284 Sheffield Street, Mountainside, New Jersey 07092, Phone : 908 789 8900,
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DATA PACKAGE

SEMI-VOLATILE ORGANICS

PROJECT NAME : NAVFAC NWIRP BETHPAGE, NY SITE 1 OU-2 - 32258

AECOM TECHNICAL SERVICES, INC.

13640 Briarwick Drive

Austin, TX - 78729

Phone No: 512-454-4797

ORDER ID : Q1531

ATTENTION : Eleanor Vivadou

Laboratory Certification ID # 20012

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Cover Page

Order ID : Q1531

Project ID : NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258

Client : AECOM Technical Services, Inc.

Lab Sample Number	Client Sample Number
Q1531-01	RE122D2-20250305
Q1531-02	RE122D3-20250305
Q1531-03	RE122D1-20250305
Q1531-04	RE126D1-20250306
Q1531-05	RE126D2-20250306
Q1531-06	DUP01-20250306
Q1531-07	RE103D1-20250306
Q1531-08	RE103D1-20250306MS
Q1531-09	RE103D1-20250306MSD
Q1531-10	RE103D3-20250306
Q1531-11	RE103D2-20250306
Q1531-12	RE108D2-20250306
Q1531-13	RE108D1-20250306
Q1531-14	RE105D1-20250306
Q1531-15	RE105D2-20250306
Q1531-16	RE125D1-20250307
Q1531-17	RE125D2-20250307
Q1531-18	FB01
Q1531-19	RE104D2-20250307
Q1531-20	RE104D3-20250307
Q1531-21	TB

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: 3/20/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

AECOM Technical Services, Inc.
Project Name: NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Project # N/A
Chemtech Project # Q1531
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
21 Water samples were received on 03/07/2025.

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 PB167057BS [2-Fluorobiphenyl - 113%],
RE126D2-20250306 [Terphenyl-d14 - 135%], DUP01-20250306 [Terphenyl-d14 - 149%], RE103D1-20250306 [Terphenyl-d14 - 257%], RE103D1-20250306DL [Terphenyl-d14 - 228%], RE103D2-20250306 [Terphenyl-d14 - 206%], RE108D2-20250306 [Terphenyl-d14 - 160%], RE105D1-20250306 [Terphenyl-d14 - 155%], RE105D2-20250306 [Terphenyl-d14 - 197%], RE105D2-20250306DL [Terphenyl-d14 - 206%] and RE104D2-20250307 [Terphenyl-d14 - 136%]. Failed surrogates are not associated with DOD, Therefore no further corrective action was required.

The Internal Standards Areas met the acceptable requirements except for PB167057BS. Failed Internal Standards are not associated with client parameter list, Therefore no further corrective action was required.

The Retention Times were acceptable for all samples.

The MS {Q1531-08MS} with File ID: BN036579.D recoveries met the requirements for all compounds except for 1,4-Dioxane[171%] Recovery failed due to matrix interference, Therefore no corrective action was taken.

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The MSD recoveries met the acceptable requirements.

The RPD for {Q1531-09MSD} with File ID: BN036580.D met criteria except for 1,4-Dioxane[54%] due to difference in results of MS and MSD.

The sample # RE103D1-20250306MS and RE103D1-20250306MSD
is failing for 1,4-Dioxane and the original sample(RE103D1-20250306) is reported with M flag for this compound.

The Blank Spike met requirements for all sample.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.
The Tuning criteria met requirements.

Samples RE103D1-20250306, RE105D2-20250306, RE125D1-20250307 and RE125D2-20250307 were diluted due to high concentrations.

E. Additional Comments:
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 <20% 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 > 20% 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: Q1531 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 met the requirements .			
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 PB167057BS [2-Fluorobiphenyl - 113%], RE126D2-20250306 [Terphenyl-d14 - 135%], DUP01-20250306 [Terphenyl-d14 - 149%], RE103D1-20250306 [Terphenyl-d14 - 257%], RE103D1-20250306DL [Terphenyl-d14 - 228%], RE103D2-20250306 [Terphenyl-d14 - 206%], RE108D2-20250306 [Terphenyl-d14 - 160%], RE105D1-20250306 [Terphenyl-d14 - 155%], RE105D2-20250306 [Terphenyl-d14 - 197%], RE105D2-20250306DL [Terphenyl-d14 - 206%] and RE104D2-20250307 [Terphenyl-d14 - 136%]. Failed surrogates are not associated with DOD, Therefore no corrective action was required.			

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

		NA	NO	YES
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓

If not met, list those compounds and their recoveries which fall outside the acceptable range.

The MS {Q1531-08MS} with File ID: BN036579.D recoveries met the requirements for all compounds except for 1,4-Dioxane[171%] Recovery failed due to matrix interference, Therefore no corrective action was taken.

The MSD recoveries met the acceptable requirements.
The Blank Spike met requirements for all samples .

The RPD for {Q1531-09MSD} with File ID: BN036580.D met criteria except for 1,4-Dioxane[54%] due to difference in results of MS and MSD.

The sample # RE103D1-20250306MS and RE103D1-20250306MSD
is failing for 1,4-Dioxane and the original sample(RE103D1-20250306) is reported with M flag for this compound.

9.	Internal Standard Area/Retention Time Shift Meet Criteria		✓	

Comments: The Internal Standards Areas met the acceptable requirements except for PB167057BS. Failed Internal Standards are not associated with client parameter list , Therefore no further corrective action was taken.

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:

Samples RE103D1-20250306, RE105D2-20250306, RE125D1-20250307 and RE125D2-20250307 were diluted due to high concentrations.

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 <20% 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 > 20% for the Initial Calibration curve for SW-846 analysis.

QA REVIEW _____ Date _____

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1531

	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:** 03/20/2025

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LAB CHRONICLE

OrderID:	Q1531	**OrderDate:**	3/7/2025 2:28:00 PM
Client:	AECOM Technical Services, Inc.	**Project:**	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258
Contact:	Eleanor Vivadou	**Location:**	I31,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1531-01	**RE122D2-20250305**	**Water**			**03/05/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-02	**RE122D3-20250305**	**Water**			**03/05/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-03	**RE122D1-20250305**	**Water**			**03/05/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/10/25	
Q1531-04	**RE126D1-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/10/25	
Q1531-05	**RE126D2-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/10/25	
Q1531-06	**DUP01-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/10/25	
Q1531-07	**RE103D1-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-07DL	**RE103D1-20250306DL**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-10	**RE103D3-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/12/25	
Q1531-11	**RE103D2-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-12	**RE108D2-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	

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LAB CHRONICLE

Q1531-13	**RE108D1-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/10/25	
Q1531-14	**RE105D1-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/10/25	
Q1531-15	**RE105D2-20250306**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-15DL	**RE105D2-20250306DL**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/12/25	
Q1531-16	**RE125D1-20250307**	**Water**			**03/07/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-16DL	**RE125D1-20250307DL**	**Water**			**03/07/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/12/25	
Q1531-17	**RE125D2-20250307**	**Water**			**03/07/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-17DL	**RE125D2-20250307DL**	**Water**			**03/07/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/12/25	
Q1531-18	**FB01**	**Water**			**03/06/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/11/25	
Q1531-19	**RE104D2-20250307**	**Water**			**03/07/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/12/25	
Q1531-20	**RE104D3-20250307**	**Water**			**03/07/25**			**03/07/25**
			SVOC-SIMGroup1	8270-Modified		03/10/25	03/12/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RE122D2-20250305									
Q1531-01	RE122D2-20250305	WATER	1,4-Dioxane	4.500		0.07	0.2	0.2	ug/L
			Total Svoc :			**4.50**			
			Total Concentration:			**4.50**			
Client ID : RE122D1-20250305									
Q1531-03	RE122D1-20250305	WATER	1,4-Dioxane	4.100		0.07	0.2	0.2	ug/L
			Total Svoc :			**4.10**			
			Total Concentration:			**4.10**			
Client ID : RE126D1-20250306									
Q1531-04	RE126D1-20250306	WATER	1,4-Dioxane	3.400		0.07	0.2	0.2	ug/L
			Total Svoc :			**3.40**			
			Total Concentration:			**3.40**			
Client ID : RE126D2-20250306									
Q1531-05	RE126D2-20250306	WATER	1,4-Dioxane	4.300		0.07	0.22	0.22	ug/L
			Total Svoc :			**4.30**			
			Total Concentration:			**4.30**			
Client ID : DUP01-20250306									
Q1531-06	DUP01-20250306	WATER	1,4-Dioxane	3.900		0.07	0.21	0.21	ug/L
			Total Svoc :			**3.90**			
			Total Concentration:			**3.90**			
Client ID : RE103D1-20250306									
Q1531-07	RE103D1-20250306	WATER	1,4-Dioxane	6.500	EM	0.07	0.21	0.21	ug/L
			Total Svoc :			**6.50**			
			Total Concentration:			**6.50**			
Client ID : RE103D1-20250306DL									
Q1531-07DL	RE103D1-20250306DL	WATER	1,4-Dioxane	6.100	D	0.14	0.42	0.42	ug/L
			Total Svoc :			**6.10**			
			Total Concentration:			**6.10**			
Client ID : RE103D2-20250306									
Q1531-11	RE103D2-20250306	WATER	1,4-Dioxane	0.480		0.07	0.21	0.21	ug/L
			Total Svoc :			**0.48**			
			Total Concentration:			**0.48**			
Client ID : RE108D2-20250306									
Q1531-12	RE108D2-20250306	WATER	1,4-Dioxane	2.700		0.07	0.2	0.2	ug/L
			Total Svoc :			**2.70**			

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Hit Summary Sheet
SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
			Total Concentration:			**2.70**			
Client ID :	**RE108D1-20250306**								
Q1531-13	RE108D1-20250306	WATER	1,4-Dioxane	3.300		0.07	0.2	0.2	ug/L
			Total Svoc :			**3.30**			
			Total Concentration:			**3.30**			
Client ID :	**RE105D1-20250306**								
Q1531-14	RE105D1-20250306	WATER	1,4-Dioxane	4.800		0.07	0.21	0.21	ug/L
			Total Svoc :			**4.80**			
			Total Concentration:			**4.80**			
Client ID :	**RE105D2-20250306**								
Q1531-15	RE105D2-20250306	WATER	1,4-Dioxane	5.600	E	0.07	0.2	0.2	ug/L
			Total Svoc :			**5.60**			
			Total Concentration:			**5.60**			
Client ID :	**RE105D2-20250306DL**								
Q1531-15DL	RE105D2-20250306DL	WATER	1,4-Dioxane	6.000	D	0.14	0.4	0.4	ug/L
			Total Svoc :			**6.00**			
			Total Concentration:			**6.00**			
Client ID :	**RE125D1-20250307**								
Q1531-16	RE125D1-20250307	WATER	1,4-Dioxane	6.200	E	0.07	0.21	0.21	ug/L
			Total Svoc :			**6.20**			
			Total Concentration:			**6.20**			
Client ID :	**RE125D1-20250307DL**								
Q1531-16DL	RE125D1-20250307DL	WATER	1,4-Dioxane	6.500	D	0.15	0.42	0.42	ug/L
			Total Svoc :			**6.50**			
			Total Concentration:			**6.50**			
Client ID :	**RE125D2-20250307**								
Q1531-17	RE125D2-20250307	WATER	1,4-Dioxane	9.200	E	0.07	0.2	0.2	ug/L
			Total Svoc :			**9.20**			
			Total Concentration:			**9.20**			
Client ID :	**RE125D2-20250307DL**								
Q1531-17DL	RE125D2-20250307DL	WATER	1,4-Dioxane	8.400	D	0.35	1	1	ug/L
			Total Svoc :			**8.40**			
			Total Concentration:			**8.40**			
Client ID :	**RE104D2-20250307**								
Q1531-19	RE104D2-20250307	WATER	1,4-Dioxane	2.300		0.07	0.2	0.2	ug/L
			Total Svoc :			**2.30**			

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Hit Summary Sheet
SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
		Total Concentration:	**2.30**					

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB167057BL	PB167057BL	2-Methylnaphthalene-d10	0.4	0.37	92		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.36	89		55	111
		2-Fluorobiphenyl	0.4	0.23	58		53	106
		Terphenyl-d14	0.4	0.43	108		58	132
PB167057BS	PB167057BS	2-Methylnaphthalene-d10	0.4	0.53	132		30	150
		Fluoranthene-d10	0.4	0.39	97		30	150
		Nitrobenzene-d5	0.4	0.38	96		55	111
		2-Fluorobiphenyl	0.4	0.45	113	*	53	106
		Terphenyl-d14	0.4	0.47	118		58	132
Q1531-01	RE122D2-20250305	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.42	105		30	150
		Nitrobenzene-d5	0.4	0.33	81		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.53	131		58	132
Q1531-02	RE122D3-20250305	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.29	74		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.52	129		58	132
Q1531-03	RE122D1-20250305	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.32	81		55	111
		2-Fluorobiphenyl	0.4	0.32	80		53	106
		Terphenyl-d14	0.4	0.46	116		58	132
Q1531-04	RE126D1-20250306	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.31	76		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.47	118		58	132
Q1531-05	RE126D2-20250306	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.54	135	*	58	132
Q1531-06	DUP01-20250306	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.60	149	*	58	132
Q1531-07	RE103D1-20250306	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	1.03	257	*	58	132
Q1531-07DL	RE103D1-20250306DL	2-Methylnaphthalene-d10	0.4	0.28	70		30	150
		Fluoranthene-d10	0.4	0.42	105		30	150
		Nitrobenzene-d5	0.4	0.29	72		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.91	228	*	58	132
Q1531-08MS	RE103D1-20250306MS	2-Methylnaphthalene-d10	0.4	0.39	97		30	150

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Surrogate Summary

SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q1531-08MS	RE103D1-20250306MS	Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.29	72		55	111
		2-Fluorobiphenyl	0.4	0.33	81		53	106
		Terphenyl-d14	0.4	0.48	121		58	132
Q1531-09MSD	RE103D1-20250306MSD	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.29	73		55	111
		2-Fluorobiphenyl	0.4	0.33	83		53	106
		Terphenyl-d14	0.4	0.49	122		58	132
Q1531-10	RE103D3-20250306	2-Methylnaphthalene-d10	0.4	0.29	73		30	150
		Fluoranthene-d10	0.4	0.41	101		30	150
		Nitrobenzene-d5	0.4	0.31	76		55	111
		2-Fluorobiphenyl	0.4	0.31	78		53	106
		Terphenyl-d14	0.4	0.51	128		58	132
Q1531-11	RE103D2-20250306	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.31	76		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.82	206	*	58	132
Q1531-12	RE108D2-20250306	2-Methylnaphthalene-d10	0.4	0.32	80		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.30	76		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.64	160	*	58	132
Q1531-13	RE108D1-20250306	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.33	81		53	106
		Terphenyl-d14	0.4	0.49	123		58	132
Q1531-14	RE105D1-20250306	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.44	111		30	150
		Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.62	155	*	58	132
Q1531-15	RE105D2-20250306	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.46	114		30	150
		Nitrobenzene-d5	0.4	0.28	69		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.79	197	*	58	132
Q1531-15DL	RE105D2-20250306DL	2-Methylnaphthalene-d10	0.4	0.37	91		30	150
		Fluoranthene-d10	0.4	0.48	120		30	150
		Nitrobenzene-d5	0.4	0.28	69		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.82	206	*	58	132
Q1531-16	RE125D1-20250307	2-Methylnaphthalene-d10	0.4	0.31	77		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.45	113		58	132
Q1531-16DL	RE125D1-20250307DL	2-Methylnaphthalene-d10	0.4	0.32	80		30	150
		Fluoranthene-d10	0.4	0.47	118		30	150

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Surrogate Summary

SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
Q1531-16DL	RE125D1-20250307DL	Nitrobenzene-d5	0.4	0.28	71		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.49	123		58	132
Q1531-17	RE125D2-20250307	2-Methylnaphthalene-d10	0.4	0.33	83		30	150
		Fluoranthene-d10	0.4	0.47	117		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.52	131		58	132
Q1531-17DL	RE125D2-20250307DL	2-Methylnaphthalene-d10	0.4	0.31	76		30	150
		Fluoranthene-d10	0.4	0.46	115		30	150
		Nitrobenzene-d5	0.4	0.32	79		55	111
		2-Fluorobiphenyl	0.4	0.26	64		53	106
		Terphenyl-d14	0.4	0.49	123		58	132
Q1531-18	FB01	2-Methylnaphthalene-d10	0.4	0.33	82		30	150
		Fluoranthene-d10	0.4	0.49	123		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.52	131		58	132
Q1531-19	RE104D2-20250307	2-Methylnaphthalene-d10	0.4	0.30	74		30	150
		Fluoranthene-d10	0.4	0.46	116		30	150
		Nitrobenzene-d5	0.4	0.30	76		55	111
		2-Fluorobiphenyl	0.4	0.32	81		53	106
		Terphenyl-d14	0.4	0.54	136	*	58	132
Q1531-20	RE104D3-20250307	2-Methylnaphthalene-d10	0.4	0.33	82		30	150
		Fluoranthene-d10	0.4	0.47	116		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.50	125		58	132

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Analytical Method: SW8270-Modified

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1531-08MS		**Client Sample ID:** RE103D1-20250306MS						**DataFile:** BN036579.D			
1,4-Dioxane	0.41	6.50	7.20	ug/L	171	*			70	130	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Analytical Method: SW8270-Modified

Parameter	Spike	Sample Result	Result	Units	Rec	Rec Qual	RPD	RPD Qual	Limits Low	Limits High	RPD
Lab Sample ID: Q1531-09MSD		**Client Sample ID:** RE103D1-20250306MSD						**DataFile:** BN036580.D			
1,4-Dioxane	0.41	6.50	6.90	ug/L	98		54	*	70	130	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1531

Client: AECOM Technical Services, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036588.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB167057BS	1,4-Dioxane	0.4	0.40	ug/L	100				70	130	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167057BL

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

Lab File ID: BN036565.D Lab Sample ID: PB167057BL

Instrument ID: BNA_N Date Extracted: 03/10/2025

Matrix: (soil/water) Water Date Analyzed: 03/10/2025

Level: (low/med) LOW Time Analyzed: 17:14

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
RE122D1-20250305	Q1531-03	BN036566.D	03/10/2025
RE126D1-20250306	Q1531-04	BN036567.D	03/10/2025
RE126D2-20250306	Q1531-05	BN036568.D	03/10/2025
DUP01-20250306	Q1531-06	BN036569.D	03/10/2025
RE108D1-20250306	Q1531-13	BN036570.D	03/10/2025
RE105D1-20250306	Q1531-14	BN036571.D	03/10/2025
RE122D2-20250305	Q1531-01	BN036576.D	03/11/2025
RE122D3-20250305	Q1531-02	BN036577.D	03/11/2025
RE103D1-20250306	Q1531-07	BN036578.D	03/11/2025
RE103D1-20250306MS	Q1531-08MS	BN036579.D	03/11/2025
RE103D1-20250306MSD	Q1531-09MSD	BN036580.D	03/11/2025
RE103D2-20250306	Q1531-11	BN036582.D	03/11/2025
PB167057BS	PB167057BS	BN036588.D	03/11/2025
RE108D2-20250306	Q1531-12	BN036583.D	03/11/2025
RE105D2-20250306	Q1531-15	BN036584.D	03/11/2025
RE125D1-20250307	Q1531-16	BN036585.D	03/11/2025
RE125D2-20250307	Q1531-17	BN036586.D	03/11/2025
FB01	Q1531-18	BN036587.D	03/11/2025
RE103D3-20250306	Q1531-10	BN036593.D	03/12/2025
RE104D2-20250307	Q1531-19	BN036594.D	03/12/2025
RE104D3-20250307	Q1531-20	BN036595.D	03/12/2025

COMMENTS:

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM SAS No.: Q1531 SDG NO.: Q1531

Lab File ID: BN036556.D DFTPP Injection Date: 03/10/2025

Instrument ID: BNA_N DFTPP Injection Time: 11:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	58.6
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	52.3
70	Less than 2.0% of mass 69	0.3 (0.7) 1
127	10.0 - 80.0% of mass 198	50.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 60.0% of mass 198	24.8
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.9 (19.6) 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	BN036557.D	03/10/2025	11:42
SSTDICC0.2	SSTDICC0.2	BN036558.D	03/10/2025	12:18
SSTDICCC0.4	SSTDICCC0.4	BN036559.D	03/10/2025	12:54
SSTDICC0.8	SSTDICC0.8	BN036560.D	03/10/2025	13:31
SSTDICC1.6	SSTDICC1.6	BN036561.D	03/10/2025	14:07
SSTDICC3.2	SSTDICC3.2	BN036562.D	03/10/2025	14:43
SSTDICC5.0	SSTDICC5.0	BN036563.D	03/10/2025	15:19
PB167057BL	PB167057BL	BN036565.D	03/10/2025	17:14
RE122D1-20250305	Q1531-03	BN036566.D	03/10/2025	17:50
RE126D1-20250306	Q1531-04	BN036567.D	03/10/2025	18:26
RE126D2-20250306	Q1531-05	BN036568.D	03/10/2025	19:02
DUP01-20250306	Q1531-06	BN036569.D	03/10/2025	19:38
RE108D1-20250306	Q1531-13	BN036570.D	03/10/2025	20:14
RE105D1-20250306	Q1531-14	BN036571.D	03/10/2025	20:50
SSTDCCC0.4EC	SSTDCCC0.4	BN036572.D	03/10/2025	21:26

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM SAS No.: Q1531 SDG NO.: Q1531

Lab File ID: BN036573.D DFTPP Injection Date: 03/11/2025

Instrument ID: BNA_N DFTPP Injection Time: 08:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	60
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	53
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	51.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	25.8
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	10.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.4 (18.4) 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	BN036574.D	03/11/2025	10:08
RE122D2-20250305	Q1531-01	BN036576.D	03/11/2025	11:20
RE122D3-20250305	Q1531-02	BN036577.D	03/11/2025	11:56
RE103D1-20250306	Q1531-07	BN036578.D	03/11/2025	12:33
RE103D1-20250306MS	Q1531-08MS	BN036579.D	03/11/2025	13:45
RE103D1-20250306MSD	Q1531-09MSD	BN036580.D	03/11/2025	14:21
RE103D1-20250306DL	Q1531-07DL	BN036581.D	03/11/2025	14:57
RE103D2-20250306	Q1531-11	BN036582.D	03/11/2025	15:32
RE108D2-20250306	Q1531-12	BN036583.D	03/11/2025	16:09
RE105D2-20250306	Q1531-15	BN036584.D	03/11/2025	16:44
RE125D1-20250307	Q1531-16	BN036585.D	03/11/2025	17:21
RE125D2-20250307	Q1531-17	BN036586.D	03/11/2025	17:57
FB01	Q1531-18	BN036587.D	03/11/2025	18:33
PB167057BS	PB167057BS	BN036588.D	03/11/2025	19:09
SSTDCCC0.4EC	SSTDCCC0.4	BN036589.D	03/11/2025	19:46

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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: AECO15

Lab Code: CHEM SAS No.: Q1531 SDG NO.: Q1531

Lab File ID: BN036590.D DFTPP Injection Date: 03/12/2025

Instrument ID: BNA_N DFTPP Injection Time: 08:35

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	62.8
68	Less than 2.0% of mass 69	1 (1.8) 1
69	Mass 69 relative abundance	56.1
70	Less than 2.0% of mass 69	0.4 (0.6) 1
127	10.0 - 80.0% of mass 198	53.6
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.2
275	10.0 - 60.0% of mass 198	26.6
365	Greater than 1% of mass 198	4.5
441	Present, but less than mass 443	9.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.1 (20.4) 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	BN036591.D	03/12/2025	09:14
RE103D3-20250306	Q1531-10	BN036593.D	03/12/2025	10:26
RE104D2-20250307	Q1531-19	BN036594.D	03/12/2025	11:02
RE104D3-20250307	Q1531-20	BN036595.D	03/12/2025	11:38
RE105D2-20250306DL	Q1531-15DL	BN036596.D	03/12/2025	12:16
RE125D1-20250307DL	Q1531-16DL	BN036597.D	03/12/2025	12:52
RE125D2-20250307DL	Q1531-17DL	BN036598.D	03/12/2025	13:29
SSTDCCC0.4EC	SSTDCCC0.4	BN036599.D	03/12/2025	14:39

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Fax : 908 789 8922

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 03/10/2025

Lab File ID: BN036559.D Time Analyzed: 12:54

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	2207	7.724	5091	10.51	3026	14.37
	UPPER LIMIT	4414	8.224	10182	11.009	6052	14.866
	LOWER LIMIT	1103.5	7.224	2545.5	10.009	1513	13.866
	EPA SAMPLE NO.						
01	PB167057BL	2263	7.72	4575	10.53	2489	14.38
02	RE122D1-20250305	1983	7.72	4161	10.52	2568	14.37
03	RE126D1-20250306	1865	7.72	4078	10.52	2447	14.37
04	RE126D2-20250306	2064	7.73	4561	10.52	2745	14.37
05	DUP01-20250306	2291	7.72	4880	10.52	2910	14.37
06	RE108D1-20250306	2186	7.72	4775	10.52	2786	14.37
07	RE105D1-20250306	2032	7.72	4598	10.52	2832	14.37

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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Fax : 908 789 8922

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

EPA Sample No.: SSTDICCC0.4 Date Analyzed: 03/10/2025

Lab File ID: BN036559.D Time Analyzed: 12:54

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	6005	17.111	4110	21.295	3539	23.554
	UPPER LIMIT	12010	17.611	8220	21.795	7078	24.054
	LOWER LIMIT	3002.5	16.611	2055	20.795	1769.5	23.054
	EPA SAMPLE NO.						
01	PB167057BL	4335	17.12	2994	21.30	2724	23.57
02	RE122D1-20250305	5031	17.11	3465	21.30	2981	23.56
03	RE126D1-20250306	5134	17.11	3745	21.30	3091	23.56
04	RE126D2-20250306	5634	17.11	3902	21.30	3043	23.56
05	DUP01-20250306	5566	17.11	3909	21.30	3415	23.56
06	RE108D1-20250306	5255	17.11	3738	21.30	3210	23.55
07	RE105D1-20250306	5726	17.11	3951	21.30	3259	23.55

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.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/11/2025

Lab File ID: BN036574.D Time Analyzed: 10:08

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	2295	7.724	5467	10.51	3343	14.37
	UPPER LIMIT	4590	8.224	10934	11.009	6686	14.866
	LOWER LIMIT	1147.5	7.224	2733.5	10.009	1671.5	13.866
	EPA SAMPLE NO.						
01	RE122D2-20250305	3302	7.72	7375	10.51	4300	14.37
02	RE122D3-20250305	2163	7.72	4662	10.51	2586	14.37
03	RE103D1-20250306	2056	7.72	4839	10.51	2887	14.37
04	RE103D1-20250306MS	1966	7.72	4554	10.51	2666	14.36
05	RE103D1-20250306MSD	1973	7.72	4547	10.51	2602	14.37
06	PB167057BS	2199	7.72	5061	10.51	2475	14.37
07	RE103D1-20250306DL	2259	7.72	5271	10.52	3220	14.37
08	RE103D2-20250306	2161	7.72	4915	10.51	2930	14.37
09	RE108D2-20250306	1904	7.72	4283	10.51	2637	14.37
10	RE105D2-20250306	1950	7.72	4552	10.51	2777	14.37
11	RE125D1-20250307	2166	7.72	4992	10.51	2872	14.36
12	RE125D2-20250307	2081	7.72	4659	10.51	2830	14.37
13	FB01	1897	7.72	4317	10.52	2633	14.37

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.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/11/2025

Lab File ID: BN036574.D Time Analyzed: 10:08

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	6922	17.111	4977		21.295	4232		23.554
	UPPER LIMIT	13844	17.611	9954		21.795	8464		24.054
	LOWER LIMIT	3461	16.611	2488.5		20.795	2116		23.054
	EPA SAMPLE NO.								
01	RE122D2-20250305	8599	17.11	6414		21.30	5766		23.55
02	RE122D3-20250305	4760	17.11	3526		21.30	3334		23.55
03	RE103D1-20250306	5689	17.11	3805		21.30	2891		23.55
04	RE103D1-20250306MS	5287	17.11	3809		21.30	3096		23.55
05	RE103D1-20250306MSD	5250	17.11	3781		21.30	3038		23.55
06	PB167057BS	4176	17.11	2420	*	21.30	2074	*	23.56
07	RE103D1-20250306DL	6427	17.11	4562		21.30	3613		23.55
08	RE103D2-20250306	5748	17.11	3765		21.30	3253		23.56
09	RE108D2-20250306	5582	17.11	3932		21.30	3177		23.55
10	RE105D2-20250306	5693	17.11	3977		21.30	3124		23.55
11	RE125D1-20250307	5521	17.11	3922		21.30	3017		23.55
12	RE125D2-20250307	5539	17.11	3781		21.30	3024		23.55
13	FB01	5337	17.11	4002		21.30	3149		23.56

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.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/12/2025

Lab File ID: BN036591.D Time Analyzed: 09:14

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	2221	7.717	5304	10.51	3177	14.36
	UPPER LIMIT	4442	8.217	10608	11.009	6354	14.855
	LOWER LIMIT	1110.5	7.217	2652	10.009	1588.5	13.855
	EPA SAMPLE NO.						
01	RE103D3-20250306	1963	7.72	4459	10.51	2879	14.36
02	RE105D2-20250306DL	1963	7.72	4593	10.51	2774	14.37
03	RE125D1-20250307DL	1986	7.72	4780	10.51	2899	14.36
04	RE104D2-20250307	1944	7.72	4249	10.51	2599	14.37
05	RE104D3-20250307	2341	7.72	5174	10.51	3132	14.37
06	RE125D2-20250307DL	2304	7.72	5150	10.52	3131	14.37

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.: Q1531 SAS No.: Q1531 SDG NO.: Q1531

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 03/12/2025

Lab File ID: BN036591.D Time Analyzed: 09:14

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	6400	17.111	4453	21.295	3635	23.551
	UPPER LIMIT	12800	17.611	8906	21.795	7270	24.051
	LOWER LIMIT	3200	16.611	2226.5	20.795	1817.5	23.051
	EPA SAMPLE NO.						
01	RE103D3-20250306	5114	17.11	3421	21.30	2969	23.55
02	RE105D2-20250306DL	5527	17.11	3876	21.30	3091	23.55
03	RE125D1-20250307DL	5979	17.11	4274	21.30	3192	23.55
04	RE104D2-20250307	5272	17.11	3676	21.30	3141	23.55
05	RE104D3-20250307	6559	17.11	4896	21.30	4323	23.55
06	RE125D2-20250307DL	5911	17.11	3996	21.30	3315	23.55

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.

SAMPLE DATA

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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/05/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE122D2-20250305	SDG No.:	Q1531
Lab Sample ID:	Q1531-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036576.D	1	03/10/25 11:35	03/11/25 11:20	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.50		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	0.42		30 - 150		105%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.53		58 - 132		131%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3300	7.724				
1146-65-2	Naphthalene-d8	7380	10.509				
15067-26-2	Acenaphthene-d10	4300	14.366				
1517-22-2	Phenanthrene-d10	8600	17.111				
1719-03-5	Chrysene-d12	6410	21.295				
1520-96-3	Perylene-d12	5770	23.548				

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\BN031125\
Data File : BN036576.D
Acq On : 11 Mar 2025 11:20
Operator : RC/JU
Sample : Q1531-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Quant Time: Mar 11 12:02:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

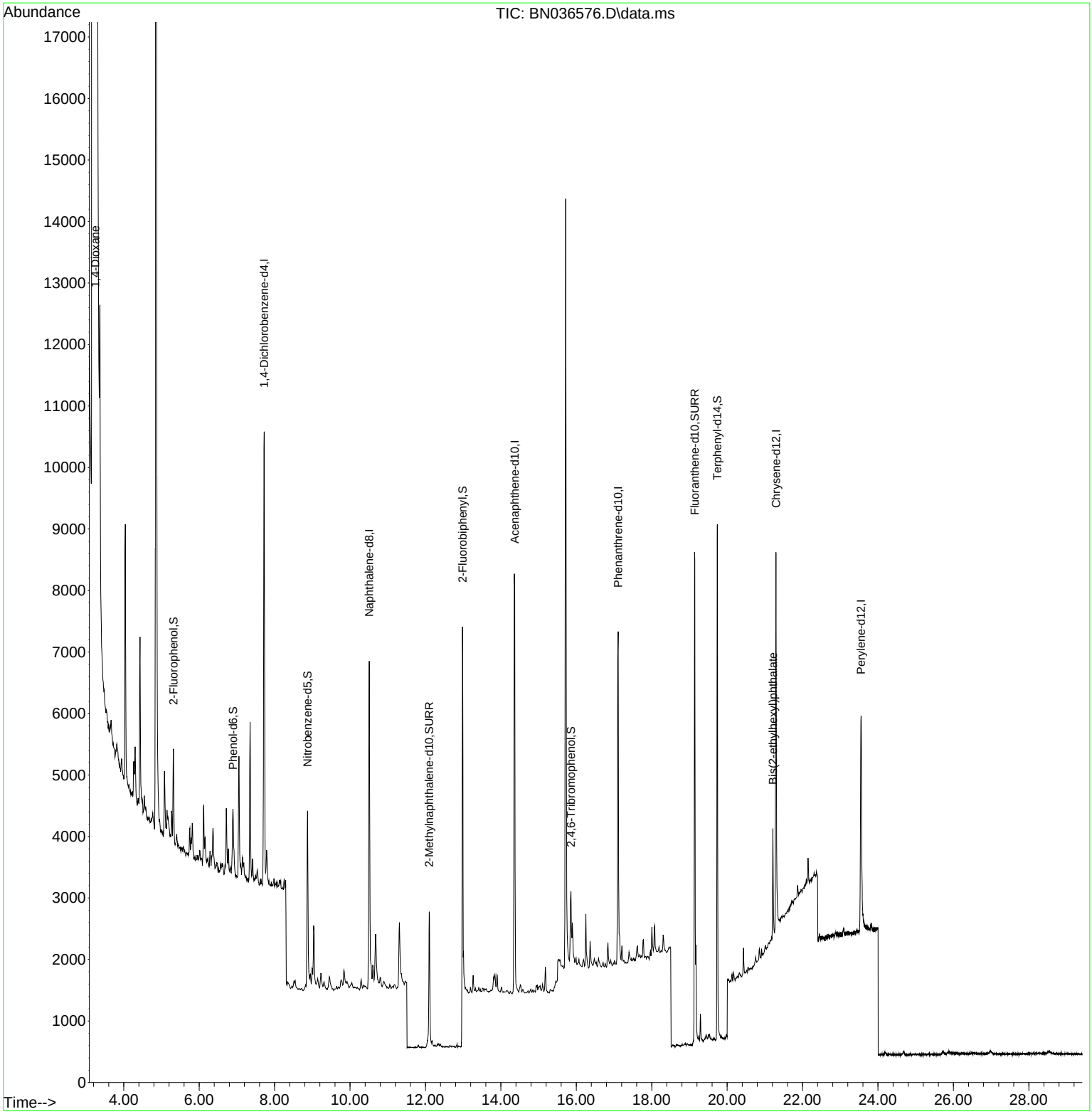
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	3302	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	7375	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	4300	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	8599	0.400	ng	0.00
29) Chrysene-d12	21.295	240	6414	0.400	ng	0.00
35) Perylene-d12	23.548	264	5766	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1122	0.146	ng	0.00
5) Phenol-d6	6.901	99	740	0.078	ng	0.00
8) Nitrobenzene-d5	8.875	82	2607	0.325	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	3642	0.332	ng	-0.01
14) 2,4,6-Tribromophenol	15.858	330	786	0.403	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	9247	0.370	ng	0.00
27) Fluoranthene-d10	19.141	212	9238	0.419	ng	0.00
31) Terphenyl-d14	19.740	244	8067	0.525	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.247	88	16423	4.484	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	1840	0.116	ng	# 94

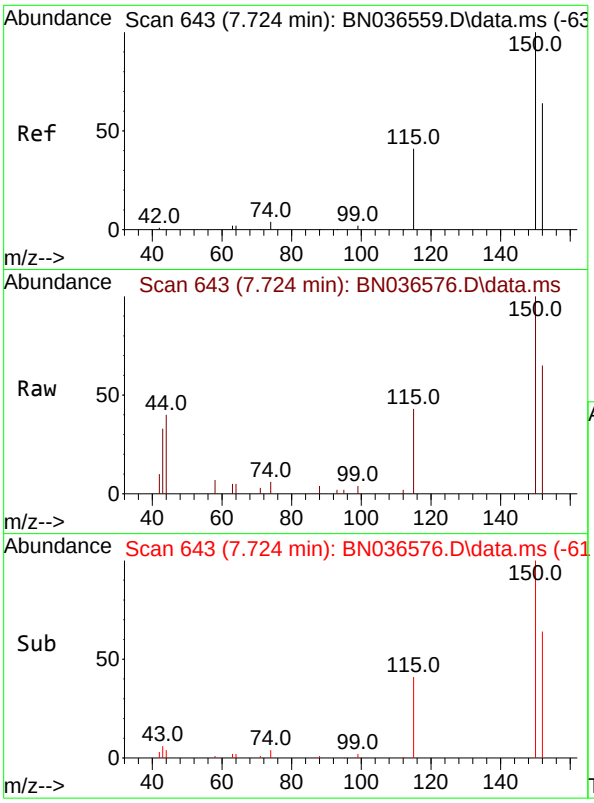
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036576.D
Acq On : 11 Mar 2025 11:20
Operator : RC/JU
Sample : Q1531-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Quant Time: Mar 11 12:02:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



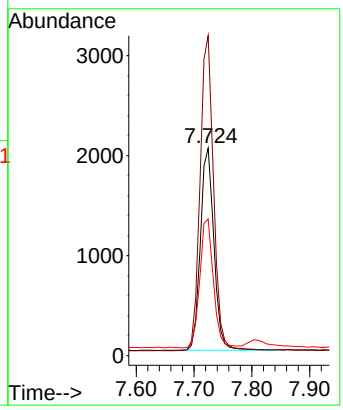


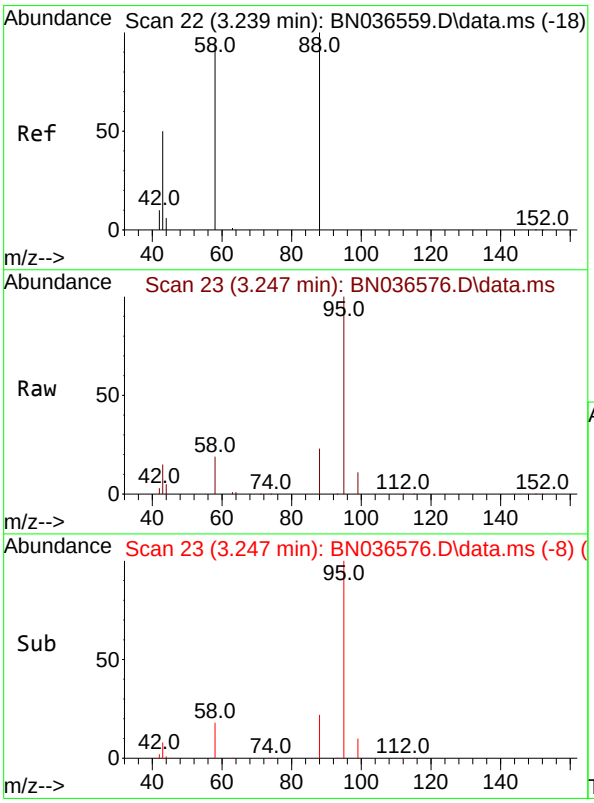
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:152 Resp: 3302

Ion	Ratio	Lower	Upper
152	100		
150	154.1	123.7	185.5
115	65.8	54.3	81.5

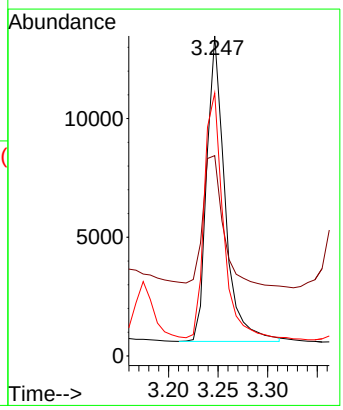


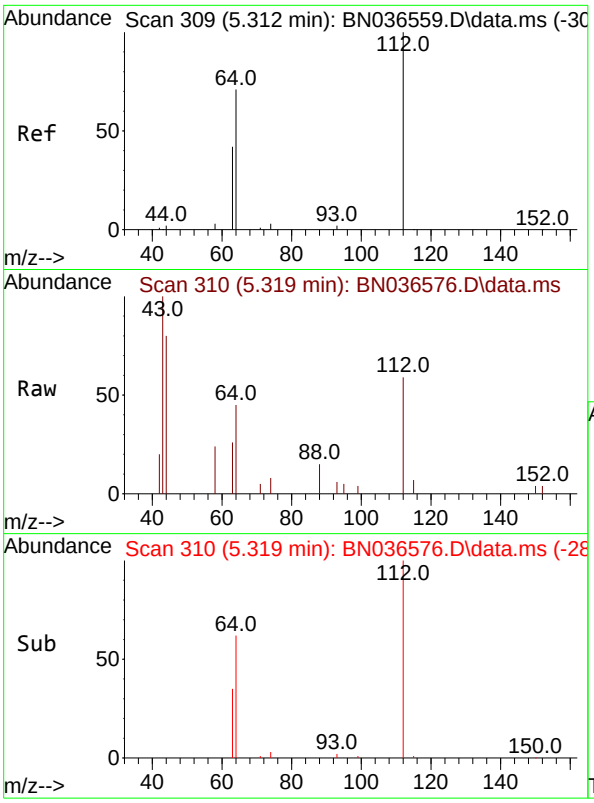


#2
1,4-Dioxane
Concen: 4.484 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion: 88 Resp: 16423

Ion	Ratio	Lower	Upper
88	100		
43	47.4	37.8	56.8
58	83.1	67.4	101.2



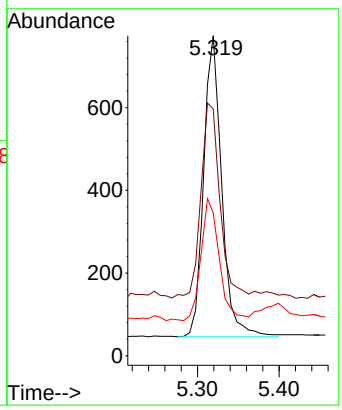


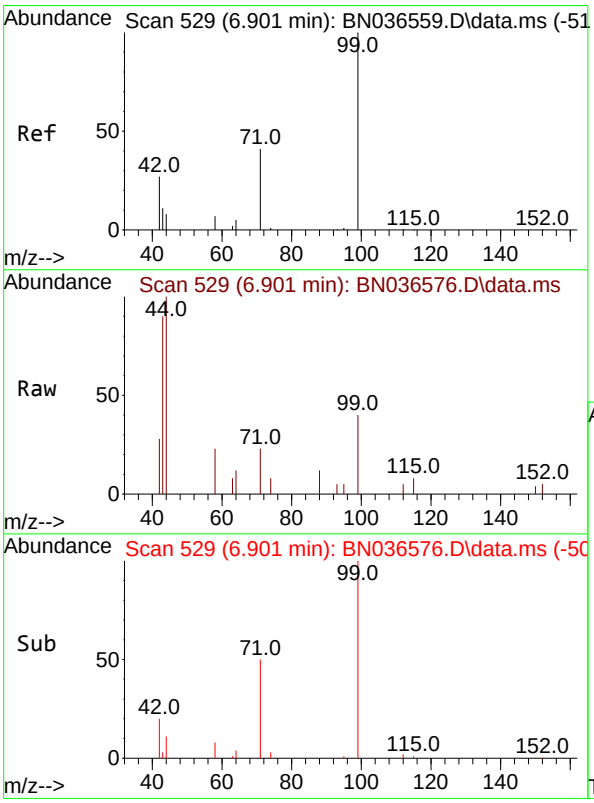
#4
2-Fluorophenol
Concen: 0.146 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:112 Resp: 1122

Ion	Ratio	Lower	Upper
112	100		
64	67.8	53.1	79.7
63	40.1	31.8	47.8

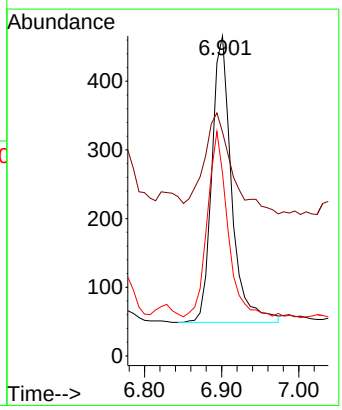


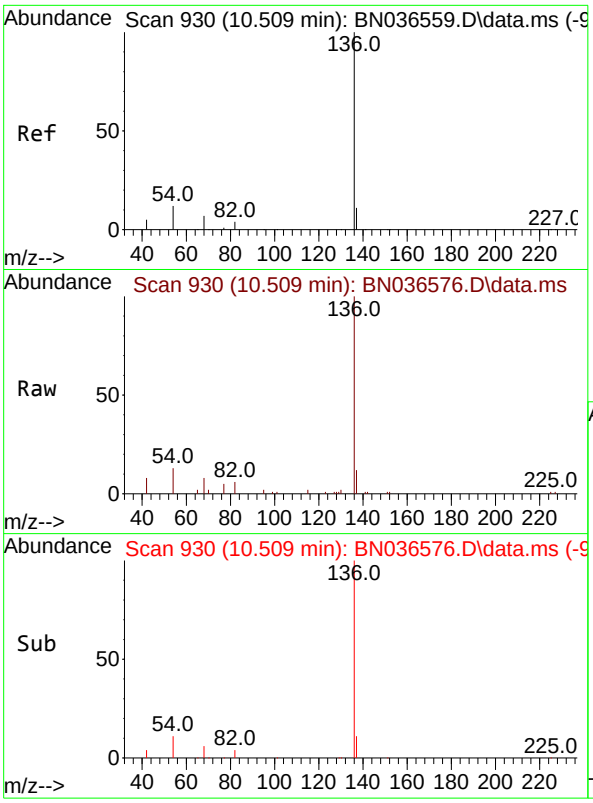


#5
Phenol-d6
Concen: 0.078 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion: 99 Resp: 740

Ion	Ratio	Lower	Upper
99	100		
42	49.3	26.5	39.7#
71	66.5	34.1	51.1#



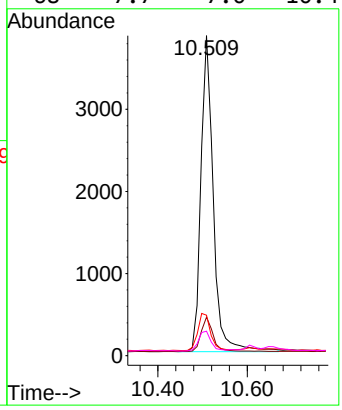


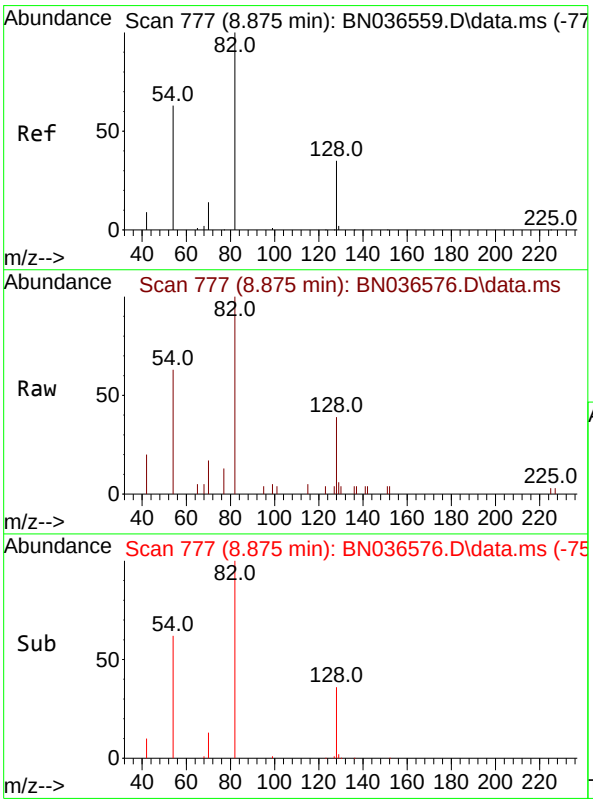
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:136 Resp: 7375

Ion	Ratio	Lower	Upper
136	100		
137	12.0	10.3	15.5
54	12.7	11.5	17.3
68	7.7	7.0	10.4

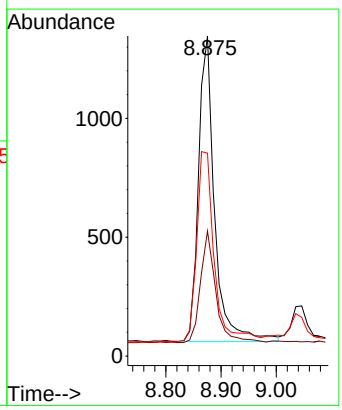


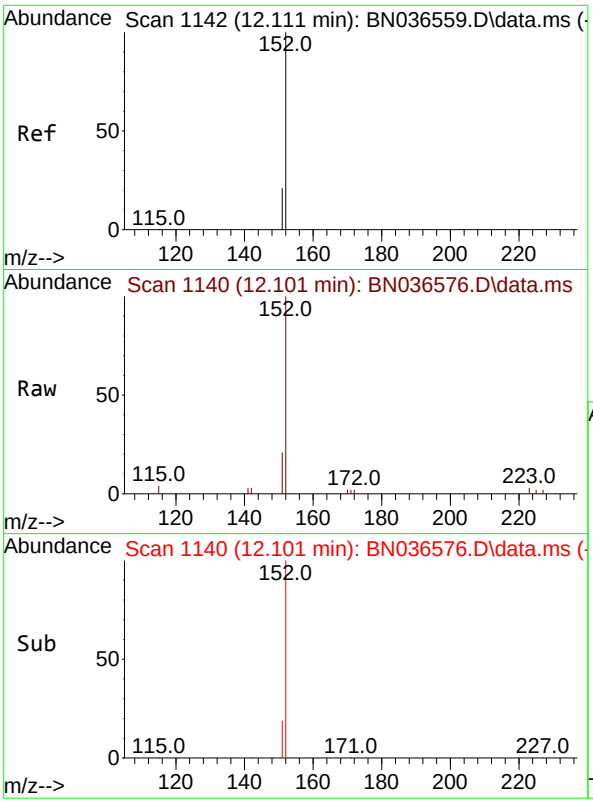


#8
Nitrobenzene-d5
Concen: 0.325 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion: 82 Resp: 2607

Ion	Ratio	Lower	Upper
82	100		
128	39.0	30.6	45.8
54	63.4	52.2	78.4



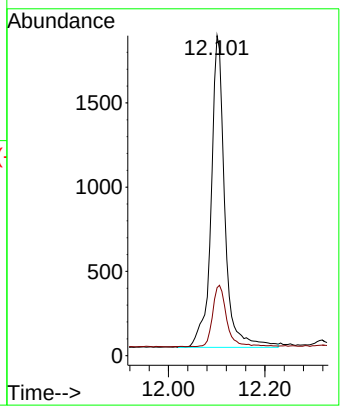


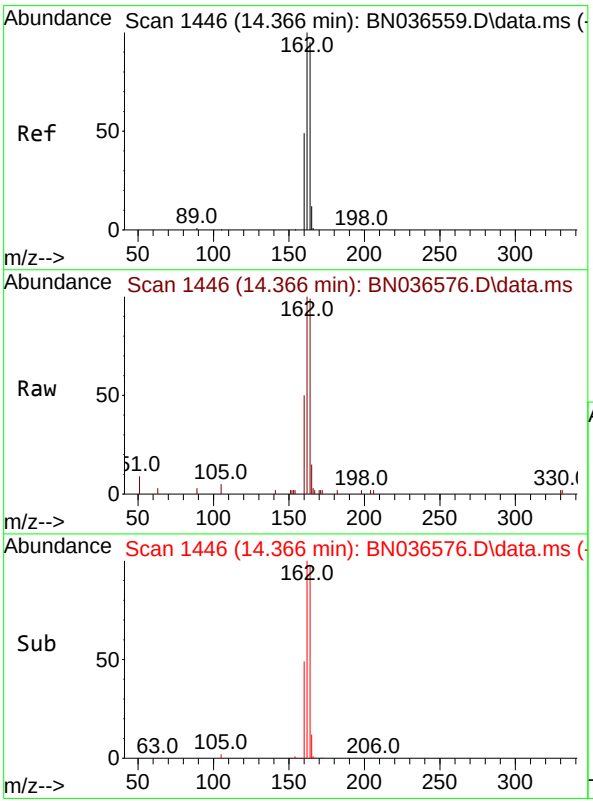
#11
2-Methylnaphthalene-d10
Concen: 0.332 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:152 Resp: 3642

Ion	Ratio	Lower	Upper
152	100		
151	20.5	17.0	25.6

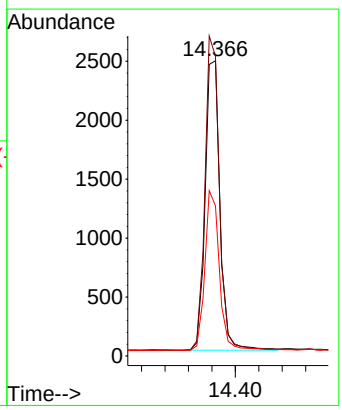


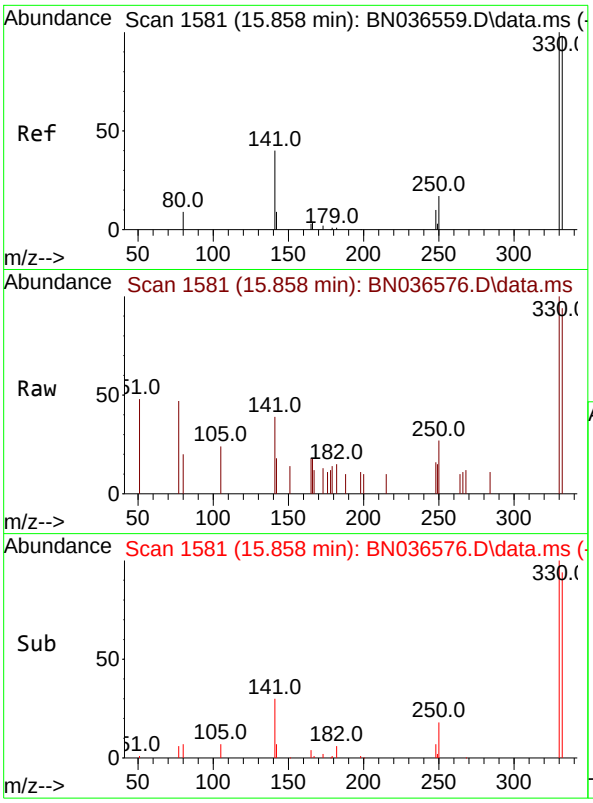


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion:164 Resp: 4300

Ion	Ratio	Lower	Upper
164	100		
162	101.4	84.2	126.2
160	50.8	42.2	63.2



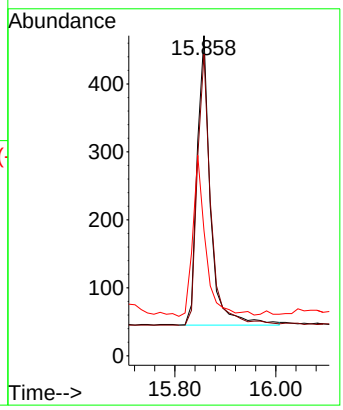


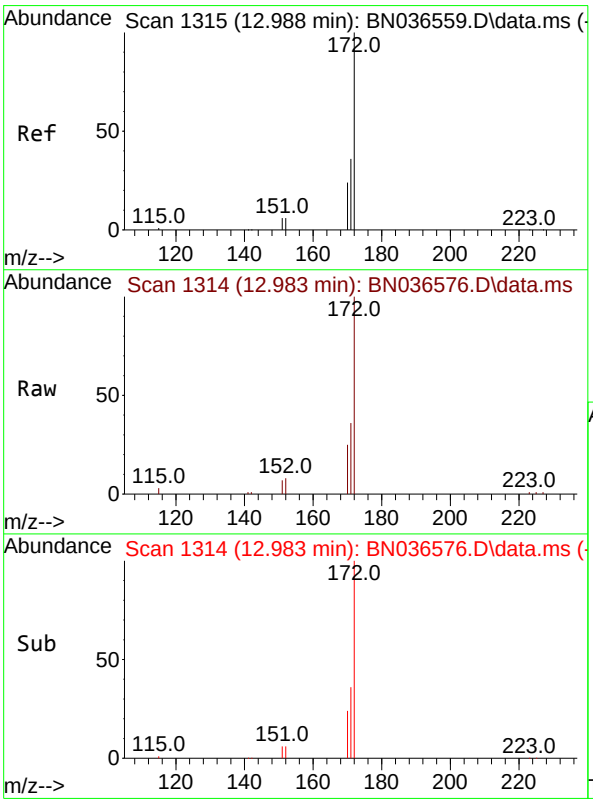
#14
2,4,6-Tribromophenol
Concen: 0.403 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:330 Resp: 786

Ion	Ratio	Lower	Upper
330	100		
332	94.9	75.2	112.8
141	53.9	43.4	65.2

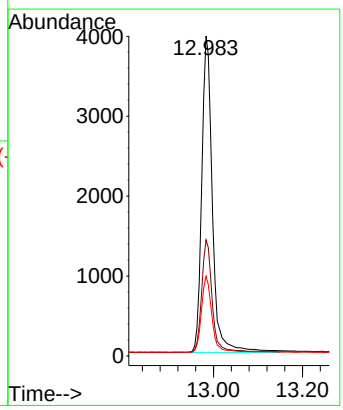


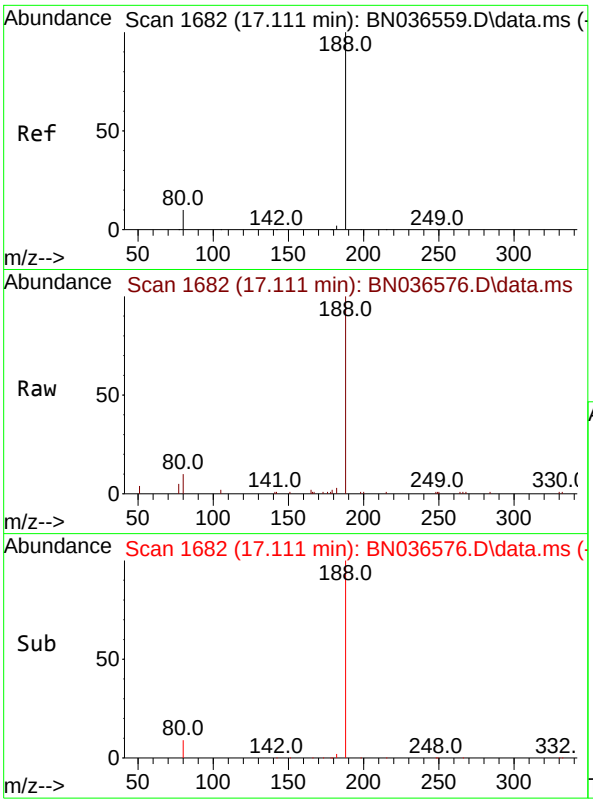


#15
2-Fluorobiphenyl
Concen: 0.370 ng
RT: 12.983 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion:172 Resp: 9247

Ion	Ratio	Lower	Upper
172	100		
171	36.3	29.5	44.3
170	24.9	20.2	30.4



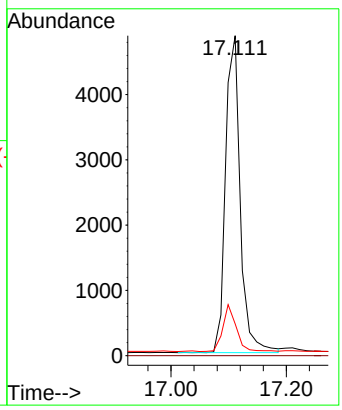


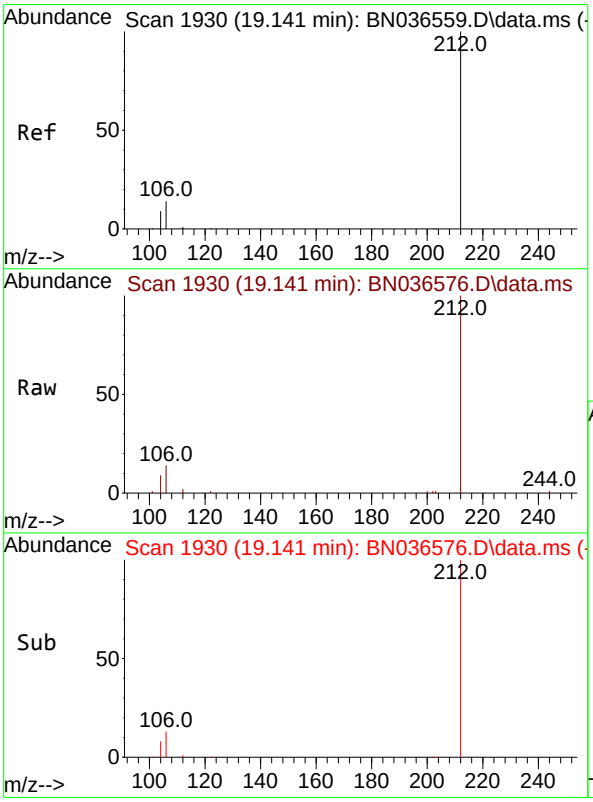
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:188 Resp: 8599

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.9	8.8	13.2

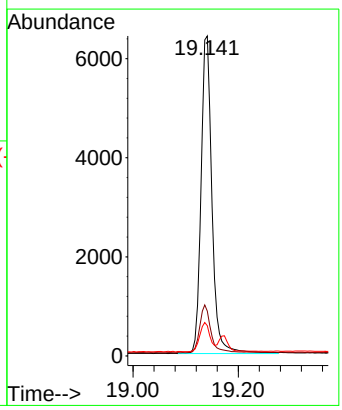


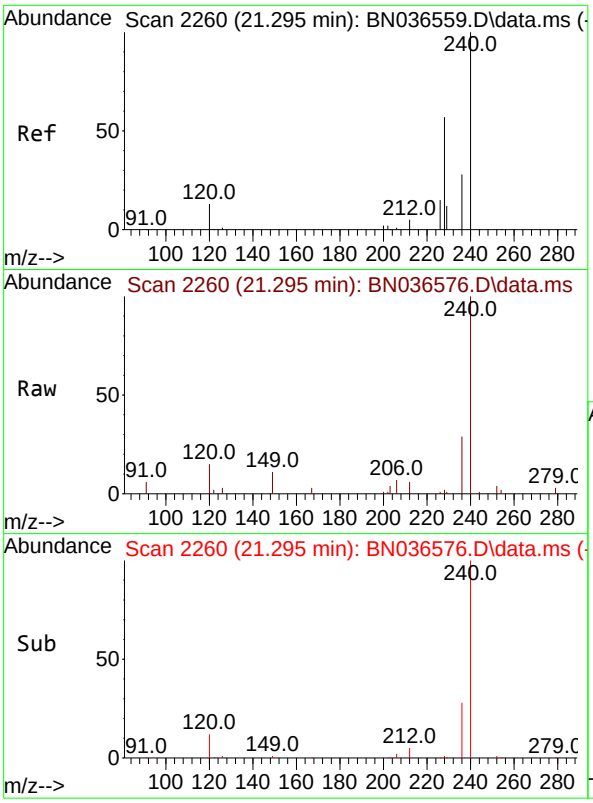


#27
Fluoranthene-d10
Concen: 0.419 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion:212 Resp: 9238

Ion	Ratio	Lower	Upper
212	100		
106	15.3	11.8	17.6
104	8.6	7.3	10.9



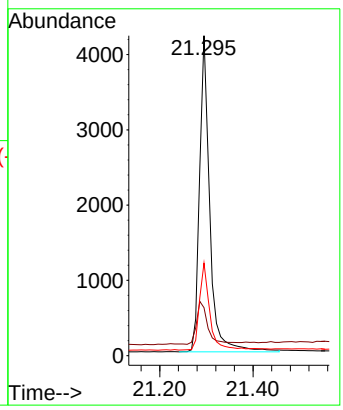


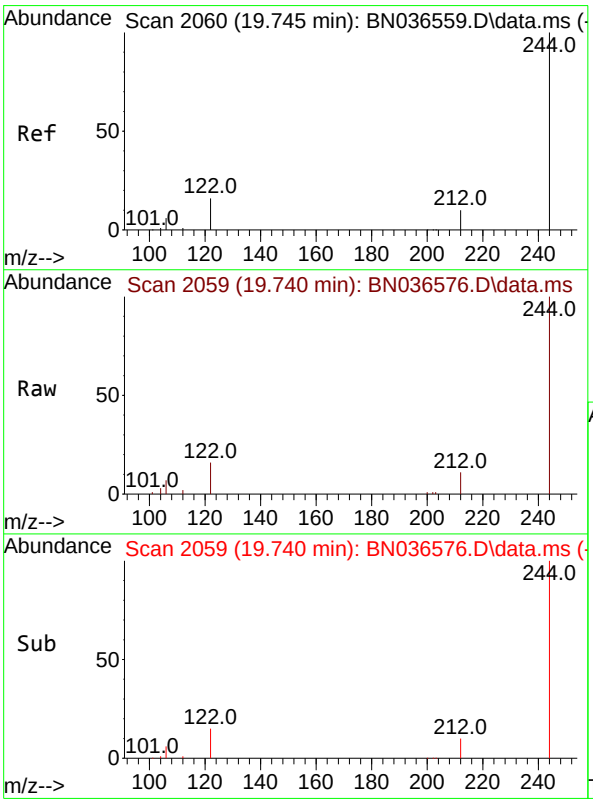
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:240 Resp: 6414

Ion	Ratio	Lower	Upper
240	100		
120	15.0	14.6	22.0
236	29.0	24.1	36.1

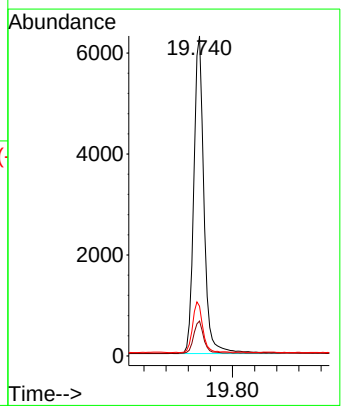


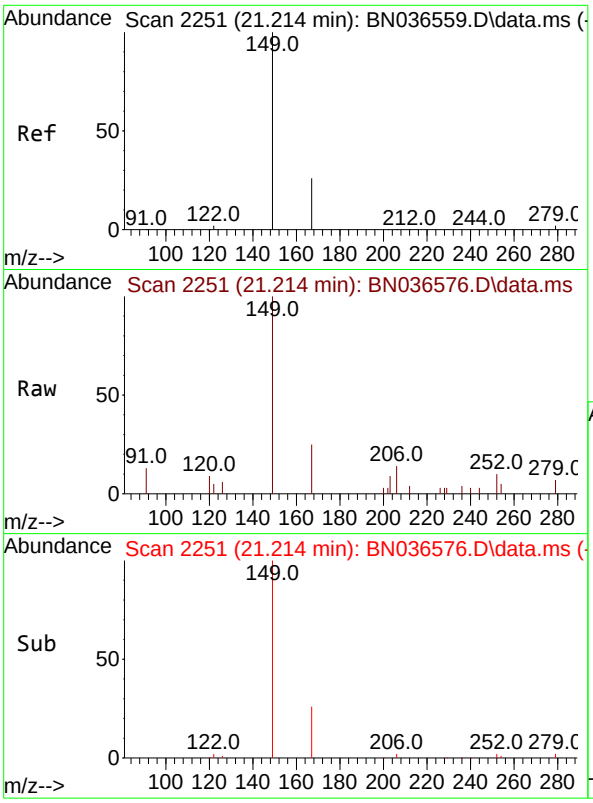


#31
Terphenyl-d14
Concen: 0.525 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion:244 Resp: 8067

Ion	Ratio	Lower	Upper
244	100		
212	10.9	9.6	14.4
122	15.5	13.9	20.9



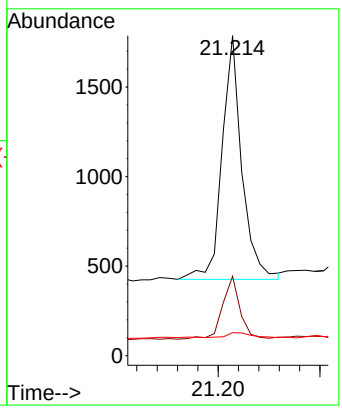


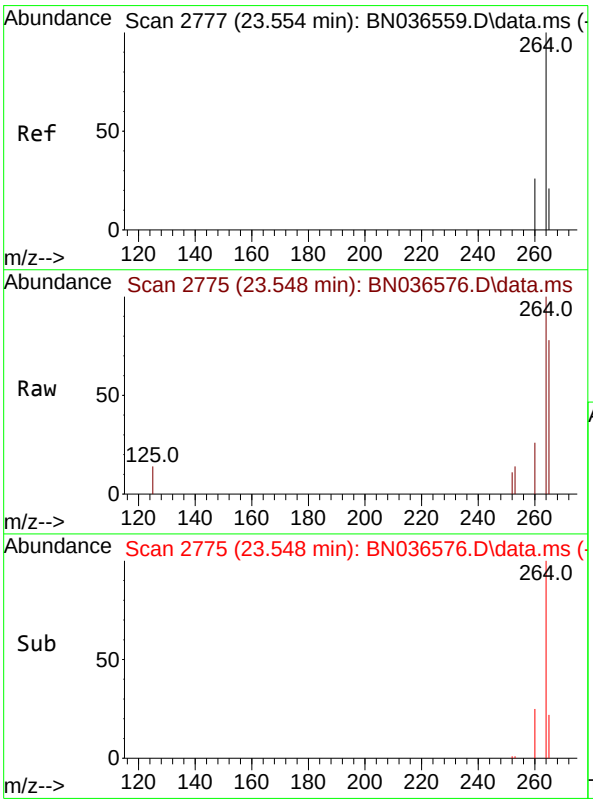
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.116 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Instrument :
BNA_N
ClientSampleId :
RE122D2-20250305

Tgt Ion:149 Resp: 1840

Ion	Ratio	Lower	Upper
149	100		
167	22.9	20.7	31.1
279	2.3	3.6	5.4#

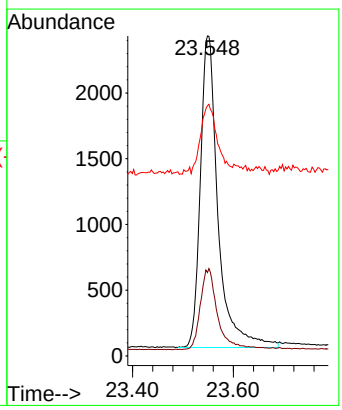




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.548 min Scan# 2775
Delta R.T. -0.006 min
Lab File: BN036576.D
Acq: 11 Mar 2025 11:20

Tgt Ion:264 Resp: 5766

Ion	Ratio	Lower	Upper
264	100		
260	26.0	22.6	33.8
265	78.2	88.1	132.1#



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/05/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE122D3-20250305	SDG No.:	Q1531
Lab Sample ID:	Q1531-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036577.D	1	03/10/25 11:35	03/11/25 11:56	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		74%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.52		58 - 132		129%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2160	7.724				
1146-65-2	Naphthalene-d8	4660	10.509				
15067-26-2	Acenaphthene-d10	2590	14.366				
1517-22-2	Phenanthrene-d10	4760	17.111				
1719-03-5	Chrysene-d12	3530	21.304				
1520-96-3	Perylene-d12	3330	23.554				

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\BN031125\
Data File : BN036577.D
Acq On : 11 Mar 2025 11:56
Operator : RC/JU
Sample : Q1531-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Quant Time: Mar 11 12:20:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

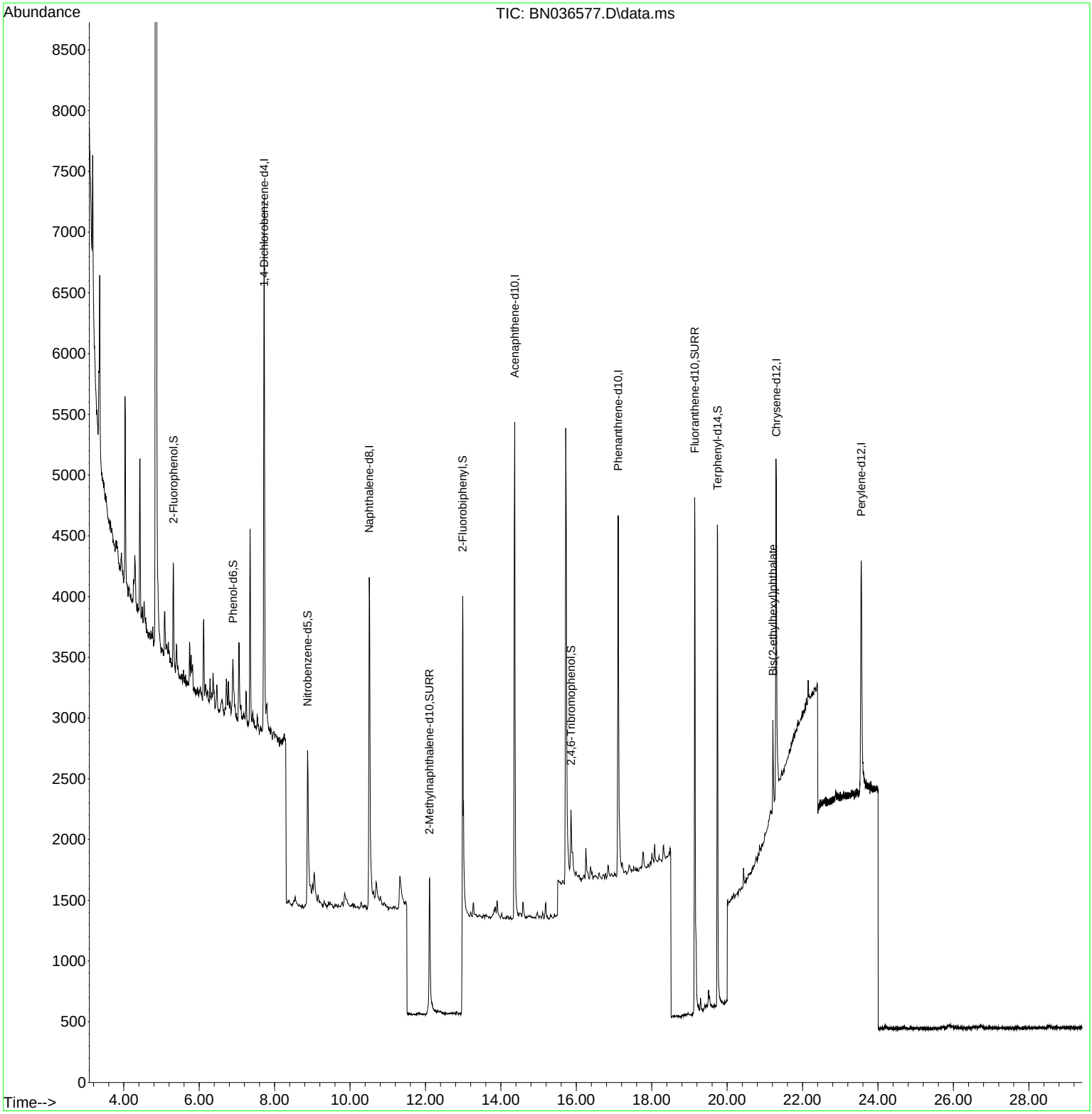
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2163	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4662	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2586	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	4760	0.400	ng	0.00
29) Chrysene-d12	21.304	240	3526	0.400	ng	0.00
35) Perylene-d12	23.554	264	3334	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	637	0.126	ng	0.00
5) Phenol-d6	6.901	99	382	0.061	ng	0.00
8) Nitrobenzene-d5	8.875	82	1490	0.294	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2238	0.323	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	388	0.331	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	5263	0.350	ng	0.00
27) Fluoranthene-d10	19.141	212	5257	0.431	ng	0.00
31) Terphenyl-d14	19.745	244	4357	0.516	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.214	149	717	0.082	ng	# 93

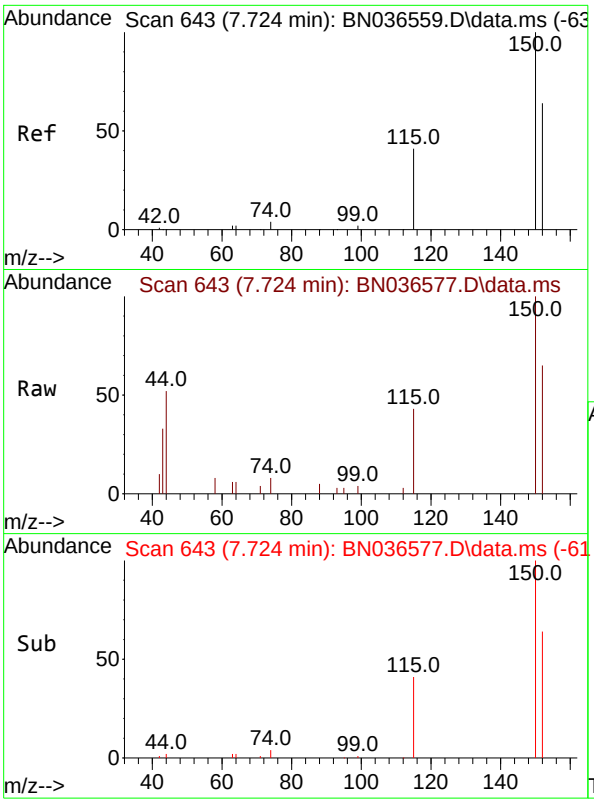
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036577.D
Acq On : 11 Mar 2025 11:56
Operator : RC/JU
Sample : Q1531-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Quant Time: Mar 11 12:20:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



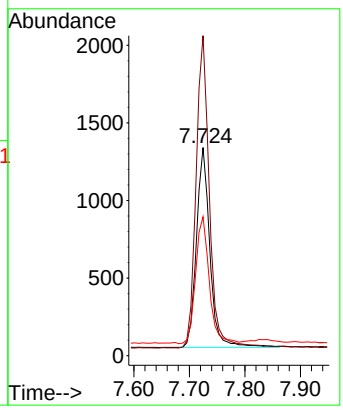


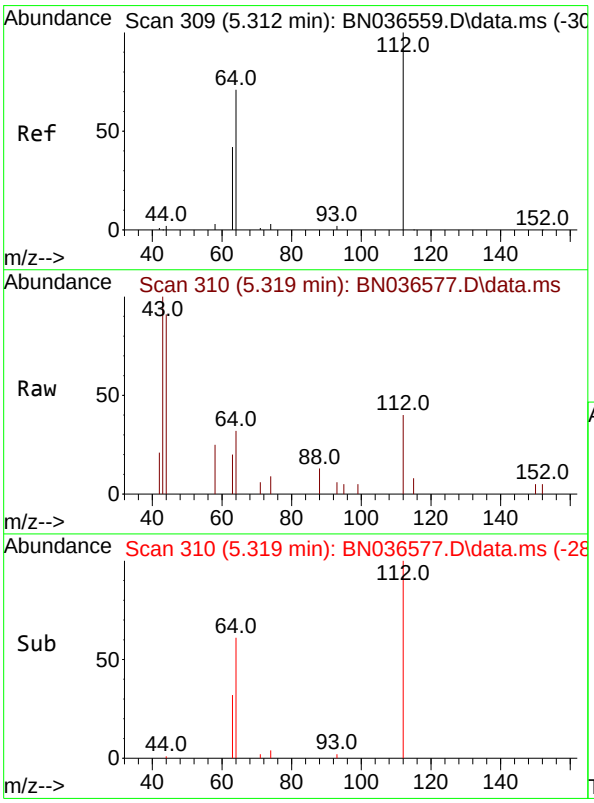
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion:152 Resp: 2163

Ion	Ratio	Lower	Upper
152	100		
150	153.8	123.7	185.5
115	66.7	54.3	81.5

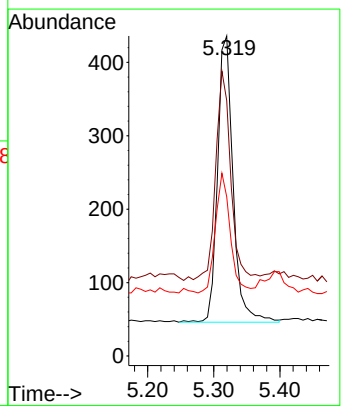


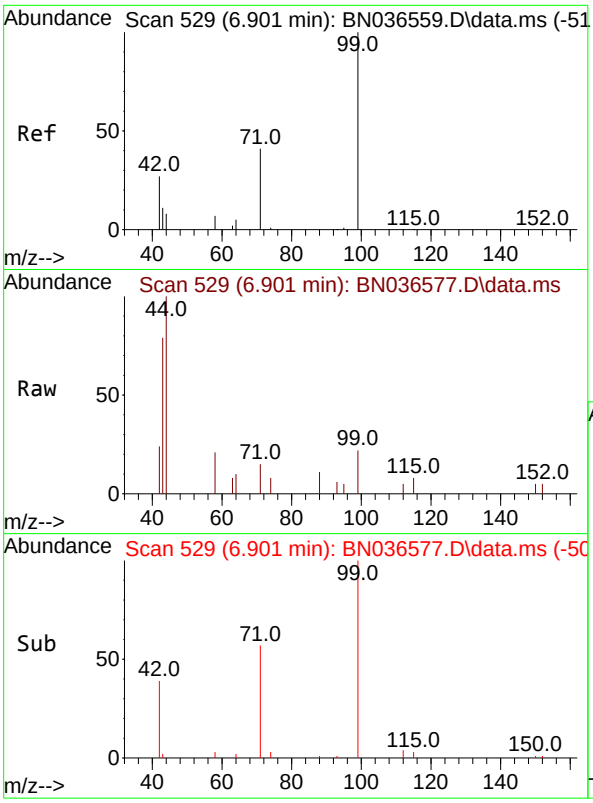


#4
2-Fluorophenol
Concen: 0.126 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.007 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:112 Resp: 637

Ion	Ratio	Lower	Upper
112	100		
64	71.4	53.1	79.7
63	39.7	31.8	47.8



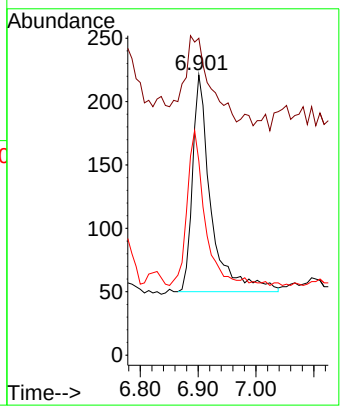


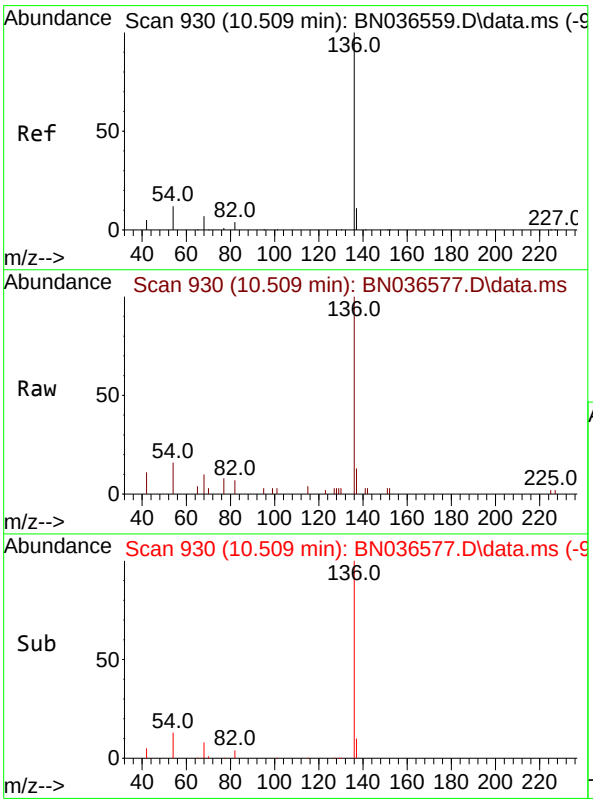
#5
Phenol-d6
Concen: 0.061 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion: 99 Resp: 382

Ion	Ratio	Lower	Upper
99	100		
42	53.4	26.5	39.7#
71	69.4	34.1	51.1#

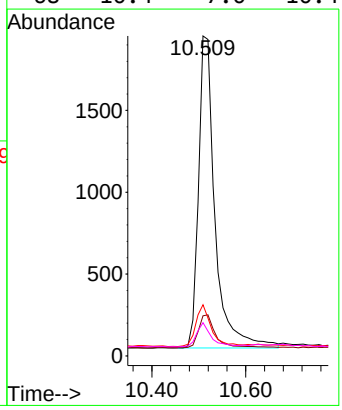


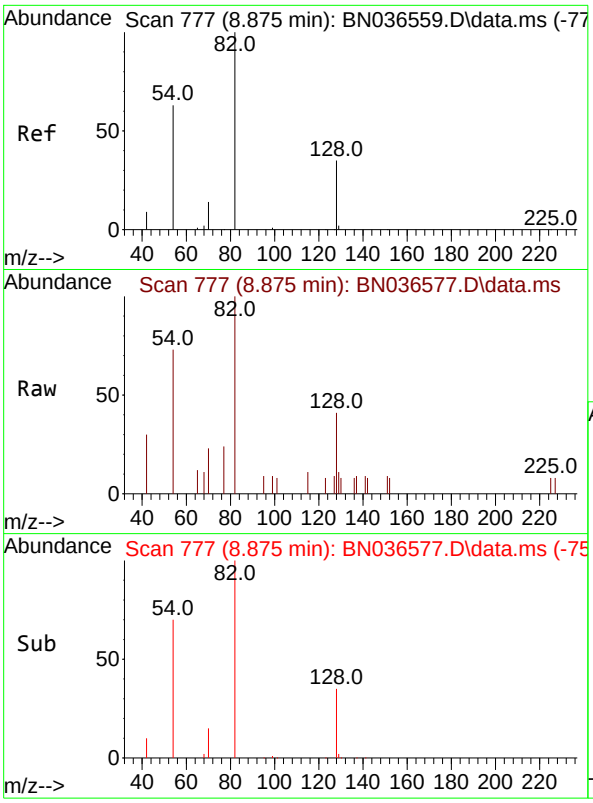


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:136 Resp: 4662

Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.3	15.5
54	16.0	11.5	17.3
68	10.4	7.0	10.4



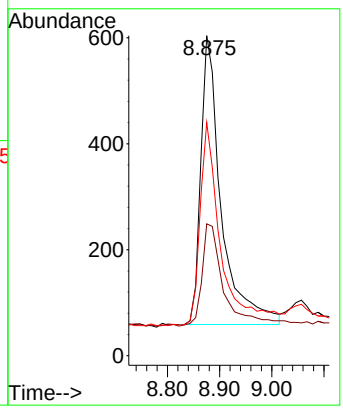


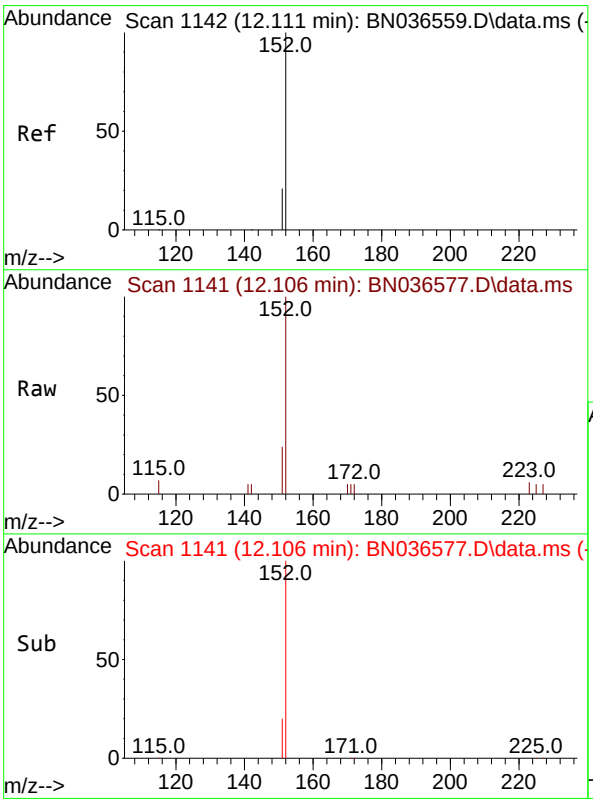
#8
Nitrobenzene-d5
Concen: 0.294 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion: 82 Resp: 1490

Ion	Ratio	Lower	Upper
82	100		
128	41.2	30.6	45.8
54	72.8	52.2	78.4

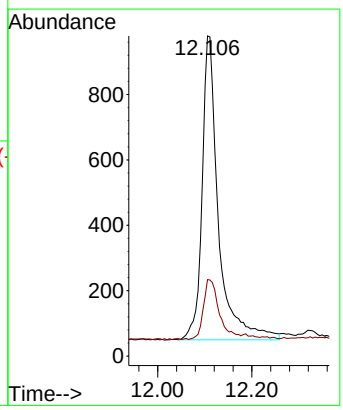


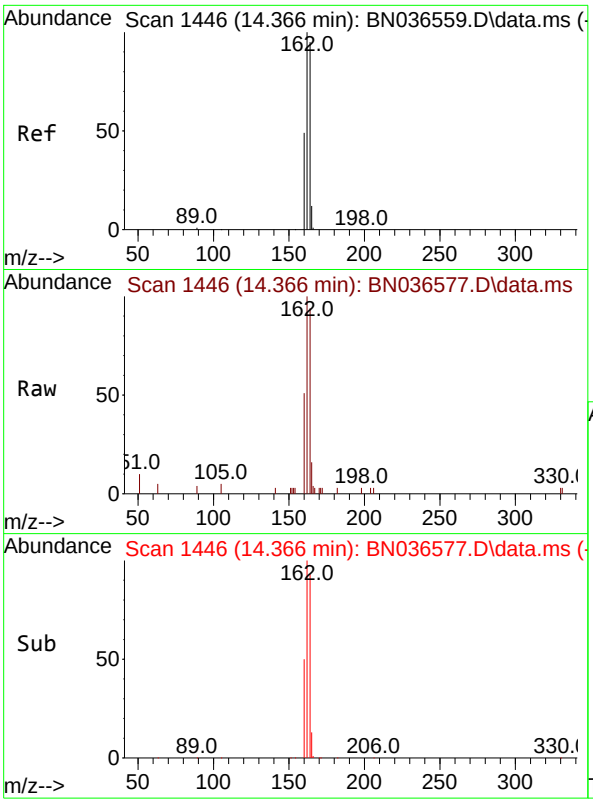


#11
2-Methylnaphthalene-d10
Concen: 0.323 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.005 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:152 Resp: 2238

Ion	Ratio	Lower	Upper
152	100		
151	19.0	17.0	25.6



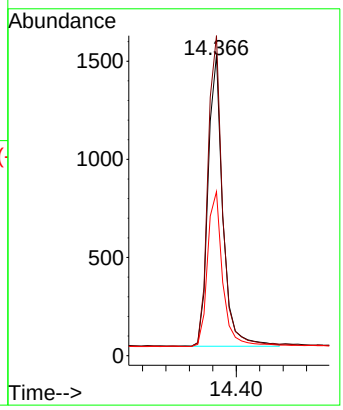


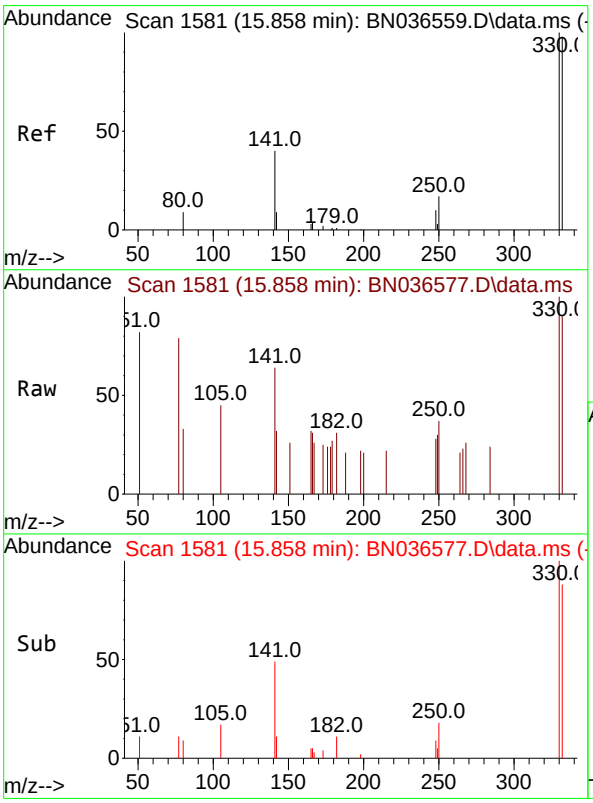
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion:164 Resp: 2586

Ion	Ratio	Lower	Upper
164	100		
162	106.5	84.2	126.2
160	54.5	42.2	63.2

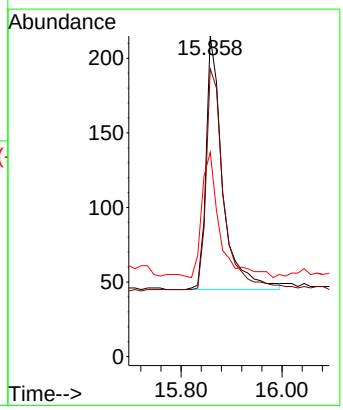


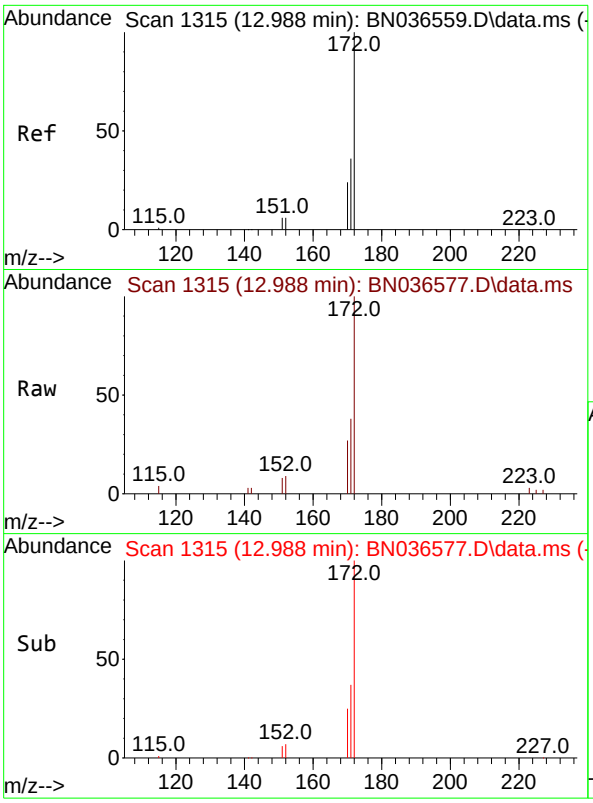


#14
2,4,6-Tribromophenol
Concen: 0.331 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:330 Resp: 388

Ion	Ratio	Lower	Upper
330	100		
332	91.8	75.2	112.8
141	53.9	43.4	65.2



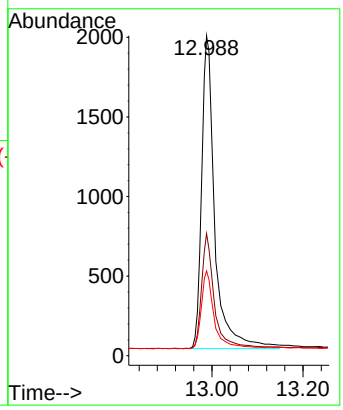


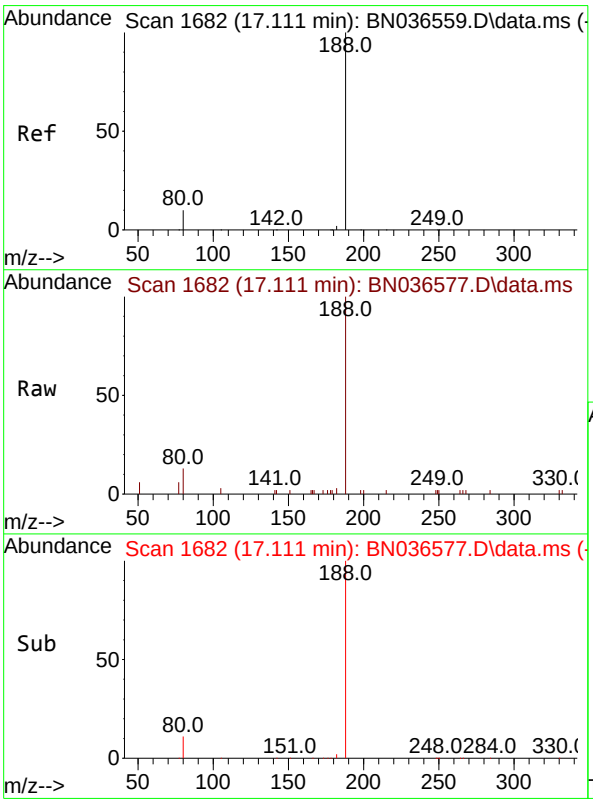
#15
2-Fluorobiphenyl
Concen: 0.350 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion:172 Resp: 5263

Ion	Ratio	Lower	Upper
172	100		
171	38.2	29.5	44.3
170	26.5	20.2	30.4

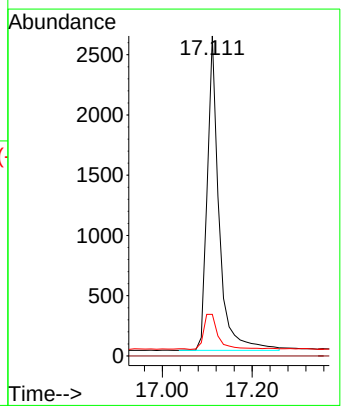


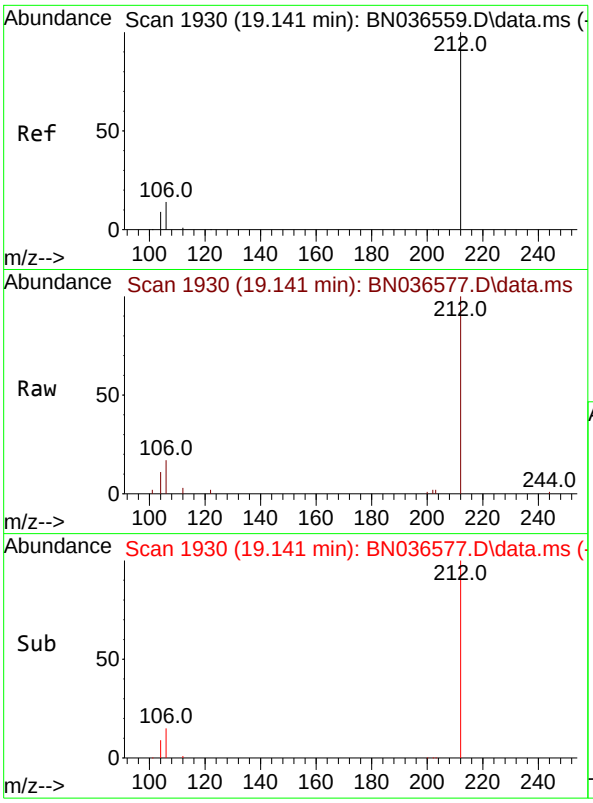


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:188 Resp: 4760

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.0	8.8	13.2



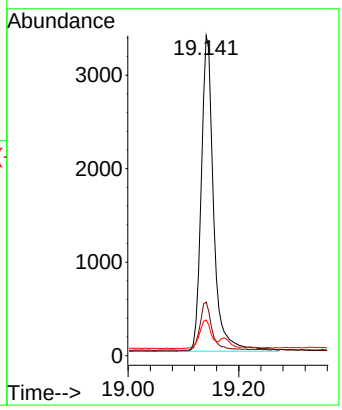


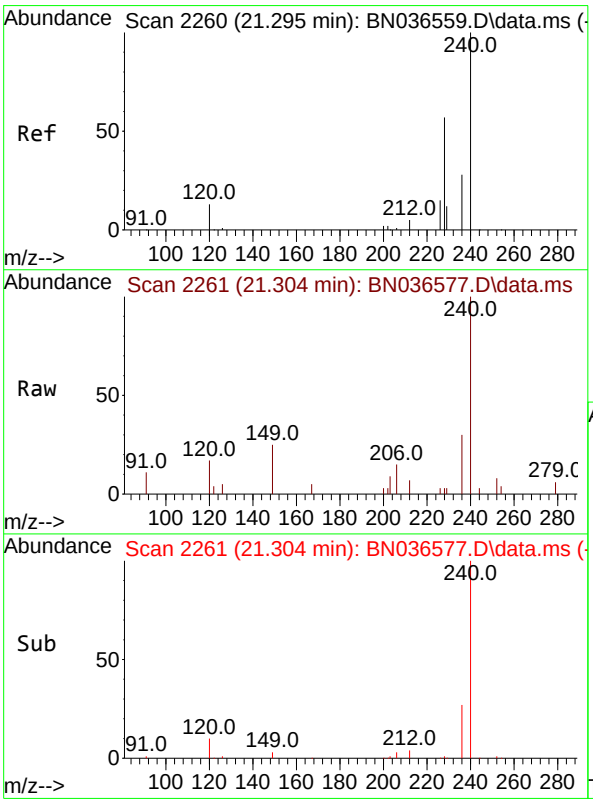
#27
Fluoranthene-d10
Concen: 0.431 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion:212 Resp: 5257

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.8	17.6
104	9.0	7.3	10.9

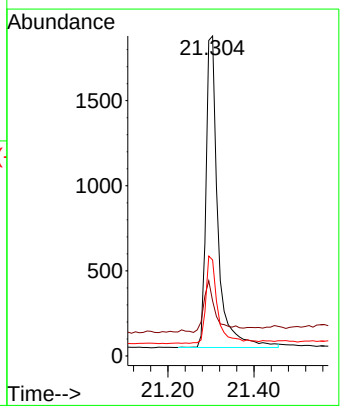


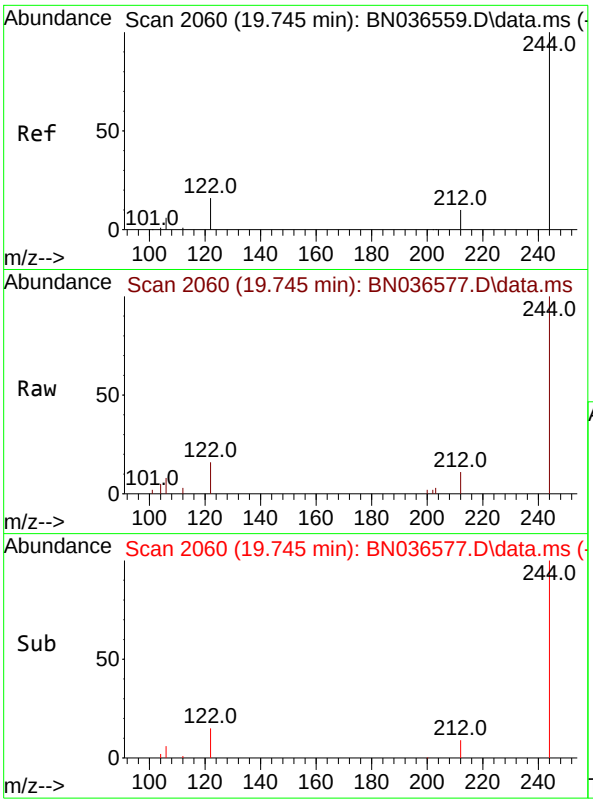


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2261
Delta R.T. 0.009 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:240 Resp: 3526

Ion	Ratio	Lower	Upper
240	100		
120	17.2	14.6	22.0
236	30.0	24.1	36.1



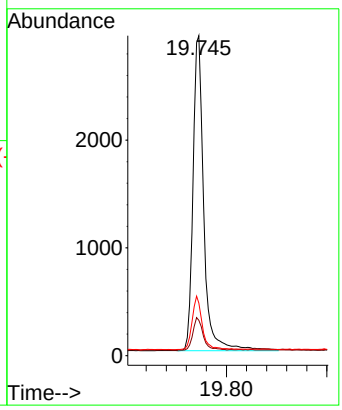


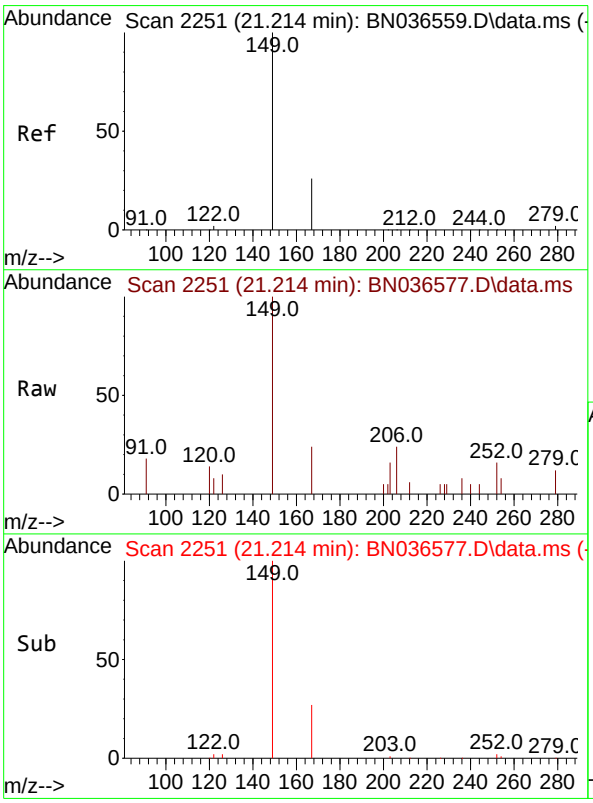
#31
Terphenyl-d14
Concen: 0.516 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion:244 Resp: 4357

Ion	Ratio	Lower	Upper
244	100		
212	11.0	9.6	14.4
122	16.5	13.9	20.9

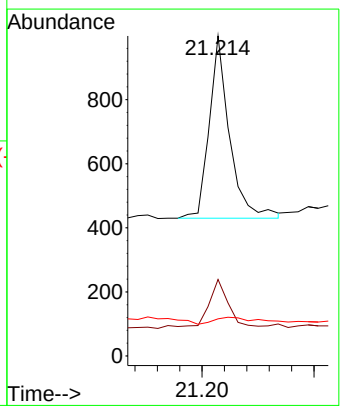


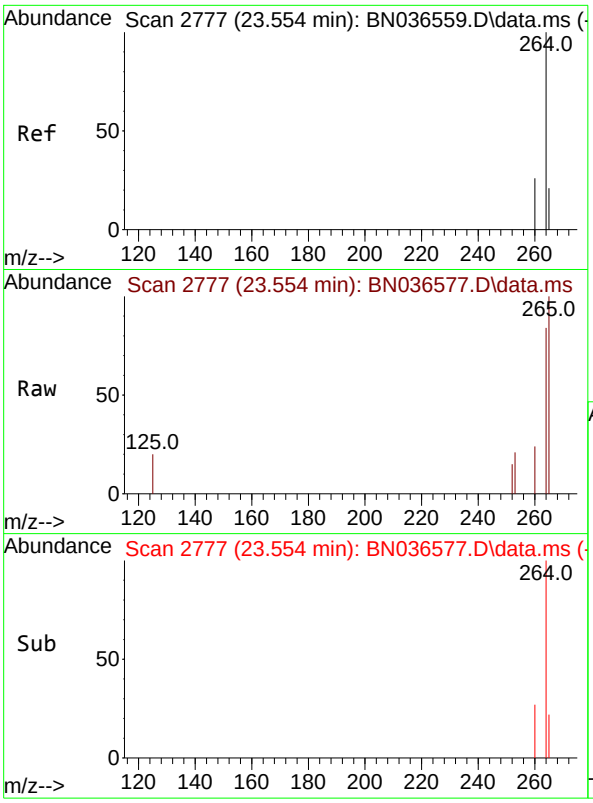


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.082 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Tgt Ion:149 Resp: 717

Ion	Ratio	Lower	Upper
149	100		
167	22.9	20.7	31.1
279	8.9	3.6	5.4#



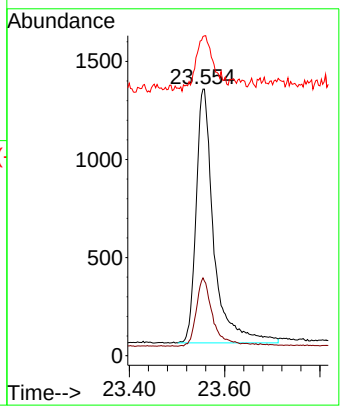


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036577.D
Acq: 11 Mar 2025 11:56

Instrument :
BNA_N
ClientSampleId :
RE122D3-20250305

Tgt Ion:264 Resp: 3334

Ion	Ratio	Lower	Upper
264	100		
260	29.1	22.6	33.8
265	119.7	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/05/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE122D1-20250305	SDG No.:	Q1531
Lab Sample ID:	Q1531-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036566.D	1	03/10/25 11:35	03/10/25 17:50	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.10		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		78%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		81%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		80%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		116%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1980	7.724				
1146-65-2	Naphthalene-d8	4160	10.52				
15067-26-2	Acenaphthene-d10	2570	14.366				
1517-22-2	Phenanthrene-d10	5030	17.111				
1719-03-5	Chrysene-d12	3470	21.304				
1520-96-3	Perylene-d12	2980	23.56				

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\BN031025\
Data File : BN036566.D
Acq On : 10 Mar 2025 17:50
Operator : RC/JU
Sample : Q1531-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Quant Time: Mar 10 18:13:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

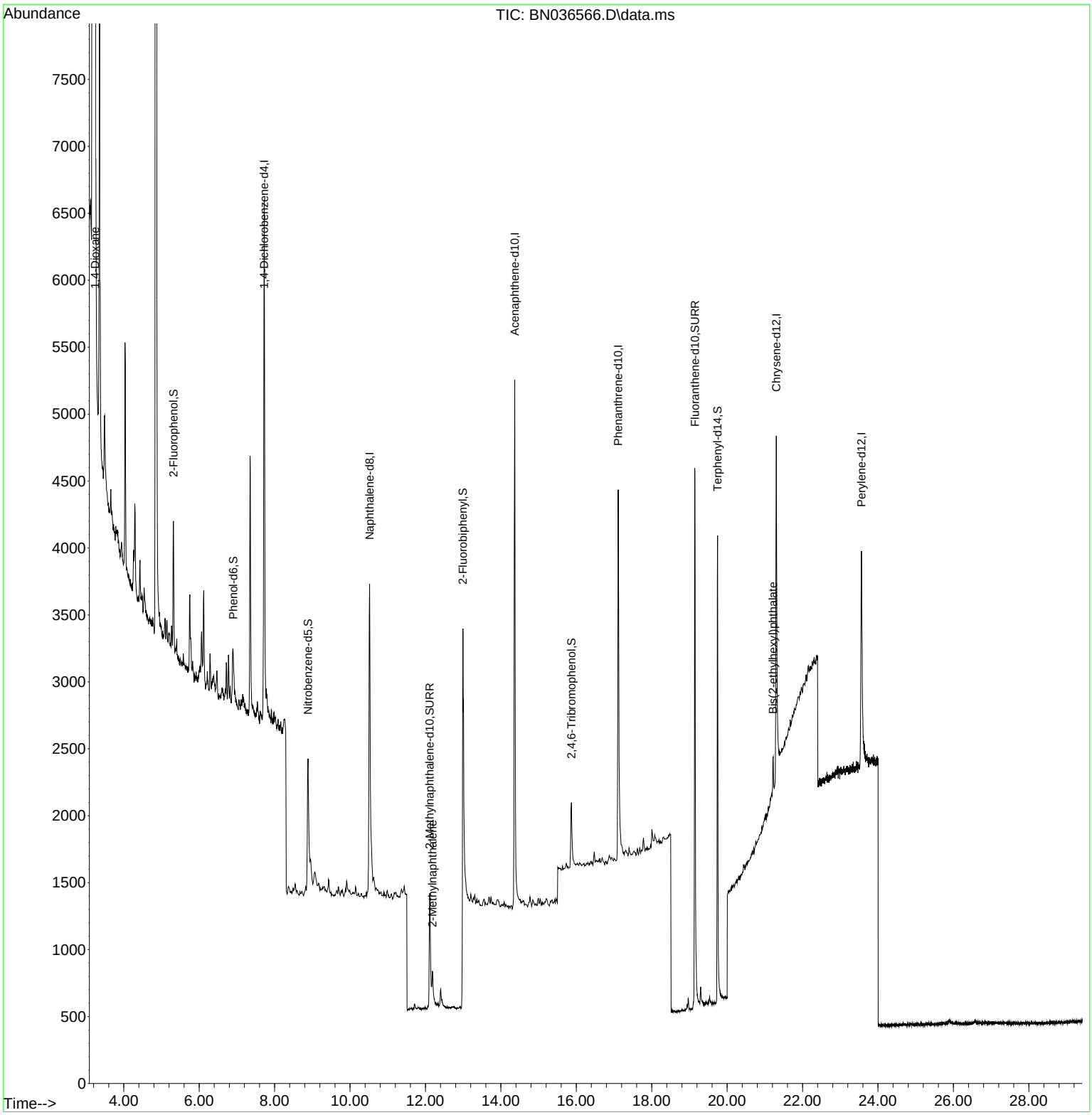
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	1983	0.400	ng	0.00
7) Naphthalene-d8	10.520	136	4161	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2568	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5031	0.400	ng	# 0.00
29) Chrysene-d12	21.304	240	3465	0.400	ng	0.00
35) Perylene-d12	23.560	264	2981	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	726	0.157	ng	0.00
5) Phenol-d6	6.908	99	461	0.081	ng	0.00
8) Nitrobenzene-d5	8.886	82	1459	0.322	ng	0.01
11) 2-Methylnaphthalene-d10	12.116	152	1922	0.311	ng	0.00
14) 2,4,6-Tribromophenol	15.870	330	436	0.374	ng	0.01
15) 2-Fluorobiphenyl	12.993	172	4776	0.320	ng	0.00
27) Fluoranthene-d10	19.146	212	5549	0.430	ng	0.00
31) Terphenyl-d14	19.745	244	3851	0.464	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	8941	4.065	ng	98
12) 2-Methylnaphthalene	12.187	142	234	0.030	ng	# 84
34) Bis(2-ethylhexyl)phtha...	21.214	149	362	0.042	ng	100

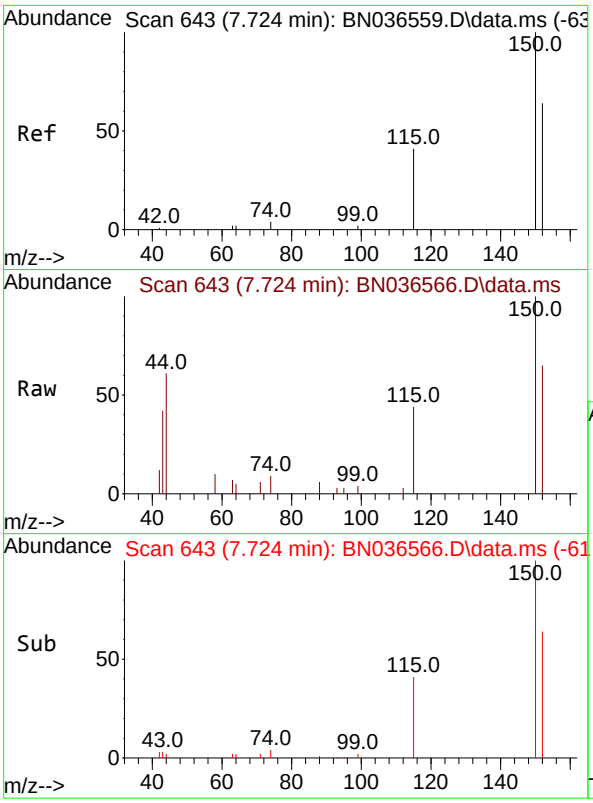
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036566.D
Acq On : 10 Mar 2025 17:50
Operator : RC/JU
Sample : Q1531-03
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Quant Time: Mar 10 18:13:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



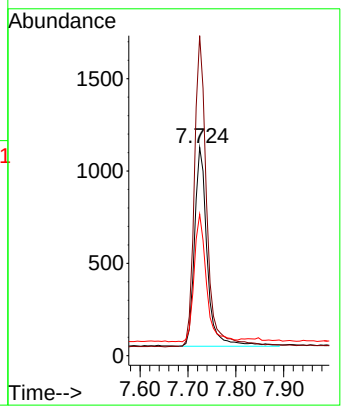


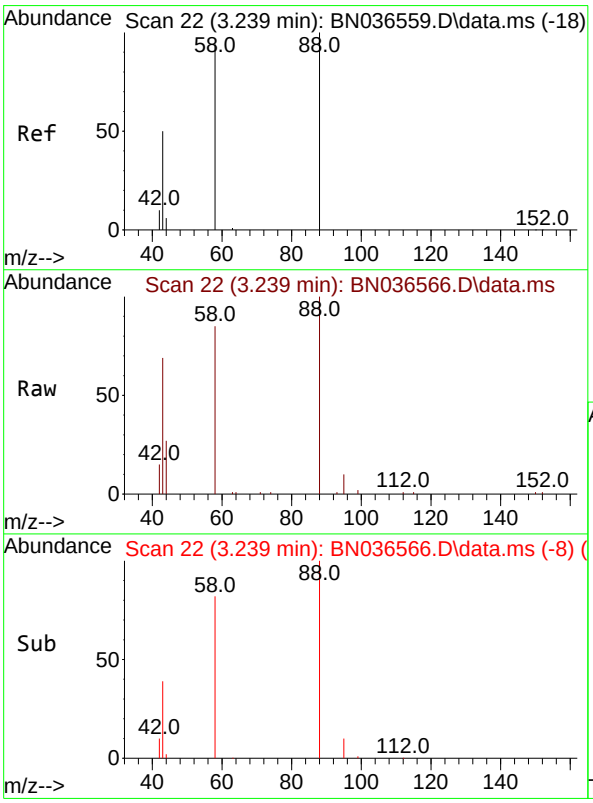
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:152 Resp: 1983

Ion	Ratio	Lower	Upper
152	100		
150	153.6	123.7	185.5
115	67.9	54.3	81.5

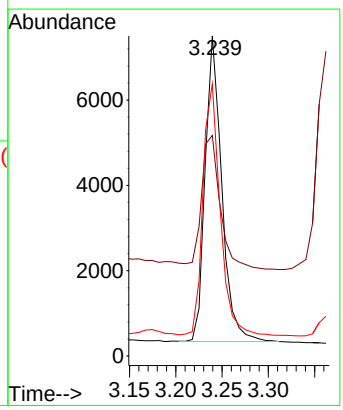


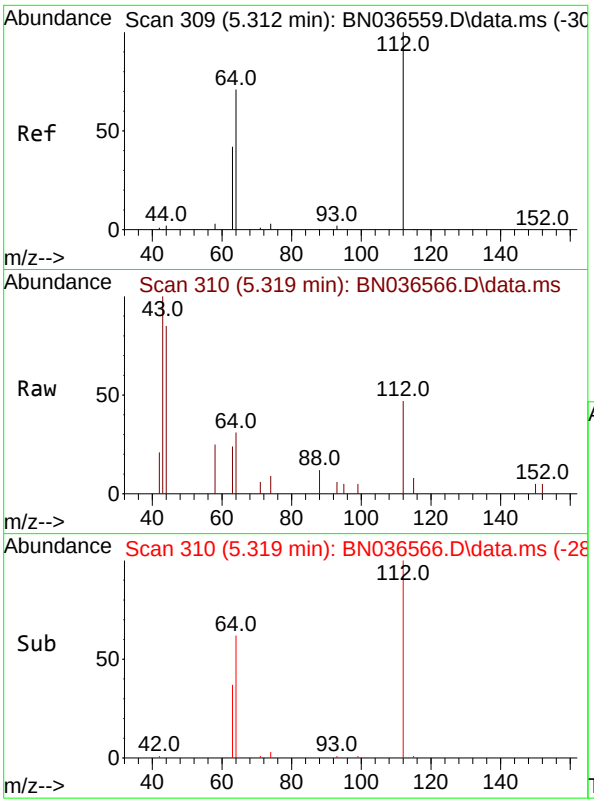


#2
1,4-Dioxane
Concen: 4.065 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion: 88 Resp: 8941

Ion	Ratio	Lower	Upper
88	100		
43	49.7	37.8	56.8
58	85.4	67.4	101.2



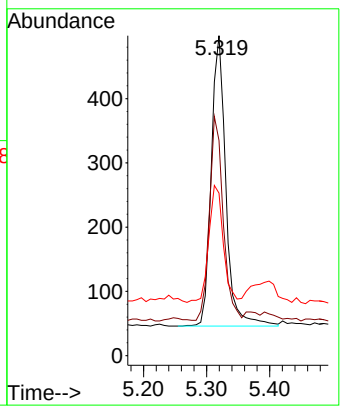


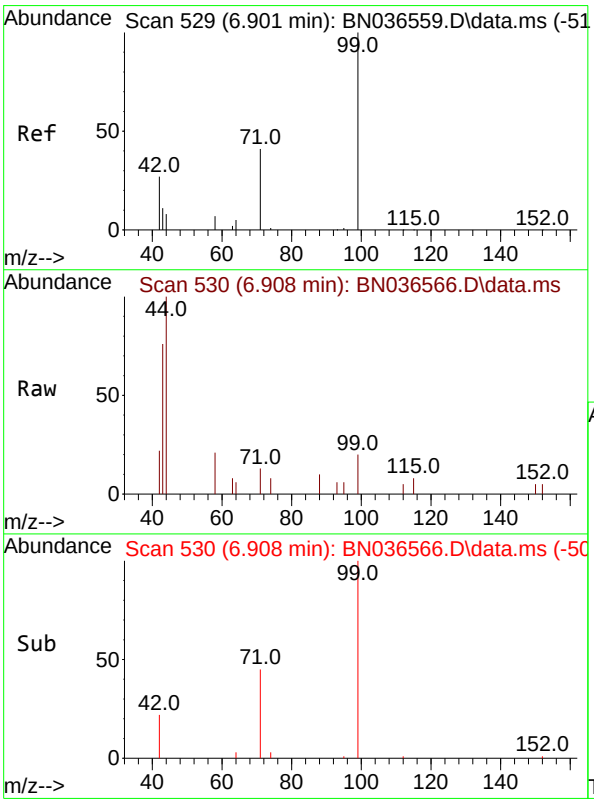
#4
2-Fluorophenol
Concen: 0.157 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:112 Resp: 726

Ion	Ratio	Lower	Upper
112	100		
64	66.0	53.1	79.7
63	39.4	31.8	47.8

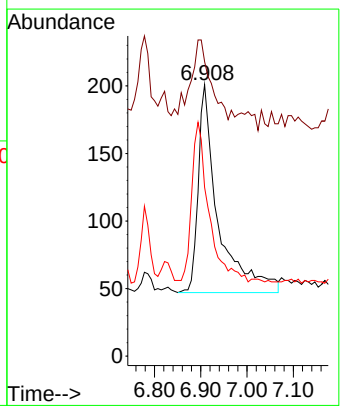


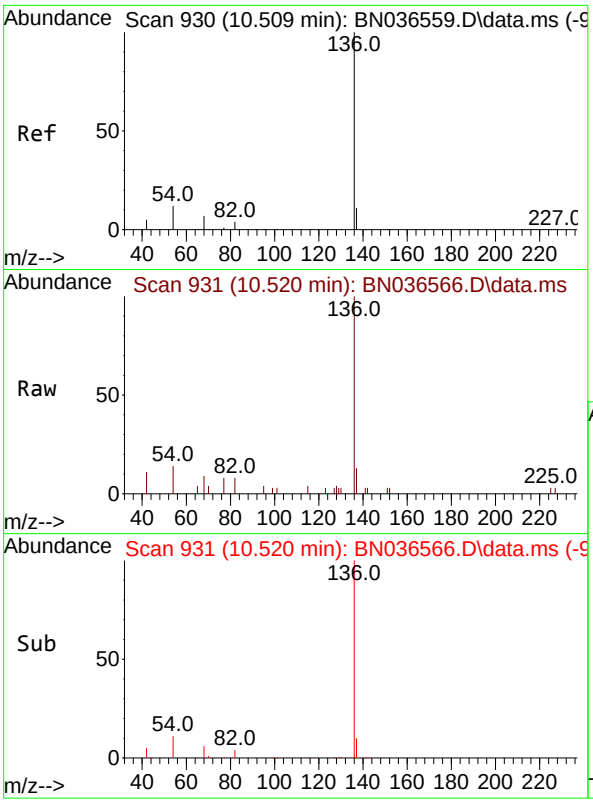


#5
Phenol-d6
Concen: 0.081 ng
RT: 6.908 min Scan# 530
Delta R.T. 0.007 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion: 99 Resp: 461

Ion	Ratio	Lower	Upper
99	100		
42	38.2	26.5	39.7
71	64.6	34.1	51.1#



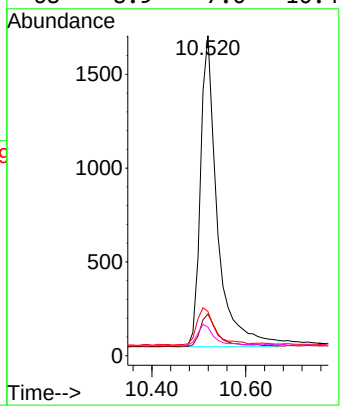


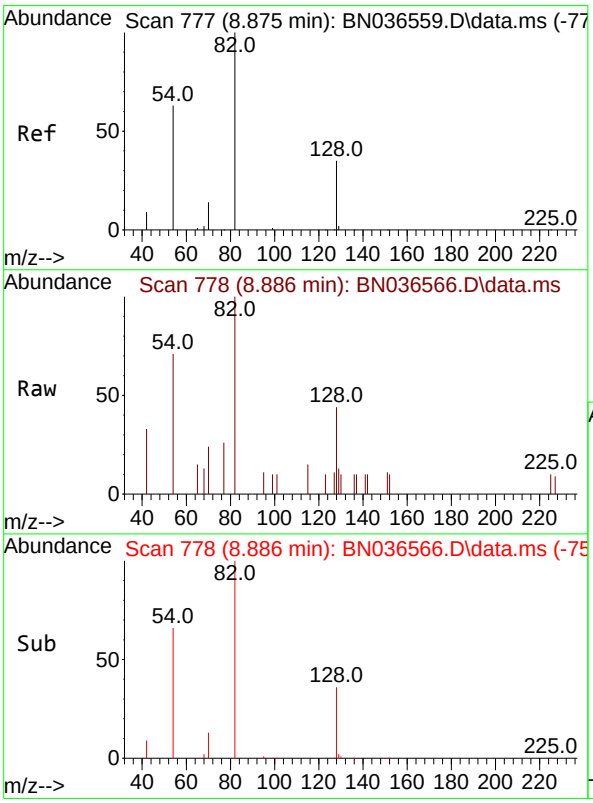
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.520 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:136 Resp: 4161

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.3	15.5
54	13.8	11.5	17.3
68	8.9	7.0	10.4

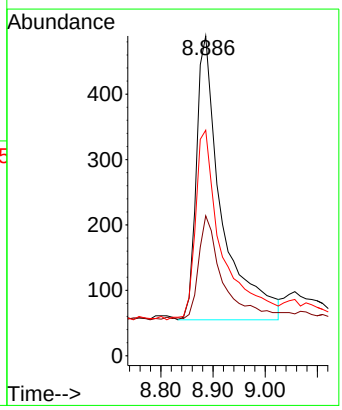


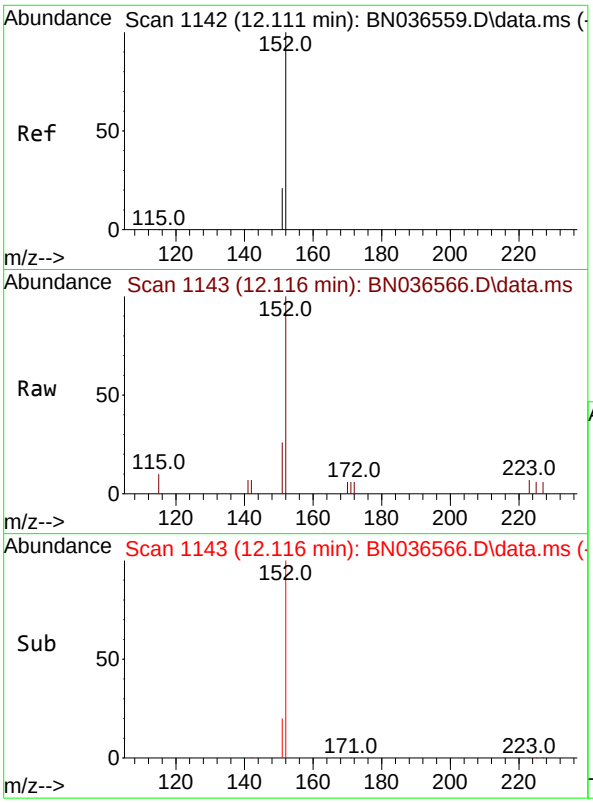


#8
Nitrobenzene-d5
Concen: 0.322 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion: 82 Resp: 1459

Ion	Ratio	Lower	Upper
82	100		
128	43.8	30.6	45.8
54	70.6	52.2	78.4



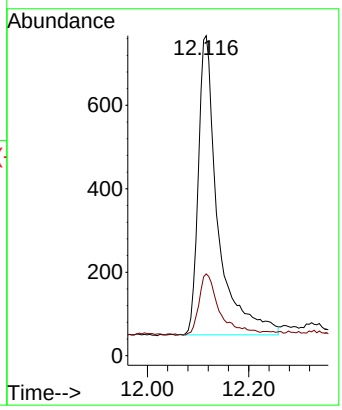


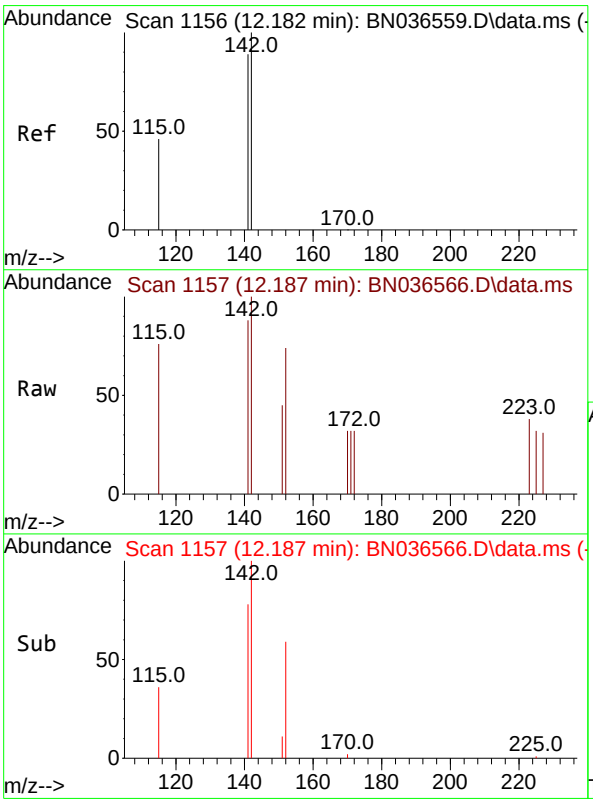
#11
2-Methylnaphthalene-d10
Concen: 0.311 ng
RT: 12.116 min Scan# 11
Delta R.T. 0.005 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:152 Resp: 1922

Ion	Ratio	Lower	Upper
152	100		
151	21.3	17.0	25.6

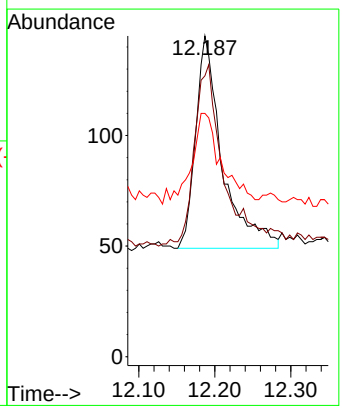


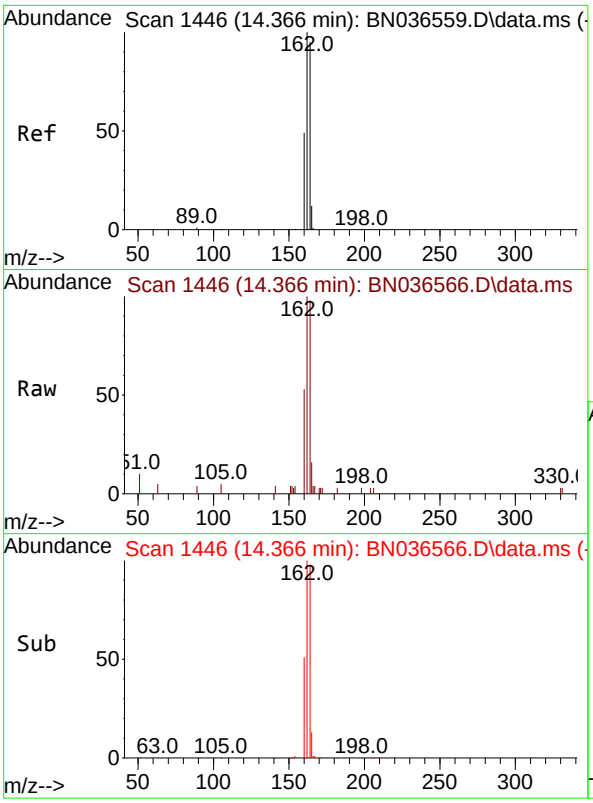


#12
2-Methylnaphthalene
Concen: 0.030 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion:142 Resp: 234

Ion	Ratio	Lower	Upper
142	100		
141	87.6	71.7	107.5
115	75.9	38.3	57.5#



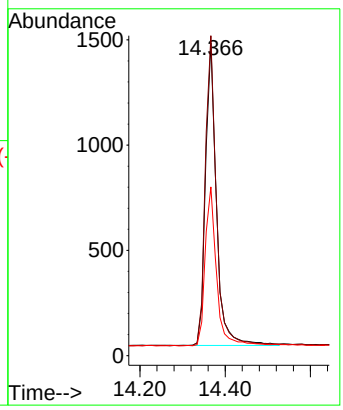


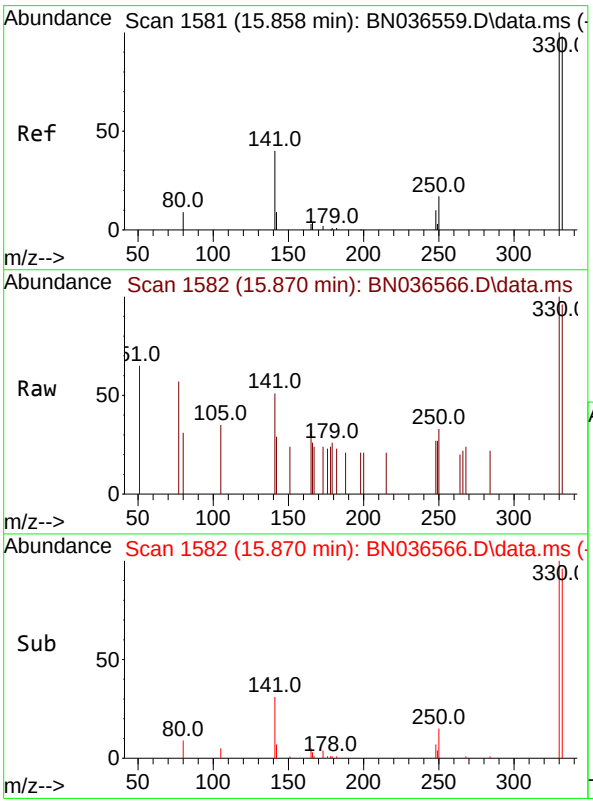
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:164 Resp: 2568

Ion	Ratio	Lower	Upper
164	100		
162	102.3	84.2	126.2
160	54.0	42.2	63.2

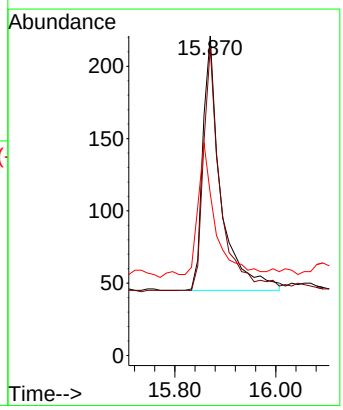


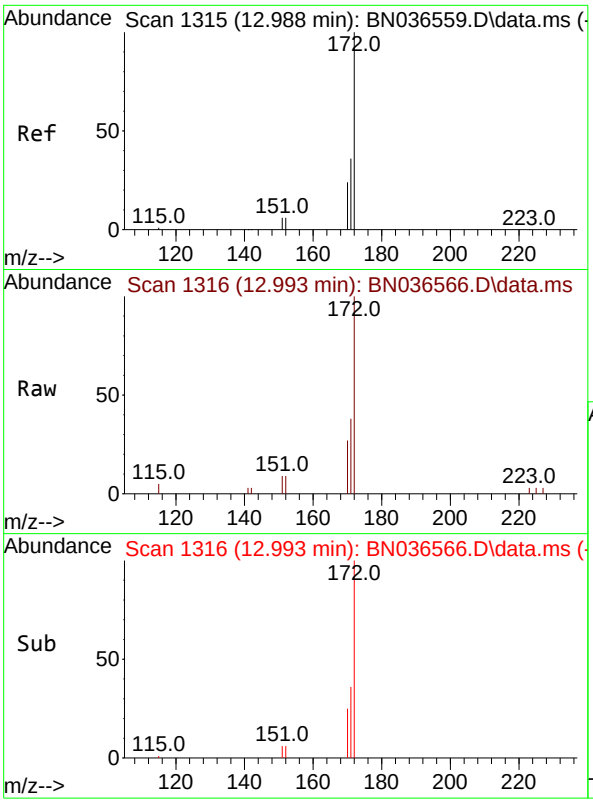


#14
2,4,6-Tribromophenol
Concen: 0.374 ng
RT: 15.870 min Scan# 1582
Delta R.T. 0.013 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion:330 Resp: 436

Ion	Ratio	Lower	Upper
330	100		
332	91.1	75.2	112.8
141	47.7	43.4	65.2



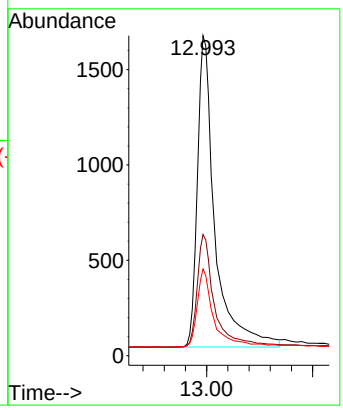


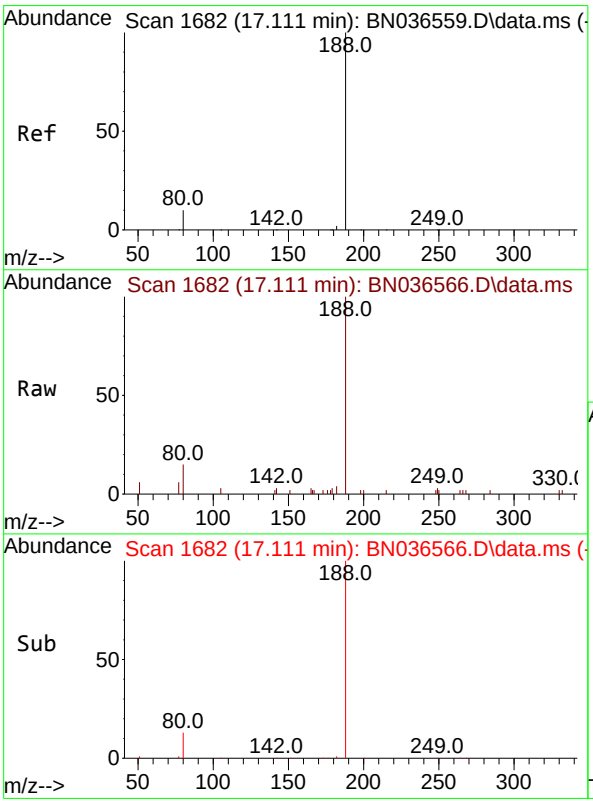
#15
2-Fluorobiphenyl
Concen: 0.320 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:172 Resp: 4776

Ion	Ratio	Lower	Upper
172	100		
171	37.8	29.5	44.3
170	27.1	20.2	30.4

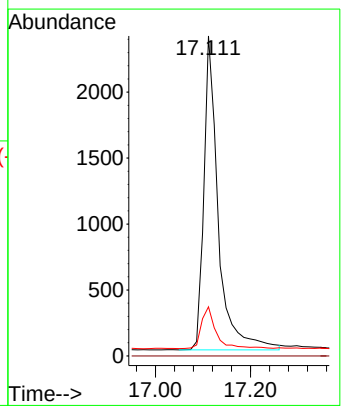


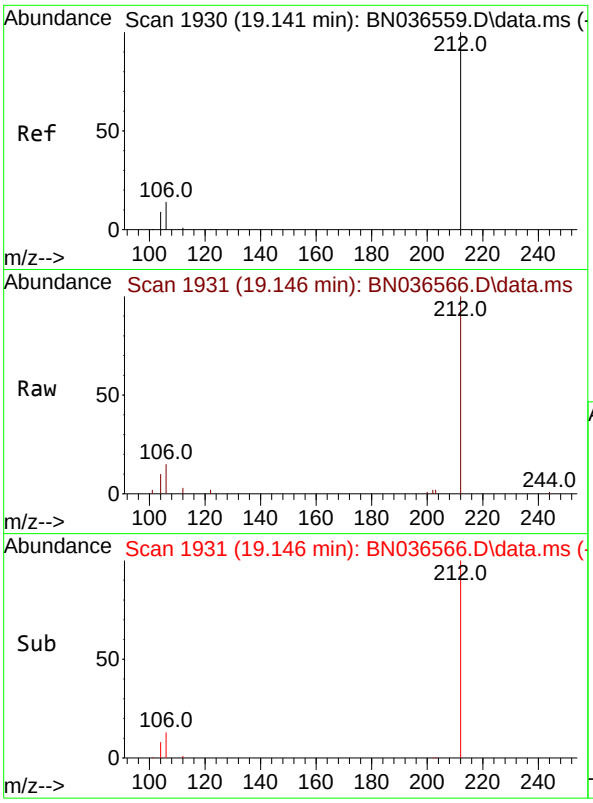


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion:188 Resp: 5031

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.3	8.8	13.2#



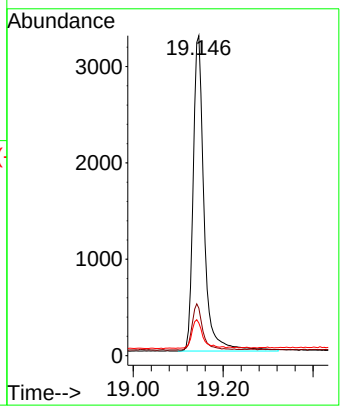


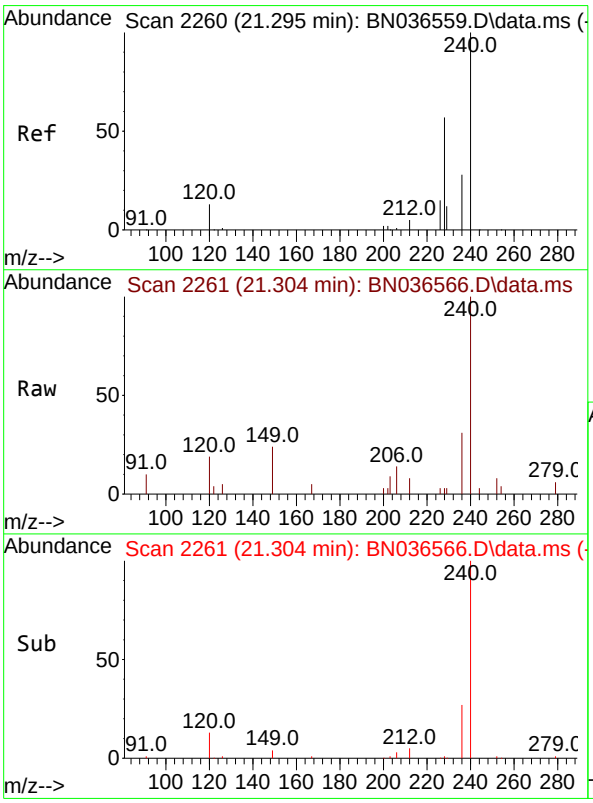
#27
Fluoranthene-d10
Concen: 0.430 ng
RT: 19.146 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:212 Resp: 5549

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.8	17.6
104	9.0	7.3	10.9

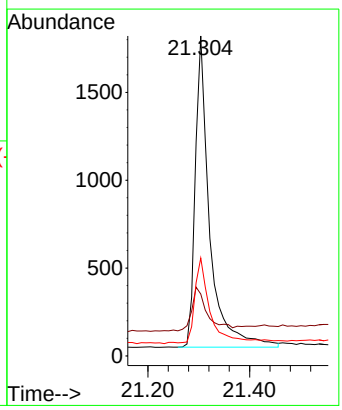


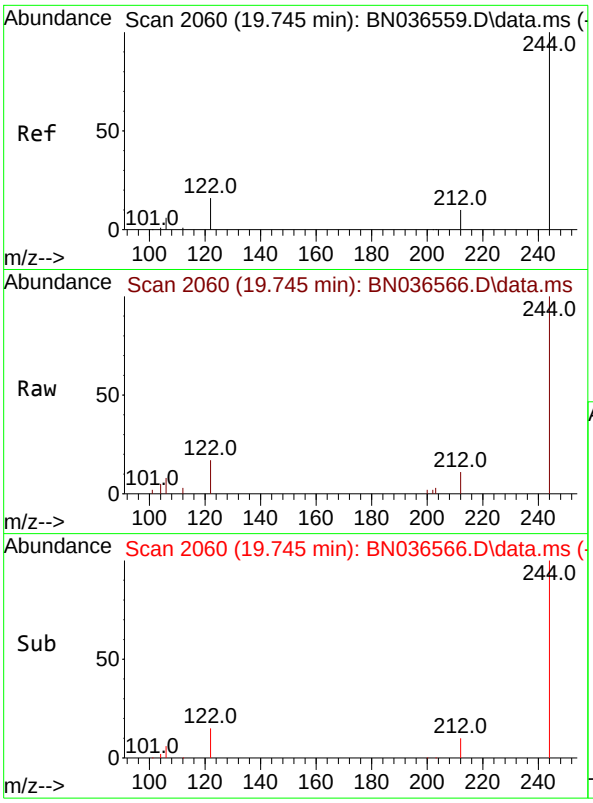


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2261
Delta R.T. 0.009 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion:240 Resp: 3465

Ion	Ratio	Lower	Upper
240	100		
120	19.3	14.6	22.0
236	30.6	24.1	36.1



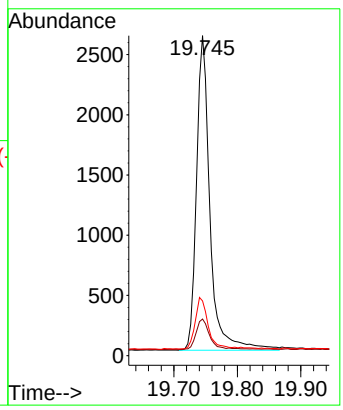


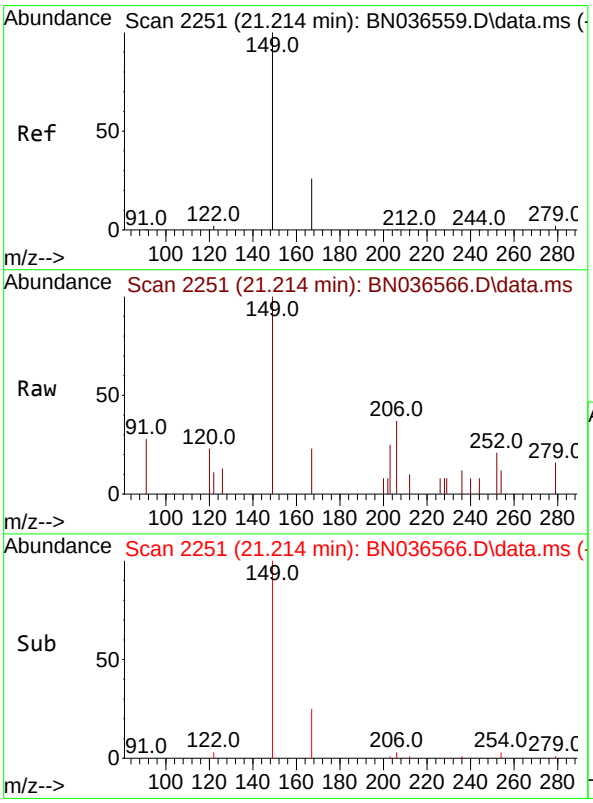
#31
Terphenyl-d14
Concen: 0.464 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:244 Resp: 3851

Ion	Ratio	Lower	Upper
244	100		
212	11.4	9.6	14.4
122	17.1	13.9	20.9

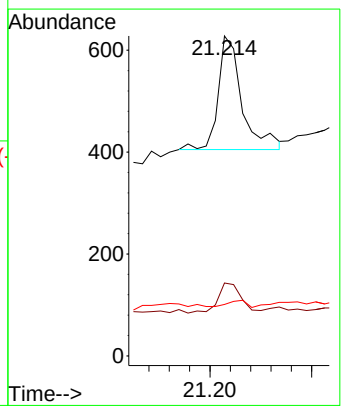


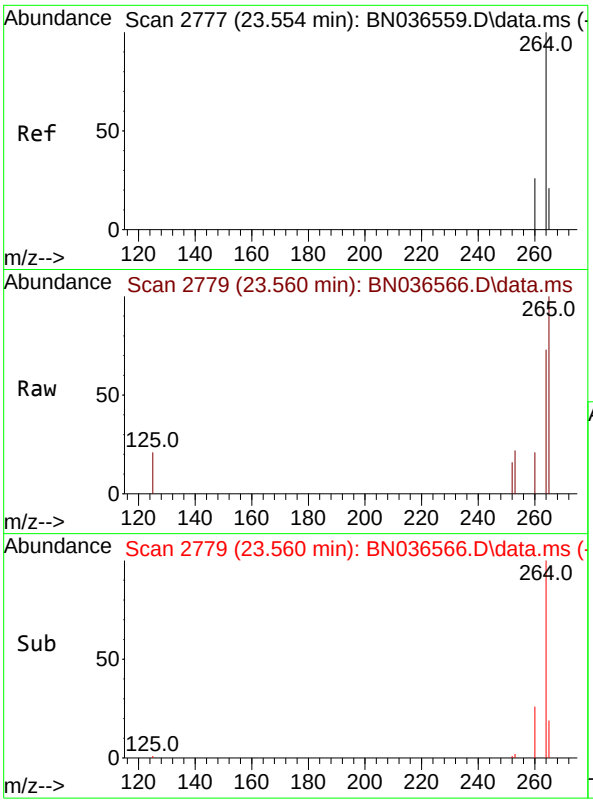


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.042 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Tgt Ion:149 Resp: 362

Ion	Ratio	Lower	Upper
149	100		
167	26.0	20.7	31.1
279	4.7	3.6	5.4



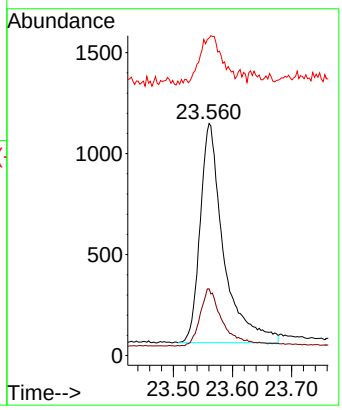


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.560 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN036566.D
Acq: 10 Mar 2025 17:50

Instrument :
BNA_N
ClientSampleId :
RE122D1-20250305

Tgt Ion:264 Resp: 2981

Ion	Ratio	Lower	Upper
264	100		
260	28.8	22.6	33.8
265	136.8	88.1	132.1#



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE126D1-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-04	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036567.D	1	03/10/25 11:35	03/10/25 18:26	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.40		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		118%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1870	7.724				
1146-65-2	Naphthalene-d8	4080	10.519				
15067-26-2	Acenaphthene-d10	2450	14.366				
1517-22-2	Phenanthrene-d10	5130	17.111				
1719-03-5	Chrysene-d12	3750	21.304				
1520-96-3	Perylene-d12	3090	23.557				

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\BN031025\
Data File : BN036567.D
Acq On : 10 Mar 2025 18:26
Operator : RC/JU
Sample : Q1531-04
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Quant Time: Mar 11 00:52:15 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

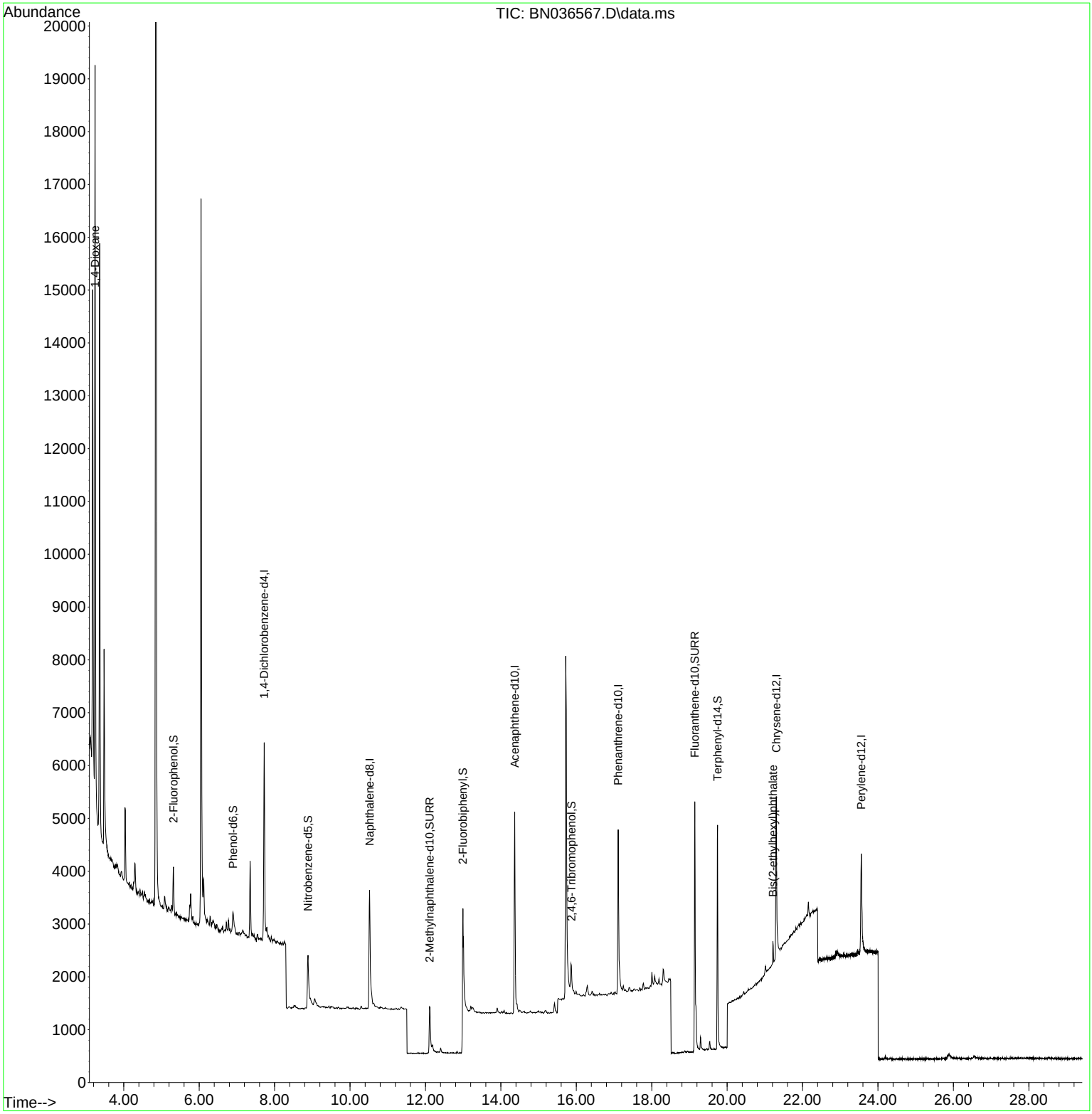
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	1865	0.400	ng	0.00
7) Naphthalene-d8	10.519	136	4078	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2447	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5134	0.400	ng	# 0.00
29) Chrysene-d12	21.304	240	3745	0.400	ng	0.00
35) Perylene-d12	23.557	264	3091	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	656	0.151	ng	0.00
5) Phenol-d6	6.901	99	386	0.072	ng	0.00
8) Nitrobenzene-d5	8.886	82	1357	0.306	ng	0.01
11) 2-Methylnaphthalene-d10	12.111	152	1961	0.323	ng	0.00
14) 2,4,6-Tribromophenol	15.870	330	424	0.382	ng	0.01
15) 2-Fluorobiphenyl	12.993	172	4605	0.323	ng	0.00
27) Fluoranthene-d10	19.141	212	5825	0.443	ng	0.00
31) Terphenyl-d14	19.745	244	4241	0.473	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	7136	3.449	ng	96
34) Bis(2-ethylhexyl)phtha...	21.214	149	483	0.052	ng	# 97

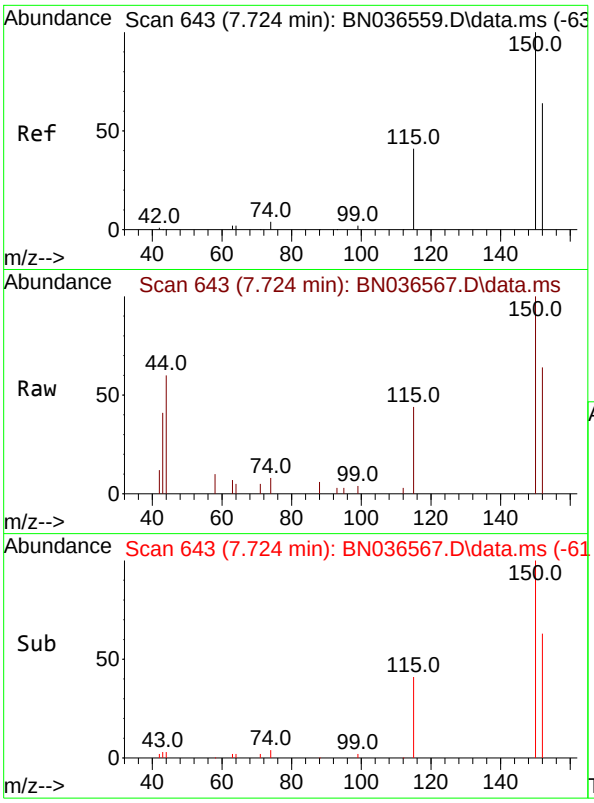
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036567.D
Acq On : 10 Mar 2025 18:26
Operator : RC/JU
Sample : Q1531-04
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Quant Time: Mar 11 00:52:15 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



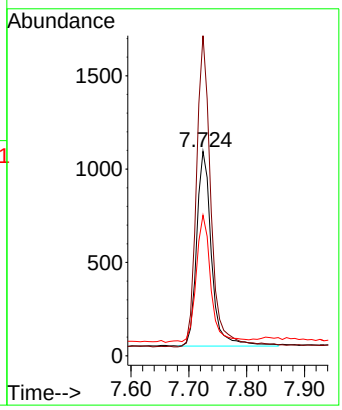


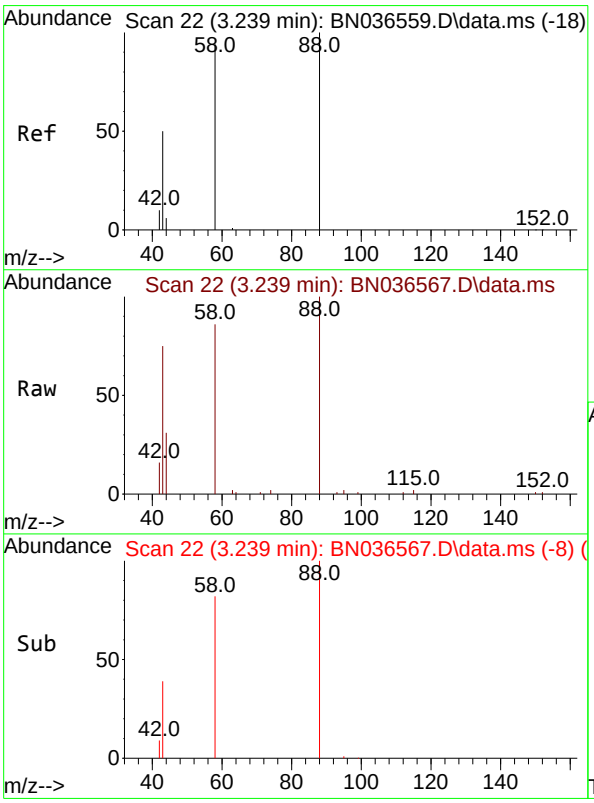
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:152 Resp: 1865

Ion	Ratio	Lower	Upper
152	100		
150	156.6	123.7	185.5
115	68.8	54.3	81.5

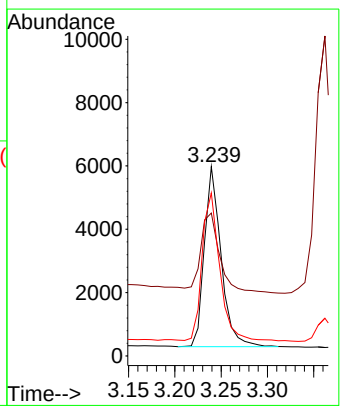


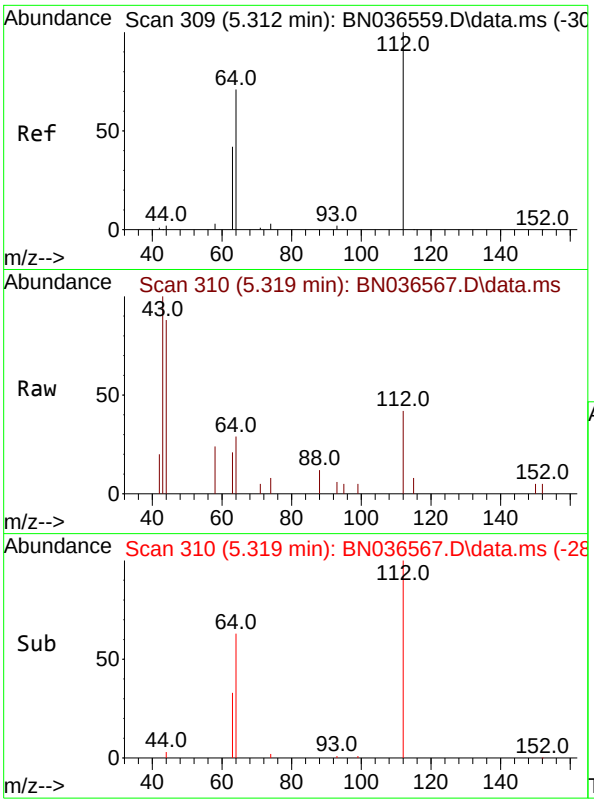


#2
1,4-Dioxane
Concen: 3.449 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion: 88 Resp: 7136

Ion	Ratio	Lower	Upper
88	100		
43	51.3	37.8	56.8
58	86.3	67.4	101.2



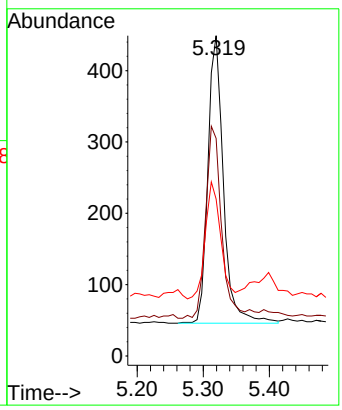


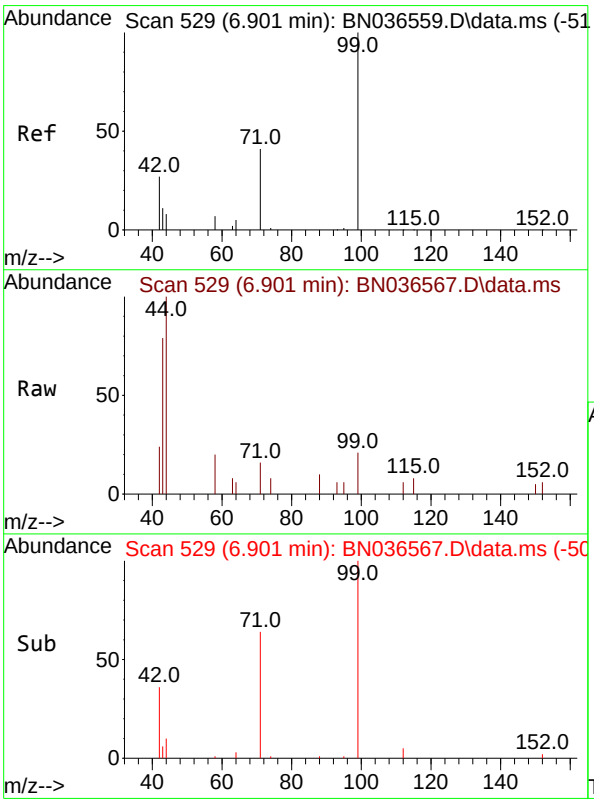
#4
2-Fluorophenol
Concen: 0.151 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:112 Resp: 656

Ion	Ratio	Lower	Upper
112	100		
64	67.4	53.1	79.7
63	39.9	31.8	47.8

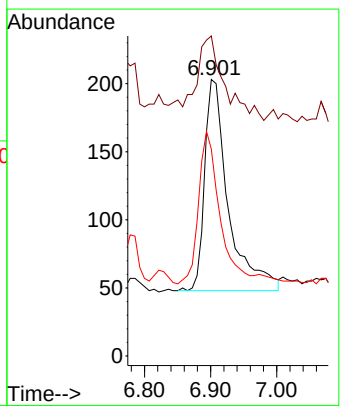


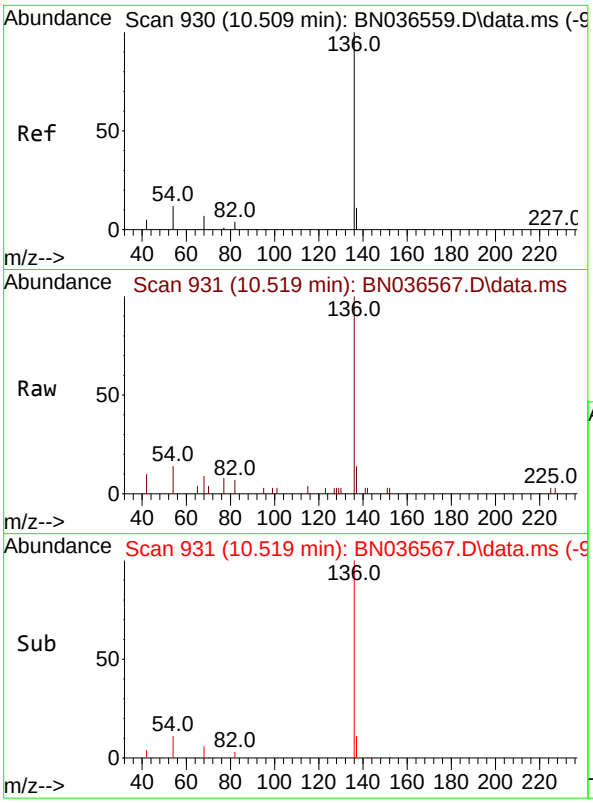


#5
Phenol-d6
Concen: 0.072 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion: 99 Resp: 386

Ion	Ratio	Lower	Upper
99	100		
42	46.6	26.5	39.7#
71	64.5	34.1	51.1#



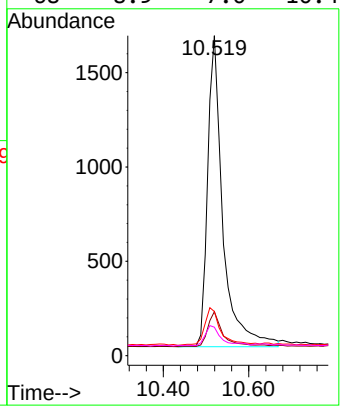


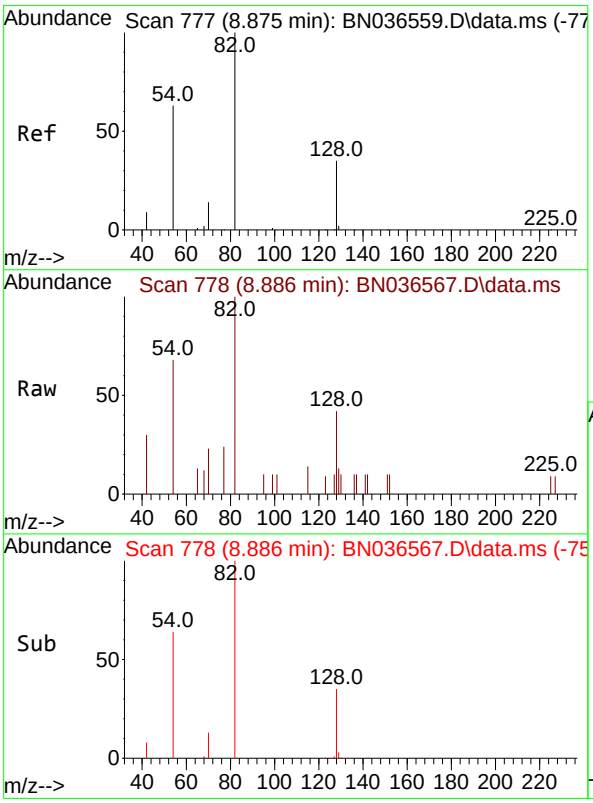
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.519 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:136 Resp: 4078

Ion	Ratio	Lower	Upper
136	100		
137	13.7	10.3	15.5
54	13.8	11.5	17.3
68	8.9	7.0	10.4

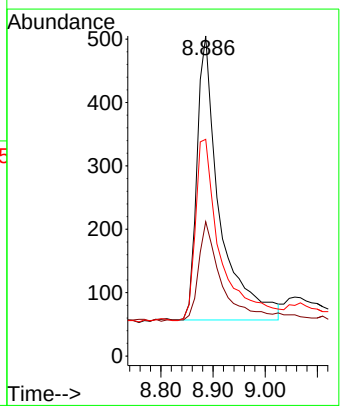


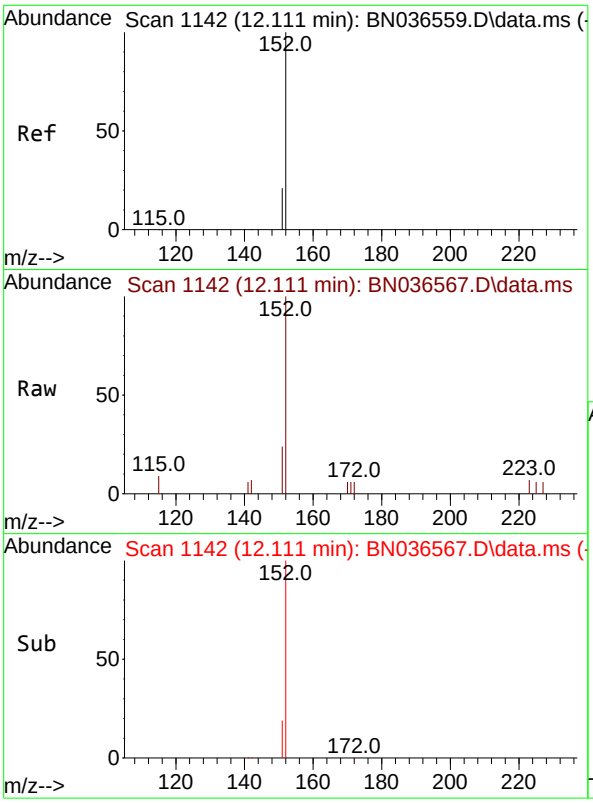


#8
Nitrobenzene-d5
Concen: 0.306 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion: 82 Resp: 1357

Ion	Ratio	Lower	Upper
82	100		
128	42.0	30.6	45.8
54	67.7	52.2	78.4



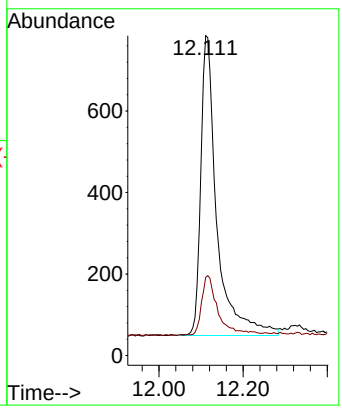


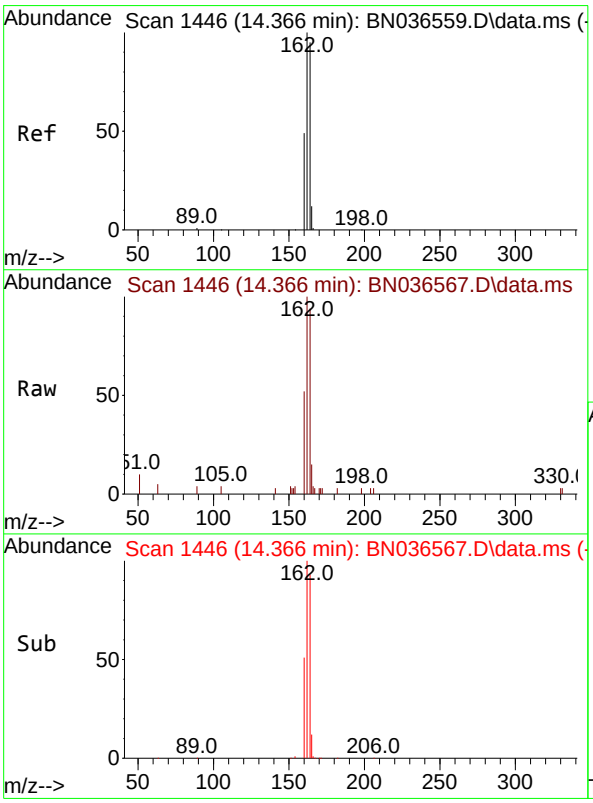
#11
2-Methylnaphthalene-d10
Concen: 0.323 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:152 Resp: 1961

Ion	Ratio	Lower	Upper
152	100		
151	19.5	17.0	25.6

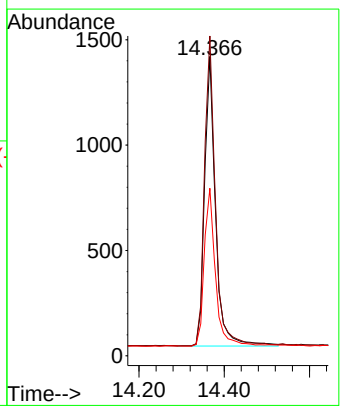


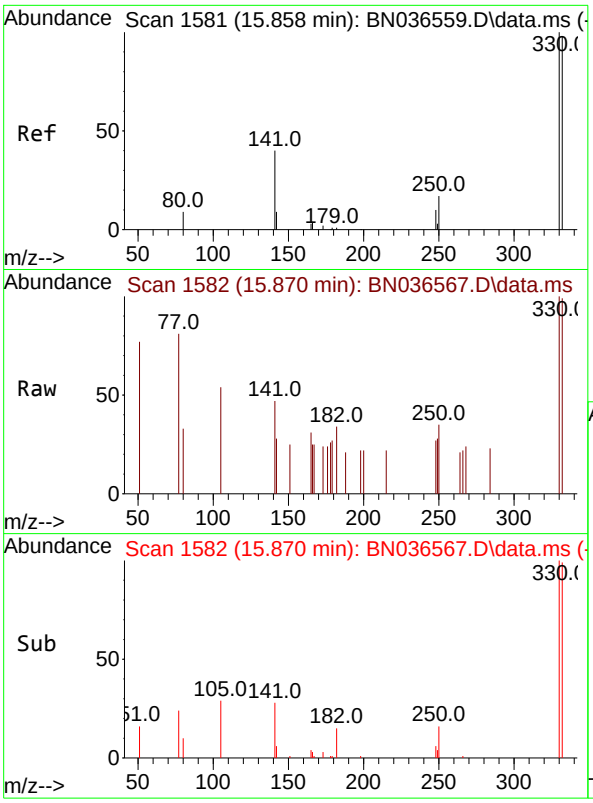


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion:164 Resp: 2447

Ion	Ratio	Lower	Upper
164	100		
162	106.8	84.2	126.2
160	55.9	42.2	63.2



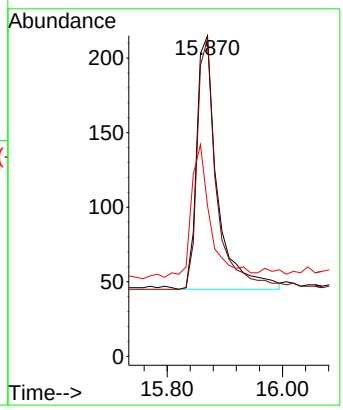


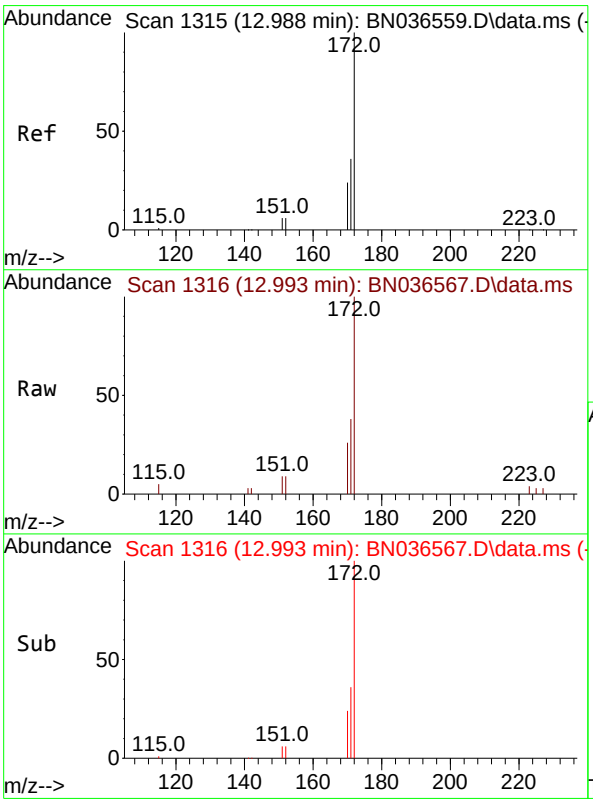
#14
2,4,6-Tribromophenol
Concen: 0.382 ng
RT: 15.870 min Scan# 1
Delta R.T. 0.013 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:330 Resp: 424

Ion	Ratio	Lower	Upper
330	100		
332	93.6	75.2	112.8
141	51.9	43.4	65.2

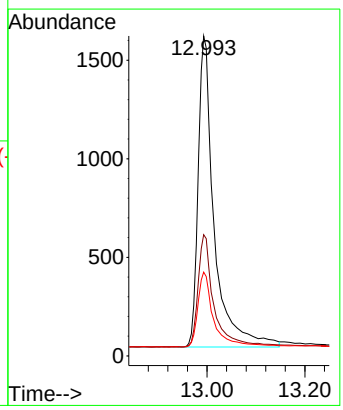


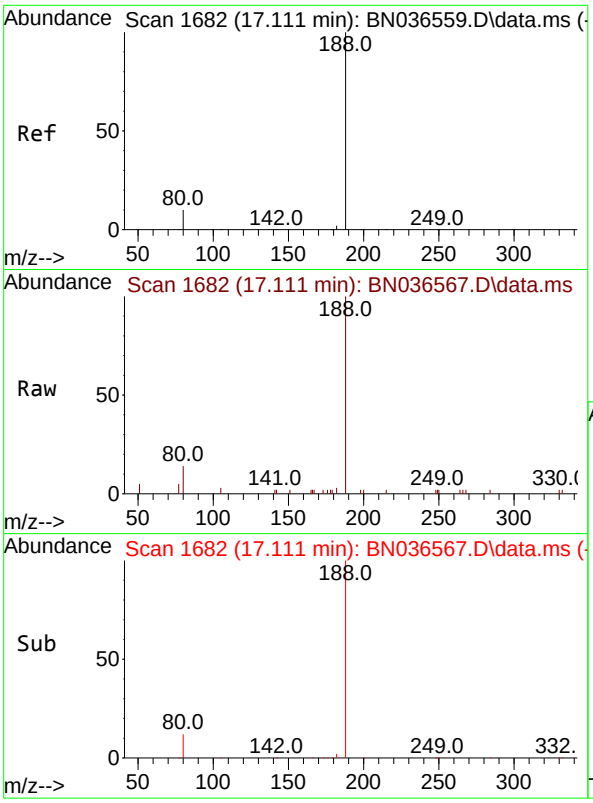


#15
2-Fluorobiphenyl
Concen: 0.323 ng
RT: 12.993 min Scan# 1316
Delta R.T. 0.005 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion:172 Resp: 4605

Ion	Ratio	Lower	Upper
172	100		
171	37.9	29.5	44.3
170	26.2	20.2	30.4



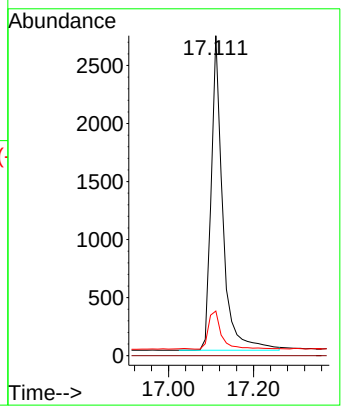


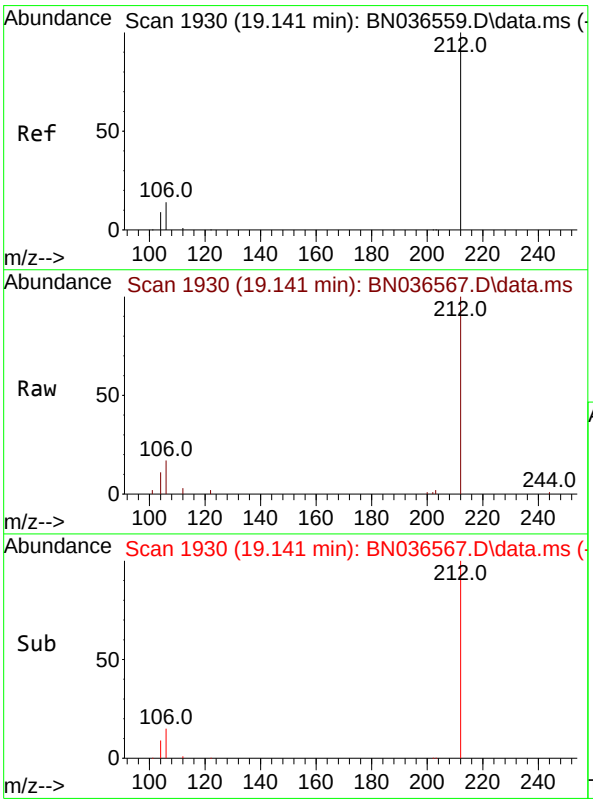
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:188 Resp: 5134

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	14.0	8.8	13.2#

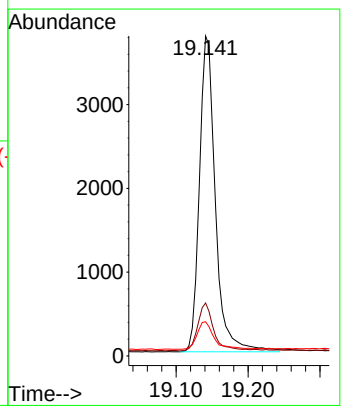


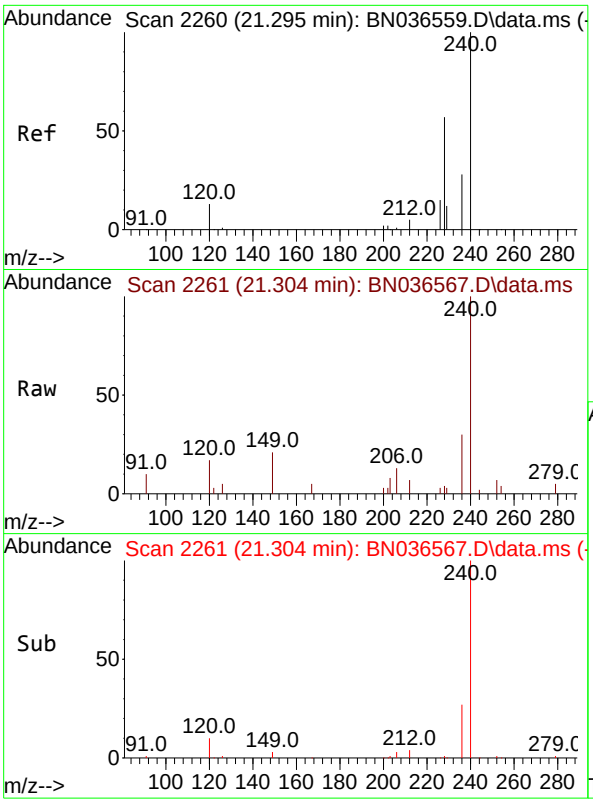


#27
Fluoranthene-d10
Concen: 0.443 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion:212 Resp: 5825

Ion	Ratio	Lower	Upper
212	100		
106	15.3	11.8	17.6
104	9.3	7.3	10.9



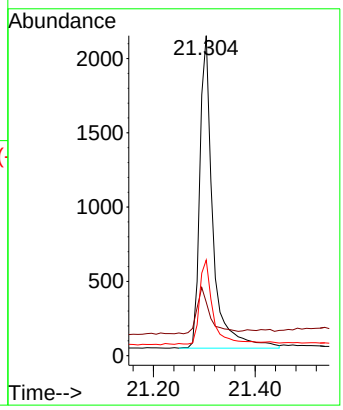


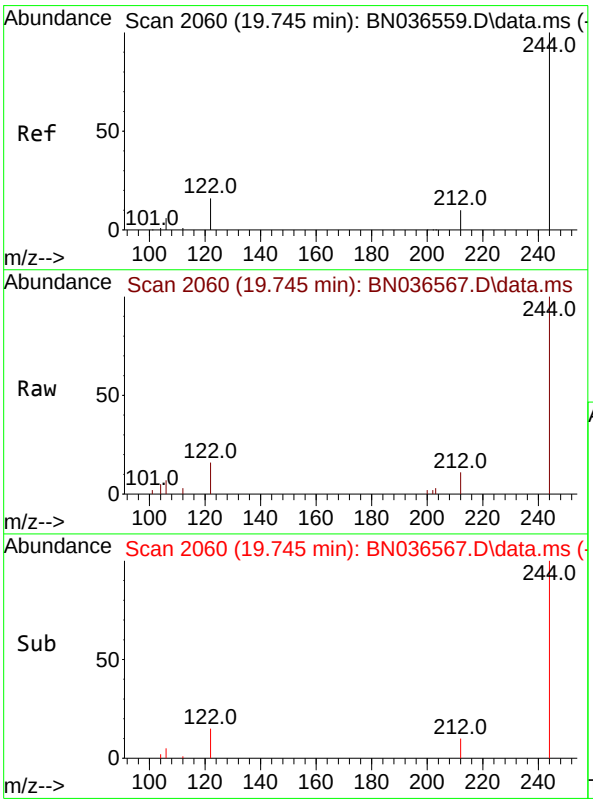
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:240 Resp: 3745

Ion	Ratio	Lower	Upper
240	100		
120	16.7	14.6	22.0
236	29.9	24.1	36.1

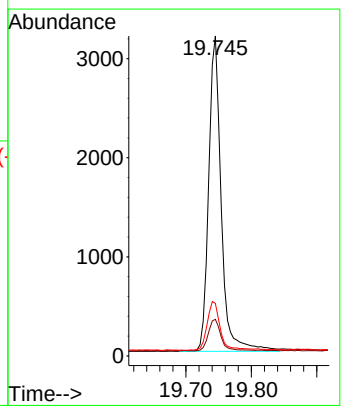


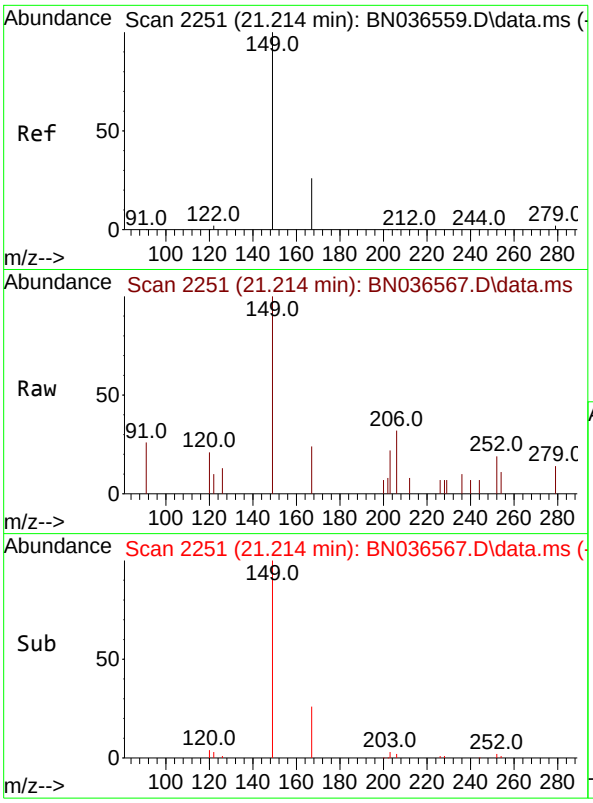


#31
Terphenyl-d14
Concen: 0.473 ng
RT: 19.745 min Scan# 2060
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion:244 Resp: 4241

Ion	Ratio	Lower	Upper
244	100		
212	11.5	9.6	14.4
122	16.4	13.9	20.9



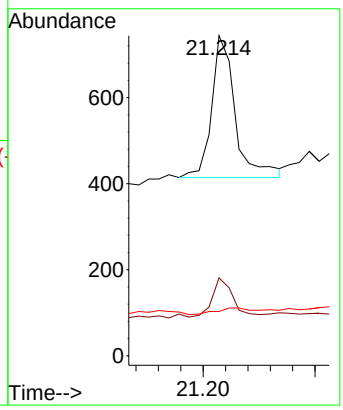


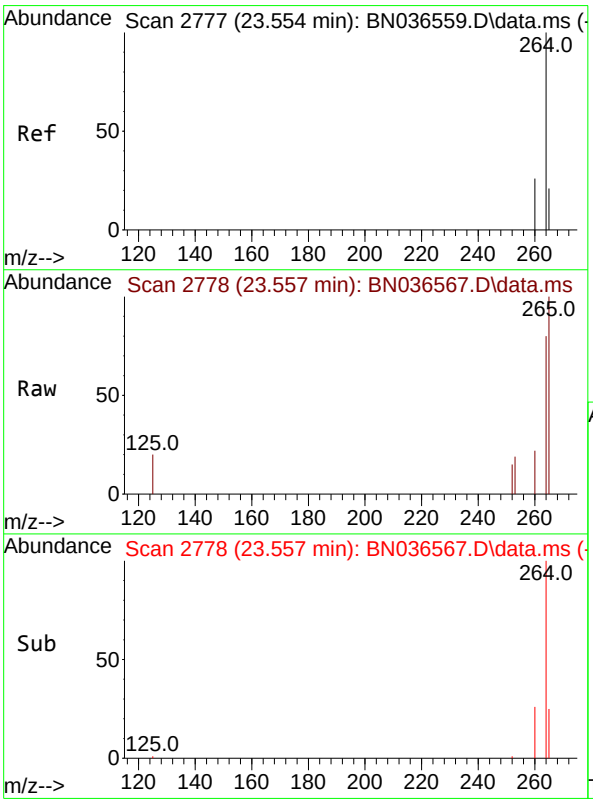
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.052 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Instrument :
BNA_N
ClientSampleId :
RE126D1-20250306

Tgt Ion:149 Resp: 483

Ion	Ratio	Lower	Upper
149	100		
167	26.7	20.7	31.1
279	7.2	3.6	5.4#

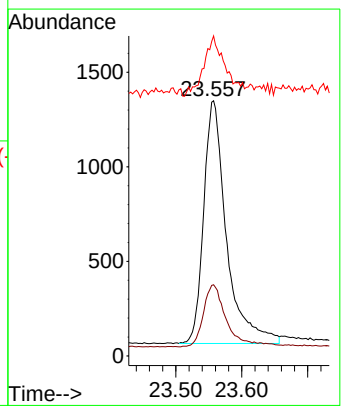




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2778
Delta R.T. 0.003 min
Lab File: BN036567.D
Acq: 10 Mar 2025 18:26

Tgt Ion:264 Resp: 3091

Ion	Ratio	Lower	Upper
264	100		
260	27.9	22.6	33.8
265	125.4	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE126D2-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-05	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	920 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036568.D	1	03/10/25 11:35	03/10/25 19:02	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.30		0.070	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		135%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2060	7.725				
1146-65-2	Naphthalene-d8	4560	10.52				
15067-26-2	Acenaphthene-d10	2750	14.366				
1517-22-2	Phenanthrene-d10	5630	17.111				
1719-03-5	Chrysene-d12	3900	21.304				
1520-96-3	Perylene-d12	3040	23.557				

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\BN031025\
Data File : BN036568.D
Acq On : 10 Mar 2025 19:02
Operator : RC/JU
Sample : Q1531-05
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Quant Time: Mar 11 00:52:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

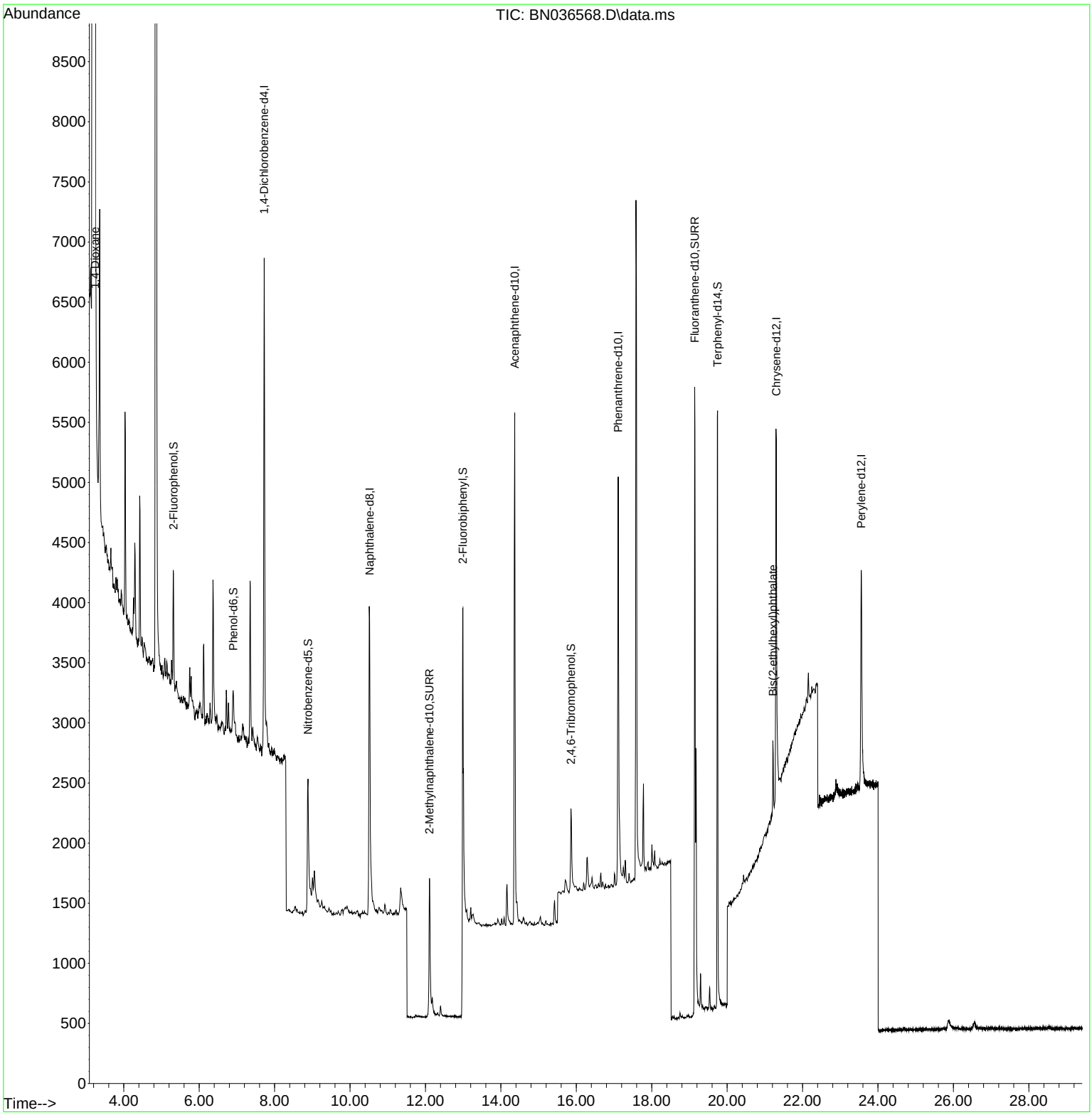
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.725	152	2064	0.400	ng	0.00
7) Naphthalene-d8	10.520	136	4561	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2745	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5634	0.400	ng	0.00
29) Chrysene-d12	21.304	240	3902	0.400	ng	0.00
35) Perylene-d12	23.557	264	3043	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.320	112	765	0.159	ng	0.00
5) Phenol-d6	6.908	99	489	0.082	ng	0.00
8) Nitrobenzene-d5	8.886	82	1487	0.300	ng	0.01
11) 2-Methylnaphthalene-d10	12.106	152	2289	0.337	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	512	0.411	ng	0.00
15) 2-Fluorobiphenyl	12.993	172	5640	0.353	ng	0.00
27) Fluoranthene-d10	19.141	212	6472	0.448	ng	0.00
31) Terphenyl-d14	19.745	244	5051	0.540	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.240	88	8987	3.925	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	652	0.067	ng	# 96

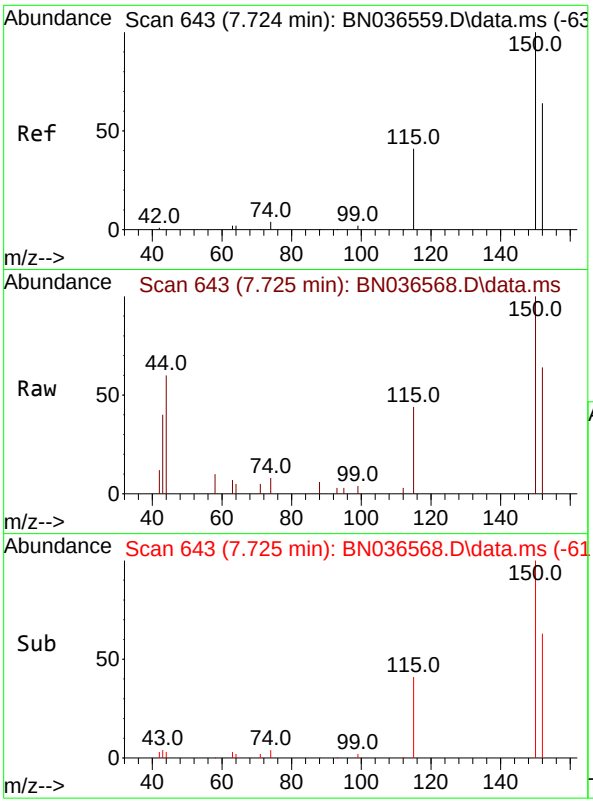
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036568.D
Acq On : 10 Mar 2025 19:02
Operator : RC/JU
Sample : Q1531-05
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Quant Time: Mar 11 00:52:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



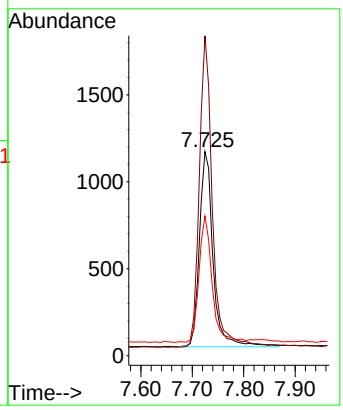


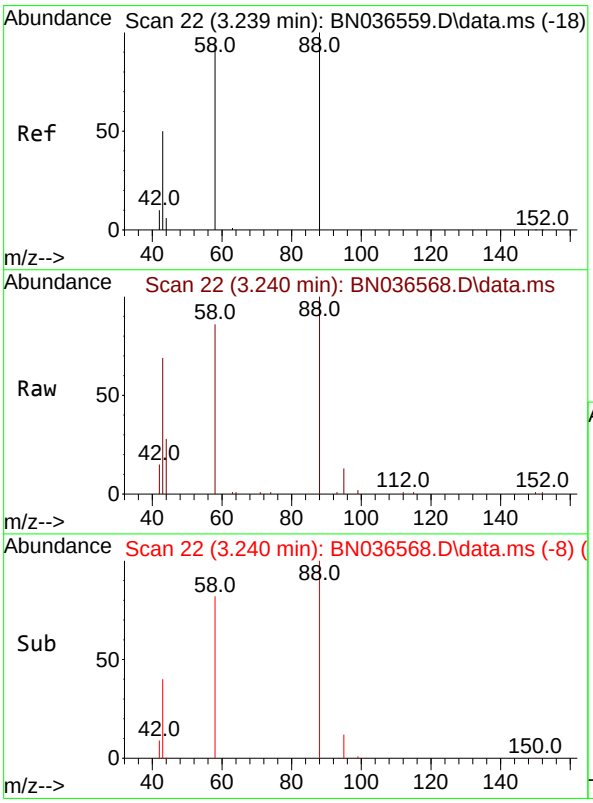
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.725 min Scan# 64
Delta R.T. 0.001 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:152 Resp: 2064

Ion	Ratio	Lower	Upper
152	100		
150	156.9	123.7	185.5
115	68.5	54.3	81.5

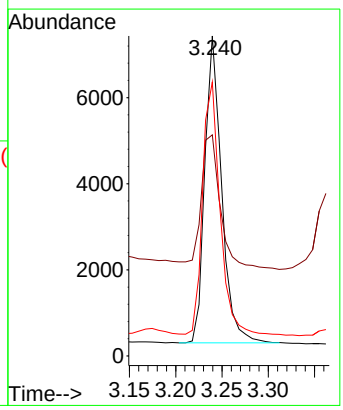


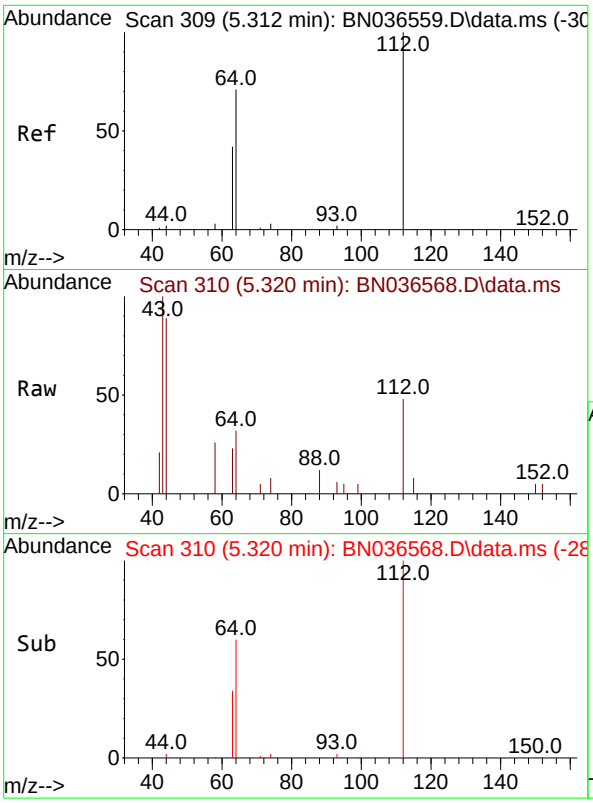


#2
1,4-Dioxane
Concen: 3.925 ng
RT: 3.240 min Scan# 22
Delta R.T. 0.001 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion: 88 Resp: 8987

Ion	Ratio	Lower	Upper
88	100		
43	50.3	37.8	56.8
58	84.9	67.4	101.2



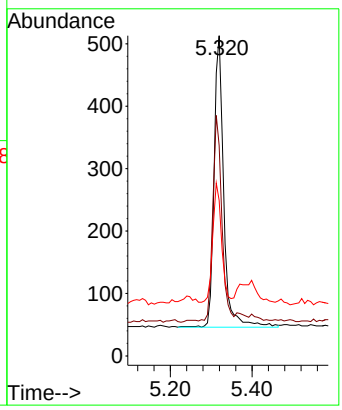


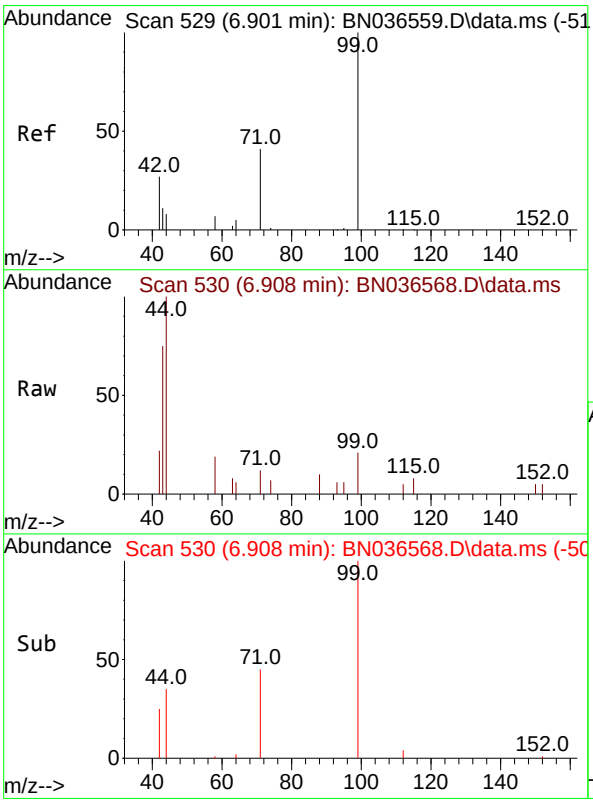
#4
2-Fluorophenol
Concen: 0.159 ng
RT: 5.320 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:112 Resp: 765

Ion	Ratio	Lower	Upper
112	100		
64	65.0	53.1	79.7
63	37.0	31.8	47.8

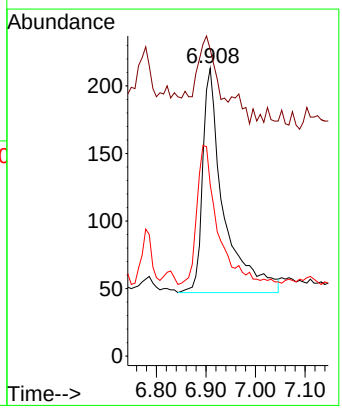


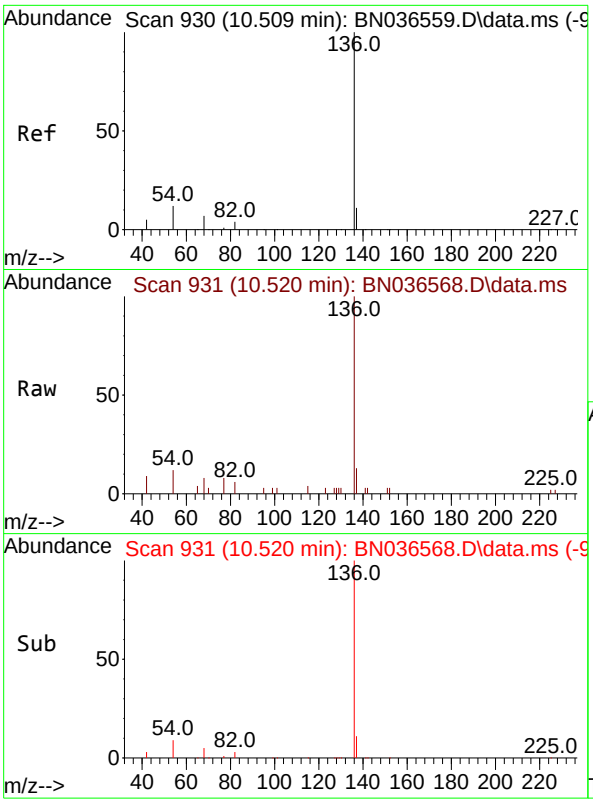


#5
Phenol-d6
Concen: 0.082 ng
RT: 6.908 min Scan# 530
Delta R.T. 0.007 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion: 99 Resp: 489

Ion	Ratio	Lower	Upper
99	100		
42	20.7	26.5	39.7#
71	60.5	34.1	51.1#



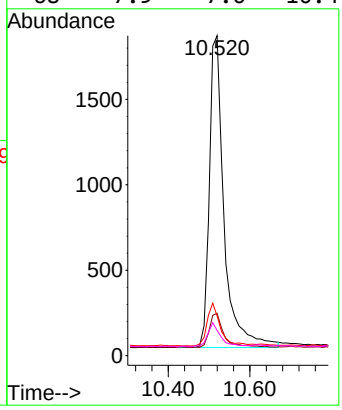


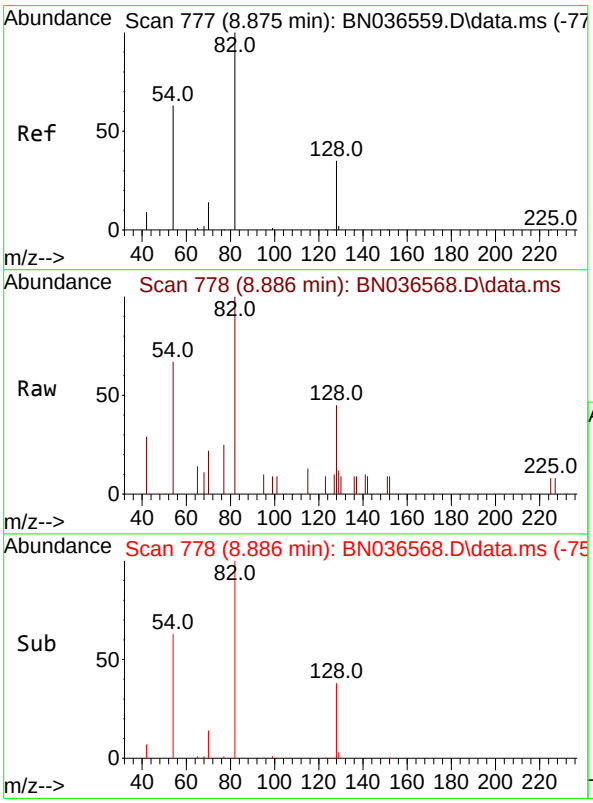
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.520 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:136 Resp: 4561

Ion	Ratio	Lower	Upper
136	100		
137	13.2	10.3	15.5
54	12.4	11.5	17.3
68	7.9	7.0	10.4

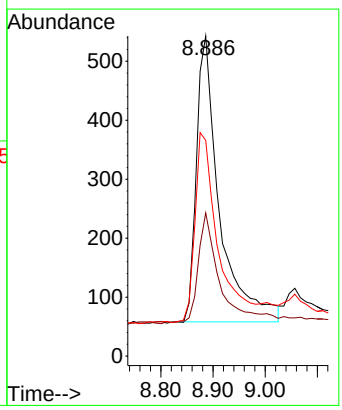


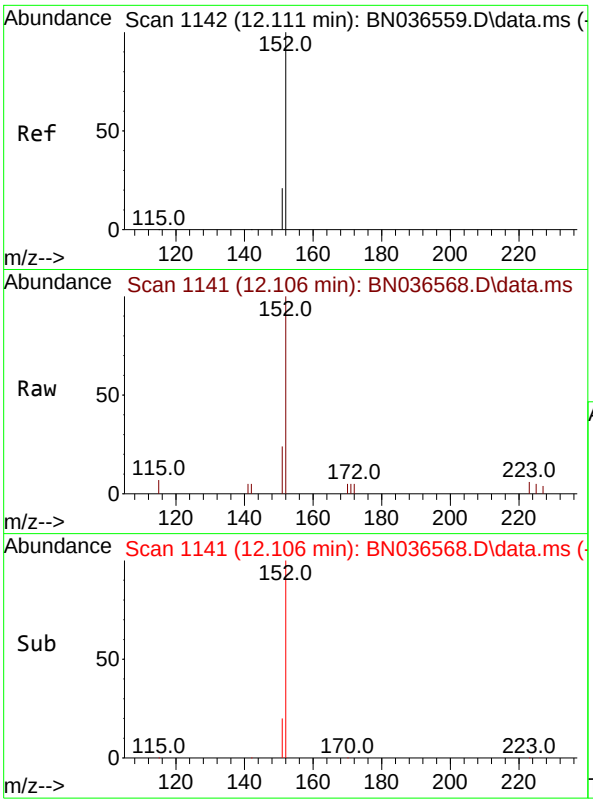


#8
Nitrobenzene-d5
Concen: 0.300 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion: 82 Resp: 1487

Ion	Ratio	Lower	Upper
82	100		
128	44.8	30.6	45.8
54	67.4	52.2	78.4



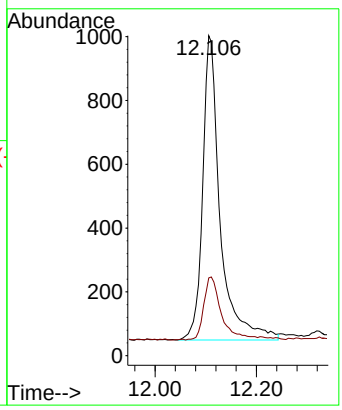


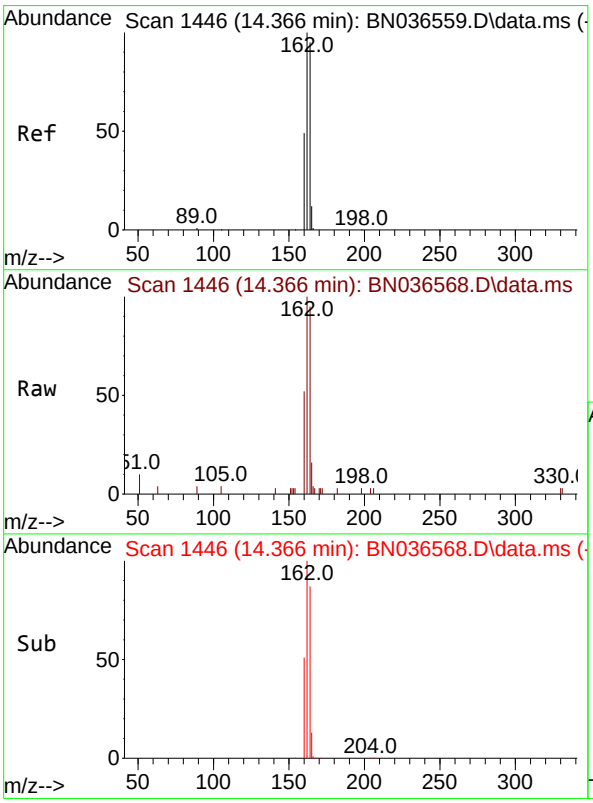
#11
2-Methylnaphthalene-d10
Concen: 0.337 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:152 Resp: 2289

Ion	Ratio	Lower	Upper
152	100		
151	21.0	17.0	25.6

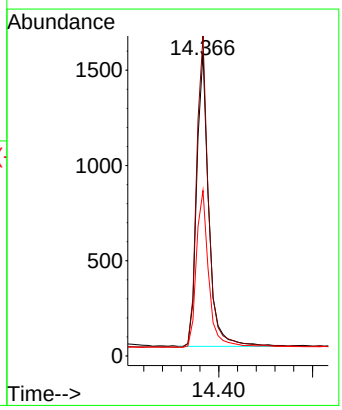


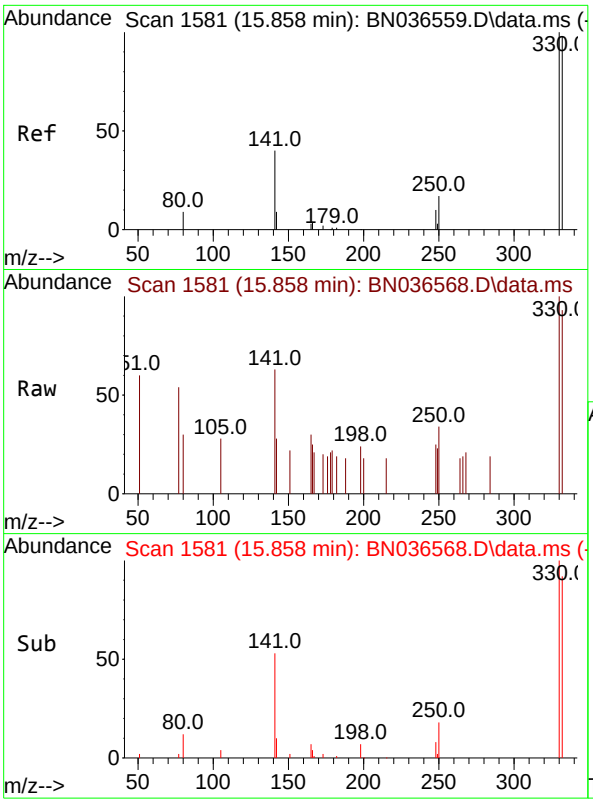


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion:164 Resp: 2745

Ion	Ratio	Lower	Upper
164	100		
162	105.7	84.2	126.2
160	54.7	42.2	63.2



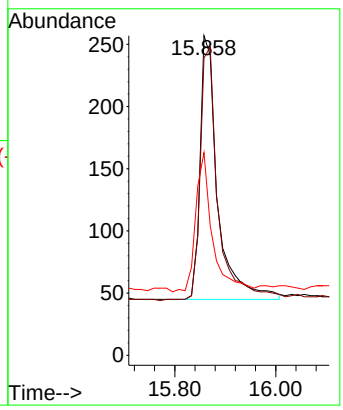


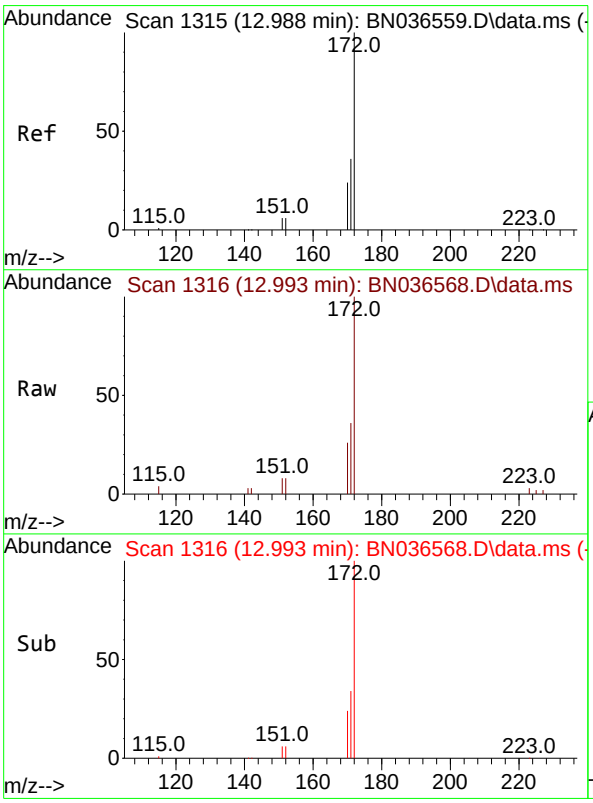
#14
2,4,6-Tribromophenol
Concen: 0.411 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:330 Resp: 512

Ion	Ratio	Lower	Upper
330	100		
332	99.4	75.2	112.8
141	50.4	43.4	65.2

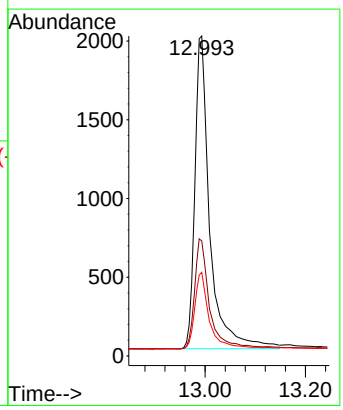


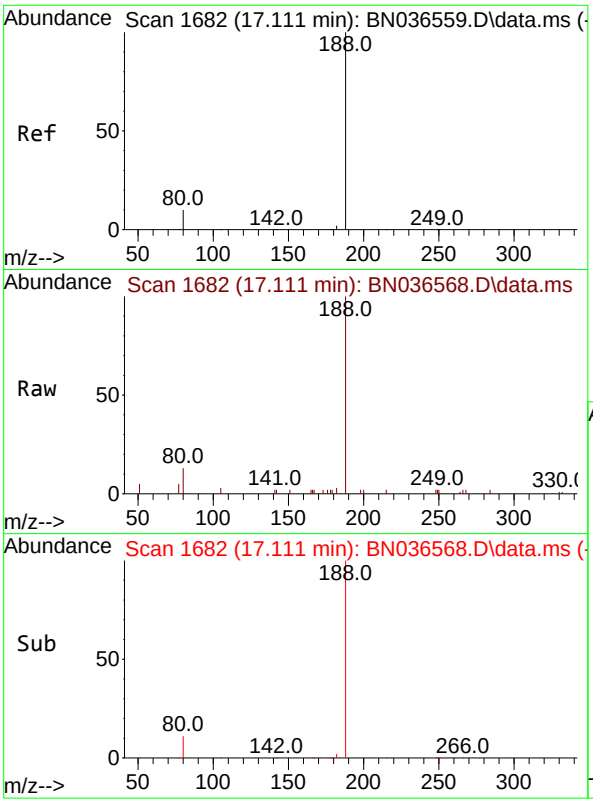


#15
2-Fluorobiphenyl
Concen: 0.353 ng
RT: 12.993 min Scan# 1316
Delta R.T. 0.005 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion:172 Resp: 5640

Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	26.1	20.2	30.4



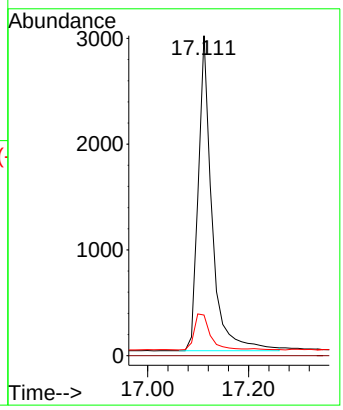


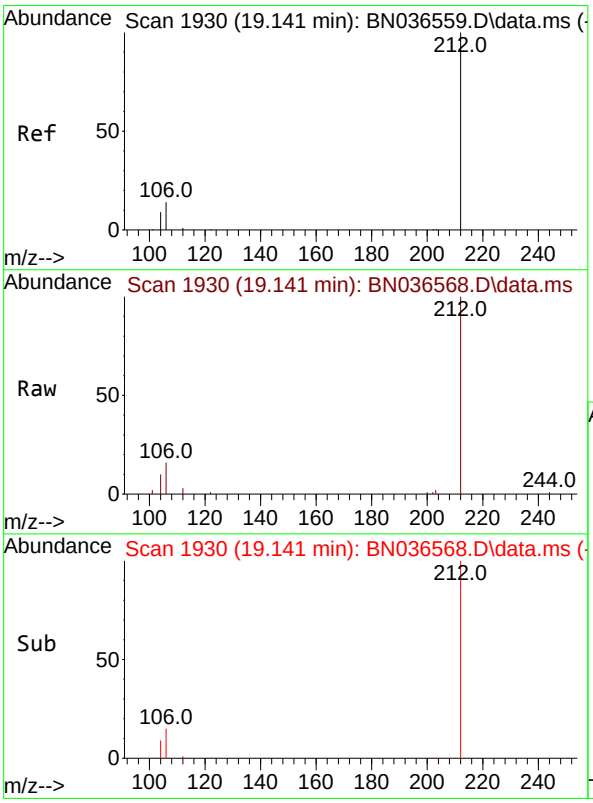
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:188 Resp: 5634

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.7	8.8	13.2

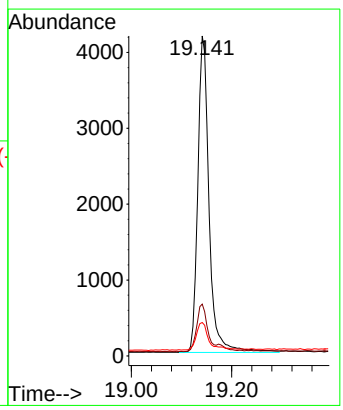


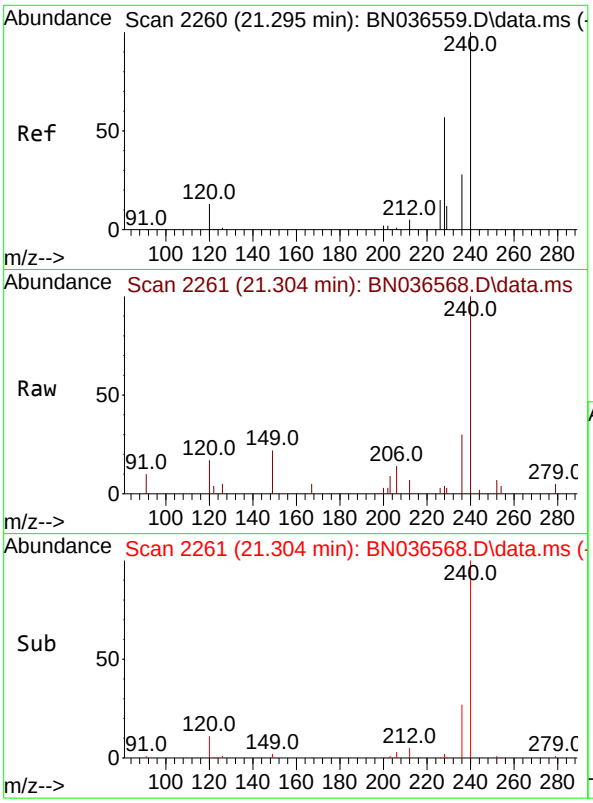


#27
Fluoranthene-d10
Concen: 0.448 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion:212 Resp: 6472

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.8	17.6
104	9.5	7.3	10.9



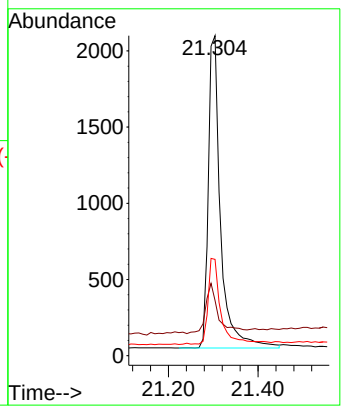


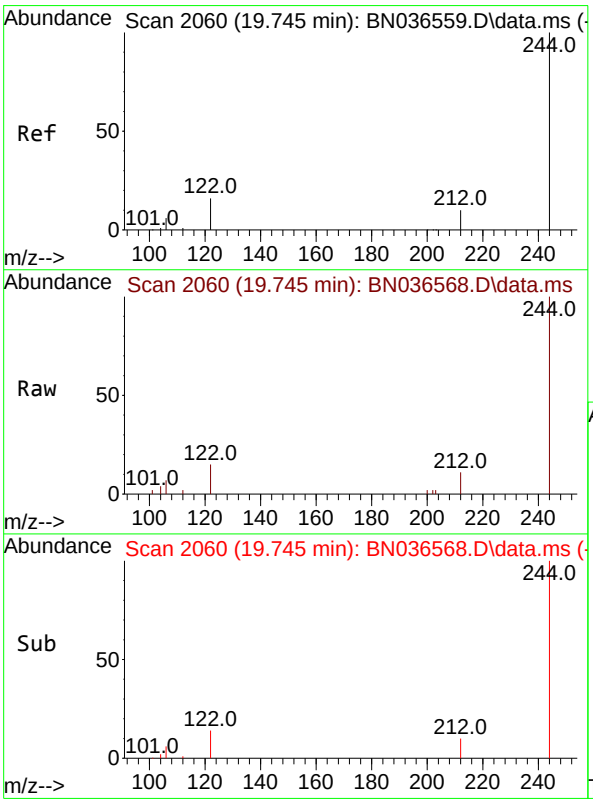
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:240 Resp: 3902

Ion	Ratio	Lower	Upper
240	100		
120	17.2	14.6	22.0
236	30.1	24.1	36.1

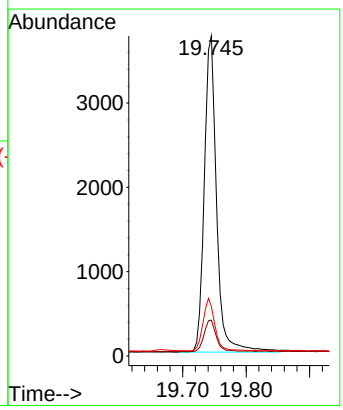


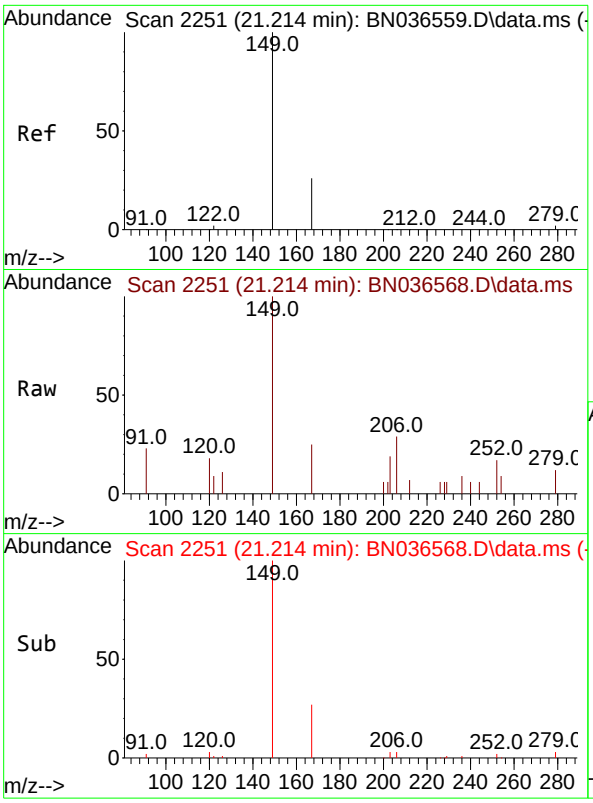


#31
Terphenyl-d14
Concen: 0.540 ng
RT: 19.745 min Scan# 2060
Delta R.T. 0.000 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion:244 Resp: 5051

Ion	Ratio	Lower	Upper
244	100		
212	11.2	9.6	14.4
122	15.5	13.9	20.9



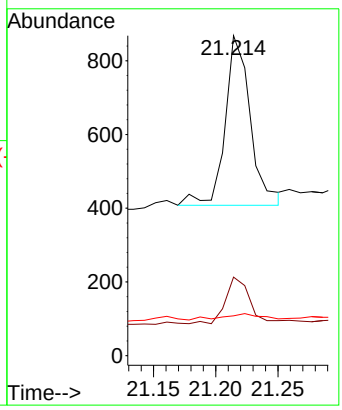


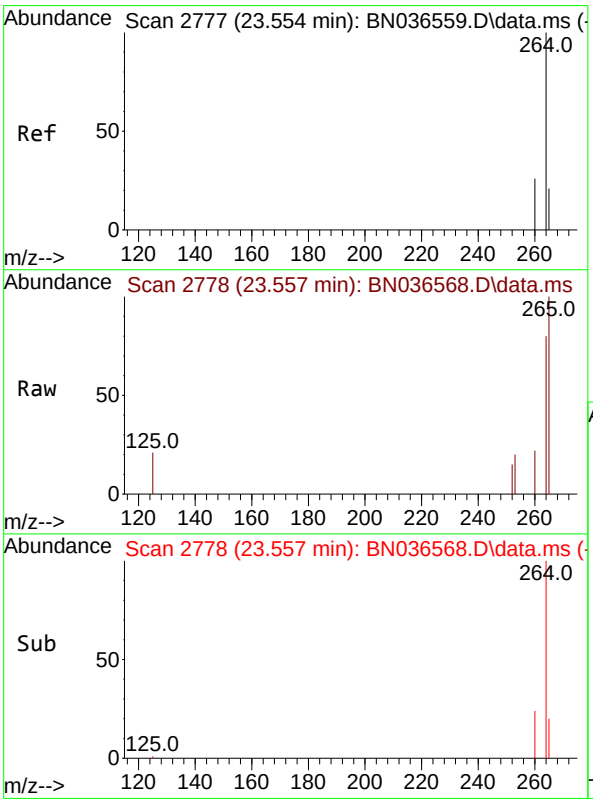
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.067 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Instrument :
BNA_N
ClientSampleId :
RE126D2-20250306

Tgt Ion:149 Resp: 652

Ion	Ratio	Lower	Upper
149	100		
167	27.6	20.7	31.1
279	6.0	3.6	5.4#

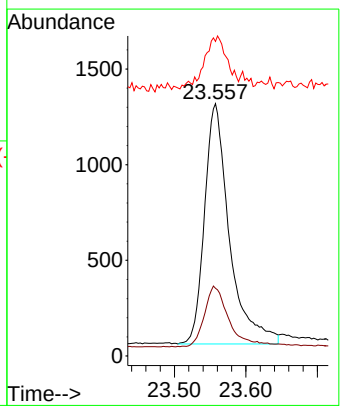




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2778
Delta R.T. 0.003 min
Lab File: BN036568.D
Acq: 10 Mar 2025 19:02

Tgt Ion:264 Resp: 3043

Ion	Ratio	Lower	Upper
264	100		
260	26.8	22.6	33.8
265	124.7	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	DUP01-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-06	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	950 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036569.D	1	03/10/25 11:35	03/10/25 19:38	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.90		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		78%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		77%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.60	*	58 - 132		149%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2290	7.724				
1146-65-2	Naphthalene-d8	4880	10.519				
15067-26-2	Acenaphthene-d10	2910	14.366				
1517-22-2	Phenanthrene-d10	5570	17.111				
1719-03-5	Chrysene-d12	3910	21.304				
1520-96-3	Perylene-d12	3420	23.557				

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\BN031025\
Data File : BN036569.D
Acq On : 10 Mar 2025 19:38
Operator : RC/JU
Sample : Q1531-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Mar 11 00:52:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2291	0.400	ng	0.00
7) Naphthalene-d8	10.519	136	4880	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2910	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5566	0.400	ng	# 0.00
29) Chrysene-d12	21.304	240	3909	0.400	ng	0.00
35) Perylene-d12	23.557	264	3415	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	829	0.155	ng	0.00
5) Phenol-d6	6.901	99	554	0.084	ng	0.00
8) Nitrobenzene-d5	8.875	82	1737	0.327	ng	0.00
11) 2-Methylnaphthalene-d10	12.116	152	2265	0.312	ng	0.00
14) 2,4,6-Tribromophenol	15.870	330	500	0.379	ng	0.01
15) 2-Fluorobiphenyl	12.993	172	5235	0.309	ng	0.00
27) Fluoranthene-d10	19.141	212	6371	0.447	ng	0.00
31) Terphenyl-d14	19.740	244	5588	0.597	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	9449	3.718	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	544m	0.056	ng	

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

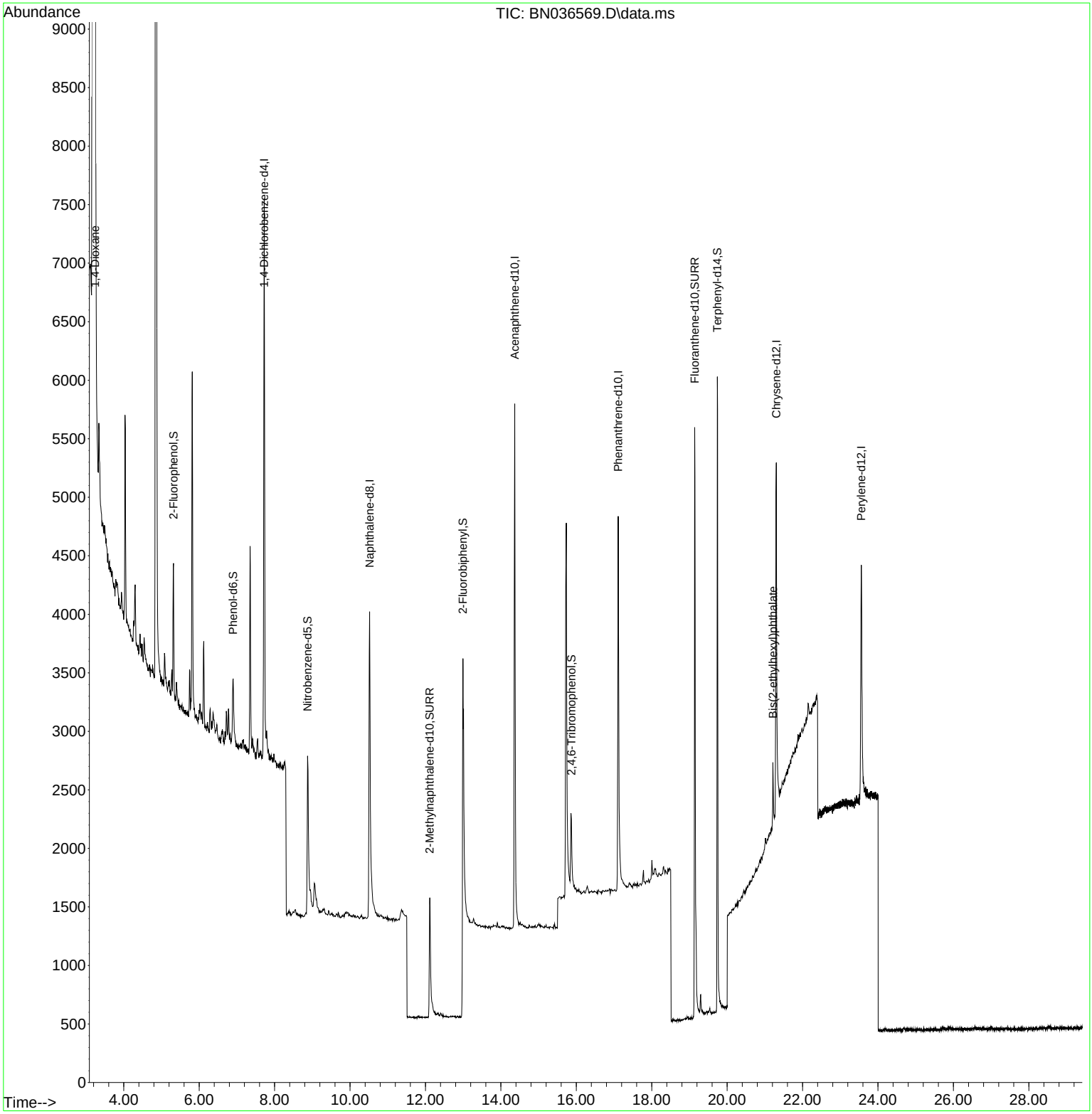
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Data File : BN036569.D
Acq On : 10 Mar 2025 19:38
Operator : RC/JU
Sample : Q1531-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

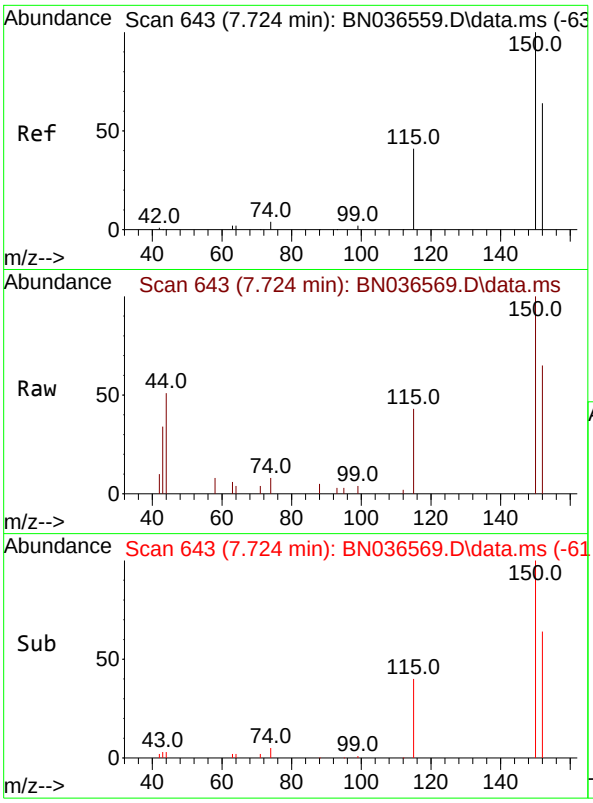
Quant Time: Mar 11 00:52:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations APPROVED

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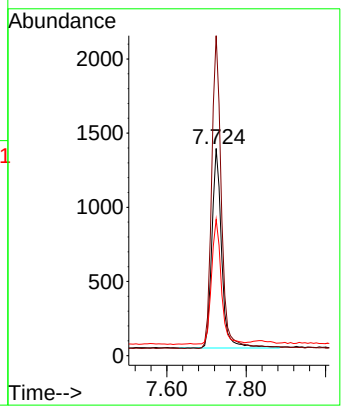




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:152 Resp: 229

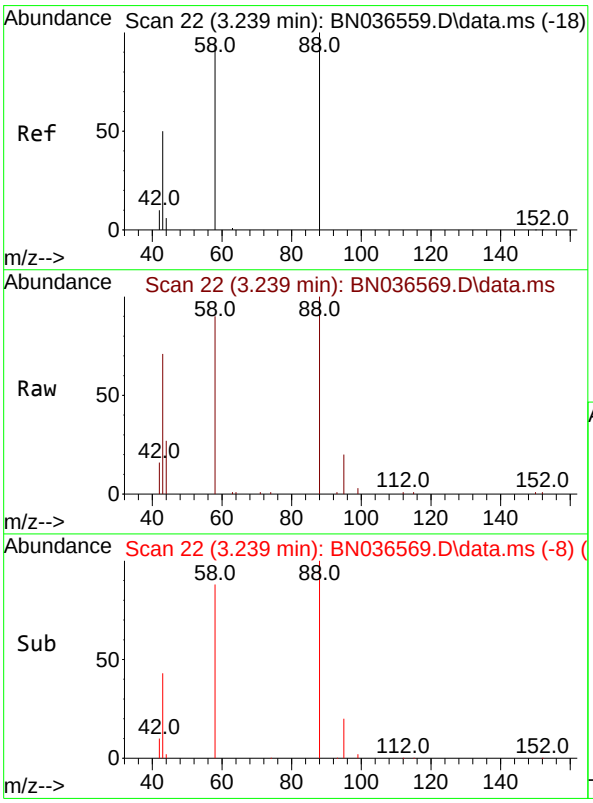
Ion	Ratio	Lower	Upper
152	100		
150	154.4	123.7	185.5
115	65.8	54.3	81.5



Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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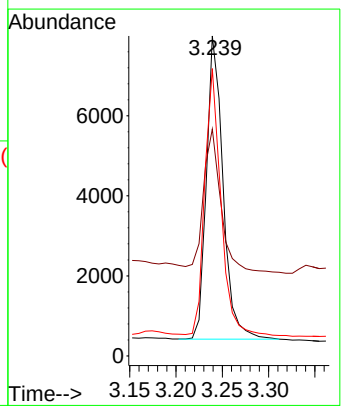
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

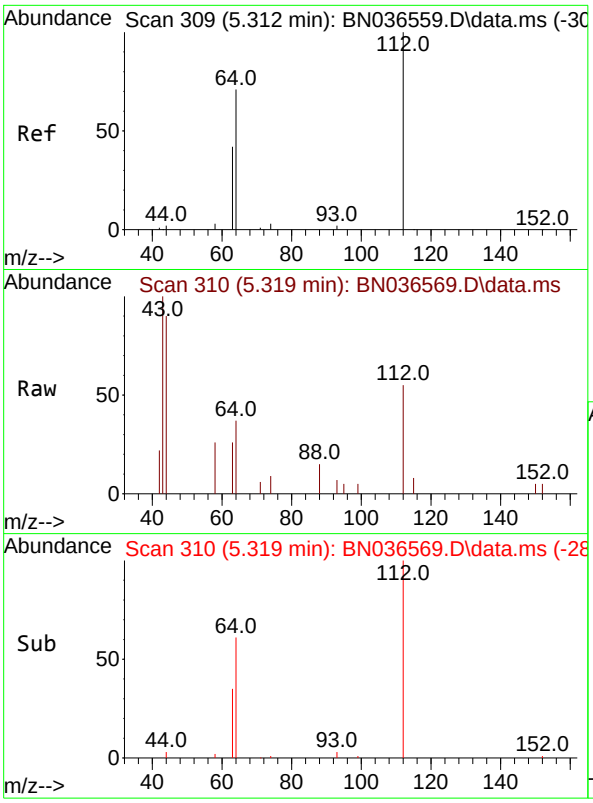


#2
1,4-Dioxane
Concen: 3.718 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion: 88 Resp: 9449

Ion	Ratio	Lower	Upper
88	100		
43	49.4	37.8	56.8
58	85.7	67.4	101.2





#4
2-Fluorophenol
Concen: 0.155 ng
RT: 5.319 min Scan# 3
Delta R.T. 0.007 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

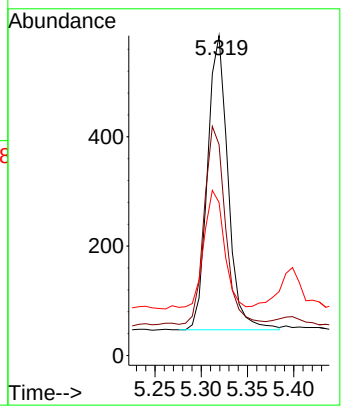
Tgt Ion:112 Resp: 82

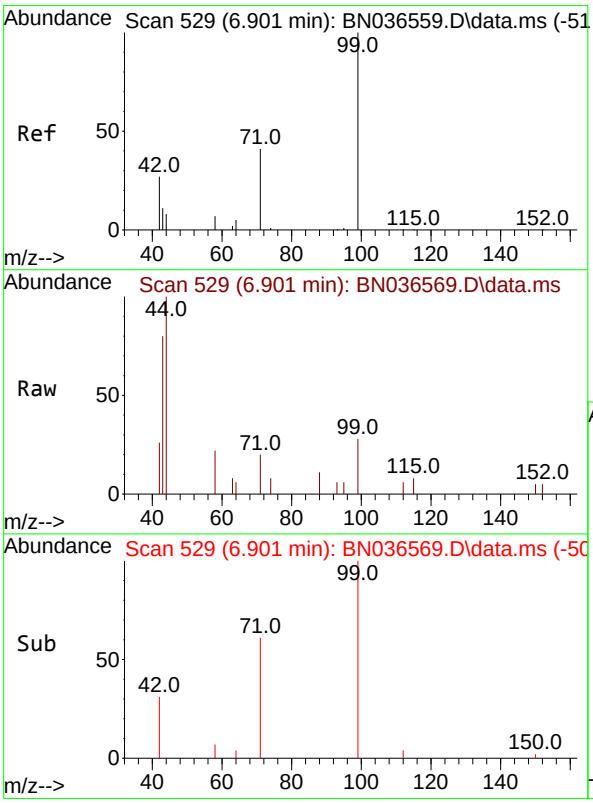
Ion	Ratio	Lower	Upper
112	100		
64	70.3	53.1	79.7
63	41.5	31.8	47.8

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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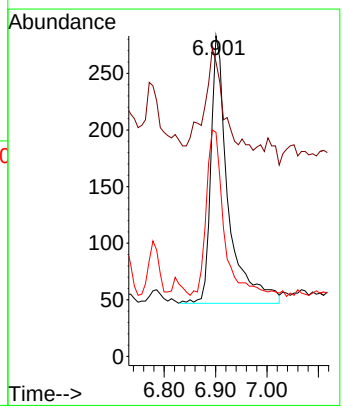


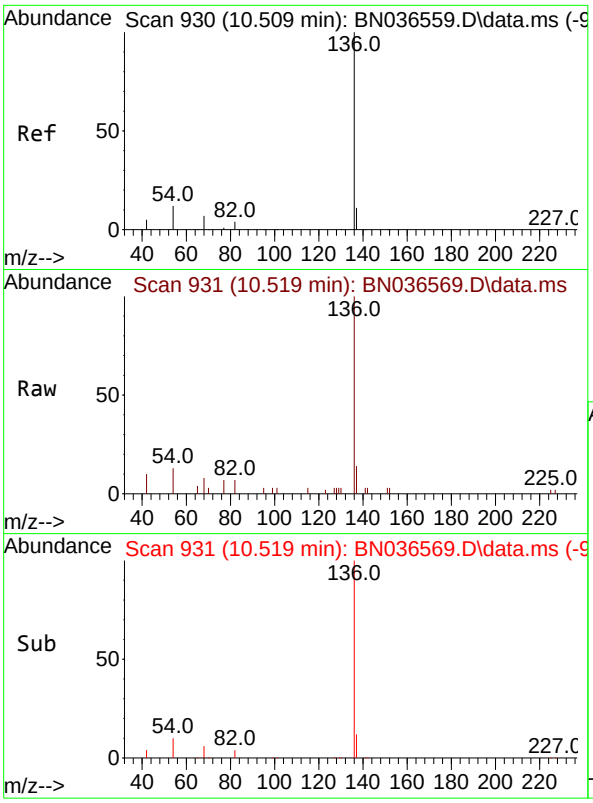


#5
Phenol-d6
Concen: 0.084 ng
RT: 6.901 min Scan# 529
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion: 99 Resp: 554

Ion	Ratio	Lower	Upper
99	100		
42	34.3	26.5	39.7
71	65.5	34.1	51.1#

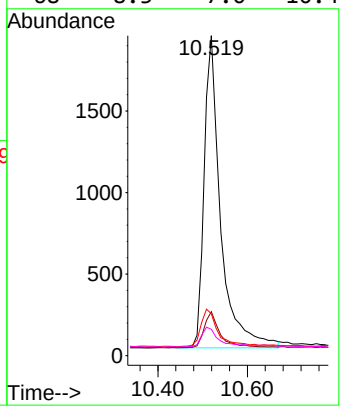




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.519 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:136 Resp: 488

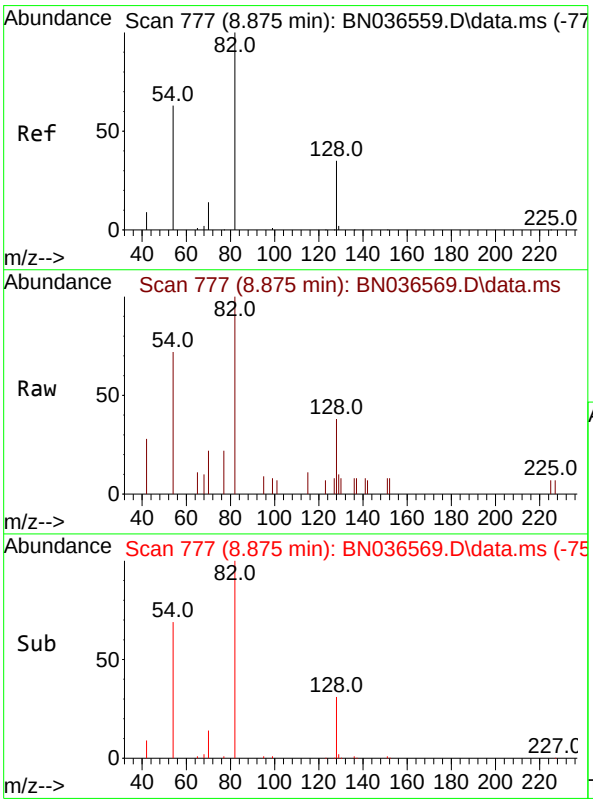
Ion	Ratio	Lower	Upper
136	100		
137	13.8	10.3	15.5
54	13.1	11.5	17.3
68	8.3	7.0	10.4



Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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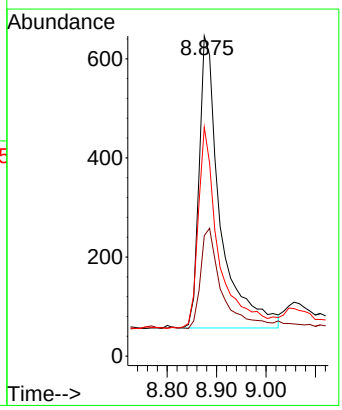
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

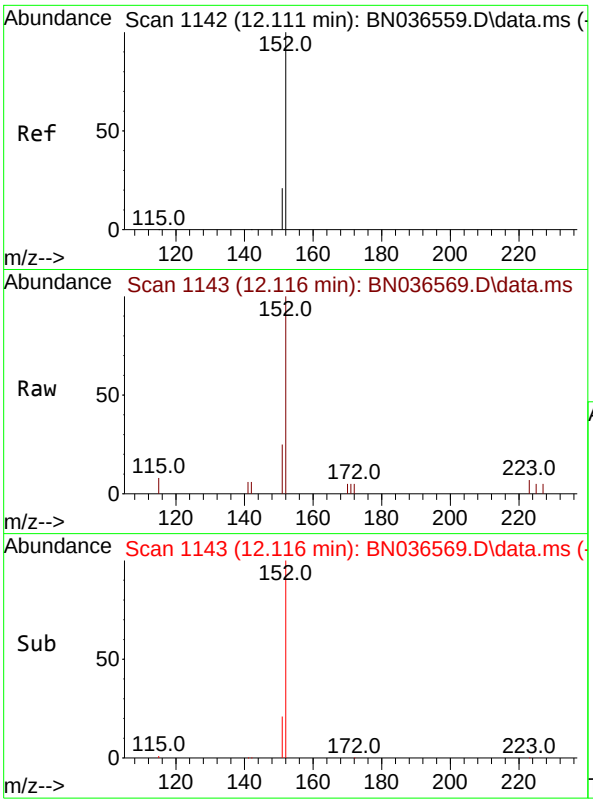


#8
Nitrobenzene-d5
Concen: 0.327 ng
RT: 8.875 min Scan# 777
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion: 82 Resp: 1737

Ion	Ratio	Lower	Upper
82	100		
128	37.6	30.6	45.8
54	71.5	52.2	78.4





#11
2-Methylnaphthalene-d10
Concen: 0.312 ng
RT: 12.116 min Scan# 11
Delta R.T. 0.005 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

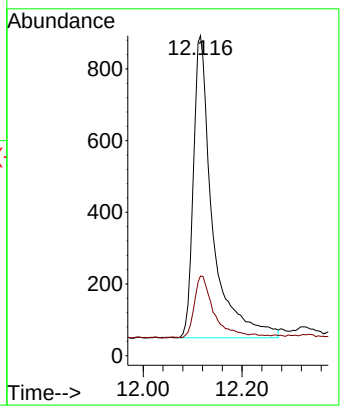
Tgt Ion:152 Resp: 226

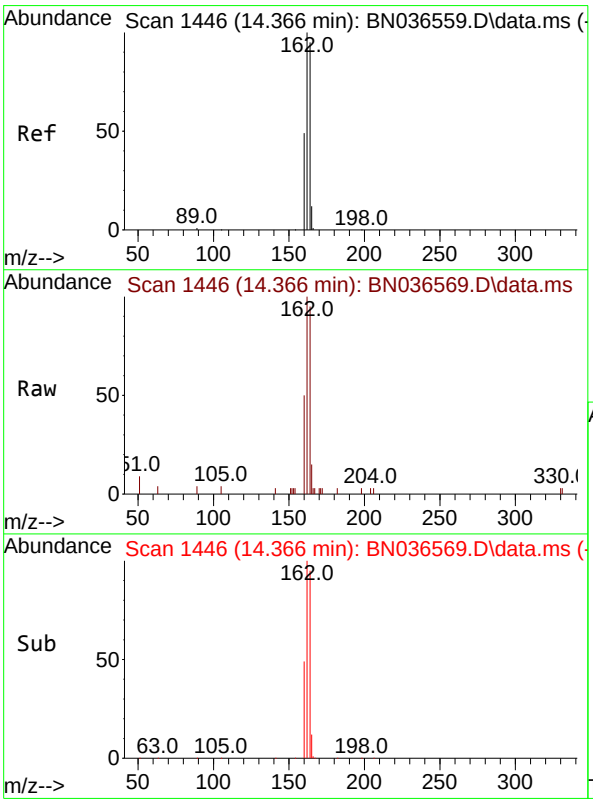
Ion	Ratio	Lower	Upper
152	100		
151	20.6	17.0	25.6

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

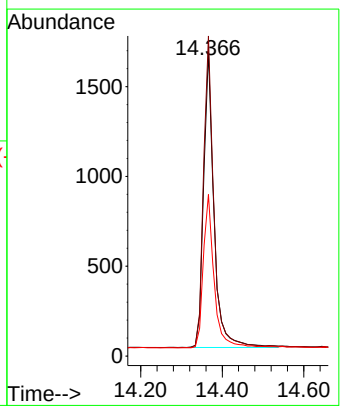


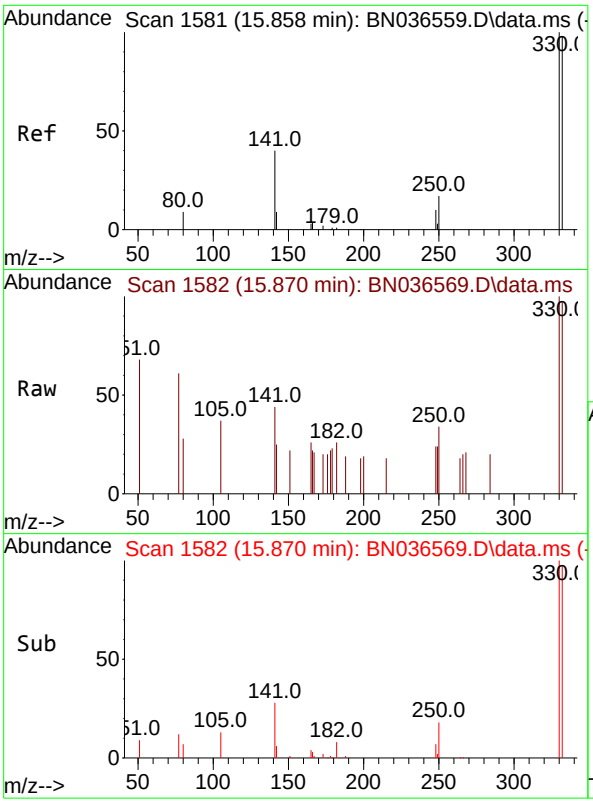


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:164 Resp: 2910

Ion	Ratio	Lower	Upper
164	100		
162	105.1	84.2	126.2
160	53.0	42.2	63.2

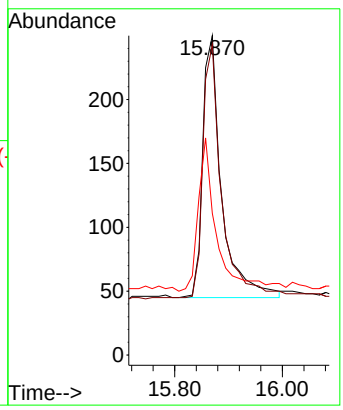




#14
2,4,6-Tribromophenol
Concen: 0.379 ng
RT: 15.870 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:330 Resp: 50

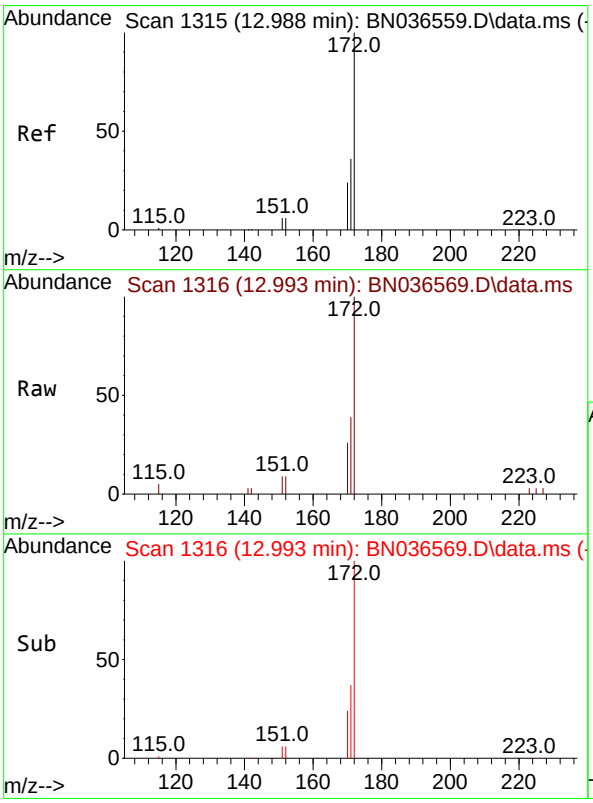
Ion	Ratio	Lower	Upper
330	100		
332	95.8	75.2	112.8
141	57.4	43.4	65.2



Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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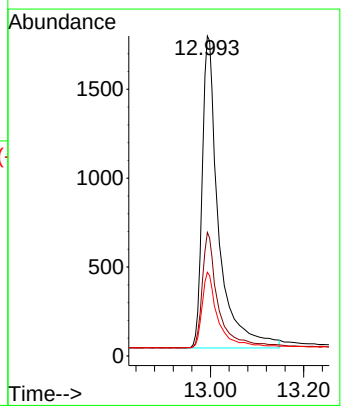
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

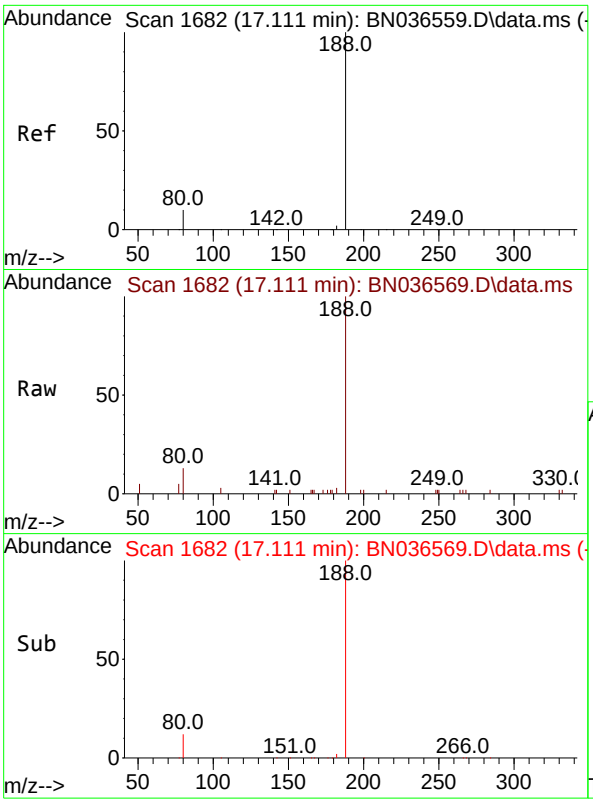


#15
2-Fluorobiphenyl
Concen: 0.309 ng
RT: 12.993 min Scan# 1316
Delta R.T. 0.005 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:172 Resp: 5235

Ion	Ratio	Lower	Upper
172	100		
171	38.6	29.5	44.3
170	26.2	20.2	30.4

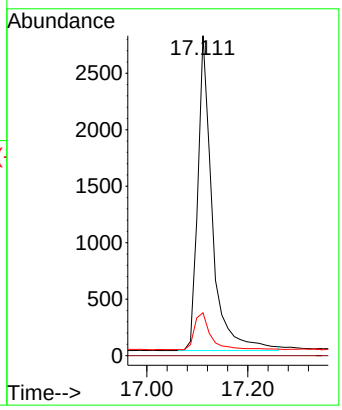




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:188 Resp: 556(

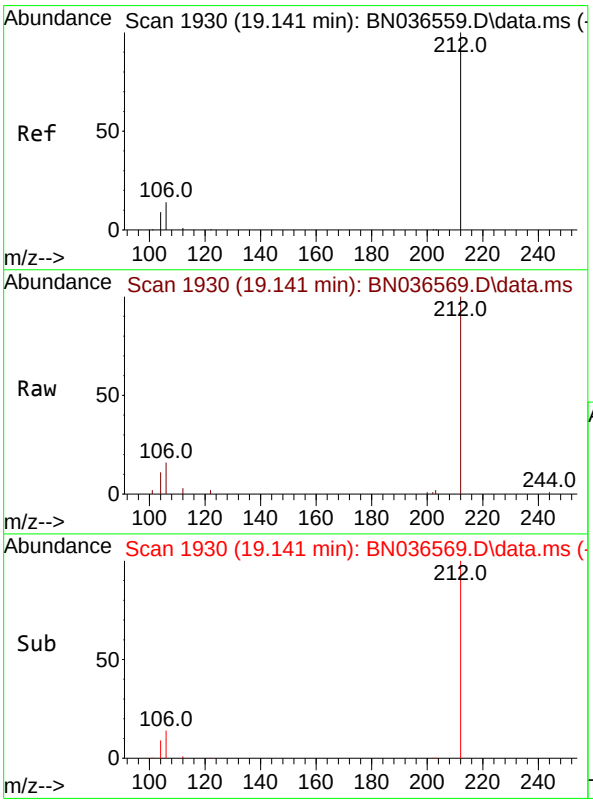
Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.4	8.8	13.2#



Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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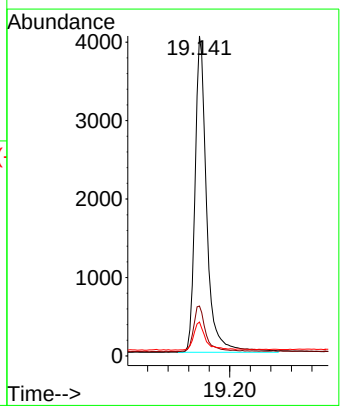
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

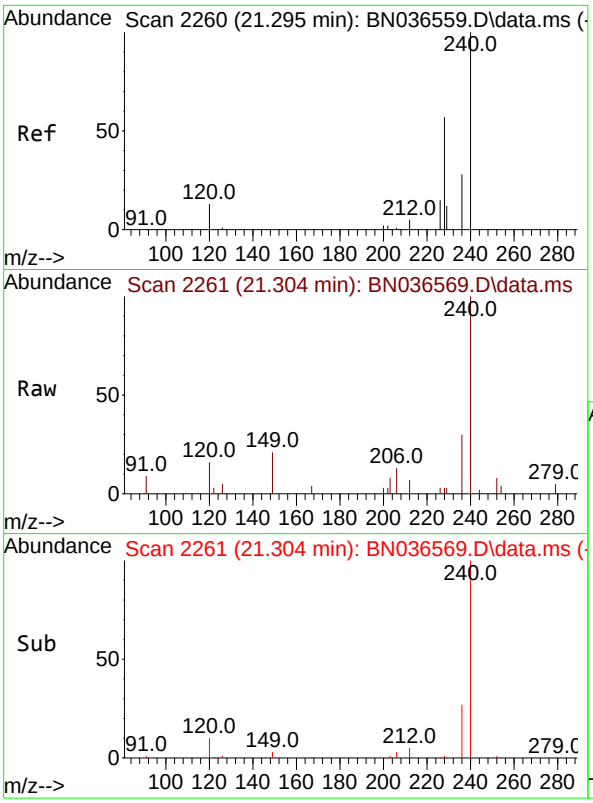


#27
Fluoranthene-d10
Concen: 0.447 ng
RT: 19.141 min Scan# 1930
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:212 Resp: 6371

Ion	Ratio	Lower	Upper
212	100		
106	15.2	11.8	17.6
104	9.0	7.3	10.9

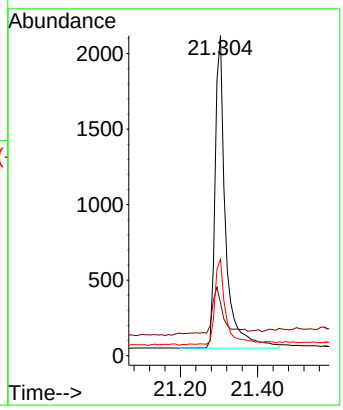




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:240 Resp: 390

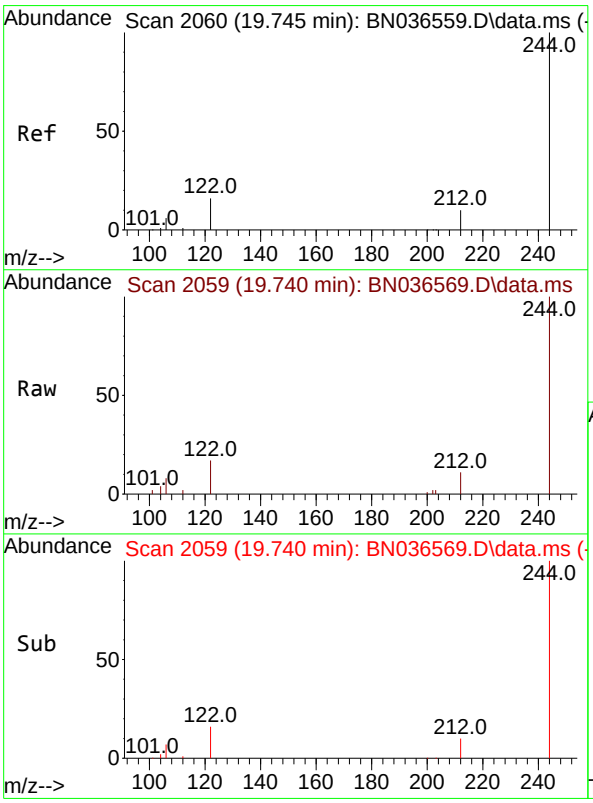
Ion	Ratio	Lower	Upper
240	100		
120	16.5	14.6	22.0
236	30.2	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
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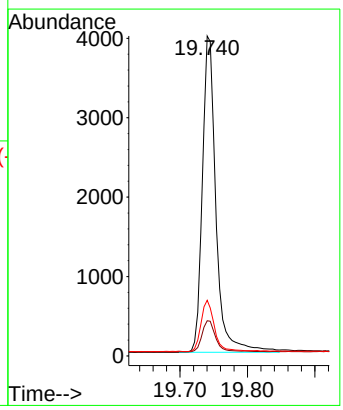
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

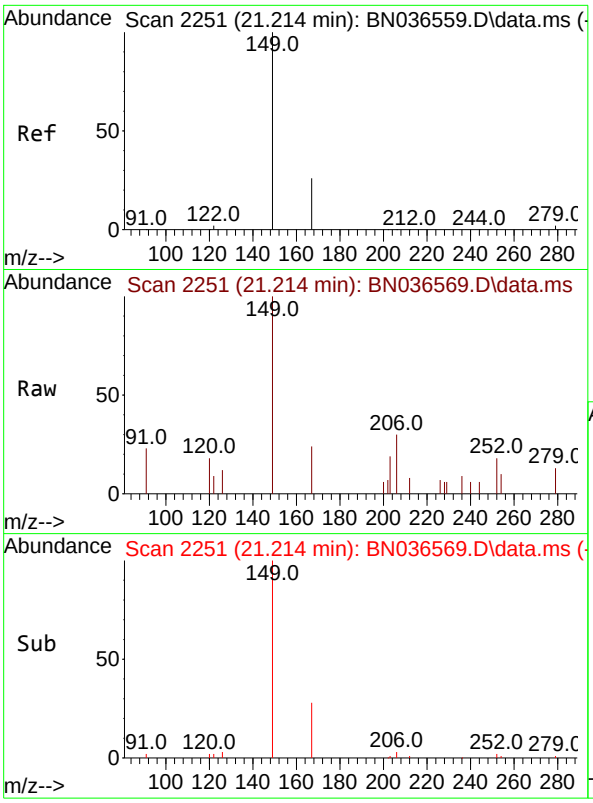


#31
Terphenyl-d14
Concen: 0.597 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:244 Resp: 5588

Ion	Ratio	Lower	Upper
244	100		
212	11.0	9.6	14.4
122	17.4	13.9	20.9

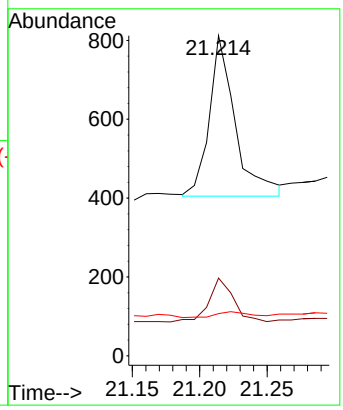




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.056 ng m
RT: 21.214 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:149 Resp: 54

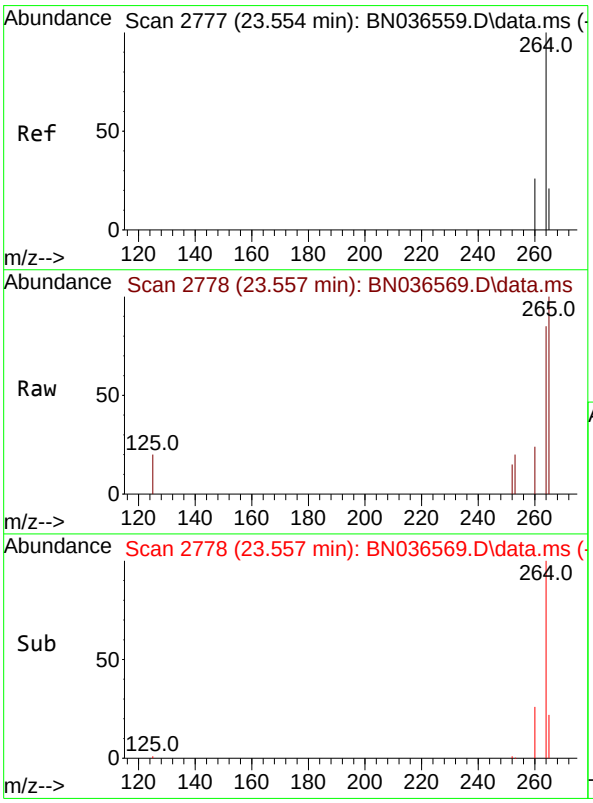
Ion	Ratio	Lower	Upper
149	100		
167	25.6	20.7	31.1
279	4.8	3.6	5.4



Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Manual Integrations
APPROVED

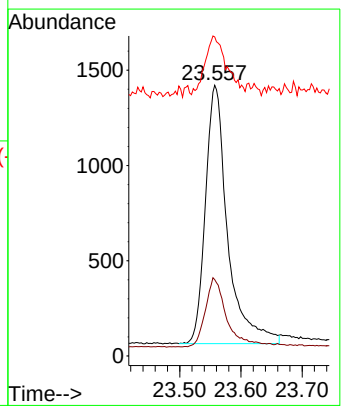
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2778
Delta R.T. 0.003 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:264 Resp: 3415

Ion	Ratio	Lower	Upper
264	100		
260	28.2	22.6	33.8
265	117.9	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE103D1-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-07	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036578.D	1	03/10/25 11:35	03/11/25 12:33	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.50	EM	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		78%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	1.03	*	58 - 132		257%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2060	7.724				
1146-65-2	Naphthalene-d8	4840	10.509				
15067-26-2	Acenaphthene-d10	2890	14.366				
1517-22-2	Phenanthrene-d10	5690	17.111				
1719-03-5	Chrysene-d12	3810	21.295				
1520-96-3	Perylene-d12	2890	23.554				

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\BN031125\
Data File : BN036578.D
Acq On : 11 Mar 2025 12:33
Operator : RC/JU
Sample : Q1531-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Quant Time: Mar 11 12:56:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

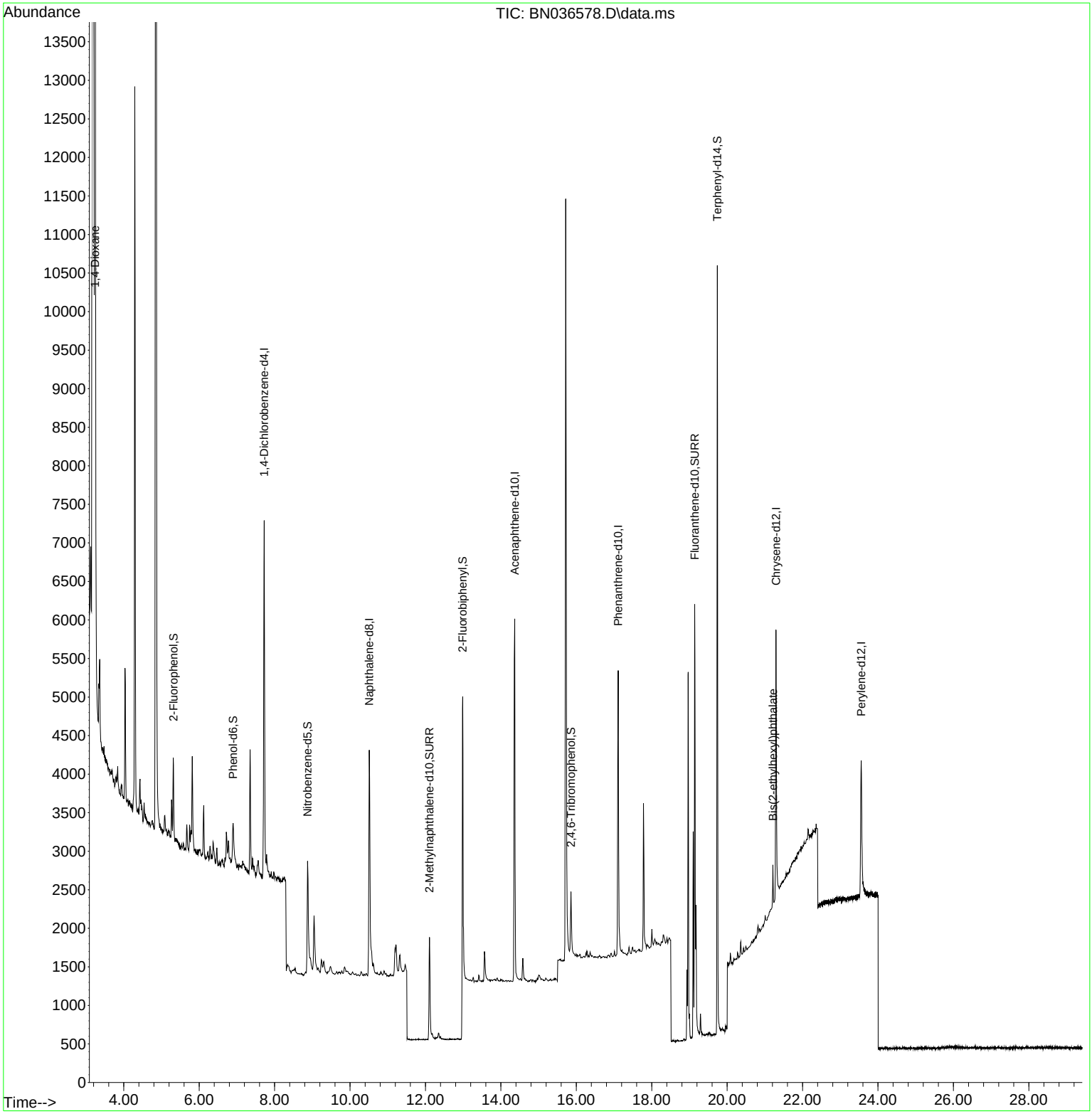
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2056	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4839	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2887	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5689	0.400	ng	0.00
29) Chrysene-d12	21.295	240	3805	0.400	ng	0.00
35) Perylene-d12	23.554	264	2891	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	791	0.165	ng	0.00
5) Phenol-d6	6.901	99	552	0.093	ng	0.00
8) Nitrobenzene-d5	8.875	82	1568	0.298	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2236	0.311	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	514	0.392	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	6510	0.388	ng	0.00
27) Fluoranthene-d10	19.141	212	6442	0.442	ng	0.00
31) Terphenyl-d14	19.740	244	9369	1.028	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	14330	6.283	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	574	0.061	ng	# 93

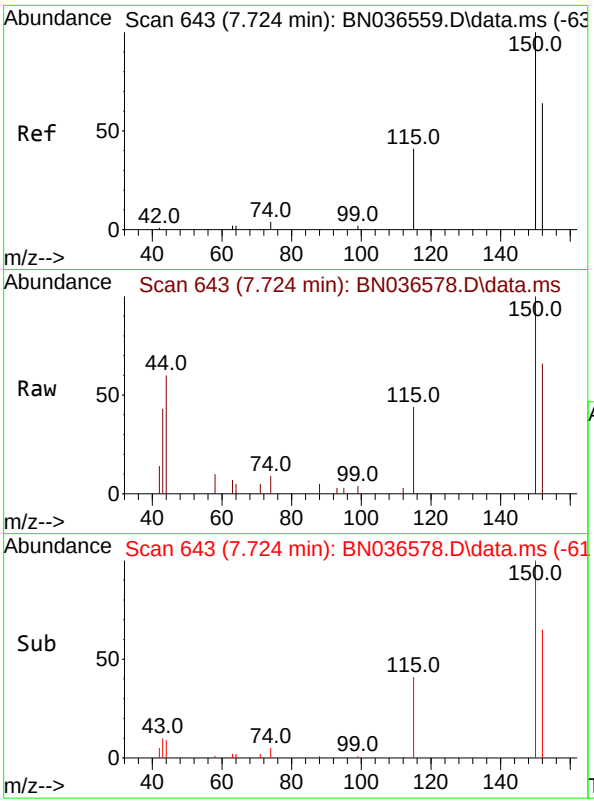
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036578.D
Acq On : 11 Mar 2025 12:33
Operator : RC/JU
Sample : Q1531-07
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Quant Time: Mar 11 12:56:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



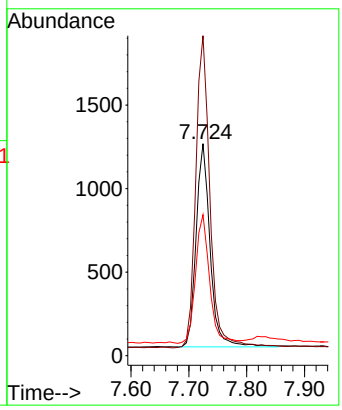


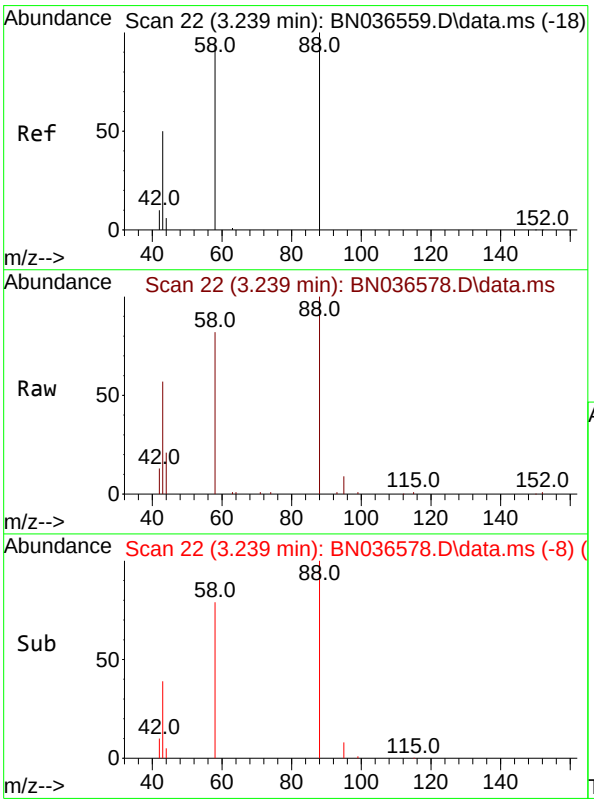
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:152 Resp: 2056

Ion	Ratio	Lower	Upper
152	100		
150	150.9	123.7	185.5
115	66.5	54.3	81.5

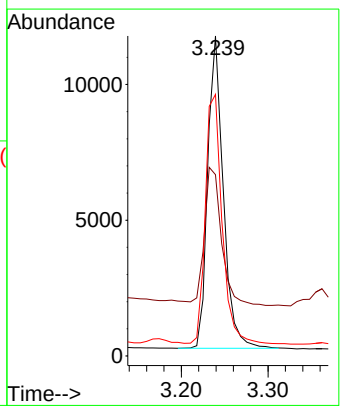


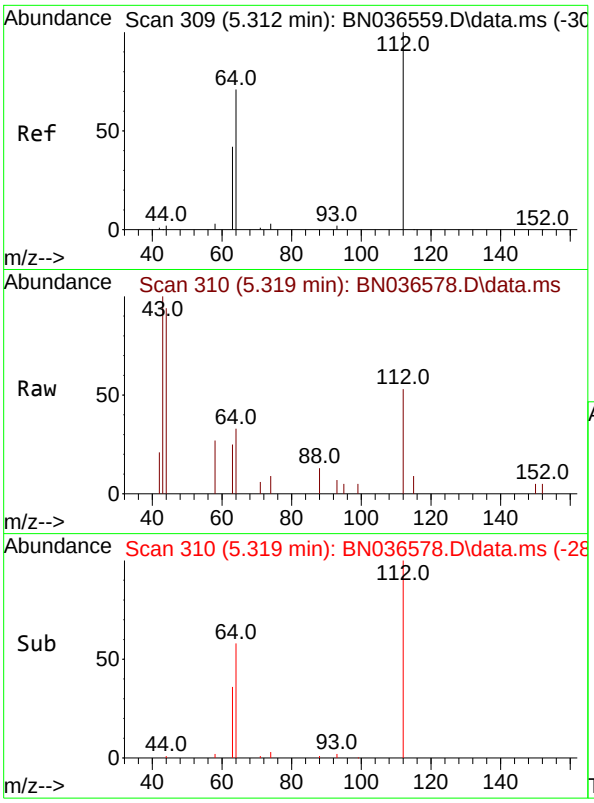


#2
1,4-Dioxane
Concen: 6.283 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion: 88 Resp: 14330

Ion	Ratio	Lower	Upper
88	100		
43	48.3	37.8	56.8
58	86.0	67.4	101.2



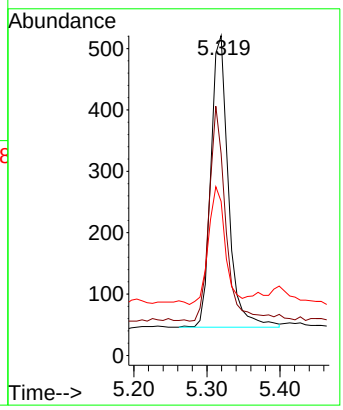


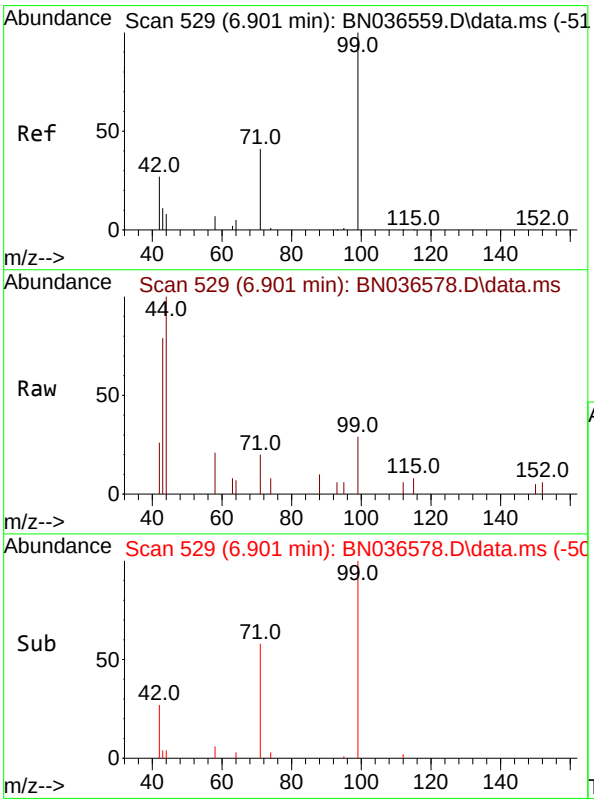
#4
2-Fluorophenol
Concen: 0.165 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:112 Resp: 791

Ion	Ratio	Lower	Upper
112	100		
64	70.3	53.1	79.7
63	38.4	31.8	47.8

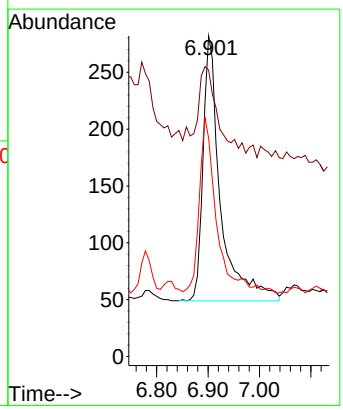


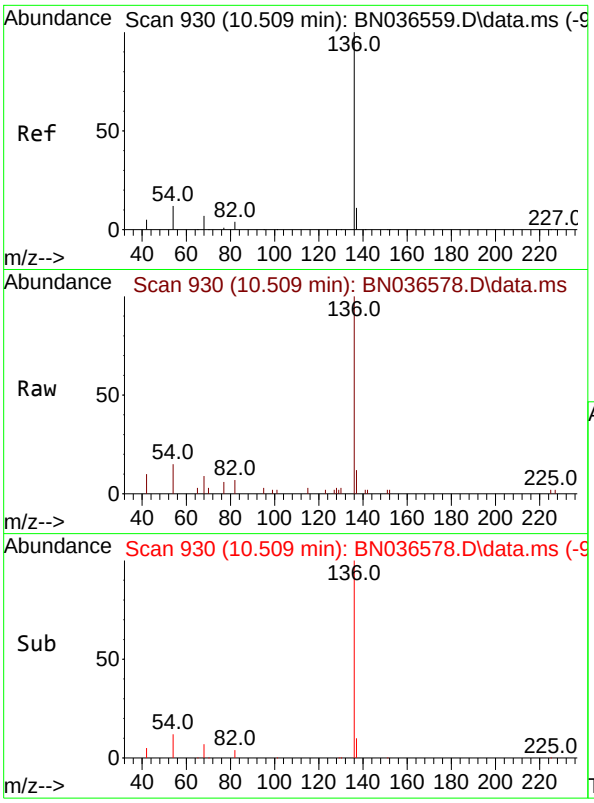


#5
Phenol-d6
Concen: 0.093 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion: 99 Resp: 552

Ion	Ratio	Lower	Upper
99	100		
42	40.6	26.5	39.7#
71	64.7	34.1	51.1#



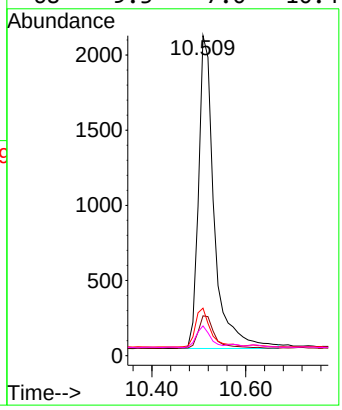


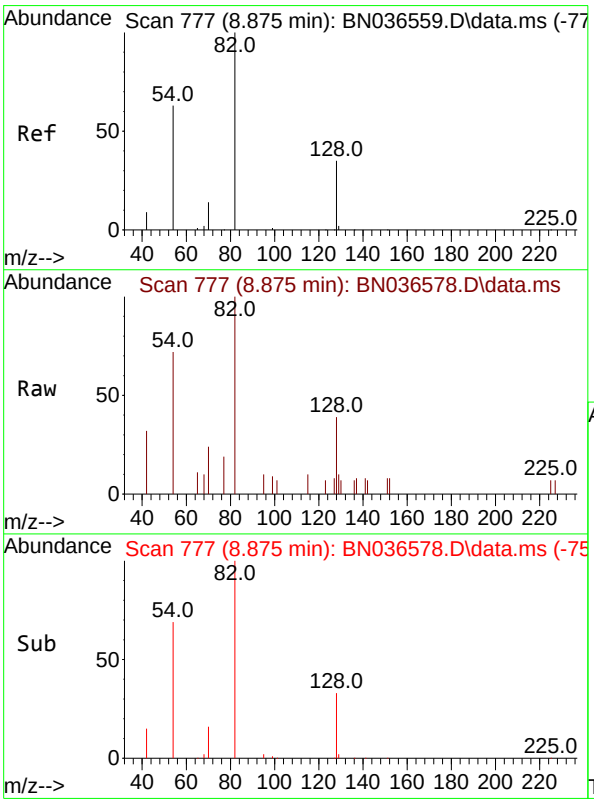
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:136 Resp: 4839

Ion	Ratio	Lower	Upper
136	100		
137	12.4	10.3	15.5
54	14.8	11.5	17.3
68	9.3	7.0	10.4

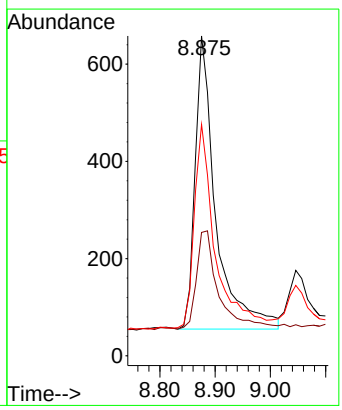


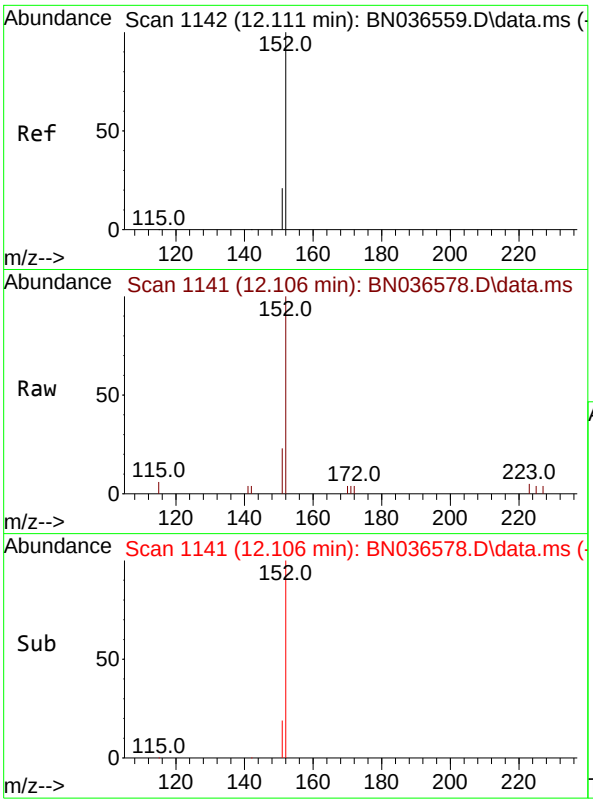


#8
Nitrobenzene-d5
Concen: 0.298 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion: 82 Resp: 1568

Ion	Ratio	Lower	Upper
82	100		
128	38.6	30.6	45.8
54	72.3	52.2	78.4



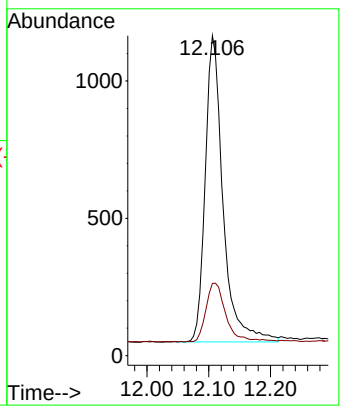


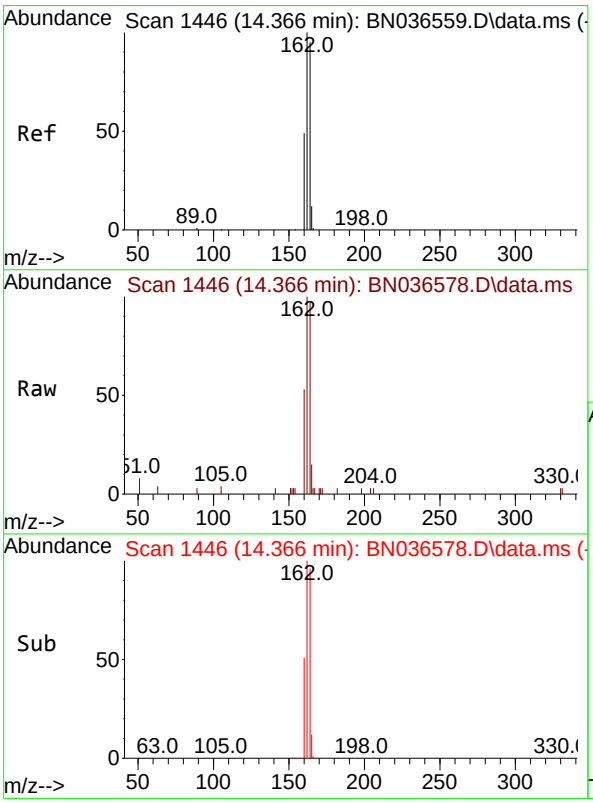
#11
2-Methylnaphthalene-d10
Concen: 0.311 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:152 Resp: 2236

Ion	Ratio	Lower	Upper
152	100		
151	21.7	17.0	25.6

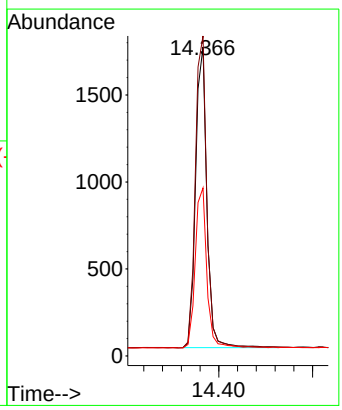


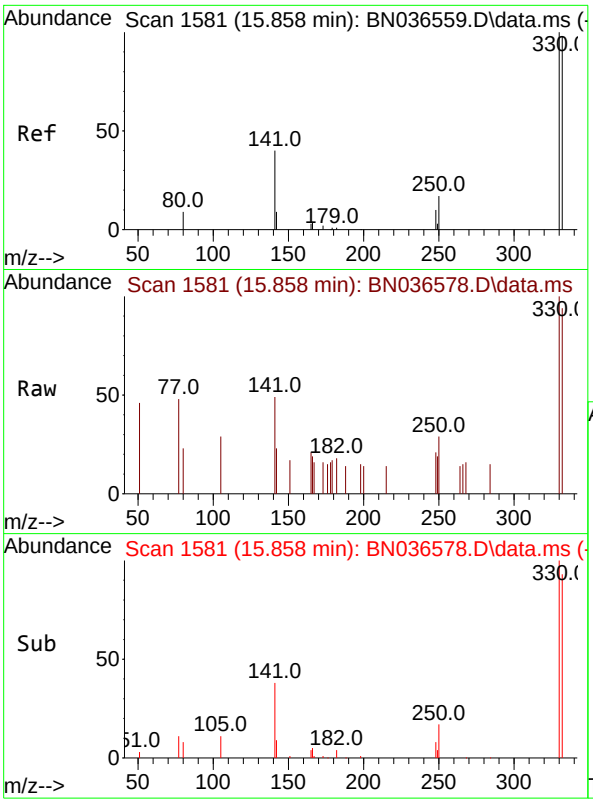


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion:164 Resp: 2887

Ion	Ratio	Lower	Upper
164	100		
162	103.5	84.2	126.2
160	54.4	42.2	63.2



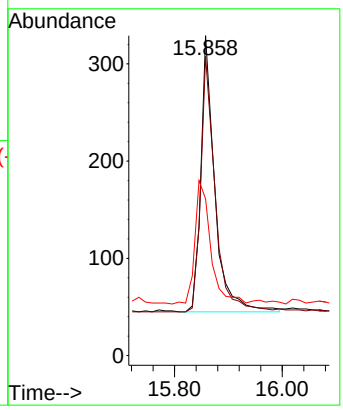


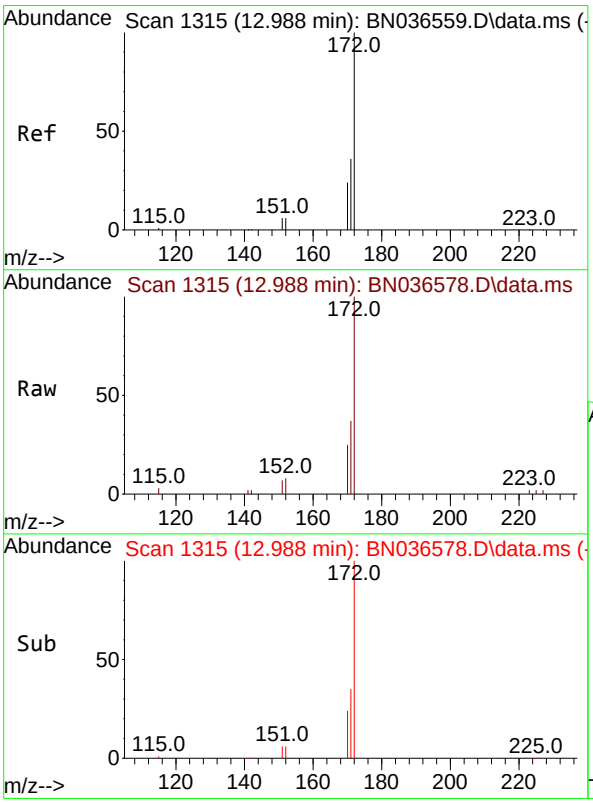
#14
2,4,6-Tribromophenol
Concen: 0.392 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:330 Resp: 514

Ion	Ratio	Lower	Upper
330	100		
332	95.5	75.2	112.8
141	50.8	43.4	65.2

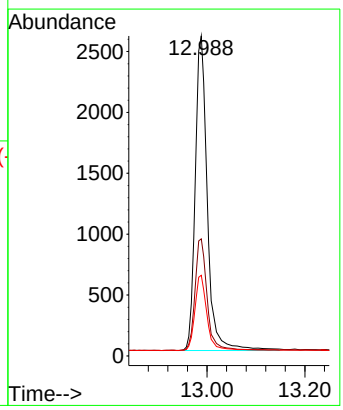


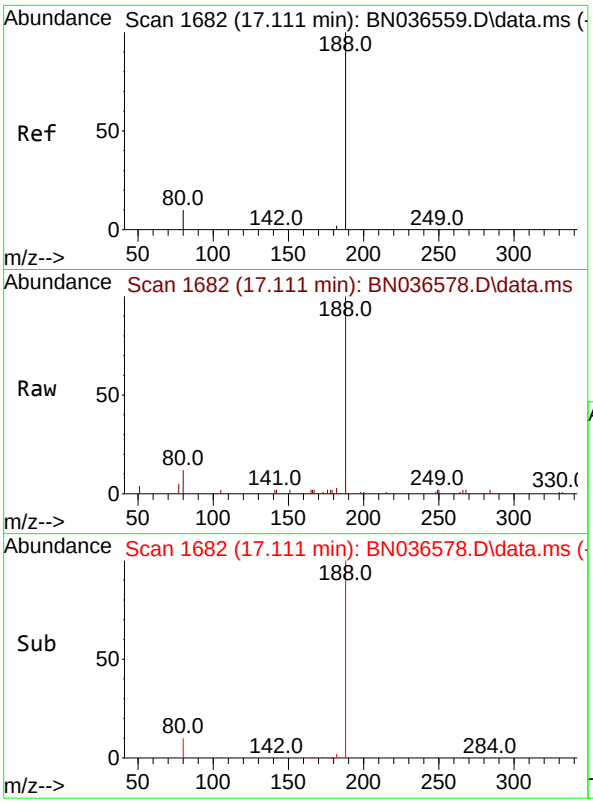


#15
2-Fluorobiphenyl
Concen: 0.388 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion:172 Resp: 6510

Ion	Ratio	Lower	Upper
172	100		
171	36.6	29.5	44.3
170	25.2	20.2	30.4



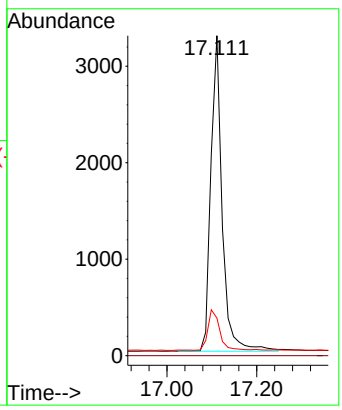


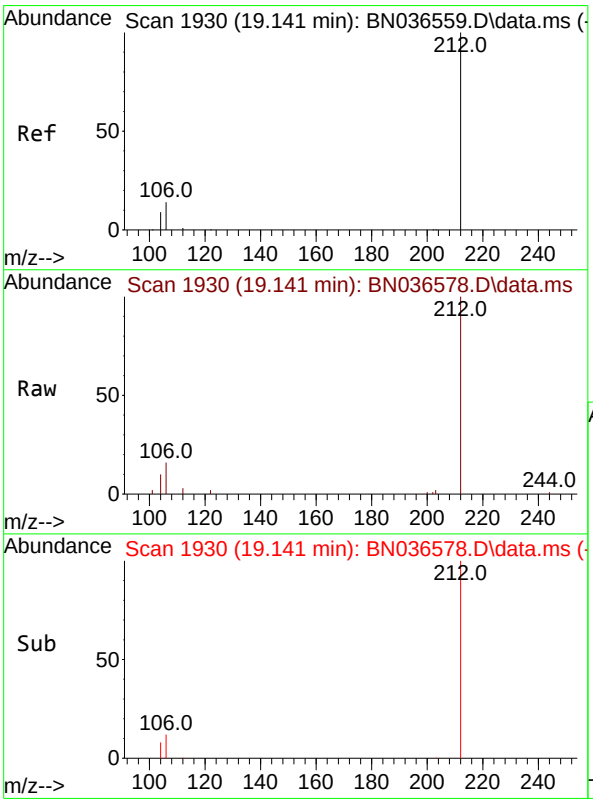
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:188 Resp: 5689

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.8	8.8	13.2

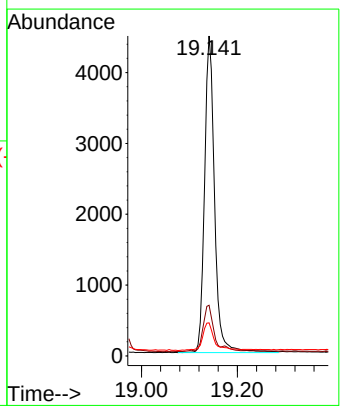


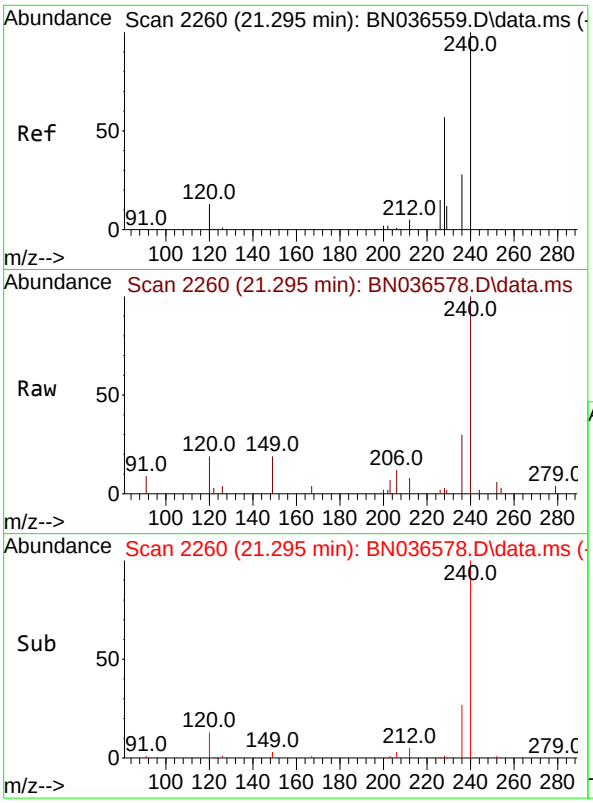


#27
Fluoranthene-d10
Concen: 0.442 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion:212 Resp: 6442

Ion	Ratio	Lower	Upper
212	100		
106	16.3	11.8	17.6
104	10.3	7.3	10.9



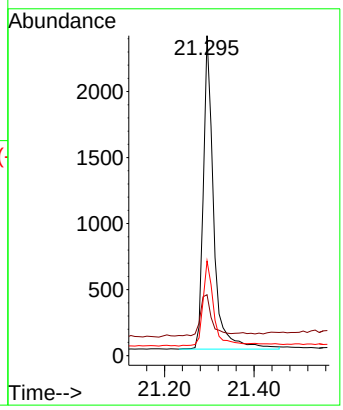


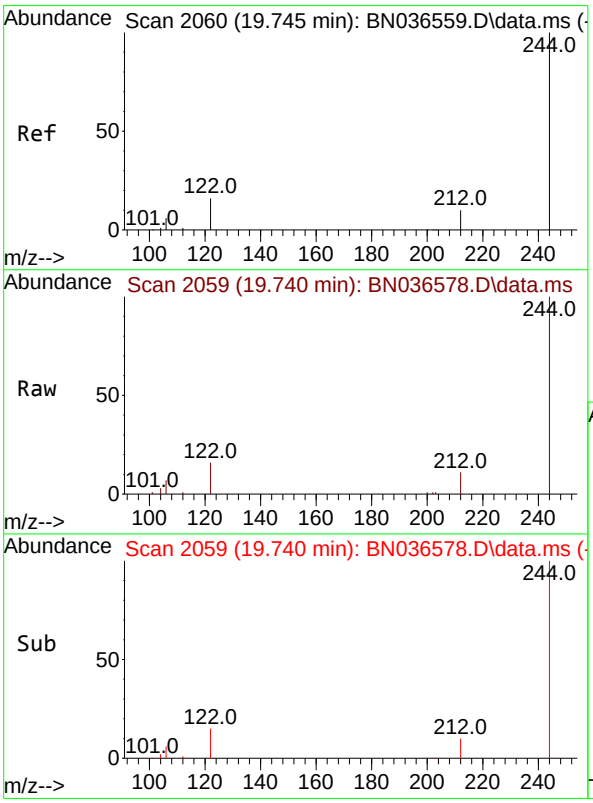
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:240 Resp: 3805

Ion	Ratio	Lower	Upper
240	100		
120	19.0	14.6	22.0
236	29.6	24.1	36.1

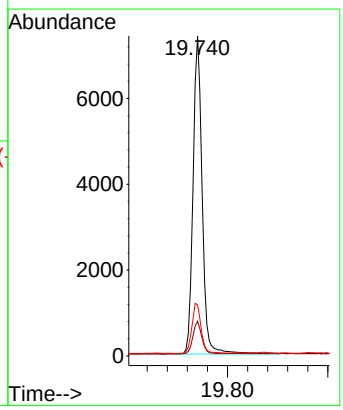


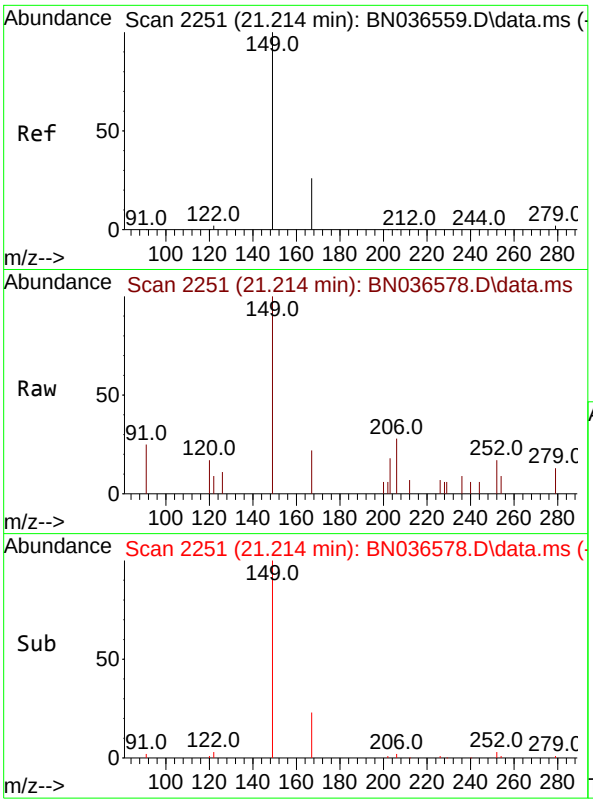


#31
Terphenyl-d14
Concen: 1.028 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion:244 Resp: 9369

Ion	Ratio	Lower	Upper
244	100		
212	10.9	9.6	14.4
122	16.0	13.9	20.9



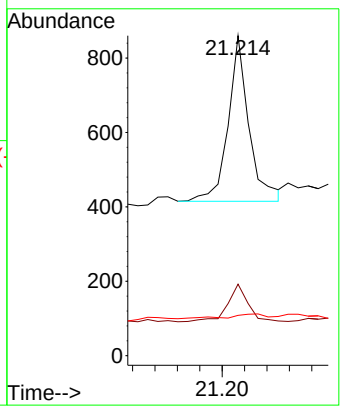


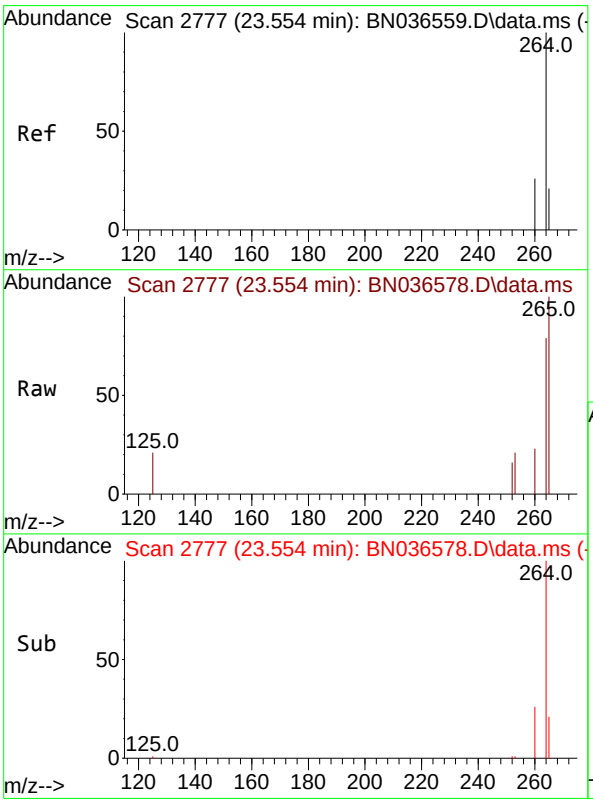
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.061 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306

Tgt Ion:149 Resp: 574

Ion	Ratio	Lower	Upper
149	100		
167	22.3	20.7	31.1
279	3.0	3.6	5.4#

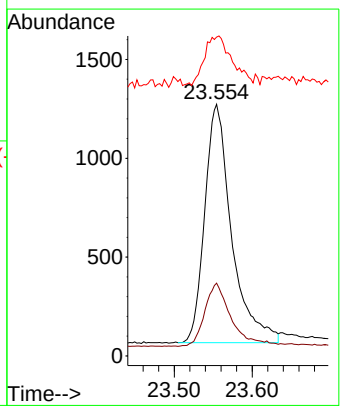




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. 0.000 min
Lab File: BN036578.D
Acq: 11 Mar 2025 12:33

Tgt Ion:264 Resp: 2891

Ion	Ratio	Lower	Upper
264	100		
260	28.9	22.6	33.8
265	126.7	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE103D1-20250306DL	SDG No.:	Q1531
Lab Sample ID:	Q1531-07DL	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036581.D	2	03/10/25 11:35	03/11/25 14:57	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.10	D	0.14	0.42	0.42	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.28		30 - 150		70%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		105%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		72%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.91	*	58 - 132		228%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2260	7.724				
1146-65-2	Naphthalene-d8	5270	10.52				
15067-26-2	Acenaphthene-d10	3220	14.366				
1517-22-2	Phenanthrene-d10	6430	17.111				
1719-03-5	Chrysene-d12	4560	21.295				
1520-96-3	Perylene-d12	3610	23.554				

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\BN031125\
Data File : BN036581.D
Acq On : 11 Mar 2025 14:57
Operator : RC/JU
Sample : Q1531-07DL 2X
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Quant Time: Mar 11 15:22:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

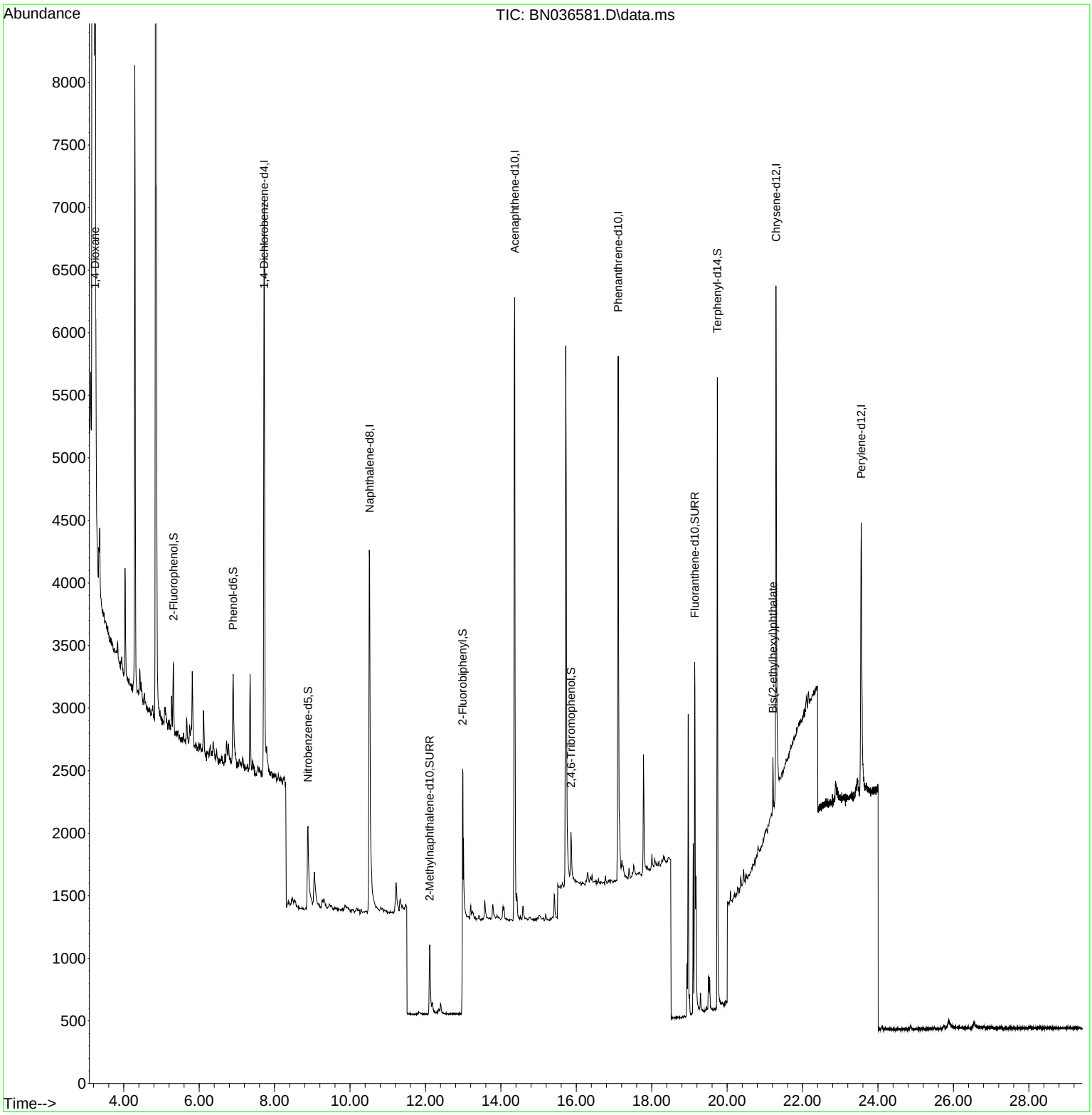
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2259	0.400	ng	0.00
7) Naphthalene-d8	10.520	136	5271	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	3220	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	6427	0.400	ng	0.00
29) Chrysene-d12	21.295	240	4562	0.400	ng	0.00
35) Perylene-d12	23.554	264	3613	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	398	0.076	ng	0.00
5) Phenol-d6	6.901	99	764	0.117	ng	0.00
8) Nitrobenzene-d5	8.886	82	833	0.145	ng	0.01
11) 2-Methylnaphthalene-d10	12.111	152	1102	0.141	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	276	0.189	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	3032	0.162	ng	0.00
27) Fluoranthene-d10	19.141	212	3474	0.211	ng	0.00
31) Terphenyl-d14	19.740	244	4984	0.456	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	7390	2.949	ng	97
34) Bis(2-ethylhexyl)phtha...	21.214	149	444	0.039	ng	# 99

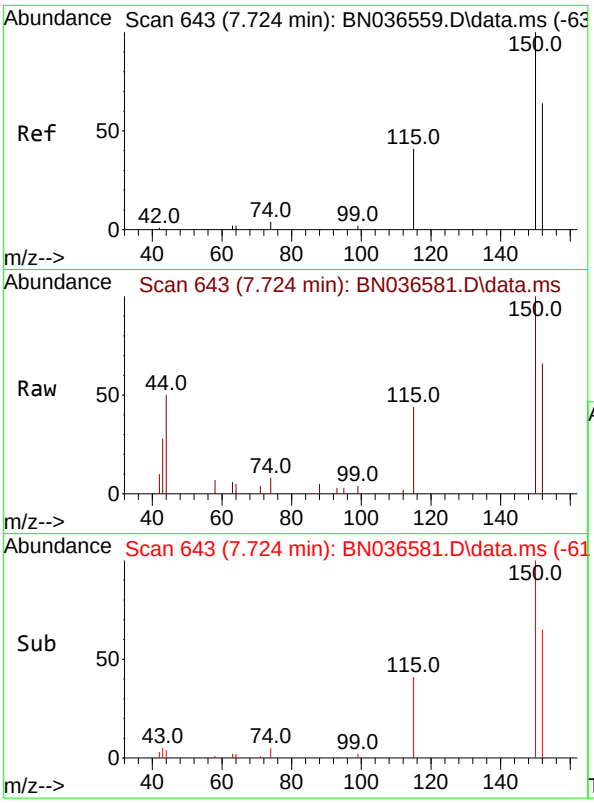
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036581.D
Acq On : 11 Mar 2025 14:57
Operator : RC/JU
Sample : Q1531-07DL 2X
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Quant Time: Mar 11 15:22:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



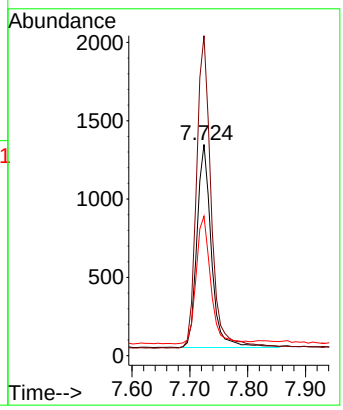


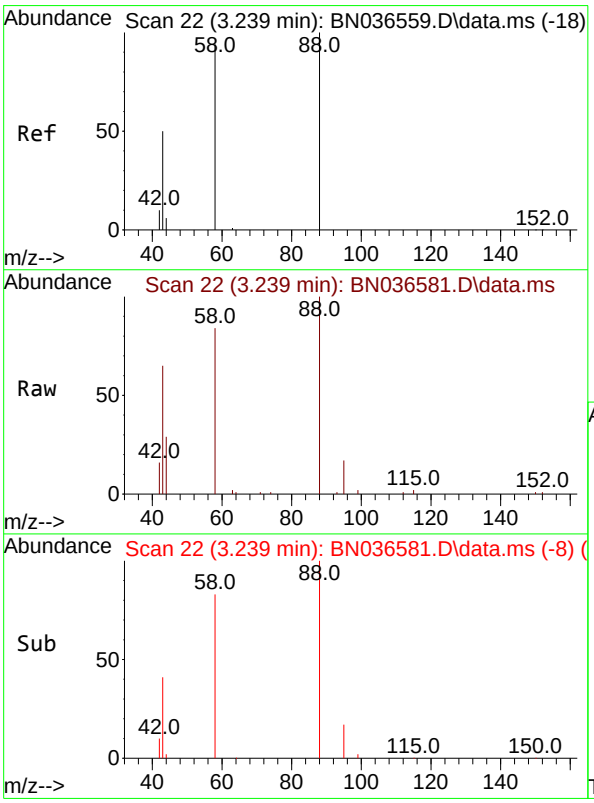
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:152 Resp: 2259

Ion	Ratio	Lower	Upper
152	100		
150	151.4	123.7	185.5
115	66.0	54.3	81.5

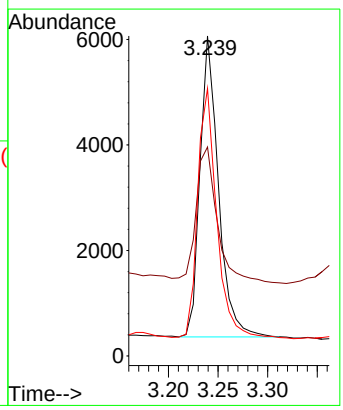


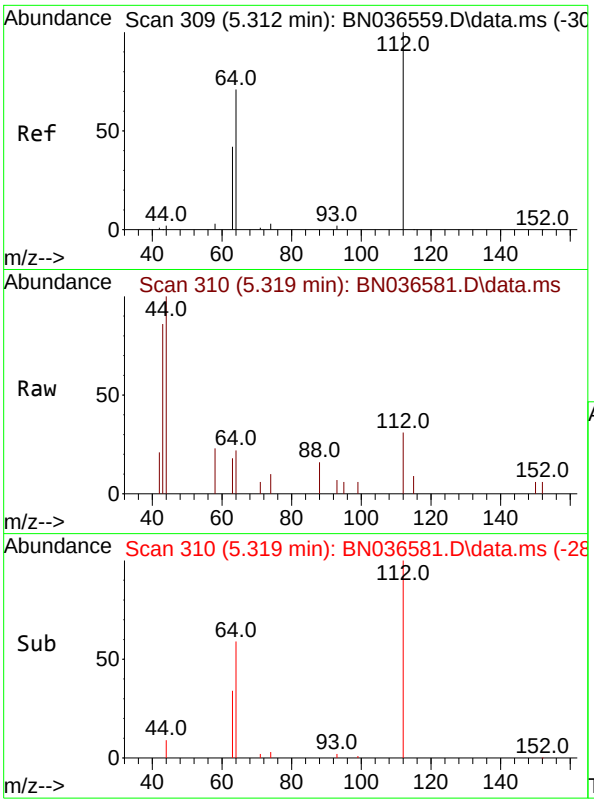


#2
1,4-Dioxane
Concen: 2.949 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion: 88 Resp: 7390

Ion	Ratio	Lower	Upper
88	100		
43	51.9	37.8	56.8
58	85.1	67.4	101.2



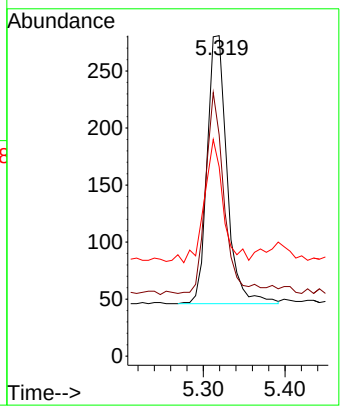


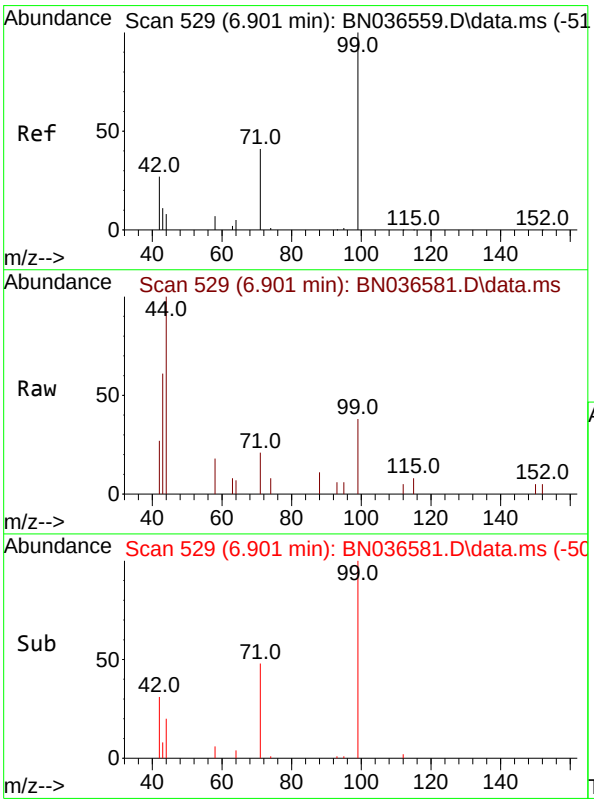
#4
2-Fluorophenol
Concen: 0.076 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:112 Resp: 398

Ion	Ratio	Lower	Upper
112	100		
64	69.6	53.1	79.7
63	45.0	31.8	47.8

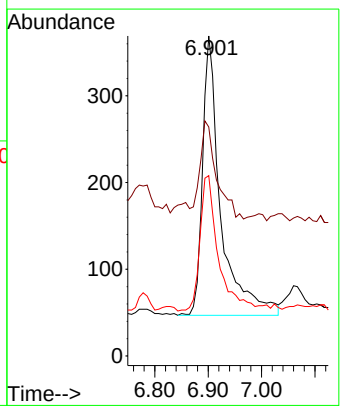


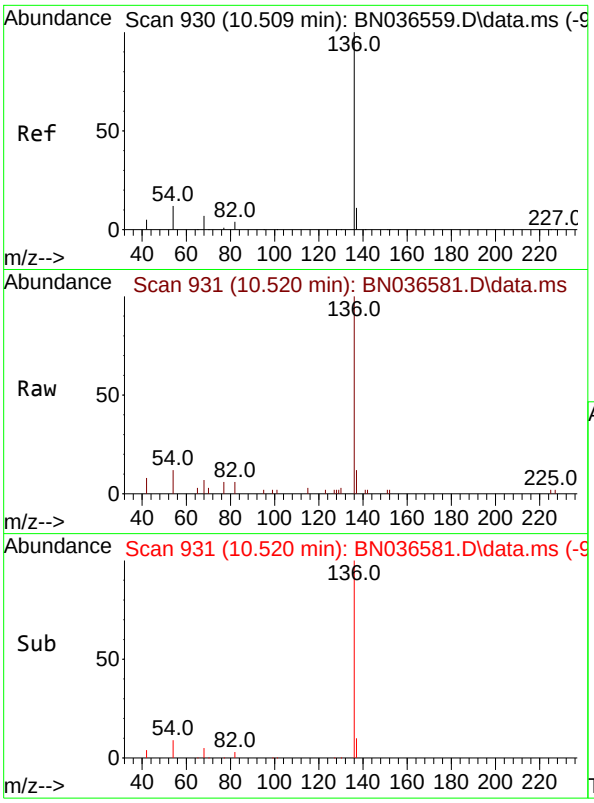


#5
Phenol-d6
Concen: 0.117 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion: 99 Resp: 764

Ion	Ratio	Lower	Upper
99	100		
42	32.2	26.5	39.7
71	47.5	34.1	51.1



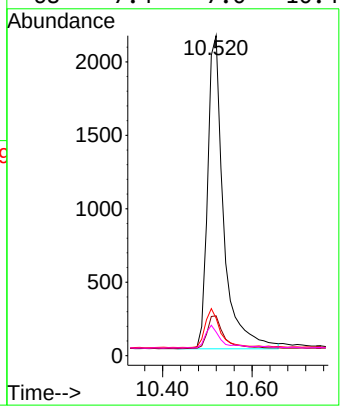


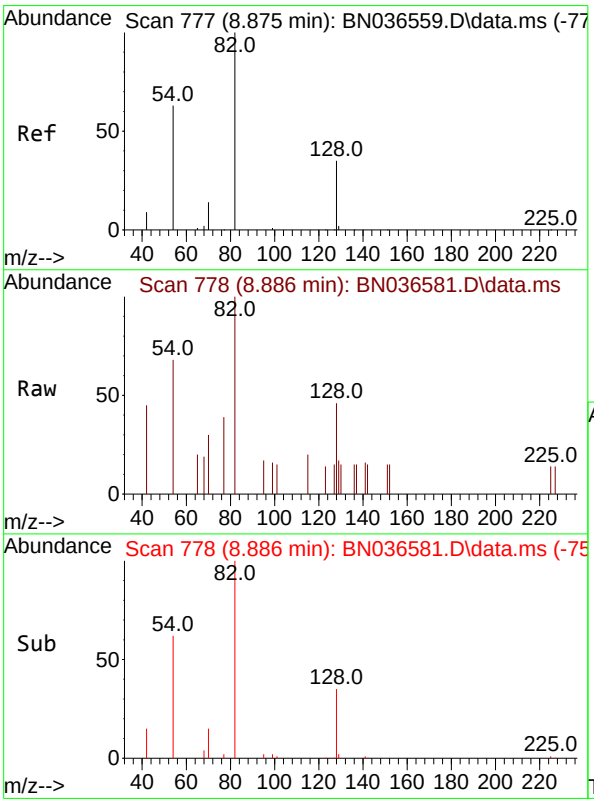
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.520 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:136 Resp: 5271

Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.3	15.5
54	11.7	11.5	17.3
68	7.4	7.0	10.4

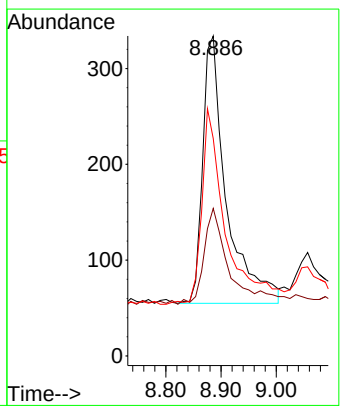


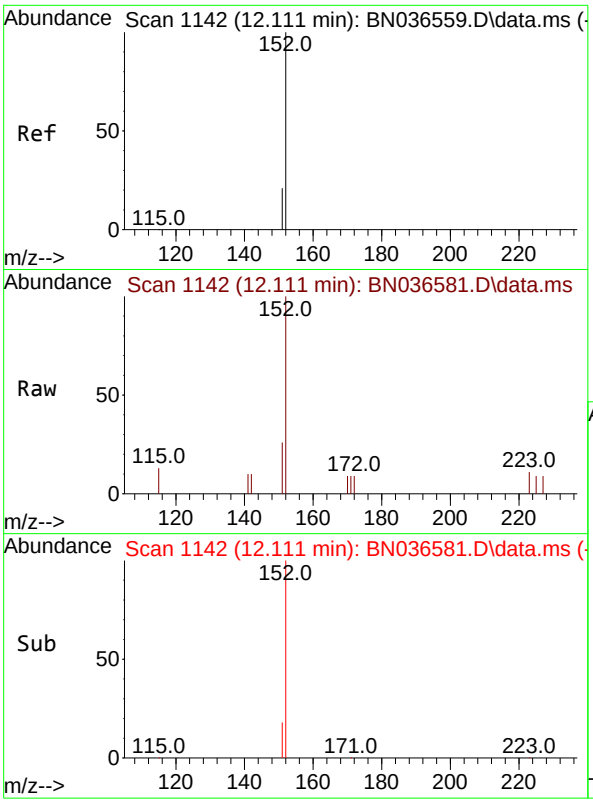


#8
Nitrobenzene-d5
Concen: 0.145 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion: 82 Resp: 833

Ion	Ratio	Lower	Upper
82	100		
128	46.1	30.6	45.8#
54	68.0	52.2	78.4



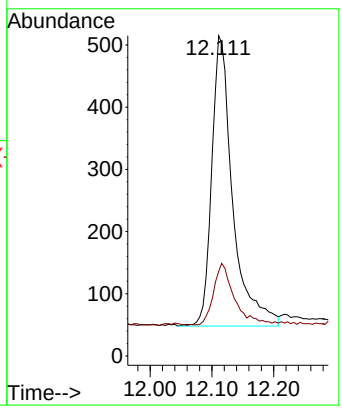


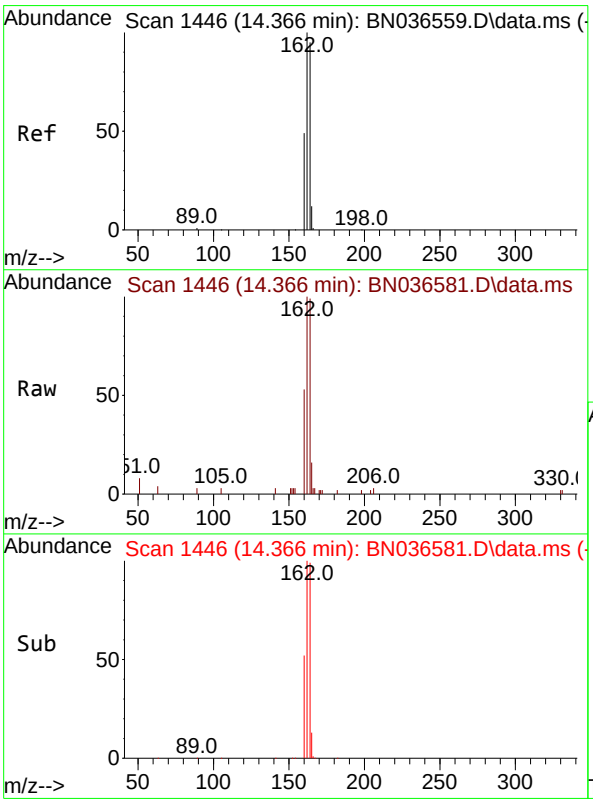
#11
2-Methylnaphthalene-d10
Concen: 0.141 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:152 Resp: 1102

Ion	Ratio	Lower	Upper
152	100		
151	21.6	17.0	25.6

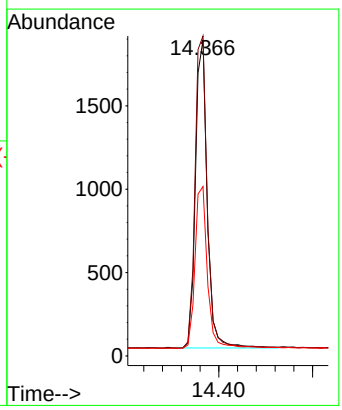


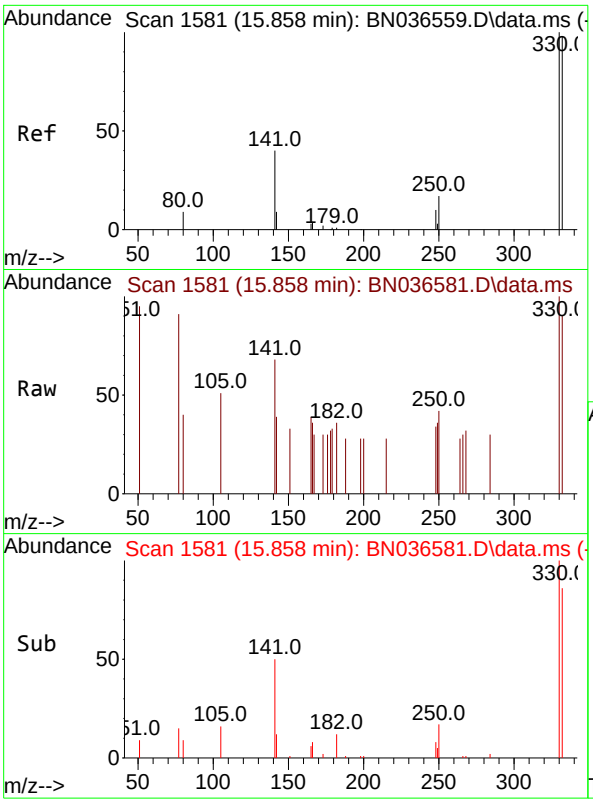


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion:164 Resp: 3220

Ion	Ratio	Lower	Upper
164	100		
162	101.2	84.2	126.2
160	53.6	42.2	63.2



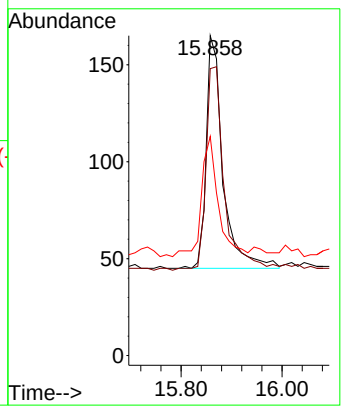


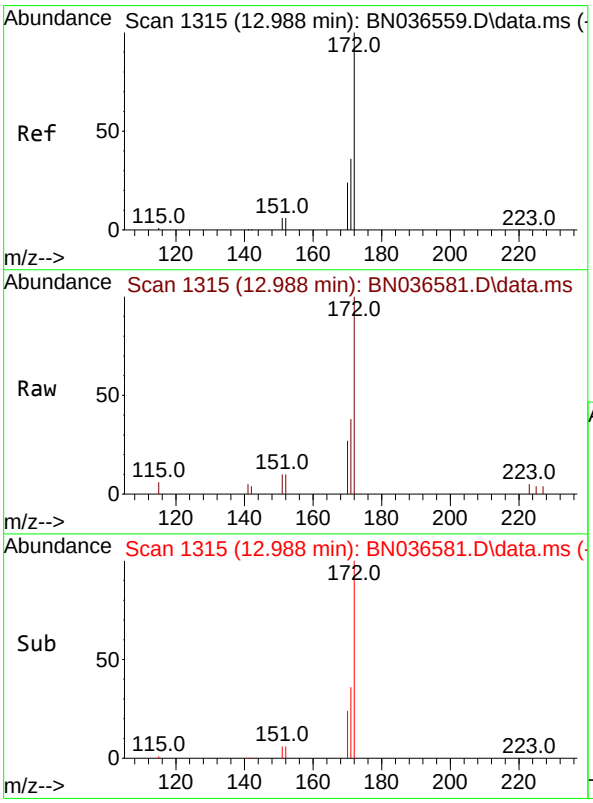
#14
2,4,6-Tribromophenol
Concen: 0.189 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:330 Resp: 276

Ion	Ratio	Lower	Upper
330	100		
332	96.7	75.2	112.8
141	52.2	43.4	65.2

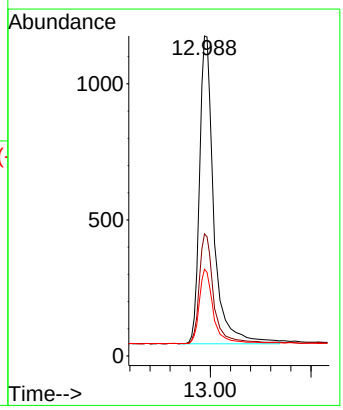


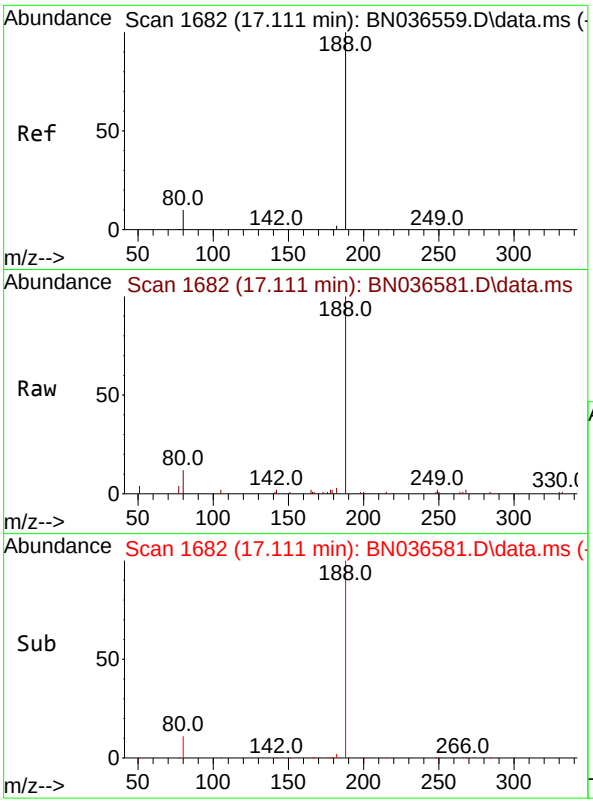


#15
2-Fluorobiphenyl
Concen: 0.162 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion:172 Resp: 3032

Ion	Ratio	Lower	Upper
172	100		
171	38.2	29.5	44.3
170	27.1	20.2	30.4



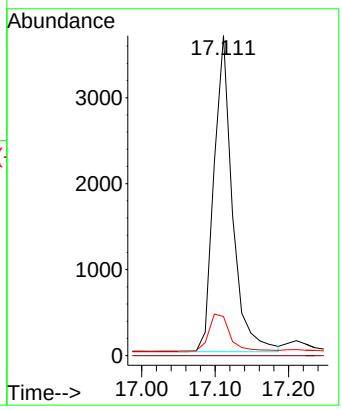


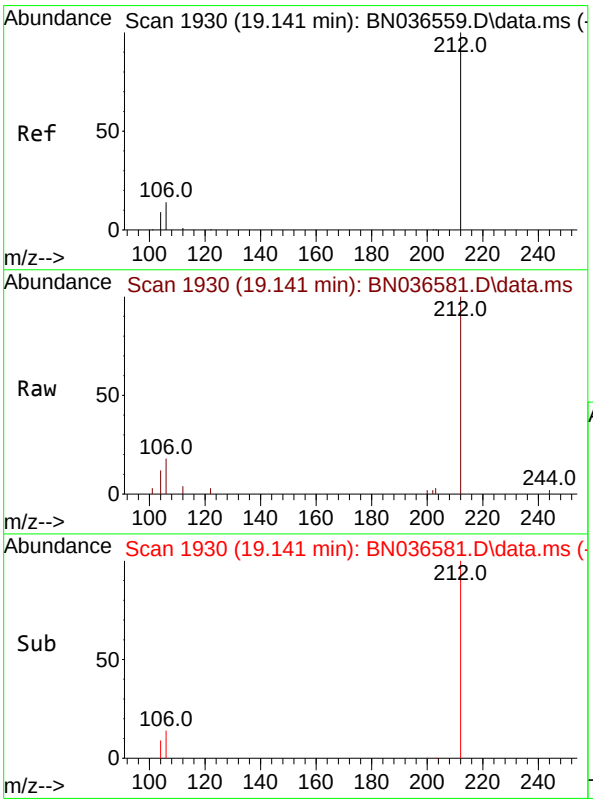
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:188 Resp: 6427

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.2	8.8	13.2

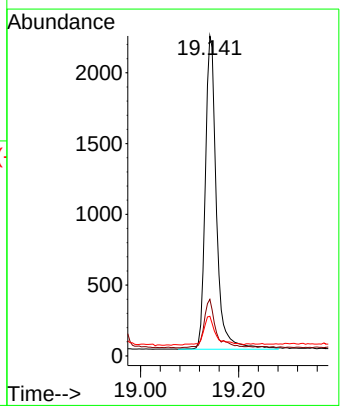


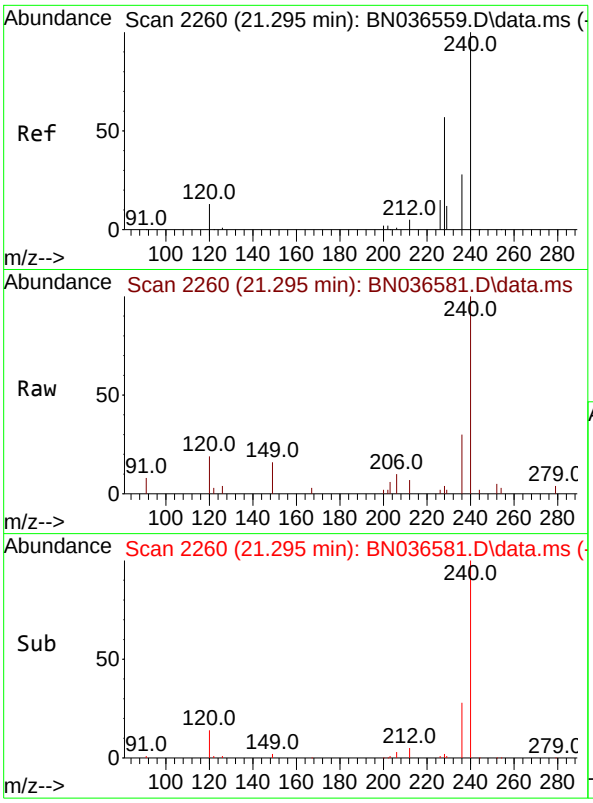


#27
Fluoranthene-d10
Concen: 0.211 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion:212 Resp: 3474

Ion	Ratio	Lower	Upper
212	100		
106	16.6	11.8	17.6
104	9.2	7.3	10.9



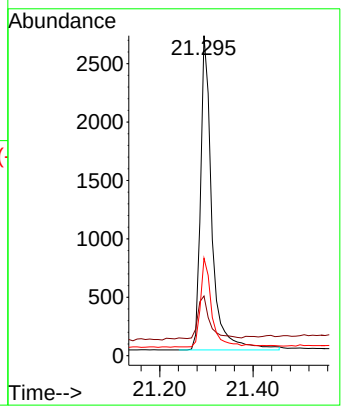


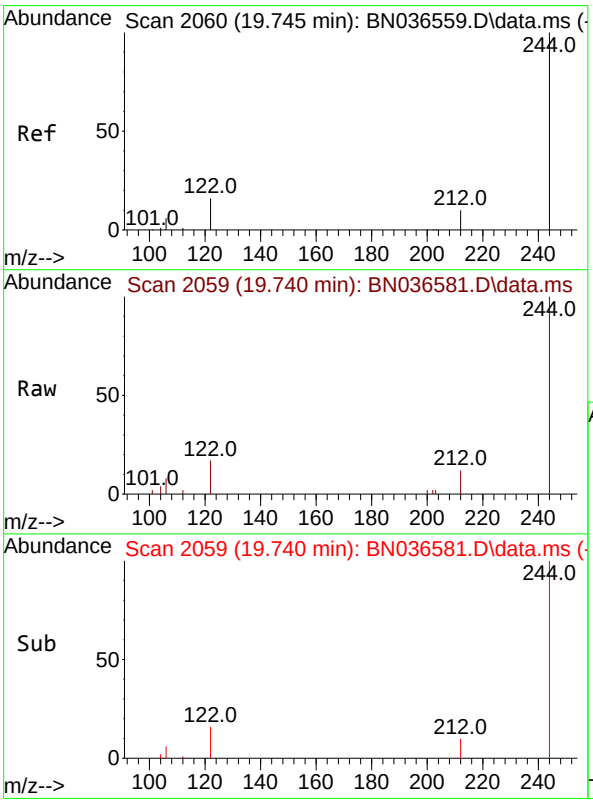
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:240 Resp: 4562

Ion	Ratio	Lower	Upper
240	100		
120	18.7	14.6	22.0
236	30.4	24.1	36.1

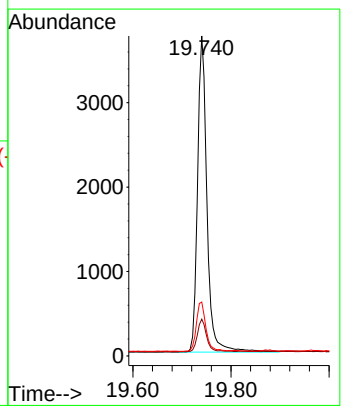


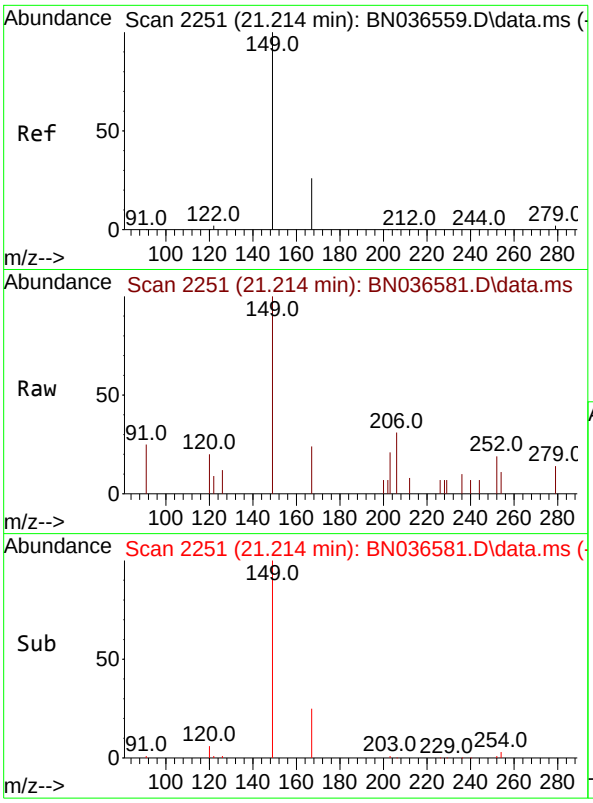


#31
Terphenyl-d14
Concen: 0.456 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion:244 Resp: 4984

Ion	Ratio	Lower	Upper
244	100		
212	11.5	9.6	14.4
122	16.8	13.9	20.9



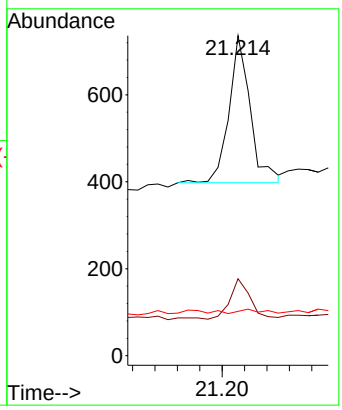


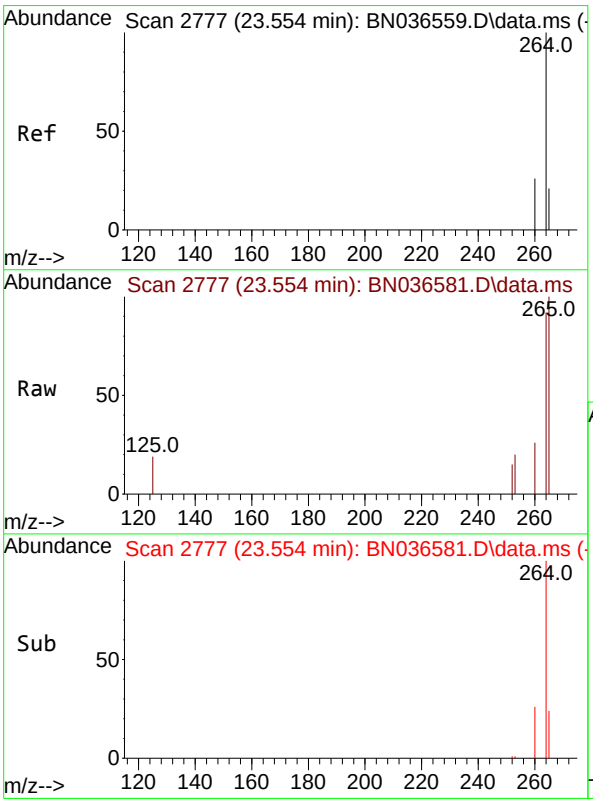
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.039 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306DL

Tgt Ion:149 Resp: 444

Ion	Ratio	Lower	Upper
149	100		
167	26.4	20.7	31.1
279	3.2	3.6	5.4#

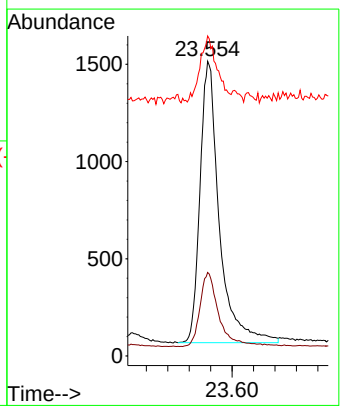




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. 0.000 min
Lab File: BN036581.D
Acq: 11 Mar 2025 14:57

Tgt Ion:264 Resp: 3613

Ion	Ratio	Lower	Upper
264	100		
260	28.4	22.6	33.8
265	108.6	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE103D3-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-10	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	950 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036593.D	1	03/10/25 11:35	03/12/25 10:26	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.29		30 - 150		73%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		78%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.51		58 - 132		128%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1960	7.724				
1146-65-2	Naphthalene-d8	4460	10.509				
15067-26-2	Acenaphthene-d10	2880	14.356				
1517-22-2	Phenanthrene-d10	5110	17.111				
1719-03-5	Chrysene-d12	3420	21.295				
1520-96-3	Perylene-d12	2970	23.551				

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\BN031225\
Data File : BN036593.D
Acq On : 12 Mar 2025 10:26
Operator : RC/JU
Sample : Q1531-10
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Quant Time: Mar 12 10:50:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

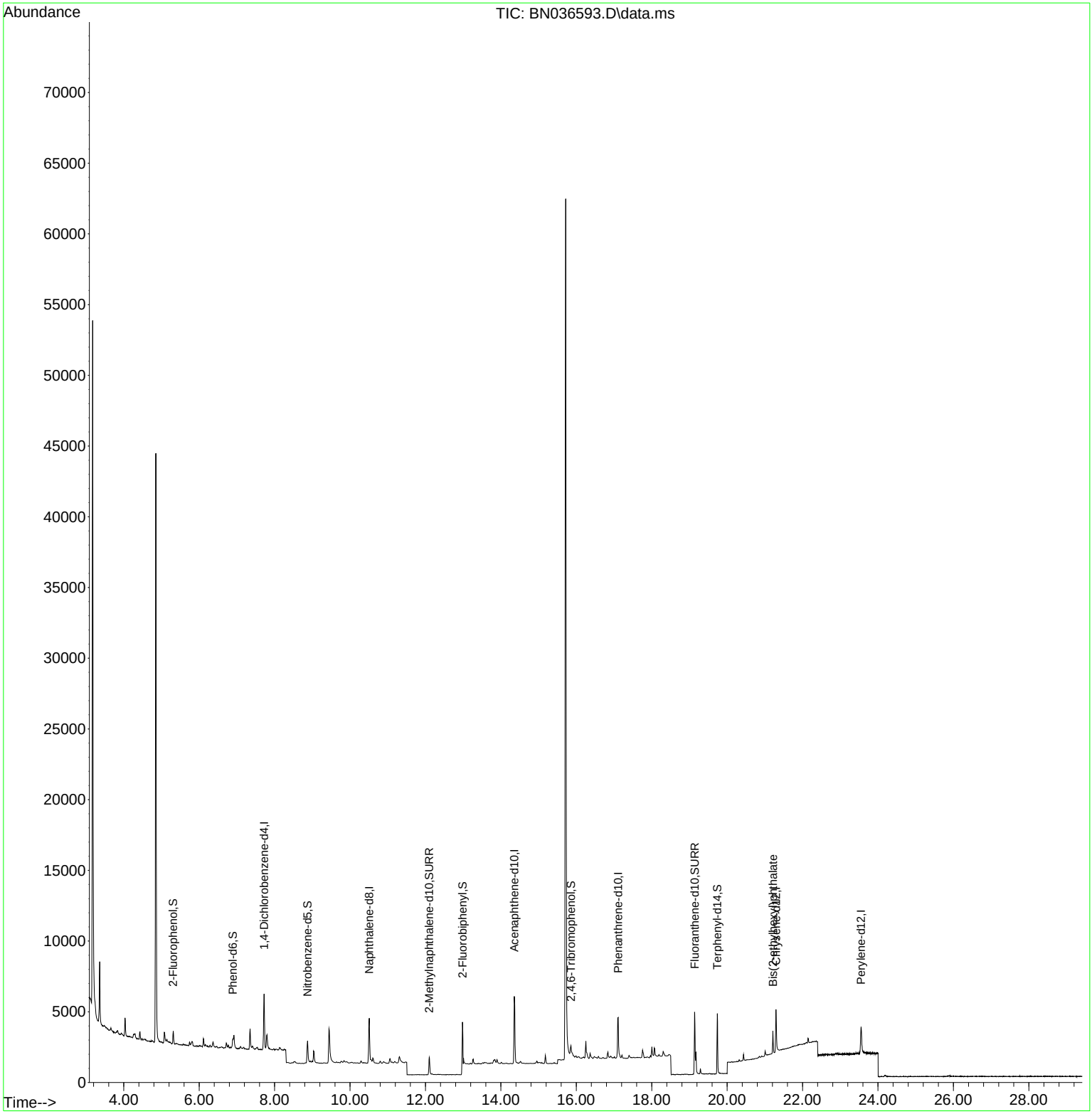
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	1963	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4459	0.400	ng	0.00
13) Acenaphthene-d10	14.356	164	2879	0.400	ng	-0.01
19) Phenanthrene-d10	17.111	188	5114	0.400	ng	0.00
29) Chrysene-d12	21.295	240	3421	0.400	ng	0.00
35) Perylene-d12	23.551	264	2969	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	634	0.139	ng	0.00
5) Phenol-d6	6.894	99	421	0.074	ng	0.00
8) Nitrobenzene-d5	8.875	82	1484	0.306	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	1943	0.293	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	475	0.364	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	5205	0.311	ng	0.00
27) Fluoranthene-d10	19.141	212	5327	0.406	ng	0.00
31) Terphenyl-d14	19.740	244	4189	0.511	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.214	149	1643	0.194	ng	96

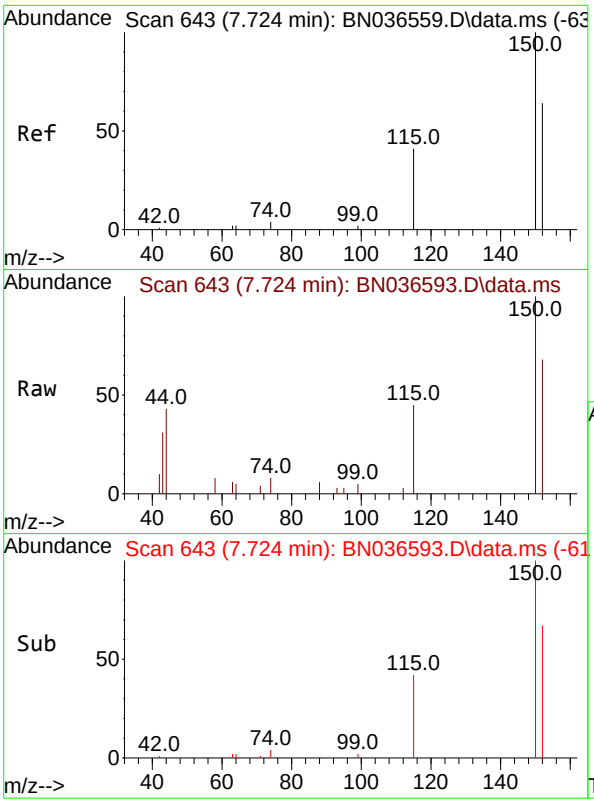
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036593.D
Acq On : 12 Mar 2025 10:26
Operator : RC/JU
Sample : Q1531-10
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Quant Time: Mar 12 10:50:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



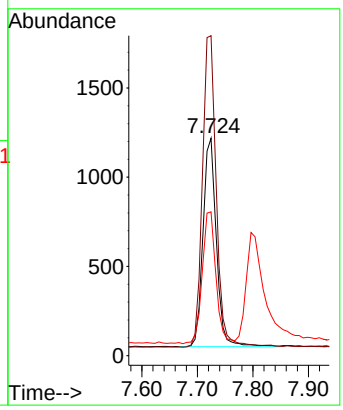


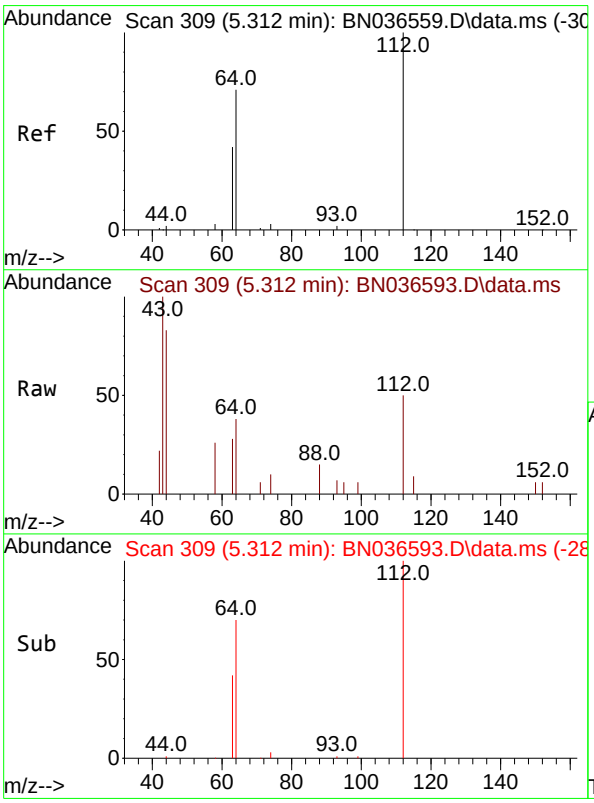
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion:152 Resp: 1963

Ion	Ratio	Lower	Upper
152	100		
150	147.2	123.7	185.5
115	66.2	54.3	81.5

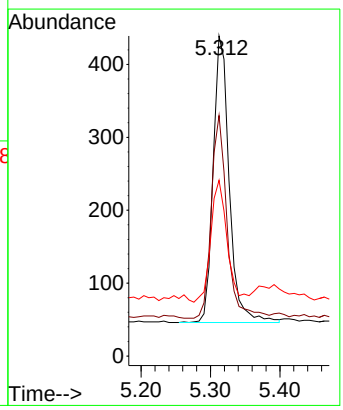


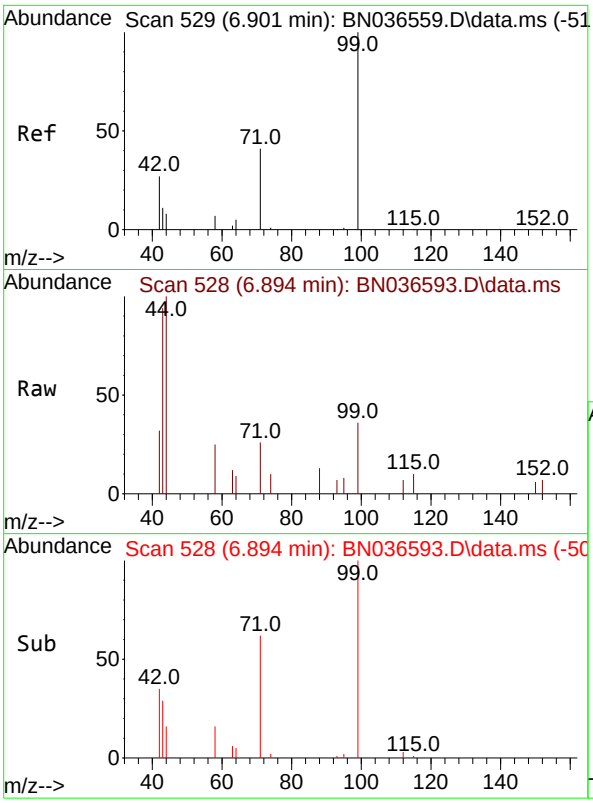


#4
2-Fluorophenol
Concen: 0.139 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:112 Resp: 634

Ion	Ratio	Lower	Upper
112	100		
64	69.2	53.1	79.7
63	43.2	31.8	47.8



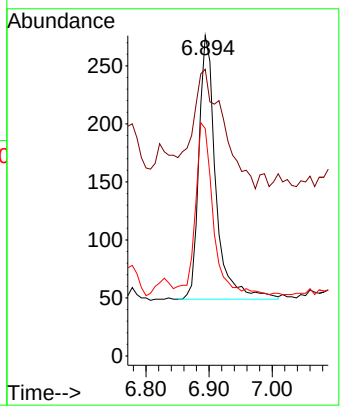


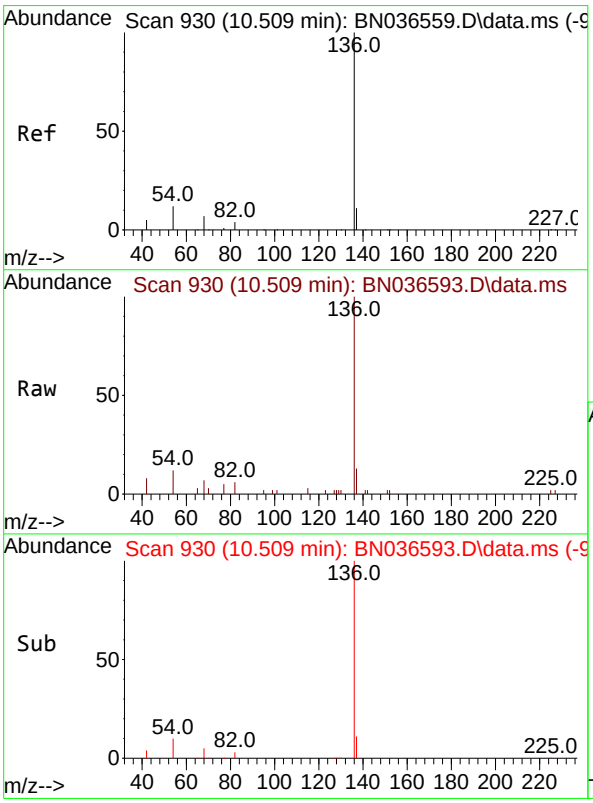
#5
Phenol-d6
Concen: 0.074 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion: 99 Resp: 421

Ion	Ratio	Lower	Upper
99	100		
42	83.1	26.5	39.7#
71	68.6	34.1	51.1#

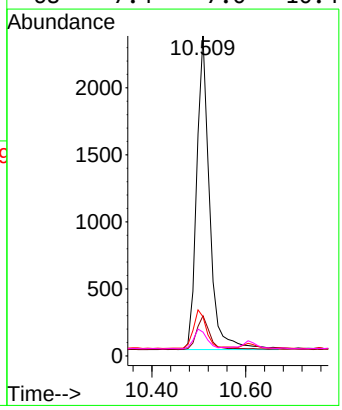


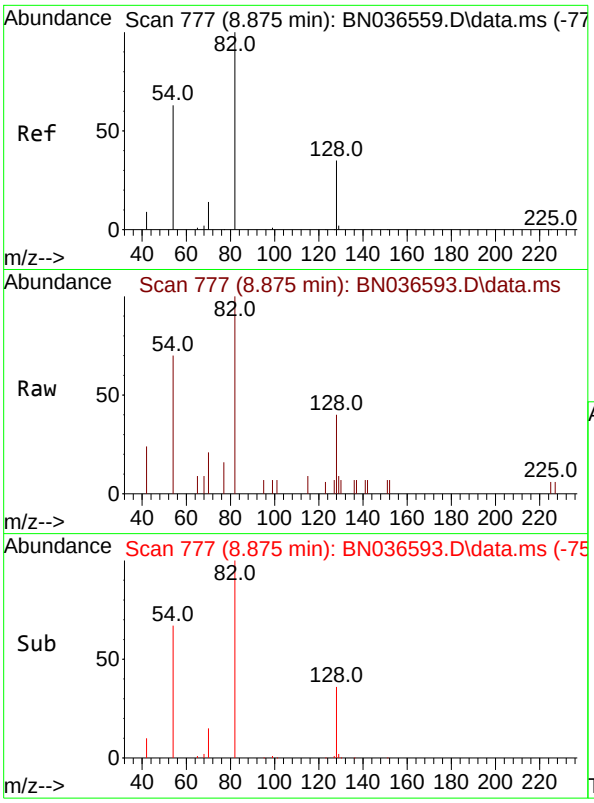


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:136 Resp: 4459

Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.3	15.5
54	12.2	11.5	17.3
68	7.4	7.0	10.4



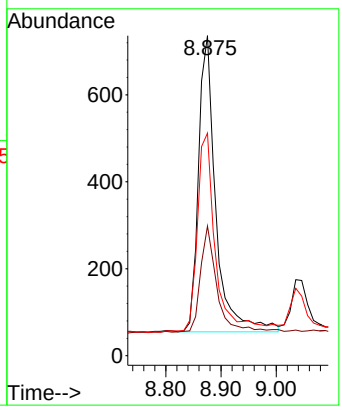


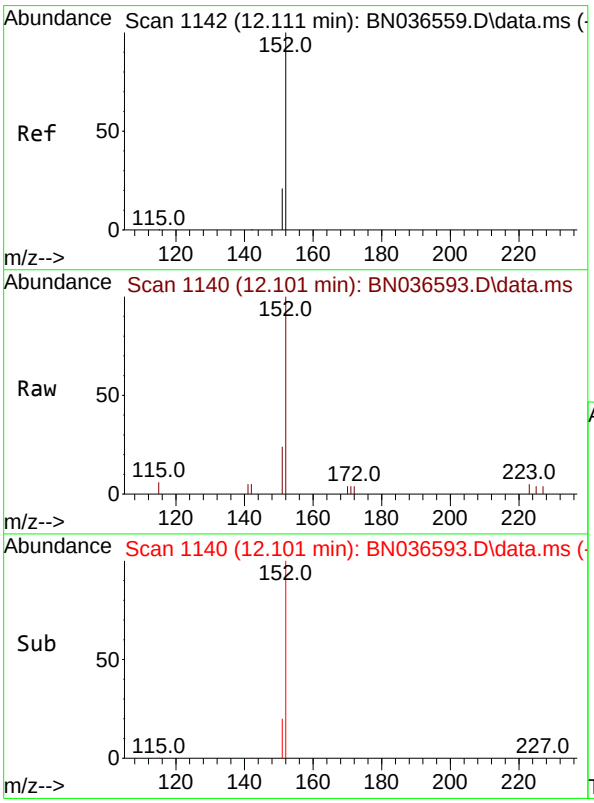
#8
Nitrobenzene-d5
Concen: 0.306 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion: 82 Resp: 1484

Ion	Ratio	Lower	Upper
82	100		
128	40.5	30.6	45.8
54	69.6	52.2	78.4

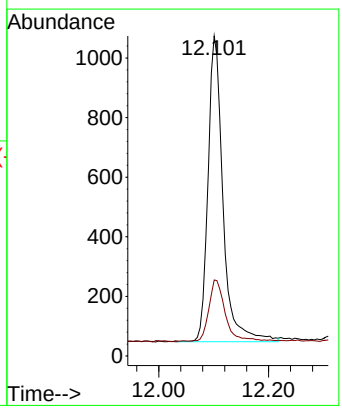


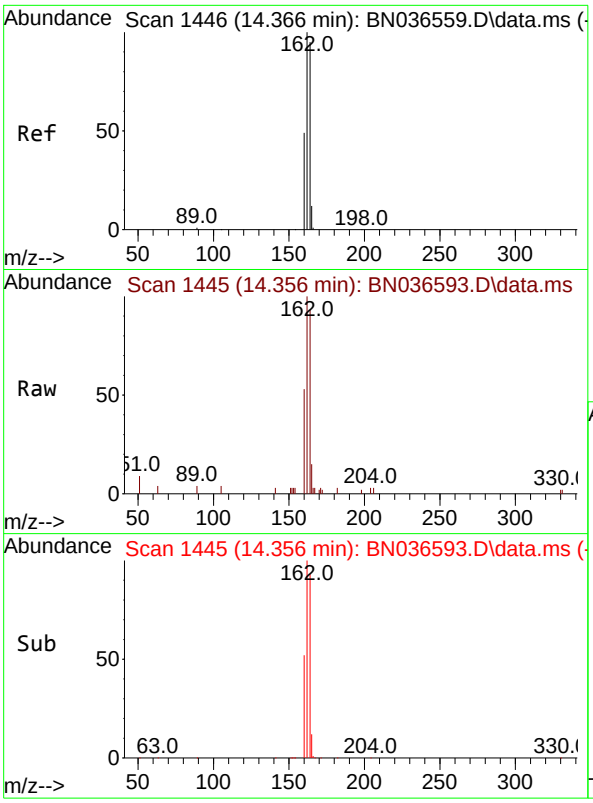


#11
2-Methylnaphthalene-d10
Concen: 0.293 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.010 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:152 Resp: 1943

Ion	Ratio	Lower	Upper
152	100		
151	21.8	17.0	25.6



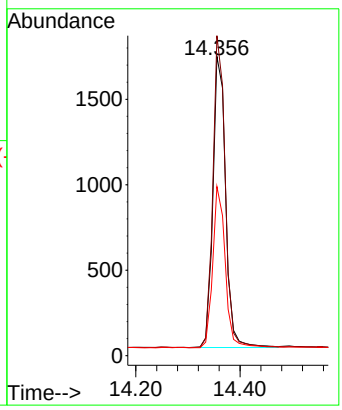


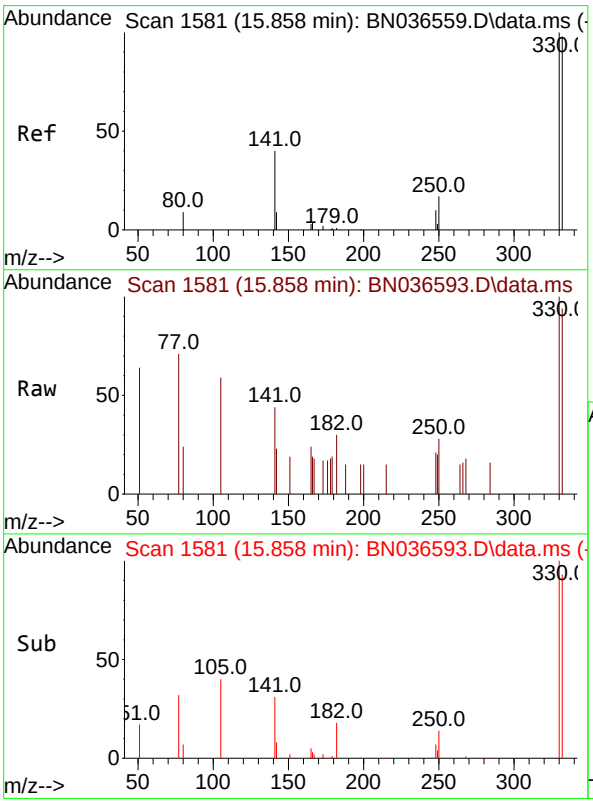
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.356 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion:164 Resp: 2879

Ion	Ratio	Lower	Upper
164	100		
162	107.0	84.2	126.2
160	56.5	42.2	63.2

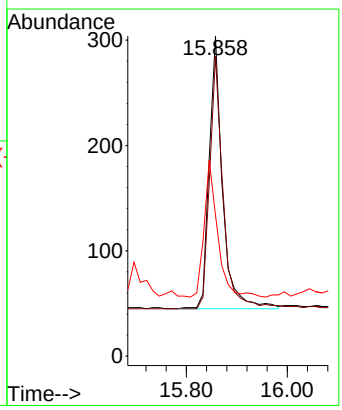


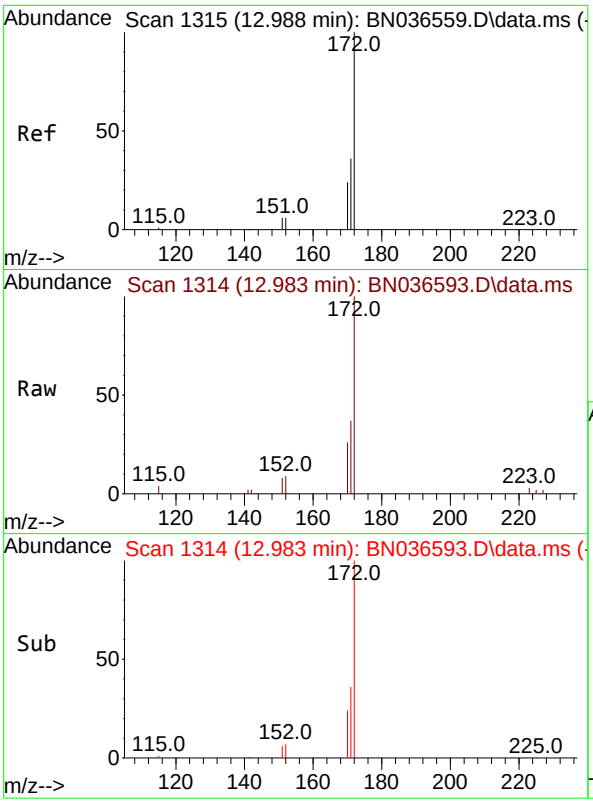


#14
2,4,6-Tribromophenol
Concen: 0.364 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:330 Resp: 475

Ion	Ratio	Lower	Upper
330	100		
332	93.1	75.2	112.8
141	51.6	43.4	65.2



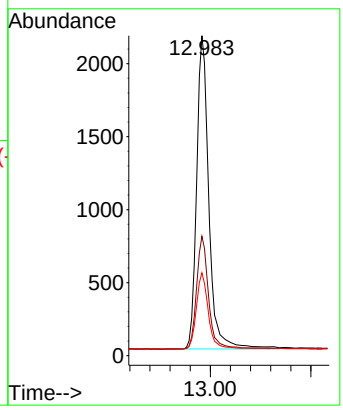


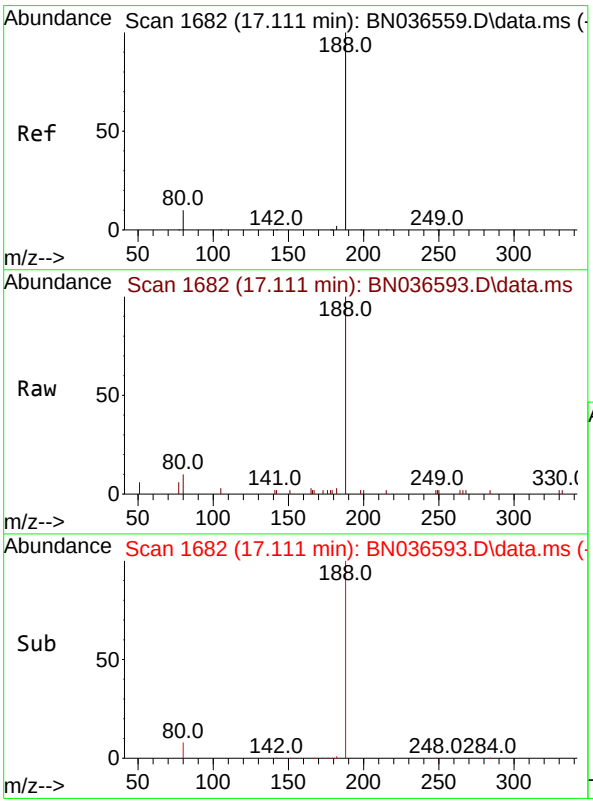
#15
2-Fluorobiphenyl
Concen: 0.311 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion:172 Resp: 5205

Ion	Ratio	Lower	Upper
172	100		
171	37.3	29.5	44.3
170	25.9	20.2	30.4

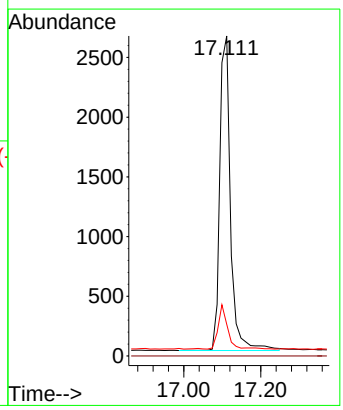


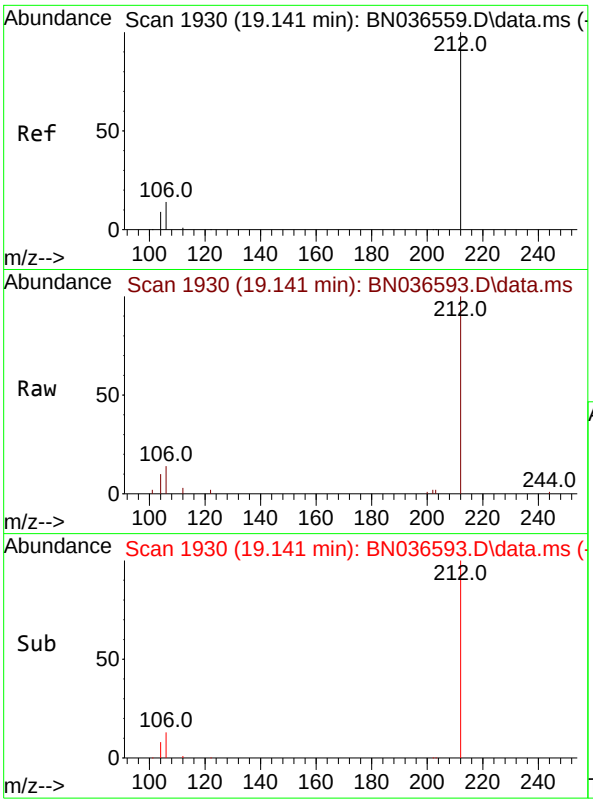


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:188 Resp: 5114

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.9	8.8	13.2



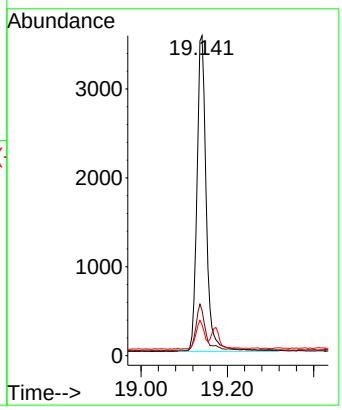


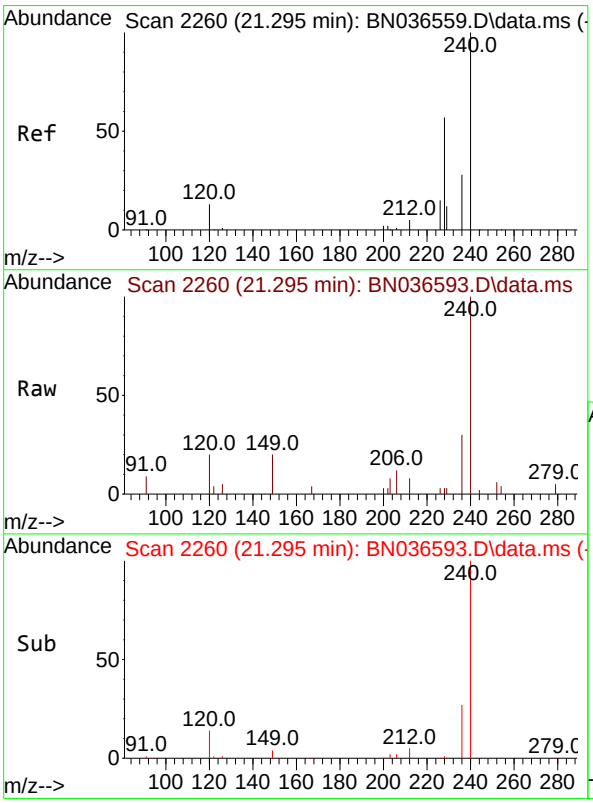
#27
Fluoranthene-d10
Concen: 0.406 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion:212 Resp: 5327

Ion	Ratio	Lower	Upper
212	100		
106	14.8	11.8	17.6
104	8.2	7.3	10.9

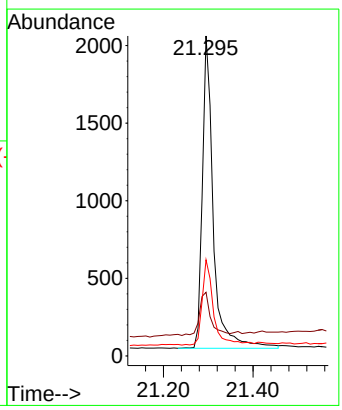


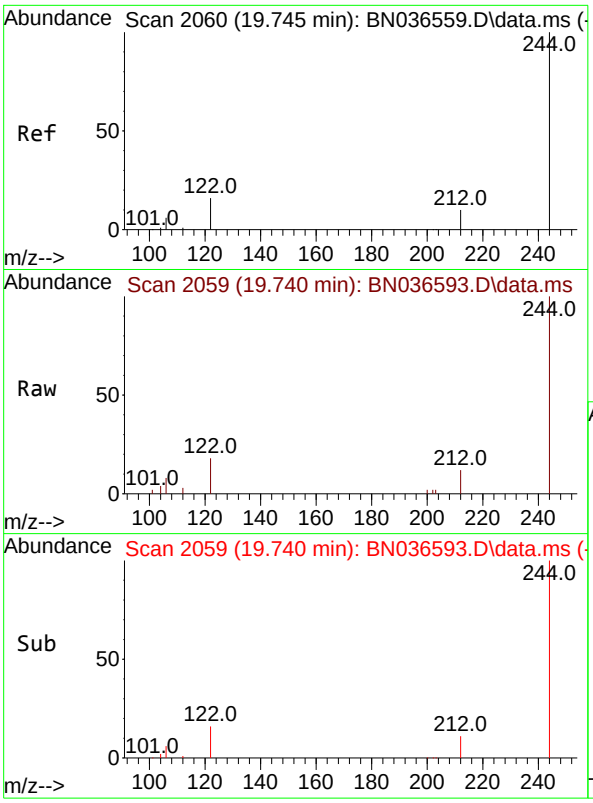


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:240 Resp: 3421

Ion	Ratio	Lower	Upper
240	100		
120	19.9	14.6	22.0
236	30.1	24.1	36.1



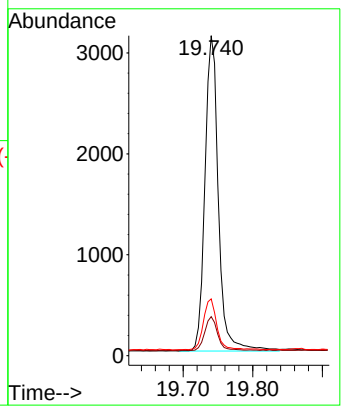


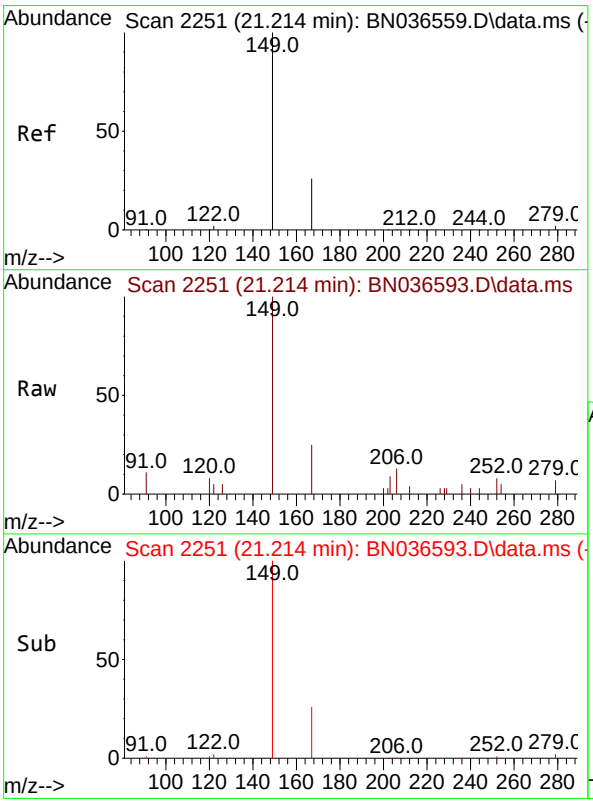
#31
Terphenyl-d14
Concen: 0.511 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion:244 Resp: 4189

Ion	Ratio	Lower	Upper
244	100		
212	12.2	9.6	14.4
122	17.8	13.9	20.9

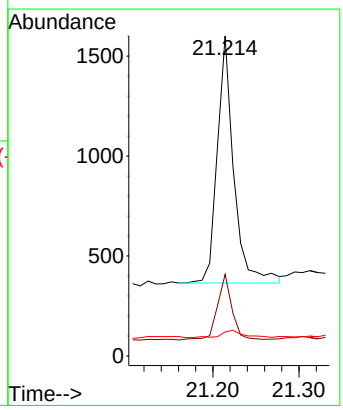


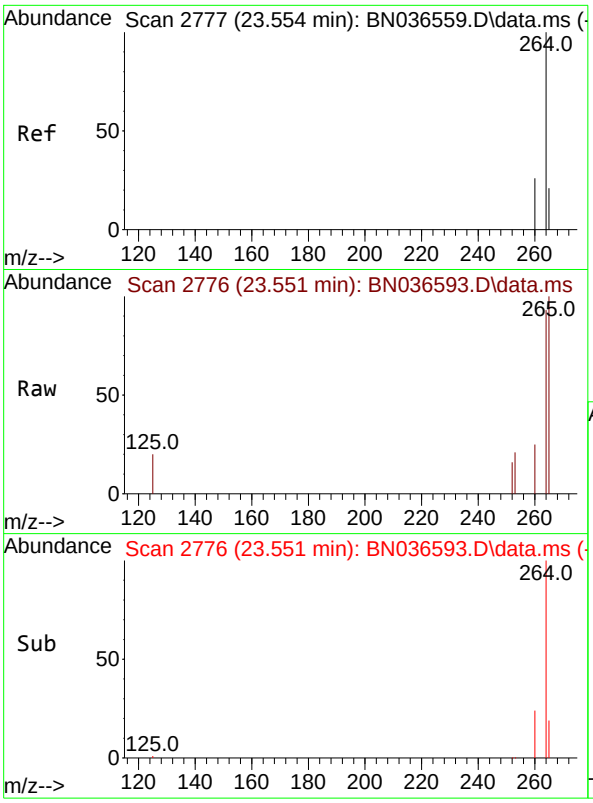


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.194 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Tgt Ion:149 Resp: 1643

Ion	Ratio	Lower	Upper
149	100		
167	23.5	20.7	31.1
279	4.2	3.6	5.4



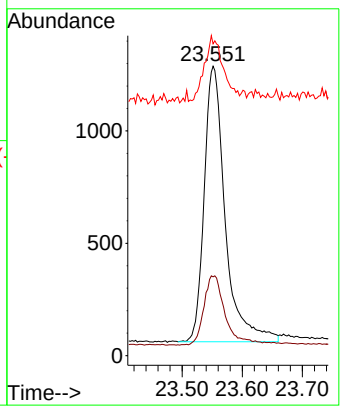


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036593.D
Acq: 12 Mar 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RE103D3-20250306

Tgt Ion:264 Resp: 2969

Ion	Ratio	Lower	Upper
264	100		
260	27.3	22.6	33.8
265	107.8	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE103D2-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-11	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036582.D	1	03/10/25 11:35	03/11/25 15:32	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.48		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.82	*	58 - 132		206%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2160	7.724				
1146-65-2	Naphthalene-d8	4920	10.509				
15067-26-2	Acenaphthene-d10	2930	14.366				
1517-22-2	Phenanthrene-d10	5750	17.111				
1719-03-5	Chrysene-d12	3770	21.295				
1520-96-3	Perylene-d12	3250	23.557				

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\BN031125\
Data File : BN036582.D
Acq On : 11 Mar 2025 15:32
Operator : RC/JU
Sample : Q1531-11
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Quant Time: Mar 11 15:58:27 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

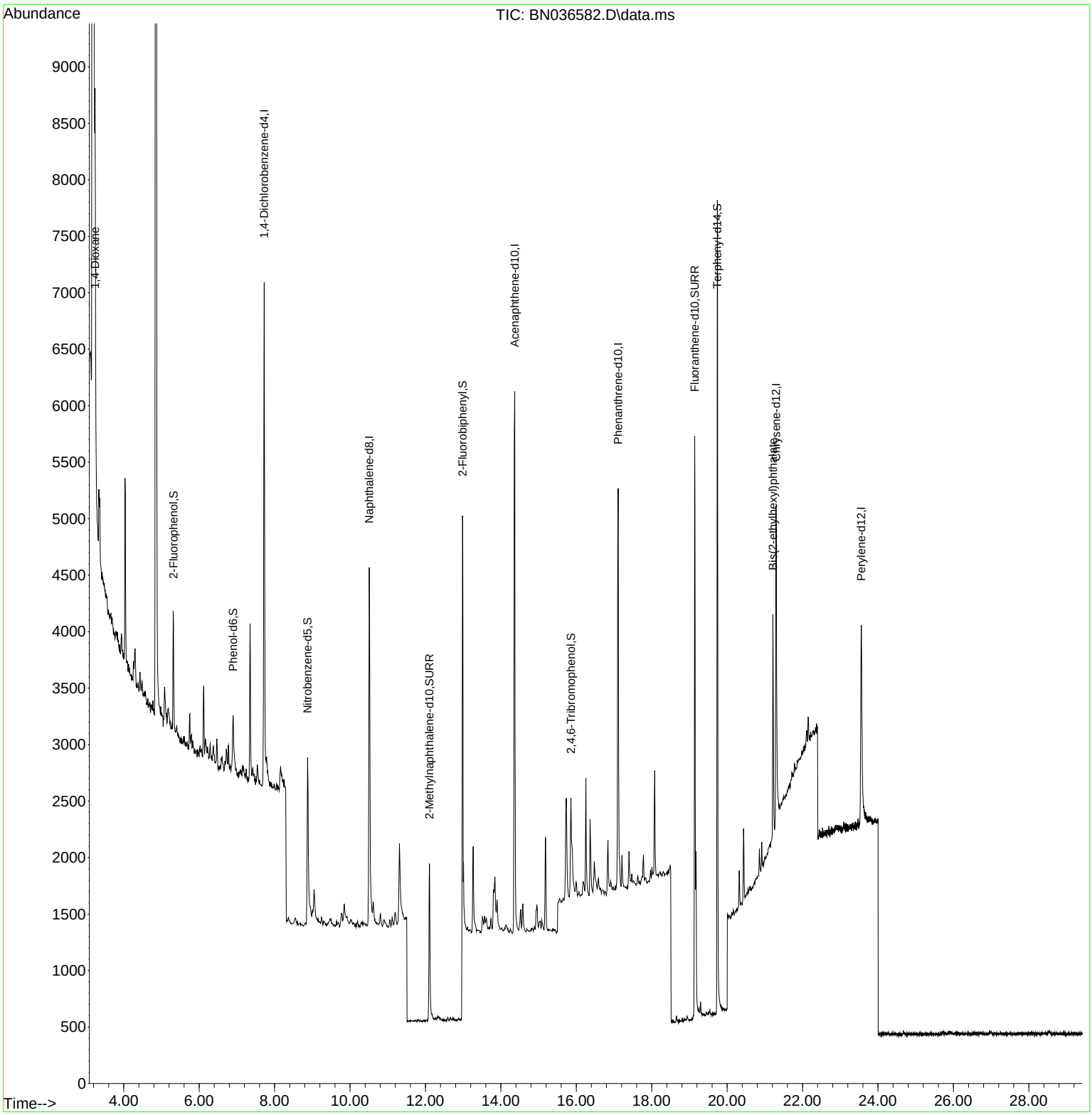
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2161	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4915	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2930	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5748	0.400	ng	0.00
29) Chrysene-d12	21.295	240	3765	0.400	ng	0.00
35) Perylene-d12	23.557	264	3253	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	764	0.152	ng	0.00
5) Phenol-d6	6.901	99	495	0.080	ng	0.00
8) Nitrobenzene-d5	8.875	82	1634	0.306	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2304	0.315	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	536	0.403	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	6493	0.381	ng	0.00
27) Fluoranthene-d10	19.141	212	6150	0.417	ng	0.00
31) Terphenyl-d14	19.740	244	7435	0.824	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	1124	0.469	ng	# 83
34) Bis(2-ethylhexyl)phtha...	21.214	149	2180	0.234	ng	95

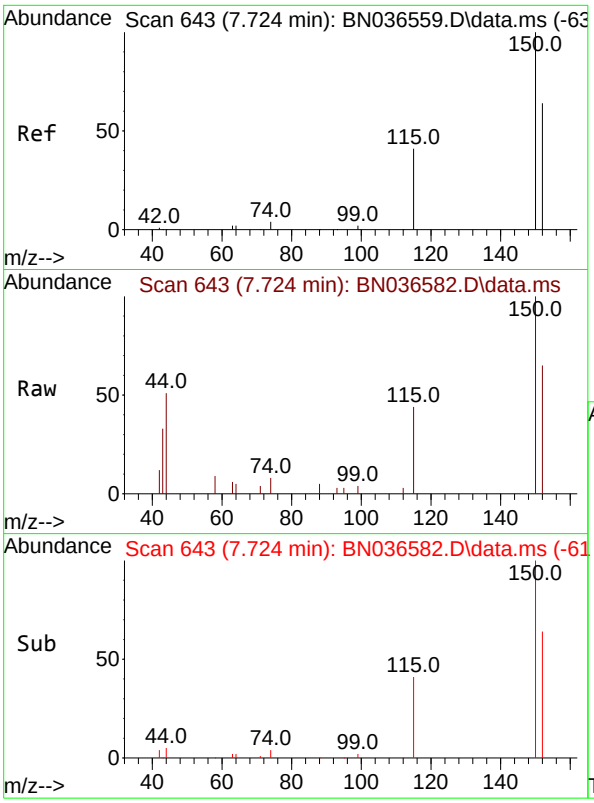
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036582.D
Acq On : 11 Mar 2025 15:32
Operator : RC/JU
Sample : Q1531-11
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Quant Time: Mar 11 15:58:27 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



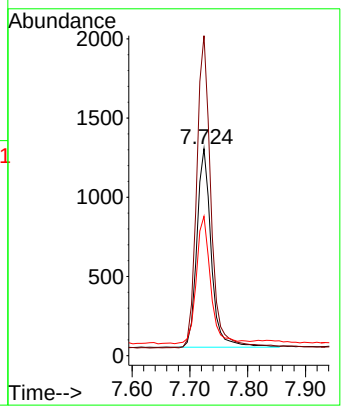


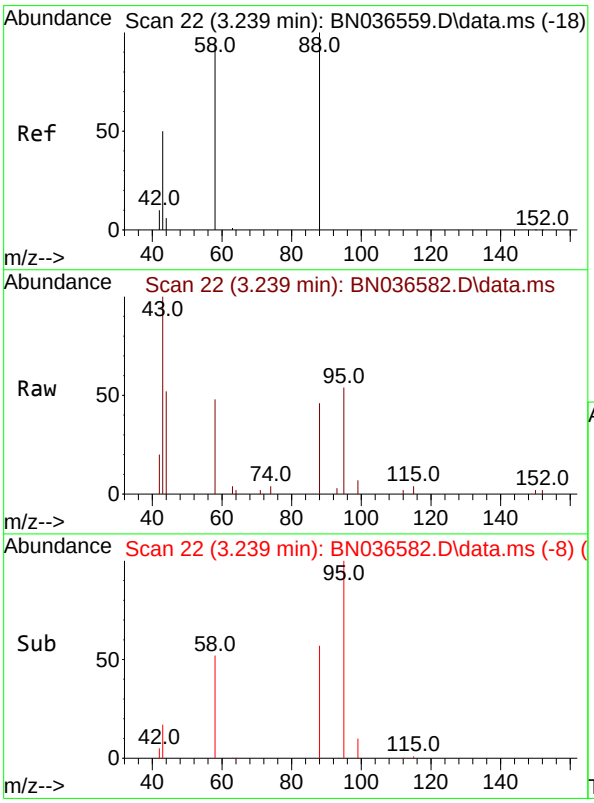
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:152 Resp: 2161

Ion	Ratio	Lower	Upper
152	100		
150	154.6	123.7	185.5
115	67.3	54.3	81.5

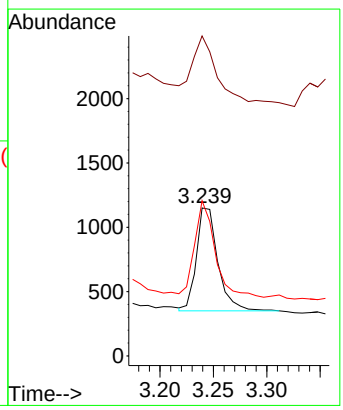


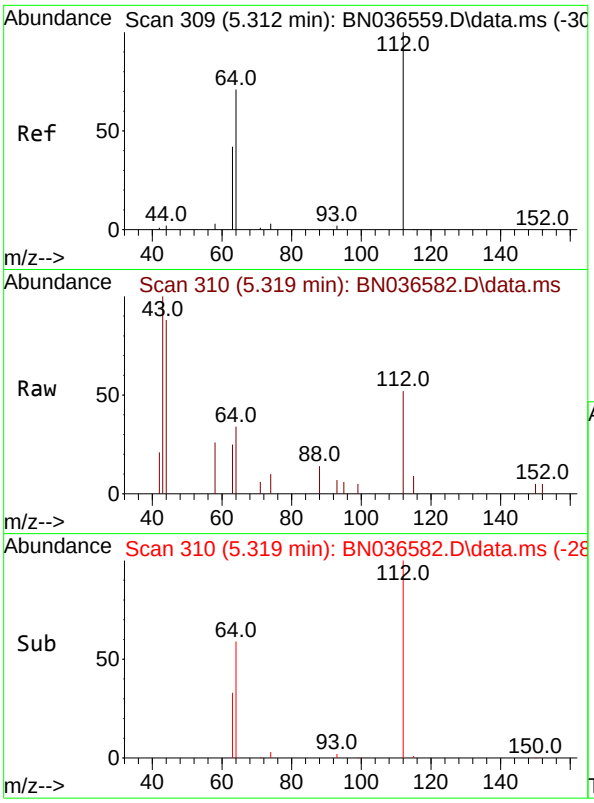


#2
1,4-Dioxane
Concen: 0.469 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion: 88 Resp: 1124

Ion	Ratio	Lower	Upper
88	100		
43	73.0	37.8	56.8#
58	88.7	67.4	101.2



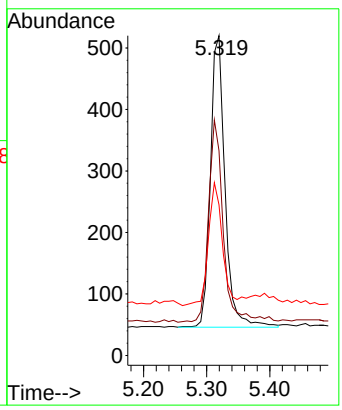


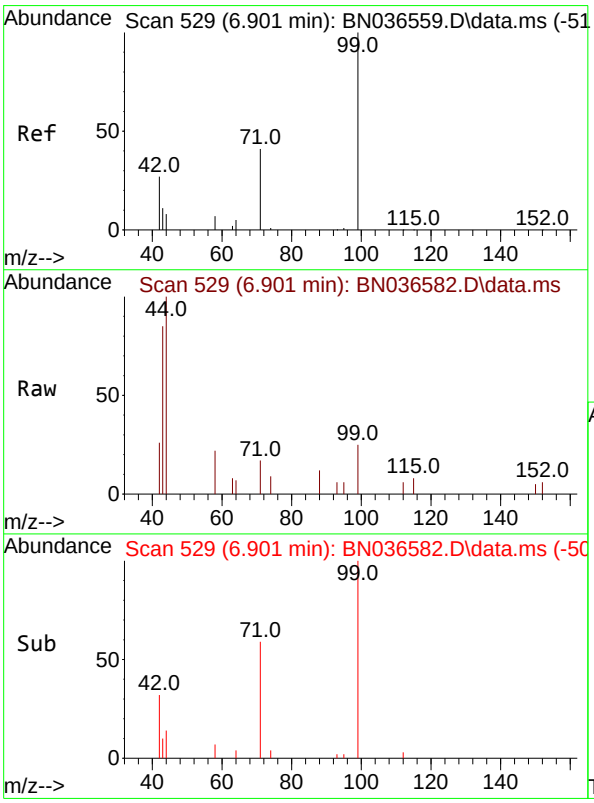
#4
2-Fluorophenol
Concen: 0.152 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:112 Resp: 764

Ion	Ratio	Lower	Upper
112	100		
64	67.5	53.1	79.7
63	40.1	31.8	47.8

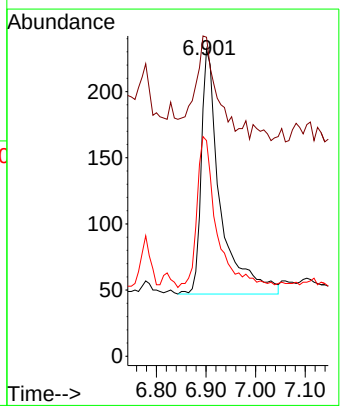


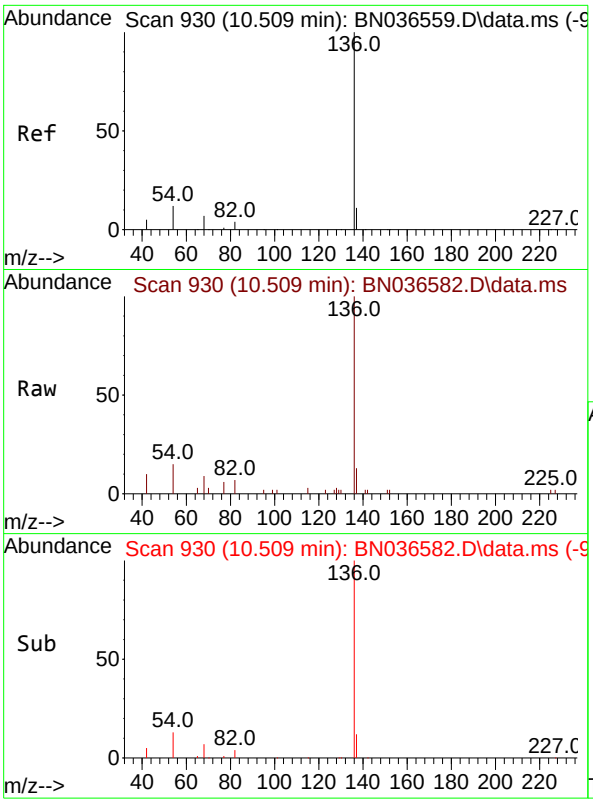


#5
Phenol-d6
Concen: 0.080 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion: 99 Resp: 495

Ion	Ratio	Lower	Upper
99	100		
42	37.8	26.5	39.7
71	64.2	34.1	51.1#



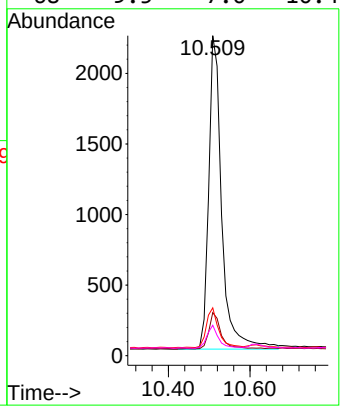


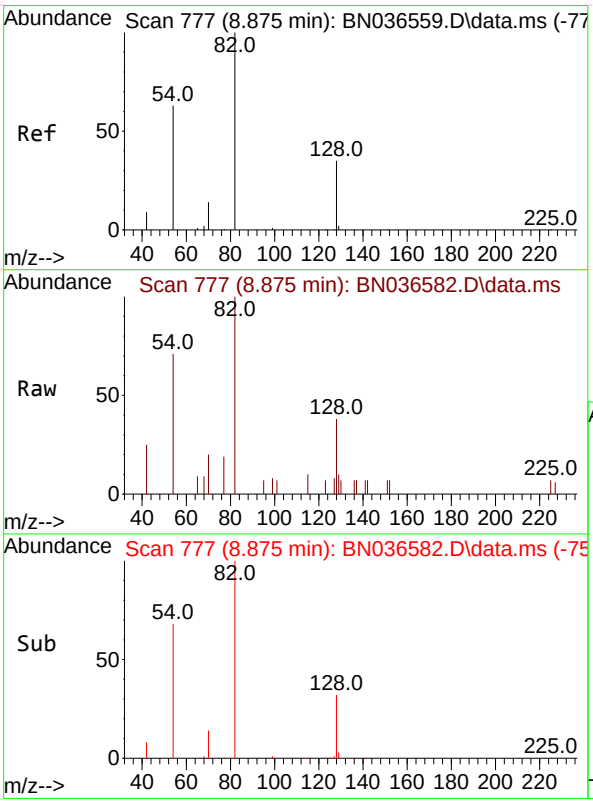
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:136 Resp: 4915

Ion	Ratio	Lower	Upper
136	100		
137	13.5	10.3	15.5
54	15.0	11.5	17.3
68	9.5	7.0	10.4

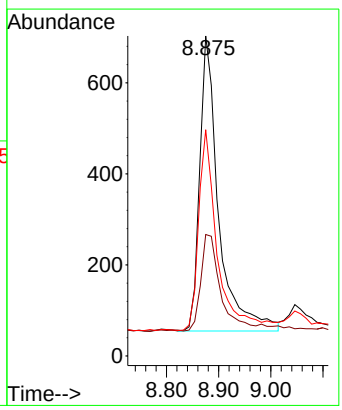


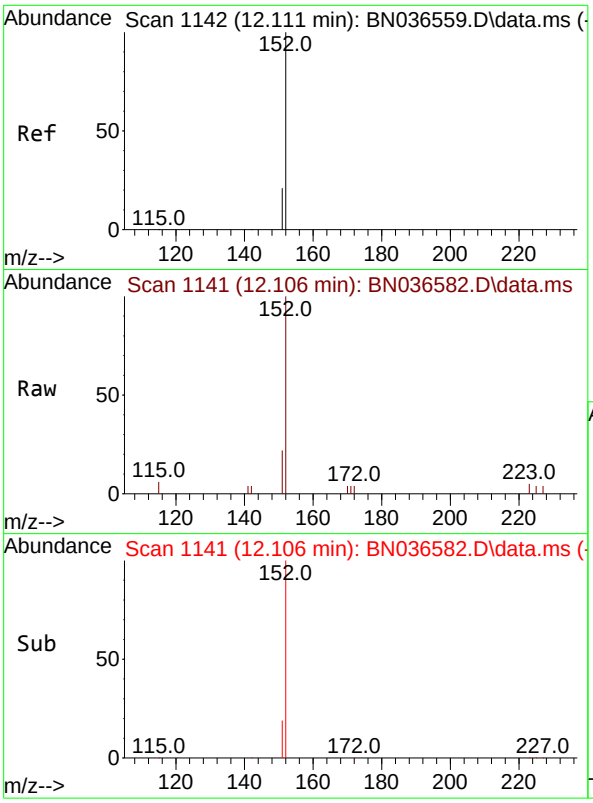


#8
Nitrobenzene-d5
Concen: 0.306 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion: 82 Resp: 1634

Ion	Ratio	Lower	Upper
82	100		
128	38.0	30.6	45.8
54	70.7	52.2	78.4



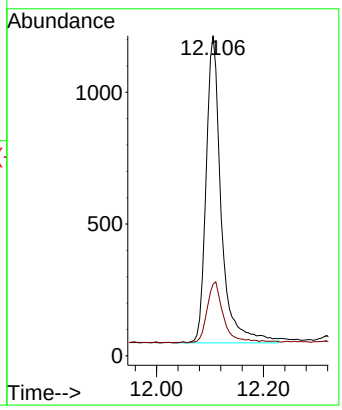


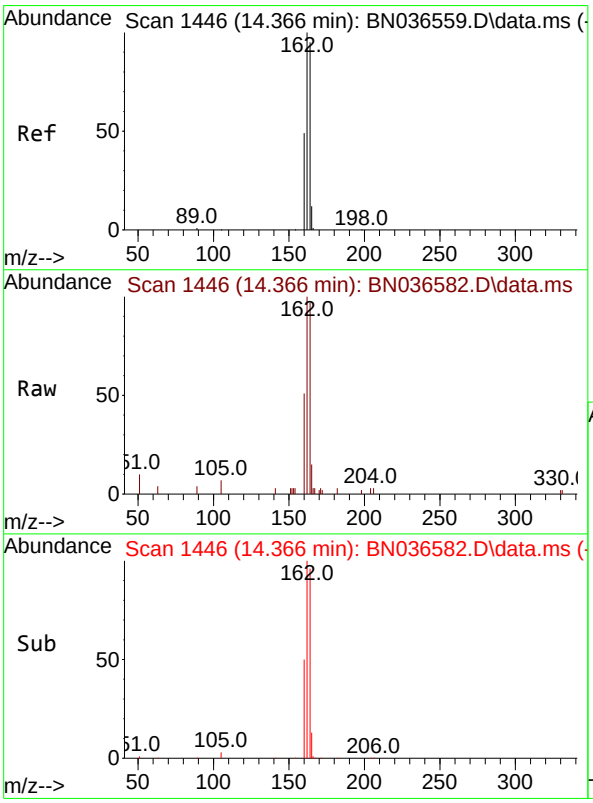
#11
2-Methylnaphthalene-d10
Concen: 0.315 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:152 Resp: 2304

Ion	Ratio	Lower	Upper
152	100		
151	21.4	17.0	25.6

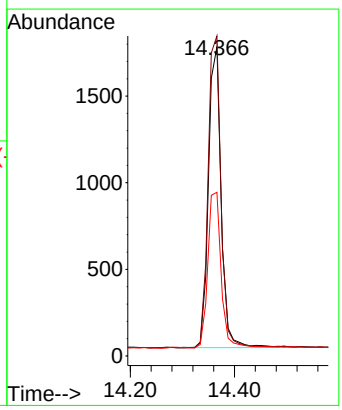


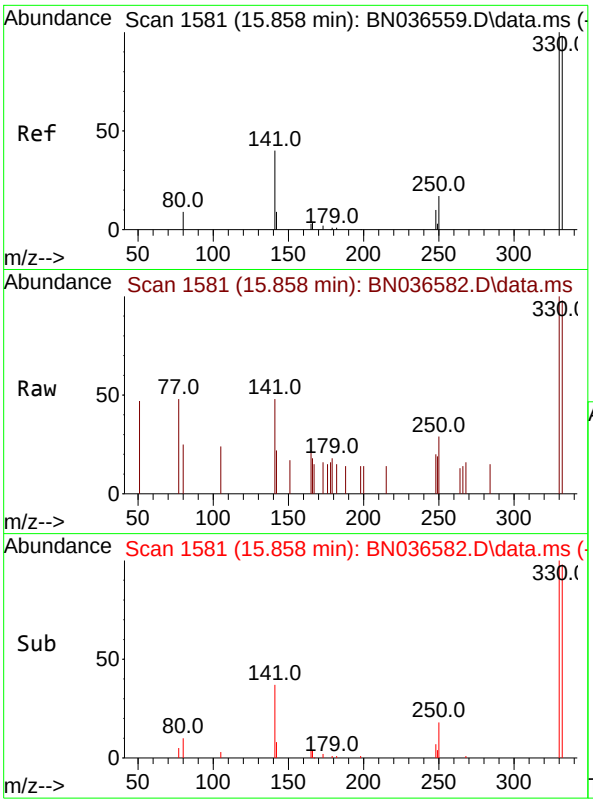


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion:164 Resp: 2930

Ion	Ratio	Lower	Upper
164	100		
162	103.5	84.2	126.2
160	53.0	42.2	63.2



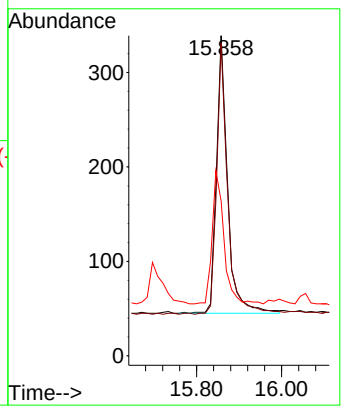


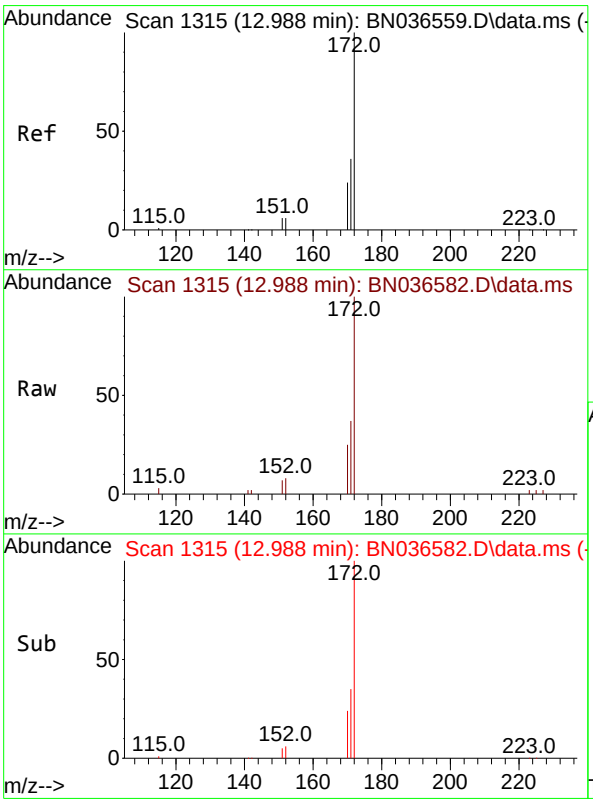
#14
2,4,6-Tribromophenol
Concen: 0.403 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:330 Resp: 536

Ion	Ratio	Lower	Upper
330	100		
332	96.6	75.2	112.8
141	50.4	43.4	65.2

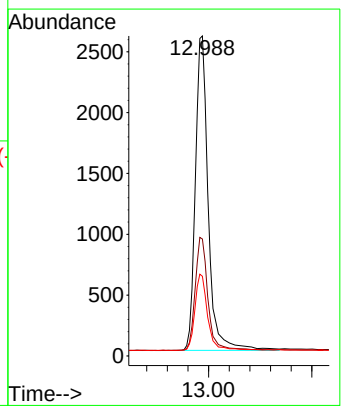


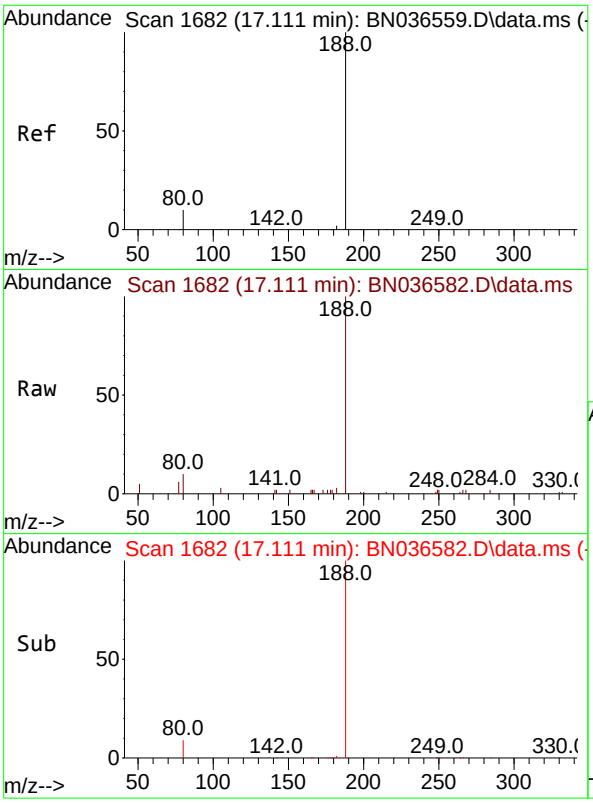


#15
2-Fluorobiphenyl
Concen: 0.381 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion:172 Resp: 6493

Ion	Ratio	Lower	Upper
172	100		
171	36.5	29.5	44.3
170	24.9	20.2	30.4



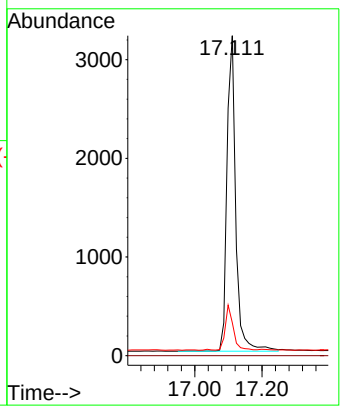


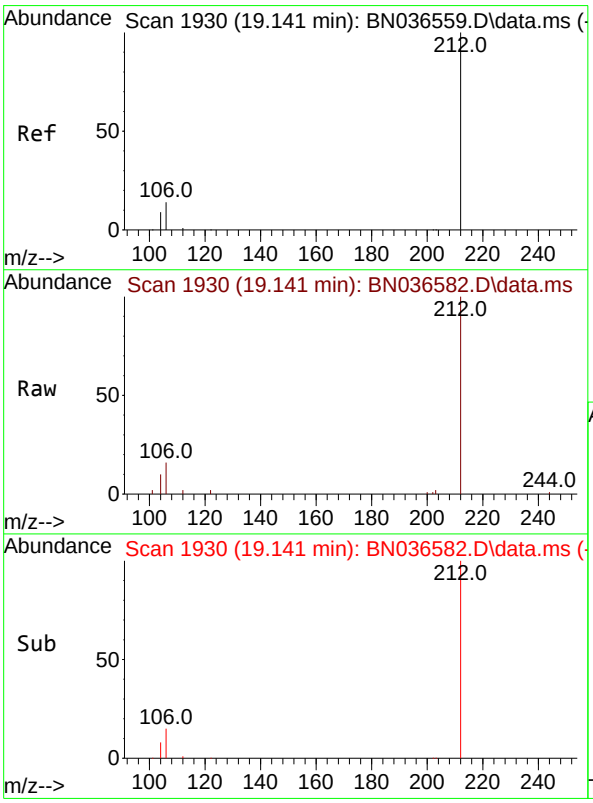
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:188 Resp: 5748

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.4	8.8	13.2

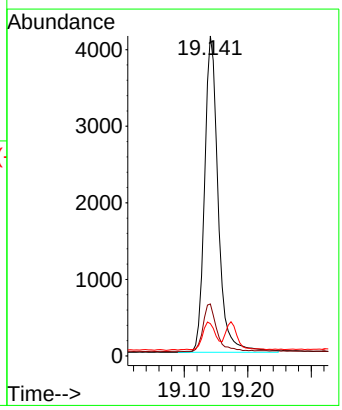


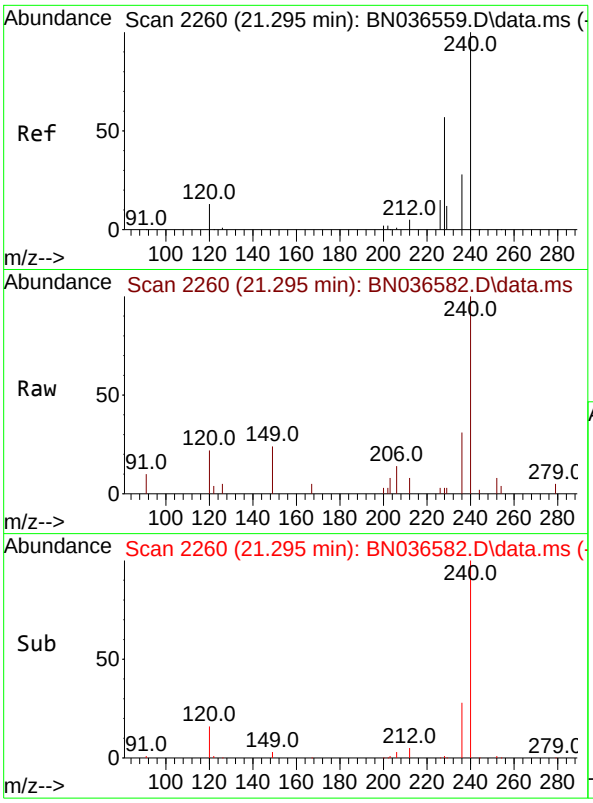


#27
Fluoranthene-d10
Concen: 0.417 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion:212 Resp: 6150

Ion	Ratio	Lower	Upper
212	100		
106	15.4	11.8	17.6
104	8.8	7.3	10.9



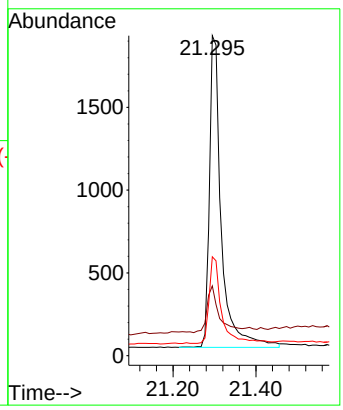


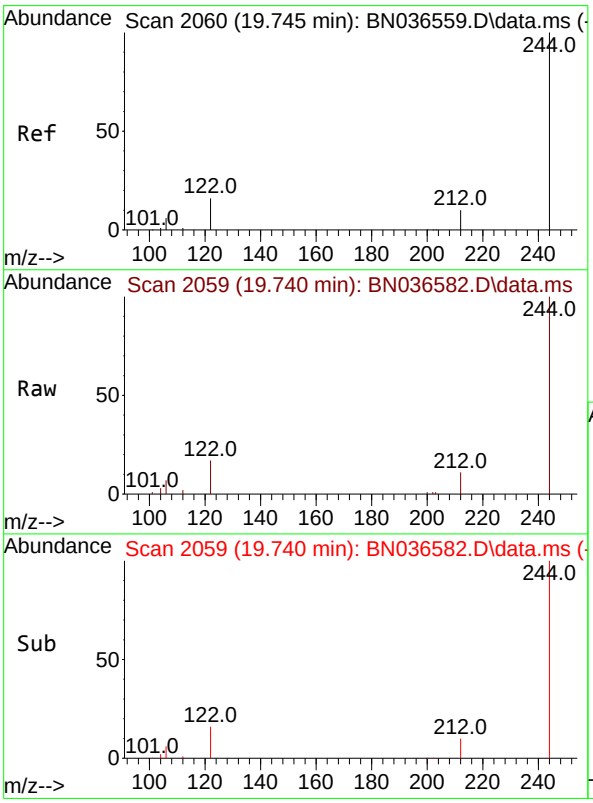
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:240 Resp: 3765

Ion	Ratio	Lower	Upper
240	100		
120	21.8	14.6	22.0
236	30.9	24.1	36.1

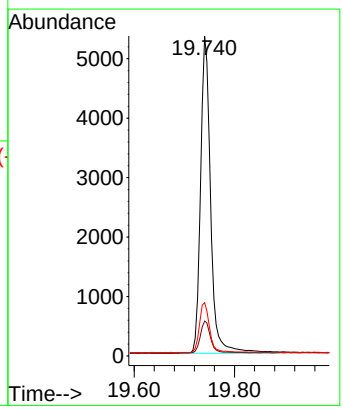


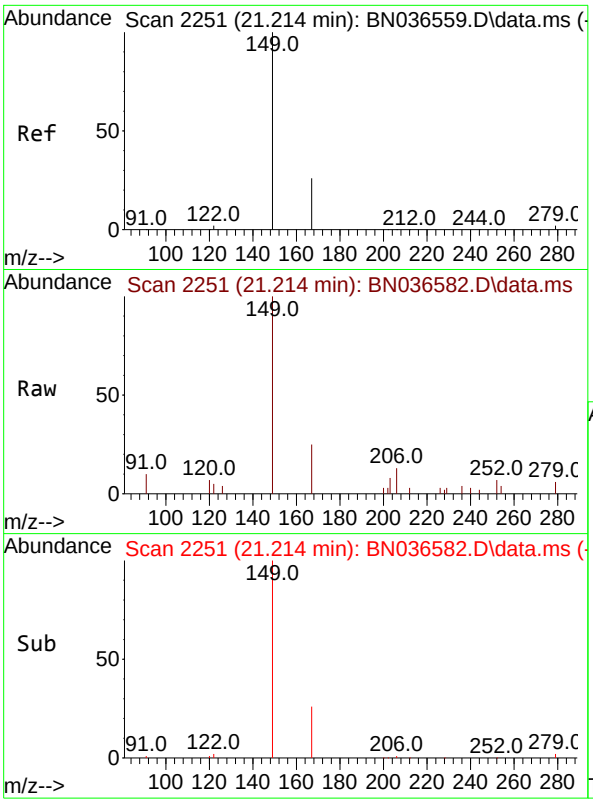


#31
Terphenyl-d14
Concen: 0.824 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion:244 Resp: 7435

Ion	Ratio	Lower	Upper
244	100		
212	10.9	9.6	14.4
122	16.7	13.9	20.9



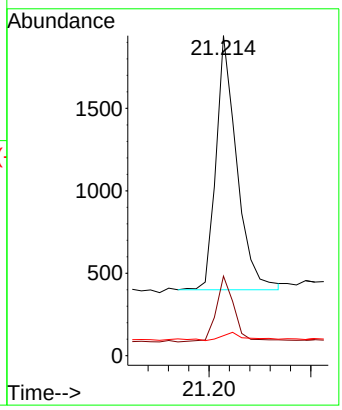


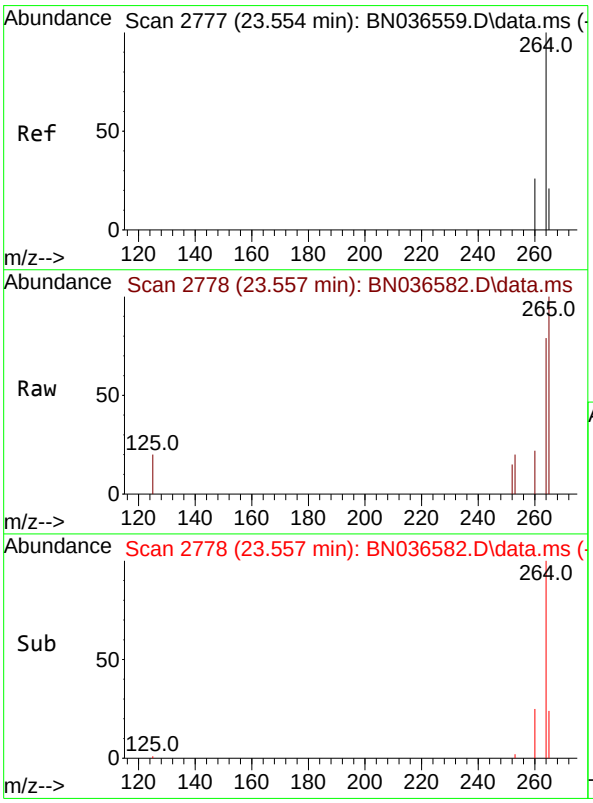
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.234 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Instrument :
BNA_N
ClientSampleId :
RE103D2-20250306

Tgt Ion:149 Resp: 2180

Ion	Ratio	Lower	Upper
149	100		
167	22.9	20.7	31.1
279	4.0	3.6	5.4

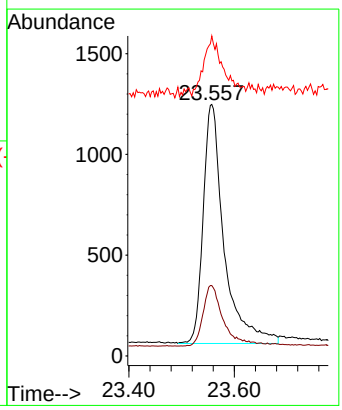




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2778
Delta R.T. 0.003 min
Lab File: BN036582.D
Acq: 11 Mar 2025 15:32

Tgt Ion:264 Resp: 3253

Ion	Ratio	Lower	Upper
264	100		
260	28.0	22.6	33.8
265	127.2	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE108D2-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-12	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036583.D	1	03/10/25 11:35	03/11/25 16:09	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	2.70		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		80%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		113%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.64	*	58 - 132		160%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1900	7.724				
1146-65-2	Naphthalene-d8	4280	10.509				
15067-26-2	Acenaphthene-d10	2640	14.366				
1517-22-2	Phenanthrene-d10	5580	17.111				
1719-03-5	Chrysene-d12	3930	21.295				
1520-96-3	Perylene-d12	3180	23.554				

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\BN031125\
Data File : BN036583.D
Acq On : 11 Mar 2025 16:09
Operator : RC/JU
Sample : Q1531-12
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Quant Time: Mar 11 16:49:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

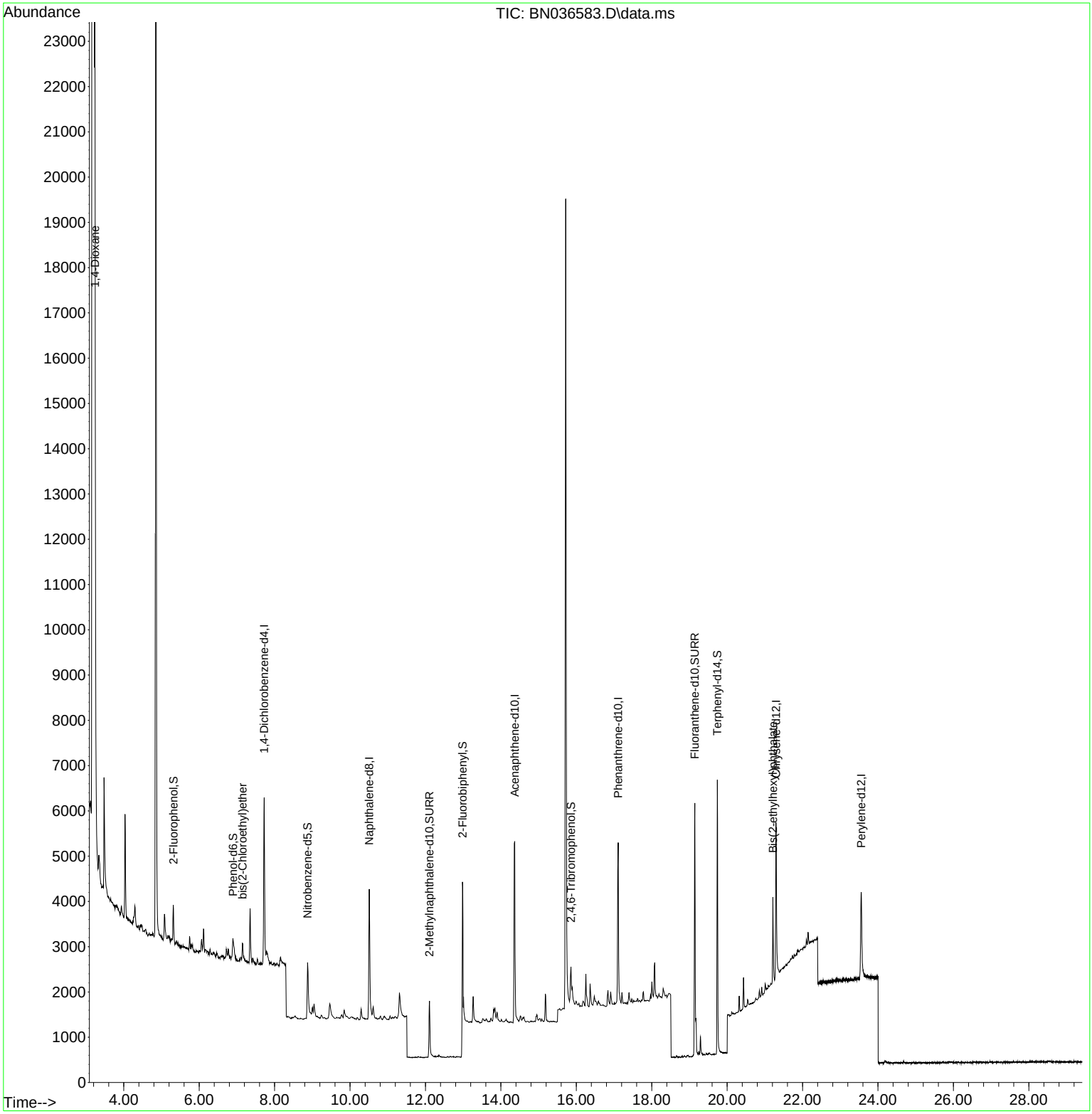
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1904	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4283	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	2637	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	5582	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3932	0.400	ng		0.00
35) Perylene-d12	23.554	264	3177	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	635	0.143	ng		0.00
5) Phenol-d6	6.901	99	399	0.073	ng		0.00
8) Nitrobenzene-d5	8.875	82	1418	0.304	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	2046	0.321	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	500	0.418	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	5552	0.362	ng		0.00
27) Fluoranthene-d10	19.141	212	6475	0.453	ng		0.00
31) Terphenyl-d14	19.740	244	6039	0.641	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	5780	2.737	ng		96
6) bis(2-Chloroethyl)ether	7.154	93	296	0.052	ng	#	88
34) Bis(2-ethylhexyl)phtha...	21.214	149	1945	0.200	ng	#	93

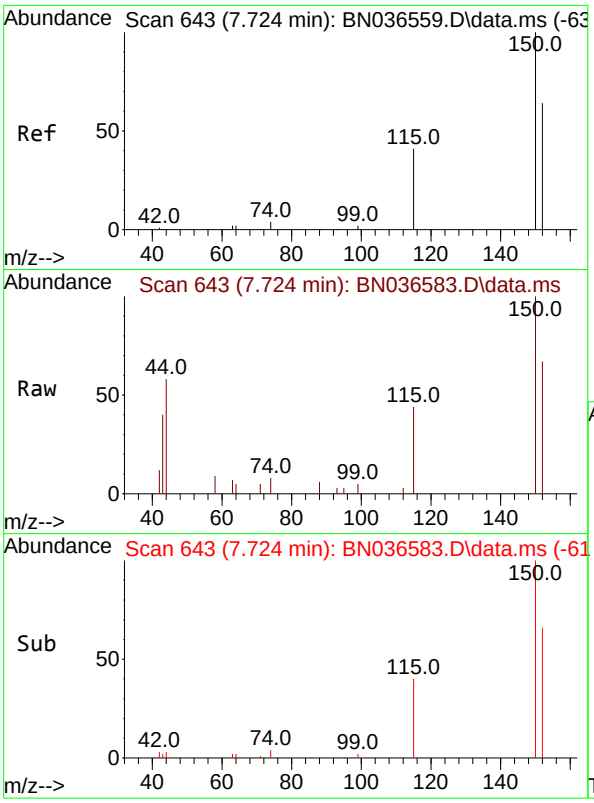
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036583.D
Acq On : 11 Mar 2025 16:09
Operator : RC/JU
Sample : Q1531-12
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Quant Time: Mar 11 16:49:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



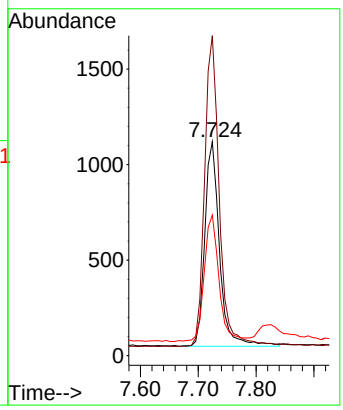


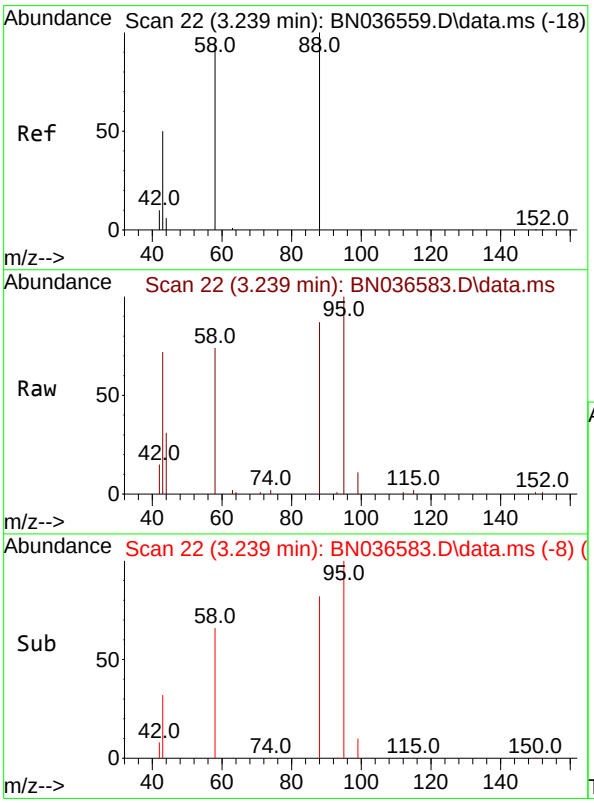
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:152 Resp: 1904

Ion	Ratio	Lower	Upper
152	100		
150	149.6	123.7	185.5
115	65.7	54.3	81.5

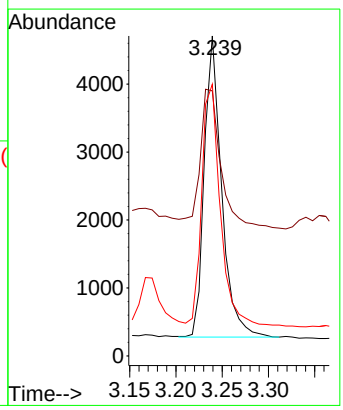


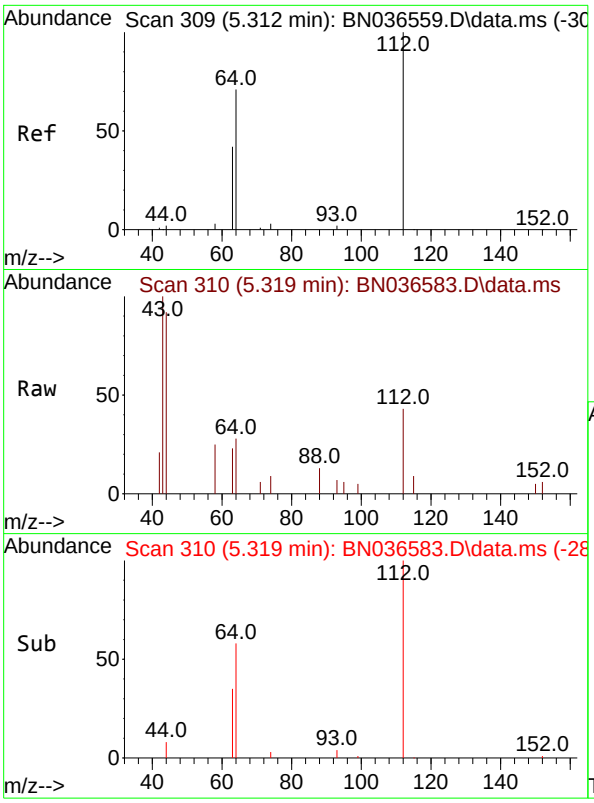


#2
1,4-Dioxane
Concen: 2.737 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion: 88 Resp: 5780

Ion	Ratio	Lower	Upper
88	100		
43	54.9	37.8	56.8
58	84.6	67.4	101.2



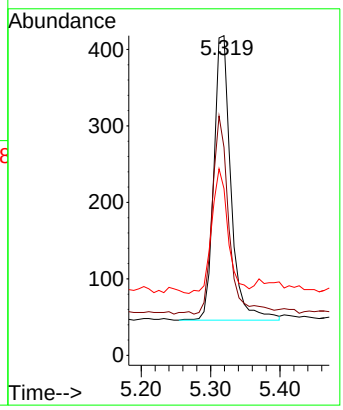


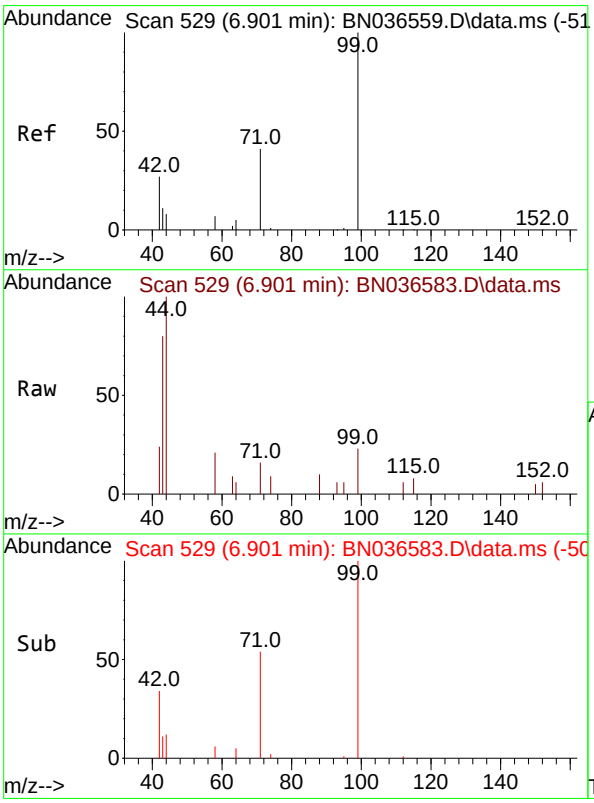
#4
2-Fluorophenol
Concen: 0.143 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:112 Resp: 635

Ion	Ratio	Lower	Upper
112	100		
64	67.9	53.1	79.7
63	42.2	31.8	47.8

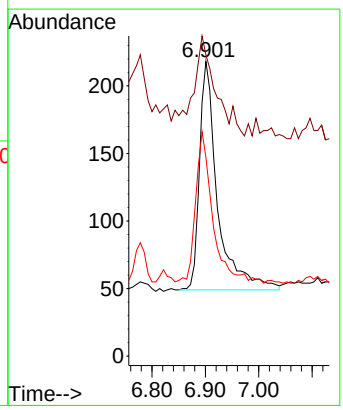


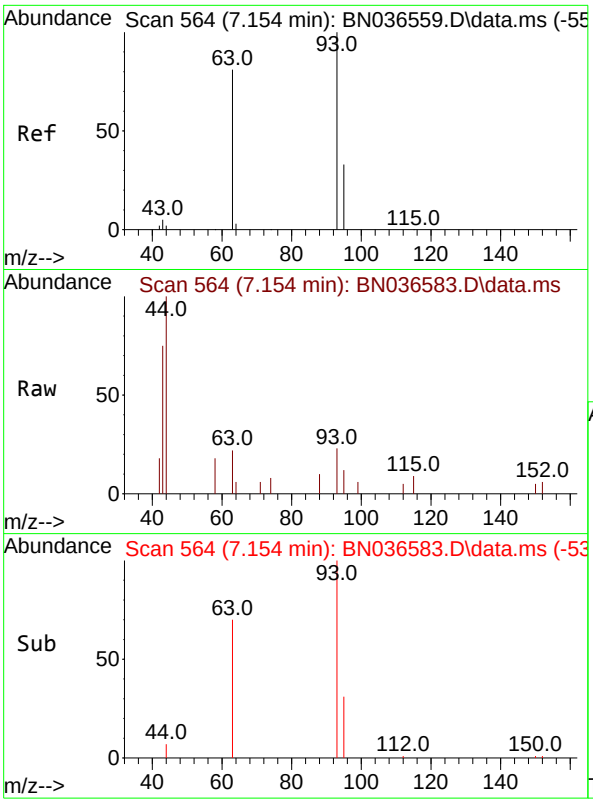


#5
Phenol-d6
Concen: 0.073 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion: 99 Resp: 399

Ion	Ratio	Lower	Upper
99	100		
42	48.9	26.5	39.7#
71	63.2	34.1	51.1#



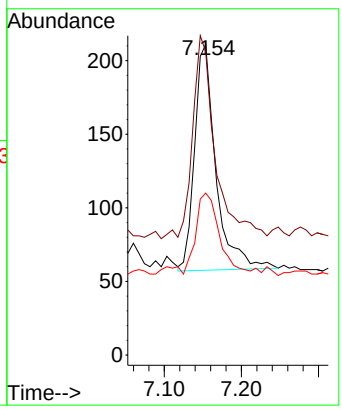


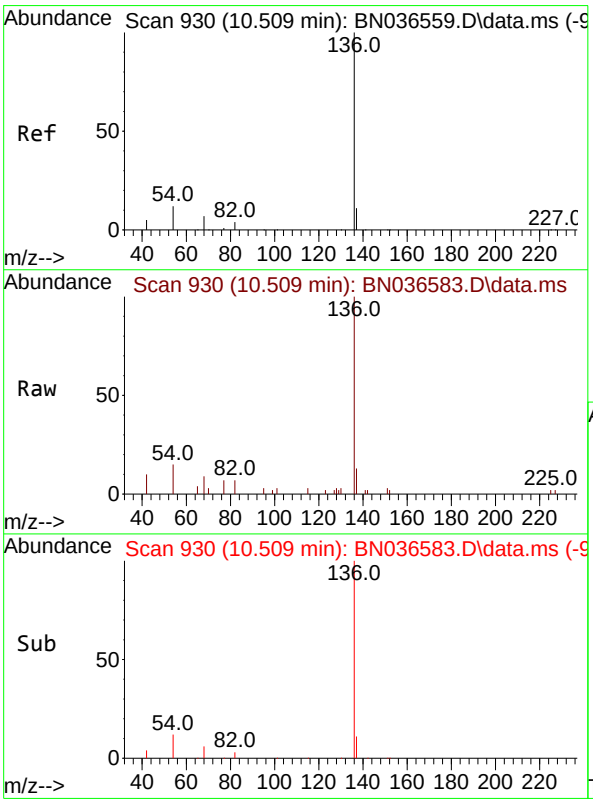
#6
bis(2-Chloroethyl)ether
Concen: 0.052 ng
RT: 7.154 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion: 93 Resp: 296

Ion	Ratio	Lower	Upper
93	100		
63	95.6	67.7	101.5
95	38.9	25.6	38.4#

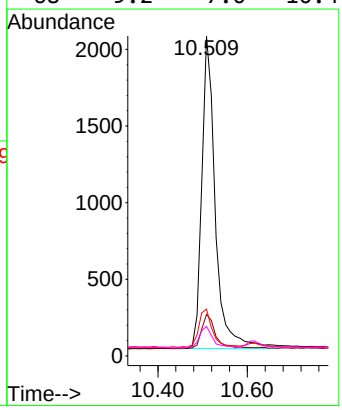


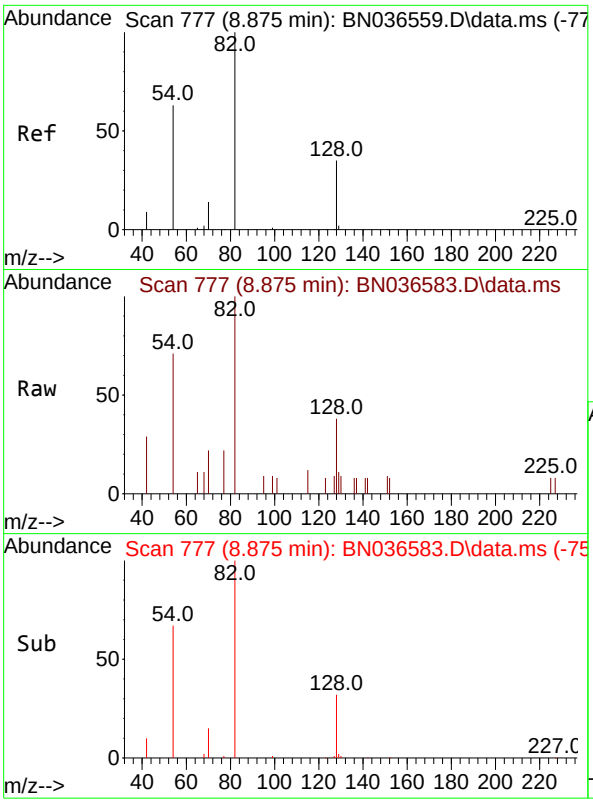


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion:136 Resp: 4283

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.3	15.5
54	14.7	11.5	17.3
68	9.2	7.0	10.4



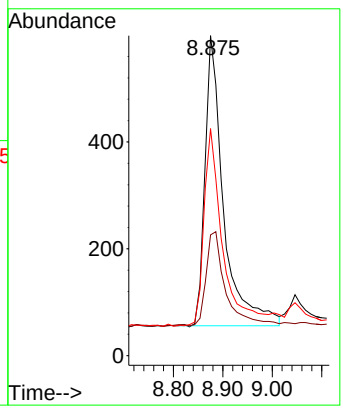


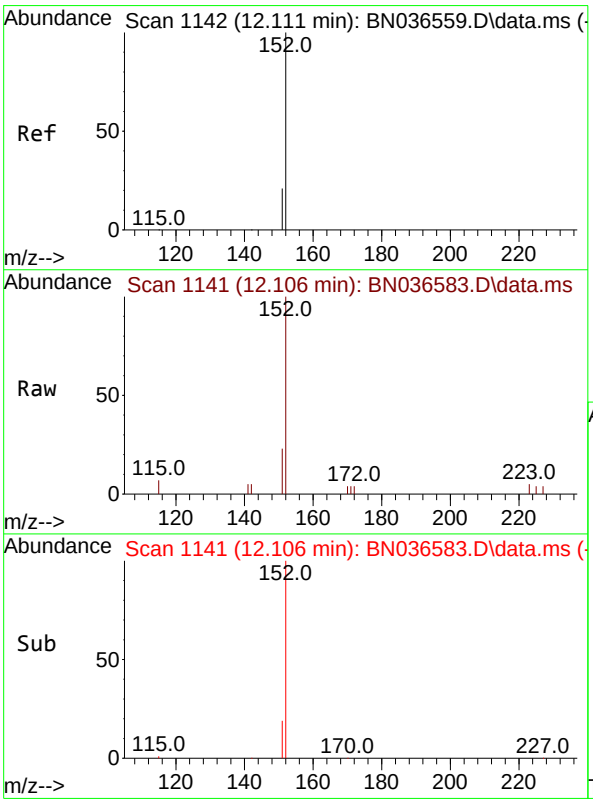
#8
Nitrobenzene-d5
Concen: 0.304 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion: 82 Resp: 1418

Ion	Ratio	Lower	Upper
82	100		
128	37.7	30.6	45.8
54	71.0	52.2	78.4

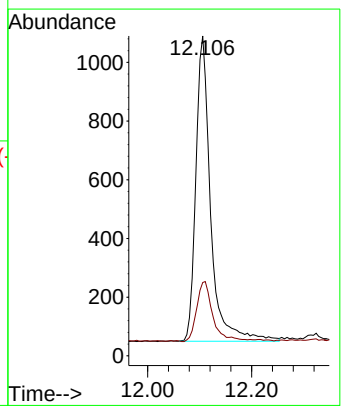


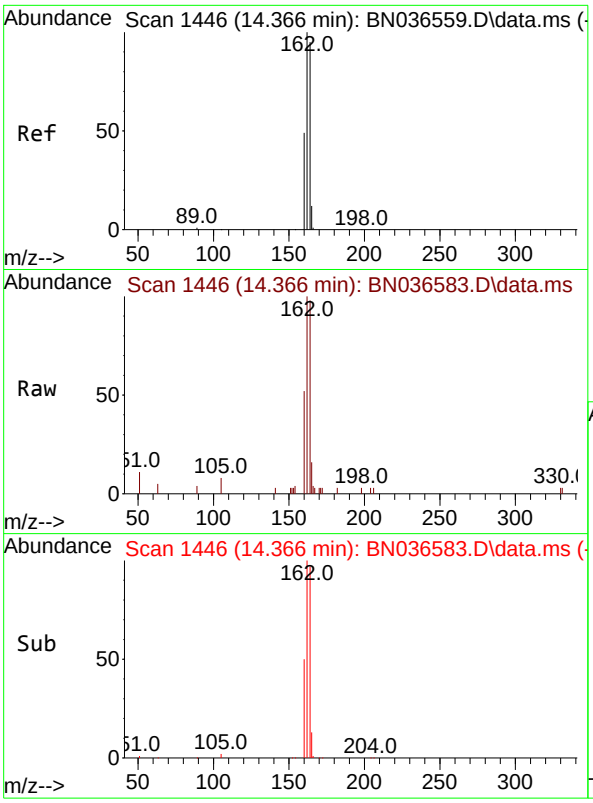


#11
2-Methylnaphthalene-d10
Concen: 0.321 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.005 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion:152 Resp: 2046

Ion	Ratio	Lower	Upper
152	100		
151	21.7	17.0	25.6



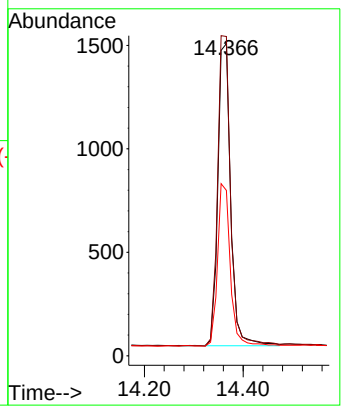


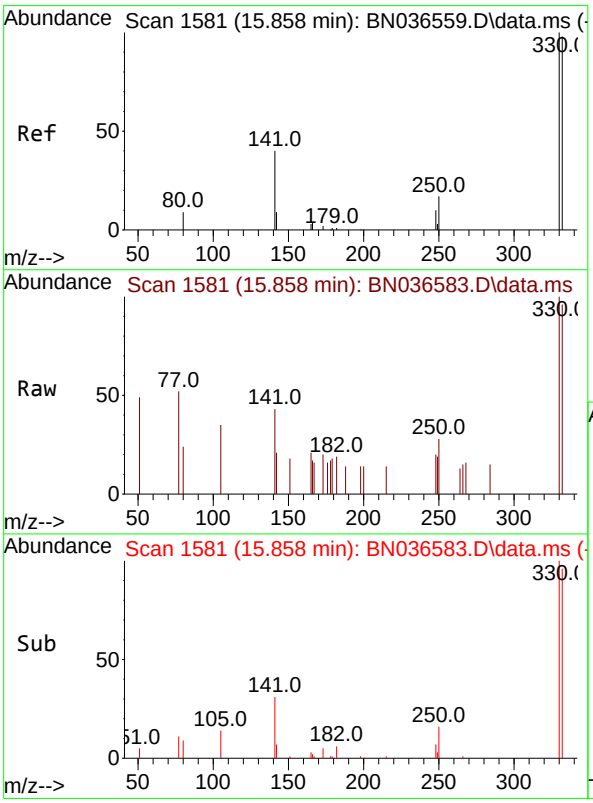
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:164 Resp: 2637

Ion	Ratio	Lower	Upper
164	100		
162	102.3	84.2	126.2
160	53.0	42.2	63.2

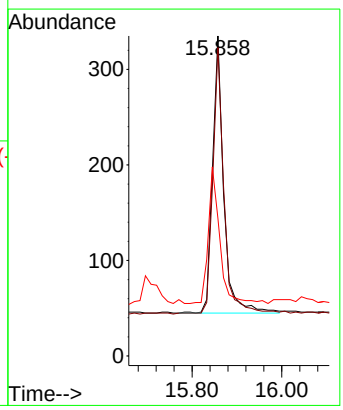


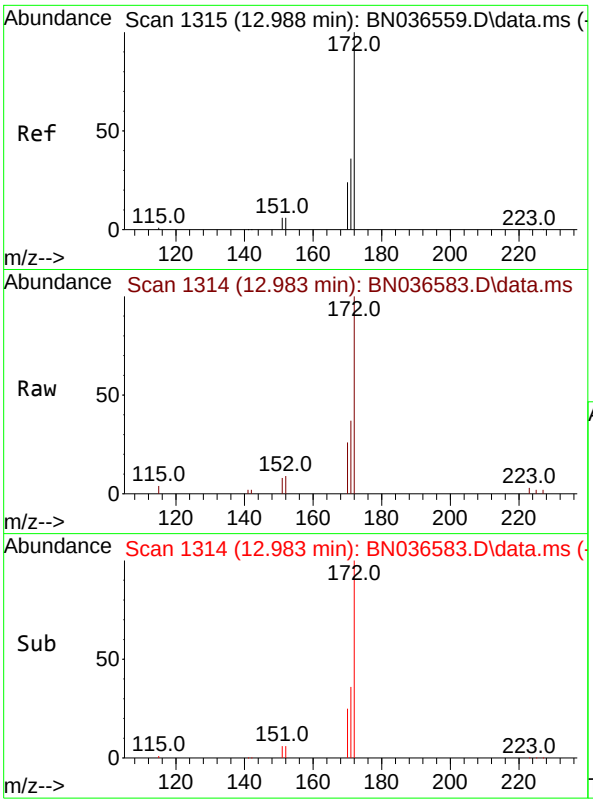


#14
2,4,6-Tribromophenol
Concen: 0.418 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion:330 Resp: 500

Ion	Ratio	Lower	Upper
330	100		
332	93.6	75.2	112.8
141	50.2	43.4	65.2



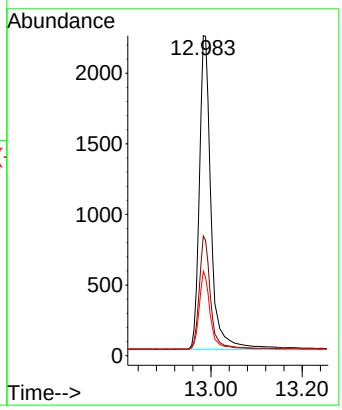


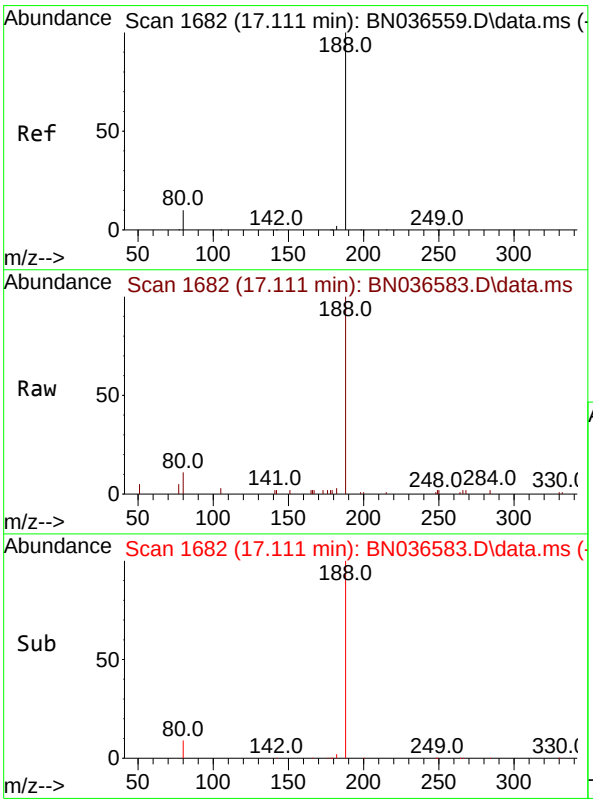
#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:172 Resp: 5552

Ion	Ratio	Lower	Upper
172	100		
171	37.4	29.5	44.3
170	26.4	20.2	30.4

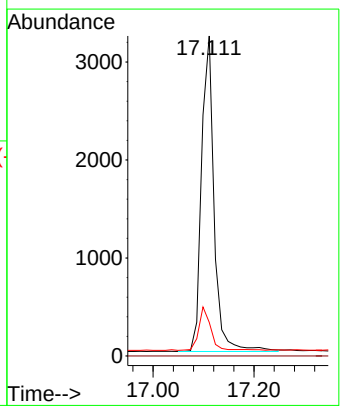


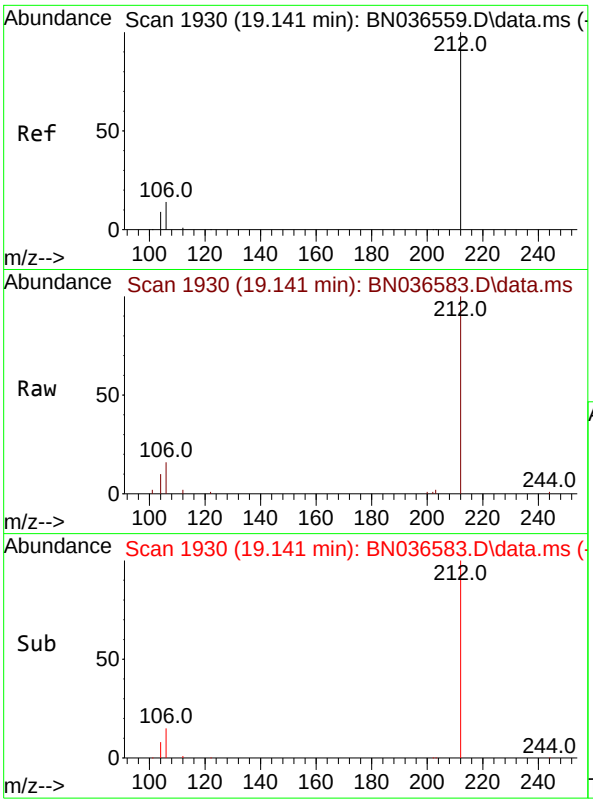


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion:188 Resp: 5582

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.5	8.8	13.2



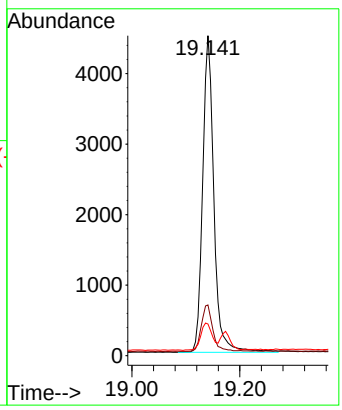


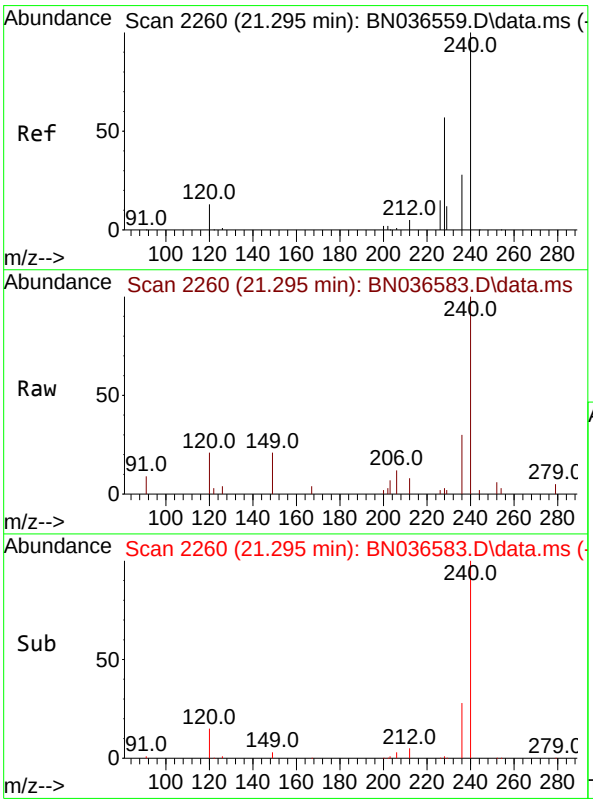
#27
Fluoranthene-d10
Concen: 0.453 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:212 Resp: 6475

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.8	17.6
104	9.1	7.3	10.9

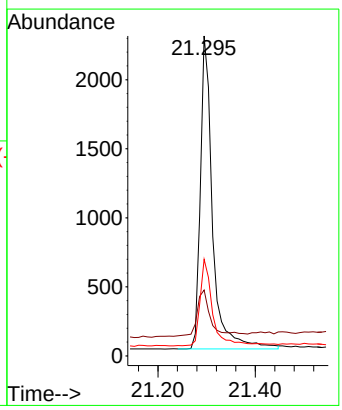


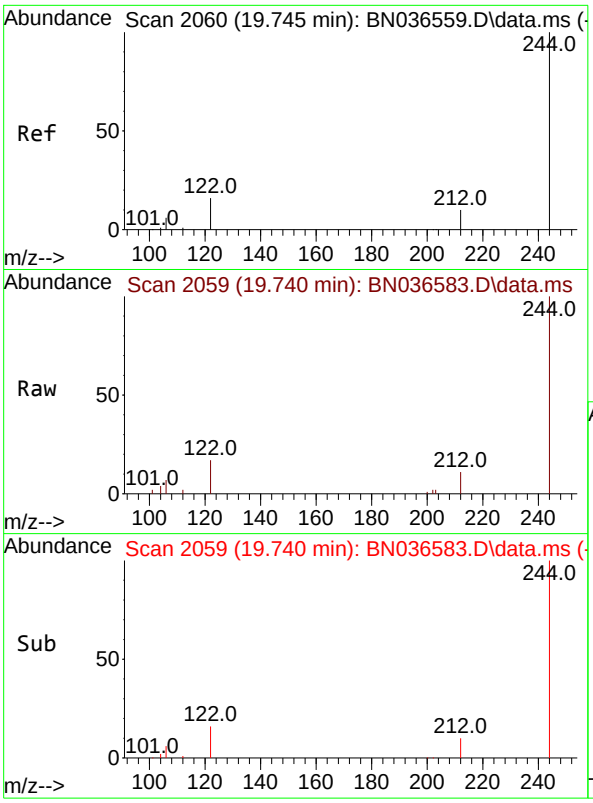


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion:240 Resp: 3932

Ion	Ratio	Lower	Upper
240	100		
120	20.6	14.6	22.0
236	30.2	24.1	36.1



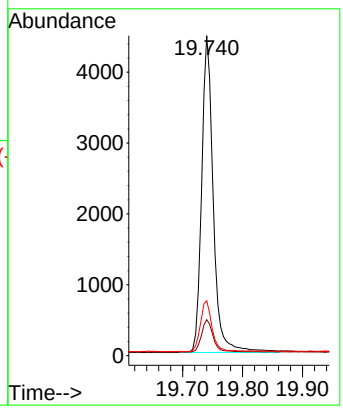


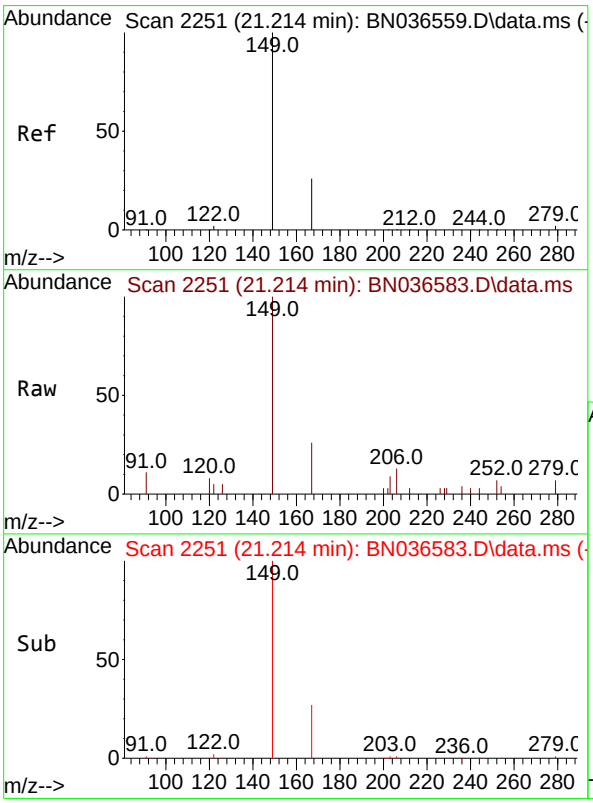
#31
Terphenyl-d14
Concen: 0.641 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:244 Resp: 6039

Ion	Ratio	Lower	Upper
244	100		
212	11.3	9.6	14.4
122	17.2	13.9	20.9

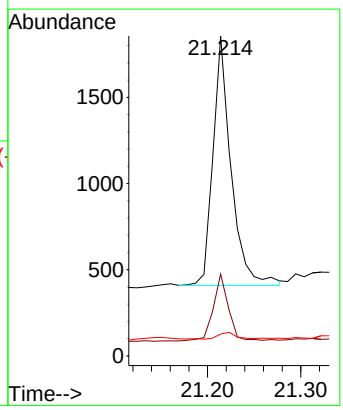


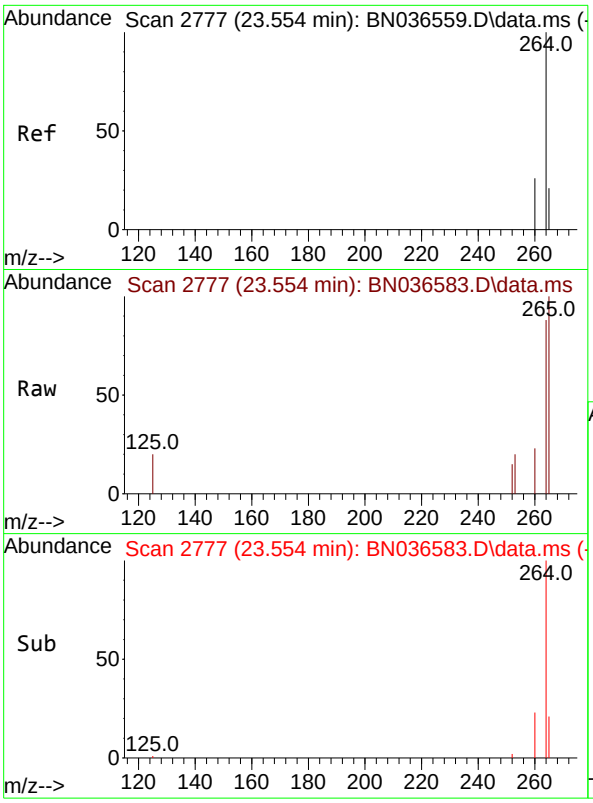


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.200 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Tgt Ion:149 Resp: 1945

Ion	Ratio	Lower	Upper
149	100		
167	22.3	20.7	31.1
279	2.6	3.6	5.4#



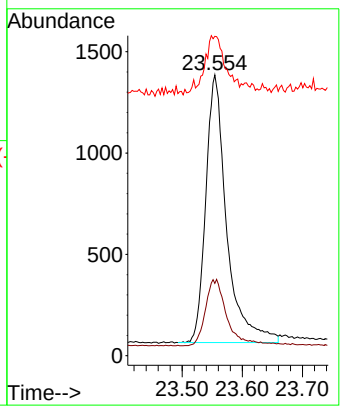


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036583.D
Acq: 11 Mar 2025 16:09

Instrument :
BNA_N
ClientSampleId :
RE108D2-20250306

Tgt Ion:264 Resp: 3177

Ion	Ratio	Lower	Upper
264	100		
260	25.8	22.6	33.8
265	113.7	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE108D1-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-13	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036570.D	1	03/10/25 11:35	03/10/25 20:14	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		78%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2190	7.724				
1146-65-2	Naphthalene-d8	4780	10.519				
15067-26-2	Acenaphthene-d10	2790	14.366				
1517-22-2	Phenanthrene-d10	5260	17.111				
1719-03-5	Chrysene-d12	3740	21.304				
1520-96-3	Perylene-d12	3210	23.554				

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\BN031025\
Data File : BN036570.D
Acq On : 10 Mar 2025 20:14
Operator : RC/JU
Sample : Q1531-13
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Quant Time: Mar 11 00:53:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

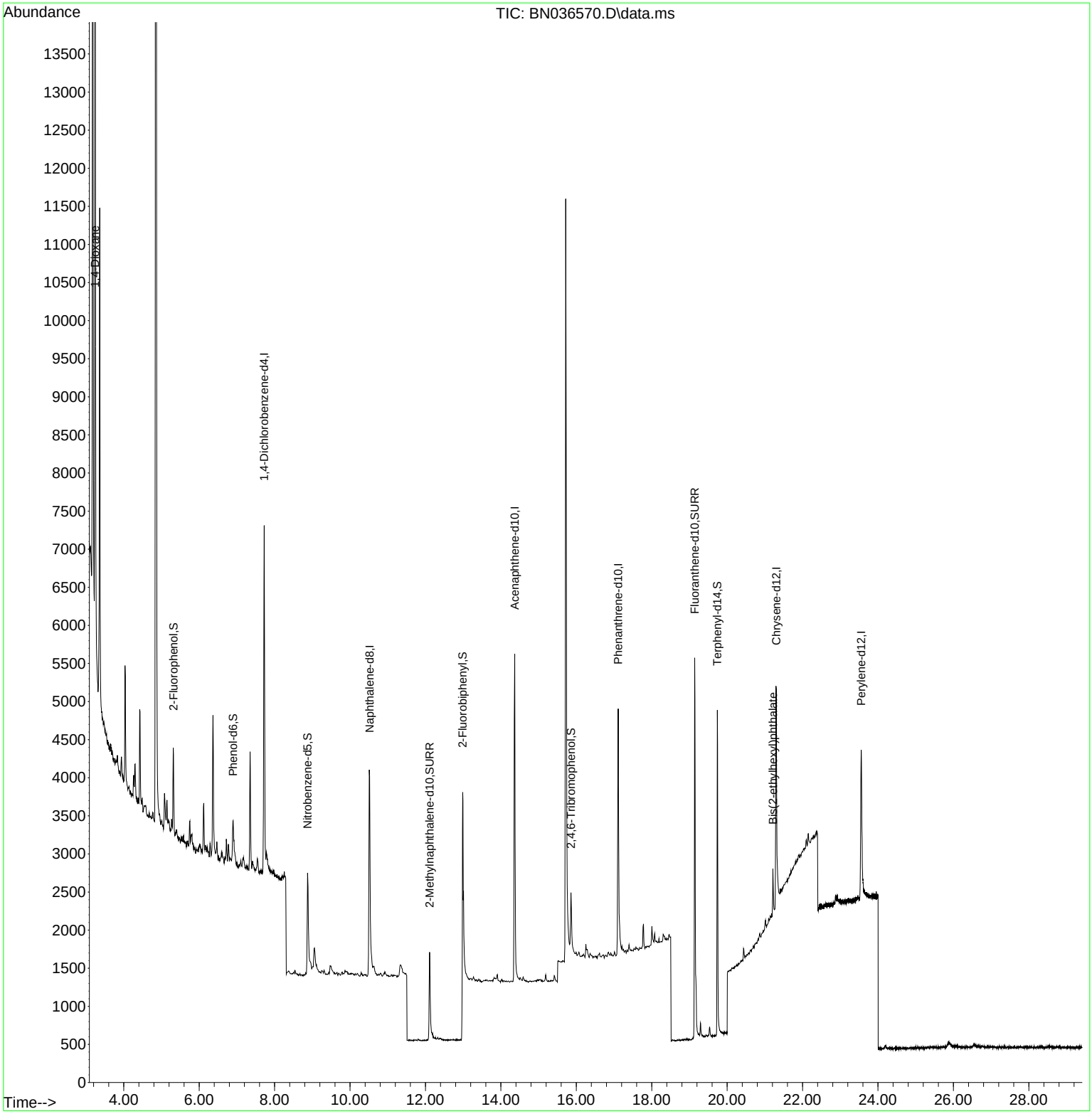
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2186	0.400	ng		0.00
7) Naphthalene-d8	10.519	136	4775	0.400	ng		0.01
13) Acenaphthene-d10	14.366	164	2786	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	5255	0.400	ng	#	0.00
29) Chrysene-d12	21.304	240	3738	0.400	ng		0.00
35) Perylene-d12	23.554	264	3210	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	816	0.160	ng		0.00
5) Phenol-d6	6.901	99	537	0.085	ng		0.00
8) Nitrobenzene-d5	8.875	82	1559	0.300	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	2206	0.311	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	530	0.419	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	5281	0.326	ng		0.00
27) Fluoranthene-d10	19.141	212	6016	0.447	ng		0.00
31) Terphenyl-d14	19.740	244	4398	0.491	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	7891	3.254	ng		96
34) Bis(2-ethylhexyl)phtha...	21.214	149	620	0.067	ng	#	96

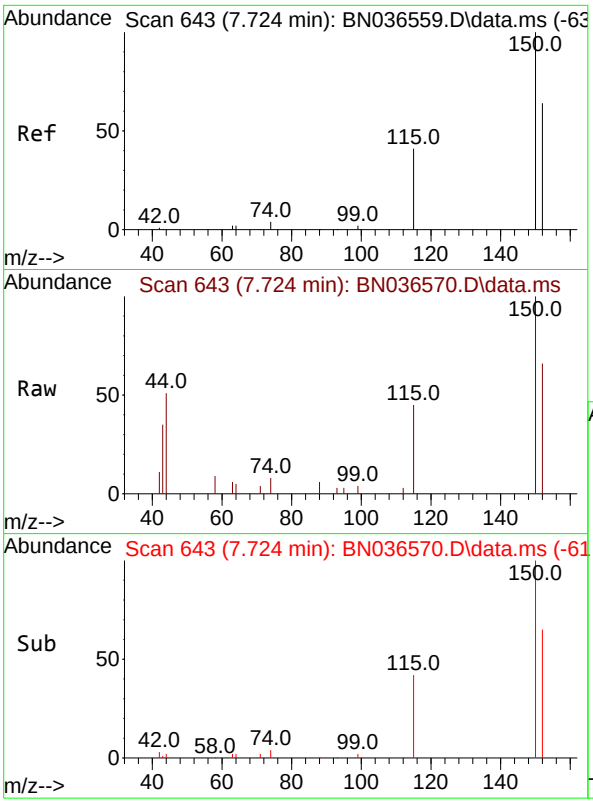
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036570.D
Acq On : 10 Mar 2025 20:14
Operator : RC/JU
Sample : Q1531-13
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Quant Time: Mar 11 00:53:06 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



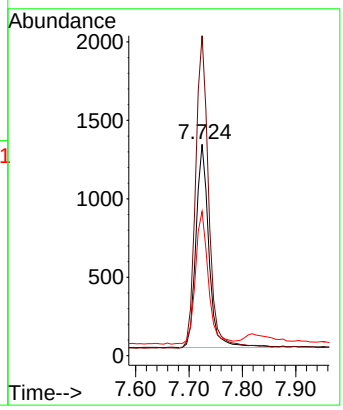


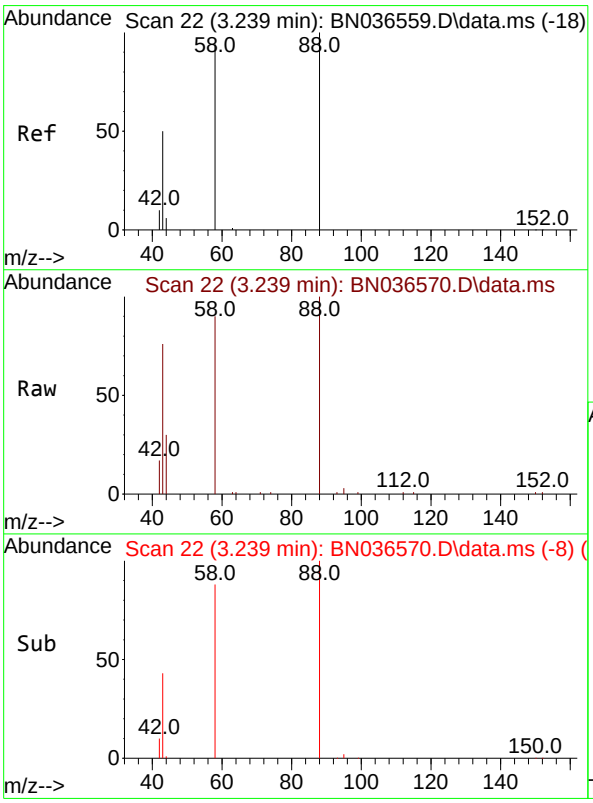
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:152 Resp: 2186

Ion	Ratio	Lower	Upper
152	100		
150	151.3	123.7	185.5
115	68.2	54.3	81.5

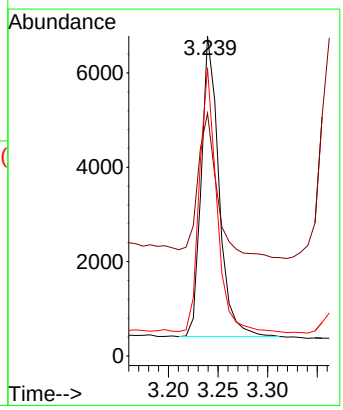


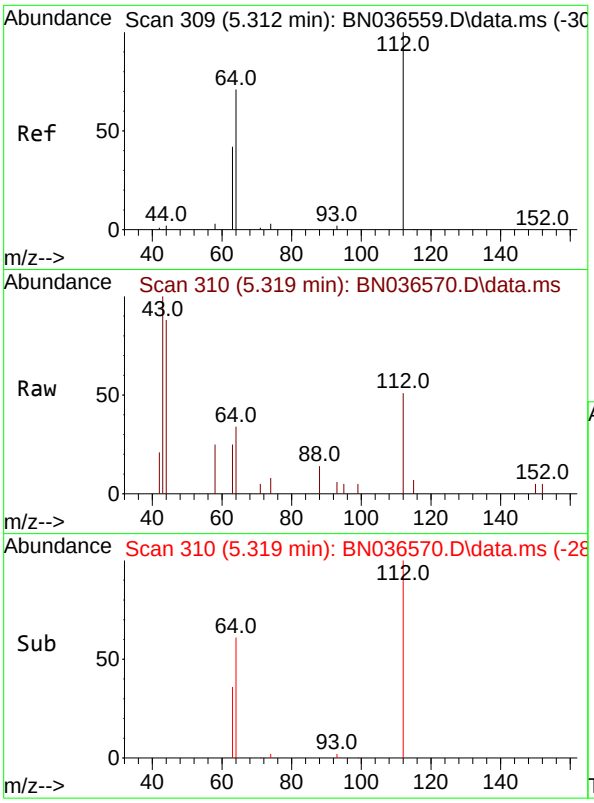


#2
1,4-Dioxane
Concen: 3.254 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion: 88 Resp: 7891

Ion	Ratio	Lower	Upper
88	100		
43	52.3	37.8	56.8
58	85.6	67.4	101.2



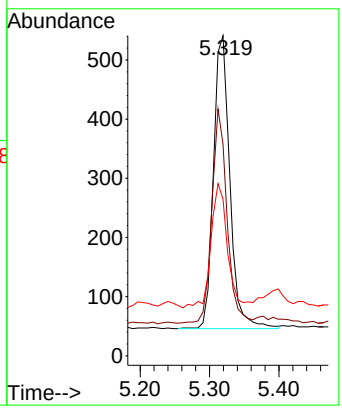


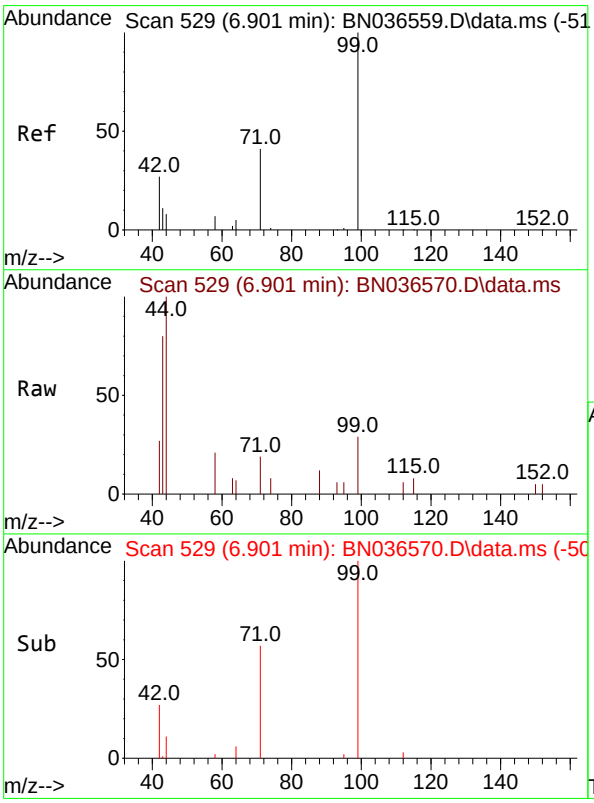
#4
2-Fluorophenol
Concen: 0.160 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:112 Resp: 816

Ion	Ratio	Lower	Upper
112	100		
64	67.4	53.1	79.7
63	41.7	31.8	47.8

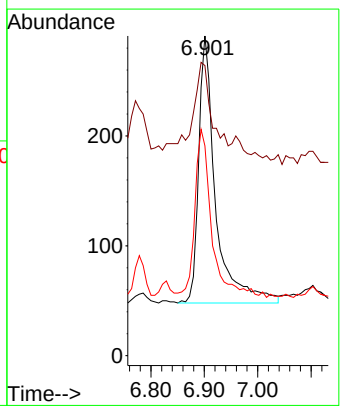


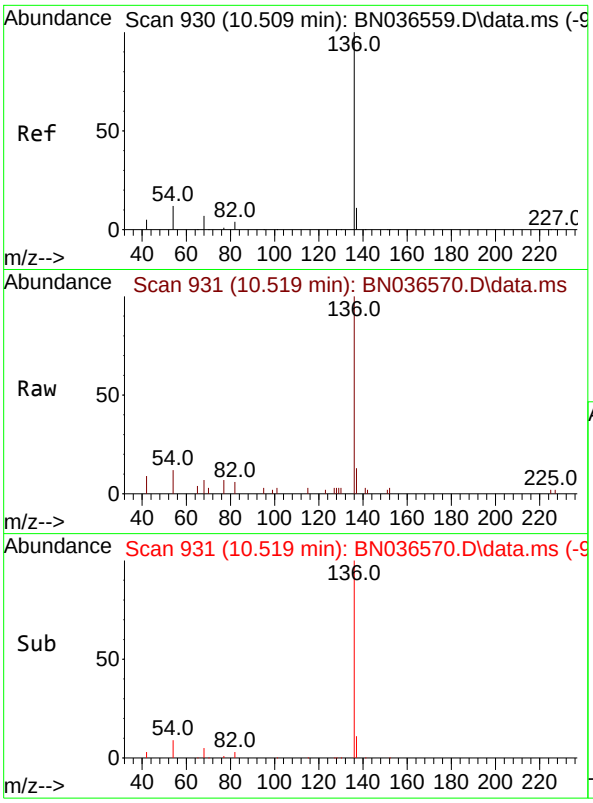


#5
Phenol-d6
Concen: 0.085 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion: 99 Resp: 537

Ion	Ratio	Lower	Upper
99	100		
42	33.9	26.5	39.7
71	60.9	34.1	51.1#



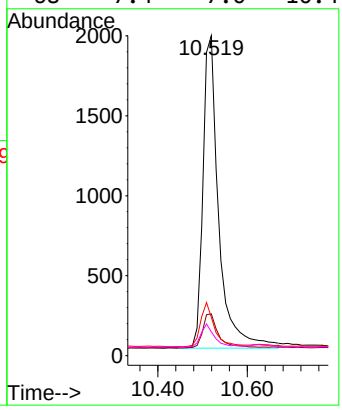


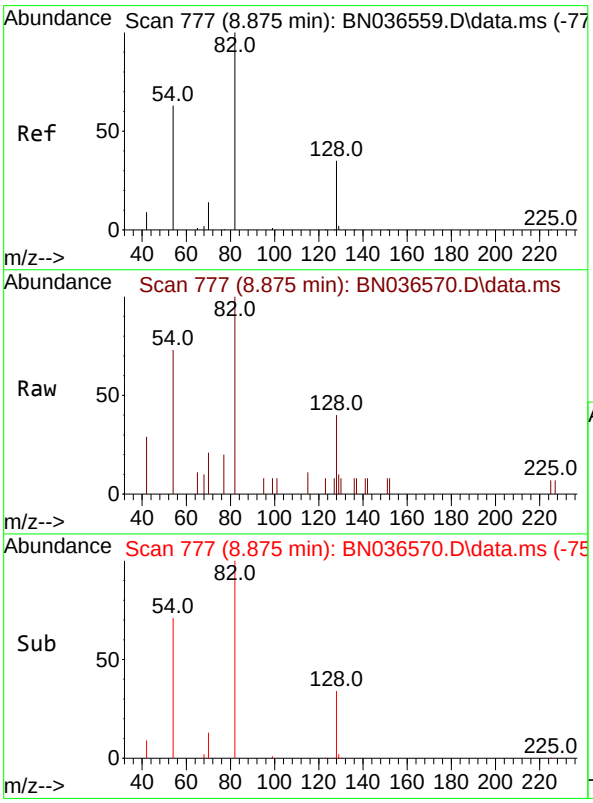
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.519 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:136 Resp: 4775

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.3	15.5
54	12.0	11.5	17.3
68	7.4	7.0	10.4

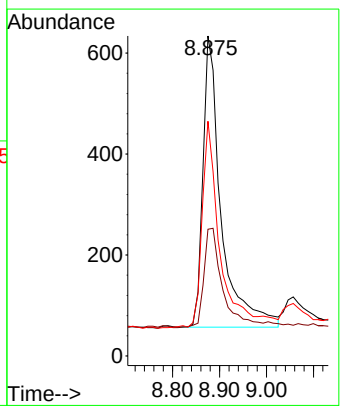


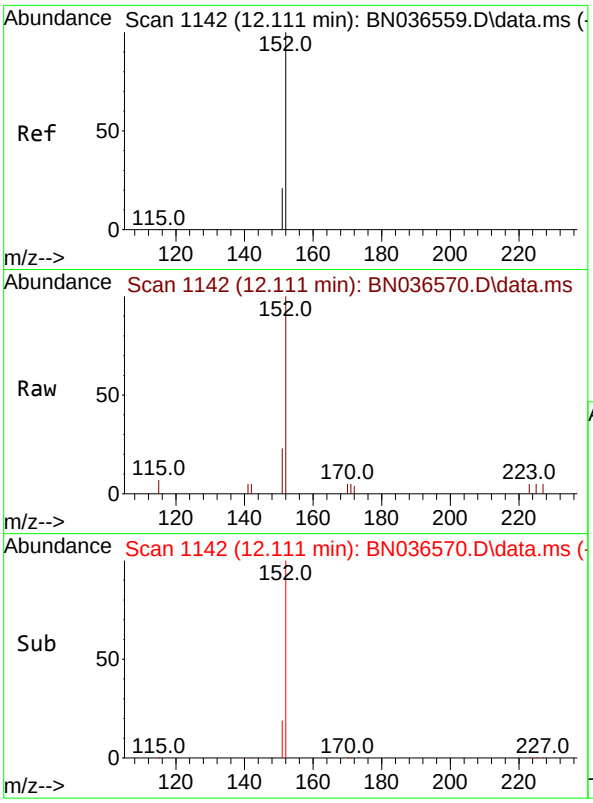


#8
Nitrobenzene-d5
Concen: 0.300 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion: 82 Resp: 1559

Ion	Ratio	Lower	Upper
82	100		
128	39.6	30.6	45.8
54	73.3	52.2	78.4



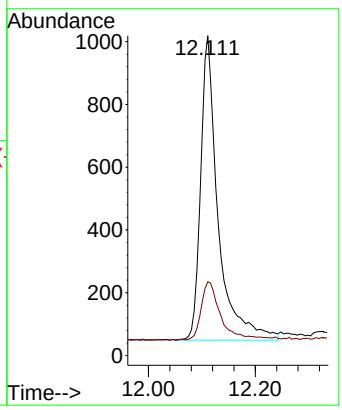


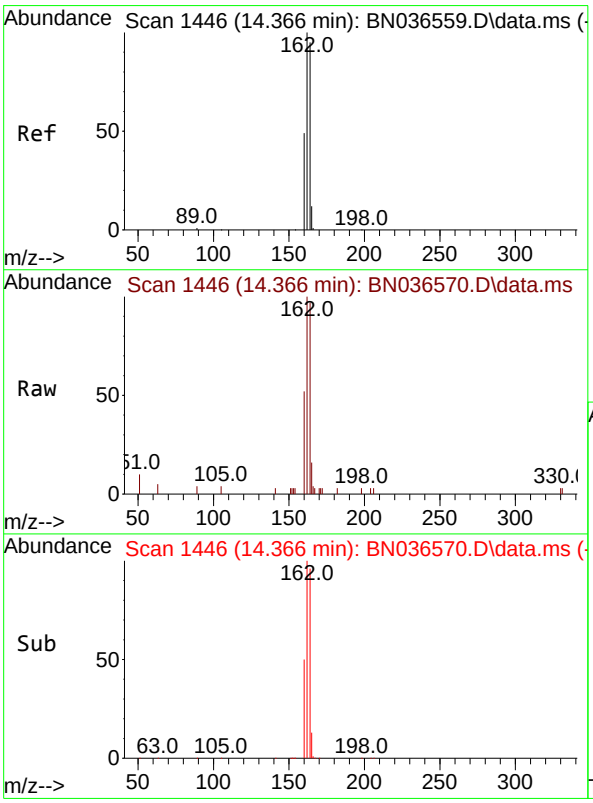
#11
2-Methylnaphthalene-d10
Concen: 0.311 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:152 Resp: 2206

Ion	Ratio	Lower	Upper
152	100		
151	21.8	17.0	25.6

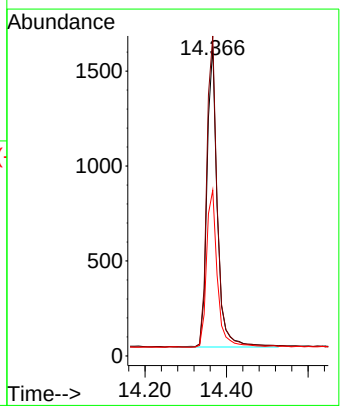


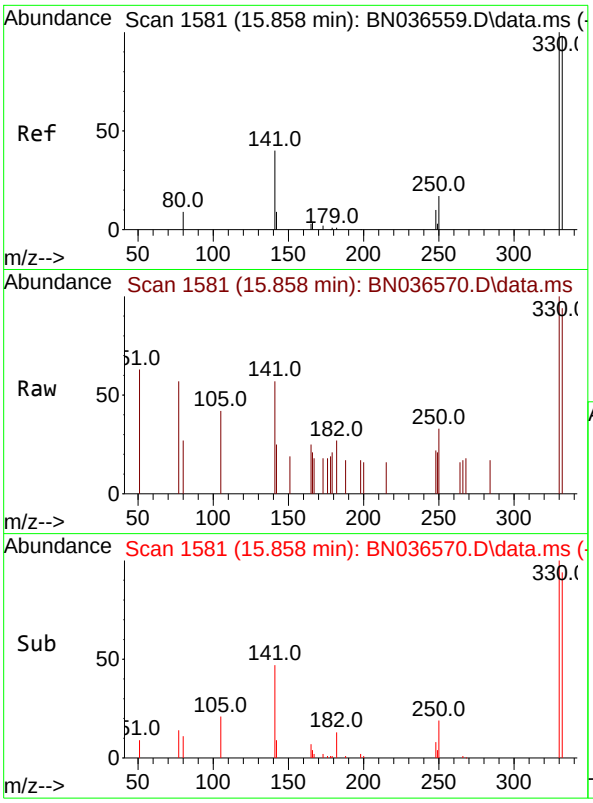


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion:164 Resp: 2786

Ion	Ratio	Lower	Upper
164	100		
162	103.4	84.2	126.2
160	53.6	42.2	63.2



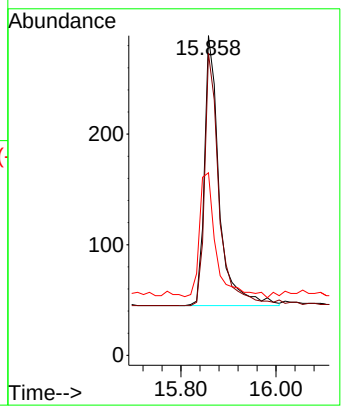


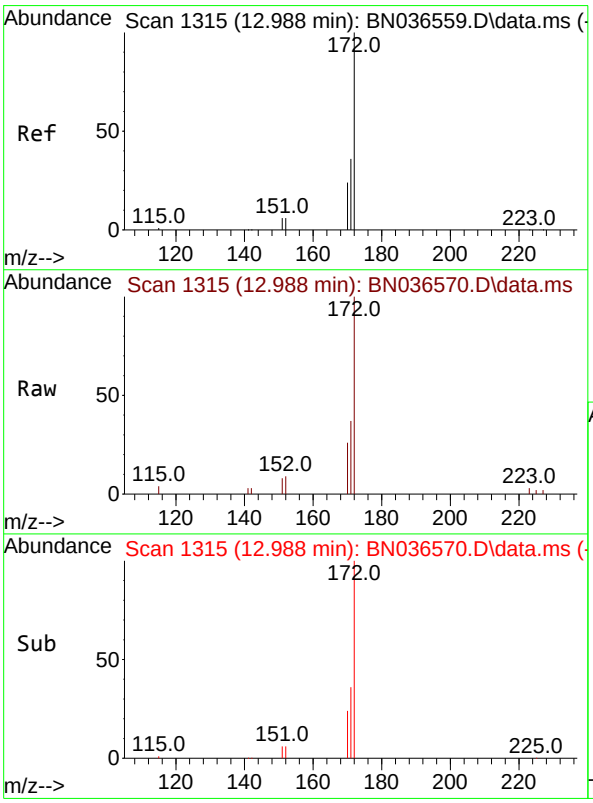
#14
2,4,6-Tribromophenol
Concen: 0.419 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:330 Resp: 530

Ion	Ratio	Lower	Upper
330	100		
332	91.1	75.2	112.8
141	52.1	43.4	65.2

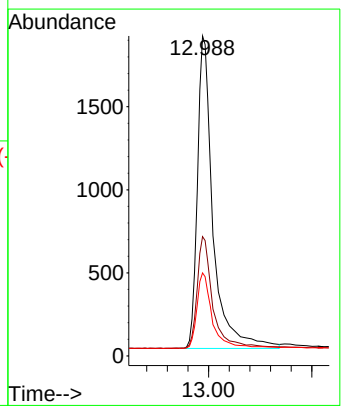


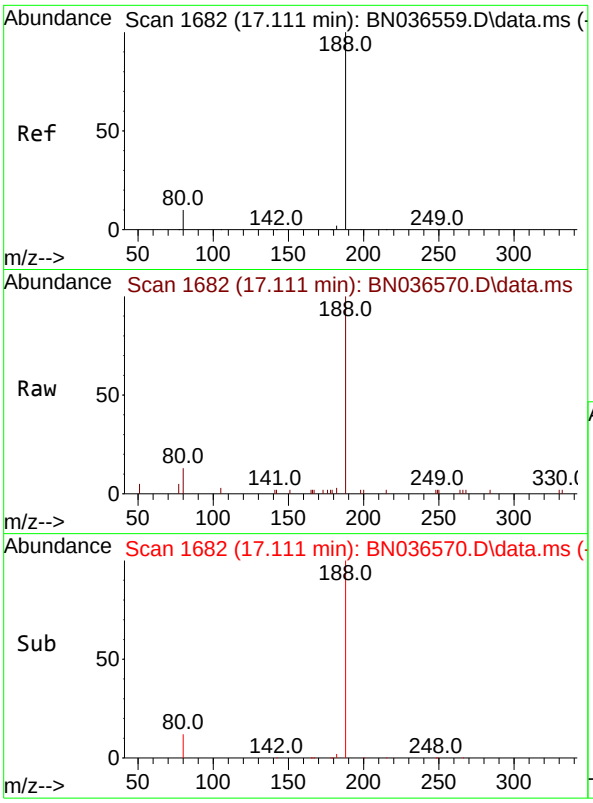


#15
2-Fluorobiphenyl
Concen: 0.326 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion:172 Resp: 5281

Ion	Ratio	Lower	Upper
172	100		
171	37.3	29.5	44.3
170	26.0	20.2	30.4



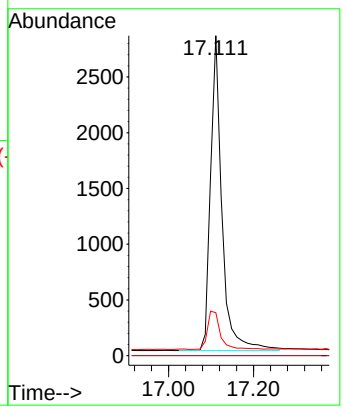


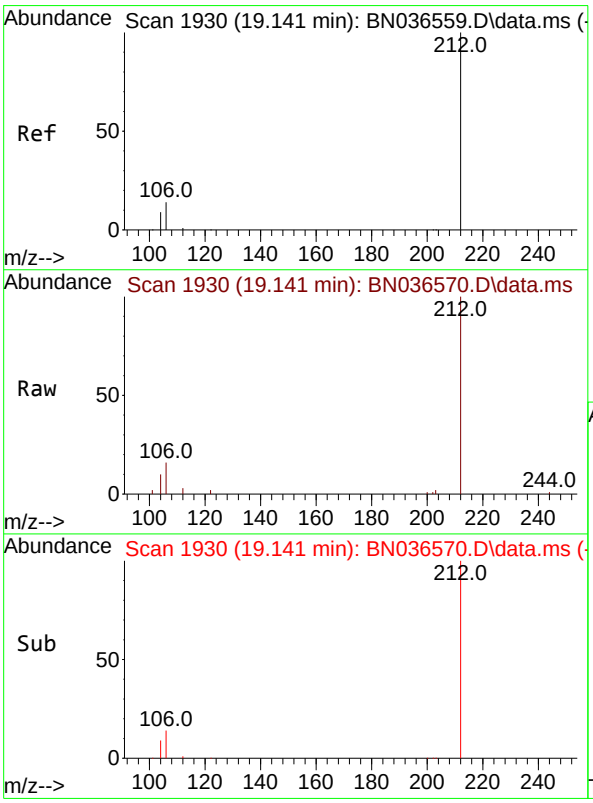
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:188 Resp: 5255

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.5	8.8	13.2#

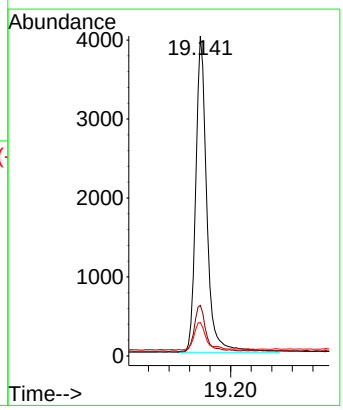


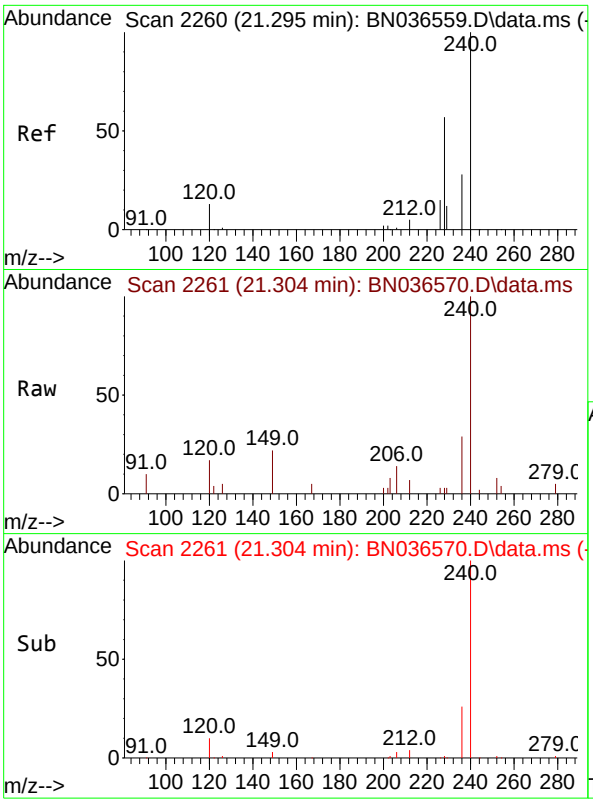


#27
Fluoranthene-d10
Concen: 0.447 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion:212 Resp: 6016

Ion	Ratio	Lower	Upper
212	100		
106	15.0	11.8	17.6
104	9.7	7.3	10.9



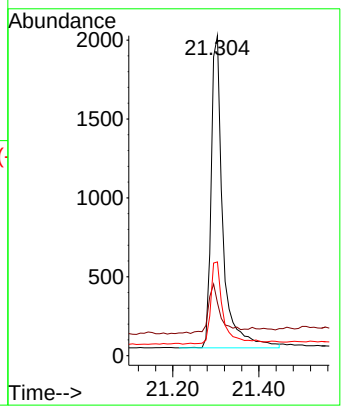


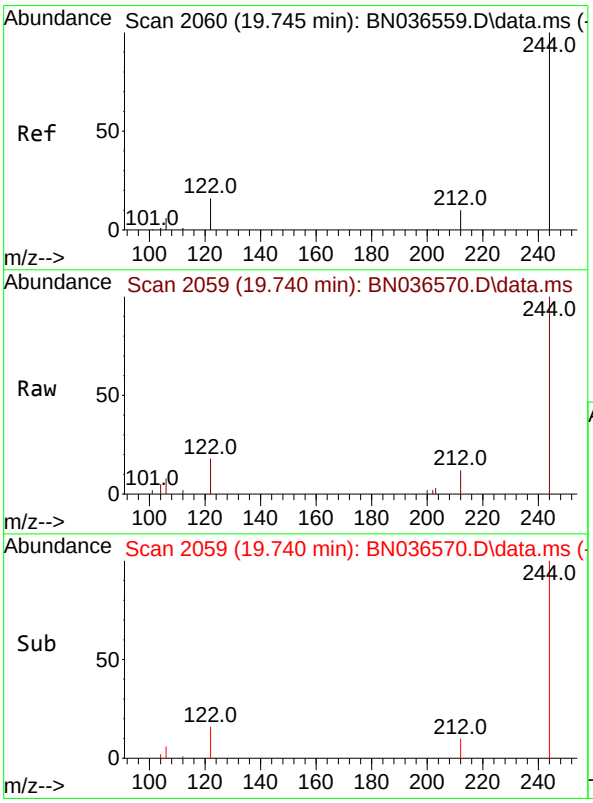
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:240 Resp: 3738

Ion	Ratio	Lower	Upper
240	100		
120	16.6	14.6	22.0
236	29.3	24.1	36.1

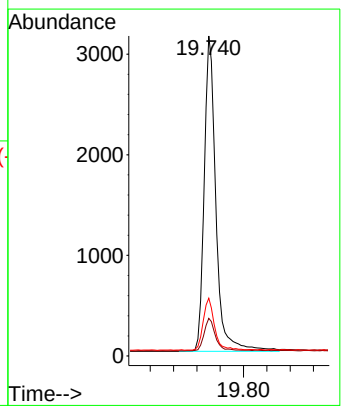


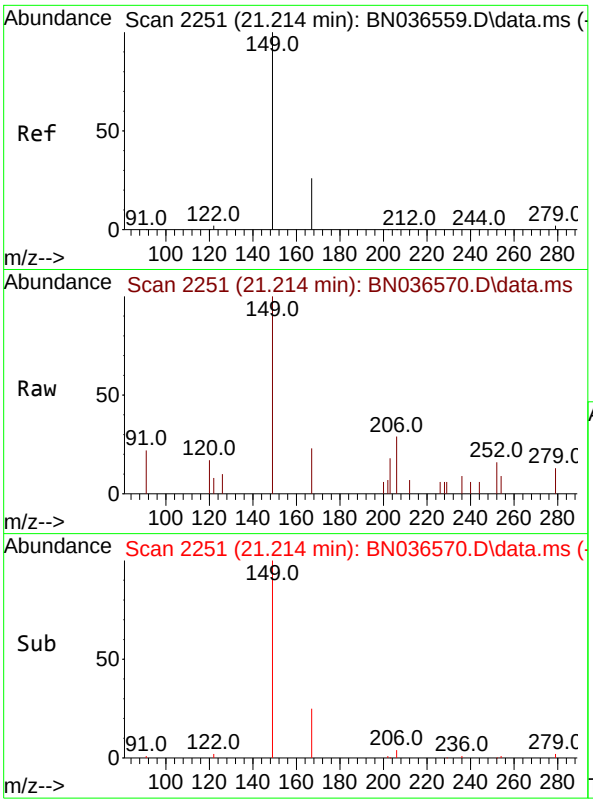


#31
Terphenyl-d14
Concen: 0.491 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion:244 Resp: 4398

Ion	Ratio	Lower	Upper
244	100		
212	11.8	9.6	14.4
122	18.0	13.9	20.9



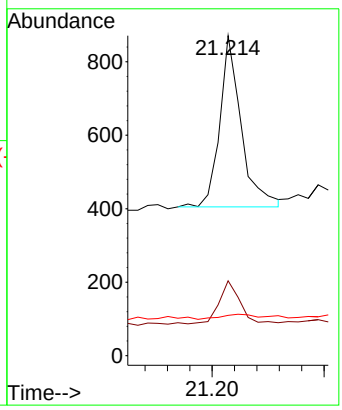


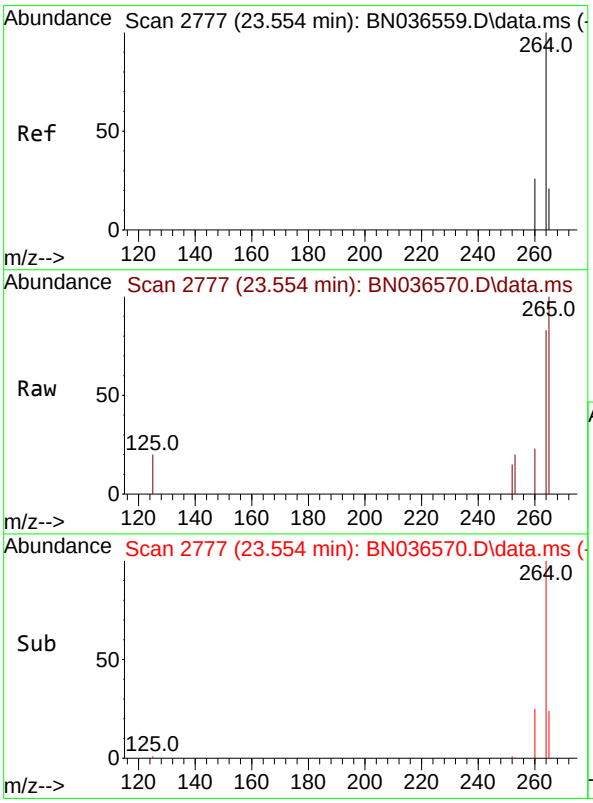
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.067 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Instrument :
BNA_N
ClientSampleId :
RE108D1-20250306

Tgt Ion:149 Resp: 620

Ion	Ratio	Lower	Upper
149	100		
167	24.2	20.7	31.1
279	6.5	3.6	5.4#

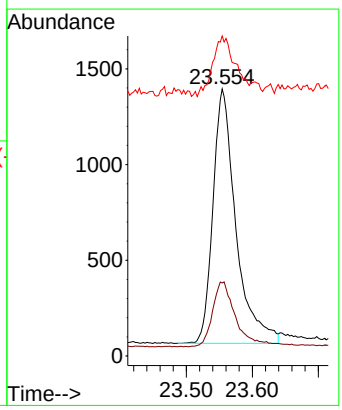




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. 0.000 min
Lab File: BN036570.D
Acq: 10 Mar 2025 20:14

Tgt Ion:264 Resp: 3210

Ion	Ratio	Lower	Upper
264	100		
260	27.3	22.6	33.8
265	119.9	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE105D1-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-14	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036571.D	1	03/10/25 11:35	03/10/25 20:50	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	4.80		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		111%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		71%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.62	*	58 - 132		155%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2030	7.724				
1146-65-2	Naphthalene-d8	4600	10.52				
15067-26-2	Acenaphthene-d10	2830	14.366				
1517-22-2	Phenanthrene-d10	5730	17.111				
1719-03-5	Chrysene-d12	3950	21.295				
1520-96-3	Perylene-d12	3260	23.554				

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\BN031025\
Data File : BN036571.D
Acq On : 10 Mar 2025 20:50
Operator : RC/JU
Sample : Q1531-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Quant Time: Mar 11 00:53:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

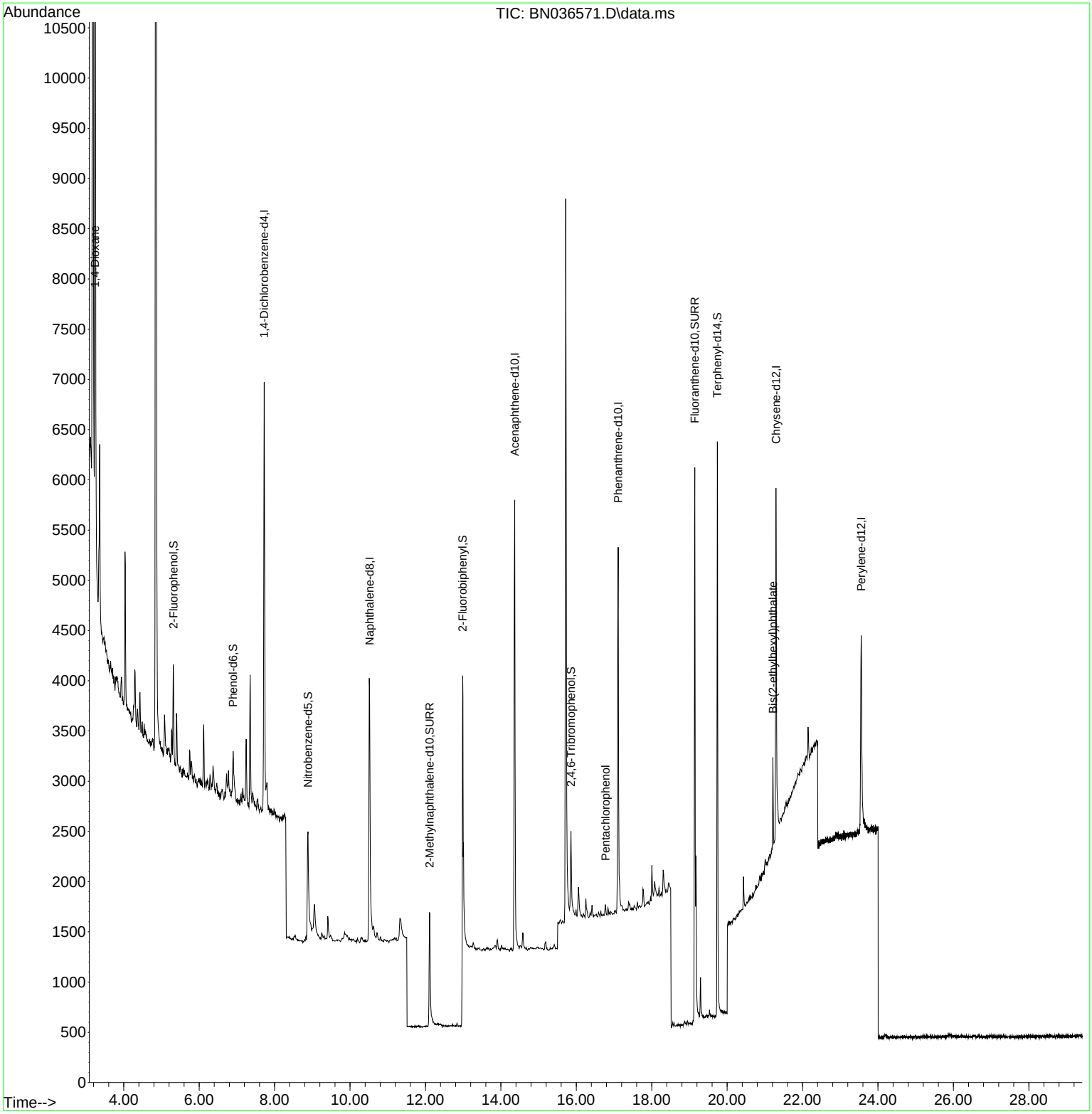
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2032	0.400	ng	0.00
7) Naphthalene-d8	10.520	136	4598	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2832	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5726	0.400	ng	0.00
29) Chrysene-d12	21.295	240	3951	0.400	ng	0.00
35) Perylene-d12	23.554	264	3259	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	716	0.151	ng	0.00
5) Phenol-d6	6.901	99	491	0.084	ng	0.00
8) Nitrobenzene-d5	8.886	82	1417	0.283	ng	0.01
11) 2-Methylnaphthalene-d10	12.111	152	2173	0.318	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	524	0.408	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	5511	0.335	ng	0.00
27) Fluoranthene-d10	19.141	212	6485	0.442	ng	0.00
31) Terphenyl-d14	19.740	244	5863	0.619	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	10456	4.639	ng	97
24) Pentachlorophenol	16.776	266	80	0.041	ng	89
34) Bis(2-ethylhexyl)phtha...	21.214	149	994	0.102	ng	95

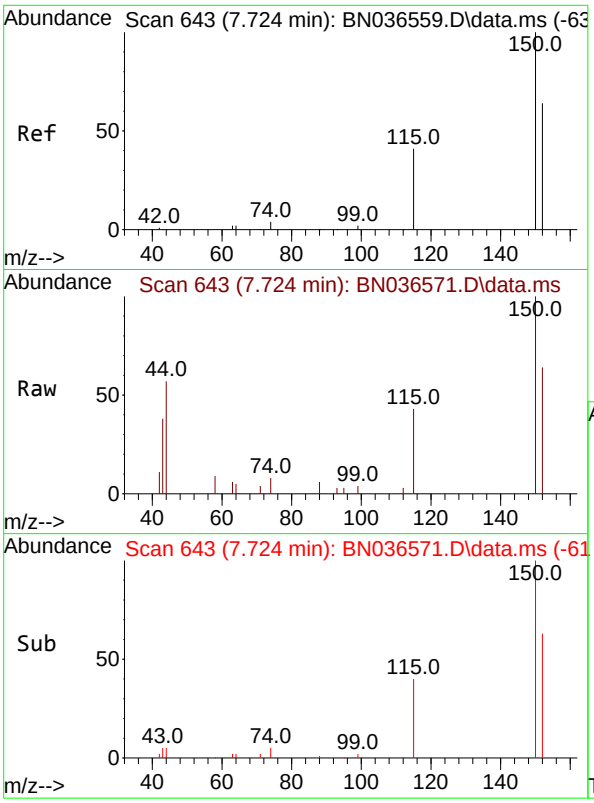
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036571.D
Acq On : 10 Mar 2025 20:50
Operator : RC/JU
Sample : Q1531-14
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Quant Time: Mar 11 00:53:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



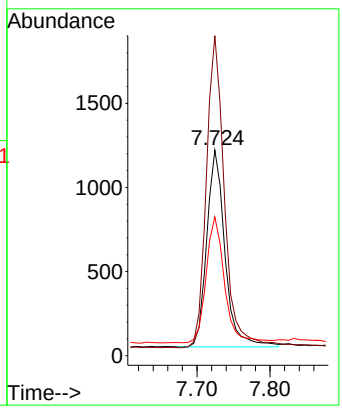


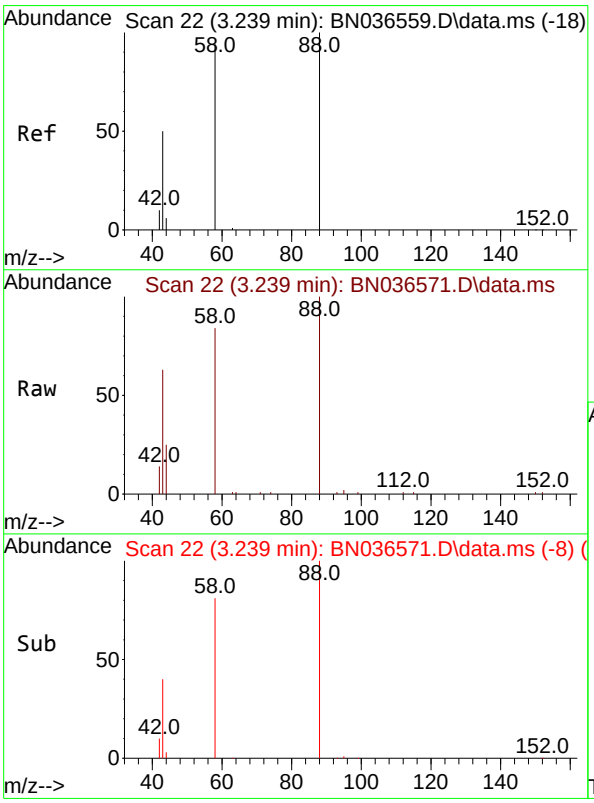
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:152 Resp: 2032

Ion	Ratio	Lower	Upper
152	100		
150	155.6	123.7	185.5
115	67.5	54.3	81.5

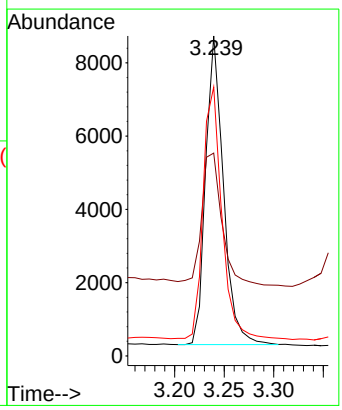


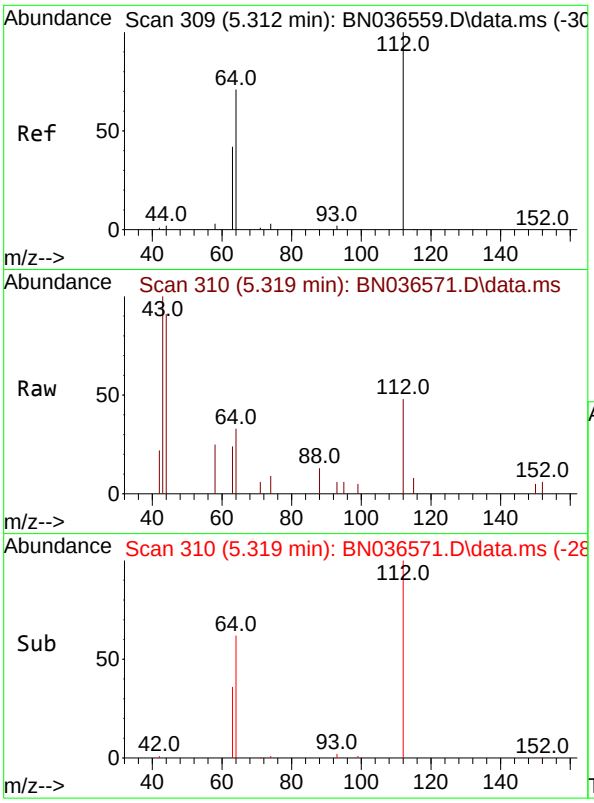


#2
1,4-Dioxane
Concen: 4.639 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion: 88 Resp: 10456

Ion	Ratio	Lower	Upper
88	100		
43	50.2	37.8	56.8
58	85.8	67.4	101.2



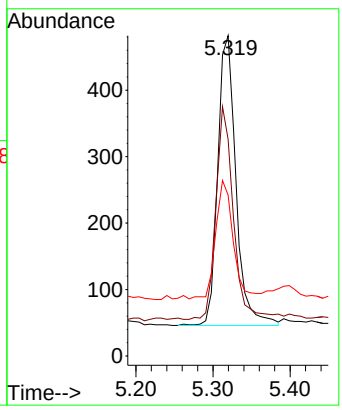


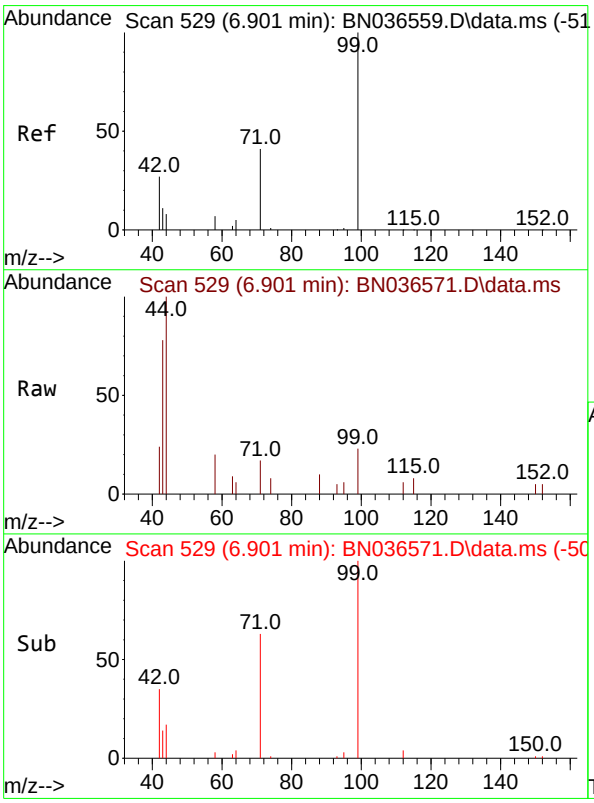
#4
2-Fluorophenol
Concen: 0.151 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:112 Resp: 716

Ion	Ratio	Lower	Upper
112	100		
64	70.8	53.1	79.7
63	37.6	31.8	47.8

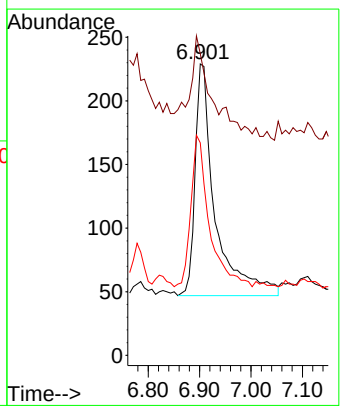


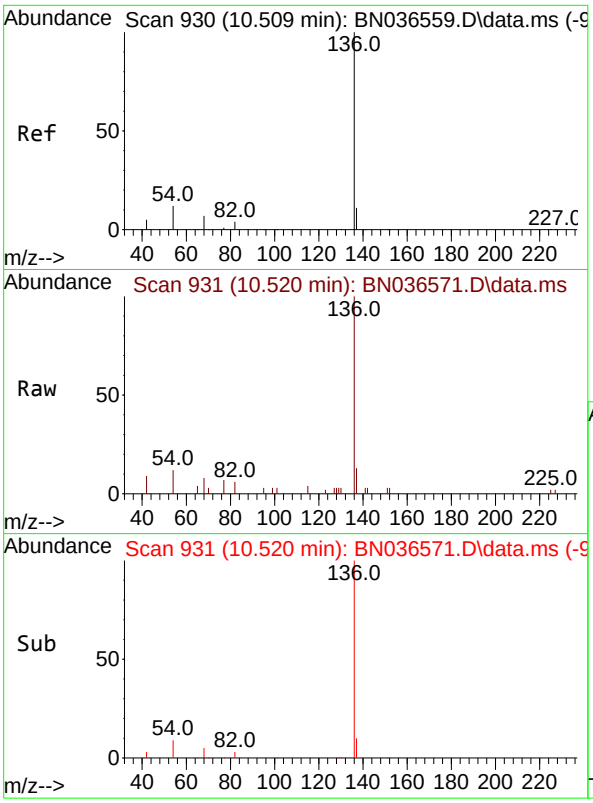


#5
Phenol-d6
Concen: 0.084 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion: 99 Resp: 491

Ion	Ratio	Lower	Upper
99	100		
42	48.9	26.5	39.7#
71	59.7	34.1	51.1#



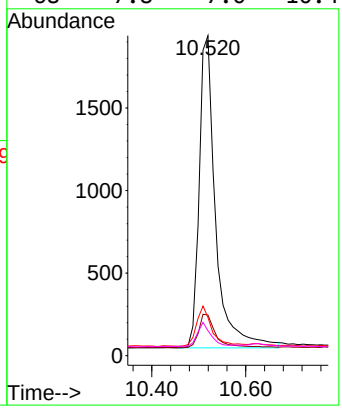


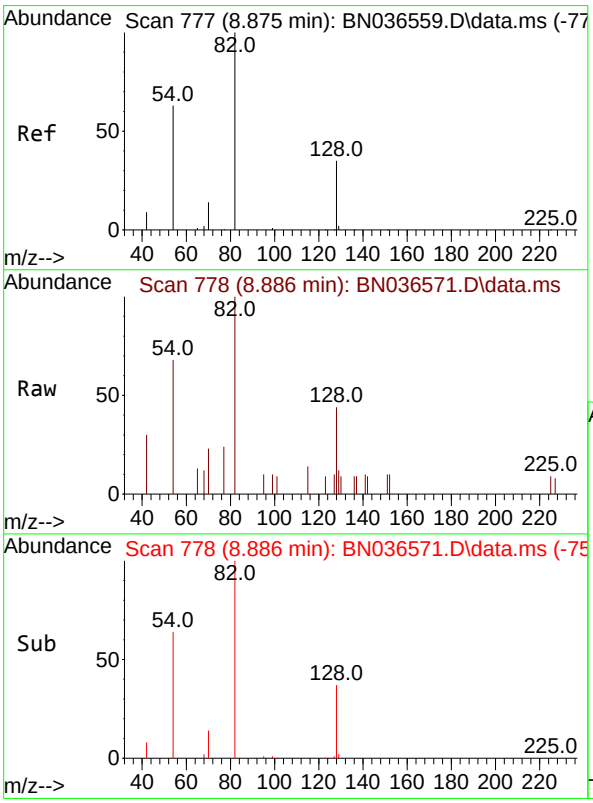
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.520 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:136 Resp: 4598

Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.3	15.5
54	12.0	11.5	17.3
68	7.8	7.0	10.4

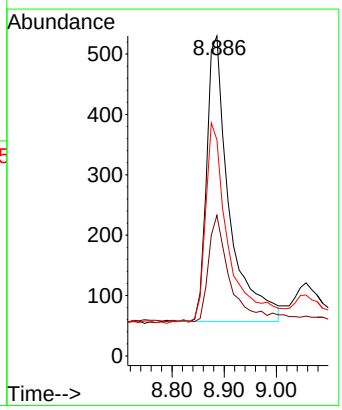


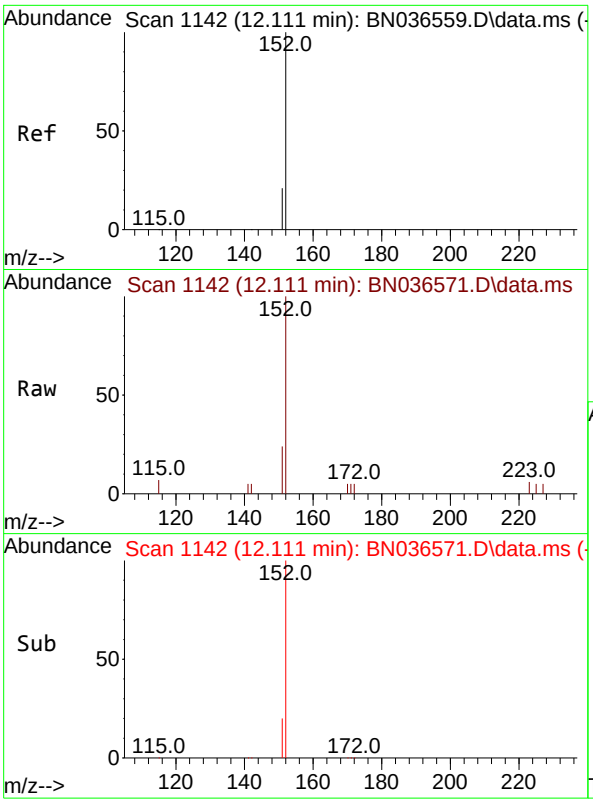


#8
Nitrobenzene-d5
Concen: 0.283 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion: 82 Resp: 1417

Ion	Ratio	Lower	Upper
82	100		
128	44.0	30.6	45.8
54	67.5	52.2	78.4



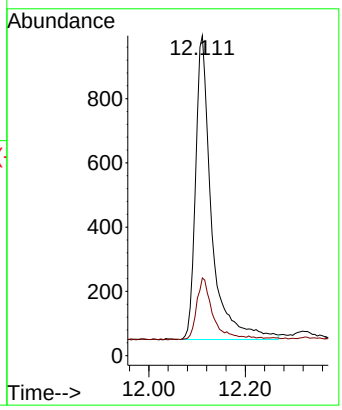


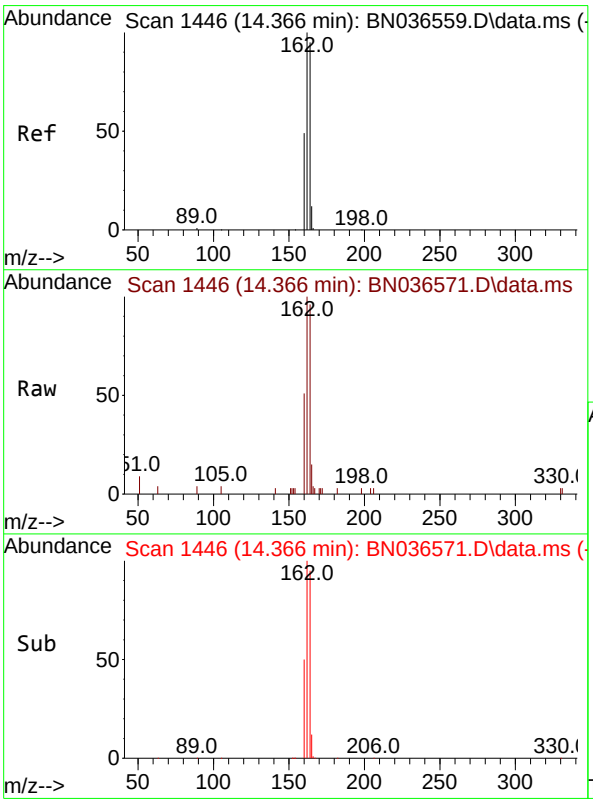
#11
2-Methylnaphthalene-d10
Concen: 0.318 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:152 Resp: 2173

Ion	Ratio	Lower	Upper
152	100		
151	20.2	17.0	25.6

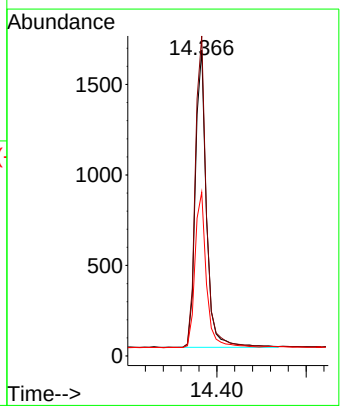


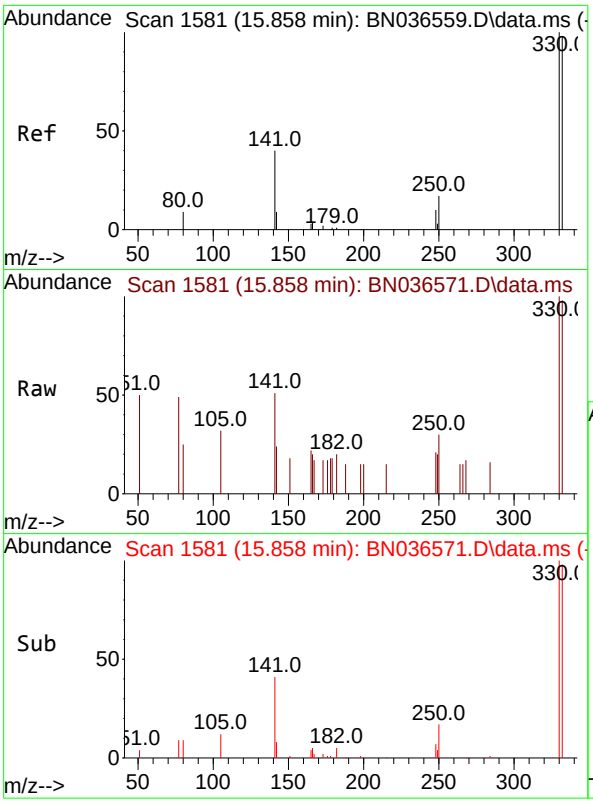


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion:164 Resp: 2832

Ion	Ratio	Lower	Upper
164	100		
162	104.7	84.2	126.2
160	53.5	42.2	63.2



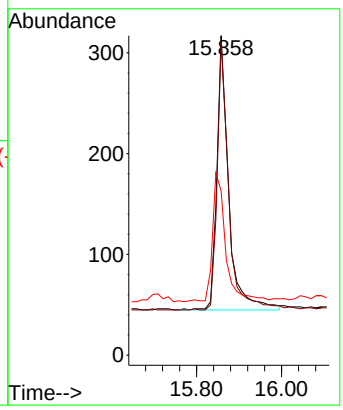


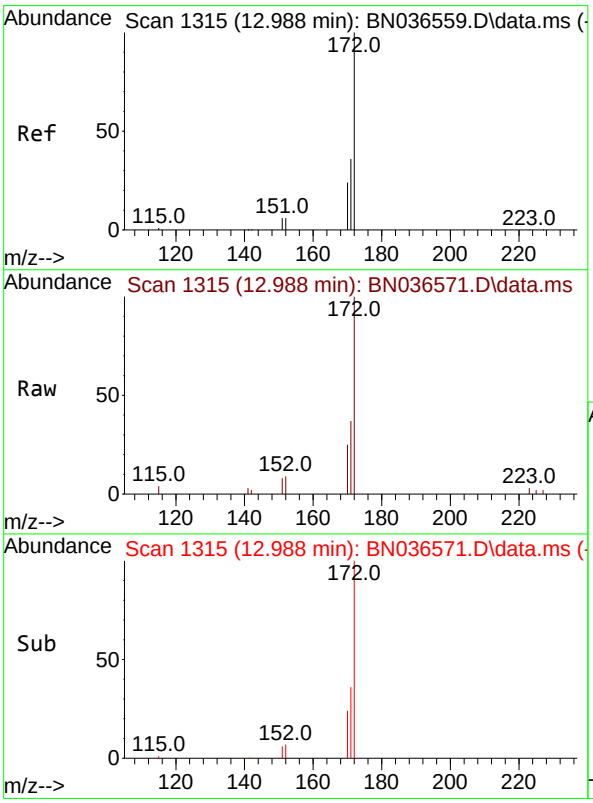
#14
2,4,6-Tribromophenol
Concen: 0.408 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:330 Resp: 524

Ion	Ratio	Lower	Upper
330	100		
332	95.4	75.2	112.8
141	52.7	43.4	65.2

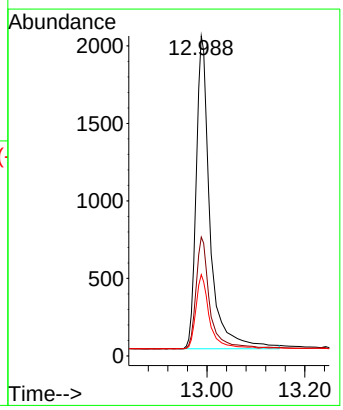


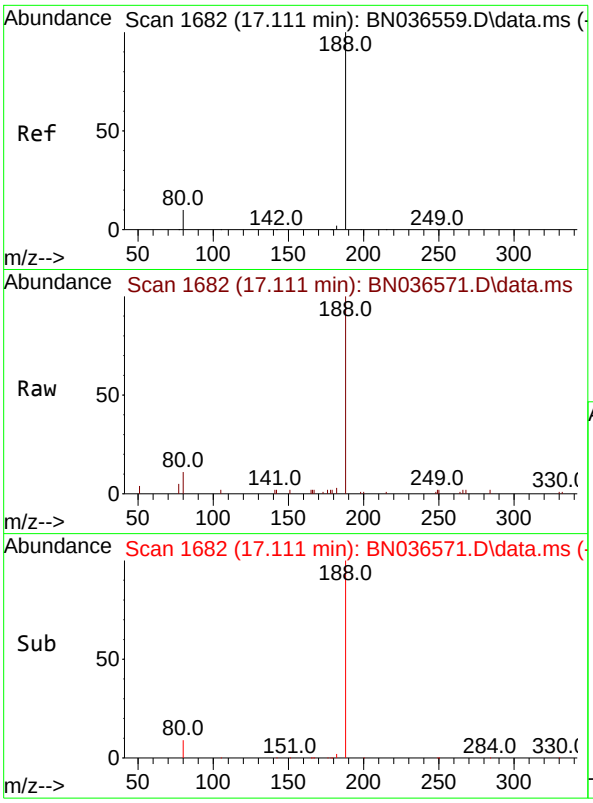


#15
2-Fluorobiphenyl
Concen: 0.335 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion:172 Resp: 5511

Ion	Ratio	Lower	Upper
172	100		
171	37.2	29.5	44.3
170	25.4	20.2	30.4



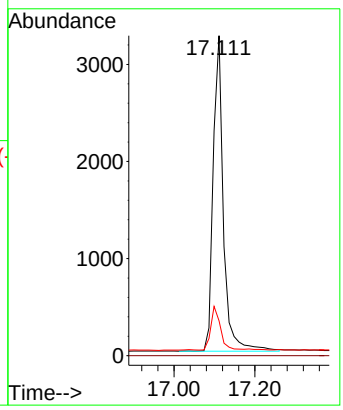


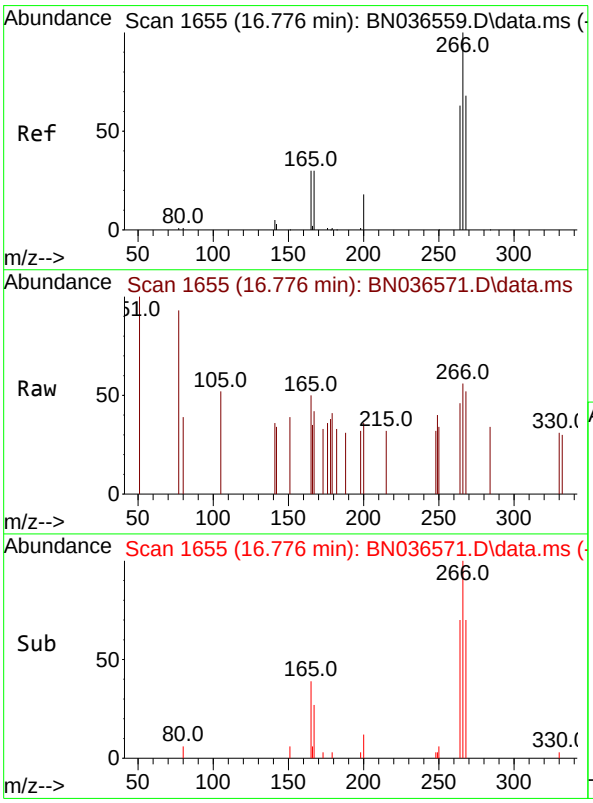
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:188 Resp: 5726

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.9	8.8	13.2

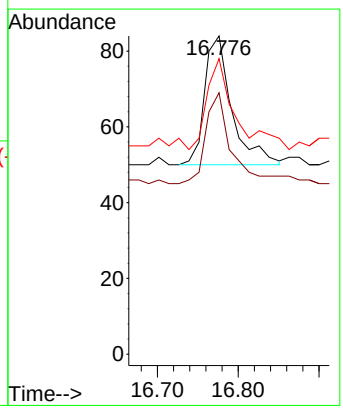


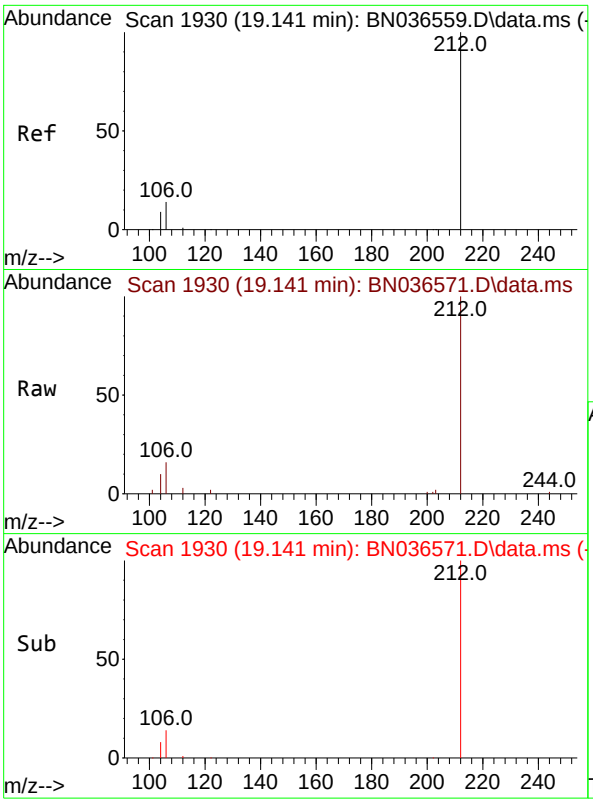


#24
Pentachlorophenol
Concen: 0.041 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion:266 Resp: 80

Ion	Ratio	Lower	Upper
266	100		
264	70.0	49.6	74.4
268	72.5	50.9	76.3



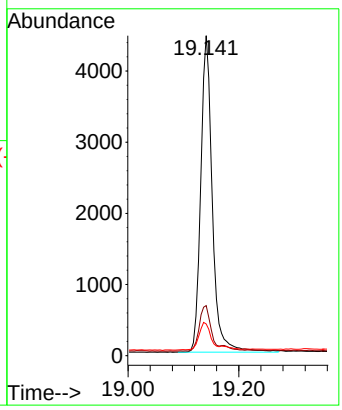


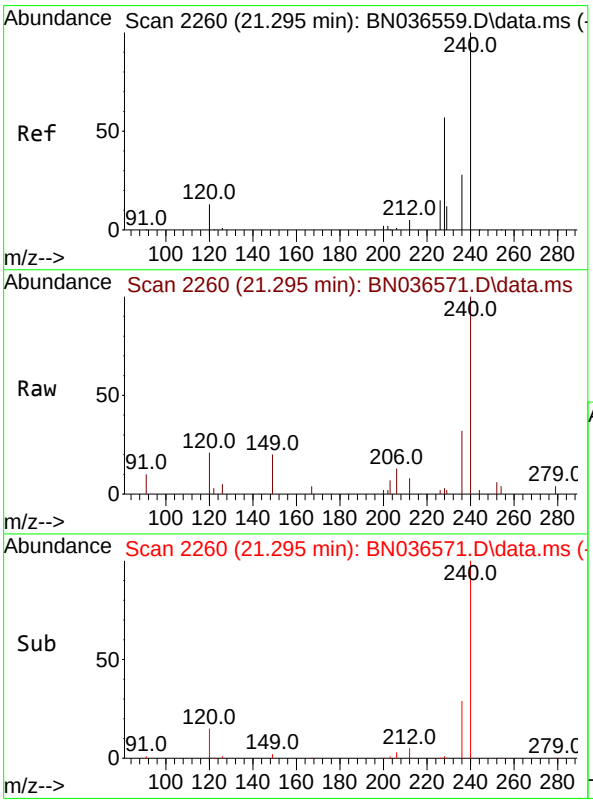
#27
Fluoranthene-d10
Concen: 0.442 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:212 Resp: 6485

Ion	Ratio	Lower	Upper
212	100		
106	15.8	11.8	17.6
104	8.8	7.3	10.9

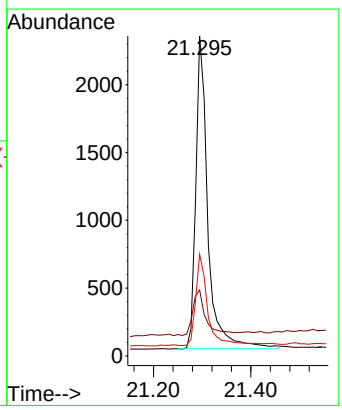


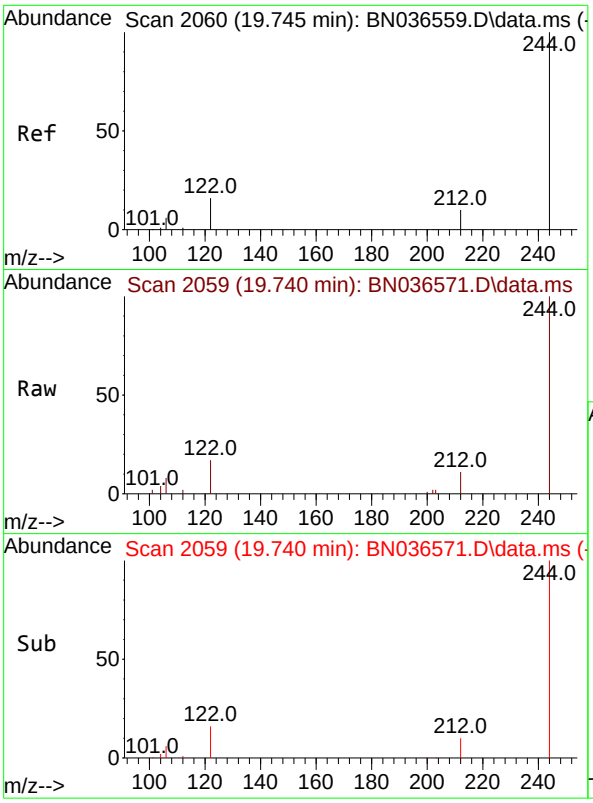


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion:240 Resp: 3951

Ion	Ratio	Lower	Upper
240	100		
120	20.6	14.6	22.0
236	31.8	24.1	36.1



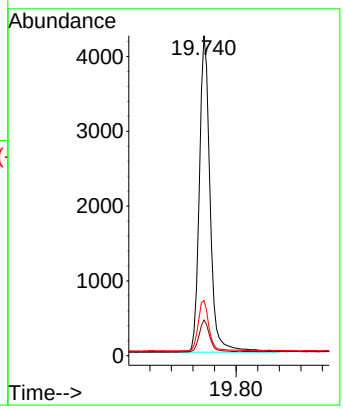


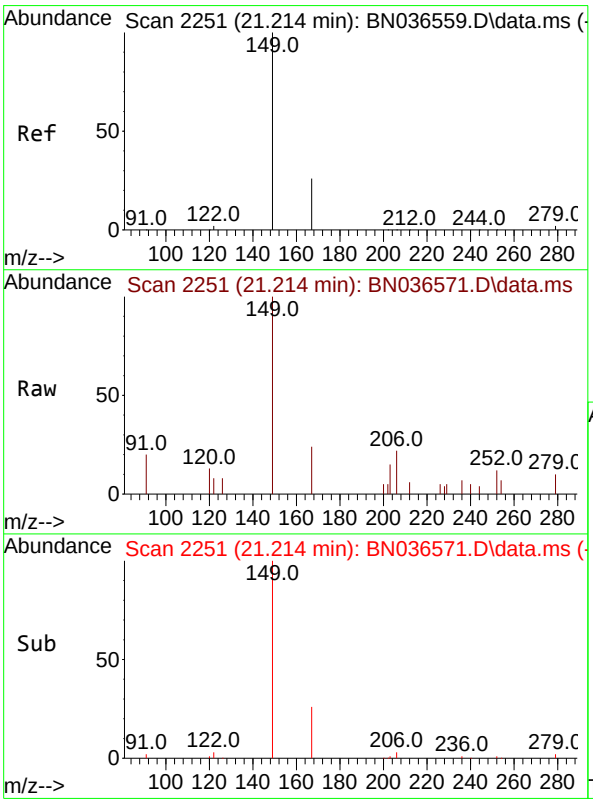
#31
Terphenyl-d14
Concen: 0.619 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:244 Resp: 5863

Ion	Ratio	Lower	Upper
244	100		
212	11.2	9.6	14.4
122	17.3	13.9	20.9

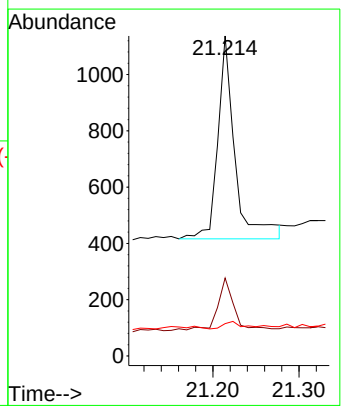


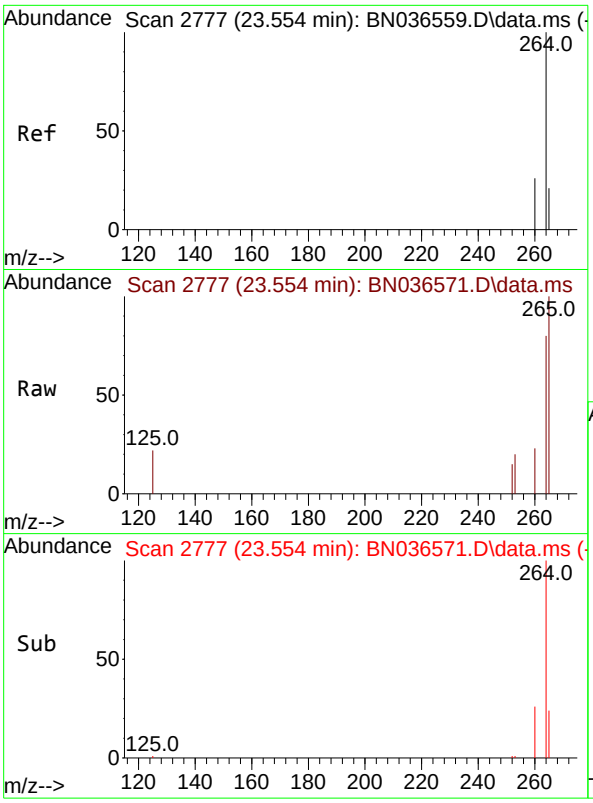


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.102 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Tgt Ion:149 Resp: 994

Ion	Ratio	Lower	Upper
149	100		
167	23.0	20.7	31.1
279	4.1	3.6	5.4



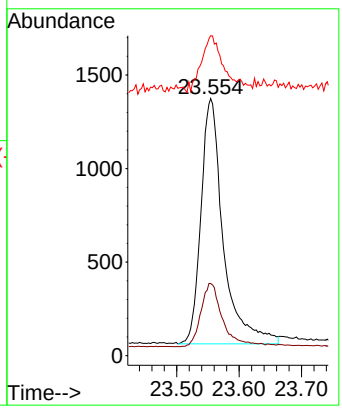


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036571.D
Acq: 10 Mar 2025 20:50

Instrument :
BNA_N
ClientSampleId :
RE105D1-20250306

Tgt Ion:264 Resp: 3259

Ion	Ratio	Lower	Upper
264	100		
260	28.1	22.6	33.8
265	124.5	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE105D2-20250306	SDG No.:	Q1531
Lab Sample ID:	Q1531-15	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036584.D	1	03/10/25 11:35	03/11/25 16:44	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	5.60	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		114%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		69%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.79	*	58 - 132		197%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1950	7.724				
1146-65-2	Naphthalene-d8	4550	10.509				
15067-26-2	Acenaphthene-d10	2780	14.366				
1517-22-2	Phenanthrene-d10	5690	17.111				
1719-03-5	Chrysene-d12	3980	21.295				
1520-96-3	Perylene-d12	3120	23.554				

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\BN031125\
Data File : BN036584.D
Acq On : 11 Mar 2025 16:44
Operator : RC/JU
Sample : Q1531-15
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Quant Time: Mar 11 17:07:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

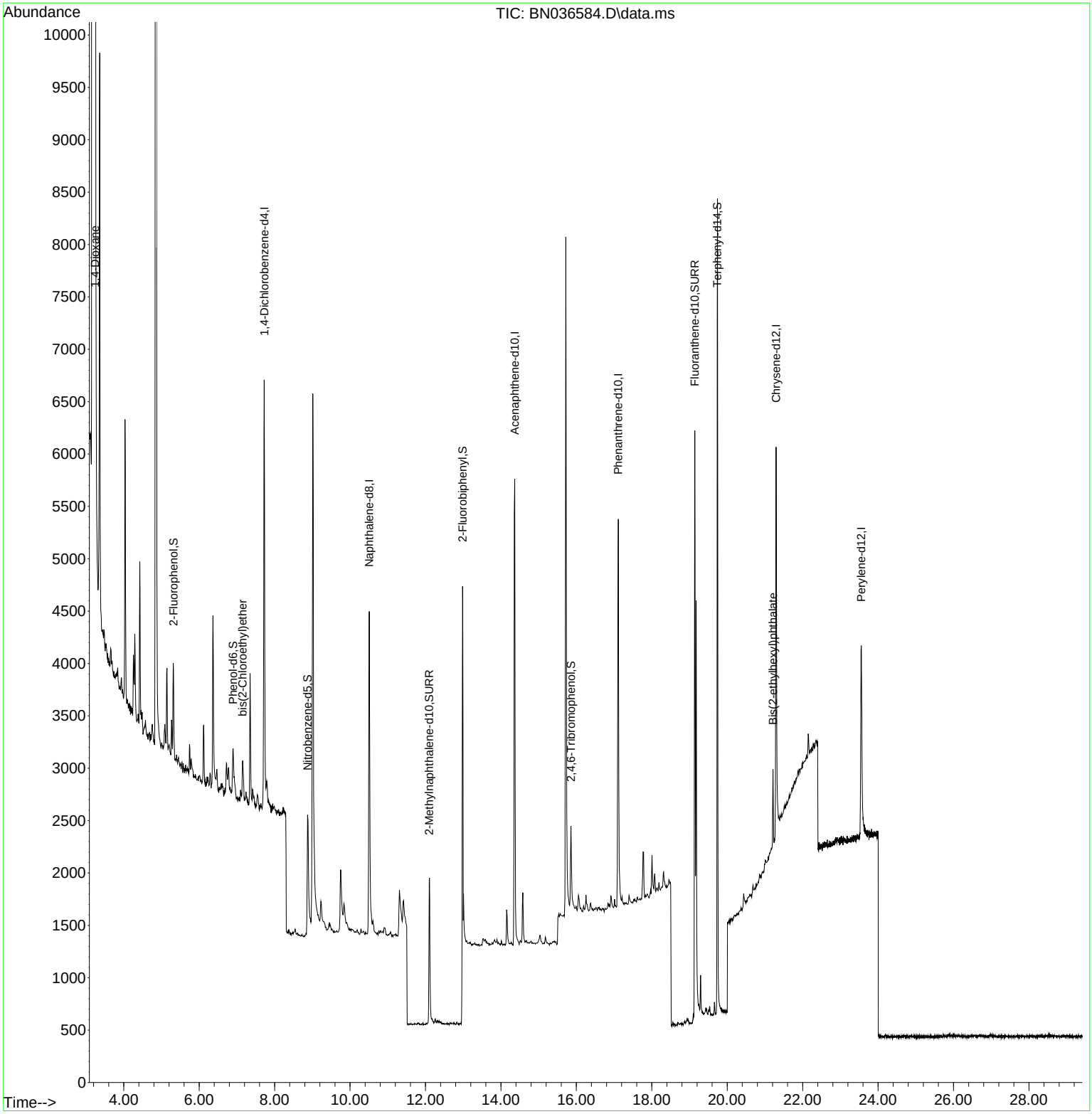
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1950	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4552	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	2777	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	5693	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3977	0.400	ng		0.00
35) Perylene-d12	23.554	264	3124	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	684	0.151	ng		0.00
5) Phenol-d6	6.901	99	435	0.077	ng		0.00
8) Nitrobenzene-d5	8.875	82	1368	0.276	ng		0.00
11) 2-Methylnaphthalene-d10	12.101	152	2278	0.336	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	499	0.396	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	5847	0.362	ng		0.00
27) Fluoranthene-d10	19.141	212	6661	0.457	ng		0.00
31) Terphenyl-d14	19.740	244	7515	0.789	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	12148	5.616	ng		97
6) bis(2-Chloroethyl)ether	7.154	93	267	0.046	ng	#	88
34) Bis(2-ethylhexyl)phtha...	21.214	149	757	0.077	ng	#	97

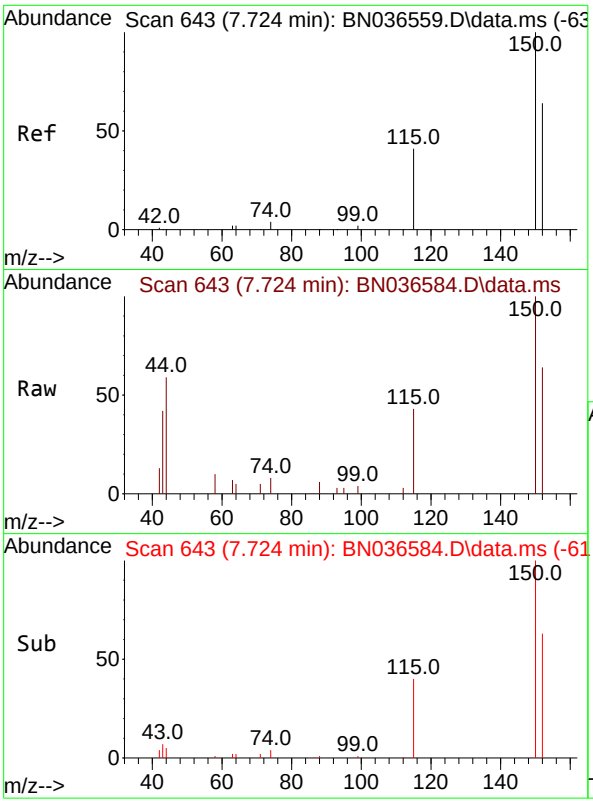
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036584.D
Acq On : 11 Mar 2025 16:44
Operator : RC/JU
Sample : Q1531-15
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Quant Time: Mar 11 17:07:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



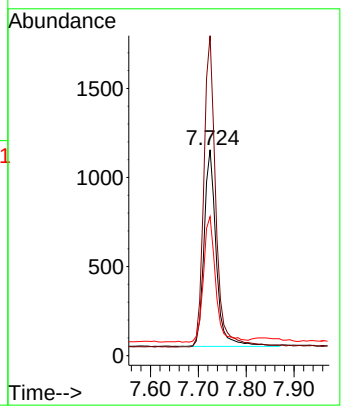


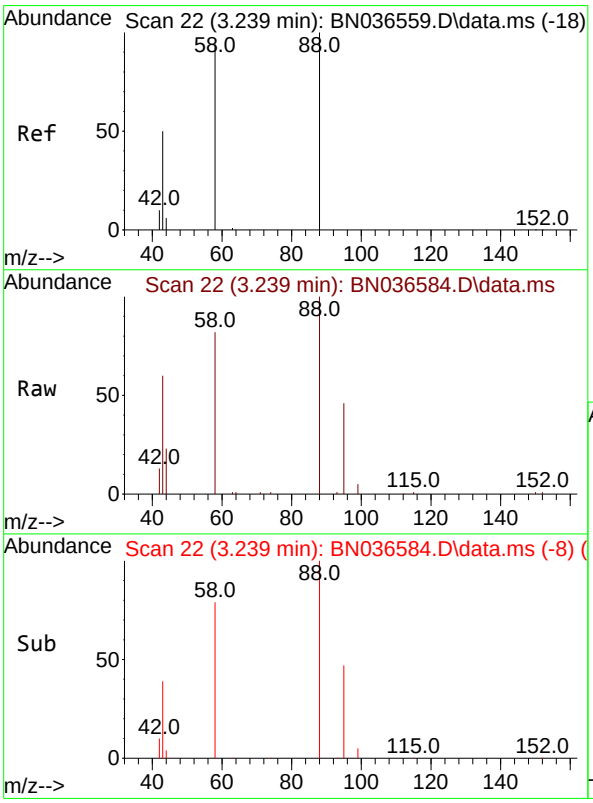
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:152 Resp: 1950

Ion	Ratio	Lower	Upper
152	100		
150	155.4	123.7	185.5
115	67.5	54.3	81.5

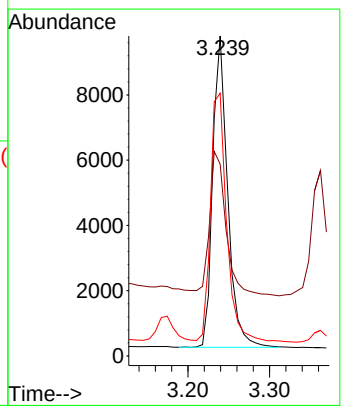


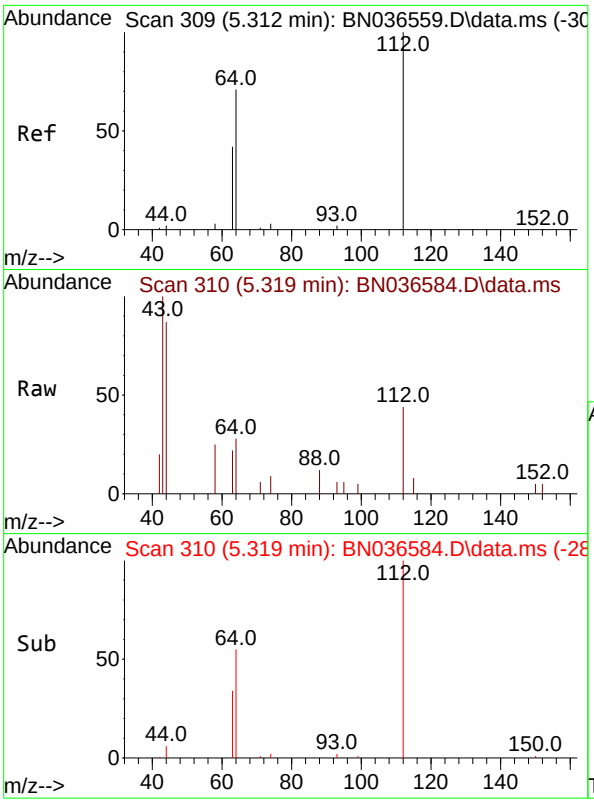


#2
1,4-Dioxane
Concen: 5.616 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion: 88 Resp: 12148

Ion	Ratio	Lower	Upper
88	100		
43	50.9	37.8	56.8
58	85.4	67.4	101.2



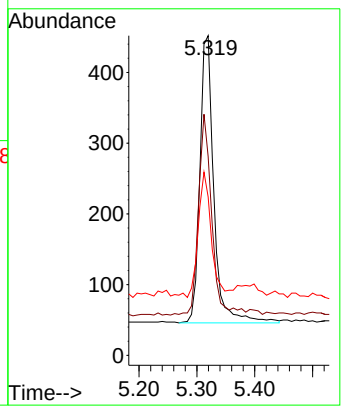


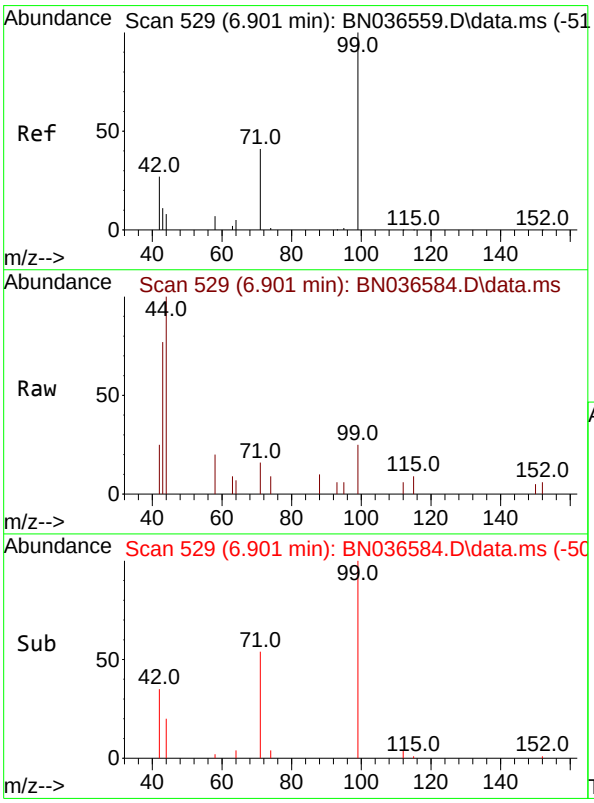
#4
2-Fluorophenol
Concen: 0.151 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:112 Resp: 684

Ion	Ratio	Lower	Upper
112	100		
64	65.9	53.1	79.7
63	40.4	31.8	47.8

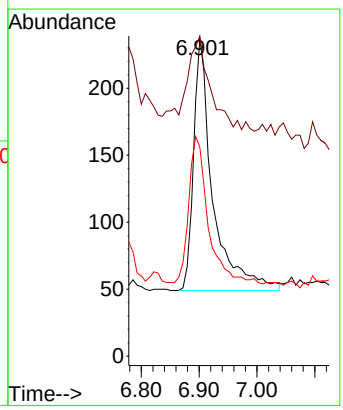


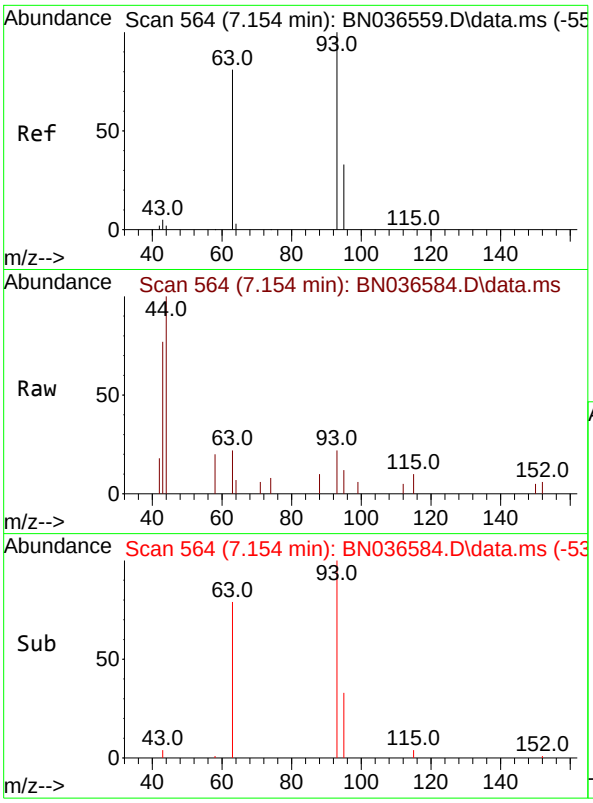


#5
Phenol-d6
Concen: 0.077 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion: 99 Resp: 435

Ion	Ratio	Lower	Upper
99	100		
42	44.1	26.5	39.7#
71	60.0	34.1	51.1#



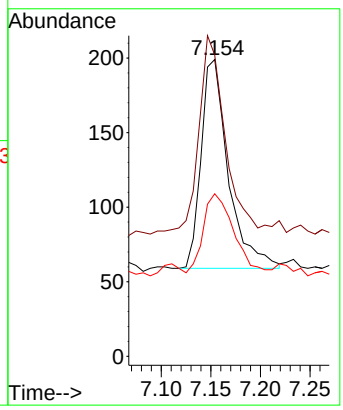


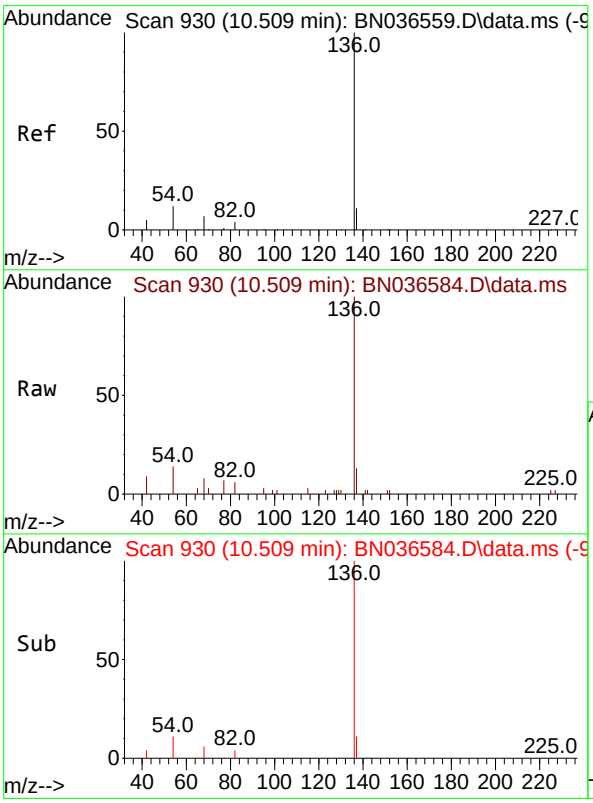
#6
bis(2-Chloroethyl)ether
Concen: 0.046 ng
RT: 7.154 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion: 93 Resp: 267

Ion	Ratio	Lower	Upper
93	100		
63	93.6	67.7	101.5
95	42.3	25.6	38.4#

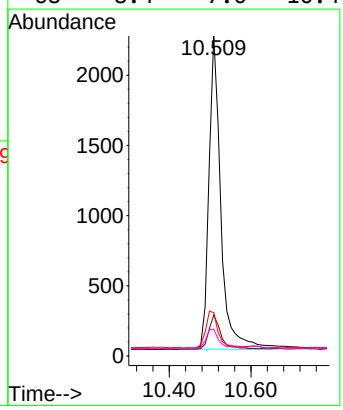


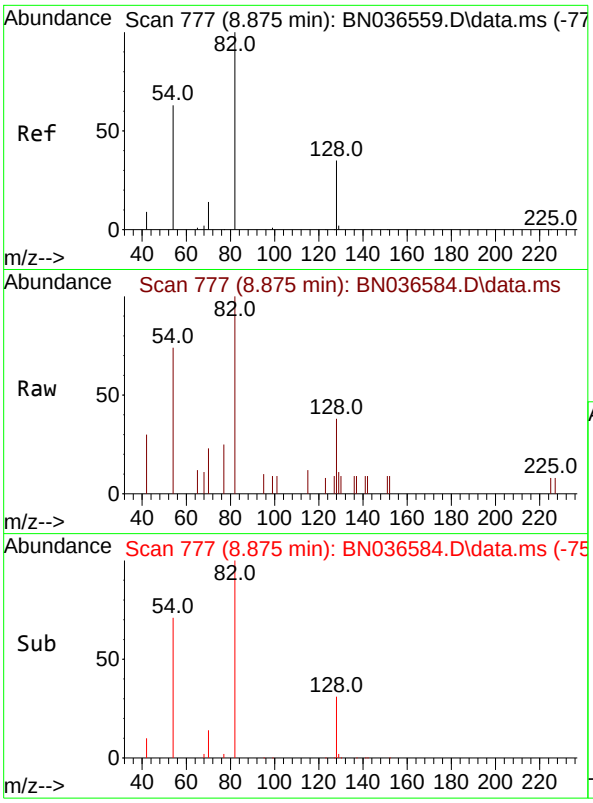


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion:136 Resp: 4552

Ion	Ratio	Lower	Upper
136	100		
137	12.8	10.3	15.5
54	13.6	11.5	17.3
68	8.4	7.0	10.4



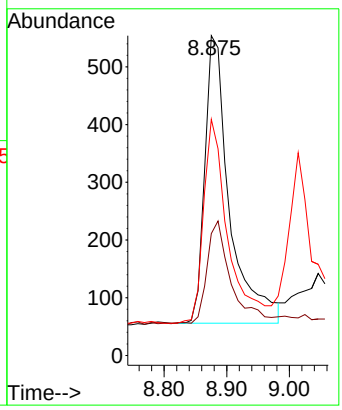


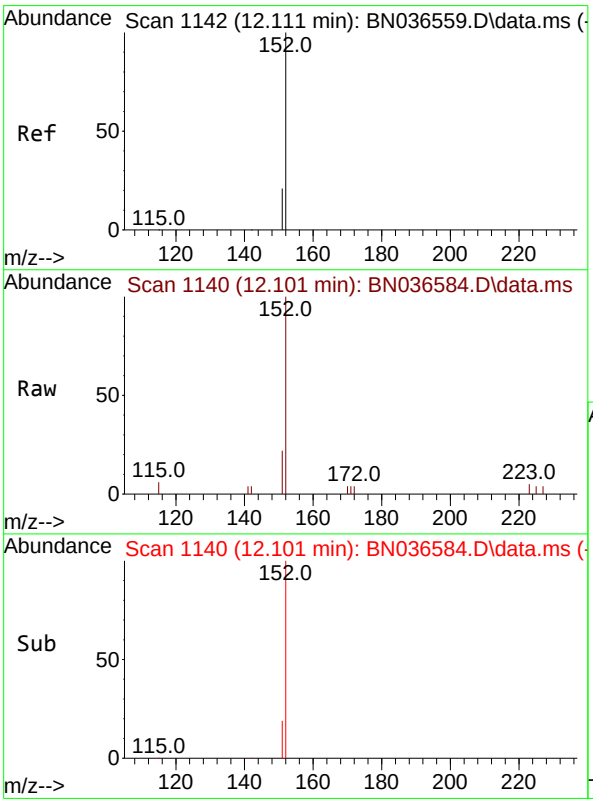
#8
Nitrobenzene-d5
Concen: 0.276 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion: 82 Resp: 1368

Ion	Ratio	Lower	Upper
82	100		
128	38.1	30.6	45.8
54	73.8	52.2	78.4

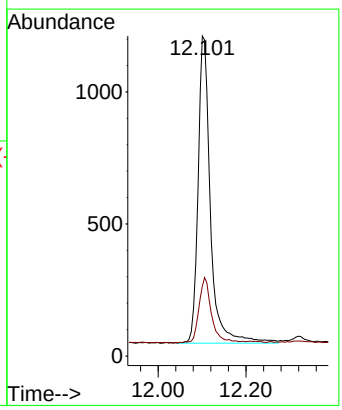


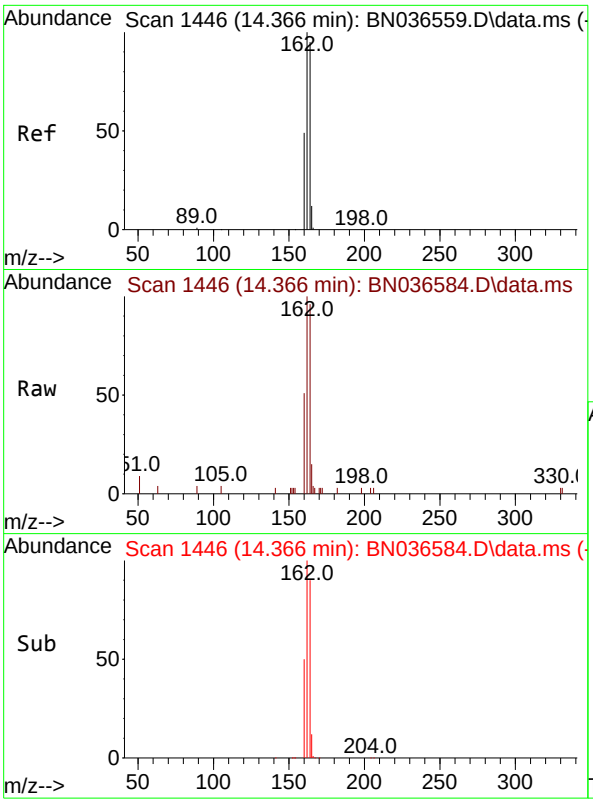


#11
2-Methylnaphthalene-d10
Concen: 0.336 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.010 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion:152 Resp: 2278

Ion	Ratio	Lower	Upper
152	100		
151	21.8	17.0	25.6



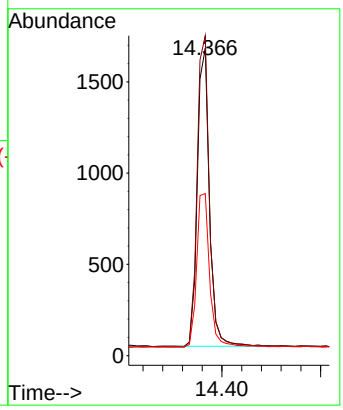


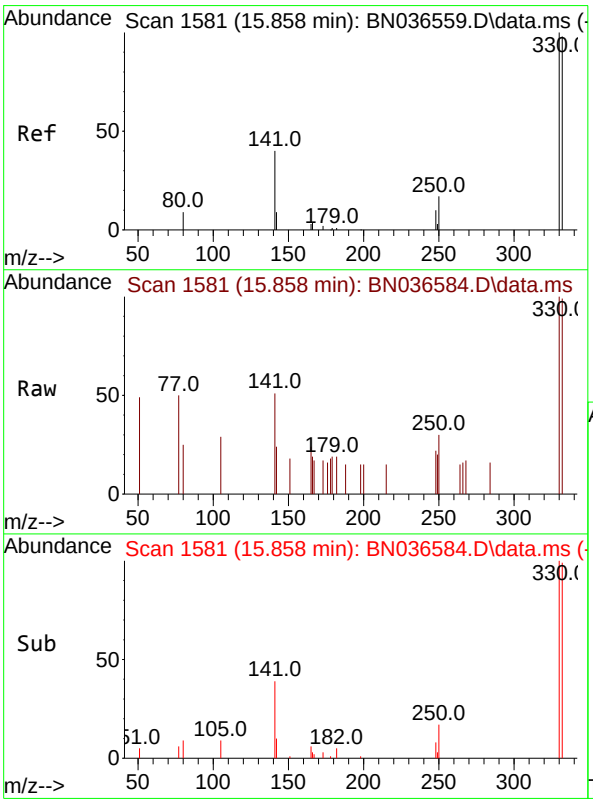
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:164 Resp: 2777

Ion	Ratio	Lower	Upper
164	100		
162	104.1	84.2	126.2
160	52.7	42.2	63.2

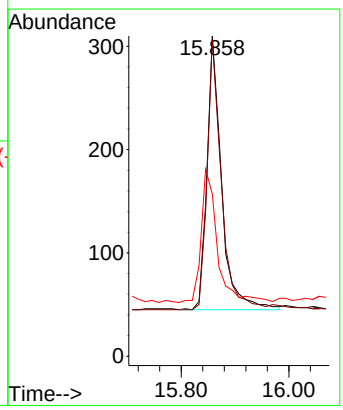


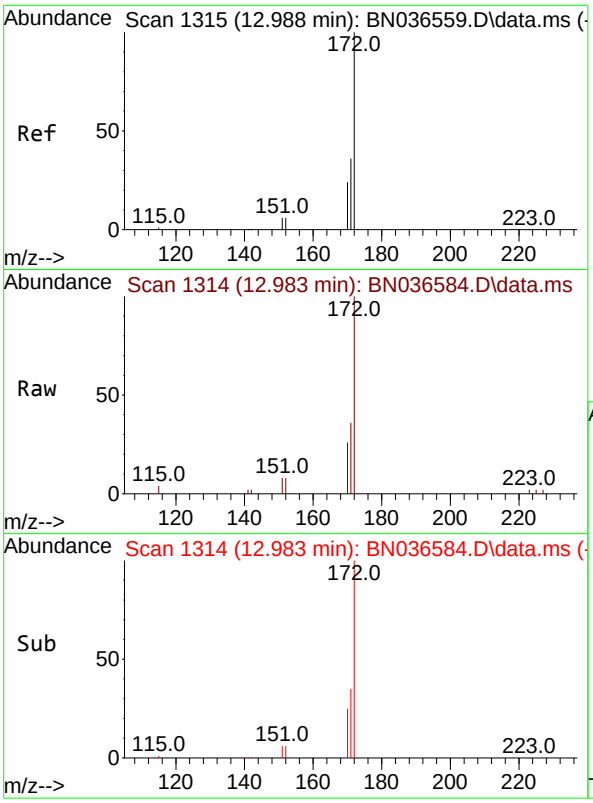


#14
2,4,6-Tribromophenol
Concen: 0.396 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion:330 Resp: 499

Ion	Ratio	Lower	Upper
330	100		
332	95.6	75.2	112.8
141	53.7	43.4	65.2



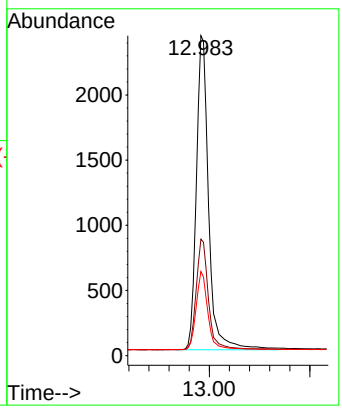


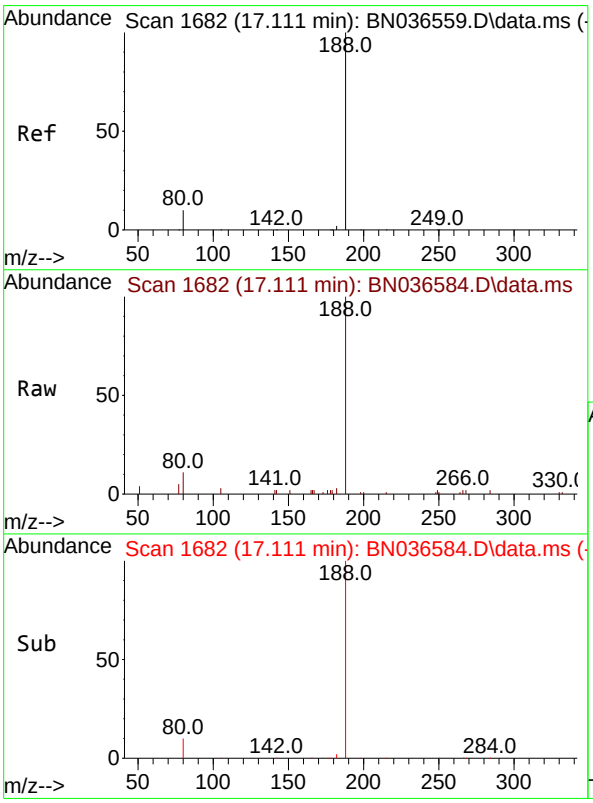
#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:172 Resp: 5847

Ion	Ratio	Lower	Upper
172	100		
171	36.4	29.5	44.3
170	26.3	20.2	30.4

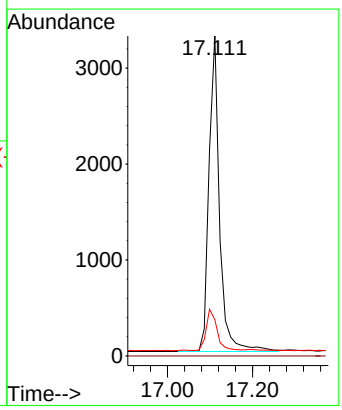


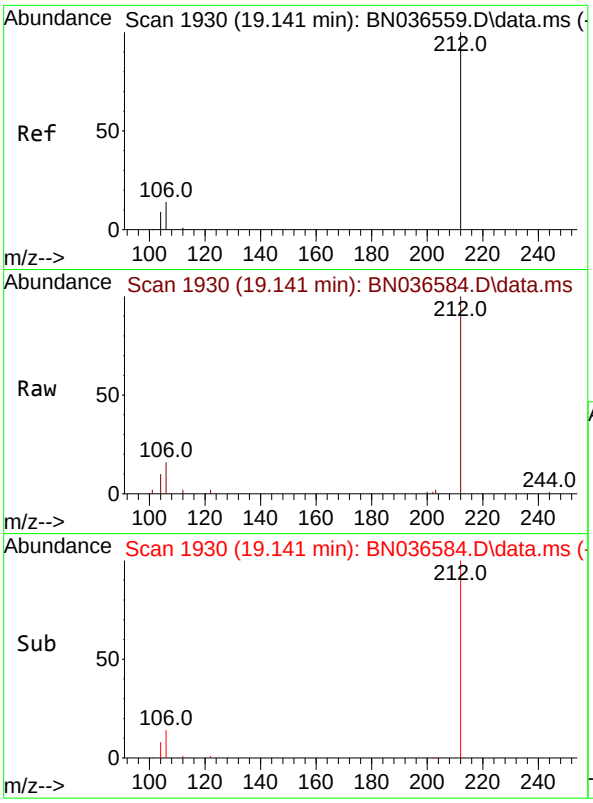


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion:188 Resp: 5693

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	8.8	13.2



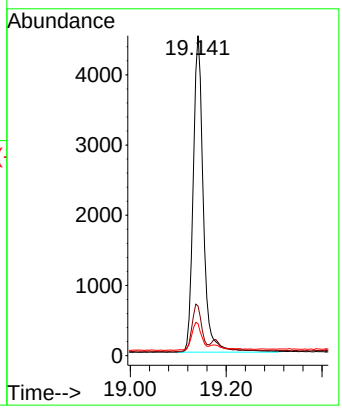


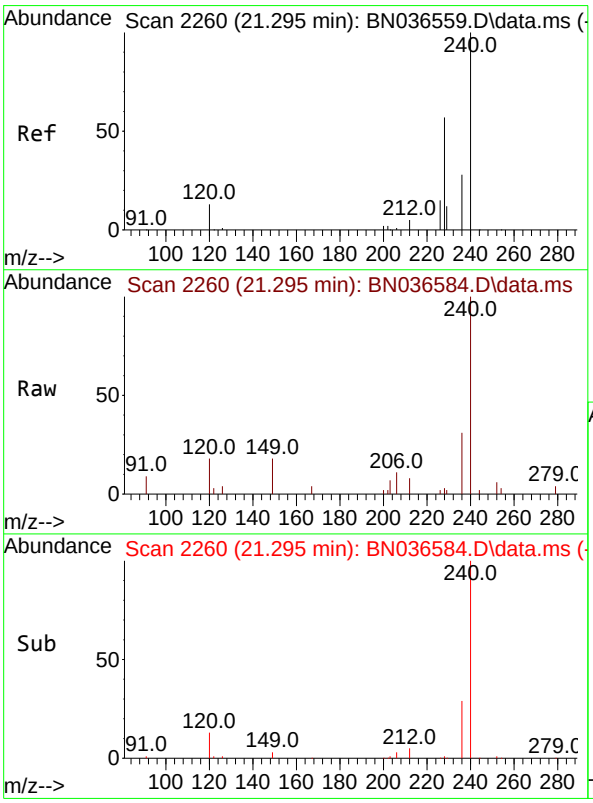
#27
Fluoranthene-d10
Concen: 0.457 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:212 Resp: 6661

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.8	17.6
104	8.7	7.3	10.9

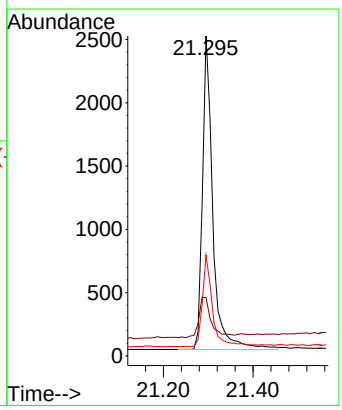


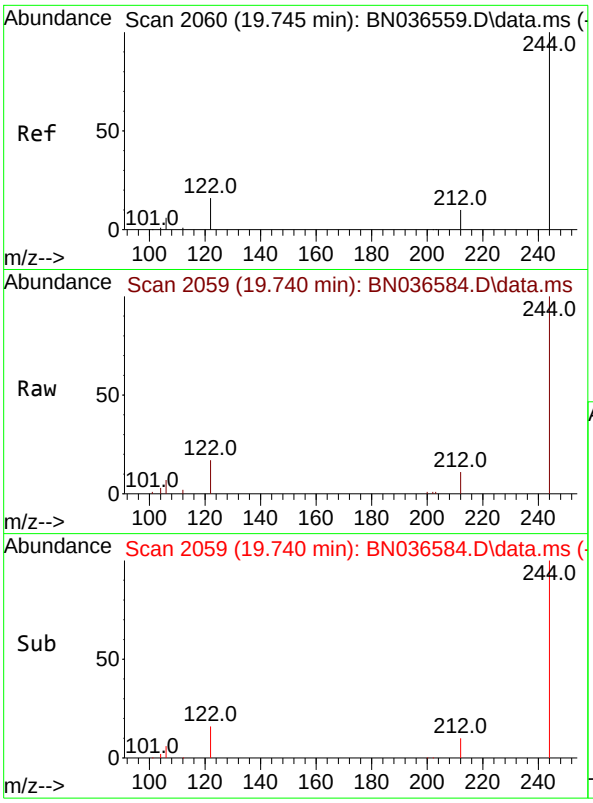


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion:240 Resp: 3977

Ion	Ratio	Lower	Upper
240	100		
120	18.2	14.6	22.0
236	31.5	24.1	36.1



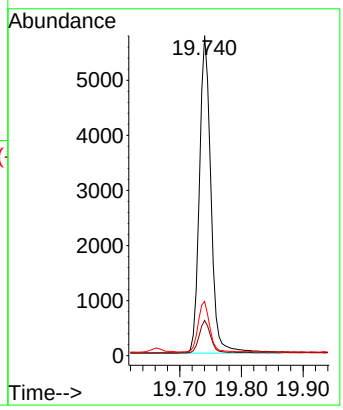


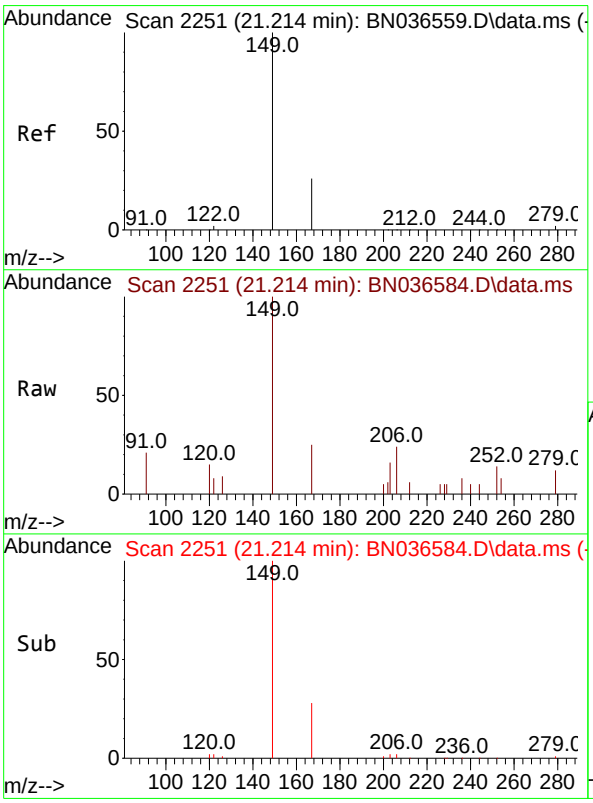
#31
Terphenyl-d14
Concen: 0.789 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:244 Resp: 7515

Ion	Ratio	Lower	Upper
244	100		
212	11.0	9.6	14.4
122	17.0	13.9	20.9

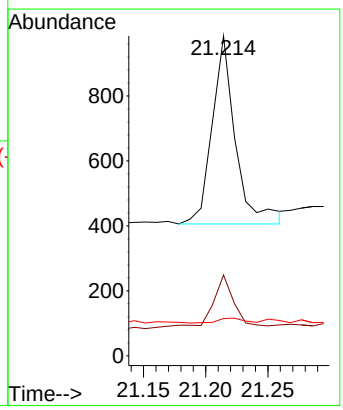


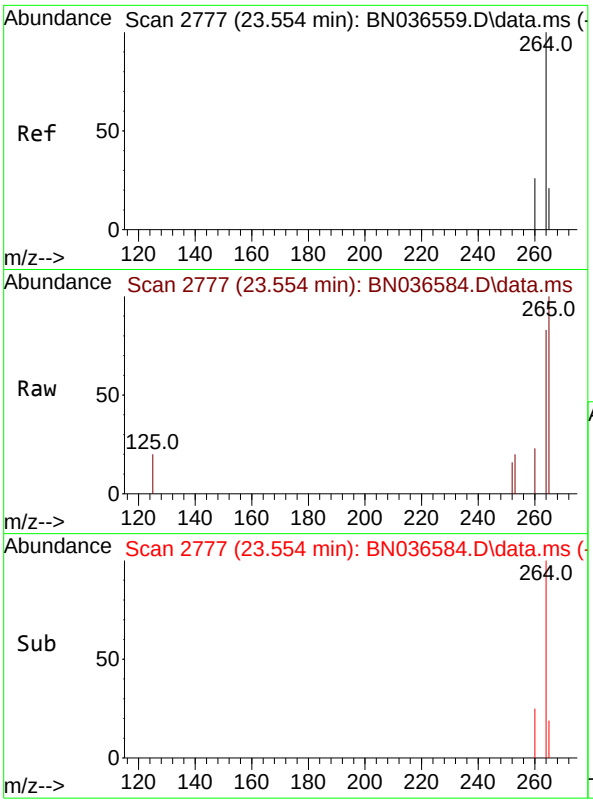


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.077 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Tgt Ion:149 Resp: 757

Ion	Ratio	Lower	Upper
149	100		
167	24.4	20.7	31.1
279	2.8	3.6	5.4#



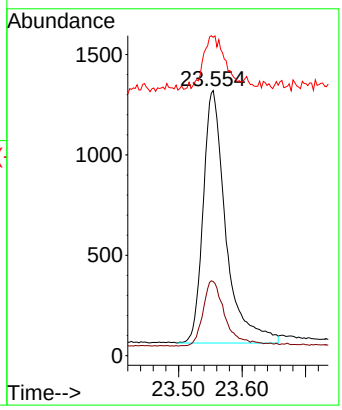


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036584.D
Acq: 11 Mar 2025 16:44

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306

Tgt Ion:264 Resp: 3124

Ion	Ratio	Lower	Upper
264	100		
260	27.9	22.6	33.8
265	120.1	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE105D2-20250306DL	SDG No.:	Q1531
Lab Sample ID:	Q1531-15DL	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036596.D	2	03/10/25 11:35	03/12/25 12:16	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.00	D	0.14	0.40	0.40	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		91%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.48		30 - 150		120%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		69%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.82	*	58 - 132		206%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1960	7.724				
1146-65-2	Naphthalene-d8	4590	10.509				
15067-26-2	Acenaphthene-d10	2770	14.366				
1517-22-2	Phenanthrene-d10	5530	17.111				
1719-03-5	Chrysene-d12	3880	21.295				
1520-96-3	Perylene-d12	3090	23.554				

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\BN031225\
Data File : BN036596.D
Acq On : 12 Mar 2025 12:16
Operator : RC/JU
Sample : Q1531-15DL 2X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Quant Time: Mar 12 12:50:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

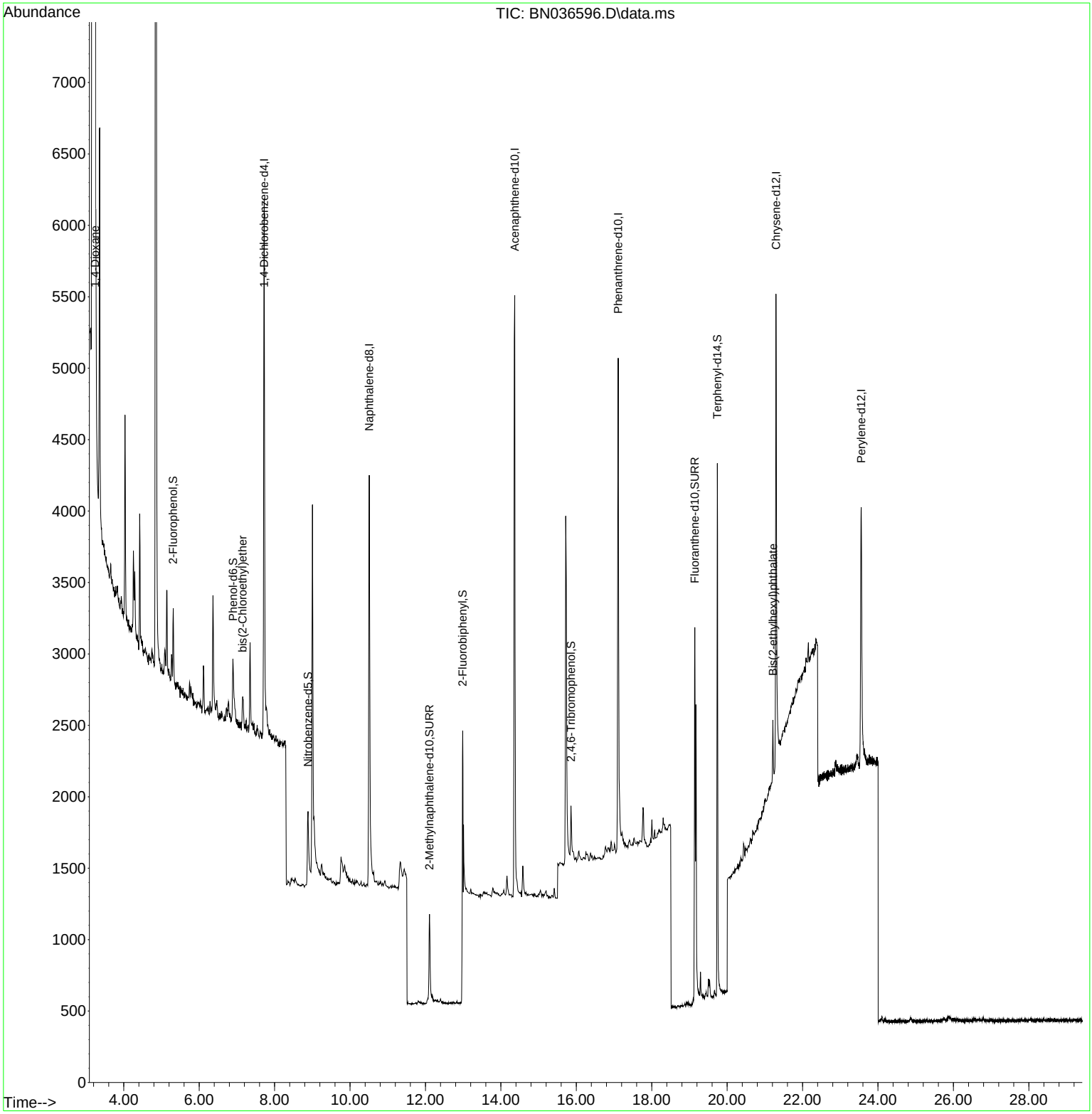
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1963	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4593	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	2774	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	5527	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3876	0.400	ng		0.00
35) Perylene-d12	23.554	264	3091	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	369	0.081	ng		0.00
5) Phenol-d6	6.901	99	509	0.090	ng		0.00
8) Nitrobenzene-d5	8.886	82	697	0.139	ng		0.01
11) 2-Methylnaphthalene-d10	12.106	152	1251	0.183	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	258	0.205	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	2982	0.185	ng		0.00
27) Fluoranthene-d10	19.141	212	3405	0.240	ng		0.00
31) Terphenyl-d14	19.740	244	3815	0.411	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	6563	3.014	ng		96
6) bis(2-Chloroethyl)ether	7.154	93	150	0.026	ng	#	90
34) Bis(2-ethylhexyl)phtha...	21.214	149	474	0.049	ng	#	96

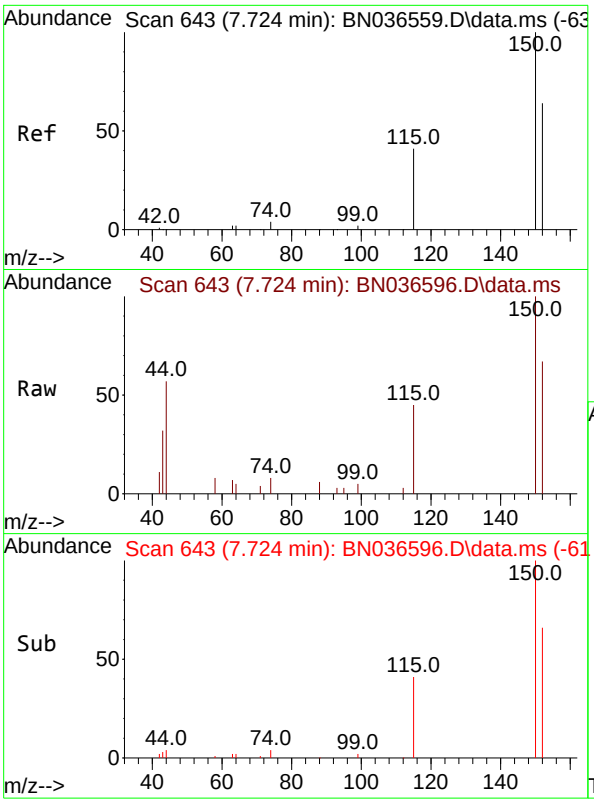
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036596.D
Acq On : 12 Mar 2025 12:16
Operator : RC/JU
Sample : Q1531-15DL 2X
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Quant Time: Mar 12 12:50:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



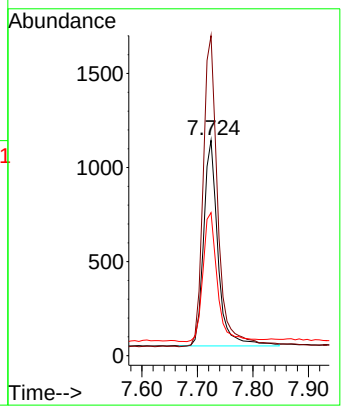


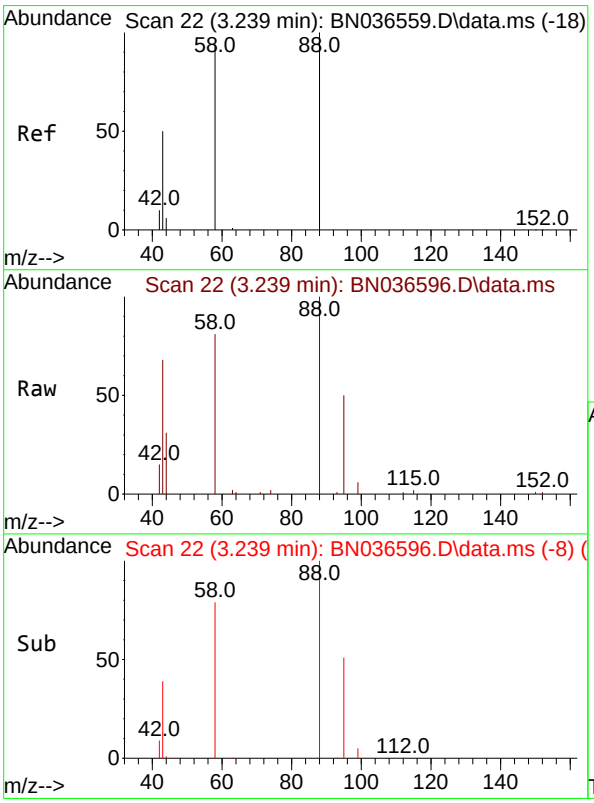
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:152 Resp: 1963

Ion	Ratio	Lower	Upper
152	100		
150	148.6	123.7	185.5
115	66.4	54.3	81.5

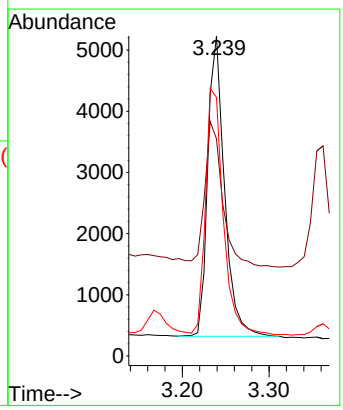


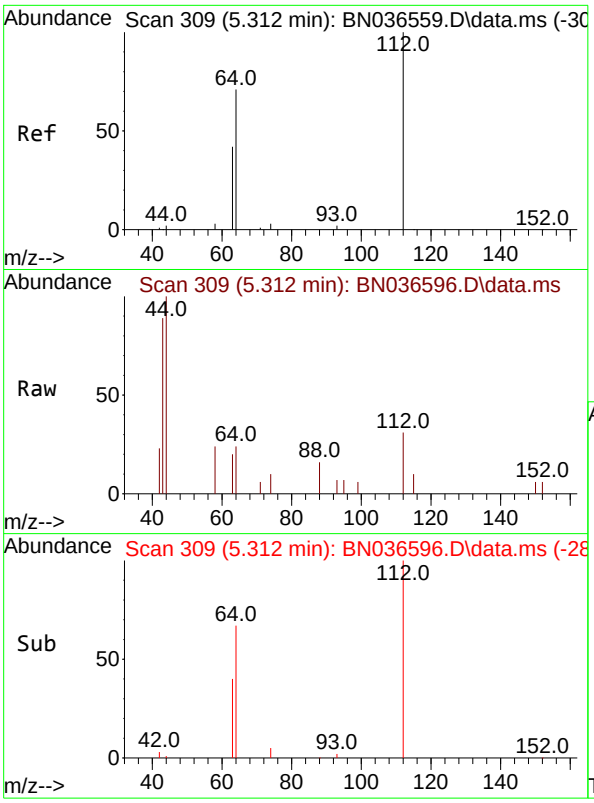


#2
1,4-Dioxane
Concen: 3.014 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion: 88 Resp: 6563

Ion	Ratio	Lower	Upper
88	100		
43	51.2	37.8	56.8
58	87.1	67.4	101.2



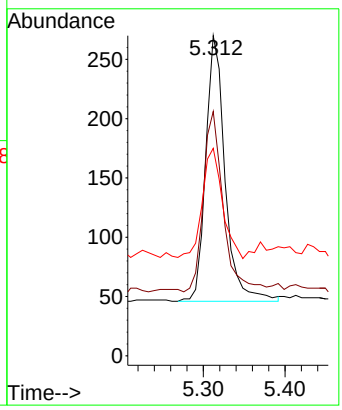


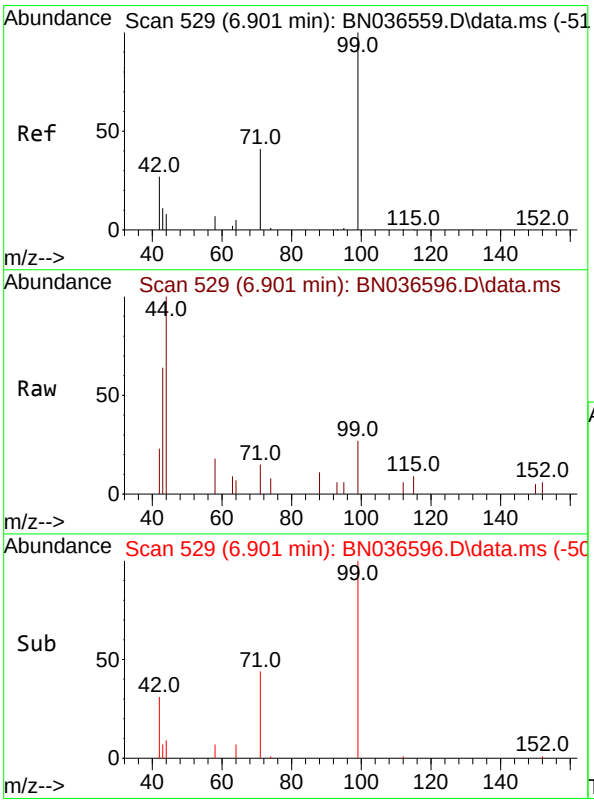
#4
2-Fluorophenol
Concen: 0.081 ng
RT: 5.312 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:112 Resp: 369

Ion	Ratio	Lower	Upper
112	100		
64	69.6	53.1	79.7
63	43.6	31.8	47.8

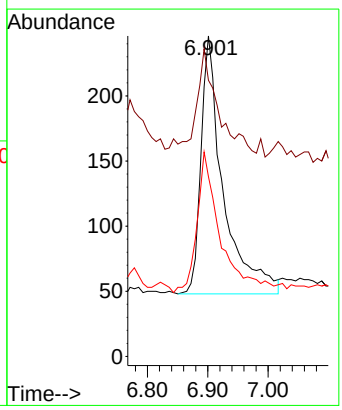


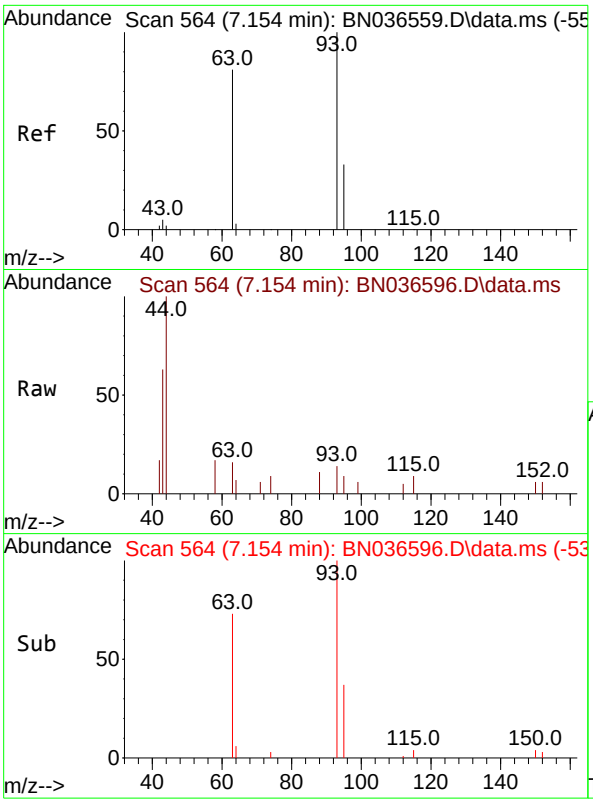


#5
Phenol-d6
Concen: 0.090 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion: 99 Resp: 509

Ion	Ratio	Lower	Upper
99	100		
42	42.2	26.5	39.7#
71	58.3	34.1	51.1#



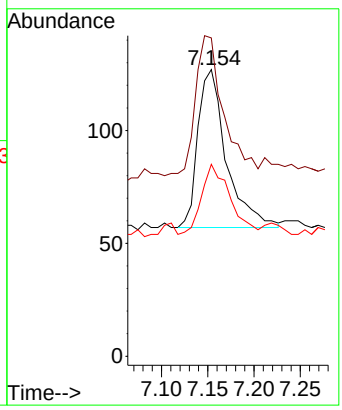


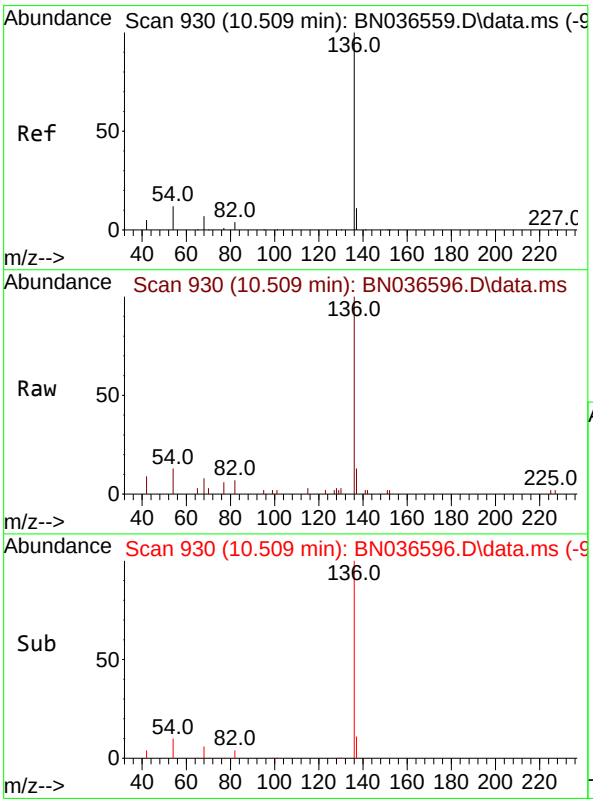
#6
bis(2-Chloroethyl)ether
Concen: 0.026 ng
RT: 7.154 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion: 93 Resp: 150

Ion	Ratio	Lower	Upper
93	100		
63	86.7	67.7	101.5
95	49.3	25.6	38.4#

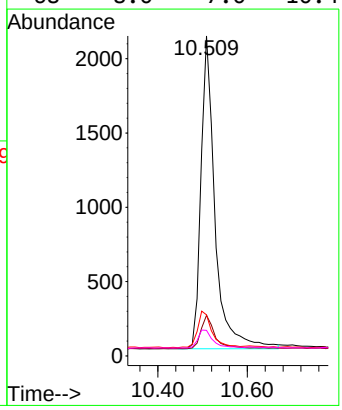


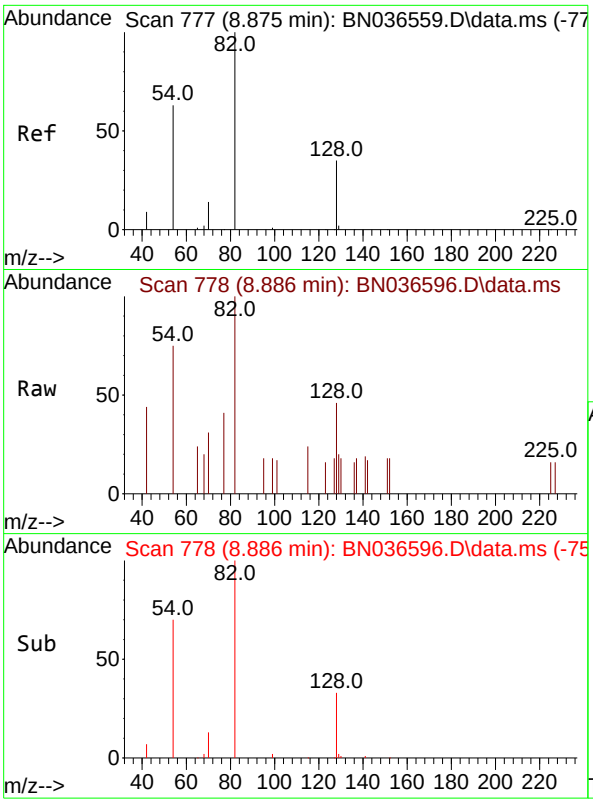


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion:136 Resp: 4593

Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.3	15.5
54	12.8	11.5	17.3
68	8.0	7.0	10.4



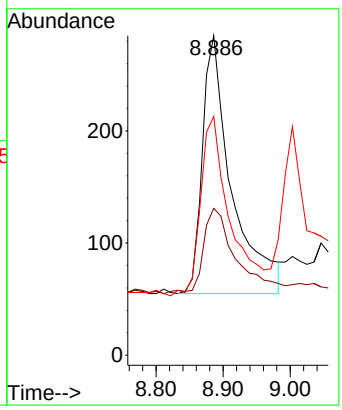


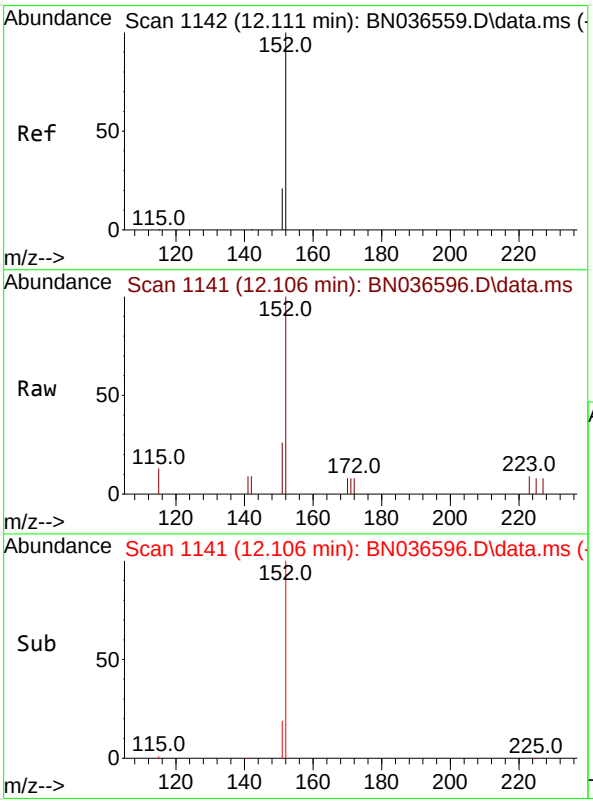
#8
Nitrobenzene-d5
Concen: 0.139 ng
RT: 8.886 min Scan# 7
Delta R.T. 0.011 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion: 82 Resp: 697

Ion	Ratio	Lower	Upper
82	100		
128	46.0	30.6	45.8#
54	74.7	52.2	78.4

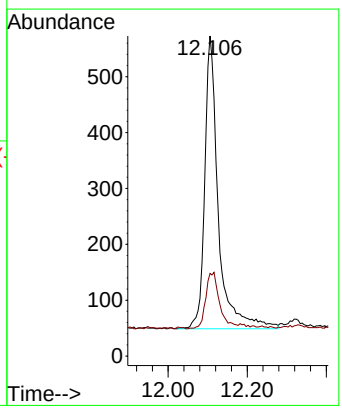


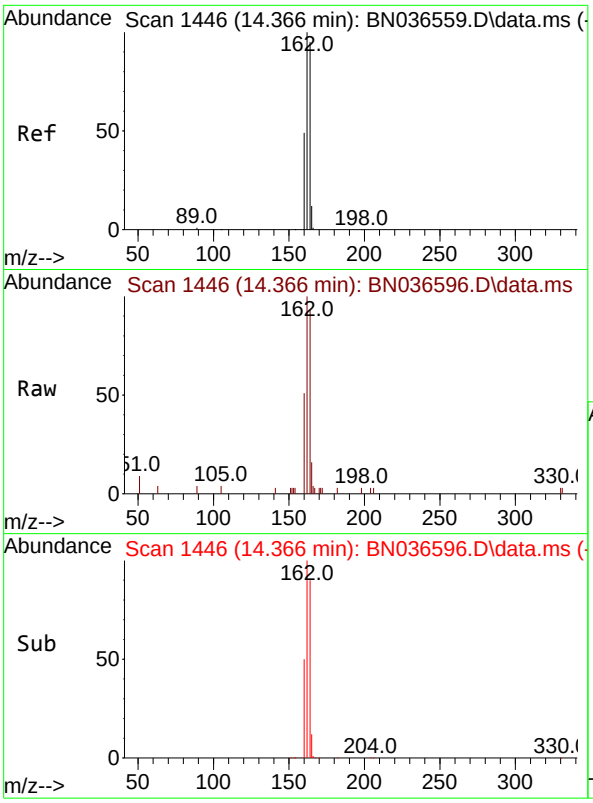


#11
2-Methylnaphthalene-d10
Concen: 0.183 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.005 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion:152 Resp: 1251

Ion	Ratio	Lower	Upper
152	100		
151	19.7	17.0	25.6



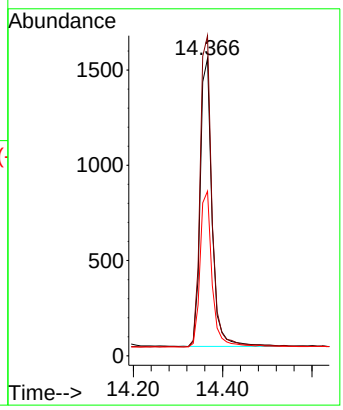


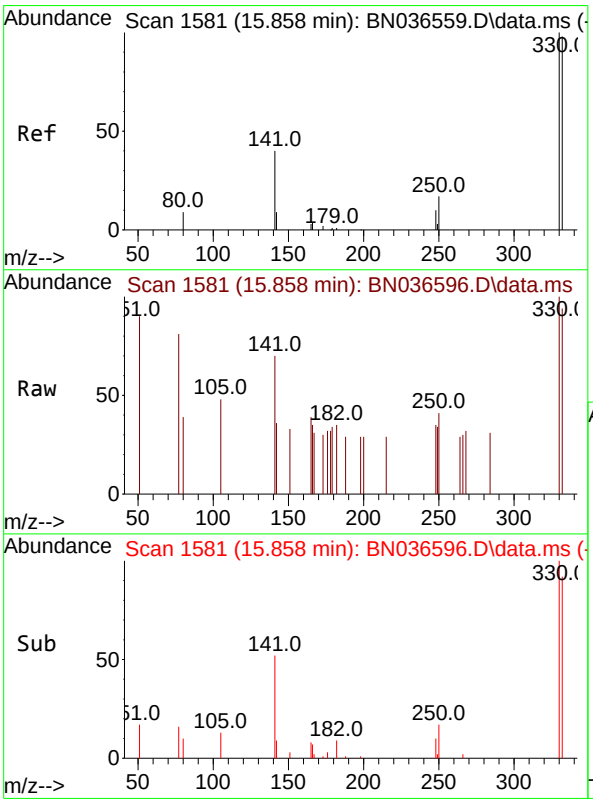
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:164 Resp: 2774

Ion	Ratio	Lower	Upper
164	100		
162	107.7	84.2	126.2
160	55.3	42.2	63.2

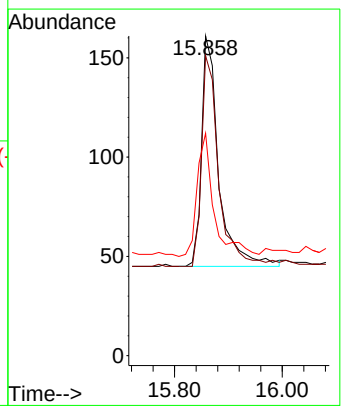


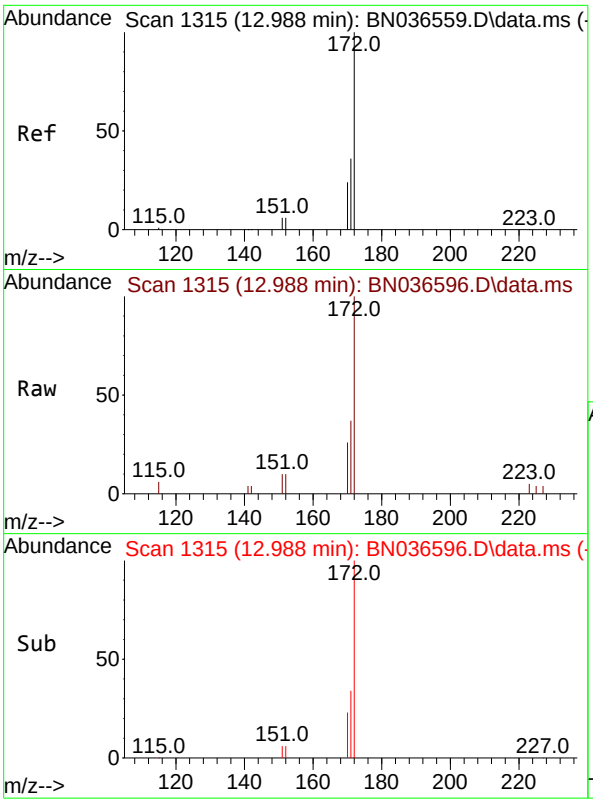


#14
2,4,6-Tribromophenol
Concen: 0.205 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion:330 Resp: 258

Ion	Ratio	Lower	Upper
330	100		
332	89.9	75.2	112.8
141	52.3	43.4	65.2



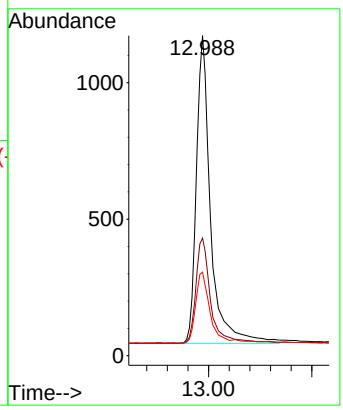


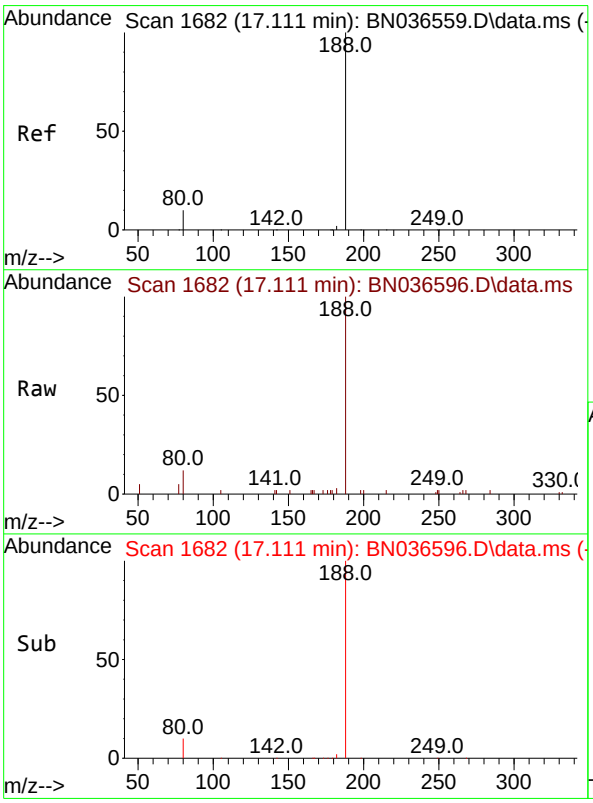
#15
2-Fluorobiphenyl
Concen: 0.185 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:172 Resp: 2982

Ion	Ratio	Lower	Upper
172	100		
171	36.8	29.5	44.3
170	26.1	20.2	30.4

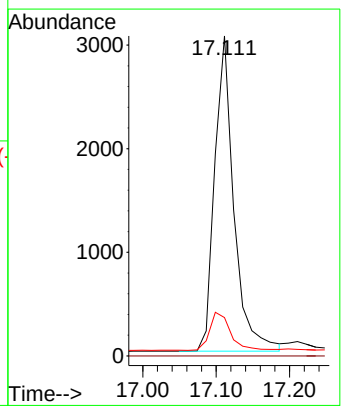


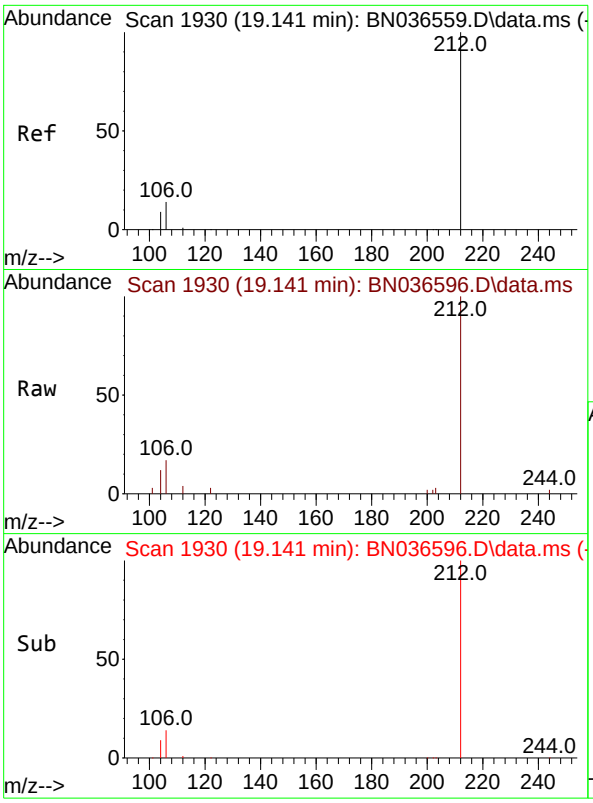


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion:188 Resp: 5527

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.0	8.8	13.2



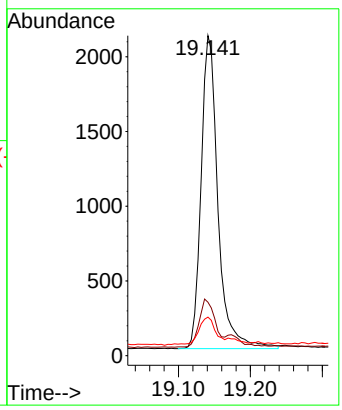


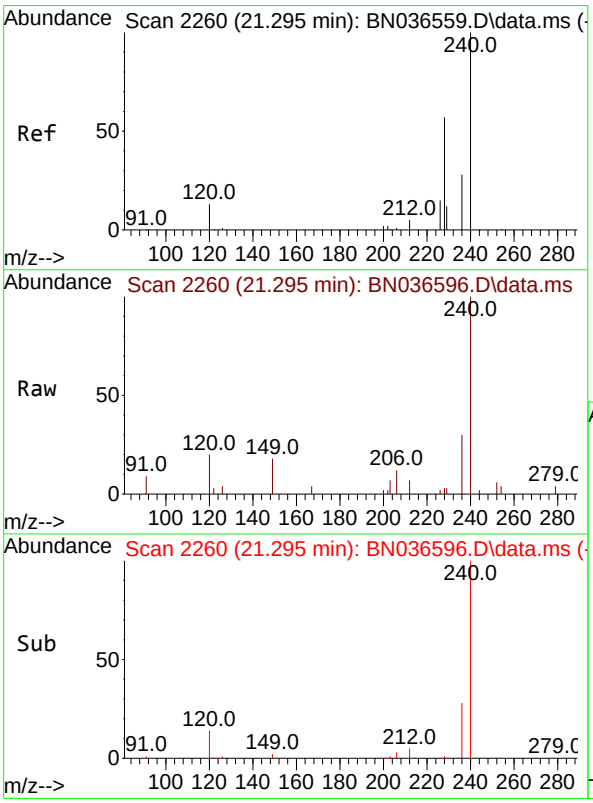
#27
Fluoranthene-d10
Concen: 0.240 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:212 Resp: 3405

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.8	17.6
104	9.3	7.3	10.9

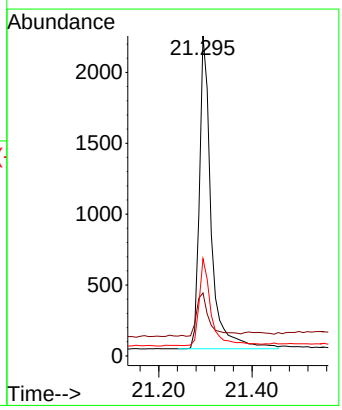


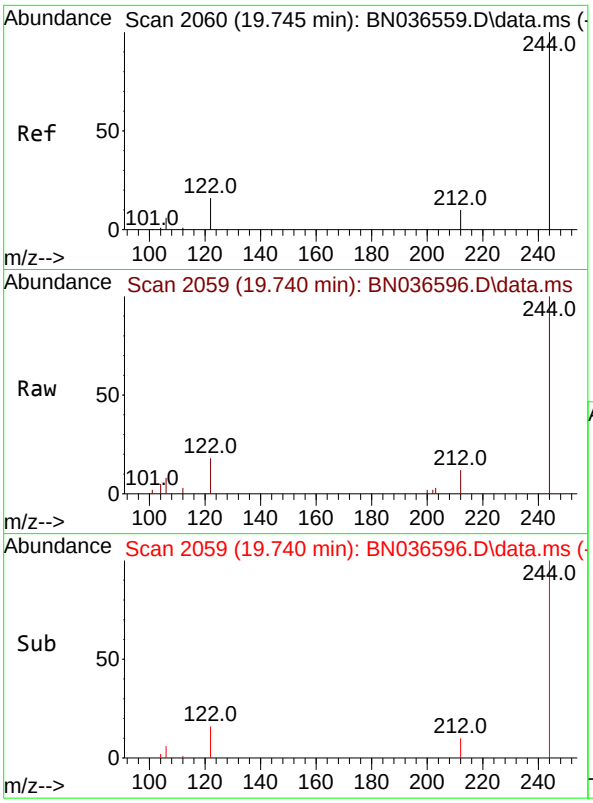


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion:240 Resp: 3876

Ion	Ratio	Lower	Upper
240	100		
120	19.7	14.6	22.0
236	30.4	24.1	36.1



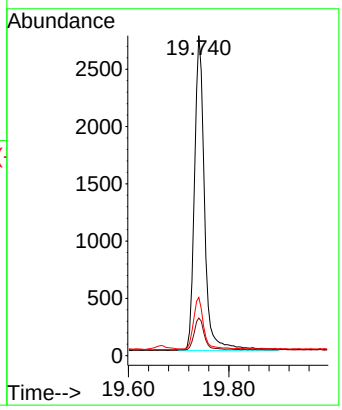


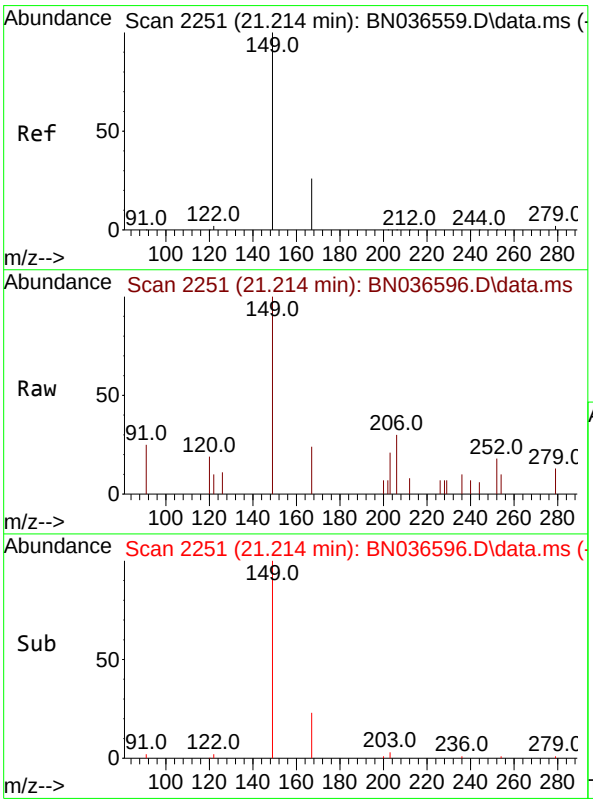
#31
Terphenyl-d14
Concen: 0.411 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:244 Resp: 3815

Ion	Ratio	Lower	Upper
244	100		
212	11.7	9.6	14.4
122	18.2	13.9	20.9

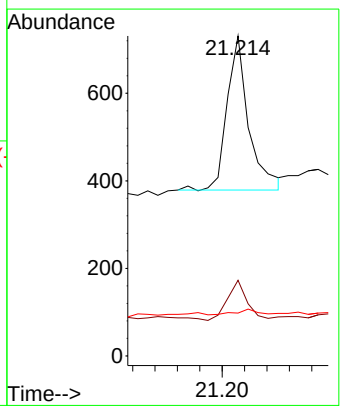


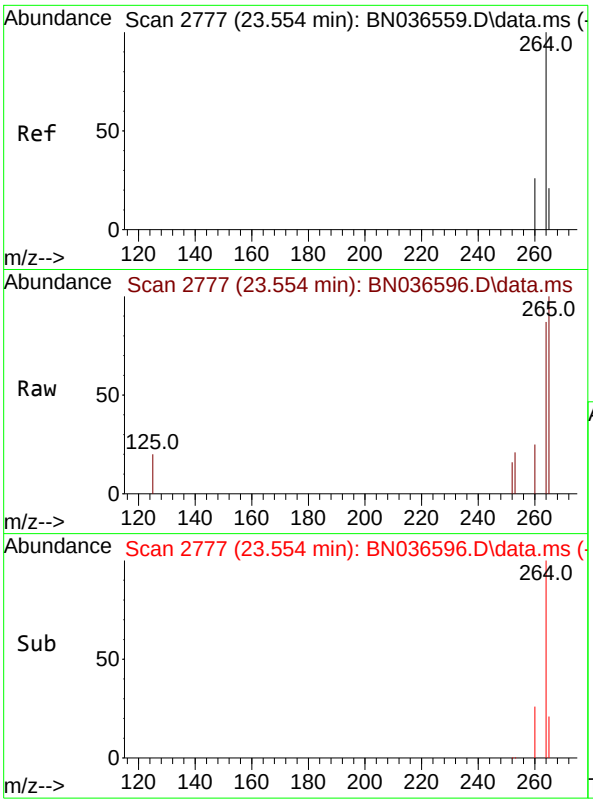


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.049 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Tgt Ion:149 Resp: 474

Ion	Ratio	Lower	Upper
149	100		
167	23.8	20.7	31.1
279	3.4	3.6	5.4#



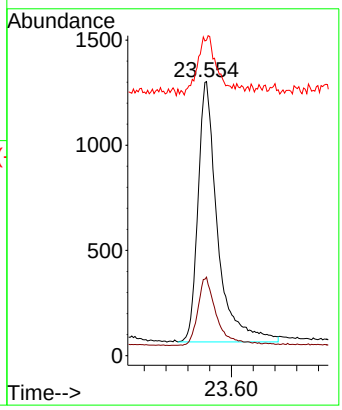


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036596.D
Acq: 12 Mar 2025 12:16

Instrument :
BNA_N
ClientSampleId :
RE105D2-20250306DL

Tgt Ion:264 Resp: 3091

Ion	Ratio	Lower	Upper
264	100		
260	28.6	22.6	33.8
265	115.1	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/07/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE125D1-20250307	SDG No.:	Q1531
Lab Sample ID:	Q1531-16	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	950 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036585.D	1	03/10/25 11:35	03/11/25 17:21	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.20	E	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		77%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		71%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.45		58 - 132		113%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2170	7.724				
1146-65-2	Naphthalene-d8	4990	10.509				
15067-26-2	Acenaphthene-d10	2870	14.355				
1517-22-2	Phenanthrene-d10	5520	17.111				
1719-03-5	Chrysene-d12	3920	21.295				
1520-96-3	Perylene-d12	3020	23.554				

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\BN031125\
Data File : BN036585.D
Acq On : 11 Mar 2025 17:21
Operator : RC/JU
Sample : Q1531-16
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Quant Time: Mar 11 18:05:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

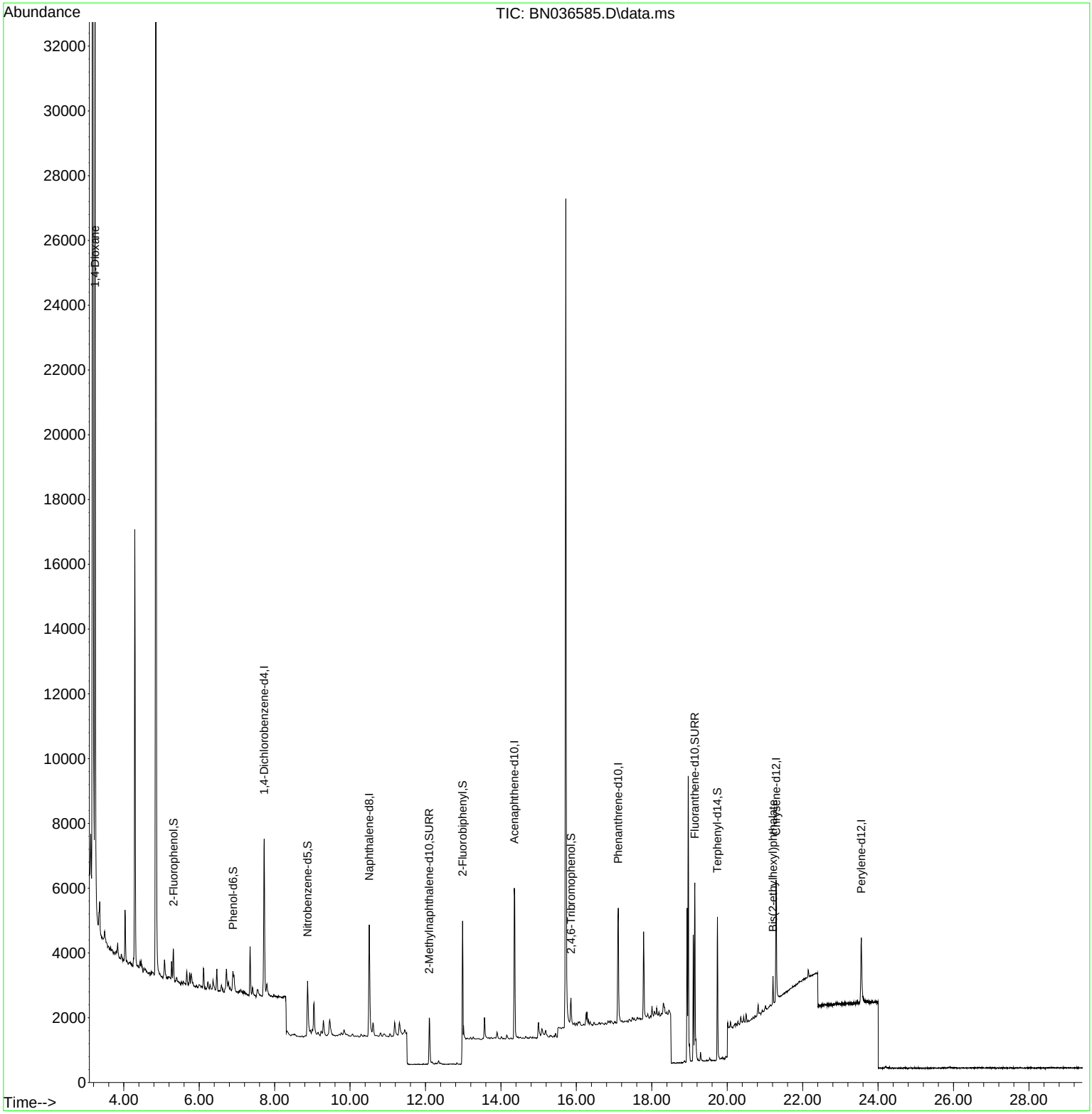
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2166	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4992	0.400	ng		0.00
13) Acenaphthene-d10	14.355	164	2872	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	5521	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3922	0.400	ng		0.00
35) Perylene-d12	23.554	264	3017	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	718	0.142	ng		0.00
5) Phenol-d6	6.901	99	513	0.082	ng		0.00
8) Nitrobenzene-d5	8.875	82	1543	0.284	ng		0.00
11) 2-Methylnaphthalene-d10	12.101	152	2295	0.309	ng		-0.01
14) 2,4,6-Tribromophenol	15.858	330	469	0.360	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	5973	0.358	ng		0.00
27) Fluoranthene-d10	19.141	212	6239	0.441	ng		0.00
31) Terphenyl-d14	19.740	244	4235	0.451	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	14140	5.885	ng		97
34) Bis(2-ethylhexyl)phtha...	21.214	149	870	0.090	ng	#	98

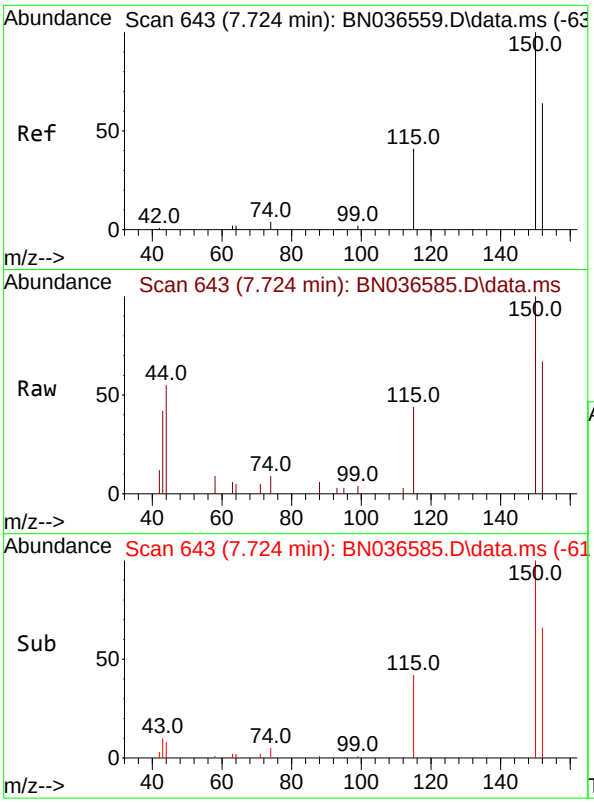
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036585.D
Acq On : 11 Mar 2025 17:21
Operator : RC/JU
Sample : Q1531-16
Misc :
ALS Vial : 13 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Quant Time: Mar 11 18:05:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



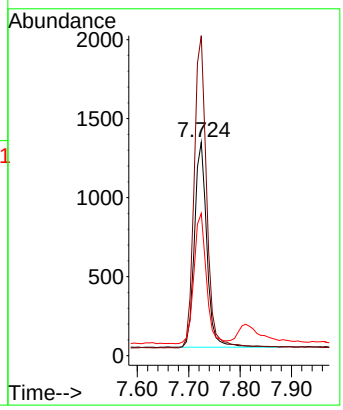


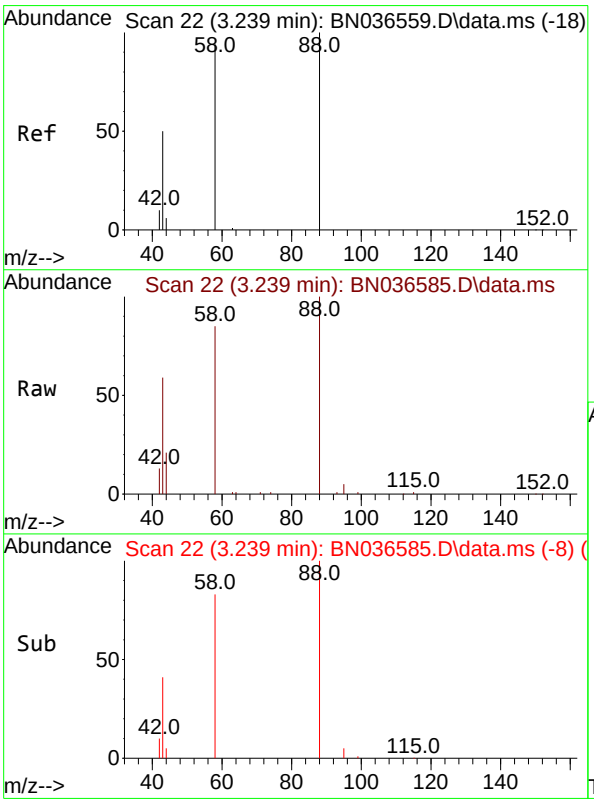
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:152 Resp: 2166

Ion	Ratio	Lower	Upper
152	100		
150	149.9	123.7	185.5
115	66.6	54.3	81.5

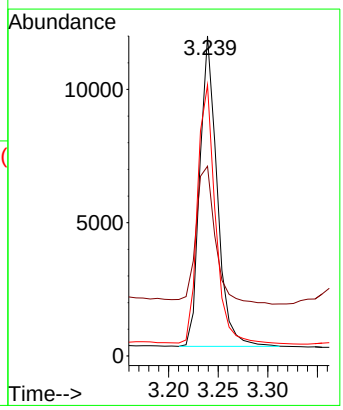


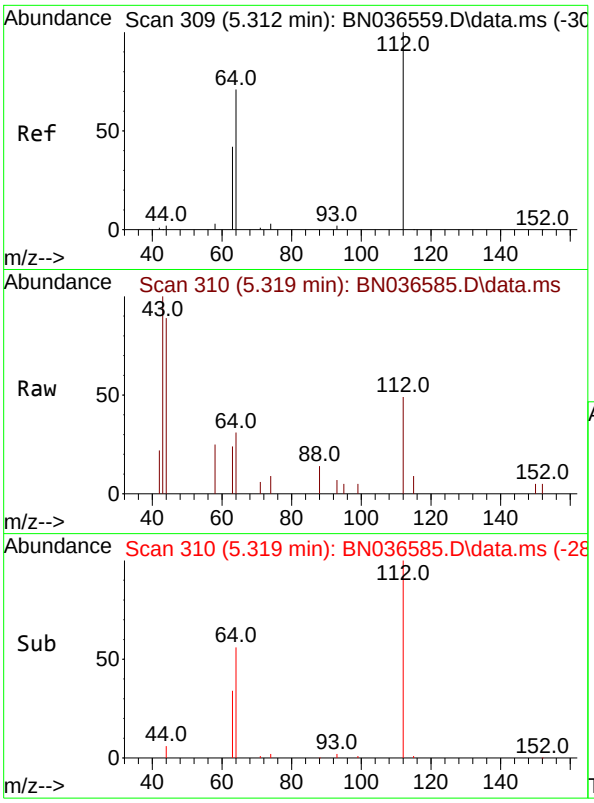


#2
1,4-Dioxane
Concen: 5.885 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion: 88 Resp: 14140

Ion	Ratio	Lower	Upper
88	100		
43	50.2	37.8	56.8
58	85.6	67.4	101.2



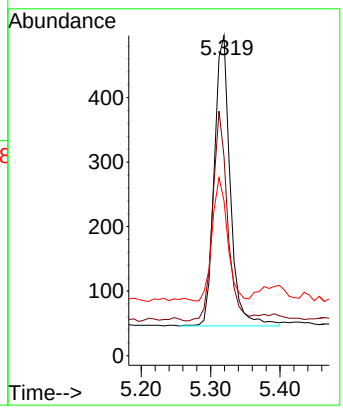


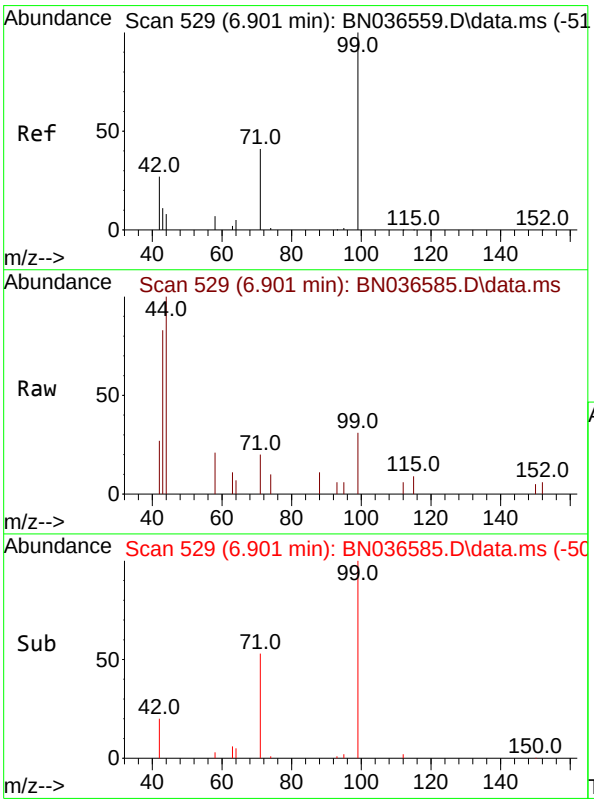
#4
2-Fluorophenol
Concen: 0.142 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:112 Resp: 718

Ion	Ratio	Lower	Upper
112	100		
64	67.8	53.1	79.7
63	40.5	31.8	47.8

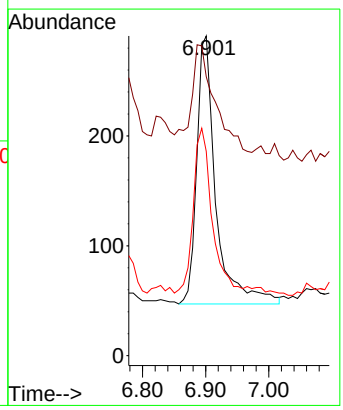


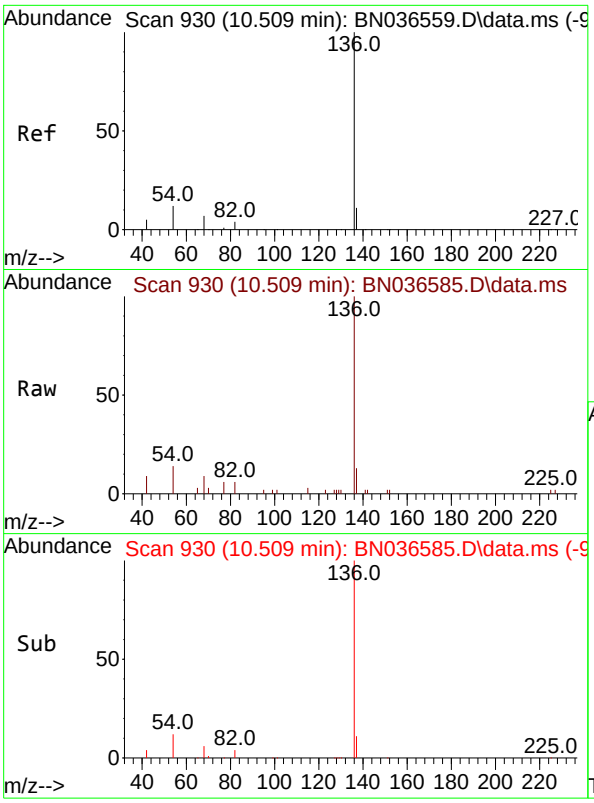


#5
Phenol-d6
Concen: 0.082 ng
RT: 6.901 min Scan# 529
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion: 99 Resp: 513

Ion	Ratio	Lower	Upper
99	100		
42	46.6	26.5	39.7#
71	59.8	34.1	51.1#



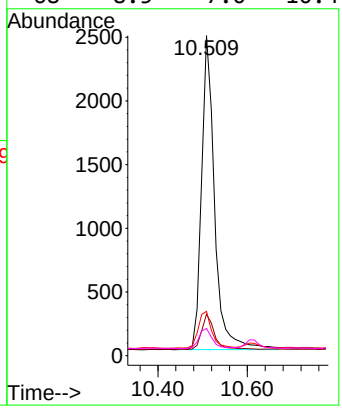


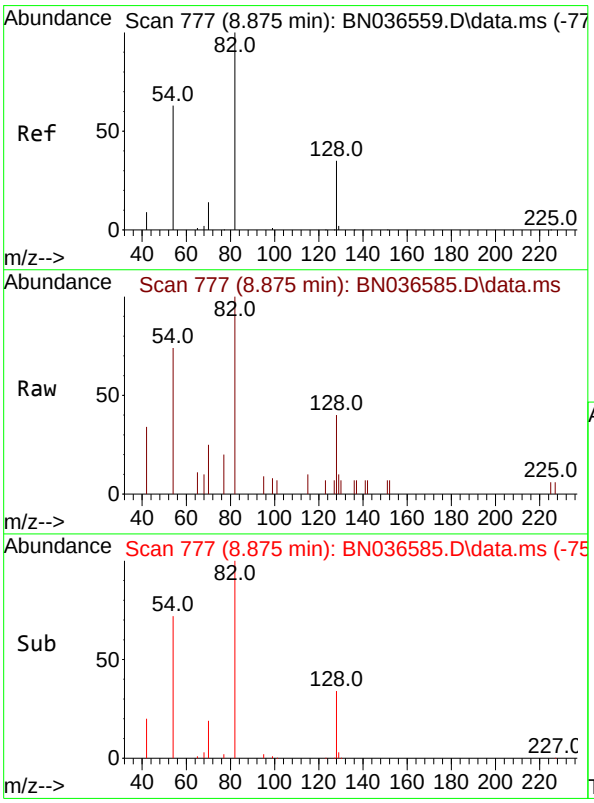
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:136 Resp: 4992

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.3	15.5
54	13.9	11.5	17.3
68	8.5	7.0	10.4

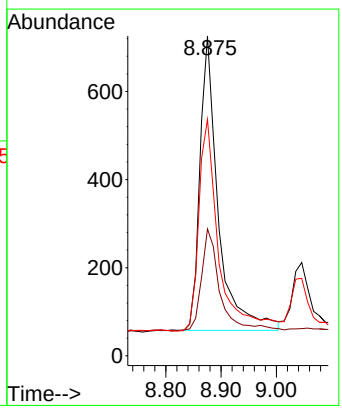


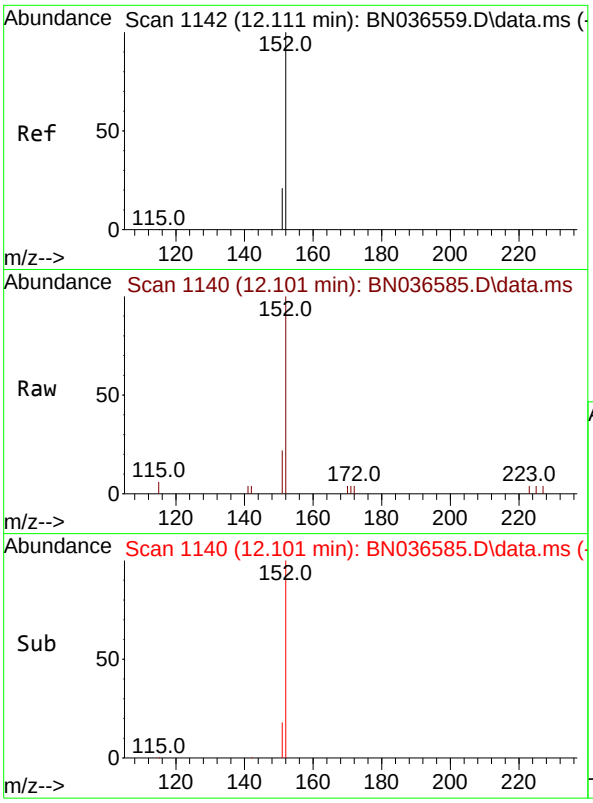


#8
Nitrobenzene-d5
Concen: 0.284 ng
RT: 8.875 min Scan# 777
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion: 82 Resp: 1543

Ion	Ratio	Lower	Upper
82	100		
128	39.7	30.6	45.8
54	74.0	52.2	78.4



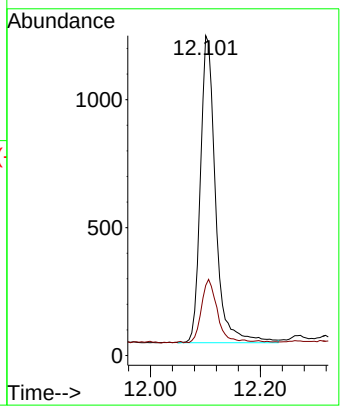


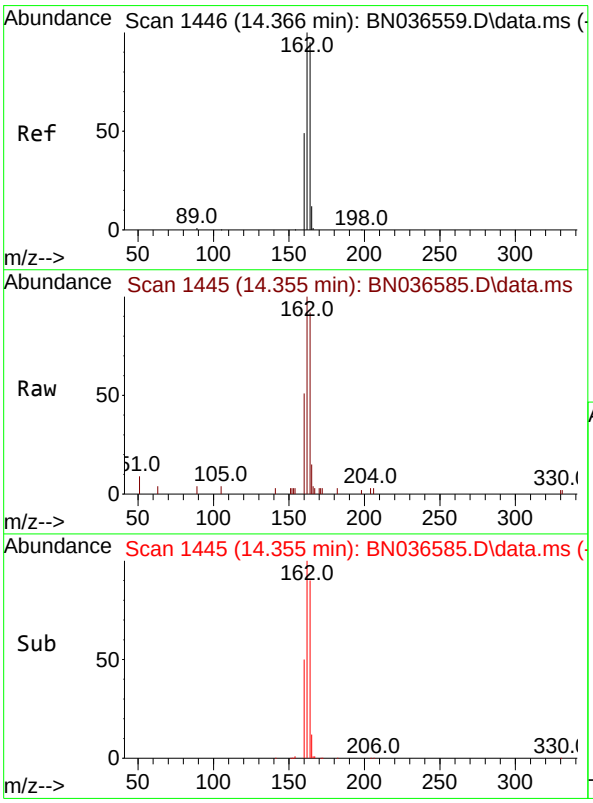
#11
2-Methylnaphthalene-d10
Concen: 0.309 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:152 Resp: 2295

Ion	Ratio	Lower	Upper
152	100		
151	21.3	17.0	25.6

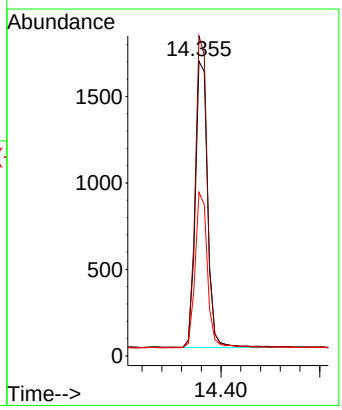


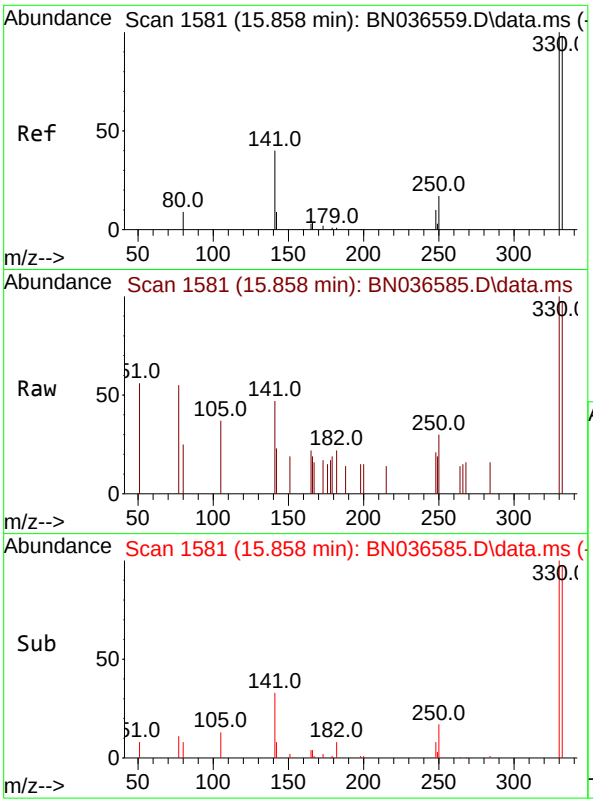


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1445
Delta R.T. -0.011 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion:164 Resp: 2872

Ion	Ratio	Lower	Upper
164	100		
162	108.6	84.2	126.2
160	55.5	42.2	63.2



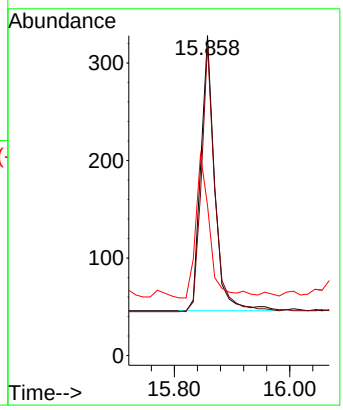


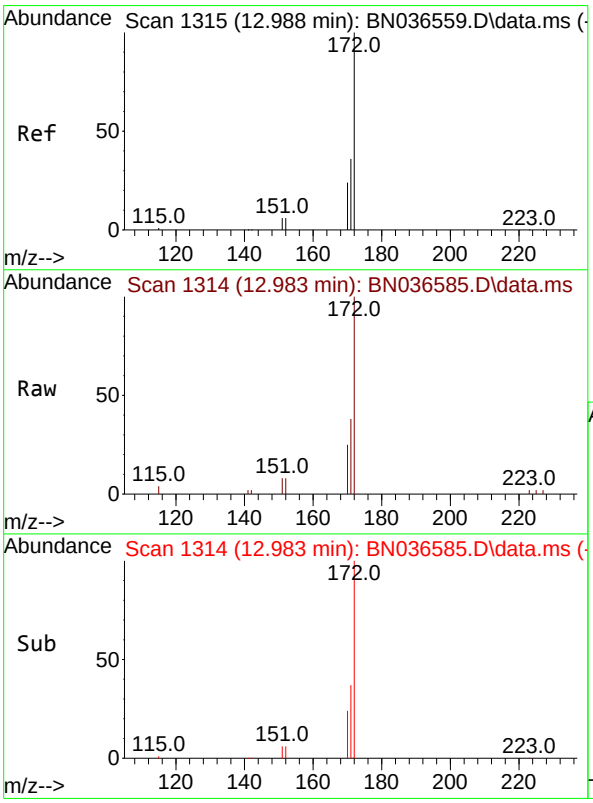
#14
2,4,6-Tribromophenol
Concen: 0.360 ng
RT: 15.858 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:330 Resp: 469

Ion	Ratio	Lower	Upper
330	100		
332	96.2	75.2	112.8
141	53.7	43.4	65.2

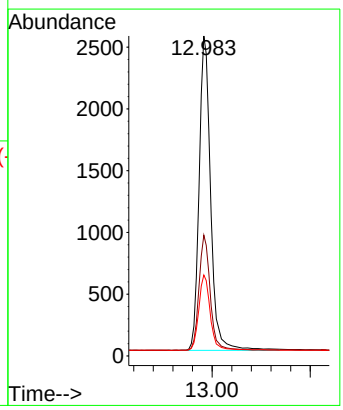


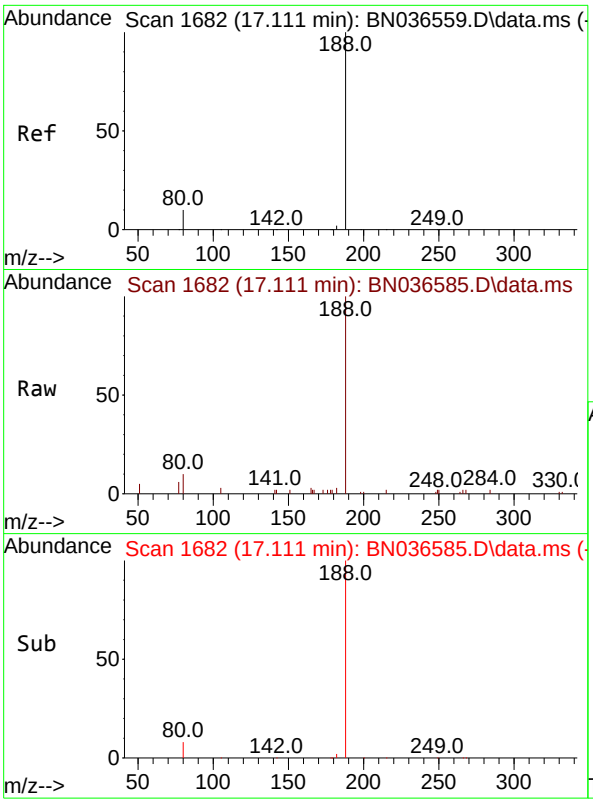


#15
2-Fluorobiphenyl
Concen: 0.358 ng
RT: 12.983 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion:172 Resp: 5973

Ion	Ratio	Lower	Upper
172	100		
171	37.7	29.5	44.3
170	25.3	20.2	30.4



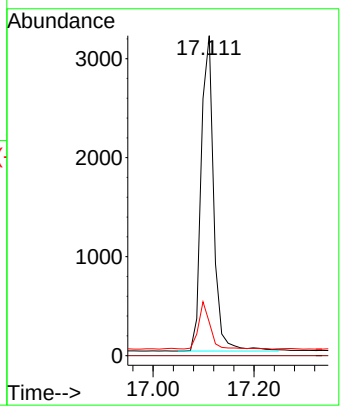


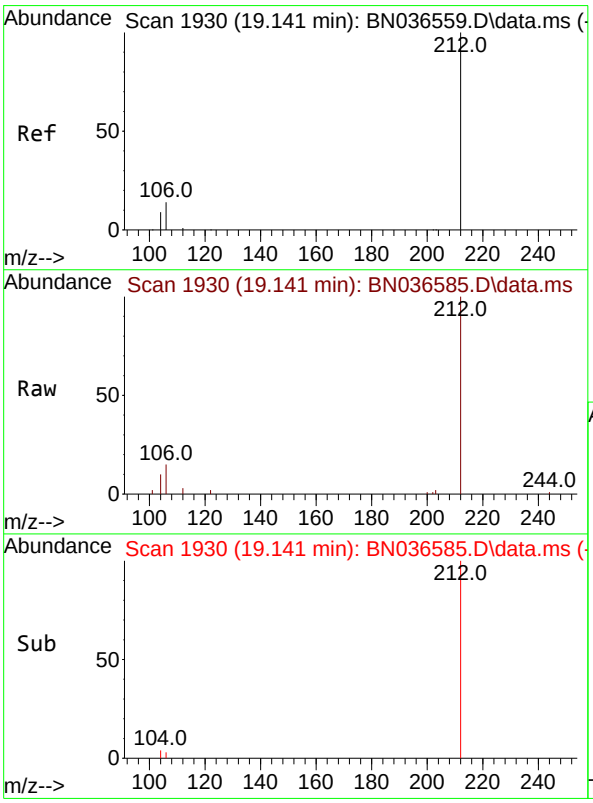
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:188 Resp: 5521

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.4	8.8	13.2

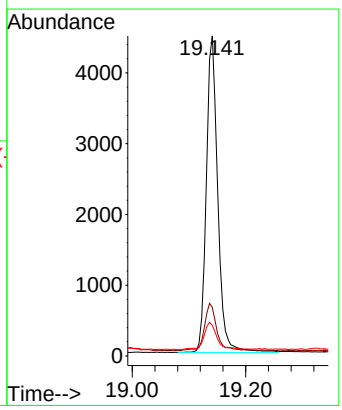


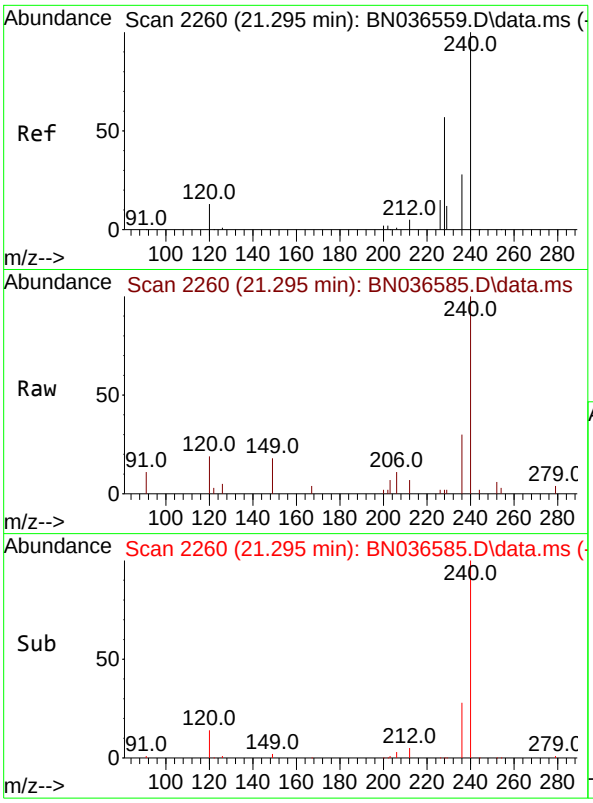


#27
Fluoranthene-d10
Concen: 0.441 ng
RT: 19.141 min Scan# 1930
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion:212 Resp: 6239

Ion	Ratio	Lower	Upper
212	100		
106	15.7	11.8	17.6
104	9.5	7.3	10.9



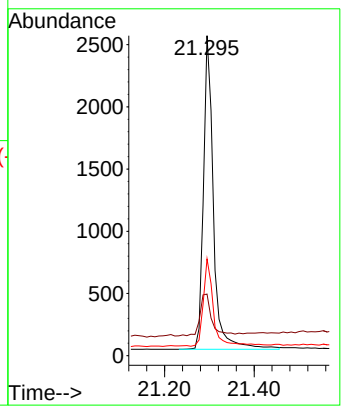


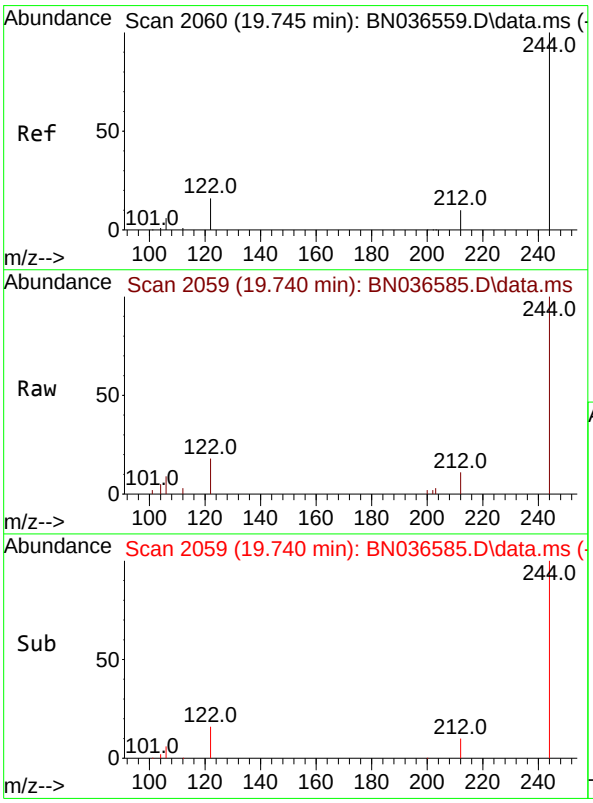
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:240 Resp: 3922

Ion	Ratio	Lower	Upper
240	100		
120	19.2	14.6	22.0
236	30.2	24.1	36.1

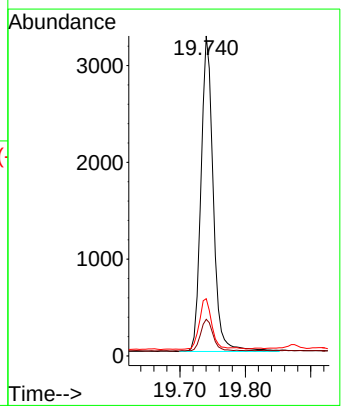


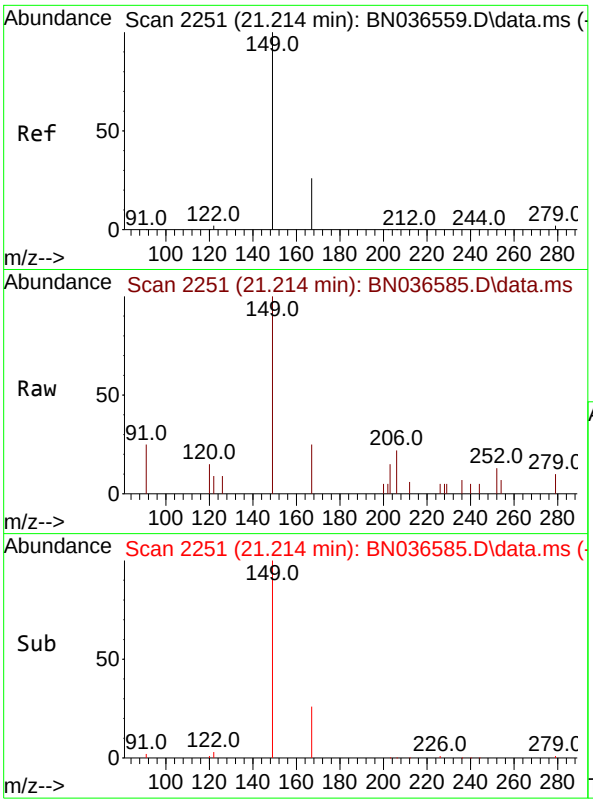


#31
Terphenyl-d14
Concen: 0.451 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion:244 Resp: 4235

Ion	Ratio	Lower	Upper
244	100		
212	11.5	9.6	14.4
122	17.9	13.9	20.9



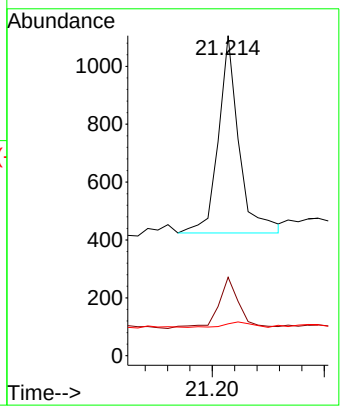


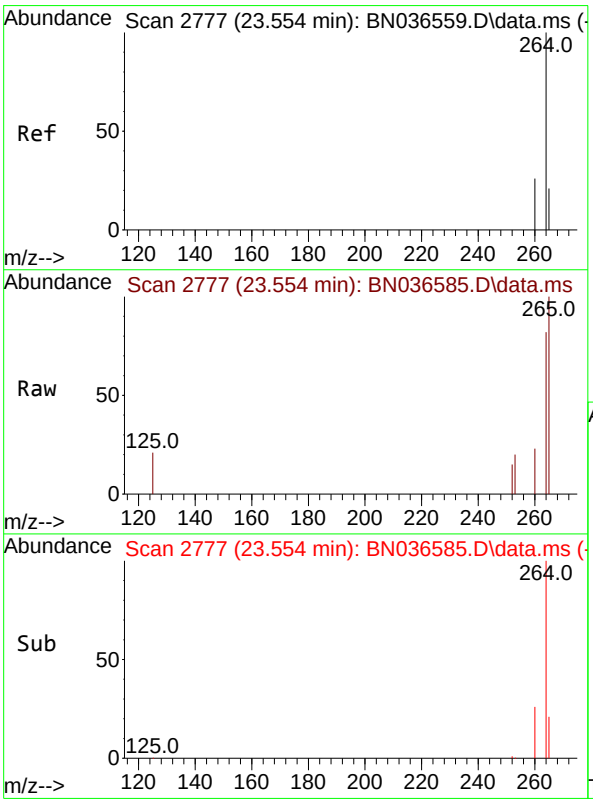
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.090 ng
RT: 21.214 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307

Tgt Ion:149 Resp: 870

Ion	Ratio	Lower	Upper
149	100		
167	27.0	20.7	31.1
279	3.4	3.6	5.4#

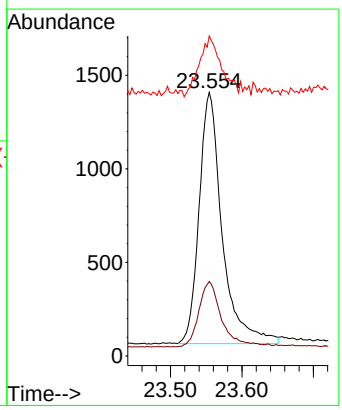




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. -0.000 min
Lab File: BN036585.D
Acq: 11 Mar 2025 17:21

Tgt Ion:264 Resp: 3017

Ion	Ratio	Lower	Upper
264	100		
260	28.3	22.6	33.8
265	121.4	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/07/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE125D1-20250307DL	SDG No.:	Q1531
Lab Sample ID:	Q1531-16DL	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	950 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036597.D	2	03/10/25 11:35	03/12/25 12:52	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.50	D	0.15	0.42	0.42	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		80%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		118%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.28		55 - 111		71%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1990	7.724				
1146-65-2	Naphthalene-d8	4780	10.509				
15067-26-2	Acenaphthene-d10	2900	14.355				
1517-22-2	Phenanthrene-d10	5980	17.111				
1719-03-5	Chrysene-d12	4270	21.295				
1520-96-3	Perylene-d12	3190	23.548				

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\BN031225\
Data File : BN036597.D
Acq On : 12 Mar 2025 12:52
Operator : RC/JU
Sample : Q1531-16DL 2X
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Quant Time: Mar 12 13:27:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

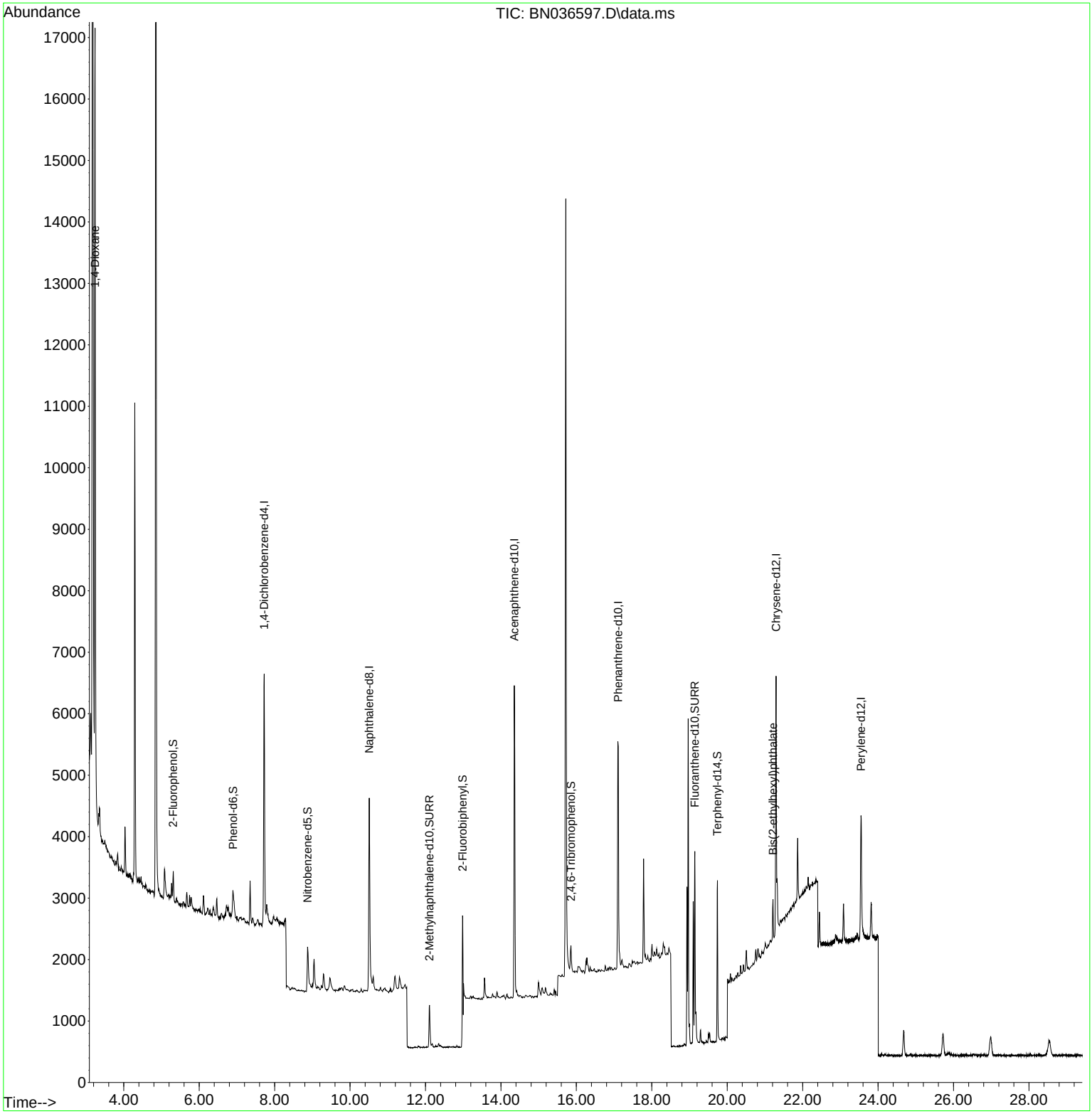
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	1986	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4780	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2899	0.400	ng	-0.01
19) Phenanthrene-d10	17.111	188	5979	0.400	ng	0.00
29) Chrysene-d12	21.295	240	4274	0.400	ng	0.00
35) Perylene-d12	23.548	264	3192	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	344	0.074	ng	0.00
5) Phenol-d6	6.901	99	444	0.078	ng	0.00
8) Nitrobenzene-d5	8.875	82	736	0.142	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	1137	0.160	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	263	0.200	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	2930	0.174	ng	0.00
27) Fluoranthene-d10	19.141	212	3639	0.237	ng	0.00
31) Terphenyl-d14	19.740	244	2515	0.246	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	6750	3.064	ng	97
34) Bis(2-ethylhexyl)phtha...	21.214	149	687	0.065	ng	99

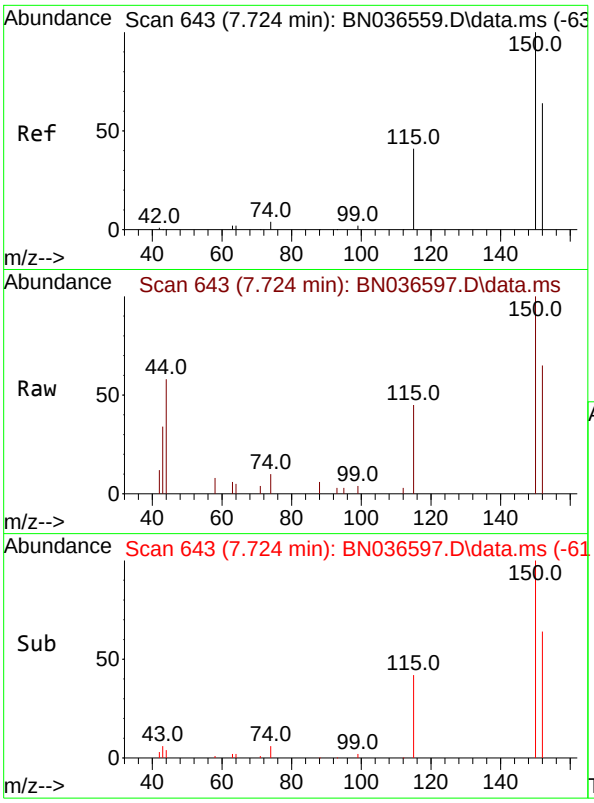
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036597.D
Acq On : 12 Mar 2025 12:52
Operator : RC/JU
Sample : Q1531-16DL 2X
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Quant Time: Mar 12 13:27:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



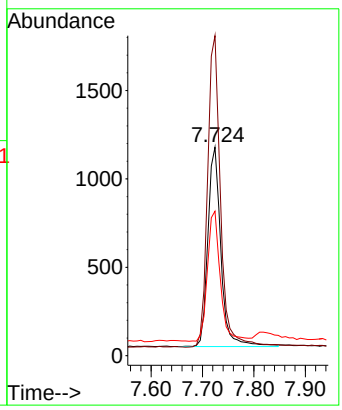


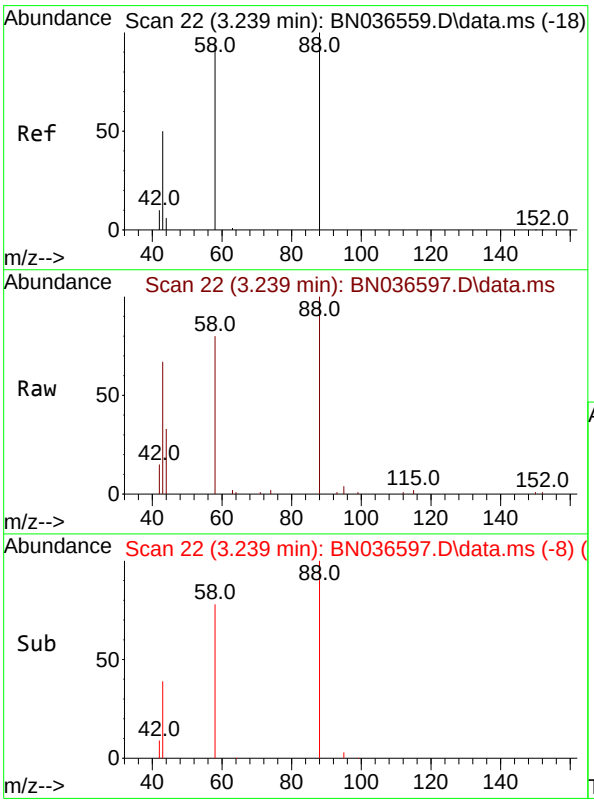
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:152 Resp: 1986

Ion	Ratio	Lower	Upper
152	100		
150	153.5	123.7	185.5
115	69.3	54.3	81.5

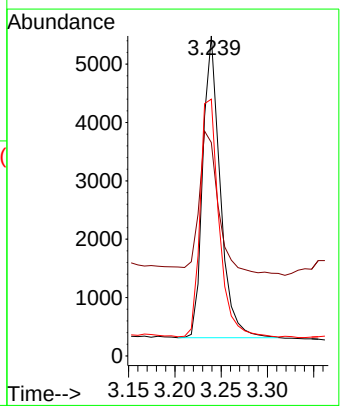


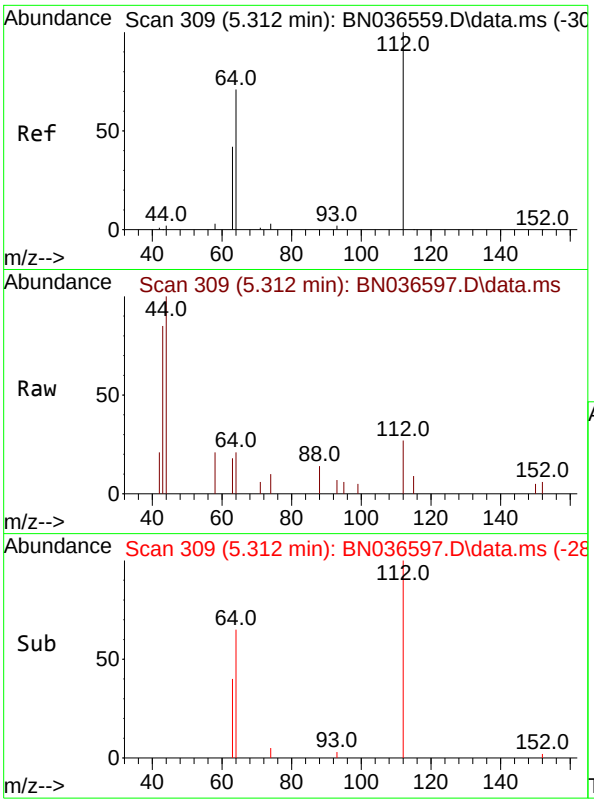


#2
1,4-Dioxane
Concen: 3.064 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion: 88 Resp: 6750

Ion	Ratio	Lower	Upper
88	100		
43	51.1	37.8	56.8
58	86.3	67.4	101.2



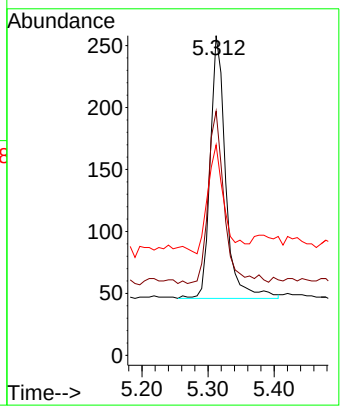


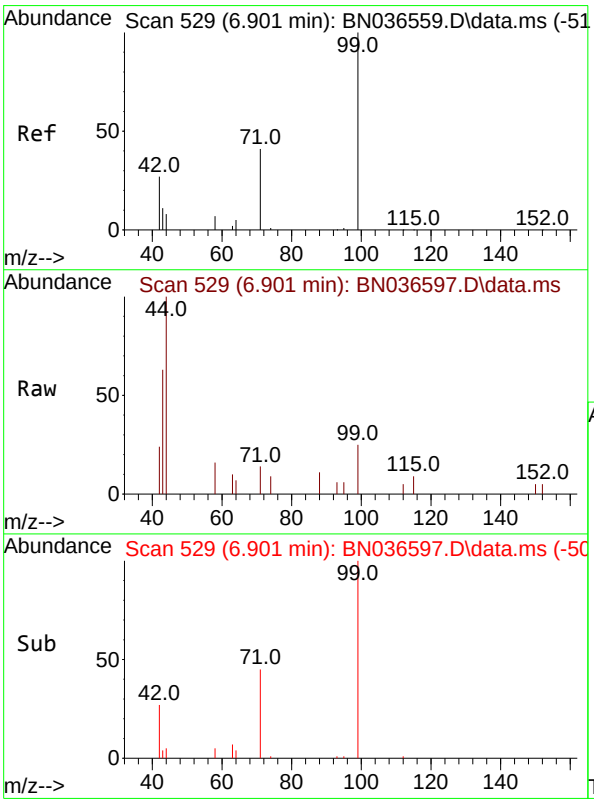
#4
2-Fluorophenol
Concen: 0.074 ng
RT: 5.312 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:112 Resp: 344

Ion	Ratio	Lower	Upper
112	100		
64	68.0	53.1	79.7
63	43.6	31.8	47.8

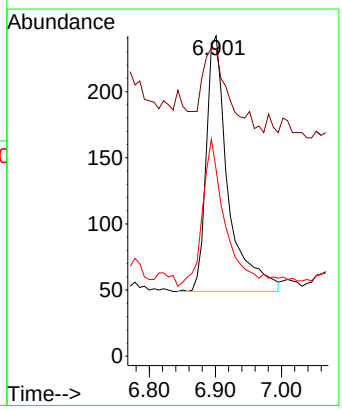


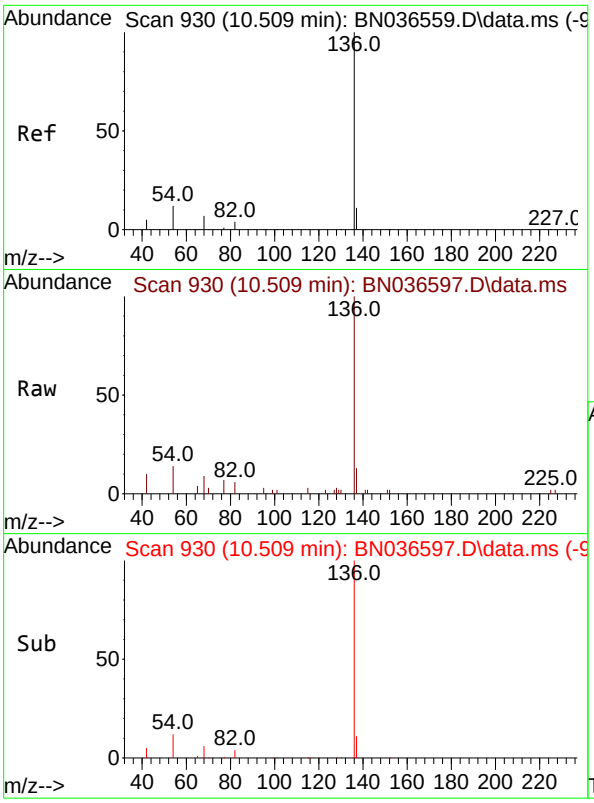


#5
Phenol-d6
Concen: 0.078 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion: 99 Resp: 444

Ion	Ratio	Lower	Upper
99	100		
42	39.4	26.5	39.7
71	57.9	34.1	51.1#



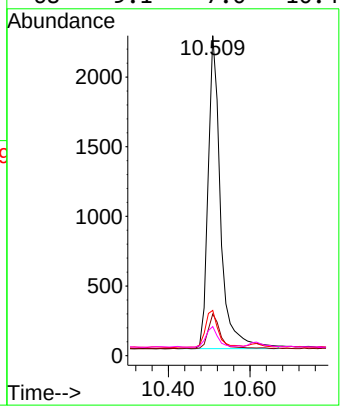


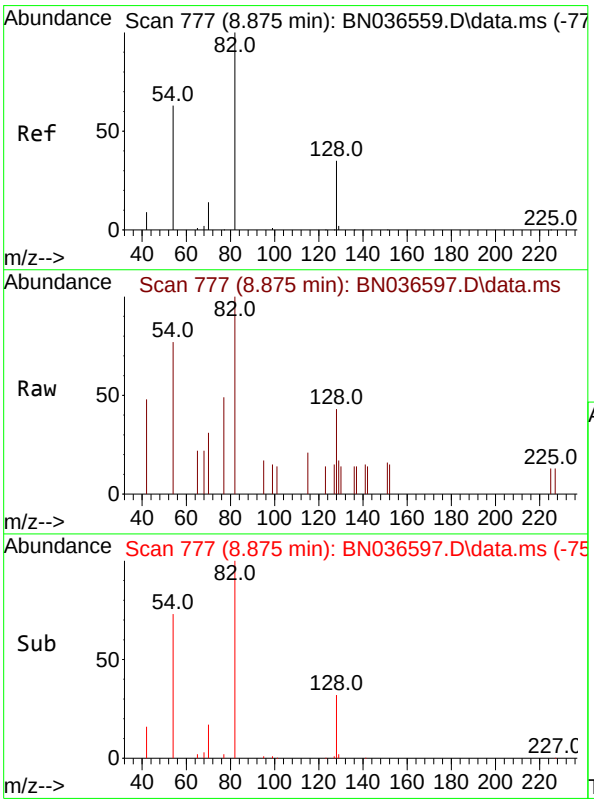
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:136 Resp: 4780

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.3	15.5
54	14.1	11.5	17.3
68	9.1	7.0	10.4

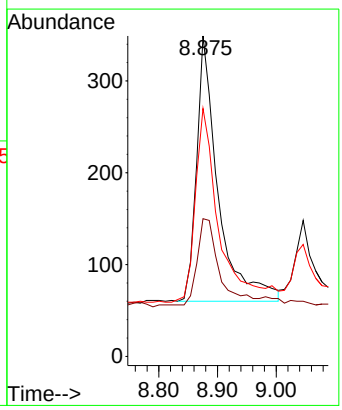


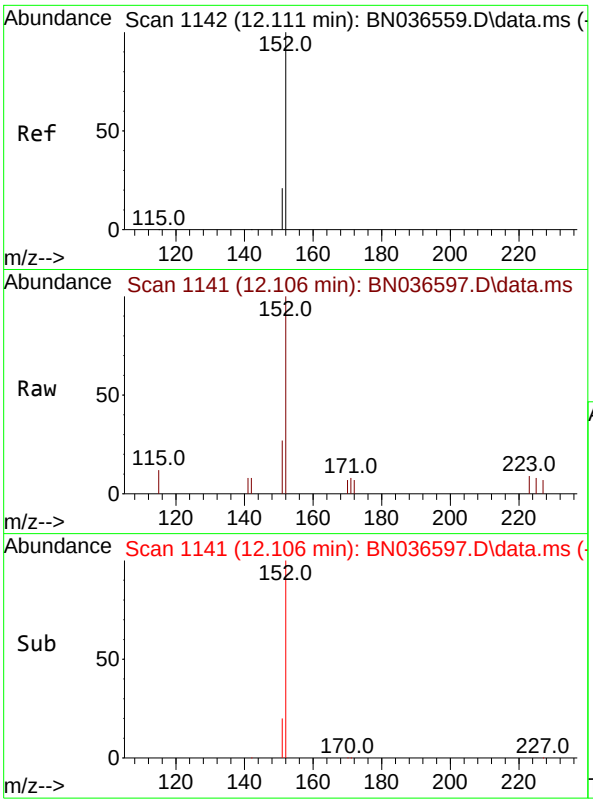


#8
Nitrobenzene-d5
Concen: 0.142 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion: 82 Resp: 736

Ion	Ratio	Lower	Upper
82	100		
128	43.0	30.6	45.8
54	77.4	52.2	78.4



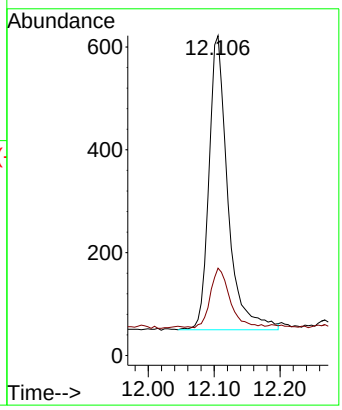


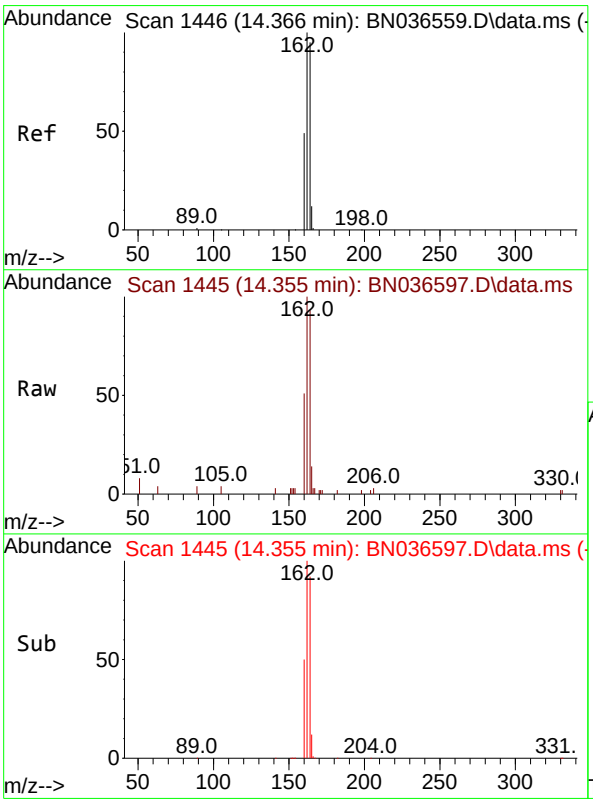
#11
2-Methylnaphthalene-d10
Concen: 0.160 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:152 Resp: 1137

Ion	Ratio	Lower	Upper
152	100		
151	21.0	17.0	25.6

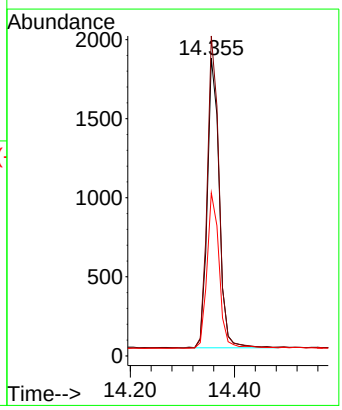


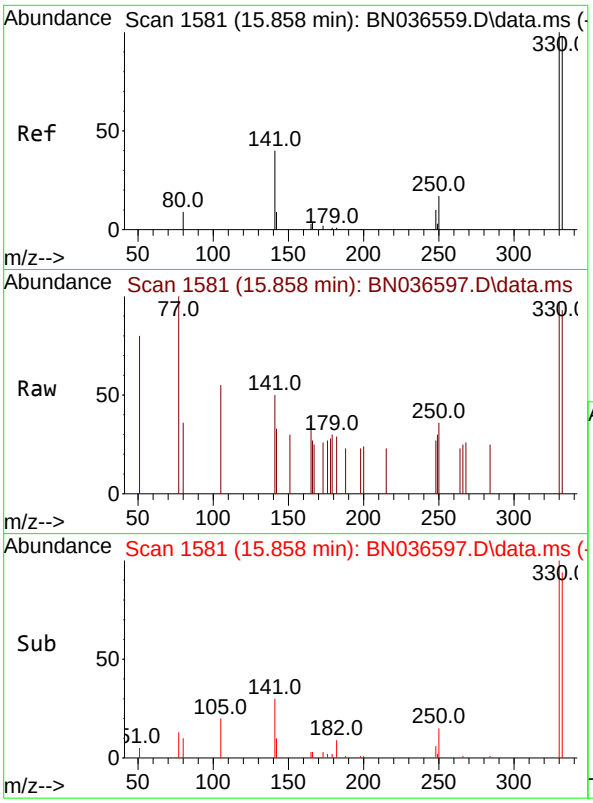


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1445
Delta R.T. -0.011 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion:164 Resp: 2899

Ion	Ratio	Lower	Upper
164	100		
162	107.5	84.2	126.2
160	54.8	42.2	63.2



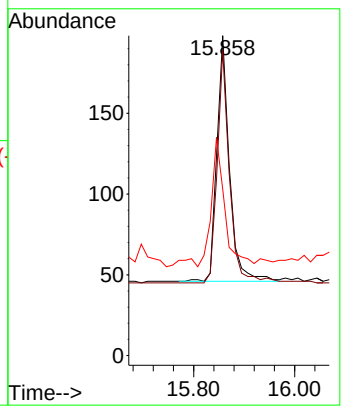


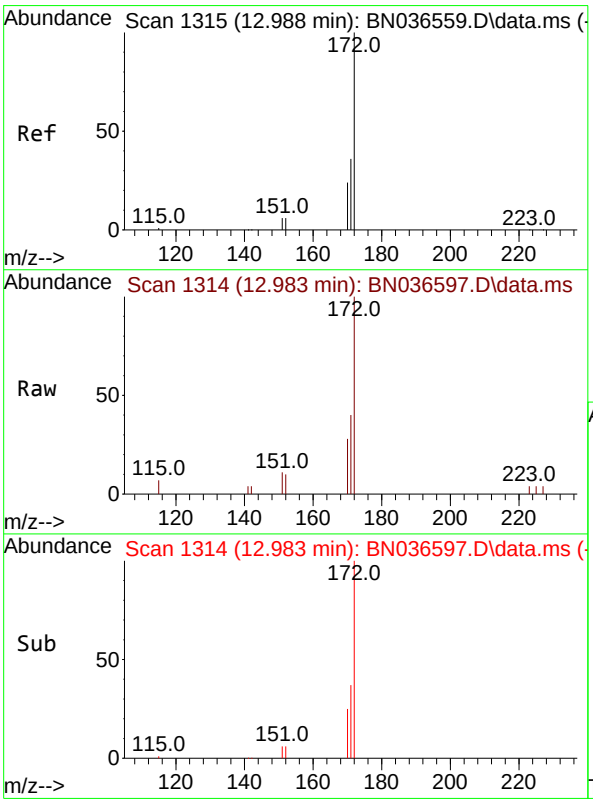
#14
2,4,6-Tribromophenol
Concen: 0.200 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:330 Resp: 263

Ion	Ratio	Lower	Upper
330	100		
332	92.0	75.2	112.8
141	55.5	43.4	65.2

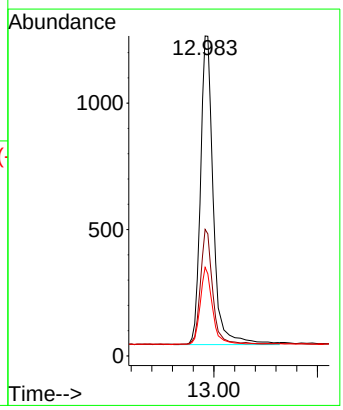


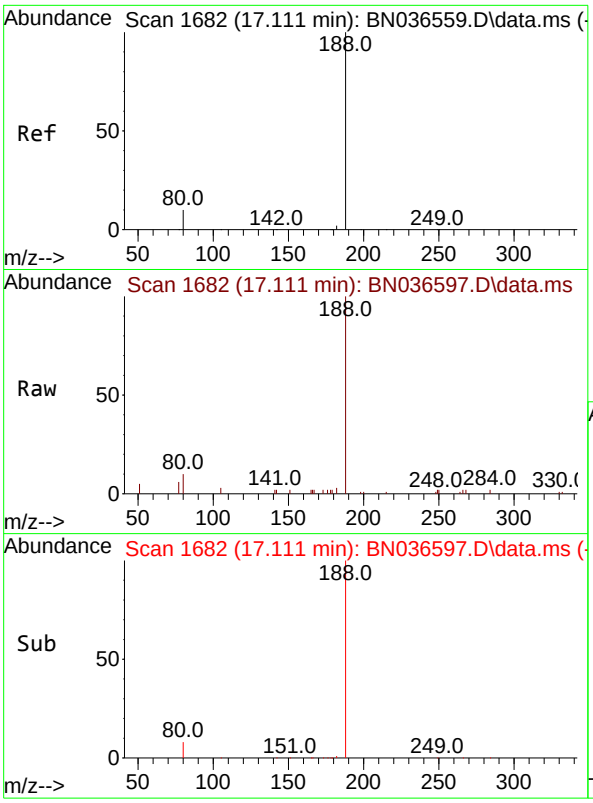


#15
2-Fluorobiphenyl
Concen: 0.174 ng
RT: 12.983 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion:172 Resp: 2930

Ion	Ratio	Lower	Upper
172	100		
171	39.6	29.5	44.3
170	27.7	20.2	30.4



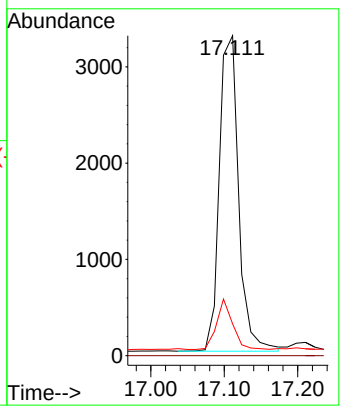


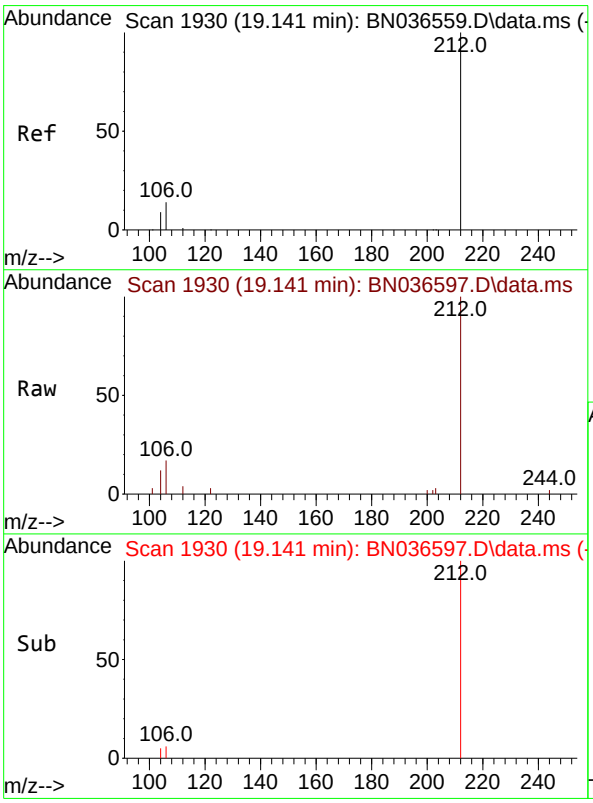
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:188 Resp: 5979

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.9	8.8	13.2

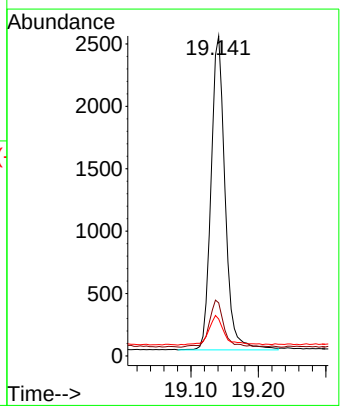


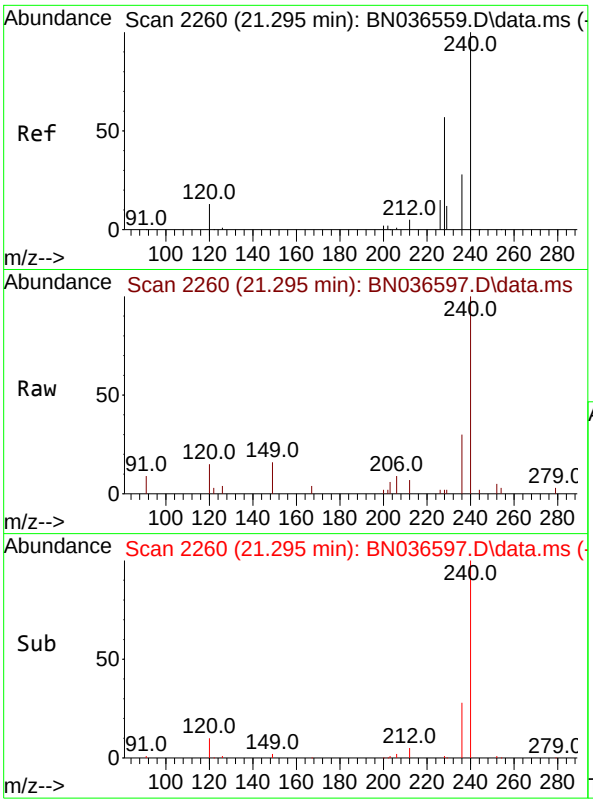


#27
Fluoranthene-d10
Concen: 0.237 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion:212 Resp: 3639

Ion	Ratio	Lower	Upper
212	100		
106	15.7	11.8	17.6
104	10.6	7.3	10.9



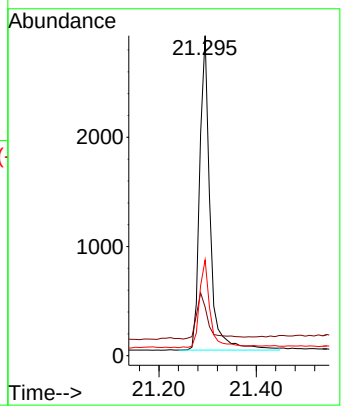


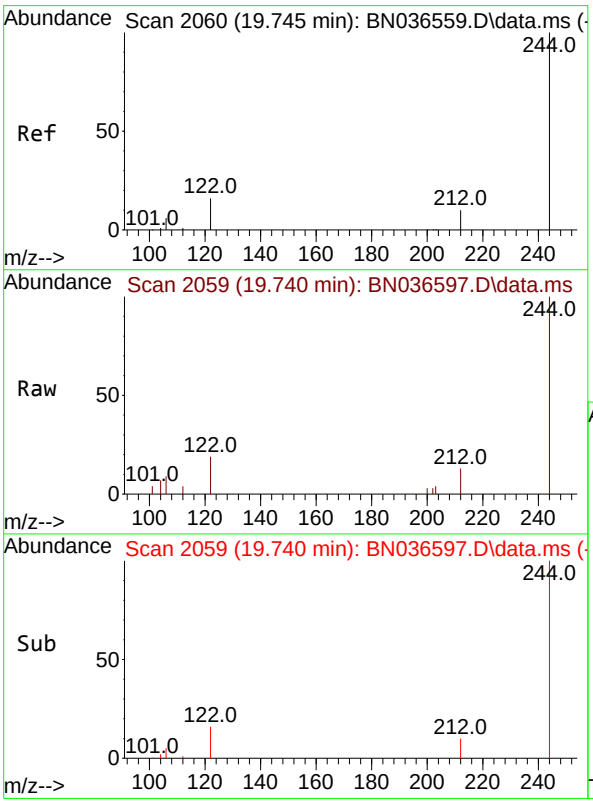
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:240 Resp: 4274

Ion	Ratio	Lower	Upper
240	100		
120	15.2	14.6	22.0
236	30.0	24.1	36.1

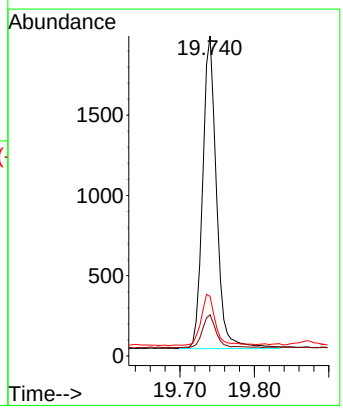


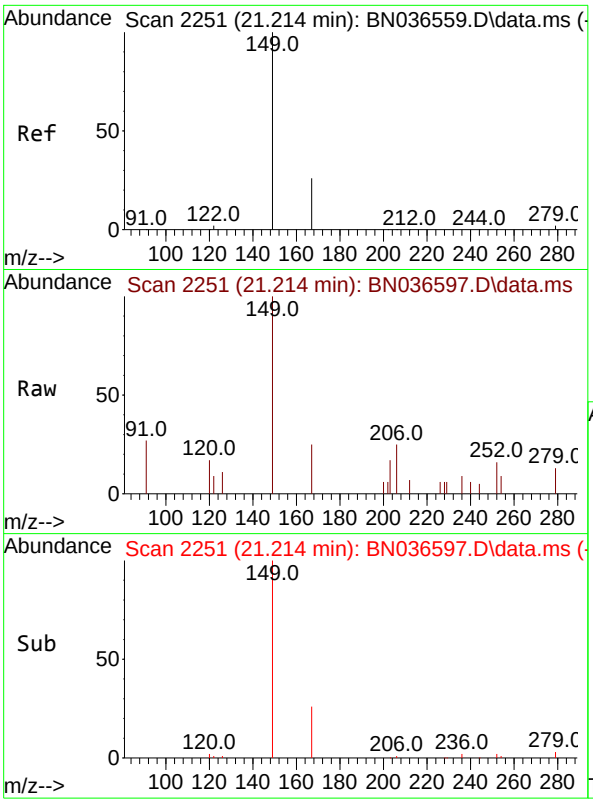


#31
Terphenyl-d14
Concen: 0.246 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.005 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion:244 Resp: 2515

Ion	Ratio	Lower	Upper
244	100		
212	12.8	9.6	14.4
122	18.6	13.9	20.9



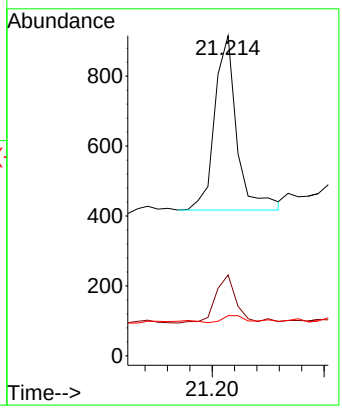


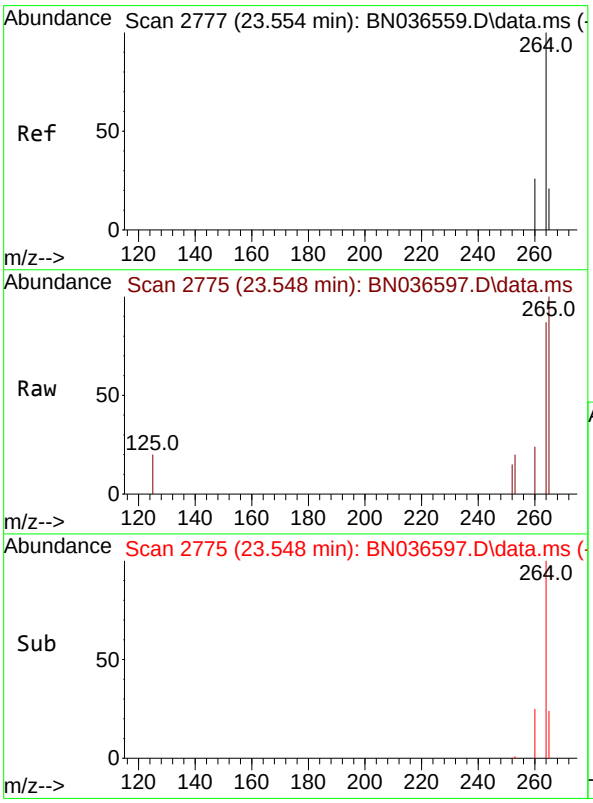
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.065 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Instrument :
BNA_N
ClientSampleId :
RE125D1-20250307DL

Tgt Ion:149 Resp: 687

Ion	Ratio	Lower	Upper
149	100		
167	25.3	20.7	31.1
279	4.2	3.6	5.4

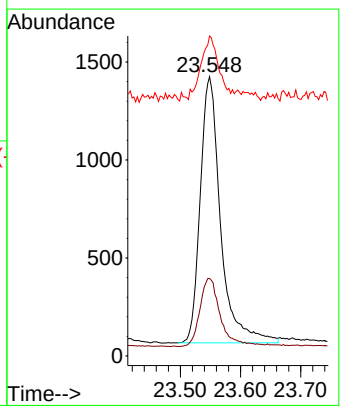




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.548 min Scan# 2775
Delta R.T. -0.006 min
Lab File: BN036597.D
Acq: 12 Mar 2025 12:52

Tgt Ion:264 Resp: 3192

Ion	Ratio	Lower	Upper
264	100		
260	27.7	22.6	33.8
265	114.6	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/07/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE125D2-20250307	SDG No.:	Q1531
Lab Sample ID:	Q1531-17	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036586.D	1	03/10/25 11:35	03/11/25 17:57	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	9.20	E	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	0.47		30 - 150		117%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.52		58 - 132		131%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2080	7.724				
1146-65-2	Naphthalene-d8	4660	10.509				
15067-26-2	Acenaphthene-d10	2830	14.366				
1517-22-2	Phenanthrene-d10	5540	17.111				
1719-03-5	Chrysene-d12	3780	21.304				
1520-96-3	Perylene-d12	3020	23.554				

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\BN031125\
Data File : BN036586.D
Acq On : 11 Mar 2025 17:57
Operator : RC/JU
Sample : Q1531-17
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Quant Time: Mar 11 18:19:27 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

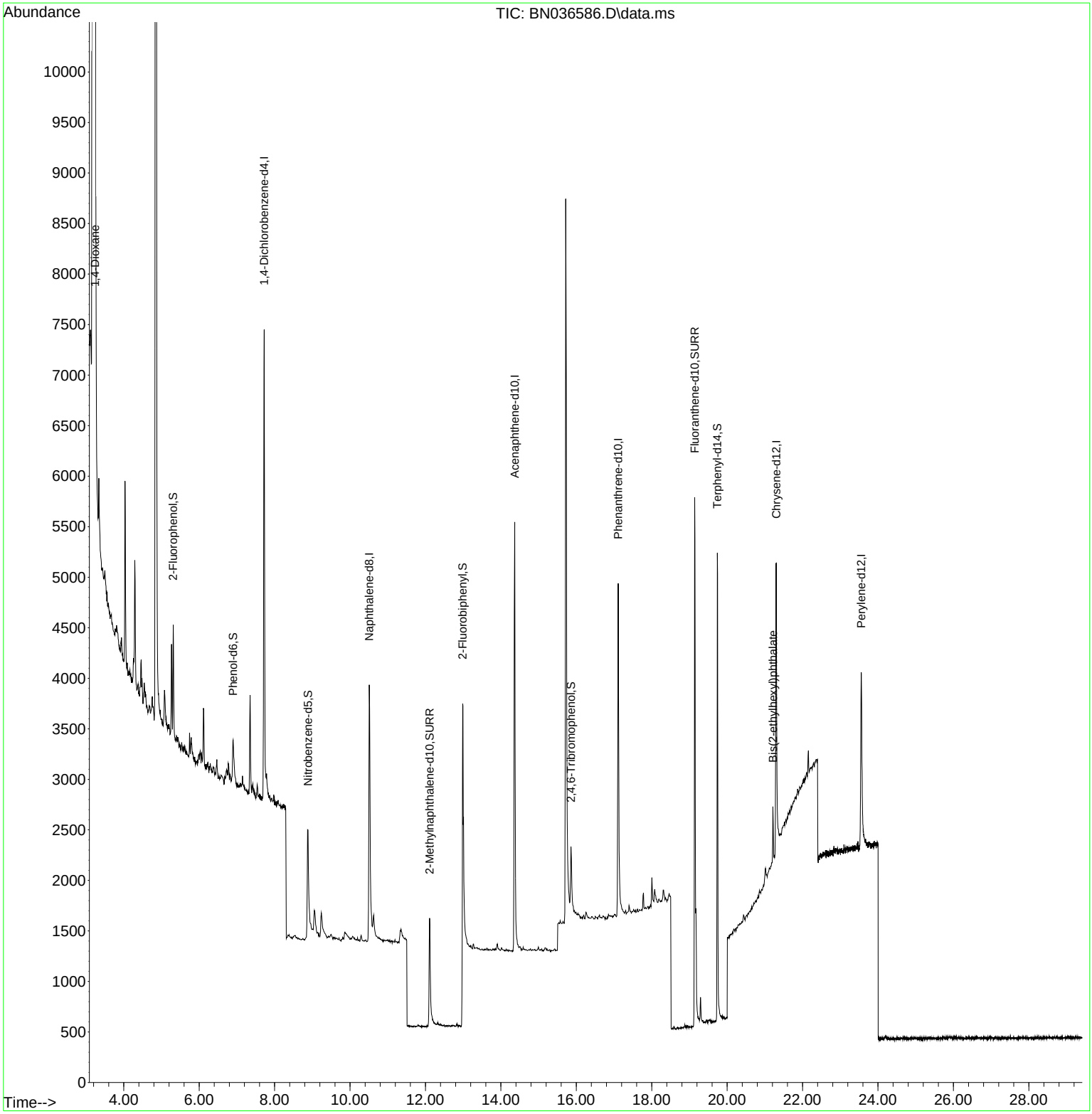
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2081	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4659	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2830	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5539	0.400	ng	# 0.00
29) Chrysene-d12	21.304	240	3781	0.400	ng	0.00
35) Perylene-d12	23.554	264	3024	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	760	0.157	ng	0.00
5) Phenol-d6	6.901	99	464	0.077	ng	0.00
8) Nitrobenzene-d5	8.886	82	1519	0.300	ng	0.01
11) 2-Methylnaphthalene-d10	12.111	152	2284	0.330	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	482	0.375	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	5327	0.324	ng	0.00
27) Fluoranthene-d10	19.141	212	6651	0.468	ng	0.00
31) Terphenyl-d14	19.740	244	4730	0.522	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	21171	9.171	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	600	0.064	ng	96

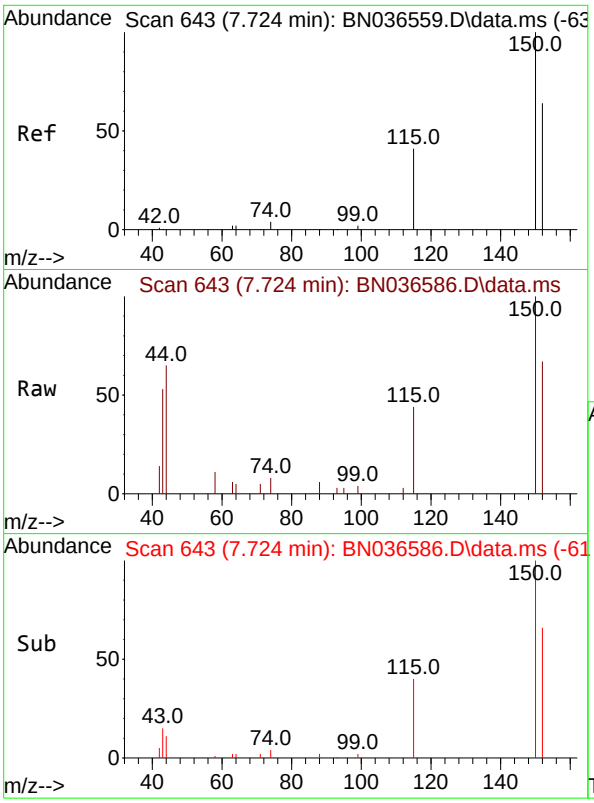
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036586.D
Acq On : 11 Mar 2025 17:57
Operator : RC/JU
Sample : Q1531-17
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Quant Time: Mar 11 18:19:27 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



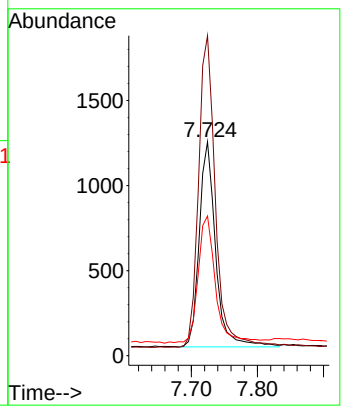


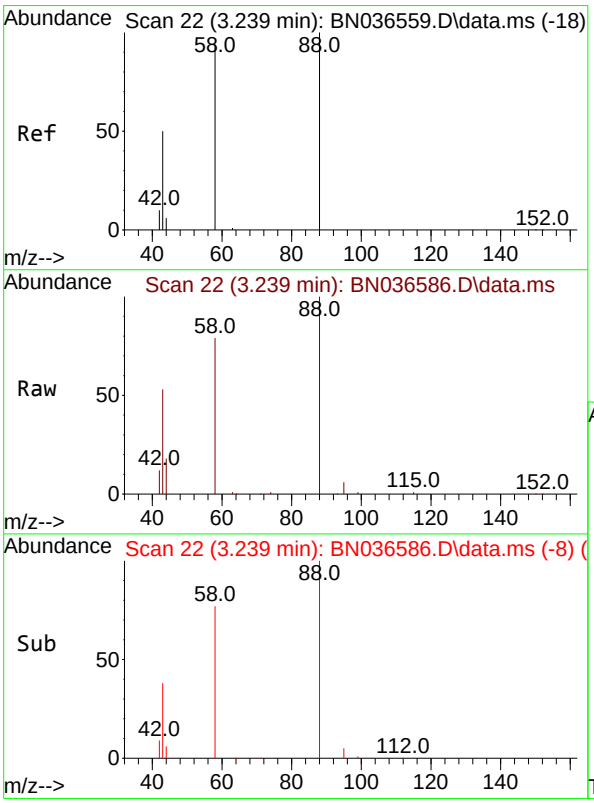
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:152 Resp: 2081

Ion	Ratio	Lower	Upper
152	100		
150	149.5	123.7	185.5
115	65.3	54.3	81.5

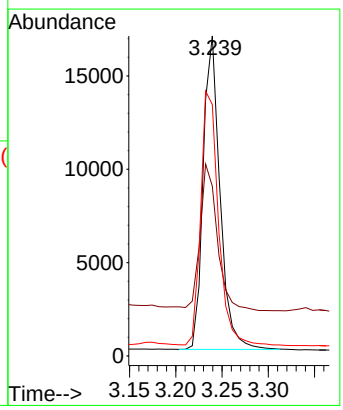


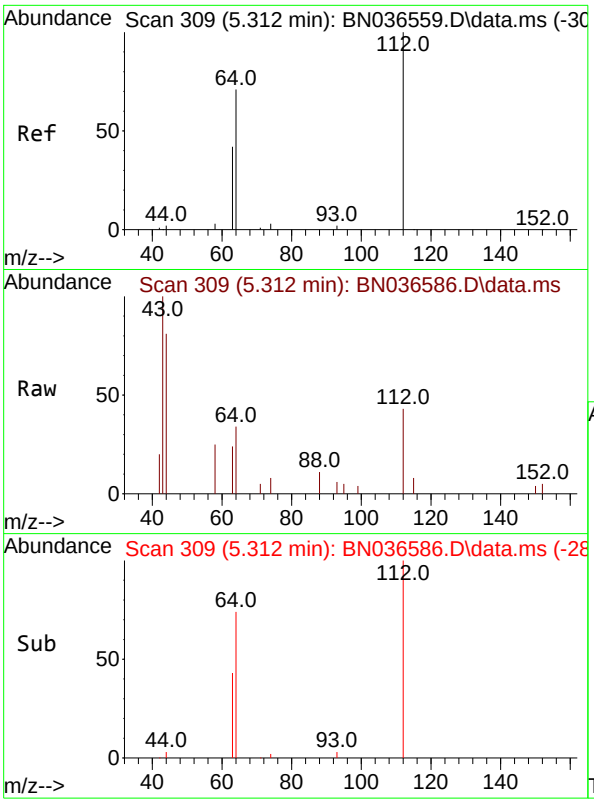


#2
1,4-Dioxane
Concen: 9.171 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion: 88 Resp: 21171

Ion	Ratio	Lower	Upper
88	100		
43	48.2	37.8	56.8
58	85.3	67.4	101.2



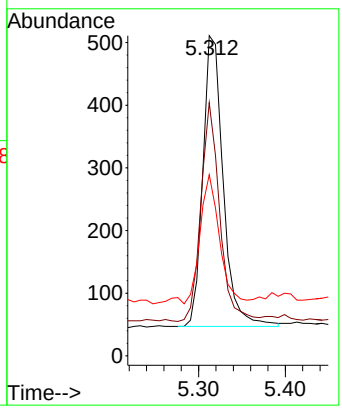


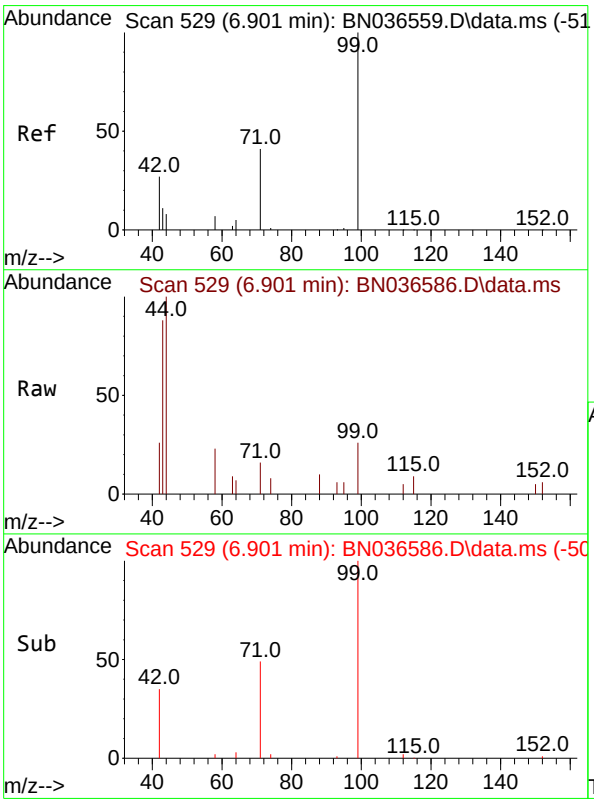
#4
2-Fluorophenol
Concen: 0.157 ng
RT: 5.312 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:112 Resp: 760

Ion	Ratio	Lower	Upper
112	100		
64	69.3	53.1	79.7
63	43.4	31.8	47.8

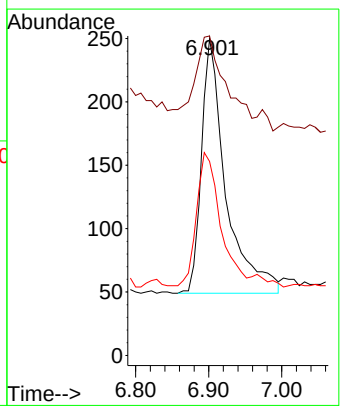


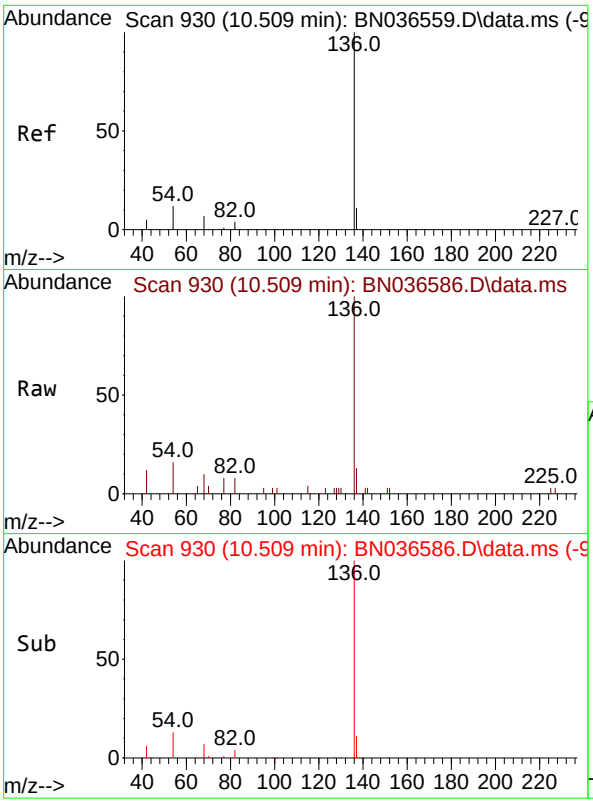


#5
Phenol-d6
Concen: 0.077 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion: 99 Resp: 464

Ion	Ratio	Lower	Upper
99	100		
42	39.9	26.5	39.7#
71	56.5	34.1	51.1#



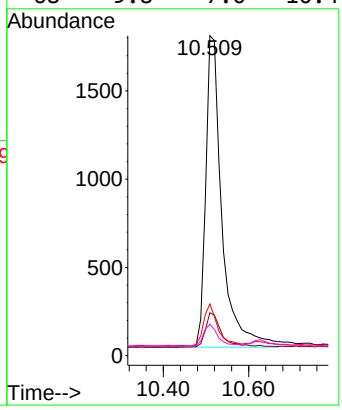


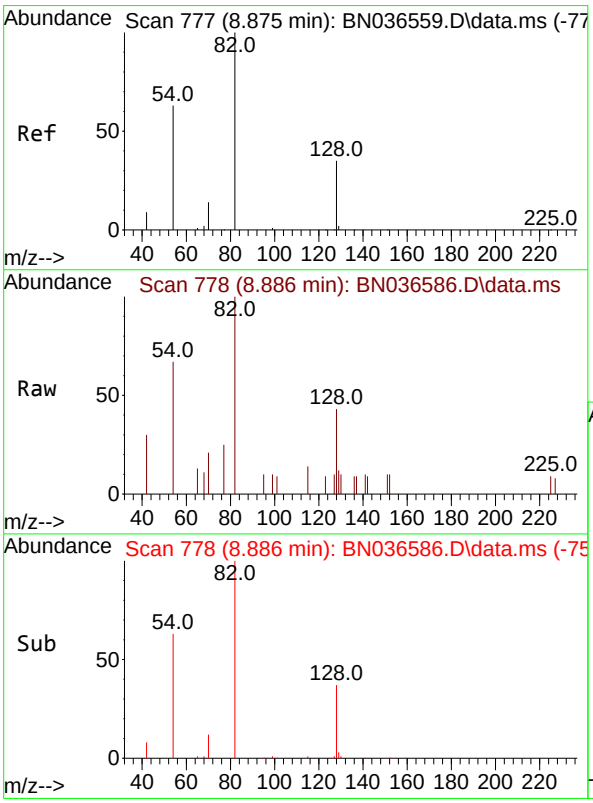
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:136 Resp: 4659

Ion	Ratio	Lower	Upper
136	100		
137	13.4	10.3	15.5
54	16.2	11.5	17.3
68	9.8	7.0	10.4

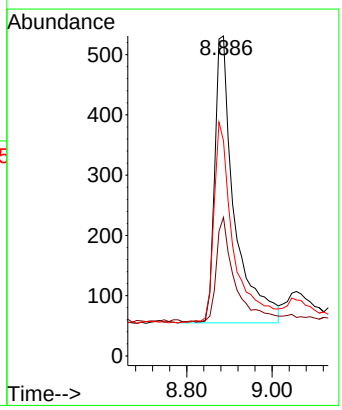


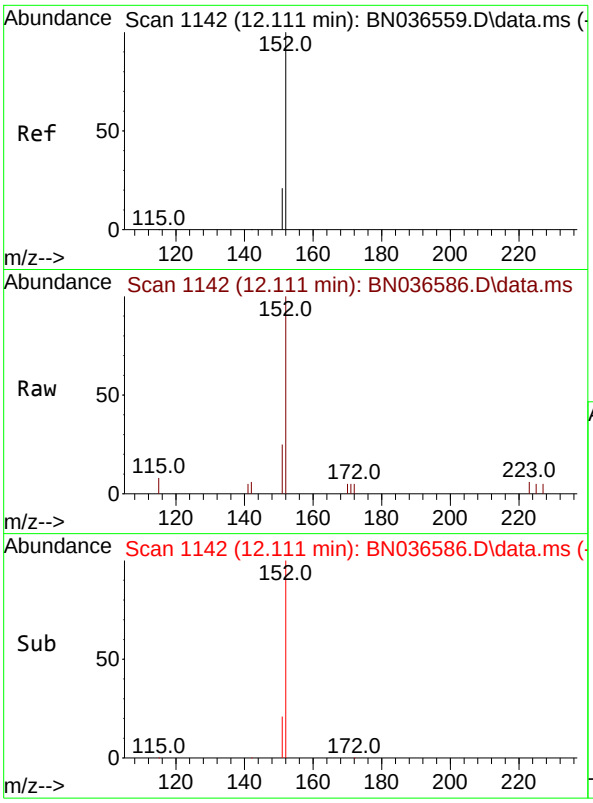


#8
Nitrobenzene-d5
Concen: 0.300 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion: 82 Resp: 1519

Ion	Ratio	Lower	Upper
82	100		
128	43.3	30.6	45.8
54	67.2	52.2	78.4



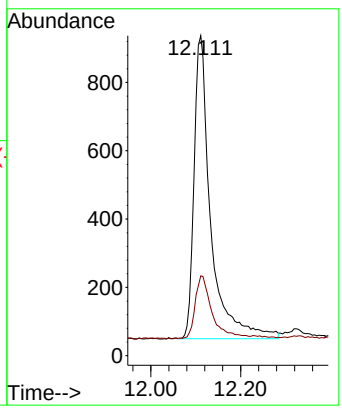


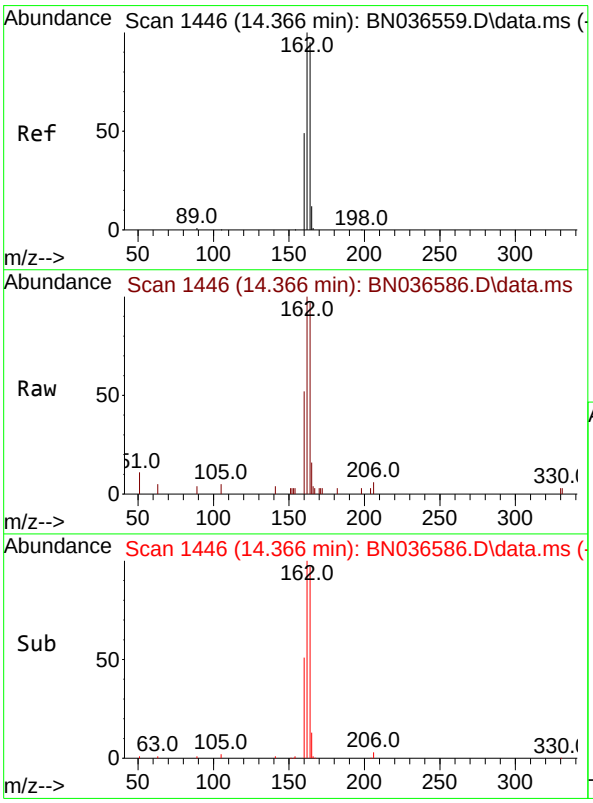
#11
2-Methylnaphthalene-d10
Concen: 0.330 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:152 Resp: 2284

Ion	Ratio	Lower	Upper
152	100		
151	20.6	17.0	25.6

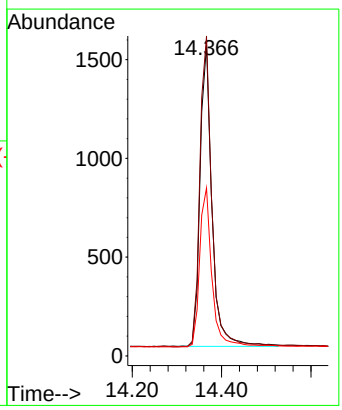


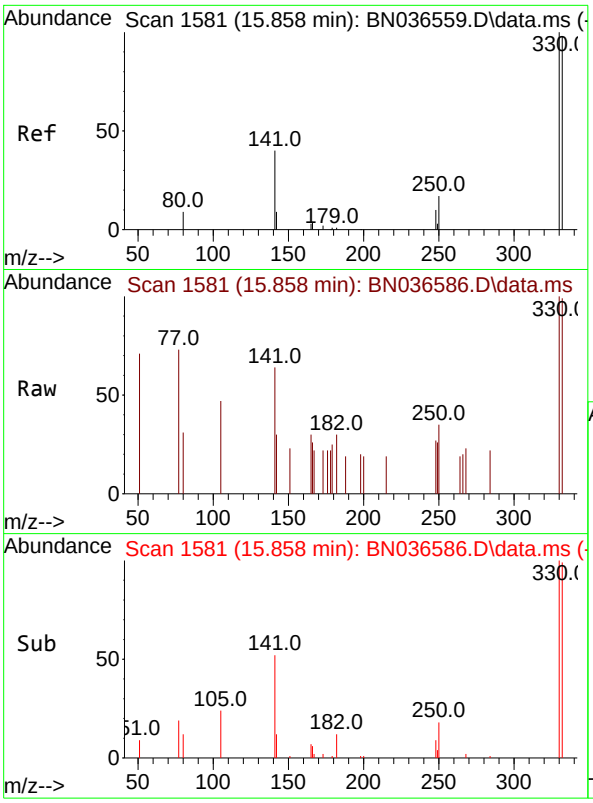


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion:164 Resp: 2830

Ion	Ratio	Lower	Upper
164	100		
162	102.9	84.2	126.2
160	54.0	42.2	63.2



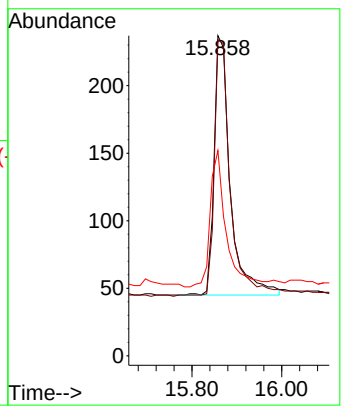


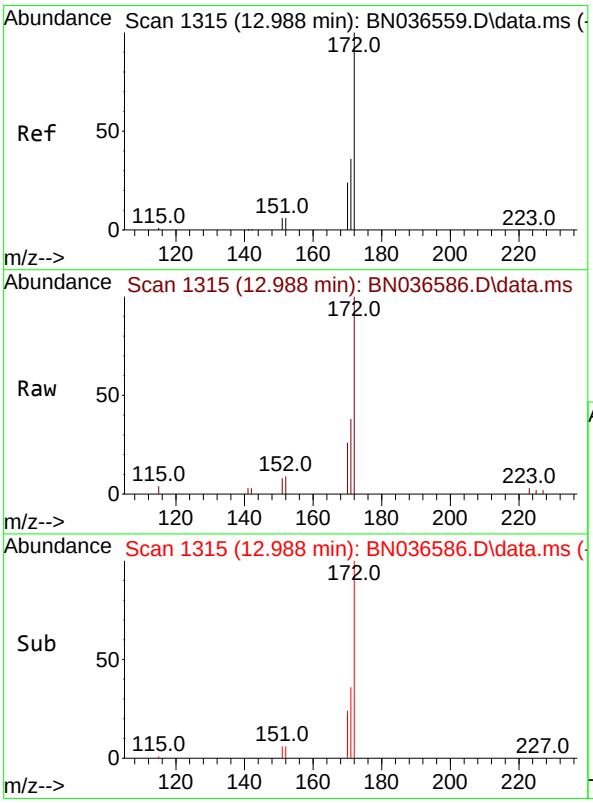
#14
2,4,6-Tribromophenol
Concen: 0.375 ng
RT: 15.858 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:330 Resp: 482

Ion	Ratio	Lower	Upper
330	100		
332	95.9	75.2	112.8
141	51.7	43.4	65.2

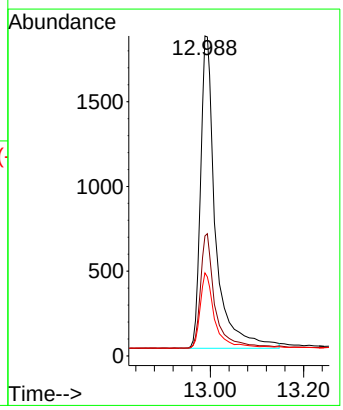


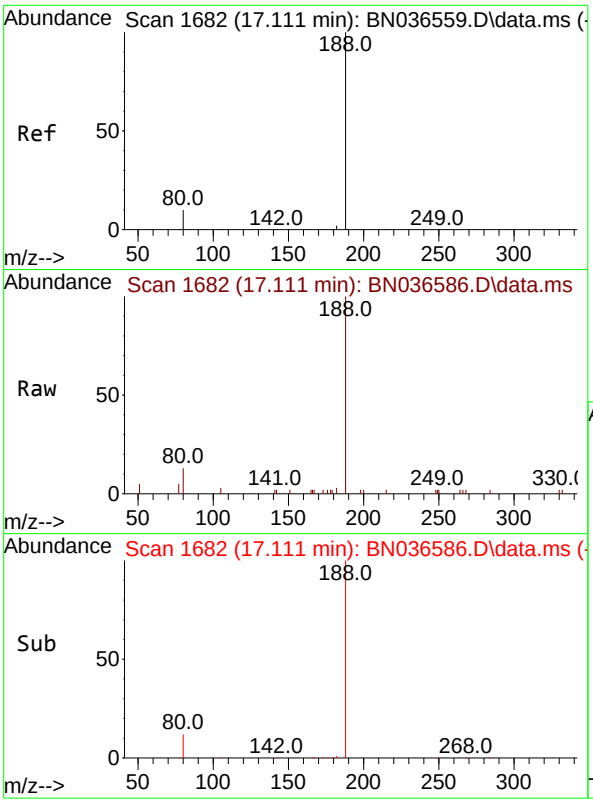


#15
2-Fluorobiphenyl
Concen: 0.324 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion:172 Resp: 5327

Ion	Ratio	Lower	Upper
172	100		
171	37.5	29.5	44.3
170	26.0	20.2	30.4



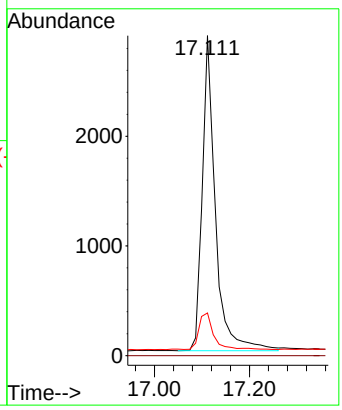


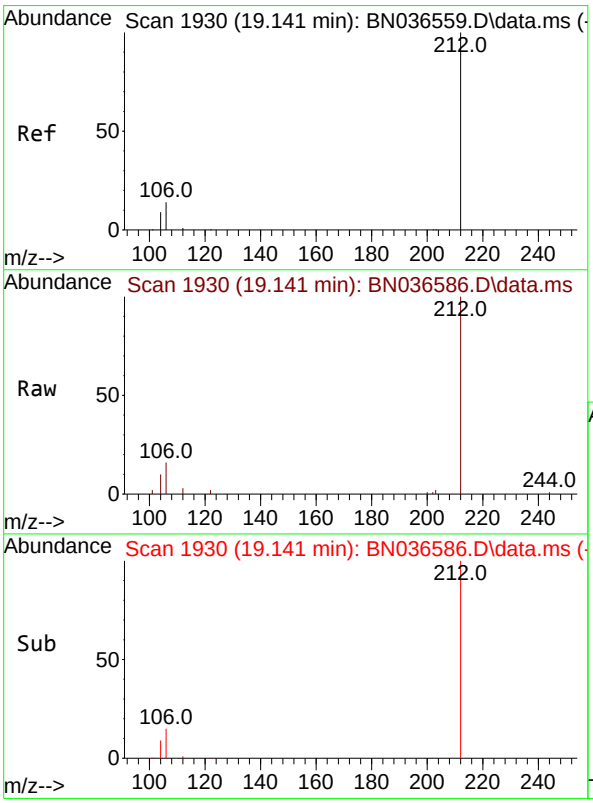
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:188 Resp: 5539

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.3	8.8	13.2#

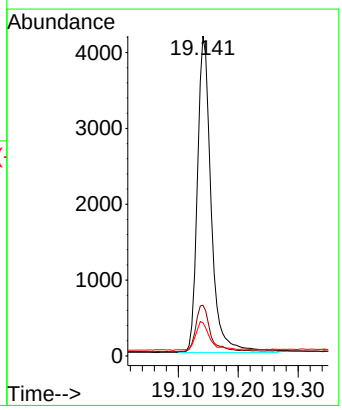


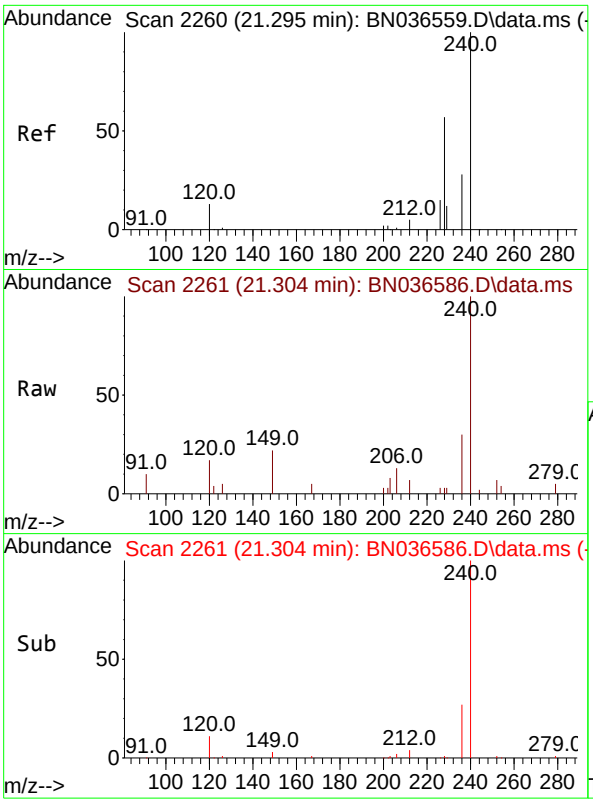


#27
Fluoranthene-d10
Concen: 0.468 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion:212 Resp: 6651

Ion	Ratio	Lower	Upper
212	100		
106	15.8	11.8	17.6
104	9.4	7.3	10.9



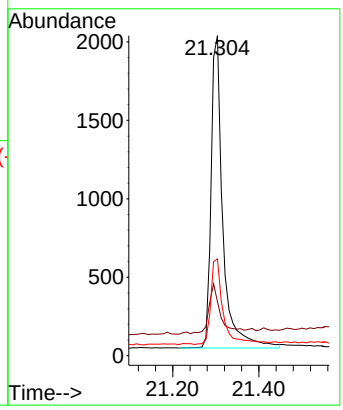


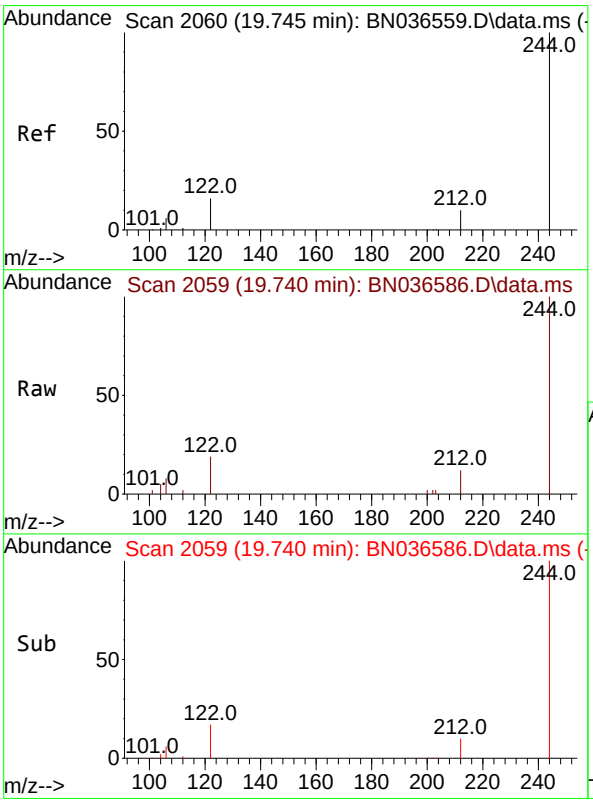
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:240 Resp: 3781

Ion	Ratio	Lower	Upper
240	100		
120	16.9	14.6	22.0
236	30.2	24.1	36.1

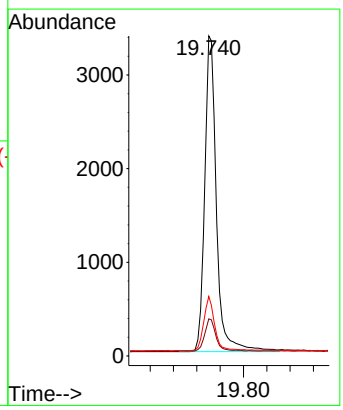


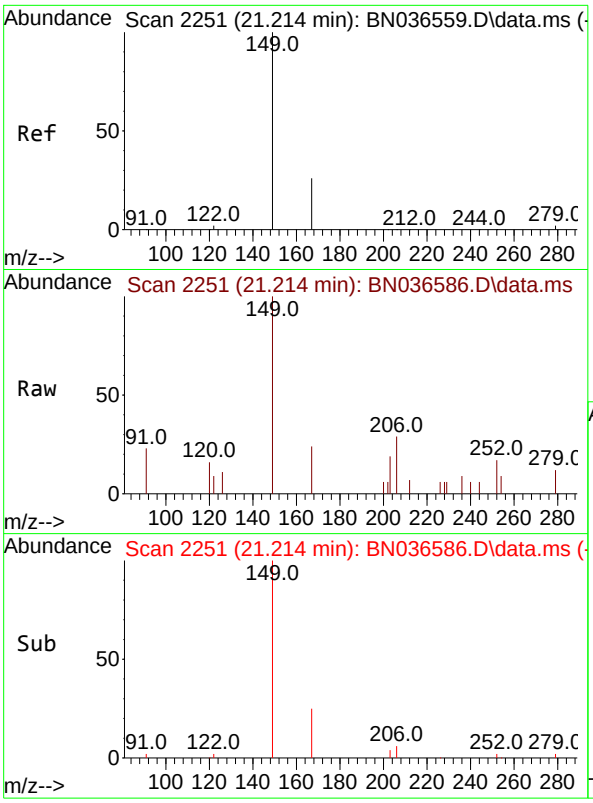


#31
Terphenyl-d14
Concen: 0.522 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.004 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion:244 Resp: 4730

Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.6	14.4
122	18.6	13.9	20.9



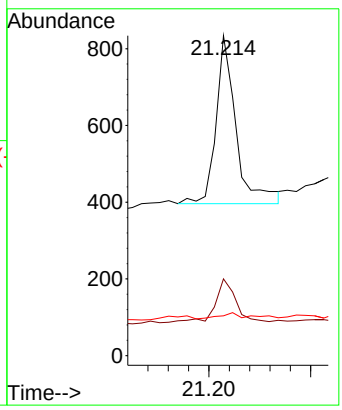


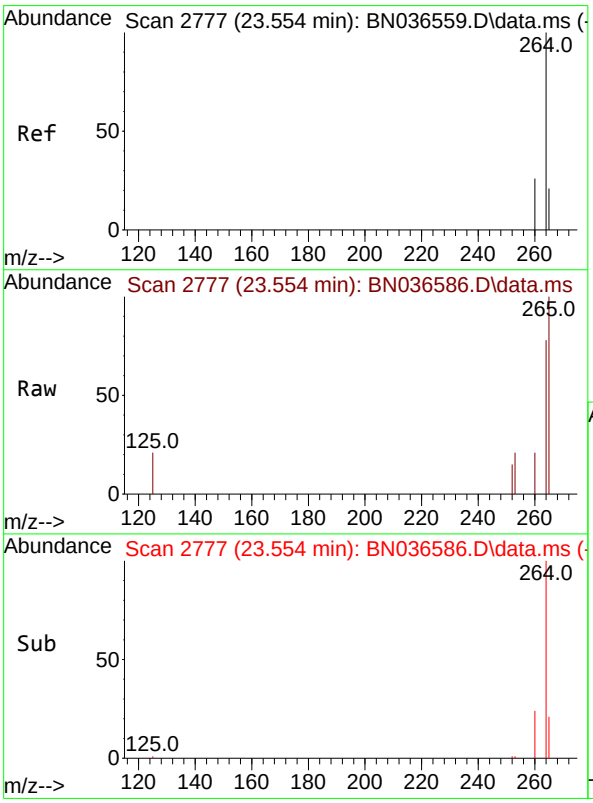
#34
Bis(2-ethylhexyl)phthalate
Concen: 0.064 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307

Tgt Ion:149 Resp: 600

Ion	Ratio	Lower	Upper
149	100		
167	23.7	20.7	31.1
279	4.3	3.6	5.4

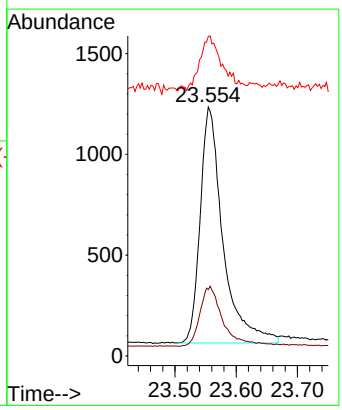




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. 0.000 min
Lab File: BN036586.D
Acq: 11 Mar 2025 17:57

Tgt Ion:264 Resp: 3024

Ion	Ratio	Lower	Upper
264	100		
260	26.6	22.6	33.8
265	128.3	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/07/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE125D2-20250307DL	SDG No.:	Q1531
Lab Sample ID:	Q1531-17DL	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036598.D	5	03/10/25 11:35	03/12/25 13:29	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	8.40	D	0.35	1.00	1.00	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		115%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.26		53 - 106		64%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2300	7.724				
1146-65-2	Naphthalene-d8	5150	10.519				
15067-26-2	Acenaphthene-d10	3130	14.366				
1517-22-2	Phenanthrene-d10	5910	17.111				
1719-03-5	Chrysene-d12	4000	21.295				
1520-96-3	Perylene-d12	3320	23.551				

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\BN031225\
Data File : BN036598.D
Acq On : 12 Mar 2025 13:29
Operator : RC/JU
Sample : Q1531-17DL 5X
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Quant Time: Mar 12 14:14:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

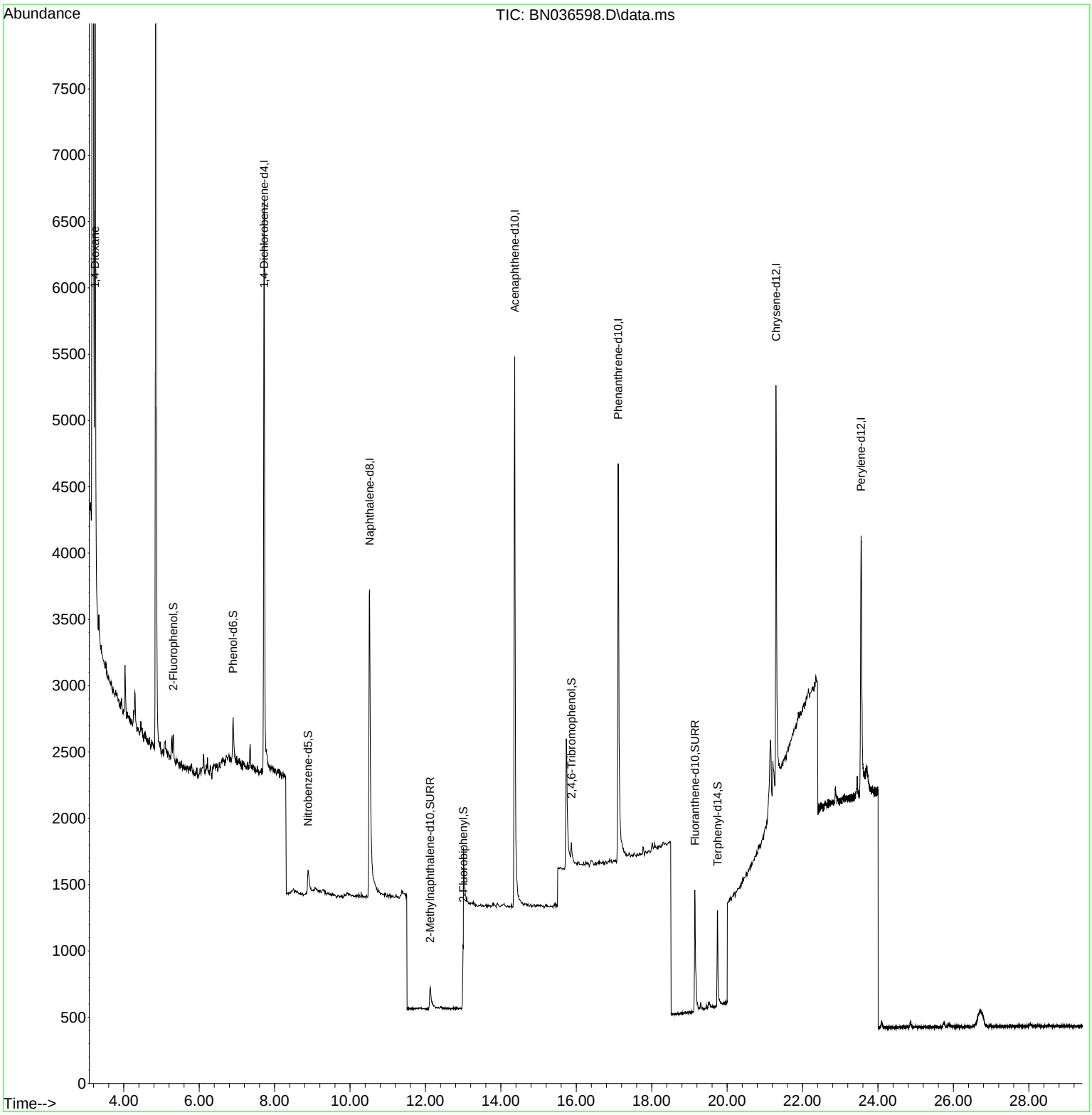
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2304	0.400	ng	0.00
7) Naphthalene-d8	10.519	136	5150	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	3131	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5911	0.400	ng	# 0.00
29) Chrysene-d12	21.295	240	3996	0.400	ng	0.00
35) Perylene-d12	23.551	264	3315	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	163	0.030	ng	0.00
5) Phenol-d6	6.901	99	418	0.063	ng	0.00
8) Nitrobenzene-d5	8.886	82	352	0.063	ng	0.01
11) 2-Methylnaphthalene-d10	12.126	152	471	0.061	ng	0.02
14) 2,4,6-Tribromophenol	15.870	330	112	0.079	ng	0.01
15) 2-Fluorobiphenyl	13.003	172	930	0.051	ng	0.02
27) Fluoranthene-d10	19.146	212	1393	0.092	ng	0.00
31) Terphenyl-d14	19.745	244	934	0.098	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	4295	1.680	ng	96

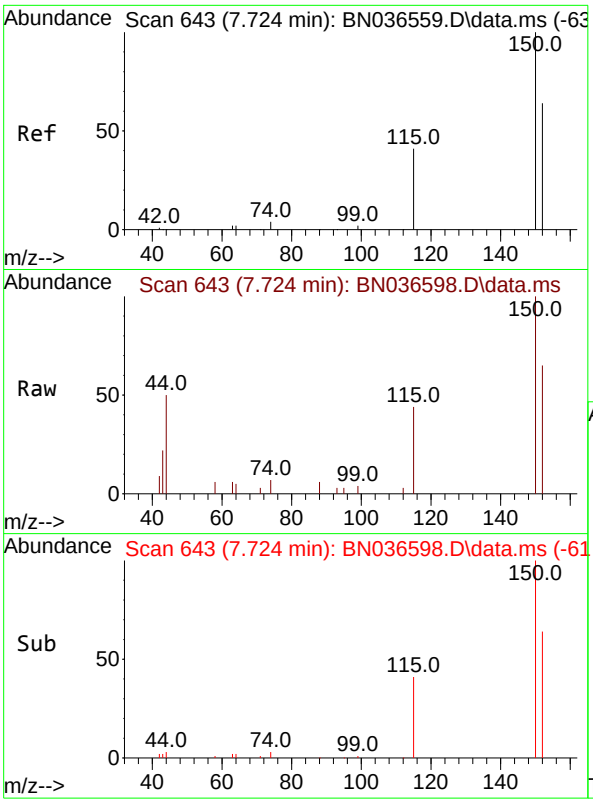
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036598.D
Acq On : 12 Mar 2025 13:29
Operator : RC/JU
Sample : Q1531-17DL 5X
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Quant Time: Mar 12 14:14:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



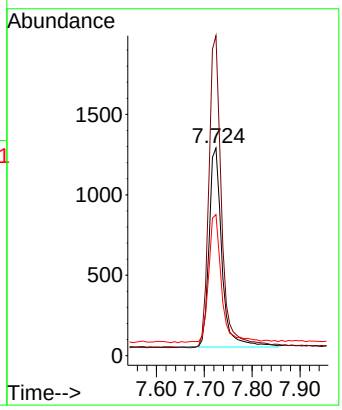


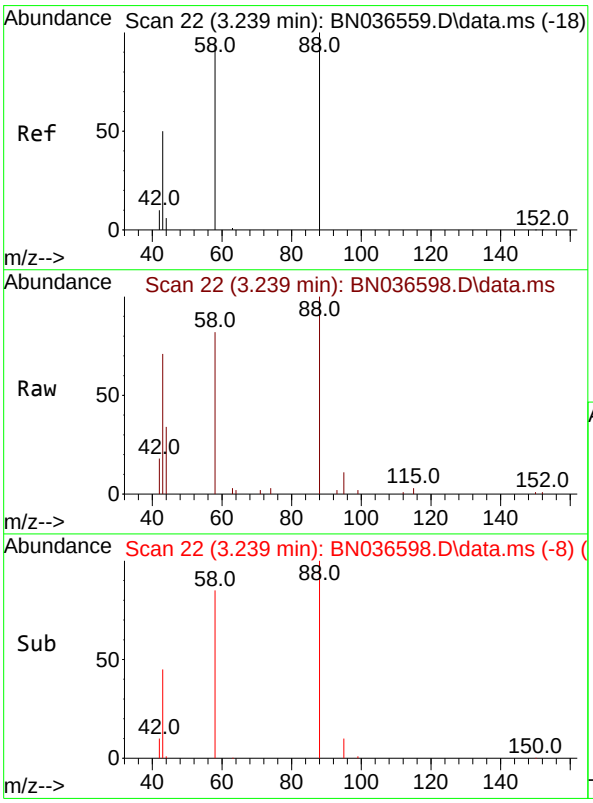
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:152 Resp: 2304

Ion	Ratio	Lower	Upper
152	100		
150	154.1	123.7	185.5
115	67.9	54.3	81.5

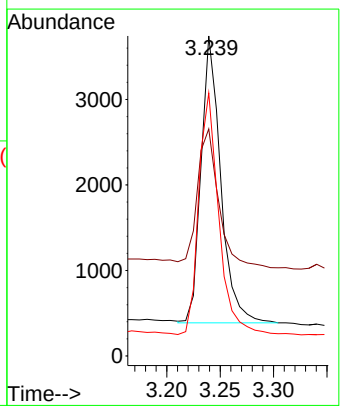


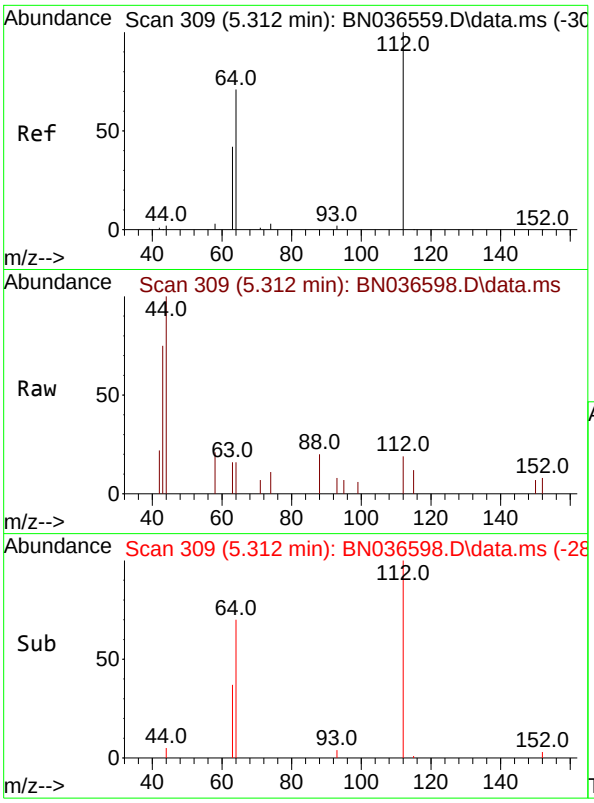


#2
1,4-Dioxane
Concen: 1.680 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion: 88 Resp: 4295

Ion	Ratio	Lower	Upper
88	100		
43	52.8	37.8	56.8
58	86.2	67.4	101.2



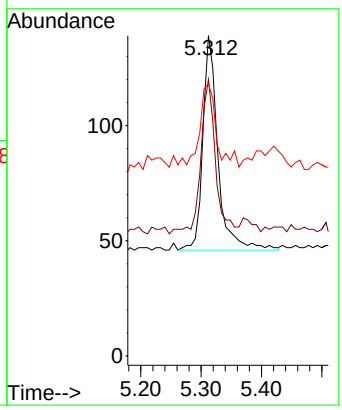


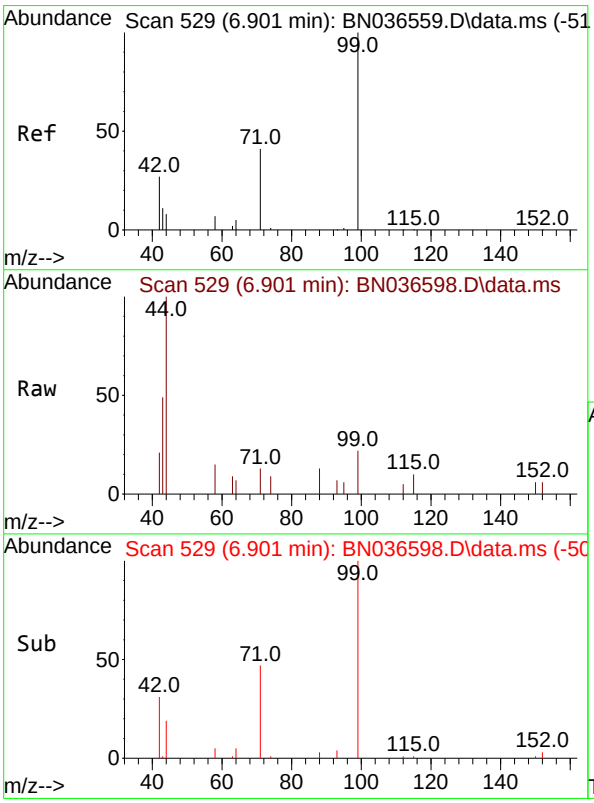
#4
2-Fluorophenol
Concen: 0.030 ng
RT: 5.312 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:112 Resp: 163

Ion	Ratio	Lower	Upper
112	100		
64	69.9	53.1	79.7
63	44.2	31.8	47.8

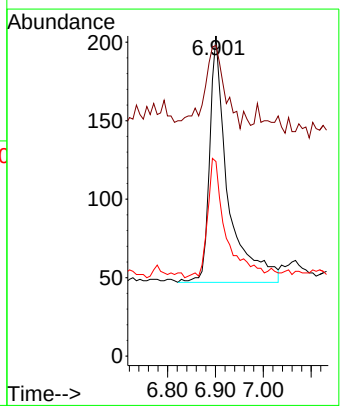


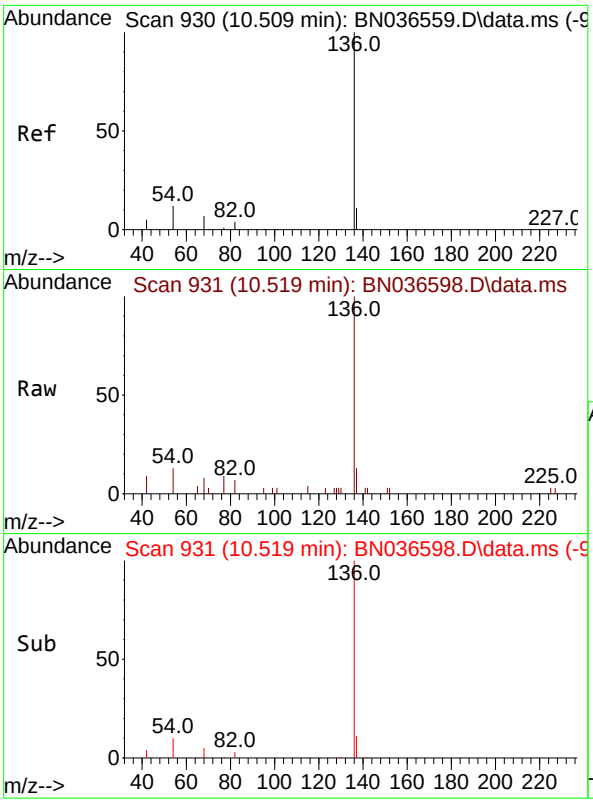


#5
Phenol-d6
Concen: 0.063 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion: 99 Resp: 418

Ion	Ratio	Lower	Upper
99	100		
42	37.3	26.5	39.7
71	48.1	34.1	51.1



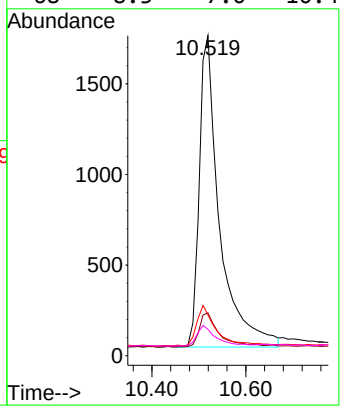


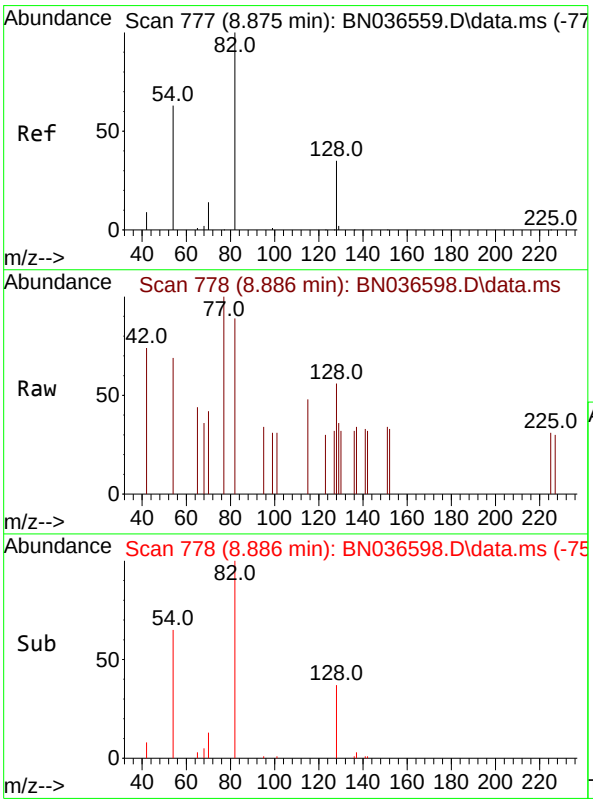
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.519 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:136 Resp: 5150

Ion	Ratio	Lower	Upper
136	100		
137	13.4	10.3	15.5
54	12.7	11.5	17.3
68	8.3	7.0	10.4

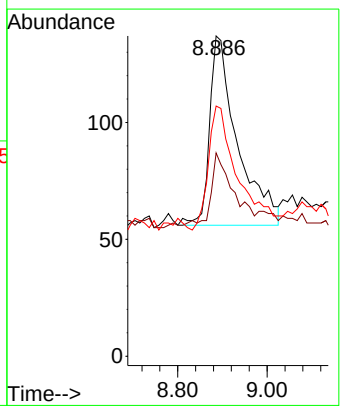


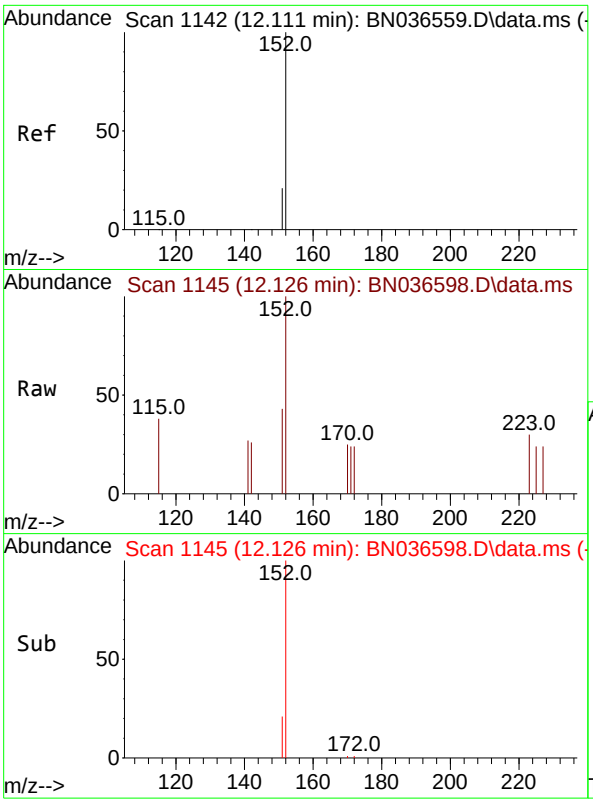


#8
Nitrobenzene-d5
Concen: 0.063 ng
RT: 8.886 min Scan# 778
Delta R.T. 0.011 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion: 82 Resp: 352

Ion	Ratio	Lower	Upper
82	100		
128	63.5	30.6	45.8#
54	78.1	52.2	78.4



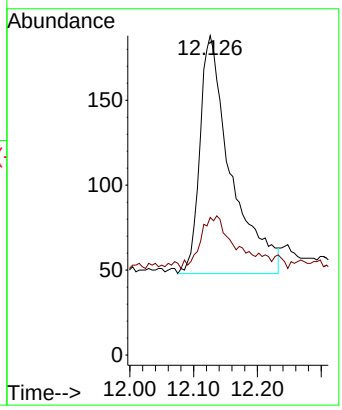


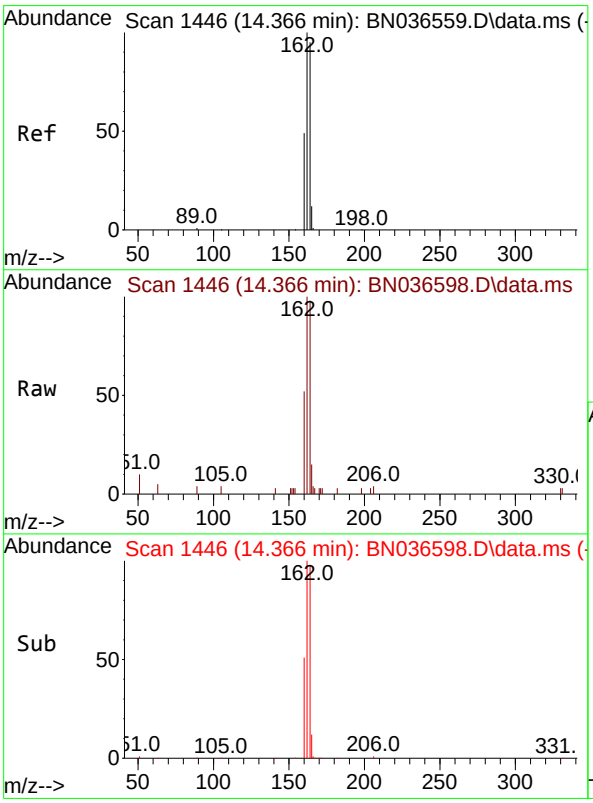
#11
2-Methylnaphthalene-d10
Concen: 0.061 ng
RT: 12.126 min Scan# 11
Delta R.T. 0.015 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:152 Resp: 471

Ion	Ratio	Lower	Upper
152	100		
151	22.9	17.0	25.6

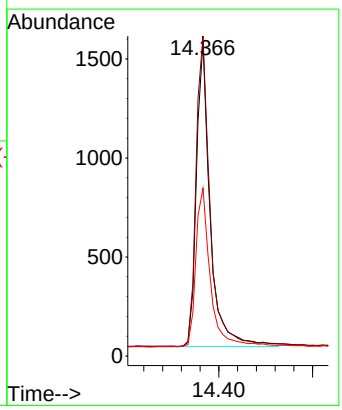


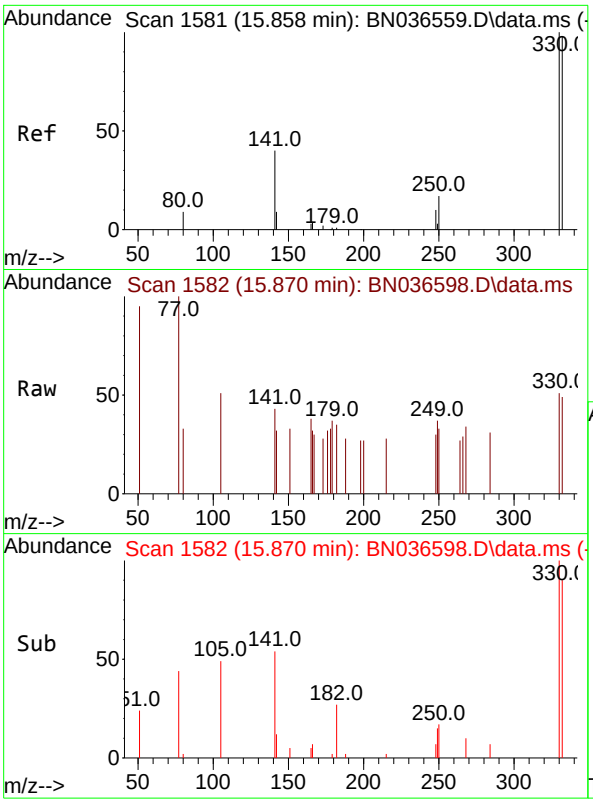


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion:164 Resp: 3131

Ion	Ratio	Lower	Upper
164	100		
162	101.8	84.2	126.2
160	53.3	42.2	63.2



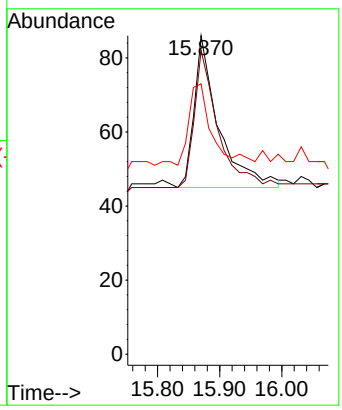


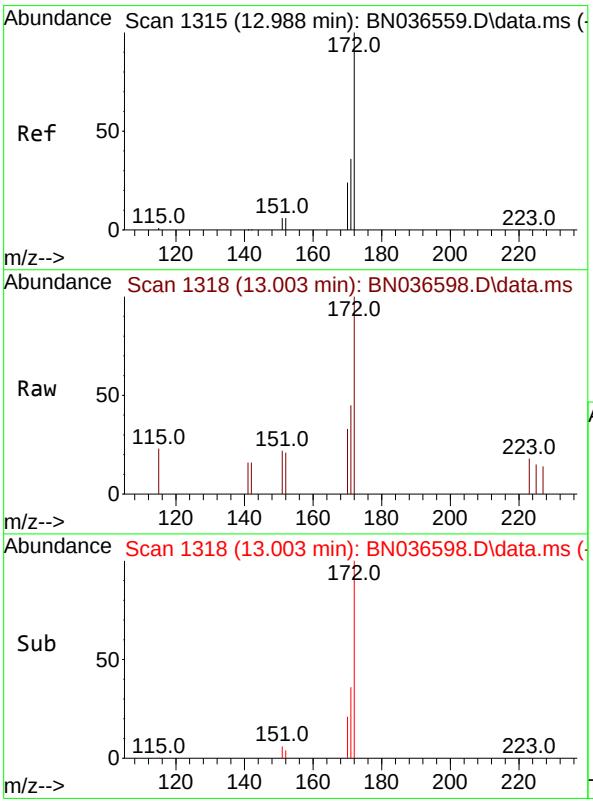
#14
2,4,6-Tribromophenol
Concen: 0.079 ng
RT: 15.870 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:330 Resp: 112

Ion	Ratio	Lower	Upper
330	100		
332	87.5	75.2	112.8
141	47.3	43.4	65.2

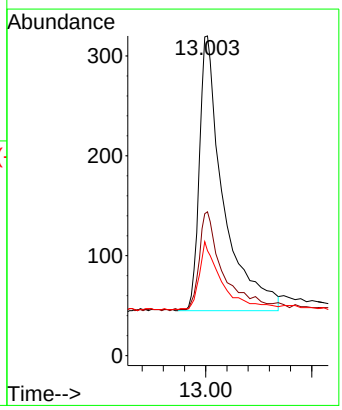


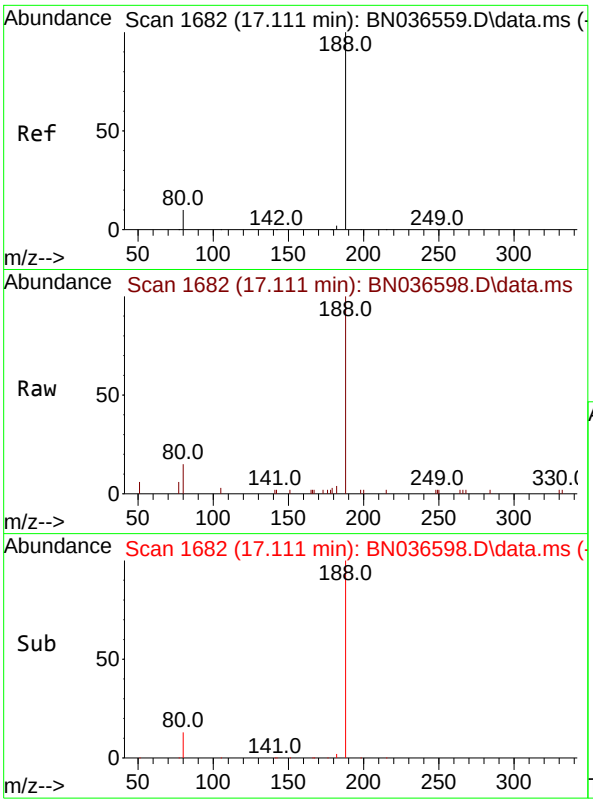


#15
2-Fluorobiphenyl
Concen: 0.051 ng
RT: 13.003 min Scan# 1318
Delta R.T. 0.015 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion:172 Resp: 930

Ion	Ratio	Lower	Upper
172	100		
171	45.0	29.5	44.3#
170	32.8	20.2	30.4#



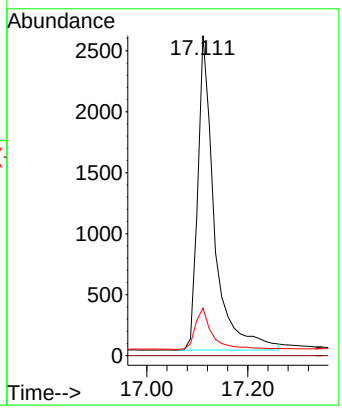


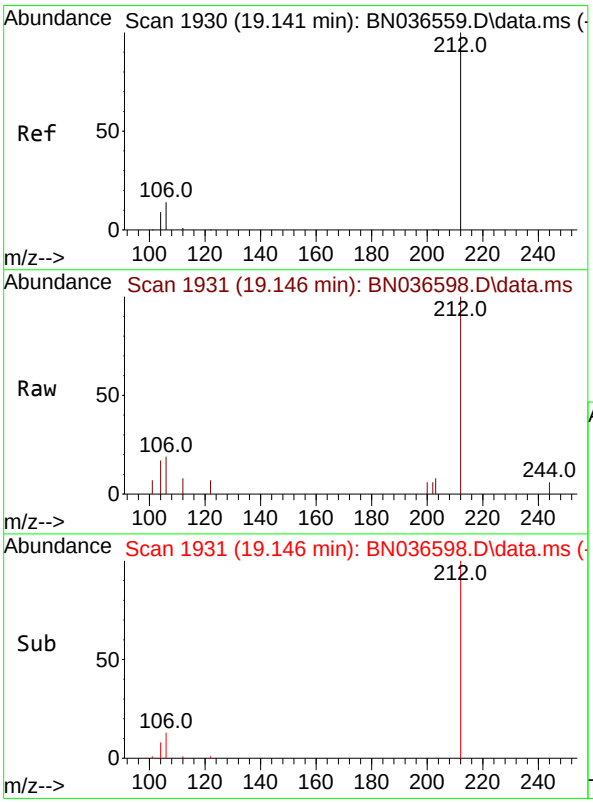
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:188 Resp: 5911

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	14.9	8.8	13.2#

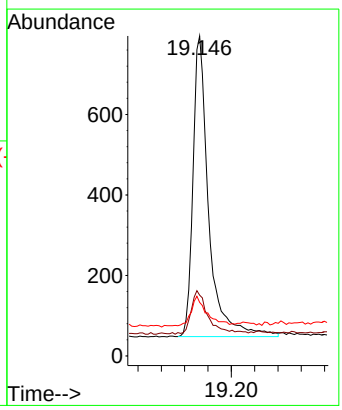


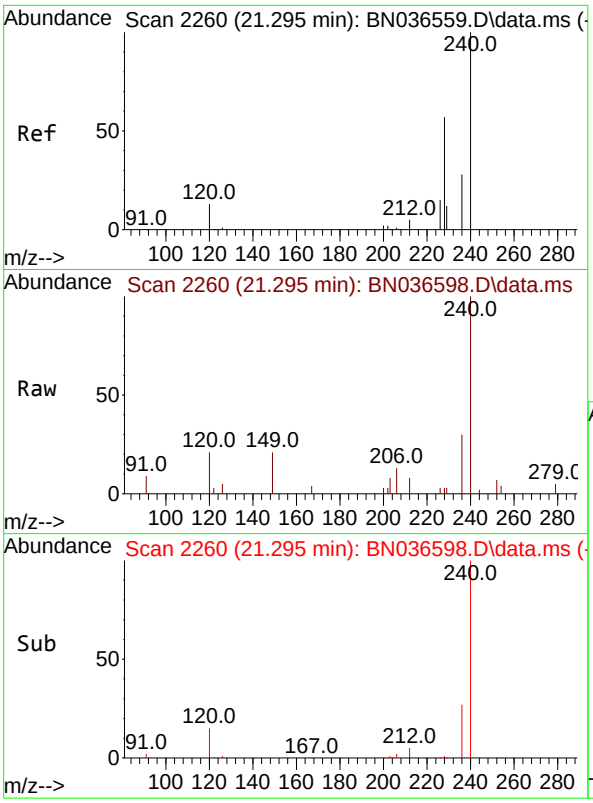


#27
Fluoranthene-d10
Concen: 0.092 ng
RT: 19.146 min Scan# 1931
Delta R.T. 0.005 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion:212 Resp: 1393

Ion	Ratio	Lower	Upper
212	100		
106	15.9	11.8	17.6
104	10.1	7.3	10.9



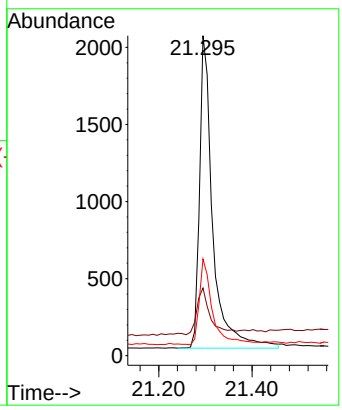


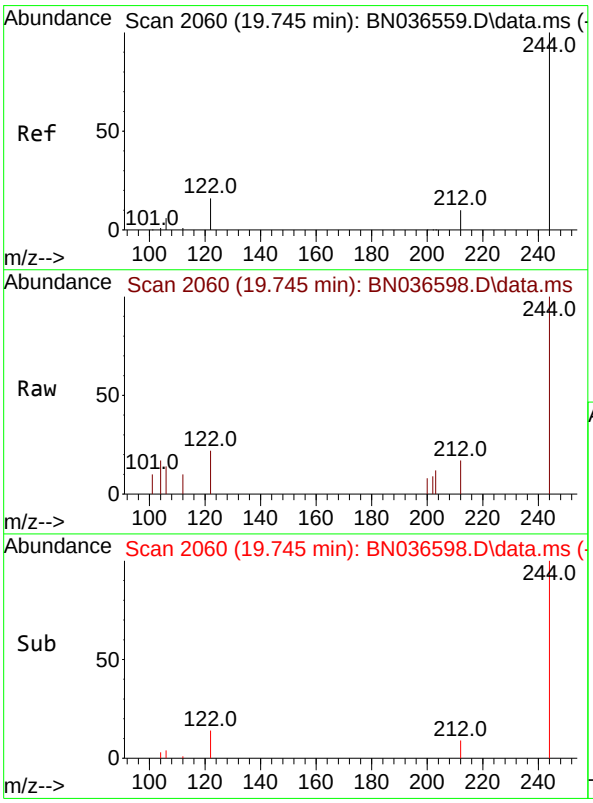
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:240 Resp: 3996

Ion	Ratio	Lower	Upper
240	100		
120	21.1	14.6	22.0
236	30.2	24.1	36.1

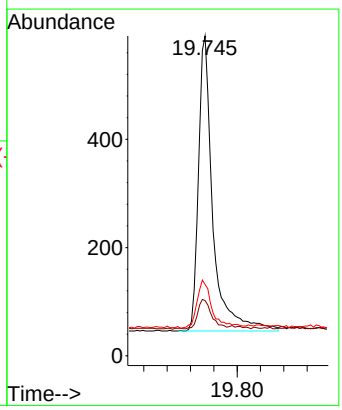


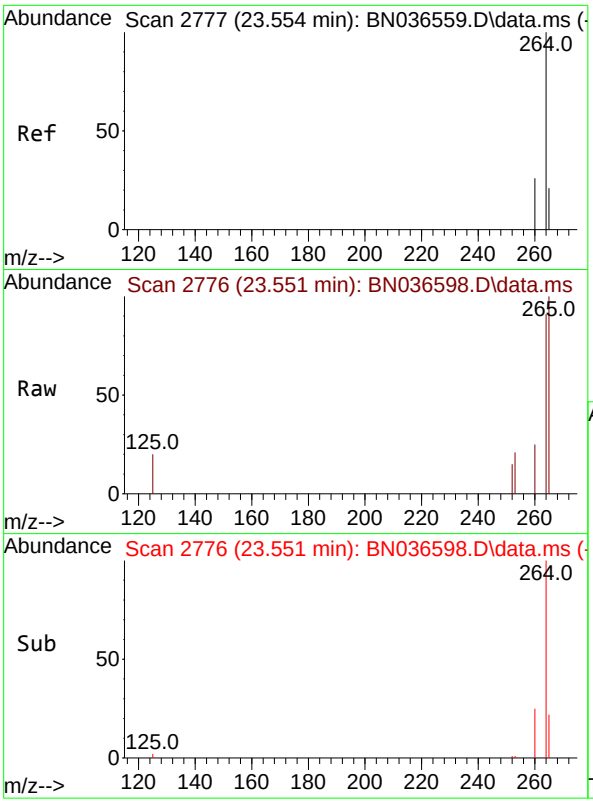


#31
Terphenyl-d14
Concen: 0.098 ng
RT: 19.745 min Scan# 2060
Delta R.T. 0.000 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Tgt Ion:244 Resp: 934

Ion	Ratio	Lower	Upper
244	100		
212	17.3	9.6	14.4#
122	22.3	13.9	20.9#



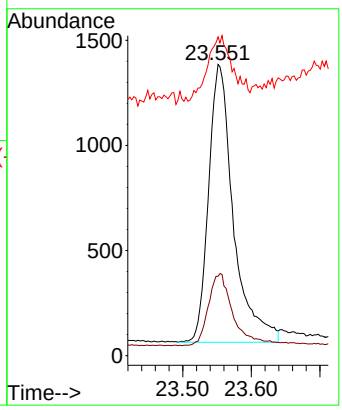


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036598.D
Acq: 12 Mar 2025 13:29

Instrument :
BNA_N
ClientSampleId :
RE125D2-20250307DL

Tgt Ion:264 Resp: 3315

Ion	Ratio	Lower	Upper
264	100		
260	27.2	22.6	33.8
265	109.5	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	FB01	SDG No.:	Q1531
Lab Sample ID:	Q1531-18	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036587.D	1	03/10/25 11:35	03/11/25 18:33	PB167057

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		82%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.49		30 - 150		123%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.52		58 - 132		131%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1900	7.724				
1146-65-2	Naphthalene-d8	4320	10.519				
15067-26-2	Acenaphthene-d10	2630	14.366				
1517-22-2	Phenanthrene-d10	5340	17.111				
1719-03-5	Chrysene-d12	4000	21.295				
1520-96-3	Perylene-d12	3150	23.557				

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\BN031125\
Data File : BN036587.D
Acq On : 11 Mar 2025 18:33
Operator : RC/JU
Sample : Q1531-18
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
FB01

Quant Time: Mar 12 01:09:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

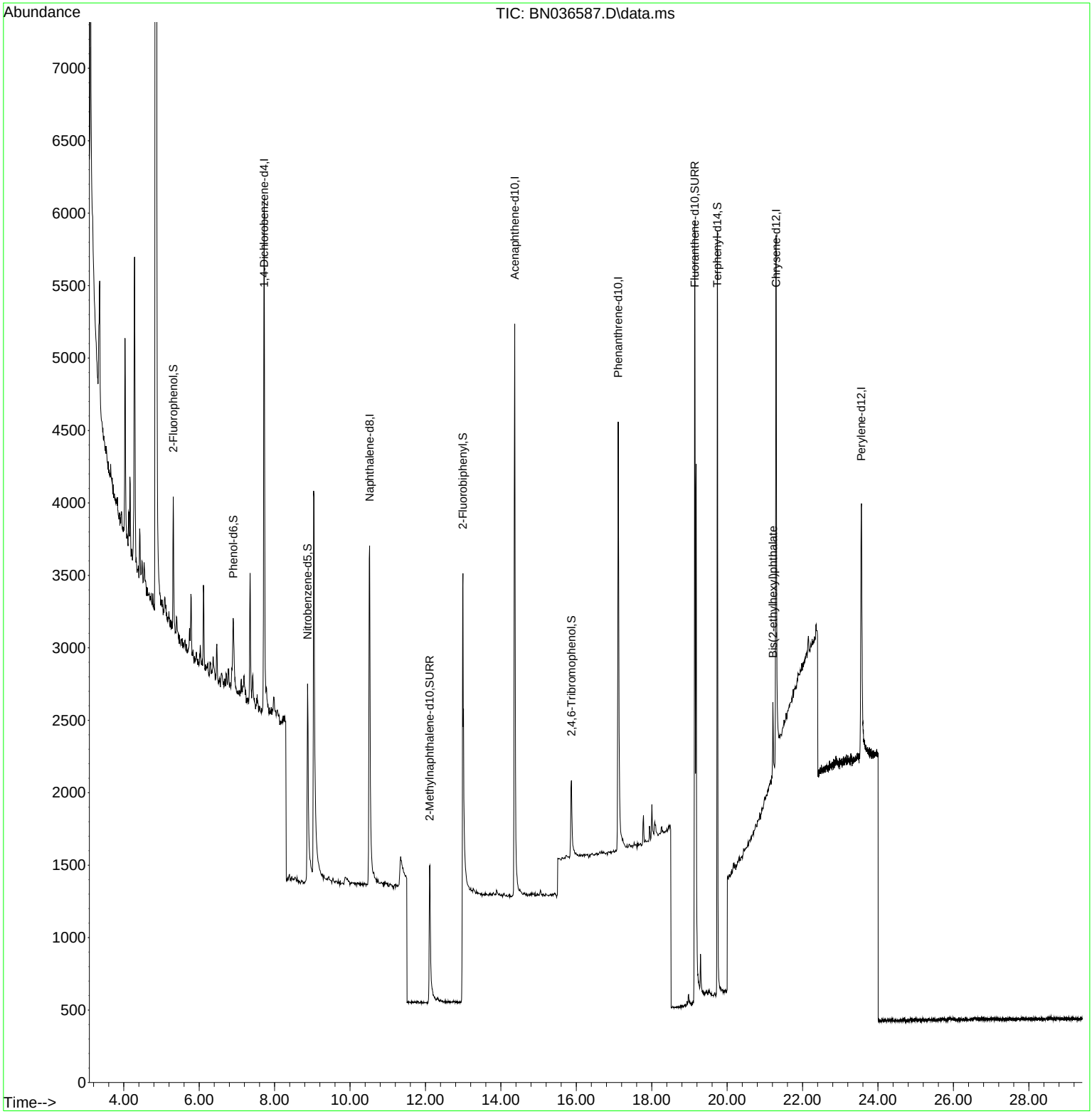
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	1897	0.400	ng	0.00
7) Naphthalene-d8	10.519	136	4317	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2633	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5337	0.400	ng	# 0.00
29) Chrysene-d12	21.295	240	4002	0.400	ng	0.00
35) Perylene-d12	23.557	264	3149	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	681	0.154	ng	0.00
5) Phenol-d6	6.908	99	442	0.081	ng	0.00
8) Nitrobenzene-d5	8.875	82	1539	0.328	ng	0.00
11) 2-Methylnaphthalene-d10	12.116	152	2100	0.327	ng	0.00
14) 2,4,6-Tribromophenol	15.870	330	471	0.394	ng	0.01
15) 2-Fluorobiphenyl	12.993	172	4935	0.322	ng	0.00
27) Fluoranthene-d10	19.141	212	6733	0.492	ng	0.00
31) Terphenyl-d14	19.740	244	5015	0.523	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.214	149	581	0.059	ng	99

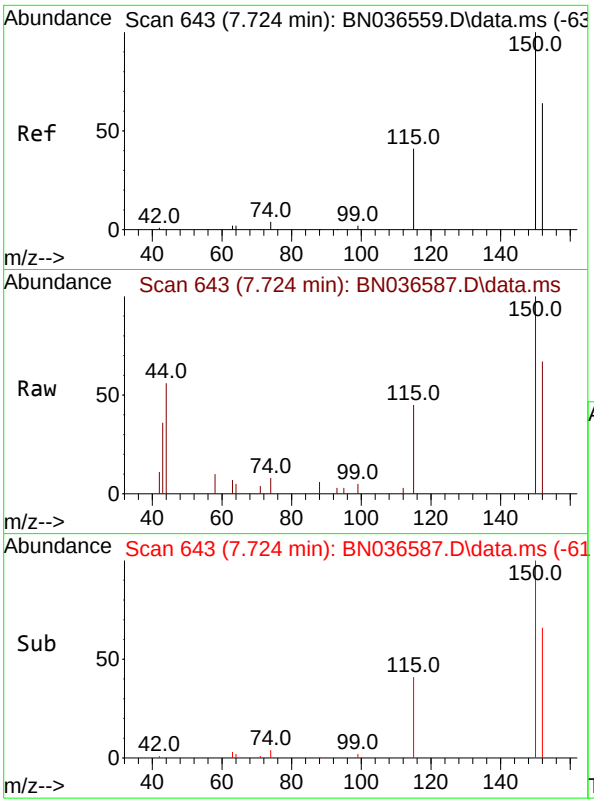
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036587.D
Acq On : 11 Mar 2025 18:33
Operator : RC/JU
Sample : Q1531-18
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
FB01

Quant Time: Mar 12 01:09:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



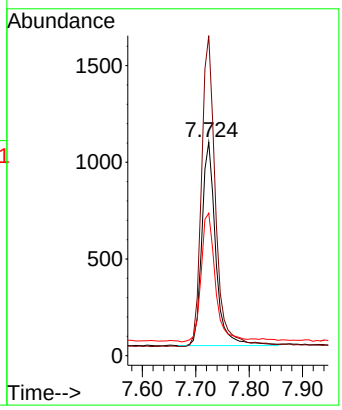


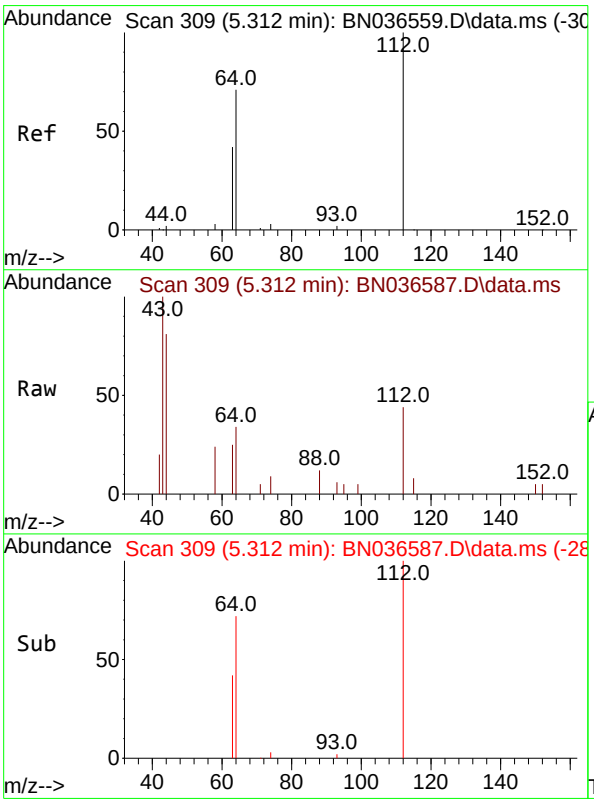
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion:152 Resp: 1897

Ion	Ratio	Lower	Upper
152	100		
150	149.8	123.7	185.5
115	66.7	54.3	81.5

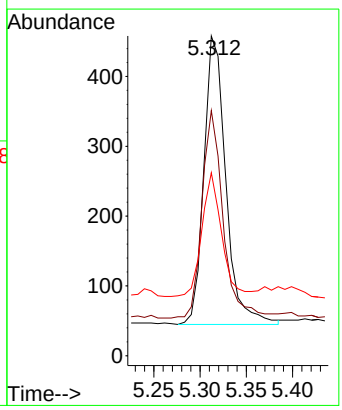


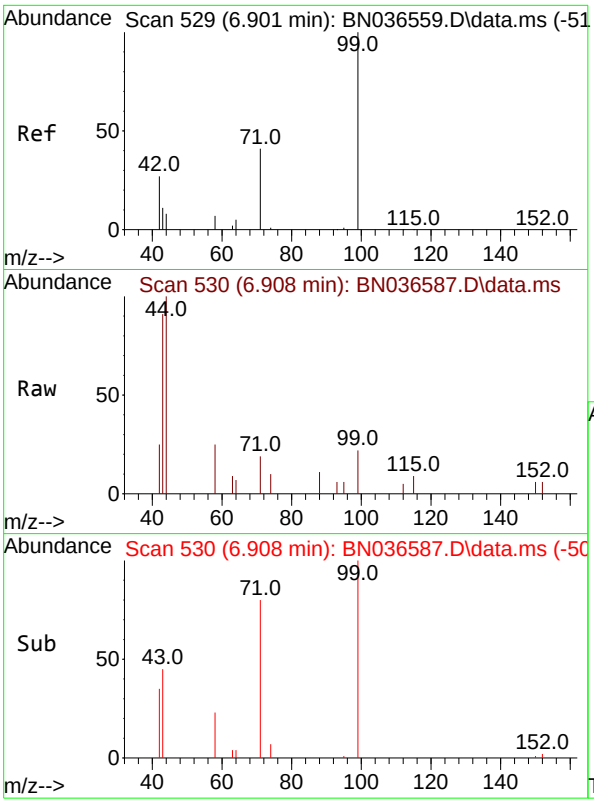


#4
2-Fluorophenol
Concen: 0.154 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:112 Resp: 681

Ion	Ratio	Lower	Upper
112	100		
64	68.9	53.1	79.7
63	38.0	31.8	47.8



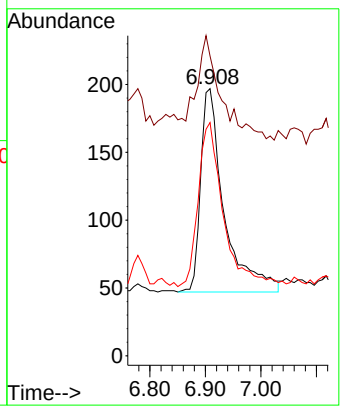


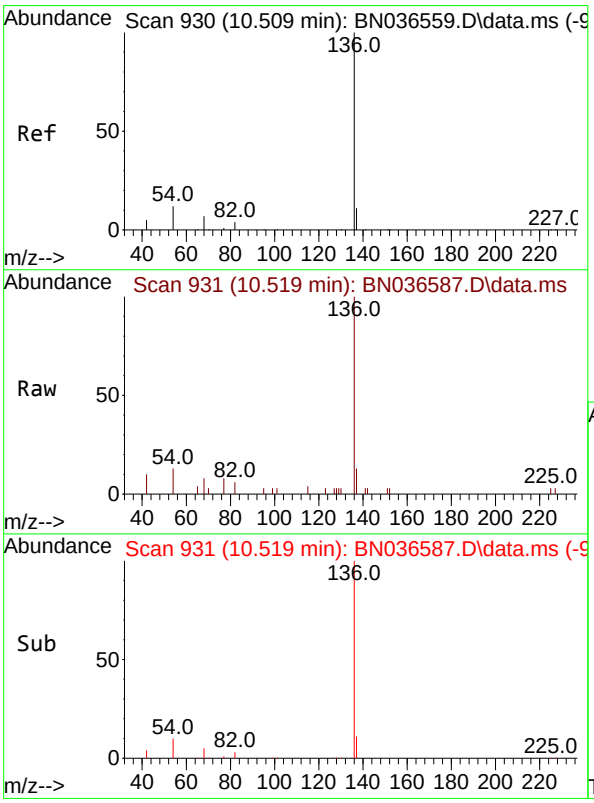
#5
Phenol-d6
Concen: 0.081 ng
RT: 6.908 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion: 99 Resp: 442

Ion	Ratio	Lower	Upper
99	100		
42	36.7	26.5	39.7
71	86.4	34.1	51.1#

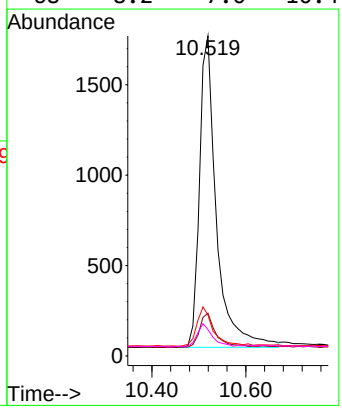


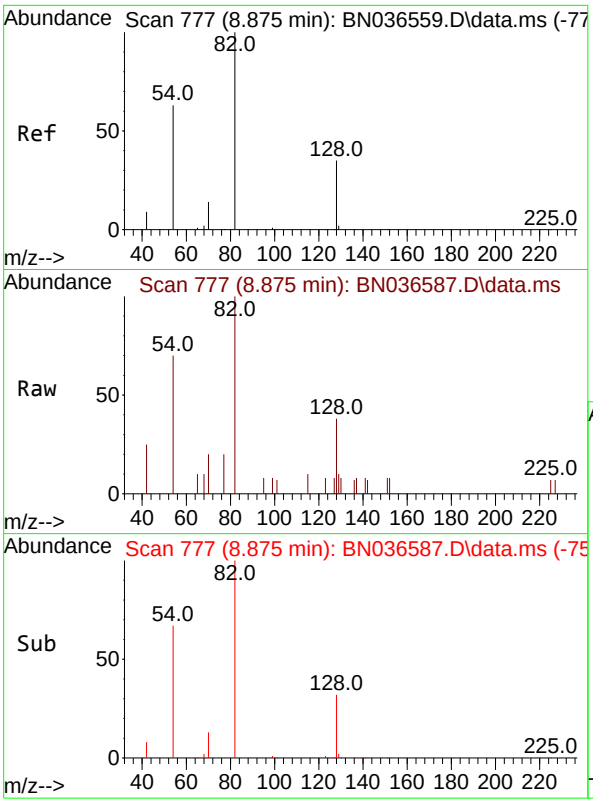


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.519 min Scan# 931
Delta R.T. 0.011 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:136 Resp: 4317

Ion	Ratio	Lower	Upper
136	100		
137	13.3	10.3	15.5
54	12.8	11.5	17.3
68	8.2	7.0	10.4



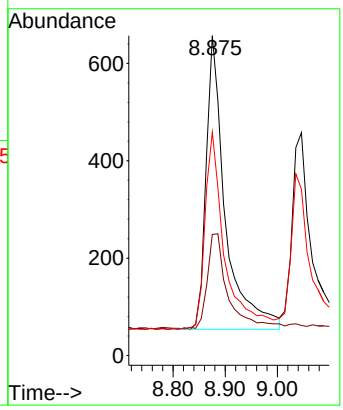


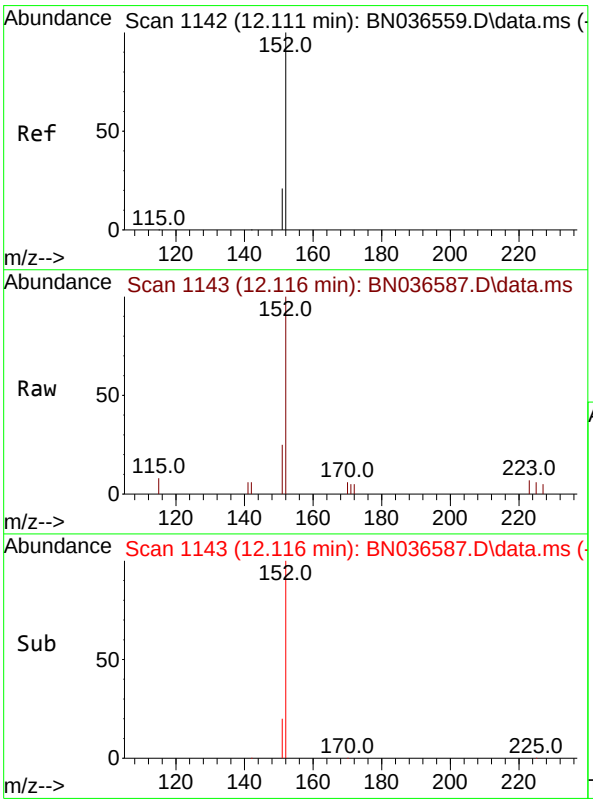
#8
Nitrobenzene-d5
Concen: 0.328 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion: 82 Resp: 1539

Ion	Ratio	Lower	Upper
82	100		
128	37.9	30.6	45.8
54	69.9	52.2	78.4

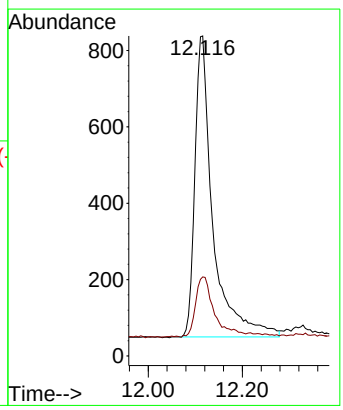


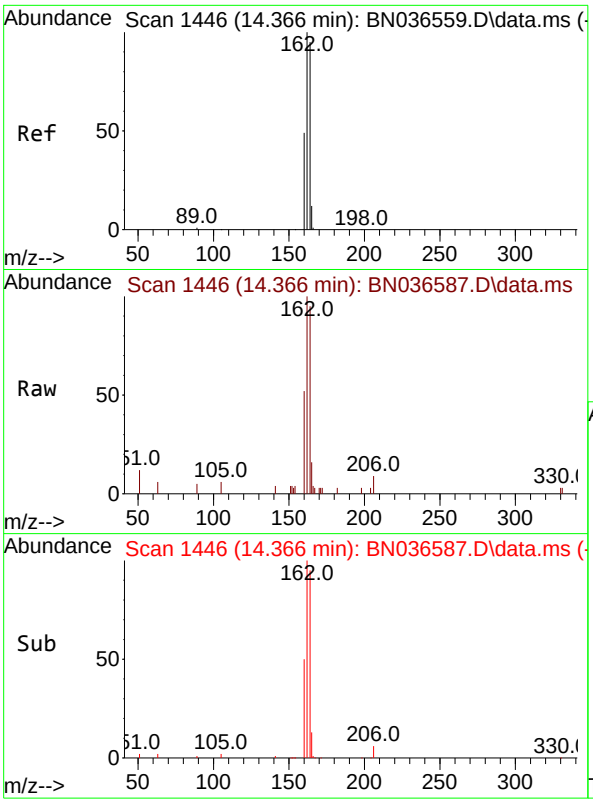


#11
2-Methylnaphthalene-d10
Concen: 0.327 ng
RT: 12.116 min Scan# 1143
Delta R.T. 0.005 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:152 Resp: 2100

Ion	Ratio	Lower	Upper
152	100		
151	21.0	17.0	25.6



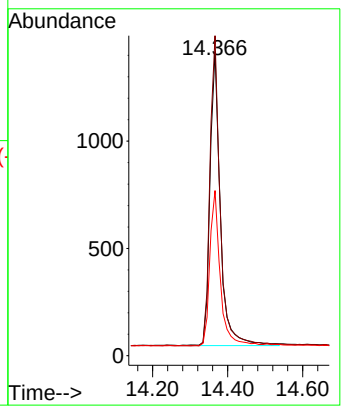


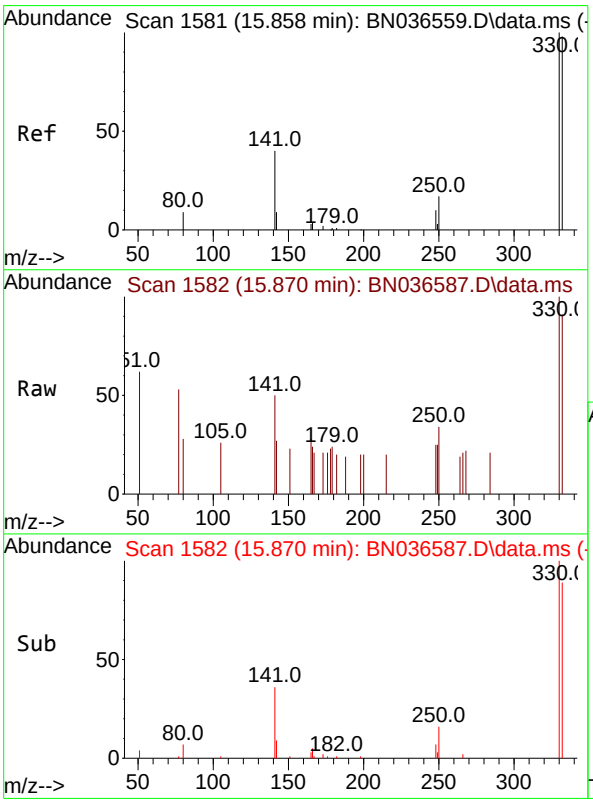
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion:164 Resp: 2633

Ion	Ratio	Lower	Upper
164	100		
162	105.4	84.2	126.2
160	54.4	42.2	63.2

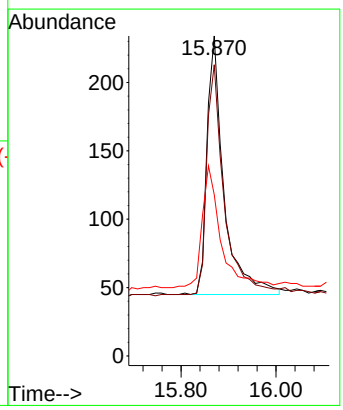


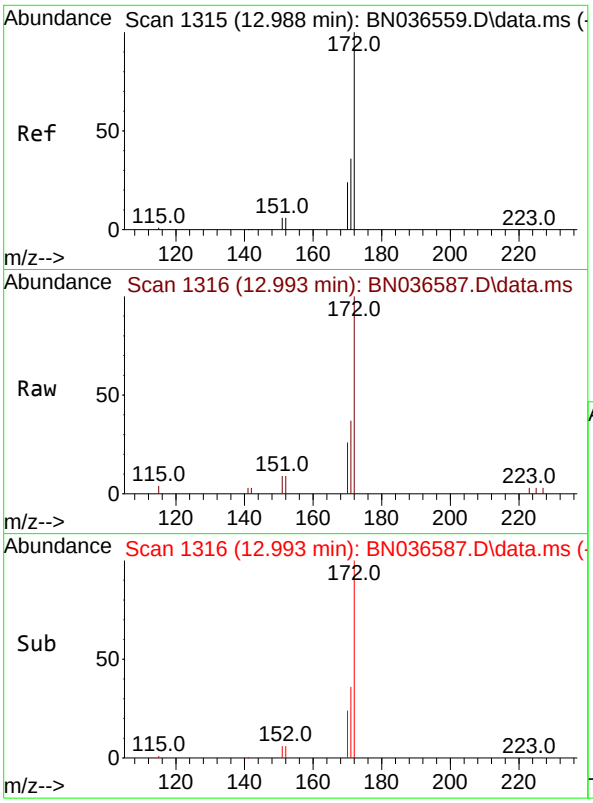


#14
2,4,6-Tribromophenol
Concen: 0.394 ng
RT: 15.870 min Scan# 1582
Delta R.T. 0.012 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:330 Resp: 471

Ion	Ratio	Lower	Upper
330	100		
332	90.4	75.2	112.8
141	51.8	43.4	65.2



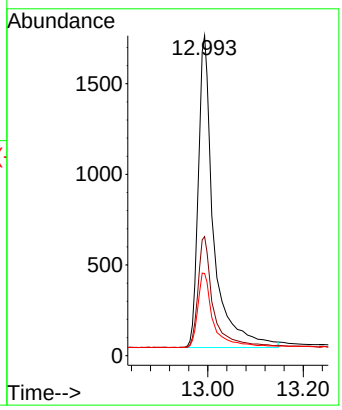


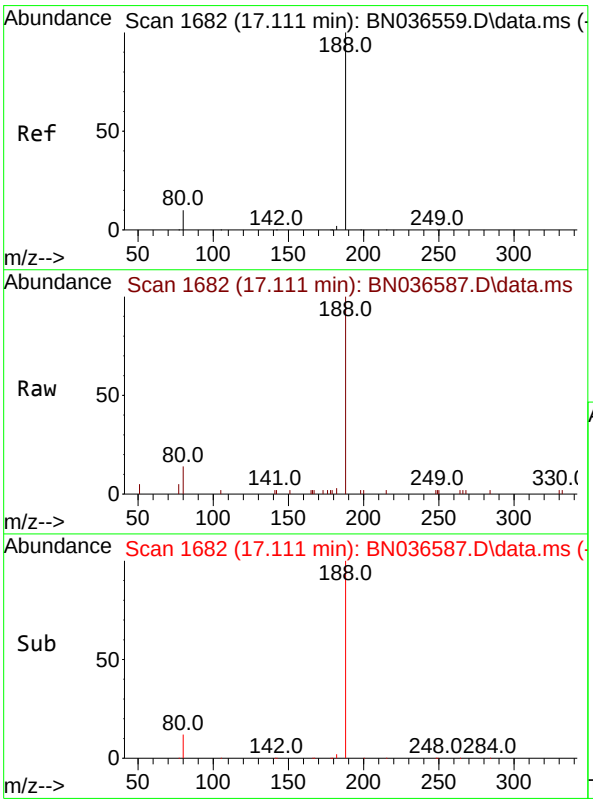
#15
2-Fluorobiphenyl
Concen: 0.322 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion:172 Resp: 4935

Ion	Ratio	Lower	Upper
172	100		
171	37.2	29.5	44.3
170	25.7	20.2	30.4

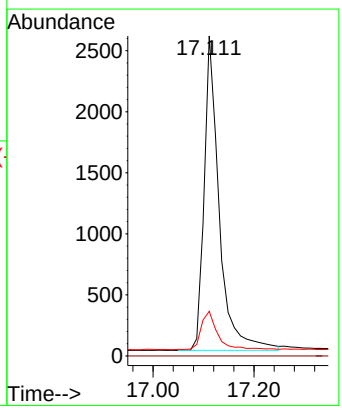


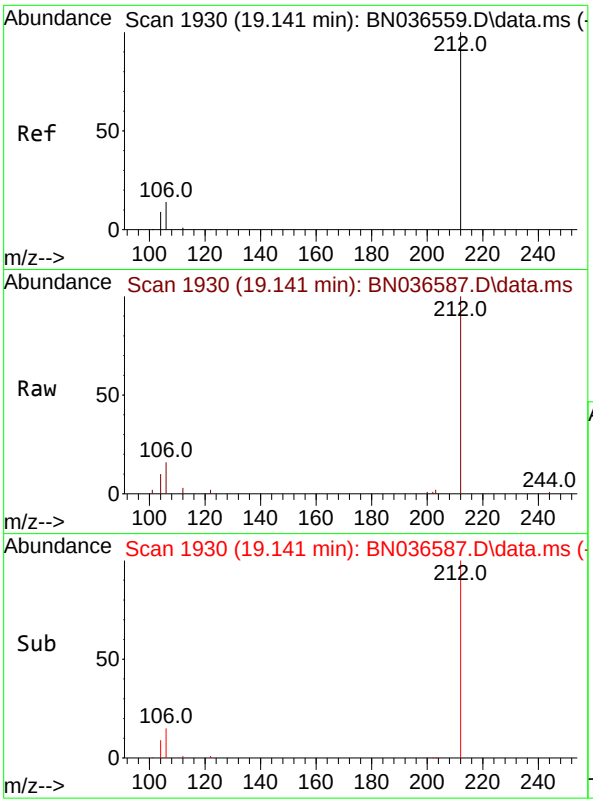


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:188 Resp: 5337

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	14.0	8.8	13.2#



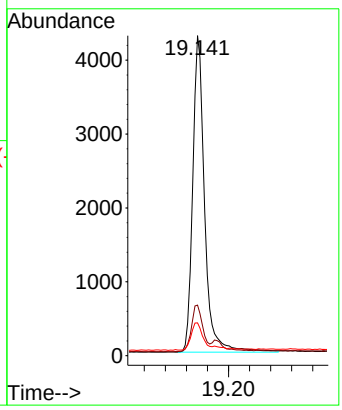


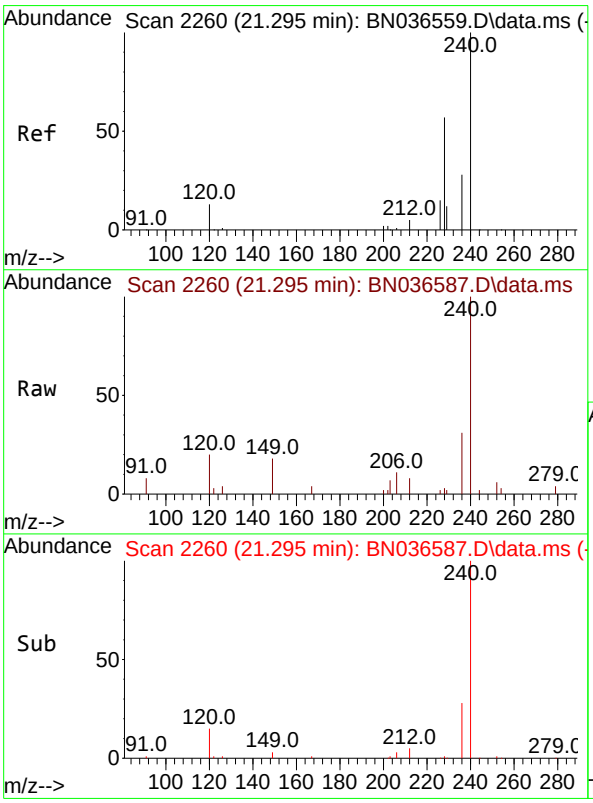
#27
Fluoranthene-d10
Concen: 0.492 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion:212 Resp: 6733

Ion	Ratio	Lower	Upper
212	100		
106	14.0	11.8	17.6
104	9.9	7.3	10.9

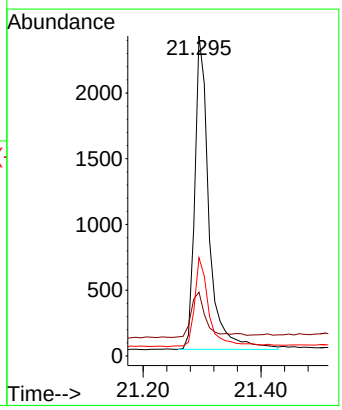


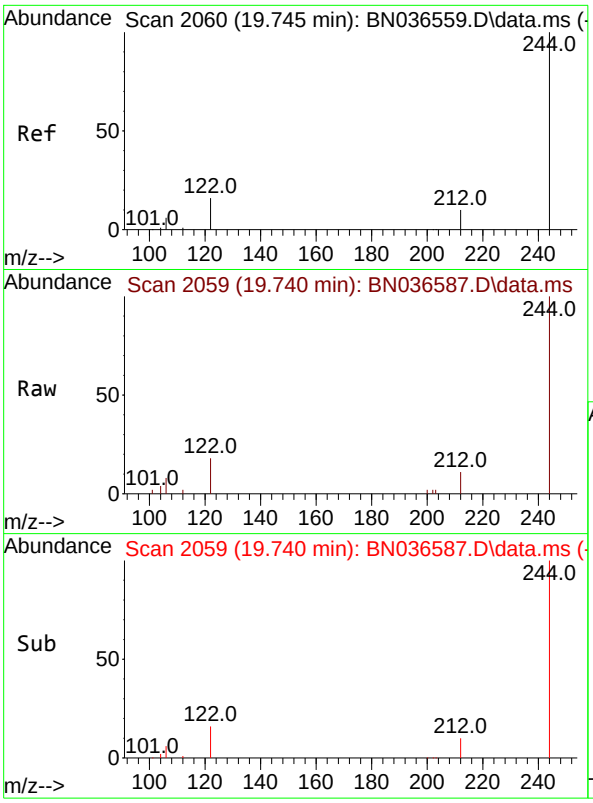


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:240 Resp: 4002

Ion	Ratio	Lower	Upper
240	100		
120	20.0	14.6	22.0
236	30.7	24.1	36.1



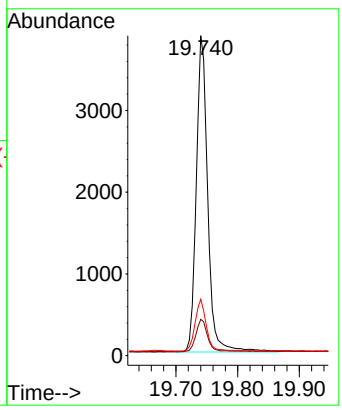


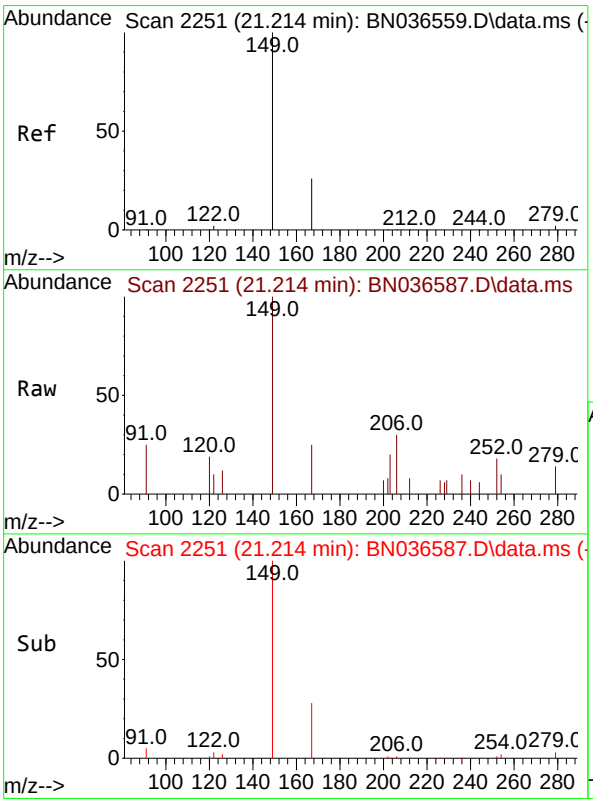
#31
Terphenyl-d14
Concen: 0.523 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion:244 Resp: 5015

Ion	Ratio	Lower	Upper
244	100		
212	11.4	9.6	14.4
122	17.6	13.9	20.9

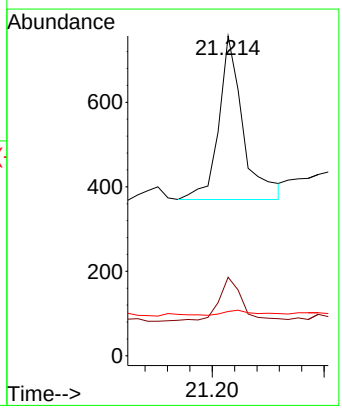


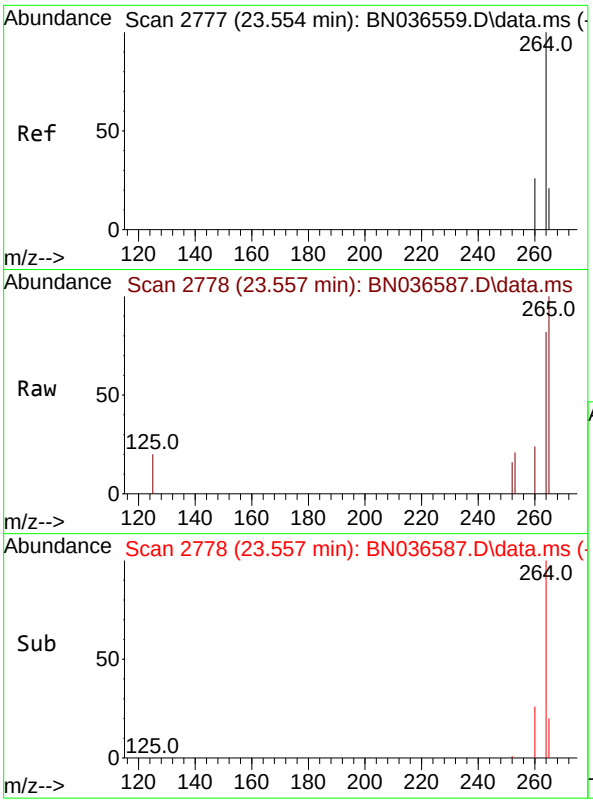


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.059 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Tgt Ion:149 Resp: 581

Ion	Ratio	Lower	Upper
149	100		
167	25.1	20.7	31.1
279	4.3	3.6	5.4



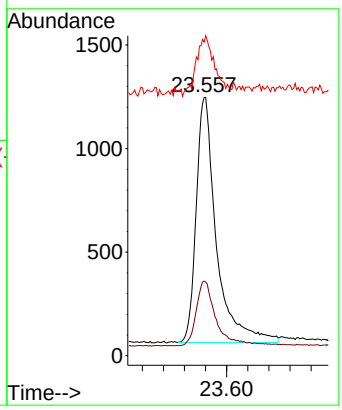


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036587.D
Acq: 11 Mar 2025 18:33

Instrument :
BNA_N
ClientSampleId :
FB01

Tgt Ion:264 Resp: 3149

Ion	Ratio	Lower	Upper
264	100		
260	28.9	22.6	33.8
265	121.5	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/07/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE104D2-20250307	SDG No.:	Q1531
Lab Sample ID:	Q1531-19	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036594.D	1	03/10/25 11:35	03/12/25 11:02	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	2.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.30		30 - 150		74%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		116%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		136%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1940	7.724				
1146-65-2	Naphthalene-d8	4250	10.509				
15067-26-2	Acenaphthene-d10	2600	14.366				
1517-22-2	Phenanthrene-d10	5270	17.111				
1719-03-5	Chrysene-d12	3680	21.295				
1520-96-3	Perylene-d12	3140	23.551				

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\BN031225\
Data File : BN036594.D
Acq On : 12 Mar 2025 11:02
Operator : RC/JU
Sample : Q1531-19
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Quant Time: Mar 12 11:24:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

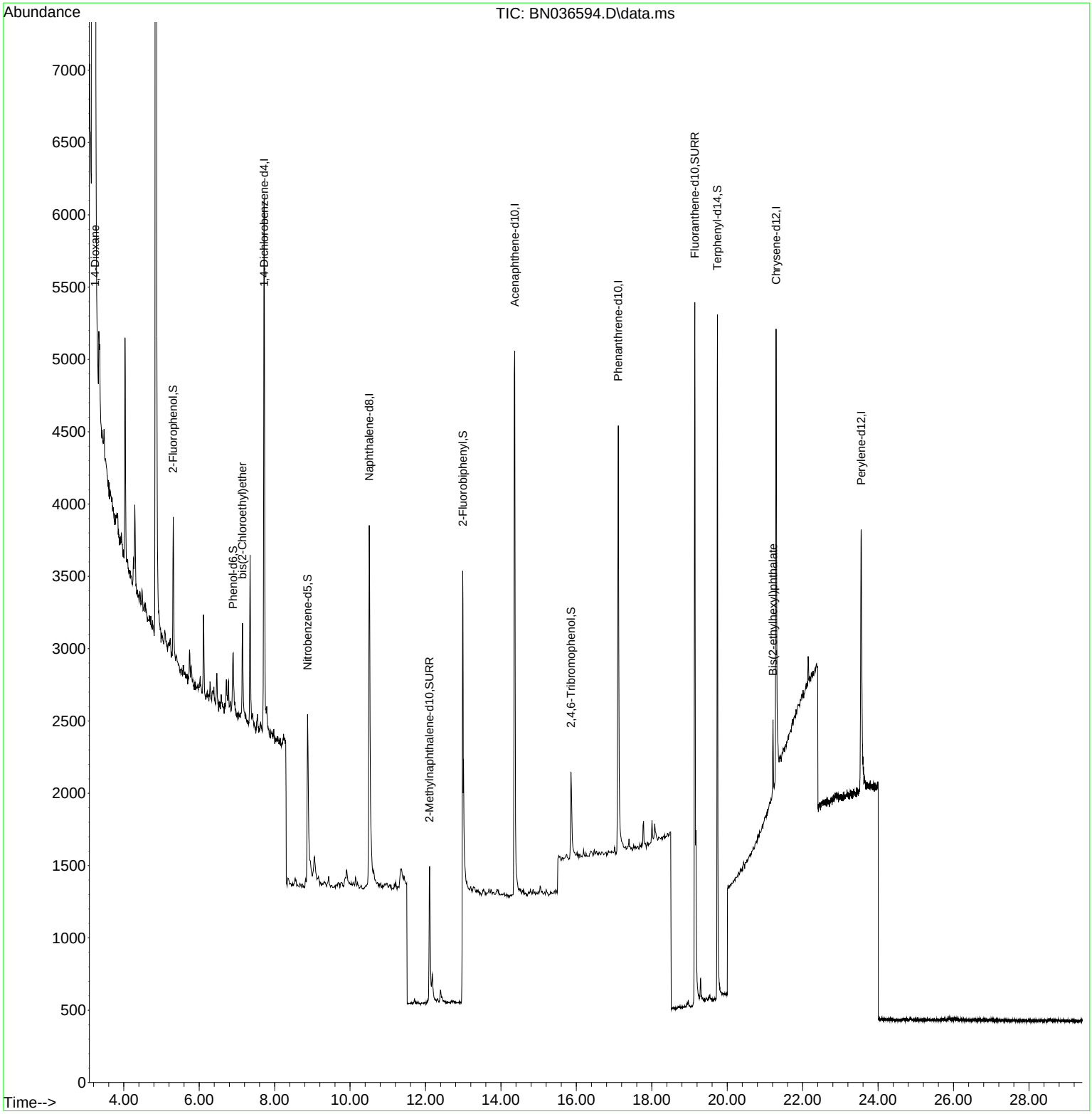
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	1944	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4249	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2599	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5272	0.400	ng	0.00
29) Chrysene-d12	21.295	240	3676	0.400	ng	0.00
35) Perylene-d12	23.551	264	3141	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	705	0.156	ng	0.00
5) Phenol-d6	6.901	99	439	0.078	ng	0.00
8) Nitrobenzene-d5	8.875	82	1399	0.303	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	1870	0.296	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	467	0.396	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	4898	0.324	ng	0.00
27) Fluoranthene-d10	19.141	212	6264	0.464	ng	0.00
31) Terphenyl-d14	19.740	244	4789	0.544	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	4958	2.299	ng	# 92
6) bis(2-Chloroethyl)ether	7.147	93	509	0.088	ng	95
34) Bis(2-ethylhexyl)phtha...	21.214	149	560	0.062	ng	96

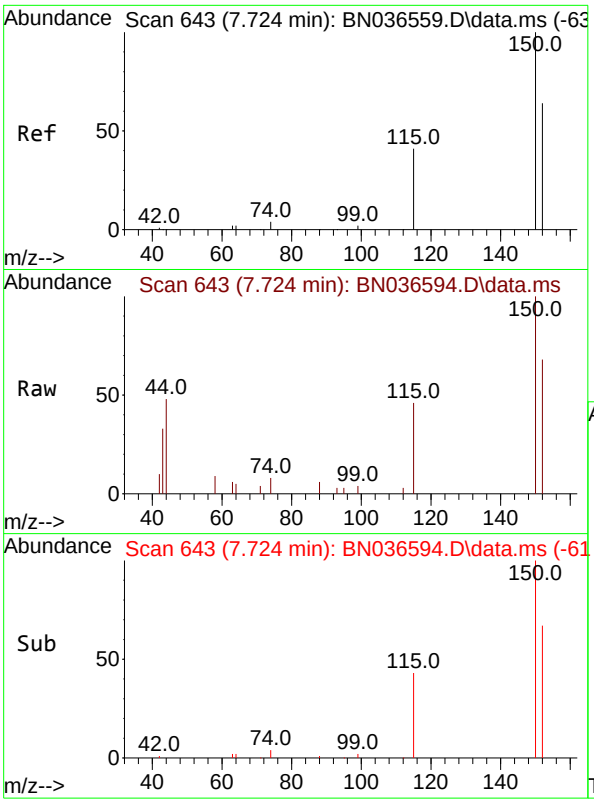
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036594.D
Acq On : 12 Mar 2025 11:02
Operator : RC/JU
Sample : Q1531-19
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Quant Time: Mar 12 11:24:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



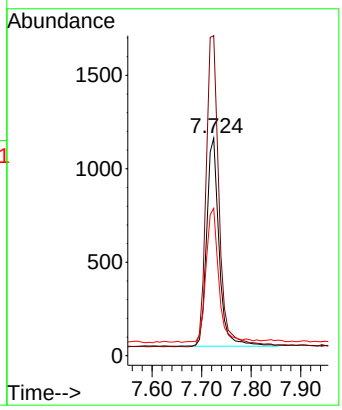


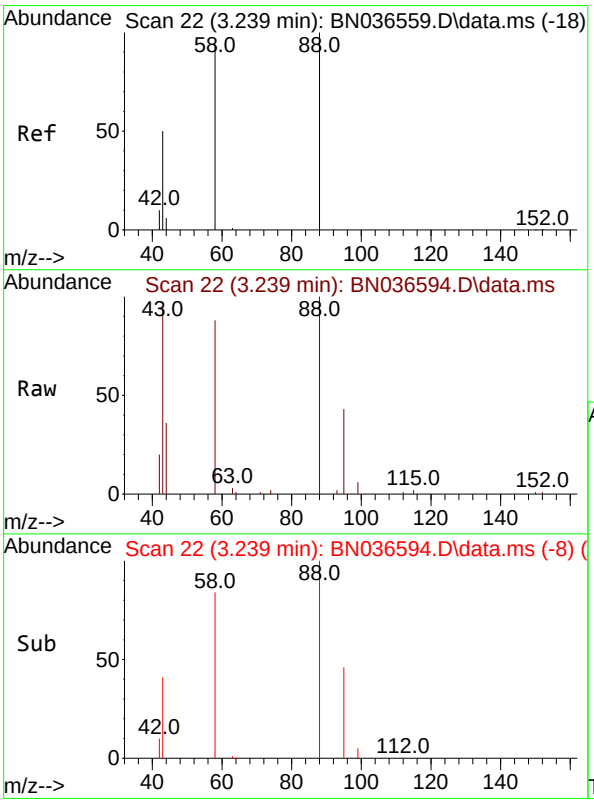
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:152 Resp: 1944

Ion	Ratio	Lower	Upper
152	100		
150	147.1	123.7	185.5
115	67.8	54.3	81.5

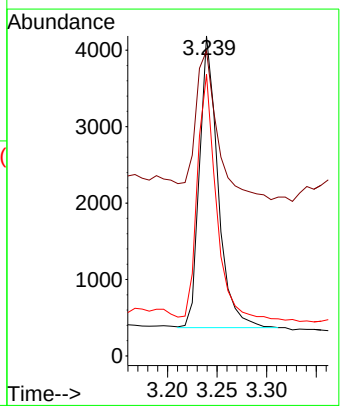


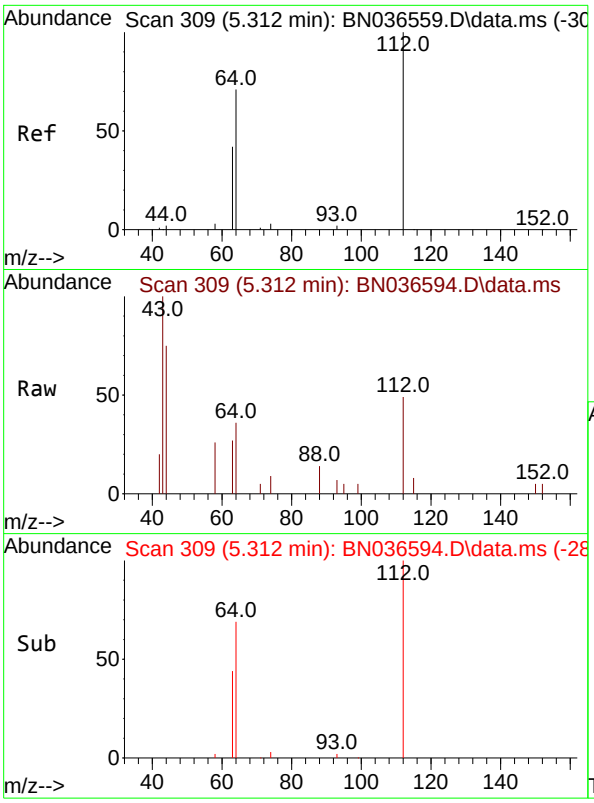


#2
1,4-Dioxane
Concen: 2.299 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion: 88 Resp: 4958

Ion	Ratio	Lower	Upper
88	100		
43	61.4	37.8	56.8#
58	84.6	67.4	101.2



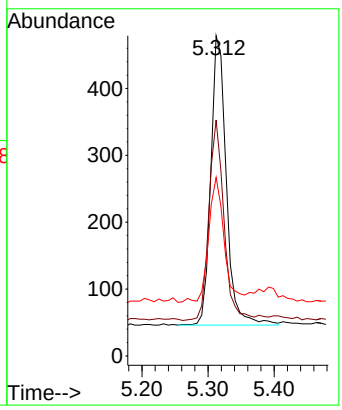


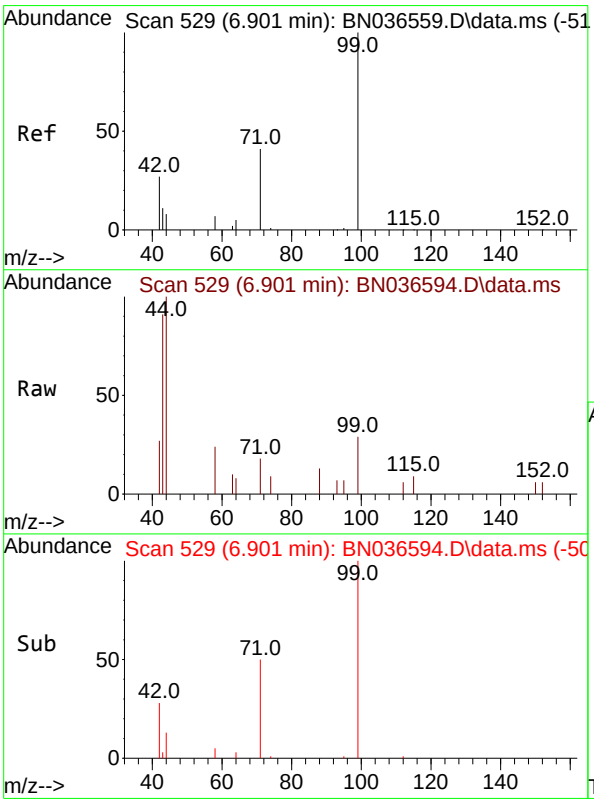
#4
2-Fluorophenol
Concen: 0.156 ng
RT: 5.312 min Scan# 3(
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:112 Resp: 705

Ion	Ratio	Lower	Upper
112	100		
64	66.8	53.1	79.7
63	42.7	31.8	47.8

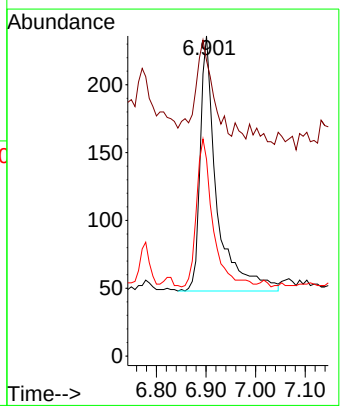


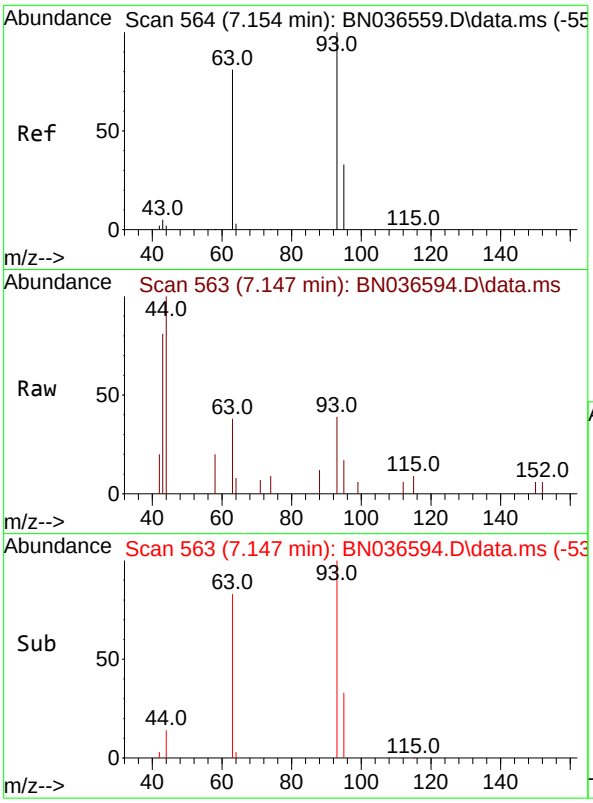


#5
Phenol-d6
Concen: 0.078 ng
RT: 6.901 min Scan# 529
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion: 99 Resp: 439

Ion	Ratio	Lower	Upper
99	100		
42	34.9	26.5	39.7
71	57.2	34.1	51.1#



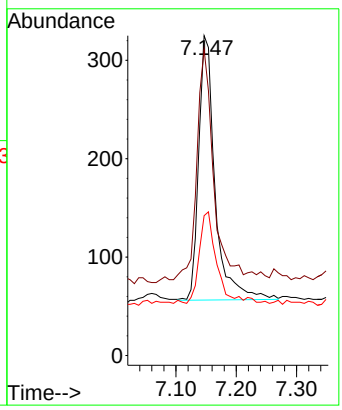


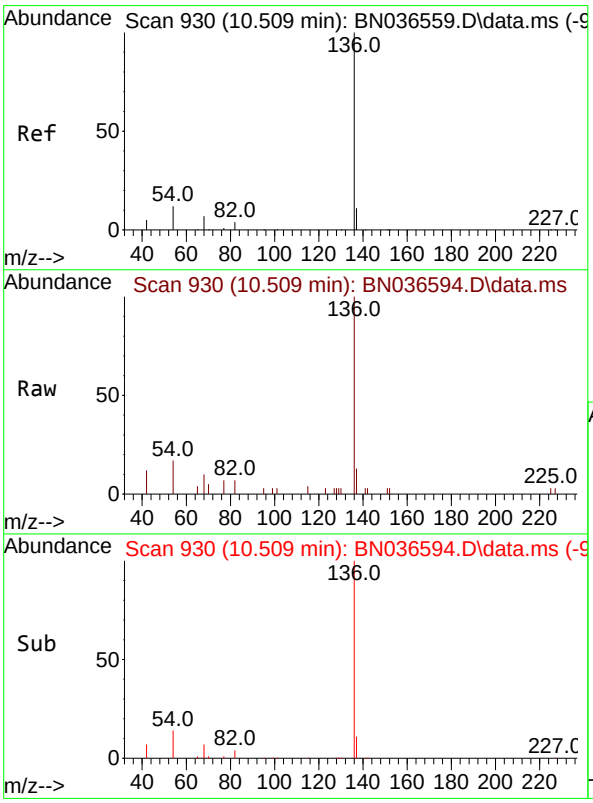
#6
bis(2-Chloroethyl)ether
Concen: 0.088 ng
RT: 7.147 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion: 93 Resp: 509

Ion	Ratio	Lower	Upper
93	100		
63	87.4	67.7	101.5
95	37.9	25.6	38.4

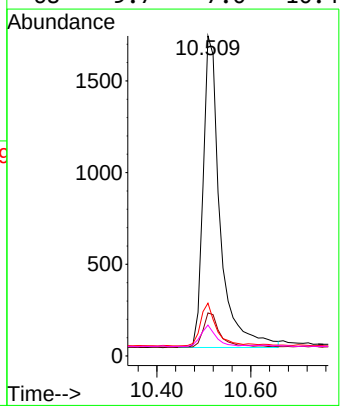


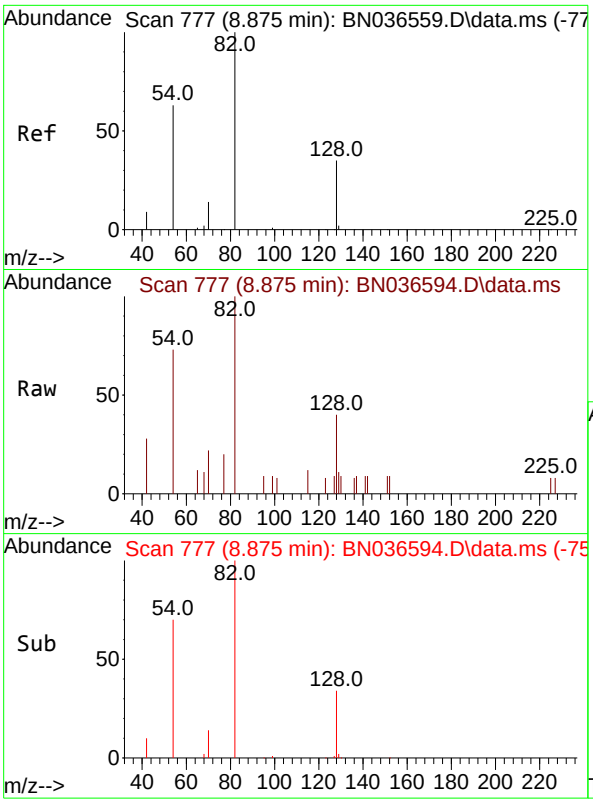


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion:136 Resp: 4249

Ion	Ratio	Lower	Upper
136	100		
137	13.5	10.3	15.5
54	16.5	11.5	17.3
68	9.7	7.0	10.4



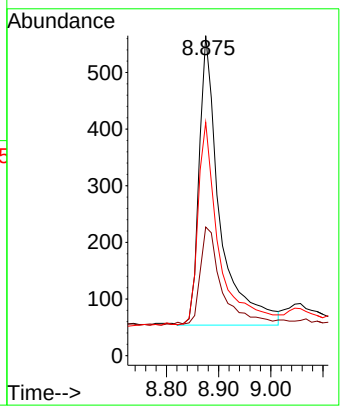


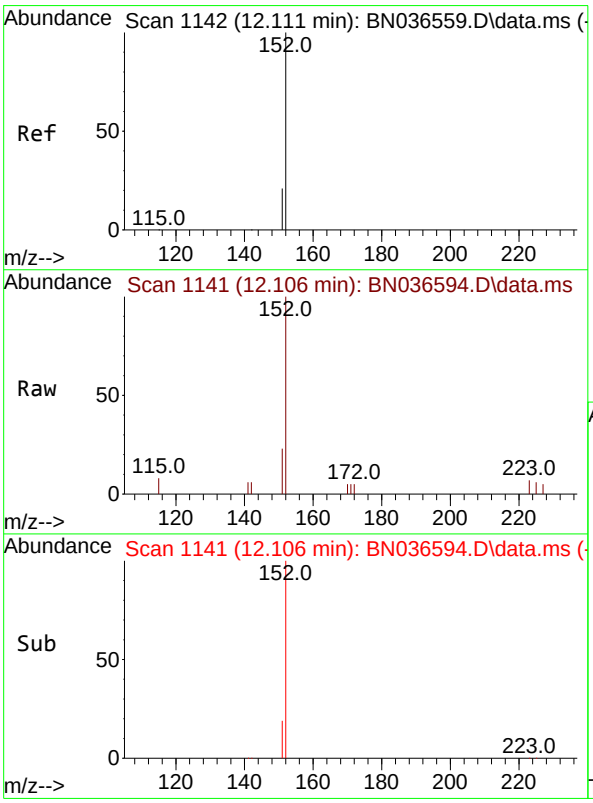
#8
Nitrobenzene-d5
Concen: 0.303 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion: 82 Resp: 1399

Ion	Ratio	Lower	Upper
82	100		
128	40.2	30.6	45.8
54	72.9	52.2	78.4

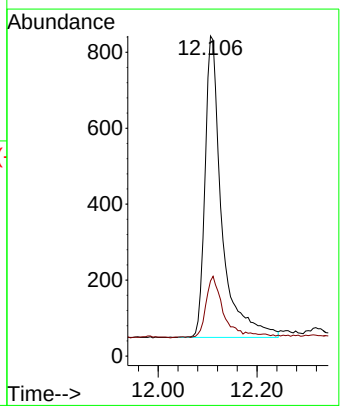


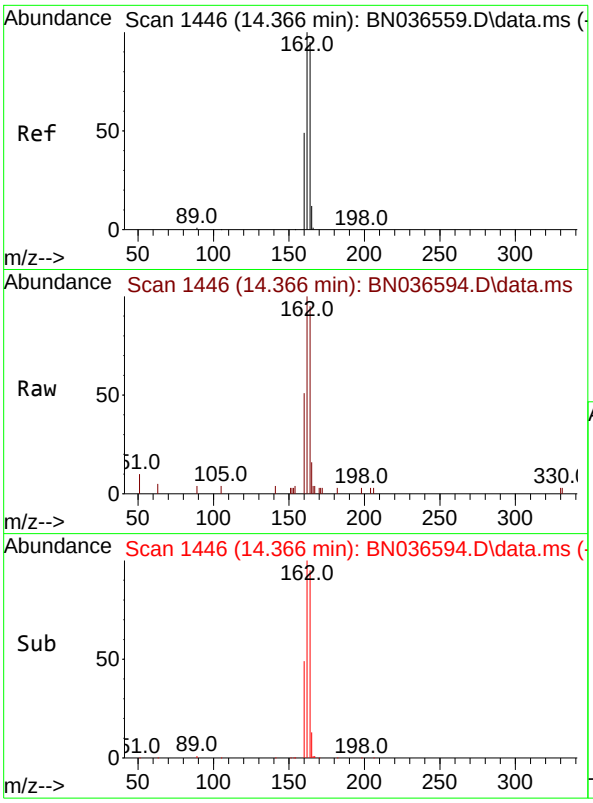


#11
2-Methylnaphthalene-d10
Concen: 0.296 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.005 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion:152 Resp: 1870

Ion	Ratio	Lower	Upper
152	100		
151	21.1	17.0	25.6



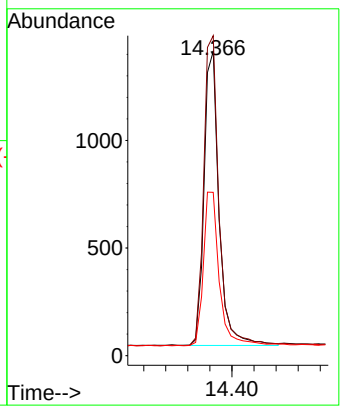


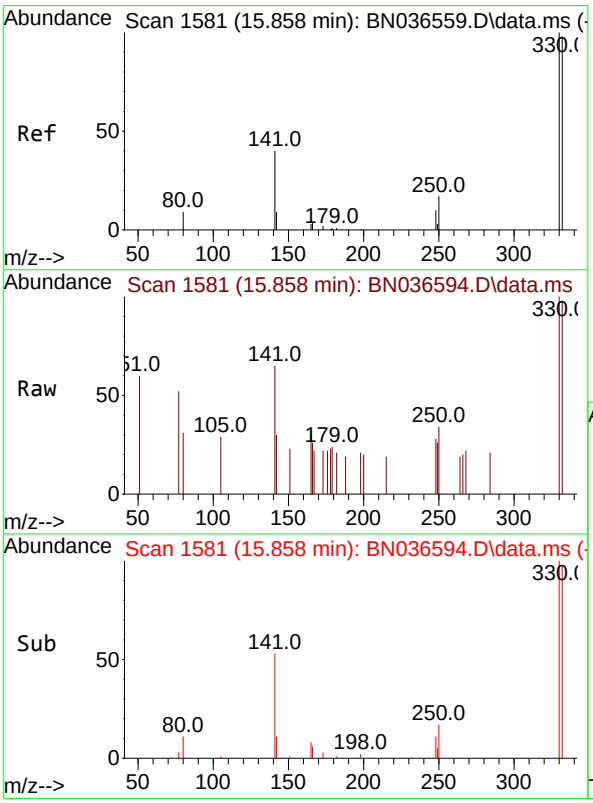
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:164 Resp: 2599

Ion	Ratio	Lower	Upper
164	100		
162	105.1	84.2	126.2
160	53.6	42.2	63.2

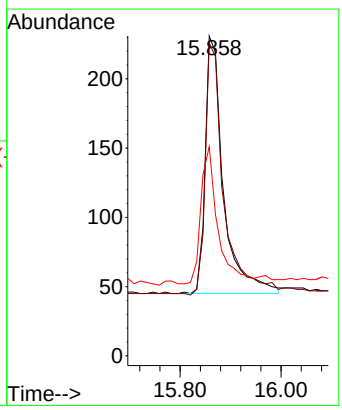


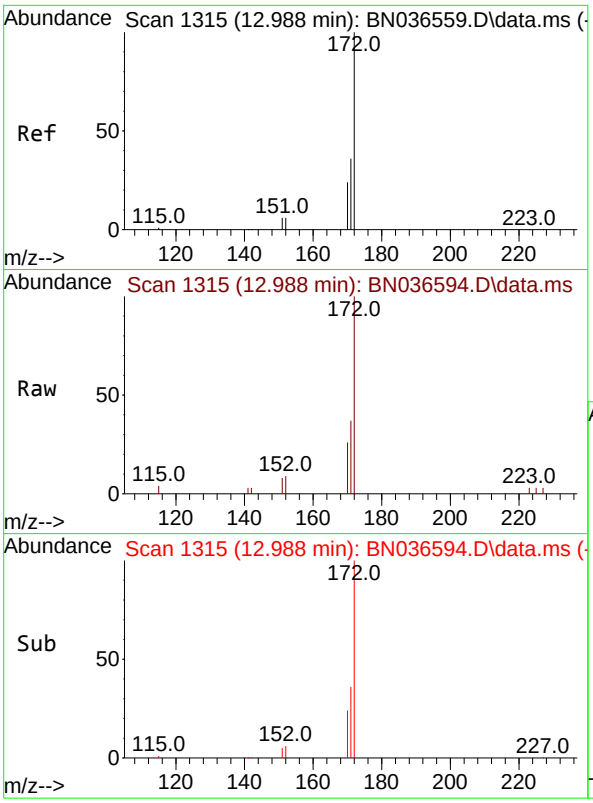


#14
2,4,6-Tribromophenol
Concen: 0.396 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion:330 Resp: 467

Ion	Ratio	Lower	Upper
330	100		
332	97.4	75.2	112.8
141	49.7	43.4	65.2



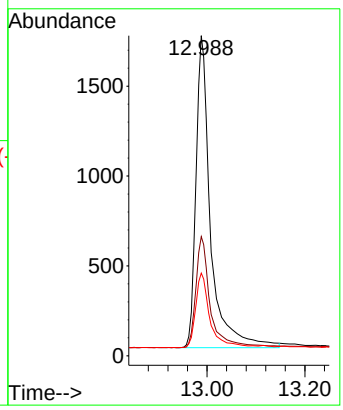


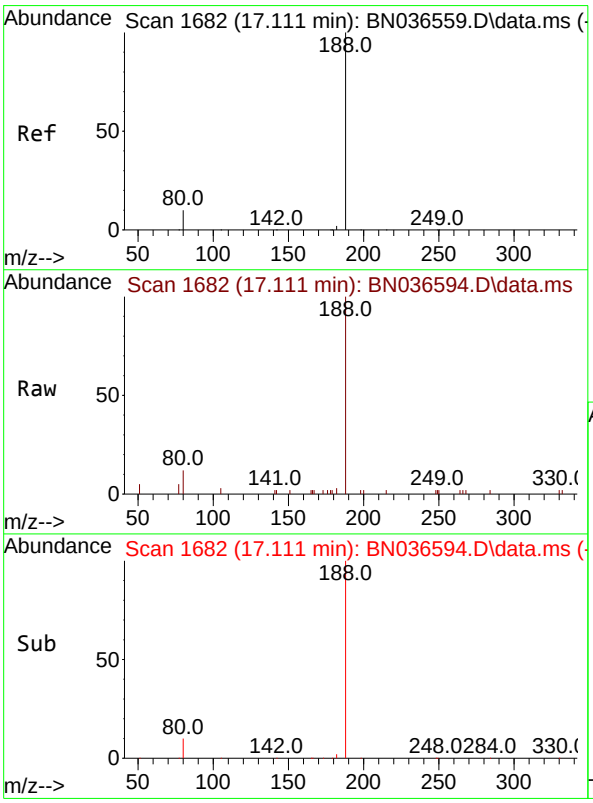
#15
2-Fluorobiphenyl
Concen: 0.324 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:172 Resp: 4898

Ion	Ratio	Lower	Upper
172	100		
171	37.2	29.5	44.3
170	25.8	20.2	30.4

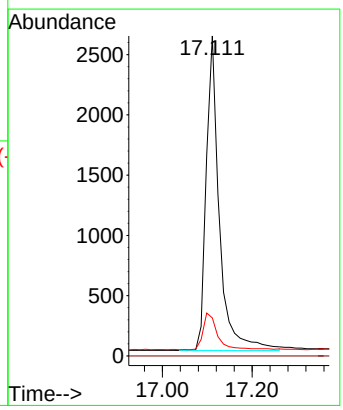


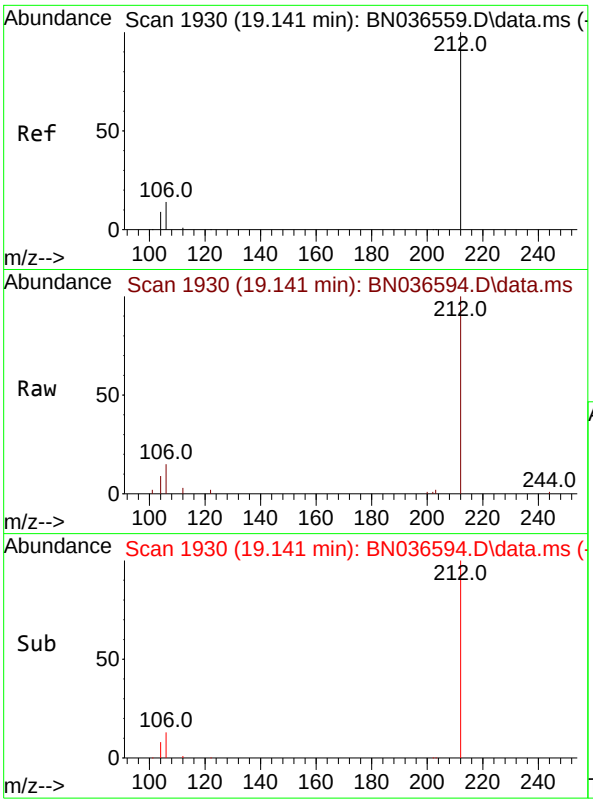


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion:188 Resp: 5272

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.9	8.8	13.2



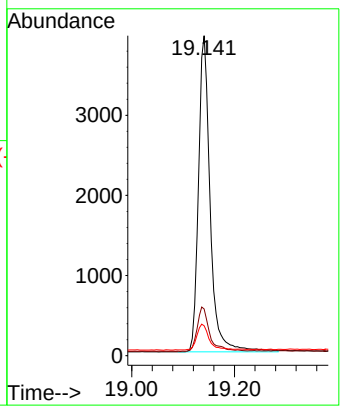


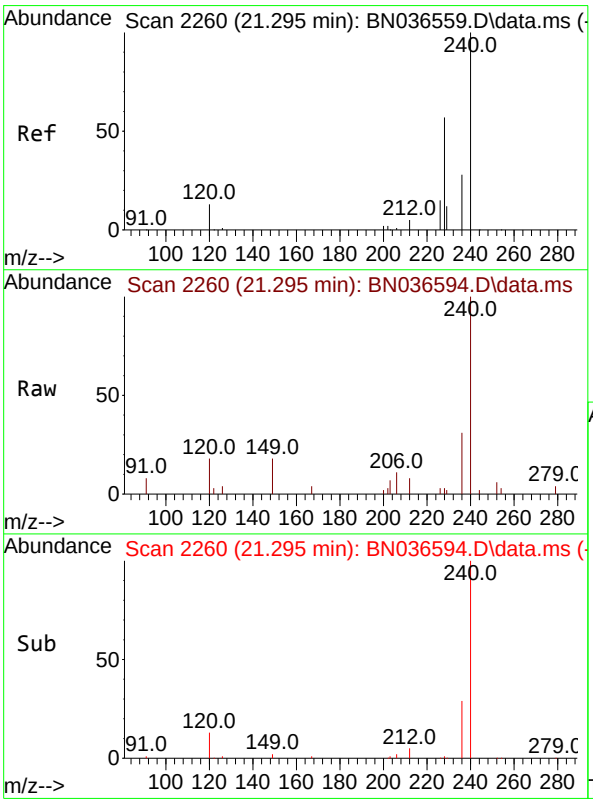
#27
Fluoranthene-d10
Concen: 0.464 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:212 Resp: 6264

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.8	17.6
104	8.5	7.3	10.9

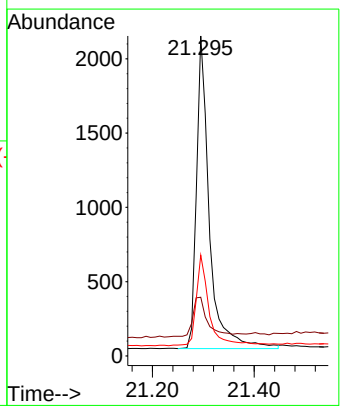


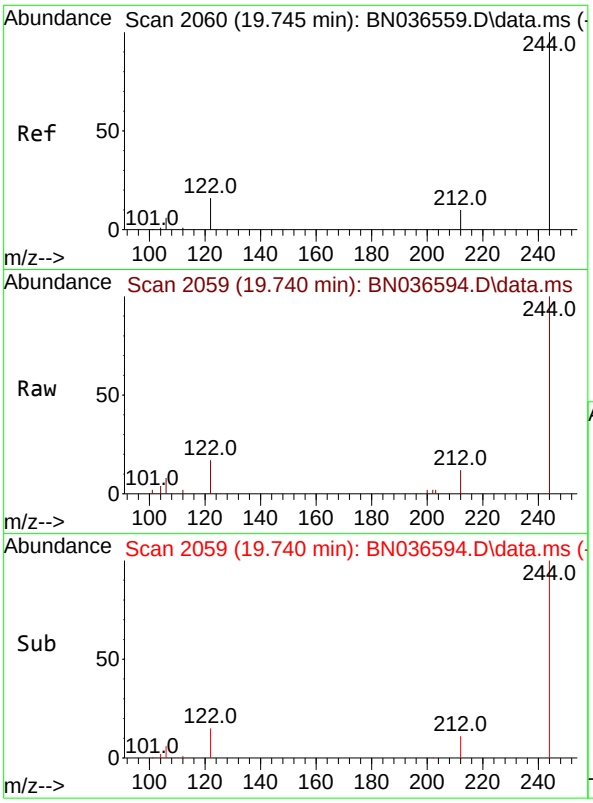


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion:240 Resp: 3676

Ion	Ratio	Lower	Upper
240	100		
120	18.3	14.6	22.0
236	31.5	24.1	36.1



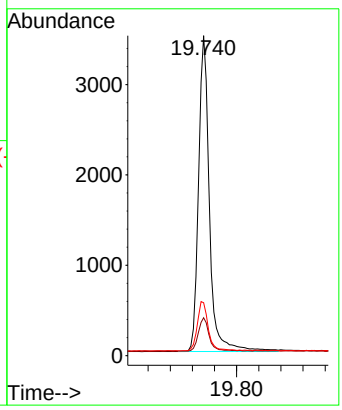


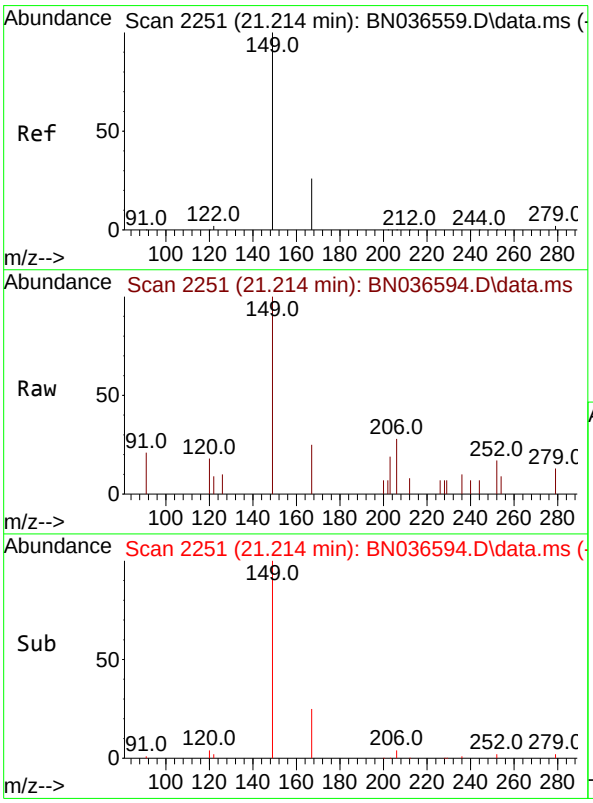
#31
Terphenyl-d14
Concen: 0.544 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:244 Resp: 4789

Ion	Ratio	Lower	Upper
244	100		
212	11.9	9.6	14.4
122	16.6	13.9	20.9

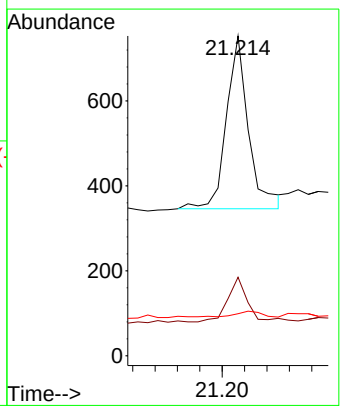


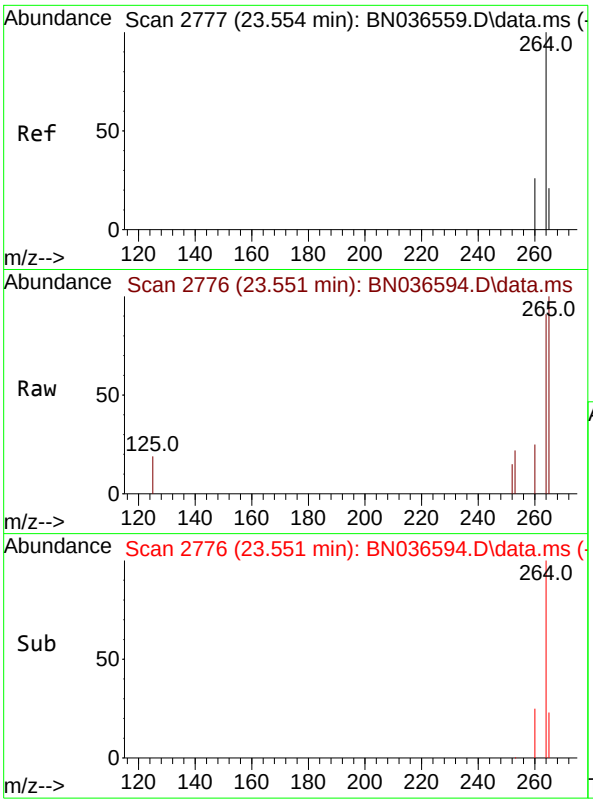


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.062 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Tgt Ion:149 Resp: 560

Ion	Ratio	Lower	Upper
149	100		
167	23.6	20.7	31.1
279	3.9	3.6	5.4



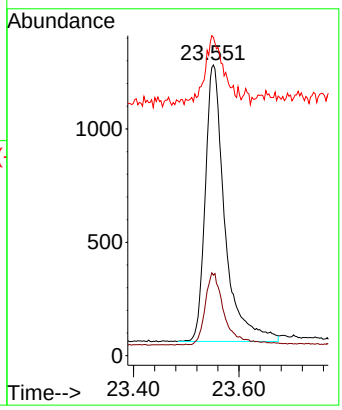


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036594.D
Acq: 12 Mar 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RE104D2-20250307

Tgt Ion:264 Resp: 3141

Ion	Ratio	Lower	Upper
264	100		
260	27.7	22.6	33.8
265	109.5	88.1	132.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/07/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE104D3-20250307	SDG No.:	Q1531
Lab Sample ID:	Q1531-20	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036595.D	1	03/10/25 11:35	03/12/25 11:38	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.33		30 - 150		82%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		116%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.50		58 - 132		125%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2340	7.724				
1146-65-2	Naphthalene-d8	5170	10.509				
15067-26-2	Acenaphthene-d10	3130	14.366				
1517-22-2	Phenanthrene-d10	6560	17.111				
1719-03-5	Chrysene-d12	4900	21.295				
1520-96-3	Perylene-d12	4320	23.552				

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\BN031225\
Data File : BN036595.D
Acq On : 12 Mar 2025 11:38
Operator : RC/JU
Sample : Q1531-20
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Quant Time: Mar 12 12:23:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

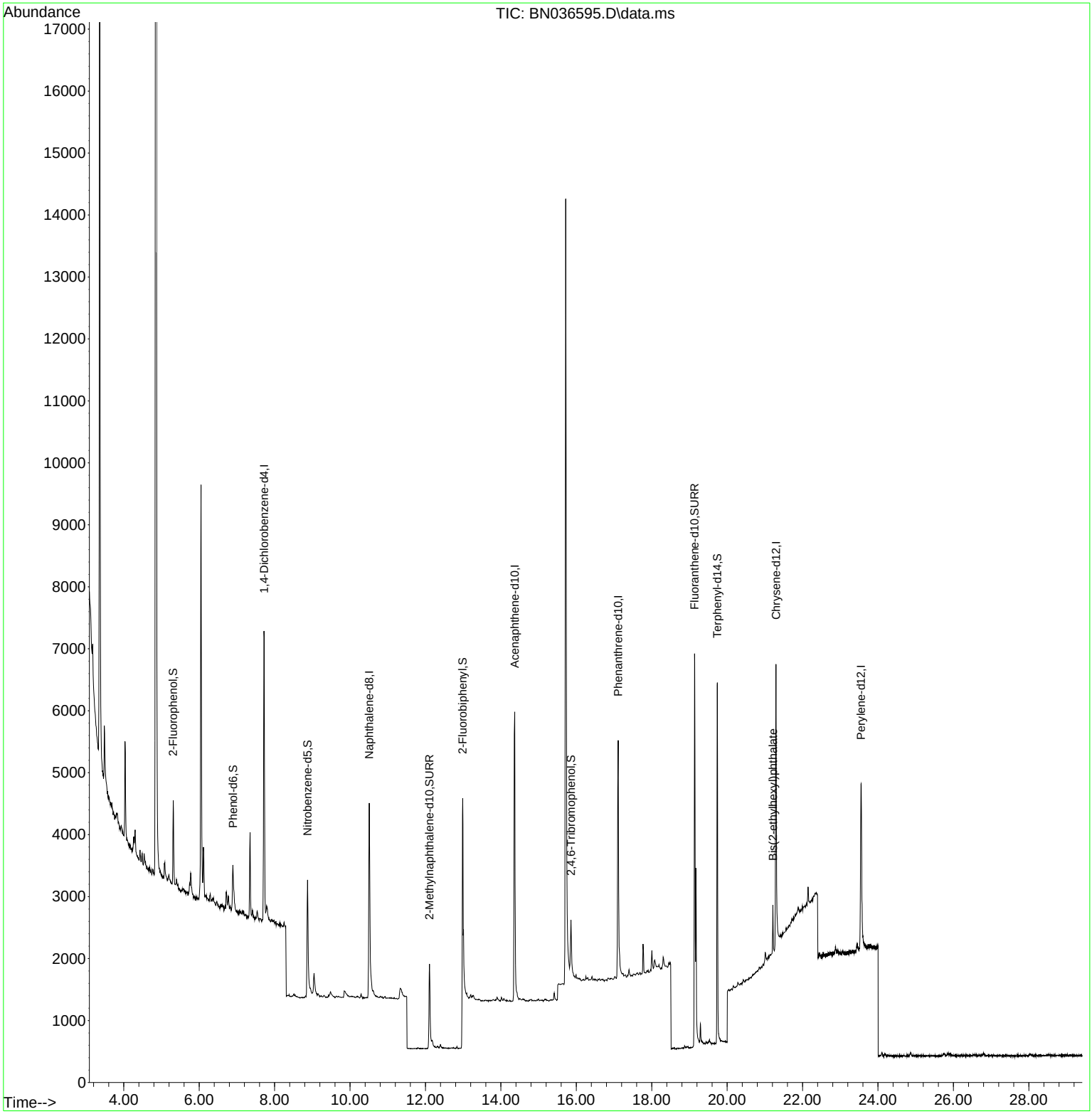
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2341	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5174	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	3132	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	6559	0.400	ng	0.00
29) Chrysene-d12	21.295	240	4896	0.400	ng	0.00
35) Perylene-d12	23.552	264	4323	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	912	0.167	ng	0.00
5) Phenol-d6	6.901	99	625	0.093	ng	0.00
8) Nitrobenzene-d5	8.875	82	1972	0.350	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2534	0.329	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	571	0.402	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	6503	0.357	ng	0.00
27) Fluoranthene-d10	19.136	212	7836	0.466	ng	0.00
31) Terphenyl-d14	19.740	244	5872	0.501	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.214	149	711	0.059	ng	100

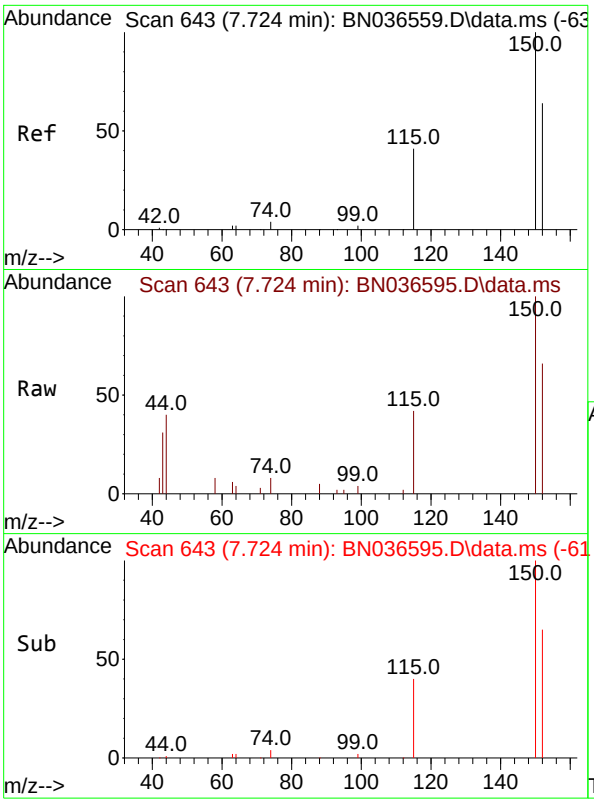
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036595.D
Acq On : 12 Mar 2025 11:38
Operator : RC/JU
Sample : Q1531-20
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Quant Time: Mar 12 12:23:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



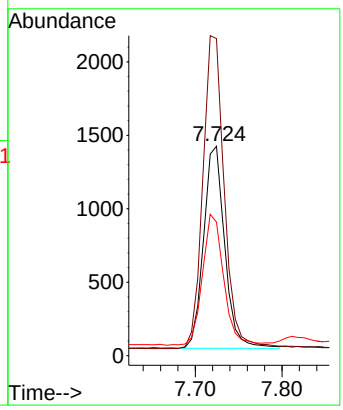


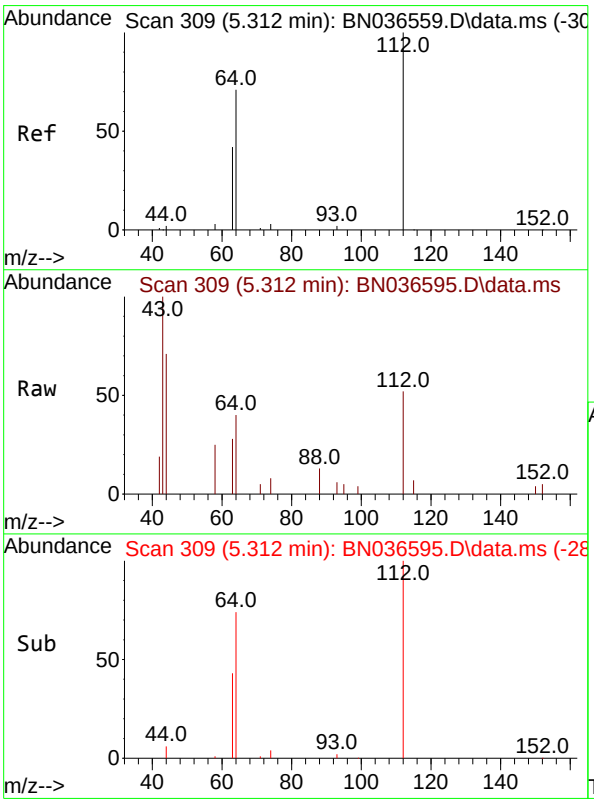
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion:152 Resp: 2341

Ion	Ratio	Lower	Upper
152	100		
150	151.3	123.7	185.5
115	63.8	54.3	81.5

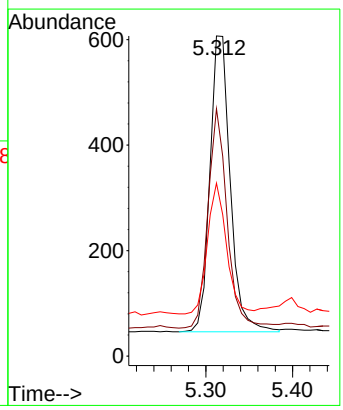


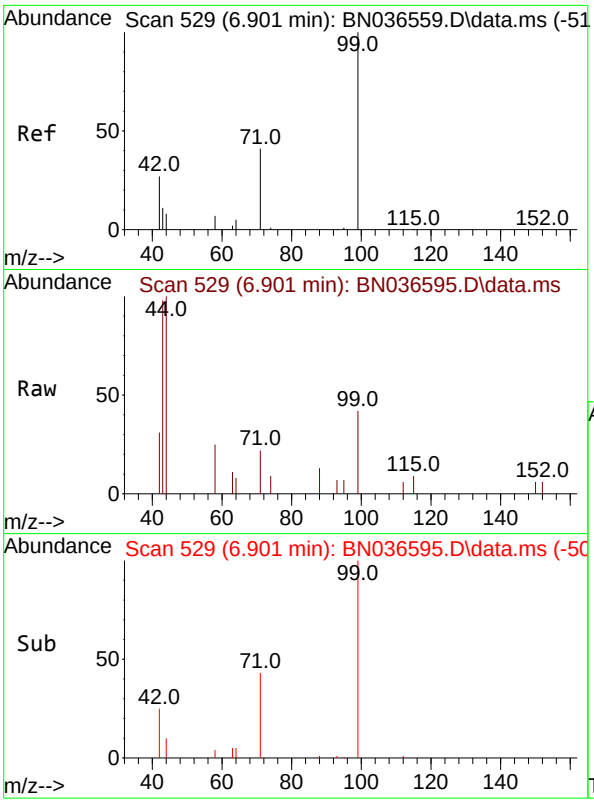


#4
2-Fluorophenol
Concen: 0.167 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:112 Resp: 912

Ion	Ratio	Lower	Upper
112	100		
64	70.0	53.1	79.7
63	41.4	31.8	47.8



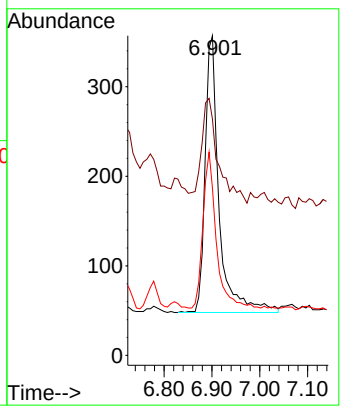


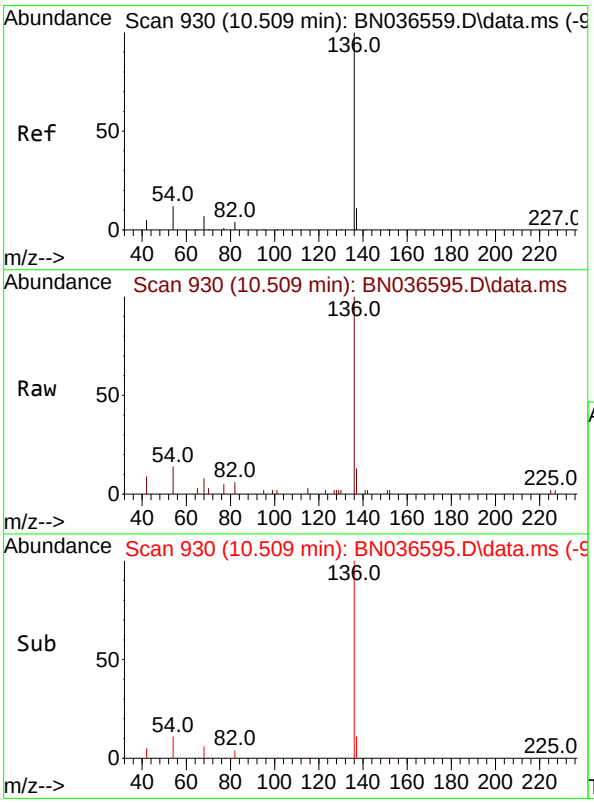
#5
Phenol-d6
Concen: 0.093 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion: 99 Resp: 625

Ion	Ratio	Lower	Upper
99	100		
42	45.9	26.5	39.7#
71	54.1	34.1	51.1#

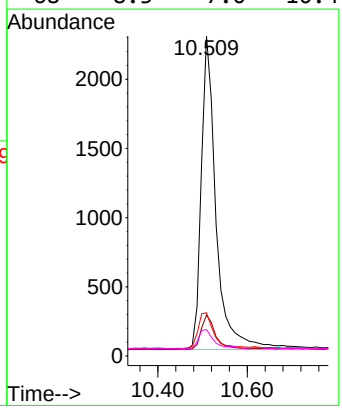


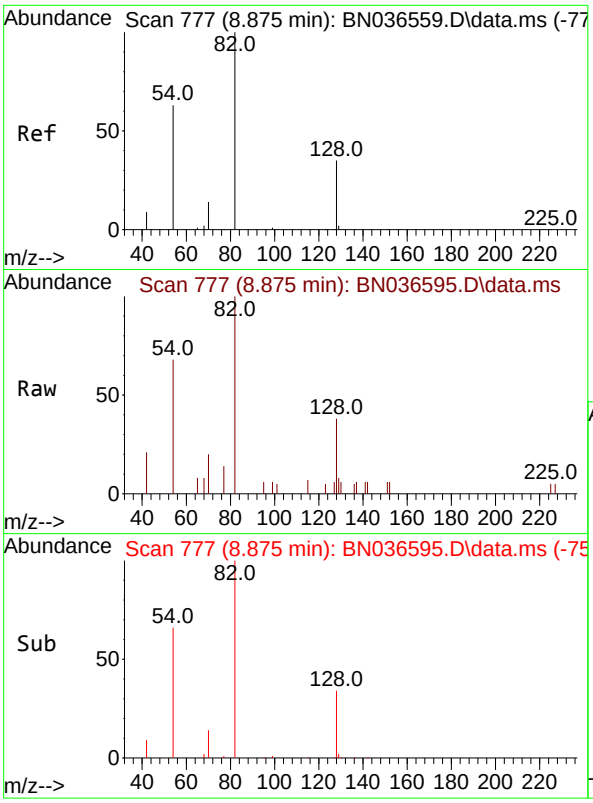


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:136 Resp: 5174

Ion	Ratio	Lower	Upper
136	100		
137	12.8	10.3	15.5
54	13.5	11.5	17.3
68	8.3	7.0	10.4



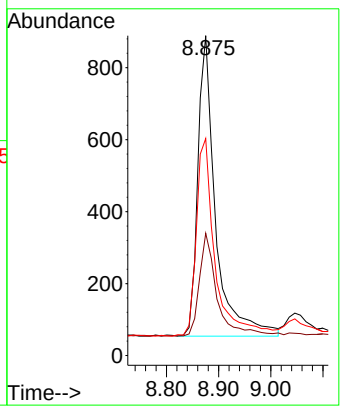


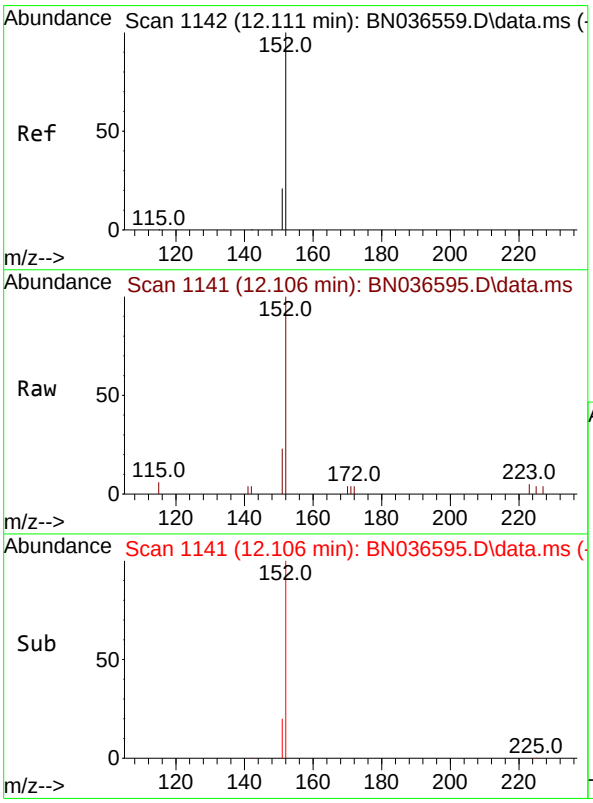
#8
Nitrobenzene-d5
Concen: 0.350 ng
RT: 8.875 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion: 82 Resp: 1972

Ion	Ratio	Lower	Upper
82	100		
128	38.2	30.6	45.8
54	67.8	52.2	78.4

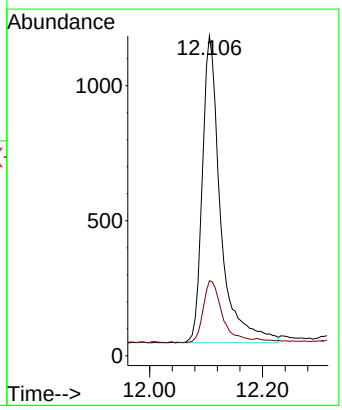


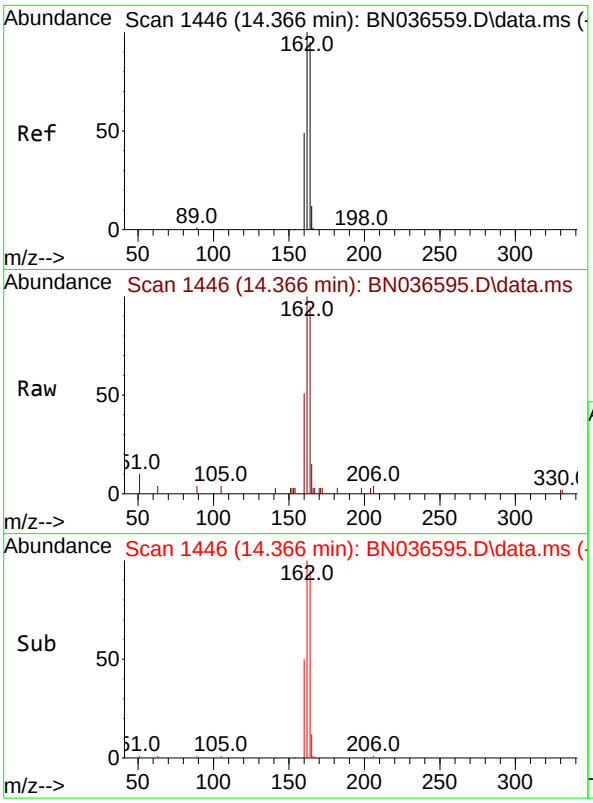


#11
2-Methylnaphthalene-d10
Concen: 0.329 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.005 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:152 Resp: 2534

Ion	Ratio	Lower	Upper
152	100		
151	21.2	17.0	25.6



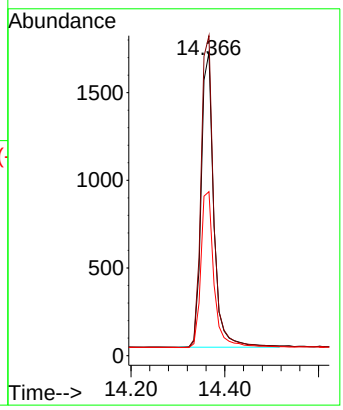


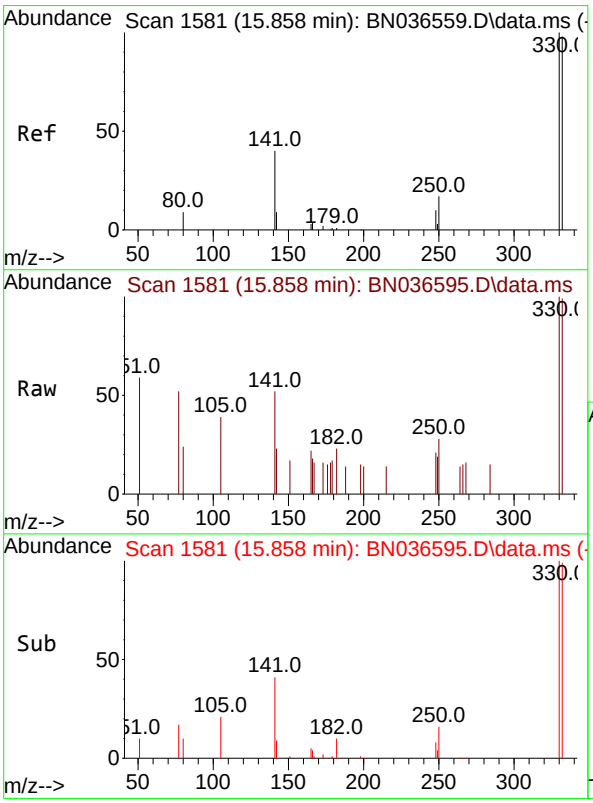
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion:164 Resp: 3132

Ion	Ratio	Lower	Upper
164	100		
162	105.6	84.2	126.2
160	54.1	42.2	63.2

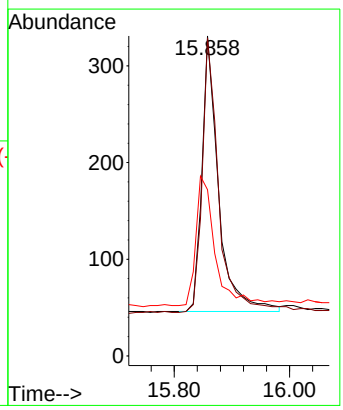


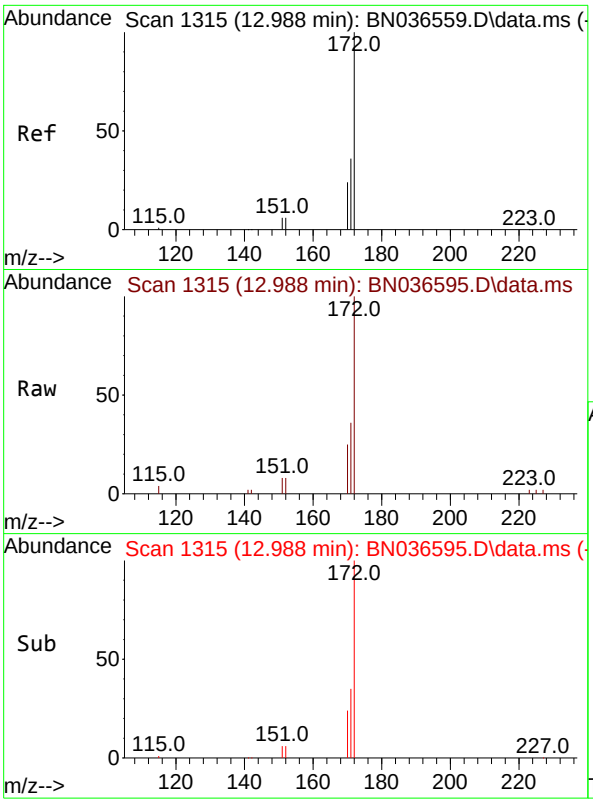


#14
2,4,6-Tribromophenol
Concen: 0.402 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:330 Resp: 571

Ion	Ratio	Lower	Upper
330	100		
332	100.4	75.2	112.8
141	56.4	43.4	65.2



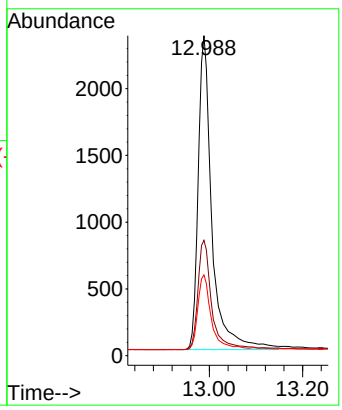


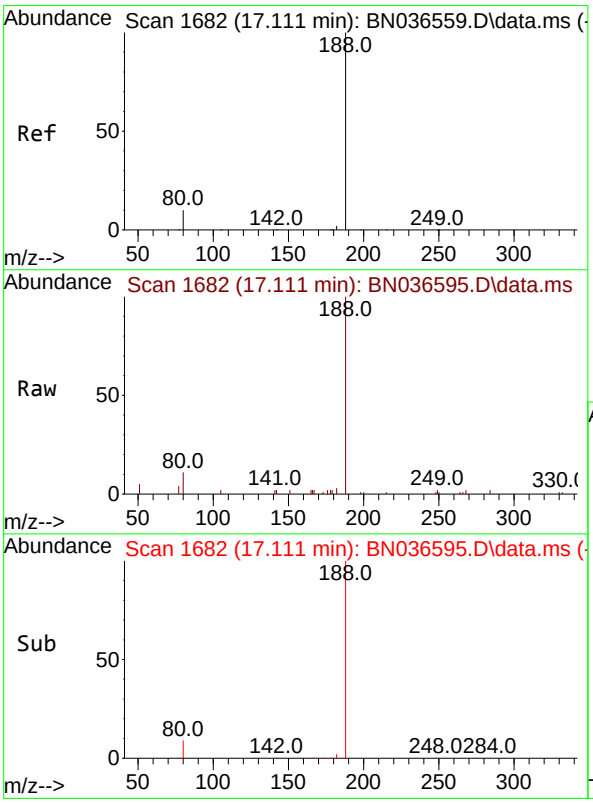
#15
2-Fluorobiphenyl
Concen: 0.357 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion:172 Resp: 6503

Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	25.2	20.2	30.4

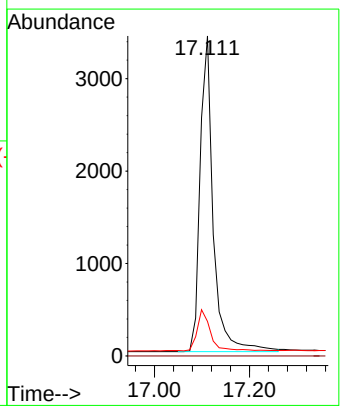


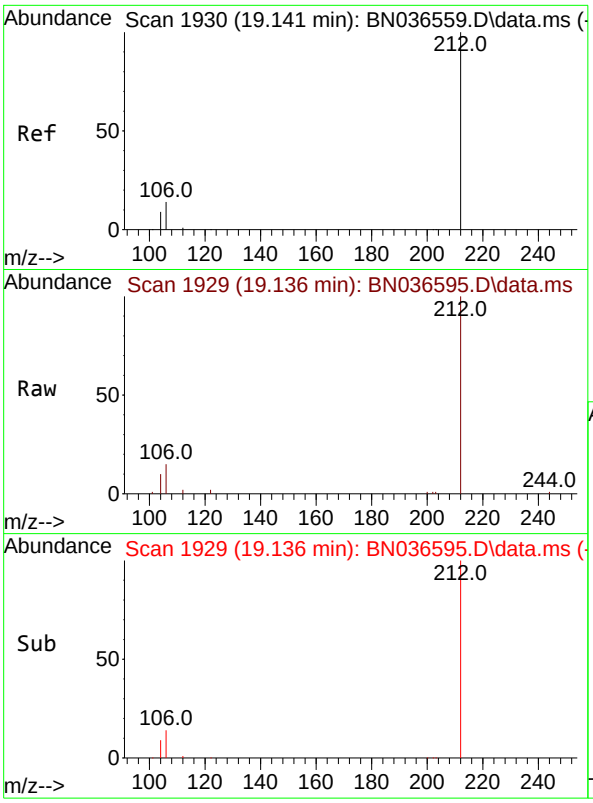


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1682
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:188 Resp: 6559

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.8	8.8	13.2



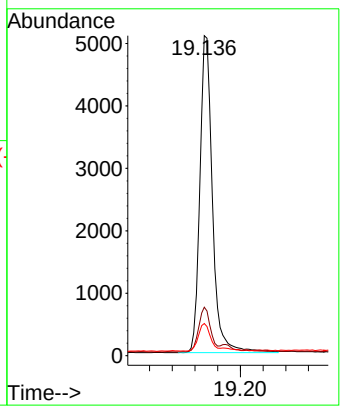


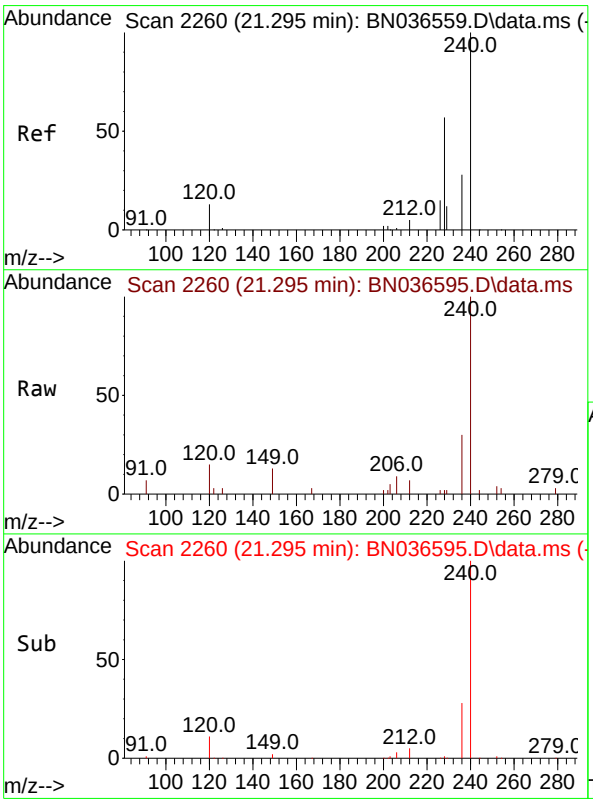
#27
Fluoranthene-d10
Concen: 0.466 ng
RT: 19.136 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion:212 Resp: 7836

Ion	Ratio	Lower	Upper
212	100		
106	13.3	11.8	17.6
104	8.2	7.3	10.9

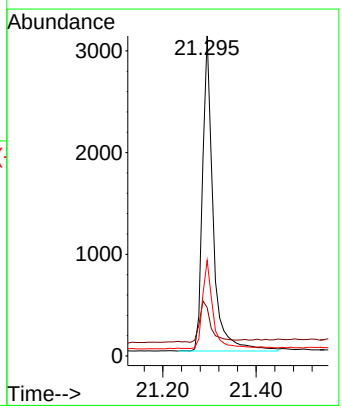


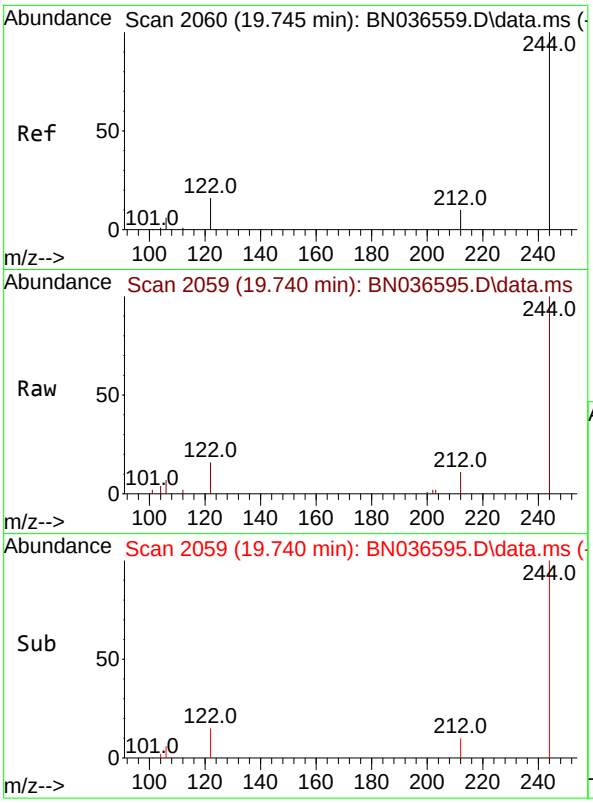


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:240 Resp: 4896

Ion	Ratio	Lower	Upper
240	100		
120	15.1	14.6	22.0
236	29.9	24.1	36.1



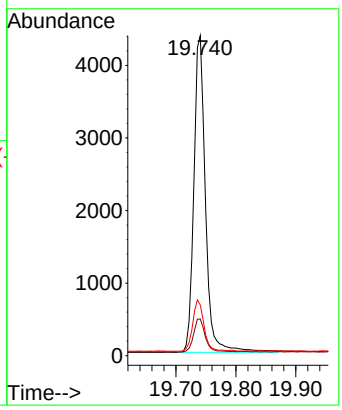


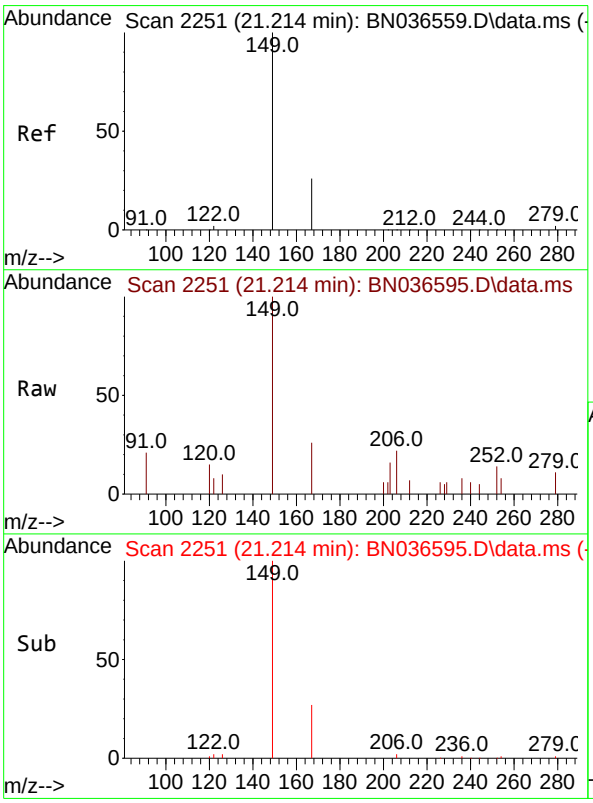
#31
Terphenyl-d14
Concen: 0.501 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion:244 Resp: 5872

Ion	Ratio	Lower	Upper
244	100		
212	11.5	9.6	14.4
122	15.9	13.9	20.9

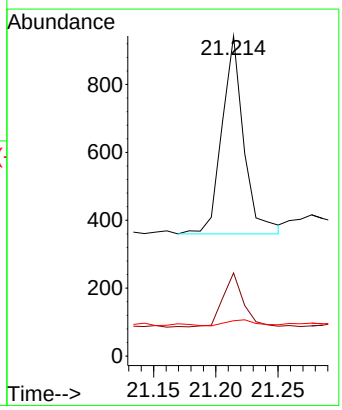


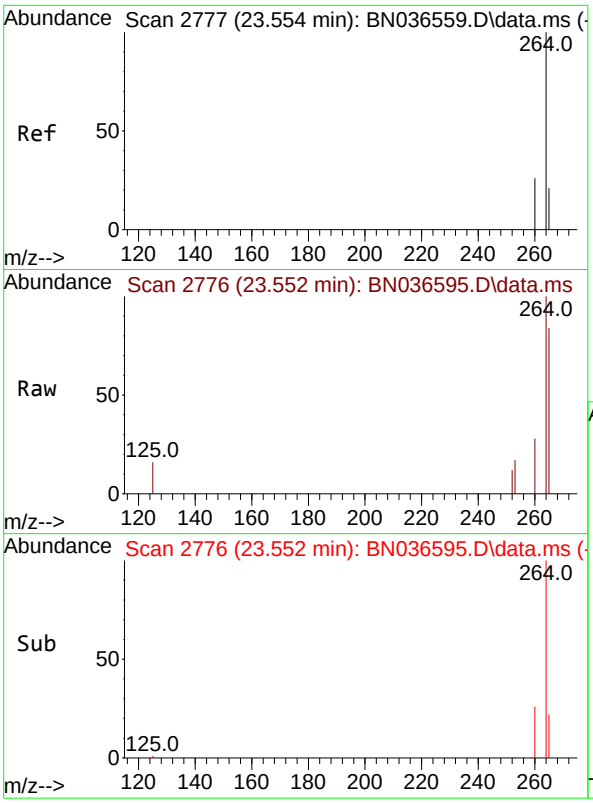


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.059 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Tgt Ion:149 Resp: 711

Ion	Ratio	Lower	Upper
149	100		
167	25.9	20.7	31.1
279	4.2	3.6	5.4



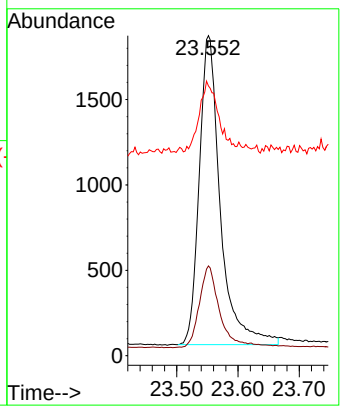


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.552 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036595.D
Acq: 12 Mar 2025 11:38

Instrument :
BNA_N
ClientSampleId :
RE104D3-20250307

Tgt Ion:264 Resp: 4323

Ion	Ratio	Lower	Upper
264	100		
260	28.1	22.6	33.8
265	84.3	88.1	132.1#



CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025
Response Via : Initial Calibration

Calibration Files
0.1 =BN036557.D 0.2 =BN036558.D 0.4 =BN036559.D 0.8 =BN036560.D 1.6 =BN036561.D 3.2 =BN036562.D 5.0 =BN036563.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	0.434	0.439	0.498	0.451	0.440	0.445	0.399	0.444	6.60
3)		n-Nitrosodimet...	1.112	0.874	0.935	0.841	0.850	0.883	0.789	0.898	11.64
4)	S	2-Fluorophenol	0.931	0.908	0.987	0.878	0.914	0.996	0.911	0.932	4.67
5)	S	Phenol-d6	1.243	1.057	1.128	1.067	1.133	1.254	1.180	1.152	6.79
6)		bis(2-Chloroet...	1.426	1.150	1.183	1.129	1.132	1.210	1.104	1.190	9.22
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.572	0.396	0.415	0.401	0.402	0.450	0.411	0.435	14.47
9)		Naphthalene	1.371	1.125	1.206	1.111	1.108	1.222	1.094	1.177	8.45
10)		Hexachlorobuta...	0.296	0.283	0.294	0.267	0.261	0.286	0.251	0.277	6.24
11)	SURR	2-Methylnaphth...	0.656	0.549	0.606	0.562	0.577	0.633	0.581	0.595	6.55
12)		2-Methylnaphth...	0.810	0.696	0.765	0.703	0.734	0.802	0.731	0.749	6.03
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.181	0.160	0.187	0.169	0.188	0.197	0.188	0.182	7.04
15)	S	2-Fluorobiphenyl	2.208	1.982	2.398	2.350	2.364	2.566	2.419	2.327	7.96
16)		Acenaphthylene	1.882	1.756	1.938	1.794	1.834	2.074	1.935	1.888	5.66
17)		Acenaphthene	1.257	1.159	1.281	1.171	1.199	1.339	1.243	1.236	5.17
18)		Fluorene	1.629	1.600	1.764	1.609	1.670	1.778	1.650	1.672	4.32
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...		0.057	0.077	0.075	0.088	0.110	0.111	0.086	24.66
21)		4-Bromophenyl-...	0.243	0.227	0.274	0.238	0.241	0.278	0.253	0.251	7.53
22)		Hexachlorobenzene	0.306	0.288	0.336	0.295	0.283	0.322	0.289	0.303	6.58
23)		Atrazine	0.193	0.191	0.213	0.192	0.200	0.216	0.200	0.201	5.08
24)		Pentachlorophenol	0.140	0.116	0.137	0.122	0.135	0.161	0.155	0.138	11.76
25)		Phenanthrene	1.190	1.111	1.297	1.141	1.165	1.300	1.195	1.200	6.09
26)		Anthracene	1.026	0.971	1.147	1.033	1.075	1.215	1.112	1.083	7.60
27)	SURR	Fluoranthene-d10	1.037	0.955	1.116	0.956	1.025	1.087	1.000	1.025	5.98
28)		Fluoranthene	1.341	1.243	1.452	1.272	1.364	1.447	1.316	1.348	5.95
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.945	2.005	2.131	1.910	1.870	1.992	1.837	1.956	5.04
31)	S	Terphenyl-d14	0.962	0.965	1.028	0.924	0.915	0.987	0.926	0.958	4.23
32)		Benzo(a)anthra...	1.389	1.315	1.437	1.304	1.347	1.528	1.415	1.391	5.63
33)		Chrysene	1.486	1.509	1.610	1.507	1.462	1.616	1.448	1.520	4.44
34)		Bis(2-ethylhex...	1.196	1.100	1.044	0.865	0.946	0.912	0.870	0.990	12.74
35)	I	Perylene-d12	----------ISTD----------								

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN031025.M

36)		Indeno(1,2,3-c...	1.160	1.316	1.546	1.404	1.417	1.693	1.571	1.444	12.27
37)		Benzo(b)fluora...	1.311	1.360	1.547	1.402	1.477	1.595	1.498	1.456	7.04
38)		Benzo(k)fluora...	1.504	1.397	1.620	1.481	1.521	1.635	1.534	1.527	5.34
39)	C	Benzo(a)pyrene	1.090	1.152	1.303	1.195	1.223	1.350	1.268	1.226	7.29
40)		Dibenzo(a,h)an...	0.893	0.981	1.163	1.126	1.102	1.351	1.252	1.124	13.76
41)		Benzo(g,h,i)pe...	1.138	1.213	1.382	1.250	1.233	1.449	1.334	1.286	8.36

(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036557.D
Acq On : 10 Mar 2025 11:42
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

Quant Time: Mar 10 16:00:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2755	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	6575	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3958	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	8269	0.400	ng		0.00
29) Chrysene-d12	21.295	240	5886	0.400	ng		0.00
35) Perylene-d12	23.554	264	5207	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	641	0.100	ng		0.00
5) Phenol-d6	6.901	99	856	0.108	ng		0.00
8) Nitrobenzene-d5	8.875	82	940	0.131	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	1079	0.110	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	179	0.100	ng		0.00
15) 2-Fluorobiphenyl	12.993	172	2185	0.095	ng		0.00
27) Fluoranthene-d10	19.141	212	2144	0.101	ng		0.00
31) Terphenyl-d14	19.745	244	1416	0.100	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	299m	0.098	ng		
3) n-Nitrosodimethylamine	3.557	42	766	0.124	ng	#	95
6) bis(2-Chloroethyl)ether	7.154	93	982	0.120	ng		98
9) Naphthalene	10.562	128	2254	0.117	ng	#	94
10) Hexachlorobutadiene	10.850	225	486	0.107	ng	#	100
12) 2-Methylnaphthalene	12.187	142	1331	0.108	ng		96
16) Acenaphthylene	14.078	152	1862	0.100	ng		99
17) Acenaphthene	14.430	154	1244	0.102	ng		99
18) Fluorene	15.414	166	1612	0.097	ng		99
21) 4-Bromophenyl-phenylether	16.304	248	502	0.097	ng		95
22) Hexachlorobenzene	16.416	284	632	0.101	ng		98
23) Atrazine	16.578	200	400	0.096	ng	#	90
24) Pentachlorophenol	16.776	266	290	0.102	ng		98
25) Phenanthrene	17.148	178	2459	0.099	ng		99
26) Anthracene	17.248	178	2121	0.095	ng		100
28) Fluoranthene	19.174	202	2772	0.099	ng		97
30) Pyrene	19.536	202	2862	0.099	ng		100
32) Benzo(a)anthracene	21.286	228	2044	0.100	ng		94
33) Chrysene	21.331	228	2187	0.098	ng		93
34) Bis(2-ethylhexyl)phtha...	21.214	149	1760	0.121	ng		96
36) Indeno(1,2,3-cd)pyrene	25.841	276	1510	0.080	ng		98
37) Benzo(b)fluoranthene	22.876	252	1707	0.090	ng	#	62
38) Benzo(k)fluoranthene	22.923	252	1958	0.098	ng	#	62
39) Benzo(a)pyrene	23.458	252	1419	0.089	ng	#	51
40) Dibenzo(a,h)anthracene	25.861	278	1163	0.079	ng	#	59
41) Benzo(g,h,i)perylene	26.539	276	1482	0.089	ng	#	84

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

ICAL Form

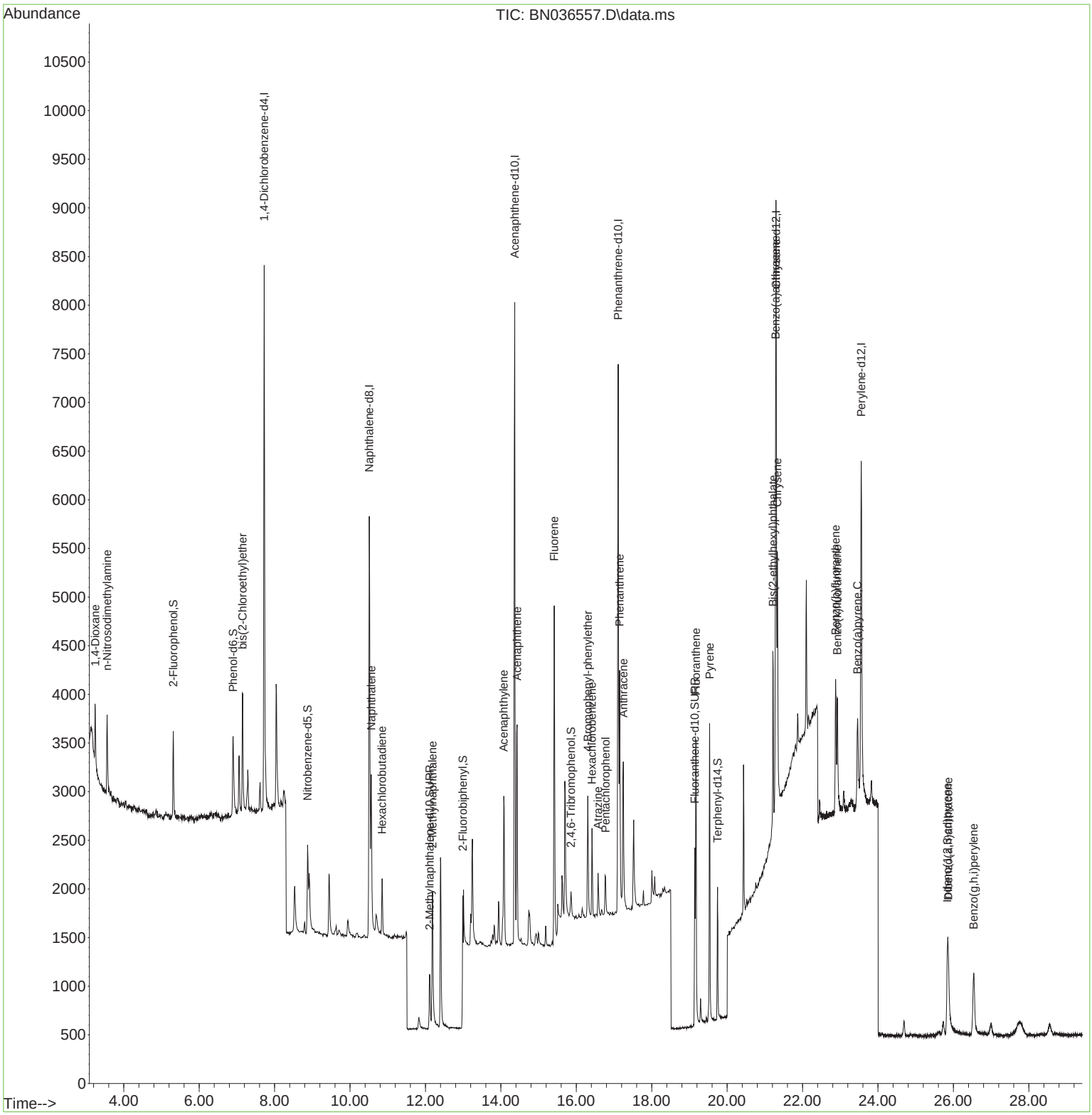
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Data File : BN036557.D
Acq On : 10 Mar 2025 11:42
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

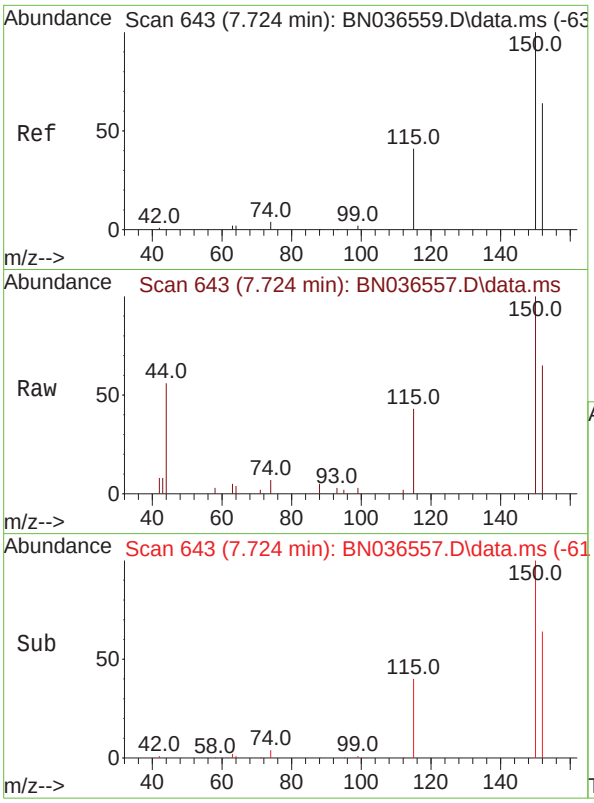
Quant Time: Mar 10 16:00:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

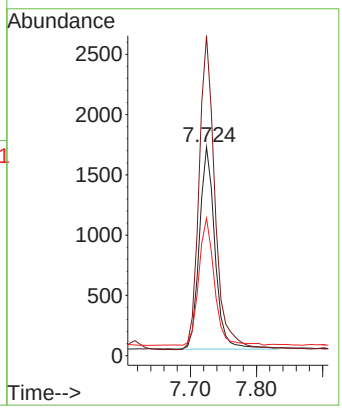




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 275

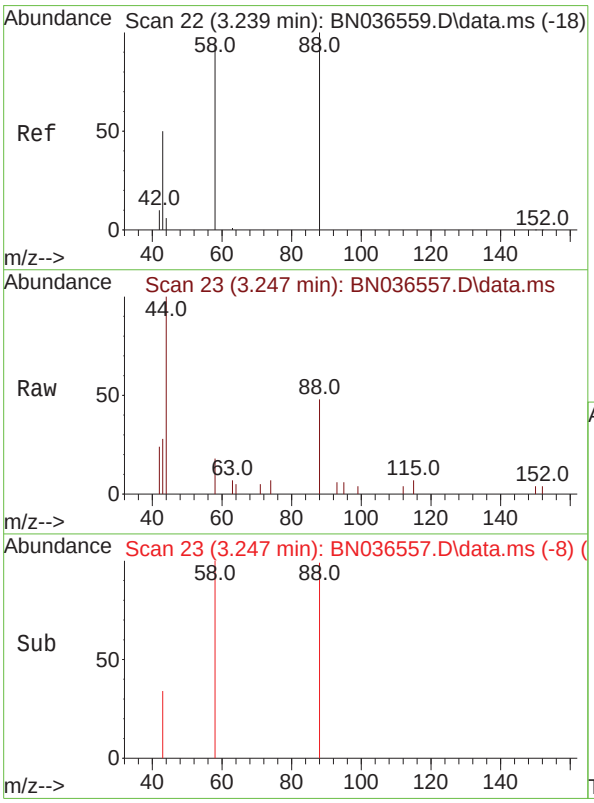
Ion	Ratio	Lower	Upper
152	100		
150	153.3	123.7	185.5
115	65.8	54.3	81.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
APPROVED

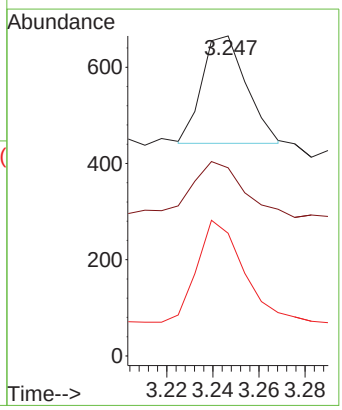
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

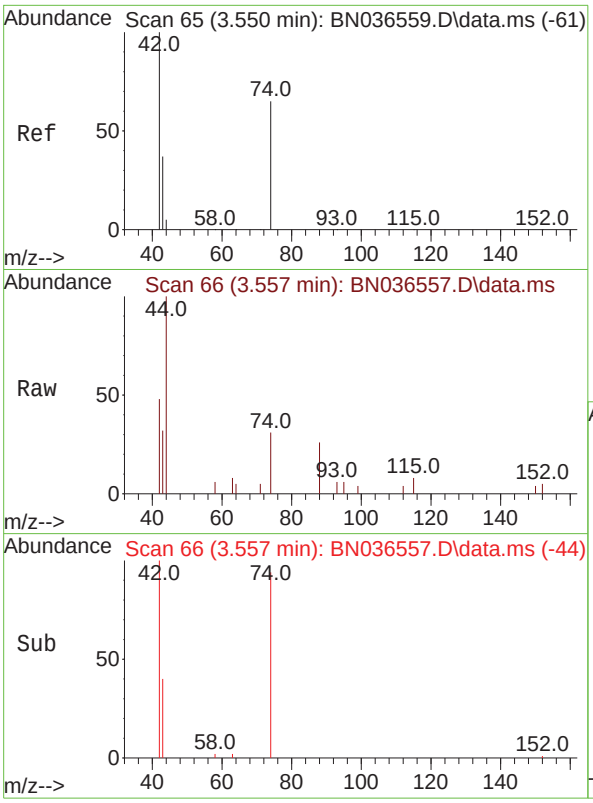


#2
1,4-Dioxane
Concen: 0.098 ng m
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 88 Resp: 299

Ion	Ratio	Lower	Upper
88	100		
43	94.6	37.8	56.8#
58	102.3	67.4	101.2#

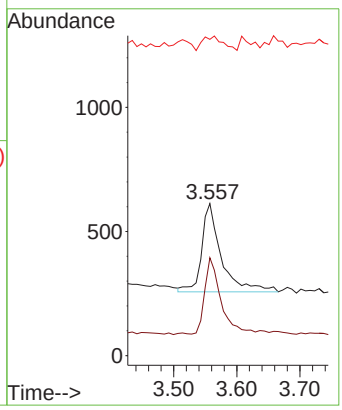




#3
n-Nitrosodimethylamine
Concen: 0.124 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 42 Resp: 76

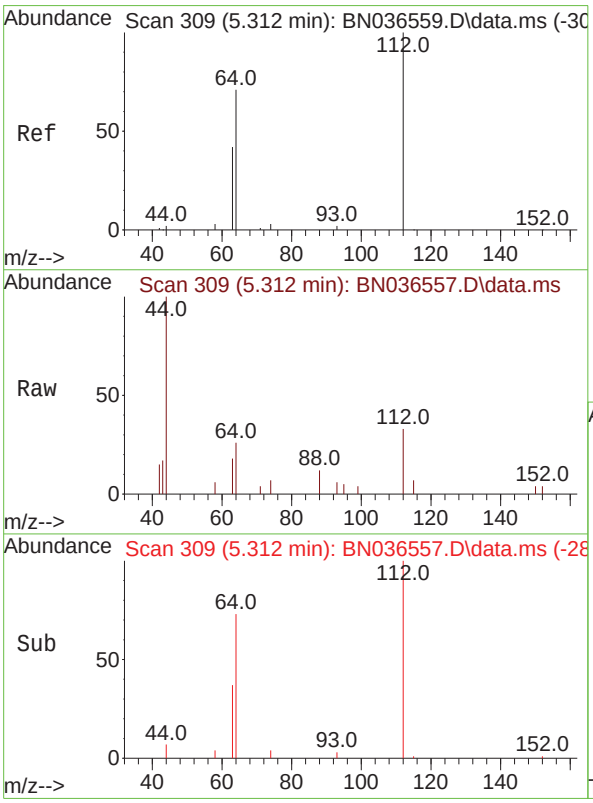
Ion	Ratio	Lower	Upper
42	100		
74	73.0	60.6	90.8
44	16.6	6.3	9.5#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

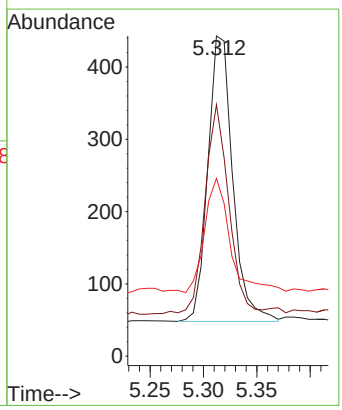
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

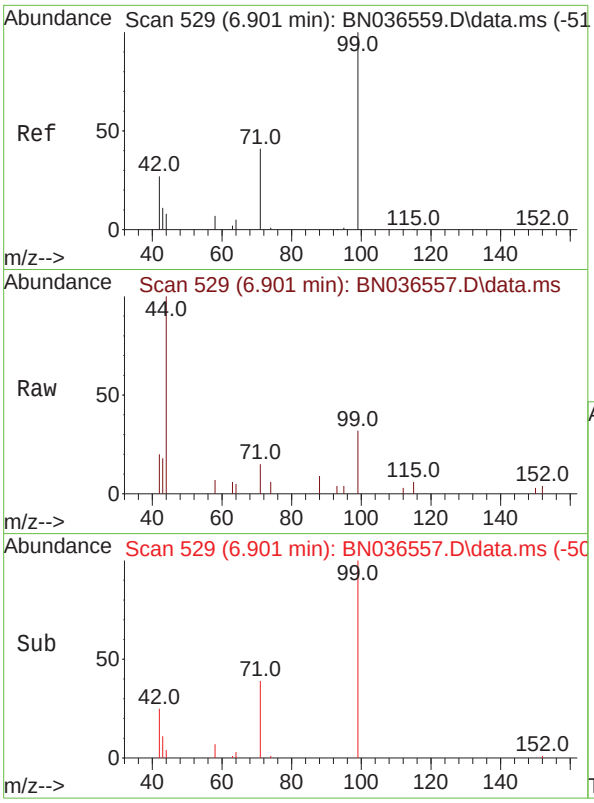


#4
2-Fluorophenol
Concen: 0.100 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:112 Resp: 641

Ion	Ratio	Lower	Upper
112	100		
64	70.4	53.1	79.7
63	40.9	31.8	47.8

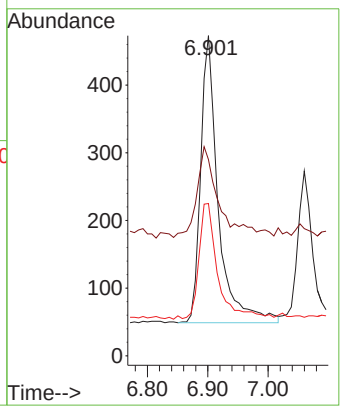




#5
Phenol-d6
Concen: 0.108 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 99 Resp: 85

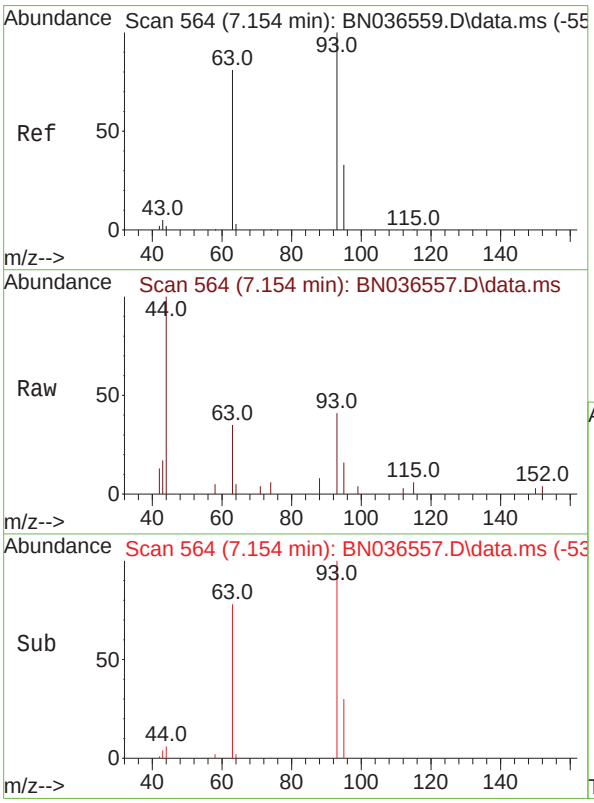
Ion	Ratio	Lower	Upper
99	100		
42	39.8	26.5	39.7#
71	42.8	34.1	51.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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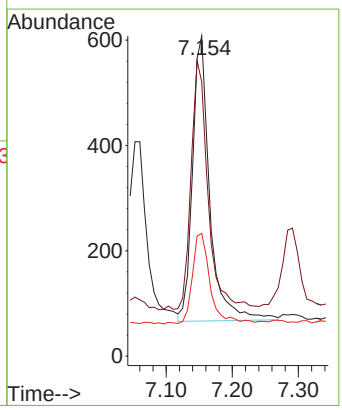
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

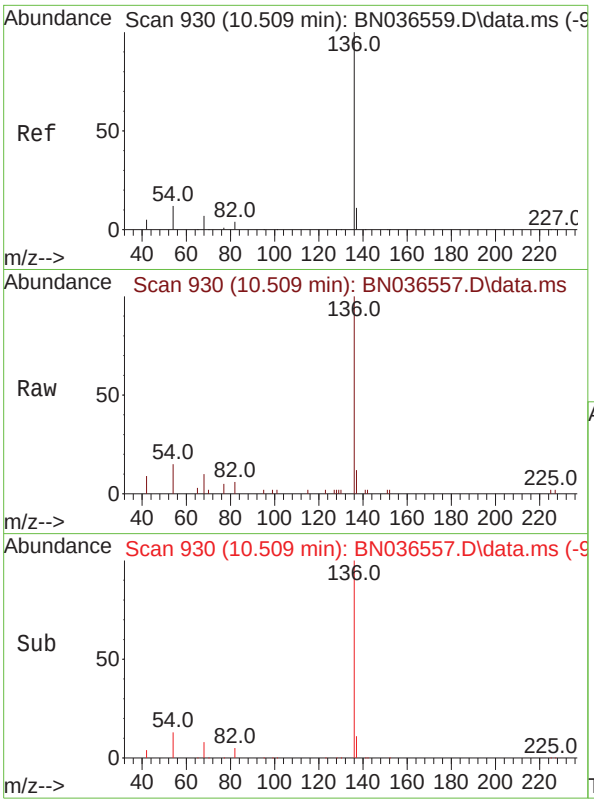


#6
bis(2-Chloroethyl)ether
Concen: 0.120 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 93 Resp: 982

Ion	Ratio	Lower	Upper
93	100		
63	86.7	67.7	101.5
95	33.0	25.6	38.4

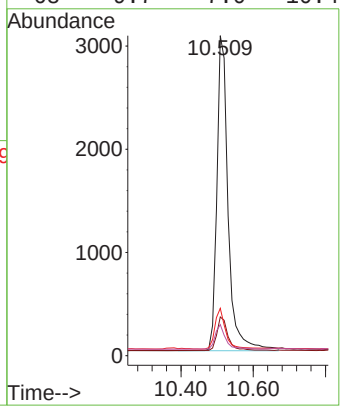




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:136 Resp: 657

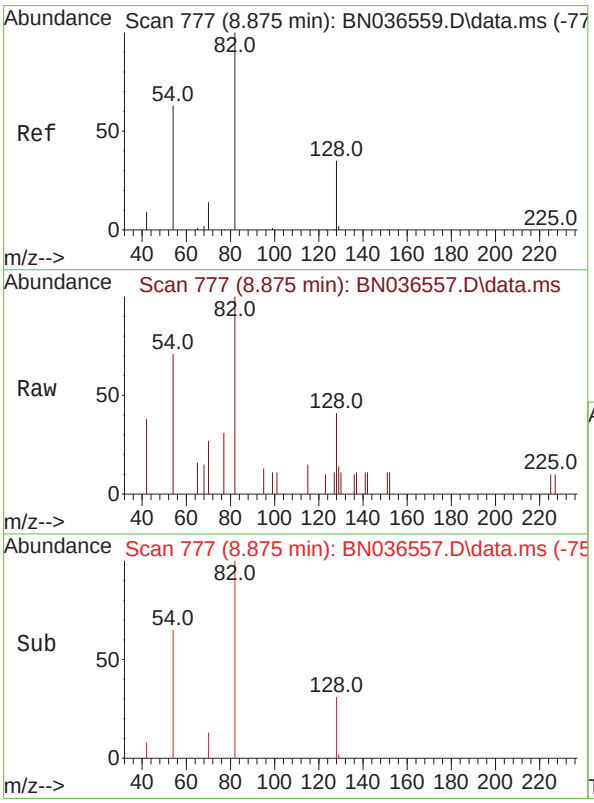
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.3	15.5
54	14.8	11.5	17.3
68	9.7	7.0	10.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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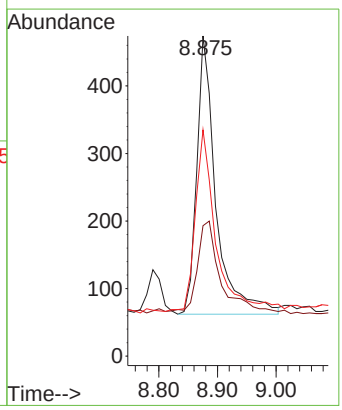
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

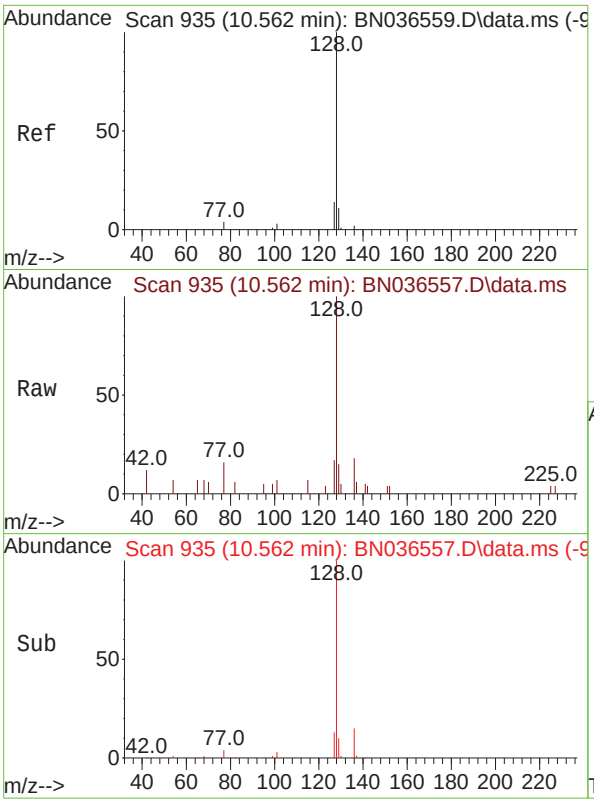


#8
Nitrobenzene-d5
Concen: 0.131 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 82 Resp: 940

Ion	Ratio	Lower	Upper
82	100		
128	40.7	30.6	45.8
54	70.7	52.2	78.4

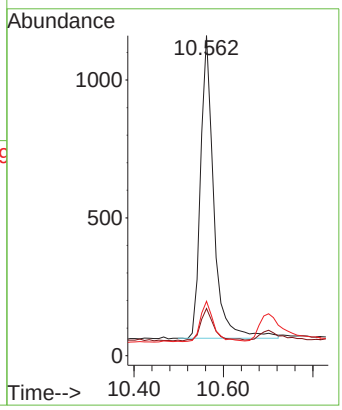




#9
Naphthalene
Concen: 0.117 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:128 Resp: 225

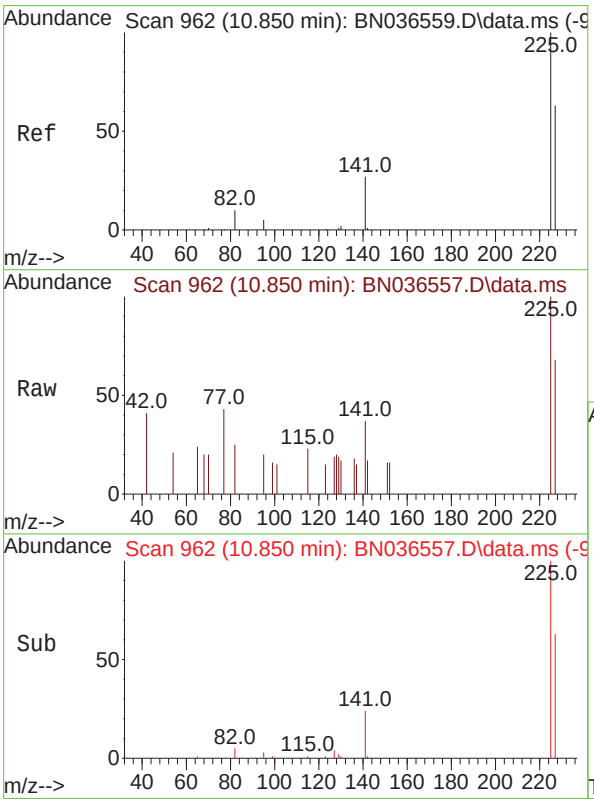
Ion	Ratio	Lower	Upper
128	100		
129	14.7	9.8	14.6#
127	17.0	11.8	17.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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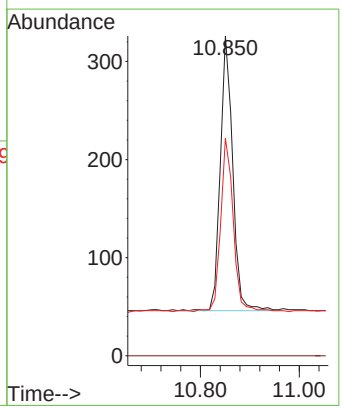
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

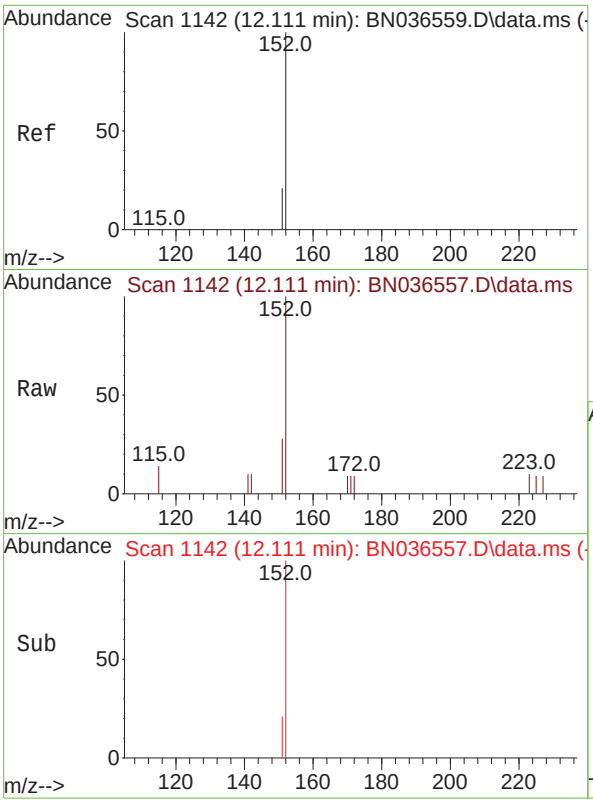


#10
Hexachlorobutadiene
Concen: 0.107 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:225 Resp: 486

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.8	51.8	77.8





#11
2-Methylnaphthalene-d10
Concen: 0.110 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

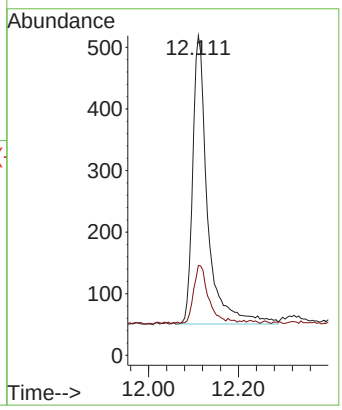
Tgt Ion:152 Resp: 107

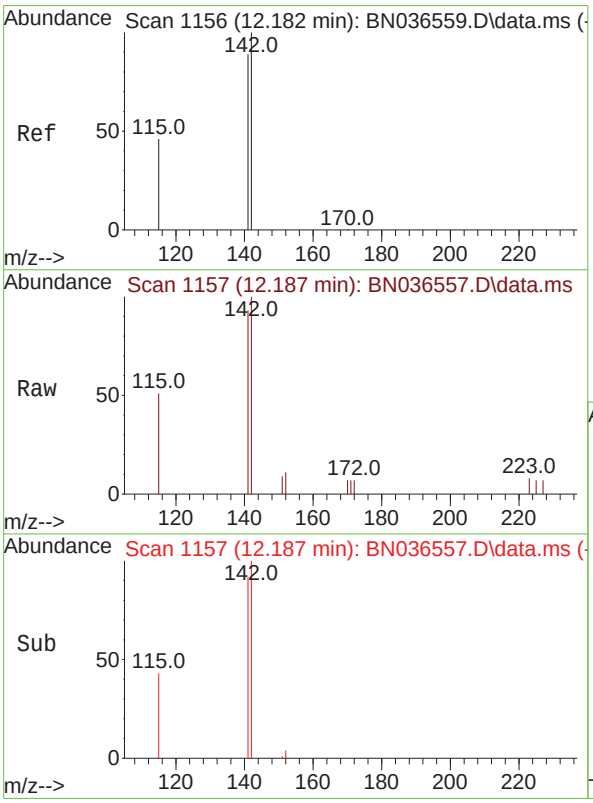
Ion	Ratio	Lower	Upper
152	100		
151	19.5	17.0	25.6

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

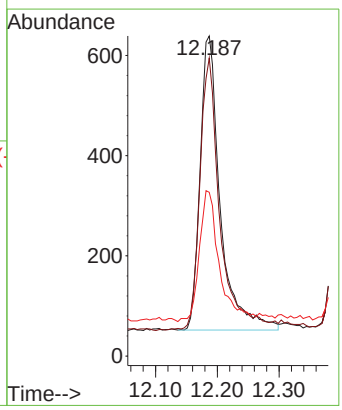


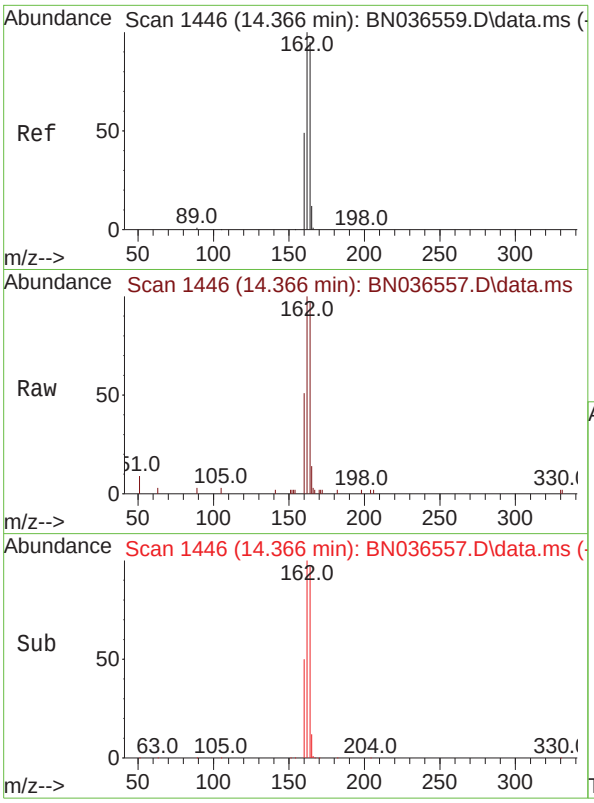


#12
2-Methylnaphthalene
Concen: 0.108 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:142 Resp: 1331

Ion	Ratio	Lower	Upper
142	100		
141	93.1	71.7	107.5
115	51.2	38.3	57.5





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

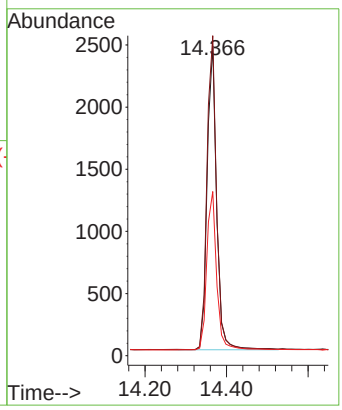
Tgt Ion:164 Resp: 395

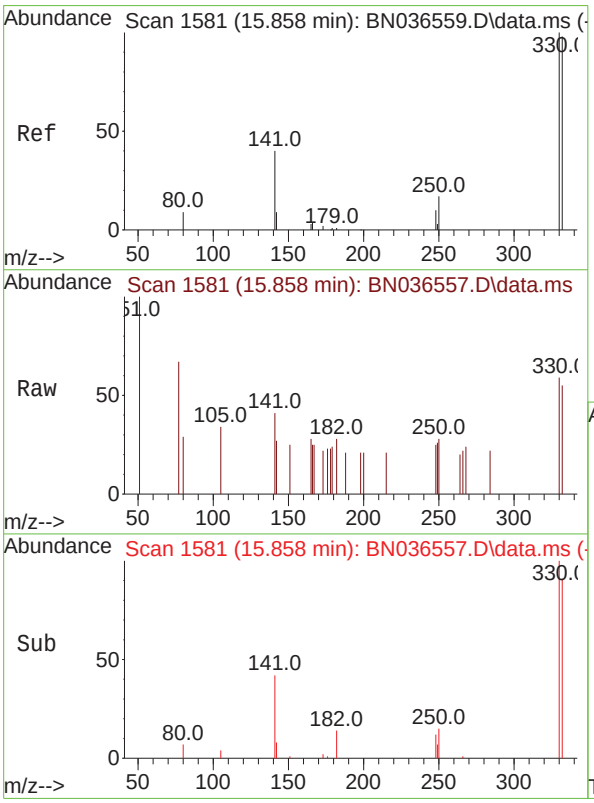
Ion	Ratio	Lower	Upper
164	100		
162	103.3	84.2	126.2
160	53.0	42.2	63.2

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

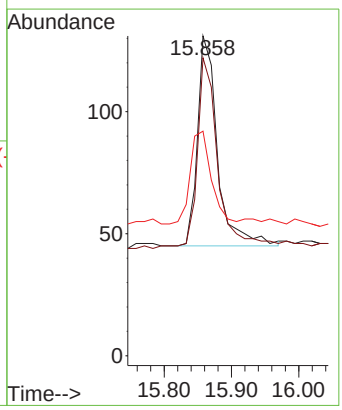


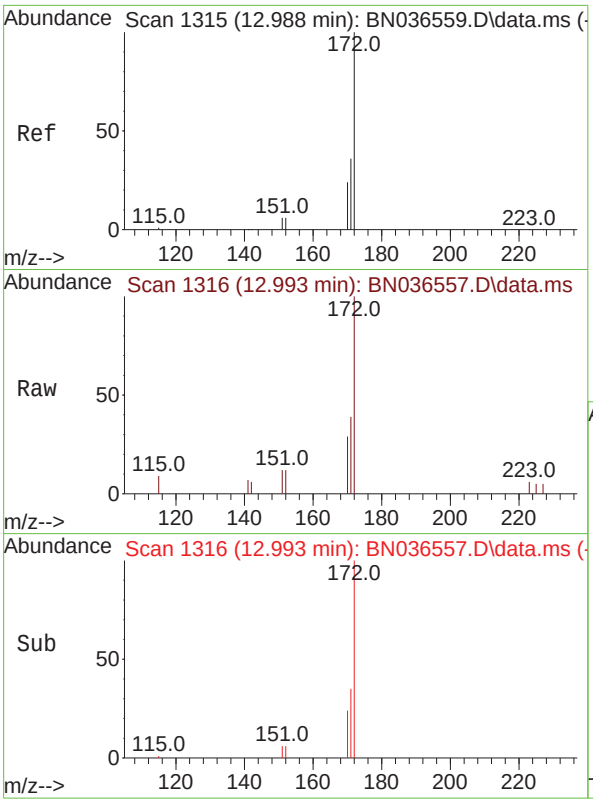


#14
2,4,6-Tribromophenol
Concen: 0.100 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:330 Resp: 179

Ion	Ratio	Lower	Upper
330	100		
332	96.1	75.2	112.8
141	46.4	43.4	65.2

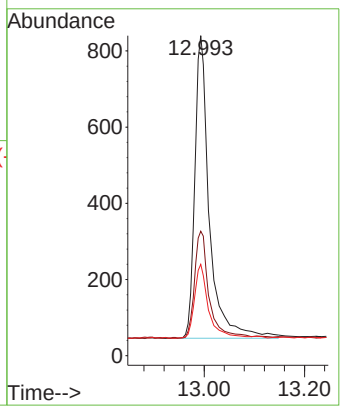




#15
2-Fluorobiphenyl
Concen: 0.095 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:172 Resp: 218

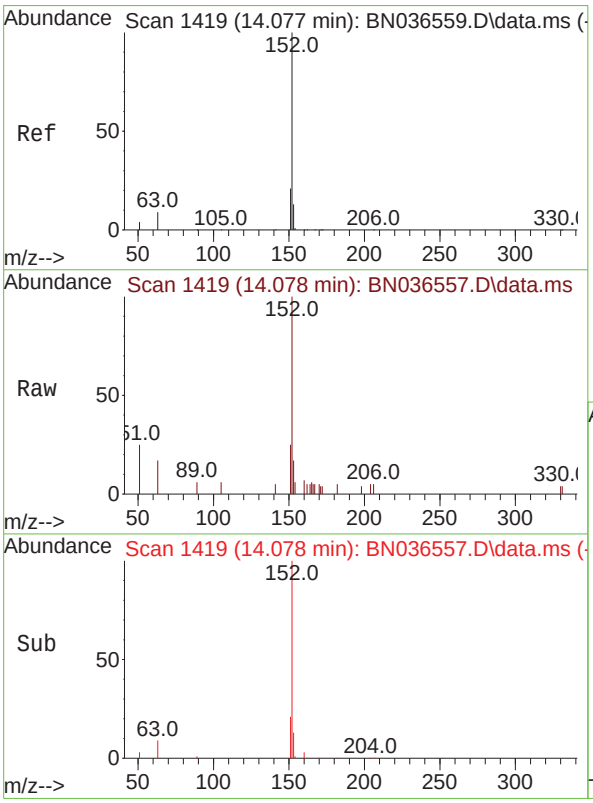
Ion	Ratio	Lower	Upper
172	100		
171	38.9	29.5	44.3
170	28.6	20.2	30.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

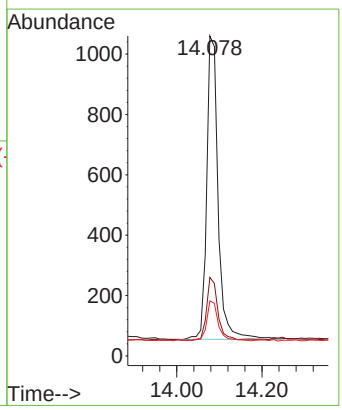
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

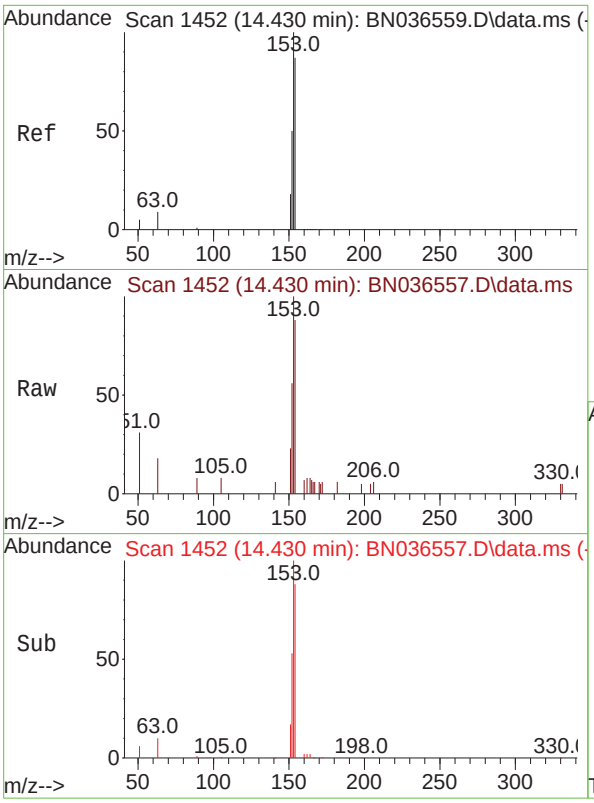


#16
Acenaphthylene
Concen: 0.100 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 1862

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.2	24.4
153	14.1	10.6	15.8

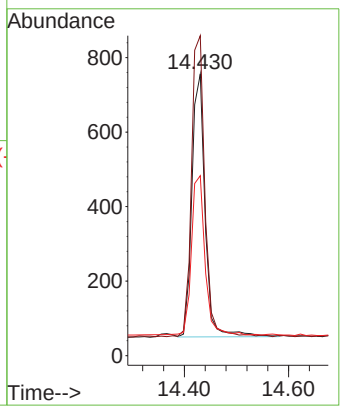




#17
Acenaphthene
Concen: 0.102 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:154 Resp: 124

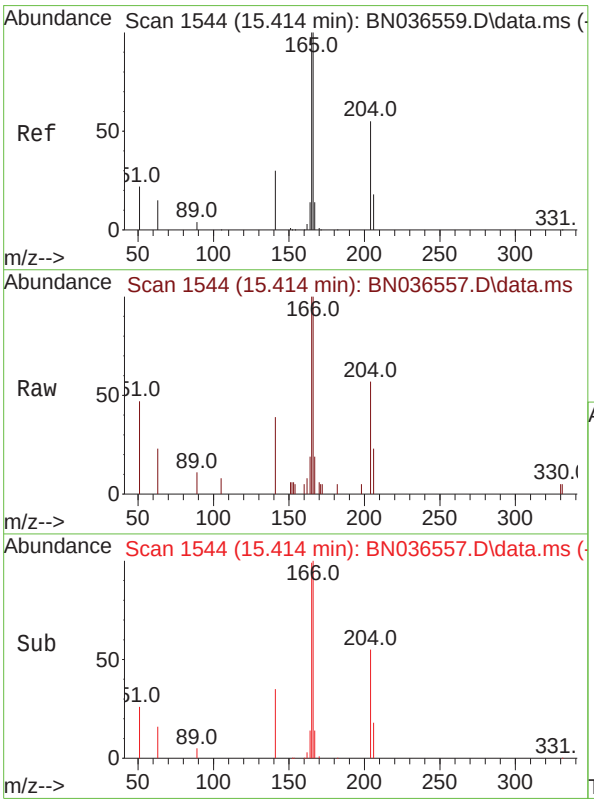
Ion	Ratio	Lower	Upper
154	100		
153	115.9	94.1	141.1
152	62.5	49.8	74.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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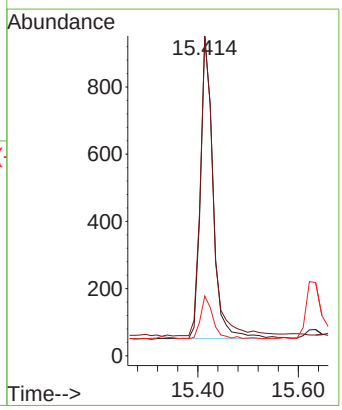
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

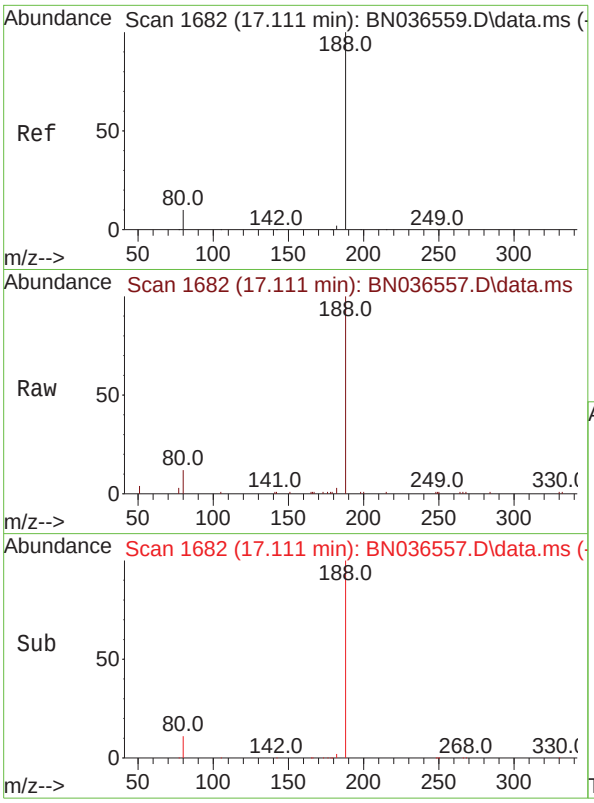


#18
Fluorene
Concen: 0.097 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:166 Resp: 1612

Ion	Ratio	Lower	Upper
166	100		
165	100.9	79.8	119.8
167	13.9	10.6	15.8

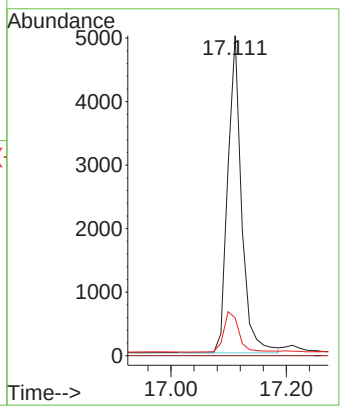




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:188 Resp: 826

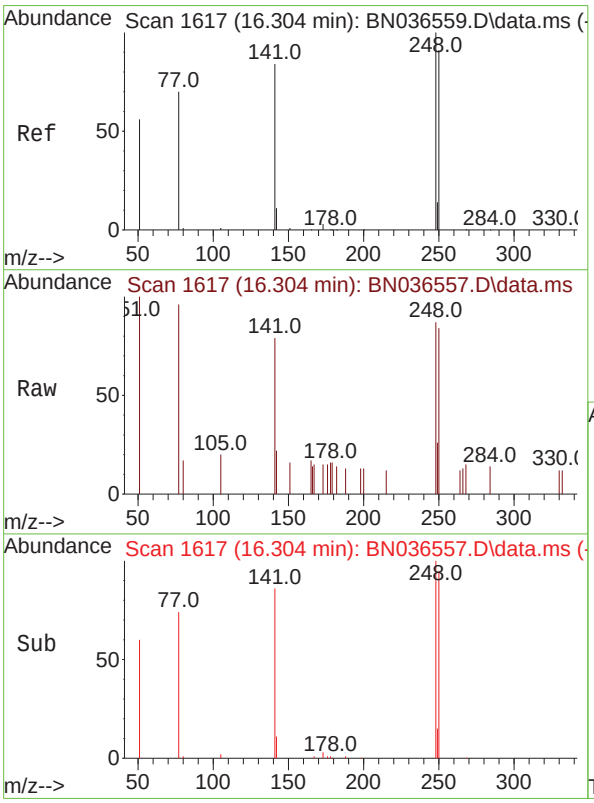
Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.8	8.8	13.2



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
APPROVED

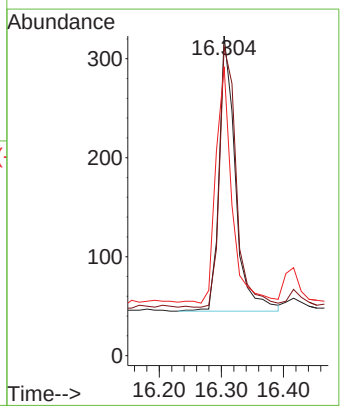
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

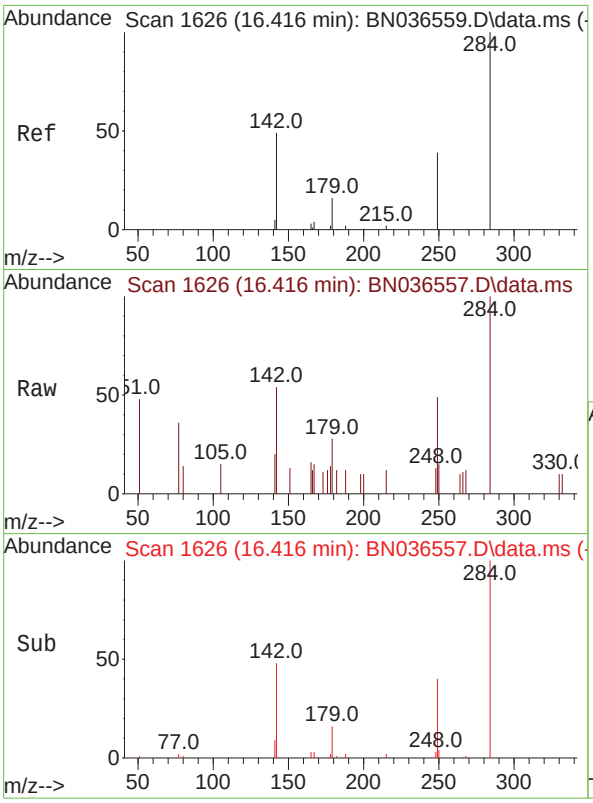


#21
4-Bromophenyl-phenylether
Concen: 0.097 ng
RT: 16.304 min Scan# 1617
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:248 Resp: 502

Ion	Ratio	Lower	Upper
248	100		
250	96.6	73.0	109.6
141	90.4	68.6	103.0

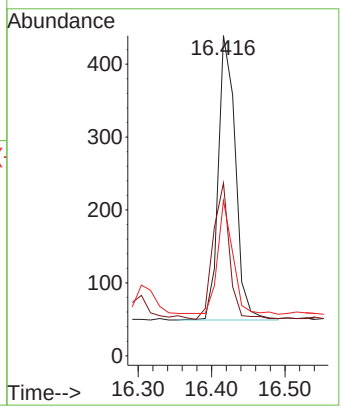




#22
Hexachlorobenzene
Concen: 0.101 ng
RT: 16.416 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:284 Resp: 63

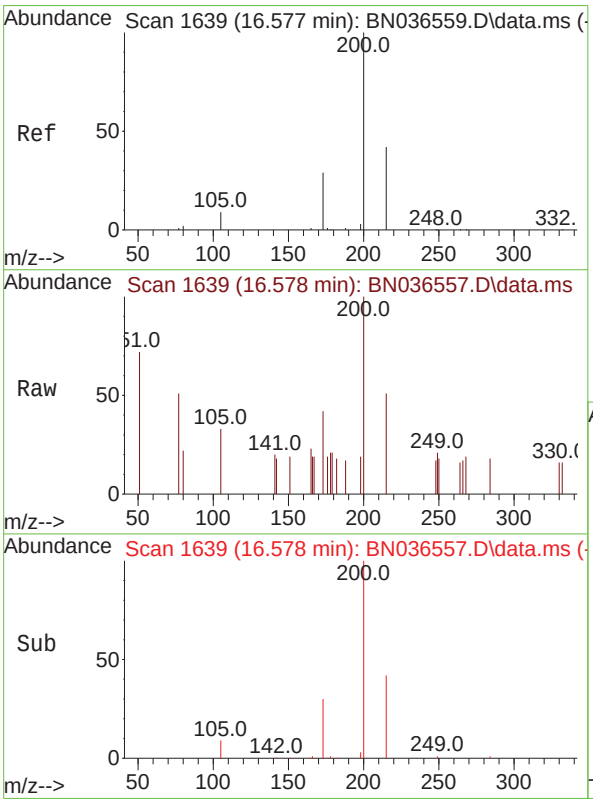
Ion	Ratio	Lower	Upper
284	100		
142	45.7	37.0	55.4
249	37.2	28.1	42.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

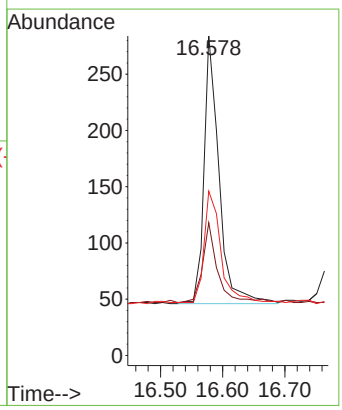
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

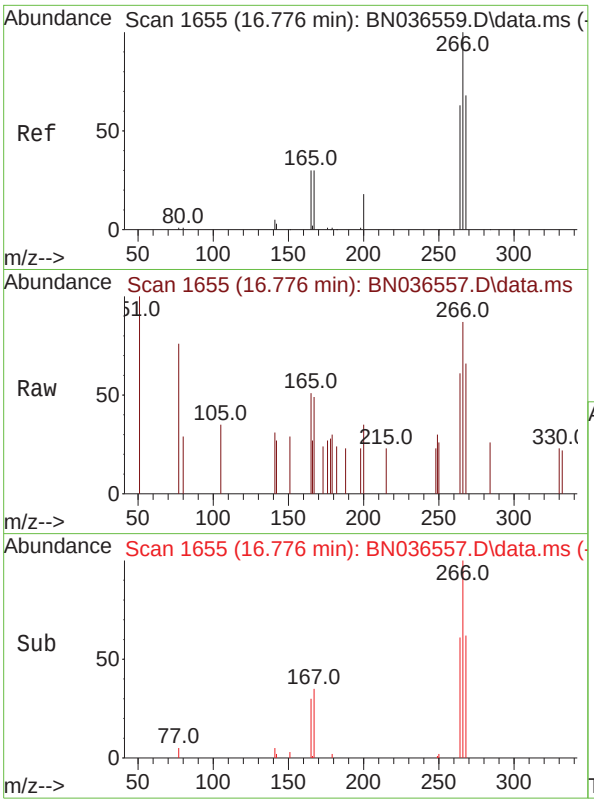


#23
Atrazine
Concen: 0.096 ng
RT: 16.578 min Scan# 1639
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:200 Resp: 400

Ion	Ratio	Lower	Upper
200	100		
173	41.5	27.3	40.9#
215	51.4	36.8	55.2

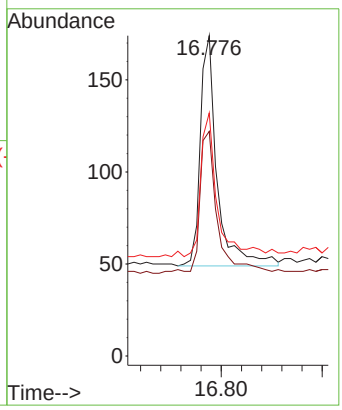




#24
Pentachlorophenol
Concen: 0.102 ng
RT: 16.776 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:266 Resp: 29

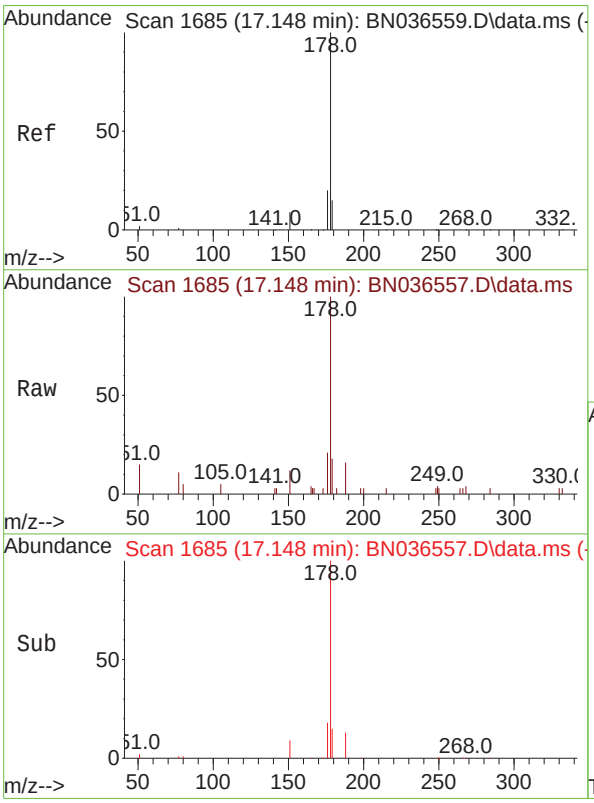
Ion	Ratio	Lower	Upper
266	100		
264	64.8	49.6	74.4
268	62.8	50.9	76.3



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
APPROVED

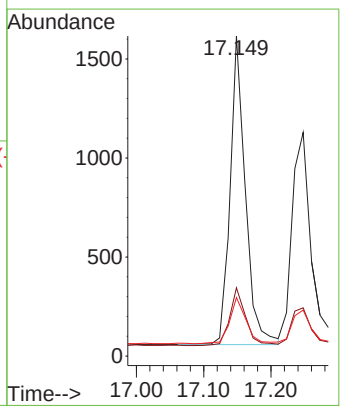
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

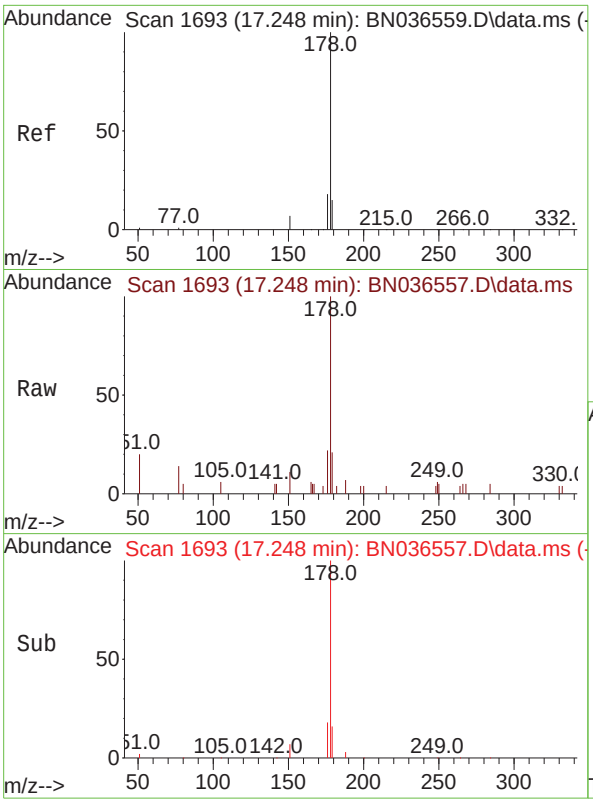


#25
Phenanthrene
Concen: 0.099 ng
RT: 17.148 min Scan# 1685
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:178 Resp: 2459

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.9	23.9
179	16.1	12.2	18.4

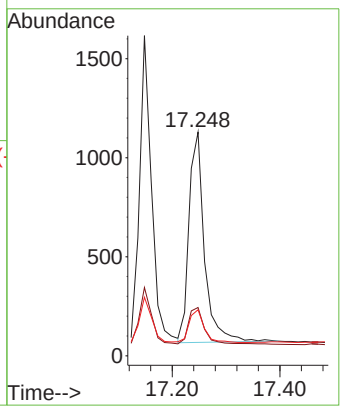




#26
Anthracene
Concen: 0.095 ng
RT: 17.248 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:178 Resp: 212

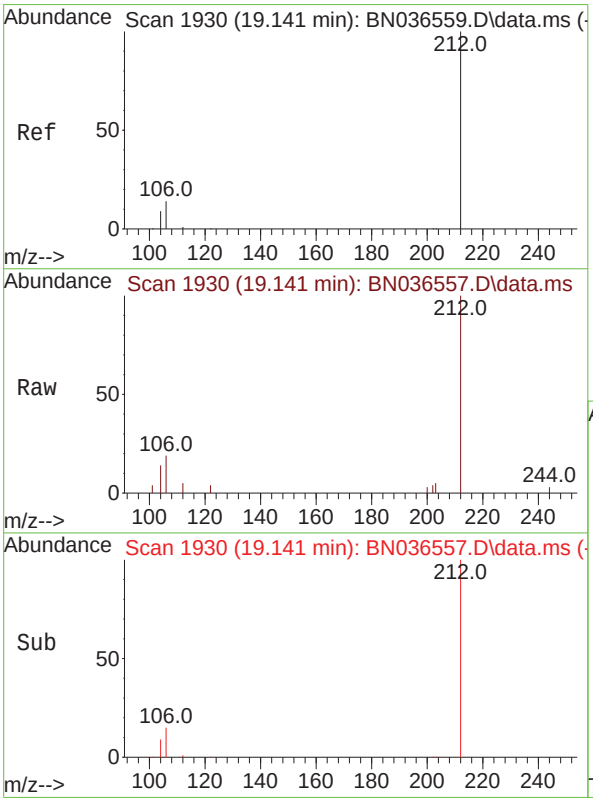
Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.7	12.6	18.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

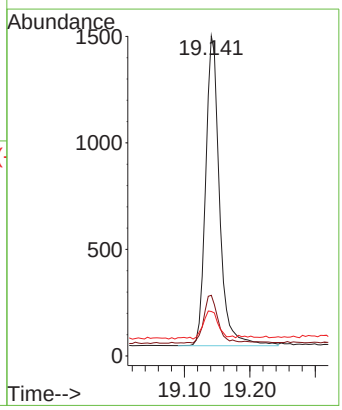
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

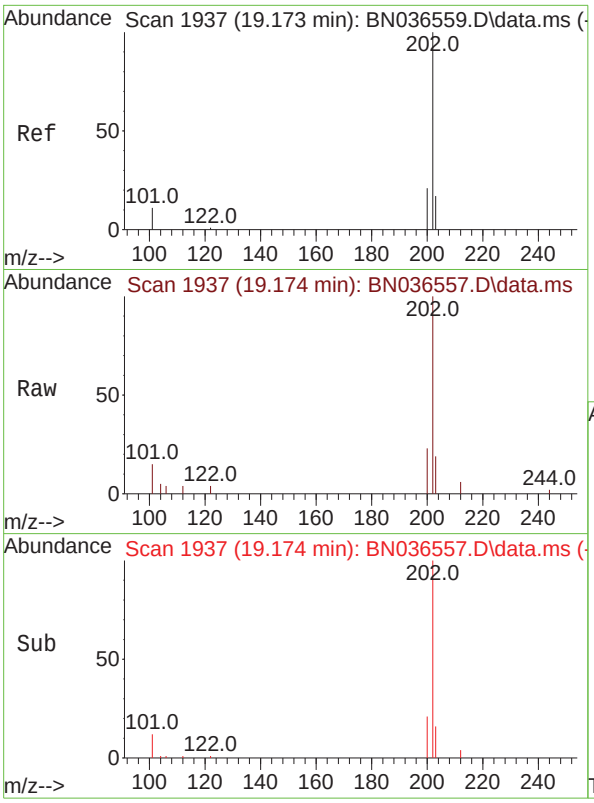


#27
Fluoranthene-d10
Concen: 0.101 ng
RT: 19.141 min Scan# 1930
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:212 Resp: 2144

Ion	Ratio	Lower	Upper
212	100		
106	15.5	11.8	17.6
104	9.7	7.3	10.9

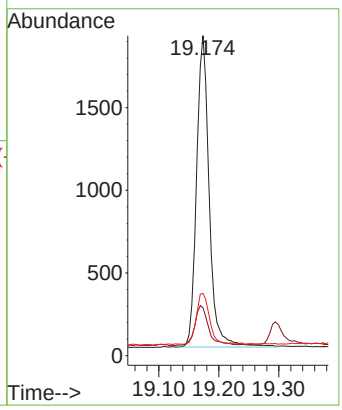




#28
Fluoranthene
Concen: 0.099 ng
RT: 19.174 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 277

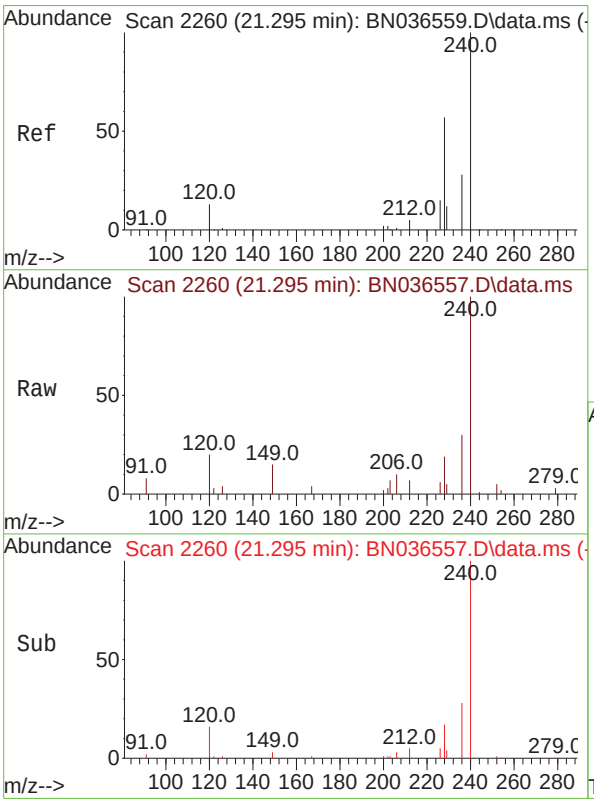
Ion	Ratio	Lower	Upper
202	100		
101	14.0	9.4	14.0
203	17.0	13.5	20.3



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

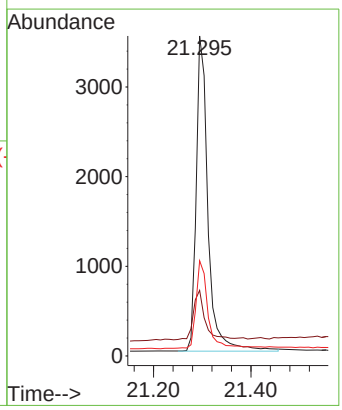
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

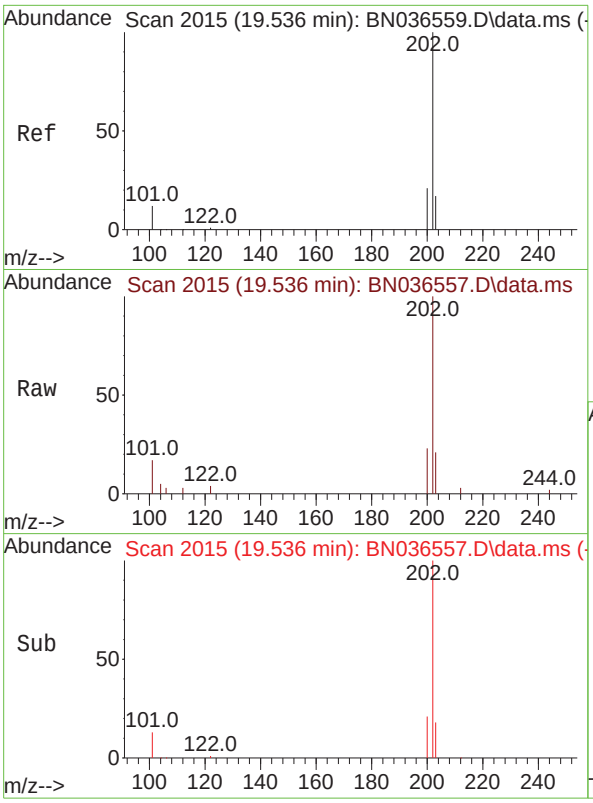


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2260
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:240 Resp: 5886

Ion	Ratio	Lower	Upper
240	100		
120	20.5	14.6	22.0
236	29.8	24.1	36.1

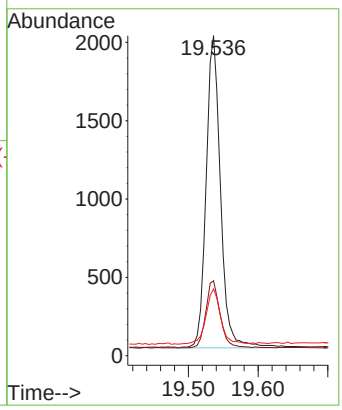




#30
Pyrene
Concen: 0.099 ng
RT: 19.536 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 286

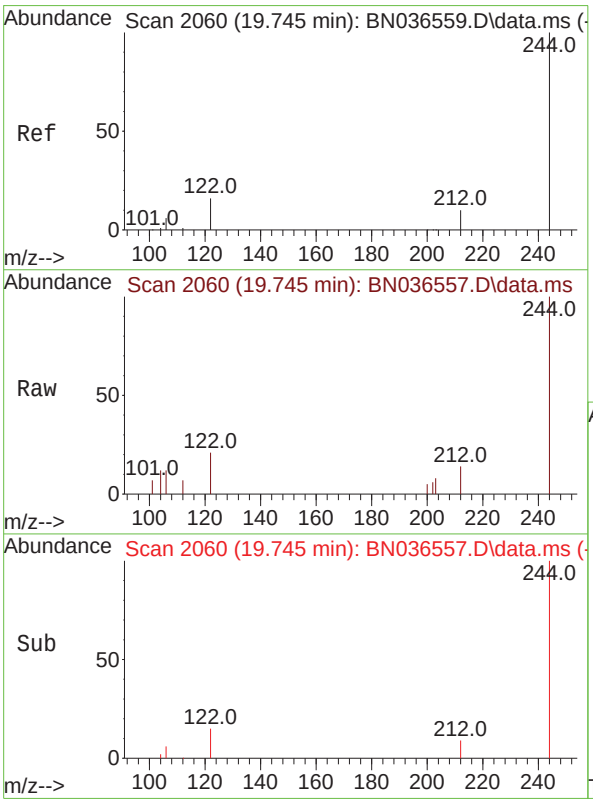
Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.1	25.7
203	17.9	14.1	21.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
APPROVED

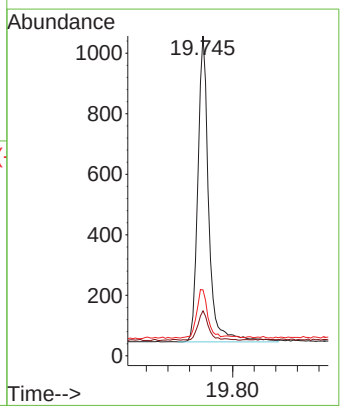
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

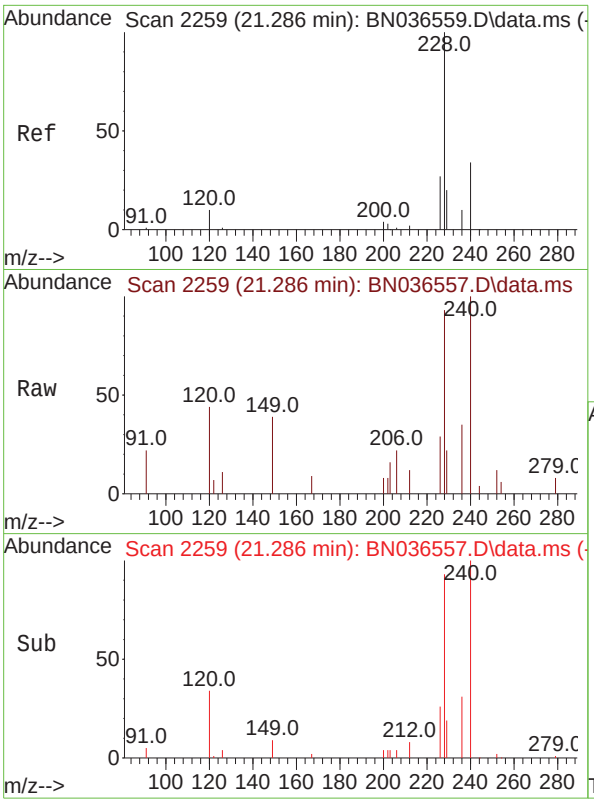


#31
Terphenyl-d14
Concen: 0.100 ng
RT: 19.745 min Scan# 2060
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:244 Resp: 1416

Ion	Ratio	Lower	Upper
244	100		
212	14.1	9.6	14.4
122	20.6	13.9	20.9

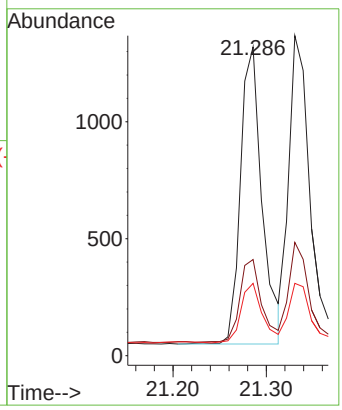




#32
Benzo(a)anthracene
Concen: 0.100 ng
RT: 21.286 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:228 Resp: 204

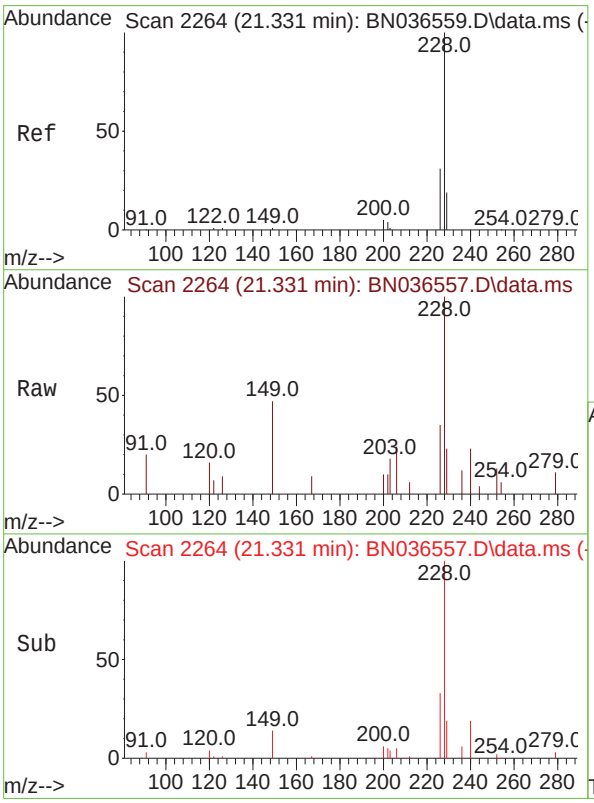
Ion	Ratio	Lower	Upper
228	100		
226	31.1	22.5	33.7
229	23.4	16.6	25.0



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

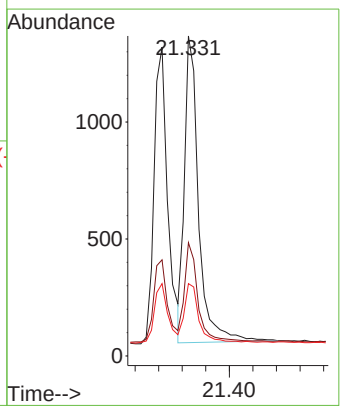
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

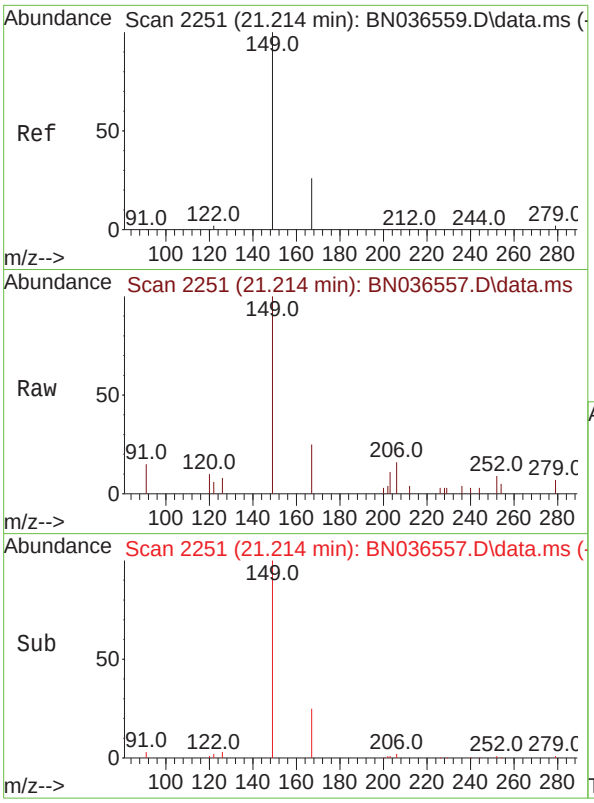


#33
Chrysene
Concen: 0.098 ng
RT: 21.331 min Scan# 2264
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:228 Resp: 2187

Ion	Ratio	Lower	Upper
228	100		
226	35.4	25.3	37.9
229	22.6	15.8	23.8





#34
Bis(2-ethylhexyl)phthalate
Concen: 0.121 ng
RT: 21.214 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

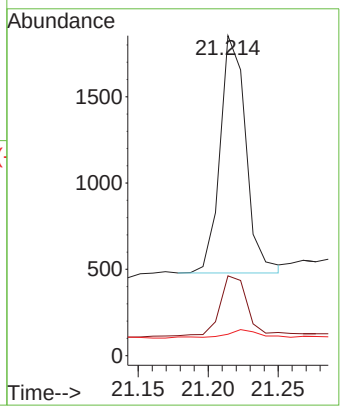
Tgt Ion:149 Resp: 176

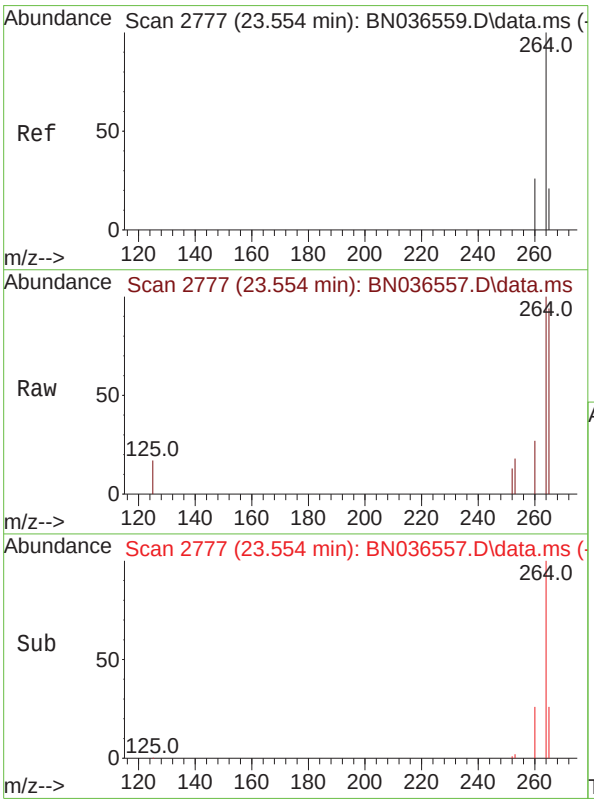
Ion	Ratio	Lower	Upper
149	100		
167	27.9	20.7	31.1
279	4.9	3.6	5.4

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

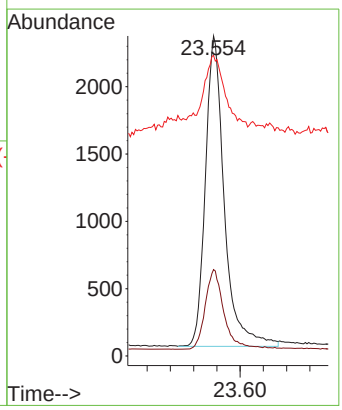


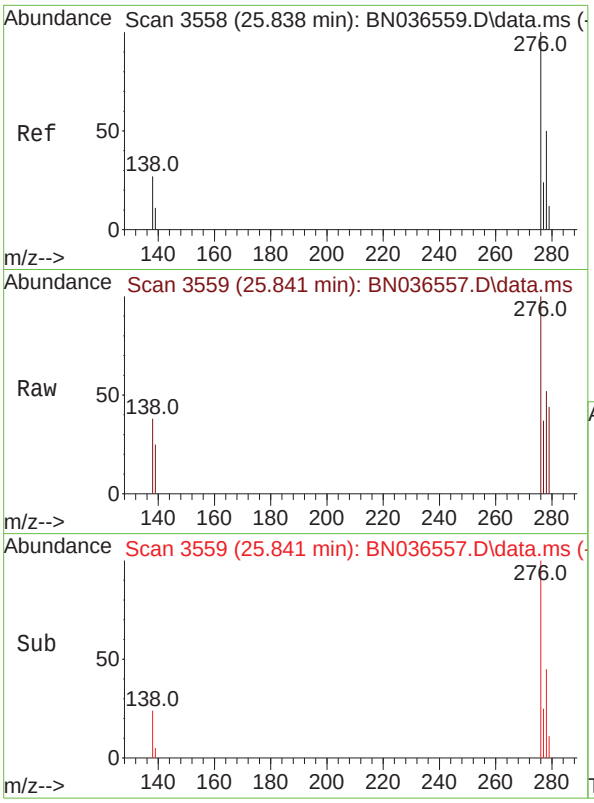


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2777
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:264 Resp: 5207

Ion	Ratio	Lower	Upper
264	100		
260	27.0	22.6	33.8
265	93.9	88.1	132.1

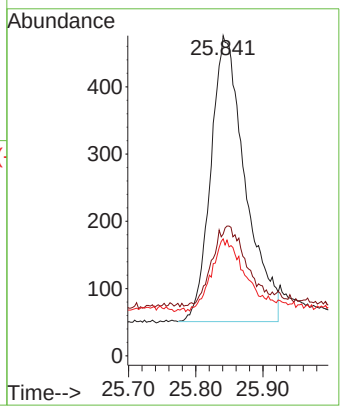




#36
Indeno(1,2,3-cd)pyrene
Concen: 0.080 ng
RT: 25.841 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:276 Resp: 151

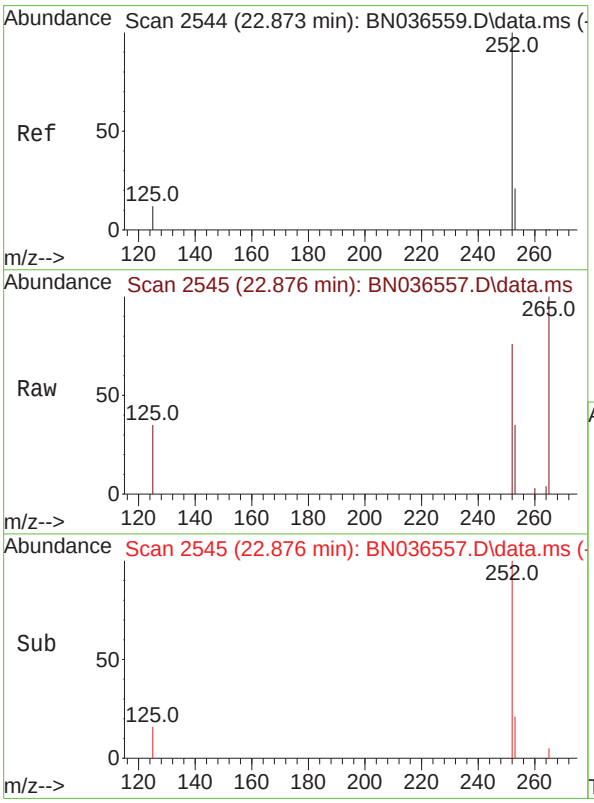
Ion	Ratio	Lower	Upper
276	100		
138	27.6	23.4	35.2
277	24.2	20.0	30.0



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
APPROVED

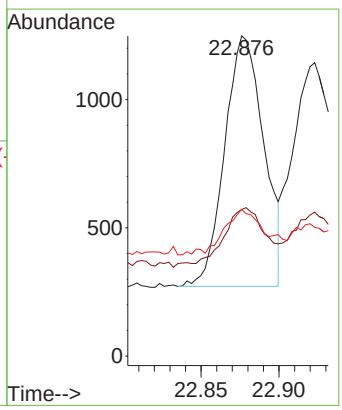
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

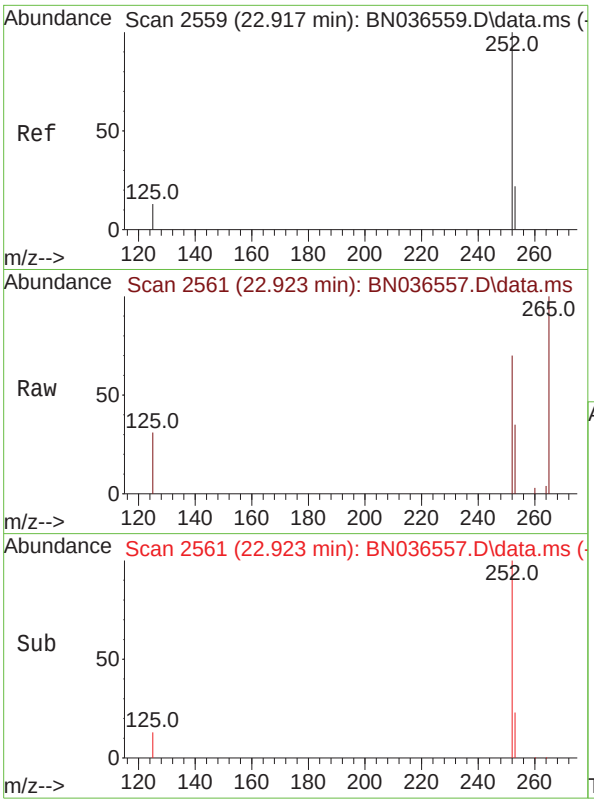


#37
Benzo(b)fluoranthene
Concen: 0.090 ng
RT: 22.876 min Scan# 2545
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 1707

Ion	Ratio	Lower	Upper
252	100		
253	45.8	23.9	35.9#
125	45.8	17.4	26.2#

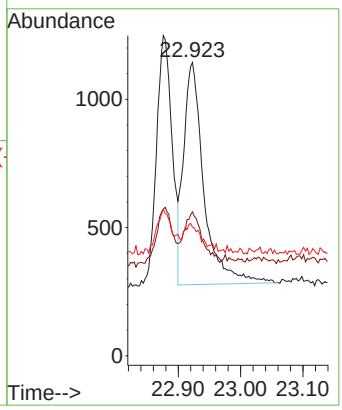




#38
Benzo(k)fluoranthene
Concen: 0.098 ng
RT: 22.923 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 195

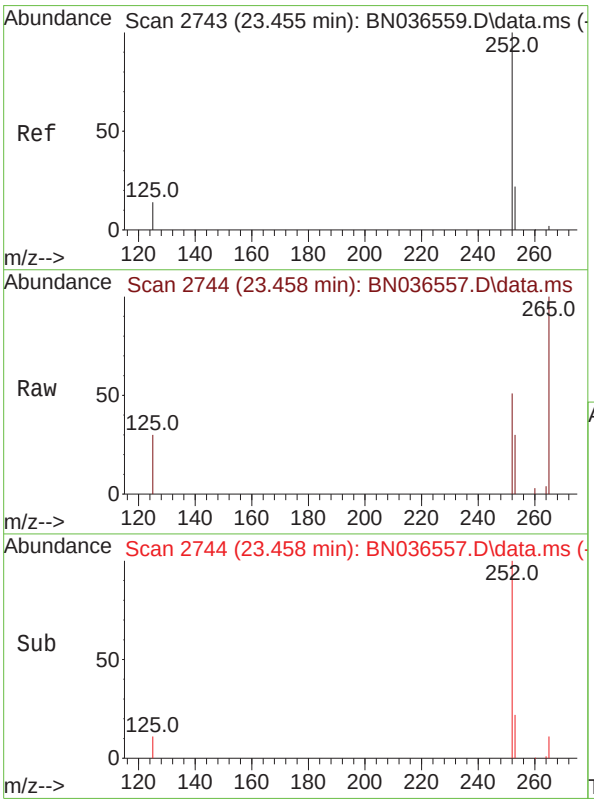
Ion	Ratio	Lower	Upper
252	100		
253	49.0	24.6	36.8#
125	43.9	17.8	26.8#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations APPROVED

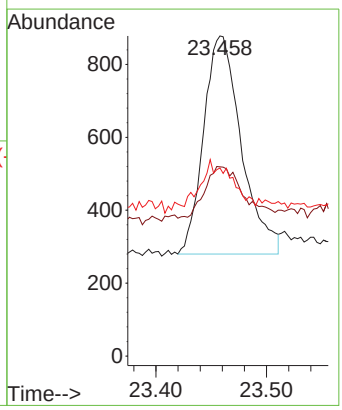
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

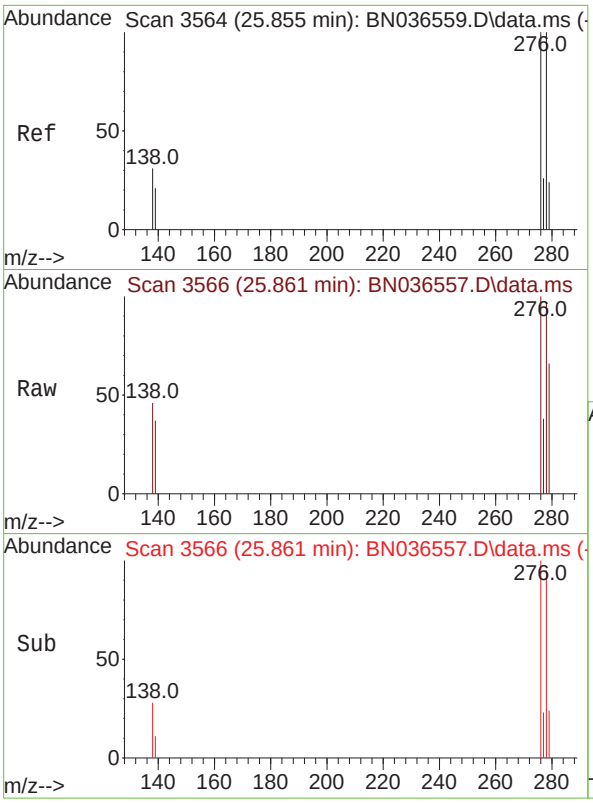


#39
Benzo(a)pyrene
Concen: 0.089 ng
RT: 23.458 min Scan# 2744
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 1419

Ion	Ratio	Lower	Upper
252	100		
253	59.1	27.8	41.8#
125	58.8	22.7	34.1#

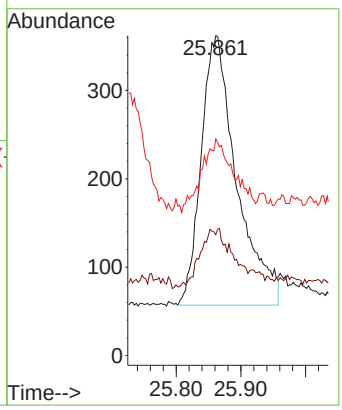




#40
Dibenzo(a,h)anthracene
Concen: 0.079 ng
RT: 25.861 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:278 Resp: 116

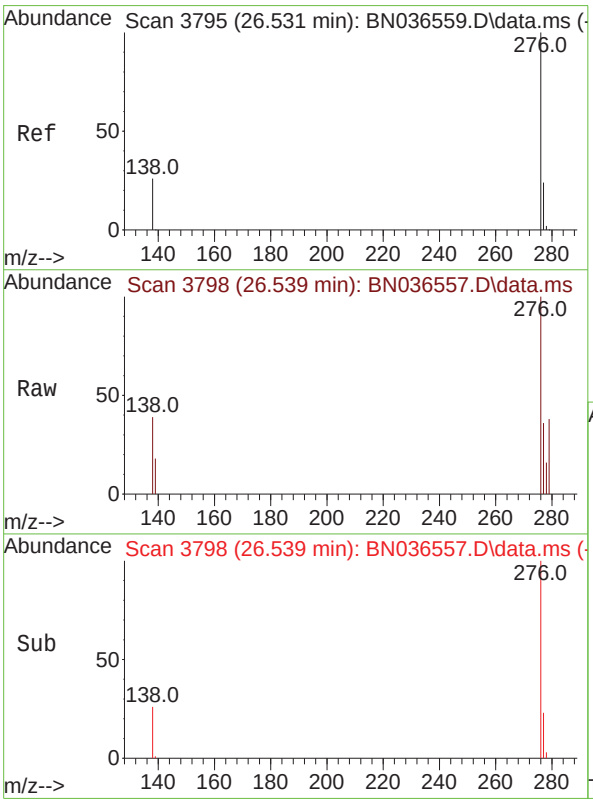
Ion	Ratio	Lower	Upper
278	100		
139	37.8	20.8	31.2#
279	67.7	28.8	43.2#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Manual Integrations
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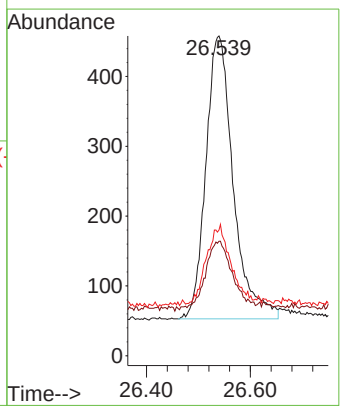
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025



#41
Benzo(g,h,i)perylene
Concen: 0.089 ng
RT: 26.539 min Scan# 3798
Delta R.T. 0.009 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:276 Resp: 1482

Ion	Ratio	Lower	Upper
276	100		
277	35.8	22.2	33.4#
138	39.3	24.1	36.1#



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036558.D
Acq On : 10 Mar 2025 12:18
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

Quant Time: Mar 10 16:00:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2504	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5844	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3516	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	7506	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4730	0.400	ng		0.00
35) Perylene-d12	23.554	264	4241	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	1137	0.195	ng		0.00
5) Phenol-d6	6.901	99	1323	0.184	ng		0.00
8) Nitrobenzene-d5	8.875	82	1156	0.182	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	1603	0.184	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	282	0.177	ng		0.00
15) 2-Fluorobiphenyl	12.993	172	3485	0.170	ng		0.00
27) Fluoranthene-d10	19.146	212	3583	0.186	ng		0.00
31) Terphenyl-d14	19.745	244	2283	0.201	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	550m	0.198	ng		
3) n-Nitrosodimethylamine	3.557	42	1094	0.195	ng		92
6) bis(2-Chloroethyl)ether	7.154	93	1440	0.193	ng		99
9) Naphthalene	10.562	128	3286	0.191	ng		97
10) Hexachlorobutadiene	10.850	225	828	0.205	ng	#	97
12) 2-Methylnaphthalene	12.187	142	2034	0.186	ng		97
16) Acenaphthylene	14.088	152	3087	0.186	ng		100
17) Acenaphthene	14.430	154	2038	0.188	ng		99
18) Fluorene	15.414	166	2813	0.191	ng		99
20) 4,6-Dinitro-2-methylph...	15.510	198	214	0.258	ng	#	69
21) 4-Bromophenyl-phenylether	16.304	248	853	0.181	ng		93
22) Hexachlorobenzene	16.416	284	1079	0.190	ng		99
23) Atrazine	16.578	200	716	0.190	ng		97
24) Pentachlorophenol	16.776	266	435	0.168	ng		98
25) Phenanthrene	17.148	178	4171	0.185	ng		100
26) Anthracene	17.248	178	3645	0.179	ng		99
28) Fluoranthene	19.174	202	4666	0.184	ng		99
30) Pyrene	19.536	202	4742	0.205	ng		100
32) Benzo(a)anthracene	21.286	228	3111	0.189	ng		97
33) Chrysene	21.331	228	3568	0.199	ng		97
34) Bis(2-ethylhexyl)phtha...	21.214	149	2601	0.222	ng	#	97
36) Indeno(1,2,3-cd)pyrene	25.844	276	2790	0.182	ng		98
37) Benzo(b)fluoranthene	22.876	252	2883	0.187	ng	#	83
38) Benzo(k)fluoranthene	22.917	252	2962	0.183	ng	#	86
39) Benzo(a)pyrene	23.458	252	2443	0.188	ng	#	76
40) Dibenzo(a,h)anthracene	25.858	278	2080	0.175	ng	#	83
41) Benzo(g,h,i)perylene	26.536	276	2573	0.189	ng		95

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

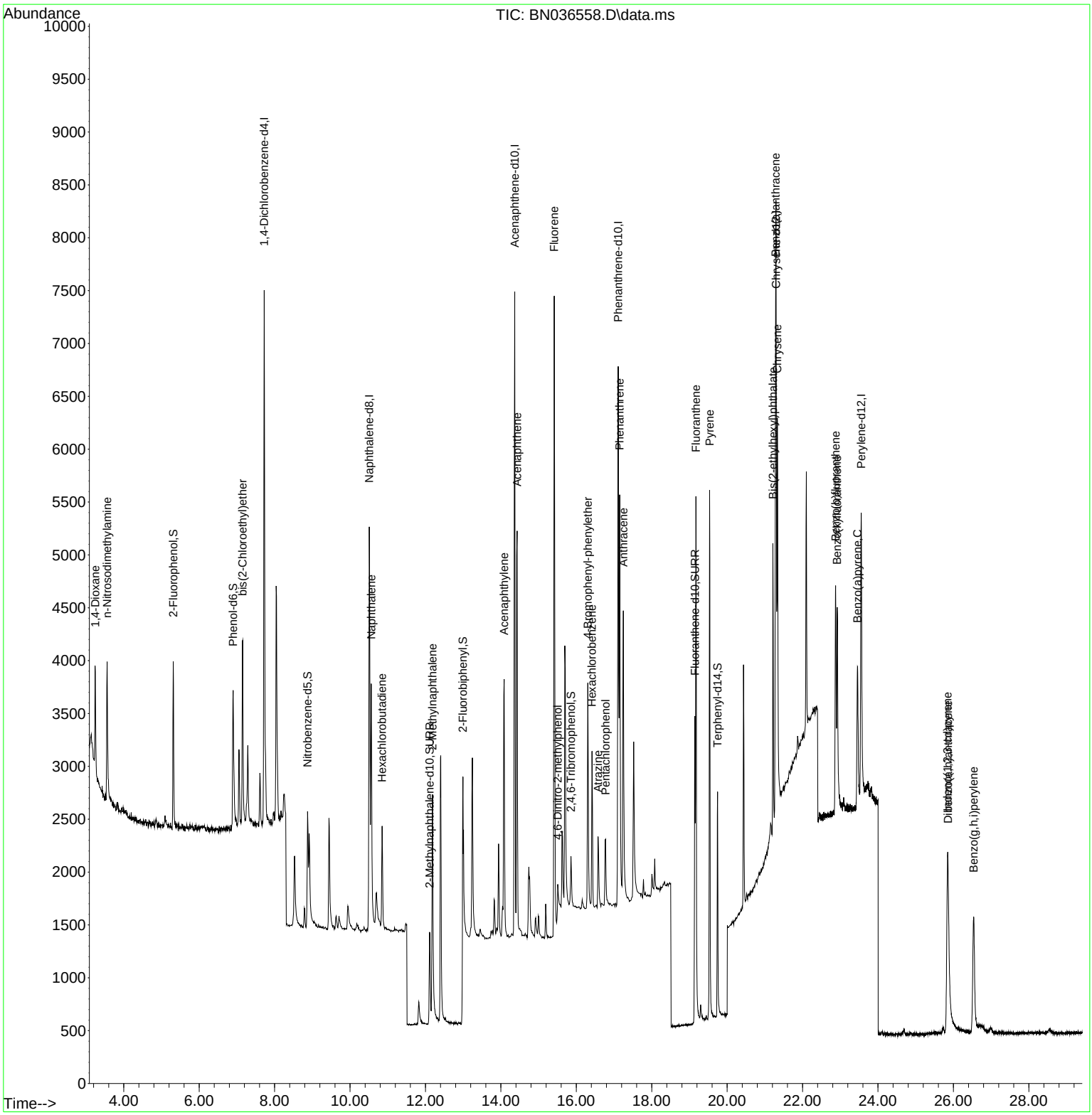
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036558.D
Acq On : 10 Mar 2025 12:18
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

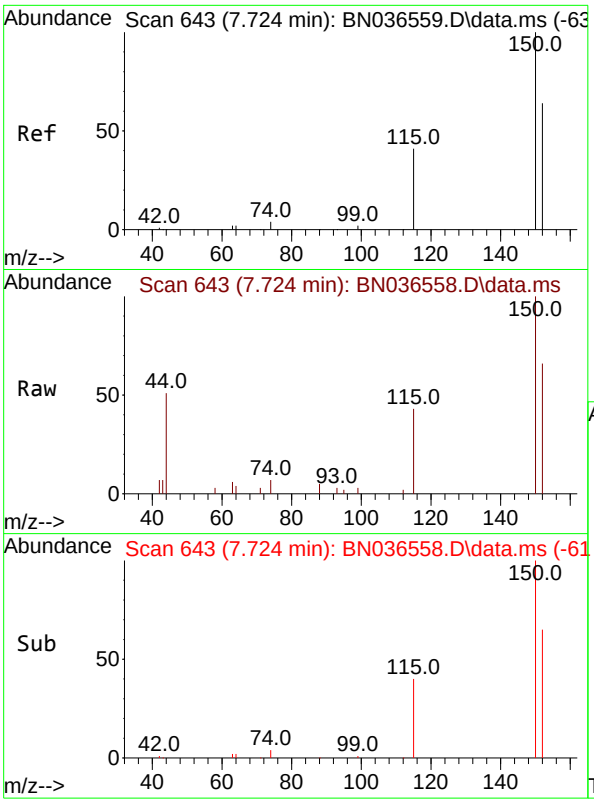
Quant Time: Mar 10 16:00:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

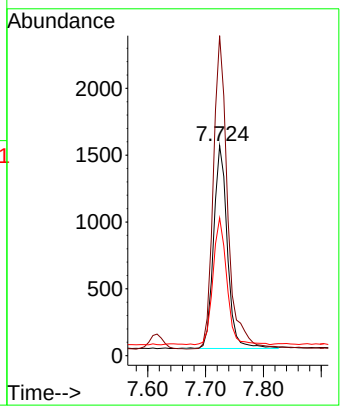




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 250

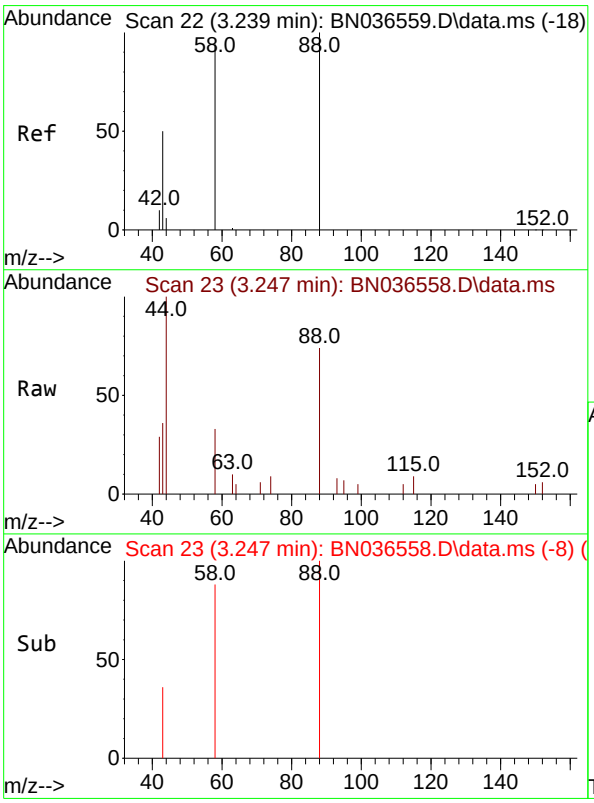
Ion	Ratio	Lower	Upper
152	100		
150	152.3	123.7	185.5
115	65.5	54.3	81.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

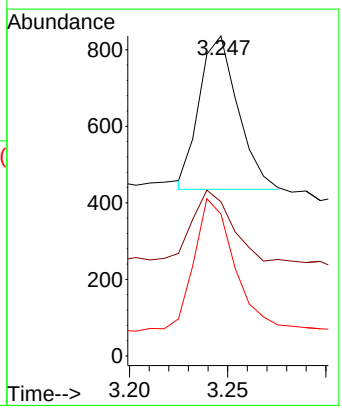
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

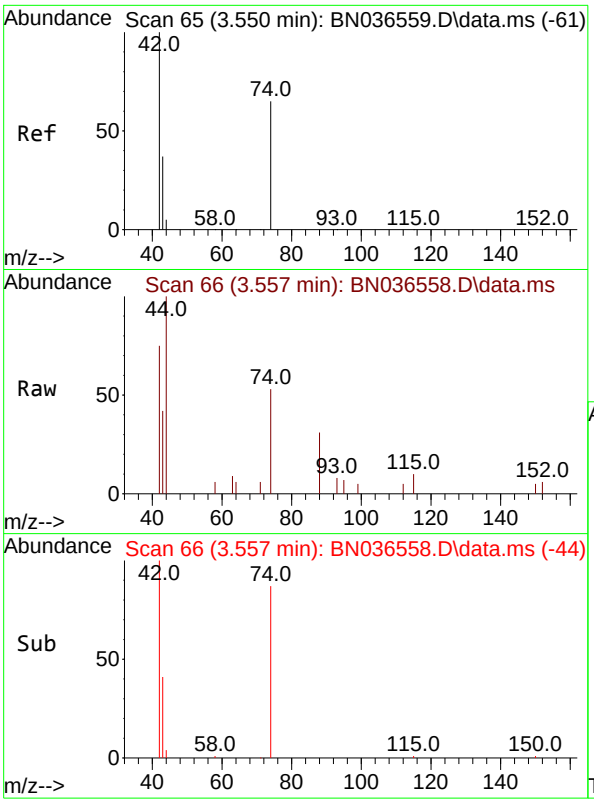


#2
1,4-Dioxane
Concen: 0.198 ng m
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 88 Resp: 550

Ion	Ratio	Lower	Upper
88	100		
43	56.5	37.8	56.8
58	93.8	67.4	101.2

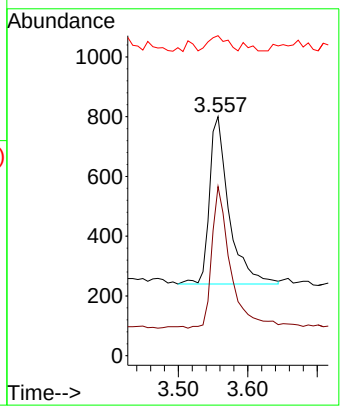




#3
n-Nitrosodimethylamine
Concen: 0.195 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 42 Resp: 109

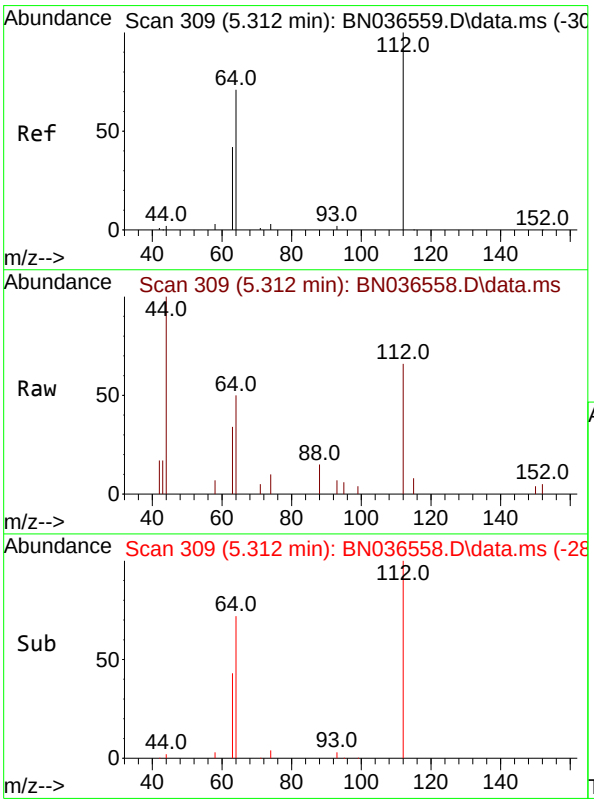
Ion	Ratio	Lower	Upper
42	100		
74	83.2	60.6	90.8
44	8.5	6.3	9.5



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

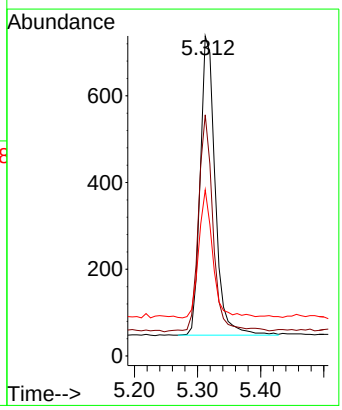
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

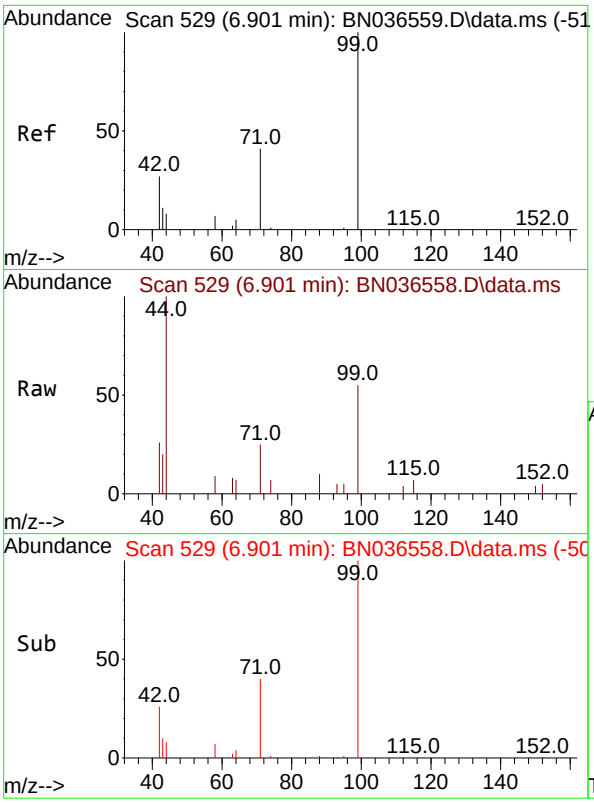


#4
2-Fluorophenol
Concen: 0.195 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:112 Resp: 1137

Ion	Ratio	Lower	Upper
112	100		
64	70.6	53.1	79.7
63	40.3	31.8	47.8

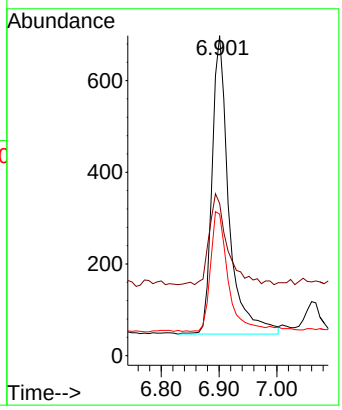




#5
Phenol-d6
Concen: 0.184 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 99 Resp: 132

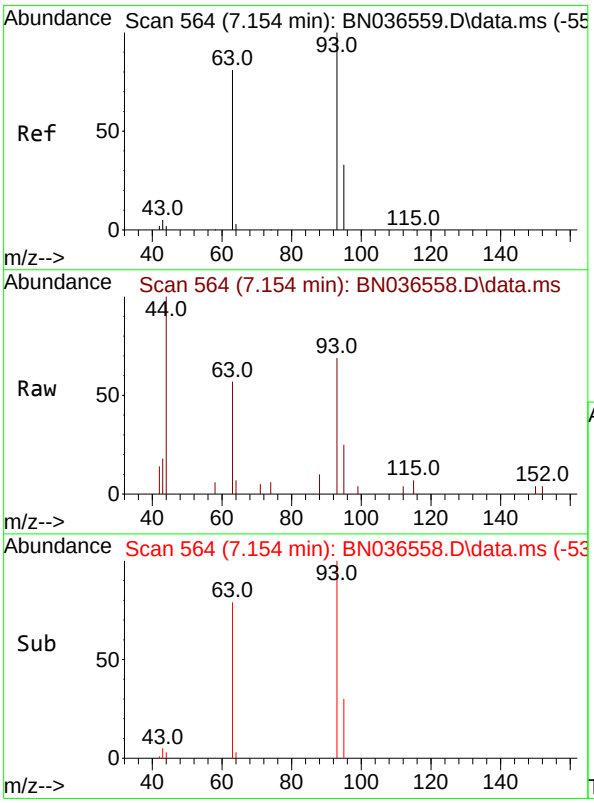
Ion	Ratio	Lower	Upper
99	100		
42	32.7	26.5	39.7
71	41.3	34.1	51.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

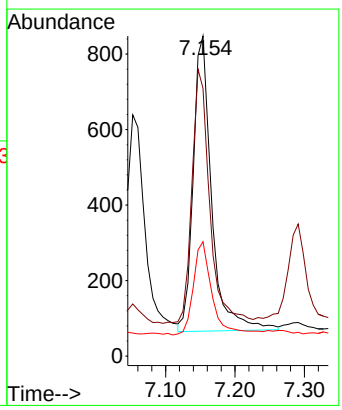
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

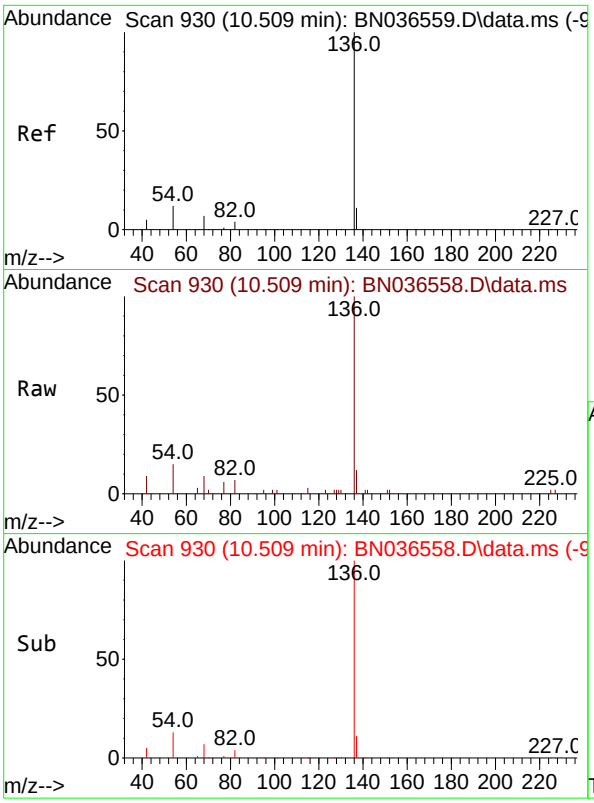


#6
bis(2-Chloroethyl)ether
Concen: 0.193 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 93 Resp: 1440

Ion	Ratio	Lower	Upper
93	100		
63	82.9	67.7	101.5
95	31.9	25.6	38.4

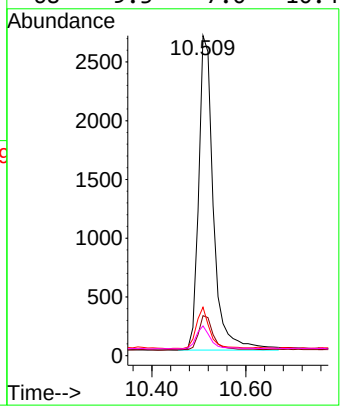




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:136 Resp: 584

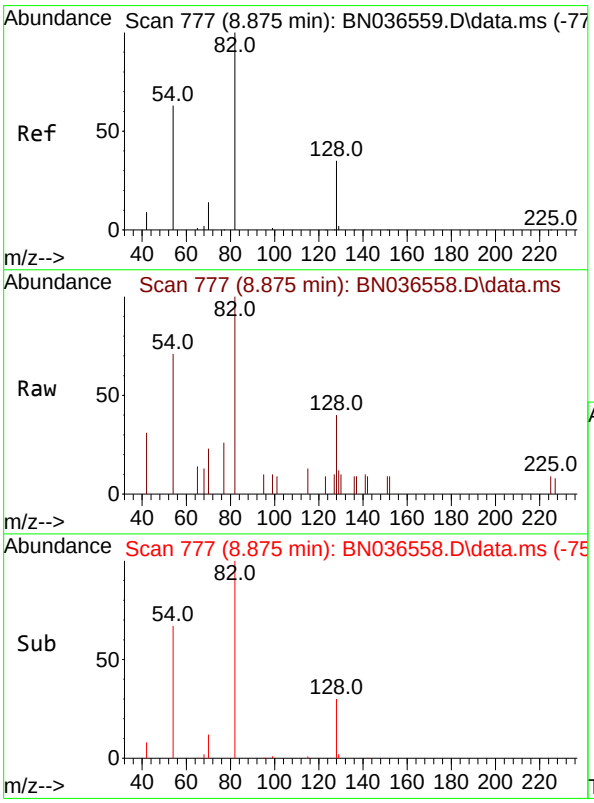
Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.3	15.5
54	15.1	11.5	17.3
68	9.3	7.0	10.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

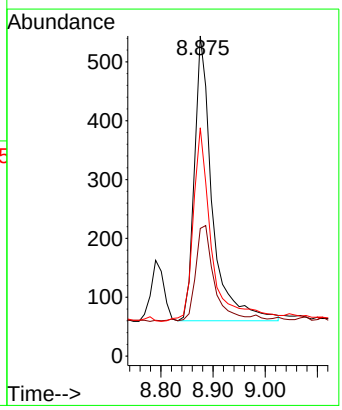
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

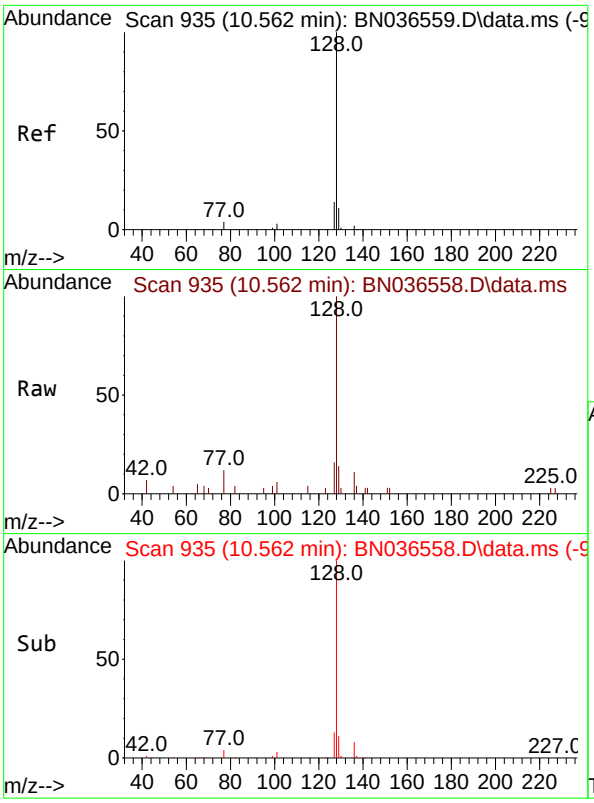


#8
Nitrobenzene-d5
Concen: 0.182 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 82 Resp: 1156

Ion	Ratio	Lower	Upper
82	100		
128	39.9	30.6	45.8
54	71.3	52.2	78.4

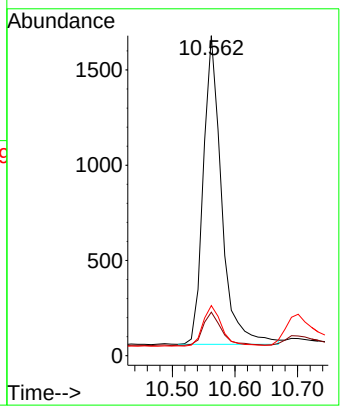




#9
Naphthalene
Concen: 0.191 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:128 Resp: 328

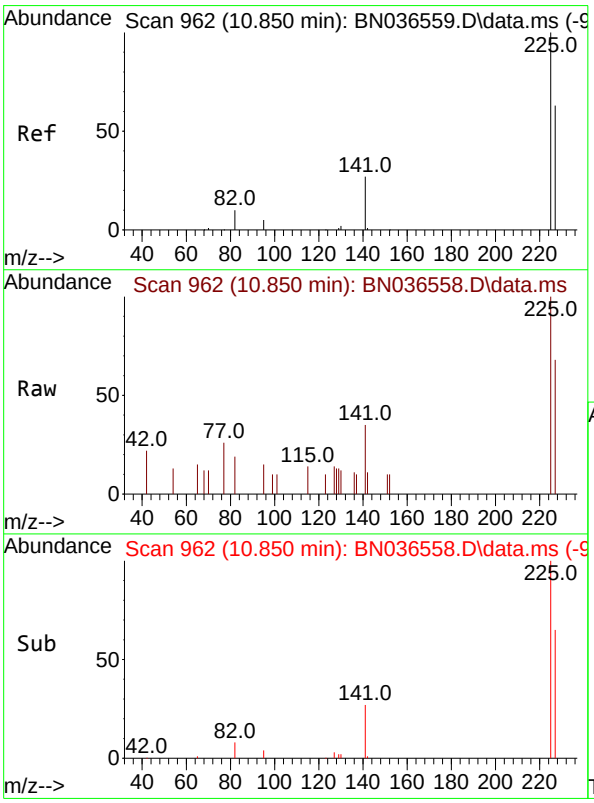
Ion	Ratio	Lower	Upper
128	100		
129	13.6	9.8	14.6
127	15.7	11.8	17.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

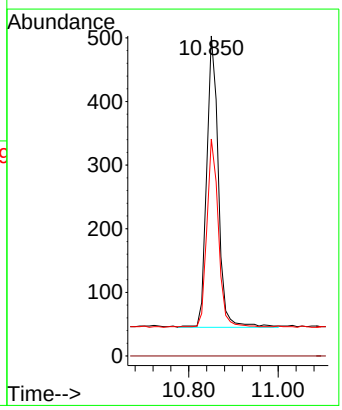
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

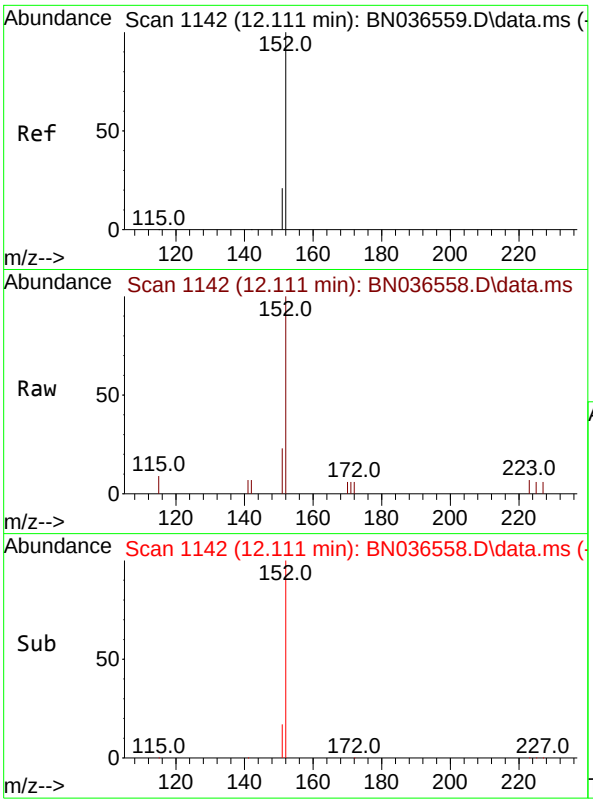


#10
Hexachlorobutadiene
Concen: 0.205 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:225 Resp: 828

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.6	51.8	77.8

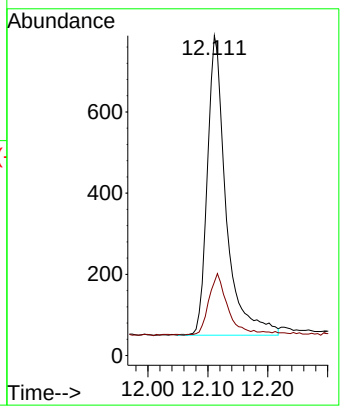




#11
2-Methylnaphthalene-d10
Concen: 0.184 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 160

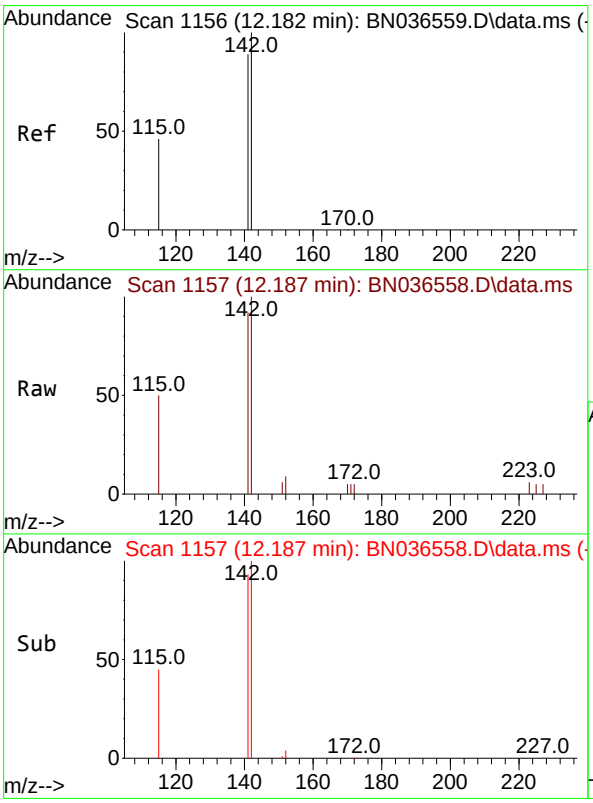
Ion	Ratio	Lower	Upper
152	100		
151	21.0	17.0	25.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

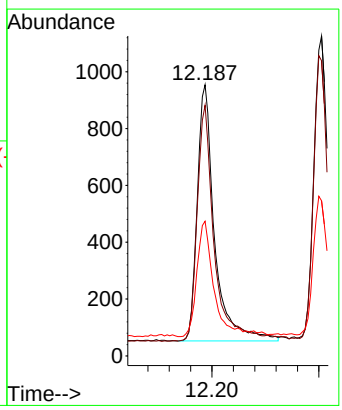
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

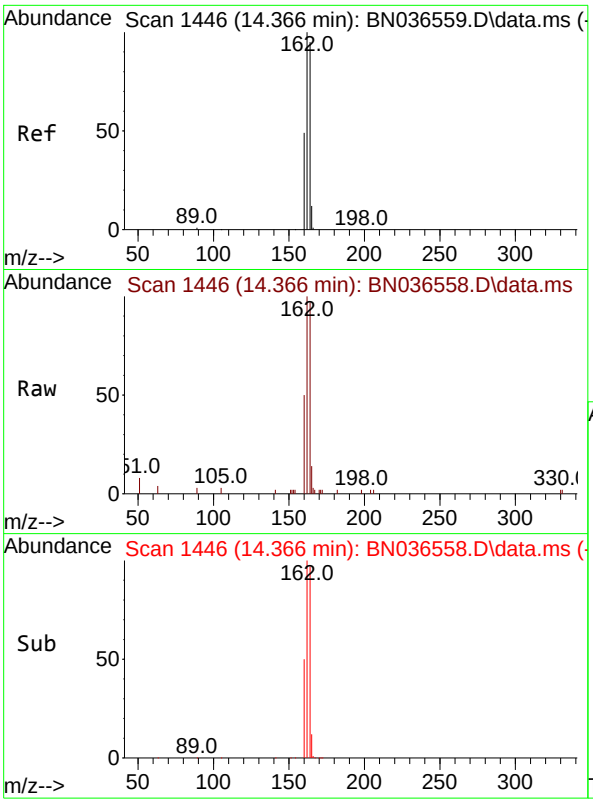


#12
2-Methylnaphthalene
Concen: 0.186 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:142 Resp: 2034

Ion	Ratio	Lower	Upper
142	100		
141	92.5	71.7	107.5
115	49.7	38.3	57.5

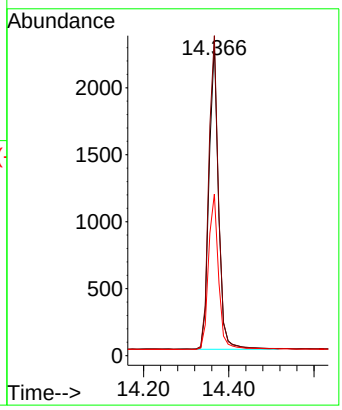




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:164 Resp: 351

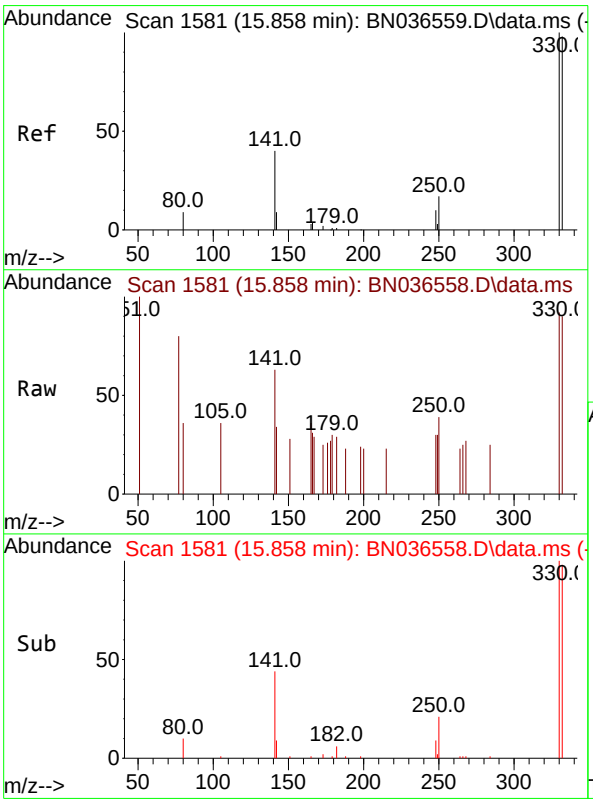
Ion	Ratio	Lower	Upper
164	100		
162	102.6	84.2	126.2
160	51.8	42.2	63.2



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

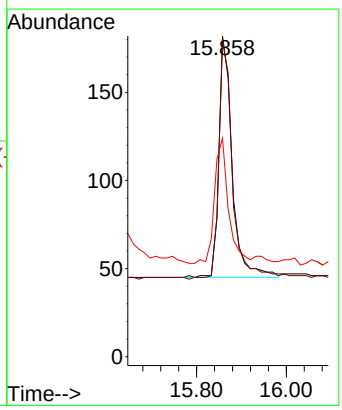
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

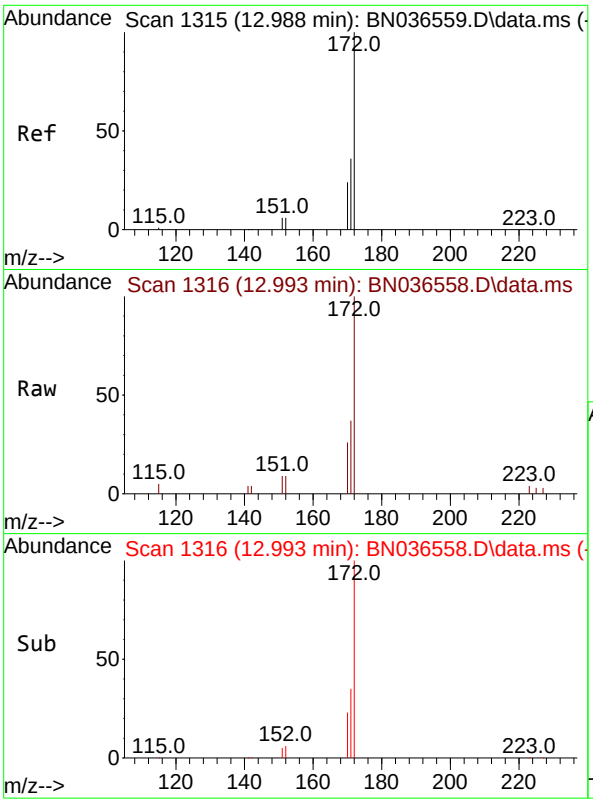


#14
2,4,6-Tribromophenol
Concen: 0.177 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:330 Resp: 282

Ion	Ratio	Lower	Upper
330	100		
332	103.5	75.2	112.8
141	53.9	43.4	65.2

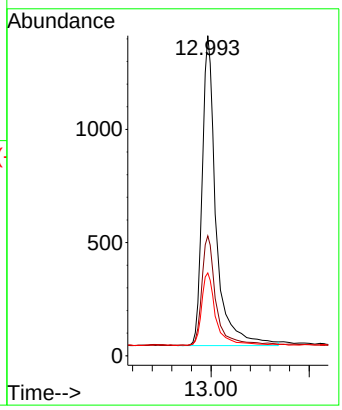




#15
2-Fluorobiphenyl
Concen: 0.170 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:172 Resp: 348

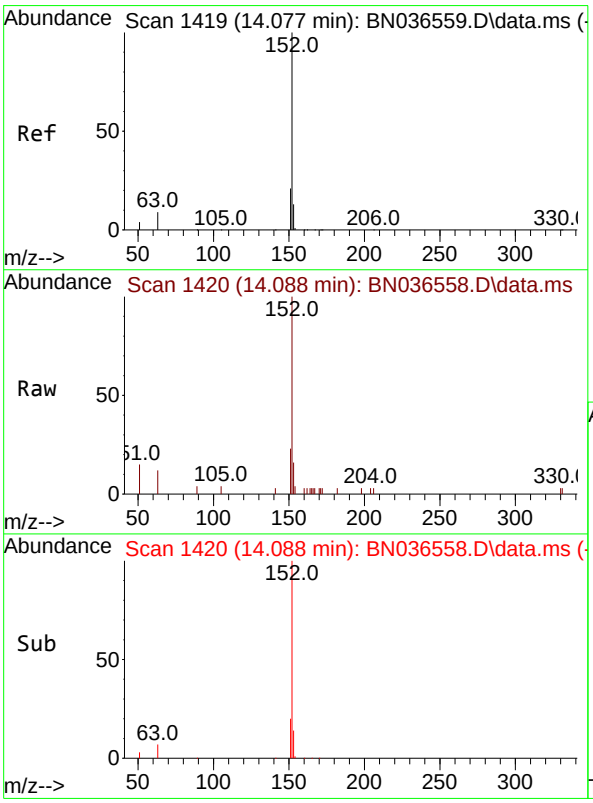
Ion	Ratio	Lower	Upper
172	100		
171	37.5	29.5	44.3
170	25.9	20.2	30.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

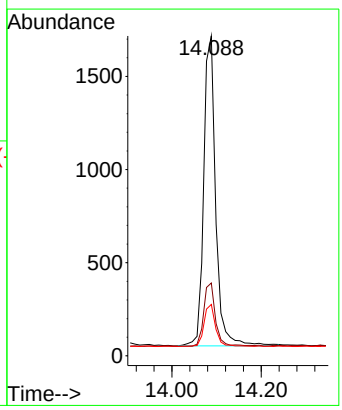
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

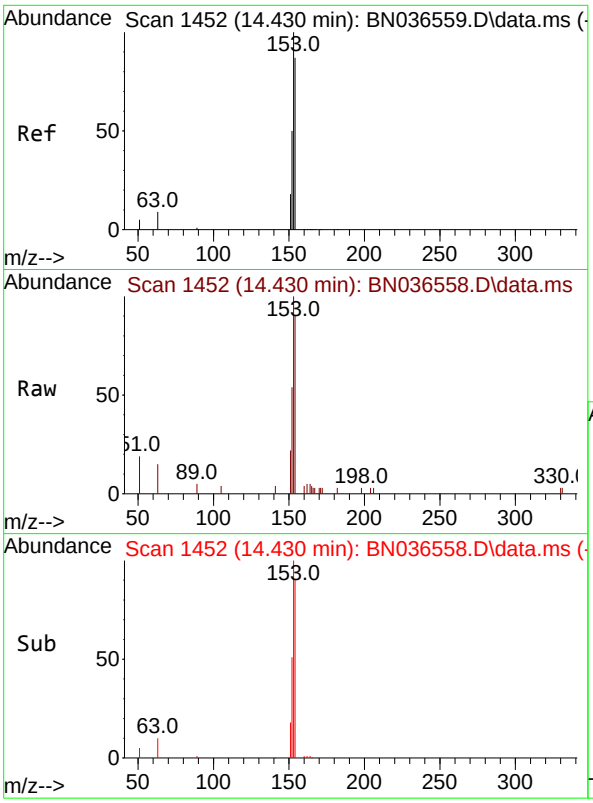


#16
Acenaphthylene
Concen: 0.186 ng
RT: 14.088 min Scan# 1420
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 3087

Ion	Ratio	Lower	Upper
152	100		
151	20.4	16.2	24.4
153	13.0	10.6	15.8

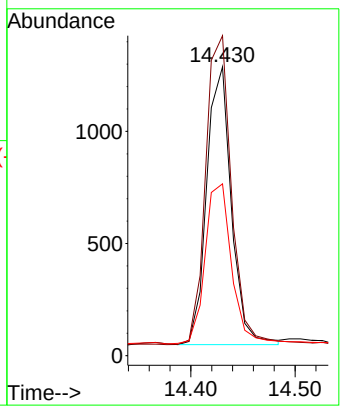




#17
Acenaphthene
Concen: 0.188 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:154 Resp: 203

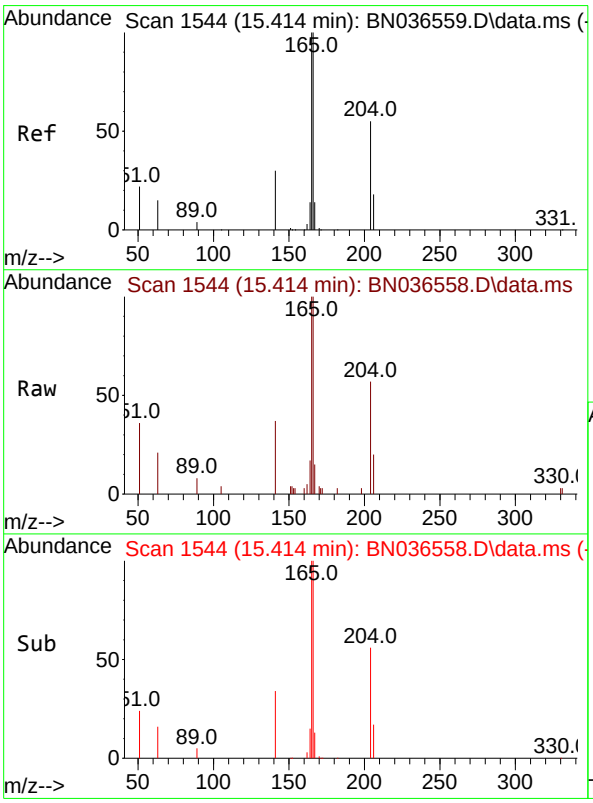
Ion	Ratio	Lower	Upper
154	100		
153	117.8	94.1	141.1
152	63.1	49.8	74.6



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

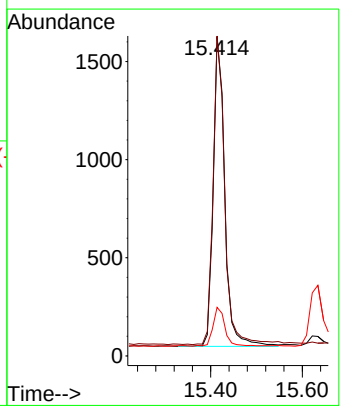
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

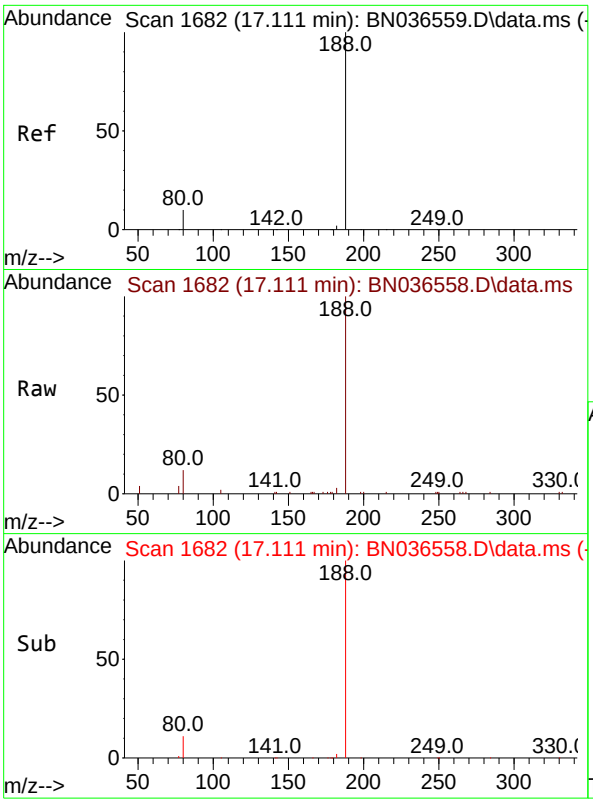


#18
Fluorene
Concen: 0.191 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:166 Resp: 2813

Ion	Ratio	Lower	Upper
166	100		
165	101.1	79.8	119.8
167	12.6	10.6	15.8

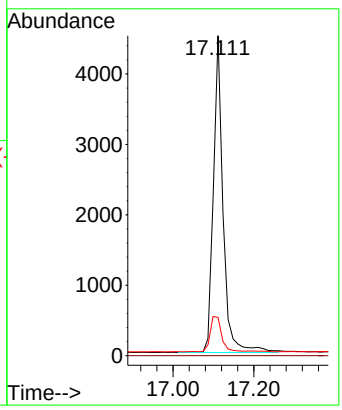




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:188 Resp: 750

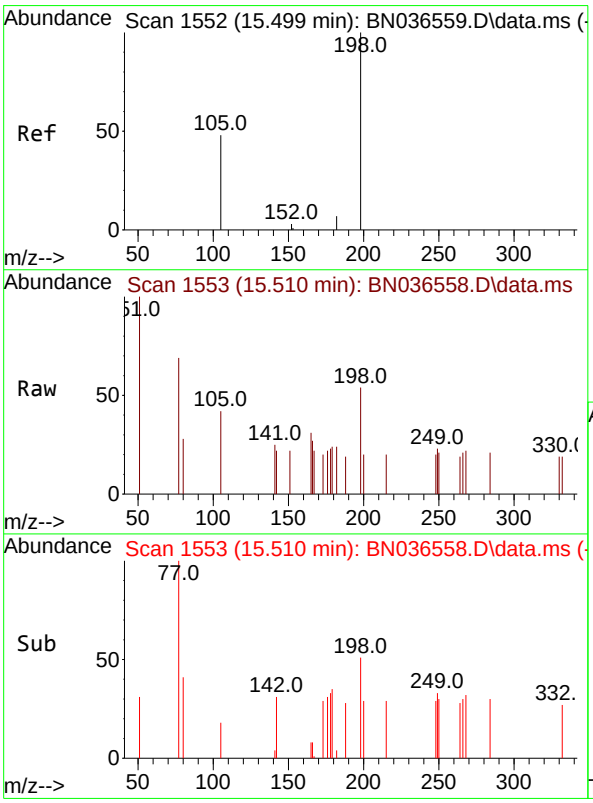
Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.9	8.8	13.2



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

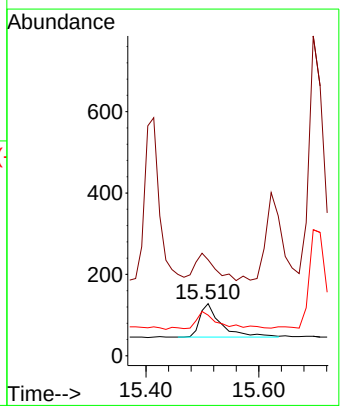
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

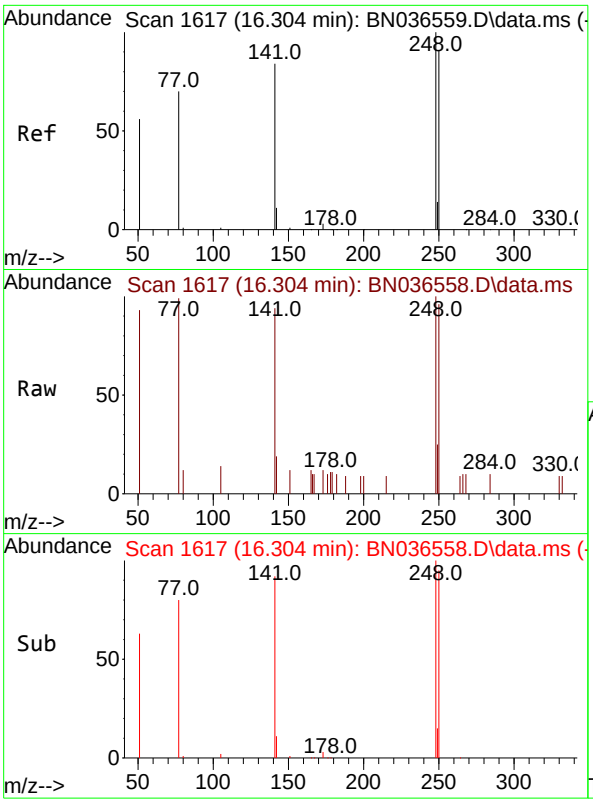


#20
4,6-Dinitro-2-methylphenol
Concen: 0.258 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:198 Resp: 214

Ion	Ratio	Lower	Upper
198	100		
51	184.4	107.9	161.9#
105	78.1	56.2	84.2





#21
4-Bromophenyl-phenylether
Concen: 0.181 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

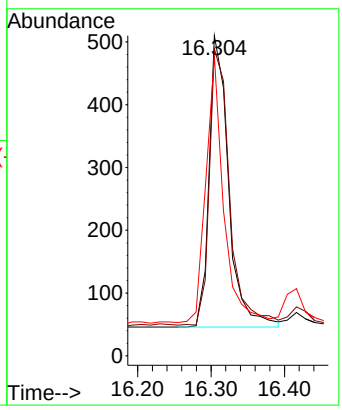
Tgt Ion:248 Resp: 85

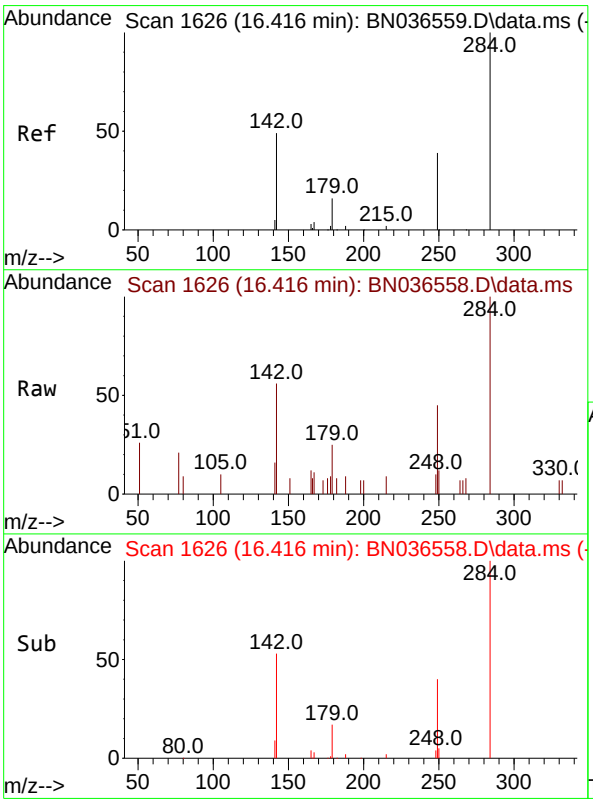
Ion	Ratio	Lower	Upper
248	100		
250	95.9	73.0	109.6
141	93.7	68.6	103.0

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

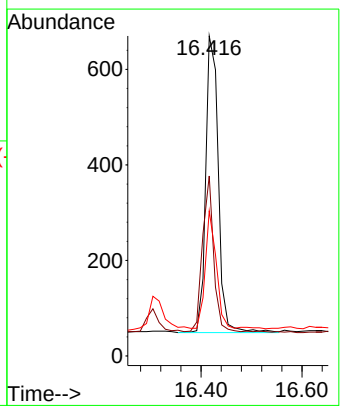


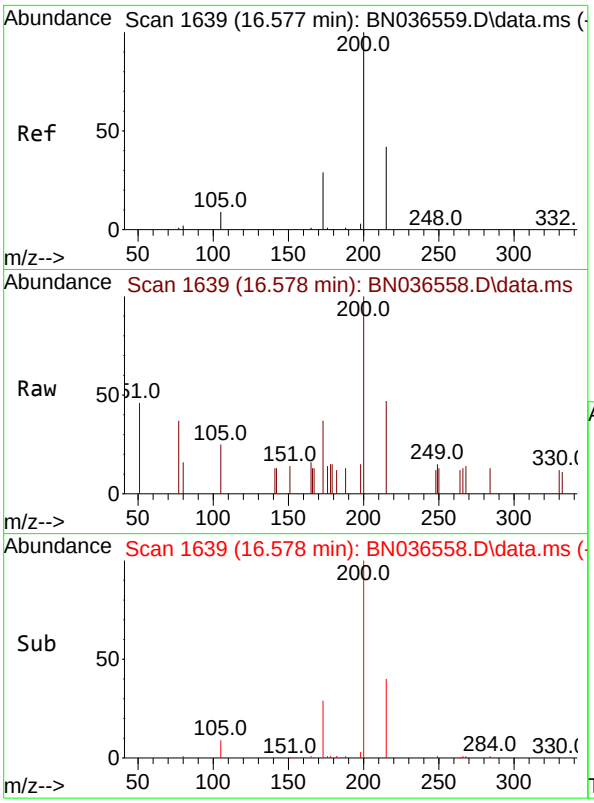


#22
Hexachlorobenzene
Concen: 0.190 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:284 Resp: 1079

Ion	Ratio	Lower	Upper
284	100		
142	47.0	37.0	55.4
249	34.8	28.1	42.1

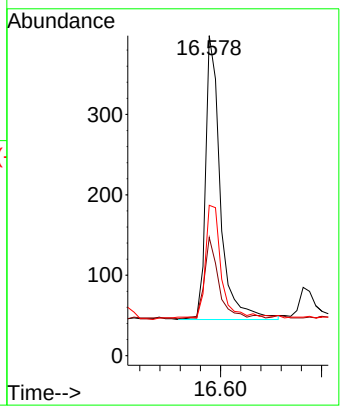




#23
Atrazine
Concen: 0.190 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:200 Resp: 71(

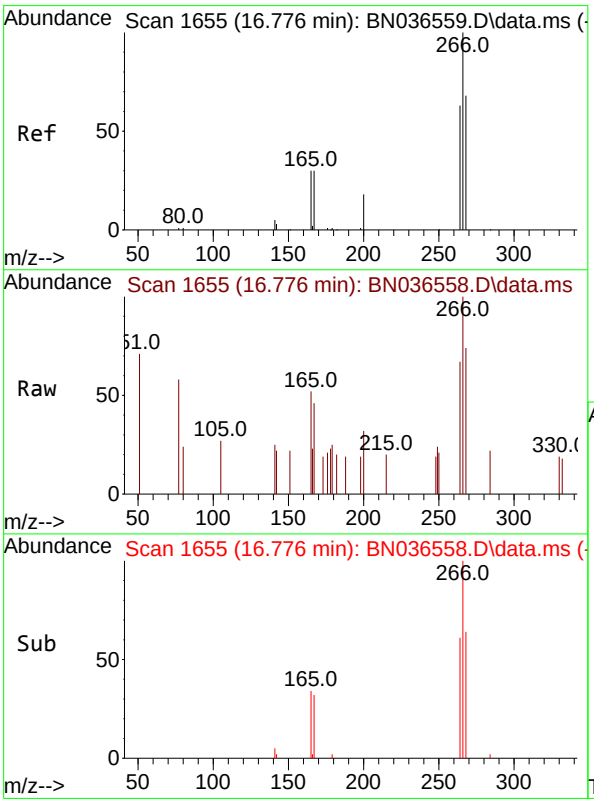
Ion	Ratio	Lower	Upper
200	100		
173	36.9	27.3	40.9
215	47.0	36.8	55.2



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

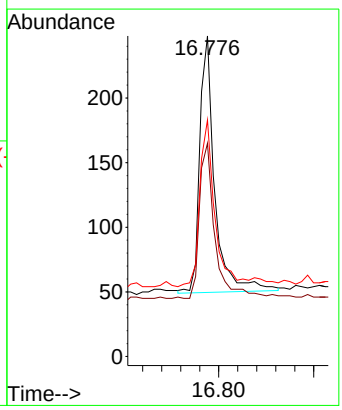
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

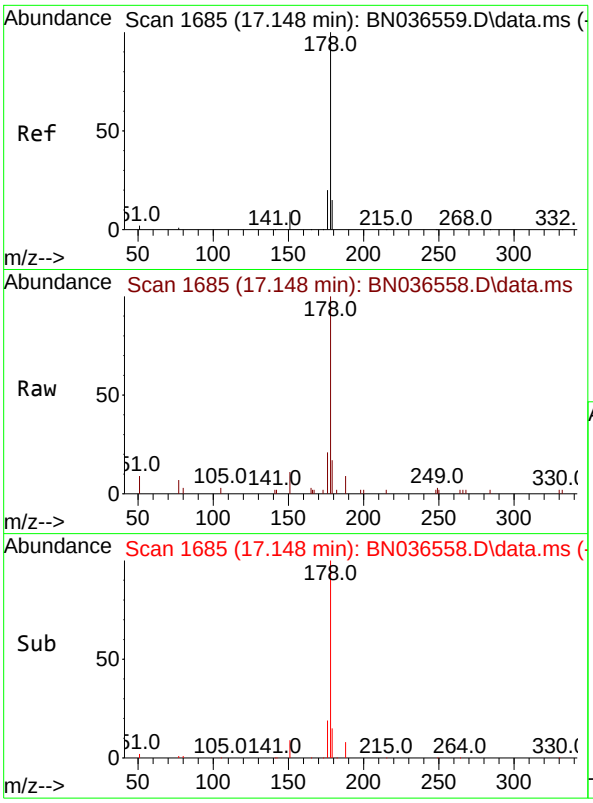


#24
Pentachlorophenol
Concen: 0.168 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:266 Resp: 435

Ion	Ratio	Lower	Upper
266	100		
264	63.4	49.6	74.4
268	65.7	50.9	76.3

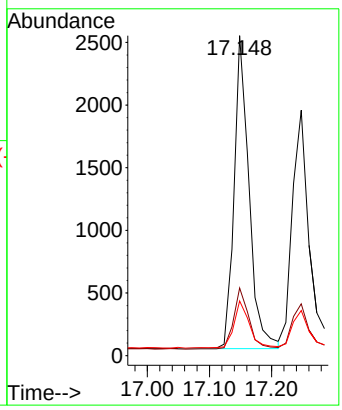




#25
Phenanthrene
Concen: 0.185 ng
RT: 17.148 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:178 Resp: 417

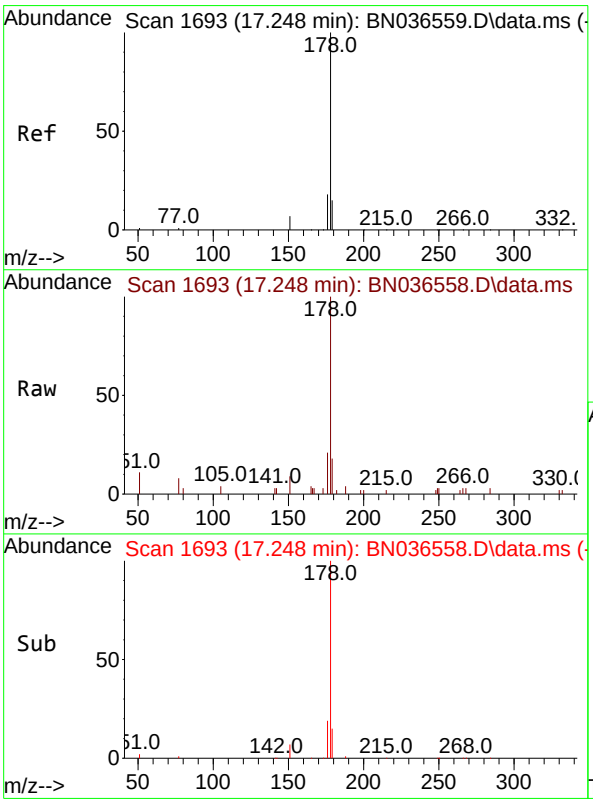
Ion	Ratio	Lower	Upper
178	100		
176	20.0	15.9	23.9
179	15.5	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

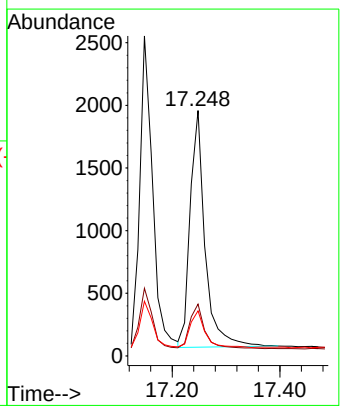
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

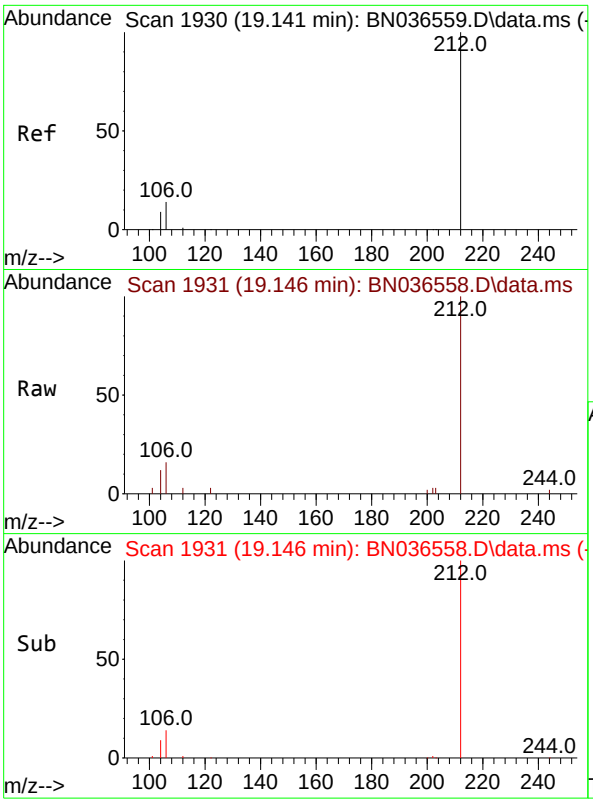


#26
Anthracene
Concen: 0.179 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:178 Resp: 3645

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.2
179	15.1	12.6	18.8

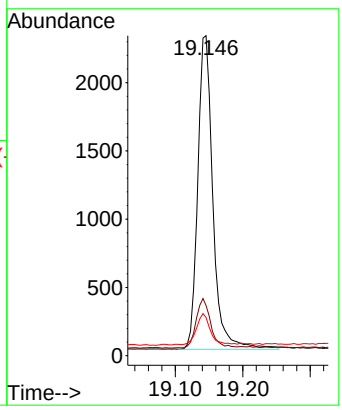




#27
Fluoranthene-d10
Concen: 0.186 ng
RT: 19.146 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:212 Resp: 358

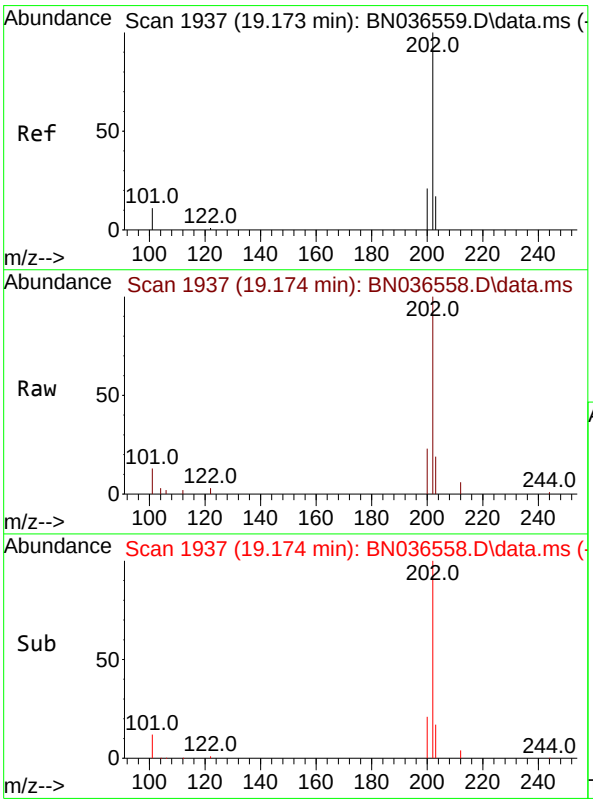
Ion	Ratio	Lower	Upper
212	100		
106	15.0	11.8	17.6
104	9.3	7.3	10.9



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

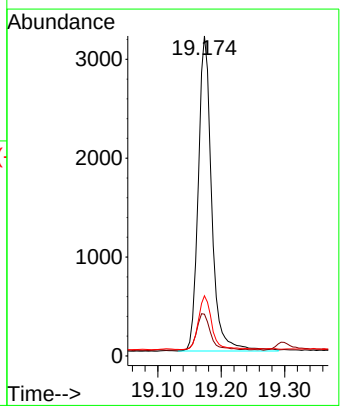
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

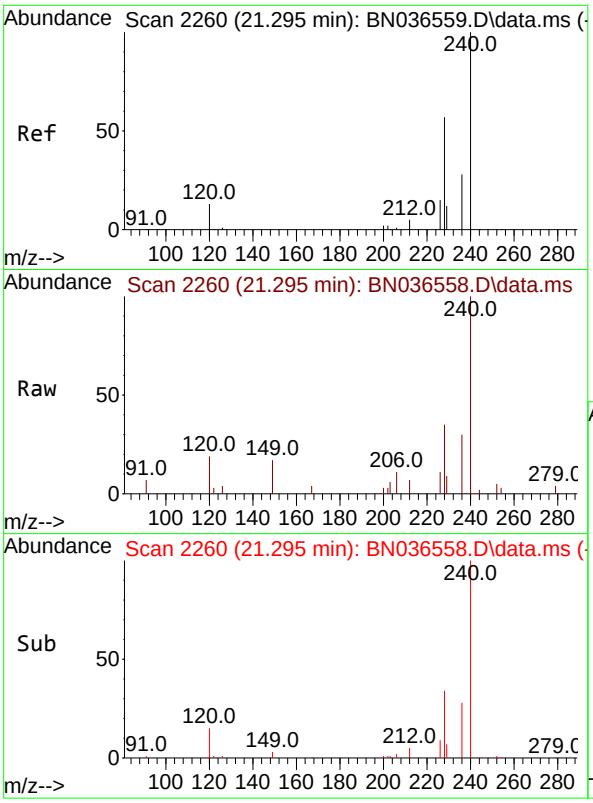


#28
Fluoranthene
Concen: 0.184 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4666

Ion	Ratio	Lower	Upper
202	100		
101	12.1	9.4	14.0
203	17.1	13.5	20.3

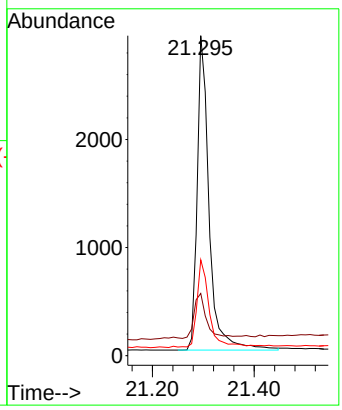




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:240 Resp: 473

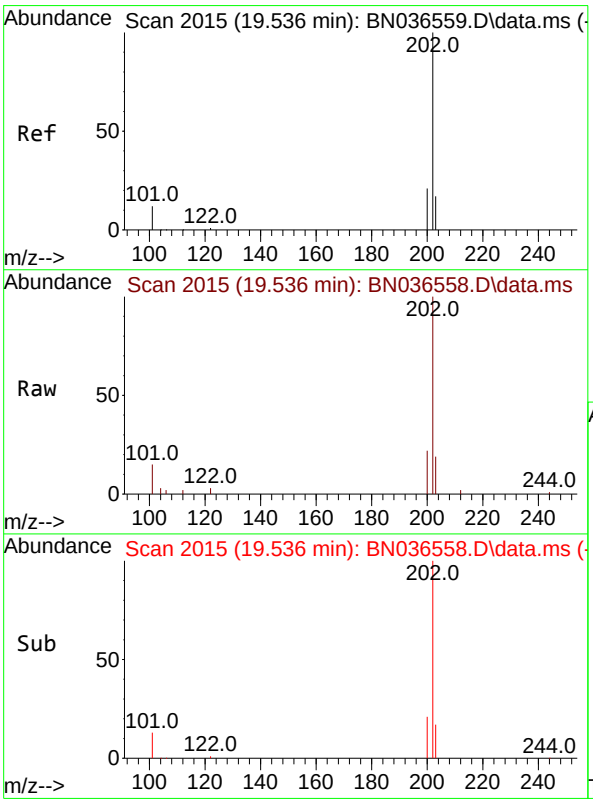
Ion	Ratio	Lower	Upper
240	100		
120	19.5	14.6	22.0
236	29.9	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

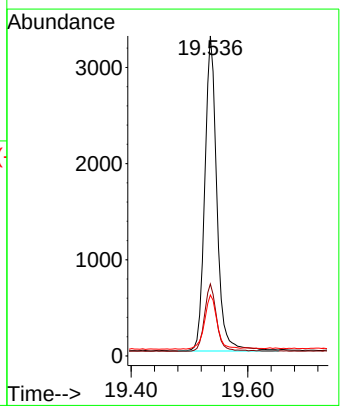
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

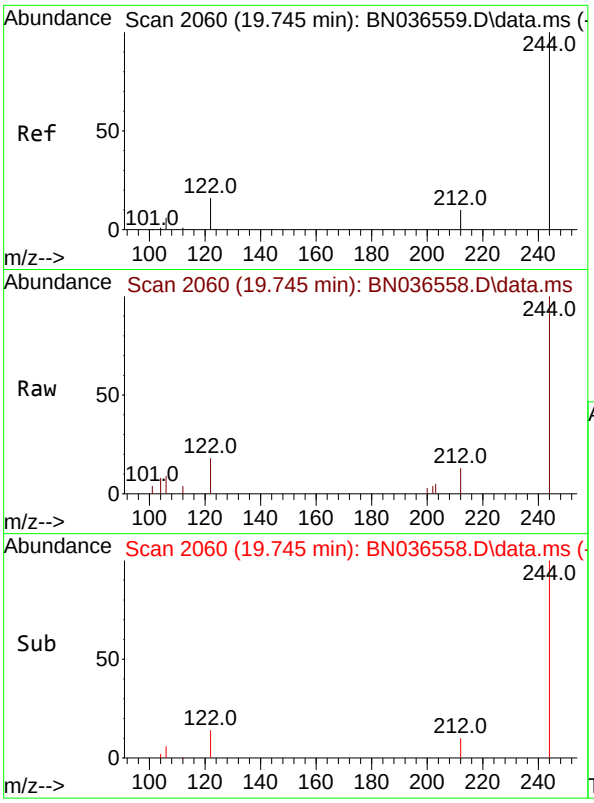


#30
Pyrene
Concen: 0.205 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4742

Ion	Ratio	Lower	Upper
202	100		
200	21.1	17.1	25.7
203	17.7	14.1	21.1

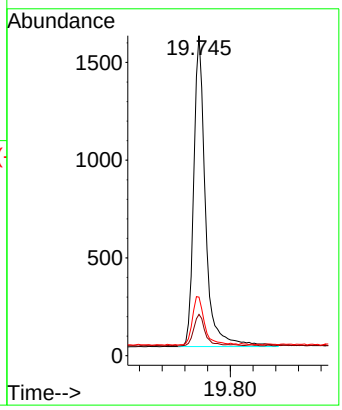




#31
Terphenyl-d14
Concen: 0.201 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:244 Resp: 228

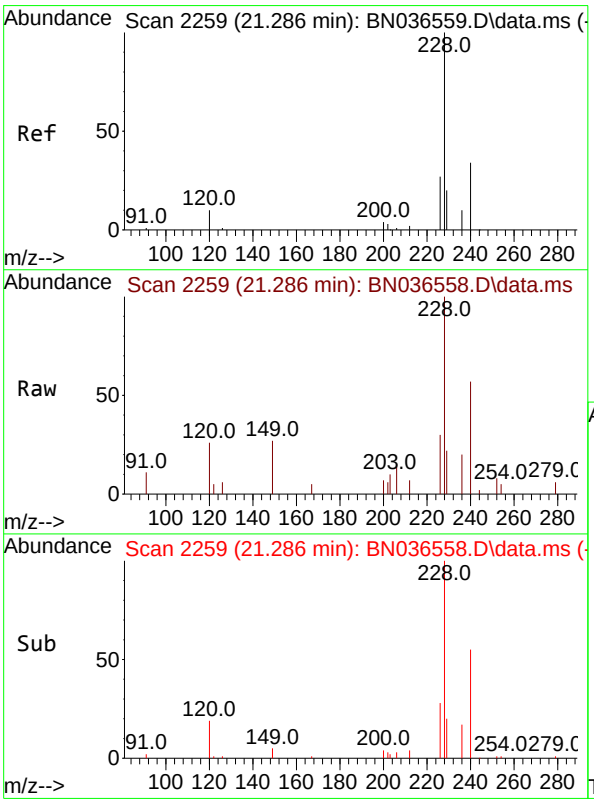
Ion	Ratio	Lower	Upper
244	100		
212	12.9	9.6	14.4
122	18.3	13.9	20.9



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

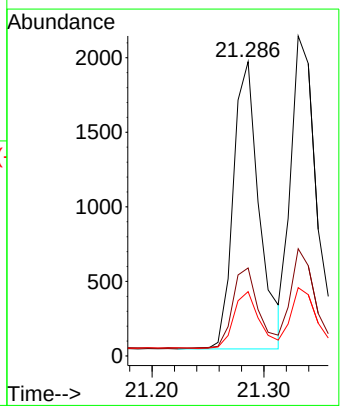
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

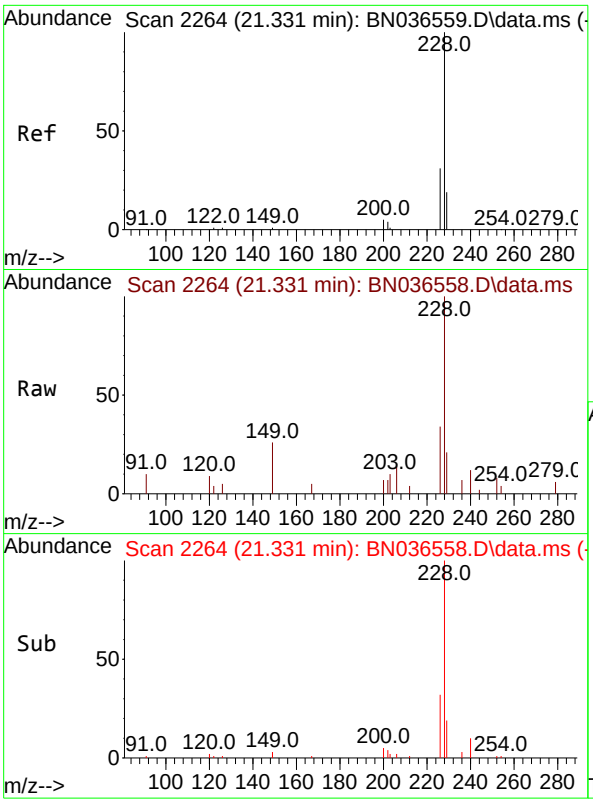


#32
Benzo(a)anthracene
Concen: 0.189 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:228 Resp: 3111

Ion	Ratio	Lower	Upper
228	100		
226	29.9	22.5	33.7
229	21.9	16.6	25.0

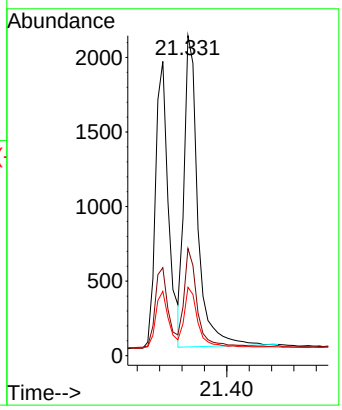




#33
Chrysene
Concen: 0.199 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:228 Resp: 356

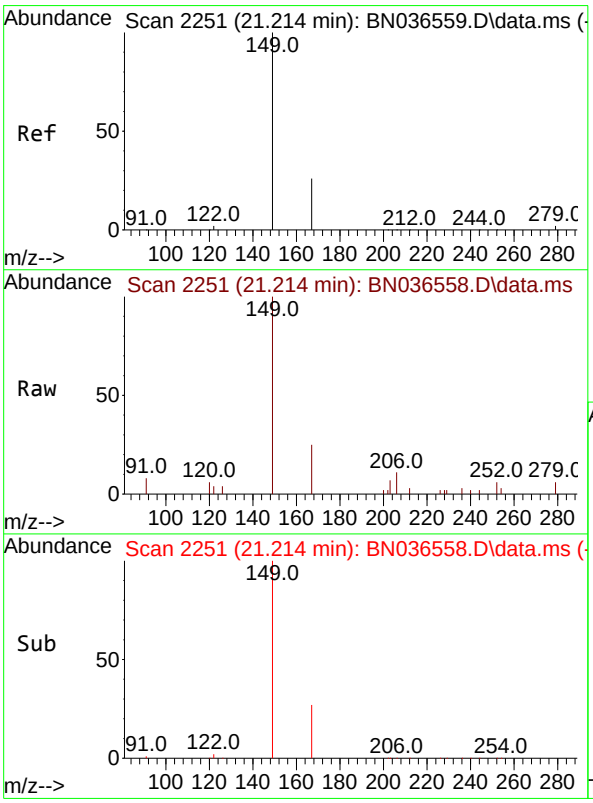
Ion	Ratio	Lower	Upper
228	100		
226	33.5	25.3	37.9
229	21.4	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

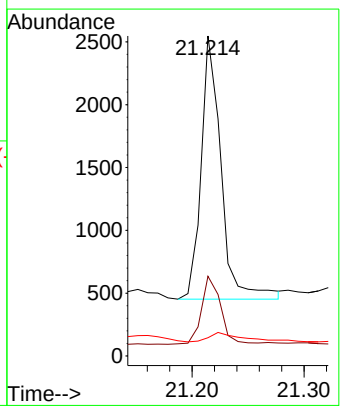
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

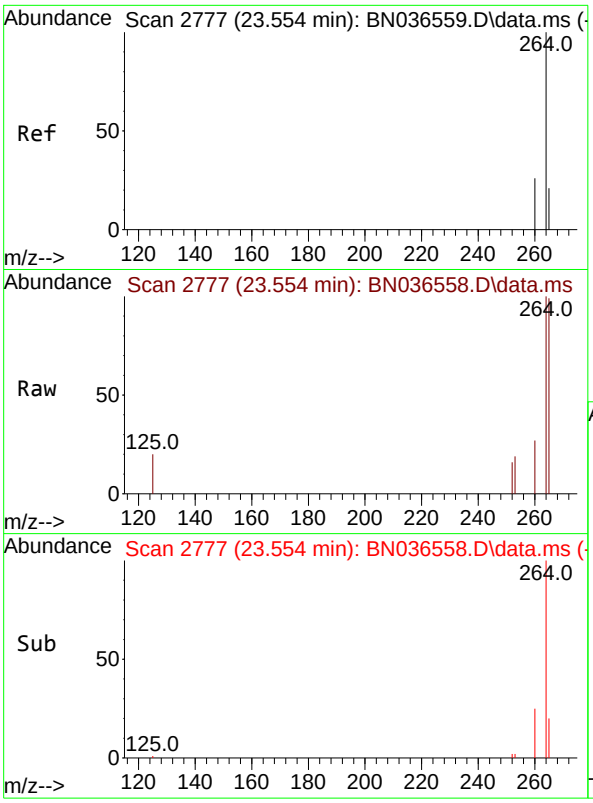


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.222 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:149 Resp: 2601

Ion	Ratio	Lower	Upper
149	100		
167	24.7	20.7	31.1
279	5.7	3.6	5.4#

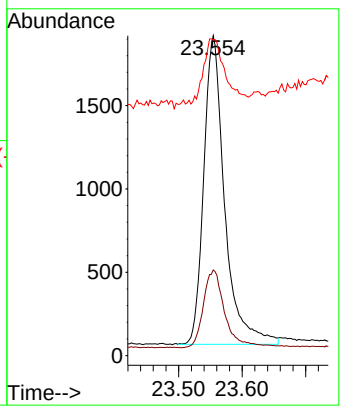




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:264 Resp: 424

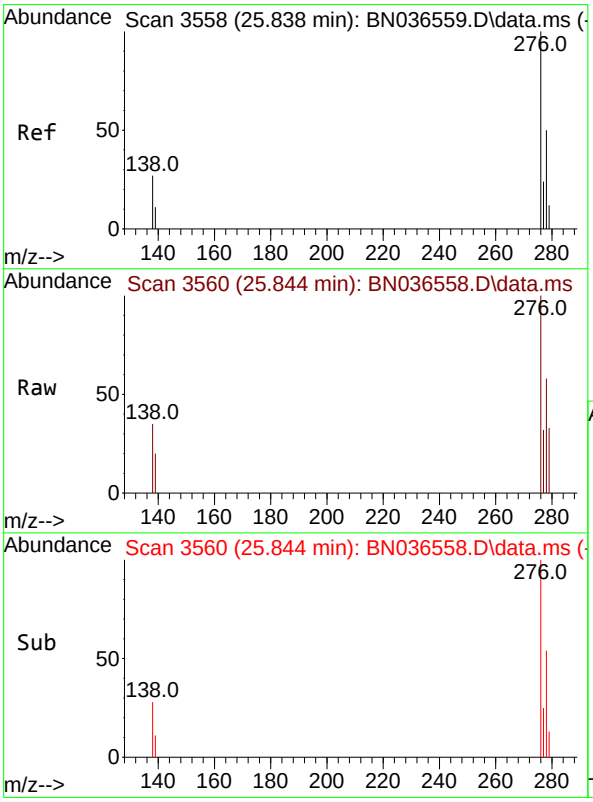
Ion	Ratio	Lower	Upper
264	100		
260	26.8	22.6	33.8
265	98.5	88.1	132.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

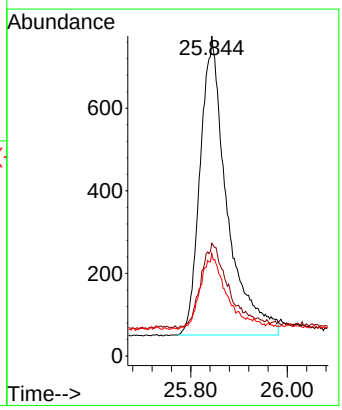
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

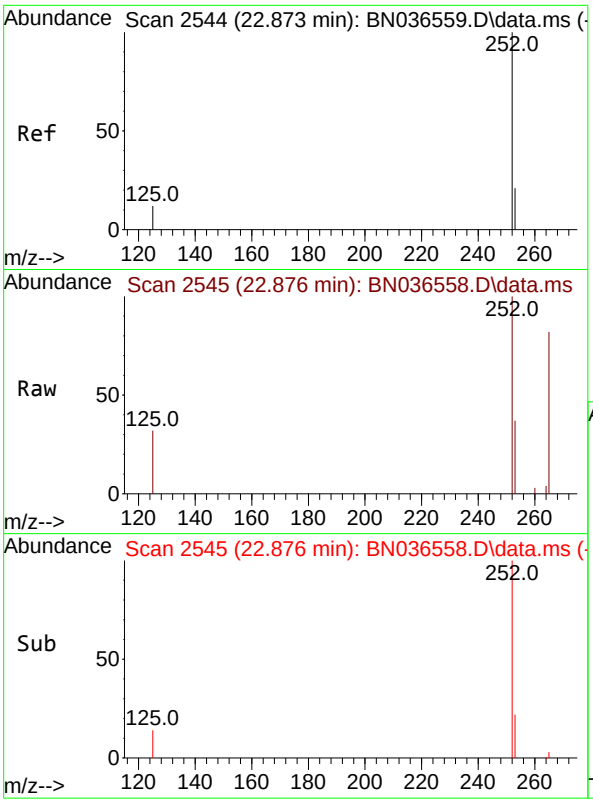


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.182 ng
RT: 25.844 min Scan# 3560
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 2790

Ion	Ratio	Lower	Upper
276	100		
138	29.1	23.4	35.2
277	23.4	20.0	30.0





#37
Benzo(b)fluoranthene
Concen: 0.187 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

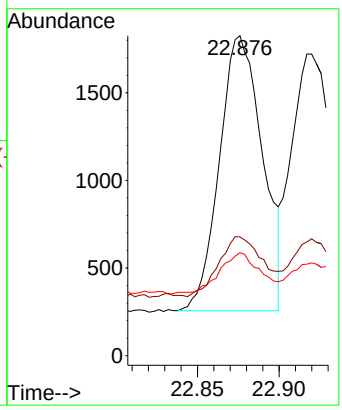
Tgt Ion:252 Resp: 288

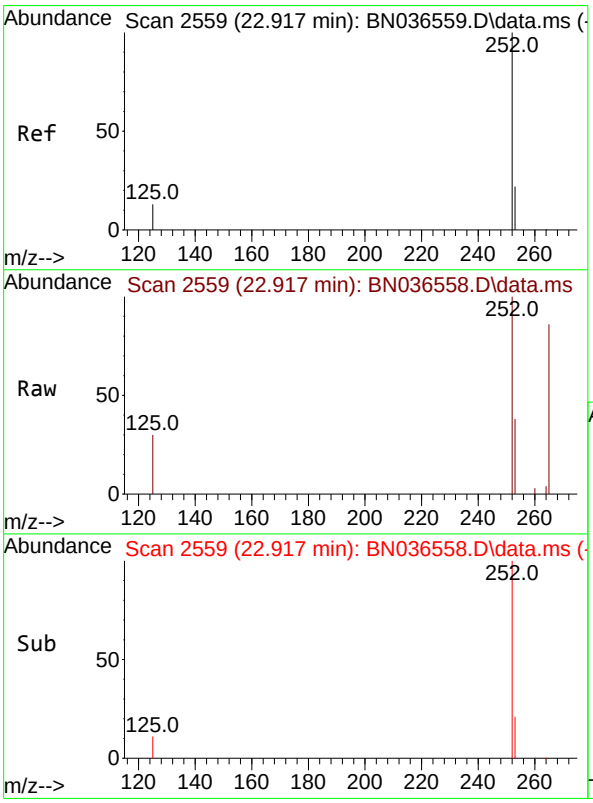
Ion	Ratio	Lower	Upper
252	100		
253	37.1	23.9	35.9#
125	32.2	17.4	26.2#

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

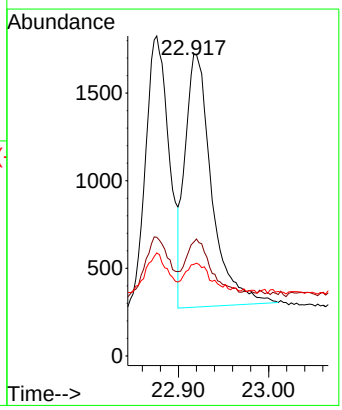


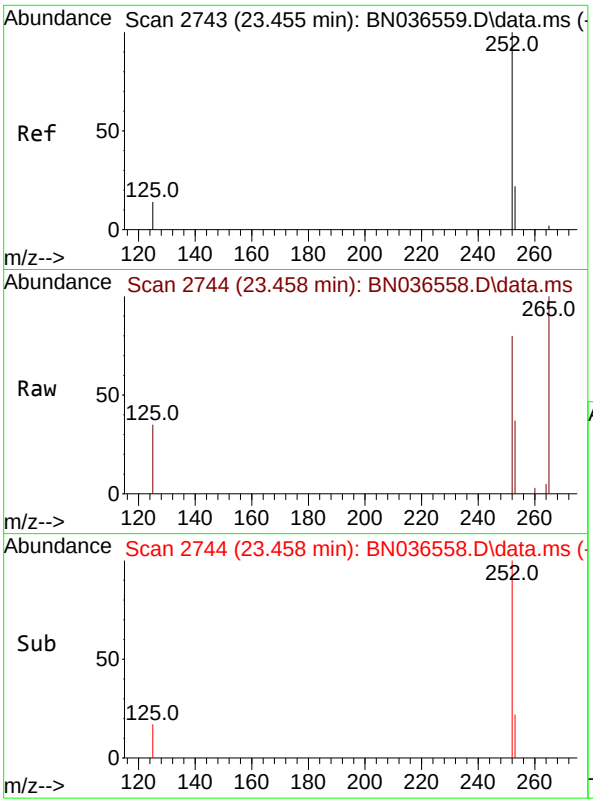


#38
Benzo(k)fluoranthene
Concen: 0.183 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:252 Resp: 2962

Ion	Ratio	Lower	Upper
252	100		
253	37.7	24.6	36.8#
125	30.3	17.8	26.8#

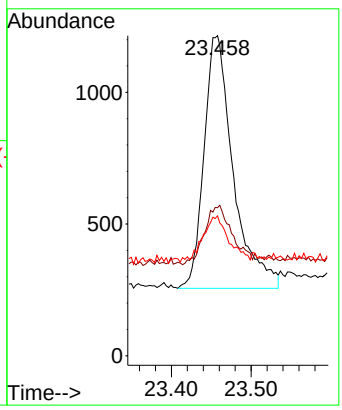




#39
Benzo(a)pyrene
Concen: 0.188 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:252 Resp: 244

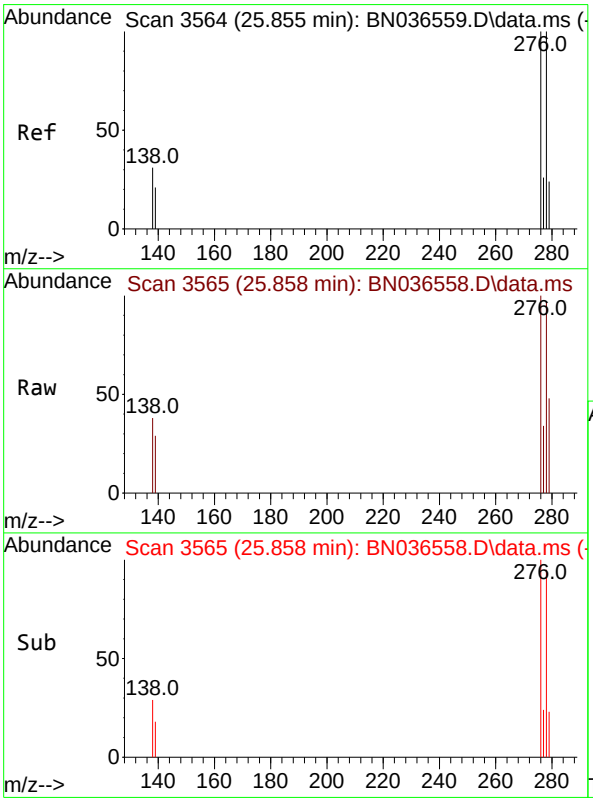
Ion	Ratio	Lower	Upper
252	100		
253	46.3	27.8	41.8#
125	43.7	22.7	34.1#



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

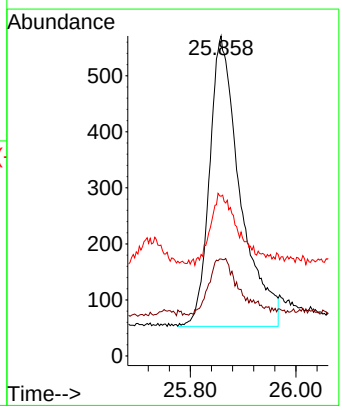
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

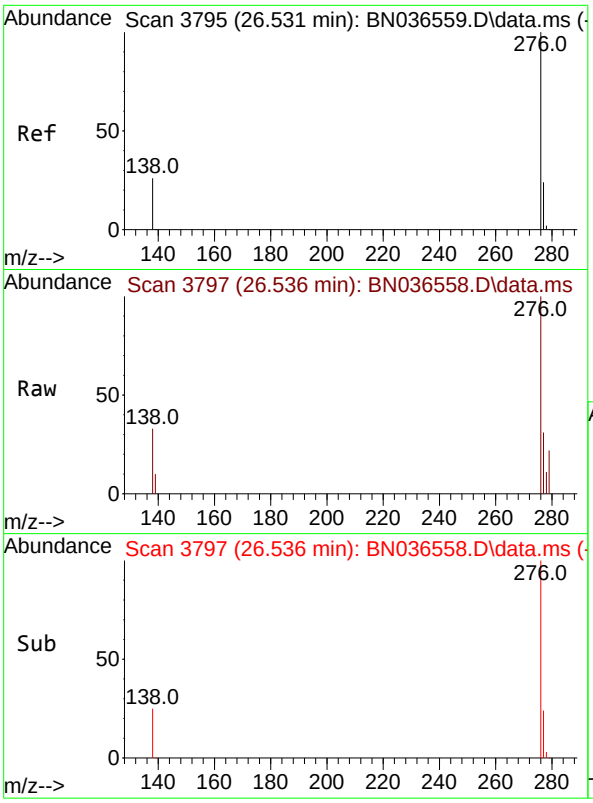


#40
Dibenzo(a,h)anthracene
Concen: 0.175 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:278 Resp: 2080

Ion	Ratio	Lower	Upper
278	100		
139	30.3	20.8	31.2
279	49.9	28.8	43.2#

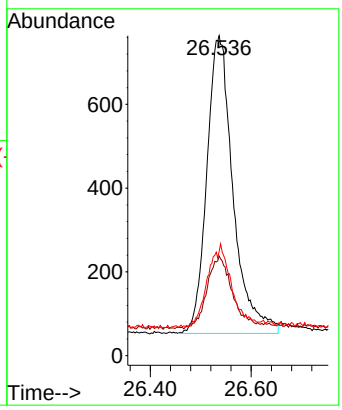




#41
Benzo(g,h,i)perylene
Concen: 0.189 ng
RT: 26.536 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 257

Ion	Ratio	Lower	Upper
276	100		
277	31.2	22.2	33.4
138	32.6	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036559.D
Acq On : 10 Mar 2025 12:54
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Mar 10 16:01:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

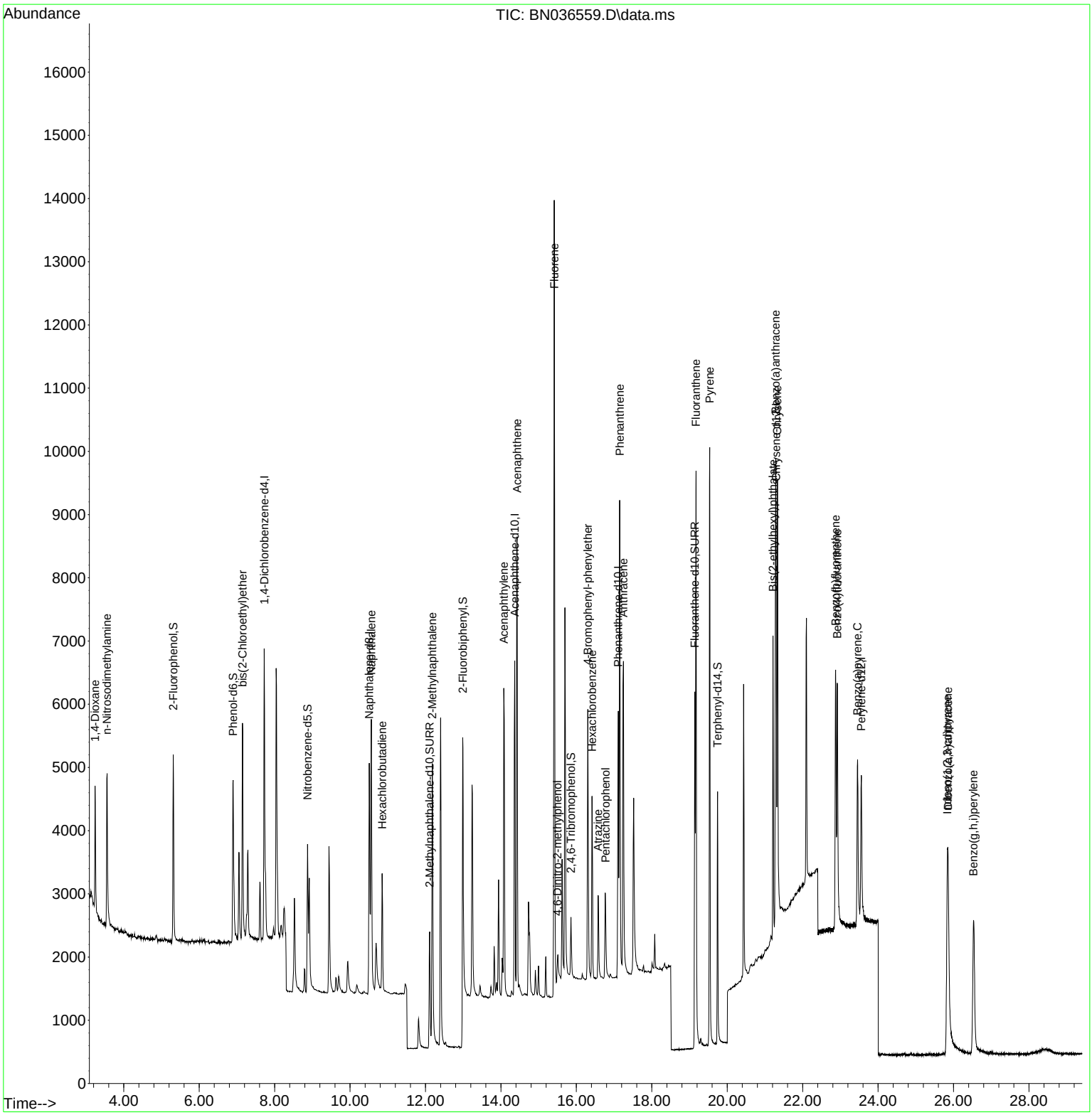
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2207	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5091	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3026	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	6005	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4110	0.400	ng		0.00
35) Perylene-d12	23.554	264	3539	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	2178	0.423	ng		0.00
5) Phenol-d6	6.901	99	2489	0.392	ng		0.00
8) Nitrobenzene-d5	8.875	82	2113	0.382	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	3085	0.407	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	567	0.413	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	7257	0.412	ng		0.00
27) Fluoranthene-d10	19.141	212	6699	0.435	ng		0.00
31) Terphenyl-d14	19.745	244	4226	0.429	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	1099	0.449	ng		100
3) n-Nitrosodimethylamine	3.550	42	2063	0.417	ng		100
6) bis(2-Chloroethyl)ether	7.154	93	2610	0.397	ng		100
9) Naphthalene	10.562	128	6139	0.410	ng		100
10) Hexachlorobutadiene	10.850	225	1498	0.425	ng	#	100
12) 2-Methylnaphthalene	12.182	142	3897	0.409	ng		100
16) Acenaphthylene	14.077	152	5865	0.411	ng		100
17) Acenaphthene	14.430	154	3877	0.415	ng		100
18) Fluorene	15.414	166	5338	0.422	ng		100
20) 4,6-Dinitro-2-methylph...	15.499	198	462	0.447	ng		100
21) 4-Bromophenyl-phenylether	16.304	248	1644	0.437	ng		100
22) Hexachlorobenzene	16.416	284	2018	0.444	ng		100
23) Atrazine	16.577	200	1279	0.424	ng		100
24) Pentachlorophenol	16.776	266	821	0.396	ng		100
25) Phenanthrene	17.148	178	7786	0.432	ng		100
26) Anthracene	17.248	178	6886	0.424	ng		100
28) Fluoranthene	19.173	202	8717	0.431	ng		100
30) Pyrene	19.536	202	8759	0.436	ng		100
32) Benzo(a)anthracene	21.286	228	5908	0.413	ng		100
33) Chrysene	21.331	228	6617	0.424	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	4291	0.422	ng		100
36) Indeno(1,2,3-cd)pyrene	25.838	276	5470	0.428	ng		100
37) Benzo(b)fluoranthene	22.873	252	5475	0.425	ng		100
38) Benzo(k)fluoranthene	22.917	252	5732	0.424	ng		100
39) Benzo(a)pyrene	23.455	252	4612	0.425	ng		100
40) Dibenzo(a,h)anthracene	25.855	278	4117	0.414	ng		100
41) Benzo(g,h,i)perylene	26.531	276	4891	0.430	ng		100

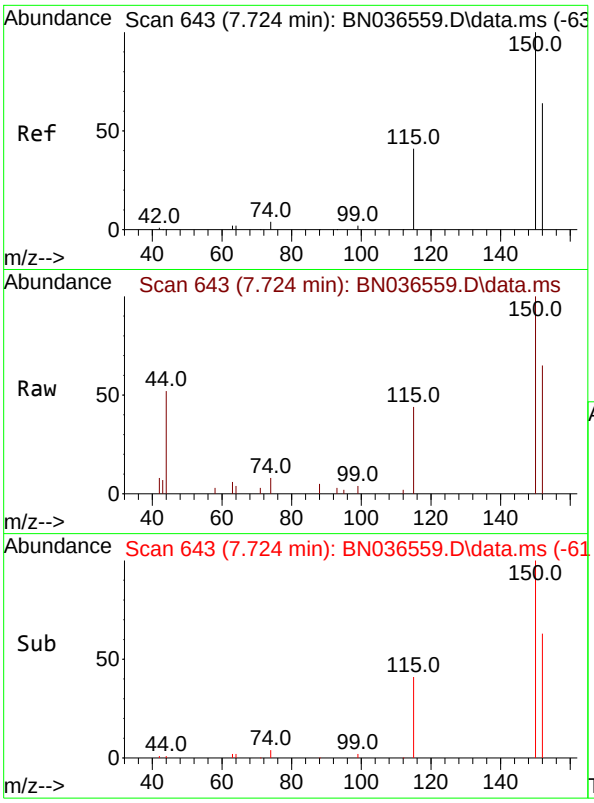
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036559.D
Acq On : 10 Mar 2025 12:54
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Mar 10 16:01:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



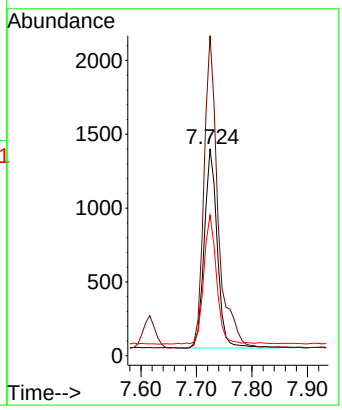


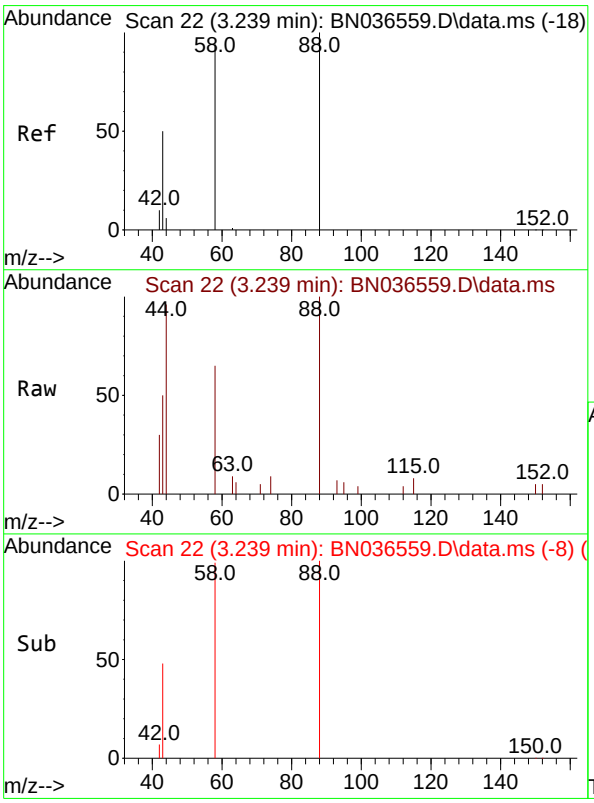
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 2207

Ion	Ratio	Lower	Upper
152	100		
150	154.6	123.7	185.5
115	67.9	54.3	81.5

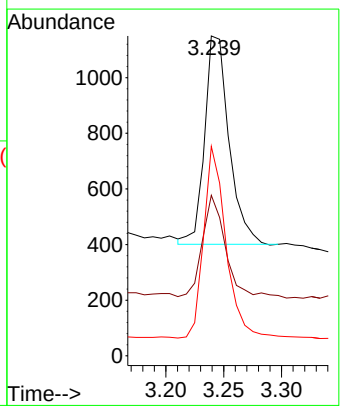


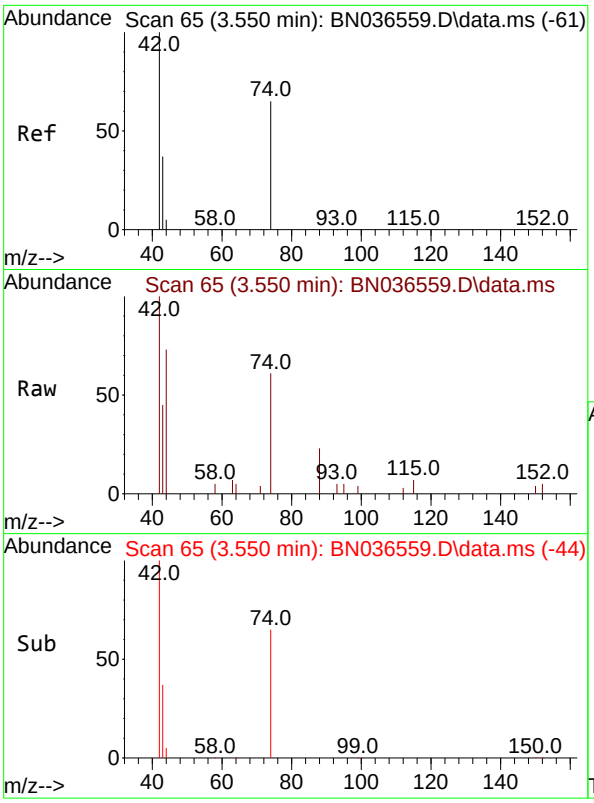


#2
1,4-Dioxane
Concen: 0.449 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion: 88 Resp: 1099

Ion	Ratio	Lower	Upper
88	100		
43	47.3	37.8	56.8
58	84.3	67.4	101.2



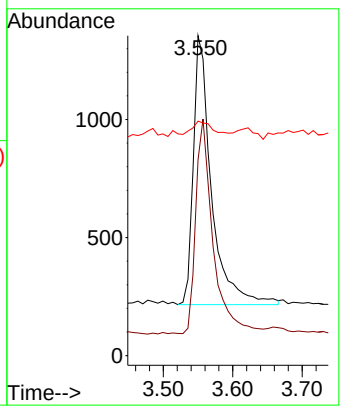


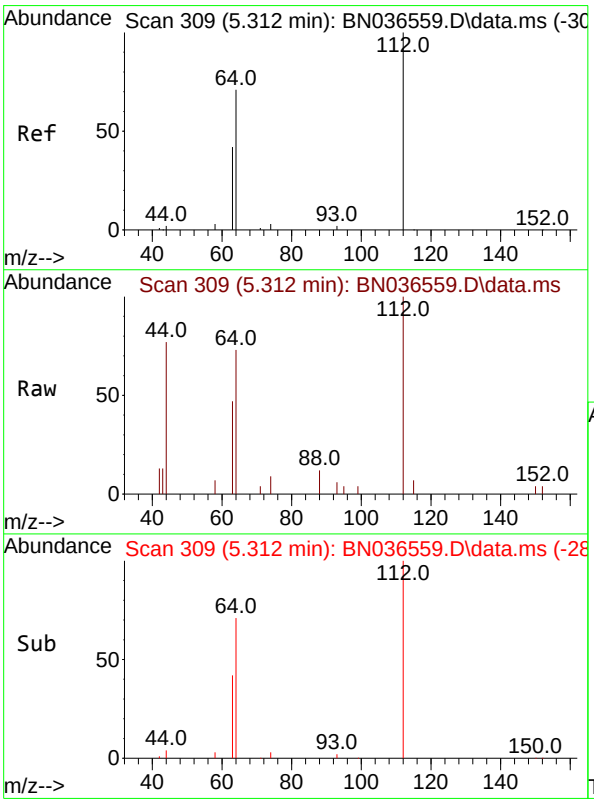
#3
n-Nitrosodimethylamine
Concen: 0.417 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 42 Resp: 2063

Ion	Ratio	Lower	Upper
42	100		
74	75.7	60.6	90.8
44	7.9	6.3	9.5

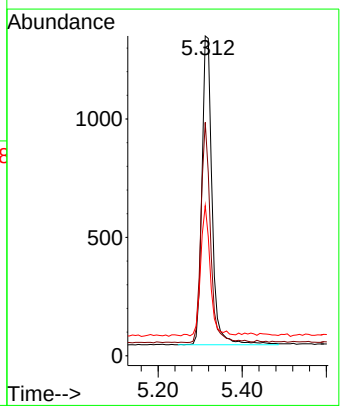


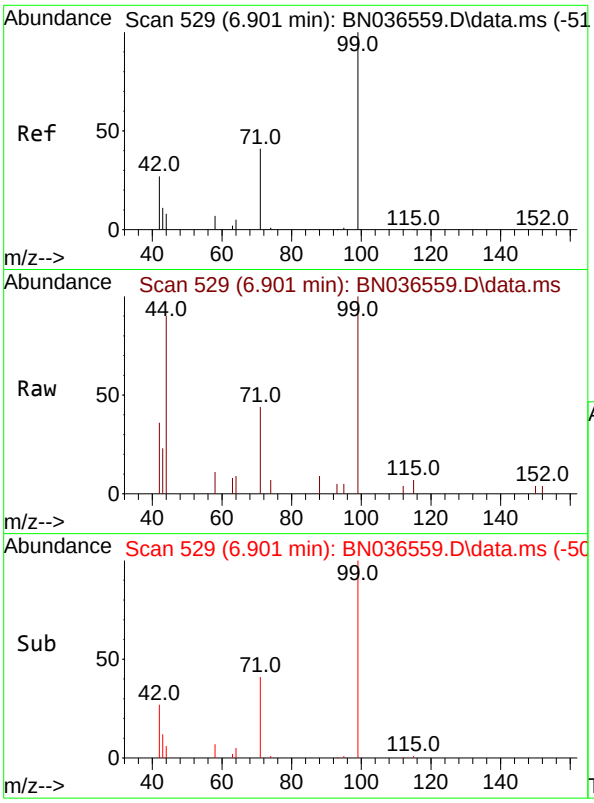


#4
2-Fluorophenol
Concen: 0.423 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:112 Resp: 2178

Ion	Ratio	Lower	Upper
112	100		
64	66.4	53.1	79.7
63	39.8	31.8	47.8



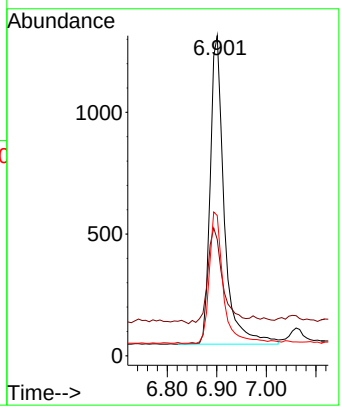


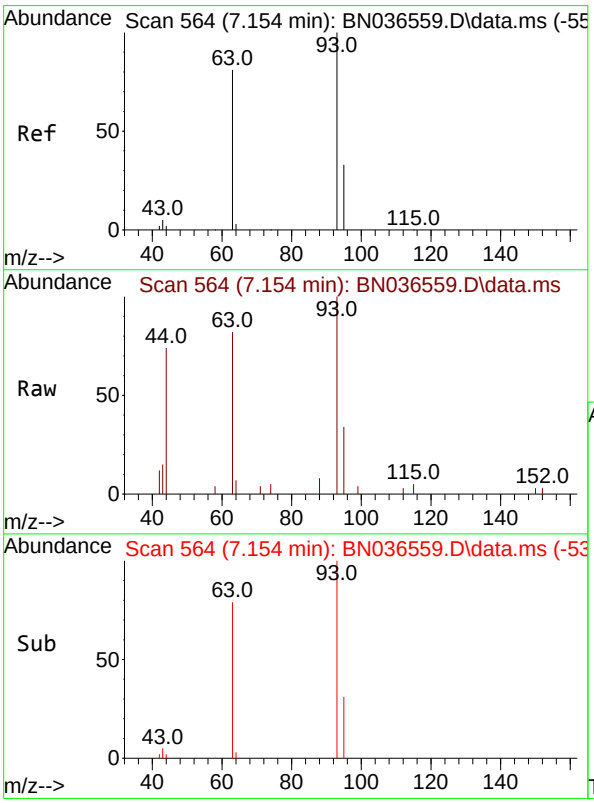
#5
Phenol-d6
Concen: 0.392 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 99 Resp: 2489

Ion	Ratio	Lower	Upper
99	100		
42	33.1	26.5	39.7
71	42.6	34.1	51.1

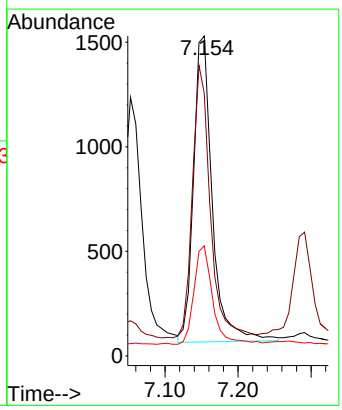


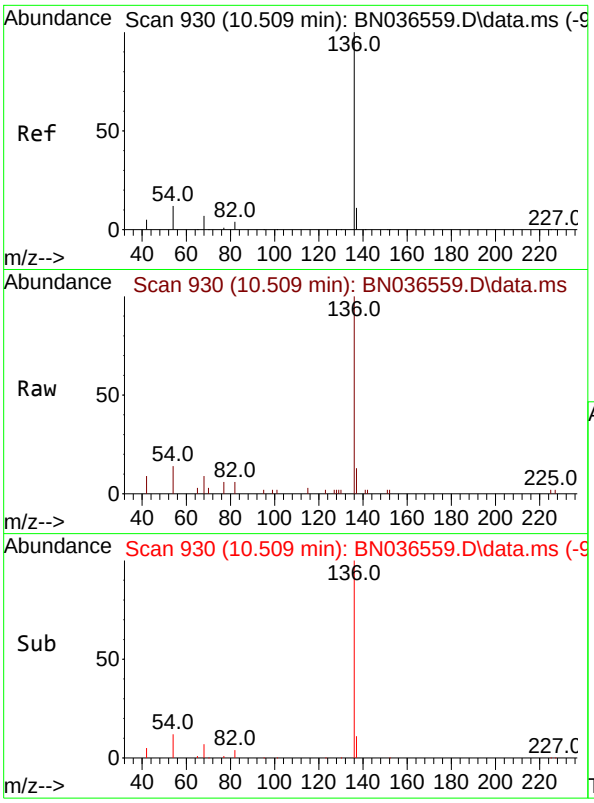


#6
bis(2-Chloroethyl)ether
Concen: 0.397 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion: 93 Resp: 2610

Ion	Ratio	Lower	Upper
93	100		
63	84.6	67.7	101.5
95	32.0	25.6	38.4



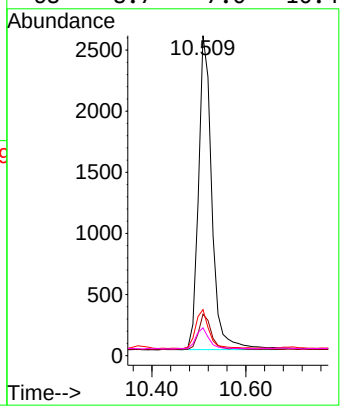


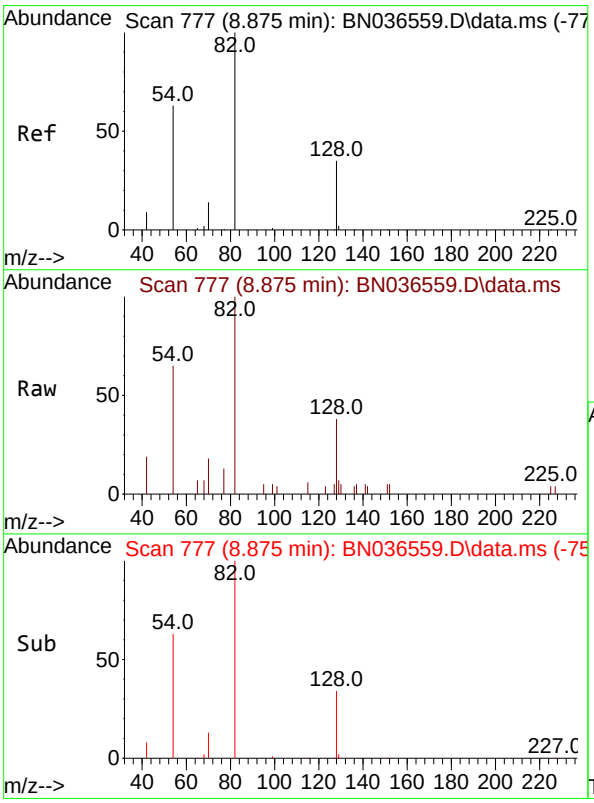
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:136 Resp: 5091

Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.3	15.5
54	14.4	11.5	17.3
68	8.7	7.0	10.4

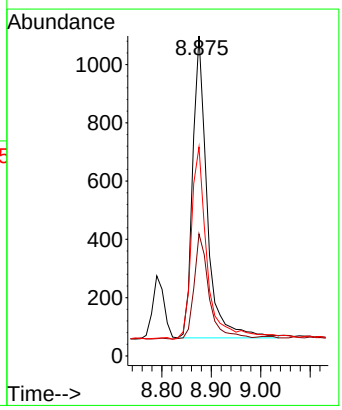


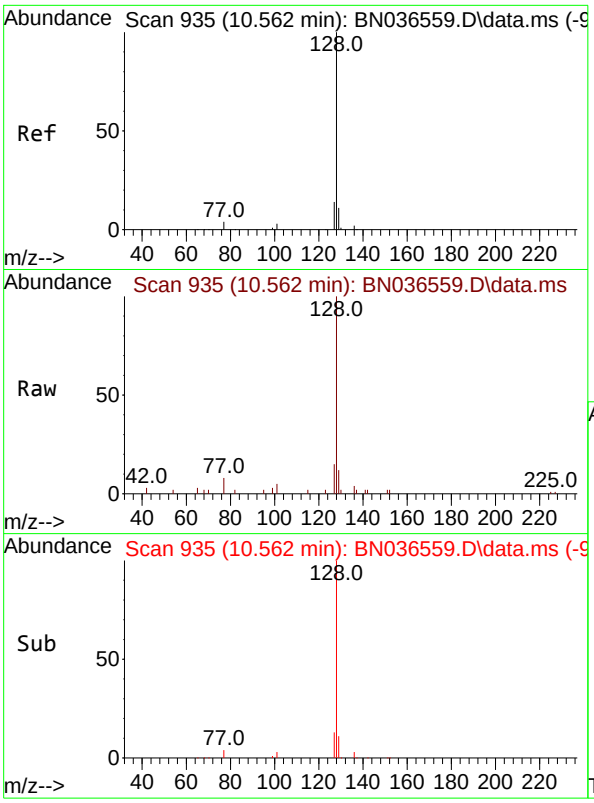


#8
Nitrobenzene-d5
Concen: 0.382 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion: 82 Resp: 2113

Ion	Ratio	Lower	Upper
82	100		
128	38.2	30.6	45.8
54	65.3	52.2	78.4



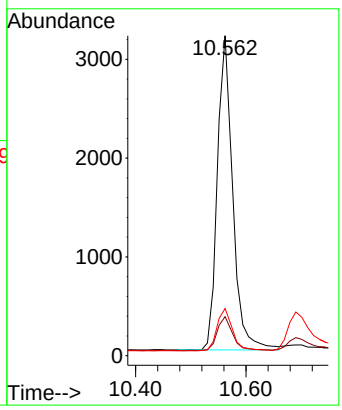


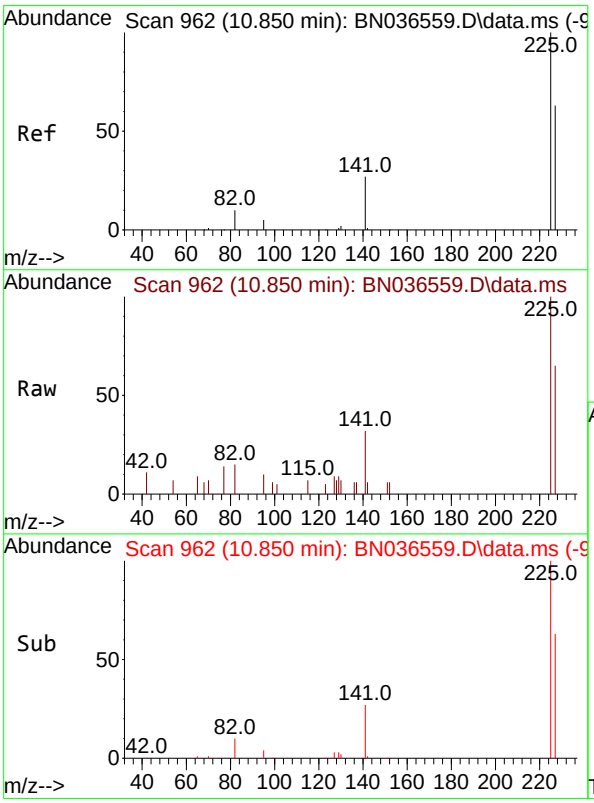
#9
Naphthalene
Concen: 0.410 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:128 Resp: 6139

Ion	Ratio	Lower	Upper
128	100		
129	12.2	9.8	14.6
127	14.8	11.8	17.8

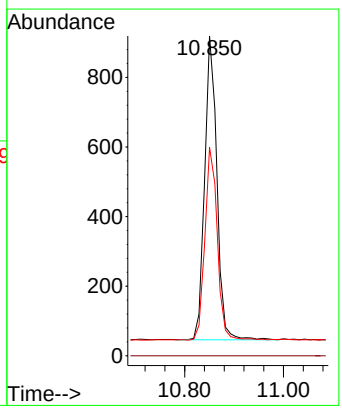


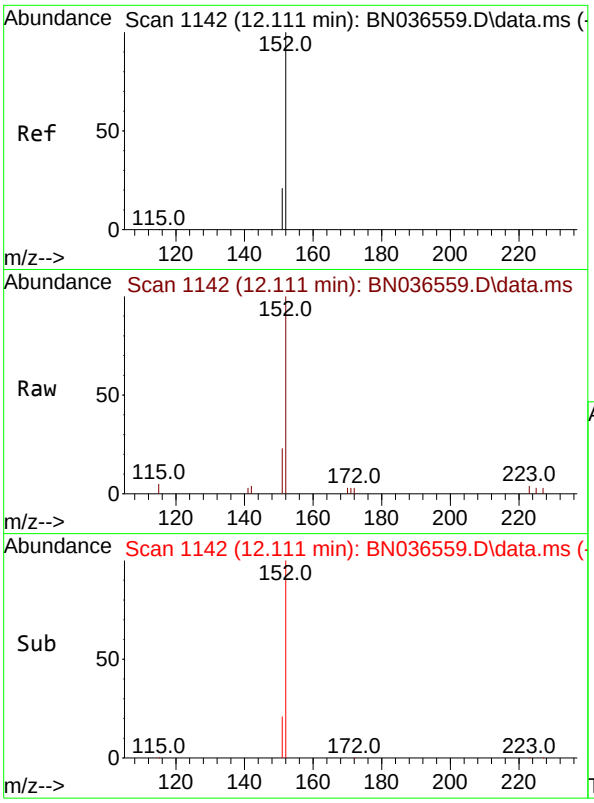


#10
Hexachlorobutadiene
Concen: 0.425 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:225 Resp: 1498

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.8	51.8	77.8



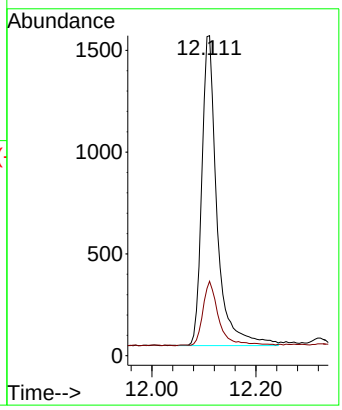


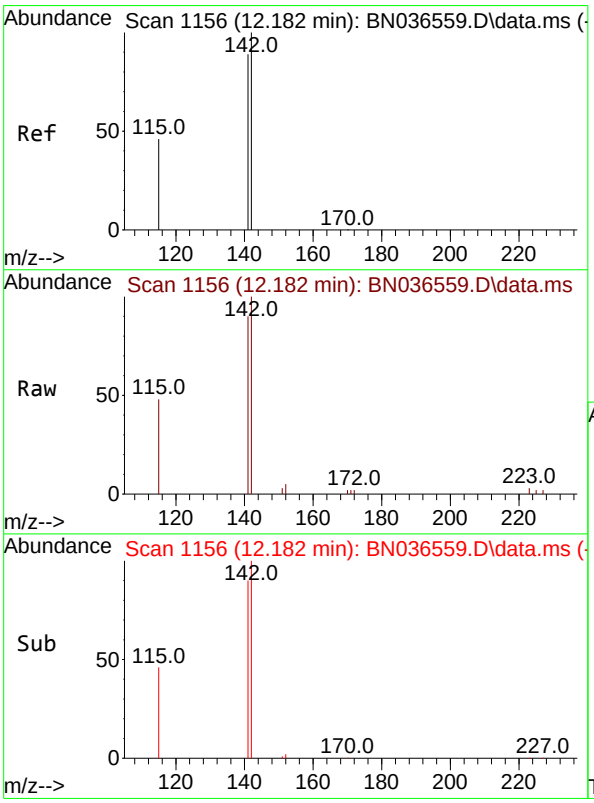
#11
2-Methylnaphthalene-d10
Concen: 0.407 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 3085

Ion	Ratio	Lower	Upper
152	100		
151	21.3	17.0	25.6

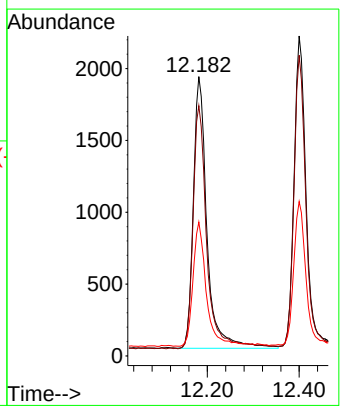


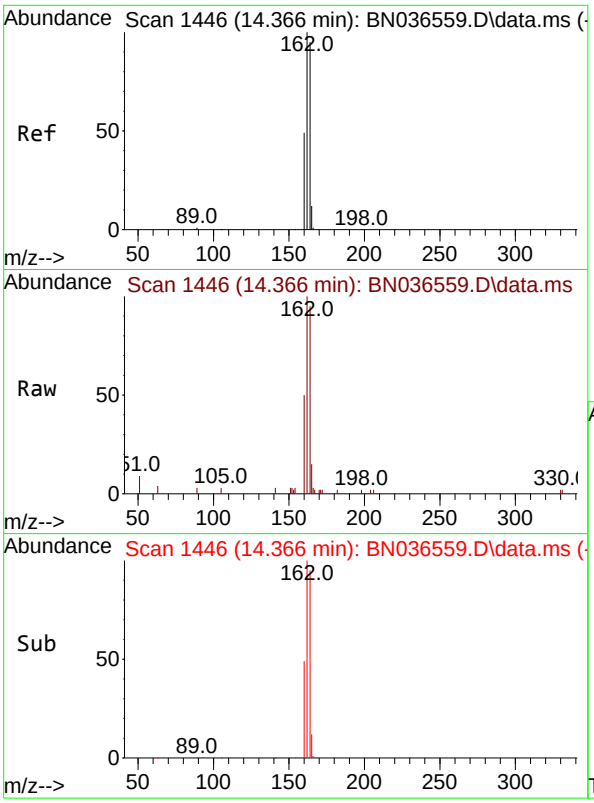


#12
2-Methylnaphthalene
Concen: 0.409 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:142 Resp: 3897

Ion	Ratio	Lower	Upper
142	100		
141	89.6	71.7	107.5
115	47.9	38.3	57.5



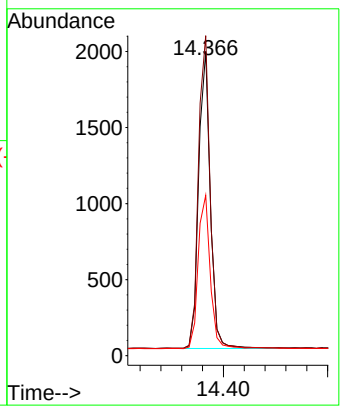


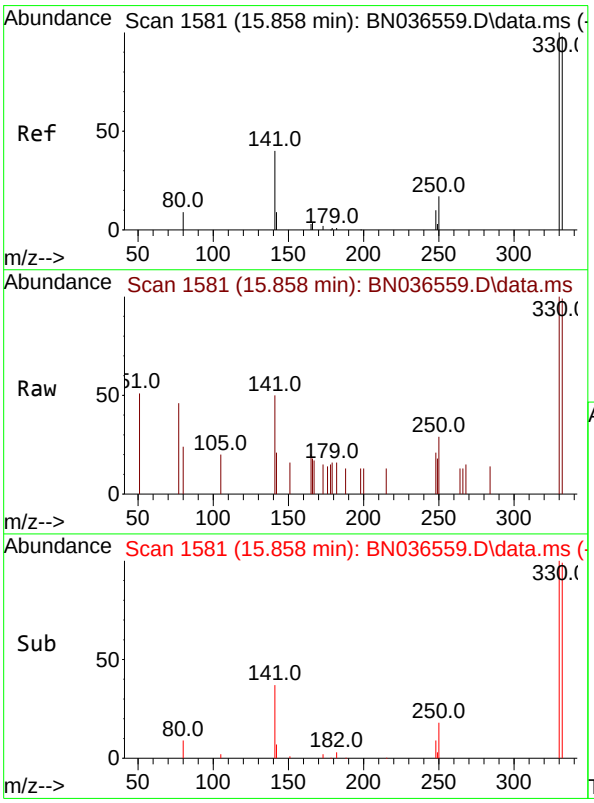
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:164 Resp: 3026

Ion	Ratio	Lower	Upper
164	100		
162	105.2	84.2	126.2
160	52.7	42.2	63.2

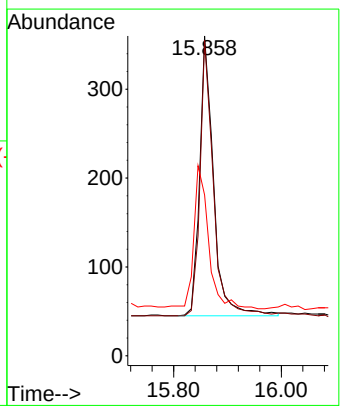


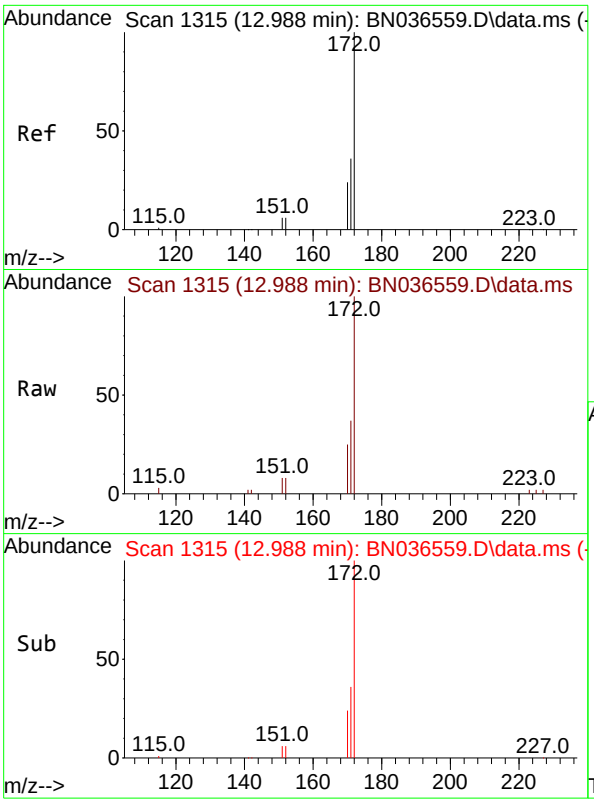


#14
2,4,6-Tribromophenol
Concen: 0.413 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:330 Resp: 567

Ion	Ratio	Lower	Upper
330	100		
332	94.0	75.2	112.8
141	54.3	43.4	65.2



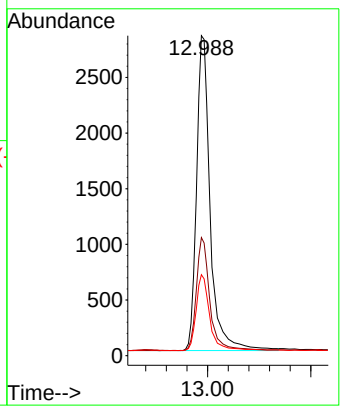


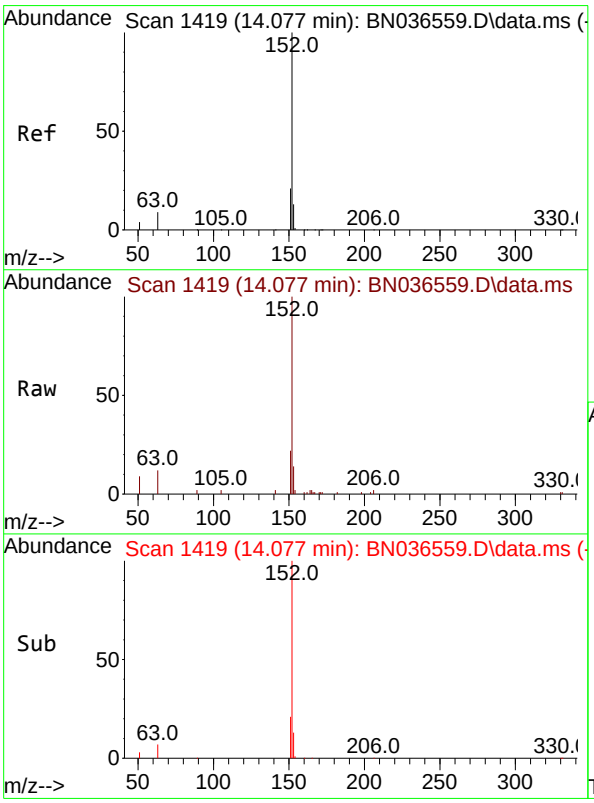
#15
2-Fluorobiphenyl
Concen: 0.412 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:172 Resp: 7257

Ion	Ratio	Lower	Upper
172	100		
171	36.9	29.5	44.3
170	25.3	20.2	30.4

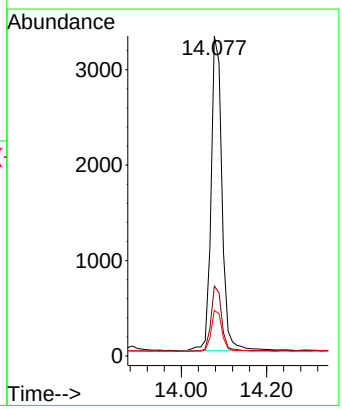


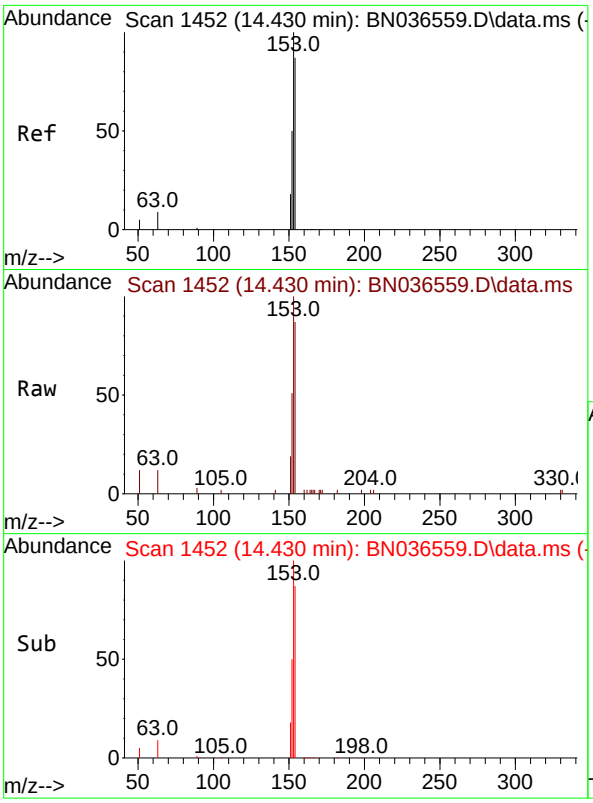


#16
Acenaphthylene
Concen: 0.411 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:152 Resp: 5865

Ion	Ratio	Lower	Upper
152	100		
151	20.3	16.2	24.4
153	13.2	10.6	15.8



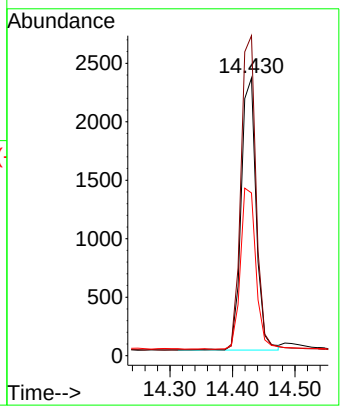


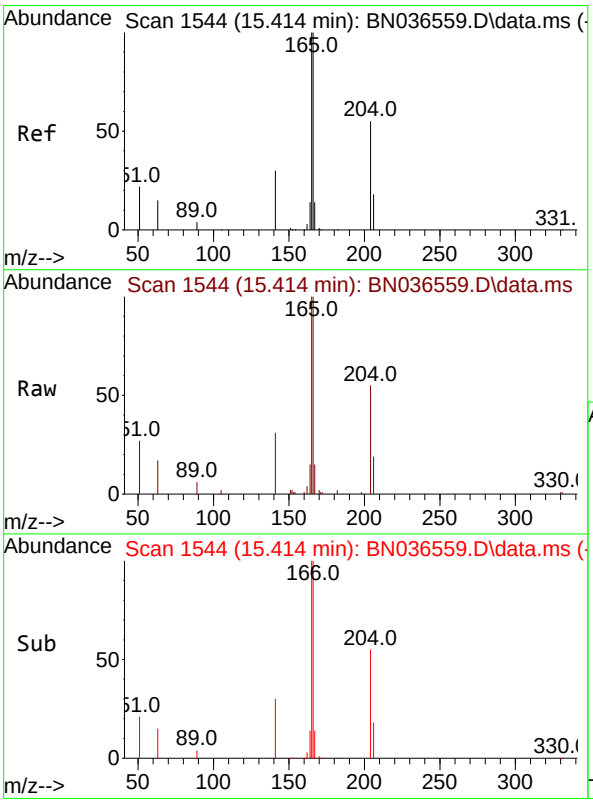
#17
Acenaphthene
Concen: 0.415 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:154 Resp: 3877

Ion	Ratio	Lower	Upper
154	100		
153	117.6	94.1	141.1
152	62.2	49.8	74.6

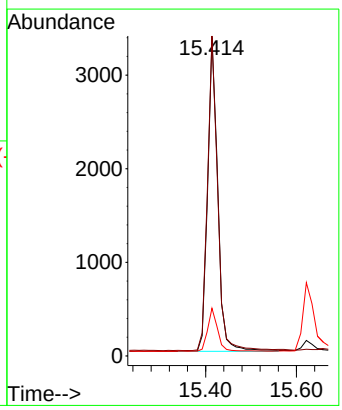


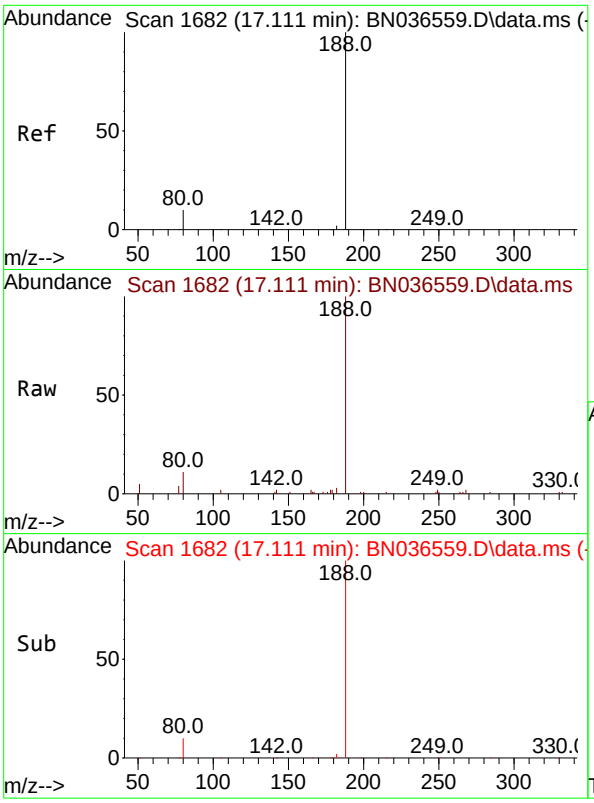


#18
Fluorene
Concen: 0.422 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:166 Resp: 5338

Ion	Ratio	Lower	Upper
166	100		
165	99.8	79.8	119.8
167	13.2	10.6	15.8



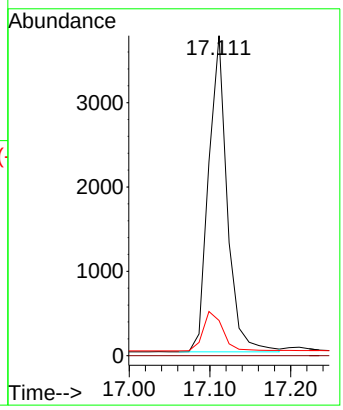


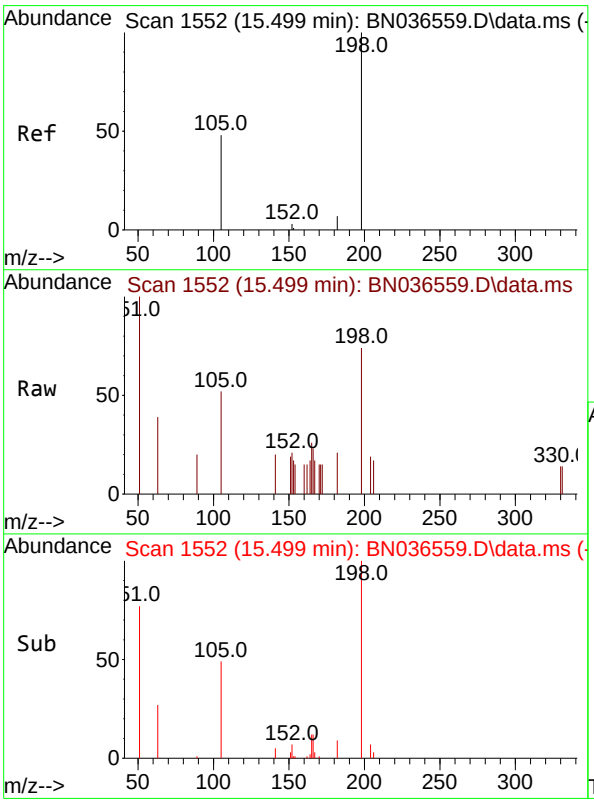
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:188 Resp: 6005

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.0	8.8	13.2

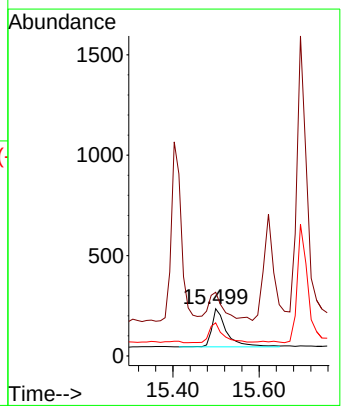


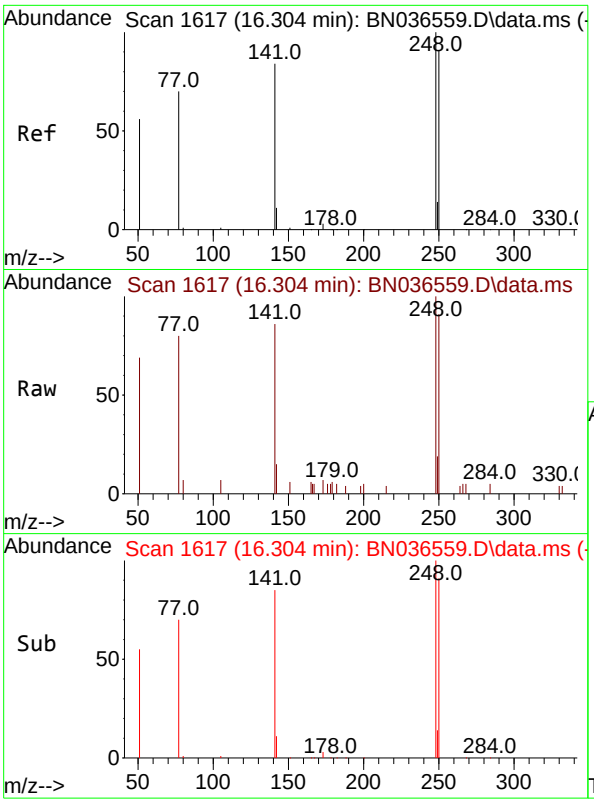


#20
4,6-Dinitro-2-methylphenol
Concen: 0.447 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:198 Resp: 462

Ion	Ratio	Lower	Upper
198	100		
51	134.9	107.9	161.9
105	70.2	56.2	84.2



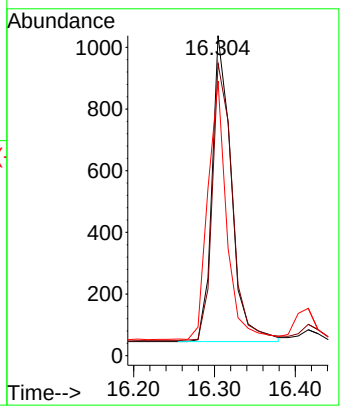


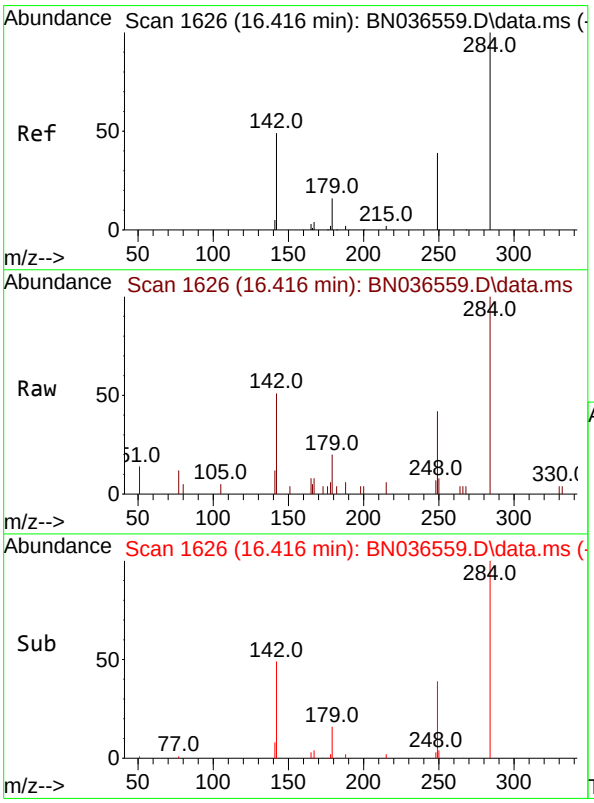
#21
4-Bromophenyl-phenylether
Concen: 0.437 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:248 Resp: 1644

Ion	Ratio	Lower	Upper
248	100		
250	91.3	73.0	109.6
141	85.8	68.6	103.0

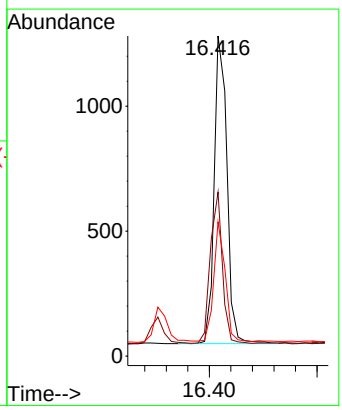


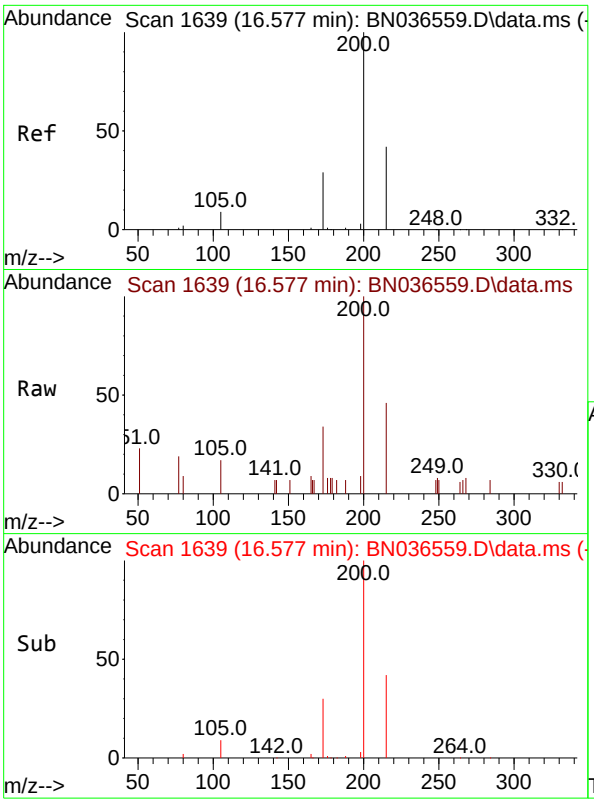


#22
Hexachlorobenzene
Concen: 0.444 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:284 Resp: 2018

Ion	Ratio	Lower	Upper
284	100		
142	46.2	37.0	55.4
249	35.1	28.1	42.1



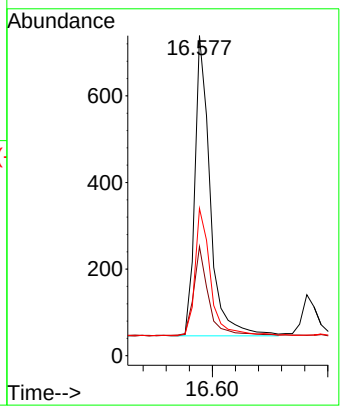


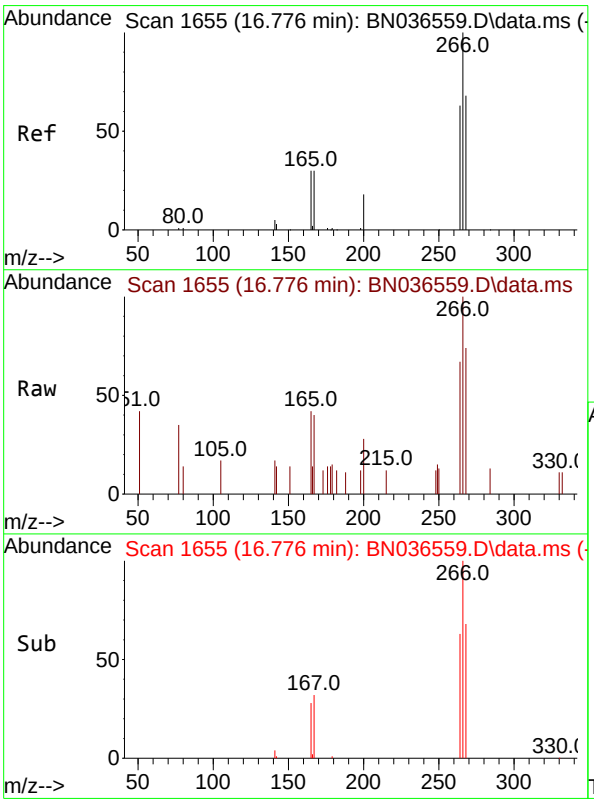
#23
Atrazine
Concen: 0.424 ng
RT: 16.577 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:200 Resp: 1279

Ion	Ratio	Lower	Upper
200	100		
173	34.1	27.3	40.9
215	46.0	36.8	55.2

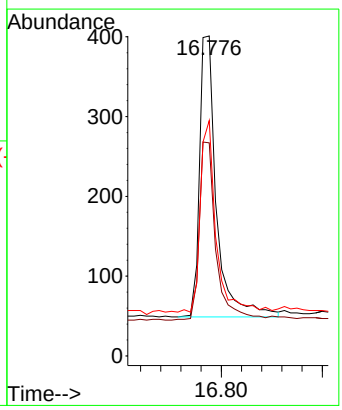


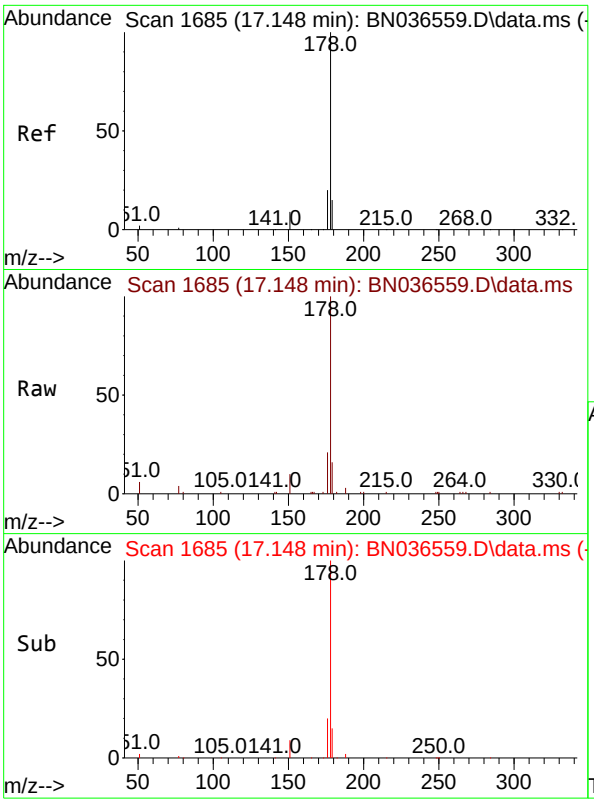


#24
Pentachlorophenol
Concen: 0.396 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:266 Resp: 821

Ion	Ratio	Lower	Upper
266	100		
264	62.0	49.6	74.4
268	63.6	50.9	76.3



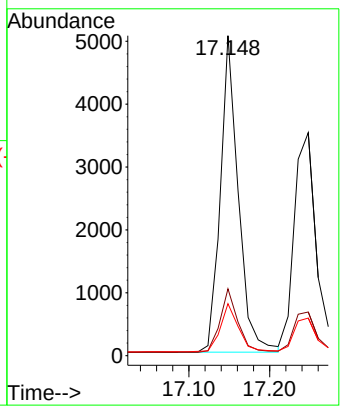


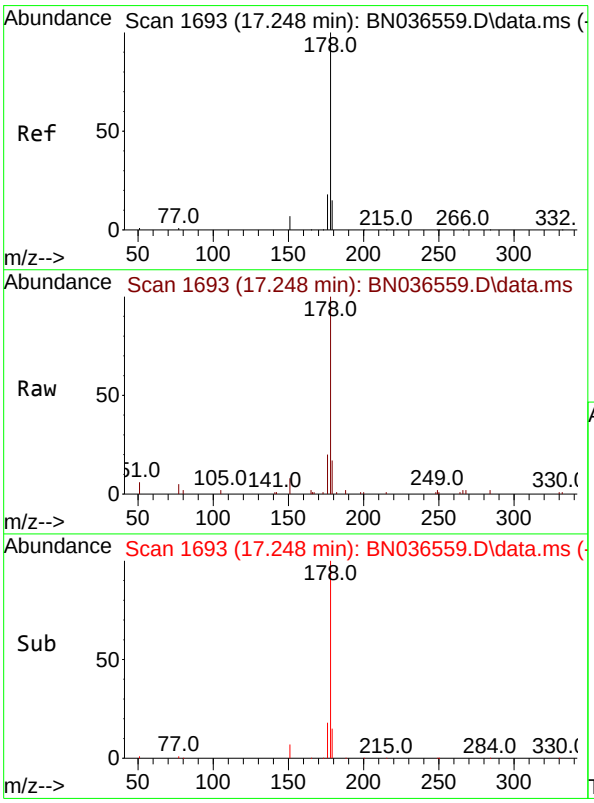
#25
Phenanthrene
Concen: 0.432 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:178 Resp: 7786

Ion	Ratio	Lower	Upper
178	100		
176	19.9	15.9	23.9
179	15.3	12.2	18.4

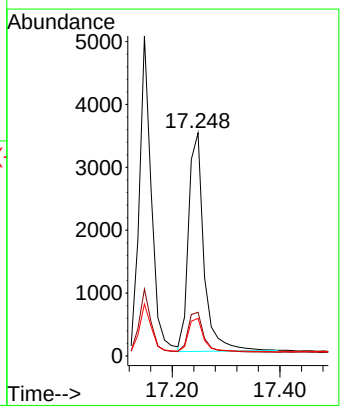


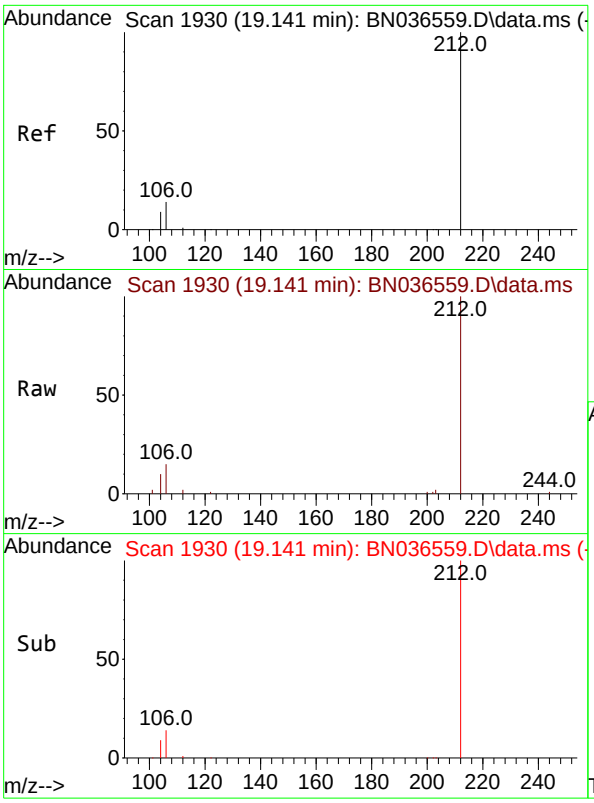


#26
Anthracene
Concen: 0.424 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:178 Resp: 6886

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.7	12.6	18.8



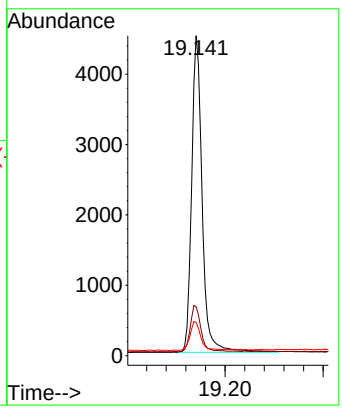


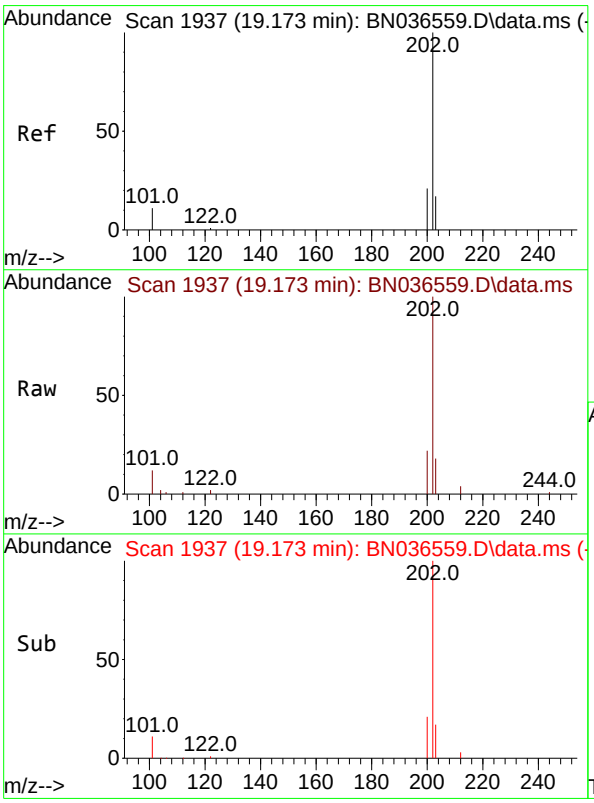
#27
Fluoranthene-d10
Concen: 0.435 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:212 Resp: 6699

Ion	Ratio	Lower	Upper
212	100		
106	14.7	11.8	17.6
104	9.1	7.3	10.9

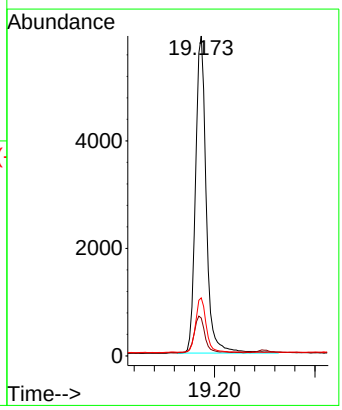


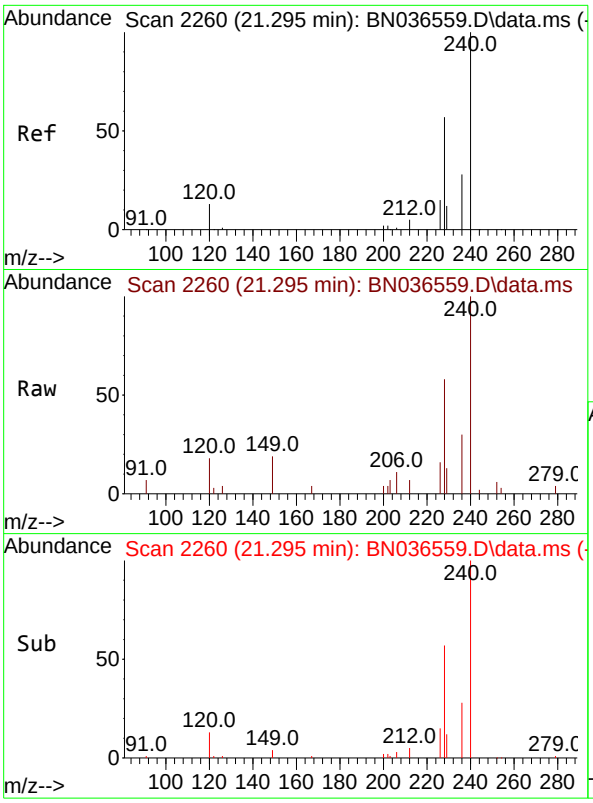


#28
Fluoranthene
Concen: 0.431 ng
RT: 19.173 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:202 Resp: 8717

Ion	Ratio	Lower	Upper
202	100		
101	11.7	9.4	14.0
203	16.9	13.5	20.3



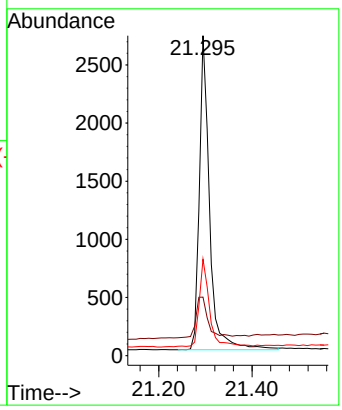


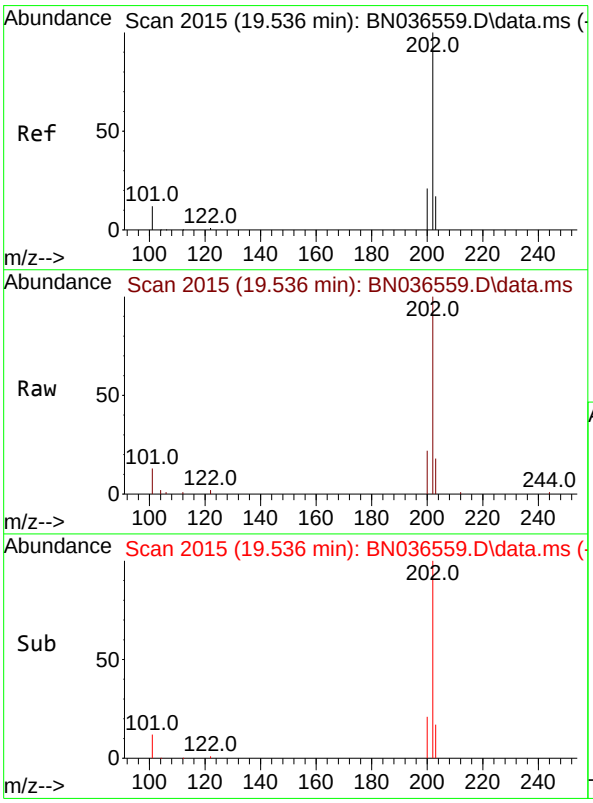
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:240 Resp: 4110

Ion	Ratio	Lower	Upper
240	100		
120	18.3	14.6	22.0
236	30.1	24.1	36.1

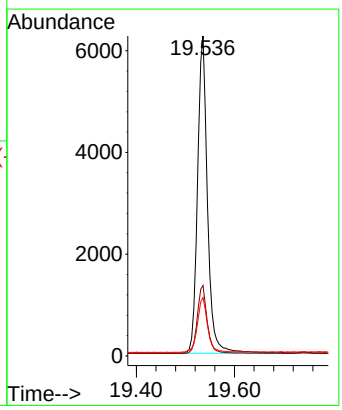


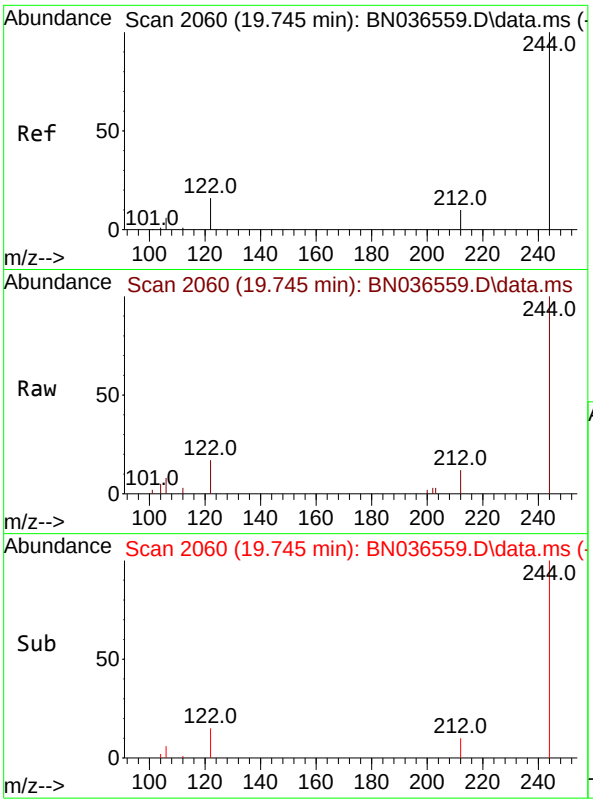


#30
Pyrene
Concen: 0.436 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:202 Resp: 8759

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.6	14.1	21.1



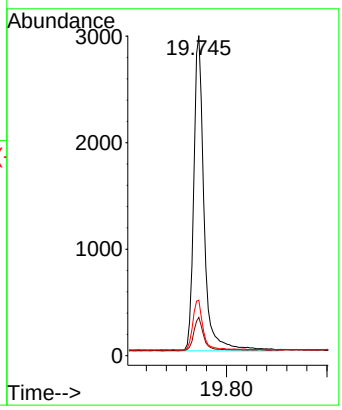


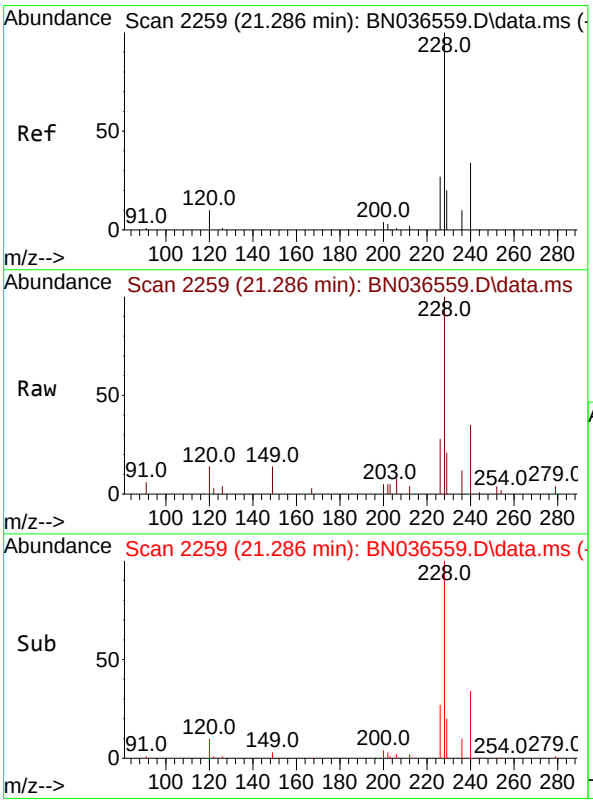
#31
Terphenyl-d14
Concen: 0.429 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:244 Resp: 4226

Ion	Ratio	Lower	Upper
244	100		
212	12.0	9.6	14.4
122	17.4	13.9	20.9

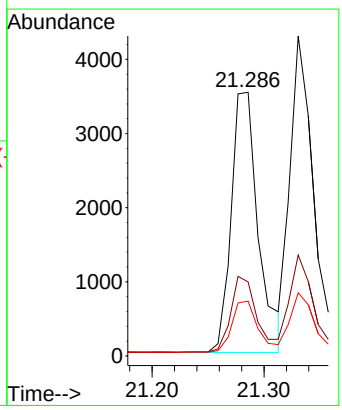


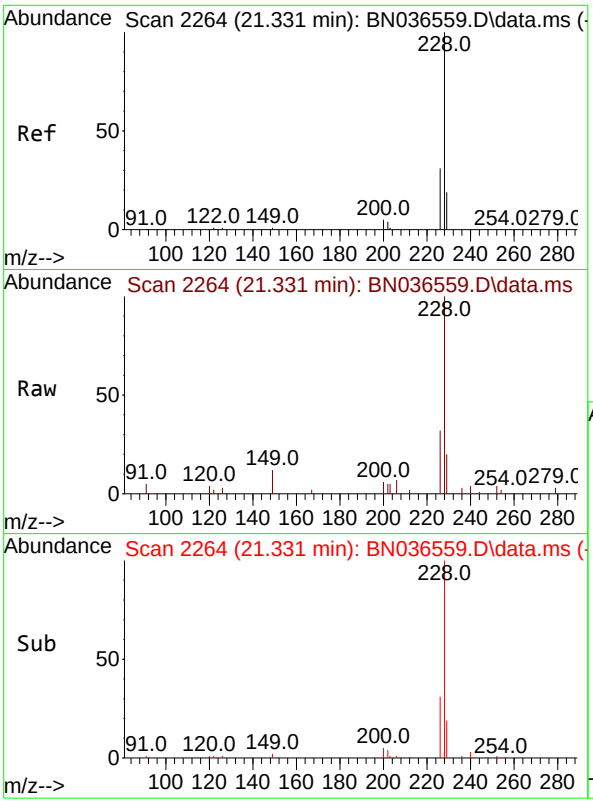


#32
Benzo(a)anthracene
Concen: 0.413 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:228 Resp: 5908

Ion	Ratio	Lower	Upper
228	100		
226	28.1	22.5	33.7
229	20.8	16.6	25.0



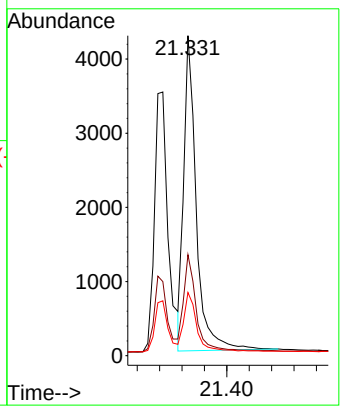


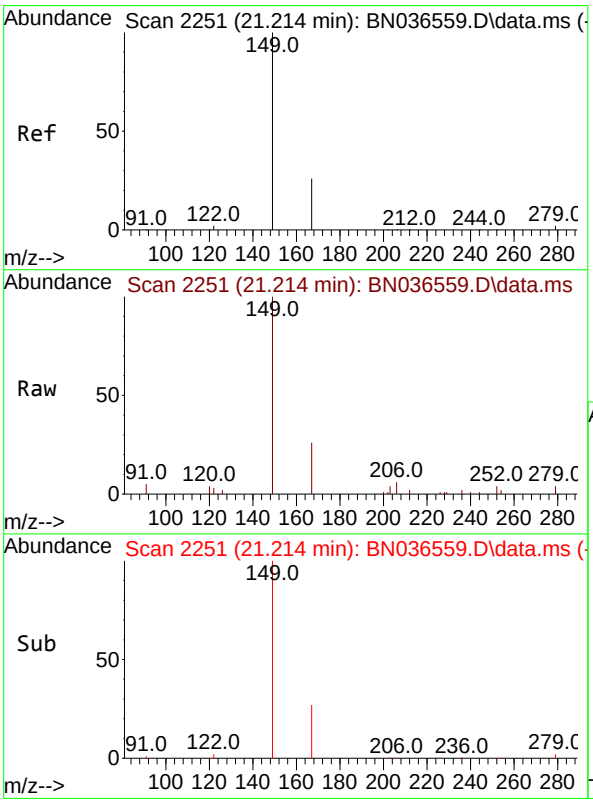
#33
Chrysene
Concen: 0.424 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:228 Resp: 6617

Ion	Ratio	Lower	Upper
228	100		
226	31.6	25.3	37.9
229	19.8	15.8	23.8

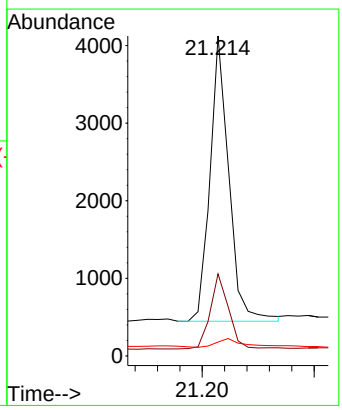


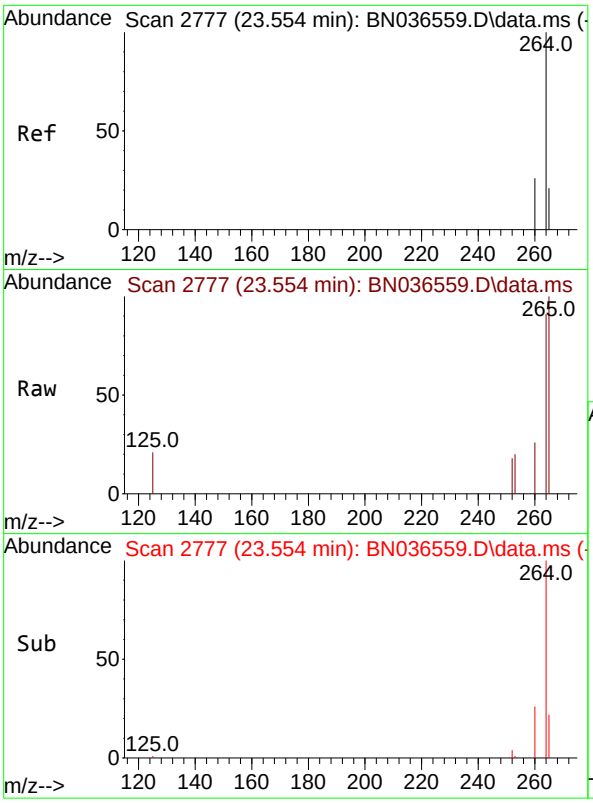


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.422 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:149 Resp: 4291

Ion	Ratio	Lower	Upper
149	100		
167	25.9	20.7	31.1
279	4.5	3.6	5.4



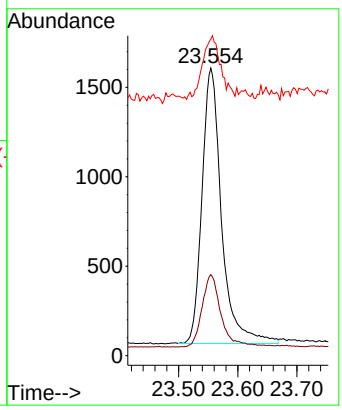


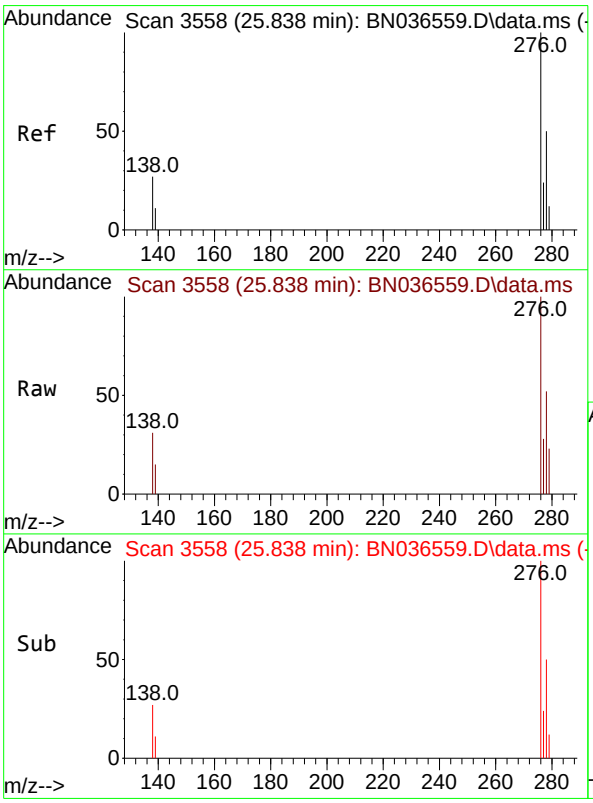
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:264 Resp: 3539

Ion	Ratio	Lower	Upper
264	100		
260	28.2	22.6	33.8
265	110.1	88.1	132.1

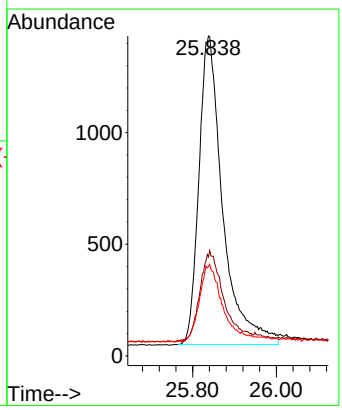


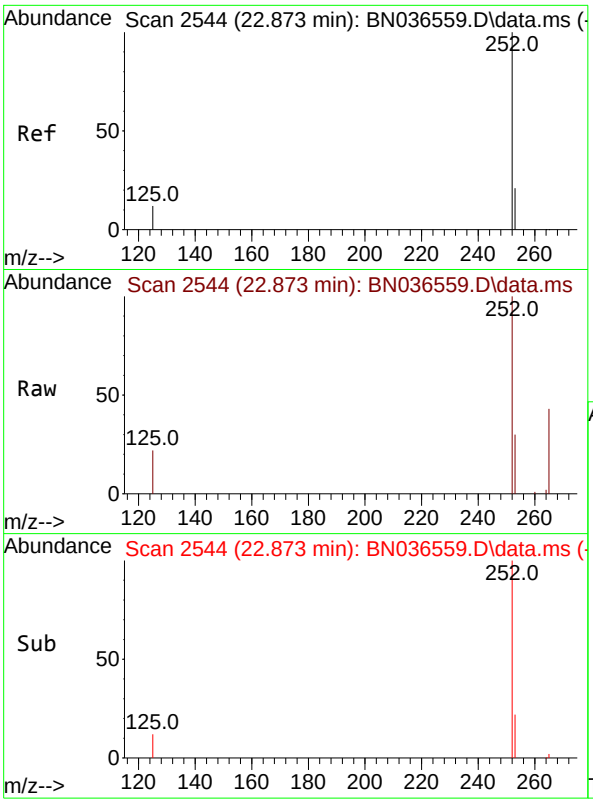


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.428 ng
RT: 25.838 min Scan# 3558
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:276 Resp: 5470

Ion	Ratio	Lower	Upper
276	100		
138	29.3	23.4	35.2
277	25.0	20.0	30.0



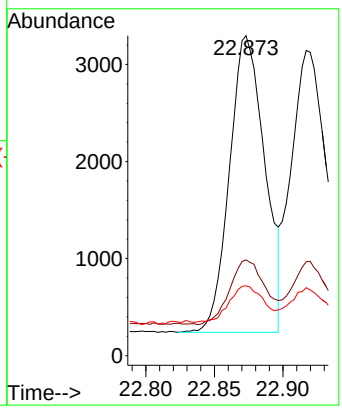


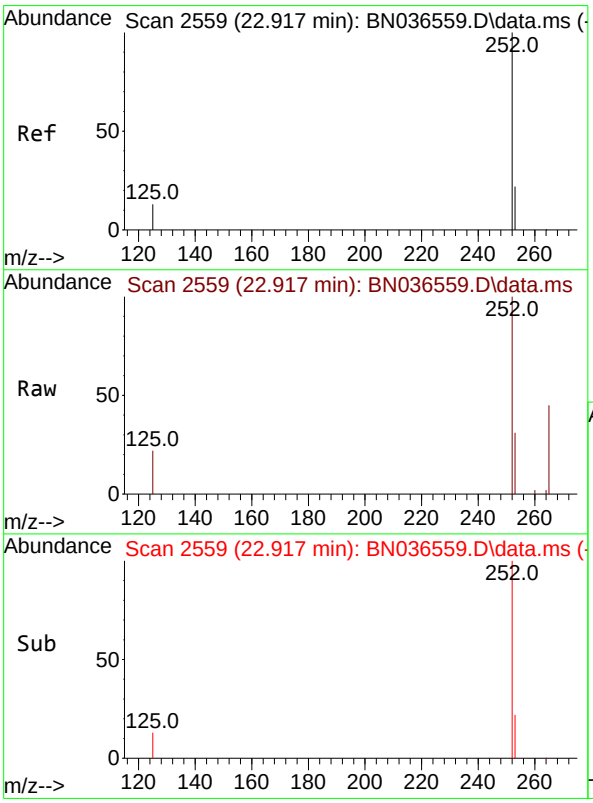
#37
Benzo(b)fluoranthene
Concen: 0.425 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 5475

Ion	Ratio	Lower	Upper
252	100		
253	29.9	23.9	35.9
125	21.8	17.4	26.2

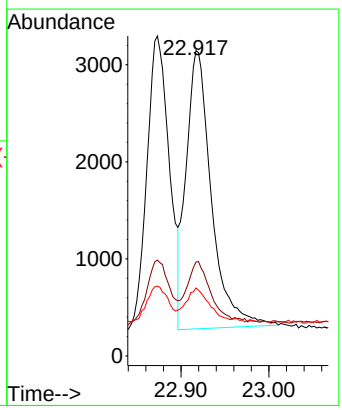


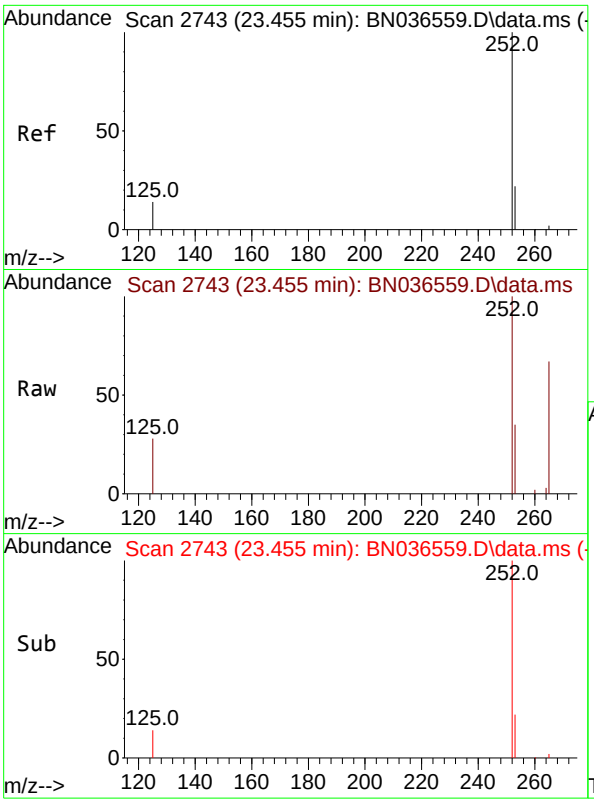


#38
Benzo(k)fluoranthene
Concen: 0.424 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:252 Resp: 5732

Ion	Ratio	Lower	Upper
252	100		
253	30.7	24.6	36.8
125	22.3	17.8	26.8



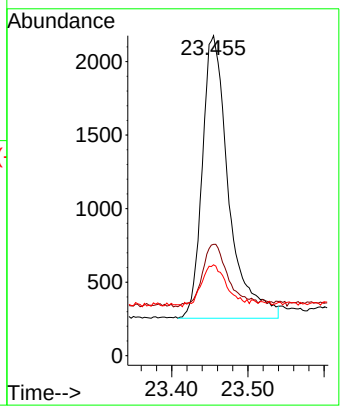


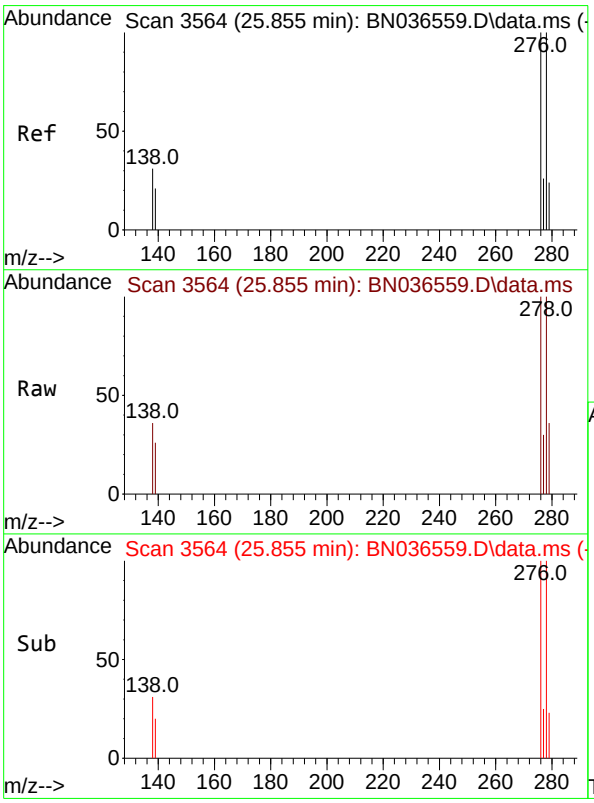
#39
Benzo(a)pyrene
Concen: 0.425 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 4612

Ion	Ratio	Lower	Upper
252	100		
253	34.8	27.8	41.8
125	28.4	22.7	34.1

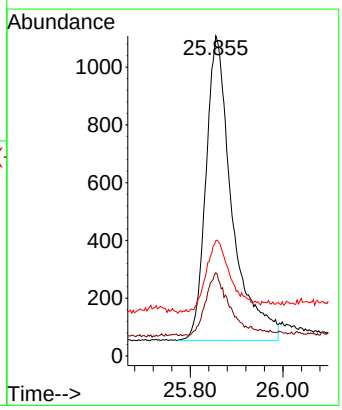


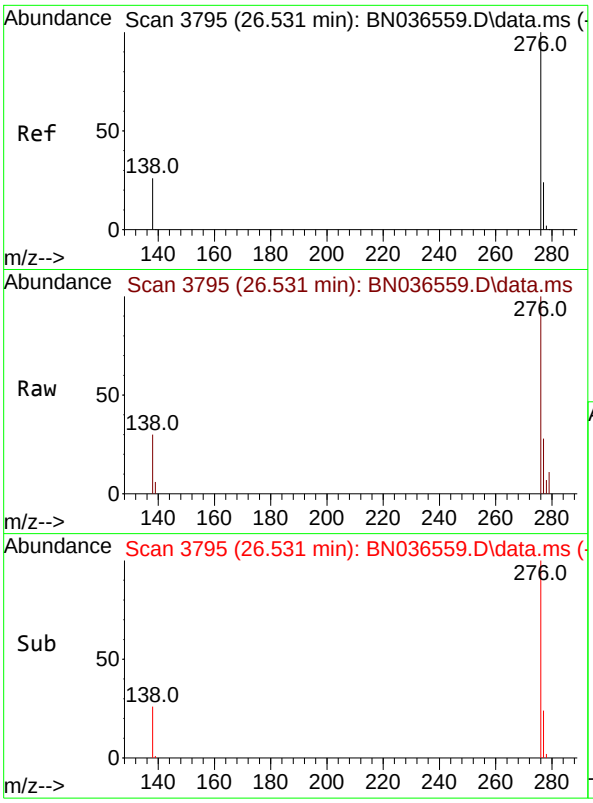


#40
Dibenzo(a,h)anthracene
Concen: 0.414 ng
RT: 25.855 min Scan# 3564
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Tgt Ion:278 Resp: 4117

Ion	Ratio	Lower	Upper
278	100		
139	26.0	20.8	31.2
279	36.0	28.8	43.2



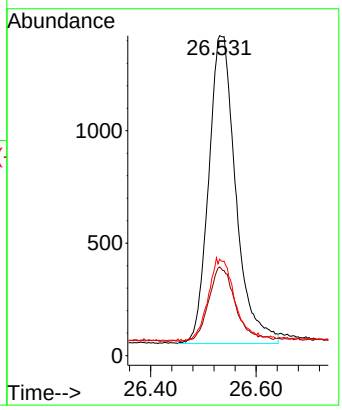


#41
Benzo(g,h,i)perylene
Concen: 0.430 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036559.D
Acq: 10 Mar 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 4891

Ion	Ratio	Lower	Upper
276	100		
277	27.8	22.2	33.4
138	30.1	24.1	36.1



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036560.D
Acq On : 10 Mar 2025 13:31
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Mar 10 16:01:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

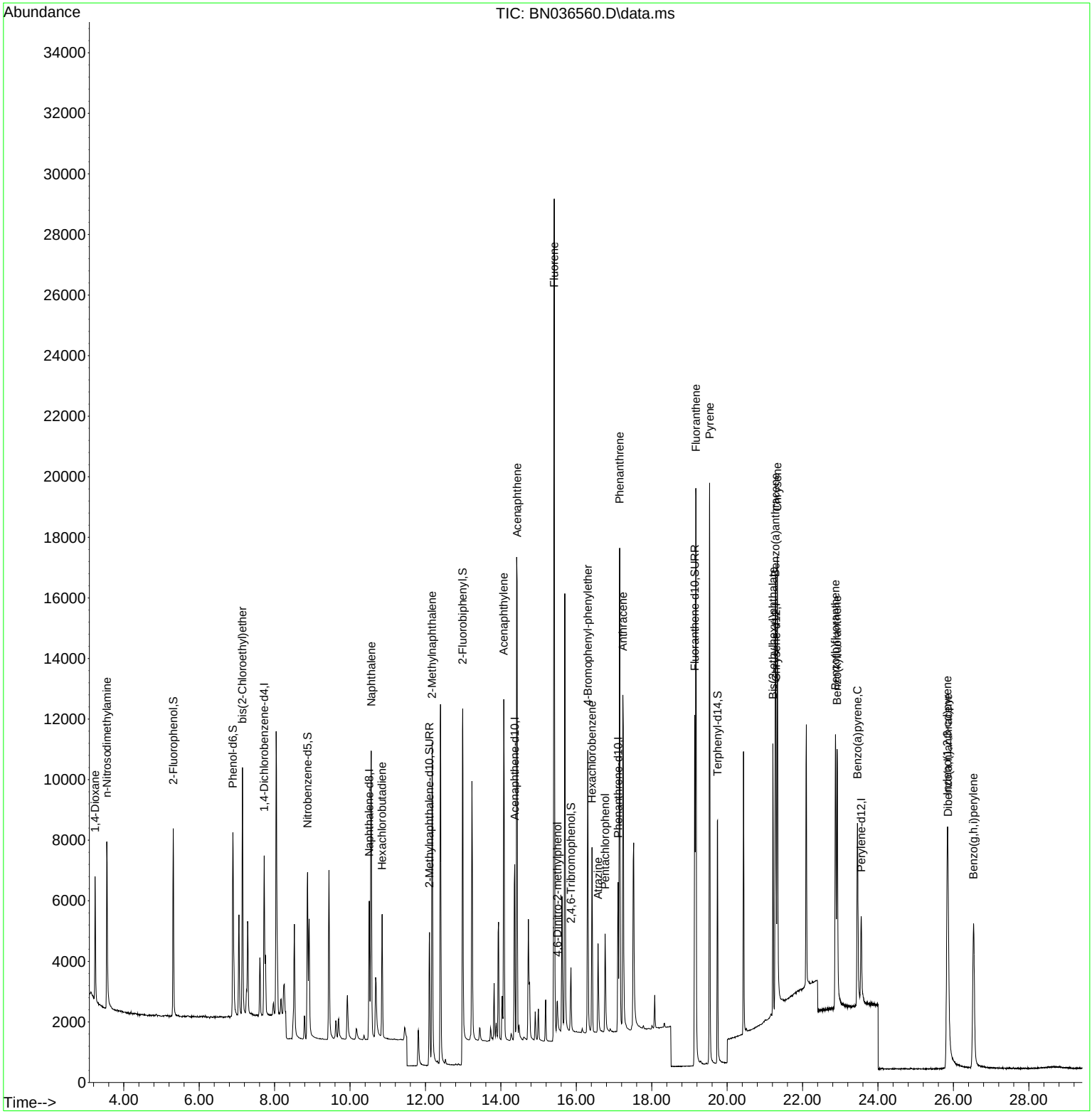
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2495	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5884	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3456	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	6971	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4636	0.400	ng		0.00
35) Perylene-d12	23.554	264	4198	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	4381	0.753	ng		0.00
5) Phenol-d6	6.894	99	5324	0.741	ng		0.00
8) Nitrobenzene-d5	8.875	82	4717	0.737	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	6616	0.756	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	1166	0.744	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	16243	0.808	ng		0.00
27) Fluoranthene-d10	19.141	212	13330	0.746	ng		0.00
31) Terphenyl-d14	19.745	244	8571	0.772	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	2251	0.813	ng		99
3) n-Nitrosodimethylamine	3.550	42	4197	0.750	ng		96
6) bis(2-Chloroethyl)ether	7.147	93	5632	0.759	ng		99
9) Naphthalene	10.562	128	13078	0.756	ng		98
10) Hexachlorobutadiene	10.851	225	3147	0.772	ng	#	99
12) 2-Methylnaphthalene	12.177	142	8272	0.751	ng		98
16) Acenaphthylene	14.078	152	12403	0.760	ng		100
17) Acenaphthene	14.430	154	8096	0.758	ng		99
18) Fluorene	15.414	166	11120	0.770	ng		100
20) 4,6-Dinitro-2-methylph...	15.499	198	1039	0.724	ng	#	59
21) 4-Bromophenyl-phenylether	16.305	248	3324	0.761	ng		93
22) Hexachlorobenzene	16.416	284	4115	0.780	ng		99
23) Atrazine	16.578	200	2677	0.764	ng		94
24) Pentachlorophenol	16.764	266	1701	0.707	ng		98
25) Phenanthrene	17.149	178	15910	0.761	ng		99
26) Anthracene	17.236	178	14403	0.763	ng		99
28) Fluoranthene	19.174	202	17738	0.755	ng		99
30) Pyrene	19.536	202	17714	0.781	ng		100
32) Benzo(a)anthracene	21.277	228	12089	0.750	ng		98
33) Chrysene	21.331	228	13974	0.793	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	8021	0.699	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.838	276	11785	0.778	ng		99
37) Benzo(b)fluoranthene	22.873	252	11771	0.770	ng	#	91
38) Benzo(k)fluoranthene	22.917	252	12432	0.776	ng	#	90
39) Benzo(a)pyrene	23.455	252	10036	0.780	ng	#	87
40) Dibenzo(a,h)anthracene	25.858	278	9450	0.801	ng		91
41) Benzo(g,h,i)perylene	26.534	276	10494	0.778	ng		96

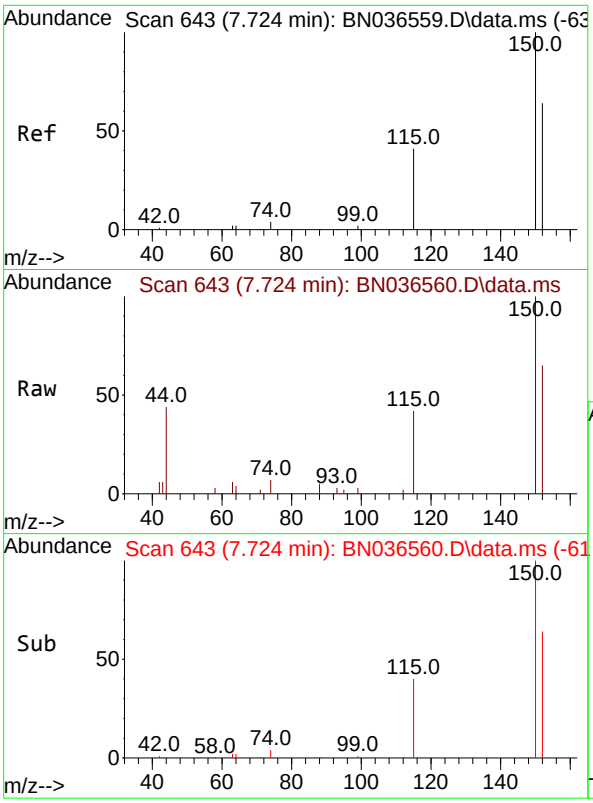
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036560.D
Acq On : 10 Mar 2025 13:31
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Mar 10 16:01:54 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



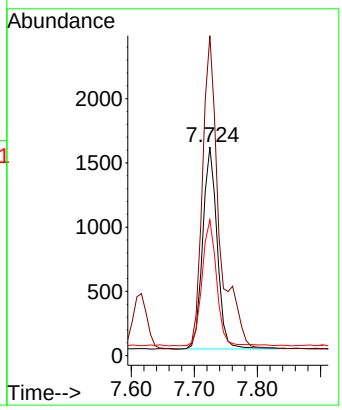


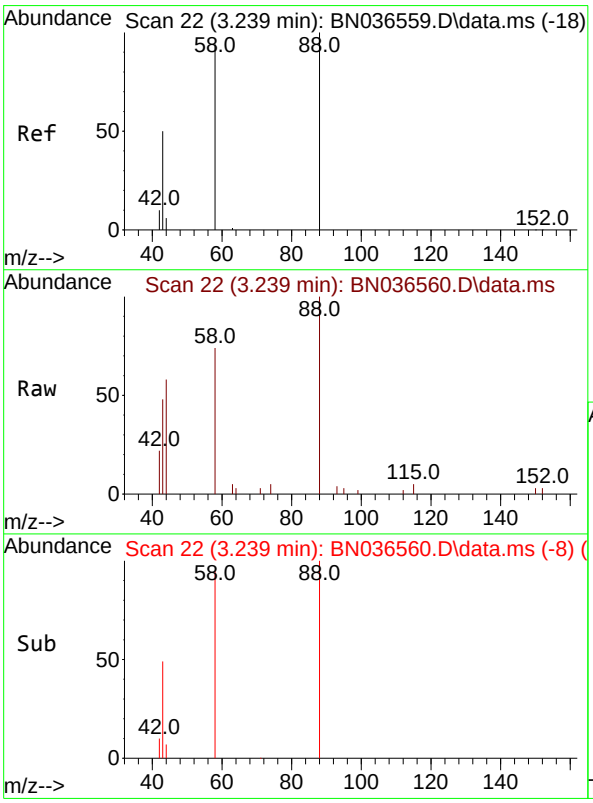
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 2495

Ion	Ratio	Lower	Upper
152	100		
150	153.3	123.7	185.5
115	65.1	54.3	81.5

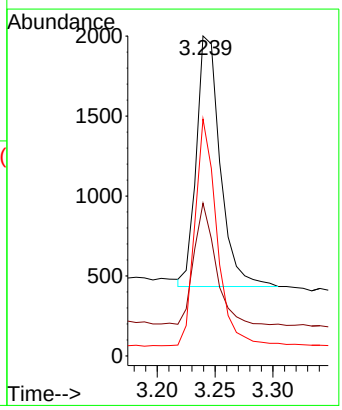


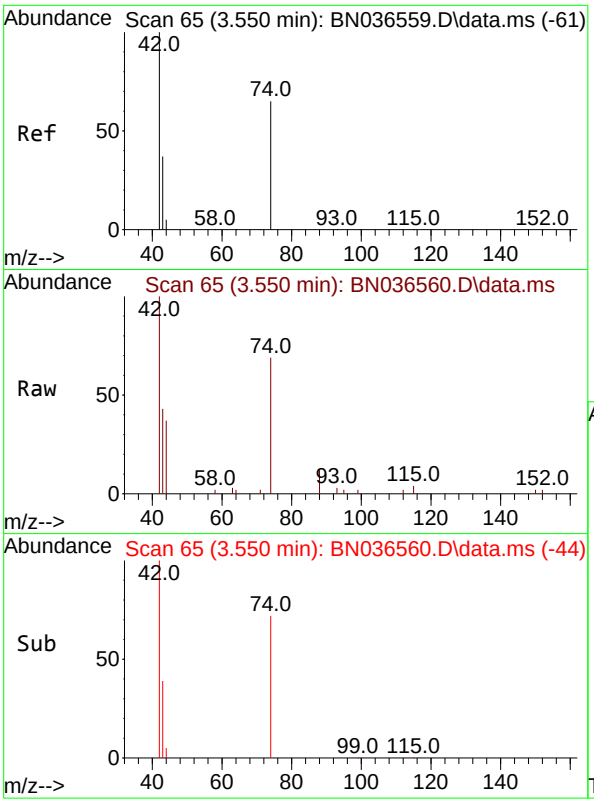


#2
1,4-Dioxane
Concen: 0.813 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion: 88 Resp: 2251

Ion	Ratio	Lower	Upper
88	100		
43	45.6	37.8	56.8
58	84.5	67.4	101.2



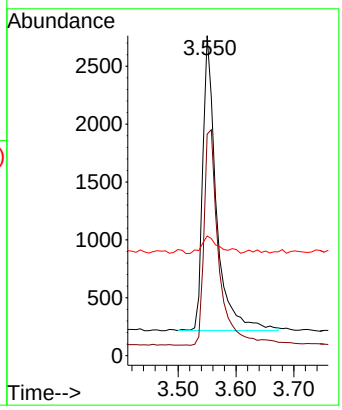


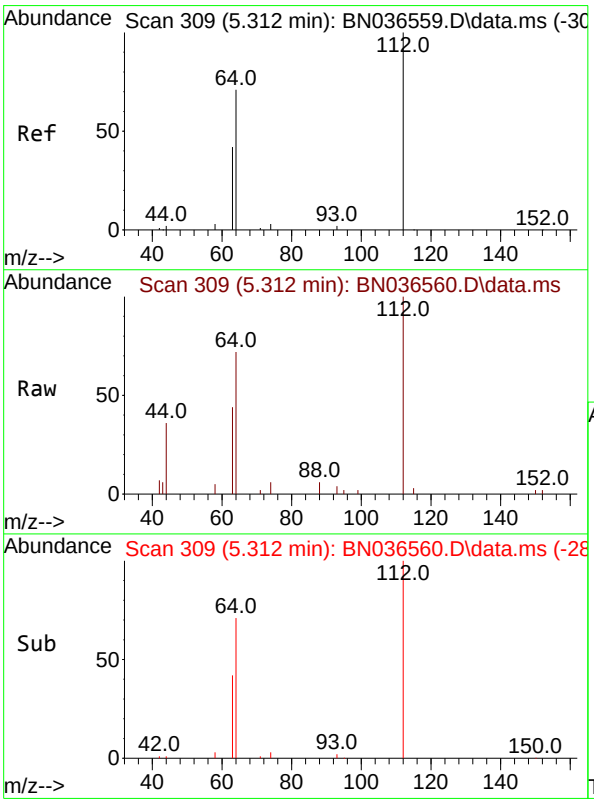
#3
n-Nitrosodimethylamine
Concen: 0.750 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 42 Resp: 4197

Ion	Ratio	Lower	Upper
42	100		
74	79.3	60.6	90.8
44	7.4	6.3	9.5

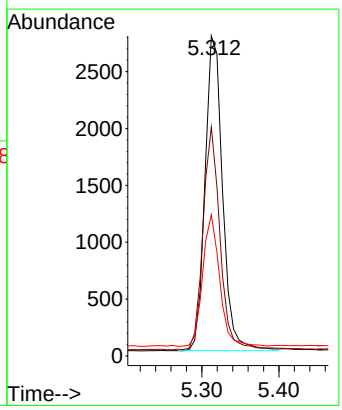


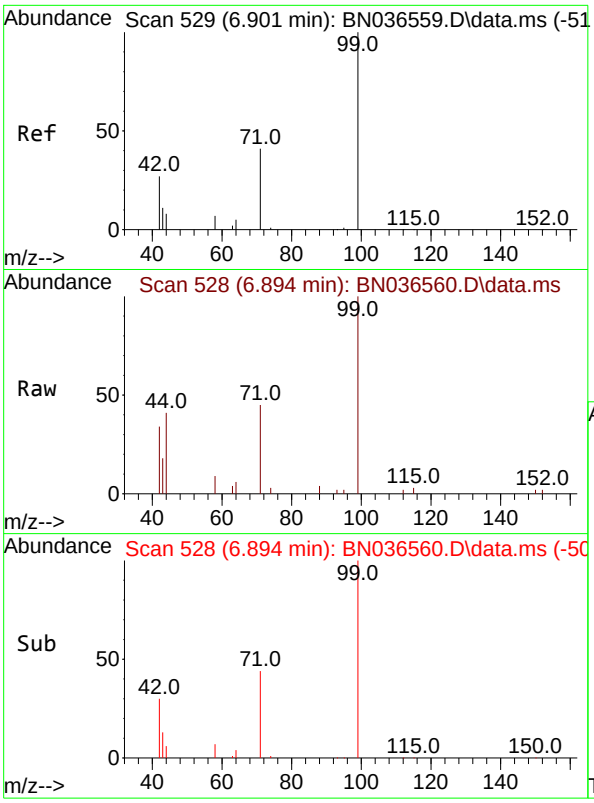


#4
2-Fluorophenol
Concen: 0.753 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:112 Resp: 4381

Ion	Ratio	Lower	Upper
112	100		
64	68.8	53.1	79.7
63	40.4	31.8	47.8



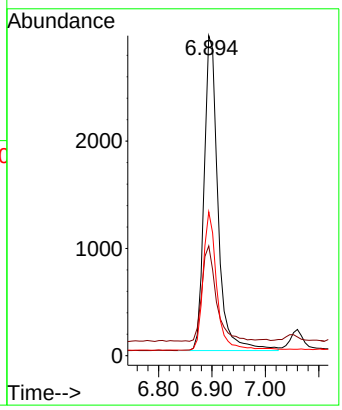


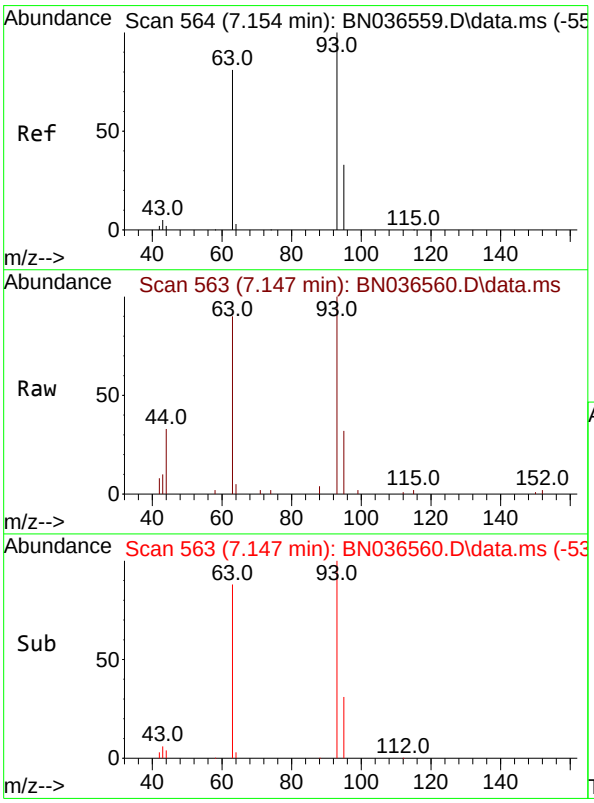
#5
Phenol-d6
Concen: 0.741 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 99 Resp: 5324

Ion	Ratio	Lower	Upper
99	100		
42	31.3	26.5	39.7
71	42.6	34.1	51.1

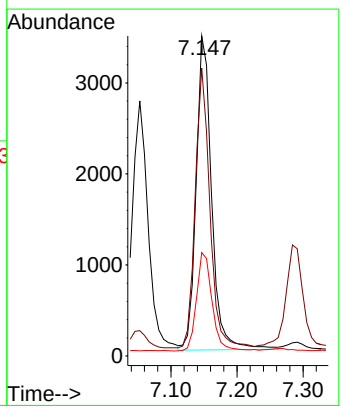


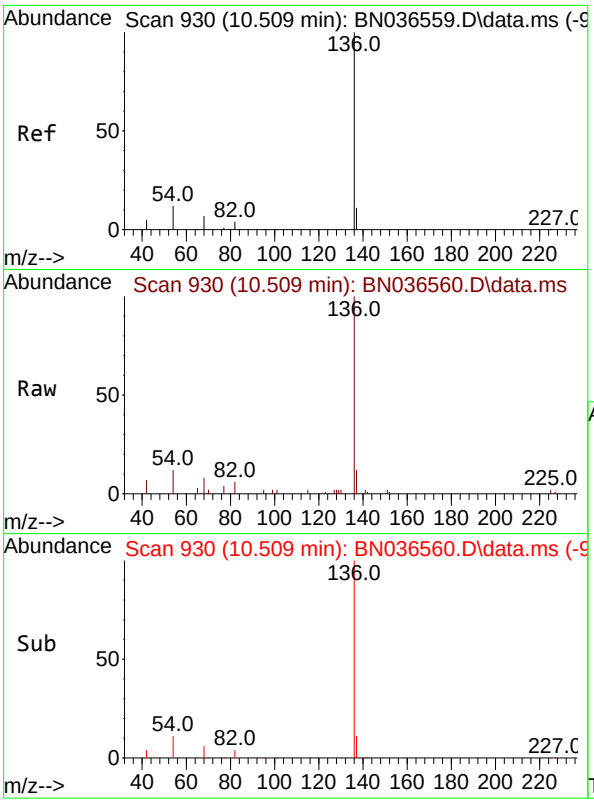


#6
bis(2-Chloroethyl)ether
Concen: 0.759 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion: 93 Resp: 5632

Ion	Ratio	Lower	Upper
93	100		
63	84.0	67.7	101.5
95	31.6	25.6	38.4



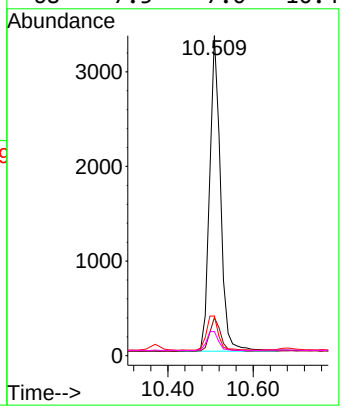


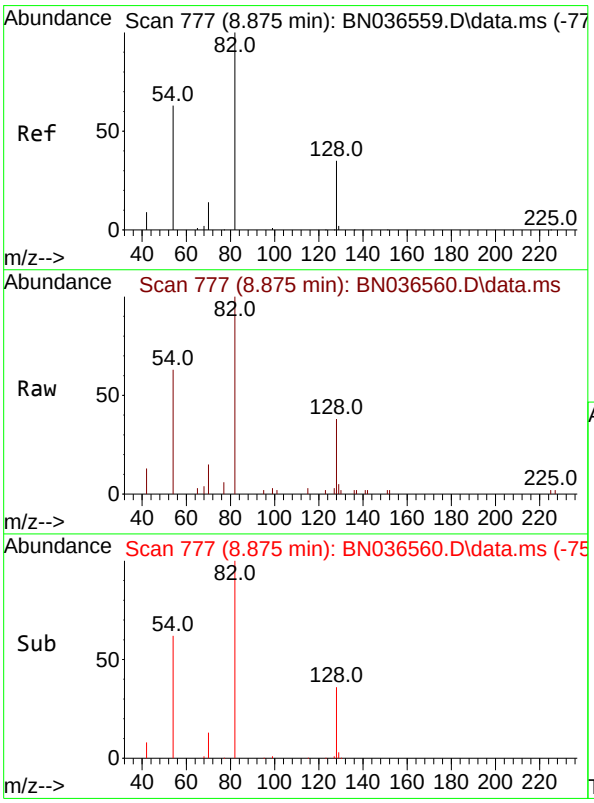
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:136 Resp: 5884

Ion	Ratio	Lower	Upper
136	100		
137	11.9	10.3	15.5
54	12.4	11.5	17.3
68	7.5	7.0	10.4

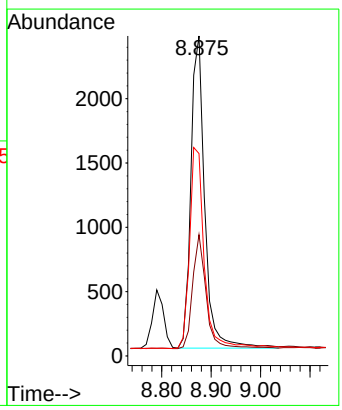


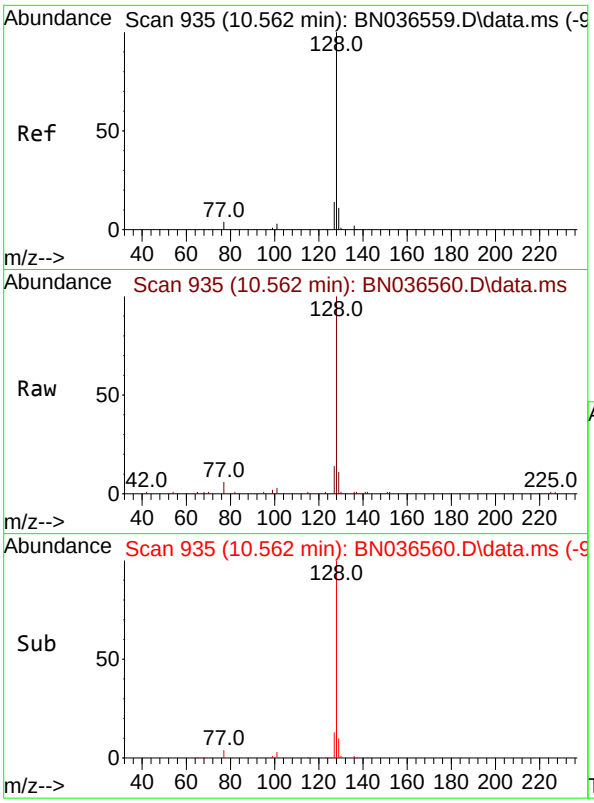


#8
Nitrobenzene-d5
Concen: 0.737 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion: 82 Resp: 4717

Ion	Ratio	Lower	Upper
82	100		
128	37.9	30.6	45.8
54	63.2	52.2	78.4



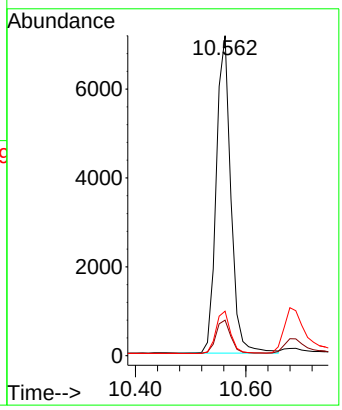


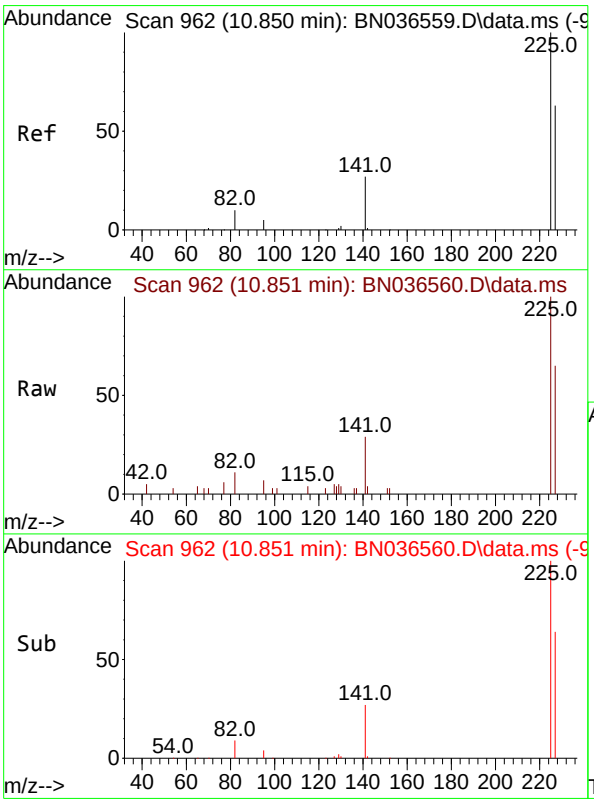
#9
Naphthalene
Concen: 0.756 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:128 Resp: 13078

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.8	14.6
127	13.9	11.8	17.8

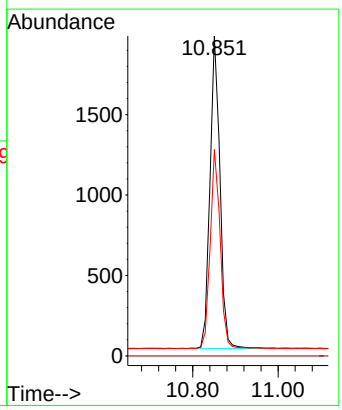


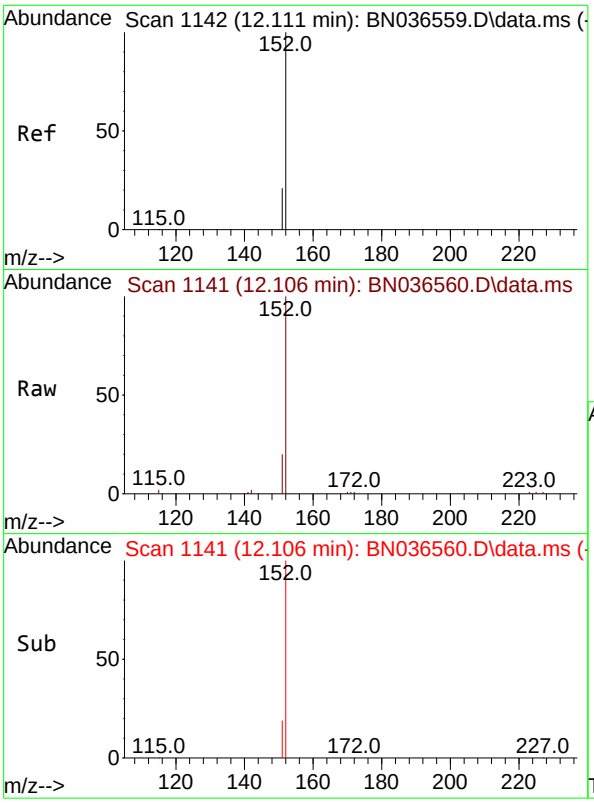


#10
Hexachlorobutadiene
Concen: 0.772 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:225 Resp: 3147

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	51.8	77.8



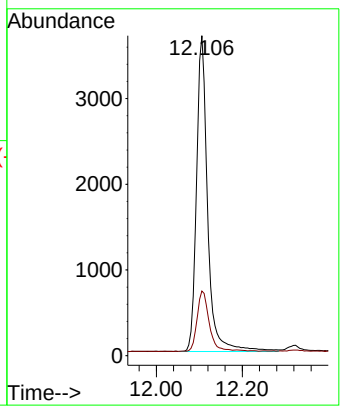


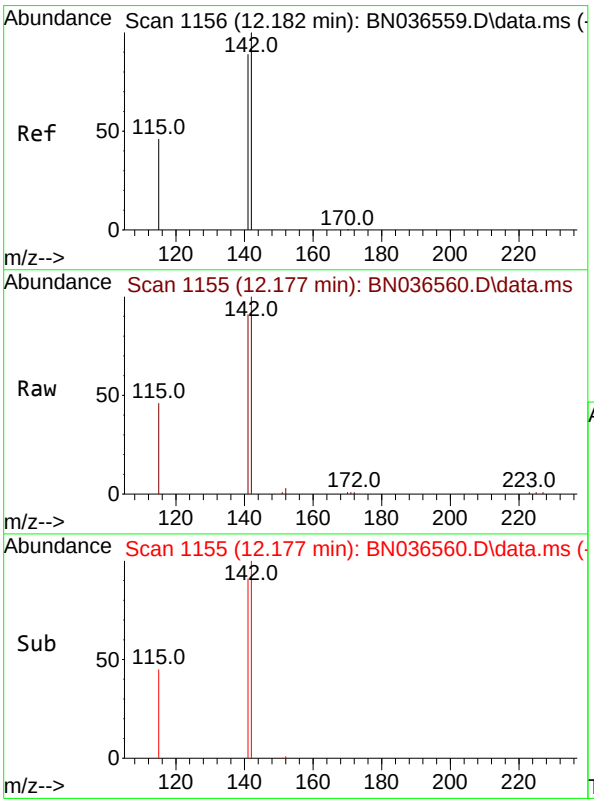
#11
2-Methylnaphthalene-d10
Concen: 0.756 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 6616

Ion	Ratio	Lower	Upper
152	100		
151	20.8	17.0	25.6

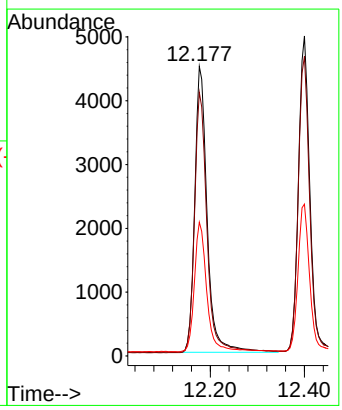


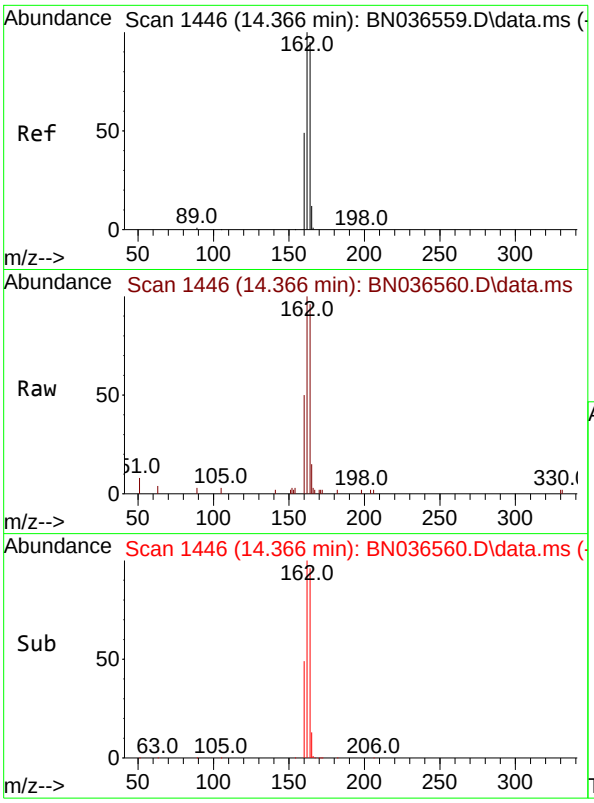


#12
2-Methylnaphthalene
Concen: 0.751 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:142 Resp: 8272

Ion	Ratio	Lower	Upper
142	100		
141	91.0	71.7	107.5
115	46.2	38.3	57.5



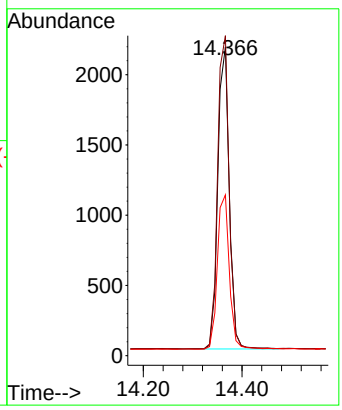


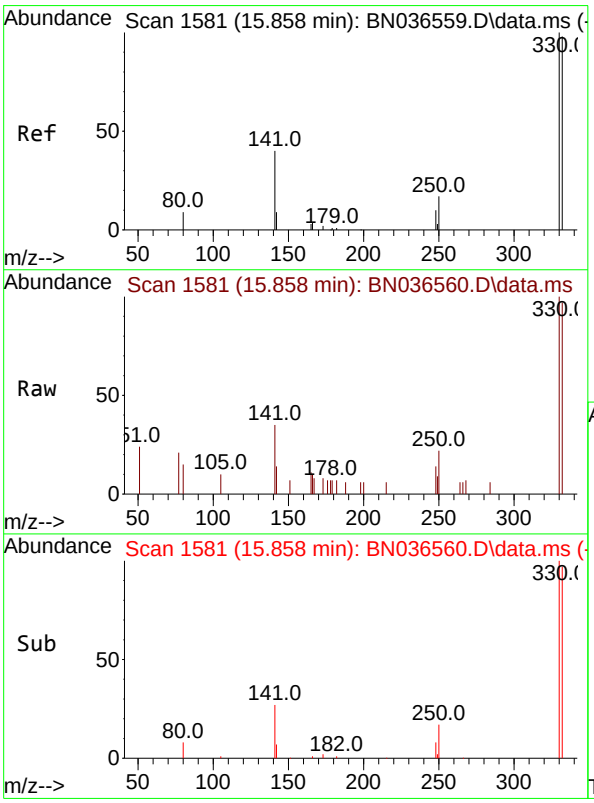
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:164 Resp: 3456

Ion	Ratio	Lower	Upper
164	100		
162	103.6	84.2	126.2
160	52.1	42.2	63.2

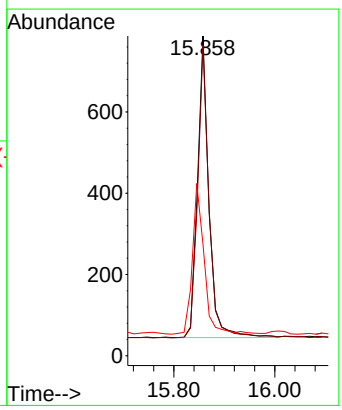


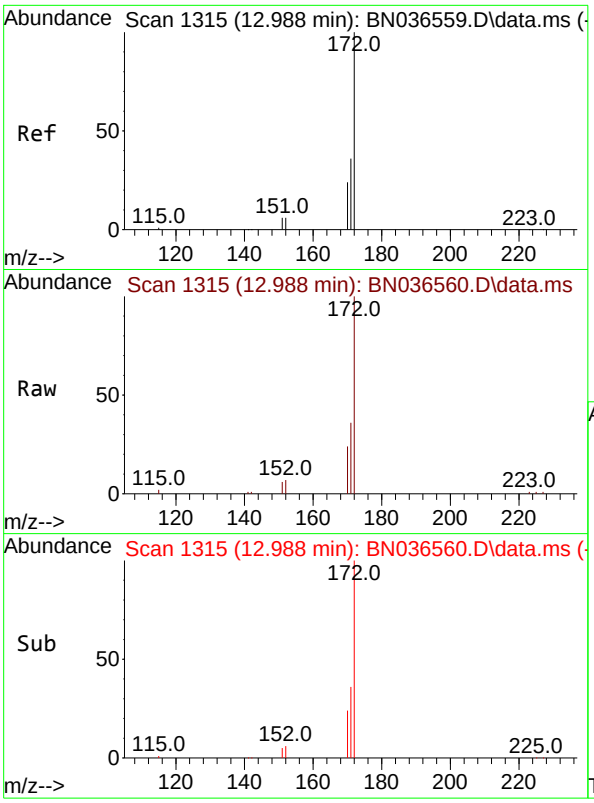


#14
2,4,6-Tribromophenol
Concen: 0.744 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:330 Resp: 1166

Ion	Ratio	Lower	Upper
330	100		
332	97.6	75.2	112.8
141	51.8	43.4	65.2



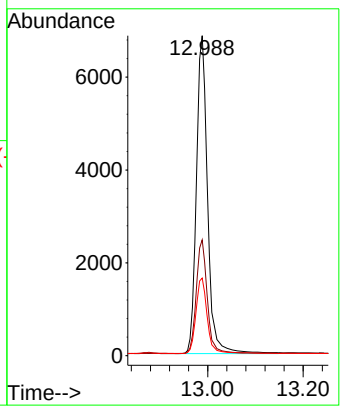


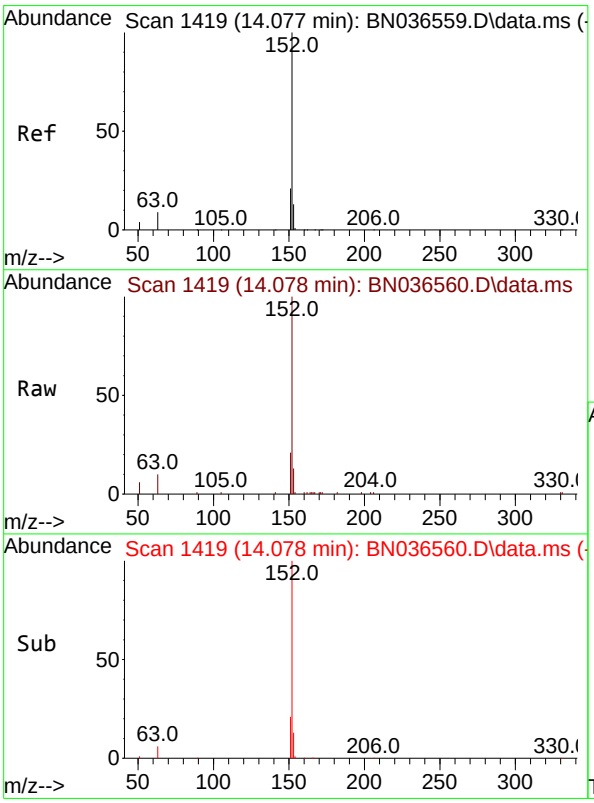
#15
2-Fluorobiphenyl
Concen: 0.808 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:172 Resp: 16243

Ion	Ratio	Lower	Upper
172	100		
171	36.2	29.5	44.3
170	24.3	20.2	30.4

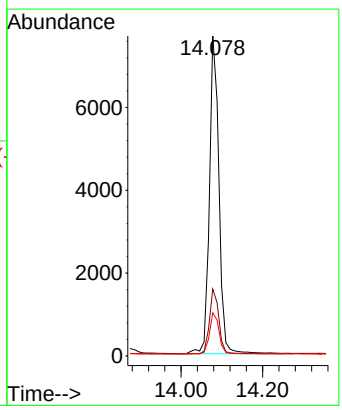


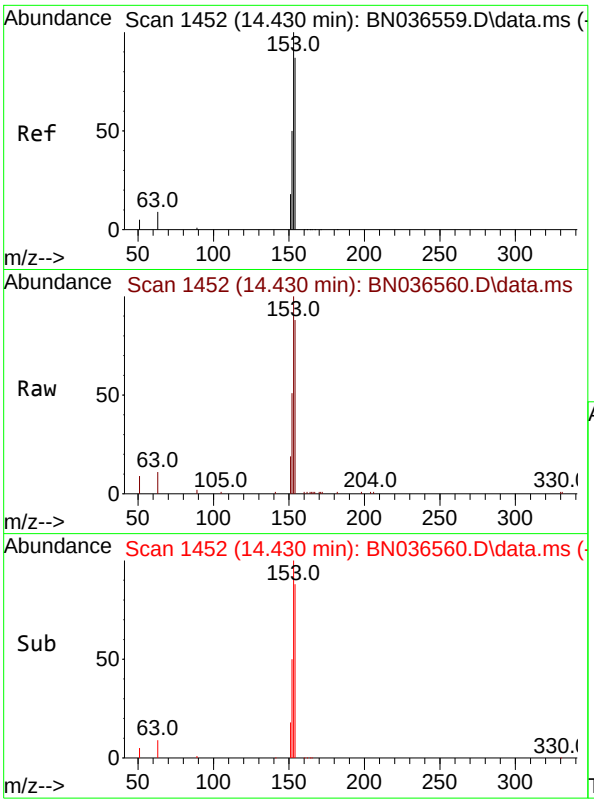


#16
Acenaphthylene
Concen: 0.760 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:152 Resp: 12403

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	13.1	10.6	15.8



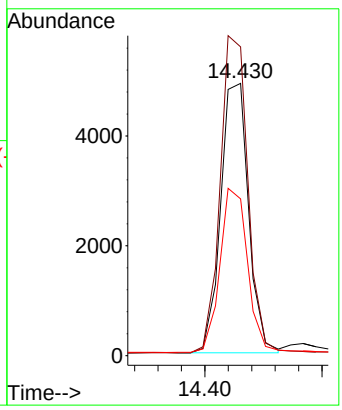


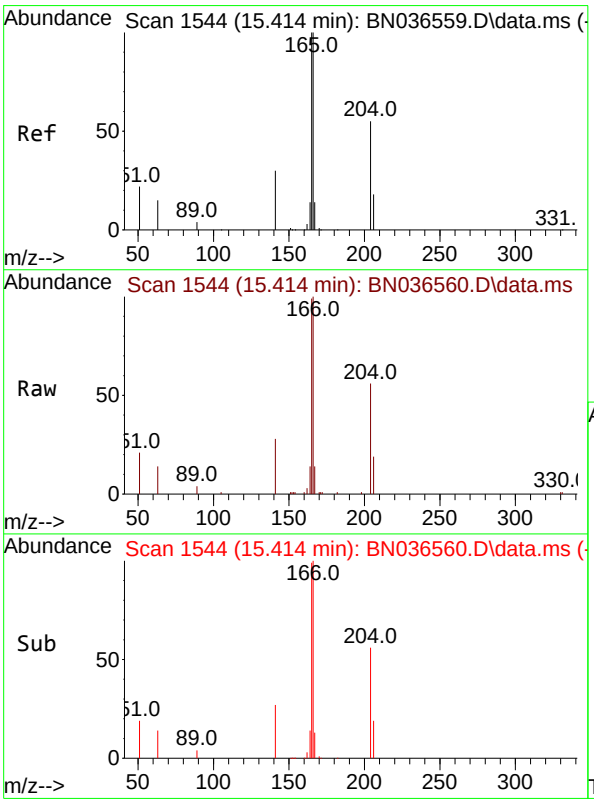
#17
Acenaphthene
Concen: 0.758 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:154 Resp: 8096

Ion	Ratio	Lower	Upper
154	100		
153	117.8	94.1	141.1
152	60.9	49.8	74.6

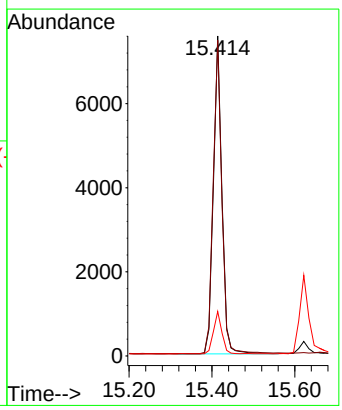


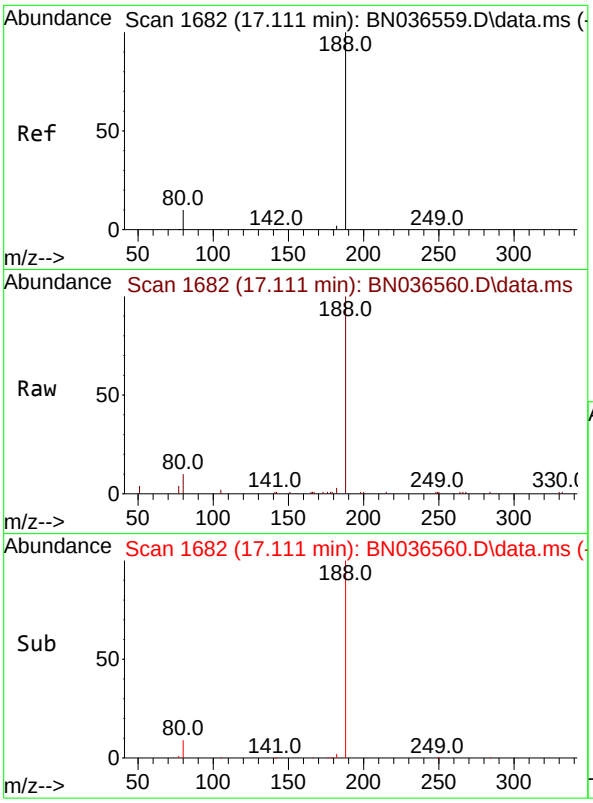


#18
Fluorene
Concen: 0.770 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:166 Resp: 11120

Ion	Ratio	Lower	Upper
166	100		
165	99.8	79.8	119.8
167	13.3	10.6	15.8



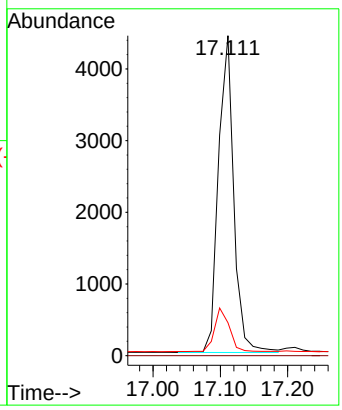


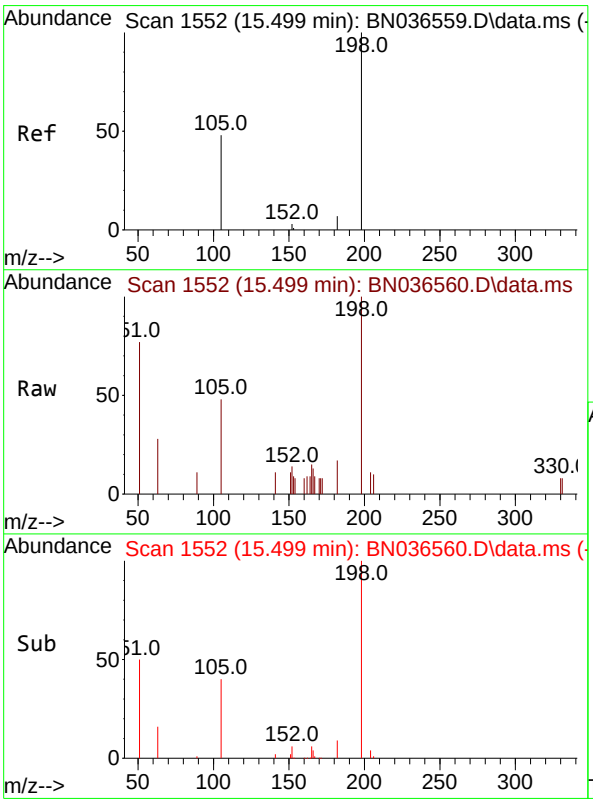
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:188 Resp: 6971

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.3	8.8	13.2

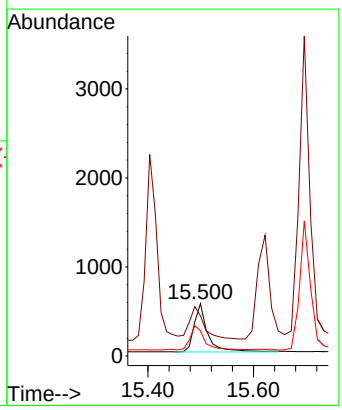


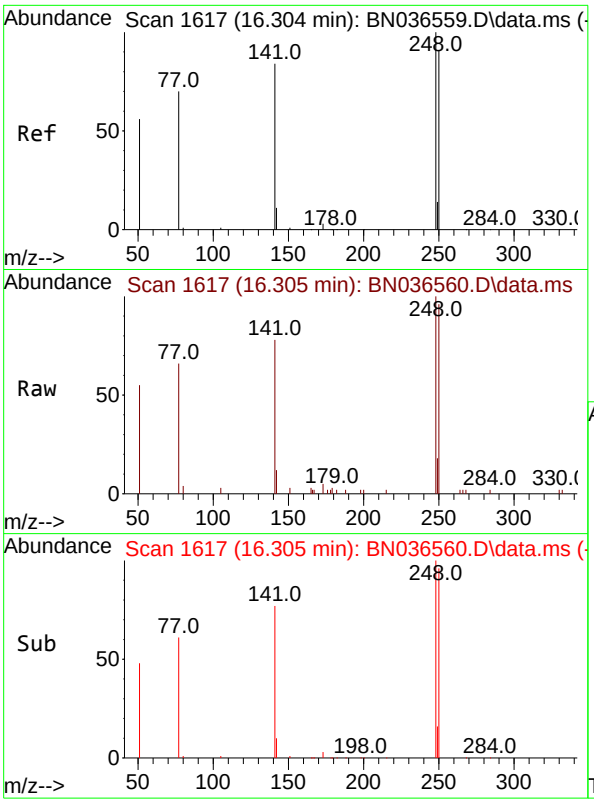


#20
4,6-Dinitro-2-methylphenol
Concen: 0.724 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:198 Resp: 1039

Ion	Ratio	Lower	Upper
198	100		
51	76.5	107.9	161.9#
105	48.1	56.2	84.2#



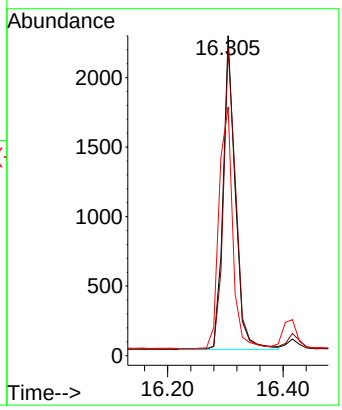


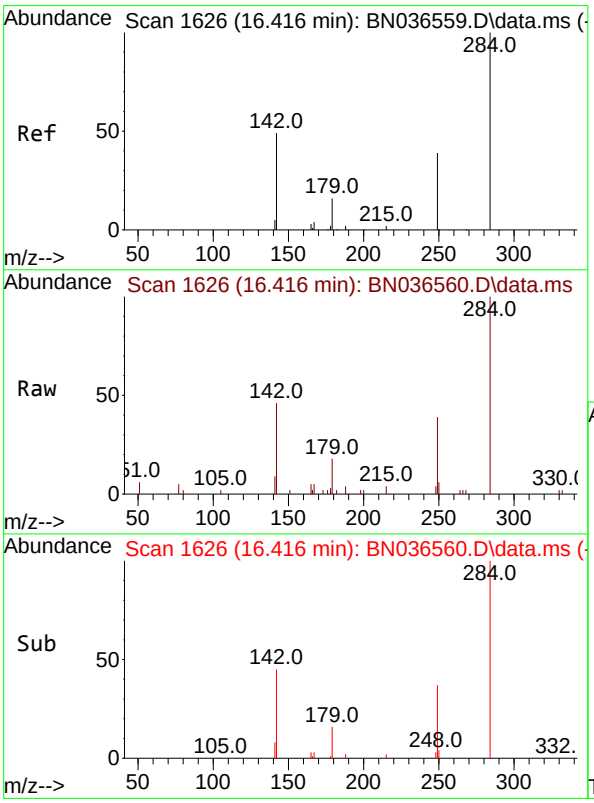
#21
4-Bromophenyl-phenylether
Concen: 0.761 ng
RT: 16.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:248 Resp: 3324

Ion	Ratio	Lower	Upper
248	100		
250	96.2	73.0	109.6
141	77.7	68.6	103.0

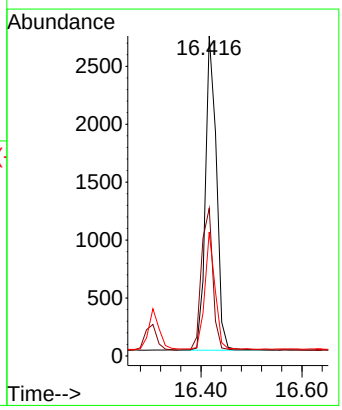


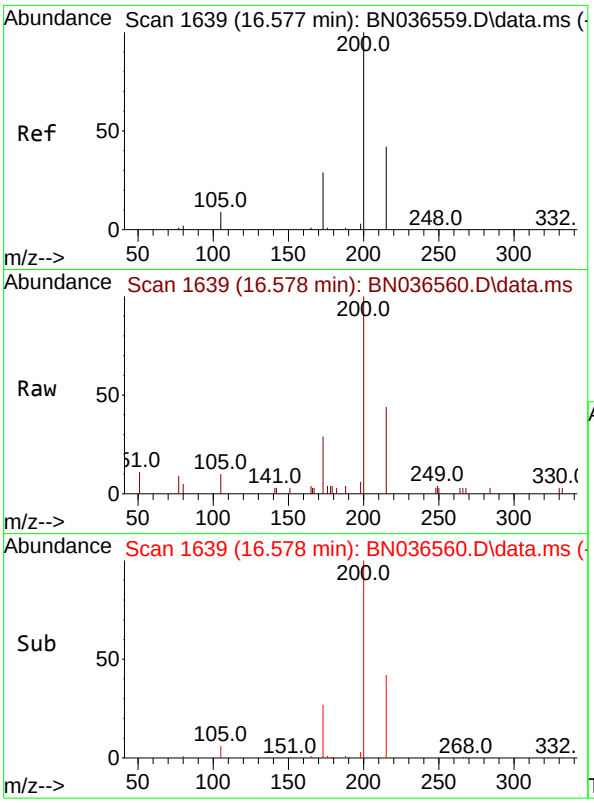


#22
Hexachlorobenzene
Concen: 0.780 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:284 Resp: 4115

Ion	Ratio	Lower	Upper
284	100		
142	47.2	37.0	55.4
249	34.7	28.1	42.1



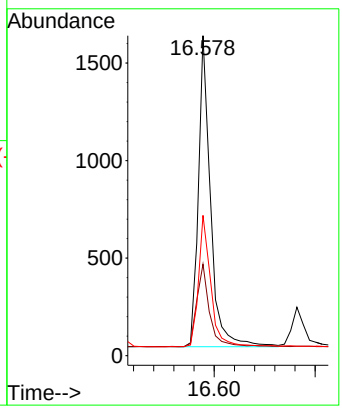


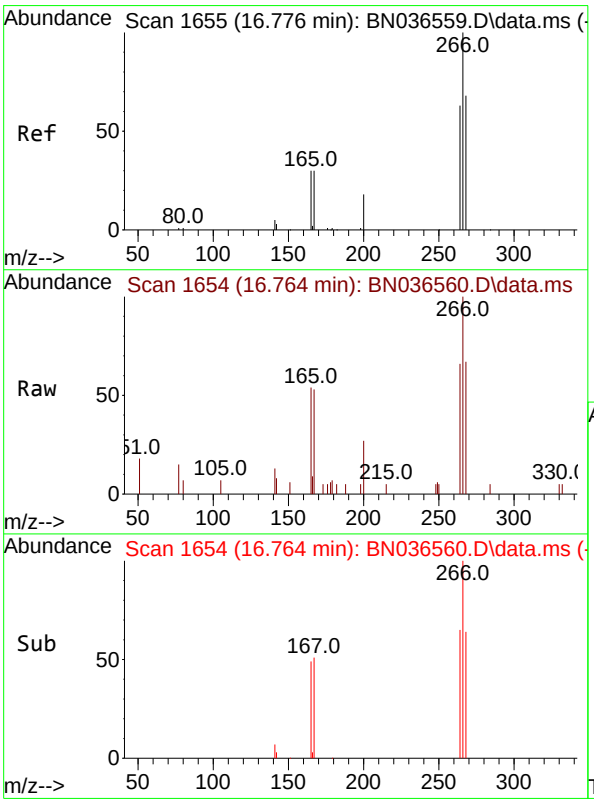
#23
Atrazine
Concen: 0.764 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:200 Resp: 2677

Ion	Ratio	Lower	Upper
200	100		
173	28.6	27.3	40.9
215	43.8	36.8	55.2

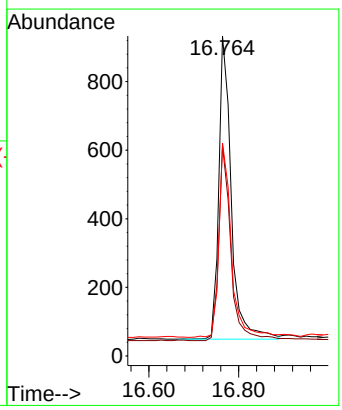


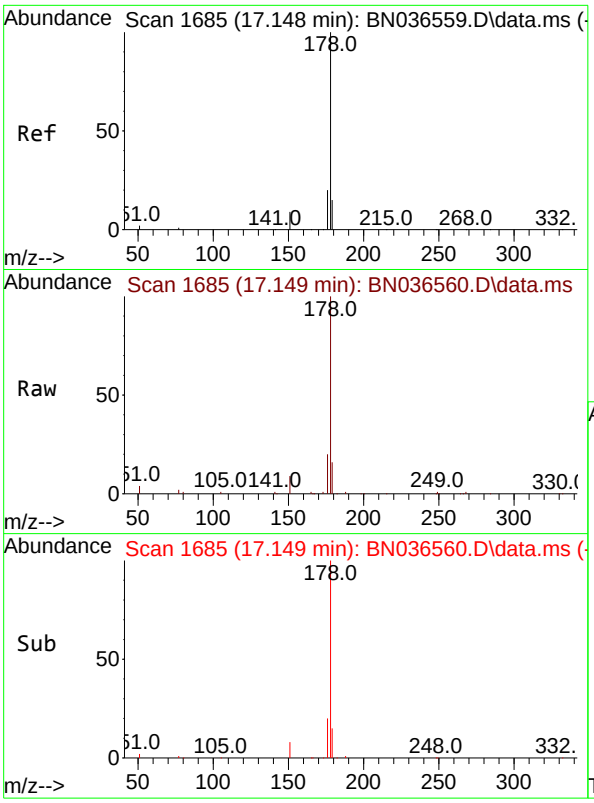


#24
Pentachlorophenol
Concen: 0.707 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:266 Resp: 1701

Ion	Ratio	Lower	Upper
266	100		
264	63.5	49.6	74.4
268	65.1	50.9	76.3



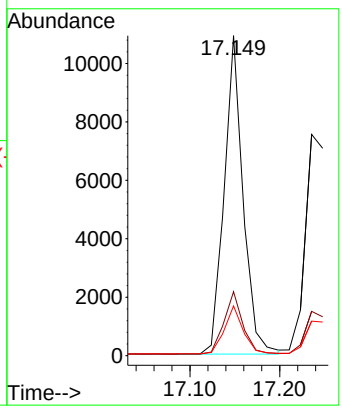


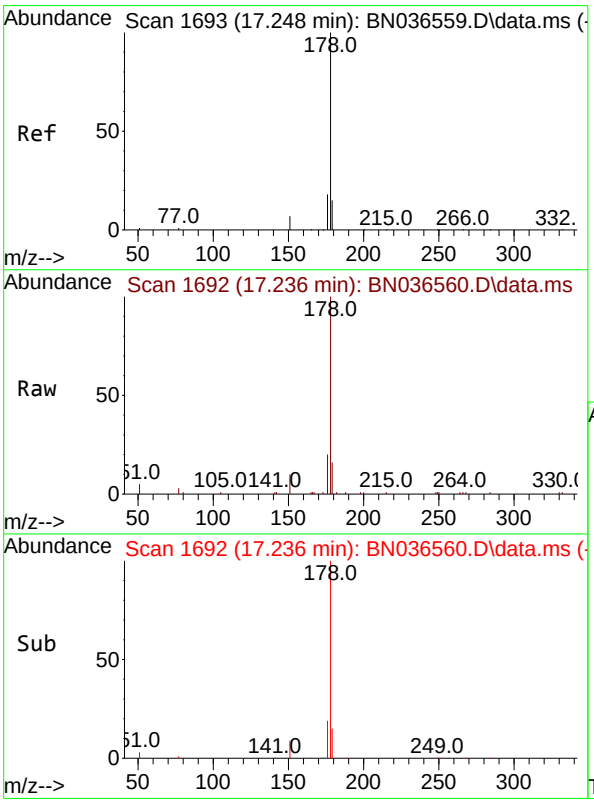
#25
Phenanthrene
Concen: 0.761 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:178 Resp: 15910

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.9	23.9
179	15.1	12.2	18.4

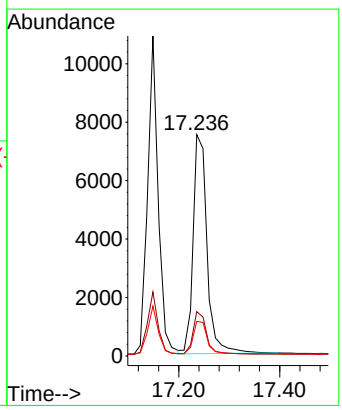


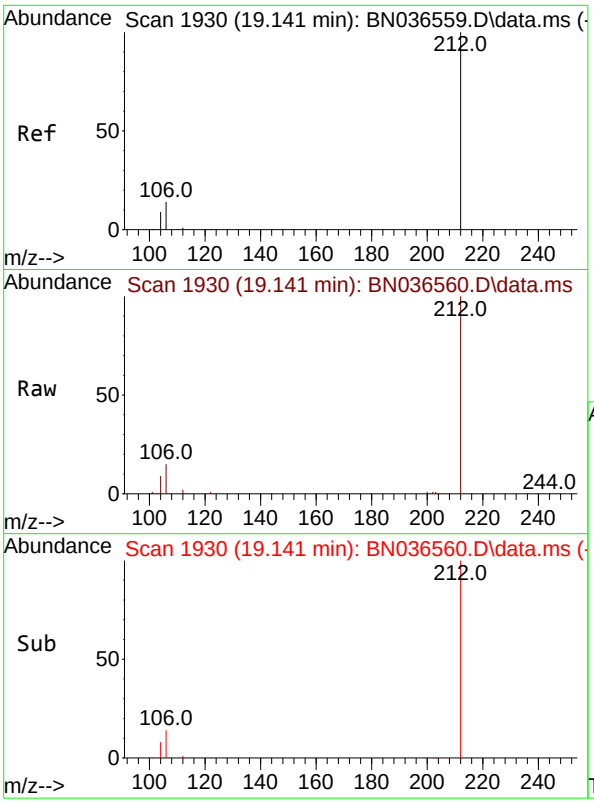


#26
Anthracene
Concen: 0.763 ng
RT: 17.236 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:178 Resp: 14403

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.4	23.2
179	15.1	12.6	18.8



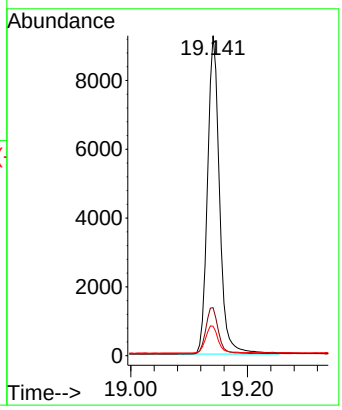


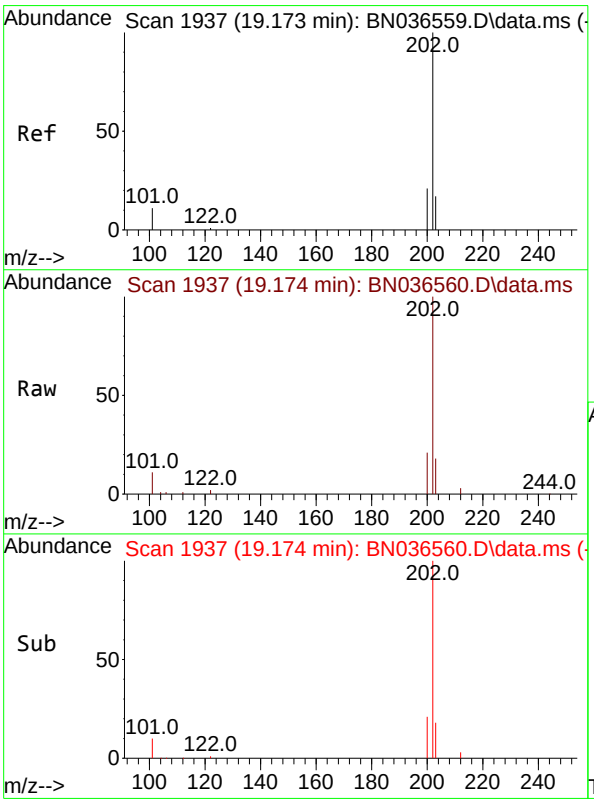
#27
Fluoranthene-d10
Concen: 0.746 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:212 Resp: 13330

Ion	Ratio	Lower	Upper
212	100		
106	15.2	11.8	17.6
104	8.9	7.3	10.9

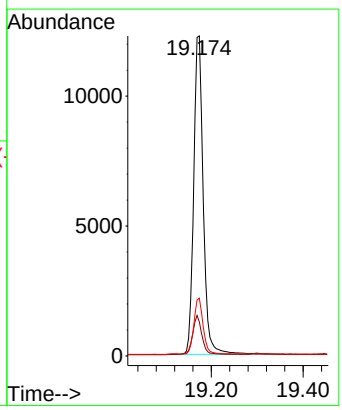


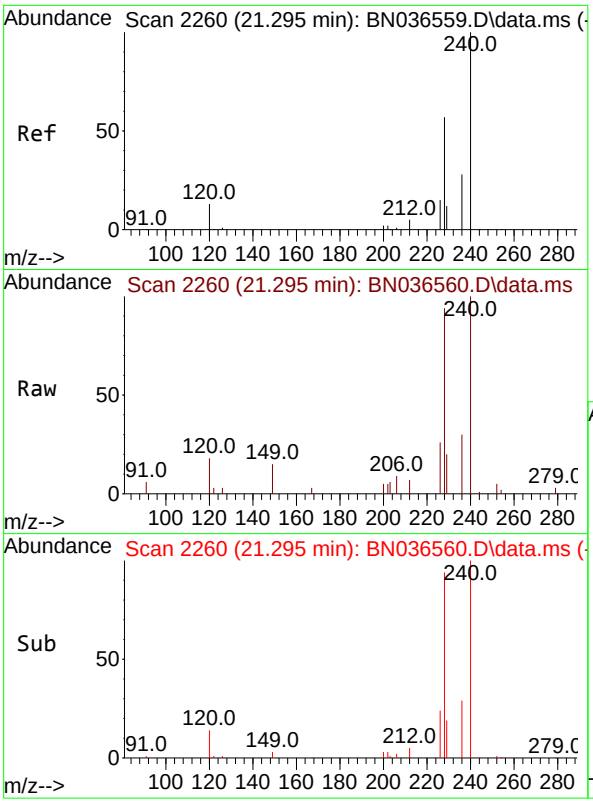


#28
Fluoranthene
Concen: 0.755 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:202 Resp: 17738

Ion	Ratio	Lower	Upper
202	100		
101	12.1	9.4	14.0
203	17.0	13.5	20.3



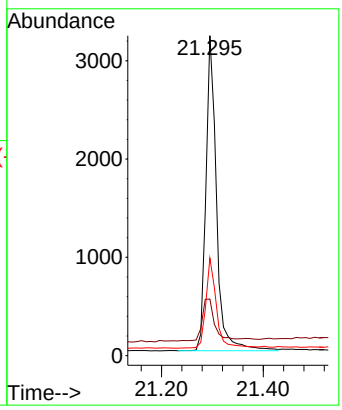


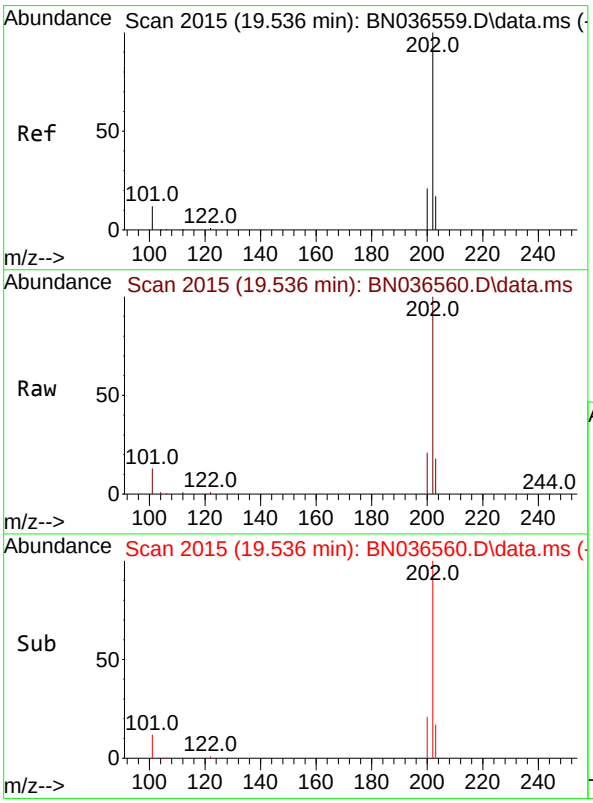
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:240 Resp: 4636

Ion	Ratio	Lower	Upper
240	100		
120	17.7	14.6	22.0
236	30.5	24.1	36.1

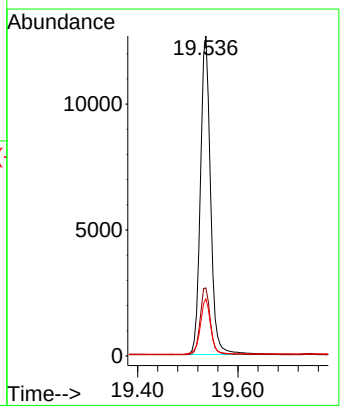


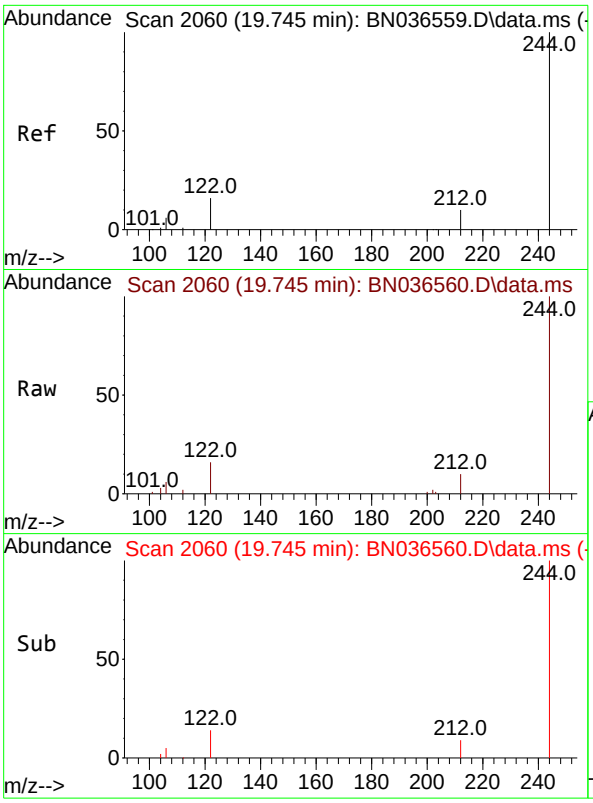


#30
Pyrene
Concen: 0.781 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:202 Resp: 17714

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.5	14.1	21.1



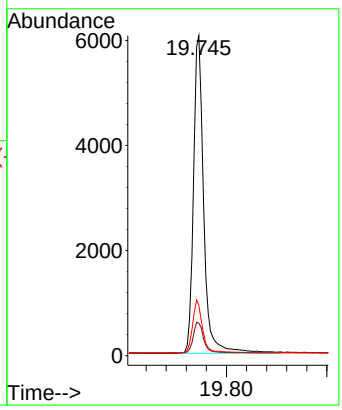


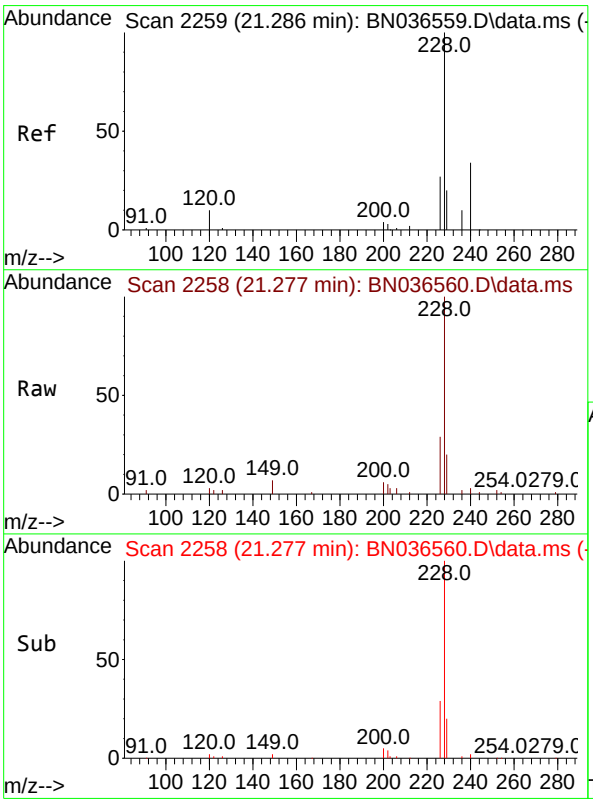
#31
Terphenyl-d14
Concen: 0.772 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:244 Resp: 8571

Ion	Ratio	Lower	Upper
244	100		
212	10.1	9.6	14.4
122	15.8	13.9	20.9

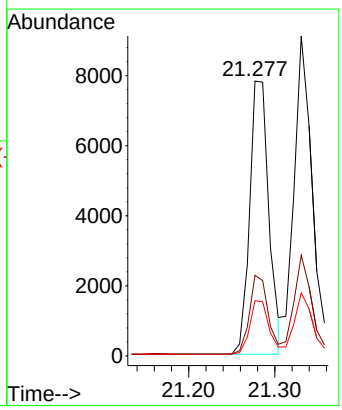


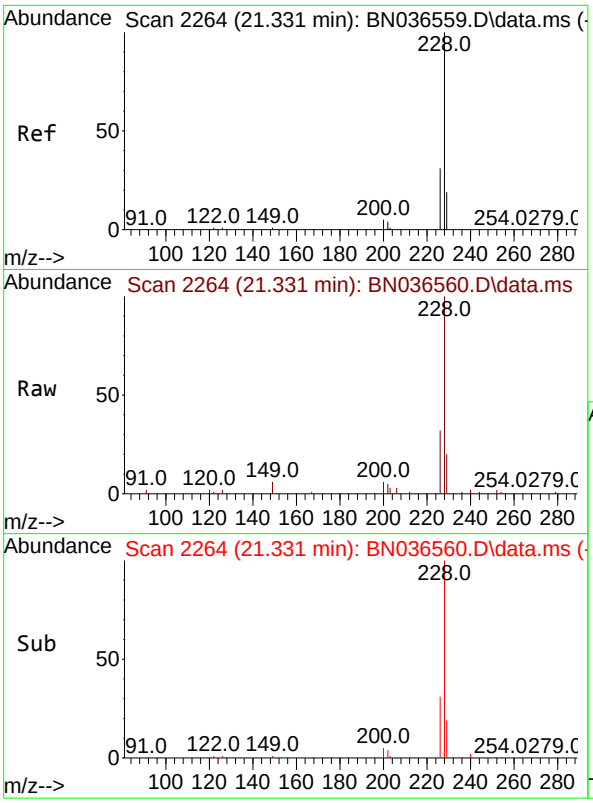


#32
Benzo(a)anthracene
Concen: 0.750 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:228 Resp: 12089

Ion	Ratio	Lower	Upper
228	100		
226	29.3	22.5	33.7
229	20.1	16.6	25.0



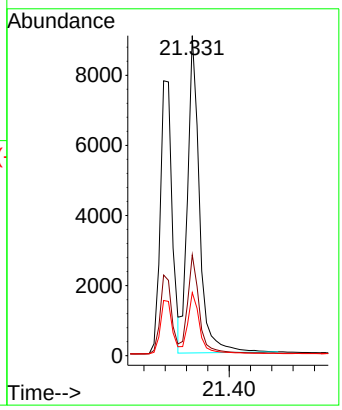


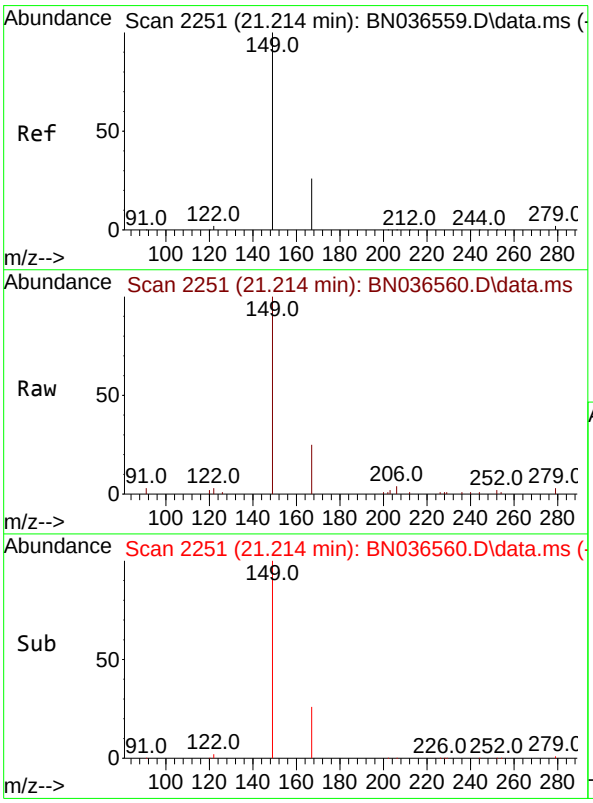
#33
Chrysene
Concen: 0.793 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:228 Resp: 13974

Ion	Ratio	Lower	Upper
228	100		
226	31.5	25.3	37.9
229	19.7	15.8	23.8

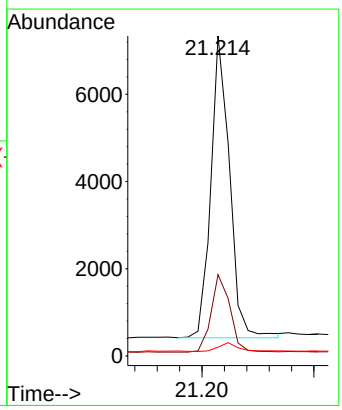


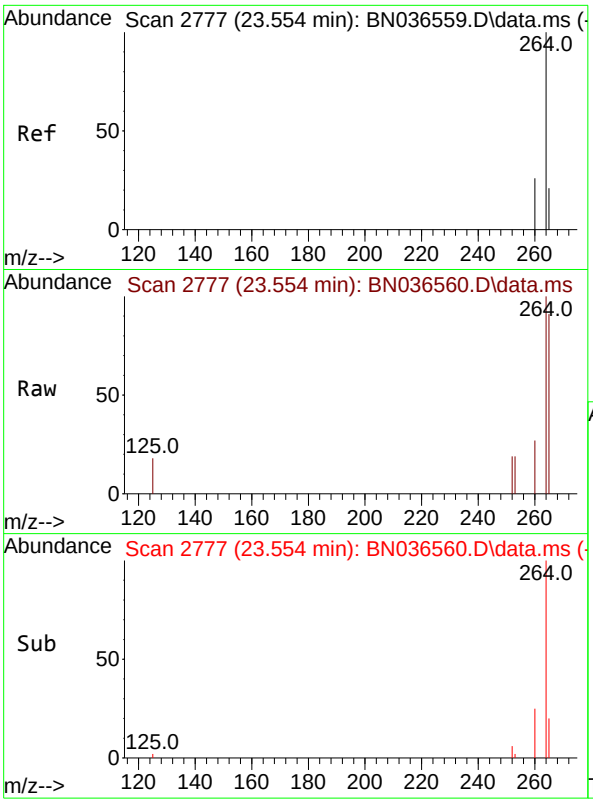


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.699 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:149 Resp: 8021

Ion	Ratio	Lower	Upper
149	100		
167	25.9	20.7	31.1
279	3.2	3.6	5.4#



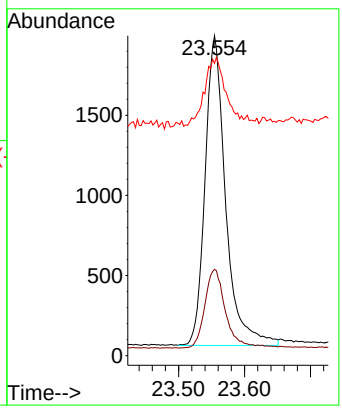


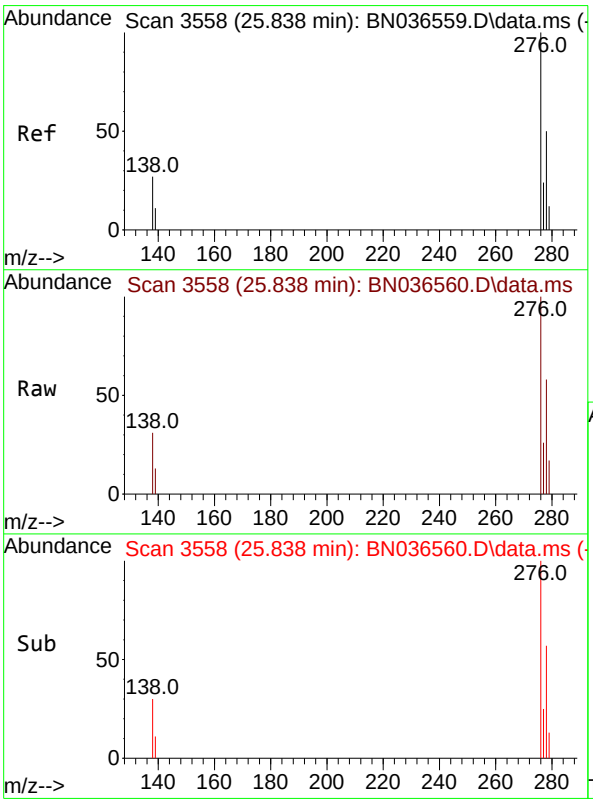
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:264 Resp: 4198

Ion	Ratio	Lower	Upper
264	100		
260	27.0	22.6	33.8
265	91.3	88.1	132.1

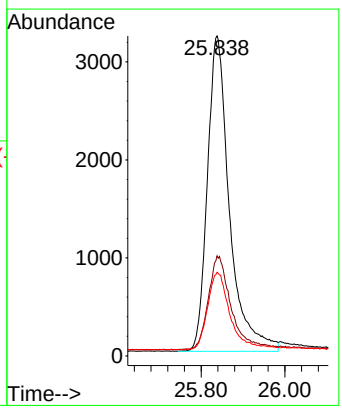


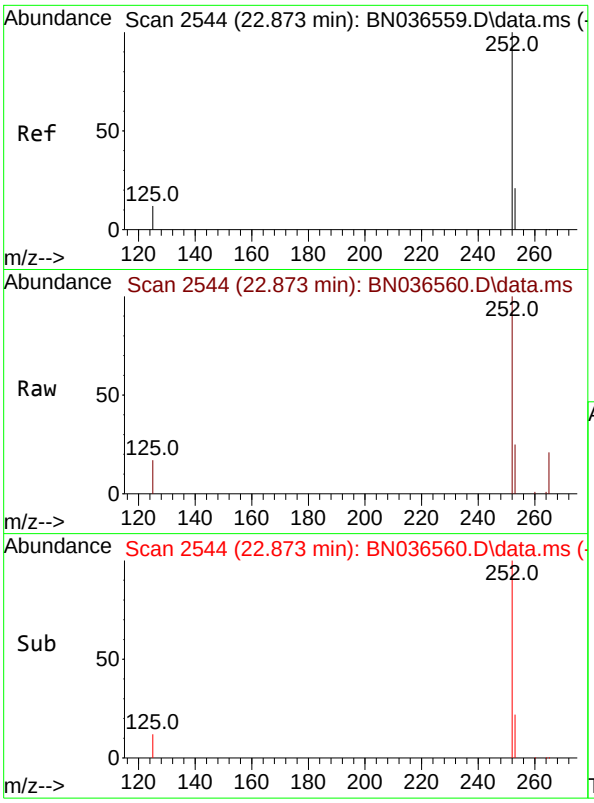


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.778 ng
RT: 25.838 min Scan# 3558
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:276 Resp: 11785

Ion	Ratio	Lower	Upper
276	100		
138	29.6	23.4	35.2
277	24.7	20.0	30.0



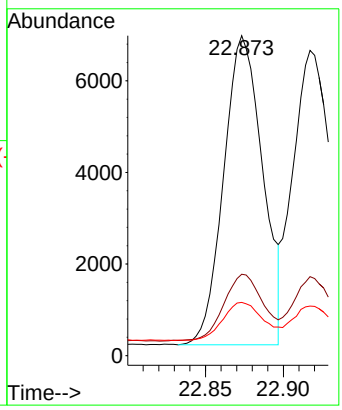


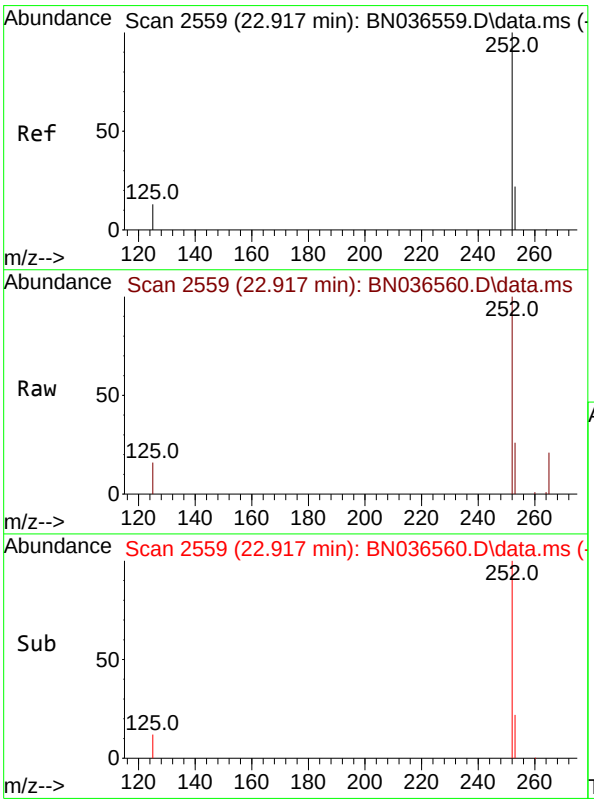
#37
Benzo(b)fluoranthene
Concen: 0.770 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 11771

Ion	Ratio	Lower	Upper
252	100		
253	25.5	23.9	35.9
125	16.7	17.4	26.2#

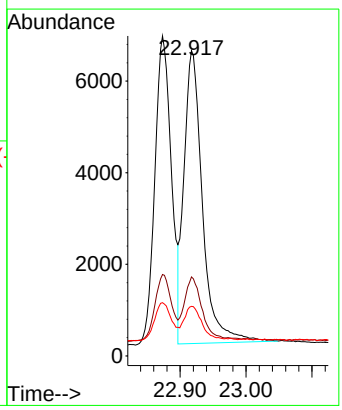


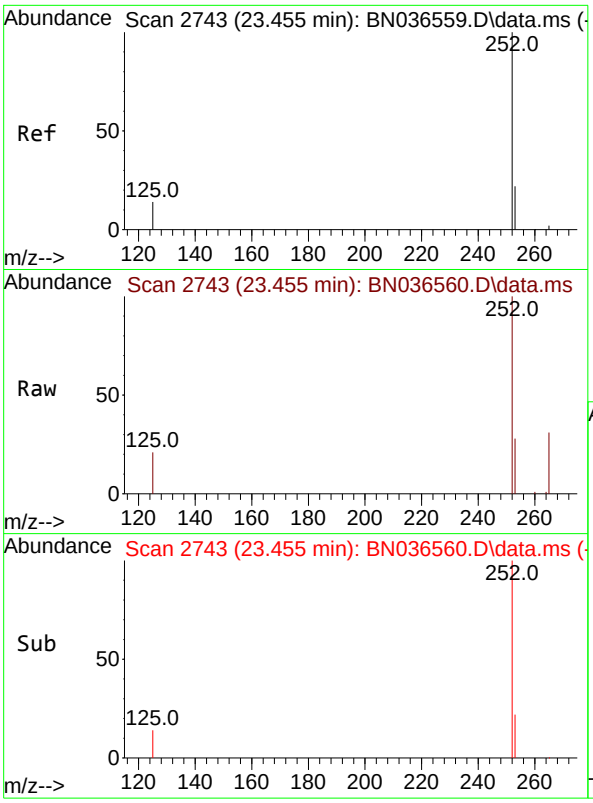


#38
Benzo(k)fluoranthene
Concen: 0.776 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:252 Resp: 12432

Ion	Ratio	Lower	Upper
252	100		
253	25.9	24.6	36.8
125	16.2	17.8	26.8#



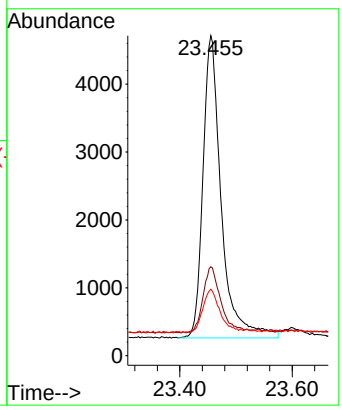


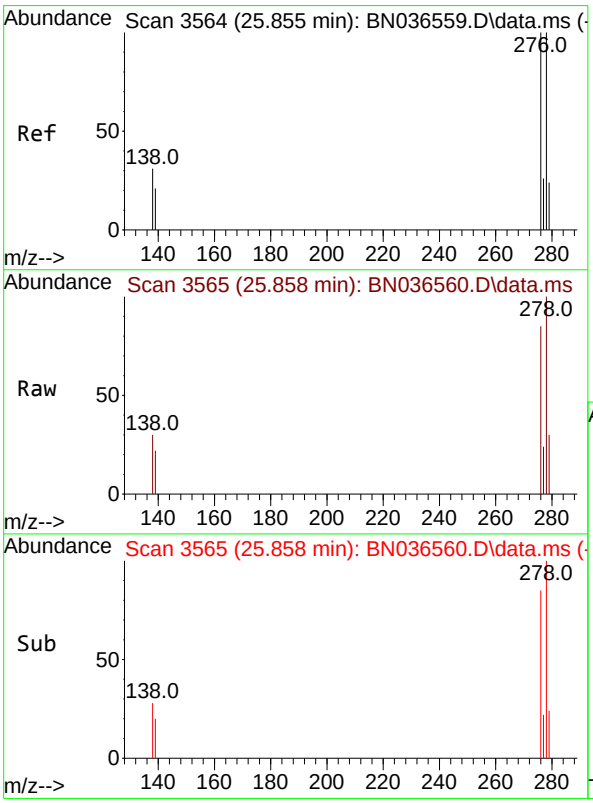
#39
Benzo(a)pyrene
Concen: 0.780 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 10036

Ion	Ratio	Lower	Upper
252	100		
253	27.8	27.8	41.8#
125	20.7	22.7	34.1#

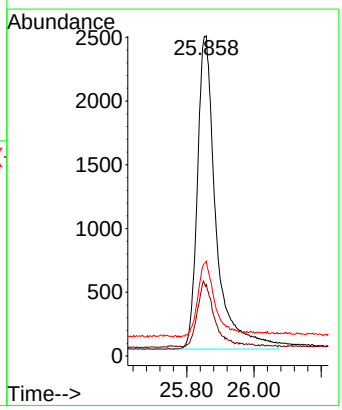


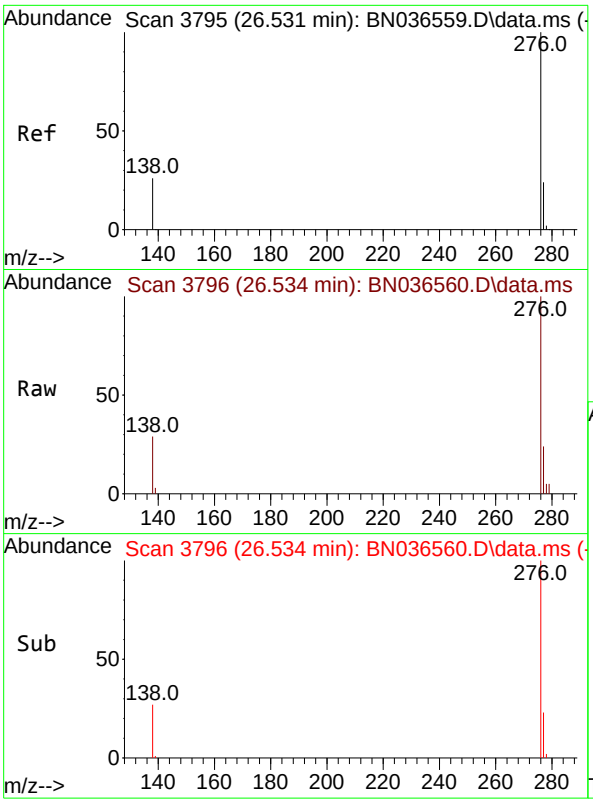


#40
Dibenzo(a,h)anthracene
Concen: 0.801 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Tgt Ion:278 Resp: 9450

Ion	Ratio	Lower	Upper
278	100		
139	22.3	20.8	31.2
279	29.6	28.8	43.2



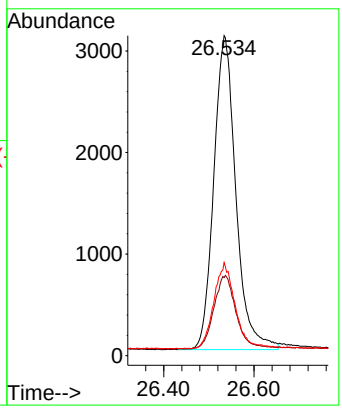


#41
Benzo(g,h,i)perylene
Concen: 0.778 ng
RT: 26.534 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036560.D
Acq: 10 Mar 2025 13:31

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:276 Resp: 10494

Ion	Ratio	Lower	Upper
276	100		
277	24.4	22.2	33.4
138	29.1	24.1	36.1



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036561.D
Acq On : 10 Mar 2025 14:07
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Mar 10 16:02:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

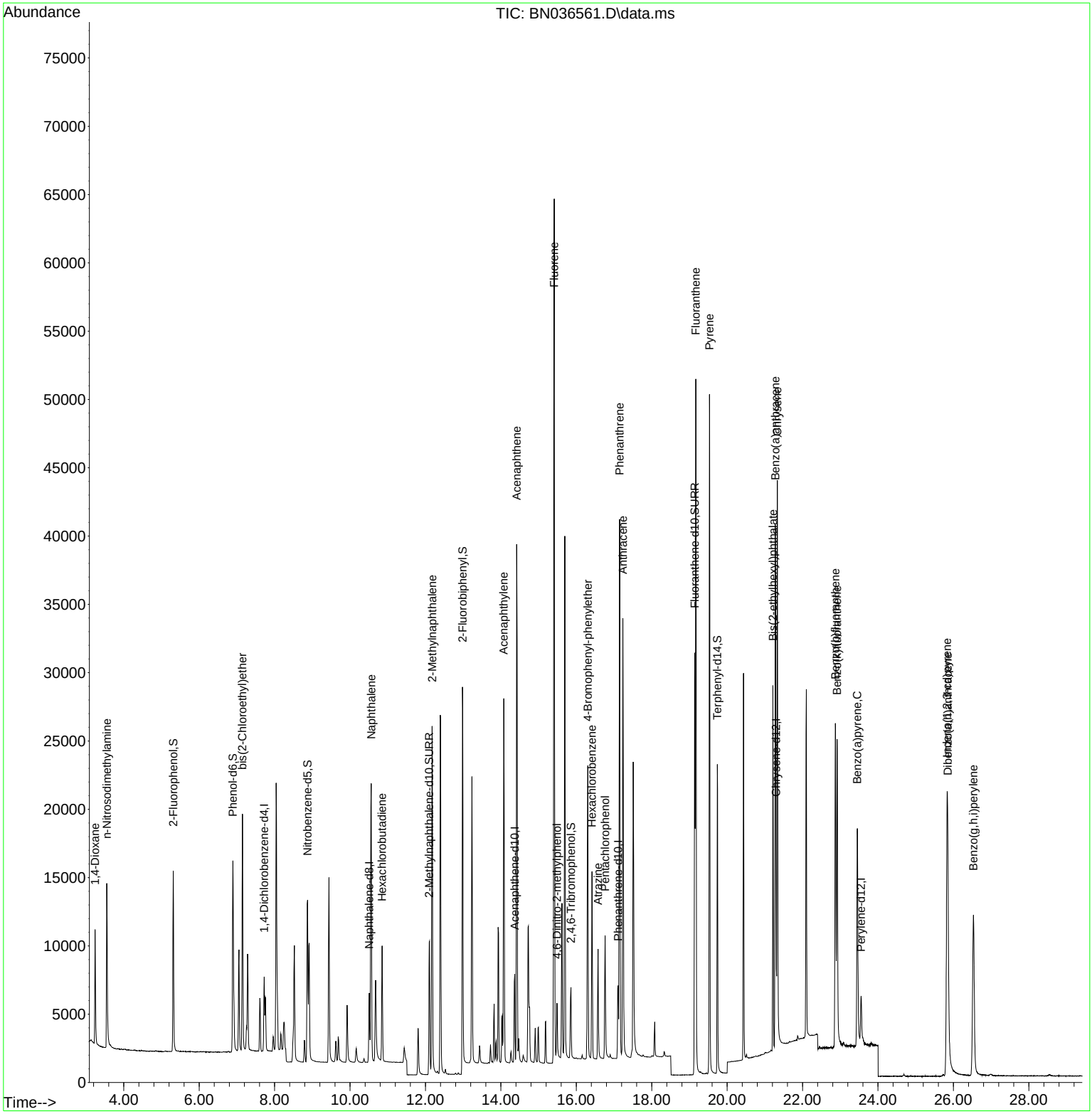
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2537	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	6200	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3827	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	8149	0.400	ng		0.00
29) Chrysene-d12	21.295	240	5977	0.400	ng		# 0.00
35) Perylene-d12	23.552	264	5048	0.400	ng		# 0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	9276	1.569	ng		0.00
5) Phenol-d6	6.894	99	11493	1.574	ng		0.00
8) Nitrobenzene-d5	8.875	82	9959	1.477	ng		0.00
11) 2-Methylnaphthalene-d10	12.101	152	14319	1.553	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	2872	1.654	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	36192	1.626	ng		0.00
27) Fluoranthene-d10	19.141	212	33414	1.600	ng		0.00
31) Terphenyl-d14	19.740	244	21872	1.527	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	4464	1.586	ng		98
3) n-Nitrosodimethylamine	3.550	42	8625	1.515	ng	#	96
6) bis(2-Chloroethyl)ether	7.147	93	11485	1.521	ng		99
9) Naphthalene	10.562	128	27473	1.506	ng		97
10) Hexachlorobutadiene	10.851	225	6466	1.506	ng	#	99
12) 2-Methylnaphthalene	12.177	142	18206	1.569	ng		98
16) Acenaphthylene	14.078	152	28080	1.555	ng		100
17) Acenaphthene	14.420	154	18355	1.553	ng		98
18) Fluorene	15.414	166	25565	1.599	ng		99
20) 4,6-Dinitro-2-methylph...	15.489	198	2879	1.488	ng	#	64
21) 4-Bromophenyl-phenylether	16.305	248	7859	1.539	ng	#	85
22) Hexachlorobenzene	16.416	284	9216	1.495	ng		100
23) Atrazine	16.578	200	6530	1.595	ng	#	91
24) Pentachlorophenol	16.764	266	4395	1.563	ng		99
25) Phenanthrene	17.149	178	37989	1.554	ng		99
26) Anthracene	17.235	178	35054	1.589	ng		99
28) Fluoranthene	19.169	202	44451	1.619	ng		99
30) Pyrene	19.531	202	44705	1.530	ng		100
32) Benzo(a)anthracene	21.277	228	32205	1.550	ng		98
33) Chrysene	21.331	228	34953	1.539	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	22621	1.529	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.832	276	28605	1.570	ng		99
37) Benzo(b)fluoranthene	22.870	252	29819	1.623	ng	#	86
38) Benzo(k)fluoranthene	22.917	252	30710	1.593	ng	#	85
39) Benzo(a)pyrene	23.452	252	24696	1.596	ng	#	79
40) Dibenzo(a,h)anthracene	25.850	278	22248	1.569	ng	#	85
41) Benzo(g,h,i)perylene	26.531	276	24906	1.535	ng		93

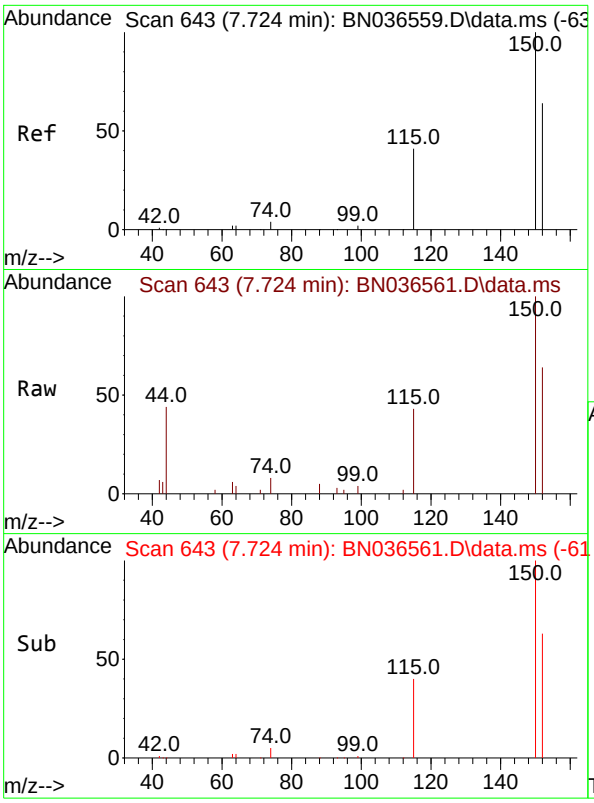
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036561.D
Acq On : 10 Mar 2025 14:07
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Mar 10 16:02:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



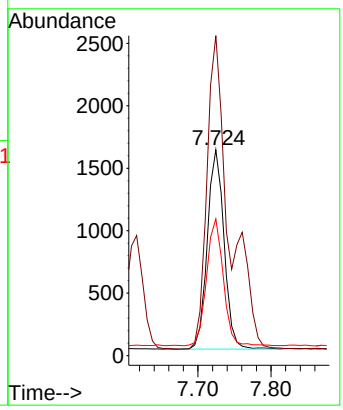


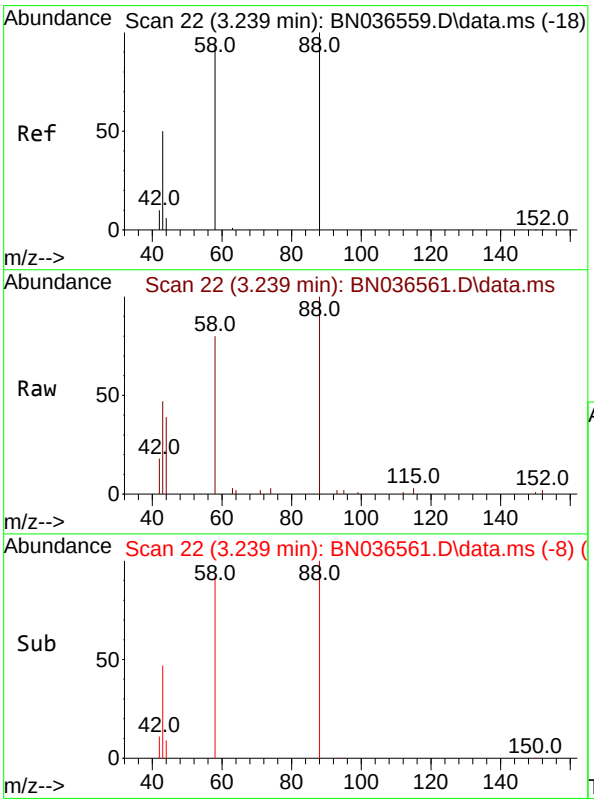
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 2537

Ion	Ratio	Lower	Upper
152	100		
150	155.4	123.7	185.5
115	66.4	54.3	81.5

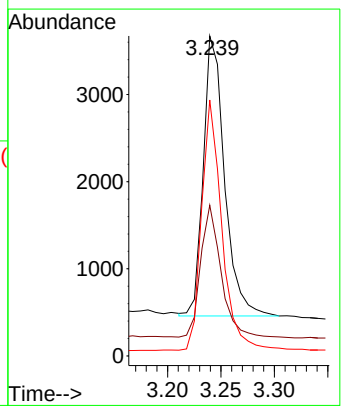


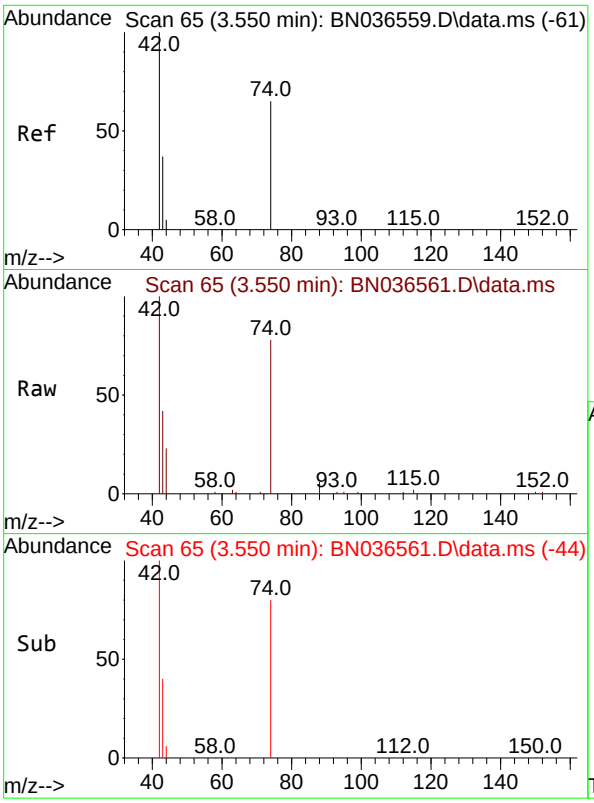


#2
1,4-Dioxane
Concen: 1.586 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion: 88 Resp: 4464

Ion	Ratio	Lower	Upper
88	100		
43	45.1	37.8	56.8
58	85.6	67.4	101.2



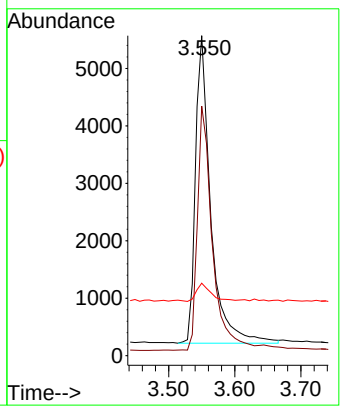


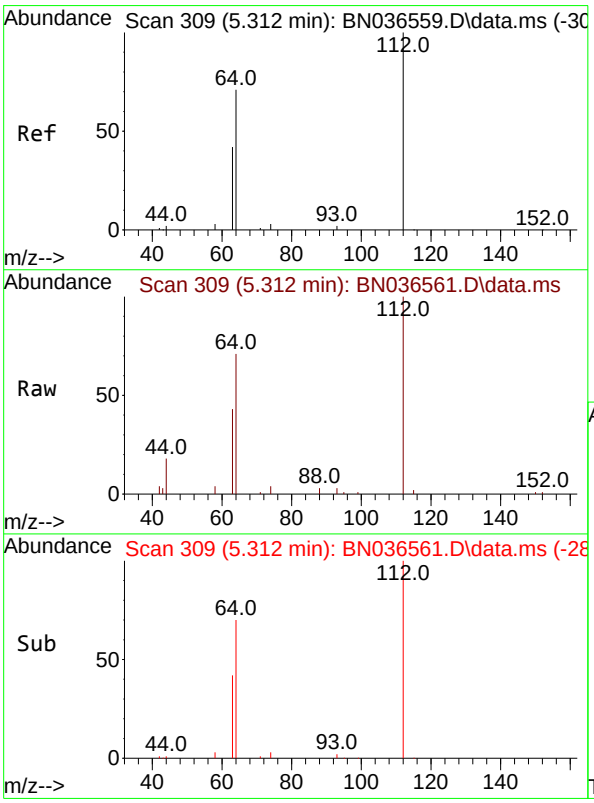
#3
n-Nitrosodimethylamine
Concen: 1.515 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 8625

Ion	Ratio	Lower	Upper
42	100		
74	79.2	60.6	90.8
44	5.8	6.3	9.5#

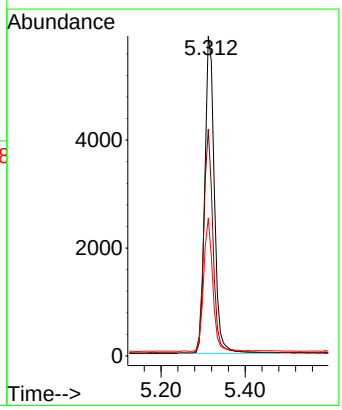


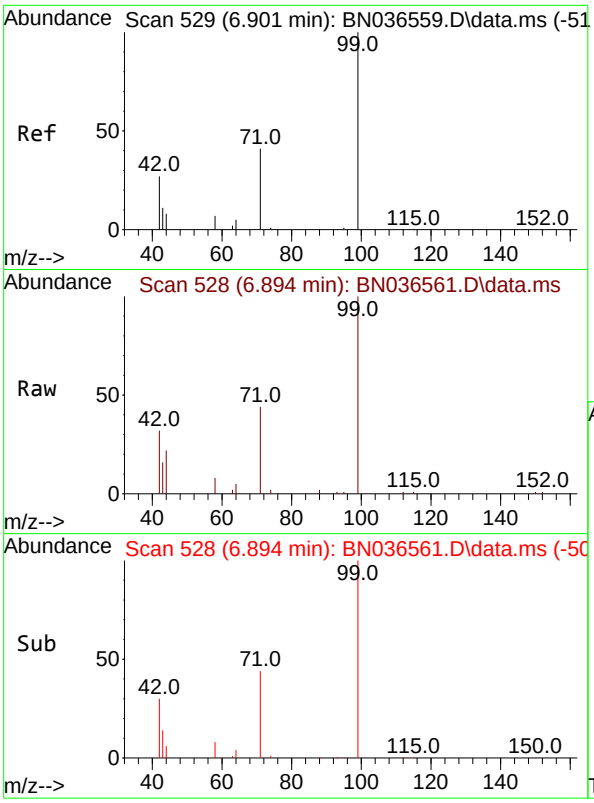


#4
2-Fluorophenol
Concen: 1.569 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:112 Resp: 9276

Ion	Ratio	Lower	Upper
112	100		
64	68.3	53.1	79.7
63	40.1	31.8	47.8



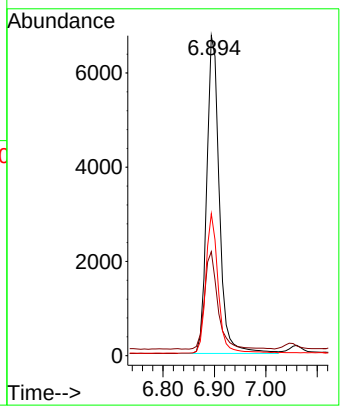


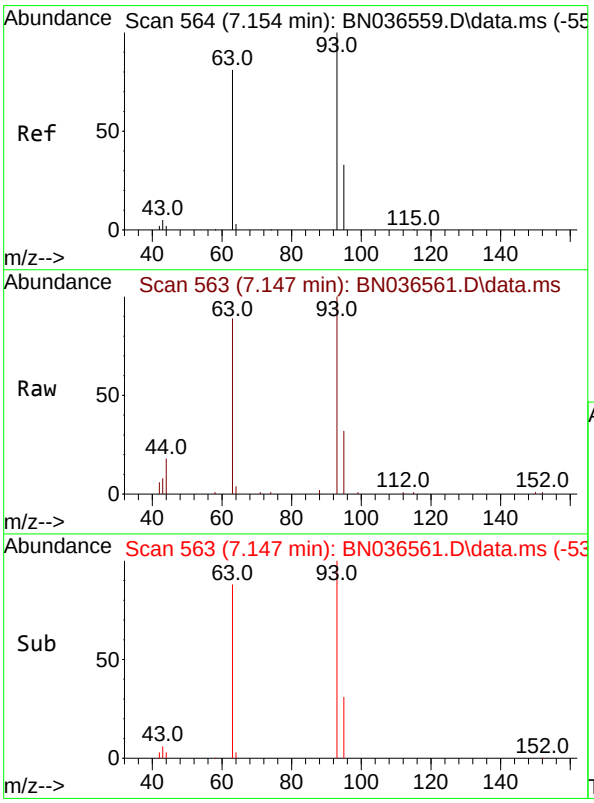
#5
Phenol-d6
Concen: 1.574 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 11493

Ion	Ratio	Lower	Upper
99	100		
42	32.6	26.5	39.7
71	43.3	34.1	51.1

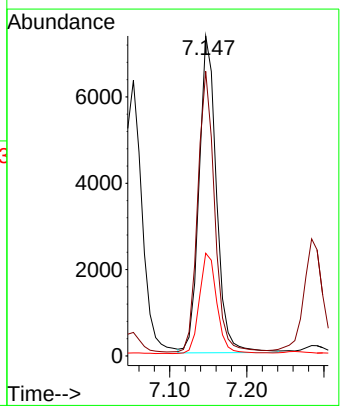


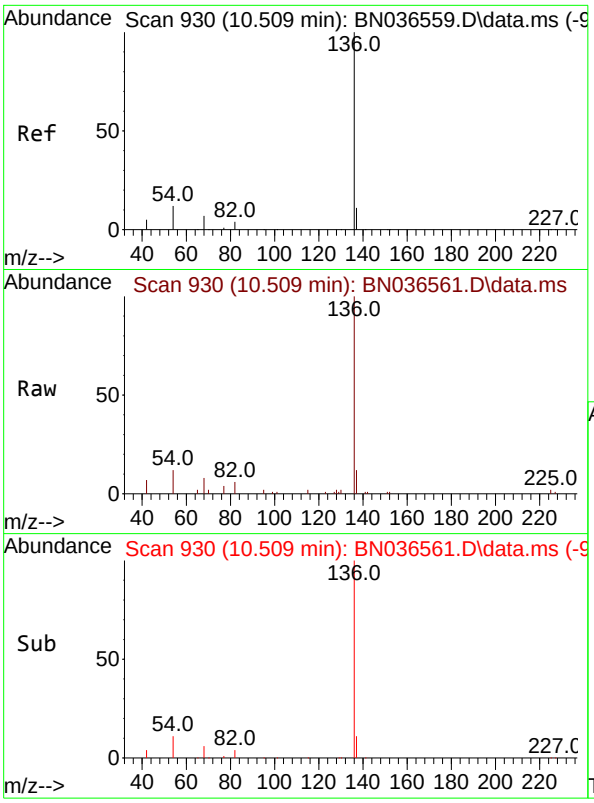


#6
bis(2-Chloroethyl)ether
Concen: 1.521 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion: 93 Resp: 11485

Ion	Ratio	Lower	Upper
93	100		
63	85.8	67.7	101.5
95	31.8	25.6	38.4



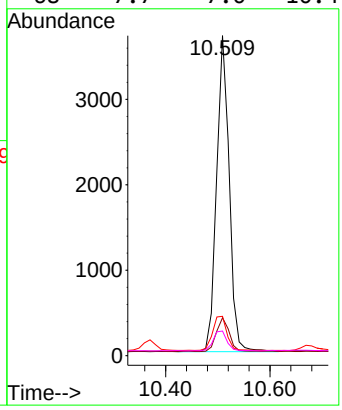


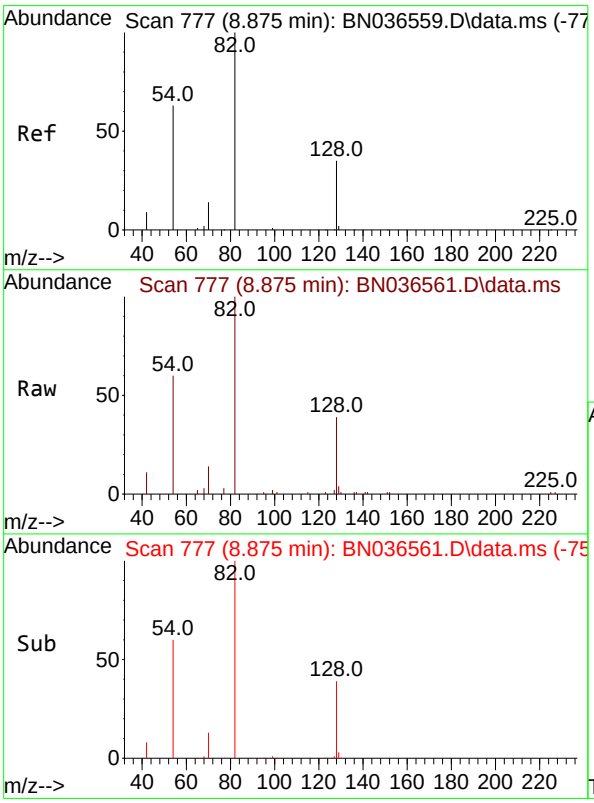
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 6200

Ion	Ratio	Lower	Upper
136	100		
137	11.9	10.3	15.5
54	12.3	11.5	17.3
68	7.7	7.0	10.4

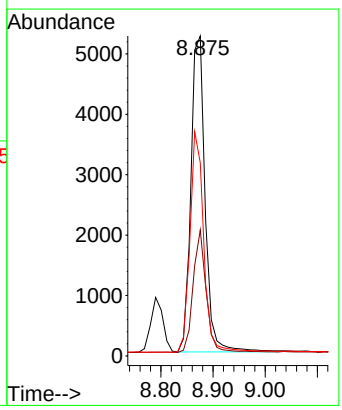


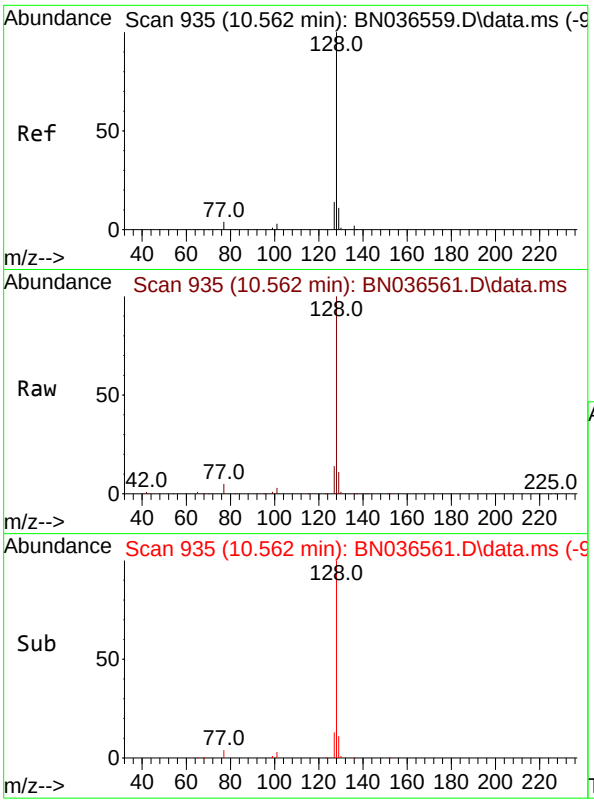


#8
Nitrobenzene-d5
Concen: 1.477 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion: 82 Resp: 9959

Ion	Ratio	Lower	Upper
82	100		
128	39.4	30.6	45.8
54	60.4	52.2	78.4



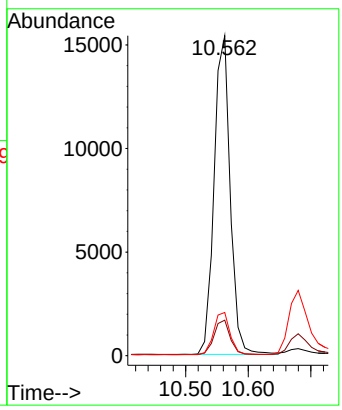


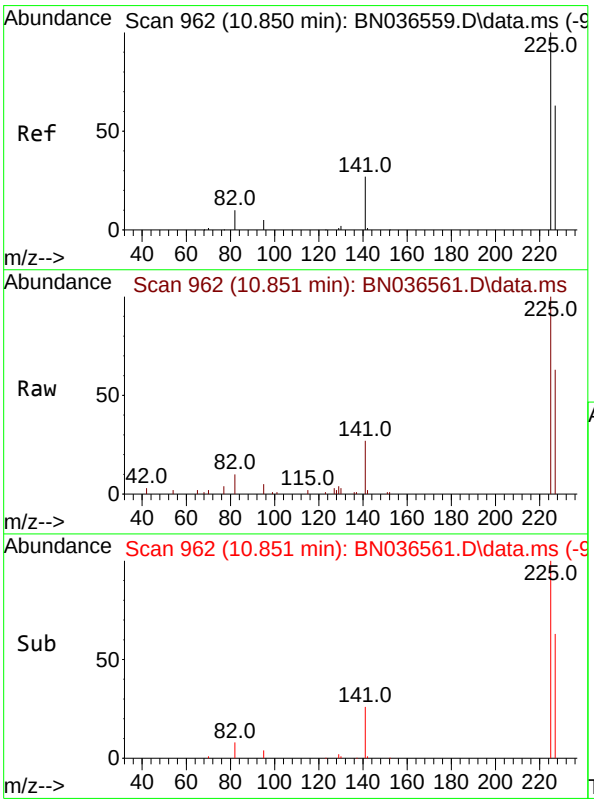
#9
Naphthalene
Concen: 1.506 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 27473

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.8	14.6
127	13.5	11.8	17.8

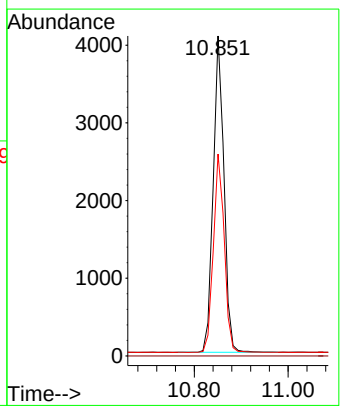


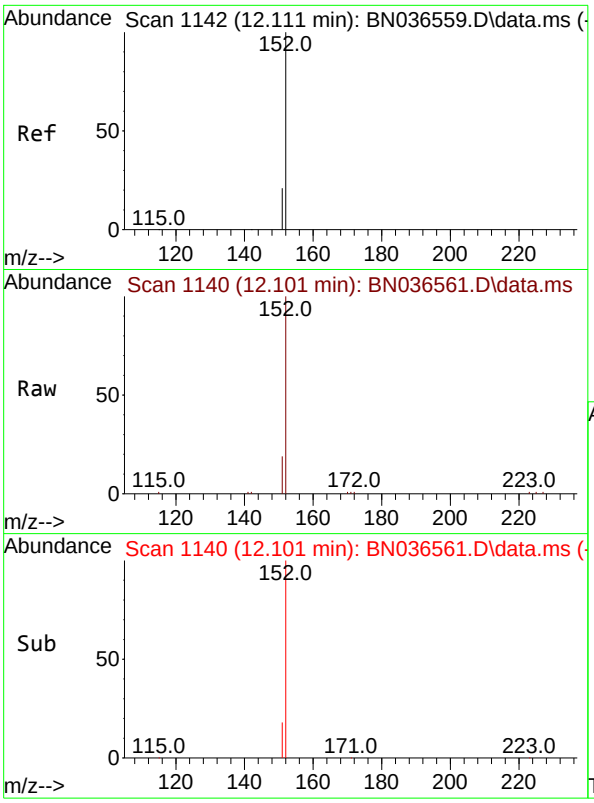


#10
Hexachlorobutadiene
Concen: 1.506 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:225 Resp: 6466

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	51.8	77.8



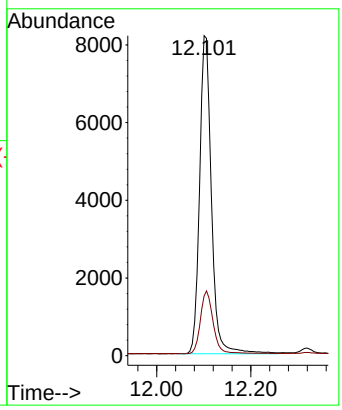


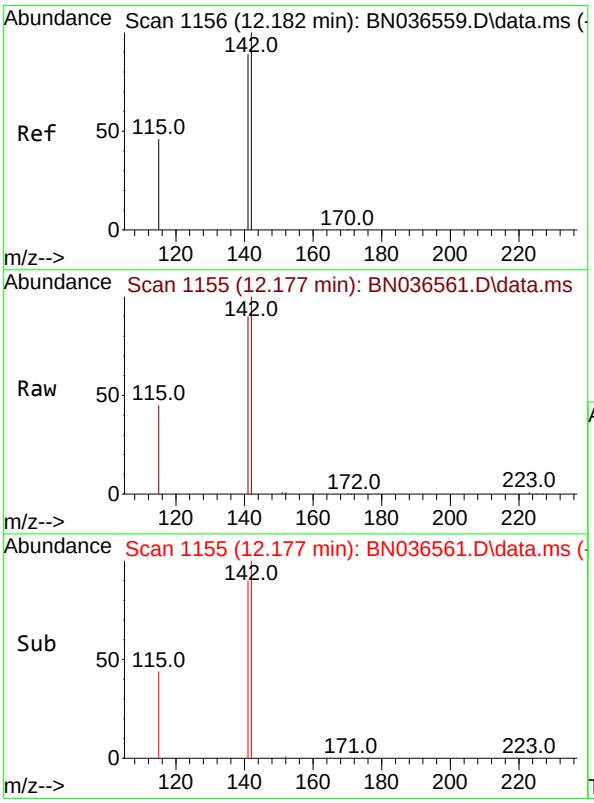
#11
2-Methylnaphthalene-d10
Concen: 1.553 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 14319

Ion	Ratio	Lower	Upper
152	100		
151	21.3	17.0	25.6

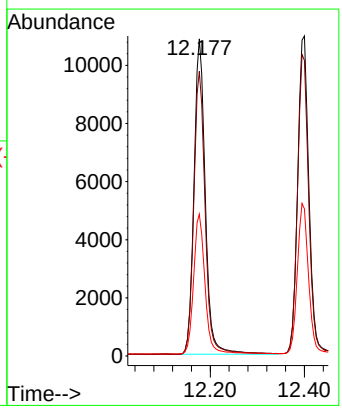


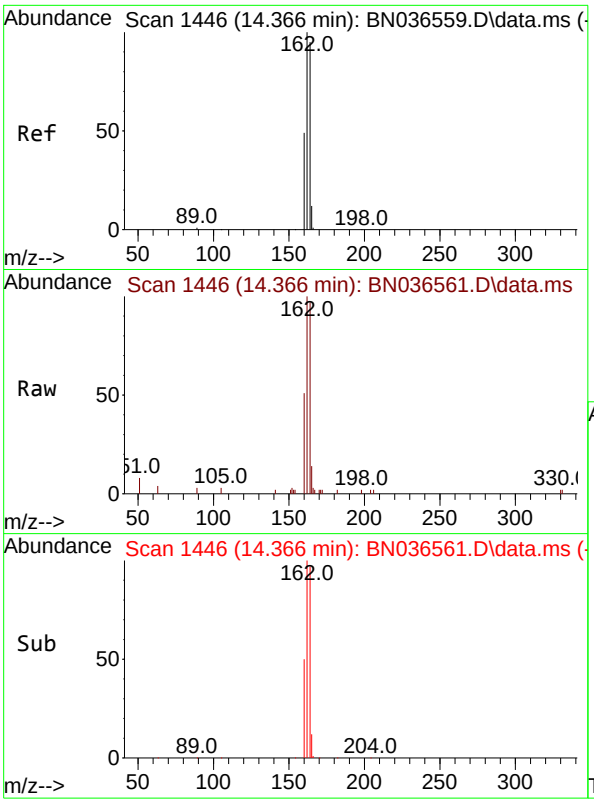


#12
2-Methylnaphthalene
Concen: 1.569 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:142 Resp: 18206

Ion	Ratio	Lower	Upper
142	100		
141	89.7	71.7	107.5
115	44.7	38.3	57.5



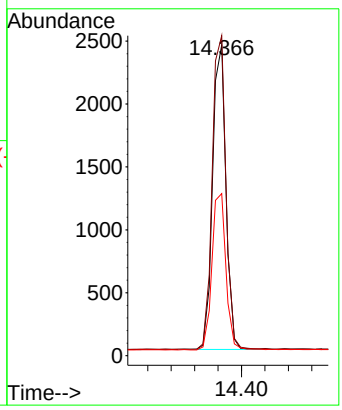


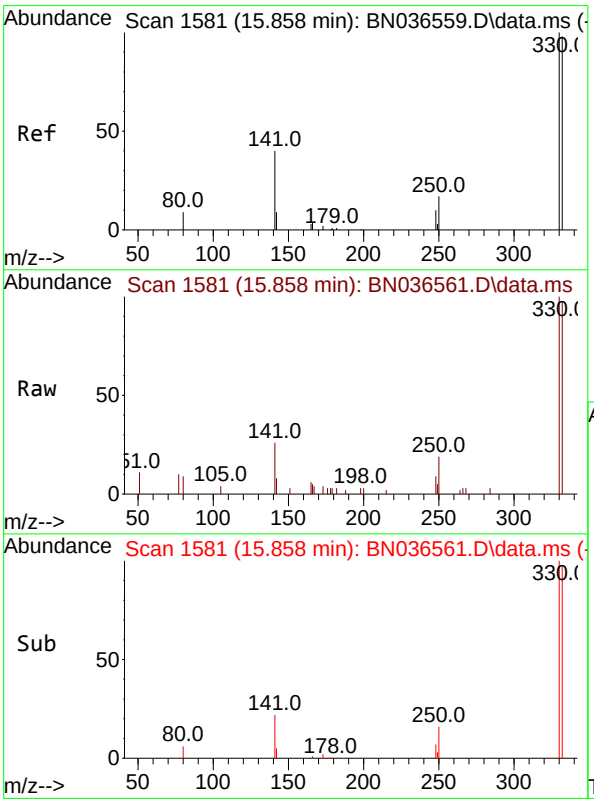
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 3827

Ion	Ratio	Lower	Upper
164	100		
162	102.9	84.2	126.2
160	52.1	42.2	63.2

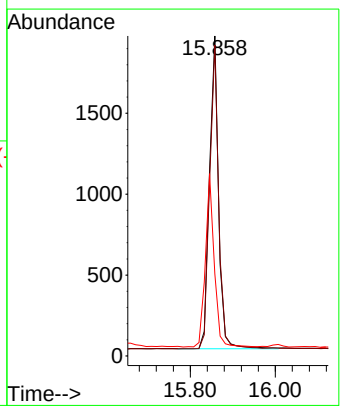


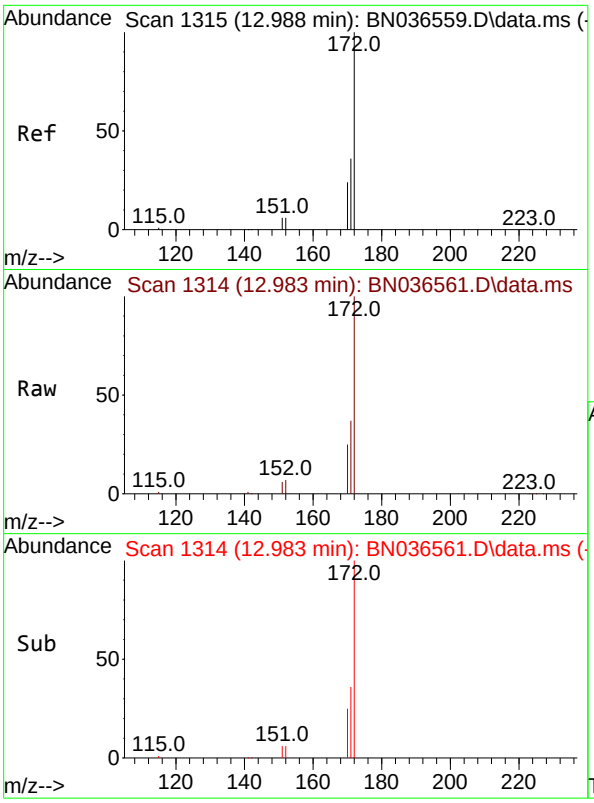


#14
2,4,6-Tribromophenol
Concen: 1.654 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:330 Resp: 2872

Ion	Ratio	Lower	Upper
330	100		
332	96.3	75.2	112.8
141	53.8	43.4	65.2



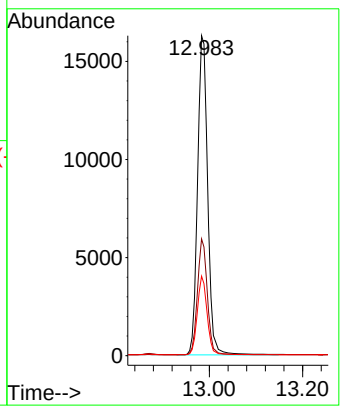


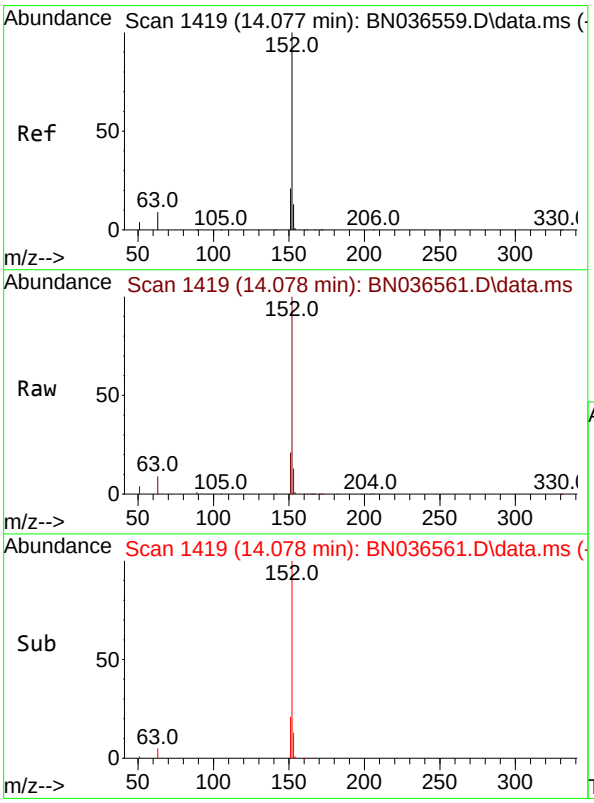
#15
2-Fluorobiphenyl
Concen: 1.626 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 36192

Ion	Ratio	Lower	Upper
172	100		
171	36.5	29.5	44.3
170	24.9	20.2	30.4

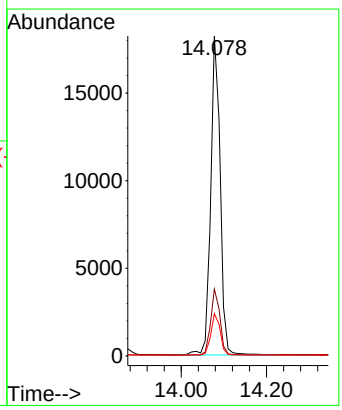


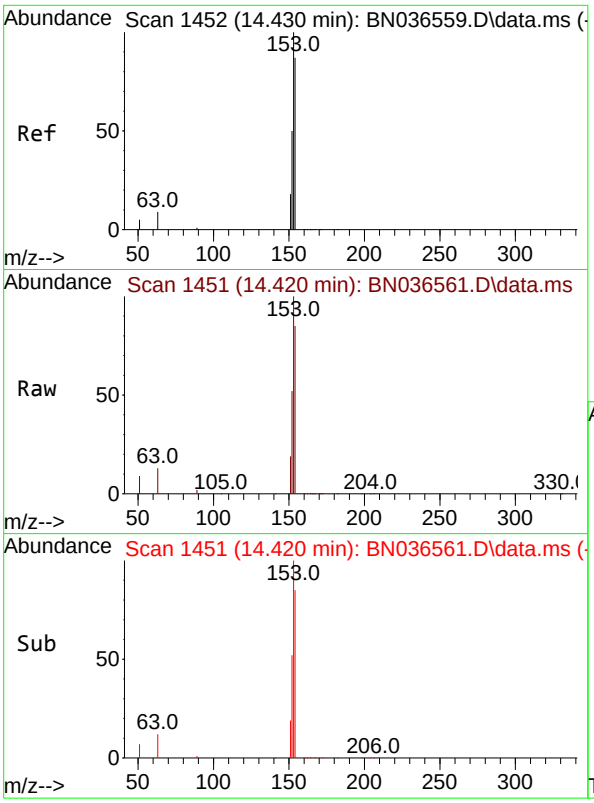


#16
Acenaphthylene
Concen: 1.555 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:152 Resp: 28080

Ion	Ratio	Lower	Upper
152	100		
151	20.3	16.2	24.4
153	13.0	10.6	15.8



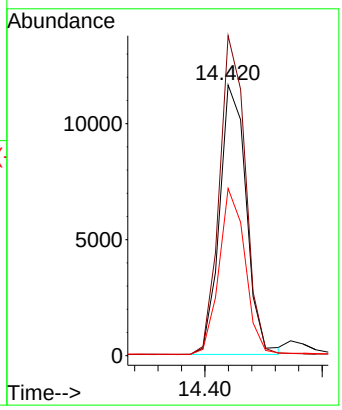


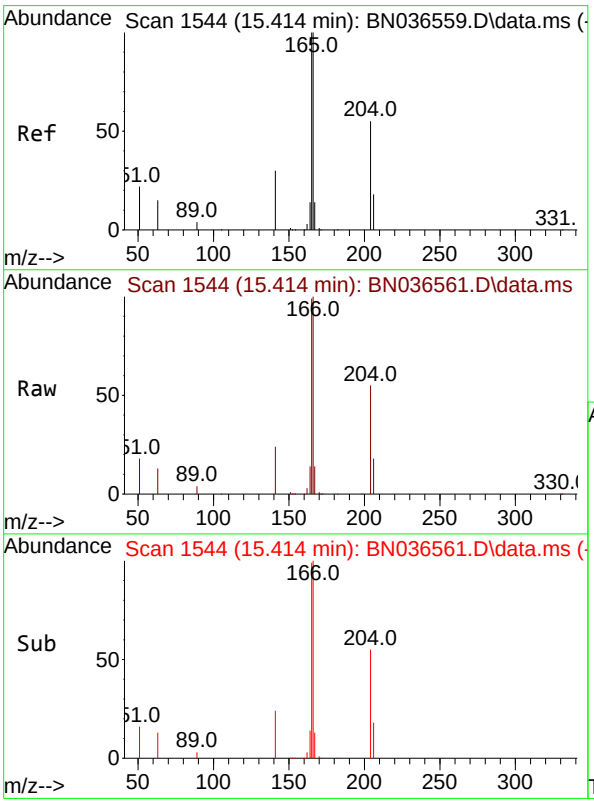
#17
Acenaphthene
Concen: 1.553 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 18355

Ion	Ratio	Lower	Upper
154	100		
153	115.7	94.1	141.1
152	60.3	49.8	74.6

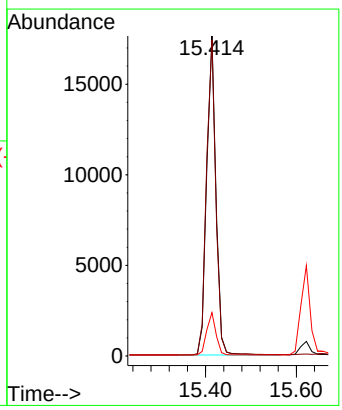


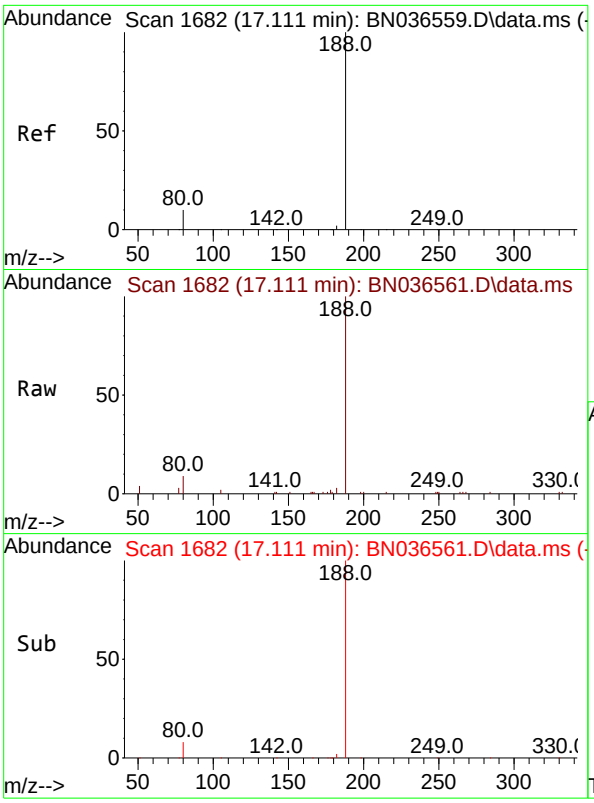


#18
Fluorene
Concen: 1.599 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:166 Resp: 25565

Ion	Ratio	Lower	Upper
166	100		
165	100.5	79.8	119.8
167	13.1	10.6	15.8



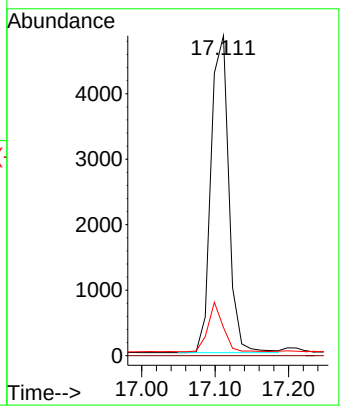


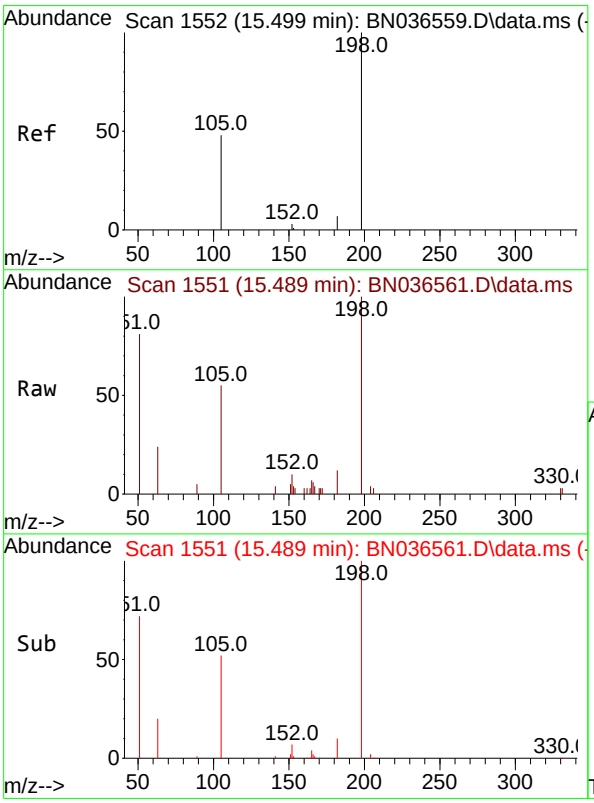
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 8149

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	8.8	8.8	13.2

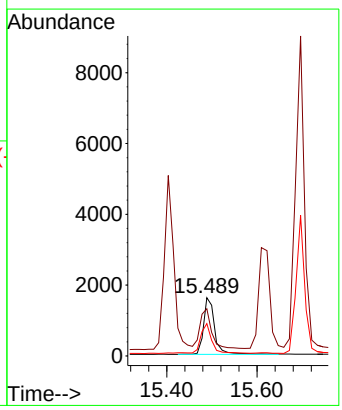


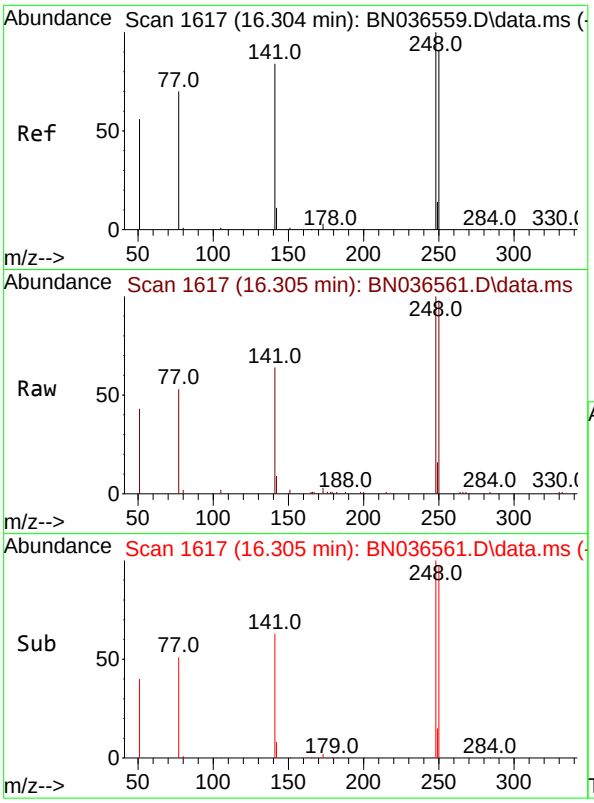


#20
4,6-Dinitro-2-methylphenol
Concen: 1.488 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:198 Resp: 2879

Ion	Ratio	Lower	Upper
198	100		
51	81.2	107.9	161.9#
105	55.5	56.2	84.2#



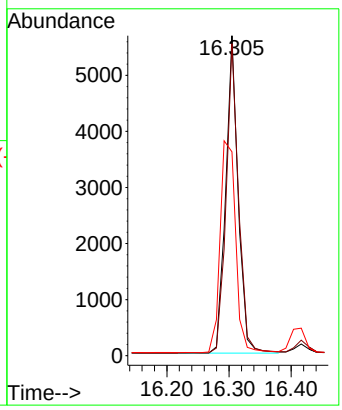


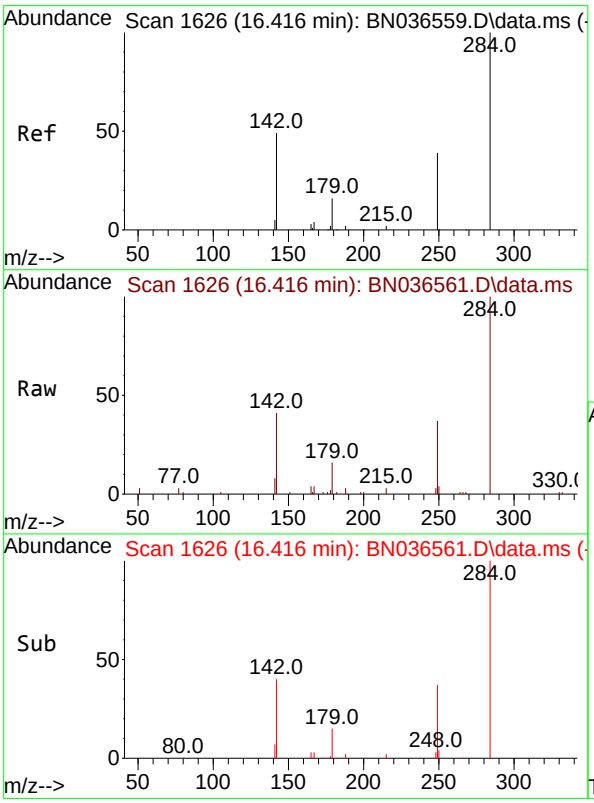
#21
4-Bromophenyl-phenylether
Concen: 1.539 ng
RT: 16.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 7859

Ion	Ratio	Lower	Upper
248	100		
250	97.5	73.0	109.6
141	63.7	68.6	103.0#

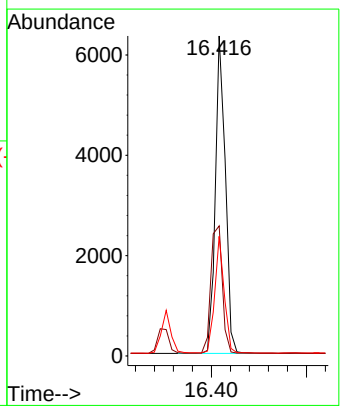


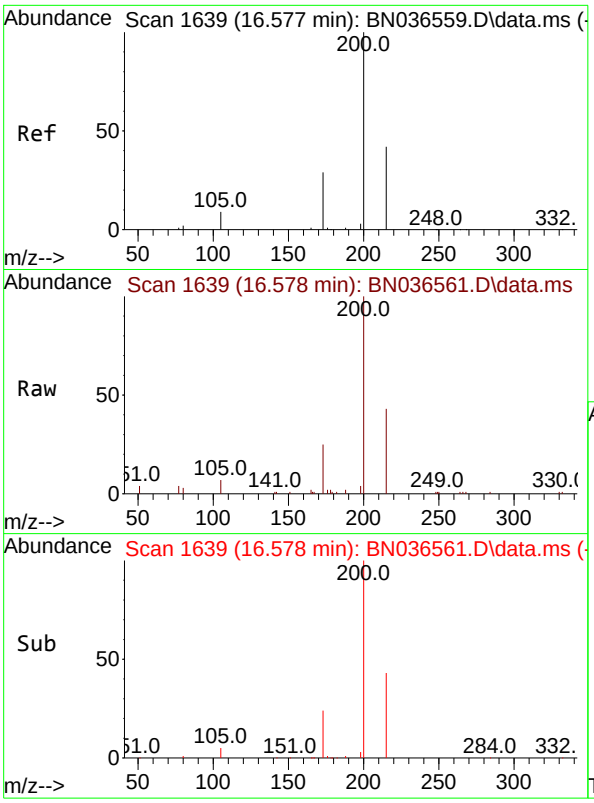


#22
Hexachlorobenzene
Concen: 1.495 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:284 Resp: 9216

Ion	Ratio	Lower	Upper
284	100		
142	46.6	37.0	55.4
249	35.1	28.1	42.1



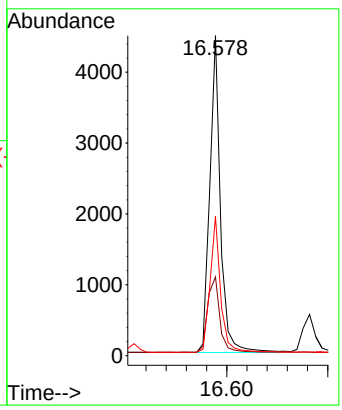


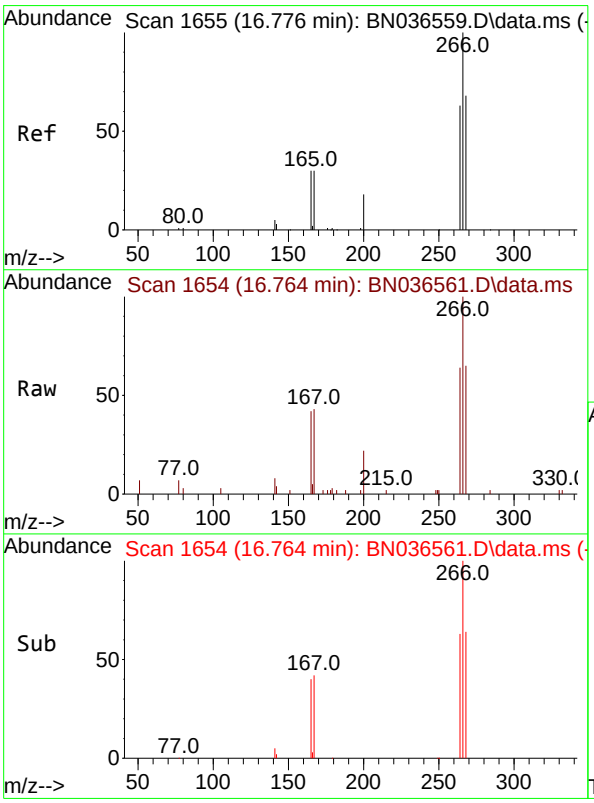
#23
Atrazine
Concen: 1.595 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 6530

Ion	Ratio	Lower	Upper
200	100		
173	24.6	27.3	40.9#
215	43.5	36.8	55.2

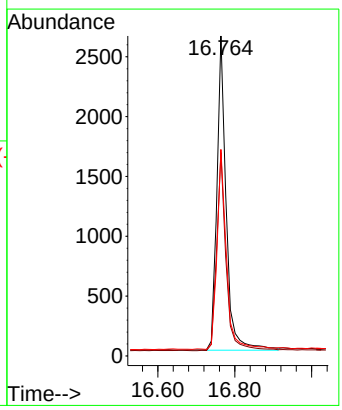


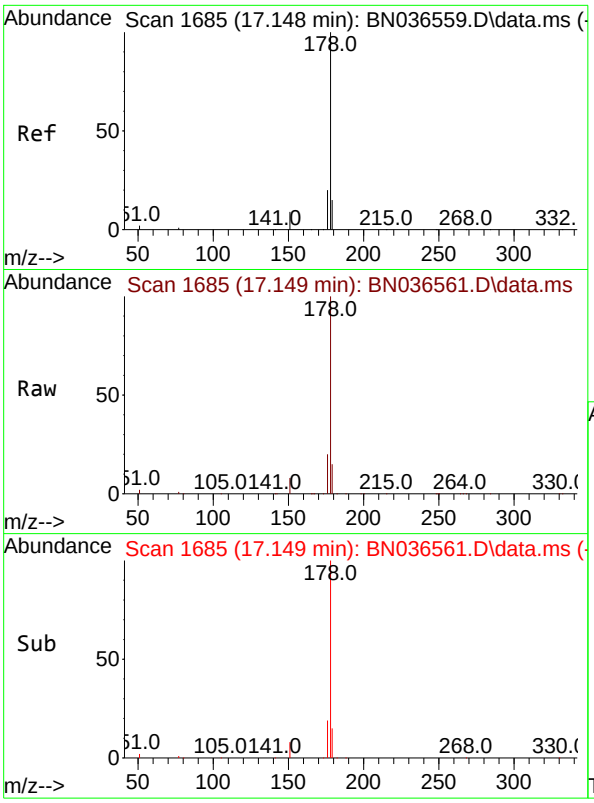


#24
Pentachlorophenol
Concen: 1.563 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:266 Resp: 4395

Ion	Ratio	Lower	Upper
266	100		
264	63.5	49.6	74.4
268	64.4	50.9	76.3



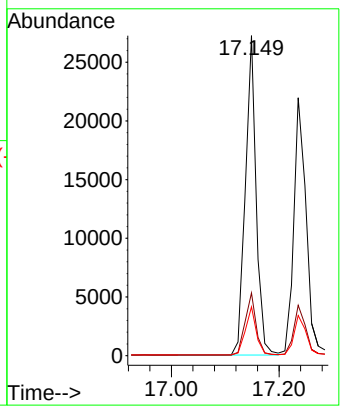


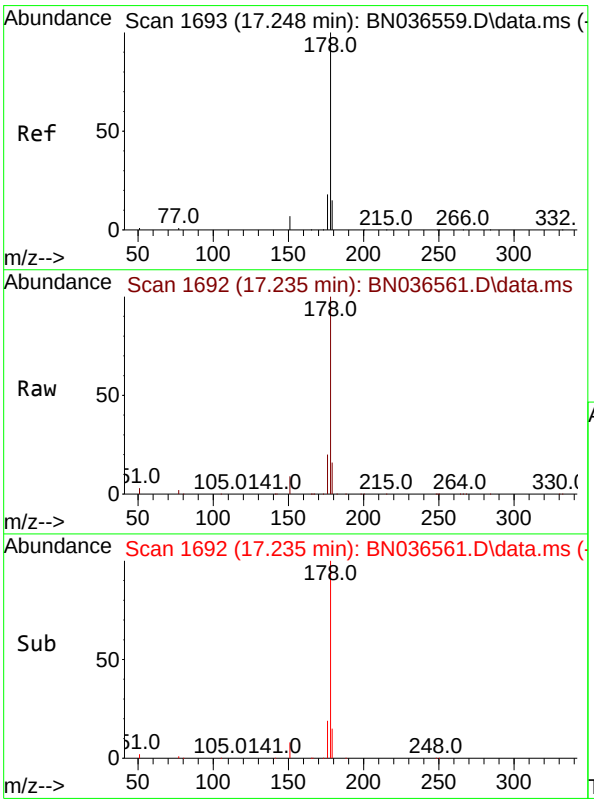
#25
Phenanthrene
Concen: 1.554 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 37989

Ion	Ratio	Lower	Upper
178	100		
176	19.7	15.9	23.9
179	15.1	12.2	18.4

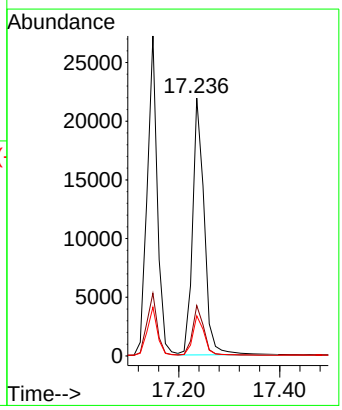


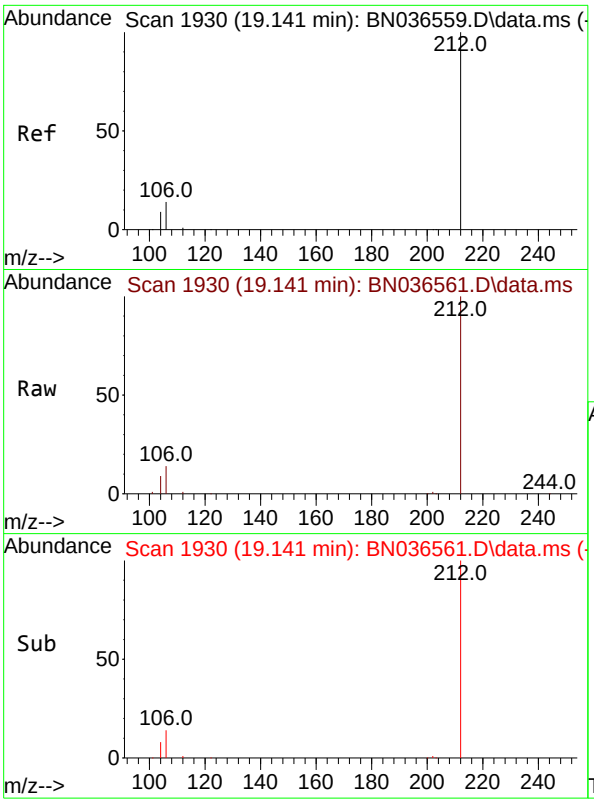


#26
Anthracene
Concen: 1.589 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:178 Resp: 35054

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.2
179	15.3	12.6	18.8



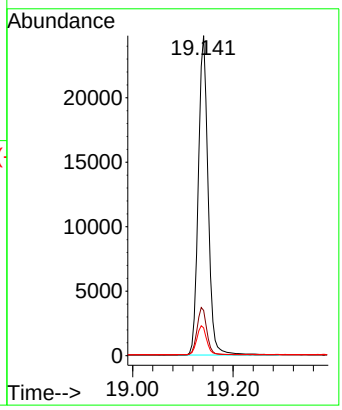


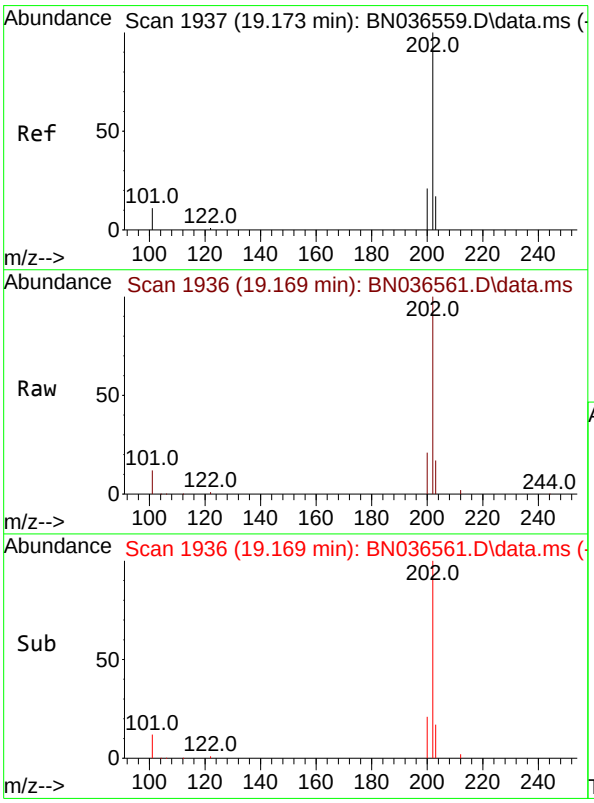
#27
Fluoranthene-d10
Concen: 1.600 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 33414

Ion	Ratio	Lower	Upper
212	100		
106	15.0	11.8	17.6
104	9.1	7.3	10.9

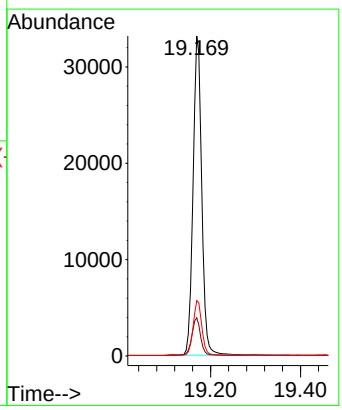


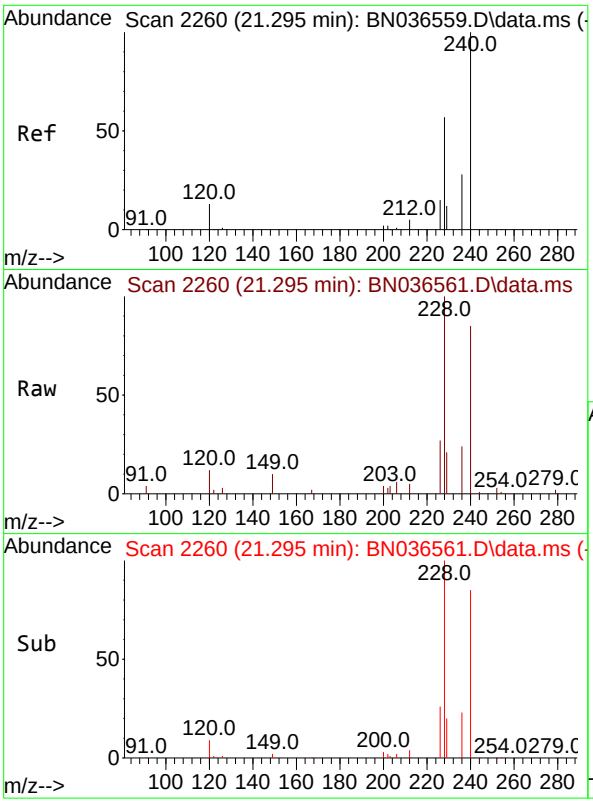


#28
Fluoranthene
Concen: 1.619 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.004 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:202 Resp: 44451

Ion	Ratio	Lower	Upper
202	100		
101	12.0	9.4	14.0
203	17.2	13.5	20.3



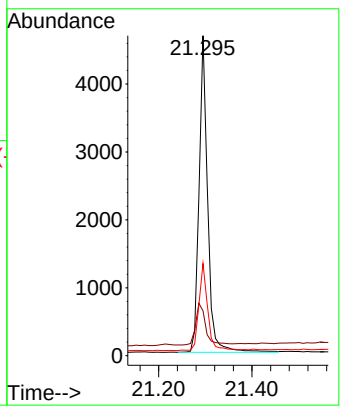


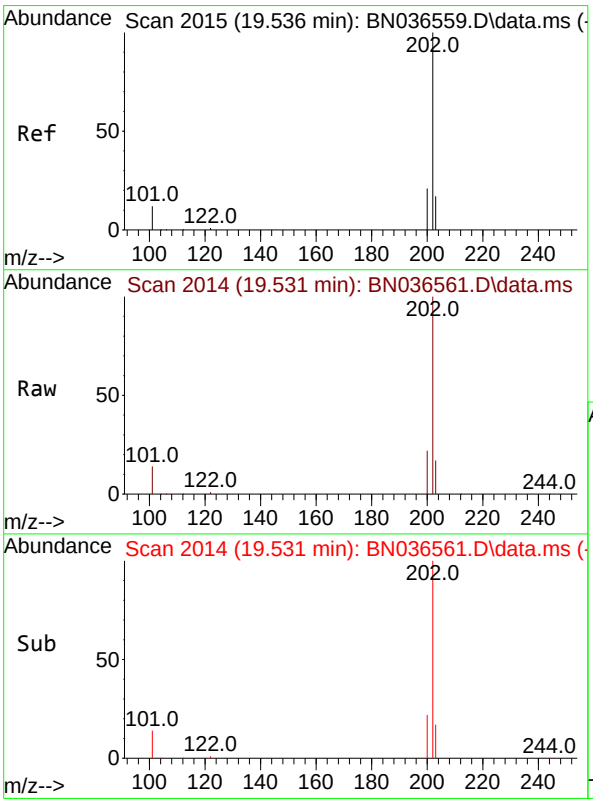
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 5977

Ion	Ratio	Lower	Upper
240	100		
120	14.0	14.6	22.0#
236	28.9	24.1	36.1

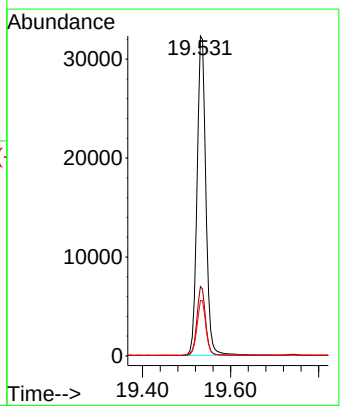


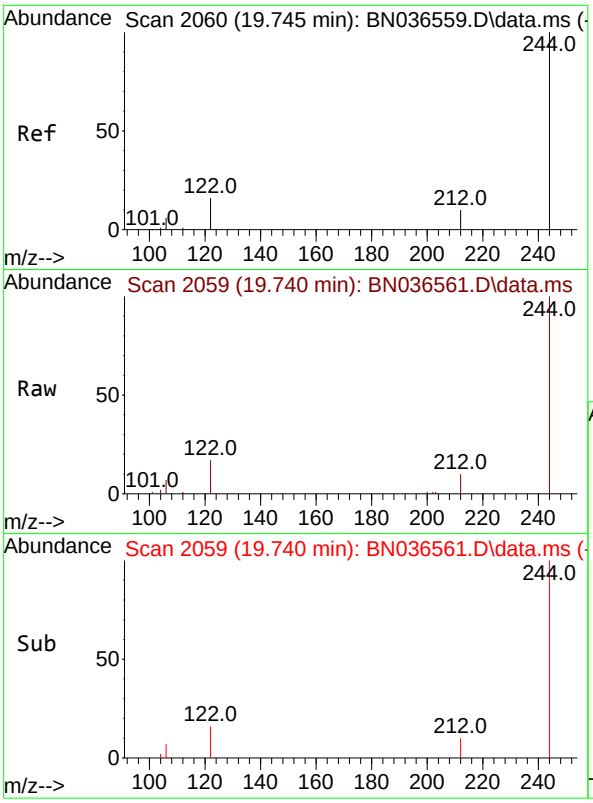


#30
Pyrene
Concen: 1.530 ng
RT: 19.531 min Scan# 2014
Delta R.T. -0.004 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:202 Resp: 44705

Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.1	25.7
203	17.5	14.1	21.1



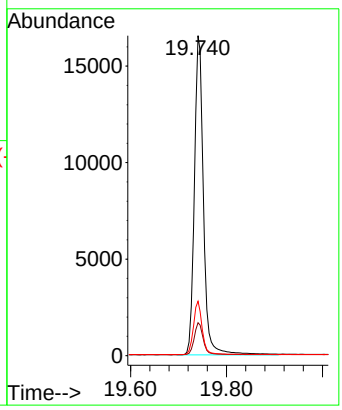


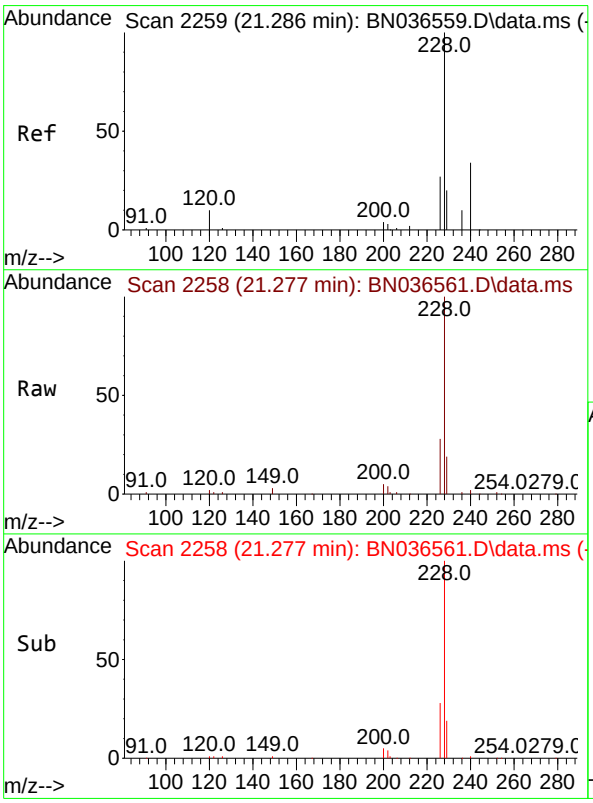
#31
Terphenyl-d14
Concen: 1.527 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 21872

Ion	Ratio	Lower	Upper
244	100		
212	10.3	9.6	14.4
122	17.0	13.9	20.9

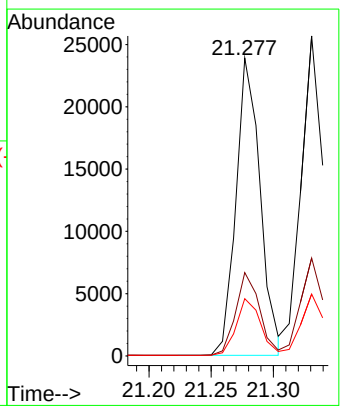


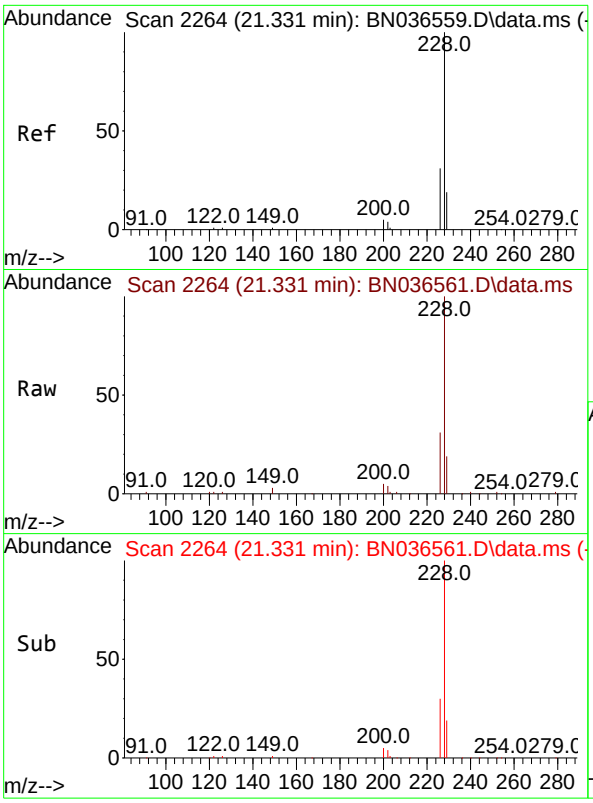


#32
Benzo(a)anthracene
Concen: 1.550 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:228 Resp: 32205

Ion	Ratio	Lower	Upper
228	100		
226	28.0	22.5	33.7
229	19.2	16.6	25.0



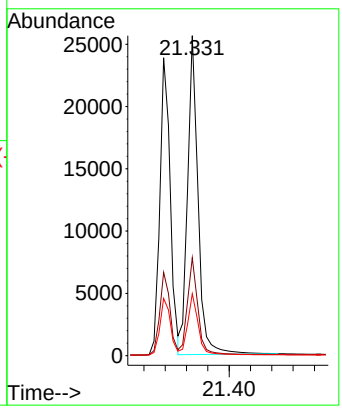


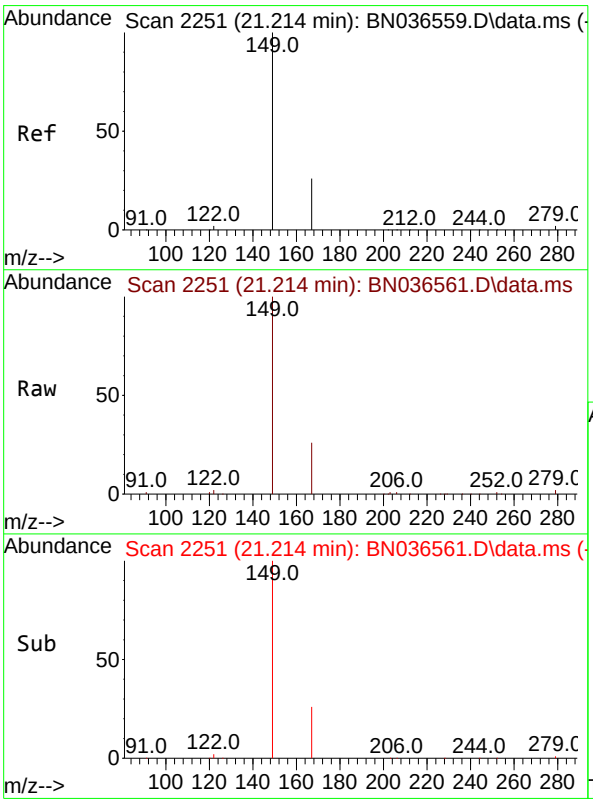
#33
Chrysene
Concen: 1.539 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 34953

Ion	Ratio	Lower	Upper
228	100		
226	30.6	25.3	37.9
229	19.3	15.8	23.8

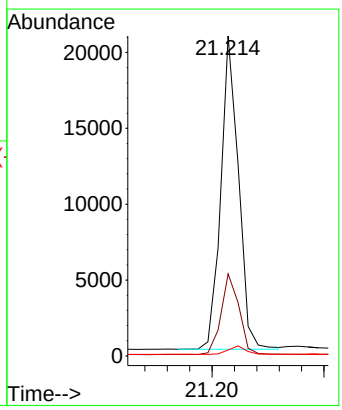


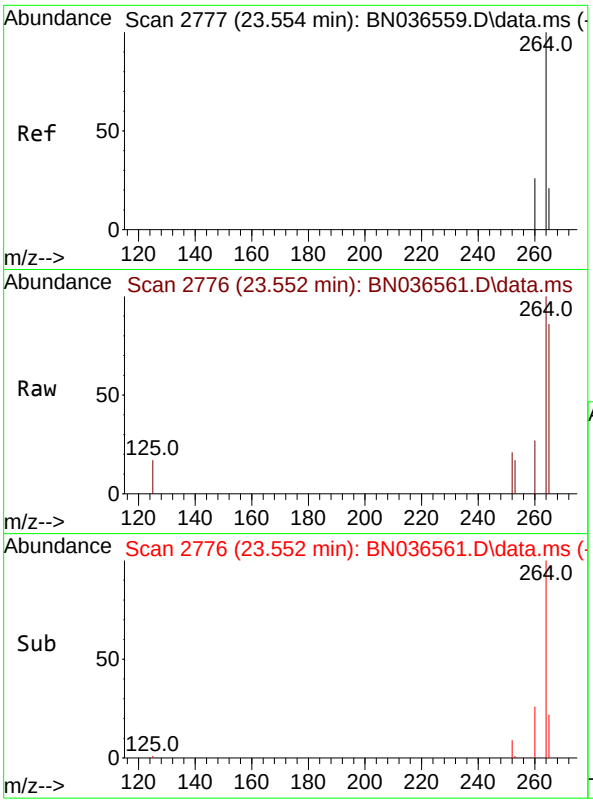


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.529 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:149 Resp: 22621

Ion	Ratio	Lower	Upper
149	100		
167	26.3	20.7	31.1
279	2.7	3.6	5.4#



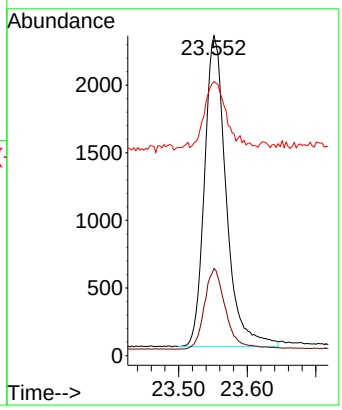


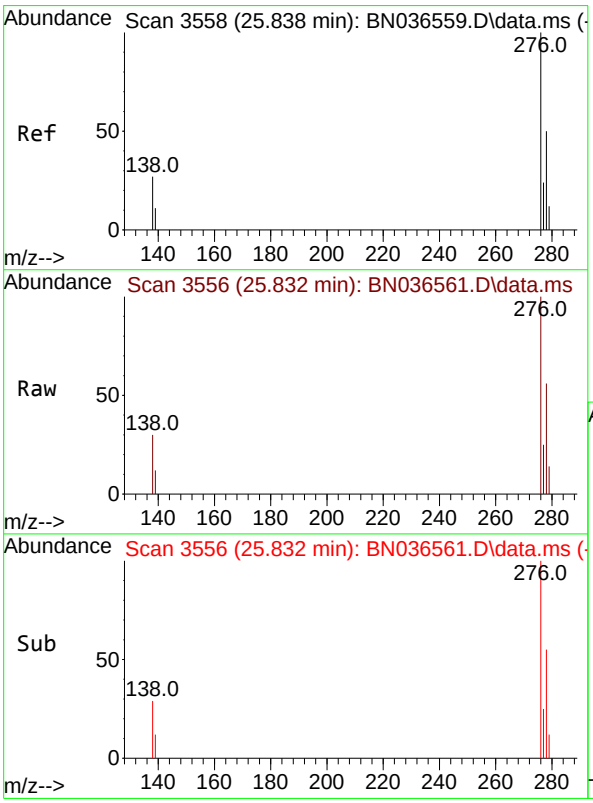
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.552 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 5048

Ion	Ratio	Lower	Upper
264	100		
260	27.2	22.6	33.8
265	85.7	88.1	132.1#

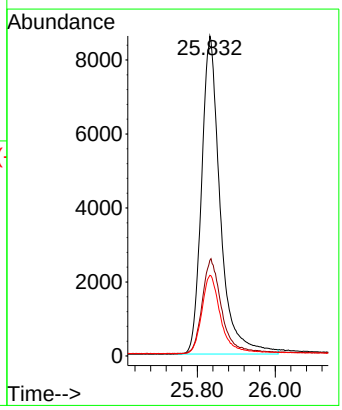


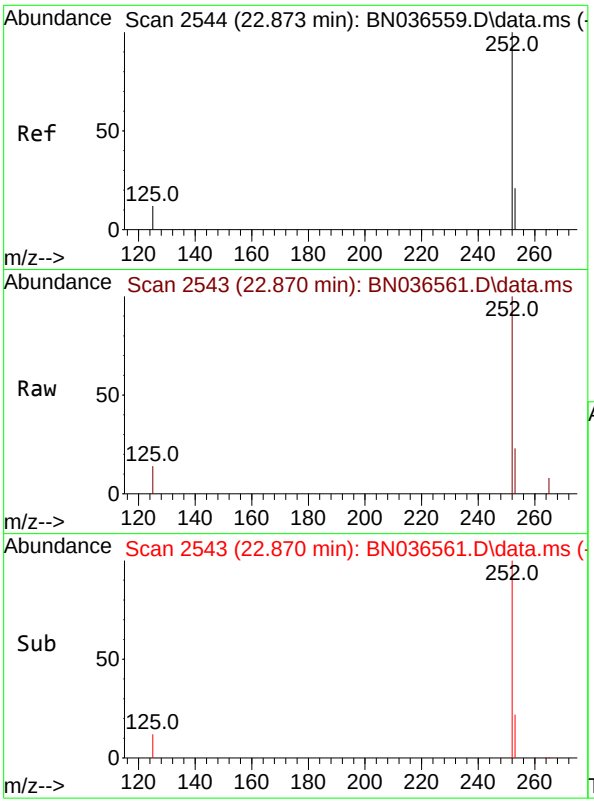


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.570 ng
RT: 25.832 min Scan# 3556
Delta R.T. -0.006 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:276 Resp: 28605

Ion	Ratio	Lower	Upper
276	100		
138	30.4	23.4	35.2
277	24.9	20.0	30.0



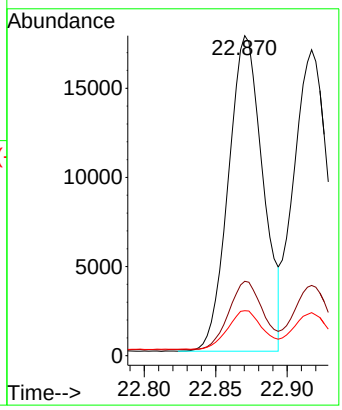


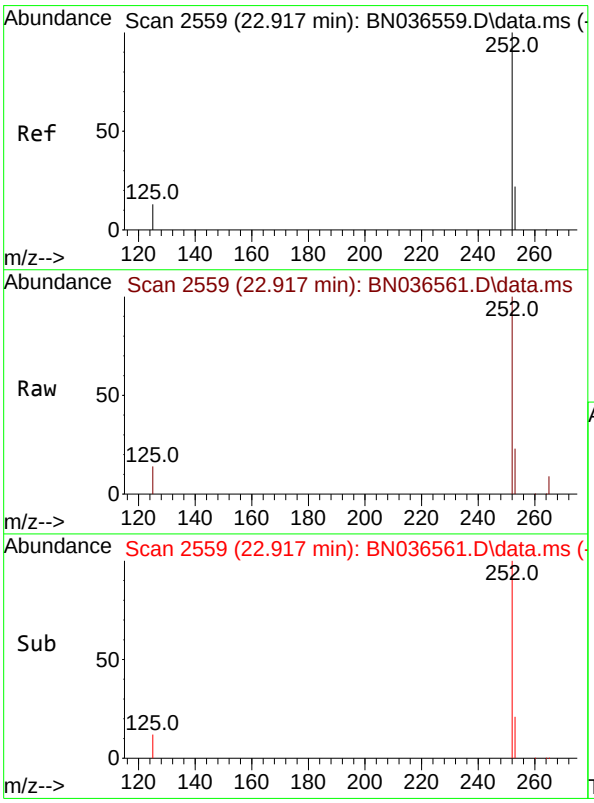
#37
Benzo(b)fluoranthene
Concen: 1.623 ng
RT: 22.870 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 29819

Ion	Ratio	Lower	Upper
252	100		
253	23.3	23.9	35.9#
125	14.0	17.4	26.2#

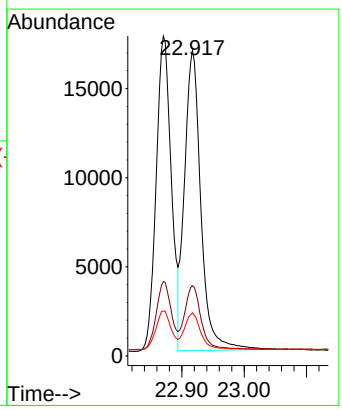


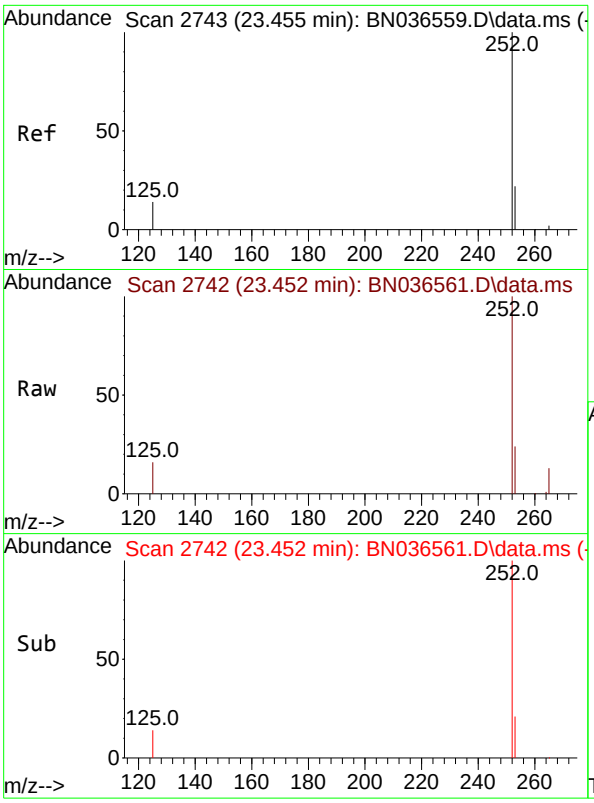


#38
Benzo(k)fluoranthene
Concen: 1.593 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:252 Resp: 30710

Ion	Ratio	Lower	Upper
252	100		
253	23.0	24.6	36.8#
125	14.1	17.8	26.8#



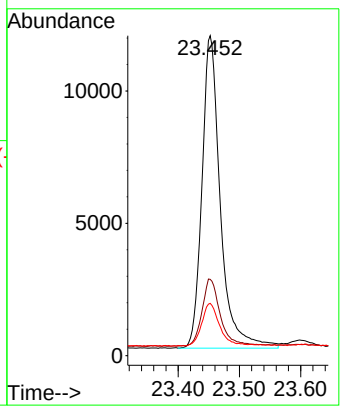


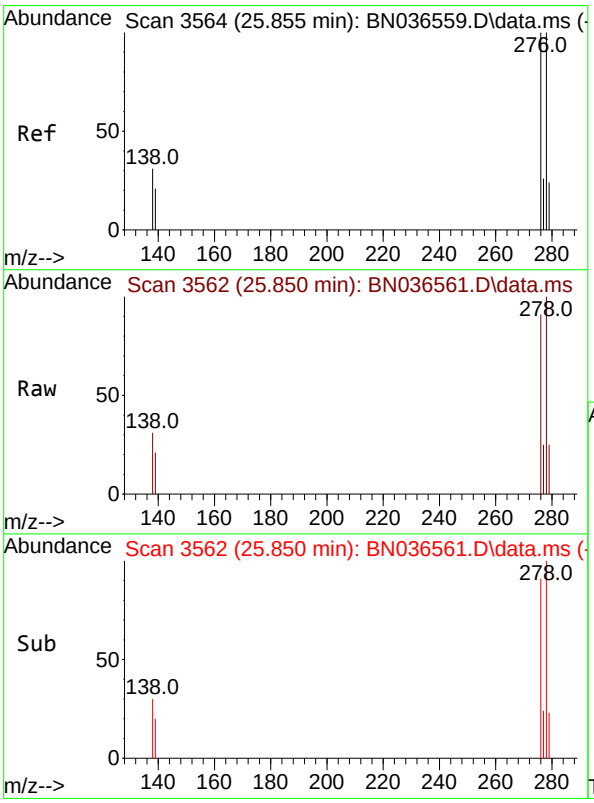
#39
Benzo(a)pyrene
Concen: 1.596 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 24696

Ion	Ratio	Lower	Upper
252	100		
253	23.9	27.8	41.8#
125	16.3	22.7	34.1#

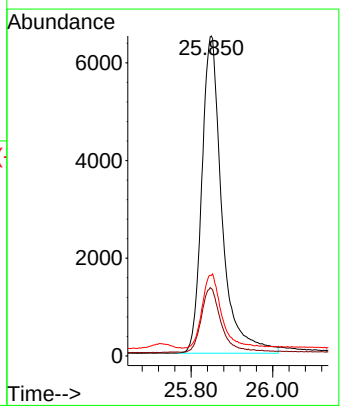


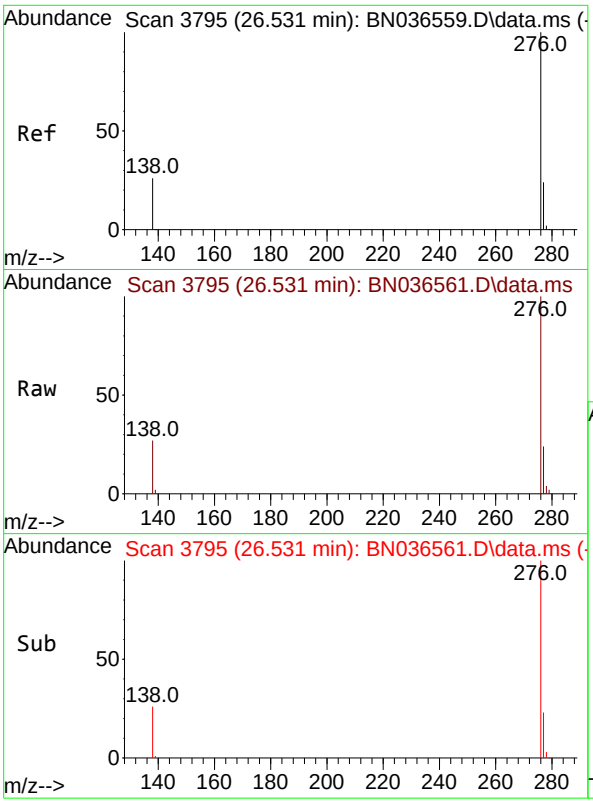


#40
Dibenzo(a,h)anthracene
Concen: 1.569 ng
RT: 25.850 min Scan# 3562
Delta R.T. -0.006 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Tgt Ion:278 Resp: 22248

Ion	Ratio	Lower	Upper
278	100		
139	21.1	20.8	31.2
279	25.1	28.8	43.2#



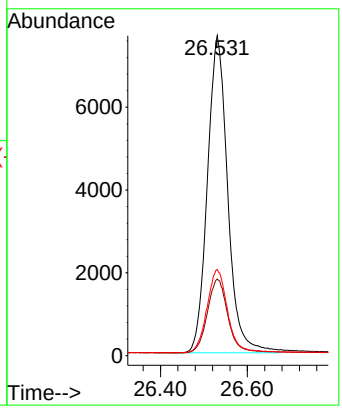


#41
Benzo(g,h,i)perylene
Concen: 1.535 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036561.D
Acq: 10 Mar 2025 14:07

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 24906

Ion	Ratio	Lower	Upper
276	100		
277	23.9	22.2	33.4
138	26.9	24.1	36.1



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036562.D
Acq On : 10 Mar 2025 14:43
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Mar 10 16:02:50 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

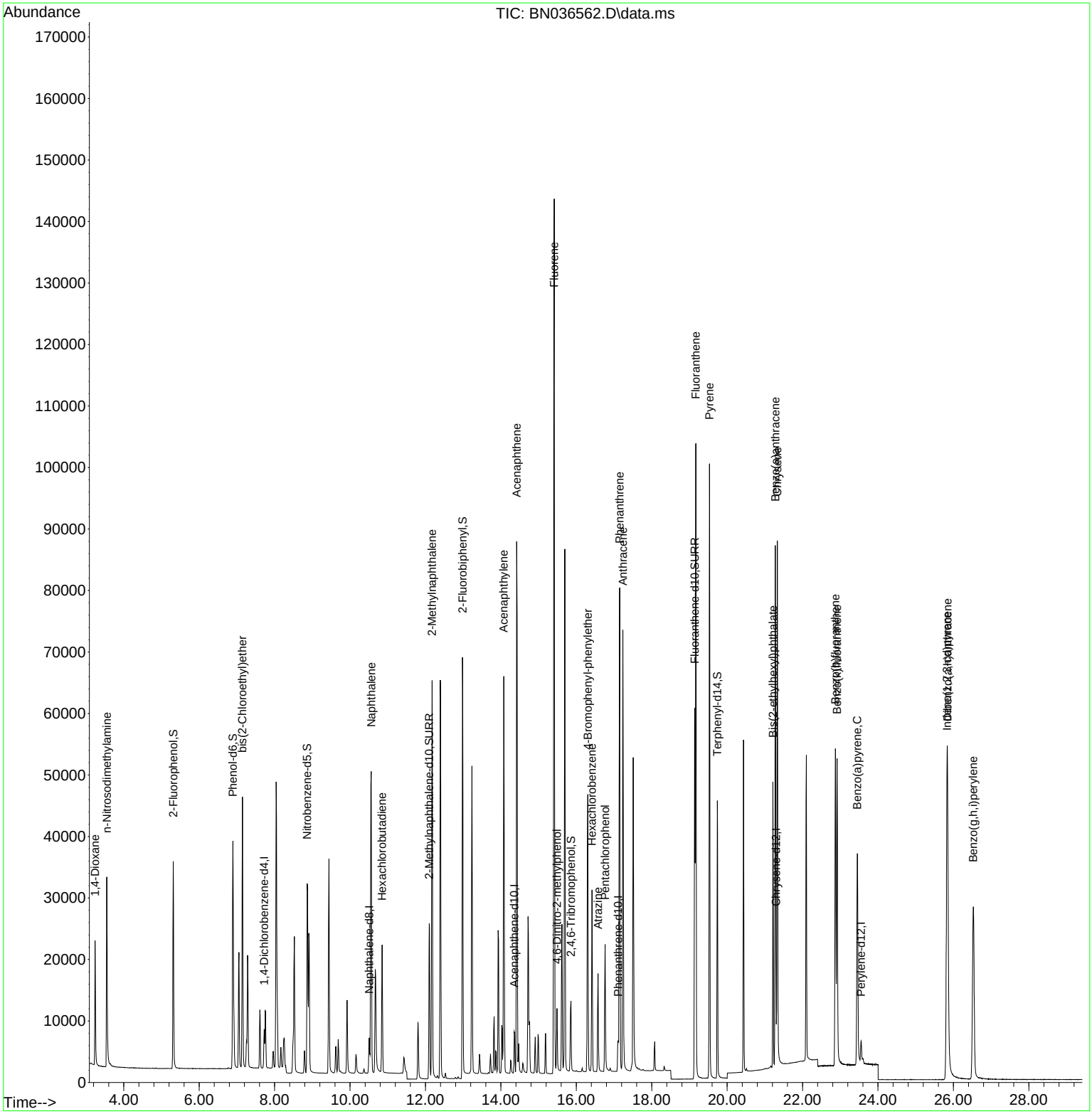
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2890	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	6824	0.400	ng		0.00
13) Acenaphthene-d10	14.355	164	3957	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	7488	0.400	ng		0.00
29) Chrysene-d12	21.295	240	5439	0.400	ng		0.00
35) Perylene-d12	23.551	264	5002	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	23032	3.420	ng		0.00
5) Phenol-d6	6.894	99	28996	3.485	ng		0.00
8) Nitrobenzene-d5	8.864	82	24586	3.312	ng		-0.01
11) 2-Methylnaphthalene-d10	12.101	152	34578	3.407	ng		-0.01
14) 2,4,6-Tribromophenol	15.858	330	6252	3.482	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	81236	3.529	ng		0.00
27) Fluoranthene-d10	19.141	212	65134	3.394	ng		0.00
31) Terphenyl-d14	19.740	244	42959	3.297	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	10288	3.209	ng		97
3) n-Nitrosodimethylamine	3.550	42	20412	3.147	ng	#	96
6) bis(2-Chloroethyl)ether	7.146	93	27978	3.253	ng		99
9) Naphthalene	10.562	128	66694	3.323	ng		96
10) Hexachlorobutadiene	10.850	225	15618	3.305	ng	#	99
12) 2-Methylnaphthalene	12.177	142	43768	3.427	ng		97
16) Acenaphthylene	14.077	152	65654	3.516	ng		99
17) Acenaphthene	14.420	154	42378	3.467	ng		97
18) Fluorene	15.414	166	56295	3.404	ng		100
20) 4,6-Dinitro-2-methylph...	15.489	198	6567	3.315	ng	#	58
21) 4-Bromophenyl-phenylether	16.304	248	16652	3.549	ng	#	82
22) Hexachlorobenzene	16.416	284	19287	3.406	ng		100
23) Atrazine	16.577	200	12969	3.448	ng	#	90
24) Pentachlorophenol	16.764	266	9625	3.726	ng		99
25) Phenanthrene	17.148	178	77903	3.468	ng		99
26) Anthracene	17.235	178	72775	3.590	ng		99
28) Fluoranthene	19.169	202	86688	3.436	ng		99
30) Pyrene	19.531	202	86694	3.260	ng		100
32) Benzo(a)anthracene	21.277	228	66496	3.516	ng		99
33) Chrysene	21.331	228	70334	3.403	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	39682	2.947	ng	#	98
36) Indeno(1,2,3-cd)pyrene	25.829	276	67767	3.754	ng		98
37) Benzo(b)fluoranthene	22.870	252	63823	3.506	ng	#	84
38) Benzo(k)fluoranthene	22.914	252	65410	3.425	ng	#	83
39) Benzo(a)pyrene	23.452	252	54009	3.523	ng	#	77
40) Dibenzo(a,h)anthracene	25.843	278	54058	3.846	ng	#	84
41) Benzo(g,h,i)perylene	26.528	276	57986	3.606	ng		94

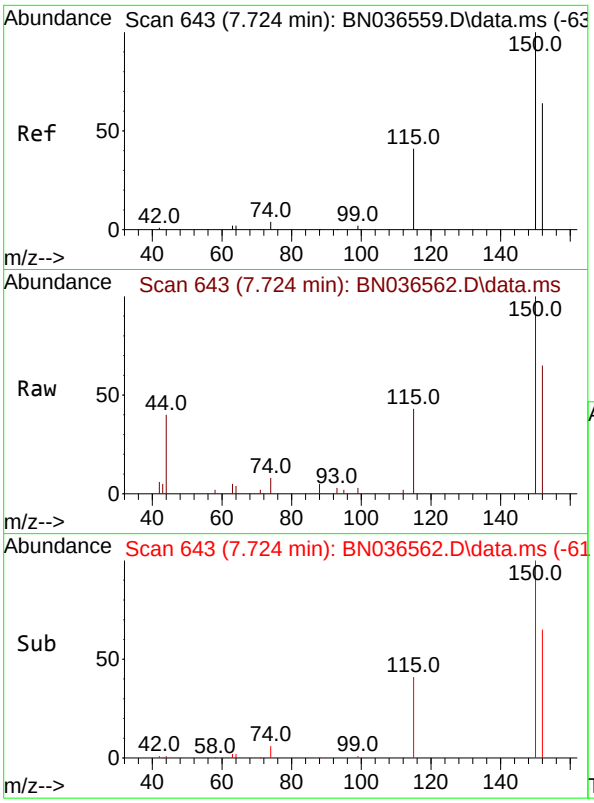
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036562.D
Acq On : 10 Mar 2025 14:43
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Mar 10 16:02:50 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



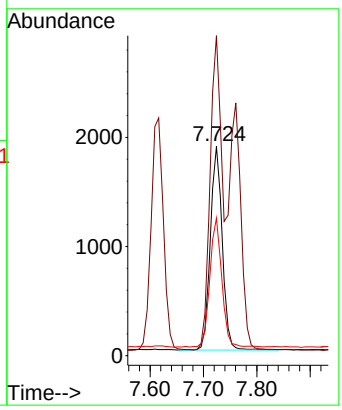


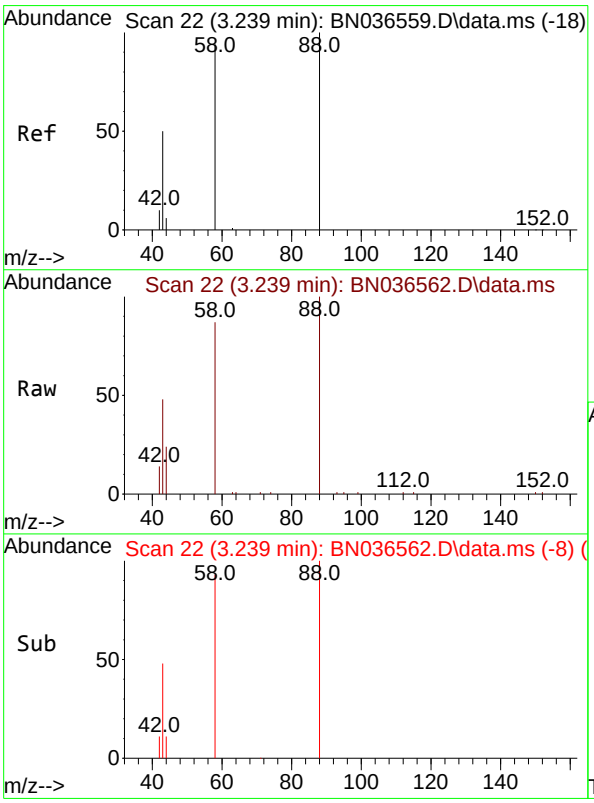
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 2890

Ion	Ratio	Lower	Upper
152	100		
150	152.9	123.7	185.5
115	65.7	54.3	81.5

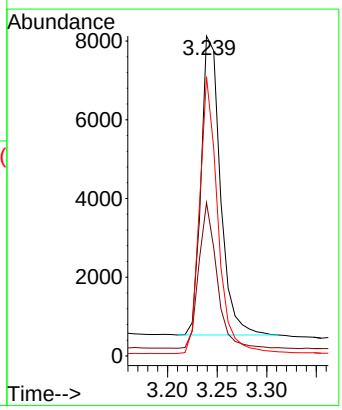


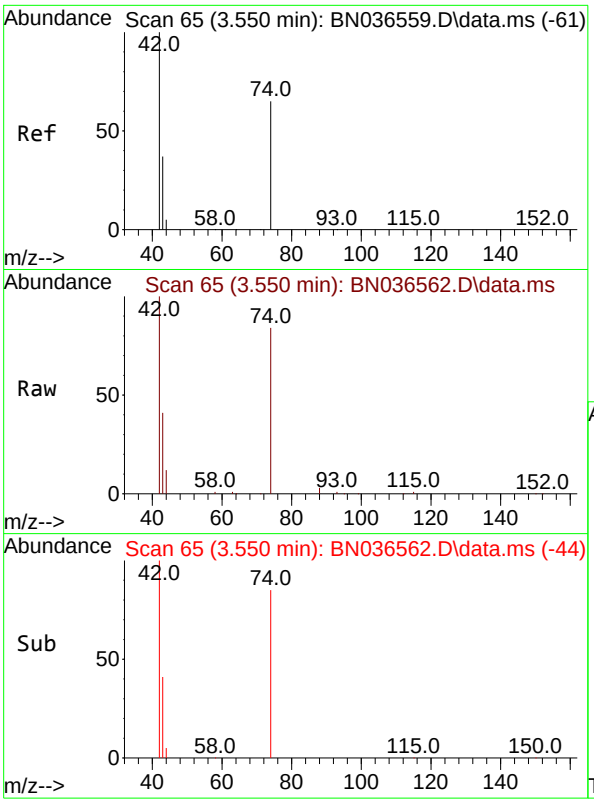


#2
1,4-Dioxane
Concen: 3.209 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion: 88 Resp: 10288

Ion	Ratio	Lower	Upper
88	100		
43	45.2	37.8	56.8
58	87.2	67.4	101.2



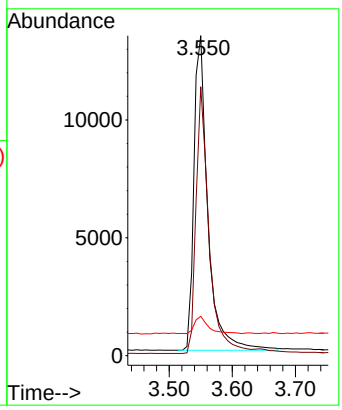


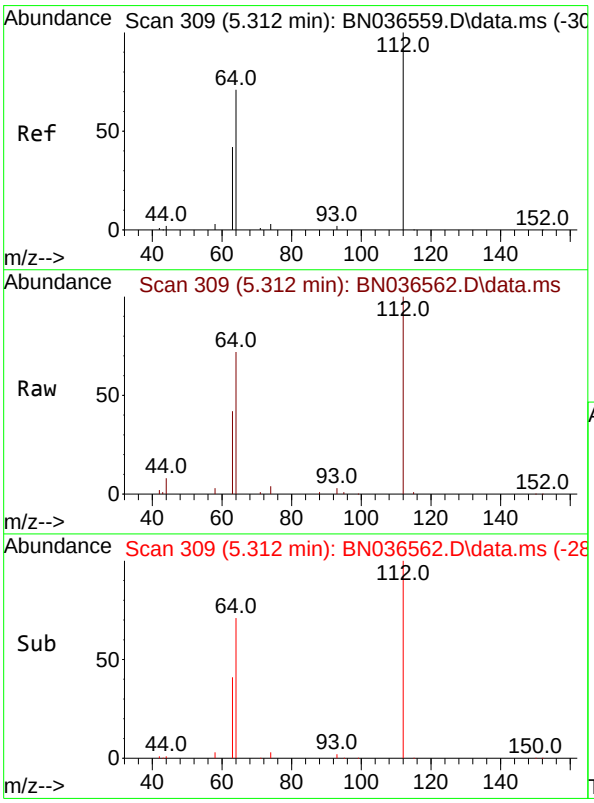
#3
n-Nitrosodimethylamine
Concen: 3.147 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 42 Resp: 20412

Ion	Ratio	Lower	Upper
42	100		
74	78.8	60.6	90.8
44	5.5	6.3	9.5#

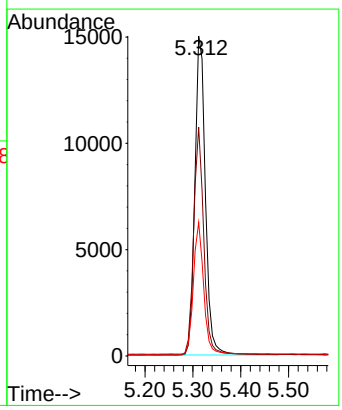


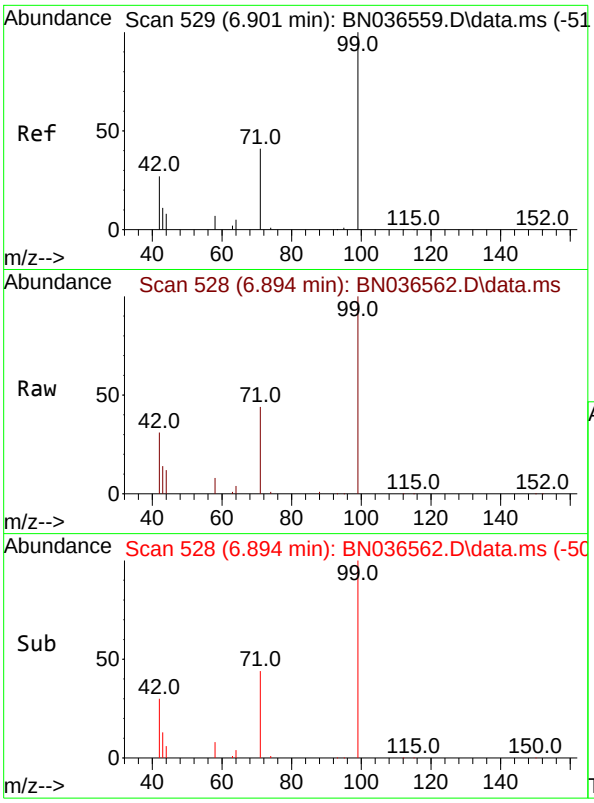


#4
2-Fluorophenol
Concen: 3.420 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:112 Resp: 23032

Ion	Ratio	Lower	Upper
112	100		
64	68.4	53.1	79.7
63	39.8	31.8	47.8



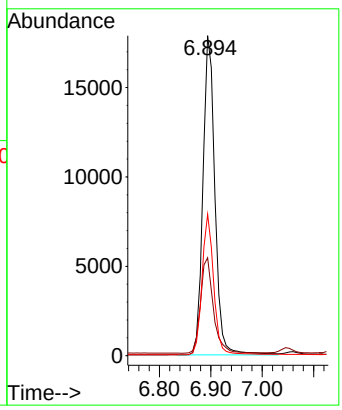


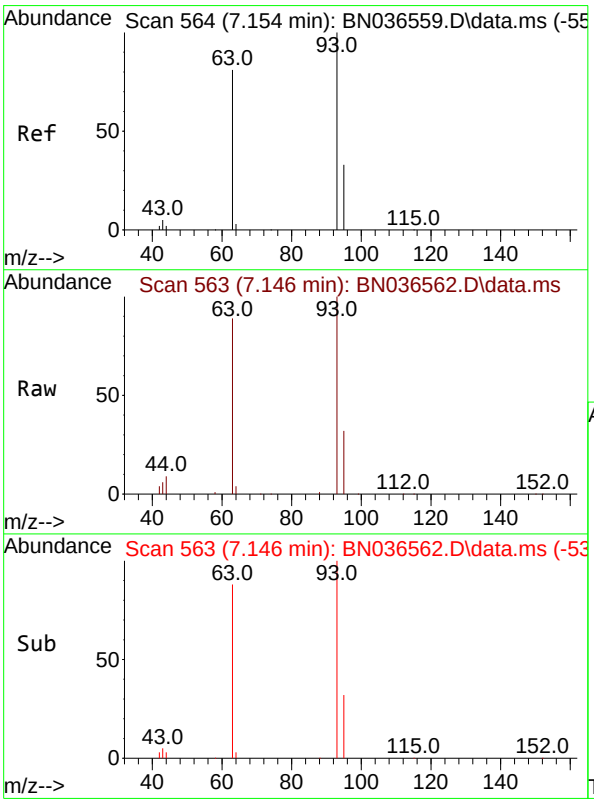
#5
Phenol-d6
Concen: 3.485 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 99 Resp: 28996

Ion	Ratio	Lower	Upper
99	100		
42	32.3	26.5	39.7
71	43.2	34.1	51.1

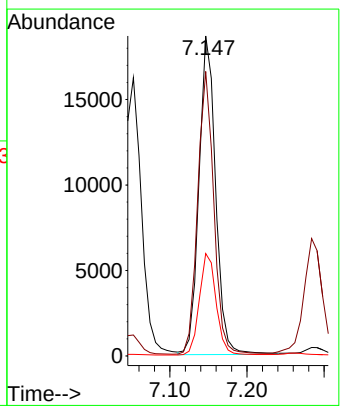


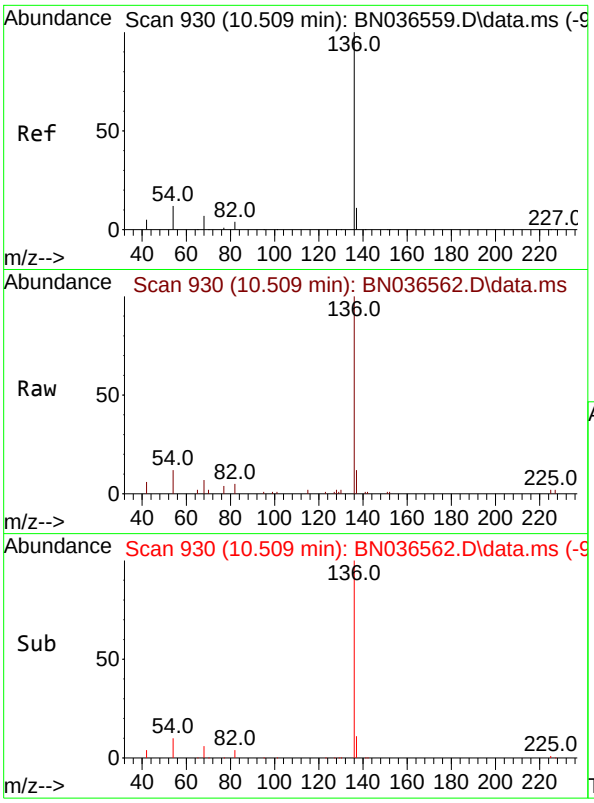


#6
bis(2-Chloroethyl)ether
Concen: 3.253 ng
RT: 7.146 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion: 93 Resp: 27978

Ion	Ratio	Lower	Upper
93	100		
63	85.7	67.7	101.5
95	32.0	25.6	38.4



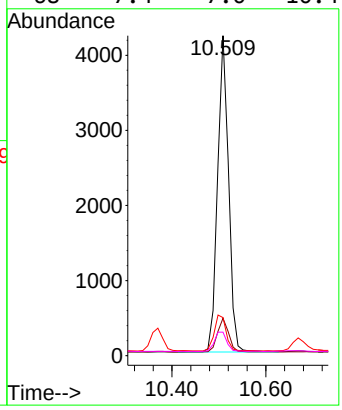


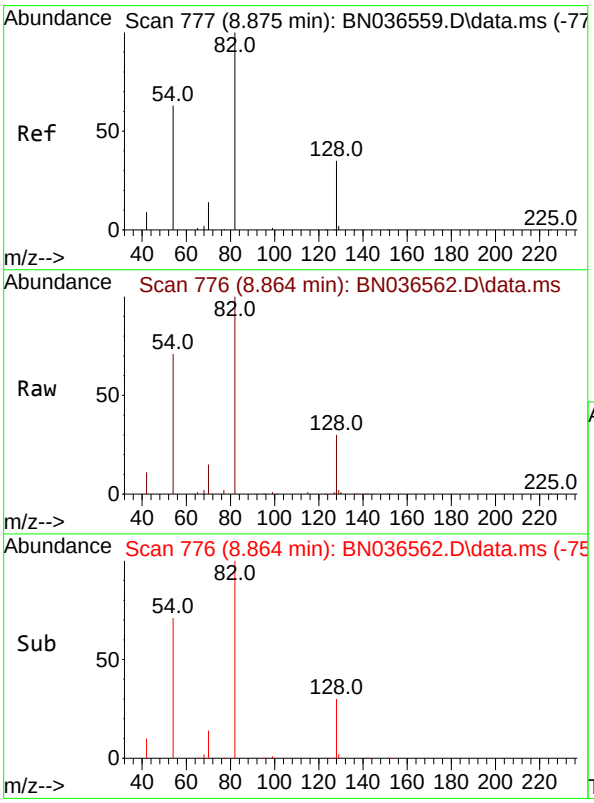
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:136 Resp: 6824

Ion	Ratio	Lower	Upper
136	100		
137	11.7	10.3	15.5
54	11.9	11.5	17.3
68	7.4	7.0	10.4

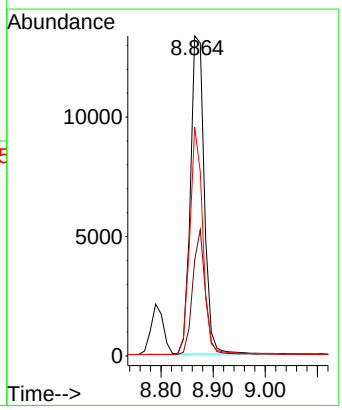


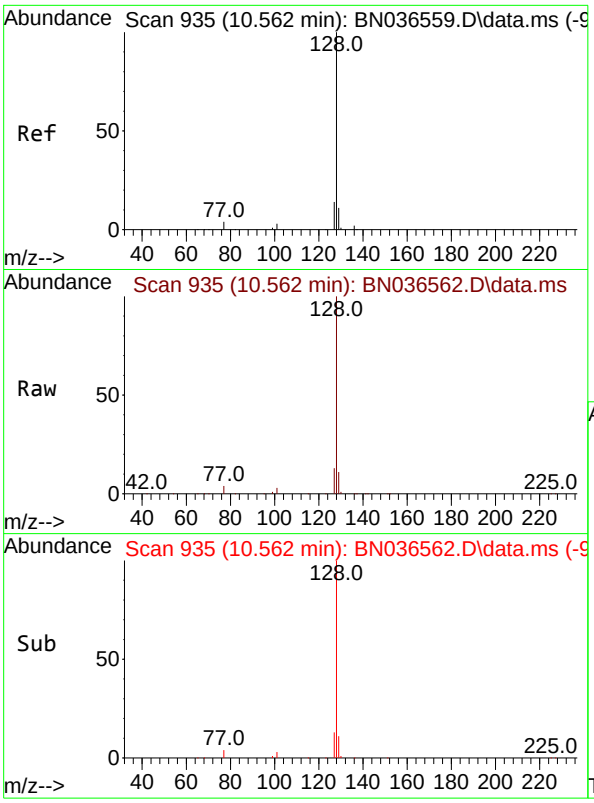


#8
Nitrobenzene-d5
Concen: 3.312 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.011 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion: 82 Resp: 24586

Ion	Ratio	Lower	Upper
82	100		
128	30.0	30.6	45.8#
54	71.4	52.2	78.4



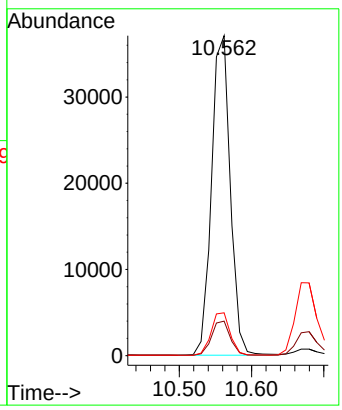


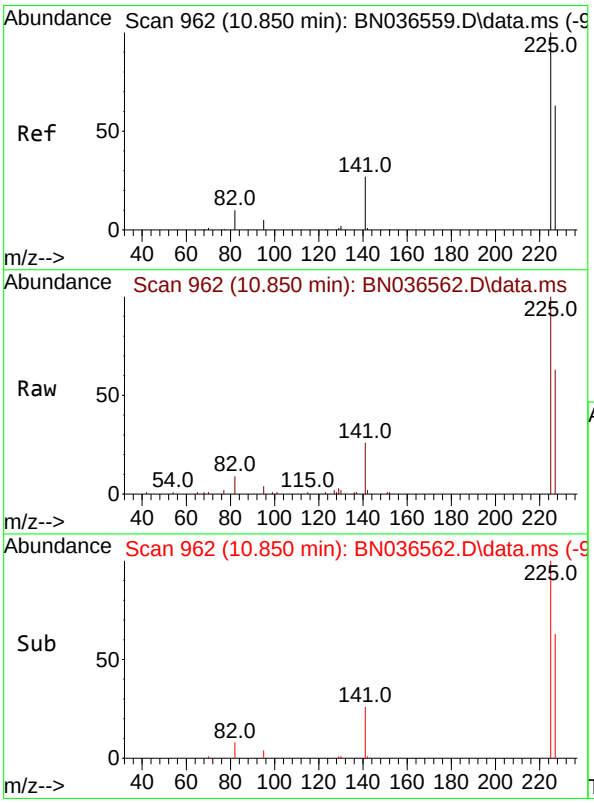
#9
Naphthalene
Concen: 3.323 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:128 Resp: 66694

Ion	Ratio	Lower	Upper
128	100		
129	10.8	9.8	14.6
127	13.4	11.8	17.8

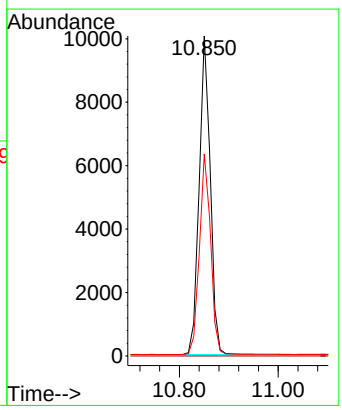


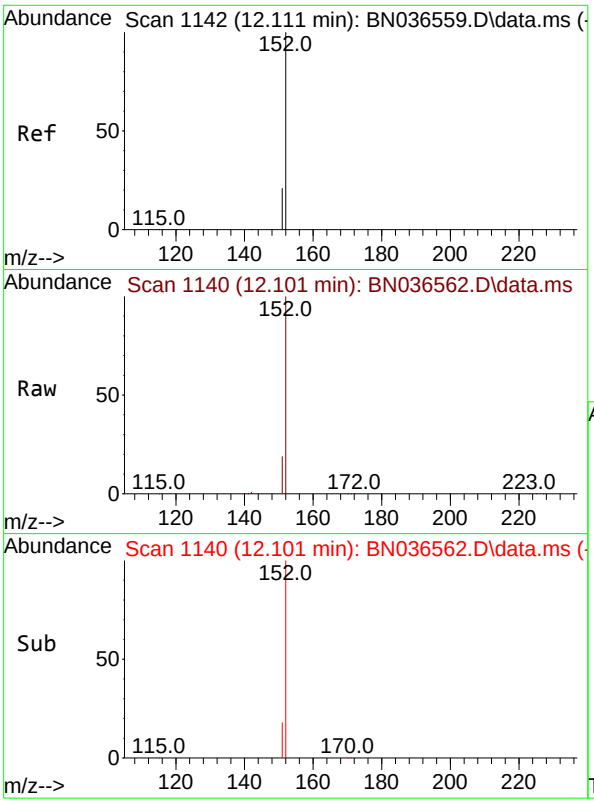


#10
Hexachlorobutadiene
Concen: 3.305 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:225 Resp: 15618

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	51.8	77.8



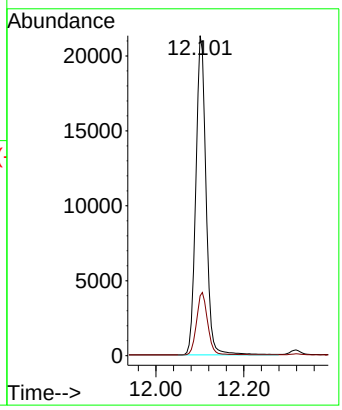


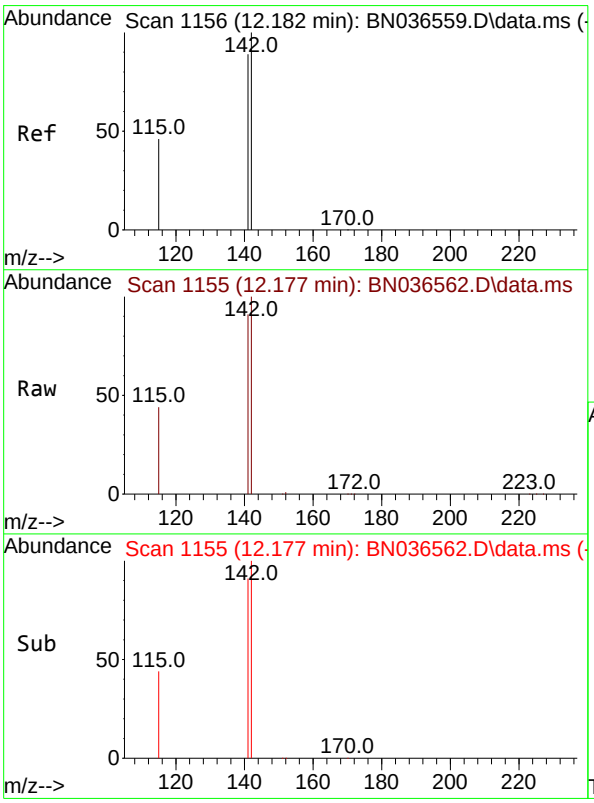
#11
2-Methylnaphthalene-d10
Concen: 3.407 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 34578

Ion	Ratio	Lower	Upper
152	100		
151	21.2	17.0	25.6

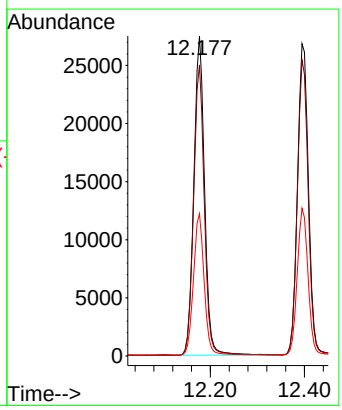


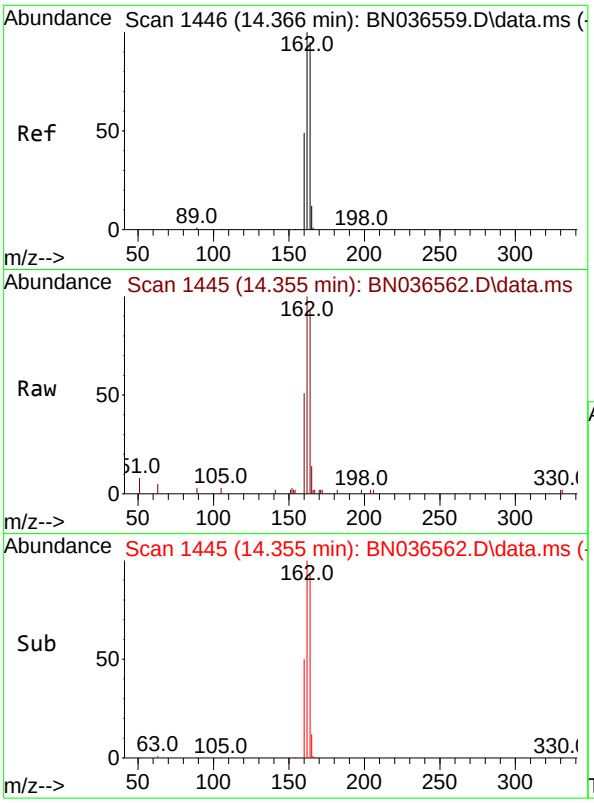


#12
2-Methylnaphthalene
Concen: 3.427 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:142 Resp: 43768

Ion	Ratio	Lower	Upper
142	100		
141	90.9	71.7	107.5
115	44.5	38.3	57.5



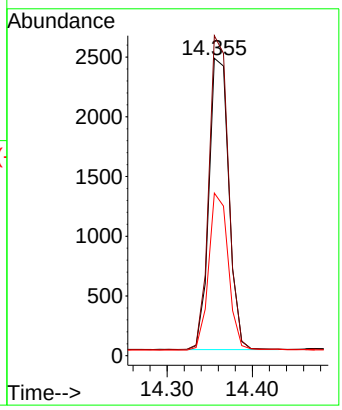


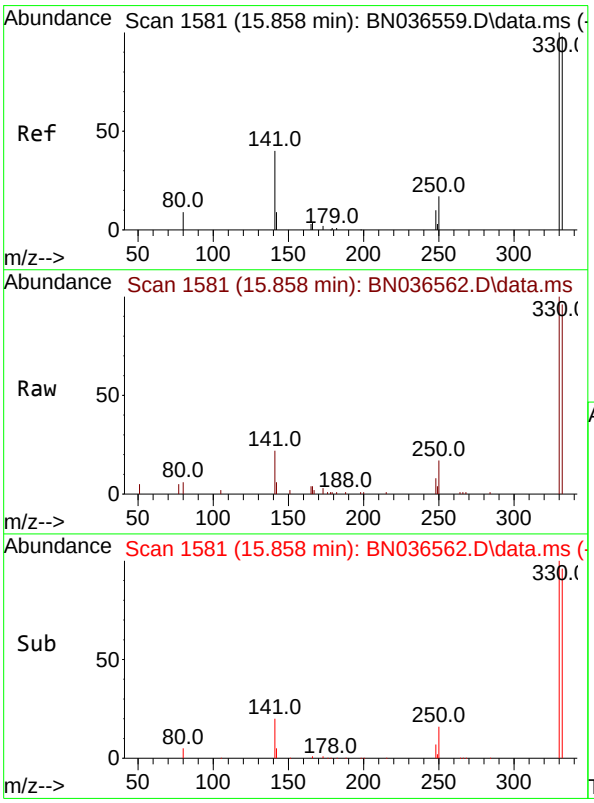
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:164 Resp: 3957

Ion	Ratio	Lower	Upper
164	100		
162	107.6	84.2	126.2
160	54.7	42.2	63.2

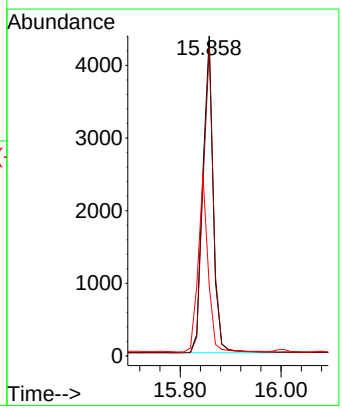


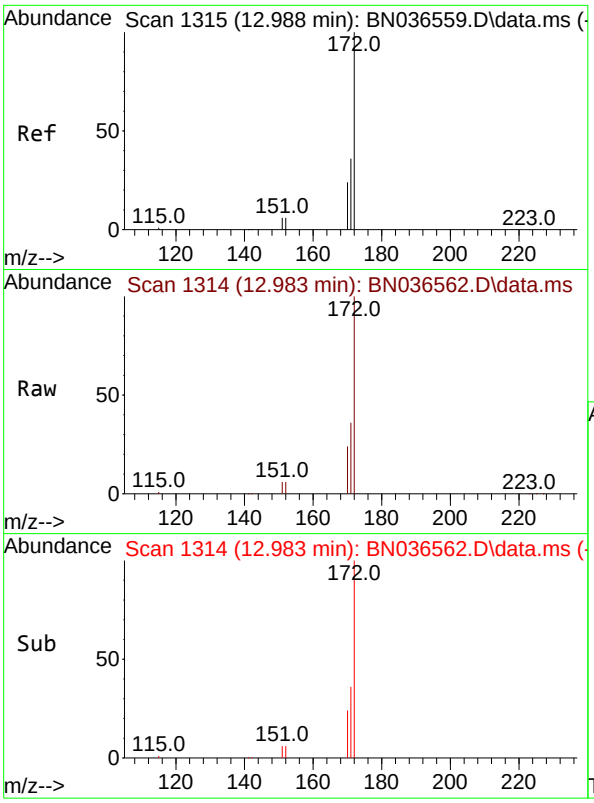


#14
2,4,6-Tribromophenol
Concen: 3.482 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:330 Resp: 6252

Ion	Ratio	Lower	Upper
330	100		
332	96.1	75.2	112.8
141	53.7	43.4	65.2



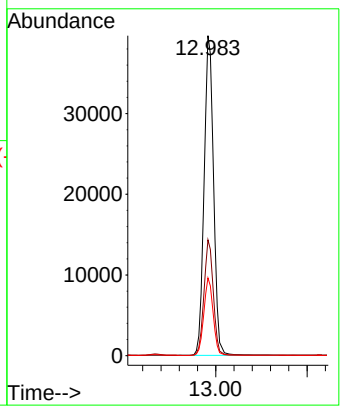


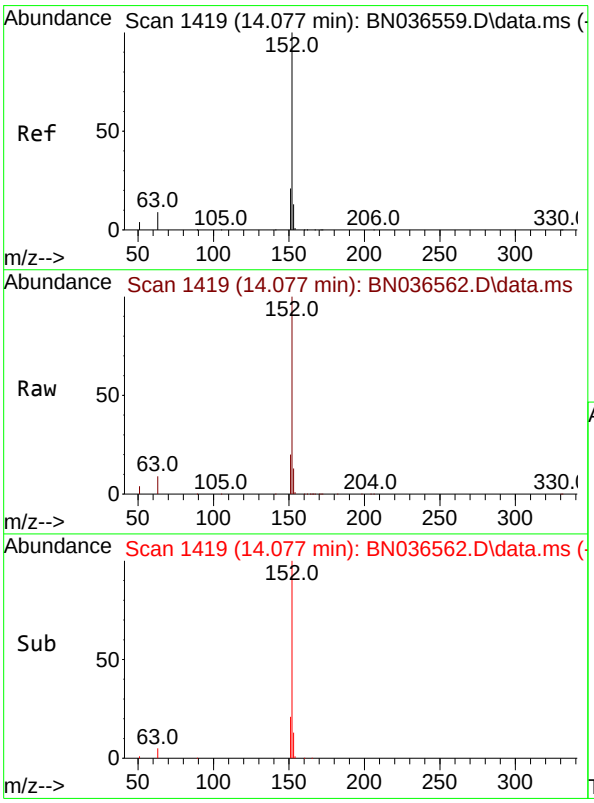
#15
2-Fluorobiphenyl
Concen: 3.529 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:172 Resp: 81236

Ion	Ratio	Lower	Upper
172	100		
171	36.2	29.5	44.3
170	24.3	20.2	30.4

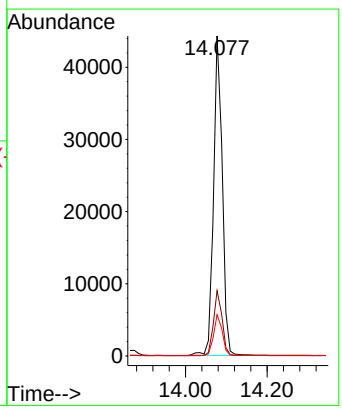


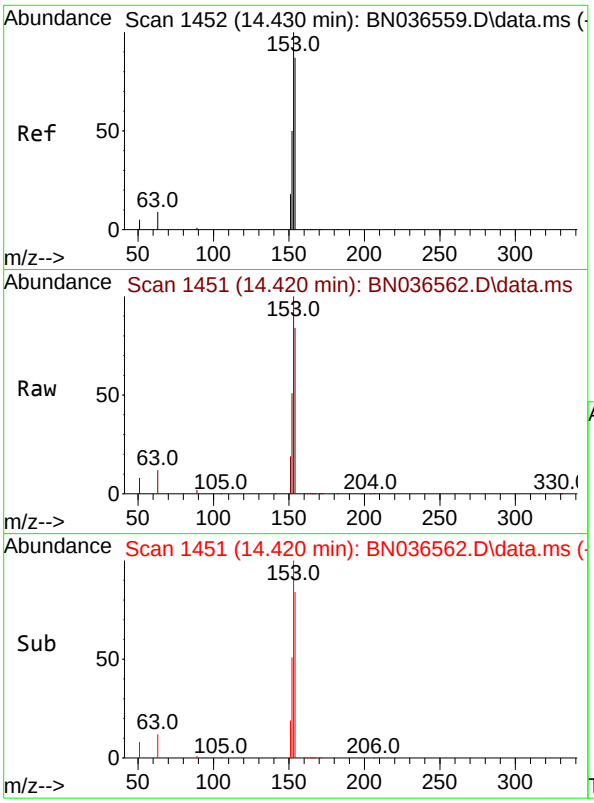


#16
Acenaphthylene
Concen: 3.516 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:152 Resp: 65654

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.2	24.4
153	12.8	10.6	15.8



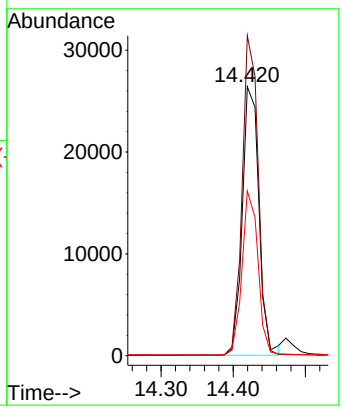


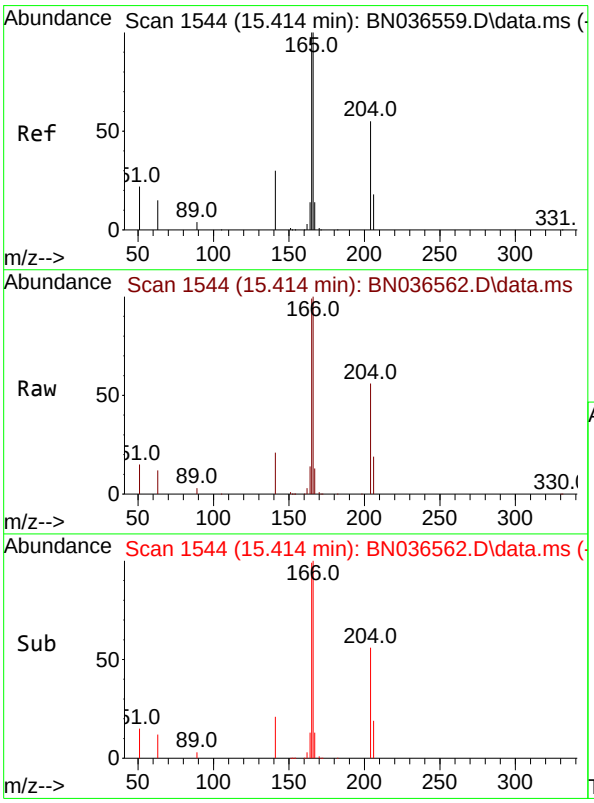
#17
Acenaphthene
Concen: 3.467 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:154 Resp: 42378

Ion	Ratio	Lower	Upper
154	100		
153	114.6	94.1	141.1
152	58.9	49.8	74.6

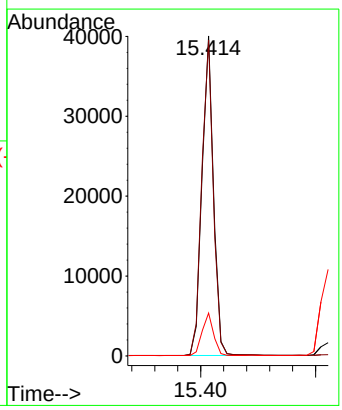


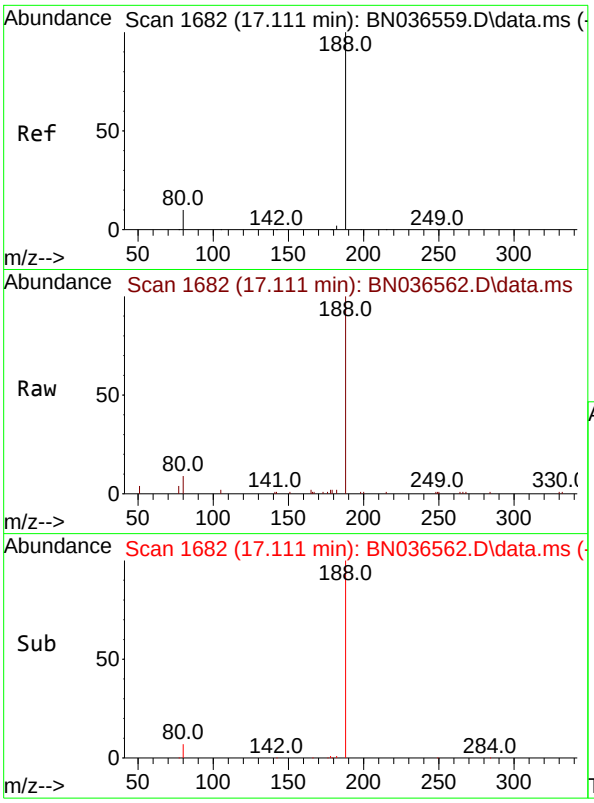


#18
Fluorene
Concen: 3.404 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:166 Resp: 56295

Ion	Ratio	Lower	Upper
166	100		
165	100.2	79.8	119.8
167	13.0	10.6	15.8



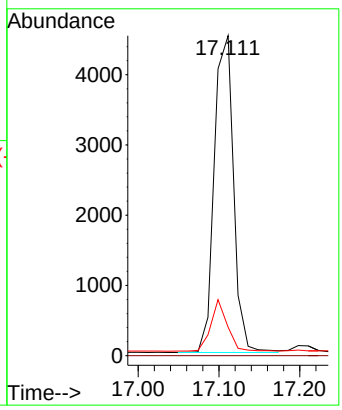


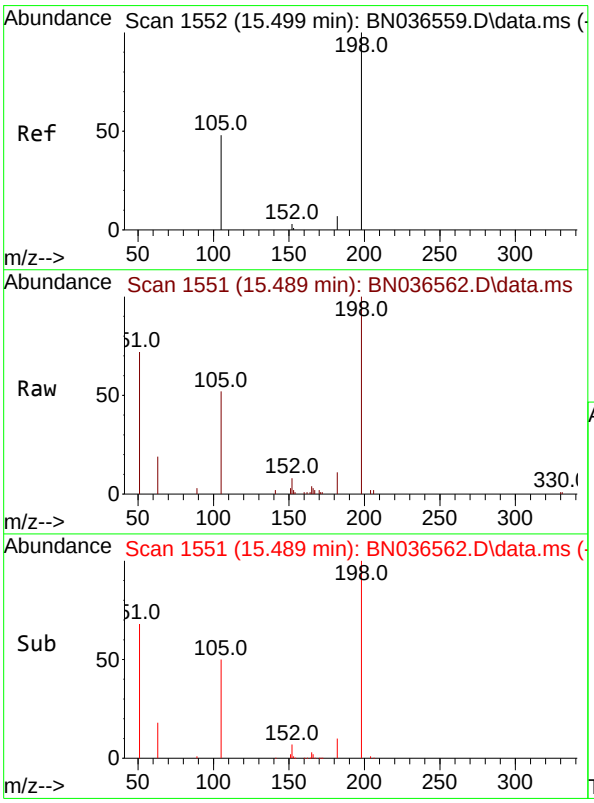
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:188 Resp: 7488

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	8.9	8.8	13.2

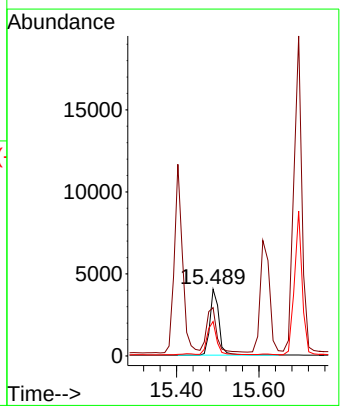


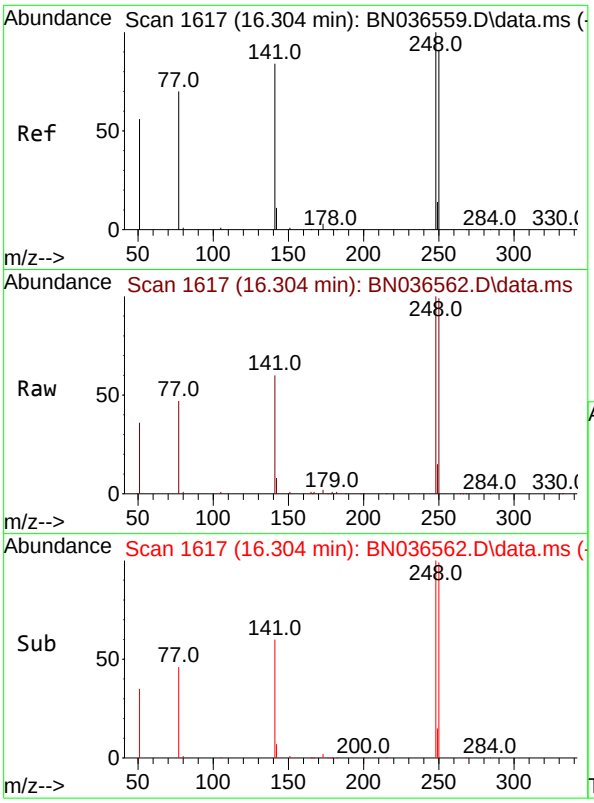


#20
4,6-Dinitro-2-methylphenol
Concen: 3.315 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:198 Resp: 6567

Ion	Ratio	Lower	Upper
198	100		
51	72.3	107.9	161.9#
105	51.5	56.2	84.2#



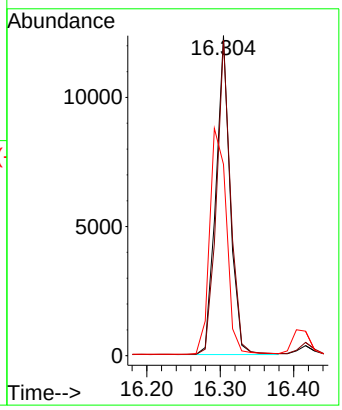


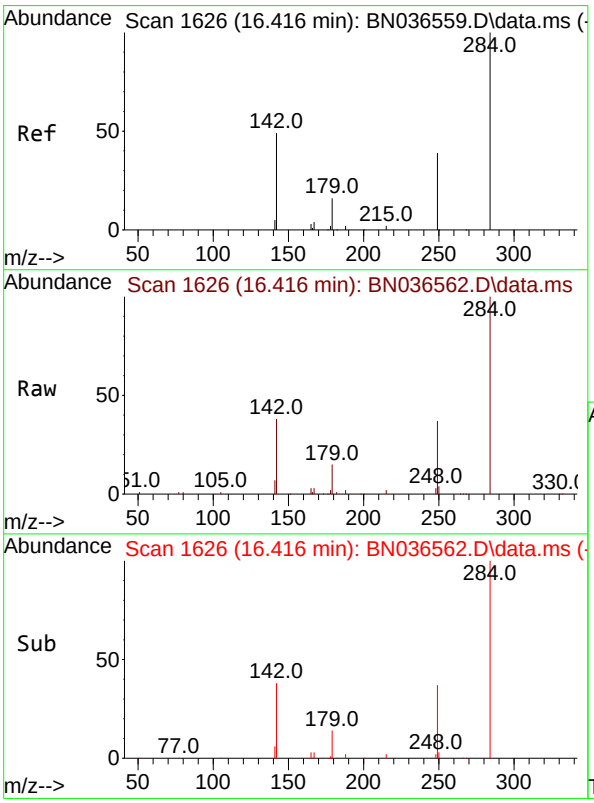
#21
4-Bromophenyl-phenylether
Concen: 3.549 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:248 Resp: 16652

Ion	Ratio	Lower	Upper
248	100		
250	98.6	73.0	109.6
141	59.8	68.6	103.0#

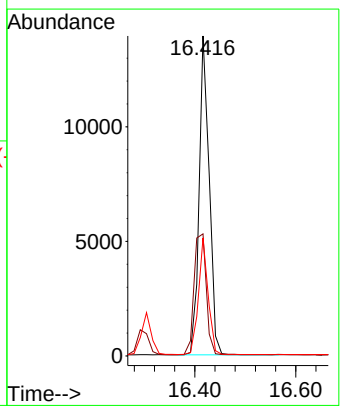


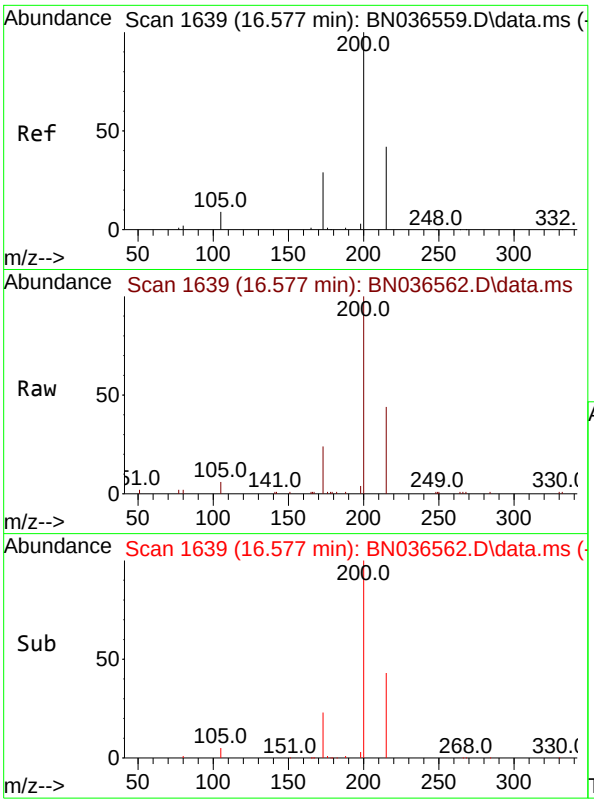


#22
Hexachlorobenzene
Concen: 3.406 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:284 Resp: 19287

Ion	Ratio	Lower	Upper
284	100		
142	46.2	37.0	55.4
249	35.5	28.1	42.1



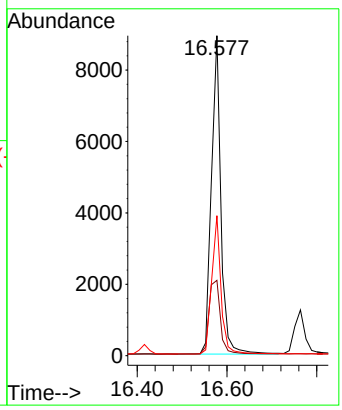


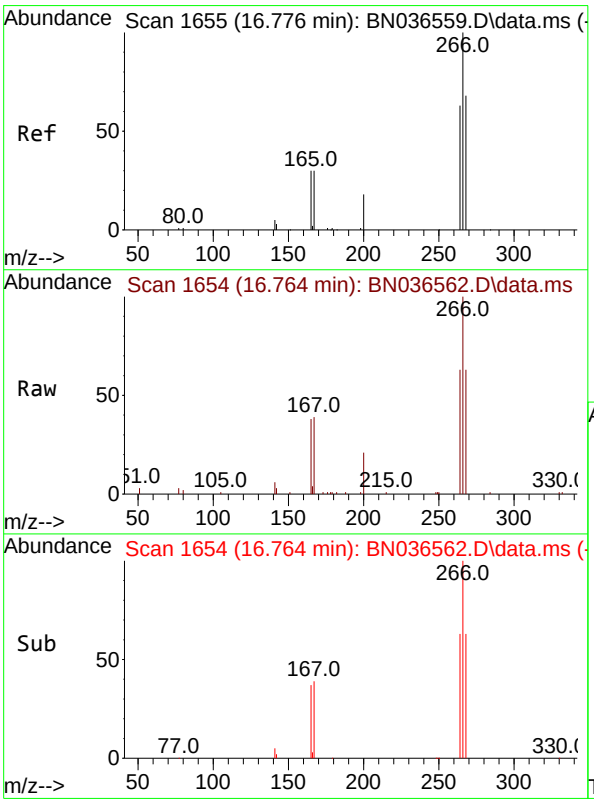
#23
Atrazine
Concen: 3.448 ng
RT: 16.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:200 Resp: 12969

Ion	Ratio	Lower	Upper
200	100		
173	23.6	27.3	40.9#
215	43.7	36.8	55.2

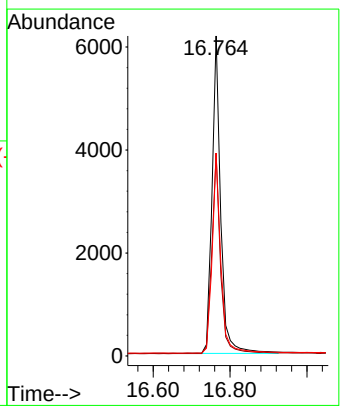


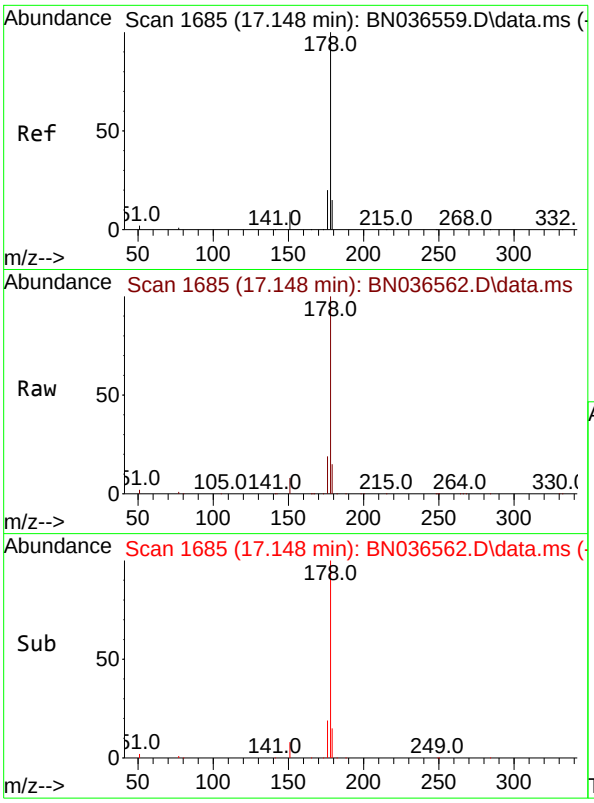


#24
Pentachlorophenol
Concen: 3.726 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:266 Resp: 9625

Ion	Ratio	Lower	Upper
266	100		
264	63.1	49.6	74.4
268	63.1	50.9	76.3



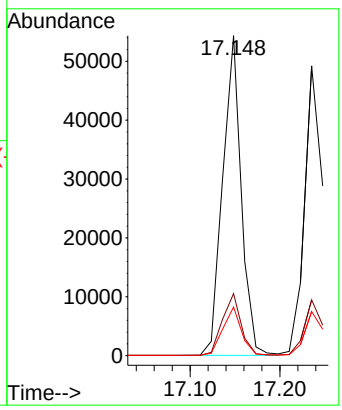


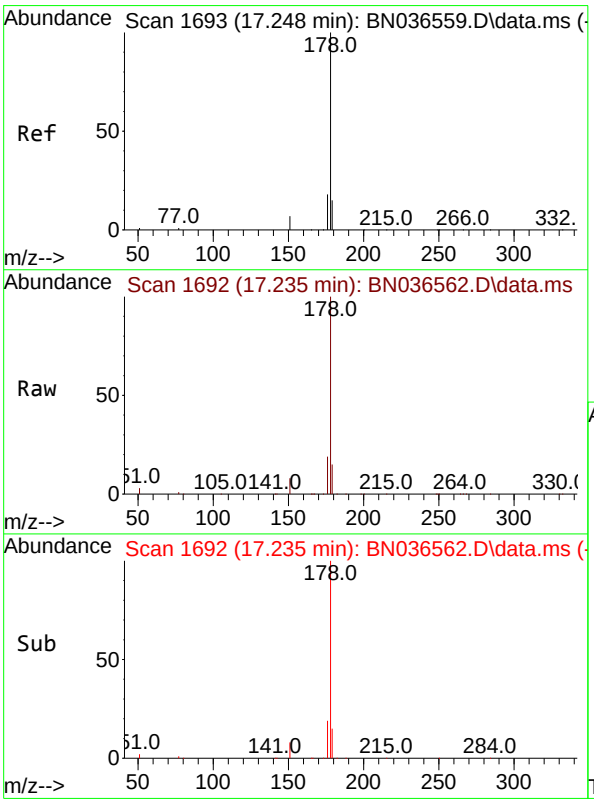
#25
Phenanthrene
Concen: 3.468 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:178 Resp: 77903

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.9	23.9
179	15.1	12.2	18.4

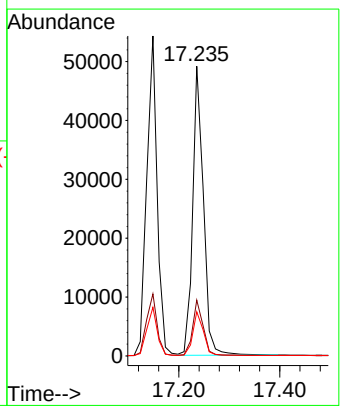


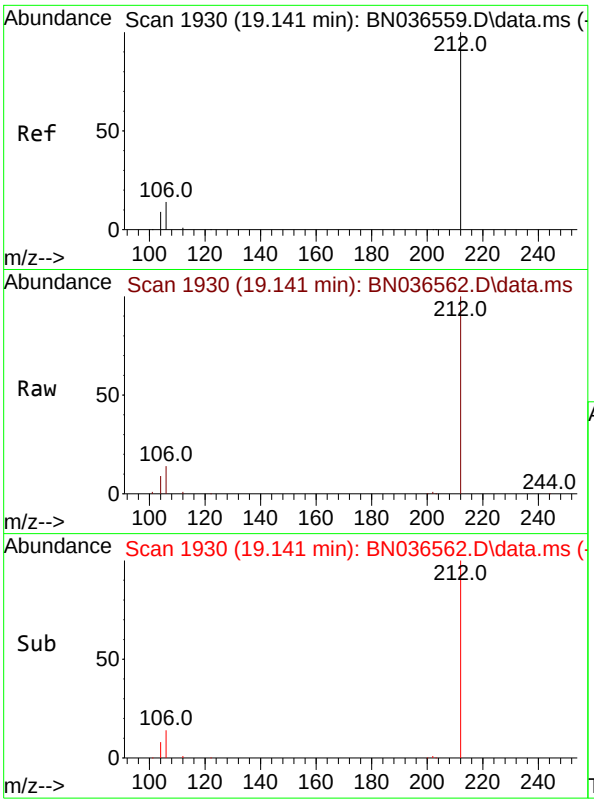


#26
Anthracene
Concen: 3.590 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:178 Resp: 72775

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.2
179	15.2	12.6	18.8



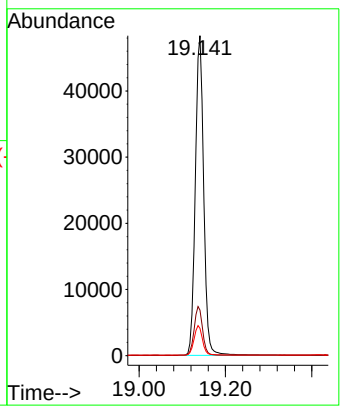


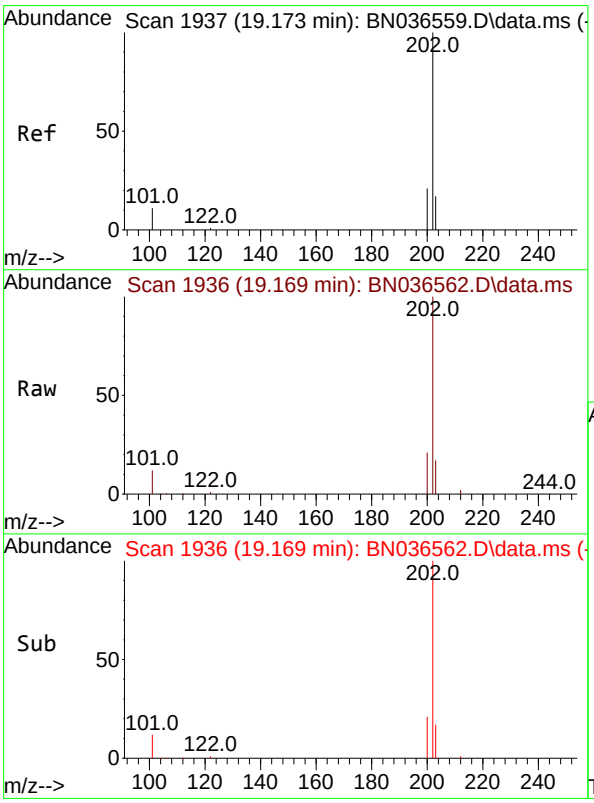
#27
Fluoranthene-d10
Concen: 3.394 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:212 Resp: 65134

Ion	Ratio	Lower	Upper
212	100		
106	15.4	11.8	17.6
104	9.2	7.3	10.9

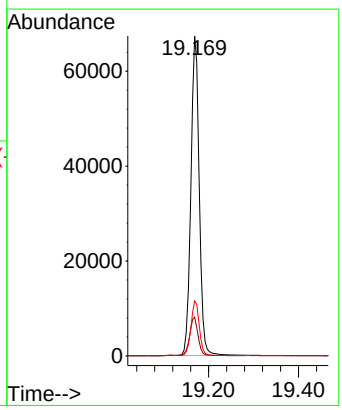


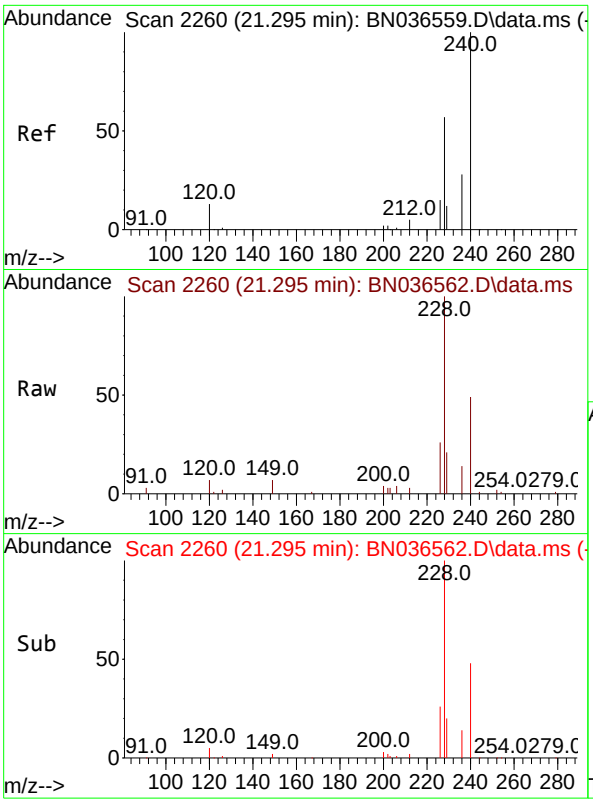


#28
Fluoranthene
Concen: 3.436 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:202 Resp: 86688

Ion	Ratio	Lower	Upper
202	100		
101	12.3	9.4	14.0
203	17.0	13.5	20.3



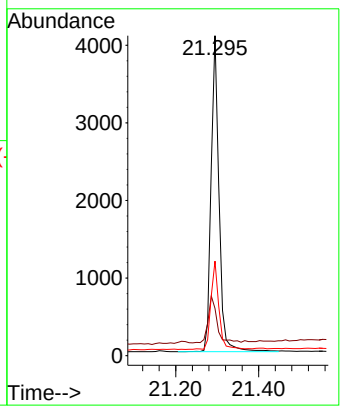


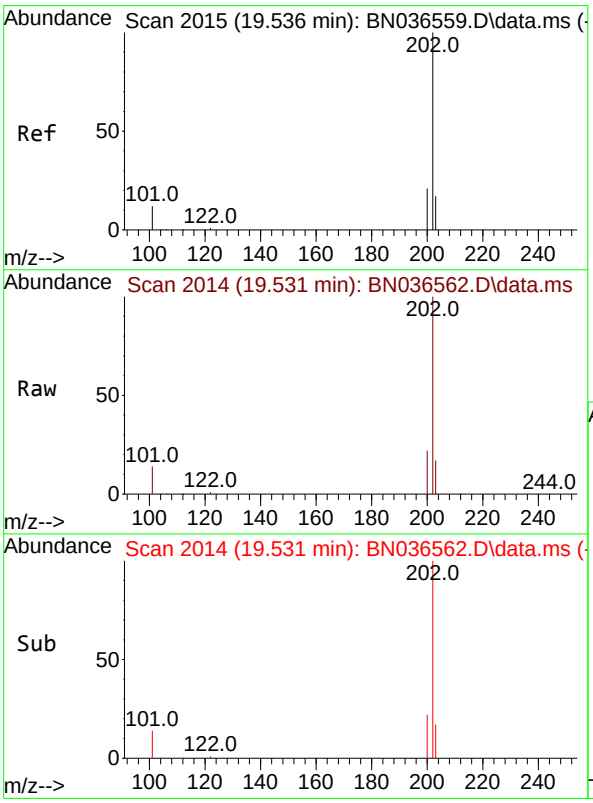
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:240 Resp: 5439

Ion	Ratio	Lower	Upper
240	100		
120	14.8	14.6	22.0
236	29.5	24.1	36.1

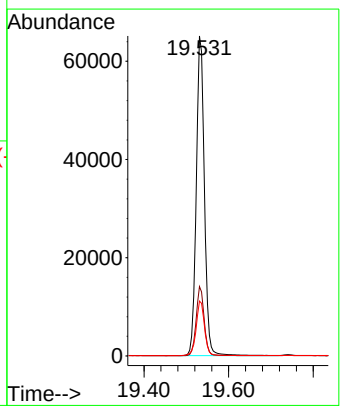


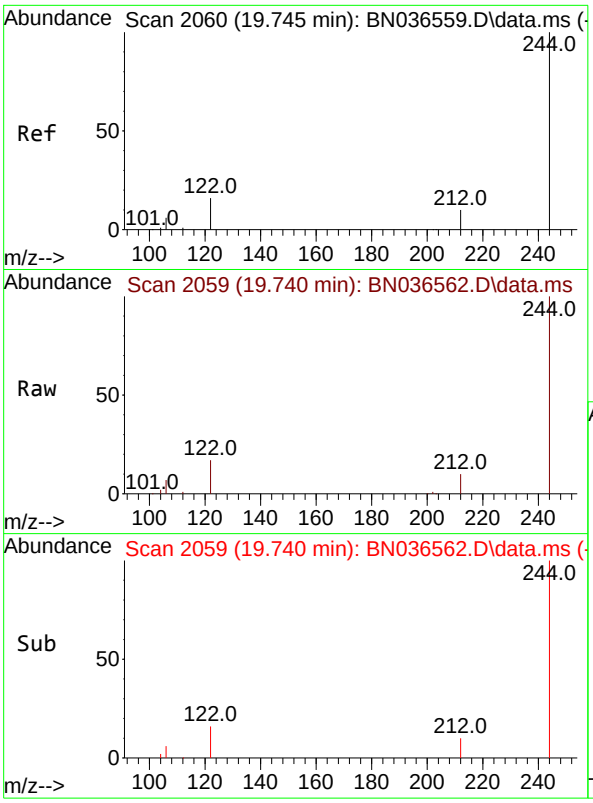


#30
Pyrene
Concen: 3.260 ng
RT: 19.531 min Scan# 2014
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:202 Resp: 86694

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.6	14.1	21.1



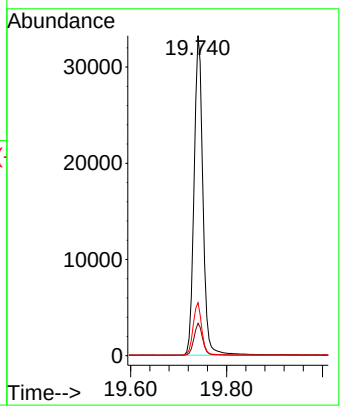


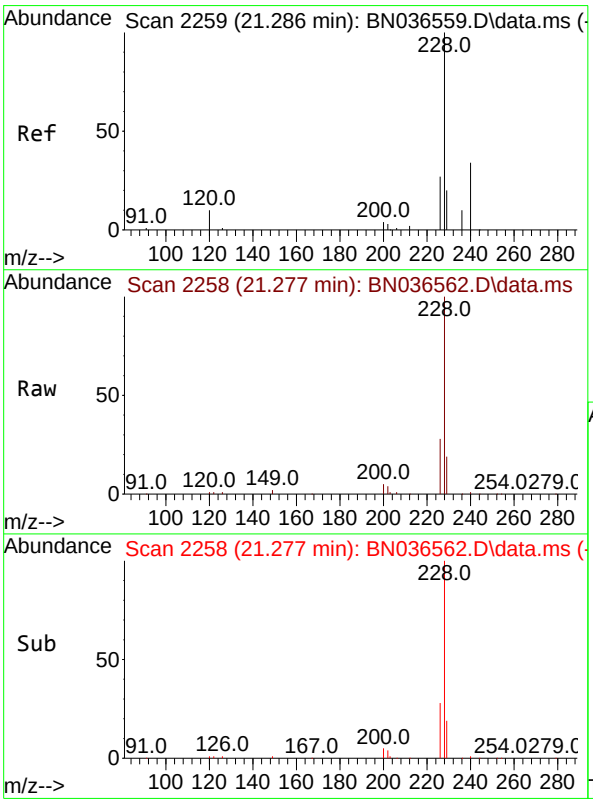
#31
Terphenyl-d14
Concen: 3.297 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:244 Resp: 42959

Ion	Ratio	Lower	Upper
244	100		
212	10.1	9.6	14.4
122	16.6	13.9	20.9

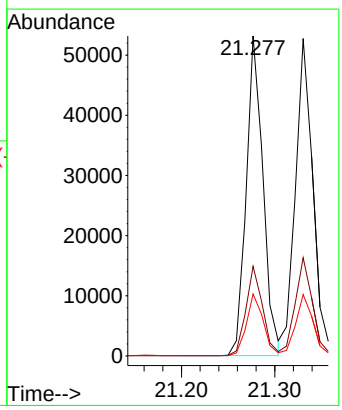


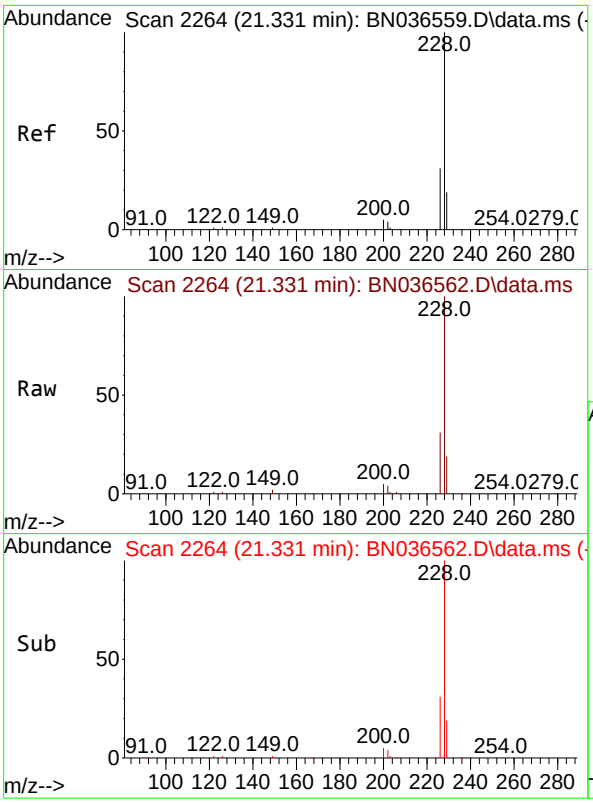


#32
Benzo(a)anthracene
Concen: 3.516 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:228 Resp: 66496

Ion	Ratio	Lower	Upper
228	100		
226	28.0	22.5	33.7
229	19.4	16.6	25.0



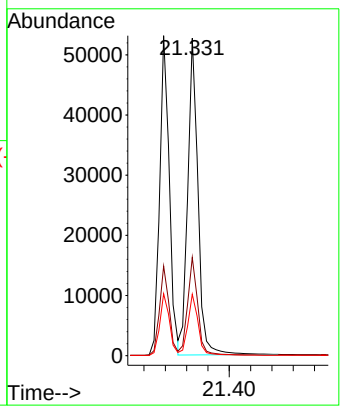


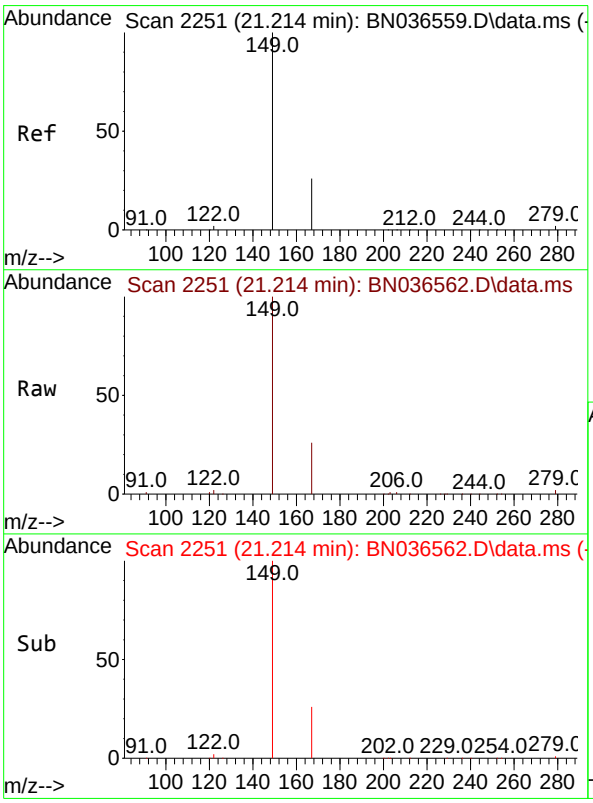
#33
Chrysene
Concen: 3.403 ng
RT: 21.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:228 Resp: 70334

Ion	Ratio	Lower	Upper
228	100		
226	31.0	25.3	37.9
229	19.4	15.8	23.8

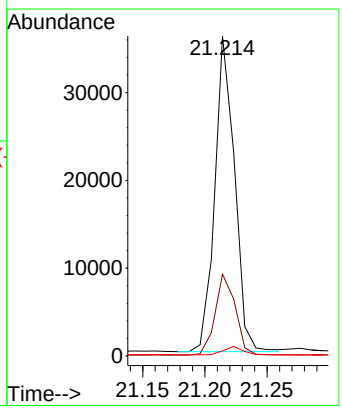


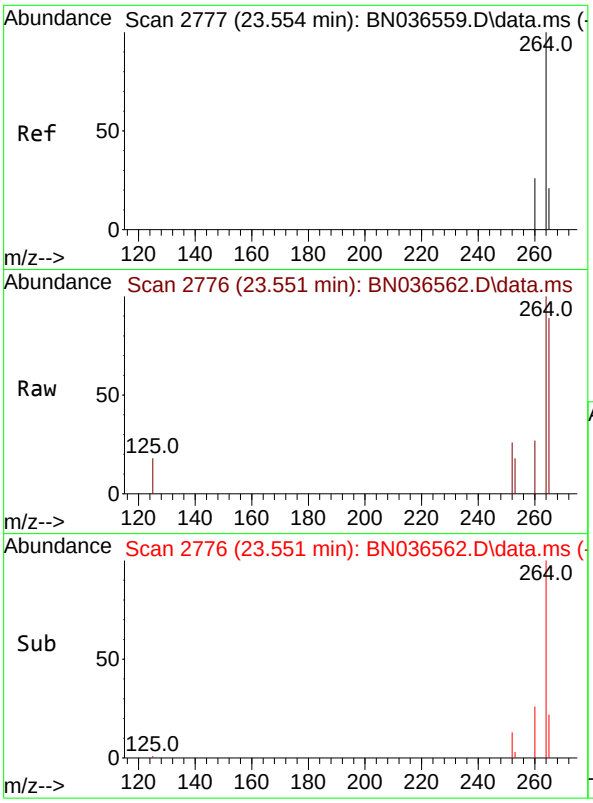


#34
Bis(2-ethylhexyl)phthalate
Concen: 2.947 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:149 Resp: 39682

Ion	Ratio	Lower	Upper
149	100		
167	26.3	20.7	31.1
279	2.6	3.6	5.4#



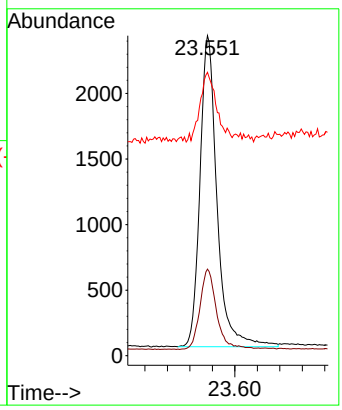


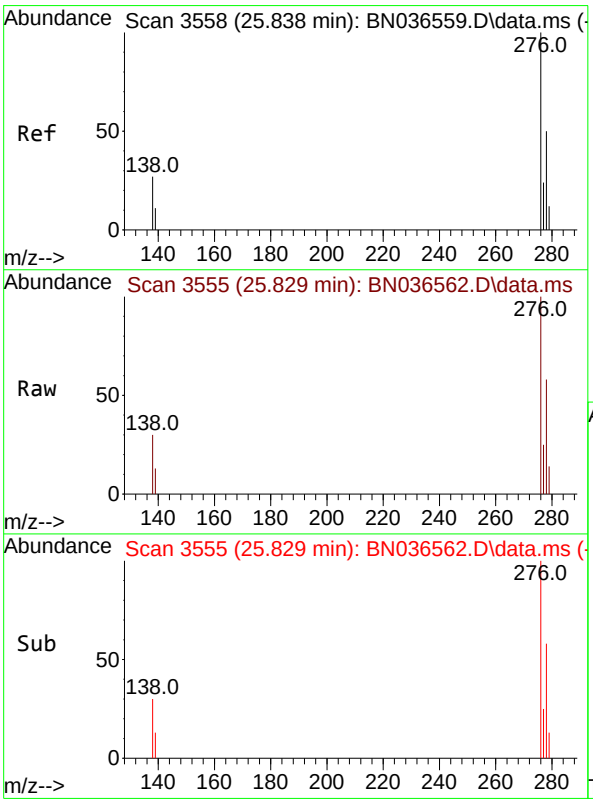
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:264 Resp: 5002

Ion	Ratio	Lower	Upper
264	100		
260	27.0	22.6	33.8
265	88.6	88.1	132.1

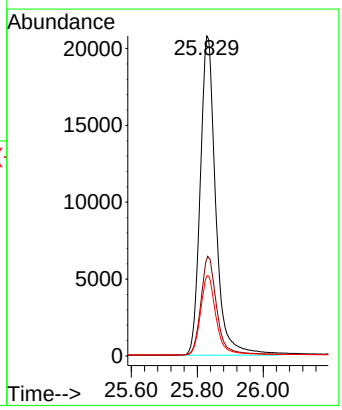


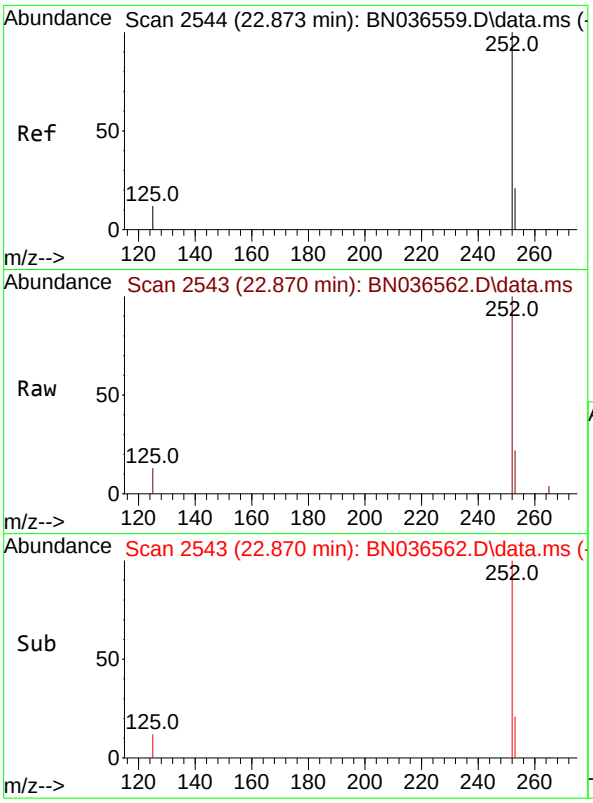


#36
Indeno(1,2,3-cd)pyrene
Concen: 3.754 ng
RT: 25.829 min Scan# 3555
Delta R.T. -0.009 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:276 Resp: 67767

Ion	Ratio	Lower	Upper
276	100		
138	31.3	23.4	35.2
277	24.8	20.0	30.0



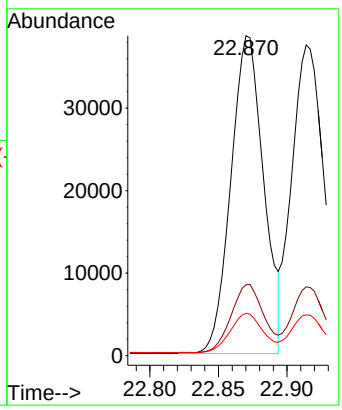


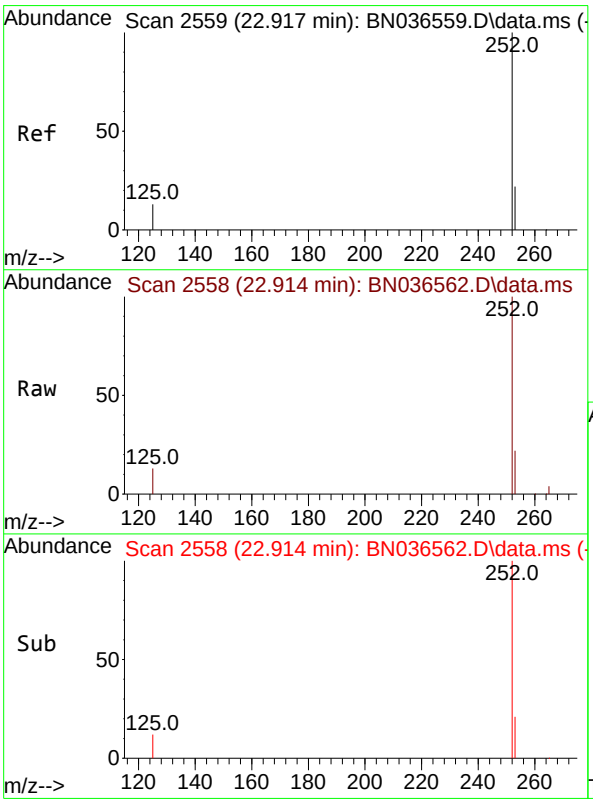
#37
Benzo(b)fluoranthene
Concen: 3.506 ng
RT: 22.870 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 63823

Ion	Ratio	Lower	Upper
252	100		
253	22.2	23.9	35.9#
125	13.3	17.4	26.2#

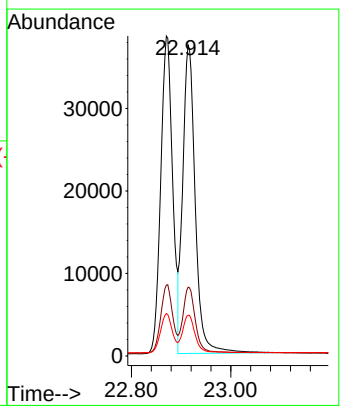


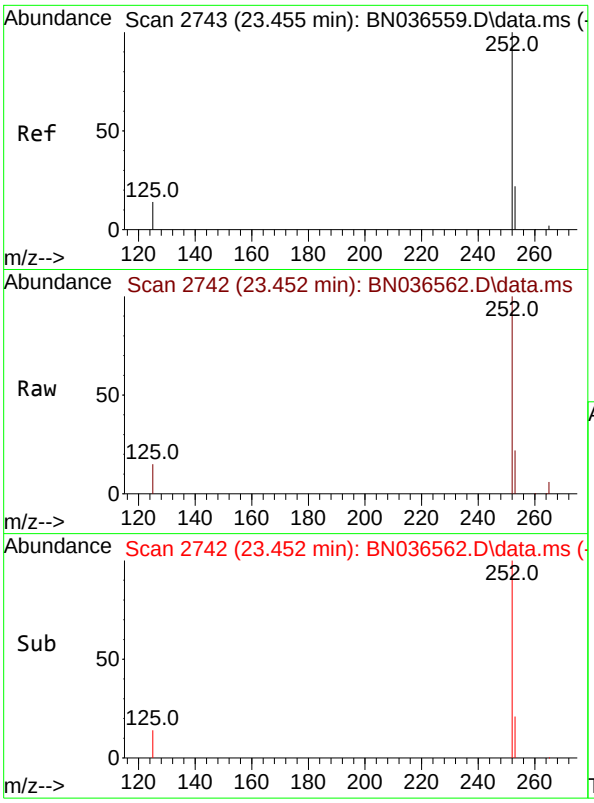


#38
Benzo(k)fluoranthene
Concen: 3.425 ng
RT: 22.914 min Scan# 2558
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:252 Resp: 65410

Ion	Ratio	Lower	Upper
252	100		
253	22.1	24.6	36.8#
125	13.2	17.8	26.8#



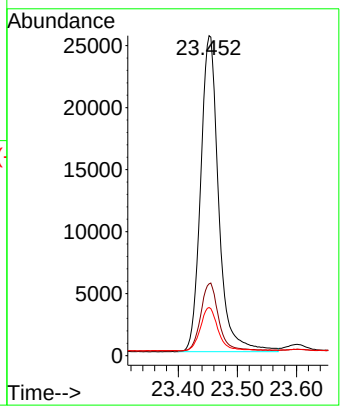


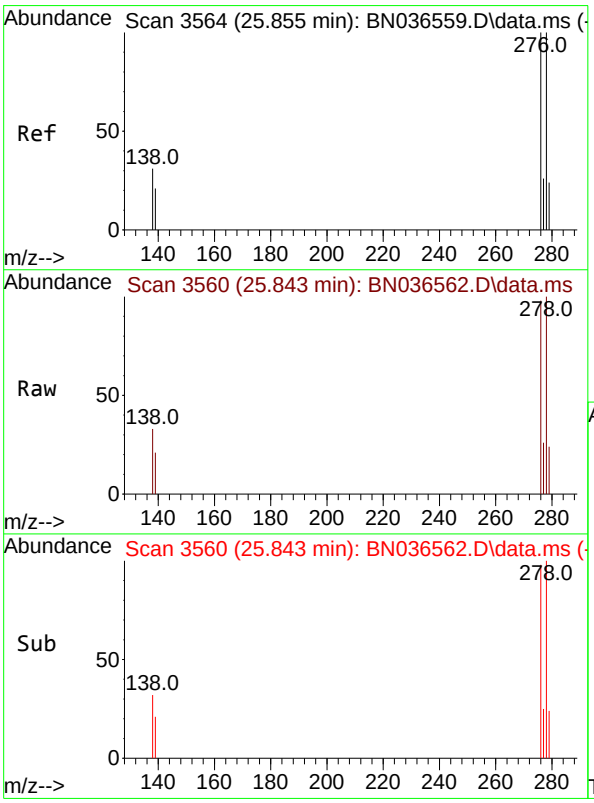
#39
Benzo(a)pyrene
Concen: 3.523 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 54009

Ion	Ratio	Lower	Upper
252	100		
253	22.4	27.8	41.8#
125	15.1	22.7	34.1#

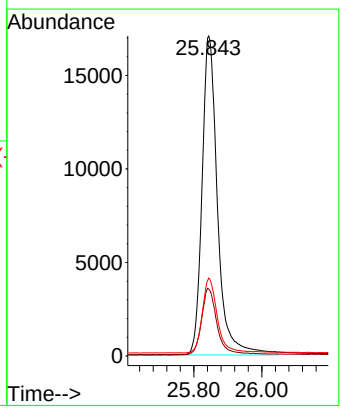


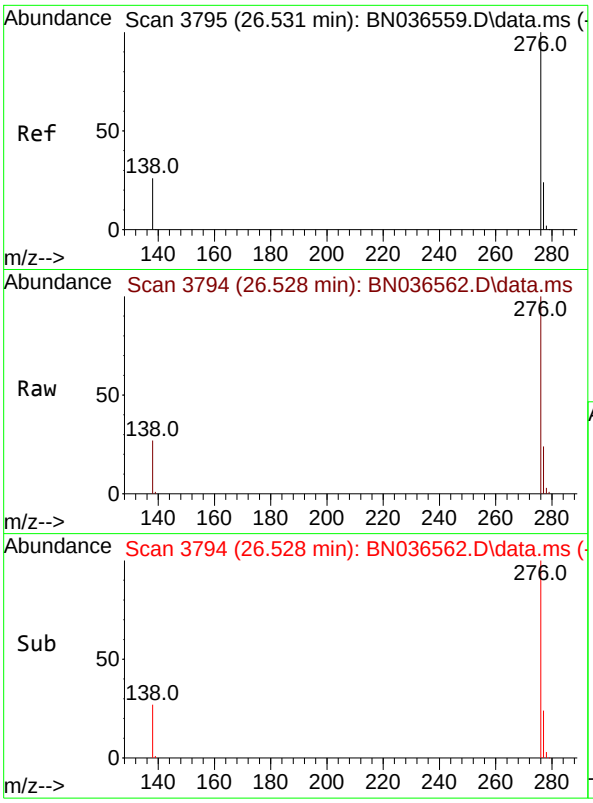


#40
Dibenzo(a,h)anthracene
Concen: 3.846 ng
RT: 25.843 min Scan# 3560
Delta R.T. -0.012 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Tgt Ion:278 Resp: 54058

Ion	Ratio	Lower	Upper
278	100		
139	20.9	20.8	31.2
279	24.4	28.8	43.2#



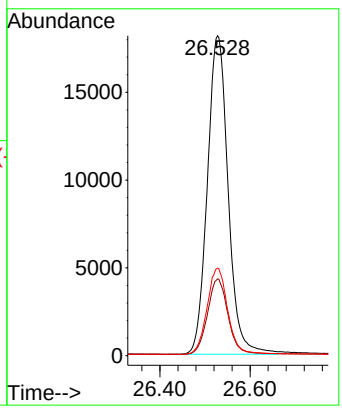


#41
Benzo(g,h,i)perylene
Concen: 3.606 ng
RT: 26.528 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN036562.D
Acq: 10 Mar 2025 14:43

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:276 Resp: 57986

Ion	Ratio	Lower	Upper
276	100		
277	24.0	22.2	33.4
138	27.4	24.1	36.1



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036563.D
Acq On : 10 Mar 2025 15:19
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Mar 10 16:03:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

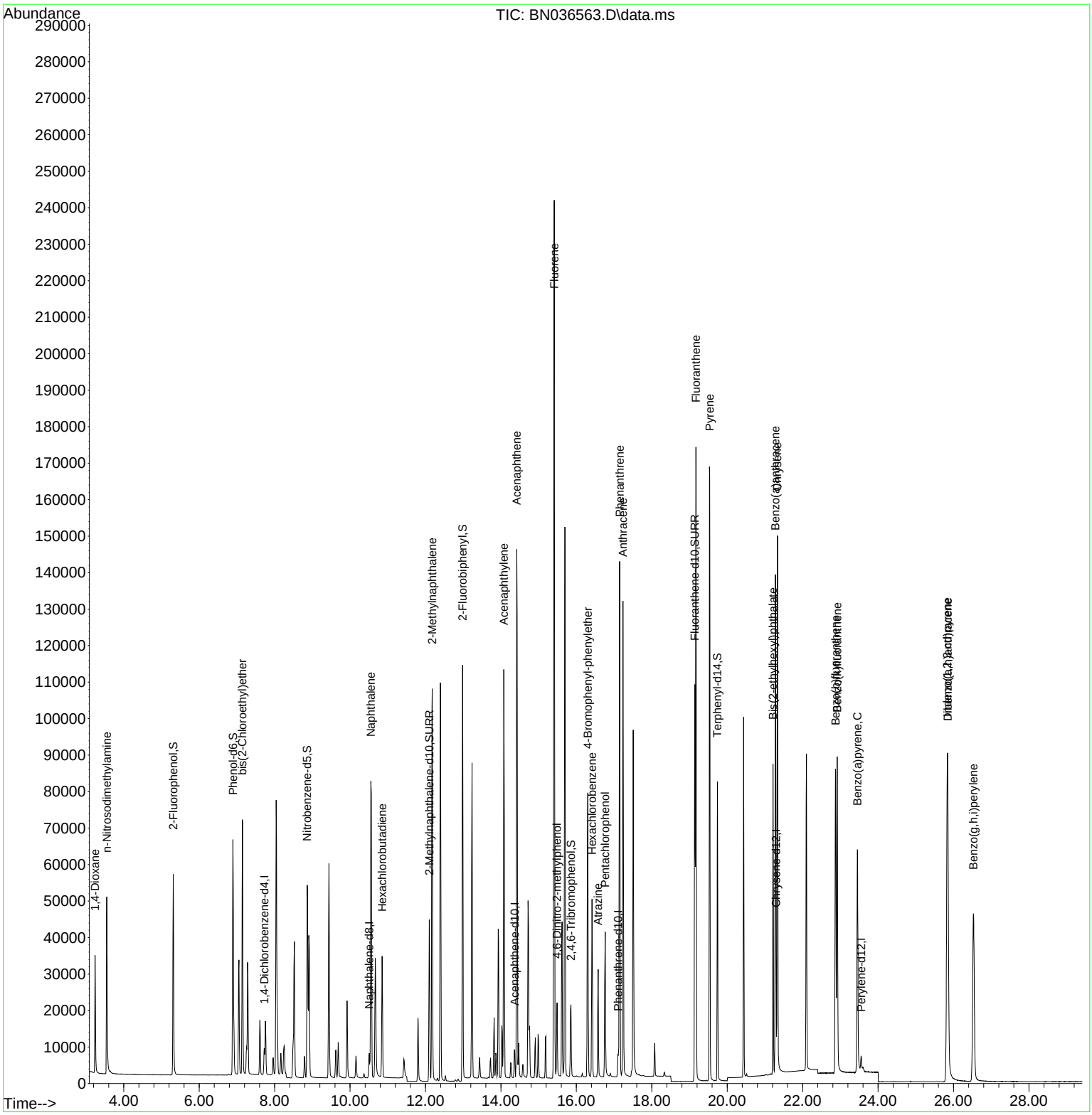
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	3261	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	7995	0.400	ng	#	0.00
13) Acenaphthene-d10	14.366	164	4664	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	9061	0.400	ng		0.00
29) Chrysene-d12	21.295	240	6472	0.400	ng		0.00
35) Perylene-d12	23.551	264	5580	0.400	ng	#	0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	37154	4.889	ng		0.00
5) Phenol-d6	6.894	99	48085	5.122	ng		0.00
8) Nitrobenzene-d5	8.864	82	41042	4.719	ng		-0.01
11) 2-Methylnaphthalene-d10	12.101	152	58048	4.881	ng		-0.01
14) 2,4,6-Tribromophenol	15.858	330	10964	5.181	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	141052	5.199	ng		0.00
27) Fluoranthene-d10	19.141	212	113317	4.879	ng		0.00
31) Terphenyl-d14	19.740	244	74923	4.832	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	16253	4.492	ng		97
3) n-Nitrosodimethylamine	3.550	42	32163	4.395	ng	#	95
6) bis(2-Chloroethyl)ether	7.146	93	44986	4.636	ng		99
9) Naphthalene	10.551	128	109289	4.647	ng		97
10) Hexachlorobutadiene	10.850	225	25105	4.535	ng	#	99
12) 2-Methylnaphthalene	12.177	142	73010	4.879	ng		98
16) Acenaphthylene	14.077	152	112792	5.125	ng		99
17) Acenaphthene	14.420	154	72446	5.028	ng		96
18) Fluorene	15.414	166	96215	4.937	ng		97
20) 4,6-Dinitro-2-methylph...	15.489	198	12627	4.968	ng	#	56
21) 4-Bromophenyl-phenylether	16.304	248	28657	5.048	ng	#	81
22) Hexachlorobenzene	16.416	284	32686	4.770	ng		99
23) Atrazine	16.577	200	22705	4.988	ng	#	90
24) Pentachlorophenol	16.764	266	17612	5.634	ng		99
25) Phenanthrene	17.148	178	135347	4.979	ng		100
26) Anthracene	17.235	178	125954	5.135	ng		99
28) Fluoranthene	19.169	202	149107	4.883	ng		99
30) Pyrene	19.536	202	148584	4.695	ng		100
32) Benzo(a)anthracene	21.277	228	114481	5.087	ng		98
33) Chrysene	21.331	228	117149	4.764	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	70345	4.390	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	109561	5.440	ng		98
37) Benzo(b)fluoranthene	22.873	252	104498	5.146	ng	#	84
38) Benzo(k)fluoranthene	22.917	252	106995	5.022	ng	#	82
39) Benzo(a)pyrene	23.452	252	88413	5.170	ng	#	76
40) Dibenzo(a,h)anthracene	25.846	278	87308	5.568	ng	#	84
41) Benzo(g,h,i)perylene	26.531	276	93067	5.189	ng		93

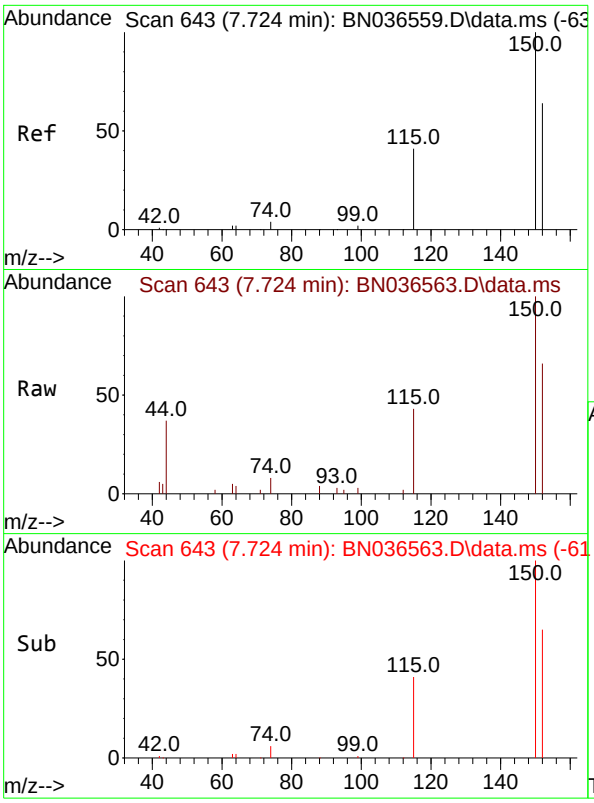
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036563.D
Acq On : 10 Mar 2025 15:19
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Mar 10 16:03:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



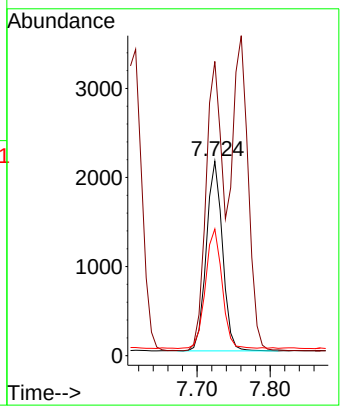


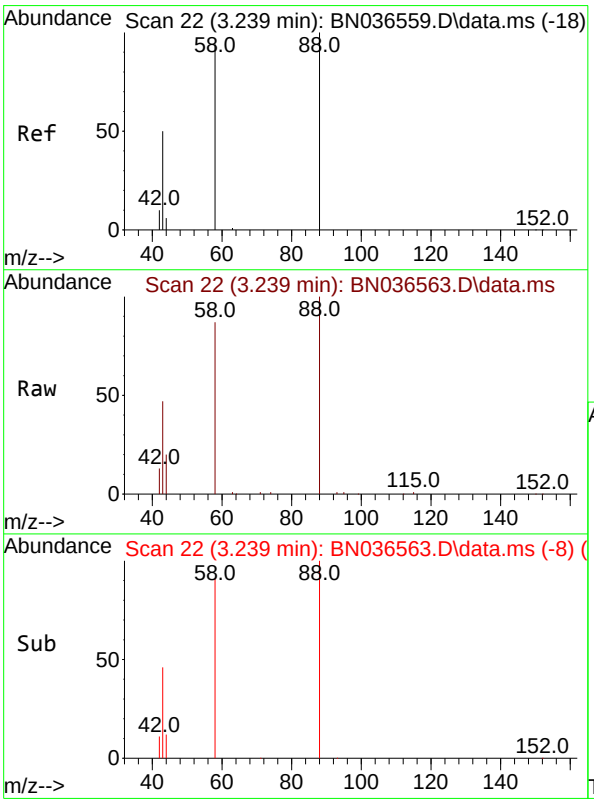
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 3261

Ion	Ratio	Lower	Upper
152	100		
150	151.3	123.7	185.5
115	65.2	54.3	81.5

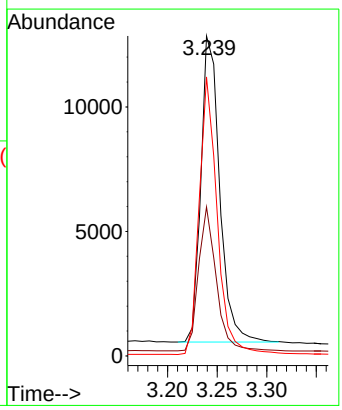


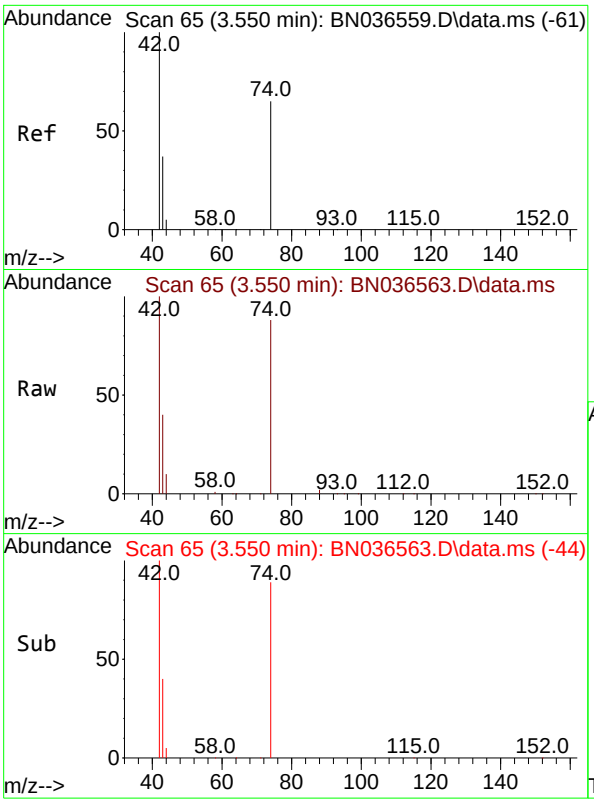


#2
1,4-Dioxane
Concen: 4.492 ng
RT: 3.239 min Scan# 22
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion: 88 Resp: 16253

Ion	Ratio	Lower	Upper
88	100		
43	44.3	37.8	56.8
58	86.4	67.4	101.2



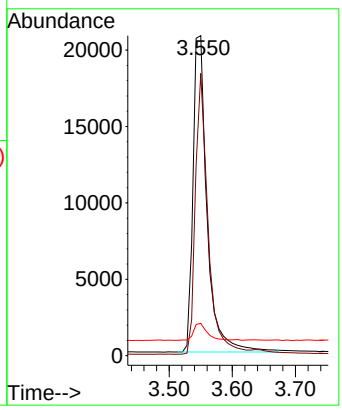


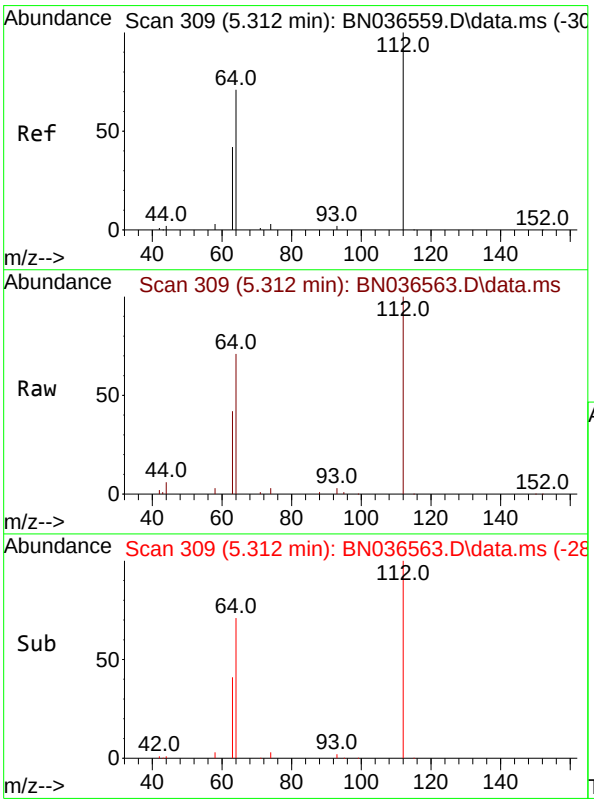
#3
n-Nitrosodimethylamine
Concen: 4.395 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 32163

Ion	Ratio	Lower	Upper
42	100		
74	79.9	60.6	90.8
44	5.3	6.3	9.5#

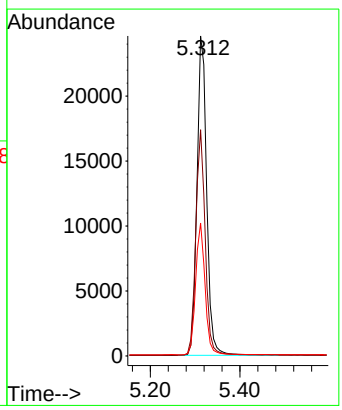


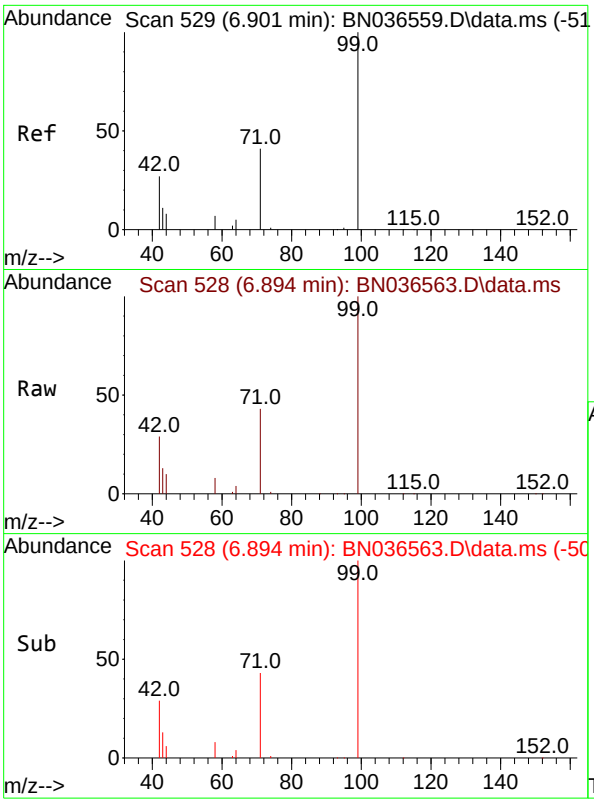


#4
2-Fluorophenol
Concen: 4.889 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:112 Resp: 37154

Ion	Ratio	Lower	Upper
112	100		
64	68.5	53.1	79.7
63	40.1	31.8	47.8



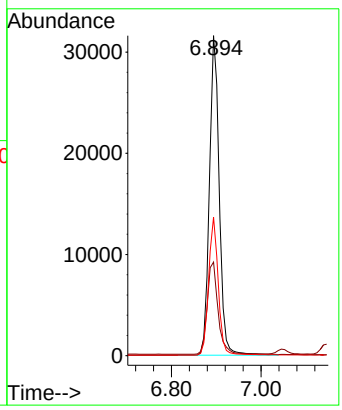


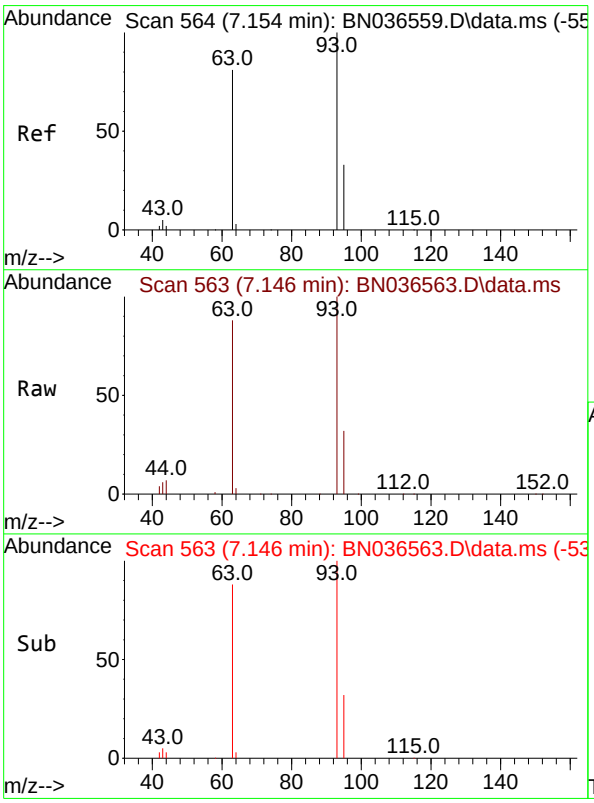
#5
Phenol-d6
Concen: 5.122 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 99 Resp: 48085

Ion	Ratio	Lower	Upper
99	100		
42	31.8	26.5	39.7
71	42.6	34.1	51.1

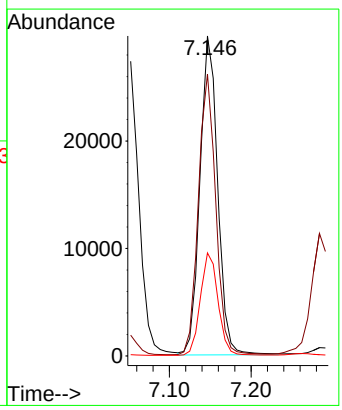


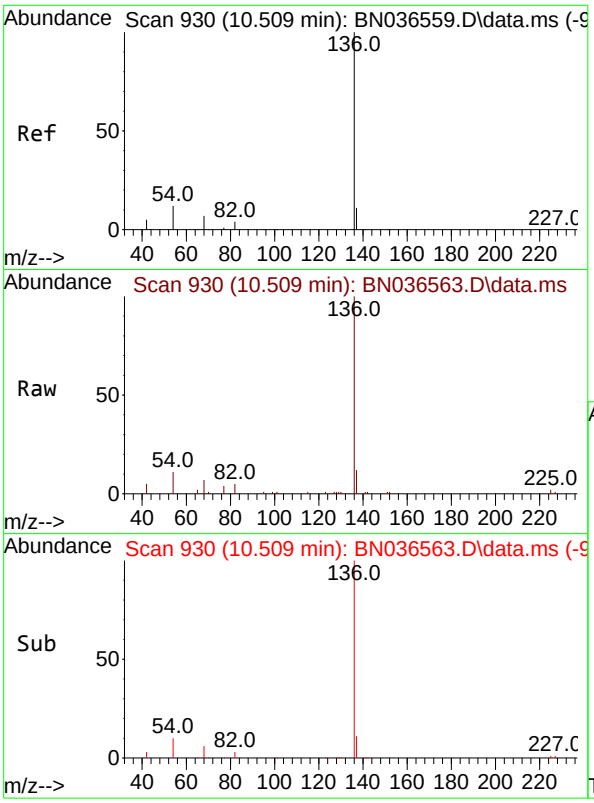


#6
bis(2-Chloroethyl)ether
Concen: 4.636 ng
RT: 7.146 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion: 93 Resp: 44986

Ion	Ratio	Lower	Upper
93	100		
63	85.8	67.7	101.5
95	32.0	25.6	38.4



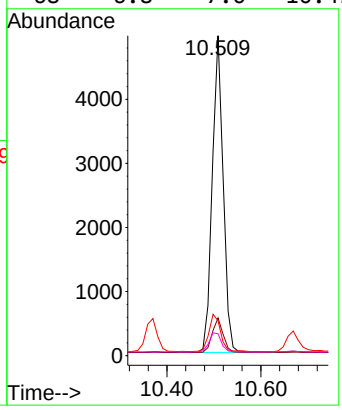


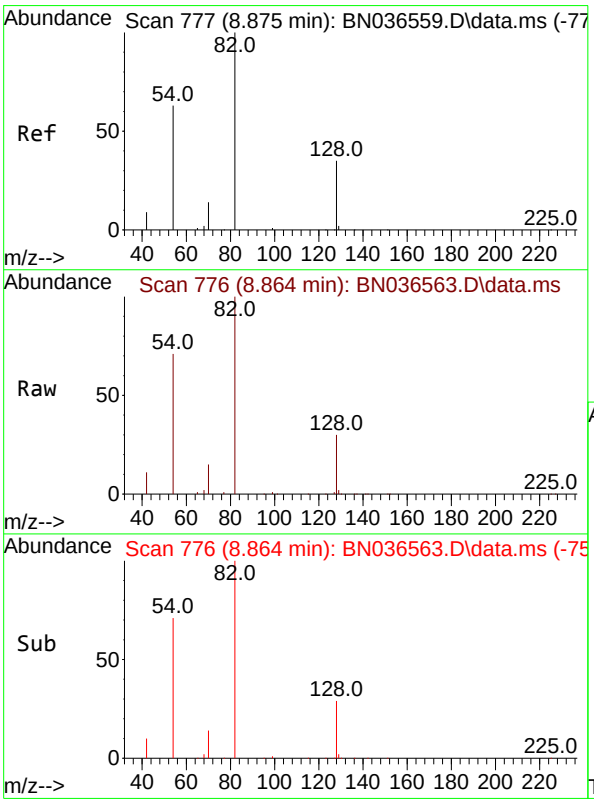
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:136 Resp: 7995

Ion	Ratio	Lower	Upper
136	100		
137	11.8	10.3	15.5
54	10.9	11.5	17.3#
68	6.8	7.0	10.4#

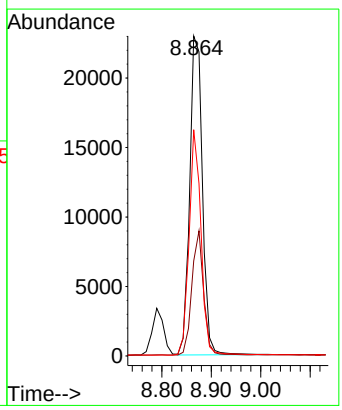


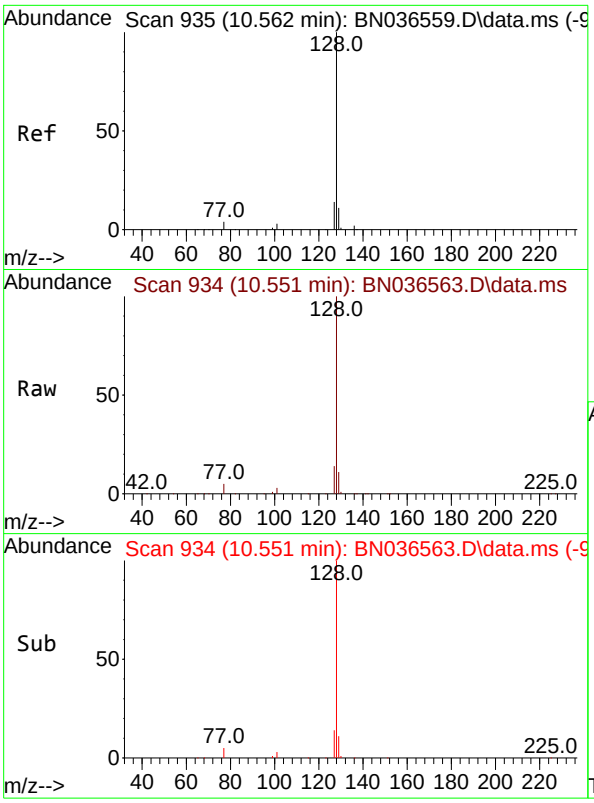


#8
Nitrobenzene-d5
Concen: 4.719 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.011 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion: 82 Resp: 41042

Ion	Ratio	Lower	Upper
82	100		
128	29.7	30.6	45.8#
54	70.7	52.2	78.4



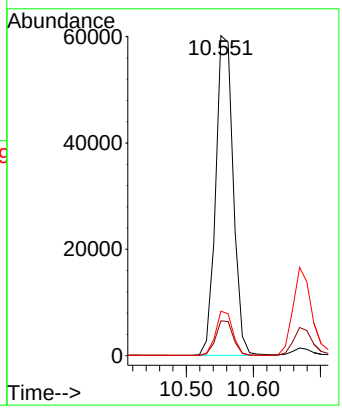


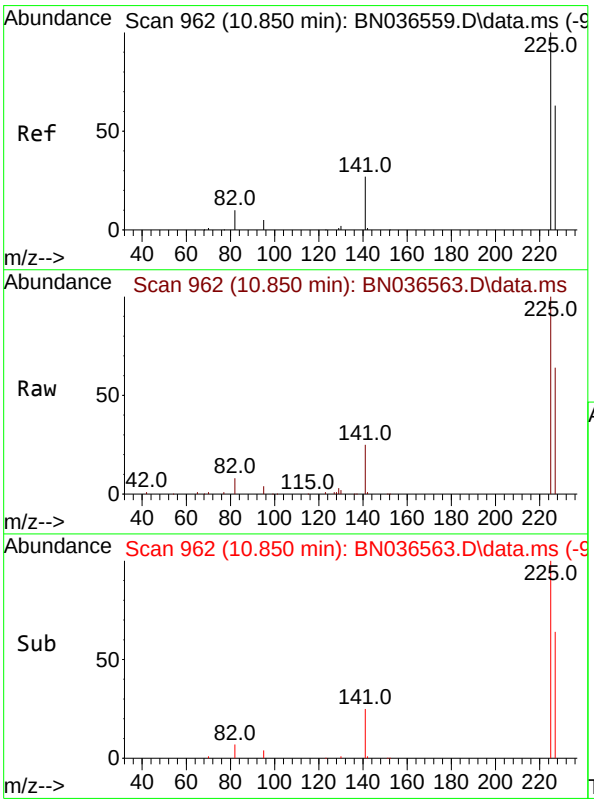
#9
Naphthalene
Concen: 4.647 ng
RT: 10.551 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 109289

Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.8	14.6
127	13.9	11.8	17.8

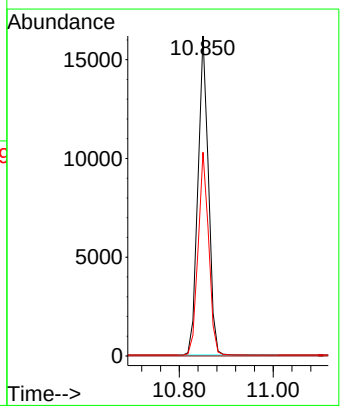


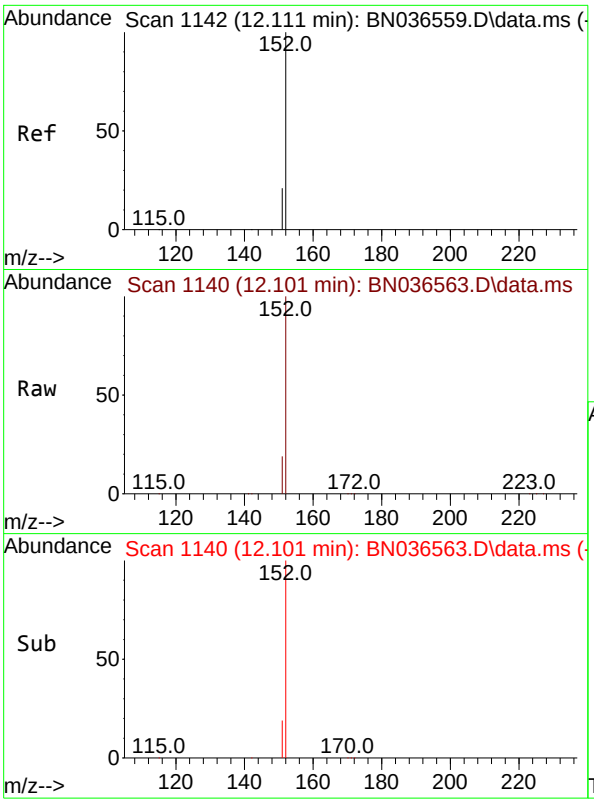


#10
Hexachlorobutadiene
Concen: 4.535 ng
RT: 10.850 min Scan# 962
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:225 Resp: 25105

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	51.8	77.8



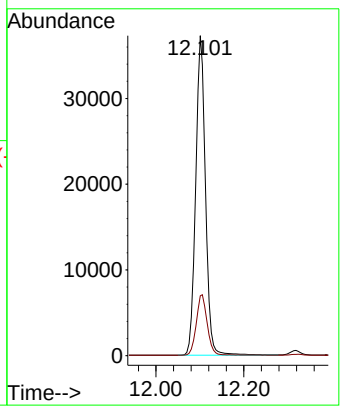


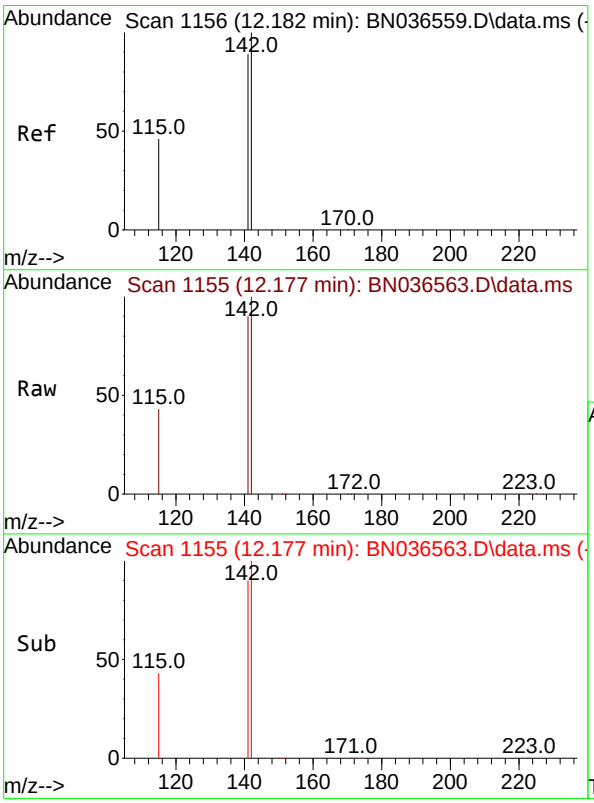
#11
2-Methylnaphthalene-d10
Concen: 4.881 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 58048

Ion	Ratio	Lower	Upper
152	100		
151	21.2	17.0	25.6

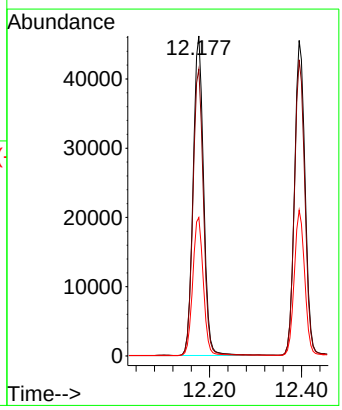


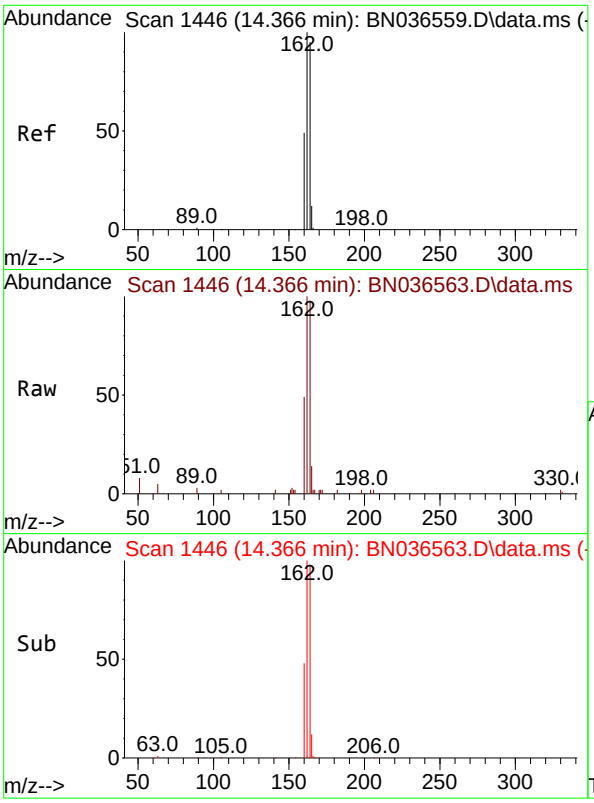


#12
2-Methylnaphthalene
Concen: 4.879 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:142 Resp: 73010

Ion	Ratio	Lower	Upper
142	100		
141	89.6	71.7	107.5
115	43.2	38.3	57.5



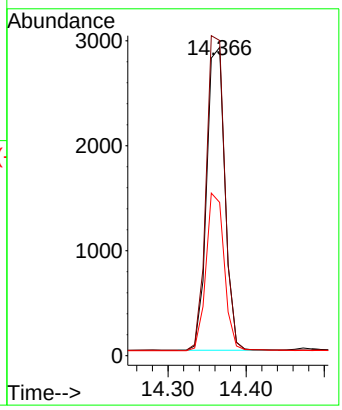


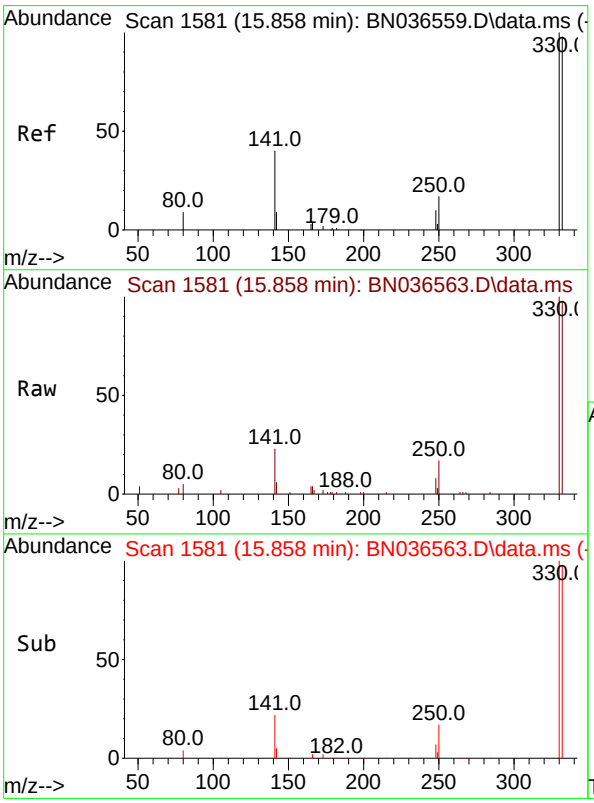
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:164 Resp: 4664

Ion	Ratio	Lower	Upper
164	100		
162	102.2	84.2	126.2
160	49.7	42.2	63.2

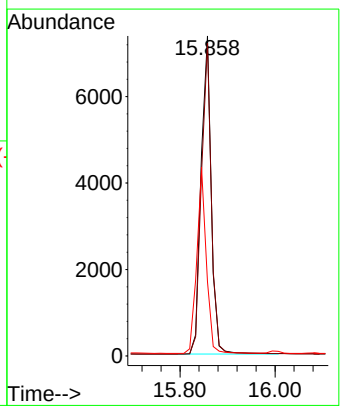


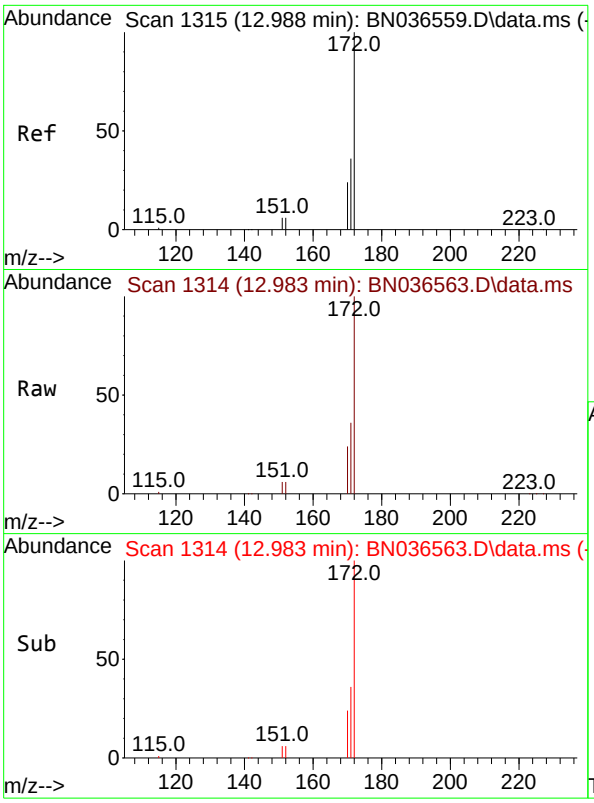


#14
2,4,6-Tribromophenol
Concen: 5.181 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:330 Resp: 10964

Ion	Ratio	Lower	Upper
330	100		
332	95.9	75.2	112.8
141	54.7	43.4	65.2



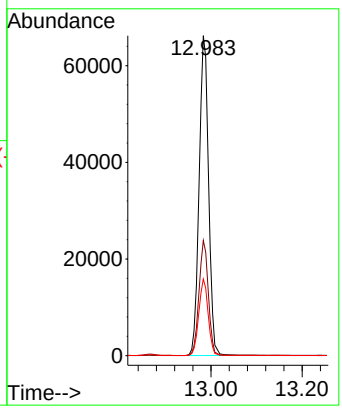


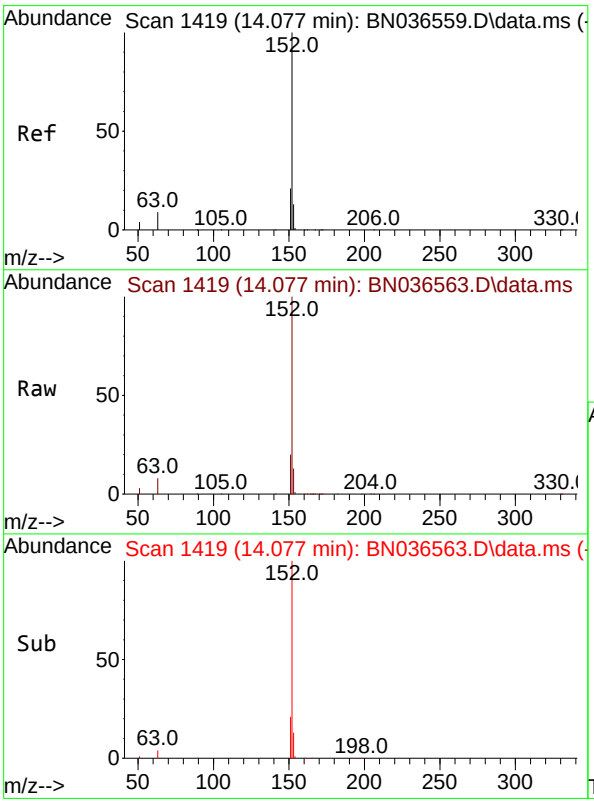
#15
2-Fluorobiphenyl
Concen: 5.199 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:172 Resp: 141052

Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	24.0	20.2	30.4

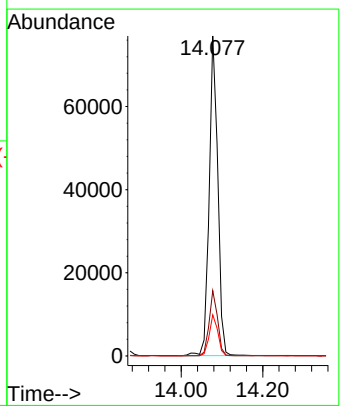


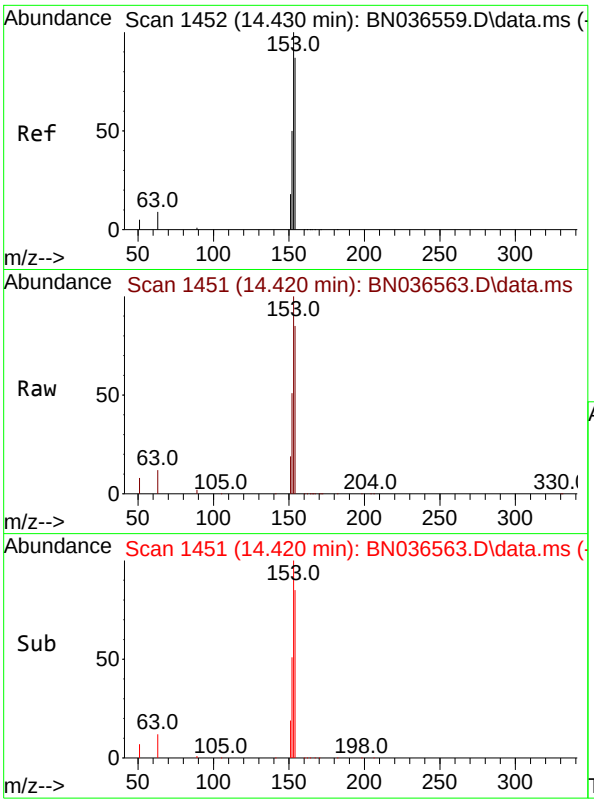


#16
Acenaphthylene
Concen: 5.125 ng
RT: 14.077 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:152 Resp: 112792

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.2	24.4
153	12.8	10.6	15.8



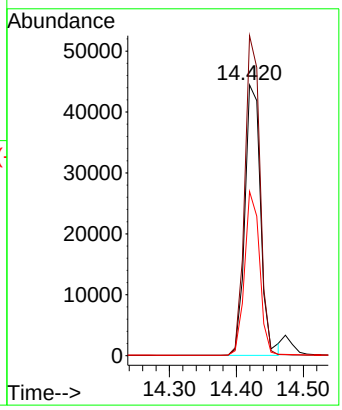


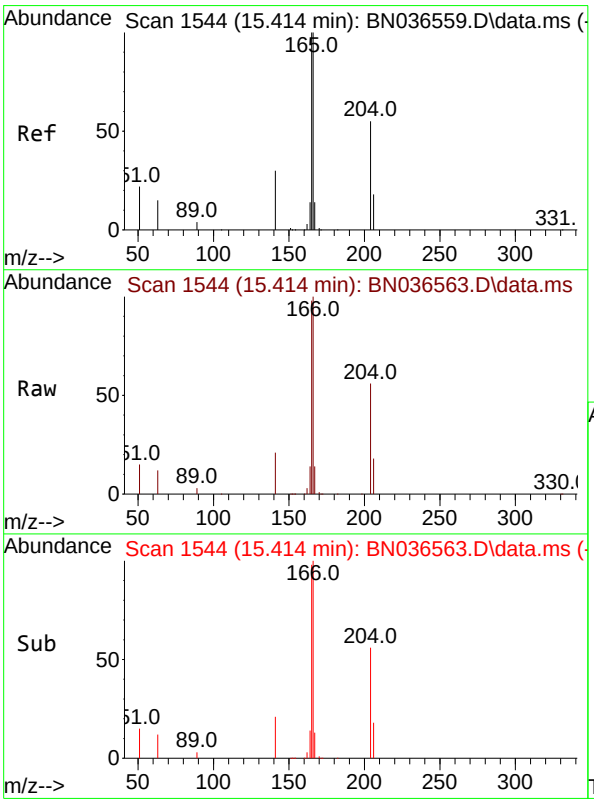
#17
Acenaphthene
Concen: 5.028 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:154 Resp: 72446

Ion	Ratio	Lower	Upper
154	100		
153	114.1	94.1	141.1
152	57.7	49.8	74.6

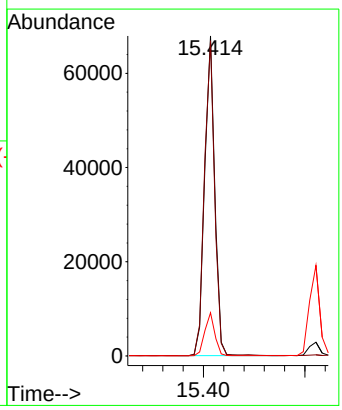


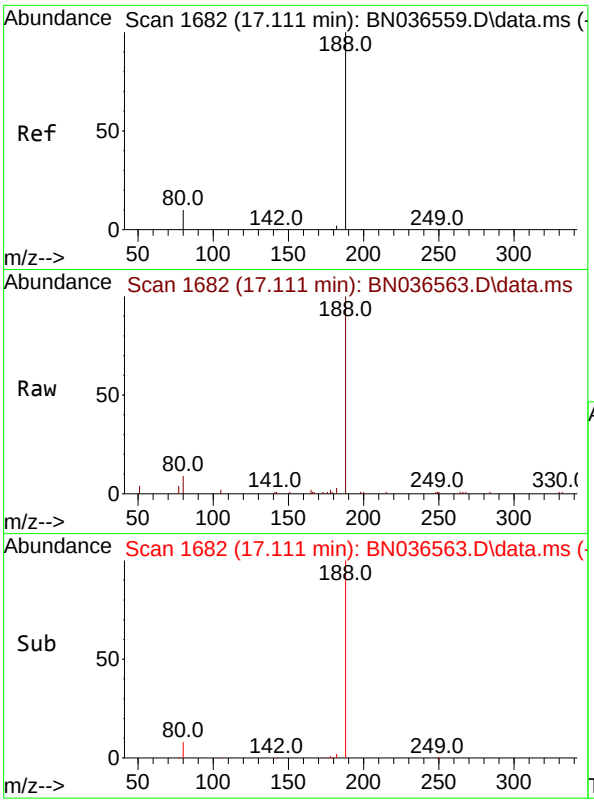


#18
Fluorene
Concen: 4.937 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:166 Resp: 96215

Ion	Ratio	Lower	Upper
166	100		
165	96.5	79.8	119.8
167	13.0	10.6	15.8



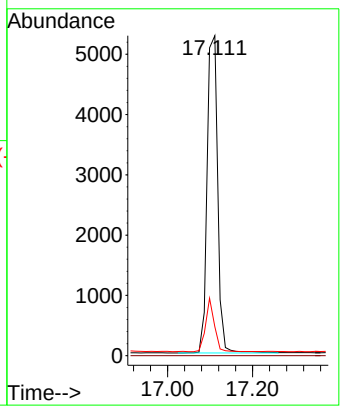


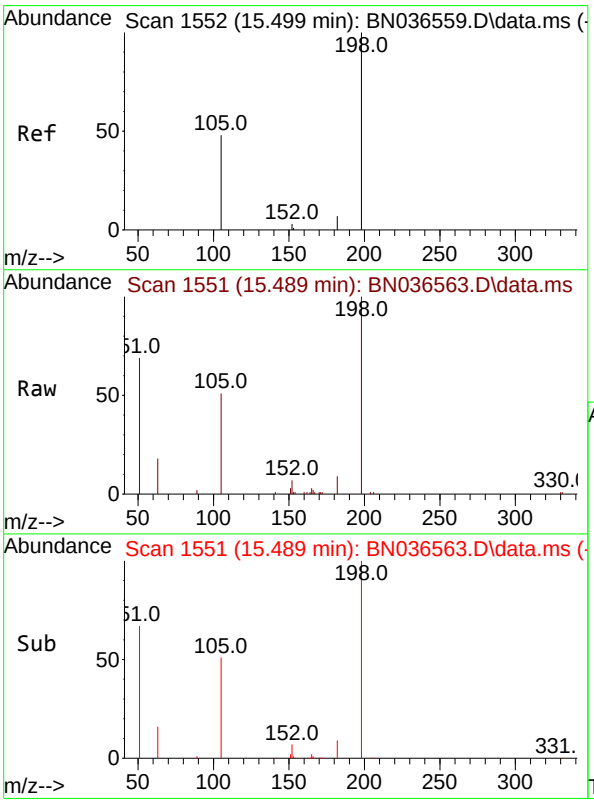
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:188 Resp: 9061

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.1	8.8	13.2

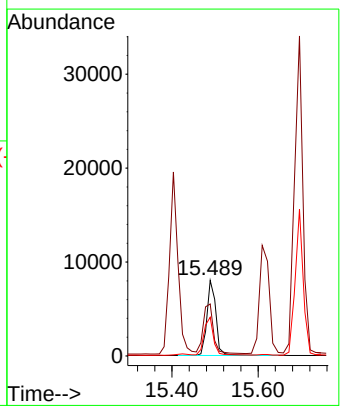


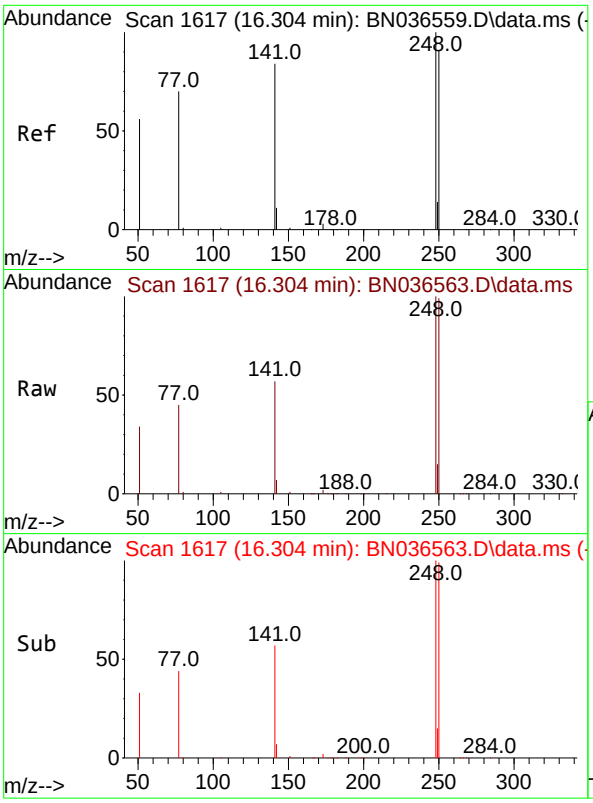


#20
4,6-Dinitro-2-methylphenol
Concen: 4.968 ng
RT: 15.489 min Scan# 1551
Delta R.T. -0.010 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:198 Resp: 12627

Ion	Ratio	Lower	Upper
198	100		
51	68.9	107.9	161.9#
105	51.3	56.2	84.2#



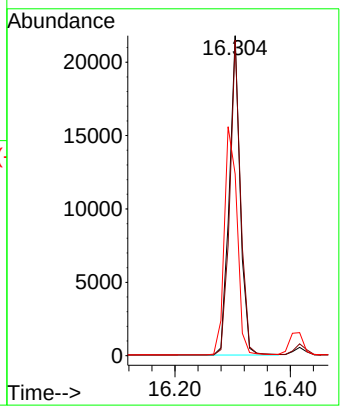


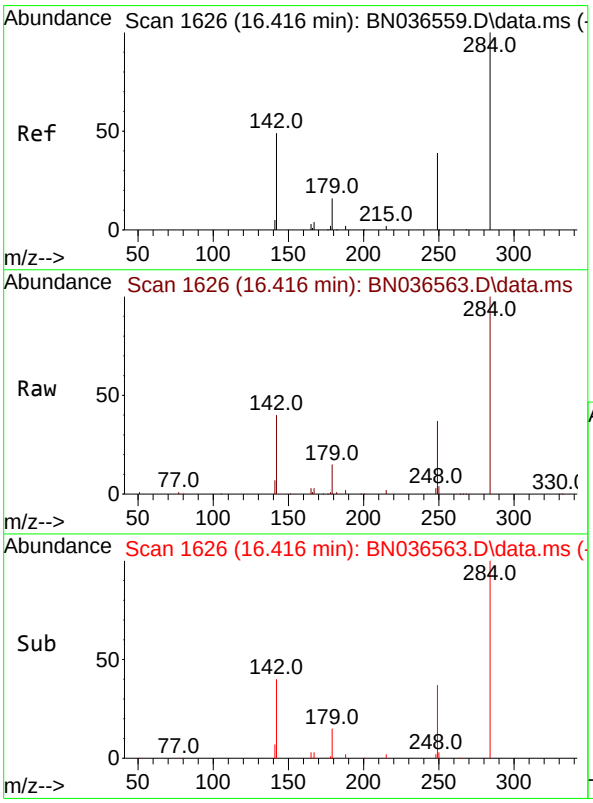
#21
4-Bromophenyl-phenylether
Concen: 5.048 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:248 Resp: 28657

Ion	Ratio	Lower	Upper
248	100		
250	98.6	73.0	109.6
141	56.7	68.6	103.0#

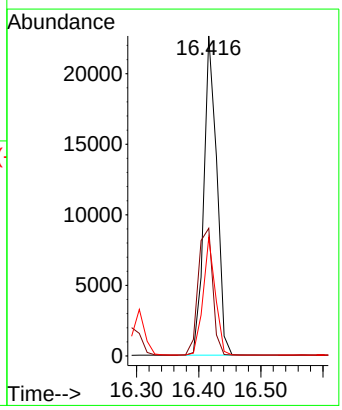


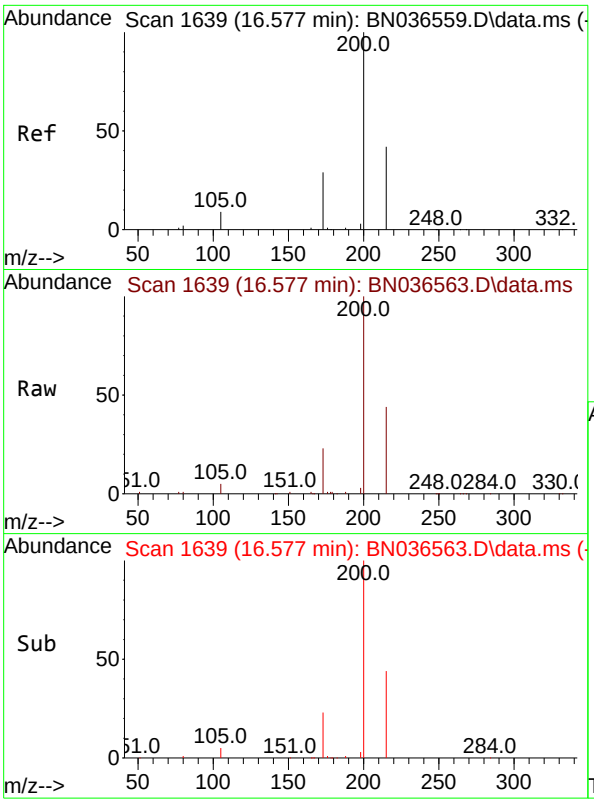


#22
Hexachlorobenzene
Concen: 4.770 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:284 Resp: 32686

Ion	Ratio	Lower	Upper
284	100		
142	45.1	37.0	55.4
249	35.1	28.1	42.1



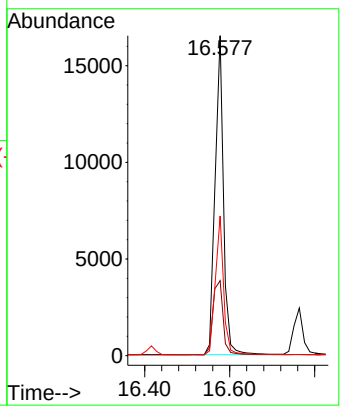


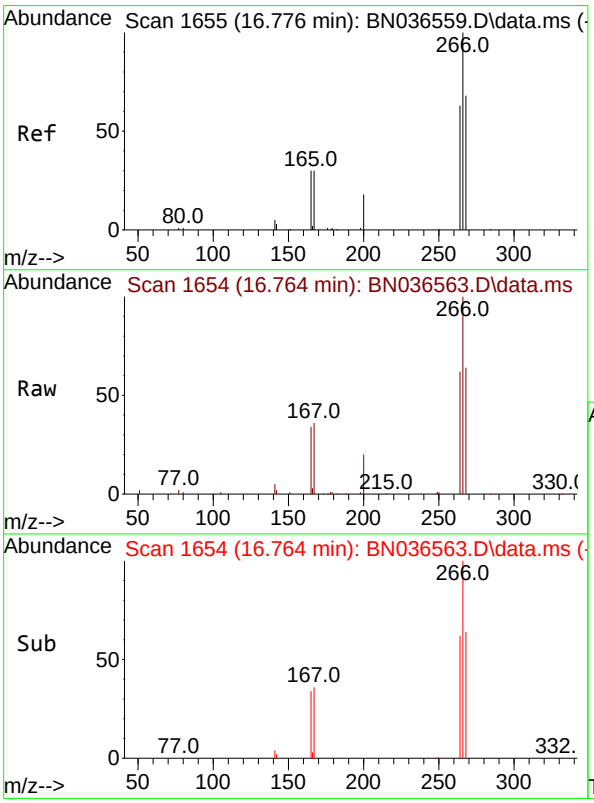
#23
Atrazine
Concen: 4.988 ng
RT: 16.577 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:200 Resp: 22705

Ion	Ratio	Lower	Upper
200	100		
173	23.4	27.3	40.9#
215	43.7	36.8	55.2

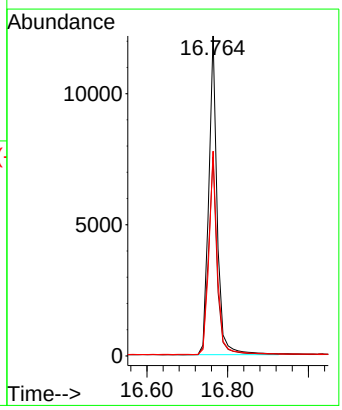


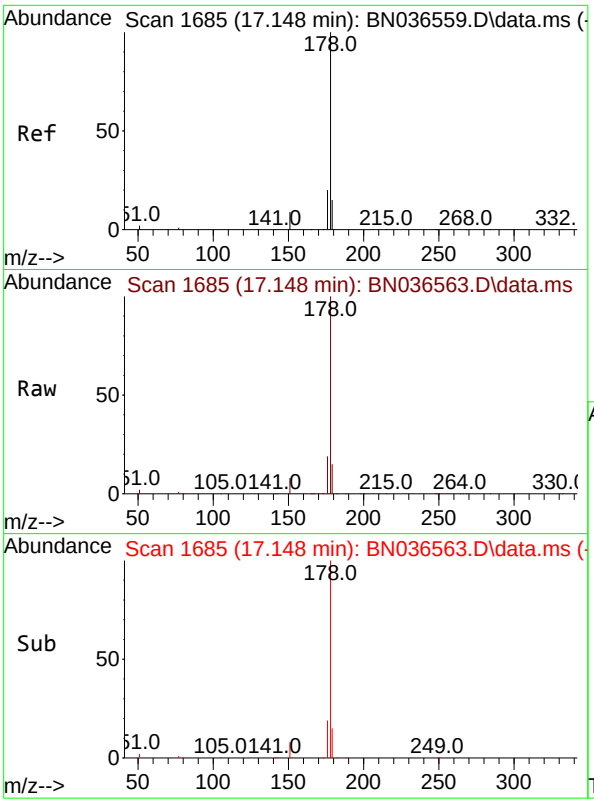


#24
Pentachlorophenol
Concen: 5.634 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:266 Resp: 17612

Ion	Ratio	Lower	Upper
266	100		
264	63.1	49.6	74.4
268	63.7	50.9	76.3



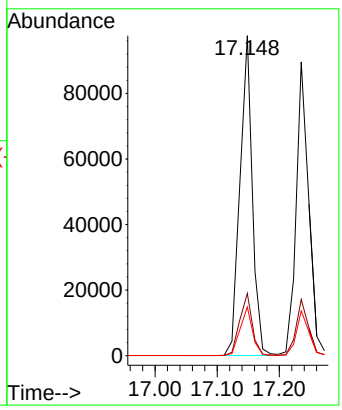


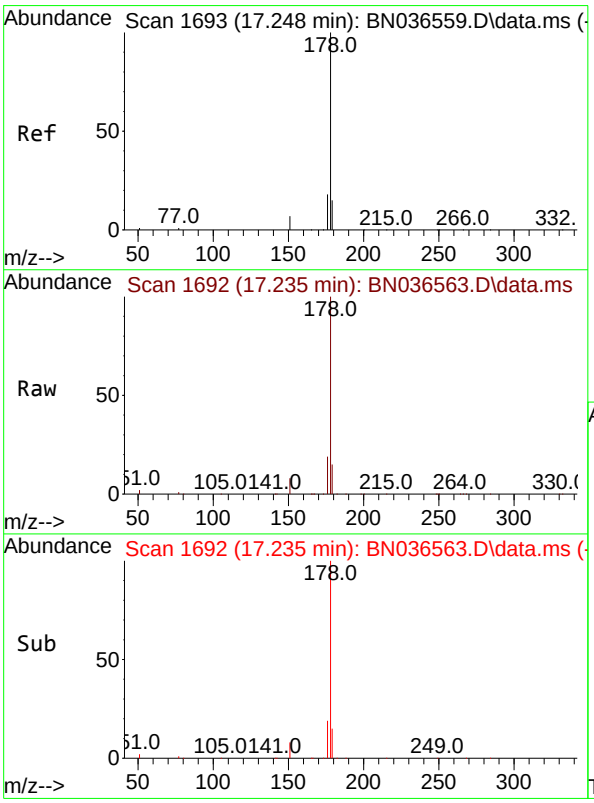
#25
Phenanthrene
Concen: 4.979 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:178 Resp: 135347

Ion	Ratio	Lower	Upper
178	100		
176	19.7	15.9	23.9
179	15.2	12.2	18.4

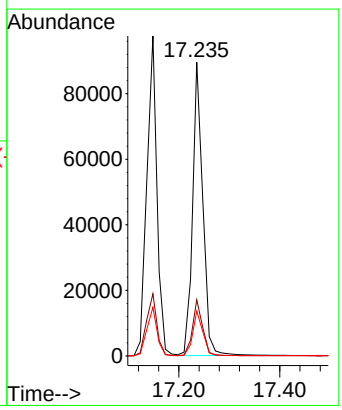


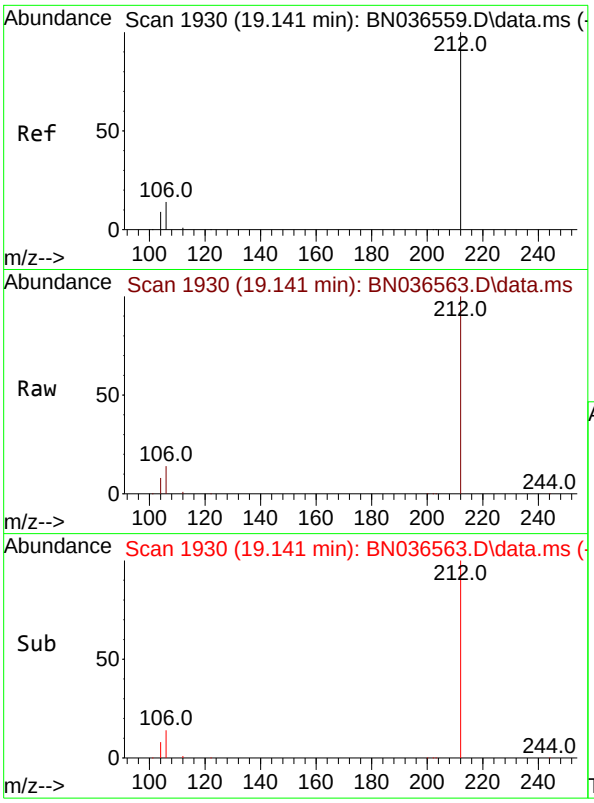


#26
Anthracene
Concen: 5.135 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:178 Resp: 125954

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.2
179	15.2	12.6	18.8



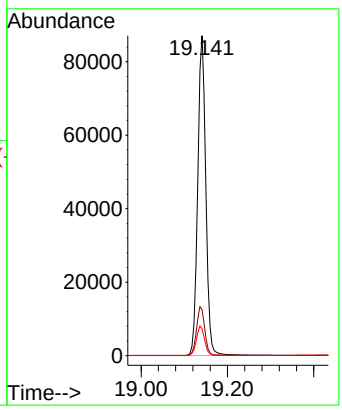


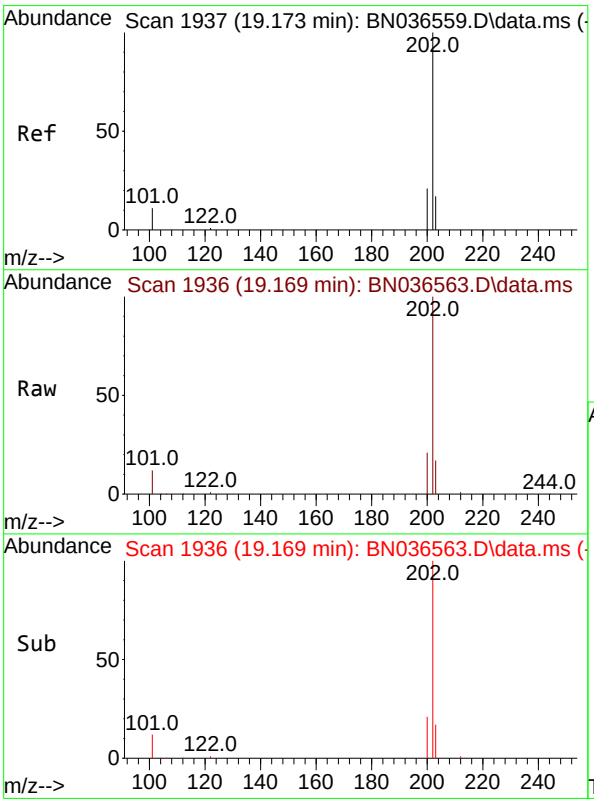
#27
Fluoranthene-d10
Concen: 4.879 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:212 Resp: 113317

Ion	Ratio	Lower	Upper
212	100		
106	15.5	11.8	17.6
104	9.2	7.3	10.9

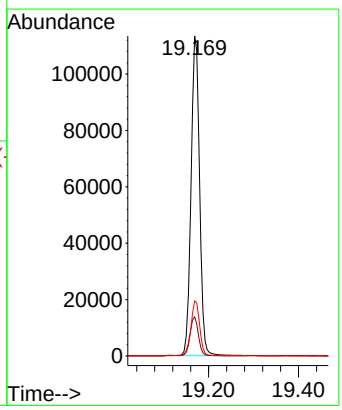


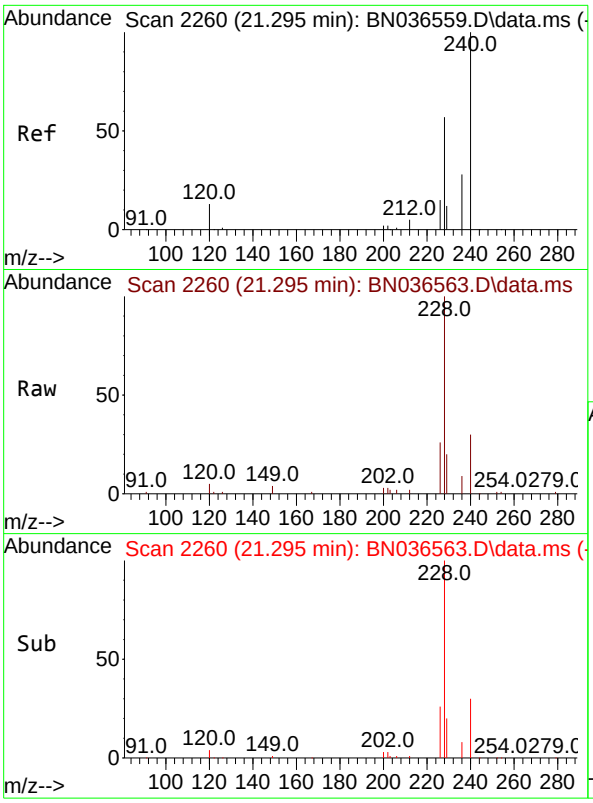


#28
Fluoranthene
Concen: 4.883 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:202 Resp: 149107

Ion	Ratio	Lower	Upper
202	100		
101	12.3	9.4	14.0
203	17.3	13.5	20.3



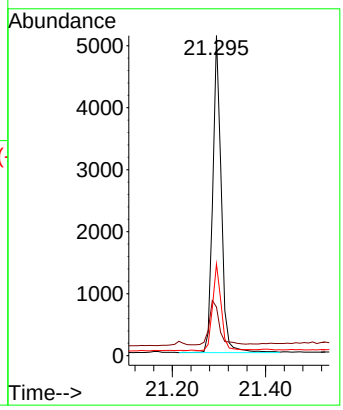


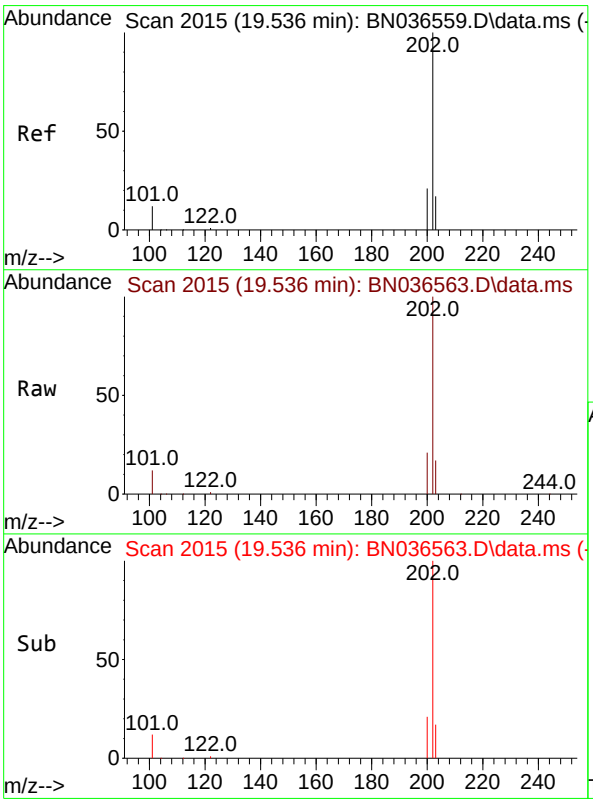
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:240 Resp: 6472

Ion	Ratio	Lower	Upper
240	100		
120	15.2	14.6	22.0
236	28.7	24.1	36.1

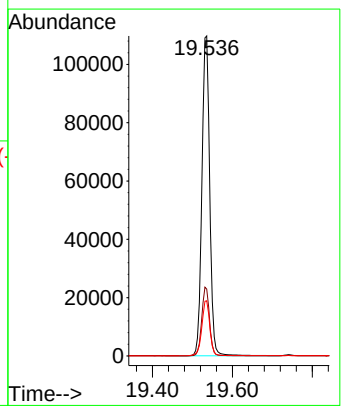


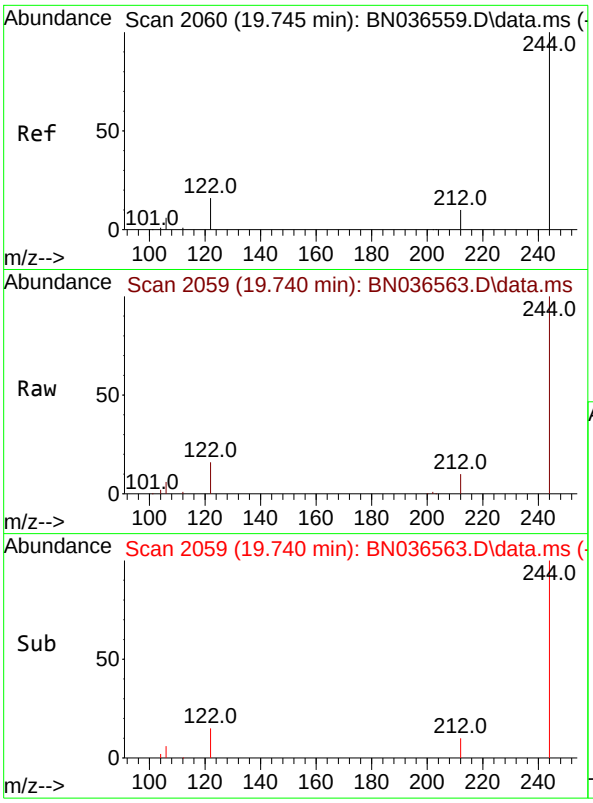


#30
Pyrene
Concen: 4.695 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:202 Resp: 148584

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.7	14.1	21.1



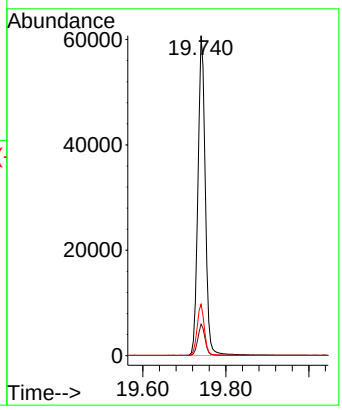


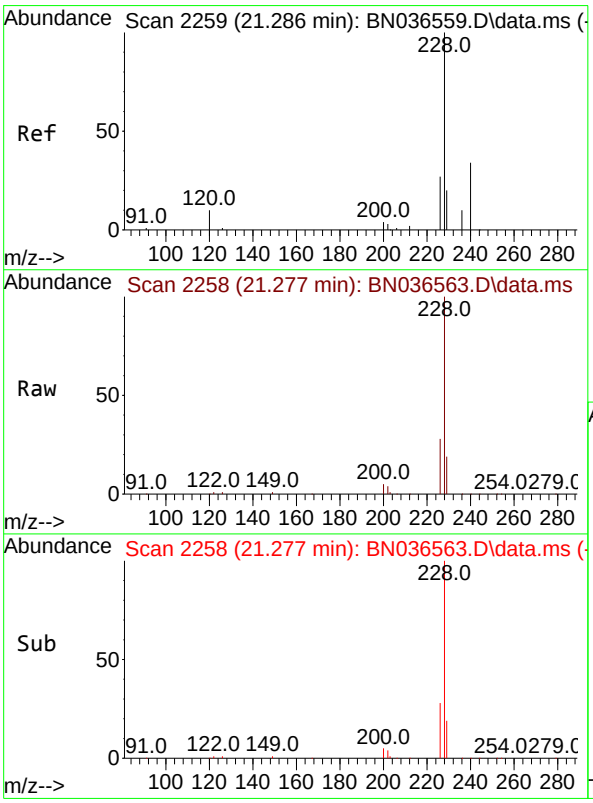
#31
Terphenyl-d14
Concen: 4.832 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:244 Resp: 74923

Ion	Ratio	Lower	Upper
244	100		
212	9.9	9.6	14.4
122	16.1	13.9	20.9

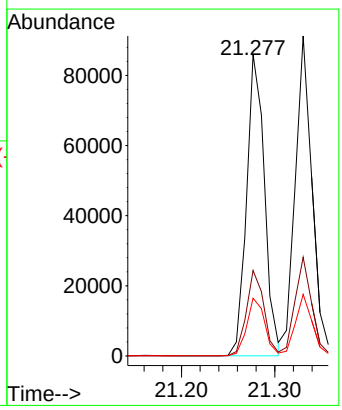


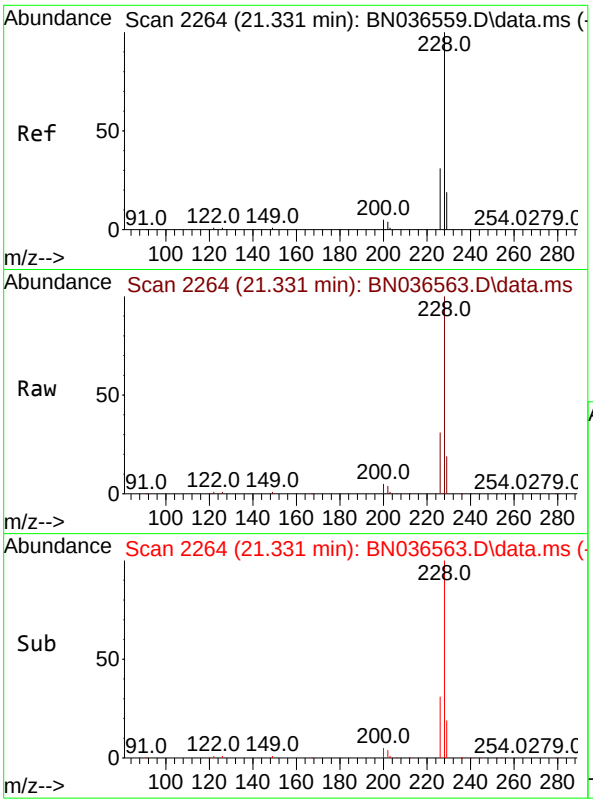


#32
Benzo(a)anthracene
Concen: 5.087 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:228 Resp: 114481

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.5	33.7
229	19.2	16.6	25.0



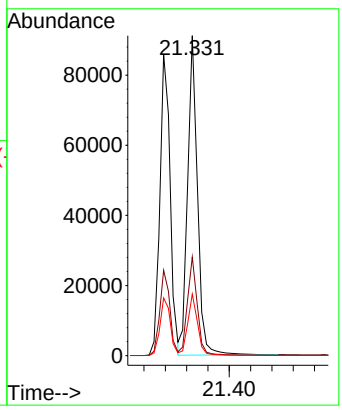


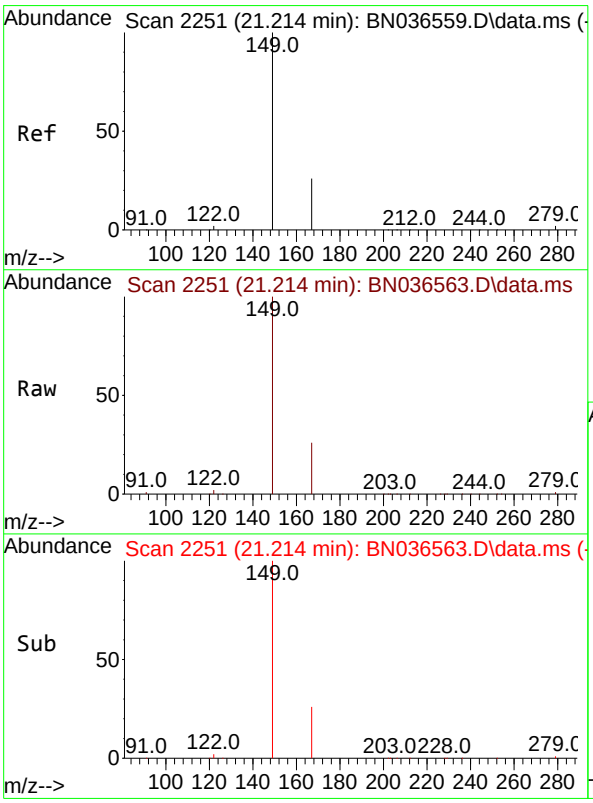
#33
Chrysene
Concen: 4.764 ng
RT: 21.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 117149

Ion	Ratio	Lower	Upper
228	100		
226	30.9	25.3	37.9
229	19.3	15.8	23.8

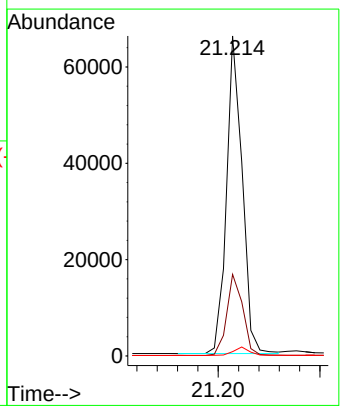


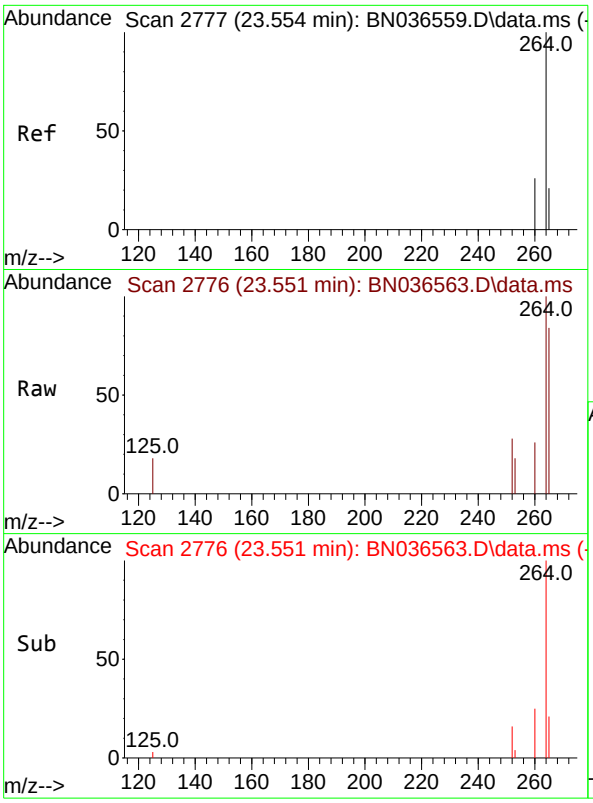


#34
Bis(2-ethylhexyl)phthalate
Concen: 4.390 ng
RT: 21.214 min Scan# 2251
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:149 Resp: 70345

Ion	Ratio	Lower	Upper
149	100		
167	26.2	20.7	31.1
279	2.6	3.6	5.4#



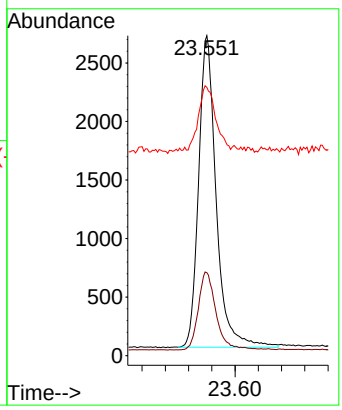


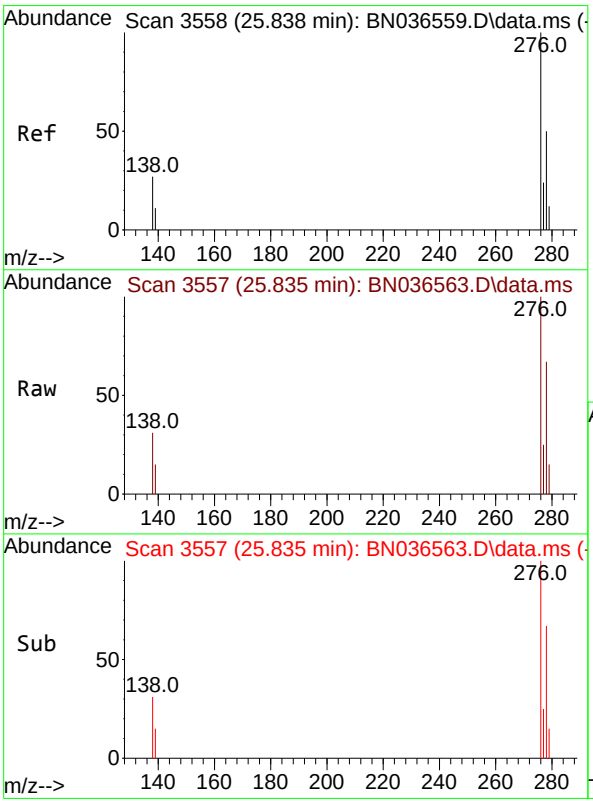
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:264 Resp: 5580

Ion	Ratio	Lower	Upper
264	100		
260	25.9	22.6	33.8
265	83.8	88.1	132.1#

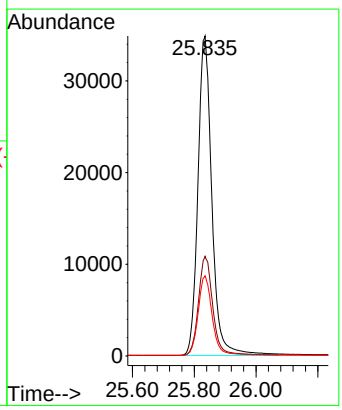


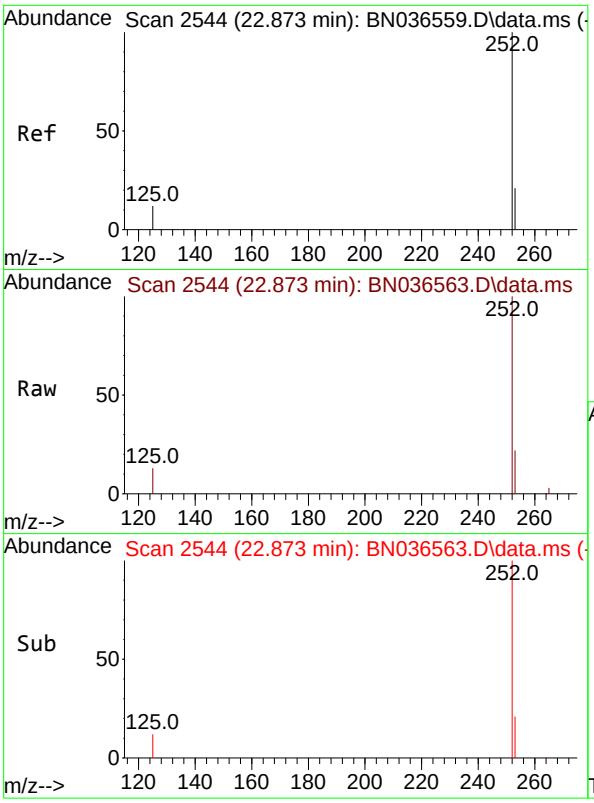


#36
Indeno(1,2,3-cd)pyrene
Concen: 5.440 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:276 Resp: 109561

Ion	Ratio	Lower	Upper
276	100		
138	31.6	23.4	35.2
277	24.9	20.0	30.0



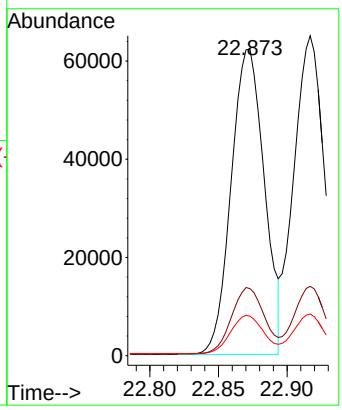


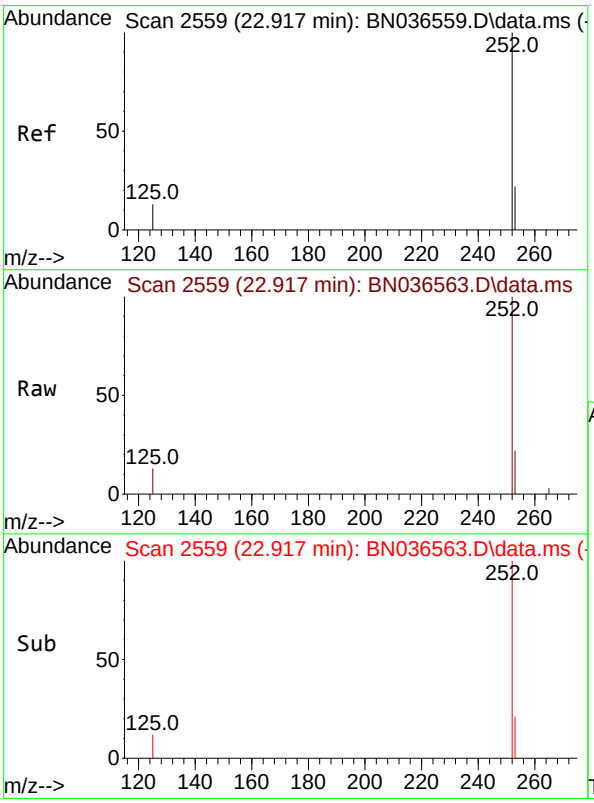
#37
Benzo(b)fluoranthene
Concen: 5.146 ng
RT: 22.873 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 104498

Ion	Ratio	Lower	Upper
252	100		
253	21.9	23.9	35.9#
125	12.9	17.4	26.2#

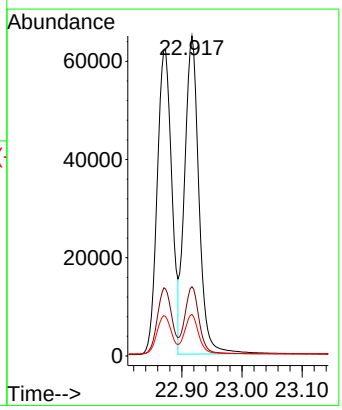


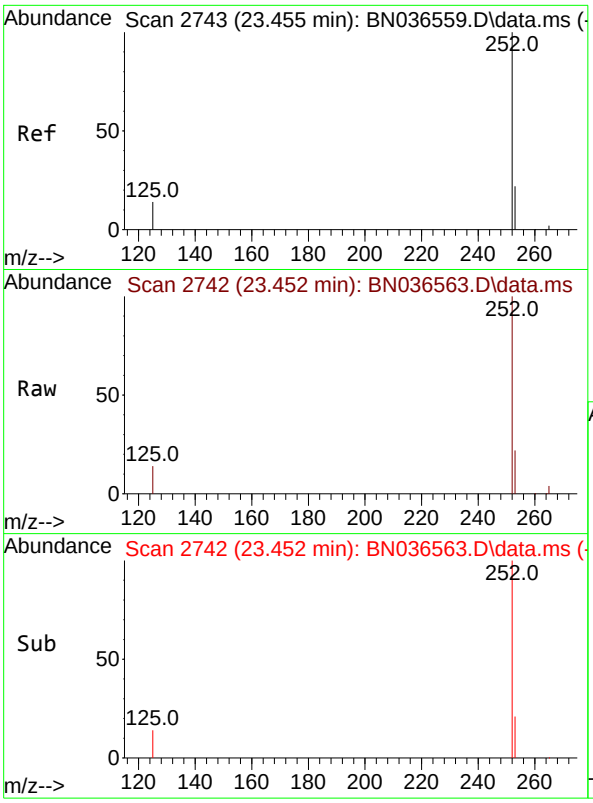


#38
Benzo(k)fluoranthene
Concen: 5.022 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:252 Resp: 106995

Ion	Ratio	Lower	Upper
252	100		
253	21.6	24.6	36.8#
125	13.0	17.8	26.8#



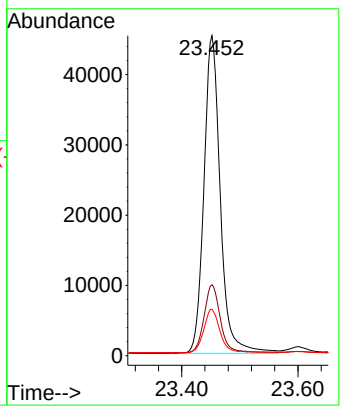


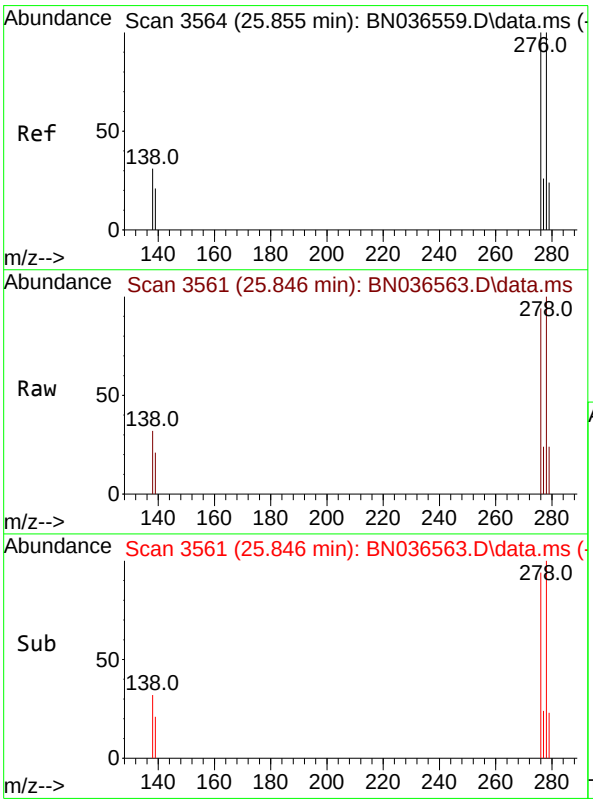
#39
Benzo(a)pyrene
Concen: 5.170 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 88413

Ion	Ratio	Lower	Upper
252	100		
253	22.2	27.8	41.8#
125	14.5	22.7	34.1#

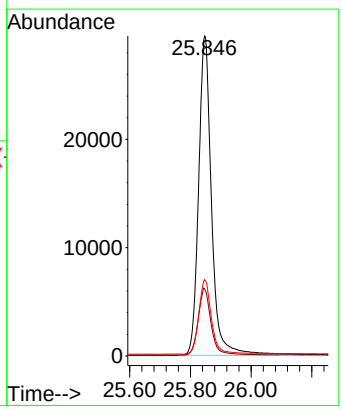


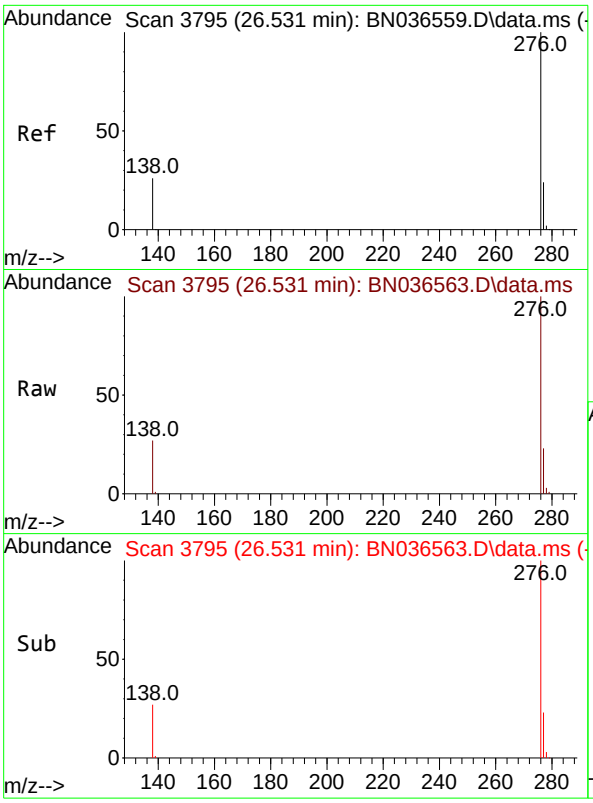


#40
Dibenzo(a,h)anthracene
Concen: 5.568 ng
RT: 25.846 min Scan# 3561
Delta R.T. -0.009 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Tgt Ion:278 Resp: 87308

Ion	Ratio	Lower	Upper
278	100		
139	21.0	20.8	31.2
279	23.9	28.8	43.2#



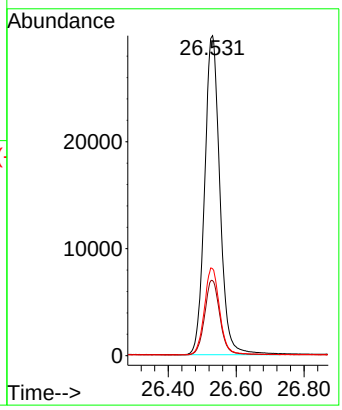


#41
Benzo(g,h,i)perylene
Concen: 5.189 ng
RT: 26.531 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN036563.D
Acq: 10 Mar 2025 15:19

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:276 Resp: 93067

Ion	Ratio	Lower	Upper
276	100		
277	23.4	22.2	33.4
138	27.1	24.1	36.1



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036564.D
Acq On : 10 Mar 2025 16:38
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Quant Time: Mar 10 17:10:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

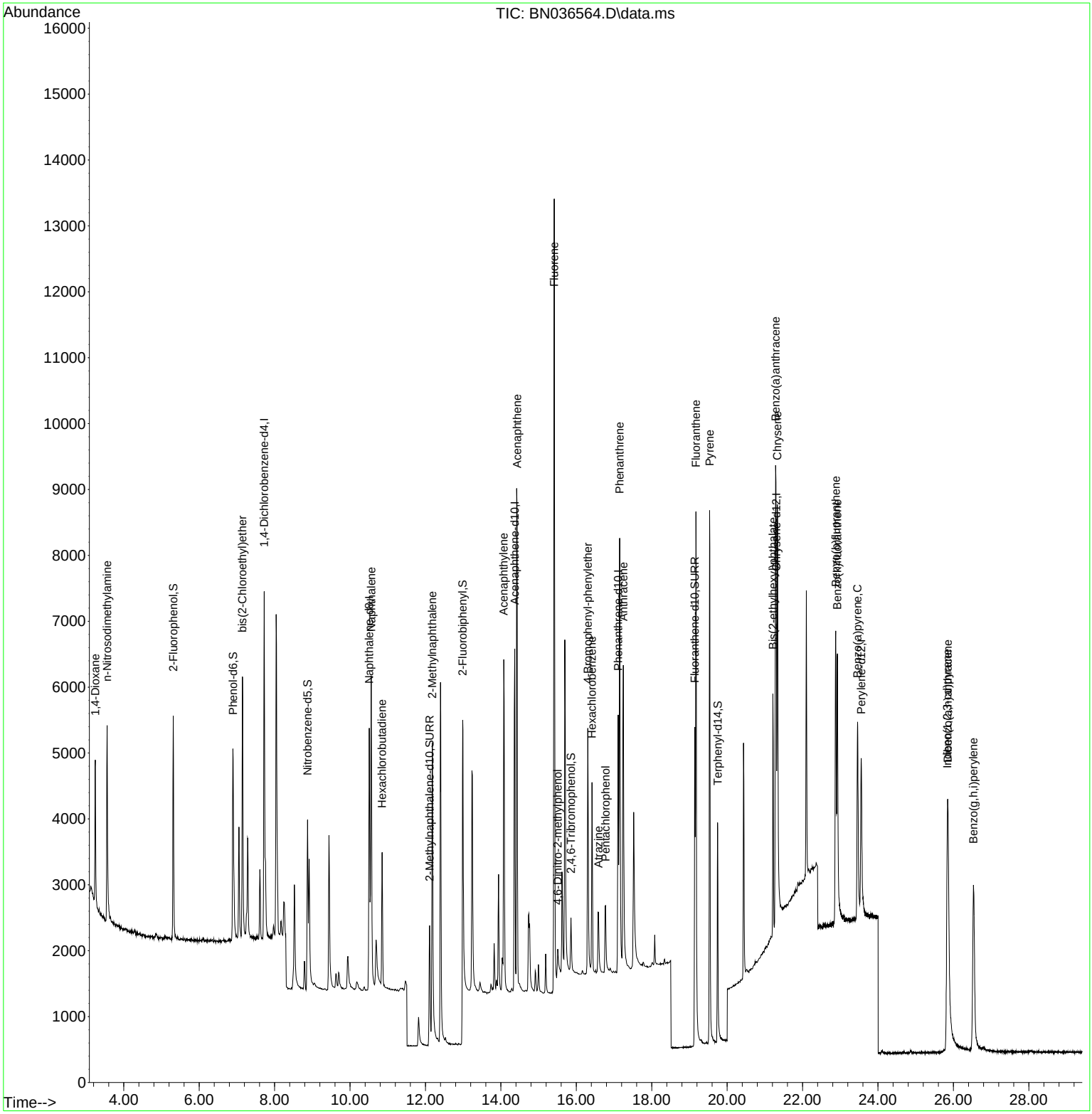
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2488	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5634	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3085	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	5778	0.400	ng		0.00
29) Chrysene-d12	21.304	240	4219	0.400	ng		0.00
35) Perylene-d12	23.554	264	3835	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	2418	0.417	ng		0.00
5) Phenol-d6	6.901	99	2744	0.383	ng		0.00
8) Nitrobenzene-d5	8.875	82	2356	0.384	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	3345	0.399	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	511	0.365	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	7753	0.432	ng		0.00
27) Fluoranthene-d10	19.141	212	6152	0.415	ng		0.00
31) Terphenyl-d14	19.750	244	3880	0.384	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	1297	0.470	ng		97
3) n-Nitrosodimethylamine	3.557	42	2284	0.409	ng		96
6) bis(2-Chloroethyl)ether	7.147	93	2945	0.398	ng		100
9) Naphthalene	10.562	128	6710	0.405	ng		99
10) Hexachlorobutadiene	10.850	225	1694	0.434	ng	#	98
12) 2-Methylnaphthalene	12.182	142	4064	0.385	ng		99
16) Acenaphthylene	14.077	152	6059	0.416	ng		99
17) Acenaphthene	14.430	154	4035	0.423	ng		99
18) Fluorene	15.414	166	5226	0.405	ng		99
20) 4,6-Dinitro-2-methylph...	15.510	198	404	0.420	ng		94
21) 4-Bromophenyl-phenylether	16.304	248	1524	0.421	ng		96
22) Hexachlorobenzene	16.416	284	1987	0.455	ng		99
23) Atrazine	16.590	200	1165	0.401	ng		95
24) Pentachlorophenol	16.776	266	699	0.351	ng		95
25) Phenanthrene	17.148	178	7229	0.417	ng		99
26) Anthracene	17.248	178	6358	0.407	ng		99
28) Fluoranthene	19.174	202	8068	0.414	ng		100
30) Pyrene	19.536	202	8156	0.395	ng		100
32) Benzo(a)anthracene	21.286	228	5814	0.396	ng		100
33) Chrysene	21.331	228	6940	0.433	ng		98
34) Bis(2-ethylhexyl)phtha...	21.214	149	3594	0.344	ng		98
36) Indeno(1,2,3-cd)pyrene	25.841	276	6410	0.463	ng		98
37) Benzo(b)fluoranthene	22.879	252	5902	0.423	ng		99
38) Benzo(k)fluoranthene	22.923	252	6286	0.429	ng		98
39) Benzo(a)pyrene	23.458	252	5147	0.438	ng		99
40) Dibenzo(a,h)anthracene	25.855	278	4740	0.440	ng		97
41) Benzo(g,h,i)perylene	26.534	276	5877	0.477	ng		97

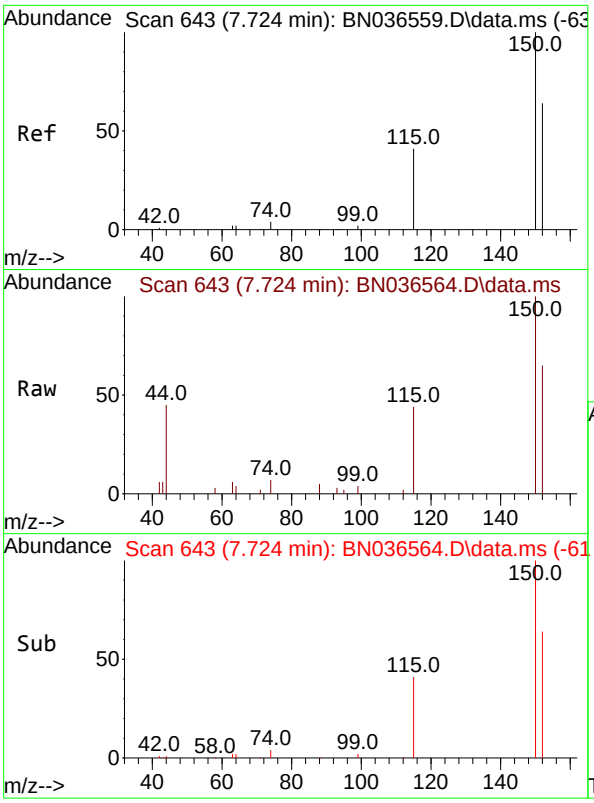
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036564.D
Acq On : 10 Mar 2025 16:38
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Quant Time: Mar 10 17:10:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



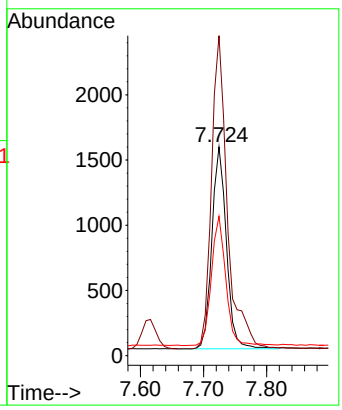


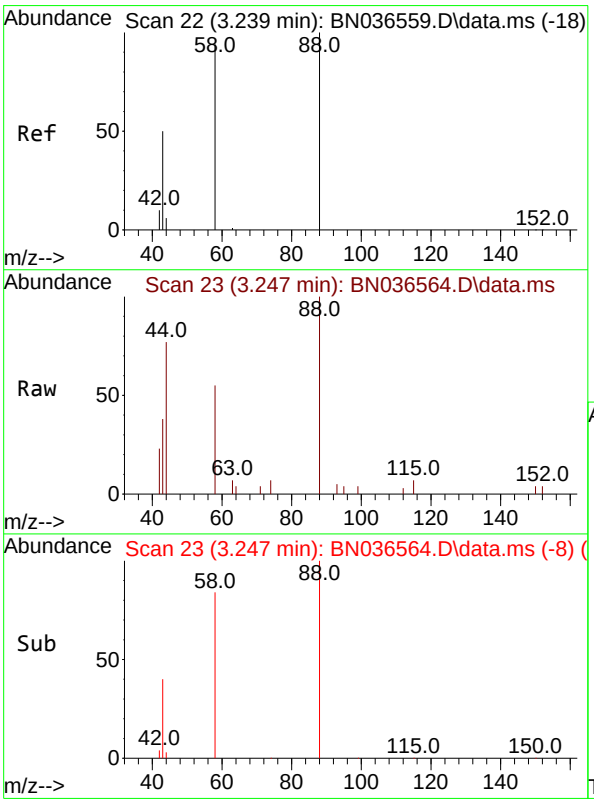
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:152 Resp: 2488

Ion	Ratio	Lower	Upper
152	100		
150	153.3	123.7	185.5
115	66.7	54.3	81.5

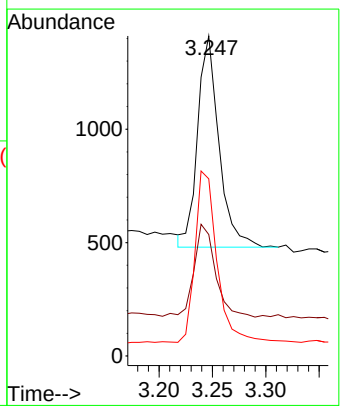


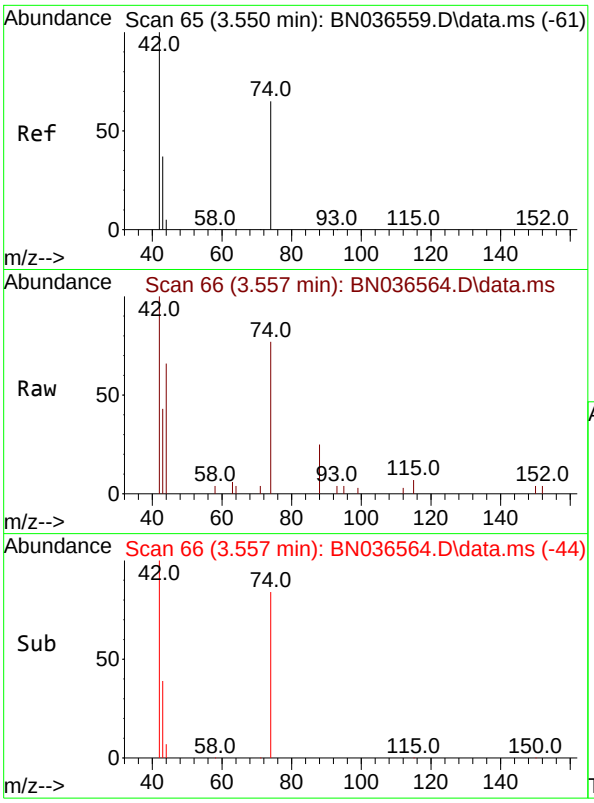


#2
1,4-Dioxane
Concen: 0.470 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion: 88 Resp: 1297

Ion	Ratio	Lower	Upper
88	100		
43	44.1	37.8	56.8
58	82.4	67.4	101.2



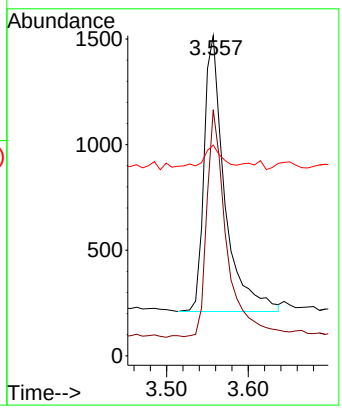


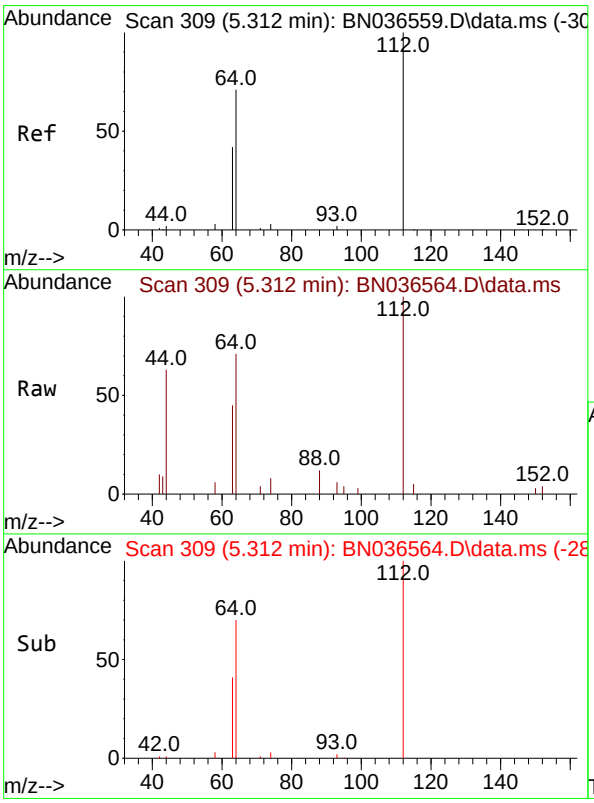
#3
n-Nitrosodimethylamine
Concen: 0.409 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion: 42 Resp: 2284

Ion	Ratio	Lower	Upper
42	100		
74	79.2	60.6	90.8
44	8.2	6.3	9.5

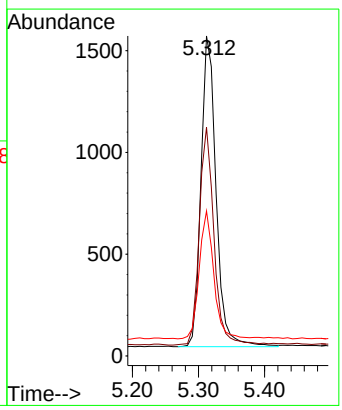


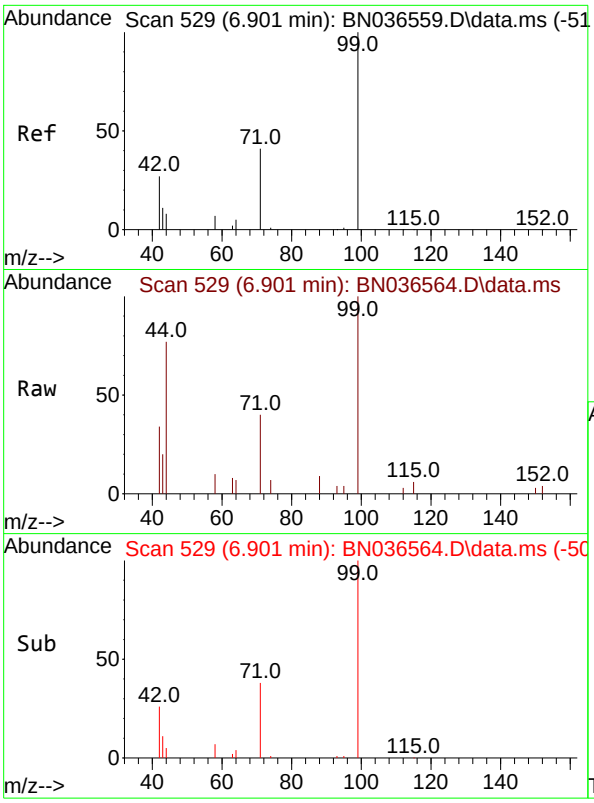


#4
2-Fluorophenol
Concen: 0.417 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:112 Resp: 2418

Ion	Ratio	Lower	Upper
112	100		
64	68.2	53.1	79.7
63	39.8	31.8	47.8



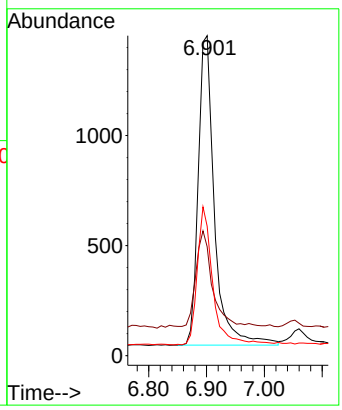


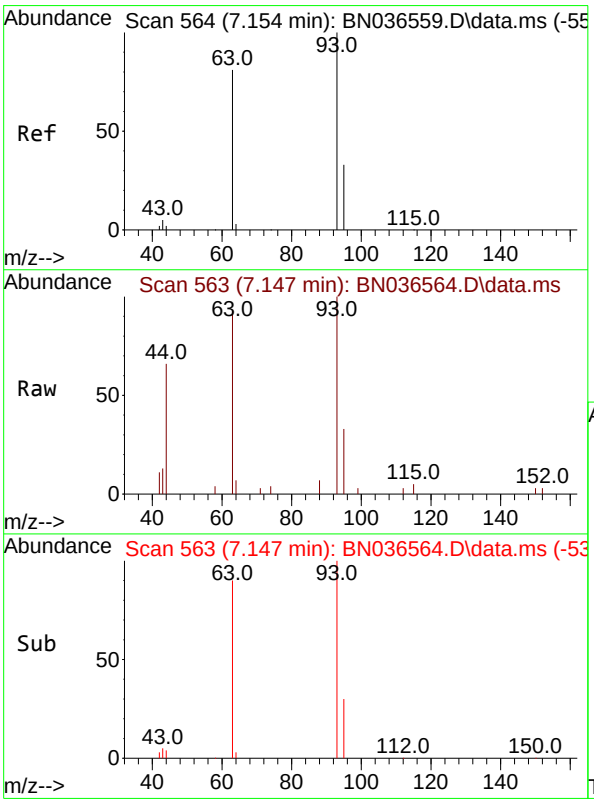
#5
Phenol-d6
Concen: 0.383 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion: 99 Resp: 2744

Ion	Ratio	Lower	Upper
99	100		
42	32.1	26.5	39.7
71	42.9	34.1	51.1

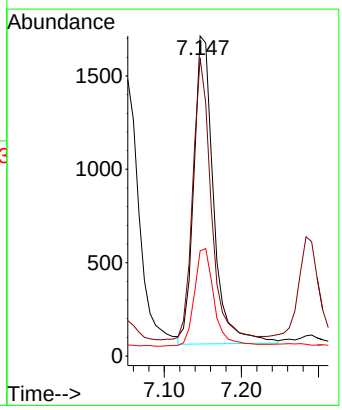


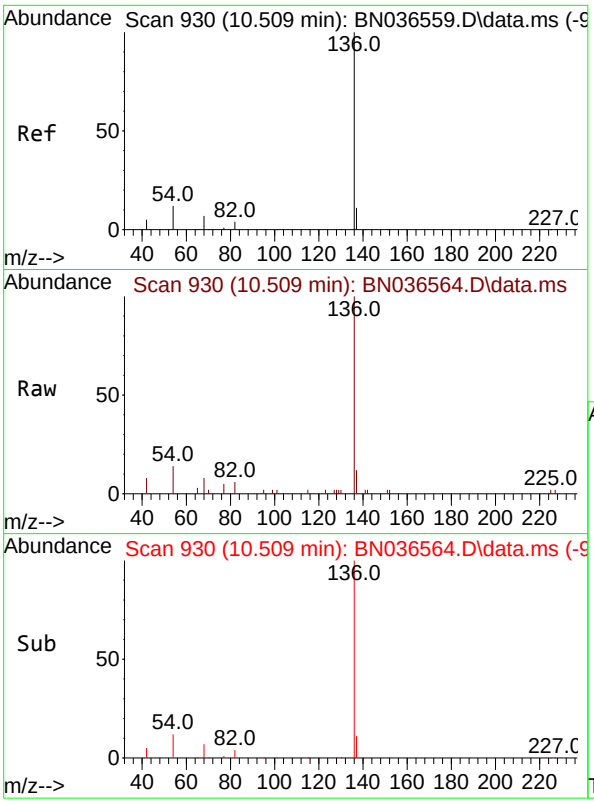


#6
bis(2-Chloroethyl)ether
Concen: 0.398 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion: 93 Resp: 2945

Ion	Ratio	Lower	Upper
93	100		
63	85.1	67.7	101.5
95	31.7	25.6	38.4



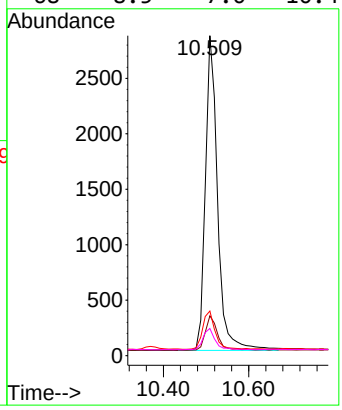


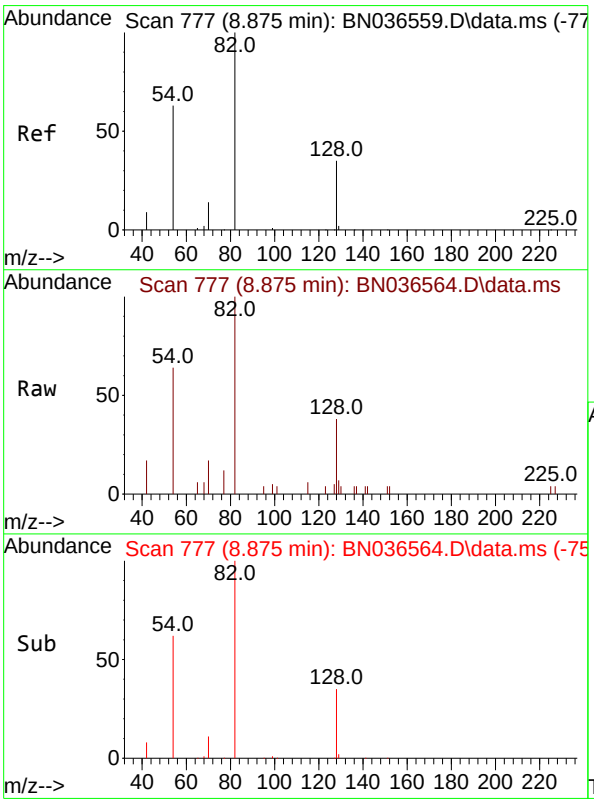
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:136 Resp: 5634

Ion	Ratio	Lower	Upper
136	100		
137	12.4	10.3	15.5
54	13.9	11.5	17.3
68	8.5	7.0	10.4

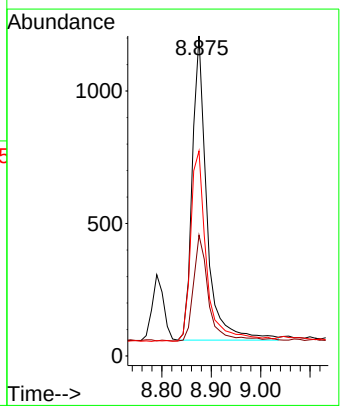


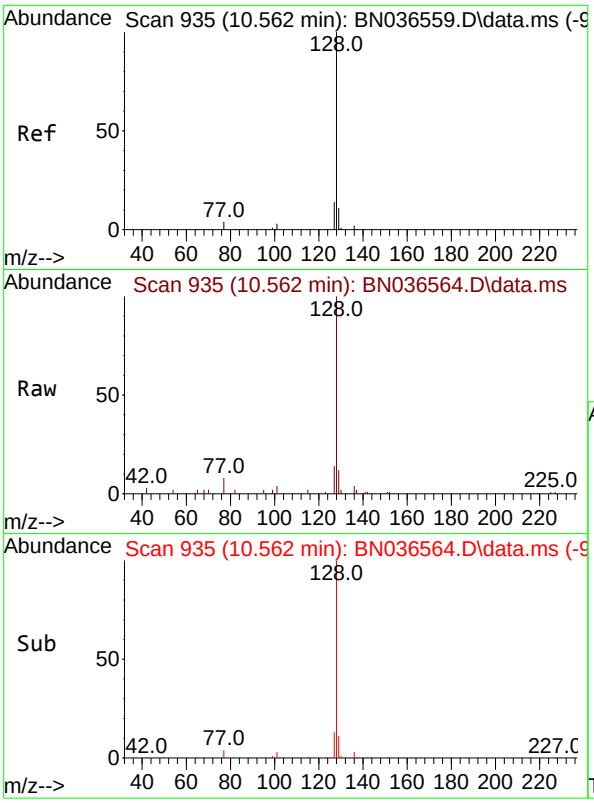


#8
Nitrobenzene-d5
Concen: 0.384 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion: 82 Resp: 2356

Ion	Ratio	Lower	Upper
82	100		
128	37.7	30.6	45.8
54	64.1	52.2	78.4



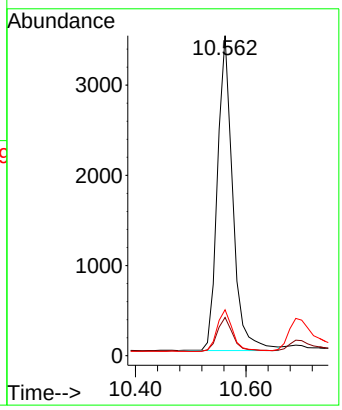


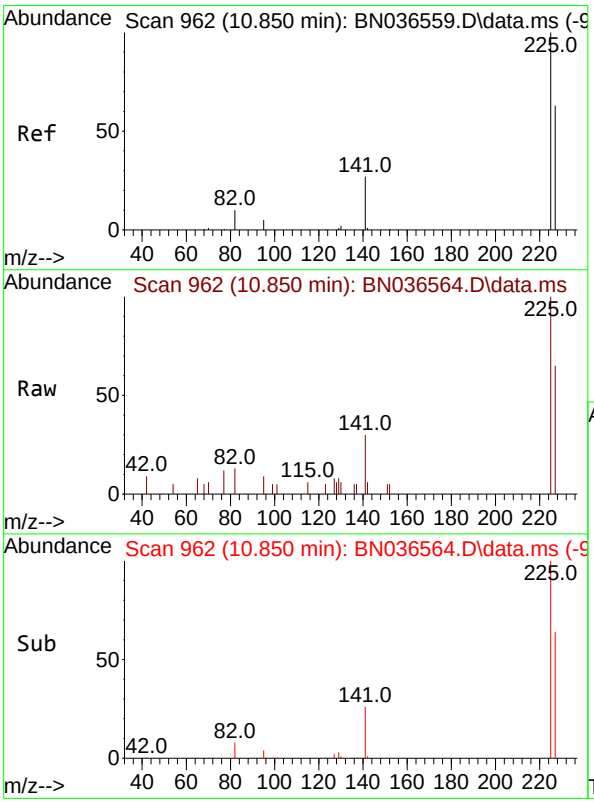
#9
Naphthalene
Concen: 0.405 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:128 Resp: 6710

Ion	Ratio	Lower	Upper
128	100		
129	11.9	9.8	14.6
127	14.3	11.8	17.8

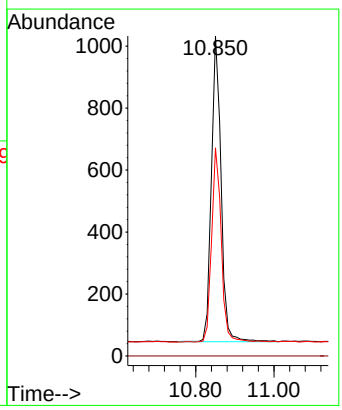


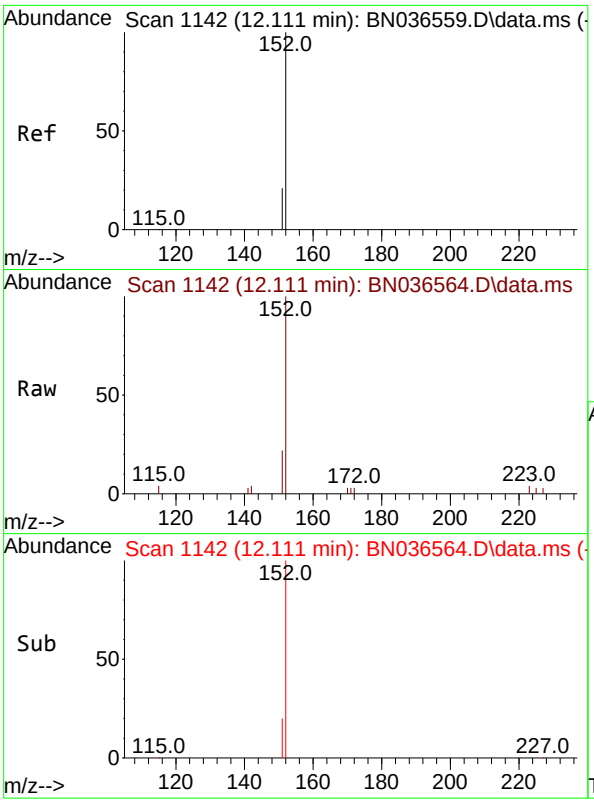


#10
Hexachlorobutadiene
Concen: 0.434 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:225 Resp: 1694

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	51.8	77.8



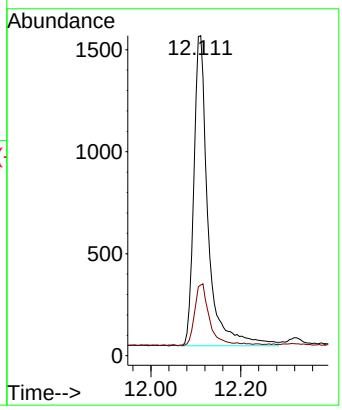


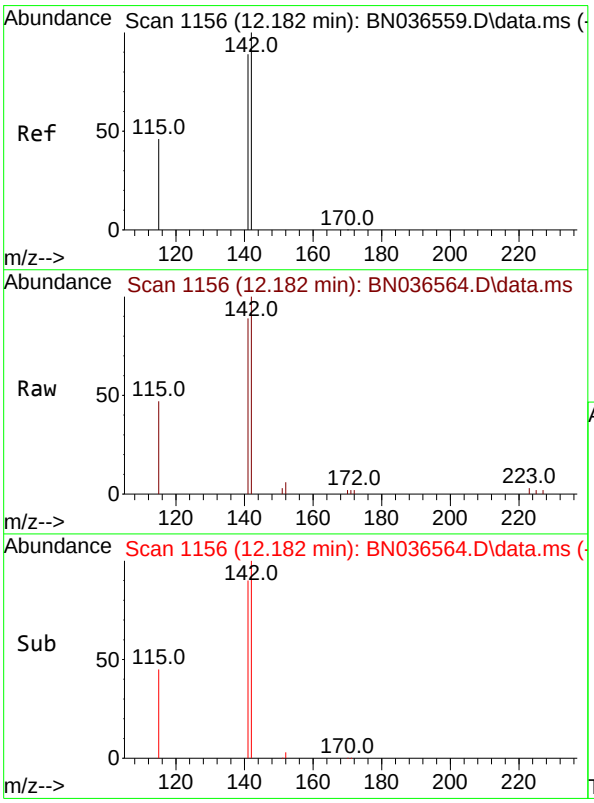
#11
2-Methylnaphthalene-d10
Concen: 0.399 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:152 Resp: 3345

Ion	Ratio	Lower	Upper
152	100		
151	20.2	17.0	25.6

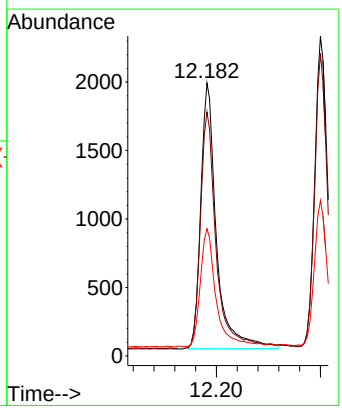


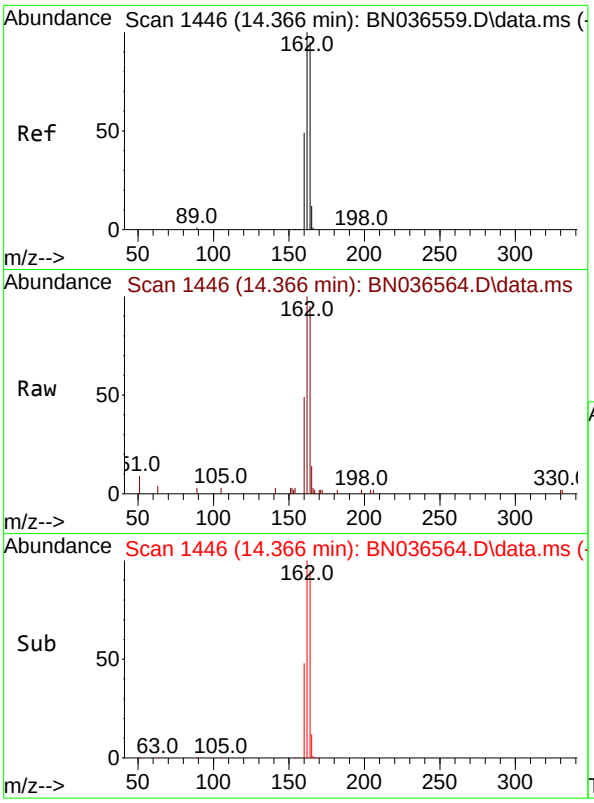


#12
2-Methylnaphthalene
Concen: 0.385 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:142 Resp: 4064

Ion	Ratio	Lower	Upper
142	100		
141	89.4	71.7	107.5
115	46.6	38.3	57.5



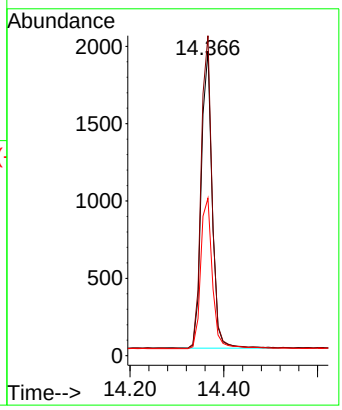


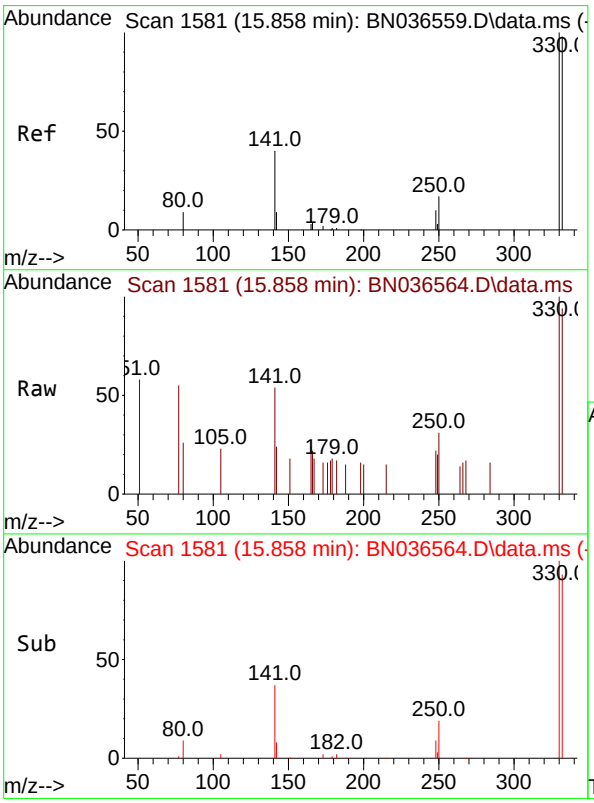
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:164 Resp: 3085

Ion	Ratio	Lower	Upper
164	100		
162	105.0	84.2	126.2
160	51.7	42.2	63.2

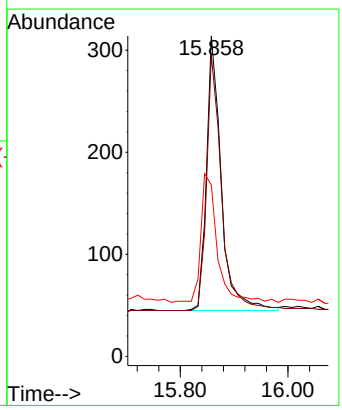


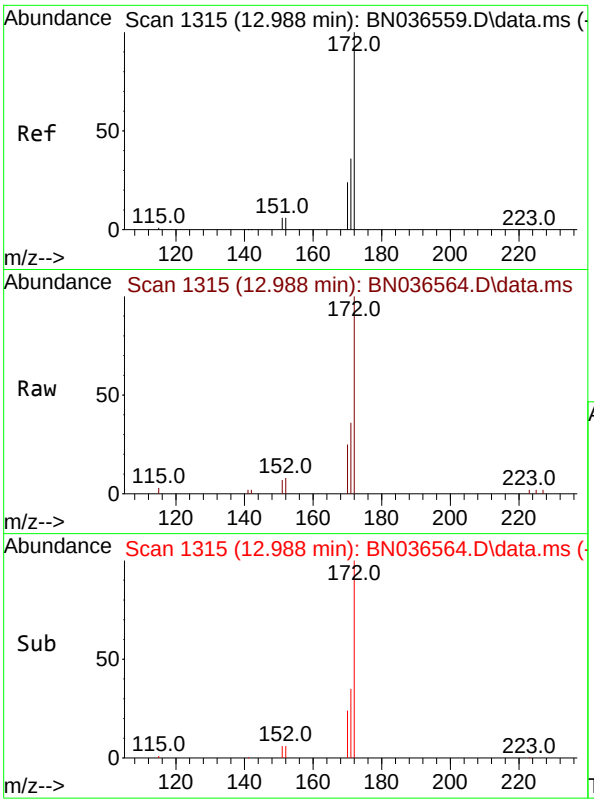


#14
2,4,6-Tribromophenol
Concen: 0.365 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:330 Resp: 511

Ion	Ratio	Lower	Upper
330	100		
332	93.9	75.2	112.8
141	51.5	43.4	65.2



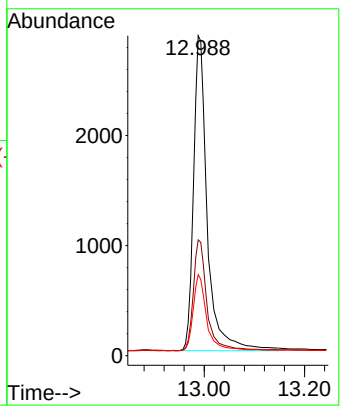


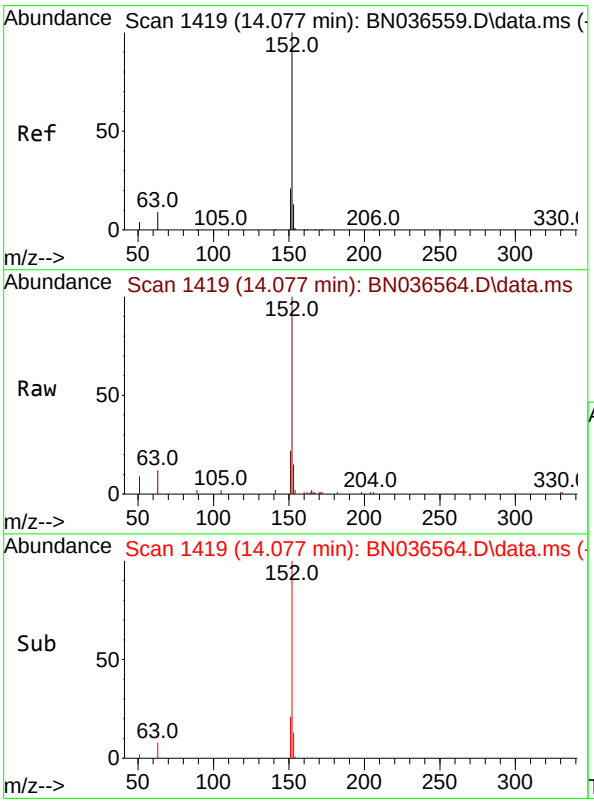
#15
2-Fluorobiphenyl
Concen: 0.432 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:172 Resp: 7753

Ion	Ratio	Lower	Upper
172	100		
171	36.2	29.5	44.3
170	25.3	20.2	30.4

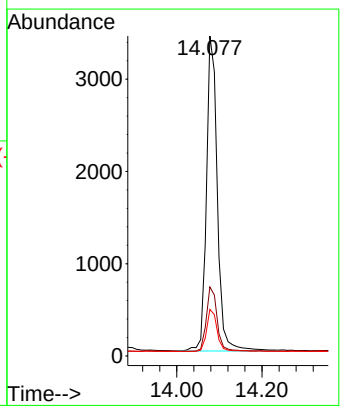


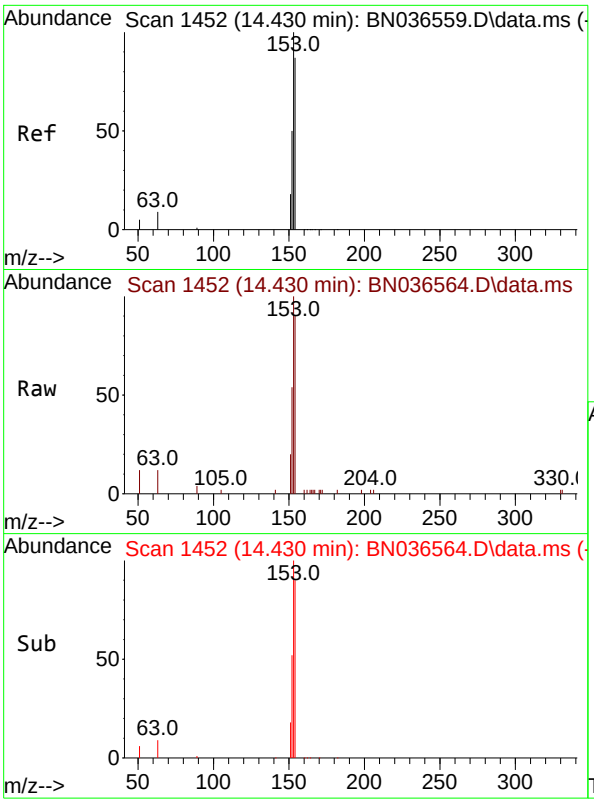


#16
Acenaphthylene
Concen: 0.416 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:152 Resp: 6059

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	12.9	10.6	15.8



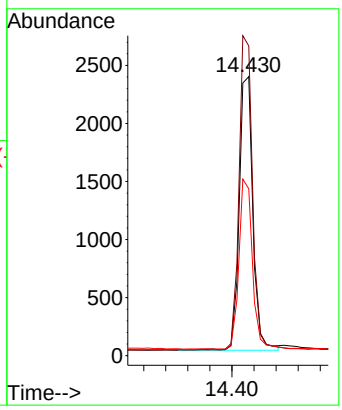


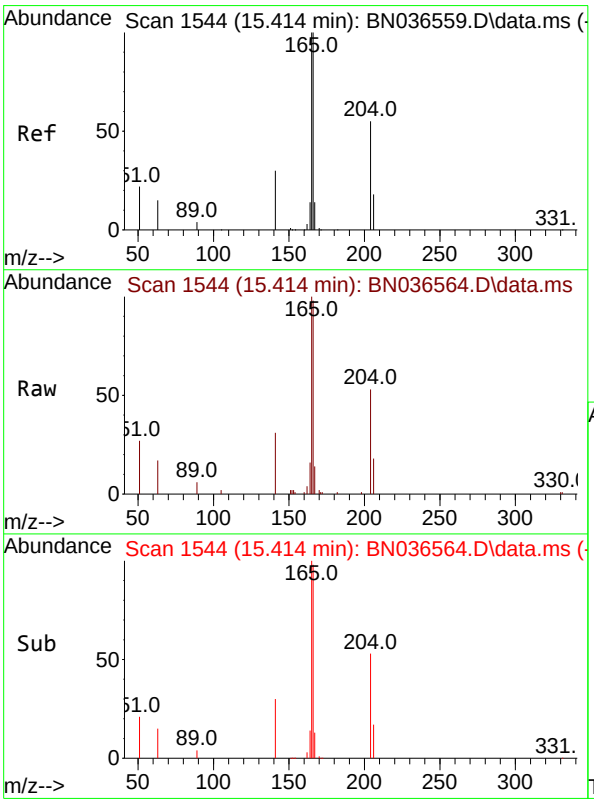
#17
Acenaphthene
Concen: 0.423 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:154 Resp: 4035

Ion	Ratio	Lower	Upper
154	100		
153	115.5	94.1	141.1
152	61.9	49.8	74.6

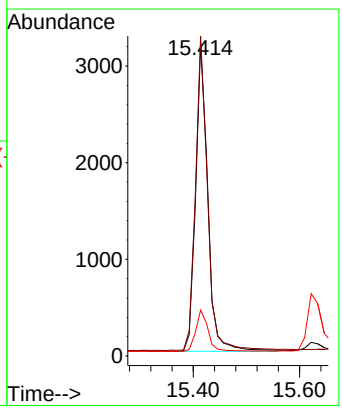


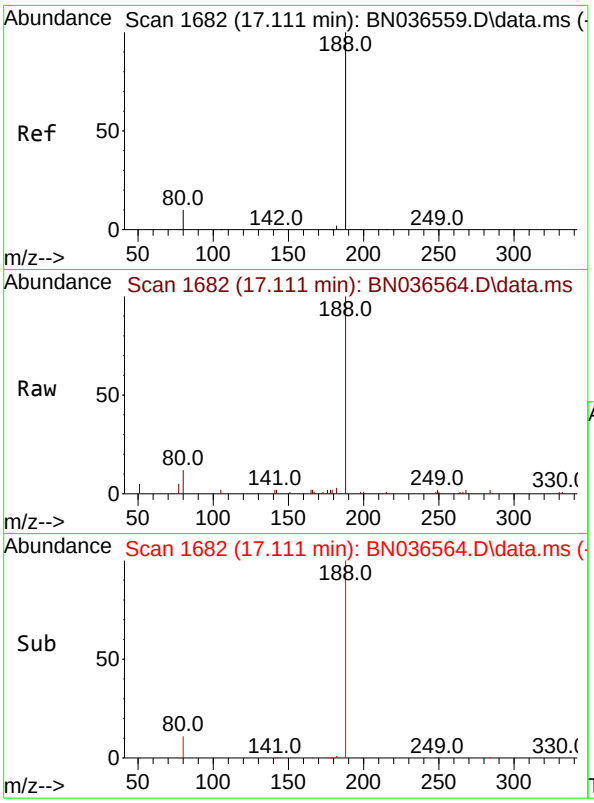


#18
Fluorene
Concen: 0.405 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:166 Resp: 5226

Ion	Ratio	Lower	Upper
166	100		
165	101.1	79.8	119.8
167	13.1	10.6	15.8



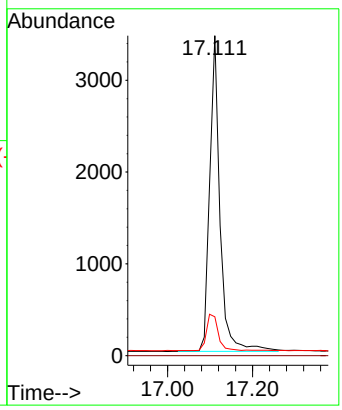


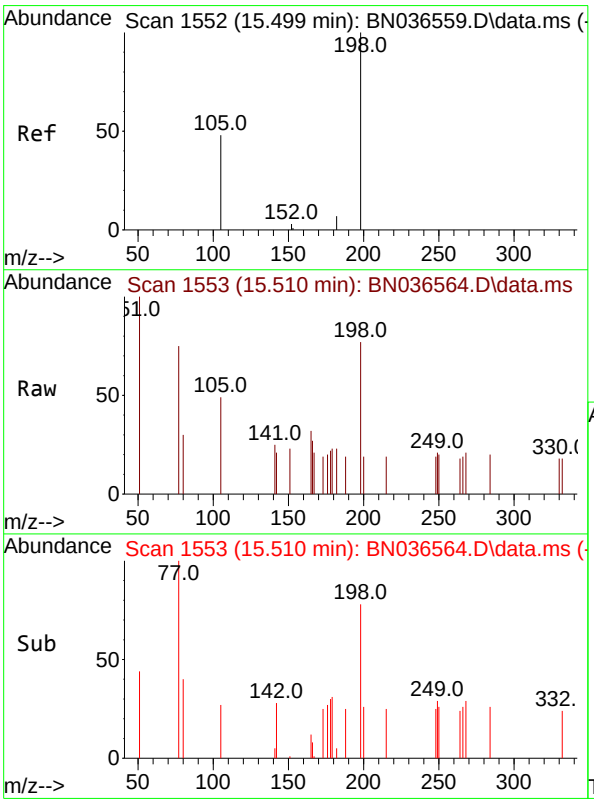
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:188 Resp: 5778

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.2	8.8	13.2

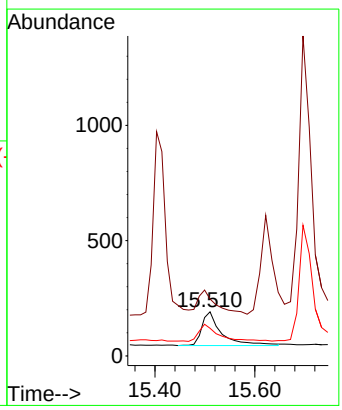


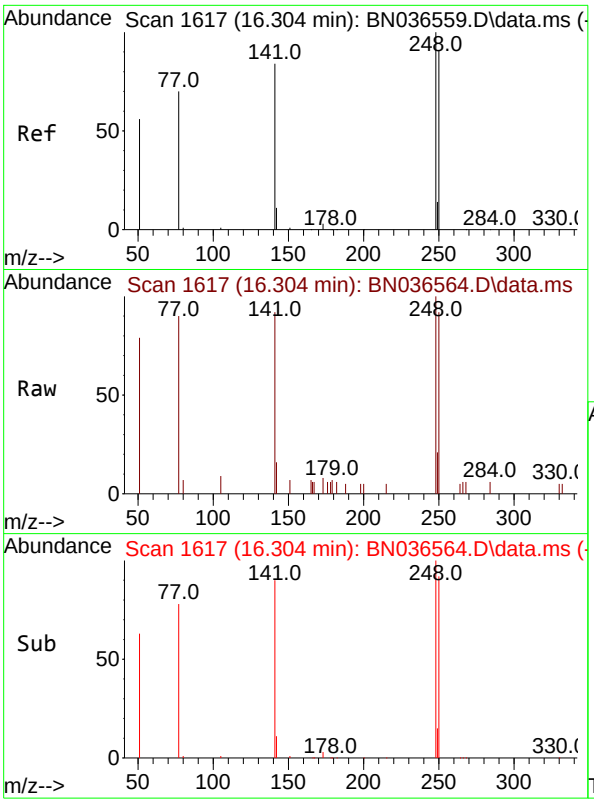


#20
4,6-Dinitro-2-methylphenol
Concen: 0.420 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:198 Resp: 404

Ion	Ratio	Lower	Upper
198	100		
51	129.3	107.9	161.9
105	62.8	56.2	84.2



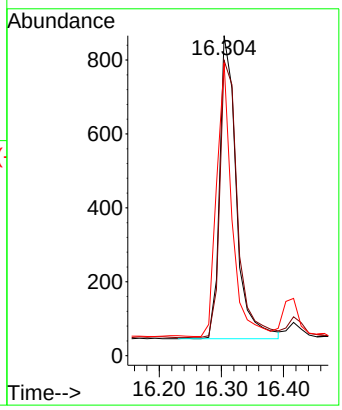


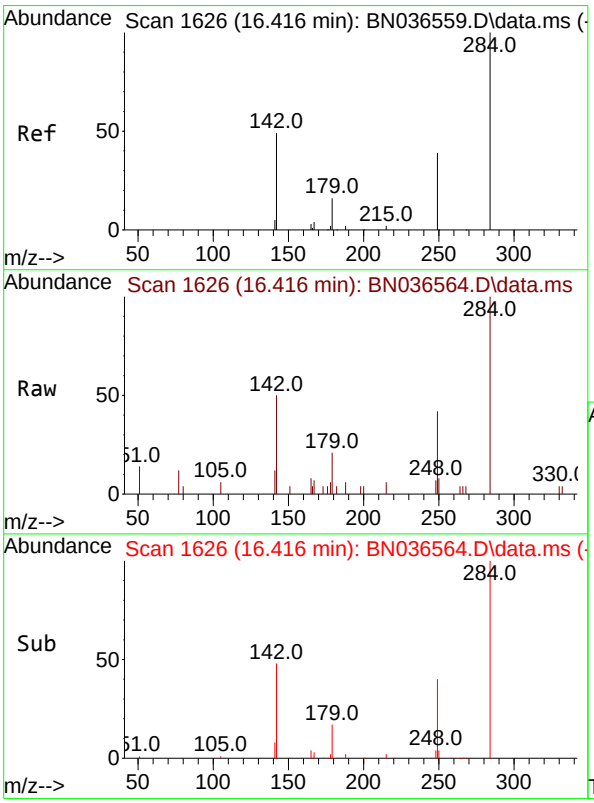
#21
4-Bromophenyl-phenylether
Concen: 0.421 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:248 Resp: 1524

Ion	Ratio	Lower	Upper
248	100		
250	92.3	73.0	109.6
141	91.6	68.6	103.0

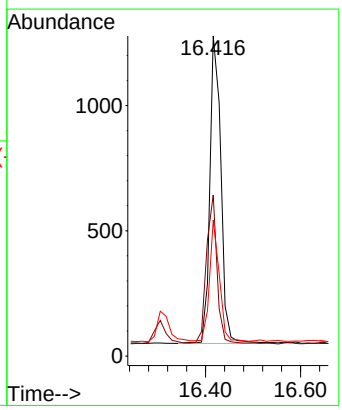


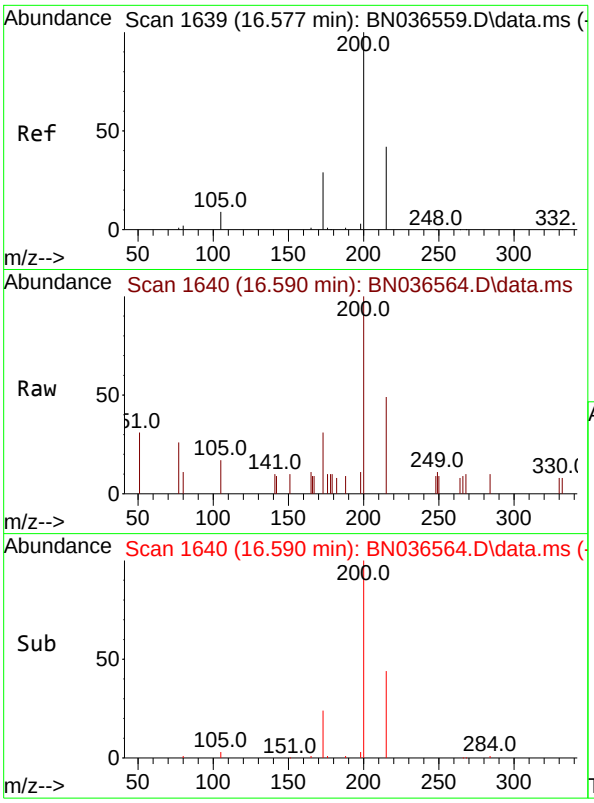


#22
Hexachlorobenzene
Concen: 0.455 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:284 Resp: 1987

Ion	Ratio	Lower	Upper
284	100		
142	47.5	37.0	55.4
249	34.9	28.1	42.1



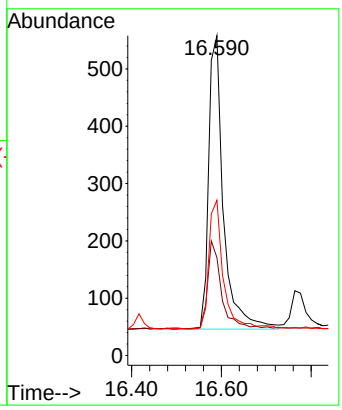


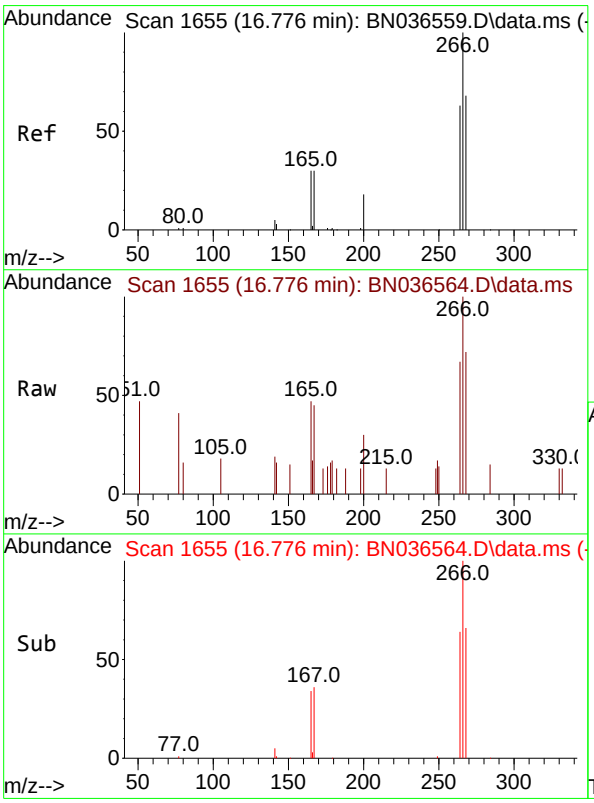
#23
Atrazine
Concen: 0.401 ng
RT: 16.590 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:200 Resp: 1165

Ion	Ratio	Lower	Upper
200	100		
173	30.6	27.3	40.9
215	48.6	36.8	55.2

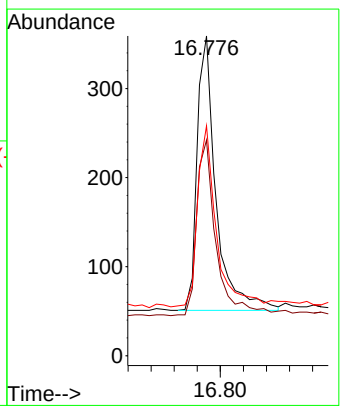


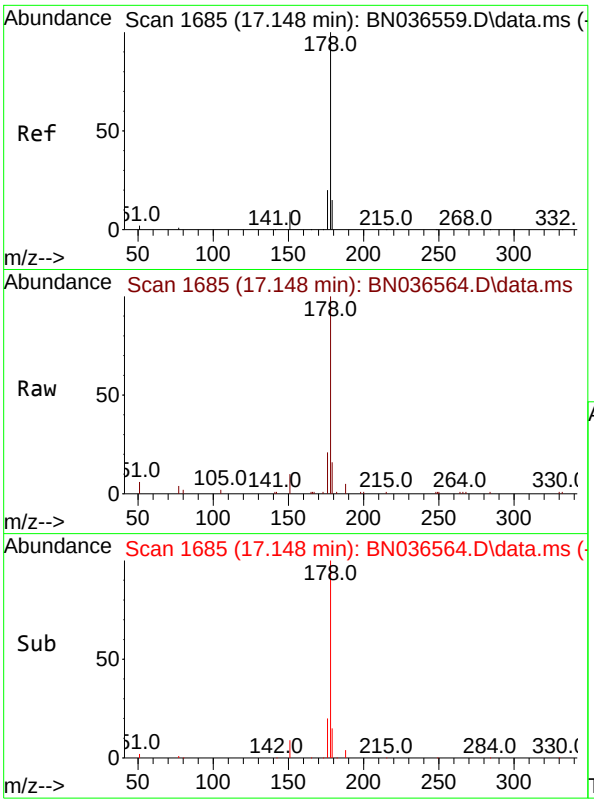


#24
Pentachlorophenol
Concen: 0.351 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:266 Resp: 699

Ion	Ratio	Lower	Upper
266	100		
264	67.1	49.6	74.4
268	66.7	50.9	76.3



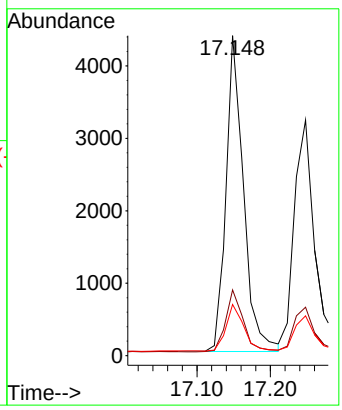


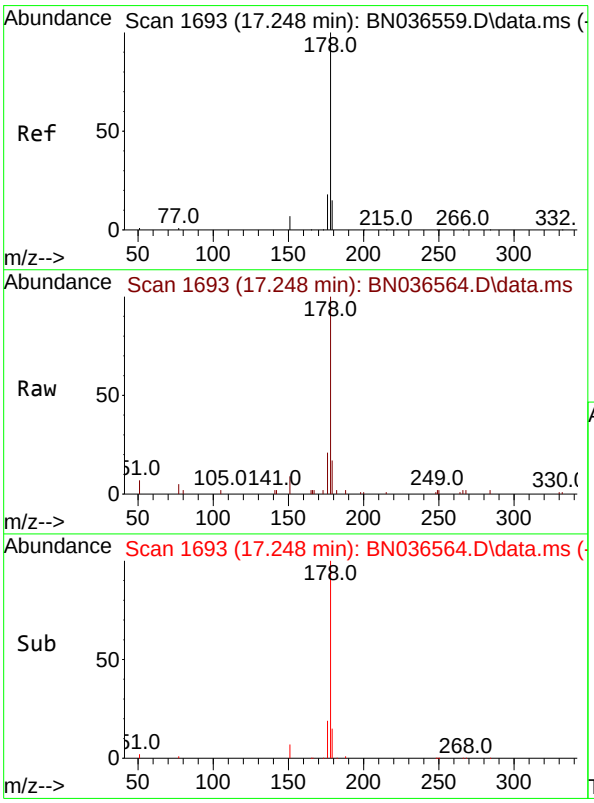
#25
Phenanthrene
Concen: 0.417 ng
RT: 17.148 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:178 Resp: 7229

Ion	Ratio	Lower	Upper
178	100		
176	19.8	15.9	23.9
179	15.0	12.2	18.4

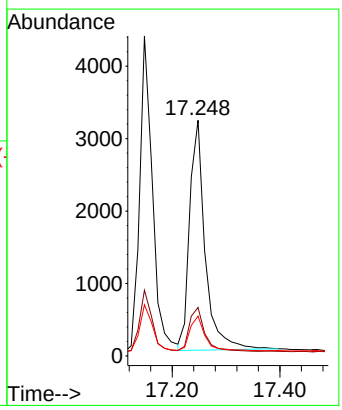


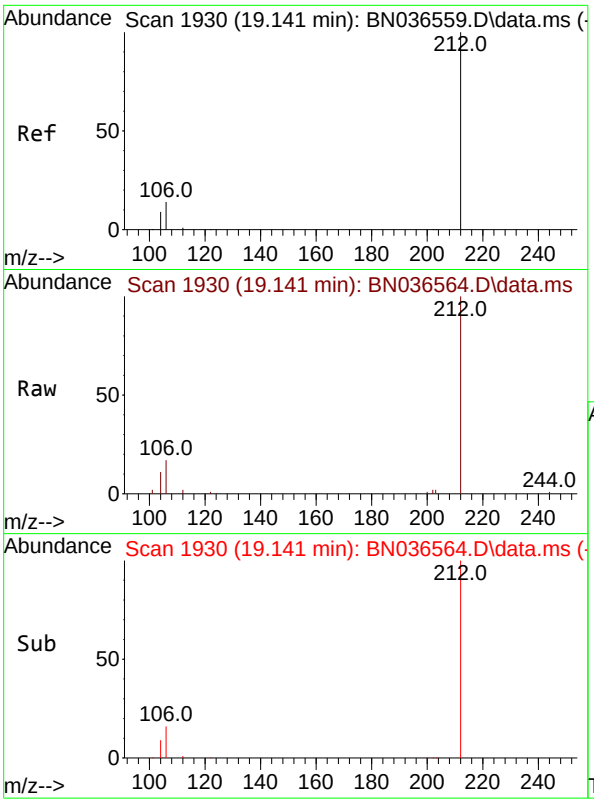


#26
Anthracene
Concen: 0.407 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:178 Resp: 6358

Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.2
179	14.8	12.6	18.8



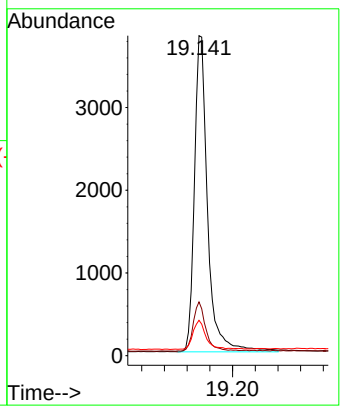


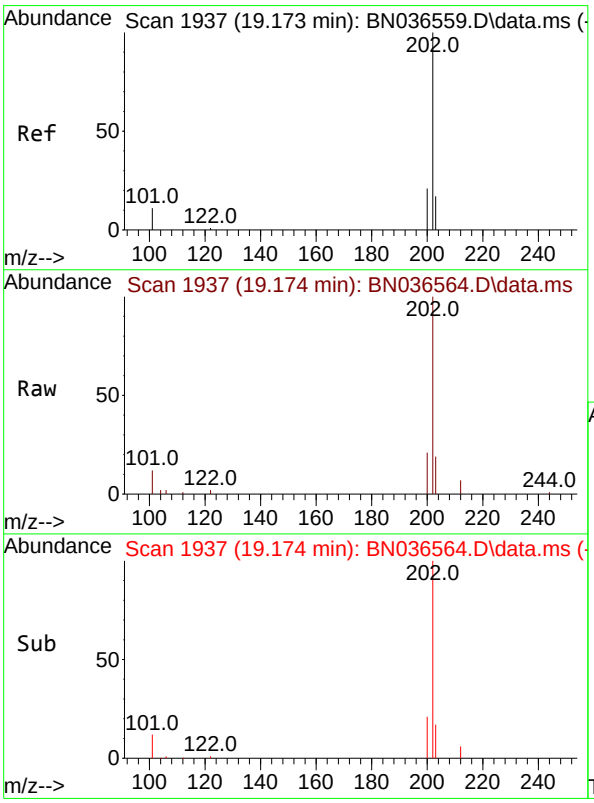
#27
Fluoranthene-d10
Concen: 0.415 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:212 Resp: 6152

Ion	Ratio	Lower	Upper
212	100		
106	14.8	11.8	17.6
104	8.8	7.3	10.9

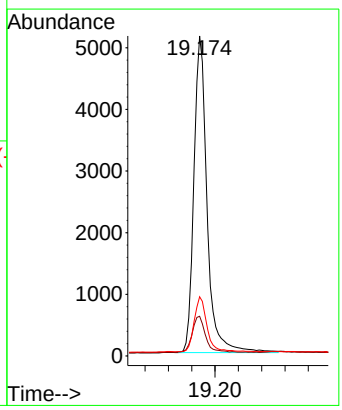


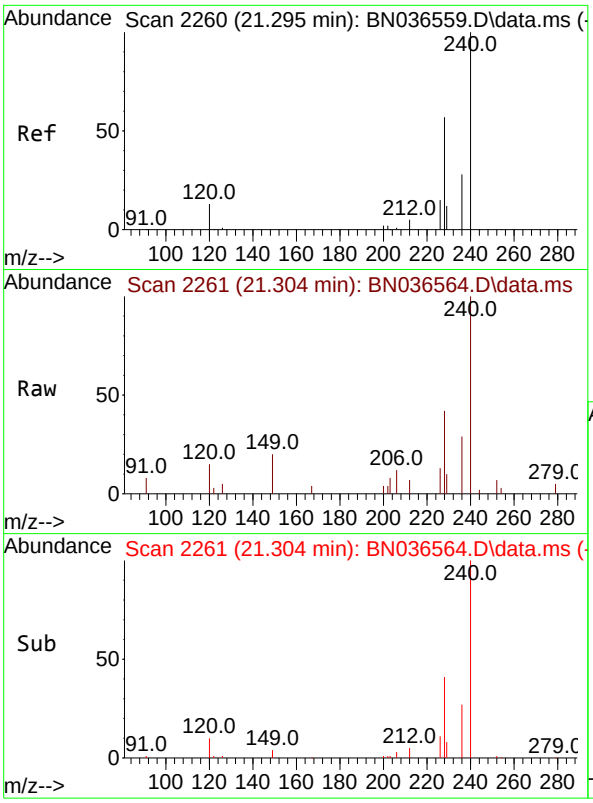


#28
Fluoranthene
Concen: 0.414 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:202 Resp: 8068

Ion	Ratio	Lower	Upper
202	100		
101	11.6	9.4	14.0
203	16.8	13.5	20.3



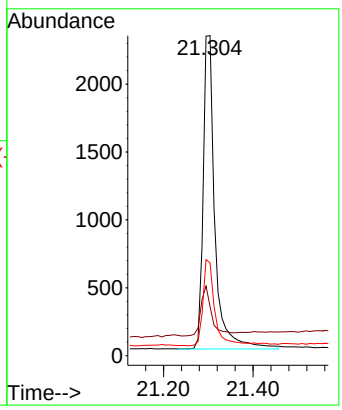


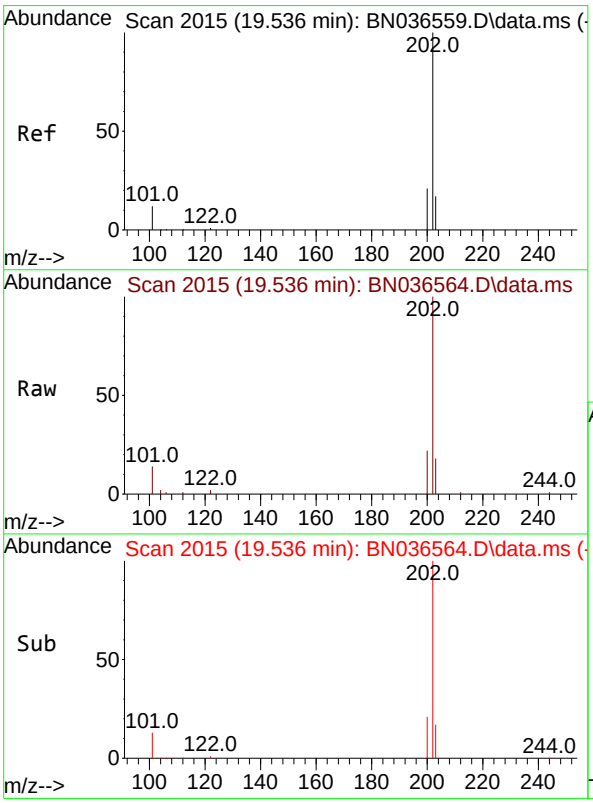
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:240 Resp: 4219

Ion	Ratio	Lower	Upper
240	100		
120	15.4	14.6	22.0
236	29.1	24.1	36.1

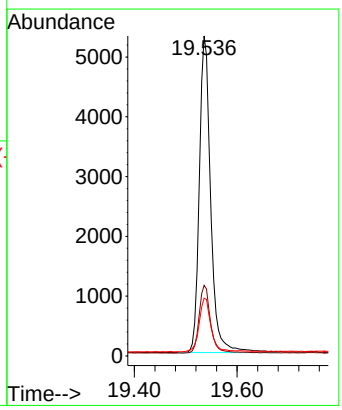


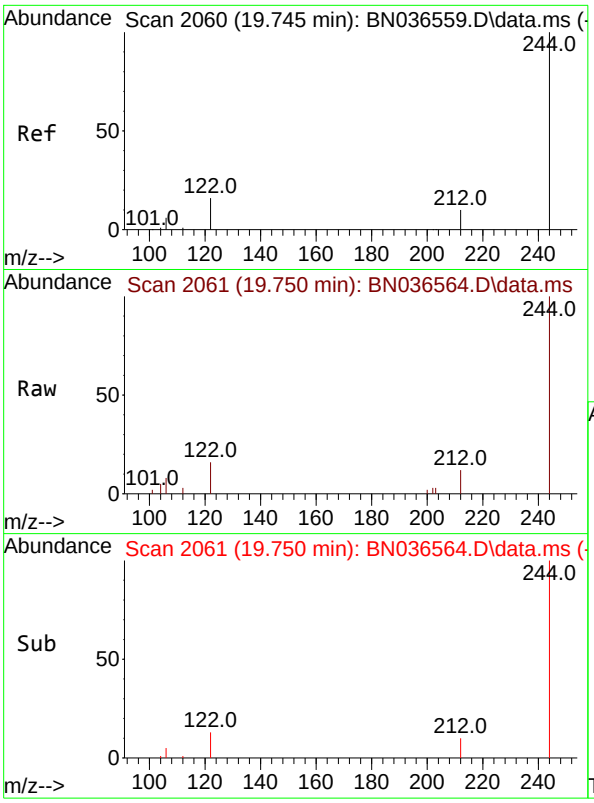


#30
Pyrene
Concen: 0.395 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:202 Resp: 8156

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.4	14.1	21.1



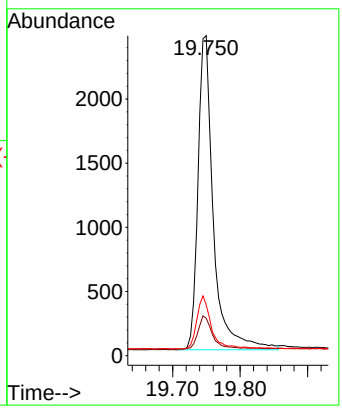


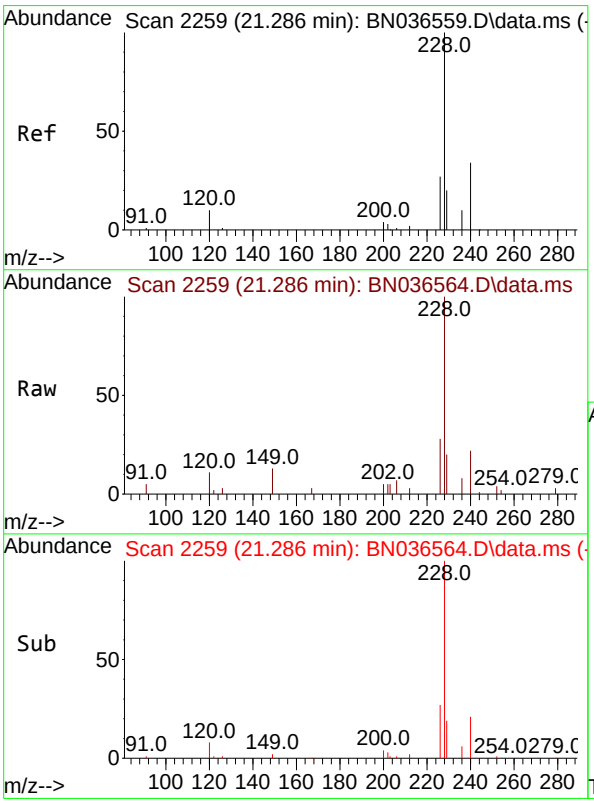
#31
Terphenyl-d14
Concen: 0.384 ng
RT: 19.750 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:244 Resp: 3880

Ion	Ratio	Lower	Upper
244	100		
212	11.7	9.6	14.4
122	15.8	13.9	20.9

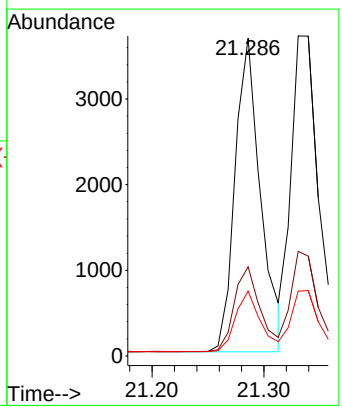


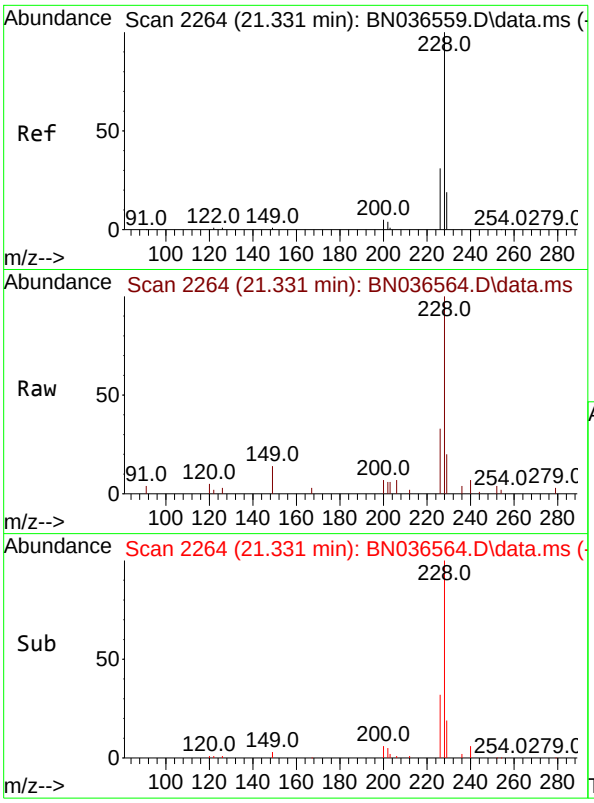


#32
Benzo(a)anthracene
Concen: 0.396 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:228 Resp: 5814

Ion	Ratio	Lower	Upper
228	100		
226	28.1	22.5	33.7
229	20.4	16.6	25.0



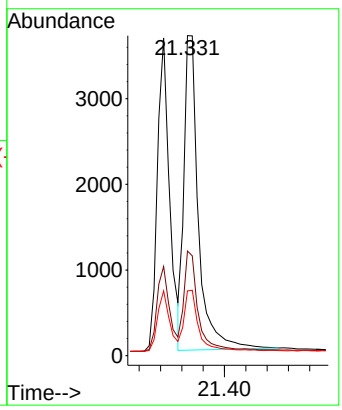


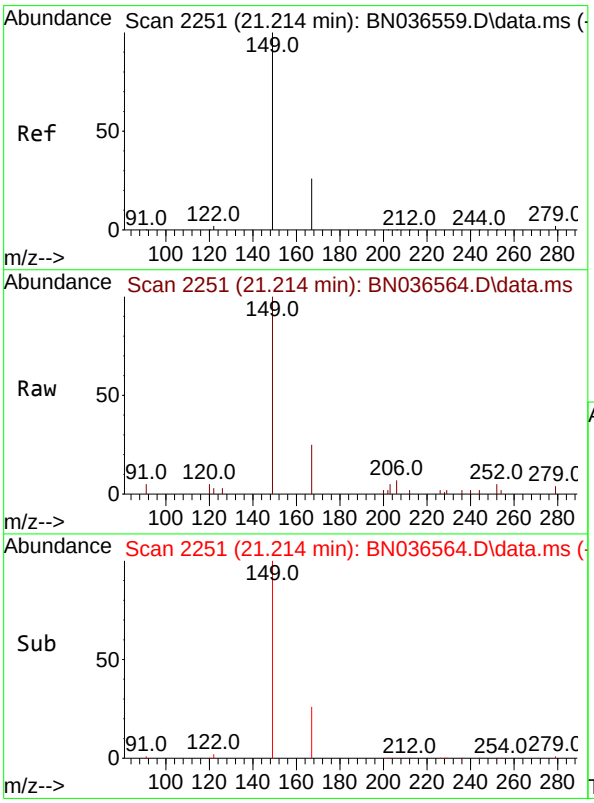
#33
Chrysene
Concen: 0.433 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:228 Resp: 6940

Ion	Ratio	Lower	Upper
228	100		
226	32.7	25.3	37.9
229	20.3	15.8	23.8

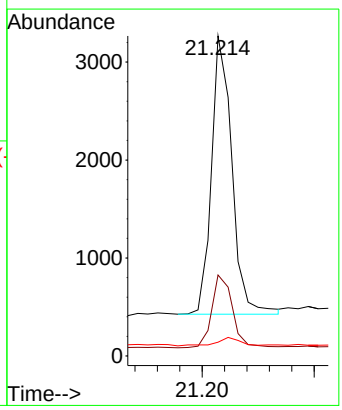


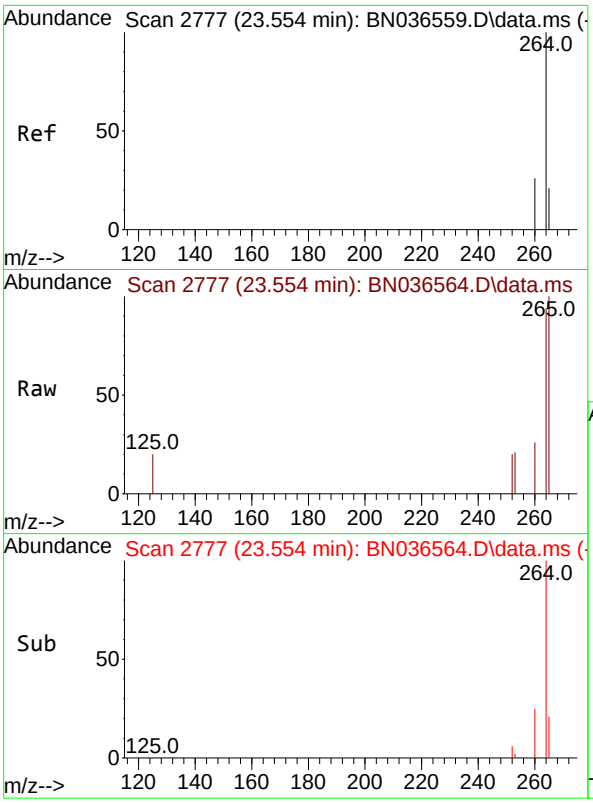


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.344 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:149 Resp: 3594

Ion	Ratio	Lower	Upper
149	100		
167	26.6	20.7	31.1
279	3.7	3.6	5.4



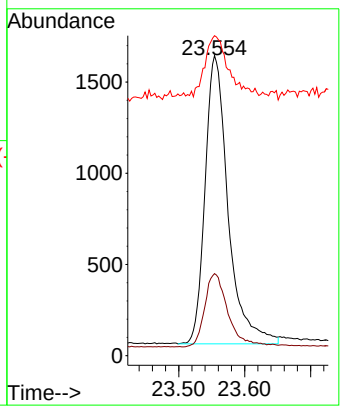


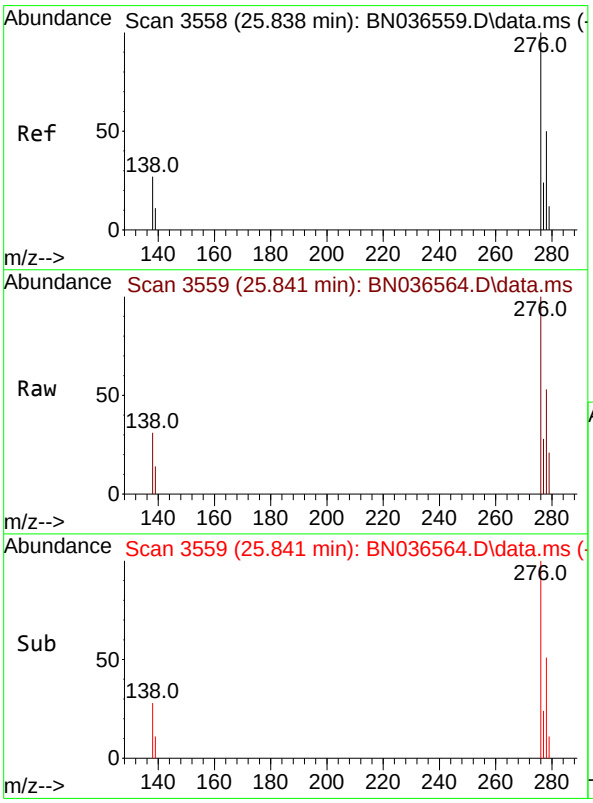
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:264 Resp: 3835

Ion	Ratio	Lower	Upper
264	100		
260	27.4	22.6	33.8
265	106.6	88.1	132.1

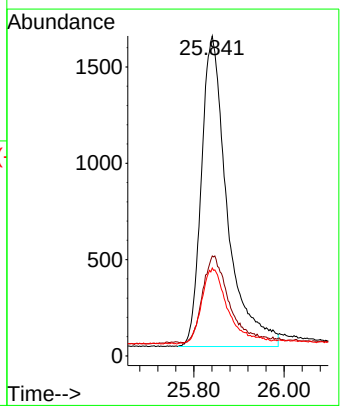


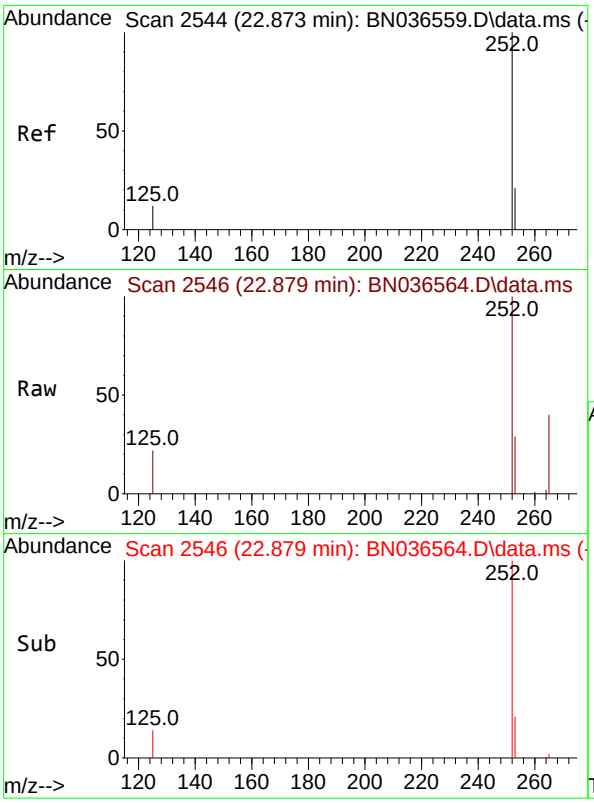


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.463 ng
RT: 25.841 min Scan# 3559
Delta R.T. 0.003 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:276 Resp: 6410

Ion	Ratio	Lower	Upper
276	100		
138	28.1	23.4	35.2
277	24.5	20.0	30.0



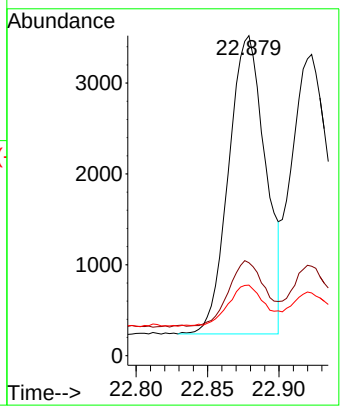


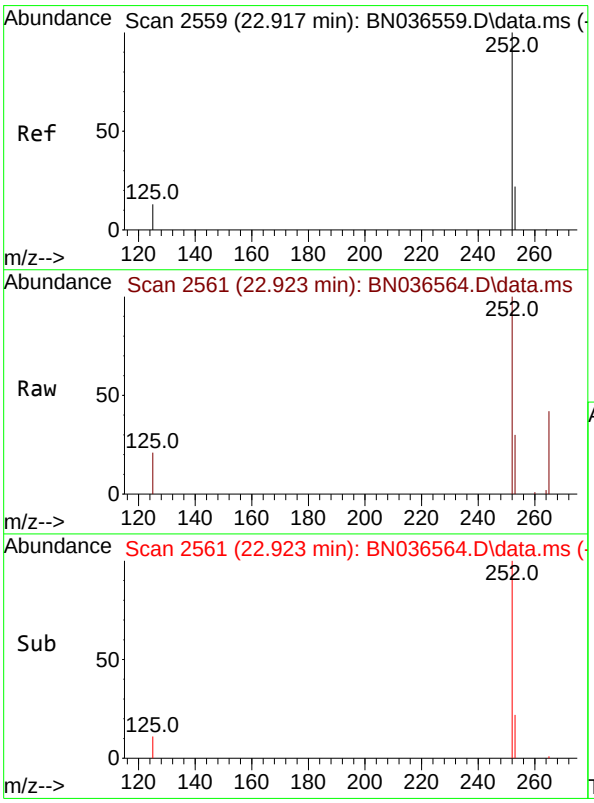
#37
Benzo(b)fluoranthene
Concen: 0.423 ng
RT: 22.879 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:252 Resp: 5902

Ion	Ratio	Lower	Upper
252	100		
253	29.0	23.9	35.9
125	22.1	17.4	26.2

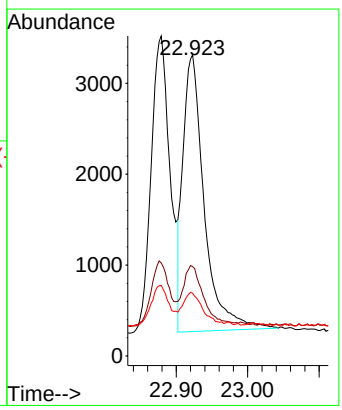


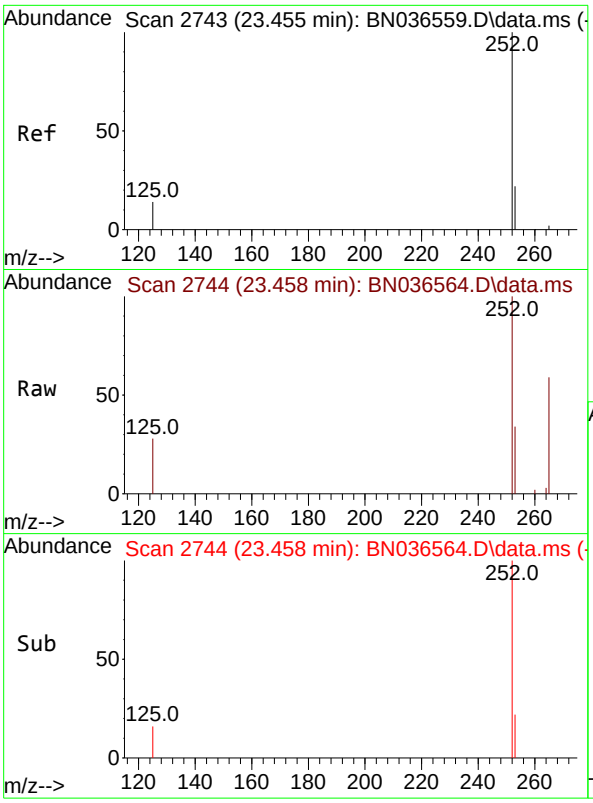


#38
Benzo(k)fluoranthene
Concen: 0.429 ng
RT: 22.923 min Scan# 2561
Delta R.T. 0.006 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:252 Resp: 6286

Ion	Ratio	Lower	Upper
252	100		
253	29.7	24.6	36.8
125	20.8	17.8	26.8



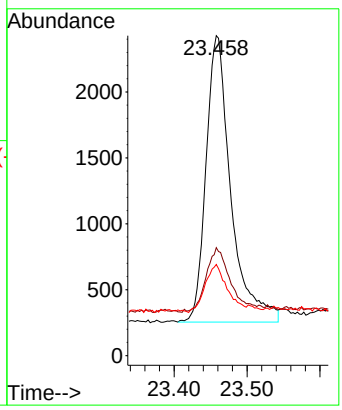


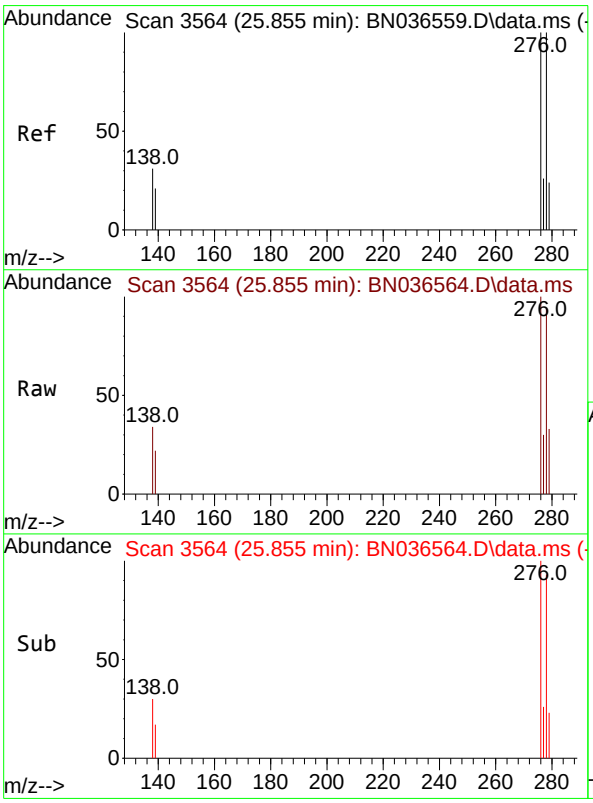
#39
Benzo(a)pyrene
Concen: 0.438 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:252 Resp: 5147

Ion	Ratio	Lower	Upper
252	100		
253	33.7	27.8	41.8
125	28.5	22.7	34.1

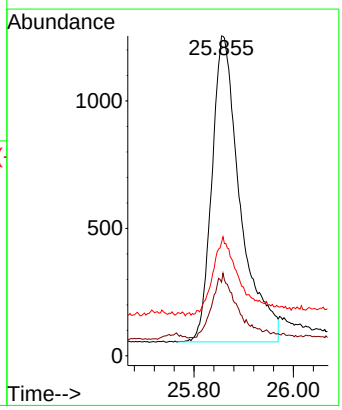


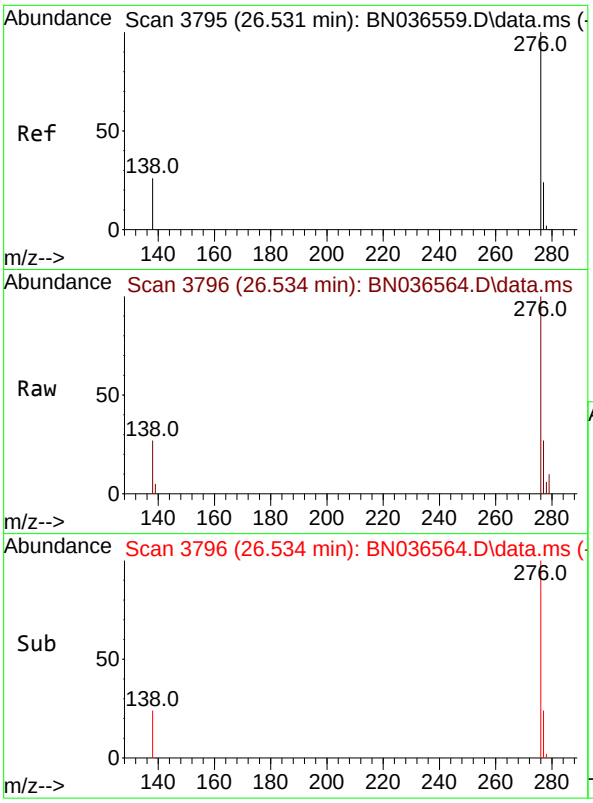


#40
Dibenzo(a,h)anthracene
Concen: 0.440 ng
RT: 25.855 min Scan# 3564
Delta R.T. 0.000 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Tgt Ion:278 Resp: 4740

Ion	Ratio	Lower	Upper
278	100		
139	23.0	20.8	31.2
279	35.5	28.8	43.2



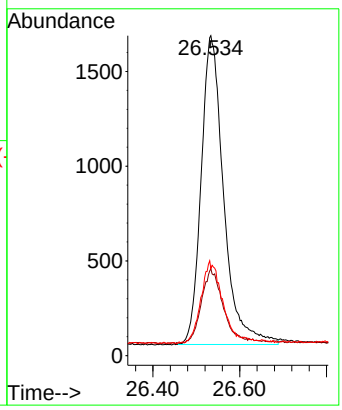


#41
Benzo(g,h,i)perylene
Concen: 0.477 ng
RT: 26.534 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036564.D
Acq: 10 Mar 2025 16:38

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Tgt Ion:276 Resp: 5877

Ion	Ratio	Lower	Upper
276	100		
277	27.2	22.2	33.4
138	27.2	24.1	36.1



Evaluate Continuing Calibration Report

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036564.D
Acq On : 10 Mar 2025 16:38
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Quant Time: Mar 10 17:10:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	113	0.00
2		1,4-Dioxane	0.444	0.521	-17.3	118	0.00
3		n-Nitrosodimethylamine	0.898	0.918	-2.2	111	0.00
4	S	2-Fluorophenol	0.932	0.972	-4.3	111	0.00
5	S	Phenol-d6	1.152	1.103	4.3	110	0.00
6		bis(2-Chloroethyl)ether	1.190	1.184	0.5	113	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	111	0.00
8	S	Nitrobenzene-d5	0.435	0.418	3.9	112	0.00
9		Naphthalene	1.177	1.191	-1.2	109	0.00
10		Hexachlorobutadiene	0.277	0.301	-8.7	113	0.00
11	SURR	2-Methylnaphthalene-d10	0.595	0.594	0.2	108	0.00
12		2-Methylnaphthalene	0.749	0.721	3.7	104	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00
14	S	2,4,6-Tribromophenol	0.182	0.166	8.8	90	0.00
15	S	2-Fluorobiphenyl	2.327	2.513	-8.0	107	0.00
16		Acenaphthylene	1.888	1.964	-4.0	103	0.00
17		Acenaphthene	1.236	1.308	-5.8	104	0.00
18		Fluorene	1.672	1.694	-1.3	98	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00
20		4,6-Dinitro-2-methylphenol	0.086	0.070	18.6	87	0.01
21		4-Bromophenyl-phenylether	0.251	0.264	-5.2	93	0.00
22		Hexachlorobenzene	0.303	0.344	-13.5	98	0.00
23		Atrazine	0.201	0.202	-0.5	91	0.01
24		Pentachlorophenol	0.138	0.121	12.3	85	0.00
25		Phenanthrene	1.200	1.251	-4.2	93	0.00
26		Anthracene	1.083	1.100	-1.6	92	0.00
27	SURR	Fluoranthene-d10	1.025	1.065	-3.9	92	0.00
28		Fluoranthene	1.348	1.396	-3.6	93	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	103	0.00
30		Pyrene	1.956	1.933	1.2	93	0.00
31	S	Terphenyl-d14	0.958	0.920	4.0	92	0.00
32		Benzo(a)anthracene	1.391	1.378	0.9	98	0.00
33		Chrysene	1.520	1.645	-8.2	105	0.00
34		Bis(2-ethylhexyl)phthalate	0.990	0.852	13.9	84	0.00
35	I	Perylene-d12	1.000	1.000	0.0	108	0.00
36		Indeno(1,2,3-cd)pyrene	1.444	1.671	-15.7	117	0.00
37		Benzo(b)fluoranthene	1.456	1.539	-5.7	108	0.00
38		Benzo(k)fluoranthene	1.527	1.639	-7.3	110	0.00
39	C	Benzo(a)pyrene	1.226	1.342	-9.5	112	0.00
40		Dibenzo(a,h)anthracene	1.124	1.236	-10.0	115	0.00
41		Benzo(g,h,i)perylene	1.286	1.532	-19.1	120	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036564.D
Acq On : 10 Mar 2025 16:38
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN031025

Quant Time: Mar 10 17:10:04 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	113	0.00
2		1,4-Dioxane	0.400	0.470	-17.5	118	0.00
3		n-Nitrosodimethylamine	0.400	0.409	-2.2	111	0.00
4	S	2-Fluorophenol	0.400	0.417	-4.2	111	0.00
5	S	Phenol-d6	0.400	0.383	4.3	110	0.00
6		bis(2-Chloroethyl)ether	0.400	0.398	0.5	113	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	111	0.00
8	S	Nitrobenzene-d5	0.400	0.384	4.0	112	0.00
9		Naphthalene	0.400	0.405	-1.3	109	0.00
10		Hexachlorobutadiene	0.400	0.434	-8.5	113	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.399	0.3	108	0.00
12		2-Methylnaphthalene	0.400	0.385	3.8	104	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	102	0.00
14	S	2,4,6-Tribromophenol	0.400	0.365	8.8	90	0.00
15	S	2-Fluorobiphenyl	0.400	0.432	-8.0	107	0.00
16		Acenaphthylene	0.400	0.416	-4.0	103	0.00
17		Acenaphthene	0.400	0.423	-5.7	104	0.00
18		Fluorene	0.400	0.405	-1.3	98	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	96	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.420	-5.0	87	0.01
21		4-Bromophenyl-phenylether	0.400	0.421	-5.2	93	0.00
22		Hexachlorobenzene	0.400	0.455	-13.7	98	0.00
23		Atrazine	0.400	0.401	-0.3	91	0.01
24		Pentachlorophenol	0.400	0.351	12.3	85	0.00
25		Phenanthrene	0.400	0.417	-4.2	93	0.00
26		Anthracene	0.400	0.407	-1.7	92	0.00
27	SURR	Fluoranthene-d10	0.400	0.415	-3.7	92	0.00
28		Fluoranthene	0.400	0.414	-3.5	93	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	103	0.00
30		Pyrene	0.400	0.395	1.3	93	0.00
31	S	Terphenyl-d14	0.400	0.384	4.0	92	0.00
32		Benzo(a)anthracene	0.400	0.396	1.0	98	0.00
33		Chrysene	0.400	0.433	-8.2	105	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.344	14.0	84	0.00
35	I	Perylene-d12	0.400	0.400	0.0	108	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.463	-15.8	117	0.00
37		Benzo(b)fluoranthene	0.400	0.423	-5.7	108	0.00
38		Benzo(k)fluoranthene	0.400	0.429	-7.2	110	0.00
39	C	Benzo(a)pyrene	0.400	0.438	-9.5	112	0.00
40		Dibenzo(a,h)anthracene	0.400	0.440	-10.0	115	0.00
41		Benzo(g,h,i)perylene	0.400	0.477	-19.2	120	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: AECO15

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG No.: Q1531

Instrument ID: BNA_N Calibration Date/Time: 03/10/2025 21:26

Lab File ID: BN036572.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.585		-1.7	50.0
Fluoranthene-d10	1.025	1.071		4.5	50.0
2-Fluorophenol	0.932	0.968		3.9	50.0
Phenol-d6	1.152	1.112		-3.5	50.0
Nitrobenzene-d5	0.435	0.405		-6.9	50.0
2-Fluorobiphenyl	2.327	2.408		3.5	50.0
2,4,6-Tribromophenol	0.182	0.171		-6.0	50.0
Terphenyl-d14	0.958	0.947		-1.1	50.0
1,4-Dioxane	0.444	0.520		17.1	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036572.D
Acq On : 10 Mar 2025 21:26
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 11 00:53:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2507	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5839	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3266	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	6207	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4431m	0.400	ng		0.00
35) Perylene-d12	23.552	264	4016	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	2426	0.415	ng		0.00
5) Phenol-d6	6.894	99	2788	0.386	ng		0.00
8) Nitrobenzene-d5	8.875	82	2365	0.372	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	3417	0.393	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	560	0.378	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	7865	0.414	ng		0.00
27) Fluoranthene-d10	19.141	212	6646	0.418	ng		0.00
31) Terphenyl-d14	19.745	244	4195	0.395	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	1303	0.469	ng		96
3) n-Nitrosodimethylamine	3.557	42	2276	0.405	ng		94
6) bis(2-Chloroethyl)ether	7.147	93	2938	0.394	ng		99
9) Naphthalene	10.562	128	6870	0.400	ng		100
10) Hexachlorobutadiene	10.851	225	1723	0.426	ng	#	99
12) 2-Methylnaphthalene	12.182	142	4313	0.395	ng		99
16) Acenaphthylene	14.078	152	6346	0.412	ng		100
17) Acenaphthene	14.420	154	4153	0.412	ng		99
18) Fluorene	15.414	166	5592	0.410	ng		99
20) 4,6-Dinitro-2-methylph...	15.500	198	439	0.423	ng		99
21) 4-Bromophenyl-phenylether	16.305	248	1638	0.421	ng		94
22) Hexachlorobenzene	16.416	284	2099	0.447	ng		98
23) Atrazine	16.578	200	1291	0.414	ng		98
24) Pentachlorophenol	16.764	266	802	0.375	ng		100
25) Phenanthrene	17.149	178	7873	0.423	ng		99
26) Anthracene	17.248	178	6961	0.414	ng		99
28) Fluoranthene	19.169	202	8718	0.417	ng		100
30) Pyrene	19.536	202	8800	0.406	ng		100
32) Benzo(a)anthracene	21.277	228	5953	0.386	ng		98
33) Chrysene	21.331	228	7391	0.439	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	3997	0.364	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	6596	0.455	ng		98
37) Benzo(b)fluoranthene	22.873	252	6161	0.422	ng		98
38) Benzo(k)fluoranthene	22.917	252	6664m	0.435	ng		
39) Benzo(a)pyrene	23.455	252	5508	0.448	ng		97
40) Dibenzo(a,h)anthracene	25.852	278	5154	0.457	ng		95
41) Benzo(g,h,i)perylene	26.522	276	5982	0.463	ng		98

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

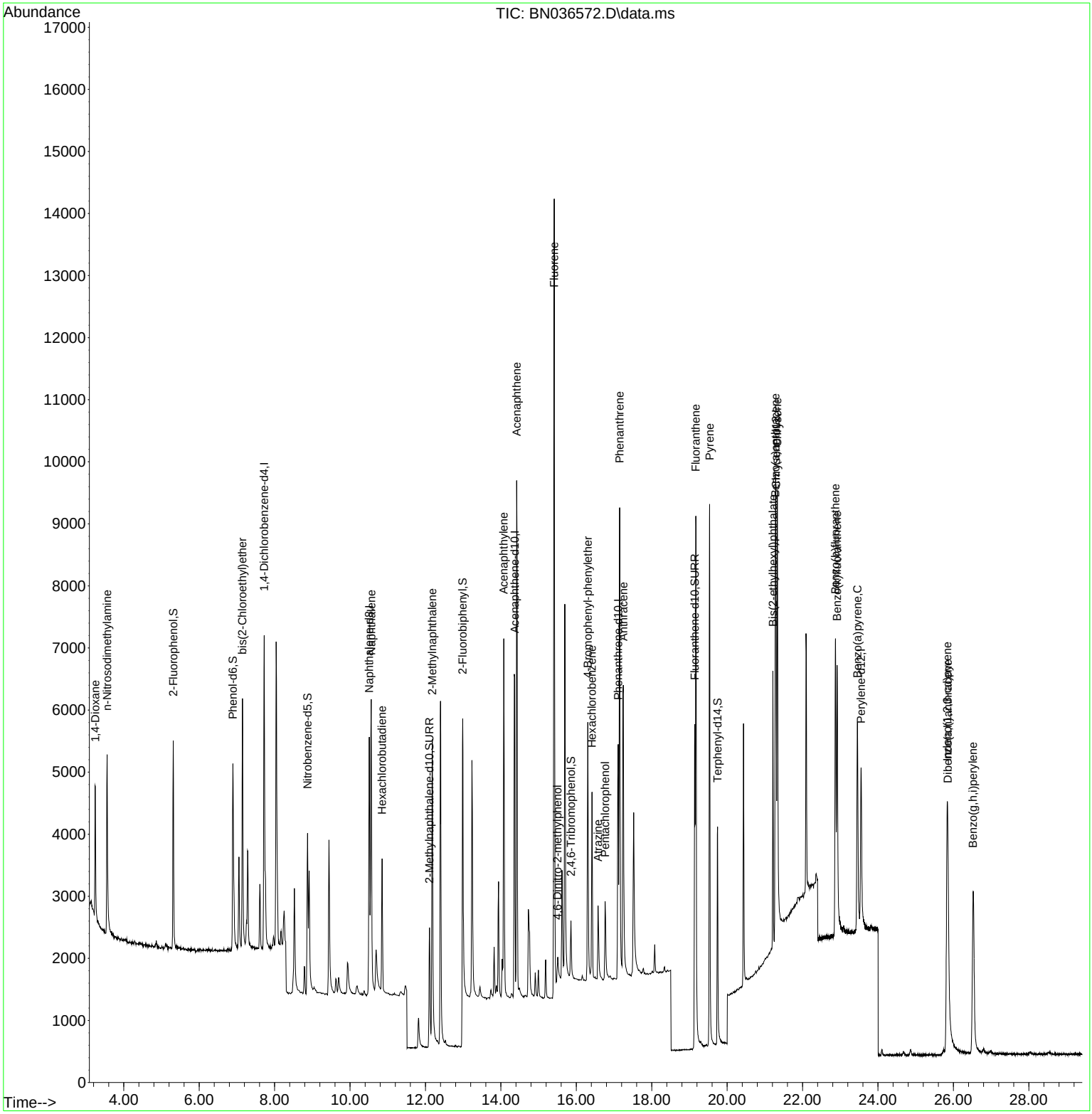
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Data File : BN036572.D
Acq On : 10 Mar 2025 21:26
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

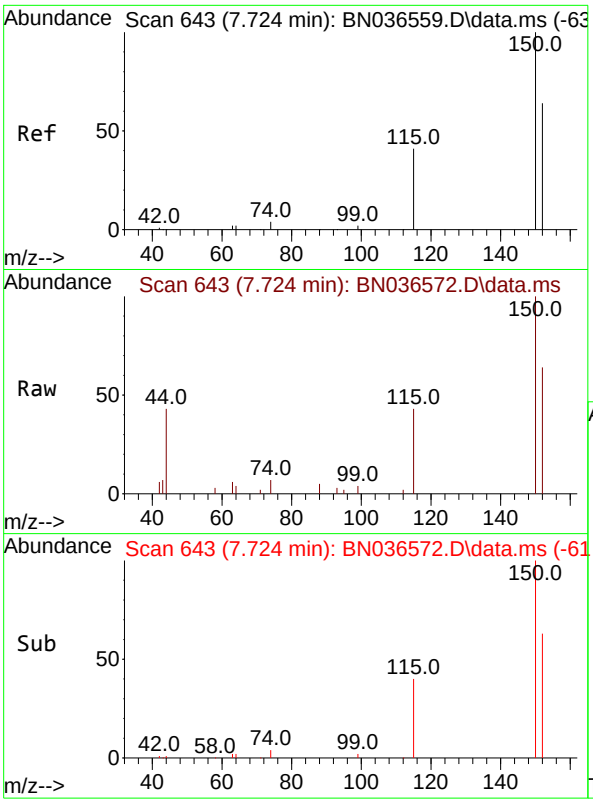
Quant Time: Mar 11 00:53:32 2025
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

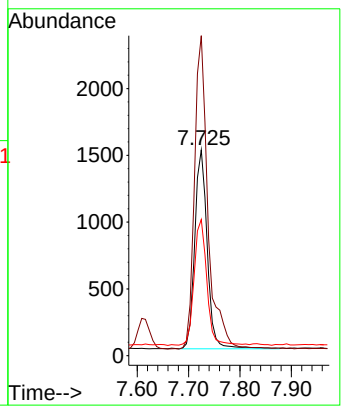




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:152 Resp: 250

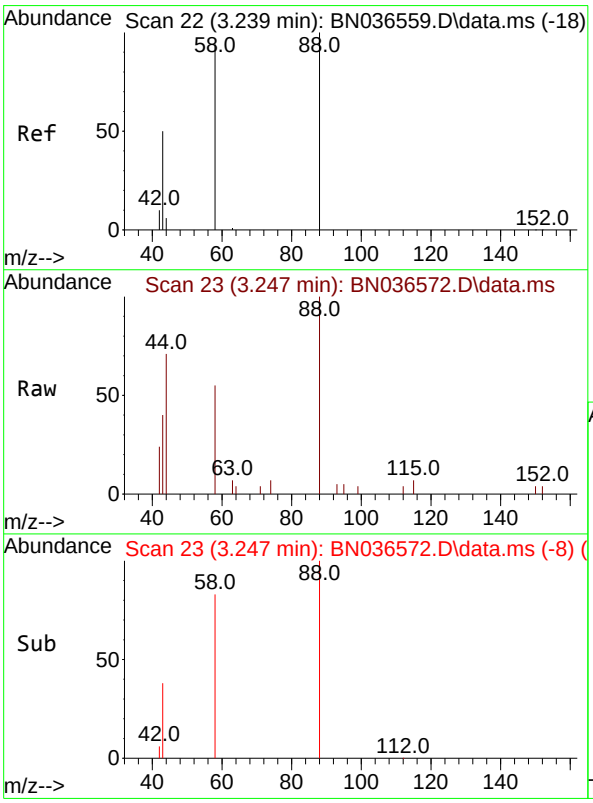
Ion	Ratio	Lower	Upper
152	100		
150	155.5	123.7	185.5
115	66.2	54.3	81.5



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

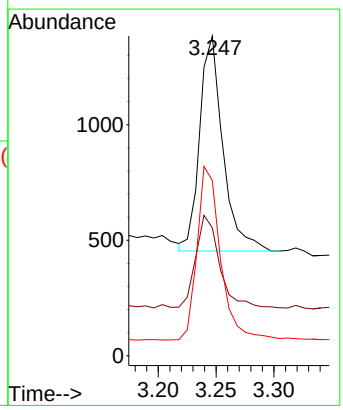
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

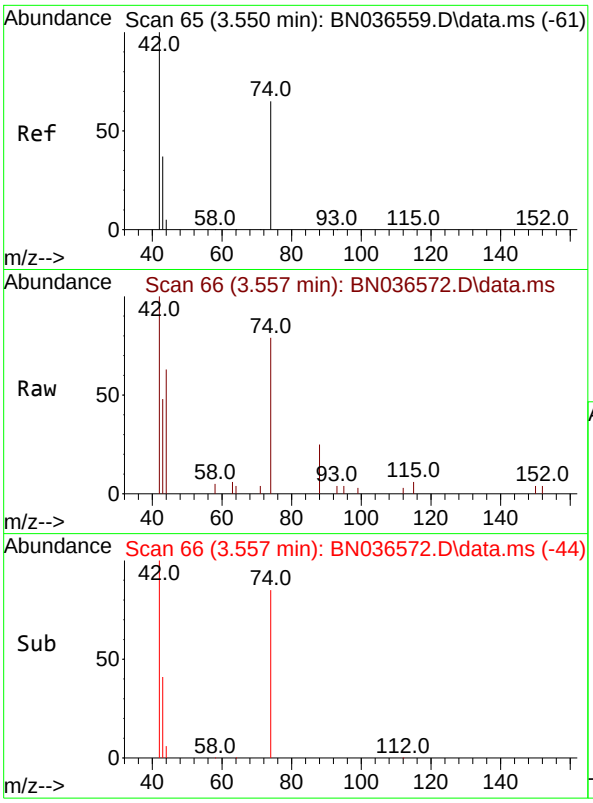


#2
1,4-Dioxane
Concen: 0.469 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 88 Resp: 1303

Ion	Ratio	Lower	Upper
88	100		
43	44.7	37.8	56.8
58	81.1	67.4	101.2

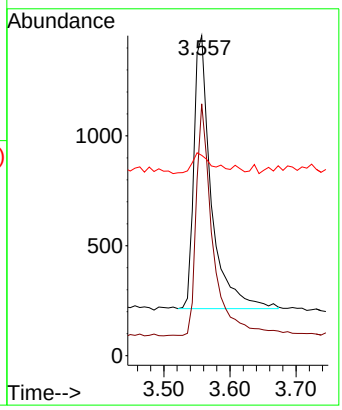




#3
n-Nitrosodimethylamine
Concen: 0.405 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 42 Resp: 227

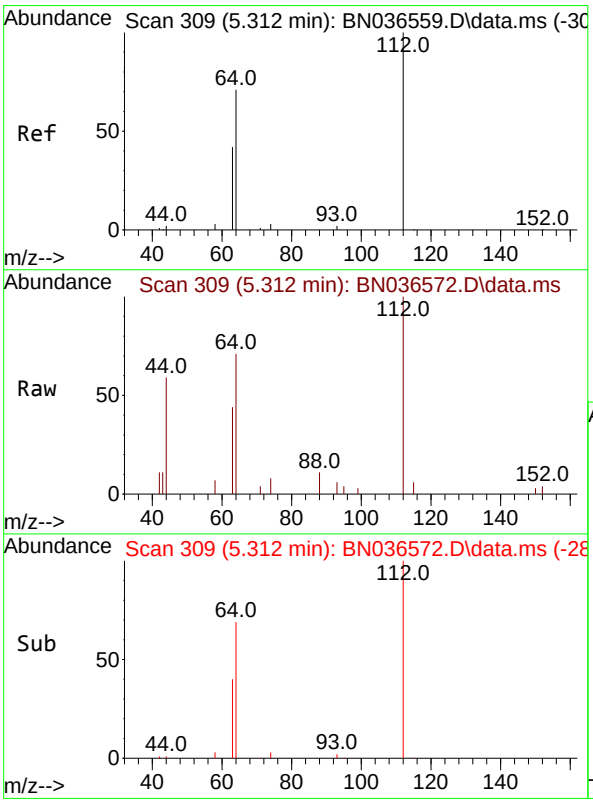
Ion	Ratio	Lower	Upper
42	100		
74	81.4	60.6	90.8
44	8.8	6.3	9.5



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

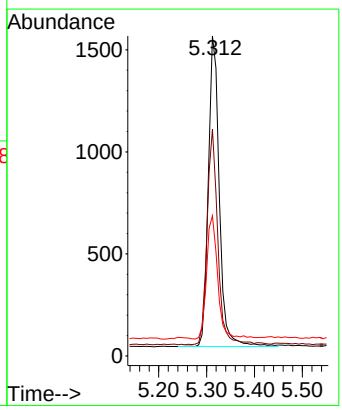
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

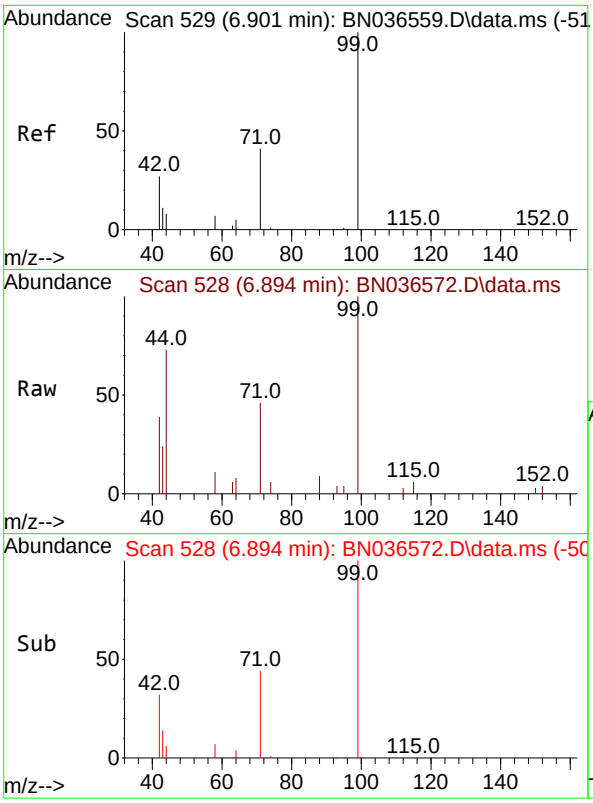


#4
2-Fluorophenol
Concen: 0.415 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:112 Resp: 2426

Ion	Ratio	Lower	Upper
112	100		
64	68.0	53.1	79.7
63	39.7	31.8	47.8

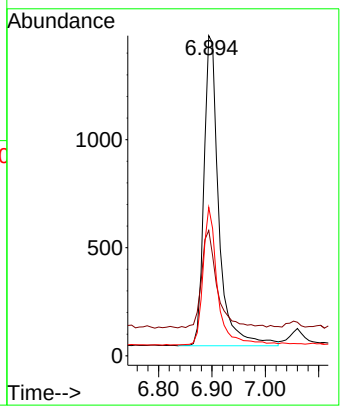




#5
Phenol-d6
Concen: 0.386 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 99 Resp: 278

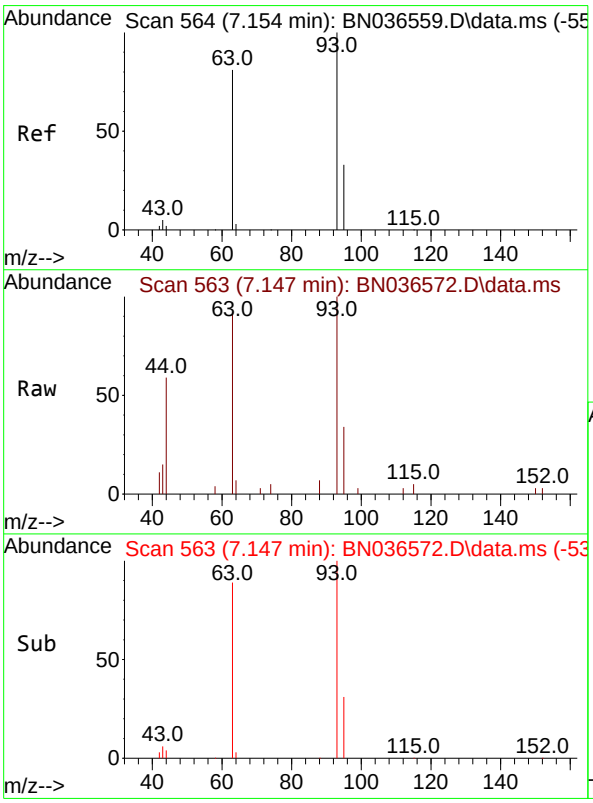
Ion	Ratio	Lower	Upper
99	100		
42	33.0	26.5	39.7
71	42.7	34.1	51.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

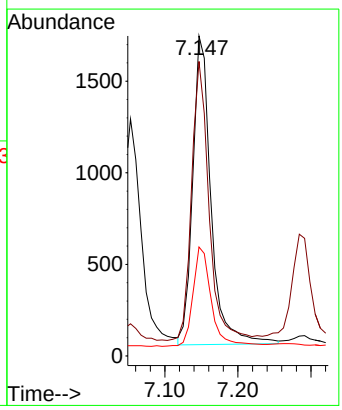
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

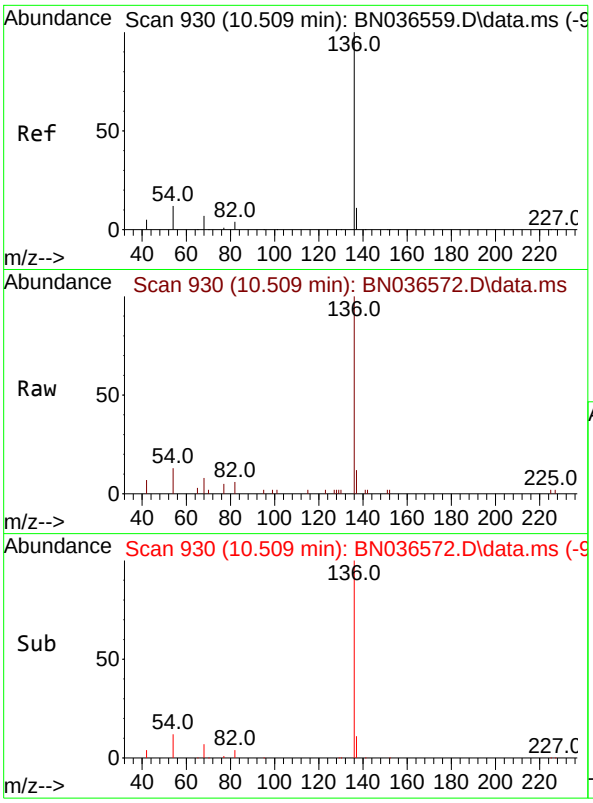


#6
bis(2-Chloroethyl)ether
Concen: 0.394 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 93 Resp: 2938

Ion	Ratio	Lower	Upper
93	100		
63	85.4	67.7	101.5
95	32.1	25.6	38.4

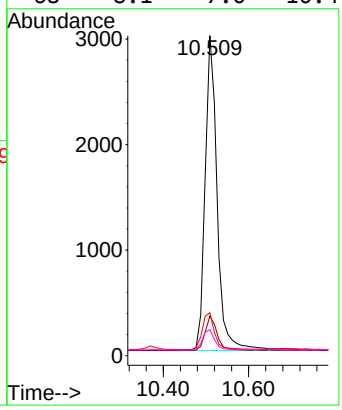




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:136 Resp: 583

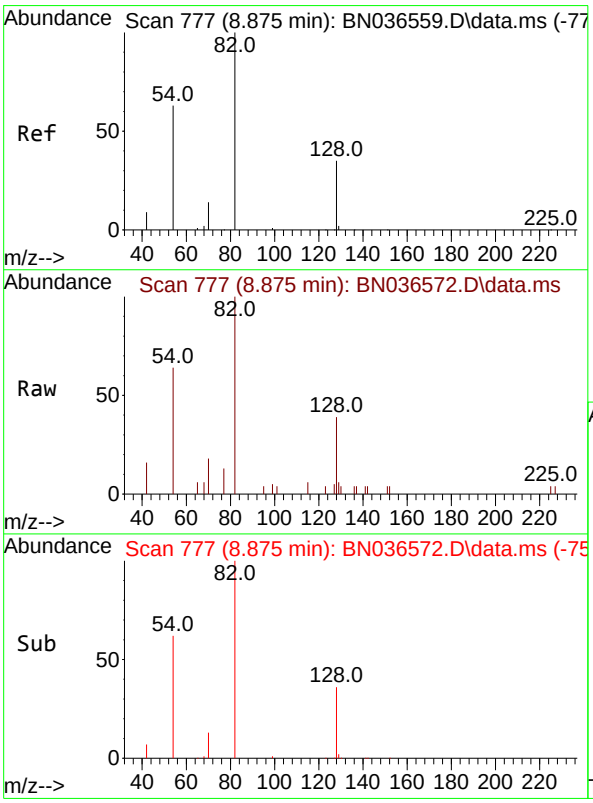
Ion	Ratio	Lower	Upper
136	100		
137	12.4	10.3	15.5
54	13.4	11.5	17.3
68	8.1	7.0	10.4



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

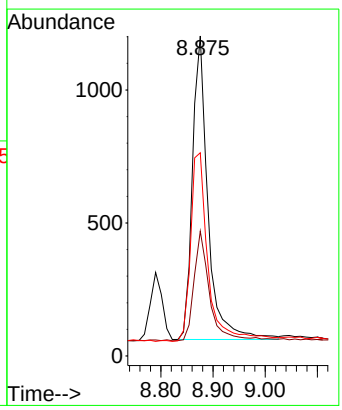
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

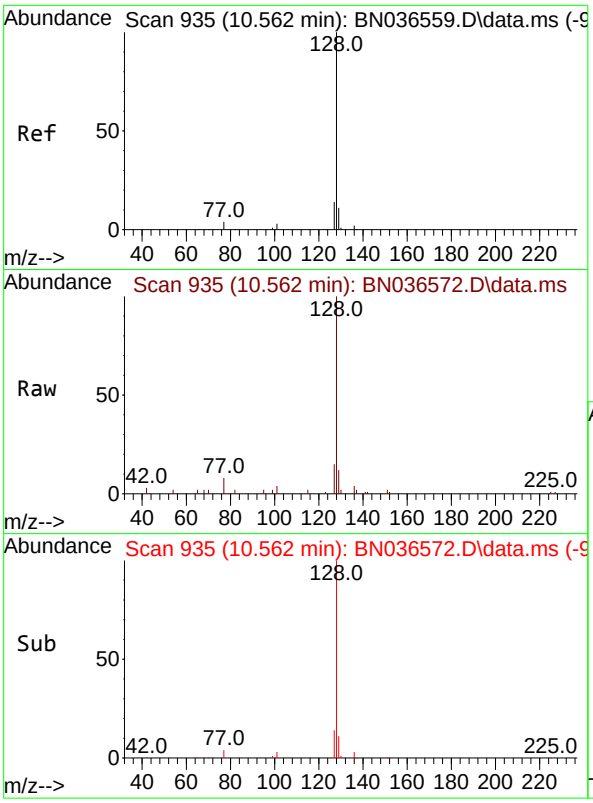


#8
Nitrobenzene-d5
Concen: 0.372 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 82 Resp: 2365

Ion	Ratio	Lower	Upper
82	100		
128	39.0	30.6	45.8
54	63.5	52.2	78.4

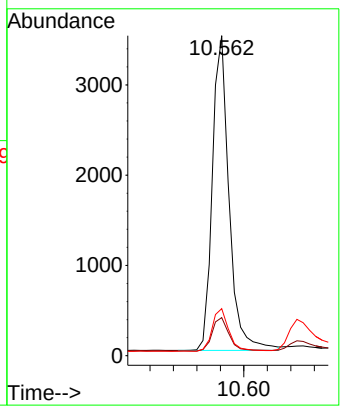




#9
Naphthalene
Concen: 0.400 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:128 Resp: 687

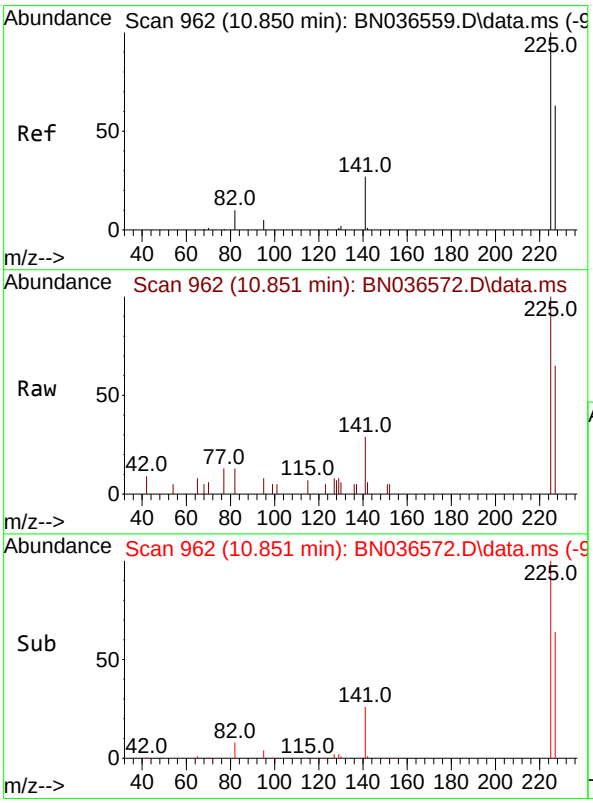
Ion	Ratio	Lower	Upper
128	100		
129	11.9	9.8	14.6
127	14.7	11.8	17.8



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

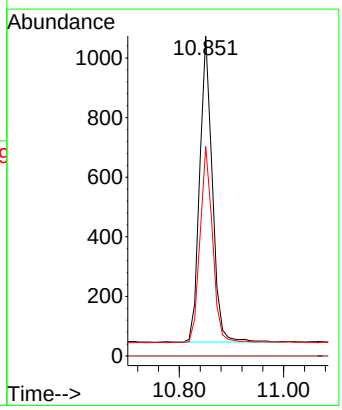
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

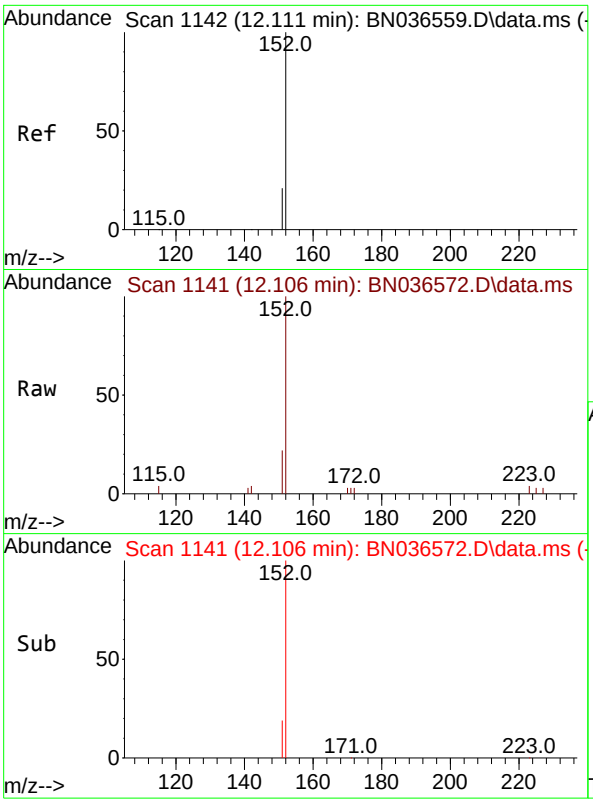


#10
Hexachlorobutadiene
Concen: 0.426 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:225 Resp: 1723

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	51.8	77.8





#11
2-Methylnaphthalene-d10
Concen: 0.393 ng
RT: 12.106 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

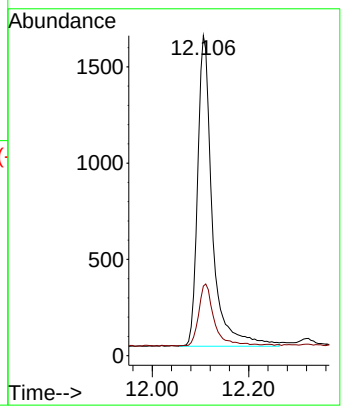
Tgt Ion:152 Resp: 341

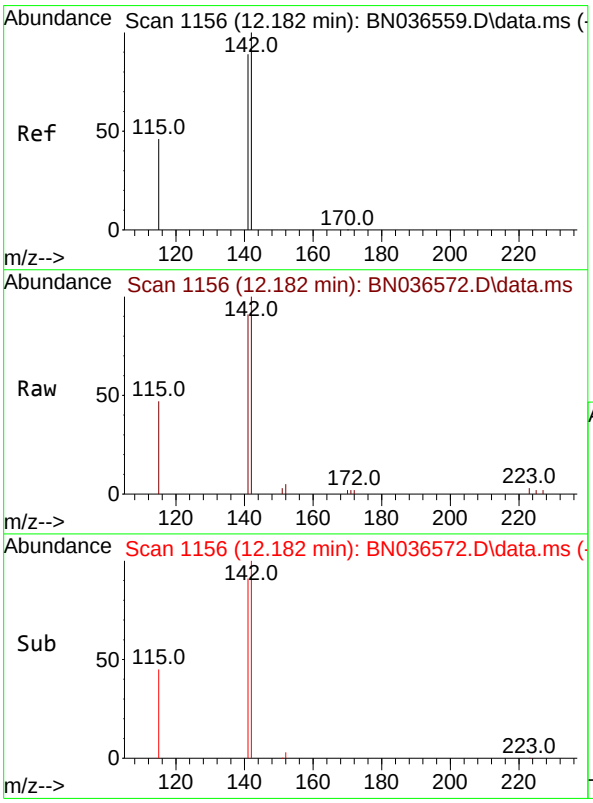
Ion	Ratio	Lower	Upper
152	100		
151	20.7	17.0	25.6

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

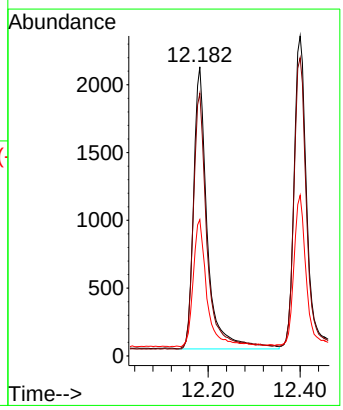


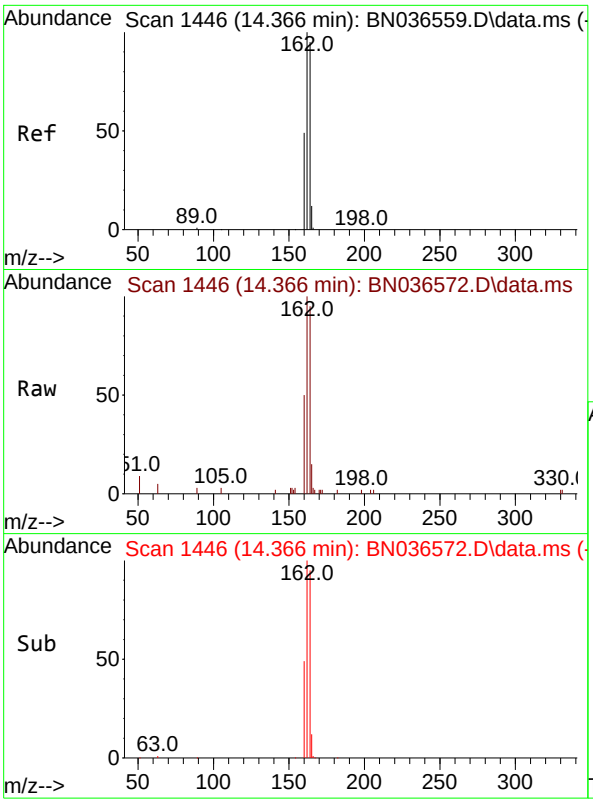


#12
2-Methylnaphthalene
Concen: 0.395 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:142 Resp: 4313

Ion	Ratio	Lower	Upper
142	100		
141	90.8	71.7	107.5
115	47.1	38.3	57.5

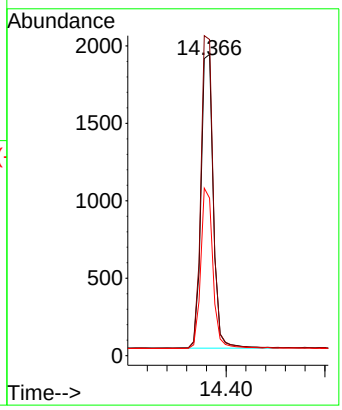




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:164 Resp: 326

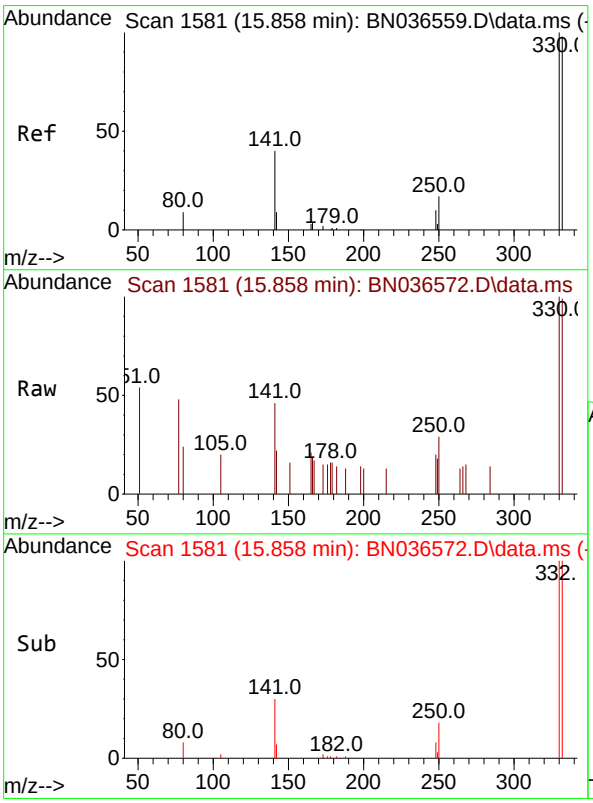
Ion	Ratio	Lower	Upper
164	100		
162	104.9	84.2	126.2
160	52.3	42.2	63.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

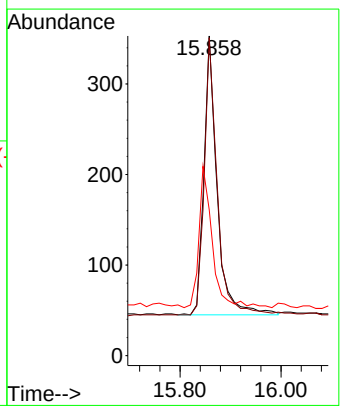
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

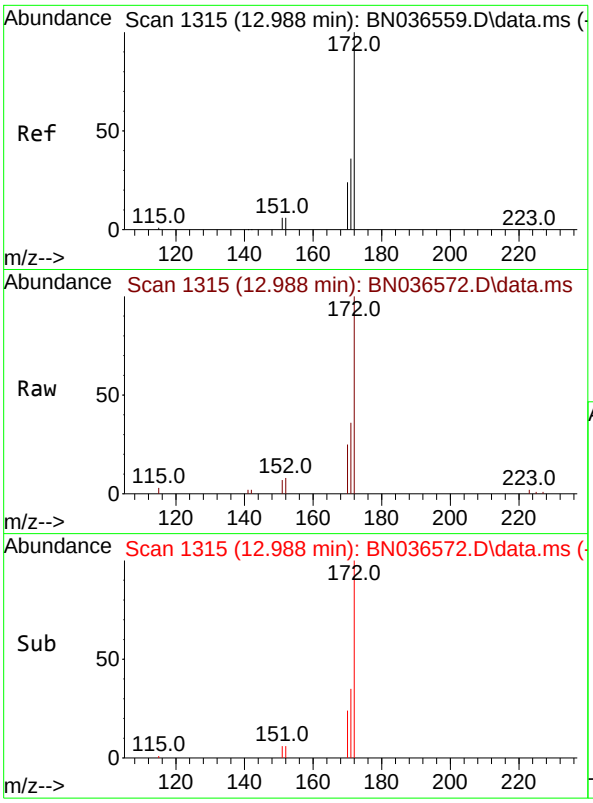


#14
2,4,6-Tribromophenol
Concen: 0.378 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:330 Resp: 560

Ion	Ratio	Lower	Upper
330	100		
332	97.7	75.2	112.8
141	51.2	43.4	65.2





#15
2-Fluorobiphenyl
Concen: 0.414 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

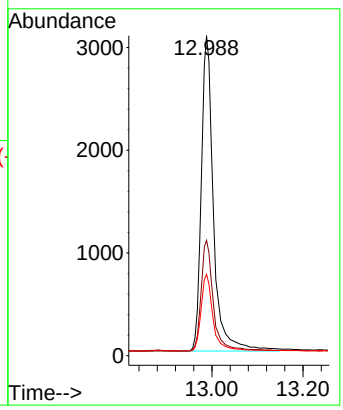
Tgt Ion:172 Resp: 786

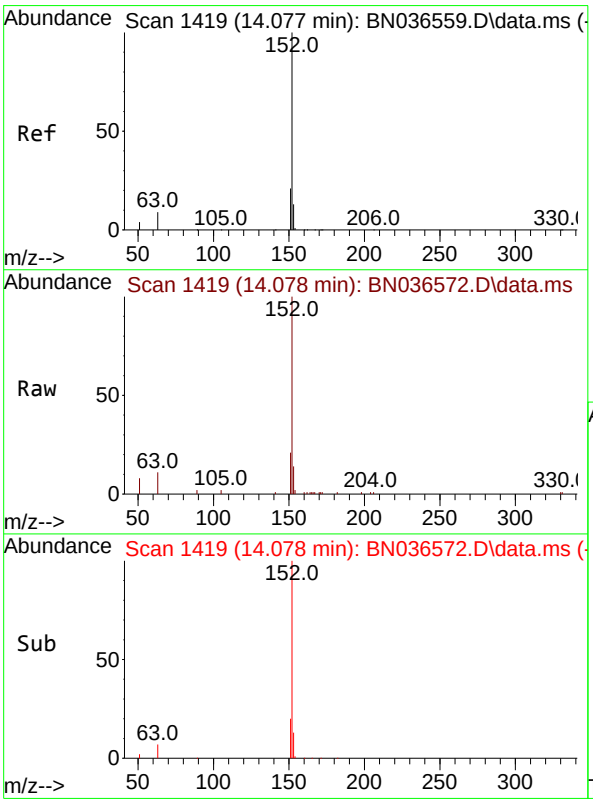
Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	25.5	20.2	30.4

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

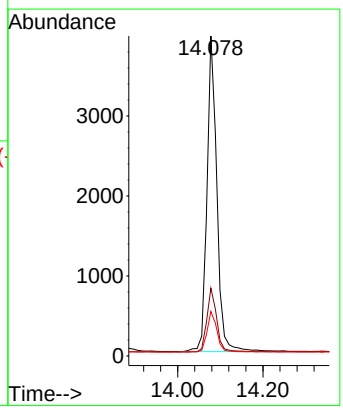


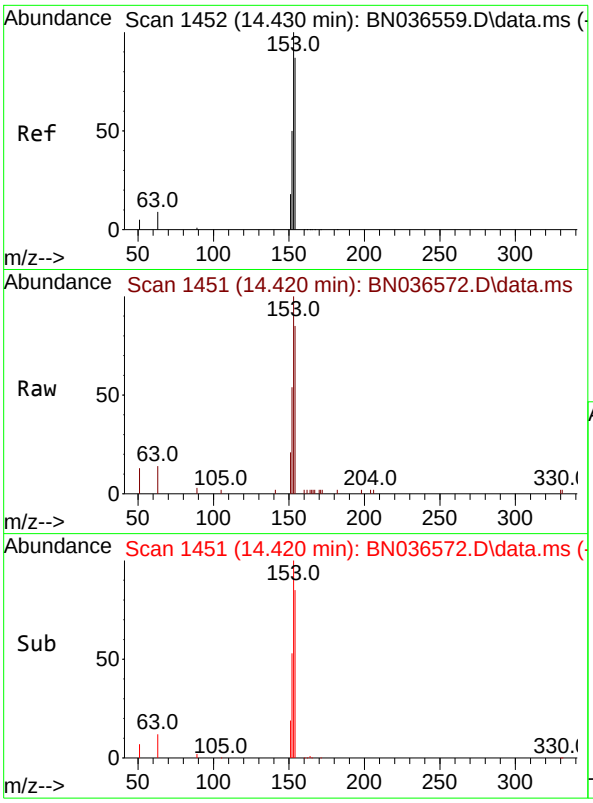


#16
Acenaphthylene
Concen: 0.412 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:152 Resp: 6346

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	13.1	10.6	15.8

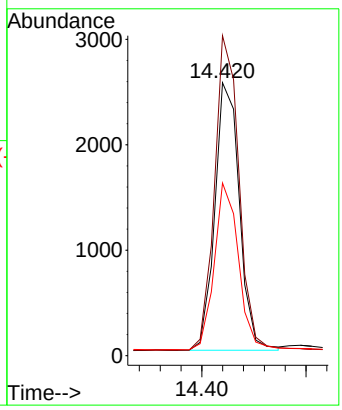




#17
Acenaphthene
Concen: 0.412 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.010 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:154 Resp: 415

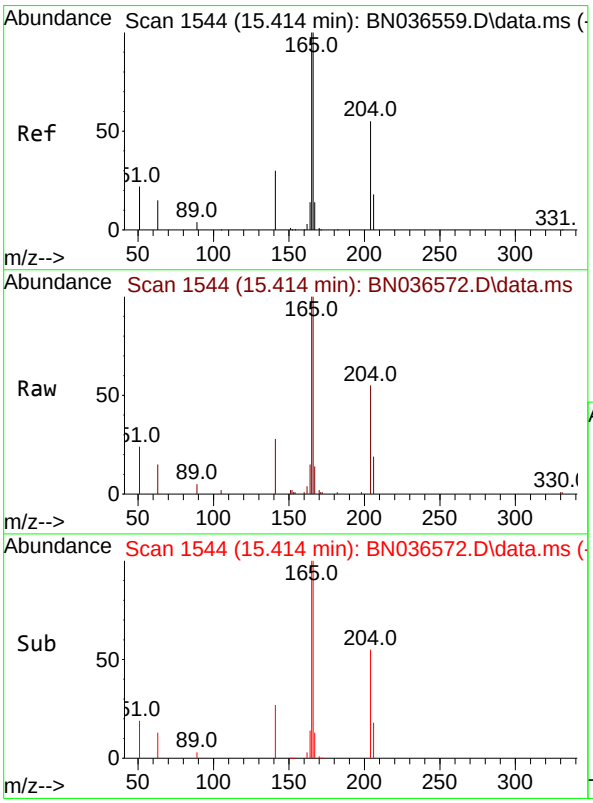
Ion	Ratio	Lower	Upper
154	100		
153	118.3	94.1	141.1
152	61.8	49.8	74.6



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

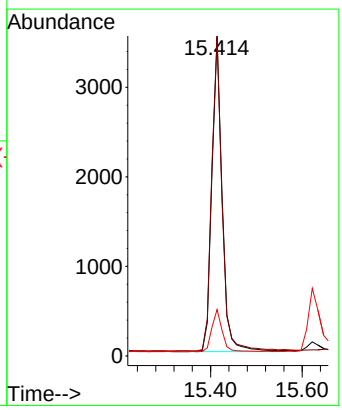
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

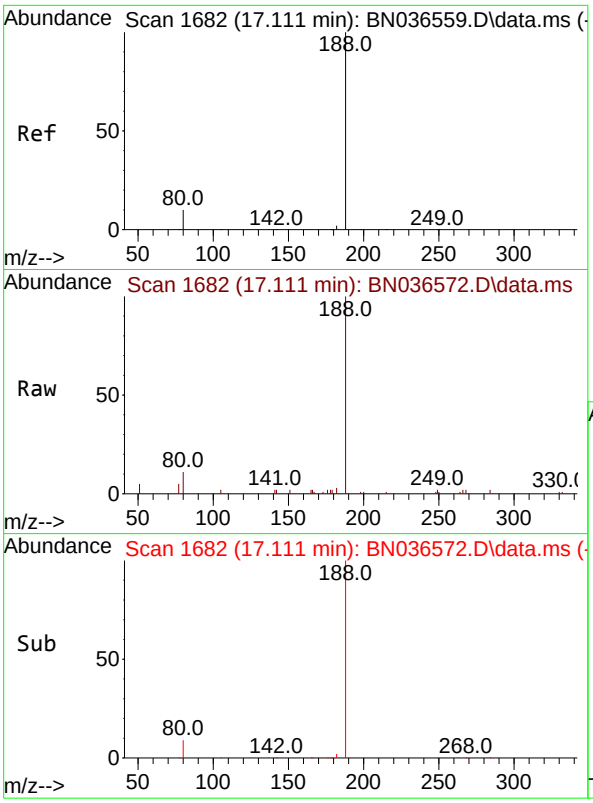


#18
Fluorene
Concen: 0.410 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:166 Resp: 5592

Ion	Ratio	Lower	Upper
166	100		
165	100.3	79.8	119.8
167	13.7	10.6	15.8

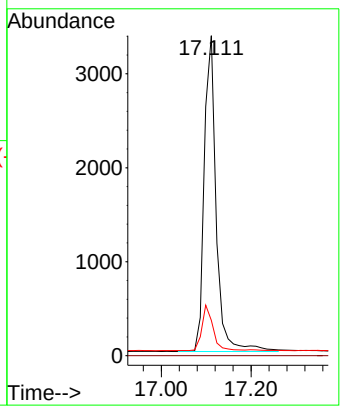




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:188 Resp: 620

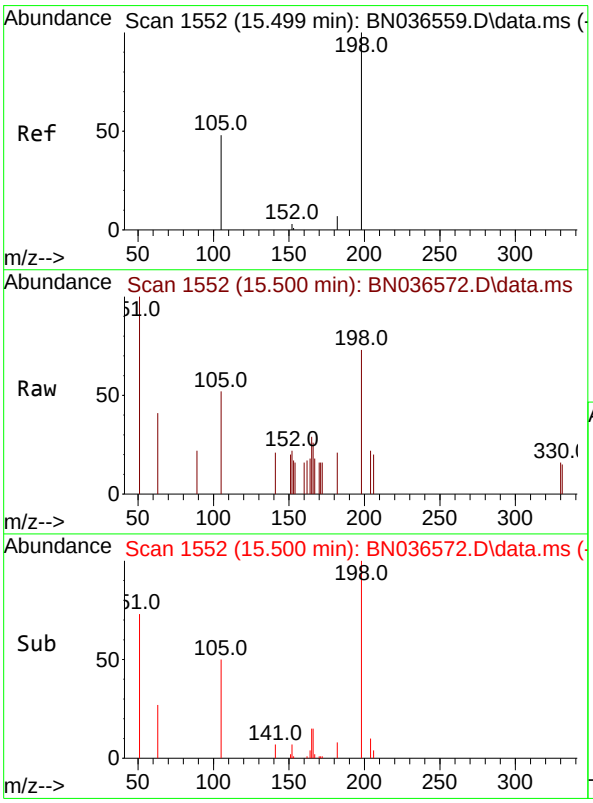
Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.0	8.8	13.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

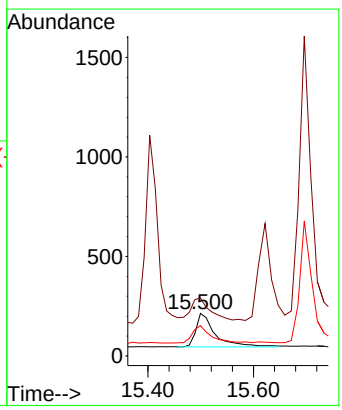
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

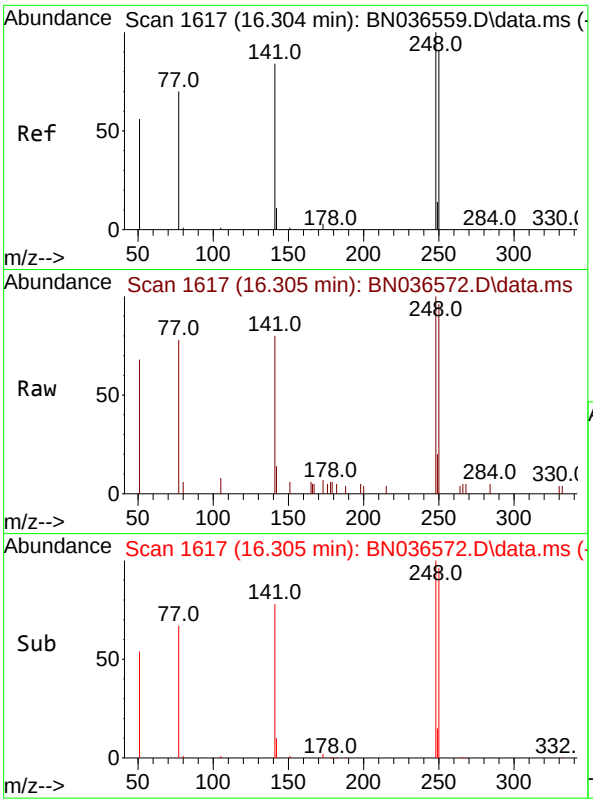


#20
4,6-Dinitro-2-methylphenol
Concen: 0.423 ng
RT: 15.500 min Scan# 1552
Delta R.T. 0.001 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:198 Resp: 439

Ion	Ratio	Lower	Upper
198	100		
51	136.4	107.9	161.9
105	71.5	56.2	84.2

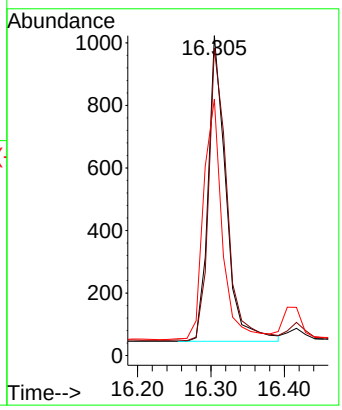




#21
4-Bromophenyl-phenylether
Concen: 0.421 ng
RT: 16.305 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:248 Resp: 163

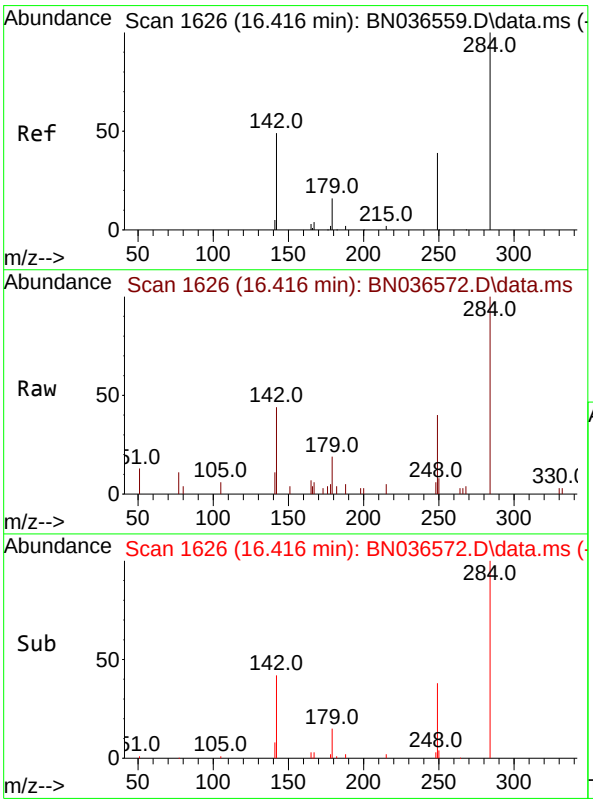
Ion	Ratio	Lower	Upper
248	100		
250	96.1	73.0	109.6
141	80.2	68.6	103.0



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

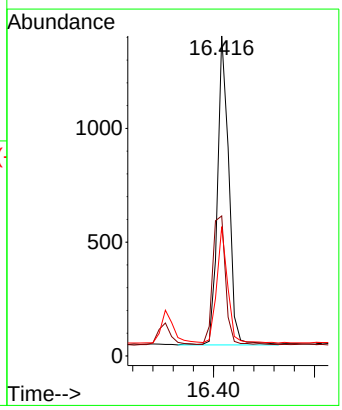
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

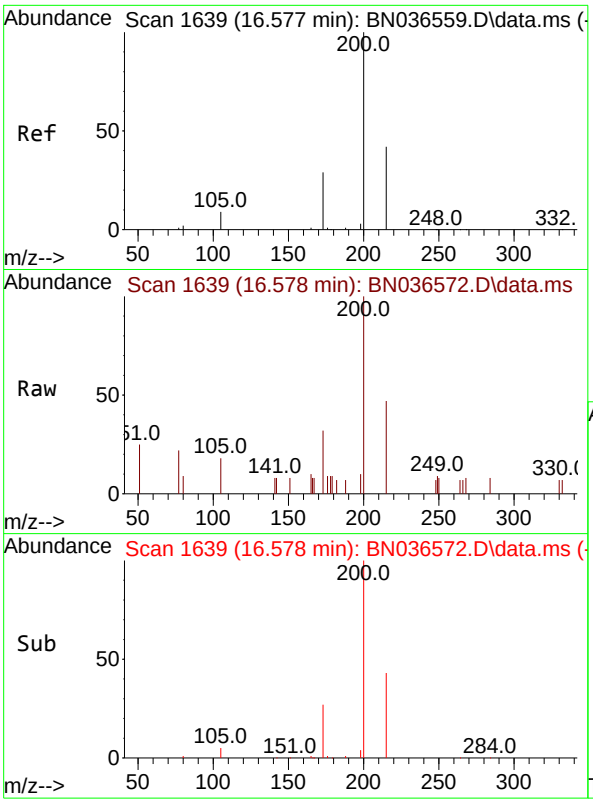


#22
Hexachlorobenzene
Concen: 0.447 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:284 Resp: 2099

Ion	Ratio	Lower	Upper
284	100		
142	47.9	37.0	55.4
249	36.2	28.1	42.1

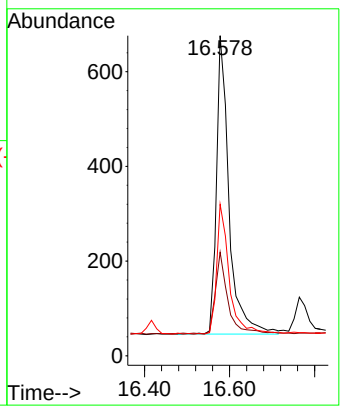




#23
Atrazine
Concen: 0.414 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:200 Resp: 129

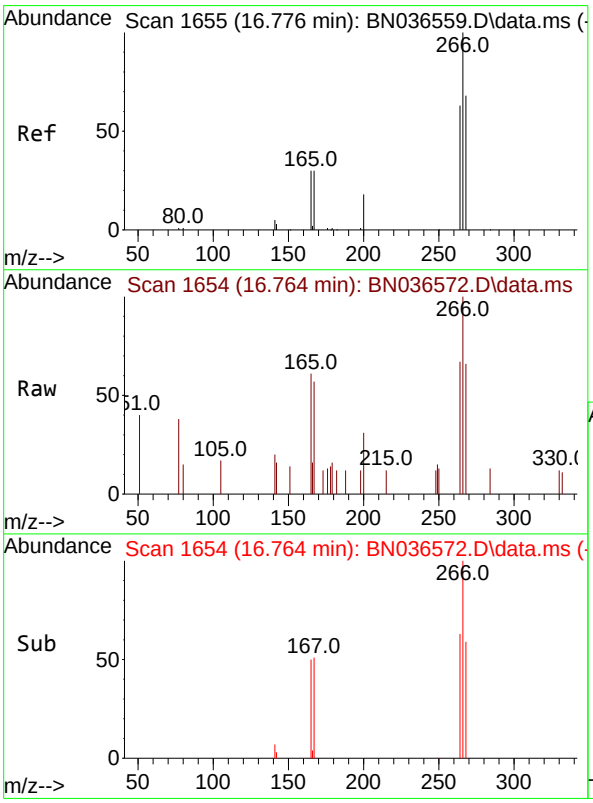
Ion	Ratio	Lower	Upper
200	100		
173	32.4	27.3	40.9
215	47.3	36.8	55.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

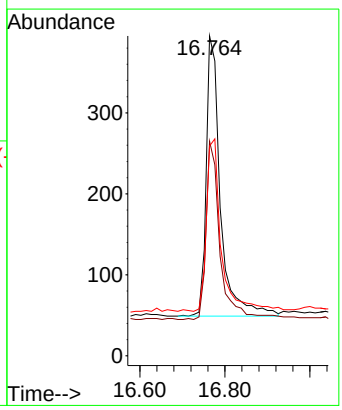
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

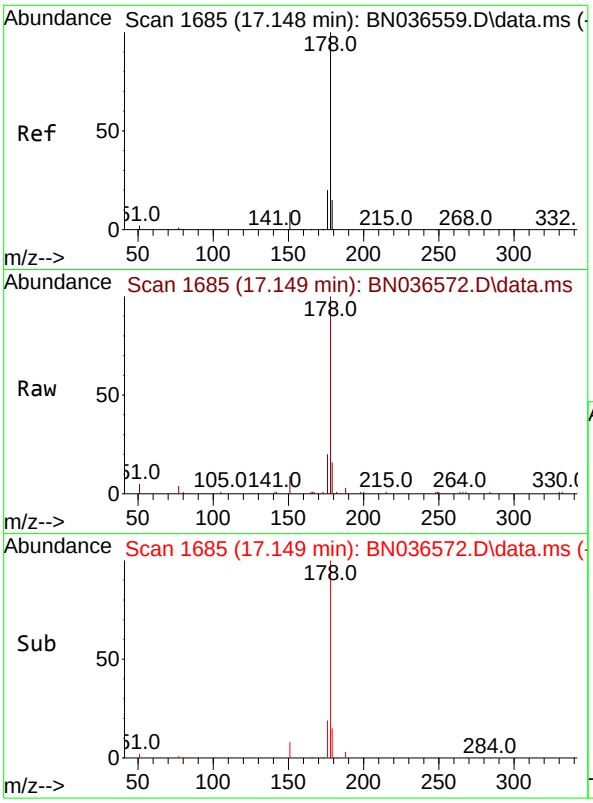


#24
Pentachlorophenol
Concen: 0.375 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:266 Resp: 802

Ion	Ratio	Lower	Upper
266	100		
264	62.5	49.6	74.4
268	63.7	50.9	76.3

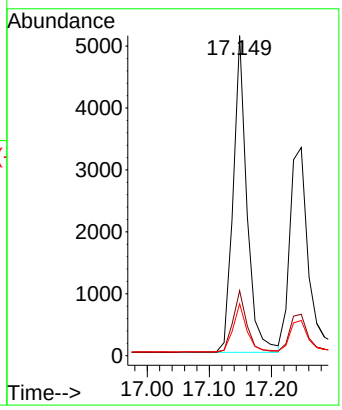




#25
Phenanthrene
Concen: 0.423 ng
RT: 17.149 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:178 Resp: 787

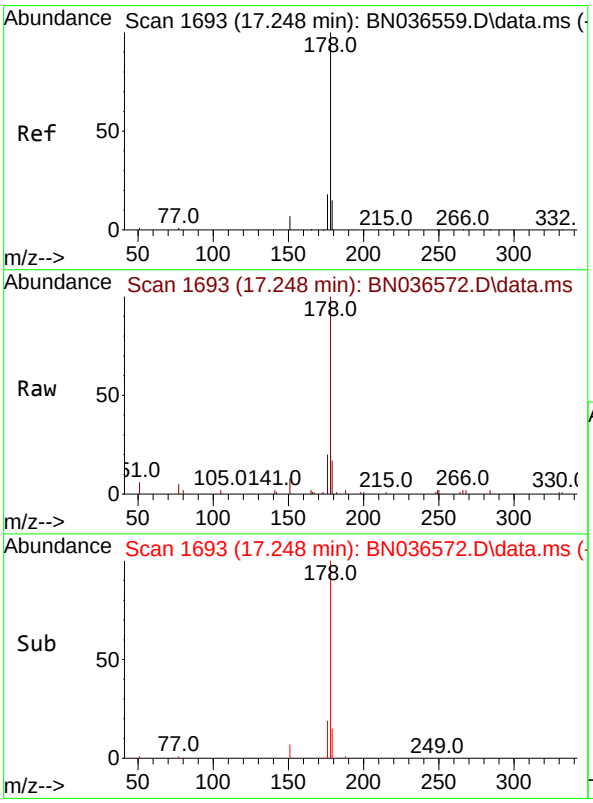
Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.9	23.9
179	15.1	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

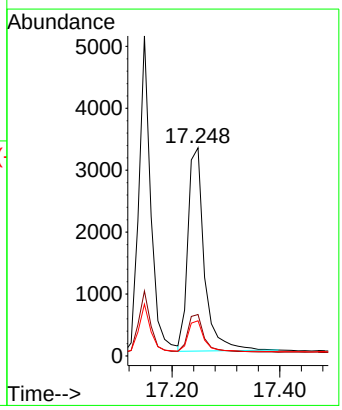
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

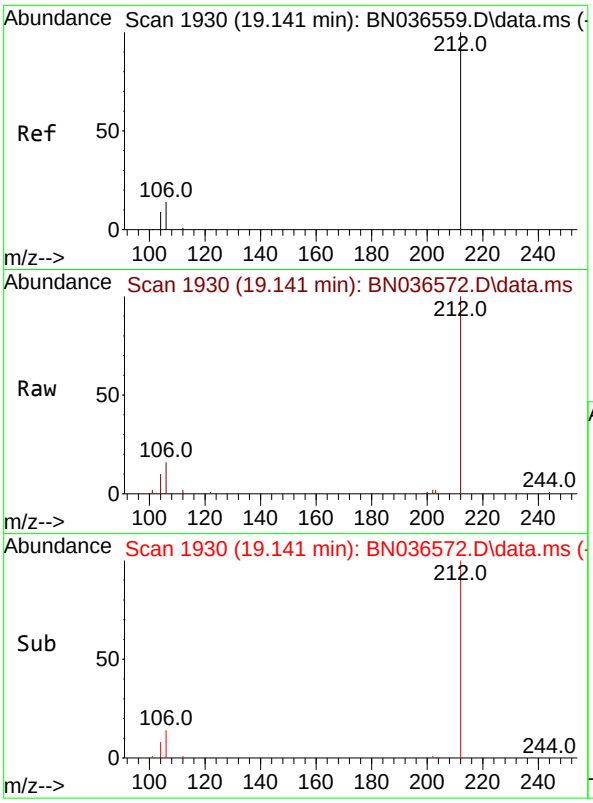


#26
Anthracene
Concen: 0.414 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:178 Resp: 6961

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.3	12.6	18.8

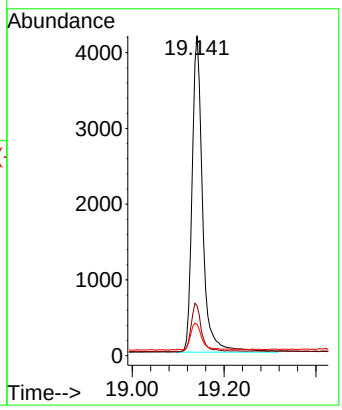




#27
Fluoranthene-d10
Concen: 0.418 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:212 Resp: 664

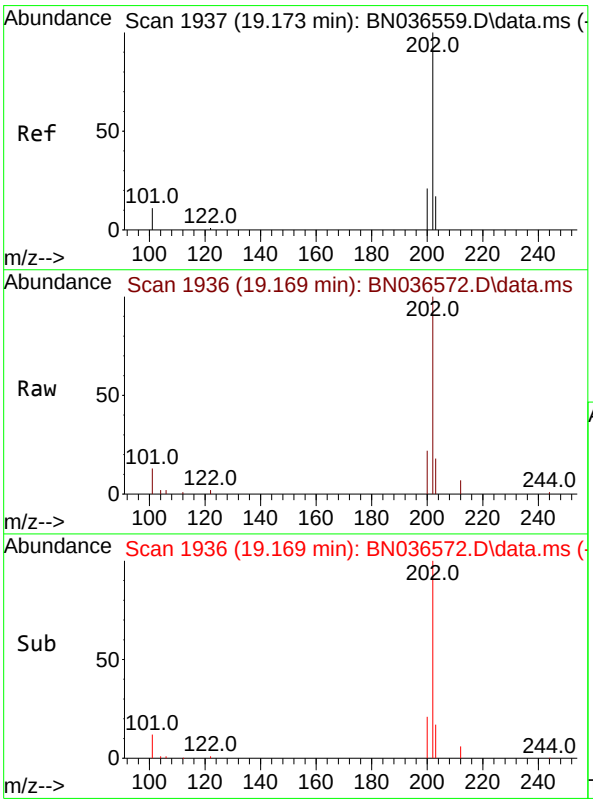
Ion	Ratio	Lower	Upper
212	100		
106	14.8	11.8	17.6
104	9.1	7.3	10.9



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

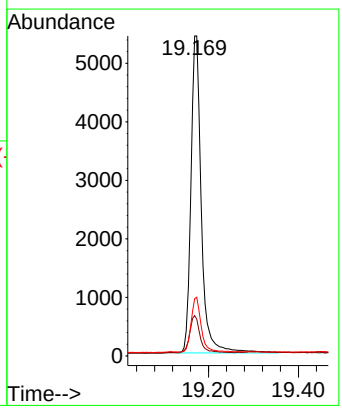
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

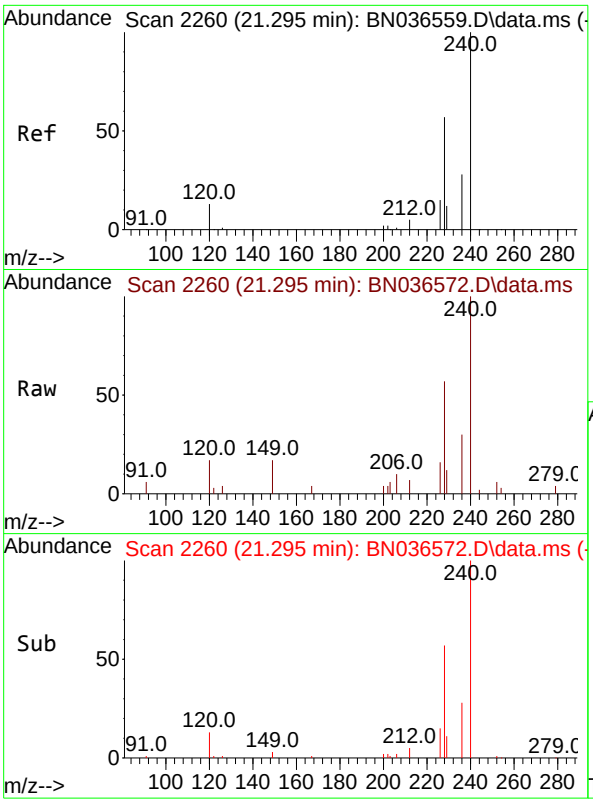


#28
Fluoranthene
Concen: 0.417 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.004 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:202 Resp: 8718

Ion	Ratio	Lower	Upper
202	100		
101	11.6	9.4	14.0
203	16.8	13.5	20.3

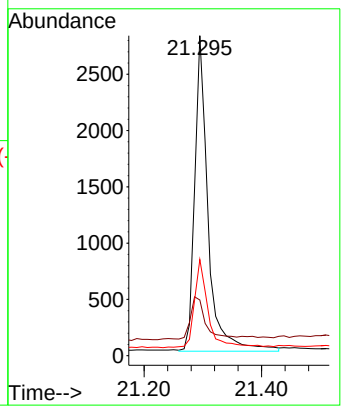




#29
Chrysene-d12
Concen: 0.400 ng m
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:240 Resp: 443

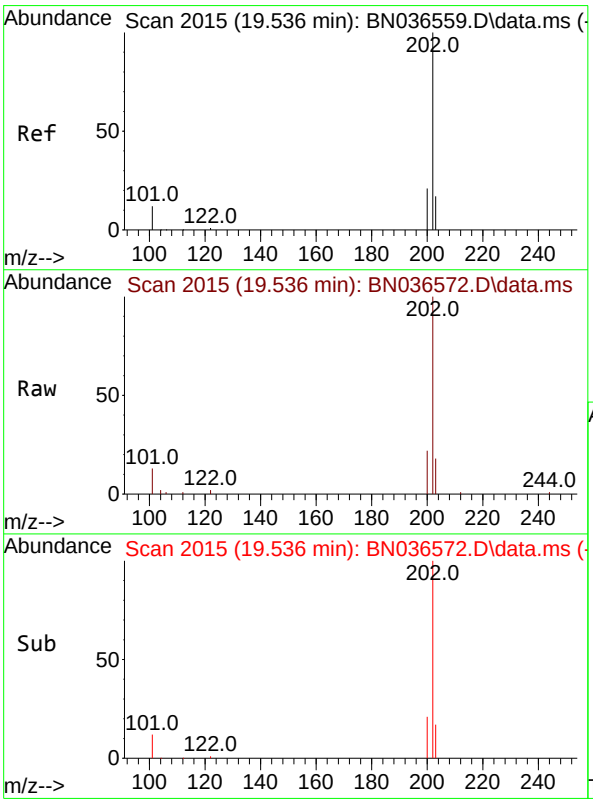
Ion	Ratio	Lower	Upper
240	100		
120	17.4	14.6	22.0
236	30.1	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

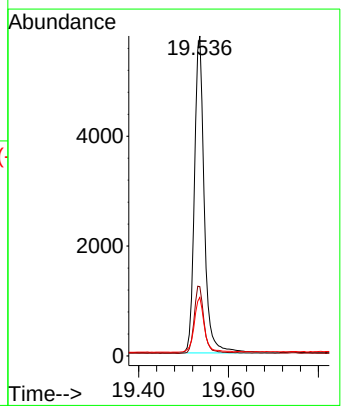
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

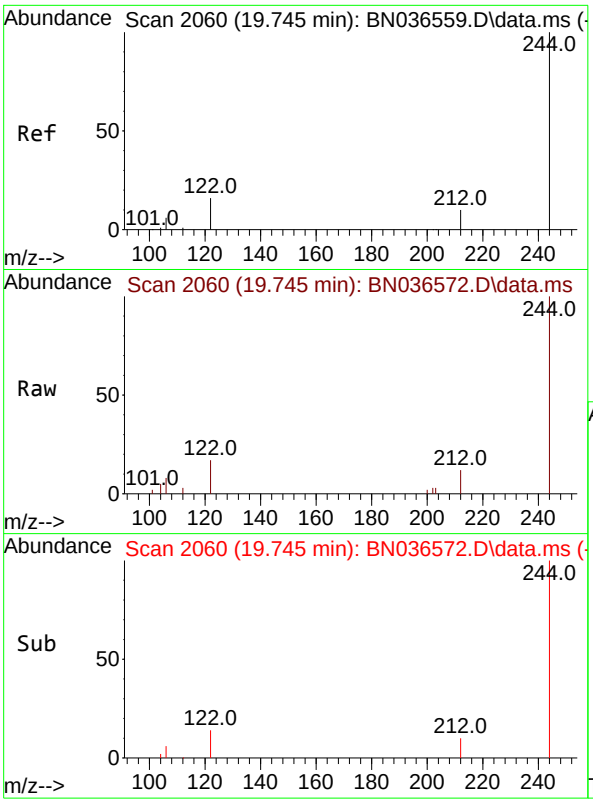


#30
Pyrene
Concen: 0.406 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:202 Resp: 8800

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.6	14.1	21.1

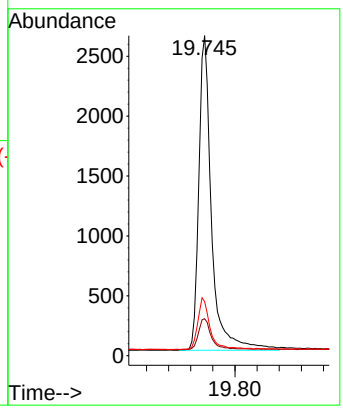




#31
Terphenyl-d14
Concen: 0.395 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:244 Resp: 419

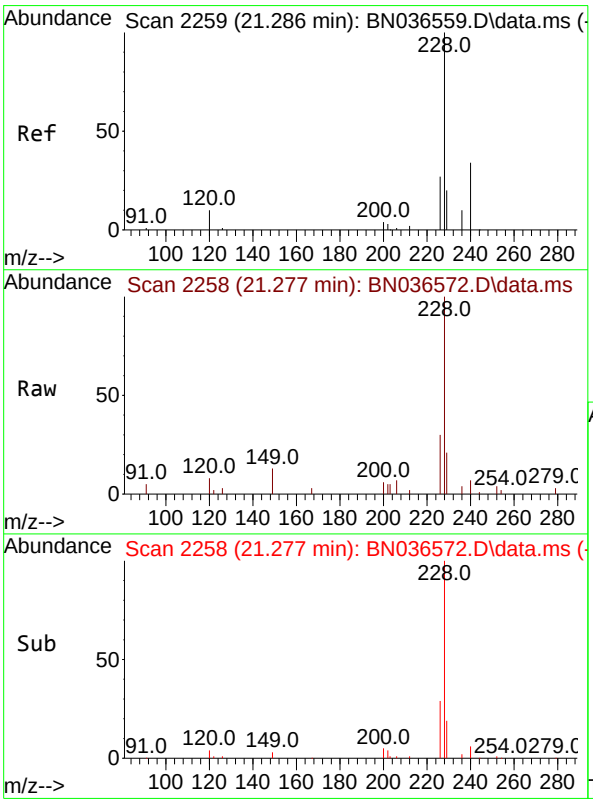
Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.6	14.4
122	16.9	13.9	20.9



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

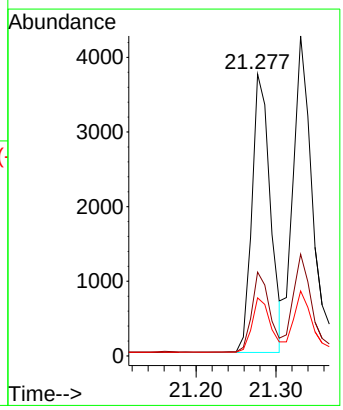
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

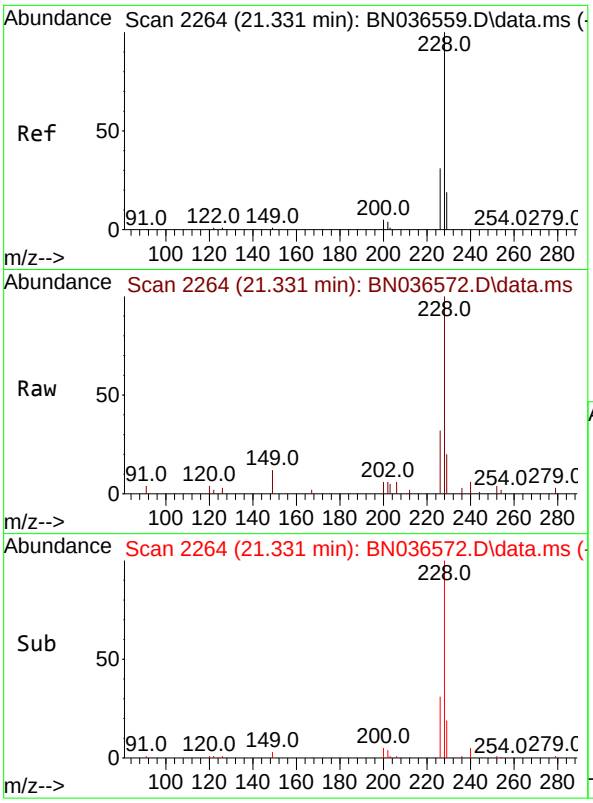


#32
Benzo(a)anthracene
Concen: 0.386 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:228 Resp: 5953

Ion	Ratio	Lower	Upper
228	100		
226	29.7	22.5	33.7
229	20.6	16.6	25.0

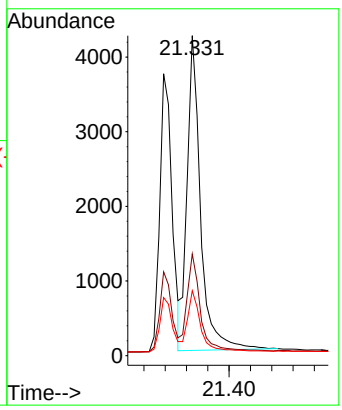




#33
Chrysene
Concen: 0.439 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:228 Resp: 739

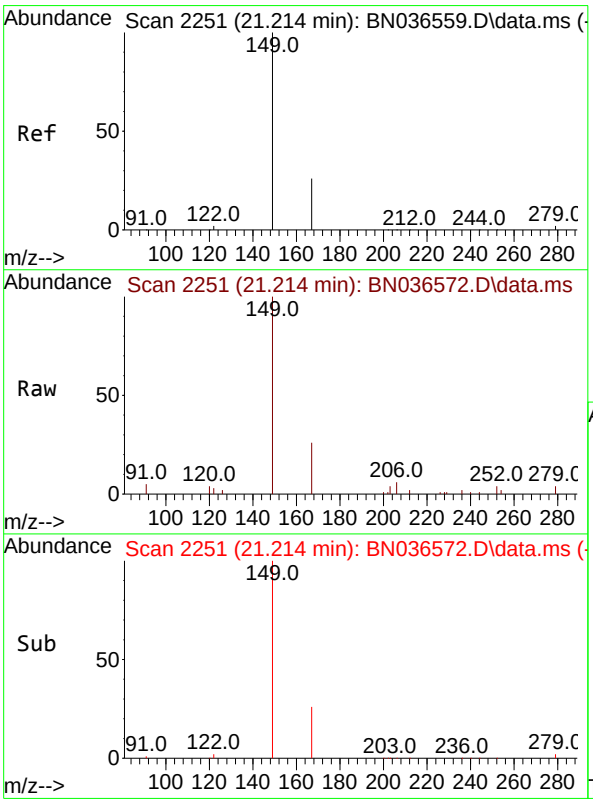
Ion	Ratio	Lower	Upper
228	100		
226	31.8	25.3	37.9
229	20.3	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

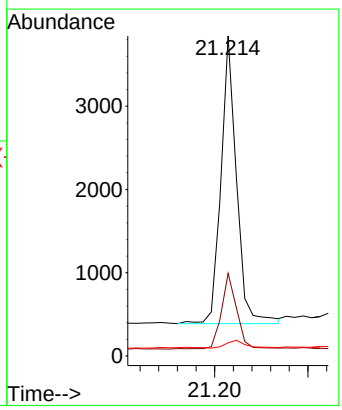
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

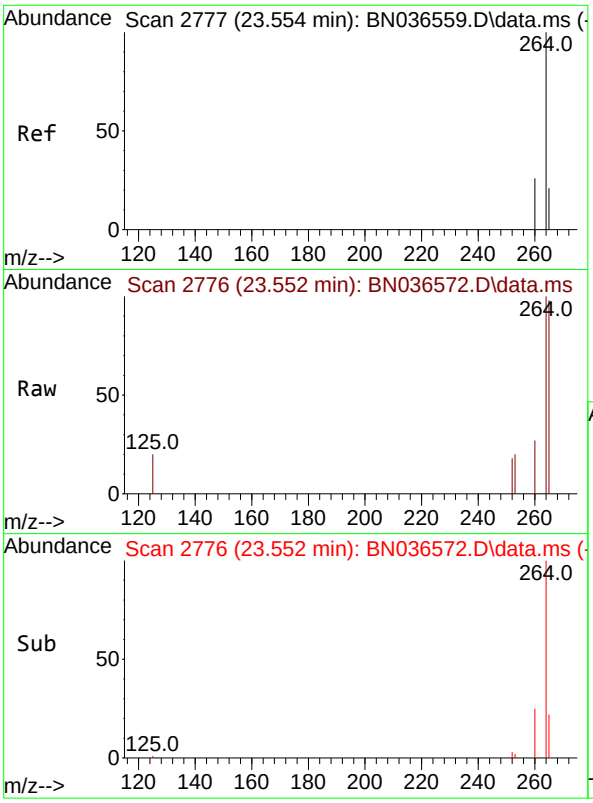


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.364 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:149 Resp: 3997

Ion	Ratio	Lower	Upper
149	100		
167	25.6	20.7	31.1
279	3.4	3.6	5.4#

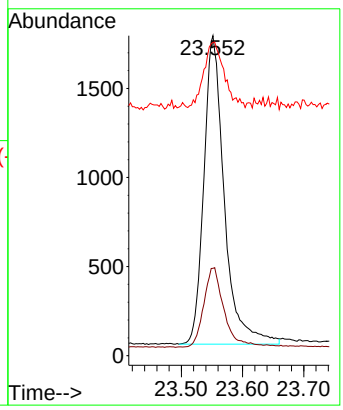




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.552 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:264 Resp: 401

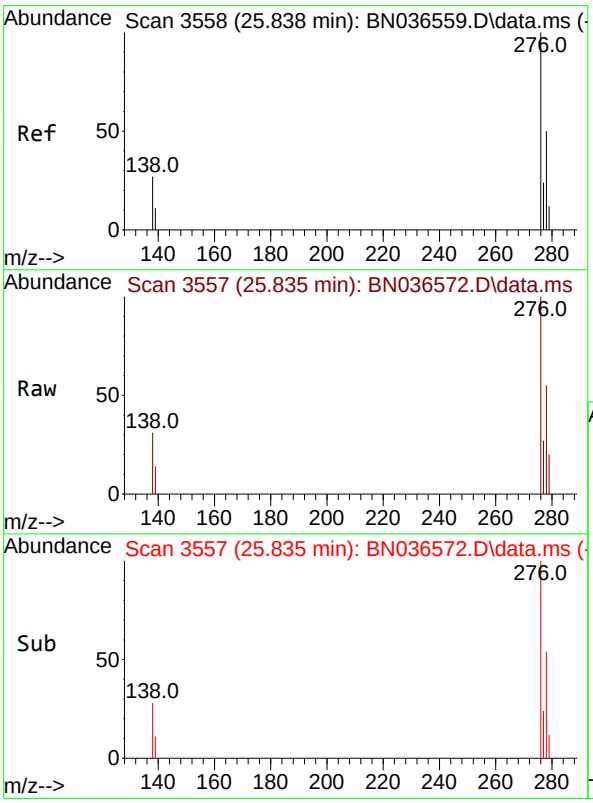
Ion	Ratio	Lower	Upper
264	100		
260	27.3	22.6	33.8
265	97.9	88.1	132.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

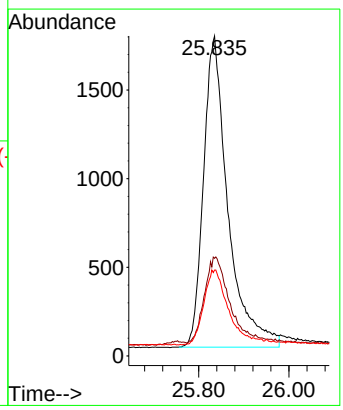
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

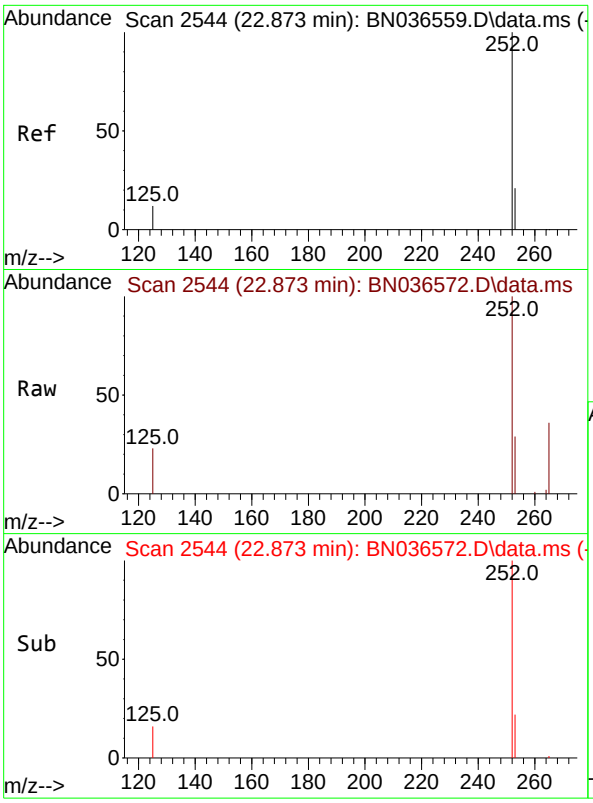


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.455 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:276 Resp: 6596

Ion	Ratio	Lower	Upper
276	100		
138	27.7	23.4	35.2
277	24.6	20.0	30.0

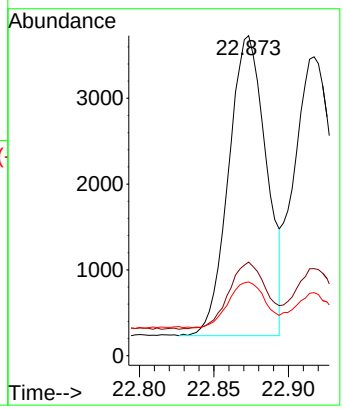




#37
Benzo(b)fluoranthene
Concen: 0.422 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:252 Resp: 616

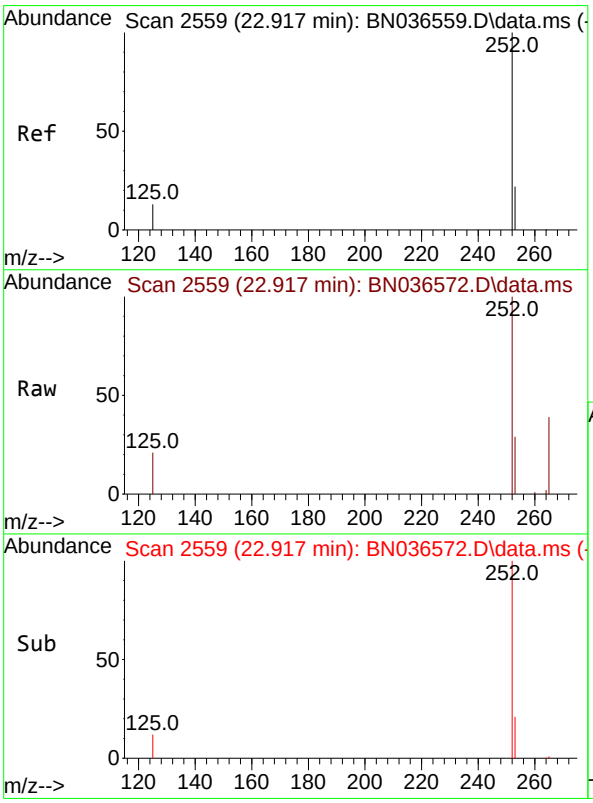
Ion	Ratio	Lower	Upper
252	100		
253	29.2	23.9	35.9
125	23.0	17.4	26.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

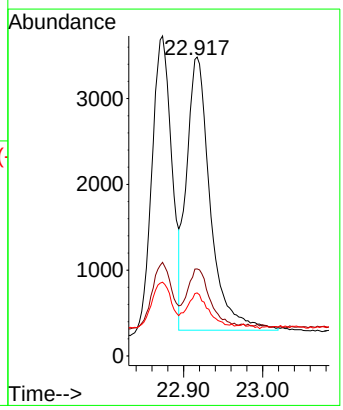
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

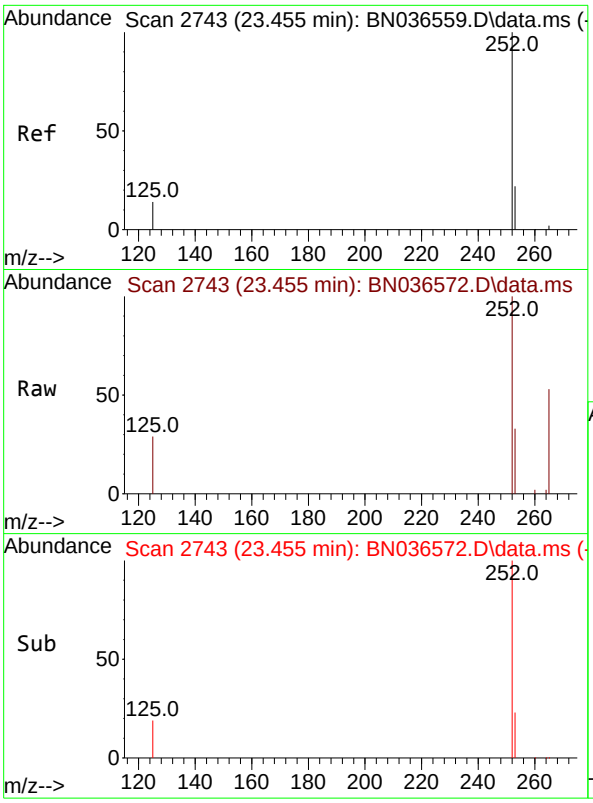


#38
Benzo(k)fluoranthene
Concen: 0.435 ng m
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:252 Resp: 6664

Ion	Ratio	Lower	Upper
252	100		
253	29.1	24.6	36.8
125	21.1	17.8	26.8

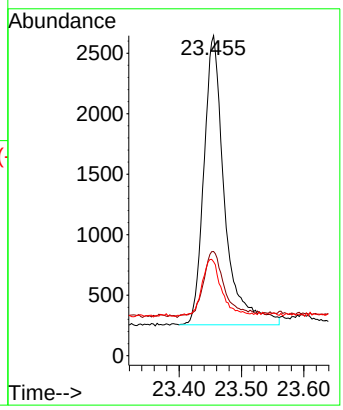




#39
Benzo(a)pyrene
Concen: 0.448 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:252 Resp: 550

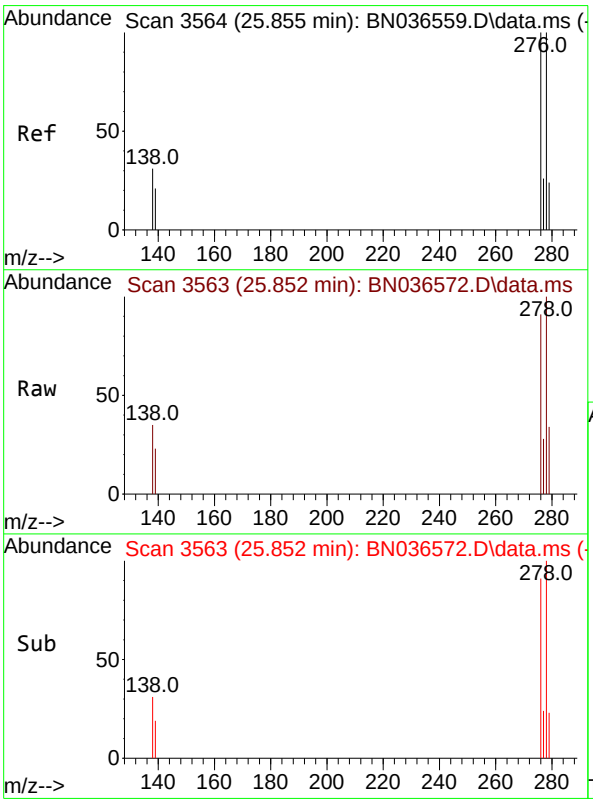
Ion	Ratio	Lower	Upper
252	100		
253	32.6	27.8	41.8
125	29.4	22.7	34.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

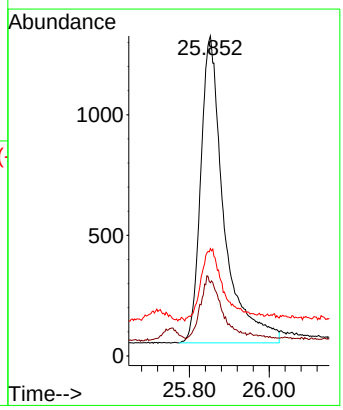
Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

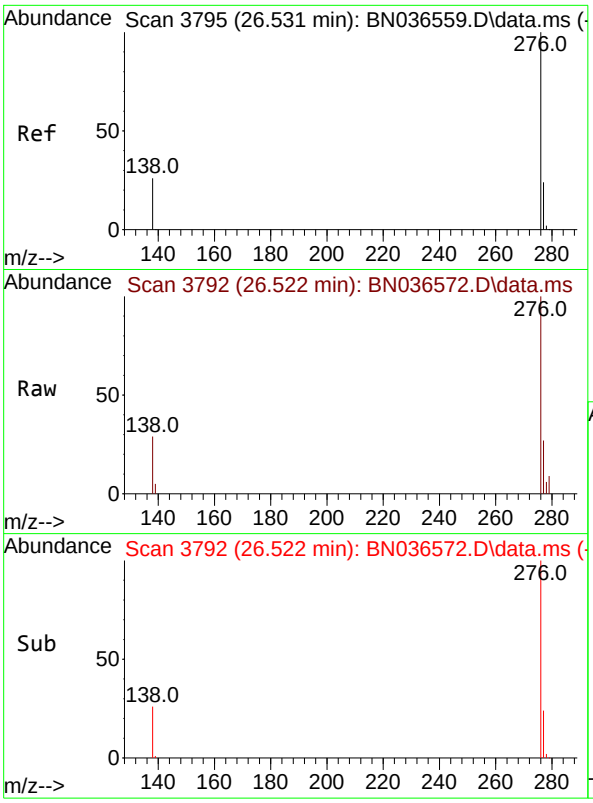


#40
Dibenzo(a,h)anthracene
Concen: 0.457 ng
RT: 25.852 min Scan# 3563
Delta R.T. -0.003 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:278 Resp: 5154

Ion	Ratio	Lower	Upper
278	100		
139	22.9	20.8	31.2
279	33.5	28.8	43.2

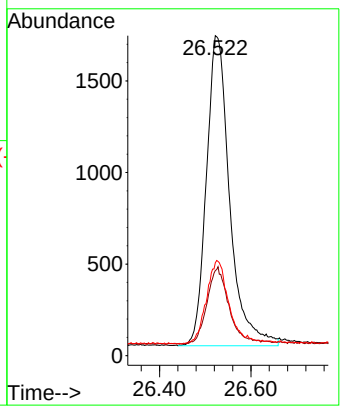




#41
Benzo(g,h,i)perylene
Concen: 0.463 ng
RT: 26.522 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:276 Resp: 598

Ion	Ratio	Lower	Upper
276	100		
277	26.6	22.2	33.4
138	29.1	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/11/2025
Supervised By :Jagrut Upadhyay 03/11/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036572.D
Acq On : 10 Mar 2025 21:26
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 11 00:53:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	114	0.00
2		1,4-Dioxane	0.444	0.520	-17.1	119	0.00
3		n-Nitrosodimethylamine	0.898	0.908	-1.1	110	0.00
4	S	2-Fluorophenol	0.932	0.968	-3.9	111	0.00
5	S	Phenol-d6	1.152	1.112	3.5	112	0.00
6		bis(2-Chloroethyl)ether	1.190	1.172	1.5	113	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	115	0.00
8	S	Nitrobenzene-d5	0.435	0.405	6.9	112	0.00
9		Naphthalene	1.177	1.177	0.0	112	0.00
10		Hexachlorobutadiene	0.277	0.295	-6.5	115	0.00
11	SURR	2-Methylnaphthalene-d10	0.595	0.585	1.7	111	0.00
12		2-Methylnaphthalene	0.749	0.739	1.3	111	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	108	0.00
14	S	2,4,6-Tribromophenol	0.182	0.171	6.0	99	0.00
15	S	2-Fluorobiphenyl	2.327	2.408	-3.5	108	0.00
16		Acenaphthylene	1.888	1.943	-2.9	108	0.00
17		Acenaphthene	1.236	1.272	-2.9	107	-0.01
18		Fluorene	1.672	1.712	-2.4	105	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	103	0.00
20		4,6-Dinitro-2-methylphenol	0.086	0.071	17.4	95	0.00
21		4-Bromophenyl-phenylether	0.251	0.264	-5.2	100	0.00
22		Hexachlorobenzene	0.303	0.338	-11.6	104	0.00
23		Atrazine	0.201	0.208	-3.5	101	0.00
24		Pentachlorophenol	0.138	0.129	6.5	98	-0.01
25		Phenanthrene	1.200	1.268	-5.7	101	0.00
26		Anthracene	1.083	1.121	-3.5	101	0.00
27	SURR	Fluoranthene-d10	1.025	1.071	-4.5	99	0.00
28		Fluoranthene	1.348	1.405	-4.2	100	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
30		Pyrene	1.956	1.986	-1.5	100	0.00
31	S	Terphenyl-d14	0.958	0.947	1.1	99	0.00
32		Benzo(a)anthracene	1.391	1.343	3.5	101	0.00
33		Chrysene	1.520	1.668	-9.7	112	0.00
34		Bis(2-ethylhexyl)phthalate	0.990	0.902	8.9	93	0.00
35	I	Perylene-d12	1.000	1.000	0.0	113	0.00
36		Indeno(1,2,3-cd)pyrene	1.444	1.642	-13.7	121	0.00
37		Benzo(b)fluoranthene	1.456	1.534	-5.4	113	0.00
38		Benzo(k)fluoranthene	1.527	1.659	-8.6	116	0.00
39	C	Benzo(a)pyrene	1.226	1.372	-11.9	119	0.00
40		Dibenzo(a,h)anthracene	1.124	1.283	-14.1	125	0.00
41		Benzo(g,h,i)perylene	1.286	1.490	-15.9	122	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036572.D
Acq On : 10 Mar 2025 21:26
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 11 00:53:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	114	0.00
2		1,4-Dioxane	0.400	0.469	-17.2	119	0.00
3		n-Nitrosodimethylamine	0.400	0.405	-1.3	110	0.00
4	S	2-Fluorophenol	0.400	0.415	-3.7	111	0.00
5	S	Phenol-d6	0.400	0.386	3.5	112	0.00
6		bis(2-Chloroethyl)ether	0.400	0.394	1.5	113	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	115	0.00
8	S	Nitrobenzene-d5	0.400	0.372	7.0	112	0.00
9		Naphthalene	0.400	0.400	0.0	112	0.00
10		Hexachlorobutadiene	0.400	0.426	-6.5	115	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.393	1.8	111	0.00
12		2-Methylnaphthalene	0.400	0.395	1.3	111	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	108	0.00
14	S	2,4,6-Tribromophenol	0.400	0.378	5.5	99	0.00
15	S	2-Fluorobiphenyl	0.400	0.414	-3.5	108	0.00
16		Acenaphthylene	0.400	0.412	-3.0	108	0.00
17		Acenaphthene	0.400	0.412	-3.0	107	-0.01
18		Fluorene	0.400	0.410	-2.5	105	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	103	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.423	-5.7	95	0.00
21		4-Bromophenyl-phenylether	0.400	0.421	-5.2	100	0.00
22		Hexachlorobenzene	0.400	0.447	-11.7	104	0.00
23		Atrazine	0.400	0.414	-3.5	101	0.00
24		Pentachlorophenol	0.400	0.375	6.3	98	-0.01
25		Phenanthrene	0.400	0.423	-5.7	101	0.00
26		Anthracene	0.400	0.414	-3.5	101	0.00
27	SURR	Fluoranthene-d10	0.400	0.418	-4.5	99	0.00
28		Fluoranthene	0.400	0.417	-4.2	100	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	108	0.00
30		Pyrene	0.400	0.406	-1.5	100	0.00
31	S	Terphenyl-d14	0.400	0.395	1.3	99	0.00
32		Benzo(a)anthracene	0.400	0.386	3.5	101	0.00
33		Chrysene	0.400	0.439	-9.7	112	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.364	9.0	93	0.00
35	I	Perylene-d12	0.400	0.400	0.0	113	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.455	-13.7	121	0.00
37		Benzo(b)fluoranthene	0.400	0.422	-5.5	113	0.00
38		Benzo(k)fluoranthene	0.400	0.435	-8.7	116	0.00
39	C	Benzo(a)pyrene	0.400	0.448	-12.0	119	0.00
40		Dibenzo(a,h)anthracene	0.400	0.457	-14.2	125	0.00
41		Benzo(g,h,i)perylene	0.400	0.463	-15.8	122	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: AECO15

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG No.: Q1531

Instrument ID: BNA_N Calibration Date/Time: 03/11/2025 10:08

Lab File ID: BN036574.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.563		-5.4	20.0
Fluoranthene-d10	1.025	1.038		1.3	20.0
2-Fluorophenol	0.932	0.903		-3.1	20.0
Phenol-d6	1.152	1.059		-8.1	20.0
Nitrobenzene-d5	0.435	0.381		-12.4	20.0
2-Fluorobiphenyl	2.327	2.112		-9.2	20.0
2,4,6-Tribromophenol	0.182	0.171		-6.0	20.0
Terphenyl-d14	0.958	0.926		-3.3	20.0
1,4-Dioxane	0.444	0.507		14.2	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036574.D
Acq On : 11 Mar 2025 10:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Mar 11 10:37:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

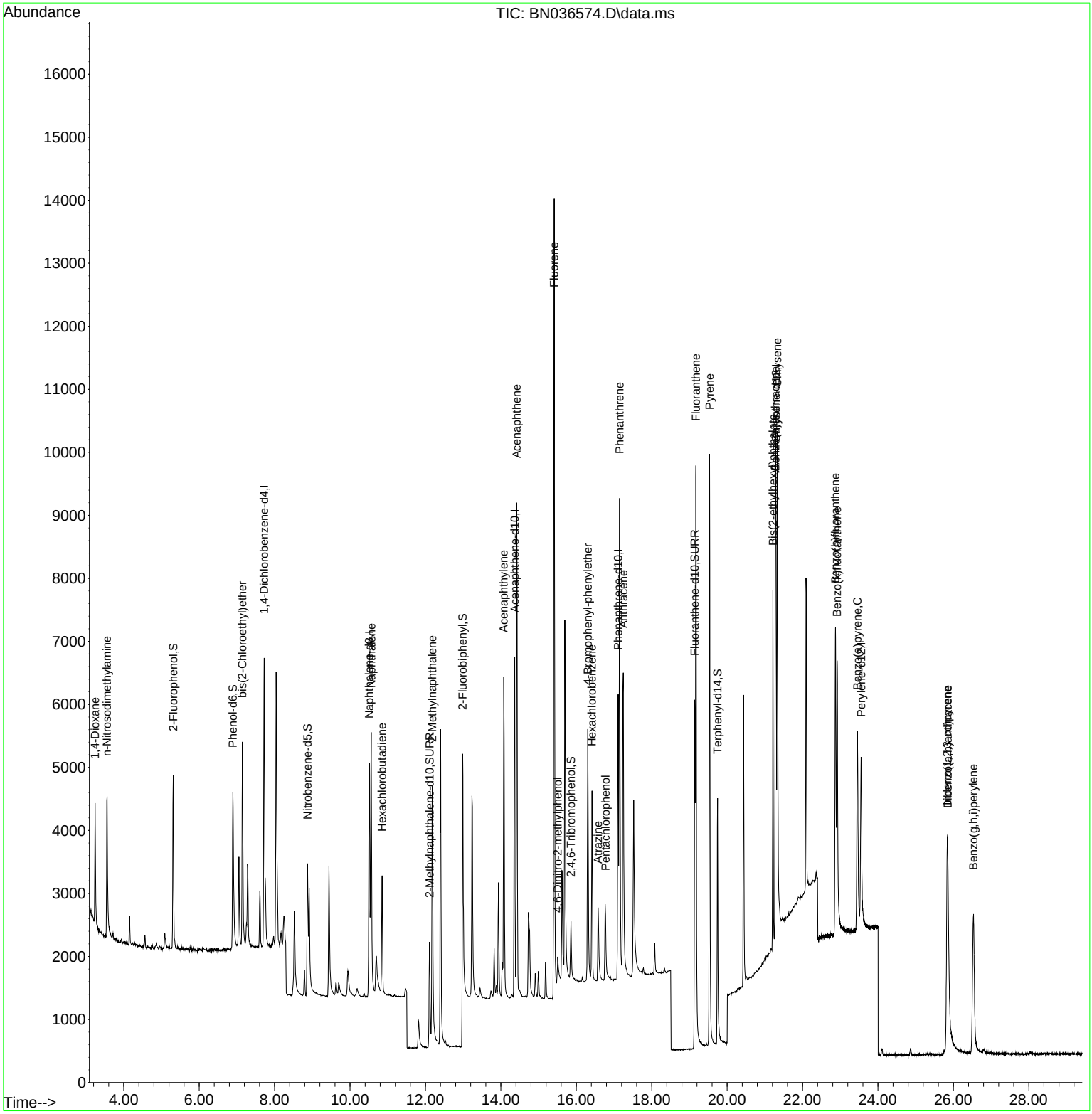
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2295	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5467	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3343	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	6922	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4977	0.400	ng		0.00
35) Perylene-d12	23.554	264	4232	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	2072	0.387	ng		0.00
5) Phenol-d6	6.894	99	2430	0.368	ng		0.00
8) Nitrobenzene-d5	8.875	82	2084	0.350	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	3077	0.378	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	570	0.376	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	7060	0.363	ng		0.00
27) Fluoranthene-d10	19.141	212	7182	0.405	ng		0.00
31) Terphenyl-d14	19.745	244	4607	0.386	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	1163	0.457	ng		95
3) n-Nitrosodimethylamine	3.550	42	1971	0.383	ng		95
6) bis(2-Chloroethyl)ether	7.147	93	2545	0.373	ng		100
9) Naphthalene	10.562	128	6096	0.379	ng		100
10) Hexachlorobutadiene	10.851	225	1495	0.395	ng	#	100
12) 2-Methylnaphthalene	12.182	142	3851	0.376	ng		98
16) Acenaphthylene	14.078	152	6004	0.381	ng		99
17) Acenaphthene	14.420	154	3941	0.382	ng		99
18) Fluorene	15.414	166	5415	0.388	ng		99
20) 4,6-Dinitro-2-methylph...	15.510	198	407	0.376	ng		95
21) 4-Bromophenyl-phenylether	16.305	248	1650	0.380	ng		96
22) Hexachlorobenzene	16.416	284	2073	0.396	ng		99
23) Atrazine	16.578	200	1319	0.379	ng		97
24) Pentachlorophenol	16.776	266	800	0.335	ng		98
25) Phenanthrene	17.149	178	8248	0.397	ng		99
26) Anthracene	17.248	178	7203	0.384	ng		99
28) Fluoranthene	19.174	202	9516	0.408	ng		100
30) Pyrene	19.536	202	9574	0.393	ng		100
32) Benzo(a)anthracene	21.277	228	6681	0.386	ng		97
33) Chrysene	21.331	228	7472	0.395	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	4774	0.387	ng	#	98
36) Indeno(1,2,3-cd)pyrene	25.835	276	5731	0.375	ng		97
37) Benzo(b)fluoranthene	22.873	252	6389	0.415	ng		97
38) Benzo(k)fluoranthene	22.917	252	6510	0.403	ng		97
39) Benzo(a)pyrene	23.455	252	5454	0.421	ng		96
40) Dibenzo(a,h)anthracene	25.852	278	4158	0.350	ng		99
41) Benzo(g,h,i)perylene	26.534	276	5220	0.384	ng		99

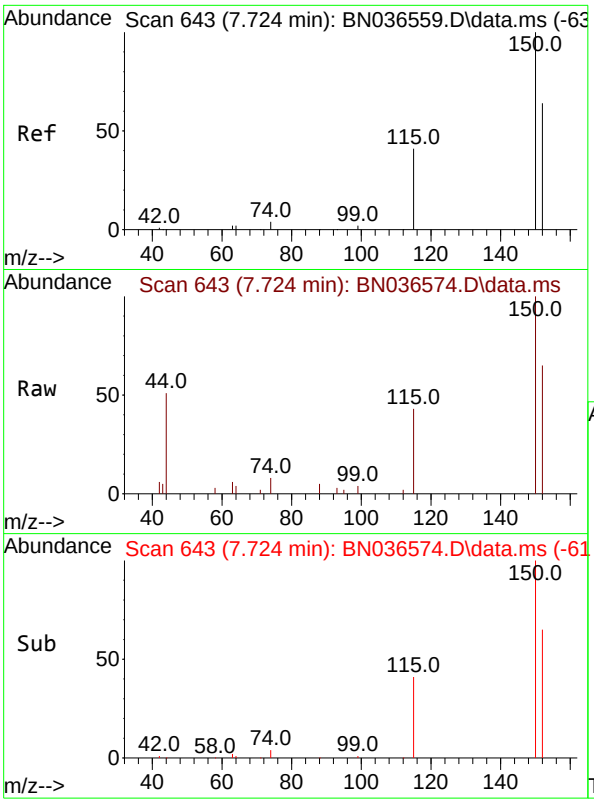
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN036574.D
Acq On : 11 Mar 2025 10:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Mar 11 10:37:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



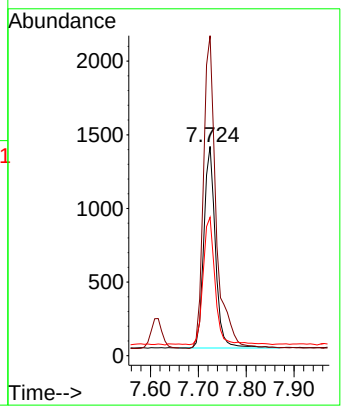


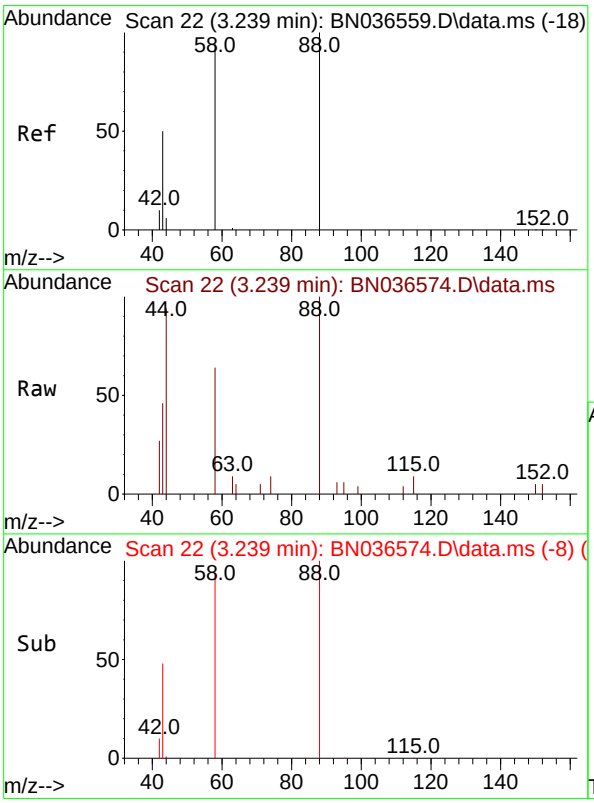
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 2295

Ion	Ratio	Lower	Upper
152	100		
150	152.9	123.7	185.5
115	66.2	54.3	81.5

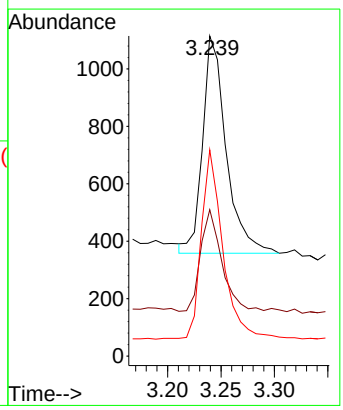


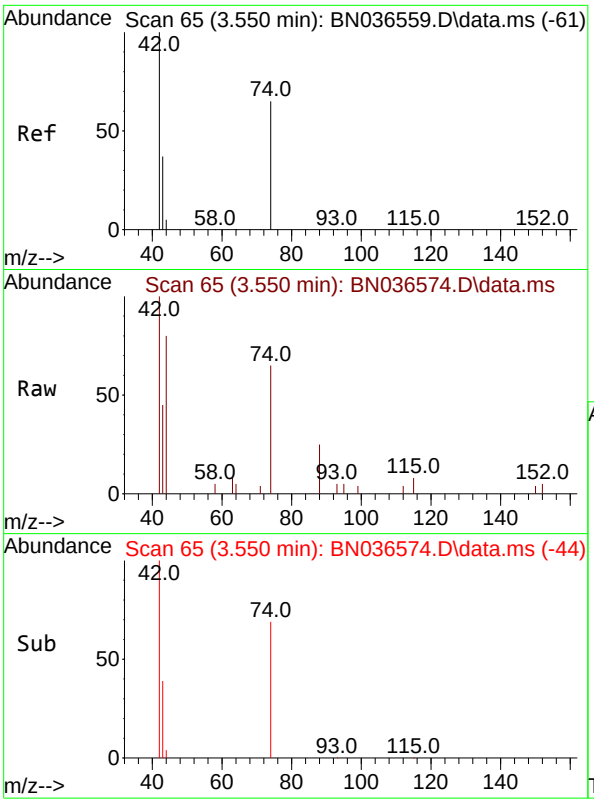


#2
1,4-Dioxane
Concen: 0.457 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion: 88 Resp: 1163

Ion	Ratio	Lower	Upper
88	100		
43	43.2	37.8	56.8
58	80.1	67.4	101.2



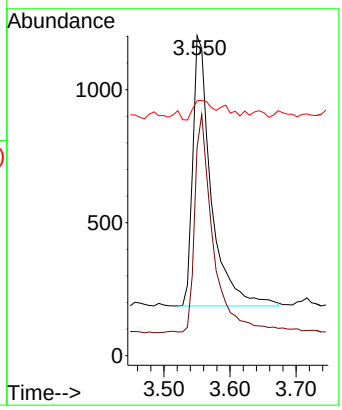


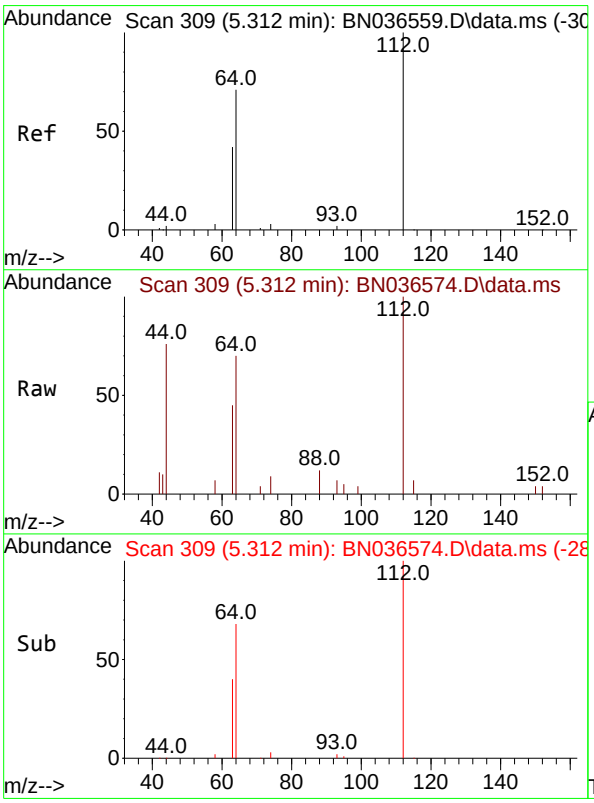
#3
n-Nitrosodimethylamine
Concen: 0.383 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 1971

Ion	Ratio	Lower	Upper
42	100		
74	80.5	60.6	90.8
44	7.4	6.3	9.5

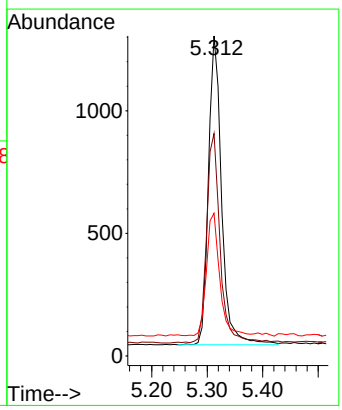


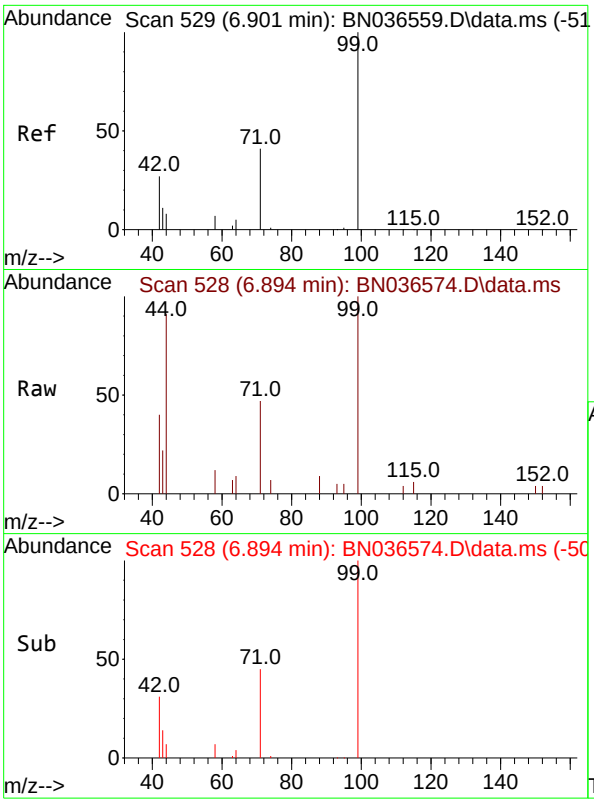


#4
2-Fluorophenol
Concen: 0.387 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:112 Resp: 2072

Ion	Ratio	Lower	Upper
112	100		
64	69.0	53.1	79.7
63	39.7	31.8	47.8



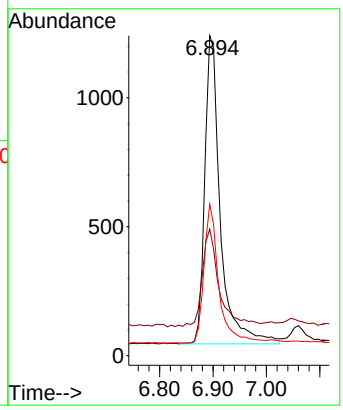


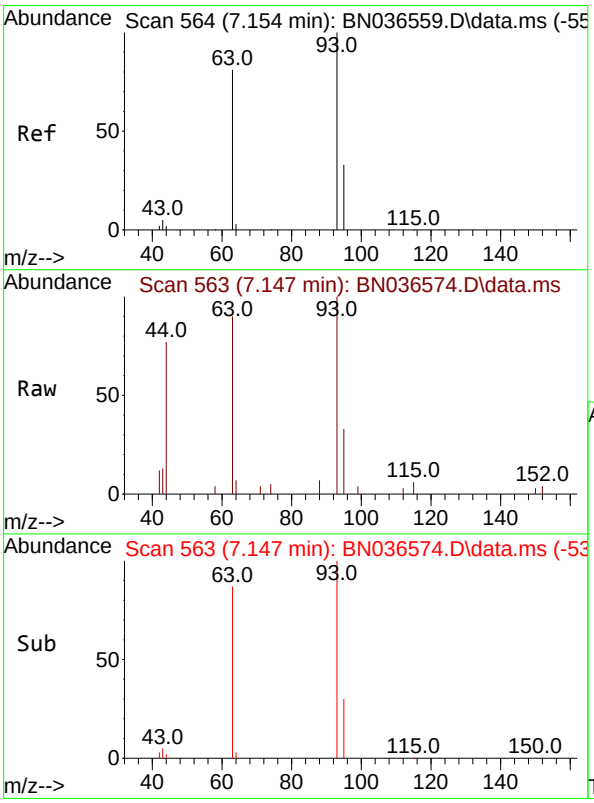
#5
Phenol-d6
Concen: 0.368 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 2430

Ion	Ratio	Lower	Upper
99	100		
42	34.2	26.5	39.7
71	42.3	34.1	51.1

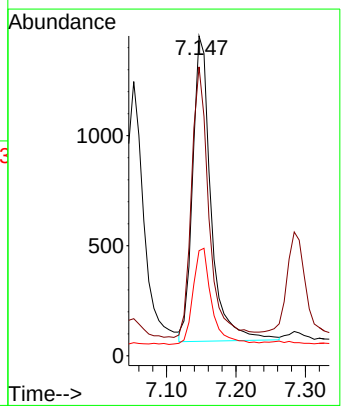


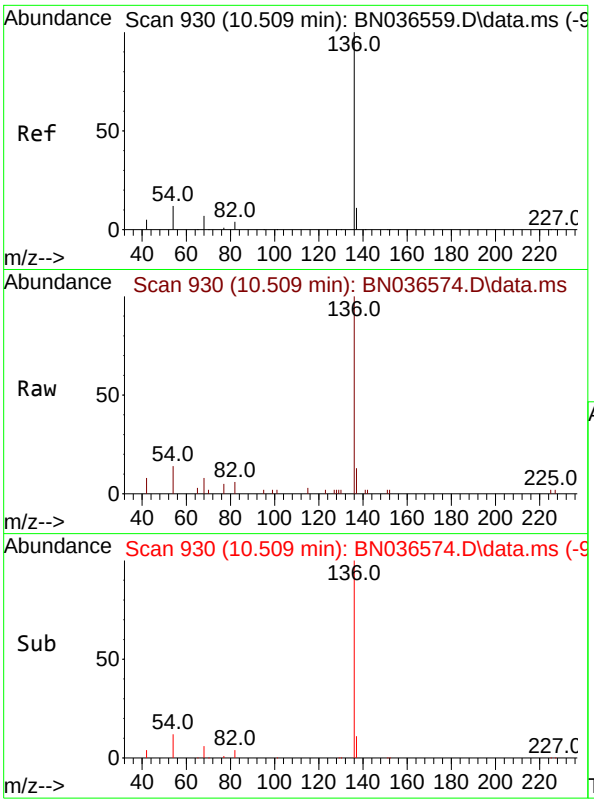


#6
bis(2-Chloroethyl)ether
Concen: 0.373 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion: 93 Resp: 2545

Ion	Ratio	Lower	Upper
93	100		
63	84.4	67.7	101.5
95	32.1	25.6	38.4



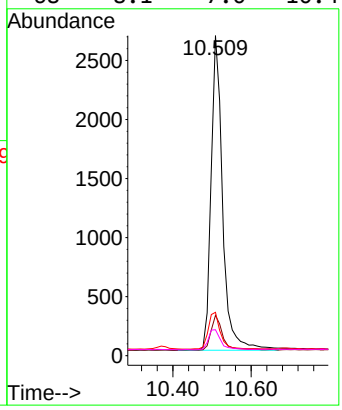


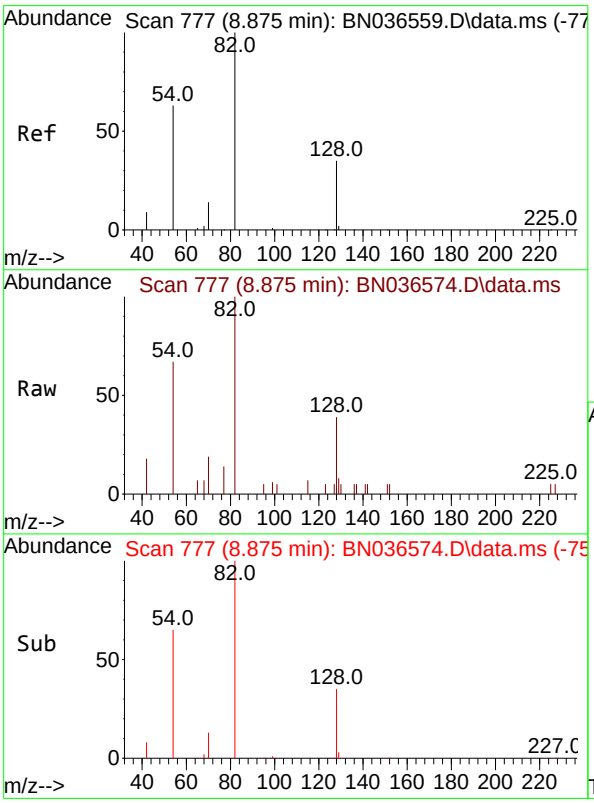
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 5467

Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.3	15.5
54	13.5	11.5	17.3
68	8.1	7.0	10.4

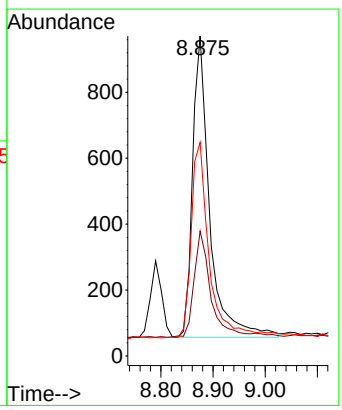


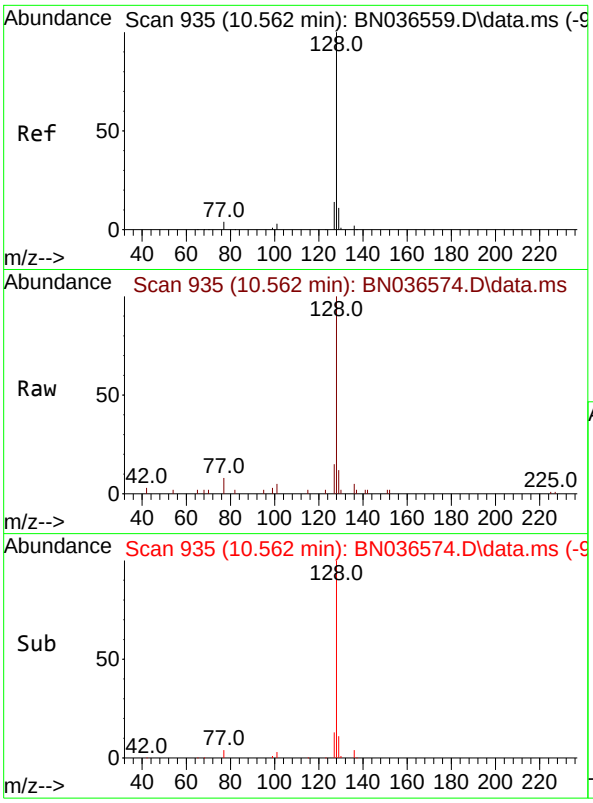


#8
Nitrobenzene-d5
Concen: 0.350 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion: 82 Resp: 2084

Ion	Ratio	Lower	Upper
82	100		
128	39.0	30.6	45.8
54	66.7	52.2	78.4



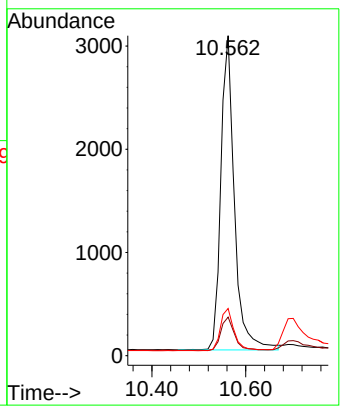


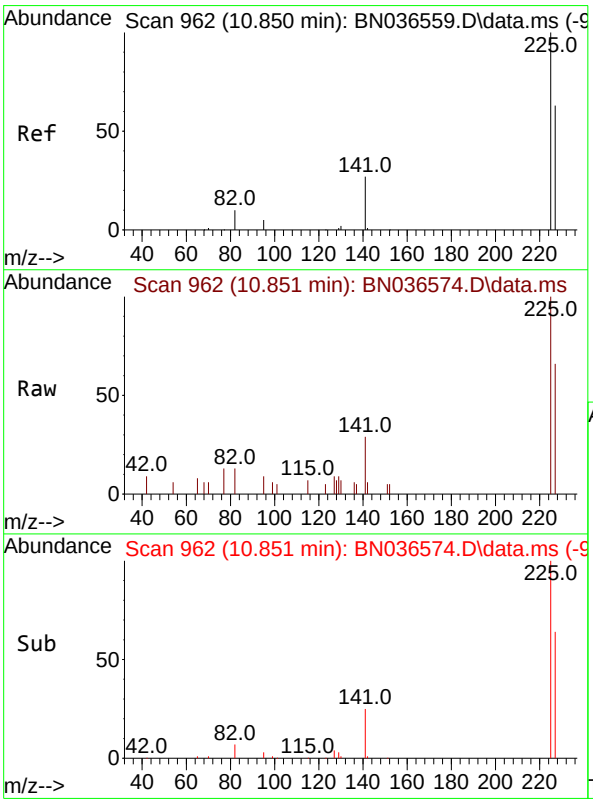
#9
Naphthalene
Concen: 0.379 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 6096

Ion	Ratio	Lower	Upper
128	100		
129	12.1	9.8	14.6
127	14.7	11.8	17.8

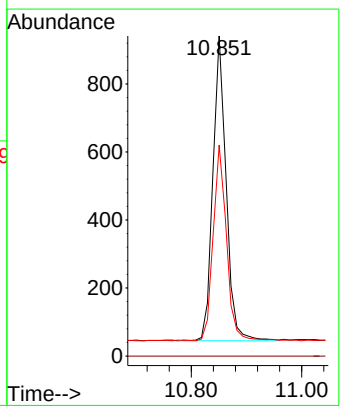


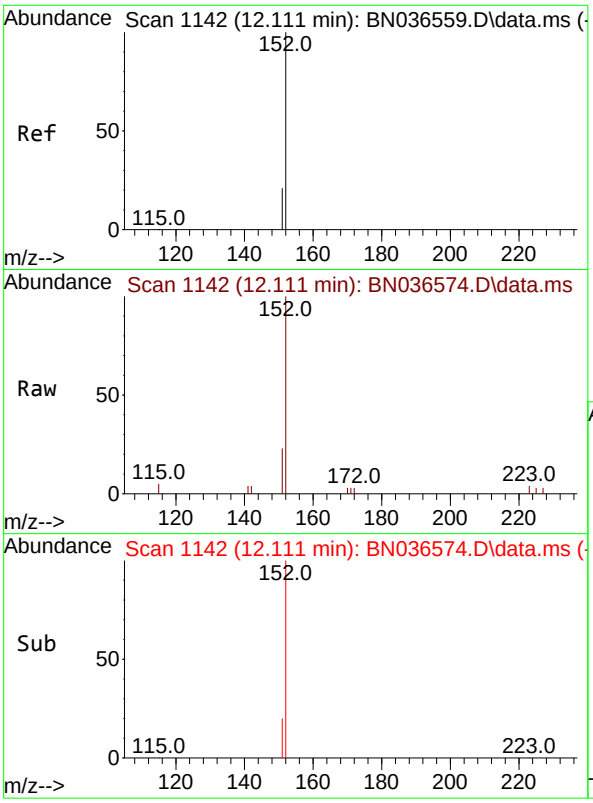


#10
Hexachlorobutadiene
Concen: 0.395 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:225 Resp: 1495

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.7	51.8	77.8



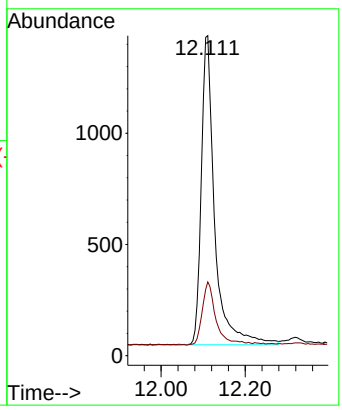


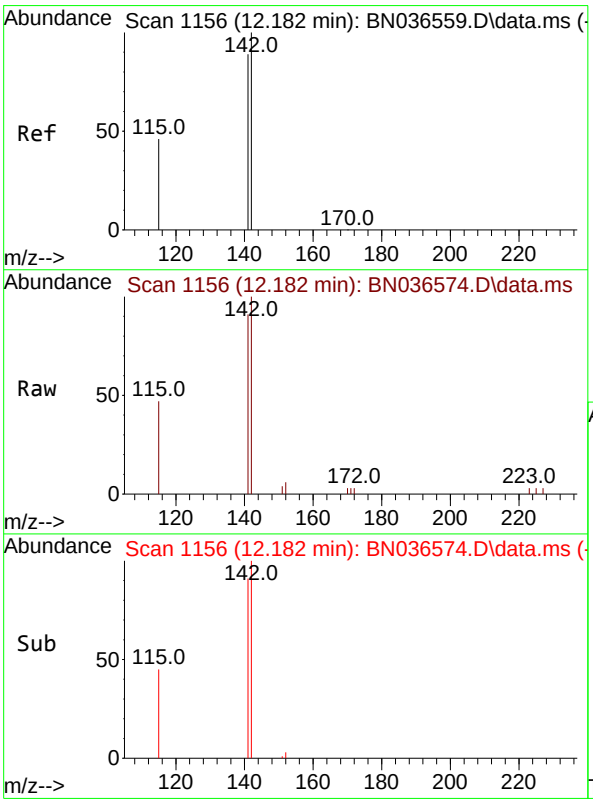
#11
2-Methylnaphthalene-d10
Concen: 0.378 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 3077

Ion	Ratio	Lower	Upper
152	100		
151	21.0	17.0	25.6

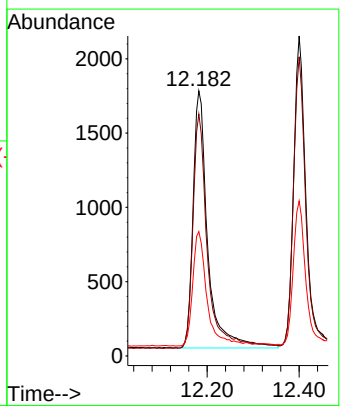


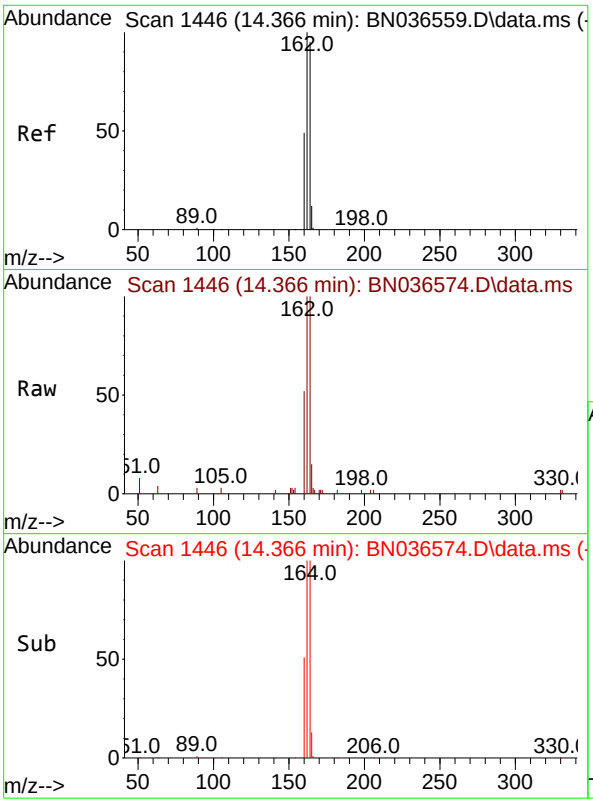


#12
2-Methylnaphthalene
Concen: 0.376 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:142 Resp: 3851

Ion	Ratio	Lower	Upper
142	100		
141	91.2	71.7	107.5
115	46.9	38.3	57.5



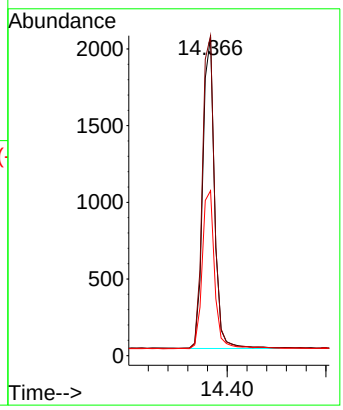


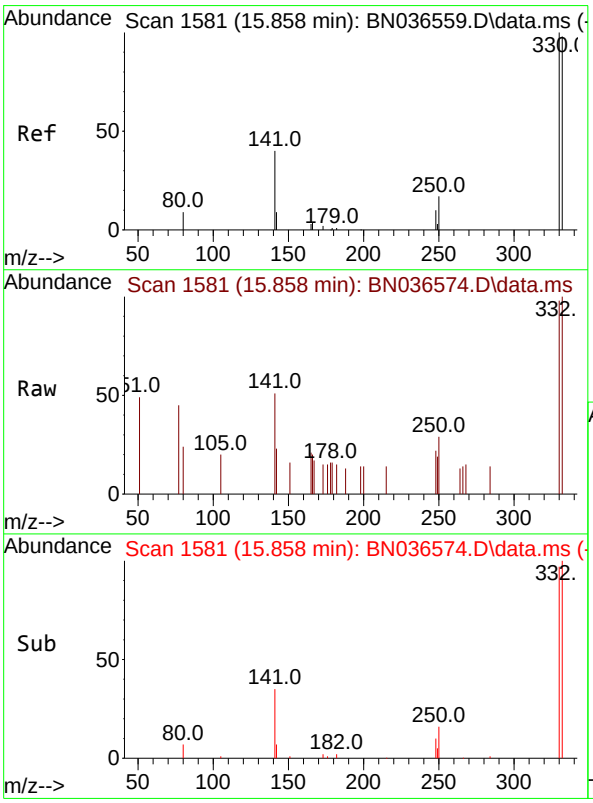
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 3343

Ion	Ratio	Lower	Upper
164	100		
162	100.3	84.2	126.2
160	51.7	42.2	63.2

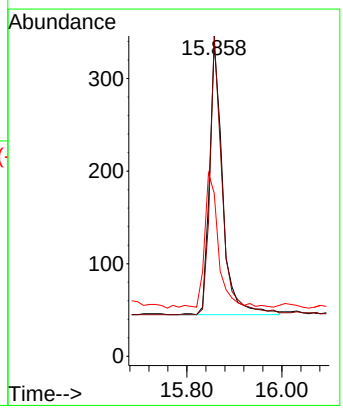


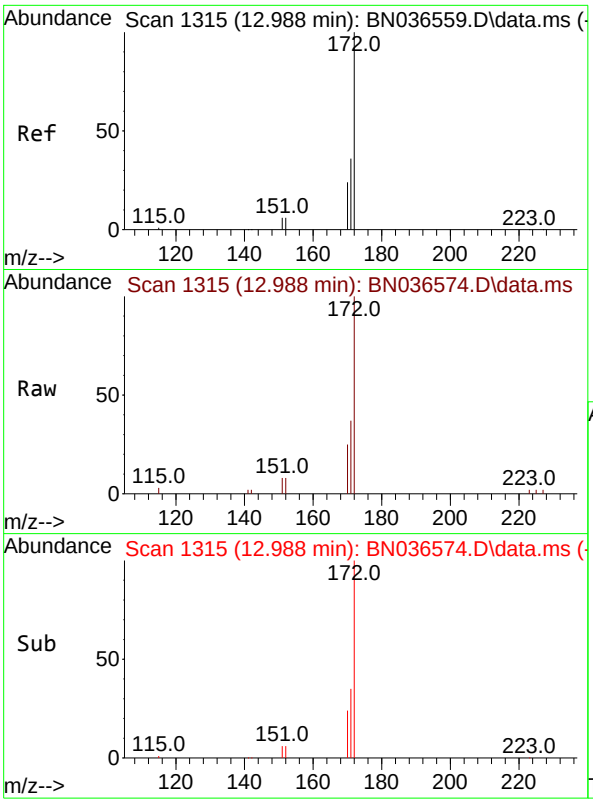


#14
2,4,6-Tribromophenol
Concen: 0.376 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:330 Resp: 570

Ion	Ratio	Lower	Upper
330	100		
332	96.0	75.2	112.8
141	53.9	43.4	65.2



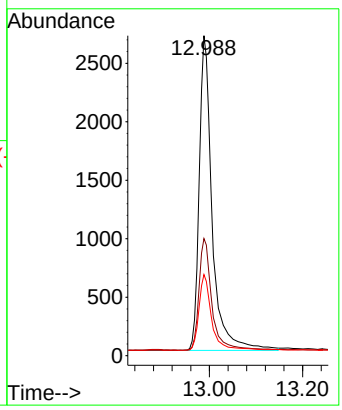


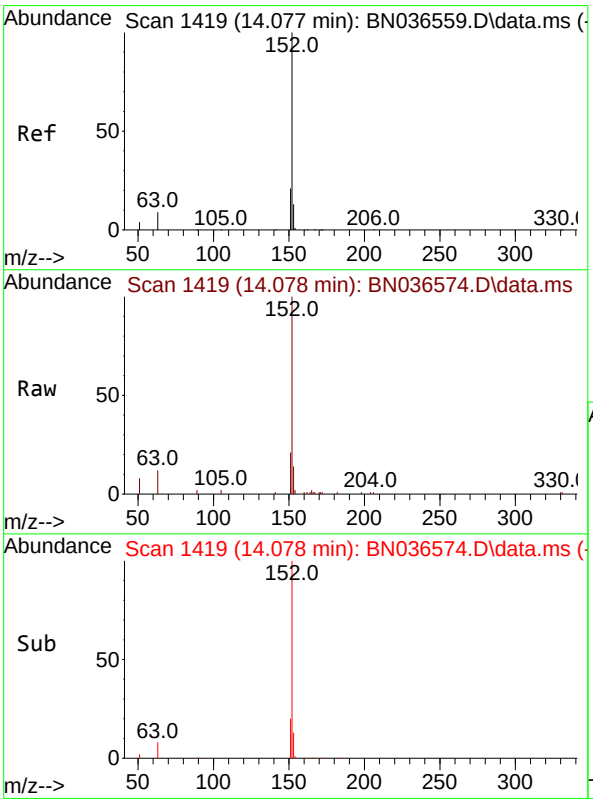
#15
2-Fluorobiphenyl
Concen: 0.363 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 7060

Ion	Ratio	Lower	Upper
172	100		
171	36.6	29.5	44.3
170	25.3	20.2	30.4

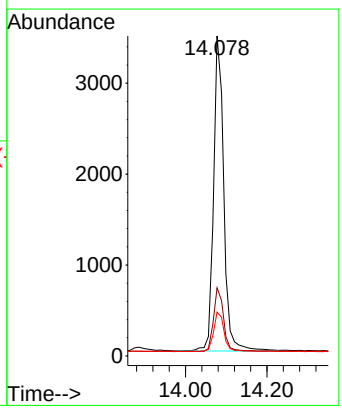


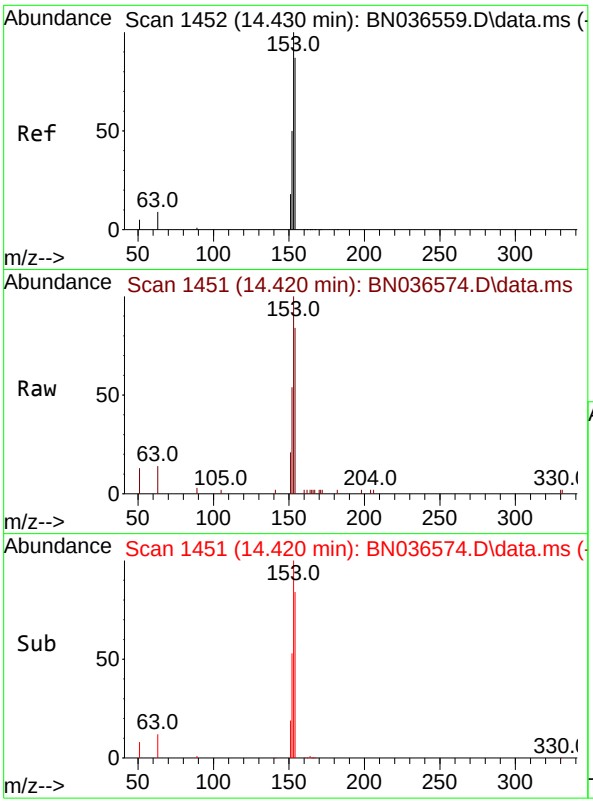


#16
Acenaphthylene
Concen: 0.381 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:152 Resp: 6004

Ion	Ratio	Lower	Upper
152	100		
151	19.8	16.2	24.4
153	12.9	10.6	15.8



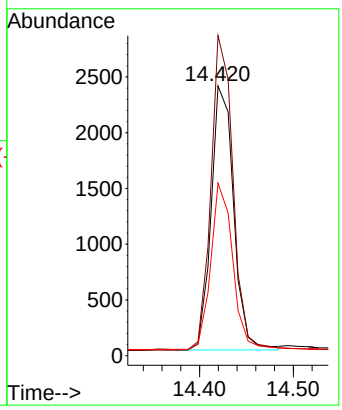


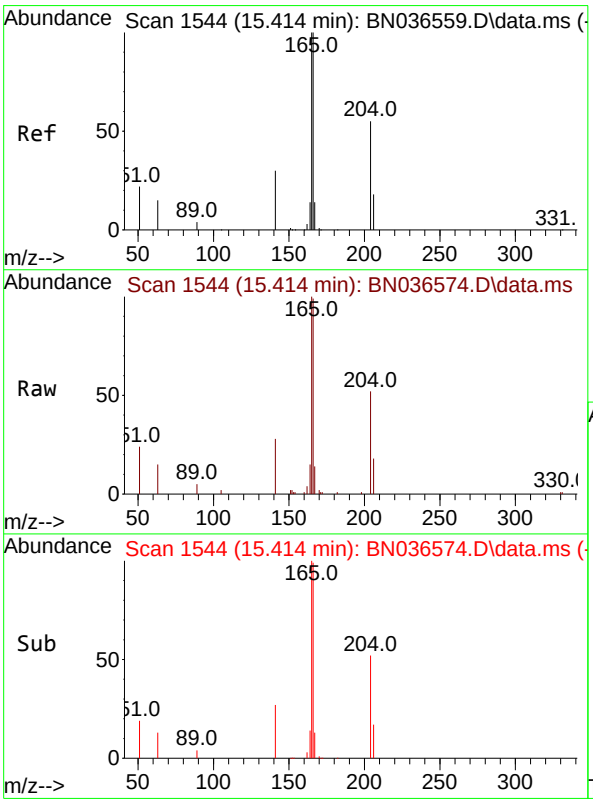
#17
Acenaphthene
Concen: 0.382 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 3941

Ion	Ratio	Lower	Upper
154	100		
153	118.4	94.1	141.1
152	62.0	49.8	74.6

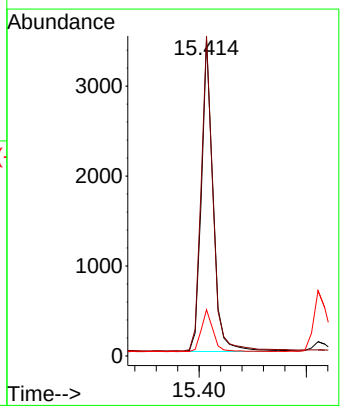


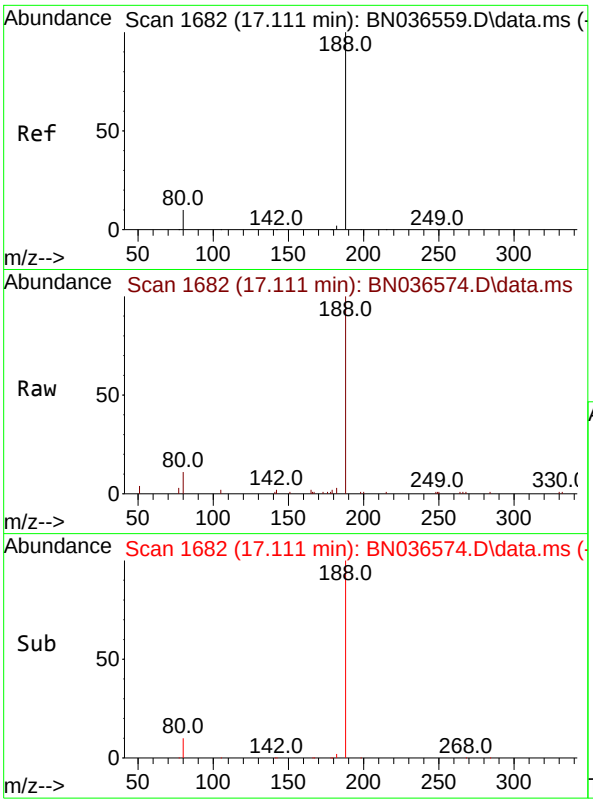


#18
Fluorene
Concen: 0.388 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:166 Resp: 5415

Ion	Ratio	Lower	Upper
166	100		
165	101.4	79.8	119.8
167	13.5	10.6	15.8



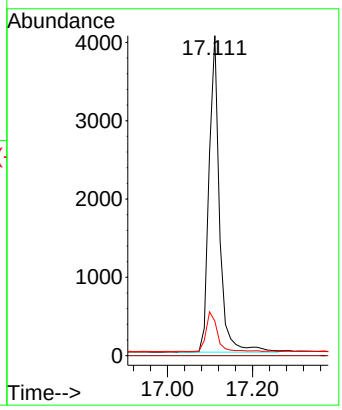


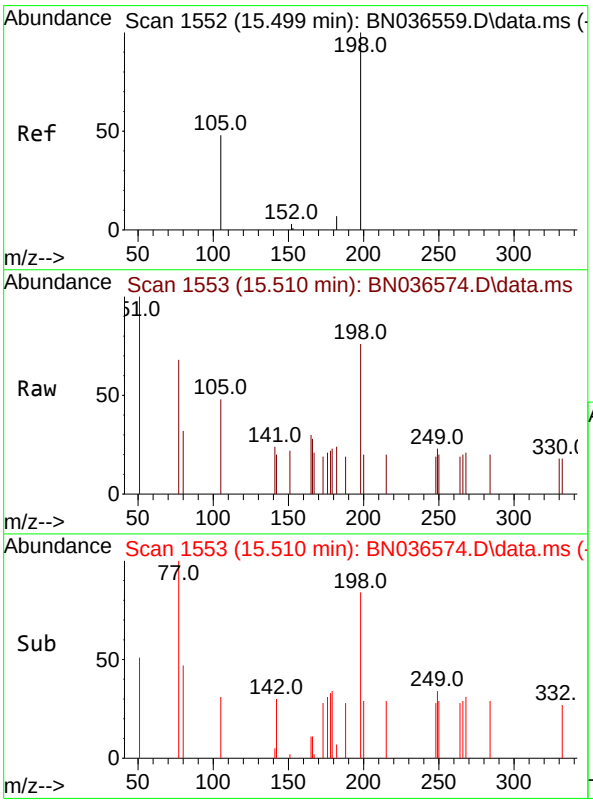
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 6922

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.8	8.8	13.2

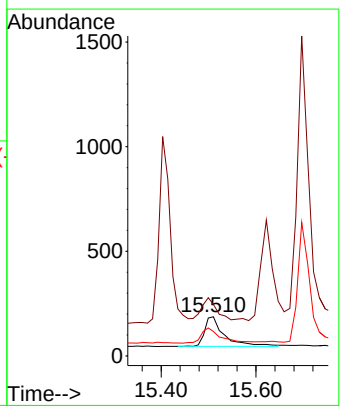


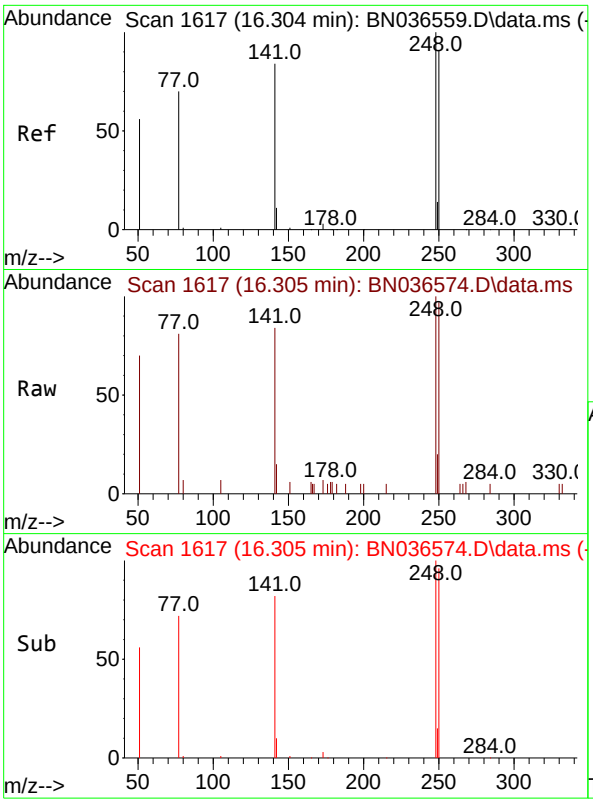


#20
4,6-Dinitro-2-methylphenol
Concen: 0.376 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:198 Resp: 407

Ion	Ratio	Lower	Upper
198	100		
51	131.6	107.9	161.9
105	62.6	56.2	84.2



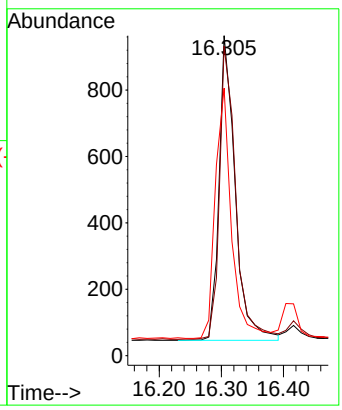


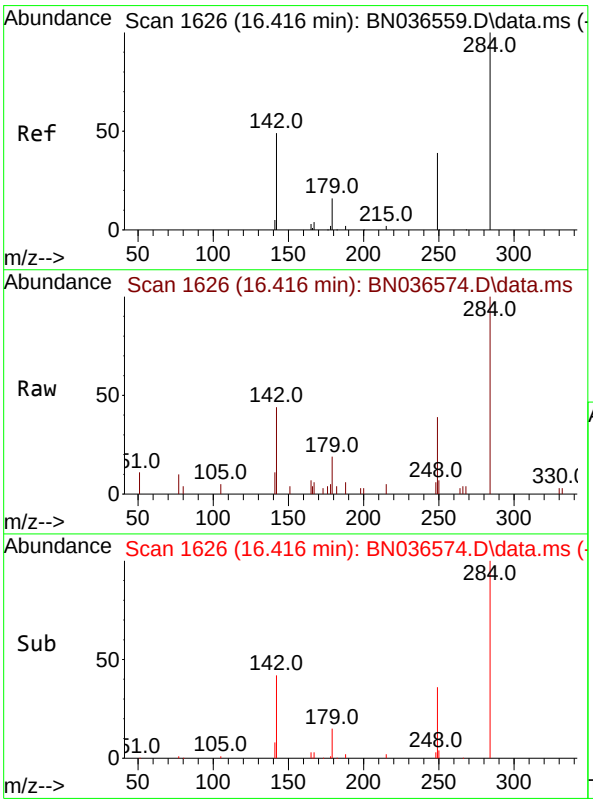
#21
4-Bromophenyl-phenylether
Concen: 0.380 ng
RT: 16.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 1650

Ion	Ratio	Lower	Upper
248	100		
250	96.7	73.0	109.6
141	83.6	68.6	103.0

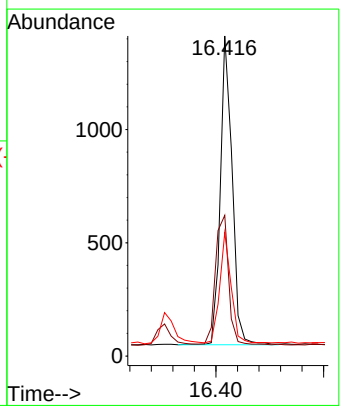


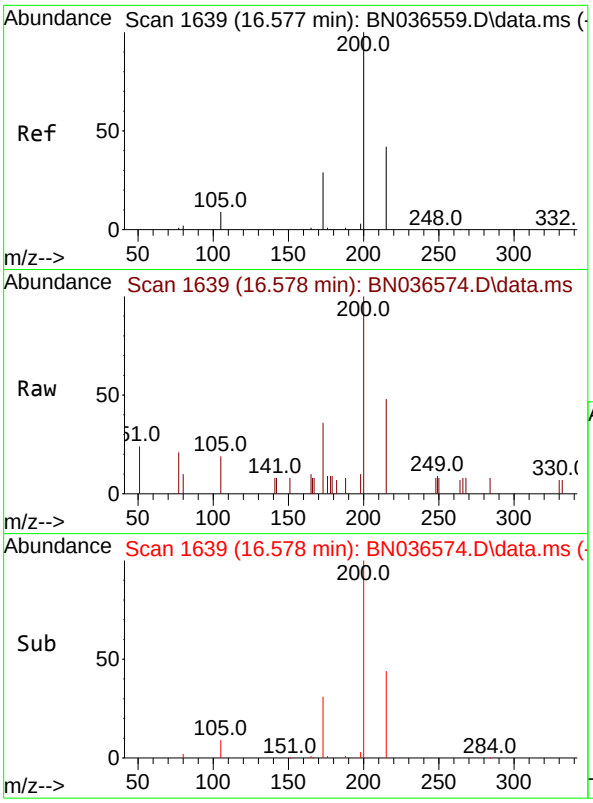


#22
Hexachlorobenzene
Concen: 0.396 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:284 Resp: 2073

Ion	Ratio	Lower	Upper
284	100		
142	47.4	37.0	55.4
249	34.8	28.1	42.1



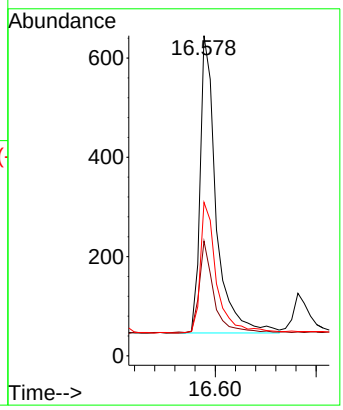


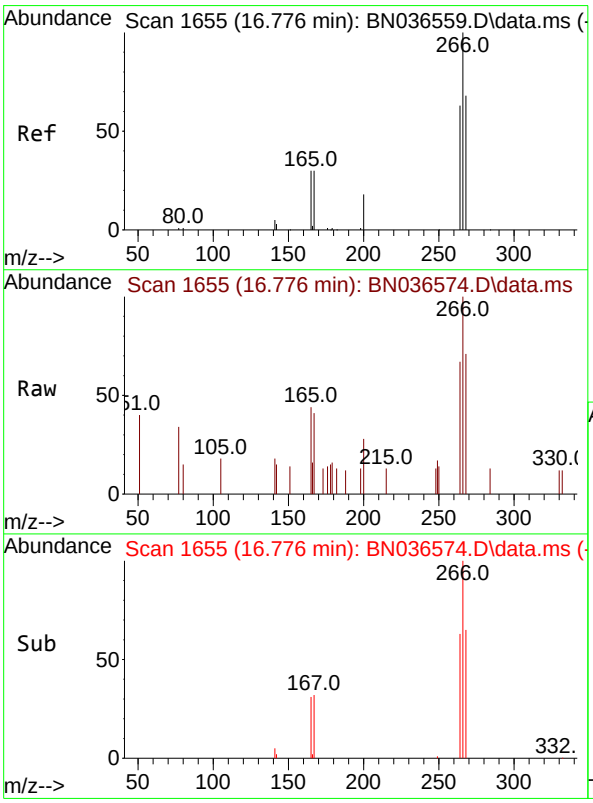
#23
Atrazine
Concen: 0.379 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 1319

Ion	Ratio	Lower	Upper
200	100		
173	35.8	27.3	40.9
215	47.9	36.8	55.2

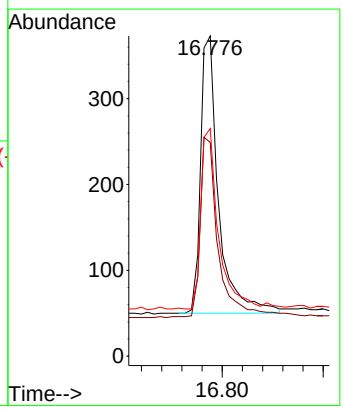


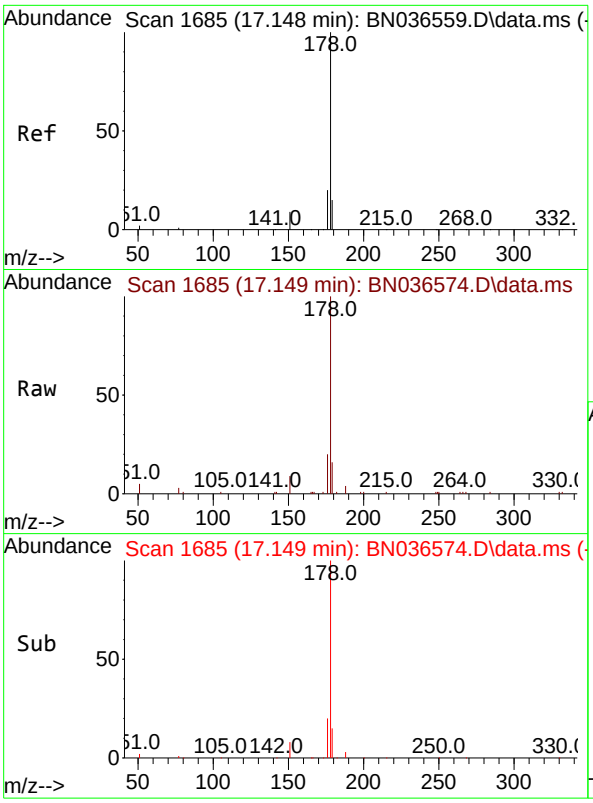


#24
Pentachlorophenol
Concen: 0.335 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:266 Resp: 800

Ion	Ratio	Lower	Upper
266	100		
264	65.5	49.6	74.4
268	63.4	50.9	76.3



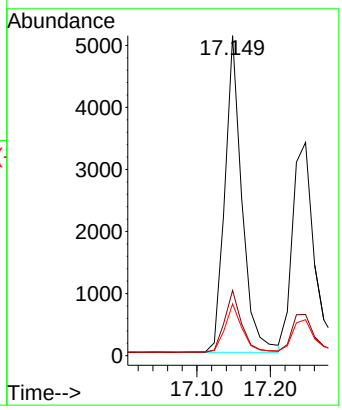


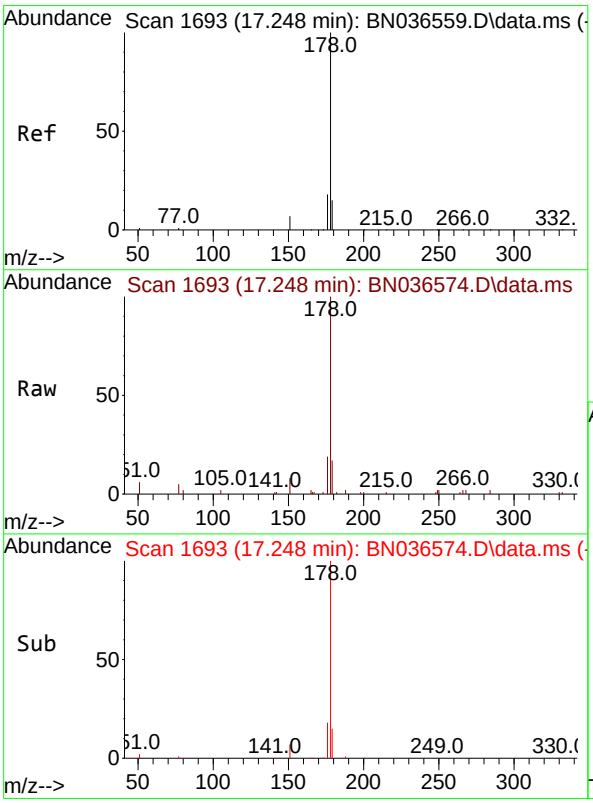
#25
Phenanthrene
Concen: 0.397 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 8248

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.9	23.9
179	15.3	12.2	18.4

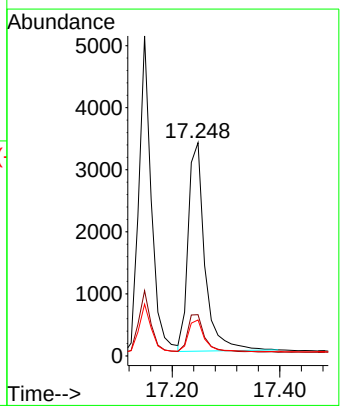


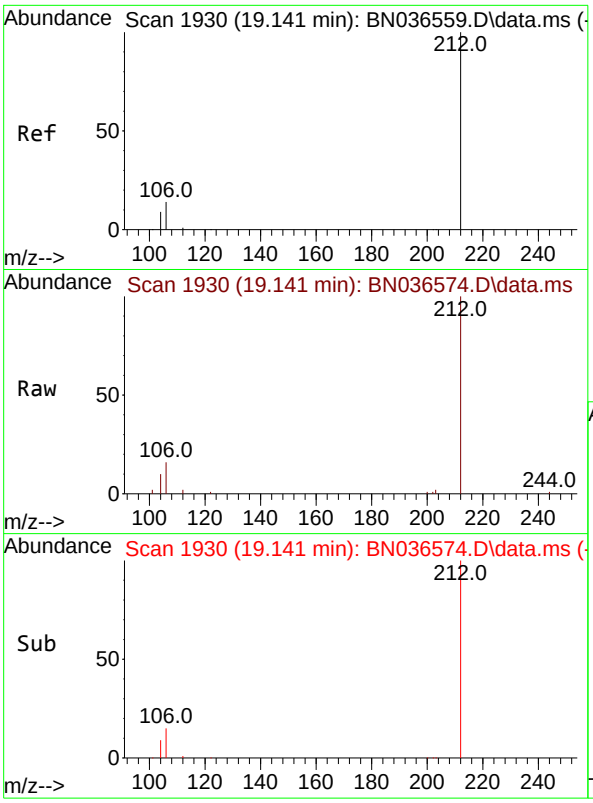


#26
Anthracene
Concen: 0.384 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:178 Resp: 7203

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.2
179	15.1	12.6	18.8



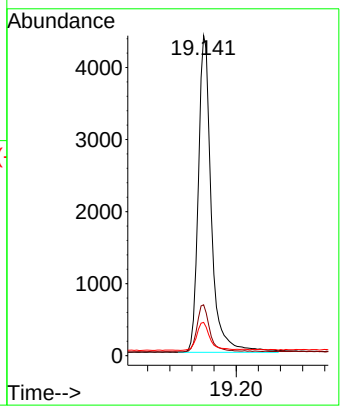


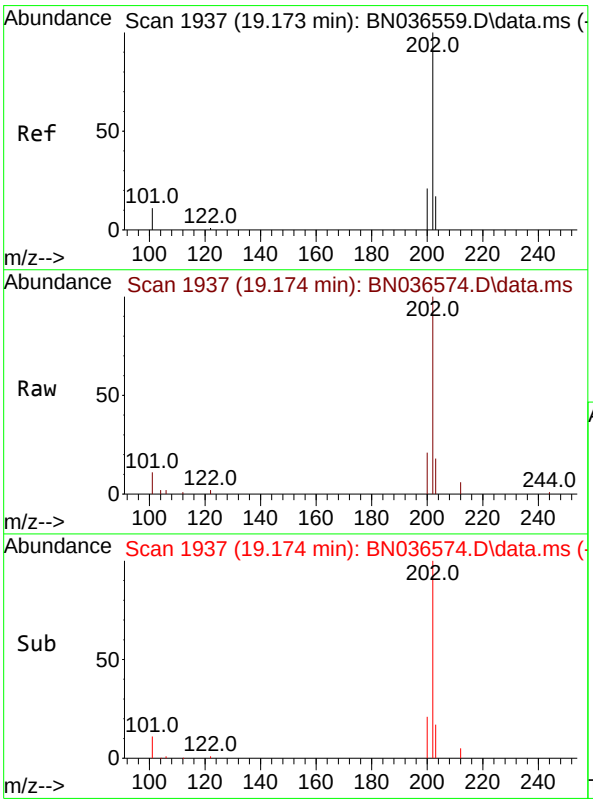
#27
Fluoranthene-d10
Concen: 0.405 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 7182

Ion	Ratio	Lower	Upper
212	100		
106	14.7	11.8	17.6
104	9.0	7.3	10.9

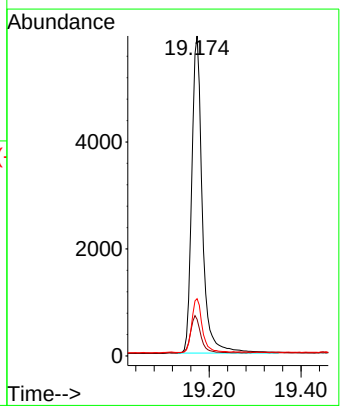


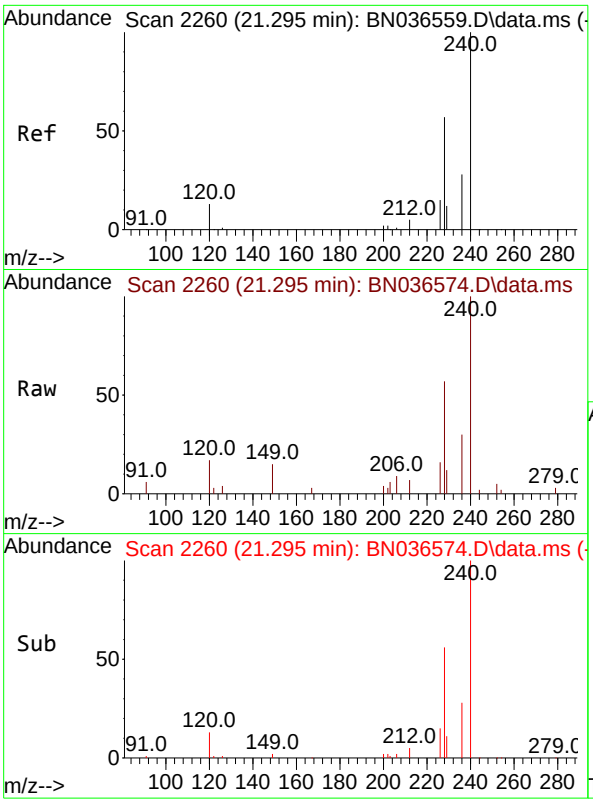


#28
Fluoranthene
Concen: 0.408 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:202 Resp: 9516

Ion	Ratio	Lower	Upper
202	100		
101	11.4	9.4	14.0
203	16.9	13.5	20.3



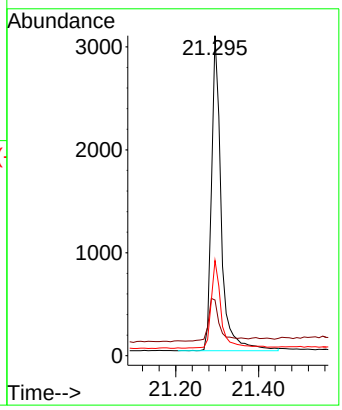


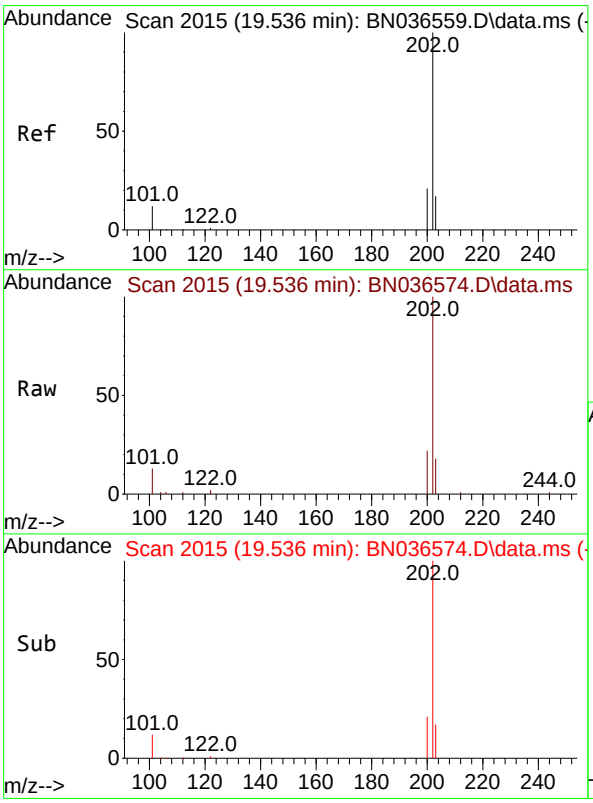
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 4977

Ion	Ratio	Lower	Upper
240	100		
120	17.4	14.6	22.0
236	29.8	24.1	36.1

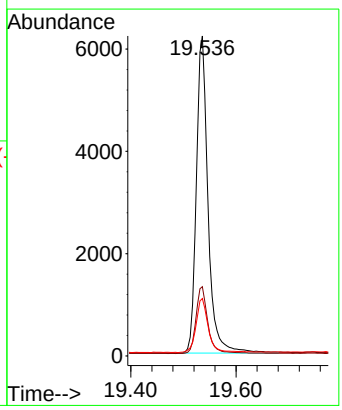


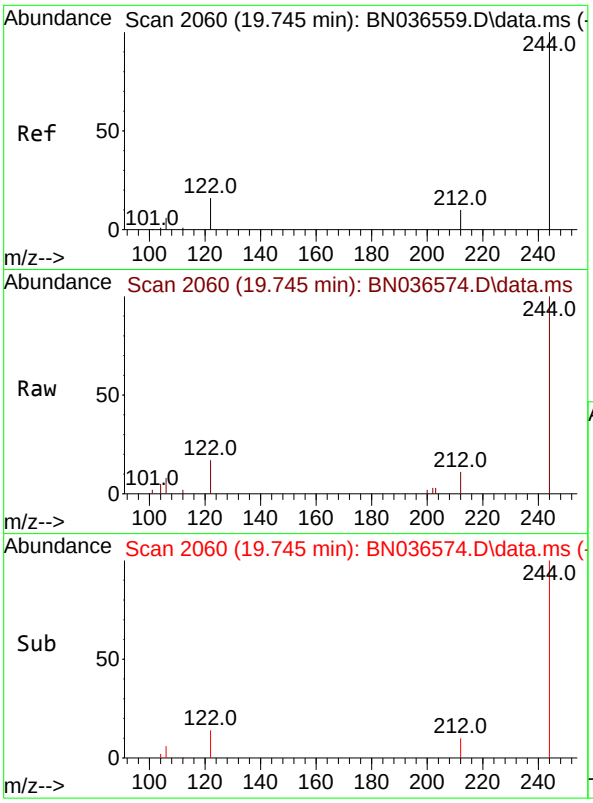


#30
Pyrene
Concen: 0.393 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:202 Resp: 9574

Ion	Ratio	Lower	Upper
202	100		
200	21.5	17.1	25.7
203	17.8	14.1	21.1



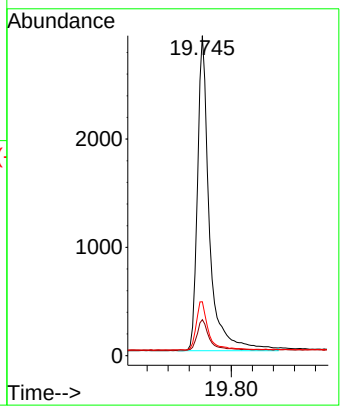


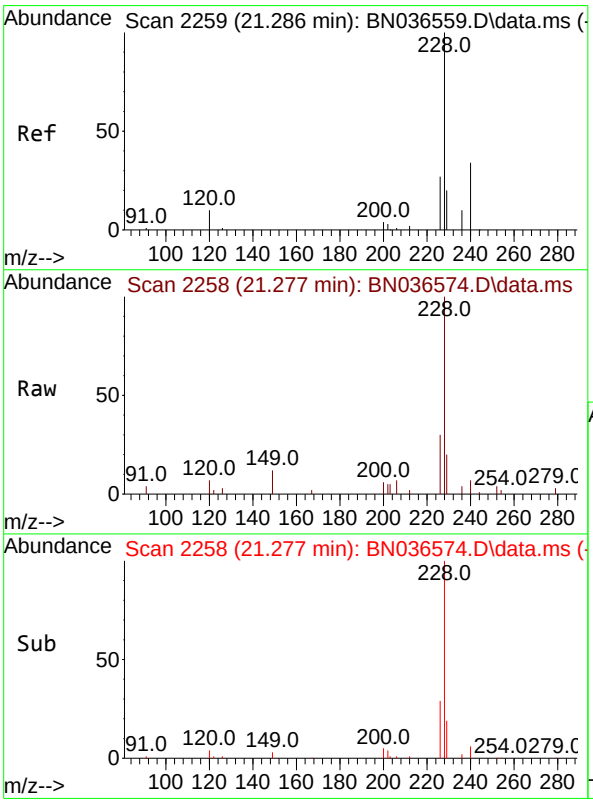
#31
Terphenyl-d14
Concen: 0.386 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 4607

Ion	Ratio	Lower	Upper
244	100		
212	11.2	9.6	14.4
122	16.8	13.9	20.9

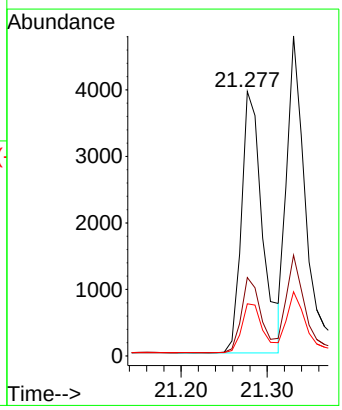


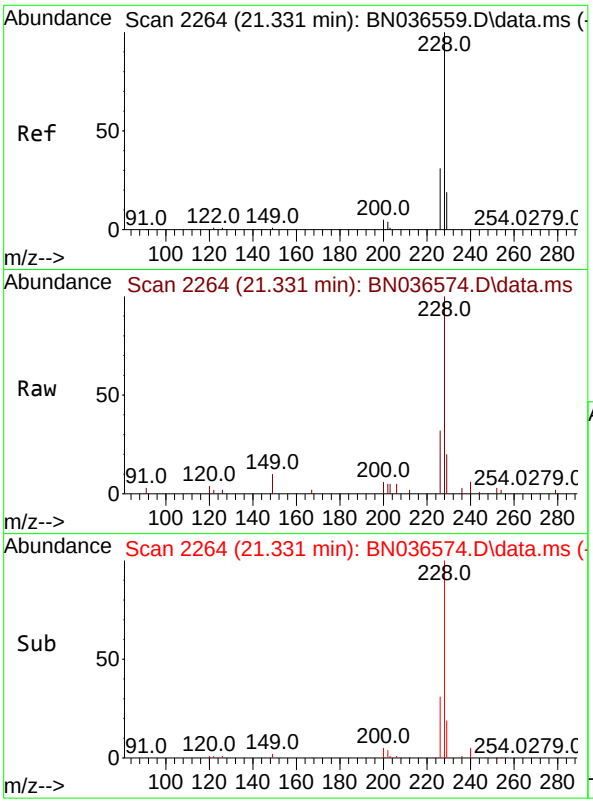


#32
Benzo(a)anthracene
Concen: 0.386 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:228 Resp: 6681

Ion	Ratio	Lower	Upper
228	100		
226	29.6	22.5	33.7
229	19.7	16.6	25.0



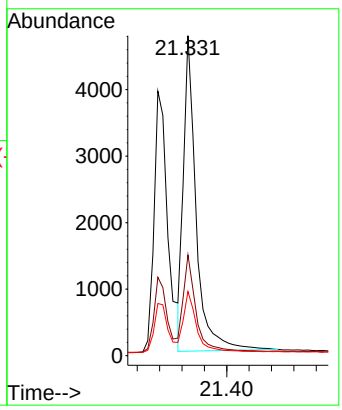


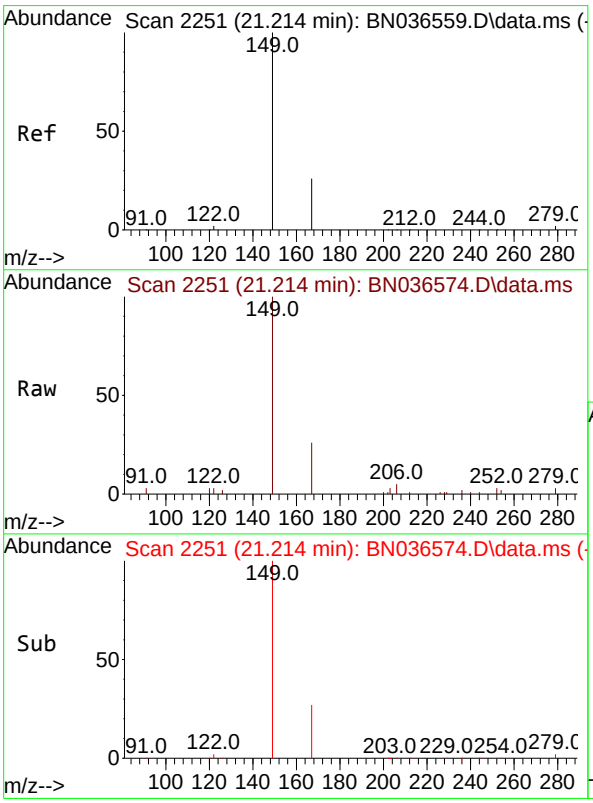
#33
Chrysene
Concen: 0.395 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 7472

Ion	Ratio	Lower	Upper
228	100		
226	31.5	25.3	37.9
229	20.1	15.8	23.8

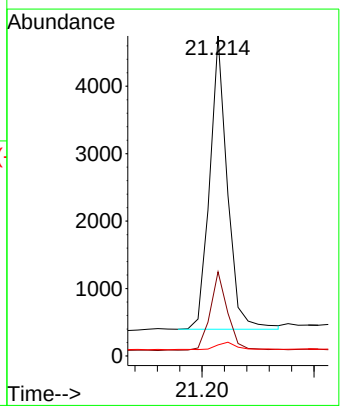


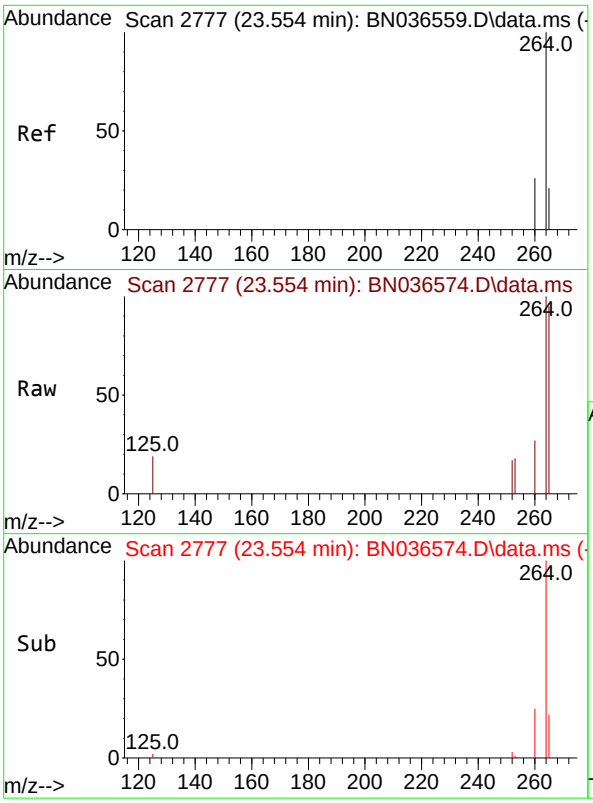


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.387 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:149 Resp: 4774

Ion	Ratio	Lower	Upper
149	100		
167	26.9	20.7	31.1
279	3.0	3.6	5.4#



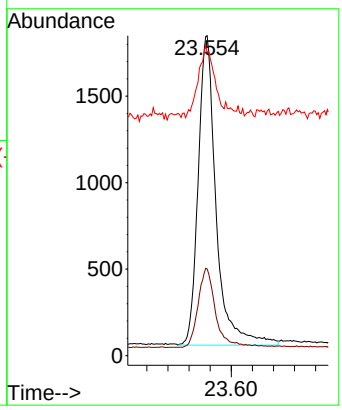


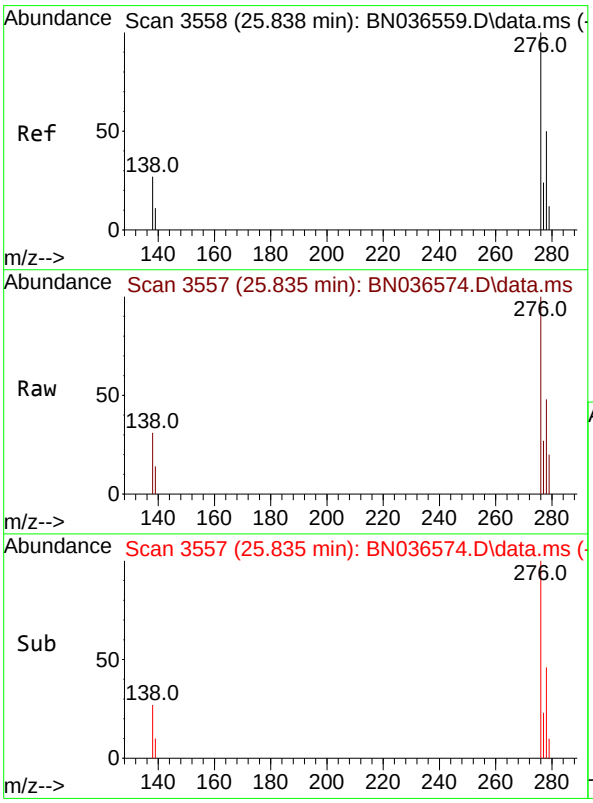
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 4232

Ion	Ratio	Lower	Upper
264	100		
260	27.1	22.6	33.8
265	94.7	88.1	132.1

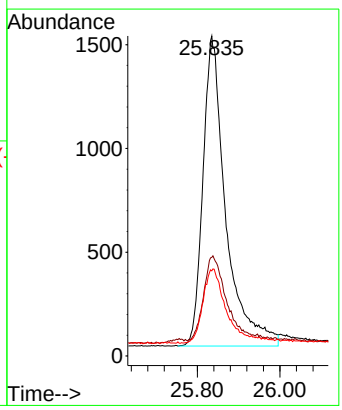


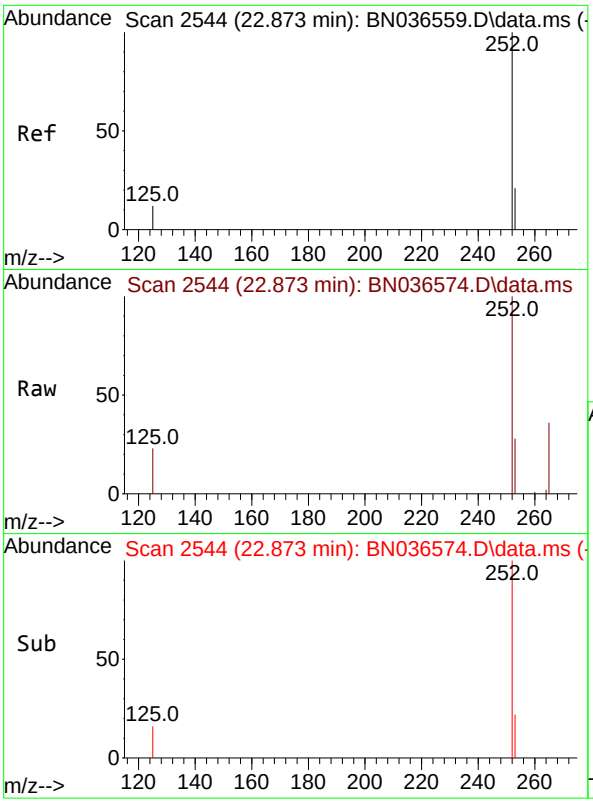


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.375 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:276 Resp: 5731

Ion	Ratio	Lower	Upper
276	100		
138	27.2	23.4	35.2
277	23.9	20.0	30.0



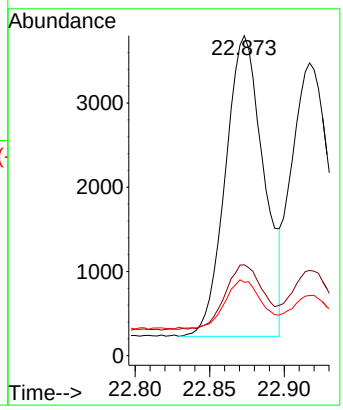


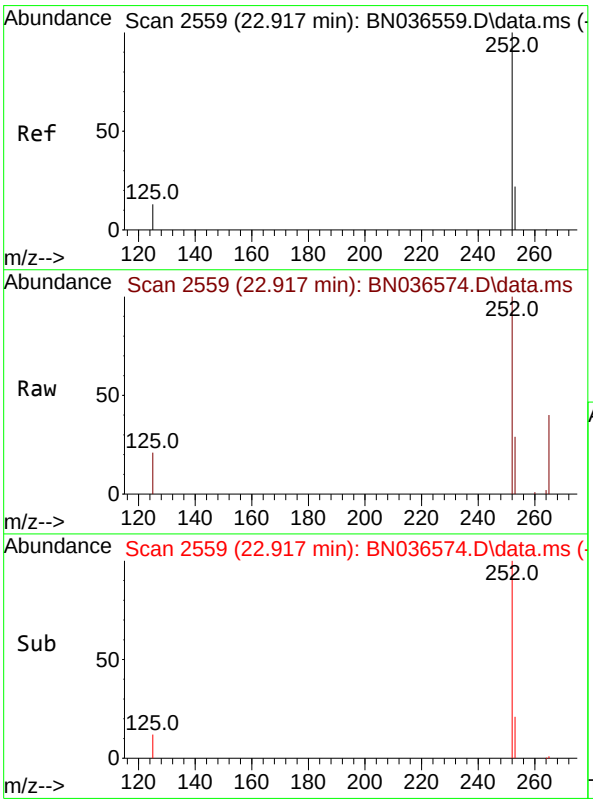
#37
Benzo(b)fluoranthene
Concen: 0.415 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 6389

Ion	Ratio	Lower	Upper
252	100		
253	28.4	23.9	35.9
125	23.0	17.4	26.2

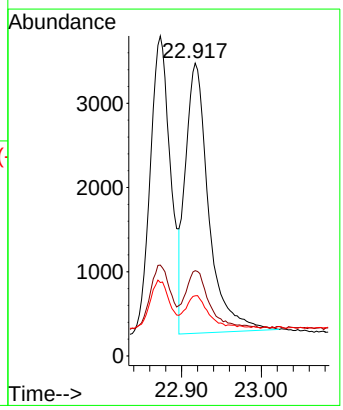


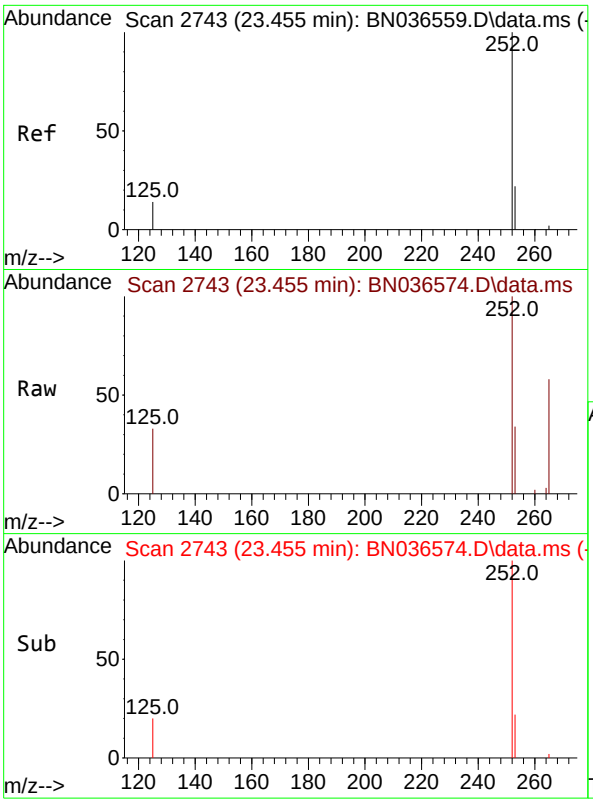


#38
Benzo(k)fluoranthene
Concen: 0.403 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:252 Resp: 6510

Ion	Ratio	Lower	Upper
252	100		
253	29.1	24.6	36.8
125	20.6	17.8	26.8



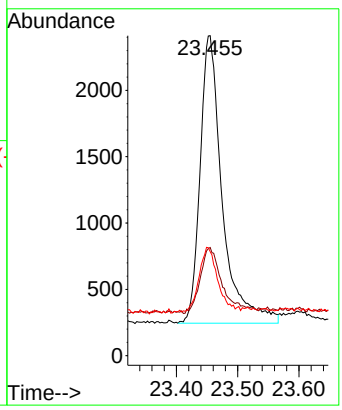


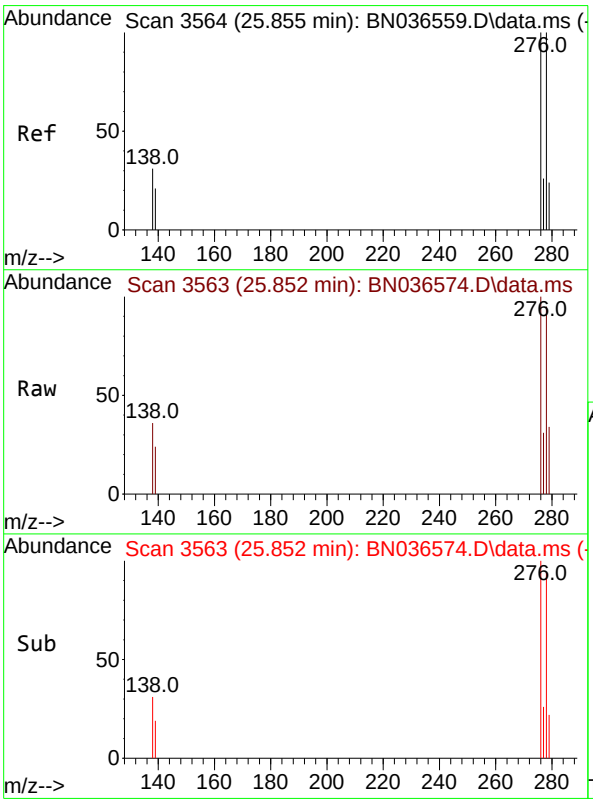
#39
Benzo(a)pyrene
Concen: 0.421 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 5454

Ion	Ratio	Lower	Upper
252	100		
253	33.8	27.8	41.8
125	32.5	22.7	34.1

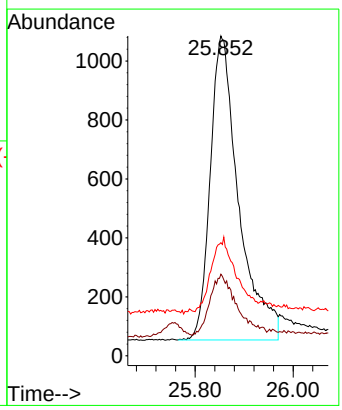


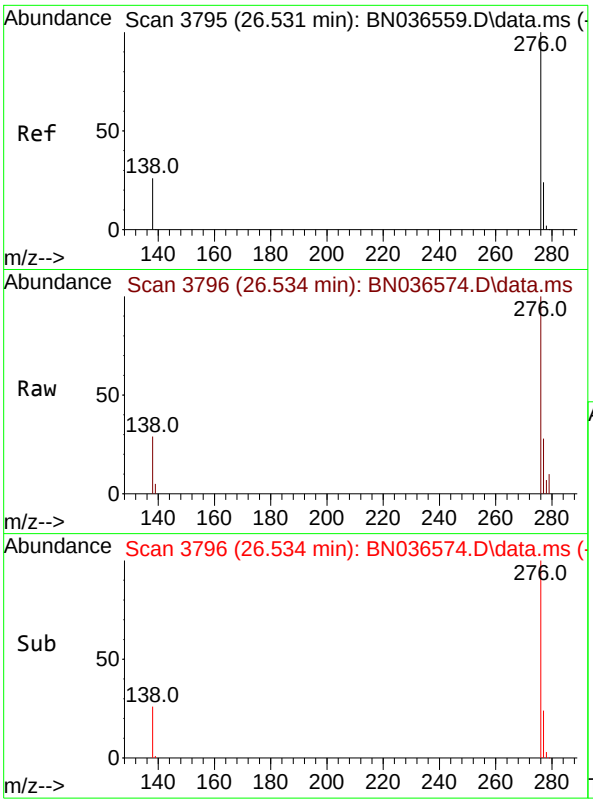


#40
Dibenzo(a,h)anthracene
Concen: 0.350 ng
RT: 25.852 min Scan# 3563
Delta R.T. -0.003 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Tgt Ion:278 Resp: 4158

Ion	Ratio	Lower	Upper
278	100		
139	25.5	20.8	31.2
279	35.4	28.8	43.2



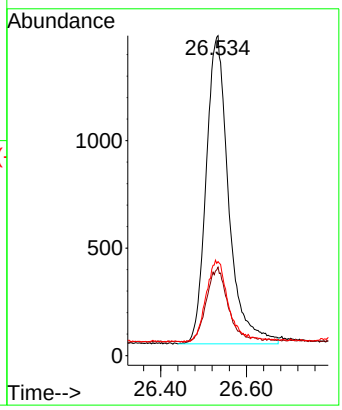


#41
Benzo(g,h,i)perylene
Concen: 0.384 ng
RT: 26.534 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036574.D
Acq: 11 Mar 2025 10:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 5220

Ion	Ratio	Lower	Upper
276	100		
277	27.6	22.2	33.4
138	29.4	24.1	36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036574.D
Acq On : 11 Mar 2025 10:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 11 10:37:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	0.444	0.507	-14.2	106	0.00
3		n-Nitrosodimethylamine	0.898	0.859	4.3	96	0.00
4	S	2-Fluorophenol	0.932	0.903	3.1	95	0.00
5	S	Phenol-d6	1.152	1.059	8.1	98	0.00
6		bis(2-Chloroethyl)ether	1.190	1.109	6.8	98	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	107	0.00
8	S	Nitrobenzene-d5	0.435	0.381	12.4	99	0.00
9		Naphthalene	1.177	1.115	5.3	99	0.00
10		Hexachlorobutadiene	0.277	0.273	1.4	100	0.00
11	SURR	2-Methylnaphthalene-d10	0.595	0.563	5.4	100	0.00
12		2-Methylnaphthalene	0.749	0.704	6.0	99	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	110	0.00
14	S	2,4,6-Tribromophenol	0.182	0.171	6.0	101	0.00
15	S	2-Fluorobiphenyl	2.327	2.112	9.2	97	0.00
16		Acenaphthylene	1.888	1.796	4.9	102	0.00
17		Acenaphthene	1.236	1.179	4.6	102	-0.01
18		Fluorene	1.672	1.620	3.1	101	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	115	0.00
20		4,6-Dinitro-2-methylphenol	0.086	0.059	31.4#	88	0.01
21		4-Bromophenyl-phenylether	0.251	0.238	5.2	100	0.00
22		Hexachlorobenzene	0.303	0.299	1.3	103	0.00
23		Atrazine	0.201	0.191	5.0	103	0.00
24		Pentachlorophenol	0.138	0.116	15.9	97	0.00
25		Phenanthrene	1.200	1.192	0.7	106	0.00
26		Anthracene	1.083	1.041	3.9	105	0.00
27	SURR	Fluoranthene-d10	1.025	1.038	-1.3	107	0.00
28		Fluoranthene	1.348	1.375	-2.0	109	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	121	0.00
30		Pyrene	1.956	1.924	1.6	109	0.00
31	S	Terphenyl-d14	0.958	0.926	3.3	109	0.00
32		Benzo(a)anthracene	1.391	1.342	3.5	113	0.00
33		Chrysene	1.520	1.501	1.3	113	0.00
34		Bis(2-ethylhexyl)phthalate	0.990	0.959	3.1	111	0.00
35	I	Perylene-d12	1.000	1.000	0.0	120	0.00
36		Indeno(1,2,3-cd)pyrene	1.444	1.354	6.2	105	0.00
37		Benzo(b)fluoranthene	1.456	1.510	-3.7	117	0.00
38		Benzo(k)fluoranthene	1.527	1.538	-0.7	114	0.00
39	C	Benzo(a)pyrene	1.226	1.289	-5.1	118	0.00
40		Dibenzo(a,h)anthracene	1.124	0.983	12.5	101	0.00
41		Benzo(g,h,i)perylene	1.286	1.233	4.1	107	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036574.D
Acq On : 11 Mar 2025 10:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 11 10:37:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	0.457	-14.2	106	0.00
3		n-Nitrosodimethylamine	0.400	0.383	4.3	96	0.00
4	S	2-Fluorophenol	0.400	0.387	3.3	95	0.00
5	S	Phenol-d6	0.400	0.368	8.0	98	0.00
6		bis(2-Chloroethyl)ether	0.400	0.373	6.8	98	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	107	0.00
8	S	Nitrobenzene-d5	0.400	0.350	12.5	99	0.00
9		Naphthalene	0.400	0.379	5.3	99	0.00
10		Hexachlorobutadiene	0.400	0.395	1.3	100	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.378	5.5	100	0.00
12		2-Methylnaphthalene	0.400	0.376	6.0	99	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	110	0.00
14	S	2,4,6-Tribromophenol	0.400	0.376	6.0	101	0.00
15	S	2-Fluorobiphenyl	0.400	0.363	9.3	97	0.00
16		Acenaphthylene	0.400	0.381	4.8	102	0.00
17		Acenaphthene	0.400	0.382	4.5	102	-0.01
18		Fluorene	0.400	0.388	3.0	101	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	115	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.376	6.0	88	0.01
21		4-Bromophenyl-phenylether	0.400	0.380	5.0	100	0.00
22		Hexachlorobenzene	0.400	0.396	1.0	103	0.00
23		Atrazine	0.400	0.379	5.3	103	0.00
24		Pentachlorophenol	0.400	0.335	16.3	97	0.00
25		Phenanthrene	0.400	0.397	0.8	106	0.00
26		Anthracene	0.400	0.384	4.0	105	0.00
27	SURR	Fluoranthene-d10	0.400	0.405	-1.3	107	0.00
28		Fluoranthene	0.400	0.408	-2.0	109	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	121	0.00
30		Pyrene	0.400	0.393	1.8	109	0.00
31	S	Terphenyl-d14	0.400	0.386	3.5	109	0.00
32		Benzo(a)anthracene	0.400	0.386	3.5	113	0.00
33		Chrysene	0.400	0.395	1.3	113	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.387	3.3	111	0.00
35	I	Perylene-d12	0.400	0.400	0.0	120	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.375	6.3	105	0.00
37		Benzo(b)fluoranthene	0.400	0.415	-3.7	117	0.00
38		Benzo(k)fluoranthene	0.400	0.403	-0.8	114	0.00
39	C	Benzo(a)pyrene	0.400	0.421	-5.2	118	0.00
40		Dibenzo(a,h)anthracene	0.400	0.350	12.5	101	0.00
41		Benzo(g,h,i)perylene	0.400	0.384	4.0	107	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: AECO15

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG No.: Q1531

Instrument ID: BNA_N Calibration Date/Time: 03/11/2025 19:46

Lab File ID: BN036589.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.575		-3.4	50.0
Fluoranthene-d10	1.025	1.029		0.4	50.0
2-Fluorophenol	0.932	0.807		-13.4	50.0
Phenol-d6	1.152	0.937		-18.7	50.0
Nitrobenzene-d5	0.435	0.390		-10.3	50.0
2-Fluorobiphenyl	2.327	2.515		8.1	50.0
2,4,6-Tribromophenol	0.182	0.177		-2.7	50.0
Terphenyl-d14	0.958	0.946		-1.3	50.0
1,4-Dioxane	0.444	0.457		2.9	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036589.D
Acq On : 11 Mar 2025 19:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 12 01:09:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1964	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4774	0.400	ng		0.00
13) Acenaphthene-d10	14.356	164	2543	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	5156	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3498	0.400	ng		0.00
35) Perylene-d12	23.554	264	2998	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	1585	0.346	ng		0.00
5) Phenol-d6	6.894	99	1840	0.325	ng		0.00
8) Nitrobenzene-d5	8.875	82	1860	0.358	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	2744	0.386	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	450	0.390	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	6396	0.432	ng		0.00
27) Fluoranthene-d10	19.141	212	5306	0.402	ng		0.00
31) Terphenyl-d14	19.745	244	3310	0.395	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	897	0.412	ng		98
3) n-Nitrosodimethylamine	3.550	42	1761	0.400	ng		95
6) bis(2-Chloroethyl)ether	7.147	93	1905	0.326	ng		99
9) Naphthalene	10.562	128	5442	0.388	ng		100
10) Hexachlorobutadiene	10.851	225	1336	0.404	ng	#	97
12) 2-Methylnaphthalene	12.182	142	3430	0.384	ng		100
16) Acenaphthylene	14.078	152	4983	0.415	ng		99
17) Acenaphthene	14.420	154	3052	0.389	ng		99
18) Fluorene	15.414	166	4246	0.400	ng		100
20) 4,6-Dinitro-2-methylph...	15.499	198	375	0.430	ng		95
21) 4-Bromophenyl-phenylether	16.305	248	1311	0.406	ng		95
22) Hexachlorobenzene	16.416	284	1646	0.422	ng		98
23) Atrazine	16.578	200	1043	0.403	ng		98
24) Pentachlorophenol	16.764	266	661	0.372	ng		100
25) Phenanthrene	17.149	178	6304	0.408	ng		99
26) Anthracene	17.248	178	5453	0.391	ng		99
28) Fluoranthene	19.169	202	7017	0.404	ng		99
30) Pyrene	19.536	202	7087	0.414	ng		100
32) Benzo(a)anthracene	21.286	228	4721	0.388	ng		100
33) Chrysene	21.331	228	5431	0.409	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	3858	0.445	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	4281	0.396	ng		95
37) Benzo(b)fluoranthene	22.873	252	4597m	0.421	ng		
38) Benzo(k)fluoranthene	22.920	252	4634m	0.405	ng		
39) Benzo(a)pyrene	23.455	252	3929	0.428	ng	#	92
40) Dibenzo(a,h)anthracene	25.852	278	3325	0.395	ng		98
41) Benzo(g,h,i)perylene	26.528	276	3963	0.411	ng		97

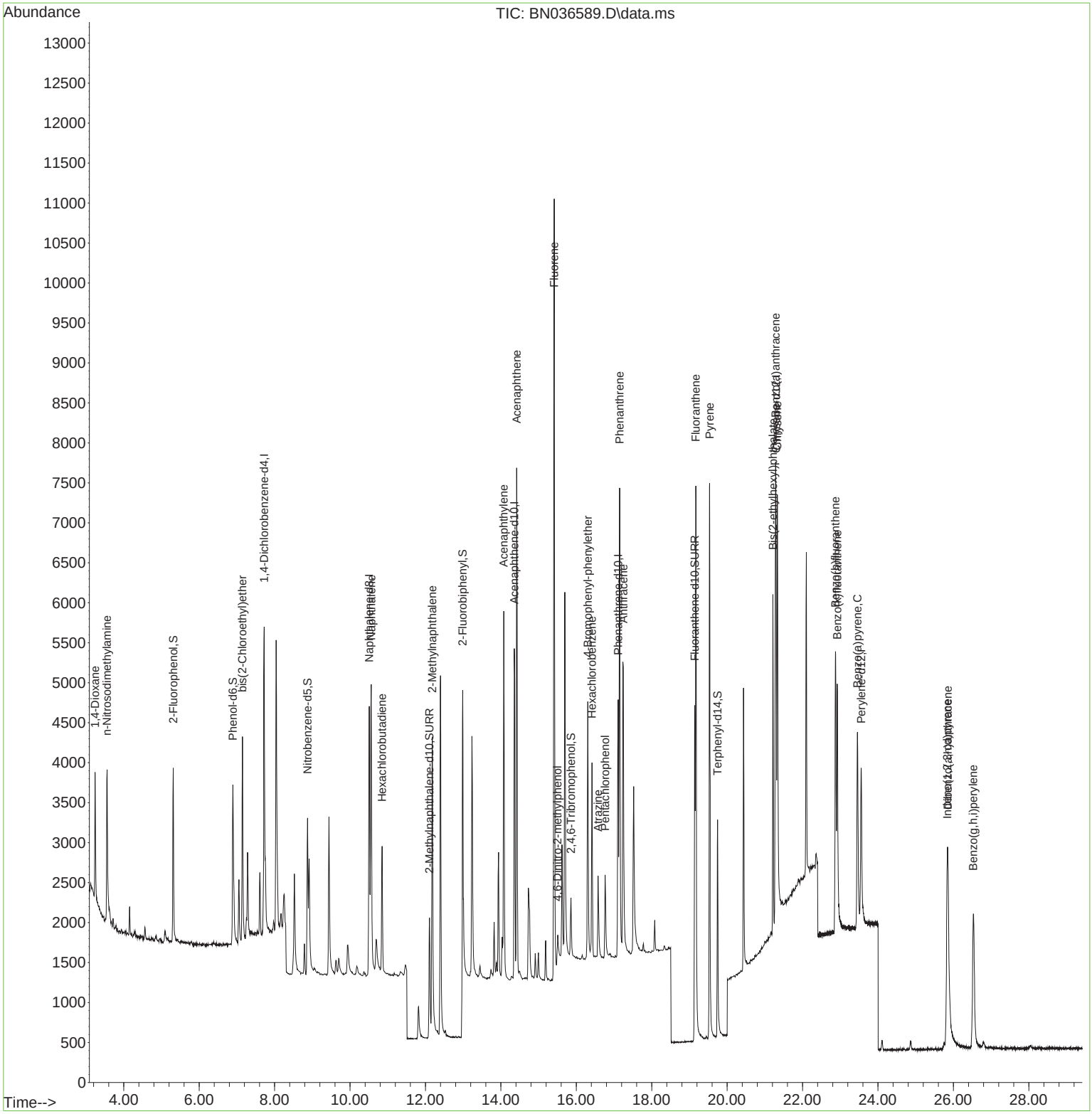
(#) = qualifier out of range (m) = manual integration (+) = signals summed

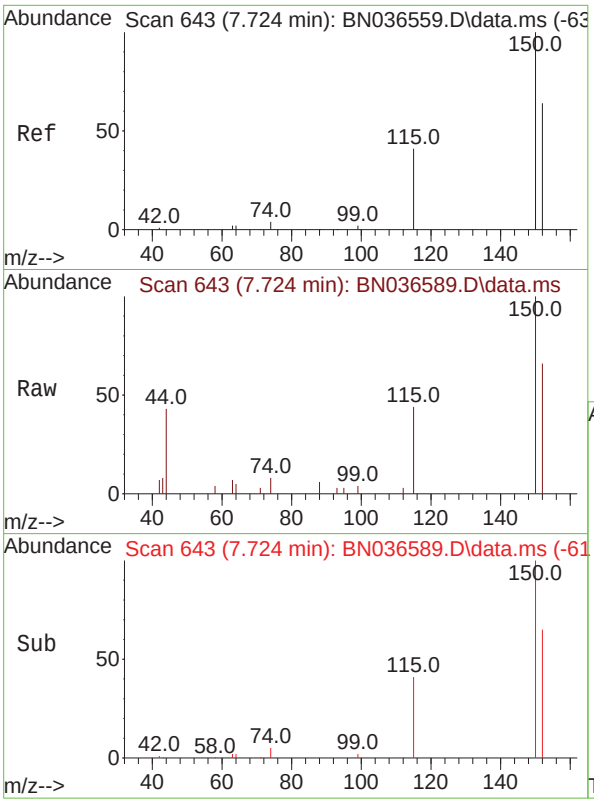
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036589.D
Acq On : 11 Mar 2025 19:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Mar 12 01:09:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

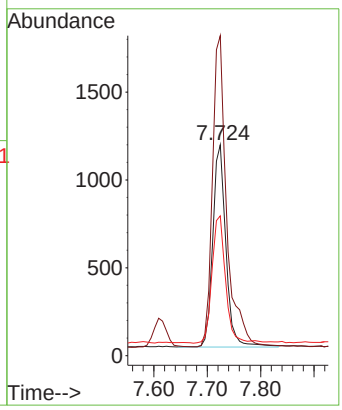




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:152 Resp: 196

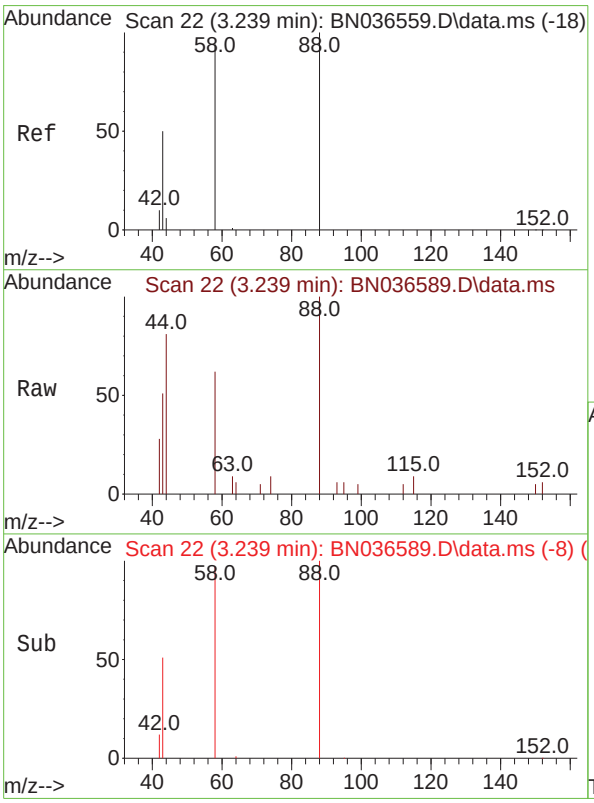
Ion	Ratio	Lower	Upper
152	100		
150	151.7	123.7	185.5
115	66.3	54.3	81.5



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

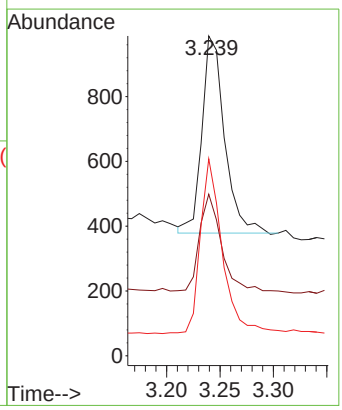
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

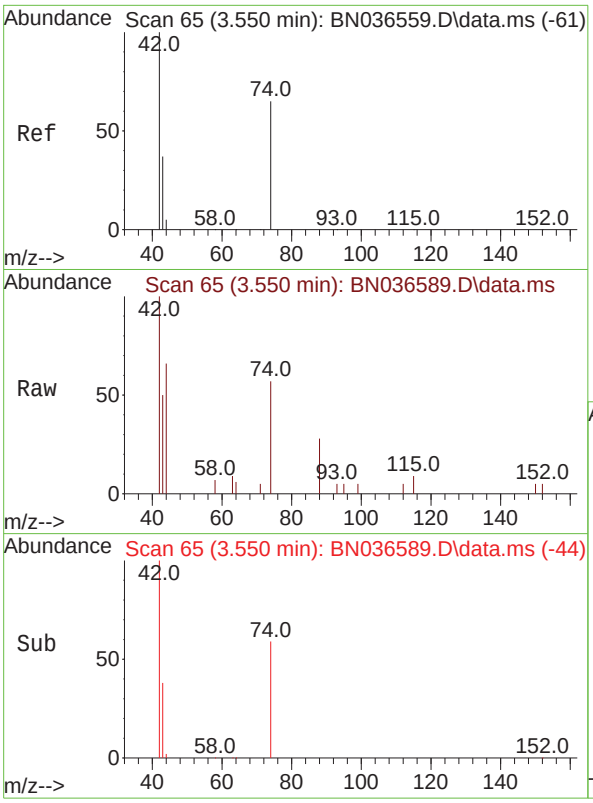


#2
1,4-Dioxane
Concen: 0.412 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 88 Resp: 897

Ion	Ratio	Lower	Upper
88	100		
43	48.8	37.8	56.8
58	86.1	67.4	101.2

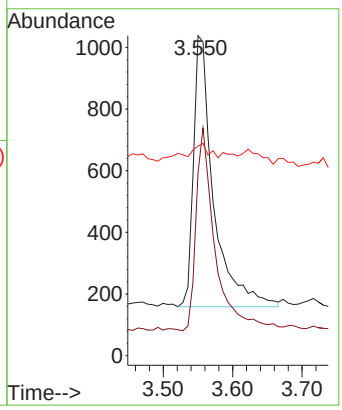




#3
n-Nitrosodimethylamine
Concen: 0.400 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 42 Resp: 176

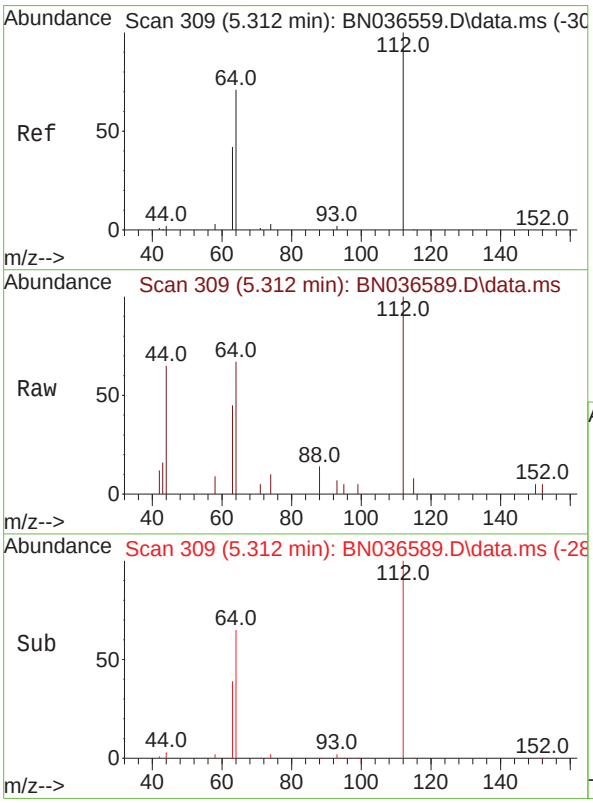
Ion	Ratio	Lower	Upper
42	100		
74	71.6	60.6	90.8
44	8.3	6.3	9.5



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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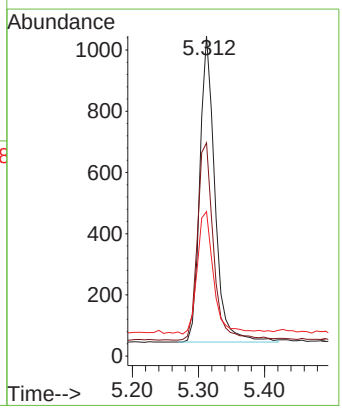
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

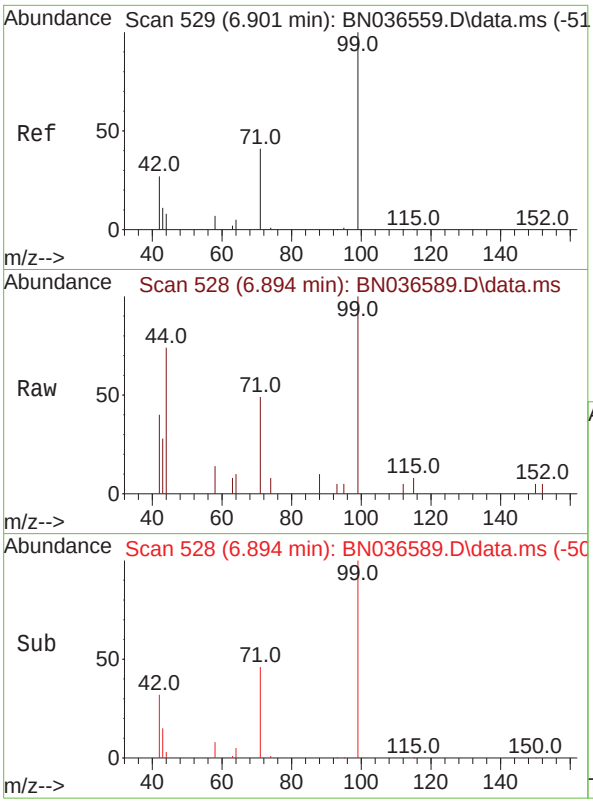


#4
2-Fluorophenol
Concen: 0.346 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:112 Resp: 1585

Ion	Ratio	Lower	Upper
112	100		
64	68.8	53.1	79.7
63	42.3	31.8	47.8





#5
Phenol-d6
Concen: 0.325 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

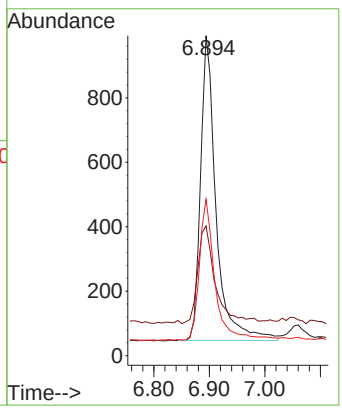
Tgt Ion: 99 Resp: 184

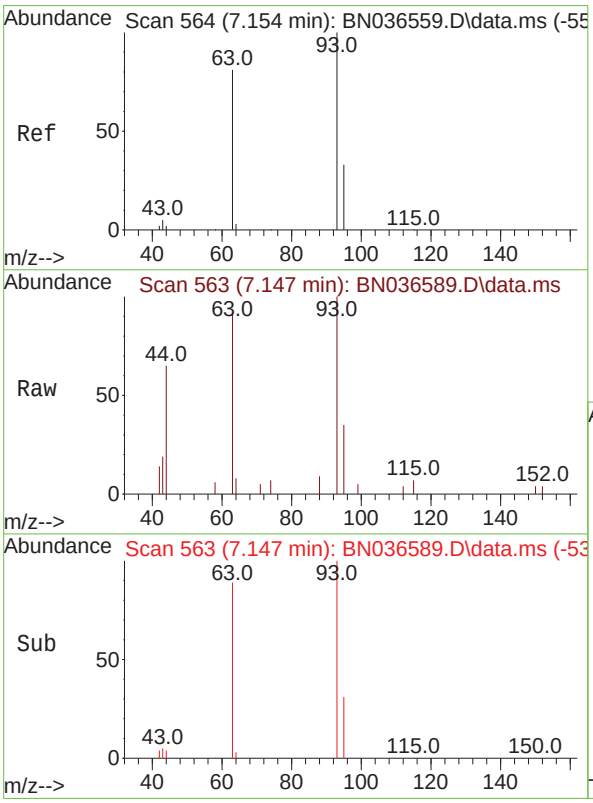
Ion	Ratio	Lower	Upper
99	100		
42	36.8	26.5	39.7
71	46.3	34.1	51.1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

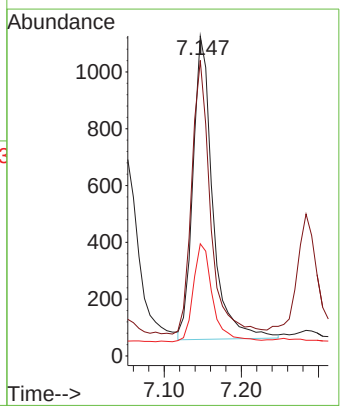


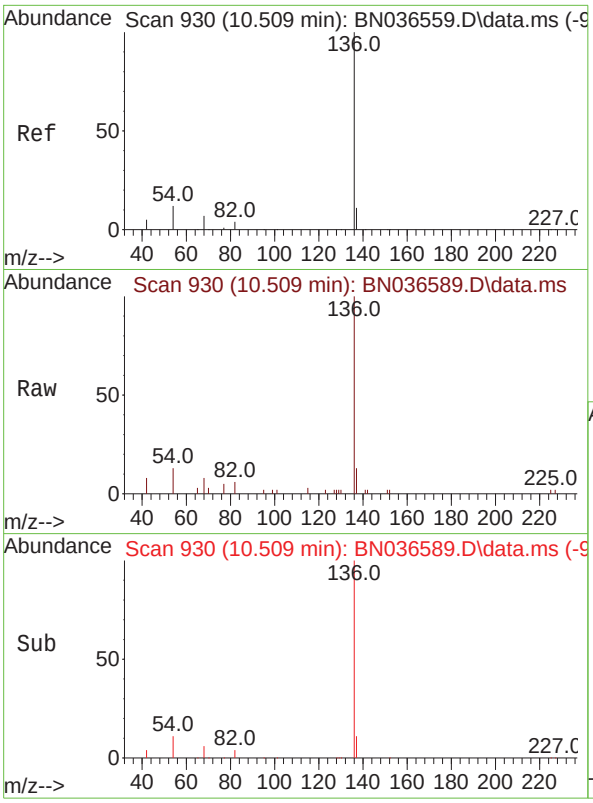


#6
bis(2-Chloroethyl)ether
Concen: 0.326 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 93 Resp: 1905

Ion	Ratio	Lower	Upper
93	100		
63	85.9	67.7	101.5
95	31.6	25.6	38.4

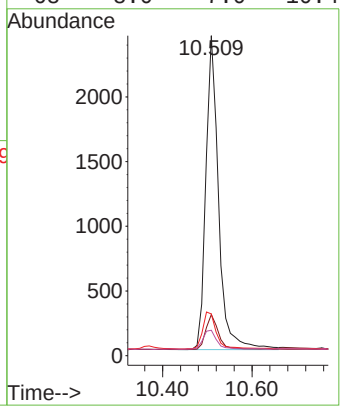




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:136 Resp: 477

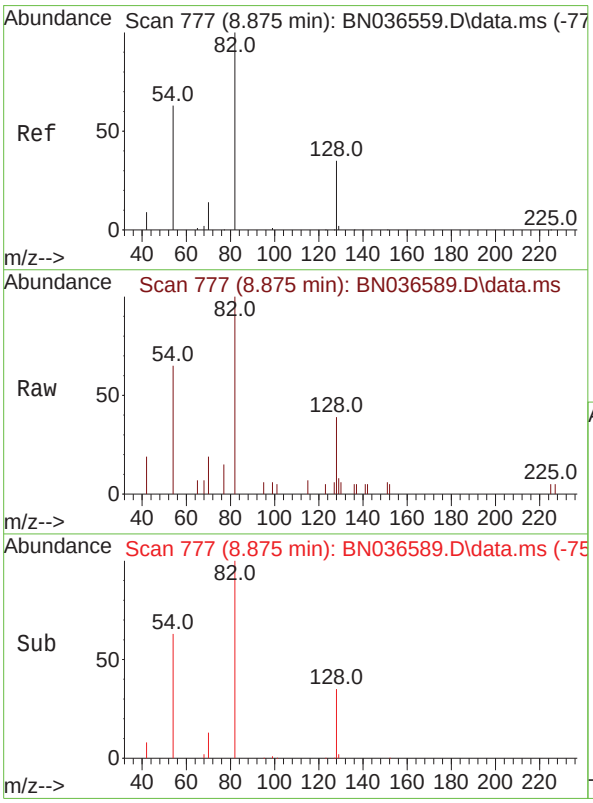
Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.3	15.5
54	13.1	11.5	17.3
68	8.0	7.0	10.4



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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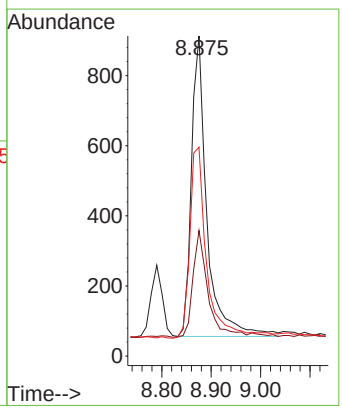
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

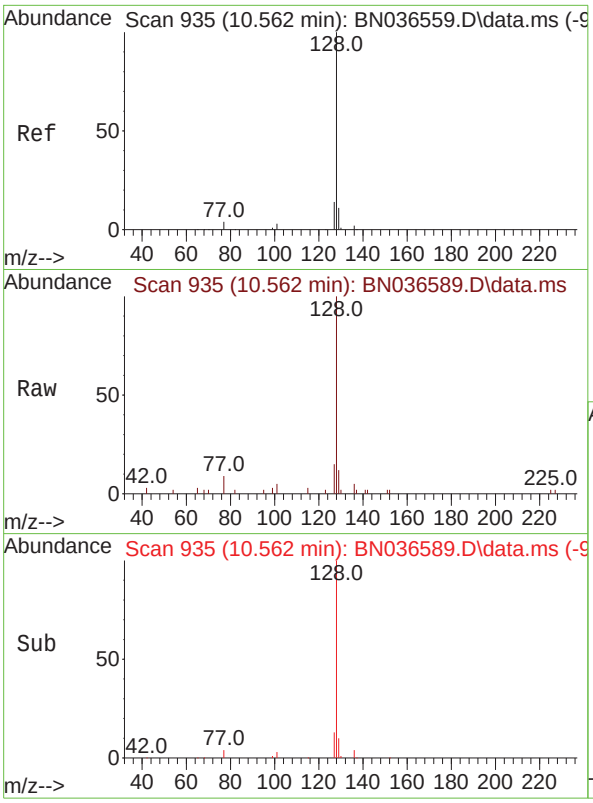


#8
Nitrobenzene-d5
Concen: 0.358 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 82 Resp: 1860

Ion	Ratio	Lower	Upper
82	100		
128	39.2	30.6	45.8
54	65.3	52.2	78.4





#9
Naphthalene
Concen: 0.388 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

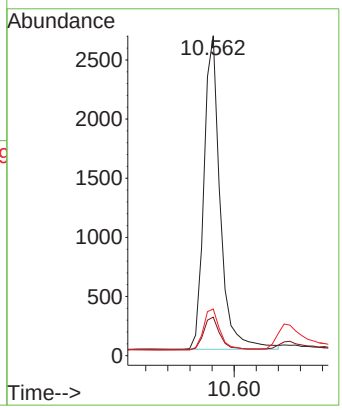
Tgt Ion:128 Resp: 544

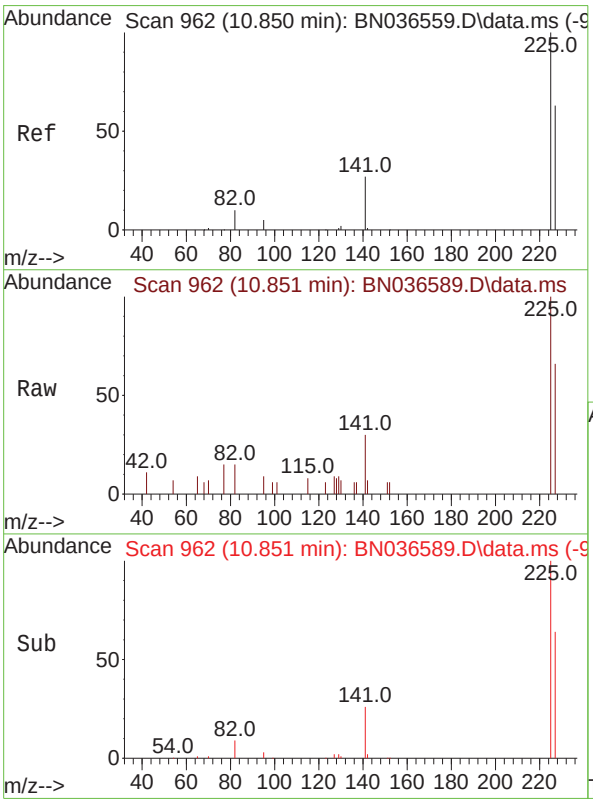
Ion	Ratio	Lower	Upper
128	100		
129	12.1	9.8	14.6
127	14.6	11.8	17.8

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

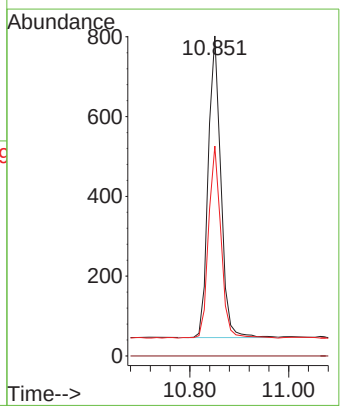


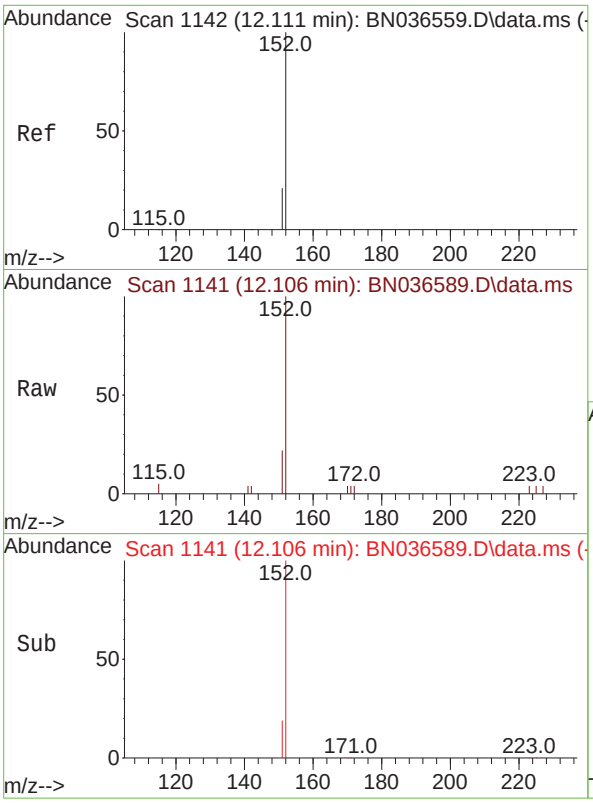


#10
Hexachlorobutadiene
Concen: 0.404 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:225 Resp: 1336

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.6	51.8	77.8





#11
2-Methylnaphthalene-d10
Concen: 0.386 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

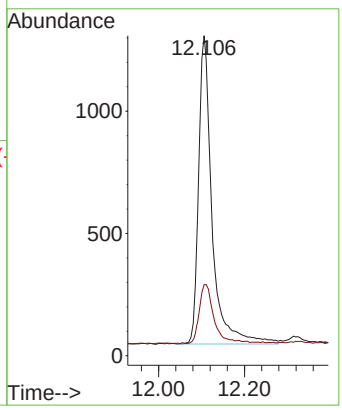
Tgt Ion:152 Resp: 274

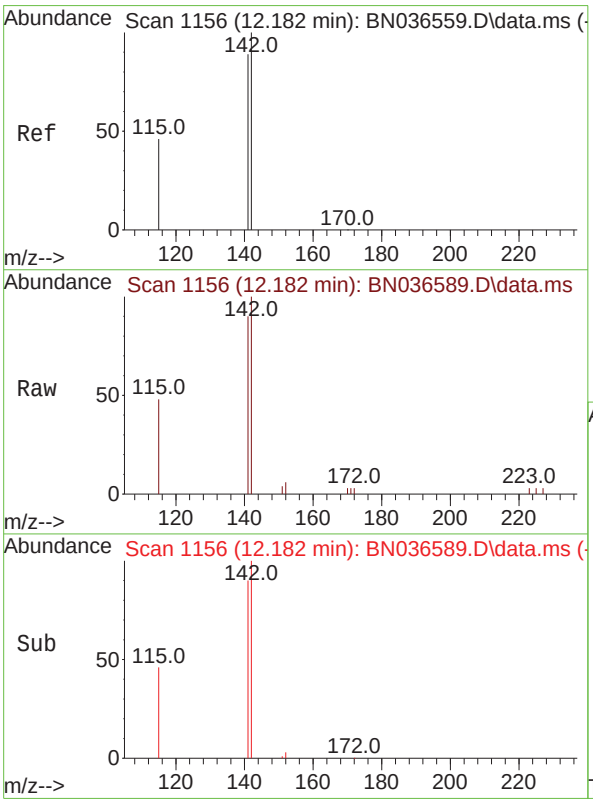
Ion	Ratio	Lower	Upper
152	100		
151	21.1	17.0	25.6

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

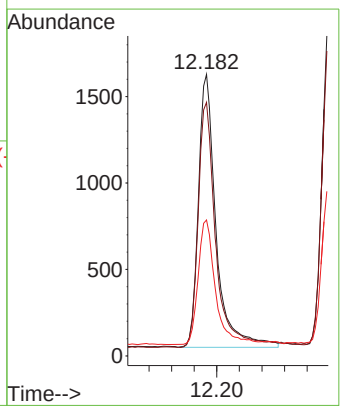


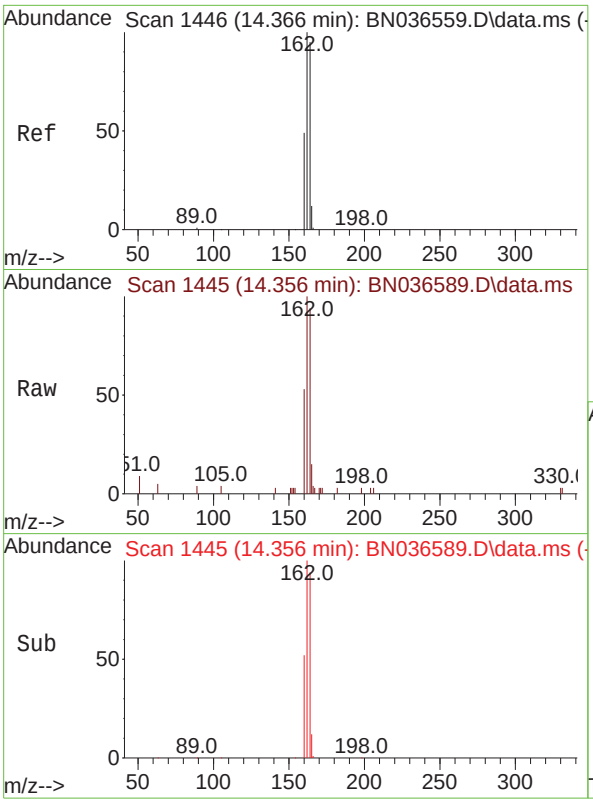


#12
2-Methylnaphthalene
Concen: 0.384 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:142 Resp: 3430

Ion	Ratio	Lower	Upper
142	100		
141	90.1	71.7	107.5
115	48.3	38.3	57.5

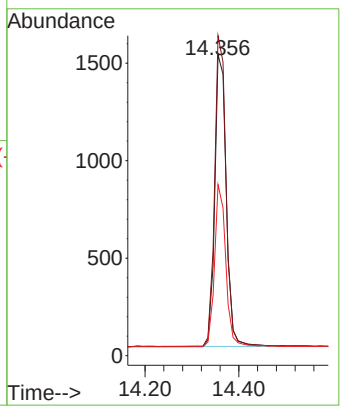




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.356 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:164 Resp: 254

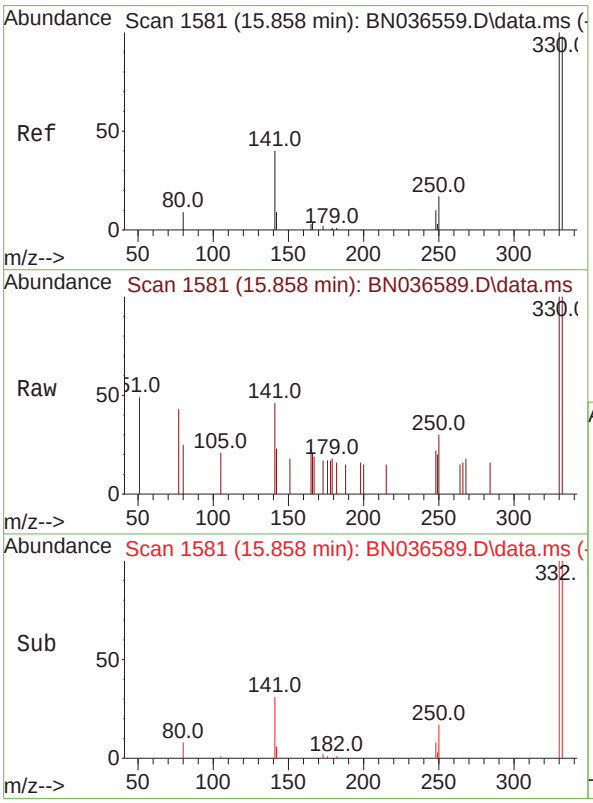
Ion	Ratio	Lower	Upper
164	100		
162	106.4	84.2	126.2
160	56.8	42.2	63.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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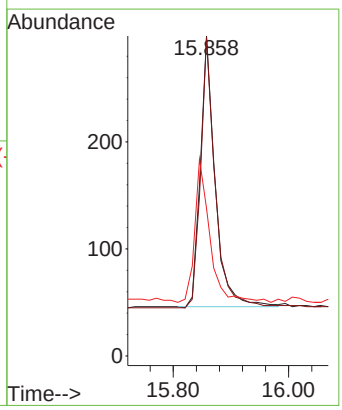
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

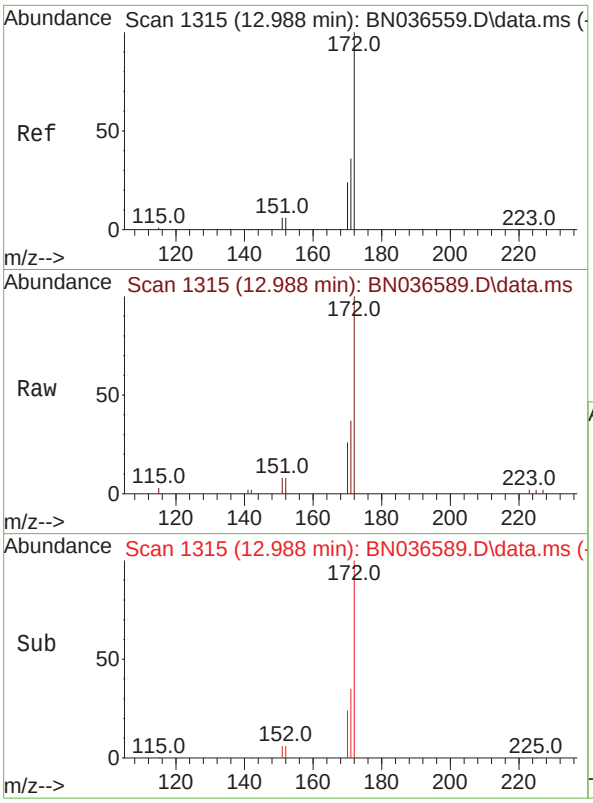


#14
2,4,6-Tribromophenol
Concen: 0.390 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:330 Resp: 450

Ion	Ratio	Lower	Upper
330	100		
332	98.7	75.2	112.8
141	54.2	43.4	65.2





#15
2-Fluorobiphenyl
Concen: 0.432 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

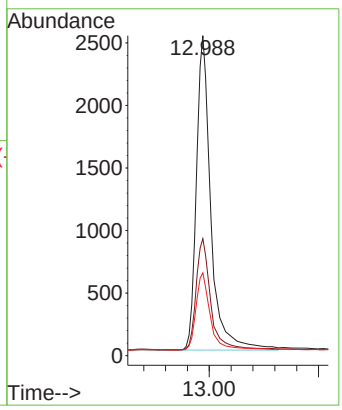
Tgt Ion:172 Resp: 639

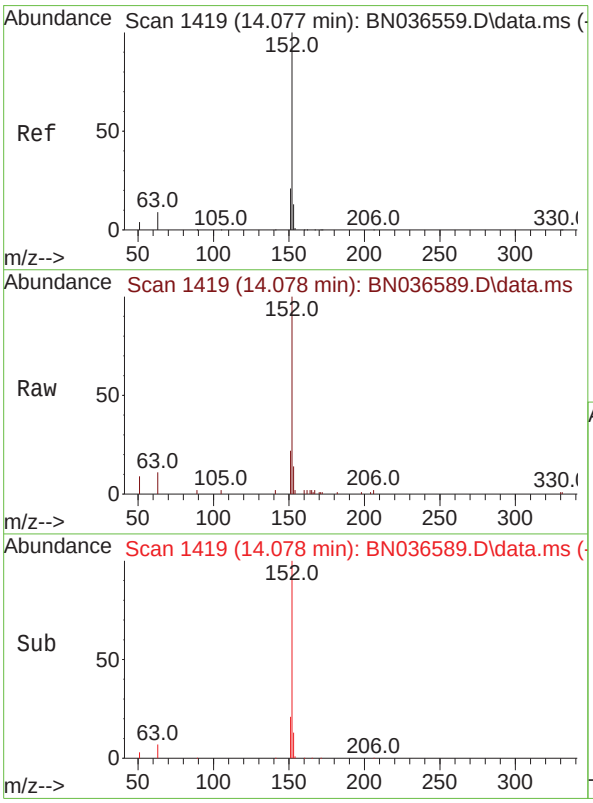
Ion	Ratio	Lower	Upper
172	100		
171	36.6	29.5	44.3
170	25.9	20.2	30.4

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

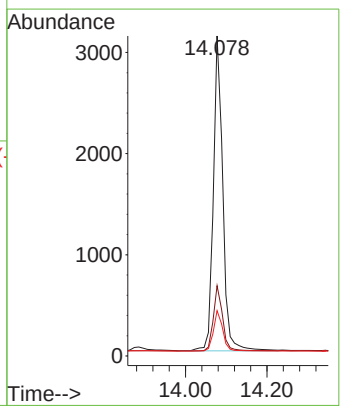


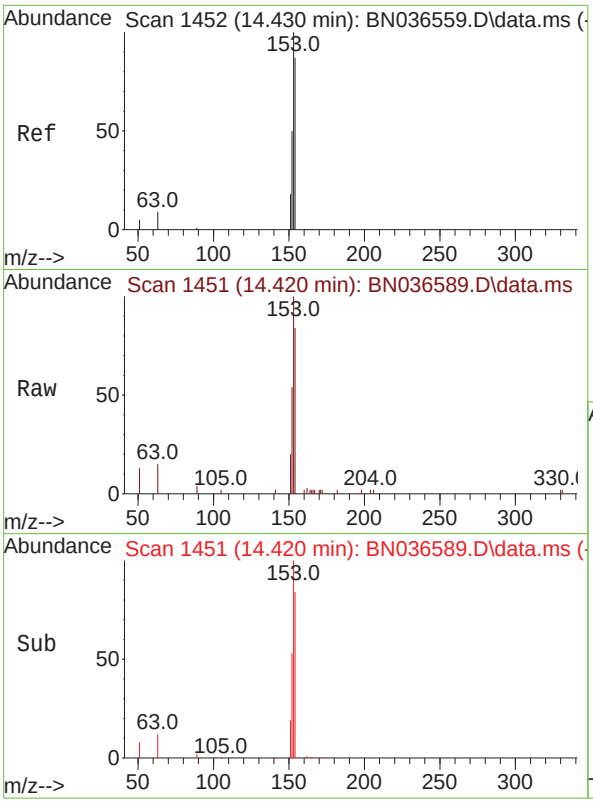


#16
Acenaphthylene
Concen: 0.415 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:152 Resp: 4983

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	12.7	10.6	15.8

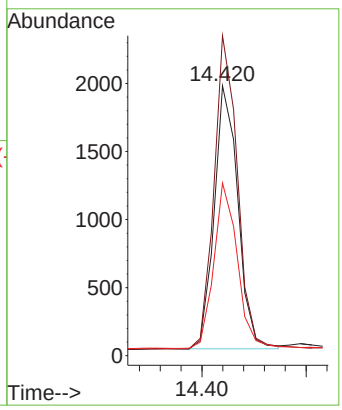




#17
Acenaphthene
Concen: 0.389 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:154 Resp: 305

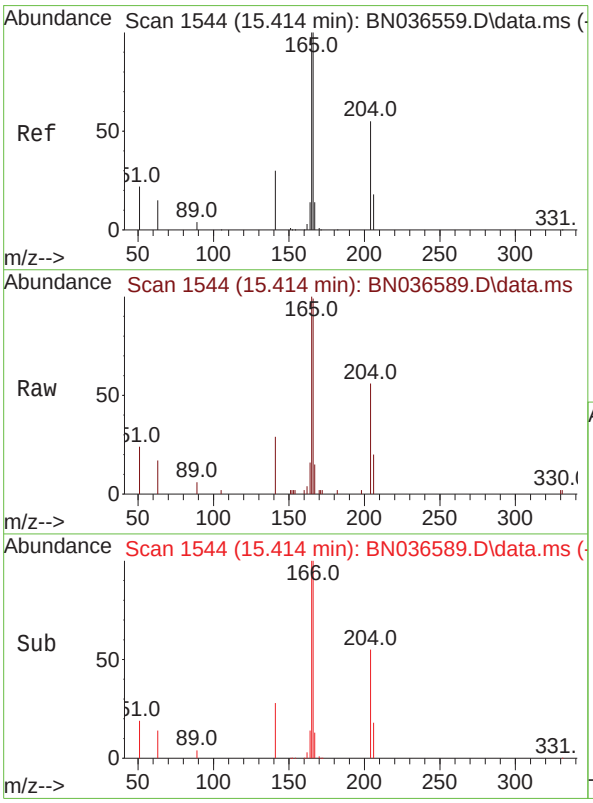
Ion	Ratio	Lower	Upper
154	100		
153	118.9	94.1	141.1
152	63.0	49.8	74.6



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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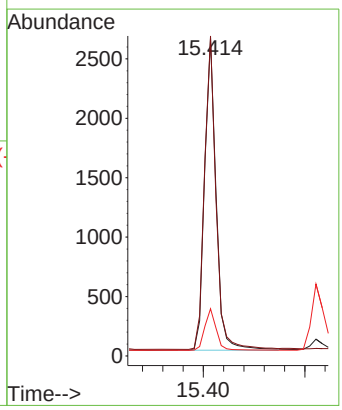
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

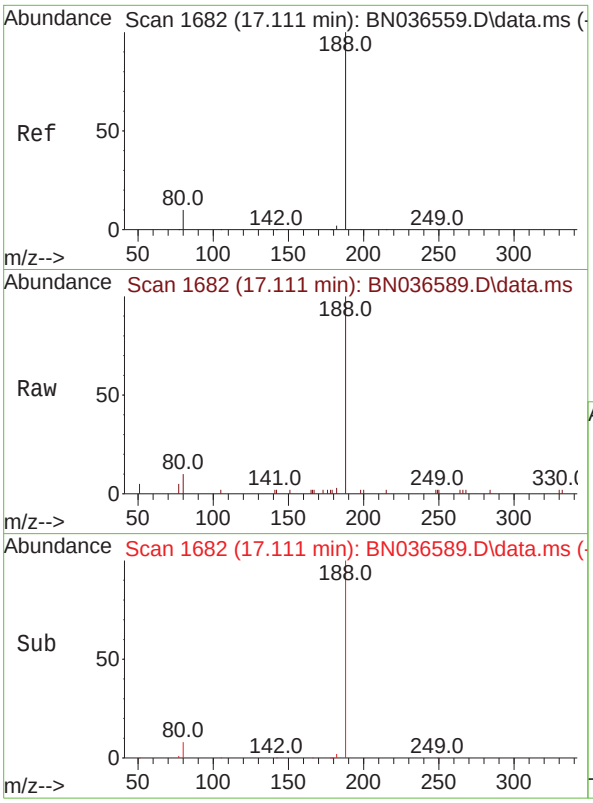


#18
Fluorene
Concen: 0.400 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:166 Resp: 4246

Ion	Ratio	Lower	Upper
166	100		
165	100.0	79.8	119.8
167	13.3	10.6	15.8





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

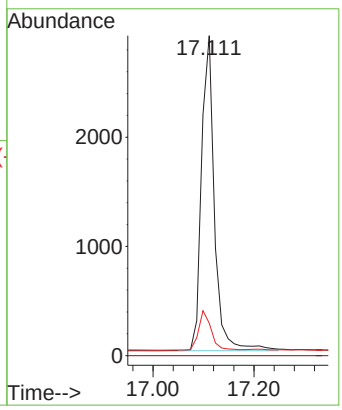
Tgt Ion:188 Resp: 515(

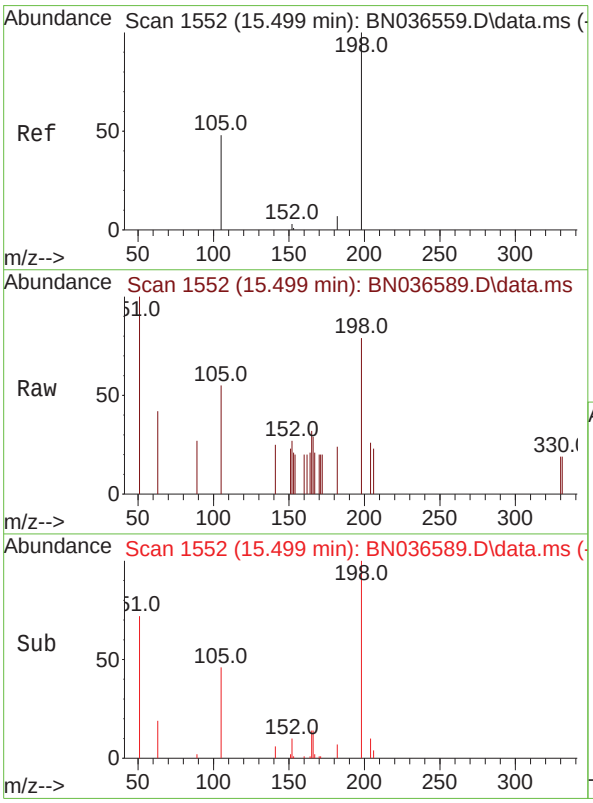
Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.1	8.8	13.2

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

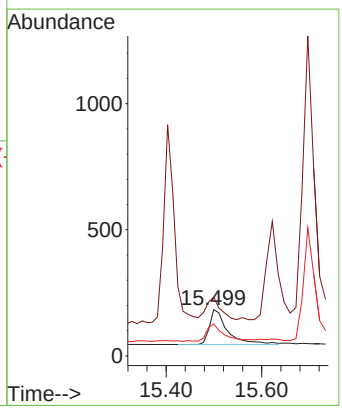


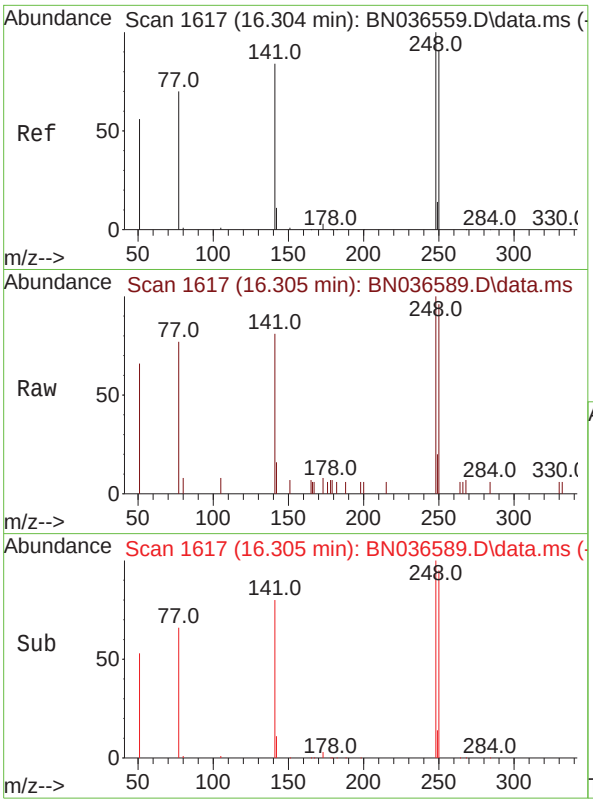


#20
4,6-Dinitro-2-methylphenol
Concen: 0.430 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:198 Resp: 375

Ion	Ratio	Lower	Upper
198	100		
51	126.6	107.9	161.9
105	69.0	56.2	84.2





#21
4-Bromophenyl-phenylether
Concen: 0.406 ng
RT: 16.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

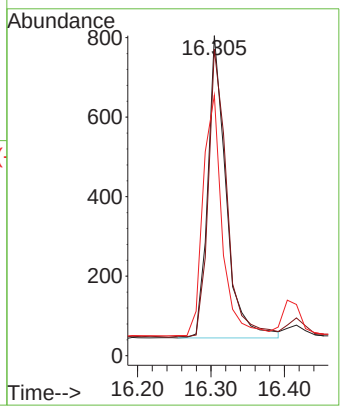
Tgt Ion:248 Resp: 131

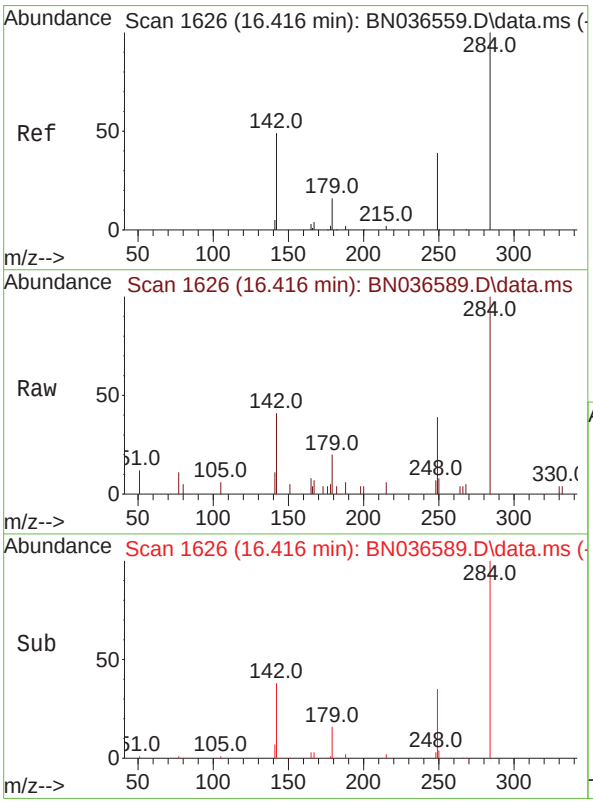
Ion	Ratio	Lower	Upper
248	100		
250	95.8	73.0	109.6
141	81.4	68.6	103.0

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

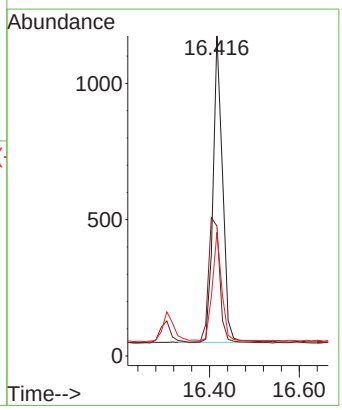


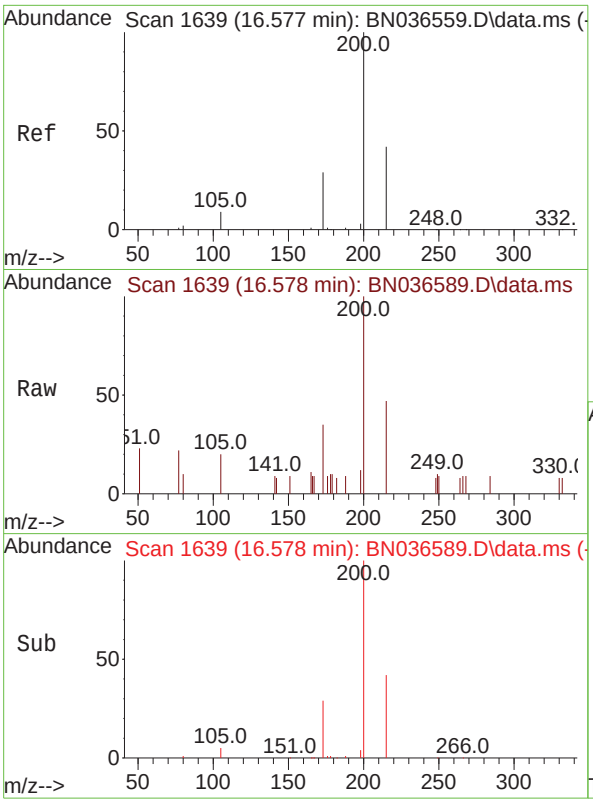


#22
Hexachlorobenzene
Concen: 0.422 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:284 Resp: 1646

Ion	Ratio	Lower	Upper
284	100		
142	48.7	37.0	55.4
249	34.7	28.1	42.1

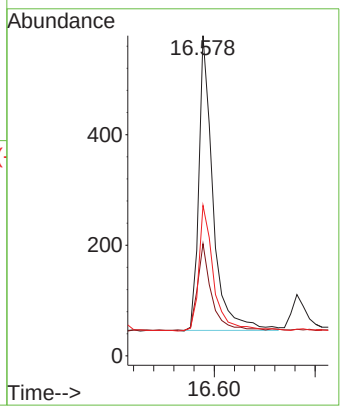




#23
Atrazine
Concen: 0.403 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:200 Resp: 104

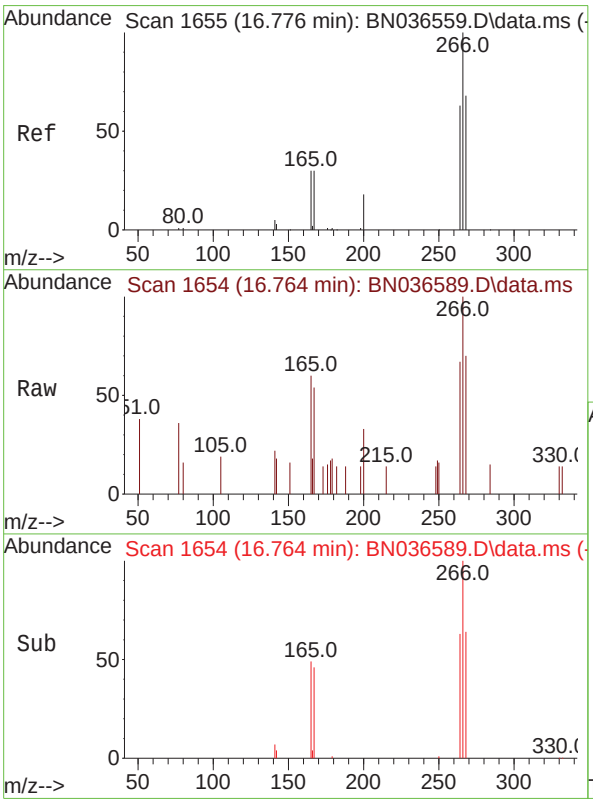
Ion	Ratio	Lower	Upper
200	100		
173	35.1	27.3	40.9
215	47.0	36.8	55.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

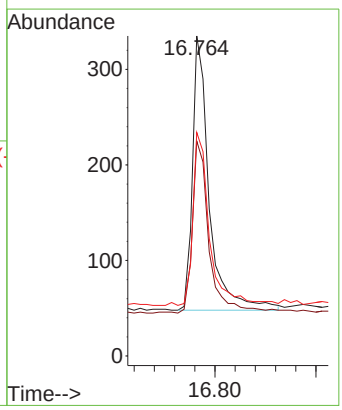
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

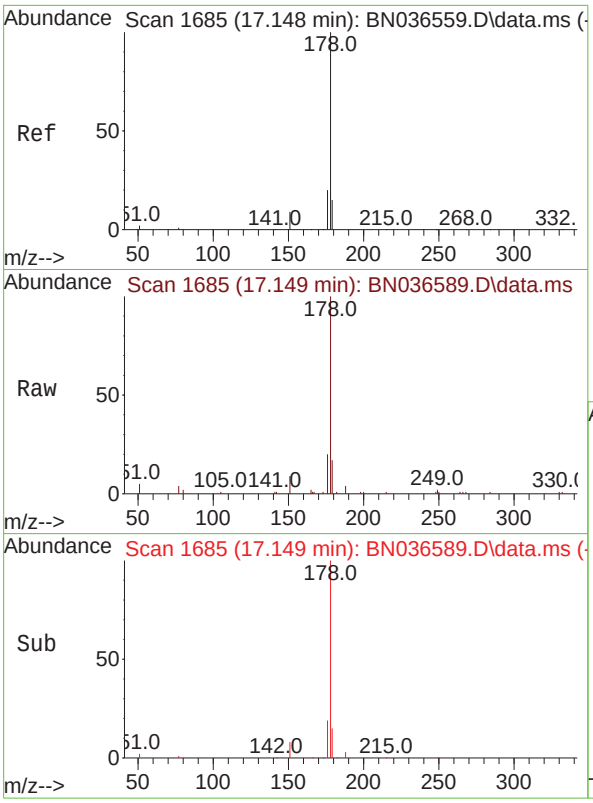


#24
Pentachlorophenol
Concen: 0.372 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:266 Resp: 661

Ion	Ratio	Lower	Upper
266	100		
264	62.6	49.6	74.4
268	63.5	50.9	76.3

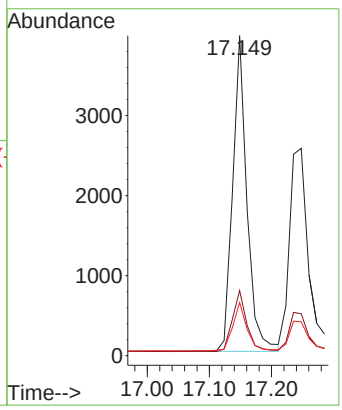




#25
Phenanthrene
Concen: 0.408 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:178 Resp: 630

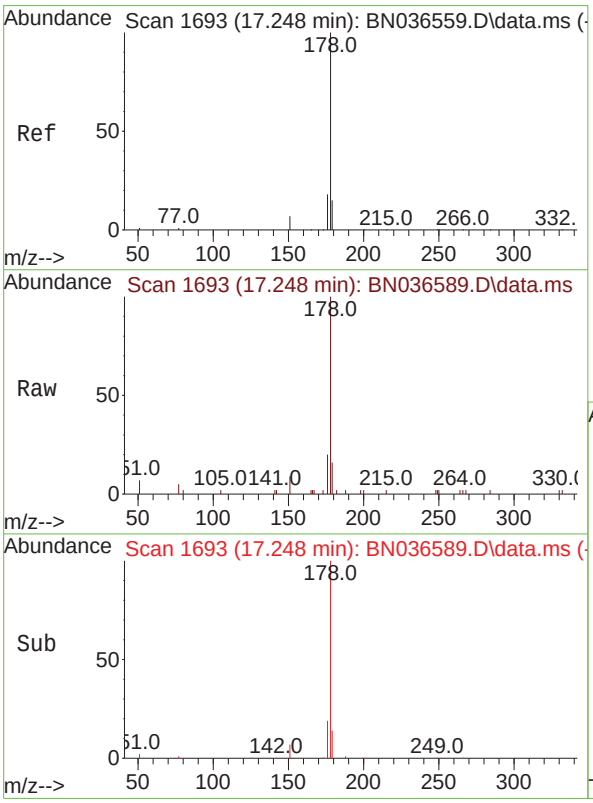
Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.9	23.9
179	15.4	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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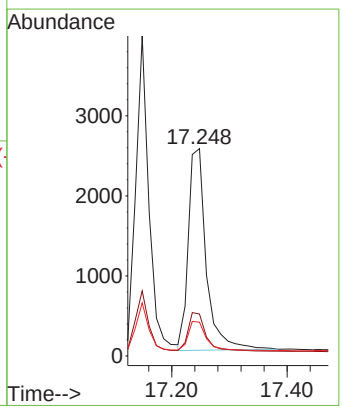
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

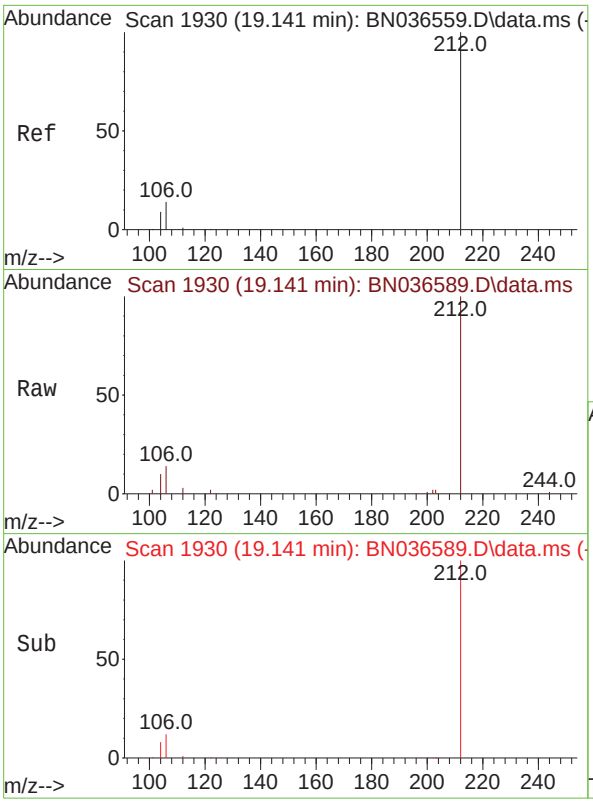


#26
Anthracene
Concen: 0.391 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:178 Resp: 5453

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.3	12.6	18.8

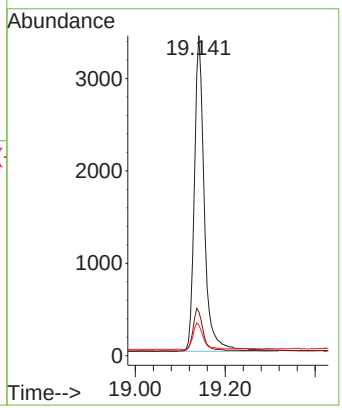




#27
Fluoranthene-d10
Concen: 0.402 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:212 Resp: 530

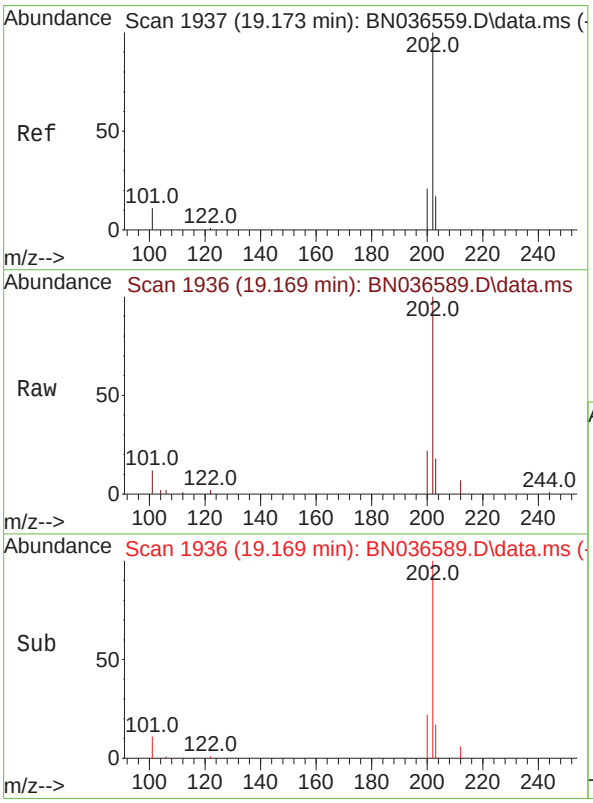
Ion	Ratio	Lower	Upper
212	100		
106	13.5	11.8	17.6
104	8.7	7.3	10.9



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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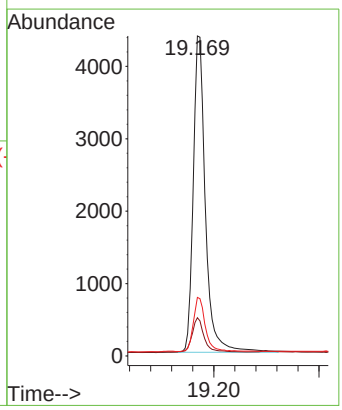
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

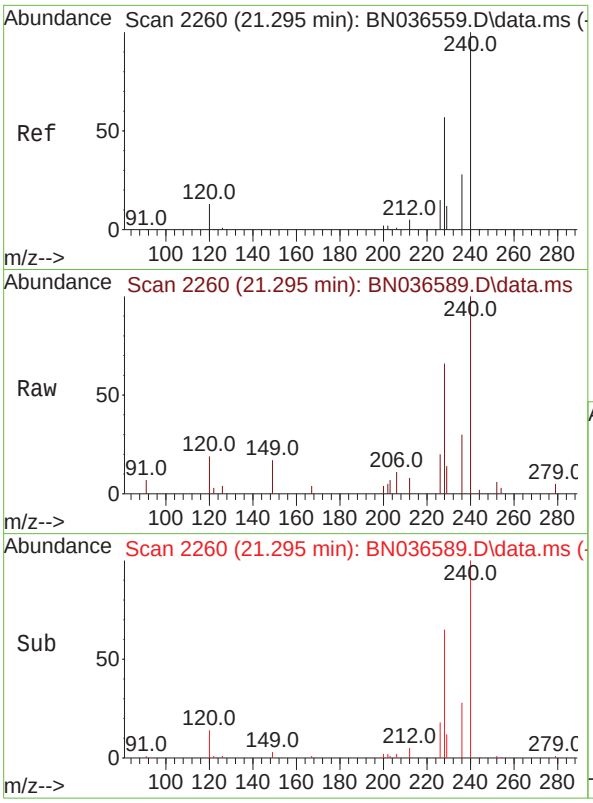


#28
Fluoranthene
Concen: 0.404 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:202 Resp: 7017

Ion	Ratio	Lower	Upper
202	100		
101	10.6	9.4	14.0
203	16.7	13.5	20.3

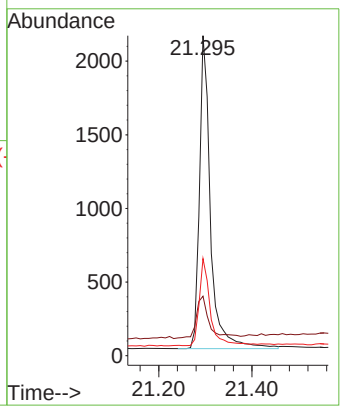




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:240 Resp: 349

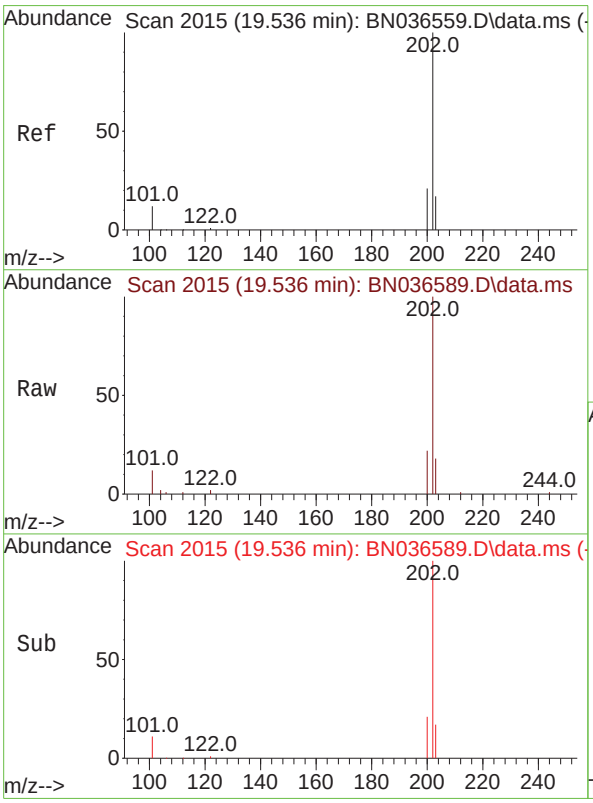
Ion	Ratio	Lower	Upper
240	100		
120	18.6	14.6	22.0
236	30.4	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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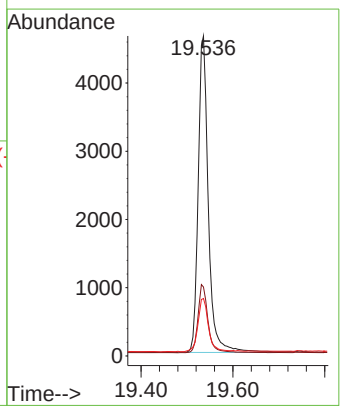
Reviewed By :Anahy Claudio 03/12/2025
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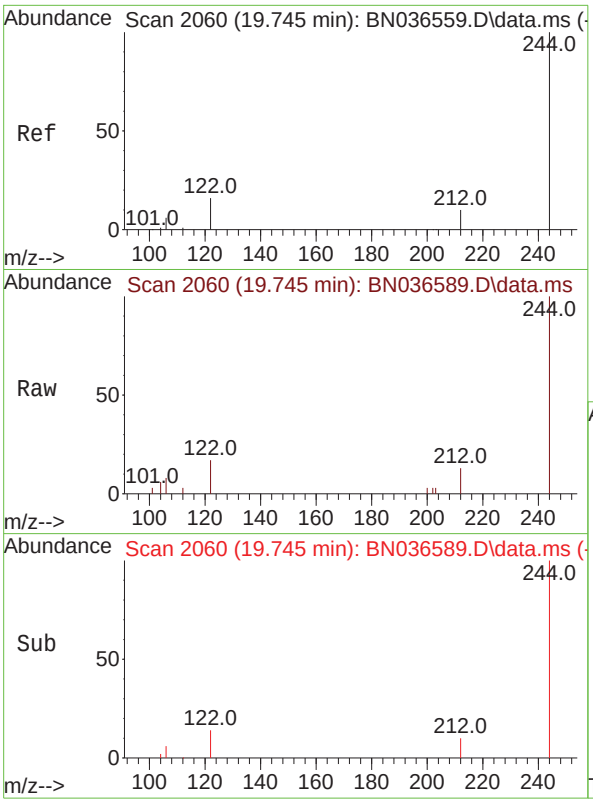


#30
Pyrene
Concen: 0.414 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:202 Resp: 7087

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.4	14.1	21.1





#31
Terphenyl-d14
Concen: 0.395 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

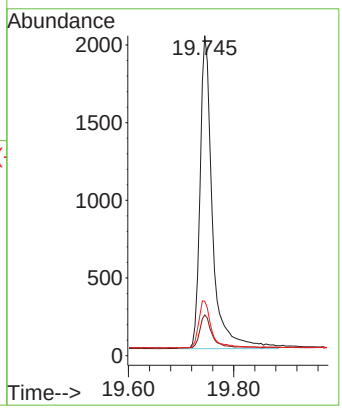
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

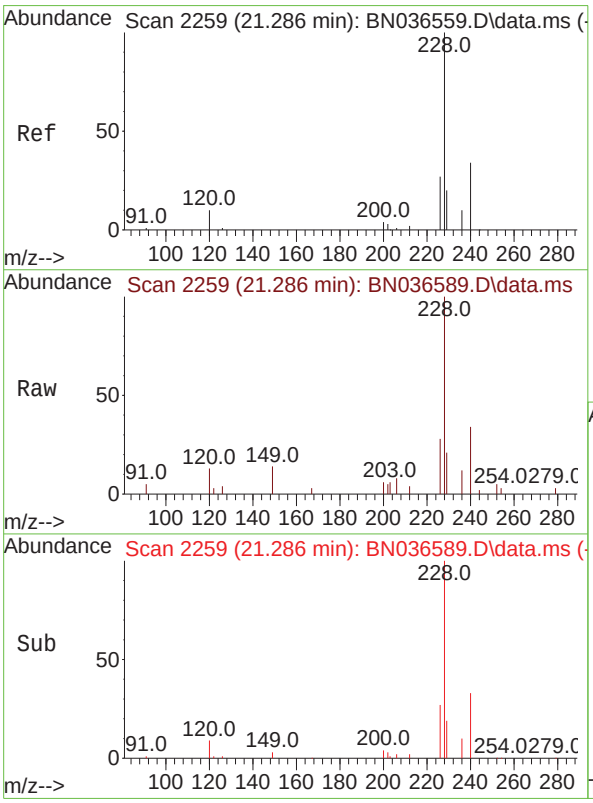
Tgt Ion:244 Resp: 331

Ion	Ratio	Lower	Upper
244	100		
212	12.7	9.6	14.4
122	17.0	13.9	20.9

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

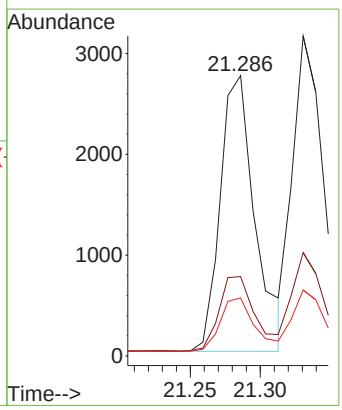


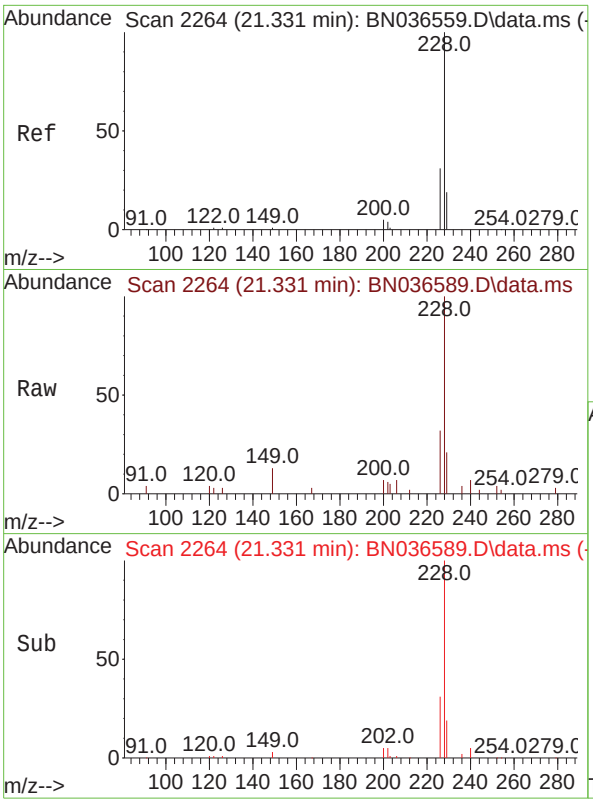


#32
Benzo(a)anthracene
Concen: 0.388 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:228 Resp: 4721

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.5	33.7
229	20.7	16.6	25.0





#33
Chrysene
Concen: 0.409 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

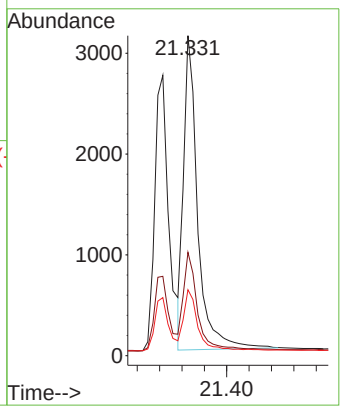
Tgt Ion:228 Resp: 543

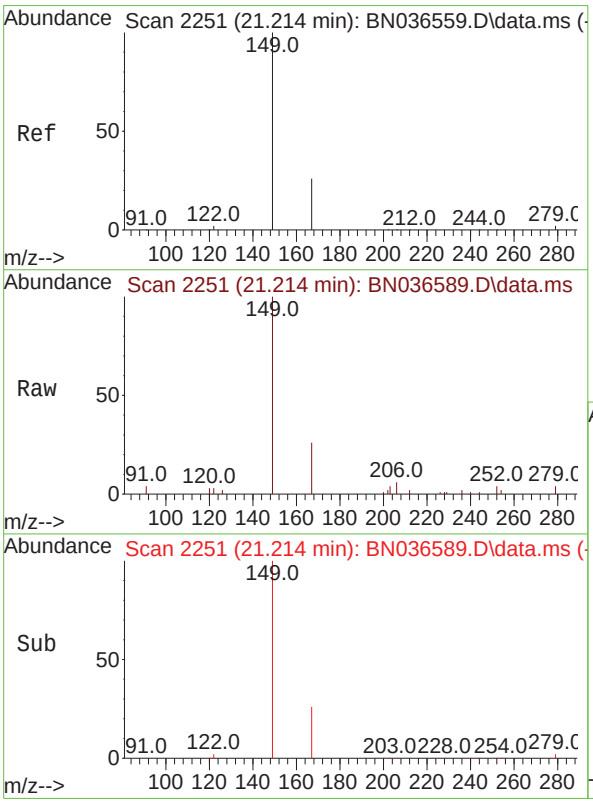
Ion	Ratio	Lower	Upper
228	100		
226	32.3	25.3	37.9
229	20.6	15.8	23.8

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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Reviewed By :Anahy Claudio 03/12/2025
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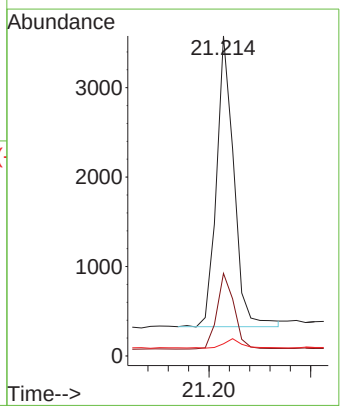


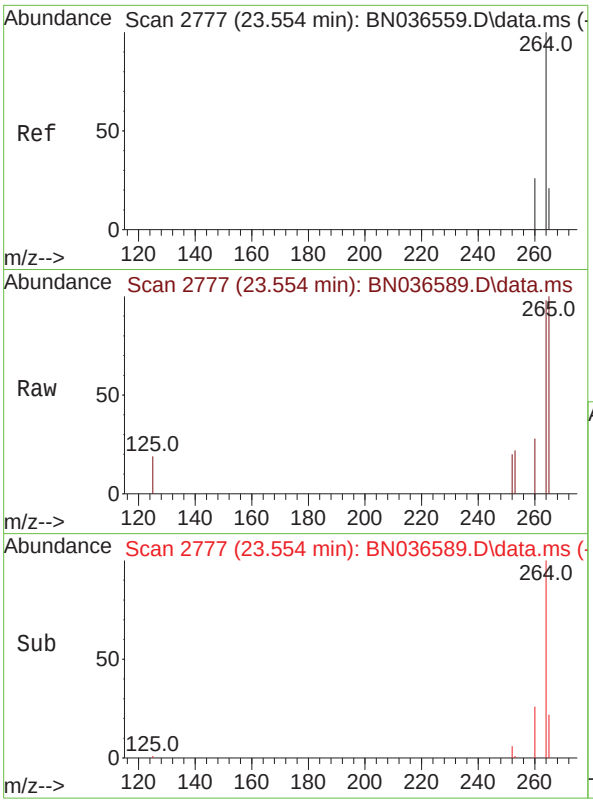


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.445 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:149 Resp: 3858

Ion	Ratio	Lower	Upper
149	100		
167	26.0	20.7	31.1
279	3.2	3.6	5.4#

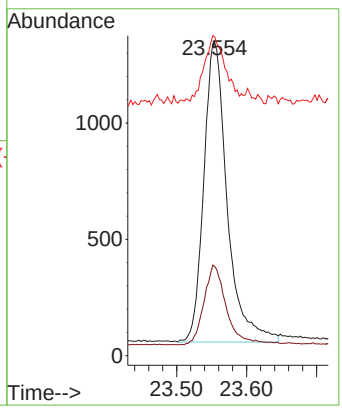




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:264 Resp: 299

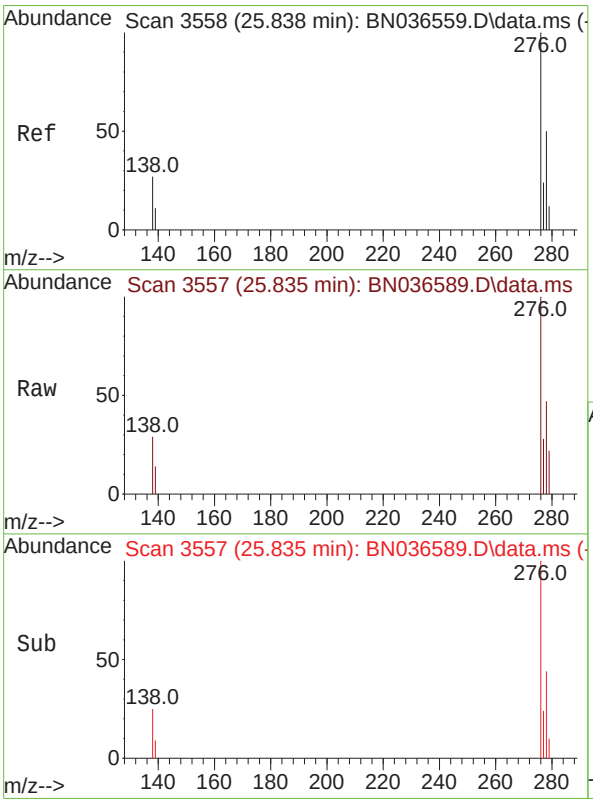
Ion	Ratio	Lower	Upper
264	100		
260	28.5	22.6	33.8
265	101.7	88.1	132.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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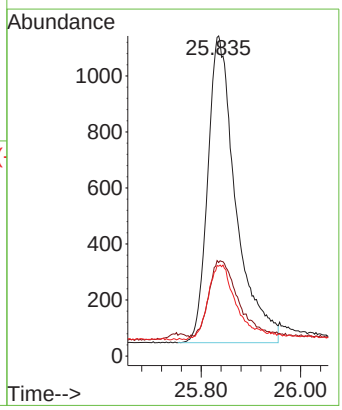
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

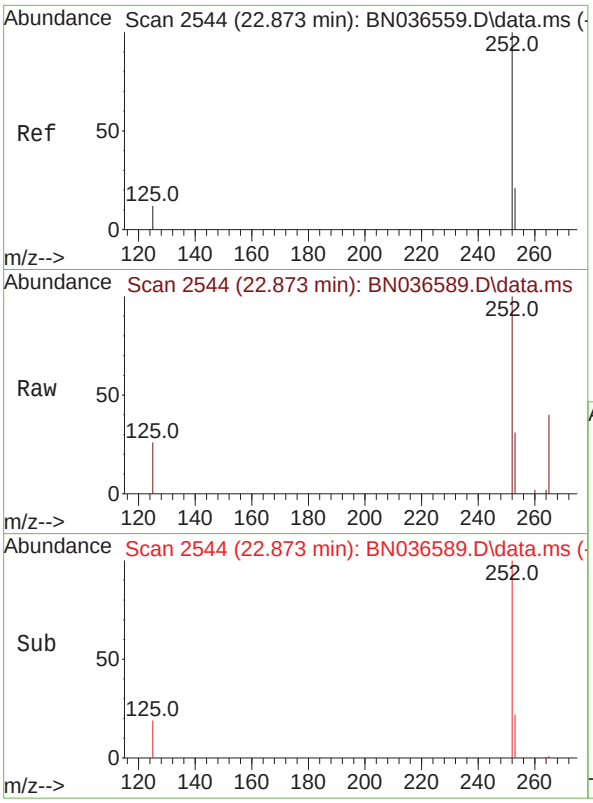


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.396 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:276 Resp: 4281

Ion	Ratio	Lower	Upper
276	100		
138	25.6	23.4	35.2
277	23.5	20.0	30.0

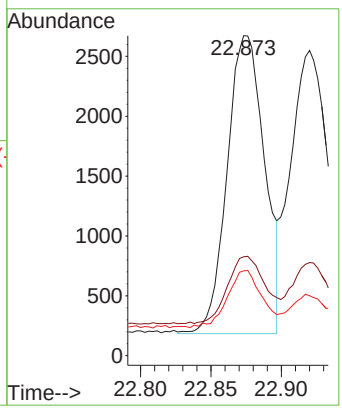




#37
Benzo(b)fluoranthene
Concen: 0.421 ng m
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:252 Resp: 459

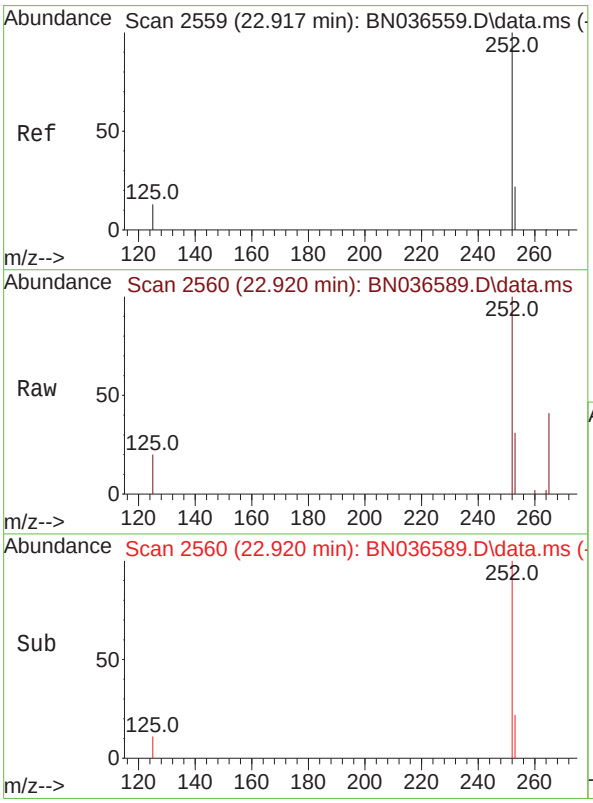
Ion	Ratio	Lower	Upper
252	100		
253	30.9	23.9	35.9
125	26.5	17.4	26.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
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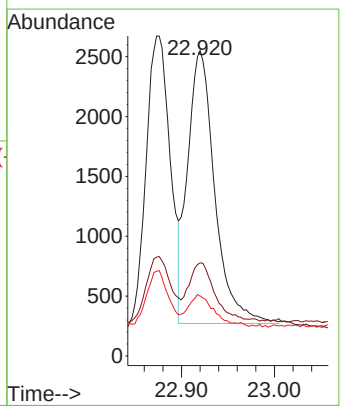
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

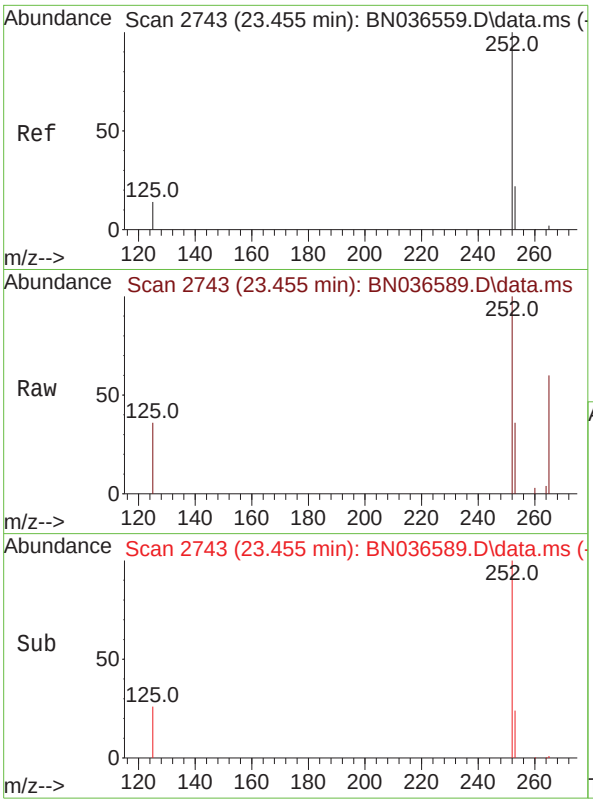


#38
Benzo(k)fluoranthene
Concen: 0.405 ng m
RT: 22.920 min Scan# 2560
Delta R.T. 0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:252 Resp: 4634

Ion	Ratio	Lower	Upper
252	100		
253	30.5	24.6	36.8
125	19.7	17.8	26.8

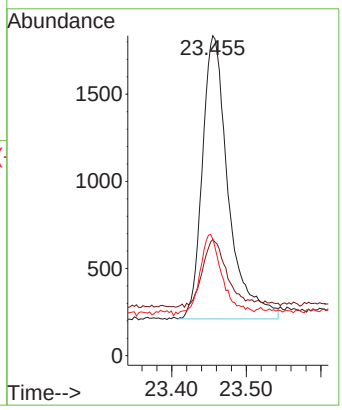




#39
Benzo(a)pyrene
Concen: 0.428 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:252 Resp: 392

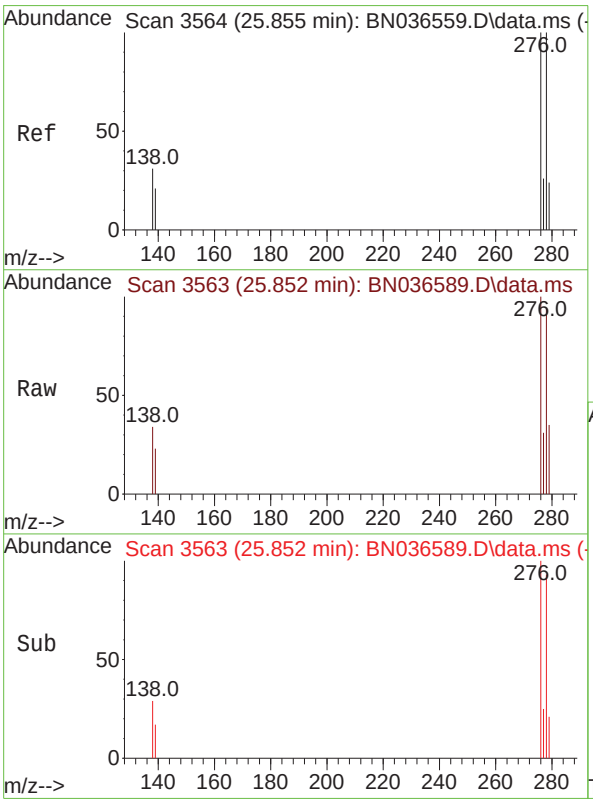
Ion	Ratio	Lower	Upper
252	100		
253	36.3	27.8	41.8
125	36.4	22.7	34.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

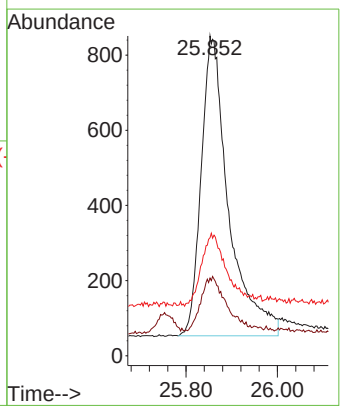
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

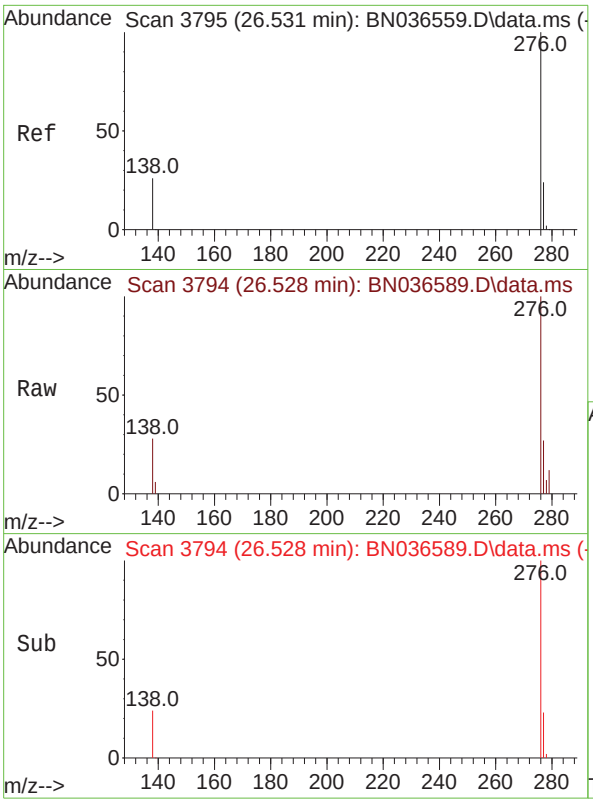


#40
Dibenzo(a,h)anthracene
Concen: 0.395 ng
RT: 25.852 min Scan# 3563
Delta R.T. -0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:278 Resp: 3325

Ion	Ratio	Lower	Upper
278	100		
139	24.3	20.8	31.2
279	36.9	28.8	43.2

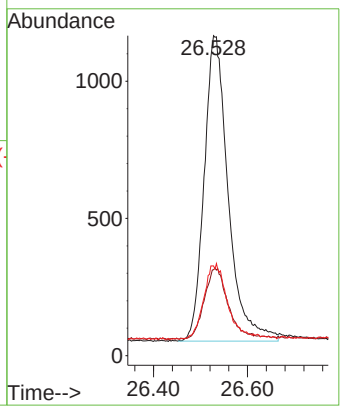




#41
Benzo(g,h,i)perylene
Concen: 0.411 ng
RT: 26.528 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:276 Resp: 396

Ion	Ratio	Lower	Upper
276	100		
277	26.8	22.2	33.4
138	28.0	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036589.D
Acq On : 11 Mar 2025 19:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 12 01:09:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	89	0.00
2		1,4-Dioxane	0.444	0.457	-2.9	82	0.00
3		n-Nitrosodimethylamine	0.898	0.897	0.1	85	0.00
4	S	2-Fluorophenol	0.932	0.807	13.4	73	0.00
5	S	Phenol-d6	1.152	0.937	18.7	74	0.00
6		bis(2-Chloroethyl)ether	1.190	0.970	18.5	73	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	94	0.00
8	S	Nitrobenzene-d5	0.435	0.390	10.3	88	0.00
9		Naphthalene	1.177	1.140	3.1	89	0.00
10		Hexachlorobutadiene	0.277	0.280	-1.1	89	0.00
11	SURR	2-Methylnaphthalene-d10	0.595	0.575	3.4	89	0.00
12		2-Methylnaphthalene	0.749	0.718	4.1	88	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	84	-0.01
14	S	2,4,6-Tribromophenol	0.182	0.177	2.7	79	0.00
15	S	2-Fluorobiphenyl	2.327	2.515	-8.1	88	0.00
16		Acenaphthylene	1.888	1.959	-3.8	85	0.00
17		Acenaphthene	1.236	1.200	2.9	79	-0.01
18		Fluorene	1.672	1.670	0.1	80	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	86	0.00
20		4,6-Dinitro-2-methylphenol	0.086	0.073	15.1	81	0.00
21		4-Bromophenyl-phenylether	0.251	0.254	-1.2	80	0.00
22		Hexachlorobenzene	0.303	0.319	-5.3	82	0.00
23		Atrazine	0.201	0.202	-0.5	82	0.00
24		Pentachlorophenol	0.138	0.128	7.2	81	-0.01
25		Phenanthrene	1.200	1.223	-1.9	81	0.00
26		Anthracene	1.083	1.058	2.3	79	0.00
27	SURR	Fluoranthene-d10	1.025	1.029	-0.4	79	0.00
28		Fluoranthene	1.348	1.361	-1.0	80	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	85	0.00
30		Pyrene	1.956	2.026	-3.6	81	0.00
31	S	Terphenyl-d14	0.958	0.946	1.3	78	0.00
32		Benzo(a)anthracene	1.391	1.350	2.9	80	0.00
33		Chrysene	1.520	1.553	-2.2	82	0.00
34		Bis(2-ethylhexyl)phthalate	0.990	1.103	-11.4	90	0.00
35	I	Perylene-d12	1.000	1.000	0.0	85	0.00
36		Indeno(1,2,3-cd)pyrene	1.444	1.428	1.1	78	0.00
37		Benzo(b)fluoranthene	1.456	1.533	-5.3	84	0.00
38		Benzo(k)fluoranthene	1.527	1.546	-1.2	81	0.00
39	C	Benzo(a)pyrene	1.226	1.311	-6.9	85	0.00
40		Dibenzo(a,h)anthracene	1.124	1.109	1.3	81	0.00
41		Benzo(g,h,i)perylene	1.286	1.322	-2.8	81	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036589.D
Acq On : 11 Mar 2025 19:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 12 01:09:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	89	0.00
2		1,4-Dioxane	0.400	0.412	-3.0	82	0.00
3		n-Nitrosodimethylamine	0.400	0.400	0.0	85	0.00
4	S	2-Fluorophenol	0.400	0.346	13.5	73	0.00
5	S	Phenol-d6	0.400	0.325	18.8	74	0.00
6		bis(2-Chloroethyl)ether	0.400	0.326	18.5	73	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	94	0.00
8	S	Nitrobenzene-d5	0.400	0.358	10.5	88	0.00
9		Naphthalene	0.400	0.388	3.0	89	0.00
10		Hexachlorobutadiene	0.400	0.404	-1.0	89	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.386	3.5	89	0.00
12		2-Methylnaphthalene	0.400	0.384	4.0	88	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	84	-0.01
14	S	2,4,6-Tribromophenol	0.400	0.390	2.5	79	0.00
15	S	2-Fluorobiphenyl	0.400	0.432	-8.0	88	0.00
16		Acenaphthylene	0.400	0.415	-3.7	85	0.00
17		Acenaphthene	0.400	0.389	2.8	79	-0.01
18		Fluorene	0.400	0.400	0.0	80	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	86	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.430	-7.5	81	0.00
21		4-Bromophenyl-phenylether	0.400	0.406	-1.5	80	0.00
22		Hexachlorobenzene	0.400	0.422	-5.5	82	0.00
23		Atrazine	0.400	0.403	-0.8	82	0.00
24		Pentachlorophenol	0.400	0.372	7.0	81	-0.01
25		Phenanthrene	0.400	0.408	-2.0	81	0.00
26		Anthracene	0.400	0.391	2.3	79	0.00
27	SURR	Fluoranthene-d10	0.400	0.402	-0.5	79	0.00
28		Fluoranthene	0.400	0.404	-1.0	80	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	85	0.00
30		Pyrene	0.400	0.414	-3.5	81	0.00
31	S	Terphenyl-d14	0.400	0.395	1.3	78	0.00
32		Benzo(a)anthracene	0.400	0.388	3.0	80	0.00
33		Chrysene	0.400	0.409	-2.2	82	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.445	-11.2	90	0.00
35	I	Perylene-d12	0.400	0.400	0.0	85	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.396	1.0	78	0.00
37		Benzo(b)fluoranthene	0.400	0.421	-5.2	84	0.00
38		Benzo(k)fluoranthene	0.400	0.405	-1.3	81	0.00
39	C	Benzo(a)pyrene	0.400	0.428	-7.0	85	0.00
40		Dibenzo(a,h)anthracene	0.400	0.395	1.3	81	0.00
41		Benzo(g,h,i)perylene	0.400	0.411	-2.7	81	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: AECO15

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG No.: Q1531

Instrument ID: BNA_N Calibration Date/Time: 03/12/2025 09:14

Lab File ID: BN036591.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.598		0.5	20.0
Fluoranthene-d10	1.025	1.078		5.2	20.0
2-Fluorophenol	0.932	0.936		0.4	20.0
Phenol-d6	1.152	1.110		-3.6	20.0
Nitrobenzene-d5	0.435	0.424		-2.5	20.0
2-Fluorobiphenyl	2.327	2.354		1.2	20.0
2,4,6-Tribromophenol	0.182	0.187		2.7	20.0
Terphenyl-d14	0.958	0.957		-0.1	20.0
1,4-Dioxane	0.444	0.524		18.0	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036591.D
Acq On : 12 Mar 2025 09:14
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Mar 12 10:40:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

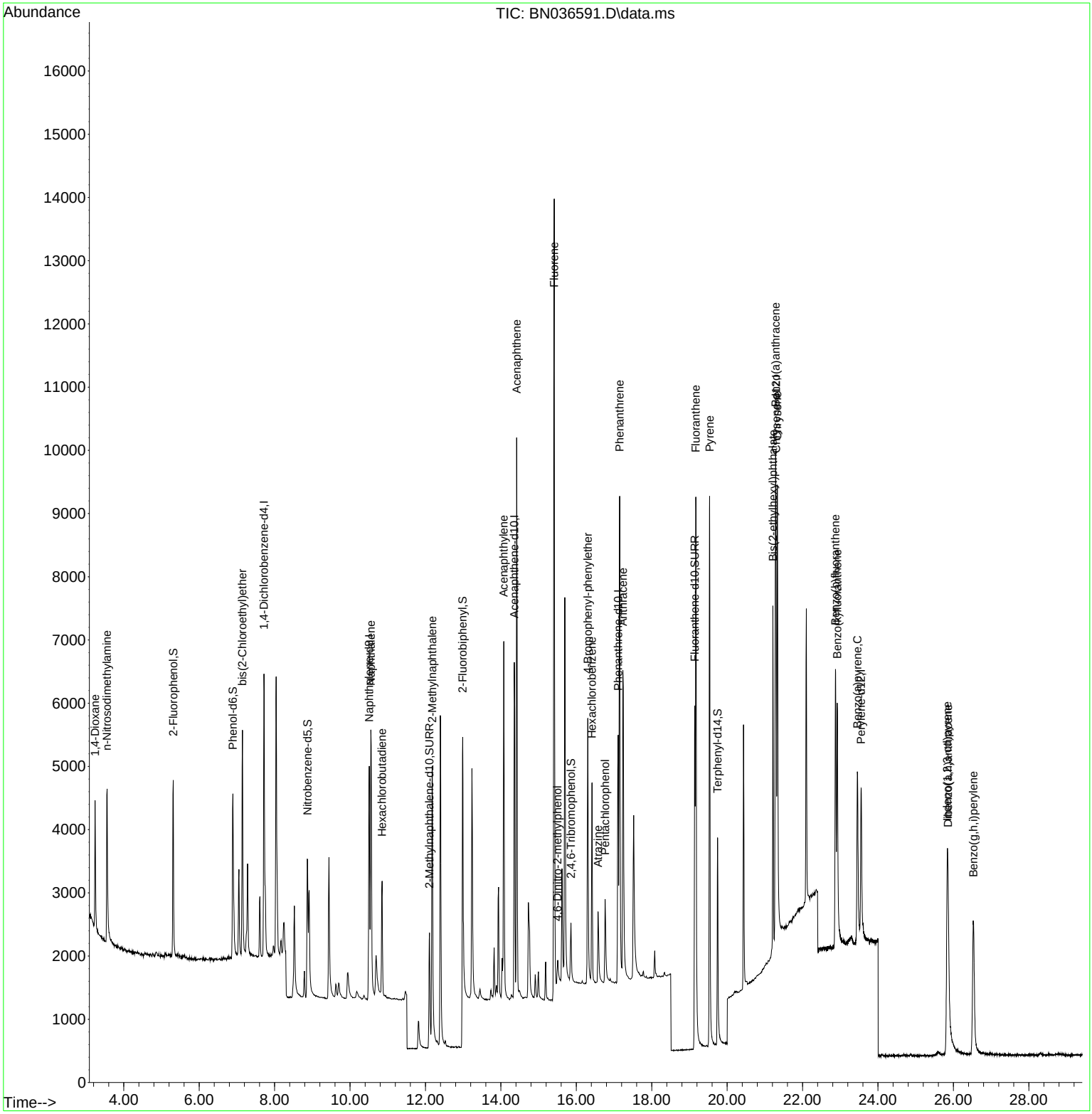
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2221	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5304	0.400	ng		0.00
13) Acenaphthene-d10	14.355	164	3177	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	6400	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4453	0.400	ng		0.00
35) Perylene-d12	23.551	264	3635	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	2078	0.401	ng		0.00
5) Phenol-d6	6.894	99	2465	0.386	ng		0.00
8) Nitrobenzene-d5	8.875	82	2247	0.389	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	3172	0.402	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	595	0.413	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	7478	0.405	ng		0.00
27) Fluoranthene-d10	19.141	212	6898	0.421	ng		0.00
31) Terphenyl-d14	19.745	244	4263	0.400	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	1164	0.472	ng		97
3) n-Nitrosodimethylamine	3.550	42	2139	0.429	ng		100
6) bis(2-Chloroethyl)ether	7.147	93	2672	0.404	ng		100
9) Naphthalene	10.551	128	6414	0.411	ng		99
10) Hexachlorobutadiene	10.850	225	1566	0.426	ng	#	98
12) 2-Methylnaphthalene	12.182	142	4039	0.407	ng		98
16) Acenaphthylene	14.078	152	6255	0.417	ng		100
17) Acenaphthene	14.420	154	4082	0.416	ng		100
18) Fluorene	15.414	166	5540	0.417	ng		100
20) 4,6-Dinitro-2-methylph...	15.499	198	428	0.408	ng		96
21) 4-Bromophenyl-phenylether	16.304	248	1685	0.420	ng		94
22) Hexachlorobenzene	16.416	284	2127	0.439	ng		98
23) Atrazine	16.578	200	1329	0.413	ng		99
24) Pentachlorophenol	16.764	266	863	0.391	ng		100
25) Phenanthrene	17.148	178	8241	0.429	ng		99
26) Anthracene	17.235	178	7257	0.419	ng		99
28) Fluoranthene	19.169	202	9164	0.425	ng		100
30) Pyrene	19.536	202	9108	0.418	ng		99
32) Benzo(a)anthracene	21.286	228	6555	0.423	ng		100
33) Chrysene	21.331	228	7174	0.424	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	5004	0.454	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	5387	0.411	ng		97
37) Benzo(b)fluoranthene	22.873	252	5696	0.431	ng		98
38) Benzo(k)fluoranthene	22.920	252	6136	0.442	ng		97
39) Benzo(a)pyrene	23.455	252	4804	0.431	ng		96
40) Dibenzo(a,h)anthracene	25.858	278	4039	0.395	ng		98
41) Benzo(g,h,i)perylene	26.534	276	4958	0.424	ng		96

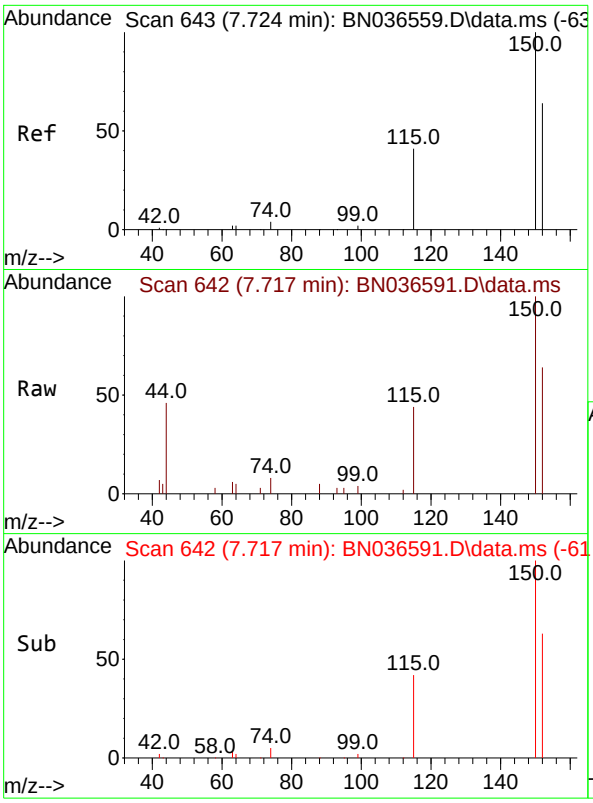
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036591.D
Acq On : 12 Mar 2025 09:14
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Mar 12 10:40:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



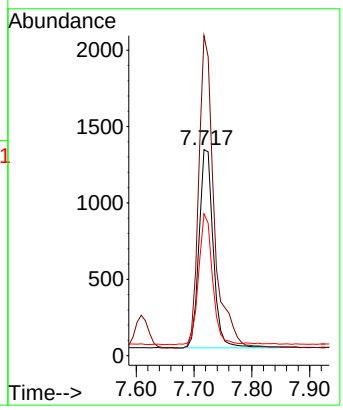


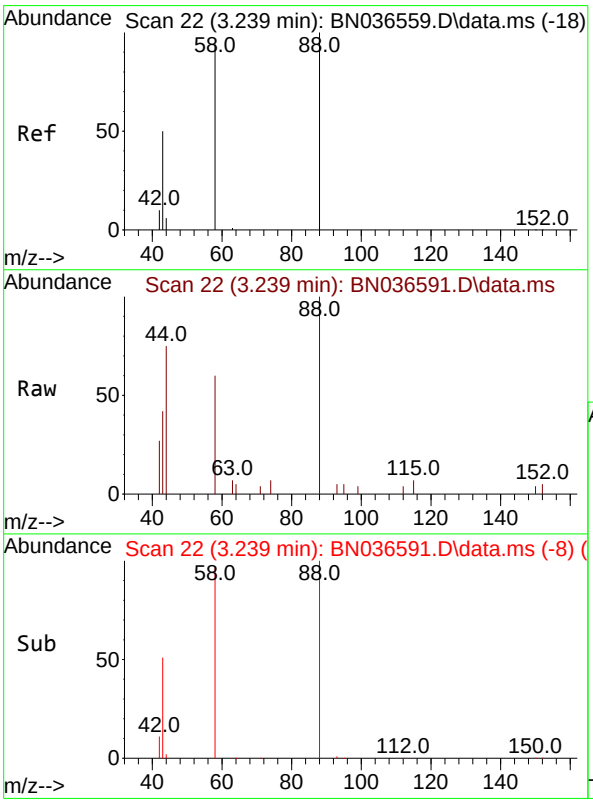
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 2221

Ion	Ratio	Lower	Upper
152	100		
150	155.3	123.7	185.5
115	68.9	54.3	81.5

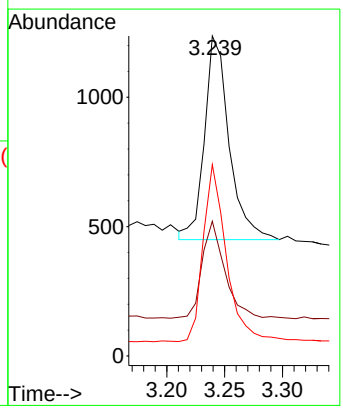


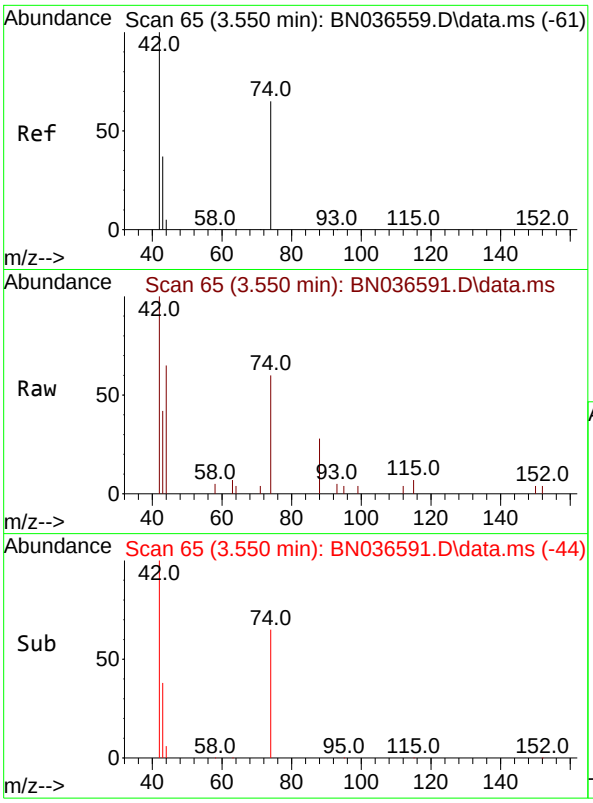


#2
1,4-Dioxane
Concen: 0.472 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion: 88 Resp: 1164

Ion	Ratio	Lower	Upper
88	100		
43	43.6	37.8	56.8
58	83.0	67.4	101.2



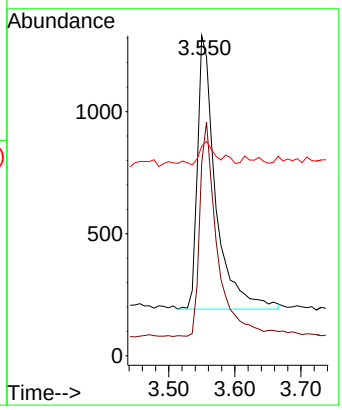


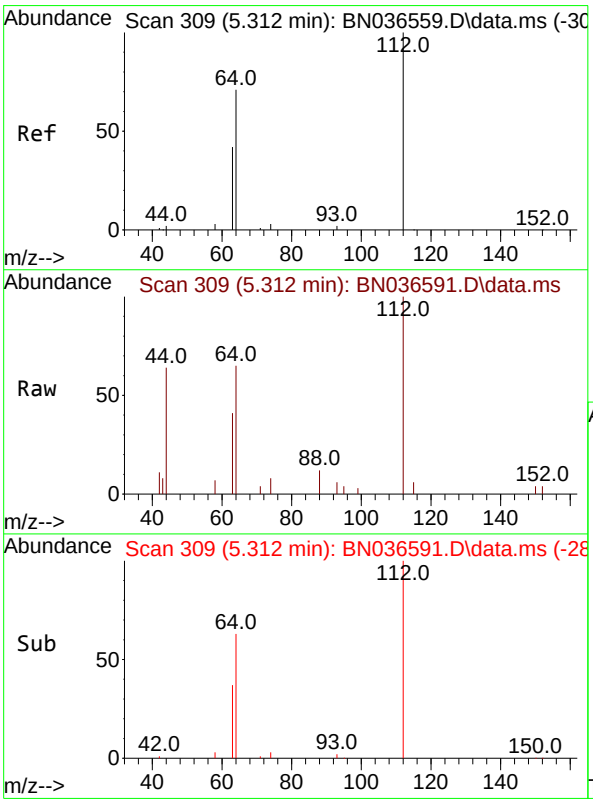
#3
n-Nitrosodimethylamine
Concen: 0.429 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 2139

Ion	Ratio	Lower	Upper
42	100		
74	75.8	60.6	90.8
44	6.5	6.3	9.5

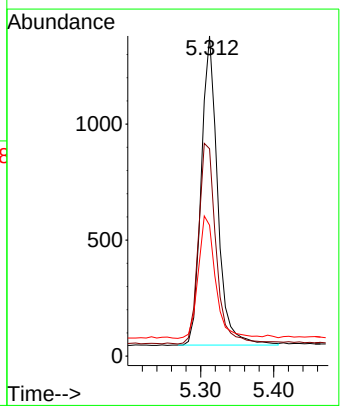


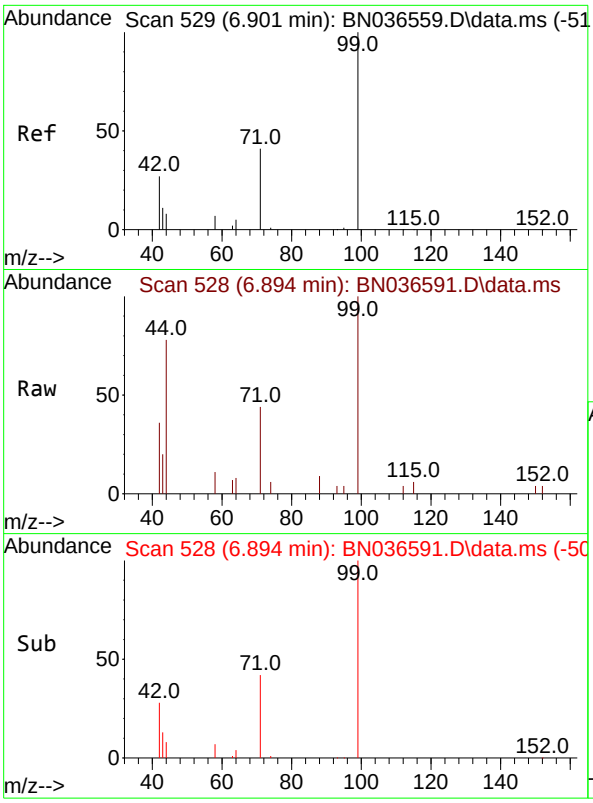


#4
2-Fluorophenol
Concen: 0.401 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:112 Resp: 2078

Ion	Ratio	Lower	Upper
112	100		
64	70.0	53.1	79.7
63	41.7	31.8	47.8



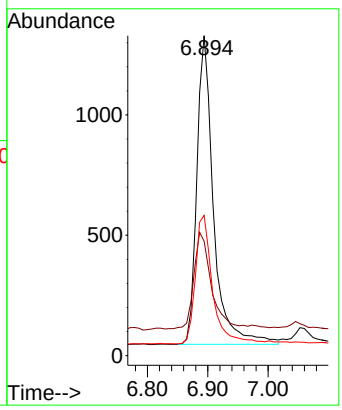


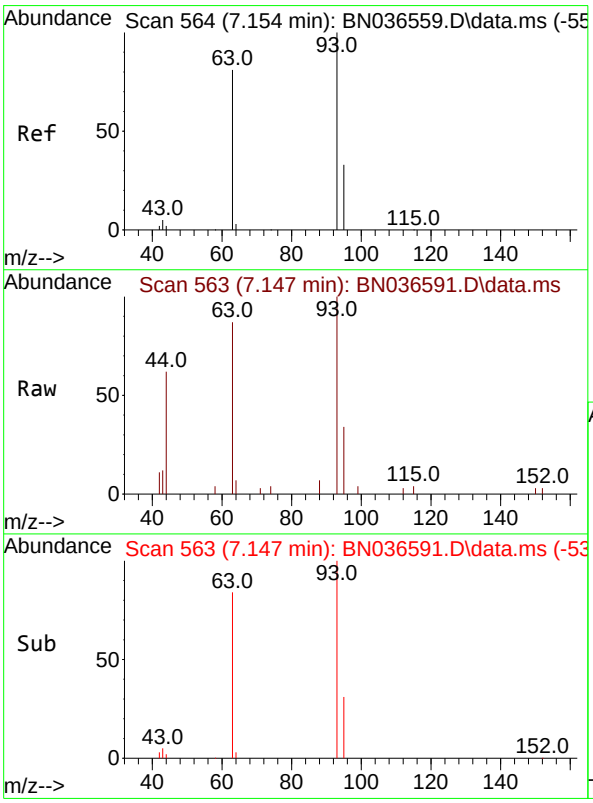
#5
Phenol-d6
Concen: 0.386 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 2465

Ion	Ratio	Lower	Upper
99	100		
42	32.4	26.5	39.7
71	42.9	34.1	51.1

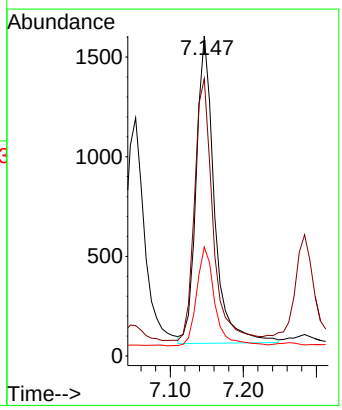


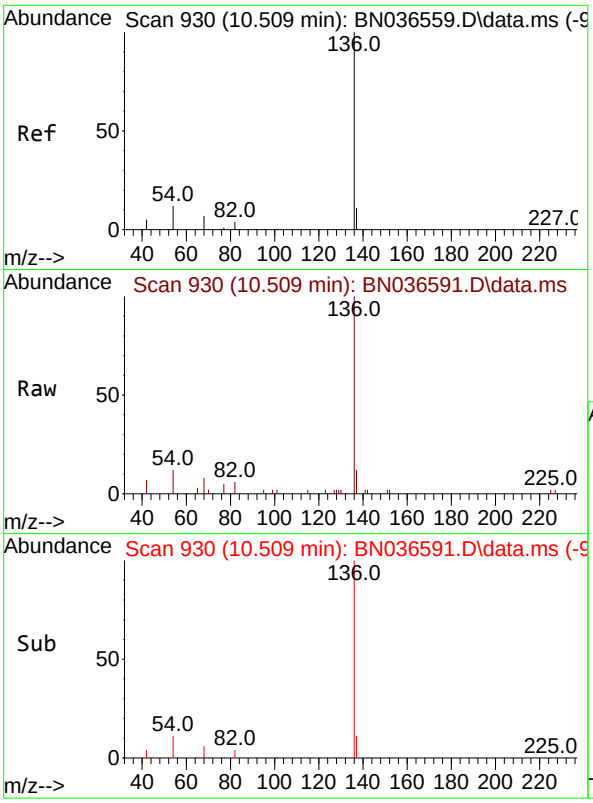


#6
bis(2-Chloroethyl)ether
Concen: 0.404 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion: 93 Resp: 2672

Ion	Ratio	Lower	Upper
93	100		
63	85.2	67.7	101.5
95	31.9	25.6	38.4



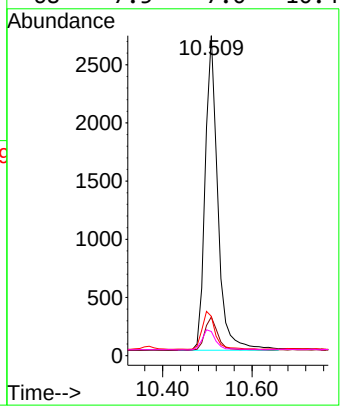


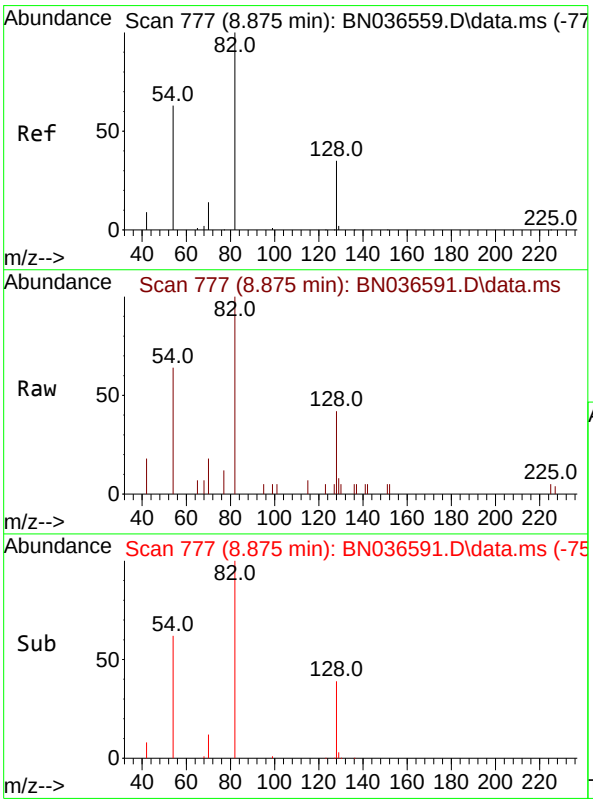
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 5304

Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.3	15.5
54	12.3	11.5	17.3
68	7.5	7.0	10.4

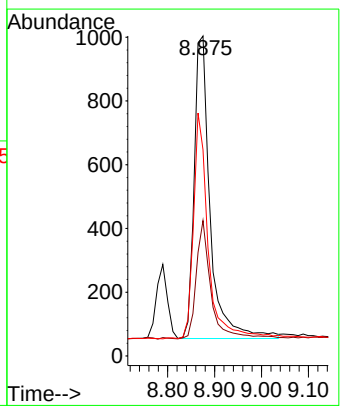


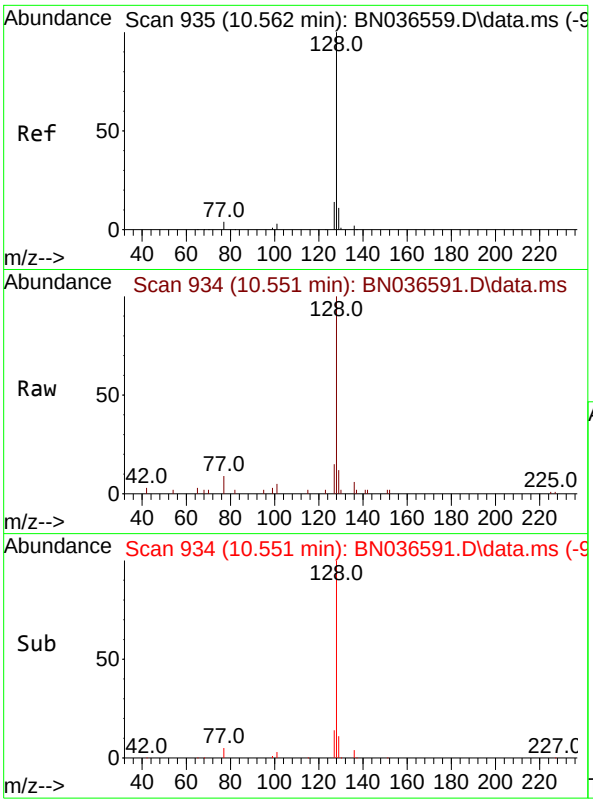


#8
Nitrobenzene-d5
Concen: 0.389 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion: 82 Resp: 2247

Ion	Ratio	Lower	Upper
82	100		
128	42.3	30.6	45.8
54	64.4	52.2	78.4



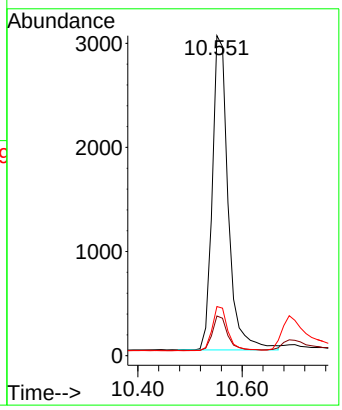


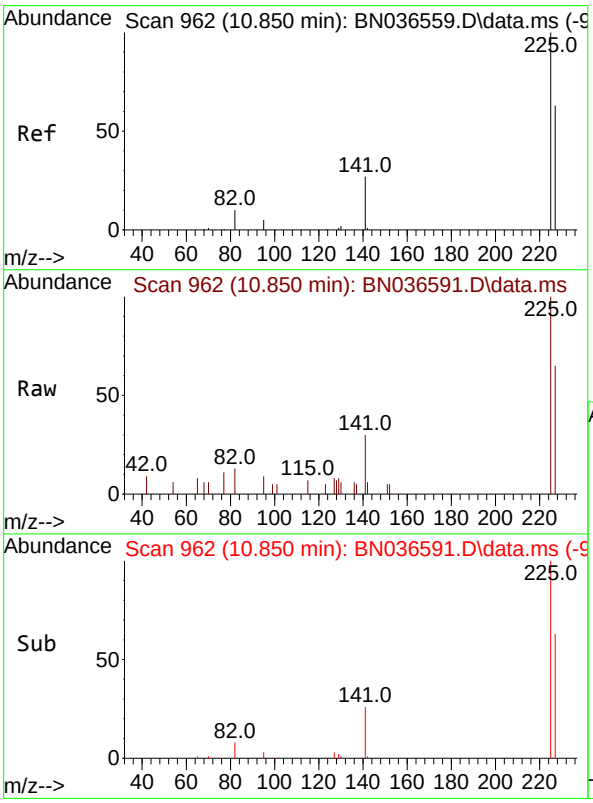
#9
Naphthalene
Concen: 0.411 ng
RT: 10.551 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 6414

Ion	Ratio	Lower	Upper
128	100		
129	12.4	9.8	14.6
127	15.4	11.8	17.8

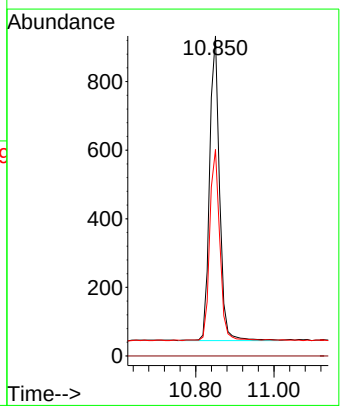


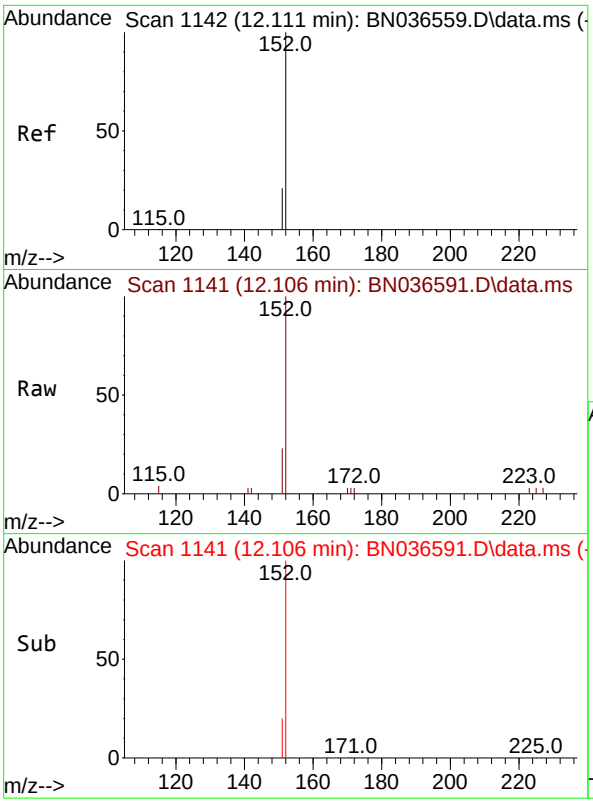


#10
Hexachlorobutadiene
Concen: 0.426 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:225 Resp: 1566

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	51.8	77.8



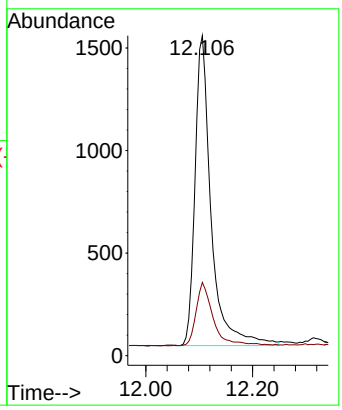


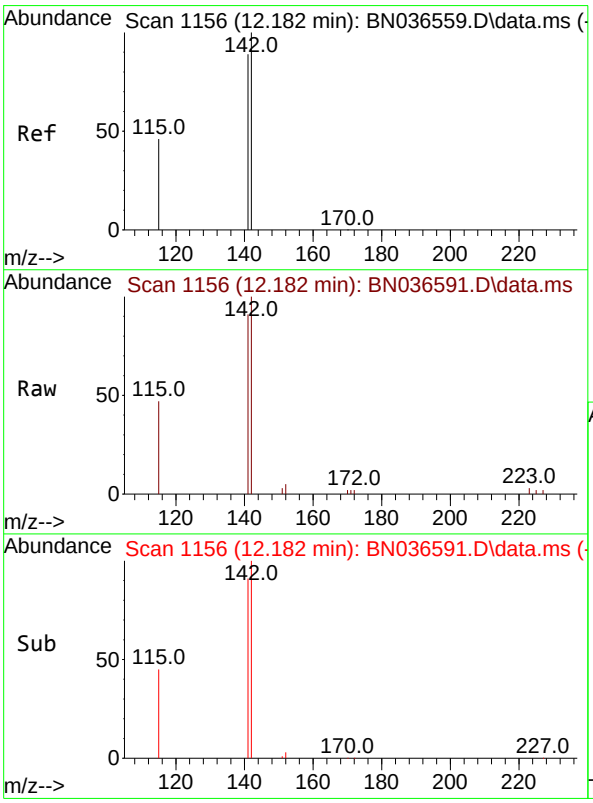
#11
2-Methylnaphthalene-d10
Concen: 0.402 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 3172

Ion	Ratio	Lower	Upper
152	100		
151	21.5	17.0	25.6

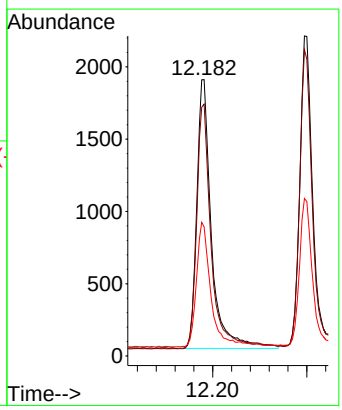


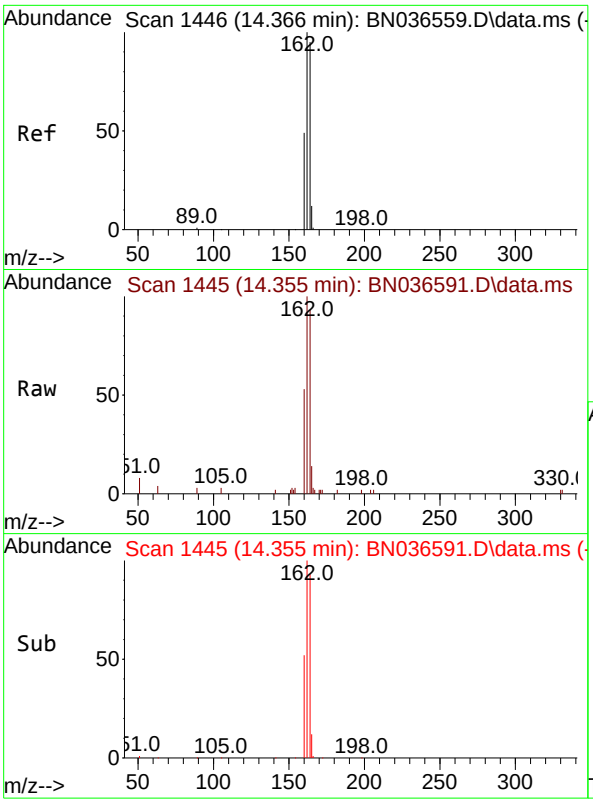


#12
2-Methylnaphthalene
Concen: 0.407 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:142 Resp: 4039

Ion	Ratio	Lower	Upper
142	100		
141	91.1	71.7	107.5
115	46.8	38.3	57.5



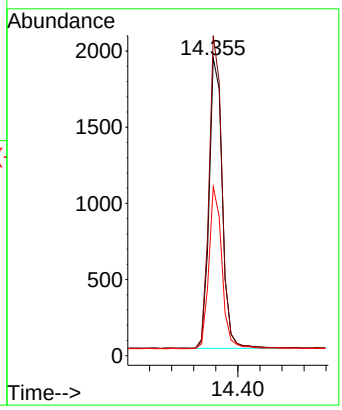


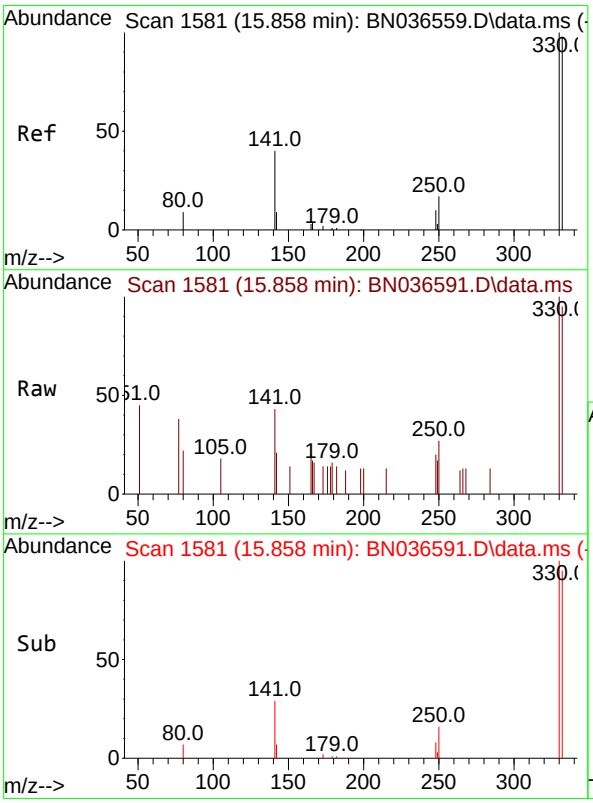
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 3177

Ion	Ratio	Lower	Upper
164	100		
162	107.4	84.2	126.2
160	56.7	42.2	63.2

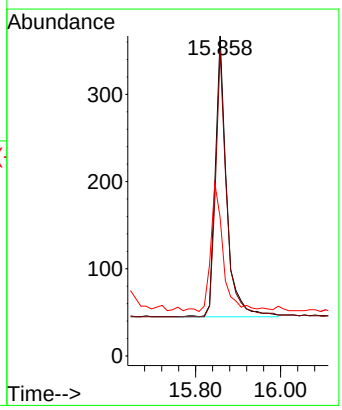


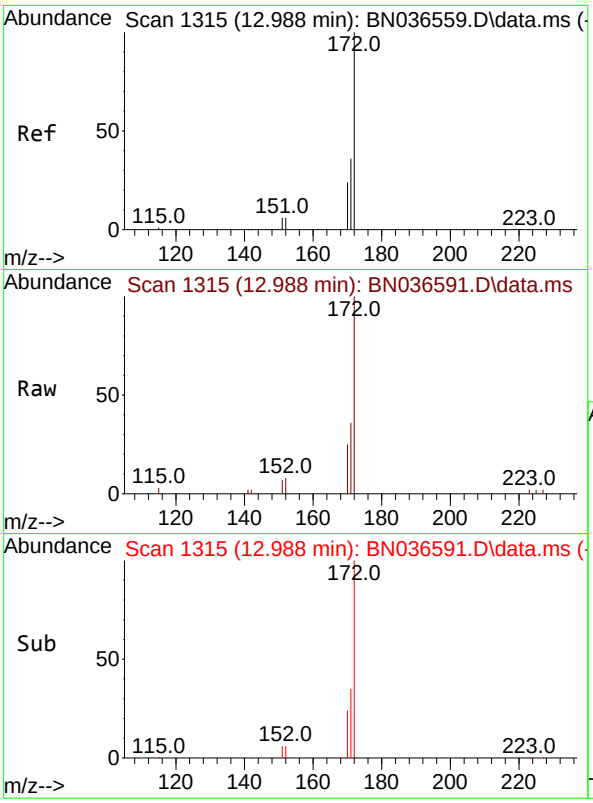


#14
2,4,6-Tribromophenol
Concen: 0.413 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:330 Resp: 595

Ion	Ratio	Lower	Upper
330	100		
332	93.6	75.2	112.8
141	50.9	43.4	65.2



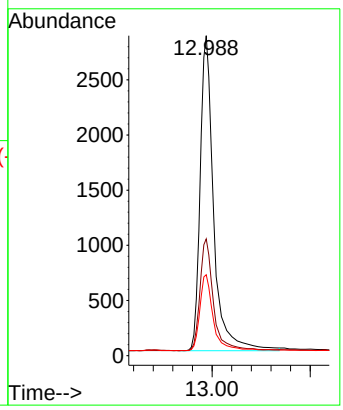


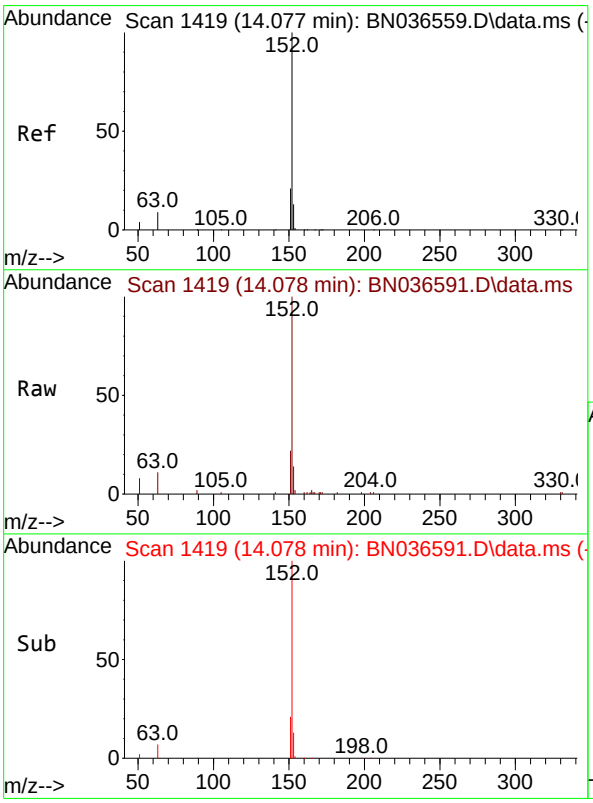
#15
2-Fluorobiphenyl
Concen: 0.405 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 7478

Ion	Ratio	Lower	Upper
172	100		
171	36.5	29.5	44.3
170	25.3	20.2	30.4

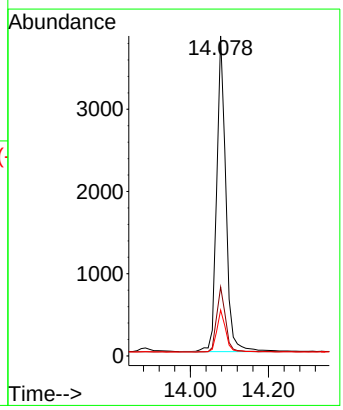


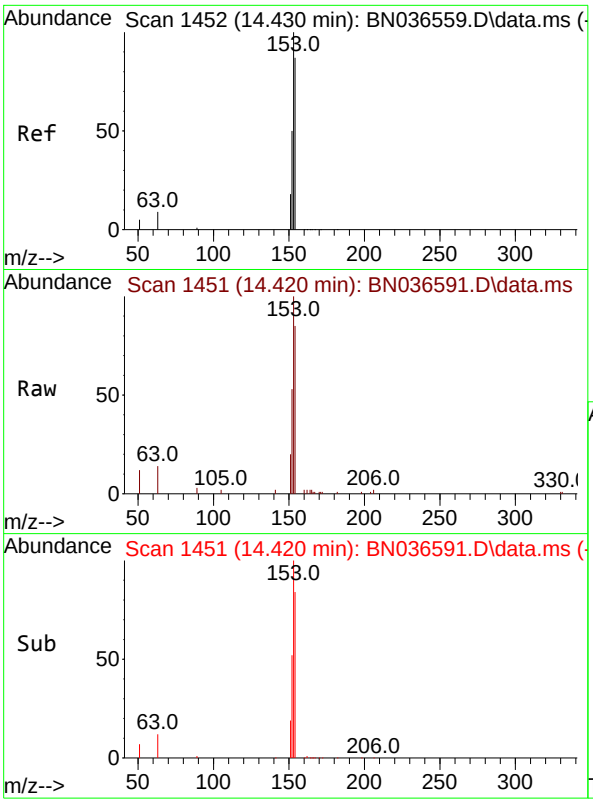


#16
Acenaphthylene
Concen: 0.417 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:152 Resp: 6255

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	13.1	10.6	15.8



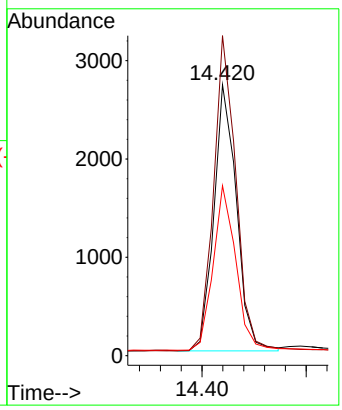


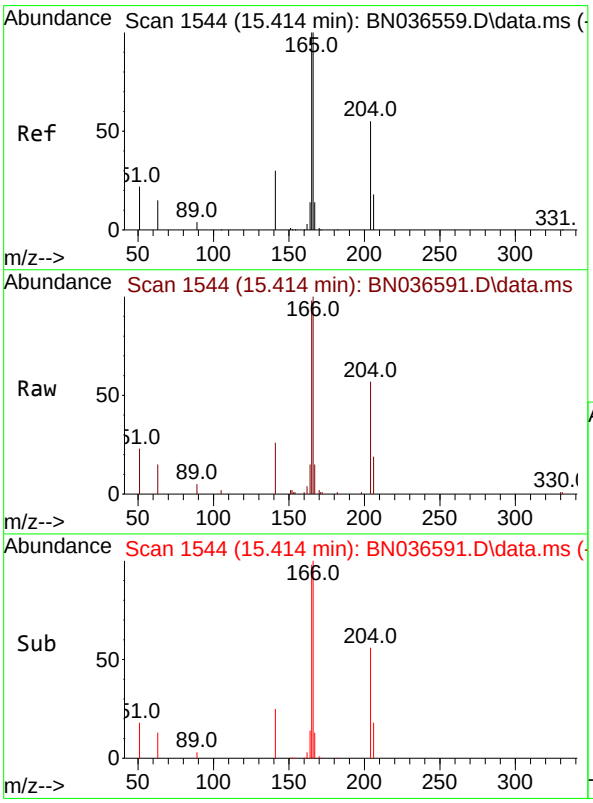
#17
Acenaphthene
Concen: 0.416 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 4082

Ion	Ratio	Lower	Upper
154	100		
153	118.0	94.1	141.1
152	62.7	49.8	74.6

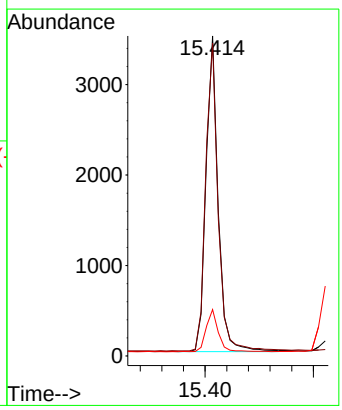


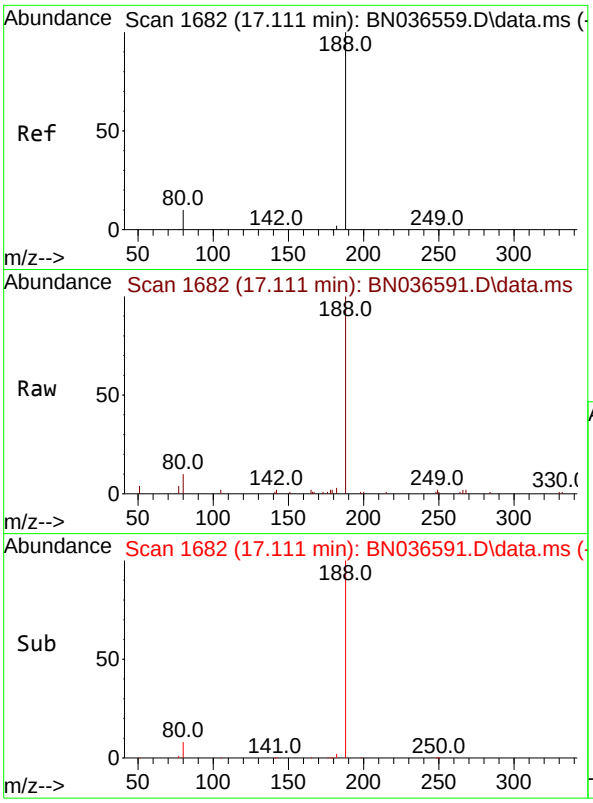


#18
Fluorene
Concen: 0.417 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:166 Resp: 5540

Ion	Ratio	Lower	Upper
166	100		
165	100.1	79.8	119.8
167	13.4	10.6	15.8



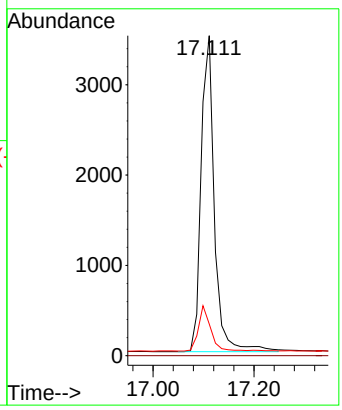


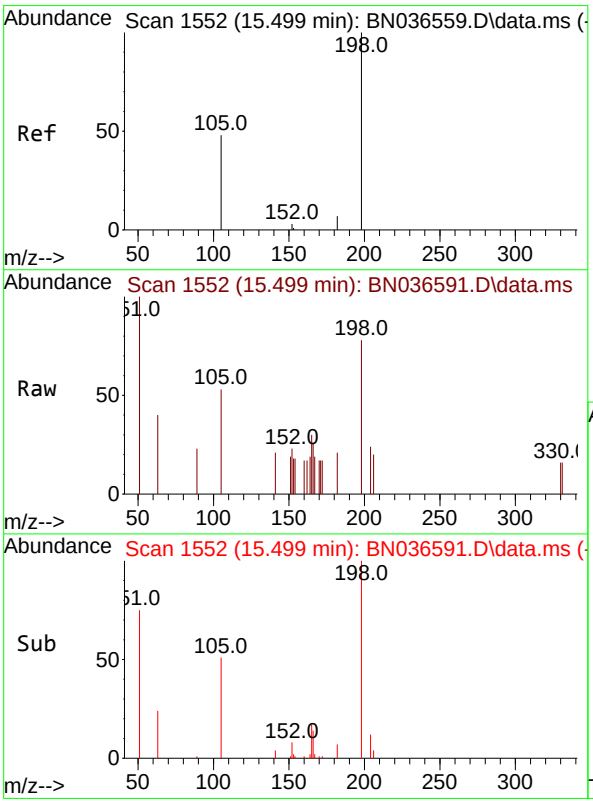
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 6400

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.9	8.8	13.2

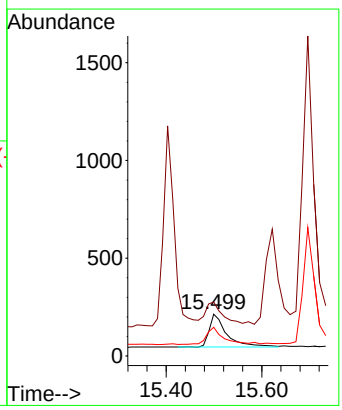


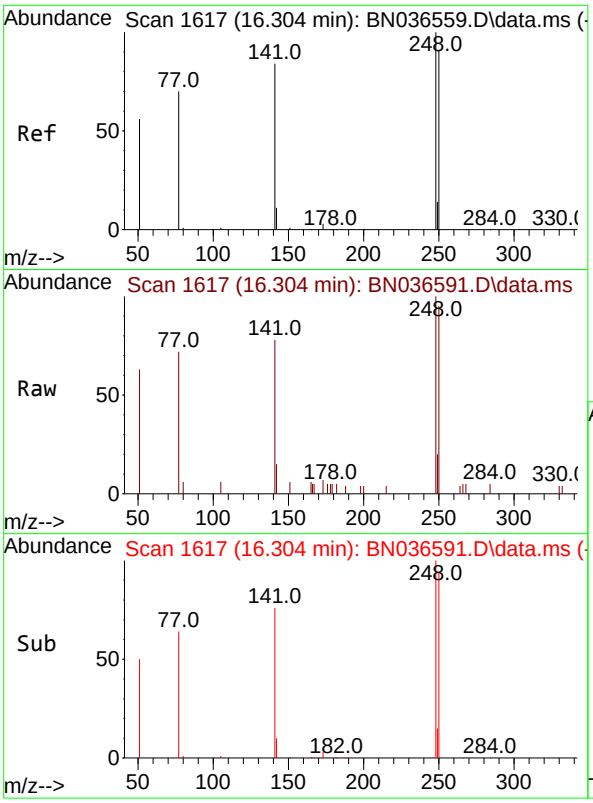


#20
4,6-Dinitro-2-methylphenol
Concen: 0.408 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:198 Resp: 428

Ion	Ratio	Lower	Upper
198	100		
51	129.0	107.9	161.9
105	68.7	56.2	84.2



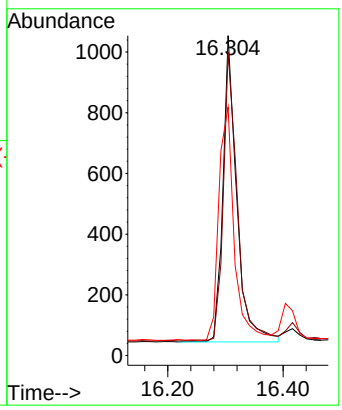


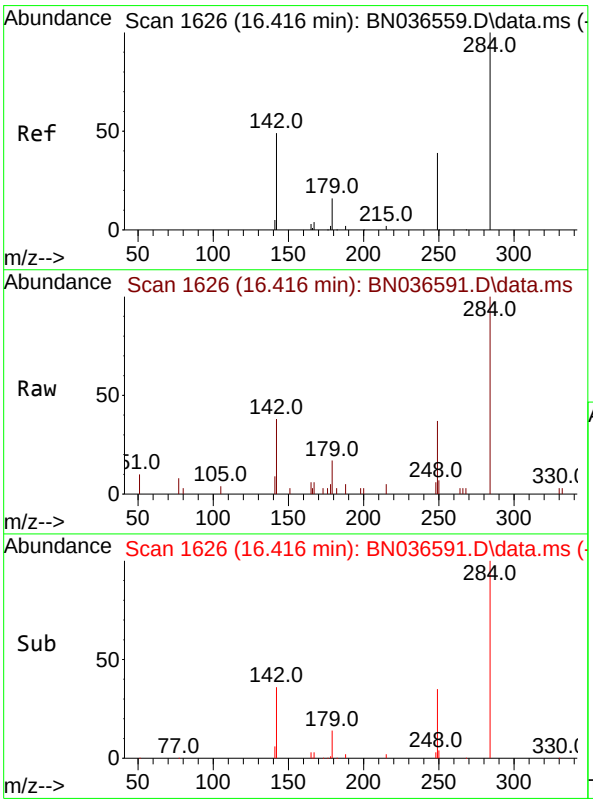
#21
4-Bromophenyl-phenylether
Concen: 0.420 ng
RT: 16.304 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 1685

Ion	Ratio	Lower	Upper
248	100		
250	94.8	73.0	109.6
141	77.7	68.6	103.0

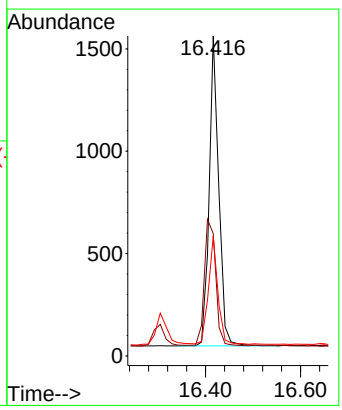


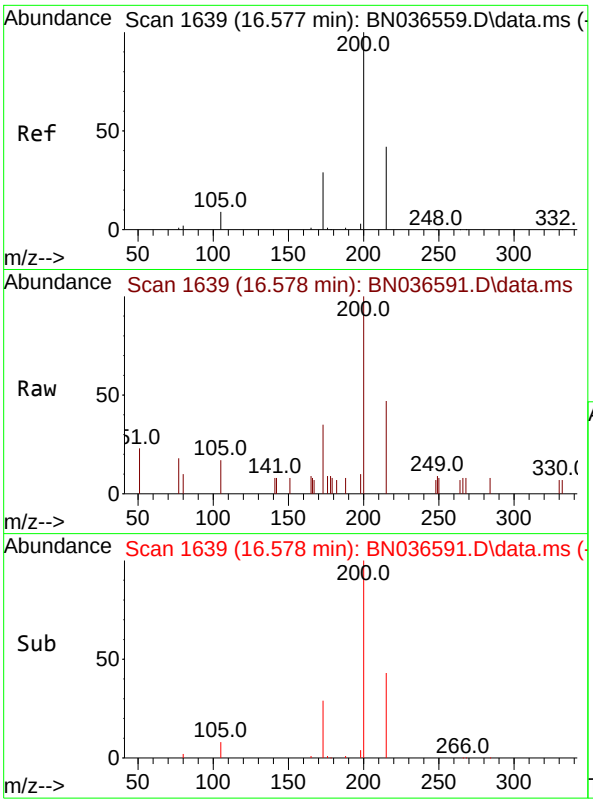


#22
Hexachlorobenzene
Concen: 0.439 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:284 Resp: 2127

Ion	Ratio	Lower	Upper
284	100		
142	48.3	37.0	55.4
249	34.9	28.1	42.1



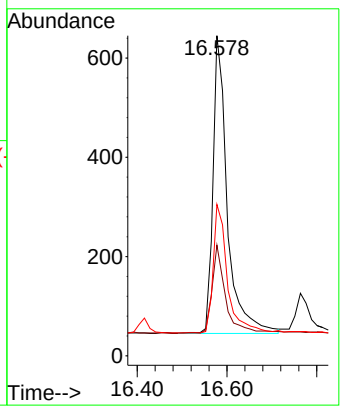


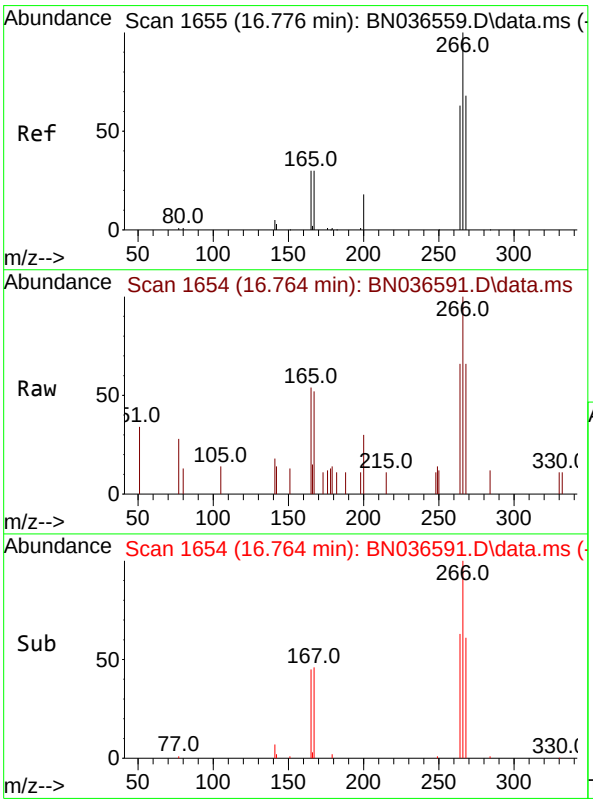
#23
Atrazine
Concen: 0.413 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 1329

Ion	Ratio	Lower	Upper
200	100		
173	34.6	27.3	40.9
215	47.3	36.8	55.2

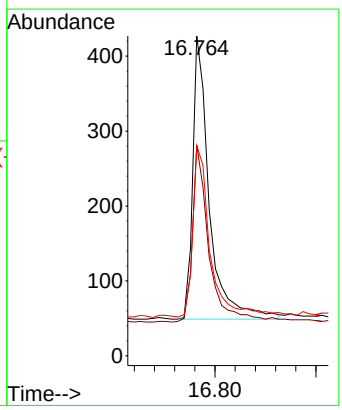


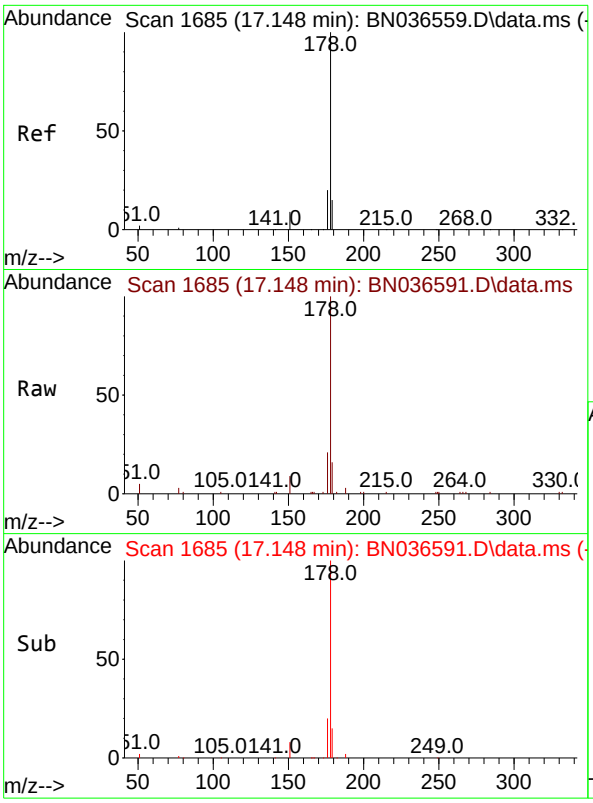


#24
Pentachlorophenol
Concen: 0.391 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:266 Resp: 863

Ion	Ratio	Lower	Upper
266	100		
264	62.1	49.6	74.4
268	63.0	50.9	76.3



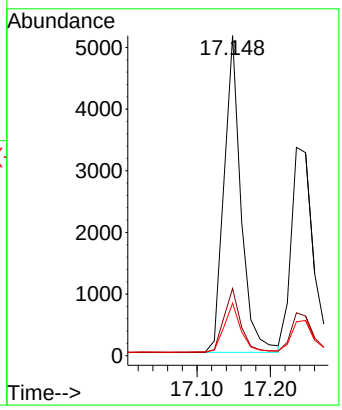


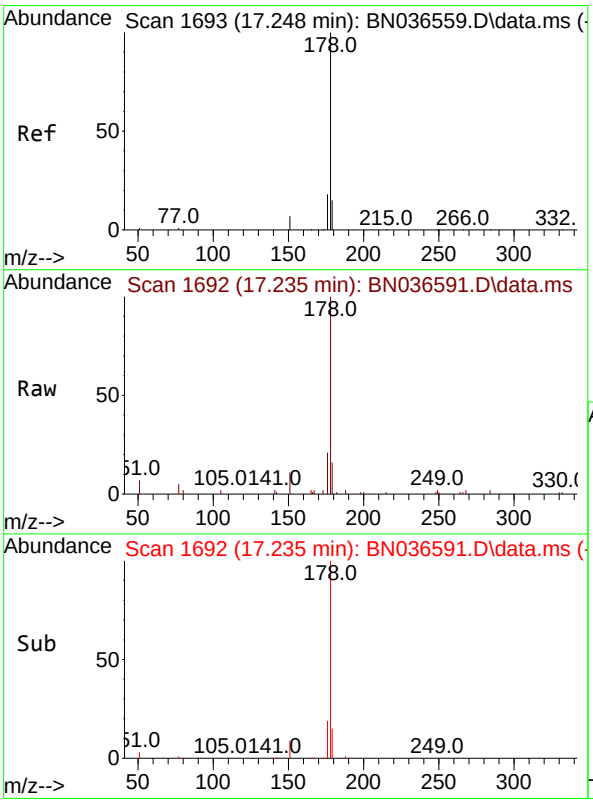
#25
Phenanthrene
Concen: 0.429 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 8241

Ion	Ratio	Lower	Upper
178	100		
176	20.3	15.9	23.9
179	15.4	12.2	18.4

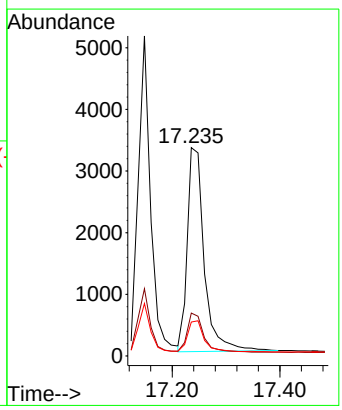


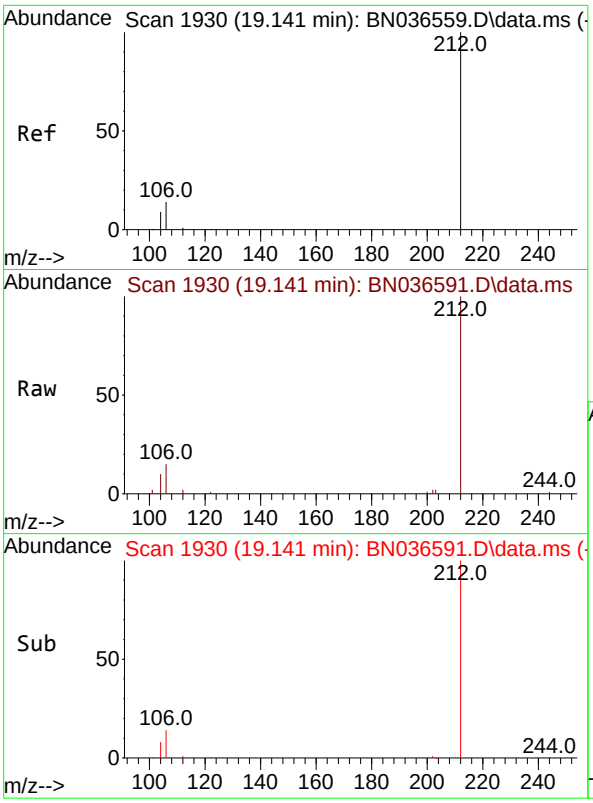


#26
Anthracene
Concen: 0.419 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:178 Resp: 7257

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.4	23.2
179	15.4	12.6	18.8



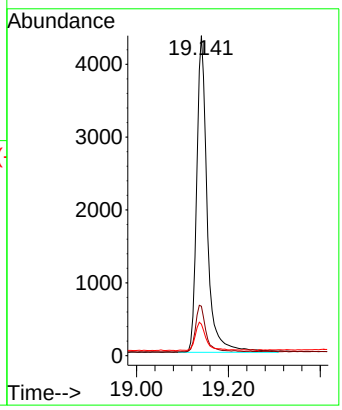


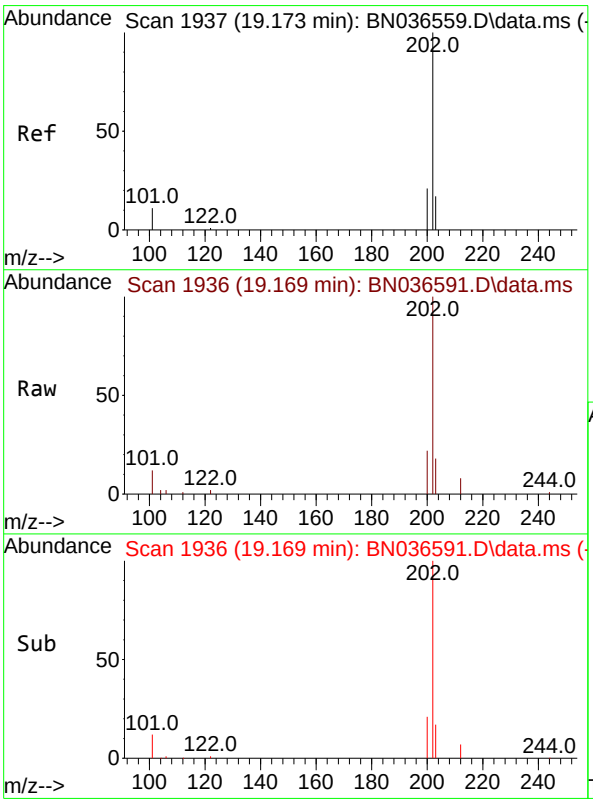
#27
Fluoranthene-d10
Concen: 0.421 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 6898

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.8	17.6
104	8.9	7.3	10.9

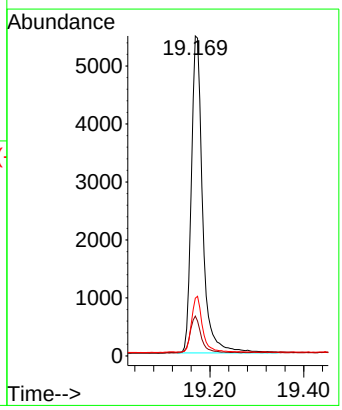


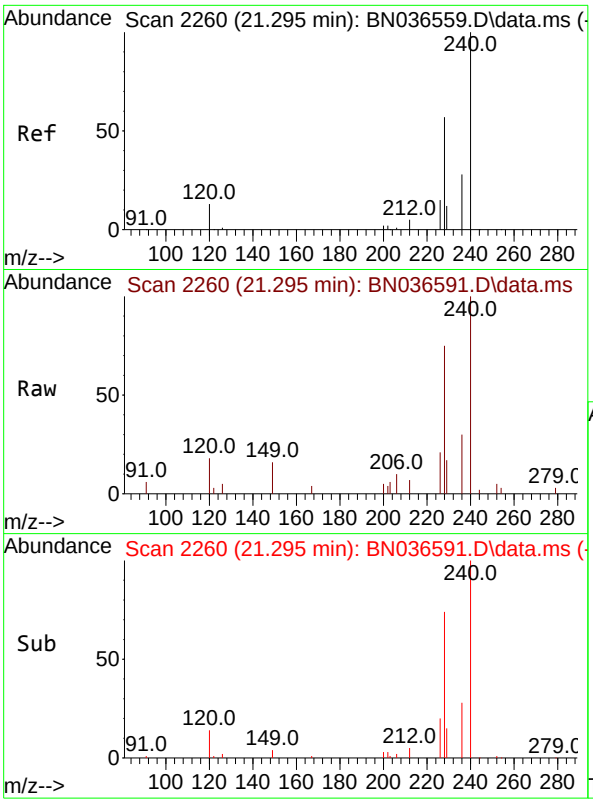


#28
Fluoranthene
Concen: 0.425 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:202 Resp: 9164

Ion	Ratio	Lower	Upper
202	100		
101	11.6	9.4	14.0
203	17.0	13.5	20.3



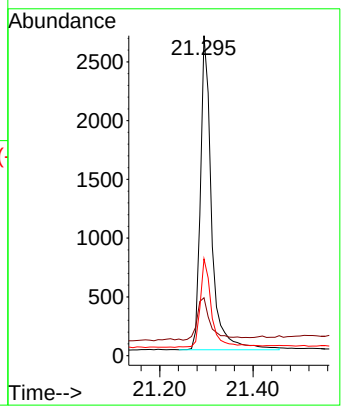


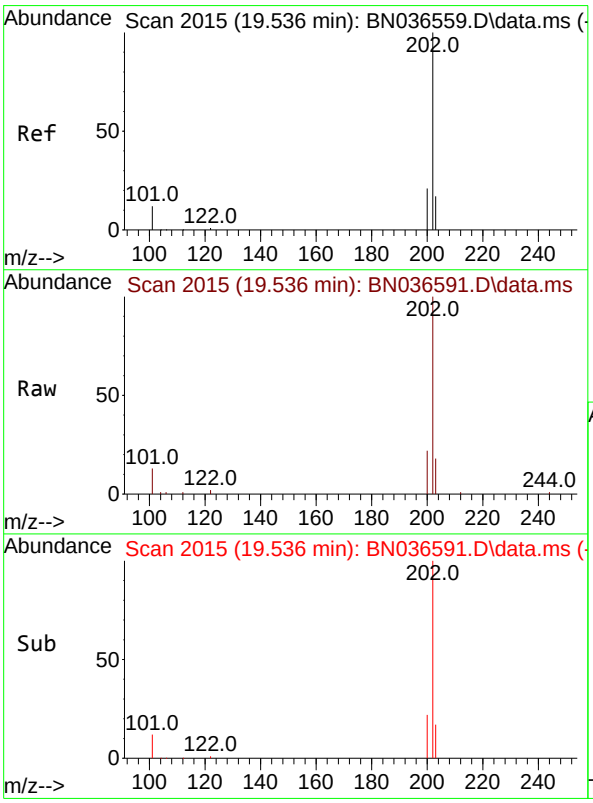
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 4453

Ion	Ratio	Lower	Upper
240	100		
120	18.1	14.6	22.0
236	30.3	24.1	36.1

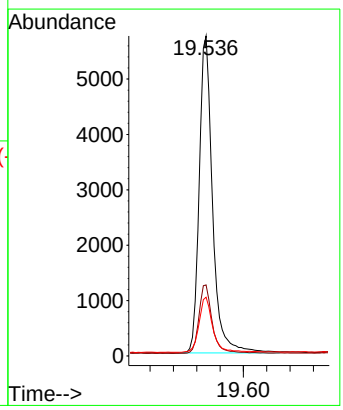


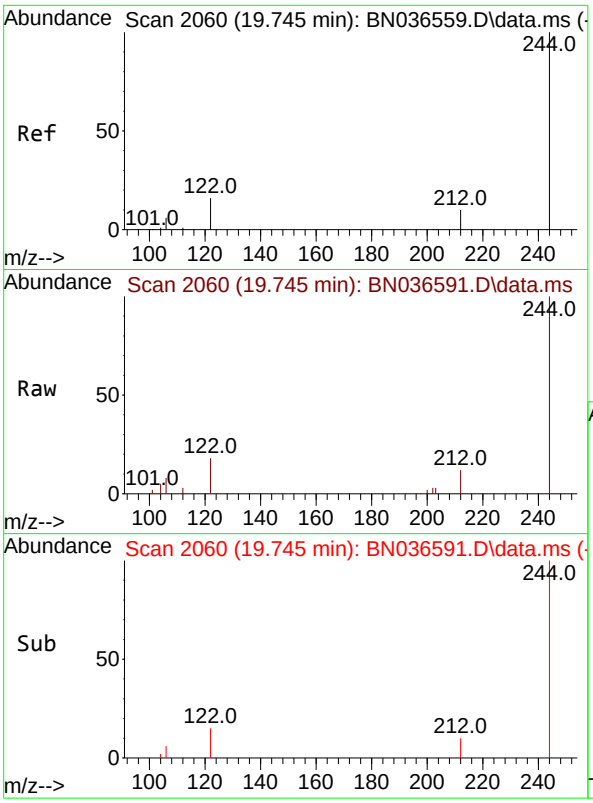


#30
Pyrene
Concen: 0.418 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:202 Resp: 9108

Ion	Ratio	Lower	Upper
202	100		
200	21.5	17.1	25.7
203	18.0	14.1	21.1



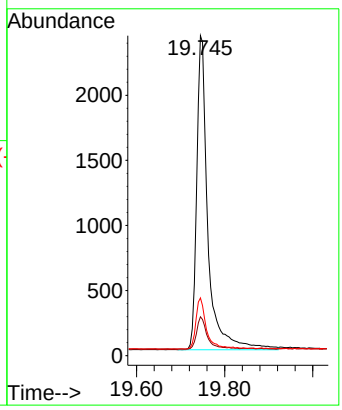


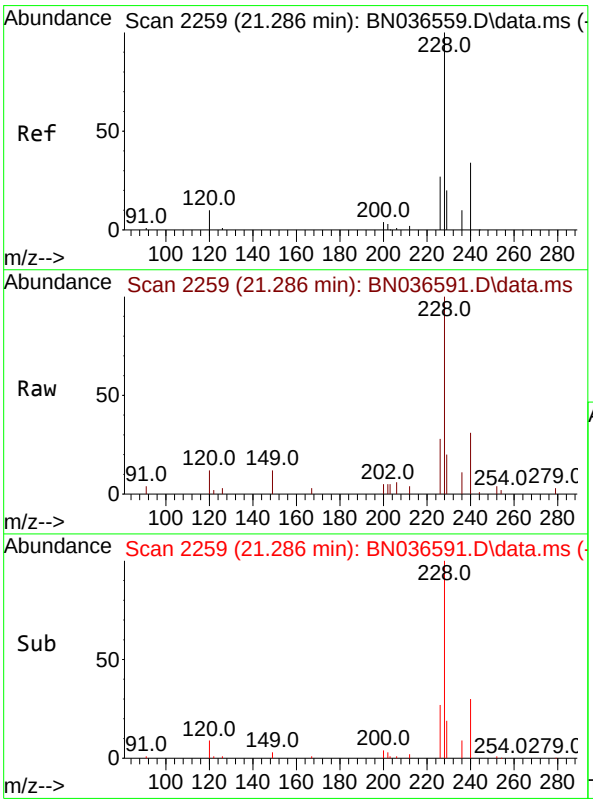
#31
Terphenyl-d14
Concen: 0.400 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 4263

Ion	Ratio	Lower	Upper
244	100		
212	12.1	9.6	14.4
122	18.0	13.9	20.9

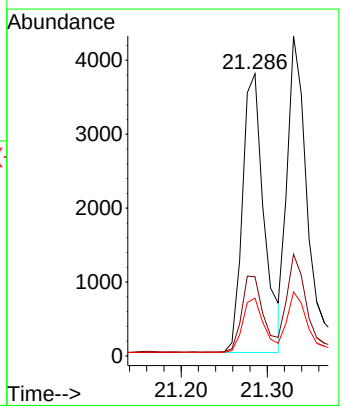


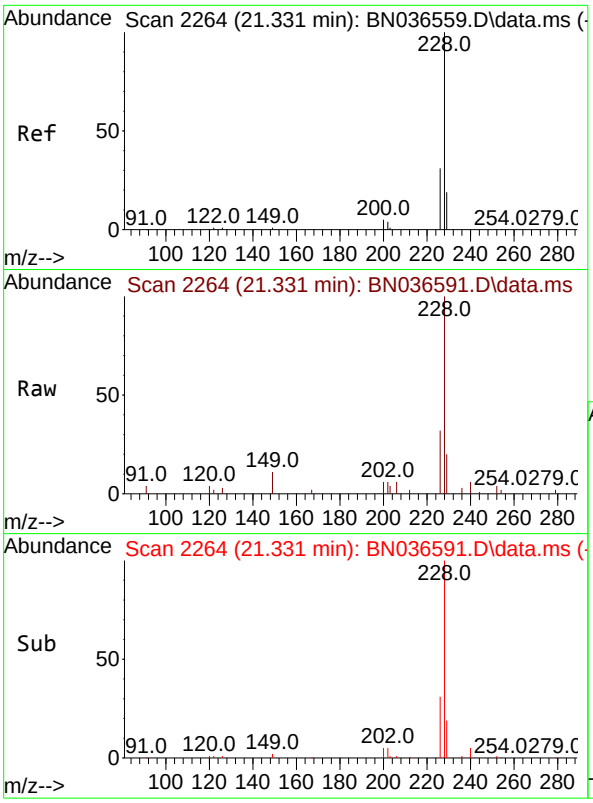


#32
Benzo(a)anthracene
Concen: 0.423 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:228 Resp: 6555

Ion	Ratio	Lower	Upper
228	100		
226	28.0	22.5	33.7
229	20.5	16.6	25.0



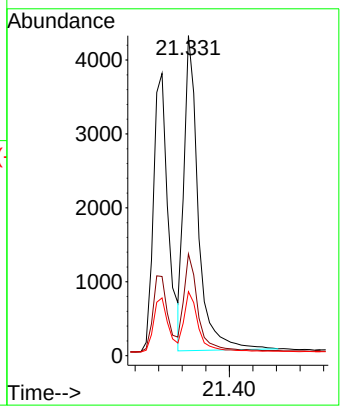


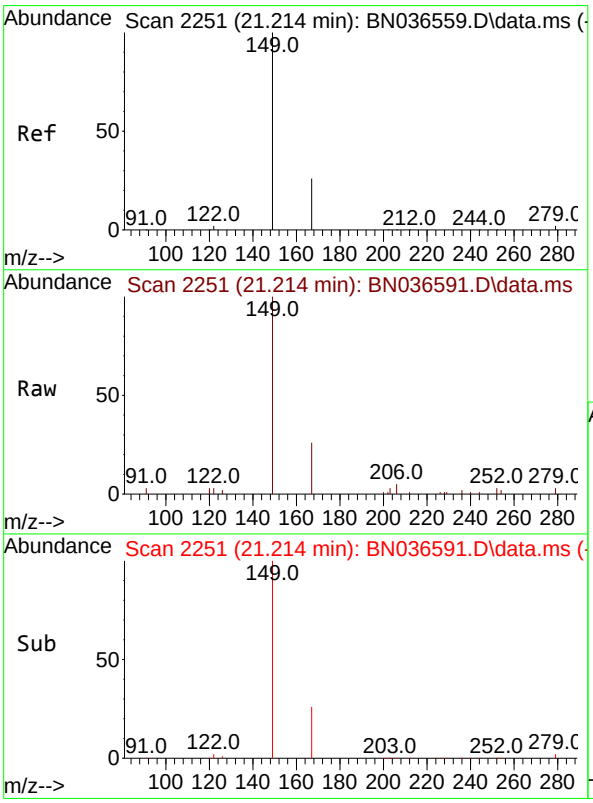
#33
Chrysene
Concen: 0.424 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 7174

Ion	Ratio	Lower	Upper
228	100		
226	31.8	25.3	37.9
229	20.0	15.8	23.8

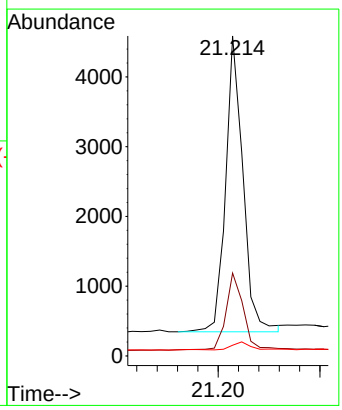


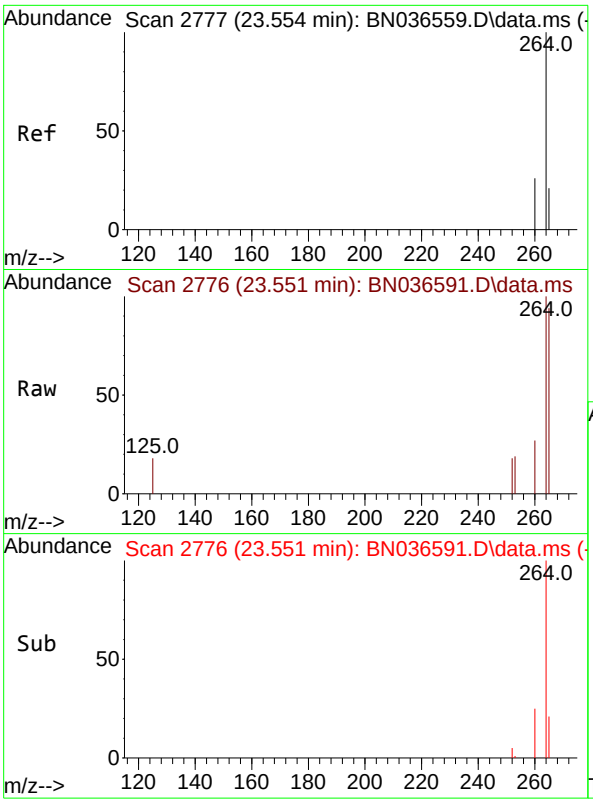


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.454 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:149 Resp: 5004

Ion	Ratio	Lower	Upper
149	100		
167	25.7	20.7	31.1
279	3.0	3.6	5.4#



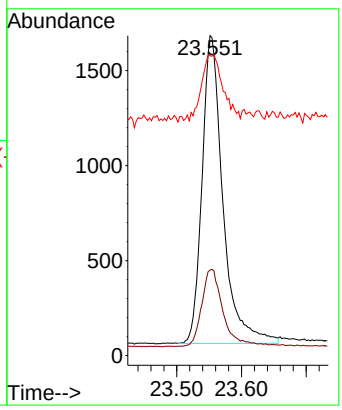


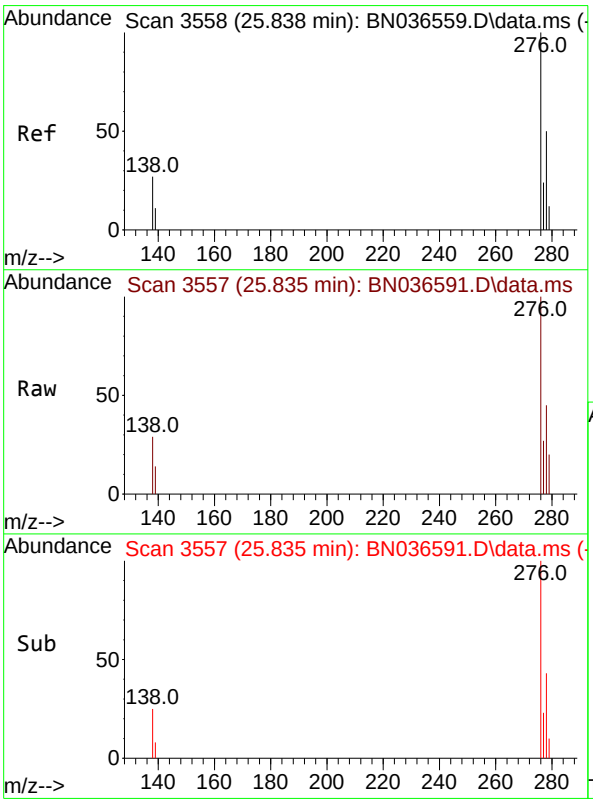
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 3635

Ion	Ratio	Lower	Upper
264	100		
260	26.7	22.6	33.8
265	93.7	88.1	132.1

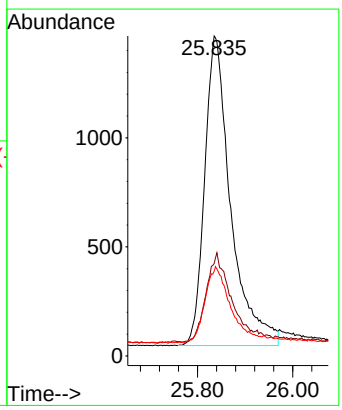


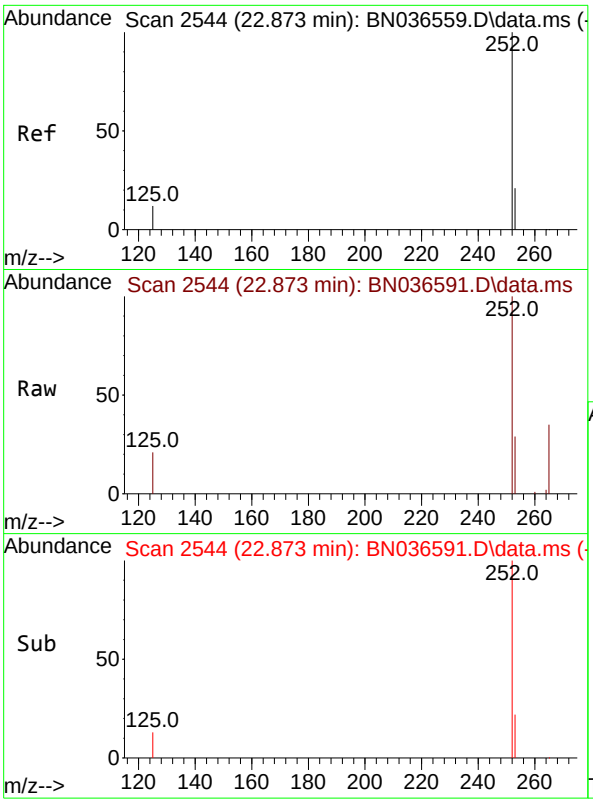


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.411 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:276 Resp: 5387

Ion	Ratio	Lower	Upper
276	100		
138	27.1	23.4	35.2
277	24.4	20.0	30.0



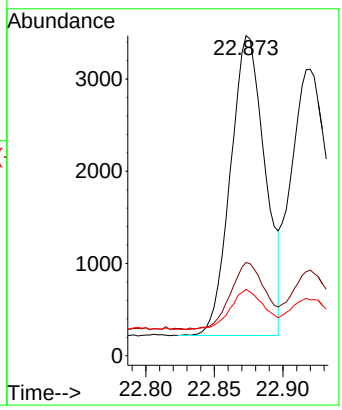


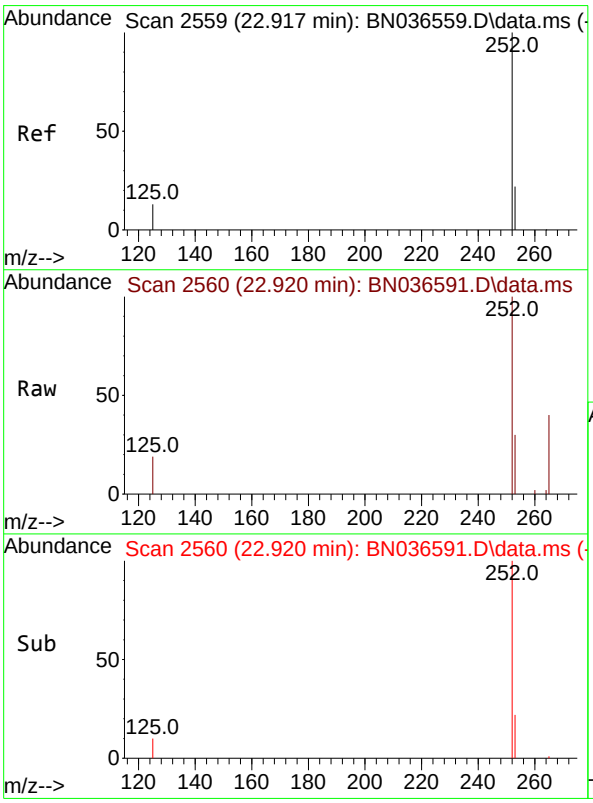
#37
Benzo(b)fluoranthene
Concen: 0.431 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 5696

Ion	Ratio	Lower	Upper
252	100		
253	29.1	23.9	35.9
125	20.8	17.4	26.2

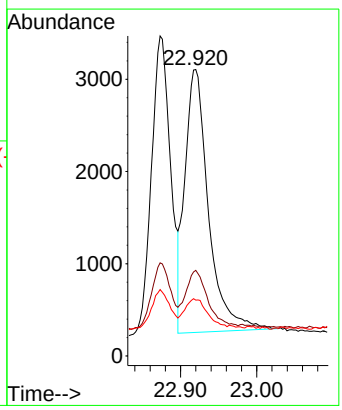


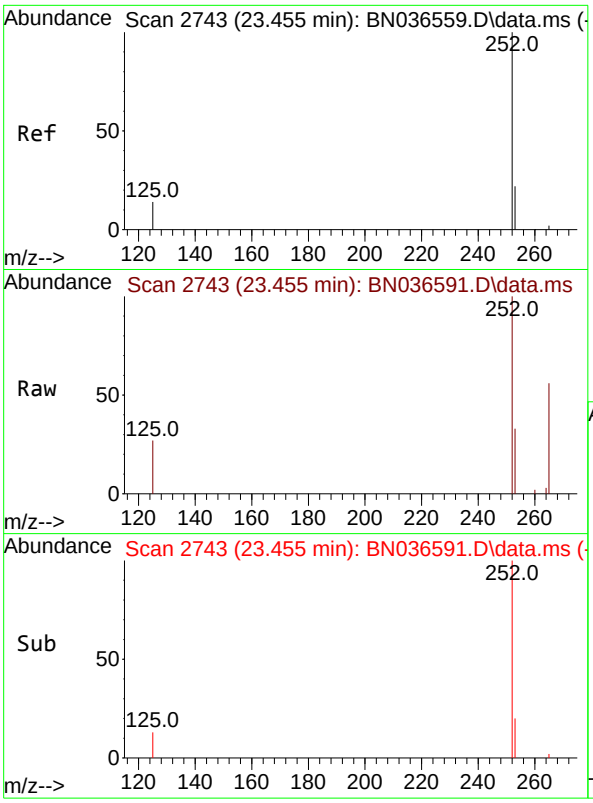


#38
Benzo(k)fluoranthene
Concen: 0.442 ng
RT: 22.920 min Scan# 2560
Delta R.T. 0.003 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:252 Resp: 6136

Ion	Ratio	Lower	Upper
252	100		
253	29.9	24.6	36.8
125	19.5	17.8	26.8



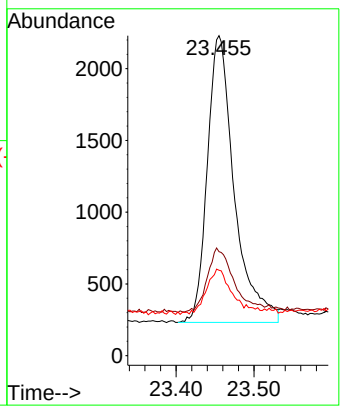


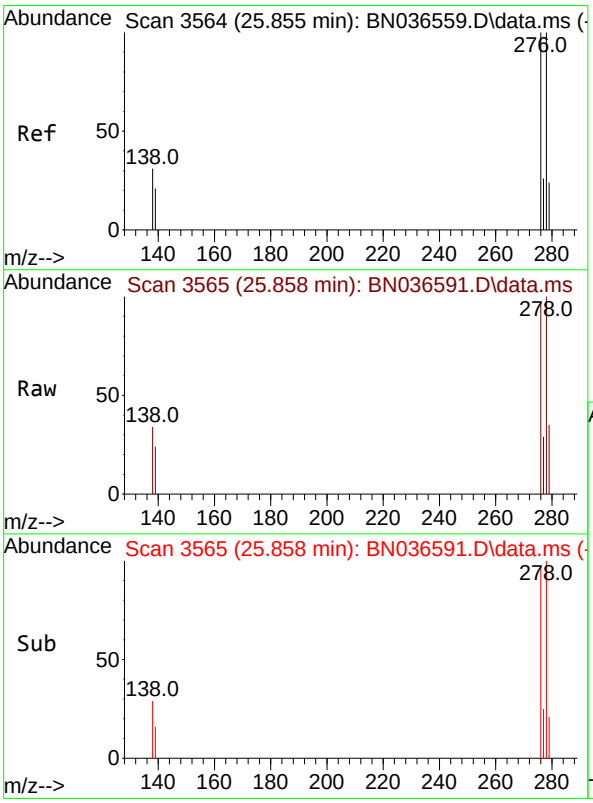
#39
Benzo(a)pyrene
Concen: 0.431 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 4804

Ion	Ratio	Lower	Upper
252	100		
253	32.5	27.8	41.8
125	26.7	22.7	34.1

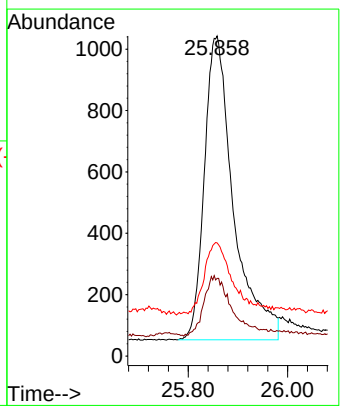


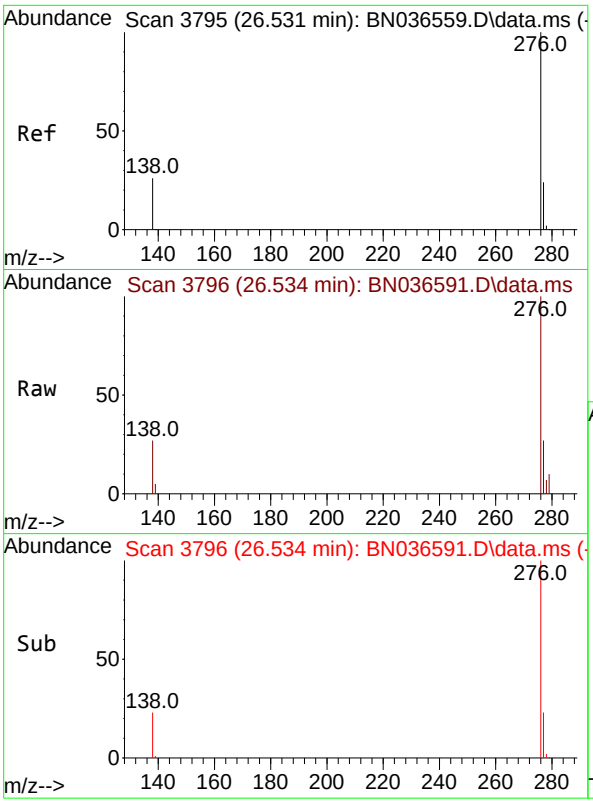


#40
Dibenzo(a,h)anthracene
Concen: 0.395 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Tgt Ion:278 Resp: 4039

Ion	Ratio	Lower	Upper
278	100		
139	24.3	20.8	31.2
279	35.4	28.8	43.2



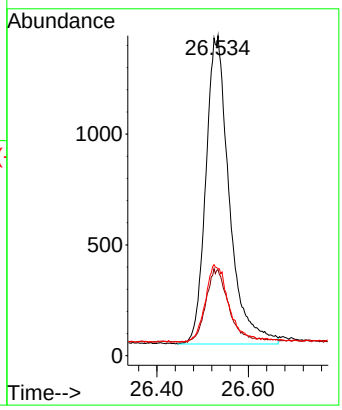


#41
Benzo(g,h,i)perylene
Concen: 0.424 ng
RT: 26.534 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN036591.D
Acq: 12 Mar 2025 09:14

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 4958

Ion	Ratio	Lower	Upper
276	100		
277	26.9	22.2	33.4
138	27.2	24.1	36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036591.D
Acq On : 12 Mar 2025 09:14
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 12 10:40:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	101	0.00
2		1,4-Dioxane	0.444	0.524	-18.0	106	0.00
3		n-Nitrosodimethylamine	0.898	0.963	-7.2	104	0.00
4	S	2-Fluorophenol	0.932	0.936	-0.4	95	0.00
5	S	Phenol-d6	1.152	1.110	3.6	99	0.00
6		bis(2-Chloroethyl)ether	1.190	1.203	-1.1	102	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	104	0.00
8	S	Nitrobenzene-d5	0.435	0.424	2.5	106	0.00
9		Naphthalene	1.177	1.209	-2.7	104	-0.01
10		Hexachlorobutadiene	0.277	0.295	-6.5	105	0.00
11	SURR	2-Methylnaphthalene-d10	0.595	0.598	-0.5	103	0.00
12		2-Methylnaphthalene	0.749	0.762	-1.7	104	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	105	-0.01
14	S	2,4,6-Tribromophenol	0.182	0.187	-2.7	105	0.00
15	S	2-Fluorobiphenyl	2.327	2.354	-1.2	103	0.00
16		Acenaphthylene	1.888	1.969	-4.3	107	0.00
17		Acenaphthene	1.236	1.285	-4.0	105	-0.01
18		Fluorene	1.672	1.744	-4.3	104	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	107	0.00
20		4,6-Dinitro-2-methylphenol	0.086	0.067	22.1	93	0.00
21		4-Bromophenyl-phenylether	0.251	0.263	-4.8	102	0.00
22		Hexachlorobenzene	0.303	0.332	-9.6	105	0.00
23		Atrazine	0.201	0.208	-3.5	104	0.00
24		Pentachlorophenol	0.138	0.135	2.2	105	-0.01
25		Phenanthrene	1.200	1.288	-7.3	106	0.00
26		Anthracene	1.083	1.134	-4.7	105	-0.01
27	SURR	Fluoranthene-d10	1.025	1.078	-5.2	103	0.00
28		Fluoranthene	1.348	1.432	-6.2	105	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
30		Pyrene	1.956	2.045	-4.6	104	0.00
31	S	Terphenyl-d14	0.958	0.957	0.1	101	0.00
32		Benzo(a)anthracene	1.391	1.472	-5.8	111	0.00
33		Chrysene	1.520	1.611	-6.0	108	0.00
34		Bis(2-ethylhexyl)phthalate	0.990	1.124	-13.5	117	0.00
35	I	Perylene-d12	1.000	1.000	0.0	103	0.00
36		Indeno(1,2,3-cd)pyrene	1.444	1.482	-2.6	98	0.00
37		Benzo(b)fluoranthene	1.456	1.567	-7.6	104	0.00
38		Benzo(k)fluoranthene	1.527	1.688	-10.5	107	0.00
39	C	Benzo(a)pyrene	1.226	1.322	-7.8	104	0.00
40		Dibenzo(a,h)anthracene	1.124	1.111	1.2	98	0.00
41		Benzo(g,h,i)perylene	1.286	1.364	-6.1	101	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036591.D
Acq On : 12 Mar 2025 09:14
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 12 10:40:47 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	101	0.00
2		1,4-Dioxane	0.400	0.472	-18.0	106	0.00
3		n-Nitrosodimethylamine	0.400	0.429	-7.2	104	0.00
4	S	2-Fluorophenol	0.400	0.401	-0.3	95	0.00
5	S	Phenol-d6	0.400	0.386	3.5	99	0.00
6		bis(2-Chloroethyl)ether	0.400	0.404	-1.0	102	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	104	0.00
8	S	Nitrobenzene-d5	0.400	0.389	2.8	106	0.00
9		Naphthalene	0.400	0.411	-2.7	104	-0.01
10		Hexachlorobutadiene	0.400	0.426	-6.5	105	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.402	-0.5	103	0.00
12		2-Methylnaphthalene	0.400	0.407	-1.7	104	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	105	-0.01
14	S	2,4,6-Tribromophenol	0.400	0.413	-3.2	105	0.00
15	S	2-Fluorobiphenyl	0.400	0.405	-1.3	103	0.00
16		Acenaphthylene	0.400	0.417	-4.2	107	0.00
17		Acenaphthene	0.400	0.416	-4.0	105	-0.01
18		Fluorene	0.400	0.417	-4.2	104	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	107	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.408	-2.0	93	0.00
21		4-Bromophenyl-phenylether	0.400	0.420	-5.0	102	0.00
22		Hexachlorobenzene	0.400	0.439	-9.7	105	0.00
23		Atrazine	0.400	0.413	-3.2	104	0.00
24		Pentachlorophenol	0.400	0.391	2.3	105	-0.01
25		Phenanthrene	0.400	0.429	-7.2	106	0.00
26		Anthracene	0.400	0.419	-4.7	105	-0.01
27	SURR	Fluoranthene-d10	0.400	0.421	-5.2	103	0.00
28		Fluoranthene	0.400	0.425	-6.2	105	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	108	0.00
30		Pyrene	0.400	0.418	-4.5	104	0.00
31	S	Terphenyl-d14	0.400	0.400	0.0	101	0.00
32		Benzo(a)anthracene	0.400	0.423	-5.7	111	0.00
33		Chrysene	0.400	0.424	-6.0	108	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.454	-13.5	117	0.00
35	I	Perylene-d12	0.400	0.400	0.0	103	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.411	-2.7	98	0.00
37		Benzo(b)fluoranthene	0.400	0.431	-7.7	104	0.00
38		Benzo(k)fluoranthene	0.400	0.442	-10.5	107	0.00
39	C	Benzo(a)pyrene	0.400	0.431	-7.7	104	0.00
40		Dibenzo(a,h)anthracene	0.400	0.395	1.3	98	0.00
41		Benzo(g,h,i)perylene	0.400	0.424	-6.0	101	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: AECO15

Lab Code: CHEM Case No.: Q1531 SAS No.: Q1531 SDG No.: Q1531

Instrument ID: BNA_N Calibration Date/Time: 03/12/2025 14:39

Lab File ID: BN036599.D Init. Calib. Date(s): 03/10/2025 03/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:42 15:19

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.595	0.568		-4.5	50.0
Fluoranthene-d10	1.025	1.089		6.2	50.0
2-Fluorophenol	0.932	0.958		2.8	50.0
Phenol-d6	1.152	1.129		-2.0	50.0
Nitrobenzene-d5	0.435	0.442		1.6	50.0
2-Fluorobiphenyl	2.327	2.369		1.8	50.0
2,4,6-Tribromophenol	0.182	0.191		4.9	50.0
Terphenyl-d14	0.958	1.019		6.4	50.0
1,4-Dioxane	0.444	0.504		13.5	50.0

All other compounds must meet a minimum RRF of 0.010.

Form VII SV-1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036599.D
Acq On : 12 Mar 2025 14:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Mar 12 15:13:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

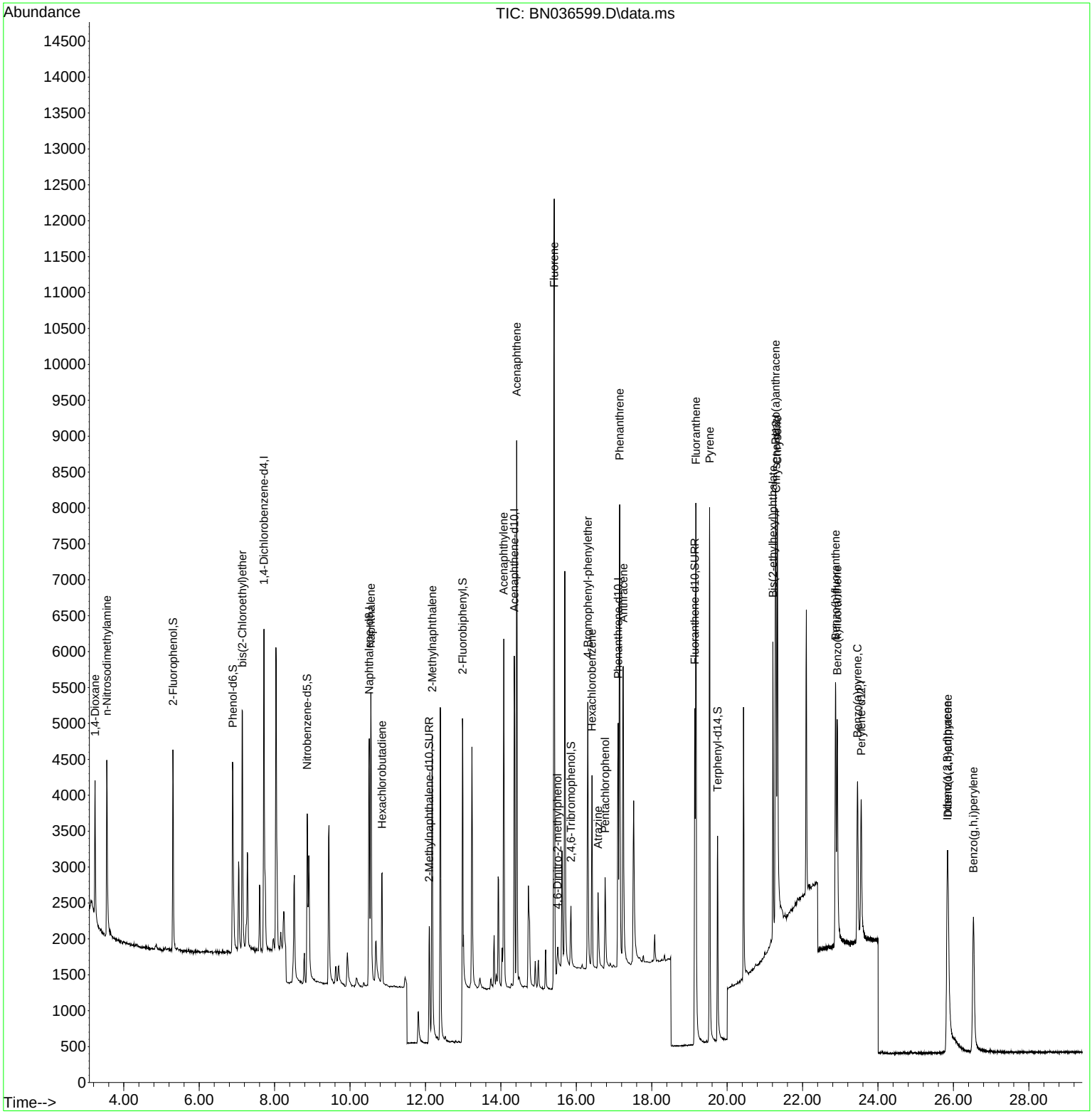
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2143	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4893	0.400	ng	#	0.00
13) Acenaphthene-d10	14.355	164	2741	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	5315	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3522	0.400	ng		0.00
35) Perylene-d12	23.554	264	3048	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	2053	0.411	ng		0.00
5) Phenol-d6	6.894	99	2419	0.392	ng		0.00
8) Nitrobenzene-d5	8.864	82	2165	0.407	ng		-0.01
11) 2-Methylnaphthalene-d10	12.101	152	2781	0.382	ng		-0.01
14) 2,4,6-Tribromophenol	15.858	330	523	0.420	ng		0.00
15) 2-Fluorobiphenyl	12.983	172	6493	0.407	ng		0.00
27) Fluoranthene-d10	19.141	212	5789	0.425	ng		0.00
31) Terphenyl-d14	19.745	244	3590	0.425	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	1080	0.454	ng		97
3) n-Nitrosodimethylamine	3.550	42	2077	0.432	ng	#	97
6) bis(2-Chloroethyl)ether	7.146	93	2535	0.397	ng		100
9) Naphthalene	10.551	128	5662	0.393	ng		99
10) Hexachlorobutadiene	10.850	225	1364	0.403	ng	#	99
12) 2-Methylnaphthalene	12.177	142	3509	0.383	ng		97
16) Acenaphthylene	14.077	152	5282	0.408	ng		100
17) Acenaphthene	14.420	154	3472	0.410	ng		99
18) Fluorene	15.414	166	4821	0.421	ng		100
20) 4,6-Dinitro-2-methylph...	15.499	198	422	0.456	ng	#	80
21) 4-Bromophenyl-phenylether	16.304	248	1471	0.442	ng		93
22) Hexachlorobenzene	16.416	284	1775	0.442	ng		94
23) Atrazine	16.577	200	1127	0.422	ng		97
24) Pentachlorophenol	16.764	266	728	0.397	ng		98
25) Phenanthrene	17.148	178	6995	0.439	ng		100
26) Anthracene	17.248	178	6038	0.420	ng		99
28) Fluoranthene	19.173	202	7601	0.424	ng		99
30) Pyrene	19.536	202	7693	0.447	ng		99
32) Benzo(a)anthracene	21.286	228	5109	0.417	ng		99
33) Chrysene	21.331	228	5894	0.440	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	4026	0.462	ng	#	96
36) Indeno(1,2,3-cd)pyrene	25.838	276	4646	0.422	ng		97
37) Benzo(b)fluoranthene	22.876	252	4787	0.432	ng		98
38) Benzo(k)fluoranthene	22.920	252	5015	0.431	ng		98
39) Benzo(a)pyrene	23.455	252	4056	0.434	ng		97
40) Dibenzo(a,h)anthracene	25.852	278	3545	0.414	ng		96
41) Benzo(g,h,i)perylene	26.531	276	4295	0.438	ng		98

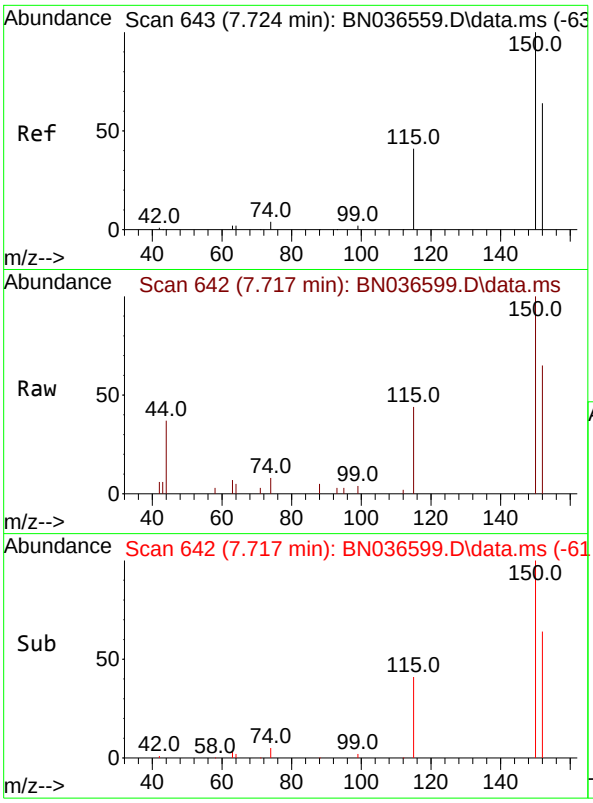
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036599.D
Acq On : 12 Mar 2025 14:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Mar 12 15:13:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



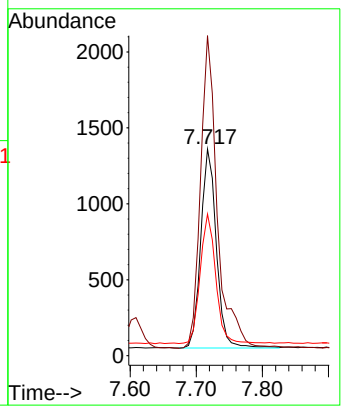


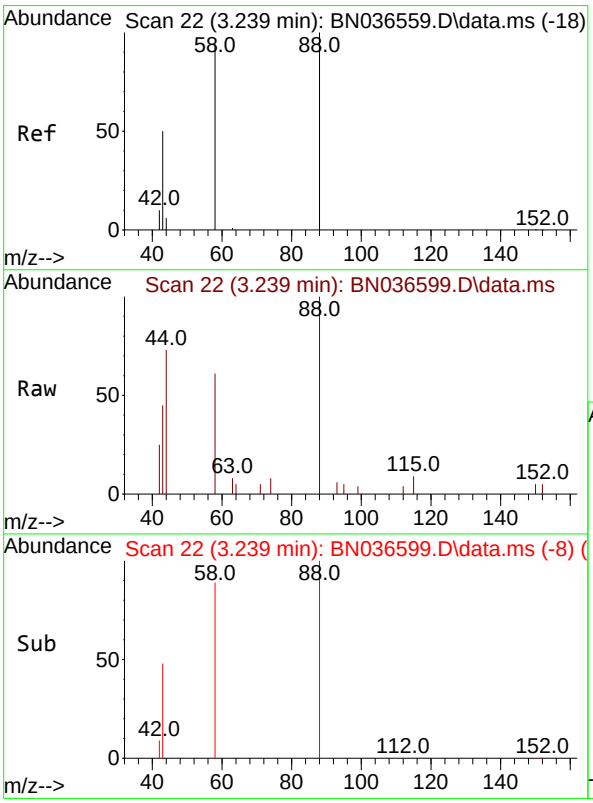
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2143

Ion	Ratio	Lower	Upper
152	100		
150	154.9	123.7	185.5
115	68.6	54.3	81.5

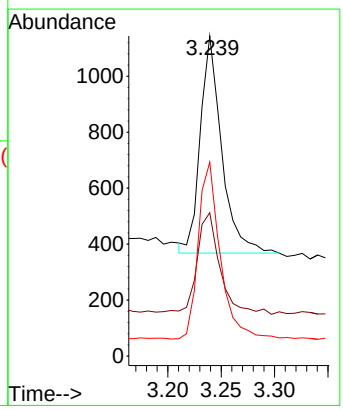


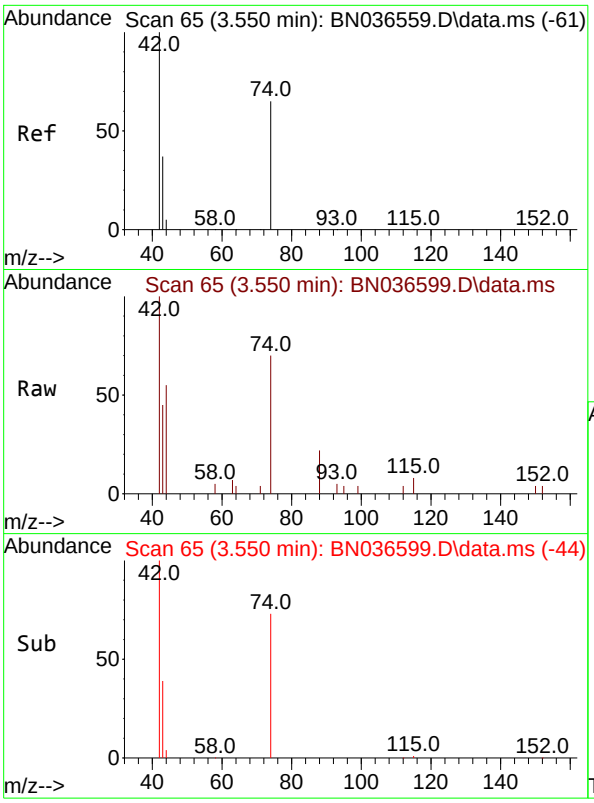


#2
1,4-Dioxane
Concen: 0.454 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion: 88 Resp: 1080

Ion	Ratio	Lower	Upper
88	100		
43	51.2	37.8	56.8
58	83.7	67.4	101.2



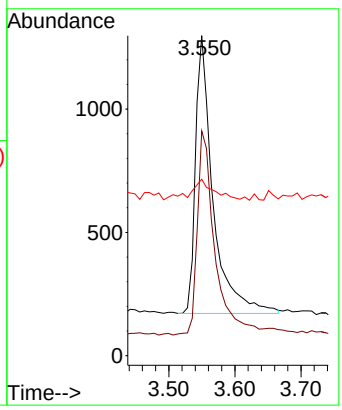


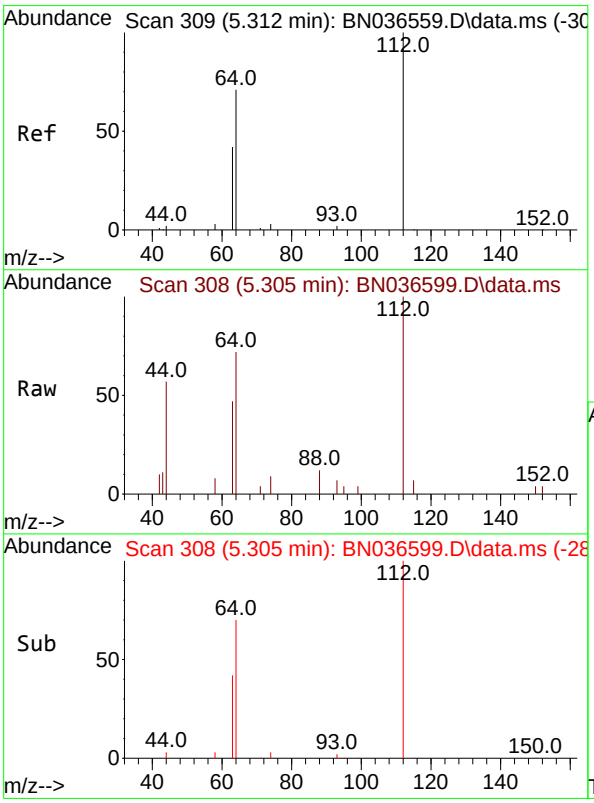
#3
n-Nitrosodimethylamine
Concen: 0.432 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 2077

Ion	Ratio	Lower	Upper
42	100		
74	73.6	60.6	90.8
44	9.6	6.3	9.5#

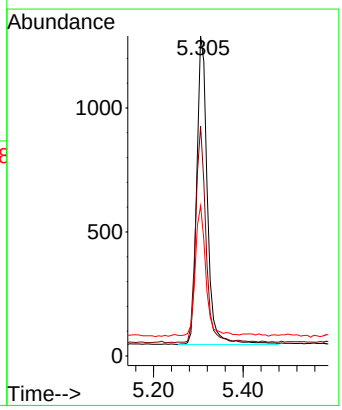


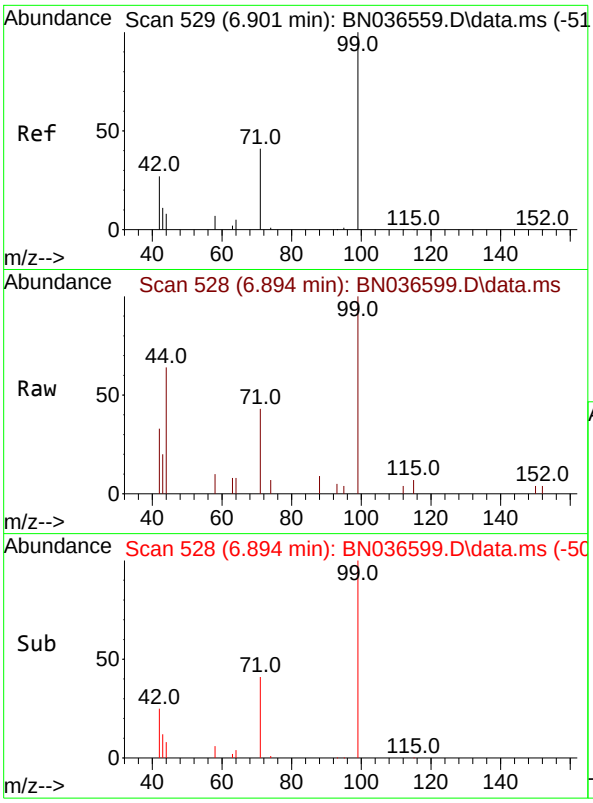


#4
2-Fluorophenol
Concen: 0.411 ng
RT: 5.305 min Scan# 308
Delta R.T. -0.007 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:112 Resp: 2053

Ion	Ratio	Lower	Upper
112	100		
64	66.8	53.1	79.7
63	41.1	31.8	47.8



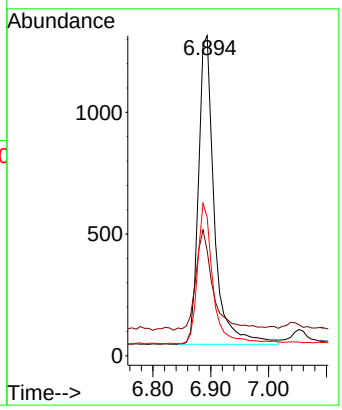


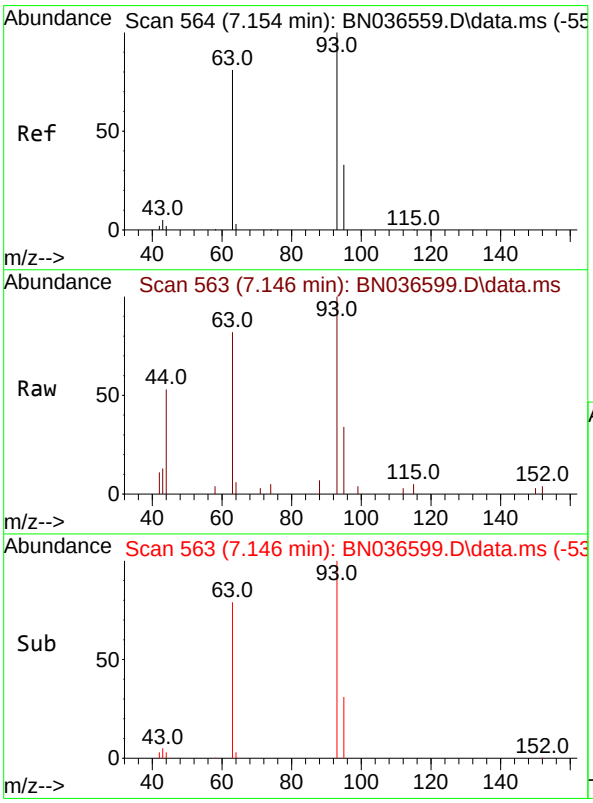
#5
Phenol-d6
Concen: 0.392 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 2419

Ion	Ratio	Lower	Upper
99	100		
42	35.6	26.5	39.7
71	44.3	34.1	51.1

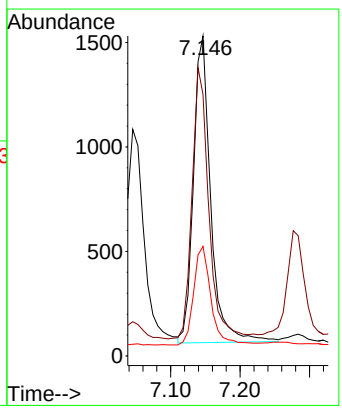


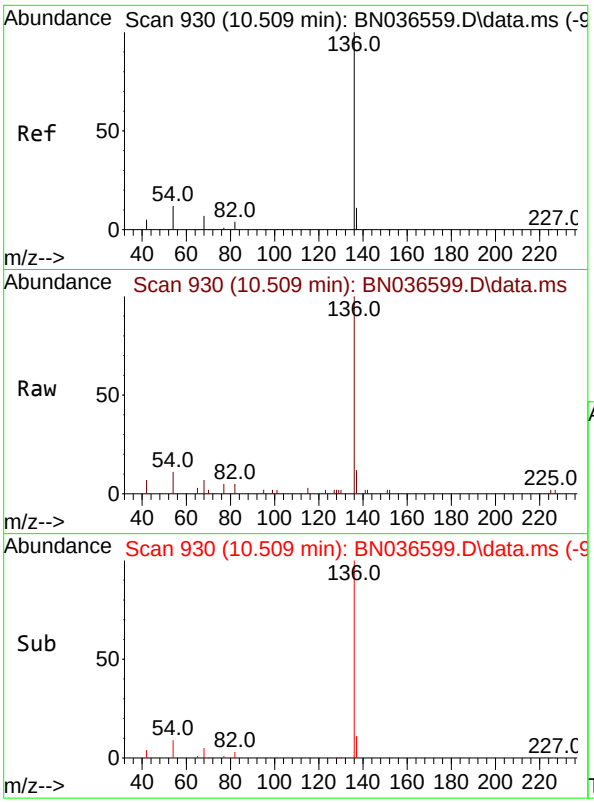


#6
bis(2-Chloroethyl)ether
Concen: 0.397 ng
RT: 7.146 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion: 93 Resp: 2535

Ion	Ratio	Lower	Upper
93	100		
63	85.2	67.7	101.5
95	32.0	25.6	38.4



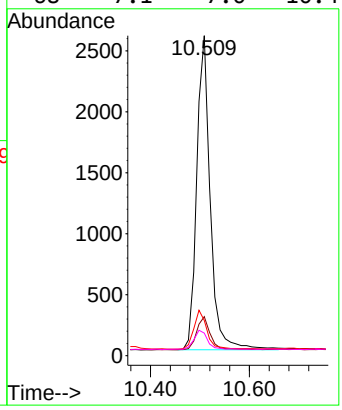


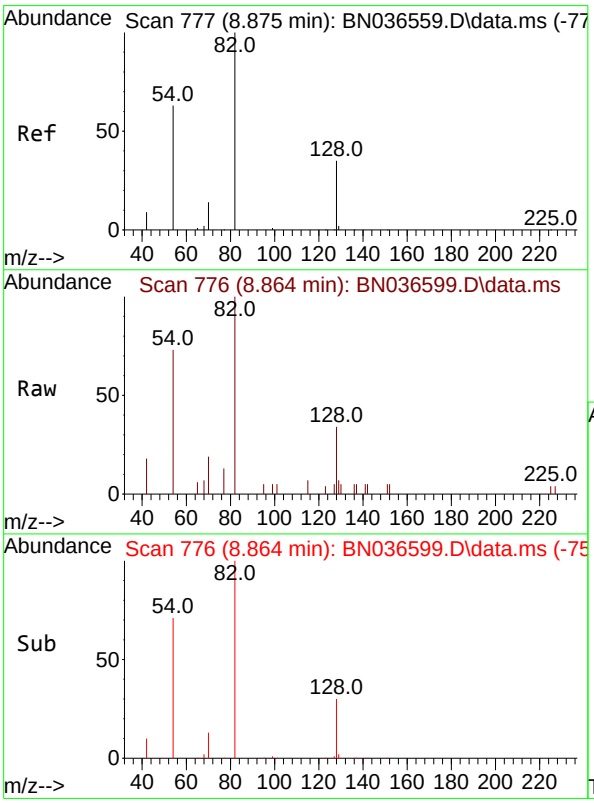
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4893

Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.3	15.5
54	11.0	11.5	17.3#
68	7.1	7.0	10.4

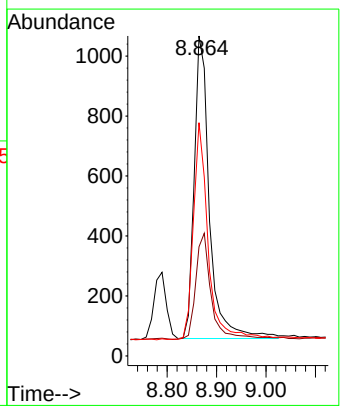


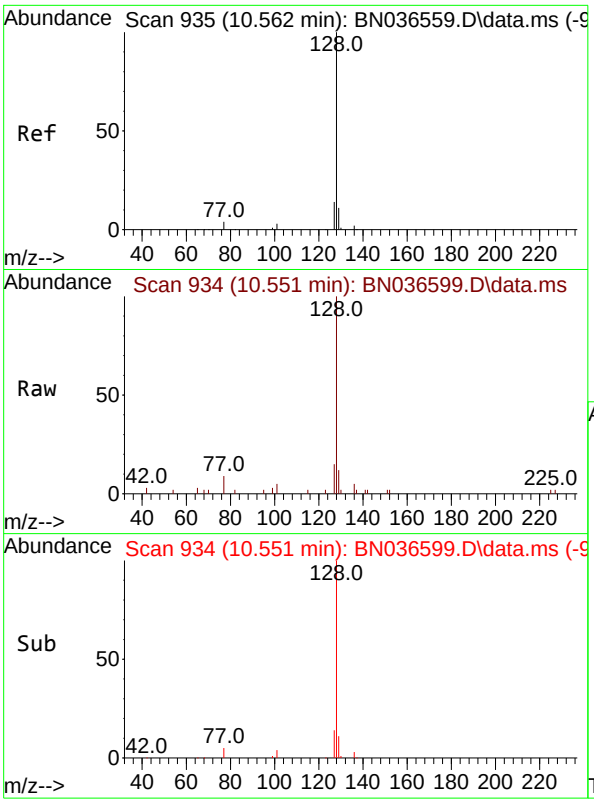


#8
Nitrobenzene-d5
Concen: 0.407 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.011 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion: 82 Resp: 2165

Ion	Ratio	Lower	Upper
82	100		
128	34.1	30.6	45.8
54	72.9	52.2	78.4



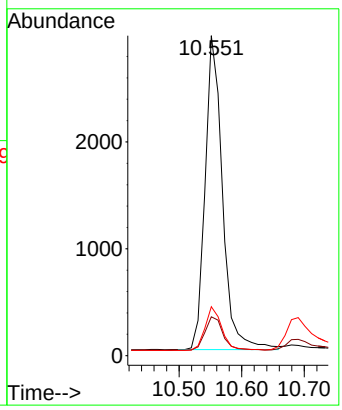


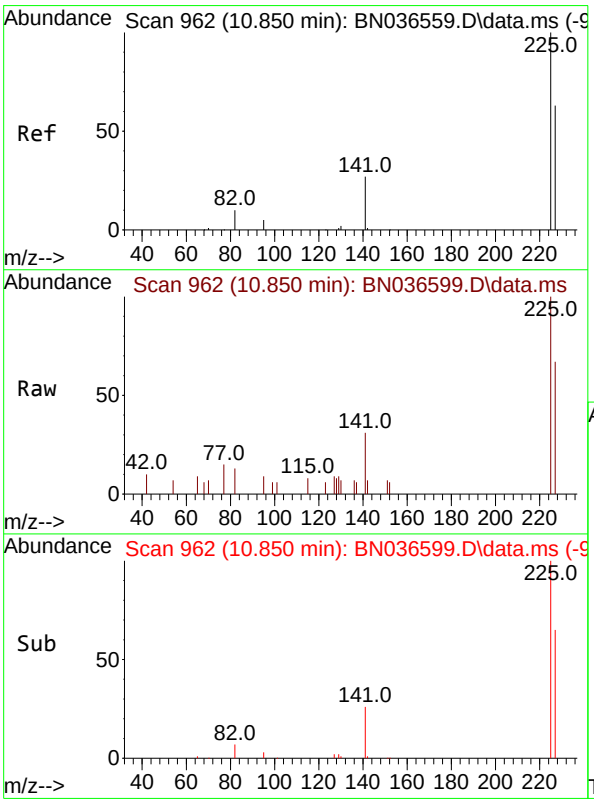
#9
Naphthalene
Concen: 0.393 ng
RT: 10.551 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 5662

Ion	Ratio	Lower	Upper
128	100		
129	12.2	9.8	14.6
127	15.3	11.8	17.8

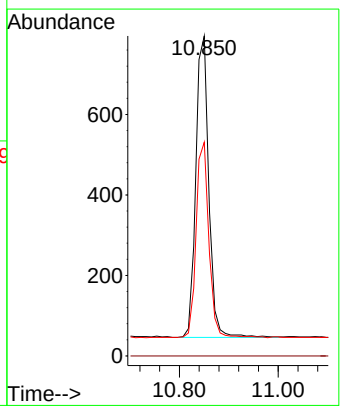


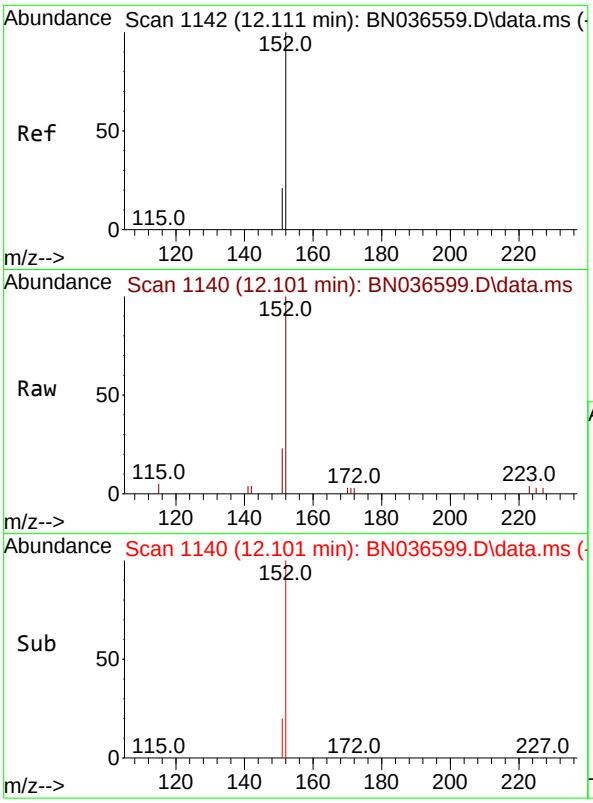


#10
Hexachlorobutadiene
Concen: 0.403 ng
RT: 10.850 min Scan# 962
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:225 Resp: 1364

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	51.8	77.8



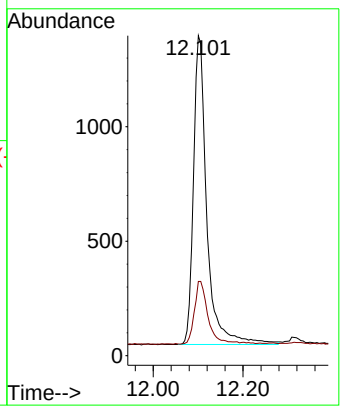


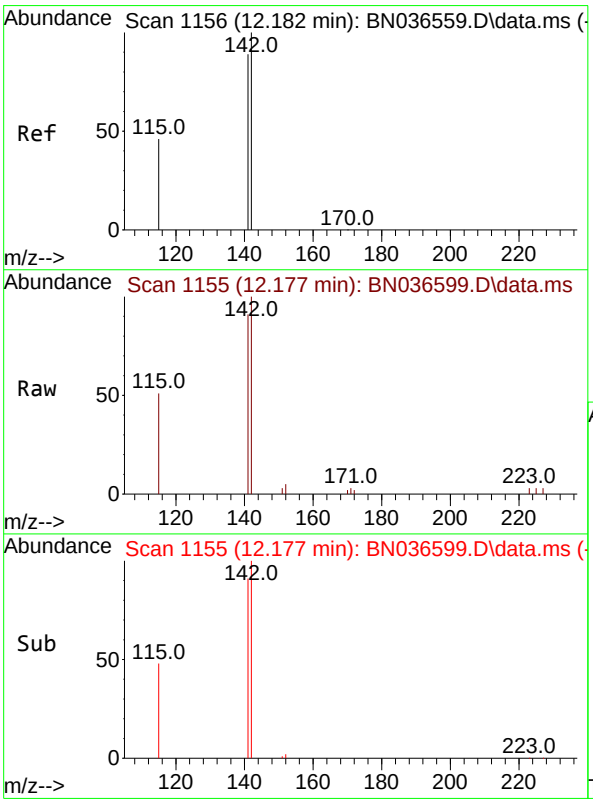
#11
2-Methylnaphthalene-d10
Concen: 0.382 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2781

Ion	Ratio	Lower	Upper
152	100		
151	20.8	17.0	25.6

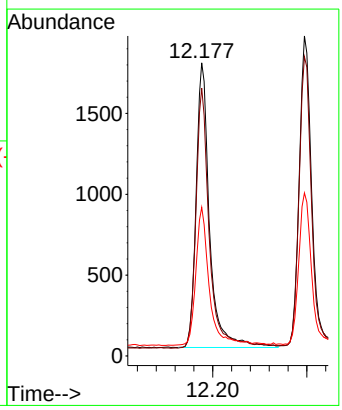


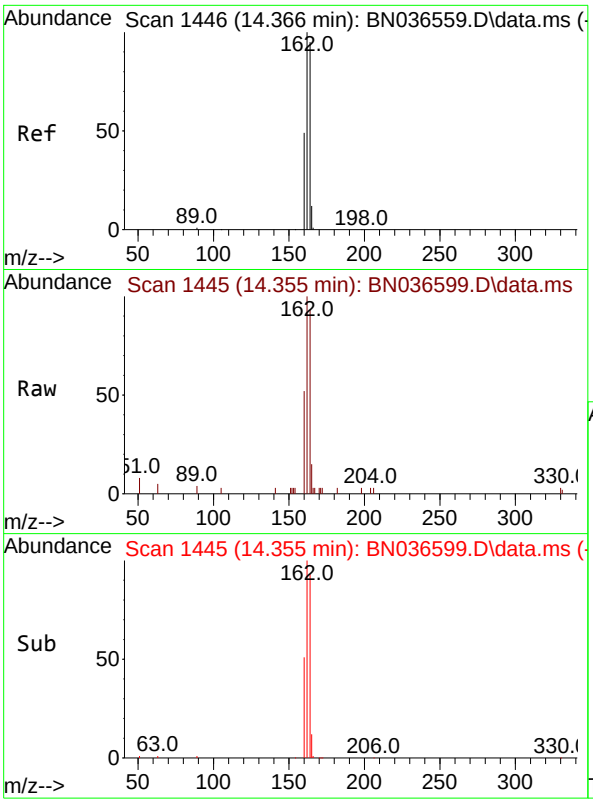


#12
2-Methylnaphthalene
Concen: 0.383 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:142 Resp: 3509

Ion	Ratio	Lower	Upper
142	100		
141	91.4	71.7	107.5
115	50.7	38.3	57.5



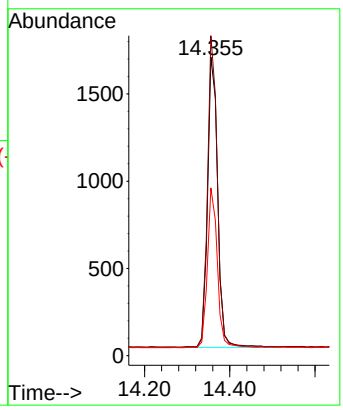


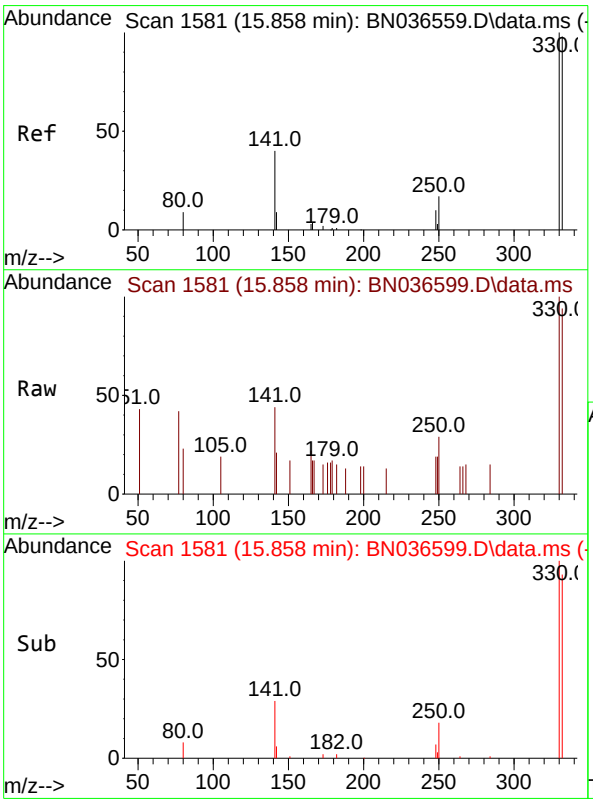
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 2741

Ion	Ratio	Lower	Upper
164	100		
162	107.1	84.2	126.2
160	56.2	42.2	63.2

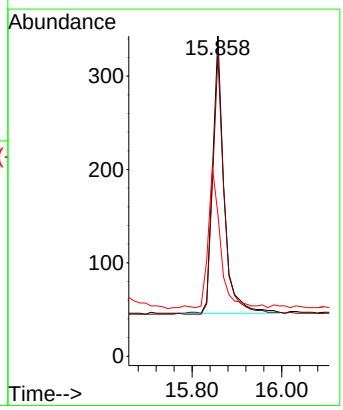


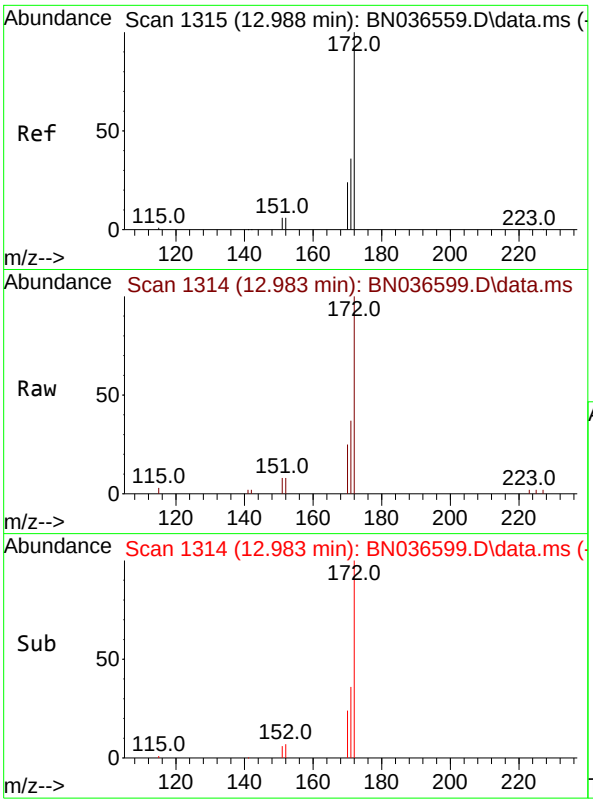


#14
2,4,6-Tribromophenol
Concen: 0.420 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:330 Resp: 523

Ion	Ratio	Lower	Upper
330	100		
332	94.1	75.2	112.8
141	54.3	43.4	65.2



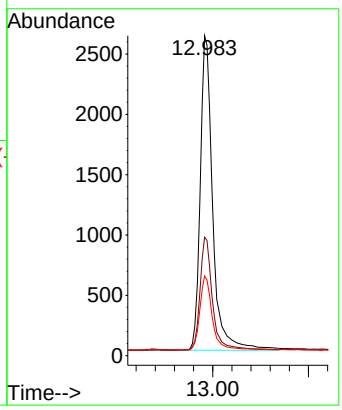


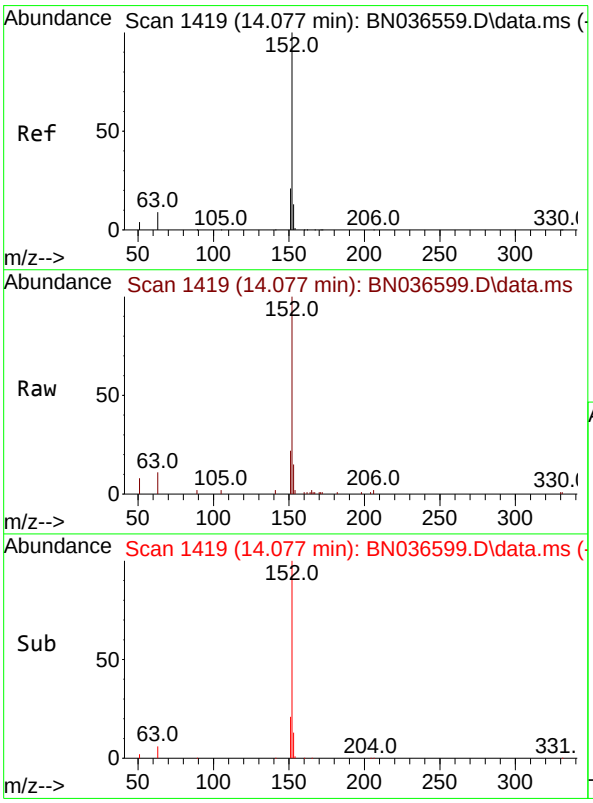
#15
2-Fluorobiphenyl
Concen: 0.407 ng
RT: 12.983 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 6493

Ion	Ratio	Lower	Upper
172	100		
171	37.0	29.5	44.3
170	24.9	20.2	30.4

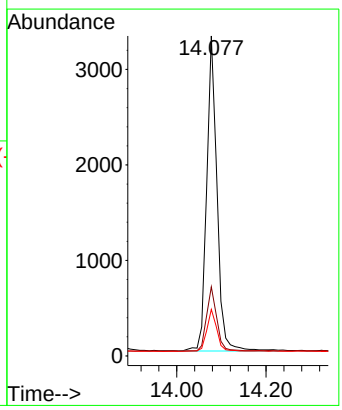


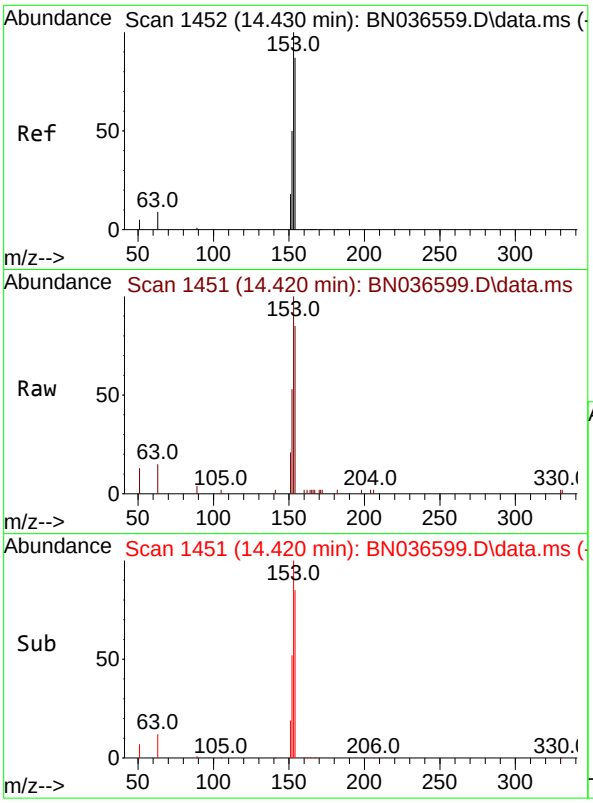


#16
Acenaphthylene
Concen: 0.408 ng
RT: 14.077 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:152 Resp: 5282

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.2	24.4
153	13.4	10.6	15.8



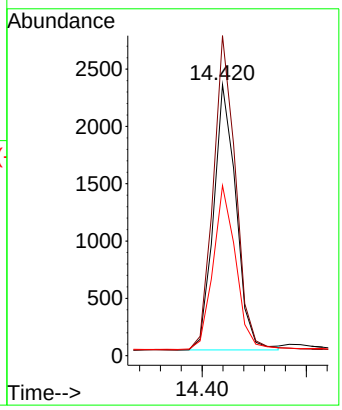


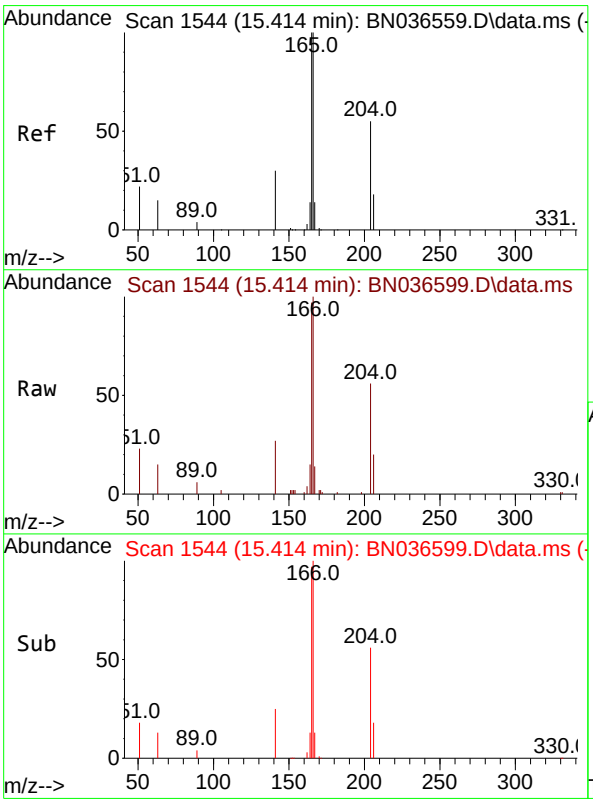
#17
Acenaphthene
Concen: 0.410 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3472

Ion	Ratio	Lower	Upper
154	100		
153	119.3	94.1	141.1
152	62.8	49.8	74.6

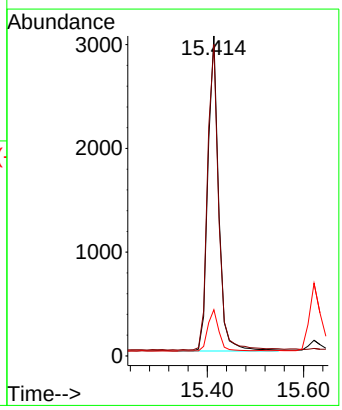


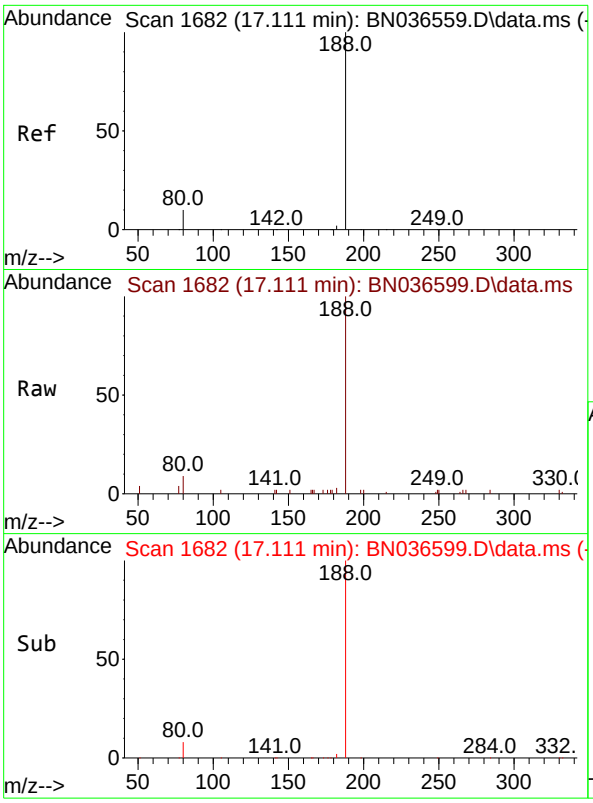


#18
Fluorene
Concen: 0.421 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:166 Resp: 4821

Ion	Ratio	Lower	Upper
166	100		
165	99.9	79.8	119.8
167	13.2	10.6	15.8



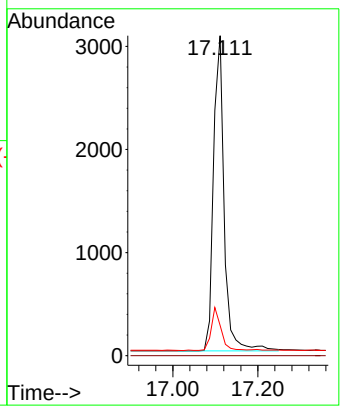


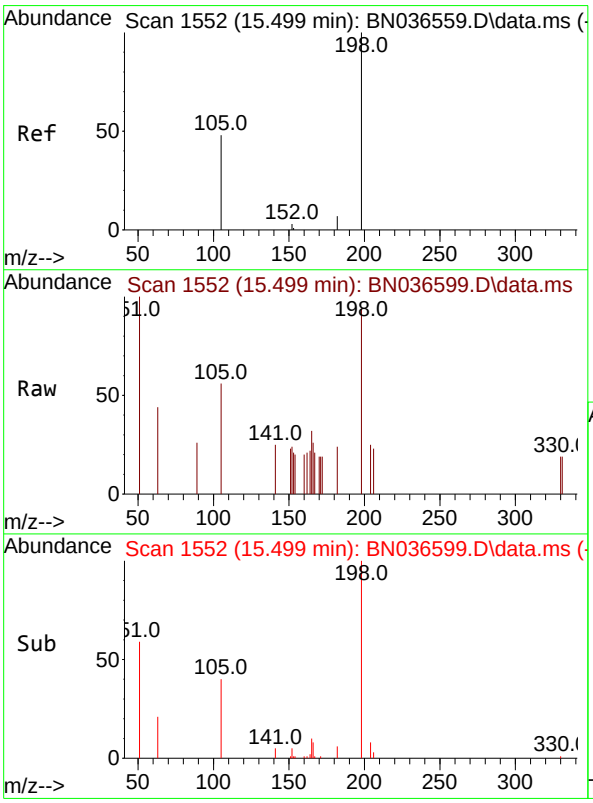
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 5315

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.5	8.8	13.2

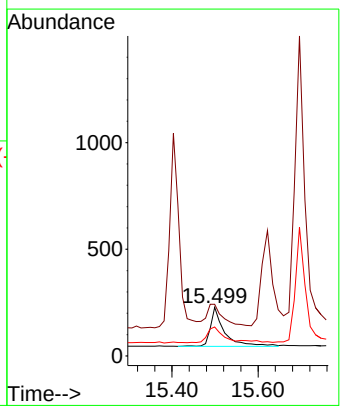


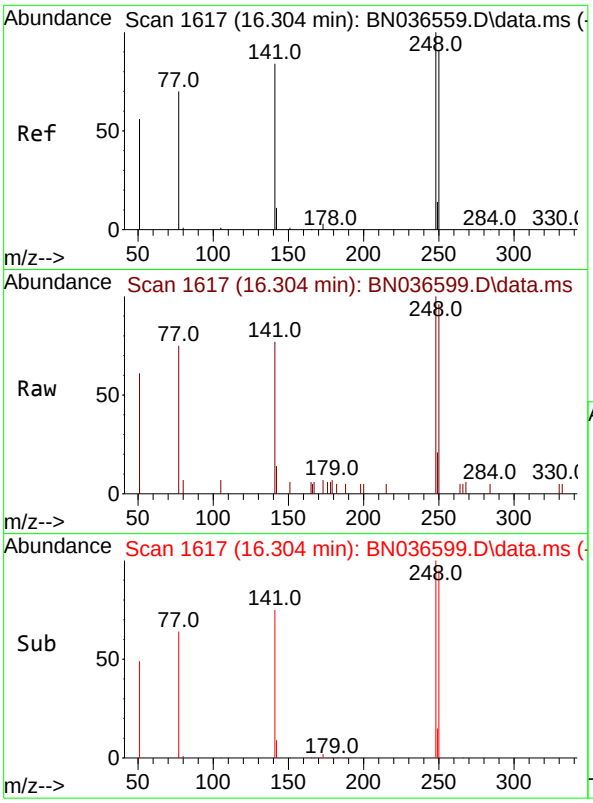


#20
4,6-Dinitro-2-methylphenol
Concen: 0.456 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:198 Resp: 422

Ion	Ratio	Lower	Upper
198	100		
51	106.1	107.9	161.9#
105	59.6	56.2	84.2



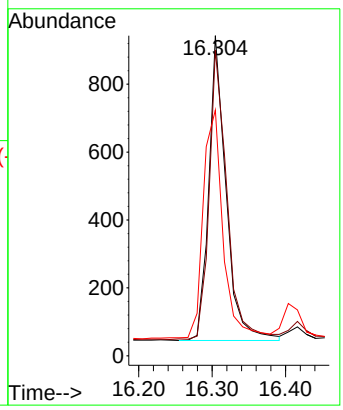


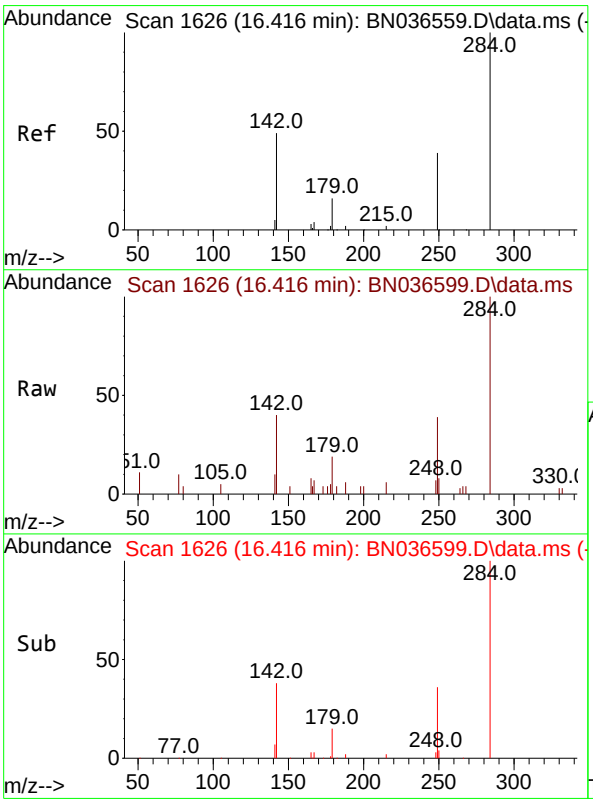
#21
4-Bromophenyl-phenylether
Concen: 0.442 ng
RT: 16.304 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1471

Ion	Ratio	Lower	Upper
248	100		
250	95.5	73.0	109.6
141	76.8	68.6	103.0

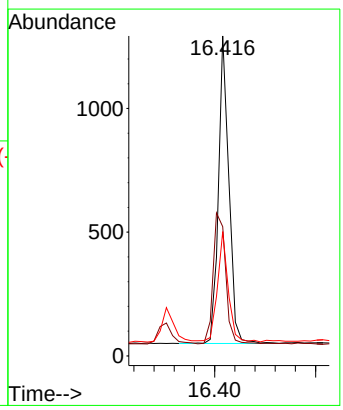


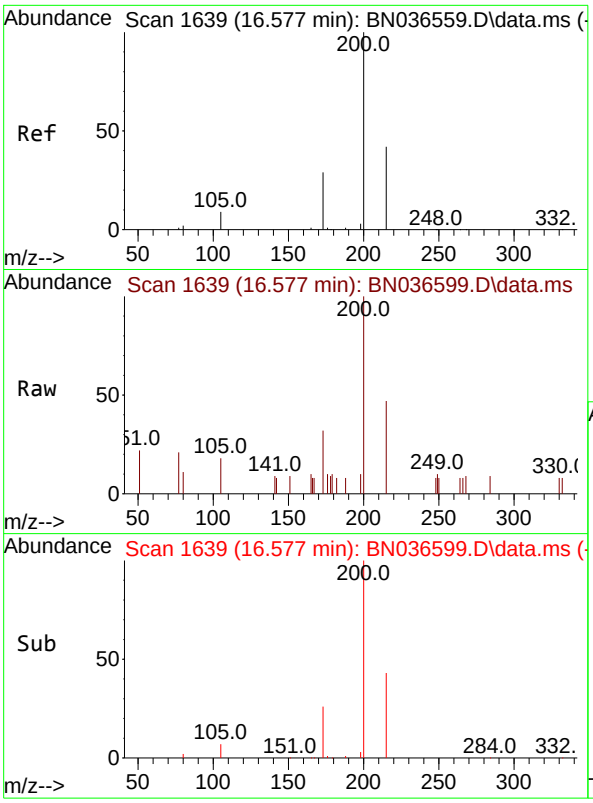


#22
Hexachlorobenzene
Concen: 0.442 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:284 Resp: 1775

Ion	Ratio	Lower	Upper
284	100		
142	51.2	37.0	55.4
249	36.8	28.1	42.1



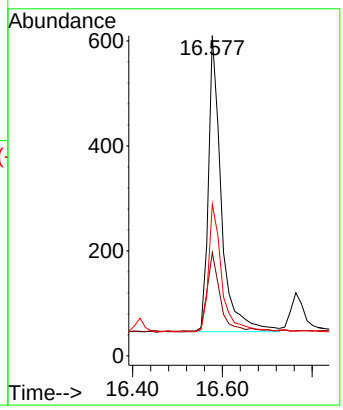


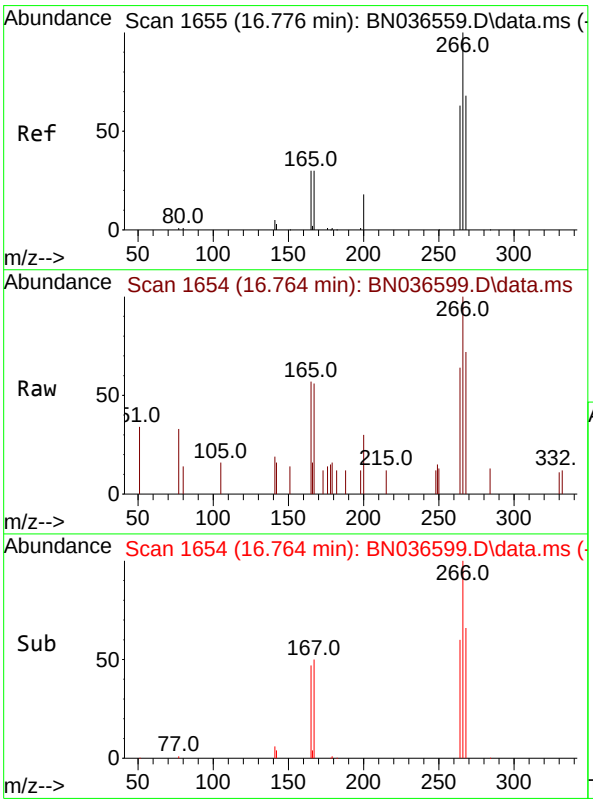
#23
Atrazine
Concen: 0.422 ng
RT: 16.577 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1127

Ion	Ratio	Lower	Upper
200	100		
173	32.3	27.3	40.9
215	47.4	36.8	55.2

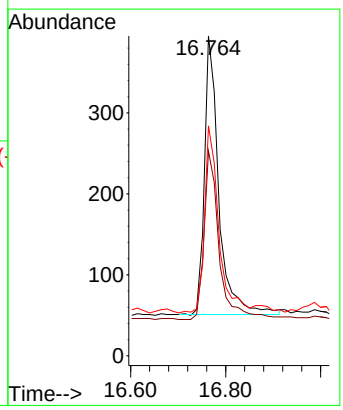


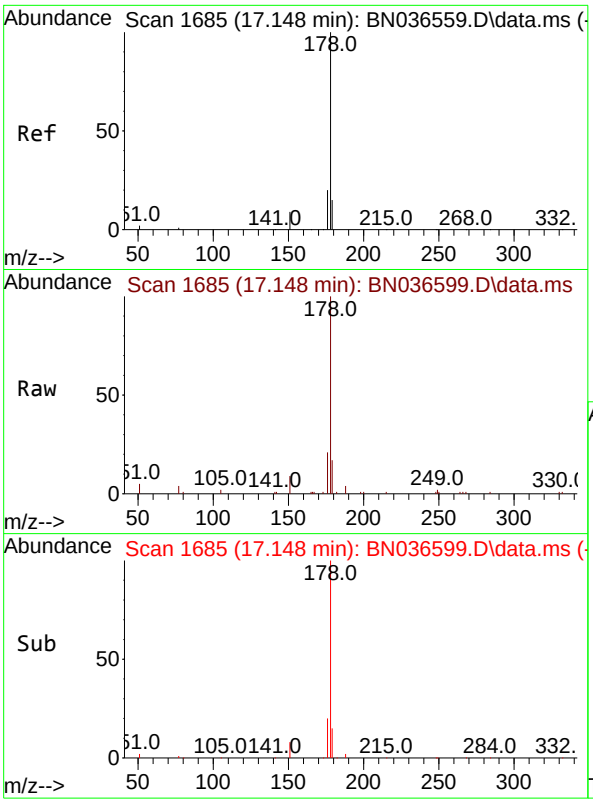


#24
Pentachlorophenol
Concen: 0.397 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:266 Resp: 728

Ion	Ratio	Lower	Upper
266	100		
264	63.2	49.6	74.4
268	65.9	50.9	76.3



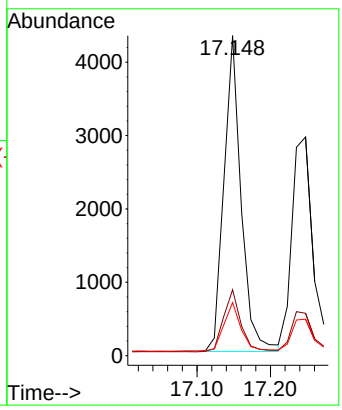


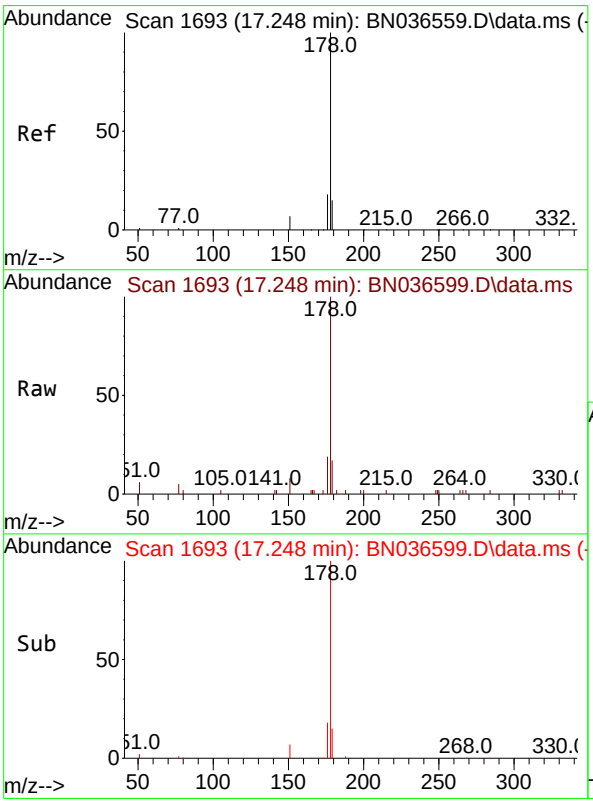
#25
Phenanthrene
Concen: 0.439 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 6995

Ion	Ratio	Lower	Upper
178	100		
176	19.8	15.9	23.9
179	15.6	12.2	18.4

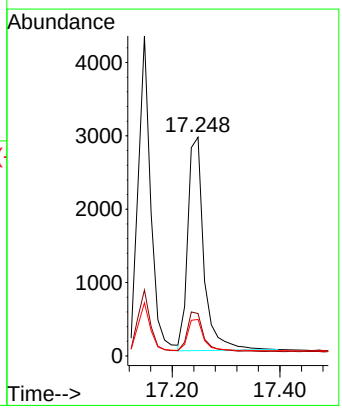


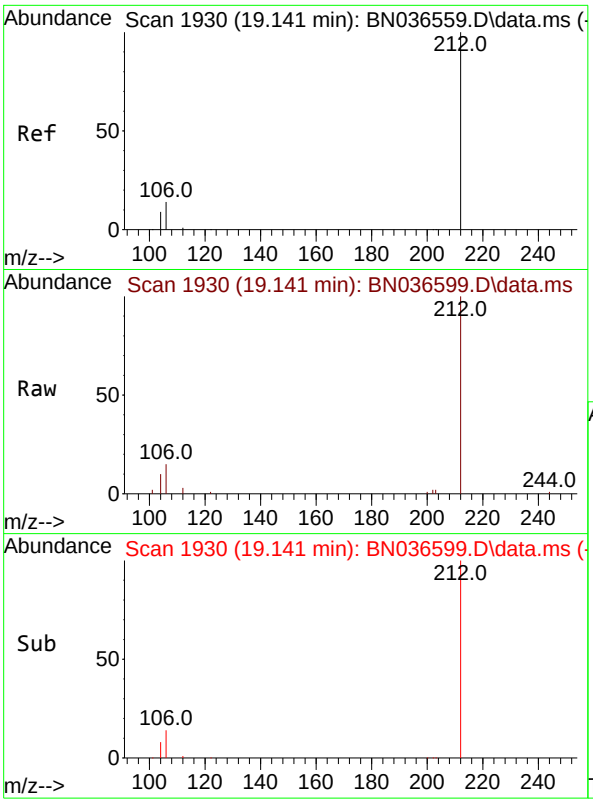


#26
Anthracene
Concen: 0.420 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:178 Resp: 6038

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.4	23.2
179	14.8	12.6	18.8



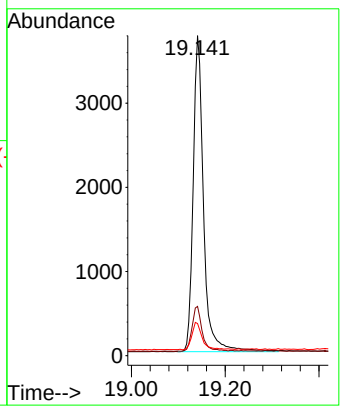


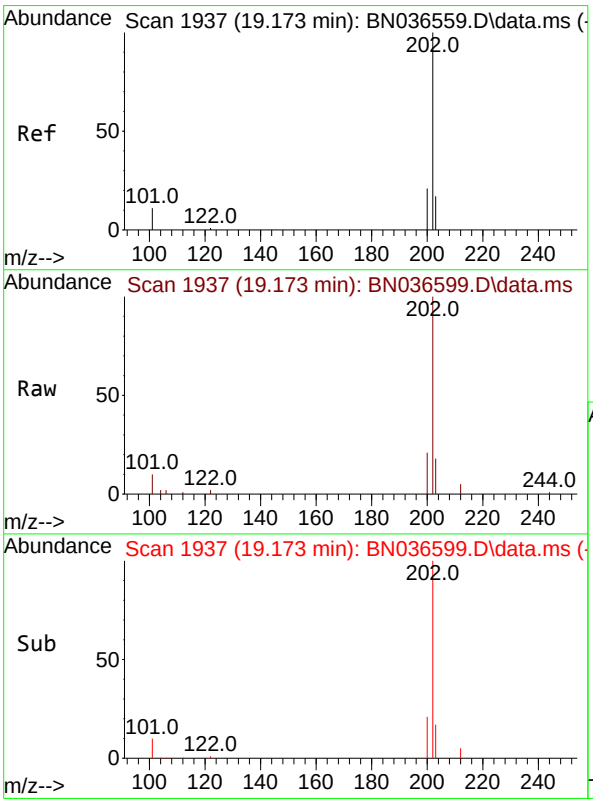
#27
Fluoranthene-d10
Concen: 0.425 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:212 Resp: 5789

Ion	Ratio	Lower	Upper
212	100		
106	13.9	11.8	17.6
104	8.4	7.3	10.9

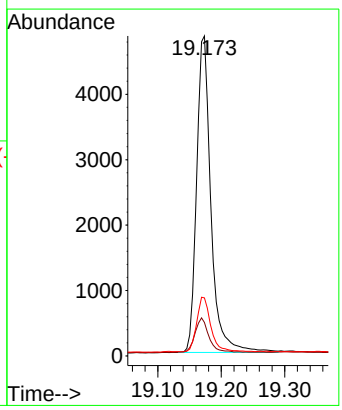


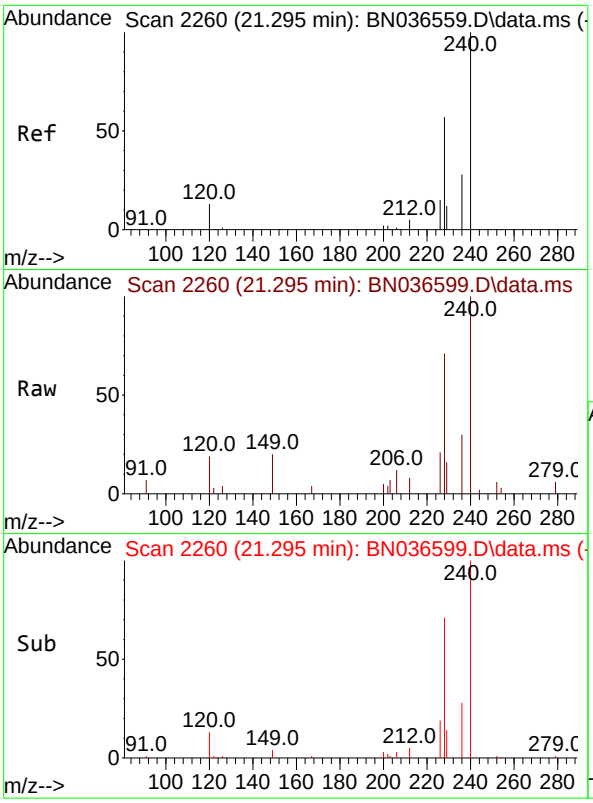


#28
Fluoranthene
Concen: 0.424 ng
RT: 19.173 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:202 Resp: 7601

Ion	Ratio	Lower	Upper
202	100		
101	10.8	9.4	14.0
203	17.0	13.5	20.3



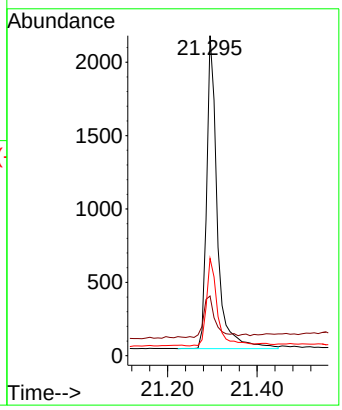


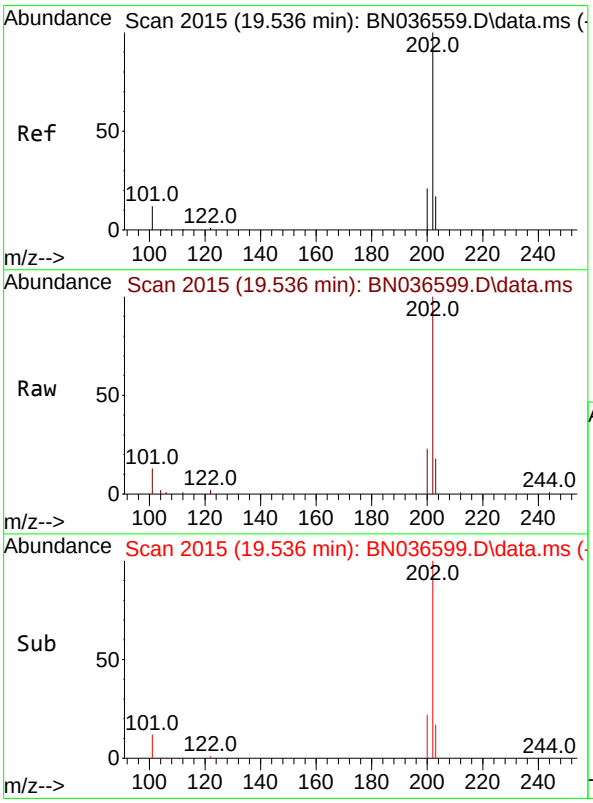
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 3522

Ion	Ratio	Lower	Upper
240	100		
120	18.7	14.6	22.0
236	30.4	24.1	36.1

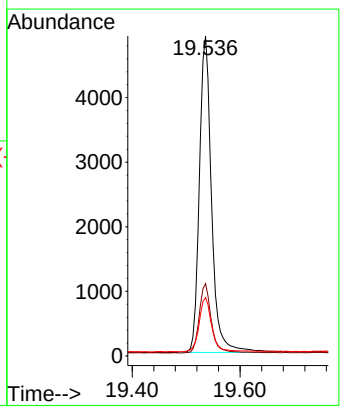


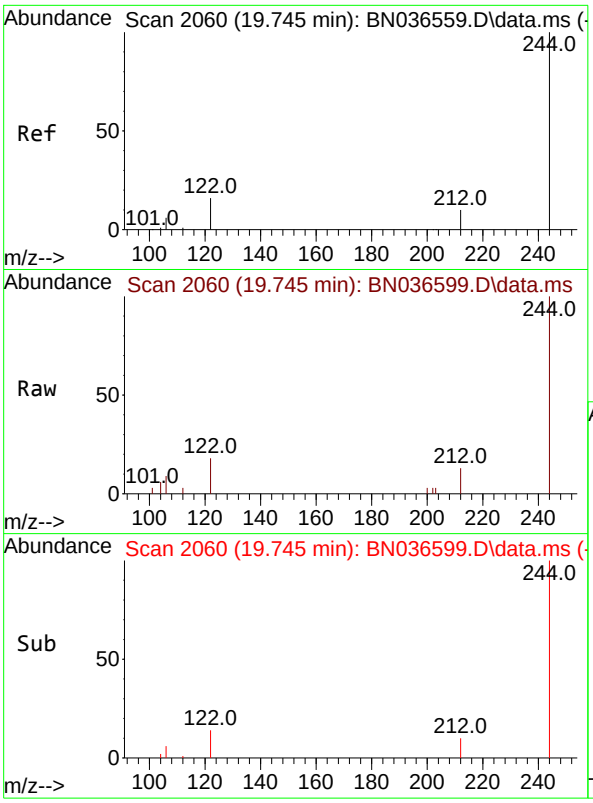


#30
Pyrene
Concen: 0.447 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:202 Resp: 7693

Ion	Ratio	Lower	Upper
202	100		
200	21.6	17.1	25.7
203	17.9	14.1	21.1



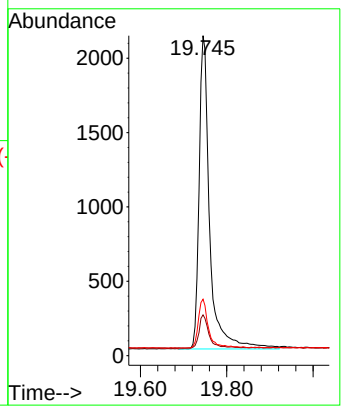


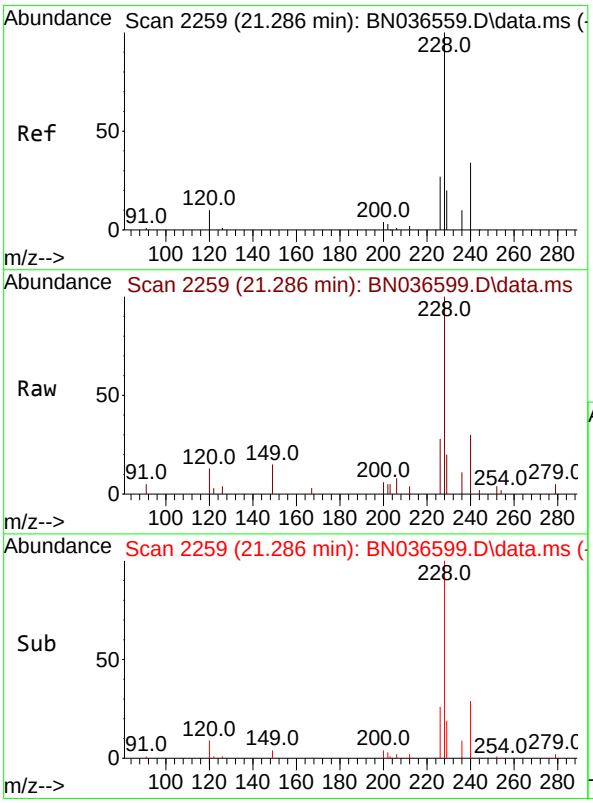
#31
Terphenyl-d14
Concen: 0.425 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 3590

Ion	Ratio	Lower	Upper
244	100		
212	12.7	9.6	14.4
122	17.6	13.9	20.9

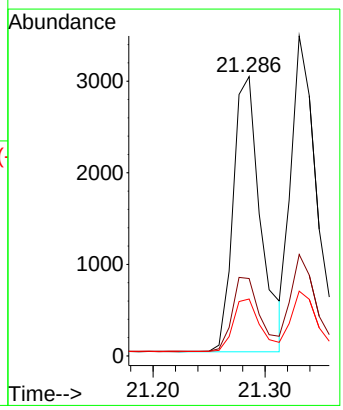


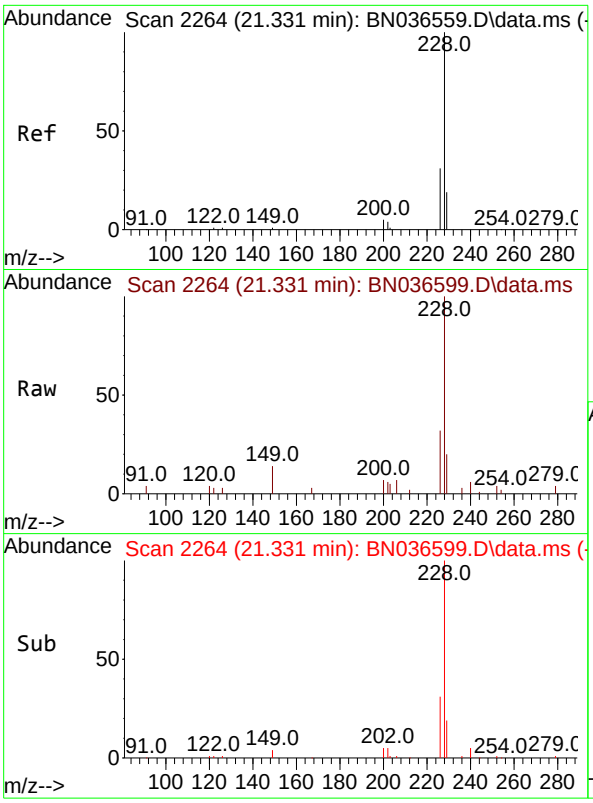


#32
Benzo(a)anthracene
Concen: 0.417 ng
RT: 21.286 min Scan# 2259
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:228 Resp: 5109

Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.5	33.7
229	20.4	16.6	25.0



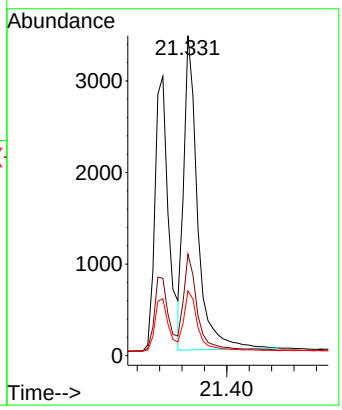


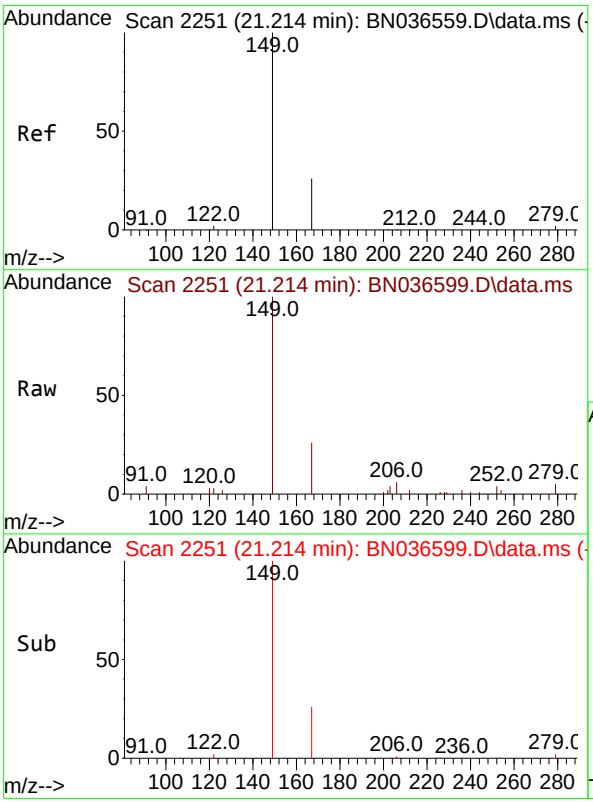
#33
Chrysene
Concen: 0.440 ng
RT: 21.331 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 5894

Ion	Ratio	Lower	Upper
228	100		
226	31.7	25.3	37.9
229	20.2	15.8	23.8

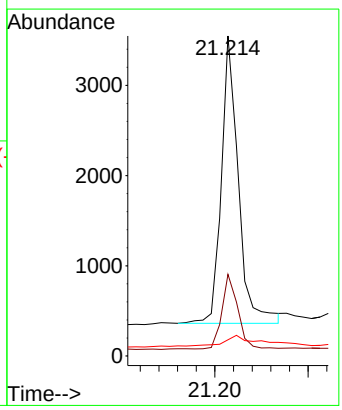


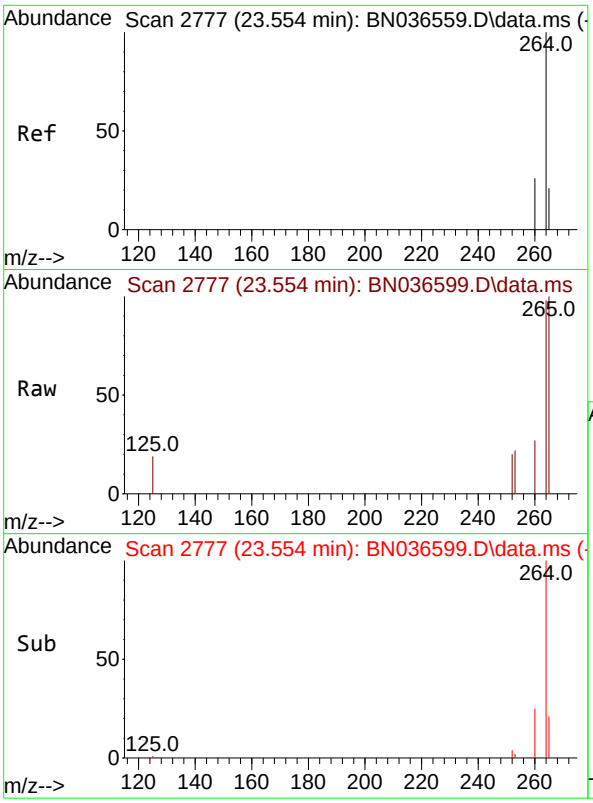


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.462 ng
RT: 21.214 min Scan# 2251
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:149 Resp: 4026

Ion	Ratio	Lower	Upper
149	100		
167	24.2	20.7	31.1
279	6.9	3.6	5.4#



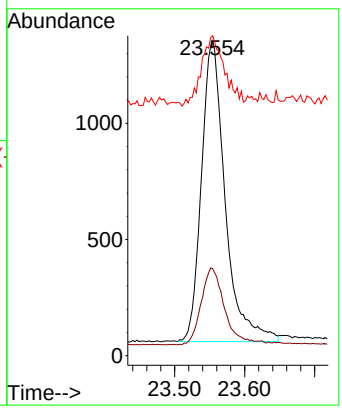


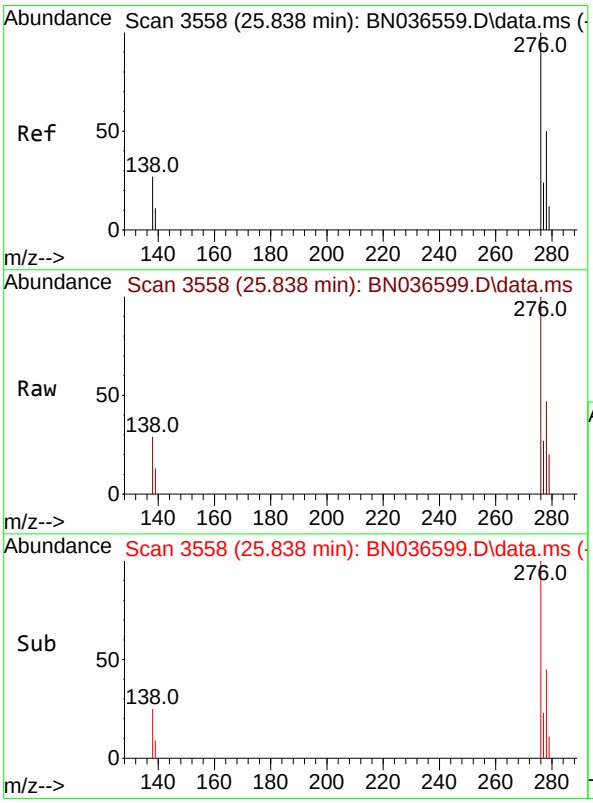
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 3048

Ion	Ratio	Lower	Upper
264	100		
260	27.6	22.6	33.8
265	101.7	88.1	132.1

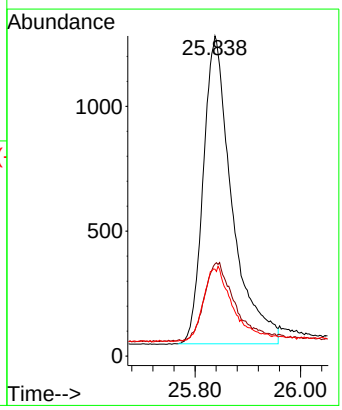


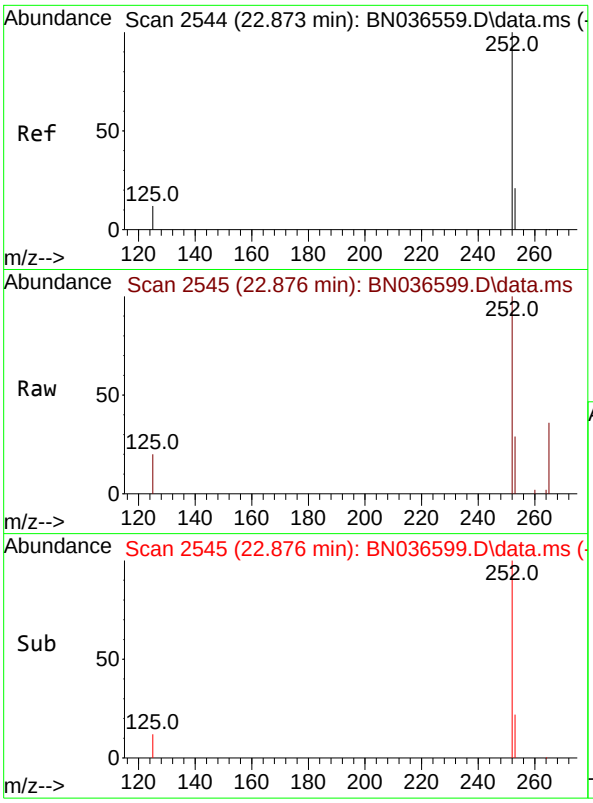


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.422 ng
RT: 25.838 min Scan# 3558
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:276 Resp: 4646

Ion	Ratio	Lower	Upper
276	100		
138	27.0	23.4	35.2
277	24.7	20.0	30.0



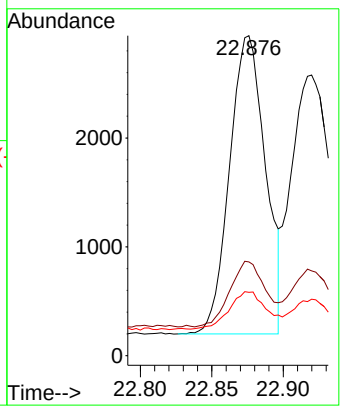


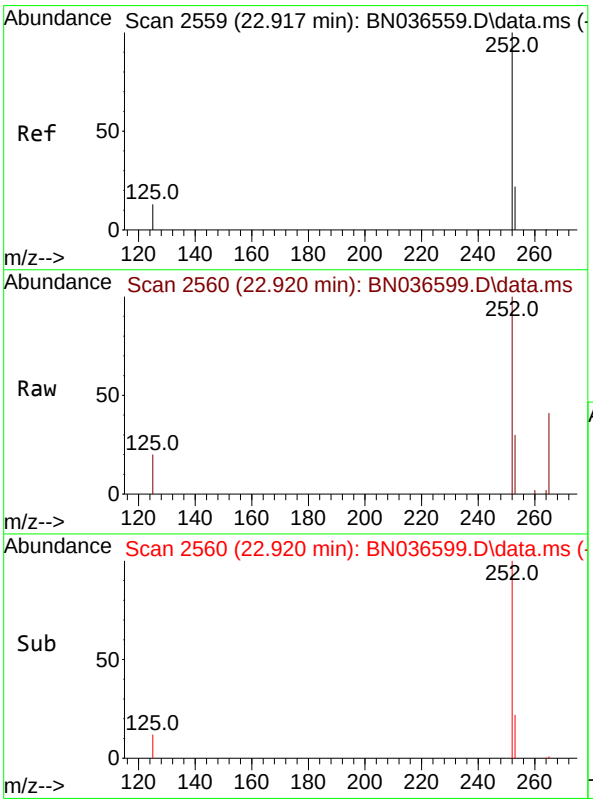
#37
Benzo(b)fluoranthene
Concen: 0.432 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4787

Ion	Ratio	Lower	Upper
252	100		
253	29.3	23.9	35.9
125	19.8	17.4	26.2

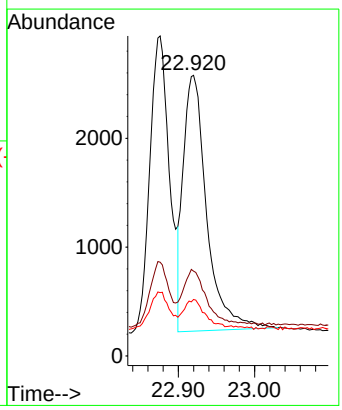


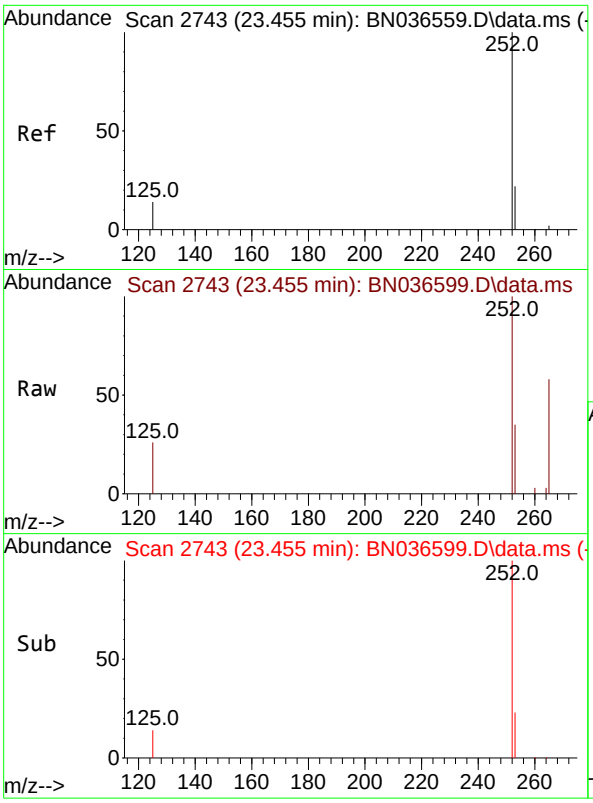


#38
Benzo(k)fluoranthene
Concen: 0.431 ng
RT: 22.920 min Scan# 2560
Delta R.T. 0.003 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:252 Resp: 5015

Ion	Ratio	Lower	Upper
252	100		
253	30.2	24.6	36.8
125	20.1	17.8	26.8



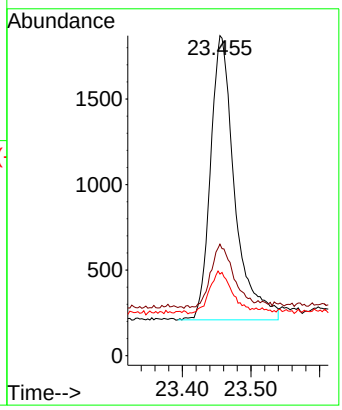


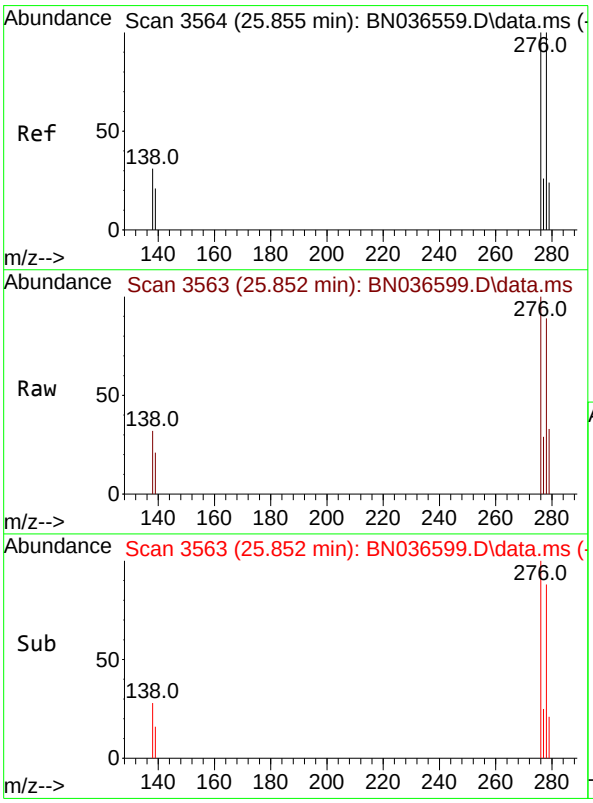
#39
Benzo(a)pyrene
Concen: 0.434 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4056

Ion	Ratio	Lower	Upper
252	100		
253	34.9	27.8	41.8
125	25.5	22.7	34.1

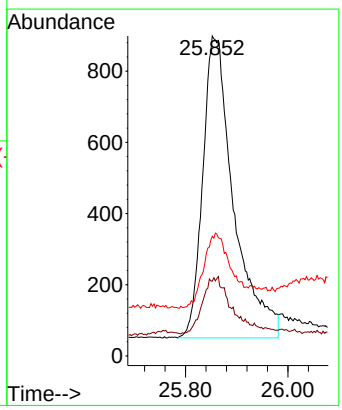


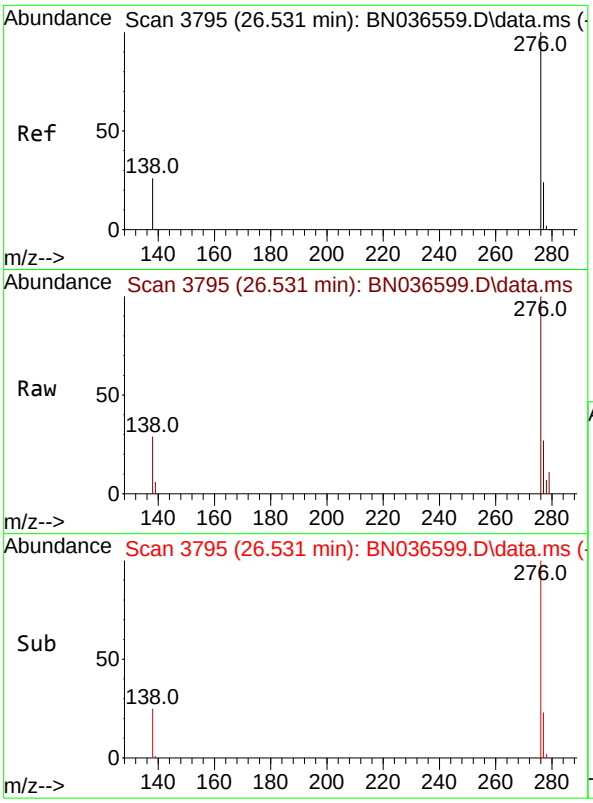


#40
Dibenzo(a,h)anthracene
Concen: 0.414 ng
RT: 25.852 min Scan# 3563
Delta R.T. -0.003 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Tgt Ion:278 Resp: 3545

Ion	Ratio	Lower	Upper
278	100		
139	23.4	20.8	31.2
279	37.4	28.8	43.2



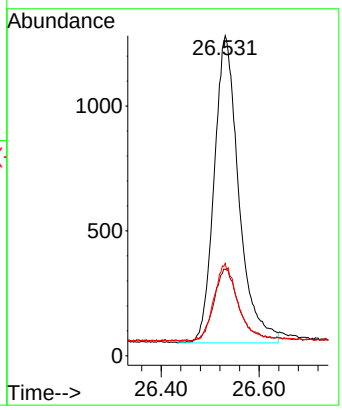


#41
Benzo(g,h,i)perylene
Concen: 0.438 ng
RT: 26.531 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN036599.D
Acq: 12 Mar 2025 14:39

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 4295

Ion	Ratio	Lower	Upper
276	100		
277	27.0	22.2	33.4
138	28.9	24.1	36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036599.D
Acq On : 12 Mar 2025 14:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 12 15:13:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	97	0.00
2		1,4-Dioxane	0.444	0.504	-13.5	98	0.00
3		n-Nitrosodimethylamine	0.898	0.969	-7.9	101	0.00
4	S	2-Fluorophenol	0.932	0.958	-2.8	94	0.00
5	S	Phenol-d6	1.152	1.129	2.0	97	0.00
6		bis(2-Chloroethyl)ether	1.190	1.183	0.6	97	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	96	0.00
8	S	Nitrobenzene-d5	0.435	0.442	-1.6	102	-0.01
9		Naphthalene	1.177	1.157	1.7	92	-0.01
10		Hexachlorobutadiene	0.277	0.279	-0.7	91	0.00
11	SURR	2-Methylnaphthalene-d10	0.595	0.568	4.5	90	-0.01
12		2-Methylnaphthalene	0.749	0.717	4.3	90	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	91	-0.01
14	S	2,4,6-Tribromophenol	0.182	0.191	-4.9	92	0.00
15	S	2-Fluorobiphenyl	2.327	2.369	-1.8	89	0.00
16		Acenaphthylene	1.888	1.927	-2.1	90	0.00
17		Acenaphthene	1.236	1.267	-2.5	90	-0.01
18		Fluorene	1.672	1.759	-5.2	90	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	89	0.00
20		4,6-Dinitro-2-methylphenol	0.086	0.079	8.1	91	0.00
21		4-Bromophenyl-phenylether	0.251	0.277	-10.4	89	0.00
22		Hexachlorobenzene	0.303	0.334	-10.2	88	0.00
23		Atrazine	0.201	0.212	-5.5	88	0.00
24		Pentachlorophenol	0.138	0.137	0.7	89	-0.01
25		Phenanthrene	1.200	1.316	-9.7	90	0.00
26		Anthracene	1.083	1.136	-4.9	88	0.00
27	SURR	Fluoranthene-d10	1.025	1.089	-6.2	86	0.00
28		Fluoranthene	1.348	1.430	-6.1	87	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	86	0.00
30		Pyrene	1.956	2.184	-11.7	88	0.00
31	S	Terphenyl-d14	0.958	1.019	-6.4	85	0.00
32		Benzo(a)anthracene	1.391	1.451	-4.3	86	0.00
33		Chrysene	1.520	1.673	-10.1	89	0.00
34		Bis(2-ethylhexyl)phthalate	0.990	1.143	-15.5	94	0.00
35	I	Perylene-d12	1.000	1.000	0.0	86	0.00
36		Indeno(1,2,3-cd)pyrene	1.444	1.524	-5.5	85	0.00
37		Benzo(b)fluoranthene	1.456	1.571	-7.9	87	0.00
38		Benzo(k)fluoranthene	1.527	1.645	-7.7	87	0.00
39	C	Benzo(a)pyrene	1.226	1.331	-8.6	88	0.00
40		Dibenzo(a,h)anthracene	1.124	1.163	-3.5	86	0.00
41		Benzo(g,h,i)perylene	1.286	1.409	-9.6	88	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036599.D
Acq On : 12 Mar 2025 14:39
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Mar 12 15:13:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
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	97	0.00
2		1,4-Dioxane	0.400	0.454	-13.5	98	0.00
3		n-Nitrosodimethylamine	0.400	0.432	-8.0	101	0.00
4	S	2-Fluorophenol	0.400	0.411	-2.7	94	0.00
5	S	Phenol-d6	0.400	0.392	2.0	97	0.00
6		bis(2-Chloroethyl)ether	0.400	0.397	0.8	97	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	96	0.00
8	S	Nitrobenzene-d5	0.400	0.407	-1.7	102	-0.01
9		Naphthalene	0.400	0.393	1.8	92	-0.01
10		Hexachlorobutadiene	0.400	0.403	-0.8	91	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.382	4.5	90	-0.01
12		2-Methylnaphthalene	0.400	0.383	4.3	90	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	91	-0.01
14	S	2,4,6-Tribromophenol	0.400	0.420	-5.0	92	0.00
15	S	2-Fluorobiphenyl	0.400	0.407	-1.7	89	0.00
16		Acenaphthylene	0.400	0.408	-2.0	90	0.00
17		Acenaphthene	0.400	0.410	-2.5	90	-0.01
18		Fluorene	0.400	0.421	-5.2	90	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	89	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.456	-14.0	91	0.00
21		4-Bromophenyl-phenylether	0.400	0.442	-10.5	89	0.00
22		Hexachlorobenzene	0.400	0.442	-10.5	88	0.00
23		Atrazine	0.400	0.422	-5.5	88	0.00
24		Pentachlorophenol	0.400	0.397	0.8	89	-0.01
25		Phenanthrene	0.400	0.439	-9.7	90	0.00
26		Anthracene	0.400	0.420	-5.0	88	0.00
27	SURR	Fluoranthene-d10	0.400	0.425	-6.2	86	0.00
28		Fluoranthene	0.400	0.424	-6.0	87	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	86	0.00
30		Pyrene	0.400	0.447	-11.7	88	0.00
31	S	Terphenyl-d14	0.400	0.425	-6.2	85	0.00
32		Benzo(a)anthracene	0.400	0.417	-4.2	86	0.00
33		Chrysene	0.400	0.440	-10.0	89	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.462	-15.5	94	0.00
35	I	Perylene-d12	0.400	0.400	0.0	86	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.422	-5.5	85	0.00
37		Benzo(b)fluoranthene	0.400	0.432	-8.0	87	0.00
38		Benzo(k)fluoranthene	0.400	0.431	-7.7	87	0.00
39	C	Benzo(a)pyrene	0.400	0.434	-8.5	88	0.00
40		Dibenzo(a,h)anthracene	0.400	0.414	-3.5	86	0.00
41		Benzo(g,h,i)perylene	0.400	0.438	-9.5	88	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

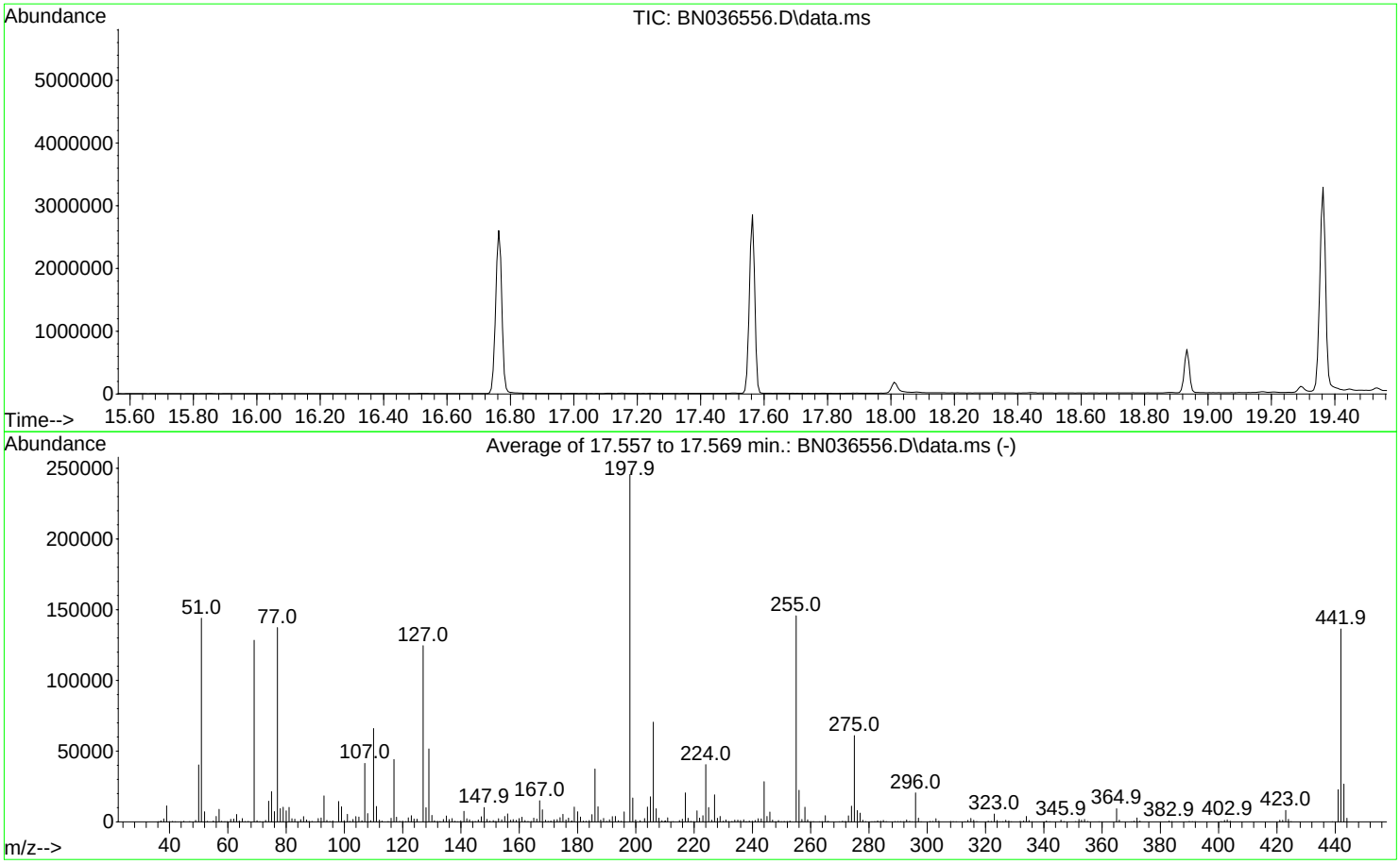
QC SAMPLE DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036556.D
Acq On : 10 Mar 2025 11:03
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-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	58.6	144050	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.3	128410	PASS
70	69	0.00	2	0.7	835	PASS
127	198	10	80	50.7	124576	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	245632	PASS
199	198	5	9	6.9	16887	PASS
275	198	10	60	24.8	60997	PASS
365	198	1	100	3.8	9349	PASS
441	198	0.01	100	9.3	22761	PASS
442	442	50	100	100.0	136488	PASS
443	442	15	24	19.6	26765	PASS

Instrument :
BNA_N
ClientSampleId :
DFTPP

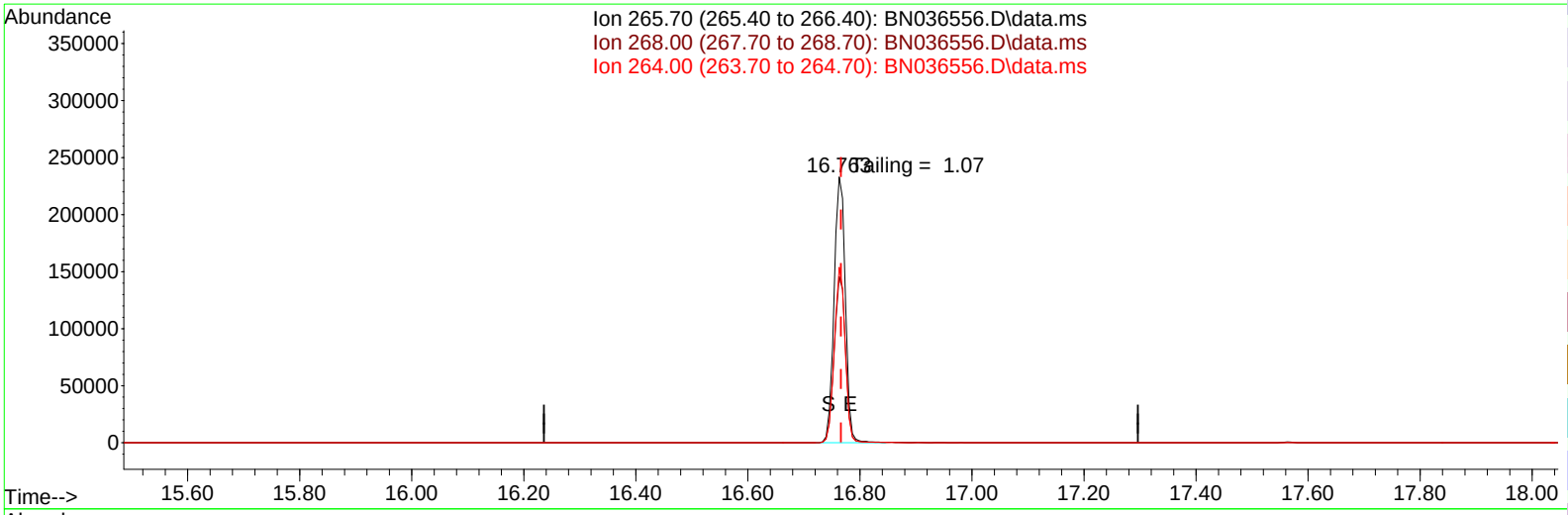
DDT Breakdown

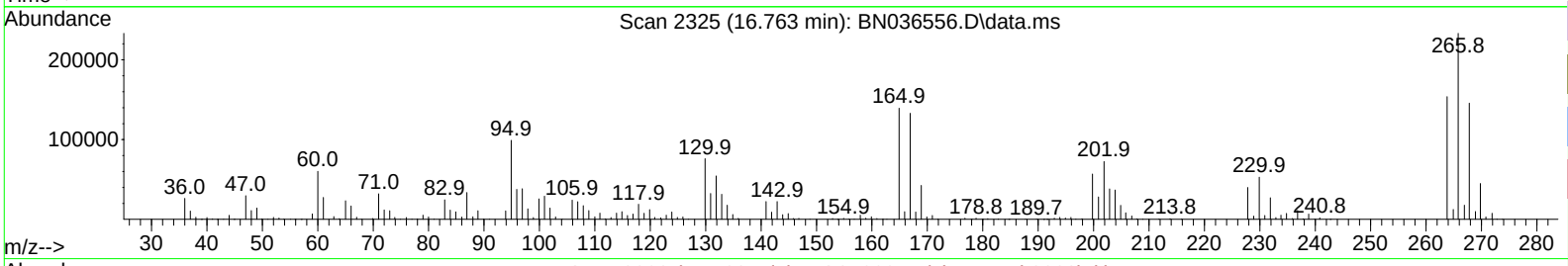
Date	Instrument Name	DFTPP Data File
3/10/2025	BNA_N	BN036556.D
Compound Name	**Response**	**Retention Time**
DDT	1110406	20.598
DDD	11596	20.21
DDE	530	19.645
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
12126	1122532	1.08

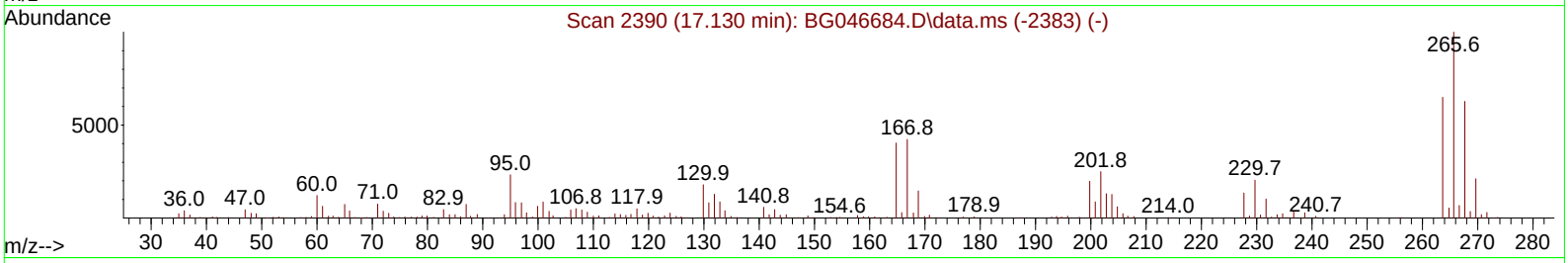
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036556.D
Acq On : 10 Mar 2025 11:03
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Mar 10 17:07:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration







TIC: BN036556.D\data.ms

(70) Pentachlorophenol (C)

16.763min (-0.003) 23577.14 ng

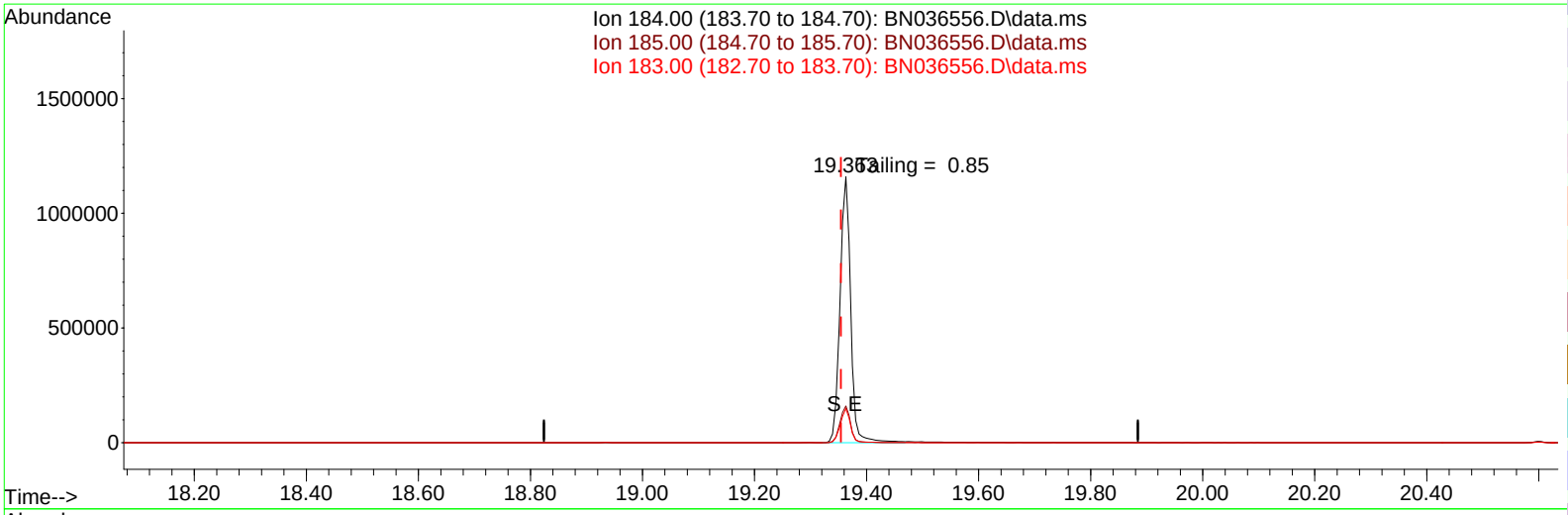
response 323613

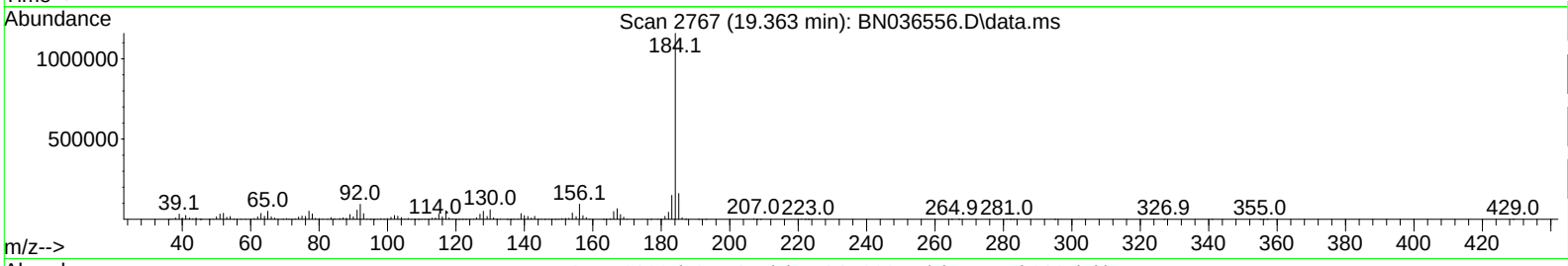
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	62.52
264.00	61.60	66.01
0.00	0.00	0.00

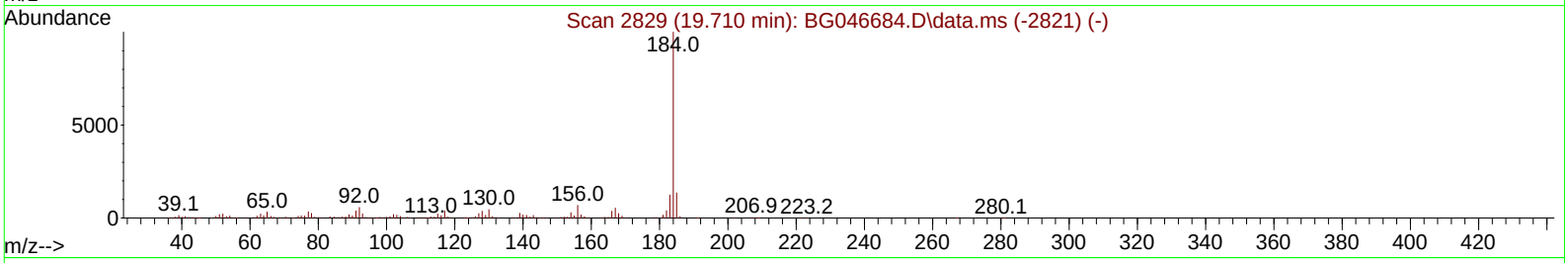
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036556.D
Acq On : 10 Mar 2025 11:03
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Mar 10 17:07:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration







TIC: BN036556.D\data.ms

(77) Benzidine

19.363min (+ 0.009) 0.00 ng

response 1553313

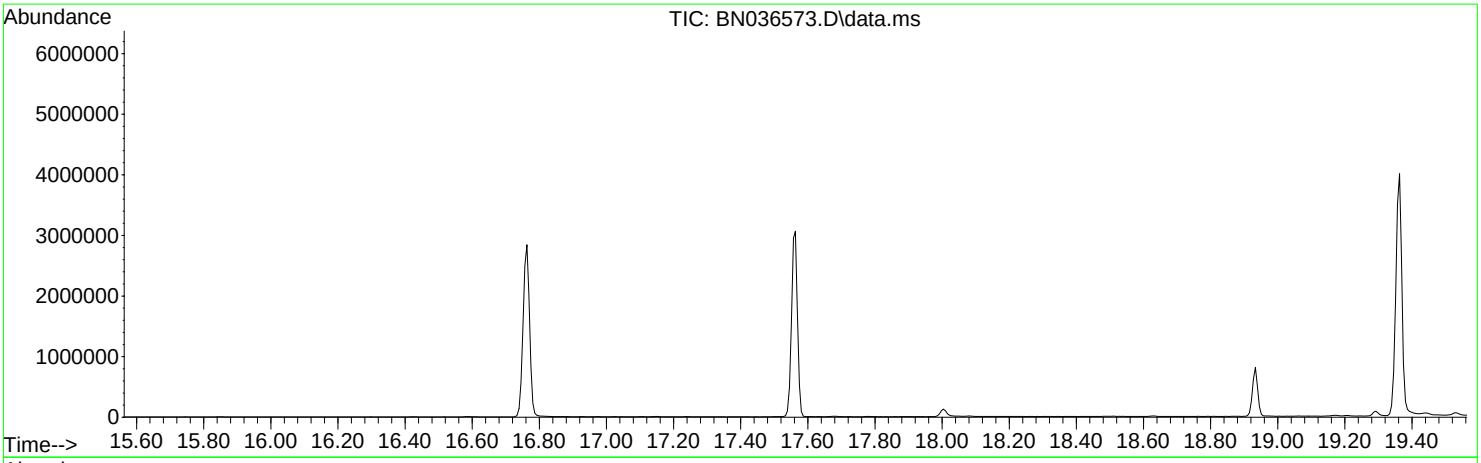
Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.86
183.00	13.20	12.85
0.00	0.00	0.00

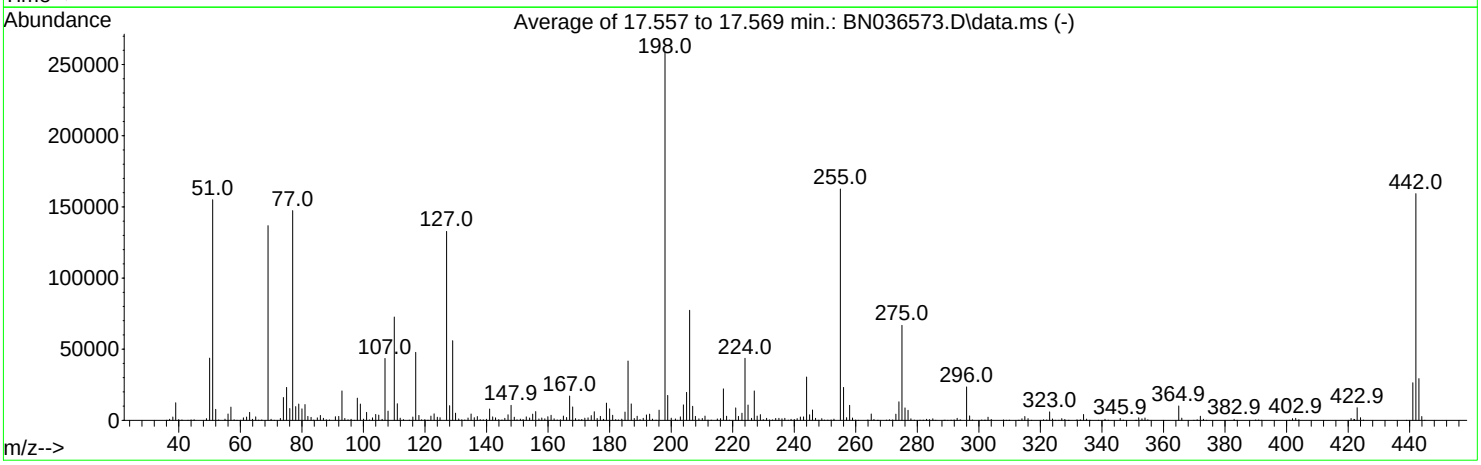
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036573.D
Acq On : 11 Mar 2025 08:50
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025





AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	60.0	155027	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	53.0	136882	PASS
70	69	0.00	2	0.6	784	PASS
127	198	10	80	51.4	132840	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	258496	PASS
199	198	5	9	6.8	17565	PASS
275	198	10	60	25.8	66808	PASS
365	198	1	100	3.9	10081	PASS
441	198	0.01	100	10.2	26384	PASS
442	442	50	100	100.0	159296	PASS
443	442	15	24	18.4	29344	PASS

Instrument :
BNA_N
ClientSampleId :
DFTPP

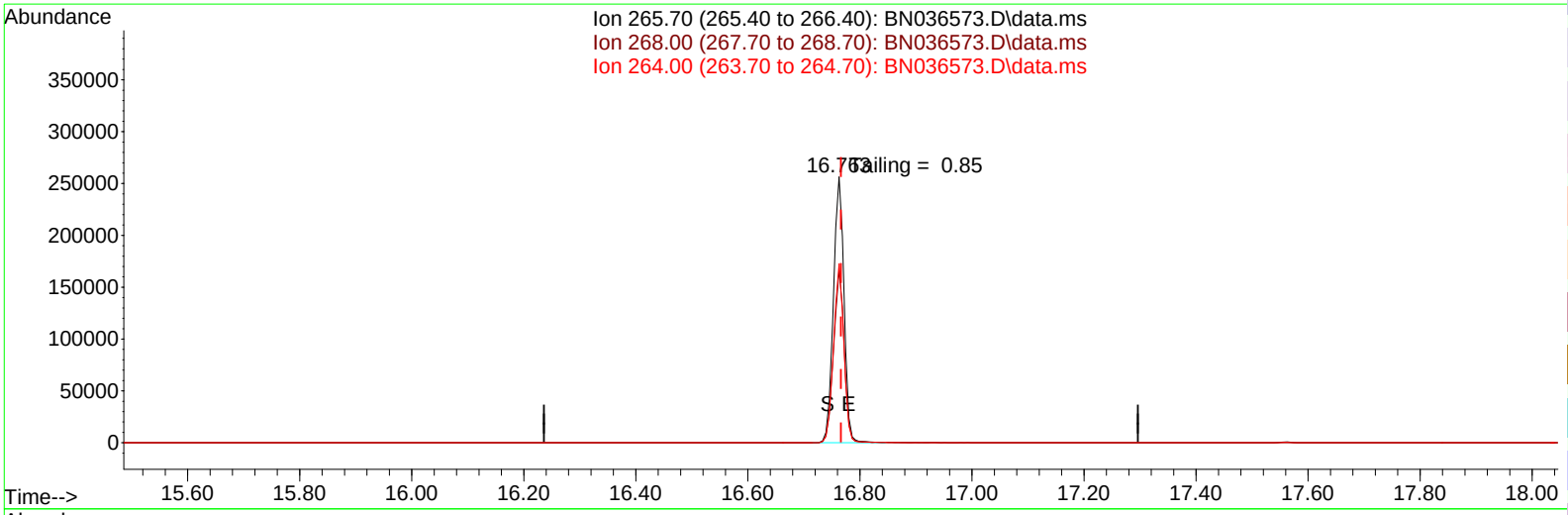
DDT Breakdown

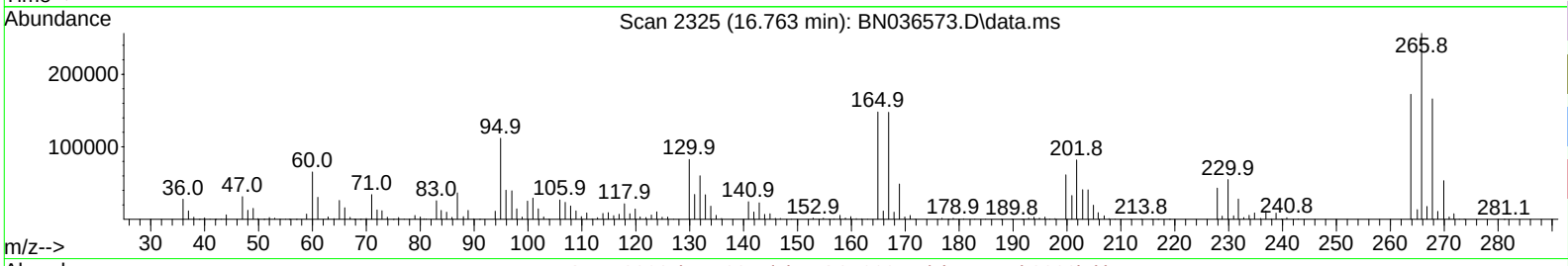
Date	Instrument Name	DFTPP Data File
3/11/2025	BNA_N	BN036573.D
Compound Name	**Response**	**Retention Time**
DDT	1170989	20.598
DDD	12216	20.21
DDE	544	19.651
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
12760	1183749	1.08

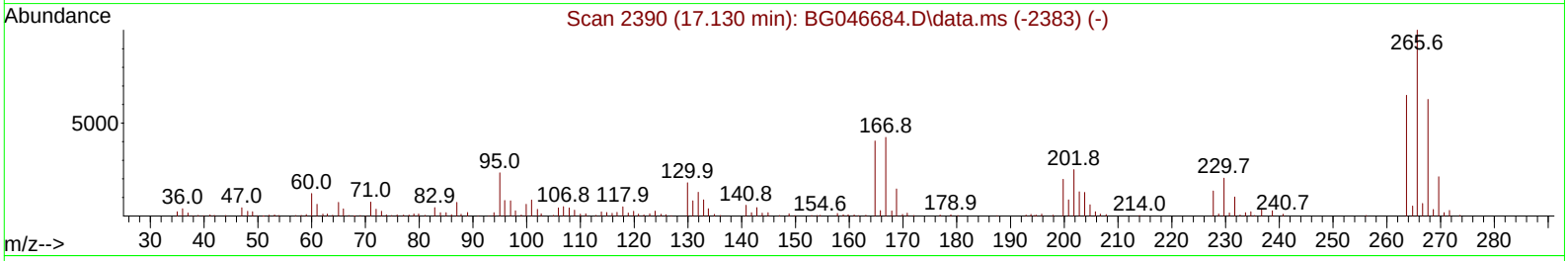
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036573.D
Acq On : 11 Mar 2025 08:50
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Mar 11 17:55:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration







TIC: BN036573.D\data.ms

(70) Pentachlorophenol (C)

16.763min (-0.003) 22415.21 ng

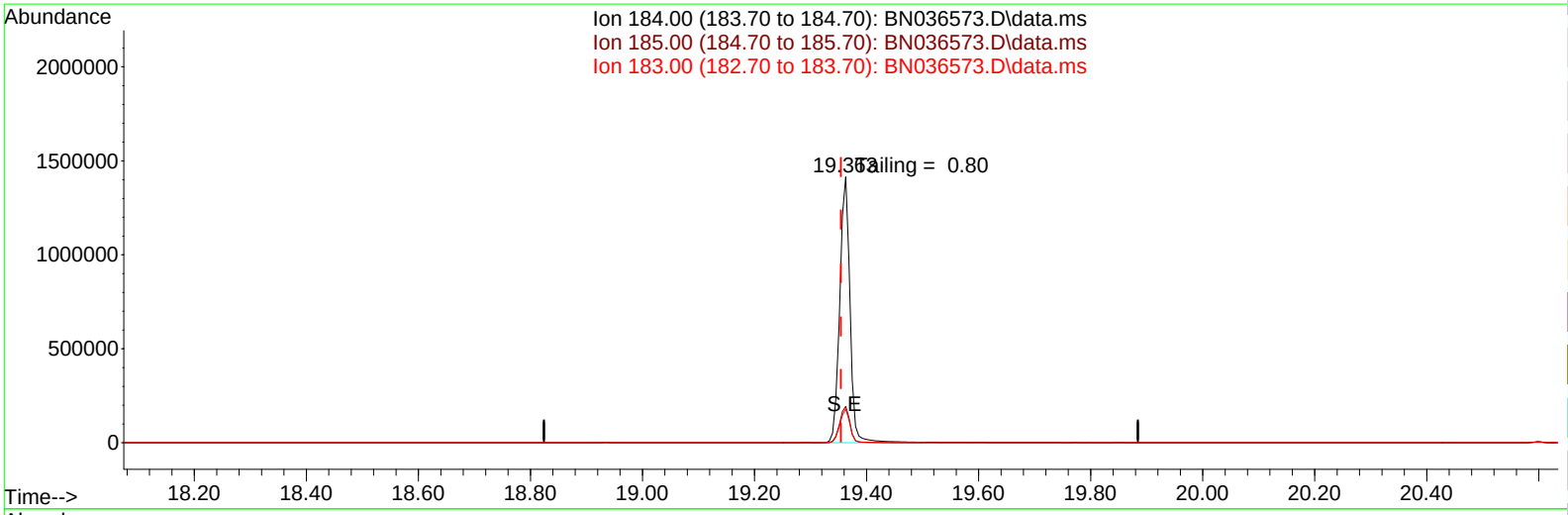
response 337921

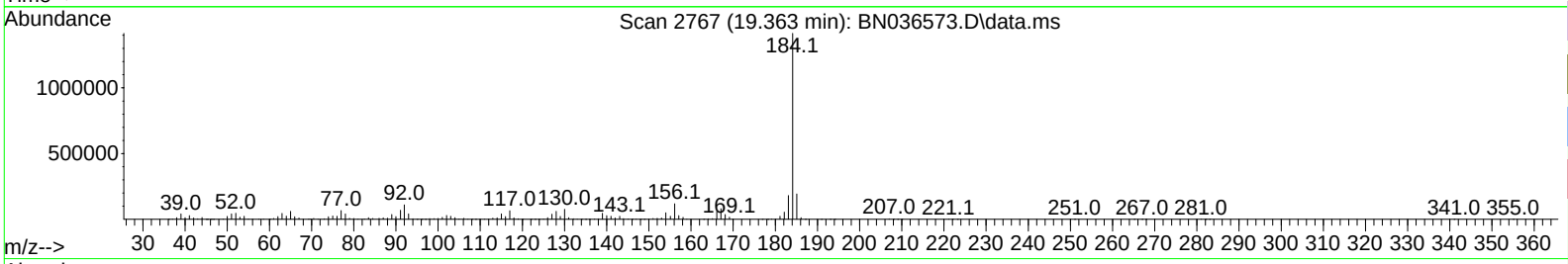
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.83
264.00	61.60	67.30
0.00	0.00	0.00

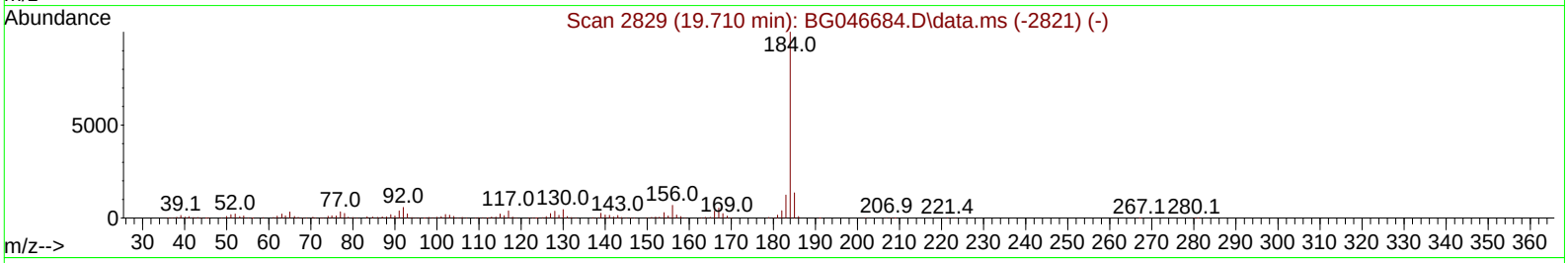
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036573.D
Acq On : 11 Mar 2025 08:50
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Mar 11 17:55:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration







TIC: BN036573.D\data.ms

(77) Benzidine

19.363min (+ 0.009) 0.00 ng

response 1813573

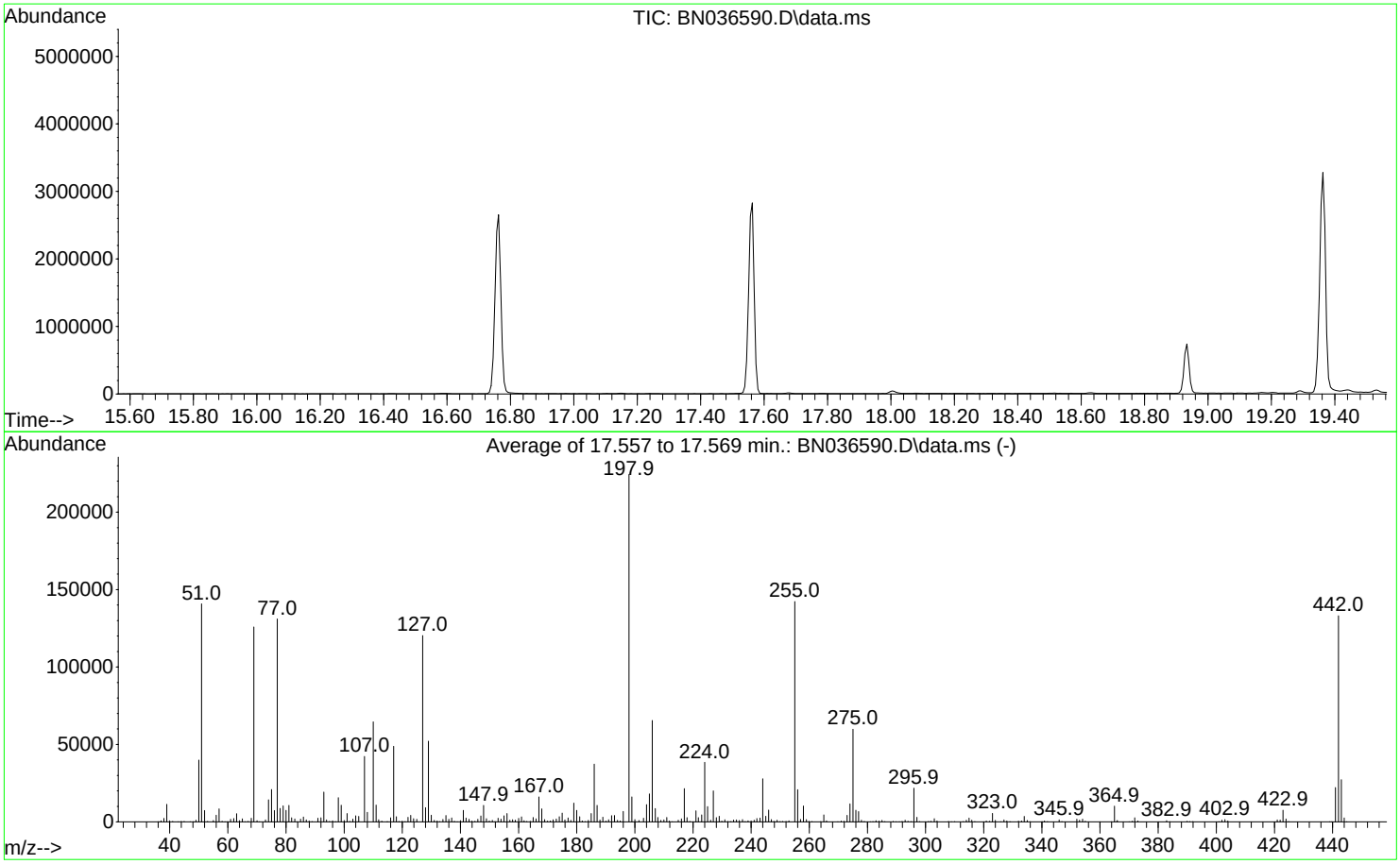
Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.66
183.00	13.20	12.80
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036590.D
Acq On : 12 Mar 2025 08:35
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-BN031025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Mar 10 16:06:28 2025



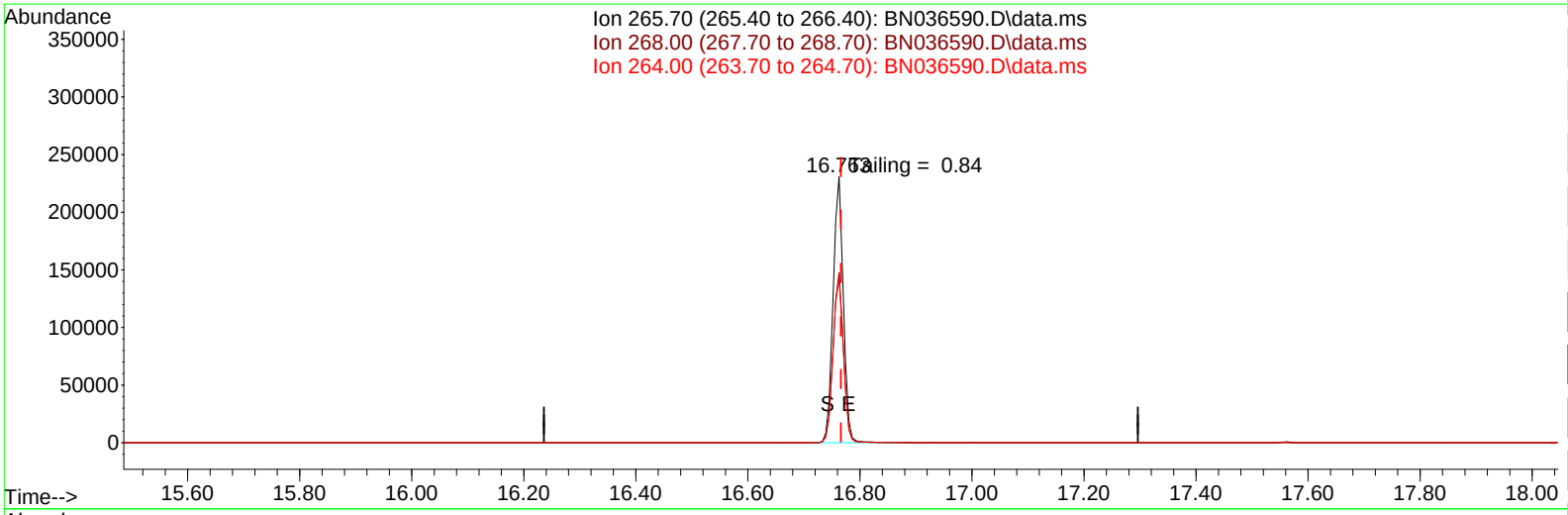
AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

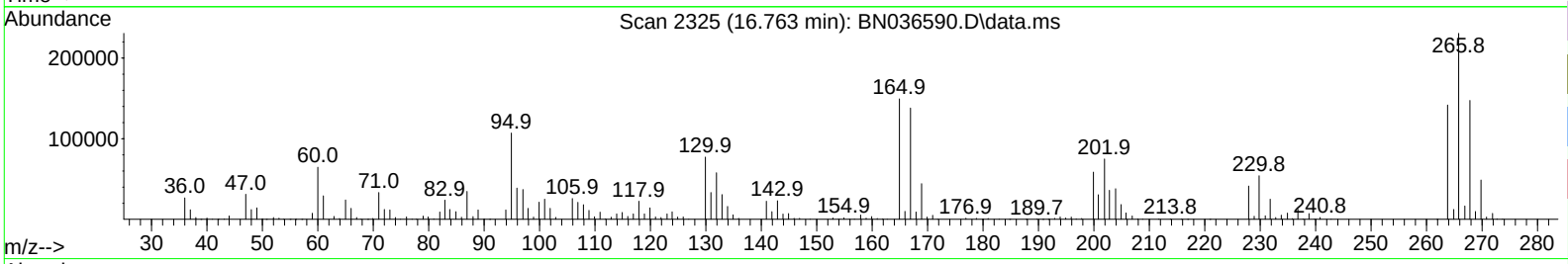
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	62.8	140749	PASS
68	69	0.00	2	1.8	2300	PASS
69	198	0.00	100	56.1	125881	PASS
70	69	0.00	2	0.6	788	PASS
127	198	10	80	53.6	120285	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	224299	PASS
199	198	5	9	7.2	16143	PASS
275	198	10	60	26.6	59765	PASS
365	198	1	100	4.5	10115	PASS
441	198	0.01	100	9.9	22131	PASS
442	442	50	100	100.0	133088	PASS
443	442	15	24	20.4	27203	PASS

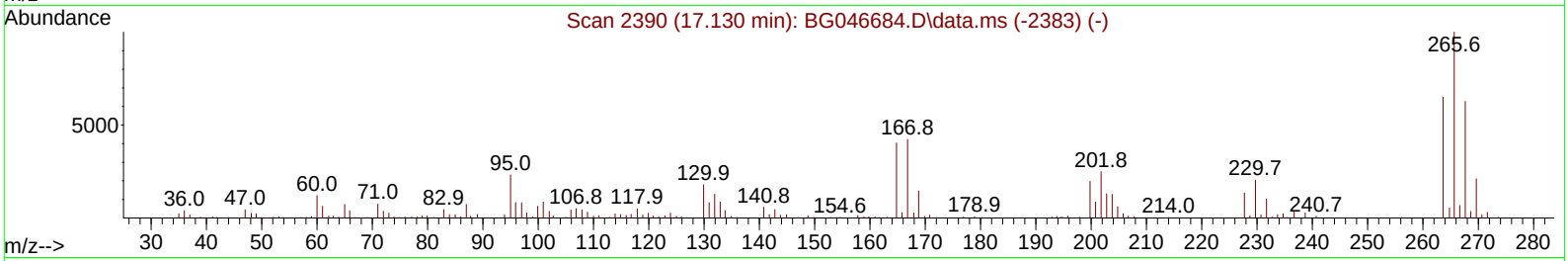
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036590.D
Acq On : 12 Mar 2025 08:35
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Mar 12 18:30:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration







TIC: BN036590.D\data.ms

(70) Pentachlorophenol (C)

16.763min (-0.003) 21862.92 ng

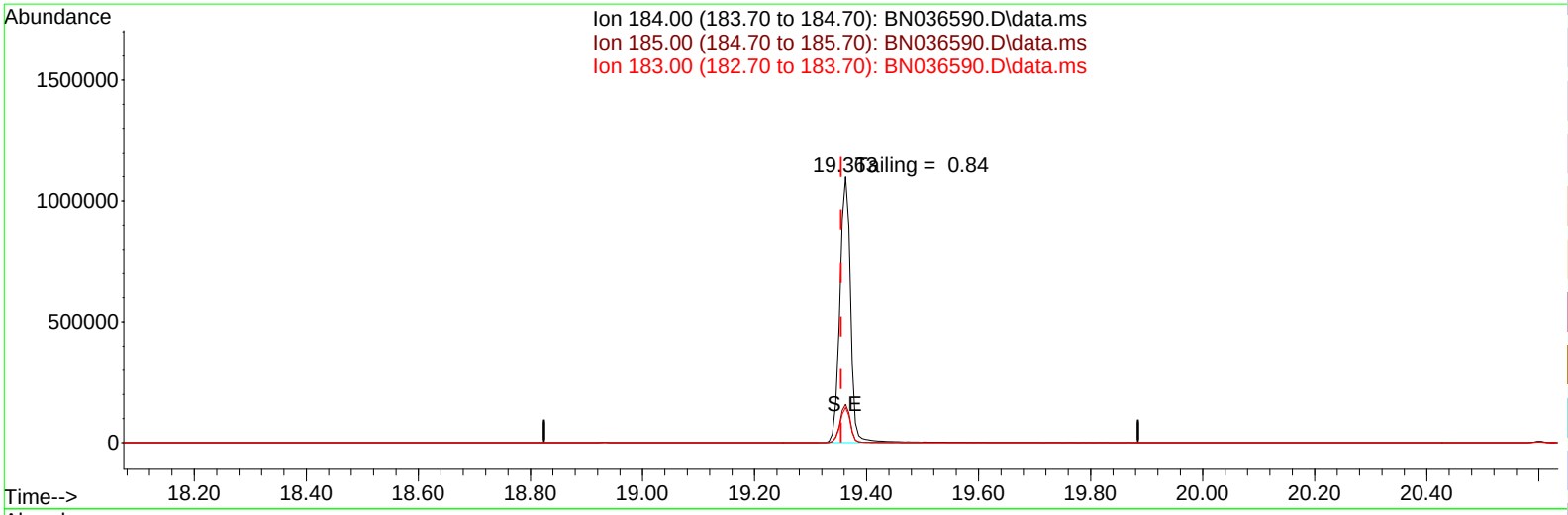
response 295280

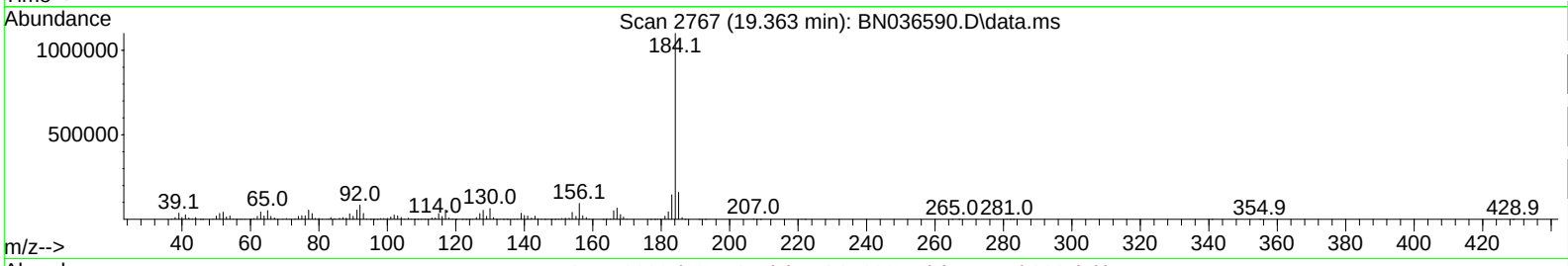
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	63.93
264.00	61.60	61.49
0.00	0.00	0.00

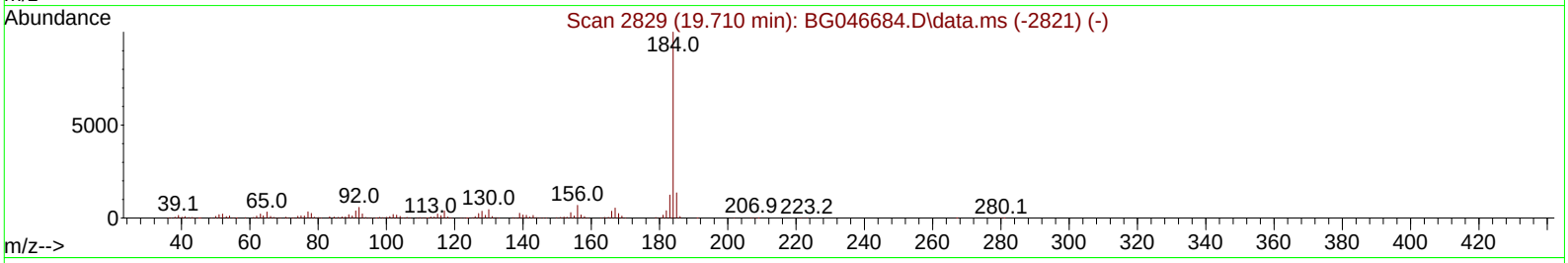
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031225\
Data File : BN036590.D
Acq On : 12 Mar 2025 08:35
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Mar 12 18:30:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Dec 25 04:23:53 2024
Response via : Initial Calibration







TIC: BN036590.D\data.ms

(77) Benzidine

19.363min (+ 0.008) 0.00 ng

response 1469311

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.46
183.00	13.20	13.24
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
3/12/2025	BNA_N	BN036590.D
Compound Name	**Response**	**Retention Time**
DDT	1023398	20.598
DDD	10765	20.21
DDE	484	19.651
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
11249	1034647	1.09

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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	
Client Sample ID:	PB167057BL	SDG No.:	Q1531
Lab Sample ID:	PB167057BL	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036565.D	1	03/10/25 11:35	03/10/25 17:14	PB167057

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	0.37		30 - 150		92%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.23		53 - 106		58%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2260	7.724				
1146-65-2	Naphthalene-d8	4580	10.53				
15067-26-2	Acenaphthene-d10	2490	14.377				
1517-22-2	Phenanthrene-d10	4340	17.124				
1719-03-5	Chrysene-d12	2990	21.304				
1520-96-3	Perylene-d12	2720	23.566				

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\BN031025\
Data File : BN036565.D
Acq On : 10 Mar 2025 17:14
Operator : RC/JU
Sample : PB167057BL
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Quant Time: Mar 10 17:40:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

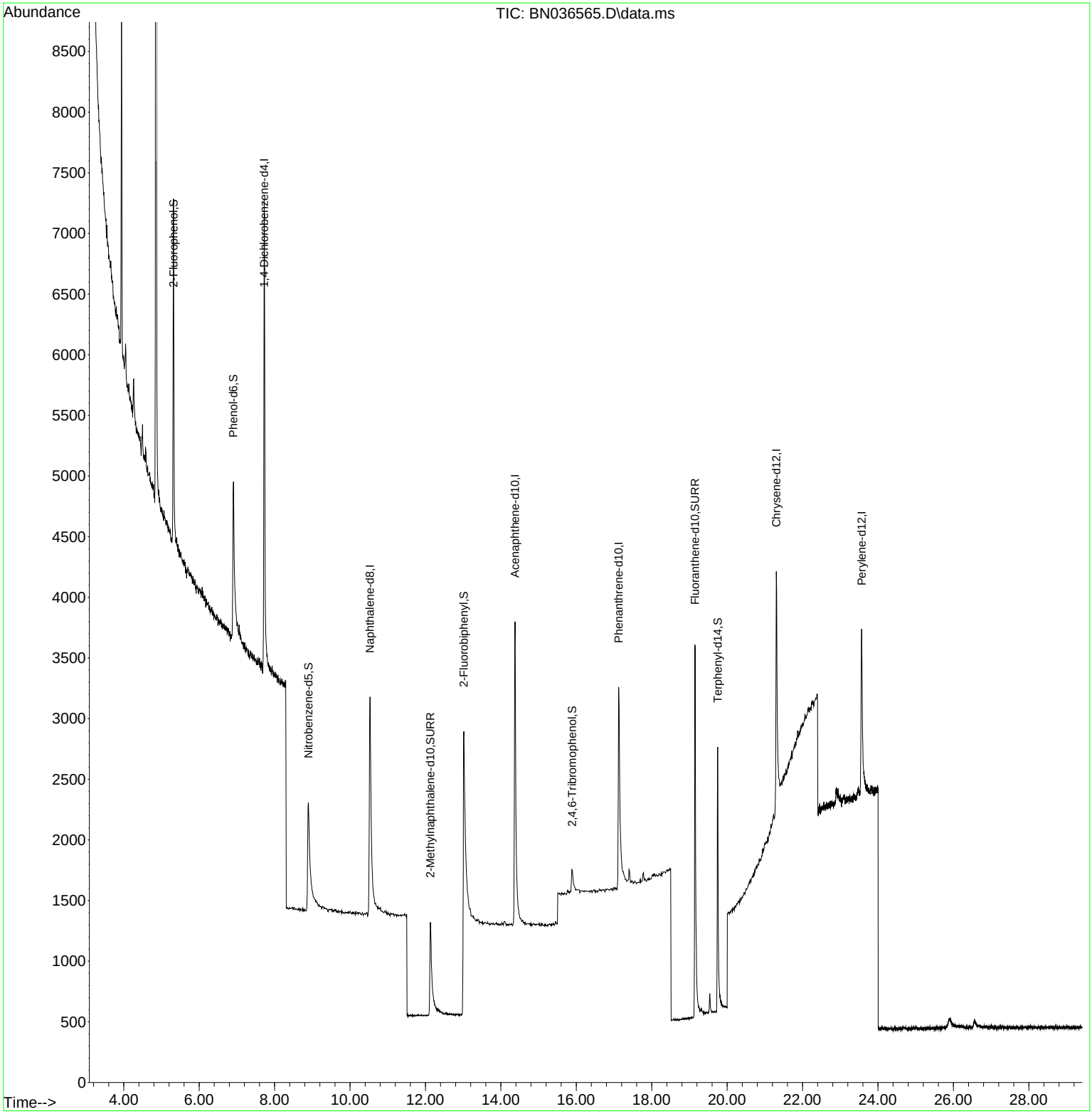
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2263	0.400	ng	0.00
7) Naphthalene-d8	10.530	136	4575	0.400	ng	0.02
13) Acenaphthene-d10	14.377	164	2489	0.400	ng	0.01
19) Phenanthrene-d10	17.124	188	4335	0.400	ng	# 0.01
29) Chrysene-d12	21.304	240	2994	0.400	ng	# 0.00
35) Perylene-d12	23.566	264	2724	0.400	ng	# 0.01
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	2195	0.416	ng	0.00
5) Phenol-d6	6.908	99	2113	0.324	ng	0.00
8) Nitrobenzene-d5	8.897	82	1776	0.357	ng	0.02
11) 2-Methylnaphthalene-d10	12.131	152	2495	0.367	ng	0.02
14) 2,4,6-Tribromophenol	15.895	330	247	0.219	ng	0.04
15) 2-Fluorobiphenyl	13.019	172	3388	0.234	ng	0.03
27) Fluoranthene-d10	19.150	212	4890	0.440	ng	0.00
31) Terphenyl-d14	19.750	244	3090	0.431	ng	0.00
Target Compounds						Qvalue

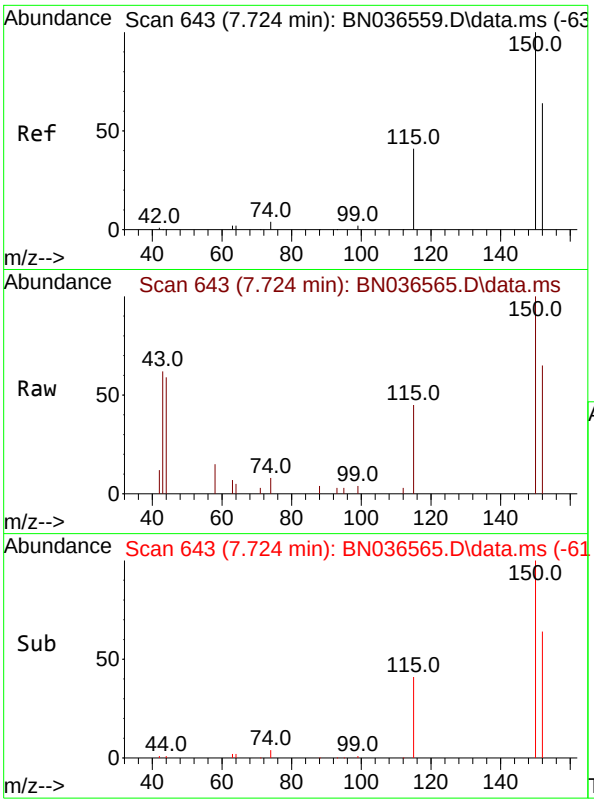
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036565.D
Acq On : 10 Mar 2025 17:14
Operator : RC/JU
Sample : PB167057BL
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Quant Time: Mar 10 17:40:08 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



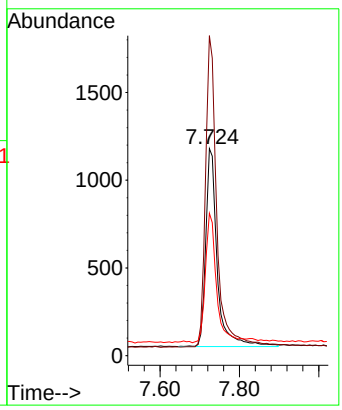


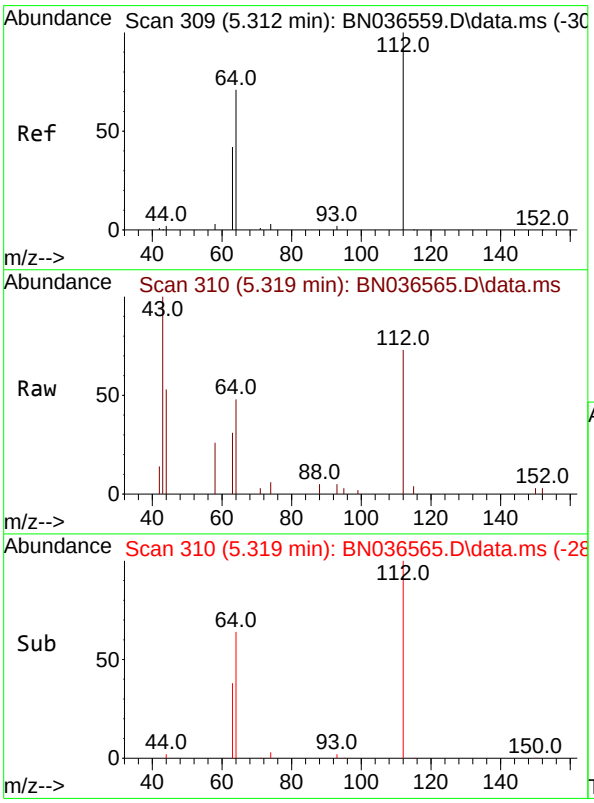
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion:152 Resp: 2263

Ion	Ratio	Lower	Upper
152	100		
150	154.6	123.7	185.5
115	68.8	54.3	81.5

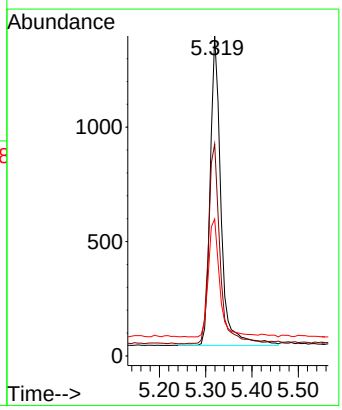


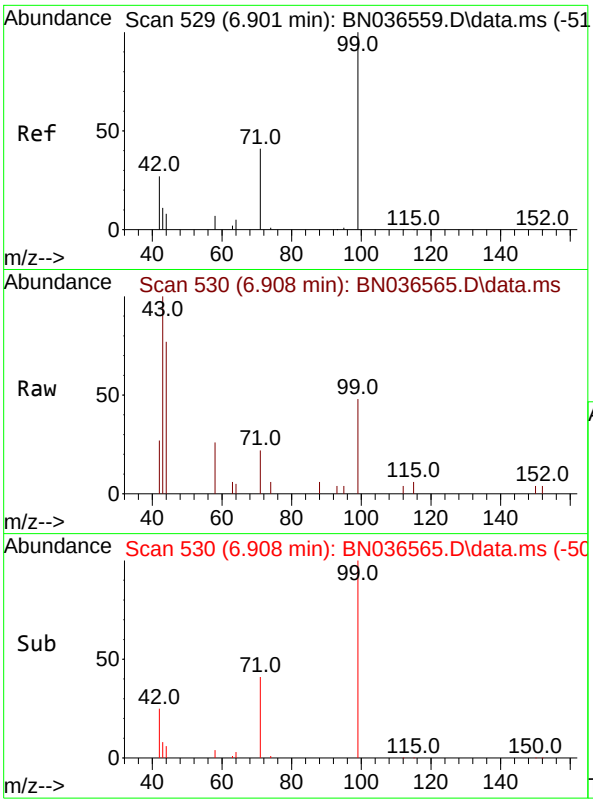


#4
2-Fluorophenol
Concen: 0.416 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.007 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:112 Resp: 2195

Ion	Ratio	Lower	Upper
112	100		
64	69.1	53.1	79.7
63	40.1	31.8	47.8



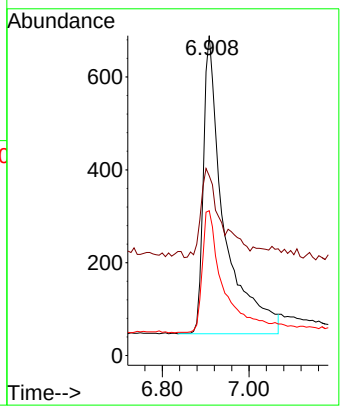


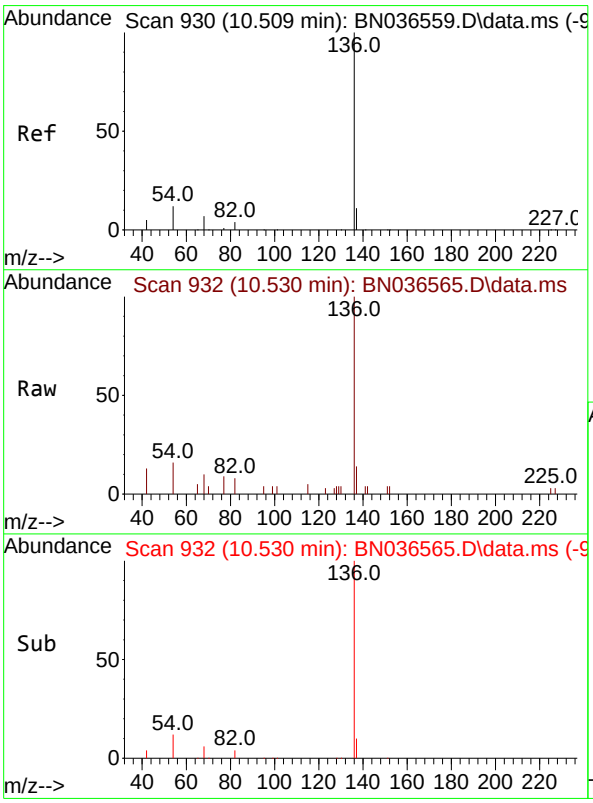
#5
Phenol-d6
Concen: 0.324 ng
RT: 6.908 min Scan# 5
Delta R.T. 0.007 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion: 99 Resp: 2113

Ion	Ratio	Lower	Upper
99	100		
42	29.4	26.5	39.7
71	42.5	34.1	51.1

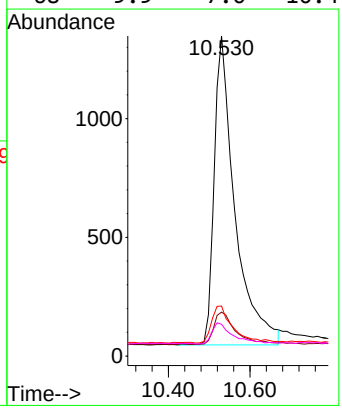


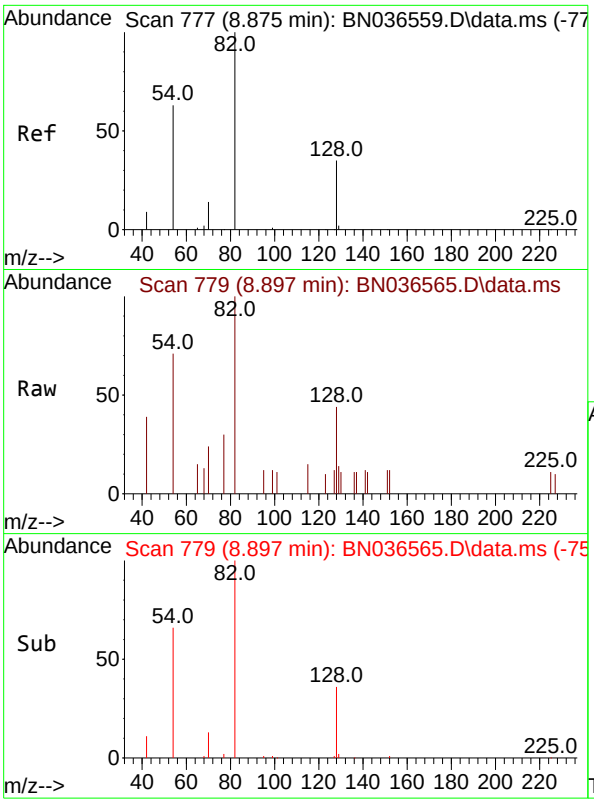


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.530 min Scan# 932
Delta R.T. 0.021 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:136 Resp: 4575

Ion	Ratio	Lower	Upper
136	100		
137	13.7	10.3	15.5
54	15.7	11.5	17.3
68	9.9	7.0	10.4



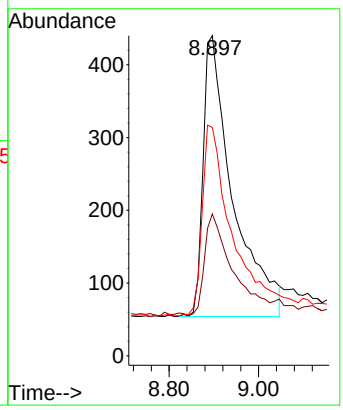


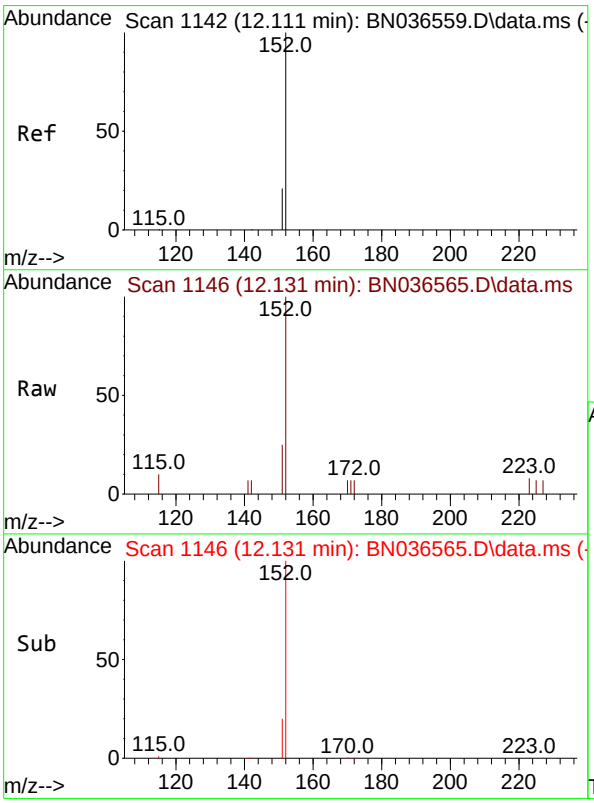
#8
Nitrobenzene-d5
Concen: 0.357 ng
RT: 8.897 min Scan# 7
Delta R.T. 0.021 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion: 82 Resp: 1776

Ion	Ratio	Lower	Upper
82	100		
128	44.3	30.6	45.8
54	71.4	52.2	78.4

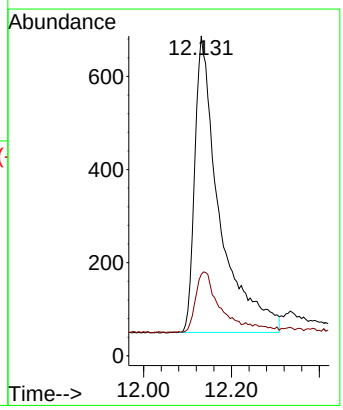


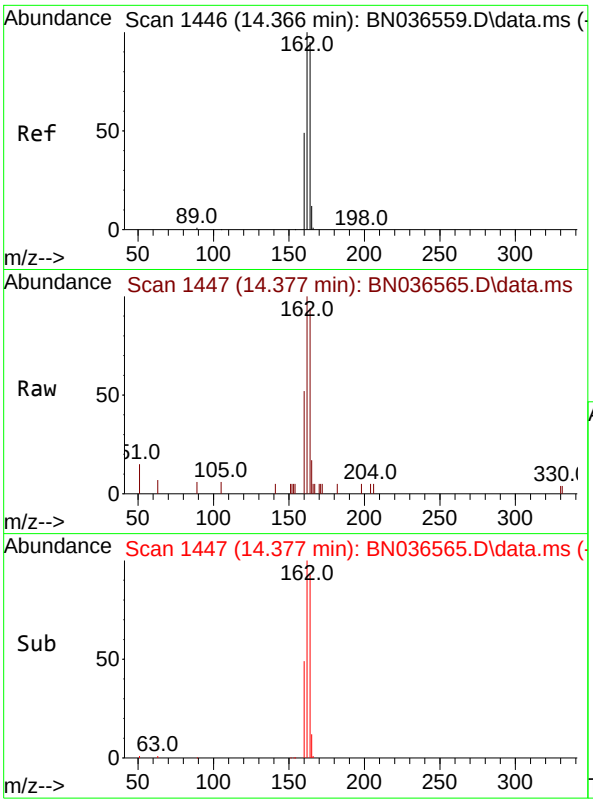


#11
2-Methylnaphthalene-d10
Concen: 0.367 ng
RT: 12.131 min Scan# 1146
Delta R.T. 0.020 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:152 Resp: 2495

Ion	Ratio	Lower	Upper
152	100		
151	18.7	17.0	25.6



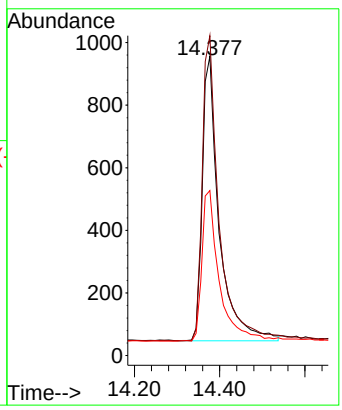


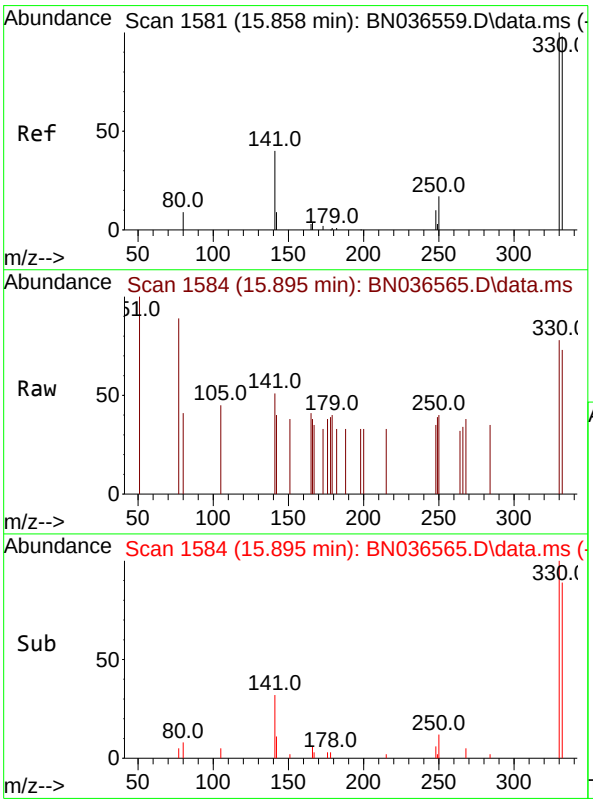
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.377 min Scan# 14
Delta R.T. 0.011 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion:164 Resp: 2489

Ion	Ratio	Lower	Upper
164	100		
162	106.9	84.2	126.2
160	55.1	42.2	63.2

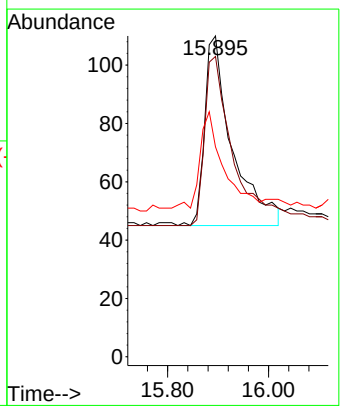


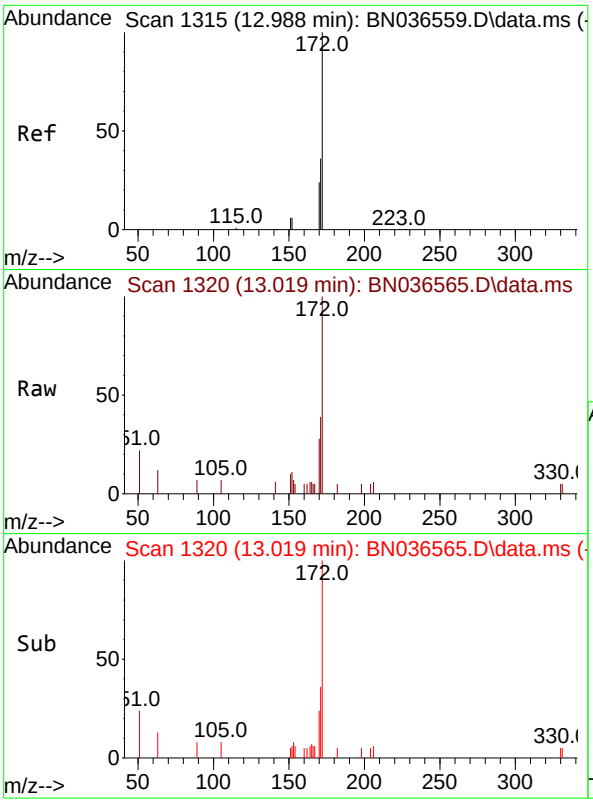


#14
2,4,6-Tribromophenol
Concen: 0.219 ng
RT: 15.895 min Scan# 1584
Delta R.T. 0.037 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:330 Resp: 247

Ion	Ratio	Lower	Upper
330	100		
332	91.1	75.2	112.8
141	42.5	43.4	65.2#



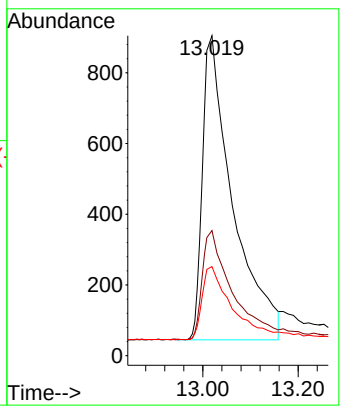


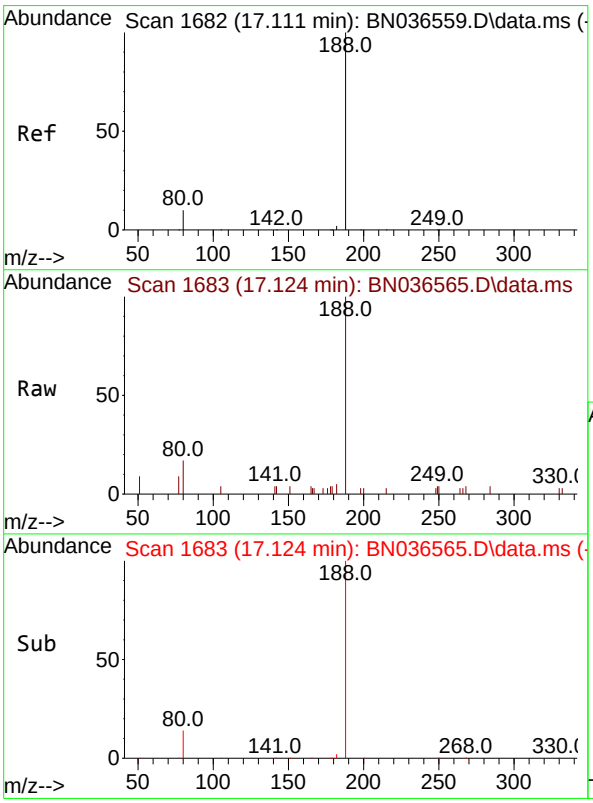
#15
2-Fluorobiphenyl
Concen: 0.234 ng
RT: 13.019 min Scan# 1
Delta R.T. 0.031 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion:172 Resp: 3388

Ion	Ratio	Lower	Upper
172	100		
171	39.1	29.5	44.3
170	27.8	20.2	30.4

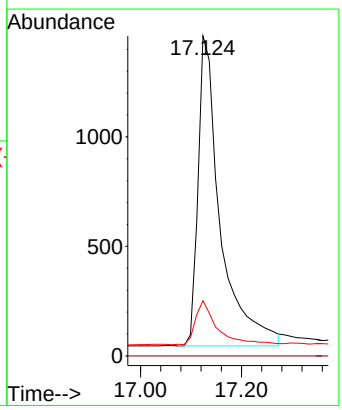


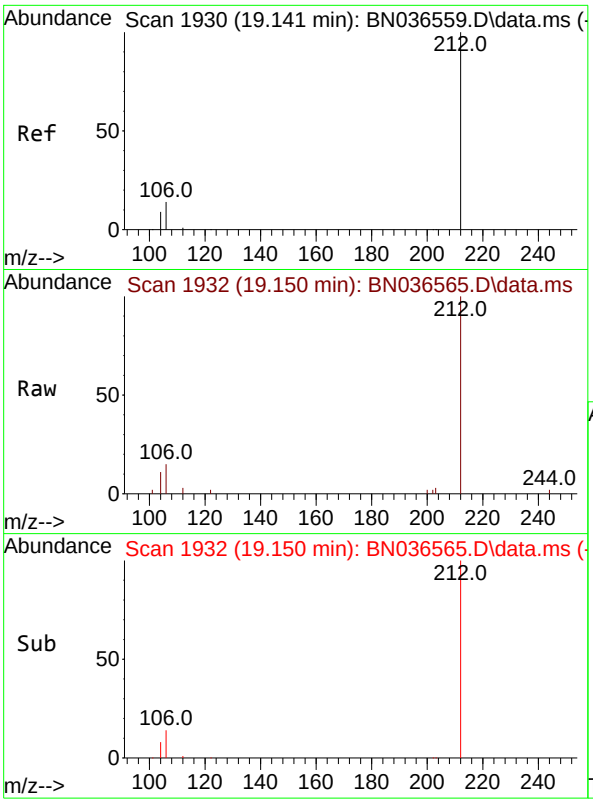


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1683
Delta R.T. 0.012 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:188 Resp: 4335

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	17.2	8.8	13.2#



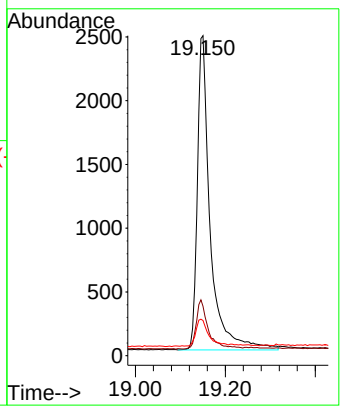


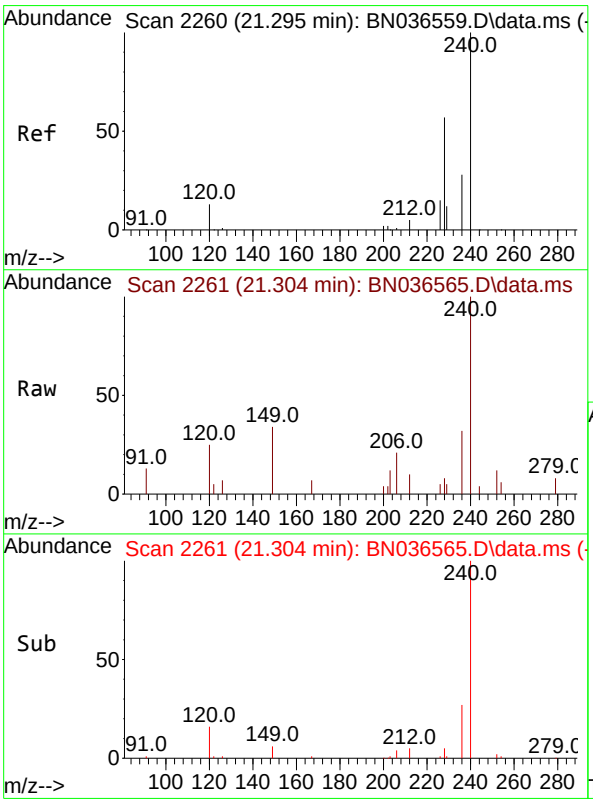
#27
Fluoranthene-d10
Concen: 0.440 ng
RT: 19.150 min Scan# 1
Delta R.T. 0.009 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion:212 Resp: 4890

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.8	17.6
104	8.6	7.3	10.9

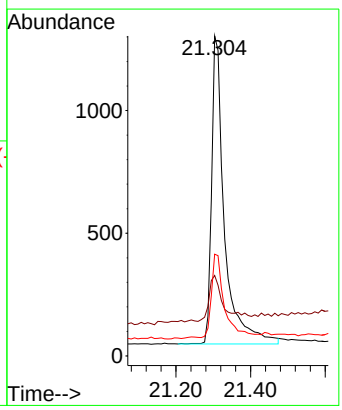


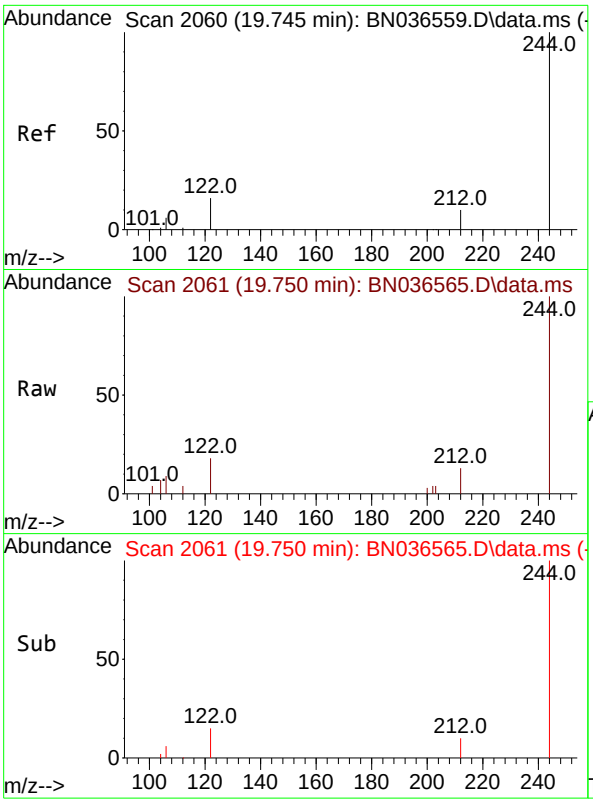


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2261
Delta R.T. 0.009 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:240 Resp: 2994

Ion	Ratio	Lower	Upper
240	100		
120	25.2	14.6	22.0#
236	31.8	24.1	36.1



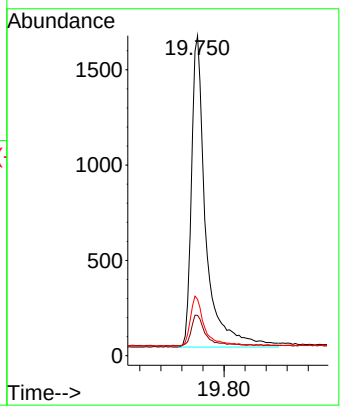


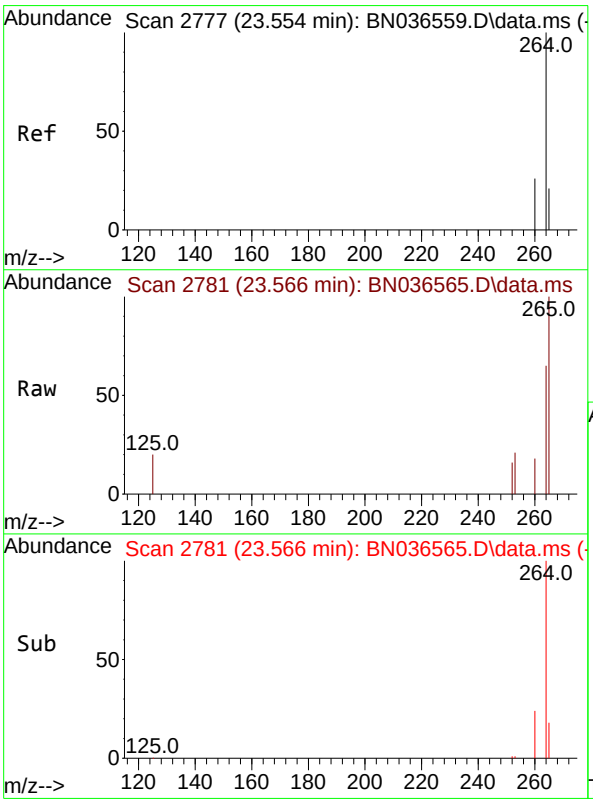
#31
Terphenyl-d14
Concen: 0.431 ng
RT: 19.750 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Instrument :
BNA_N
ClientSampleId :
PB167057BL

Tgt Ion:244 Resp: 3090

Ion	Ratio	Lower	Upper
244	100		
212	12.6	9.6	14.4
122	17.6	13.9	20.9

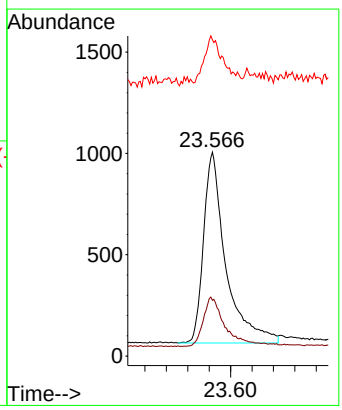




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.566 min Scan# 2781
Delta R.T. 0.012 min
Lab File: BN036565.D
Acq: 10 Mar 2025 17:14

Tgt Ion:264 Resp: 2724

Ion	Ratio	Lower	Upper
264	100		
260	27.3	22.6	33.8
265	155.0	88.1	132.1#



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	
Client Sample ID:	PB167057BS	SDG No.:	Q1531
Lab Sample ID:	PB167057BS	Matrix:	Water
Analytical Method:	SW8270ESIM	% 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 :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036588.D	1	03/10/25 11:35	03/11/25 19:09	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.40		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.53		30 - 150		132%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		97%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		96%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.45	*	53 - 106		113%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		118%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2200	7.724				
1146-65-2	Naphthalene-d8	5060	10.509				
15067-26-2	Acenaphthene-d10	2480	14.366				
1517-22-2	Phenanthrene-d10	4180	17.111				
1719-03-5	Chrysene-d12	2420	21.304				
1520-96-3	Perylene-d12	2070	23.557				

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\BN031125\
Data File : BN036588.D
Acq On : 11 Mar 2025 19:09
Operator : RC/JU
Sample : PB167057BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Mar 12 01:09:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2199	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5061	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2475	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	4176	0.400	ng	0.00
29) Chrysene-d12	21.304	240	2420	0.400	ng	0.00
35) Perylene-d12	23.557	264	2074	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	2148	0.419	ng	0.00
5) Phenol-d6	6.901	99	2472	0.390	ng	0.00
8) Nitrobenzene-d5	8.875	82	2108	0.383	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	3960	0.526	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	375	0.334	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	6472	0.450	ng	0.00
27) Fluoranthene-d10	19.141	212	4153	0.388	ng	0.00
31) Terphenyl-d14	19.750	244	2732	0.471	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.247	88	979	0.401	ng	# 29
3) n-Nitrosodimethylamine	3.550	42	2276	0.461	ng	# 96
6) bis(2-Chloroethyl)ether	7.147	93	2676	0.409	ng	99
9) Naphthalene	10.562	128	6313	0.424	ng	99
10) Hexachlorobutadiene	10.850	225	1584	0.452	ng	# 97
12) 2-Methylnaphthalene	12.177	142	3954	0.417	ng	99
16) Acenaphthylene	14.077	152	5361	0.459	ng	100
17) Acenaphthene	14.420	154	3280	0.429	ng	99
18) Fluorene	15.414	166	4237	0.410	ng	99
20) 4,6-Dinitro-2-methylph...	15.510	198	335	0.460	ng	# 78
21) 4-Bromophenyl-phenylether	16.304	248	1256	0.480	ng	92
22) Hexachlorobenzene	16.416	284	1619	0.513	ng	98
23) Atrazine	16.590	200	1046	0.499	ng	92
24) Pentachlorophenol	16.776	266	917	0.637	ng	99
25) Phenanthrene	17.148	178	6029	0.481	ng	99
26) Anthracene	17.248	178	5609	0.496	ng	99
28) Fluoranthene	19.174	202	6012	0.427	ng	98
30) Pyrene	19.536	202	6199	0.524	ng	99
32) Benzo(a)anthracene	21.286	228	3838	0.456	ng	99
33) Chrysene	21.331	228	4624	0.503	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	2665	0.445	ng	# 98
36) Indeno(1,2,3-cd)pyrene	25.841	276	4164	0.556	ng	94
37) Benzo(b)fluoranthene	22.876	252	3355	0.445	ng	94
38) Benzo(k)fluoranthene	22.923	252	4137m	0.522	ng	
39) Benzo(a)pyrene	23.458	252	3242	0.510	ng	98
40) Dibenzo(a,h)anthracene	25.861	278	3176	0.545	ng	95
41) Benzo(g,h,i)perylene	26.531	276	3258	0.489	ng	98

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

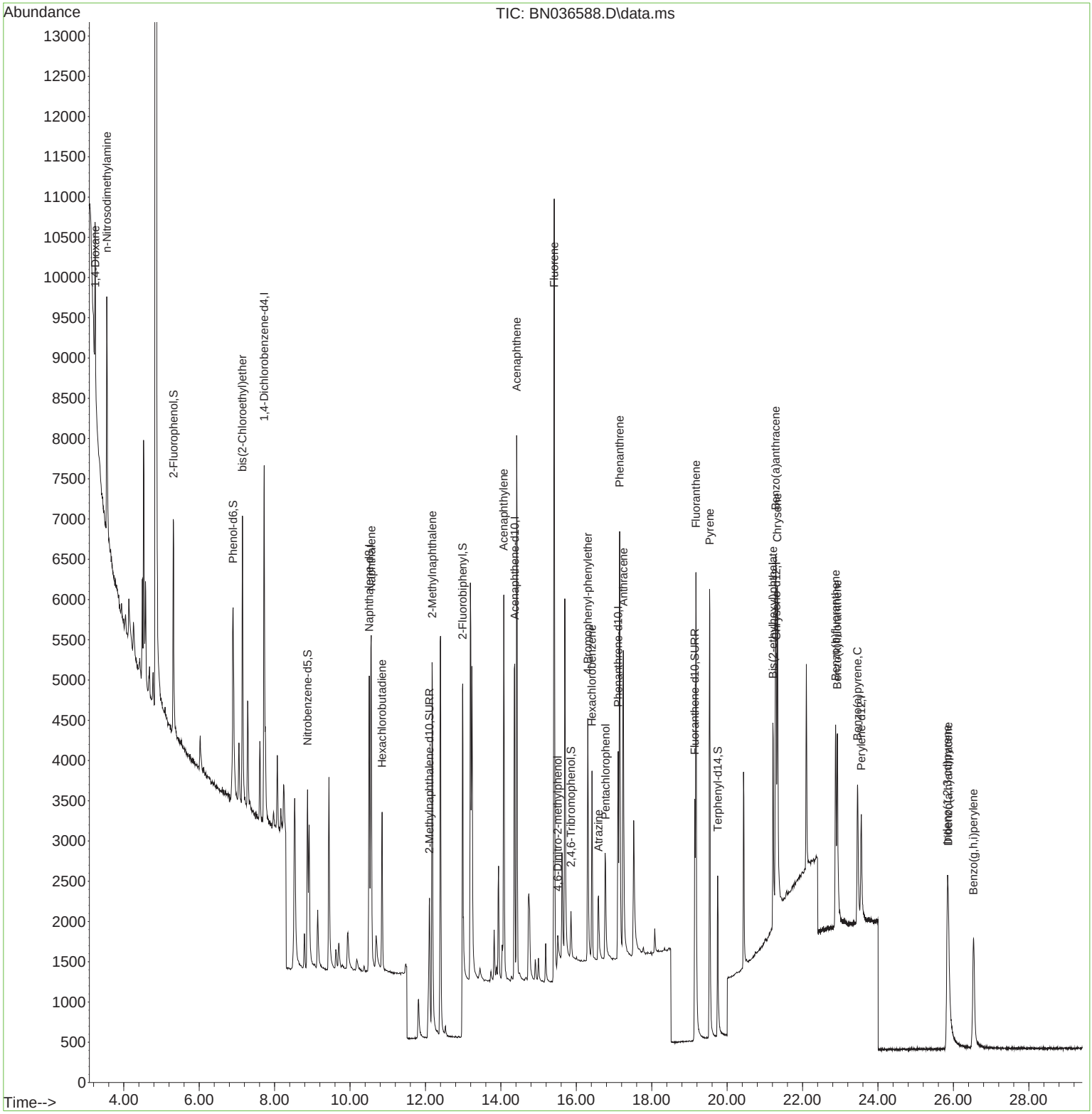
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Acq On : 11 Mar 2025 19:09
Operator : RC/JU
Sample : PB167057BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

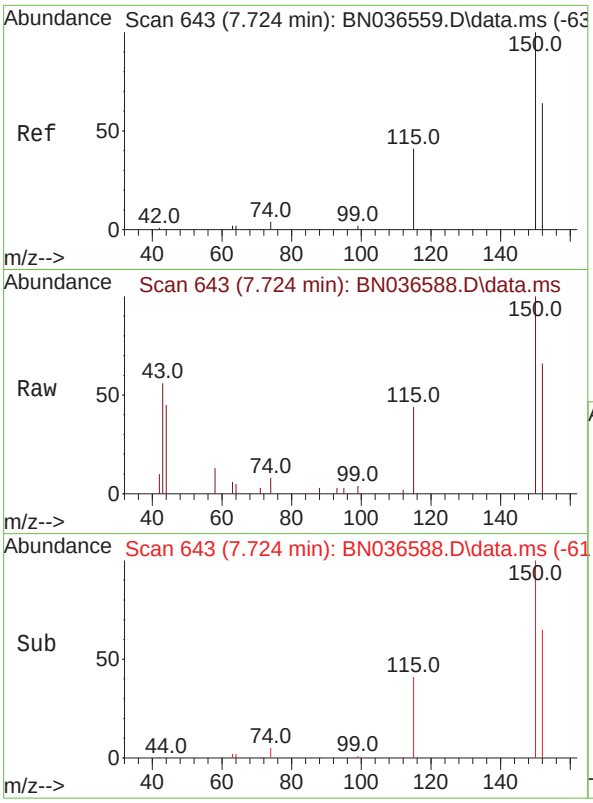
Quant Time: Mar 12 01:09:20 2025
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Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations APPROVED

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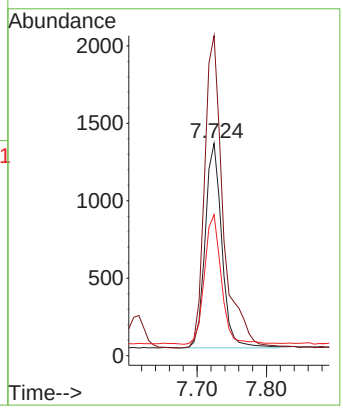




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:152 Resp: 219

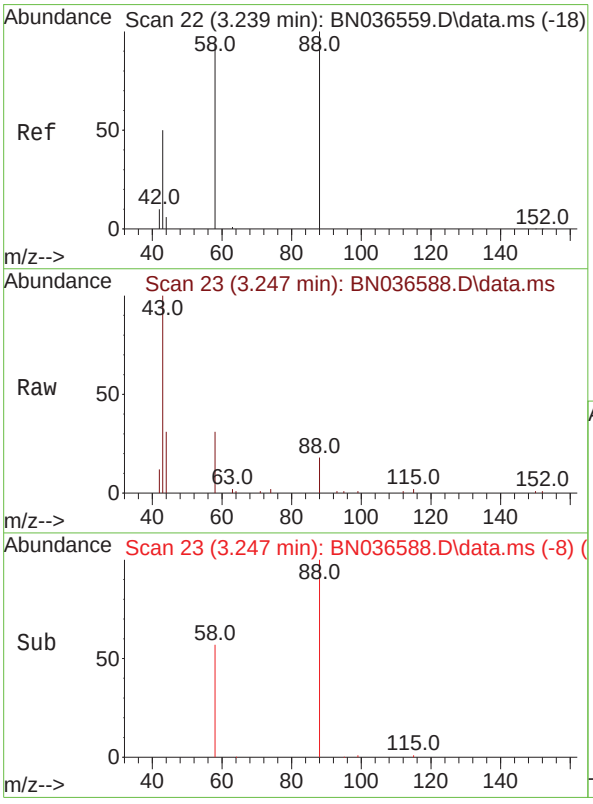
Ion	Ratio	Lower	Upper
152	100		
150	150.7	123.7	185.5
115	66.4	54.3	81.5



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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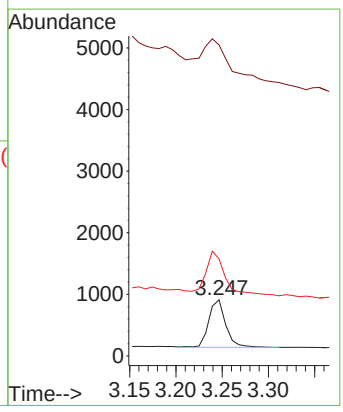
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

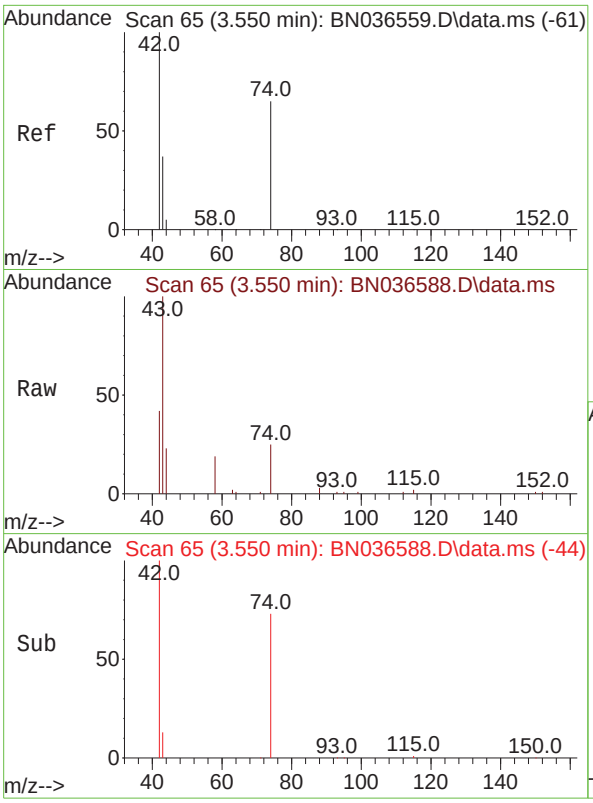


#2
1,4-Dioxane
Concen: 0.401 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 88 Resp: 979

Ion	Ratio	Lower	Upper
88	100		
43	149.4	37.8	56.8#
58	107.3	67.4	101.2#

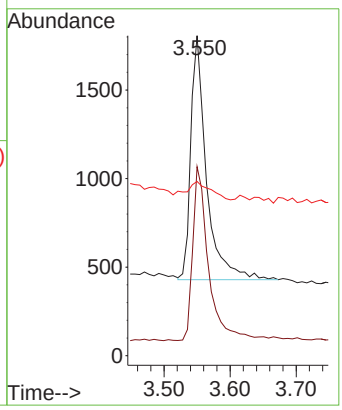




#3
n-Nitrosodimethylamine
Concen: 0.461 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 42 Resp: 227

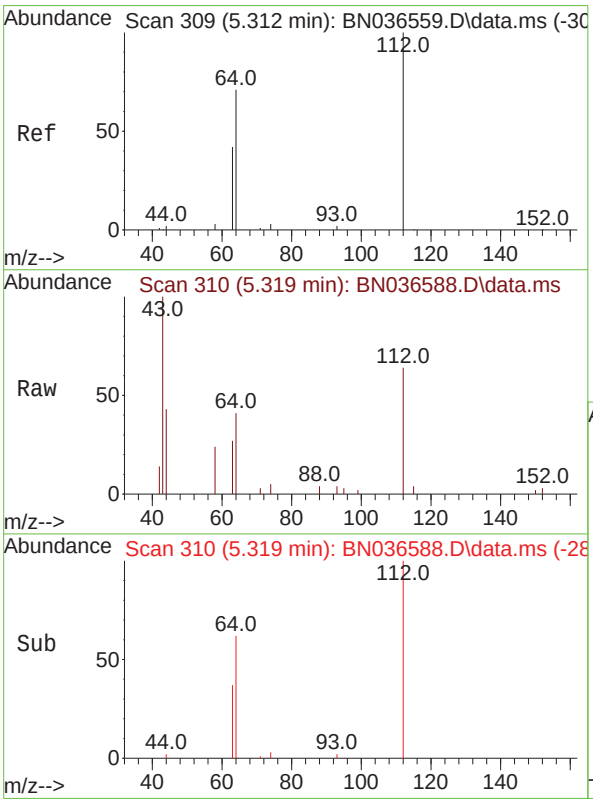
Ion	Ratio	Lower	Upper
42	100		
74	72.7	60.6	90.8
44	9.7	6.3	9.5#



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

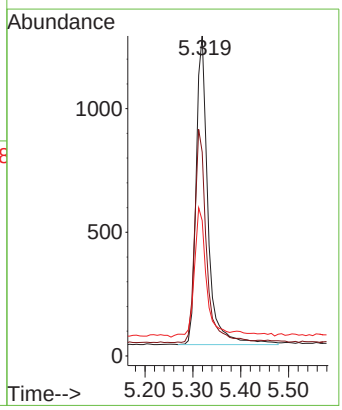
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

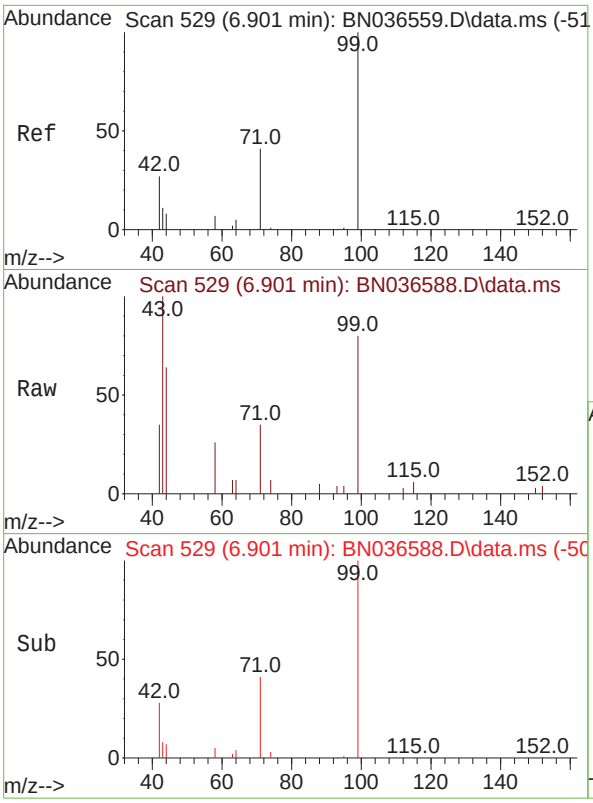


#4
2-Fluorophenol
Concen: 0.419 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.007 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:112 Resp: 2148

Ion	Ratio	Lower	Upper
112	100		
64	68.3	53.1	79.7
63	42.4	31.8	47.8





#5
Phenol-d6
Concen: 0.390 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

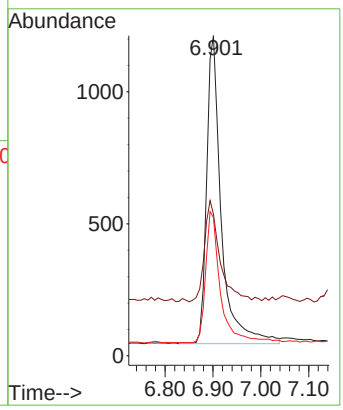
Tgt Ion: 99 Resp: 247

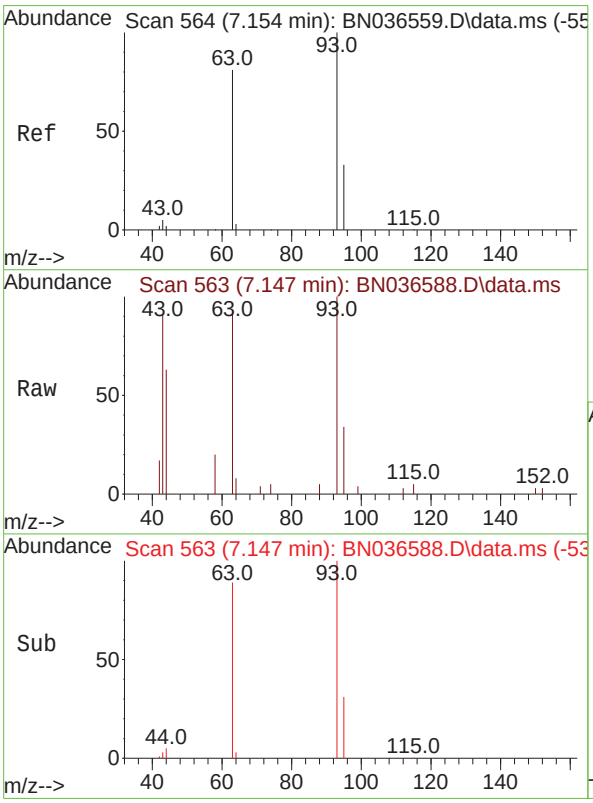
Ion	Ratio	Lower	Upper
99	100		
42	35.1	26.5	39.7
71	43.5	34.1	51.1

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

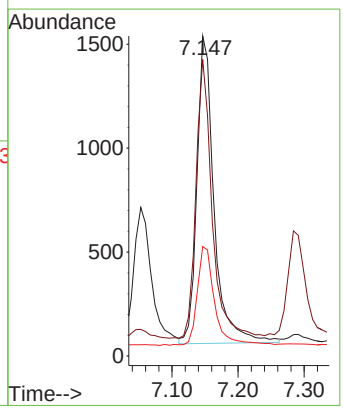


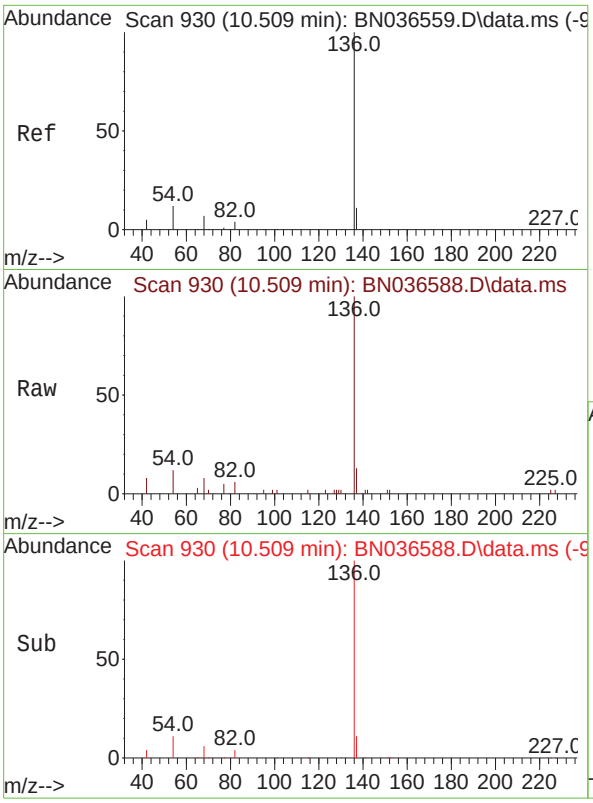


#6
bis(2-Chloroethyl)ether
Concen: 0.409 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 93 Resp: 2676

Ion	Ratio	Lower	Upper
93	100		
63	85.4	67.7	101.5
95	32.9	25.6	38.4

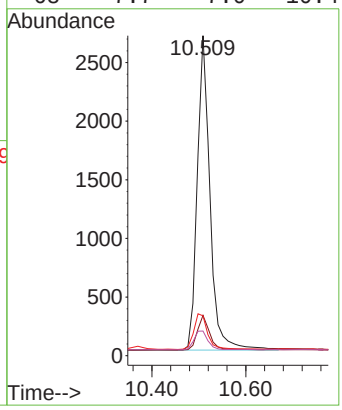




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

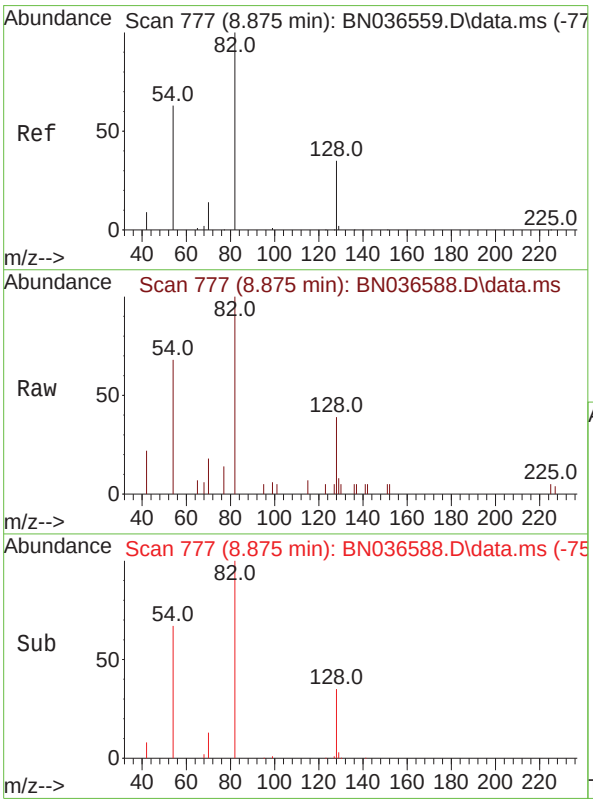
Tgt Ion:136 Resp: 506

Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.3	15.5
54	12.5	11.5	17.3
68	7.7	7.0	10.4



Instrument :
BNA_N
ClientSampleId :
PB167057BS

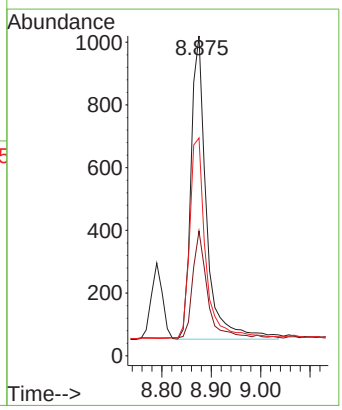
Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

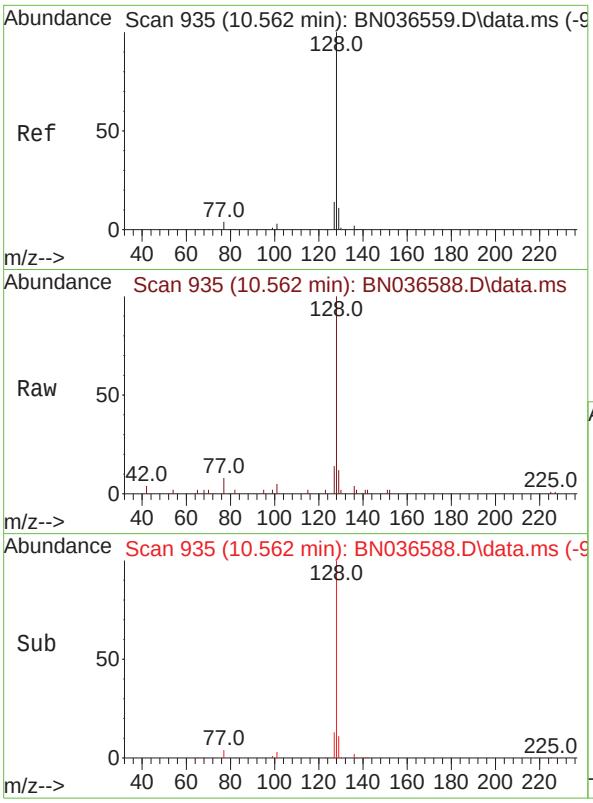


#8
Nitrobenzene-d5
Concen: 0.383 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 82 Resp: 2108

Ion	Ratio	Lower	Upper
82	100		
128	39.0	30.6	45.8
54	68.1	52.2	78.4

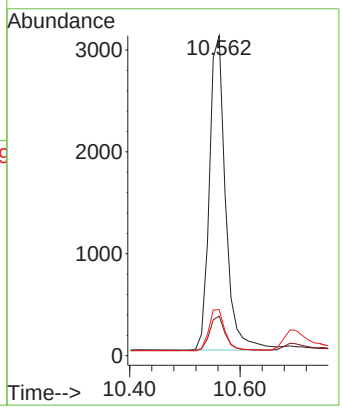




#9
Naphthalene
Concen: 0.424 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:128 Resp: 631

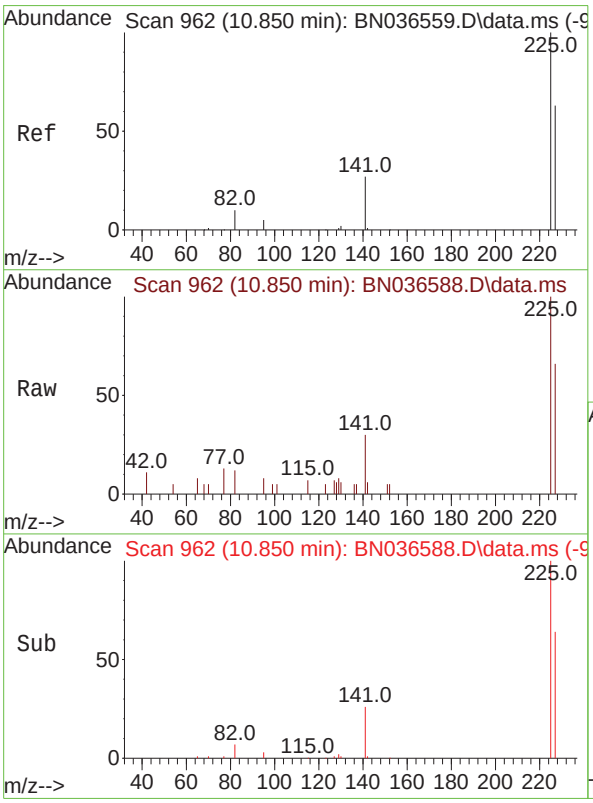
Ion	Ratio	Lower	Upper
128	100		
129	12.4	9.8	14.6
127	14.4	11.8	17.8



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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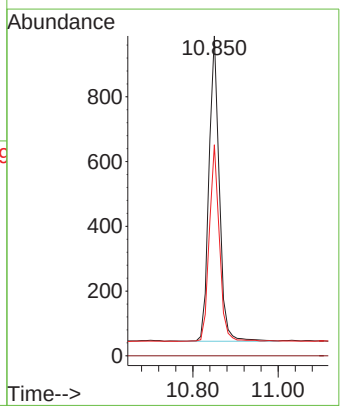
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

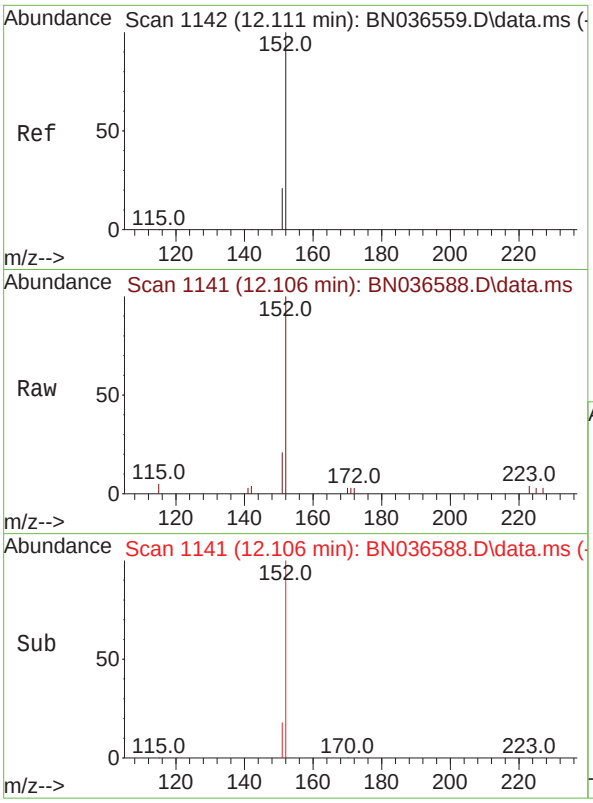


#10
Hexachlorobutadiene
Concen: 0.452 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:225 Resp: 1584

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.7	51.8	77.8





#11
2-Methylnaphthalene-d10
Concen: 0.526 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

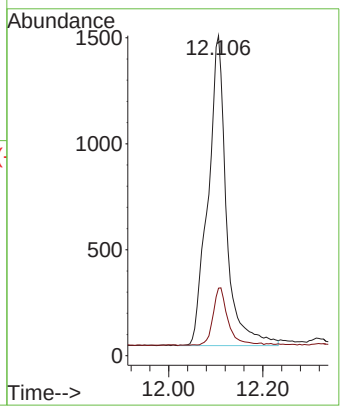
Tgt Ion:152 Resp: 396

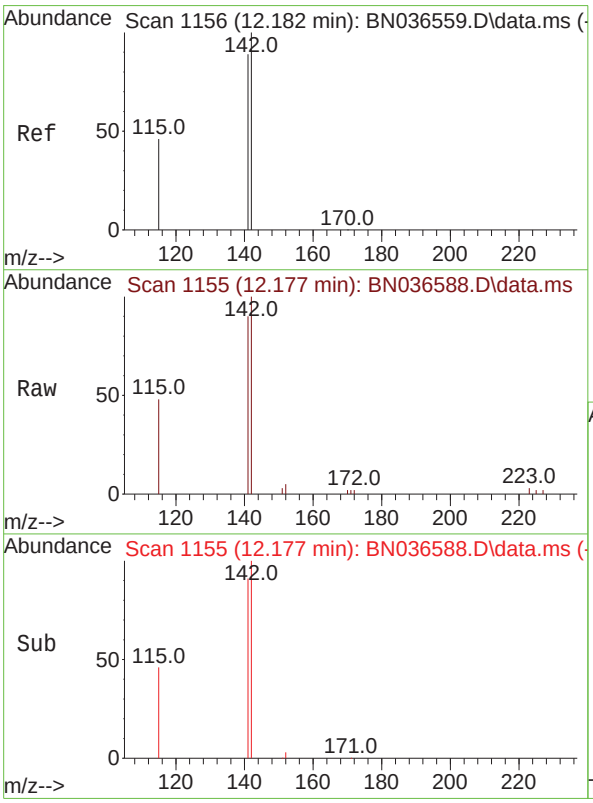
Ion	Ratio	Lower	Upper
152	100		
151	14.7	17.0	25.6#

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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Supervised By :Jagrut Upadhyay 03/12/2025

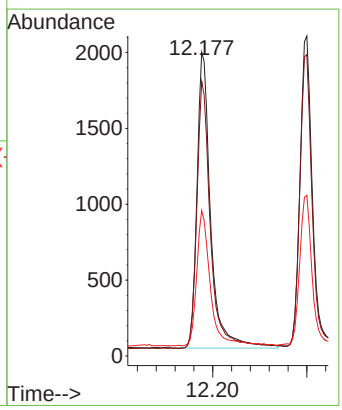


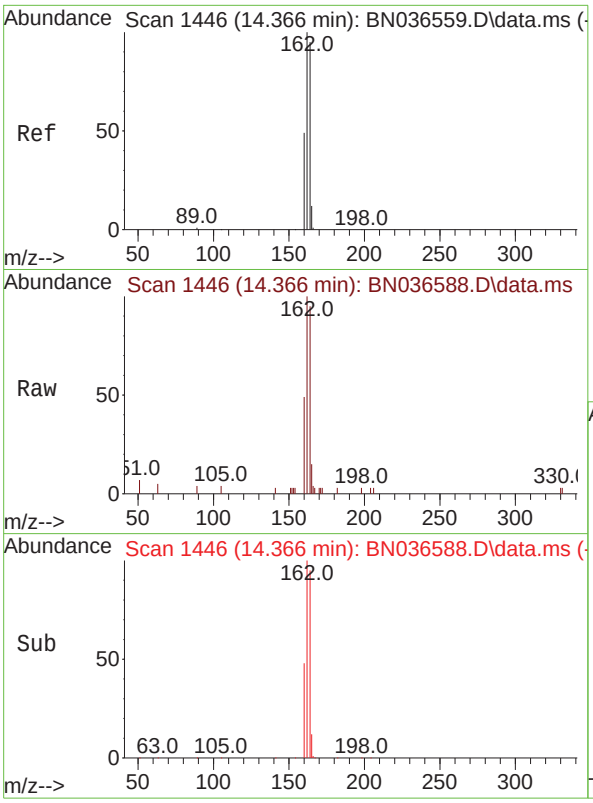


#12
2-Methylnaphthalene
Concen: 0.417 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:142 Resp: 3954

Ion	Ratio	Lower	Upper
142	100		
141	90.5	71.7	107.5
115	47.9	38.3	57.5





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

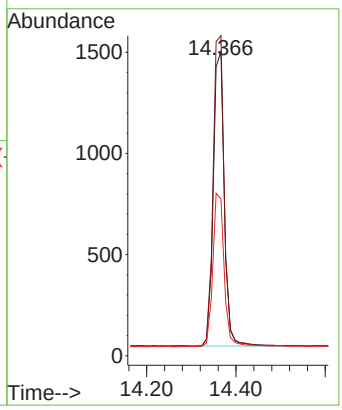
Tgt Ion:164 Resp: 247

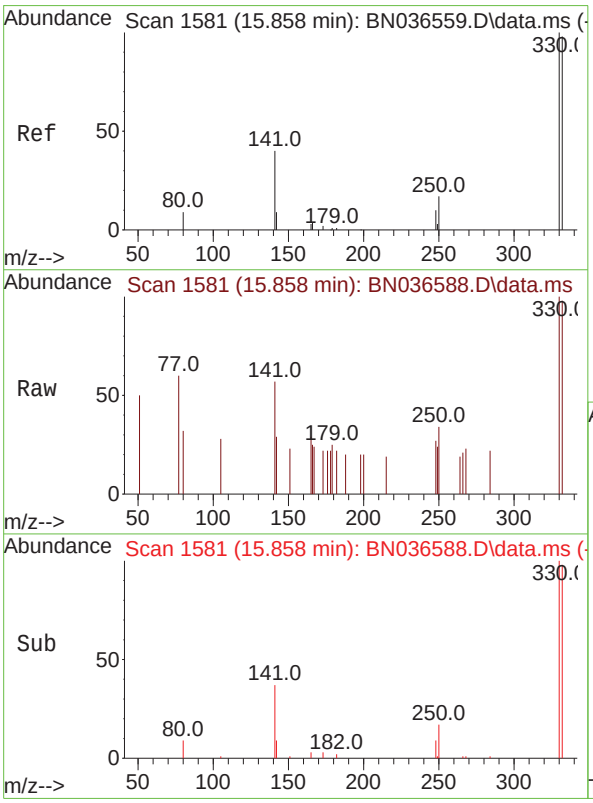
Ion	Ratio	Lower	Upper
164	100		
162	105.2	84.2	126.2
160	51.5	42.2	63.2

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

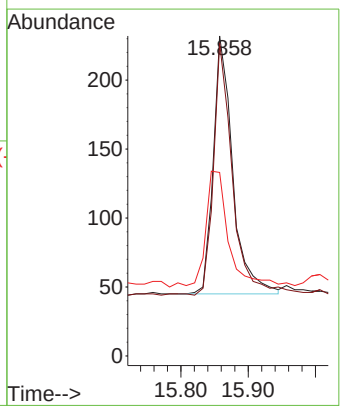


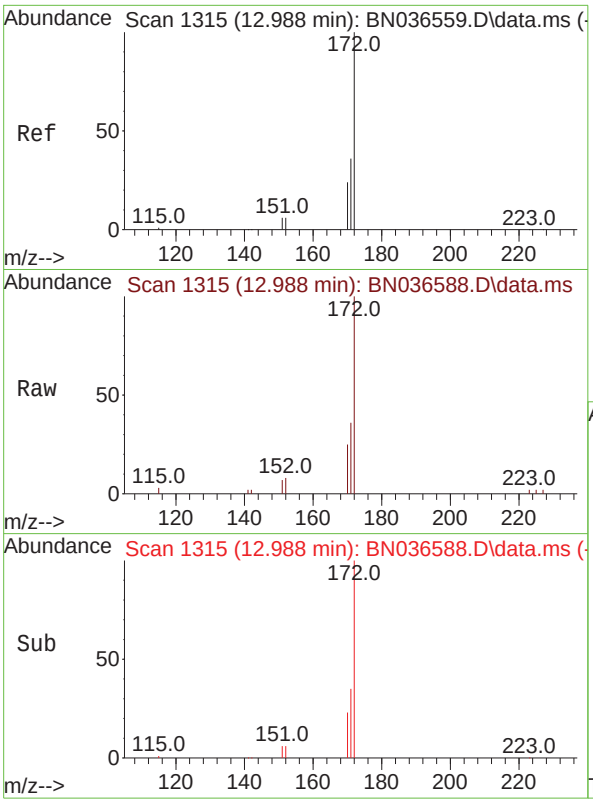


#14
2,4,6-Tribromophenol
Concen: 0.334 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:330 Resp: 375

Ion	Ratio	Lower	Upper
330	100		
332	96.8	75.2	112.8
141	53.9	43.4	65.2

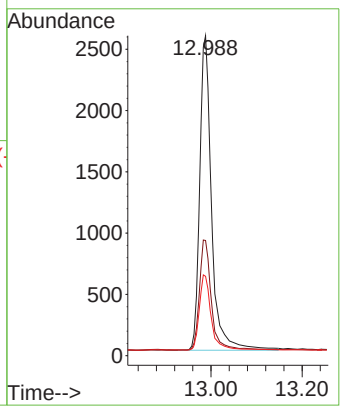




#15
2-Fluorobiphenyl
Concen: 0.450 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:172 Resp: 647

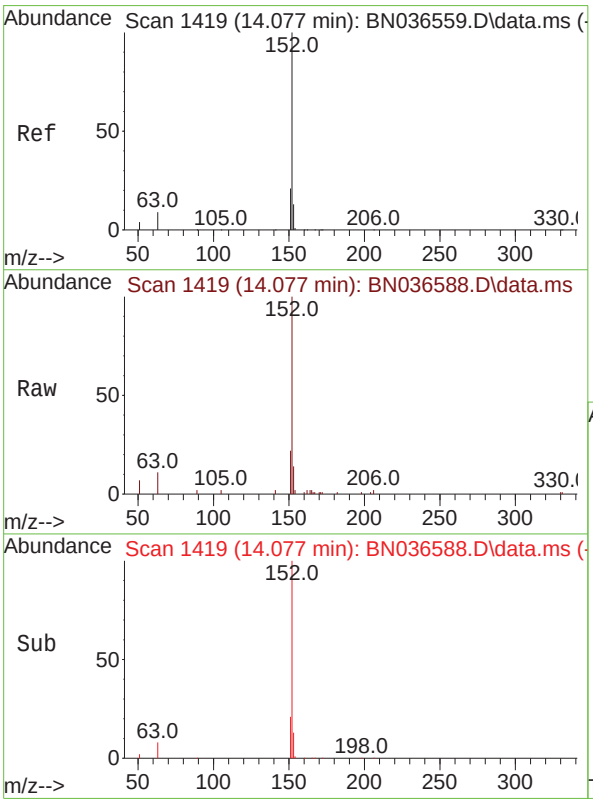
Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	24.8	20.2	30.4



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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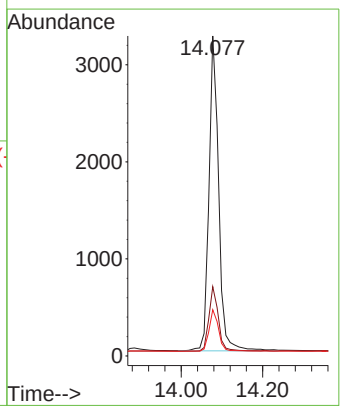
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

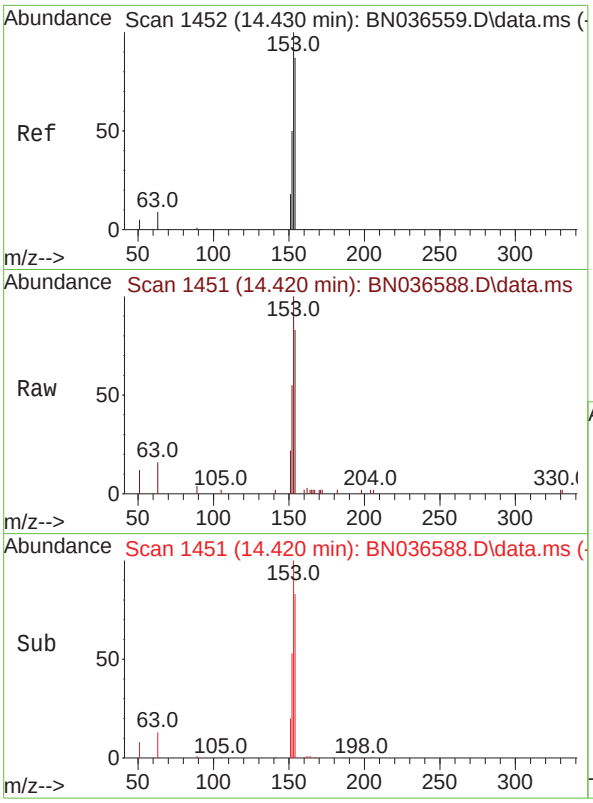


#16
Acenaphthylene
Concen: 0.459 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:152 Resp: 5361

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.2	24.4
153	13.2	10.6	15.8

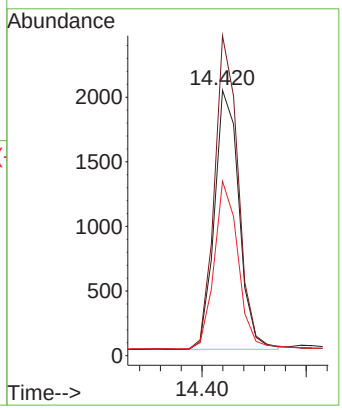




#17
Acenaphthene
Concen: 0.429 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:154 Resp: 328(

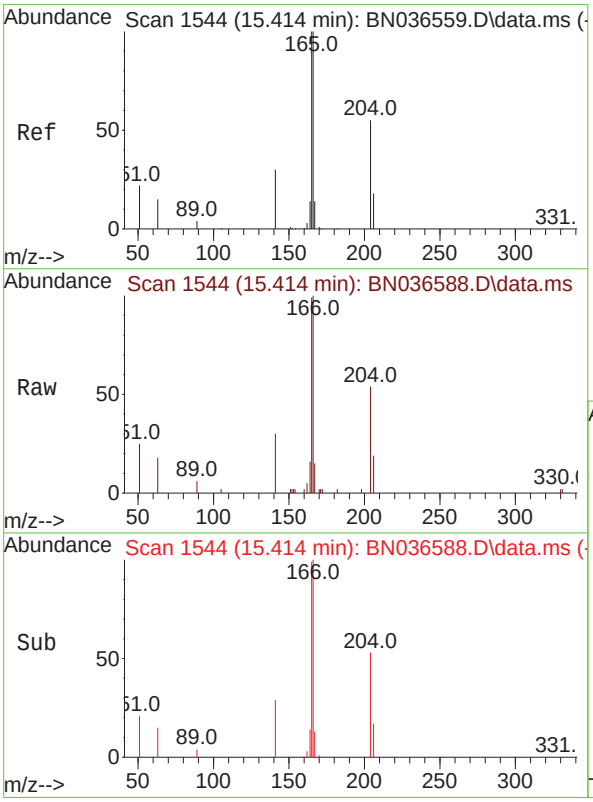
Ion	Ratio	Lower	Upper
154	100		
153	118.0	94.1	141.1
152	63.9	49.8	74.6



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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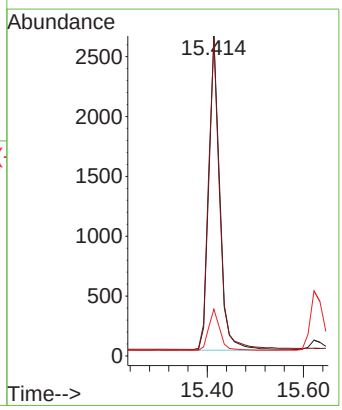
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

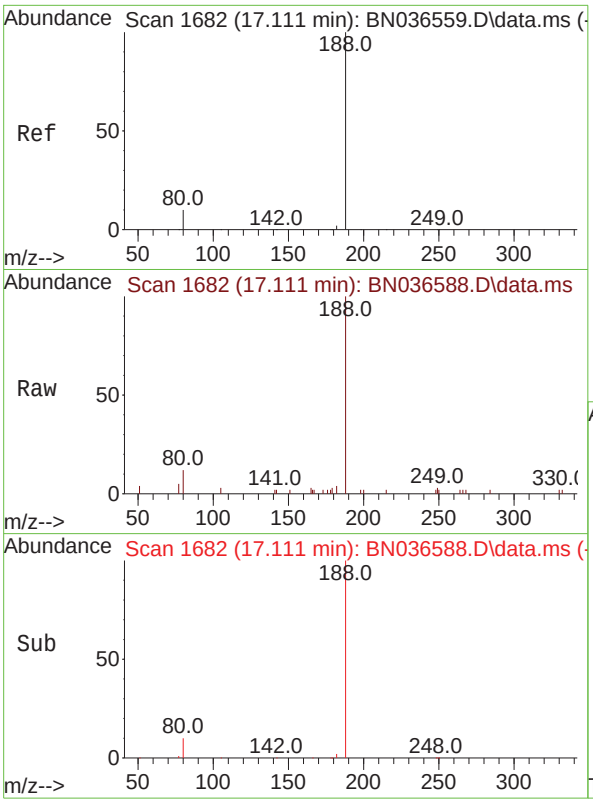


#18
Fluorene
Concen: 0.410 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:166 Resp: 4237

Ion	Ratio	Lower	Upper
166	100		
165	100.2	79.8	119.8
167	13.7	10.6	15.8





#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

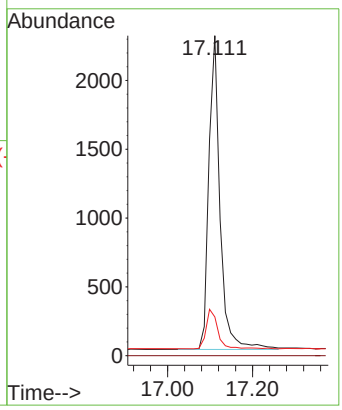
Tgt Ion:188 Resp: 417(

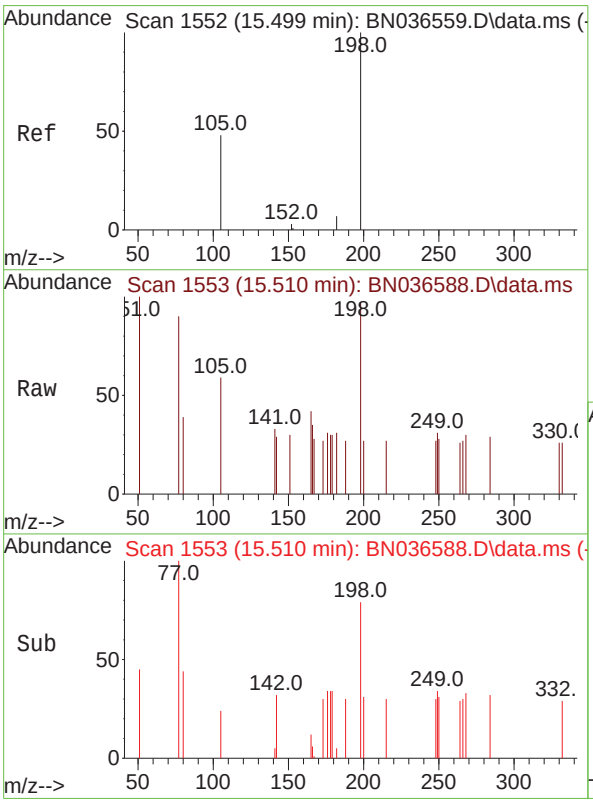
Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.1	8.8	13.2

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

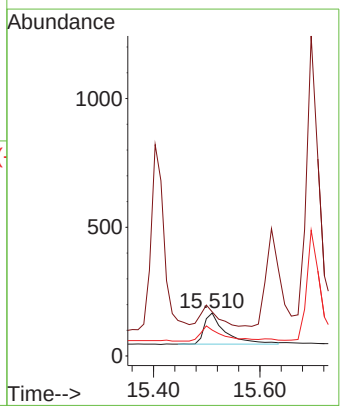


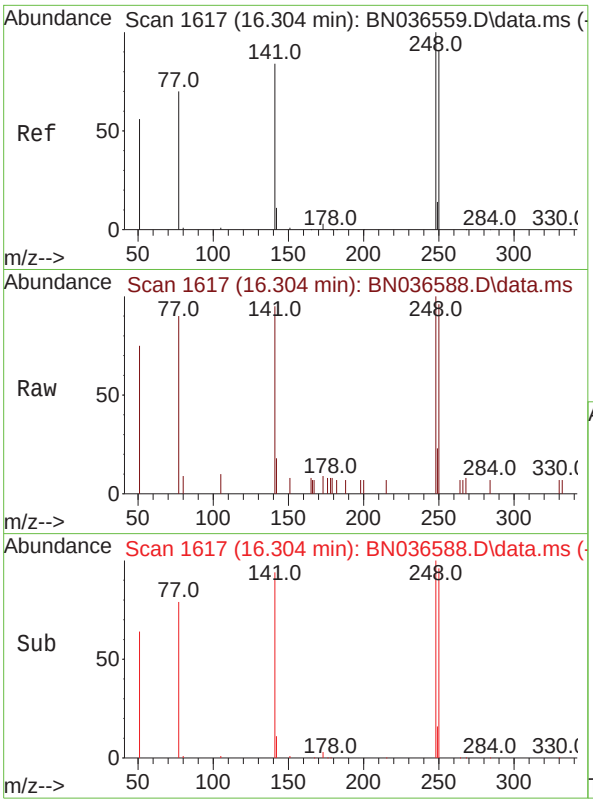


#20
4,6-Dinitro-2-methylphenol
Concen: 0.460 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:198 Resp: 335

Ion	Ratio	Lower	Upper
198	100		
51	103.0	107.9	161.9#
105	60.5	56.2	84.2

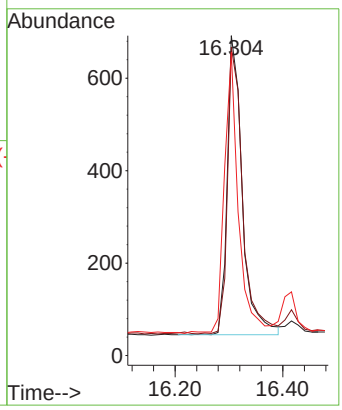




#21
4-Bromophenyl-phenylether
Concen: 0.480 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:248 Resp: 125(

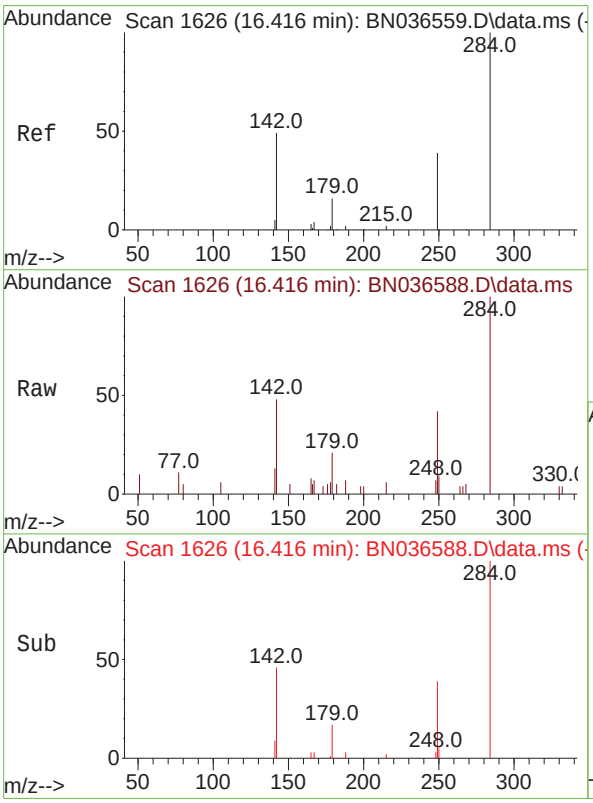
Ion	Ratio	Lower	Upper
248	100		
250	96.4	73.0	109.6
141	94.8	68.6	103.0



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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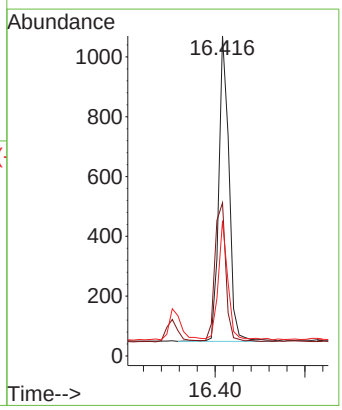
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

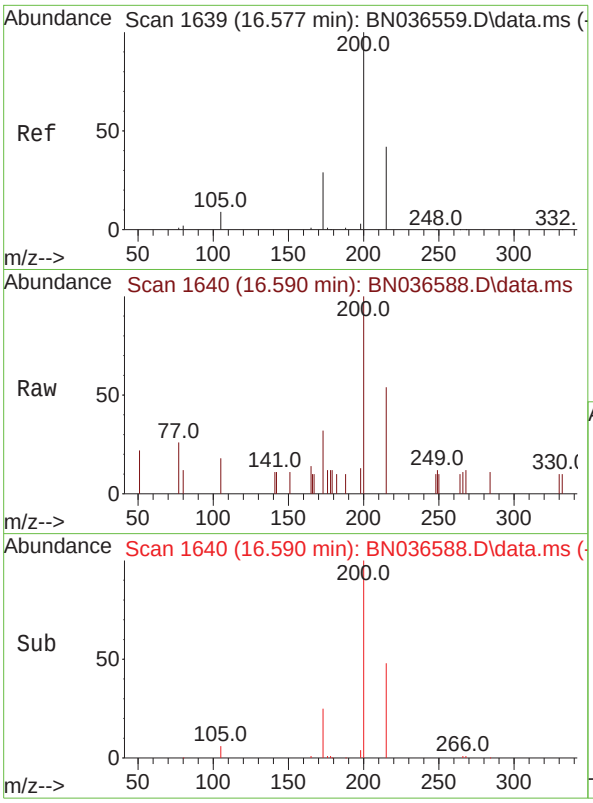


#22
Hexachlorobenzene
Concen: 0.513 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:284 Resp: 1619

Ion	Ratio	Lower	Upper
284	100		
142	48.5	37.0	55.4
249	35.0	28.1	42.1

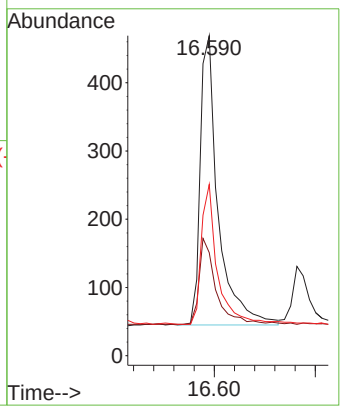




#23
Atrazine
Concen: 0.499 ng
RT: 16.590 min Scan# 1(
Delta R.T. 0.012 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:200 Resp: 104(

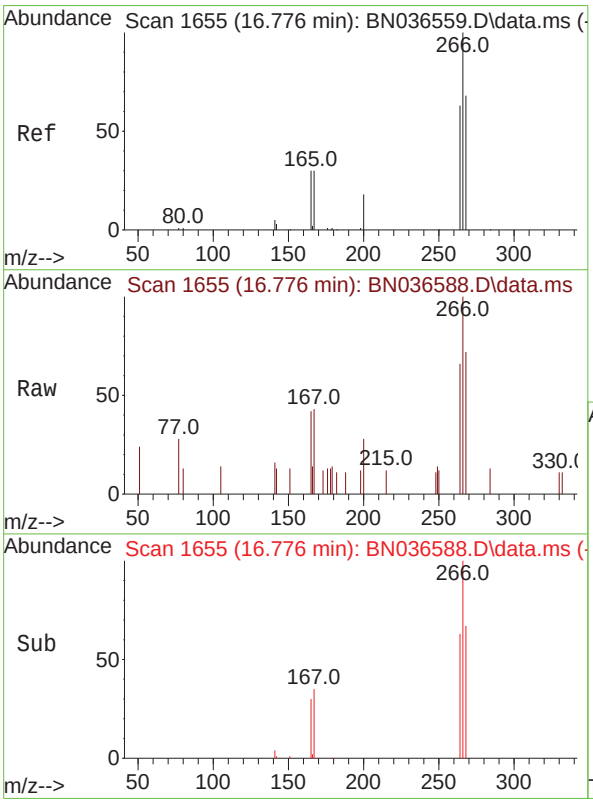
Ion	Ratio	Lower	Upper
200	100		
173	32.2	27.3	40.9
215	53.5	36.8	55.2



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

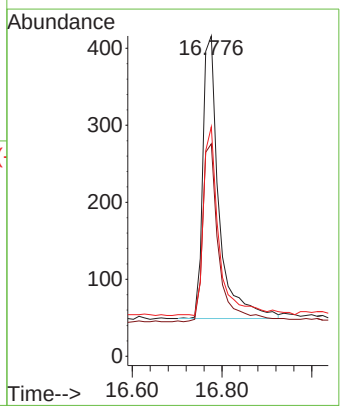
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

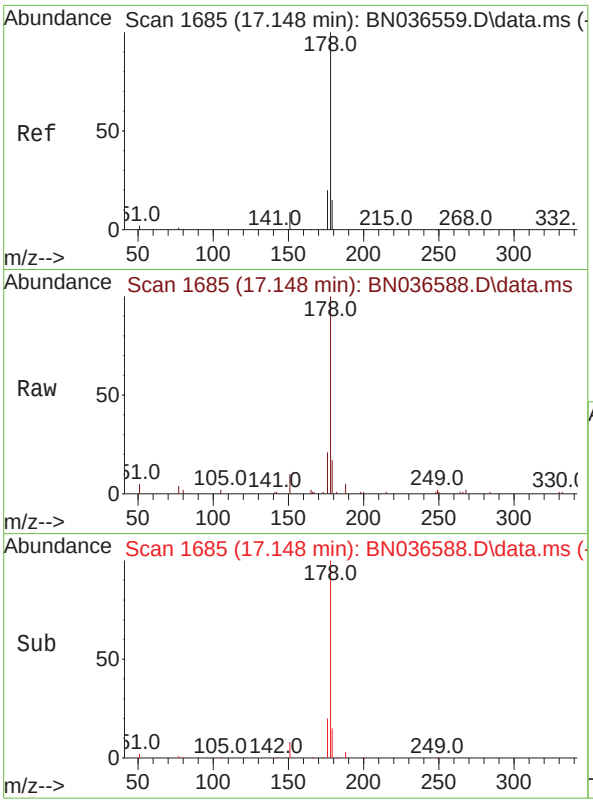


#24
Pentachlorophenol
Concen: 0.637 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:266 Resp: 917

Ion	Ratio	Lower	Upper
266	100		
264	62.4	49.6	74.4
268	64.8	50.9	76.3

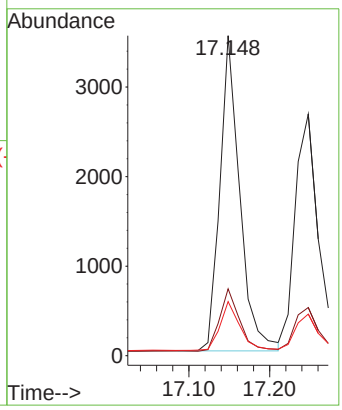




#25
Phenanthrene
Concen: 0.481 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:178 Resp: 602

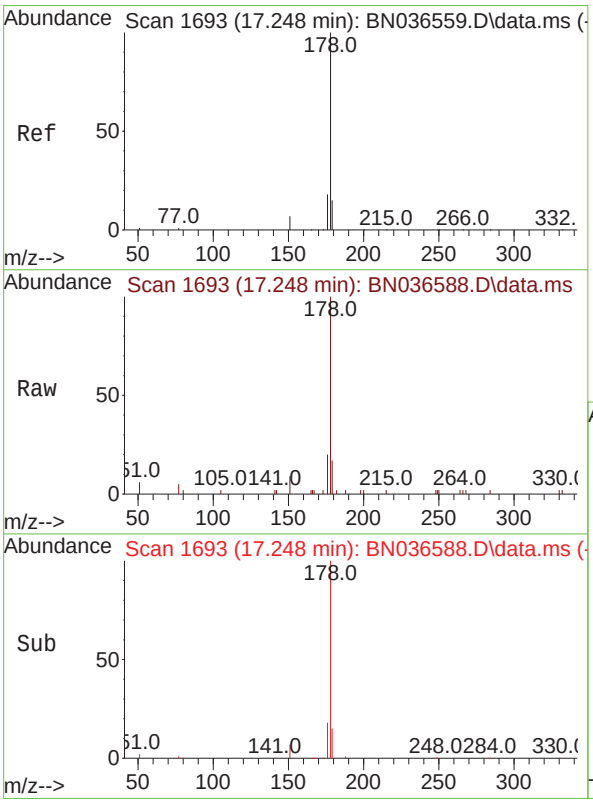
Ion	Ratio	Lower	Upper
178	100		
176	20.1	15.9	23.9
179	15.7	12.2	18.4



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
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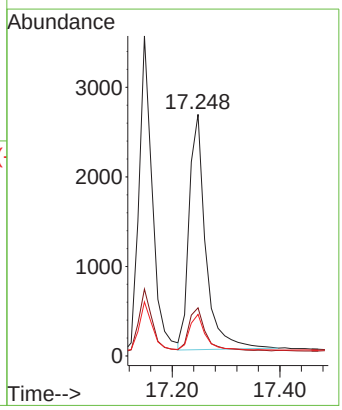
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

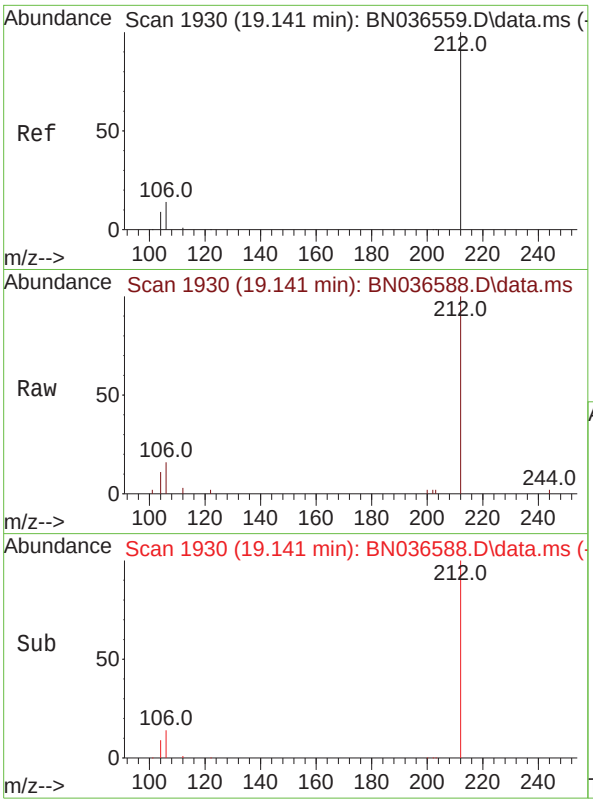


#26
Anthracene
Concen: 0.496 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:178 Resp: 5609

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.2
179	15.1	12.6	18.8

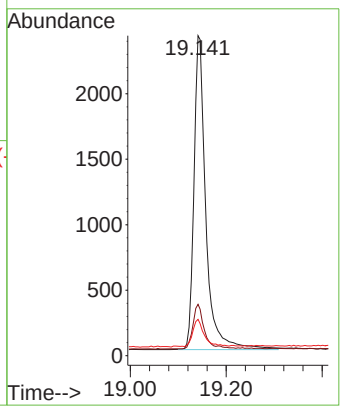




#27
Fluoranthene-d10
Concen: 0.388 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:212 Resp: 415

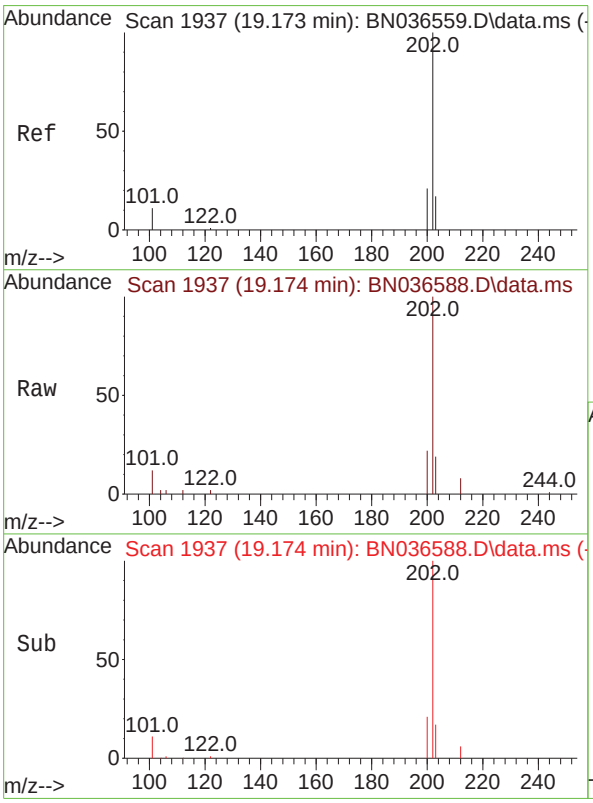
Ion	Ratio	Lower	Upper
212	100		
106	13.6	11.8	17.6
104	8.4	7.3	10.9



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

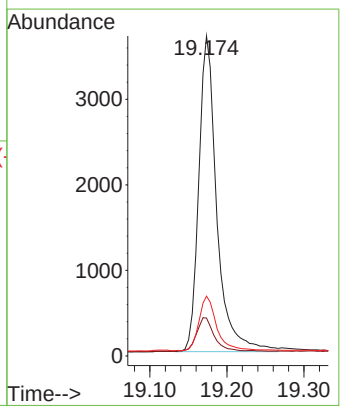
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

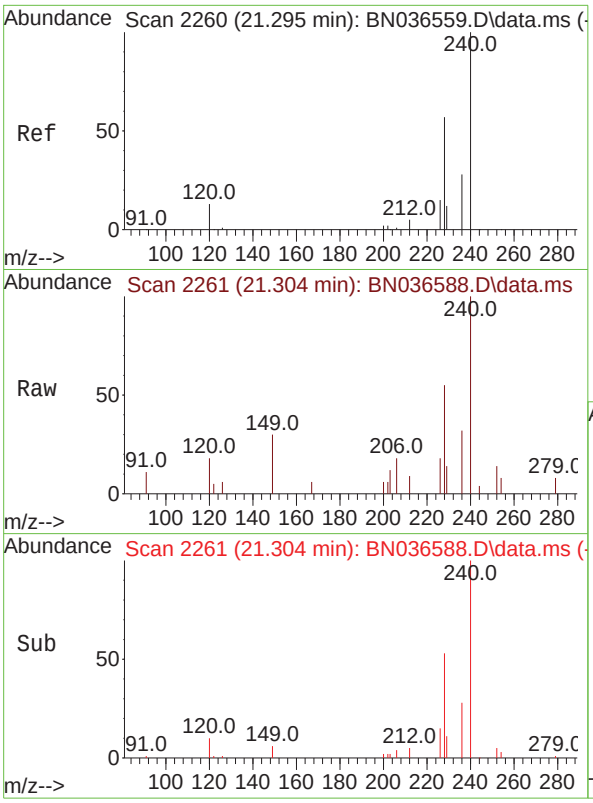


#28
Fluoranthene
Concen: 0.427 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:202 Resp: 6012

Ion	Ratio	Lower	Upper
202	100		
101	10.4	9.4	14.0
203	17.2	13.5	20.3

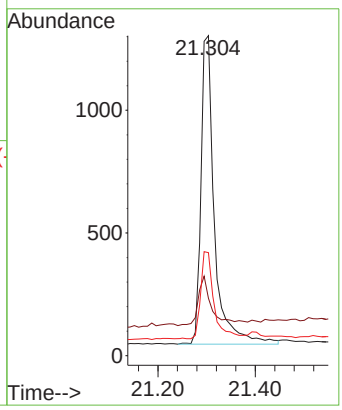




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:240 Resp: 242

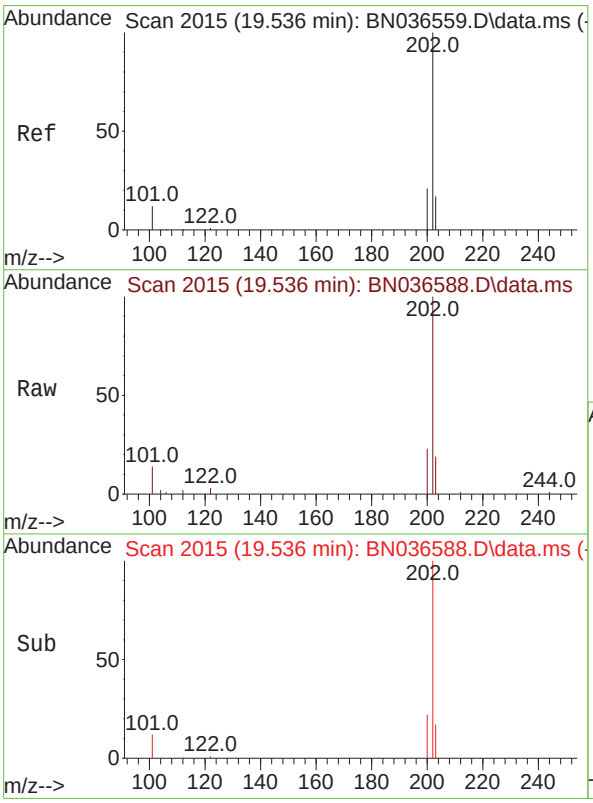
Ion	Ratio	Lower	Upper
240	100		
120	17.9	14.6	22.0
236	32.2	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

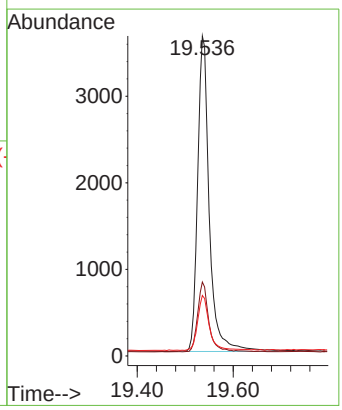
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

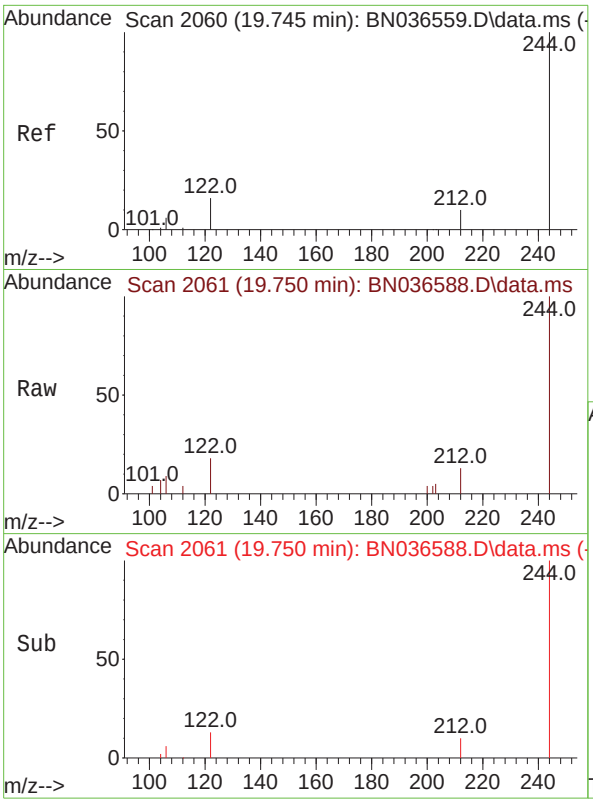


#30
Pyrene
Concen: 0.524 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:202 Resp: 6199

Ion	Ratio	Lower	Upper
202	100		
200	20.8	17.1	25.7
203	17.4	14.1	21.1





#31
Terphenyl-d14
Concen: 0.471 ng
RT: 19.750 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

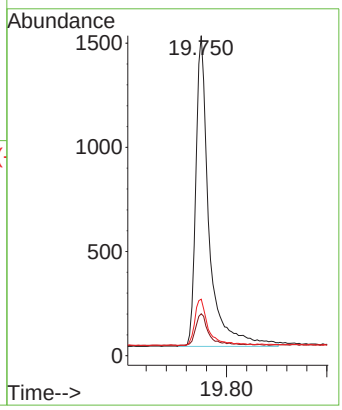
Instrument :
BNA_N
ClientSampleId :
PB167057BS

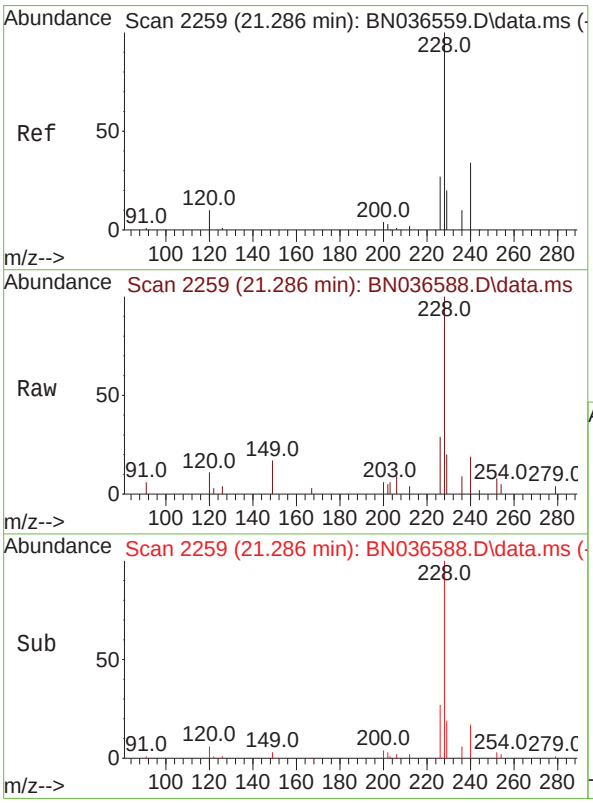
Tgt Ion:244 Resp: 273

Ion	Ratio	Lower	Upper
244	100		
212	13.1	9.6	14.4
122	17.6	13.9	20.9

Manual Integrations
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Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

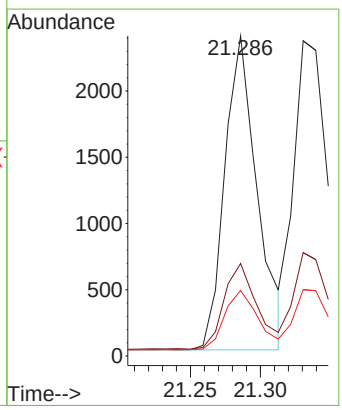


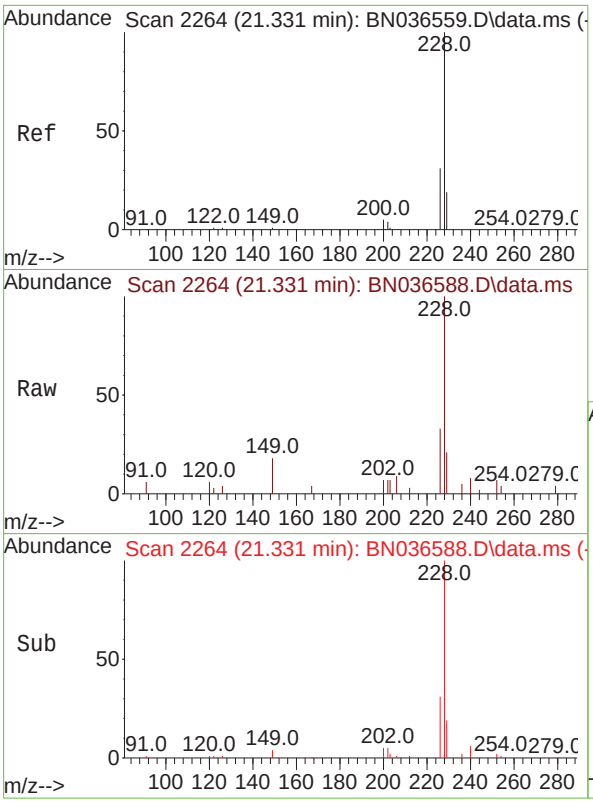


#32
Benzo(a)anthracene
Concen: 0.456 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:228 Resp: 3838

Ion	Ratio	Lower	Upper
228	100		
226	28.9	22.5	33.7
229	20.4	16.6	25.0

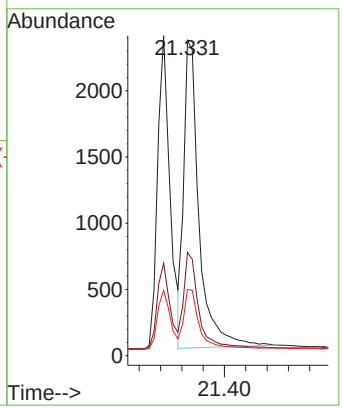




#33
Chrysene
Concen: 0.503 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:228 Resp: 462

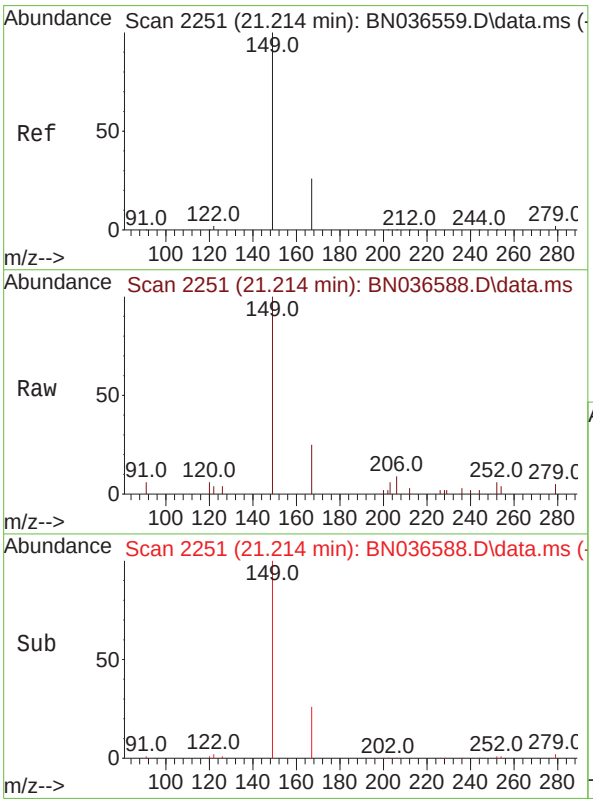
Ion	Ratio	Lower	Upper
228	100		
226	32.8	25.3	37.9
229	21.0	15.8	23.8



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations APPROVED

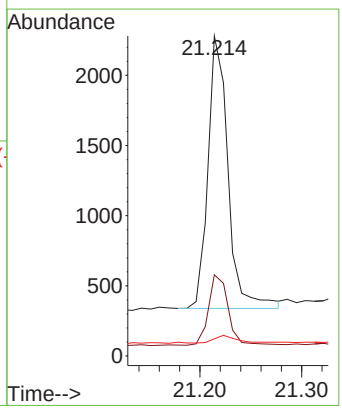
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

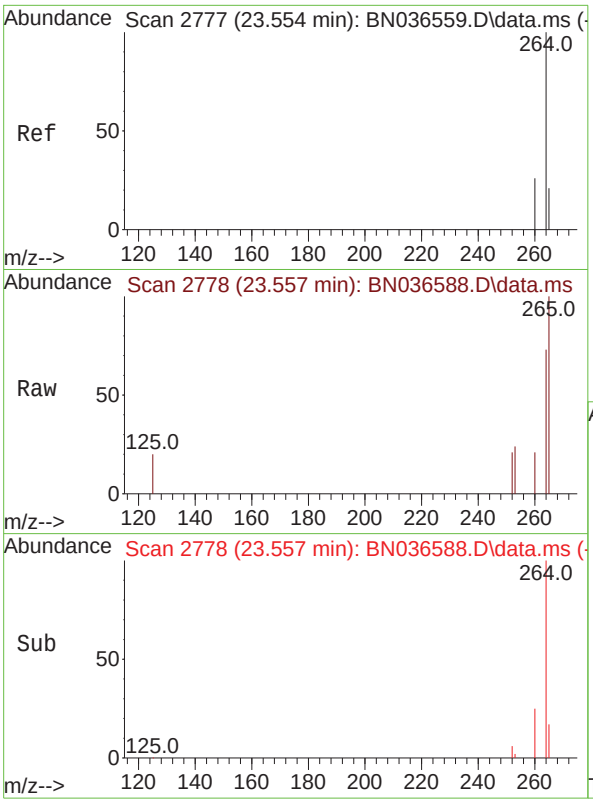


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.445 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:149 Resp: 2665

Ion	Ratio	Lower	Upper
149	100		
167	25.0	20.7	31.1
279	2.9	3.6	5.4#





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

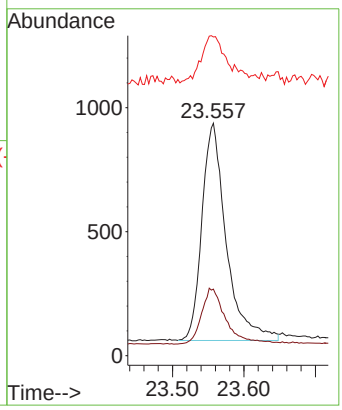
Tgt Ion:264 Resp: 207

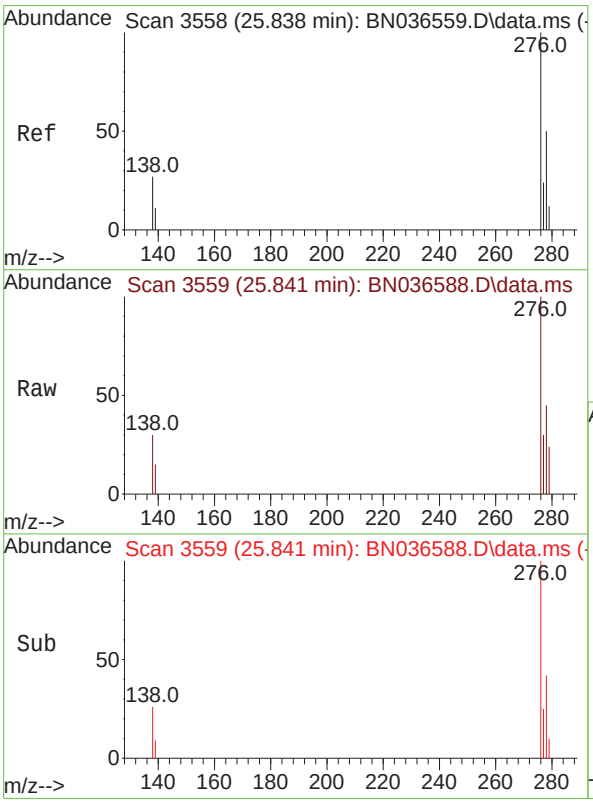
Ion	Ratio	Lower	Upper
264	100		
260	28.6	22.6	33.8
265	137.1	88.1	132.1#

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

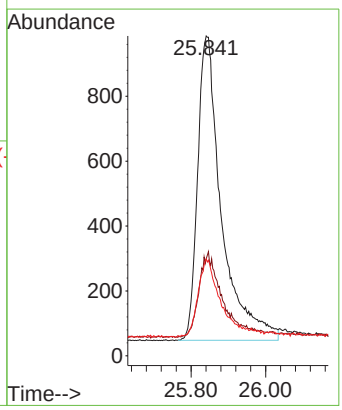


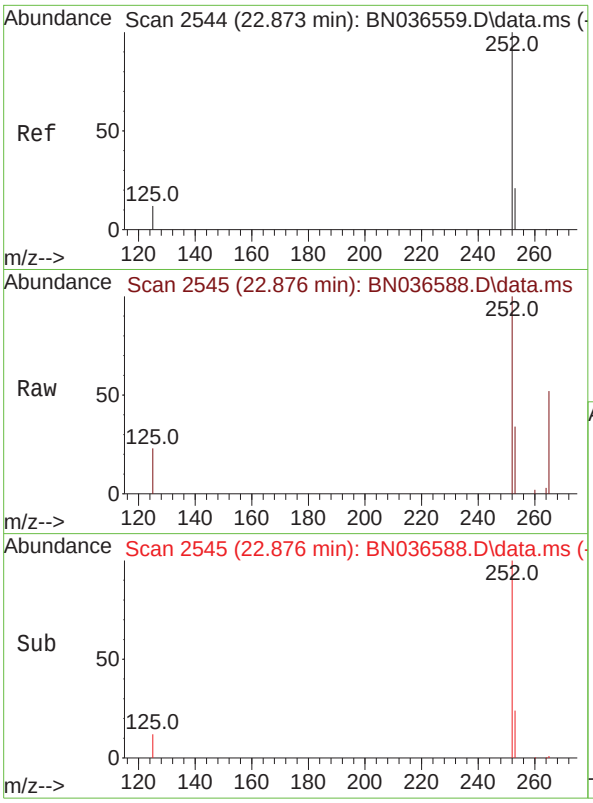


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.556 ng
RT: 25.841 min Scan# 3559
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:276 Resp: 4164

Ion	Ratio	Lower	Upper
276	100		
138	25.7	23.4	35.2
277	22.9	20.0	30.0

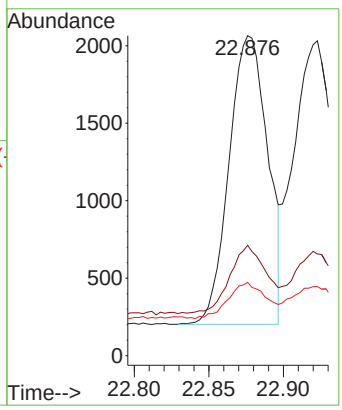




#37
Benzo(b)fluoranthene
Concen: 0.445 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:252 Resp: 335

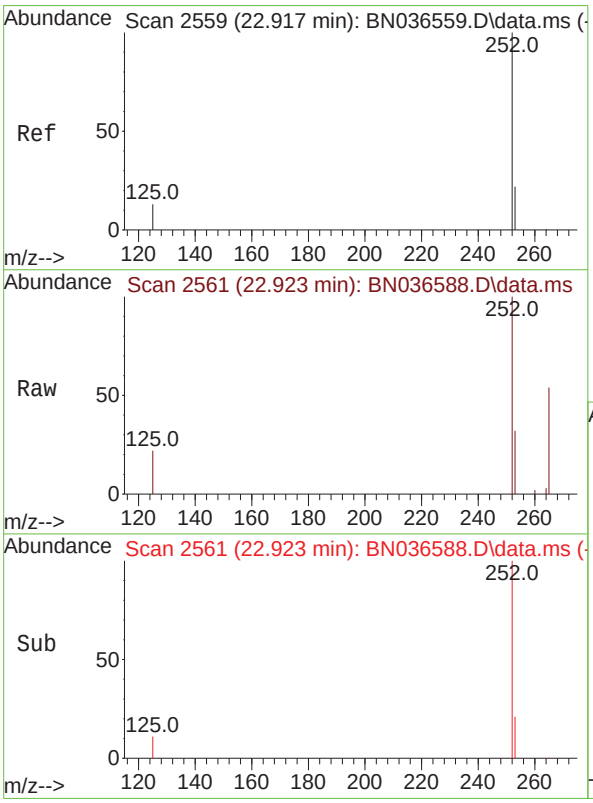
Ion	Ratio	Lower	Upper
252	100		
253	34.5	23.9	35.9
125	22.9	17.4	26.2



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

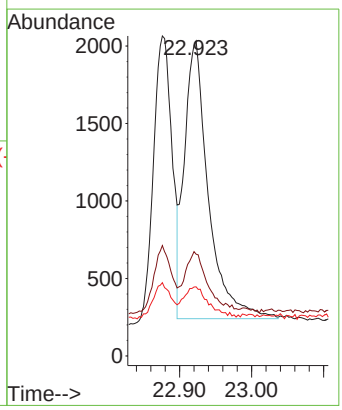
Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

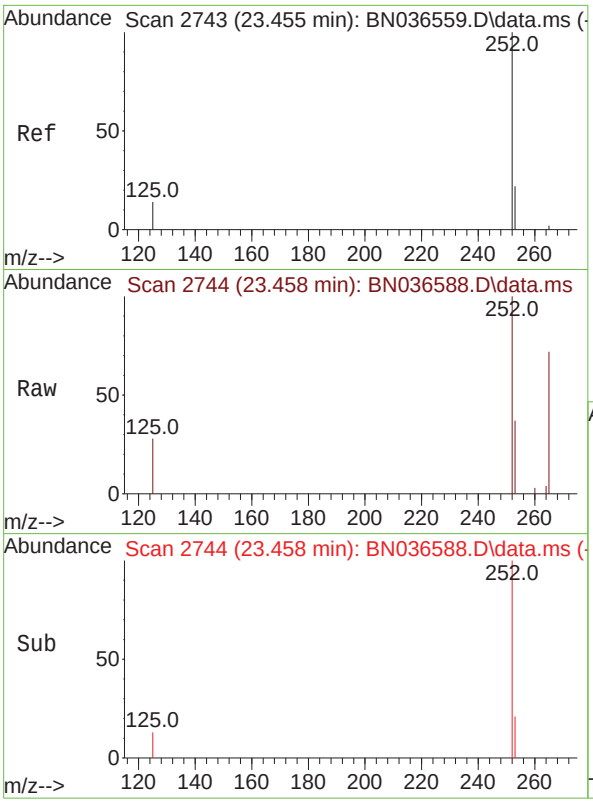


#38
Benzo(k)fluoranthene
Concen: 0.522 ng m
RT: 22.923 min Scan# 2561
Delta R.T. 0.006 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:252 Resp: 4137

Ion	Ratio	Lower	Upper
252	100		
253	32.3	24.6	36.8
125	21.9	17.8	26.8





#39
Benzo(a)pyrene
Concen: 0.510 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

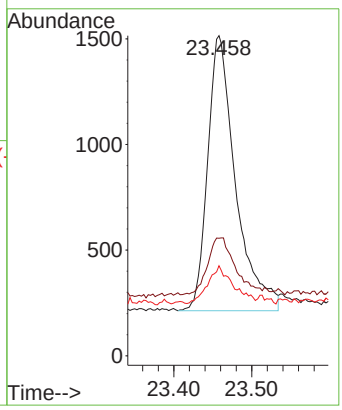
Tgt Ion:252 Resp: 324

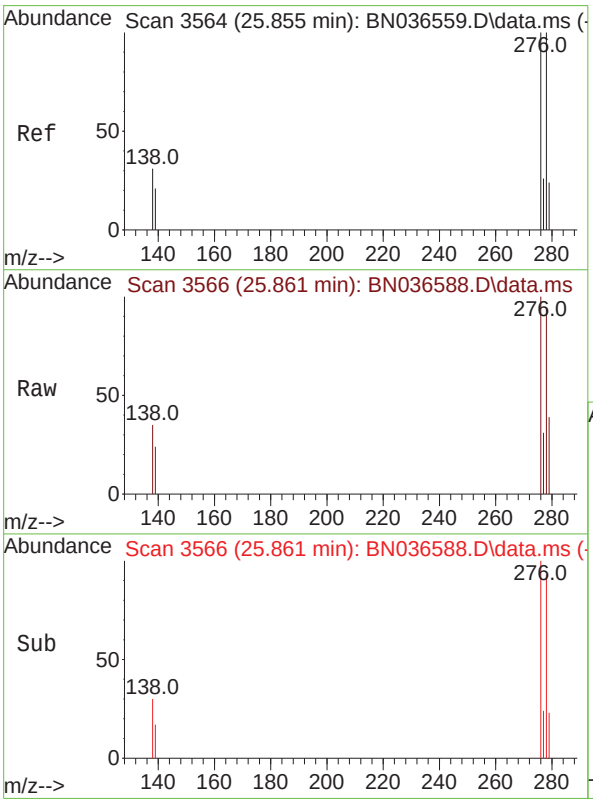
Ion	Ratio	Lower	Upper
252	100		
253	36.7	27.8	41.8
125	28.1	22.7	34.1

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

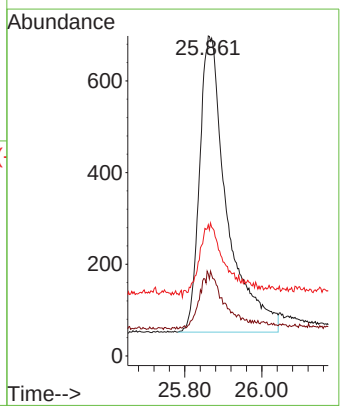


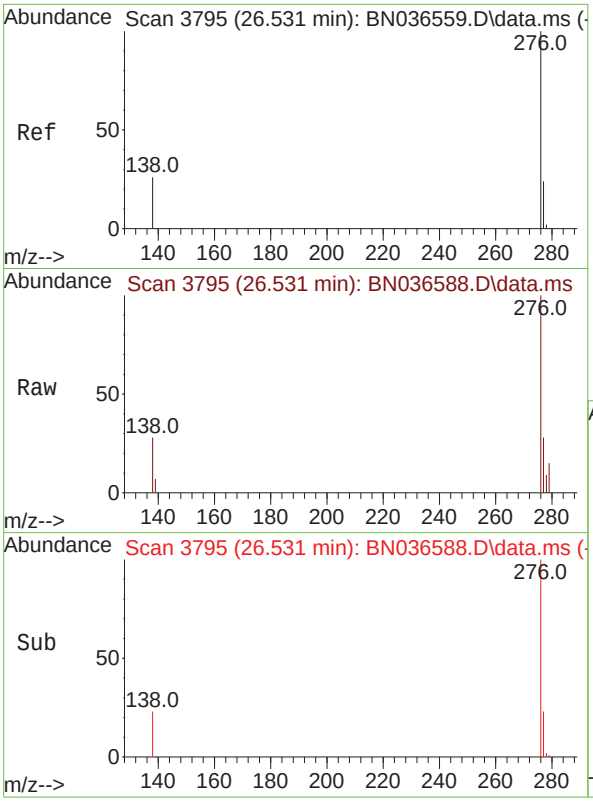


#40
Dibenzo(a,h)anthracene
Concen: 0.545 ng
RT: 25.861 min Scan# 3566
Delta R.T. 0.006 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:278 Resp: 3176

Ion	Ratio	Lower	Upper
278	100		
139	25.6	20.8	31.2
279	41.0	28.8	43.2

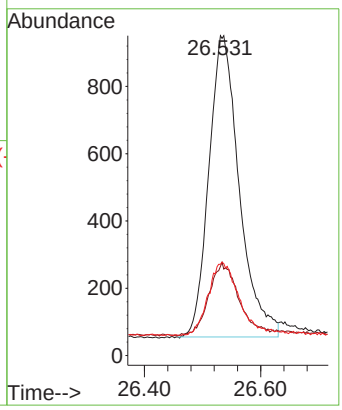




#41
Benzo(g,h,i)perylene
Concen: 0.489 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:276 Resp: 325

Ion	Ratio	Lower	Upper
276	100		
277	27.9	22.2	33.4
138	28.5	24.1	36.1



Instrument :
BNA_N
ClientSampleId :
PB167057BS

Manual Integrations
APPROVED

Reviewed By :Anahy Claudio 03/12/2025
Supervised By :Jagrut Upadhyay 03/12/2025

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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE103D1-20250306MS	SDG No.:	Q1531
Lab Sample ID:	Q1531-08MS	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036579.D	1	03/10/25 11:35	03/11/25 13:45	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.20	E	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		72%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		81%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		121%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.724				
1146-65-2	Naphthalene-d8	4550	10.509				
15067-26-2	Acenaphthene-d10	2670	14.355				
1517-22-2	Phenanthrene-d10	5290	17.111				
1719-03-5	Chrysene-d12	3810	21.295				
1520-96-3	Perylene-d12	3100	23.554				

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\BN031125\
Data File : BN036579.D
Acq On : 11 Mar 2025 13:45
Operator : RC/JU
Sample : Q1531-08MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Quant Time: Mar 11 14:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

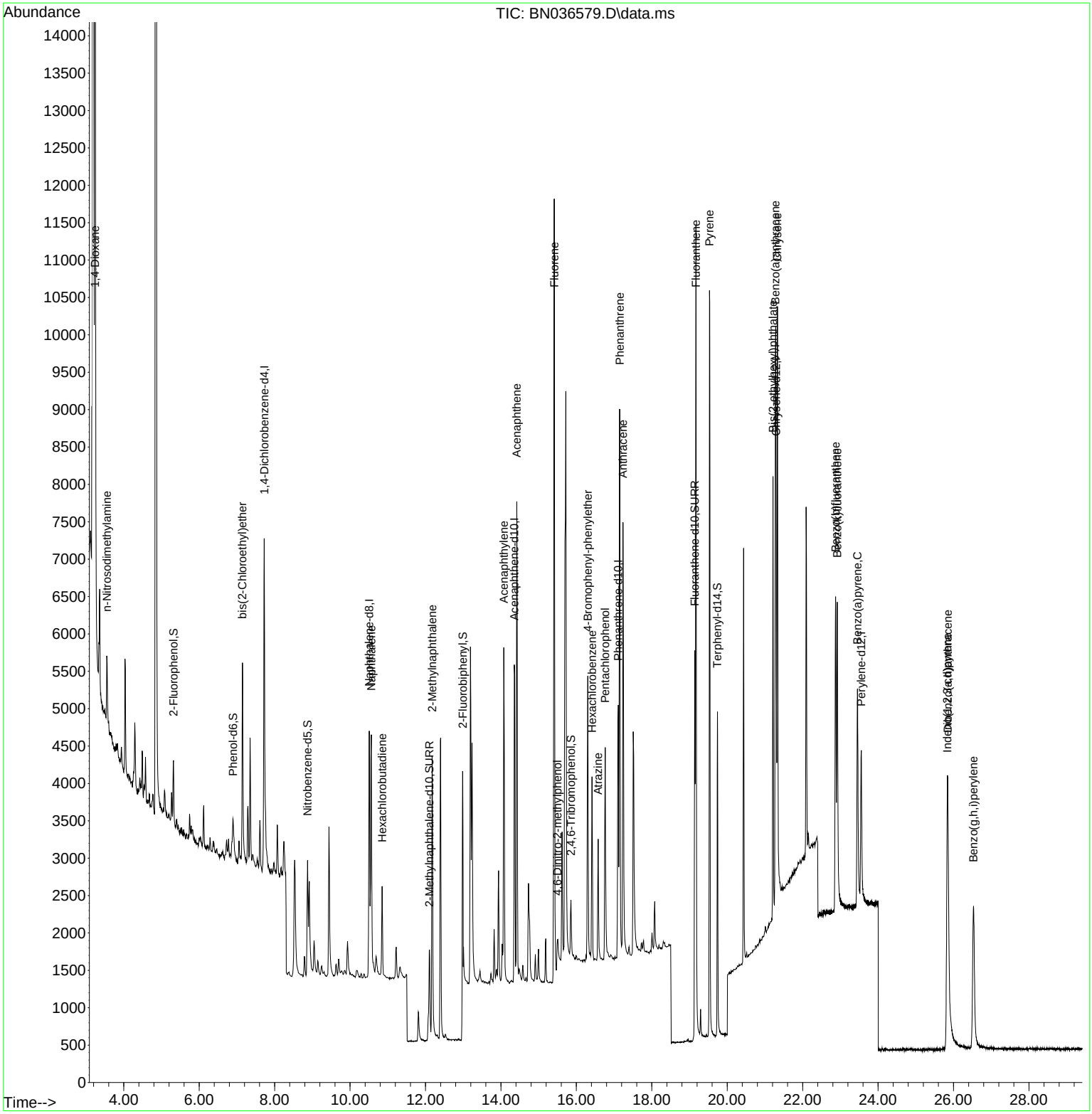
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1966	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4554	0.400	ng		0.00
13) Acenaphthene-d10	14.355	164	2666	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	5287	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3809	0.400	ng		0.00
35) Perylene-d12	23.554	264	3096	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	678	0.148	ng		0.00
5) Phenol-d6	6.901	99	481	0.085	ng		0.00
8) Nitrobenzene-d5	8.875	82	1420	0.287	ng		0.00
11) 2-Methylnaphthalene-d10	12.101	152	2639	0.390	ng		-0.01
14) 2,4,6-Tribromophenol	15.858	330	471	0.389	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	5044	0.325	ng		0.00
27) Fluoranthene-d10	19.141	212	5901	0.435	ng		0.00
31) Terphenyl-d14	19.740	244	4410	0.483	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	15270	7.002	ng		97
3) n-Nitrosodimethylamine	3.550	42	804	0.182	ng	#	97
6) bis(2-Chloroethyl)ether	7.147	93	2001	0.342	ng		96
9) Naphthalene	10.562	128	4693	0.350	ng		99
10) Hexachlorobutadiene	10.850	225	956	0.303	ng	#	98
12) 2-Methylnaphthalene	12.177	142	3028	0.355	ng		99
16) Acenaphthylene	14.078	152	5093	0.405	ng		100
17) Acenaphthene	14.420	154	3200	0.389	ng		99
18) Fluorene	15.414	166	4423	0.397	ng		98
20) 4,6-Dinitro-2-methylph...	15.499	198	451	0.479	ng	#	77
21) 4-Bromophenyl-phenylether	16.304	248	1454	0.439	ng		90
22) Hexachlorobenzene	16.416	284	1681	0.420	ng		99
23) Atrazine	16.578	200	1449	0.546	ng		95
24) Pentachlorophenol	16.764	266	1496	0.820	ng		100
25) Phenanthrene	17.148	178	7638	0.482	ng		100
26) Anthracene	17.235	178	6937	0.485	ng		100
28) Fluoranthene	19.169	202	9138	0.513	ng	#	93
30) Pyrene	19.531	202	9436	0.507	ng		100
32) Benzo(a)anthracene	21.277	228	6388	0.482	ng		99
33) Chrysene	21.331	228	7409	0.512	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	4963	0.526	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	5521	0.494	ng		99
37) Benzo(b)fluoranthene	22.873	252	5536	0.491	ng		100
38) Benzo(k)fluoranthene	22.917	252	5823	0.493	ng		98
39) Benzo(a)pyrene	23.452	252	5125	0.540	ng		97
40) Dibenzo(a,h)anthracene	25.846	278	4290	0.493	ng		97
41) Benzo(g,h,i)perylene	26.531	276	4516	0.454	ng		98

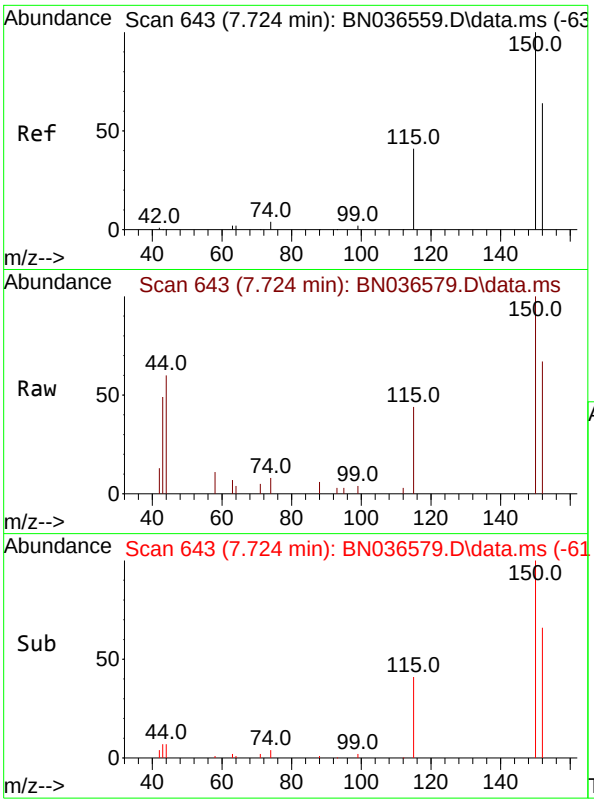
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036579.D
Acq On : 11 Mar 2025 13:45
Operator : RC/JU
Sample : Q1531-08MS
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Quant Time: Mar 11 14:07:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



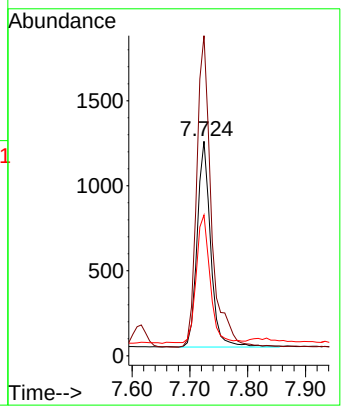


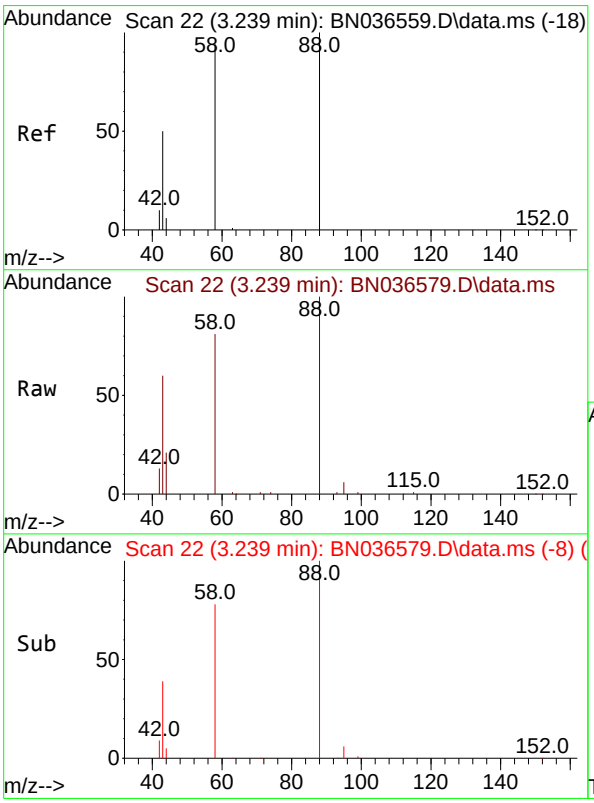
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:152 Resp: 1966

Ion	Ratio	Lower	Upper
152	100		
150	149.2	123.7	185.5
115	65.6	54.3	81.5

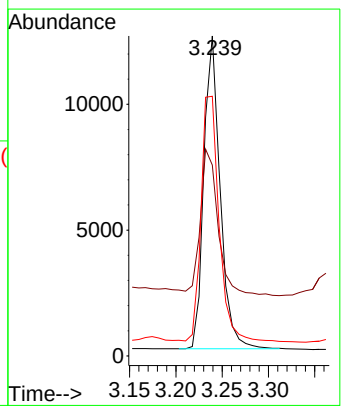


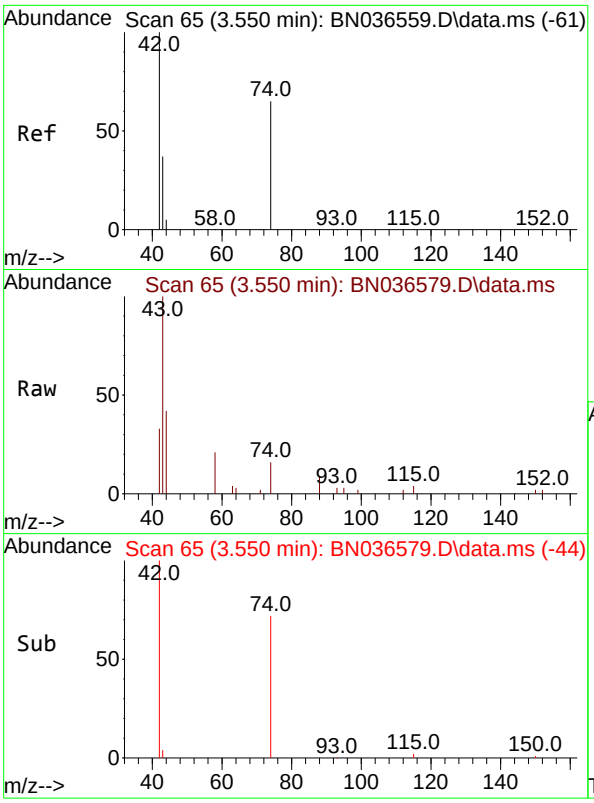


#2
1,4-Dioxane
Concen: 7.002 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion: 88 Resp: 15270

Ion	Ratio	Lower	Upper
88	100		
43	50.8	37.8	56.8
58	86.4	67.4	101.2



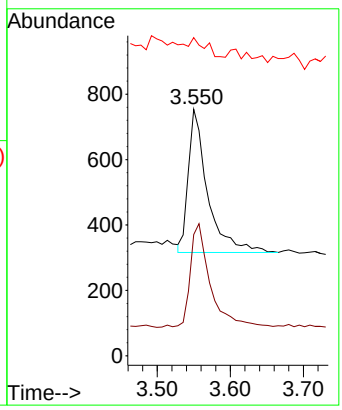


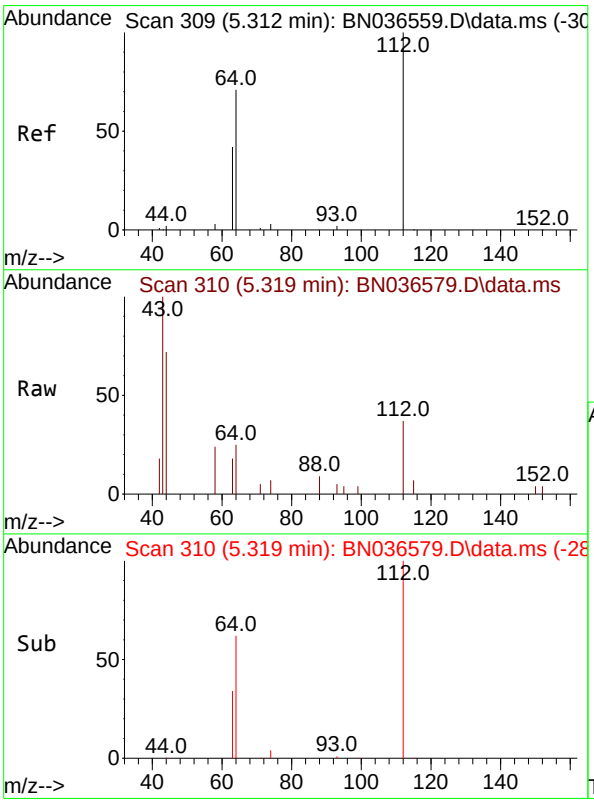
#3
n-Nitrosodimethylamine
Concen: 0.182 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion: 42 Resp: 804

Ion	Ratio	Lower	Upper
42	100		
74	75.2	60.6	90.8
44	0.0	6.3	9.5#

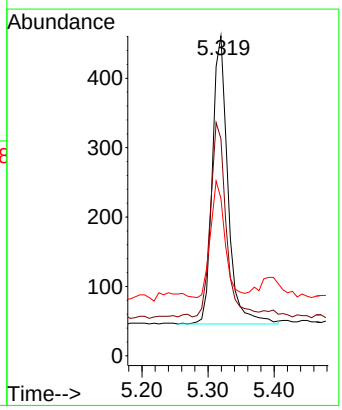


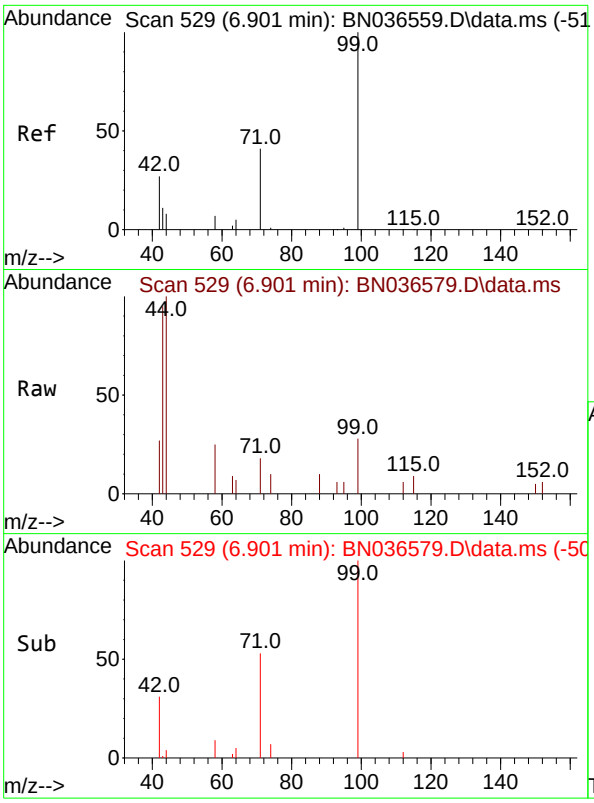


#4
2-Fluorophenol
Concen: 0.148 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.007 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:112 Resp: 678

Ion	Ratio	Lower	Upper
112	100		
64	71.4	53.1	79.7
63	39.1	31.8	47.8



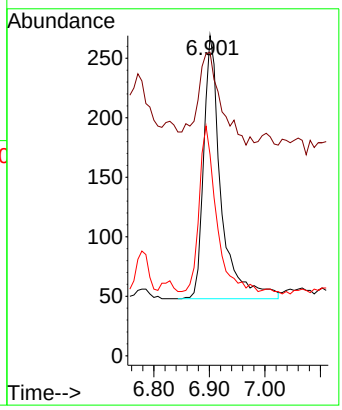


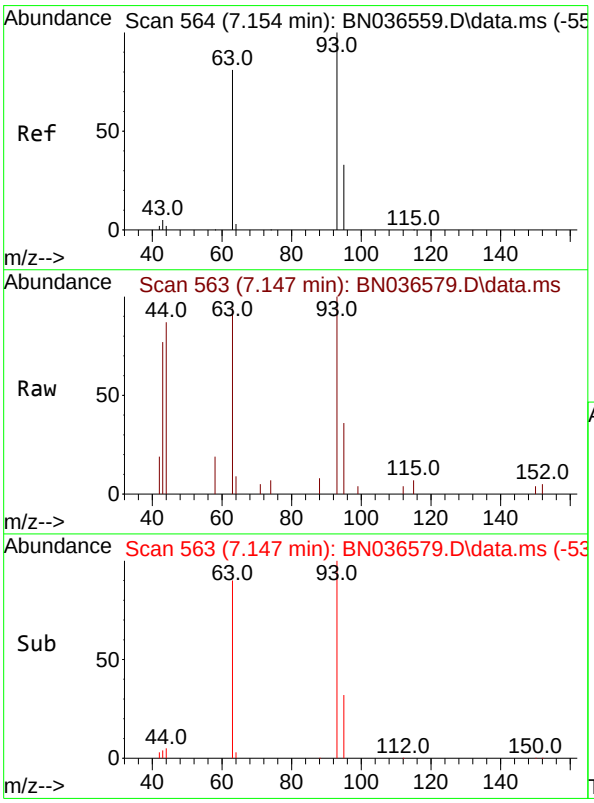
#5
Phenol-d6
Concen: 0.085 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion: 99 Resp: 481

Ion	Ratio	Lower	Upper
99	100		
42	46.8	26.5	39.7#
71	61.7	34.1	51.1#

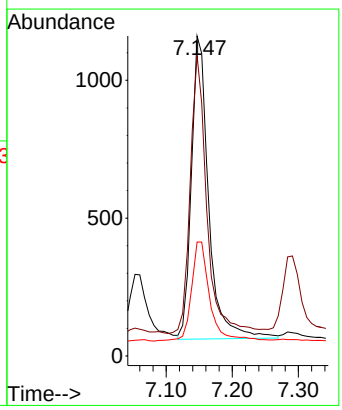


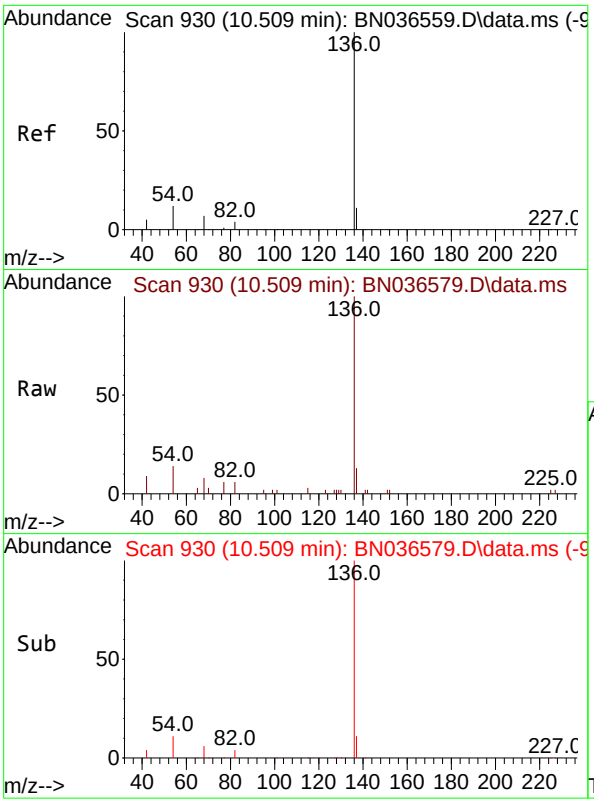


#6
bis(2-Chloroethyl)ether
Concen: 0.342 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion: 93 Resp: 2001

Ion	Ratio	Lower	Upper
93	100		
63	88.2	67.7	101.5
95	34.8	25.6	38.4



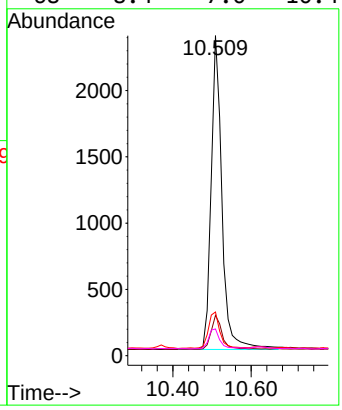


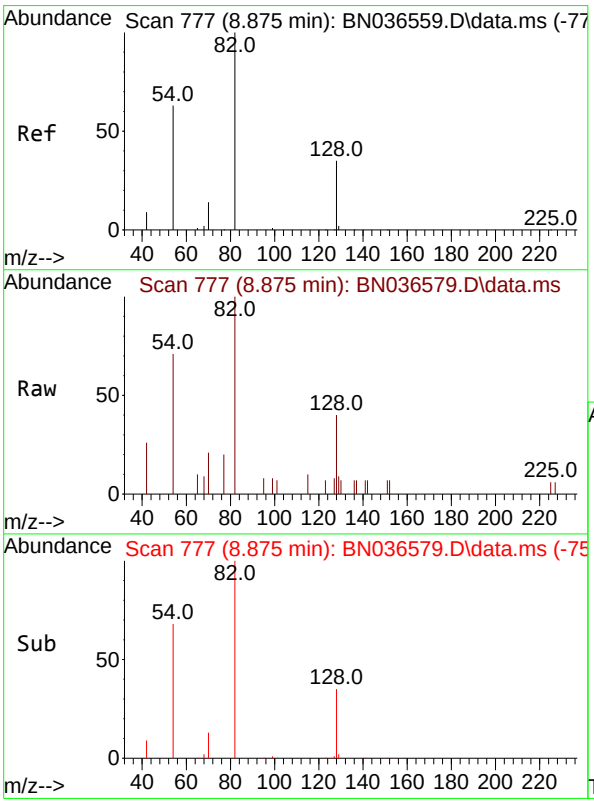
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:136 Resp: 4554

Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.3	15.5
54	13.7	11.5	17.3
68	8.4	7.0	10.4

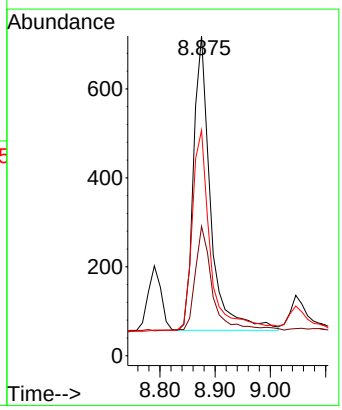


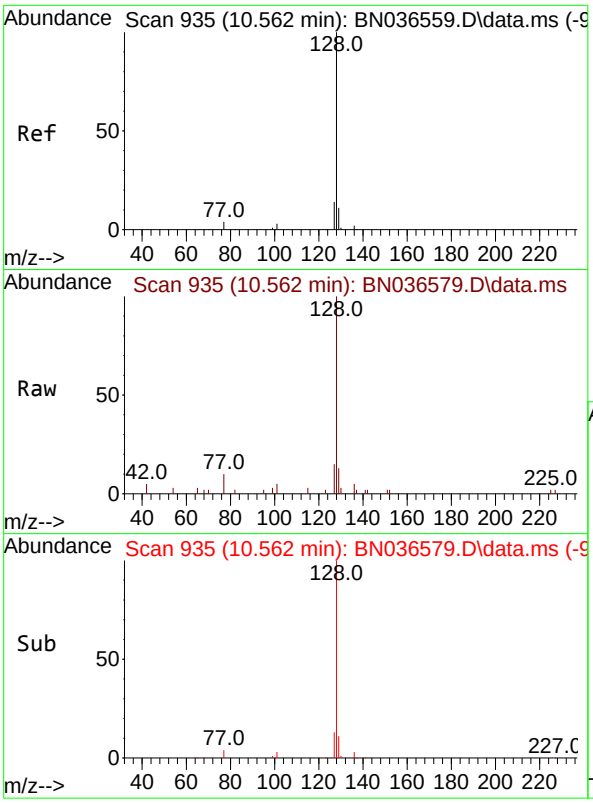


#8
Nitrobenzene-d5
Concen: 0.287 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion: 82 Resp: 1420

Ion	Ratio	Lower	Upper
82	100		
128	40.5	30.6	45.8
54	70.5	52.2	78.4



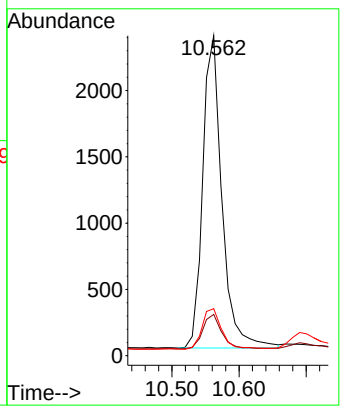


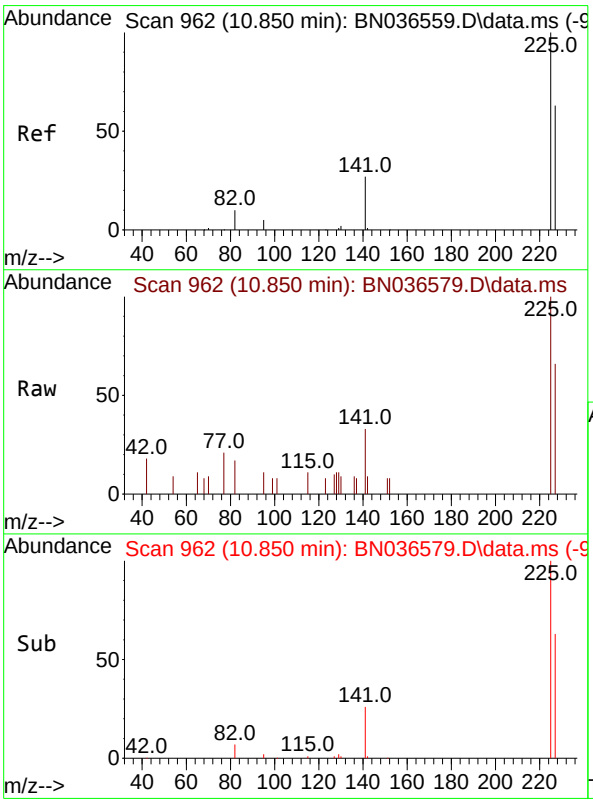
#9
Naphthalene
Concen: 0.350 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:128 Resp: 4693

Ion	Ratio	Lower	Upper
128	100		
129	12.9	9.8	14.6
127	14.7	11.8	17.8

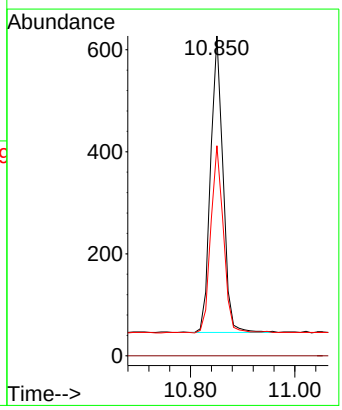


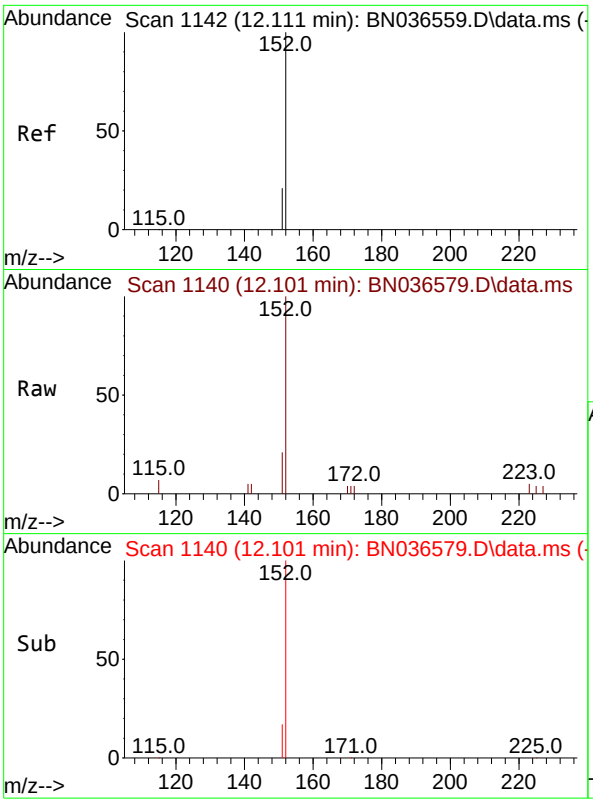


#10
Hexachlorobutadiene
Concen: 0.303 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:225 Resp: 956

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	51.8	77.8



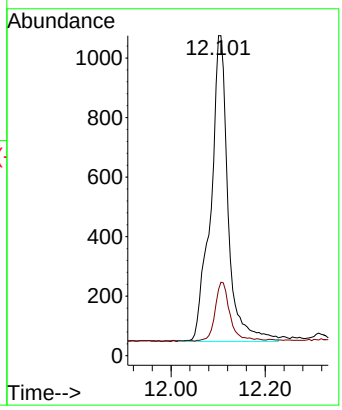


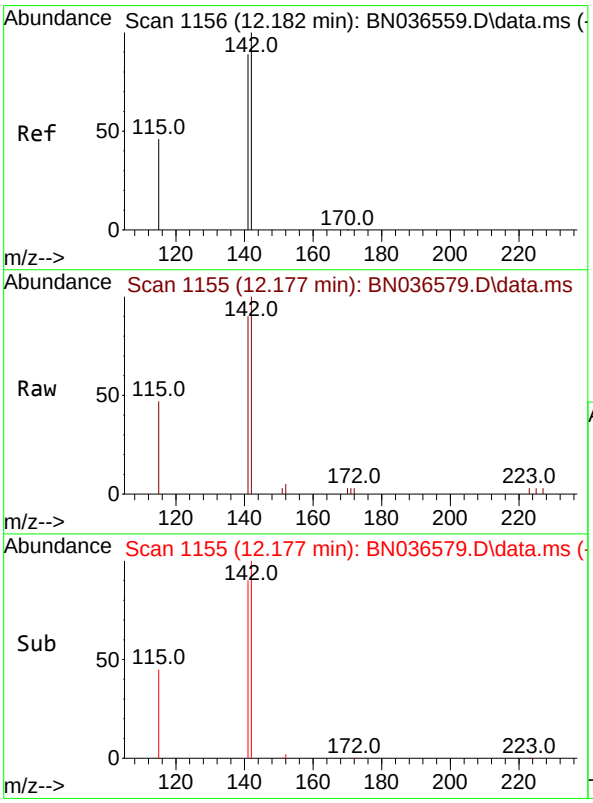
#11
2-Methylnaphthalene-d10
Concen: 0.390 ng
RT: 12.101 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:152 Resp: 2639

Ion	Ratio	Lower	Upper
152	100		
151	16.3	17.0	25.6#

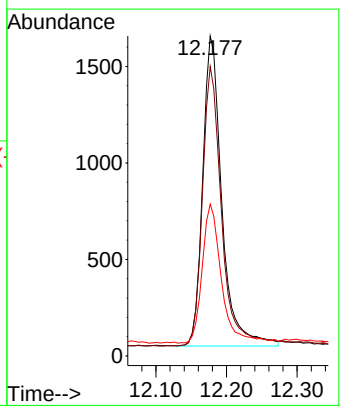


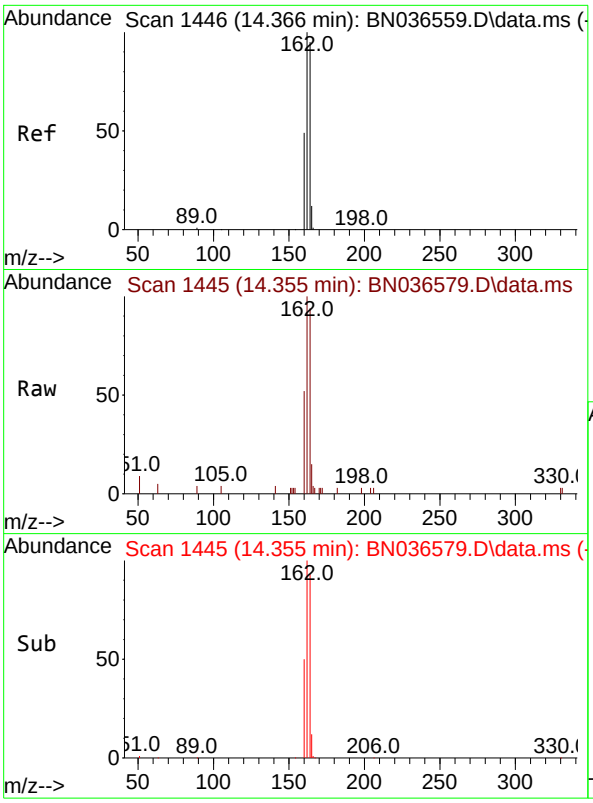


#12
2-Methylnaphthalene
Concen: 0.355 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:142 Resp: 3028

Ion	Ratio	Lower	Upper
142	100		
141	90.5	71.7	107.5
115	47.5	38.3	57.5



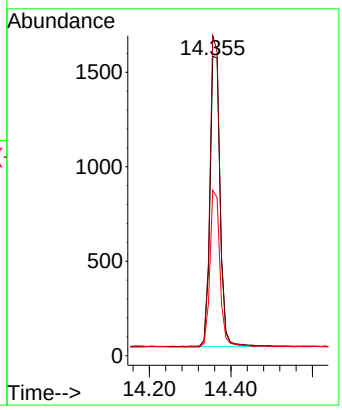


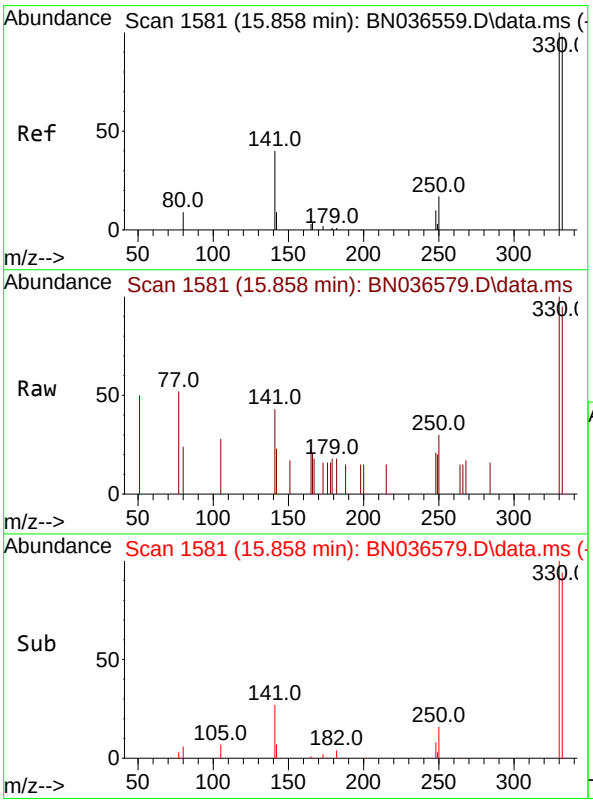
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:164 Resp: 2666

Ion	Ratio	Lower	Upper
164	100		
162	106.9	84.2	126.2
160	55.3	42.2	63.2

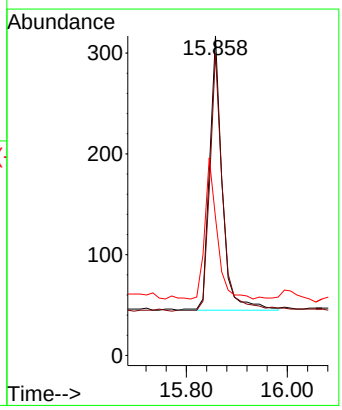


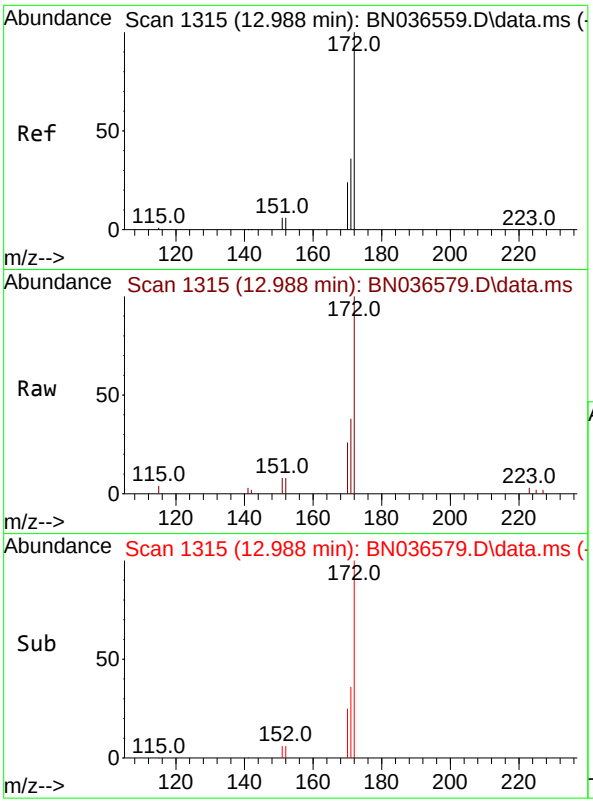


#14
2,4,6-Tribromophenol
Concen: 0.389 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:330 Resp: 471

Ion	Ratio	Lower	Upper
330	100		
332	96.6	75.2	112.8
141	49.7	43.4	65.2



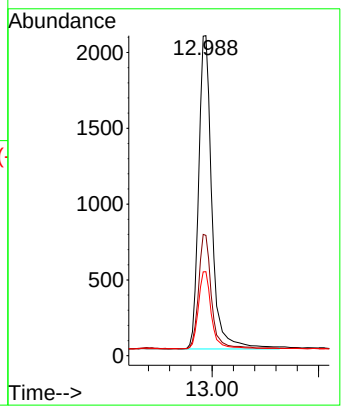


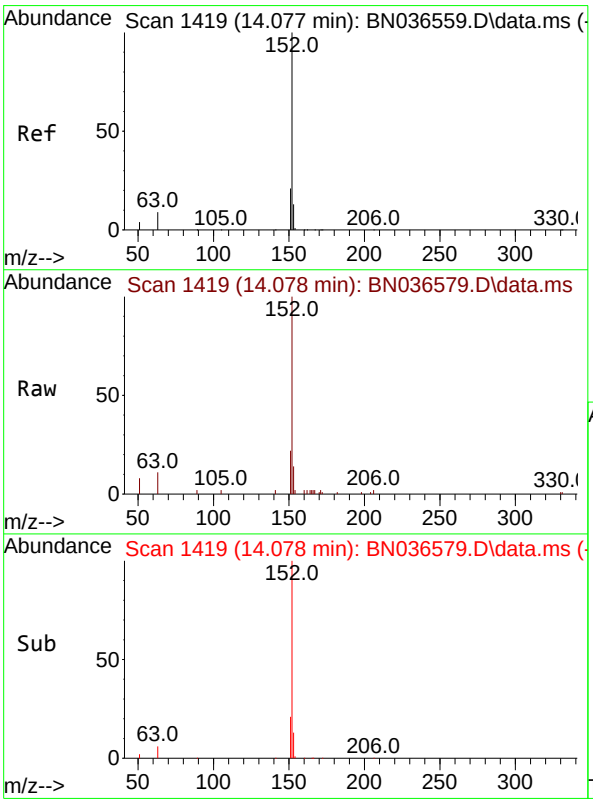
#15
2-Fluorobiphenyl
Concen: 0.325 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:172 Resp: 5044

Ion	Ratio	Lower	Upper
172	100		
171	37.6	29.5	44.3
170	26.2	20.2	30.4

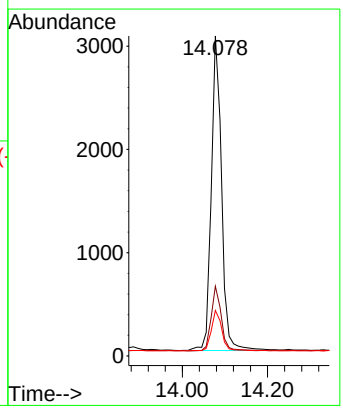


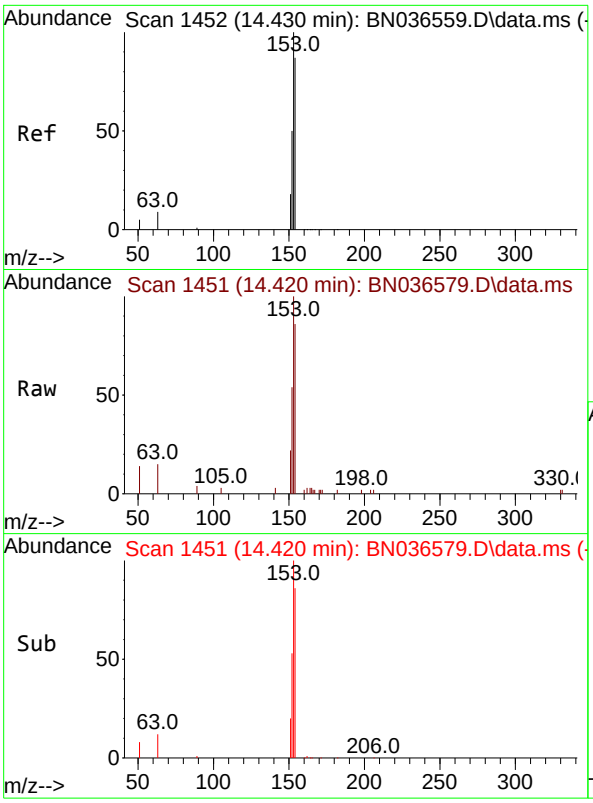


#16
Acenaphthylene
Concen: 0.405 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:152 Resp: 5093

Ion	Ratio	Lower	Upper
152	100		
151	20.3	16.2	24.4
153	13.3	10.6	15.8



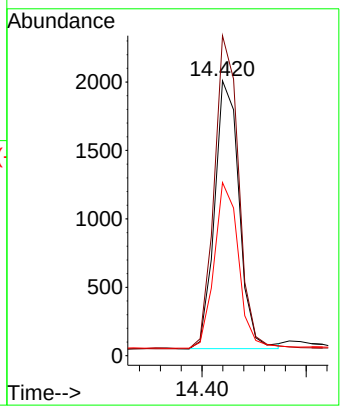


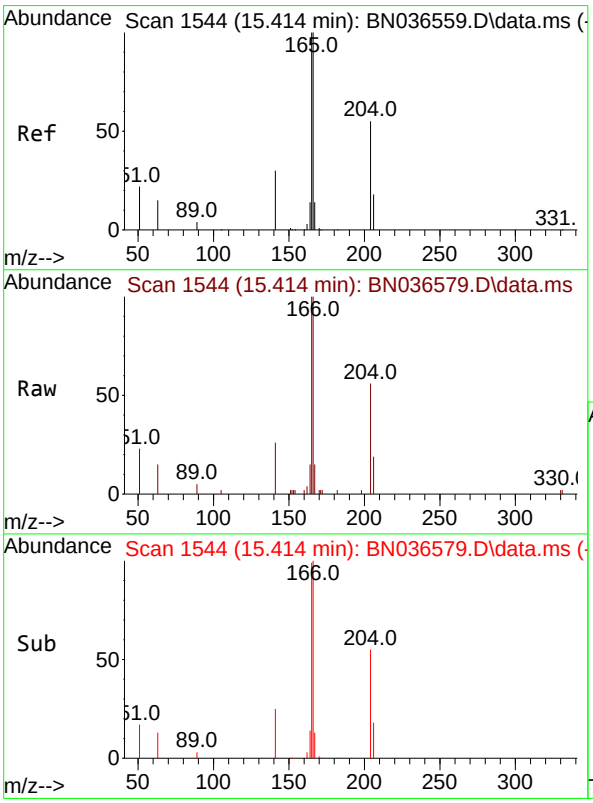
#17
Acenaphthene
Concen: 0.389 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:154 Resp: 3200

Ion	Ratio	Lower	Upper
154	100		
153	116.9	94.1	141.1
152	62.7	49.8	74.6

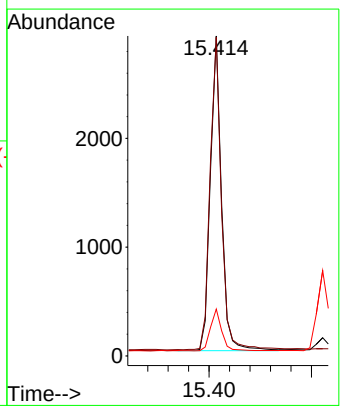


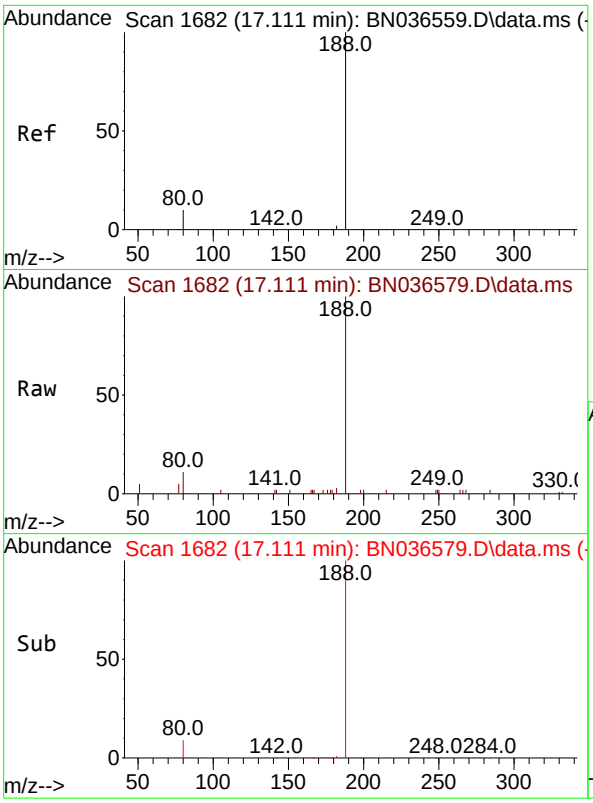


#18
Fluorene
Concen: 0.397 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:166 Resp: 4423

Ion	Ratio	Lower	Upper
166	100		
165	101.5	79.8	119.8
167	13.0	10.6	15.8



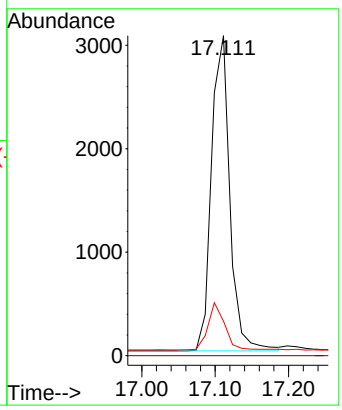


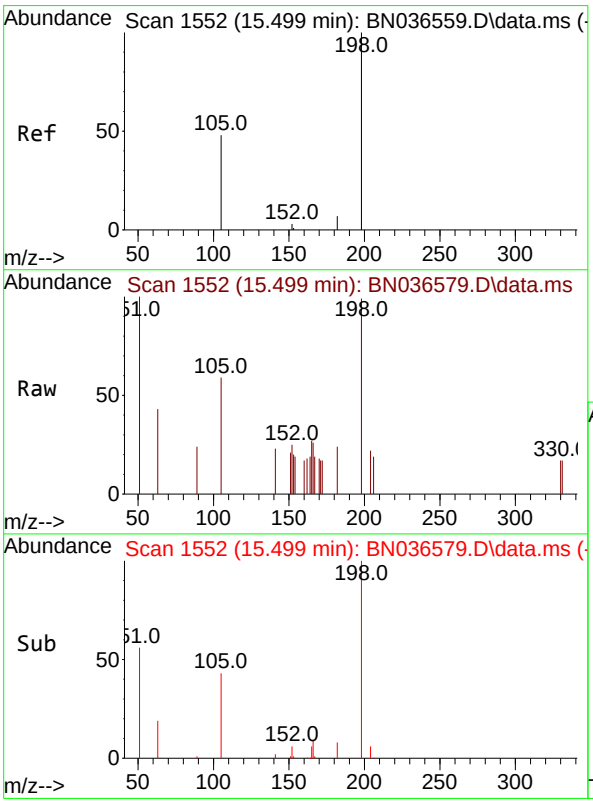
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:188 Resp: 5287

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.8	8.8	13.2

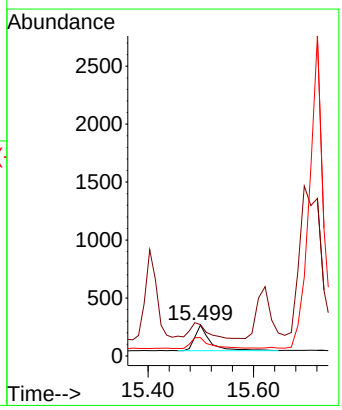


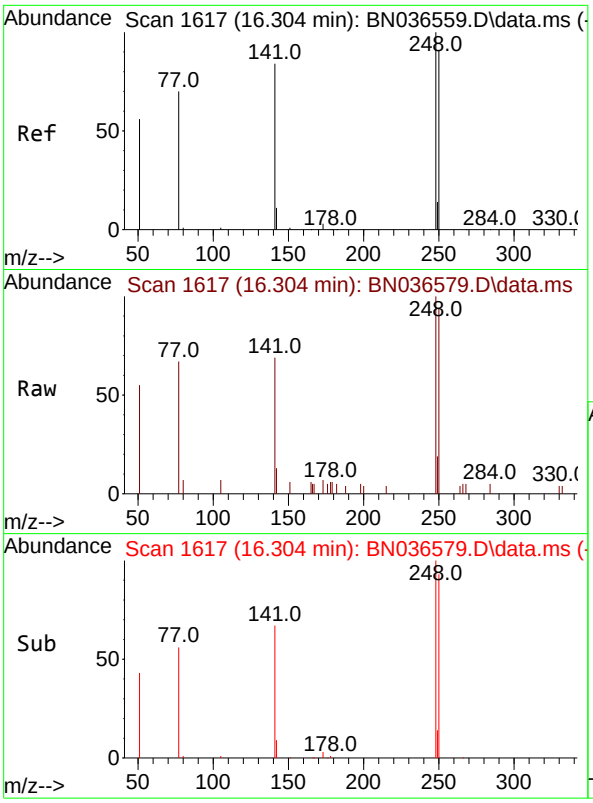


#20
4,6-Dinitro-2-methylphenol
Concen: 0.479 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:198 Resp: 451

Ion	Ratio	Lower	Upper
198	100		
51	101.5	107.9	161.9#
105	59.8	56.2	84.2



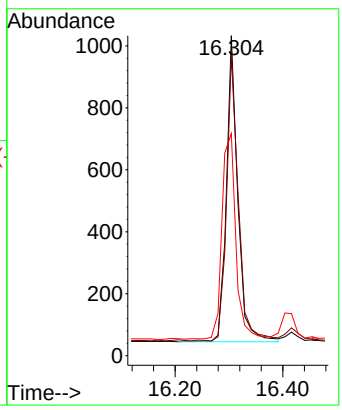


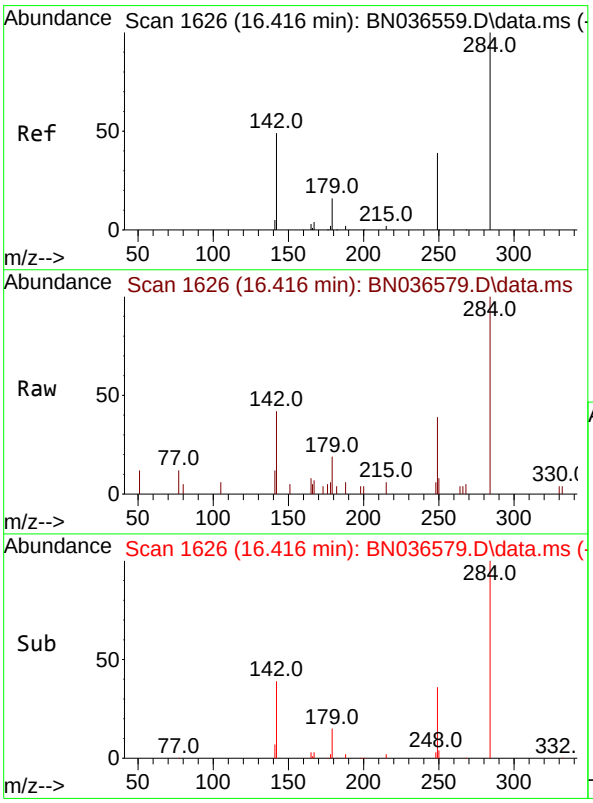
#21
4-Bromophenyl-phenylether
Concen: 0.439 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:248 Resp: 1454

Ion	Ratio	Lower	Upper
248	100		
250	93.9	73.0	109.6
141	69.4	68.6	103.0

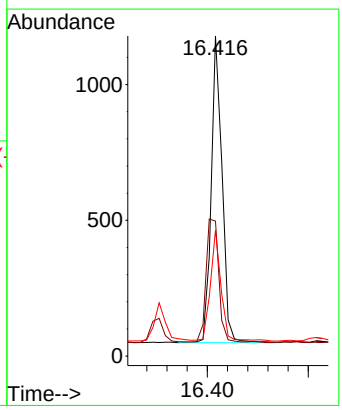


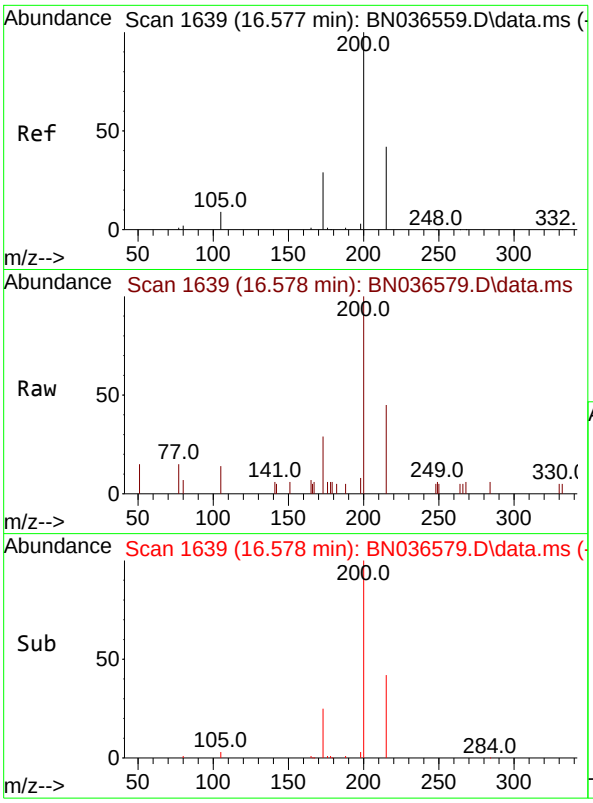


#22
Hexachlorobenzene
Concen: 0.420 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:284 Resp: 1681

Ion	Ratio	Lower	Upper
284	100		
142	46.9	37.0	55.4
249	35.6	28.1	42.1



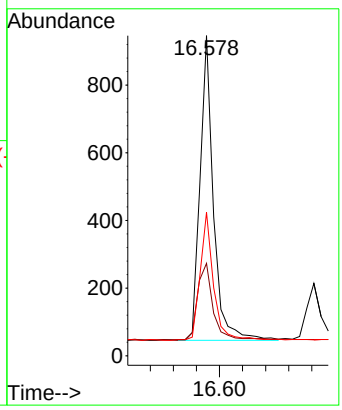


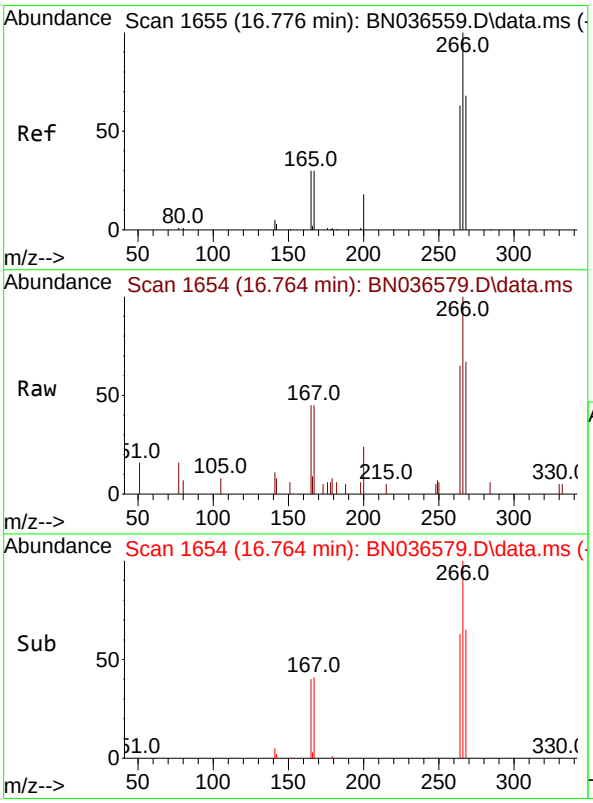
#23
Atrazine
Concen: 0.546 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:200 Resp: 1449

Ion	Ratio	Lower	Upper
200	100		
173	28.9	27.3	40.9
215	44.8	36.8	55.2

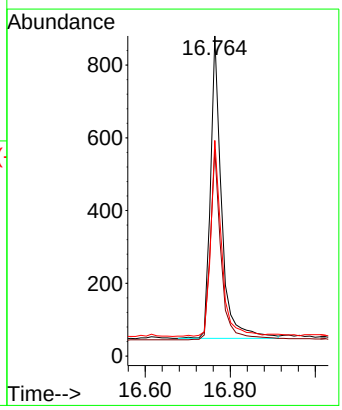


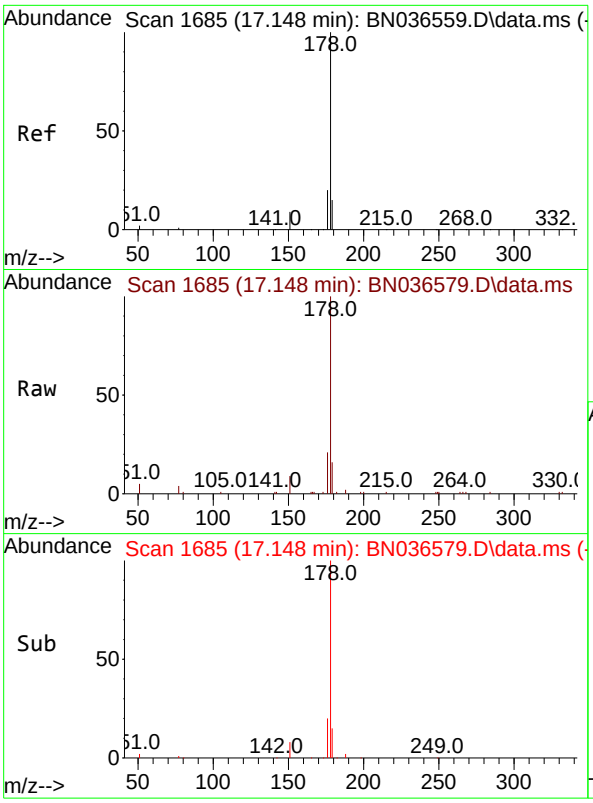


#24
Pentachlorophenol
Concen: 0.820 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:266 Resp: 1496

Ion	Ratio	Lower	Upper
266	100		
264	61.3	49.6	74.4
268	63.6	50.9	76.3



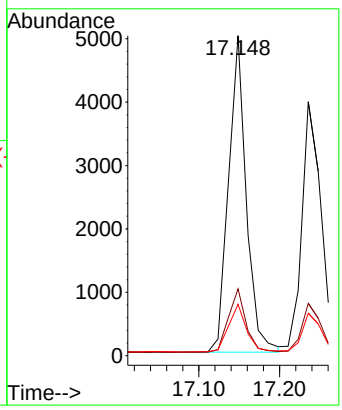


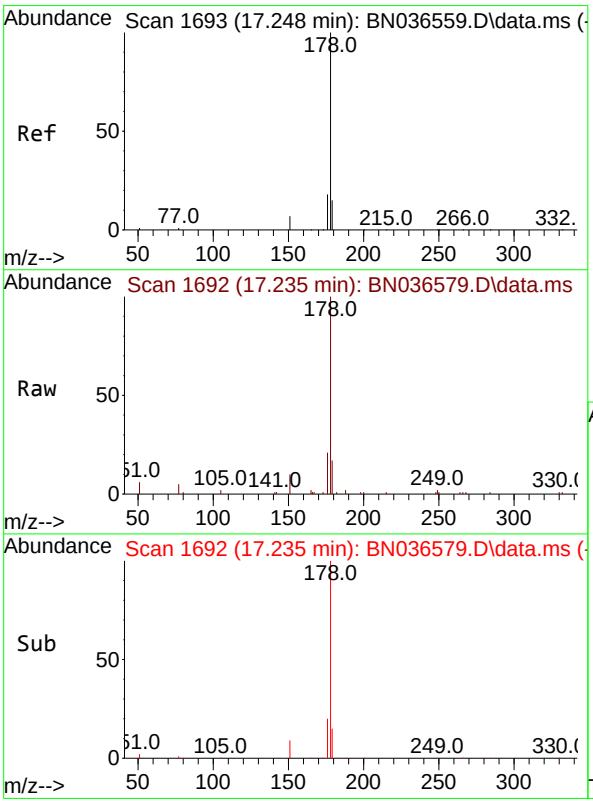
#25
Phenanthrene
Concen: 0.482 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:178 Resp: 7638

Ion	Ratio	Lower	Upper
178	100		
176	19.7	15.9	23.9
179	15.1	12.2	18.4

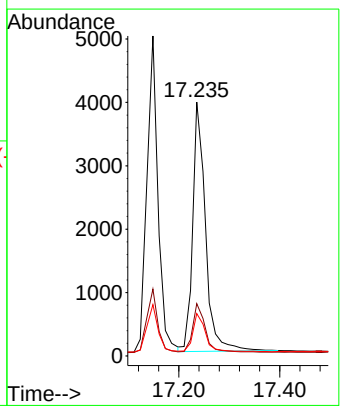


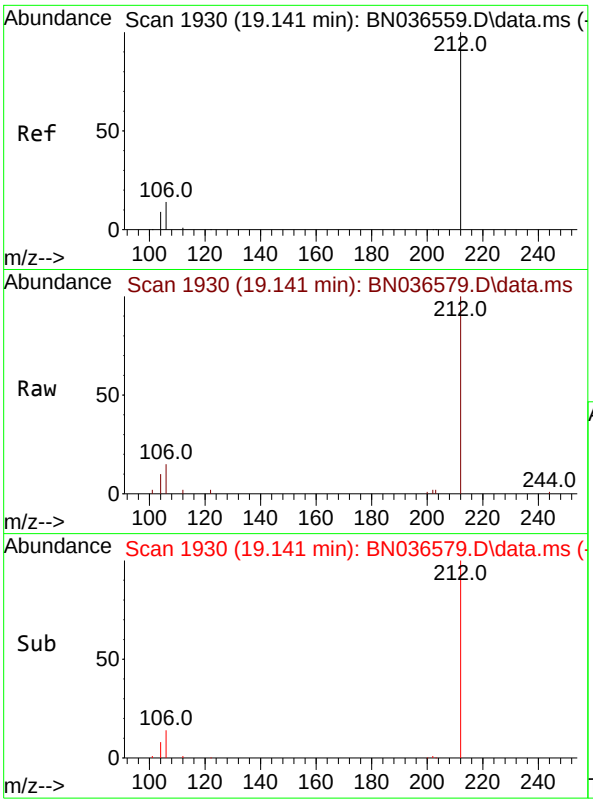


#26
Anthracene
Concen: 0.485 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:178 Resp: 6937

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.4	12.6	18.8



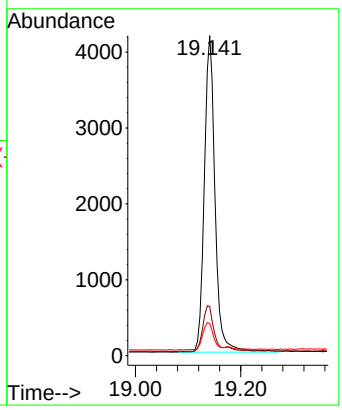


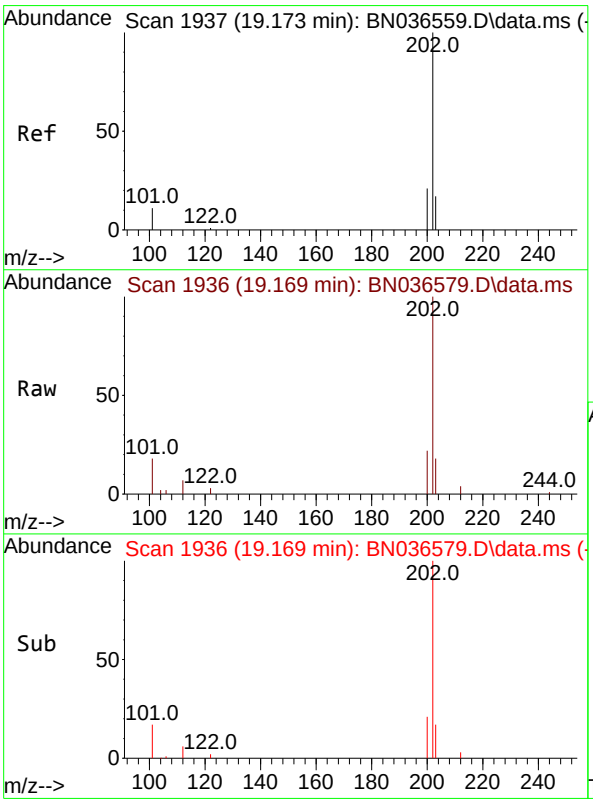
#27
Fluoranthene-d10
Concen: 0.435 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:212 Resp: 5901

Ion	Ratio	Lower	Upper
212	100		
106	14.5	11.8	17.6
104	9.0	7.3	10.9

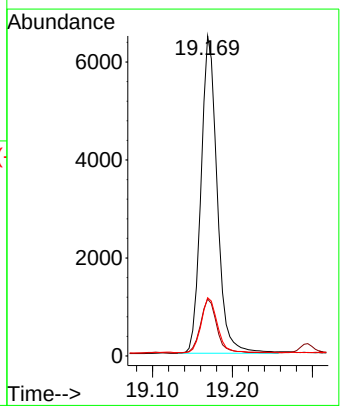


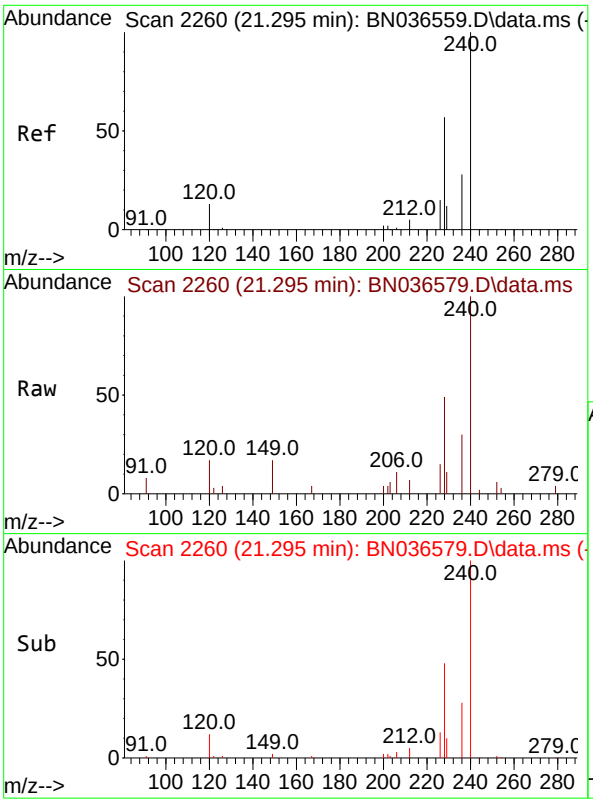


#28
Fluoranthene
Concen: 0.513 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:202 Resp: 9138

Ion	Ratio	Lower	Upper
202	100		
101	17.4	9.4	14.0#
203	17.3	13.5	20.3



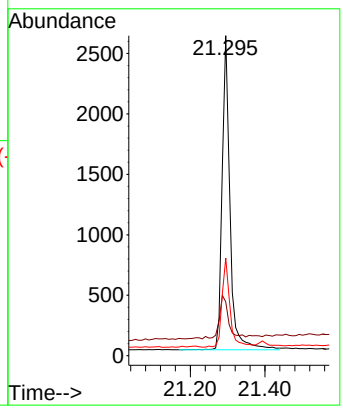


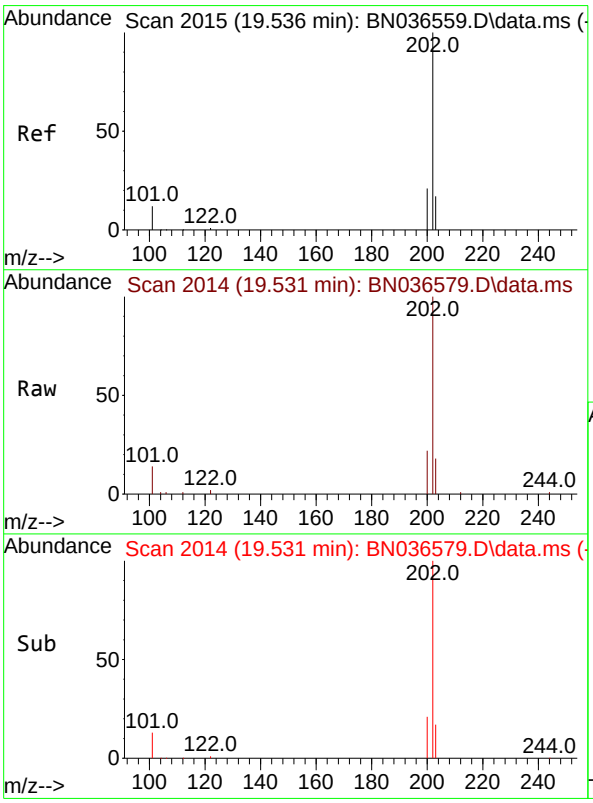
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:240 Resp: 3809

Ion	Ratio	Lower	Upper
240	100		
120	16.8	14.6	22.0
236	30.5	24.1	36.1

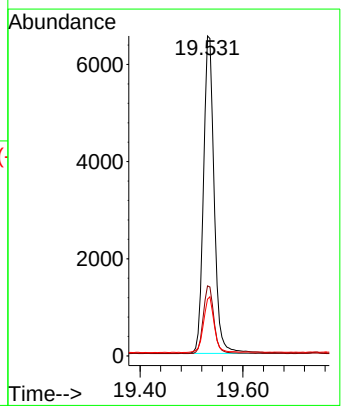


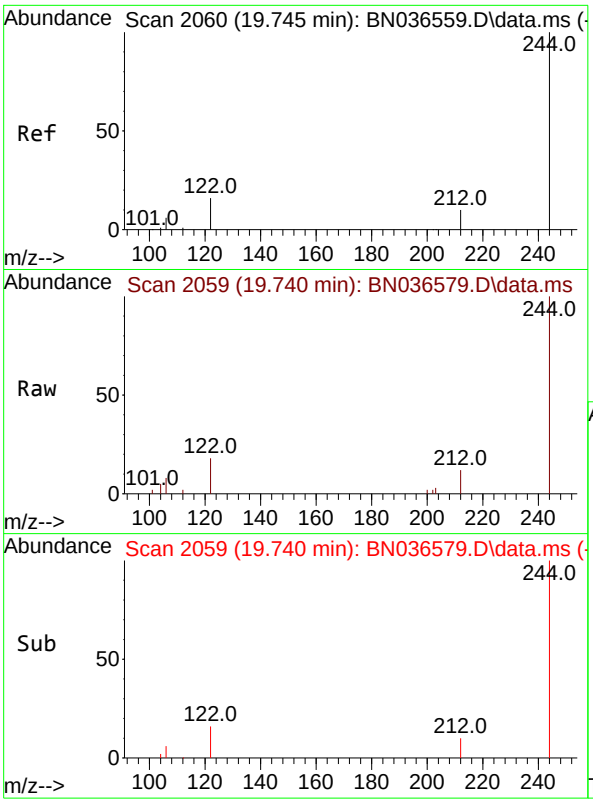


#30
Pyrene
Concen: 0.507 ng
RT: 19.531 min Scan# 2014
Delta R.T. -0.005 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:202 Resp: 9436

Ion	Ratio	Lower	Upper
202	100		
200	21.5	17.1	25.7
203	17.5	14.1	21.1



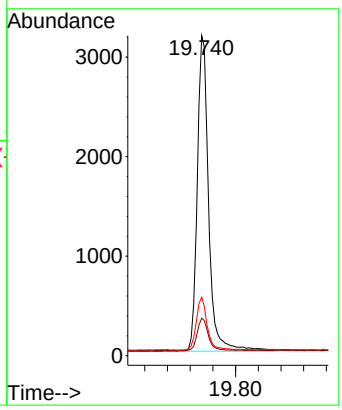


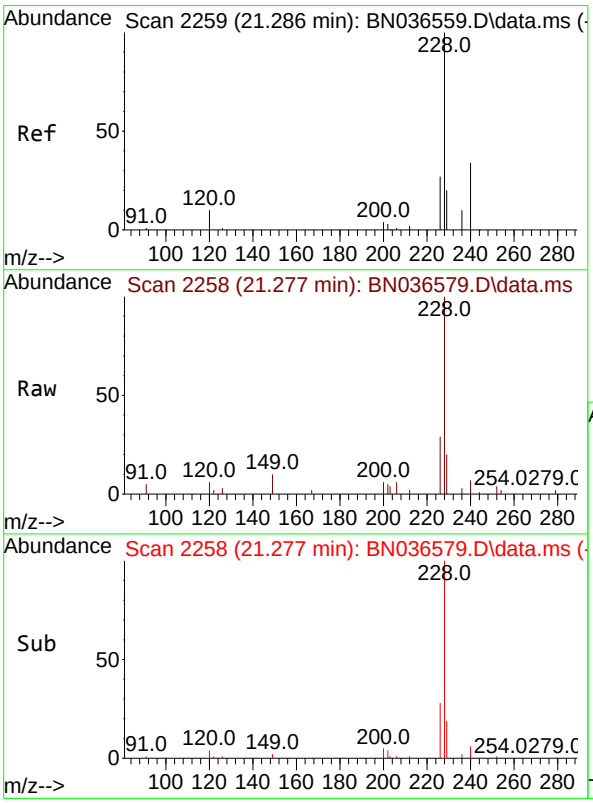
#31
Terphenyl-d14
Concen: 0.483 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:244 Resp: 4410

Ion	Ratio	Lower	Upper
244	100		
212	11.7	9.6	14.4
122	18.3	13.9	20.9

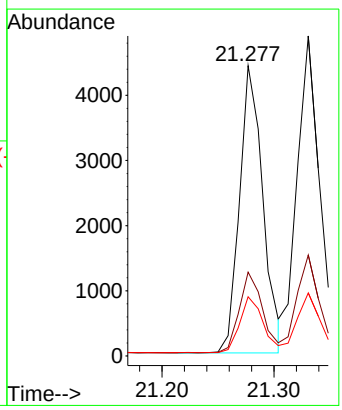


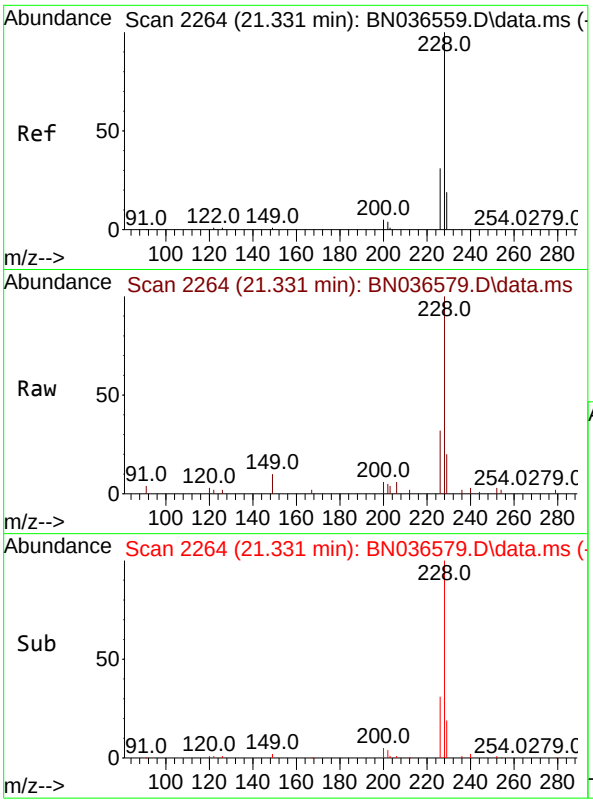


#32
Benzo(a)anthracene
Concen: 0.482 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:228 Resp: 6388

Ion	Ratio	Lower	Upper
228	100		
226	28.9	22.5	33.7
229	20.4	16.6	25.0



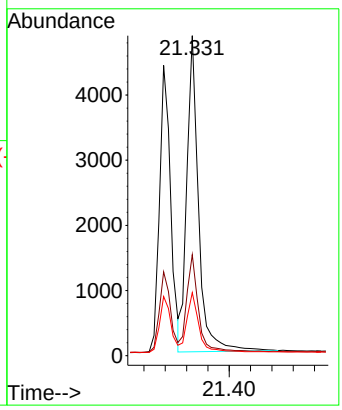


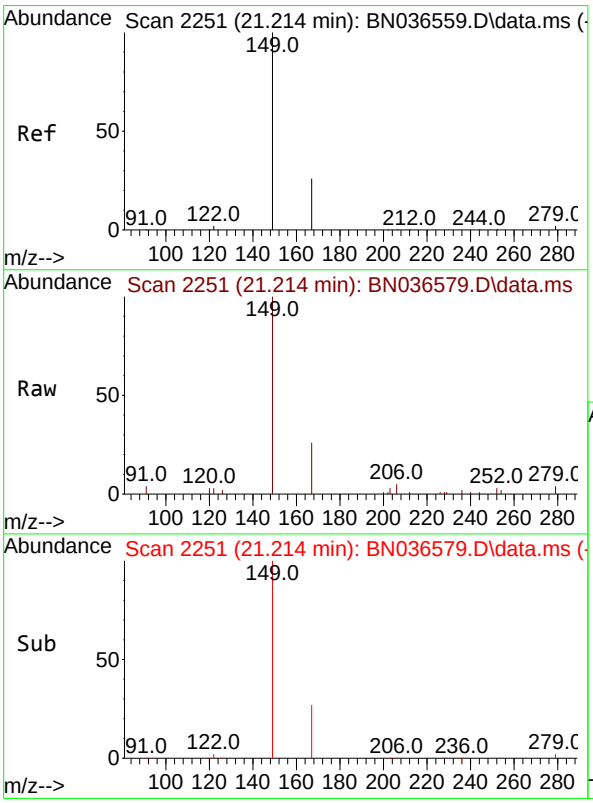
#33
Chrysene
Concen: 0.512 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:228 Resp: 7409

Ion	Ratio	Lower	Upper
228	100		
226	31.5	25.3	37.9
229	19.7	15.8	23.8

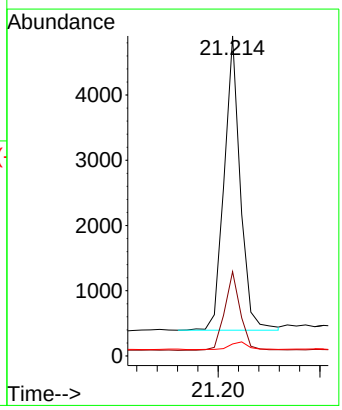


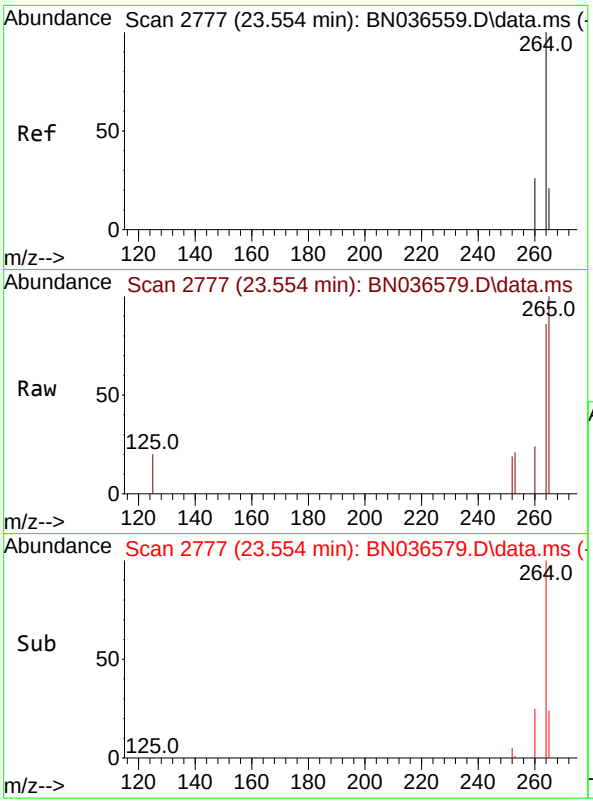


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.526 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:149 Resp: 4963

Ion	Ratio	Lower	Upper
149	100		
167	26.1	20.7	31.1
279	2.8	3.6	5.4#



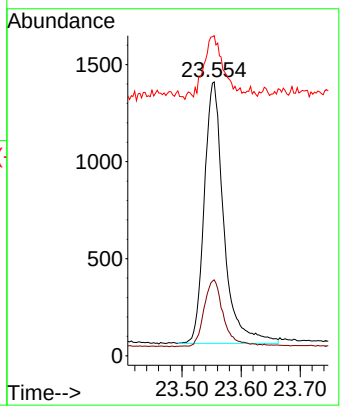


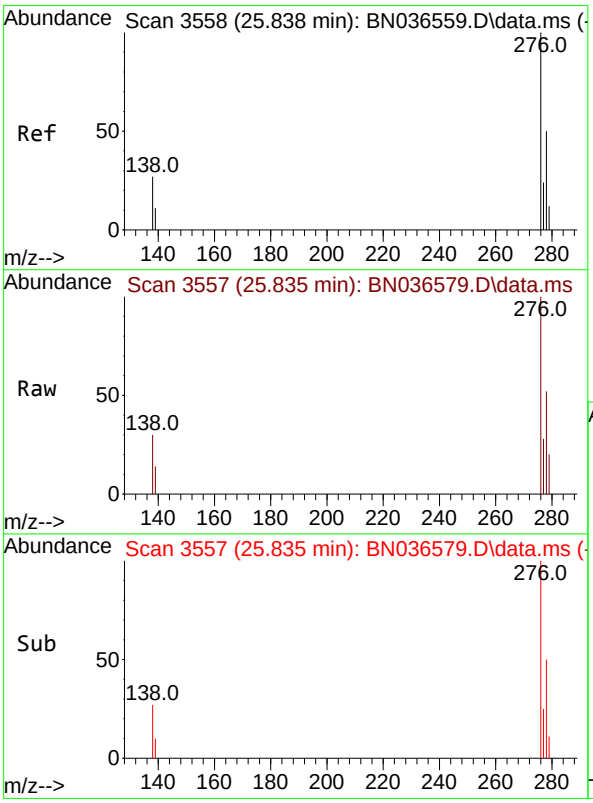
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:264 Resp: 3096

Ion	Ratio	Lower	Upper
264	100		
260	27.7	22.6	33.8
265	116.9	88.1	132.1

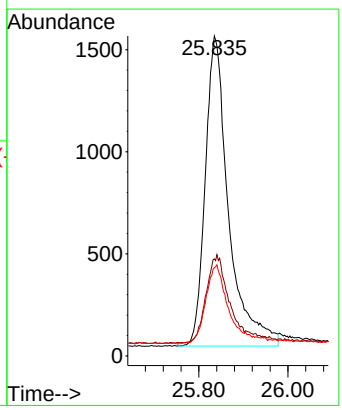


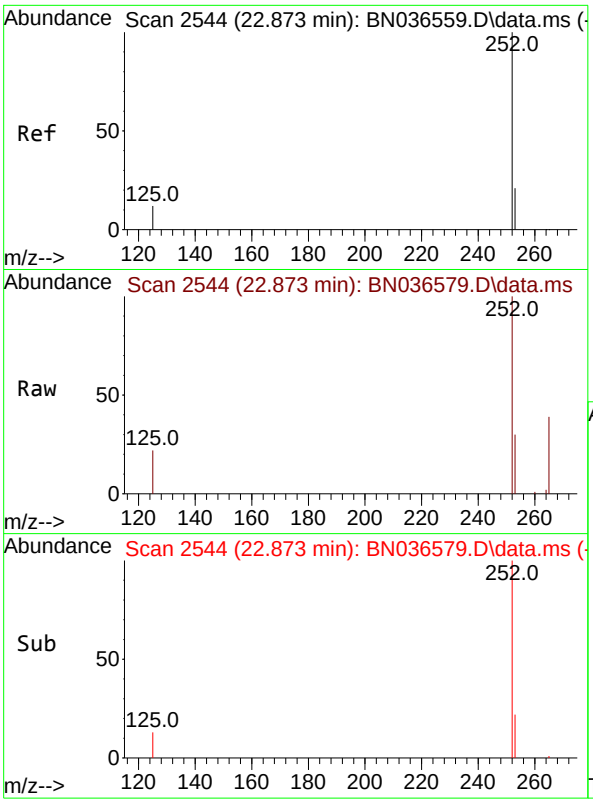


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.494 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:276 Resp: 5521

Ion	Ratio	Lower	Upper
276	100		
138	29.1	23.4	35.2
277	24.7	20.0	30.0



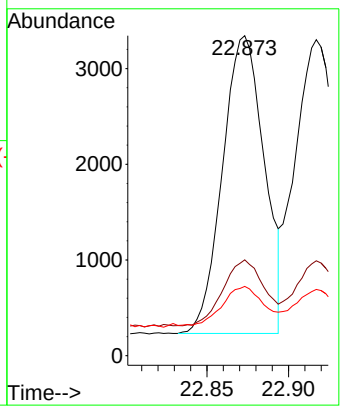


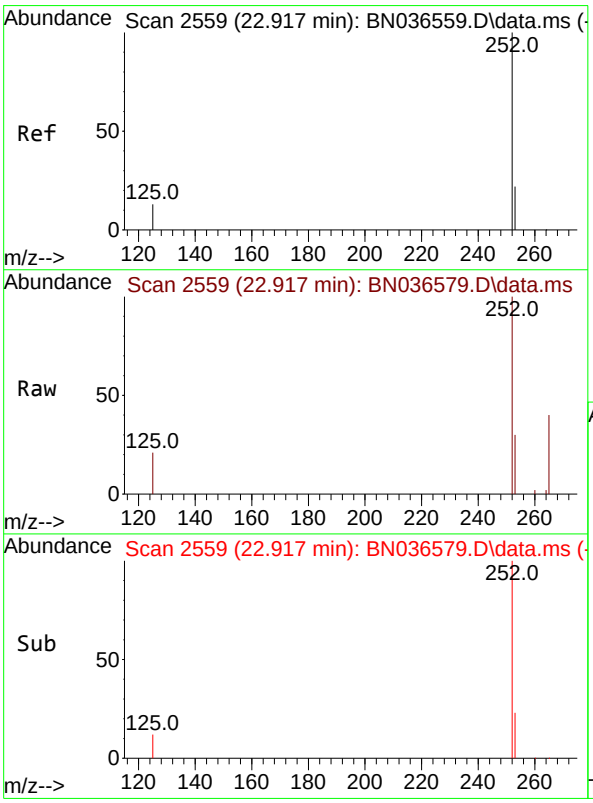
#37
Benzo(b)fluoranthene
Concen: 0.491 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:252 Resp: 5536

Ion	Ratio	Lower	Upper
252	100		
253	30.0	23.9	35.9
125	21.7	17.4	26.2

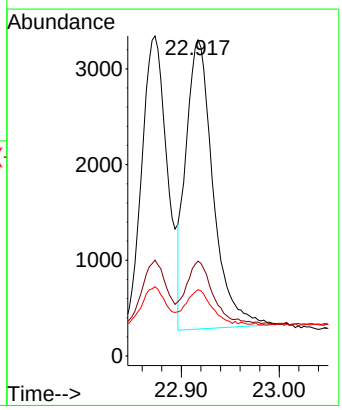


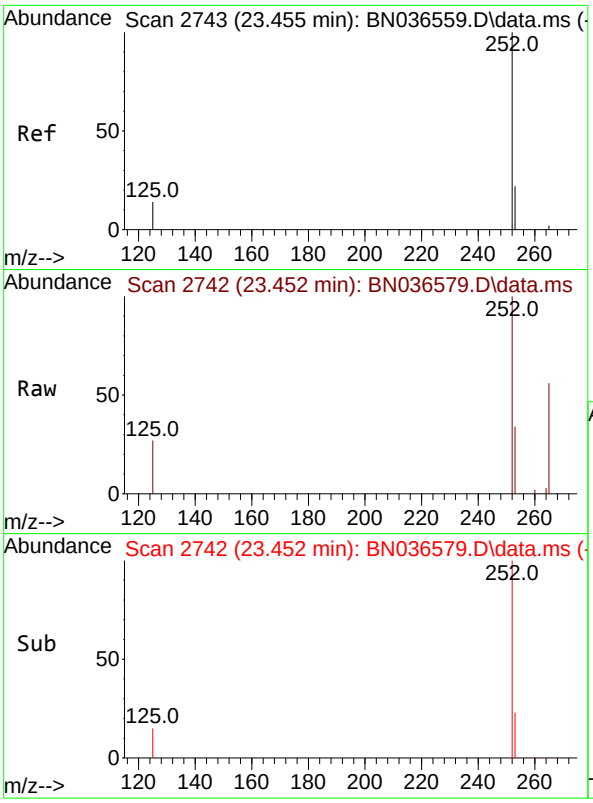


#38
Benzo(k)fluoranthene
Concen: 0.493 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:252 Resp: 5823

Ion	Ratio	Lower	Upper
252	100		
253	30.0	24.6	36.8
125	21.0	17.8	26.8



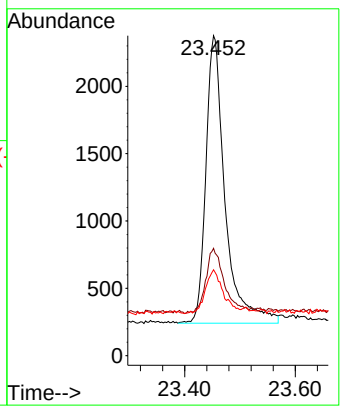


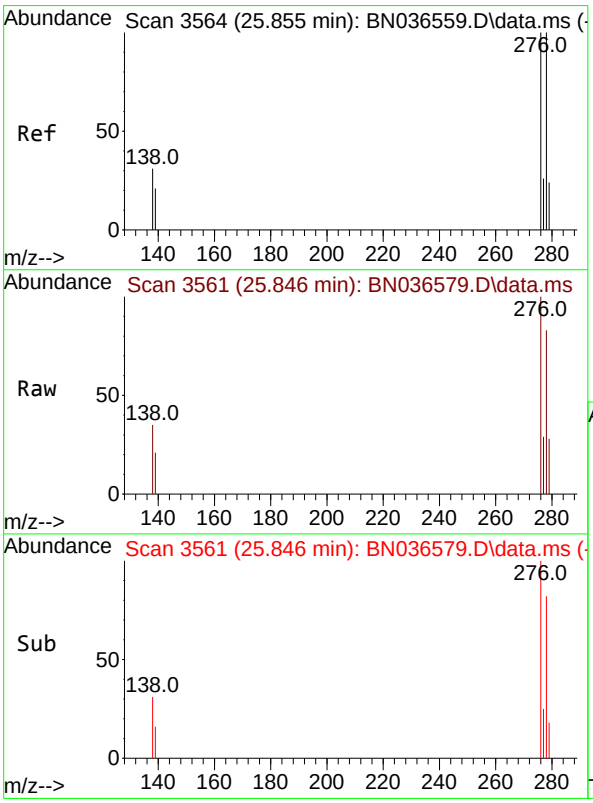
#39
Benzo(a)pyrene
Concen: 0.540 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:252 Resp: 5125

Ion	Ratio	Lower	Upper
252	100		
253	33.5	27.8	41.8
125	26.9	22.7	34.1

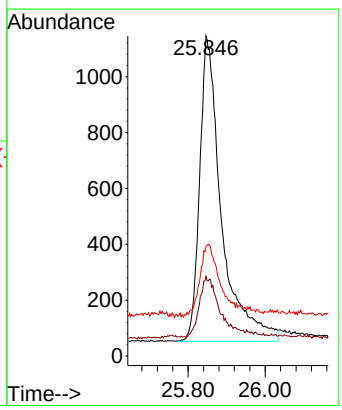


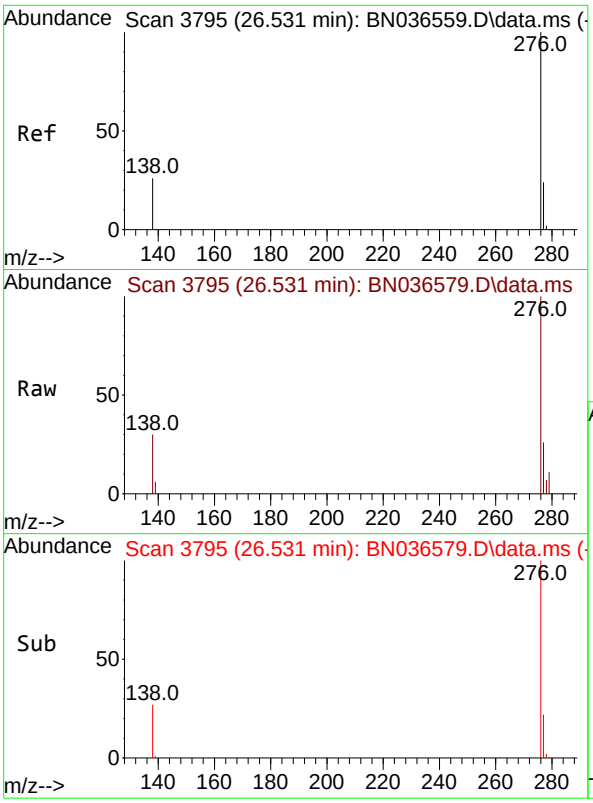


#40
Dibenzo(a,h)anthracene
Concen: 0.493 ng
RT: 25.846 min Scan# 3561
Delta R.T. -0.009 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Tgt Ion:278 Resp: 4290

Ion	Ratio	Lower	Upper
278	100		
139	24.9	20.8	31.2
279	34.2	28.8	43.2



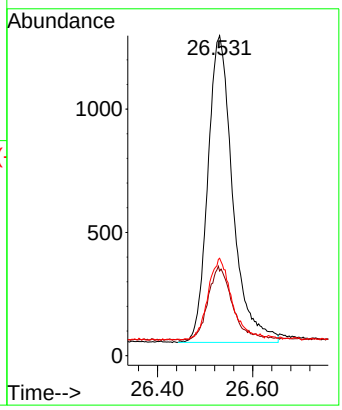


#41
Benzo(g,h,i)perylene
Concen: 0.454 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036579.D
Acq: 11 Mar 2025 13:45

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MS

Tgt Ion:276 Resp: 4516

Ion	Ratio	Lower	Upper
276	100		
277	26.4	22.2	33.4
138	30.4	24.1	36.1



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

Report of Analysis

Client:	AECOM Technical Services, Inc.	Date Collected:	03/06/25
Project:	NAVFAC NWIRP Bethpage, NY Site 1 OU-2 - 32258	Date Received:	03/07/25
Client Sample ID:	RE103D1-20250306MSD	SDG No.:	Q1531
Lab Sample ID:	Q1531-09MSD	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036580.D	1	03/10/25 11:35	03/11/25 14:21	PB167057

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	6.90	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.29		55 - 111		73%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		122%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.724				
1146-65-2	Naphthalene-d8	4550	10.509				
15067-26-2	Acenaphthene-d10	2600	14.366				
1517-22-2	Phenanthrene-d10	5250	17.111				
1719-03-5	Chrysene-d12	3780	21.295				
1520-96-3	Perylene-d12	3040	23.551				

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\BN031125\
Data File : BN036580.D
Acq On : 11 Mar 2025 14:21
Operator : RC/JU
Sample : Q1531-09MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Quant Time: Mar 11 14:54:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

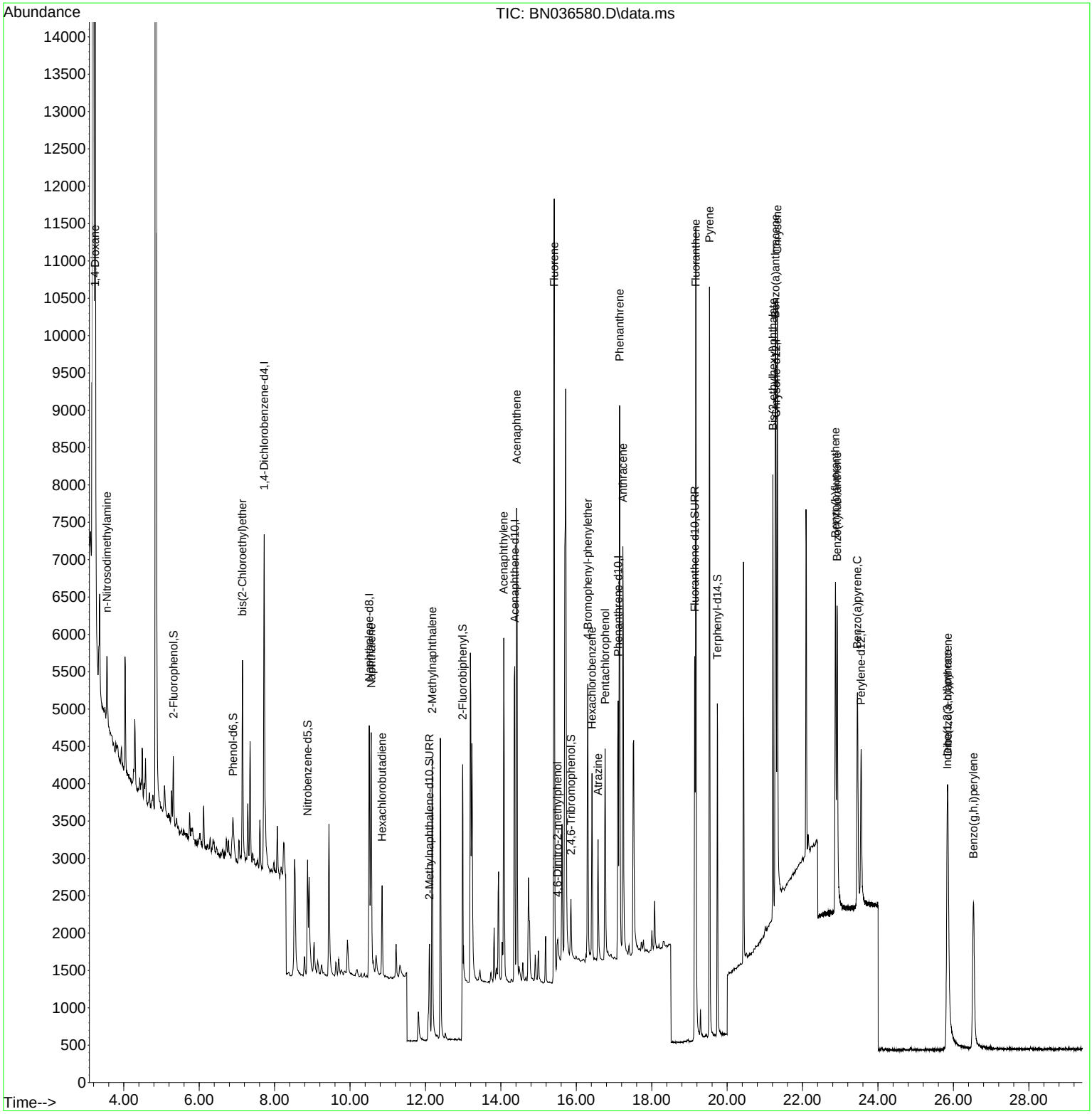
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1973	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4547	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	2602	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	5250	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3781	0.400	ng		0.00
35) Perylene-d12	23.551	264	3038	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.319	112	676	0.147	ng		0.00
5) Phenol-d6	6.901	99	481	0.085	ng		0.00
8) Nitrobenzene-d5	8.875	82	1440	0.291	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	2635	0.390	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	478	0.405	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	5009	0.331	ng		0.00
27) Fluoranthene-d10	19.141	212	5833	0.433	ng		0.00
31) Terphenyl-d14	19.740	244	4405	0.486	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	14905	6.810	ng		98
3) n-Nitrosodimethylamine	3.550	42	807	0.182	ng	#	95
6) bis(2-Chloroethyl)ether	7.146	93	2019	0.344	ng		98
9) Naphthalene	10.562	128	4809	0.360	ng		99
10) Hexachlorobutadiene	10.850	225	988	0.314	ng	#	98
12) 2-Methylnaphthalene	12.177	142	3057	0.359	ng		96
16) Acenaphthylene	14.077	152	5078	0.414	ng		99
17) Acenaphthene	14.420	154	3171	0.395	ng		99
18) Fluorene	15.414	166	4437	0.408	ng		99
20) 4,6-Dinitro-2-methylph...	15.499	198	467	0.493	ng	#	76
21) 4-Bromophenyl-phenylether	16.304	248	1418	0.431	ng		89
22) Hexachlorobenzene	16.416	284	1670	0.421	ng		98
23) Atrazine	16.577	200	1456	0.552	ng		96
24) Pentachlorophenol	16.764	266	1484	0.819	ng		98
25) Phenanthrene	17.148	178	7563	0.480	ng		100
26) Anthracene	17.235	178	6988	0.492	ng		99
28) Fluoranthene	19.169	202	9115	0.515	ng	#	94
30) Pyrene	19.531	202	9415	0.509	ng		100
32) Benzo(a)anthracene	21.277	228	6361	0.484	ng		98
33) Chrysene	21.331	228	7345	0.511	ng		100
34) Bis(2-ethylhexyl)phtha...	21.214	149	5004	0.535	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	5484	0.500	ng		99
37) Benzo(b)fluoranthene	22.873	252	5544	0.501	ng		99
38) Benzo(k)fluoranthene	22.917	252	5839	0.503	ng		97
39) Benzo(a)pyrene	23.452	252	5088	0.546	ng		96
40) Dibenzo(a,h)anthracene	25.855	278	4317	0.506	ng		98
41) Benzo(g,h,i)perylene	26.531	276	4563	0.467	ng		98

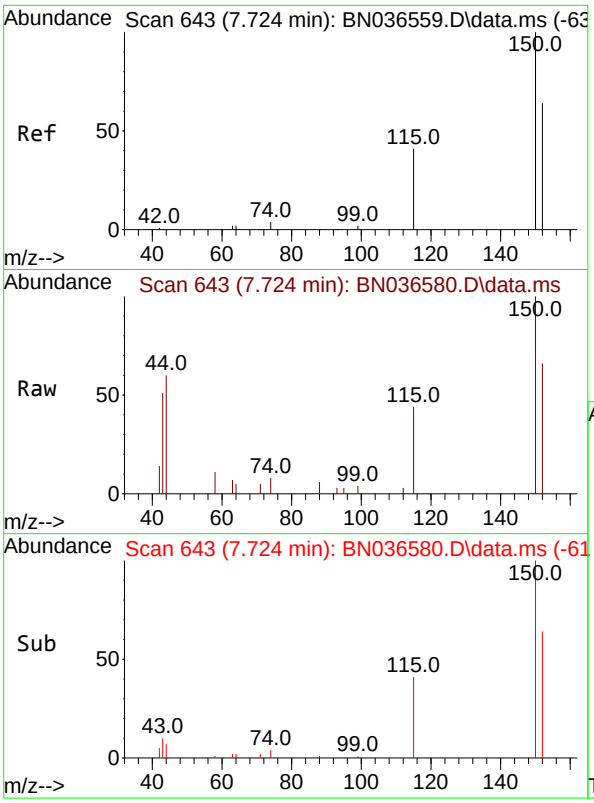
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036580.D
Acq On : 11 Mar 2025 14:21
Operator : RC/JU
Sample : Q1531-09MSD
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Quant Time: Mar 11 14:54:12 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



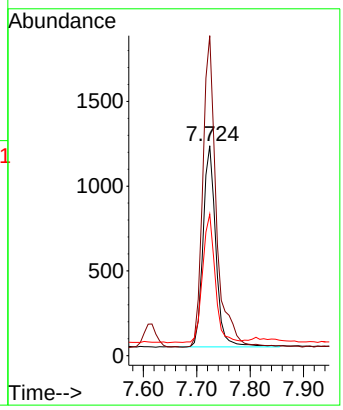


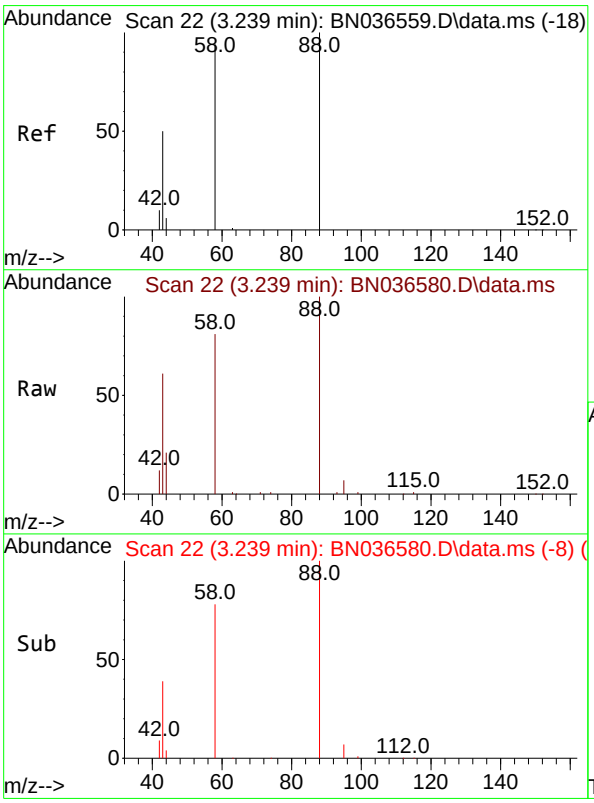
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:152 Resp: 1973

Ion	Ratio	Lower	Upper
152	100		
150	152.5	123.7	185.5
115	67.4	54.3	81.5

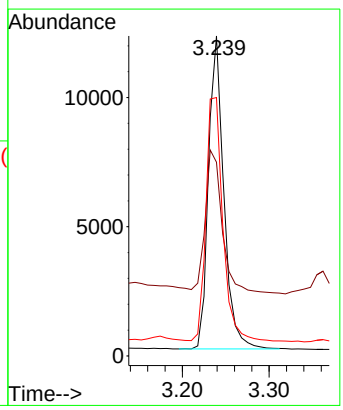


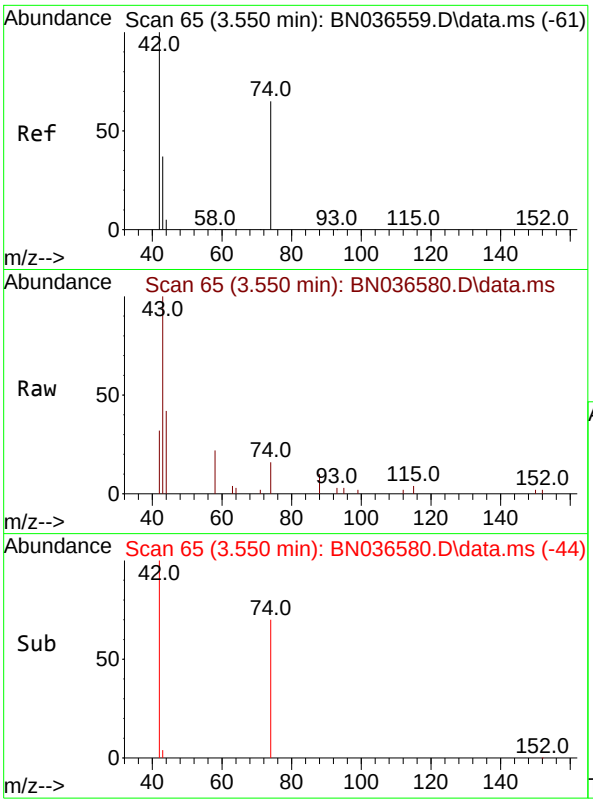


#2
1,4-Dioxane
Concen: 6.810 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion: 88 Resp: 14905

Ion	Ratio	Lower	Upper
88	100		
43	50.0	37.8	56.8
58	85.4	67.4	101.2



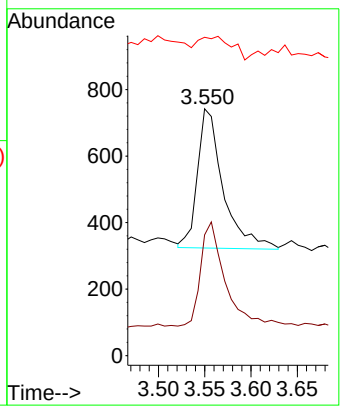


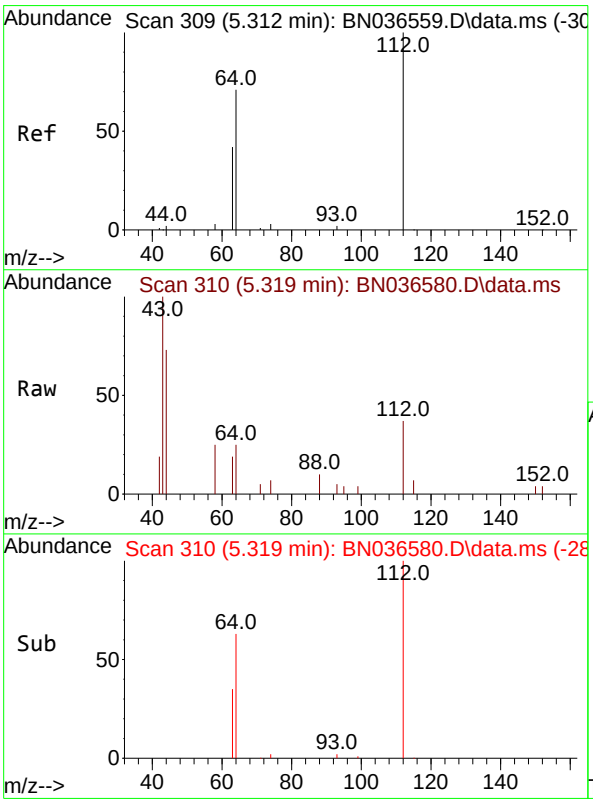
#3
n-Nitrosodimethylamine
Concen: 0.182 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion: 42 Resp: 807

Ion	Ratio	Lower	Upper
42	100		
74	72.7	60.6	90.8
44	14.6	6.3	9.5#

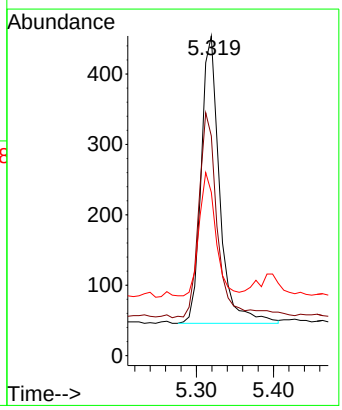


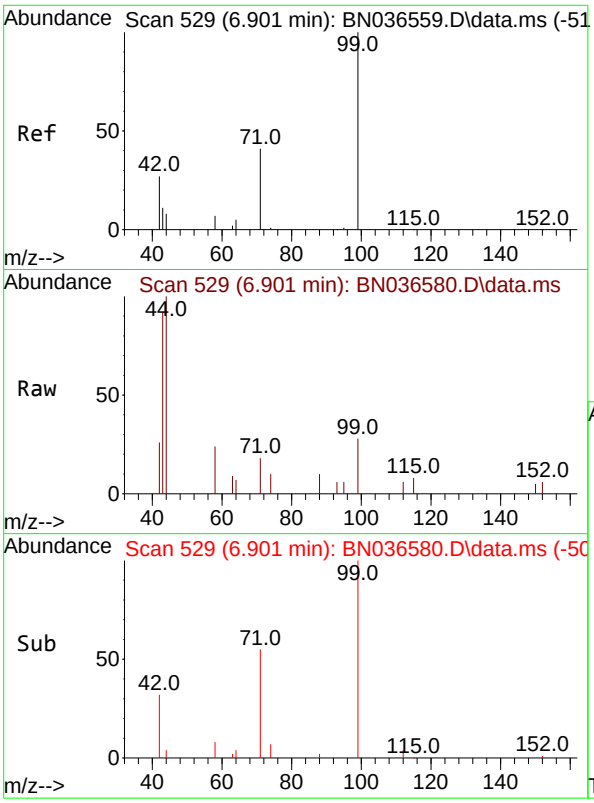


#4
2-Fluorophenol
Concen: 0.147 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.007 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:112 Resp: 676

Ion	Ratio	Lower	Upper
112	100		
64	73.8	53.1	79.7
63	38.5	31.8	47.8



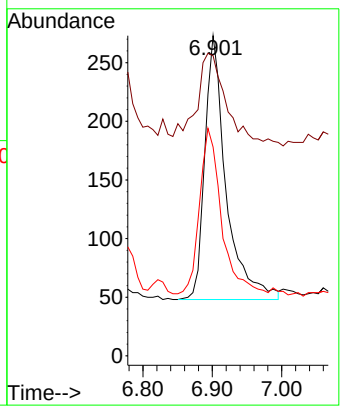


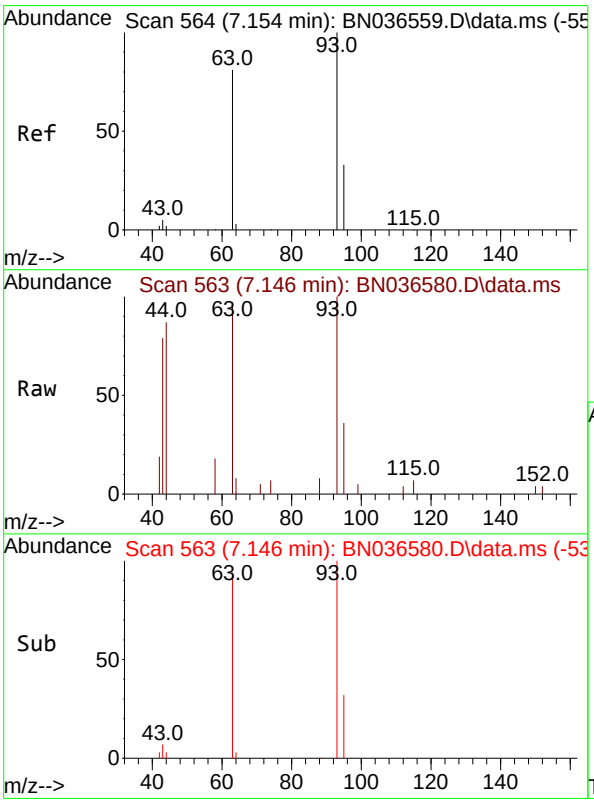
#5
Phenol-d6
Concen: 0.085 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion: 99 Resp: 481

Ion	Ratio	Lower	Upper
99	100		
42	50.9	26.5	39.7#
71	63.8	34.1	51.1#

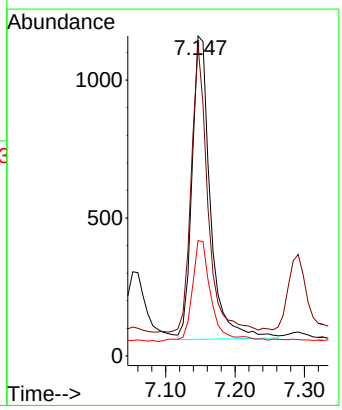


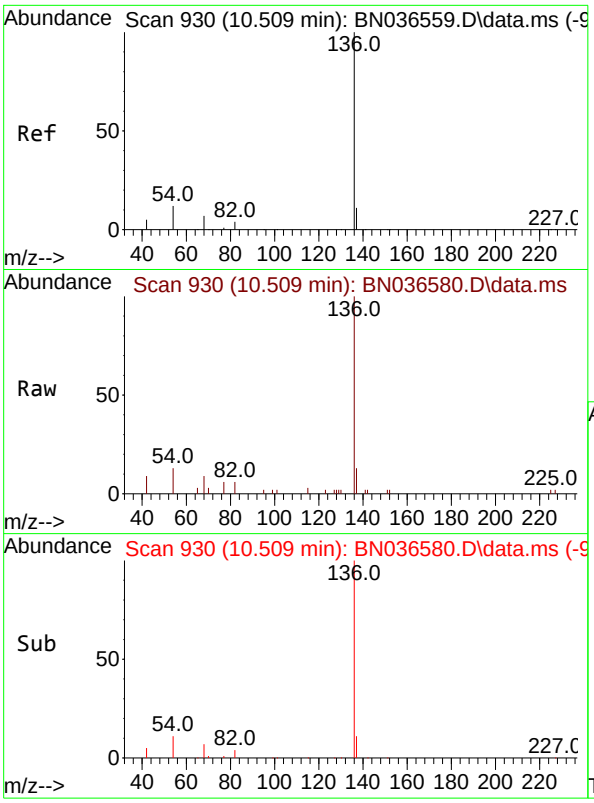


#6
bis(2-Chloroethyl)ether
Concen: 0.344 ng
RT: 7.146 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion: 93 Resp: 2019

Ion	Ratio	Lower	Upper
93	100		
63	85.3	67.7	101.5
95	34.9	25.6	38.4



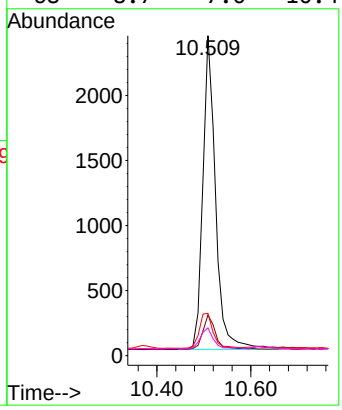


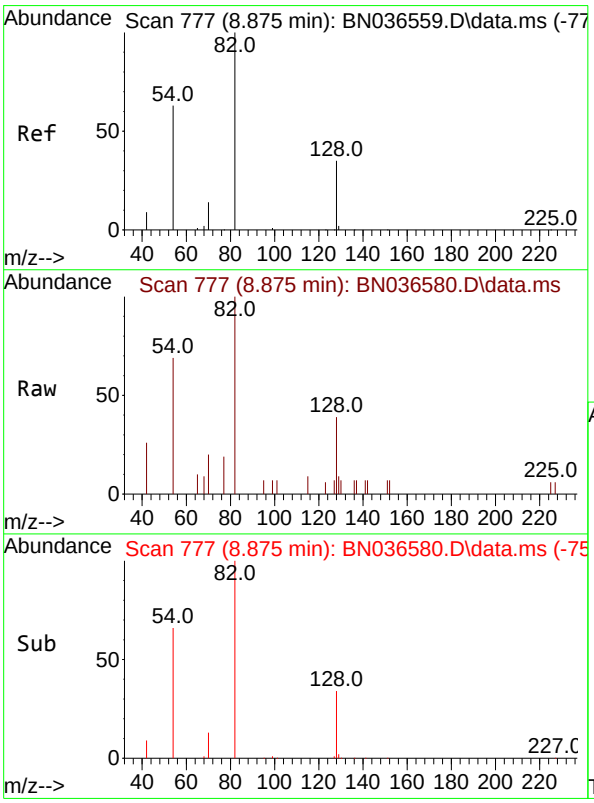
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:136 Resp: 4547

Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.3	15.5
54	13.3	11.5	17.3
68	8.7	7.0	10.4

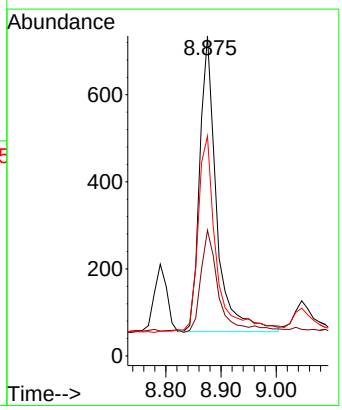


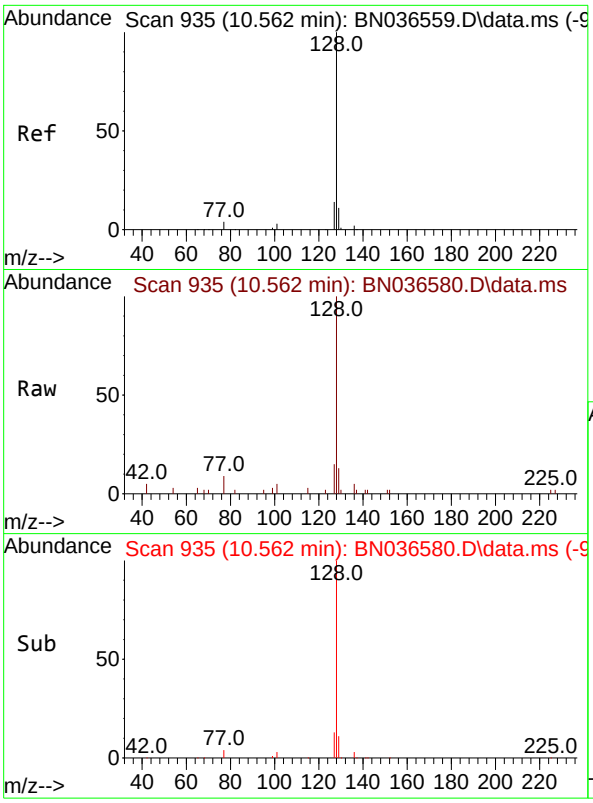


#8
Nitrobenzene-d5
Concen: 0.291 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion: 82 Resp: 1440

Ion	Ratio	Lower	Upper
82	100		
128	39.3	30.6	45.8
54	68.7	52.2	78.4



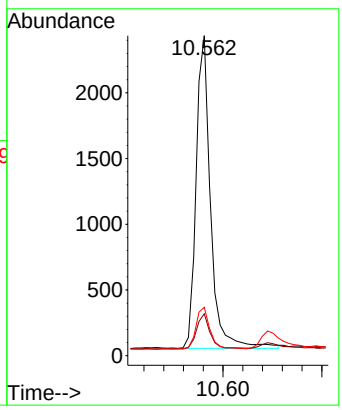


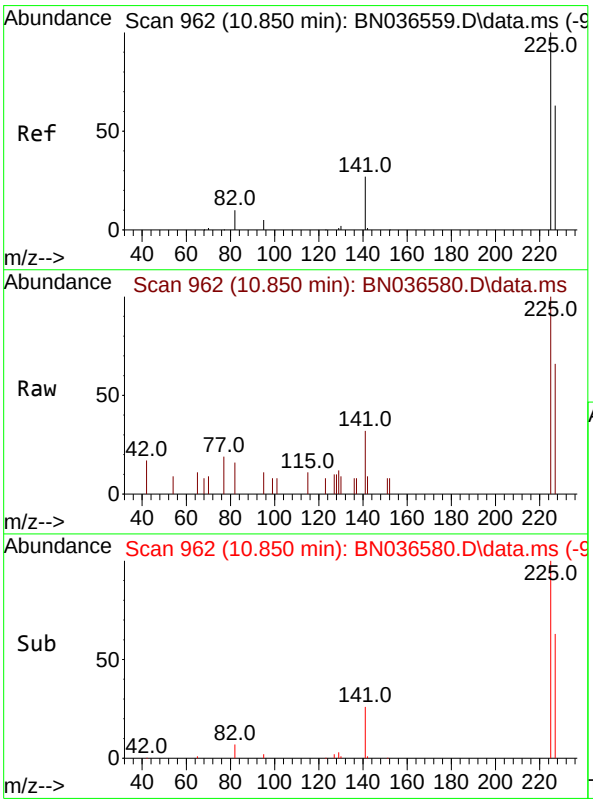
#9
Naphthalene
Concen: 0.360 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:128 Resp: 4809

Ion	Ratio	Lower	Upper
128	100		
129	13.1	9.8	14.6
127	15.1	11.8	17.8

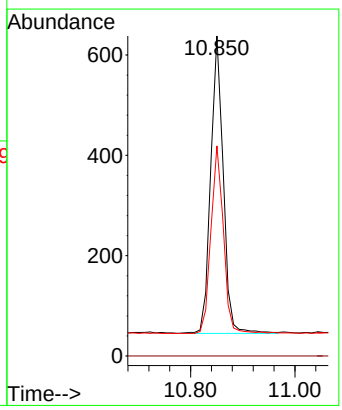


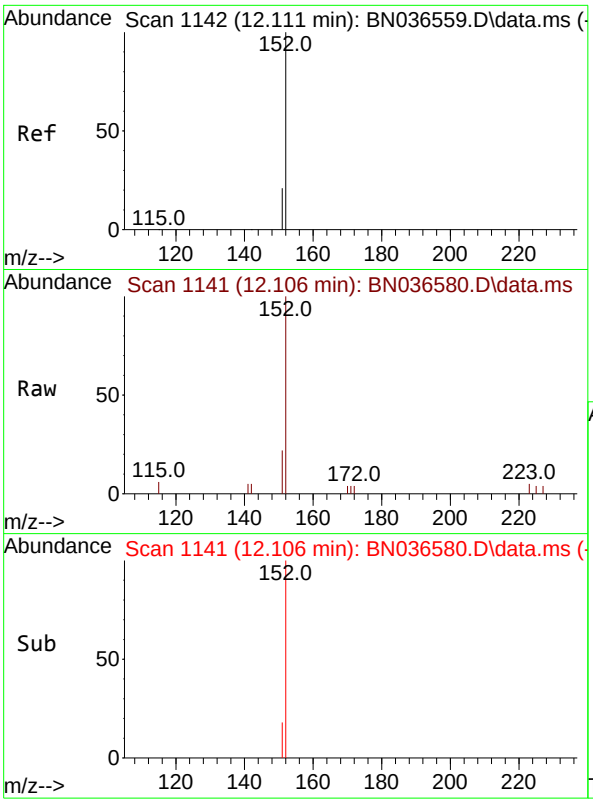


#10
Hexachlorobutadiene
Concen: 0.314 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:225 Resp: 988

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.1	51.8	77.8



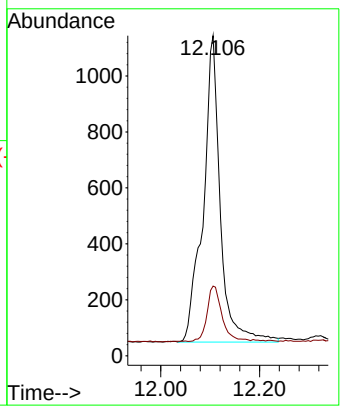


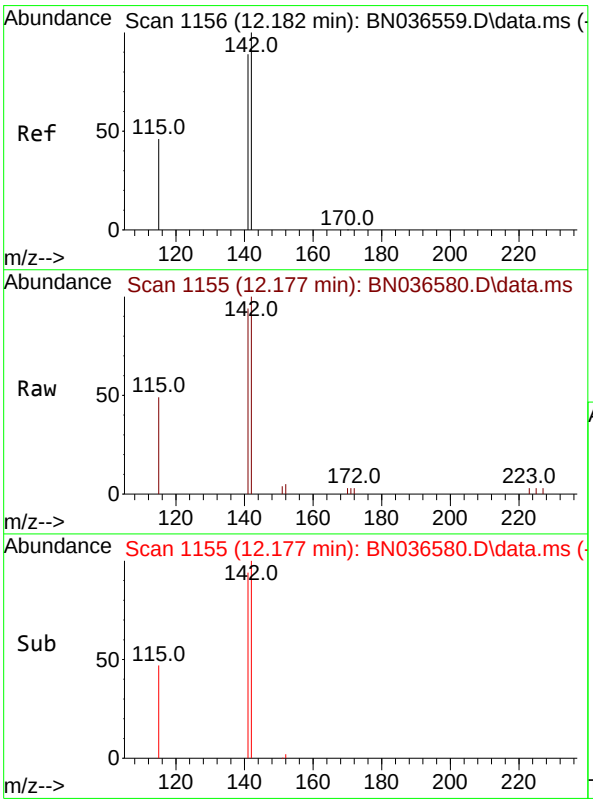
#11
2-Methylnaphthalene-d10
Concen: 0.390 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:152 Resp: 2635

Ion	Ratio	Lower	Upper
152	100		
151	15.7	17.0	25.6#

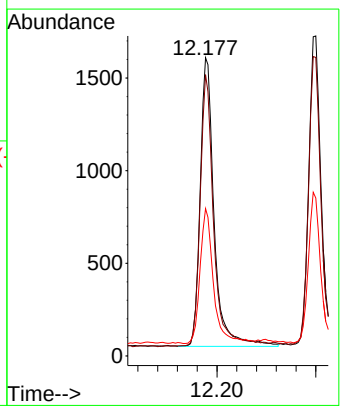


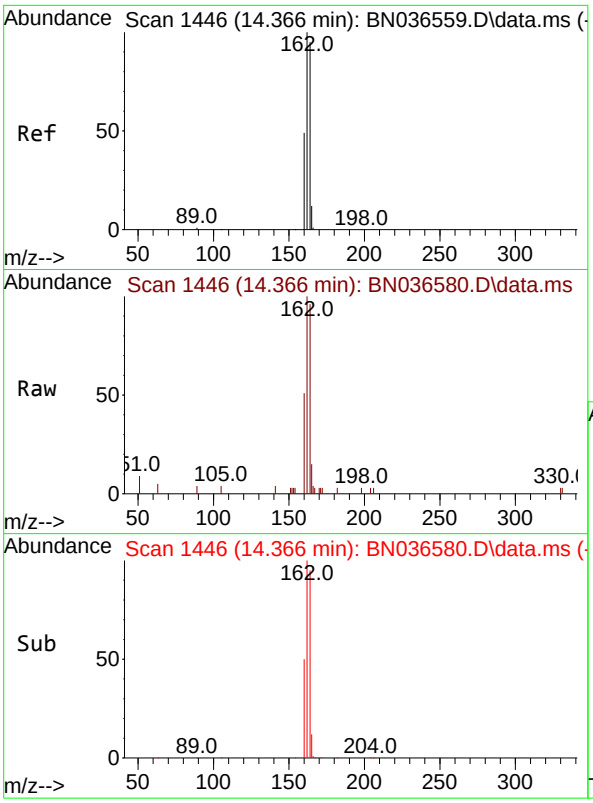


#12
2-Methylnaphthalene
Concen: 0.359 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:142 Resp: 3057

Ion	Ratio	Lower	Upper
142	100		
141	94.3	71.7	107.5
115	49.4	38.3	57.5



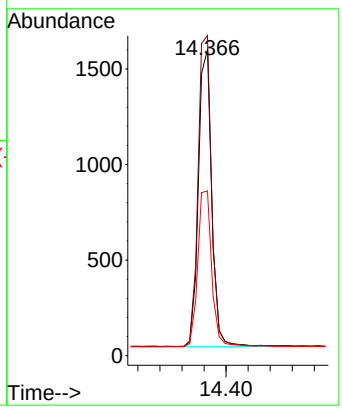


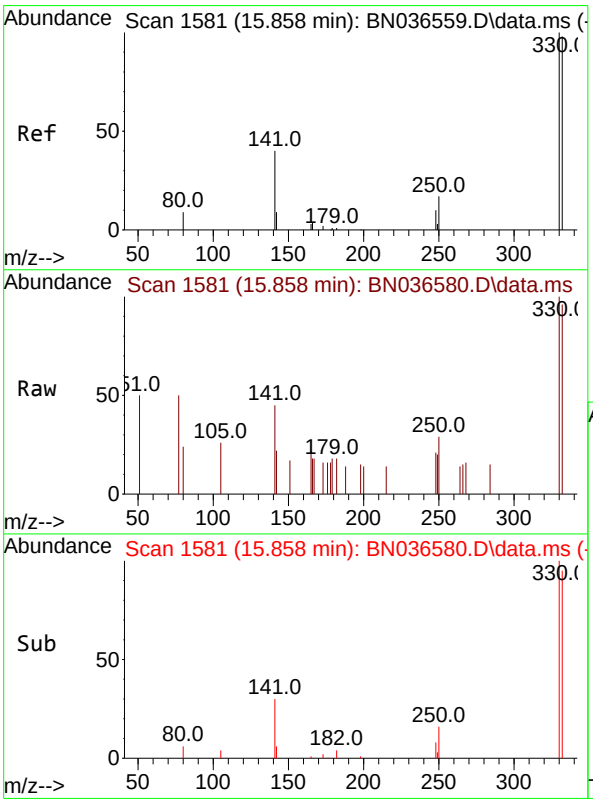
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:164 Resp: 2602

Ion	Ratio	Lower	Upper
164	100		
162	104.5	84.2	126.2
160	53.8	42.2	63.2

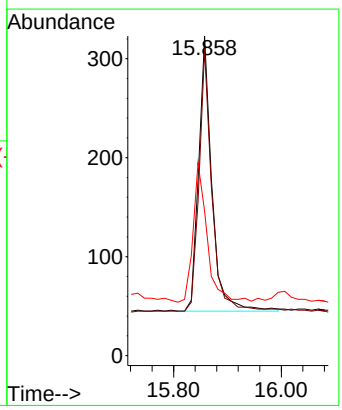


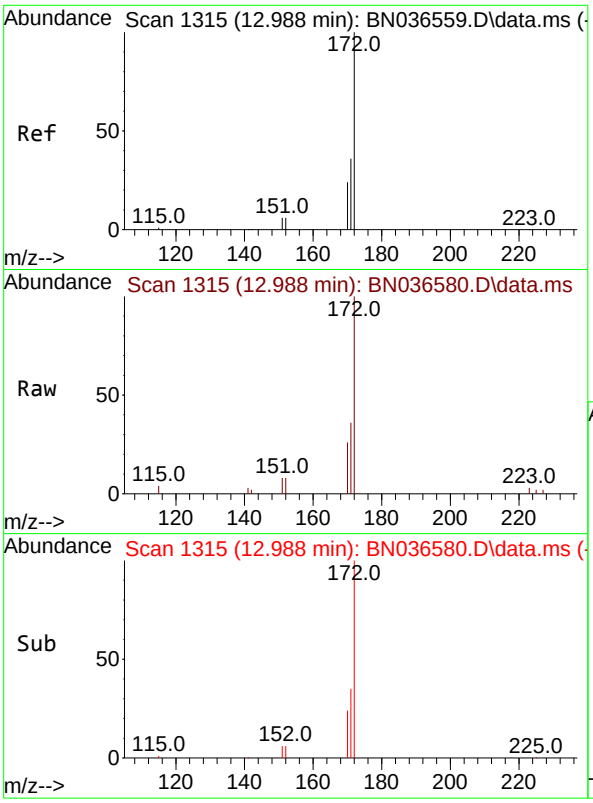


#14
2,4,6-Tribromophenol
Concen: 0.405 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:330 Resp: 478

Ion	Ratio	Lower	Upper
330	100		
332	91.6	75.2	112.8
141	53.3	43.4	65.2



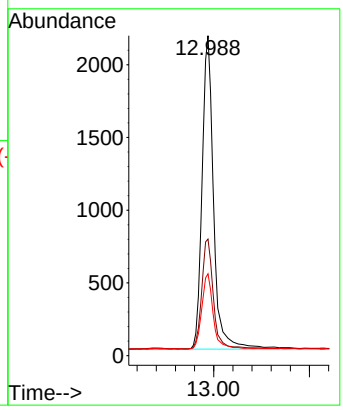


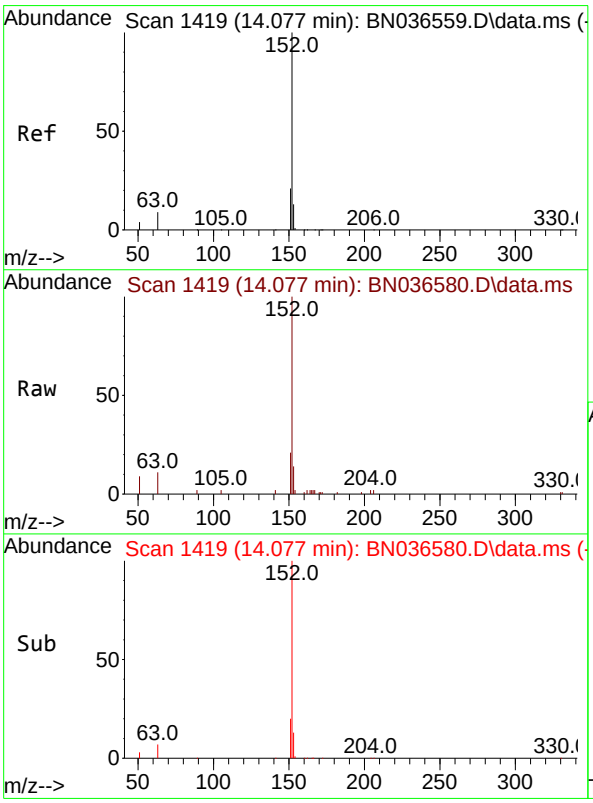
#15
2-Fluorobiphenyl
Concen: 0.331 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:172 Resp: 5009

Ion	Ratio	Lower	Upper
172	100		
171	36.5	29.5	44.3
170	25.6	20.2	30.4

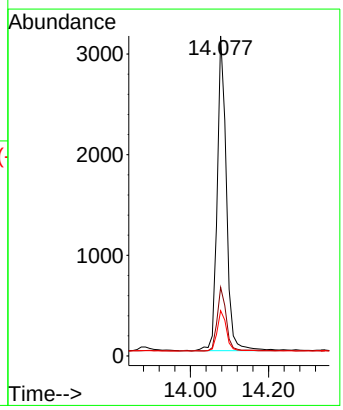


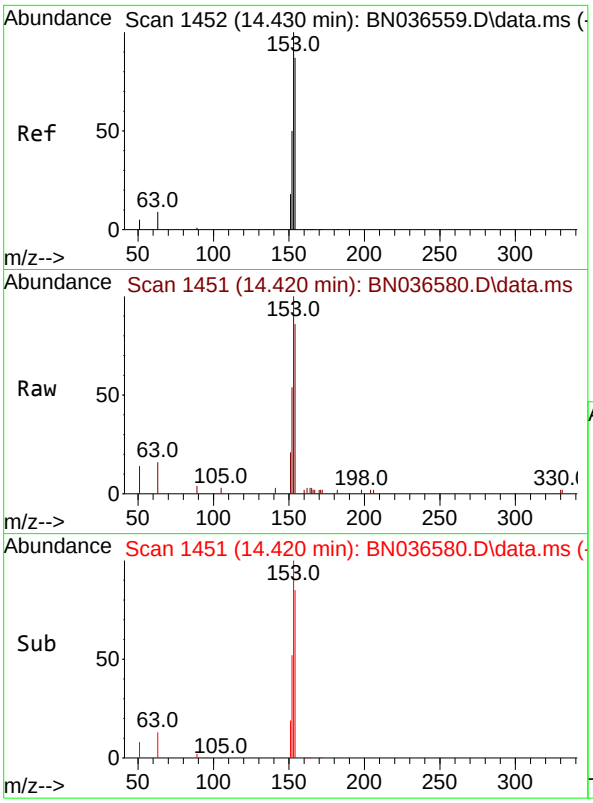


#16
Acenaphthylene
Concen: 0.414 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:152 Resp: 5078

Ion	Ratio	Lower	Upper
152	100		
151	19.9	16.2	24.4
153	13.3	10.6	15.8



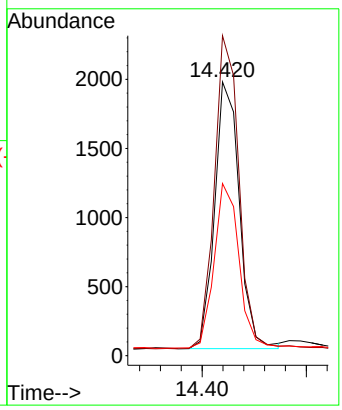


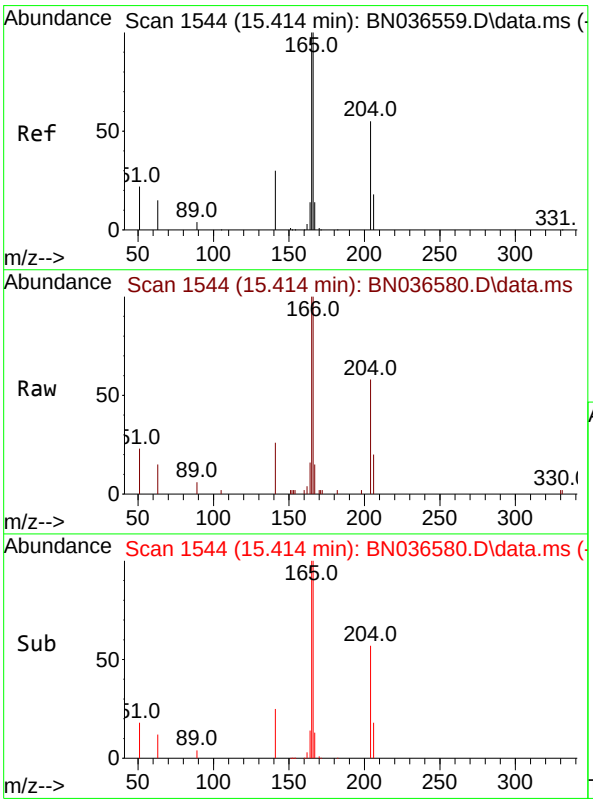
#17
Acenaphthene
Concen: 0.395 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:154 Resp: 3171

Ion	Ratio	Lower	Upper
154	100		
153	117.8	94.1	141.1
152	63.4	49.8	74.6

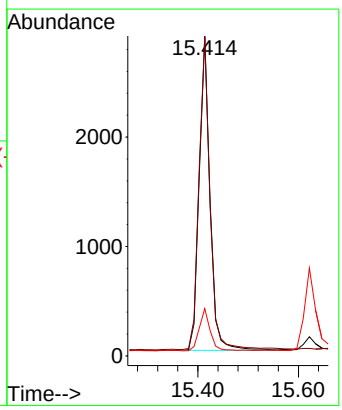


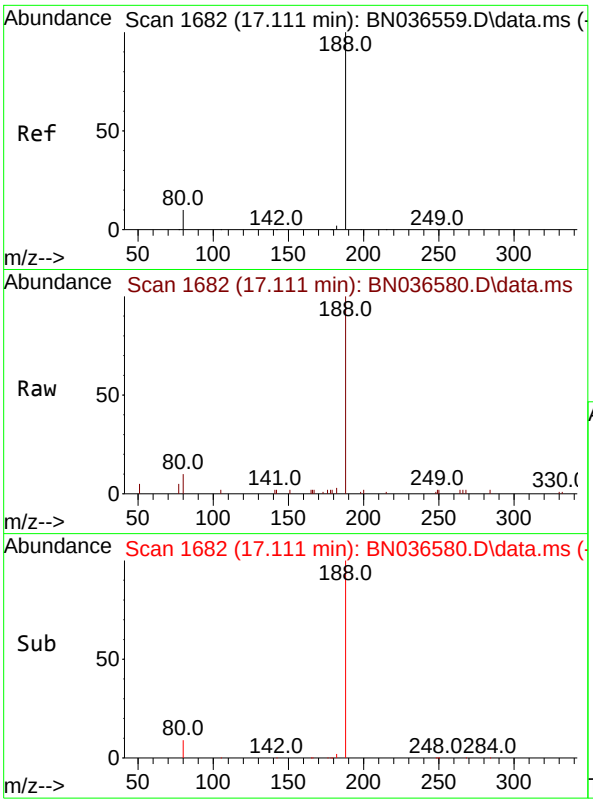


#18
Fluorene
Concen: 0.408 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:166 Resp: 4437

Ion	Ratio	Lower	Upper
166	100		
165	101.0	79.8	119.8
167	13.5	10.6	15.8



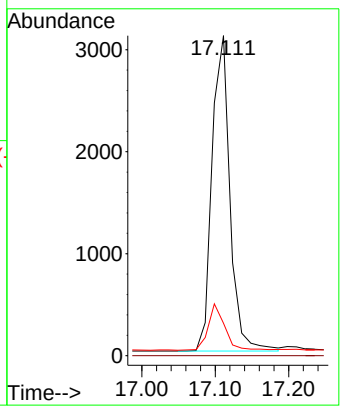


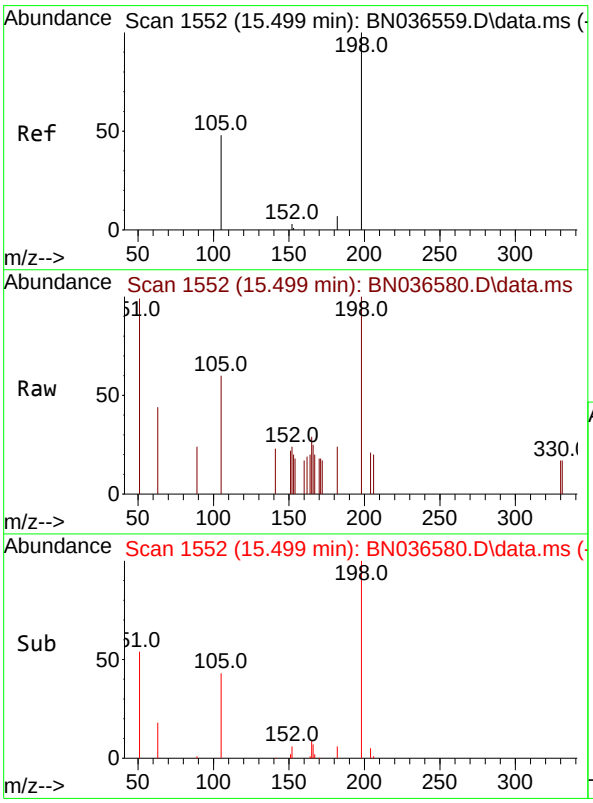
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:188 Resp: 5250

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.1	8.8	13.2

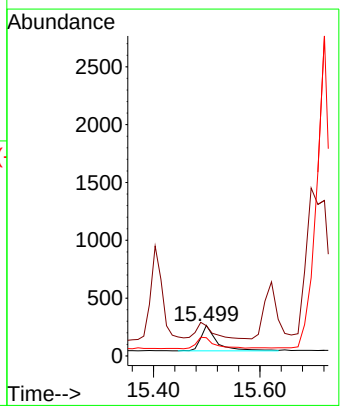


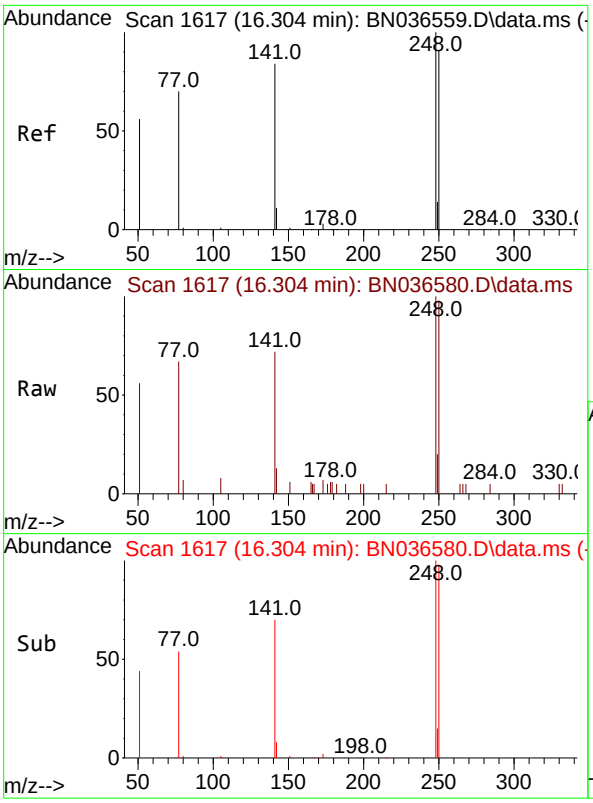


#20
4,6-Dinitro-2-methylphenol
Concen: 0.493 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:198 Resp: 467

Ion	Ratio	Lower	Upper
198	100		
51	98.9	107.9	161.9#
105	59.8	56.2	84.2



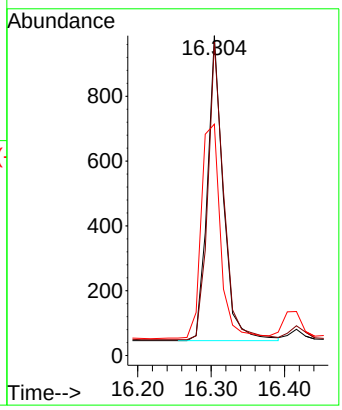


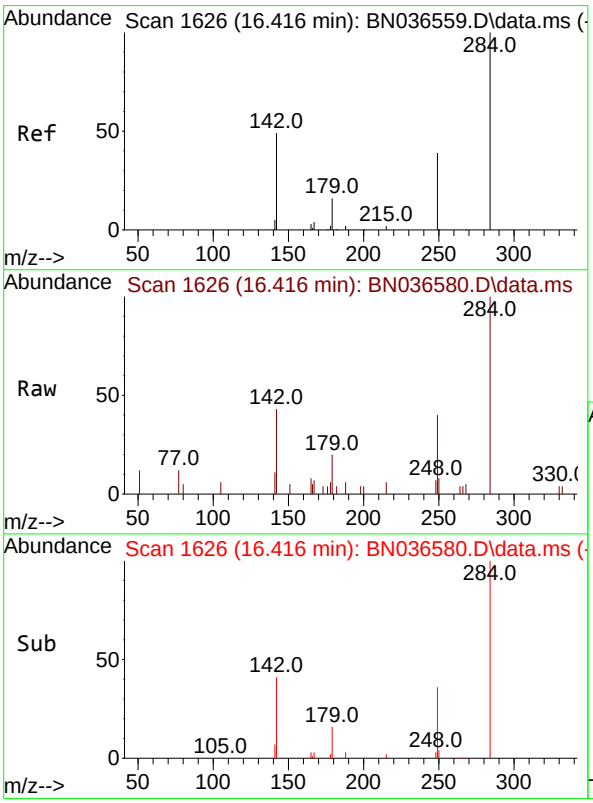
#21
4-Bromophenyl-phenylether
Concen: 0.431 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:248 Resp: 1418

Ion	Ratio	Lower	Upper
248	100		
250	98.0	73.0	109.6
141	72.3	68.6	103.0

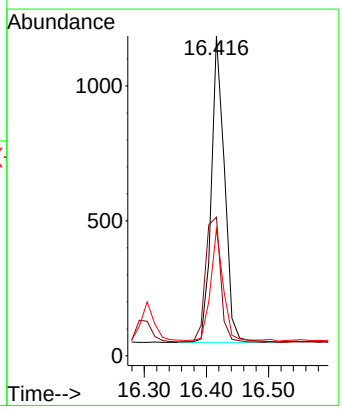


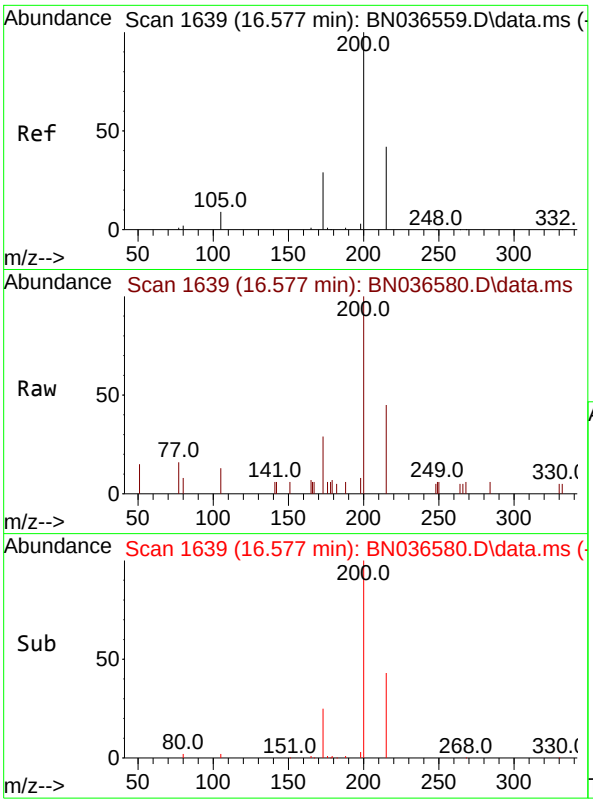


#22
Hexachlorobenzene
Concen: 0.421 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:284 Resp: 1670

Ion	Ratio	Lower	Upper
284	100		
142	47.5	37.0	55.4
249	34.3	28.1	42.1



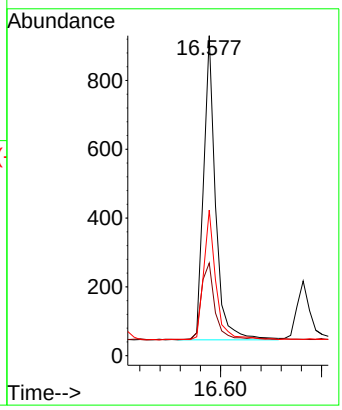


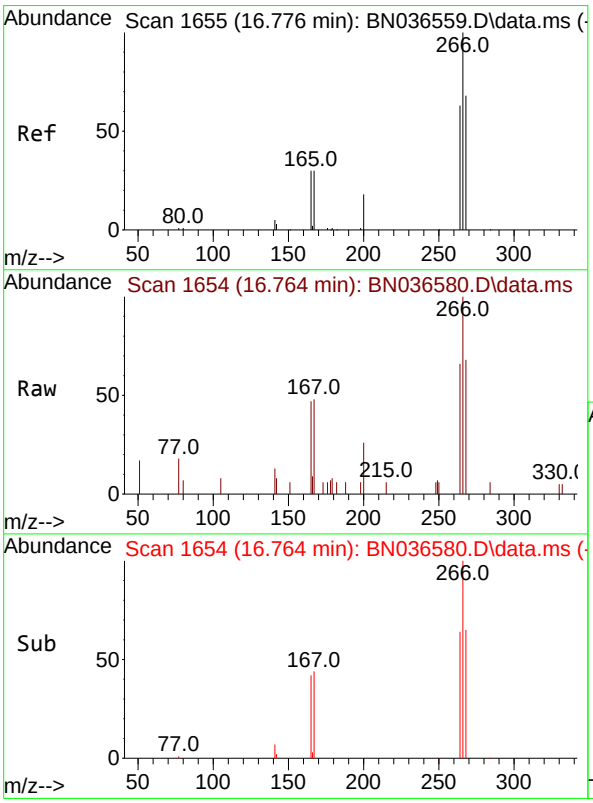
#23
Atrazine
Concen: 0.552 ng
RT: 16.577 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:200 Resp: 1456

Ion	Ratio	Lower	Upper
200	100		
173	28.9	27.3	40.9
215	45.5	36.8	55.2

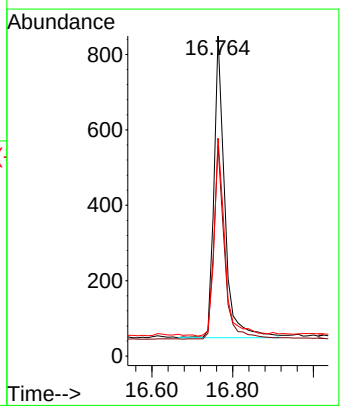


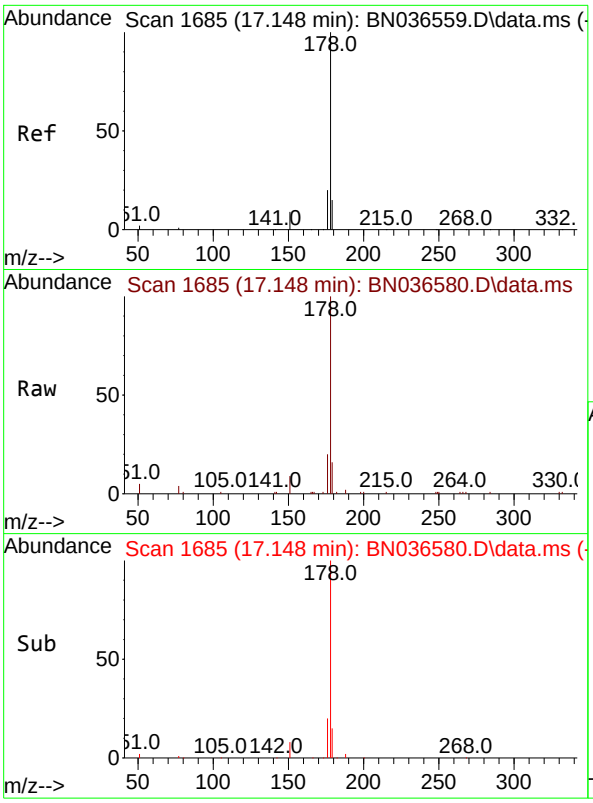


#24
Pentachlorophenol
Concen: 0.819 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:266 Resp: 1484

Ion	Ratio	Lower	Upper
266	100		
264	63.6	49.6	74.4
268	64.9	50.9	76.3



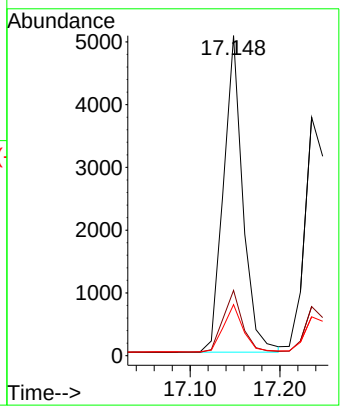


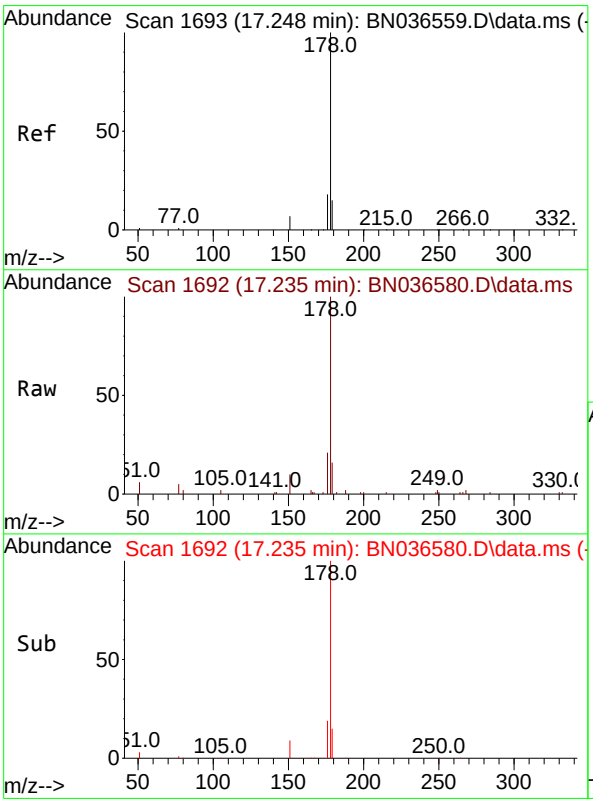
#25
Phenanthrene
Concen: 0.480 ng
RT: 17.148 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:178 Resp: 7563

Ion	Ratio	Lower	Upper
178	100		
176	19.9	15.9	23.9
179	15.6	12.2	18.4

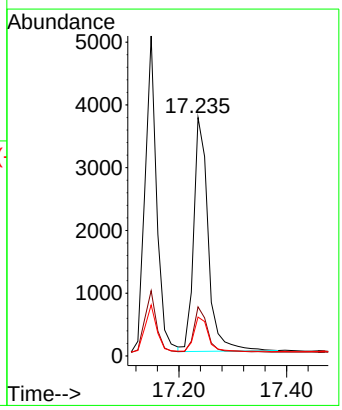


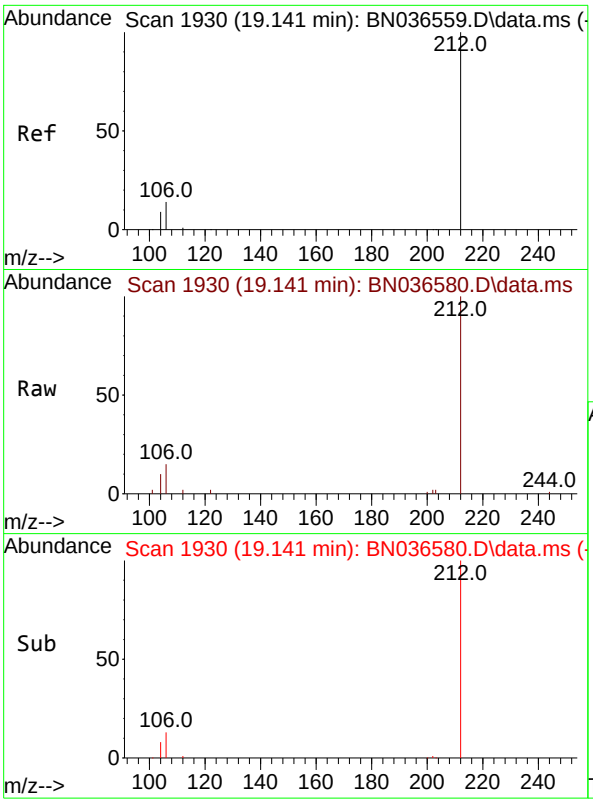


#26
Anthracene
Concen: 0.492 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.012 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:178 Resp: 6988

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.2
179	15.2	12.6	18.8



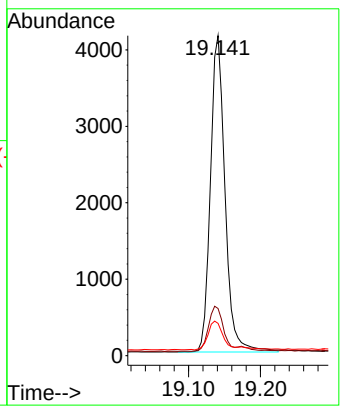


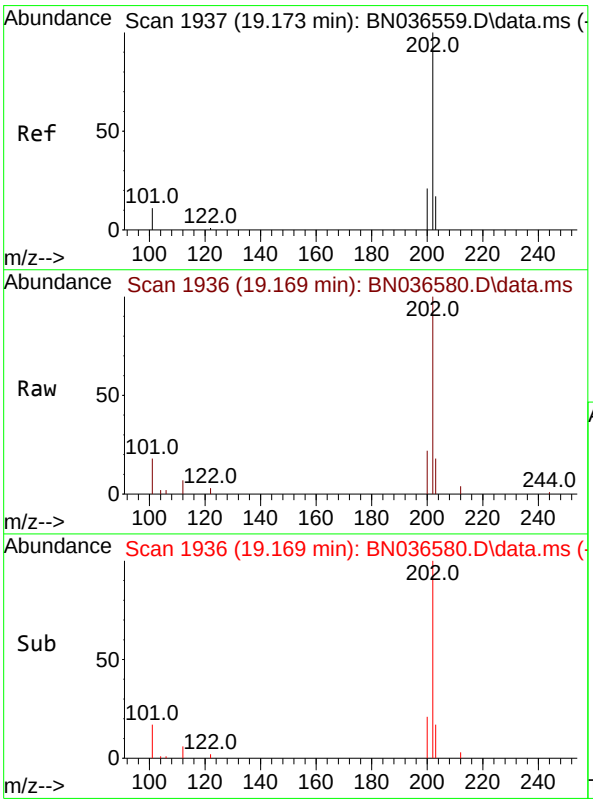
#27
Fluoranthene-d10
Concen: 0.433 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:212 Resp: 5833

Ion	Ratio	Lower	Upper
212	100		
106	14.3	11.8	17.6
104	10.2	7.3	10.9

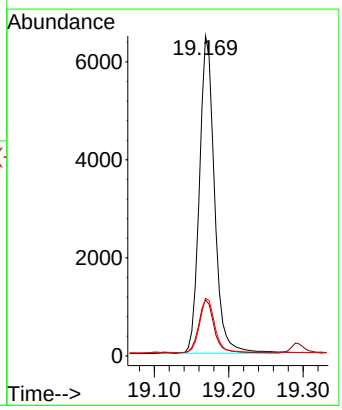


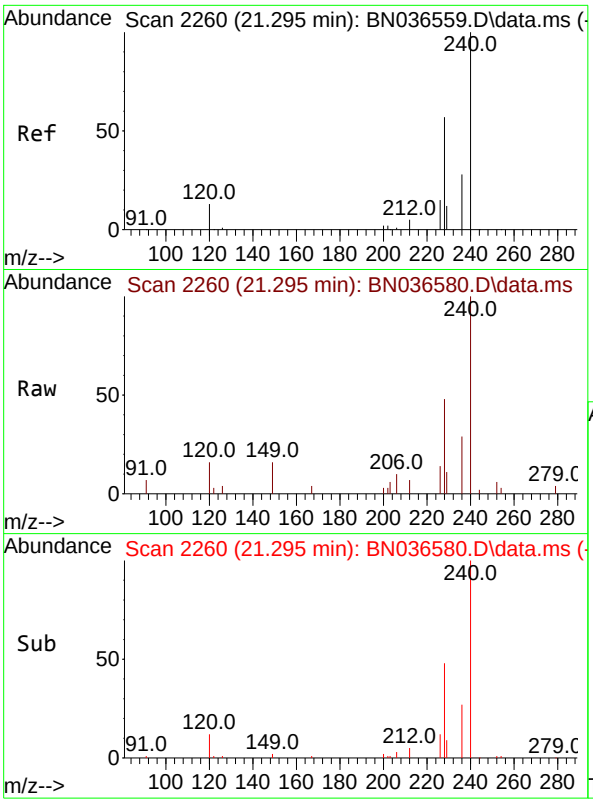


#28
Fluoranthene
Concen: 0.515 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:202 Resp: 9115

Ion	Ratio	Lower	Upper
202	100		
101	17.2	9.4	14.0#
203	17.2	13.5	20.3



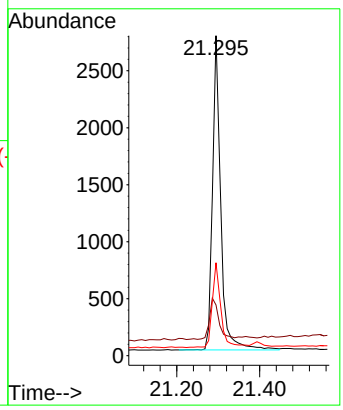


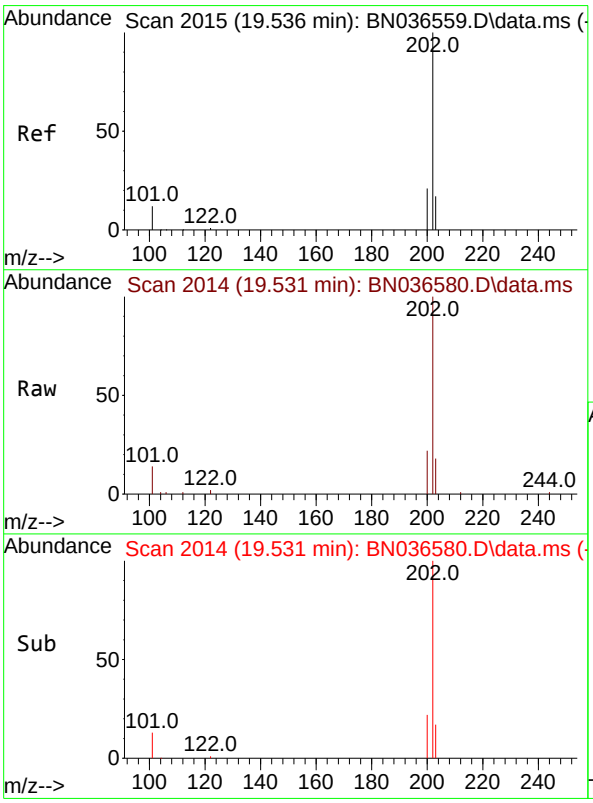
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:240 Resp: 3781

Ion	Ratio	Lower	Upper
240	100		
120	15.9	14.6	22.0
236	29.1	24.1	36.1

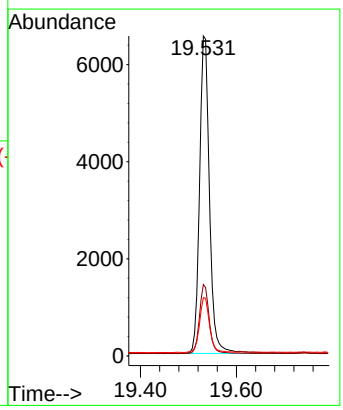


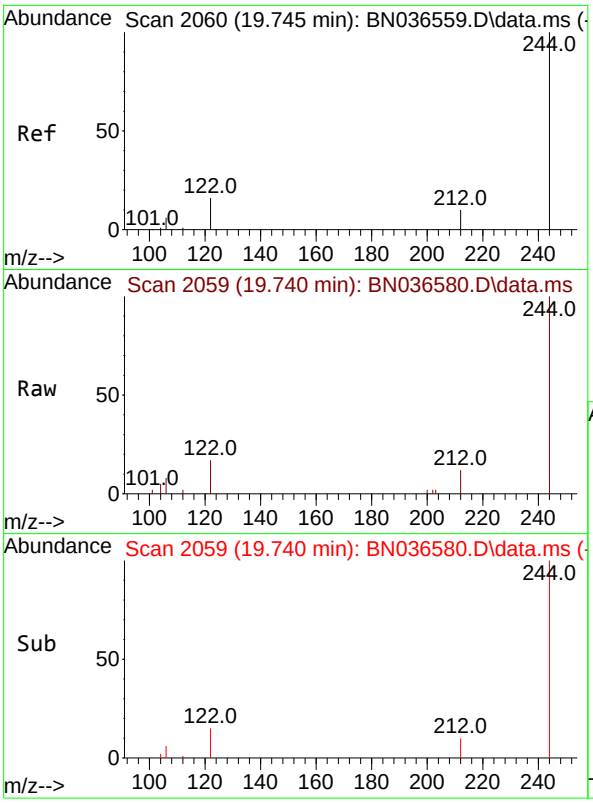


#30
Pyrene
Concen: 0.509 ng
RT: 19.531 min Scan# 2014
Delta R.T. -0.005 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:202 Resp: 9415

Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.1	25.7
203	17.5	14.1	21.1



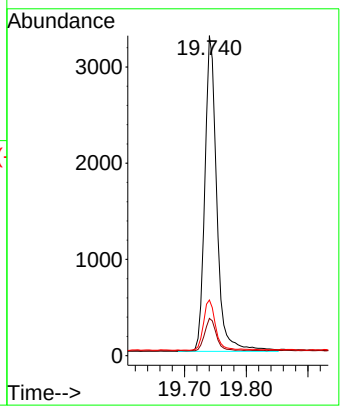


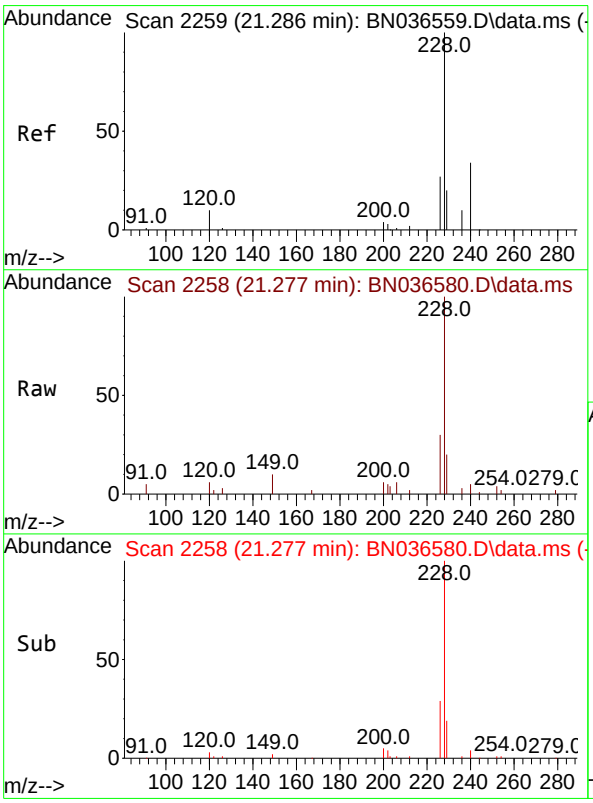
#31
Terphenyl-d14
Concen: 0.486 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:244 Resp: 4405

Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.6	14.4
122	17.4	13.9	20.9

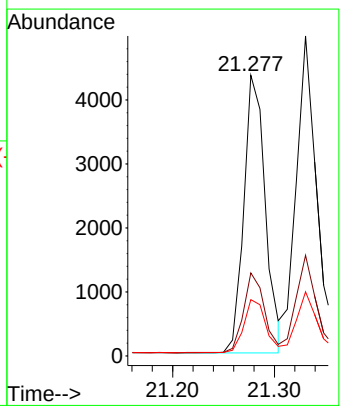


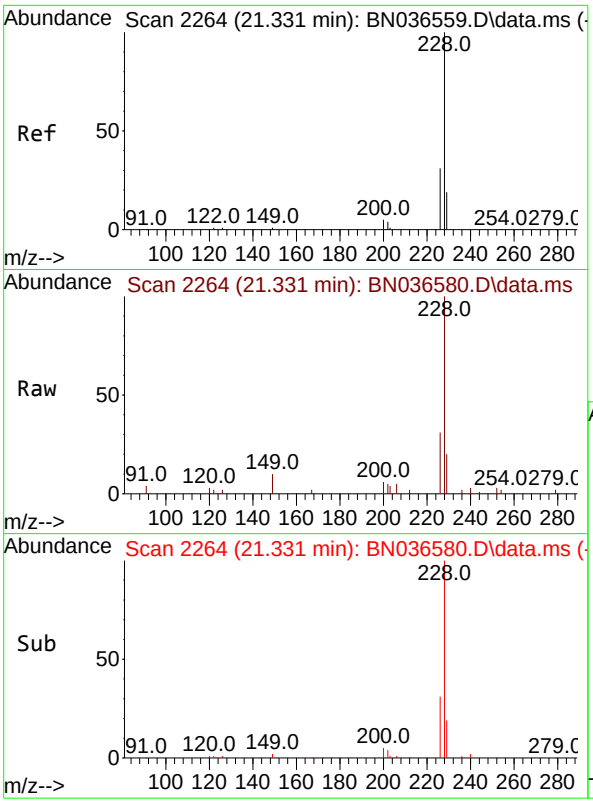


#32
Benzo(a)anthracene
Concen: 0.484 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:228 Resp: 6361

Ion	Ratio	Lower	Upper
228	100		
226	29.6	22.5	33.7
229	20.1	16.6	25.0



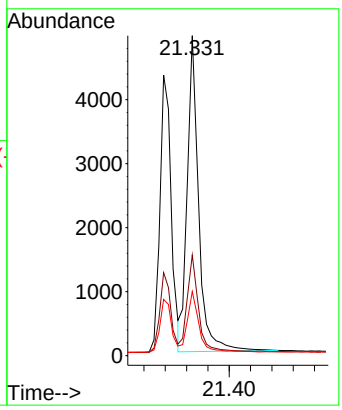


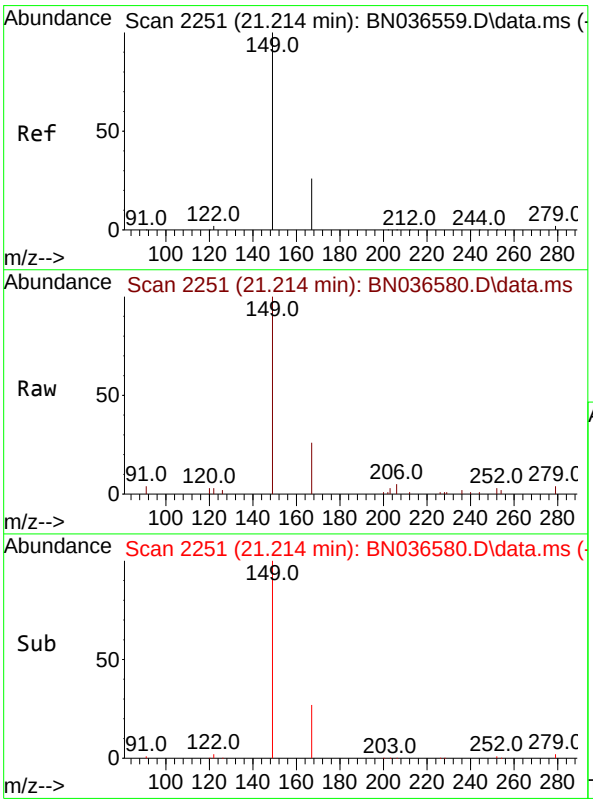
#33
Chrysene
Concen: 0.511 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:228 Resp: 7345

Ion	Ratio	Lower	Upper
228	100		
226	31.5	25.3	37.9
229	20.0	15.8	23.8

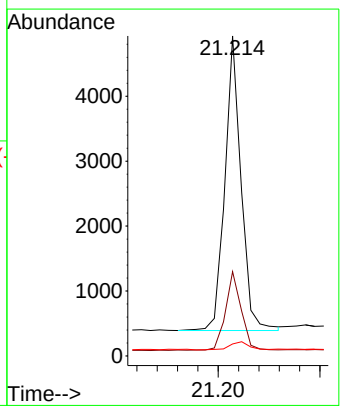


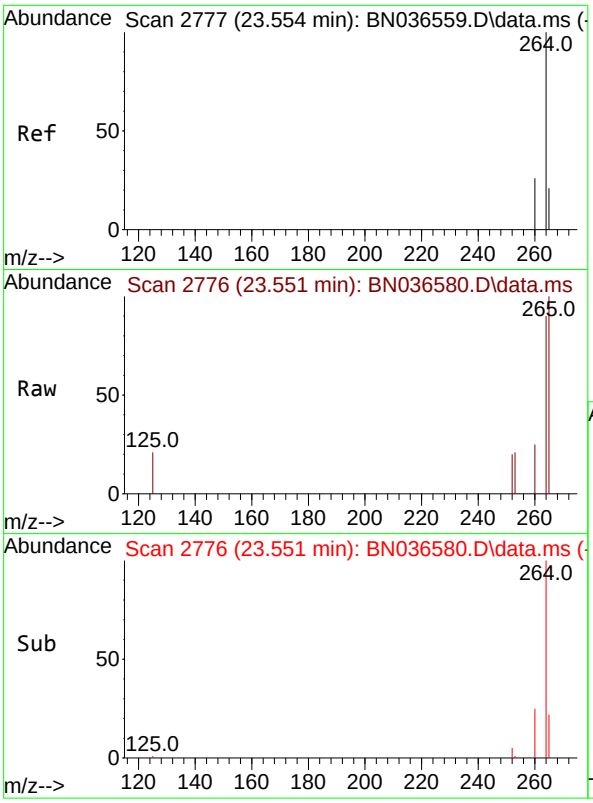


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.535 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:149 Resp: 5004

Ion	Ratio	Lower	Upper
149	100		
167	25.8	20.7	31.1
279	3.3	3.6	5.4#



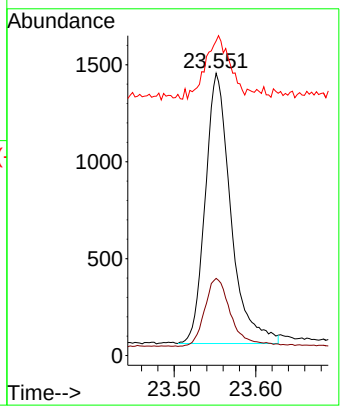


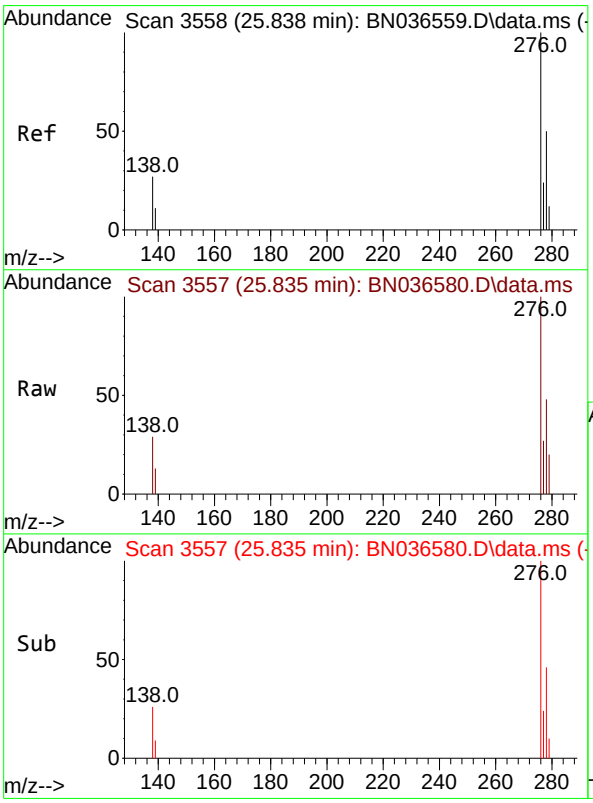
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.551 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:264 Resp: 3038

Ion	Ratio	Lower	Upper
264	100		
260	27.3	22.6	33.8
265	111.5	88.1	132.1

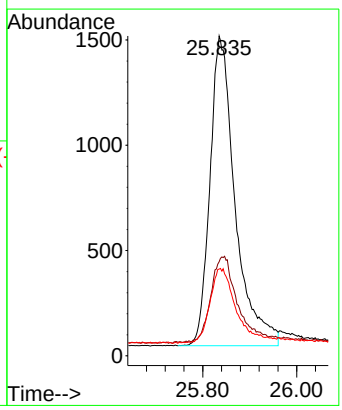


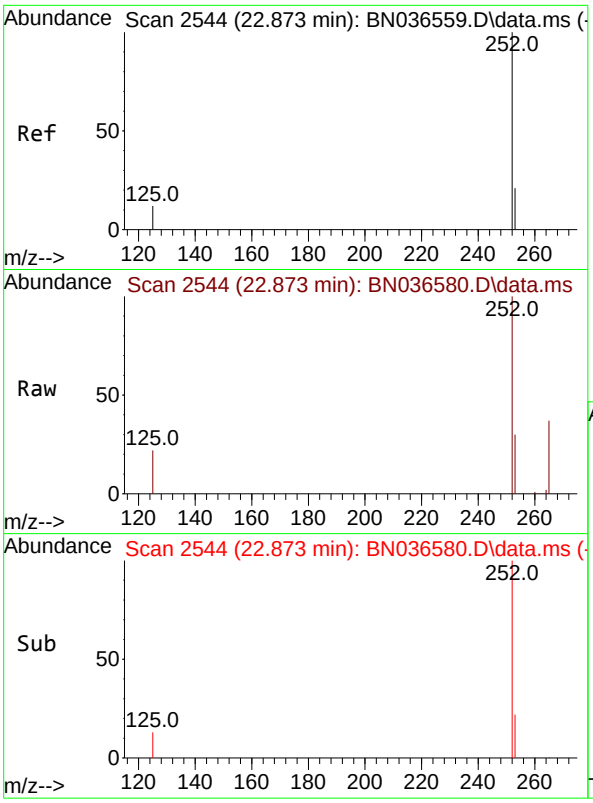


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.500 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:276 Resp: 5484

Ion	Ratio	Lower	Upper
276	100		
138	28.5	23.4	35.2
277	24.5	20.0	30.0



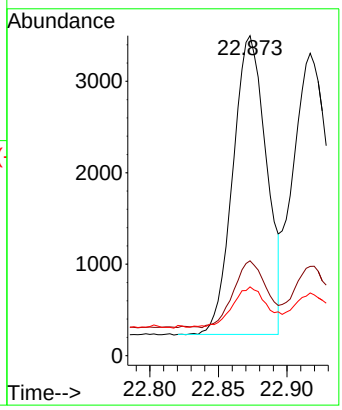


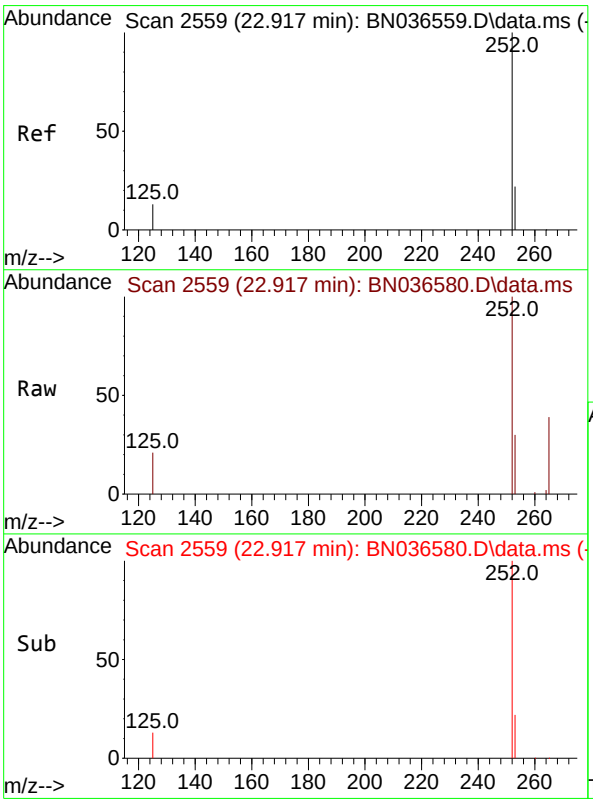
#37
Benzo(b)fluoranthene
Concen: 0.501 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:252 Resp: 5544

Ion	Ratio	Lower	Upper
252	100		
253	29.6	23.9	35.9
125	21.5	17.4	26.2

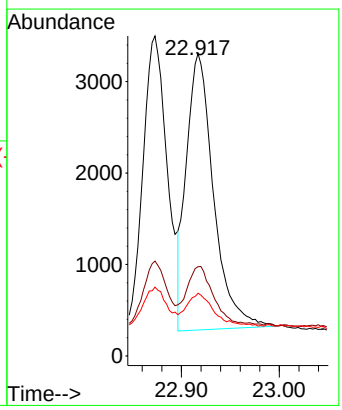


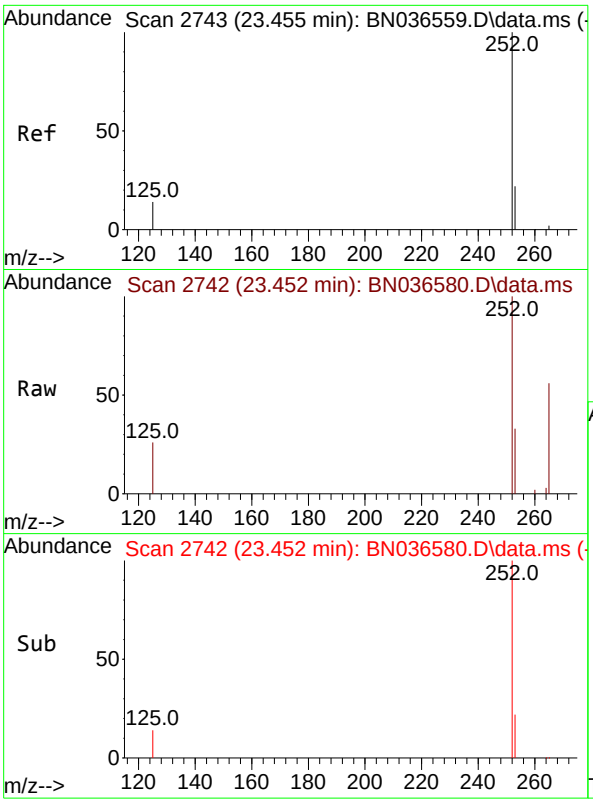


#38
Benzo(k)fluoranthene
Concen: 0.503 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:252 Resp: 5839

Ion	Ratio	Lower	Upper
252	100		
253	29.5	24.6	36.8
125	20.8	17.8	26.8



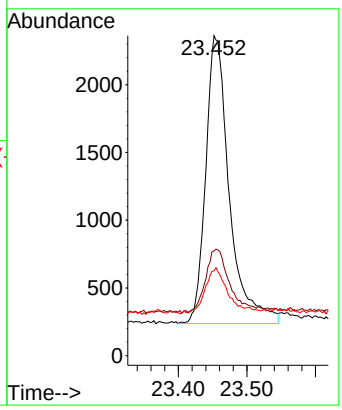


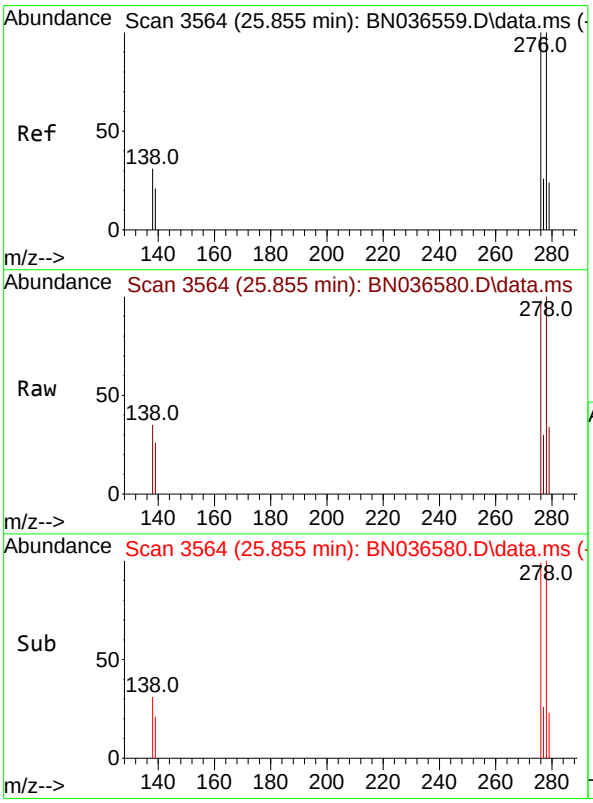
#39
Benzo(a)pyrene
Concen: 0.546 ng
RT: 23.452 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:252 Resp: 5088

Ion	Ratio	Lower	Upper
252	100		
253	32.7	27.8	41.8
125	26.5	22.7	34.1

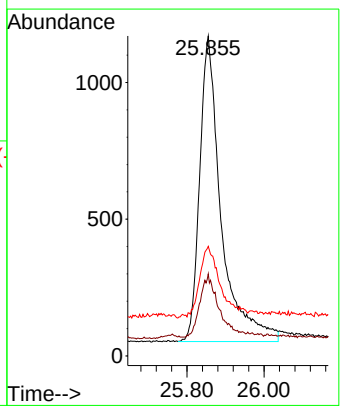


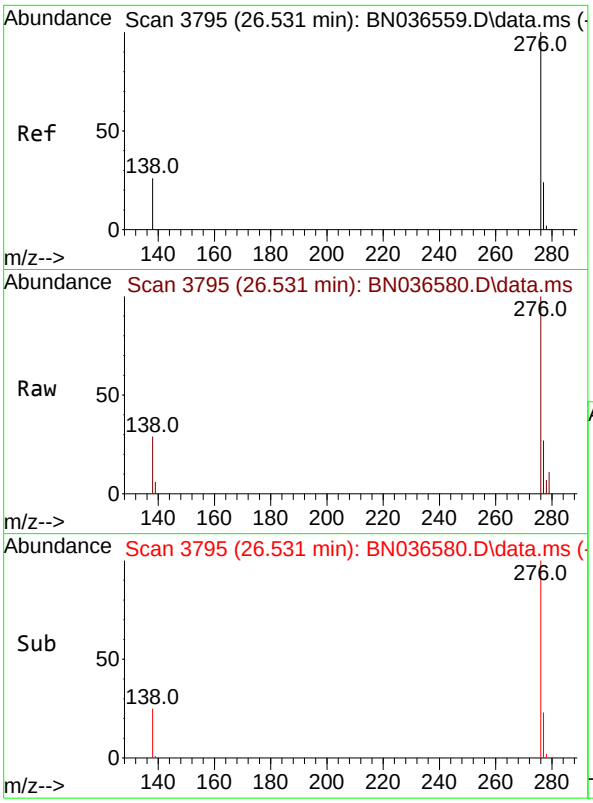


#40
Dibenzo(a,h)anthracene
Concen: 0.506 ng
RT: 25.855 min Scan# 3564
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Tgt Ion:278 Resp: 4317

Ion	Ratio	Lower	Upper
278	100		
139	25.6	20.8	31.2
279	34.3	28.8	43.2



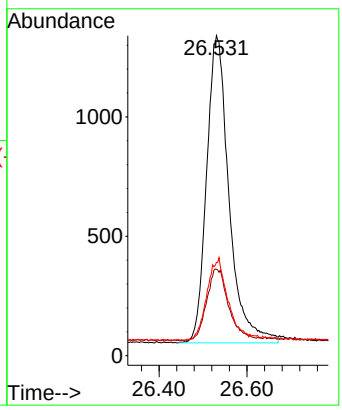


#41
Benzo(g,h,i)perylene
Concen: 0.467 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036580.D
Acq: 11 Mar 2025 14:21

Instrument :
BNA_N
ClientSampleId :
RE103D1-20250306MSD

Tgt Ion:276 Resp: 4563

Ion	Ratio	Lower	Upper
276	100		
277	27.0	22.2	33.4
138	29.2	24.1	36.1



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Manual Integration Report

Sequence:	BN031025	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC0.1	BN036557.D	1,4-Dioxane	anahy	3/11/2025 9:18:29 AM	Jagrut	3/11/2025 10:27:49 AM	Peak Integrated by Software
SSTDICC0.2	BN036558.D	1,4-Dioxane	anahy	3/11/2025 9:19:12 AM	Jagrut	3/11/2025 10:27:51 AM	Peak Integrated by Software
Q1531-06	BN036569.D	Bis(2-ethylhexyl)phthalate	anahy	3/11/2025 9:20:01 AM	Jagrut	3/11/2025 10:27:54 AM	Peak Integrated by Software
SSTDCCC0.4	BN036572.D	Benzo(k)fluoranthene	anahy	3/11/2025 9:20:59 AM	Jagrut	3/11/2025 10:27:55 AM	Peak Integrated by Software
SSTDCCC0.4	BN036572.D	Chrysene-d12	anahy	3/11/2025 9:20:59 AM	Jagrut	3/11/2025 10:27:55 AM	Peak Integrated by Software

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Manual Integration Report

Sequence:	BN031125	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB167057BS	BN036588.D	Benzo(k)fluoranthene	anahy	3/12/2025 10:53:01 AM	Jagrut	3/12/2025 4:49:58 PM	Peak Integrated by Software
SSTDCCC0.4	BN036589.D	Benzo(b)fluoranthene	anahy	3/12/2025 10:53:38 AM	Jagrut	3/12/2025 4:50:01 PM	Peak Integrated by Software
SSTDCCC0.4	BN036589.D	Benzo(k)fluoranthene	anahy	3/12/2025 10:53:38 AM	Jagrut	3/12/2025 4:50:01 PM	Peak Integrated by Software

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Manual Integration Report

Sequence:	BN031225	Instrument	BNA_n

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

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN031025

Review By	anahy	Review On	3/11/2025 9:36:11 AM		
Supervise By	Jagrut	Supervise On	3/11/2025 10:28:11 AM		
SubDirectory	BN031025	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn031025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036556.D	10 Mar 2025 11:03	RC/JU	Ok
2	SSTDICC0.1	BN036557.D	10 Mar 2025 11:42	RC/JU	Ok,M
3	SSTDICC0.2	BN036558.D	10 Mar 2025 12:18	RC/JU	Ok,M
4	SSTDICCC0.4	BN036559.D	10 Mar 2025 12:54	RC/JU	Ok
5	SSTDICC0.8	BN036560.D	10 Mar 2025 13:31	RC/JU	Ok
6	SSTDICC1.6	BN036561.D	10 Mar 2025 14:07	RC/JU	Ok
7	SSTDICC3.2	BN036562.D	10 Mar 2025 14:43	RC/JU	Ok
8	SSTDICC5.0	BN036563.D	10 Mar 2025 15:19	RC/JU	Ok
9	SSTDICV0.4	BN036564.D	10 Mar 2025 16:38	RC/JU	Ok
10	PB167057BL	BN036565.D	10 Mar 2025 17:14	RC/JU	Ok
11	Q1531-03	BN036566.D	10 Mar 2025 17:50	RC/JU	Ok
12	Q1531-04	BN036567.D	10 Mar 2025 18:26	RC/JU	Ok
13	Q1531-05	BN036568.D	10 Mar 2025 19:02	RC/JU	Ok
14	Q1531-06	BN036569.D	10 Mar 2025 19:38	RC/JU	Ok,M
15	Q1531-13	BN036570.D	10 Mar 2025 20:14	RC/JU	Ok
16	Q1531-14	BN036571.D	10 Mar 2025 20:50	RC/JU	Ok
17	SSTDCCC0.4	BN036572.D	10 Mar 2025 21:26	RC/JU	Ok,M

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN031125

Review By	anahy	Review On	3/12/2025 10:53:54 AM		
Supervise By	Jagrut	Supervise On	3/12/2025 4:50:16 PM		
SubDirectory	BN031125	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn031025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036573.D	11 Mar 2025 08:50	RC/JU	Ok
2	SSTDCCC0.4	BN036574.D	11 Mar 2025 10:08	RC/JU	Ok
3	PB167057BL	BN036575.D	11 Mar 2025 10:44	RC/JU	Ok
4	Q1531-01	BN036576.D	11 Mar 2025 11:20	RC/JU	Ok
5	Q1531-02	BN036577.D	11 Mar 2025 11:56	RC/JU	Ok
6	Q1531-07	BN036578.D	11 Mar 2025 12:33	RC/JU	Dilution
7	Q1531-08MS	BN036579.D	11 Mar 2025 13:45	RC/JU	Ok
8	Q1531-09MSD	BN036580.D	11 Mar 2025 14:21	RC/JU	Ok
9	Q1531-07DL	BN036581.D	11 Mar 2025 14:57	RC/JU	Ok
10	Q1531-11	BN036582.D	11 Mar 2025 15:32	RC/JU	Ok
11	Q1531-12	BN036583.D	11 Mar 2025 16:09	RC/JU	Ok
12	Q1531-15	BN036584.D	11 Mar 2025 16:44	RC/JU	Dilution
13	Q1531-16	BN036585.D	11 Mar 2025 17:21	RC/JU	Dilution
14	Q1531-17	BN036586.D	11 Mar 2025 17:57	RC/JU	Dilution
15	Q1531-18	BN036587.D	11 Mar 2025 18:33	RC/JU	Ok
16	PB167057BS	BN036588.D	11 Mar 2025 19:09	RC/JU	Ok,M
17	SSTDCCC0.4	BN036589.D	11 Mar 2025 19:46	RC/JU	Ok,M

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN031225

Review By	anahy	Review On	3/13/2025 9:45:45 AM		
Supervise By	Jagrut	Supervise On	3/13/2025 10:05:02 AM		
SubDirectory	BN031225	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn031025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036590.D	12 Mar 2025 08:35	RC/JU	Ok
2	SSTDCCC0.4	BN036591.D	12 Mar 2025 09:14	RC/JU	Ok
3	PB167057BL	BN036592.D	12 Mar 2025 09:50	RC/JU	Ok
4	Q1531-10	BN036593.D	12 Mar 2025 10:26	RC/JU	Ok
5	Q1531-19	BN036594.D	12 Mar 2025 11:02	RC/JU	Ok
6	Q1531-20	BN036595.D	12 Mar 2025 11:38	RC/JU	Ok
7	Q1531-15DL	BN036596.D	12 Mar 2025 12:16	RC/JU	Ok
8	Q1531-16DL	BN036597.D	12 Mar 2025 12:52	RC/JU	Ok
9	Q1531-17DL	BN036598.D	12 Mar 2025 13:29	RC/JU	Ok
10	SSTDCCC0.4	BN036599.D	12 Mar 2025 14:39	RC/JU	Ok

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN031025

Review By	anahy	Review On	3/11/2025 9:36:11 AM	
Supervise By	Jagrut	Supervise On	3/11/2025 10:28:11 AM	
SubDirectory	BN031025	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn031025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN036556.D	10 Mar 2025 11:03		RC/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN036557.D	10 Mar 2025 11:42	Compound #20 removed.	RC/JU	Ok,M
3	SSTDICC0.2	SSTDICC0.2	BN036558.D	10 Mar 2025 12:18		RC/JU	Ok,M
4	SSTDICCC0.4	SSTDICCC0.4	BN036559.D	10 Mar 2025 12:54		RC/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN036560.D	10 Mar 2025 13:31		RC/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN036561.D	10 Mar 2025 14:07	Compound #20 kept on QR.	RC/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN036562.D	10 Mar 2025 14:43	Method is good for DOD.	RC/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN036563.D	10 Mar 2025 15:19		RC/JU	Ok
9	SSTDICV0.4	ICVBN031025	BN036564.D	10 Mar 2025 16:38		RC/JU	Ok
10	PB167057BL	PB167057BL	BN036565.D	10 Mar 2025 17:14		RC/JU	Ok
11	Q1531-03	RE122D1-20250305	BN036566.D	10 Mar 2025 17:50		RC/JU	Ok
12	Q1531-04	RE126D1-20250306	BN036567.D	10 Mar 2025 18:26		RC/JU	Ok
13	Q1531-05	RE126D2-20250306	BN036568.D	10 Mar 2025 19:02		RC/JU	Ok
14	Q1531-06	DUP01-20250306	BN036569.D	10 Mar 2025 19:38		RC/JU	Ok,M
15	Q1531-13	RE108D1-20250306	BN036570.D	10 Mar 2025 20:14		RC/JU	Ok
16	Q1531-14	RE105D1-20250306	BN036571.D	10 Mar 2025 20:50		RC/JU	Ok
17	SSTDCCC0.4	SSTDCCC0.4EC	BN036572.D	10 Mar 2025 21:26		RC/JU	Ok,M

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN031125

Review By	anahy	Review On	3/12/2025 10:53:54 AM	
Supervise By	Jagrut	Supervise On	3/12/2025 4:50:16 PM	
SubDirectory	BN031125	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn031025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN036573.D	11 Mar 2025 08:50		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036574.D	11 Mar 2025 10:08		RC/JU	Ok
3	PB167057BL	PB167057BL	BN036575.D	11 Mar 2025 10:44		RC/JU	Ok
4	Q1531-01	RE122D2-20250305	BN036576.D	11 Mar 2025 11:20		RC/JU	Ok
5	Q1531-02	RE122D3-20250305	BN036577.D	11 Mar 2025 11:56		RC/JU	Ok
6	Q1531-07	RE103D1-20250306	BN036578.D	11 Mar 2025 12:33	Need 2X Dilution	RC/JU	Dilution
7	Q1531-08MS	RE103D1-20250306MS	BN036579.D	11 Mar 2025 13:45		RC/JU	Ok
8	Q1531-09MSD	RE103D1-20250306MS	BN036580.D	11 Mar 2025 14:21		RC/JU	Ok
9	Q1531-07DL	RE103D1-20250306DL	BN036581.D	11 Mar 2025 14:57		RC/JU	Ok
10	Q1531-11	RE103D2-20250306	BN036582.D	11 Mar 2025 15:32		RC/JU	Ok
11	Q1531-12	RE108D2-20250306	BN036583.D	11 Mar 2025 16:09		RC/JU	Ok
12	Q1531-15	RE105D2-20250306	BN036584.D	11 Mar 2025 16:44	Need 2X Dilution	RC/JU	Dilution
13	Q1531-16	RE125D1-20250307	BN036585.D	11 Mar 2025 17:21	Need 2X Dilution	RC/JU	Dilution
14	Q1531-17	RE125D2-20250307	BN036586.D	11 Mar 2025 17:57	Need 5X Dilution	RC/JU	Dilution
15	Q1531-18	FB01	BN036587.D	11 Mar 2025 18:33		RC/JU	Ok
16	PB167057BS	PB167057BS	BN036588.D	11 Mar 2025 19:09		RC/JU	Ok,M
17	SSTDCCC0.4	SSTDCCC0.4EC	BN036589.D	11 Mar 2025 19:46		RC/JU	Ok,M

M : Manual Integration

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Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN031225

Review By	anahy	Review On	3/13/2025 9:45:45 AM	
Supervise By	Jagrut	Supervise On	3/13/2025 10:05:02 AM	
SubDirectory	BN031225	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn031025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN036590.D	12 Mar 2025 08:35		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036591.D	12 Mar 2025 09:14		RC/JU	Ok
3	PB167057BL	PB167057BL	BN036592.D	12 Mar 2025 09:50		RC/JU	Ok
4	Q1531-10	RE103D3-20250306	BN036593.D	12 Mar 2025 10:26		RC/JU	Ok
5	Q1531-19	RE104D2-20250307	BN036594.D	12 Mar 2025 11:02		RC/JU	Ok
6	Q1531-20	RE104D3-20250307	BN036595.D	12 Mar 2025 11:38		RC/JU	Ok
7	Q1531-15DL	RE105D2-20250306DL	BN036596.D	12 Mar 2025 12:16		RC/JU	Ok
8	Q1531-16DL	RE125D1-20250307DL	BN036597.D	12 Mar 2025 12:52		RC/JU	Ok
9	Q1531-17DL	RE125D2-20250307DL	BN036598.D	12 Mar 2025 13:29		RC/JU	Ok
10	SSTDCCC0.4	SSTDCCC0.4EC	BN036599.D	12 Mar 2025 14:39		RC/JU	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB167057

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#: E3880

Extraction By: RS

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,5,6,7

Extraction Start Date : 03/10/2025

Extraction Start Time : 11:35

Extraction End Date : 03/10/2025

Extraction End Time : 16:55

Concentration By: EH

Supervisor By : RUPESH

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	SP6739
Surrogate	1.0ML	0.4 PPM	SP6741
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	E3878
Baked Na2SO4	N/A	EP2593
10N NaoH	N/A	EP2559
H2SO4 1:1	N/A	EP2565
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 -01,02

KD Bath Temperature: 60 °C

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
3/10/25	RS (Bottle lab)	RC/SVOC
17:00	Preparation Group	Analysis Group

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB167057

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 03/10/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167057BL	SBLK057	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			SEP-1
PB167057BS	SLCS057	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			2
Q1531-01	RE122D2-20250305	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	C		3
Q1531-02	RE122D3-20250305	SVOC-SIMGrou p1	960	6	RUPESH	ritesh	1	C		4
Q1531-03	RE122D1-20250305	SVOC-SIMGrou p1	980	6	RUPESH	ritesh	1	C		5
Q1531-04	RE126D1-20250306	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	C		6
Q1531-05	RE126D2-20250306	SVOC-SIMGrou p1	920	6	RUPESH	ritesh	1	C		7
Q1531-06	DUP01-20250306	SVOC-SIMGrou p1	950	6	RUPESH	ritesh	1	C		8
Q1531-07	RE103D1-20250306	SVOC-SIMGrou p1	960	6	RUPESH	ritesh	1	C		9
Q1531-08	Q1531-07MS	SVOC-SIMGrou p1	970	6	RUPESH	ritesh	1	C		10
Q1531-09	Q1531-07MSD	SVOC-SIMGrou p1	980	6	RUPESH	ritesh	1	C		11
Q1531-10	RE103D3-20250306	SVOC-SIMGrou p1	950	6	RUPESH	ritesh	1	C		12
Q1531-11	RE103D2-20250306	SVOC-SIMGrou p1	970	6	RUPESH	ritesh	1	C		13
Q1531-12	RE108D2-20250306	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	C		14
Q1531-13	RE108D1-20250306	SVOC-SIMGrou p1	980	6	RUPESH	ritesh	1	C		15
Q1531-14	RE105D1-20250306	SVOC-SIMGrou p1	960	6	RUPESH	ritesh	1	C		16
Q1531-15	RE105D2-20250306	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	C		SEP-1
Q1531-16	RE125D1-202503057	SVOC-SIMGrou p1	950	6	RUPESH	ritesh	1	C		2
Q1531-17	RE125D2-20250307	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	C		3
Q1531-18	FB01	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	C		4
Q1531-19	RE104D2-20250307	SVOC-SIMGrou p1	980	6	RUPESH	ritesh	1	C		5
Q1531-20	RE104D3-20250307	SVOC-SIMGrou p1	960	6	RUPESH	ritesh	1	C		6

RS 3/10

* **Extracts relinguished on the same date as received.**

Q1531-SVOC-SIMGroup1

6/30/25 11:35

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1531 **WorkList ID :** 188159 **Department :** Extraction **Date :** 03-10-2025 11:30:23

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1531-01	RE122D2-20250305	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/05/2025	8270-Modified
Q1531-02	RE122D3-20250305	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/05/2025	8270-Modified
Q1531-03	RE122D1-20250305	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/05/2025	8270-Modified
Q1531-04	RE126D1-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-05	RE126D2-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-06	DUP01-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-07	RE103D1-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-08	Q1531-07MS	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-09	Q1531-07MSD	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-10	RE103D3-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-11	RE103D2-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-12	RE108D2-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-13	RE108D1-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-14	RE105D1-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-15	RE105D2-20250306	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/06/2025	8270-Modified
Q1531-16	RE125D1-202503057	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/07/2025	8270-Modified
Q1531-17	RE125D2-20250307	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/07/2025	8270-Modified
Q1531-18	FB01	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/07/2025	8270-Modified
Q1531-19	RE104D2-20250307	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/07/2025	8270-Modified
Q1531-20	RE104D3-20250307	Water	SVOC-SIMGroup1	Cool 4 deg C	AECO15	I31	03/07/2025	8270-Modified

Date/Time 3/10/25 11:30
Raw Sample Received by: RJ (Ext-Lab)
Raw Sample Relinquished by: JD (SM)

Date/Time 3/10/25 12:15
Raw Sample Received by: JD (SM)
Raw Sample Relinquished by: RJ (Ext-Lab)

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Prep Standard - Chemical Standard Summary

Order ID : Q1531

Test : SVOC-SIMGroup1

Prepbatch ID : PB167057,

Sequence ID/Qc Batch ID: BN031025,BN031125,BN031225,

Standard ID :
EP2559,EP2565,EP2593,SP6682,SP6683,SP6684,SP6717,SP6730,SP6731,SP6732,SP6733,SP6734,SP6735,SP6736,SP6738,SP6739,SP6740,SP6741,

Chemical ID :
1ul/100ul sample,E3551,E3657,E3828,E3871,E3873,E3874,E3878,M5173,S10104,S10246,S11074,S11495,S11650,S11785,S11831,S11832,S12114,S12142,S12189,S12208,S12270,S12328,S12469,S12478,S12517,S12525,S12651,S12791,S12966,W3112,

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Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1874	10 N SODIUM HYDROXIDE SOLN	EP2559	11/14/2024	05/14/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 11/14/2024

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
314	1.1 H2SO4 SOLN	EP2565	11/20/2024	05/20/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/20/2024

FROM 1000.00000ml of M5173 + 1000.00000ml of W3112 = Final Quantity: 2000.000 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	EP2593	03/07/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 03/07/2025

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	SP6682	11/15/2024	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 12/03/2024

FROM 0.10000ml of S12328 + 4.90000ml of E3828 = 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	SP6683	11/15/2024	04/10/2025	Jagrut Upadhyay	None	None	Yogesh Patel 12/03/2024

FROM 0.00630ml of S12189 + 0.01280ml of S12208 + 0.03200ml of S11074 + 0.03200ml of S11831 + 0.06400ml of S12142 + 0.06400ml of S12469 + 0.06400ml of S12517 + 19.72490ml of E3828 = 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	SP6684	11/15/2024	04/10/2025	Jagrut Upadhyay	None	None	Yogesh Patel 12/03/2024

FROM 0.87500ml of E3828 + 0.01000ml of SP6682 + 0.12500ml of SP6683 = 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	SP6717	01/15/2025	03/31/2025	Rahul Chavli	None	None	Yogesh Patel 01/16/2025

FROM 1.00000ml of S10246 + 19.00000ml of E3871 = 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)	SP6730	02/04/2025	05/12/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.03350ml of S10104 + 0.05000ml of S11495 + 0.12500ml of S11832 + 0.12500ml of S12114 + 0.25000ml of S12270 + 0.25000ml of S12791 + 24.16650ml of E3874 = 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	SP6731	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6730 = 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	SP6732	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.68000ml of E3874 + 0.01000ml of SP6682 + 0.32000ml of SP6730 = 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	SP6733	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.84000ml of E3874 + 0.01000ml of SP6682 + 0.16000ml of SP6730 = 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	SP6734	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.92000ml of E3874 + 0.01000ml of SP6682 + 0.08000ml of SP6730 = 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	SP6735	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.96000ml of E3874 + 0.01000ml of SP6682 + 0.04000ml of SP6730 = 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	SP6736	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6735 = 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	SP6738	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.75000ml of E3874 + 0.01000ml of SP6682 + 0.25000ml of SP6735 = 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	SP6739	02/05/2025	07/29/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.00080ml of S11650 + 0.01000ml of S11785 + 0.02000ml of S12478 + 0.02000ml of S12525 + 0.02000ml of S12966 + 49.92920ml of E3873 = Final Quantity: 50.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3493	Internal Standard 0.4 PPM	SP6740	02/13/2025	07/30/2025	Rahul Chavli	None	None	Yogesh Patel 02/28/2025

FROM 0.10000ml of S12651 + 4.90000ml of E3874 = Final Quantity: 5.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3491	8270-SIM-Surrogate 0.4 PPM	SP6741	02/20/2025	04/10/2025	Rahul Chavli	None	None	mohammad ahmed 02/28/2025

FROM 0.00400ml of S12189 + 0.00800ml of S12208 + 0.02000ml of S11832 + 99.96800ml of E3873 = 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	07/01/2025	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)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

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)	24K1762005	07/14/2025	01/14/2025 / Rajesh	12/27/2024 / Rajesh	E3871

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)	24H2762008	07/29/2025	01/29/2025 / Rajesh	01/29/2025 / Rajesh	E3873

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)	25A0262002	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	08/14/2025	02/14/2025 / Rajesh	12/27/2024 / Rajesh	E3878

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	06/02/2025	06/01/2022 / Rajesh	04/05/2022 / william	M5173

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	07/30/2025	01/30/2025 / anahy	12/09/2021 / Christian	S10104

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	03/31/2025	01/15/2025 / Rahul	03/18/2022 / Christian	S10246

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	A0187043	05/15/2025	11/15/2024 / Jagrut	02/06/2023 / Christian	S11074

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	05/12/2025	11/12/2024 / Jagrut	08/11/2023 / Yogesh	S11495

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0201728	07/29/2025	01/29/2025 / anahy	11/09/2023 / Yogesh	S11650

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	07/29/2025	01/29/2025 / anahy	11/21/2023 / Rahul	S11785

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	A0201976	04/11/2025	10/11/2024 / Jagrut	11/21/2023 / rahul	S11831

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	A0201976	07/24/2025	01/24/2025 / anahy	11/21/2023 / rahul	S11832

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	05/12/2025	11/12/2024 / Jagrut	03/08/2024 / Rahul	S12114

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	04/30/2025	11/14/2024 / anahy	03/15/2024 / Rahul	S12142

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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	A0206206	04/10/2025	10/10/2024 / anahy	03/15/2024 / Rahul	S12189

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	A0206381	05/15/2025	11/15/2024 / Jagrut	03/15/2024 / Rahul	S12208

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	520963	07/30/2025	01/30/2025 / anahy	05/24/2024 / Rahul	S12270

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	A0206540	05/13/2025	11/13/2024 / anahy	05/30/2024 / Rahul	S12328

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	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12469

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	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12478

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Fax : 908 789 8922

CHEMICAL RECEIPT LOG BOOK

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]	A0214017	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12517

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]	A0214017	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12525

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	A0212266	08/07/2025	02/07/2025 / anahy	09/20/2024 / anahy	S12651

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	06/21/2025	01/30/2025 / anahy	05/24/2024 / Rahul	S12791

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]	A0219438	07/29/2025	01/29/2025 / anahy	12/11/2024 / anahy	S12966

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

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-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.

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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 03/08/22 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)

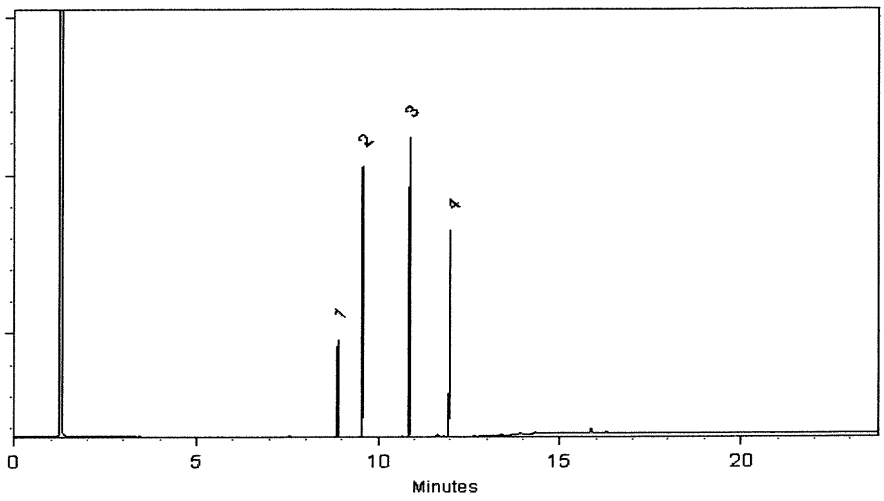
Carrier Gas:
hydrogen-constant pressure 10 psi.

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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 02/06/23 by CG

S11071 to S11075

Catalog No. : 31853 **Lot No.:** A0187043

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	2,019.0 µg/mL	+/- 11.8486	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBN5929)		+/- 43.2570	µg/mL	Unstressed
	Purity 99%		+/- 44.5129	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

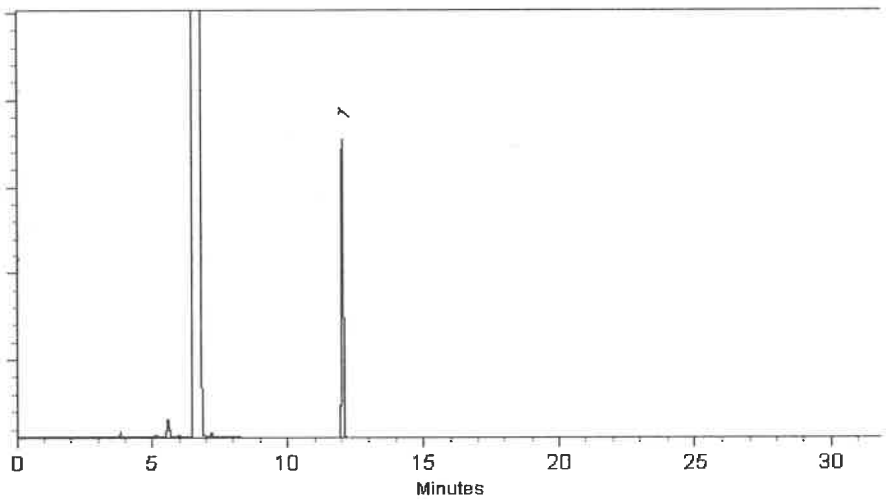
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Brittany Federinko - Operations Tech I

Date Mixed: 07-Jul-2022 **Balance:** 1128360905

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 12-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

PRODUCTOS QUIMICOS MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MEXICO
CP 64070
TEL +52 81 13 52 57 57
www.pqm.com.mx

CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na_2SO_4
SPECIFICATION NUMBER :	6399	RELEASE DATE:	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.

RG-02-01, Ed. 3

Recd. by RP 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.: 24J0862003
Manufactured Date: 2024-09-12
Expiration Date:2025-12-12
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	1
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	0.2 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: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3828

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

12/9-1/24

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date:2026-01-07
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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	<= 0.3	0.0
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 3871

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.: 24H2762008
Manufactured Date: 2024-04-18
Expiration Date:2027-04-18
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 1/29/25

E 3873

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

PO: PO2-1178.2 PRODUCT CODE: SHIP DATE: 1/20/2025

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date:2026-02-20
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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 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 3874

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor | J.T.Baker

Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date:2026-01-07
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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid (µeq/g)	<= 0.3	0.0
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 3878

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

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

James Ethier
Jamie Ethier
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700
Avantor Performance Materials, LLC
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

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
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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. : 555872 **Lot No.:** A0201728

Description : Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

511649 ↓ 511658 Y.P. 11/13/23

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP230530RSR	99%	25,000.0 µg/mL	+/- 777.0837

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Josh McCloskey - Operations Technician I

Date Mixed: 05-Sep-2023 **Balance:** B251644995

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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Fax: 1-814-353-1309

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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.)

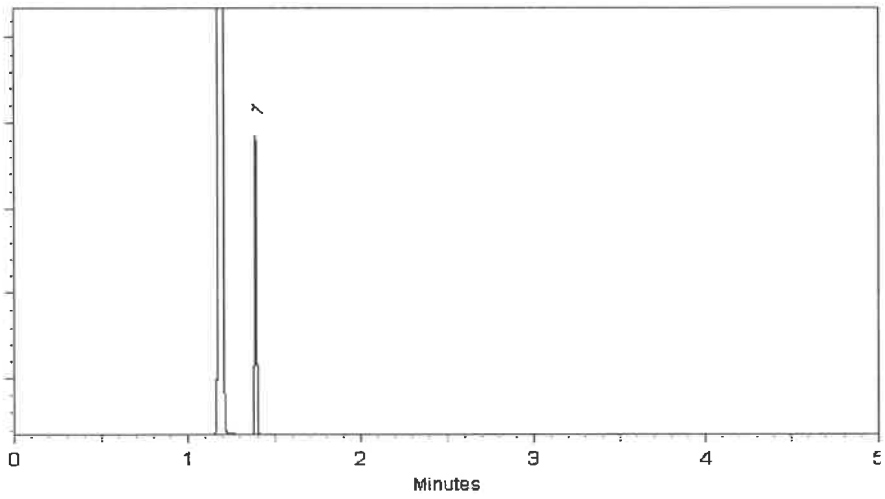
Inj. Temp:
250°C

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.
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RESTEK
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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ISO 17034 Accredited Reference Material Producer Certificate #3222.01

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. : 33913 **Lot No.:** A0201976

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

S11828 ↓ S11832 } RC/ 11/30/23

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 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	2-Methylnaphthalene-d10	7297-45-2	EF-135	98%	2,015.9 µg/mL	+/- 90.8098
2	Fluoranthene-d10	93951-69-0	PR-32557	99%	2,020.0 µg/mL	+/- 90.9963

* 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.)

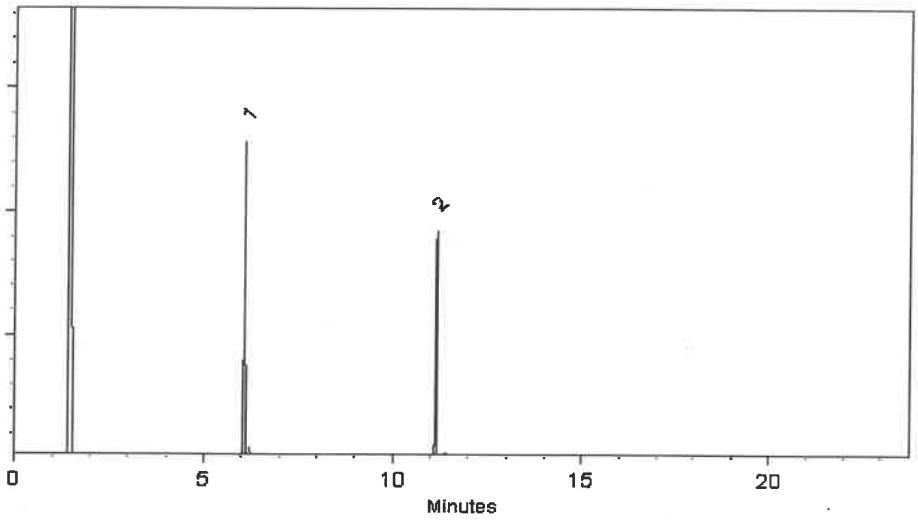
Inj. Temp:
250°C

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.

Dakota Parson - Operations Technician I **Date Mixed:** 13-Sep-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 28-Sep-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.
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Certified Uncertainty Value Notes:

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  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.
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Certificate of Analysis

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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. : 33913 **Lot No.:** A0201976

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

S11828 ↓ S11832 RC/ 11/30/23

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 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	2-Methylnaphthalene-d10	7297-45-2	EF-135	98%	2,015.9 µg/mL	+/- 90.8098
2	Fluoranthene-d10	93951-69-0	PR-32557	99%	2,020.0 µg/mL	+/- 90.9963

* 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.)

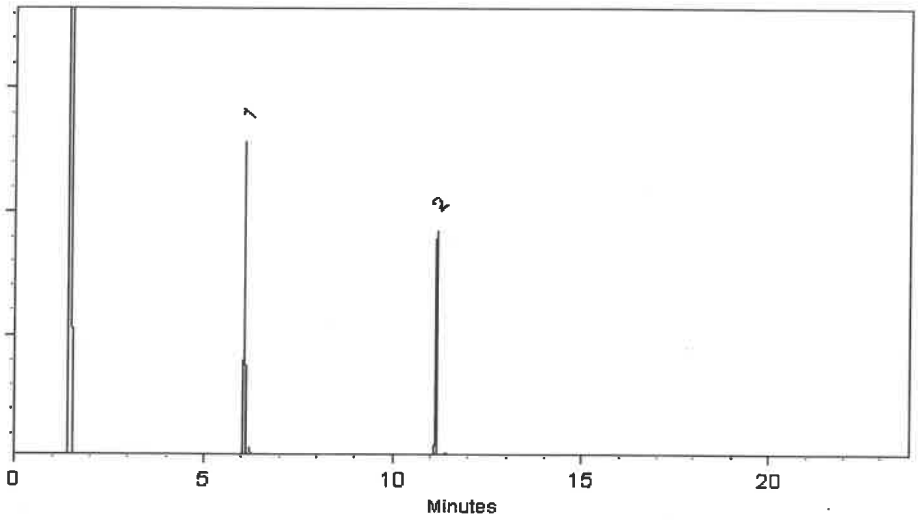
Inj. Temp:
250°C

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.

Dakota Parson - Operations Technician I **Date Mixed:** 13-Sep-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC **Date Passed:** 28-Sep-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:

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- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 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:

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  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.
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Santa Rosa, CA 95403

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(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-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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
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Fax: 1-814-353-1309

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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

S12117 ↓ S12146 RC/ 03/18/24

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

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%

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

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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. : 31087 **Lot No.:** A0206206

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 : January 31, 2032 **Storage:** 10°C or colder

Ship: Ambient

S12187 ↓ S12206 } RC/ 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorophenol	367-12-4	STBK1705	99%	10,005.3 µg/mL	+/- 302.5390
2	Phenol-d6	13127-88-3	PR-33287A	99%	10,005.5 µg/mL	+/- 302.5475
3	2,4,6-Tribromophenol	118-79-6	RP230831RSR	99%	10,006.6 µg/mL	+/- 302.5783

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
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:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

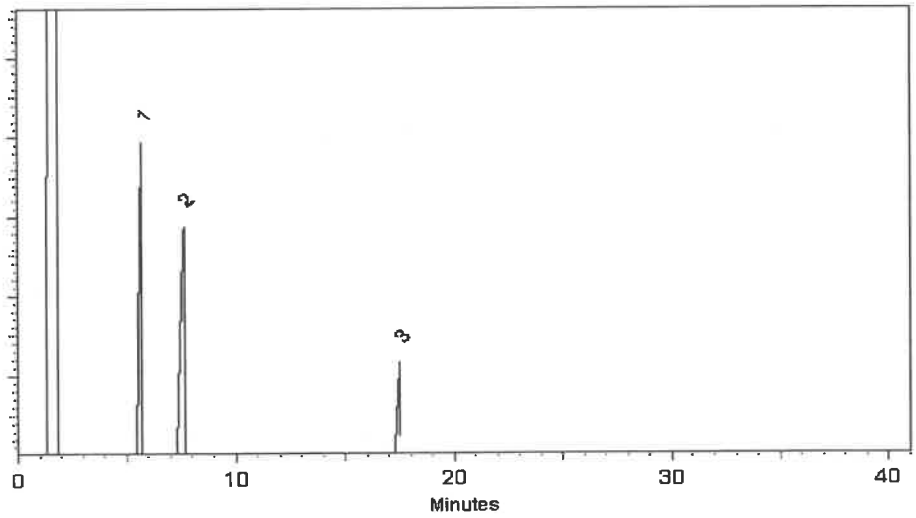
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 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.

Penelope Riglin - Operations Tech I

Date Mixed: 04-Jan-2024 **Balance Serial #** 1128360905

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

RESTEK
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CERTIFIED REFERENCE MATERIAL

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

Certificate of Analysis

chromatographic plus

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. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

S12207 ↓ S12221 RC/ 03/18/24

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitrobenzene-d5	4165-60-0	I-25158	99%	5,029.3 µg/mL	+/- 226.5204
2	2-Fluorobiphenyl	321-60-8	00021384	99%	5,030.9 µg/mL	+/- 226.5936
3	p-Terphenyl-d14	1718-51-0	PR-32599	99%	5,026.4 µg/mL	+/- 226.3909

* Expanded Uncertainty displayed in same units as Grav. Conc.

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.

Quality Confirmation Test

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.)

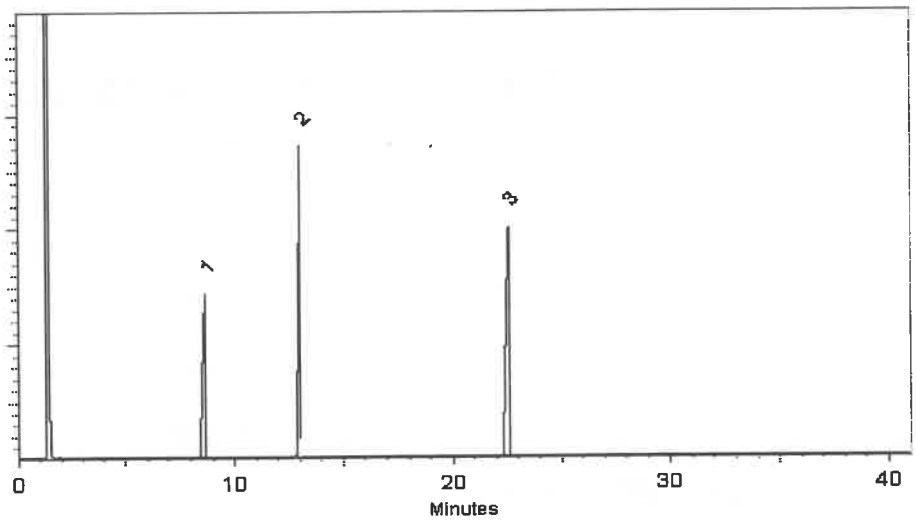
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 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.

Jess Hoy - Operations Tech I

Date Mixed: 09-Jan-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

CPI INTERNATIONAL

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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-110381-01	520963	≤ -10 °C	Methylene Chloride	10/10/2028	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	1010 ± 9.89
acenaphthylene	208-96-8	97.6	14.290.1P	1014 ± 9.93
aniline	62-53-3	99.97	64.1.4P	1001 ± 9.8
anthracene	120-12-7	99.5	15.7.1P	999.6 ± 9.79
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 9.8
benzo[a]anthracene	56-55-3	100	16.7.3P	1007 ± 9.86
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1011 ± 14.11
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 10.96
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 13.95
benzo[a]pyrene	50-32-8	97	20.286.2P	999.9 ± 22.24
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 9.82
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	1000 ± 14.69
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1003 ± 13.89
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.15P	999.4 ± 14.68
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 9.8
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 17.03
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	1000 ± 13.85
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 16.79
carbazole	86-74-8	99.4	239.7.2P	1000 ± 9.8

S12270 ↓ S12274 } RC/ 05/24/24

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
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.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	100	66.7.1P	1000 ± 9.79
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	1001 ± 17.07
4-chloro-3-methylphenol	59-50-7	99	102.1.2P	1006 ± 17.16
2-chloronaphthalene	91-58-7	99.9	42.7.6P	1000 ± 9.79
2-chlorophenol	95-57-8	99.8	103.7.1P	1007 ± 13.96
chrysene	218-01-9	96	21.286.2P	998.4 ± 12.85
dibenz[a,h]anthracene	53-70-3	99.44	22.286.3P	1000 ± 9.74
dibenzofuran	132-64-9	100	67.7.2.1P	1002 ± 9.77
di-n-butyl phthalate	84-74-2	99.84	40.286.1P	1007 ± 24.48
1,2-dichlorobenzene	95-50-1	99.8	43.7.1P	1000 ± 9.79
1,3-dichlorobenzene	541-73-1	99.5	44.1.3P	999.4 ± 9.79
1,4-dichlorobenzene	106-46-7	99.9	45.29.2P	1000 ± 9.79
2,4-dichlorophenol	120-83-2	99.6	104.7.1.1P	1005 ± 13.93
diethyl phthalate	84-66-2	99.8	38.7.1P	1011 ± 14
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	1009 ± 13.98
dimethyl phthalate	131-11-3	99.9	39.9.2P	996.5 ± 13.8
1,2-dinitrobenzene	528-29-0	99.86	86.7.3.1P	999.5 ± 9.75
1,3-dinitrobenzene	99-65-0	100	313.7.2P	998 ± 9.79
1,4-dinitrobenzene	100-25-4	100	907.7.1P	999.5 ± 9.8
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1002 ± 13.89
2,4-dinitrotoluene	121-14-2	100	87.7.3P	999.8 ± 13.85
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	999.6 ± 13.85
di-n-octyl phthalate	117-84-0	99.1	41.7.5P	991.6 ± 13.74
diphenylamine	122-39-4	100	78.1.6P	998 ± 13.79
2,3,5,6-tetrachlorophenol	935-95-5	97	1112.286.1P	1004 ± 14.02
fluoranthene	206-44-0	98.6	23.7.4P	999.6 ± 9.79
fluorene	86-73-7	98.4	24.7.1P	999.7 ± 9.79

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
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.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	999.9 ± 13.96
hexachlorobutadiene	87-68-3	97.4	47.1.4P	1000 ± 9.79
hexachlorocyclopentadiene	77-47-4	99.2	48.2.2P	1001 ± 9.8
hexachloroethane	67-72-1	99.9	49.1.4P	1003 ± 9.82
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.4P	999.4 ± 22.23
isophorone	78-59-1	98.9	90.1.4P	999.9 ± 13.85
2-methyl-4,6-dinitrophenol	534-52-1	99.6	107.421.2DP	991 ± 24.09
1-methylnaphthalene	90-12-0	97.1	249.7.5P	999.2 ± 13.95
2-methylnaphthalene	91-57-6	97.4	68.7.2P	1006 ± 22.38
2-methylphenol	95-48-7	99.6	114.7.3P	1001 ± 13.87
3-methylphenol	108-39-4	99.1	115.7.4P	499.7 ± 6.92
4-methylphenol	106-44-5	99.5	116.7.1P	501.2 ± 6.94
naphthalene	91-20-3	99.8	26.9.1P	1018 ± 9.97
2-nitroaniline	88-74-4	99.7	69.29.1P	999.6 ± 9.79
3-nitroaniline	99-09-2	100	70.7.3P	1000 ± 9.74
4-nitroaniline	100-01-6	99.7	71.29.1P	1001 ± 9.8
nitrobenzene	98-95-3	100	94.7.1P	1000 ± 13.85
2-nitrophenol	88-75-5	99.1	108.29.1P	996.5 ± 13.81
4-nitrophenol	100-02-7	100	109.7.1P	1000 ± 13.82
N-nitrosodimethylamine	62-75-9	99.5	57.3.19P	998.5 ± 14.67
N-nitrosodi-n-propylamine	621-64-7	99.8	59.286.1P	996.8 ± 17
pentachlorophenol	87-86-5	99	110.1.7P	1004 ± 13.92
phenanthrene	85-01-8	99.7	27.1.5P	999 ± 12.87
phenol	108-95-2	100	112.7.1P	998.5 ± 13.8
pyrene	129-00-0	99.2	28.9.2P	998.9 ± 9.78
pyridine	110-86-1	100	101.24.1P	999 ± 9.73
2,3,4,6-Tetrachlorophenol	58-90-2	91.8	120.421.1P	996.5 ± 13.92

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
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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Catalog No.: Z-110381-01 **Lot No.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	999.6 ± 9.79
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	999.5 ± 13.85
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	996 ± 13.8

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
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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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

S12312 ↓ S12331 } RC/ 05/30/24

Catalog No. : 31206 **Lot No.:** A0206540

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 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%	2,007.1 µg/mL	+/- 90.4025
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,005.9 µg/mL	+/- 90.3454
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,007.9 µg/mL	+/- 90.4385
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,006.7 µg/mL	+/- 90.3845
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,015.5 µg/mL	+/- 90.7778
6	Perylene-d12	1520-96-3	PR-33205	99%	2,014.7 µg/mL	+/- 90.7448

* 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.)

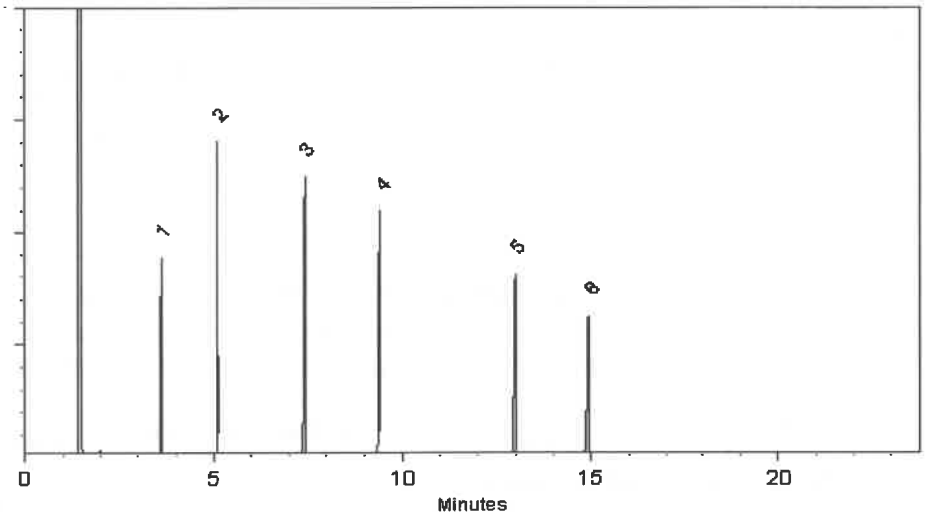
Inj. Temp:
250°C

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.

Malina Homan - Operations Technician I

Date Mixed: 12-Jan-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

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Certificate of Analysis

gravimetric

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.

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

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  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.
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Catalog No. : 555224 **Lot No.:** A0214017

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 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	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,005.0 µg/mL	+/- 29.541899
2	Acetophenone	98-86-2	STBH8205	99%	1,005.0 µg/mL	+/- 29.541899
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,008.0 µg/mL	+/- 29.630084
4	Benzoic acid	65-85-0	MKCR2694	99%	1,010.0 µg/mL	+/- 29.688874
5	Biphenyl	92-52-4	MKCS5928	99%	1,008.0 µg/mL	+/- 29.630084

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12509 ↓ S12568 } RC/ 7/24/24

Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2015
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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.
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Catalog No. : 555224 **Lot No.:** A0214017

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 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	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,005.0 µg/mL	+/- 29.541899
2	Acetophenone	98-86-2	STBH8205	99%	1,005.0 µg/mL	+/- 29.541899
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,008.0 µg/mL	+/- 29.630084
4	Benzoic acid	65-85-0	MKCR2694	99%	1,010.0 µg/mL	+/- 29.688874
5	Biphenyl	92-52-4	MKCS5928	99%	1,008.0 µg/mL	+/- 29.630084

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12509 ↓ S12568 } RC/ 7/24/24

Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024 **Balance:** 1128360905

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General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
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Purity Notes:

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- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 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.
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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31206 **Lot No.:** A0212266

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 : April 30, 2030 **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%	2,000.6 µg/mL	+/- 90.1075
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,000.3 µg/mL	+/- 90.0925
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,000.4 µg/mL	+/- 90.1000
4	Phenanthrene-d10	1517-22-2	PR-34099	99%	2,000.5 µg/mL	+/- 90.1037
5	Chrysene-d12	1719-03-5	PR-33506	99%	2,000.7 µg/mL	+/- 90.1112
6	Perylene-d12	1520-96-3	PR-33205	99%	2,000.6 µg/mL	+/- 90.1075

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12645 ↓ S12674 AC 10/1/24

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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-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

~~S12280~~ ↓ S12284 RCI 05/24/24

New numbers Generated.

S12790 ↓ S12794 RCI 11/12/24

*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. : 31850 **Lot No.:** A0219438

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12963 ↓ S12992 AC 12/17/24

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%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/- 36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/- 36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/- 36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/- 36.6257
22	2,4-Dichlorophenol	120-83-2	BCCK6969	99%	1,001.5	µg/mL	+/- 36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/- 36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/- 36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/- 36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/- 36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/- 36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/- 36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/- 36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/- 36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/- 36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/- 36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/- 36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/- 36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/- 36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/- 36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/- 36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/- 36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/- 36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/- 36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/- 36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/- 36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/- 36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/- 36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/- 36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/- 36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/- 36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/- 36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/- 36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/- 36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/- 36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/- 36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/- 36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/- 36.4938
55	Azobenzene	103-33-3	BCCK0887	99%	1,002.4	µg/mL	+/- 36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/- 36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/- 36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/- 36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/- 36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/- 36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/- 36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/- 36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/- 36.5120
64	Pyrene	129-00-0	BCCK2592	99%	1,002.0	µg/mL	+/- 36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/- 36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/- 36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/- 36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/- 36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/- 36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/- 36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/- 36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/- 36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/- 36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/- 36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/- 36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/- 36.5217

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. QUOTE NO. Q1531
COC Number 2041501

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RESOLUTION
ADDRESS:
CITY STATE: ZIP:
ATTENTION: ELEANOR VIVAUDOU
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: NWIRP BETHPAGE
PROJECT NO 60731872 LOCATION: BETH PAGE
PROJECT MANAGER: E. VIVAUDOU
e-mail: ELEANOR.VIVAUDOU@AECOM.COM
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: E. VIVAUDOU PO#:
ADDRESS: 27 ELLIS PLACE
CITY OSSINING STATE: NY ZIP: 10562
ATTENTION: E. VIVAUDOU PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: STANDARD DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ Level 1 (Results Only)
- ☐ Level 2 (Results + QC)
- ☐ Level 3 (Results + QC + Raw Data)
- ☐ Level 4 (QC + Full Raw Data)
- ☐ NJ Reduced
- ☐ NYS ASP A
- ☐ NYS ASP B
- ☐ US EPA CLP
- ☐ Other
- ☒ EDD FORMAT NJDEP EDD CAT B

ANALYSIS

VOCs 8260
1,4 DIOXANE SIM 8270

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES A/E 1	PRESERVATIVES E 2	3	4	5	6	7	8	9	COMMENTS
1.	RE122D2 - 20250305	GW		X	3-5-25	1400	3	2	1								
2.	RE122D3 - 20250305	GW		X	3-5-25	1345	3	2	1								
3.	RE122D1 - 20250305	GW		X	3-5-25	1455	3	2	1								
4.	RE126D1 - 20250306	GW		X	3-6-25	0905	3	2	1								
5.	RE126D2 - 20250306	GW		X	3-6-25	1015	3	2	1								
6.	DUP01 - 20250306	GW		X	3-5-25	—	3	2	1								
7.	RE103D1 - 20250306	GW		X	3-6-25	0940	9	6	3								MS/MSD
8.	RE103D3 - 20250306	GW		X		1010	3	2	1								
9.	RE103D2 - 20250306	GW		X		1110	3	2	1								
10.	RE108D2 - 20250306	GW		X		1150	3	2	1								

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	3-7-25 1400	1. 3-7-25 1400
2.		2.
3.	3-7-25 1645	3.

Conditions of bottles or coolers at receipt: ☐ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP 3.1 °C
Comments:

Page 1 of 2

CLIENT: ☐ Hand Delivered ☐ Other
CHEMTECH: ☐ Picked Up ☐ Field Sampling

Shipment Complete ☐ YES ☐ NO

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Alliance TECHNICAL GROUP
284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

ALLIANCE PROJECT NO. Q1531
QUOTE NO.
COC Number 2045856

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: RESOLUTION
ADDRESS:
CITY STATE: ZIP:
ATTENTION: ELEANOR VIVAUDOU
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: NWIRP BETHPAGE
PROJECT NO. 60731872 LOCATION: BETHPAGE
PROJECT MANAGER: E. VIVAUDOU
e-mail: ELEANOR.VIVAUDOU@AECOM.COM
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: E. VIVAUDOU PO#:
ADDRESS: 27 ELLIS PL.
CITY OSSINING STATE: NY ZIP: 10562
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) DAYS*
HARDCOPY (DATA PACKAGE): DAYS*
EDD: STANDARD DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

DATA DELIVERABLE INFORMATION

❑ Level 1 (Results Only) ❑ Level 4 (QC + Full Raw Data)
❑ Level 2 (Results + QC) ❑ NJ Reduced ❑ US EPA CLP
❑ Level 3 (Results + QC ❑ NYS ASP A ❑ NYS ASP B
+ Raw Data) ❑ Other
X EDD FORMAT NYSDEC EDD CAT B

ANALYSIS

1: VOCs 8260 2: 1,4 DIOXANE SIM 8270 3: 4: 5: 6: 7: 8: 9:

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# OF BOTTLES	PRESERVATIVES A/E 1	PRESERVATIVES E 2	3	4	5	6	7	8	9	COMMENTS
1.	RE108D1-20250306	GW		X	3-6-25	1205	3	2	1								
2.	RE105D1-20250306	GW		X	↓	1420	3	2	1								
3.	RE105D2-20250306	GW		X	↓	1448	3	2	1								
4.	RE125D1-20250307	GW		X	3-7-25	1030	3	2	1								
5.	RE125D2-20250307	GW		X	3-7-25	1000	3	2	1								
6.	FB-01	DW		X	3-6-25	1350	3	2	1								
7.	RE104D2-20250307	GW		X	3-7-25	1012	3	2	1								
8.	RE104D3-20250307	GW		X	3-7-25	0950	3	2	1								
9.	TB	DW		X	03-24	—	2	2									
10.																	

← Specify Preservatives
A-HCl D-NaOH
B-HN03 E-ICE
C-H2SO4 F-OTHER

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER:	DATE/TIME:	RECEIVED BY:
1.	3-7-25 1400	1. 3-7-25
2.		2.
3.	3-7-25 1645	3.

Conditions of bottles or coolers at receipt: ❑ COMPLIANT ❑ NON COMPLIANT ❑ COOLER TEMP 3.1 °C
Comments:

Page 2 of 2
CLIENT: ❑ Hand Delivered ❑ Other
Shipment Complete ❑ YES ❑ NO

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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 (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1531 AECO15
Client Name : AECOM Technical Service
Client Contact : Eleanor Vivadou
Invoice Name : AECOM Technical Service
Invoice Contact : Eleanor Vivadou

Order Date : 3/7/2025 2:28:00 PM
Project Name : NAVFAC NWIRP Bethpag
Receive DateTime : 3/7/2025 ~~12:00:00~~ 16:45 AM
Purchase Order :

Project Mgr :
Report Type : ~~Results Only~~ NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1531-01	RE122D2-20250305	Water	03/05/2025	14:00					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-02	RE122D3-20250305	Water	03/05/2025	13:45					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-03	RE122D1-20250305	Water	03/05/2025	14:55					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-04	RE126D1-20250306	Water	03/06/2025	09:05					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-05	RE126D2-20250306	Water	03/06/2025	10:15					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-06	DUP01-20250306	Water	03/06/2025	00:00					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-07	RE103D1-20250306	Water	03/06/2025	09:40					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-08	Q1531-07MS	Water	03/06/2025	09:40					

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1531 AECO15
Client Name : AECOM Technical Service
Client Contact : Eleanor Vivadou
Invoice Name : AECOM Technical Service
Invoice Contact : Eleanor Vivadou

Order Date : 3/7/2025 2:28:00 PM
Project Name : NAVFAC NWIRP Bethpag
Receive DateTime : 3/7/2025 ~~12:00:00~~ 16:45 AM
Purchase Order :

Project Mgr :
Report Type : ~~Results Only~~ NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-09	Q1531-07MSD	Water	03/06/2025	09:40					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-10	RE103D3-20250306	Water	03/06/2025	10:10					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-11	RE103D2-20250306	Water	03/06/2025	11:10					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-12	RE108D2-20250306	Water	03/06/2025	11:50					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-13	RE108D1-20250306	Water	03/06/2025	12:05					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-14	RE105D1-20250306	Water	03/06/2025	14:20					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1531-15	RE105D2-20250306	Water	03/06/2025	14:48					
					VOCMS Group1		8260-Low		10 Bus. Days

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Fax : 908 789 8922

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1531 AECO15
Client Name : AECOM Technical Service
Client Contact : Eleanor Vivadou
Invoice Name : AECOM Technical Service
Invoice Contact : Eleanor Vivadou

Order Date : 3/7/2025 2:28:00 PM
Project Name : NAVFAC NWIRP Bethpag
Receive DateTime : 3/7/2025 ~~12:00:00~~ AM 16:45
Purchase Order :

Project Mgr :
Report Type : ~~Results Only~~ NYS ASP B
EDD Type : EQUIS
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1531-16	~~RE125D1-20250307~~ RE125D1-20250307	Water	03/07/2025	10:30	VOCMS Group1		8260-Low		10 Bus. Days
Q1531-17	RE125D2-20250307	Water	03/07/2025	10:00	VOCMS Group1		8260-Low		10 Bus. Days
Q1531-18	FB01	Water	~~03/07/2025~~ 03/06/2025	13:50	VOCMS Group1		8260-Low		10 Bus. Days
Q1531-19	RE104D2-20250307	Water	03/07/2025	10:12	VOCMS Group1		8260-Low		10 Bus. Days
Q1531-20	RE104D3-20250307	Water	03/07/2025	09:50	VOCMS Group1		8260-Low		10 Bus. Days
Q1531-21	TB	Water	03/07/2025	00:00	VOCMS Group1		8260-Low		10 Bus. Days

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

LOGIN REPORT/SAMPLE TRANSFER

Order ID :	Q1531 AECO15	**Order Date :**	3/7/2025 2:28:00 PM	**Project Mgr :**	
Client Name :	AECOM Technical Service:	**Project Name :**	NAVFAC NWIRP Bethpag	**Report Type :**	~~Results Only~~ NYS ASP B
Client Contact :	Eleanor Vivadou	**Receive DateTime :**	3/7/2025 ~~12:00:00 AM~~ 16:45	**EDD Type :**	EQUIS
Invoice Name :	AECOM Technical Service:	**Purchase Order :**		**Hard Copy Date :**	
Invoice Contact :	Eleanor Vivadou			**Date Signoff :**	

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinguished By : CP
Date / Time : 3-10-25 8:55

Received By : Sam
Date / Time : 3/10/25 8:55 Reg # 4

Storage Area : VOA Refridgerator Room

Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036557.D
Acq On : 10 Mar 2025 11:42
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Mar 10 16:00:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

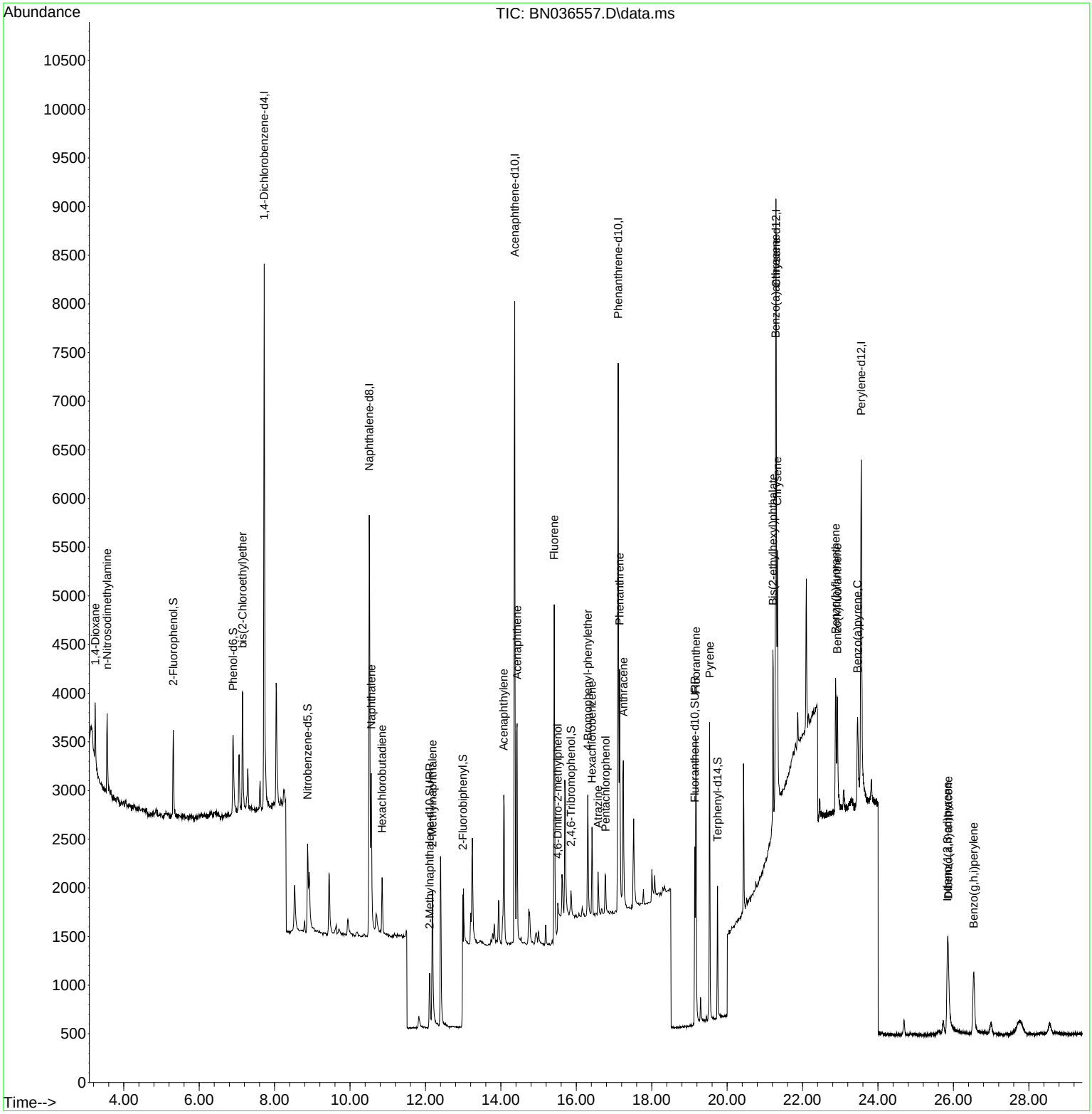
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2755	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	6575	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3958	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	8269	0.400	ng		0.00
29) Chrysene-d12	21.295	240	5886	0.400	ng		0.00
35) Perylene-d12	23.554	264	5207	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	641	0.100	ng		0.00
5) Phenol-d6	6.901	99	856	0.108	ng		0.00
8) Nitrobenzene-d5	8.875	82	940	0.131	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	1079	0.110	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	179	0.100	ng		0.00
15) 2-Fluorobiphenyl	12.993	172	2185	0.095	ng		0.00
27) Fluoranthene-d10	19.141	212	2144	0.101	ng		0.00
31) Terphenyl-d14	19.745	244	1416	0.100	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	534	0.175	ng	#	78
3) n-Nitrosodimethylamine	3.557	42	766	0.124	ng	#	95
6) bis(2-Chloroethyl)ether	7.154	93	982	0.120	ng		98
9) Naphthalene	10.562	128	2254	0.117	ng	#	94
10) Hexachlorobutadiene	10.850	225	486	0.107	ng	#	100
12) 2-Methylnaphthalene	12.187	142	1331	0.108	ng		96
16) Acenaphthylene	14.078	152	1862	0.100	ng		99
17) Acenaphthene	14.430	154	1244	0.102	ng		99
18) Fluorene	15.414	166	1612	0.097	ng		99
20) 4,6-Dinitro-2-methylph...	15.510	198	122	0.204	ng	#	24
21) 4-Bromophenyl-phenylether	16.304	248	502	0.097	ng		95
22) Hexachlorobenzene	16.416	284	632	0.101	ng		98
23) Atrazine	16.578	200	400	0.096	ng	#	90
24) Pentachlorophenol	16.776	266	290	0.102	ng		98
25) Phenanthrene	17.148	178	2459	0.099	ng		99
26) Anthracene	17.248	178	2121	0.095	ng		100
28) Fluoranthene	19.174	202	2772	0.099	ng		97
30) Pyrene	19.536	202	2862	0.099	ng		100
32) Benzo(a)anthracene	21.286	228	2044	0.100	ng		94
33) Chrysene	21.331	228	2187	0.098	ng		93
34) Bis(2-ethylhexyl)phtha...	21.214	149	1760	0.121	ng		96
36) Indeno(1,2,3-cd)pyrene	25.841	276	1510	0.080	ng		98
37) Benzo(b)fluoranthene	22.876	252	1707	0.090	ng	#	62
38) Benzo(k)fluoranthene	22.923	252	1958	0.098	ng	#	62
39) Benzo(a)pyrene	23.458	252	1419	0.089	ng	#	51
40) Dibenzo(a,h)anthracene	25.861	278	1163	0.079	ng	#	59
41) Benzo(g,h,i)perylene	26.539	276	1482	0.089	ng	#	84

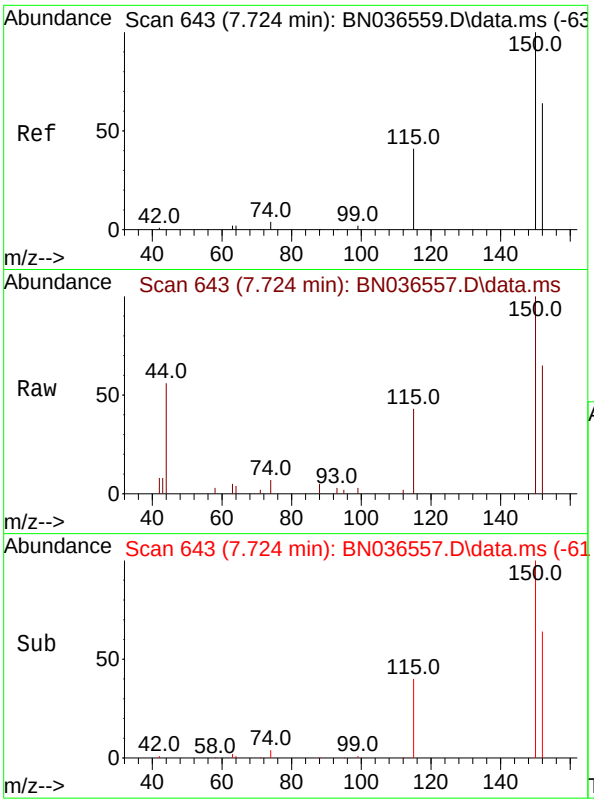
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036557.D
Acq On : 10 Mar 2025 11:42
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Mar 10 16:00:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



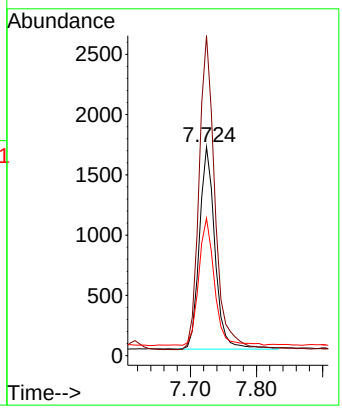


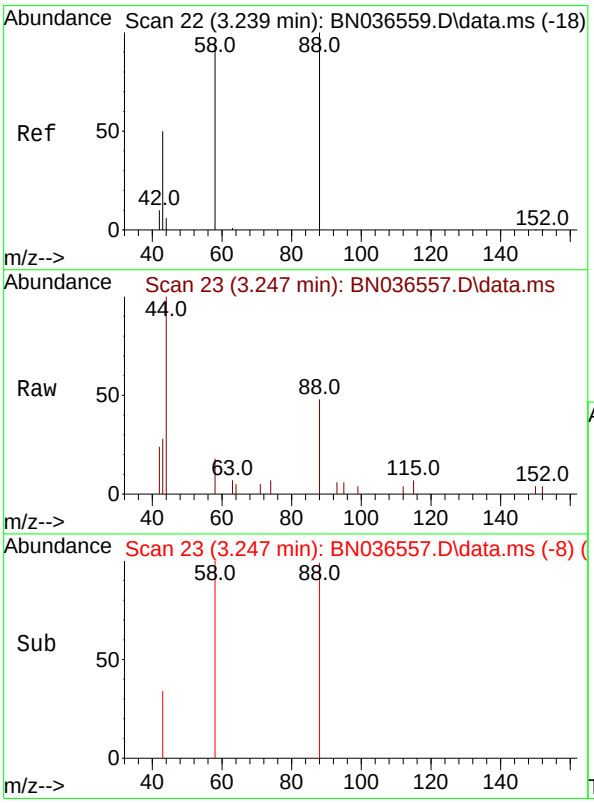
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 2755

Ion	Ratio	Lower	Upper
152	100		
150	153.3	123.7	185.5
115	65.8	54.3	81.5

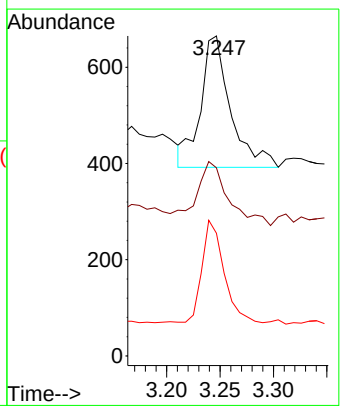


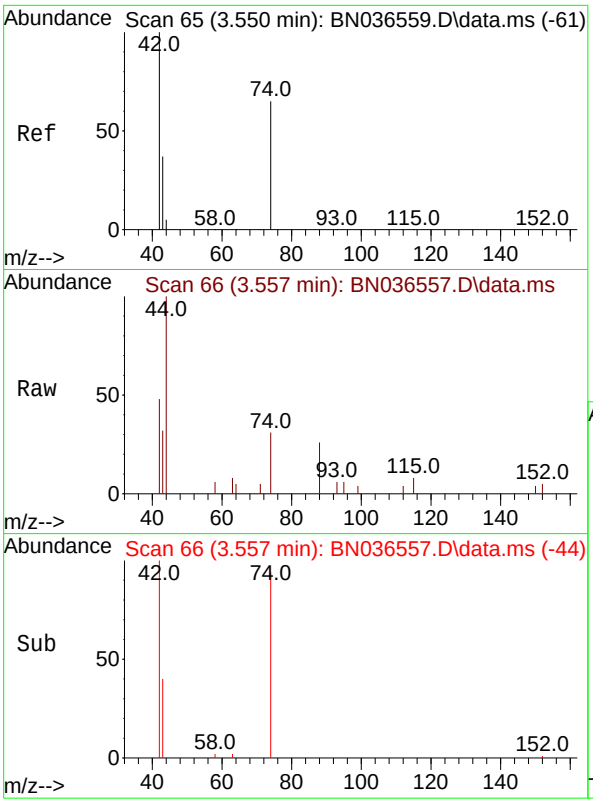


#2
1,4-Dioxane
Concen: 0.175 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 88 Resp: 534

Ion	Ratio	Lower	Upper
88	100		
43	53.0	37.8	56.8
58	57.3	67.4	101.2#



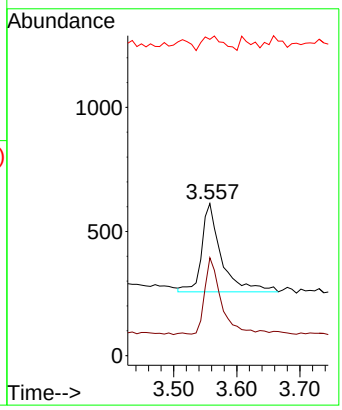


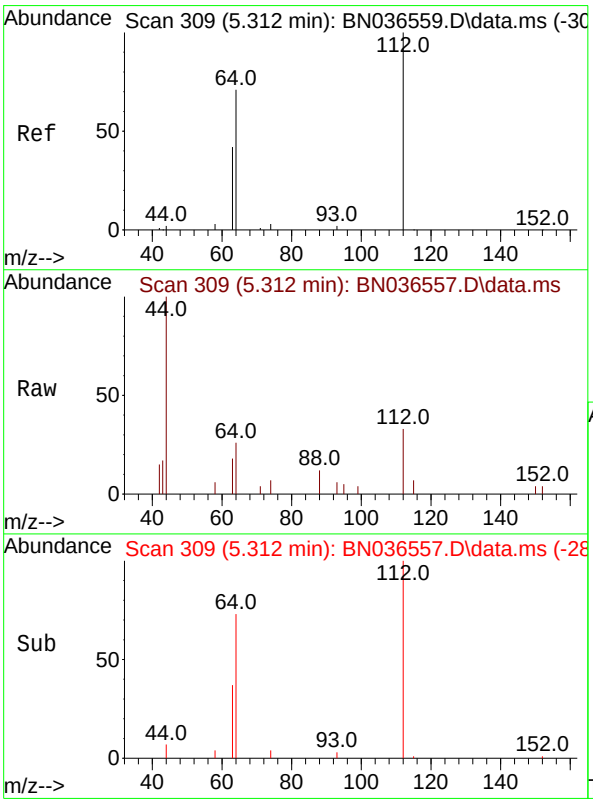
#3
n-Nitrosodimethylamine
Concen: 0.124 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 42 Resp: 766

Ion	Ratio	Lower	Upper
42	100		
74	73.0	60.6	90.8
44	16.6	6.3	9.5#

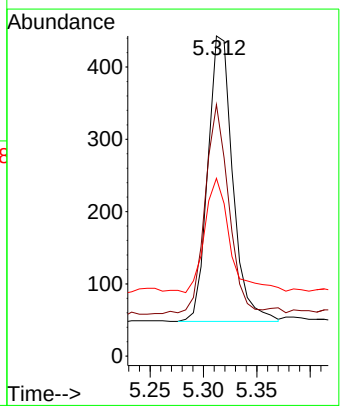


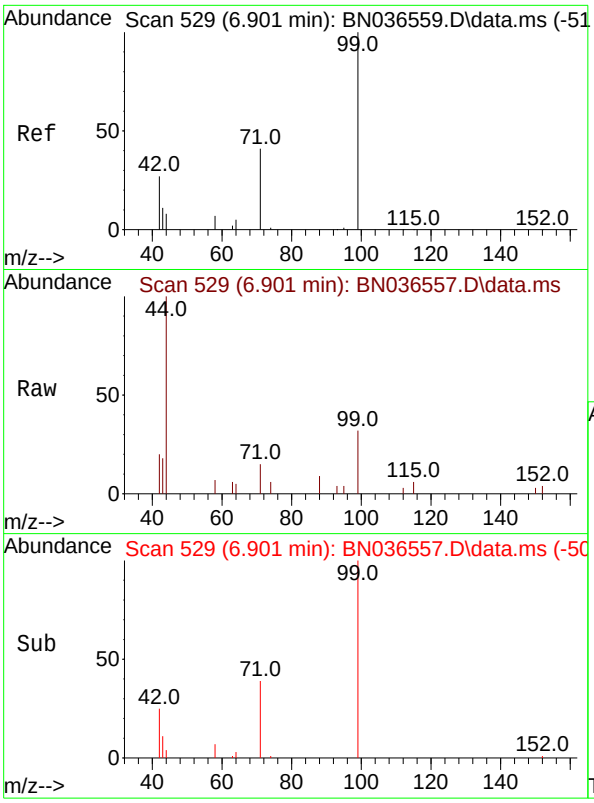


#4
2-Fluorophenol
Concen: 0.100 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:112 Resp: 641

Ion	Ratio	Lower	Upper
112	100		
64	70.4	53.1	79.7
63	40.9	31.8	47.8



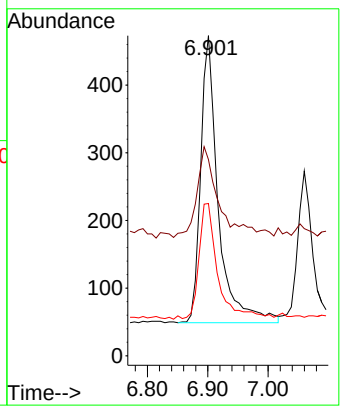


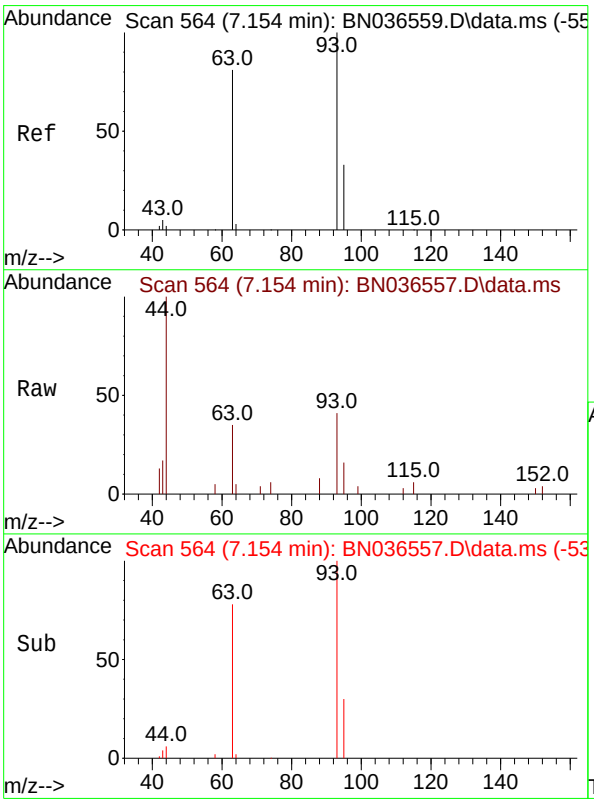
#5
Phenol-d6
Concen: 0.108 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 856

Ion	Ratio	Lower	Upper
99	100		
42	39.8	26.5	39.7#
71	42.8	34.1	51.1

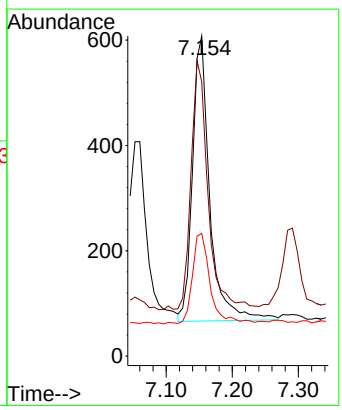


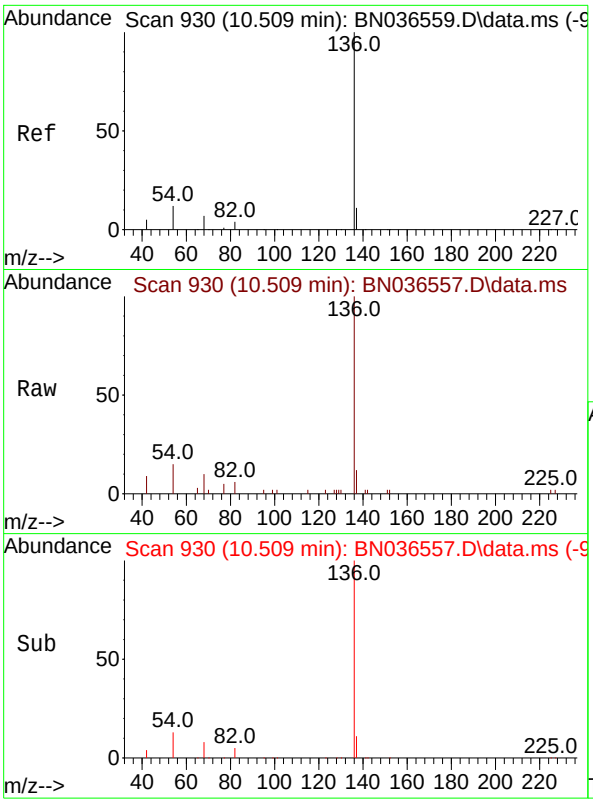


#6
bis(2-Chloroethyl)ether
Concen: 0.120 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 93 Resp: 982

Ion	Ratio	Lower	Upper
93	100		
63	86.7	67.7	101.5
95	33.0	25.6	38.4



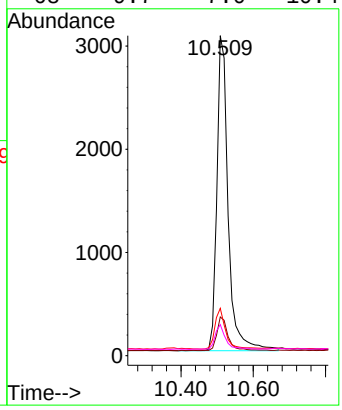


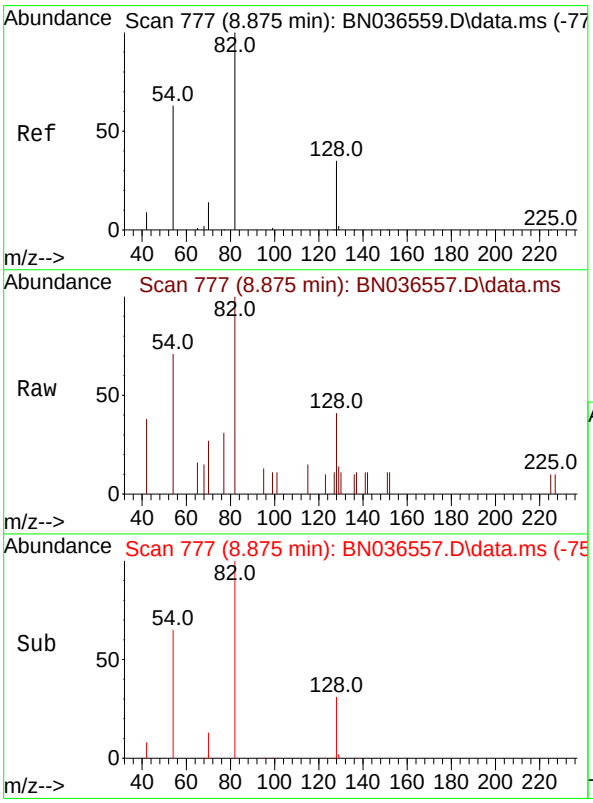
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 6575

Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.3	15.5
54	14.8	11.5	17.3
68	9.7	7.0	10.4

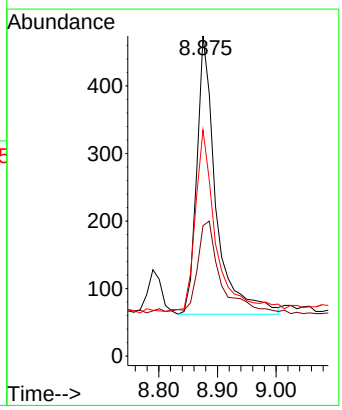


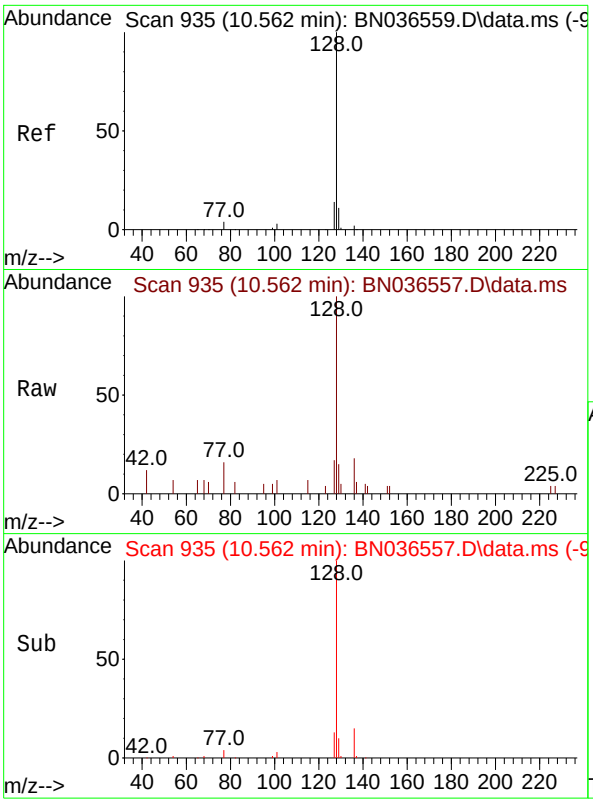


#8
Nitrobenzene-d5
Concen: 0.131 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion: 82 Resp: 940

Ion	Ratio	Lower	Upper
82	100		
128	40.7	30.6	45.8
54	70.7	52.2	78.4



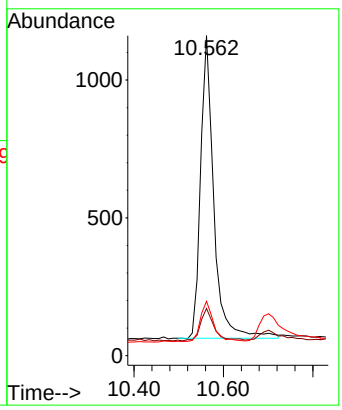


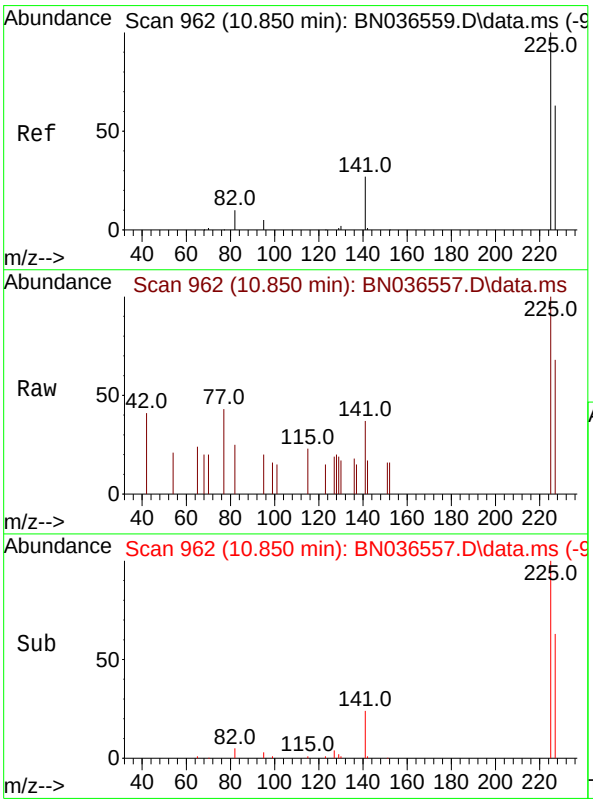
#9
Naphthalene
Concen: 0.117 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 2254

Ion	Ratio	Lower	Upper
128	100		
129	14.7	9.8	14.6#
127	17.0	11.8	17.8

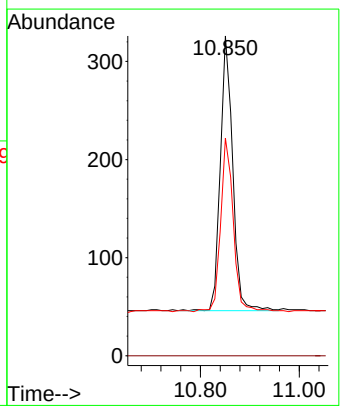


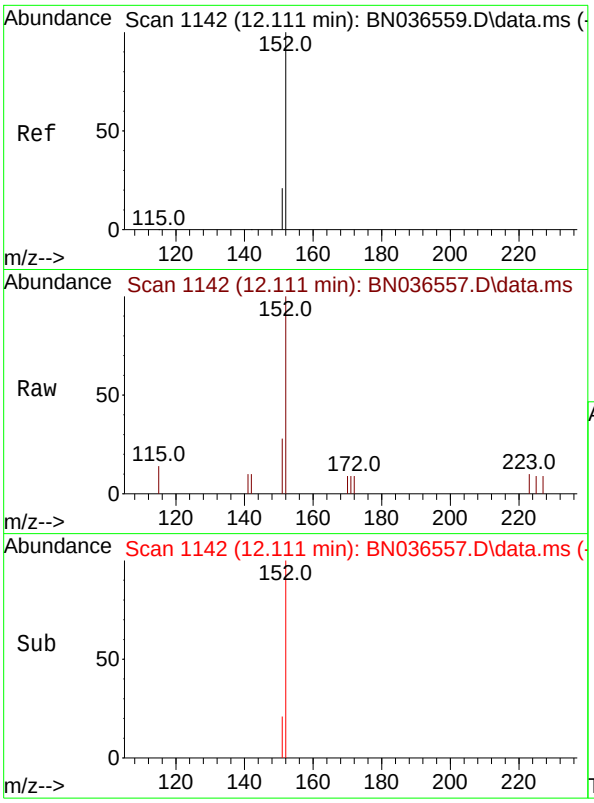


#10
Hexachlorobutadiene
Concen: 0.107 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:225 Resp: 486

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.8	51.8	77.8



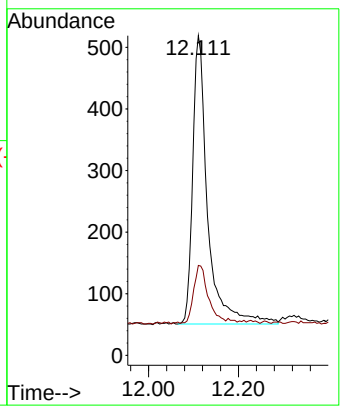


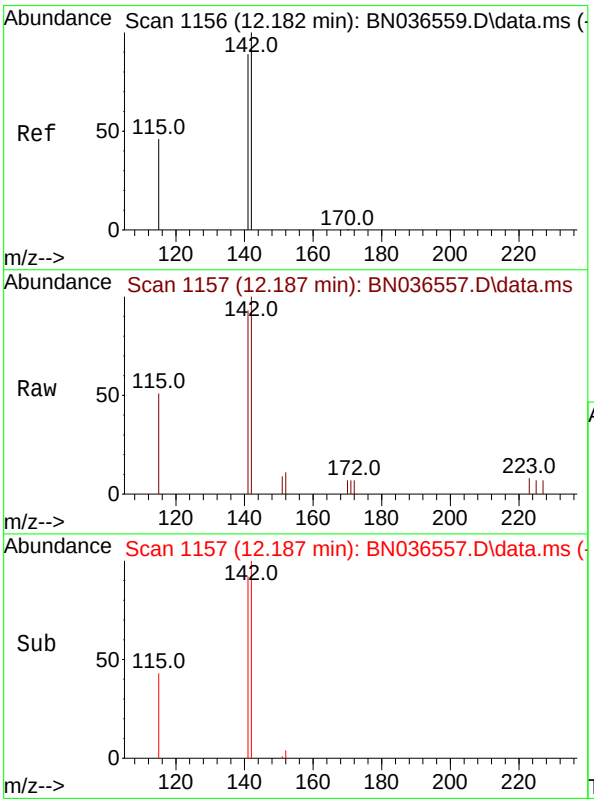
#11
2-Methylnaphthalene-d10
Concen: 0.110 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 1079

Ion	Ratio	Lower	Upper
152	100		
151	19.5	17.0	25.6

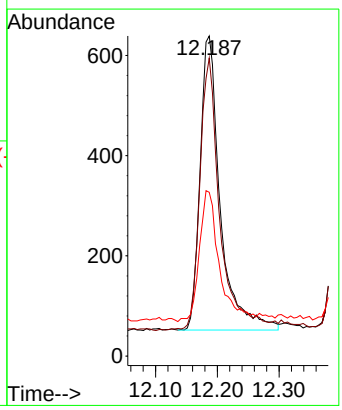


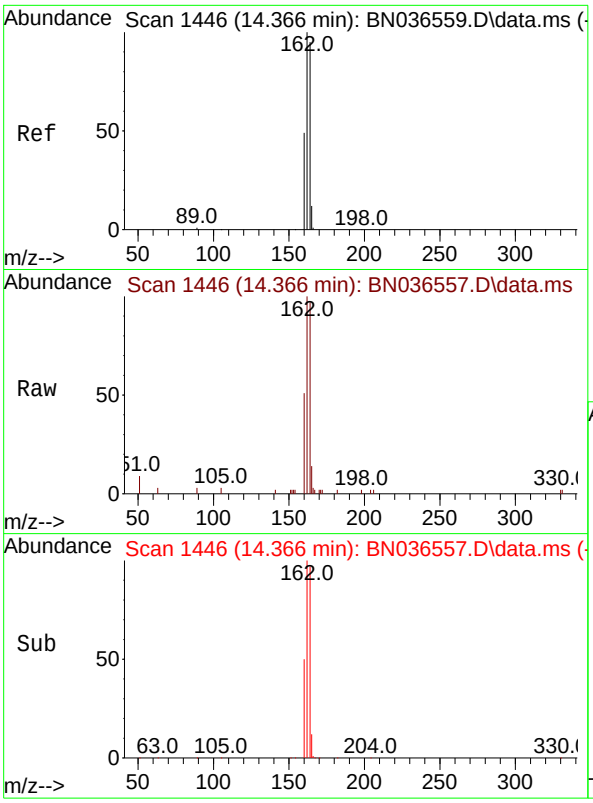


#12
2-Methylnaphthalene
Concen: 0.108 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:142 Resp: 1331

Ion	Ratio	Lower	Upper
142	100		
141	93.1	71.7	107.5
115	51.2	38.3	57.5



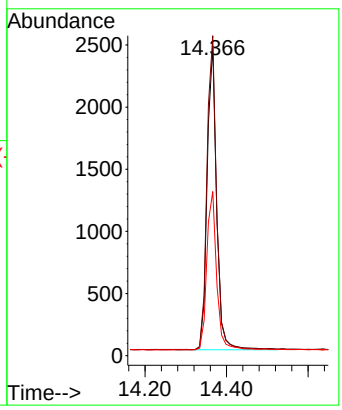


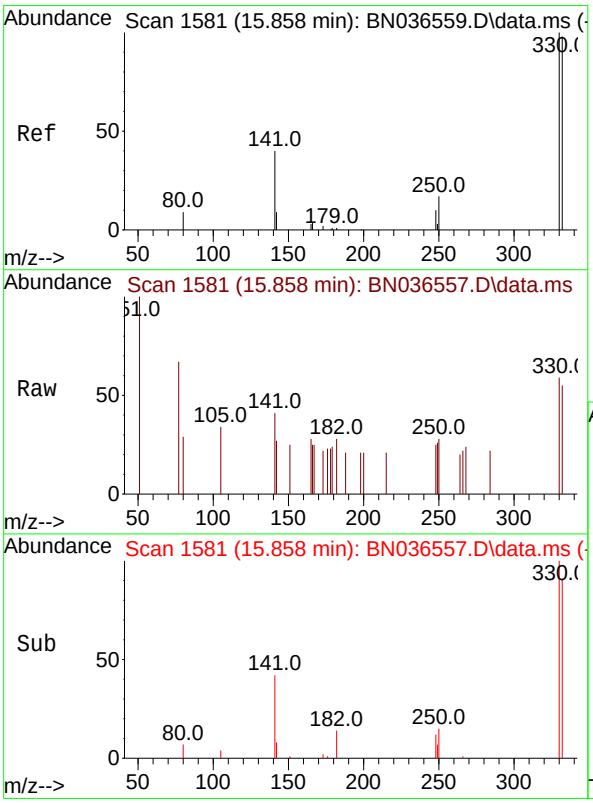
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 3958

Ion	Ratio	Lower	Upper
164	100		
162	103.3	84.2	126.2
160	53.0	42.2	63.2

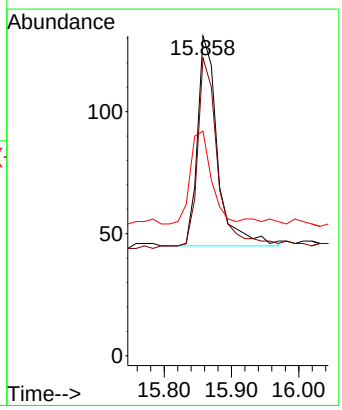


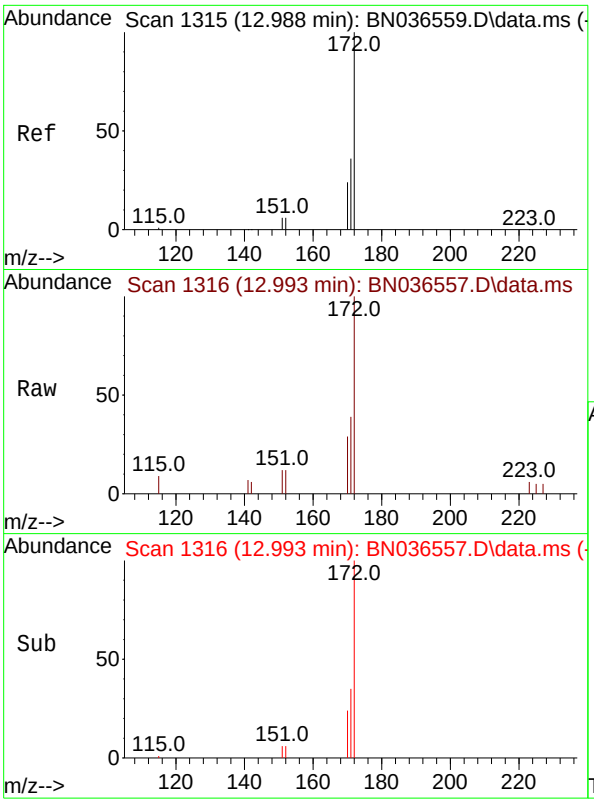


#14
2,4,6-Tribromophenol
Concen: 0.100 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:330 Resp: 179

Ion	Ratio	Lower	Upper
330	100		
332	96.1	75.2	112.8
141	46.4	43.4	65.2



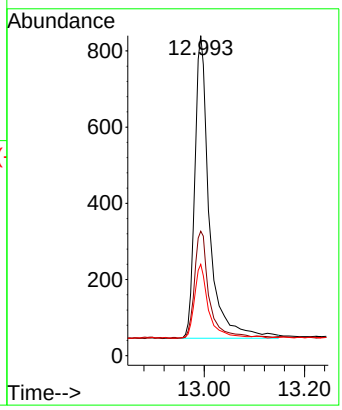


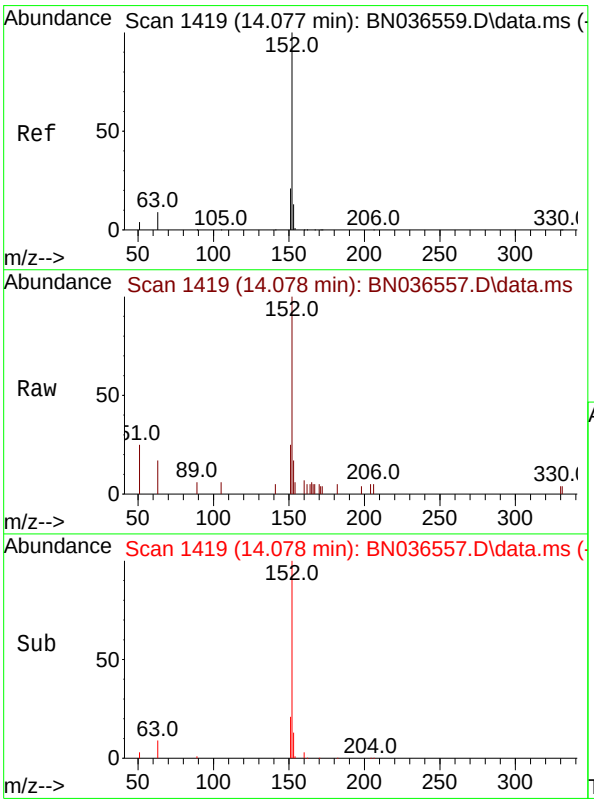
#15
2-Fluorobiphenyl
Concen: 0.095 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 2185

Ion	Ratio	Lower	Upper
172	100		
171	38.9	29.5	44.3
170	28.6	20.2	30.4

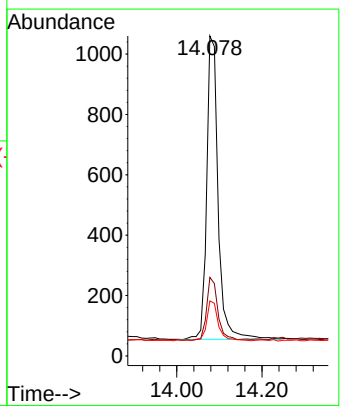


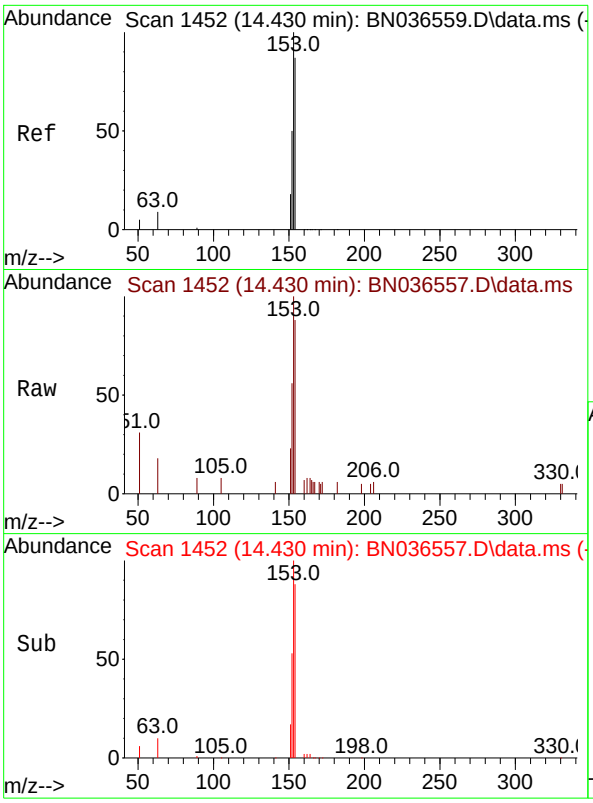


#16
Acenaphthylene
Concen: 0.100 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:152 Resp: 1862

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.2	24.4
153	14.1	10.6	15.8



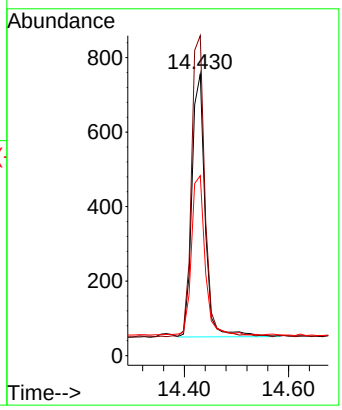


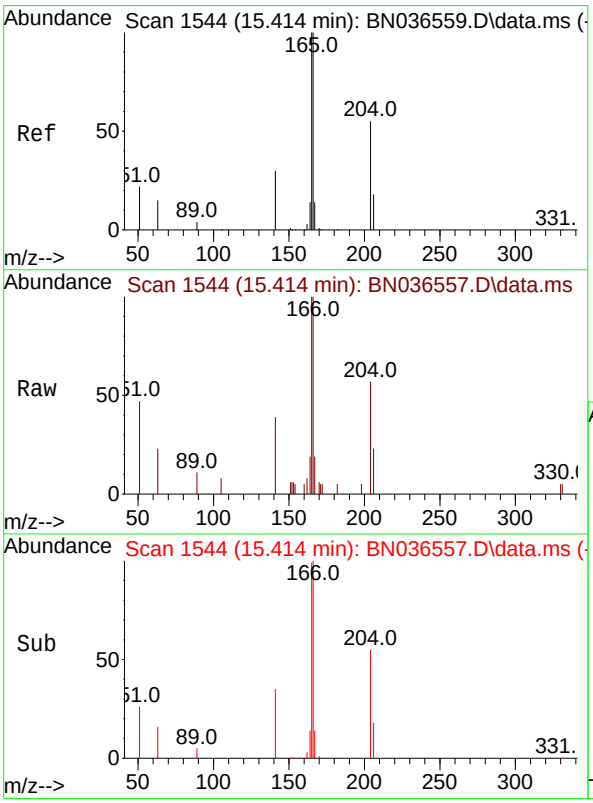
#17
Acenaphthene
Concen: 0.102 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 1244

Ion	Ratio	Lower	Upper
154	100		
153	115.9	94.1	141.1
152	62.5	49.8	74.6

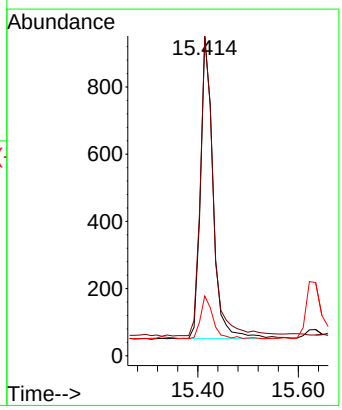


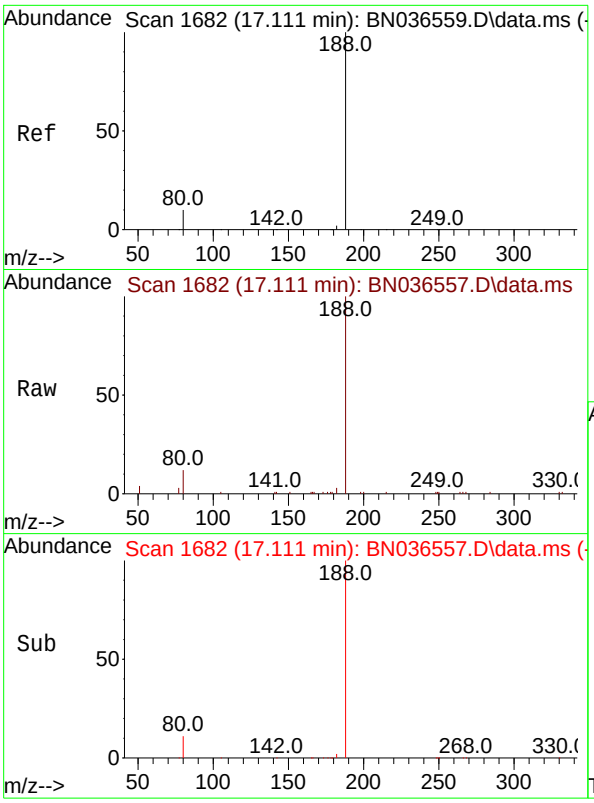


#18
Fluorene
Concen: 0.097 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:166 Resp: 1612

Ion	Ratio	Lower	Upper
166	100		
165	100.9	79.8	119.8
167	13.9	10.6	15.8



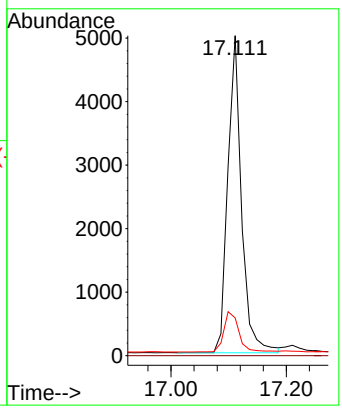


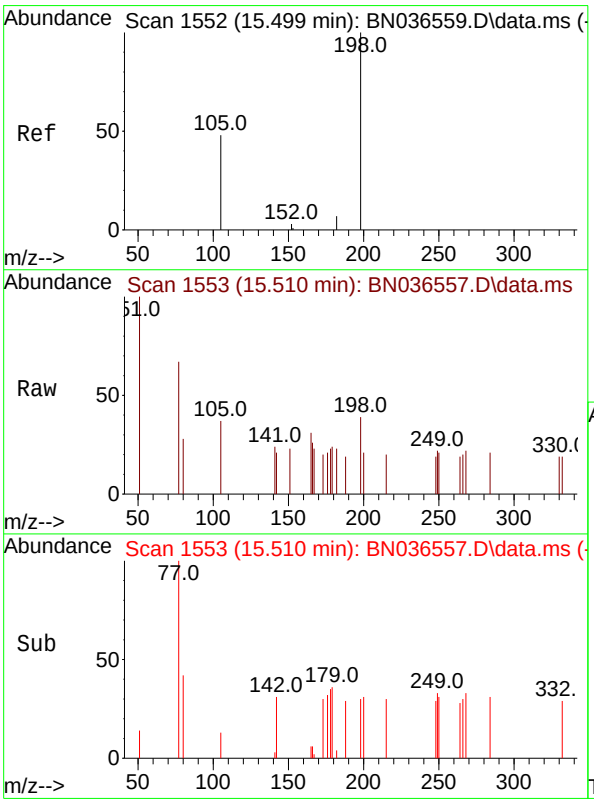
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 8269

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.8	8.8	13.2

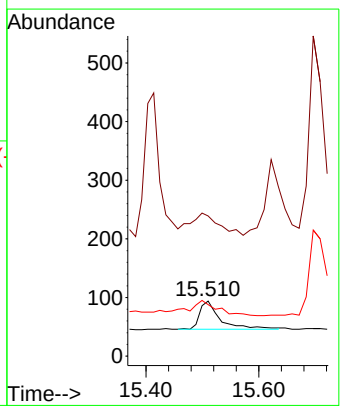


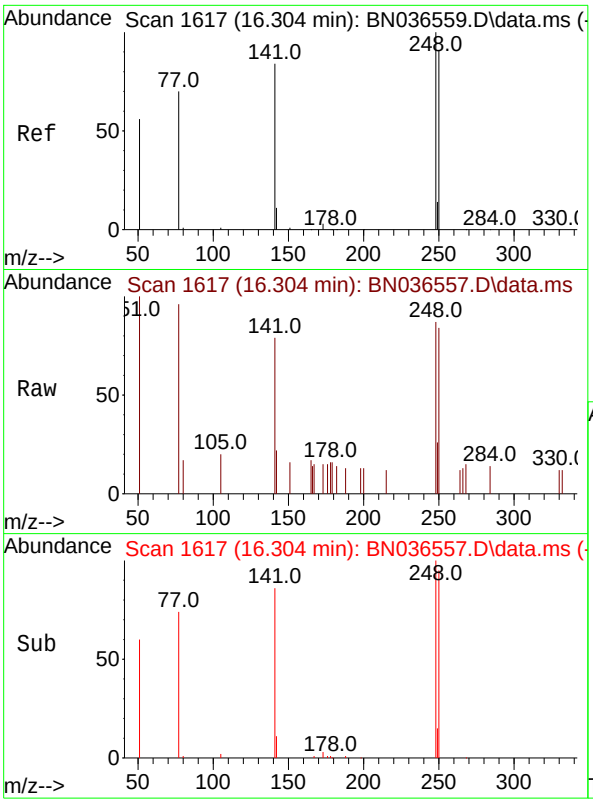


#20
4,6-Dinitro-2-methylphenol
Concen: 0.204 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:198 Resp: 122

Ion	Ratio	Lower	Upper
198	100		
51	254.3	107.9	161.9#
105	93.6	56.2	84.2#



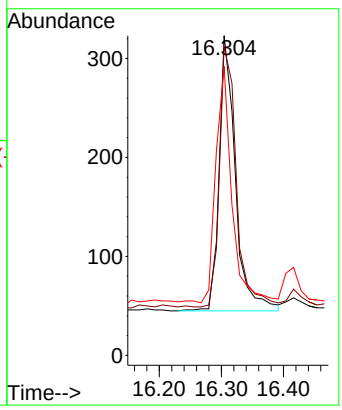


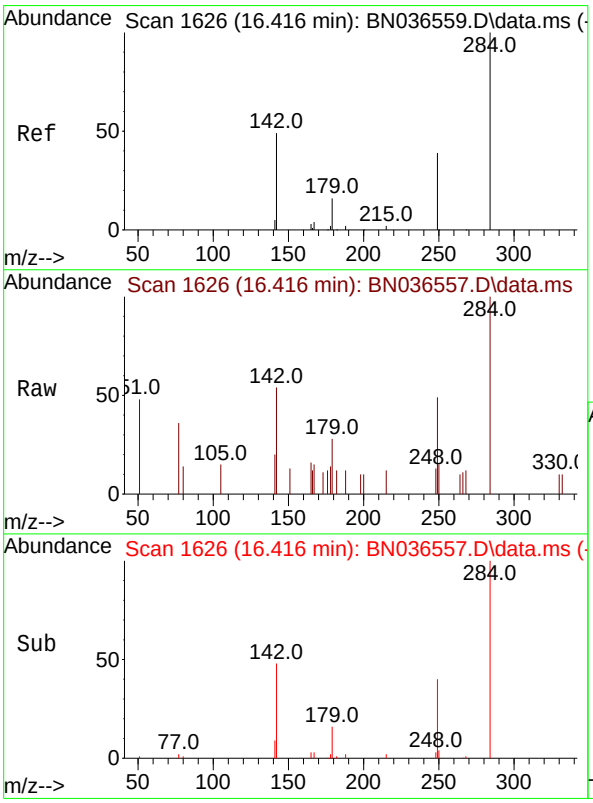
#21
4-Bromophenyl-phenylether
Concen: 0.097 ng
RT: 16.304 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:248 Resp: 502

Ion	Ratio	Lower	Upper
248	100		
250	96.6	73.0	109.6
141	90.4	68.6	103.0

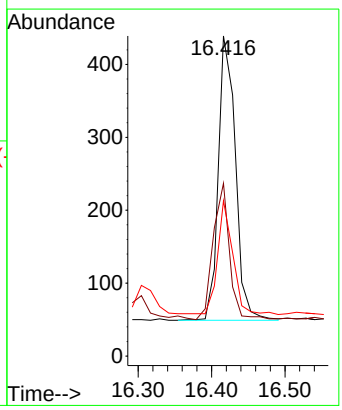


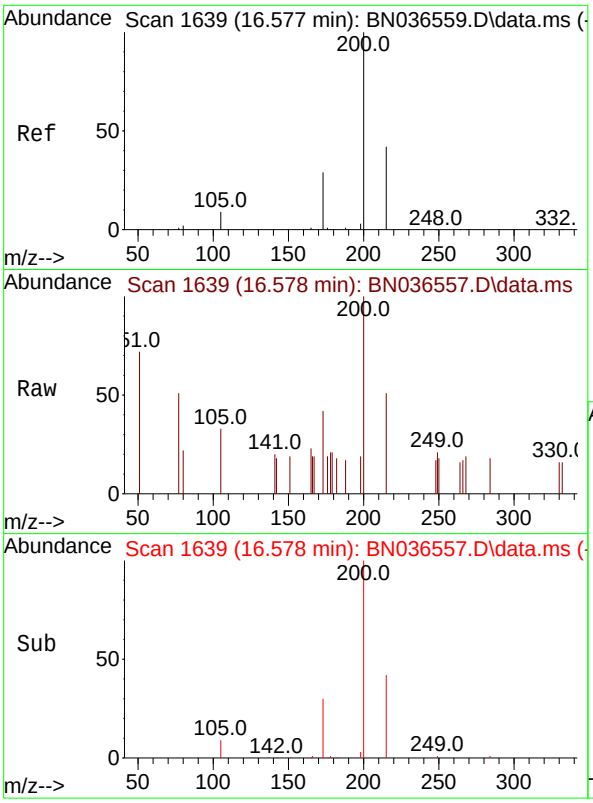


#22
Hexachlorobenzene
Concen: 0.101 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:284 Resp: 632

Ion	Ratio	Lower	Upper
284	100		
142	45.7	37.0	55.4
249	37.2	28.1	42.1



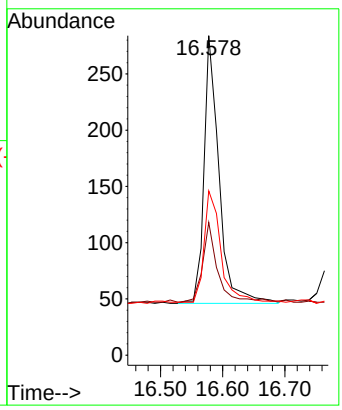


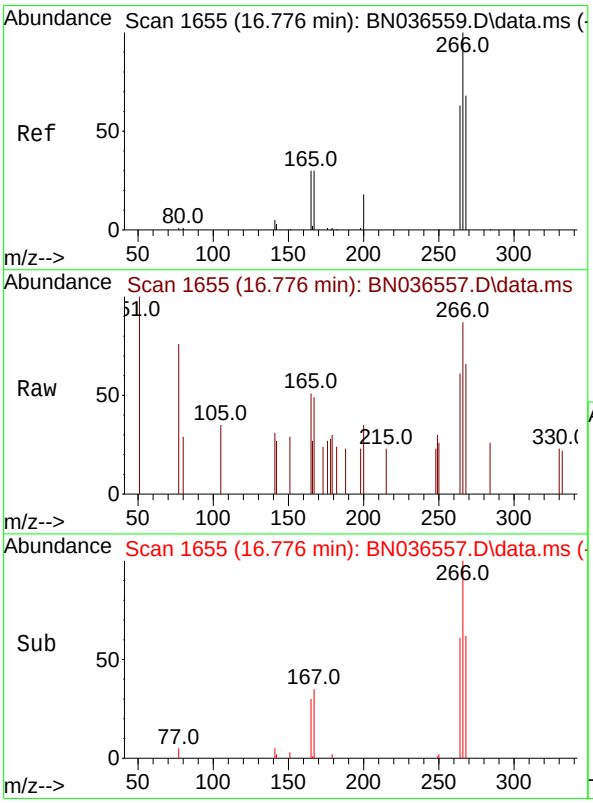
#23
Atrazine
Concen: 0.096 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:200 Resp: 400

Ion	Ratio	Lower	Upper
200	100		
173	41.5	27.3	40.9#
215	51.4	36.8	55.2

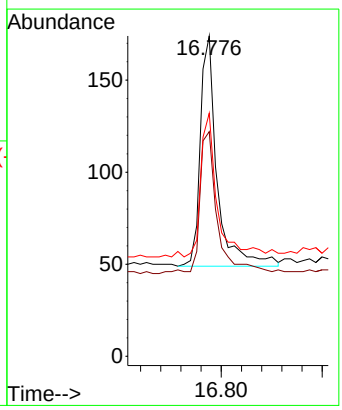


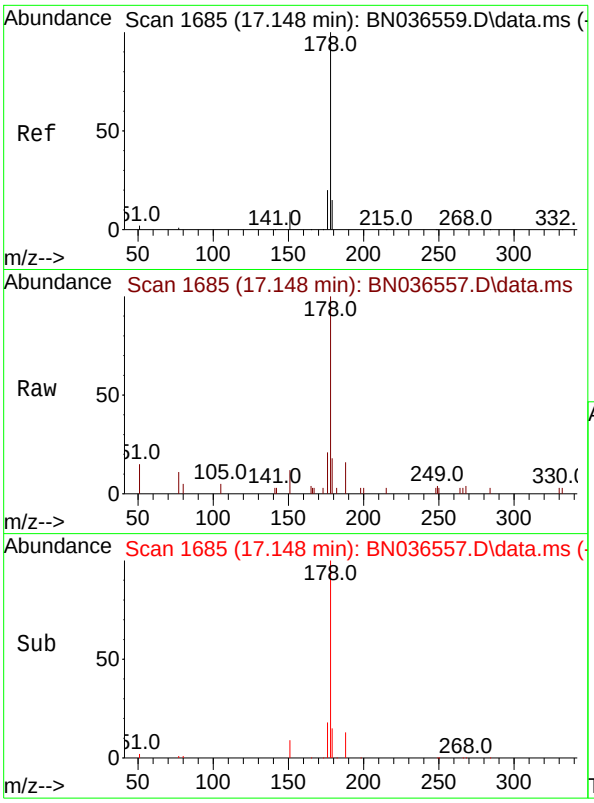


#24
Pentachlorophenol
Concen: 0.102 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:266 Resp: 290

Ion	Ratio	Lower	Upper
266	100		
264	64.8	49.6	74.4
268	62.8	50.9	76.3



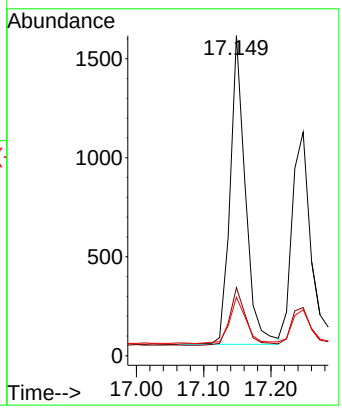


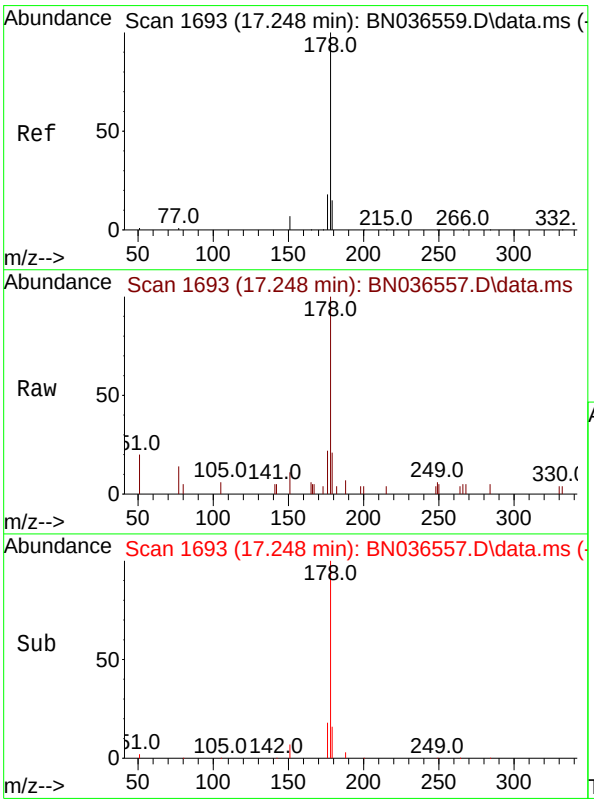
#25
Phenanthrene
Concen: 0.099 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 2459

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.9	23.9
179	16.1	12.2	18.4

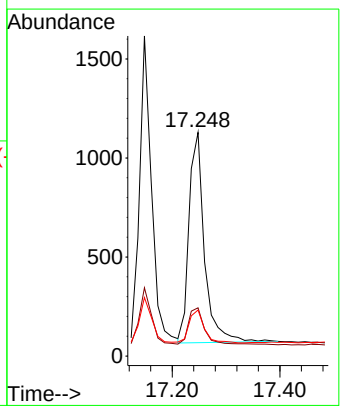


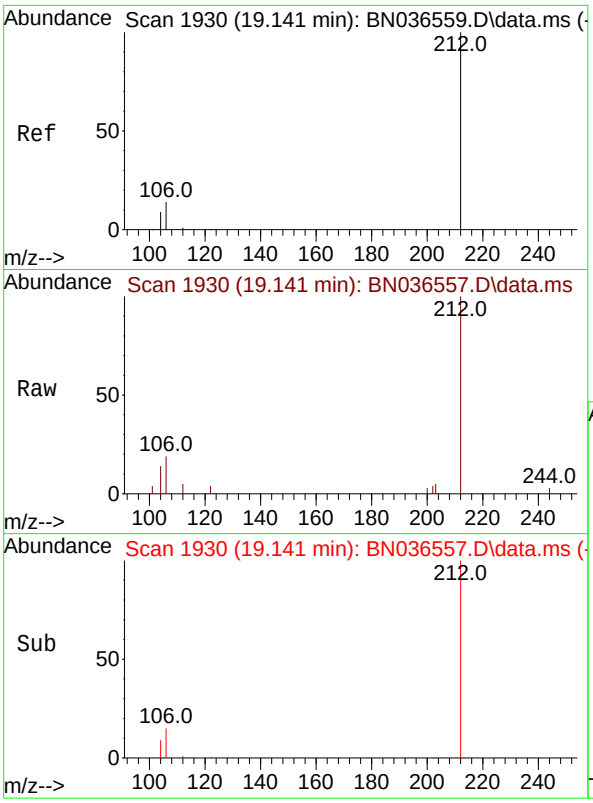


#26
Anthracene
Concen: 0.095 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:178 Resp: 2121

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.4	23.2
179	15.7	12.6	18.8



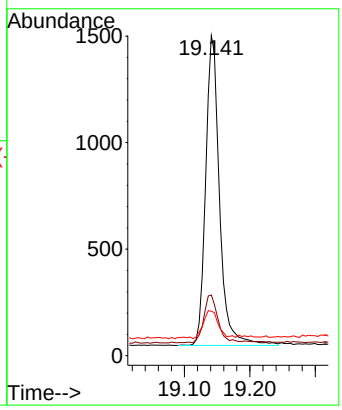


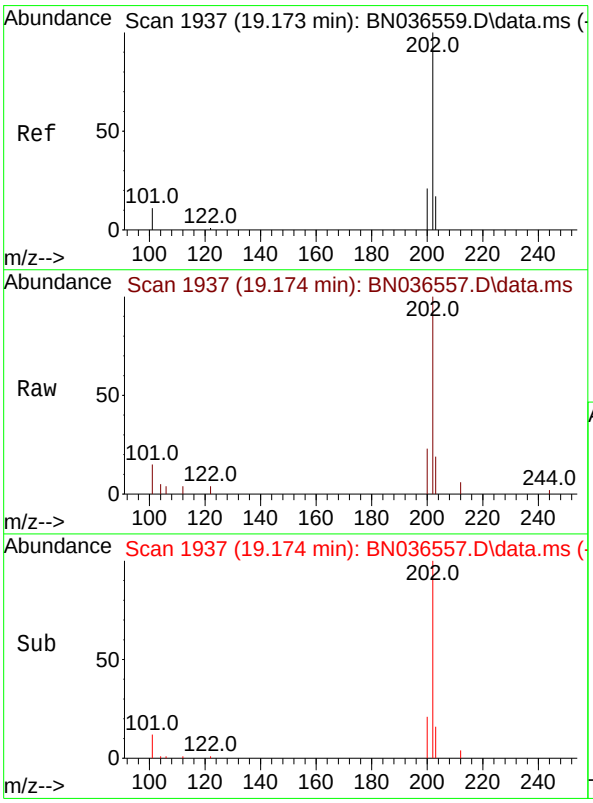
#27
Fluoranthene-d10
Concen: 0.101 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:212 Resp: 2144

Ion	Ratio	Lower	Upper
212	100		
106	15.5	11.8	17.6
104	9.7	7.3	10.9

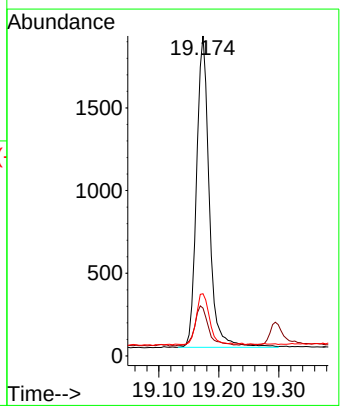


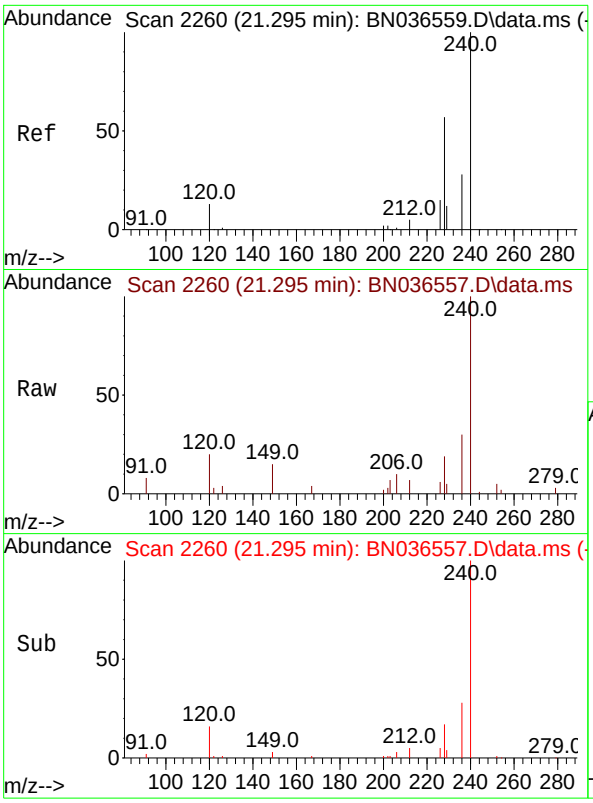


#28
Fluoranthene
Concen: 0.099 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 2772

Ion	Ratio	Lower	Upper
202	100		
101	14.0	9.4	14.0
203	17.0	13.5	20.3



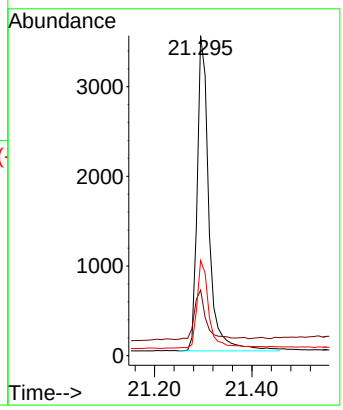


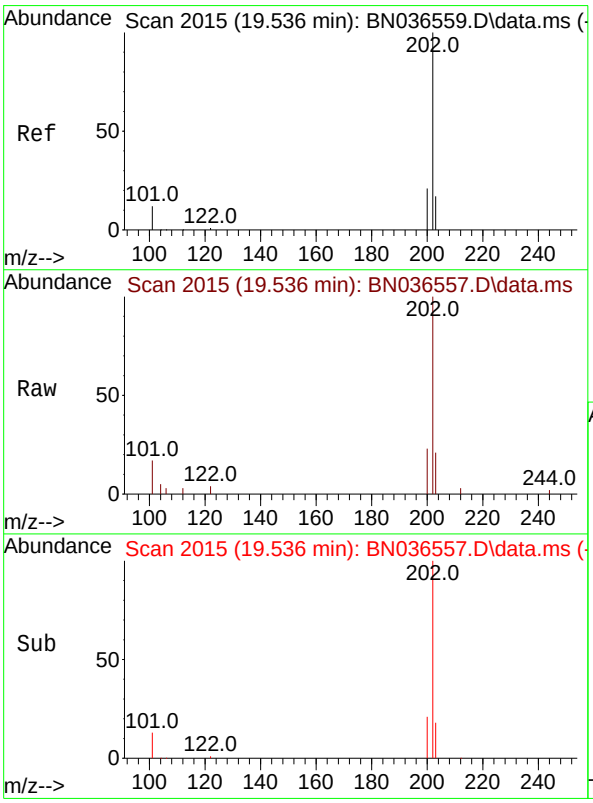
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:240 Resp: 5886

Ion	Ratio	Lower	Upper
240	100		
120	20.5	14.6	22.0
236	29.8	24.1	36.1

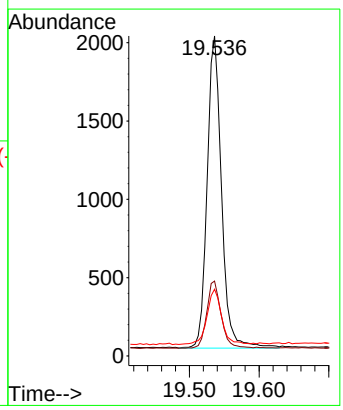


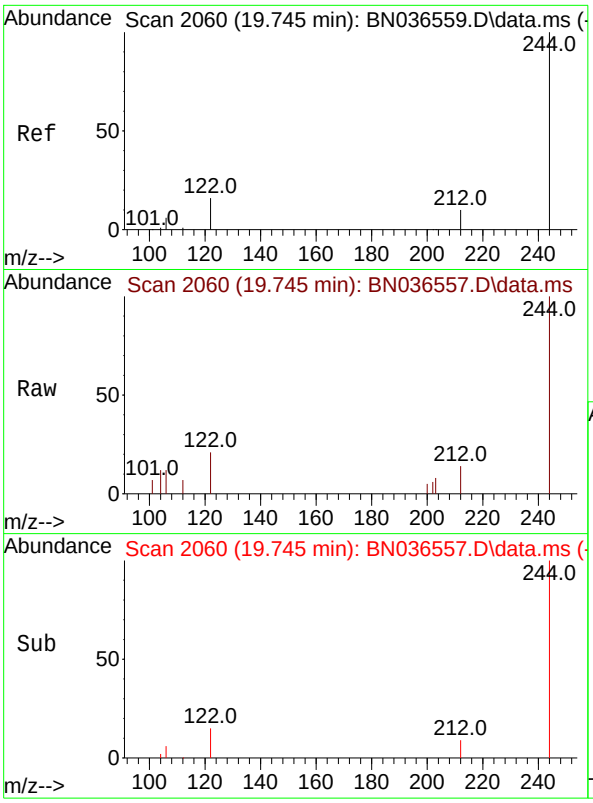


#30
Pyrene
Concen: 0.099 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:202 Resp: 2862

Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.1	25.7
203	17.9	14.1	21.1



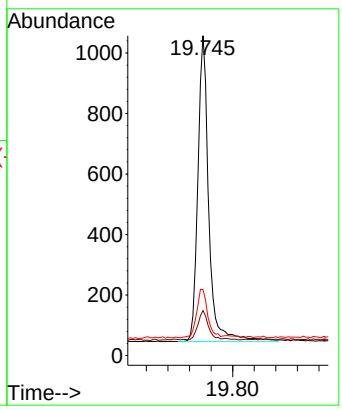


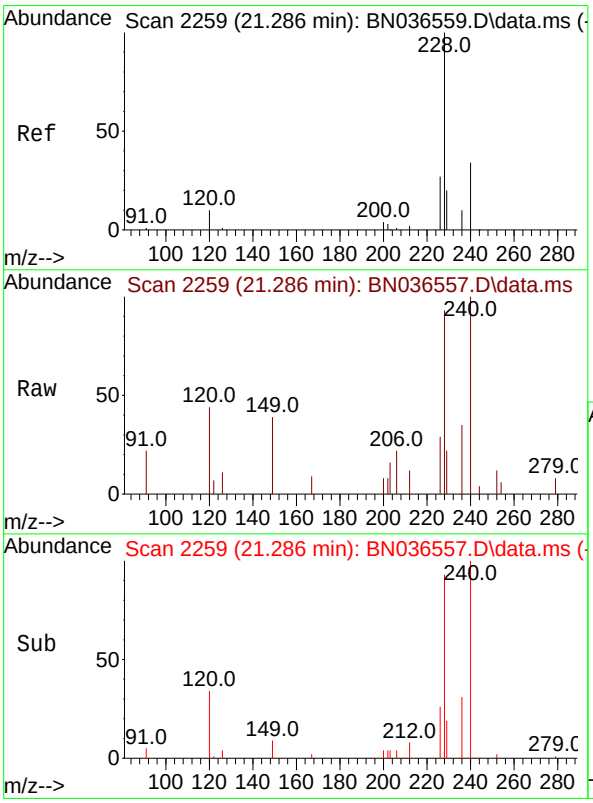
#31
Terphenyl-d14
Concen: 0.100 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:244 Resp: 1416

Ion	Ratio	Lower	Upper
244	100		
212	14.1	9.6	14.4
122	20.6	13.9	20.9

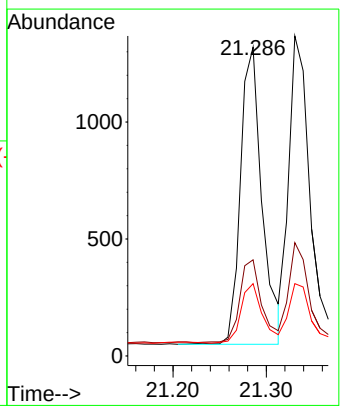


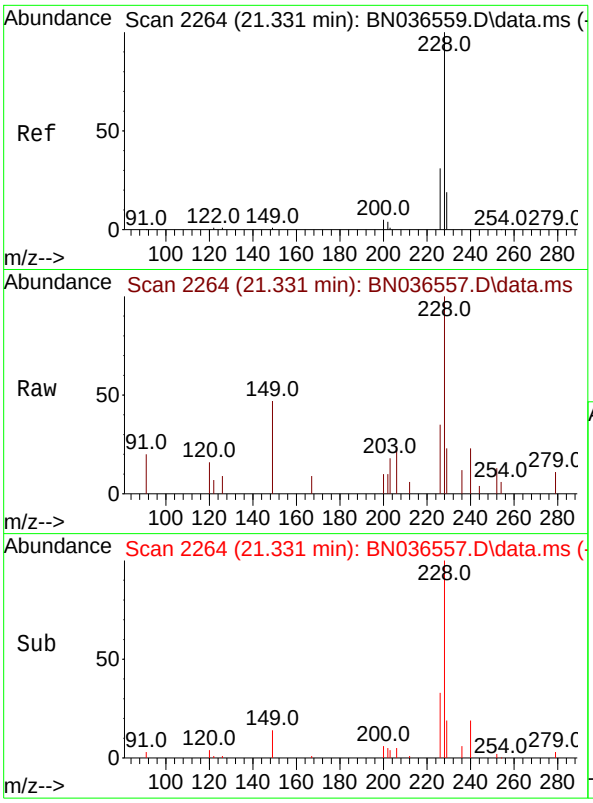


#32
Benzo(a)anthracene
Concen: 0.100 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:228 Resp: 2044

Ion	Ratio	Lower	Upper
228	100		
226	31.1	22.5	33.7
229	23.4	16.6	25.0



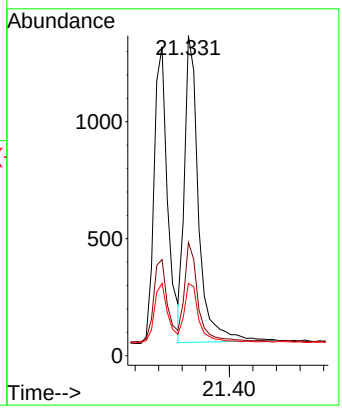


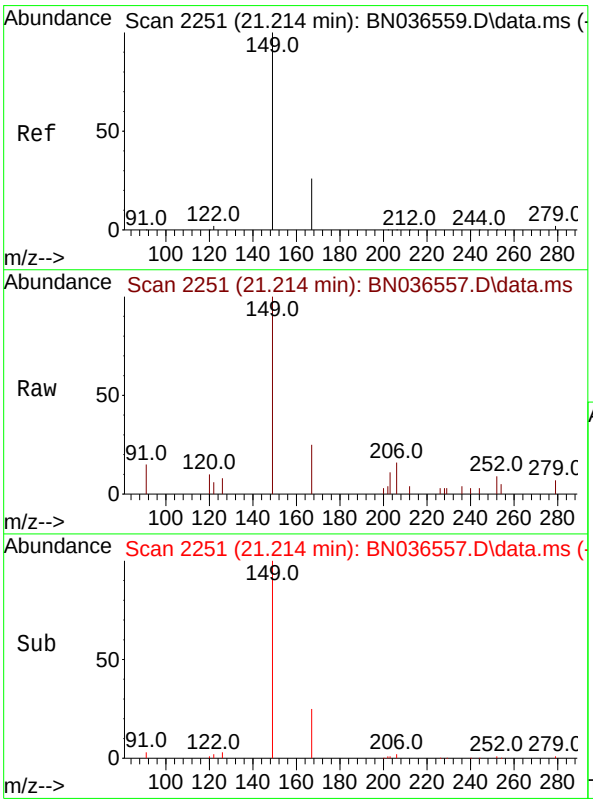
#33
Chrysene
Concen: 0.098 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 2187

Ion	Ratio	Lower	Upper
228	100		
226	35.4	25.3	37.9
229	22.6	15.8	23.8

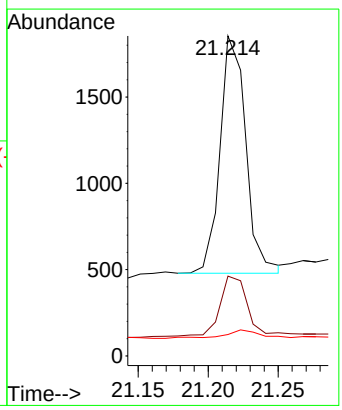


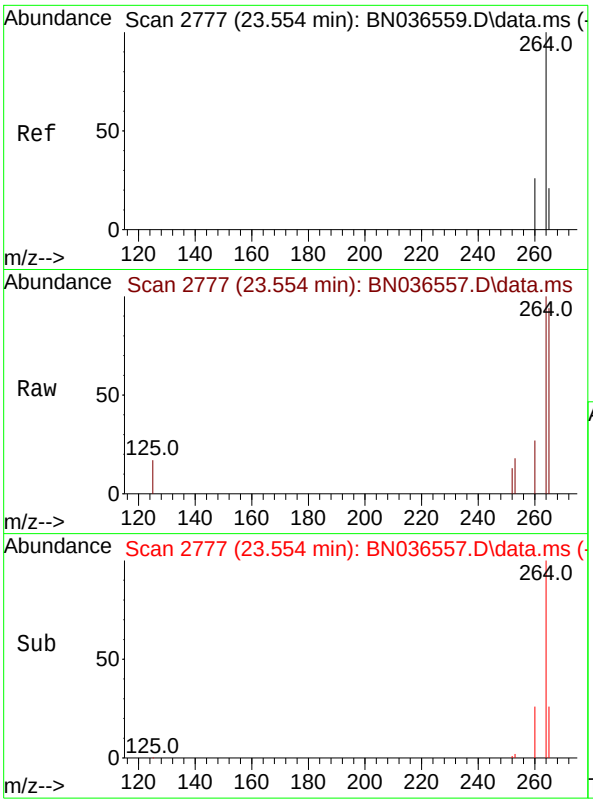


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.121 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:149 Resp: 1760

Ion	Ratio	Lower	Upper
149	100		
167	27.9	20.7	31.1
279	4.9	3.6	5.4



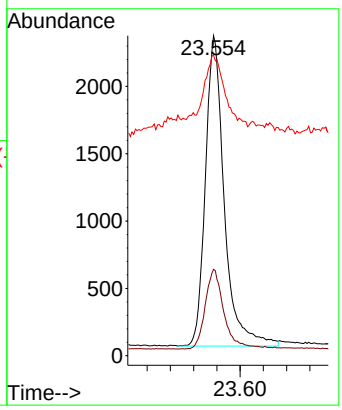


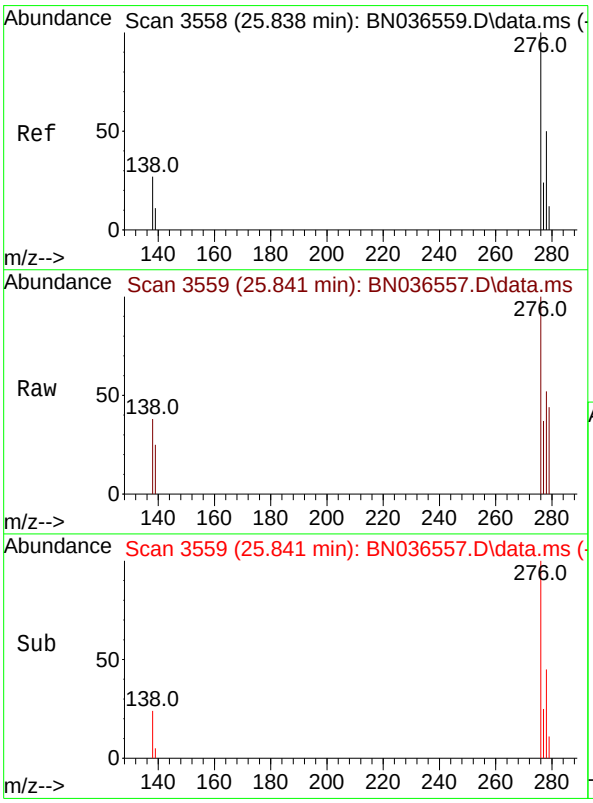
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:264 Resp: 5207

Ion	Ratio	Lower	Upper
264	100		
260	27.0	22.6	33.8
265	93.9	88.1	132.1

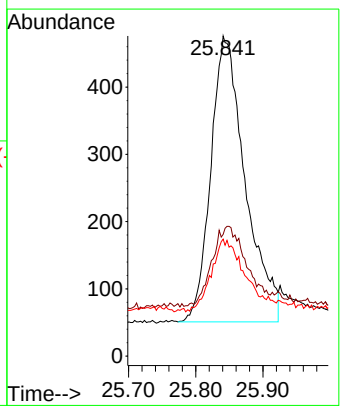


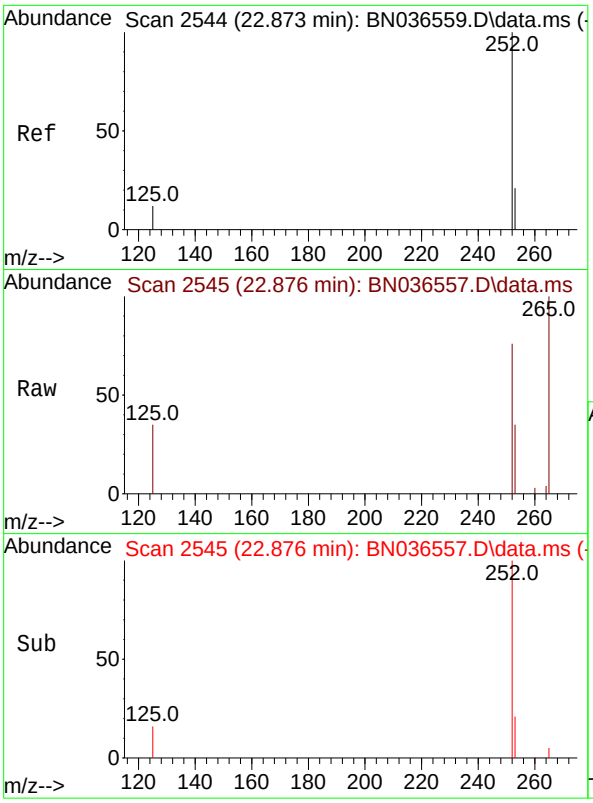


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.080 ng
RT: 25.841 min Scan# 3559
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:276 Resp: 1510

Ion	Ratio	Lower	Upper
276	100		
138	27.6	23.4	35.2
277	24.2	20.0	30.0



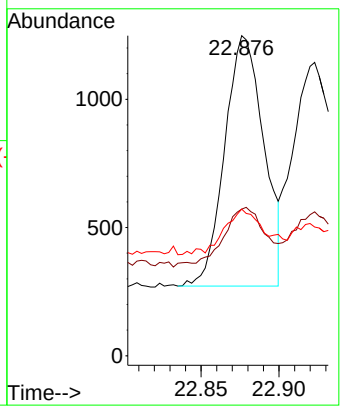


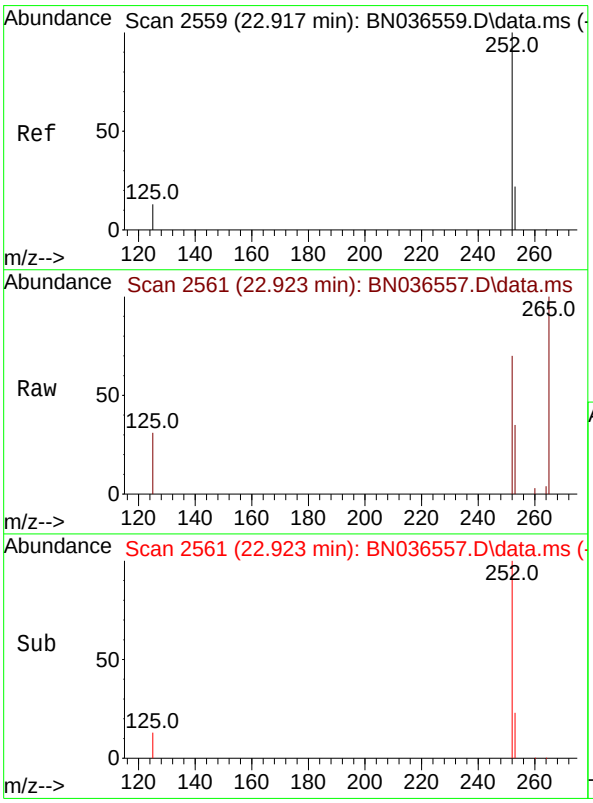
#37
Benzo(b)fluoranthene
Concen: 0.090 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 1707

Ion	Ratio	Lower	Upper
252	100		
253	45.8	23.9	35.9#
125	45.8	17.4	26.2#

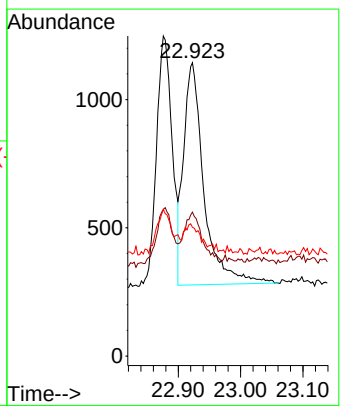


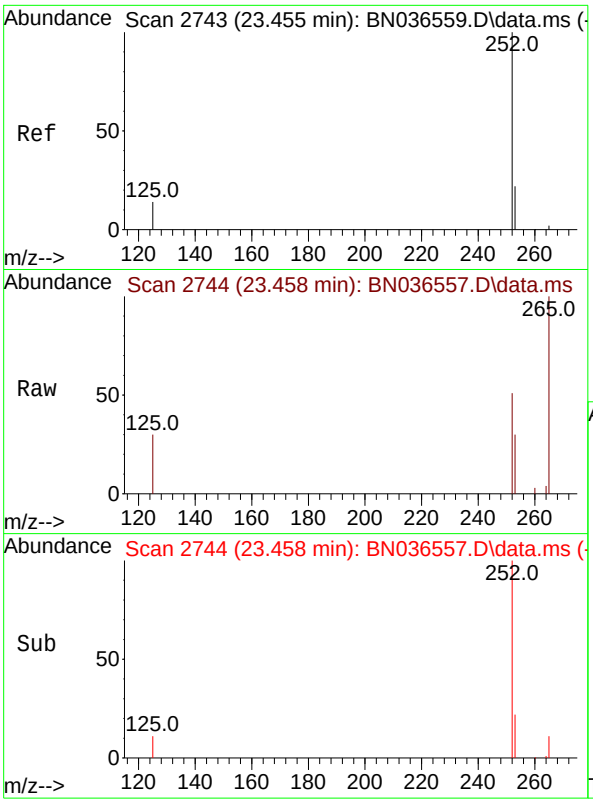


#38
Benzo(k)fluoranthene
Concen: 0.098 ng
RT: 22.923 min Scan# 2561
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:252 Resp: 1958

Ion	Ratio	Lower	Upper
252	100		
253	49.0	24.6	36.8#
125	43.9	17.8	26.8#



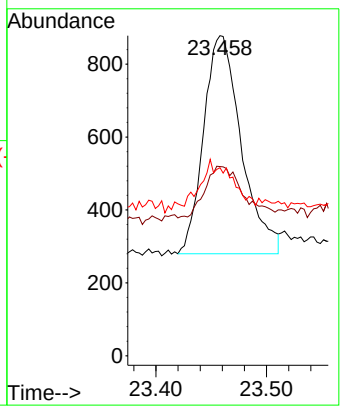


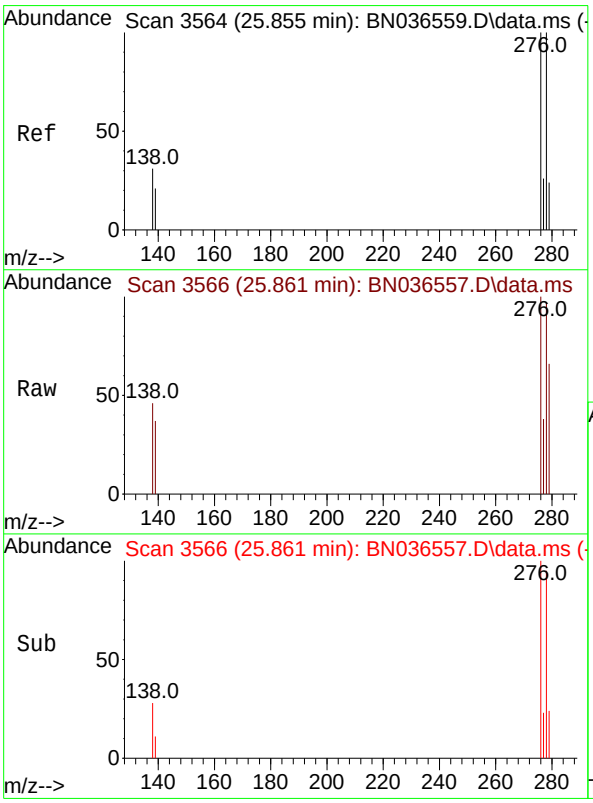
#39
Benzo(a)pyrene
Concen: 0.089 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 1419

Ion	Ratio	Lower	Upper
252	100		
253	59.1	27.8	41.8#
125	58.8	22.7	34.1#

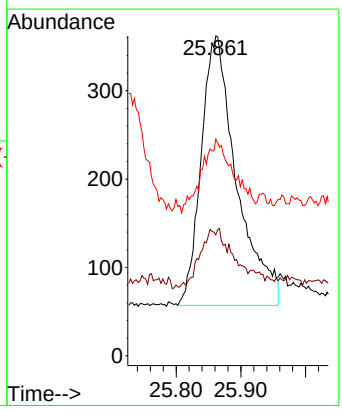


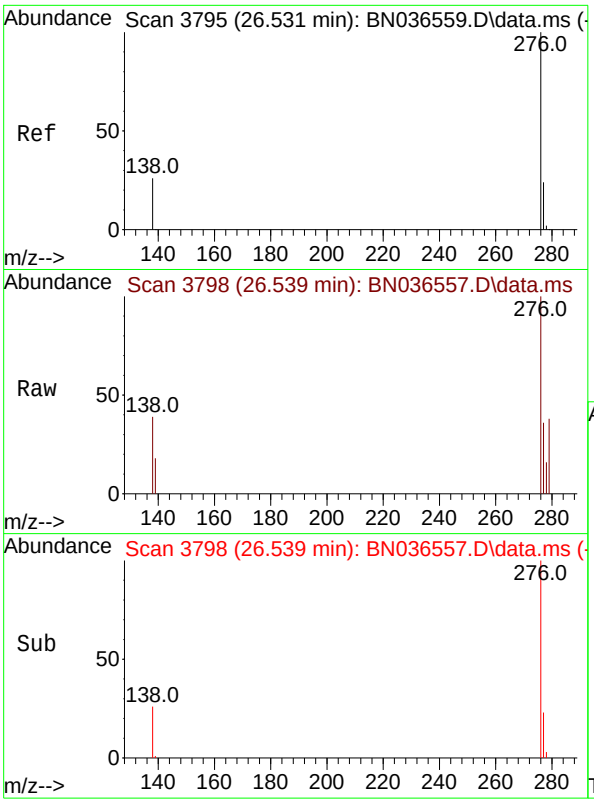


#40
Dibenzo(a,h)anthracene
Concen: 0.079 ng
RT: 25.861 min Scan# 3566
Delta R.T. 0.006 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Tgt Ion:278 Resp: 1163

Ion	Ratio	Lower	Upper
278	100		
139	37.8	20.8	31.2#
279	67.7	28.8	43.2#



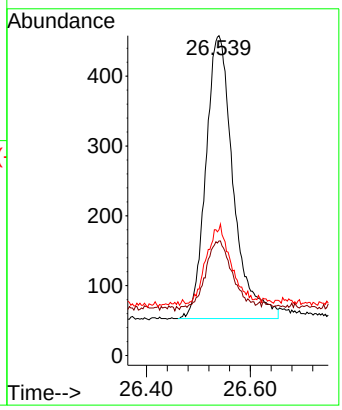


#41
Benzo(g,h,i)perylene
Concen: 0.089 ng
RT: 26.539 min Scan# 3
Delta R.T. 0.009 min
Lab File: BN036557.D
Acq: 10 Mar 2025 11:42

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 1482

Ion	Ratio	Lower	Upper
276	100		
277	35.8	22.2	33.4#
138	39.3	24.1	36.1#



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036558.D
Acq On : 10 Mar 2025 12:18
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Mar 10 16:00:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration

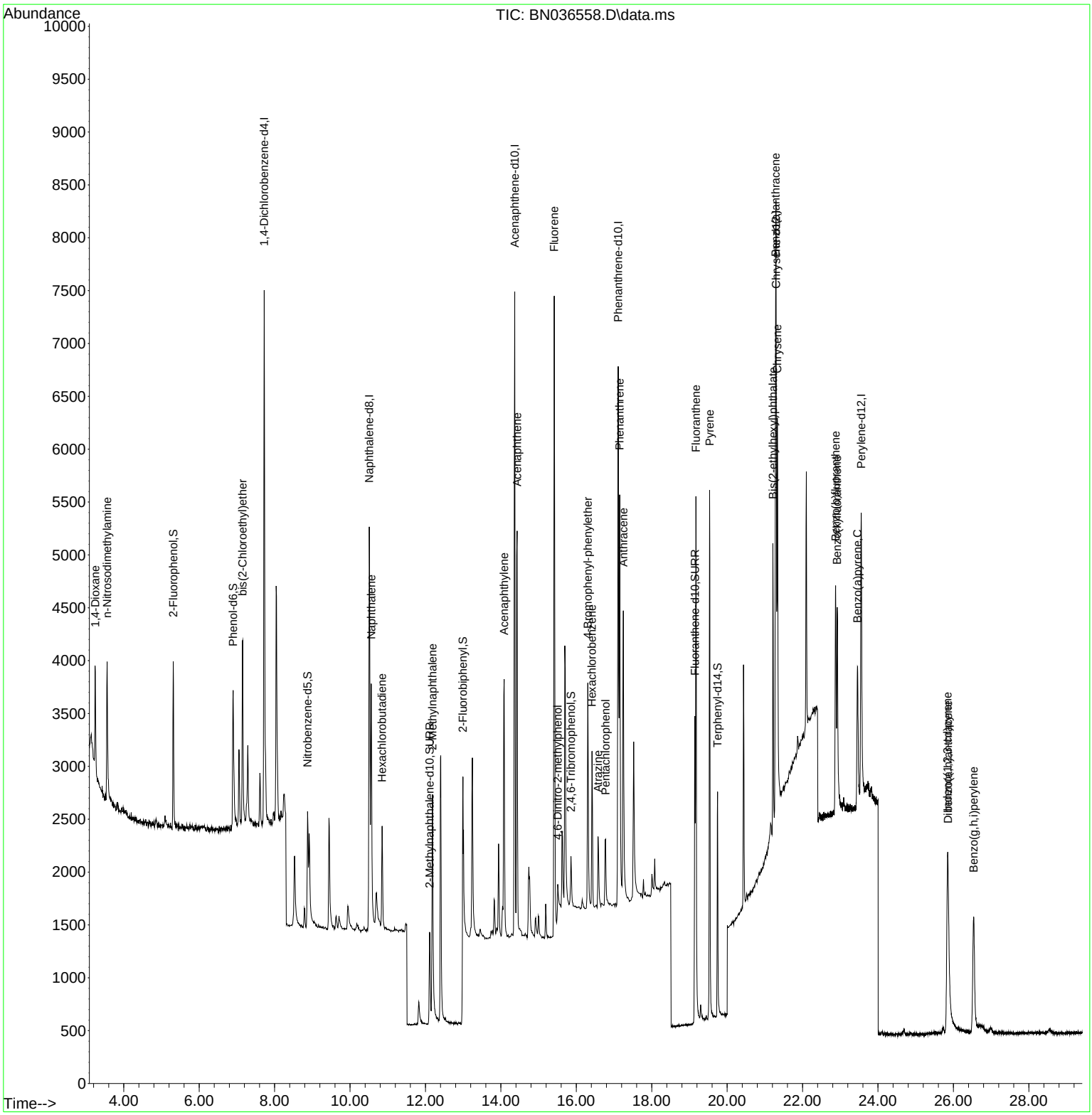
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2504	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5844	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3516	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	7506	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4730	0.400	ng		0.00
35) Perylene-d12	23.554	264	4241	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	1137	0.195	ng		0.00
5) Phenol-d6	6.901	99	1323	0.184	ng		0.00
8) Nitrobenzene-d5	8.875	82	1156	0.182	ng		0.00
11) 2-Methylnaphthalene-d10	12.111	152	1603	0.184	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	282	0.177	ng		0.00
15) 2-Fluorobiphenyl	12.993	172	3485	0.170	ng		0.00
27) Fluoranthene-d10	19.146	212	3583	0.186	ng		0.00
31) Terphenyl-d14	19.745	244	2283	0.201	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	700	0.252	ng		91
3) n-Nitrosodimethylamine	3.557	42	1094	0.195	ng		92
6) bis(2-Chloroethyl)ether	7.154	93	1440	0.193	ng		99
9) Naphthalene	10.562	128	3286	0.191	ng		97
10) Hexachlorobutadiene	10.850	225	828	0.205	ng	#	97
12) 2-Methylnaphthalene	12.187	142	2034	0.186	ng		97
16) Acenaphthylene	14.088	152	3087	0.186	ng		100
17) Acenaphthene	14.430	154	2038	0.188	ng		99
18) Fluorene	15.414	166	2813	0.191	ng		99
20) 4,6-Dinitro-2-methylph...	15.510	198	214	0.258	ng	#	69
21) 4-Bromophenyl-phenylether	16.304	248	853	0.181	ng		93
22) Hexachlorobenzene	16.416	284	1079	0.190	ng		99
23) Atrazine	16.578	200	716	0.190	ng		97
24) Pentachlorophenol	16.776	266	435	0.168	ng		98
25) Phenanthrene	17.148	178	4171	0.185	ng		100
26) Anthracene	17.248	178	3645	0.179	ng		99
28) Fluoranthene	19.174	202	4666	0.184	ng		99
30) Pyrene	19.536	202	4742	0.205	ng		100
32) Benzo(a)anthracene	21.286	228	3111	0.189	ng		97
33) Chrysene	21.331	228	3568	0.199	ng		97
34) Bis(2-ethylhexyl)phtha...	21.214	149	2601	0.222	ng	#	97
36) Indeno(1,2,3-cd)pyrene	25.844	276	2790	0.182	ng		98
37) Benzo(b)fluoranthene	22.876	252	2883	0.187	ng	#	83
38) Benzo(k)fluoranthene	22.917	252	2962	0.183	ng	#	86
39) Benzo(a)pyrene	23.458	252	2443	0.188	ng	#	76
40) Dibenzo(a,h)anthracene	25.858	278	2080	0.175	ng	#	83
41) Benzo(g,h,i)perylene	26.536	276	2573	0.189	ng		95

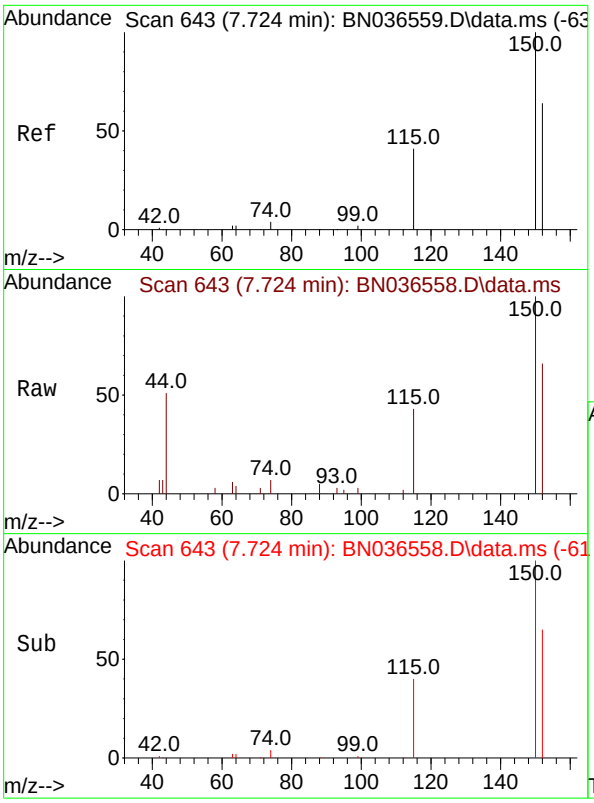
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036558.D
Acq On : 10 Mar 2025 12:18
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Mar 10 16:00:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 15:54:23 2025
Response via : Initial Calibration



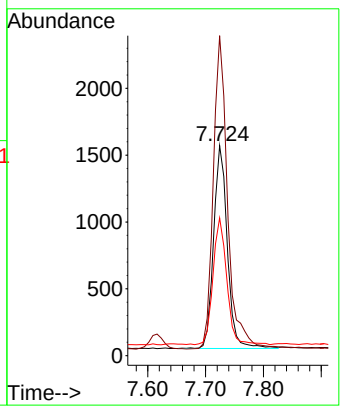


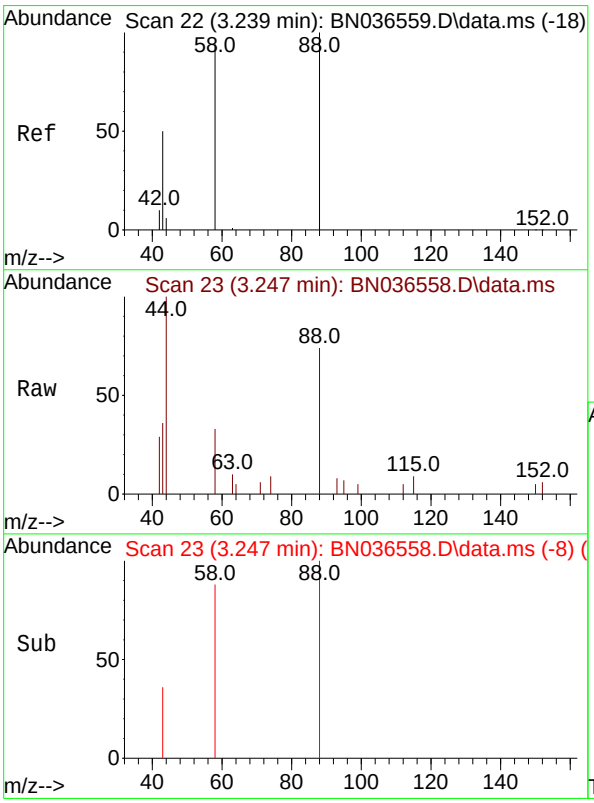
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 2504

Ion	Ratio	Lower	Upper
152	100		
150	152.3	123.7	185.5
115	65.5	54.3	81.5

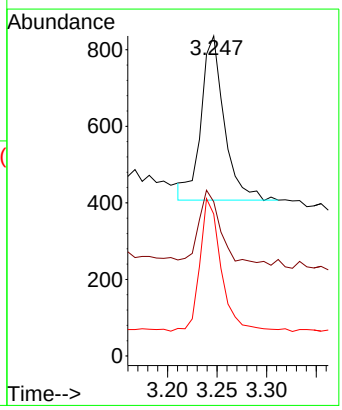


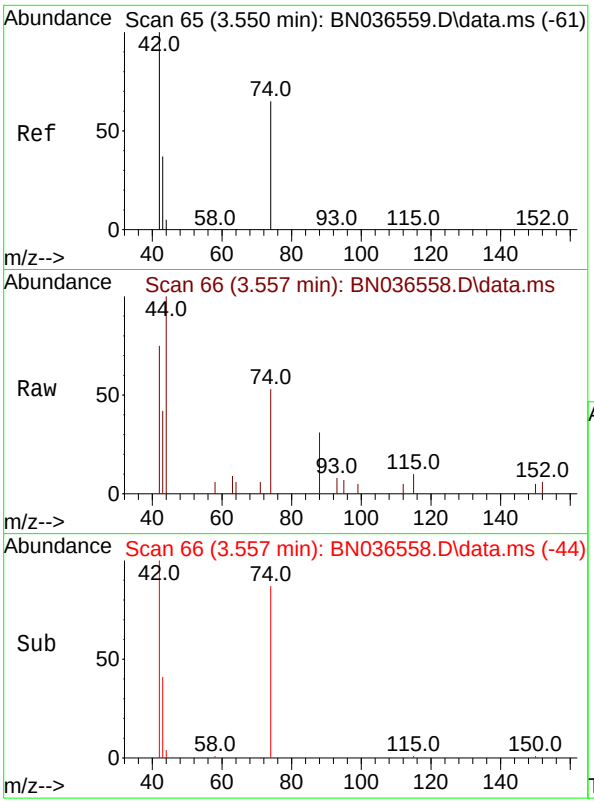


#2
1,4-Dioxane
Concen: 0.252 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 88 Resp: 700

Ion	Ratio	Lower	Upper
88	100		
43	44.4	37.8	56.8
58	73.7	67.4	101.2



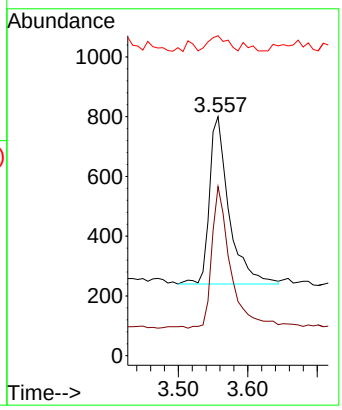


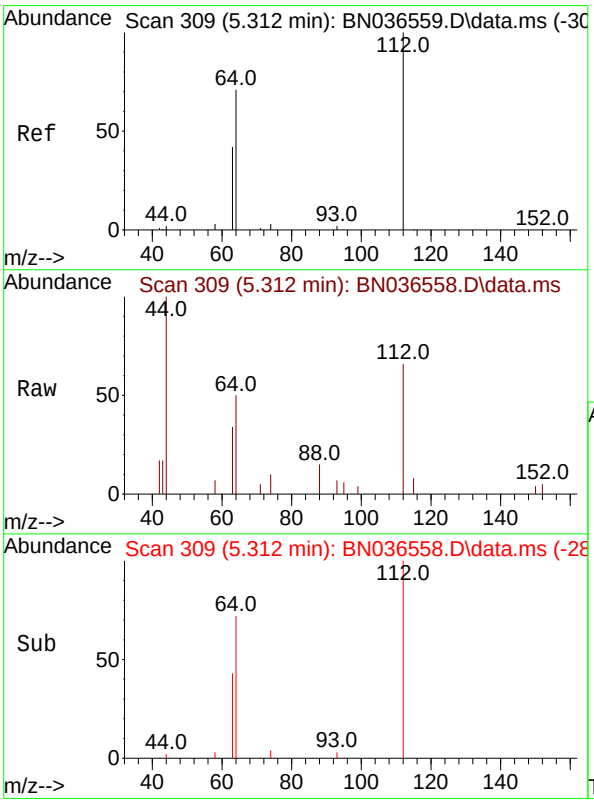
#3
n-Nitrosodimethylamine
Concen: 0.195 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 42 Resp: 1094

Ion	Ratio	Lower	Upper
42	100		
74	83.2	60.6	90.8
44	8.5	6.3	9.5

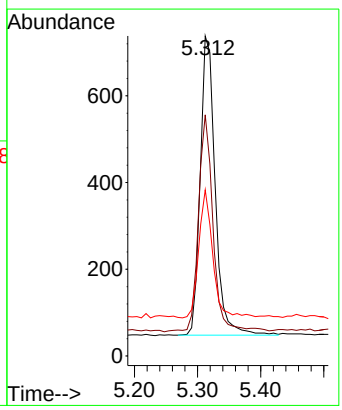


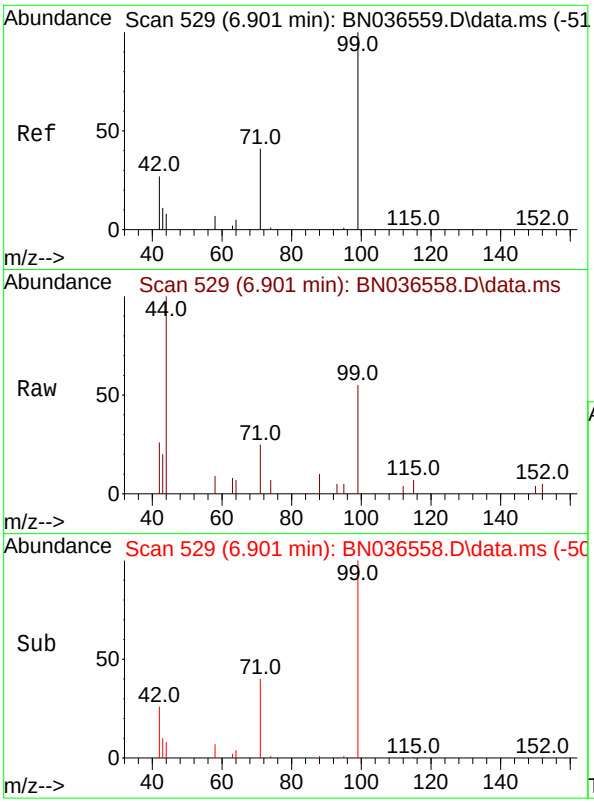


#4
2-Fluorophenol
Concen: 0.195 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:112 Resp: 1137

Ion	Ratio	Lower	Upper
112	100		
64	70.6	53.1	79.7
63	40.3	31.8	47.8



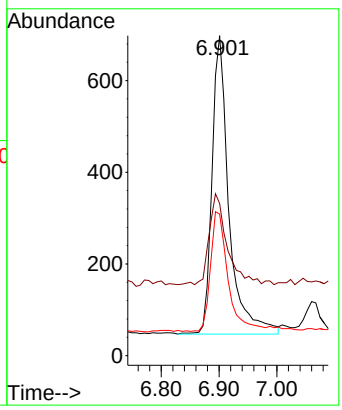


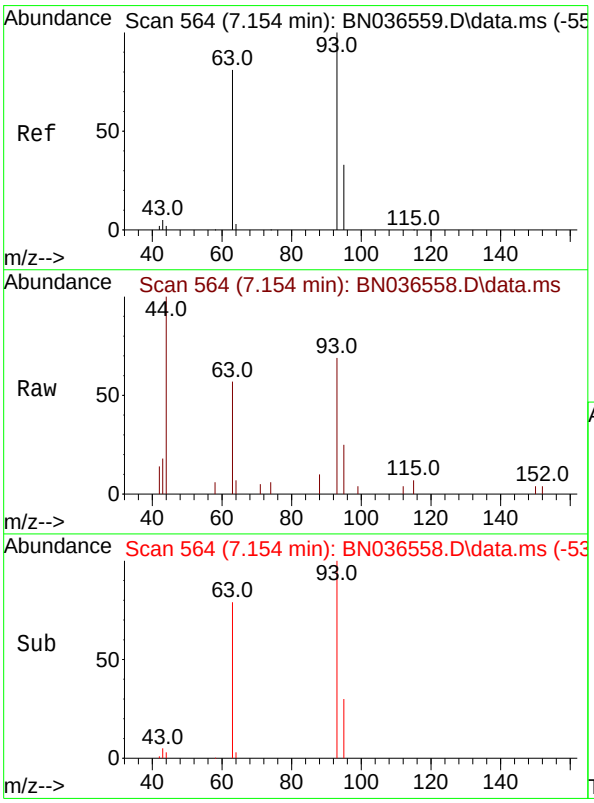
#5
Phenol-d6
Concen: 0.184 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 99 Resp: 1323

Ion	Ratio	Lower	Upper
99	100		
42	32.7	26.5	39.7
71	41.3	34.1	51.1

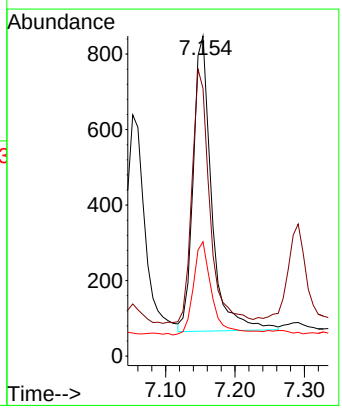


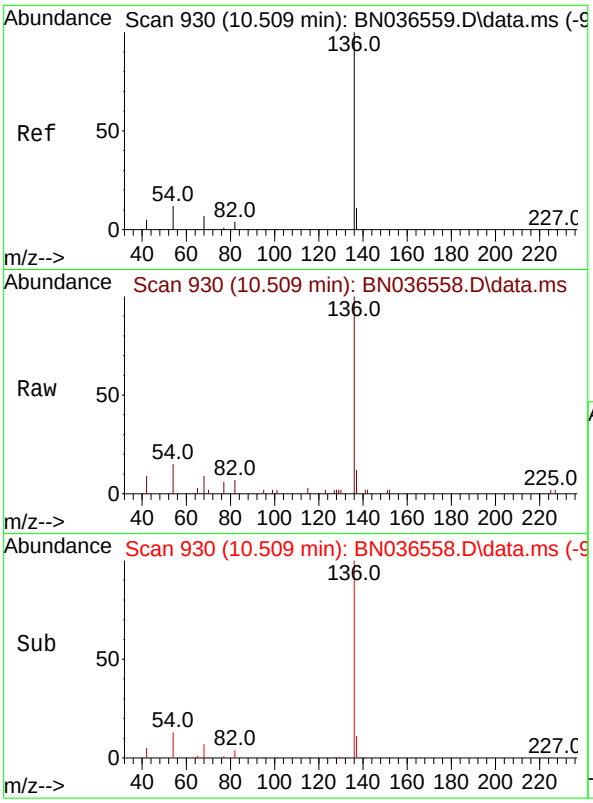


#6
bis(2-Chloroethyl)ether
Concen: 0.193 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 93 Resp: 1440

Ion	Ratio	Lower	Upper
93	100		
63	82.9	67.7	101.5
95	31.9	25.6	38.4



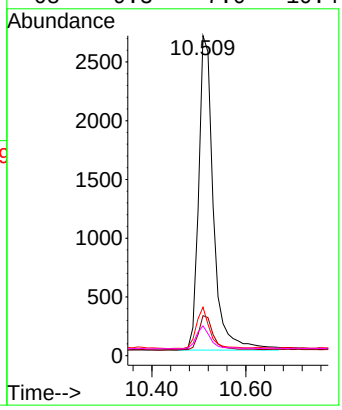


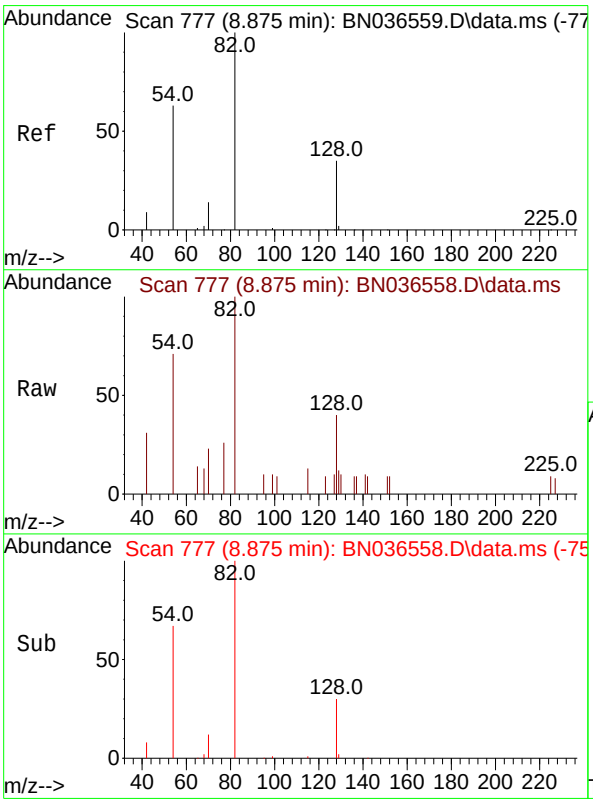
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:136 Resp: 5844

Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.3	15.5
54	15.1	11.5	17.3
68	9.3	7.0	10.4

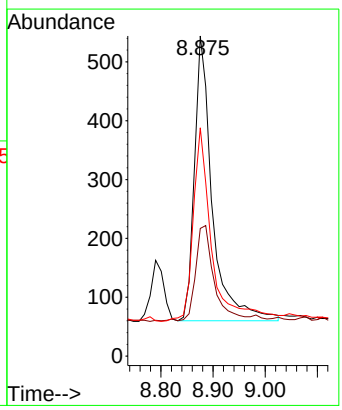


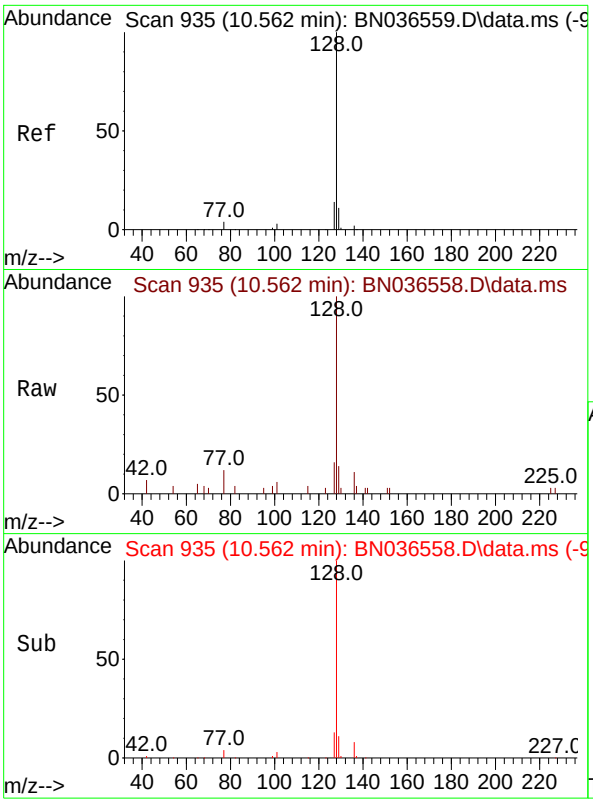


#8
Nitrobenzene-d5
Concen: 0.182 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion: 82 Resp: 1156

Ion	Ratio	Lower	Upper
82	100		
128	39.9	30.6	45.8
54	71.3	52.2	78.4



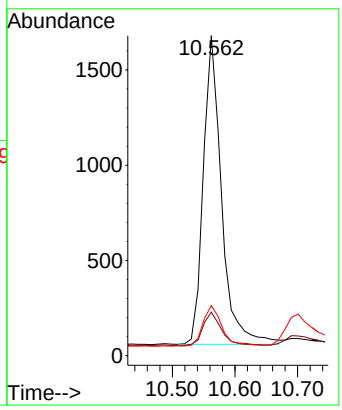


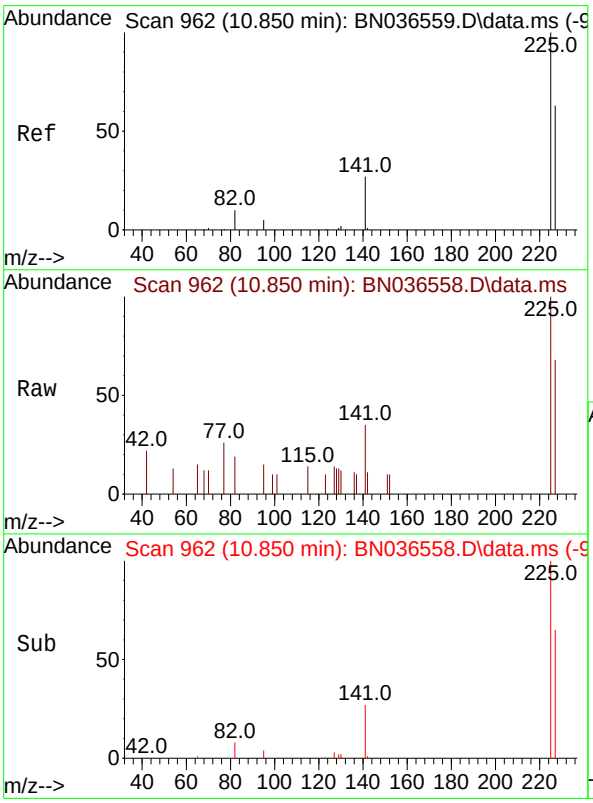
#9
Naphthalene
Concen: 0.191 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:128 Resp: 3286

Ion	Ratio	Lower	Upper
128	100		
129	13.6	9.8	14.6
127	15.7	11.8	17.8

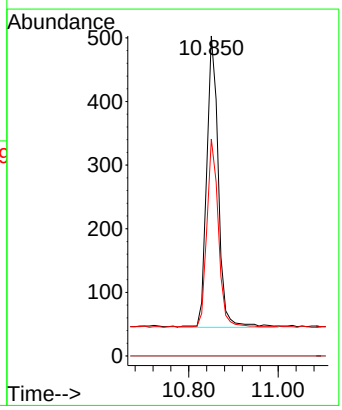


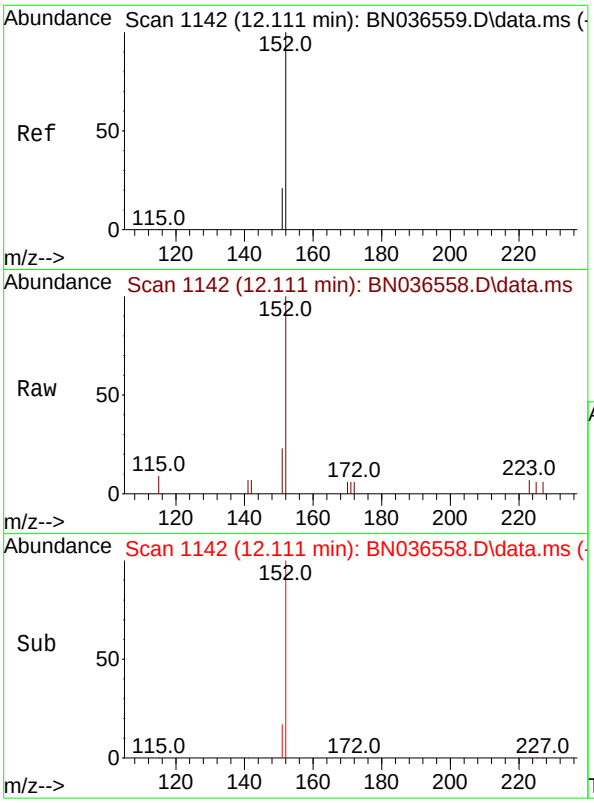


#10
Hexachlorobutadiene
Concen: 0.205 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:225 Resp: 828

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.6	51.8	77.8



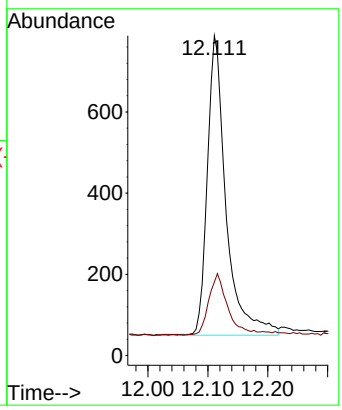


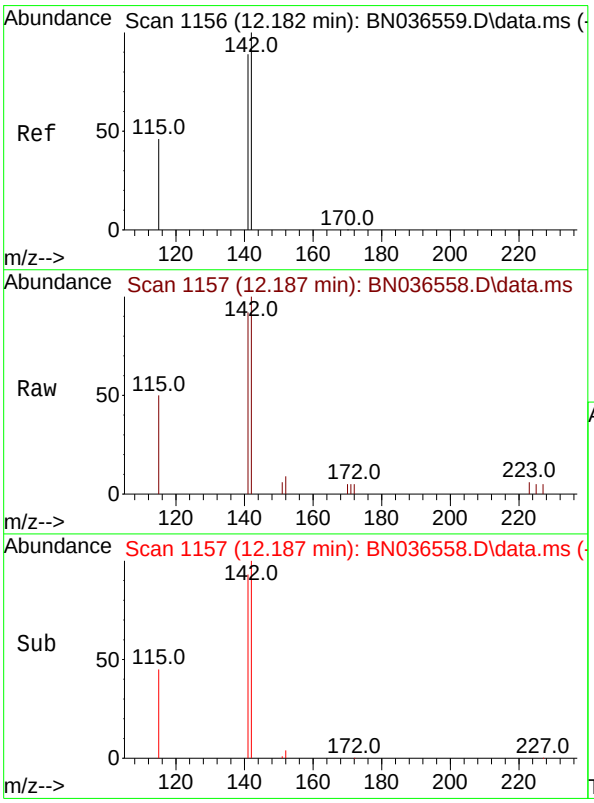
#11
2-Methylnaphthalene-d10
Concen: 0.184 ng
RT: 12.111 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 1603

Ion	Ratio	Lower	Upper
152	100		
151	21.0	17.0	25.6

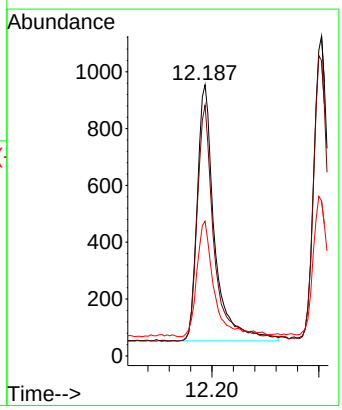


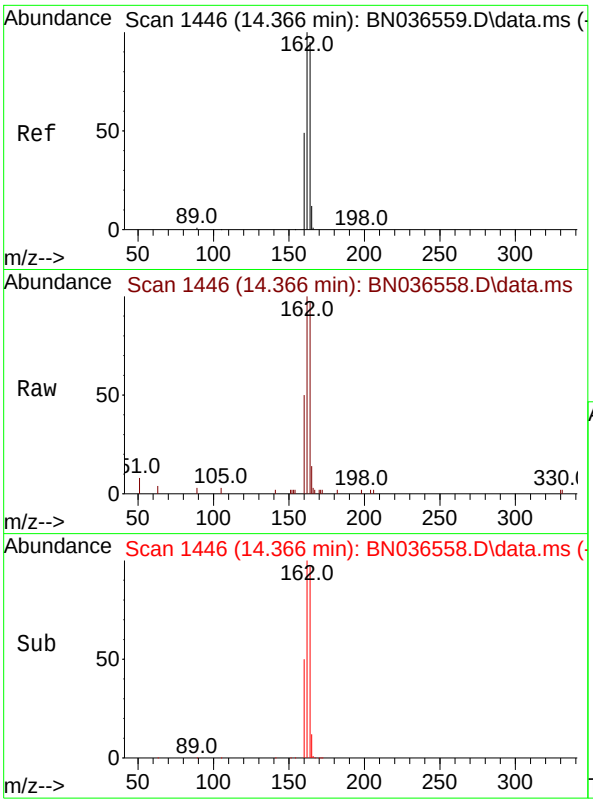


#12
2-Methylnaphthalene
Concen: 0.186 ng
RT: 12.187 min Scan# 1157
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:142 Resp: 2034

Ion	Ratio	Lower	Upper
142	100		
141	92.5	71.7	107.5
115	49.7	38.3	57.5



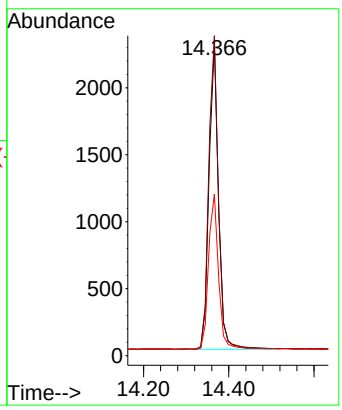


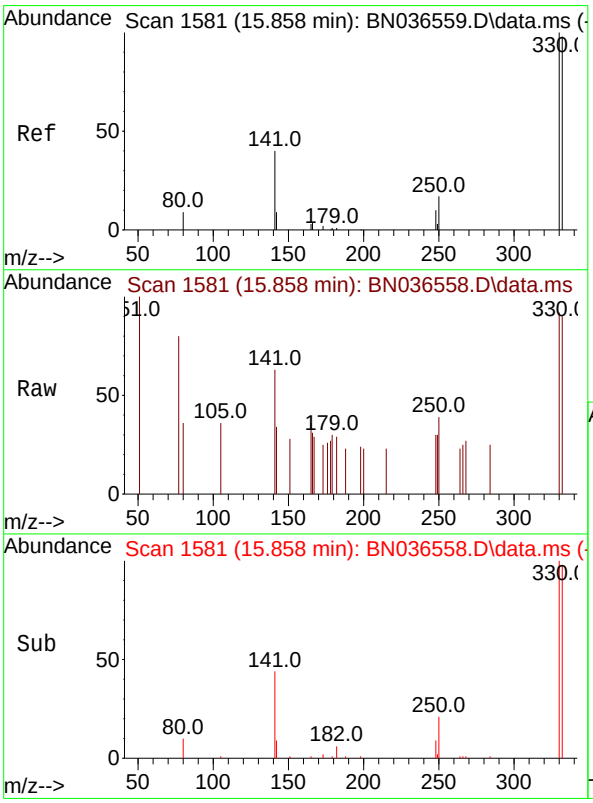
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:164 Resp: 3516

Ion	Ratio	Lower	Upper
164	100		
162	102.6	84.2	126.2
160	51.8	42.2	63.2

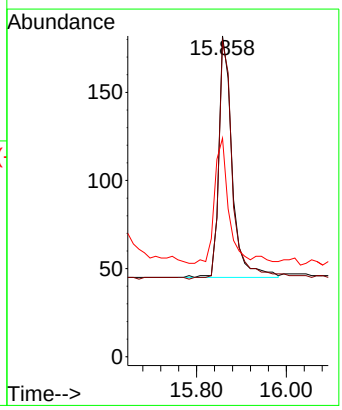


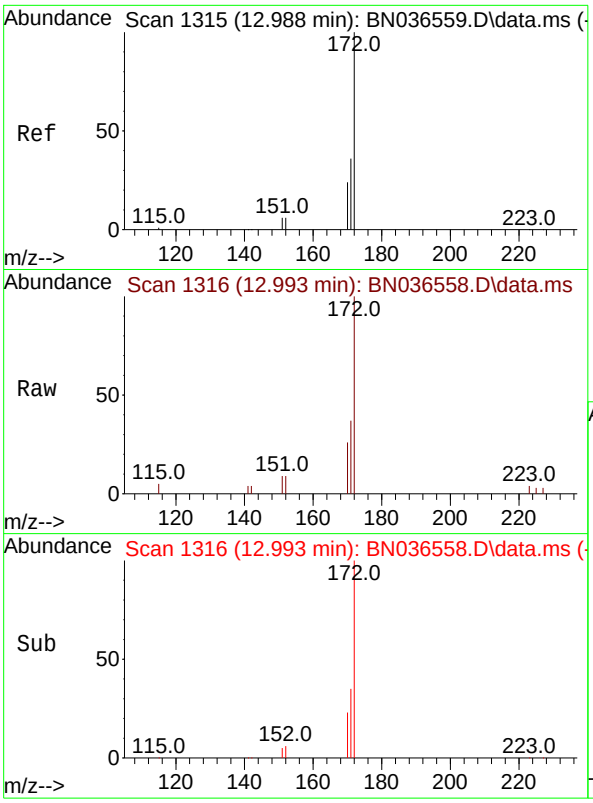


#14
2,4,6-Tribromophenol
Concen: 0.177 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:330 Resp: 282

Ion	Ratio	Lower	Upper
330	100		
332	103.5	75.2	112.8
141	53.9	43.4	65.2



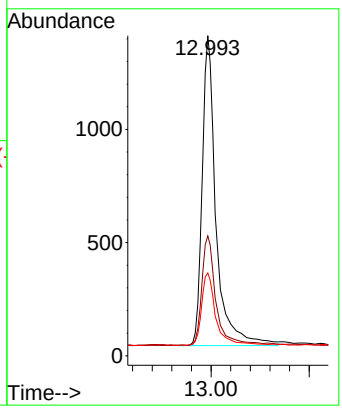


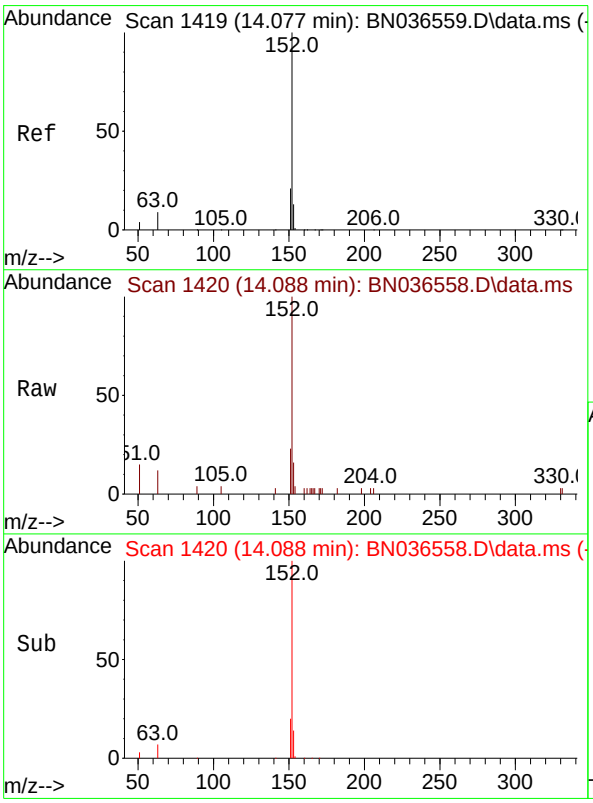
#15
2-Fluorobiphenyl
Concen: 0.170 ng
RT: 12.993 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:172 Resp: 3485

Ion	Ratio	Lower	Upper
172	100		
171	37.5	29.5	44.3
170	25.9	20.2	30.4

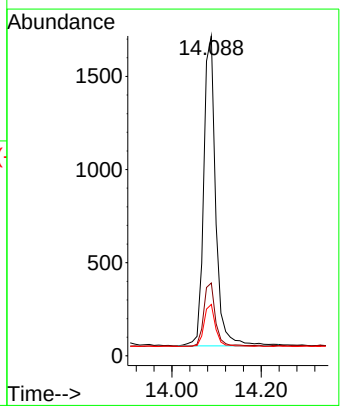


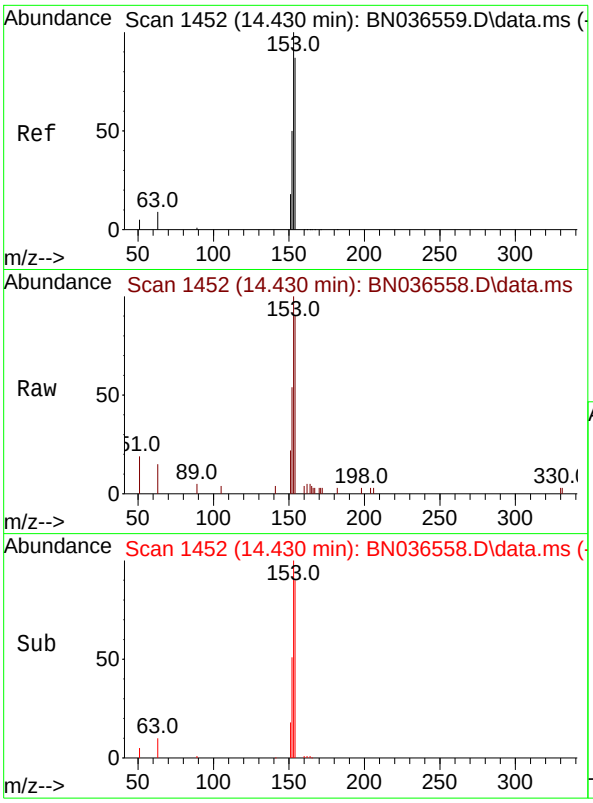


#16
Acenaphthylene
Concen: 0.186 ng
RT: 14.088 min Scan# 1420
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:152 Resp: 3087

Ion	Ratio	Lower	Upper
152	100		
151	20.4	16.2	24.4
153	13.0	10.6	15.8



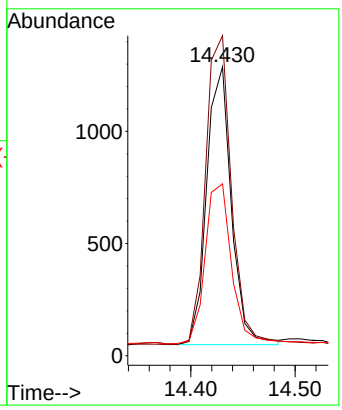


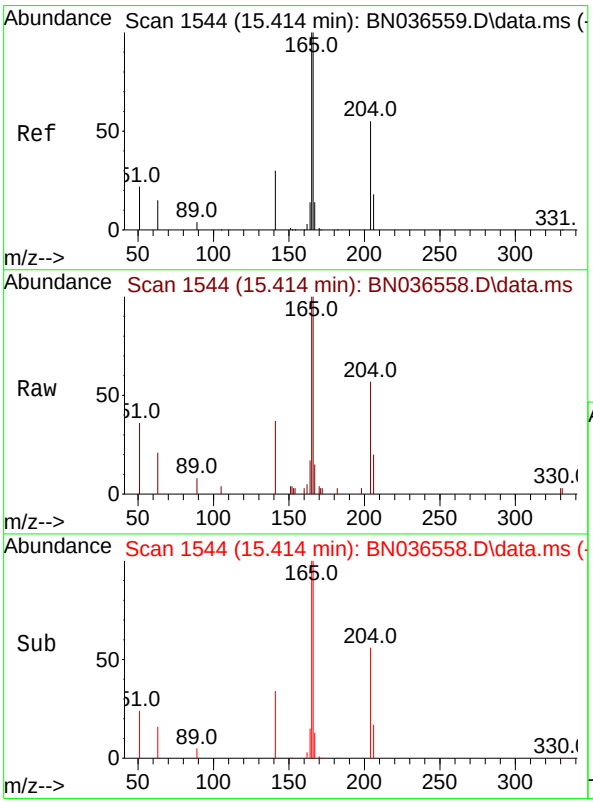
#17
Acenaphthene
Concen: 0.188 ng
RT: 14.430 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:154 Resp: 2038

Ion	Ratio	Lower	Upper
154	100		
153	117.8	94.1	141.1
152	63.1	49.8	74.6

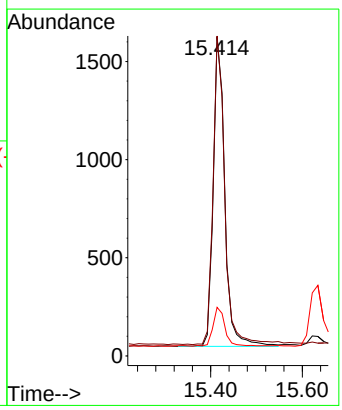


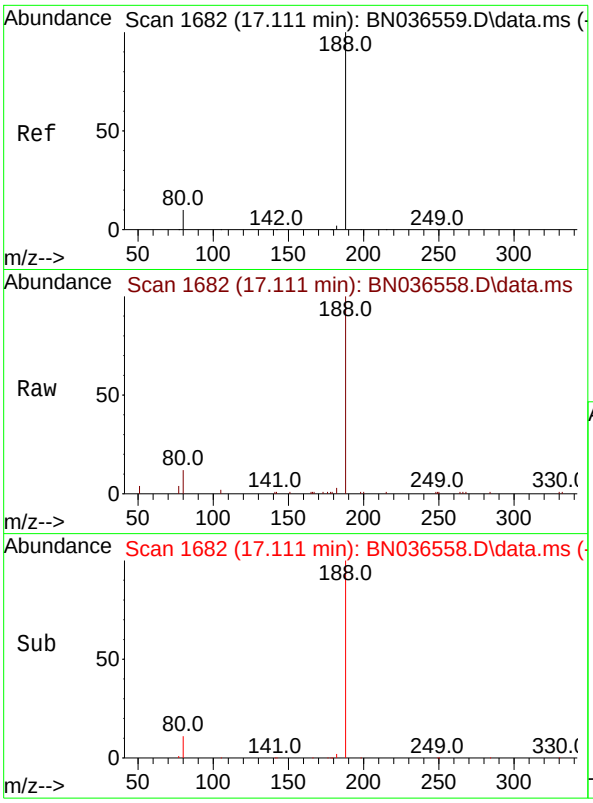


#18
Fluorene
Concen: 0.191 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:166 Resp: 2813

Ion	Ratio	Lower	Upper
166	100		
165	101.1	79.8	119.8
167	12.6	10.6	15.8



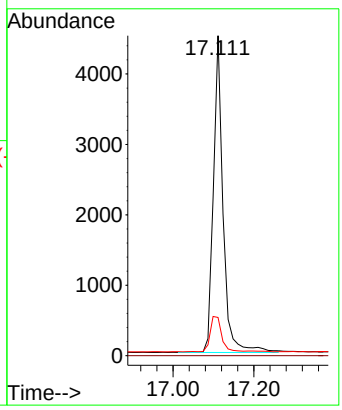


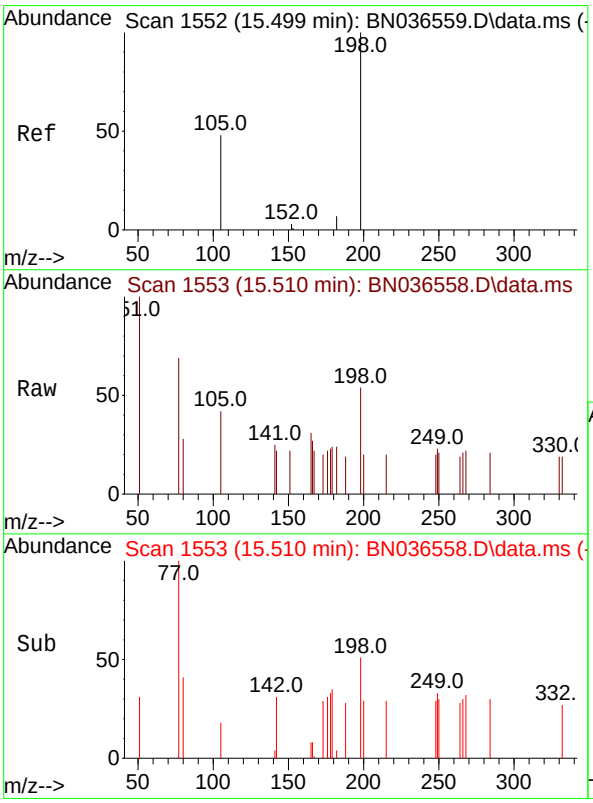
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:188 Resp: 7506

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.9	8.8	13.2

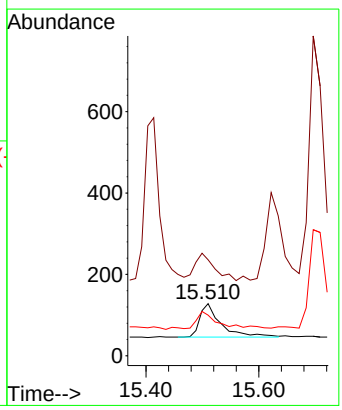


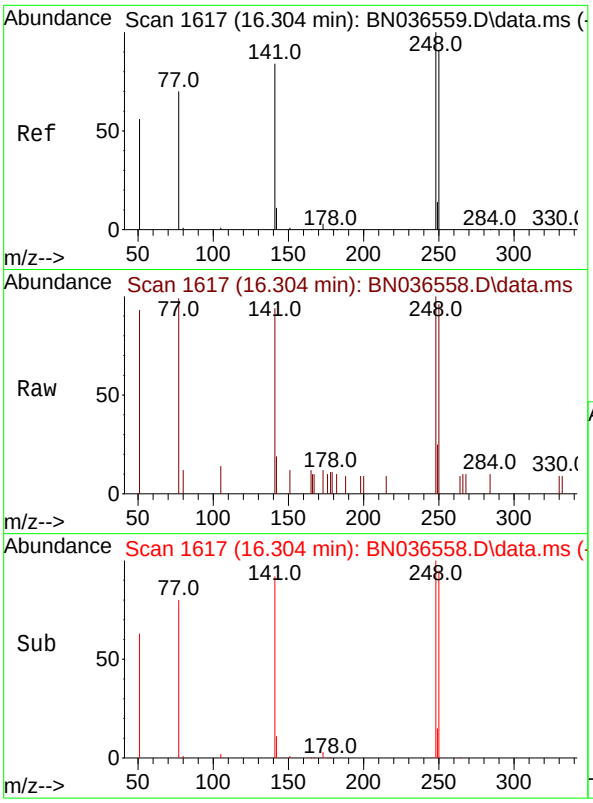


#20
4,6-Dinitro-2-methylphenol
Concen: 0.258 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:198 Resp: 214

Ion	Ratio	Lower	Upper
198	100		
51	184.4	107.9	161.9#
105	78.1	56.2	84.2



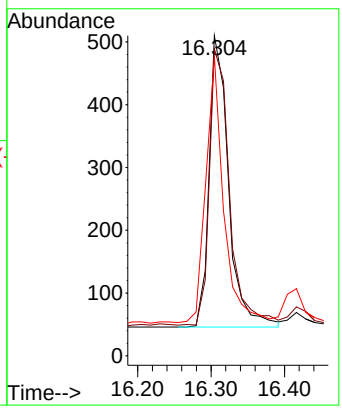


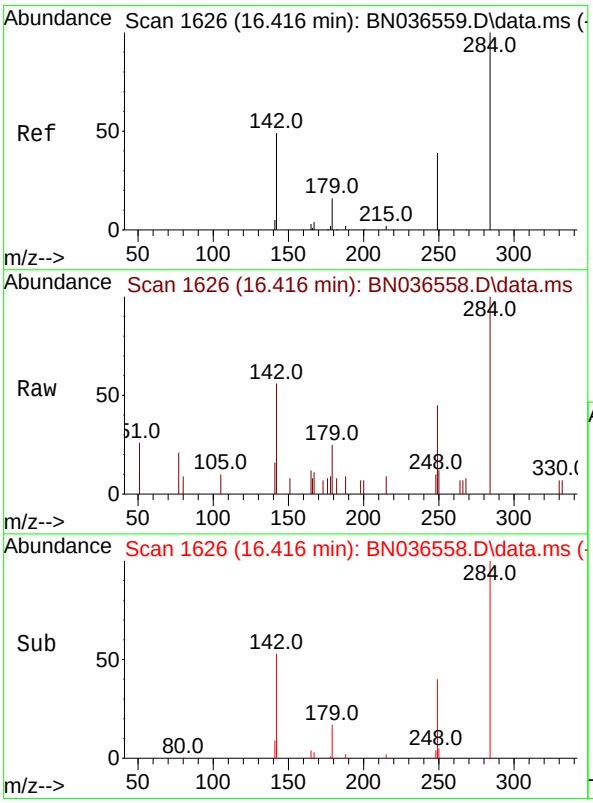
#21
4-Bromophenyl-phenylether
Concen: 0.181 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:248 Resp: 853

Ion	Ratio	Lower	Upper
248	100		
250	95.9	73.0	109.6
141	93.7	68.6	103.0

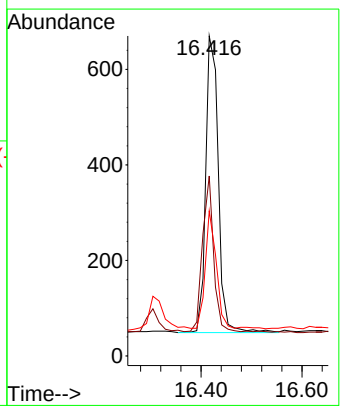


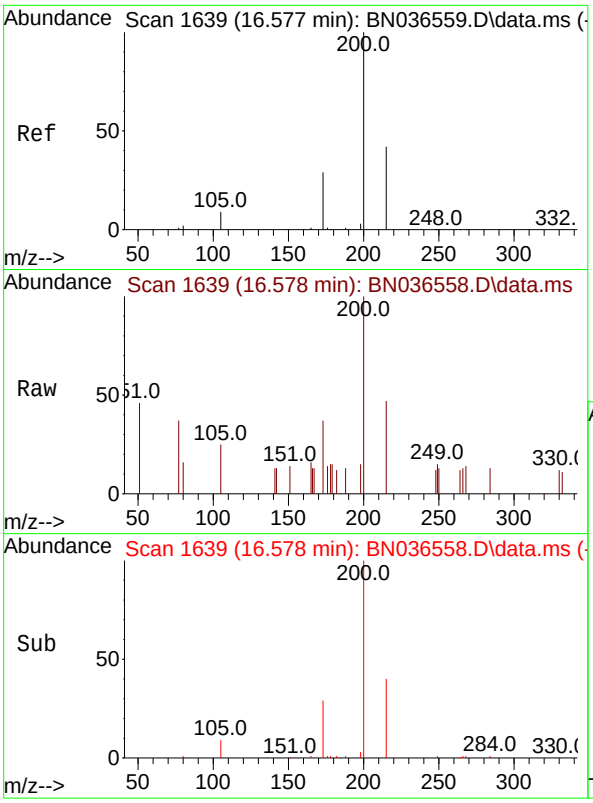


#22
Hexachlorobenzene
Concen: 0.190 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:284 Resp: 1079

Ion	Ratio	Lower	Upper
284	100		
142	47.0	37.0	55.4
249	34.8	28.1	42.1



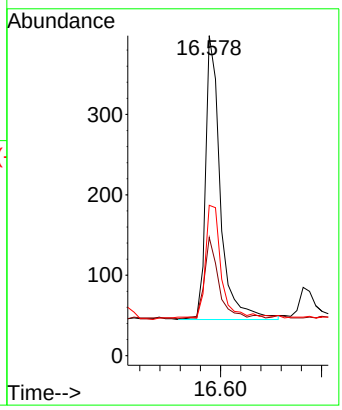


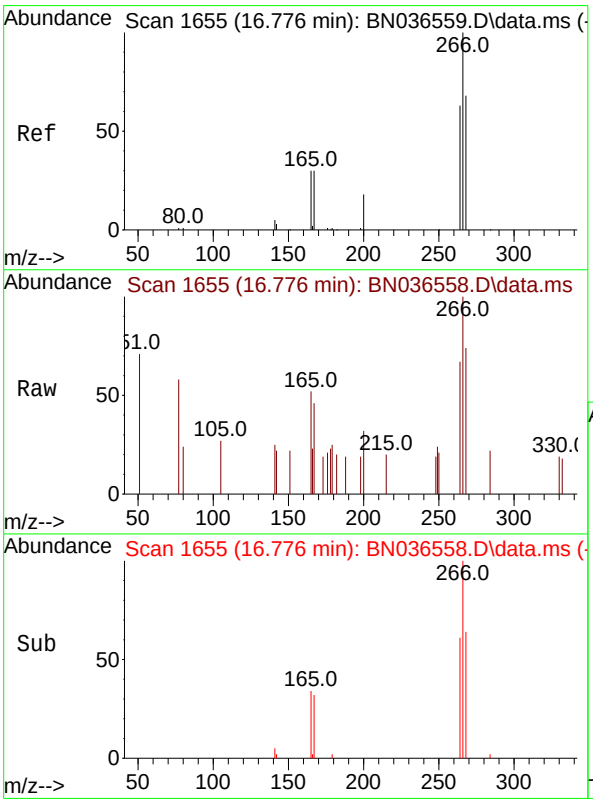
#23
Atrazine
Concen: 0.190 ng
RT: 16.578 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:200 Resp: 716

Ion	Ratio	Lower	Upper
200	100		
173	36.9	27.3	40.9
215	47.0	36.8	55.2

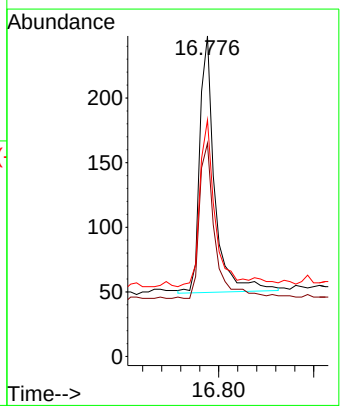


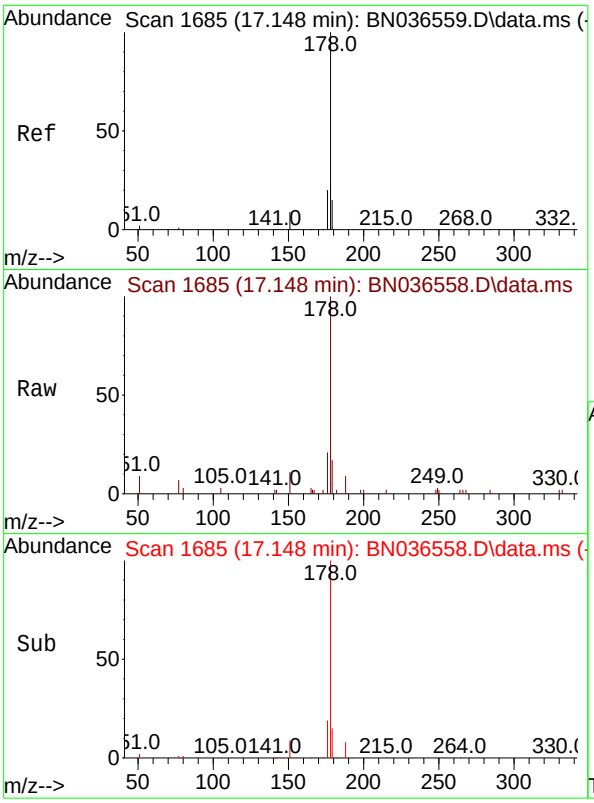


#24
Pentachlorophenol
Concen: 0.168 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:266 Resp: 435

Ion	Ratio	Lower	Upper
266	100		
264	63.4	49.6	74.4
268	65.7	50.9	76.3



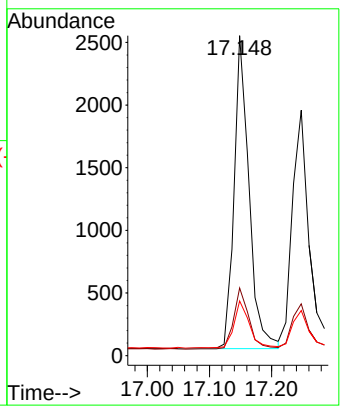


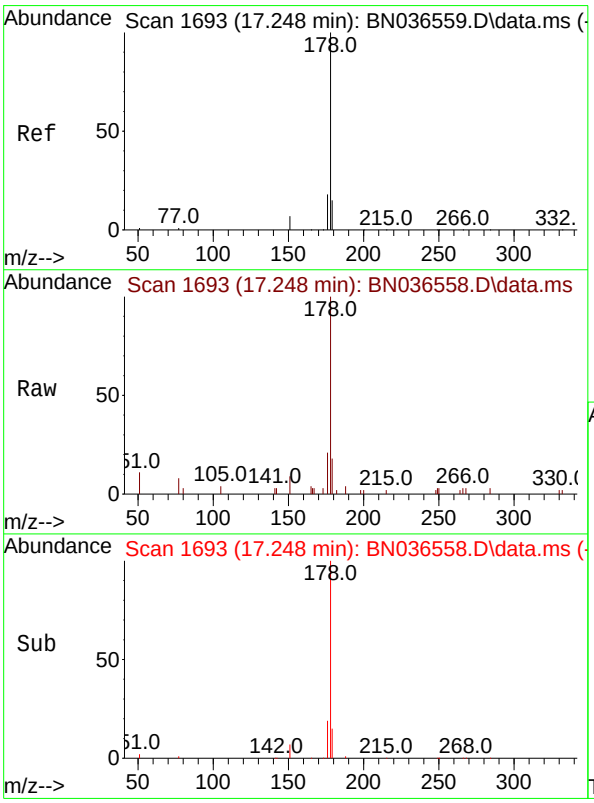
#25
Phenanthrene
Concen: 0.185 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:178 Resp: 4171

Ion	Ratio	Lower	Upper
178	100		
176	20.0	15.9	23.9
179	15.5	12.2	18.4

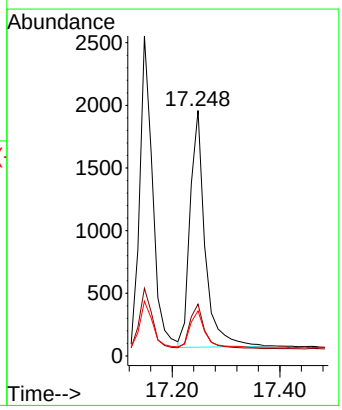


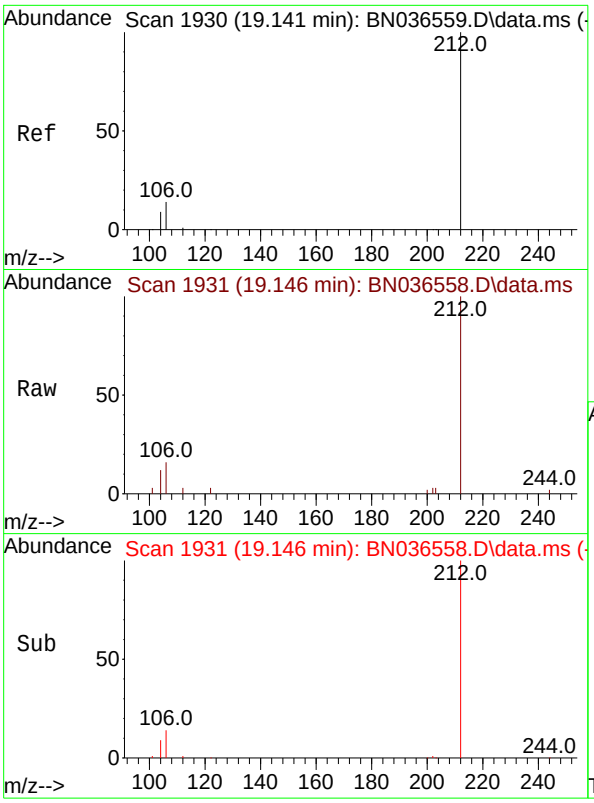


#26
Anthracene
Concen: 0.179 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:178 Resp: 3645

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.4	23.2
179	15.1	12.6	18.8



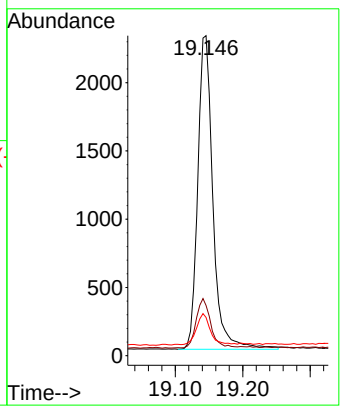


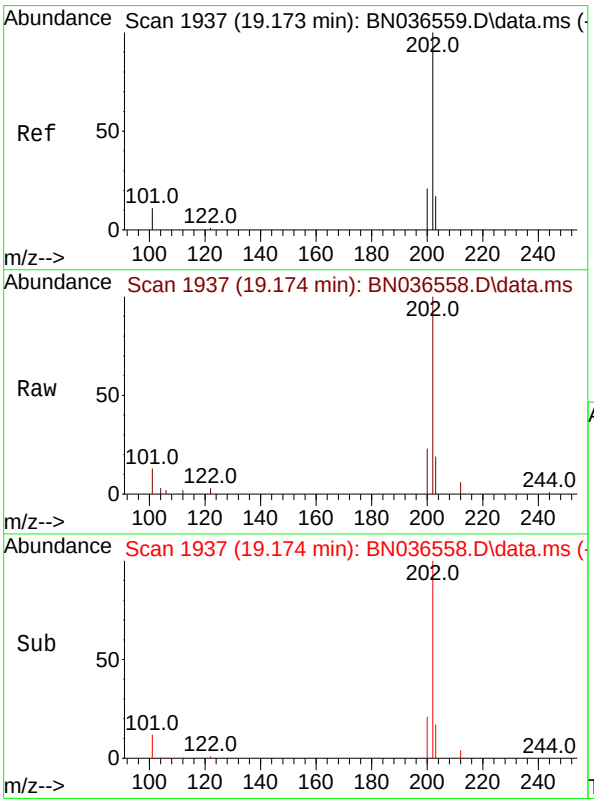
#27
Fluoranthene-d10
Concen: 0.186 ng
RT: 19.146 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:212 Resp: 3583

Ion	Ratio	Lower	Upper
212	100		
106	15.0	11.8	17.6
104	9.3	7.3	10.9

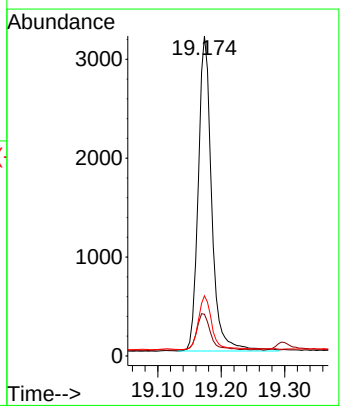


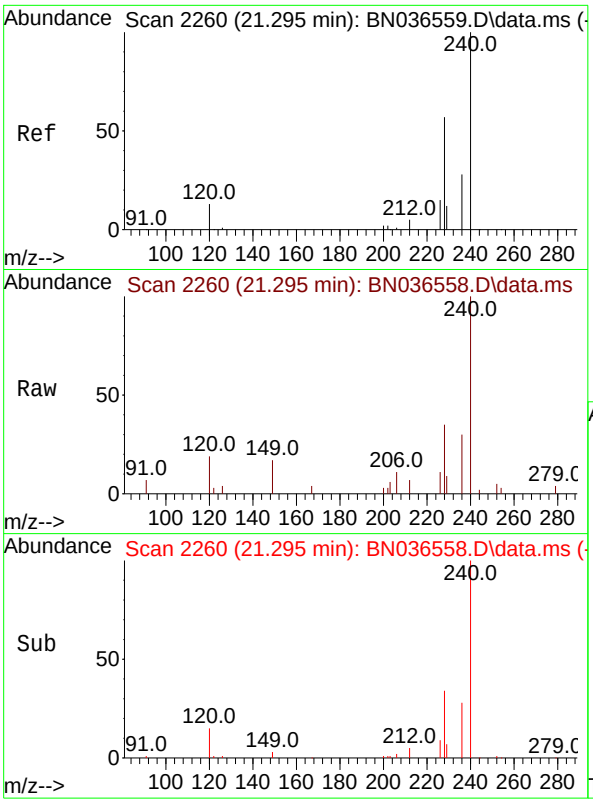


#28
Fluoranthene
Concen: 0.184 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4666

Ion	Ratio	Lower	Upper
202	100		
101	12.1	9.4	14.0
203	17.1	13.5	20.3



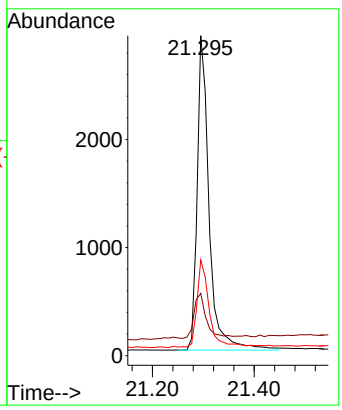


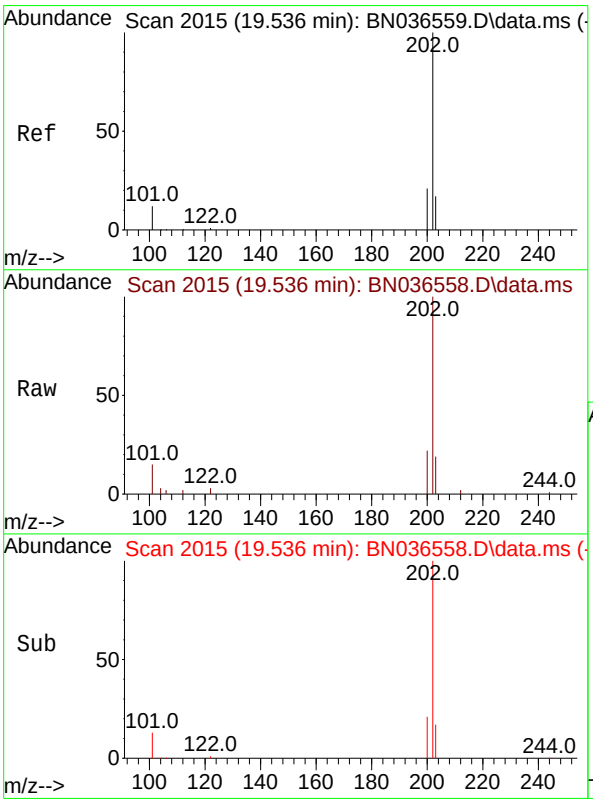
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:240 Resp: 4730

Ion	Ratio	Lower	Upper
240	100		
120	19.5	14.6	22.0
236	29.9	24.1	36.1

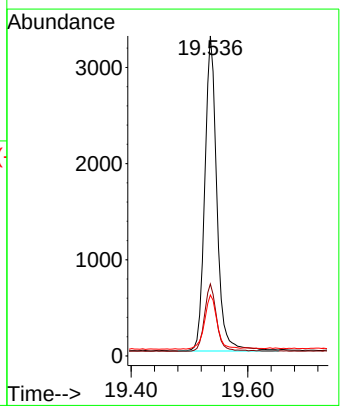


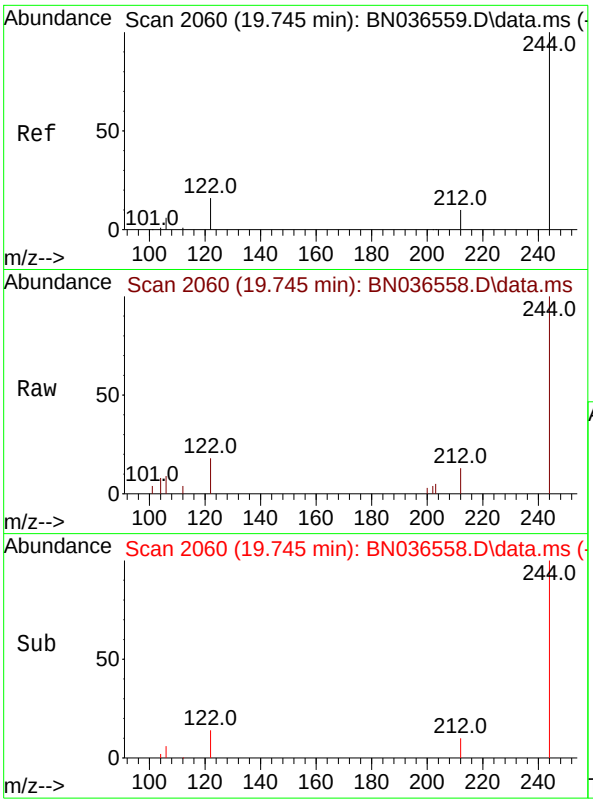


#30
Pyrene
Concen: 0.205 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4742

Ion	Ratio	Lower	Upper
202	100		
200	21.1	17.1	25.7
203	17.7	14.1	21.1



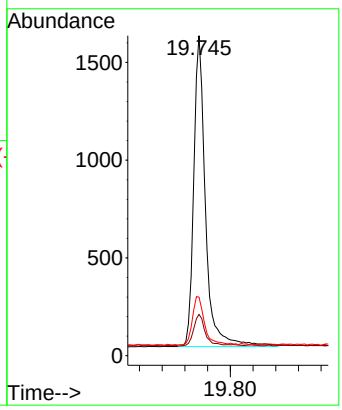


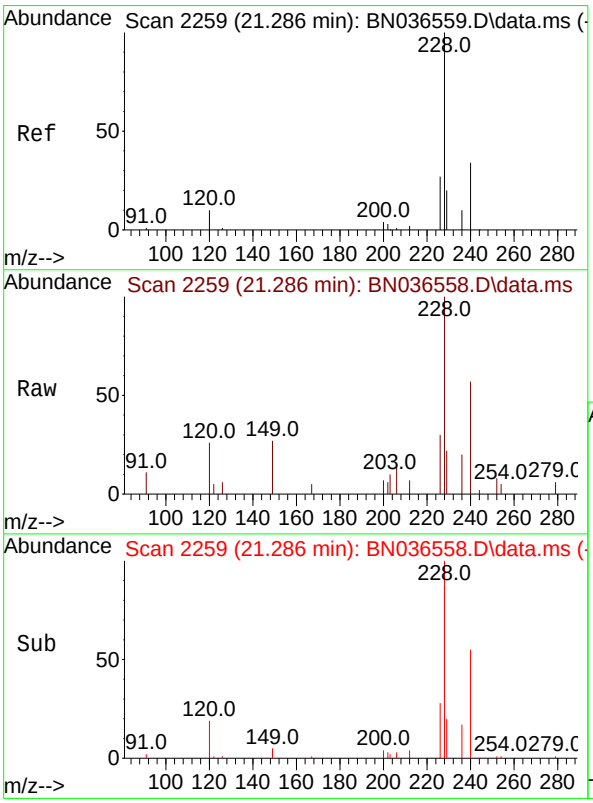
#31
Terphenyl-d14
Concen: 0.201 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:244 Resp: 2283

Ion	Ratio	Lower	Upper
244	100		
212	12.9	9.6	14.4
122	18.3	13.9	20.9

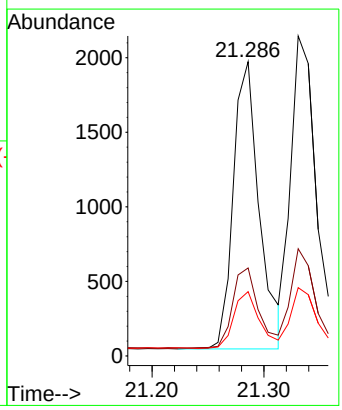


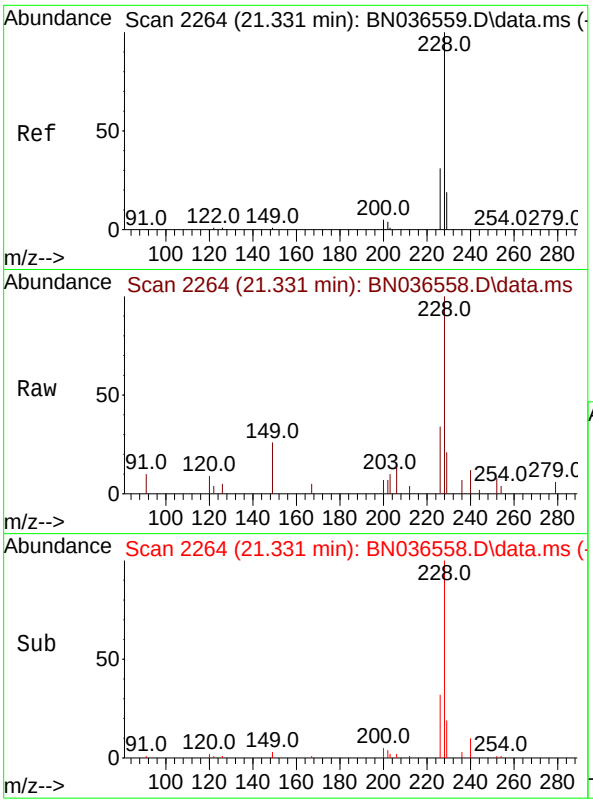


#32
Benzo(a)anthracene
Concen: 0.189 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:228 Resp: 3111

Ion	Ratio	Lower	Upper
228	100		
226	29.9	22.5	33.7
229	21.9	16.6	25.0



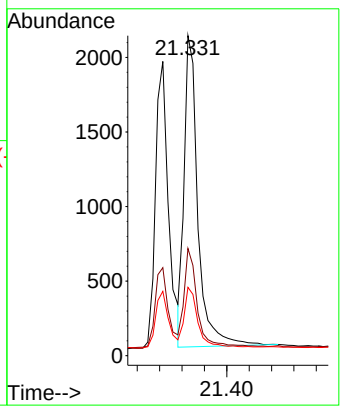


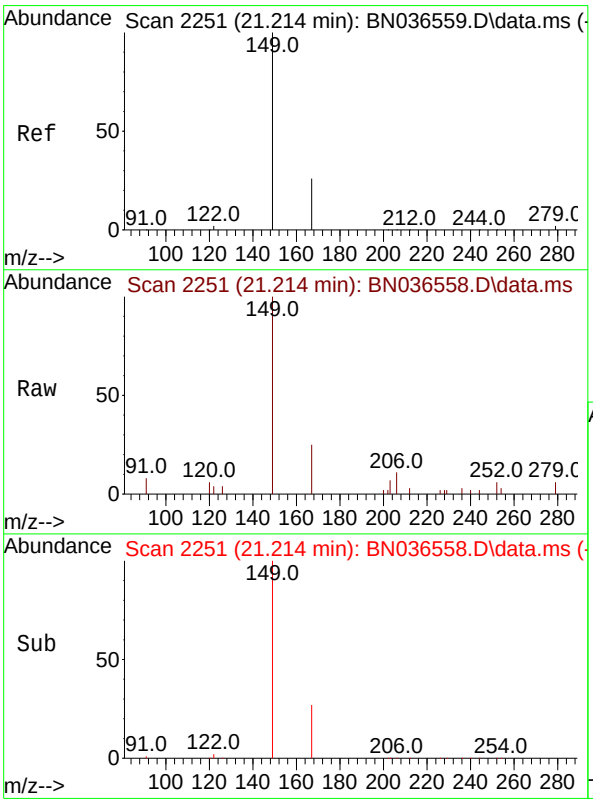
#33
Chrysene
Concen: 0.199 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:228 Resp: 3568

Ion	Ratio	Lower	Upper
228	100		
226	33.5	25.3	37.9
229	21.4	15.8	23.8

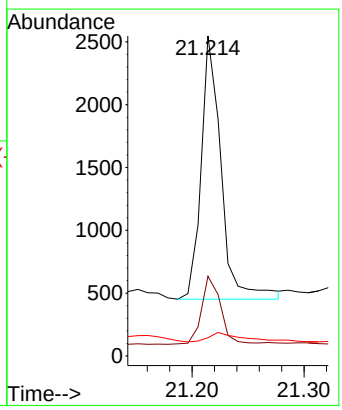


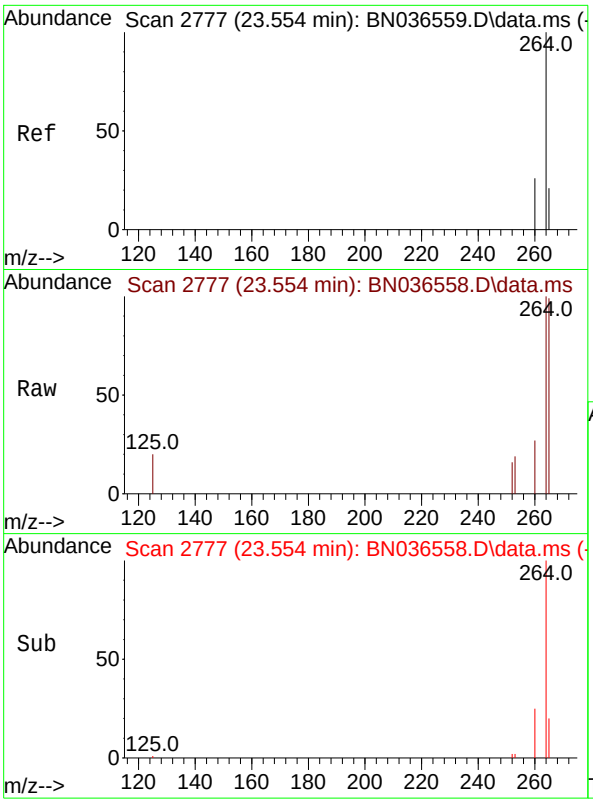


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.222 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:149 Resp: 2601

Ion	Ratio	Lower	Upper
149	100		
167	24.7	20.7	31.1
279	5.7	3.6	5.4#



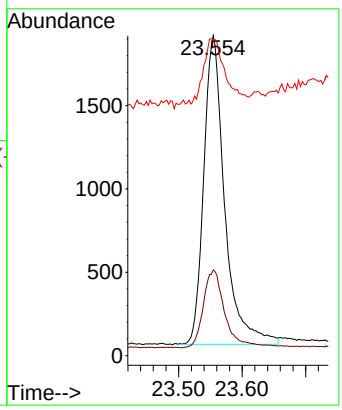


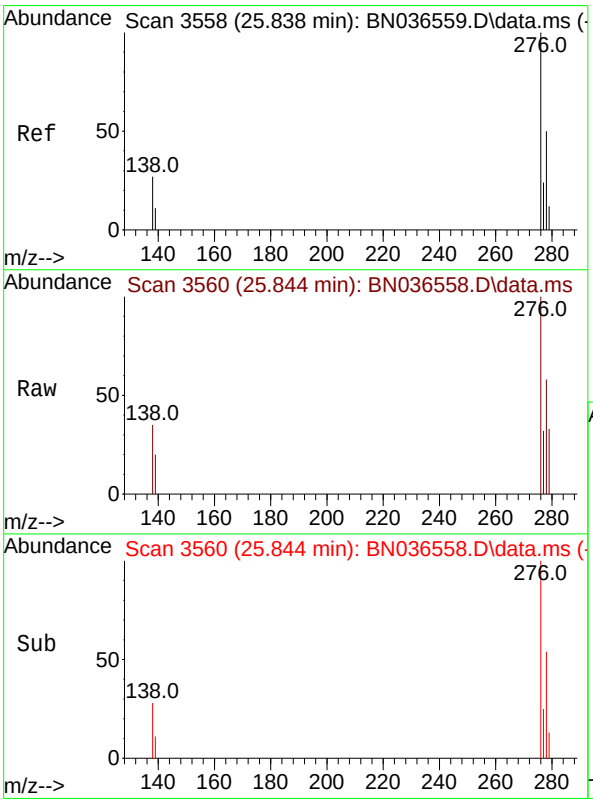
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:264 Resp: 4241

Ion	Ratio	Lower	Upper
264	100		
260	26.8	22.6	33.8
265	98.5	88.1	132.1

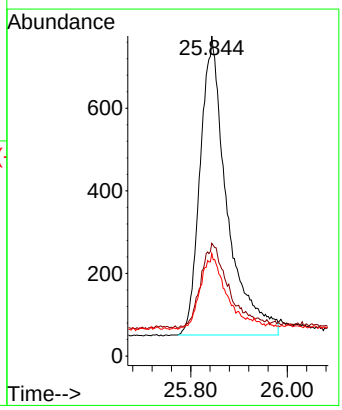


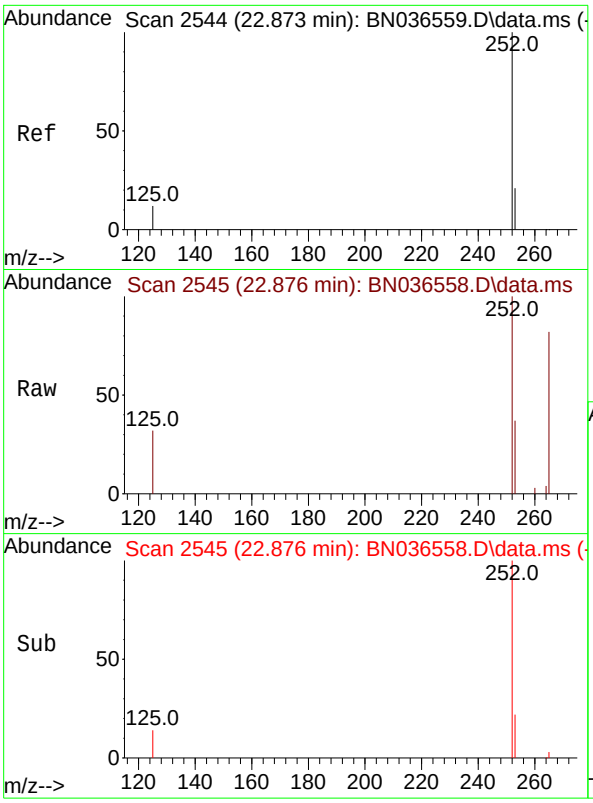


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.182 ng
RT: 25.844 min Scan# 3560
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 2790

Ion	Ratio	Lower	Upper
276	100		
138	29.1	23.4	35.2
277	23.4	20.0	30.0



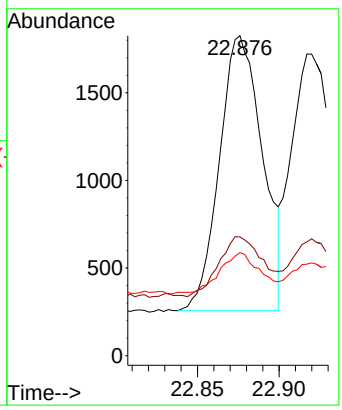


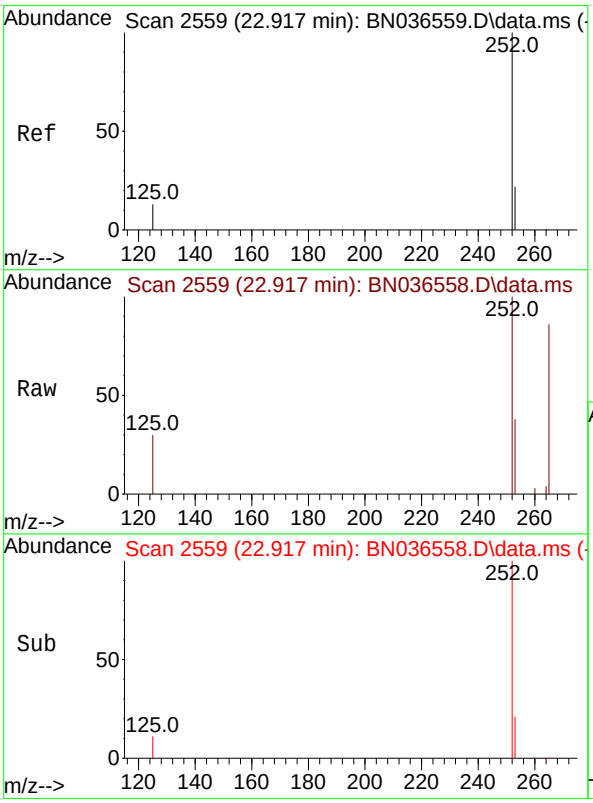
#37
Benzo(b)fluoranthene
Concen: 0.187 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 2883

Ion	Ratio	Lower	Upper
252	100		
253	37.1	23.9	35.9#
125	32.2	17.4	26.2#

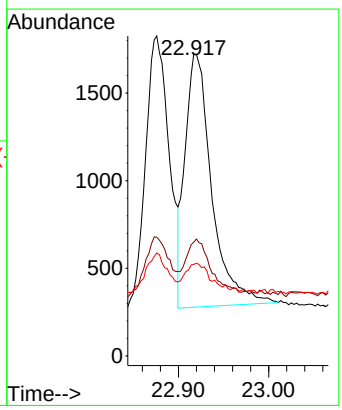


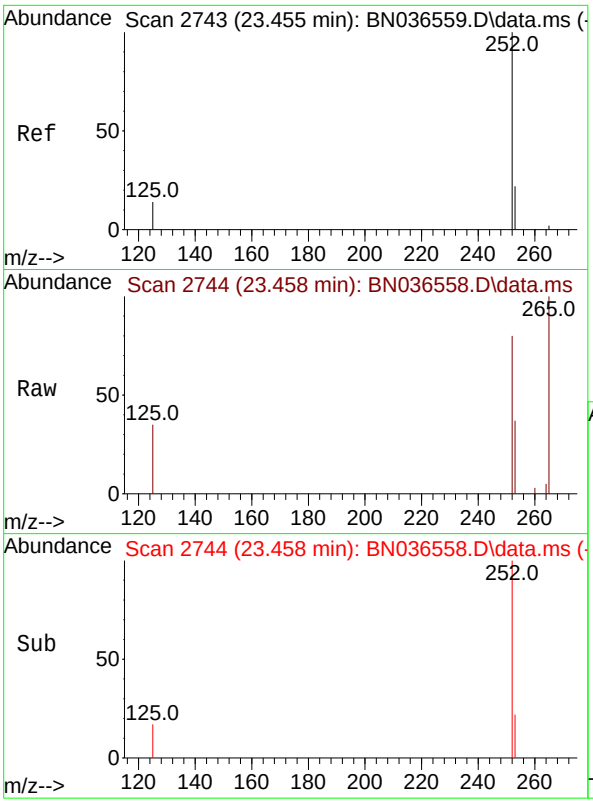


#38
Benzo(k)fluoranthene
Concen: 0.183 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:252 Resp: 2962

Ion	Ratio	Lower	Upper
252	100		
253	37.7	24.6	36.8#
125	30.3	17.8	26.8#



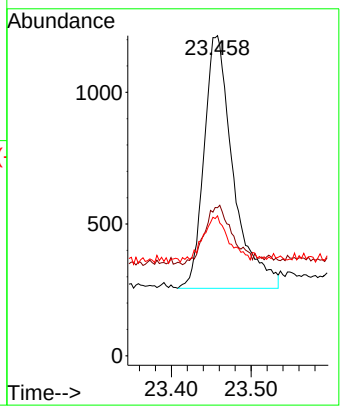


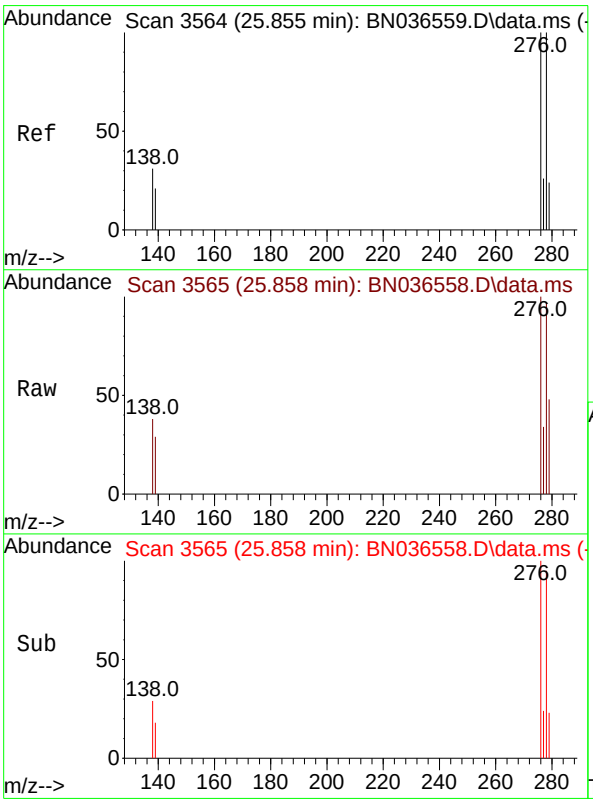
#39
Benzo(a)pyrene
Concen: 0.188 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 2443

Ion	Ratio	Lower	Upper
252	100		
253	46.3	27.8	41.8#
125	43.7	22.7	34.1#

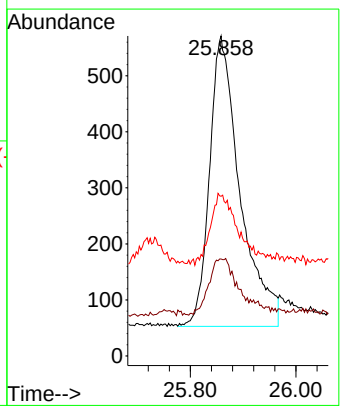


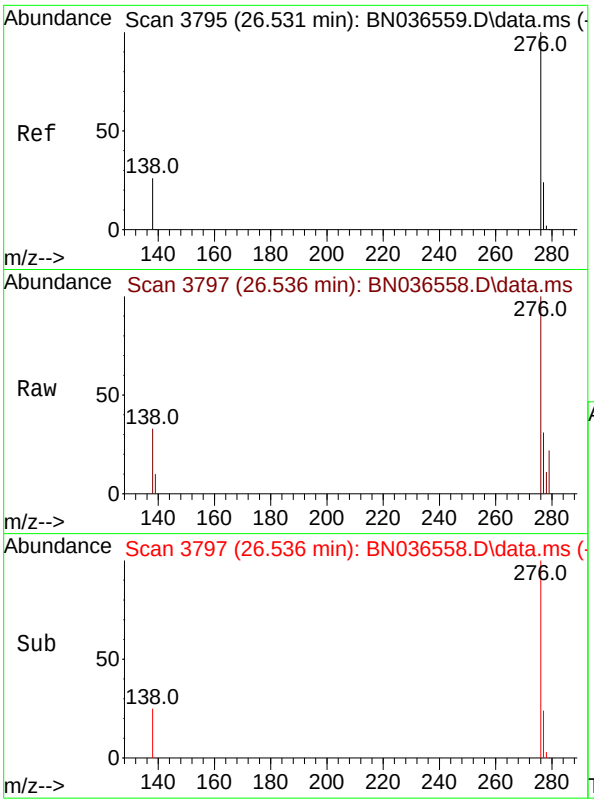


#40
Dibenzo(a,h)anthracene
Concen: 0.175 ng
RT: 25.858 min Scan# 3565
Delta R.T. 0.003 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Tgt Ion:278 Resp: 2080

Ion	Ratio	Lower	Upper
278	100		
139	30.3	20.8	31.2
279	49.9	28.8	43.2#



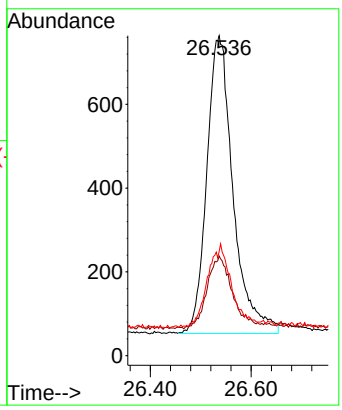


#41
Benzo(g,h,i)perylene
Concen: 0.189 ng
RT: 26.536 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036558.D
Acq: 10 Mar 2025 12:18

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 2573

Ion	Ratio	Lower	Upper
276	100		
277	31.2	22.2	33.4
138	32.6	24.1	36.1



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036569.D
Acq On : 10 Mar 2025 19:38
Operator : RC/JU
Sample : Q1531-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Quant Time: Mar 11 00:52:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

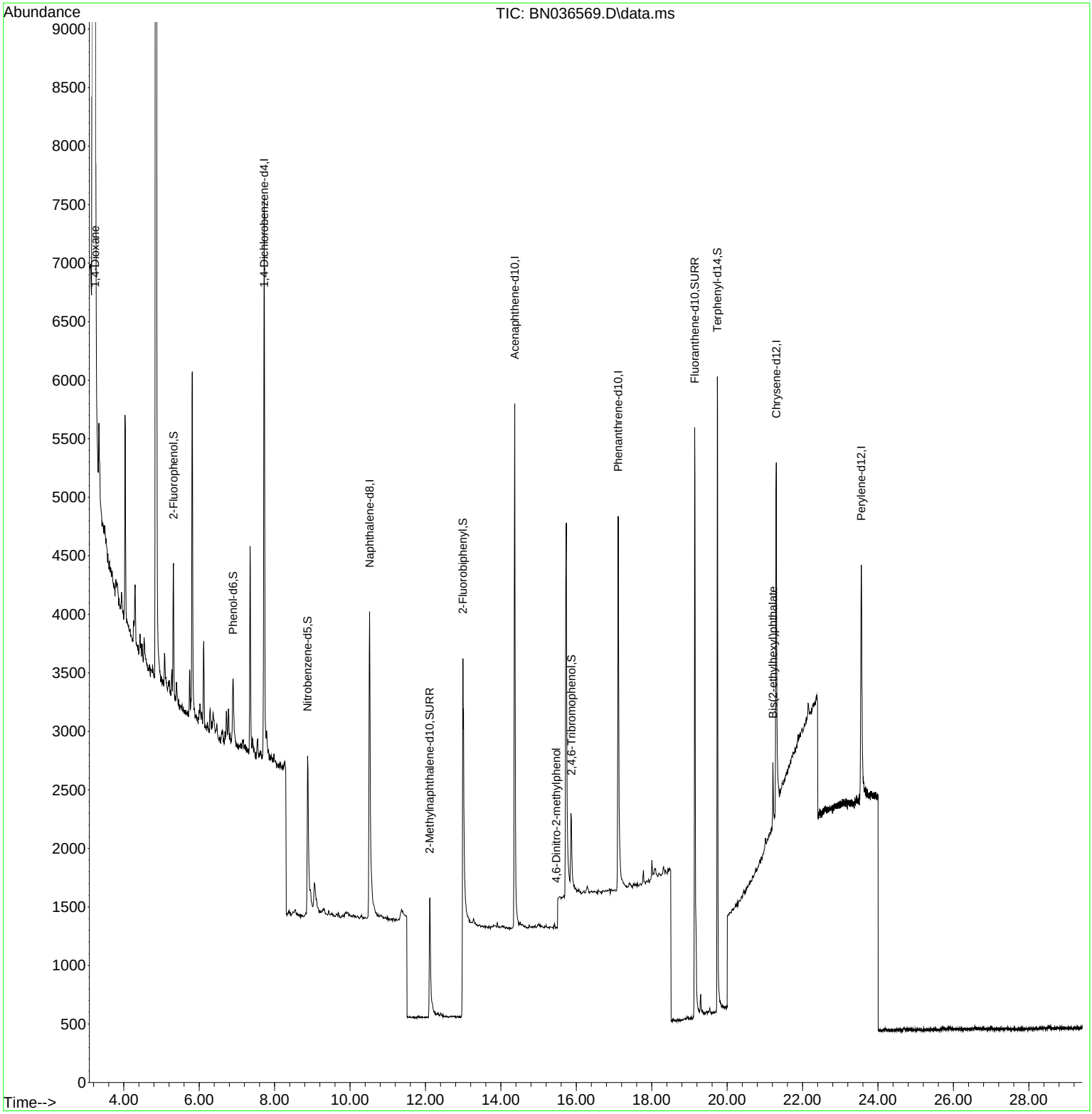
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2291	0.400	ng	0.00
7) Naphthalene-d8	10.519	136	4880	0.400	ng	0.01
13) Acenaphthene-d10	14.366	164	2910	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5566	0.400	ng	# 0.00
29) Chrysene-d12	21.304	240	3909	0.400	ng	0.00
35) Perylene-d12	23.557	264	3415	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	829	0.155	ng	0.00
5) Phenol-d6	6.901	99	554	0.084	ng	0.00
8) Nitrobenzene-d5	8.875	82	1737	0.327	ng	0.00
11) 2-Methylnaphthalene-d10	12.116	152	2265	0.312	ng	0.00
14) 2,4,6-Tribromophenol	15.870	330	500	0.379	ng	0.01
15) 2-Fluorobiphenyl	12.993	172	5235	0.309	ng	0.00
27) Fluoranthene-d10	19.141	212	6371	0.447	ng	0.00
31) Terphenyl-d14	19.740	244	5588	0.597	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	9449	3.718	ng	98
20) 4,6-Dinitro-2-methylph...	15.467	198	1	0.146	ng	# 1
34) Bis(2-ethylhexyl)phtha...	21.214	149	522	0.054	ng	99

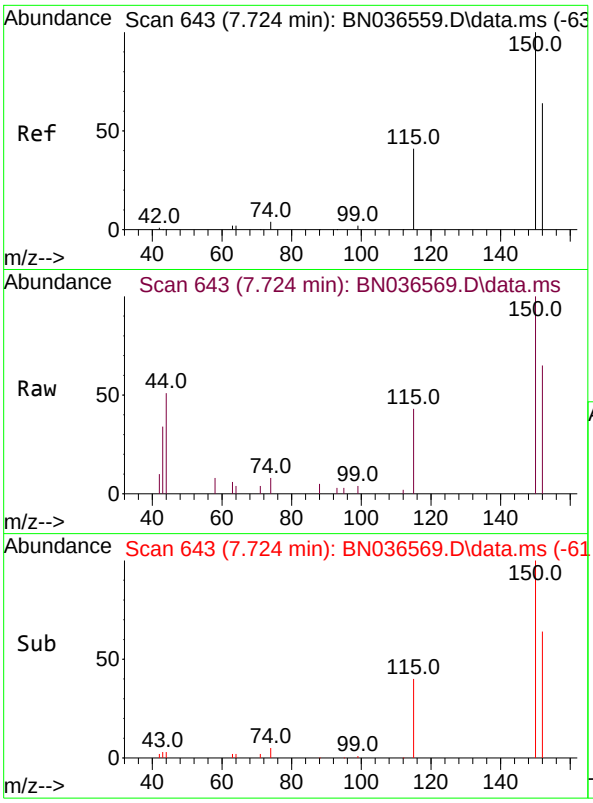
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036569.D
Acq On : 10 Mar 2025 19:38
Operator : RC/JU
Sample : Q1531-06
Misc :
ALS Vial : 14 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Quant Time: Mar 11 00:52:53 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



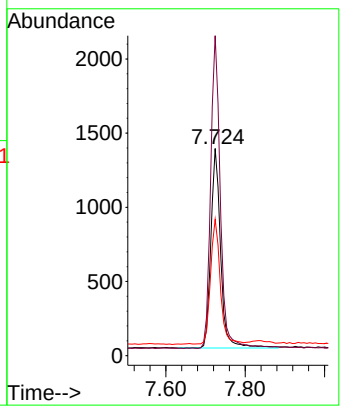


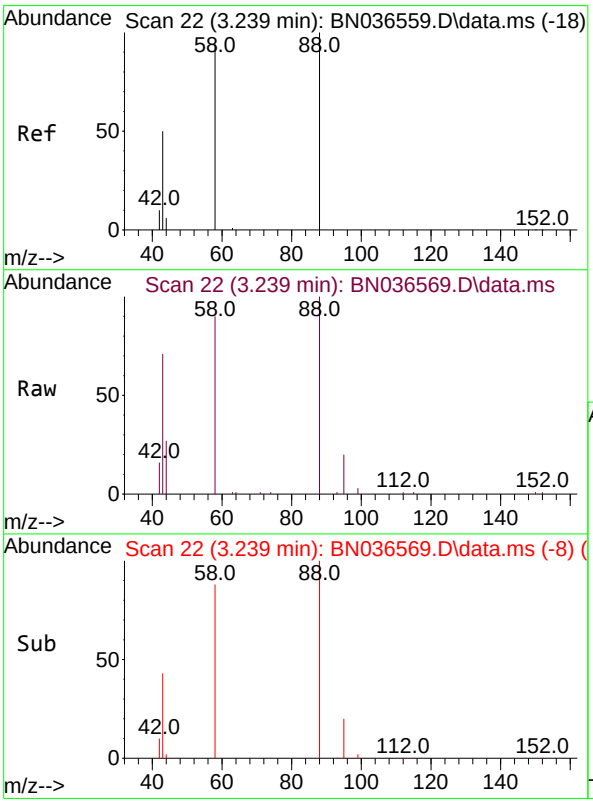
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:152 Resp: 2291

Ion	Ratio	Lower	Upper
152	100		
150	154.4	123.7	185.5
115	65.8	54.3	81.5

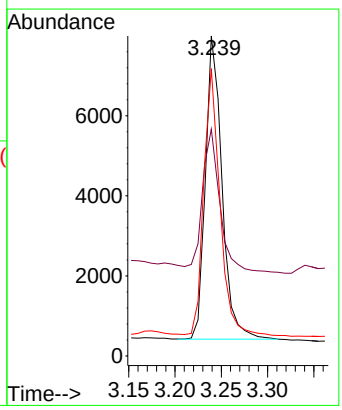


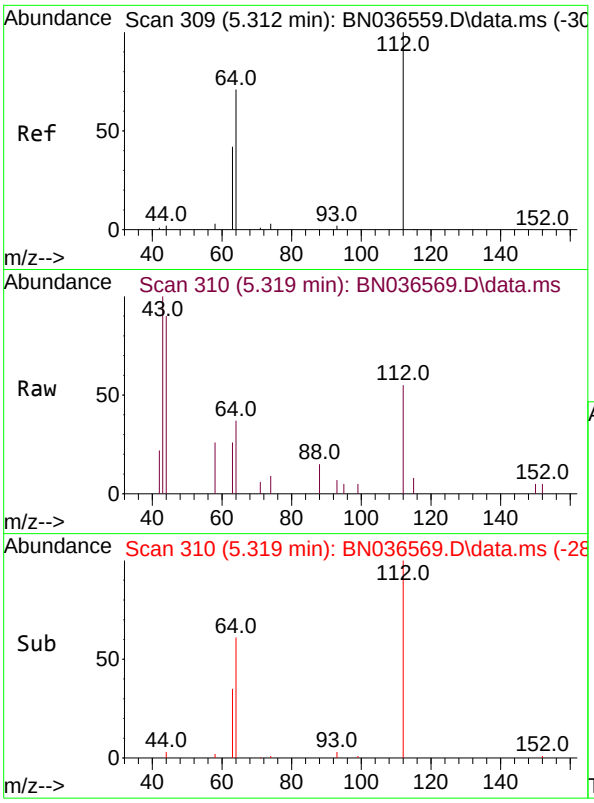


#2
1,4-Dioxane
Concen: 3.718 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion: 88 Resp: 9449

Ion	Ratio	Lower	Upper
88	100		
43	49.4	37.8	56.8
58	85.7	67.4	101.2



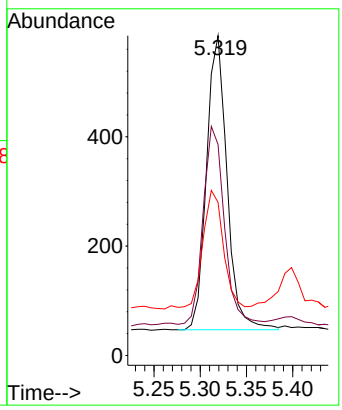


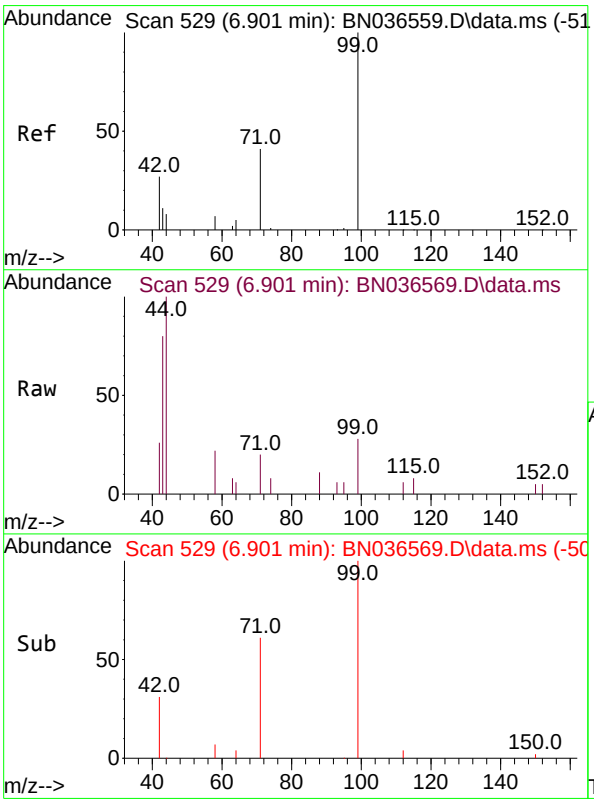
#4
2-Fluorophenol
Concen: 0.155 ng
RT: 5.319 min Scan# 31
Delta R.T. 0.007 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:112 Resp: 829

Ion	Ratio	Lower	Upper
112	100		
64	70.3	53.1	79.7
63	41.5	31.8	47.8

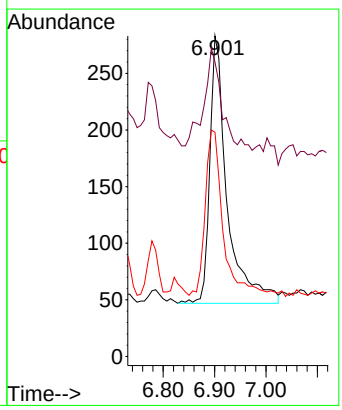


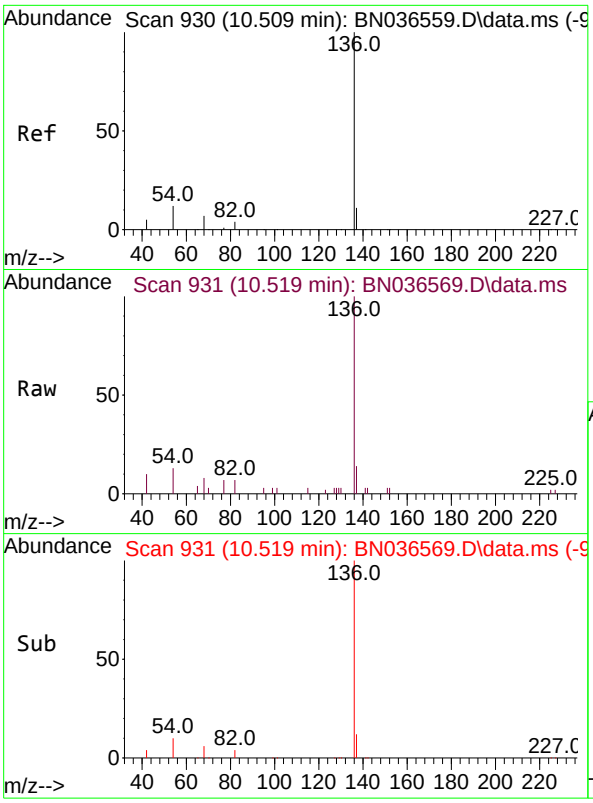


#5
Phenol-d6
Concen: 0.084 ng
RT: 6.901 min Scan# 529
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion: 99 Resp: 554

Ion	Ratio	Lower	Upper
99	100		
42	34.3	26.5	39.7
71	65.5	34.1	51.1#



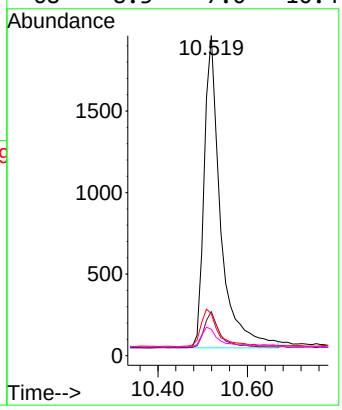


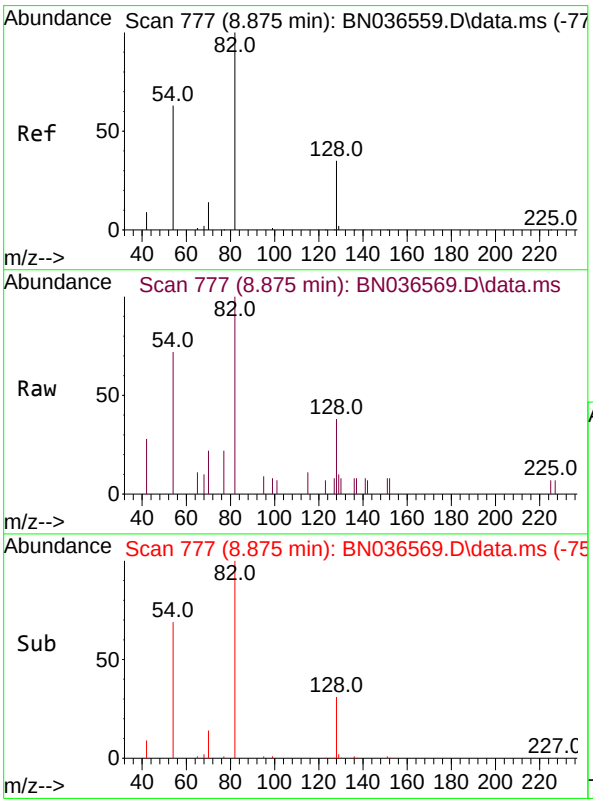
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.519 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:136 Resp: 4880

Ion	Ratio	Lower	Upper
136	100		
137	13.8	10.3	15.5
54	13.1	11.5	17.3
68	8.3	7.0	10.4

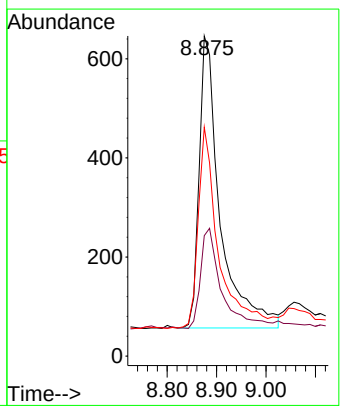


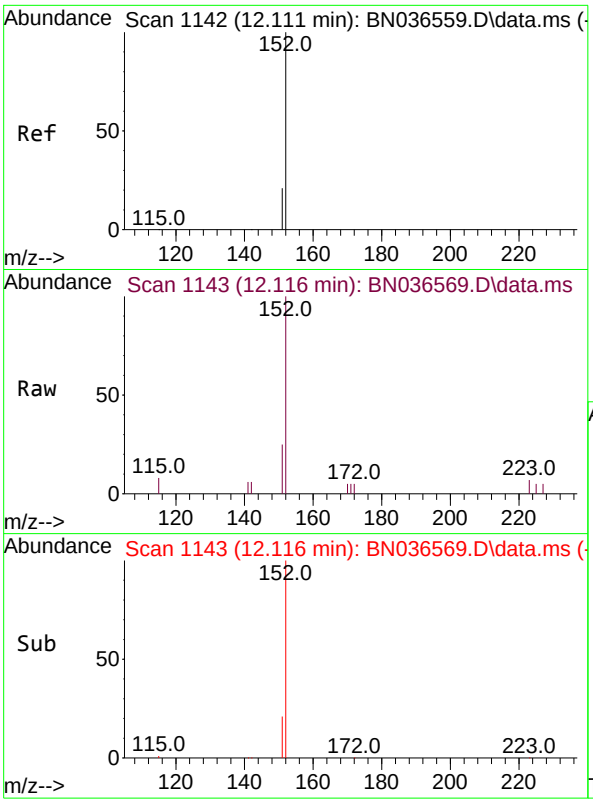


#8
Nitrobenzene-d5
Concen: 0.327 ng
RT: 8.875 min Scan# 777
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion: 82 Resp: 1737

Ion	Ratio	Lower	Upper
82	100		
128	37.6	30.6	45.8
54	71.5	52.2	78.4



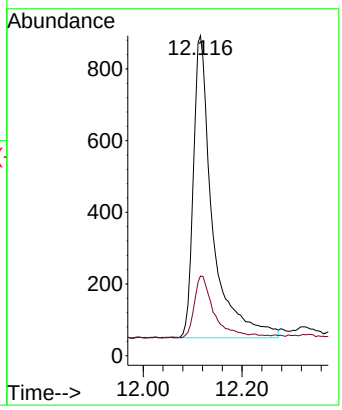


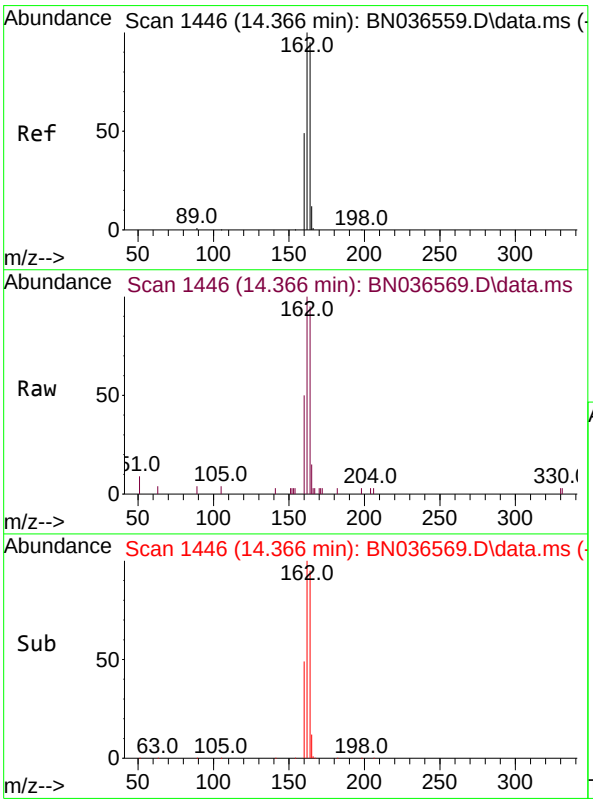
#11
2-Methylnaphthalene-d10
Concen: 0.312 ng
RT: 12.116 min Scan# 11
Delta R.T. 0.005 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:152 Resp: 2265

Ion	Ratio	Lower	Upper
152	100		
151	20.6	17.0	25.6

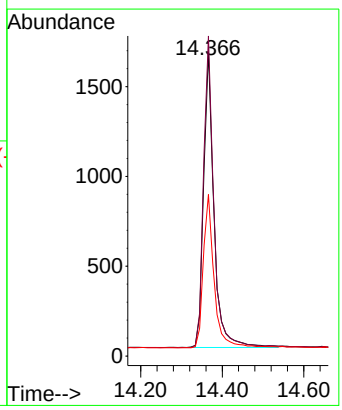


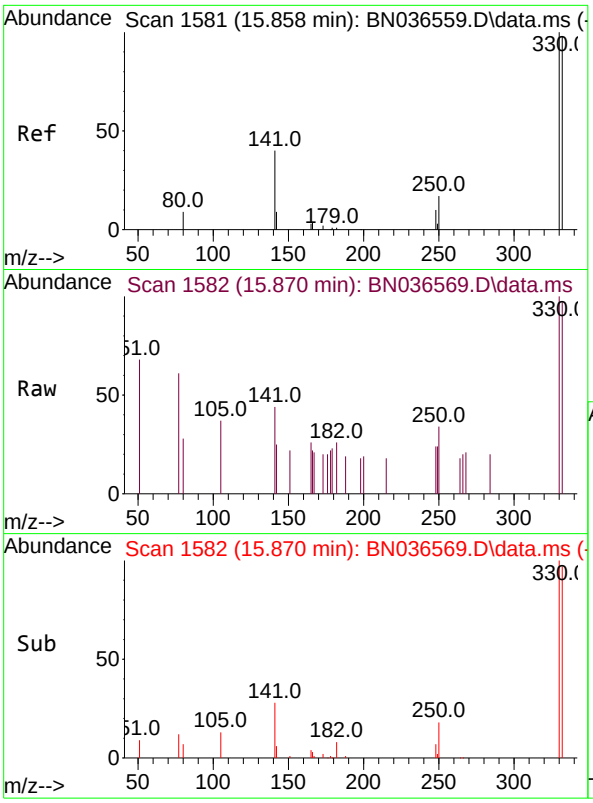


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:164 Resp: 2910

Ion	Ratio	Lower	Upper
164	100		
162	105.1	84.2	126.2
160	53.0	42.2	63.2



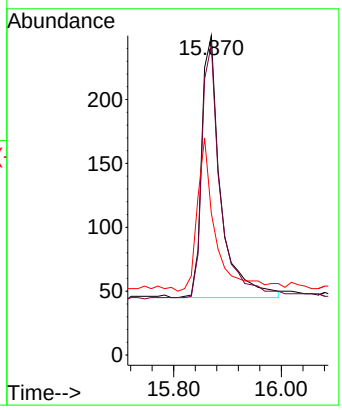


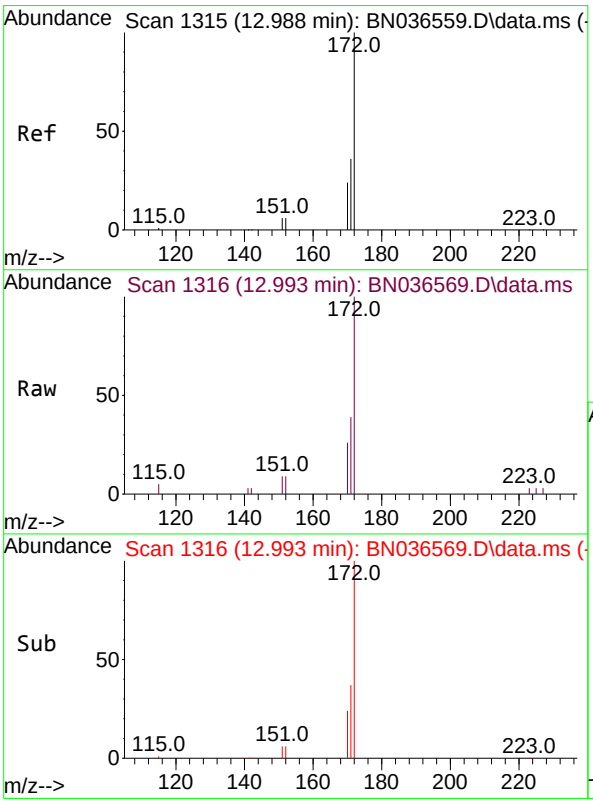
#14
2,4,6-Tribromophenol
Concen: 0.379 ng
RT: 15.870 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:330 Resp: 500

Ion	Ratio	Lower	Upper
330	100		
332	95.8	75.2	112.8
141	57.4	43.4	65.2

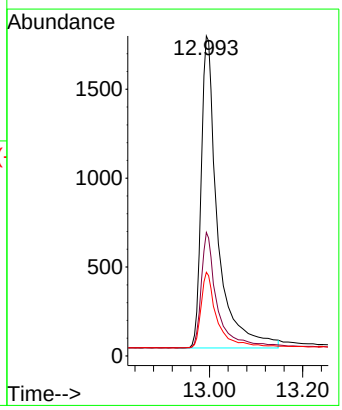


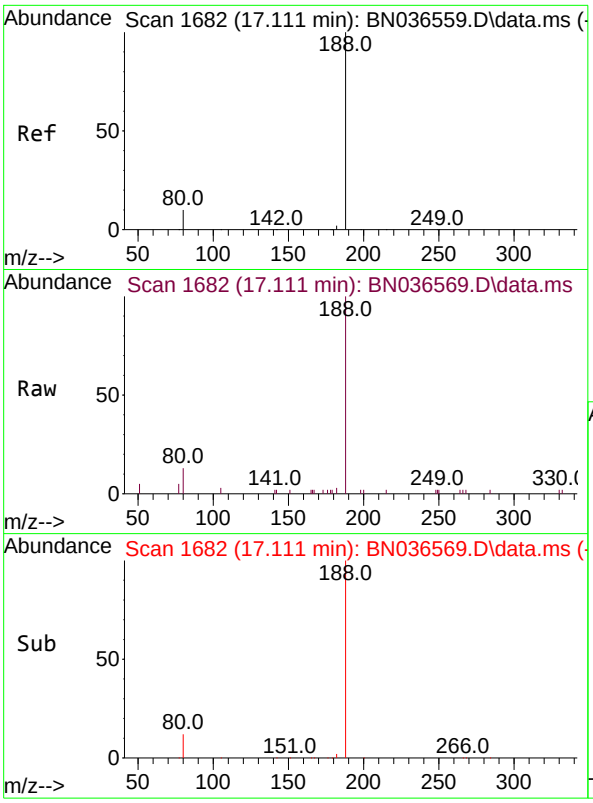


#15
2-Fluorobiphenyl
Concen: 0.309 ng
RT: 12.993 min Scan# 1316
Delta R.T. 0.005 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:172 Resp: 5235

Ion	Ratio	Lower	Upper
172	100		
171	38.6	29.5	44.3
170	26.2	20.2	30.4



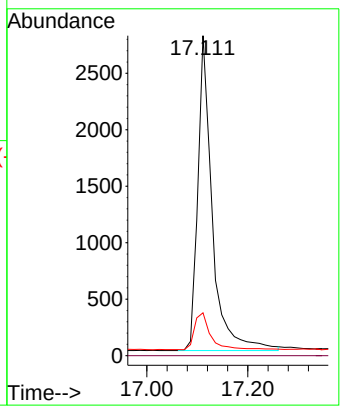


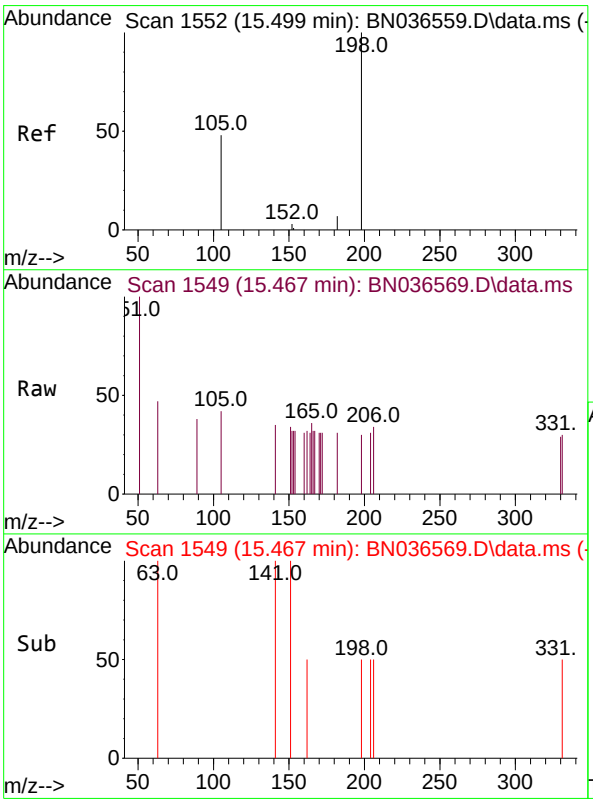
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:188 Resp: 5566

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.4	8.8	13.2#

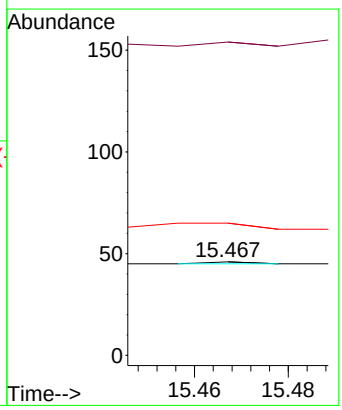


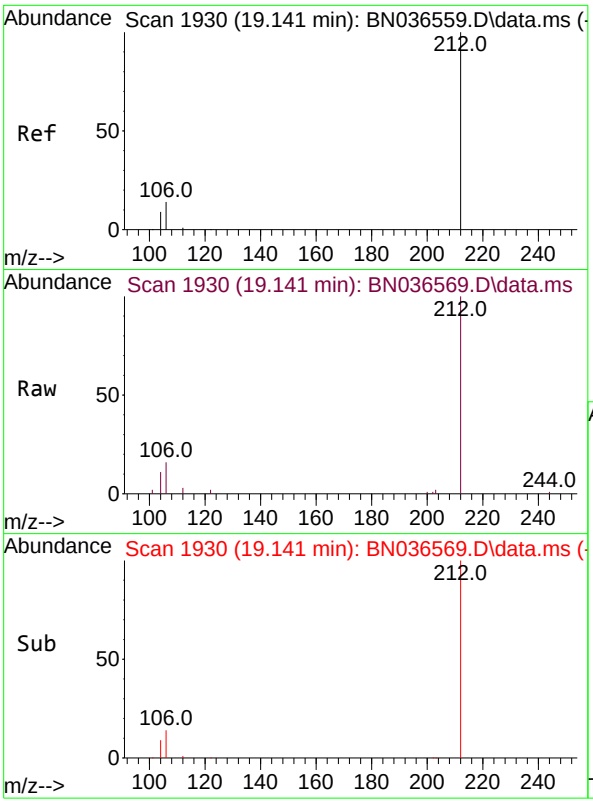


#20
4,6-Dinitro-2-methylphenol
Concen: 0.146 ng
RT: 15.467 min Scan# 1549
Delta R.T. -0.032 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:198 Resp: 1

Ion	Ratio	Lower	Upper
198	100		
51	334.8	107.9	161.9#
105	141.3	56.2	84.2#



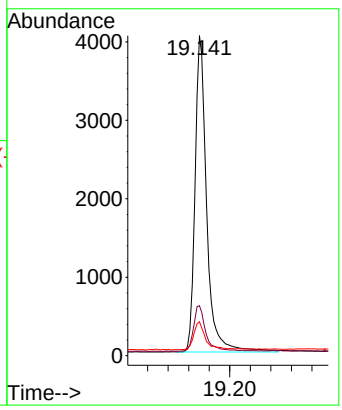


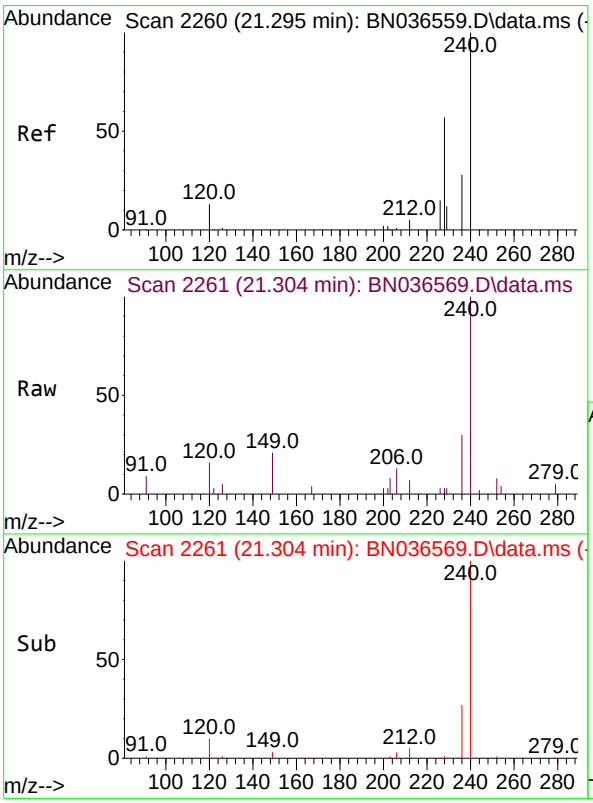
#27
Fluoranthene-d10
Concen: 0.447 ng
RT: 19.141 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:212 Resp: 6371

Ion	Ratio	Lower	Upper
212	100		
106	15.2	11.8	17.6
104	9.0	7.3	10.9

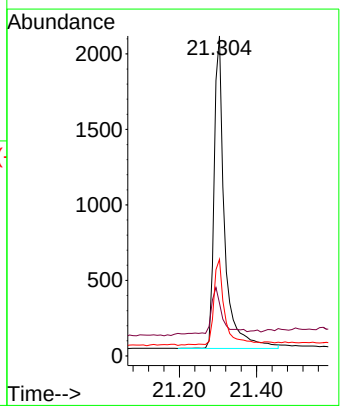


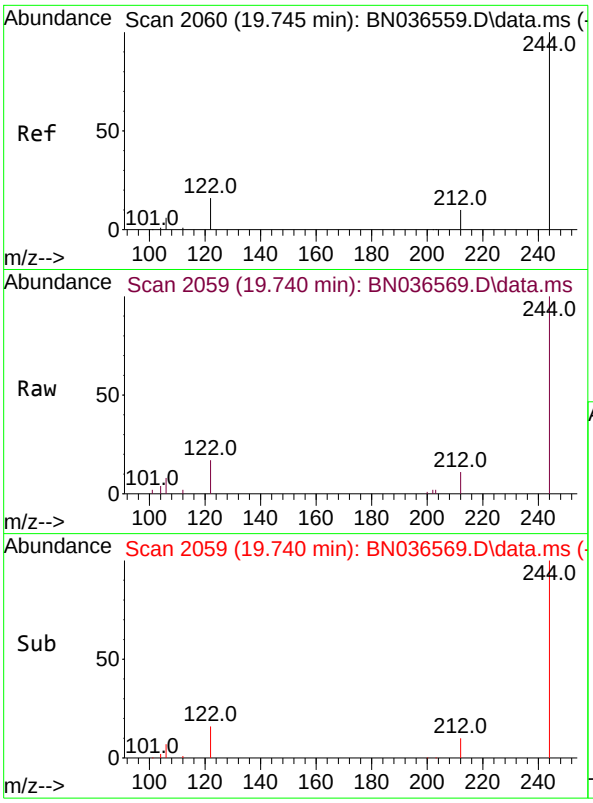


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2261
Delta R.T. 0.009 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:240 Resp: 3909

Ion	Ratio	Lower	Upper
240	100		
120	16.5	14.6	22.0
236	30.2	24.1	36.1



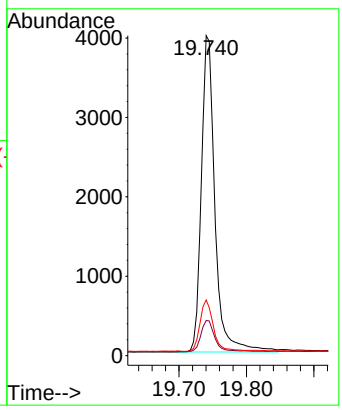


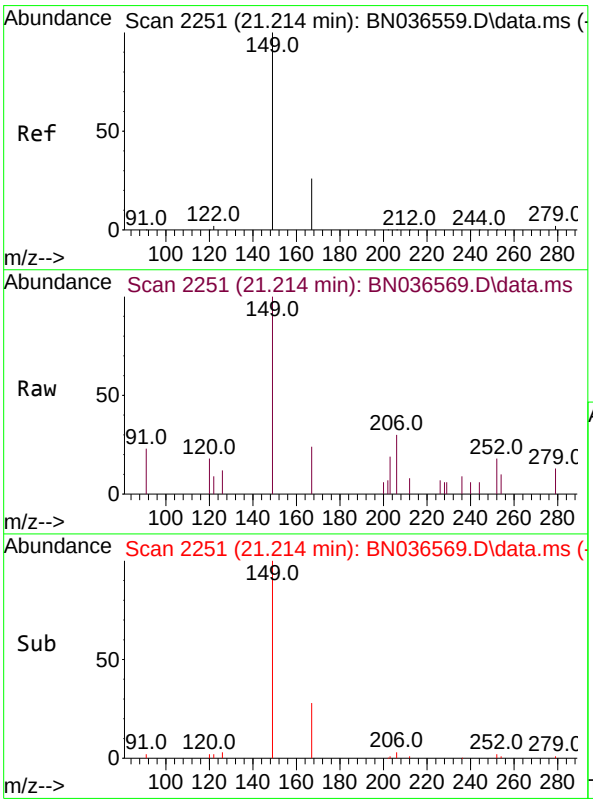
#31
Terphenyl-d14
Concen: 0.597 ng
RT: 19.740 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:244 Resp: 5588

Ion	Ratio	Lower	Upper
244	100		
212	11.0	9.6	14.4
122	17.4	13.9	20.9

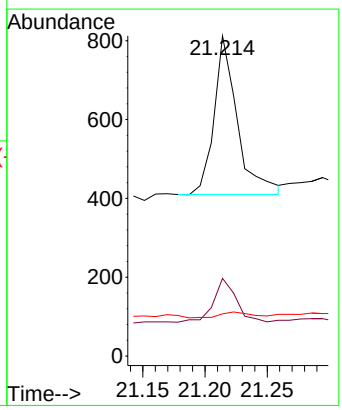


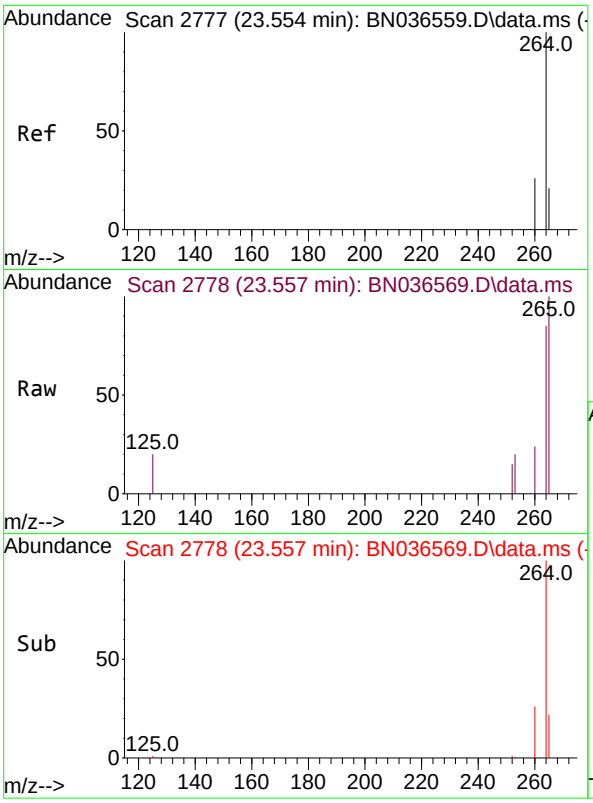


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.054 ng
RT: 21.214 min Scan# 2251
Delta R.T. -0.000 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Tgt Ion:149 Resp: 522

Ion	Ratio	Lower	Upper
149	100		
167	26.6	20.7	31.1
279	5.0	3.6	5.4



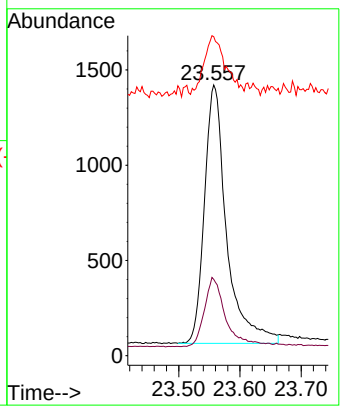


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036569.D
Acq: 10 Mar 2025 19:38

Instrument :
BNA_N
ClientSampleId :
DUP01-20250306

Tgt Ion:264 Resp: 3415

Ion	Ratio	Lower	Upper
264	100		
260	28.2	22.6	33.8
265	117.9	88.1	132.1



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036572.D
Acq On : 10 Mar 2025 21:26
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Mar 11 00:53:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

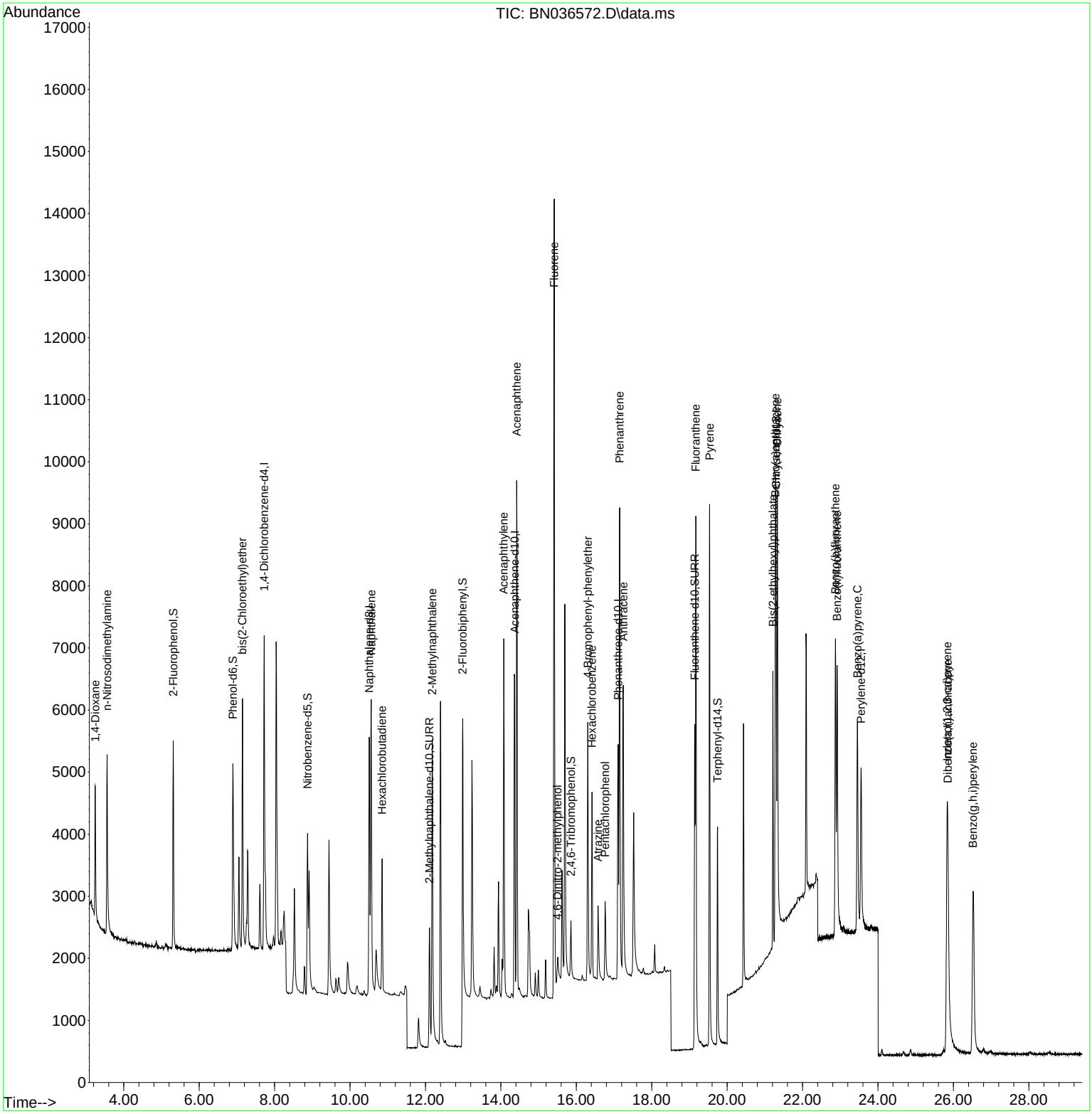
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	2507	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	5839	0.400	ng		0.00
13) Acenaphthene-d10	14.366	164	3266	0.400	ng		0.00
19) Phenanthrene-d10	17.111	188	6207	0.400	ng		0.00
29) Chrysene-d12	21.295	240	4352	0.400	ng		0.00
35) Perylene-d12	23.552	264	4016	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	2426	0.415	ng		0.00
5) Phenol-d6	6.894	99	2788	0.386	ng		0.00
8) Nitrobenzene-d5	8.875	82	2365	0.372	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	3417	0.393	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	560	0.378	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	7865	0.414	ng		0.00
27) Fluoranthene-d10	19.141	212	6646	0.418	ng		0.00
31) Terphenyl-d14	19.745	244	4195	0.402	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.247	88	1303	0.469	ng		96
3) n-Nitrosodimethylamine	3.557	42	2276	0.405	ng		94
6) bis(2-Chloroethyl)ether	7.147	93	2938	0.394	ng		99
9) Naphthalene	10.562	128	6870	0.400	ng		100
10) Hexachlorobutadiene	10.851	225	1723	0.426	ng	#	99
12) 2-Methylnaphthalene	12.182	142	4313	0.395	ng		99
16) Acenaphthylene	14.078	152	6346	0.412	ng		100
17) Acenaphthene	14.420	154	4153	0.412	ng		99
18) Fluorene	15.414	166	5592	0.410	ng		99
20) 4,6-Dinitro-2-methylph...	15.500	198	439	0.423	ng		99
21) 4-Bromophenyl-phenylether	16.305	248	1638	0.421	ng		94
22) Hexachlorobenzene	16.416	284	2099	0.447	ng		98
23) Atrazine	16.578	200	1291	0.414	ng		98
24) Pentachlorophenol	16.764	266	802	0.375	ng		100
25) Phenanthrene	17.149	178	7873	0.423	ng		99
26) Anthracene	17.248	178	6961	0.414	ng		99
28) Fluoranthene	19.169	202	8718	0.417	ng		100
30) Pyrene	19.536	202	8800	0.414	ng		100
32) Benzo(a)anthracene	21.277	228	5953	0.393	ng		98
33) Chrysene	21.331	228	7391	0.447	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	3997	0.371	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	6596	0.455	ng		98
37) Benzo(b)fluoranthene	22.873	252	6161	0.422	ng		98
38) Benzo(k)fluoranthene	22.917	252	6498	0.424	ng		97
39) Benzo(a)pyrene	23.455	252	5508	0.448	ng		97
40) Dibenzo(a,h)anthracene	25.852	278	5154	0.457	ng		95
41) Benzo(g,h,i)perylene	26.522	276	5982	0.463	ng		98

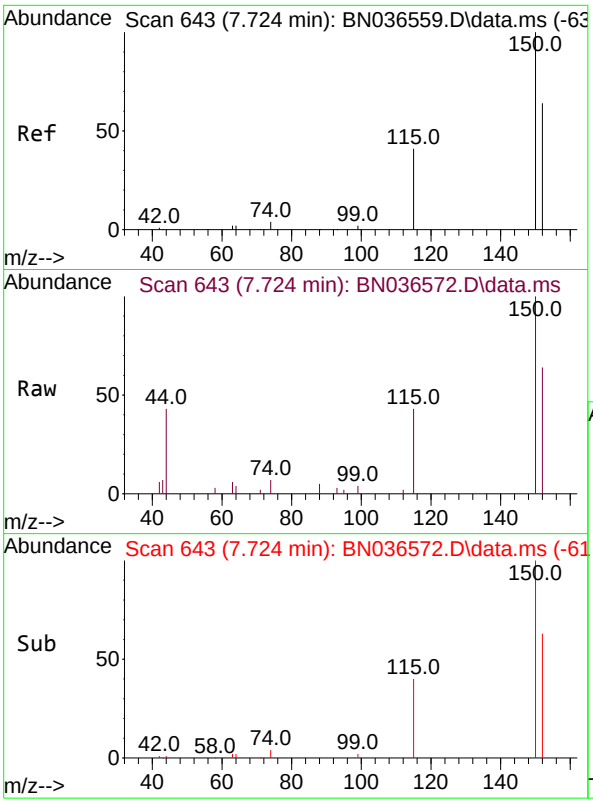
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031025\
Data File : BN036572.D
Acq On : 10 Mar 2025 21:26
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Mar 11 00:53:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



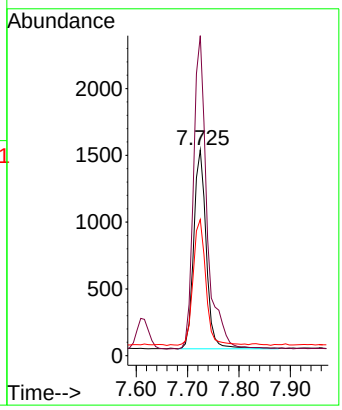


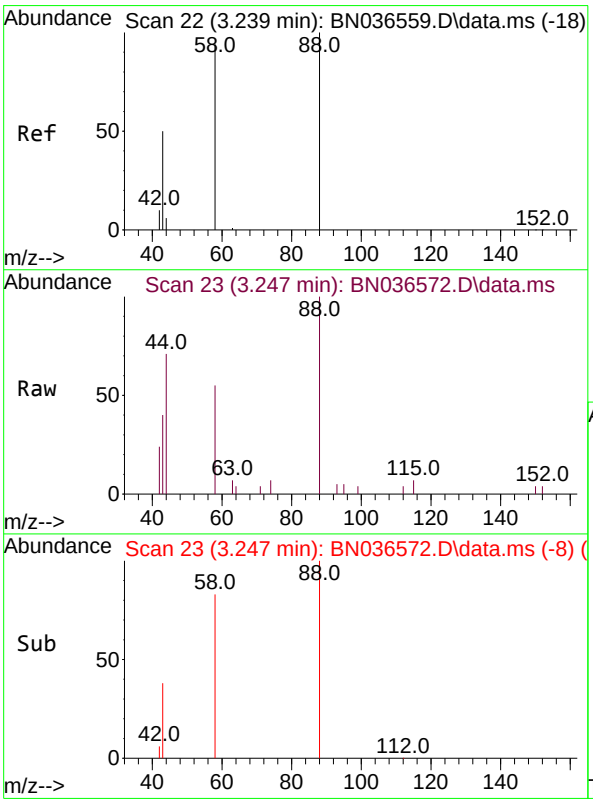
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2507

Ion	Ratio	Lower	Upper
152	100		
150	155.5	123.7	185.5
115	66.2	54.3	81.5

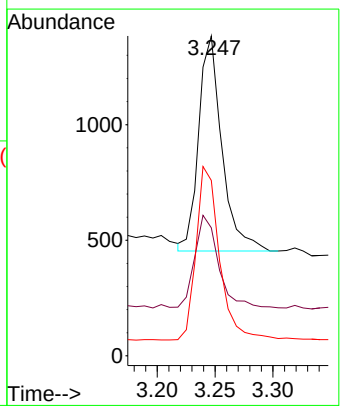


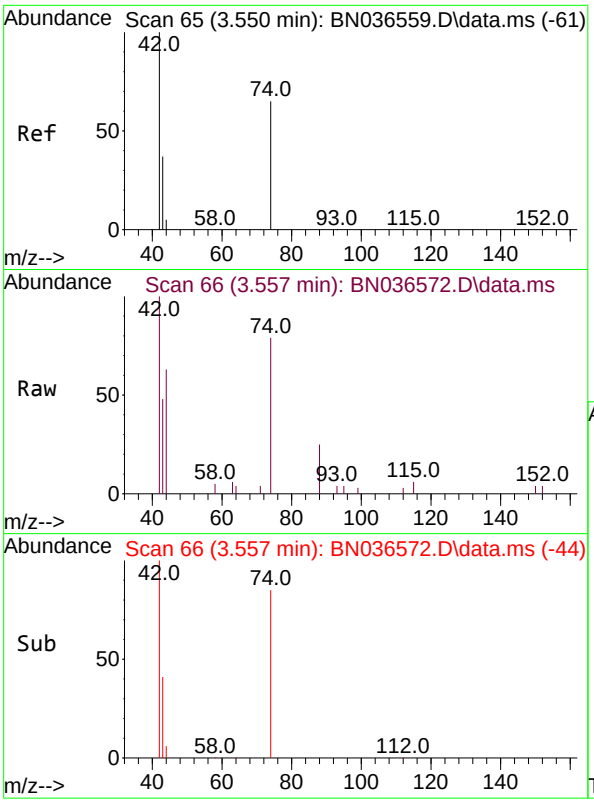


#2
1,4-Dioxane
Concen: 0.469 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 88 Resp: 1303

Ion	Ratio	Lower	Upper
88	100		
43	44.7	37.8	56.8
58	81.1	67.4	101.2



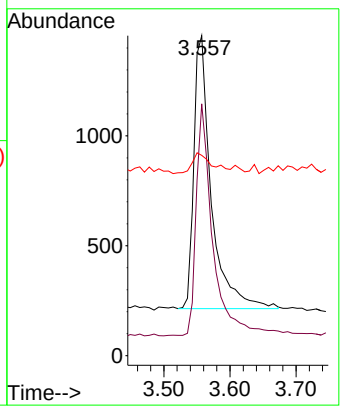


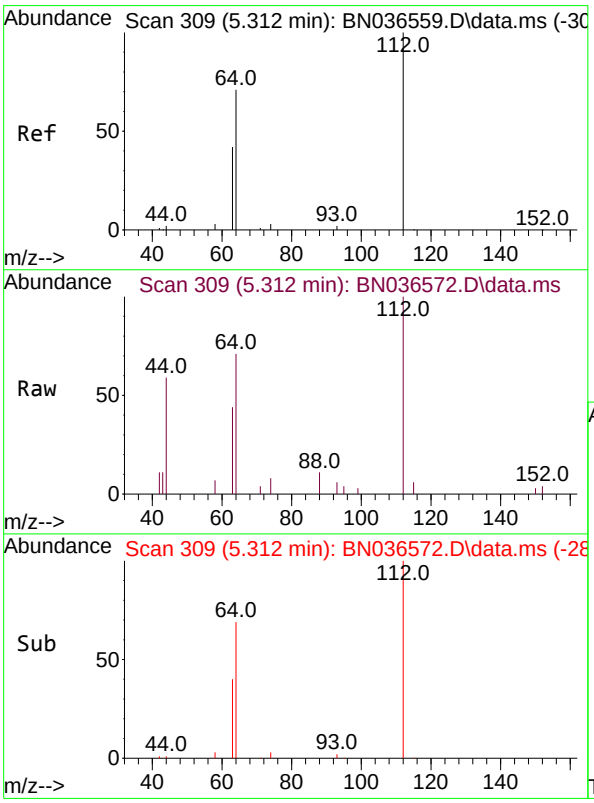
#3
n-Nitrosodimethylamine
Concen: 0.405 ng
RT: 3.557 min Scan# 6
Delta R.T. 0.007 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 2276

Ion	Ratio	Lower	Upper
42	100		
74	81.4	60.6	90.8
44	8.8	6.3	9.5

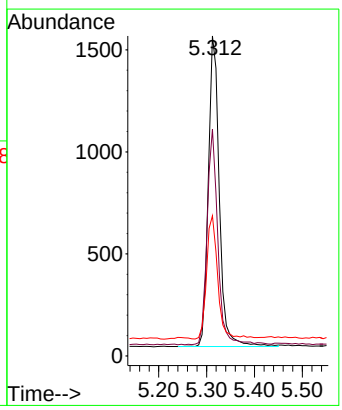


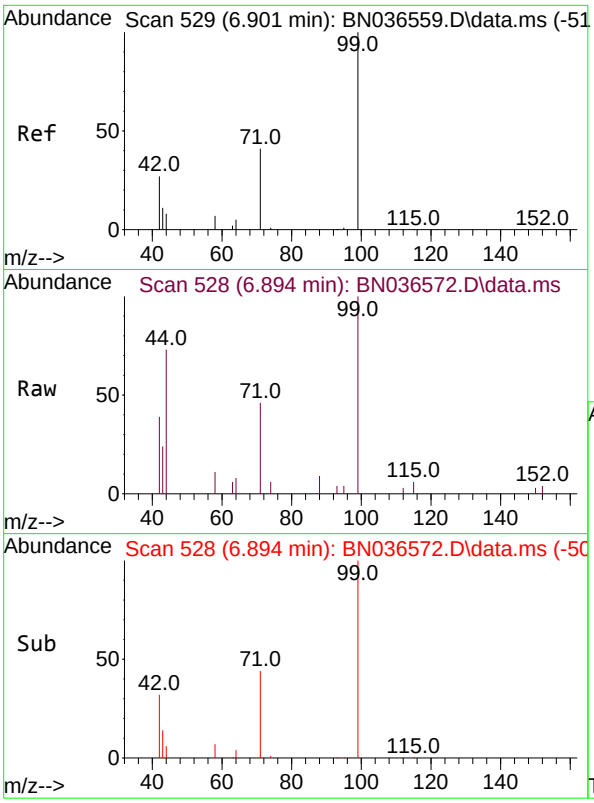


#4
2-Fluorophenol
Concen: 0.415 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:112 Resp: 2426

Ion	Ratio	Lower	Upper
112	100		
64	68.0	53.1	79.7
63	39.7	31.8	47.8



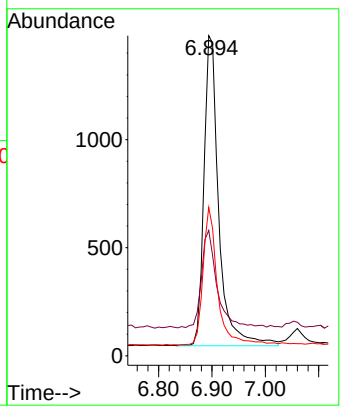


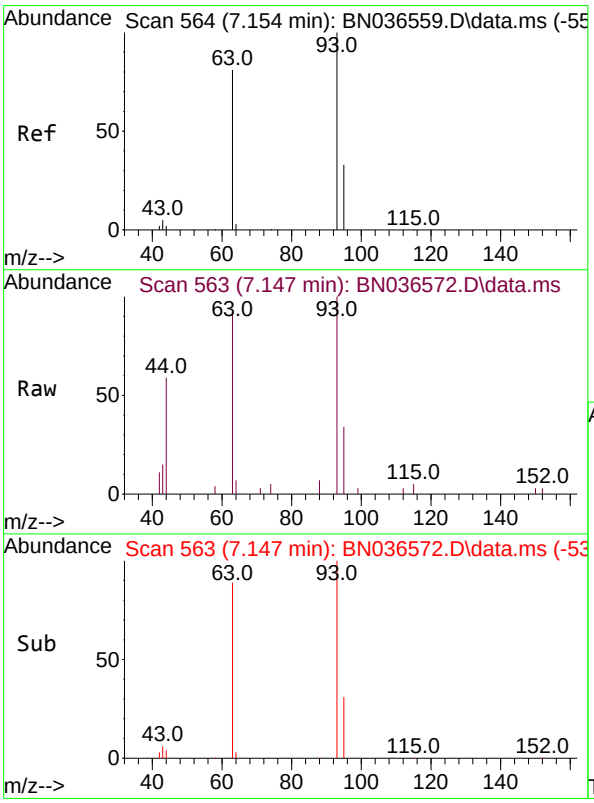
#5
Phenol-d6
Concen: 0.386 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 2788

Ion	Ratio	Lower	Upper
99	100		
42	33.0	26.5	39.7
71	42.7	34.1	51.1

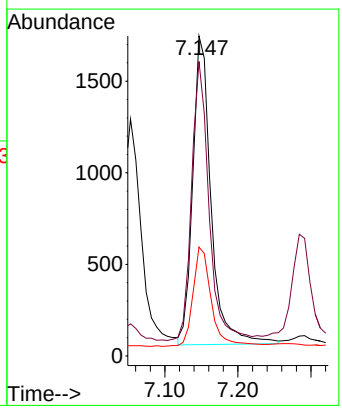


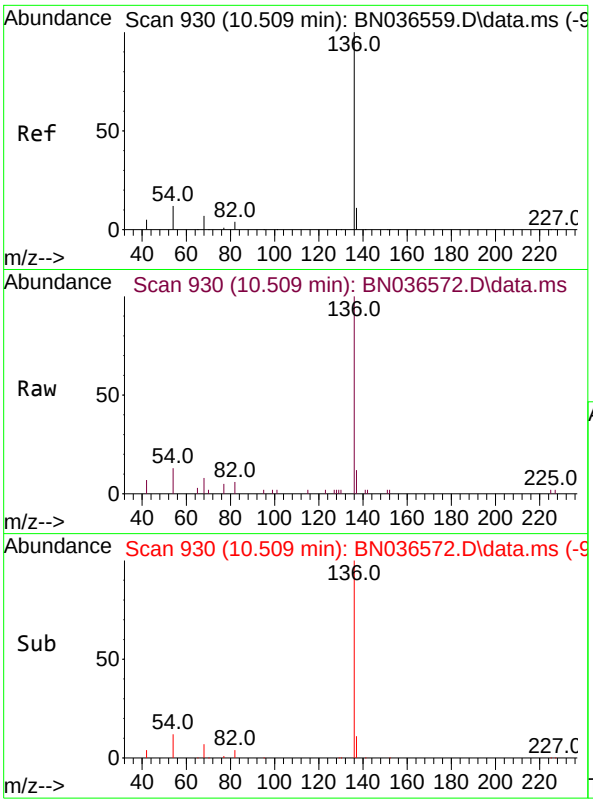


#6
bis(2-Chloroethyl)ether
Concen: 0.394 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 93 Resp: 2938

Ion	Ratio	Lower	Upper
93	100		
63	85.4	67.7	101.5
95	32.1	25.6	38.4



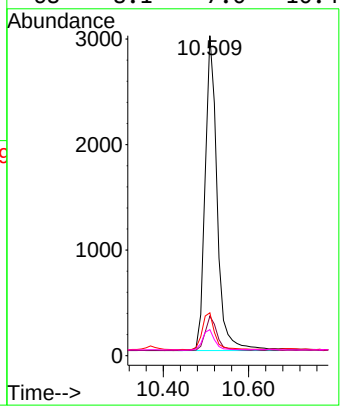


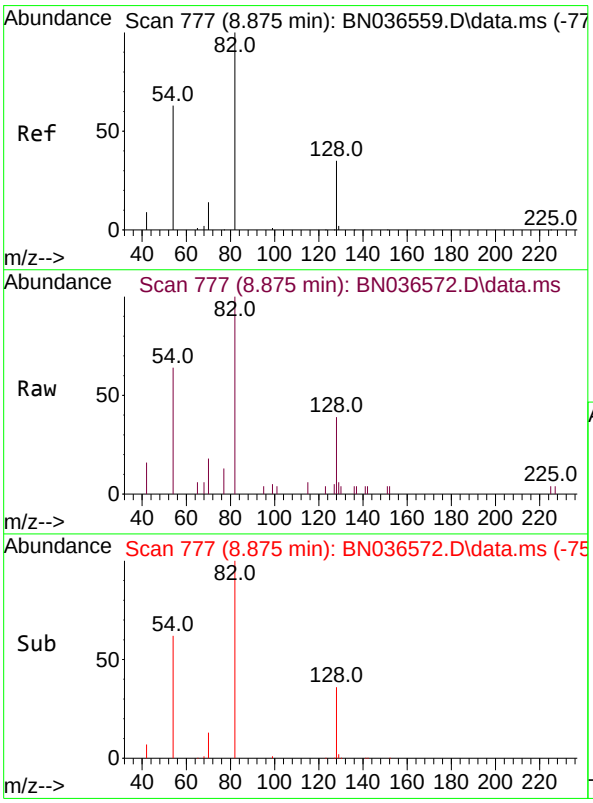
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 5839

Ion	Ratio	Lower	Upper
136	100		
137	12.4	10.3	15.5
54	13.4	11.5	17.3
68	8.1	7.0	10.4

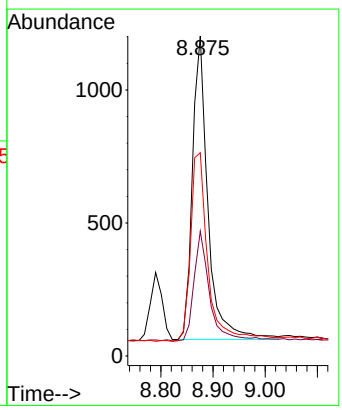


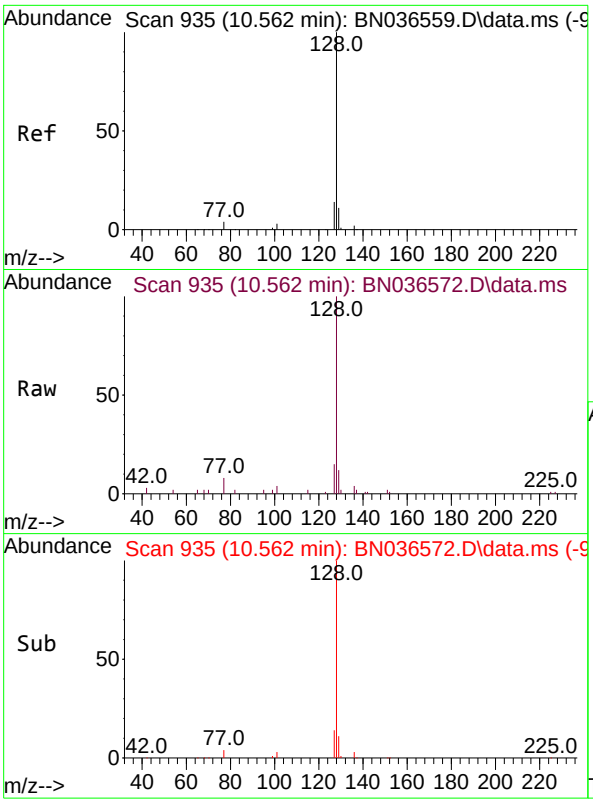


#8
Nitrobenzene-d5
Concen: 0.372 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion: 82 Resp: 2365

Ion	Ratio	Lower	Upper
82	100		
128	39.0	30.6	45.8
54	63.5	52.2	78.4



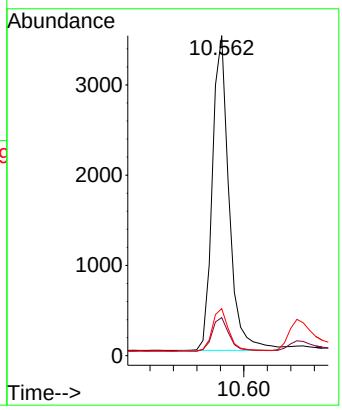


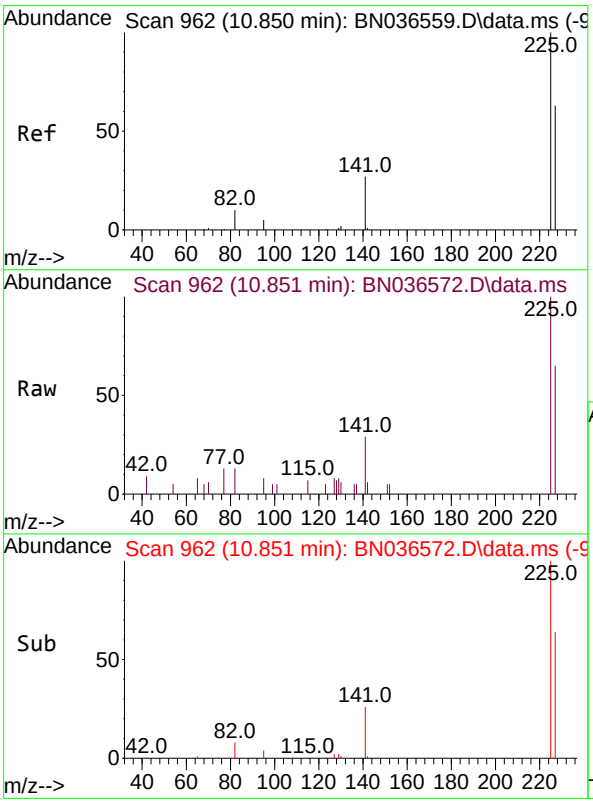
#9
Naphthalene
Concen: 0.400 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 6870

Ion	Ratio	Lower	Upper
128	100		
129	11.9	9.8	14.6
127	14.7	11.8	17.8

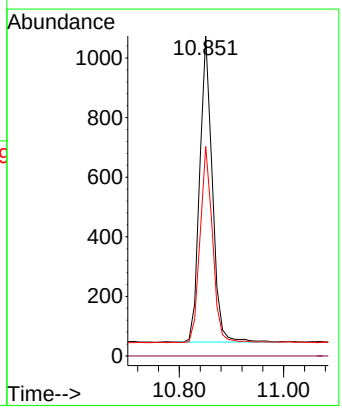


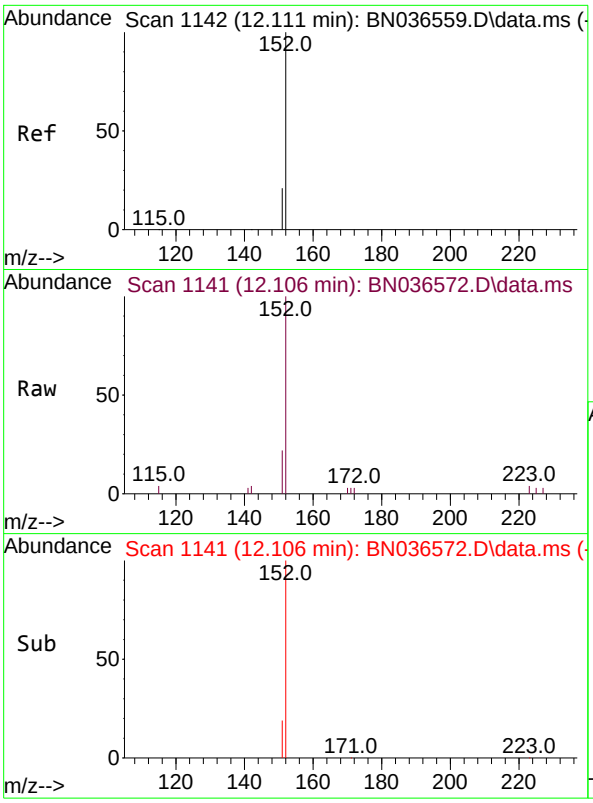


#10
Hexachlorobutadiene
Concen: 0.426 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:225 Resp: 1723

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	51.8	77.8



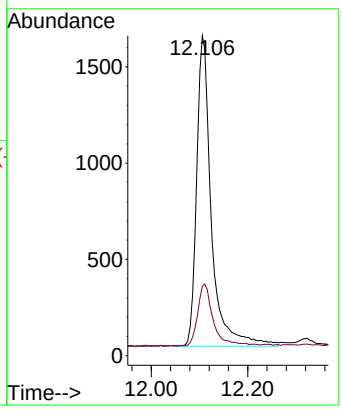


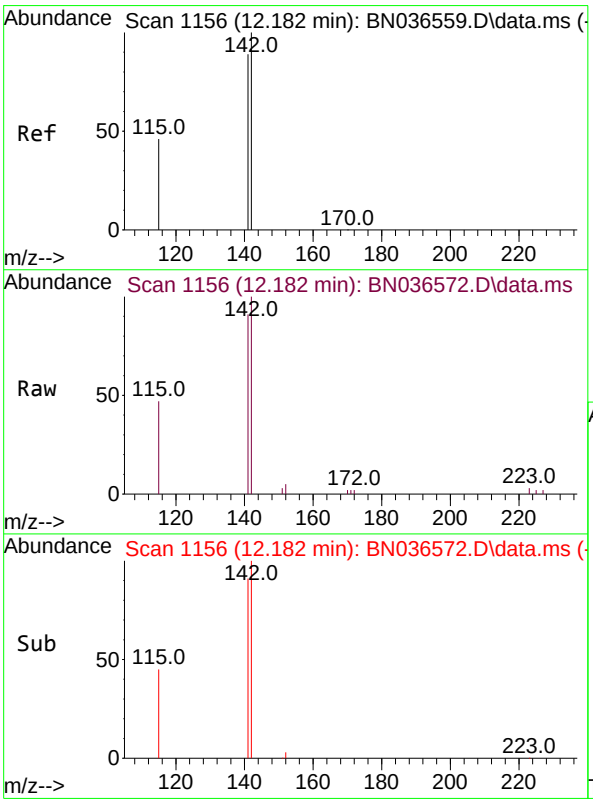
#11
2-Methylnaphthalene-d10
Concen: 0.393 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 3417

Ion	Ratio	Lower	Upper
152	100		
151	20.7	17.0	25.6

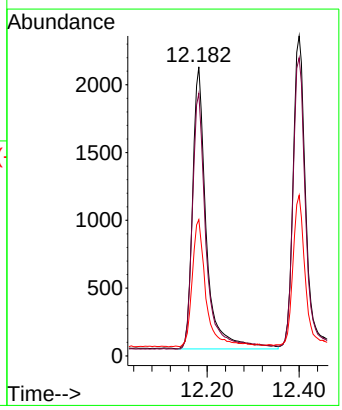


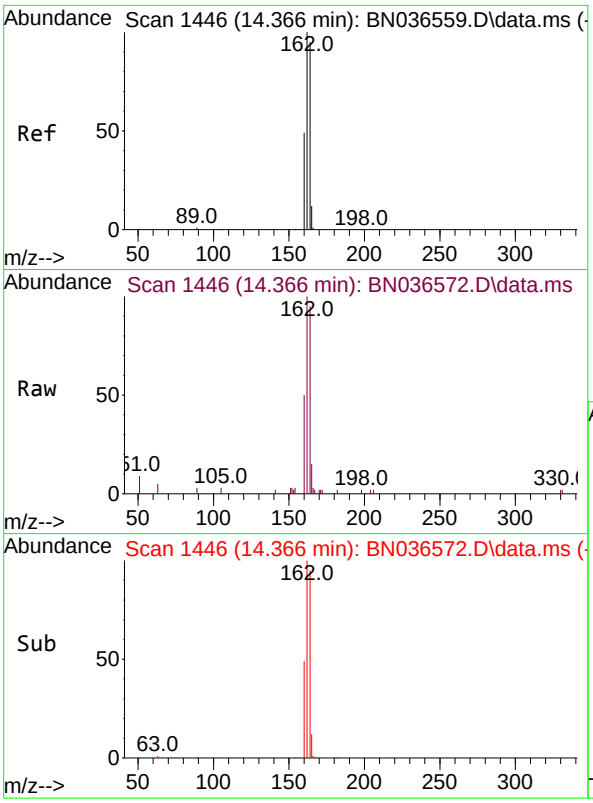


#12
2-Methylnaphthalene
Concen: 0.395 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:142 Resp: 4313

Ion	Ratio	Lower	Upper
142	100		
141	90.8	71.7	107.5
115	47.1	38.3	57.5



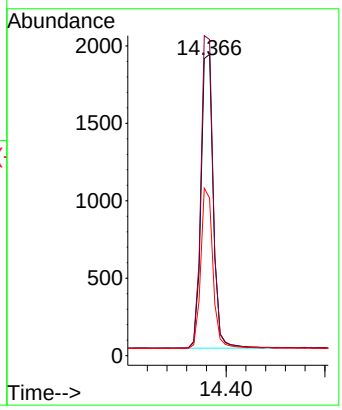


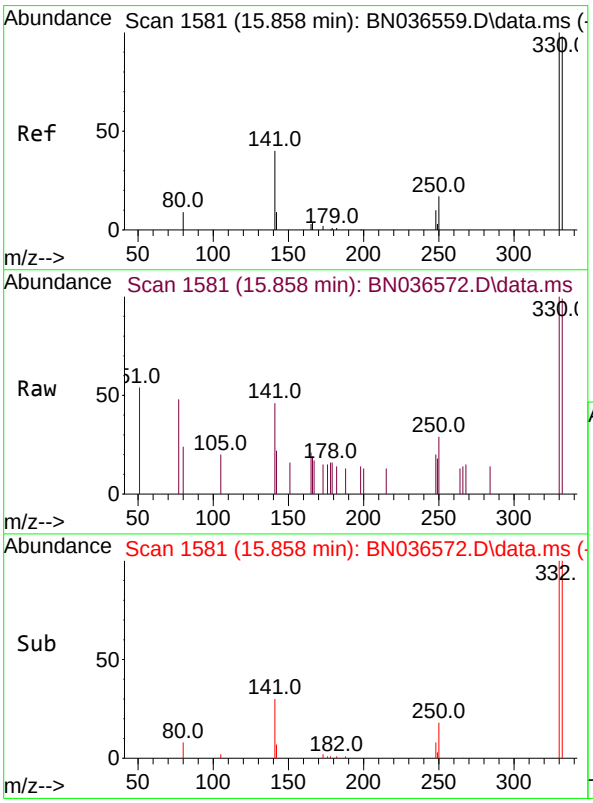
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 3266

Ion	Ratio	Lower	Upper
164	100		
162	104.9	84.2	126.2
160	52.3	42.2	63.2

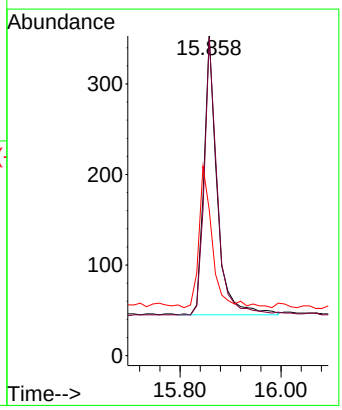


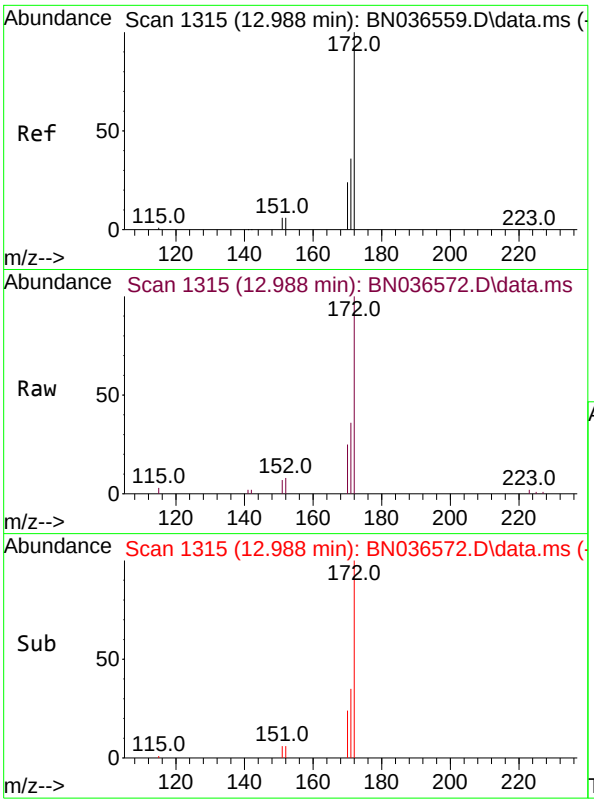


#14
2,4,6-Tribromophenol
Concen: 0.378 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:330 Resp: 560

Ion	Ratio	Lower	Upper
330	100		
332	97.7	75.2	112.8
141	51.2	43.4	65.2



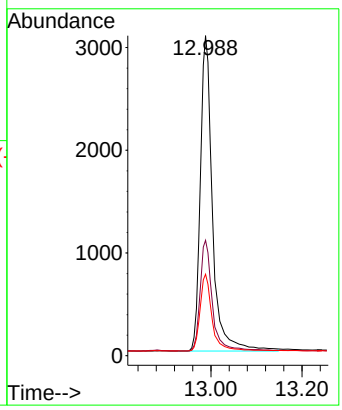


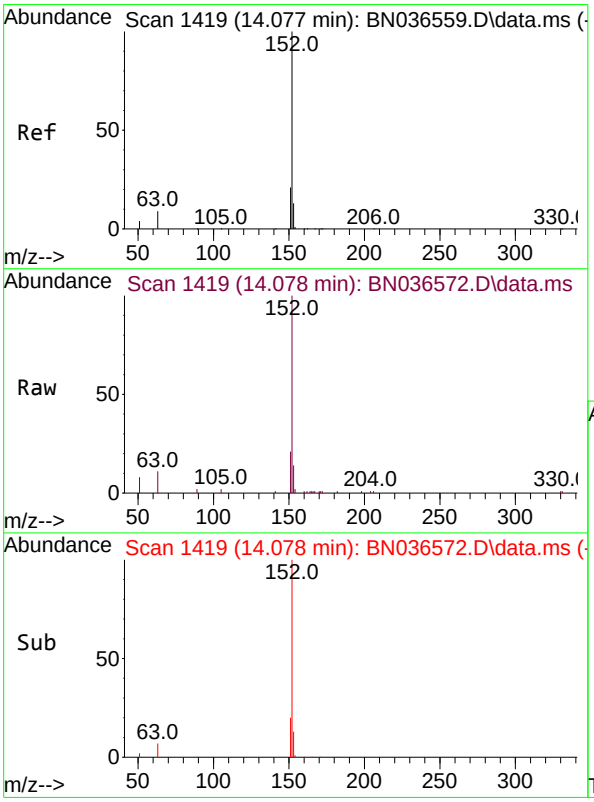
#15
2-Fluorobiphenyl
Concen: 0.414 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 7865

Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	25.5	20.2	30.4

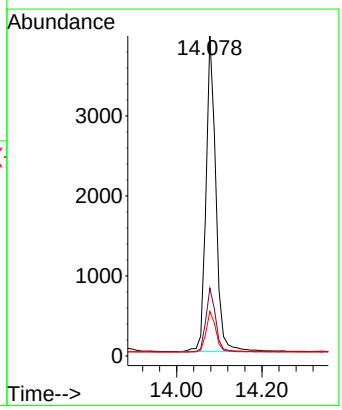


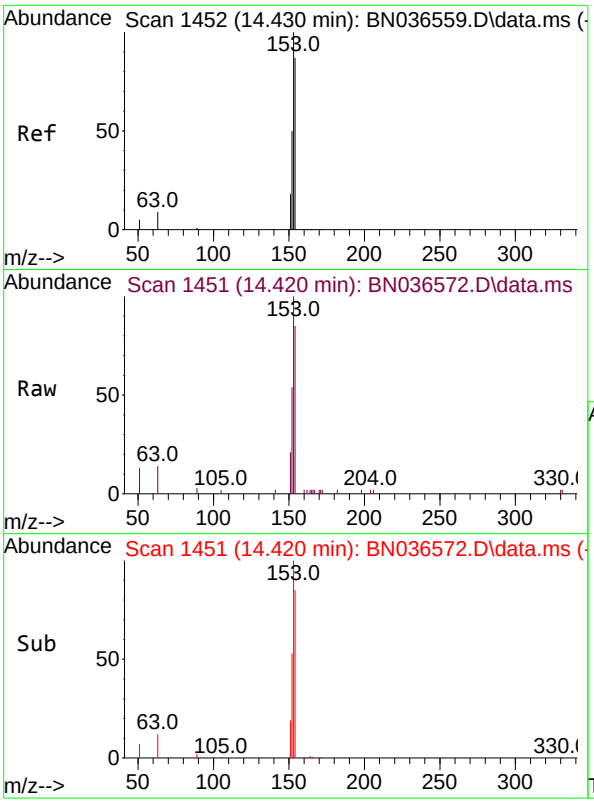


#16
Acenaphthylene
Concen: 0.412 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:152 Resp: 6346

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	13.1	10.6	15.8



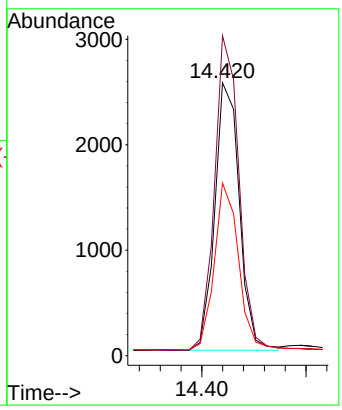


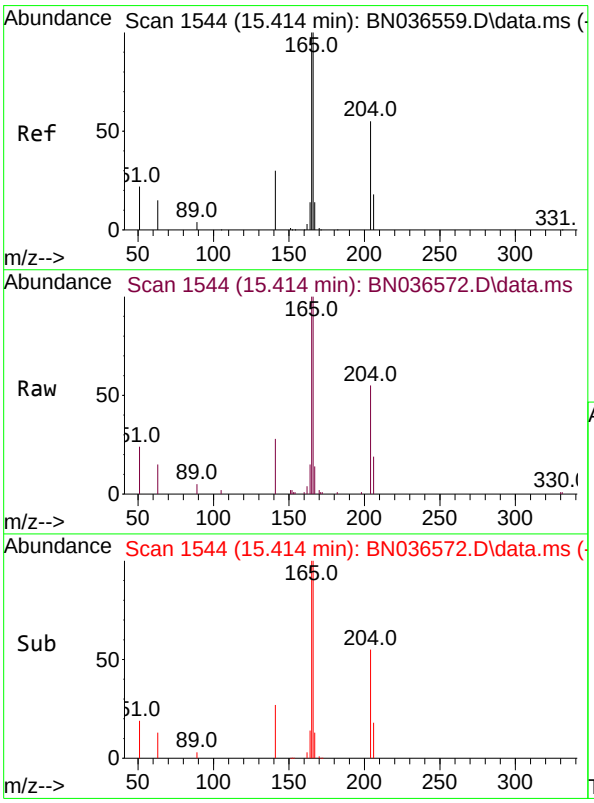
#17
Acenaphthene
Concen: 0.412 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.010 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 4153

Ion	Ratio	Lower	Upper
154	100		
153	118.3	94.1	141.1
152	61.8	49.8	74.6

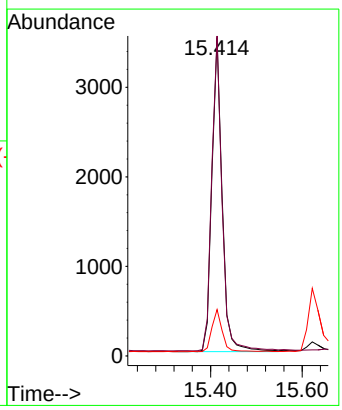


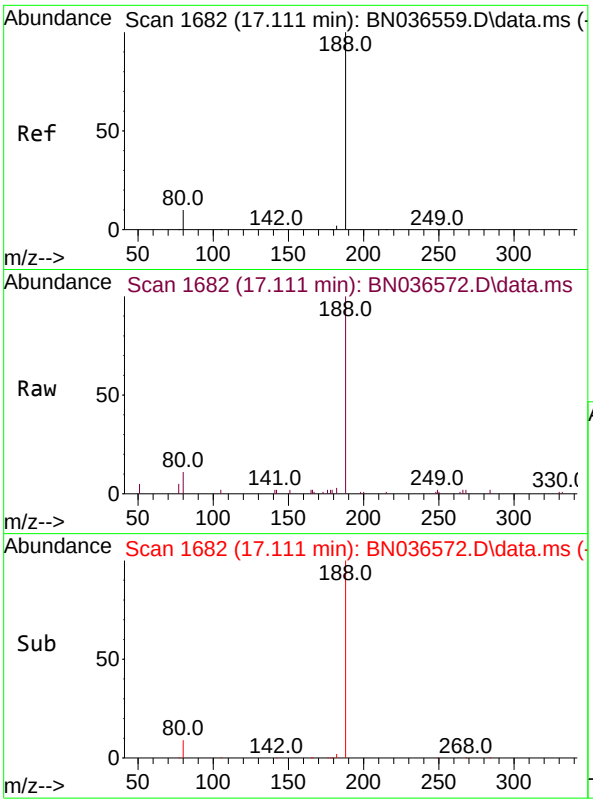


#18
Fluorene
Concen: 0.410 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:166 Resp: 5592

Ion	Ratio	Lower	Upper
166	100		
165	100.3	79.8	119.8
167	13.7	10.6	15.8



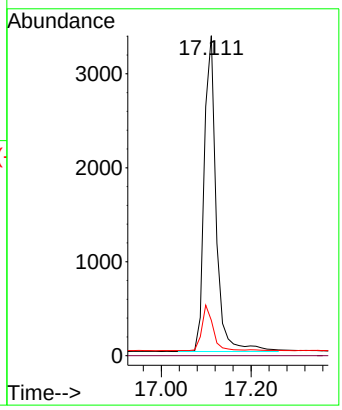


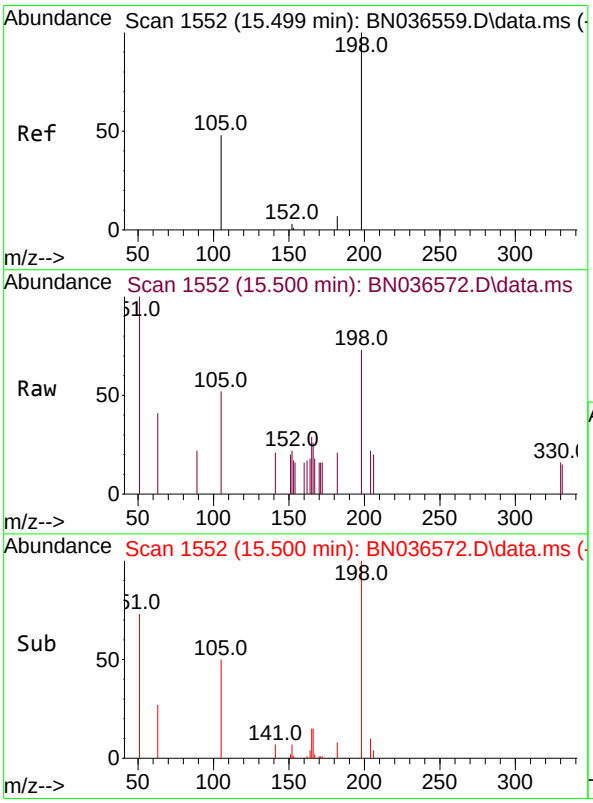
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 6207

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.0	8.8	13.2

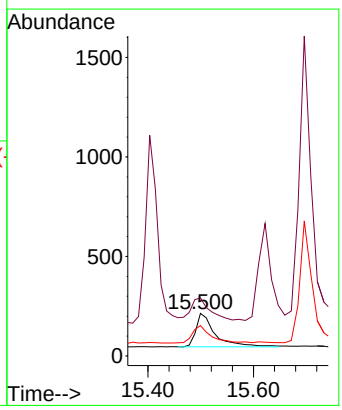


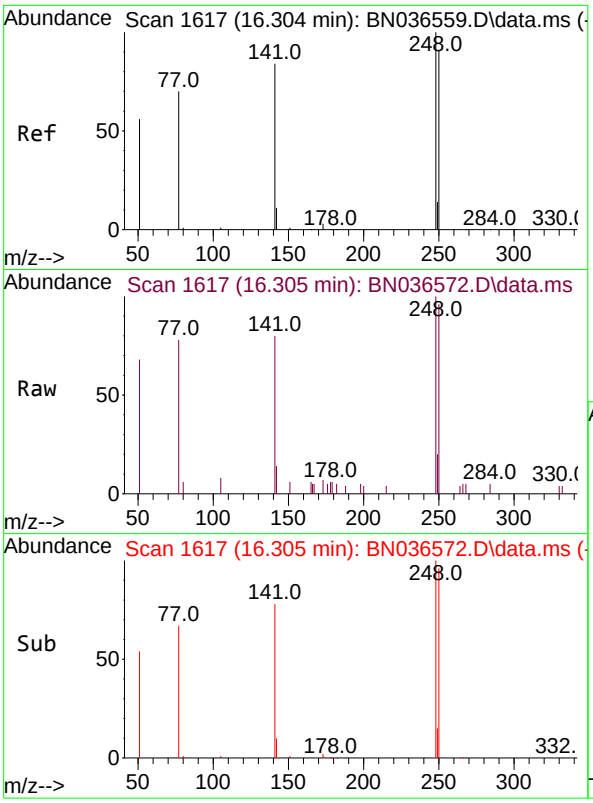


#20
4,6-Dinitro-2-methylphenol
Concen: 0.423 ng
RT: 15.500 min Scan# 1552
Delta R.T. 0.001 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:198 Resp: 439

Ion	Ratio	Lower	Upper
198	100		
51	136.4	107.9	161.9
105	71.5	56.2	84.2



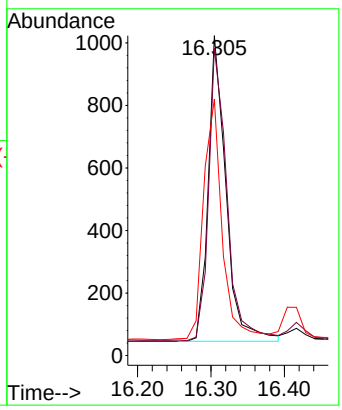


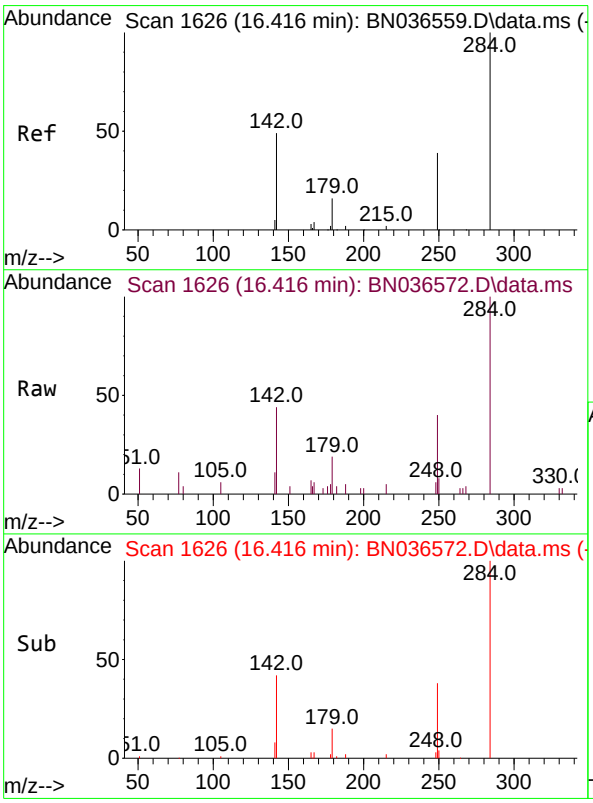
#21
4-Bromophenyl-phenylether
Concen: 0.421 ng
RT: 16.305 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1638

Ion	Ratio	Lower	Upper
248	100		
250	96.1	73.0	109.6
141	80.2	68.6	103.0

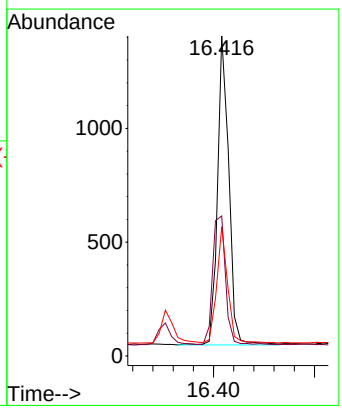


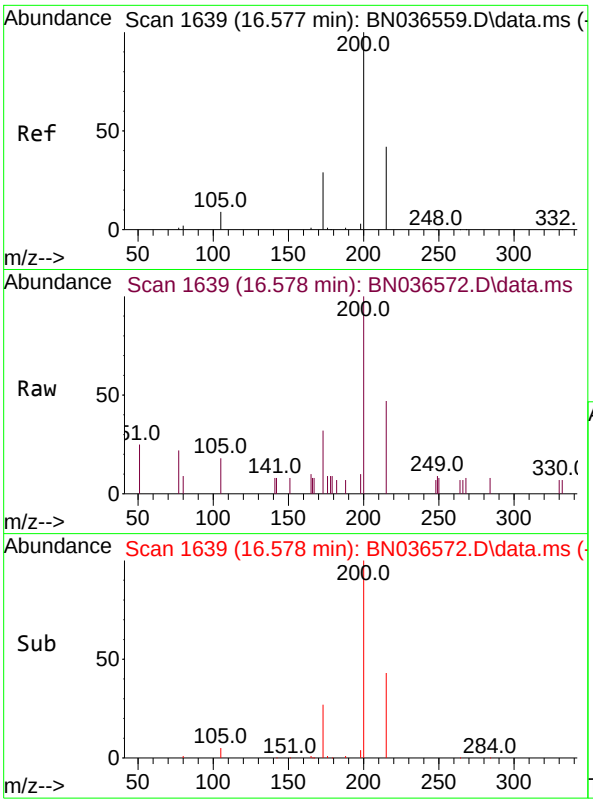


#22
Hexachlorobenzene
Concen: 0.447 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:284 Resp: 2099

Ion	Ratio	Lower	Upper
284	100		
142	47.9	37.0	55.4
249	36.2	28.1	42.1



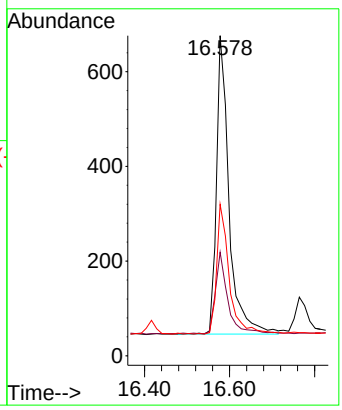


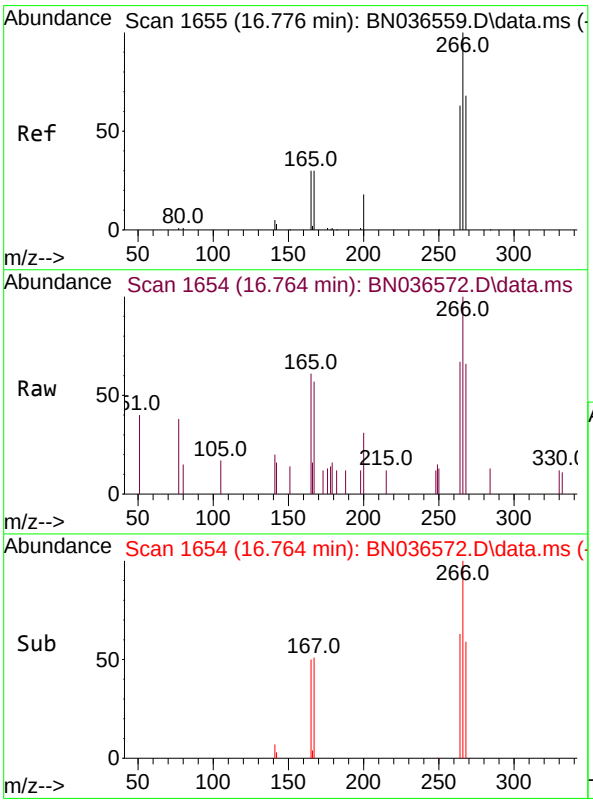
#23
Atrazine
Concen: 0.414 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1291

Ion	Ratio	Lower	Upper
200	100		
173	32.4	27.3	40.9
215	47.3	36.8	55.2

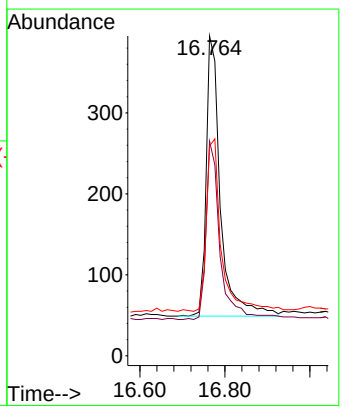


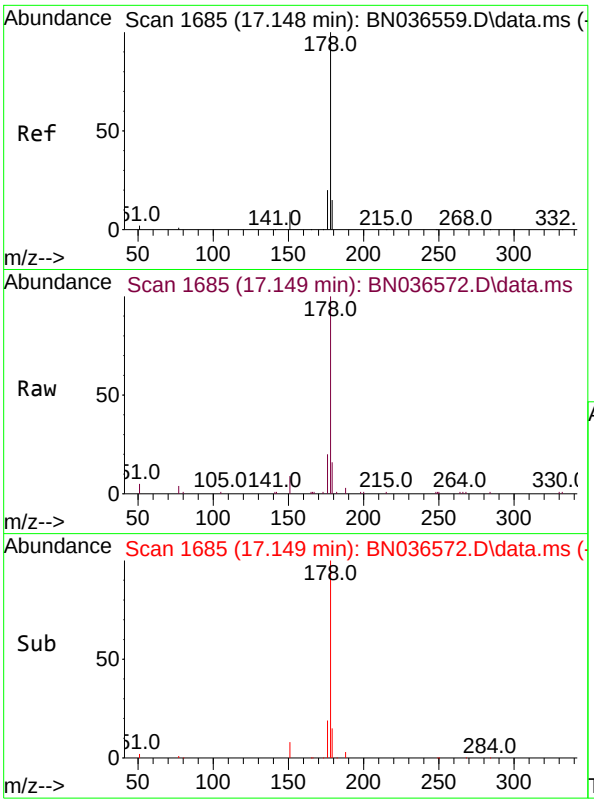


#24
Pentachlorophenol
Concen: 0.375 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:266 Resp: 802

Ion	Ratio	Lower	Upper
266	100		
264	62.5	49.6	74.4
268	63.7	50.9	76.3



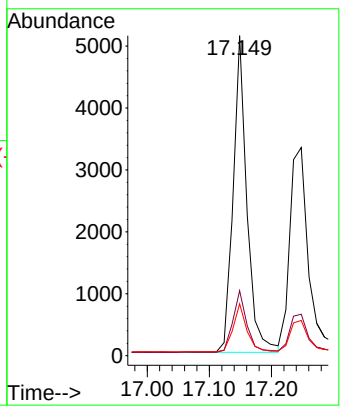


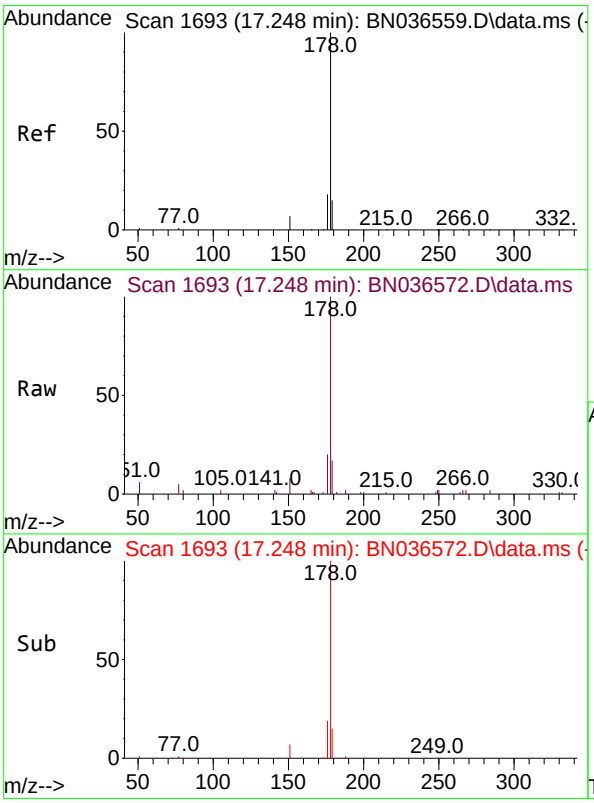
#25
Phenanthrene
Concen: 0.423 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 7873

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.9	23.9
179	15.1	12.2	18.4

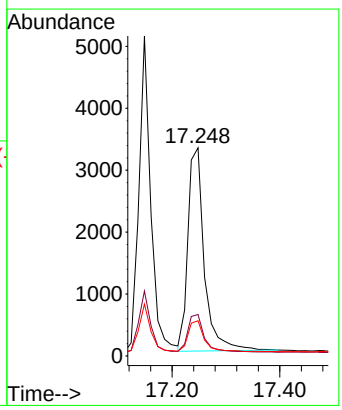


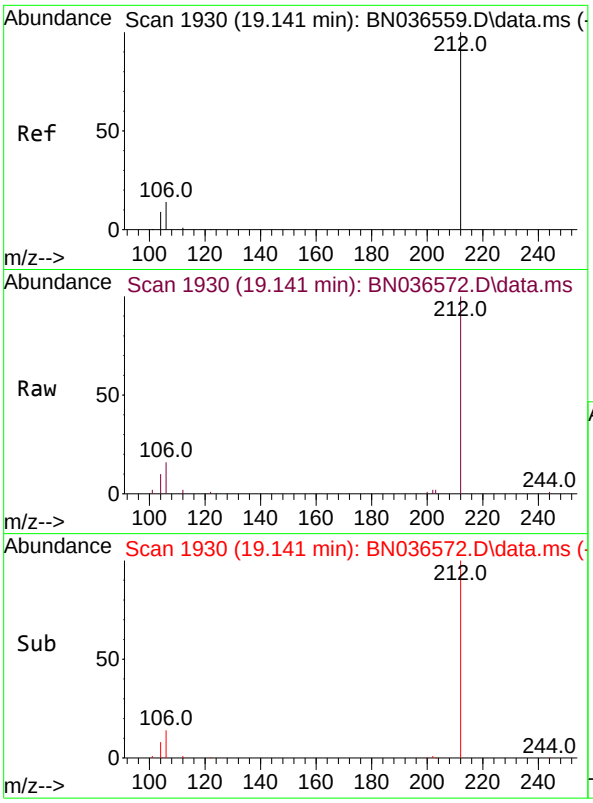


#26
Anthracene
Concen: 0.414 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:178 Resp: 6961

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.3	12.6	18.8



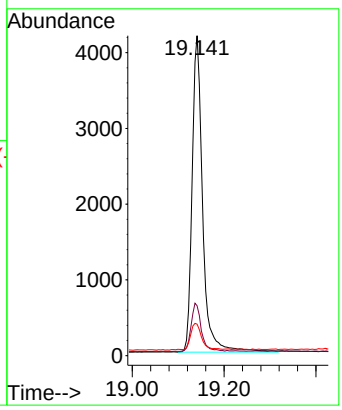


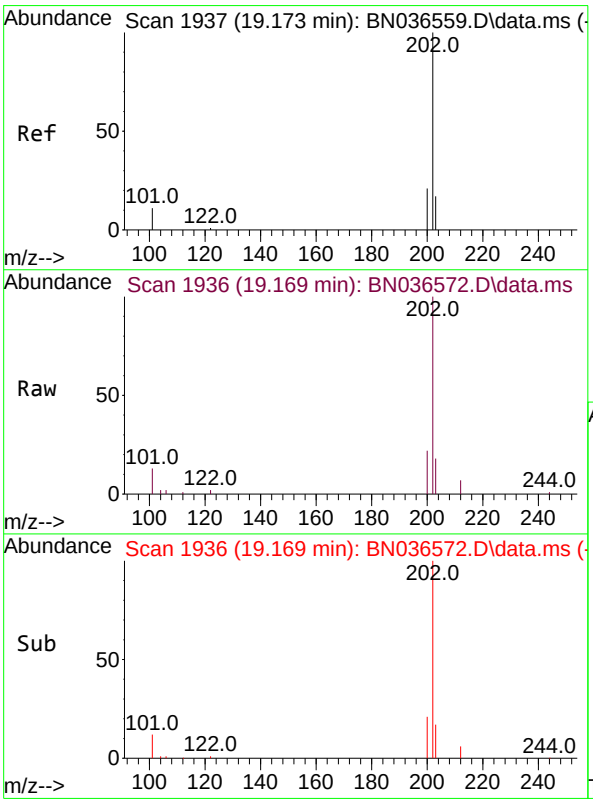
#27
Fluoranthene-d10
Concen: 0.418 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:212 Resp: 6646

Ion	Ratio	Lower	Upper
212	100		
106	14.8	11.8	17.6
104	9.1	7.3	10.9

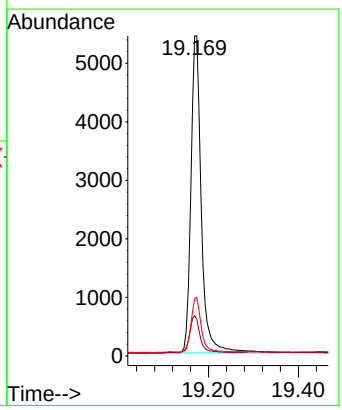


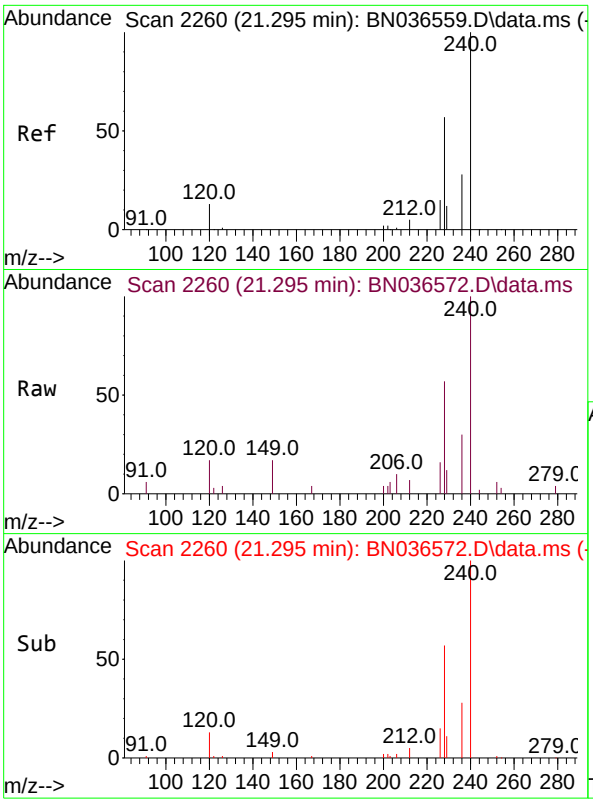


#28
Fluoranthene
Concen: 0.417 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.004 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:202 Resp: 8718

Ion	Ratio	Lower	Upper
202	100		
101	11.6	9.4	14.0
203	16.8	13.5	20.3



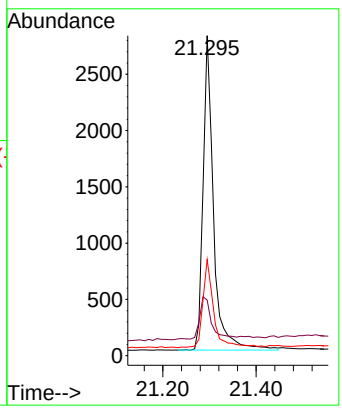


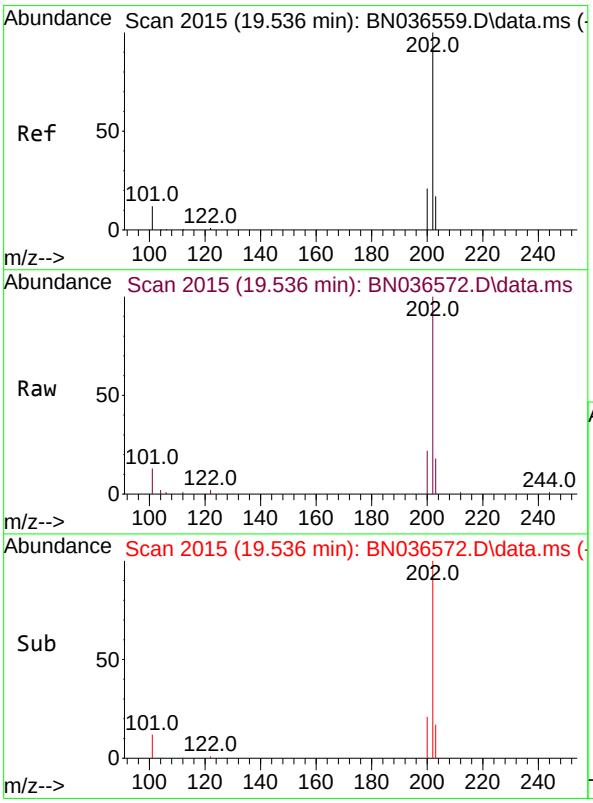
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 4352

Ion	Ratio	Lower	Upper
240	100		
120	17.4	14.6	22.0
236	30.1	24.1	36.1

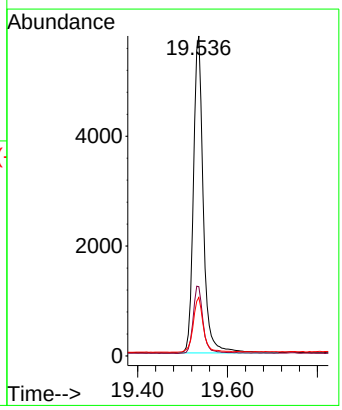


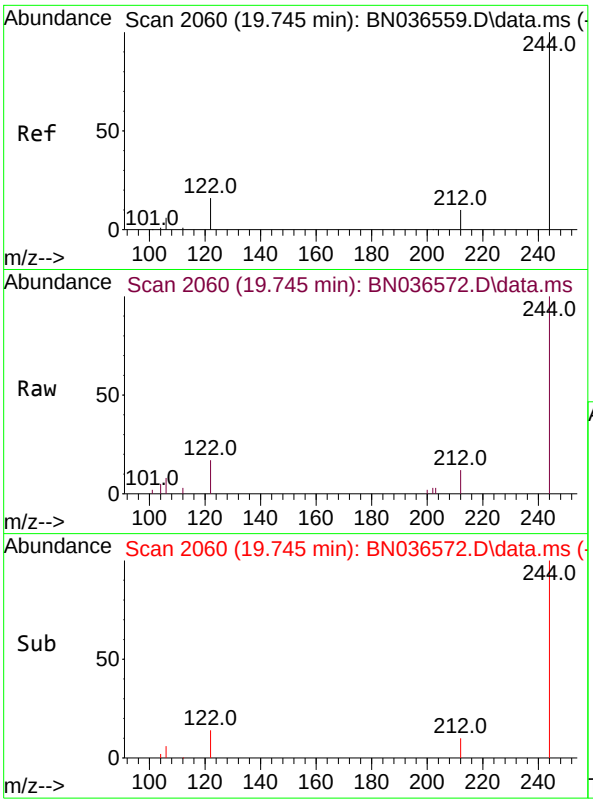


#30
Pyrene
Concen: 0.414 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:202 Resp: 8800

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.6	14.1	21.1



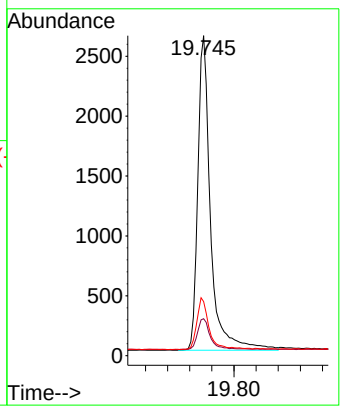


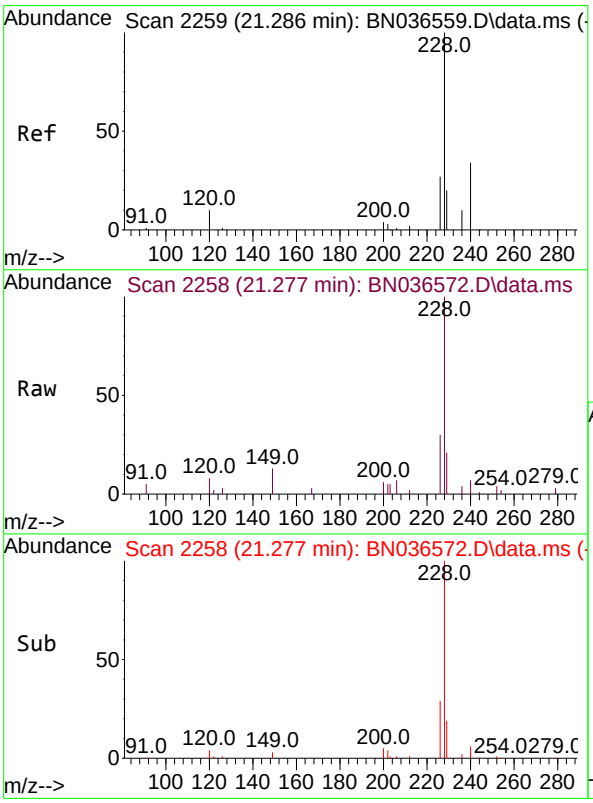
#31
Terphenyl-d14
Concen: 0.402 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 4195

Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.6	14.4
122	16.9	13.9	20.9

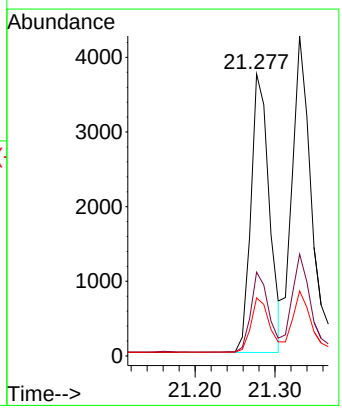


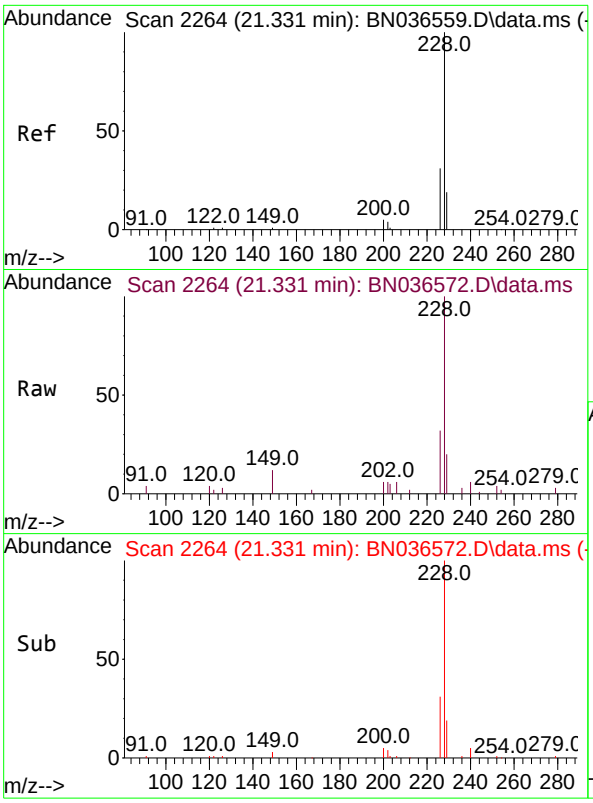


#32
Benzo(a)anthracene
Concen: 0.393 ng
RT: 21.277 min Scan# 2258
Delta R.T. -0.009 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:228 Resp: 5953

Ion	Ratio	Lower	Upper
228	100		
226	29.7	22.5	33.7
229	20.6	16.6	25.0



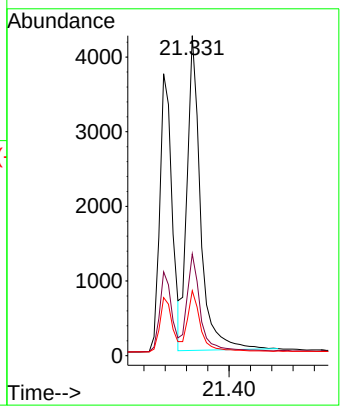


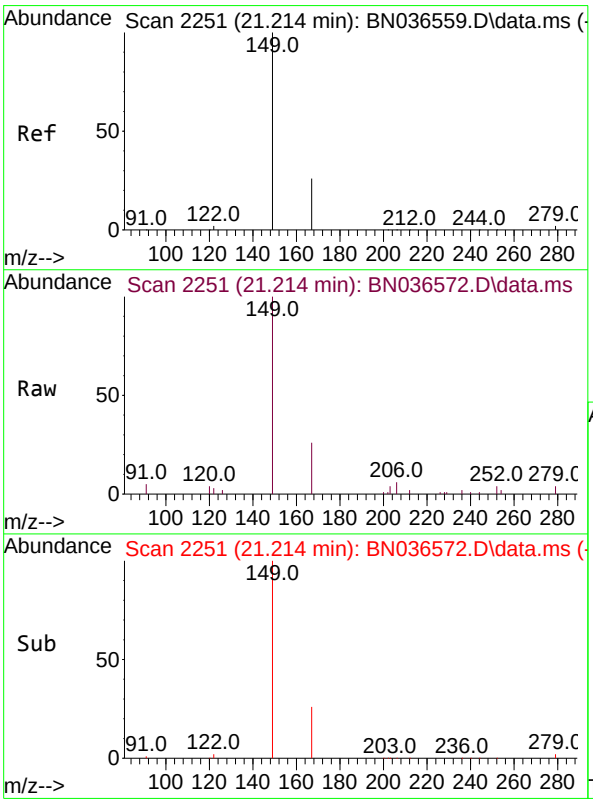
#33
Chrysene
Concen: 0.447 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 7391

Ion	Ratio	Lower	Upper
228	100		
226	31.8	25.3	37.9
229	20.3	15.8	23.8

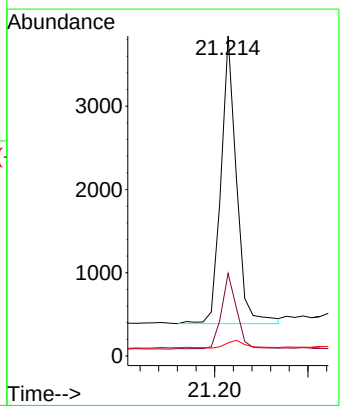


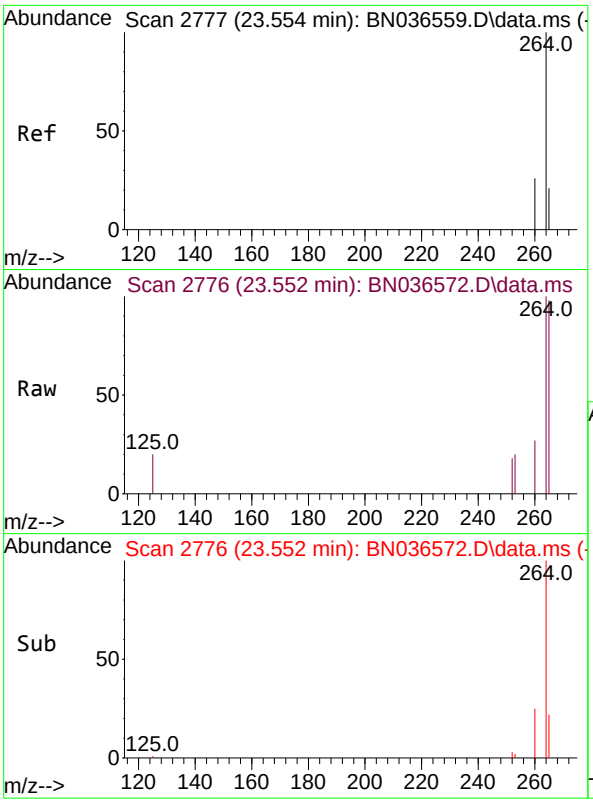


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.371 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:149 Resp: 3997

Ion	Ratio	Lower	Upper
149	100		
167	25.6	20.7	31.1
279	3.4	3.6	5.4#



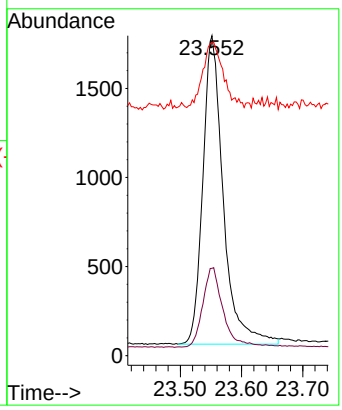


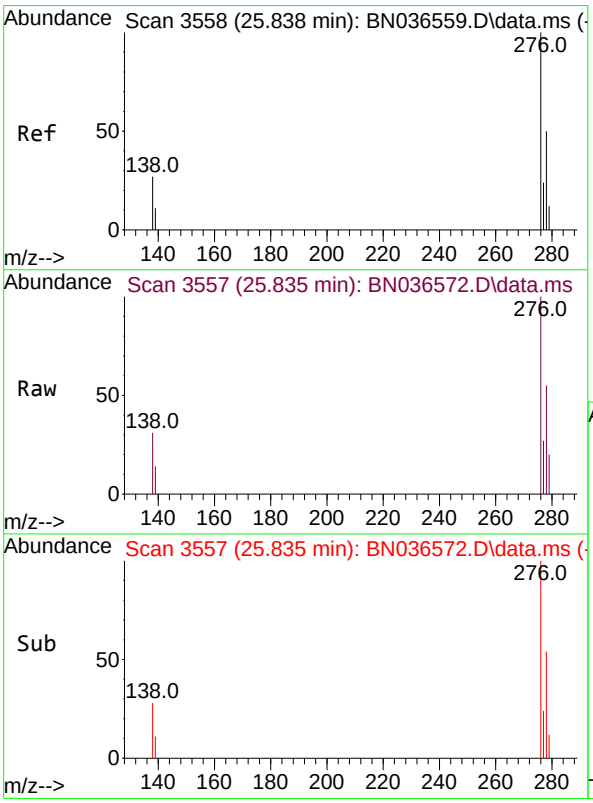
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.552 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 4016

Ion	Ratio	Lower	Upper
264	100		
260	27.3	22.6	33.8
265	97.9	88.1	132.1

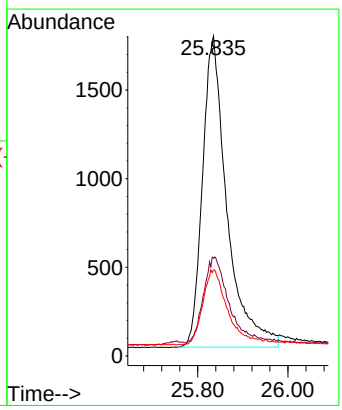


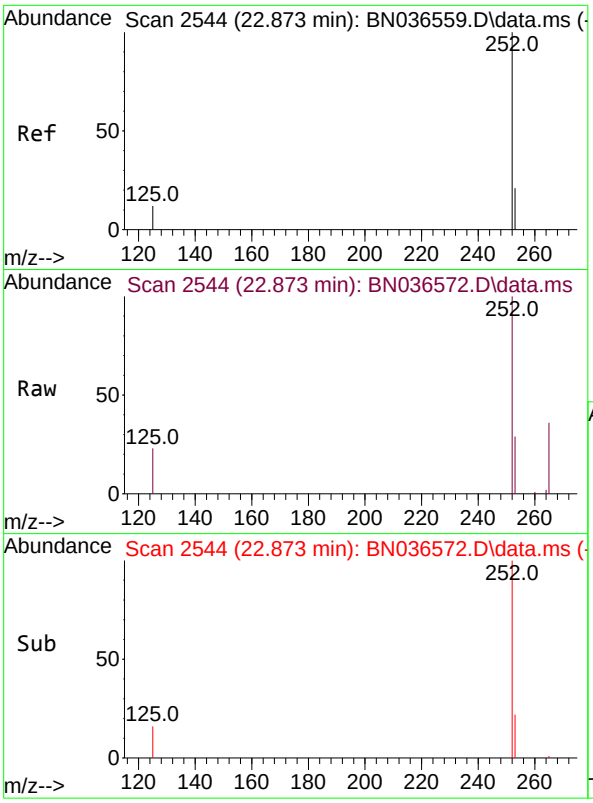


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.455 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:276 Resp: 6596

Ion	Ratio	Lower	Upper
276	100		
138	27.7	23.4	35.2
277	24.6	20.0	30.0



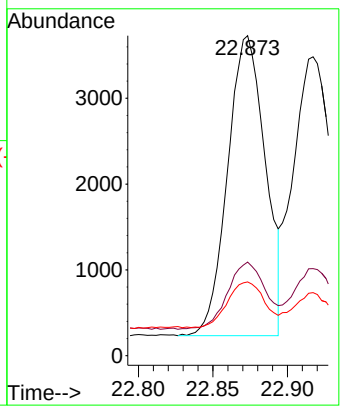


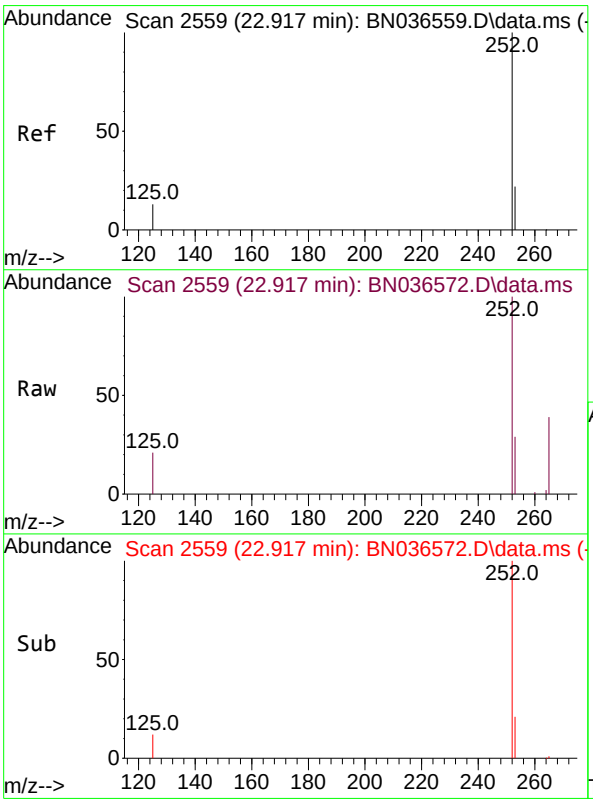
#37
Benzo(b)fluoranthene
Concen: 0.422 ng
RT: 22.873 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 6161

Ion	Ratio	Lower	Upper
252	100		
253	29.2	23.9	35.9
125	23.0	17.4	26.2

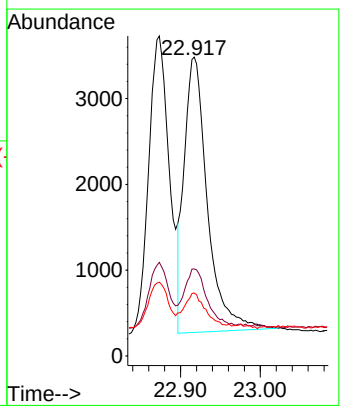


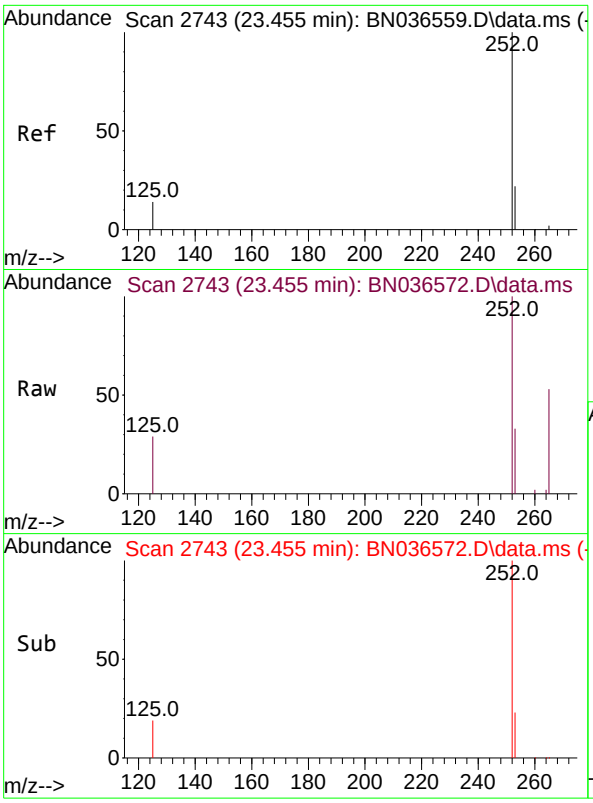


#38
Benzo(k)fluoranthene
Concen: 0.424 ng
RT: 22.917 min Scan# 2559
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:252 Resp: 6498

Ion	Ratio	Lower	Upper
252	100		
253	29.1	24.6	36.8
125	21.1	17.8	26.8



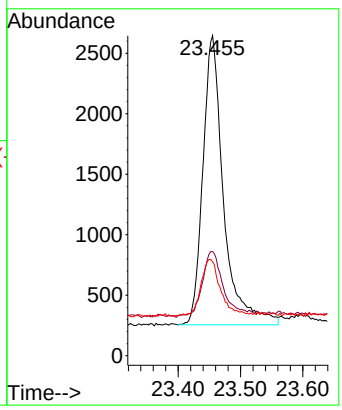


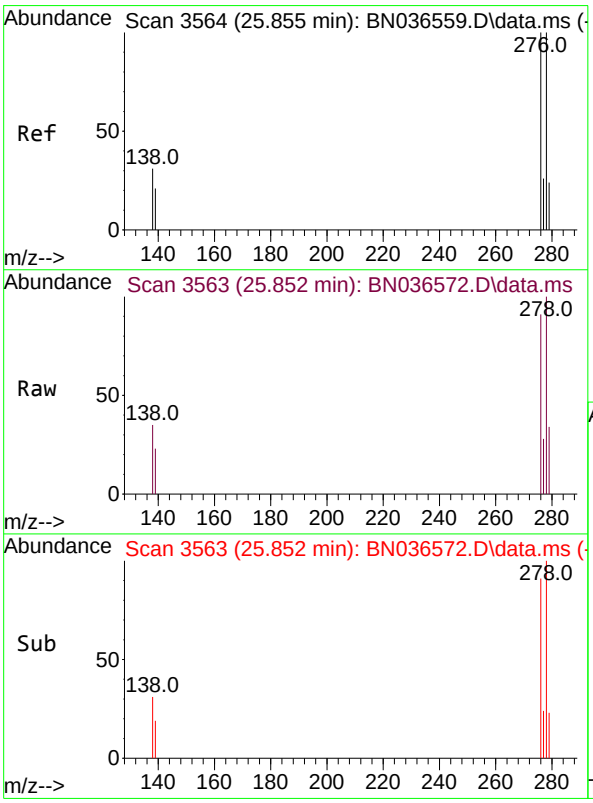
#39
Benzo(a)pyrene
Concen: 0.448 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 5508

Ion	Ratio	Lower	Upper
252	100		
253	32.6	27.8	41.8
125	29.4	22.7	34.1

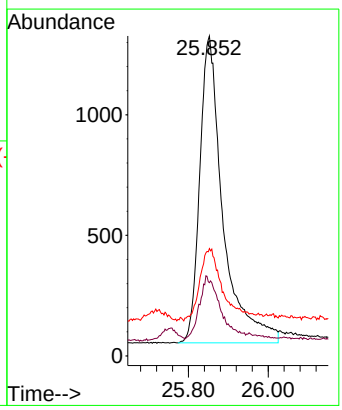


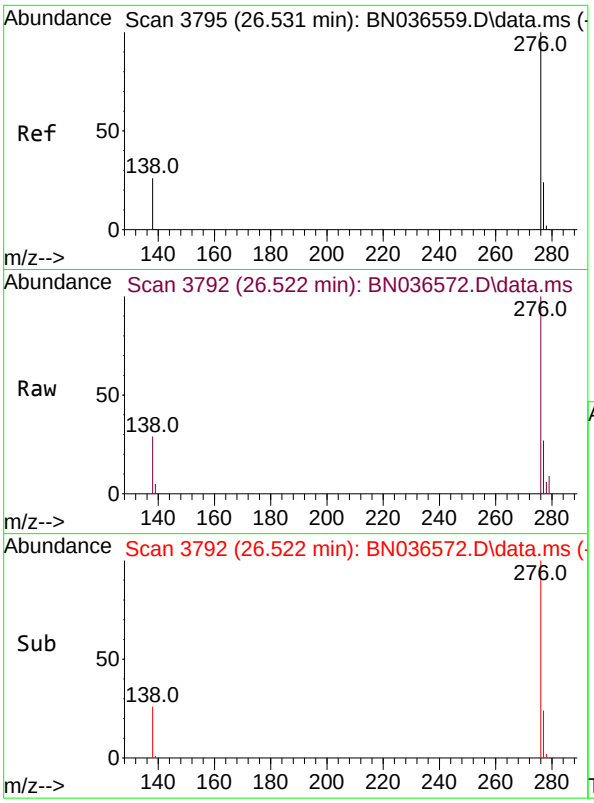


#40
Dibenzo(a,h)anthracene
Concen: 0.457 ng
RT: 25.852 min Scan# 3563
Delta R.T. -0.003 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Tgt Ion:278 Resp: 5154

Ion	Ratio	Lower	Upper
278	100		
139	22.9	20.8	31.2
279	33.5	28.8	43.2



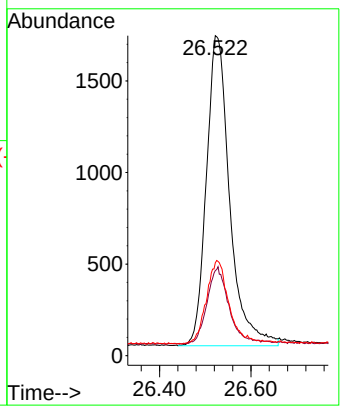


#41
Benzo(g,h,i)perylene
Concen: 0.463 ng
RT: 26.522 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN036572.D
Acq: 10 Mar 2025 21:26

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 5982

Ion	Ratio	Lower	Upper
276	100		
277	26.6	22.2	33.4
138	29.1	24.1	36.1



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036588.D
Acq On : 11 Mar 2025 19:09
Operator : RC/JU
Sample : PB167057BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Quant Time: Mar 12 01:09:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

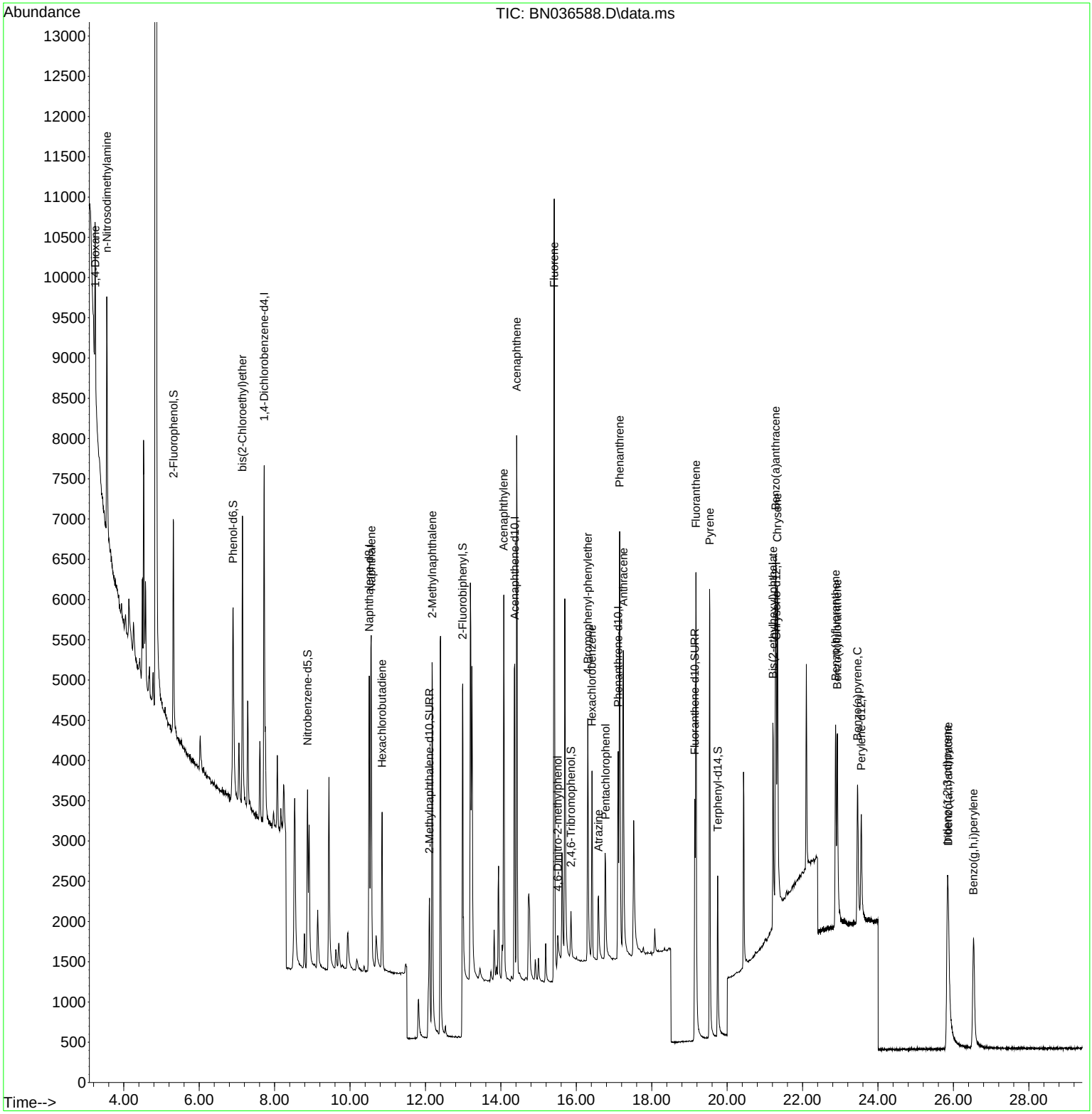
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.724	152	2199	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5061	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2475	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	4176	0.400	ng	0.00
29) Chrysene-d12	21.304	240	2420	0.400	ng	0.00
35) Perylene-d12	23.557	264	2074	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	2148	0.419	ng	0.00
5) Phenol-d6	6.901	99	2472	0.390	ng	0.00
8) Nitrobenzene-d5	8.875	82	2108	0.383	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	3960	0.526	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	375	0.334	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	6472	0.450	ng	0.00
27) Fluoranthene-d10	19.141	212	4153	0.388	ng	0.00
31) Terphenyl-d14	19.750	244	2732	0.471	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.247	88	979	0.401	ng	# 29
3) n-Nitrosodimethylamine	3.550	42	2276	0.461	ng	# 96
6) bis(2-Chloroethyl)ether	7.147	93	2676	0.409	ng	99
9) Naphthalene	10.562	128	6313	0.424	ng	99
10) Hexachlorobutadiene	10.850	225	1584	0.452	ng	# 97
12) 2-Methylnaphthalene	12.177	142	3954	0.417	ng	99
16) Acenaphthylene	14.077	152	5361	0.459	ng	100
17) Acenaphthene	14.420	154	3280	0.429	ng	99
18) Fluorene	15.414	166	4237	0.410	ng	99
20) 4,6-Dinitro-2-methylph...	15.510	198	335	0.460	ng	# 78
21) 4-Bromophenyl-phenylether	16.304	248	1256	0.480	ng	92
22) Hexachlorobenzene	16.416	284	1619	0.513	ng	98
23) Atrazine	16.590	200	1046	0.499	ng	92
24) Pentachlorophenol	16.776	266	917	0.637	ng	99
25) Phenanthrene	17.148	178	6029	0.481	ng	99
26) Anthracene	17.248	178	5609	0.496	ng	99
28) Fluoranthene	19.174	202	6012	0.427	ng	98
30) Pyrene	19.536	202	6199	0.524	ng	99
32) Benzo(a)anthracene	21.286	228	3838	0.456	ng	99
33) Chrysene	21.331	228	4624	0.503	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	2665	0.445	ng	# 98
36) Indeno(1,2,3-cd)pyrene	25.841	276	4164	0.556	ng	94
37) Benzo(b)fluoranthene	22.876	252	3355	0.445	ng	94
38) Benzo(k)fluoranthene	22.923	252	4065	0.513	ng	98
39) Benzo(a)pyrene	23.458	252	3242	0.510	ng	98
40) Dibenzo(a,h)anthracene	25.861	278	3176	0.545	ng	95
41) Benzo(g,h,i)perylene	26.531	276	3258	0.489	ng	98

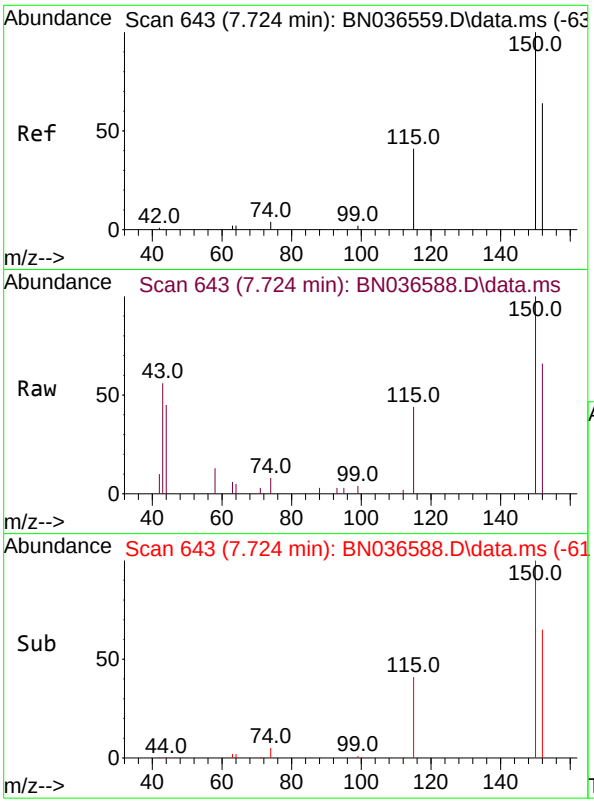
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036588.D
Acq On : 11 Mar 2025 19:09
Operator : RC/JU
Sample : PB167057BS
Misc :
ALS Vial : 16 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Quant Time: Mar 12 01:09:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



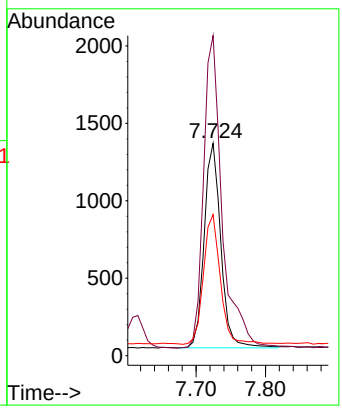


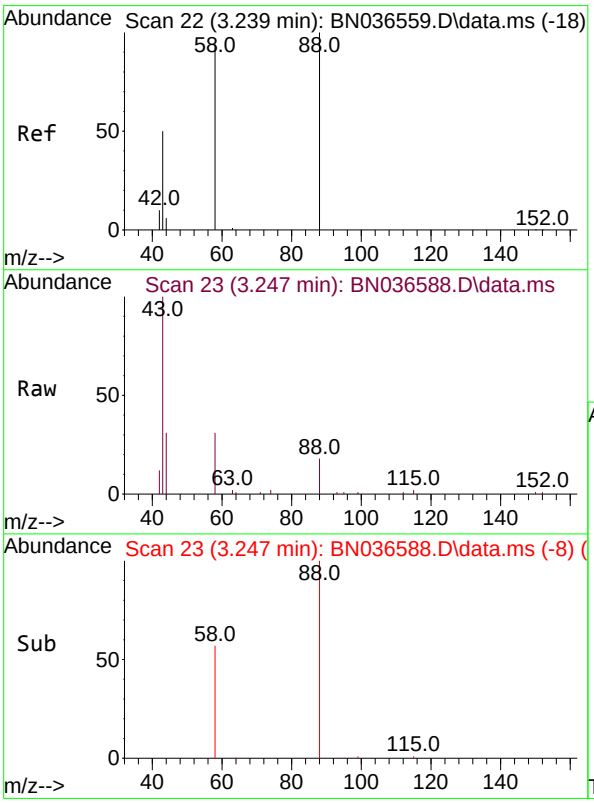
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:152 Resp: 2199

Ion	Ratio	Lower	Upper
152	100		
150	150.7	123.7	185.5
115	66.4	54.3	81.5

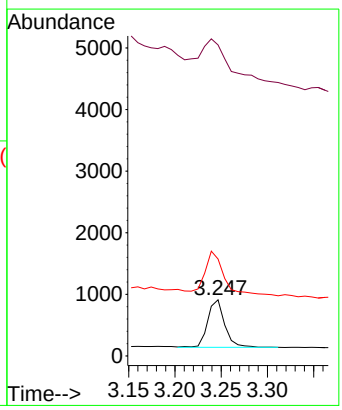


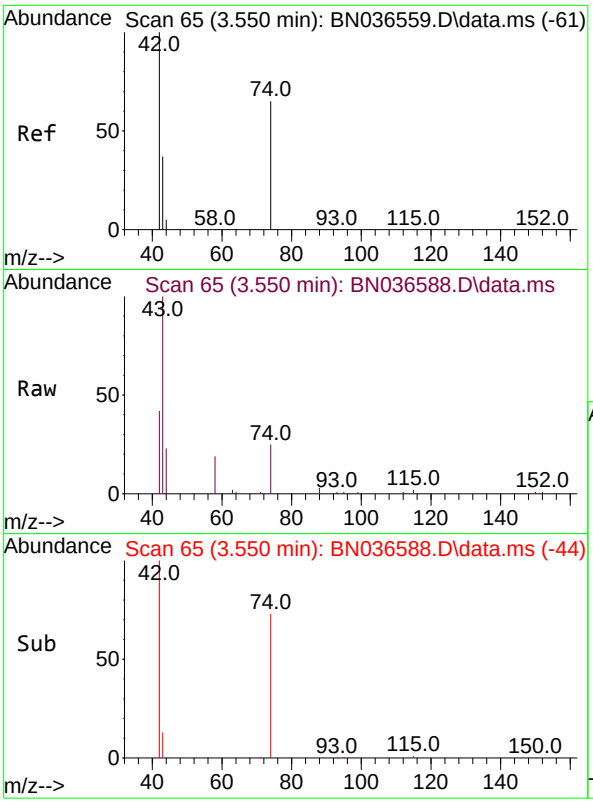


#2
1,4-Dioxane
Concen: 0.401 ng
RT: 3.247 min Scan# 23
Delta R.T. 0.008 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 88 Resp: 979

Ion	Ratio	Lower	Upper
88	100		
43	149.4	37.8	56.8#
58	107.3	67.4	101.2#



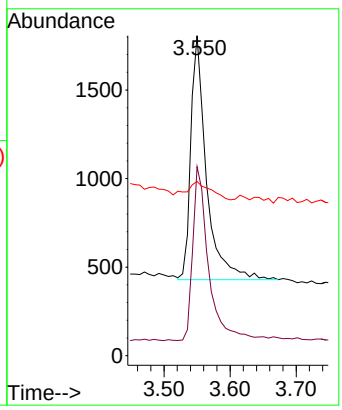


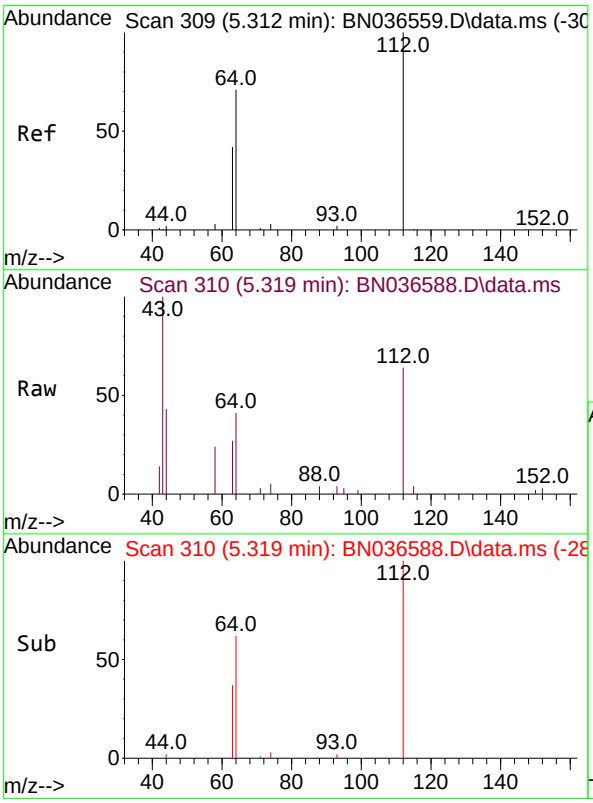
#3
n-Nitrosodimethylamine
Concen: 0.461 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion: 42 Resp: 2276

Ion	Ratio	Lower	Upper
42	100		
74	72.7	60.6	90.8
44	9.7	6.3	9.5#

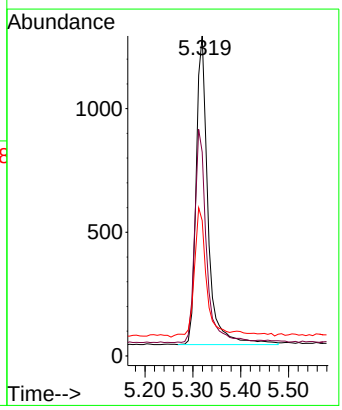


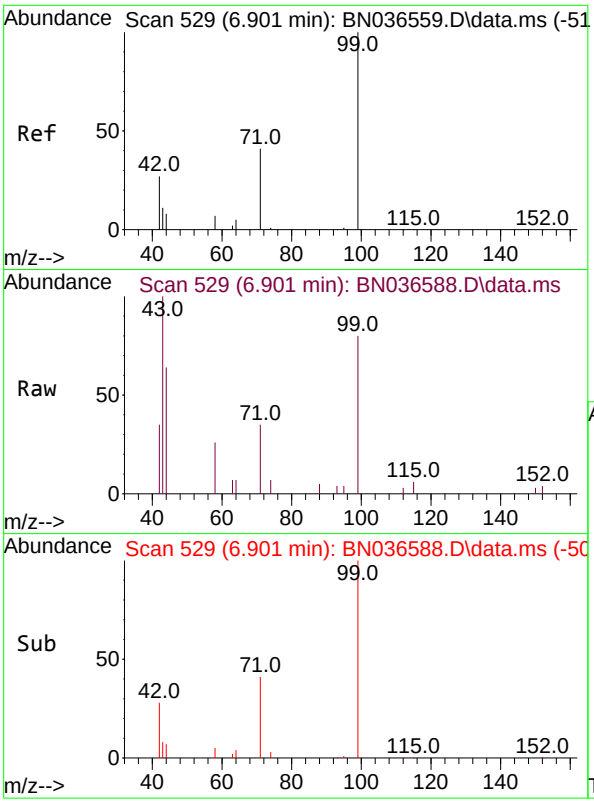


#4
2-Fluorophenol
Concen: 0.419 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.007 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:112 Resp: 2148

Ion	Ratio	Lower	Upper
112	100		
64	68.3	53.1	79.7
63	42.4	31.8	47.8



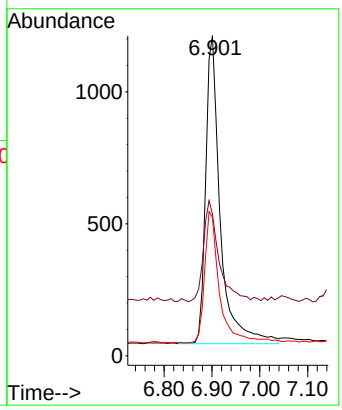


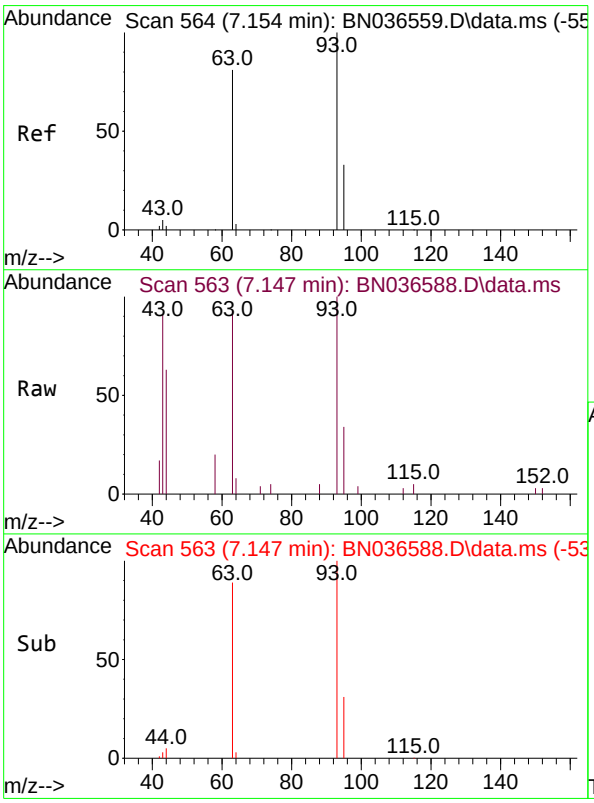
#5
Phenol-d6
Concen: 0.390 ng
RT: 6.901 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion: 99 Resp: 2472

Ion	Ratio	Lower	Upper
99	100		
42	35.1	26.5	39.7
71	43.5	34.1	51.1

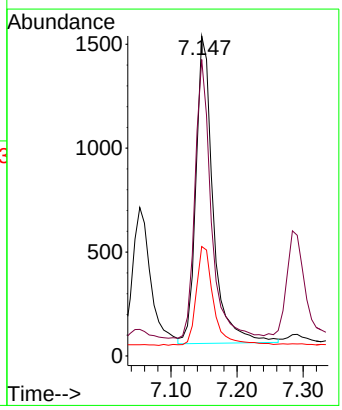


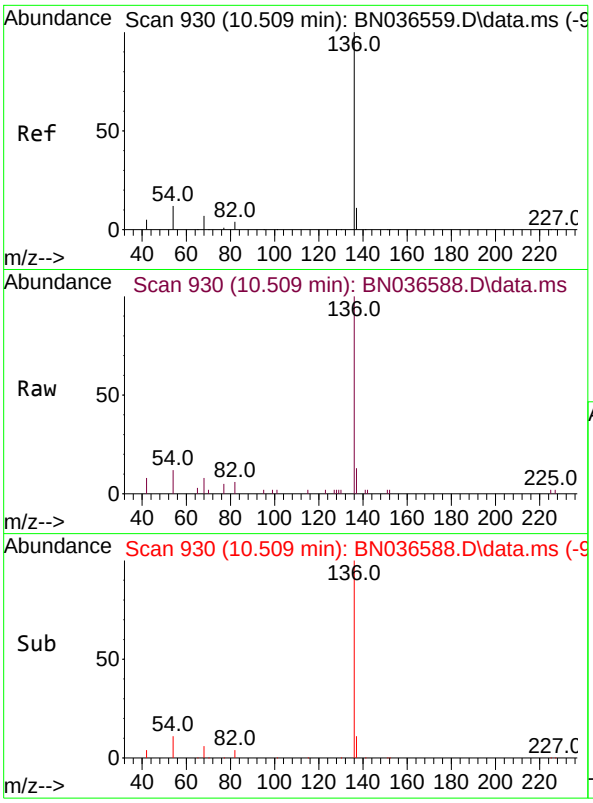


#6
bis(2-Chloroethyl)ether
Concen: 0.409 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 93 Resp: 2676

Ion	Ratio	Lower	Upper
93	100		
63	85.4	67.7	101.5
95	32.9	25.6	38.4



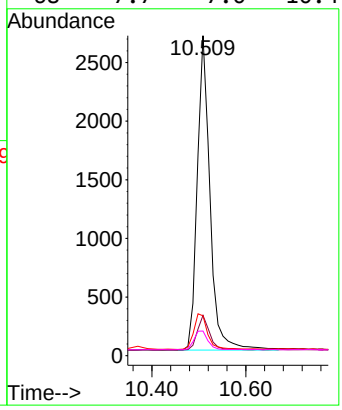


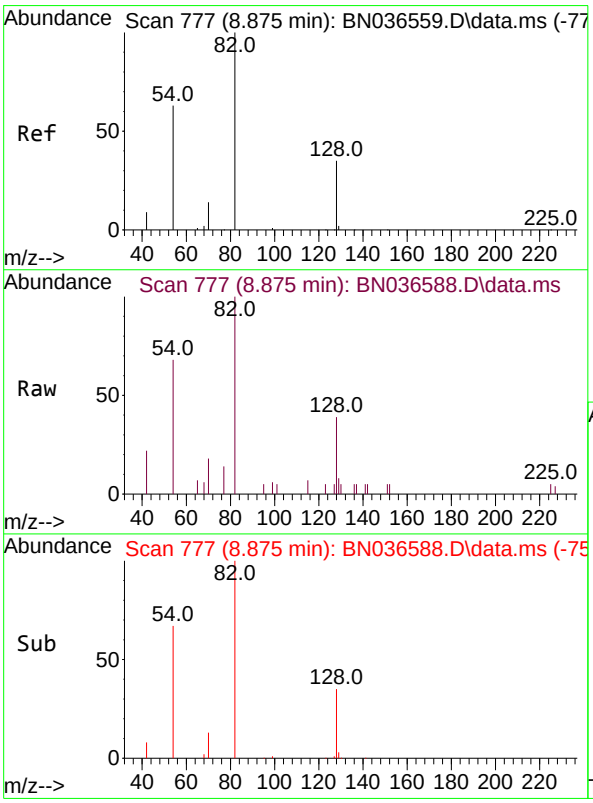
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:136 Resp: 5061

Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.3	15.5
54	12.5	11.5	17.3
68	7.7	7.0	10.4

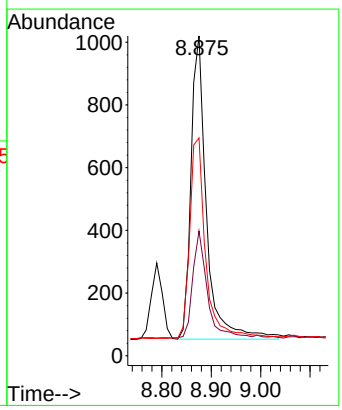


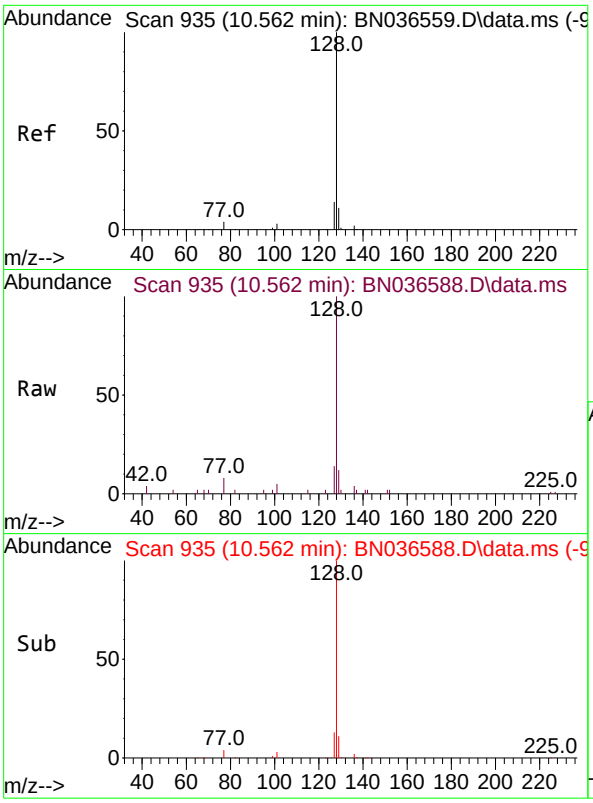


#8
Nitrobenzene-d5
Concen: 0.383 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion: 82 Resp: 2108

Ion	Ratio	Lower	Upper
82	100		
128	39.0	30.6	45.8
54	68.1	52.2	78.4



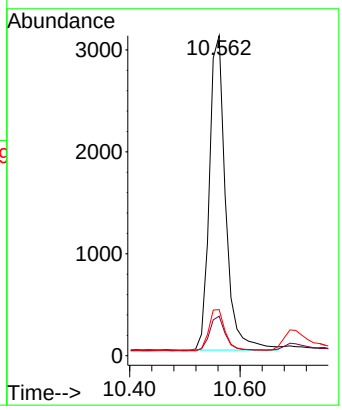


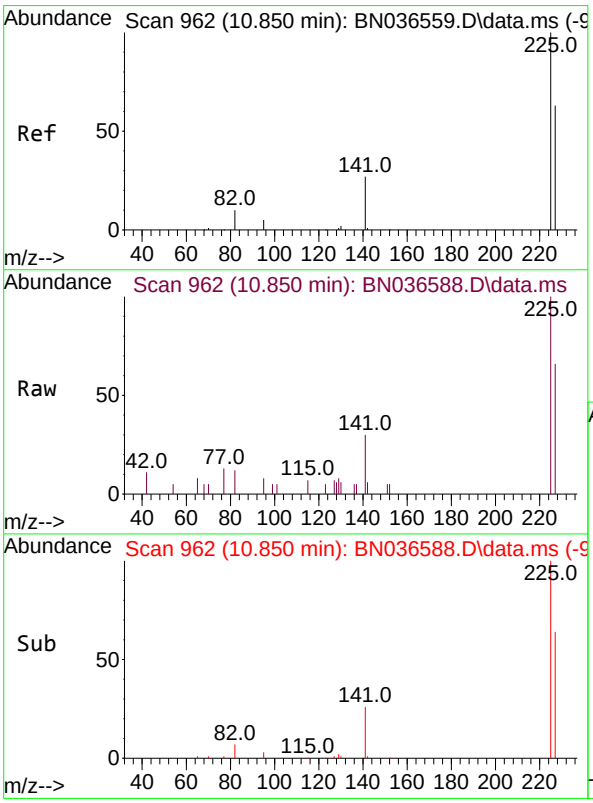
#9
Naphthalene
Concen: 0.424 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:128 Resp: 6313

Ion	Ratio	Lower	Upper
128	100		
129	12.4	9.8	14.6
127	14.4	11.8	17.8

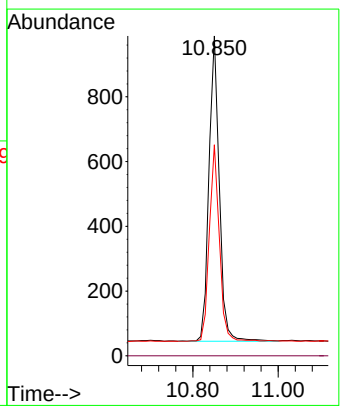


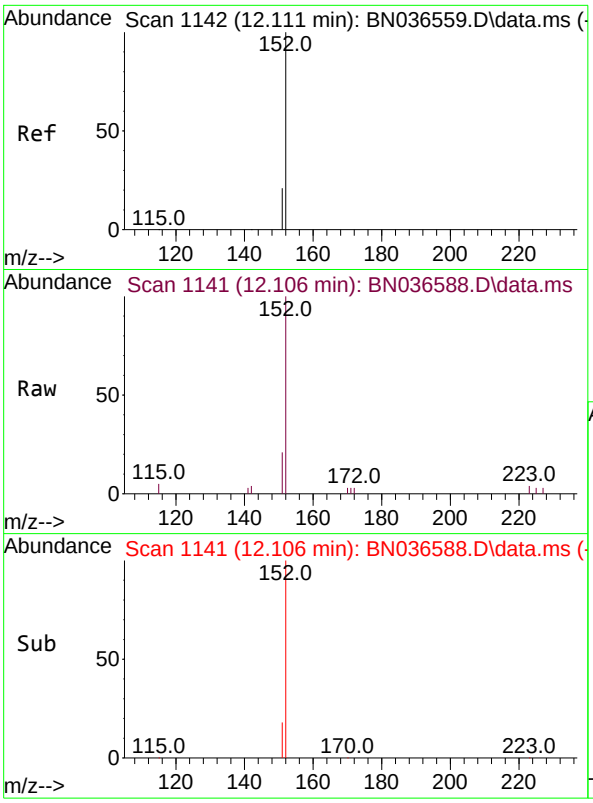


#10
Hexachlorobutadiene
Concen: 0.452 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:225 Resp: 1584

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.7	51.8	77.8



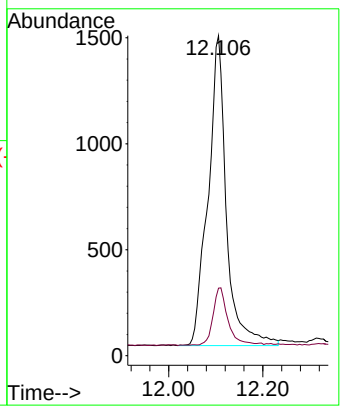


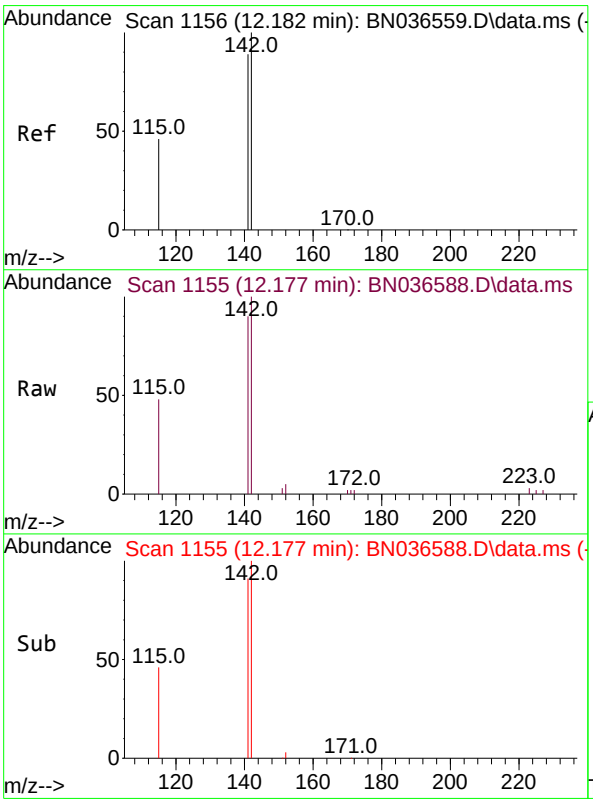
#11
2-Methylnaphthalene-d10
Concen: 0.526 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:152 Resp: 3960

Ion	Ratio	Lower	Upper
152	100		
151	14.7	17.0	25.6#

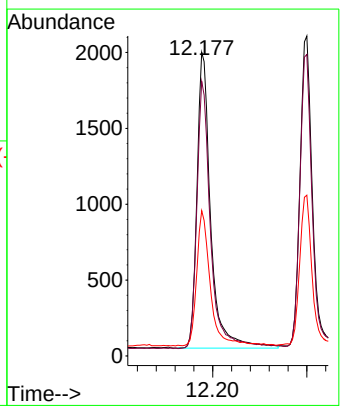


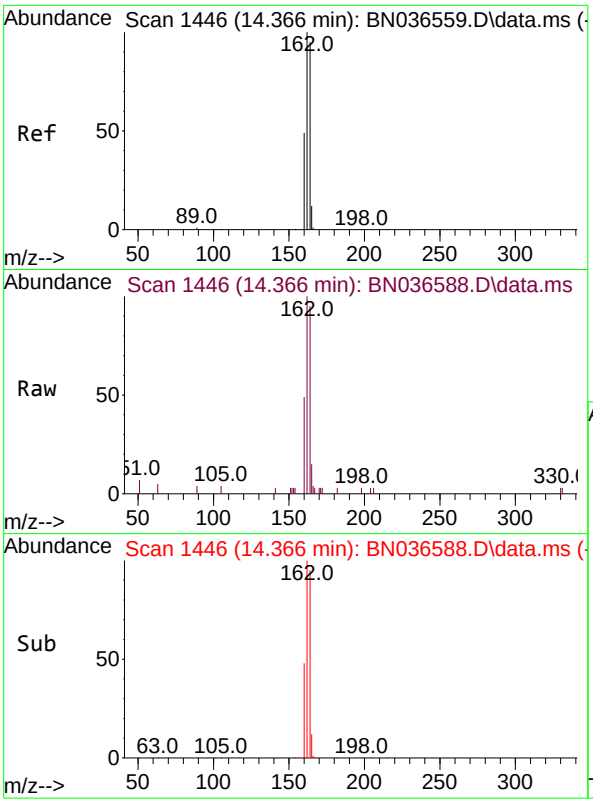


#12
2-Methylnaphthalene
Concen: 0.417 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:142 Resp: 3954

Ion	Ratio	Lower	Upper
142	100		
141	90.5	71.7	107.5
115	47.9	38.3	57.5



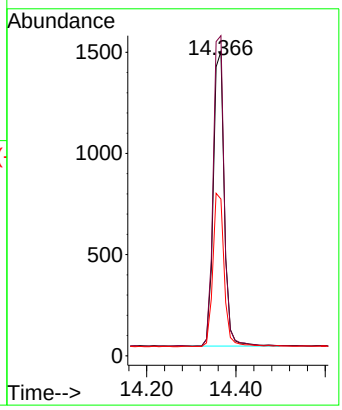


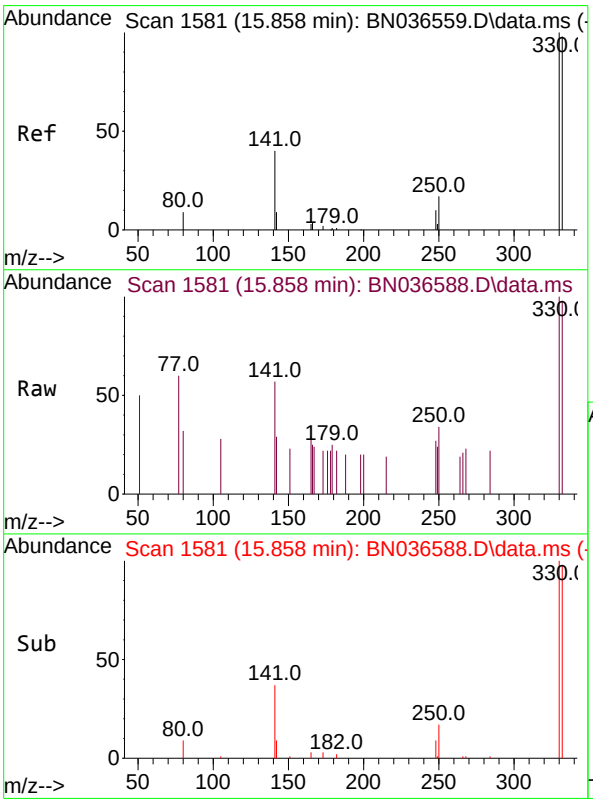
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:164 Resp: 2475

Ion	Ratio	Lower	Upper
164	100		
162	105.2	84.2	126.2
160	51.5	42.2	63.2

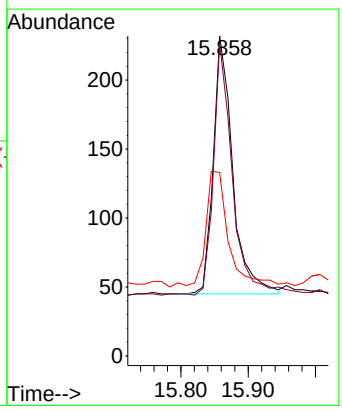


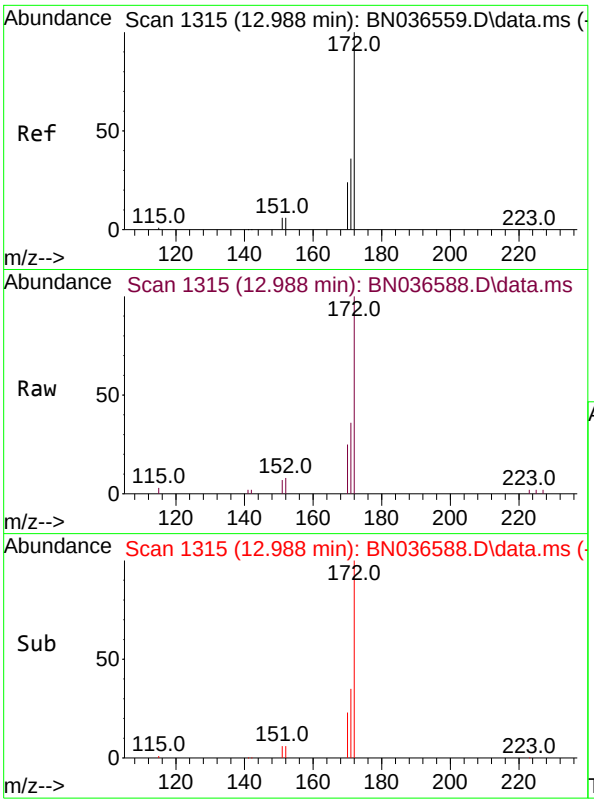


#14
2,4,6-Tribromophenol
Concen: 0.334 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:330 Resp: 375

Ion	Ratio	Lower	Upper
330	100		
332	96.8	75.2	112.8
141	53.9	43.4	65.2



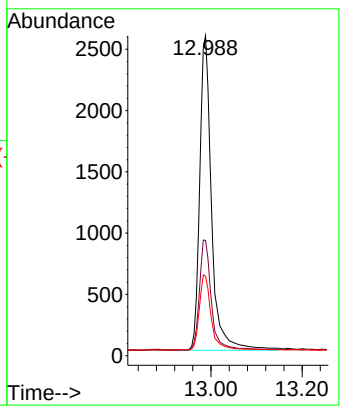


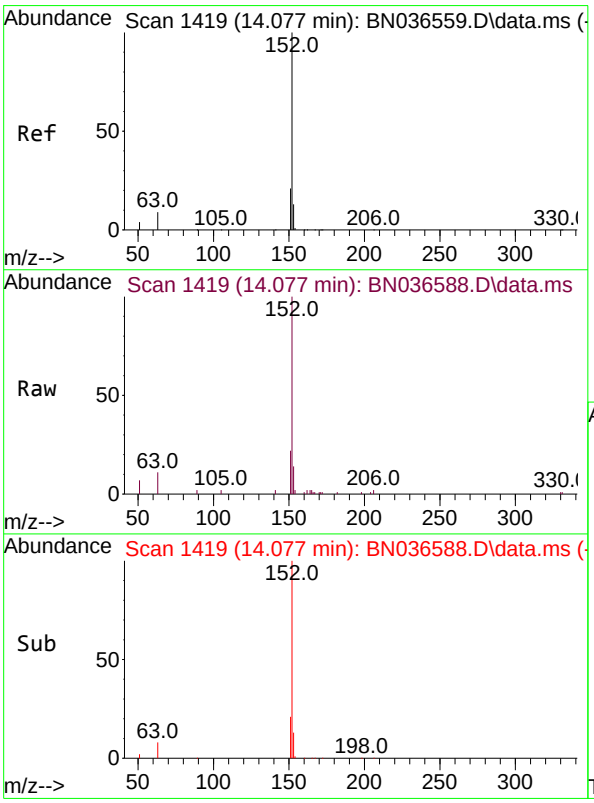
#15
2-Fluorobiphenyl
Concen: 0.450 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:172 Resp: 6472

Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.5	44.3
170	24.8	20.2	30.4

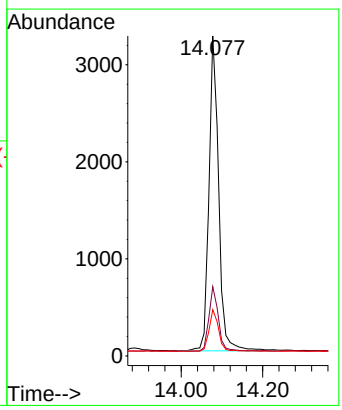


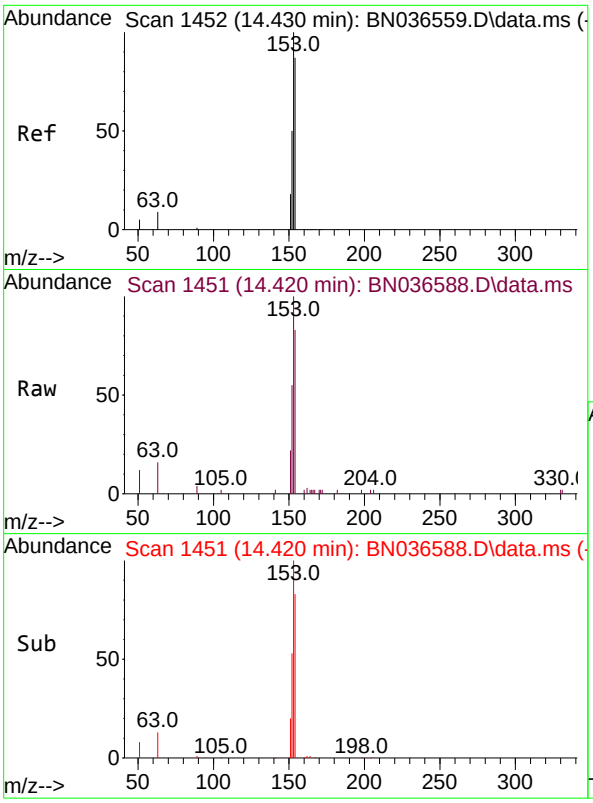


#16
Acenaphthylene
Concen: 0.459 ng
RT: 14.077 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:152 Resp: 5361

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.2	24.4
153	13.2	10.6	15.8



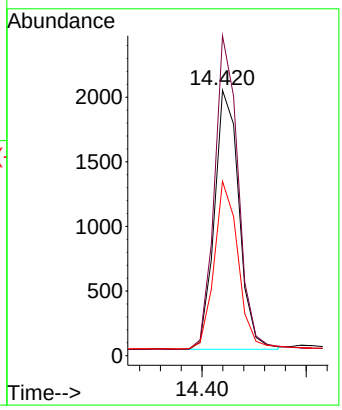


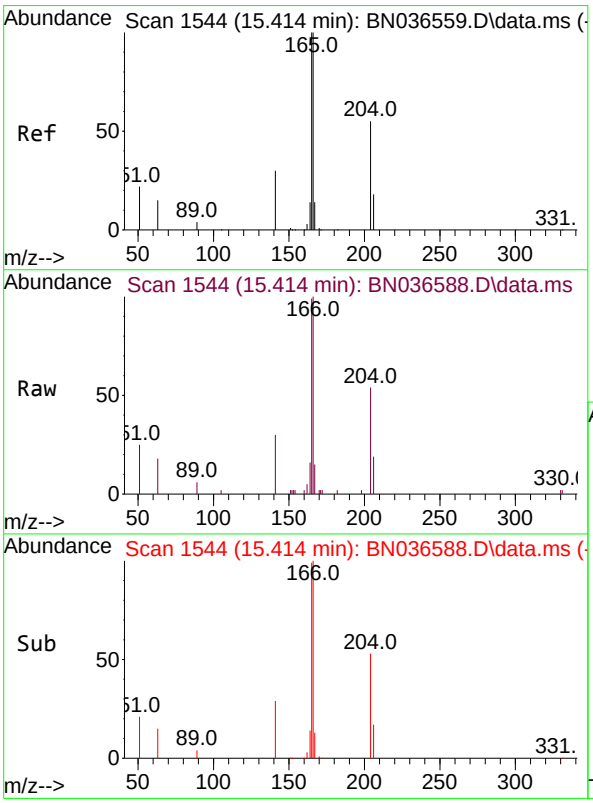
#17
Acenaphthene
Concen: 0.429 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:154 Resp: 3280

Ion	Ratio	Lower	Upper
154	100		
153	118.0	94.1	141.1
152	63.9	49.8	74.6

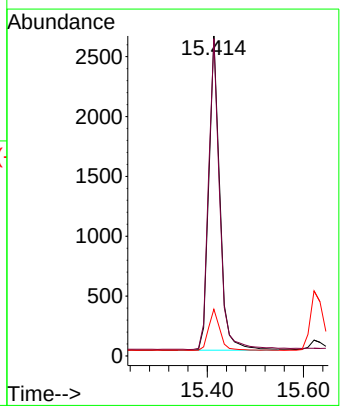


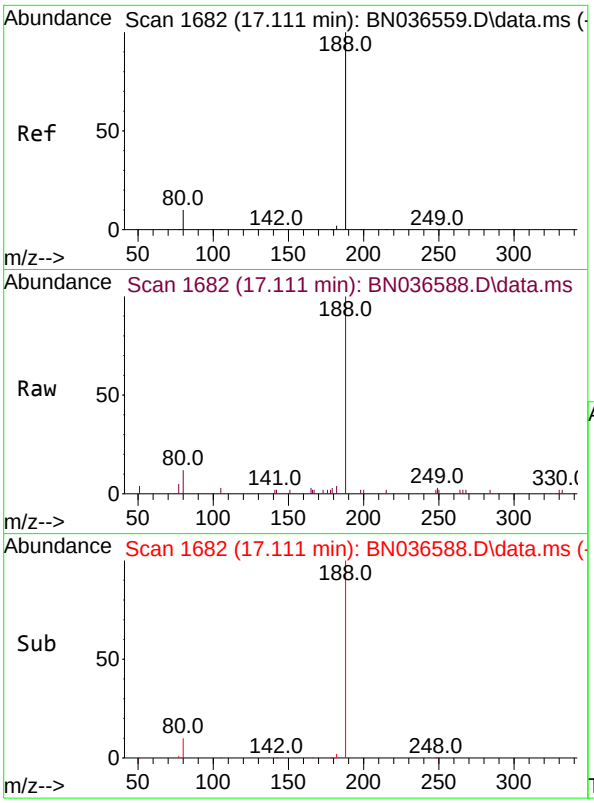


#18
Fluorene
Concen: 0.410 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:166 Resp: 4237

Ion	Ratio	Lower	Upper
166	100		
165	100.2	79.8	119.8
167	13.7	10.6	15.8



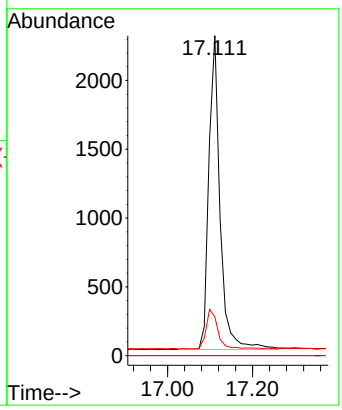


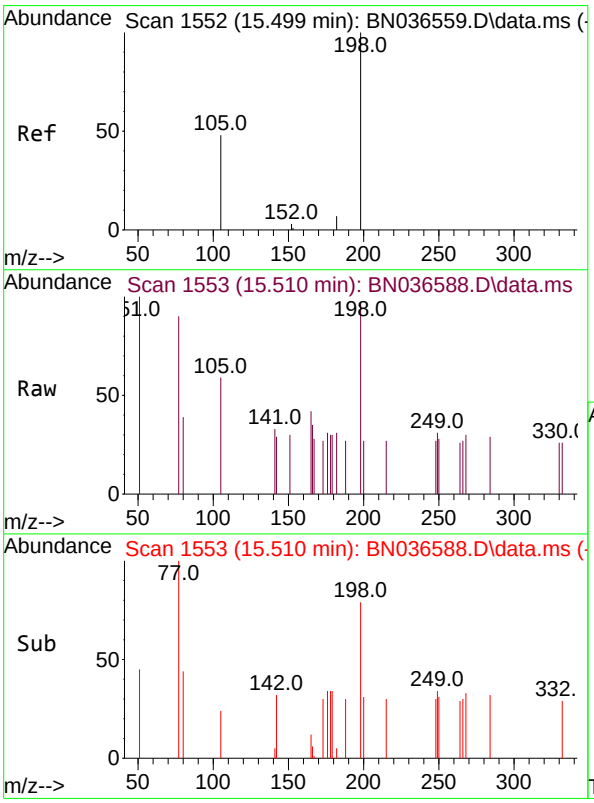
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:188 Resp: 4176

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.1	8.8	13.2

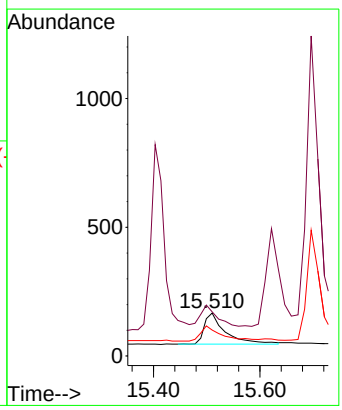


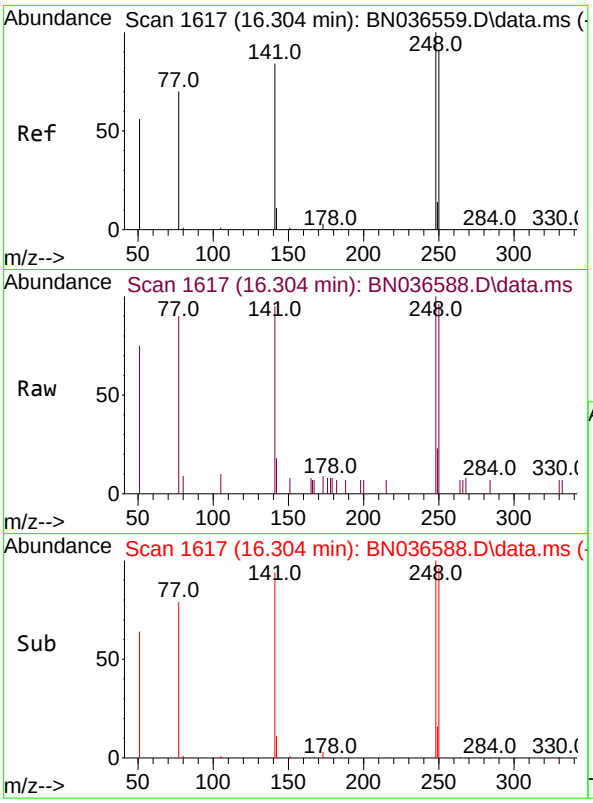


#20
4,6-Dinitro-2-methylphenol
Concen: 0.460 ng
RT: 15.510 min Scan# 1553
Delta R.T. 0.011 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:198 Resp: 335

Ion	Ratio	Lower	Upper
198	100		
51	103.0	107.9	161.9#
105	60.5	56.2	84.2



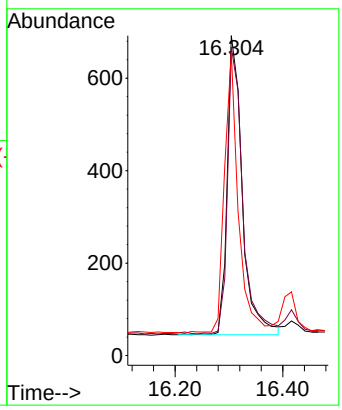


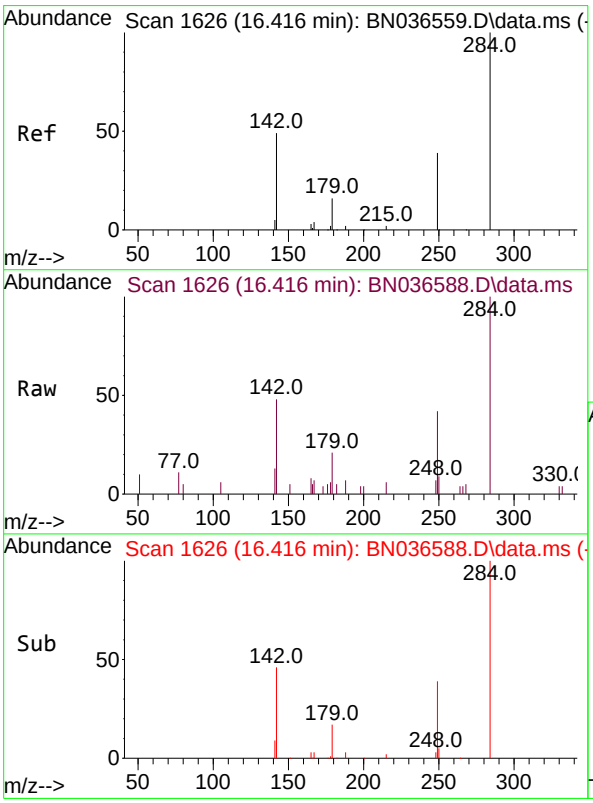
#21
4-Bromophenyl-phenylether
Concen: 0.480 ng
RT: 16.304 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:248 Resp: 1256

Ion	Ratio	Lower	Upper
248	100		
250	96.4	73.0	109.6
141	94.8	68.6	103.0

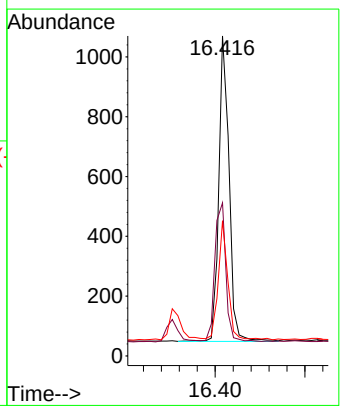


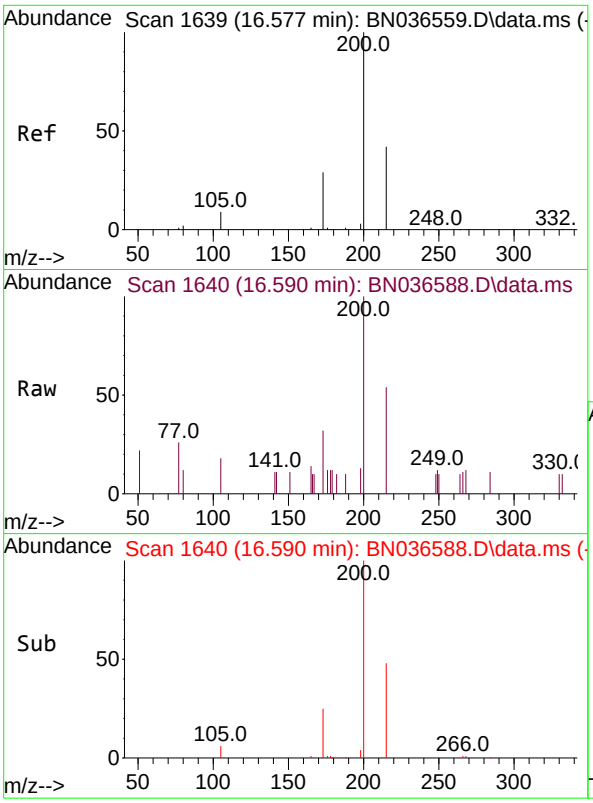


#22
Hexachlorobenzene
Concen: 0.513 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:284 Resp: 1619

Ion	Ratio	Lower	Upper
284	100		
142	48.5	37.0	55.4
249	35.0	28.1	42.1



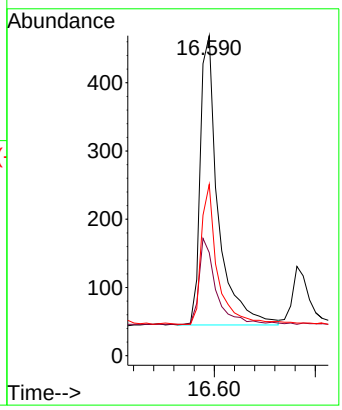


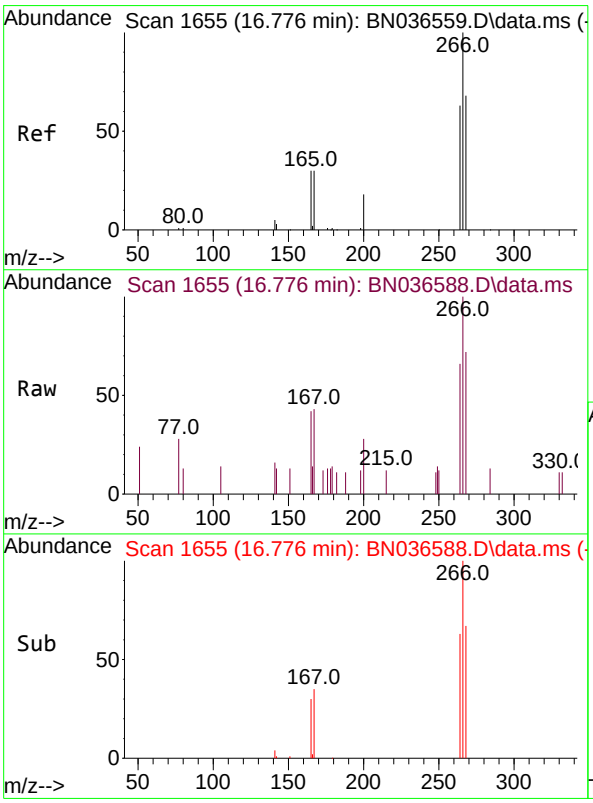
#23
Atrazine
Concen: 0.499 ng
RT: 16.590 min Scan# 1(
Delta R.T. 0.012 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:200 Resp: 1046

Ion	Ratio	Lower	Upper
200	100		
173	32.2	27.3	40.9
215	53.5	36.8	55.2

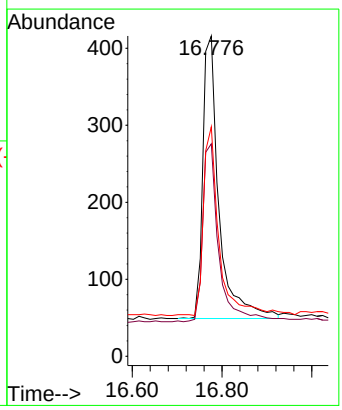


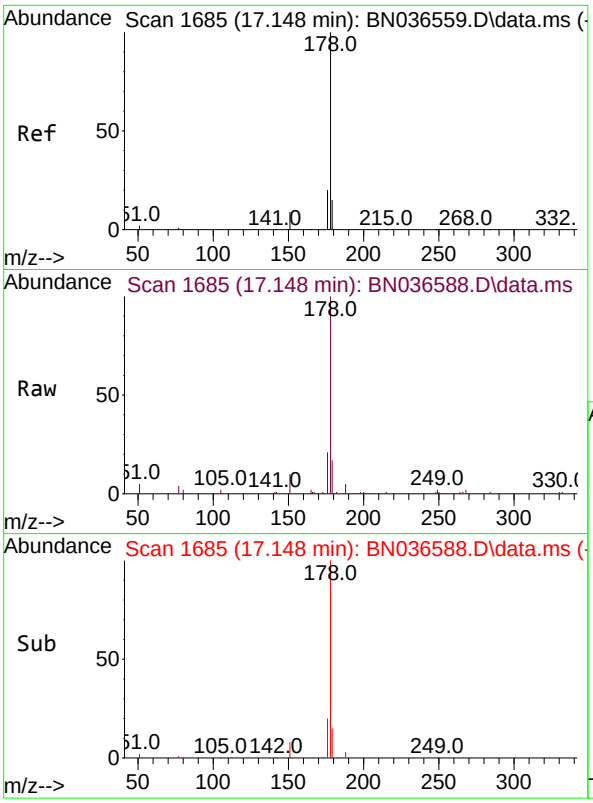


#24
Pentachlorophenol
Concen: 0.637 ng
RT: 16.776 min Scan# 1655
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:266 Resp: 917

Ion	Ratio	Lower	Upper
266	100		
264	62.4	49.6	74.4
268	64.8	50.9	76.3



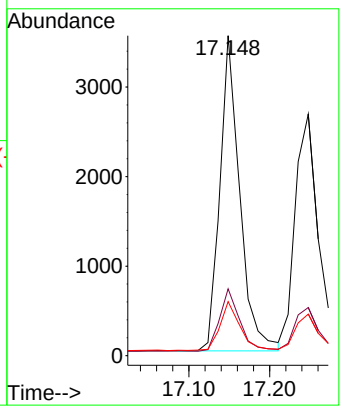


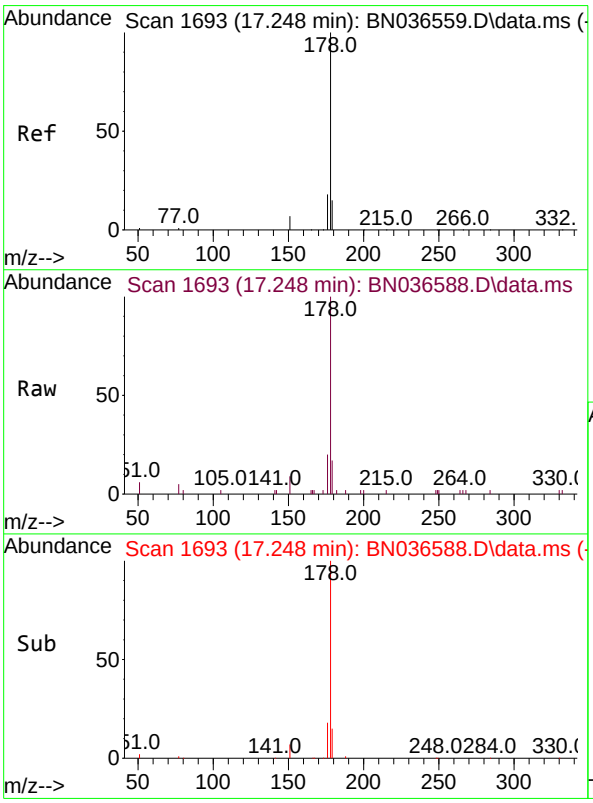
#25
Phenanthrene
Concen: 0.481 ng
RT: 17.148 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:178 Resp: 6029

Ion	Ratio	Lower	Upper
178	100		
176	20.1	15.9	23.9
179	15.7	12.2	18.4

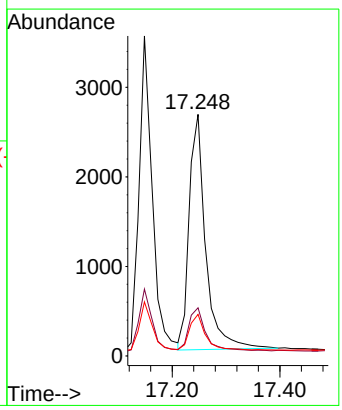


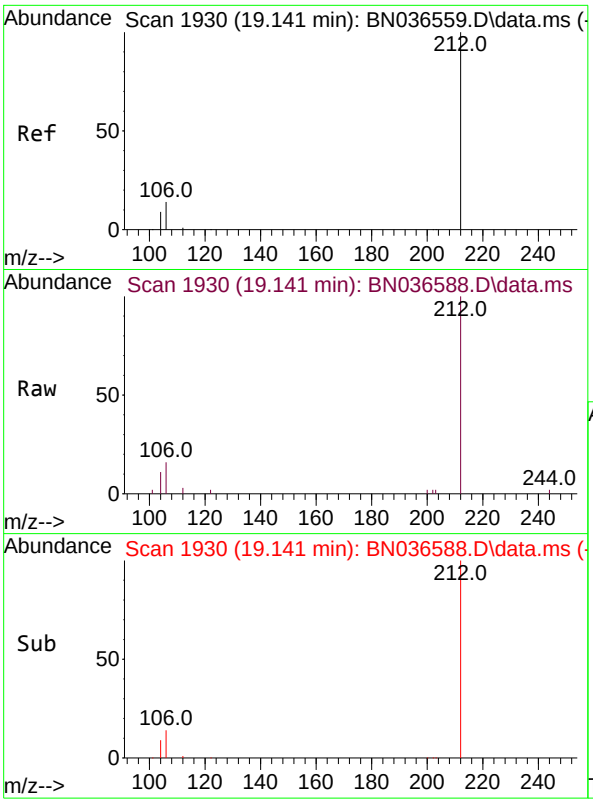


#26
Anthracene
Concen: 0.496 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:178 Resp: 5609

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.4	23.2
179	15.1	12.6	18.8



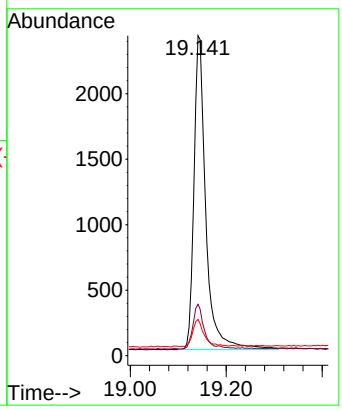


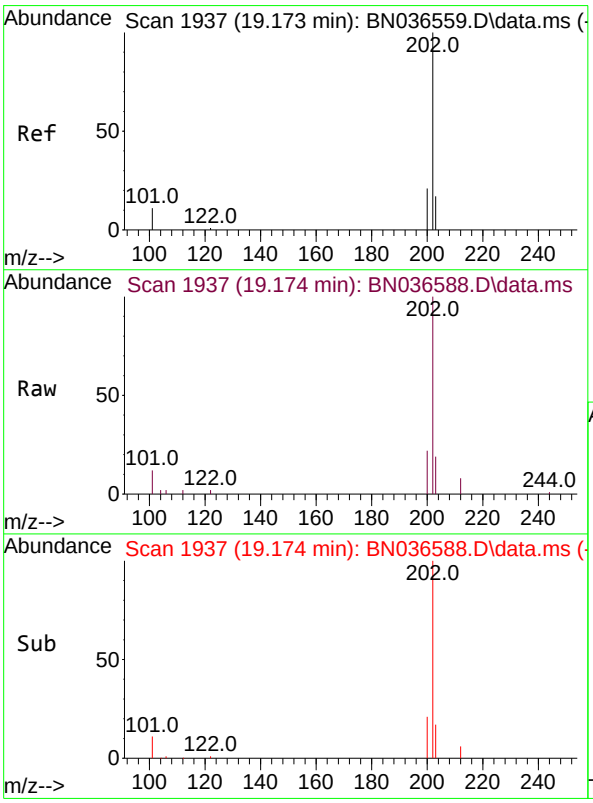
#27
Fluoranthene-d10
Concen: 0.388 ng
RT: 19.141 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:212 Resp: 4153

Ion	Ratio	Lower	Upper
212	100		
106	13.6	11.8	17.6
104	8.4	7.3	10.9

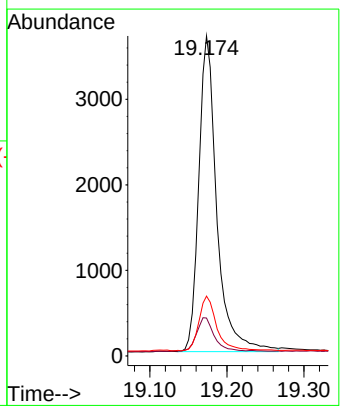


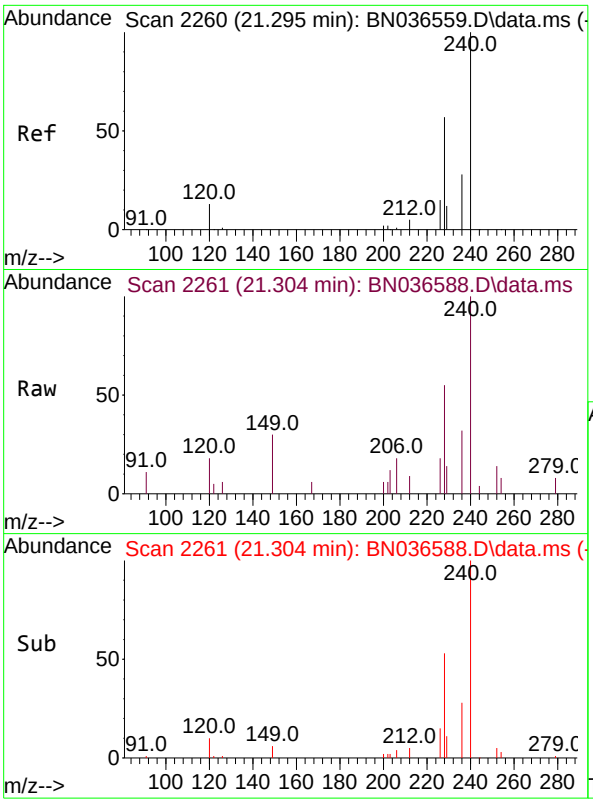


#28
Fluoranthene
Concen: 0.427 ng
RT: 19.174 min Scan# 1937
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:202 Resp: 6012

Ion	Ratio	Lower	Upper
202	100		
101	10.4	9.4	14.0
203	17.2	13.5	20.3



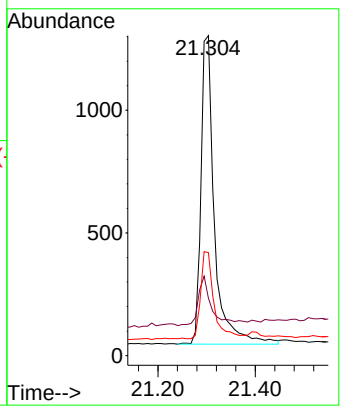


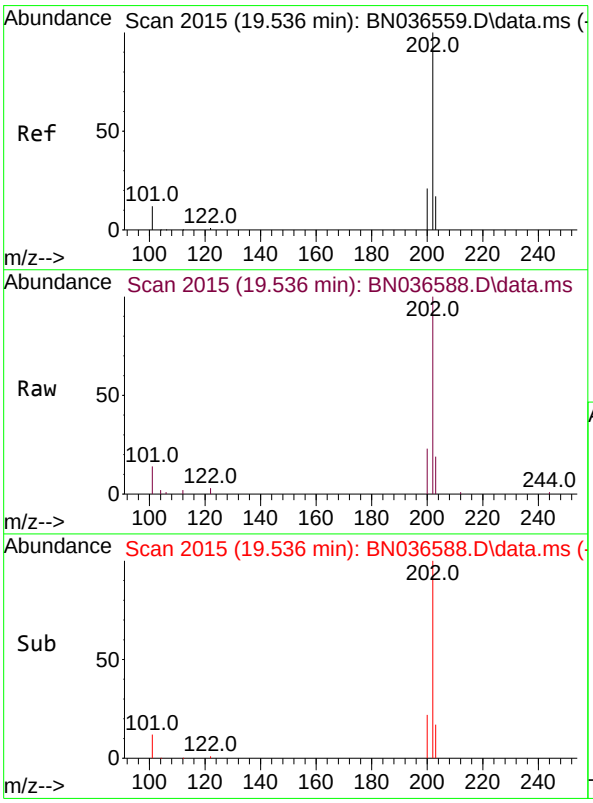
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:240 Resp: 2420

Ion	Ratio	Lower	Upper
240	100		
120	17.9	14.6	22.0
236	32.2	24.1	36.1

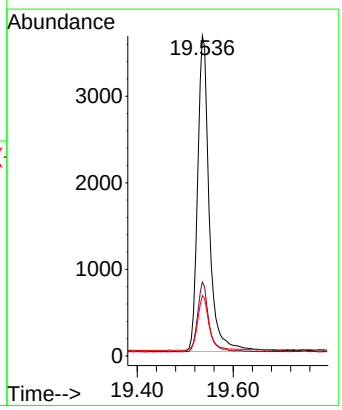


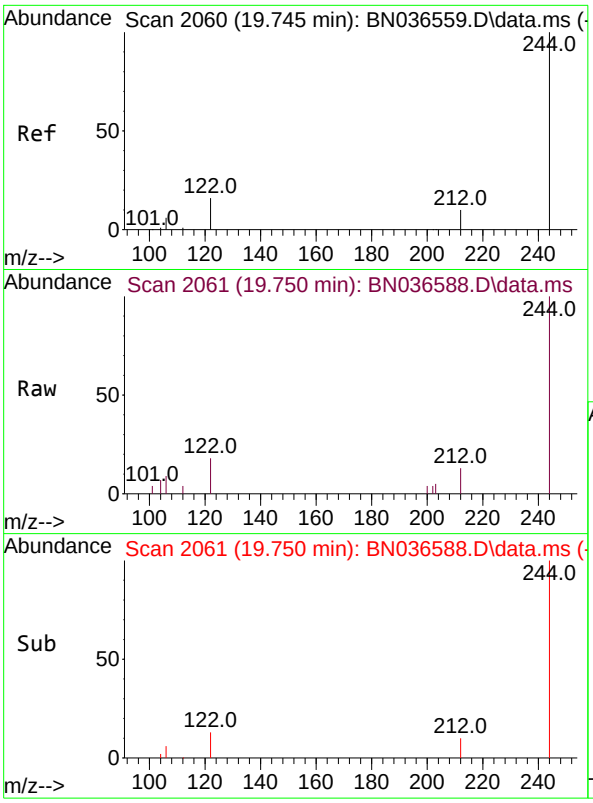


#30
Pyrene
Concen: 0.524 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:202 Resp: 6199

Ion	Ratio	Lower	Upper
202	100		
200	20.8	17.1	25.7
203	17.4	14.1	21.1



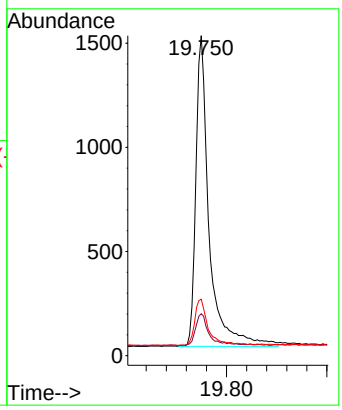


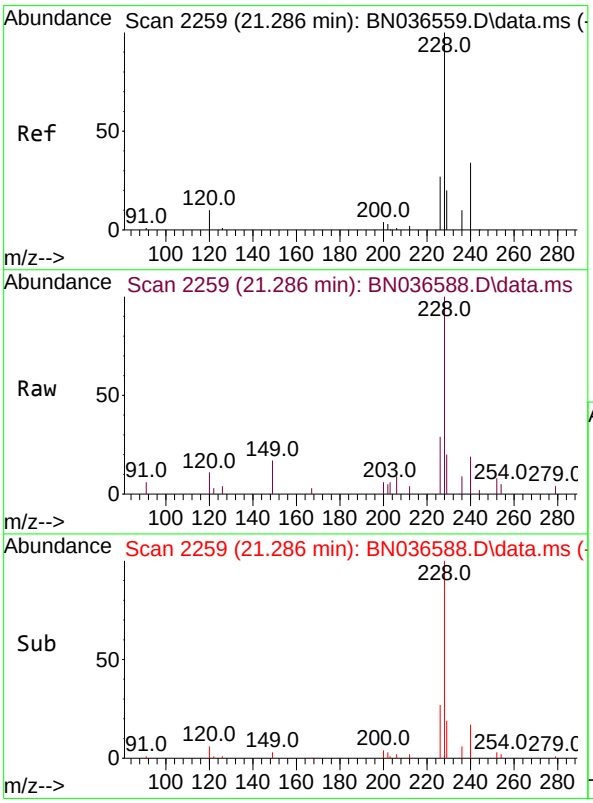
#31
Terphenyl-d14
Concen: 0.471 ng
RT: 19.750 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:244 Resp: 2732

Ion	Ratio	Lower	Upper
244	100		
212	13.1	9.6	14.4
122	17.6	13.9	20.9

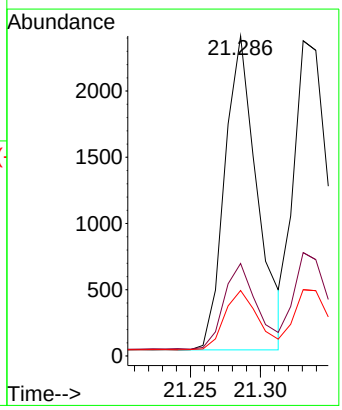


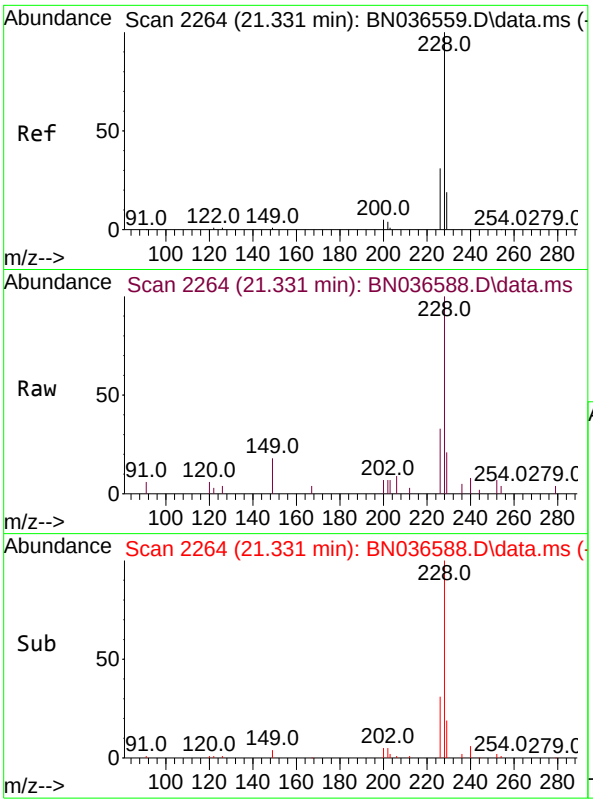


#32
Benzo(a)anthracene
Concen: 0.456 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:228 Resp: 3838

Ion	Ratio	Lower	Upper
228	100		
226	28.9	22.5	33.7
229	20.4	16.6	25.0



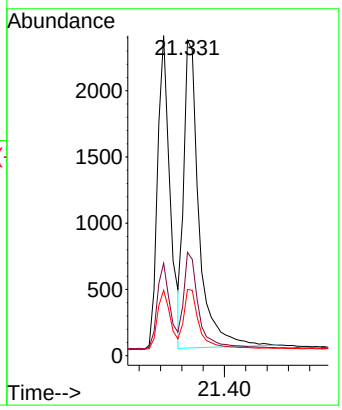


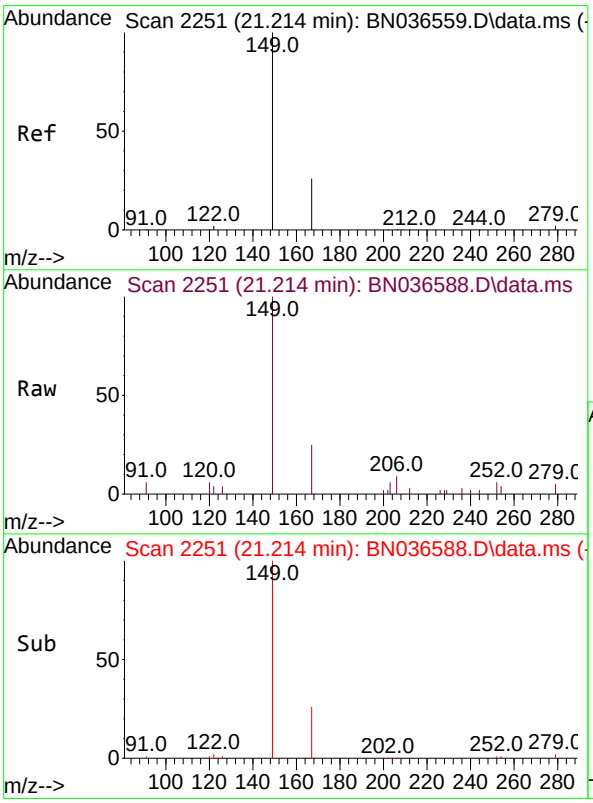
#33
Chrysene
Concen: 0.503 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:228 Resp: 4624

Ion	Ratio	Lower	Upper
228	100		
226	32.8	25.3	37.9
229	21.0	15.8	23.8

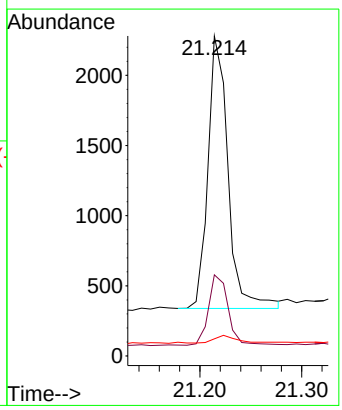


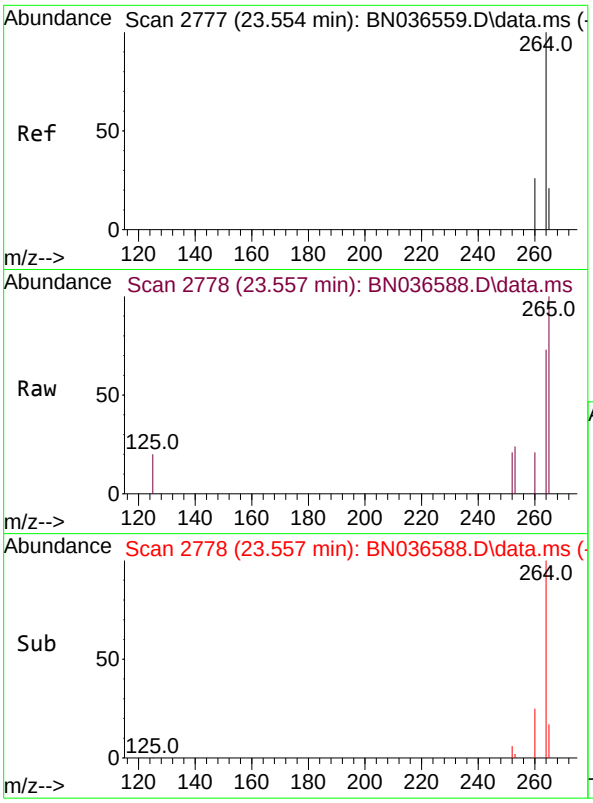


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.445 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:149 Resp: 2665

Ion	Ratio	Lower	Upper
149	100		
167	25.0	20.7	31.1
279	2.9	3.6	5.4#



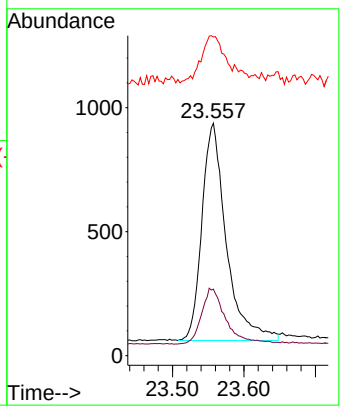


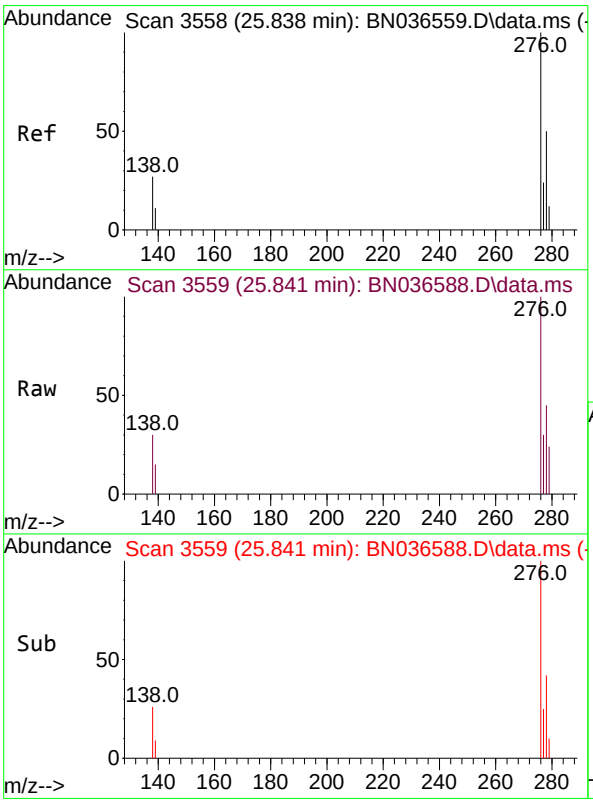
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.557 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:264 Resp: 2074

Ion	Ratio	Lower	Upper
264	100		
260	28.6	22.6	33.8
265	137.1	88.1	132.1#

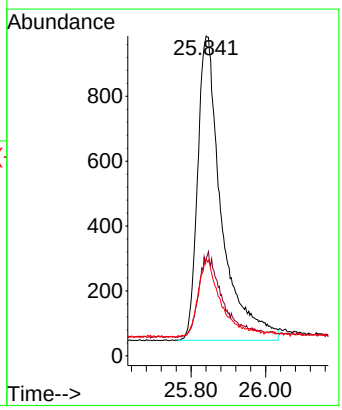


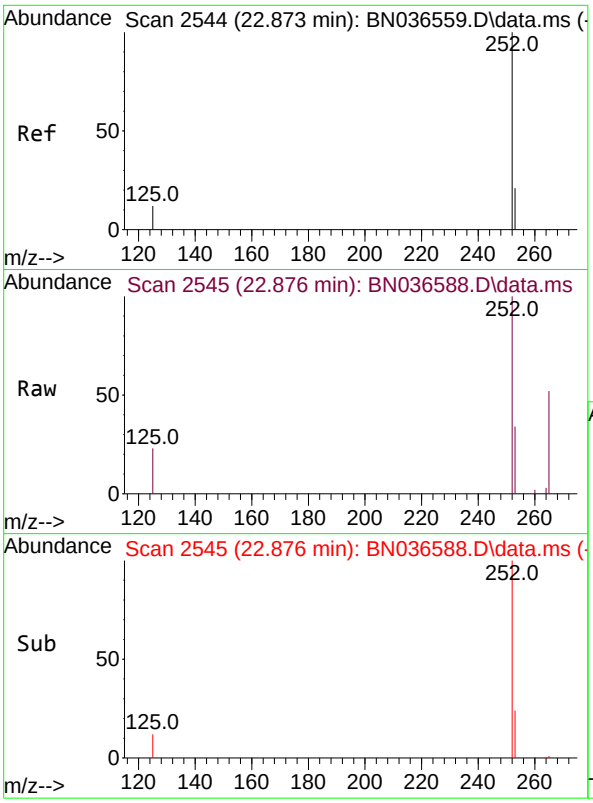


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.556 ng
RT: 25.841 min Scan# 3559
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:276 Resp: 4164

Ion	Ratio	Lower	Upper
276	100		
138	25.7	23.4	35.2
277	22.9	20.0	30.0



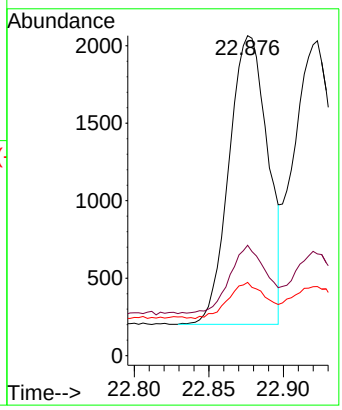


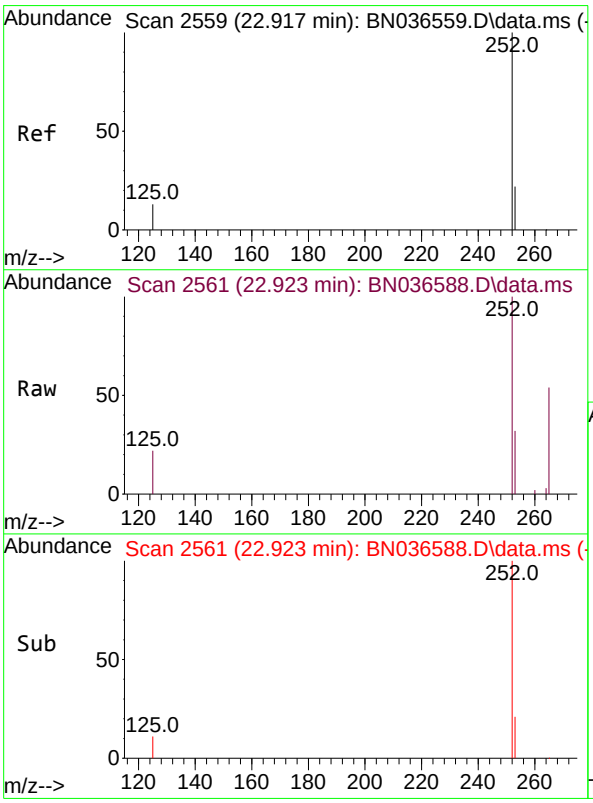
#37
Benzo(b)fluoranthene
Concen: 0.445 ng
RT: 22.876 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:252 Resp: 3355

Ion	Ratio	Lower	Upper
252	100		
253	34.5	23.9	35.9
125	22.9	17.4	26.2

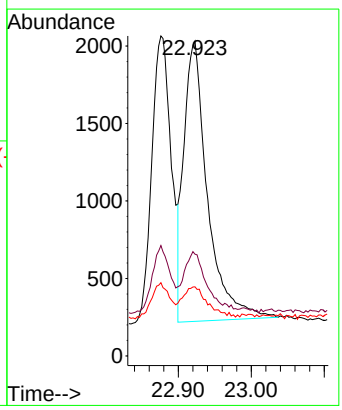


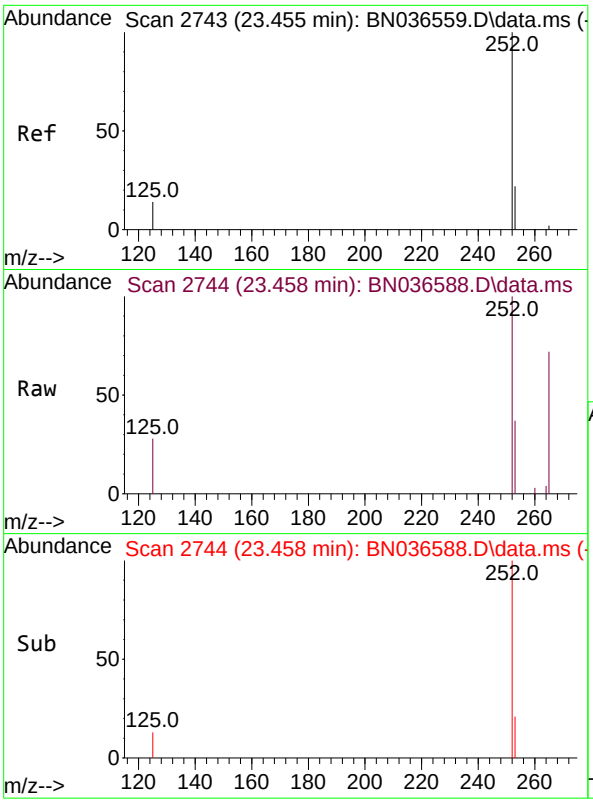


#38
Benzo(k)fluoranthene
Concen: 0.513 ng
RT: 22.923 min Scan# 2561
Delta R.T. 0.006 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:252 Resp: 4065

Ion	Ratio	Lower	Upper
252	100		
253	32.3	24.6	36.8
125	21.9	17.8	26.8



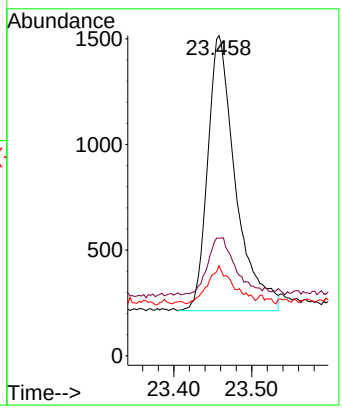


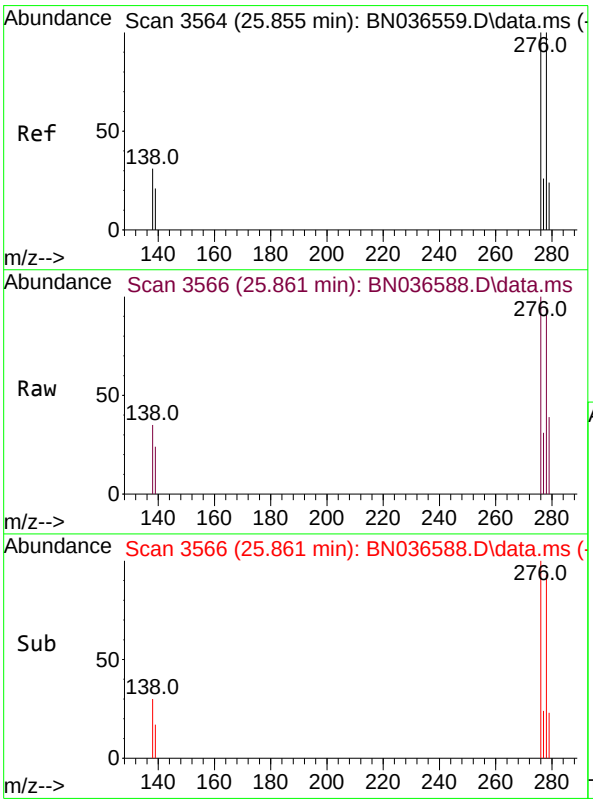
#39
Benzo(a)pyrene
Concen: 0.510 ng
RT: 23.458 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:252 Resp: 3242

Ion	Ratio	Lower	Upper
252	100		
253	36.7	27.8	41.8
125	28.1	22.7	34.1

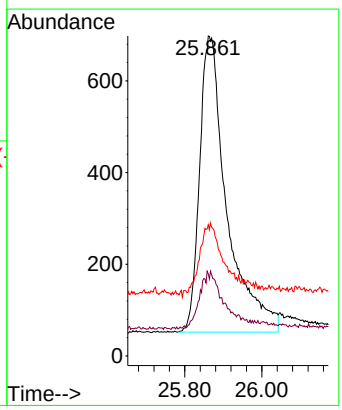


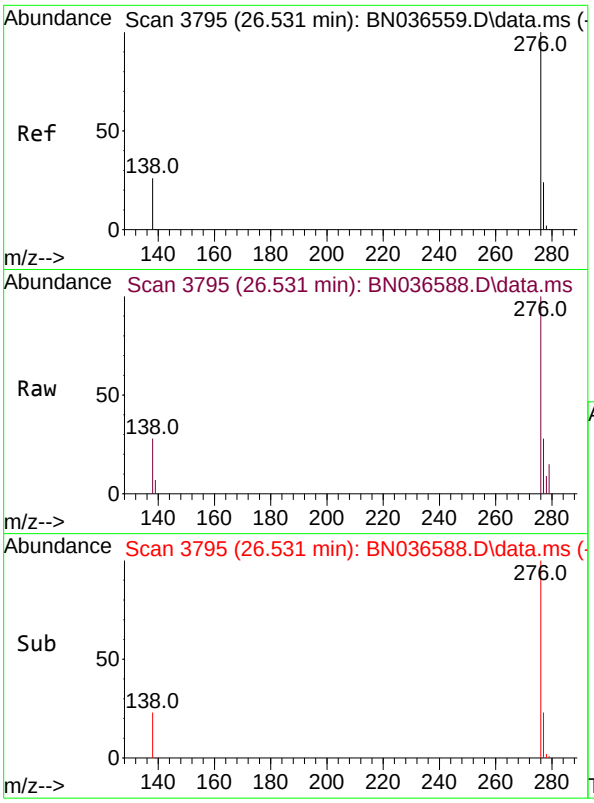


#40
Dibenzo(a,h)anthracene
Concen: 0.545 ng
RT: 25.861 min Scan# 3566
Delta R.T. 0.006 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Tgt Ion:278 Resp: 3176

Ion	Ratio	Lower	Upper
278	100		
139	25.6	20.8	31.2
279	41.0	28.8	43.2



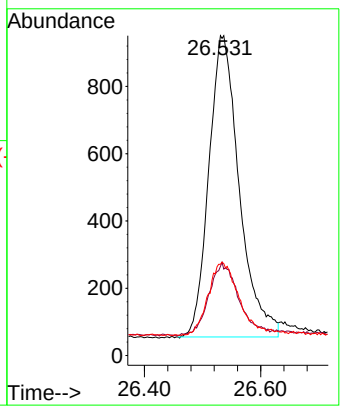


#41
Benzo(g,h,i)perylene
Concen: 0.489 ng
RT: 26.531 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036588.D
Acq: 11 Mar 2025 19:09

Instrument :
BNA_N
ClientSampleId :
PB167057BS

Tgt Ion:276 Resp: 3258

Ion	Ratio	Lower	Upper
276	100		
277	27.9	22.2	33.4
138	28.5	24.1	36.1



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036589.D
Acq On : 11 Mar 2025 19:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Mar 12 01:09:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.724	152	1964	0.400	ng		0.00
7) Naphthalene-d8	10.509	136	4774	0.400	ng		0.00
13) Acenaphthene-d10	14.356	164	2543	0.400	ng		-0.01
19) Phenanthrene-d10	17.111	188	5156	0.400	ng		0.00
29) Chrysene-d12	21.295	240	3498	0.400	ng		0.00
35) Perylene-d12	23.554	264	2998	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.312	112	1585	0.346	ng		0.00
5) Phenol-d6	6.894	99	1840	0.325	ng		0.00
8) Nitrobenzene-d5	8.875	82	1860	0.358	ng		0.00
11) 2-Methylnaphthalene-d10	12.106	152	2744	0.386	ng		0.00
14) 2,4,6-Tribromophenol	15.858	330	450	0.390	ng		0.00
15) 2-Fluorobiphenyl	12.988	172	6396	0.432	ng		0.00
27) Fluoranthene-d10	19.141	212	5306	0.402	ng		0.00
31) Terphenyl-d14	19.745	244	3310	0.395	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	897	0.412	ng		98
3) n-Nitrosodimethylamine	3.550	42	1761	0.400	ng		95
6) bis(2-Chloroethyl)ether	7.147	93	1905	0.326	ng		99
9) Naphthalene	10.562	128	5442	0.388	ng		100
10) Hexachlorobutadiene	10.851	225	1336	0.404	ng	#	97
12) 2-Methylnaphthalene	12.182	142	3430	0.384	ng		100
16) Acenaphthylene	14.078	152	4983	0.415	ng		99
17) Acenaphthene	14.420	154	3052	0.389	ng		99
18) Fluorene	15.414	166	4246	0.400	ng		100
20) 4,6-Dinitro-2-methylph...	15.499	198	375	0.430	ng		95
21) 4-Bromophenyl-phenylether	16.305	248	1311	0.406	ng		95
22) Hexachlorobenzene	16.416	284	1646	0.422	ng		98
23) Atrazine	16.578	200	1043	0.403	ng		98
24) Pentachlorophenol	16.764	266	661	0.372	ng		100
25) Phenanthrene	17.149	178	6304	0.408	ng		99
26) Anthracene	17.248	178	5453	0.391	ng		99
28) Fluoranthene	19.169	202	7017	0.404	ng		99
30) Pyrene	19.536	202	7087	0.414	ng		100
32) Benzo(a)anthracene	21.286	228	4721	0.388	ng		100
33) Chrysene	21.331	228	5431	0.409	ng		99
34) Bis(2-ethylhexyl)phtha...	21.214	149	3858	0.445	ng	#	99
36) Indeno(1,2,3-cd)pyrene	25.835	276	4281	0.396	ng		95
37) Benzo(b)fluoranthene	22.920	252	4544	0.416	ng		97
38) Benzo(k)fluoranthene	22.920	252	4544	0.397	ng		98
39) Benzo(a)pyrene	23.455	252	3929	0.428	ng	#	92
40) Dibenzo(a,h)anthracene	25.852	278	3325	0.395	ng		98
41) Benzo(g,h,i)perylene	26.528	276	3963	0.411	ng		97

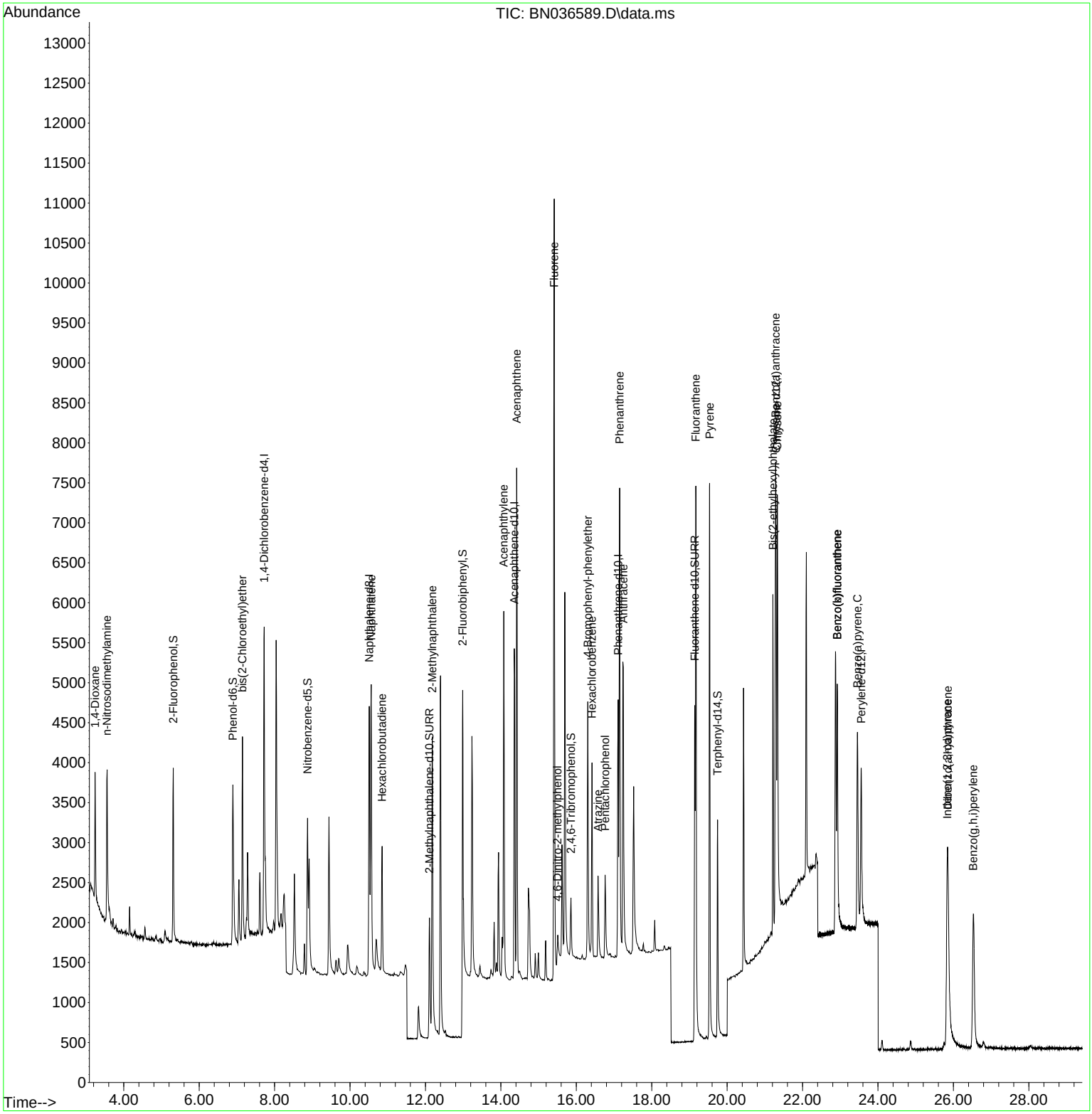
(#) = qualifier out of range (m) = manual integration (+) = signals summed

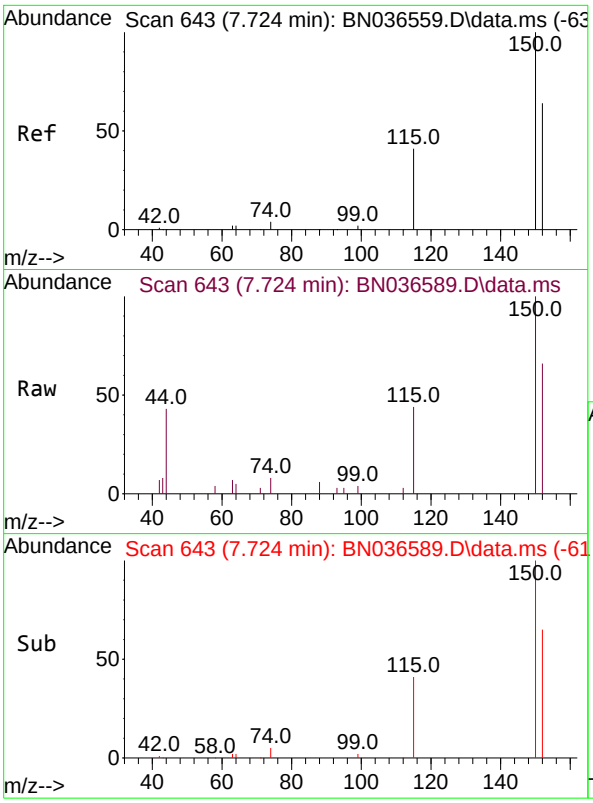
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN031125\
Data File : BN036589.D
Acq On : 11 Mar 2025 19:46
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Mar 12 01:09:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN031025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Mar 10 16:06:28 2025
Response via : Initial Calibration



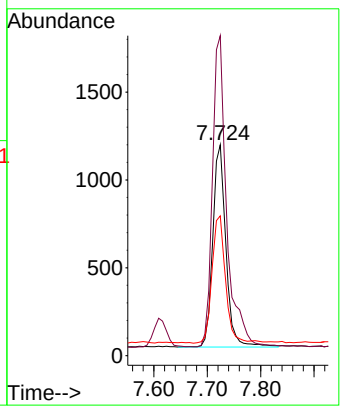


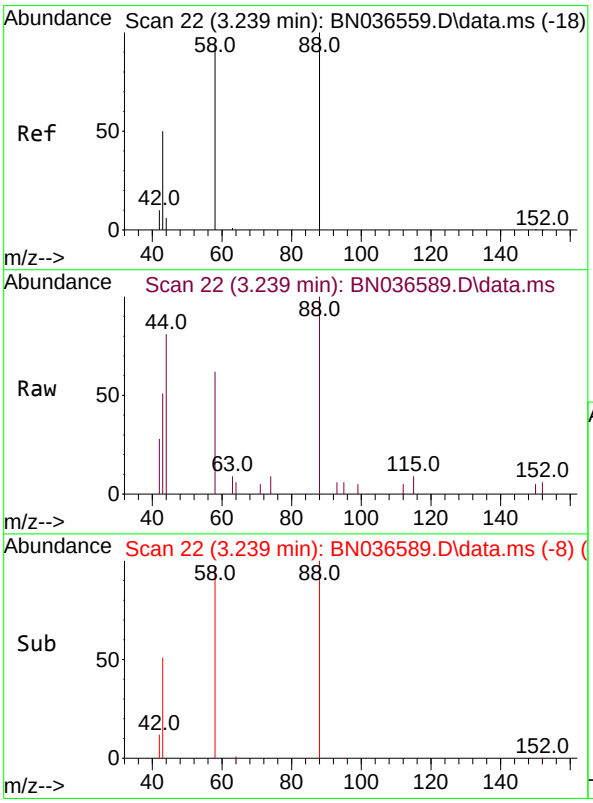
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.724 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 1964

Ion	Ratio	Lower	Upper
152	100		
150	151.7	123.7	185.5
115	66.3	54.3	81.5

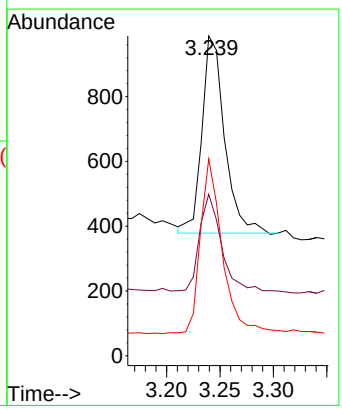


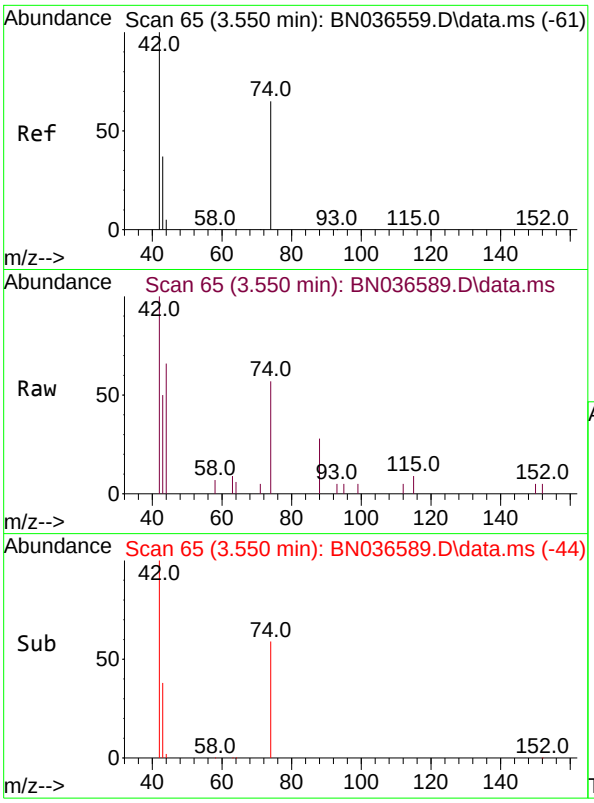


#2
1,4-Dioxane
Concen: 0.412 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 88 Resp: 897

Ion	Ratio	Lower	Upper
88	100		
43	48.8	37.8	56.8
58	86.1	67.4	101.2



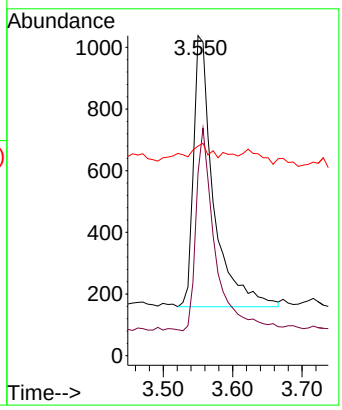


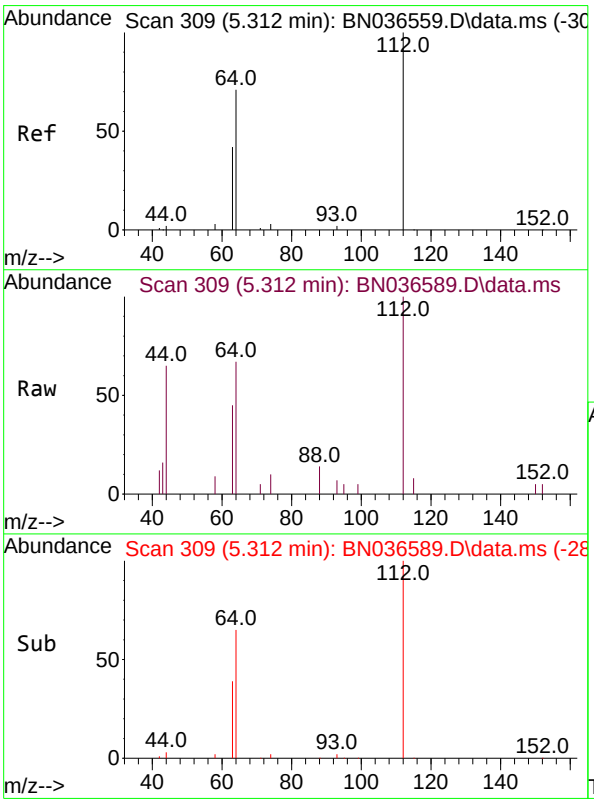
#3
n-Nitrosodimethylamine
Concen: 0.400 ng
RT: 3.550 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1761

Ion	Ratio	Lower	Upper
42	100		
74	71.6	60.6	90.8
44	8.3	6.3	9.5

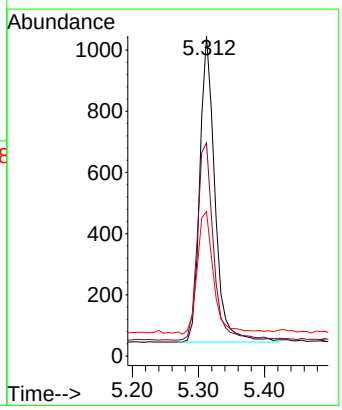


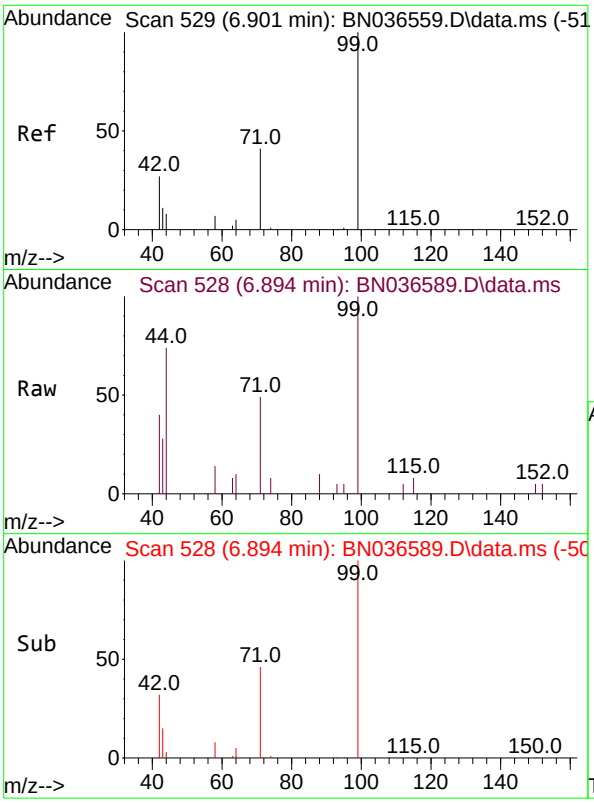


#4
2-Fluorophenol
Concen: 0.346 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:112 Resp: 1585

Ion	Ratio	Lower	Upper
112	100		
64	68.8	53.1	79.7
63	42.3	31.8	47.8



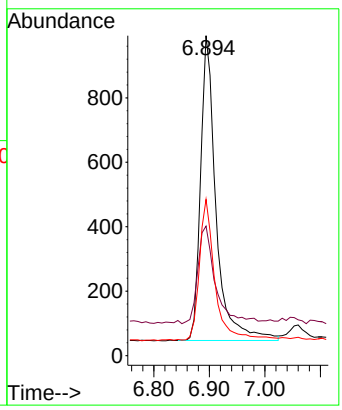


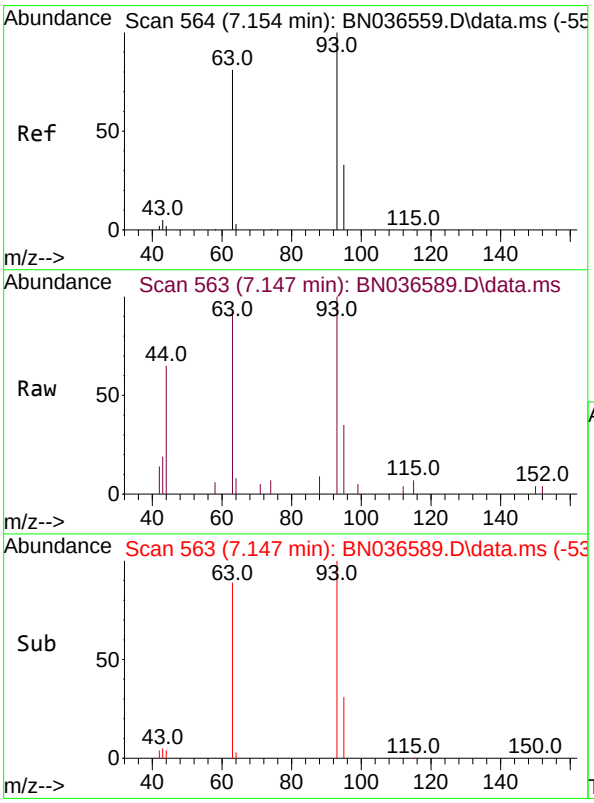
#5
Phenol-d6
Concen: 0.325 ng
RT: 6.894 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 1840

Ion	Ratio	Lower	Upper
99	100		
42	36.8	26.5	39.7
71	46.3	34.1	51.1

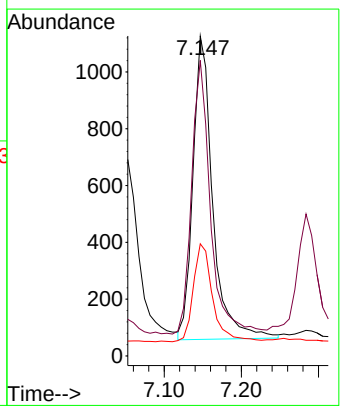


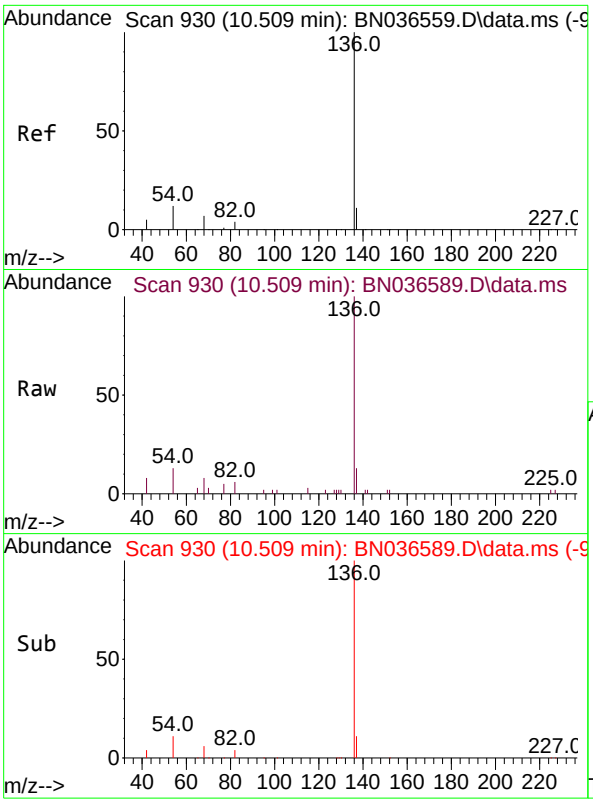


#6
bis(2-Chloroethyl)ether
Concen: 0.326 ng
RT: 7.147 min Scan# 563
Delta R.T. -0.007 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 93 Resp: 1905

Ion	Ratio	Lower	Upper
93	100		
63	85.9	67.7	101.5
95	31.6	25.6	38.4



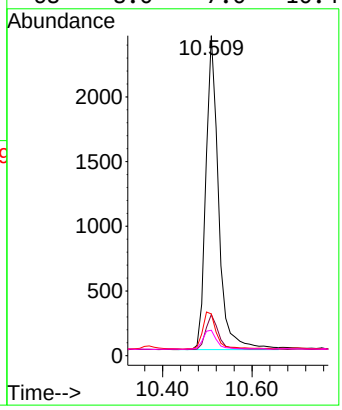


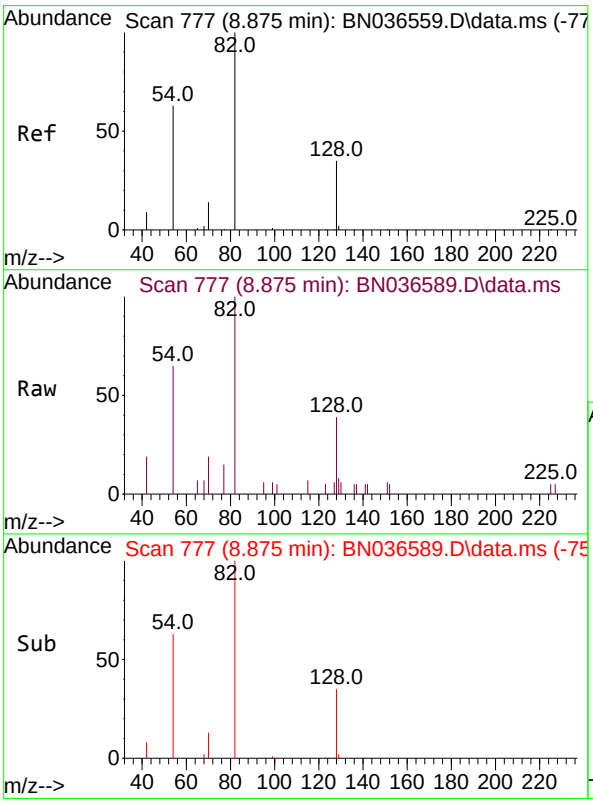
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4774

Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.3	15.5
54	13.1	11.5	17.3
68	8.0	7.0	10.4

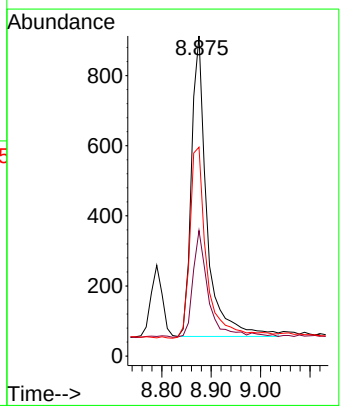


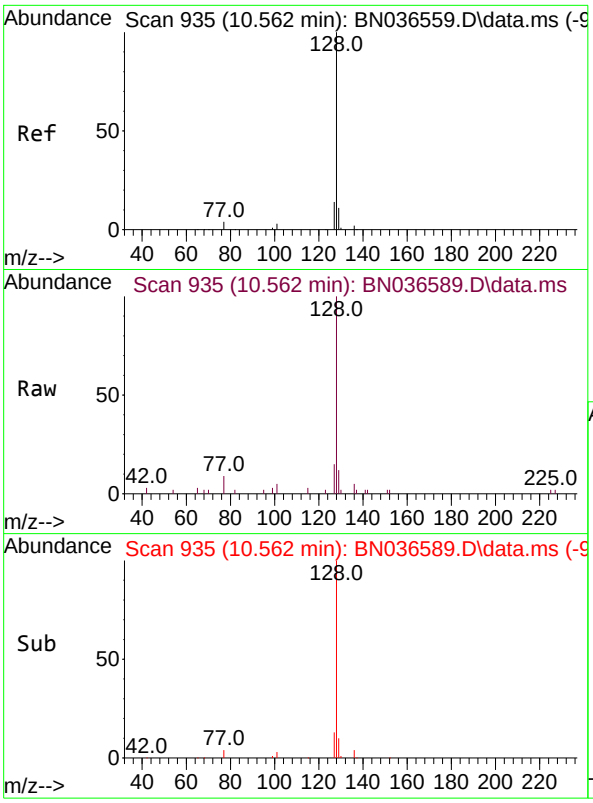


#8
Nitrobenzene-d5
Concen: 0.358 ng
RT: 8.875 min Scan# 777
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion: 82 Resp: 1860

Ion	Ratio	Lower	Upper
82	100		
128	39.2	30.6	45.8
54	65.3	52.2	78.4



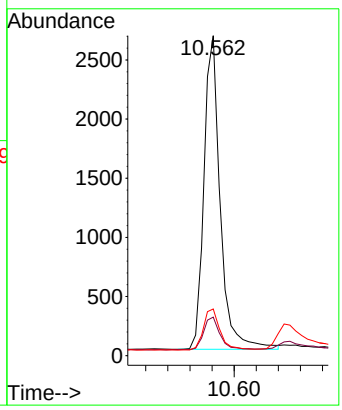


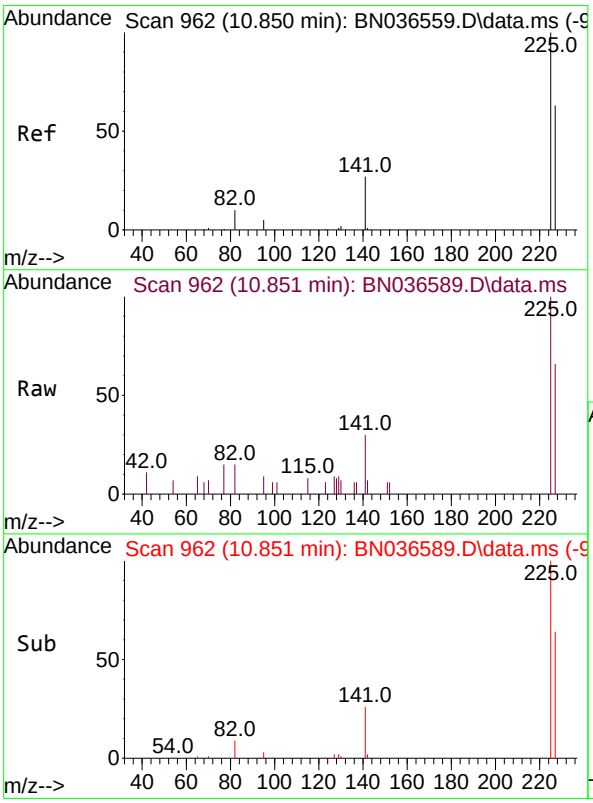
#9
Naphthalene
Concen: 0.388 ng
RT: 10.562 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 5442

Ion	Ratio	Lower	Upper
128	100		
129	12.1	9.8	14.6
127	14.6	11.8	17.8

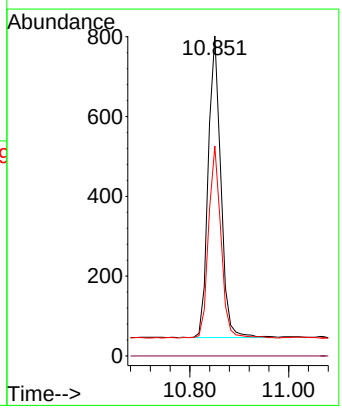


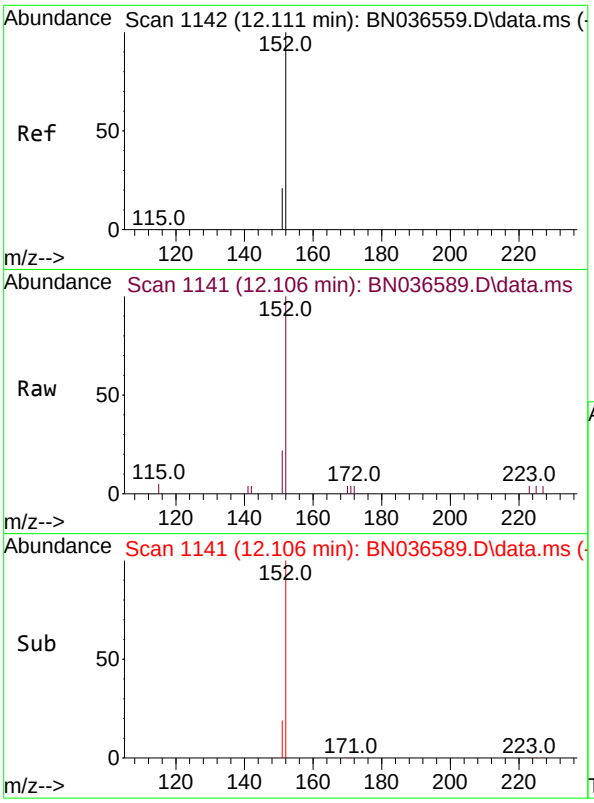


#10
Hexachlorobutadiene
Concen: 0.404 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:225 Resp: 1336

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.6	51.8	77.8



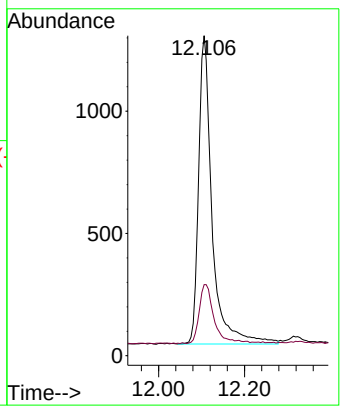


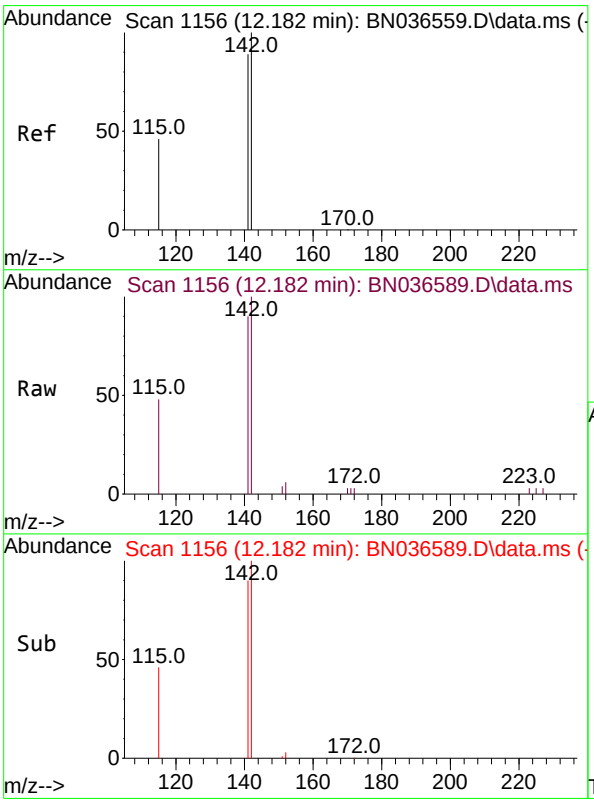
#11
2-Methylnaphthalene-d10
Concen: 0.386 ng
RT: 12.106 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2744

Ion	Ratio	Lower	Upper
152	100		
151	21.1	17.0	25.6

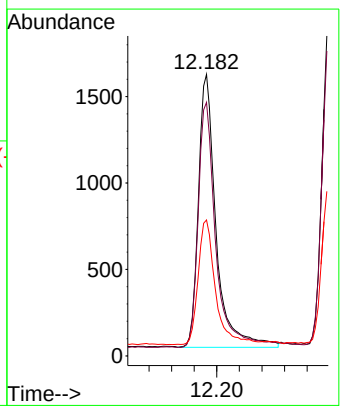


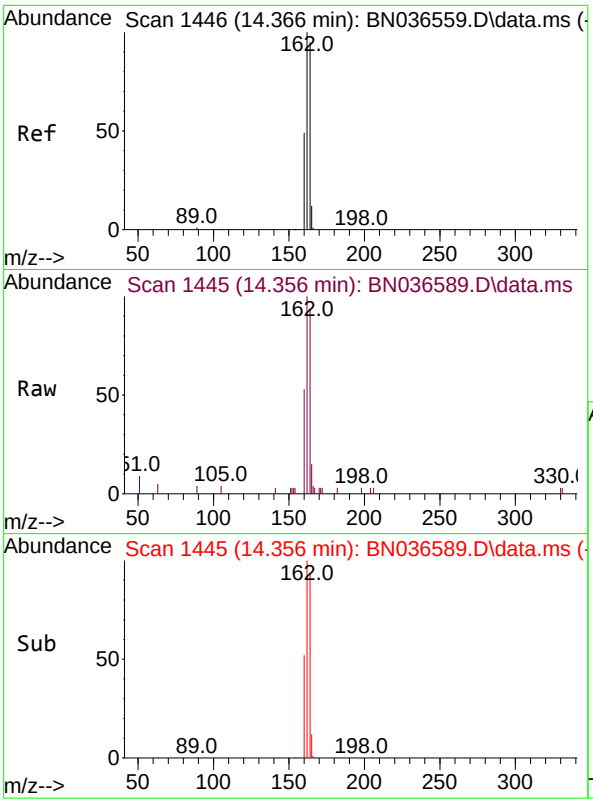


#12
2-Methylnaphthalene
Concen: 0.384 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:142 Resp: 3430

Ion	Ratio	Lower	Upper
142	100		
141	90.1	71.7	107.5
115	48.3	38.3	57.5



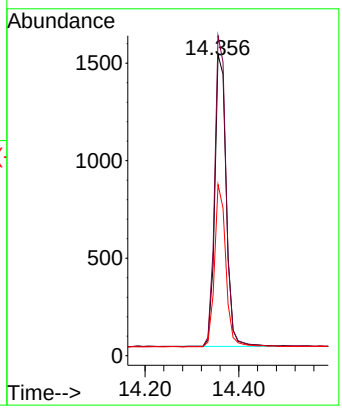


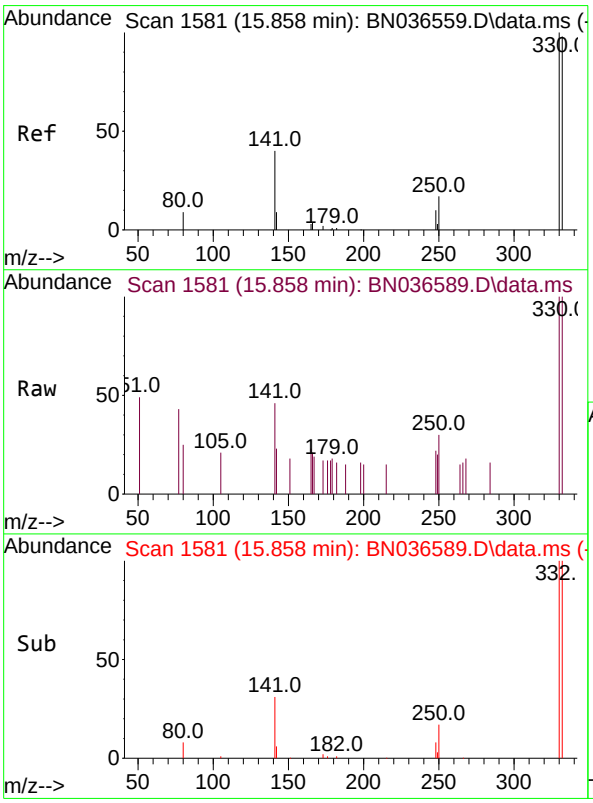
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.356 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 2543

Ion	Ratio	Lower	Upper
164	100		
162	106.4	84.2	126.2
160	56.8	42.2	63.2

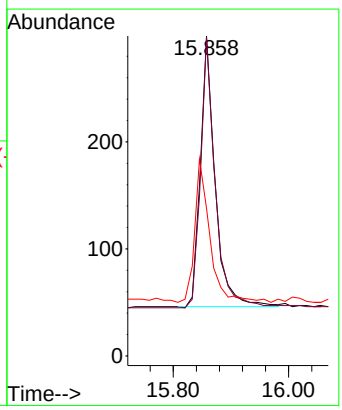


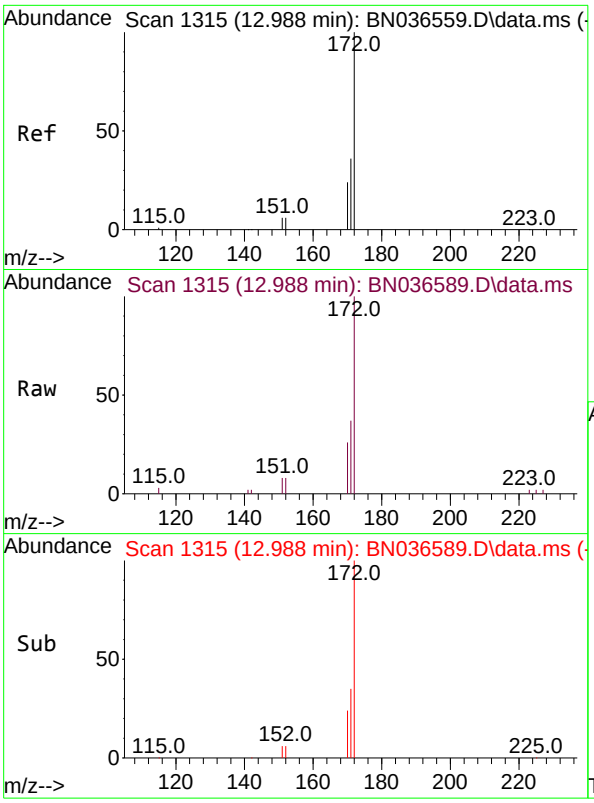


#14
2,4,6-Tribromophenol
Concen: 0.390 ng
RT: 15.858 min Scan# 1581
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:330 Resp: 450

Ion	Ratio	Lower	Upper
330	100		
332	98.7	75.2	112.8
141	54.2	43.4	65.2



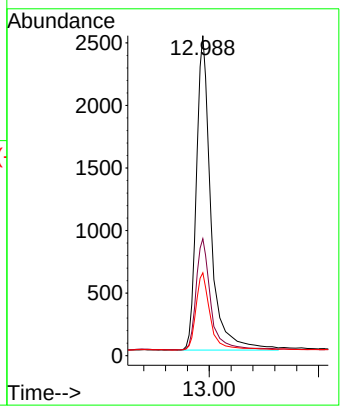


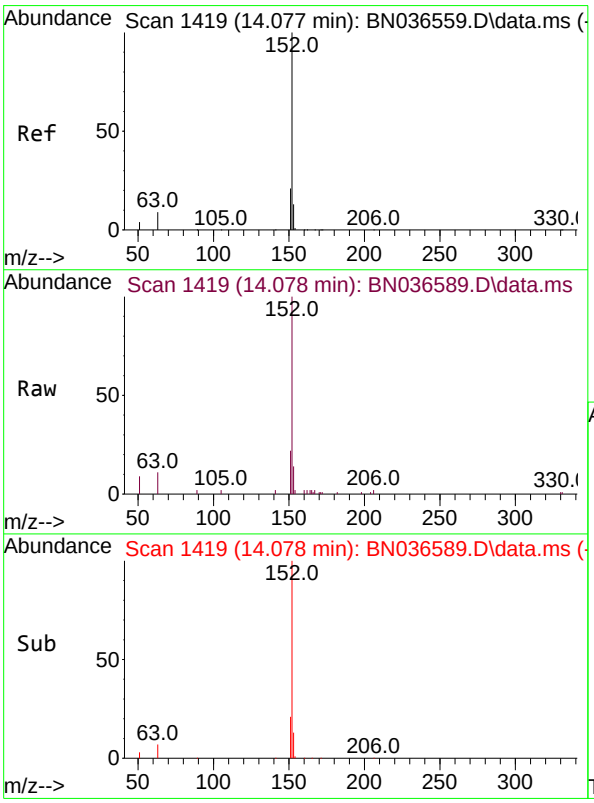
#15
2-Fluorobiphenyl
Concen: 0.432 ng
RT: 12.988 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 6396

Ion	Ratio	Lower	Upper
172	100		
171	36.6	29.5	44.3
170	25.9	20.2	30.4

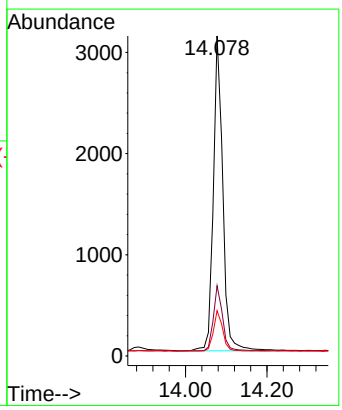


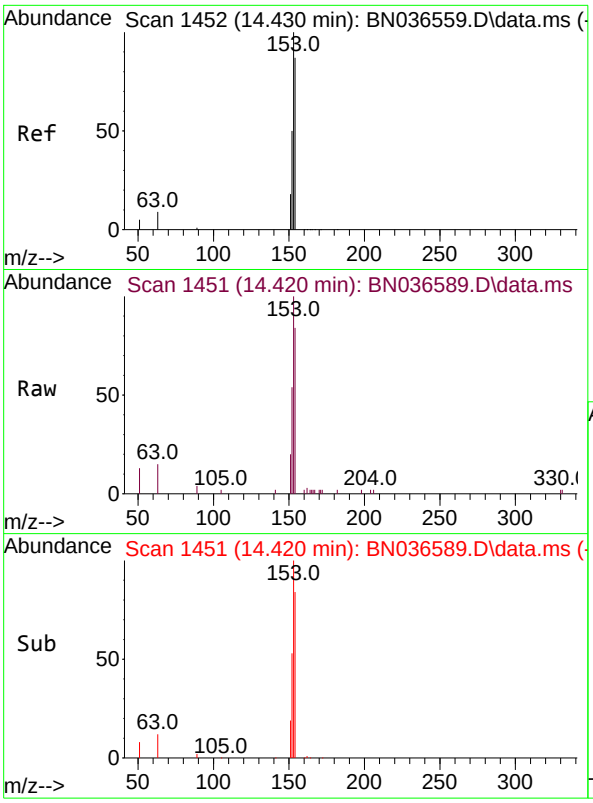


#16
Acenaphthylene
Concen: 0.415 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:152 Resp: 4983

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.4
153	12.7	10.6	15.8



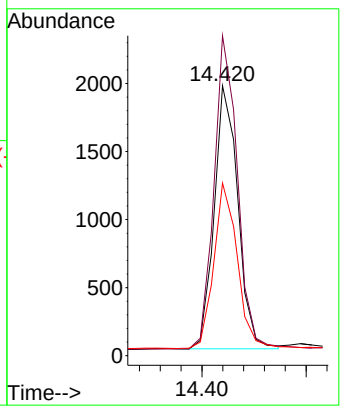


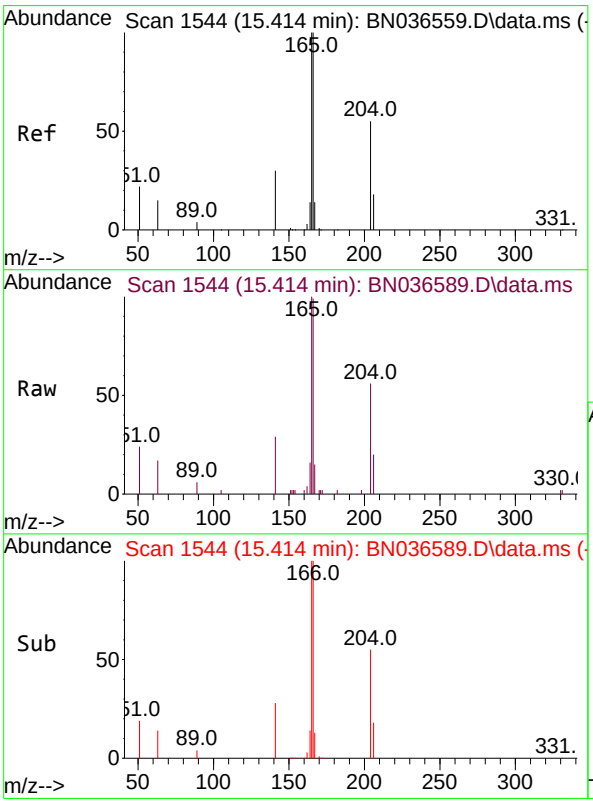
#17
Acenaphthene
Concen: 0.389 ng
RT: 14.420 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3052

Ion	Ratio	Lower	Upper
154	100		
153	118.9	94.1	141.1
152	63.0	49.8	74.6

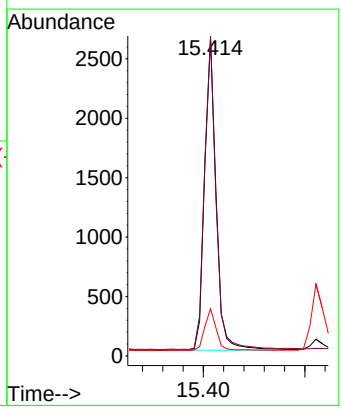


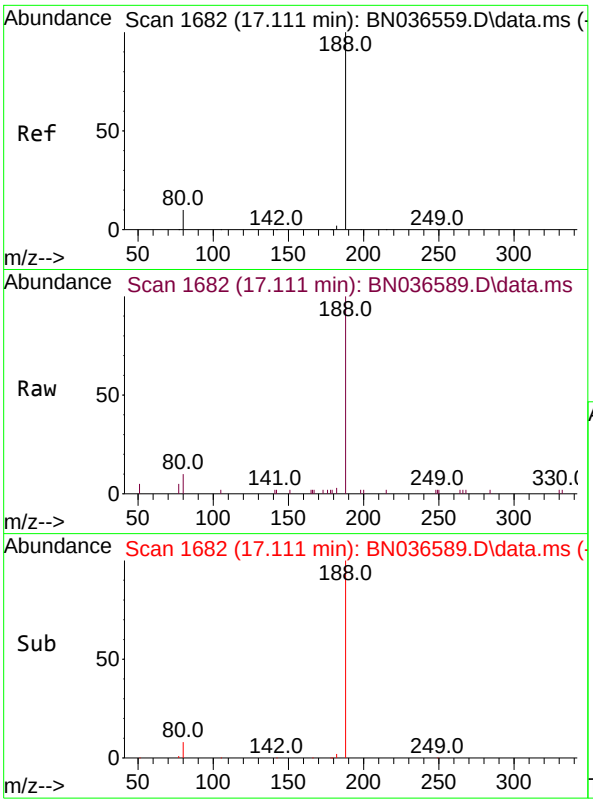


#18
Fluorene
Concen: 0.400 ng
RT: 15.414 min Scan# 1544
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:166 Resp: 4246

Ion	Ratio	Lower	Upper
166	100		
165	100.0	79.8	119.8
167	13.3	10.6	15.8



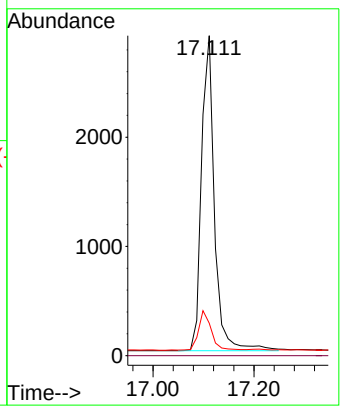


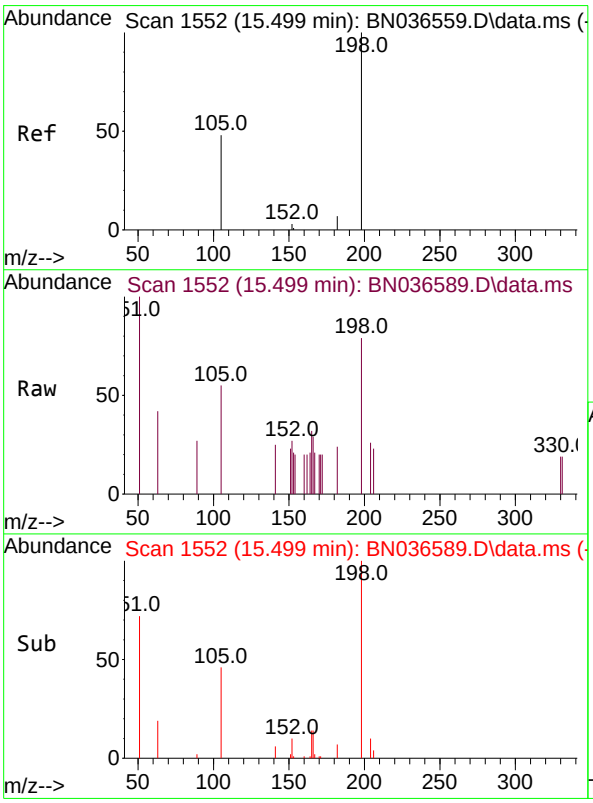
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.111 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 5156

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.1	8.8	13.2

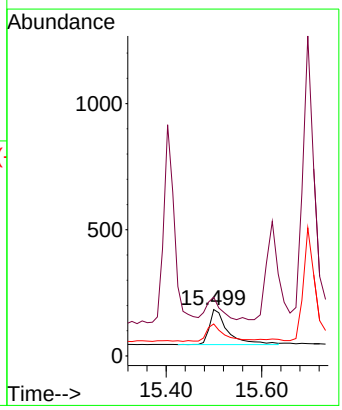


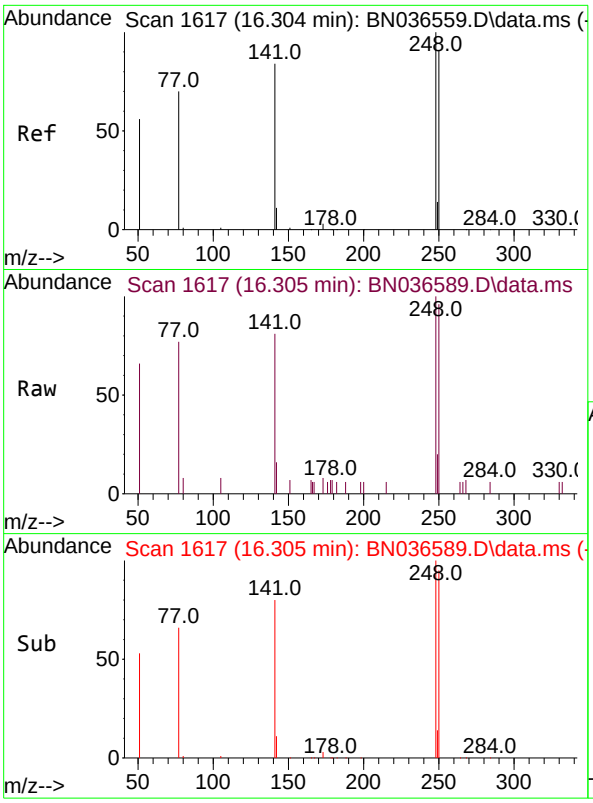


#20
4,6-Dinitro-2-methylphenol
Concen: 0.430 ng
RT: 15.499 min Scan# 1552
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:198 Resp: 375

Ion	Ratio	Lower	Upper
198	100		
51	126.6	107.9	161.9
105	69.0	56.2	84.2



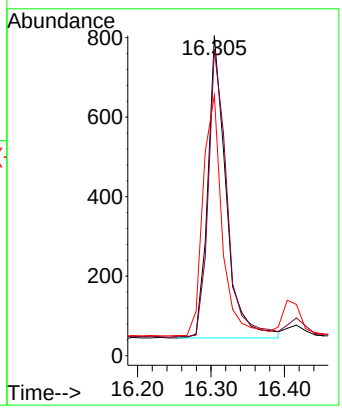


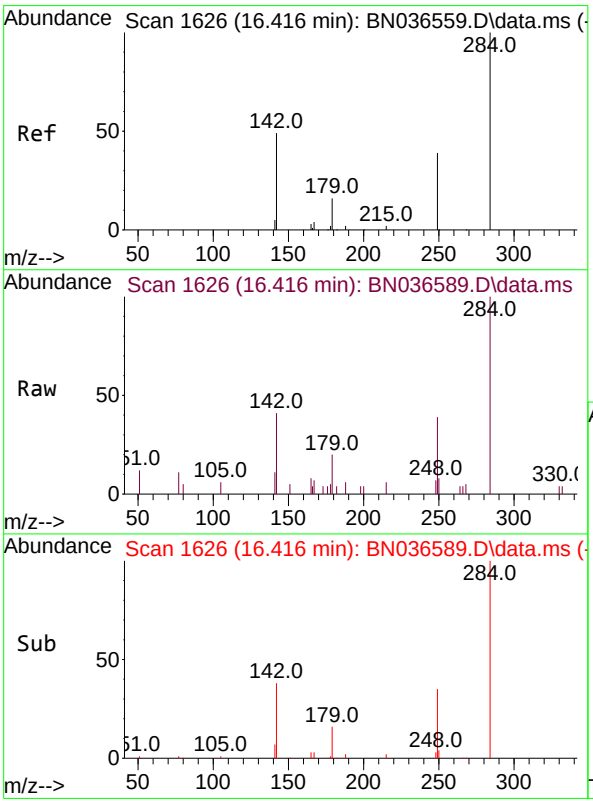
#21
4-Bromophenyl-phenylether
Concen: 0.406 ng
RT: 16.305 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1311

Ion	Ratio	Lower	Upper
248	100		
250	95.8	73.0	109.6
141	81.4	68.6	103.0

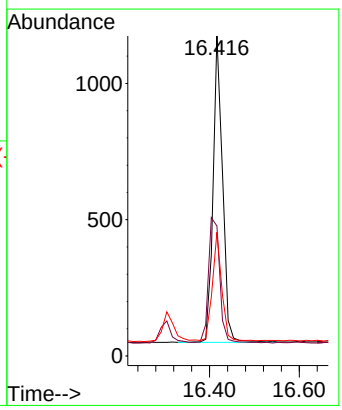


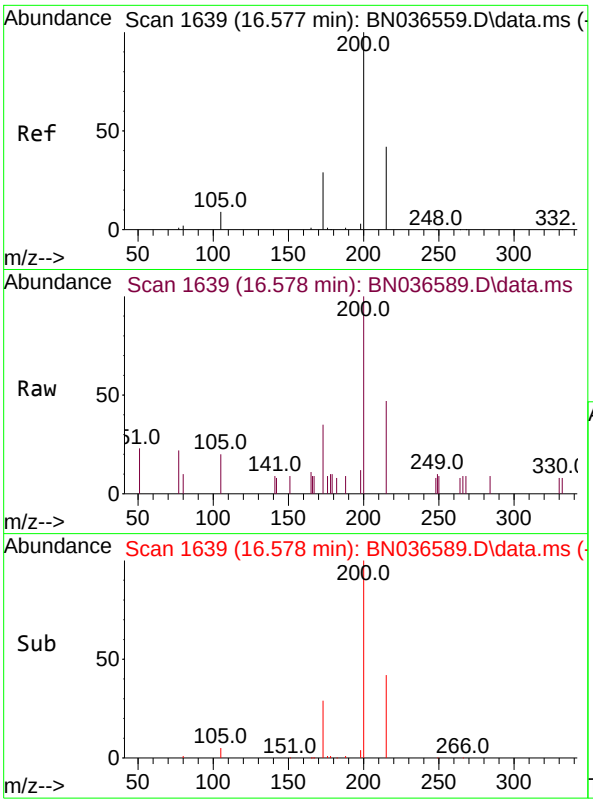


#22
Hexachlorobenzene
Concen: 0.422 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:284 Resp: 1646

Ion	Ratio	Lower	Upper
284	100		
142	48.7	37.0	55.4
249	34.7	28.1	42.1



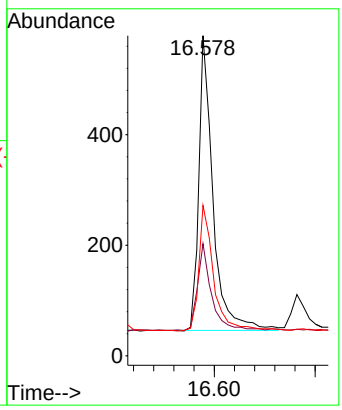


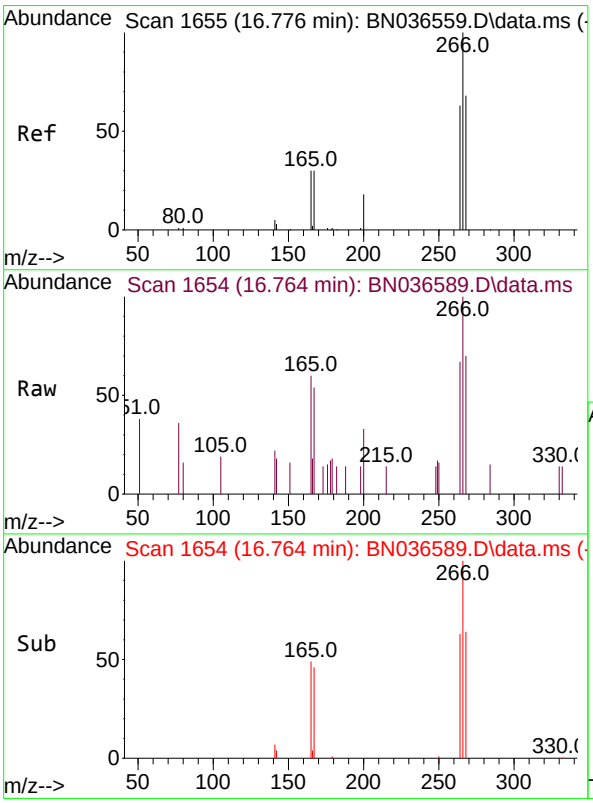
#23
Atrazine
Concen: 0.403 ng
RT: 16.578 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1043

Ion	Ratio	Lower	Upper
200	100		
173	35.1	27.3	40.9
215	47.0	36.8	55.2

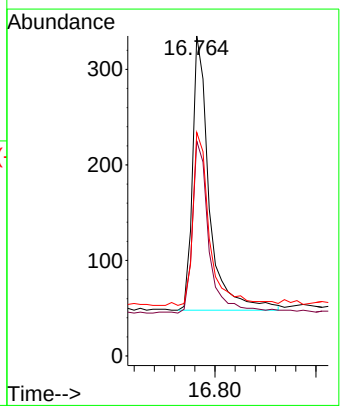


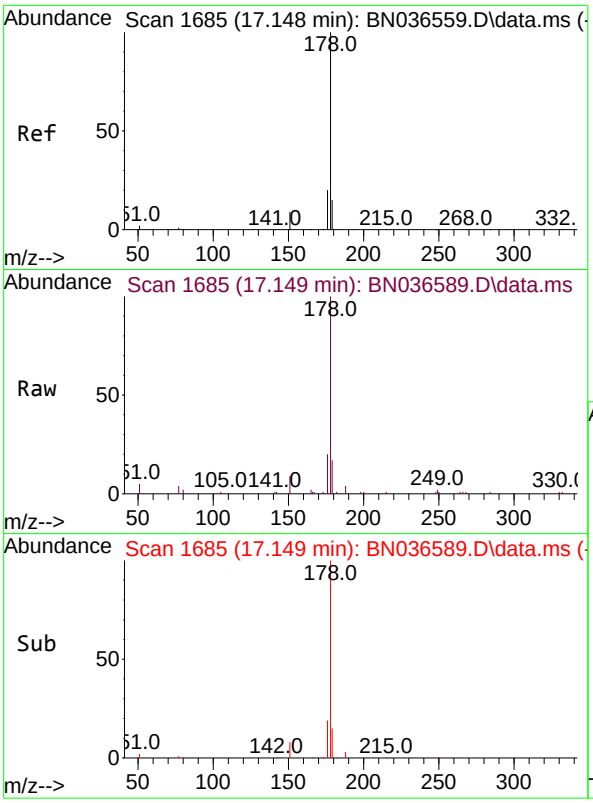


#24
Pentachlorophenol
Concen: 0.372 ng
RT: 16.764 min Scan# 1654
Delta R.T. -0.012 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:266 Resp: 661

Ion	Ratio	Lower	Upper
266	100		
264	62.6	49.6	74.4
268	63.5	50.9	76.3



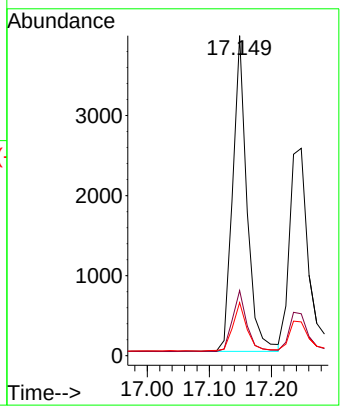


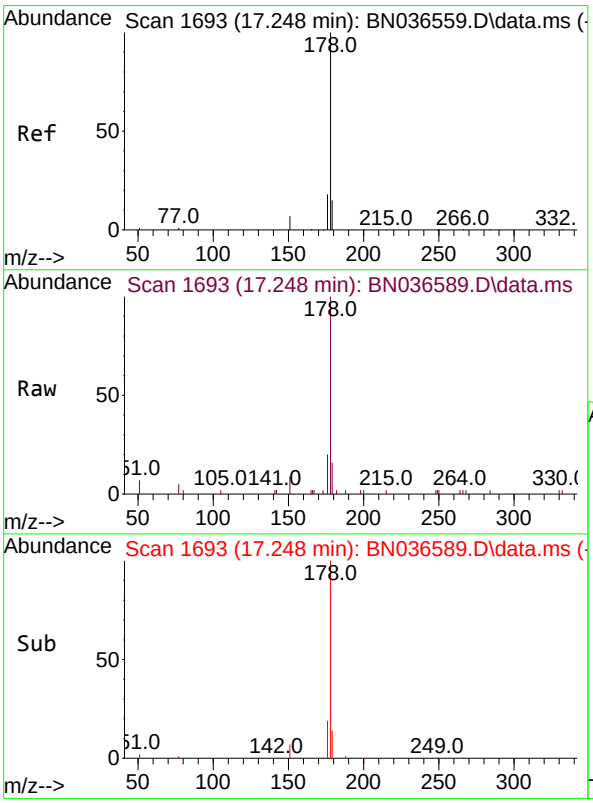
#25
Phenanthrene
Concen: 0.408 ng
RT: 17.149 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 6304

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.9	23.9
179	15.4	12.2	18.4

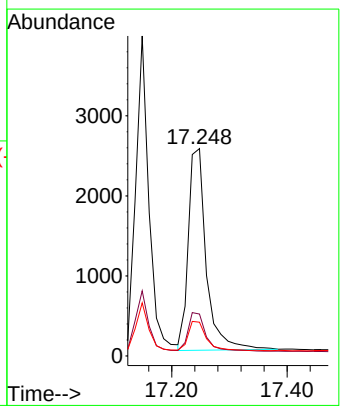


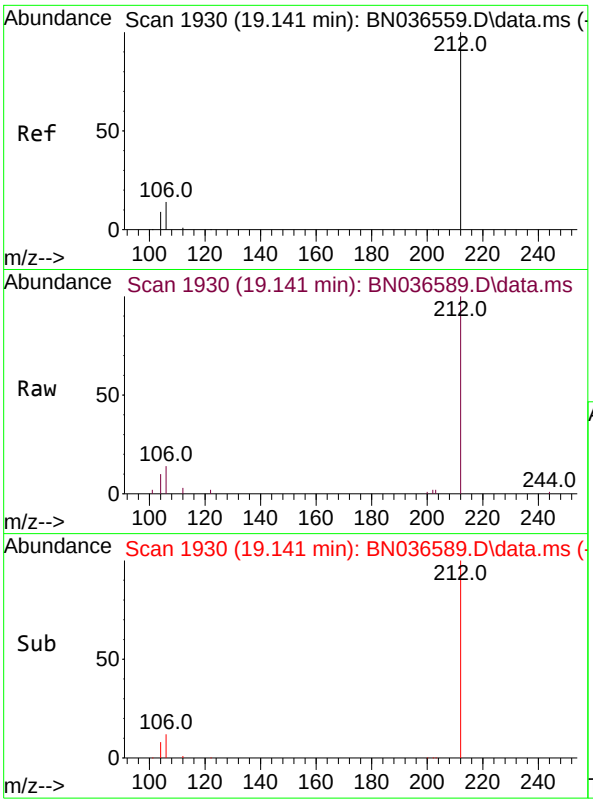


#26
Anthracene
Concen: 0.391 ng
RT: 17.248 min Scan# 1693
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:178 Resp: 5453

Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.3	12.6	18.8





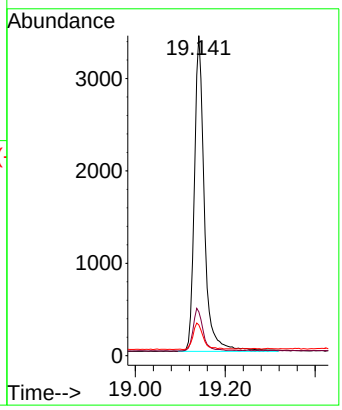
#27
Fluoranthene-d10
Concen: 0.402 ng
RT: 19.141 min Scan# 1

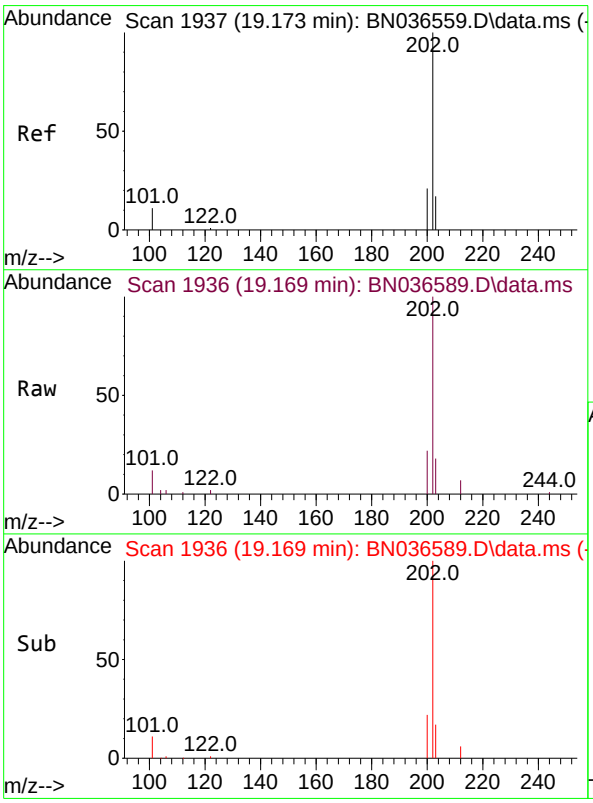
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:212 Resp: 5306

Ion	Ratio	Lower	Upper
212	100		
106	13.5	11.8	17.6
104	8.7	7.3	10.9

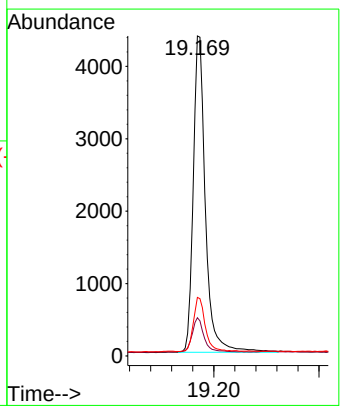


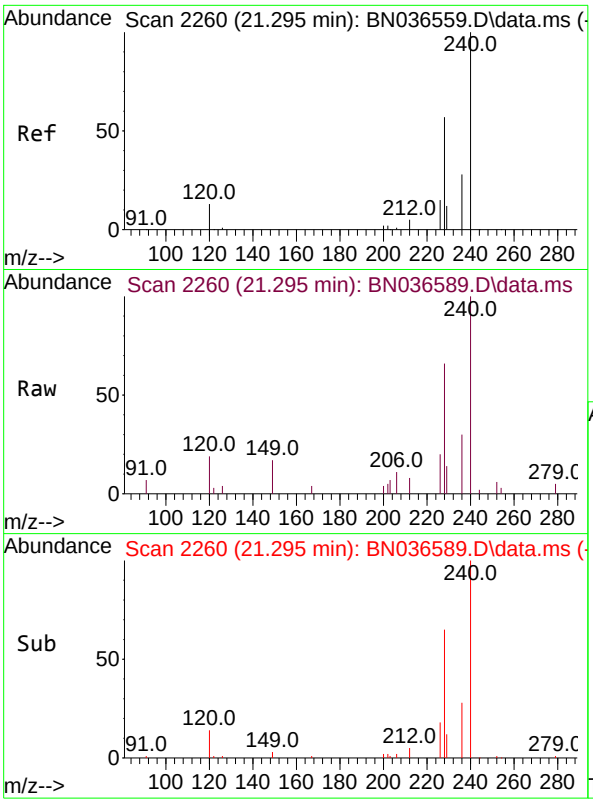


#28
Fluoranthene
Concen: 0.404 ng
RT: 19.169 min Scan# 1936
Delta R.T. -0.005 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:202 Resp: 7017

Ion	Ratio	Lower	Upper
202	100		
101	10.6	9.4	14.0
203	16.7	13.5	20.3



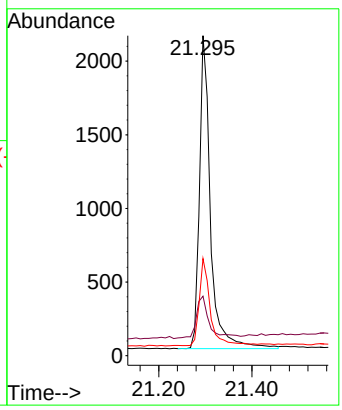


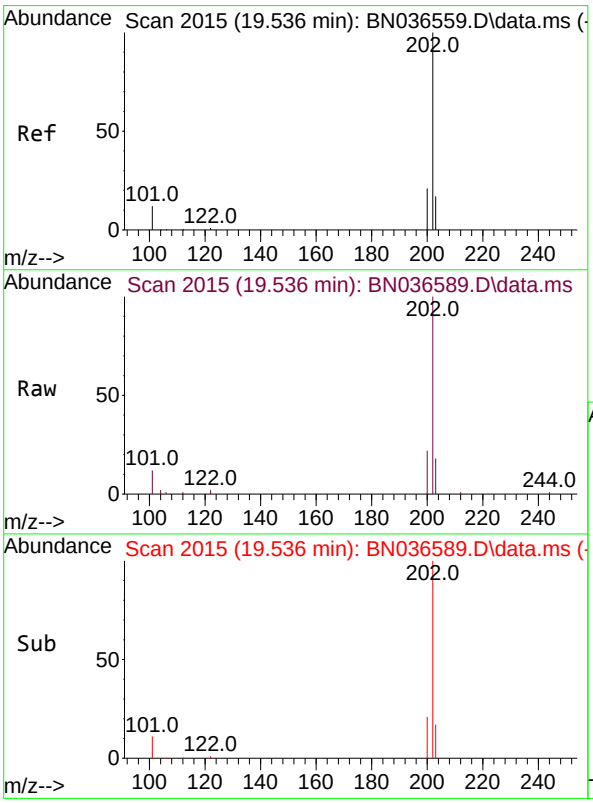
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.295 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 3498

Ion	Ratio	Lower	Upper
240	100		
120	18.6	14.6	22.0
236	30.4	24.1	36.1

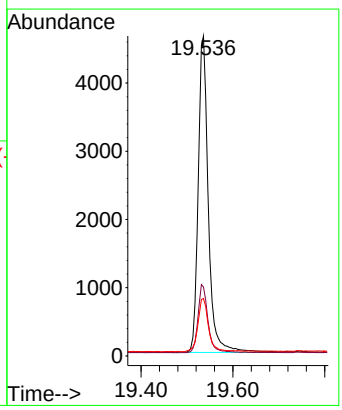


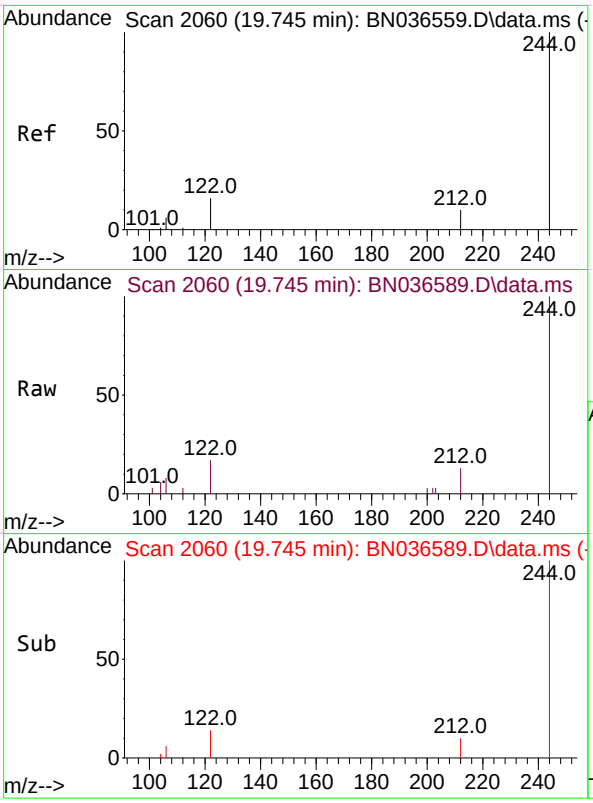


#30
Pyrene
Concen: 0.414 ng
RT: 19.536 min Scan# 2015
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:202 Resp: 7087

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.1	25.7
203	17.4	14.1	21.1



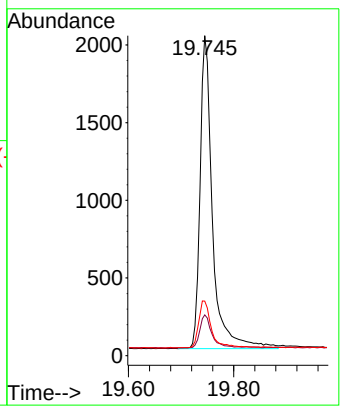


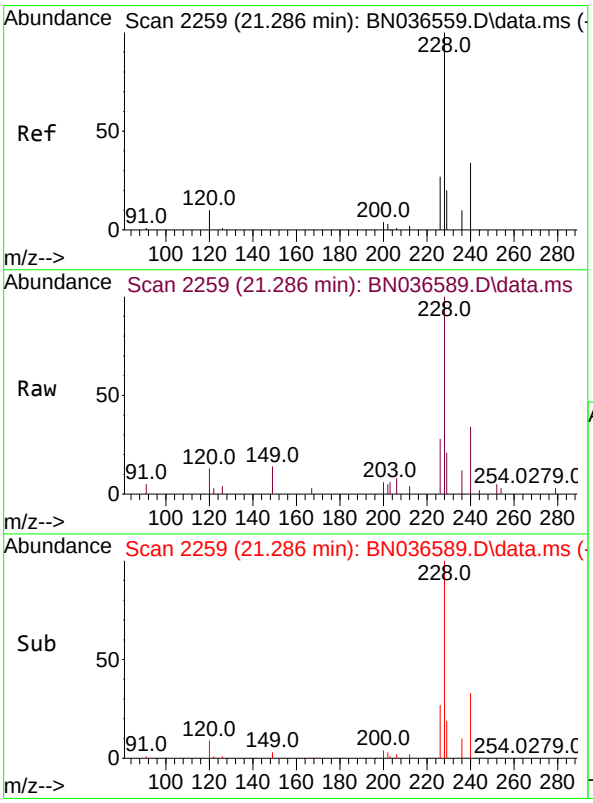
#31
Terphenyl-d14
Concen: 0.395 ng
RT: 19.745 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 3310

Ion	Ratio	Lower	Upper
244	100		
212	12.7	9.6	14.4
122	17.0	13.9	20.9

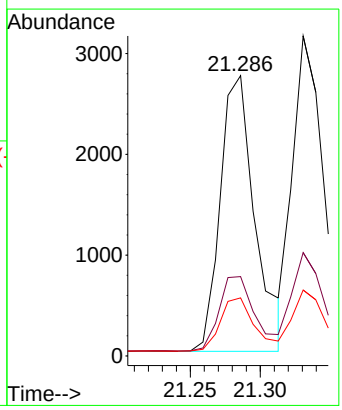


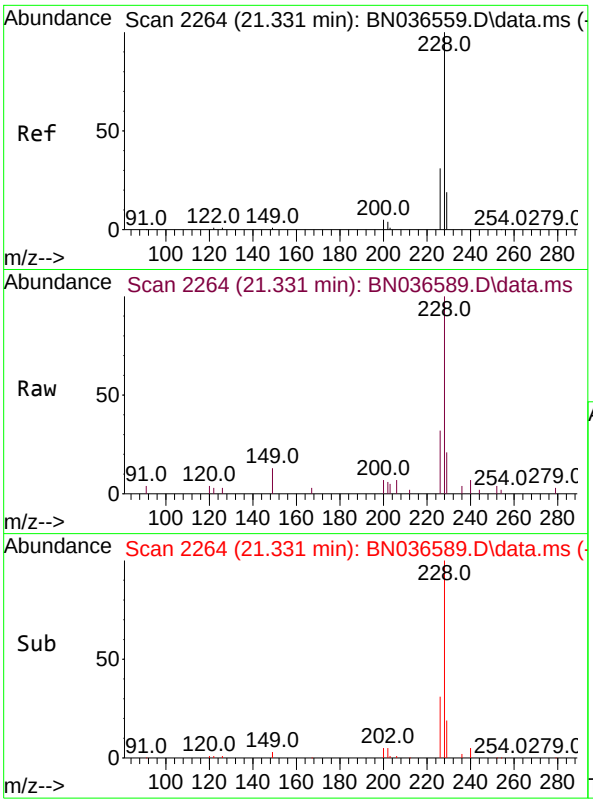


#32
Benzo(a)anthracene
Concen: 0.388 ng
RT: 21.286 min Scan# 2259
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:228 Resp: 4721

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.5	33.7
229	20.7	16.6	25.0



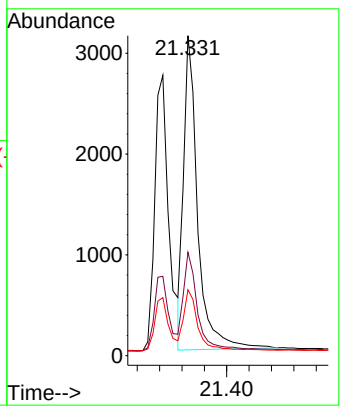


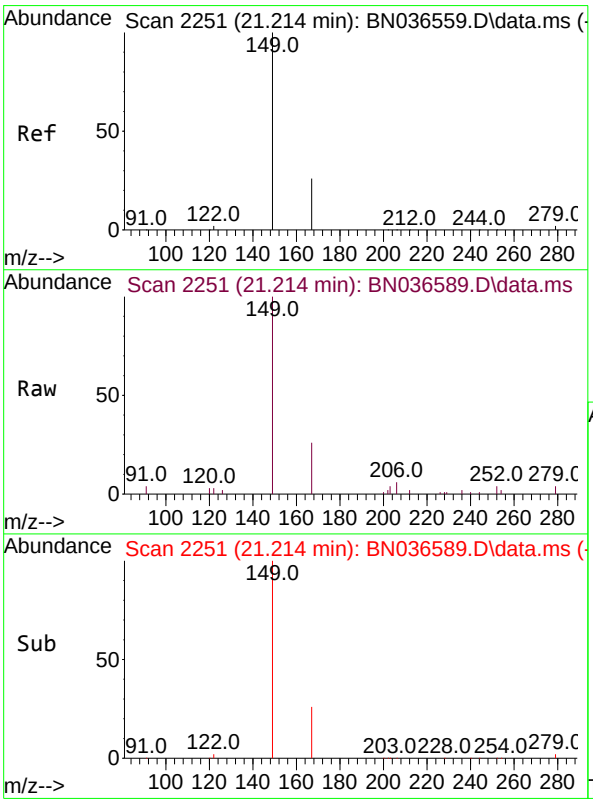
#33
Chrysene
Concen: 0.409 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 5431

Ion	Ratio	Lower	Upper
228	100		
226	32.3	25.3	37.9
229	20.6	15.8	23.8

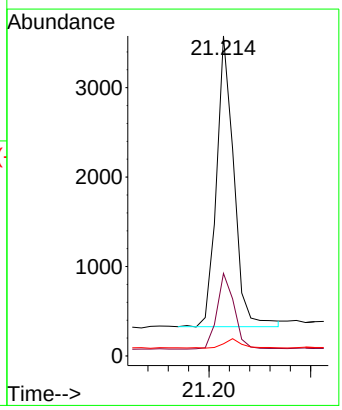


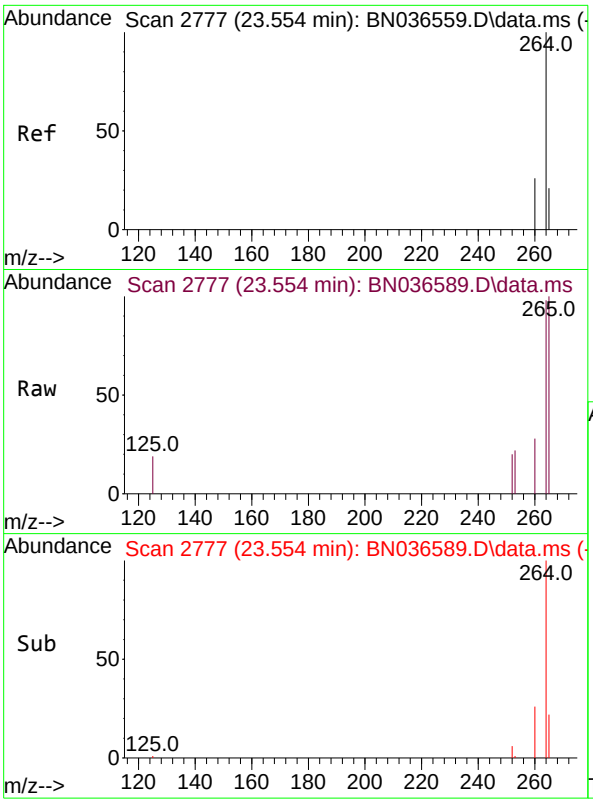


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.445 ng
RT: 21.214 min Scan# 2251
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:149 Resp: 3858

Ion	Ratio	Lower	Upper
149	100		
167	26.0	20.7	31.1
279	3.2	3.6	5.4#



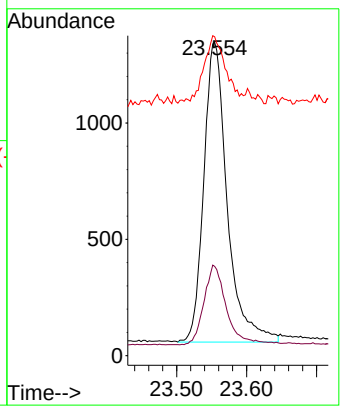


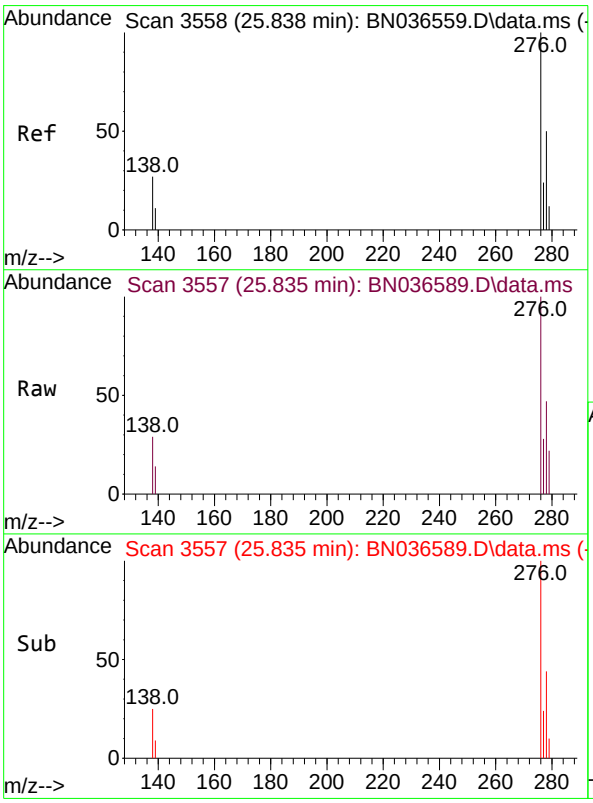
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.554 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 2998

Ion	Ratio	Lower	Upper
264	100		
260	28.5	22.6	33.8
265	101.7	88.1	132.1

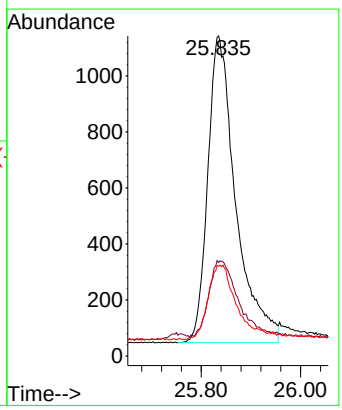


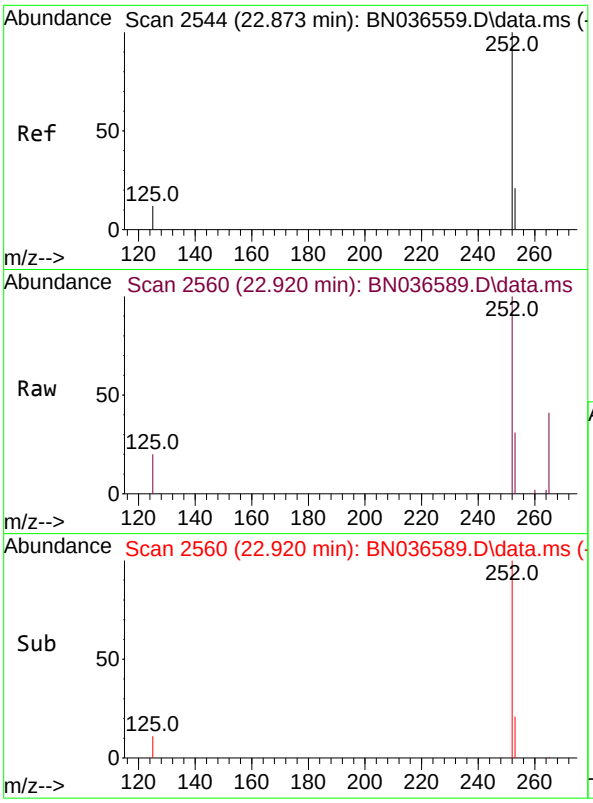


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.396 ng
RT: 25.835 min Scan# 3557
Delta R.T. -0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:276 Resp: 4281

Ion	Ratio	Lower	Upper
276	100		
138	25.6	23.4	35.2
277	23.5	20.0	30.0



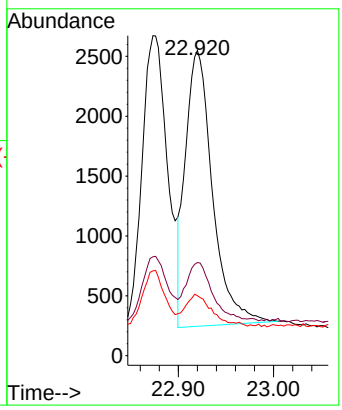


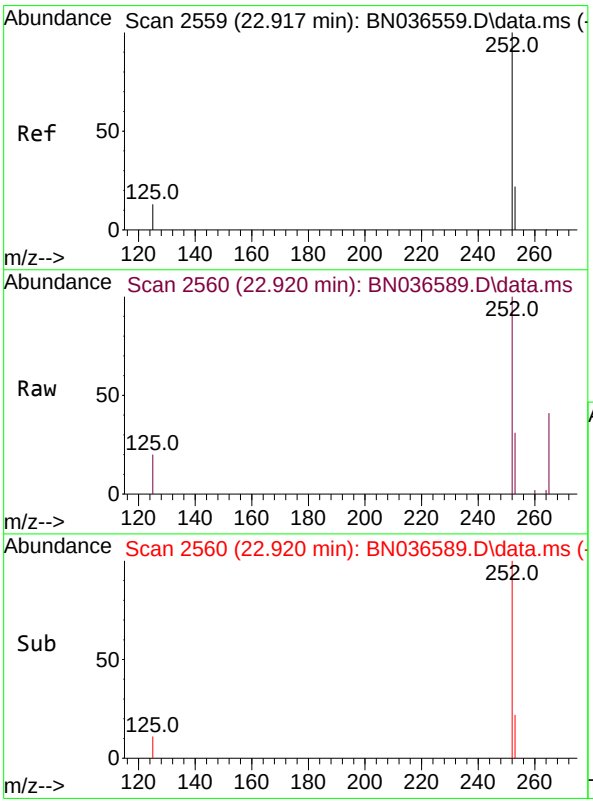
#37
Benzo(b)fluoranthene
Concen: 0.416 ng
RT: 22.920 min Scan# 2
Delta R.T. 0.047 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 4544

Ion	Ratio	Lower	Upper
252	100		
253	30.5	23.9	35.9
125	19.7	17.4	26.2

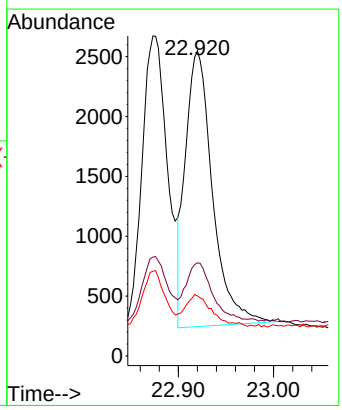


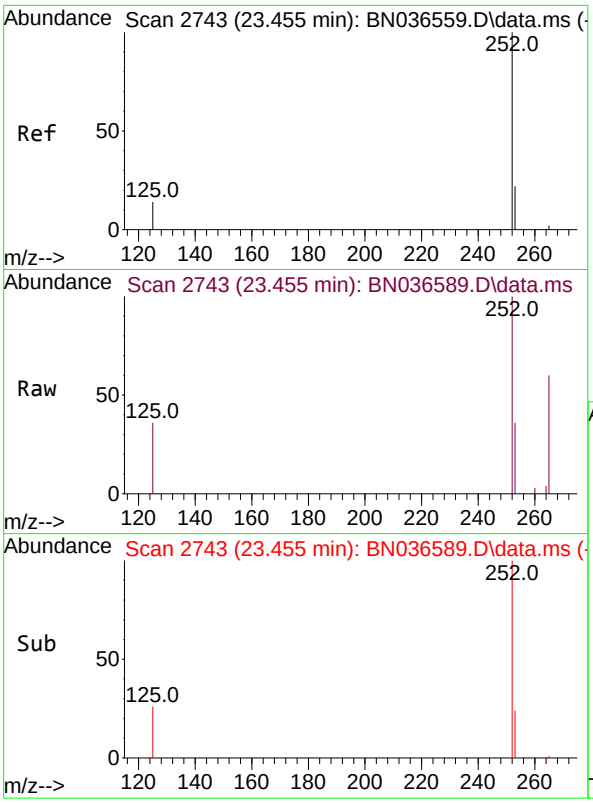


#38
Benzo(k)fluoranthene
Concen: 0.397 ng
RT: 22.920 min Scan# 2560
Delta R.T. 0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:252 Resp: 4544

Ion	Ratio	Lower	Upper
252	100		
253	30.5	24.6	36.8
125	19.7	17.8	26.8



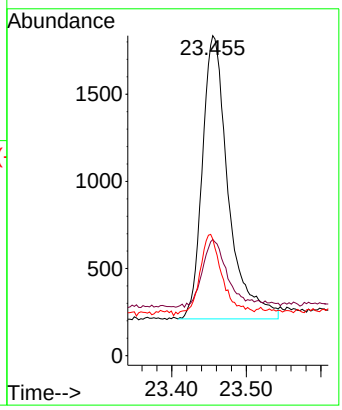


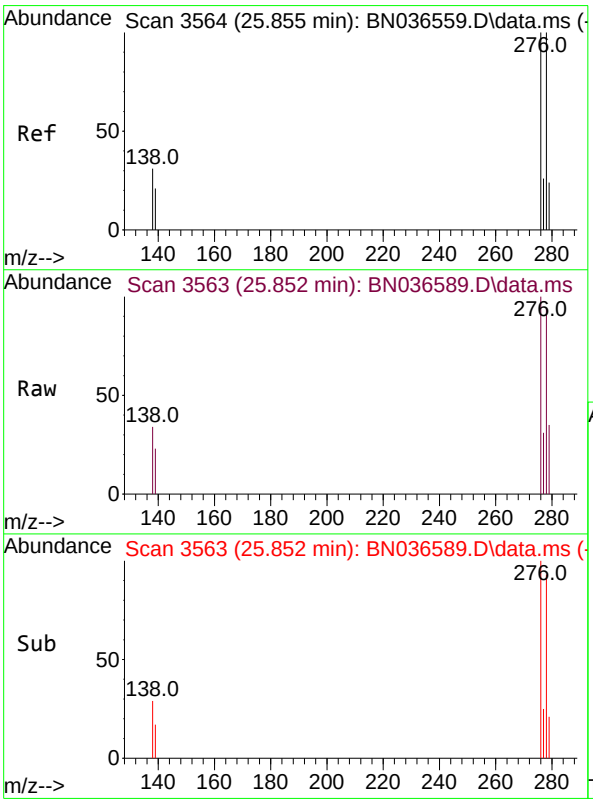
#39
Benzo(a)pyrene
Concen: 0.428 ng
RT: 23.455 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 3929

Ion	Ratio	Lower	Upper
252	100		
253	36.3	27.8	41.8
125	36.4	22.7	34.1#

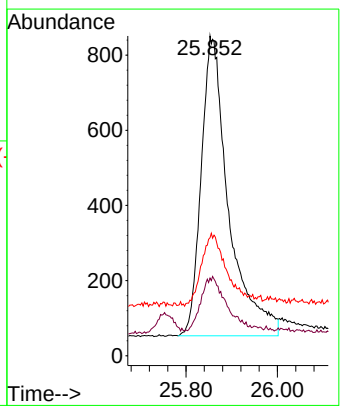


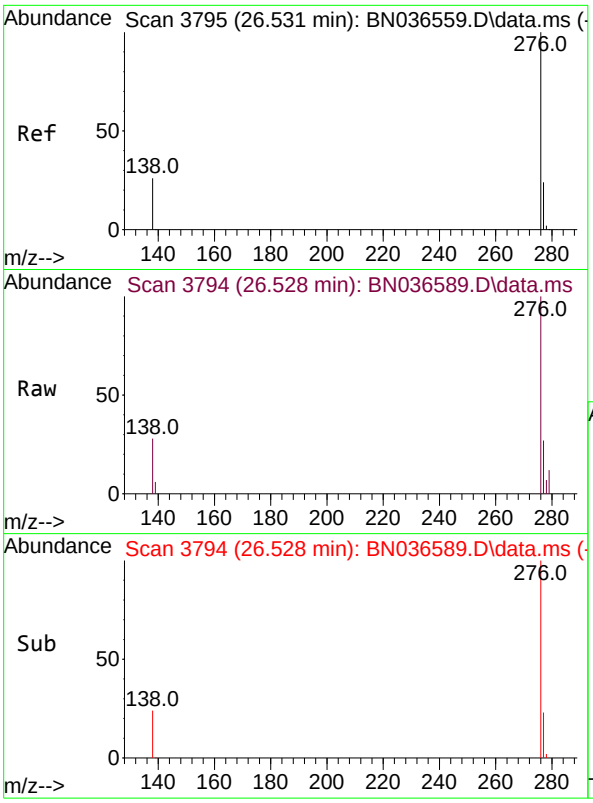


#40
Dibenzo(a,h)anthracene
Concen: 0.395 ng
RT: 25.852 min Scan# 3563
Delta R.T. -0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Tgt Ion:278 Resp: 3325

Ion	Ratio	Lower	Upper
278	100		
139	24.3	20.8	31.2
279	36.9	28.8	43.2





#41
Benzo(g,h,i)perylene
Concen: 0.411 ng
RT: 26.528 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN036589.D
Acq: 11 Mar 2025 19:46

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 3963

Ion	Ratio	Lower	Upper
276	100		
277	26.8	22.2	33.4
138	28.0	24.1	36.1

