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DATA PACKAGE

SEMI-VOLATILE ORGANICS

PROJECT NAME : NWIRP Bethpage CTO WE13 - VPB-192 #112G08005

TETRA TECH NUS, INC.

661 Andersen Drive

Suite 200

Pittsburgh, PA - 15220-2745

Phone No: 412-921-7090

ORDER ID : Q1380

ATTENTION : Ernie Wu

Laboratory Certification ID # 20012

Table Of Contents for Q1380

1) SEMI-VOLATILE DATA 2
2) Signature Page 4
3) Case Narrative 5
4) Qualifier Page 8
5) Conformance/Non Conformance 9
6) QA Checklist 12
7) Chronicle 13
8) Hit Summary 14
9) QC Data Summary For SVOC-SIMGroup1 15
- 9.1) Deuterated Monitoring Compound Summary 16
- 9.2) MS/MSD Summary 17
- 9.3) LCS/LCSD Summary 19
- 9.4) Method Blank Summary 20
- 9.5) GS/MS Tune Summary 21
- 9.6) Internal Standard Area and RT Summary 23

10) Sample Data 25
- 10.0.1) BP-VPB-192-EB-20250212 26
- 10.0.2) BP-VPB-192-GW-780-782 37
- 10.1) VPB192-HYD-20250214 48

11) Calibration Data Summary 59
- 11.1) Initial Calibration Data 60
  - 11.1.1) BN021025 60
- 11.2) Continued Calibration Data 247
  - 11.2.1) BN036473.D 247
  - 11.2.2) BN036482.D 273

12) QC Sample Data 299
- 12.1) Tune Raw Data 300
- 12.2) Method Blank Data 308
- 12.3) LCS Data 318
- 12.4) MS Data 342
- 12.5) MSD Data 366

13) Manual Integration 390
14) Analytical Runlogs 392
15) Percent Solid 396
16) Extraction Logs 400

16.1) PB166758.pdf 400
16.2) PB166758IC.pdf 402
17) Standard Prep Logs 403
18) Shipping Document 471
18.1) Chain Of Custody 472
18.2) Lab Certificate 473
18.3) Internal COC 474
19) Not Reviewed Data 476

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Cover Page

Order ID : Q1380

Project ID : NWIRP Bethpage CTO WE13 - VPB-192 #112G08005

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
Q1380-01	BP-VPB-192-EB-20250212
Q1380-02	BP-VPB-192-TB-20250210
Q1380-06	BP-VPB-192-GW-725-727
Q1380-07	BP-VPB-192-GW-725-727MS
Q1380-08	BP-VPB-192-GW-725-727MSD
Q1380-09	BP-VPB-192-GW-780-782
Q1380-10	BP-VPB-192-GW-780-782MS
Q1380-11	BP-VPB-192-GW-780-782MSD
Q1380-12	VPB192-HYD-20250214

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: 2/26/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NWIRP Bethpage CTO WE13 - VPB-192 #112G08005
Project Manager: Ernie Wu
Chemtech Project # Q1380
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:
3 Solid samples were received on 02/17/2025.
6 Water samples were received on 02/17/2025.

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 PB166758BS [2-Fluorobiphenyl - 118%], BP-VPB-192-EB-20250212 [Terphenyl-d14 - 146%], BP-VPB-192-GW-780-782 [2-Fluorobiphenyl - 118%], BP-VPB-192-GW-780-782MS [2-Fluorobiphenyl - 110%, Terphenyl-d14 - 135%], BP-VPB-192-GW-780-782MSD [2-Fluorobiphenyl - 113%, Terphenyl-d14 - 138%],failure surrogates are not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken while,
VPB192-HYD-20250214 [2-Methylnaphthalene-d10 - 6%]surrogate failing biased low also Due to the limited volume of this sample, it will not be re-extracted therefore no corrective action taken.

The Internal Standards Areas met the acceptable requirements.
The Retention Times were acceptable for all samples.

The MS {Q1380-10MS} with File ID: BN036477.D recoveries met the requirements for all compounds except for 1,4-Dioxane[64%] due to matrix interference.

The MSD recoveries met the acceptable requirements .

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The sample # BP-VPB-192-GW-780-782MS is failing for 1,4-Dioxane and the original sample(BP-VPB-192-GW-780-782) is reported with M flag for this compound.

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

E. Additional Comments:
The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).

Less volume was taken for samples #BP-VPB-192-GW-780-782, BP-VPB-192-GW-780-782MS,BP-VPB-192-GW-780-782MSD at the time of extraction due to Limited volume received.

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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Phone: 908 789 8900 Fax: 908 789 8922

284 Sheffield Street, Mountainside NJ 07092 Tel.
908-789-8900 Fax: 908-789-8922

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

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

CHEMTECH PROJECT NUMBER: Q1380 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 PB166758BS [2-Fluorobiphenyl - 118%], BP-VPB-192-EB-20250212 [Terphenyl-d14 - 146%], BP-VPB-192-GW-780-782 [2-Fluorobiphenyl - 118%], BP-VPB-192-GW-780-782MS [2-Fluorobiphenyl - 110%, Terphenyl-d14 - 135%], BP-VPB-192-GW-780-782MSD [2-Fluorobiphenyl - 113%, Terphenyl-d14 - 138%],failure surrogates are not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken while,			
	VPB192-HYD-20250214 [2-Methylnaphthalene-d10 - 6%]surrogate failing biased low also Due to the limited volume of this sample, it will not be re-extracted therefore no corrective action taken.			

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 {Q1380-10MS} with File ID: BN036477.D recoveries met the requirements for all compounds except for 1,4-Dioxane[64%] due to matrix interference.			
	The MSD recoveries met the acceptable requirements .			
	The sample # BP-VPB-192-GW-780-782MS is failing for 1,4-Dioxane and the original sample(BP-VPB-192-GW-780-782) is reported with M flag for this compound..			
	The Blank Spike met requirements for all samples .			
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
11.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).
Less volume was taken for samples #BP-VPB-192-GW-780-782, BP-VPB-192-GW-780-782MS,BP-VPB-192-GW-780-782MSD at the time of extraction due to Limited volume received.
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 _____

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

(CONTINUED)

NA NO YES

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APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1380

	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:** 02/26/2025

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LAB CHRONICLE

OrderID:	Q1380	**OrderDate:**	2/17/2025 3:59:00 PM
Client:	Tetra Tech NUS, Inc.	**Project:**	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005
Contact:	Ernie Wu	**Location:**	H31,VOA Ref. #2 Soil,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1380-01	**BP-VPB-192-EB-20250212**	**Water**			**02/12/25**			**02/17/25**
			SVOC-SIMGroup1	8270-Modified		02/18/25	02/20/25	
Q1380-09	**BP-VPB-192-GW-780-782**	**Water**			**02/13/25**			**02/17/25**
			SVOC-SIMGroup1	8270-Modified		02/18/25	02/20/25	
Q1380-12	**VPB192-HYD-20250214**	**Water**			**02/14/25**			**02/17/25**
			SVOC-SIMGroup1	8270-Modified		02/18/25	02/20/25	

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Hit Summary Sheet
SW-846

SDG No.: Q1380

Client: Tetra Tech NUS, Inc.

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

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q1380

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB166758BL	PB166758BL	2-Methylnaphthalene-d10	0.4	0.35	87		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.37	93		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
PB166758BS	PB166758BS	2-Methylnaphthalene-d10	0.4	0.52	129		30	150
		Fluoranthene-d10	0.4	0.41	101		30	150
		Nitrobenzene-d5	0.4	0.39	97		55	111
		2-Fluorobiphenyl	0.4	0.47	118	*	53	106
		Terphenyl-d14	0.4	0.43	108		58	132
Q1380-01	BP-VPB-192-EB-20250212	2-Methylnaphthalene-d10	0.4	0.31	76		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.30	76		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.58	146	*	58	132
Q1380-09	BP-VPB-192-GW-780-782	2-Methylnaphthalene-d10	0.4	0.35	88		30	150
		Fluoranthene-d10	0.4	0.41	103		30	150
		Nitrobenzene-d5	0.4	0.36	91		55	111
		2-Fluorobiphenyl	0.4	0.47	118	*	53	106
		Terphenyl-d14	0.4	0.50	126		58	132
Q1380-10MS	BP-VPB-192-GW-780-782MS	2-Methylnaphthalene-d10	0.4	0.32	80		30	150
		Fluoranthene-d10	0.4	0.45	112		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.44	110	*	53	106
		Terphenyl-d14	0.4	0.54	135	*	58	132
Q1380-11MSD	BP-VPB-192-GW-780-782MSD	2-Methylnaphthalene-d10	0.4	0.32	80		30	150
		Fluoranthene-d10	0.4	0.47	116		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.45	113	*	53	106
		Terphenyl-d14	0.4	0.55	138	*	58	132
Q1380-12	VPB192-HYD-20250214	2-Methylnaphthalene-d10	0.4	0.023	6	*	30	150
		Fluoranthene-d10	0.4	0.34	86		30	150
		Nitrobenzene-d5	0.4	0.31	79		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.45	112		58	132

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1380

Client: Tetra Tech NUS, 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: Q1380-10MS		**Client Sample ID:** BP-VPB-192-GW-780-782MS						**DataFile:** BN036477.D			
1,4-Dioxane	1.3	0	0.83	ug/L	64	*			70	130	

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Matrix Spike/Matrix Spike Duplicate Summary

SW-846

SDG No.: Q1380

Client: Tetra Tech NUS, 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: Q1380-11MSD		**Client Sample ID:** BP-VPB-192-GW-780-782MSD						**DataFile:** BN036478.D			
1,4-Dioxane	1.3	0	0.92	ug/L	71		10		70	130	20

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Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1380

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified **DataFile:** BN036480.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB166758BS	1,4-Dioxane	0.4	0.35	ug/L	88				70	130	

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166758BL

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1380 SAS No.: Q1380 SDG NO.: Q1380

Lab File ID: BN036474.D Lab Sample ID: PB166758BL

Instrument ID: BNA_N Date Extracted: 02/18/2025

Matrix: (soil/water) Water Date Analyzed: 02/20/2025

Level: (low/med) LOW Time Analyzed: 10:47

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166758BS	PB166758BS	BN036480.D	02/20/2025
BP-VPB-192-EB-20250212	Q1380-01	BN036475.D	02/20/2025
BP-VPB-192-GW-780-782	Q1380-09	BN036476.D	02/20/2025
BP-VPB-192-GW-780-782MS	Q1380-10MS	BN036477.D	02/20/2025
BP-VPB-192-GW-780-782MSD	Q1380-11MSD	BN036478.D	02/20/2025
VPB192-HYD-20250214	Q1380-12	BN036479.D	02/20/2025

COMMENTS:

Alliance TECHNICAL GROUP
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Fax : 908 789 8922

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1380 SDG NO.: Q1380

Lab File ID: BN036408.D DFTPP Injection Date: 02/10/2025

Instrument ID: BNA_N DFTPP Injection Time: 11:46

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	51.4
68	Less than 2.0% of mass 69	0.3 (0.7) 1
69	Mass 69 relative abundance	47.7
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	48.3
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
275	10.0 - 60.0% of mass 198	24.7
365	Greater than 1% of mass 198	3.3
441	Present, but less than mass 443	7.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.5 (20.1) 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	BN036409.D	02/10/2025	12:25
SSTDICC0.2	SSTDICC0.2	BN036410.D	02/10/2025	13:01
SSTDICCC0.4	SSTDICCC0.4	BN036411.D	02/10/2025	13:36
SSTDICC0.8	SSTDICC0.8	BN036412.D	02/10/2025	14:12
SSTDICC1.6	SSTDICC1.6	BN036413.D	02/10/2025	14:48
SSTDICC3.2	SSTDICC3.2	BN036414.D	02/10/2025	15:24
SSTDICC5.0	SSTDICC5.0	BN036415.D	02/10/2025	16:00

Alliance TECHNICAL GROUP
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM SAS No.: Q1380 SDG NO.: Q1380

Lab File ID: BN036472.D DFTPP Injection Date: 02/20/2025

Instrument ID: BNA_N DFTPP Injection Time: 09:32

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	57.4
68	Less than 2.0% of mass 69	0.8 (1.5) 1
69	Mass 69 relative abundance	52.1
70	Less than 2.0% of mass 69	0.3 (0.5) 1
127	10.0 - 80.0% of mass 198	50.3
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	24.3
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	8.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.6 (19.3) 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	BN036473.D	02/20/2025	10:11
PB166758BL	PB166758BL	BN036474.D	02/20/2025	10:47
BP-VPB-192-EB-20250212	Q1380-01	BN036475.D	02/20/2025	11:24
BP-VPB-192-GW-780-782	Q1380-09	BN036476.D	02/20/2025	12:00
BP-VPB-192-GW-780-782MS	Q1380-10MS	BN036477.D	02/20/2025	12:36
BP-VPB-192-GW-780-782MSD	Q1380-11MSD	BN036478.D	02/20/2025	13:12
VPB192-HYD-20250214	Q1380-12	BN036479.D	02/20/2025	13:48
PB166758BS	PB166758BS	BN036480.D	02/20/2025	14:24
SSTDCCC0.4EC	SSTDCCC0.4	BN036482.D	02/20/2025	16:08

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1380 SAS No.: Q1380 SDG NO.: Q1380

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/20/2025

Lab File ID: BN036473.D Time Analyzed: 10:11

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	1766	7.746	4292	10.54	2899	14.39
	UPPER LIMIT	3532	8.246	8584	11.041	5798	14.887
	LOWER LIMIT	883	7.246	2146	10.041	1449.5	13.887
	EPA SAMPLE NO.						
01	PB166758BL	1874	7.75	3905	10.55	2305	14.40
02	BP-VPB-192-EB-20250212	1491	7.75	3323	10.54	2119	14.39
03	PB166758BS	1827	7.75	4127	10.54	2357	14.39
04	BP-VPB-192-GW-780-782	1676	7.75	3840	10.54	2412	14.39
05	BP-VPB-192-GW-780-782MS	1709	7.75	3995	10.54	2495	14.39
06	BP-VPB-192-GW-780-782MSD	1787	7.75	4250	10.53	2636	14.39
07	VPB192-HYD-20250214	1727	7.75	4024	10.54	2593	14.39

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.: Q1380 SAS No.: Q1380 SDG NO.: Q1380

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/20/2025

Lab File ID: BN036473.D Time Analyzed: 10:11

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	6167	17.136	5687	21.313	5826	23.586
	UPPER LIMIT	12334	17.636	11374	21.813	11652	24.086
	LOWER LIMIT	3083.5	16.636	2843.5	20.813	2913	23.086
	EPA SAMPLE NO.						
01	PB166758BL	4889	17.15	4485	21.33	3907	23.60
02	BP-VPB-192-EB-20250212	4759	17.14	4677	21.32	4457	23.59
03	PB166758BS	5256	17.14	4823	21.32	4362	23.59
04	BP-VPB-192-GW-780-782	5513	17.12	5354	21.32	4859	23.59
05	BP-VPB-192-GW-780-782MS	5565	17.12	5523	21.31	5300	23.59
06	BP-VPB-192-GW-780-782MSD	5810	17.12	5865	21.31	5479	23.58
07	VPB192-HYD-20250214	5756	17.14	5466	21.32	4501	23.59

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:	Tetra Tech NUS, Inc.	Date Collected:	02/12/25
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	02/17/25
Client Sample ID:	BP-VPB-192-EB-20250212	SDG No.:	Q1380
Lab Sample ID:	Q1380-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	890 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
BN036475.D	1	02/18/25 11:40	02/20/25 11:24	PB166758

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22	U	0.080	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		76%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		76%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.58	*	58 - 132		146%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1490	7.746				
1146-65-2	Naphthalene-d8	3320	10.541				
15067-26-2	Acenaphthene-d10	2120	14.388				
1517-22-2	Phenanthrene-d10	4760	17.136				
1719-03-5	Chrysene-d12	4680	21.322				
1520-96-3	Perylene-d12	4460	23.592				

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\BN022025\
Data File : BN036475.D
Acq On : 20 Feb 2025 11:24
Operator : RC/JU
Sample : Q1380-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Quant Time: Feb 21 00:09:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

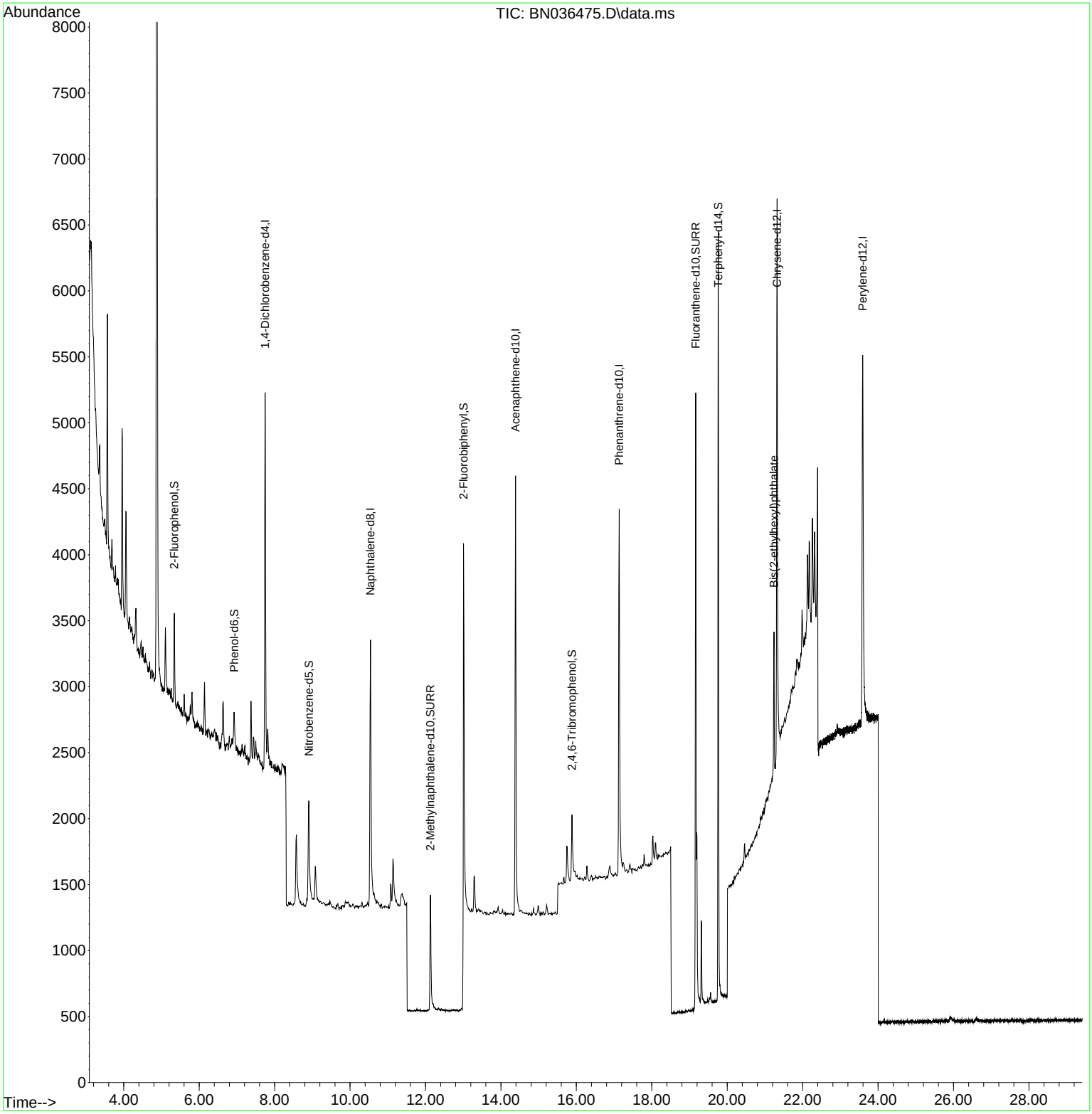
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1491	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	3323	0.400	ng	0.00
13) Acenaphthene-d10	14.388	164	2119	0.400	ng	0.00
19) Phenanthrene-d10	17.136	188	4759	0.400	ng	0.00
29) Chrysene-d12	21.322	240	4677	0.400	ng	0.00
35) Perylene-d12	23.592	264	4457	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	488	0.138	ng	0.00
5) Phenol-d6	6.930	99	321	0.078	ng	0.00
8) Nitrobenzene-d5	8.907	82	997	0.304	ng	0.00
11) 2-Methylnaphthalene-d10	12.131	152	1557	0.305	ng	-0.01
14) 2,4,6-Tribromophenol	15.883	330	365	0.347	ng	0.00
15) 2-Fluorobiphenyl	13.009	172	3049	0.383	ng	-0.01
27) Fluoranthene-d10	19.164	212	5702	0.431	ng	0.00
31) Terphenyl-d14	19.764	244	5814	0.582	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.241	149	1068	0.111	ng	99

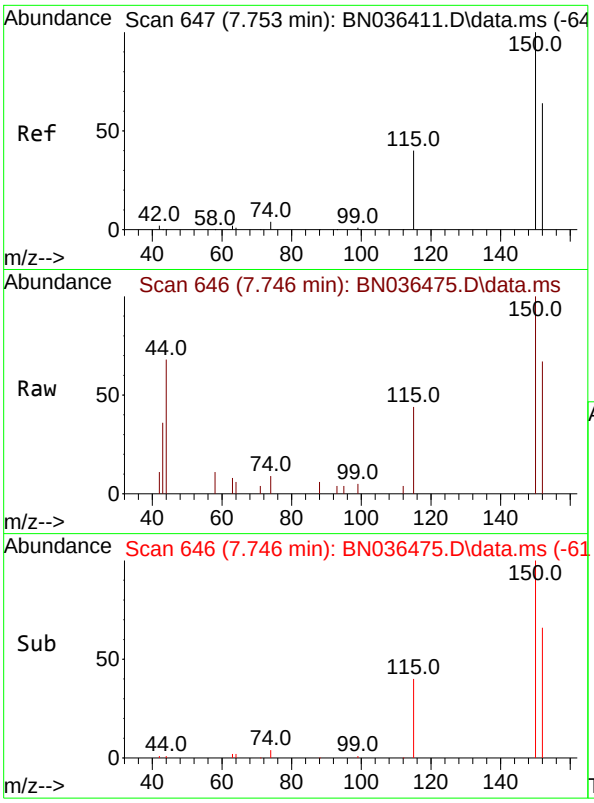
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036475.D
Acq On : 20 Feb 2025 11:24
Operator : RC/JU
Sample : Q1380-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Quant Time: Feb 21 00:09:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



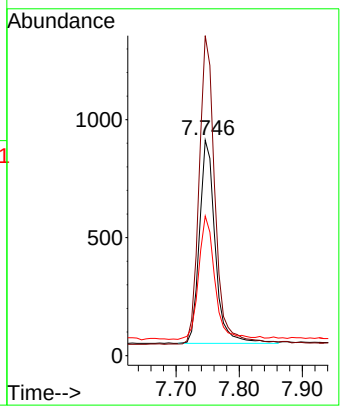


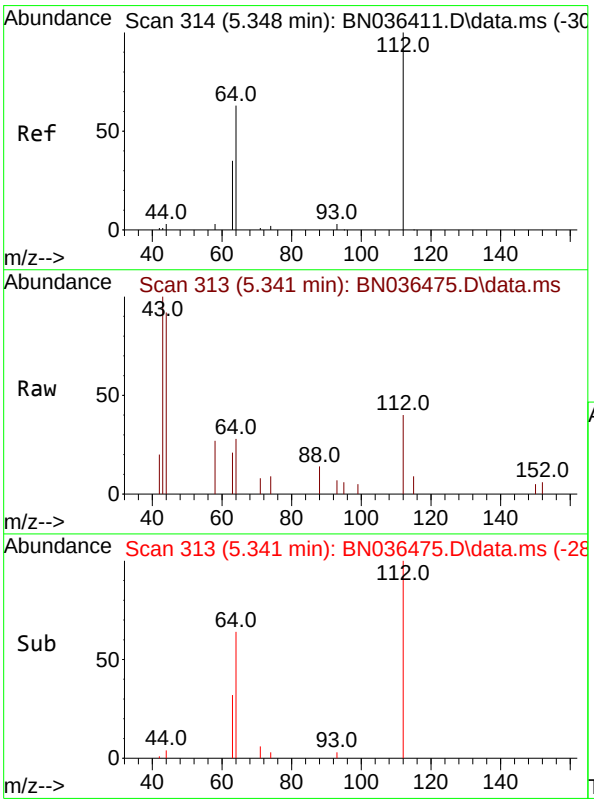
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion:152 Resp: 1491

Ion	Ratio	Lower	Upper
152	100		
150	148.5	123.7	185.5
115	64.8	52.5	78.7

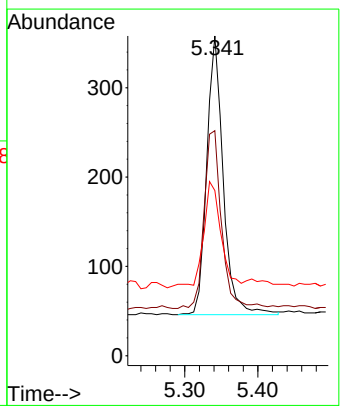


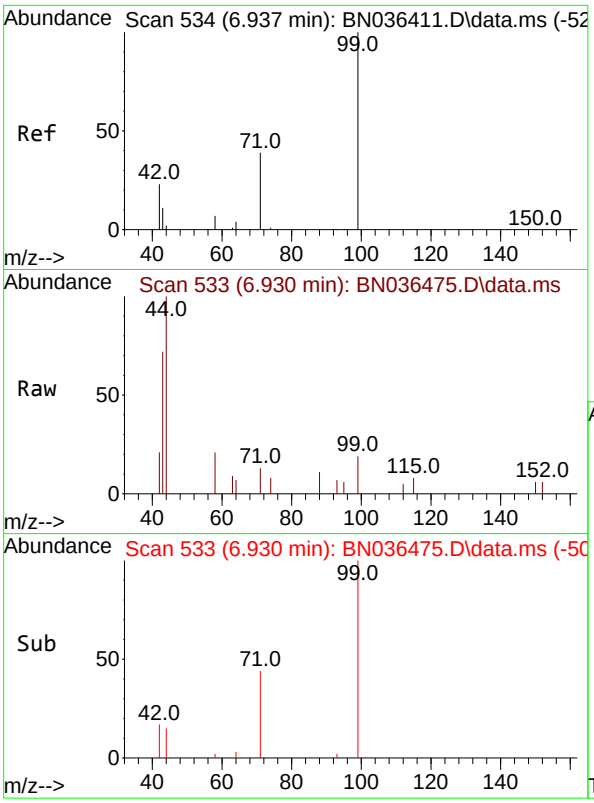


#4
2-Fluorophenol
Concen: 0.138 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:112 Resp: 488

Ion	Ratio	Lower	Upper
112	100		
64	67.4	53.4	80.0
63	40.8	30.3	45.5



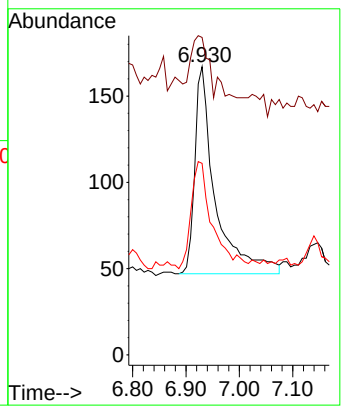


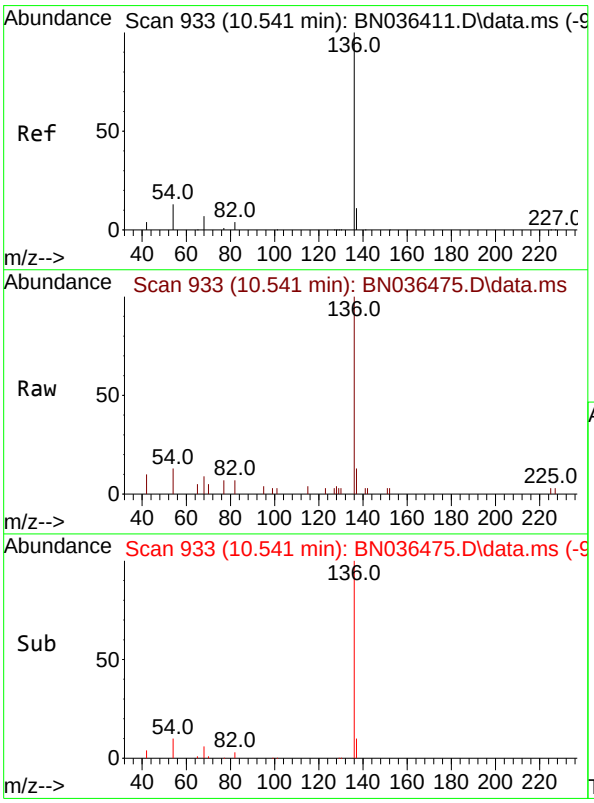
#5
Phenol-d6
Concen: 0.078 ng
RT: 6.930 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion: 99 Resp: 321

Ion	Ratio	Lower	Upper
99	100		
42	27.7	21.7	32.5
71	53.3	32.6	49.0#

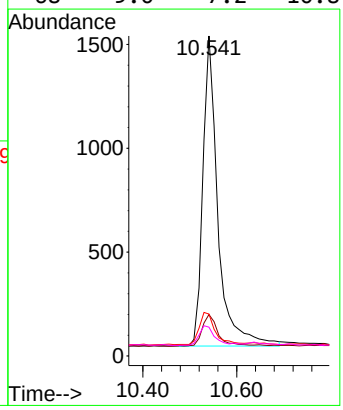


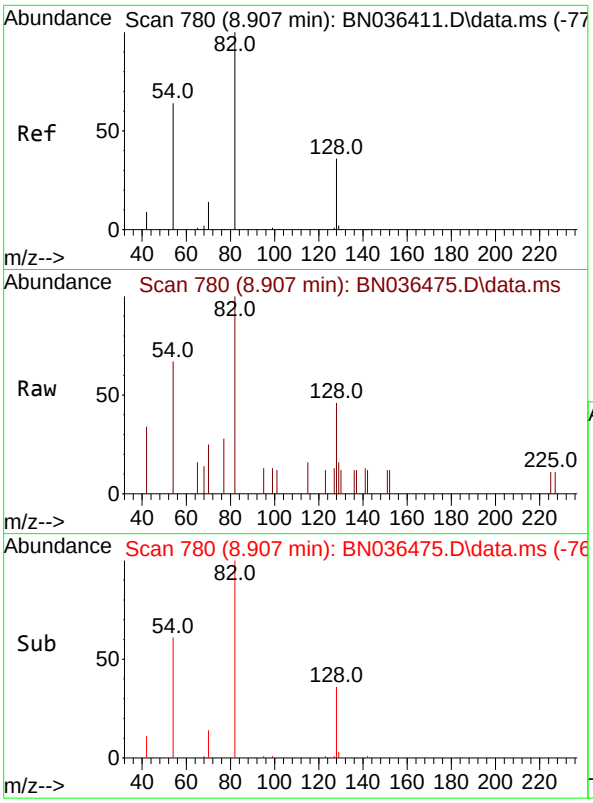


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 933
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:136 Resp: 3323

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.1	15.1
54	13.1	11.8	17.6
68	9.0	7.2	10.8



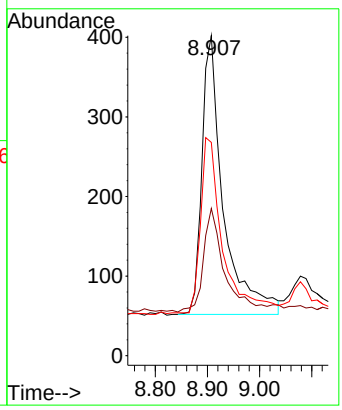


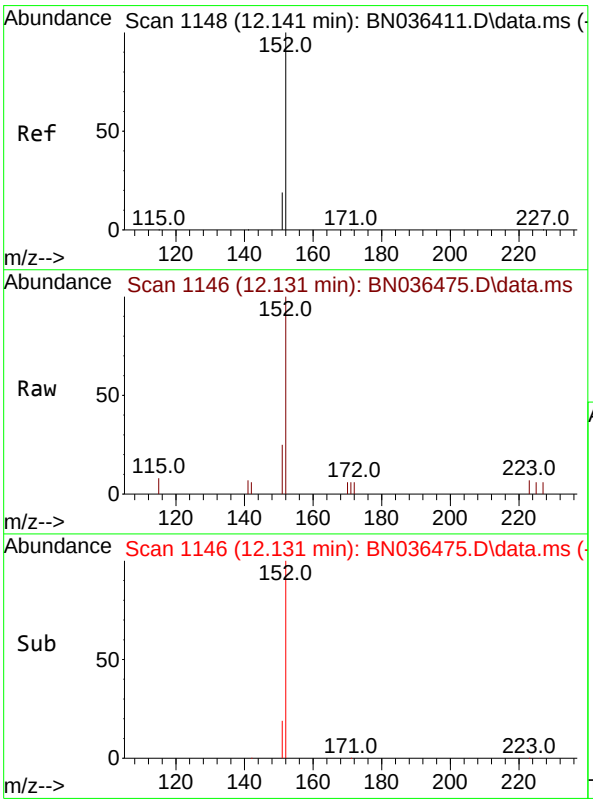
#8
Nitrobenzene-d5
Concen: 0.304 ng
RT: 8.907 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion: 82 Resp: 997

Ion	Ratio	Lower	Upper
82	100		
128	46.0	31.9	47.9
54	66.7	53.1	79.7

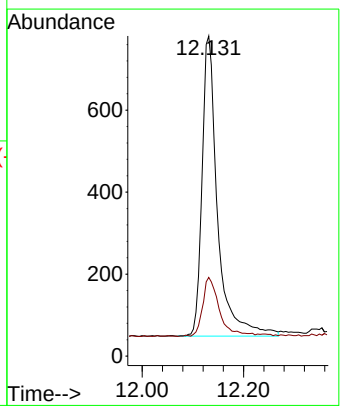


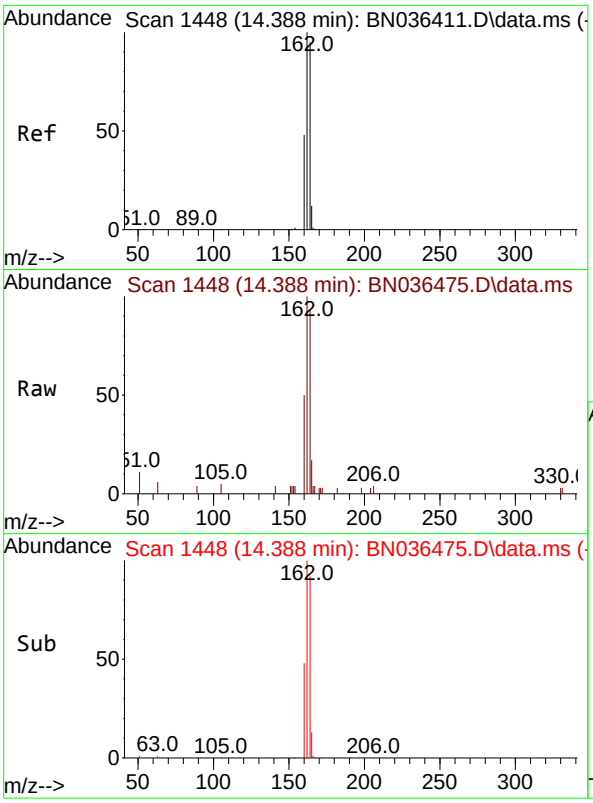


#11
2-Methylnaphthalene-d10
Concen: 0.305 ng
RT: 12.131 min Scan# 1146
Delta R.T. -0.010 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:152 Resp: 1557

Ion	Ratio	Lower	Upper
152	100		
151	21.6	16.6	25.0



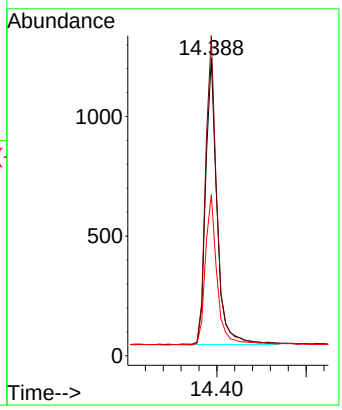


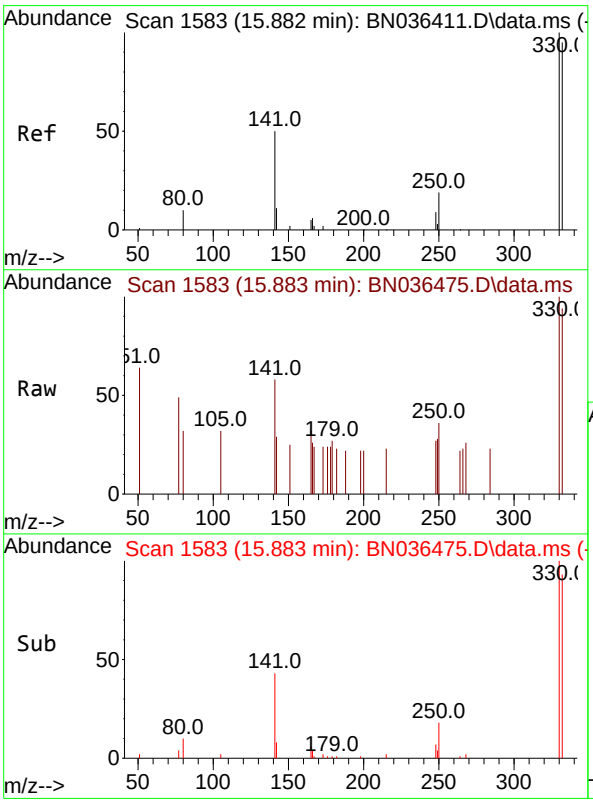
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion:164 Resp: 2119

Ion	Ratio	Lower	Upper
164	100		
162	107.6	84.1	126.1
160	54.1	41.4	62.0

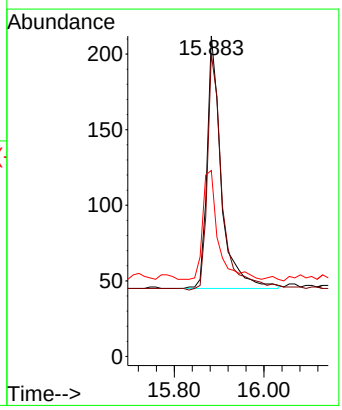


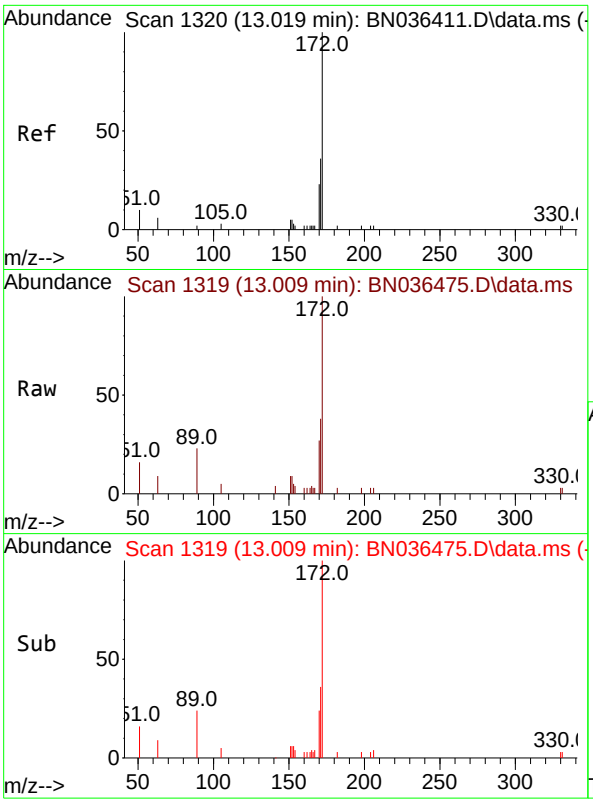


#14
2,4,6-Tribromophenol
Concen: 0.347 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:330 Resp: 365

Ion	Ratio	Lower	Upper
330	100		
332	97.8	76.6	114.8
141	46.0	37.8	56.8



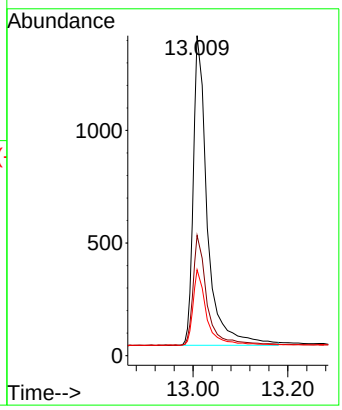


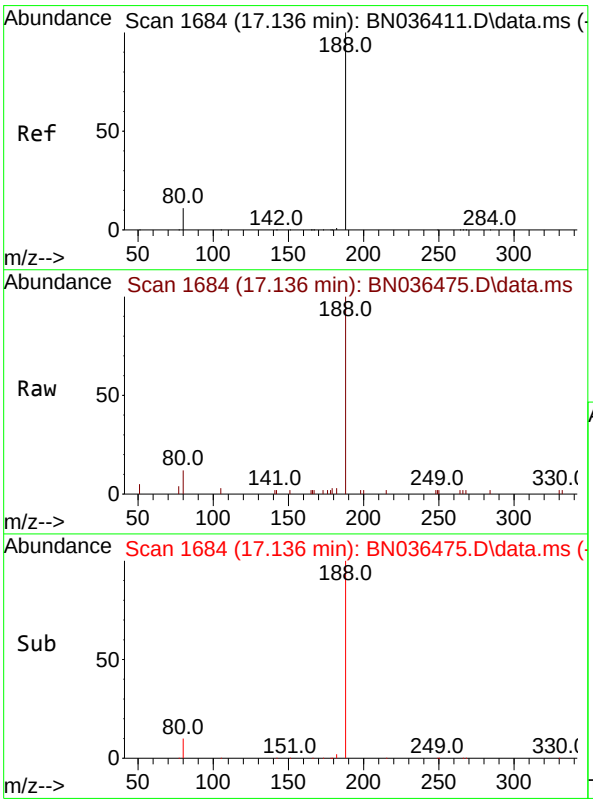
#15
2-Fluorobiphenyl
Concen: 0.383 ng
RT: 13.009 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion:172 Resp: 3049

Ion	Ratio	Lower	Upper
172	100		
171	37.6	29.6	44.4
170	26.8	19.8	29.6

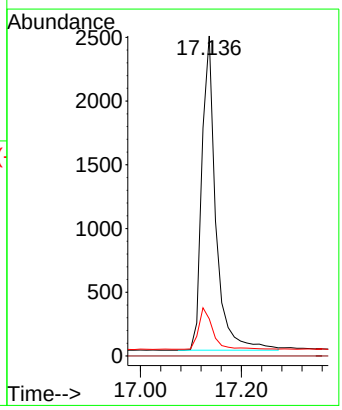


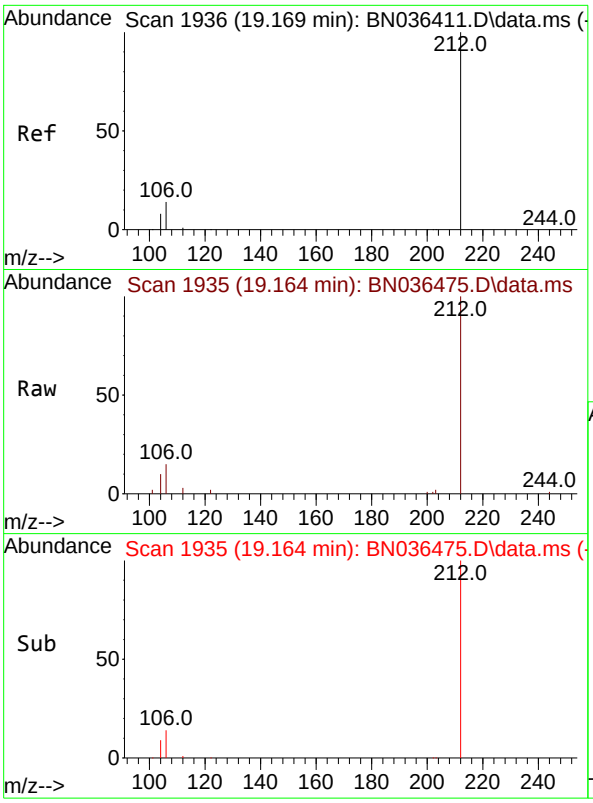


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:188 Resp: 4759

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.6	9.8	14.6



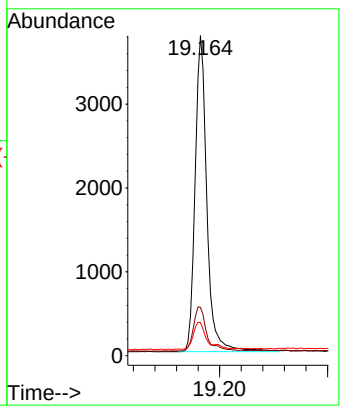


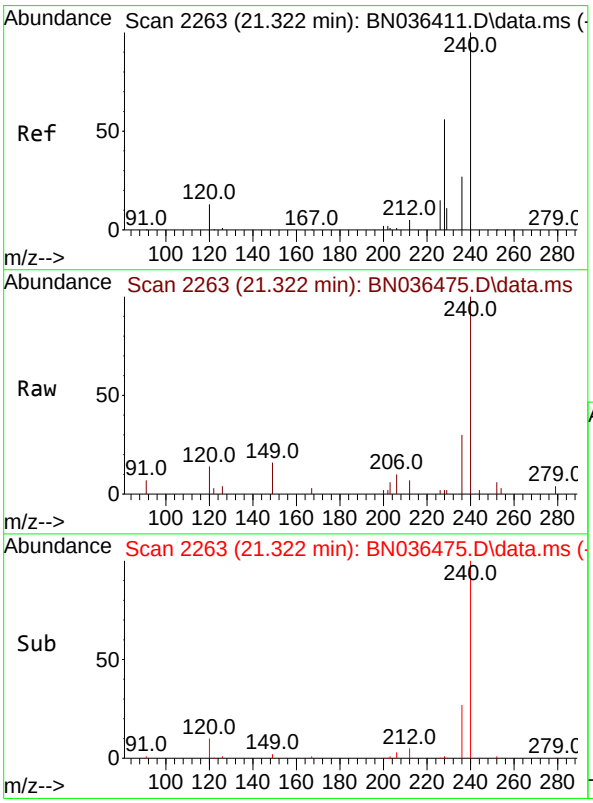
#27
Fluoranthene-d10
Concen: 0.431 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion:212 Resp: 5702

Ion	Ratio	Lower	Upper
212	100		
106	15.5	11.5	17.3
104	8.8	7.1	10.7

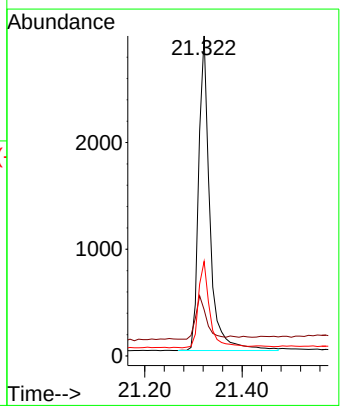


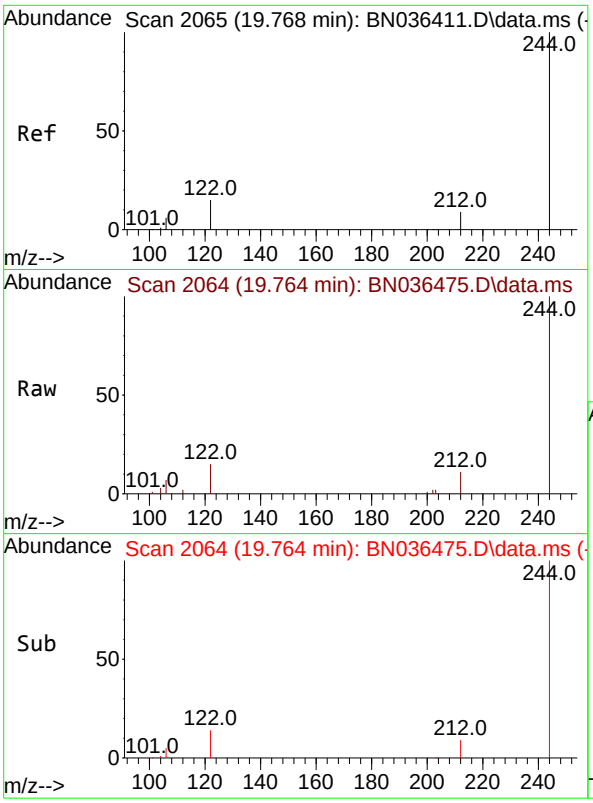


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2263
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:240 Resp: 4677

Ion	Ratio	Lower	Upper
240	100		
120	14.4	13.3	19.9
236	29.5	23.0	34.6



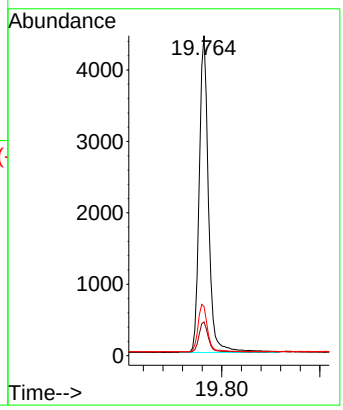


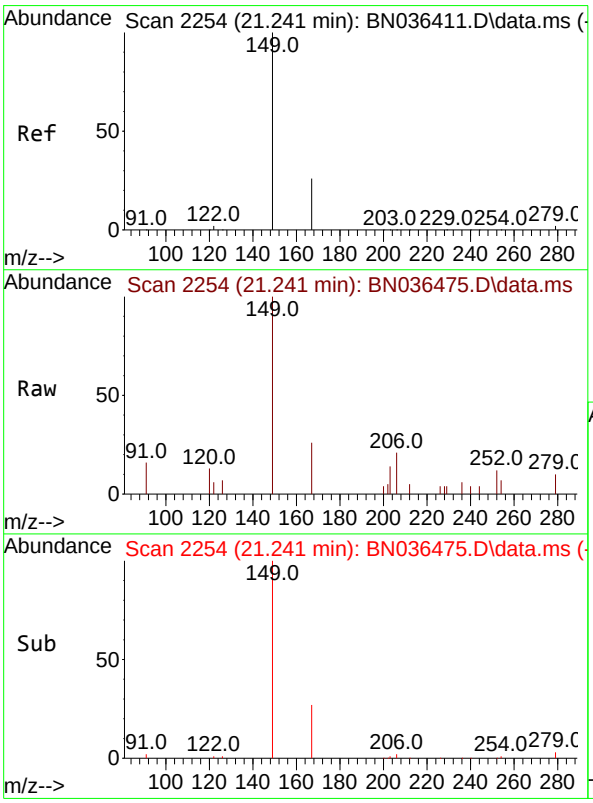
#31
Terphenyl-d14
Concen: 0.582 ng
RT: 19.764 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion:244 Resp: 5814

Ion	Ratio	Lower	Upper
244	100		
212	10.6	8.1	12.1
122	15.4	12.8	19.2

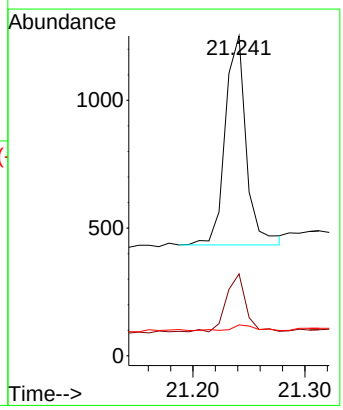


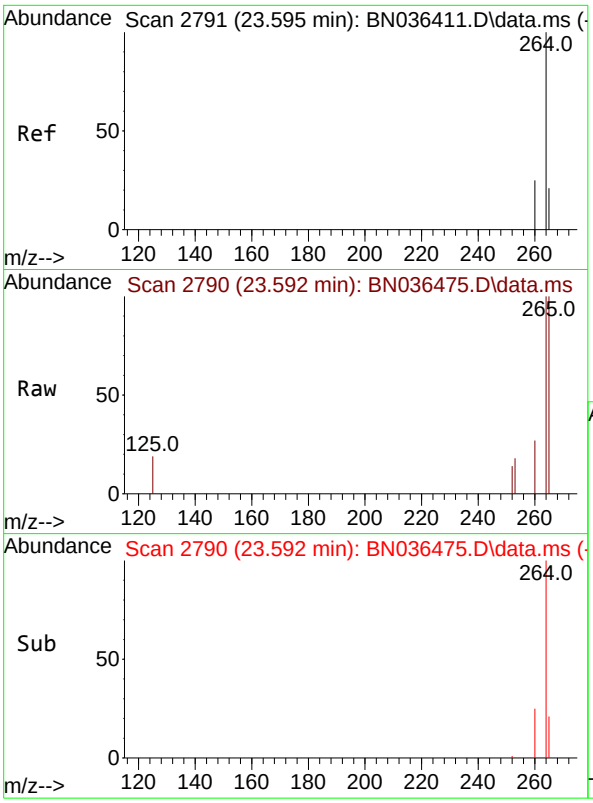


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.111 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Tgt Ion:149 Resp: 1068

Ion	Ratio	Lower	Upper
149	100		
167	25.8	21.2	31.8
279	3.0	2.7	4.1



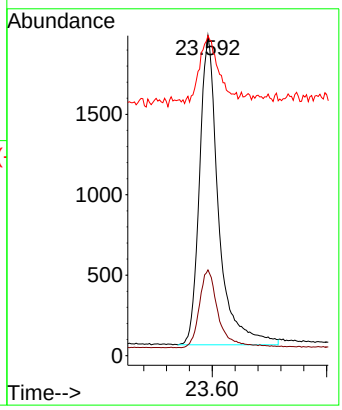


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.592 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036475.D
Acq: 20 Feb 2025 11:24

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250212

Tgt Ion:264 Resp: 4457

Ion	Ratio	Lower	Upper
264	100		
260	26.8	20.9	31.3
265	100.0	60.7	91.1#



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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/13/25
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	02/17/25
Client Sample ID:	BP-VPB-192-GW-780-782	SDG No.:	Q1380
Lab Sample ID:	Q1380-09	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	380 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
BN036476.D	1	02/18/25 11:40	02/20/25 12:00	PB166758

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.53	UM	0.18	0.53	0.53	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		88%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		103%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		91%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		118%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.50		58 - 132		126%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1680	7.746				
1146-65-2	Naphthalene-d8	3840	10.541				
15067-26-2	Acenaphthene-d10	2410	14.388				
1517-22-2	Phenanthrene-d10	5510	17.124				
1719-03-5	Chrysene-d12	5350	21.322				
1520-96-3	Perylene-d12	4860	23.59				

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\BN022025\
Data File : BN036476.D
Acq On : 20 Feb 2025 12:00
Operator : RC/JU
Sample : Q1380-09
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Quant Time: Feb 21 00:10:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

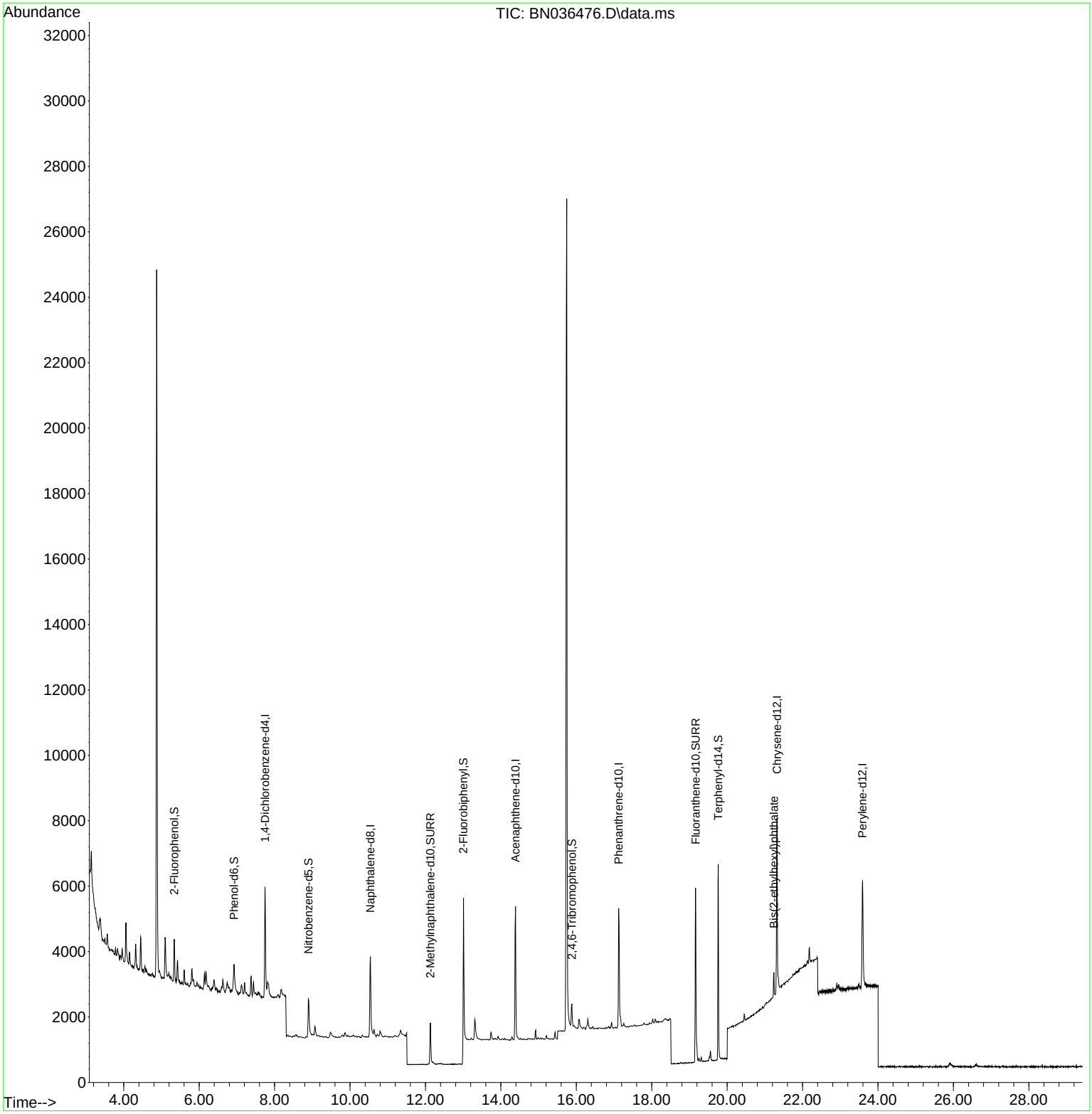
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1676	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	3840	0.400	ng	# 0.00
13) Acenaphthene-d10	14.388	164	2412	0.400	ng	0.00
19) Phenanthrene-d10	17.124	188	5513	0.400	ng	#-0.01
29) Chrysene-d12	21.322	240	5354	0.400	ng	0.00
35) Perylene-d12	23.590	264	4859	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	978	0.247	ng	0.00
5) Phenol-d6	6.923	99	814	0.175	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1381	0.364	ng	-0.01
11) 2-Methylnaphthalene-d10	12.131	152	2066	0.350	ng	-0.01
14) 2,4,6-Tribromophenol	15.883	330	429	0.359	ng	0.00
15) 2-Fluorobiphenyl	13.009	172	4271	0.471	ng	-0.01
27) Fluoranthene-d10	19.164	212	6346	0.414	ng	0.00
31) Terphenyl-d14	19.764	244	5755	0.504	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.241	149	756	0.069	ng	97

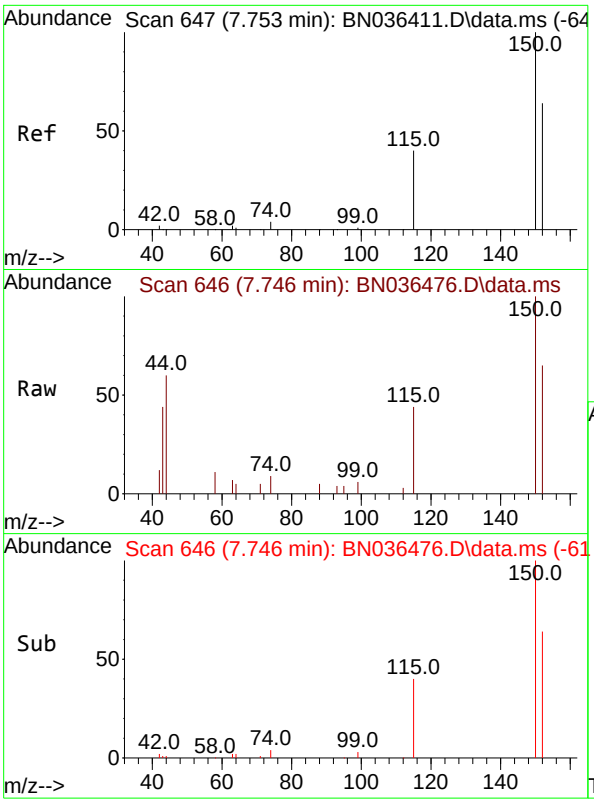
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036476.D
Acq On : 20 Feb 2025 12:00
Operator : RC/JU
Sample : Q1380-09
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Quant Time: Feb 21 00:10:00 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



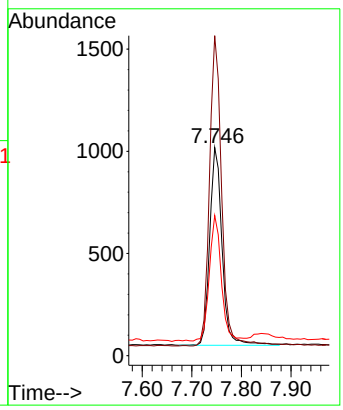


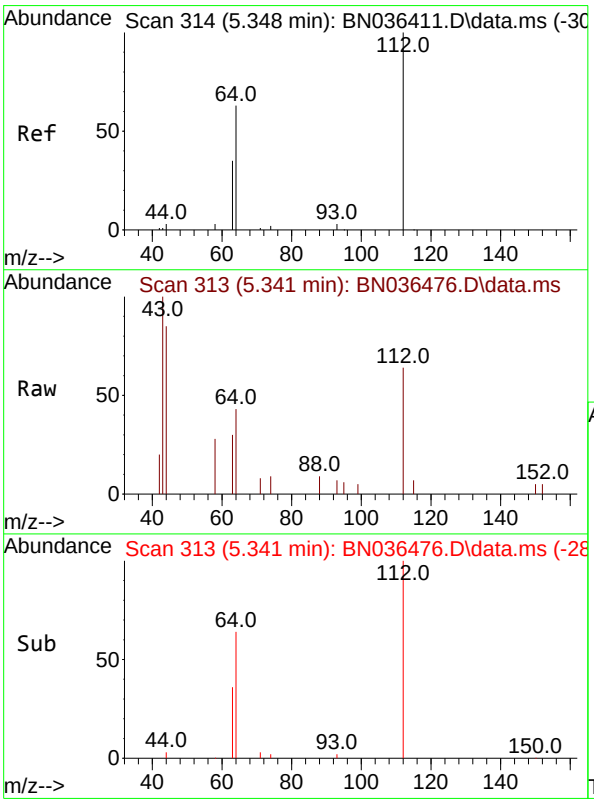
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion:152 Resp: 1676

Ion	Ratio	Lower	Upper
152	100		
150	153.7	123.7	185.5
115	67.3	52.5	78.7

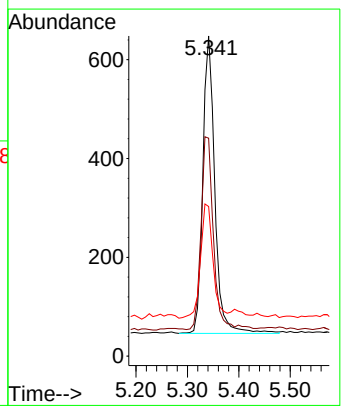


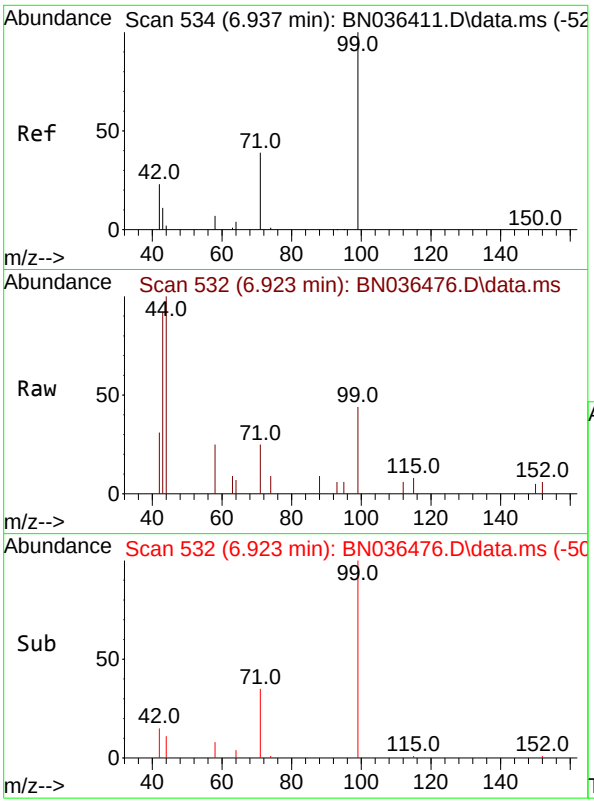


#4
2-Fluorophenol
Concen: 0.247 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:112 Resp: 978

Ion	Ratio	Lower	Upper
112	100		
64	66.9	53.4	80.0
63	39.8	30.3	45.5



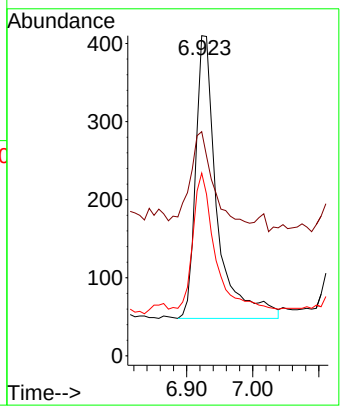


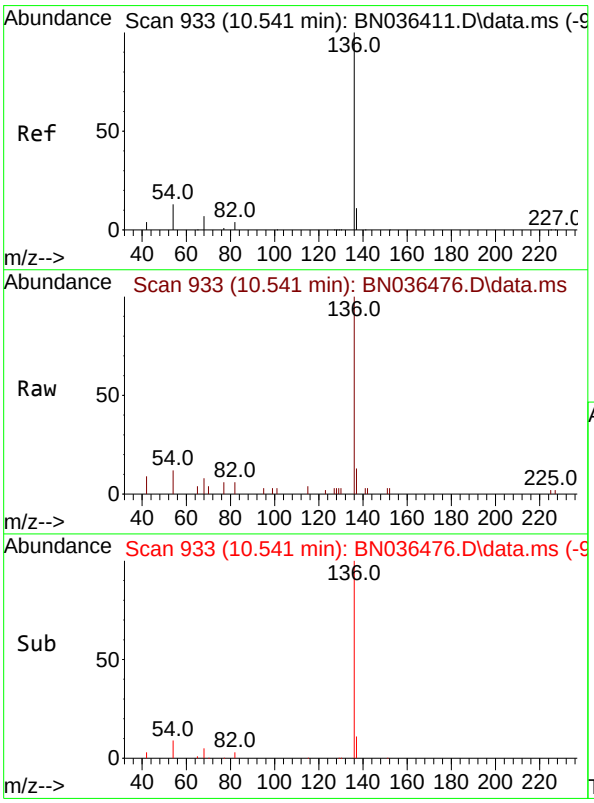
#5
Phenol-d6
Concen: 0.175 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.014 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion: 99 Resp: 814

Ion	Ratio	Lower	Upper
99	100		
42	36.9	21.7	32.5#
71	49.8	32.6	49.0#

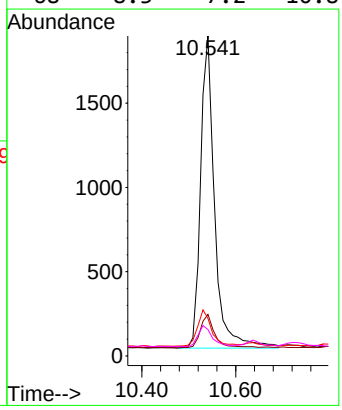


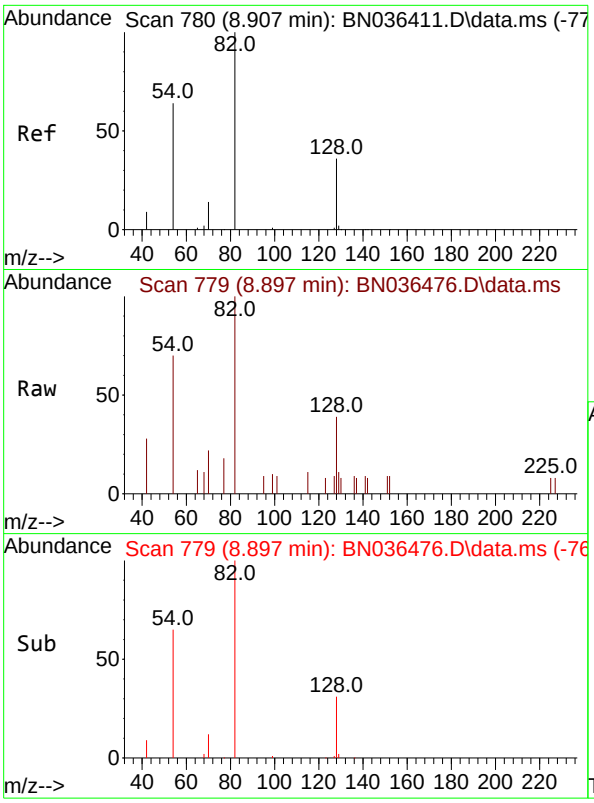


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 933
Delta R.T. 0.000 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:136 Resp: 3840

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.1	15.1
54	11.7	11.8	17.6#
68	8.3	7.2	10.8



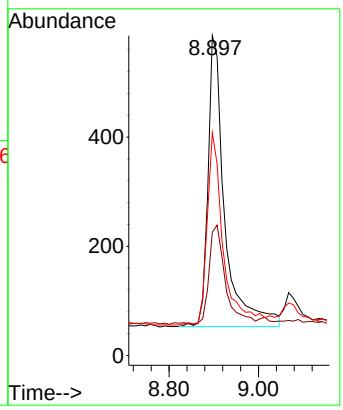


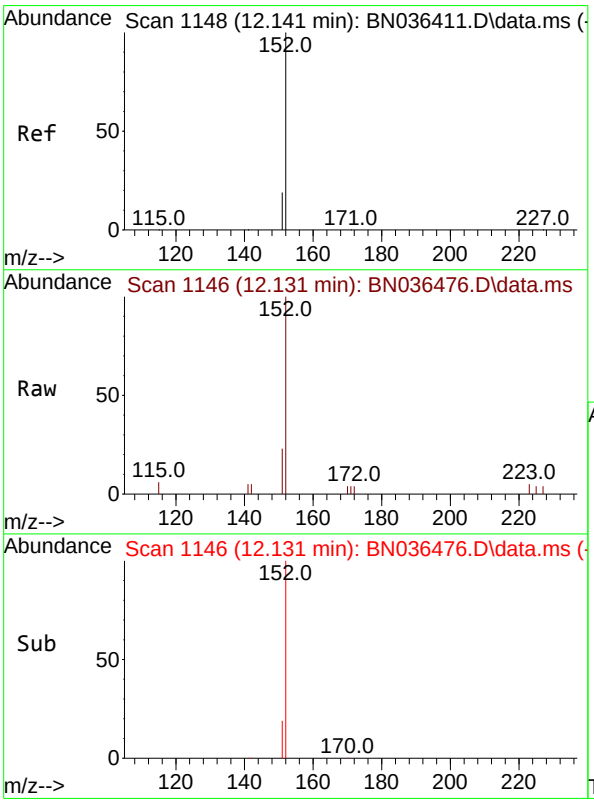
#8
Nitrobenzene-d5
Concen: 0.364 ng
RT: 8.897 min Scan# 7
Delta R.T. -0.011 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion: 82 Resp: 1381

Ion	Ratio	Lower	Upper
82	100		
128	38.6	31.9	47.9
54	69.6	53.1	79.7

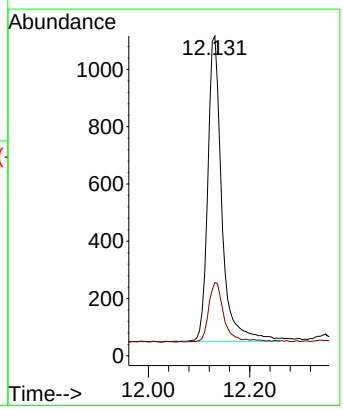


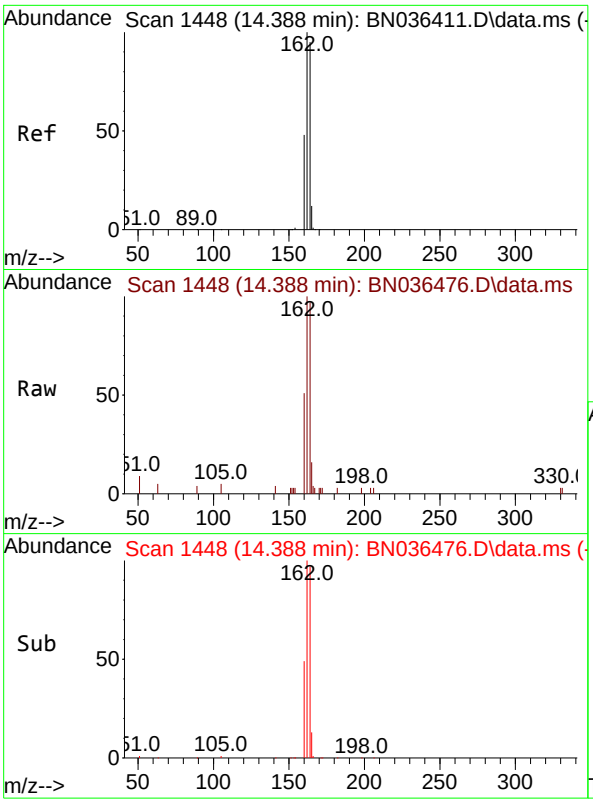


#11
2-Methylnaphthalene-d10
Concen: 0.350 ng
RT: 12.131 min Scan# 1146
Delta R.T. -0.010 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:152 Resp: 2066

Ion	Ratio	Lower	Upper
152	100		
151	20.5	16.6	25.0



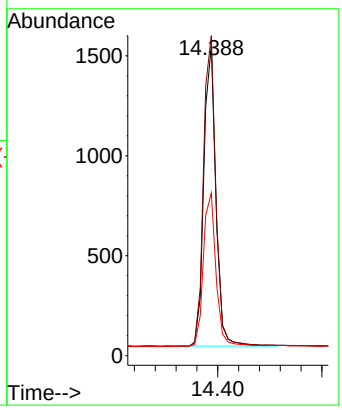


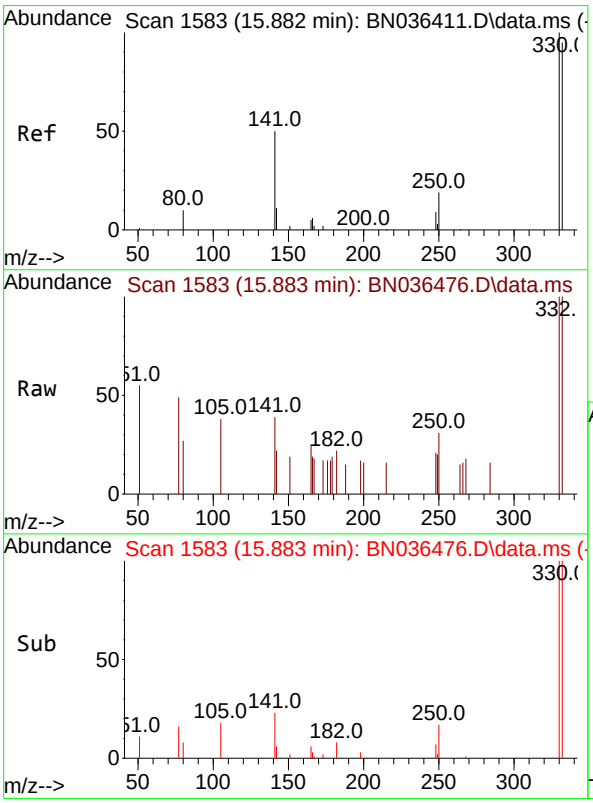
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion:164 Resp: 2412

Ion	Ratio	Lower	Upper
164	100		
162	103.2	84.1	126.1
160	52.4	41.4	62.0

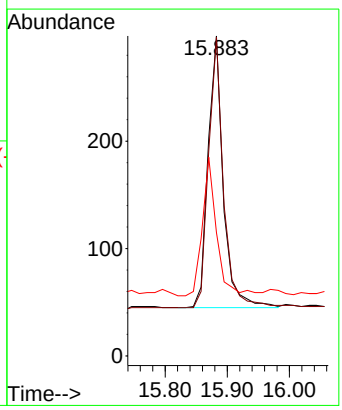


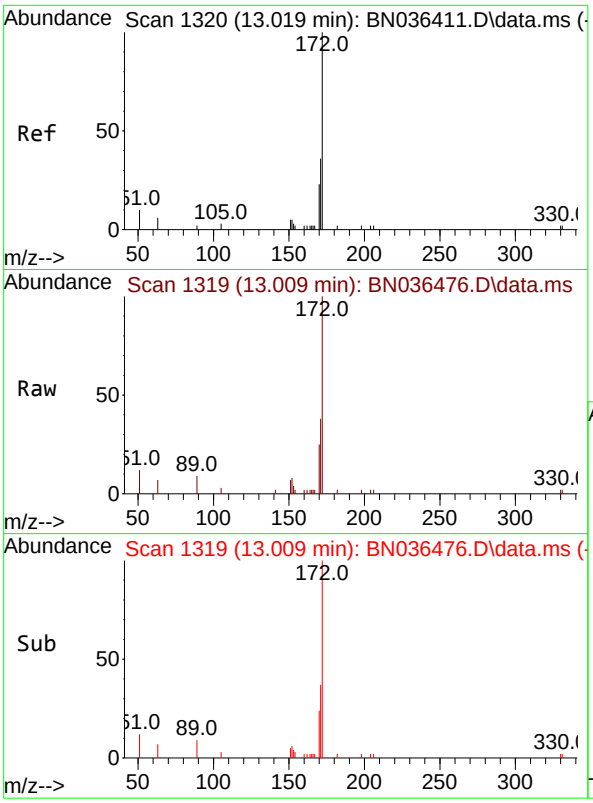


#14
2,4,6-Tribromophenol
Concen: 0.359 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:330 Resp: 429

Ion	Ratio	Lower	Upper
330	100		
332	98.8	76.6	114.8
141	48.0	37.8	56.8



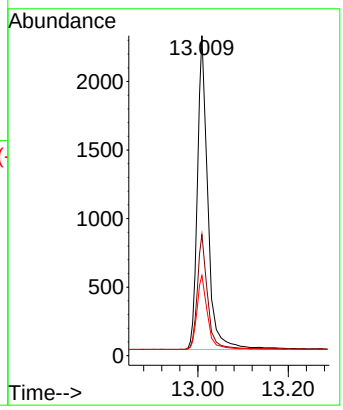


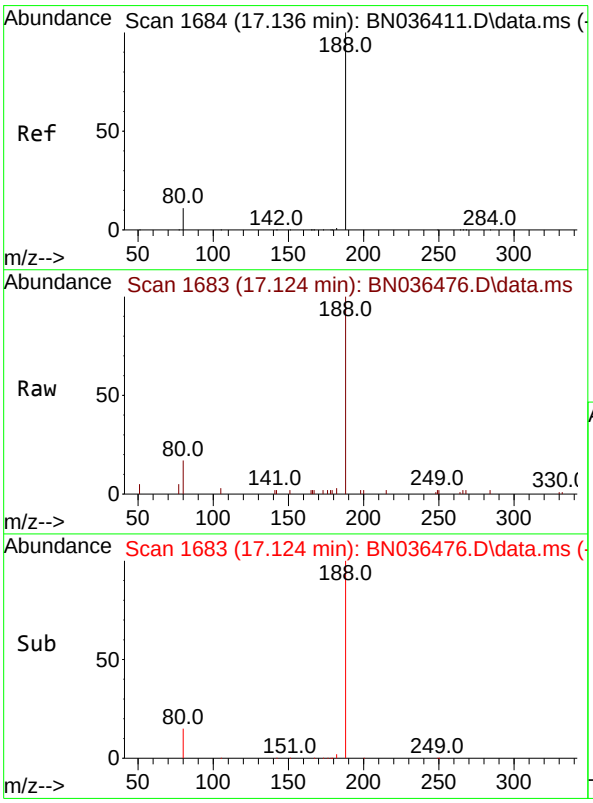
#15
2-Fluorobiphenyl
Concen: 0.471 ng
RT: 13.009 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion:172 Resp: 4271

Ion	Ratio	Lower	Upper
172	100		
171	37.8	29.6	44.4
170	25.1	19.8	29.6

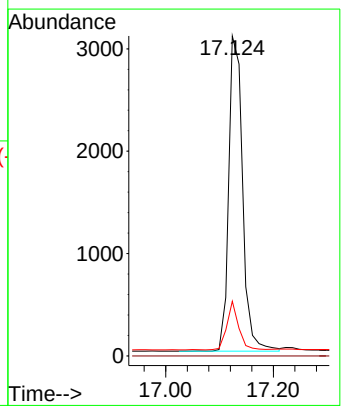


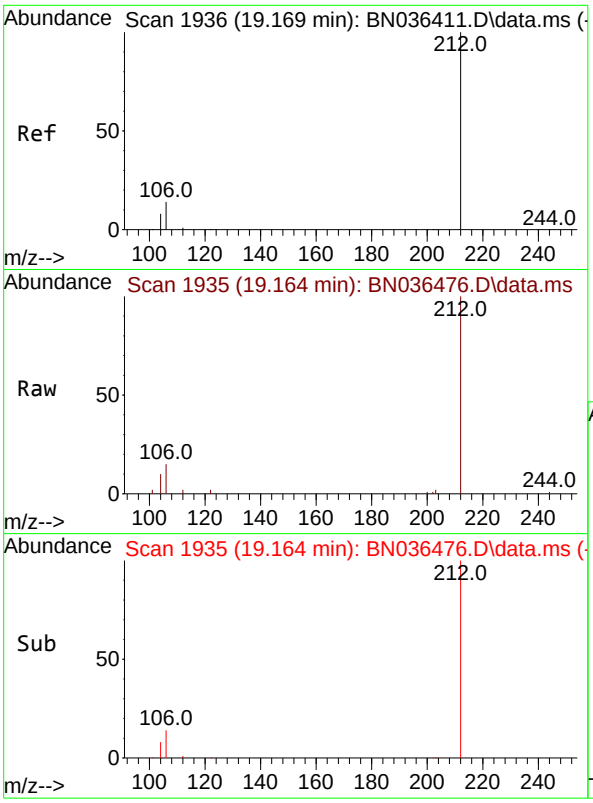


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1683
Delta R.T. -0.012 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:188 Resp: 5513

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	17.1	9.8	14.6#



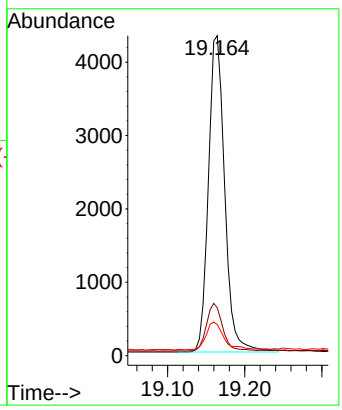


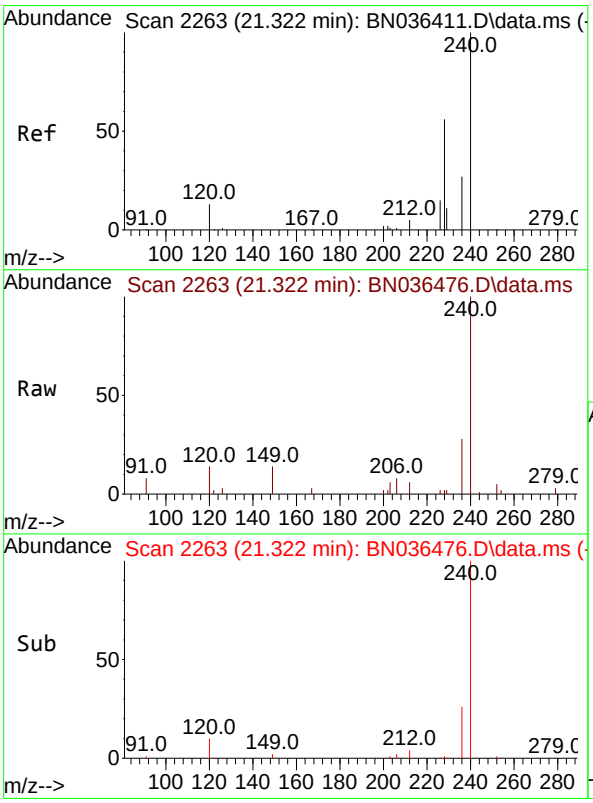
#27
Fluoranthene-d10
Concen: 0.414 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion:212 Resp: 6346

Ion	Ratio	Lower	Upper
212	100		
106	15.0	11.5	17.3
104	9.6	7.1	10.7

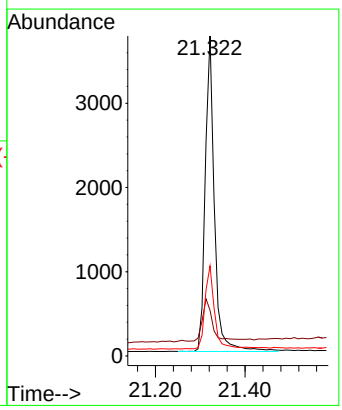


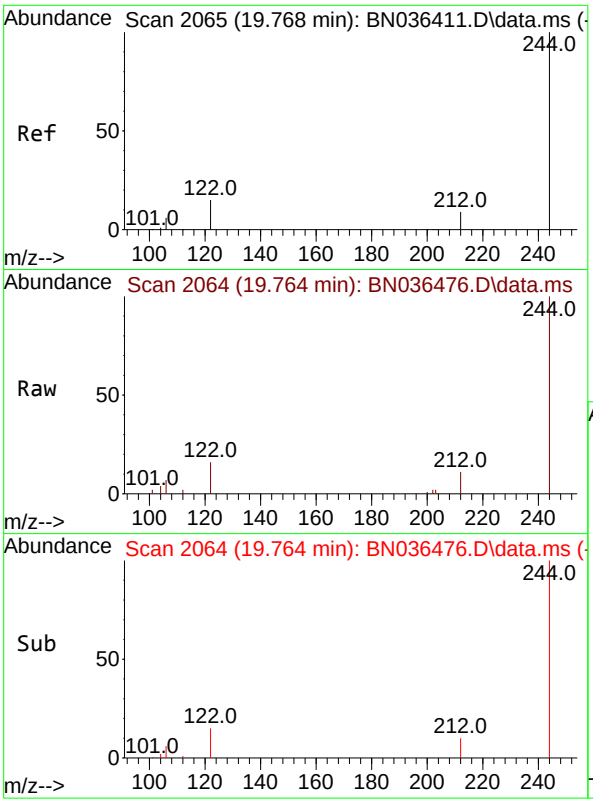


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2263
Delta R.T. 0.000 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:240 Resp: 5354

Ion	Ratio	Lower	Upper
240	100		
120	14.3	13.3	19.9
236	28.2	23.0	34.6



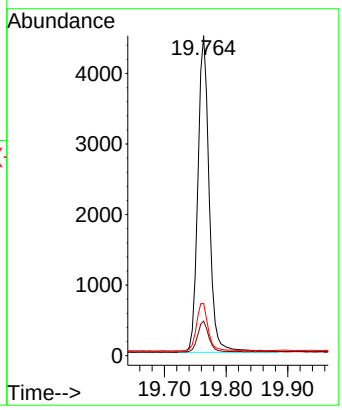


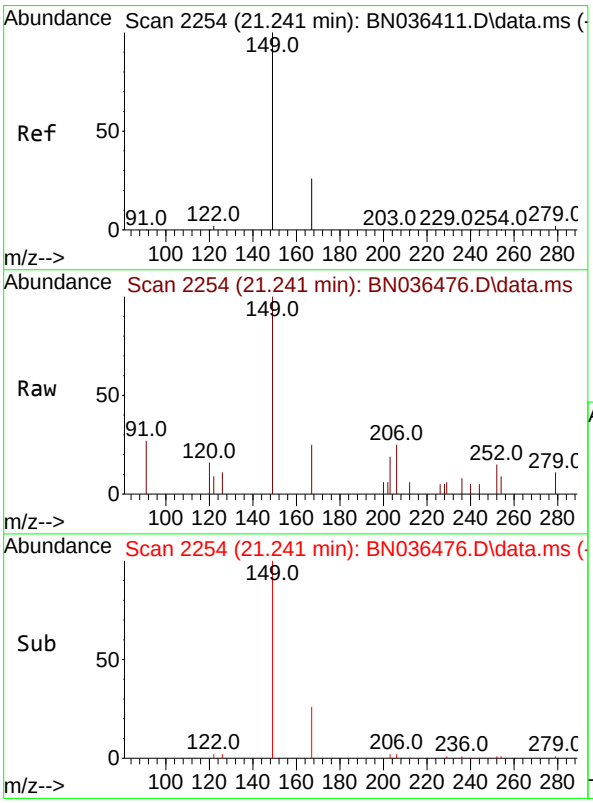
#31
Terphenyl-d14
Concen: 0.504 ng
RT: 19.764 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion:244 Resp: 5755

Ion	Ratio	Lower	Upper
244	100		
212	10.8	8.1	12.1
122	16.3	12.8	19.2

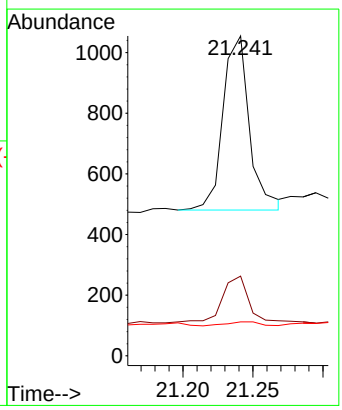


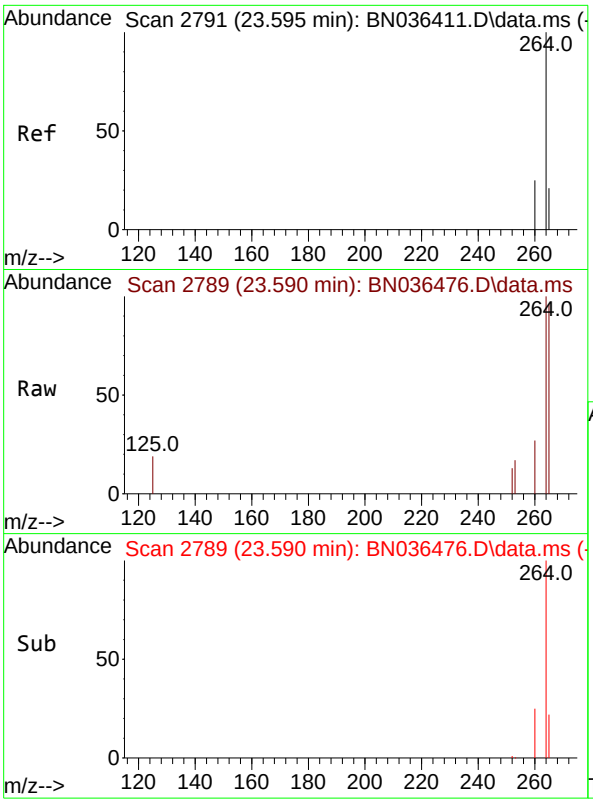


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.069 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Tgt Ion:149 Resp: 756

Ion	Ratio	Lower	Upper
149	100		
167	28.0	21.2	31.8
279	2.8	2.7	4.1



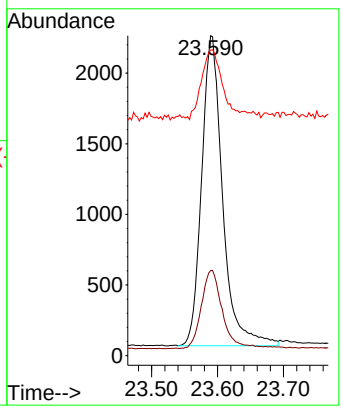


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.590 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036476.D
Acq: 20 Feb 2025 12:00

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782

Tgt Ion:264 Resp: 4859

Ion	Ratio	Lower	Upper
264	100		
260	26.6	20.9	31.3
265	95.5	60.7	91.1#



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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/14/25
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	02/17/25
Client Sample ID:	VPB192-HYD-20250214	SDG No.:	Q1380
Lab Sample ID:	Q1380-12	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	940 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
BN036479.D	1	02/18/25 11:40	02/20/25 13:48	PB166758

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	0.023	*	30 - 150		6%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		86%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		55 - 111		79%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.45		58 - 132		112%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1730	7.746				
1146-65-2	Naphthalene-d8	4020	10.541				
15067-26-2	Acenaphthene-d10	2590	14.388				
1517-22-2	Phenanthrene-d10	5760	17.136				
1719-03-5	Chrysene-d12	5470	21.322				
1520-96-3	Perylene-d12	4500	23.587				

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\BN022025\
Data File : BN036479.D
Acq On : 20 Feb 2025 13:48
Operator : RC/JU
Sample : Q1380-12
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Quant Time: Feb 21 00:11:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

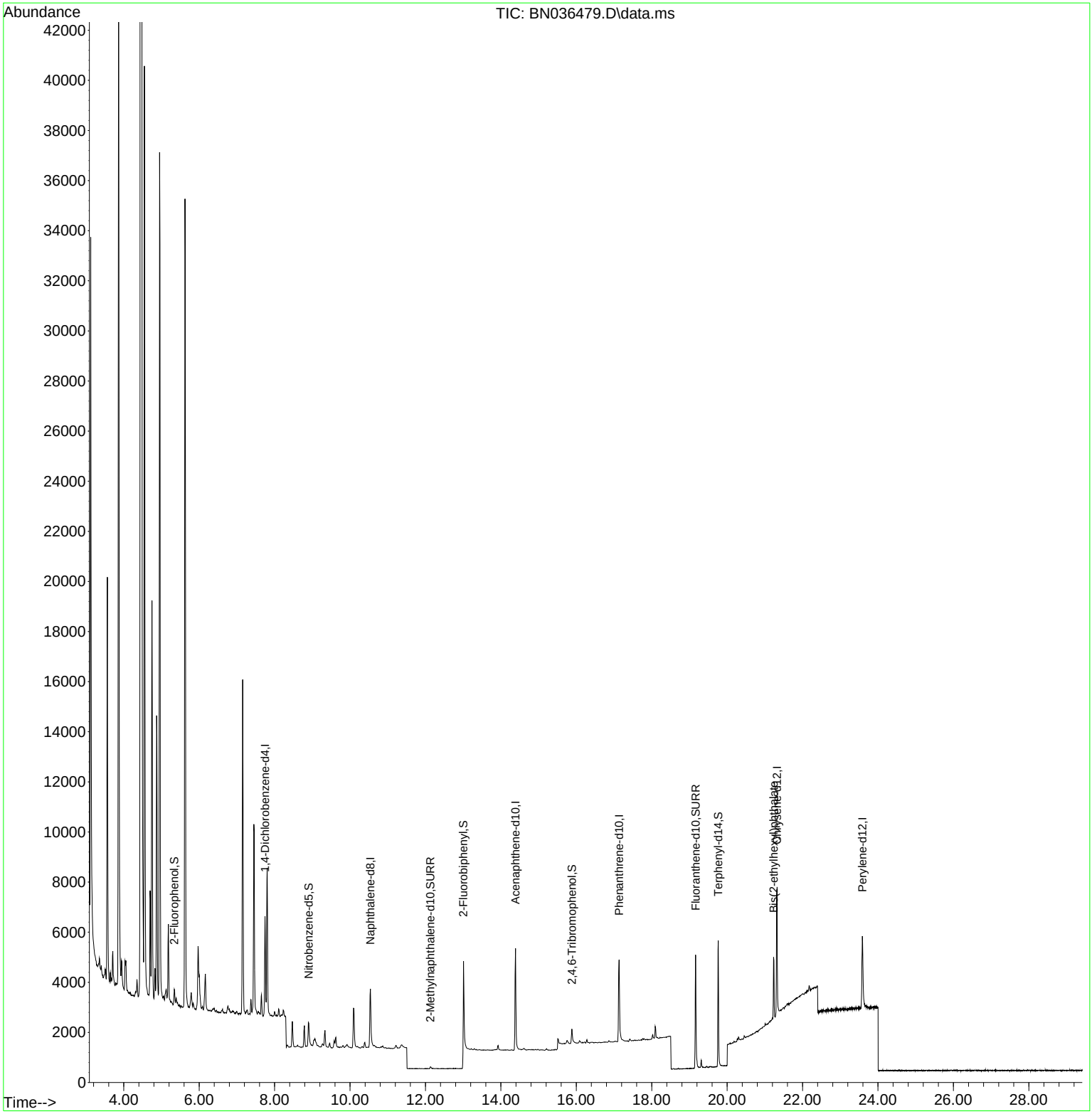
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1727	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	4024	0.400	ng	0.00
13) Acenaphthene-d10	14.388	164	2593	0.400	ng	0.00
19) Phenanthrene-d10	17.136	188	5756	0.400	ng	0.00
29) Chrysene-d12	21.322	240	5466	0.400	ng	0.00
35) Perylene-d12	23.587	264	4501	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	254	0.062	ng	0.00
5) Phenol-d6	6.937	99	13	0.003	ng	0.00
8) Nitrobenzene-d5	8.907	82	1245	0.314	ng	0.00
11) 2-Methylnaphthalene-d10	12.131	152	144	0.023	ng	-0.01
14) 2,4,6-Tribromophenol	15.882	330	390	0.303	ng	0.00
15) 2-Fluorobiphenyl	13.008	172	3787	0.388	ng	-0.01
27) Fluoranthene-d10	19.164	212	5514	0.344	ng	0.00
31) Terphenyl-d14	19.764	244	5234	0.449	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.232	149	2546	0.227	ng	99

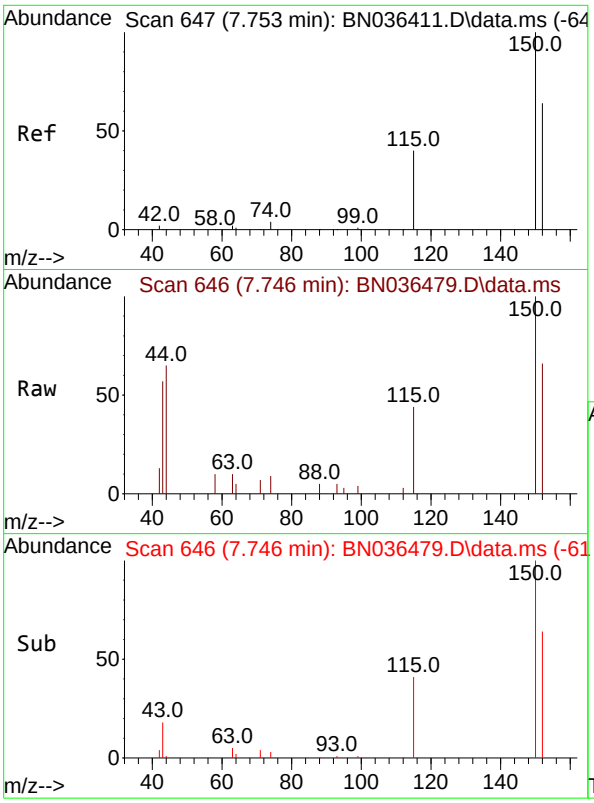
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036479.D
Acq On : 20 Feb 2025 13:48
Operator : RC/JU
Sample : Q1380-12
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Quant Time: Feb 21 00:11:17 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



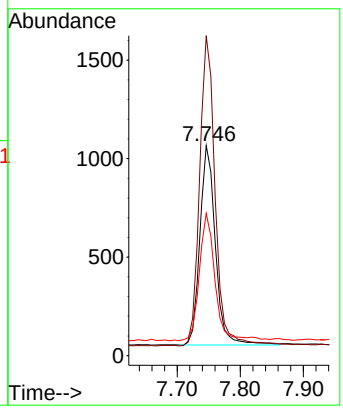


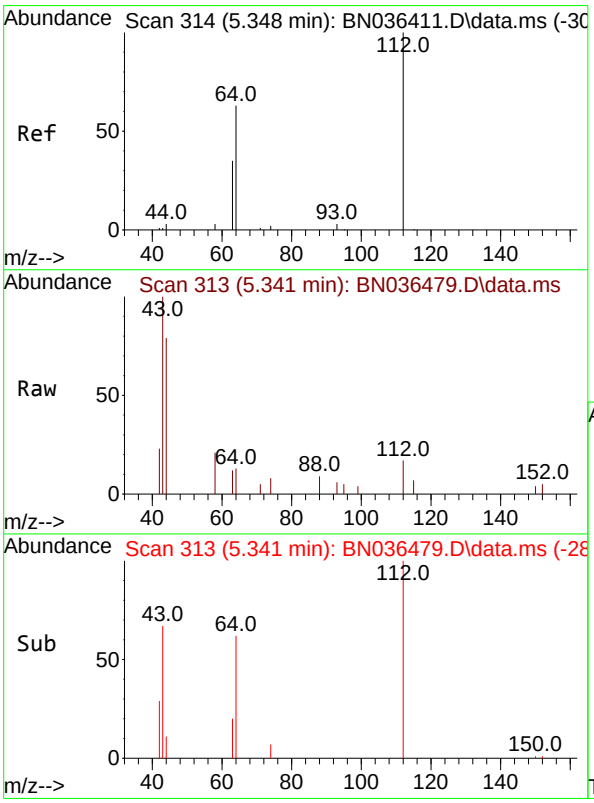
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion:152 Resp: 1727

Ion	Ratio	Lower	Upper
152	100		
150	152.3	123.7	185.5
115	67.7	52.5	78.7

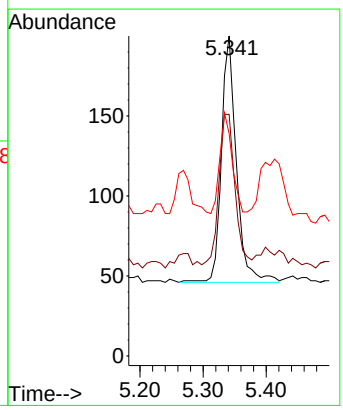


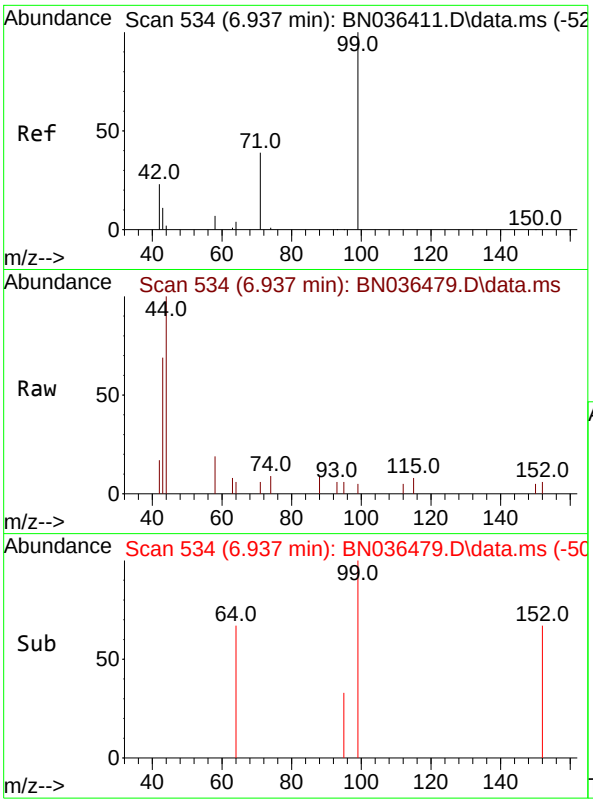


#4
2-Fluorophenol
Concen: 0.062 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:112 Resp: 254

Ion	Ratio	Lower	Upper
112	100		
64	66.5	53.4	80.0
63	38.2	30.3	45.5



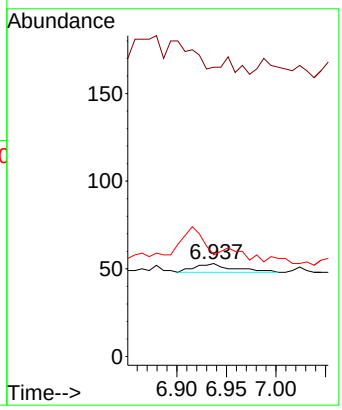


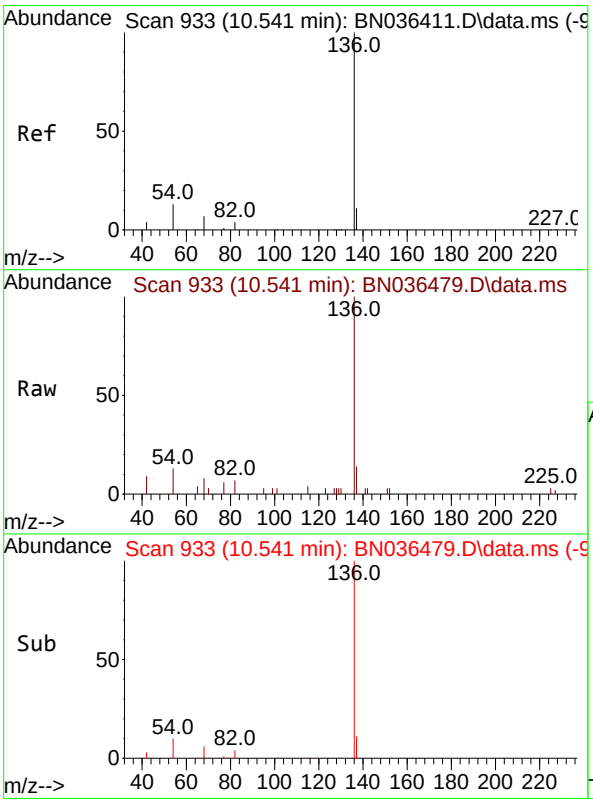
#5
Phenol-d6
Concen: 0.003 ng
RT: 6.937 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion: 99 Resp: 13

Ion	Ratio	Lower	Upper
99	100		
42	53.8	21.7	32.5#
71	0.0	32.6	49.0#

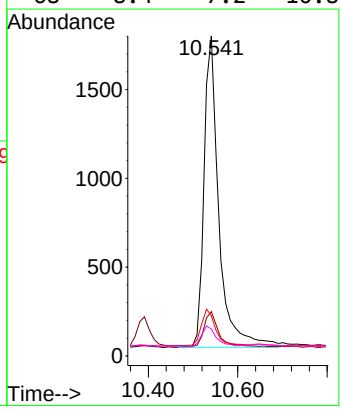


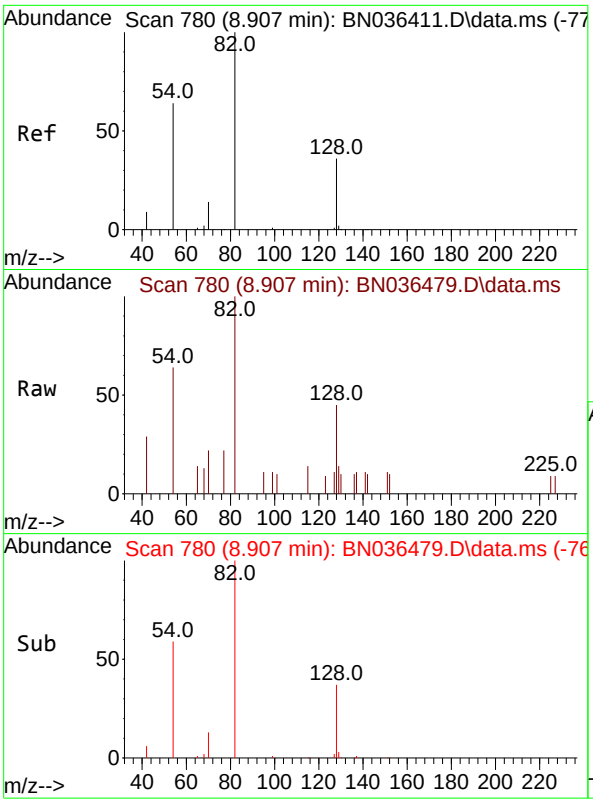


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 933
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:136 Resp: 4024

Ion	Ratio	Lower	Upper
136	100		
137	13.9	10.1	15.1
54	12.6	11.8	17.6
68	8.4	7.2	10.8



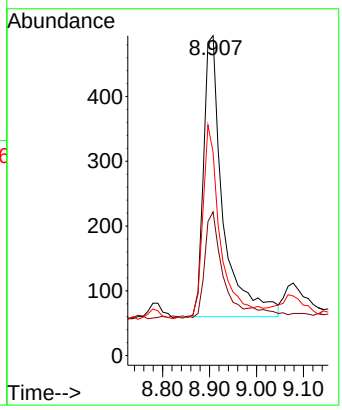


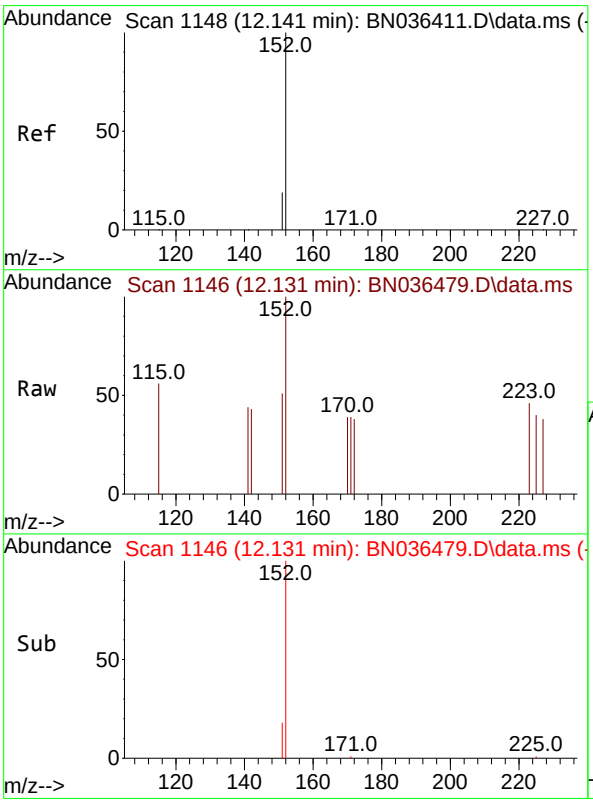
#8
Nitrobenzene-d5
Concen: 0.314 ng
RT: 8.907 min Scan# 7
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion: 82 Resp: 1245

Ion	Ratio	Lower	Upper
82	100		
128	44.9	31.9	47.9
54	63.6	53.1	79.7

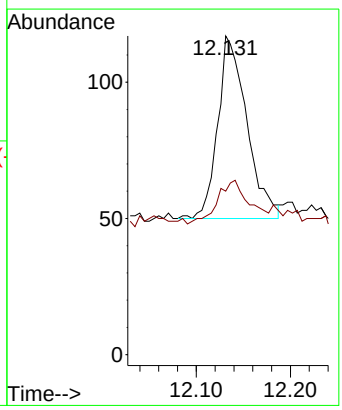


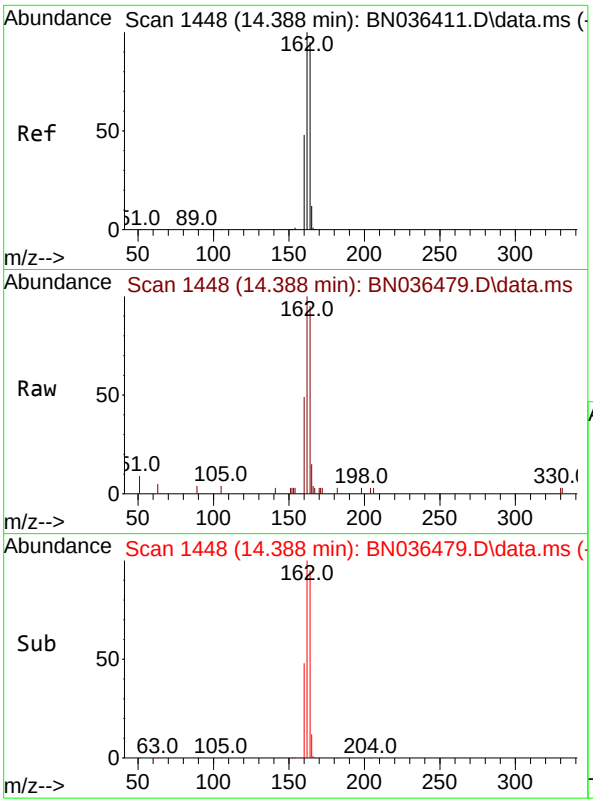


#11
2-Methylnaphthalene-d10
Concen: 0.023 ng
RT: 12.131 min Scan# 1146
Delta R.T. -0.010 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:152 Resp: 144

Ion	Ratio	Lower	Upper
152	100		
151	26.4	16.6	25.0#



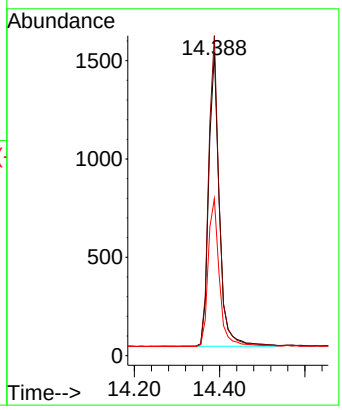


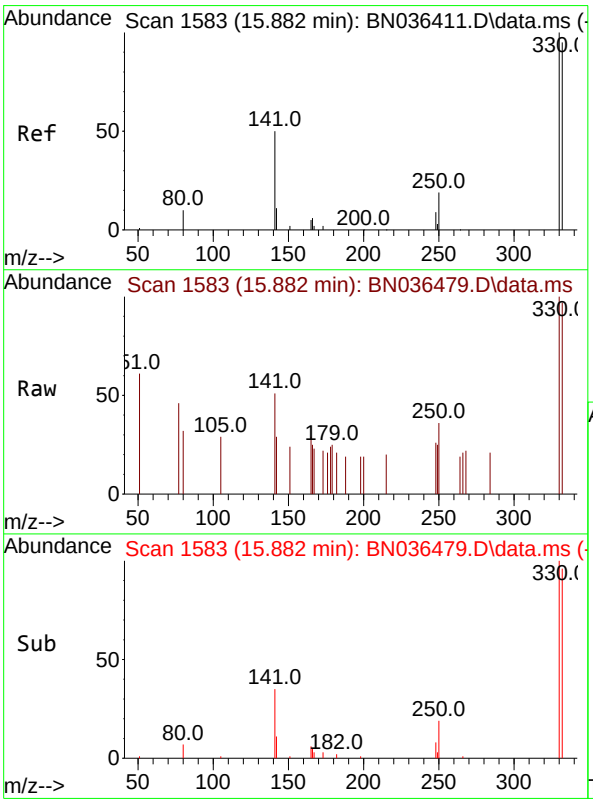
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion:164 Resp: 2593

Ion	Ratio	Lower	Upper
164	100		
162	105.5	84.1	126.1
160	51.8	41.4	62.0

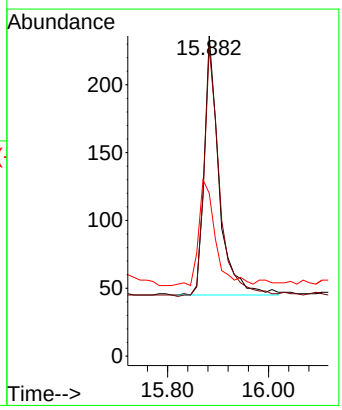


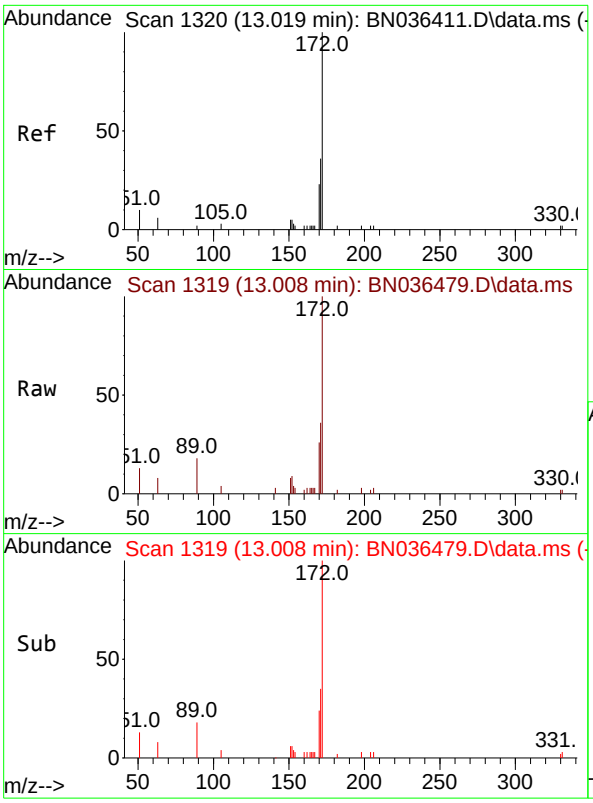


#14
2,4,6-Tribromophenol
Concen: 0.303 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:330 Resp: 390

Ion	Ratio	Lower	Upper
330	100		
332	101.3	76.6	114.8
141	45.9	37.8	56.8



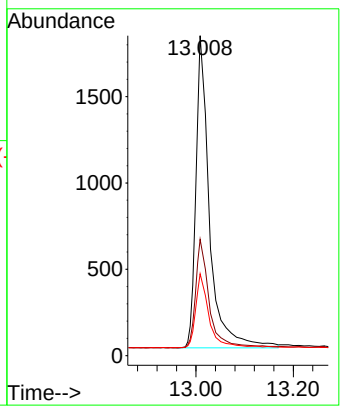


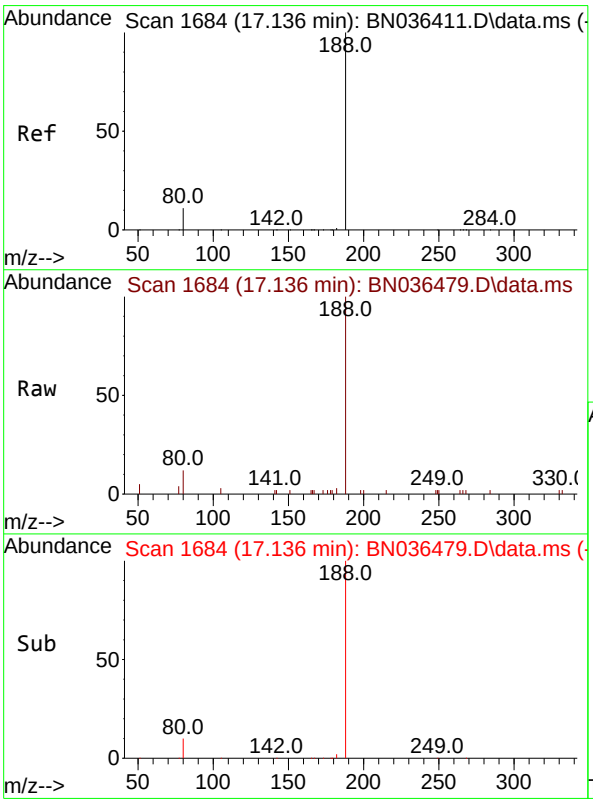
#15
2-Fluorobiphenyl
Concen: 0.388 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion:172 Resp: 3787

Ion	Ratio	Lower	Upper
172	100		
171	36.3	29.6	44.4
170	25.6	19.8	29.6

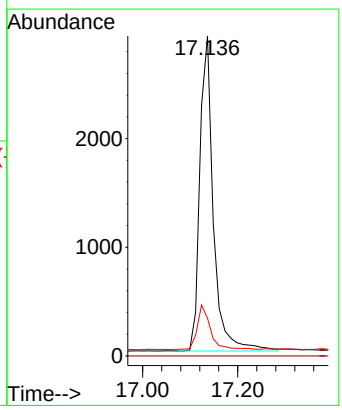


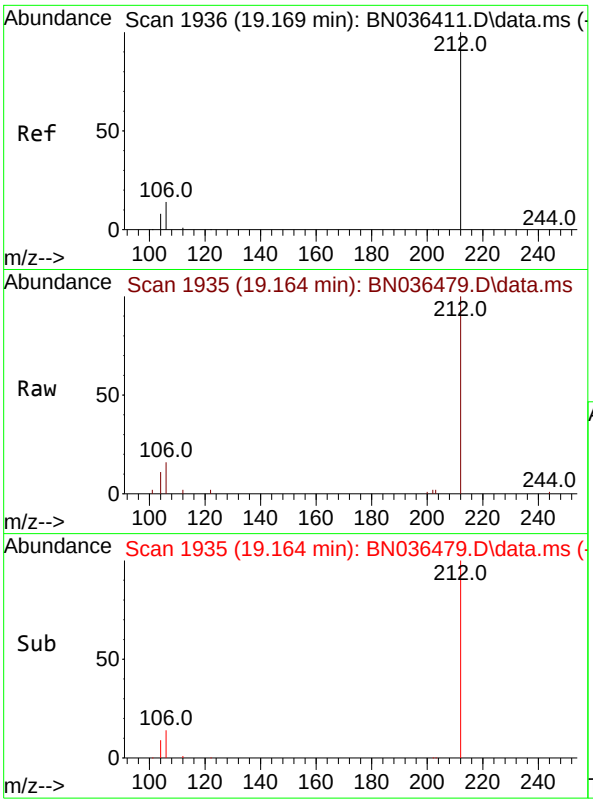


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:188 Resp: 5756

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.8	9.8	14.6



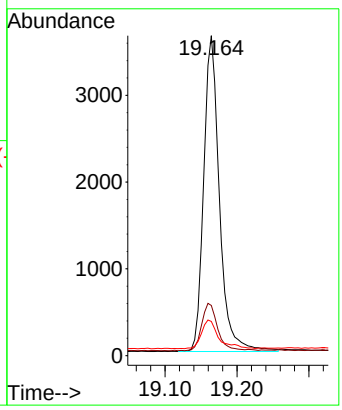


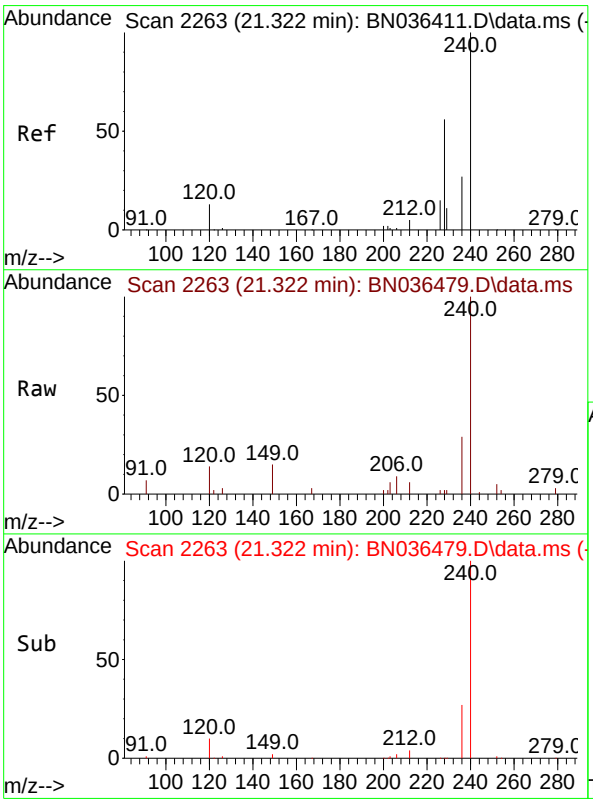
#27
Fluoranthene-d10
Concen: 0.344 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion:212 Resp: 5514

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.5	17.3
104	9.9	7.1	10.7

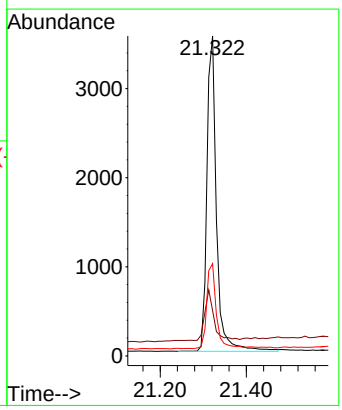


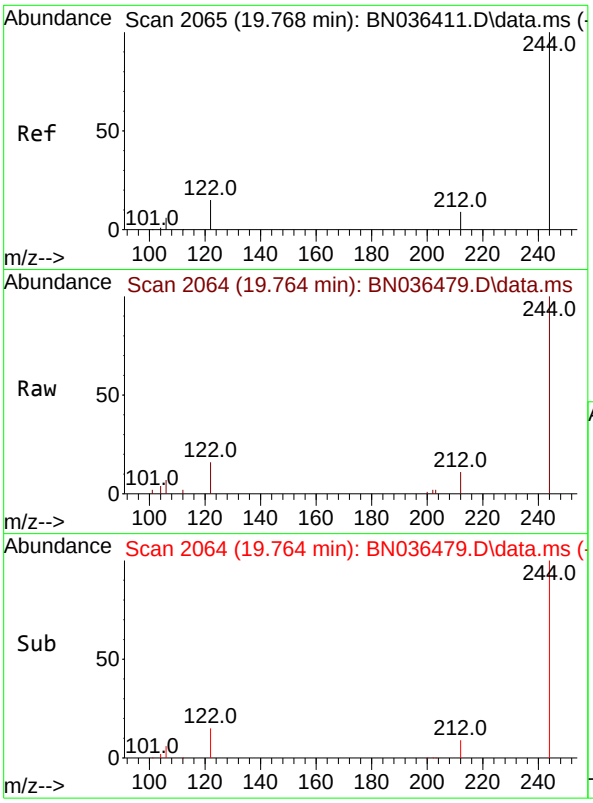


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2263
Delta R.T. -0.000 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:240 Resp: 5466

Ion	Ratio	Lower	Upper
240	100		
120	14.1	13.3	19.9
236	28.8	23.0	34.6



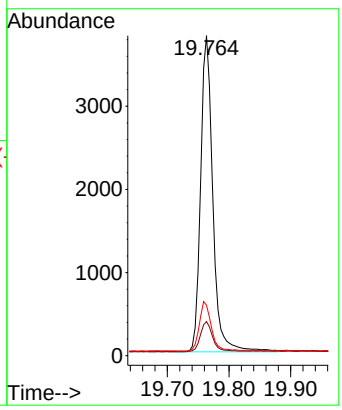


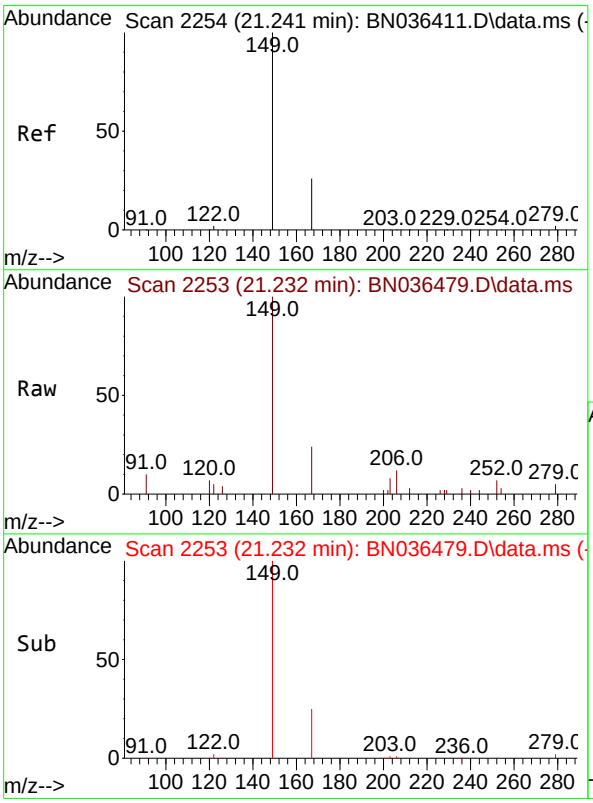
#31
Terphenyl-d14
Concen: 0.449 ng
RT: 19.764 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion:244 Resp: 5234

Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.1	12.1
122	15.8	12.8	19.2

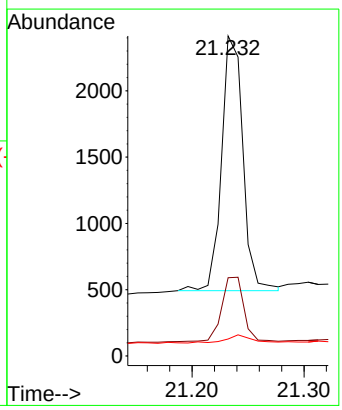


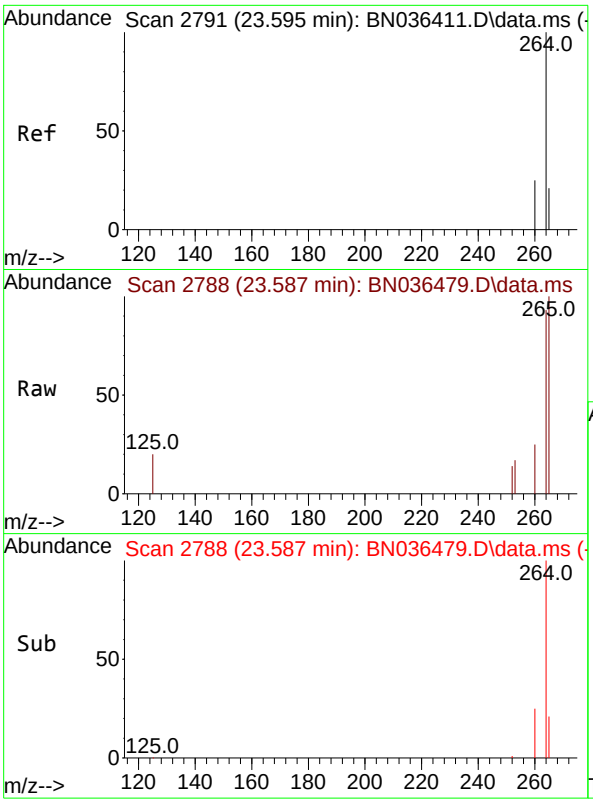


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.227 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Tgt Ion:149 Resp: 2546

Ion	Ratio	Lower	Upper
149	100		
167	26.0	21.2	31.8
279	3.9	2.7	4.1



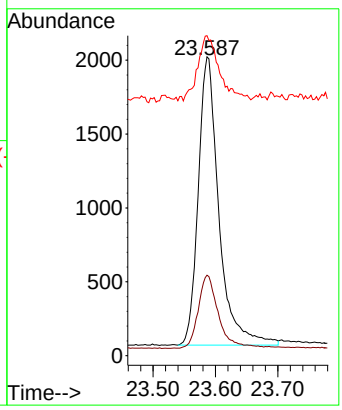


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.587 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036479.D
Acq: 20 Feb 2025 13:48

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250214

Tgt Ion:264 Resp: 4501

Ion	Ratio	Lower	Upper
264	100		
260	26.9	20.9	31.3
265	107.1	60.7	91.1#



CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN021025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue Feb 11 01:17:14 2025
Response Via : Initial Calibration

Calibration Files
0.1 =BN036409.D 0.2 =BN036410.D 0.4 =BN036411.D 0.8 =BN036412.D 1.6 =BN036413.D 3.2 =BN036414.D 5.0 =BN036415.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	0.555	0.437	0.433	0.414	0.411	0.433	0.381	0.438	12.66
3)		n-Nitrosodimet...	0.906	0.779	0.764	0.724	0.708	0.769	0.670	0.760	9.90
4)	S	2-Fluorophenol	1.009	0.954	0.936	0.920	0.914	0.999	0.885	0.945	4.80
5)	S	Phenol-d6	1.134	1.007	1.032	1.062	1.099	1.267	1.164	1.109	8.00
6)		bis(2-Chloroet...	1.382	1.070	1.086	1.129	1.120	1.225	1.107	1.160	9.48
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.500	0.363	0.365	0.370	0.367	0.417	0.381	0.395	12.70
9)		Naphthalene	1.400	1.141	1.116	1.088	1.075	1.186	1.073	1.154	10.01
10)		Hexachlorobuta...	0.319	0.293	0.283	0.272	0.264	0.282	0.253	0.281	7.67
11)	SURR	2-Methylnaphth...	0.647	0.583	0.602	0.588	0.597	0.668	0.618	0.615	5.19
12)		2-Methylnaphth...	0.833	0.712	0.738	0.721	0.726	0.816	0.750	0.757	6.40
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.196	0.181	0.186	0.184	0.195	0.226	0.219	0.198	8.90
15)	S	2-Fluorobiphenyl	1.409	1.390	1.377	1.491	1.564	1.738	1.558	1.504	8.57
16)		Acenaphthylene	1.807	1.667	1.692	1.683	1.734	1.964	1.820	1.767	5.98
17)		Acenaphthene	1.245	1.125	1.146	1.128	1.175	1.273	1.169	1.180	4.89
18)		Fluorene	1.696	1.630	1.661	1.627	1.669	1.829	1.646	1.680	4.17
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...	0.071	0.067	0.069	0.074	0.084	0.107		0.078	19.60
21)		4-Bromophenyl-...	0.243	0.227	0.231	0.232	0.236	0.264	0.238	0.239	5.15
22)		Hexachlorobenzene	0.305	0.296	0.284	0.287	0.289	0.317	0.285	0.295	4.11
23)		Atrazine	0.196	0.190	0.187	0.186	0.194	0.229	0.213	0.199	8.00
24)		Pentachlorophenol	0.140	0.125	0.122	0.122	0.134	0.170	0.167	0.140	14.74
25)		Phenanthrene	1.233	1.090	1.095	1.112	1.138	1.273	1.153	1.156	6.12
26)		Anthracene	0.990	0.933	0.967	0.978	1.015	1.167	1.088	1.020	7.92
27)	SURR	Fluoranthene-d10	1.109	1.043	1.063	1.059	1.098	1.258	1.156	1.112	6.70
28)		Fluoranthene	1.441	1.323	1.353	1.356	1.404	1.607	1.461	1.421	6.76
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.584	1.568	1.534	1.490	1.488	1.629	1.492	1.541	3.59
31)	S	Terphenyl-d14	0.860	0.847	0.852	0.829	0.834	0.913	0.843	0.854	3.27
32)		Benzo(a)anthra...	1.257	1.276	1.293	1.255	1.300	1.471	1.362	1.316	5.86
33)		Chrysene	1.449	1.456	1.360	1.414	1.404	1.527	1.366	1.425	4.08
34)		Bis(2-ethylhex...	0.902	0.875	0.777	0.745	0.761	0.861	0.819	0.820	7.45
35)	I	Perylene-d12	----------ISTD----------								

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN021025.M

36)		Indeno(1,2,3-c...	1.182	1.289	1.378	1.390	1.446	1.630	1.471	1.398	10.13
37)		Benzo(b)fluora...	1.174	1.220	1.260	1.290	1.333	1.529	1.416	1.317	9.24
38)		Benzo(k)fluora...	1.258	1.253	1.363	1.326	1.347	1.532	1.413	1.356	7.08
39)	C	Benzo(a)pyrene	1.091	1.081	1.102	1.114	1.145	1.309	1.206	1.150	7.12
40)		Dibenzo(a,h)an...	0.906	1.021	1.075	1.087	1.154	1.304	1.176	1.103	11.40
41)		Benzo(g,h,i)pe...	1.140	1.212	1.254	1.230	1.269	1.400	1.249	1.250	6.27

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036409.D
Acq On : 10 Feb 2025 12:25
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Feb 11 00:34:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

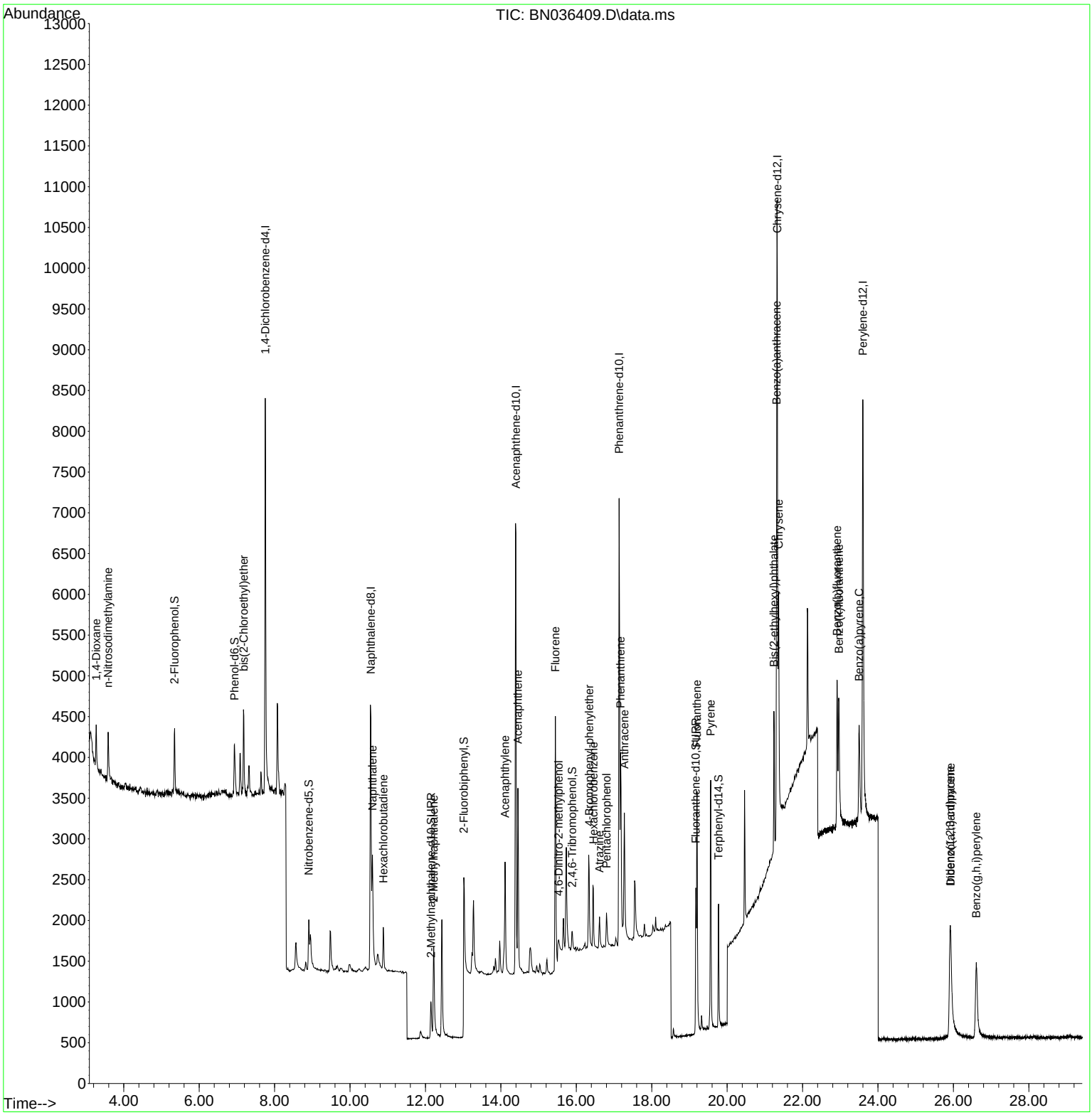
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2370	0.400	ng		0.00
7) Naphthalene-d8	10.552	136	5687	0.400	ng		# 0.01
13) Acenaphthene-d10	14.398	164	3837	0.400	ng		0.01
19) Phenanthrene-d10	17.136	188	8539	0.400	ng		0.00
29) Chrysene-d12	21.331	240	8027	0.400	ng		# 0.00
35) Perylene-d12	23.598	264	8068	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	598	0.099	ng		0.00
5) Phenol-d6	6.937	99	672	0.095	ng		0.00
8) Nitrobenzene-d5	8.907	82	711	0.134	ng		0.00
11) 2-Methylnaphthalene-d10	12.146	152	920	0.118	ng		0.00
14) 2,4,6-Tribromophenol	15.895	330	188	0.080	ng		0.01
15) 2-Fluorobiphenyl	13.019	172	1352	0.083	ng		0.00
27) Fluoranthene-d10	19.169	212	2368	0.108	ng		0.00
31) Terphenyl-d14	19.773	244	1725	0.104	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	329	0.126	ng		93
3) n-Nitrosodimethylamine	3.586	42	537	0.114	ng	#	96
6) bis(2-Chloroethyl)ether	7.183	93	819	0.140	ng		99
9) Naphthalene	10.594	128	1990	0.123	ng	#	91
10) Hexachlorobutadiene	10.883	225	454	0.089	ng	#	99
12) 2-Methylnaphthalene	12.217	142	1185	0.116	ng		96
16) Acenaphthylene	14.110	152	1733	0.098	ng		99
17) Acenaphthene	14.452	154	1194	0.098	ng		98
18) Fluorene	15.446	166	1627	0.104	ng		99
20) 4,6-Dinitro-2-methylph...	15.535	198	151	0.079	ng	#	36
21) 4-Bromophenyl-phenylether	16.342	248	518	0.089	ng	#	81
22) Hexachlorobenzene	16.453	284	651	0.085	ng		99
23) Atrazine	16.615	200	419	0.097	ng	#	85
24) Pentachlorophenol	16.801	266	298	0.089	ng		97
25) Phenanthrene	17.173	178	2633	0.105	ng		100
26) Anthracene	17.273	178	2113	0.093	ng		96
28) Fluoranthene	19.201	202	3077	0.104	ng		99
30) Pyrene	19.564	202	3179	0.099	ng		99
32) Benzo(a)anthracene	21.313	228	2523	0.088	ng		96
33) Chrysene	21.366	228	2908	0.099	ng		97
34) Bis(2-ethylhexyl)phtha...	21.241	149	1810	0.114	ng		99
36) Indeno(1,2,3-cd)pyrene	25.911	276	2385	0.075	ng		98
37) Benzo(b)fluoranthene	22.917	252	2367	0.083	ng	#	67
38) Benzo(k)fluoranthene	22.961	252	2537	0.087	ng	#	65
39) Benzo(a)pyrene	23.499	252	2200	0.089	ng	#	53
40) Dibenzo(a,h)anthracene	25.928	278	1827	0.073	ng	#	62
41) Benzo(g,h,i)perylene	26.607	276	2299	0.083	ng	#	83

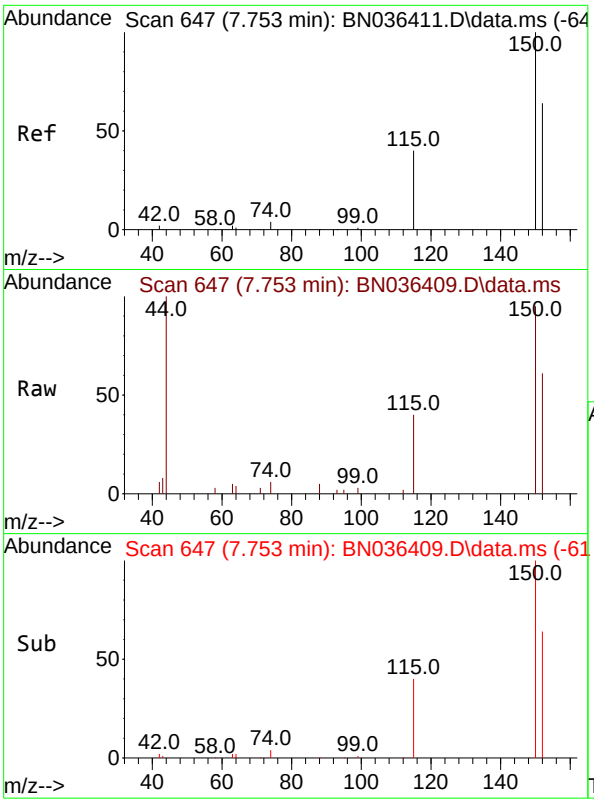
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036409.D
Acq On : 10 Feb 2025 12:25
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Feb 11 00:34:59 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



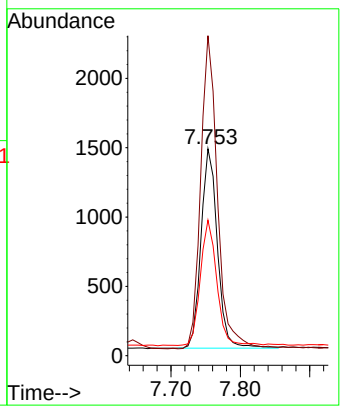


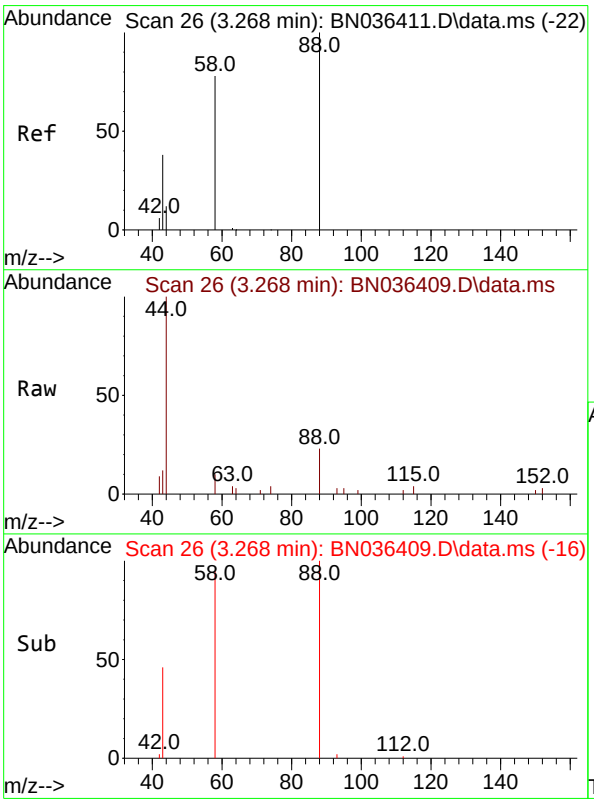
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 2370

Ion	Ratio	Lower	Upper
152	100		
150	154.7	123.7	185.5
115	65.5	52.5	78.7

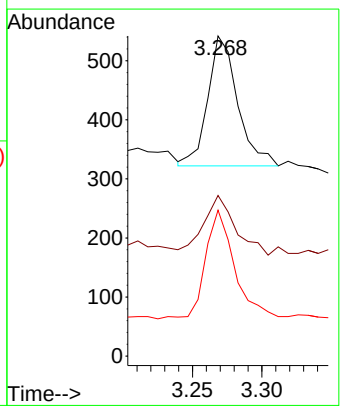


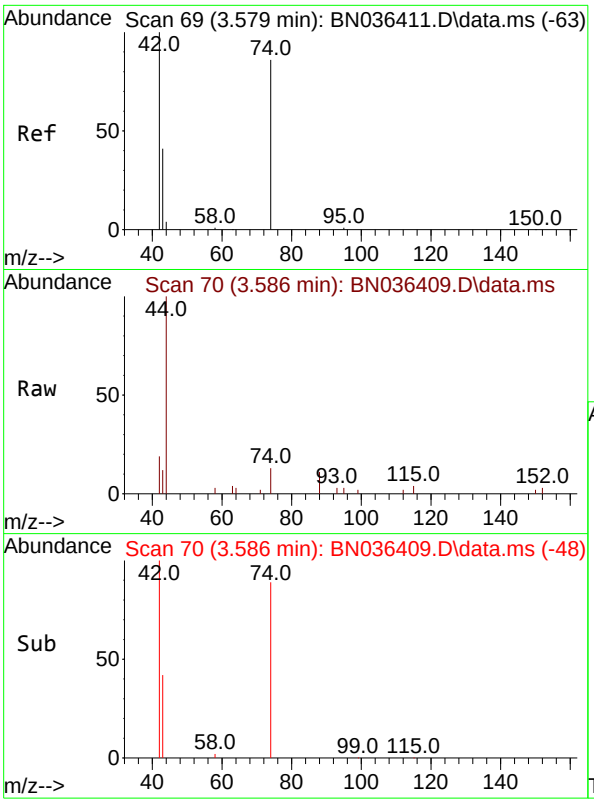


#2
1,4-Dioxane
Concen: 0.126 ng
RT: 3.268 min Scan# 26
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion: 88 Resp: 329

Ion	Ratio	Lower	Upper
88	100		
43	48.9	33.7	50.5
58	81.8	68.9	103.3



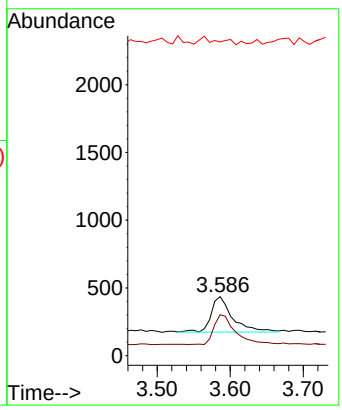


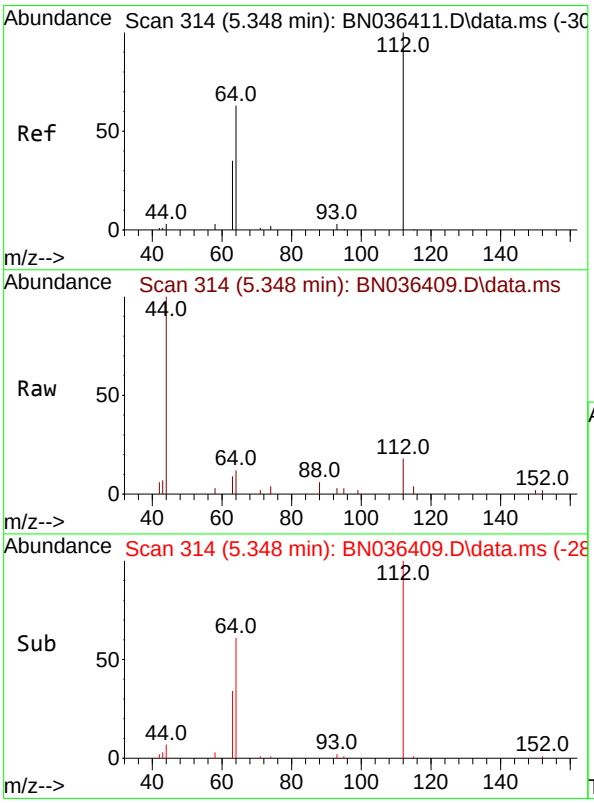
#3
n-Nitrosodimethylamine
Concen: 0.114 ng
RT: 3.586 min Scan# 7
Delta R.T. 0.007 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 42 Resp: 537

Ion	Ratio	Lower	Upper
42	100		
74	87.0	71.8	107.6
44	5.4	7.8	11.6#

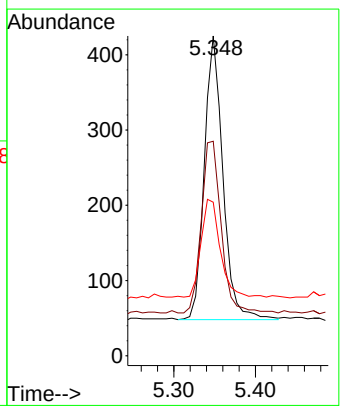


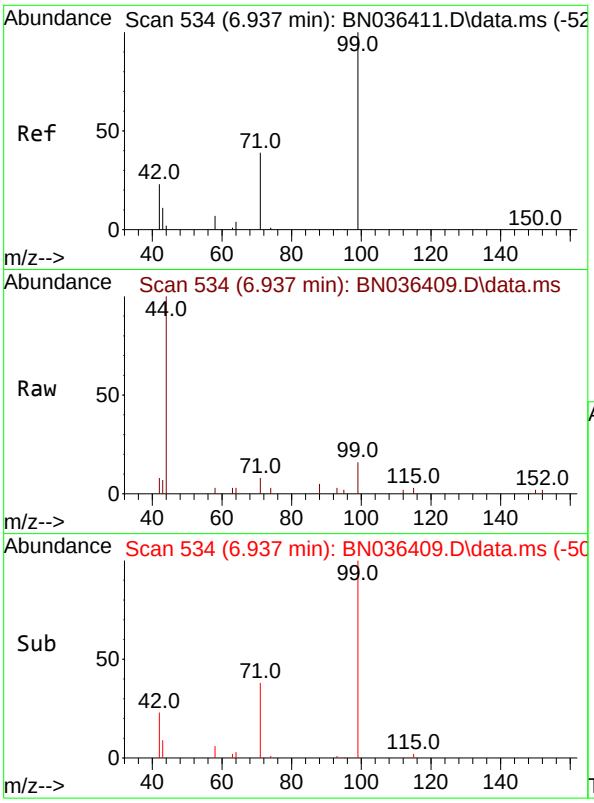


#4
2-Fluorophenol
Concen: 0.099 ng
RT: 5.348 min Scan# 314
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:112 Resp: 598

Ion	Ratio	Lower	Upper
112	100		
64	64.2	53.4	80.0
63	36.0	30.3	45.5



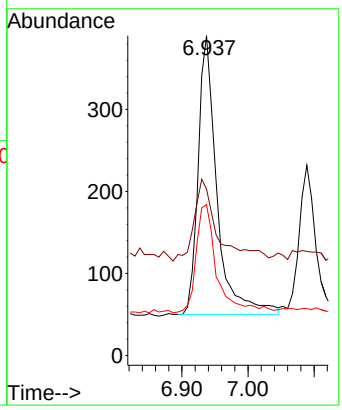


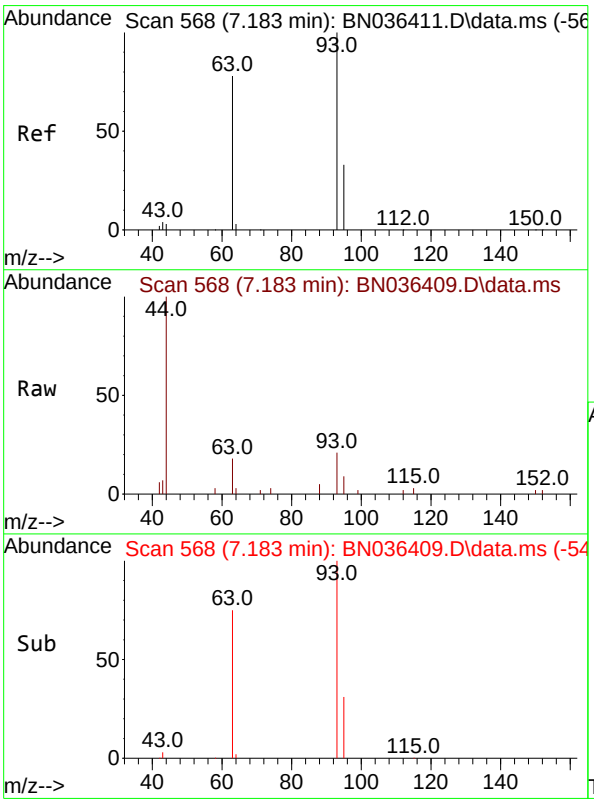
#5
Phenol-d6
Concen: 0.095 ng
RT: 6.937 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 672

Ion	Ratio	Lower	Upper
99	100		
42	36.8	21.7	32.5#
71	42.9	32.6	49.0

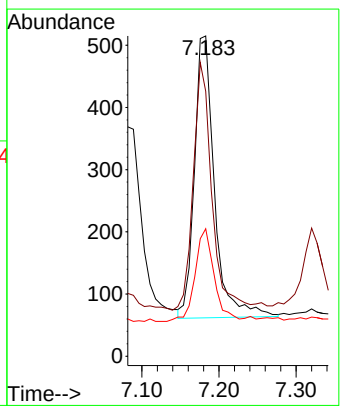


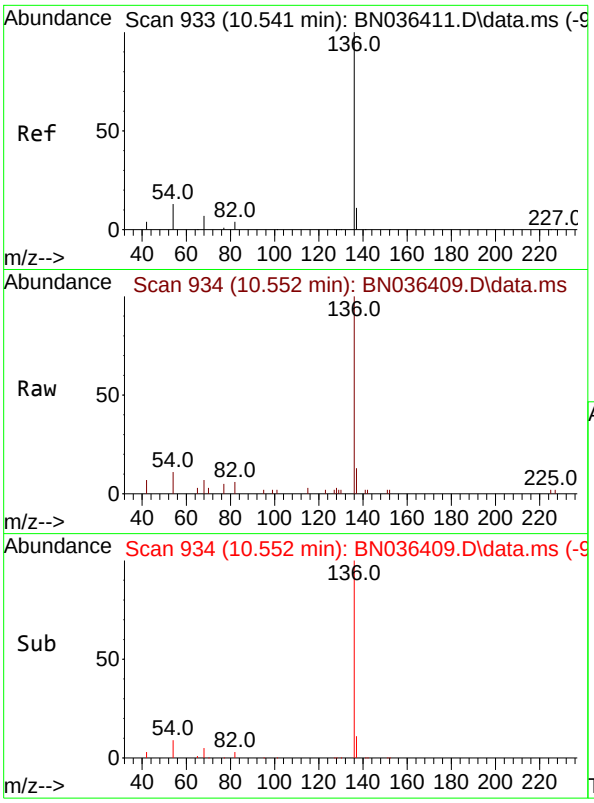


#6
bis(2-Chloroethyl)ether
Concen: 0.140 ng
RT: 7.183 min Scan# 568
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion: 93 Resp: 819

Ion	Ratio	Lower	Upper
93	100		
63	82.8	66.3	99.5
95	31.5	26.2	39.4



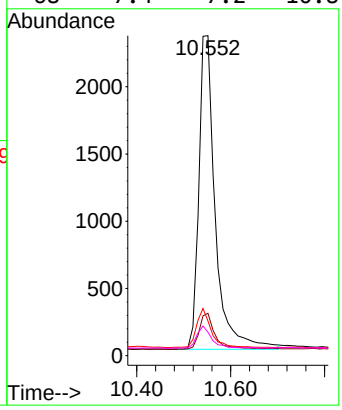


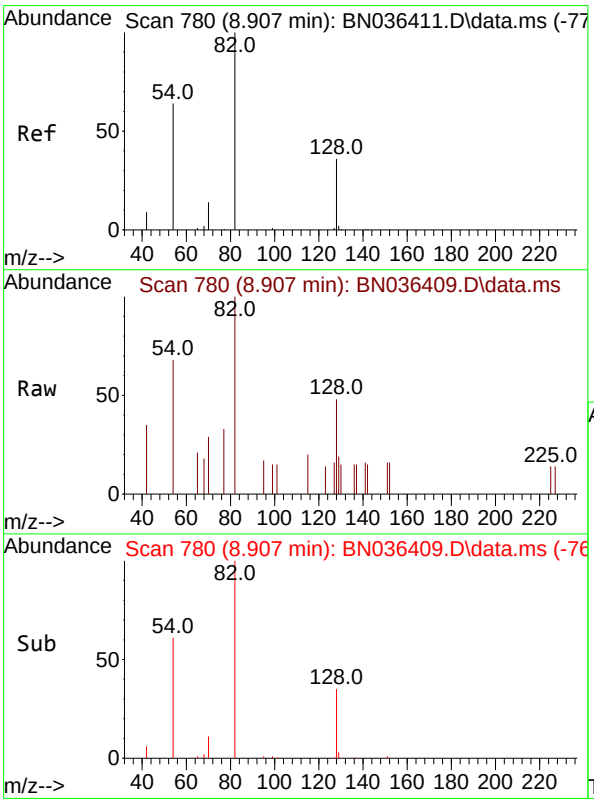
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 5687

Ion	Ratio	Lower	Upper
136	100		
137	13.3	10.1	15.1
54	10.9	11.8	17.6#
68	7.4	7.2	10.8

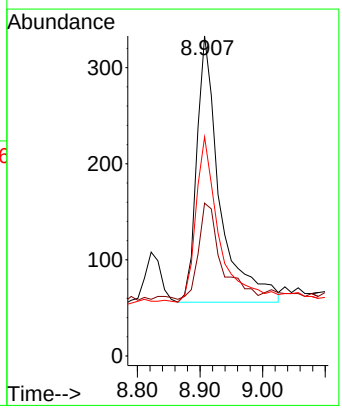


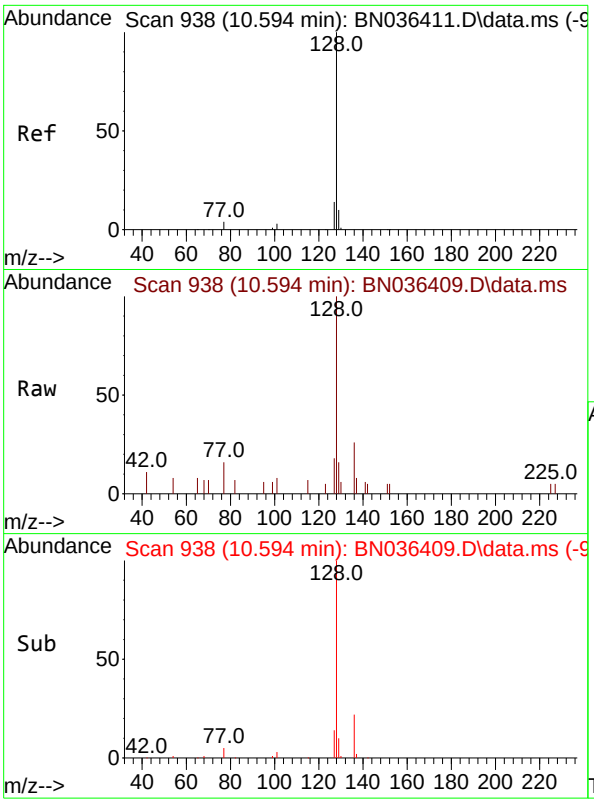


#8
Nitrobenzene-d5
Concen: 0.134 ng
RT: 8.907 min Scan# 780
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion: 82 Resp: 711

Ion	Ratio	Lower	Upper
82	100		
128	47.7	31.9	47.9
54	68.5	53.1	79.7



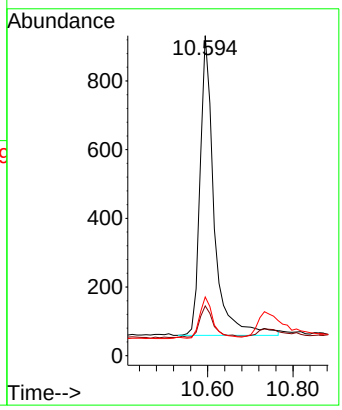


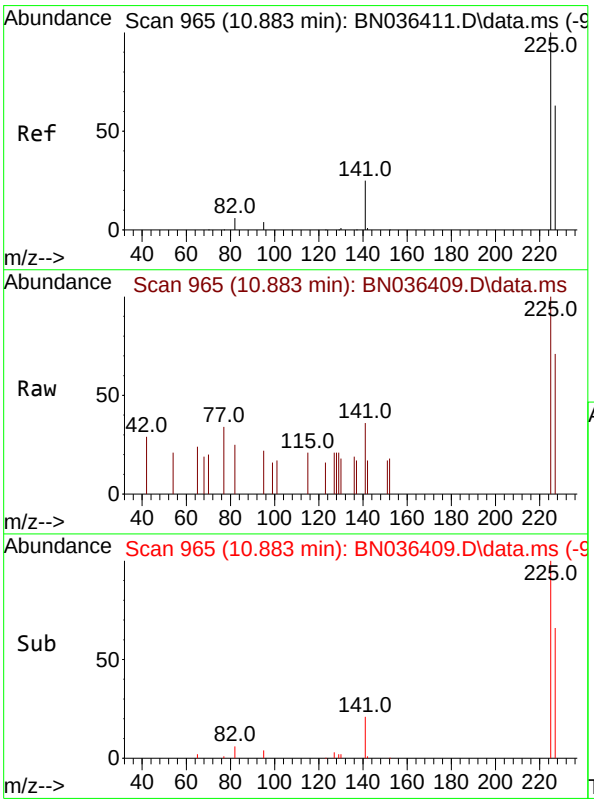
#9
Naphthalene
Concen: 0.123 ng
RT: 10.594 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 1990

Ion	Ratio	Lower	Upper
128	100		
129	15.6	9.6	14.4#
127	18.3	12.0	18.0#

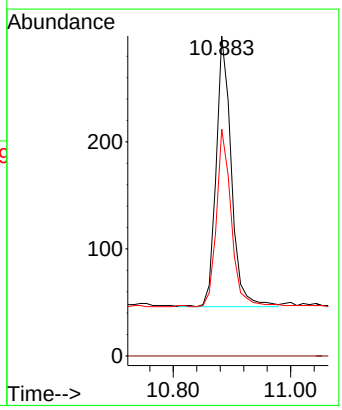


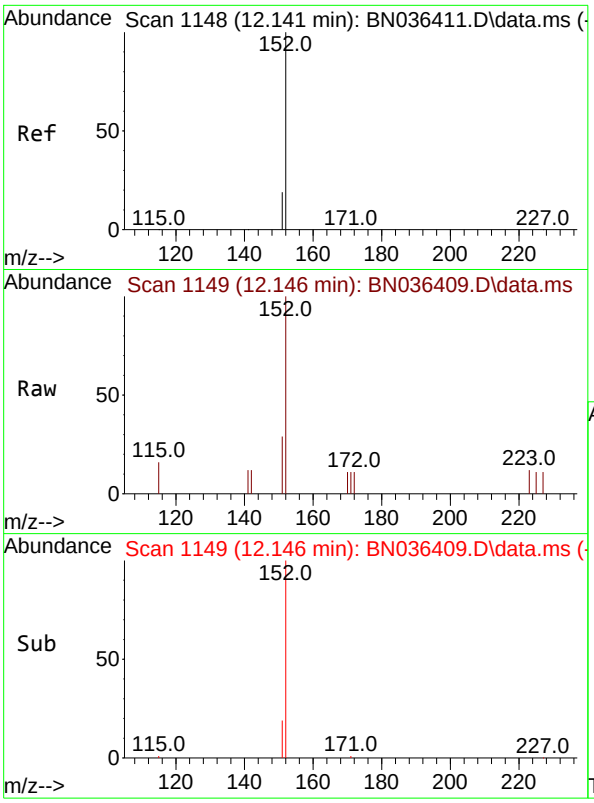


#10
Hexachlorobutadiene
Concen: 0.089 ng
RT: 10.883 min Scan# 965
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:225 Resp: 454

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	50.9	76.3



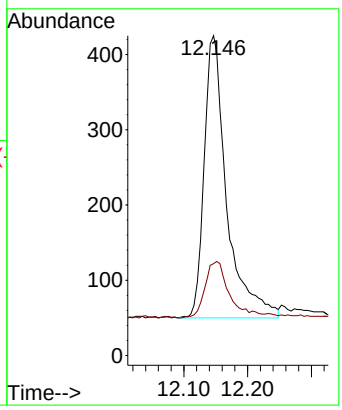


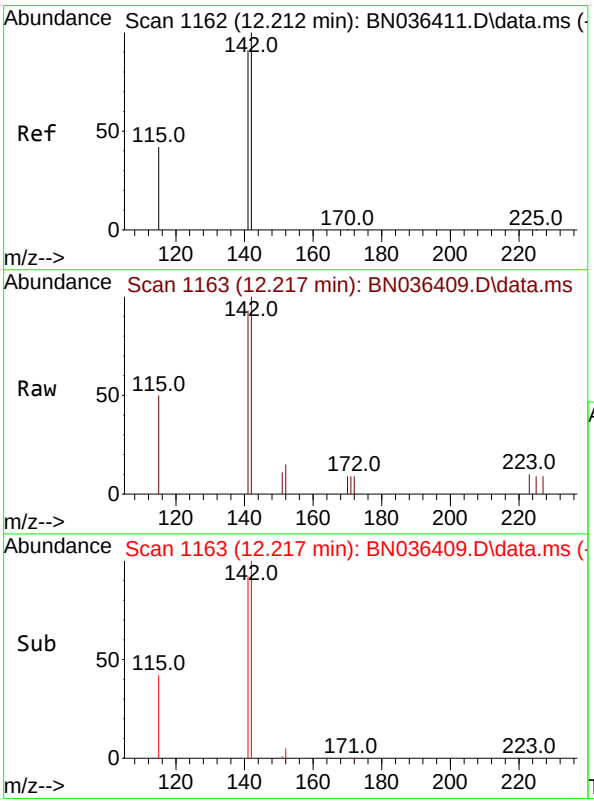
#11
2-Methylnaphthalene-d10
Concen: 0.118 ng
RT: 12.146 min Scan# 11
Delta R.T. 0.005 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 920

Ion	Ratio	Lower	Upper
152	100		
151	21.6	16.6	25.0

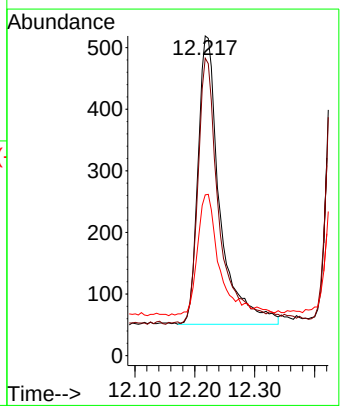


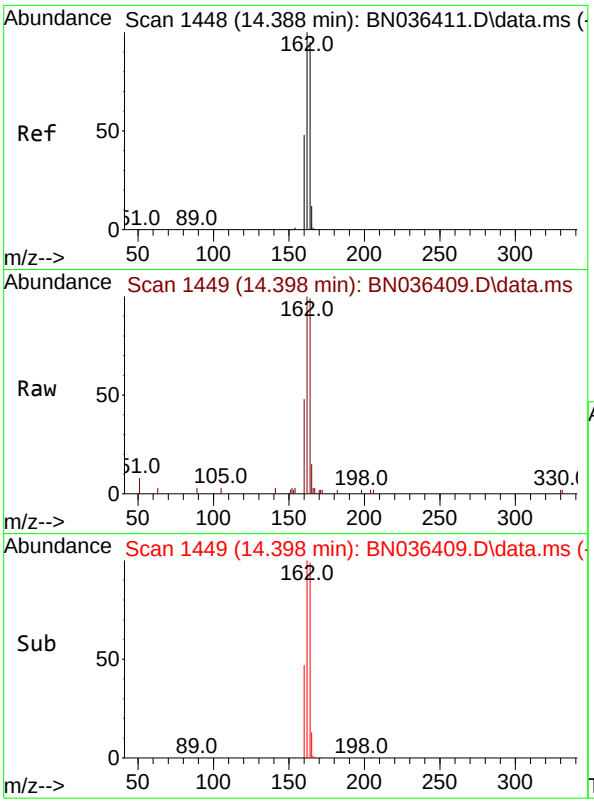


#12
2-Methylnaphthalene
Concen: 0.116 ng
RT: 12.217 min Scan# 1163
Delta R.T. 0.005 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:142 Resp: 1185

Ion	Ratio	Lower	Upper
142	100		
141	93.1	72.8	109.2
115	50.3	35.5	53.3



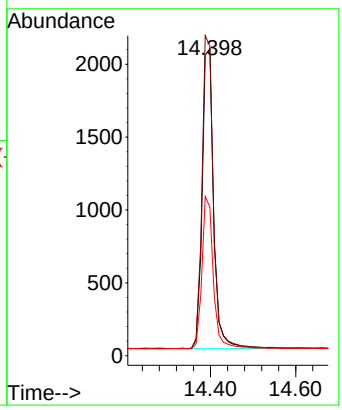


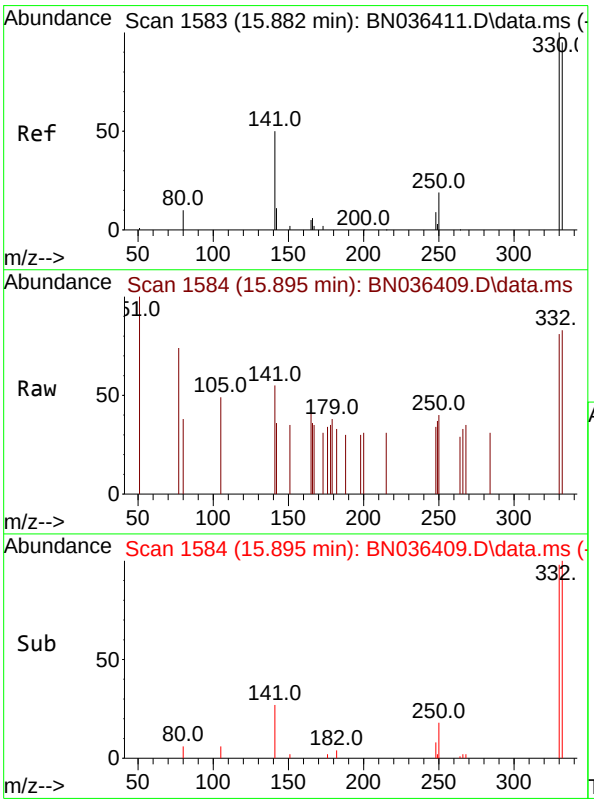
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.398 min Scan# 14
Delta R.T. 0.011 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 3837

Ion	Ratio	Lower	Upper
164	100		
162	100.8	84.1	126.1
160	48.4	41.4	62.0

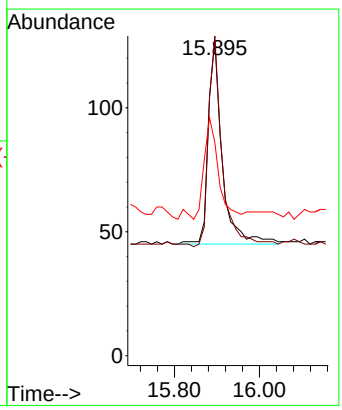


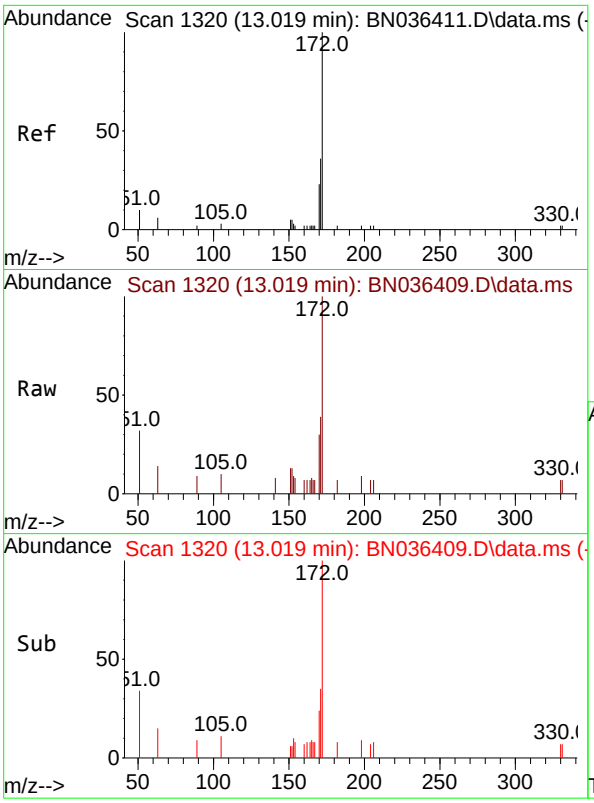


#14
2,4,6-Tribromophenol
Concen: 0.080 ng
RT: 15.895 min Scan# 1584
Delta R.T. 0.012 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:330 Resp: 188

Ion	Ratio	Lower	Upper
330	100		
332	101.6	76.6	114.8
141	50.5	37.8	56.8



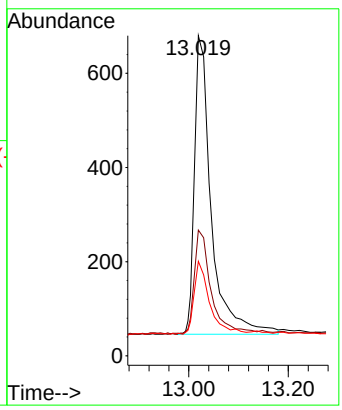


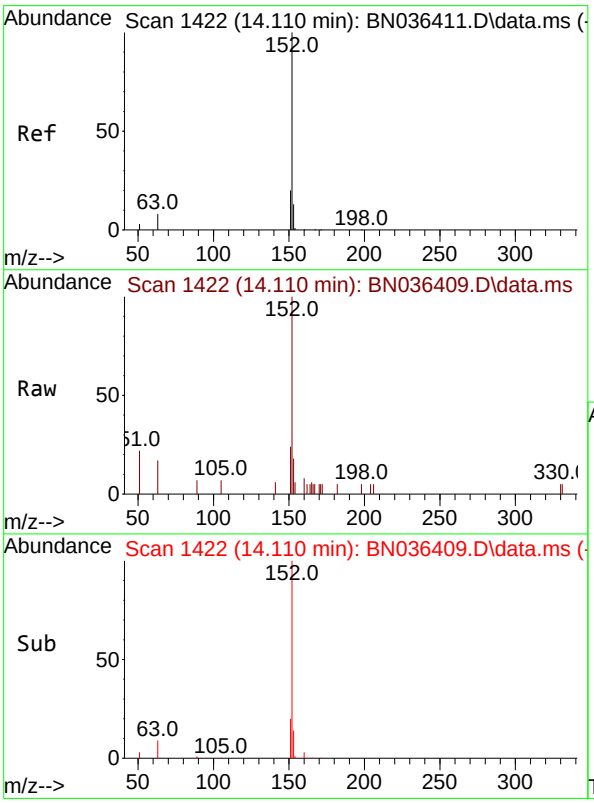
#15
2-Fluorobiphenyl
Concen: 0.083 ng
RT: 13.019 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 1352

Ion	Ratio	Lower	Upper
172	100		
171	39.3	29.6	44.4
170	29.6	19.8	29.6

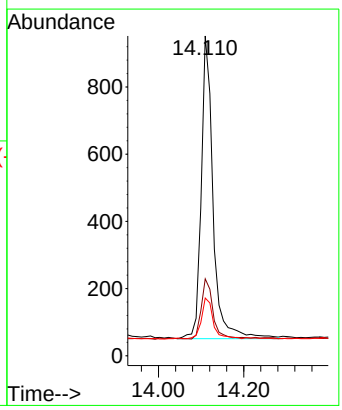


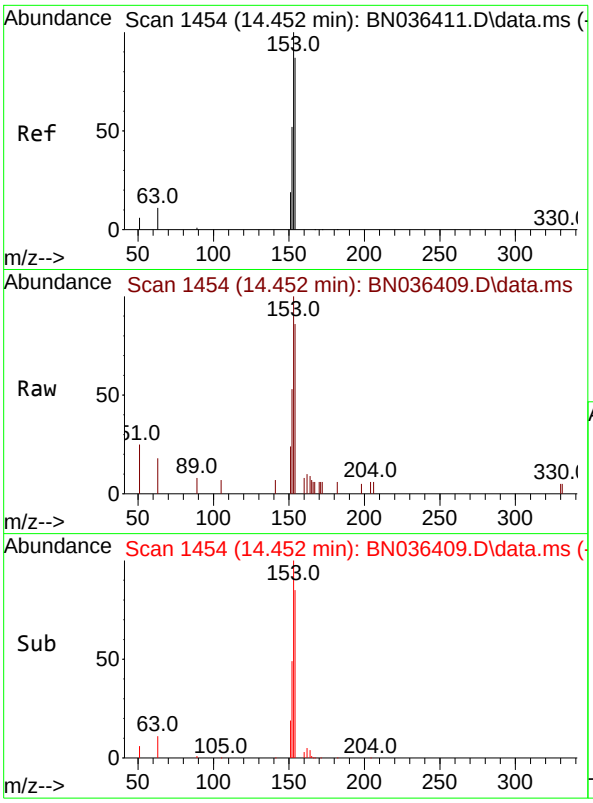


#16
Acenaphthylene
Concen: 0.098 ng
RT: 14.110 min Scan# 1422
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:152 Resp: 1733

Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.8	23.8
153	13.3	10.2	15.2



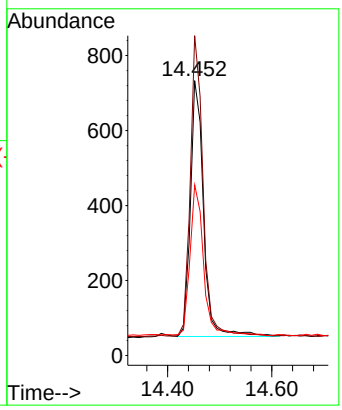


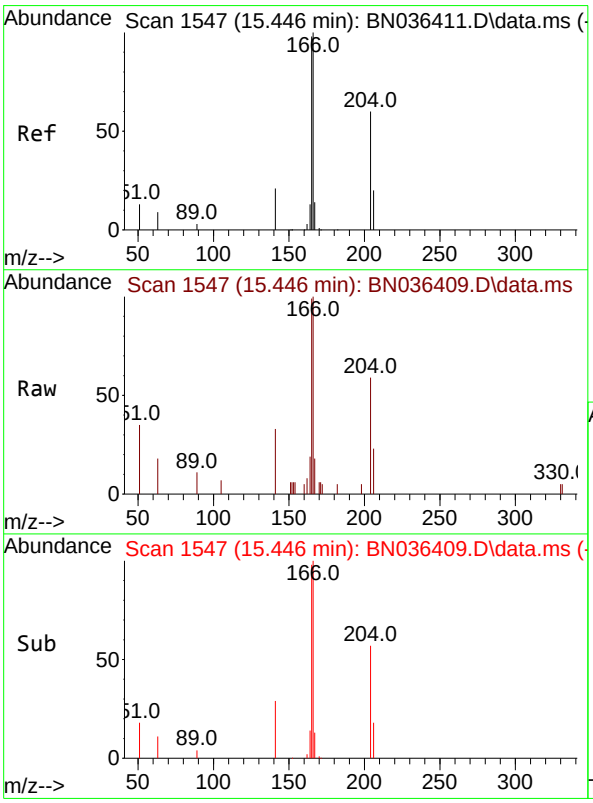
#17
Acenaphthene
Concen: 0.098 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 1194

Ion	Ratio	Lower	Upper
154	100		
153	114.2	93.3	139.9
152	61.5	48.8	73.2

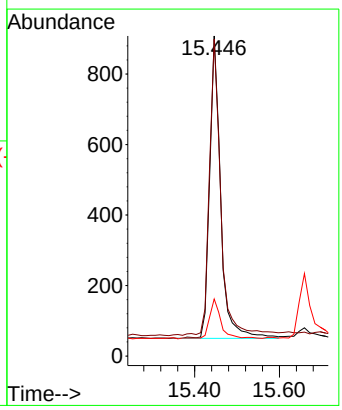


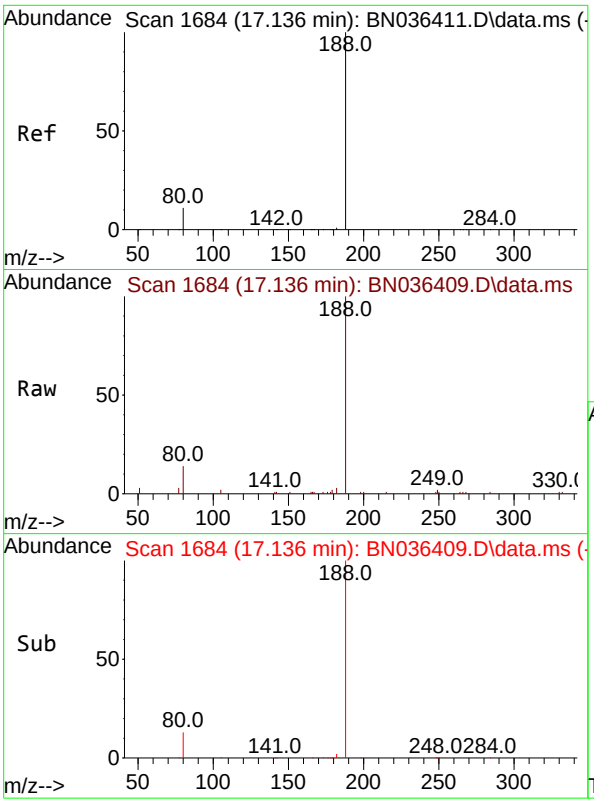


#18
Fluorene
Concen: 0.104 ng
RT: 15.446 min Scan# 1547
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:166 Resp: 1627

Ion	Ratio	Lower	Upper
166	100		
165	100.3	79.5	119.3
167	13.0	10.4	15.6



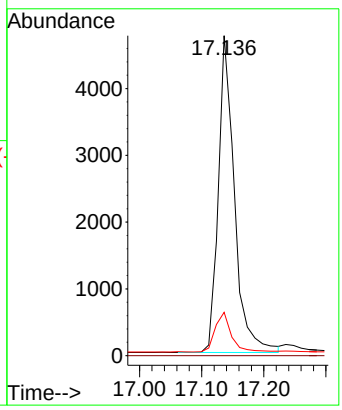


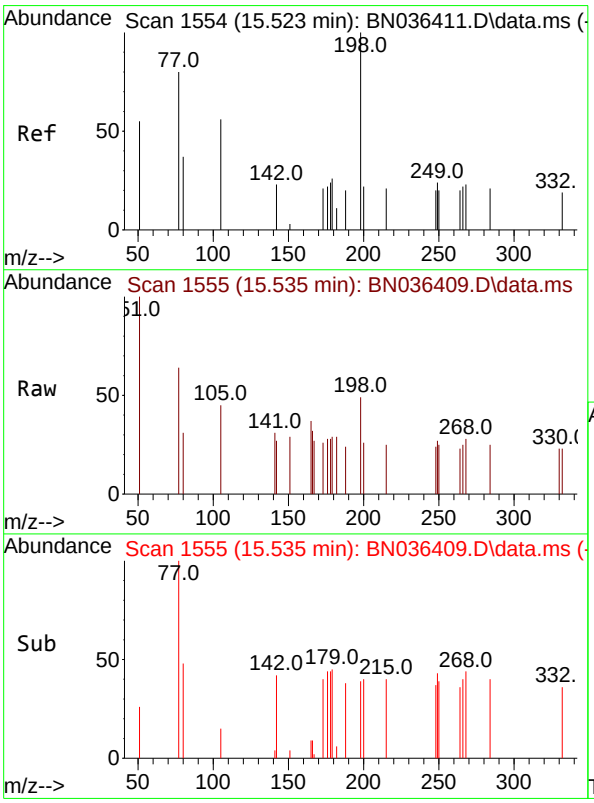
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 8539

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.6	9.8	14.6

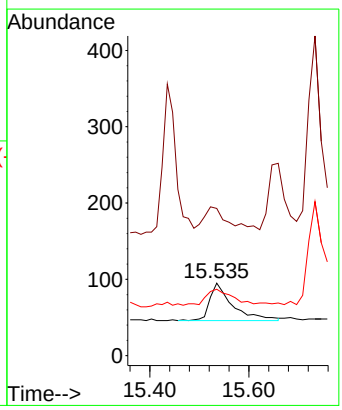


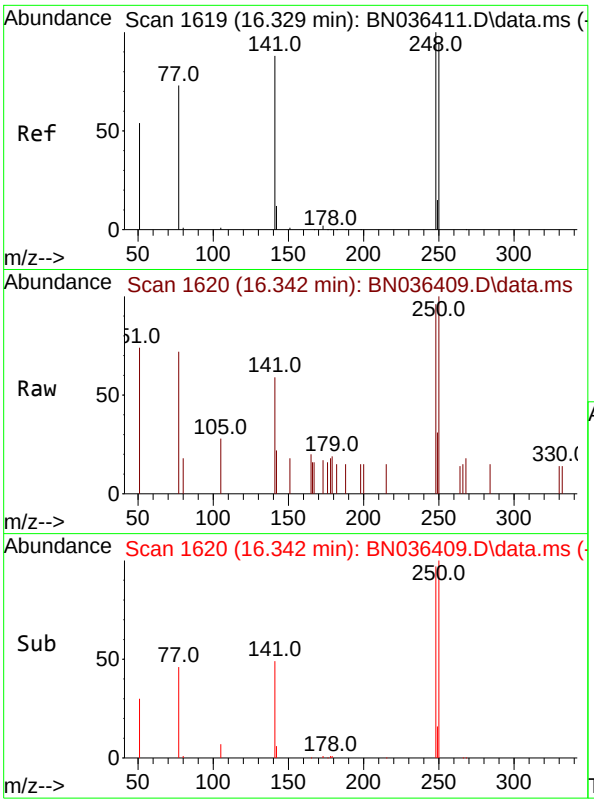


#20
4,6-Dinitro-2-methylphenol
Concen: 0.079 ng
RT: 15.535 min Scan# 1555
Delta R.T. 0.012 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:198 Resp: 151

Ion	Ratio	Lower	Upper
198	100		
51	203.2	86.6	129.8#
105	91.6	57.5	86.3#



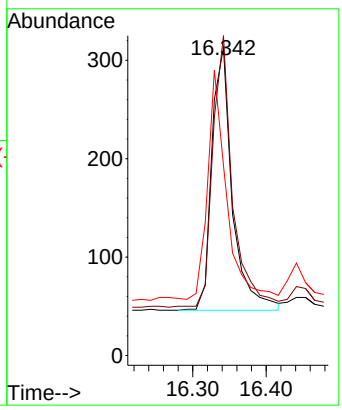


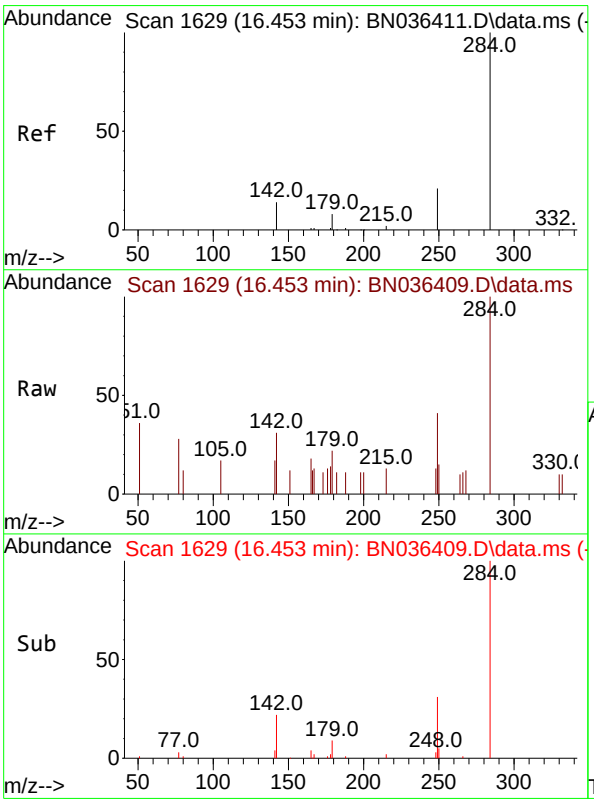
#21
4-Bromophenyl-phenylether
Concen: 0.089 ng
RT: 16.342 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:248 Resp: 518

Ion	Ratio	Lower	Upper
248	100		
250	103.8	76.1	114.1
141	61.7	71.7	107.5#

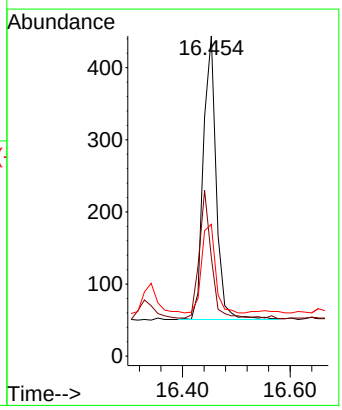


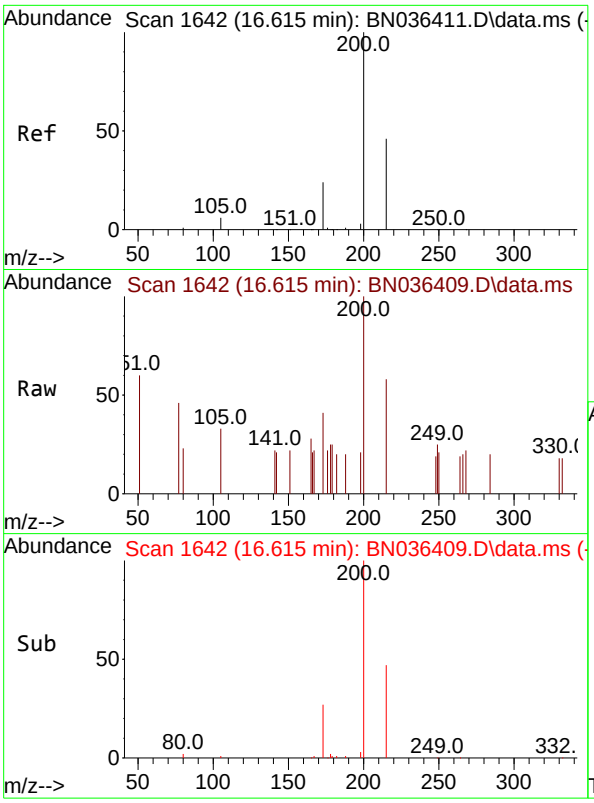


#22
Hexachlorobenzene
Concen: 0.085 ng
RT: 16.453 min Scan# 1629
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:284 Resp: 651

Ion	Ratio	Lower	Upper
284	100		
142	41.5	33.4	50.0
249	35.0	28.6	43.0



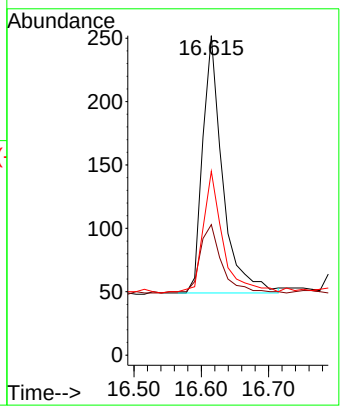


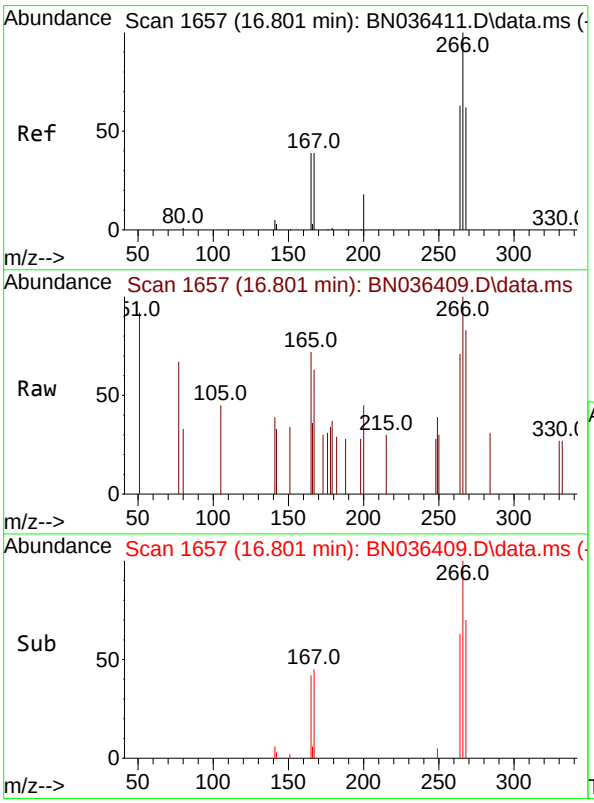
#23
Atrazine
Concen: 0.097 ng
RT: 16.615 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:200 Resp: 419

Ion	Ratio	Lower	Upper
200	100		
173	40.9	23.2	34.8#
215	57.5	40.0	60.0

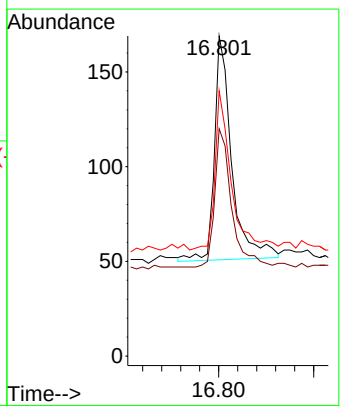


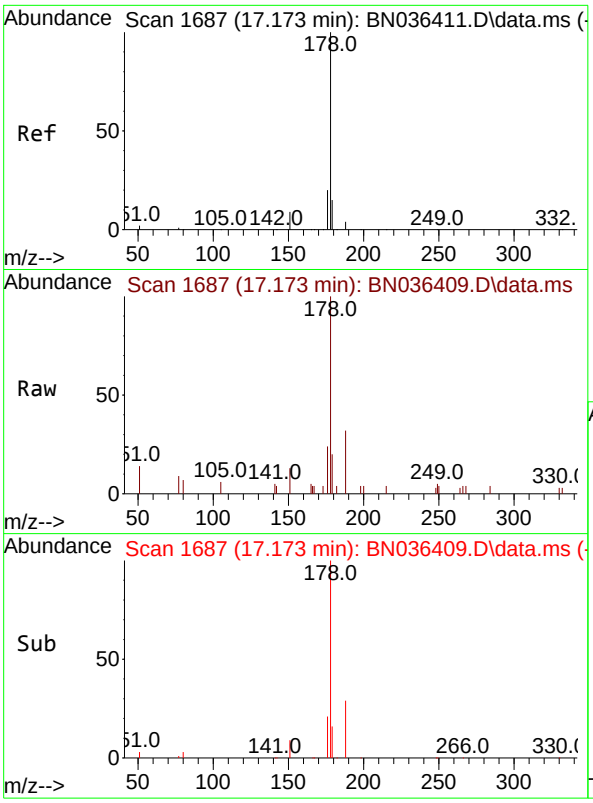


#24
Pentachlorophenol
Concen: 0.089 ng
RT: 16.801 min Scan# 1657
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:266 Resp: 298

Ion	Ratio	Lower	Upper
266	100		
264	60.1	50.6	76.0
268	63.1	51.9	77.9



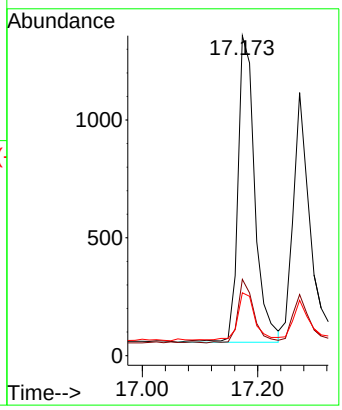


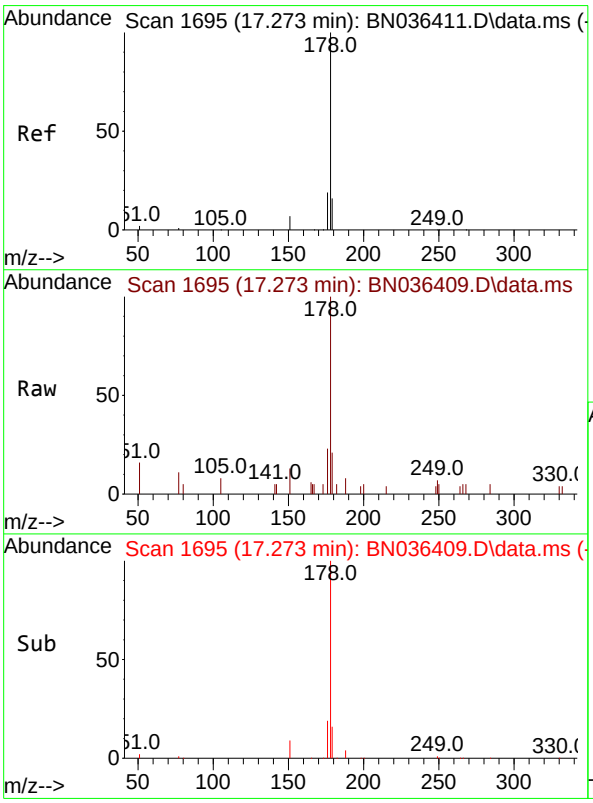
#25
Phenanthrene
Concen: 0.105 ng
RT: 17.173 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 2633

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.7	23.5
179	15.5	12.4	18.6

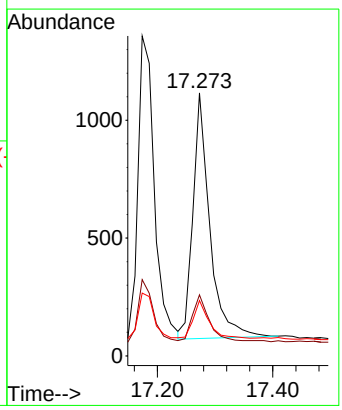


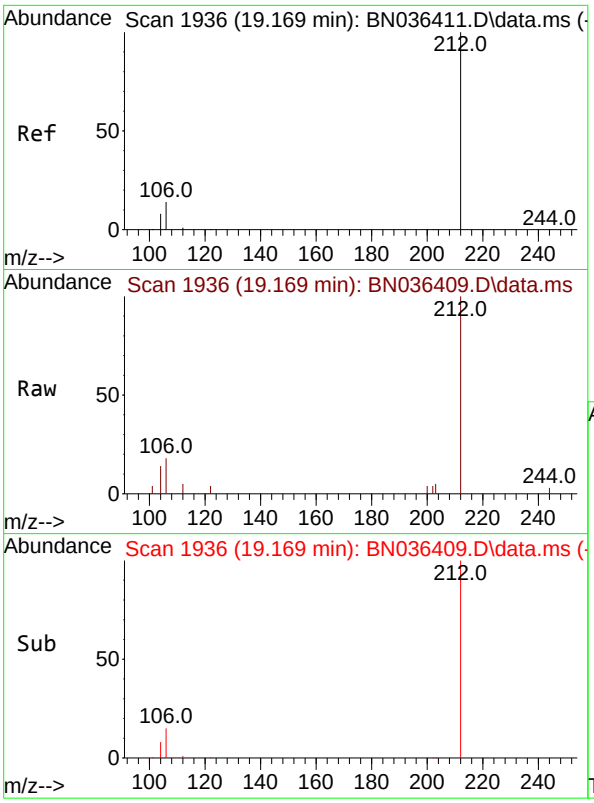


#26
Anthracene
Concen: 0.093 ng
RT: 17.273 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:178 Resp: 2113

Ion	Ratio	Lower	Upper
178	100		
176	20.8	14.9	22.3
179	14.6	12.4	18.6



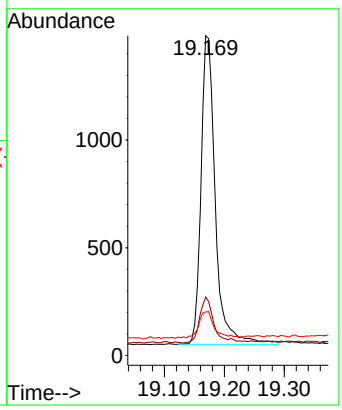


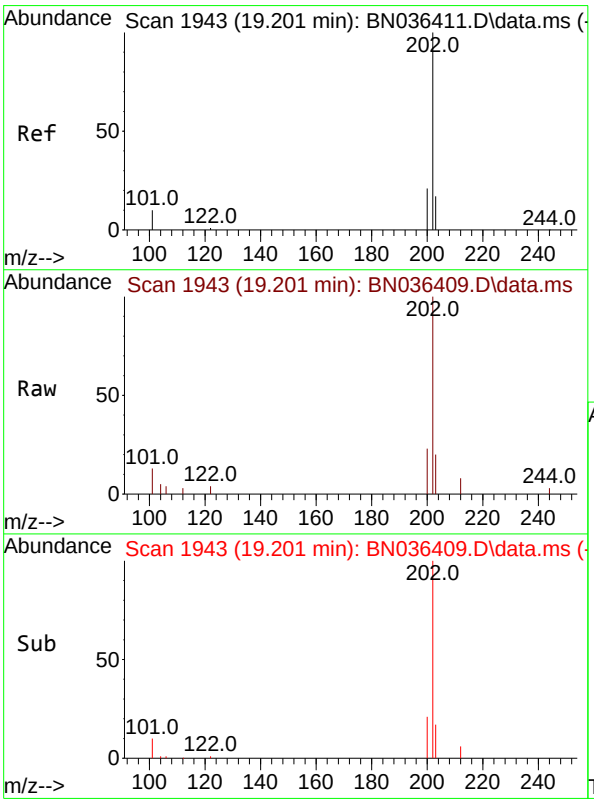
#27
Fluoranthene-d10
Concen: 0.108 ng
RT: 19.169 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:212 Resp: 2368

Ion	Ratio	Lower	Upper
212	100		
106	14.8	11.5	17.3
104	9.8	7.1	10.7

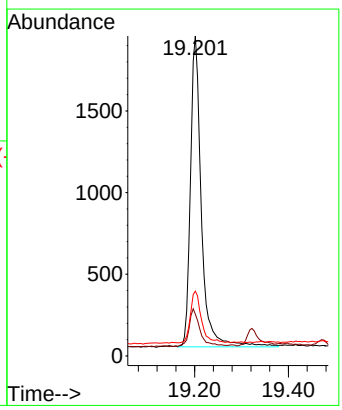


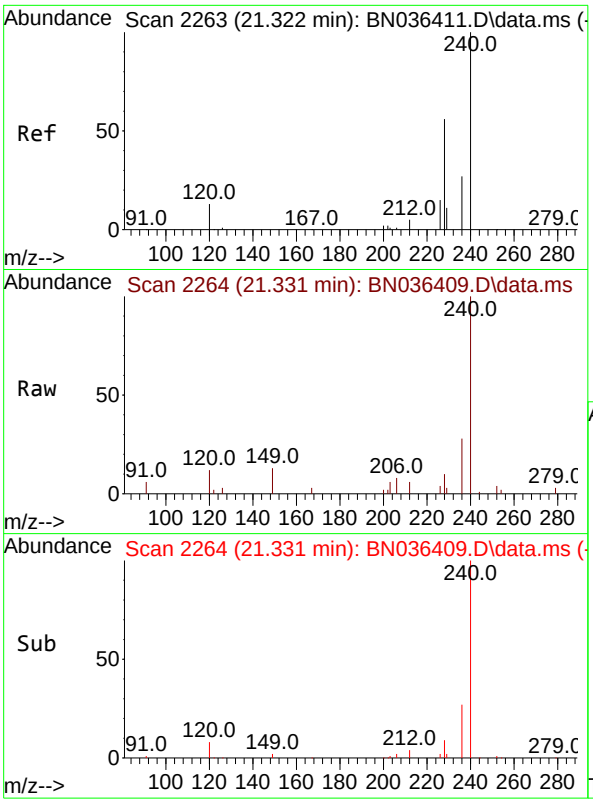


#28
Fluoranthene
Concen: 0.104 ng
RT: 19.201 min Scan# 1943
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:202 Resp: 3077

Ion	Ratio	Lower	Upper
202	100		
101	12.2	9.2	13.8
203	16.6	13.4	20.0



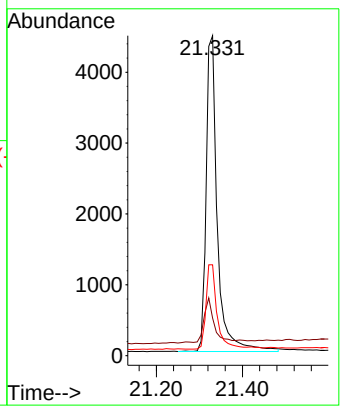


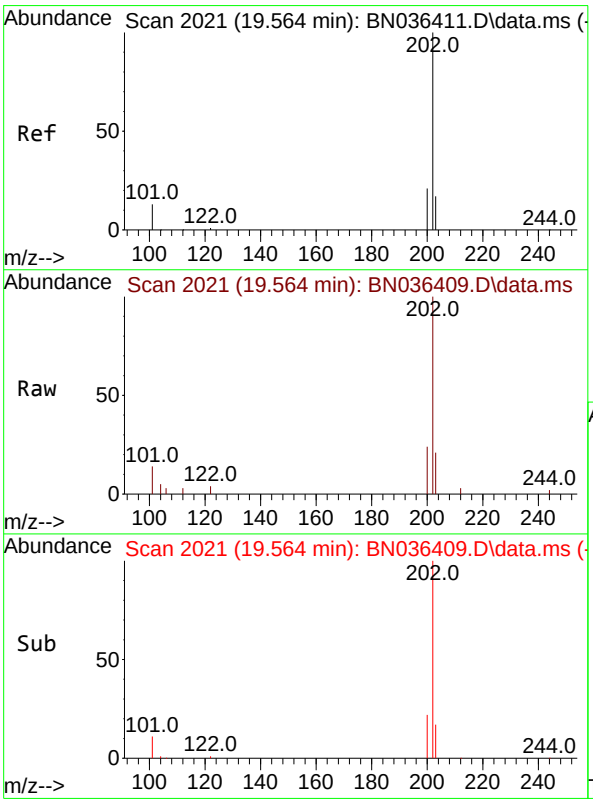
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:240 Resp: 8027

Ion	Ratio	Lower	Upper
240	100		
120	11.7	13.3	19.9#
236	28.4	23.0	34.6

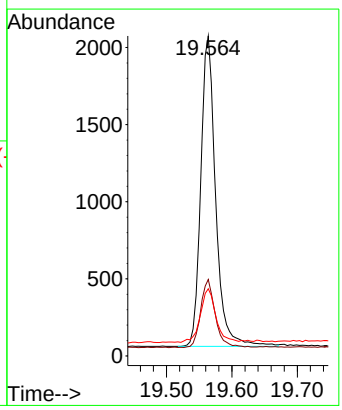


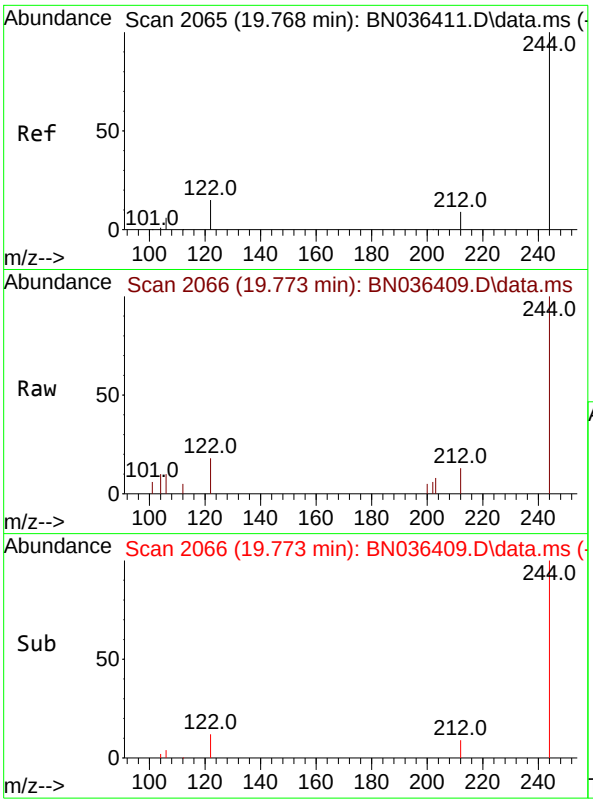


#30
Pyrene
Concen: 0.099 ng
RT: 19.564 min Scan# 2021
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:202 Resp: 3179

Ion	Ratio	Lower	Upper
202	100		
200	21.4	16.9	25.3
203	17.8	13.9	20.9



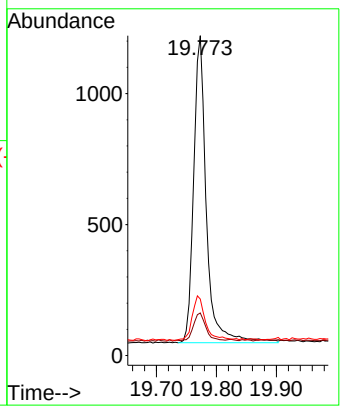


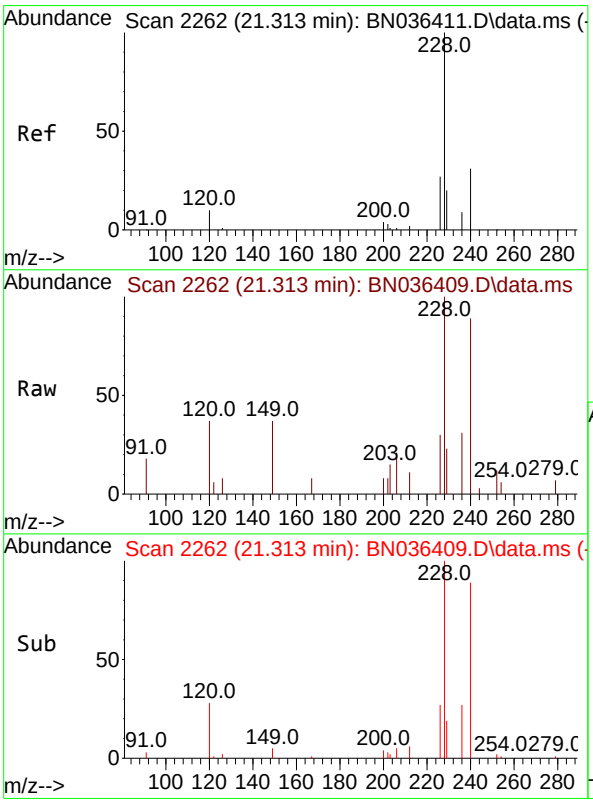
#31
Terphenyl-d14
Concen: 0.104 ng
RT: 19.773 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:244 Resp: 1725

Ion	Ratio	Lower	Upper
244	100		
212	13.3	8.1	12.1#
122	17.7	12.8	19.2

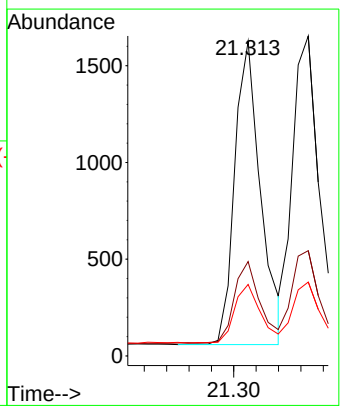


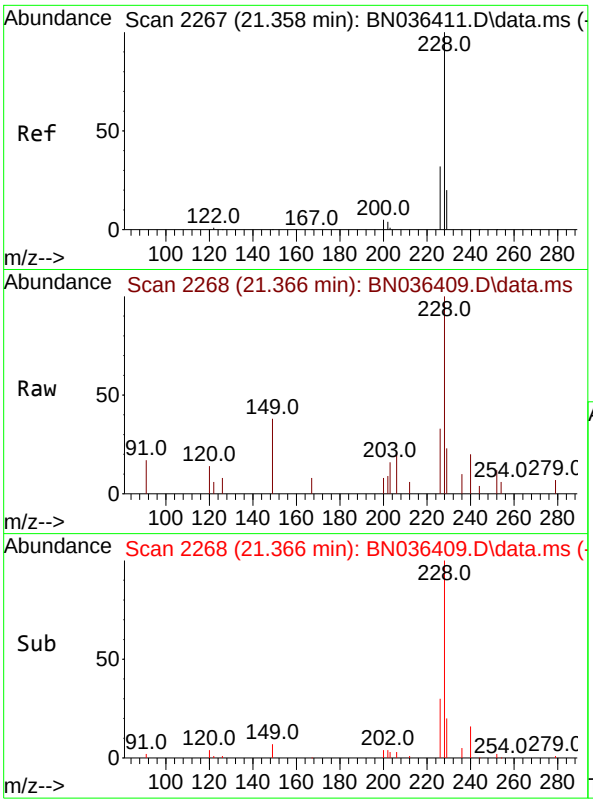


#32
Benzo(a)anthracene
Concen: 0.088 ng
RT: 21.313 min Scan# 2262
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:228 Resp: 2523

Ion	Ratio	Lower	Upper
228	100		
226	30.0	22.2	33.2
229	22.7	16.5	24.7



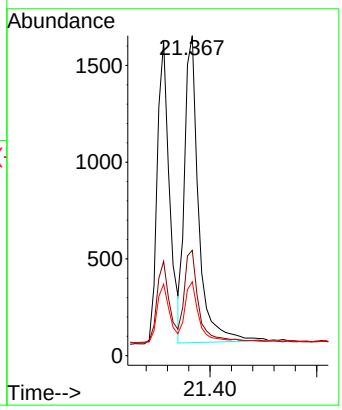


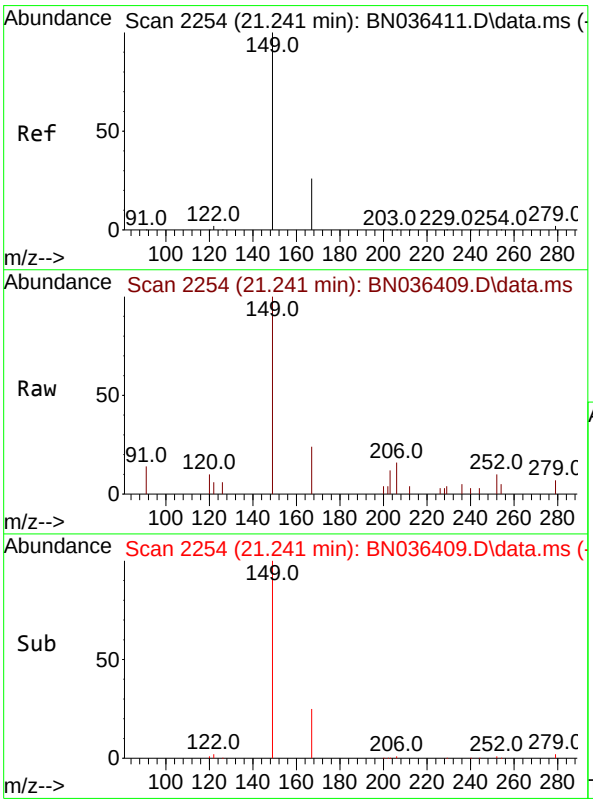
#33
Chrysene
Concen: 0.099 ng
RT: 21.366 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 2908

Ion	Ratio	Lower	Upper
228	100		
226	32.9	25.5	38.3
229	23.1	16.4	24.6

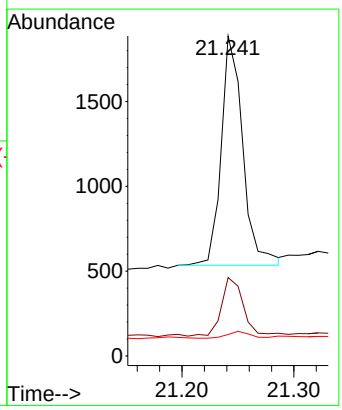


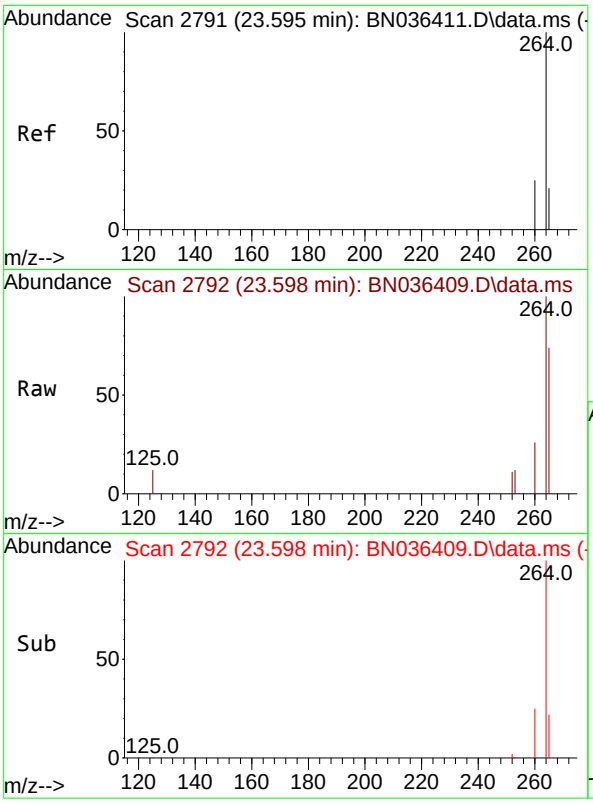


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.114 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:149 Resp: 1810

Ion	Ratio	Lower	Upper
149	100		
167	26.2	21.2	31.8
279	3.1	2.7	4.1



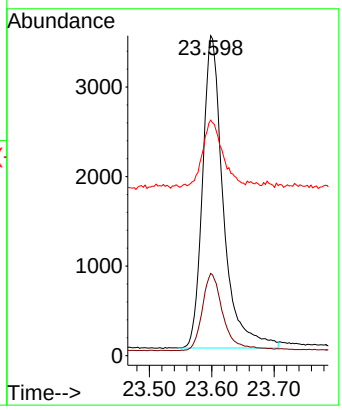


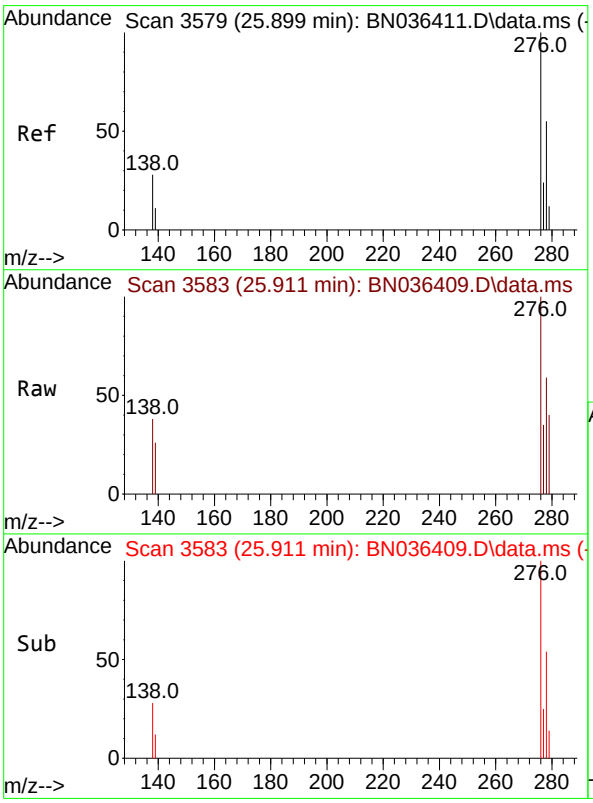
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.598 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:264 Resp: 8068

Ion	Ratio	Lower	Upper
264	100		
260	25.7	20.9	31.3
265	73.6	60.7	91.1

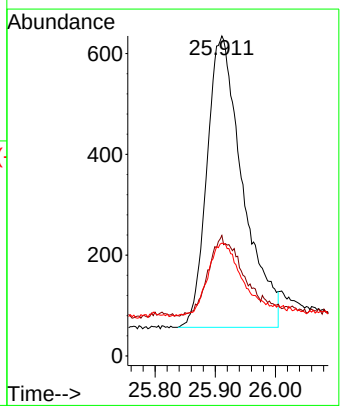


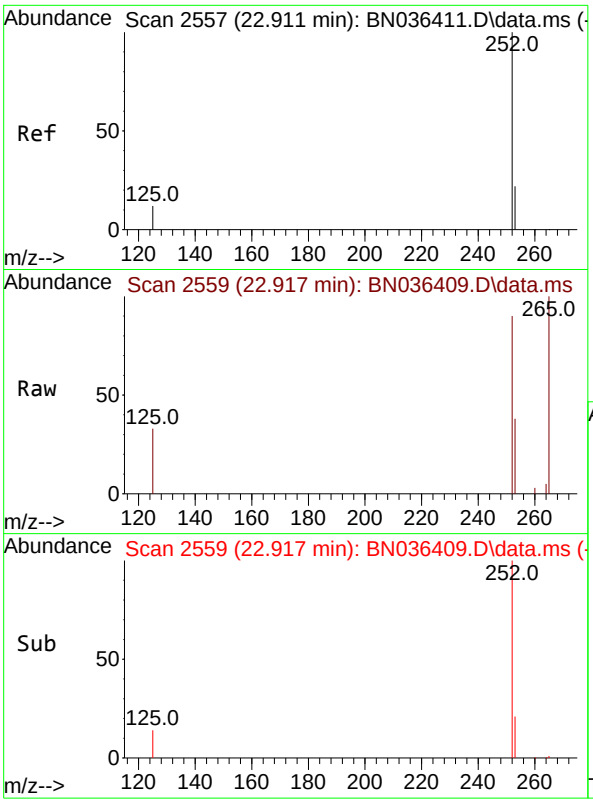


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.075 ng
RT: 25.911 min Scan# 3583
Delta R.T. 0.012 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:276 Resp: 2385

Ion	Ratio	Lower	Upper
276	100		
138	25.9	22.2	33.2
277	24.8	19.8	29.6



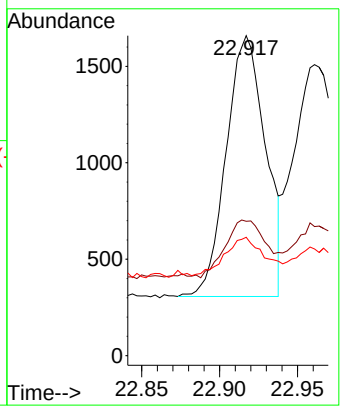


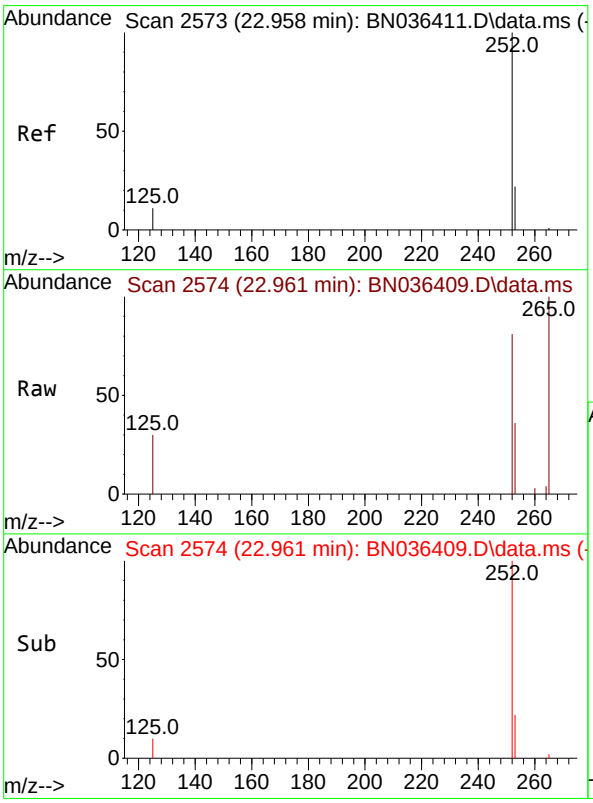
#37
Benzo(b)fluoranthene
Concen: 0.083 ng
RT: 22.917 min Scan# 2
Delta R.T. 0.006 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 2367

Ion	Ratio	Lower	Upper
252	100		
253	42.0	21.9	32.9#
125	37.0	15.0	22.6#

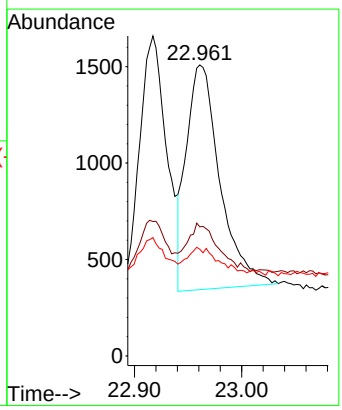


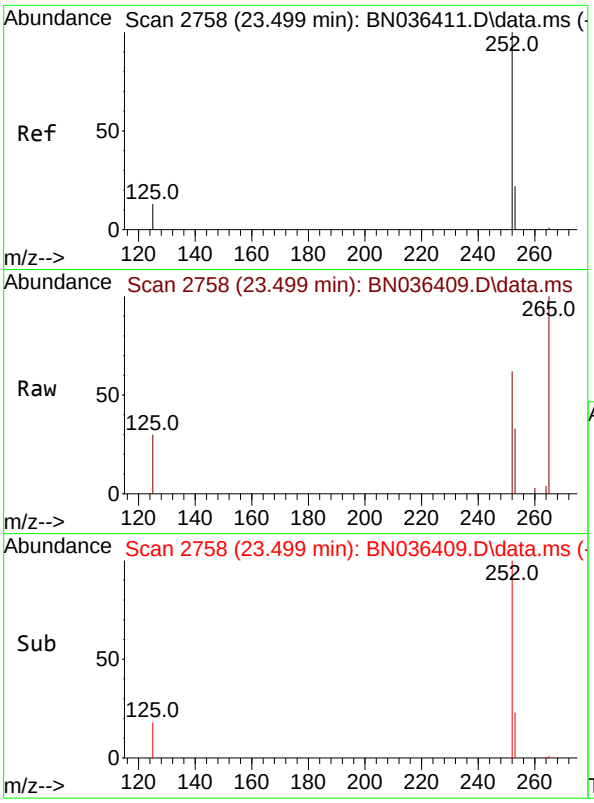


#38
Benzo(k)fluoranthene
Concen: 0.087 ng
RT: 22.961 min Scan# 2574
Delta R.T. 0.003 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:252 Resp: 2537

Ion	Ratio	Lower	Upper
252	100		
253	44.3	22.2	33.4#
125	36.6	15.0	22.4#



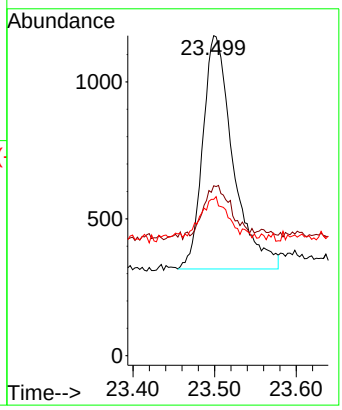


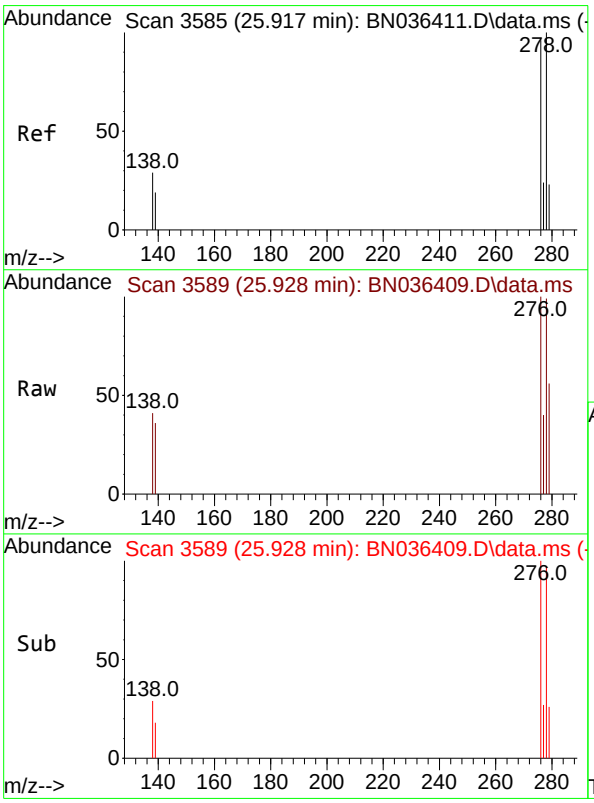
#39
Benzo(a)pyrene
Concen: 0.089 ng
RT: 23.499 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 2200

Ion	Ratio	Lower	Upper
252	100		
253	53.1	24.4	36.6#
125	48.8	18.2	27.2#

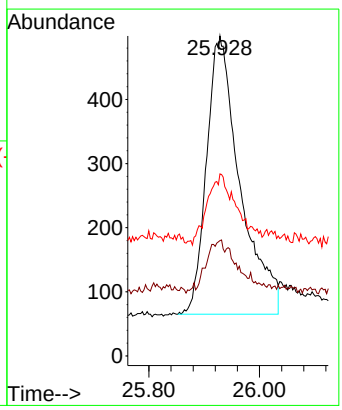


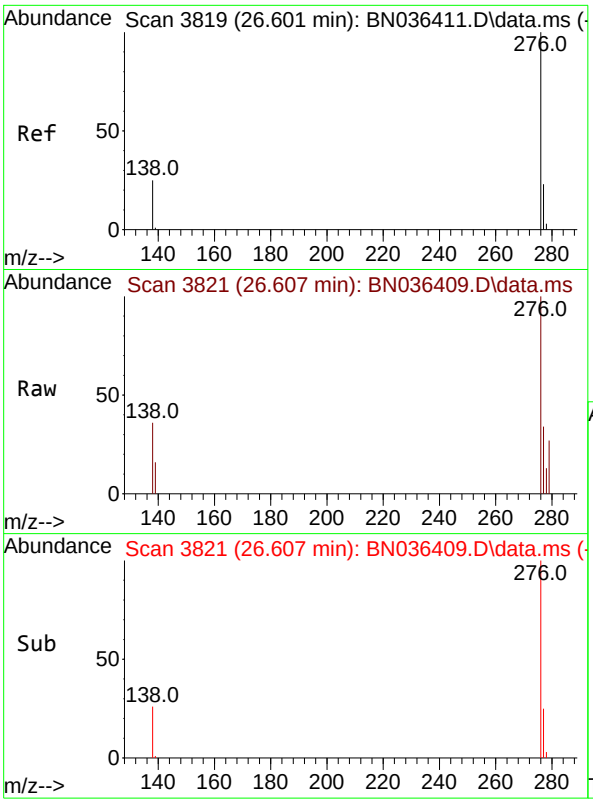


#40
Dibenzo(a,h)anthracene
Concen: 0.073 ng
RT: 25.928 min Scan# 3589
Delta R.T. 0.012 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Tgt Ion:278 Resp: 1827

Ion	Ratio	Lower	Upper
278	100		
139	36.1	18.5	27.7#
279	56.9	24.8	37.2#



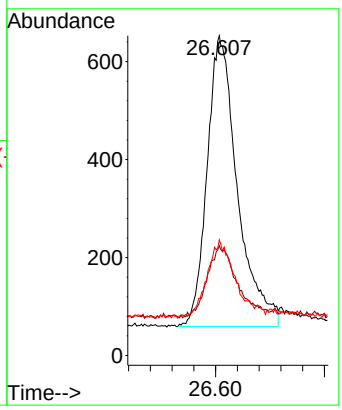


#41
Benzo(g,h,i)perylene
Concen: 0.083 ng
RT: 26.607 min Scan# 3
Delta R.T. 0.006 min
Lab File: BN036409.D
Acq: 10 Feb 2025 12:25

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 2299

Ion	Ratio	Lower	Upper
276	100		
277	34.3	20.7	31.1#
138	36.1	21.8	32.6#



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036410.D
Acq On : 10 Feb 2025 13:01
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Feb 11 00:35:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

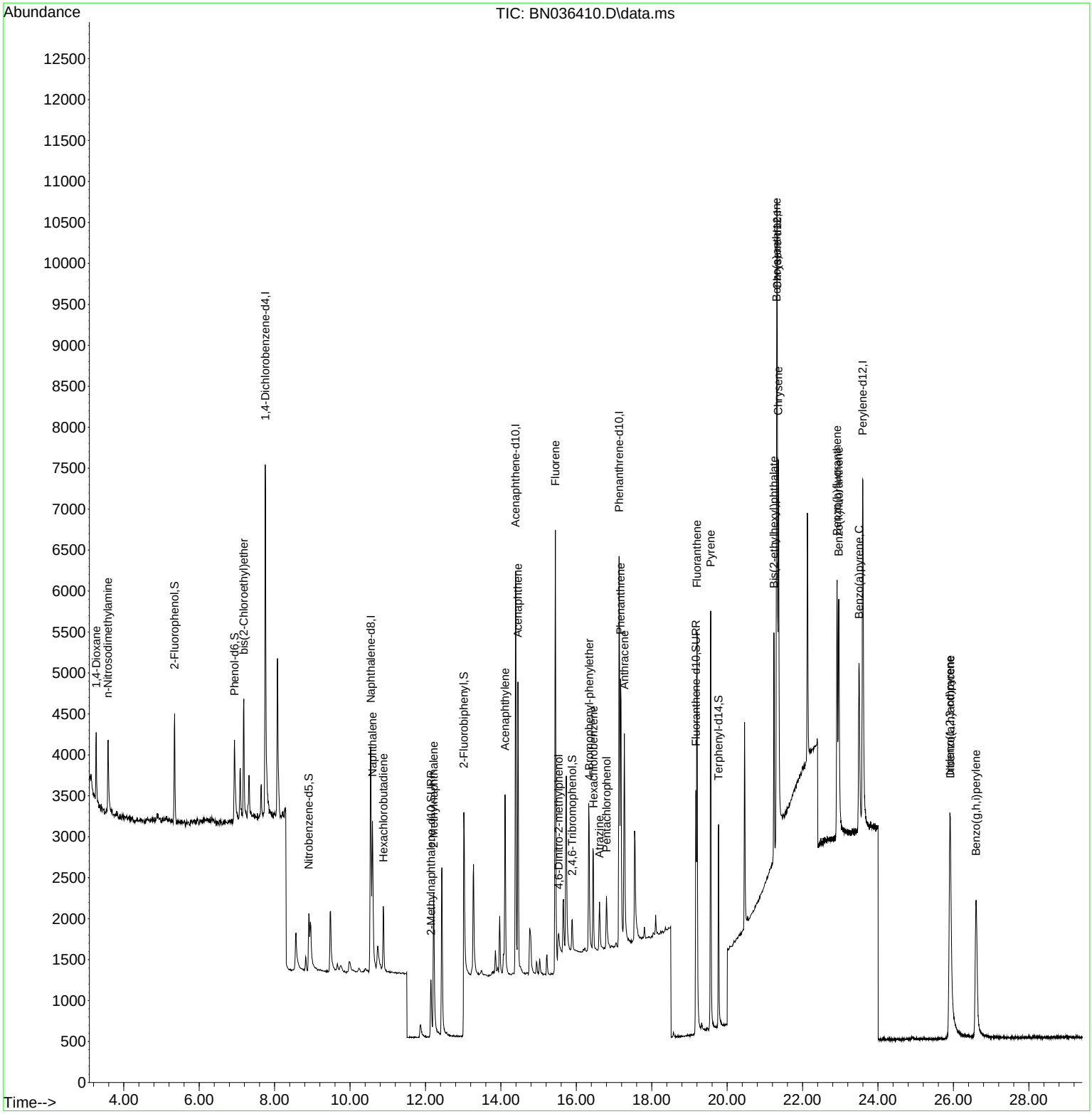
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2157	0.400	ng		0.00
7) Naphthalene-d8	10.551	136	4791	0.400	ng		# 0.01
13) Acenaphthene-d10	14.387	164	3185	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	7435	0.400	ng		0.00
29) Chrysene-d12	21.331	240	6531	0.400	ng		# 0.00
35) Perylene-d12	23.595	264	6918	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	1029	0.187	ng		0.00
5) Phenol-d6	6.937	99	1086	0.170	ng		0.00
8) Nitrobenzene-d5	8.907	82	869	0.195	ng		0.00
11) 2-Methylnaphthalene-d10	12.146	152	1397	0.213	ng		0.00
14) 2,4,6-Tribromophenol	15.895	330	289	0.147	ng		0.01
15) 2-Fluorobiphenyl	13.019	172	2214	0.163	ng		0.00
27) Fluoranthene-d10	19.173	212	3879	0.203	ng		0.00
31) Terphenyl-d14	19.773	244	2765	0.204	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	471	0.198	ng		97
3) n-Nitrosodimethylamine	3.579	42	840	0.196	ng	#	98
6) bis(2-Chloroethyl)ether	7.183	93	1154	0.217	ng		98
9) Naphthalene	10.594	128	2733	0.200	ng	#	95
10) Hexachlorobutadiene	10.882	225	702	0.164	ng	#	99
12) 2-Methylnaphthalene	12.217	142	1706	0.198	ng		97
16) Acenaphthylene	14.110	152	2654	0.180	ng		98
17) Acenaphthene	14.452	154	1791	0.177	ng		98
18) Fluorene	15.446	166	2596	0.200	ng		100
20) 4,6-Dinitro-2-methylph...	15.535	198	248	0.149	ng	#	85
21) 4-Bromophenyl-phenylether	16.342	248	844	0.166	ng	#	80
22) Hexachlorobenzene	16.453	284	1101	0.166	ng		97
23) Atrazine	16.615	200	705	0.188	ng		95
24) Pentachlorophenol	16.801	266	463	0.159	ng		95
25) Phenanthrene	17.173	178	4051	0.186	ng		100
26) Anthracene	17.273	178	3467	0.175	ng		98
28) Fluoranthene	19.201	202	4918	0.190	ng		100
30) Pyrene	19.564	202	5119	0.196	ng		100
32) Benzo(a)anthracene	21.313	228	4166	0.180	ng		98
33) Chrysene	21.357	228	4754	0.200	ng		99
34) Bis(2-ethylhexyl)phtha...	21.241	149	2858	0.221	ng		100
36) Indeno(1,2,3-cd)pyrene	25.905	276	4459	0.164	ng		99
37) Benzo(b)fluoranthene	22.914	252	4220	0.172	ng	#	85
38) Benzo(k)fluoranthene	22.958	252	4335	0.173	ng	#	85
39) Benzo(a)pyrene	23.499	252	3740	0.177	ng	#	80
40) Dibenzo(a,h)anthracene	25.919	278	3533	0.164	ng	#	86
41) Benzo(g,h,i)perylene	26.601	276	4192	0.177	ng		93

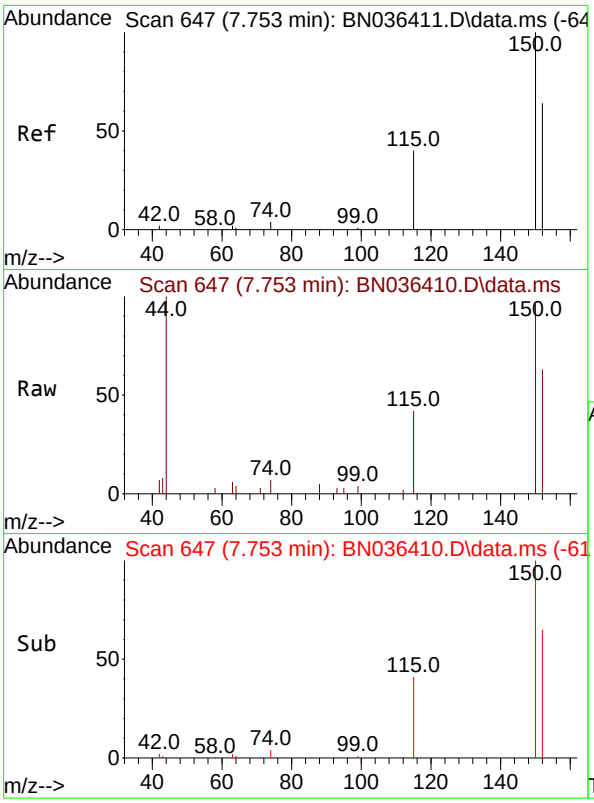
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036410.D
Acq On : 10 Feb 2025 13:01
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Feb 11 00:35:26 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



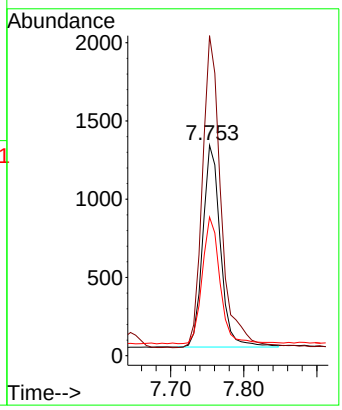


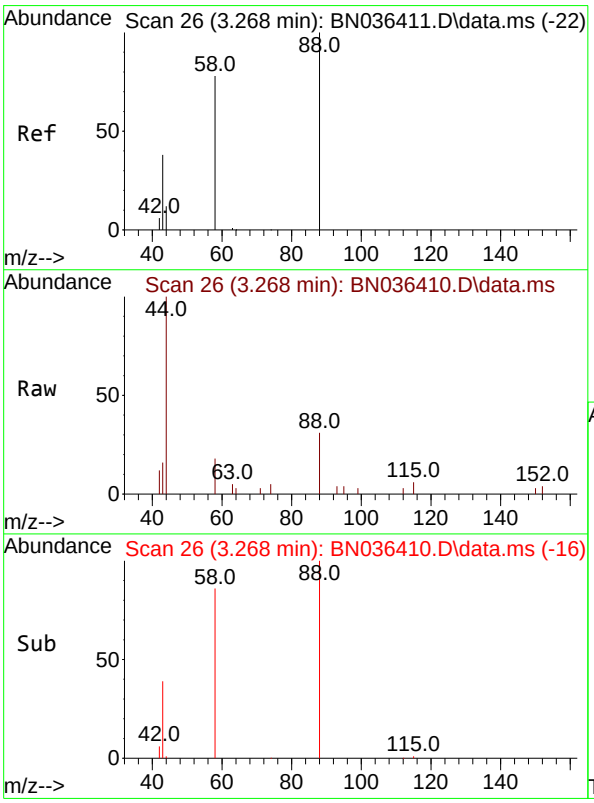
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 2157

Ion	Ratio	Lower	Upper
152	100		
150	152.0	123.7	185.5
115	65.9	52.5	78.7

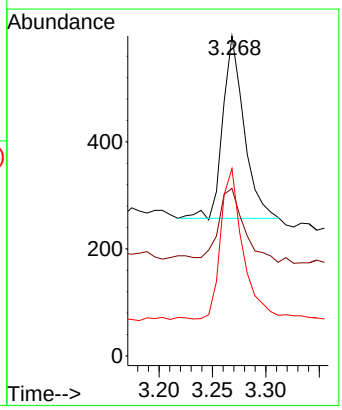


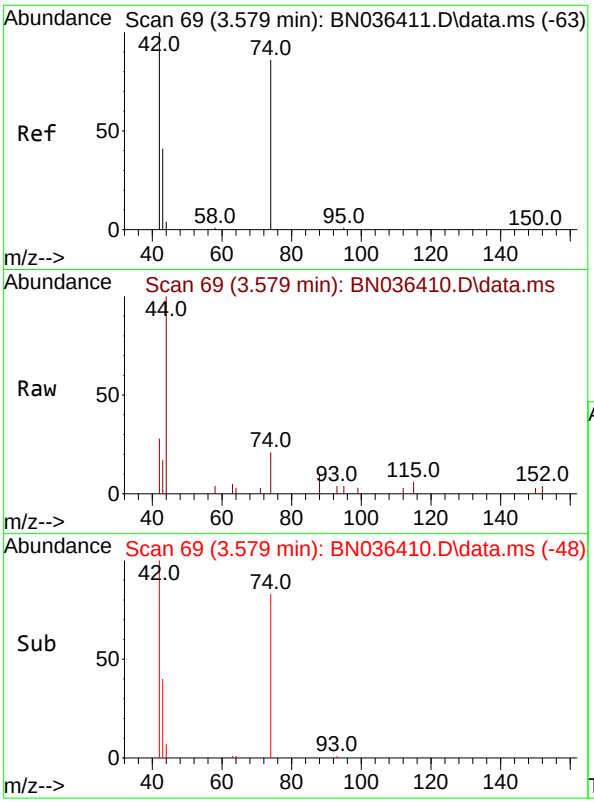


#2
1,4-Dioxane
Concen: 0.198 ng
RT: 3.268 min Scan# 26
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion: 88 Resp: 471

Ion	Ratio	Lower	Upper
88	100		
43	48.2	33.7	50.5
58	85.8	68.9	103.3



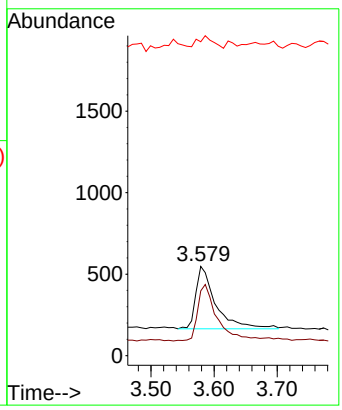


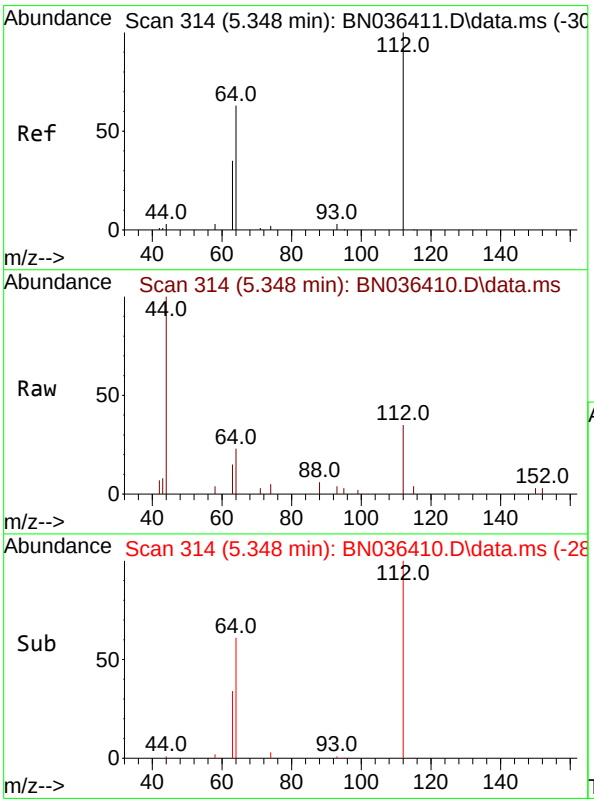
#3
n-Nitrosodimethylamine
Concen: 0.196 ng
RT: 3.579 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 42 Resp: 840

Ion	Ratio	Lower	Upper
42	100		
74	90.6	71.8	107.6
44	14.5	7.8	11.6#

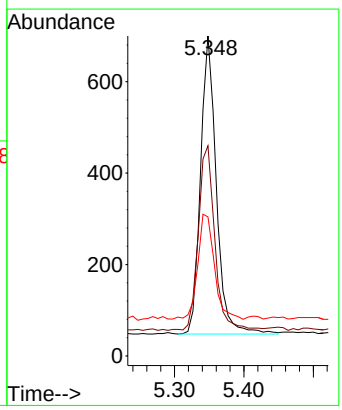


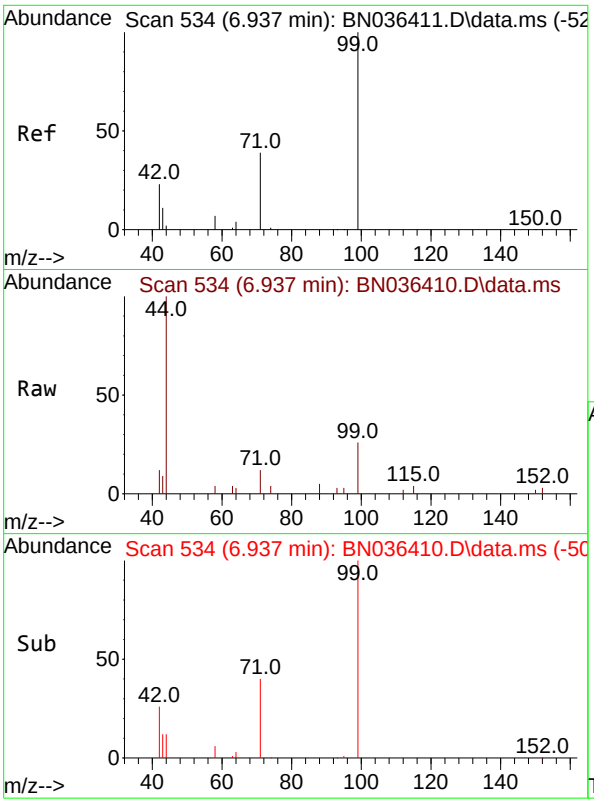


#4
2-Fluorophenol
Concen: 0.187 ng
RT: 5.348 min Scan# 314
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:112 Resp: 1029

Ion	Ratio	Lower	Upper
112	100		
64	64.8	53.4	80.0
63	37.2	30.3	45.5



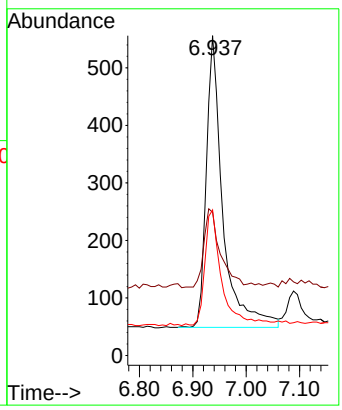


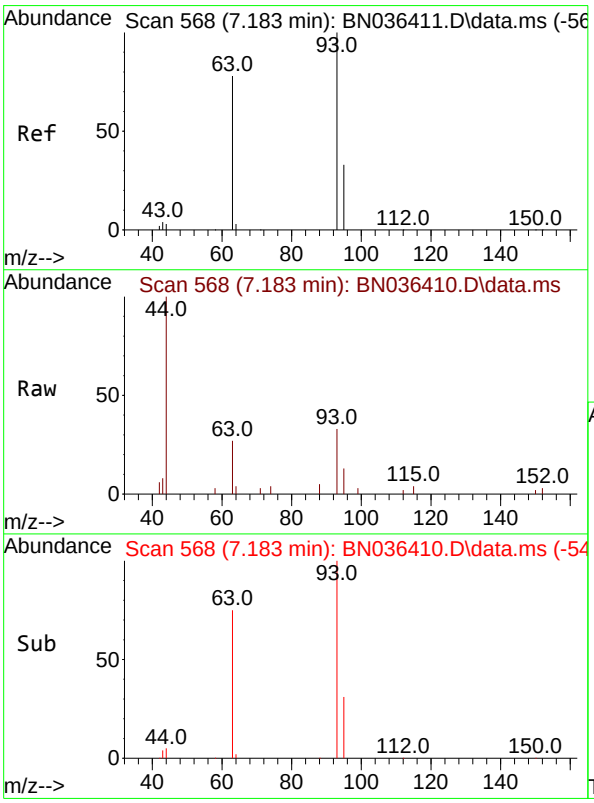
#5
Phenol-d6
Concen: 0.170 ng
RT: 6.937 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 99 Resp: 1086

Ion	Ratio	Lower	Upper
99	100		
42	26.8	21.7	32.5
71	40.7	32.6	49.0

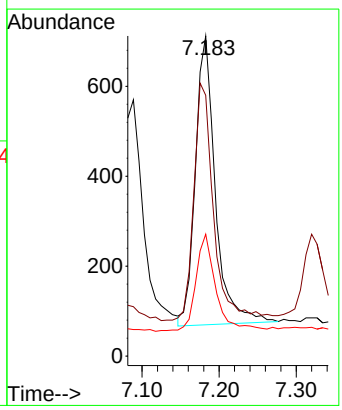


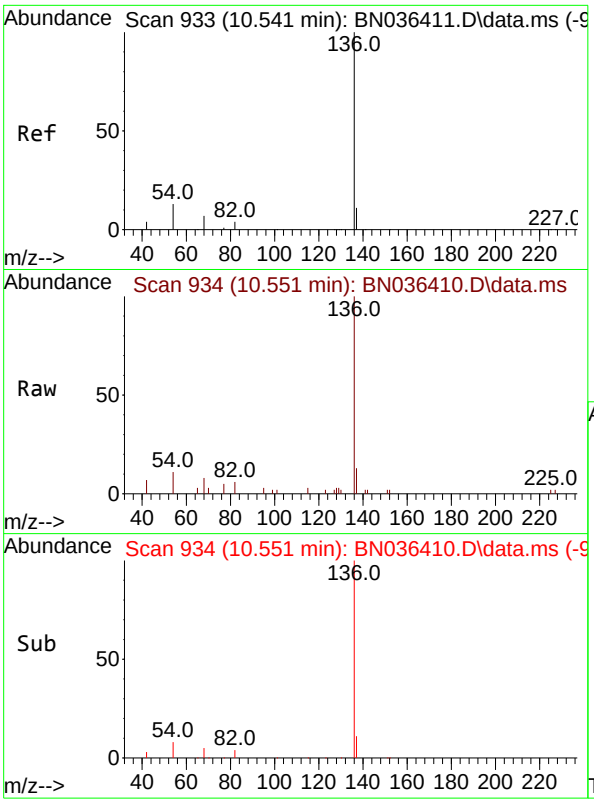


#6
bis(2-Chloroethyl)ether
Concen: 0.217 ng
RT: 7.183 min Scan# 568
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion: 93 Resp: 1154

Ion	Ratio	Lower	Upper
93	100		
63	81.6	66.3	99.5
95	34.1	26.2	39.4



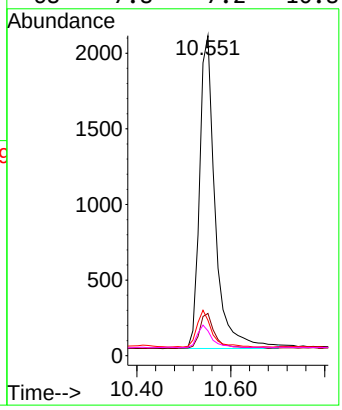


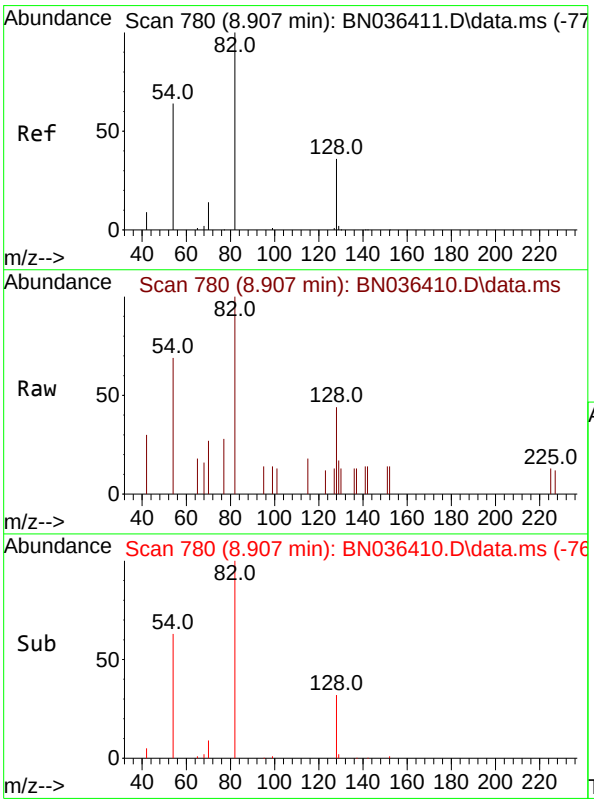
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.551 min Scan# 9
Delta R.T. 0.011 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:136 Resp: 4791

Ion	Ratio	Lower	Upper
136	100		
137	13.2	10.1	15.1
54	11.1	11.8	17.6#
68	7.8	7.2	10.8

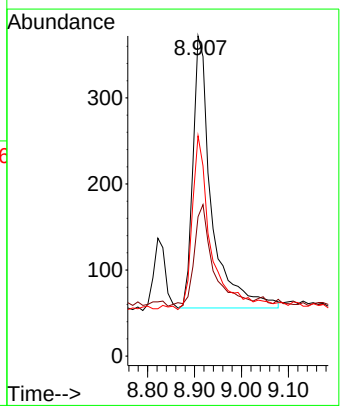


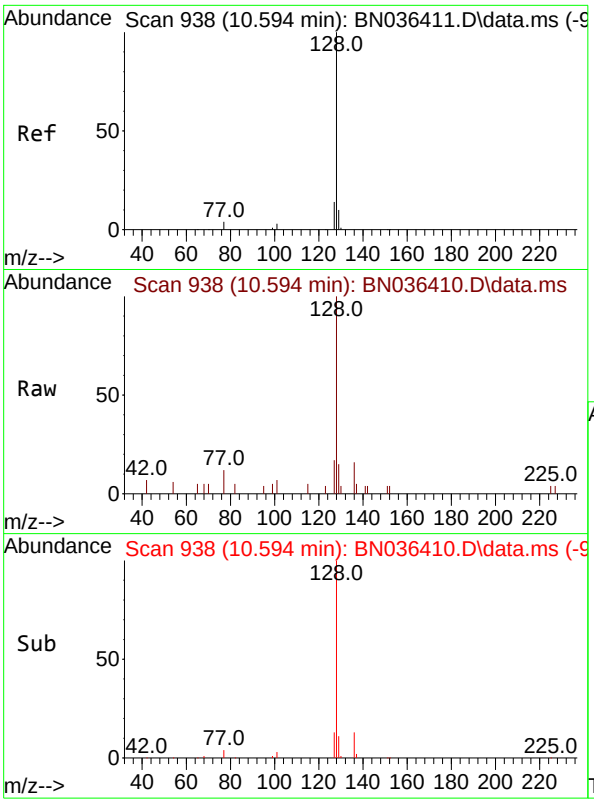


#8
Nitrobenzene-d5
Concen: 0.195 ng
RT: 8.907 min Scan# 780
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion: 82 Resp: 869

Ion	Ratio	Lower	Upper
82	100		
128	43.5	31.9	47.9
54	68.8	53.1	79.7



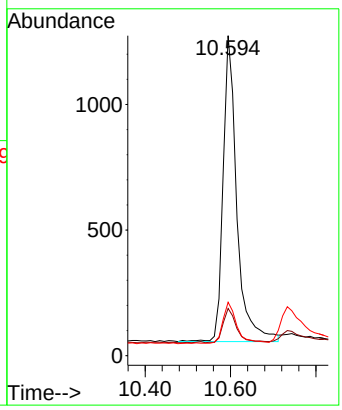


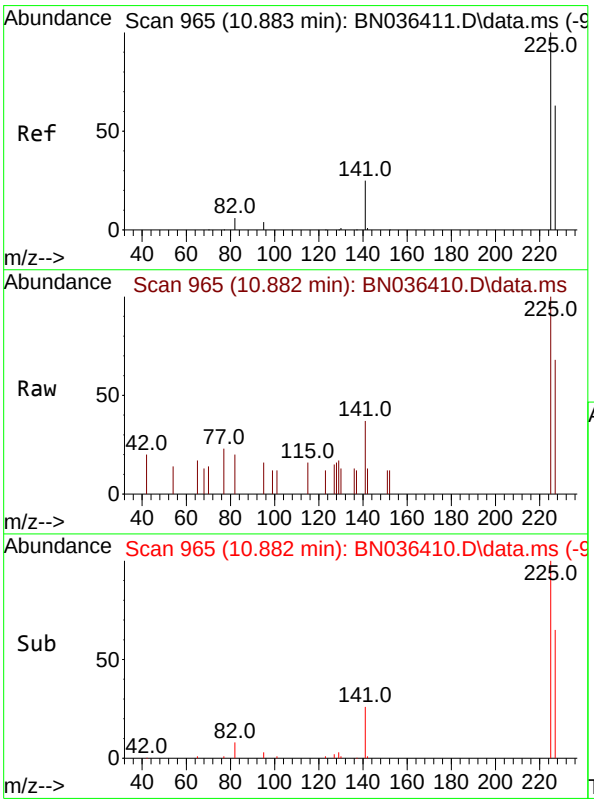
#9
Naphthalene
Concen: 0.200 ng
RT: 10.594 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:128 Resp: 2733

Ion	Ratio	Lower	Upper
128	100		
129	14.8	9.6	14.4#
127	16.7	12.0	18.0

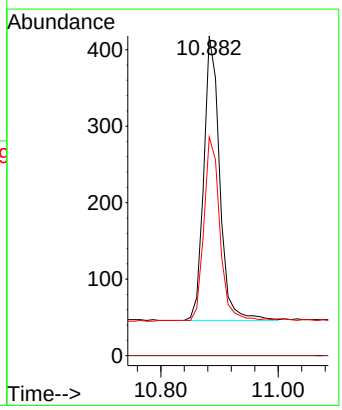


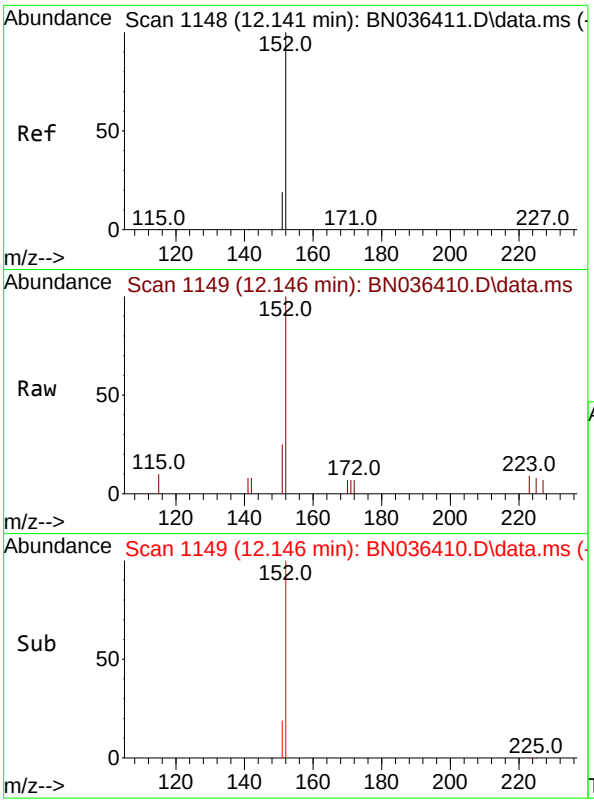


#10
Hexachlorobutadiene
Concen: 0.164 ng
RT: 10.882 min Scan# 965
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:225 Resp: 702

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	50.9	76.3



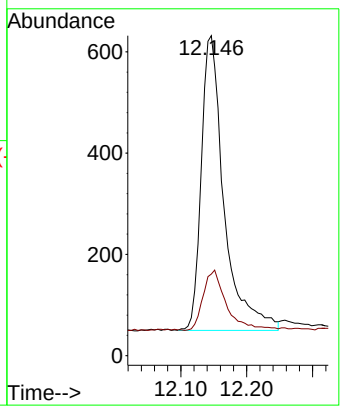


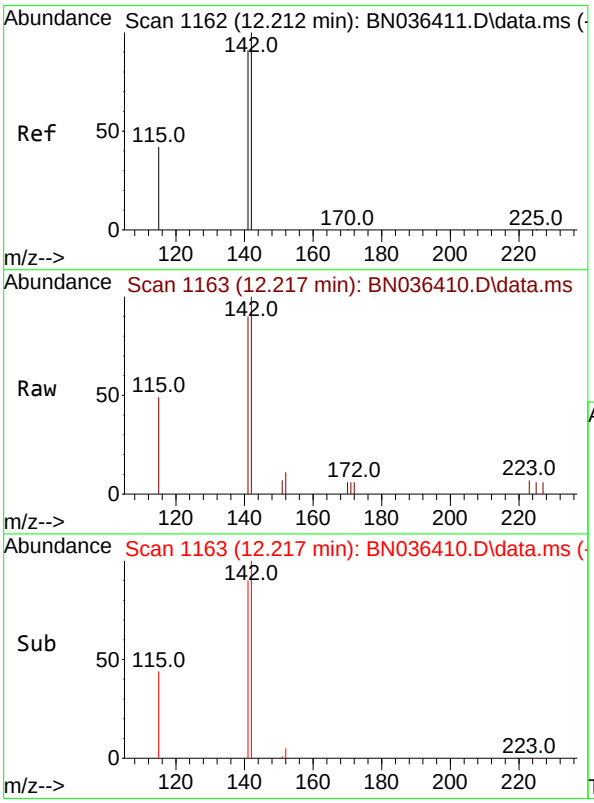
#11
2-Methylnaphthalene-d10
Concen: 0.213 ng
RT: 12.146 min Scan# 11
Delta R.T. 0.005 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 1397

Ion	Ratio	Lower	Upper
152	100		
151	21.0	16.6	25.0

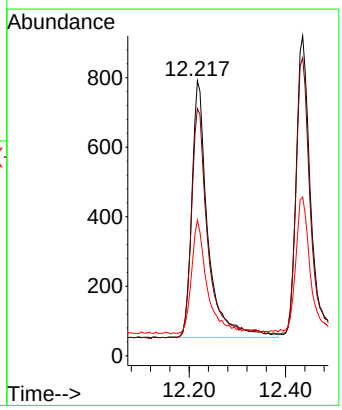


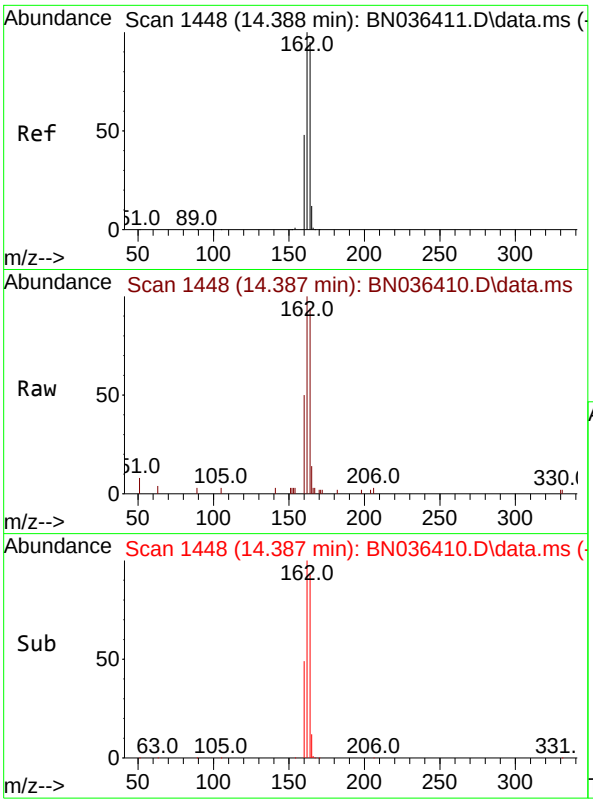


#12
2-Methylnaphthalene
Concen: 0.198 ng
RT: 12.217 min Scan# 1163
Delta R.T. 0.005 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:142 Resp: 1706

Ion	Ratio	Lower	Upper
142	100		
141	89.9	72.8	109.2
115	49.4	35.5	53.3



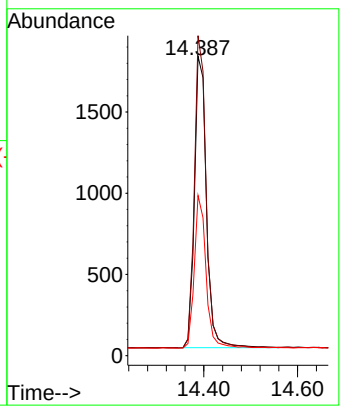


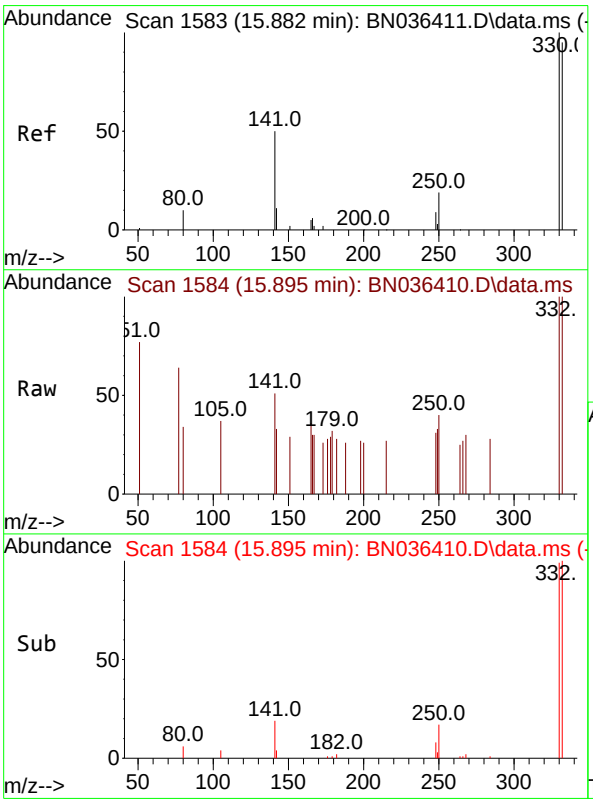
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.387 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:164 Resp: 3185

Ion	Ratio	Lower	Upper
164	100		
162	106.9	84.1	126.1
160	53.5	41.4	62.0

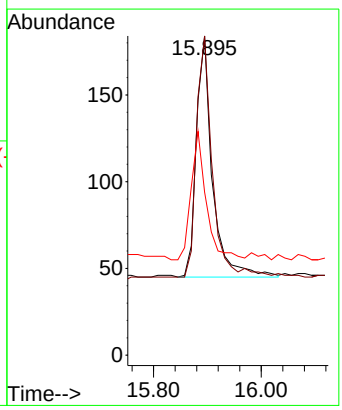


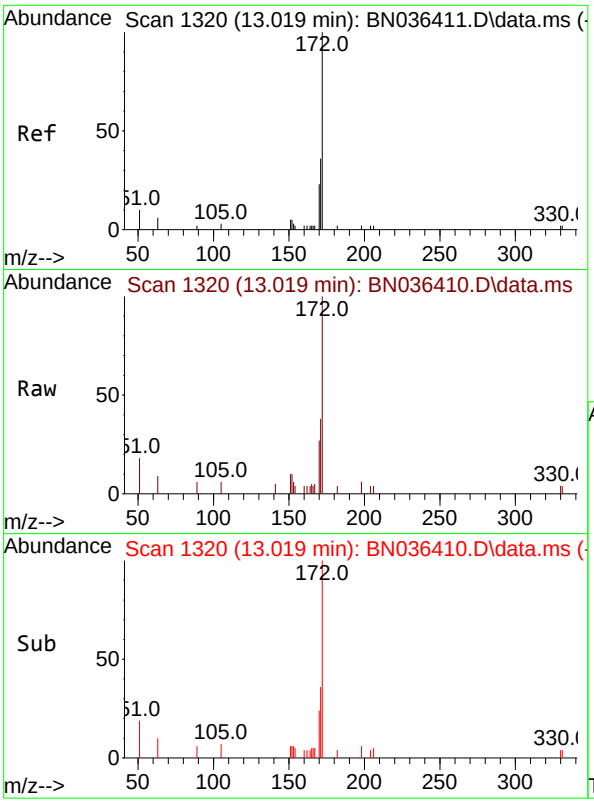


#14
2,4,6-Tribromophenol
Concen: 0.147 ng
RT: 15.895 min Scan# 1584
Delta R.T. 0.012 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:330 Resp: 289

Ion	Ratio	Lower	Upper
330	100		
332	99.0	76.6	114.8
141	49.8	37.8	56.8



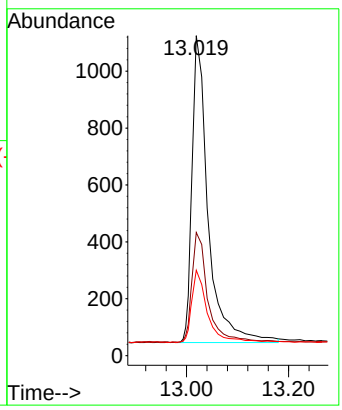


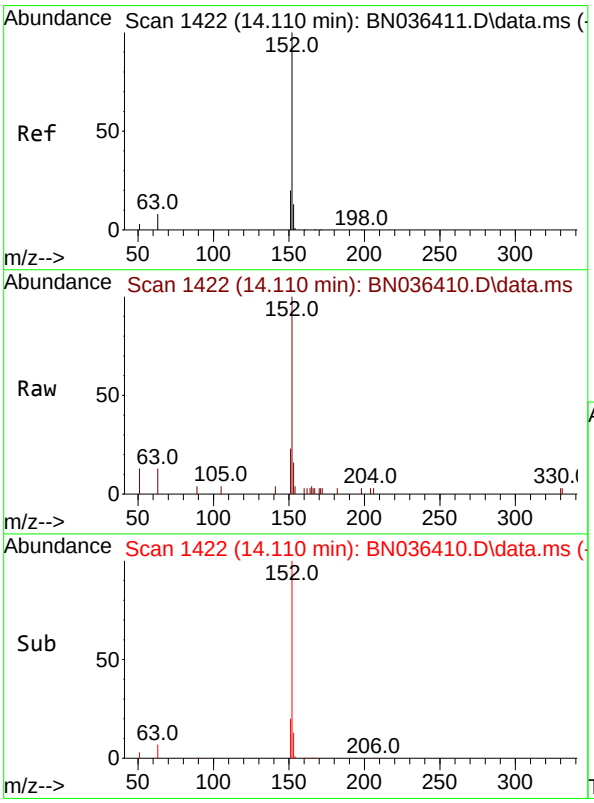
#15
2-Fluorobiphenyl
Concen: 0.163 ng
RT: 13.019 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:172 Resp: 2214

Ion	Ratio	Lower	Upper
172	100		
171	38.5	29.6	44.4
170	26.7	19.8	29.6

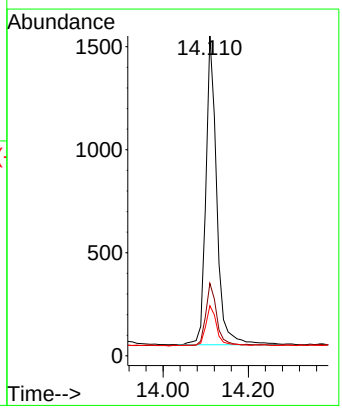


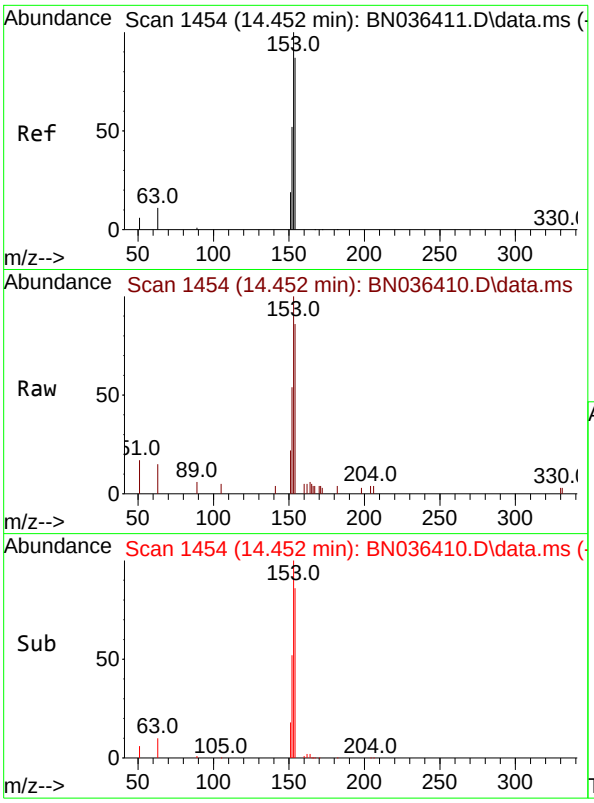


#16
Acenaphthylene
Concen: 0.180 ng
RT: 14.110 min Scan# 1422
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:152 Resp: 2654

Ion	Ratio	Lower	Upper
152	100		
151	20.2	15.8	23.8
153	13.9	10.2	15.2



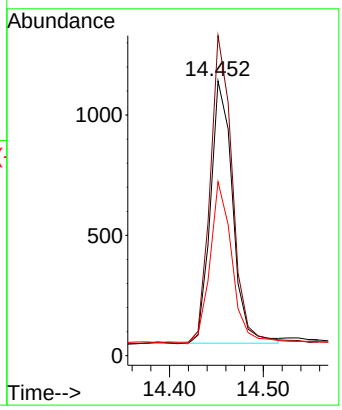


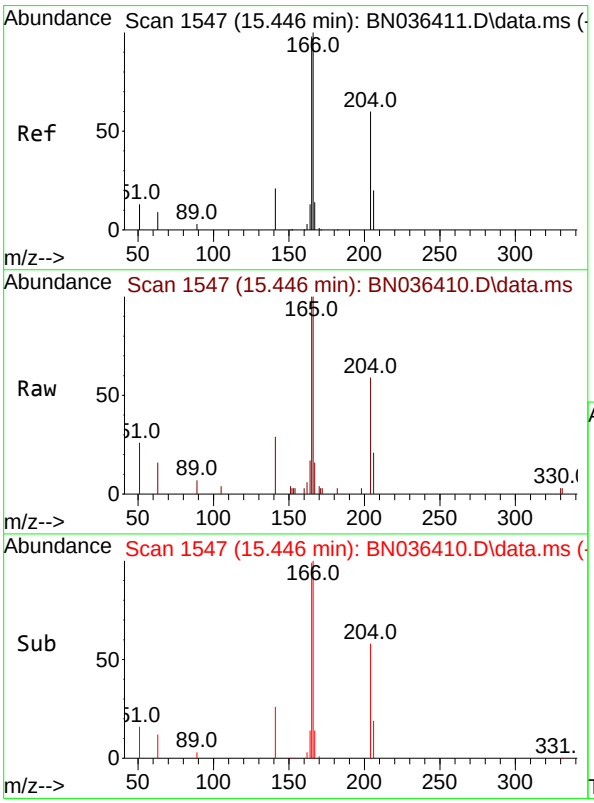
#17
Acenaphthene
Concen: 0.177 ng
RT: 14.452 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:154 Resp: 1791

Ion	Ratio	Lower	Upper
154	100		
153	119.4	93.3	139.9
152	61.4	48.8	73.2

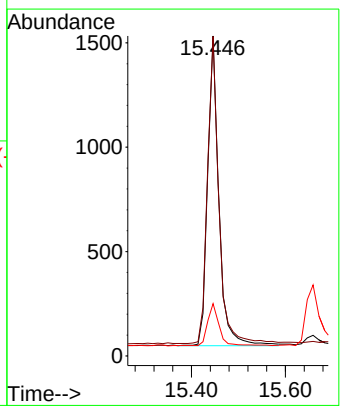


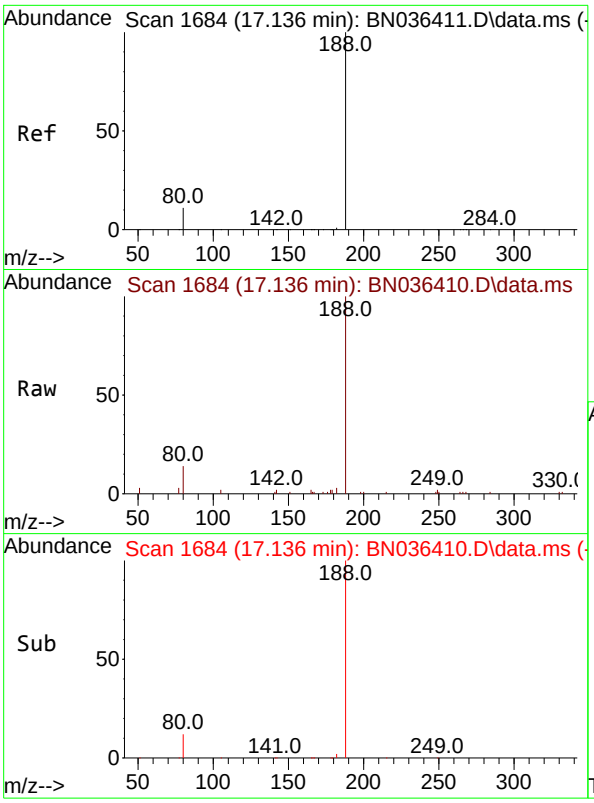


#18
Fluorene
Concen: 0.200 ng
RT: 15.446 min Scan# 1547
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:166 Resp: 2596

Ion	Ratio	Lower	Upper
166	100		
165	99.4	79.5	119.3
167	13.8	10.4	15.6



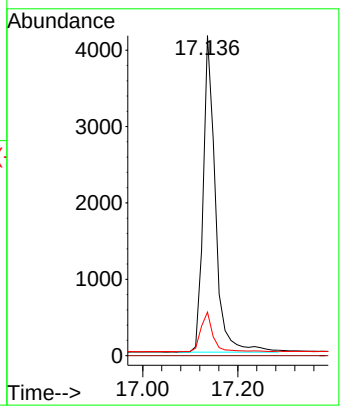


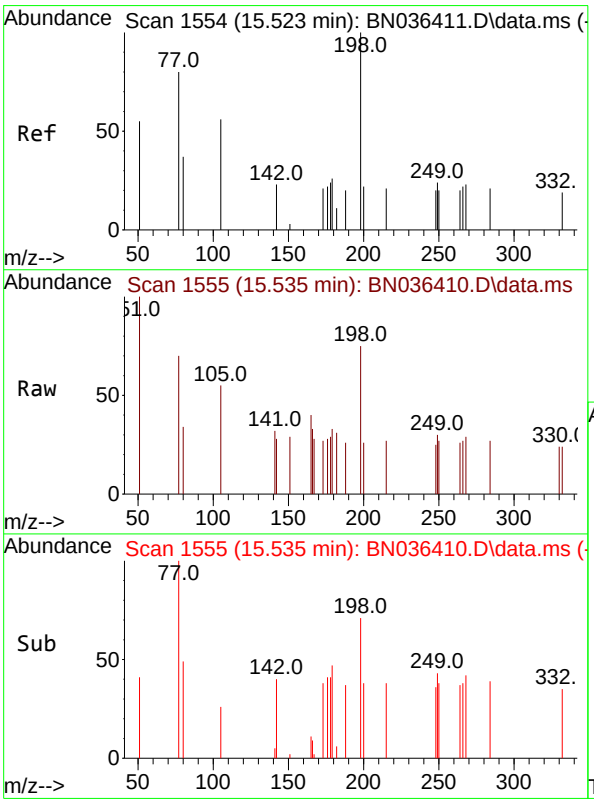
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:188 Resp: 7435

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.6	9.8	14.6

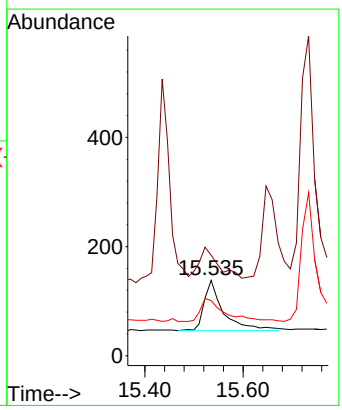


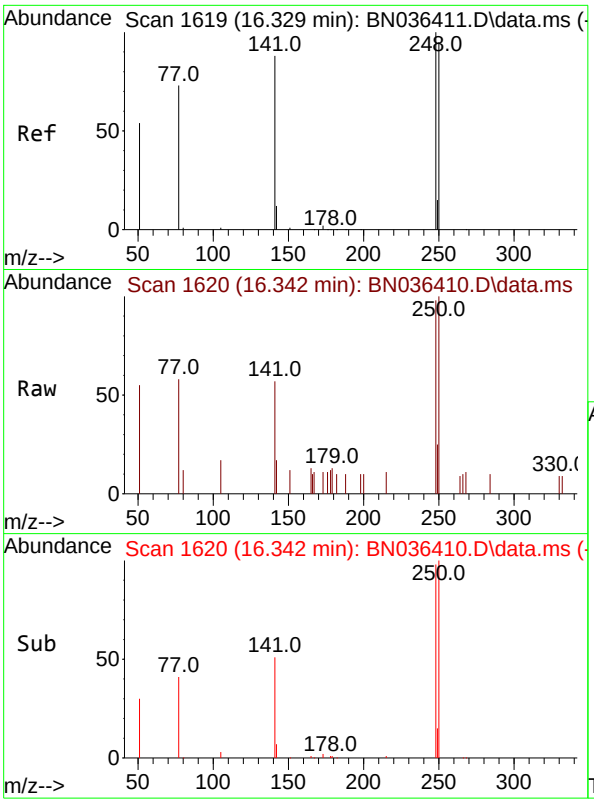


#20
4,6-Dinitro-2-methylphenol
Concen: 0.149 ng
RT: 15.535 min Scan# 1555
Delta R.T. 0.012 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:198 Resp: 248

Ion	Ratio	Lower	Upper
198	100		
51	133.3	86.6	129.8#
105	73.2	57.5	86.3



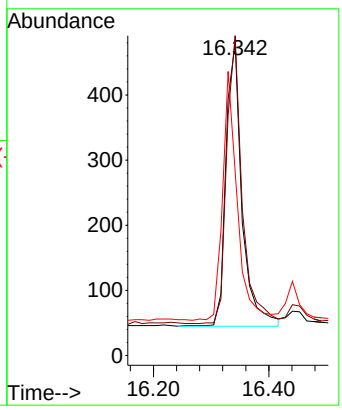


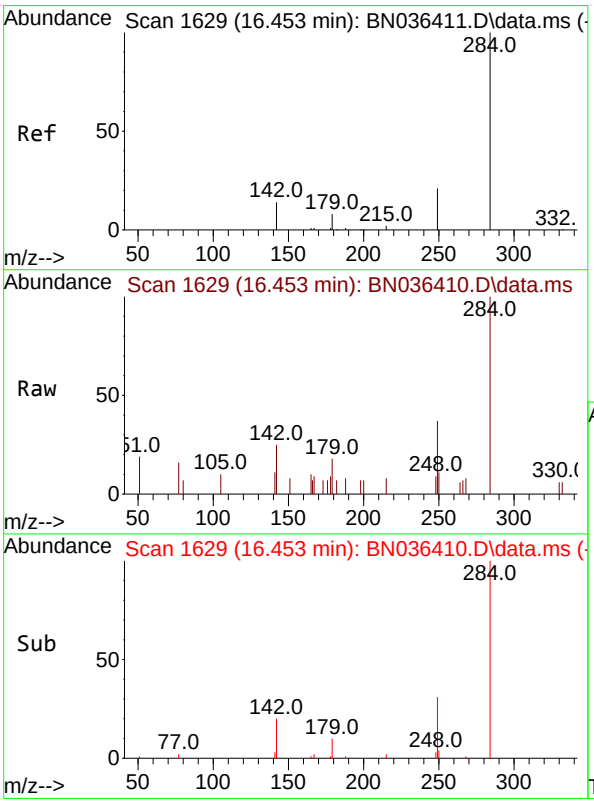
#21
4-Bromophenyl-phenylether
Concen: 0.166 ng
RT: 16.342 min Scan# 1
Delta R.T. 0.012 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:248 Resp: 844

Ion	Ratio	Lower	Upper
248	100		
250	102.3	76.1	114.1
141	58.7	71.7	107.5#

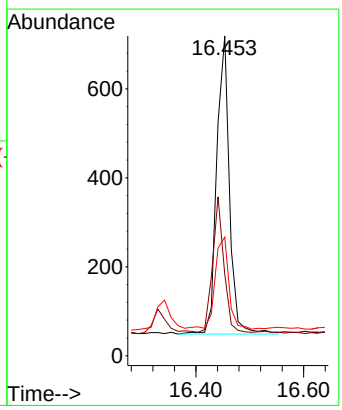


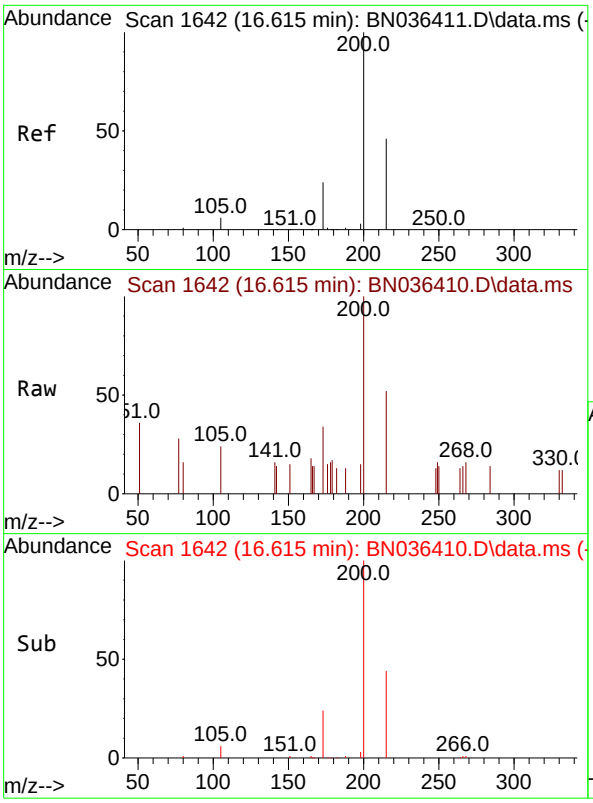


#22
Hexachlorobenzene
Concen: 0.166 ng
RT: 16.453 min Scan# 1629
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:284 Resp: 1101

Ion	Ratio	Lower	Upper
284	100		
142	39.9	33.4	50.0
249	33.7	28.6	43.0



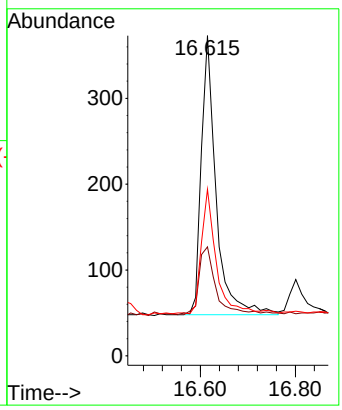


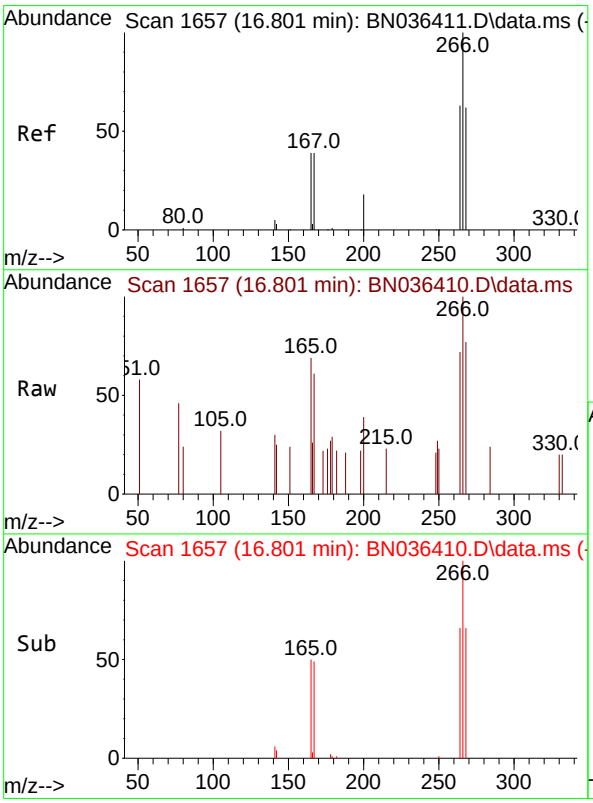
#23
Atrazine
Concen: 0.188 ng
RT: 16.615 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:200 Resp: 705

Ion	Ratio	Lower	Upper
200	100		
173	34.0	23.2	34.8
215	52.0	40.0	60.0

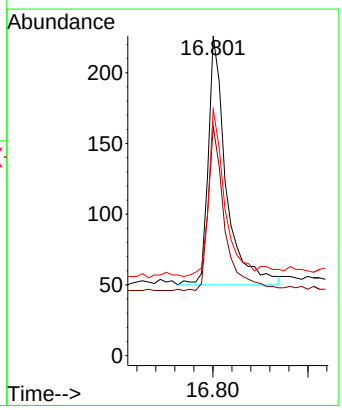


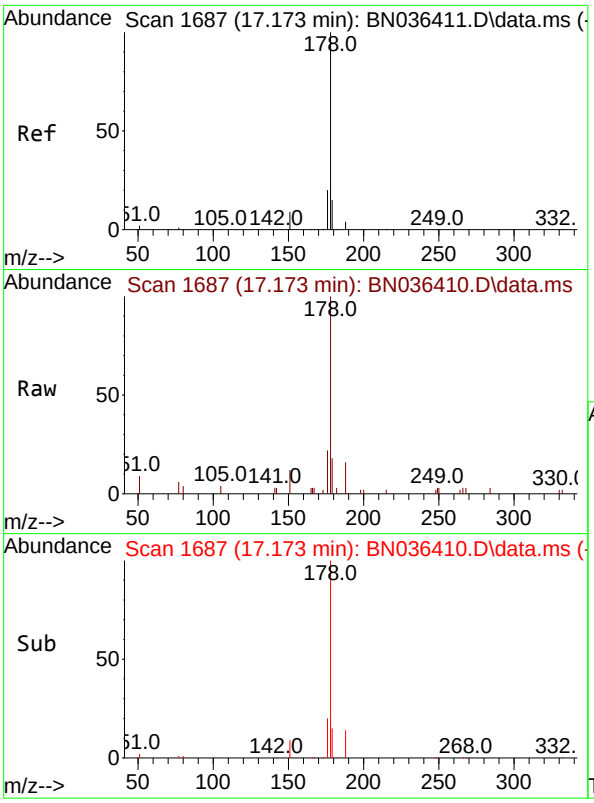


#24
Pentachlorophenol
Concen: 0.159 ng
RT: 16.801 min Scan# 1657
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:266 Resp: 463

Ion	Ratio	Lower	Upper
266	100		
264	60.9	50.6	76.0
268	60.0	51.9	77.9



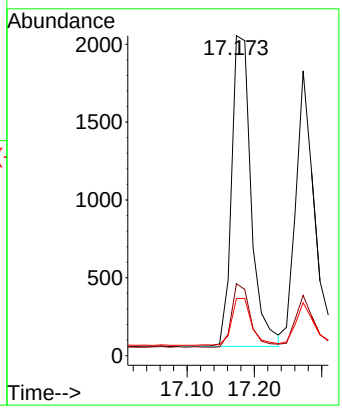


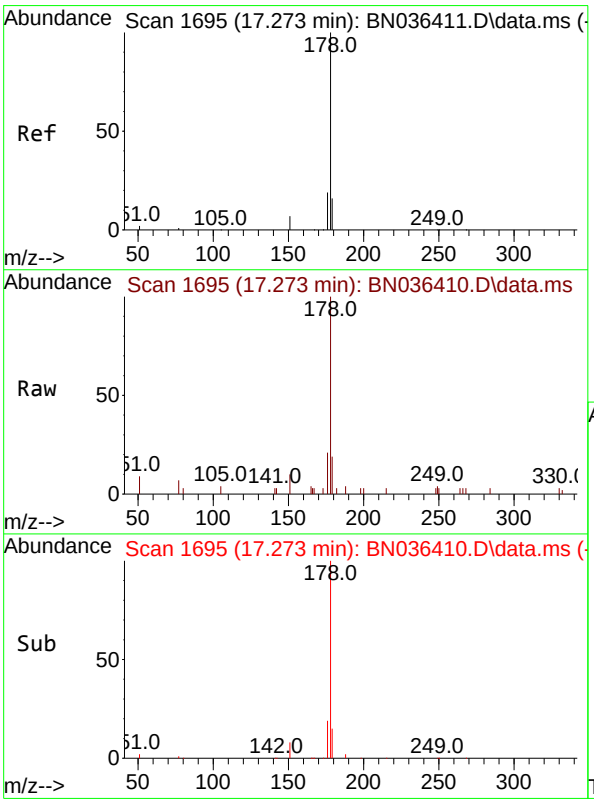
#25
Phenanthrene
Concen: 0.186 ng
RT: 17.173 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:178 Resp: 4051

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.7	23.5
179	15.3	12.4	18.6

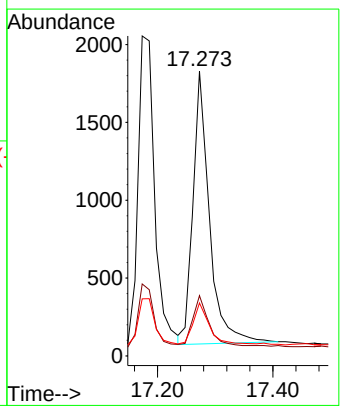


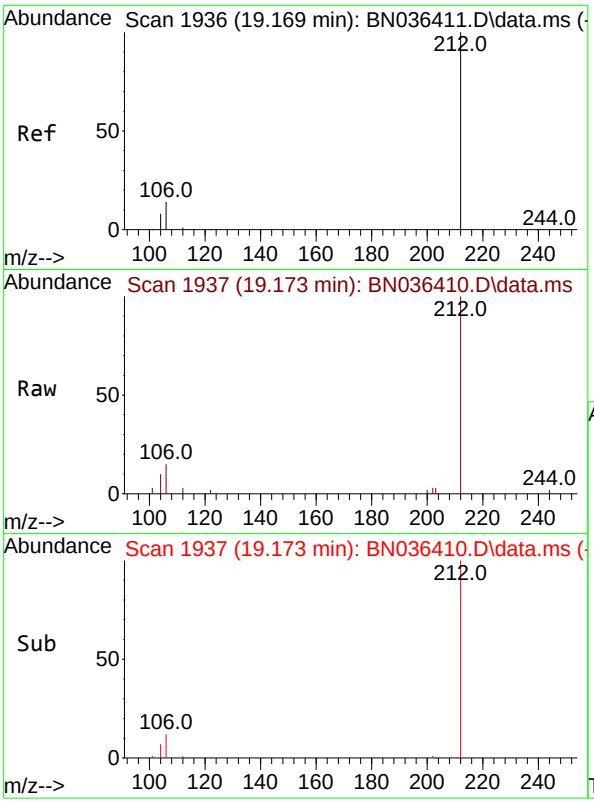


#26
Anthracene
Concen: 0.175 ng
RT: 17.273 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:178 Resp: 3467

Ion	Ratio	Lower	Upper
178	100		
176	19.6	14.9	22.3
179	16.5	12.4	18.6



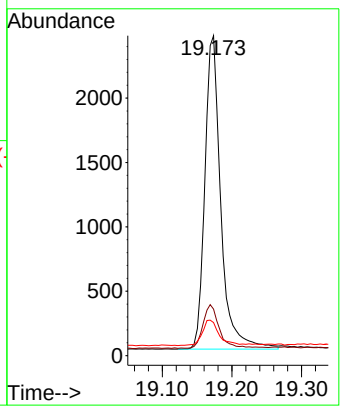


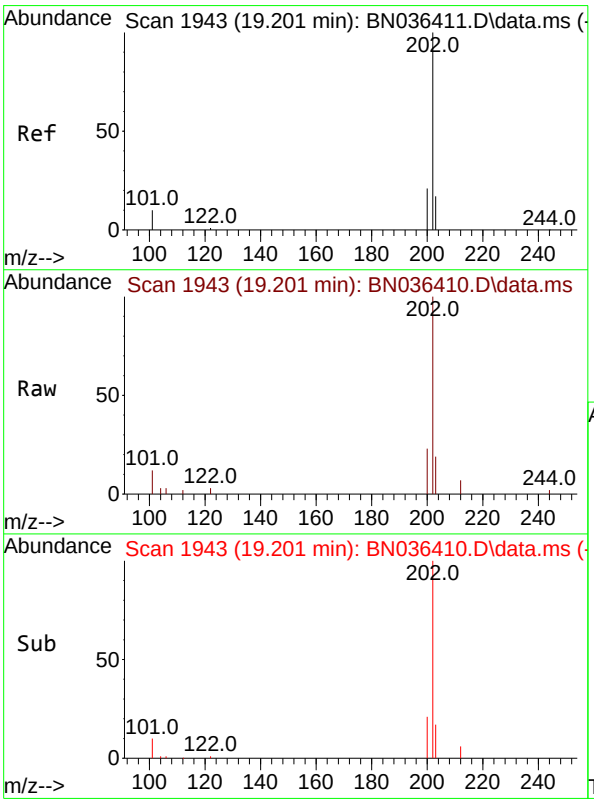
#27
Fluoranthene-d10
Concen: 0.203 ng
RT: 19.173 min Scan# 1
Delta R.T. 0.005 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:212 Resp: 3879

Ion	Ratio	Lower	Upper
212	100		
106	14.1	11.5	17.3
104	8.6	7.1	10.7

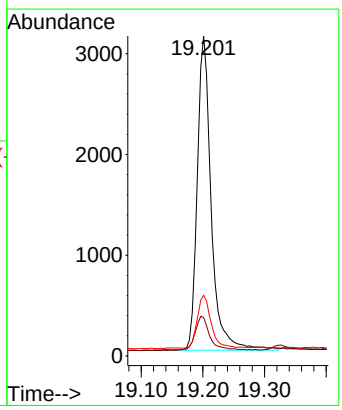


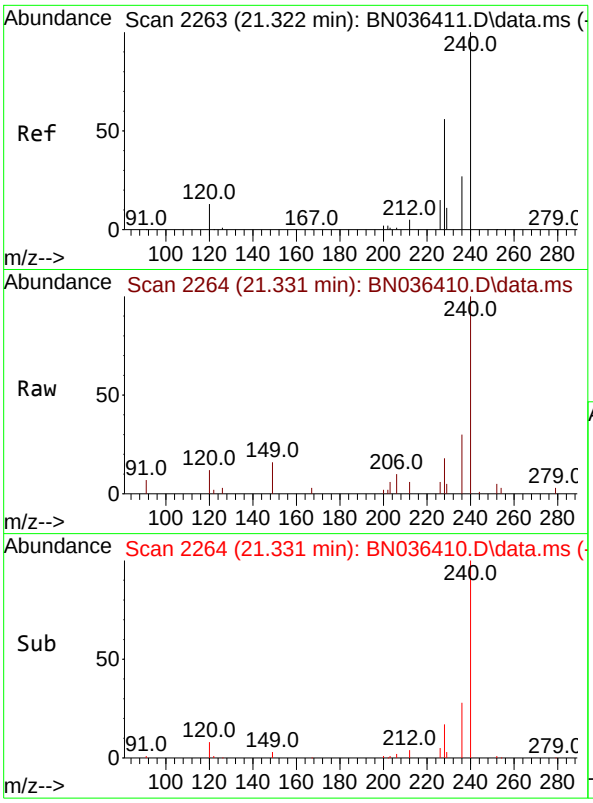


#28
Fluoranthene
Concen: 0.190 ng
RT: 19.201 min Scan# 1943
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:202 Resp: 4918

Ion	Ratio	Lower	Upper
202	100		
101	11.6	9.2	13.8
203	16.7	13.4	20.0



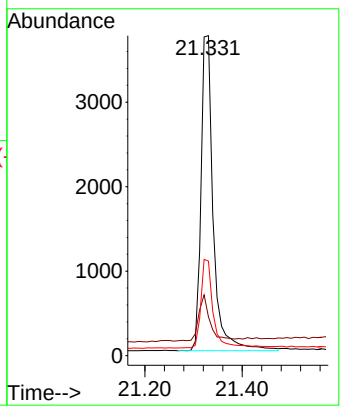


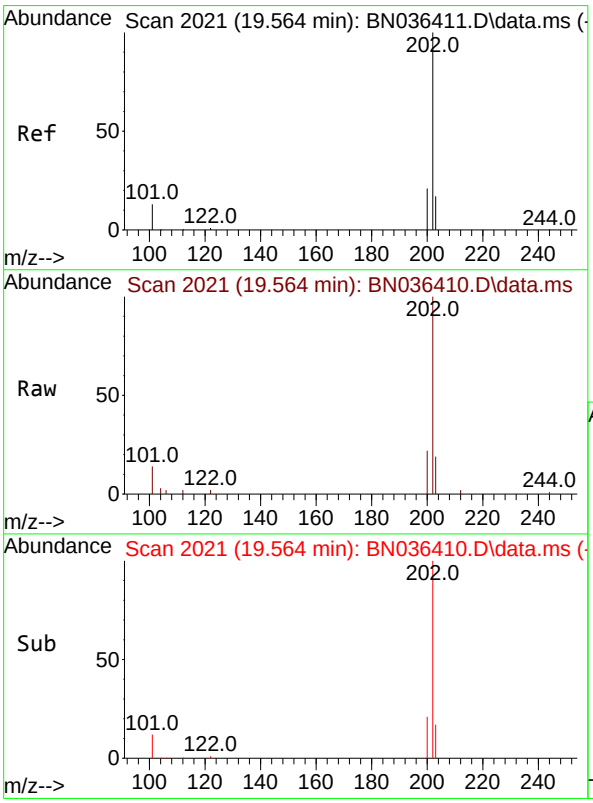
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.331 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:240 Resp: 6531

Ion	Ratio	Lower	Upper
240	100		
120	12.1	13.3	19.9#
236	29.5	23.0	34.6

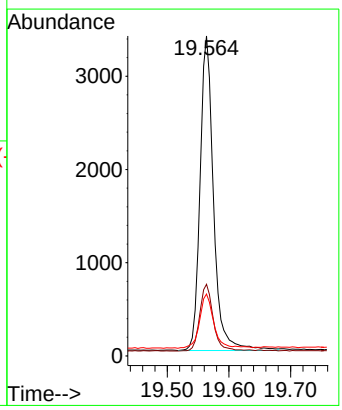


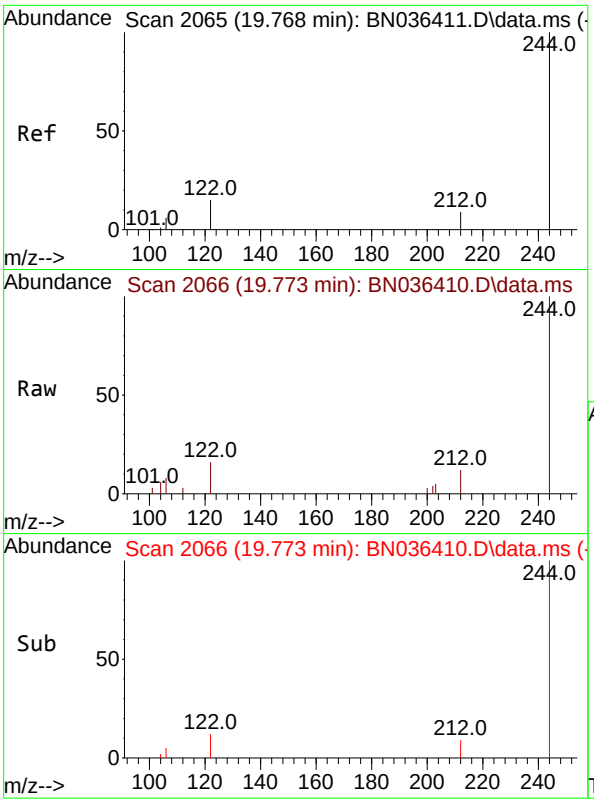


#30
Pyrene
Concen: 0.196 ng
RT: 19.564 min Scan# 2021
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:202 Resp: 5119

Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.9	25.3
203	17.6	13.9	20.9



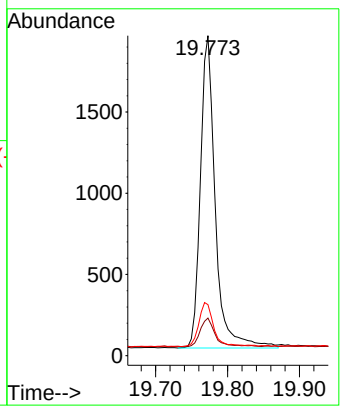


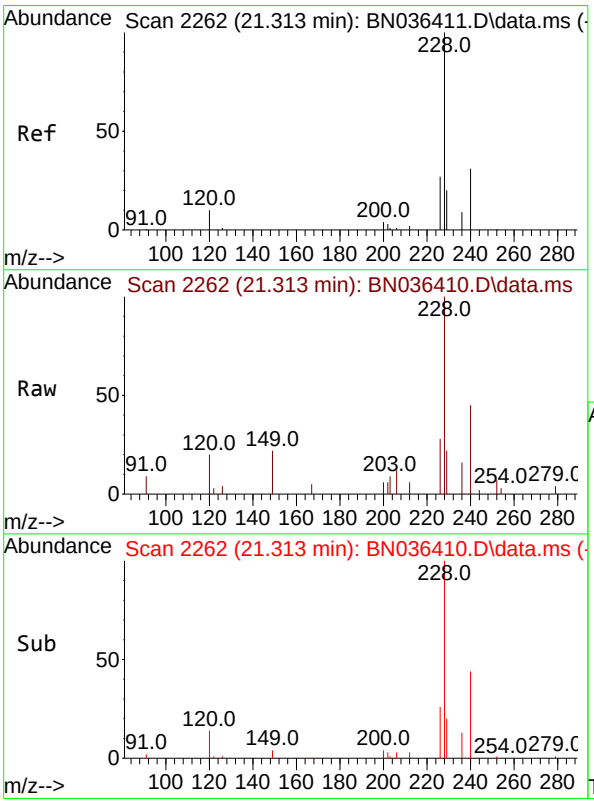
#31
Terphenyl-d14
Concen: 0.204 ng
RT: 19.773 min Scan# 2
Delta R.T. 0.005 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:244 Resp: 2765

Ion	Ratio	Lower	Upper
244	100		
212	11.8	8.1	12.1
122	15.9	12.8	19.2

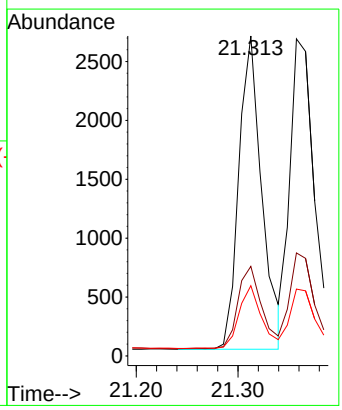


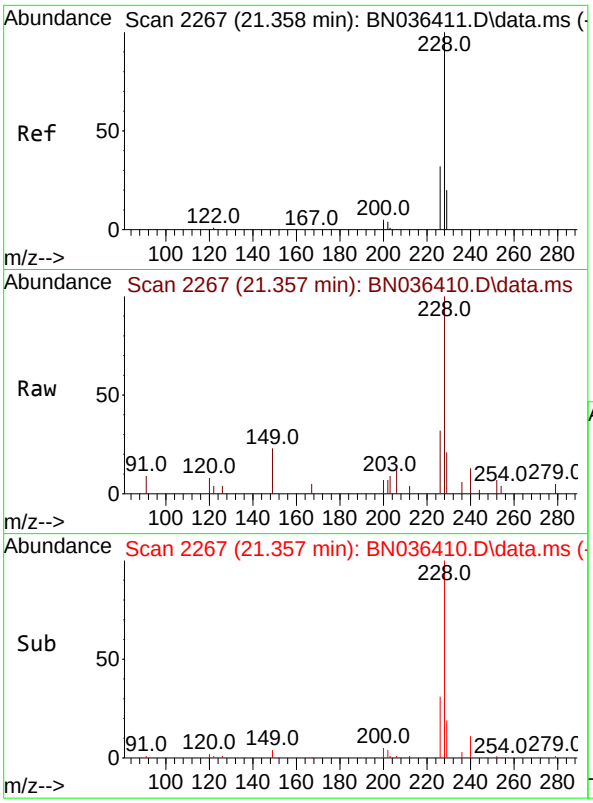


#32
Benzo(a)anthracene
Concen: 0.180 ng
RT: 21.313 min Scan# 2262
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:228 Resp: 4166

Ion	Ratio	Lower	Upper
228	100		
226	28.0	22.2	33.2
229	21.9	16.5	24.7



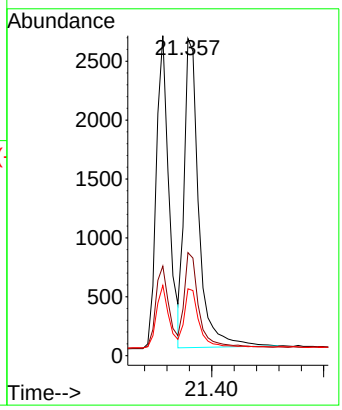


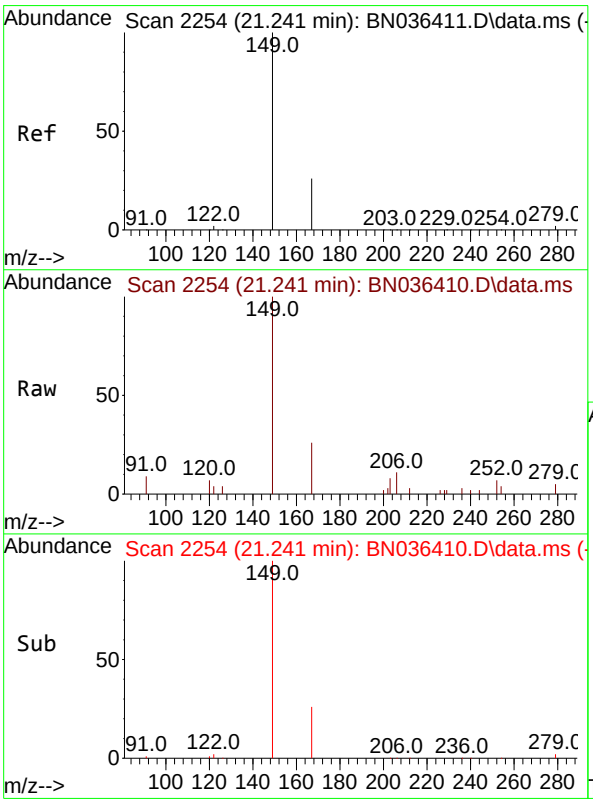
#33
Chrysene
Concen: 0.200 ng
RT: 21.357 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:228 Resp: 4754

Ion	Ratio	Lower	Upper
228	100		
226	32.5	25.5	38.3
229	21.1	16.4	24.6

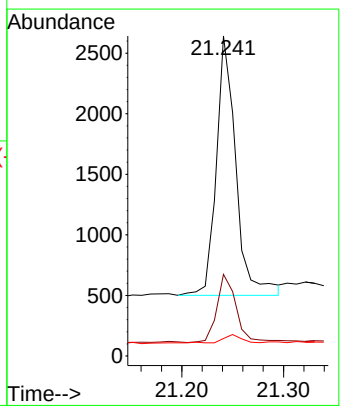


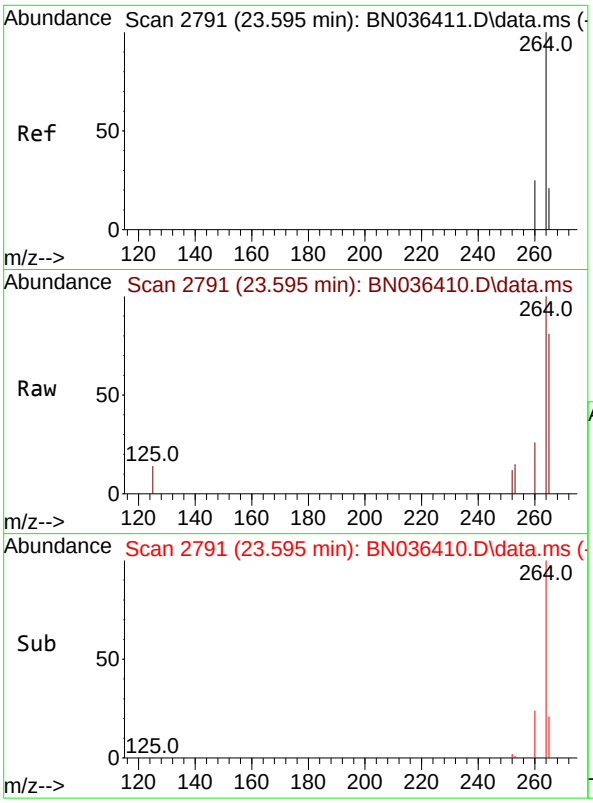


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.221 ng
RT: 21.241 min Scan# 2254
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:149 Resp: 2858

Ion	Ratio	Lower	Upper
149	100		
167	26.6	21.2	31.8
279	2.9	2.7	4.1



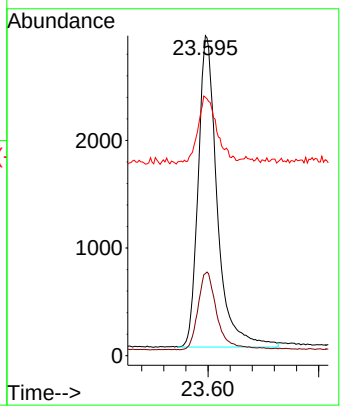


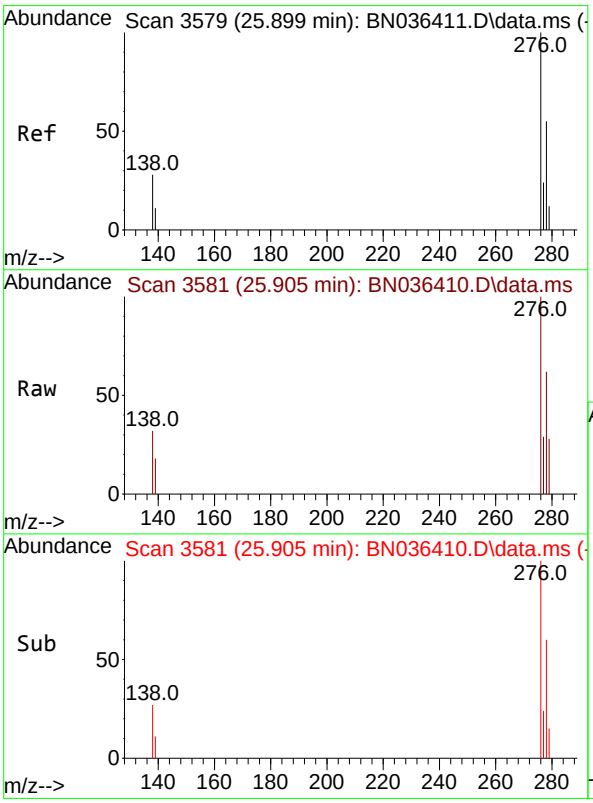
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.595 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:264 Resp: 6918

Ion	Ratio	Lower	Upper
264	100		
260	25.7	20.9	31.3
265	80.8	60.7	91.1

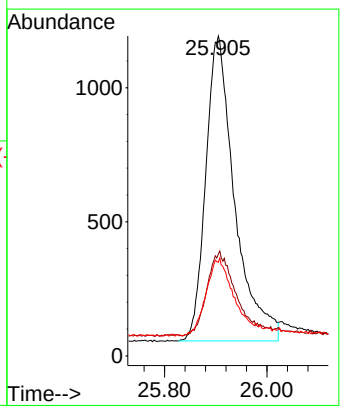


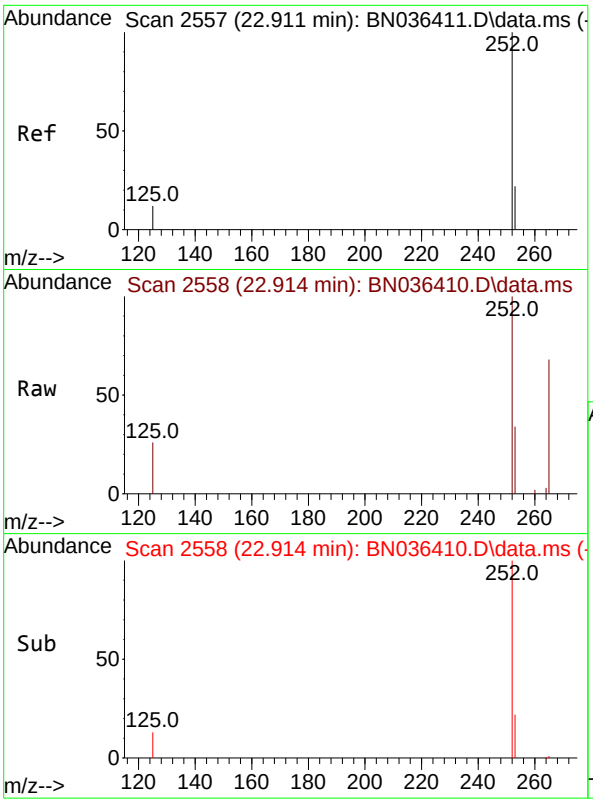


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.164 ng
RT: 25.905 min Scan# 3581
Delta R.T. 0.006 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:276 Resp: 4459

Ion	Ratio	Lower	Upper
276	100		
138	28.4	22.2	33.2
277	25.1	19.8	29.6



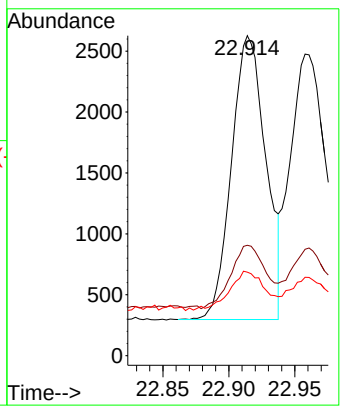


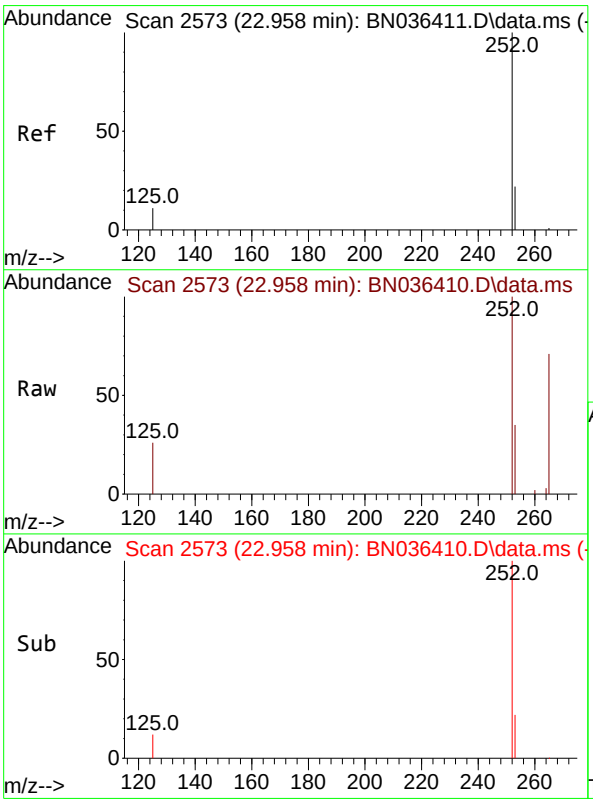
#37
Benzo(b)fluoranthene
Concen: 0.172 ng
RT: 22.914 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 4220

Ion	Ratio	Lower	Upper
252	100		
253	34.5	21.9	32.9#
125	26.1	15.0	22.6#

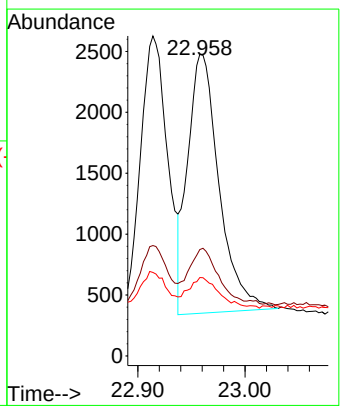


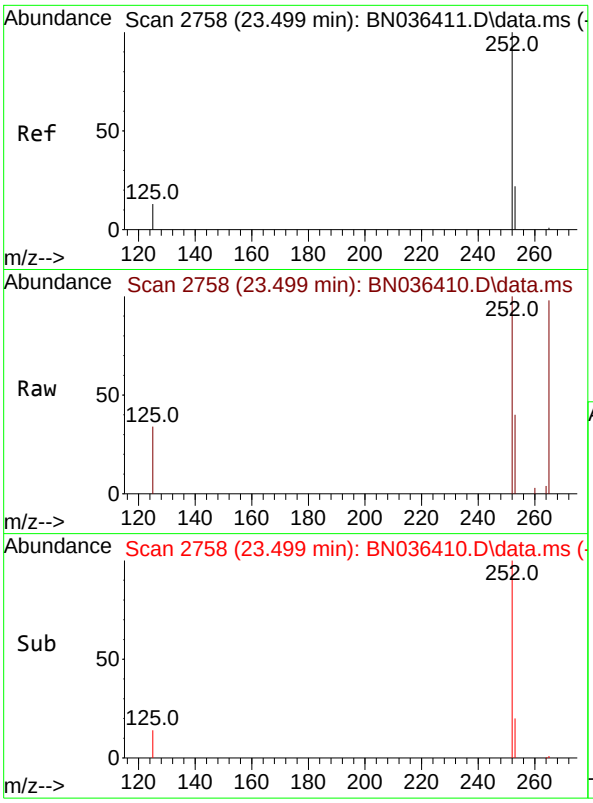


#38
Benzo(k)fluoranthene
Concen: 0.173 ng
RT: 22.958 min Scan# 2573
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:252 Resp: 4335

Ion	Ratio	Lower	Upper
252	100		
253	35.3	22.2	33.4#
125	26.0	15.0	22.4#



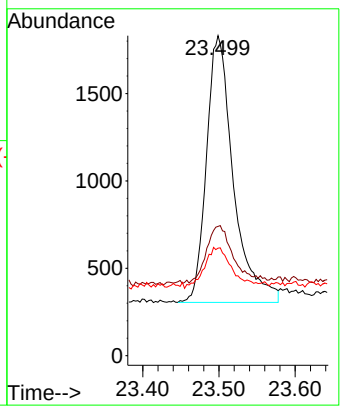


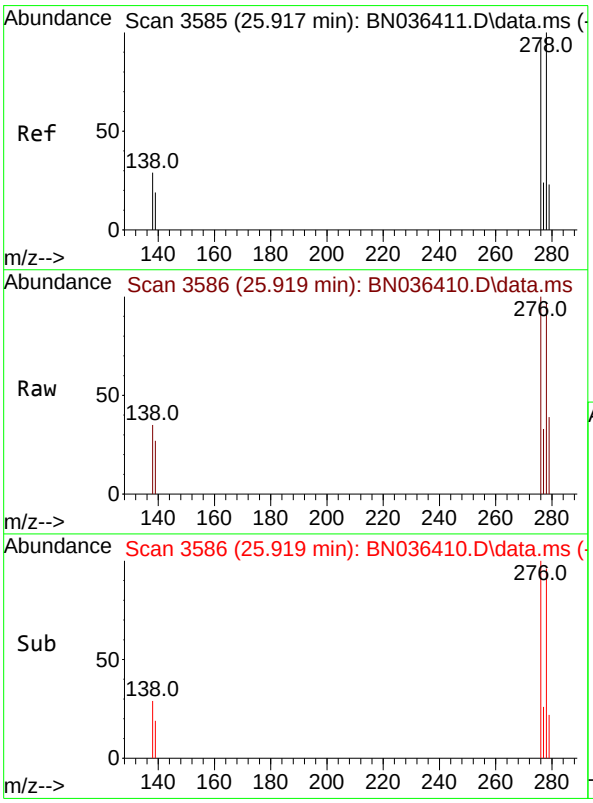
#39
Benzo(a)pyrene
Concen: 0.177 ng
RT: 23.499 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 3740

Ion	Ratio	Lower	Upper
252	100		
253	40.4	24.4	36.6#
125	33.6	18.2	27.2#

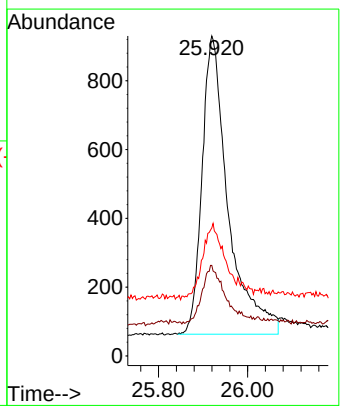


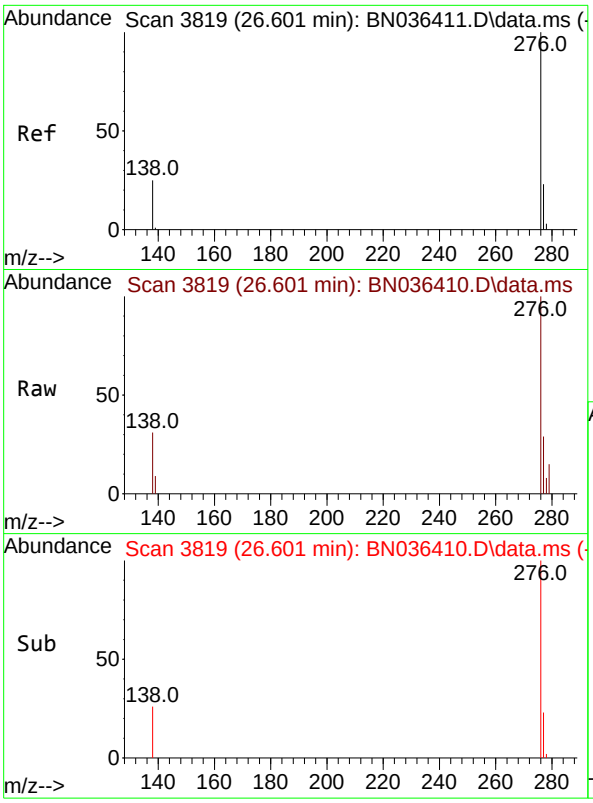


#40
Dibenzo(a,h)anthracene
Concen: 0.164 ng
RT: 25.919 min Scan# 3586
Delta R.T. 0.003 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Tgt Ion:278 Resp: 3533

Ion	Ratio	Lower	Upper
278	100		
139	28.3	18.5	27.7#
279	40.0	24.8	37.2#



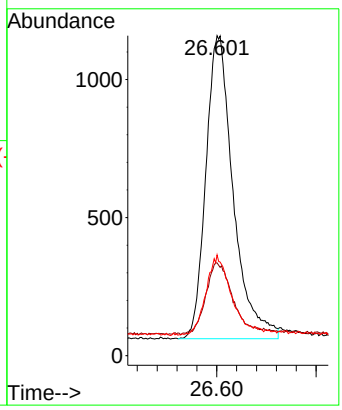


#41
Benzo(g,h,i)perylene
Concen: 0.177 ng
RT: 26.601 min Scan# 3
Delta R.T. -0.000 min
Lab File: BN036410.D
Acq: 10 Feb 2025 13:01

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 4192

Ion	Ratio	Lower	Upper
276	100		
277	29.0	20.7	31.1
138	31.5	21.8	32.6



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036411.D
Acq On : 10 Feb 2025 13:36
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Feb 11 00:35:50 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

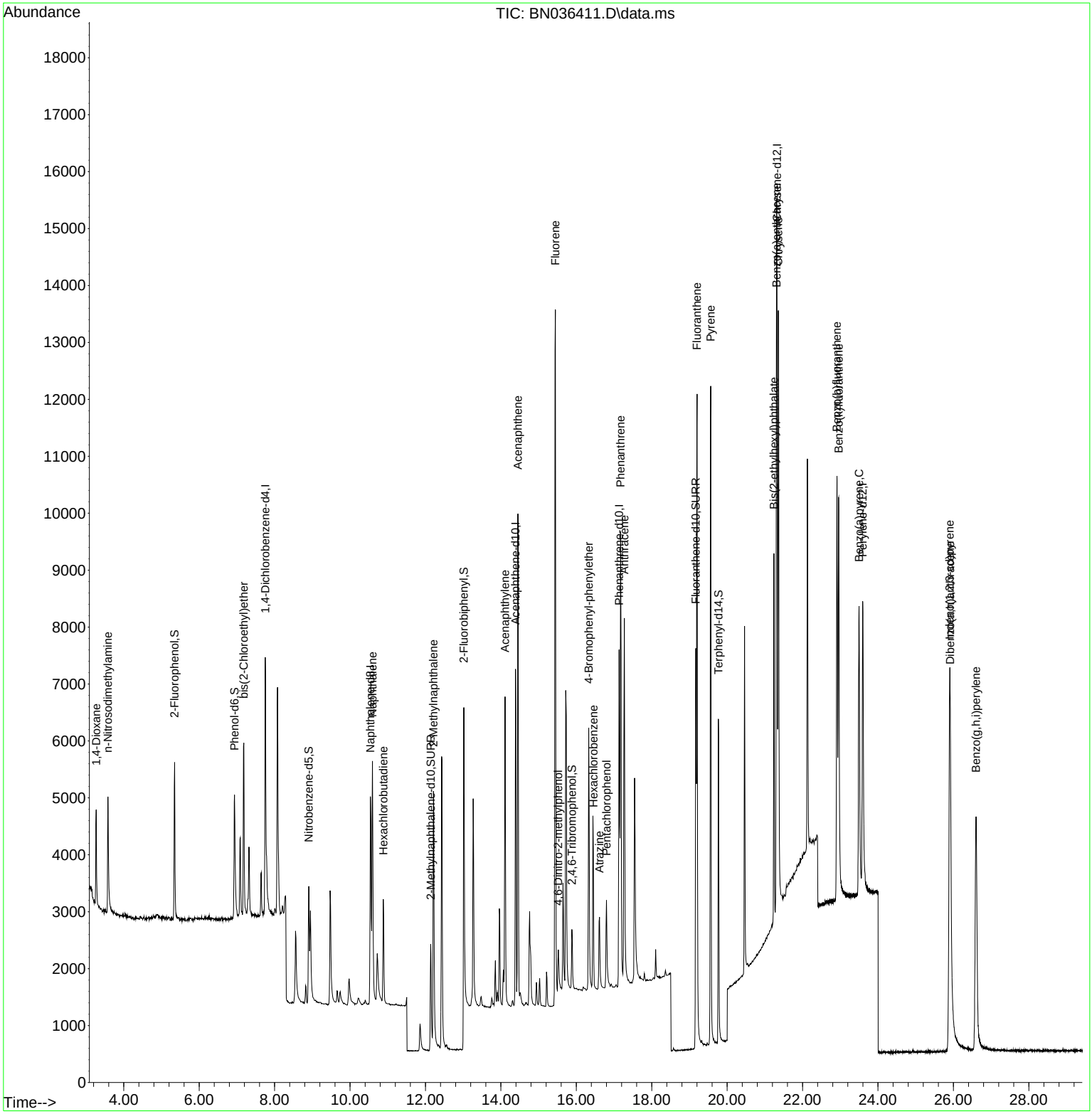
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2219	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	5528	0.400	ng		0.00
13) Acenaphthene-d10	14.388	164	3606	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	8328	0.400	ng		0.00
29) Chrysene-d12	21.322	240	7484	0.400	ng		0.00
35) Perylene-d12	23.595	264	7735	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	2078	0.368	ng		0.00
5) Phenol-d6	6.937	99	2290	0.348	ng		0.00
8) Nitrobenzene-d5	8.907	82	2015	0.391	ng		0.00
11) 2-Methylnaphthalene-d10	12.141	152	3329	0.440	ng		0.00
14) 2,4,6-Tribromophenol	15.882	330	670	0.302	ng		0.00
15) 2-Fluorobiphenyl	13.019	172	4965	0.323	ng		0.00
27) Fluoranthene-d10	19.169	212	8851	0.413	ng		0.00
31) Terphenyl-d14	19.768	244	6378	0.412	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	961	0.392	ng		99
3) n-Nitrosodimethylamine	3.579	42	1695	0.385	ng		100
6) bis(2-Chloroethyl)ether	7.183	93	2410	0.440	ng		100
9) Naphthalene	10.594	128	6168	0.391	ng		100
10) Hexachlorobutadiene	10.883	225	1567	0.317	ng	#	100
12) 2-Methylnaphthalene	12.212	142	4078	0.411	ng		100
16) Acenaphthylene	14.110	152	6103	0.366	ng		100
17) Acenaphthene	14.452	154	4132	0.362	ng		100
18) Fluorene	15.446	166	5991	0.407	ng		99
20) 4,6-Dinitro-2-methylph...	15.523	198	572	0.307	ng		100
21) 4-Bromophenyl-phenylether	16.329	248	1920	0.337	ng		100
22) Hexachlorobenzene	16.453	284	2369	0.318	ng		100
23) Atrazine	16.615	200	1560	0.372	ng		100
24) Pentachlorophenol	16.801	266	1018	0.313	ng		99
25) Phenanthrene	17.173	178	9119	0.374	ng		100
26) Anthracene	17.273	178	8056	0.363	ng		100
28) Fluoranthene	19.201	202	11264	0.389	ng		100
30) Pyrene	19.564	202	11479	0.384	ng		100
32) Benzo(a)anthracene	21.313	228	9677	0.364	ng		100
33) Chrysene	21.358	228	10178	0.373	ng		100
34) Bis(2-ethylhexyl)phtha...	21.241	149	5815	0.392	ng		100
36) Indeno(1,2,3-cd)pyrene	25.899	276	10661	0.351	ng		100
37) Benzo(b)fluoranthene	22.911	252	9743	0.355	ng		100
38) Benzo(k)fluoranthene	22.958	252	10543	0.377	ng		100
39) Benzo(a)pyrene	23.499	252	8521	0.362	ng		100
40) Dibenzo(a,h)anthracene	25.917	278	8314	0.344	ng		100
41) Benzo(g,h,i)perylene	26.601	276	9701	0.366	ng		100

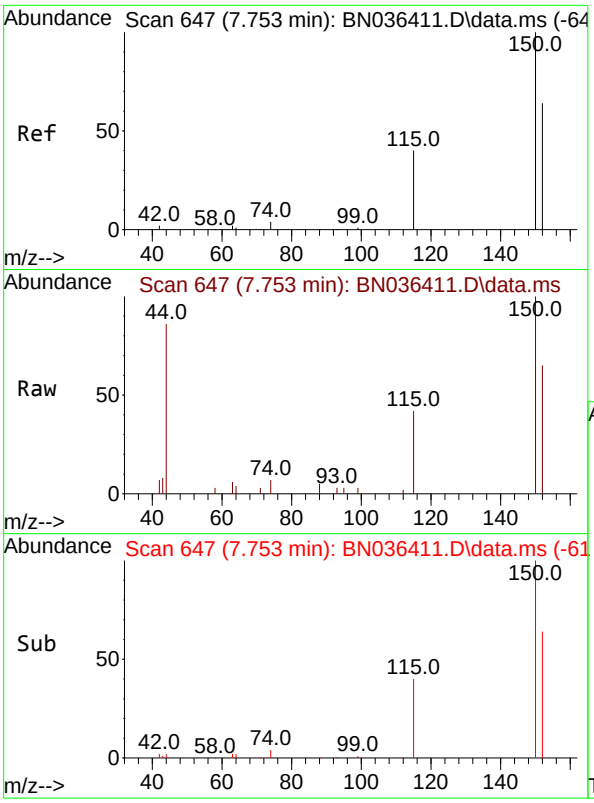
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036411.D
Acq On : 10 Feb 2025 13:36
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Feb 11 00:35:50 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



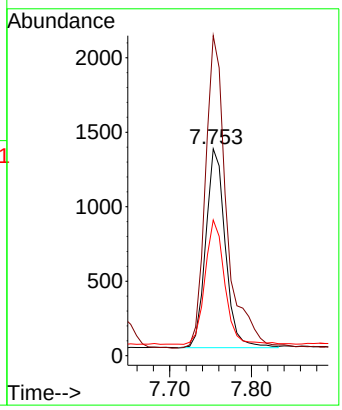


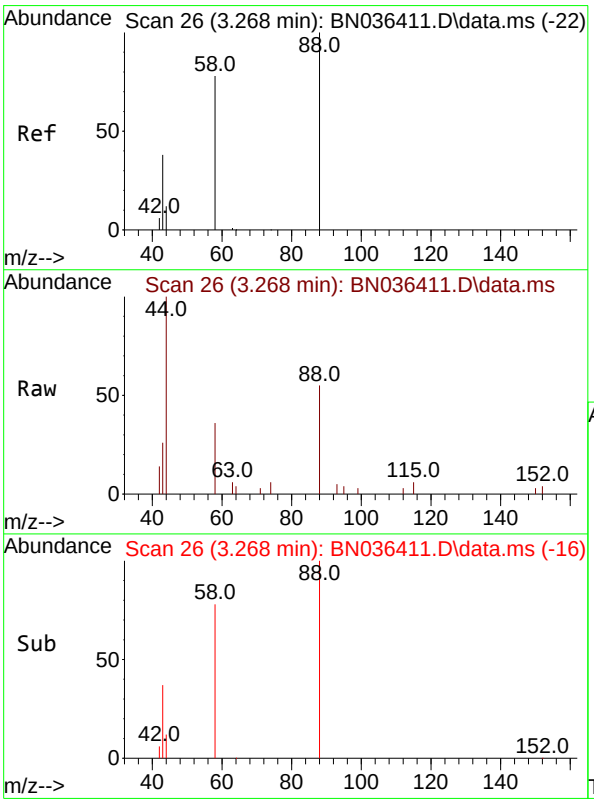
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 2219

Ion	Ratio	Lower	Upper
152	100		
150	154.6	123.7	185.5
115	65.6	52.5	78.7

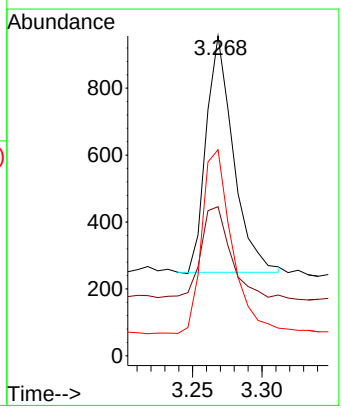


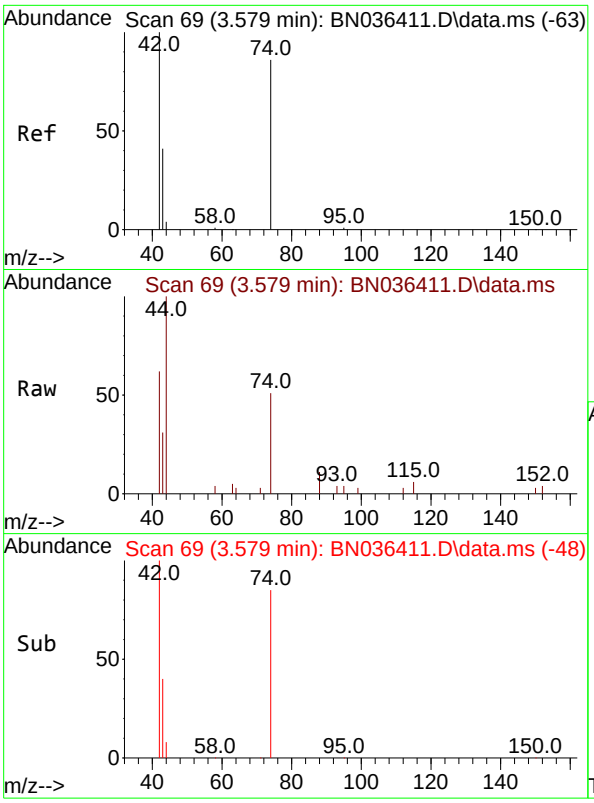


#2
1,4-Dioxane
Concen: 0.392 ng
RT: 3.268 min Scan# 26
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion: 88 Resp: 961

Ion	Ratio	Lower	Upper
88	100		
43	41.4	33.7	50.5
58	87.1	68.9	103.3



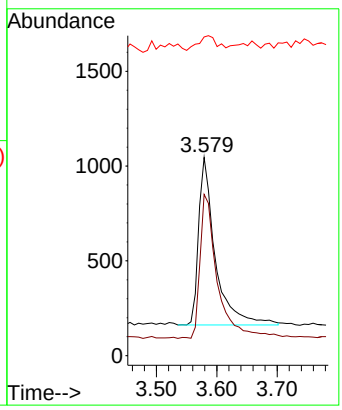


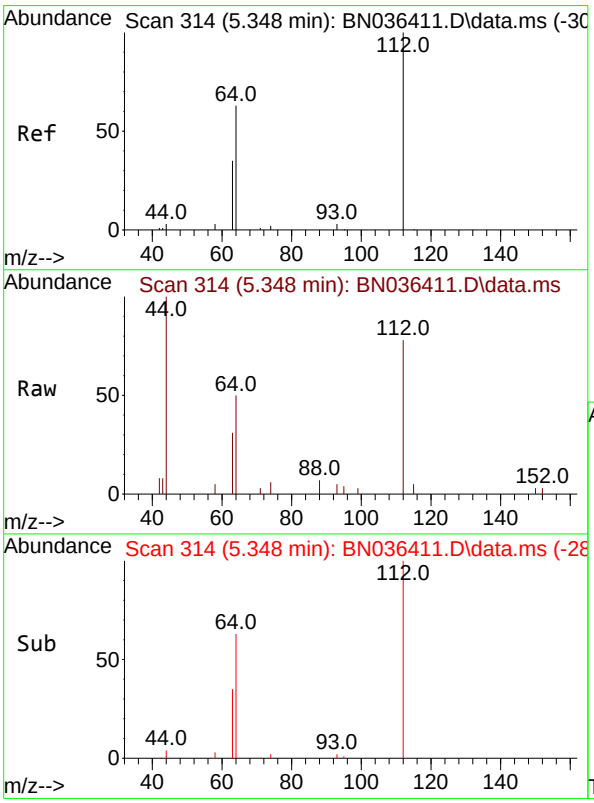
#3
n-Nitrosodimethylamine
Concen: 0.385 ng
RT: 3.579 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 42 Resp: 1695

Ion	Ratio	Lower	Upper
42	100		
74	89.7	71.8	107.6
44	9.7	7.8	11.6

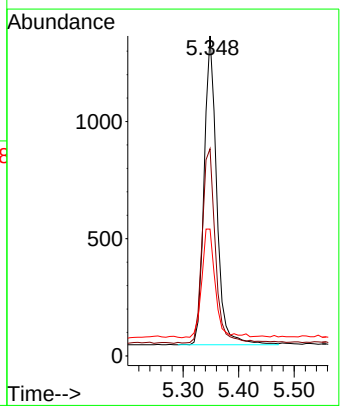


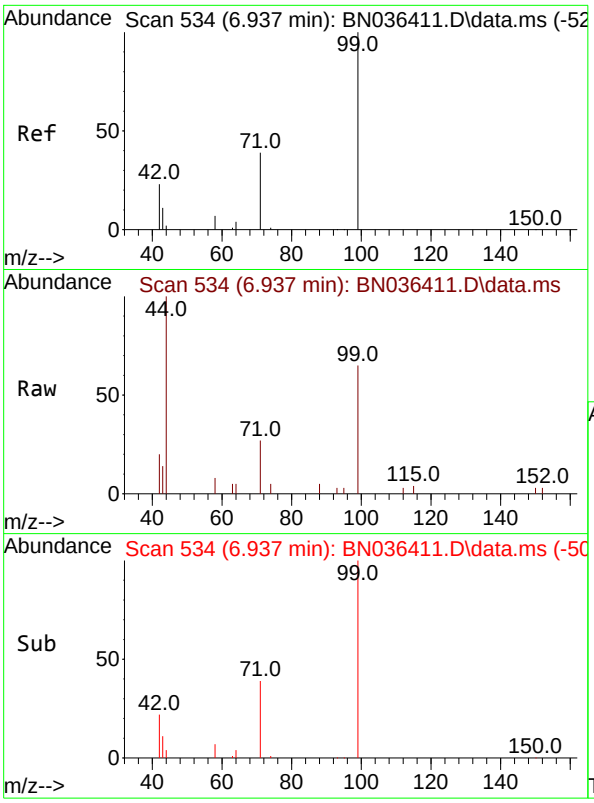


#4
2-Fluorophenol
Concen: 0.368 ng
RT: 5.348 min Scan# 314
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:112 Resp: 2078

Ion	Ratio	Lower	Upper
112	100		
64	66.7	53.4	80.0
63	37.9	30.3	45.5



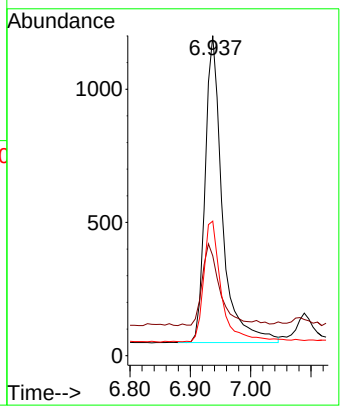


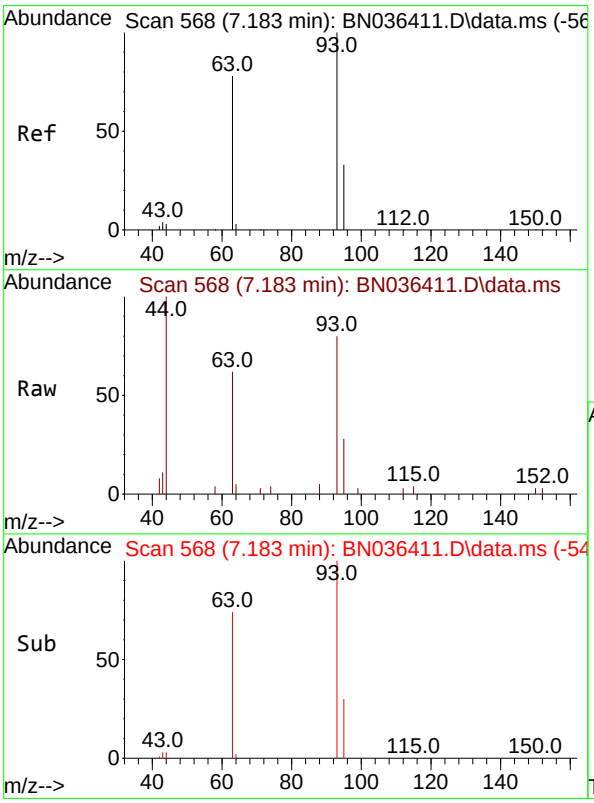
#5
Phenol-d6
Concen: 0.348 ng
RT: 6.937 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 99 Resp: 2290

Ion	Ratio	Lower	Upper
99	100		
42	27.1	21.7	32.5
71	40.8	32.6	49.0

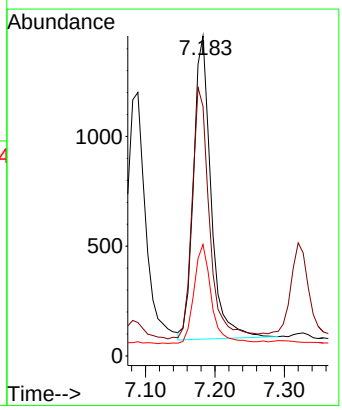


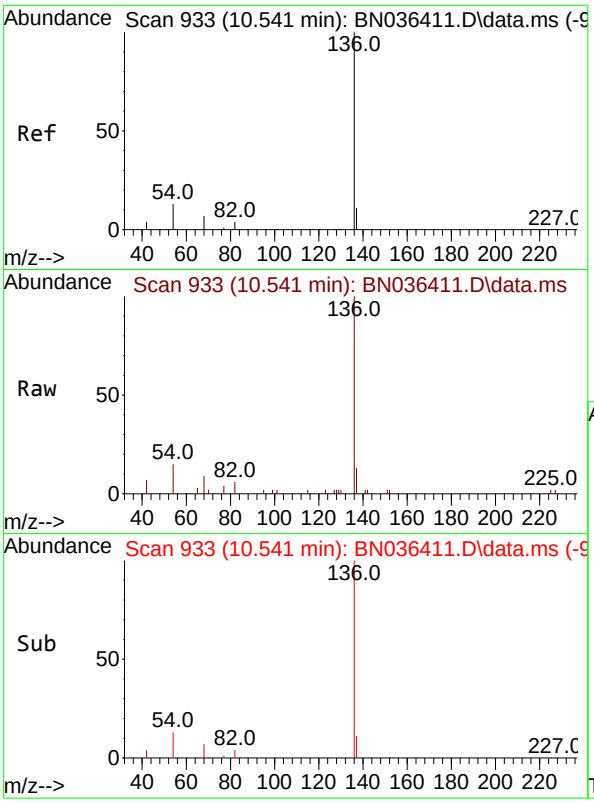


#6
bis(2-Chloroethyl)ether
Concen: 0.440 ng
RT: 7.183 min Scan# 568
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion: 93 Resp: 2410

Ion	Ratio	Lower	Upper
93	100		
63	82.9	66.3	99.5
95	32.8	26.2	39.4



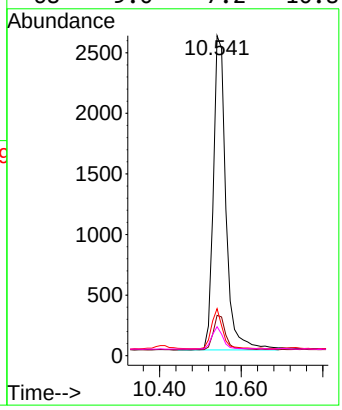


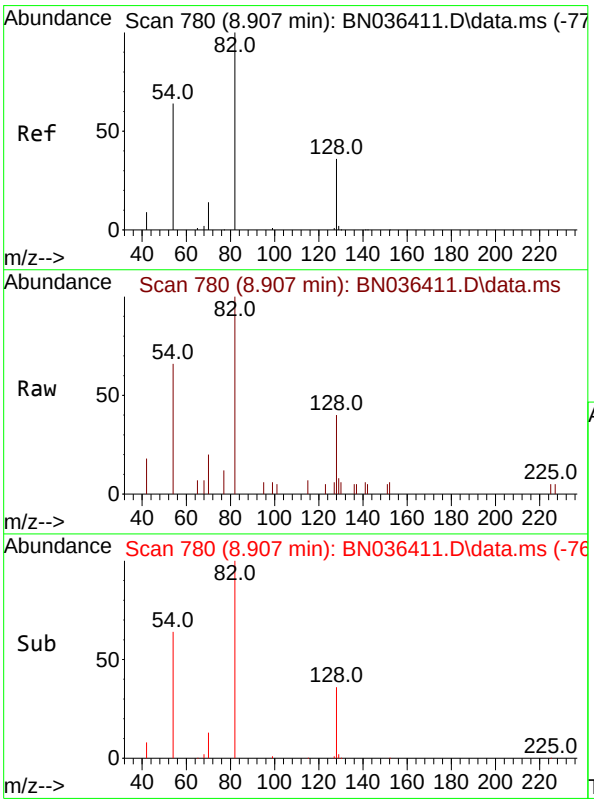
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:136 Resp: 5528

Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.1	15.1
54	14.7	11.8	17.6
68	9.0	7.2	10.8

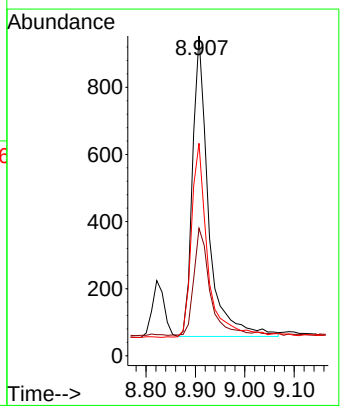


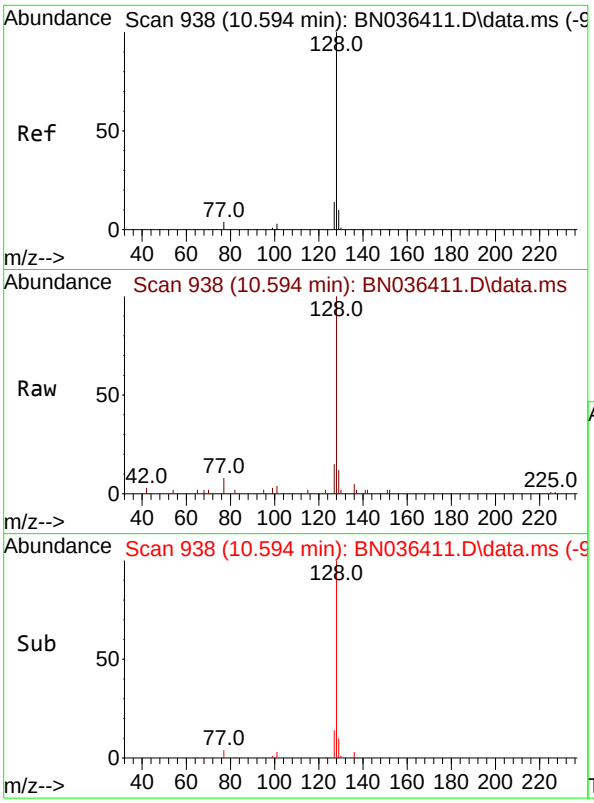


#8
Nitrobenzene-d5
Concen: 0.391 ng
RT: 8.907 min Scan# 780
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion: 82 Resp: 2015

Ion	Ratio	Lower	Upper
82	100		
128	39.9	31.9	47.9
54	66.4	53.1	79.7



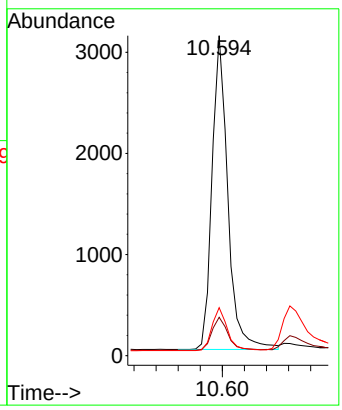


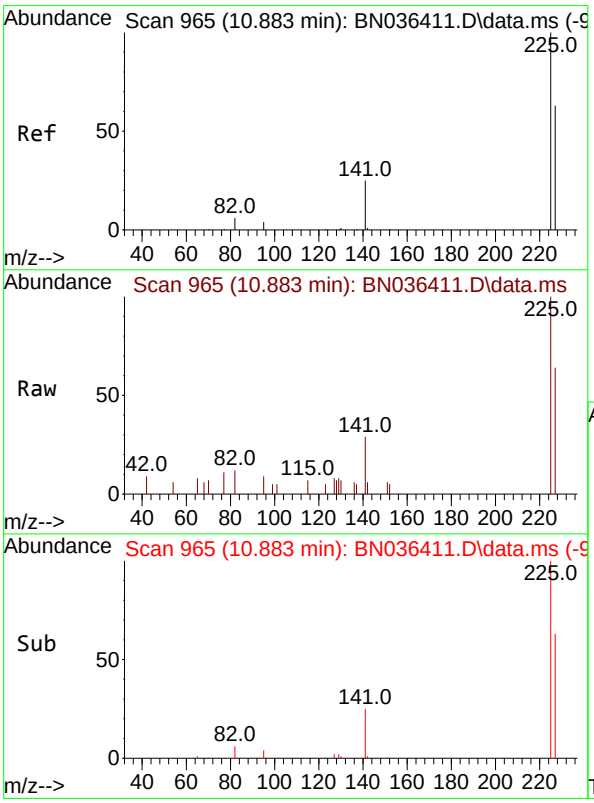
#9
Naphthalene
Concen: 0.391 ng
RT: 10.594 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:128 Resp: 6168

Ion	Ratio	Lower	Upper
128	100		
129	12.0	9.6	14.4
127	15.0	12.0	18.0

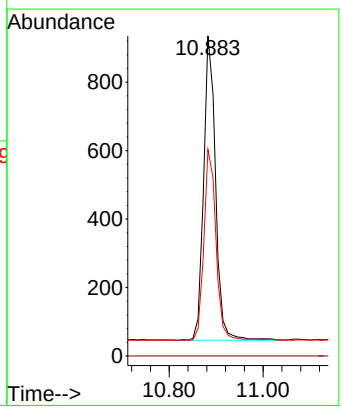


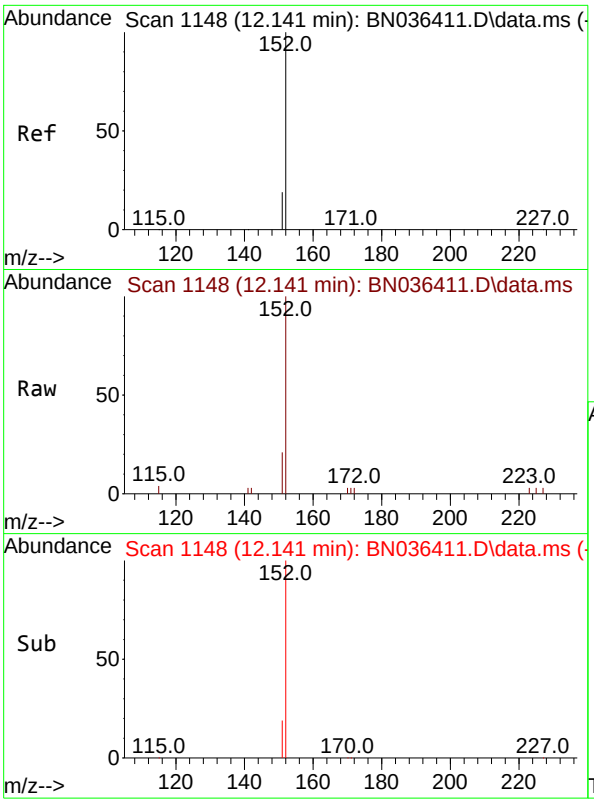


#10
Hexachlorobutadiene
Concen: 0.317 ng
RT: 10.883 min Scan# 965
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:225 Resp: 1567

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	50.9	76.3



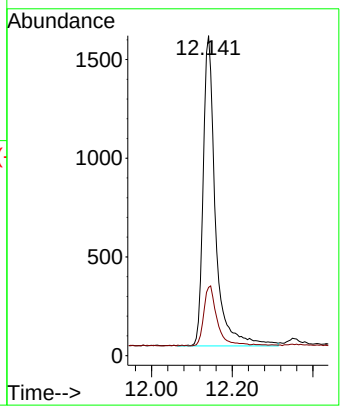


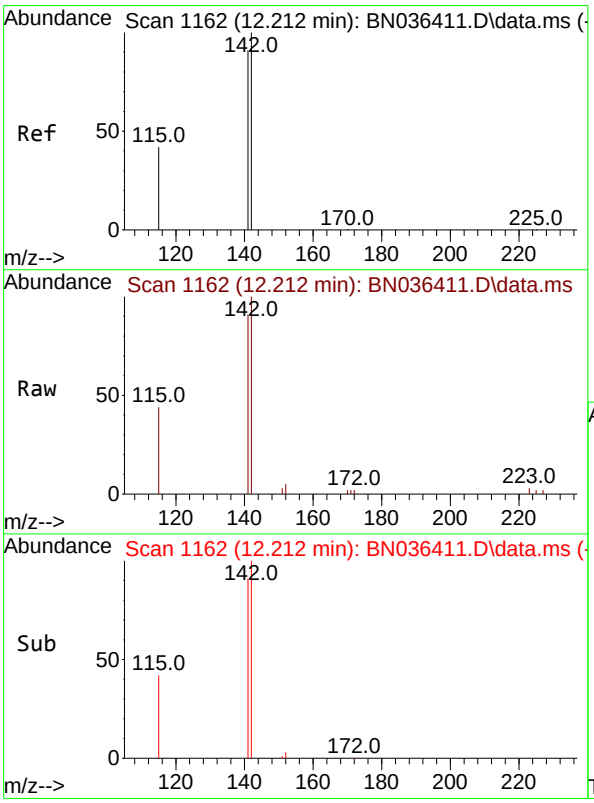
#11
2-Methylnaphthalene-d10
Concen: 0.440 ng
RT: 12.141 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 3329

Ion	Ratio	Lower	Upper
152	100		
151	20.8	16.6	25.0

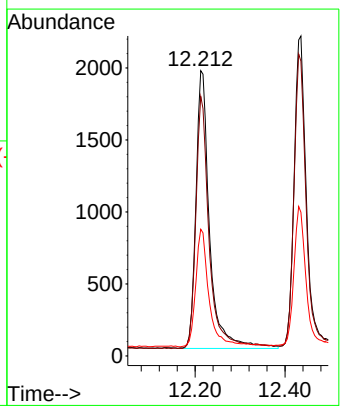


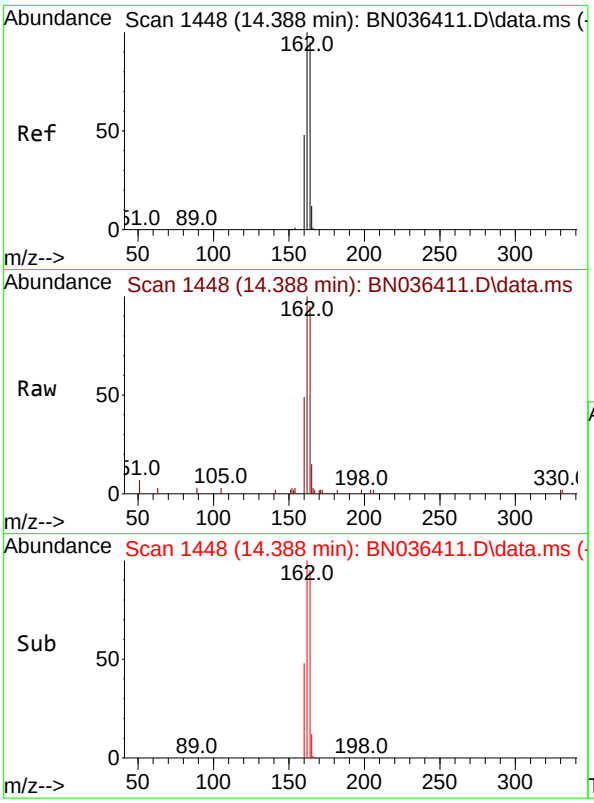


#12
2-Methylnaphthalene
Concen: 0.411 ng
RT: 12.212 min Scan# 1162
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:142 Resp: 4078

Ion	Ratio	Lower	Upper
142	100		
141	91.0	72.8	109.2
115	44.4	35.5	53.3



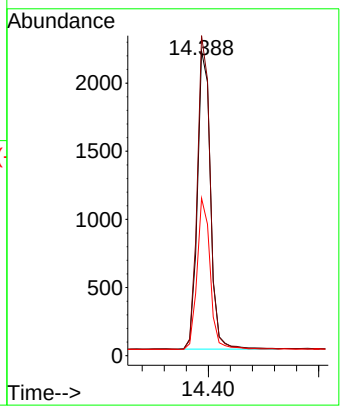


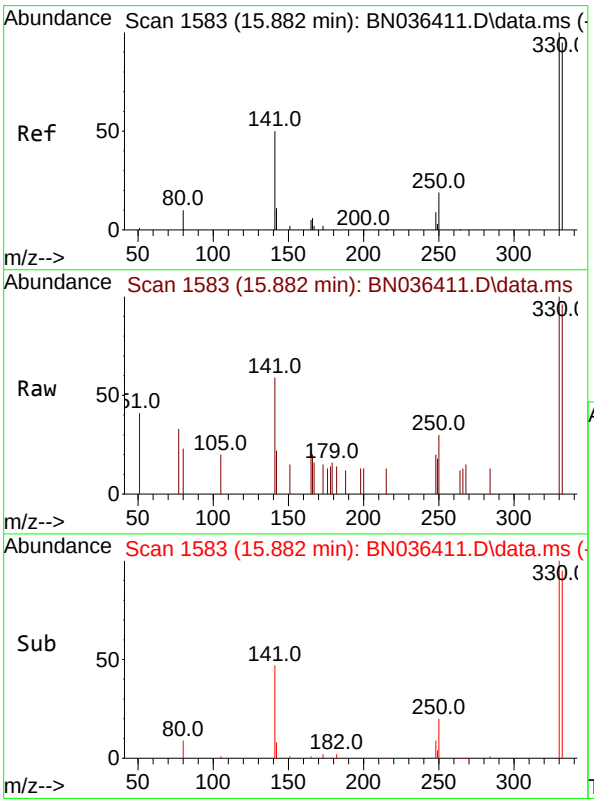
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:164 Resp: 3606

Ion	Ratio	Lower	Upper
164	100		
162	105.1	84.1	126.1
160	51.7	41.4	62.0

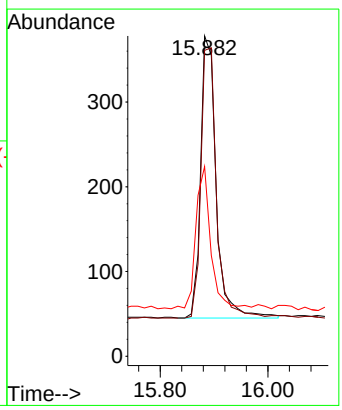


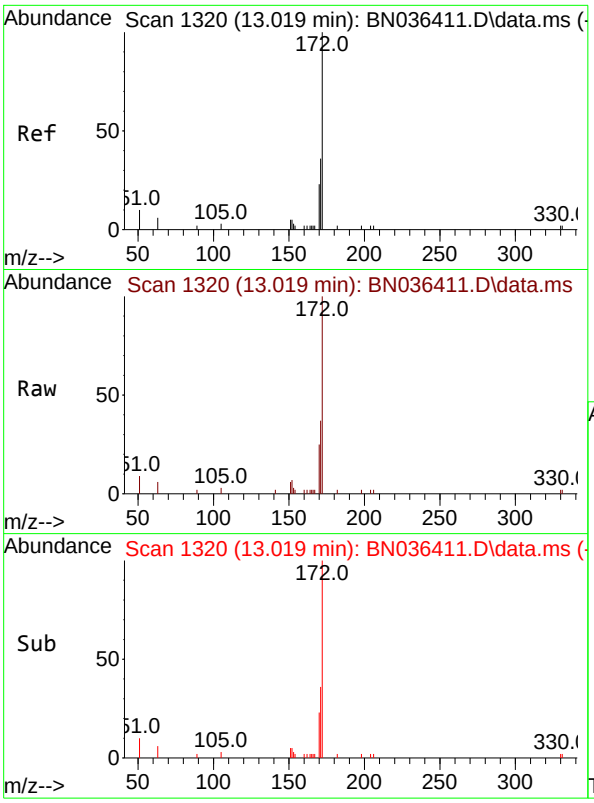


#14
2,4,6-Tribromophenol
Concen: 0.302 ng
RT: 15.882 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:330 Resp: 670

Ion	Ratio	Lower	Upper
330	100		
332	95.7	76.6	114.8
141	47.3	37.8	56.8



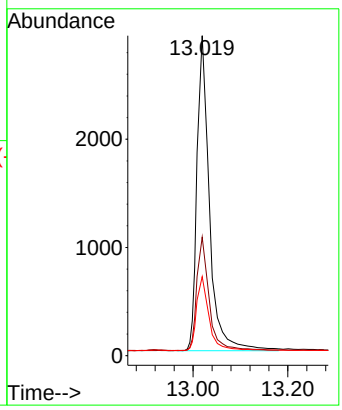


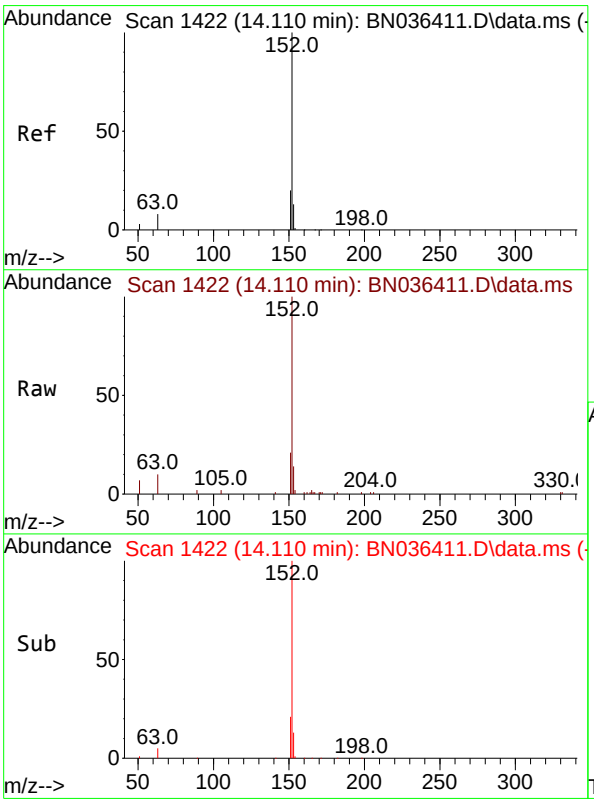
#15
2-Fluorobiphenyl
Concen: 0.323 ng
RT: 13.019 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:172 Resp: 4965

Ion	Ratio	Lower	Upper
172	100		
171	37.0	29.6	44.4
170	24.7	19.8	29.6

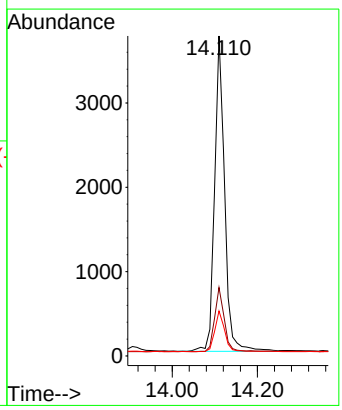


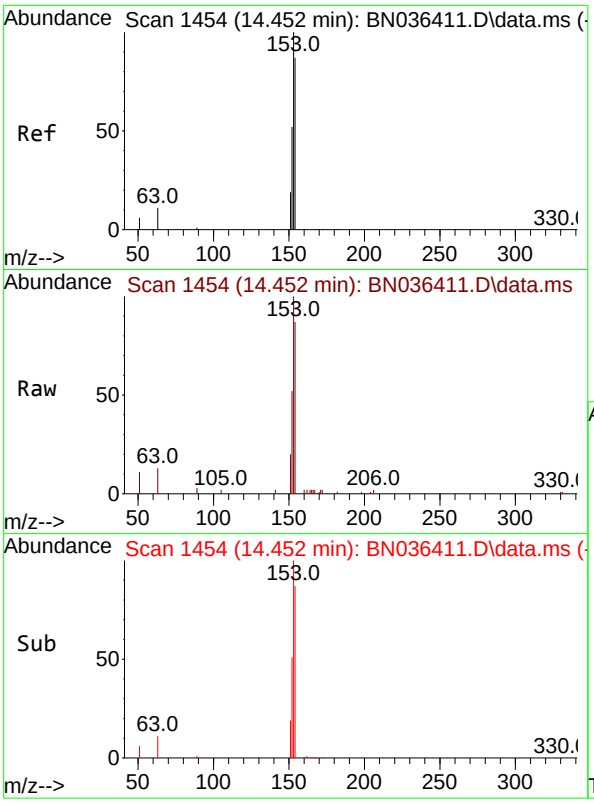


#16
Acenaphthylene
Concen: 0.366 ng
RT: 14.110 min Scan# 1422
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:152 Resp: 6103

Ion	Ratio	Lower	Upper
152	100		
151	19.8	15.8	23.8
153	12.7	10.2	15.2



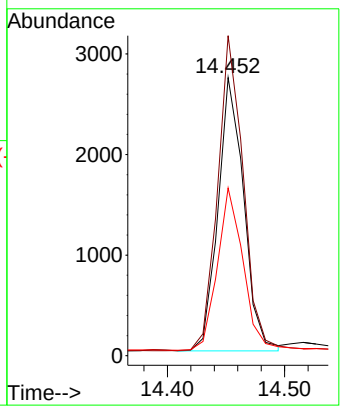


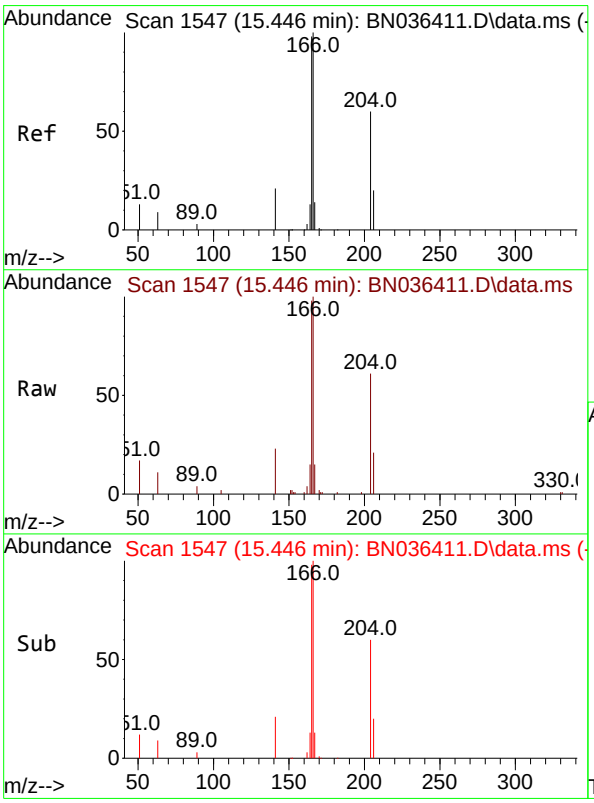
#17
Acenaphthene
Concen: 0.362 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:154 Resp: 4132

Ion	Ratio	Lower	Upper
154	100		
153	116.6	93.3	139.9
152	61.0	48.8	73.2

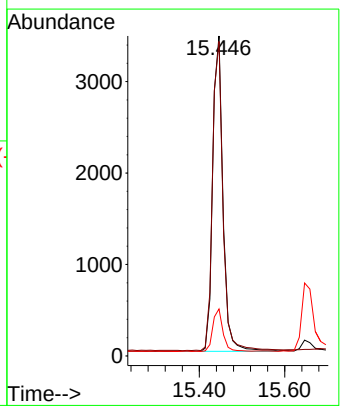


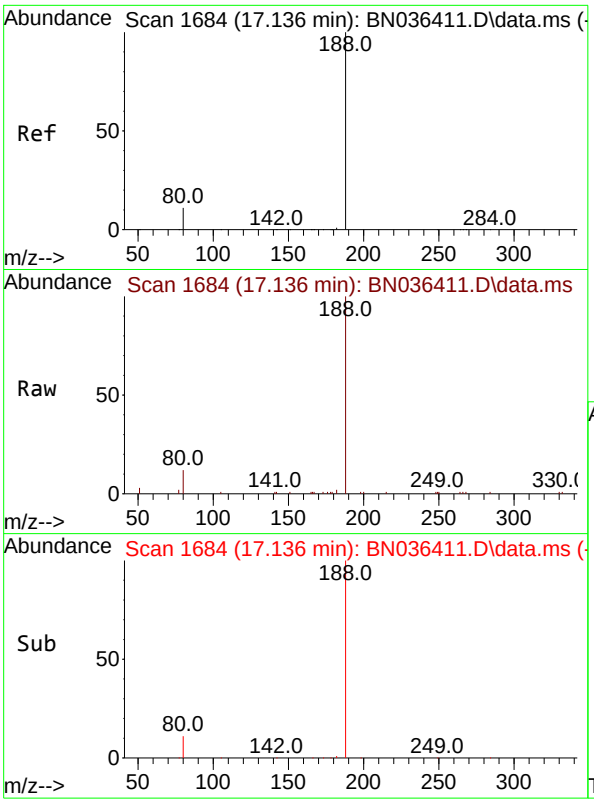


#18
Fluorene
Concen: 0.407 ng
RT: 15.446 min Scan# 1547
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:166 Resp: 5991

Ion	Ratio	Lower	Upper
166	100		
165	100.0	79.5	119.3
167	13.0	10.4	15.6



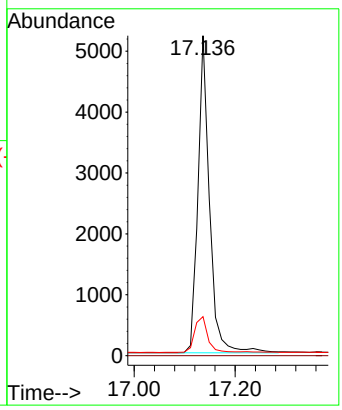


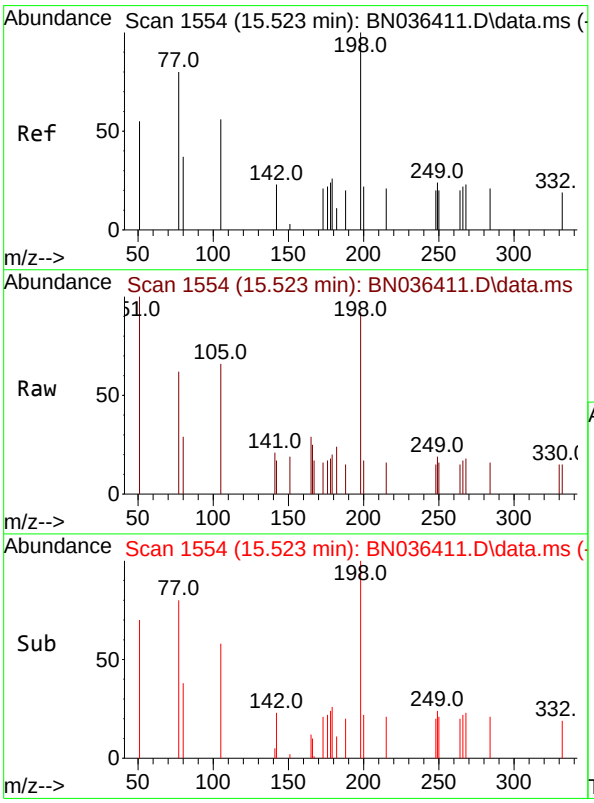
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:188 Resp: 8328

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.2	9.8	14.6

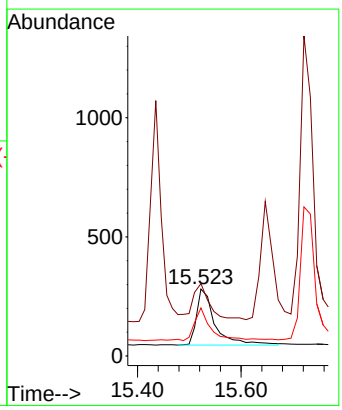


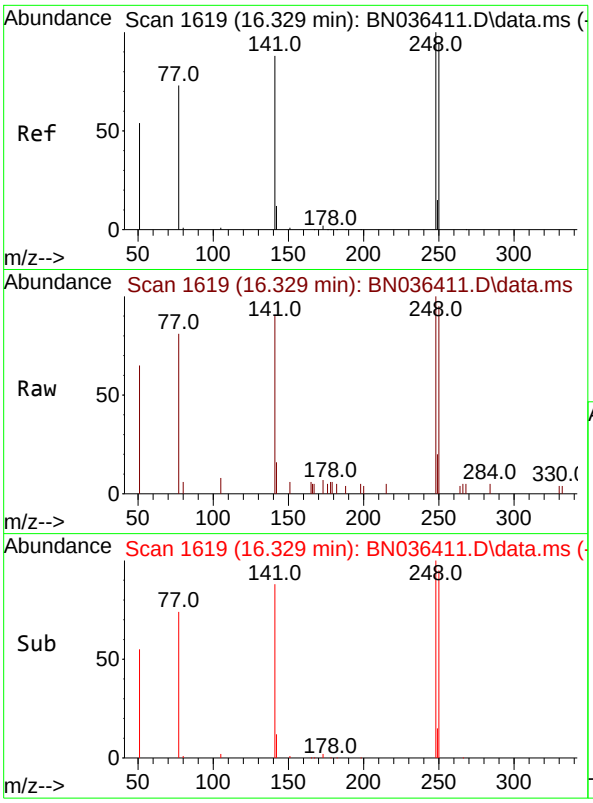


#20
4,6-Dinitro-2-methylphenol
Concen: 0.307 ng
RT: 15.523 min Scan# 1554
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:198 Resp: 572

Ion	Ratio	Lower	Upper
198	100		
51	108.2	86.6	129.8
105	71.9	57.5	86.3



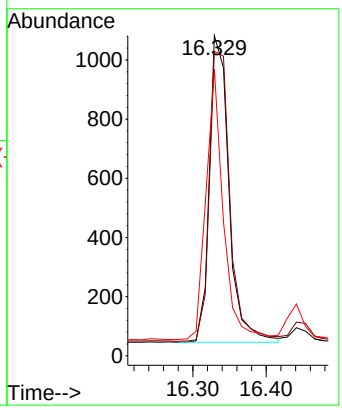


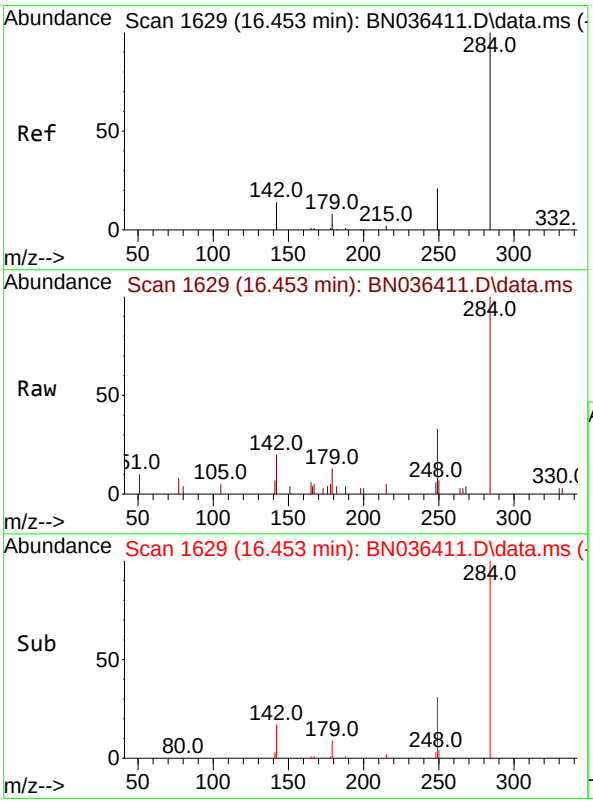
#21
4-Bromophenyl-phenylether
Concen: 0.337 ng
RT: 16.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:248 Resp: 1920

Ion	Ratio	Lower	Upper
248	100		
250	95.1	76.1	114.1
141	89.6	71.7	107.5

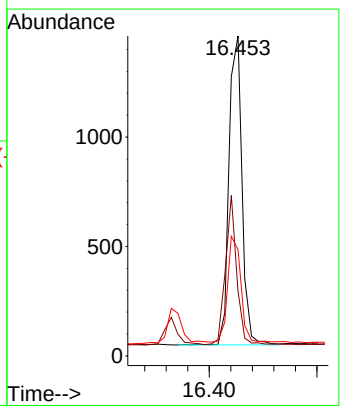


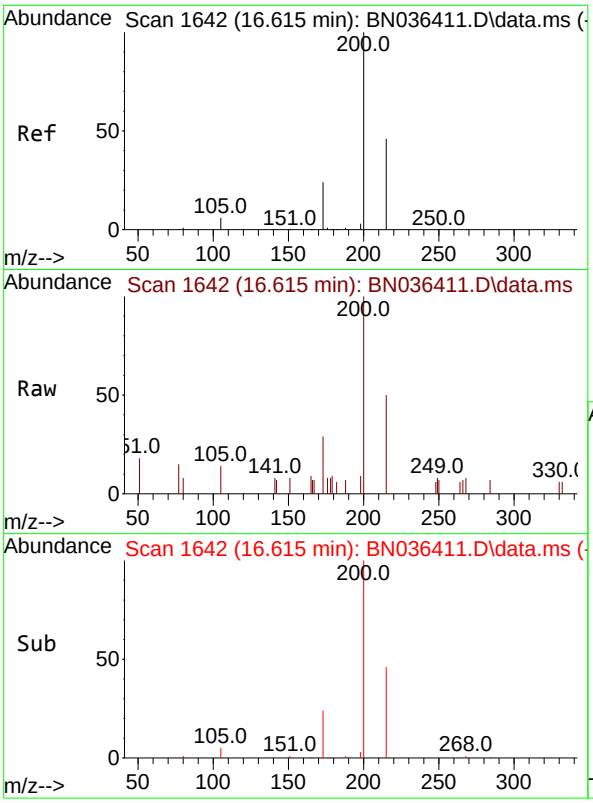


#22
Hexachlorobenzene
Concen: 0.318 ng
RT: 16.453 min Scan# 1629
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:284 Resp: 2369

Ion	Ratio	Lower	Upper
284	100		
142	41.7	33.4	50.0
249	35.4	28.6	43.0



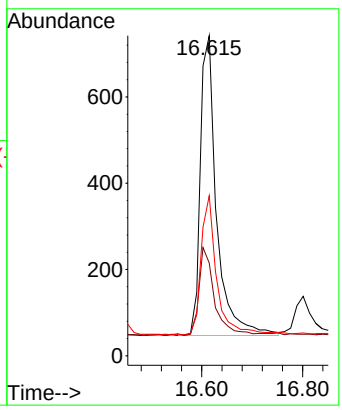


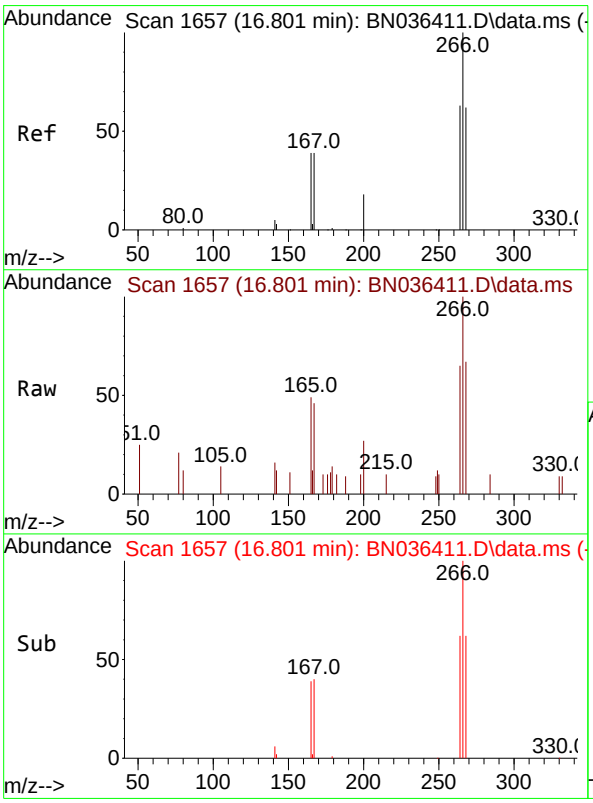
#23
Atrazine
Concen: 0.372 ng
RT: 16.615 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:200 Resp: 1560

Ion	Ratio	Lower	Upper
200	100		
173	29.0	23.2	34.8
215	50.0	40.0	60.0

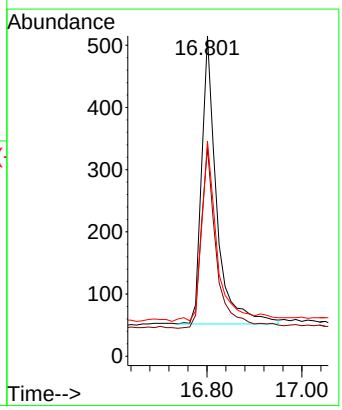


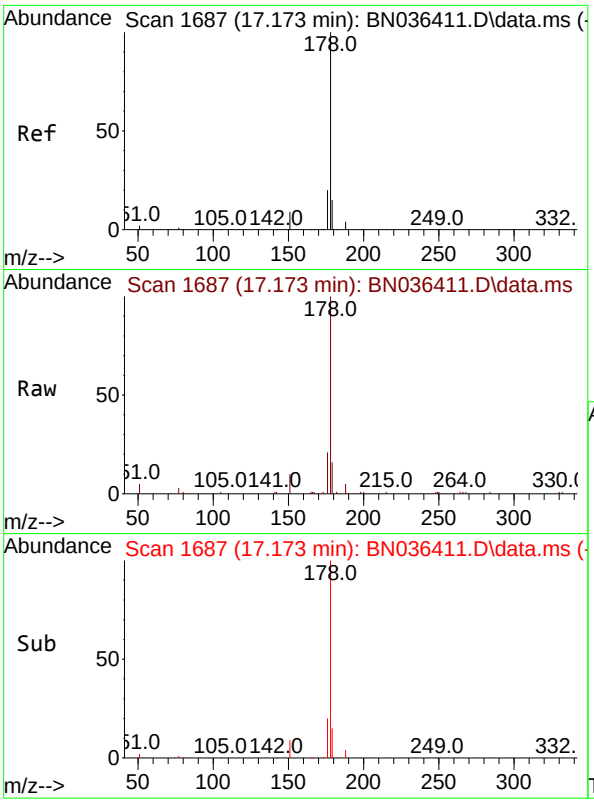


#24
Pentachlorophenol
Concen: 0.313 ng
RT: 16.801 min Scan# 1657
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:266 Resp: 1018

Ion	Ratio	Lower	Upper
266	100		
264	64.0	50.6	76.0
268	65.1	51.9	77.9



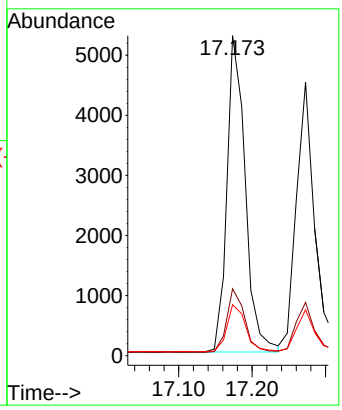


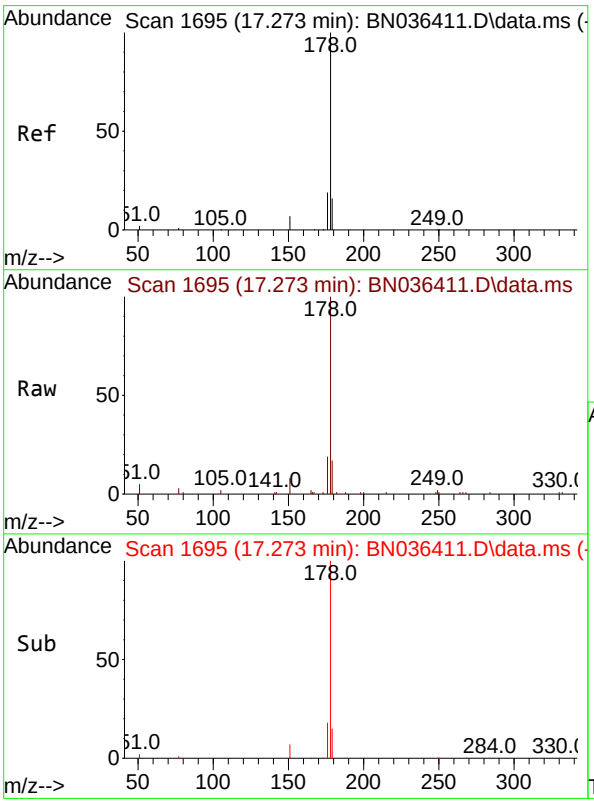
#25
Phenanthrene
Concen: 0.374 ng
RT: 17.173 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:178 Resp: 9119

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.7	23.5
179	15.5	12.4	18.6

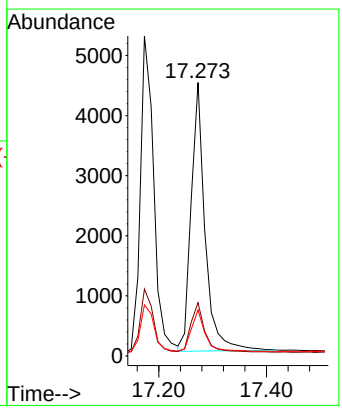


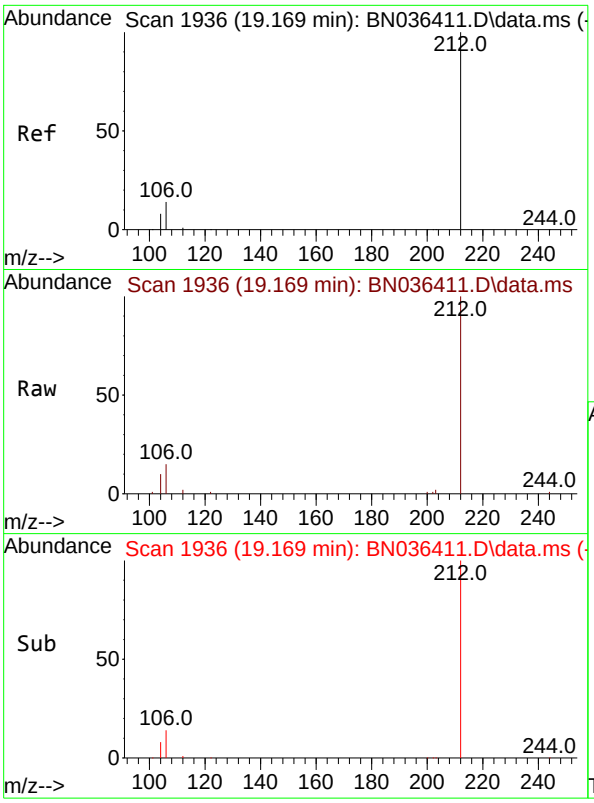


#26
Anthracene
Concen: 0.363 ng
RT: 17.273 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:178 Resp: 8056

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.9	22.3
179	15.3	12.4	18.6



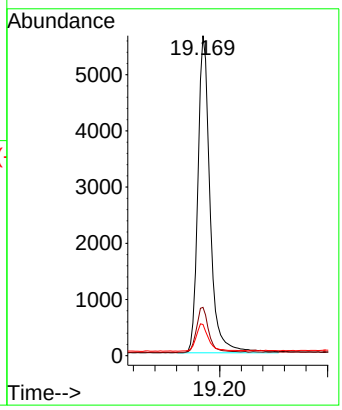


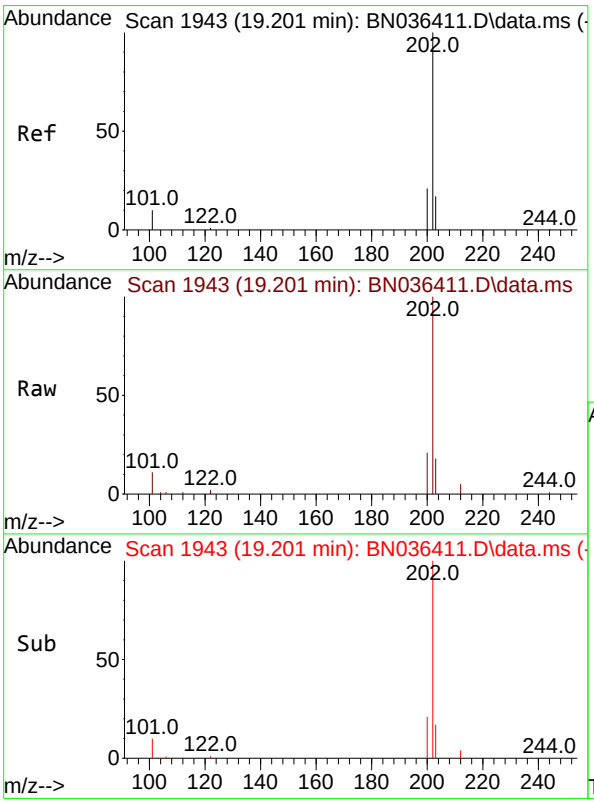
#27
Fluoranthene-d10
Concen: 0.413 ng
RT: 19.169 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:212 Resp: 8851

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.5	17.3
104	8.9	7.1	10.7

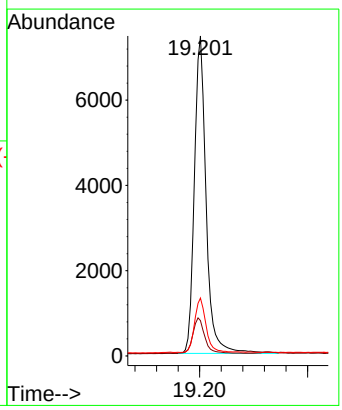


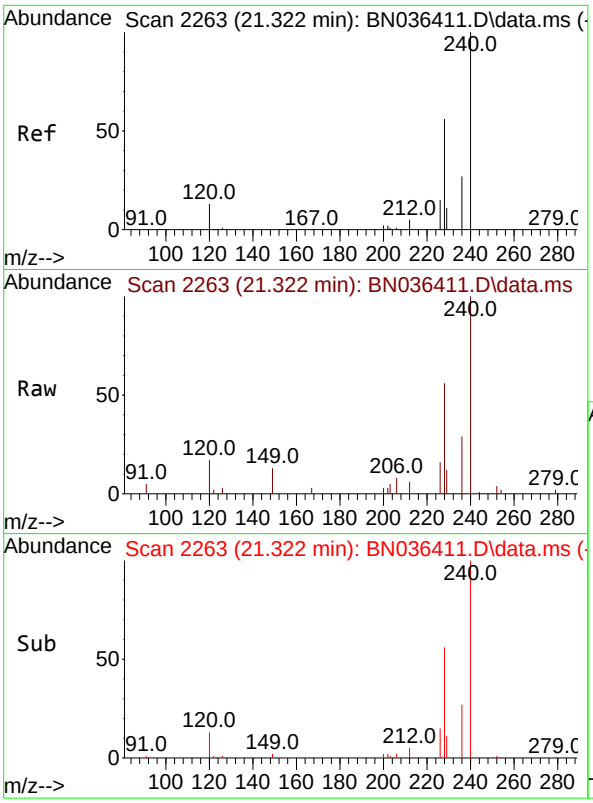


#28
Fluoranthene
Concen: 0.389 ng
RT: 19.201 min Scan# 1943
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:202 Resp: 11264

Ion	Ratio	Lower	Upper
202	100		
101	11.5	9.2	13.8
203	16.7	13.4	20.0



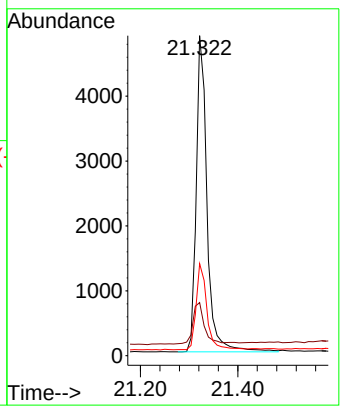


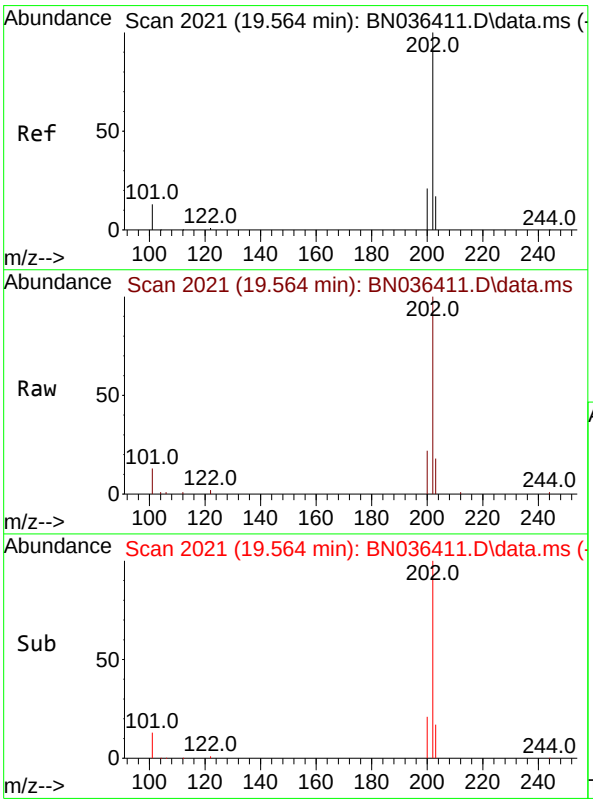
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:240 Resp: 7484

Ion	Ratio	Lower	Upper
240	100		
120	16.6	13.3	19.9
236	28.8	23.0	34.6

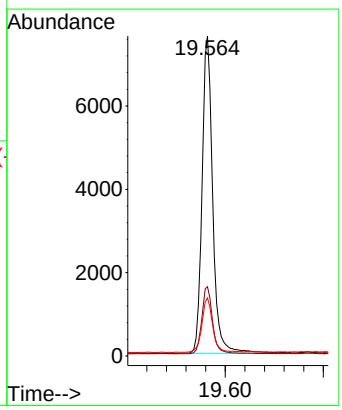


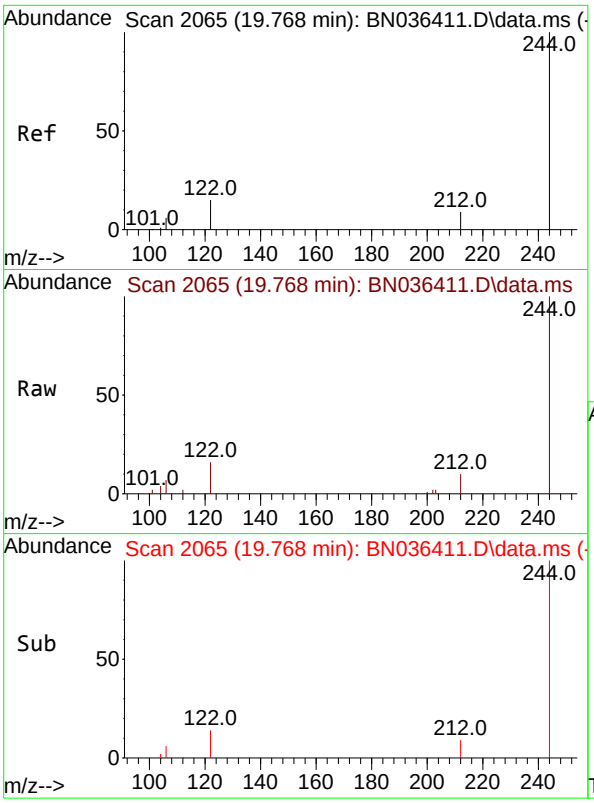


#30
Pyrene
Concen: 0.384 ng
RT: 19.564 min Scan# 2021
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:202 Resp: 11479

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.4	13.9	20.9



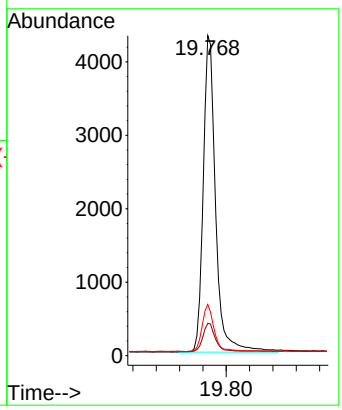


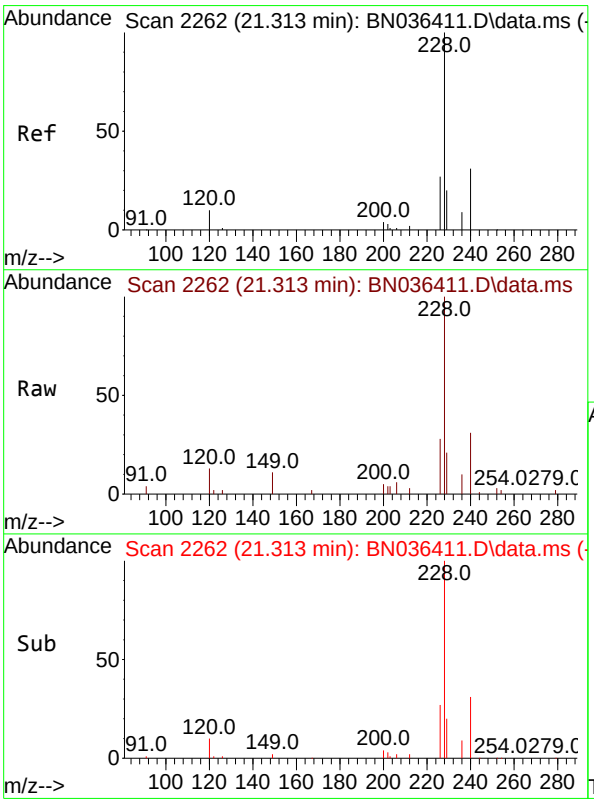
#31
Terphenyl-d14
Concen: 0.412 ng
RT: 19.768 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:244 Resp: 6378

Ion	Ratio	Lower	Upper
244	100		
212	10.1	8.1	12.1
122	16.0	12.8	19.2

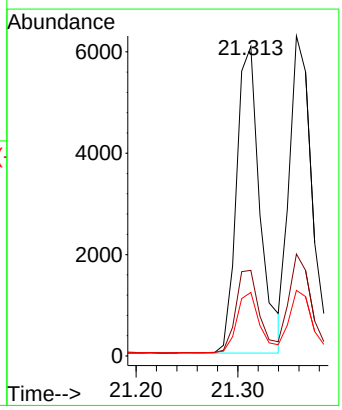


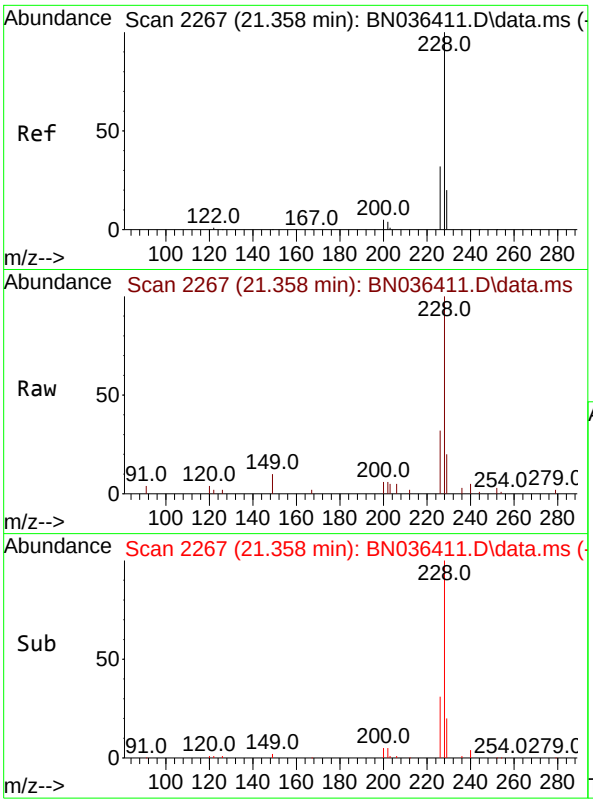


#32
Benzo(a)anthracene
Concen: 0.364 ng
RT: 21.313 min Scan# 2262
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:228 Resp: 9677

Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.2	33.2
229	20.6	16.5	24.7



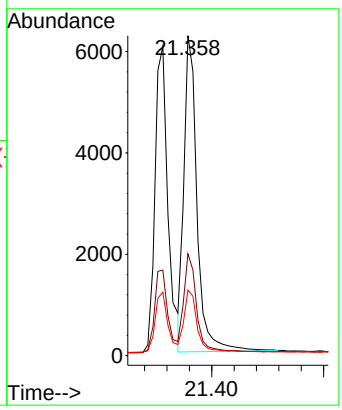


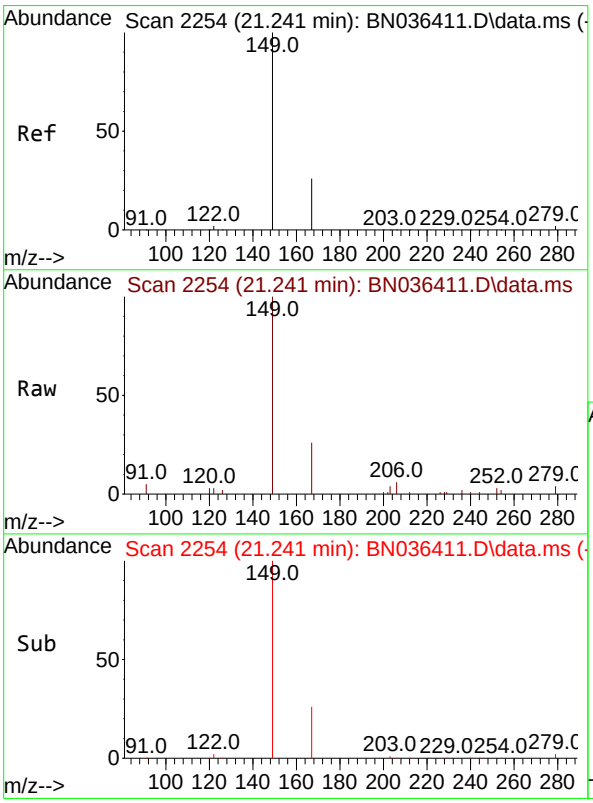
#33
Chrysene
Concen: 0.373 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:228 Resp: 10178

Ion	Ratio	Lower	Upper
228	100		
226	31.9	25.5	38.3
229	20.5	16.4	24.6

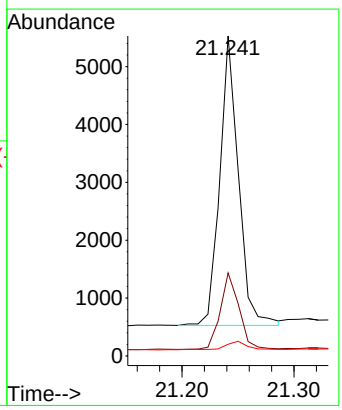


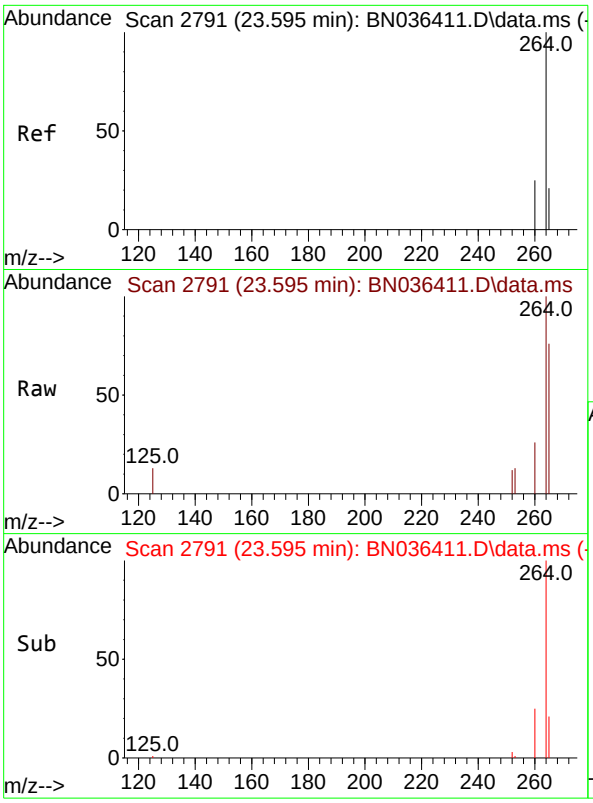


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.392 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:149 Resp: 5815

Ion	Ratio	Lower	Upper
149	100		
167	26.5	21.2	31.8
279	3.4	2.7	4.1



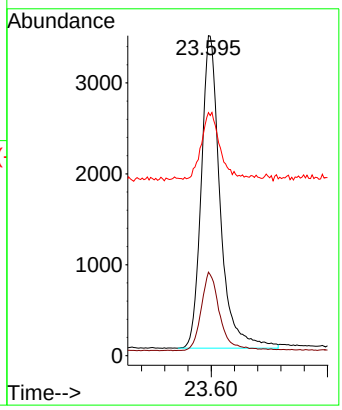


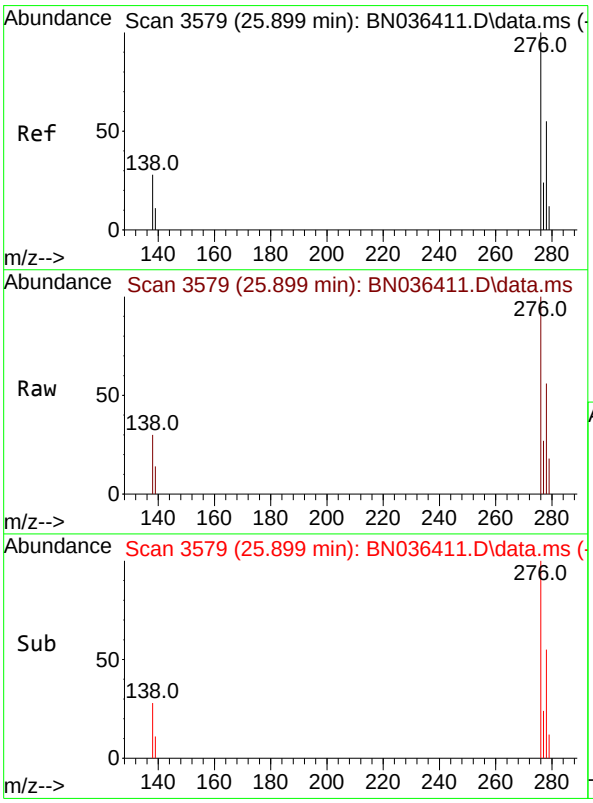
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.595 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:264 Resp: 7735

Ion	Ratio	Lower	Upper
264	100		
260	26.1	20.9	31.3
265	75.9	60.7	91.1

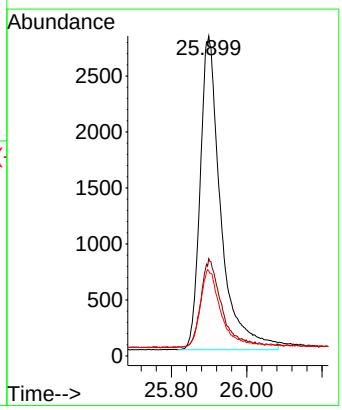


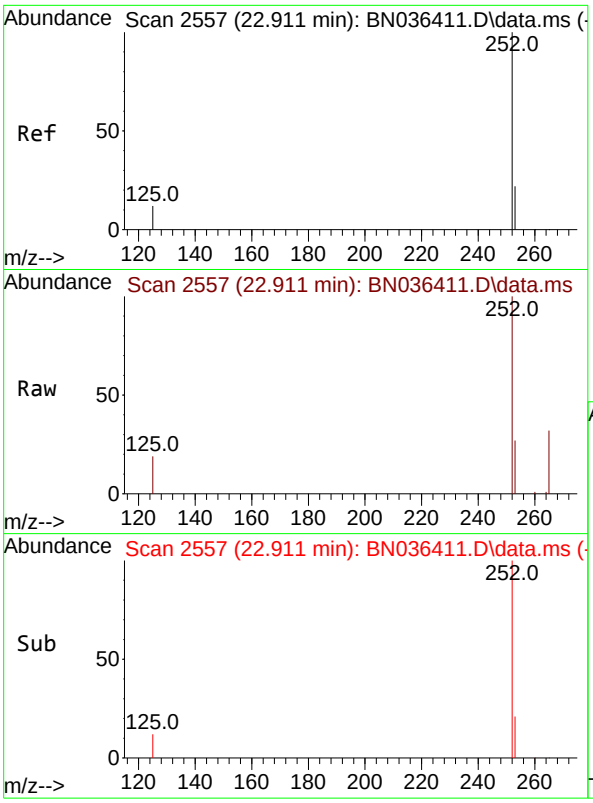


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.351 ng
RT: 25.899 min Scan# 3579
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:276 Resp: 10661

Ion	Ratio	Lower	Upper
276	100		
138	27.8	22.2	33.2
277	24.8	19.8	29.6



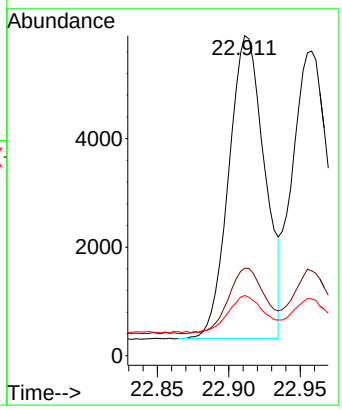


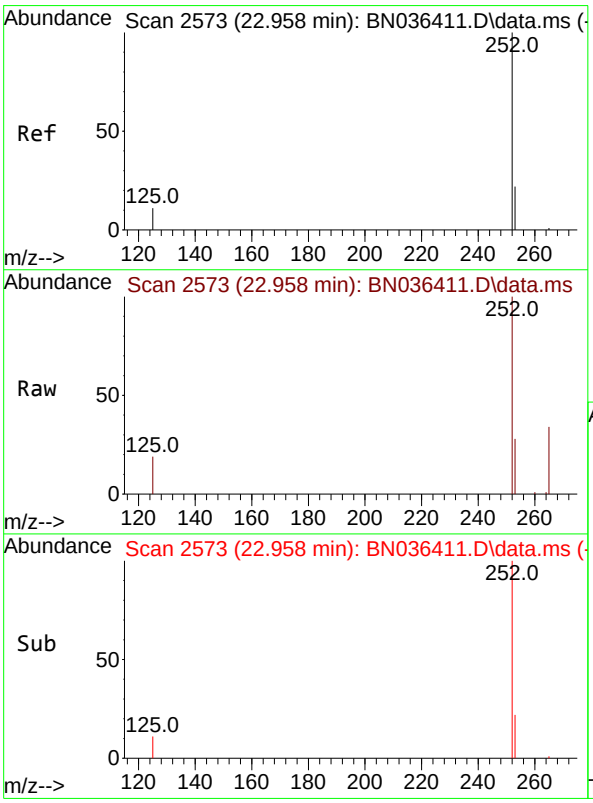
#37
Benzo(b)fluoranthene
Concen: 0.355 ng
RT: 22.911 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 9743

Ion	Ratio	Lower	Upper
252	100		
253	27.4	21.9	32.9
125	18.8	15.0	22.6

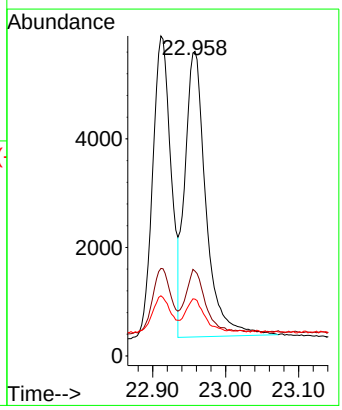


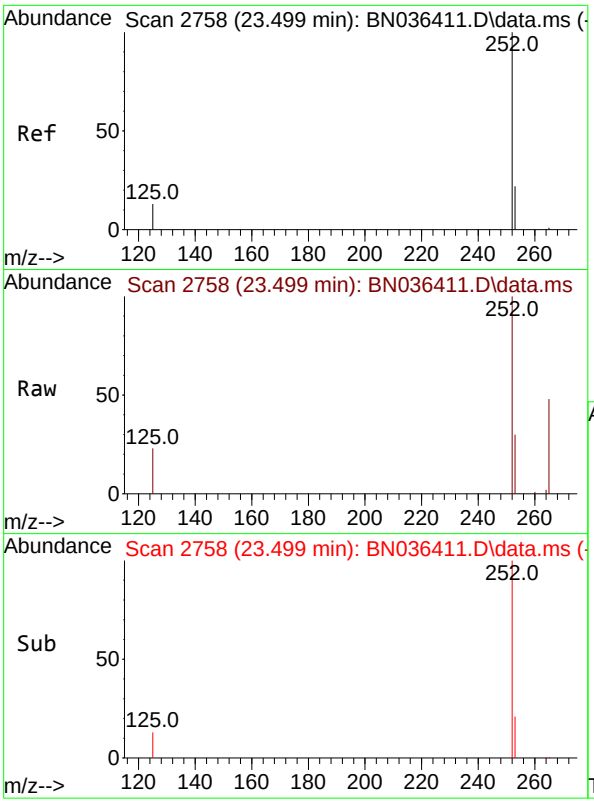


#38
Benzo(k)fluoranthene
Concen: 0.377 ng
RT: 22.958 min Scan# 2573
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:252 Resp: 10543

Ion	Ratio	Lower	Upper
252	100		
253	27.8	22.2	33.4
125	18.7	15.0	22.4



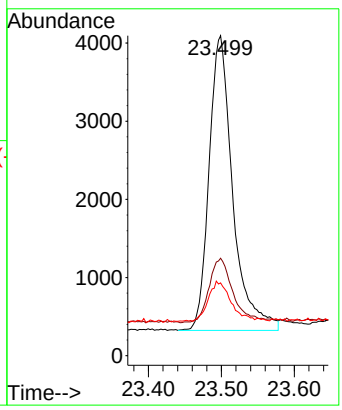


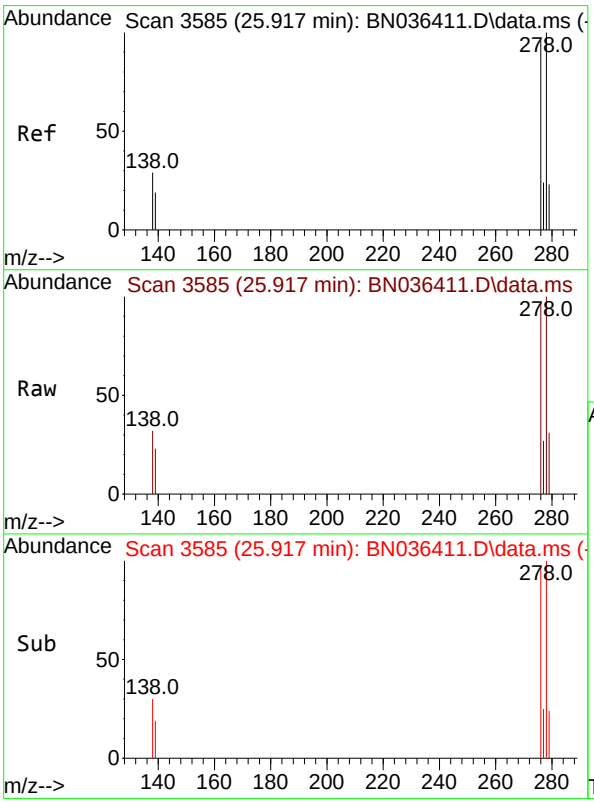
#39
Benzo(a)pyrene
Concen: 0.362 ng
RT: 23.499 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 8521

Ion	Ratio	Lower	Upper
252	100		
253	30.5	24.4	36.6
125	22.7	18.2	27.2

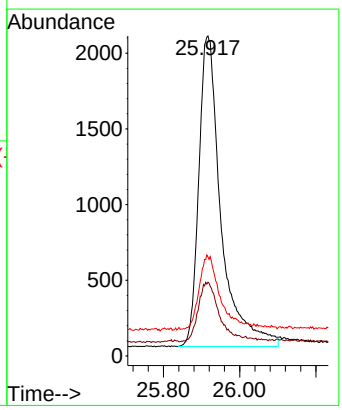


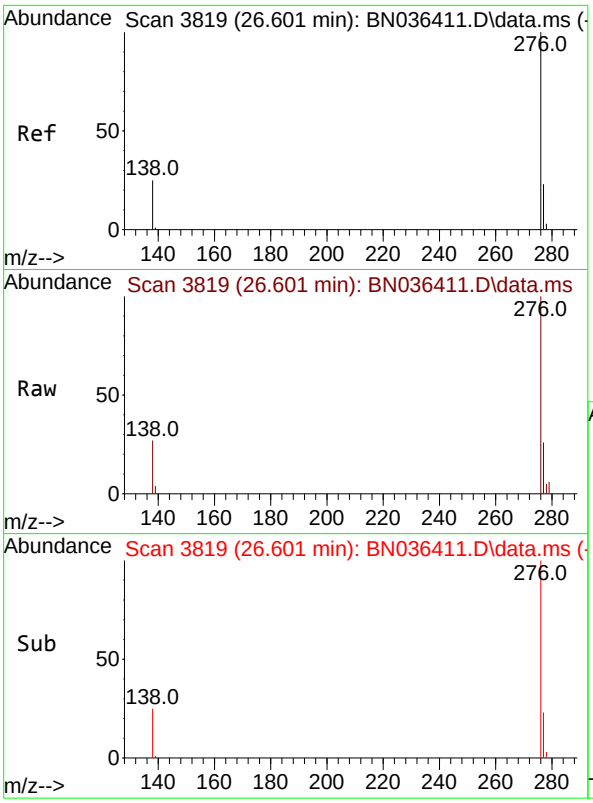


#40
Dibenzo(a,h)anthracene
Concen: 0.344 ng
RT: 25.917 min Scan# 3585
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Tgt Ion:278 Resp: 8314

Ion	Ratio	Lower	Upper
278	100		
139	23.1	18.5	27.7
279	31.0	24.8	37.2



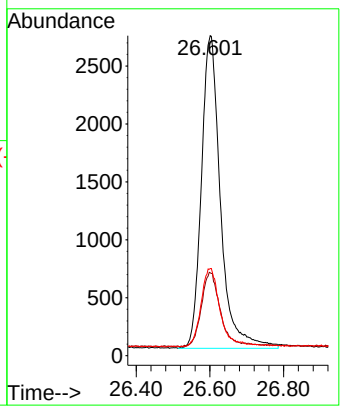


#41
Benzo(g,h,i)perylene
Concen: 0.366 ng
RT: 26.601 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN036411.D
Acq: 10 Feb 2025 13:36

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 9701

Ion	Ratio	Lower	Upper
276	100		
277	25.9	20.7	31.1
138	27.2	21.8	32.6



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036412.D
Acq On : 10 Feb 2025 14:12
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Feb 11 00:36:15 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

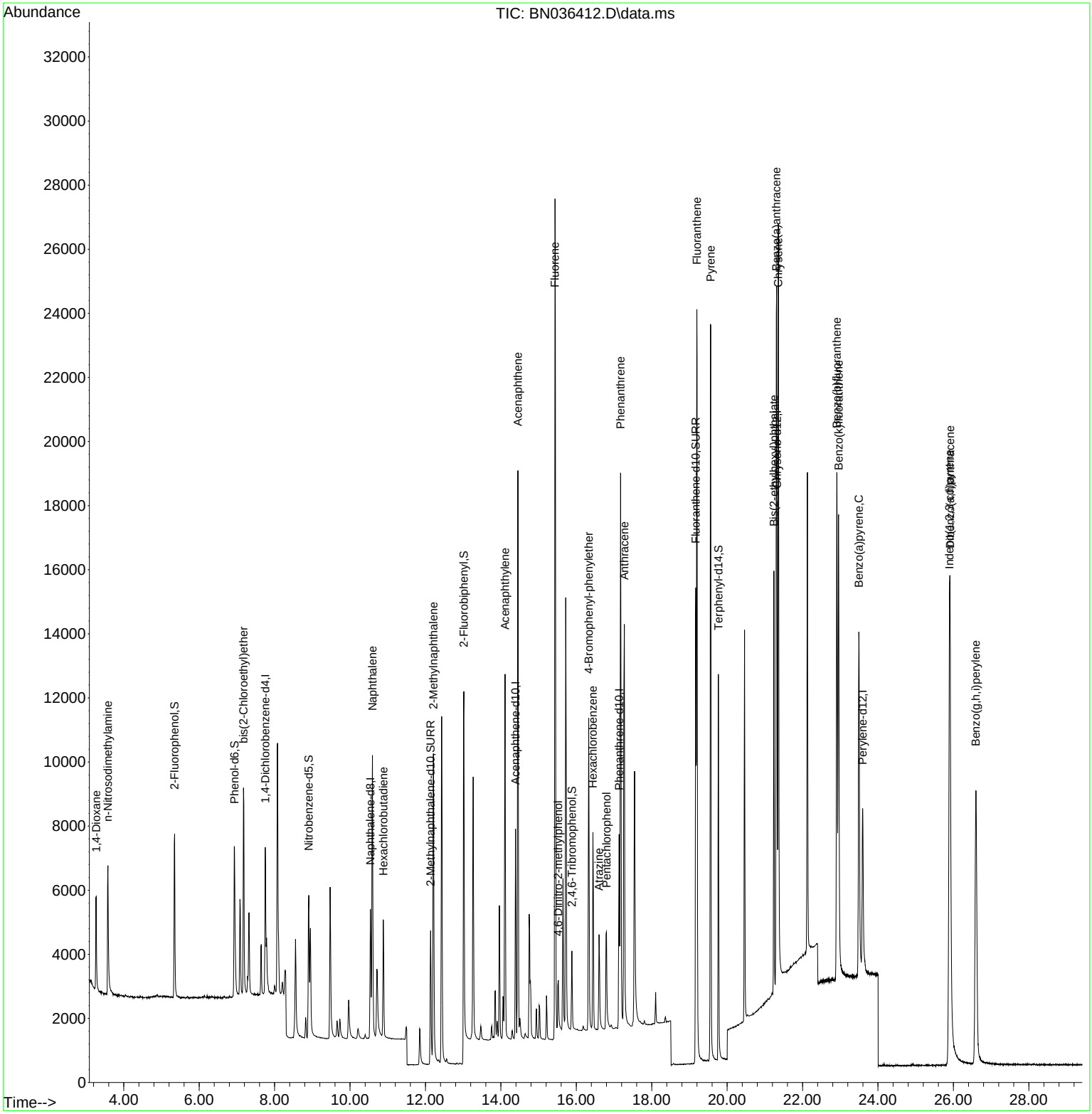
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2190	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	5510	0.400	ng		0.00
13) Acenaphthene-d10	14.388	164	3611	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	8139	0.400	ng		0.00
29) Chrysene-d12	21.322	240	7521	0.400	ng		0.00
35) Perylene-d12	23.595	264	7758	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	4030	0.723	ng		0.00
5) Phenol-d6	6.937	99	4653	0.715	ng		0.00
8) Nitrobenzene-d5	8.907	82	4082	0.795	ng		0.00
11) 2-Methylnaphthalene-d10	12.136	152	6480	0.860	ng		0.00
14) 2,4,6-Tribromophenol	15.883	330	1331	0.598	ng		0.00
15) 2-Fluorobiphenyl	13.019	172	10765	0.699	ng		0.00
27) Fluoranthene-d10	19.169	212	17242	0.823	ng		0.00
31) Terphenyl-d14	19.768	244	12467	0.800	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	1812	0.748	ng		99
3) n-Nitrosodimethylamine	3.579	42	3171	0.729	ng	#	98
6) bis(2-Chloroethyl)ether	7.176	93	4947	0.915	ng		97
9) Naphthalene	10.594	128	11992	0.762	ng		98
10) Hexachlorobutadiene	10.883	225	2996	0.608	ng	#	100
12) 2-Methylnaphthalene	12.212	142	7947	0.804	ng		97
16) Acenaphthylene	14.110	152	12153	0.727	ng		99
17) Acenaphthene	14.452	154	8143	0.712	ng		98
18) Fluorene	15.435	166	11752	0.798	ng		100
20) 4,6-Dinitro-2-methylph...	15.523	198	1199	0.658	ng	#	66
21) 4-Bromophenyl-phenylether	16.329	248	3776	0.677	ng		94
22) Hexachlorobenzene	16.441	284	4670	0.642	ng		96
23) Atrazine	16.602	200	3020	0.737	ng		94
24) Pentachlorophenol	16.801	266	1989	0.625	ng		99
25) Phenanthrene	17.173	178	18094	0.758	ng		99
26) Anthracene	17.273	178	15928	0.735	ng		99
28) Fluoranthene	19.197	202	22075	0.781	ng		99
30) Pyrene	19.564	202	22410	0.746	ng		99
32) Benzo(a)anthracene	21.304	228	18881	0.707	ng		98
33) Chrysene	21.358	228	21269	0.776	ng		97
34) Bis(2-ethylhexyl)phtha...	21.241	149	11207	0.752	ng		99
36) Indeno(1,2,3-cd)pyrene	25.893	276	21570	0.708	ng		98
37) Benzo(b)fluoranthene	22.908	252	20019	0.727	ng	#	93
38) Benzo(k)fluoranthene	22.955	252	20570	0.733	ng	#	93
39) Benzo(a)pyrene	23.493	252	17289	0.731	ng	#	91
40) Dibenzo(a,h)anthracene	25.911	278	16872	0.697	ng		93
41) Benzo(g,h,i)perylene	26.598	276	19078	0.718	ng		98

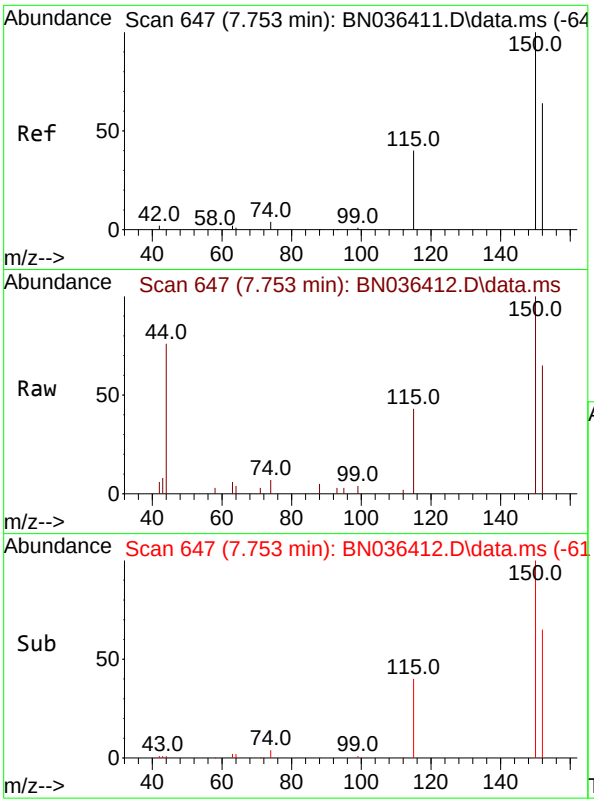
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036412.D
Acq On : 10 Feb 2025 14:12
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Feb 11 00:36:15 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



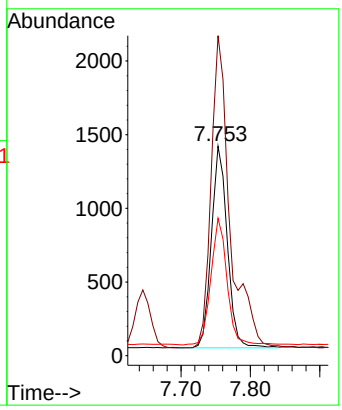


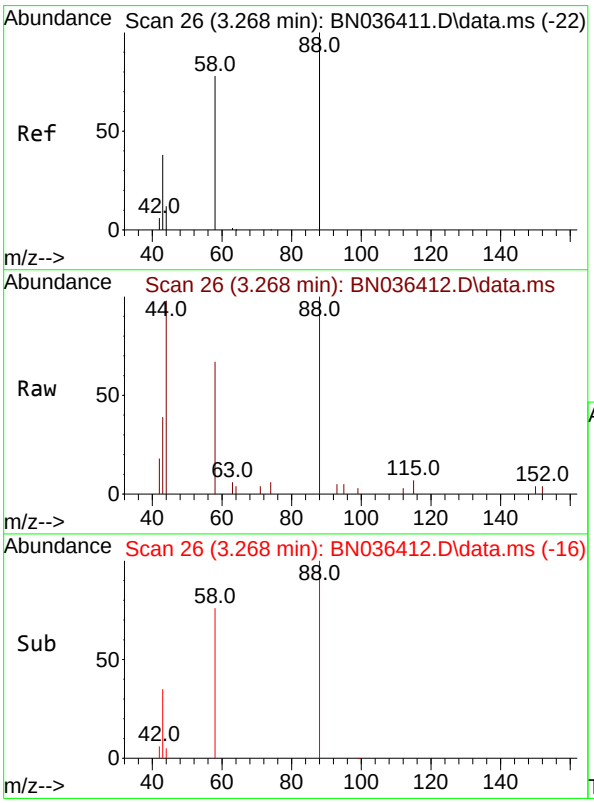
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 2190

Ion	Ratio	Lower	Upper
152	100		
150	152.7	123.7	185.5
115	65.6	52.5	78.7

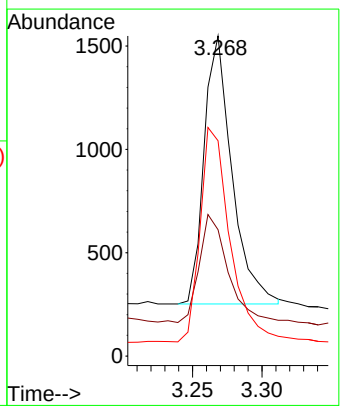


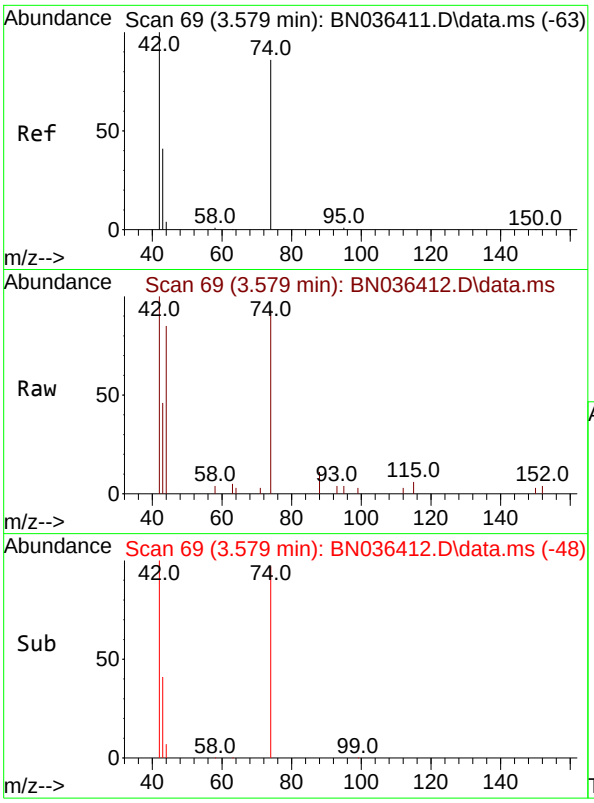


#2
1,4-Dioxane
Concen: 0.748 ng
RT: 3.268 min Scan# 26
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion: 88 Resp: 1812

Ion	Ratio	Lower	Upper
88	100		
43	41.0	33.7	50.5
58	86.3	68.9	103.3



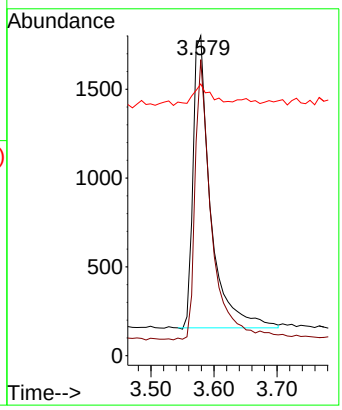


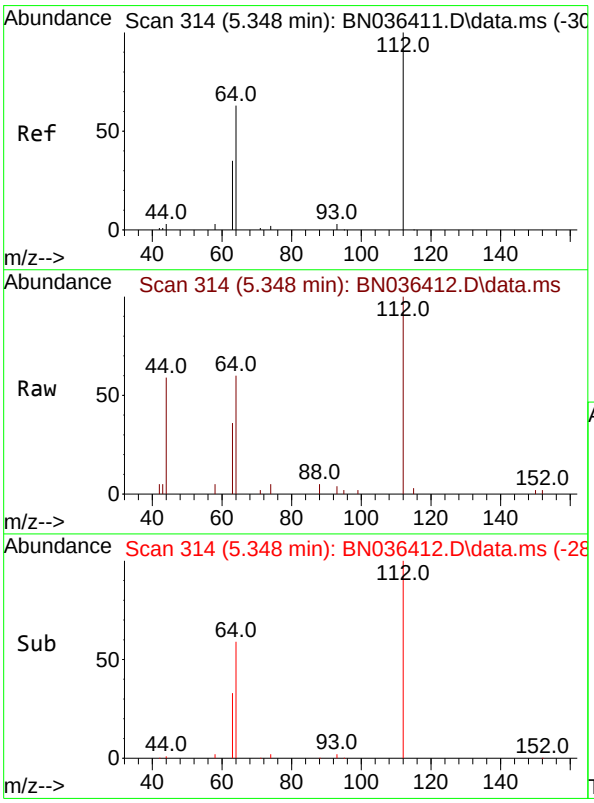
#3
n-Nitrosodimethylamine
Concen: 0.729 ng
RT: 3.579 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 42 Resp: 3171

Ion	Ratio	Lower	Upper
42	100		
74	91.4	71.8	107.6
44	7.2	7.8	11.6#

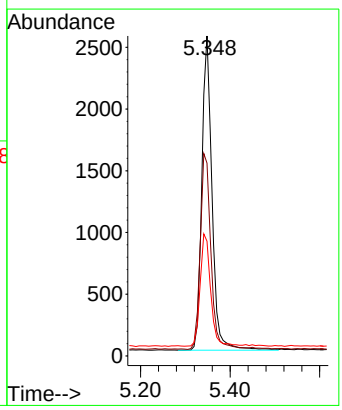


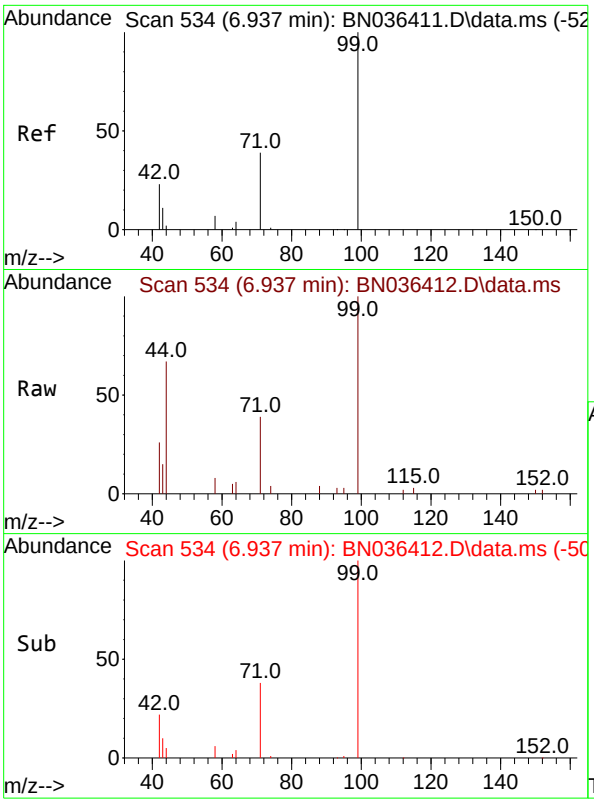


#4
2-Fluorophenol
Concen: 0.723 ng
RT: 5.348 min Scan# 314
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:112 Resp: 4030

Ion	Ratio	Lower	Upper
112	100		
64	65.3	53.4	80.0
63	36.6	30.3	45.5



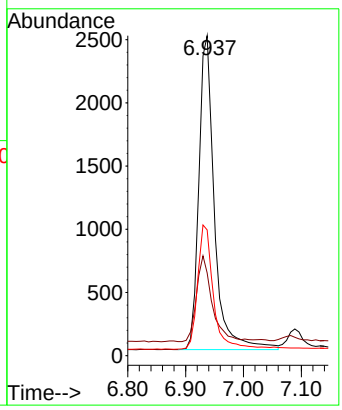


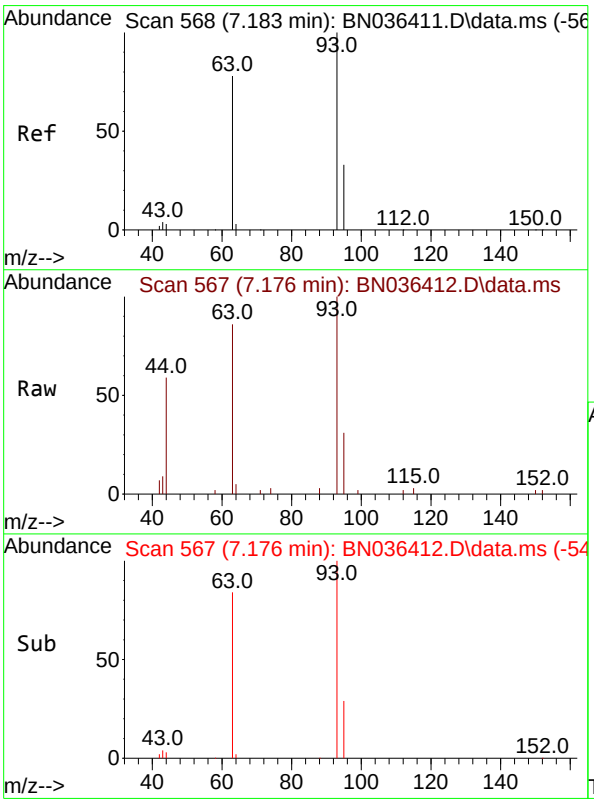
#5
Phenol-d6
Concen: 0.715 ng
RT: 6.937 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 99 Resp: 4653

Ion	Ratio	Lower	Upper
99	100		
42	27.6	21.7	32.5
71	40.0	32.6	49.0

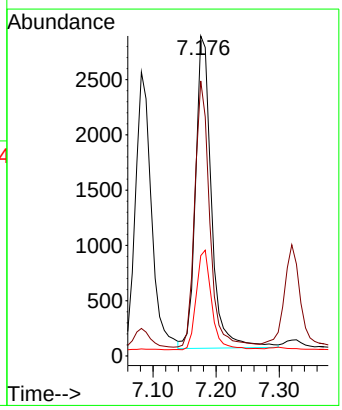


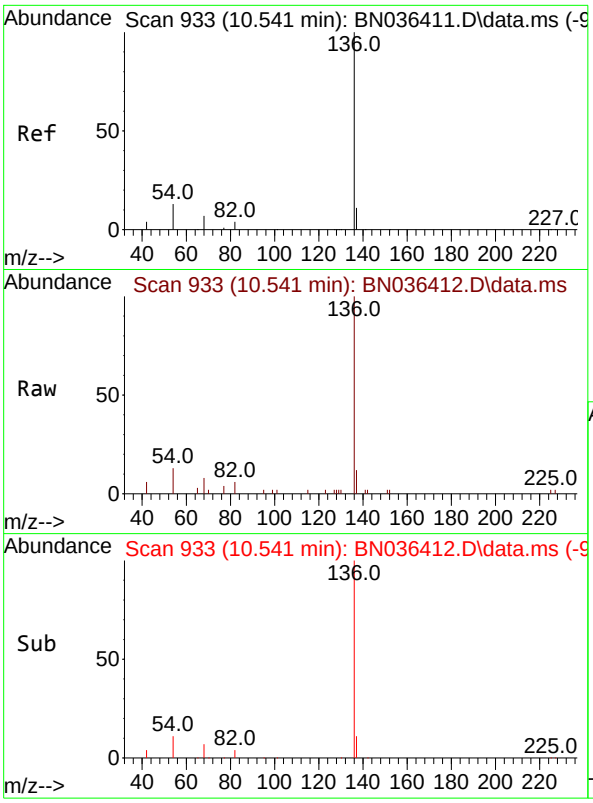


#6
bis(2-Chloroethyl)ether
Concen: 0.915 ng
RT: 7.176 min Scan# 567
Delta R.T. -0.007 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion: 93 Resp: 4947

Ion	Ratio	Lower	Upper
93	100		
63	80.8	66.3	99.5
95	31.0	26.2	39.4



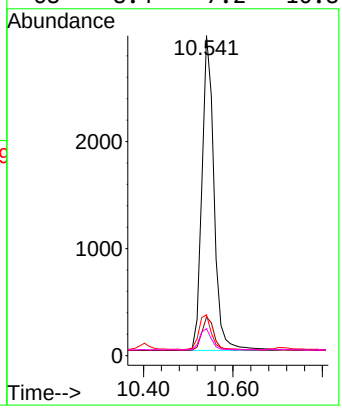


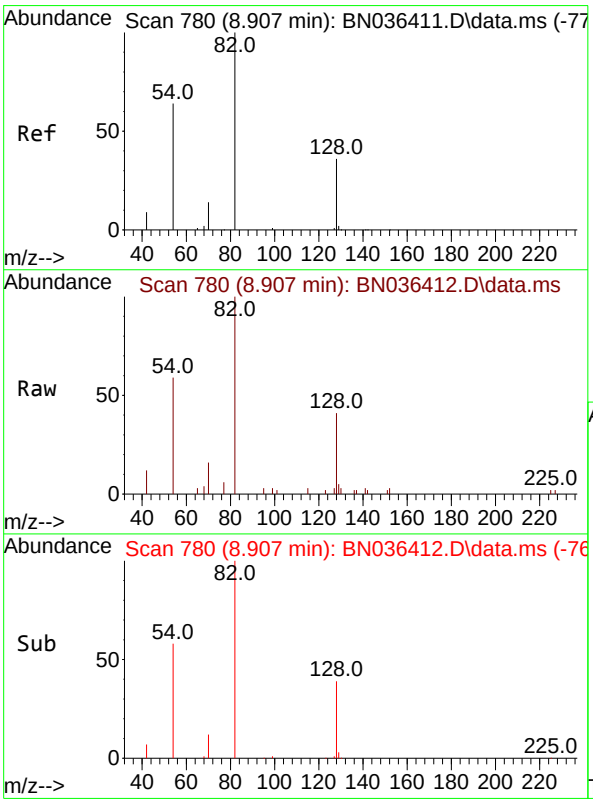
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:136 Resp: 5510

Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.1	15.1
54	12.7	11.8	17.6
68	8.4	7.2	10.8

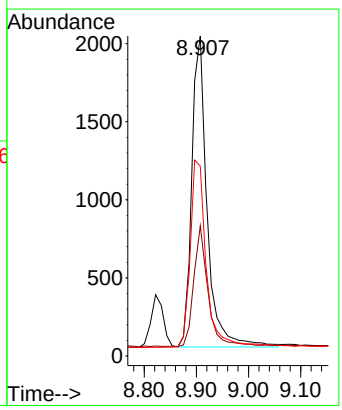


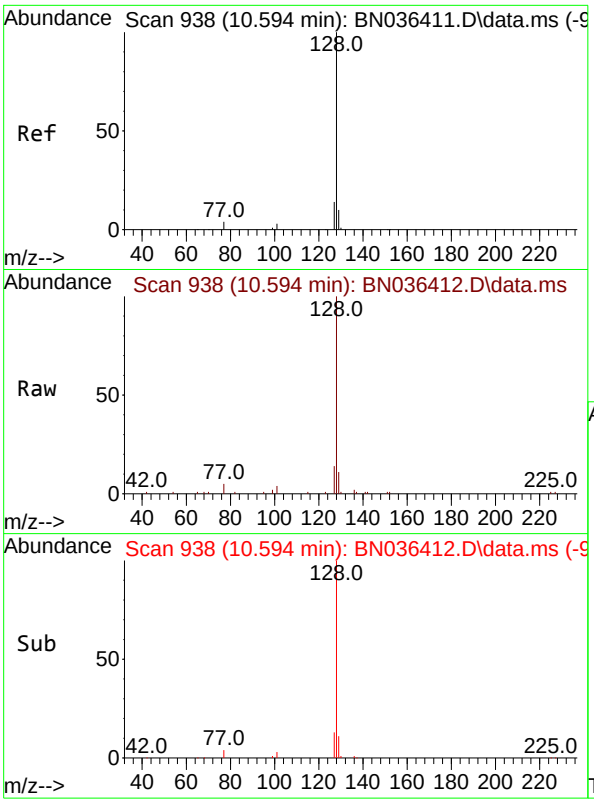


#8
Nitrobenzene-d5
Concen: 0.795 ng
RT: 8.907 min Scan# 780
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion: 82 Resp: 4082

Ion	Ratio	Lower	Upper
82	100		
128	40.7	31.9	47.9
54	59.3	53.1	79.7



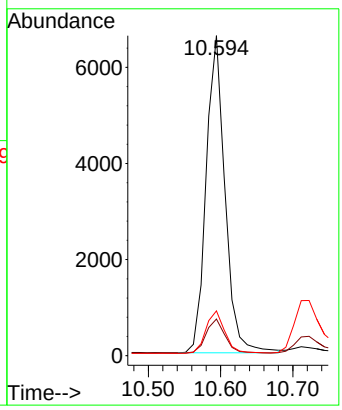


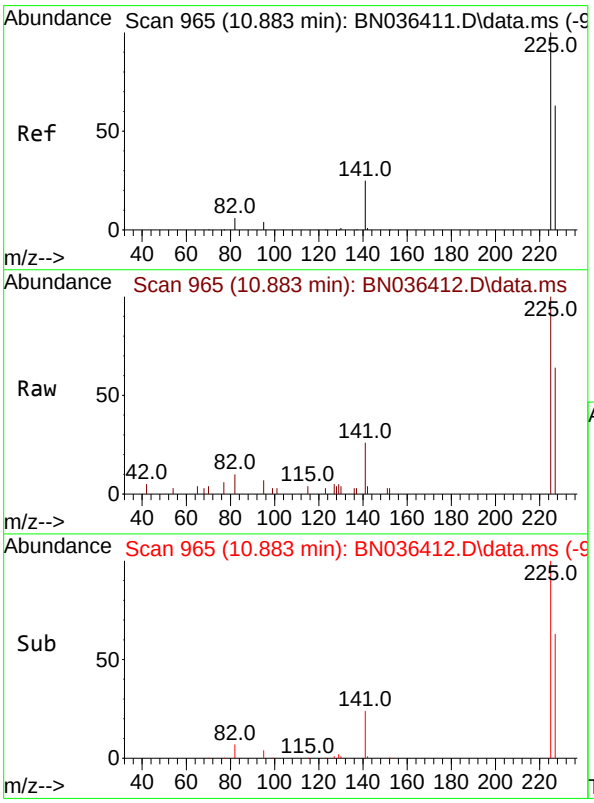
#9
Naphthalene
Concen: 0.762 ng
RT: 10.594 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:128 Resp: 11992

Ion	Ratio	Lower	Upper
128	100		
129	11.5	9.6	14.4
127	14.0	12.0	18.0

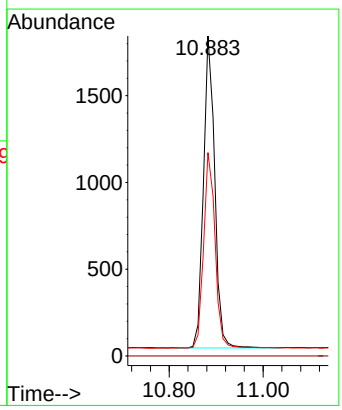


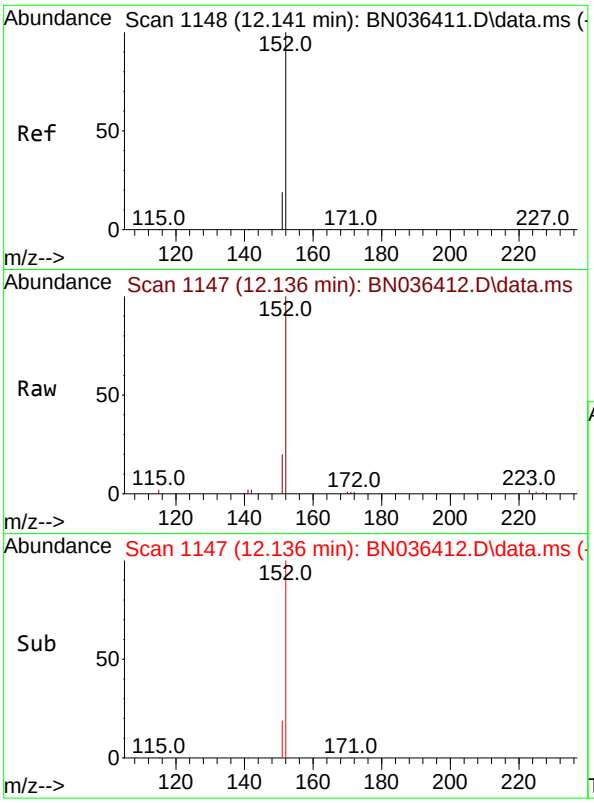


#10
Hexachlorobutadiene
Concen: 0.608 ng
RT: 10.883 min Scan# 965
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:225 Resp: 2996

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	50.9	76.3



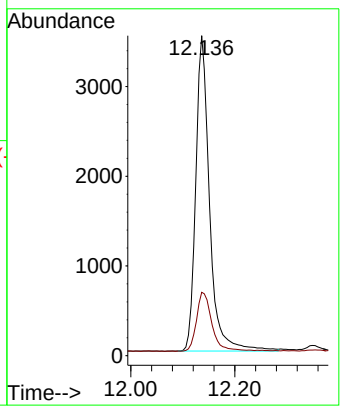


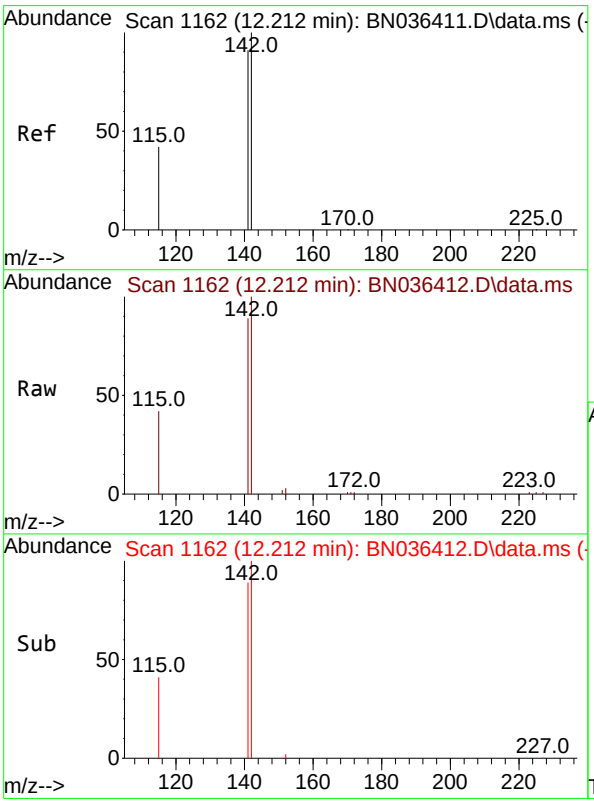
#11
2-Methylnaphthalene-d10
Concen: 0.860 ng
RT: 12.136 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 6480

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.6	25.0

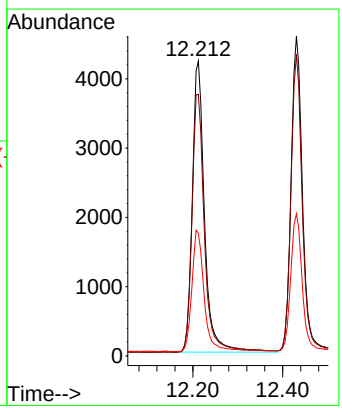


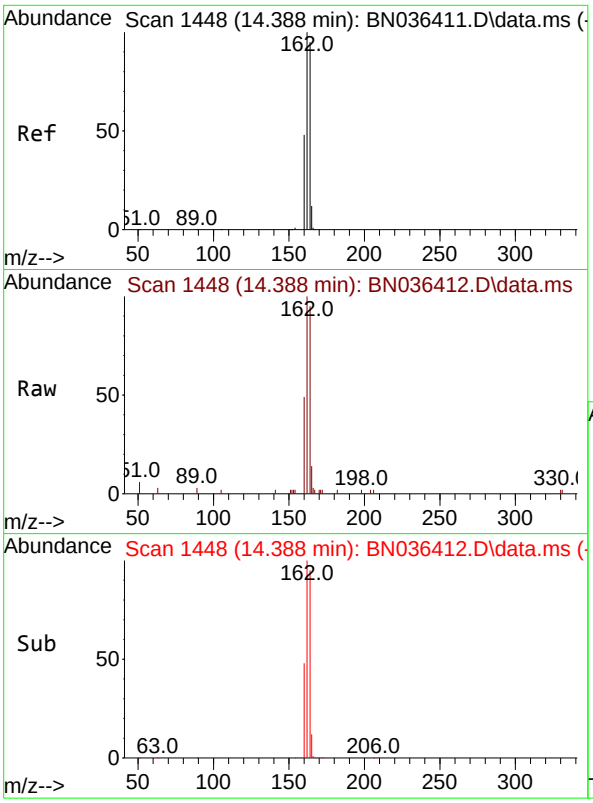


#12
2-Methylnaphthalene
Concen: 0.804 ng
RT: 12.212 min Scan# 1162
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:142 Resp: 7947

Ion	Ratio	Lower	Upper
142	100		
141	88.7	72.8	109.2
115	41.6	35.5	53.3



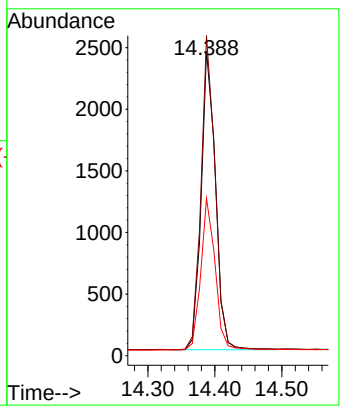


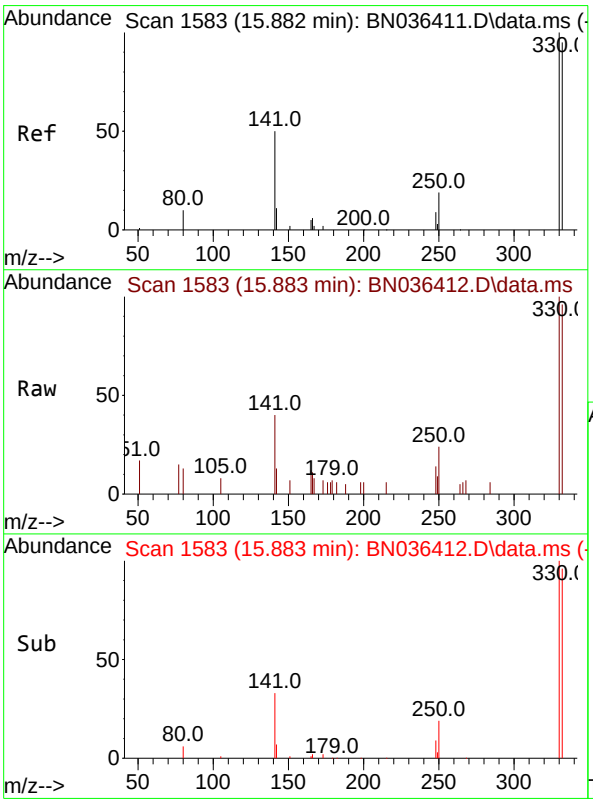
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:164 Resp: 3611

Ion	Ratio	Lower	Upper
164	100		
162	105.0	84.1	126.1
160	51.6	41.4	62.0

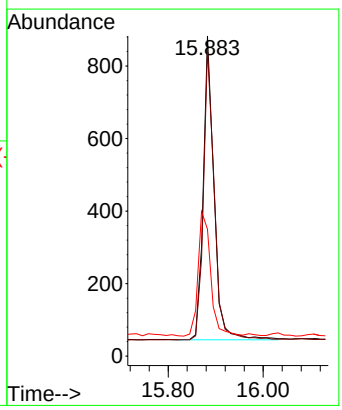


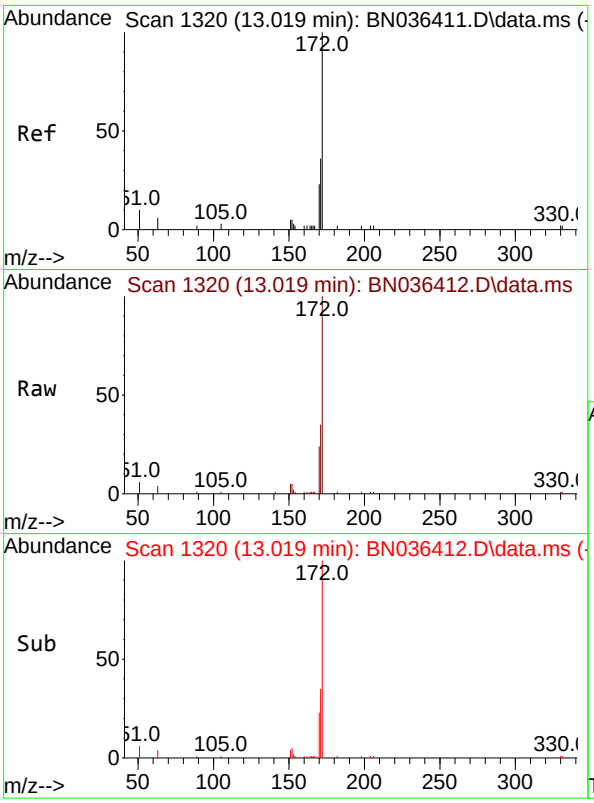


#14
2,4,6-Tribromophenol
Concen: 0.598 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:330 Resp: 1331

Ion	Ratio	Lower	Upper
330	100		
332	95.8	76.6	114.8
141	47.5	37.8	56.8



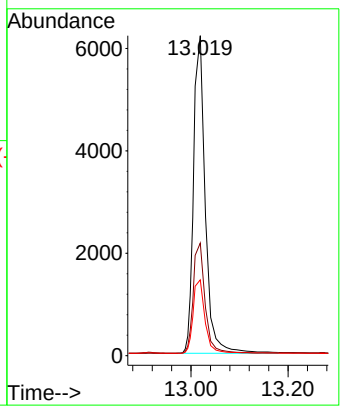


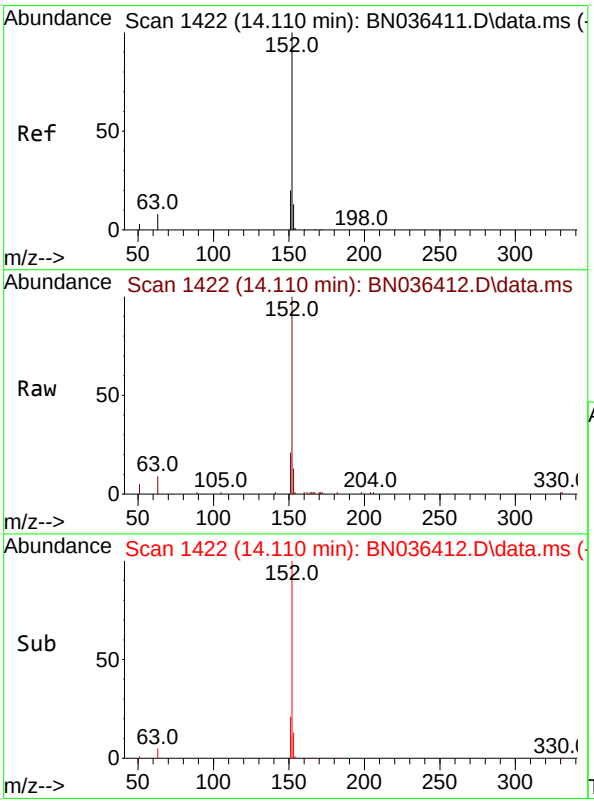
#15
2-Fluorobiphenyl
Concen: 0.699 ng
RT: 13.019 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:172 Resp: 10765

Ion	Ratio	Lower	Upper
172	100		
171	35.2	29.6	44.4
170	23.7	19.8	29.6

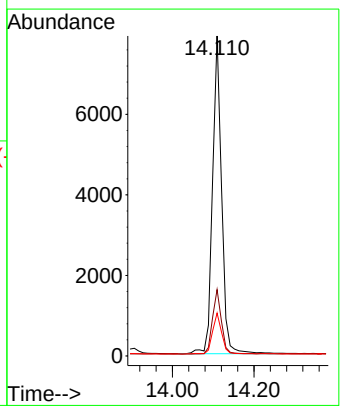


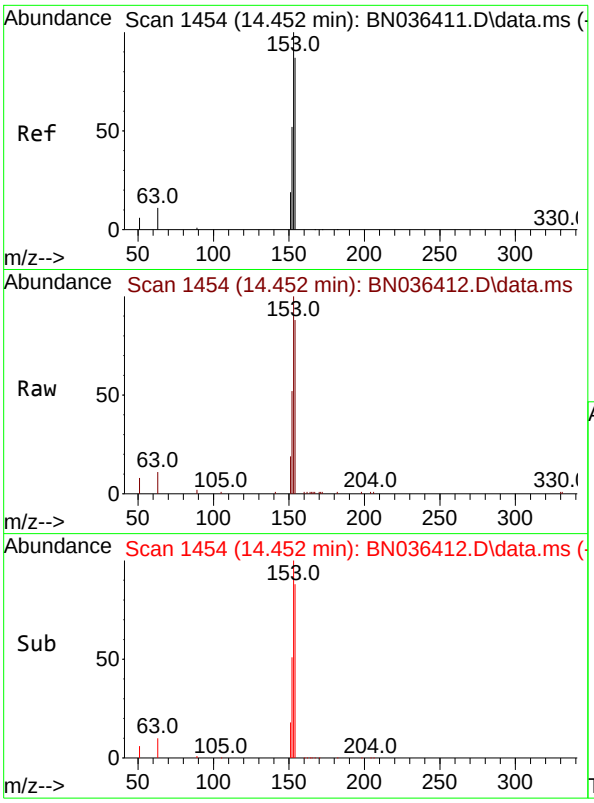


#16
Acenaphthylene
Concen: 0.727 ng
RT: 14.110 min Scan# 1422
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:152 Resp: 12153

Ion	Ratio	Lower	Upper
152	100		
151	20.0	15.8	23.8
153	13.0	10.2	15.2



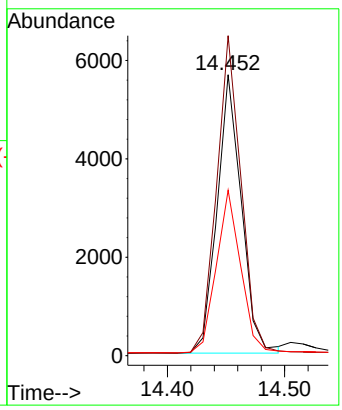


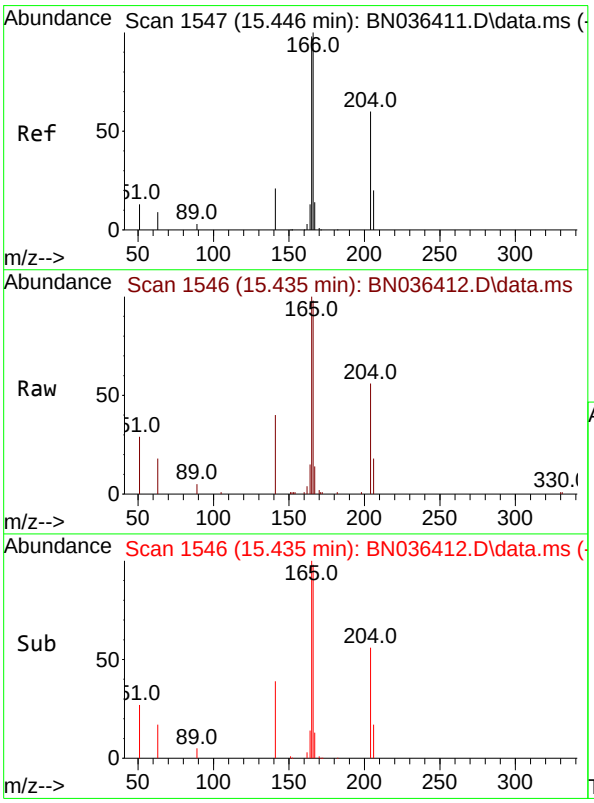
#17
Acenaphthene
Concen: 0.712 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:154 Resp: 8143

Ion	Ratio	Lower	Upper
154	100		
153	115.5	93.3	139.9
152	59.0	48.8	73.2

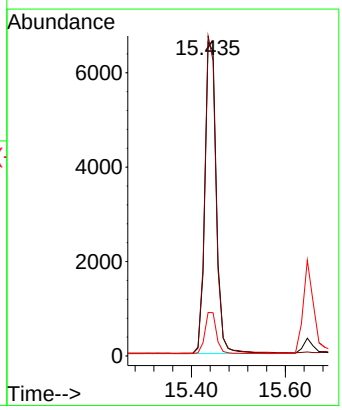


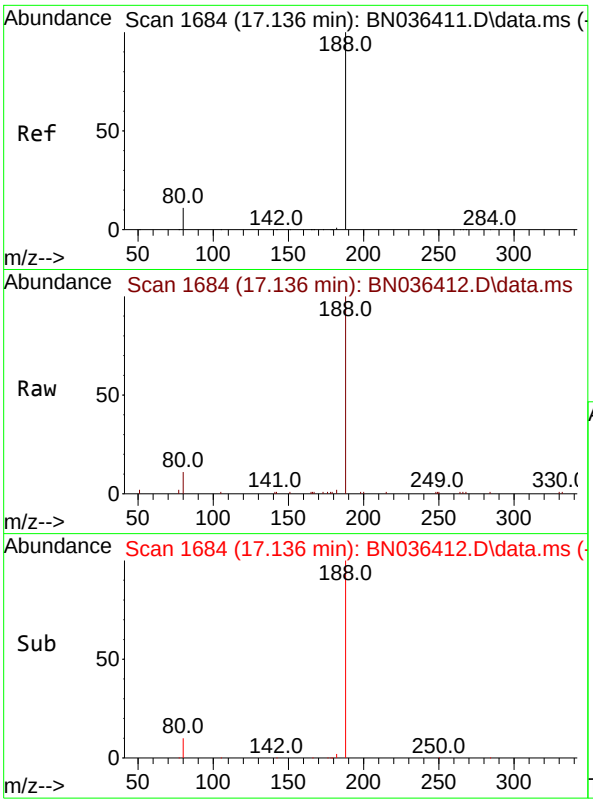


#18
Fluorene
Concen: 0.798 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:166 Resp: 11752

Ion	Ratio	Lower	Upper
166	100		
165	99.6	79.5	119.3
167	13.3	10.4	15.6



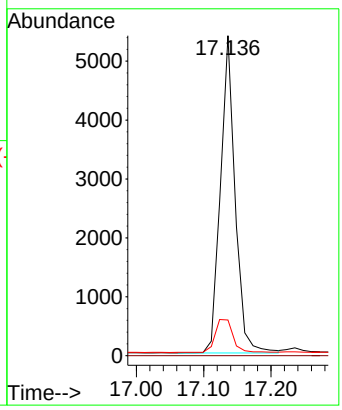


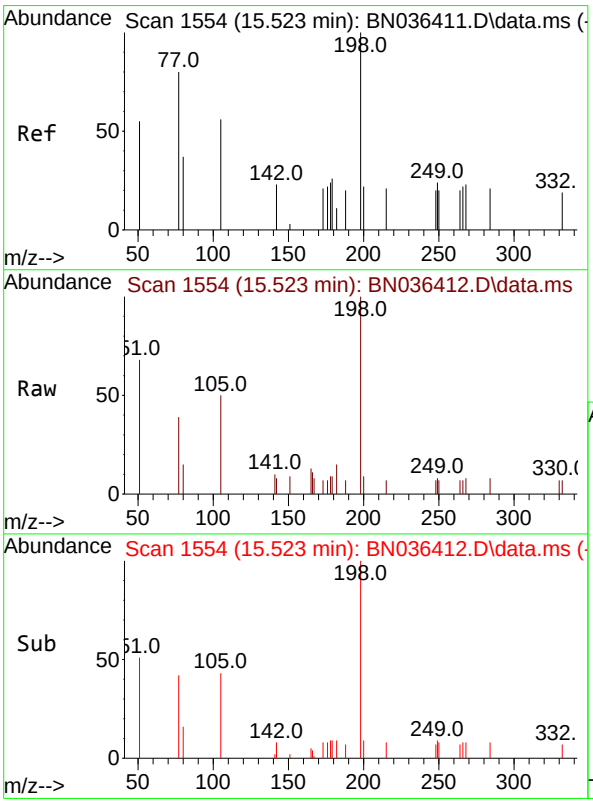
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:188 Resp: 8139

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.1	9.8	14.6

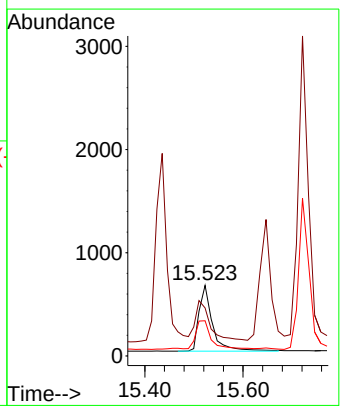


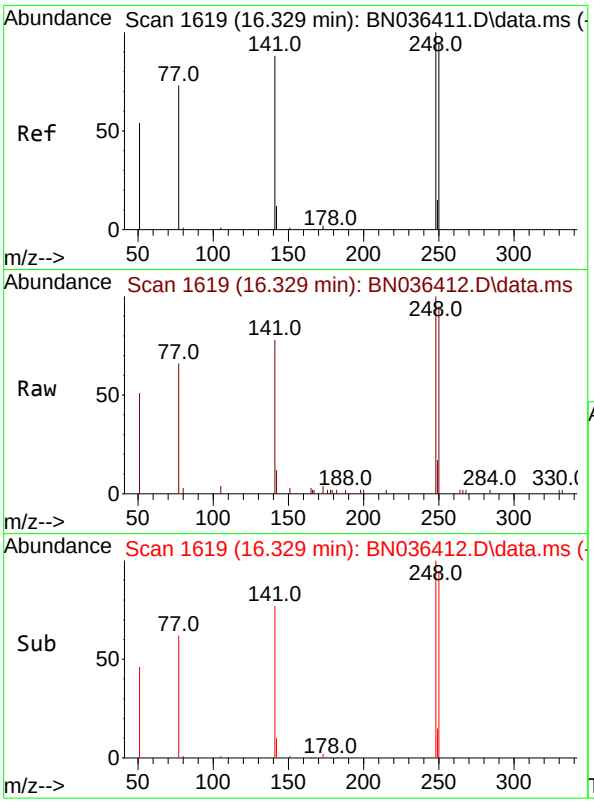


#20
4,6-Dinitro-2-methylphenol
Concen: 0.658 ng
RT: 15.523 min Scan# 1554
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:198 Resp: 1199

Ion	Ratio	Lower	Upper
198	100		
51	68.0	86.6	129.8#
105	49.9	57.5	86.3#



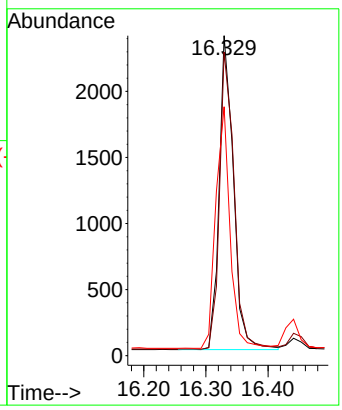


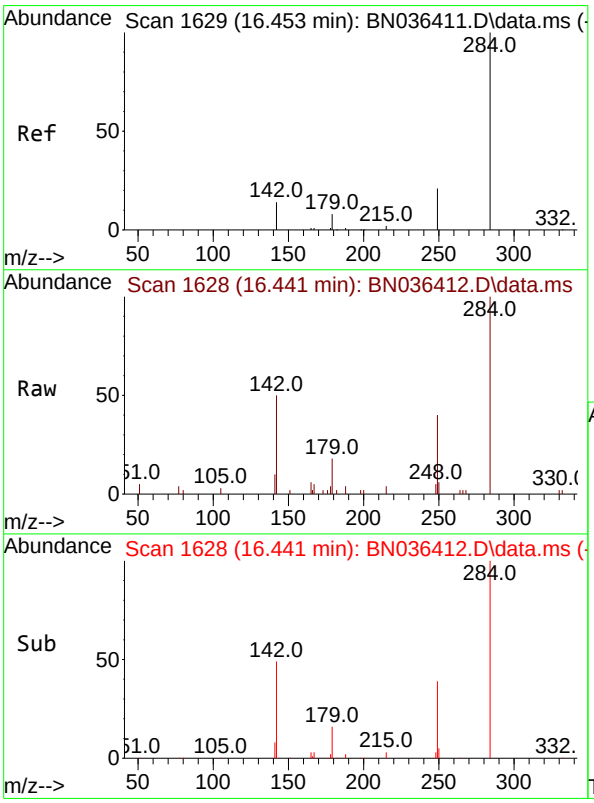
#21
4-Bromophenyl-phenylether
Concen: 0.677 ng
RT: 16.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:248 Resp: 3776

Ion	Ratio	Lower	Upper
248	100		
250	94.9	76.1	114.1
141	77.8	71.7	107.5

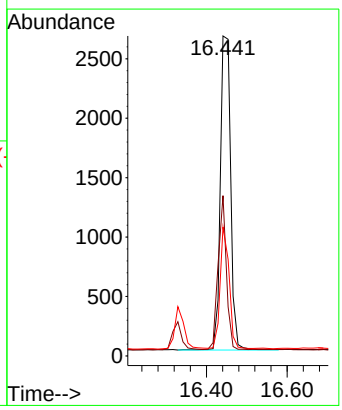


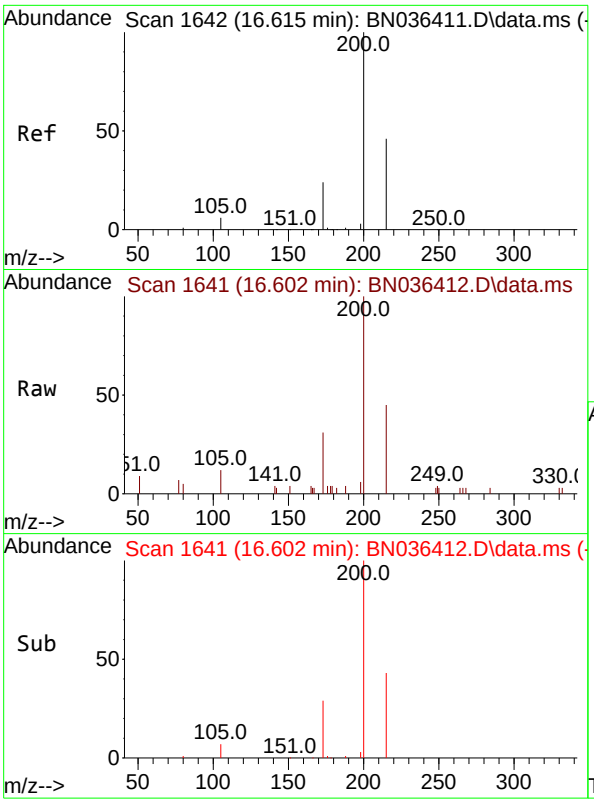


#22
Hexachlorobenzene
Concen: 0.642 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:284 Resp: 4670

Ion	Ratio	Lower	Upper
284	100		
142	39.5	33.4	50.0
249	33.7	28.6	43.0



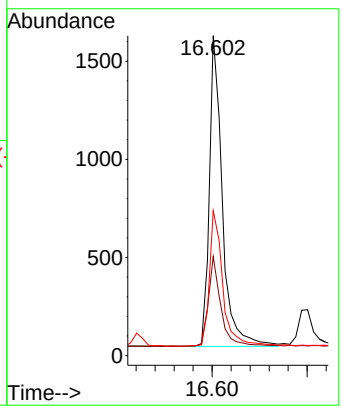


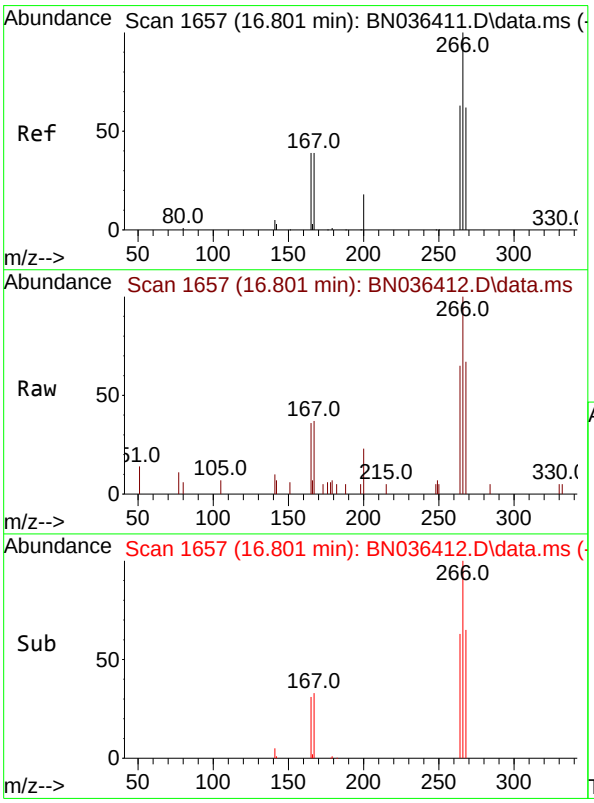
#23
Atrazine
Concen: 0.737 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:200 Resp: 3020

Ion	Ratio	Lower	Upper
200	100		
173	31.0	23.2	34.8
215	45.3	40.0	60.0

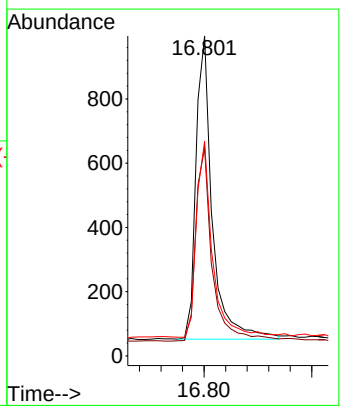


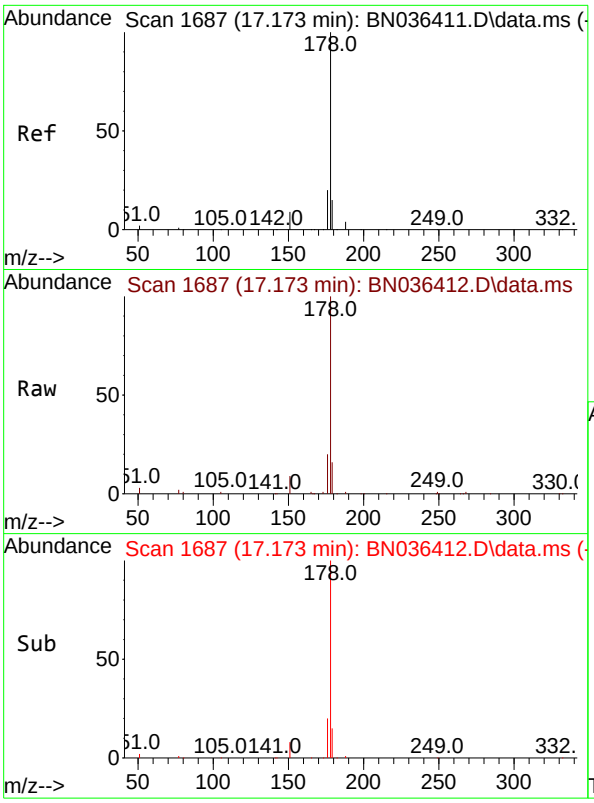


#24
Pentachlorophenol
Concen: 0.625 ng
RT: 16.801 min Scan# 1657
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:266 Resp: 1989

Ion	Ratio	Lower	Upper
266	100		
264	64.5	50.6	76.0
268	64.4	51.9	77.9



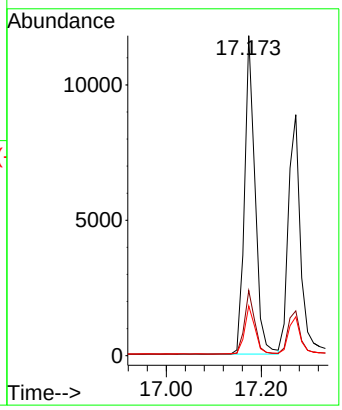


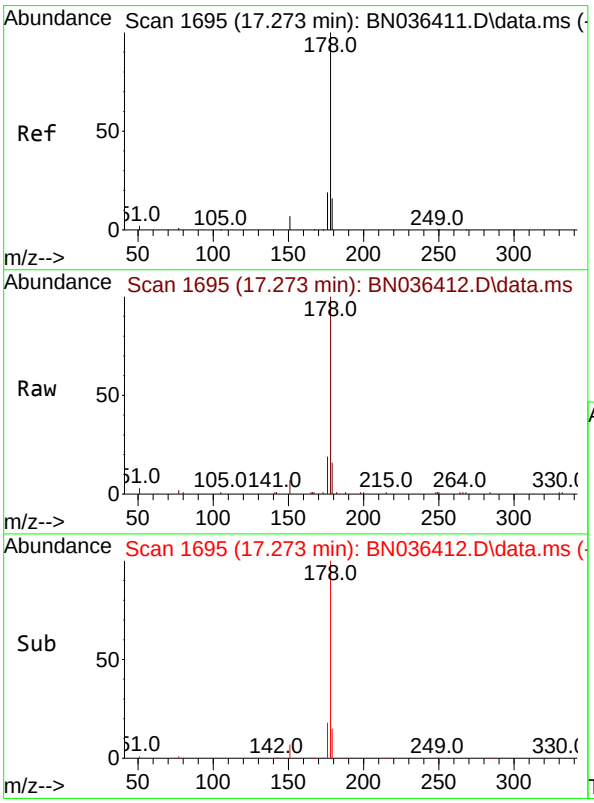
#25
Phenanthrene
Concen: 0.758 ng
RT: 17.173 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:178 Resp: 18094

Ion	Ratio	Lower	Upper
178	100		
176	19.8	15.7	23.5
179	15.1	12.4	18.6

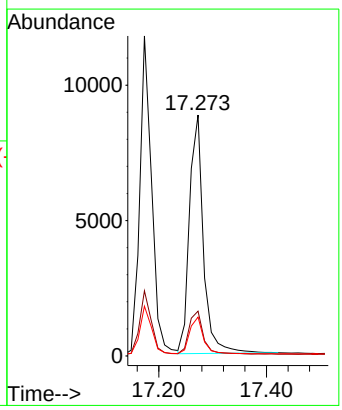


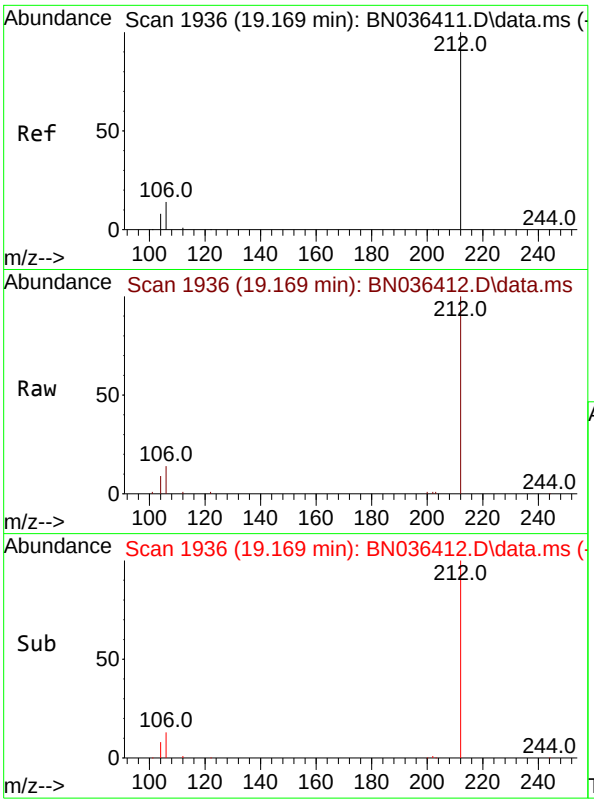


#26
Anthracene
Concen: 0.735 ng
RT: 17.273 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:178 Resp: 15928

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.9	22.3
179	15.4	12.4	18.6



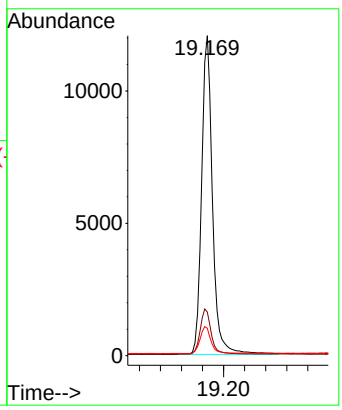


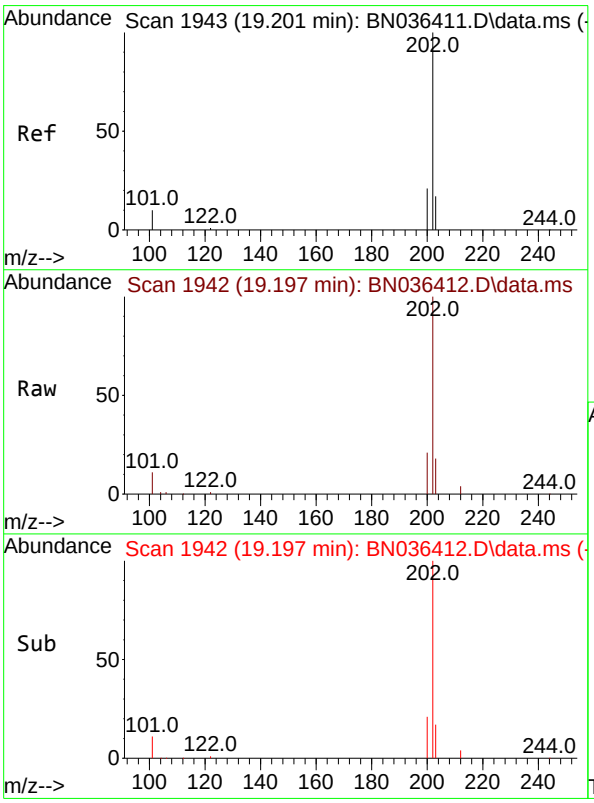
#27
Fluoranthene-d10
Concen: 0.823 ng
RT: 19.169 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:212 Resp: 17242

Ion	Ratio	Lower	Upper
212	100		
106	14.2	11.5	17.3
104	8.4	7.1	10.7

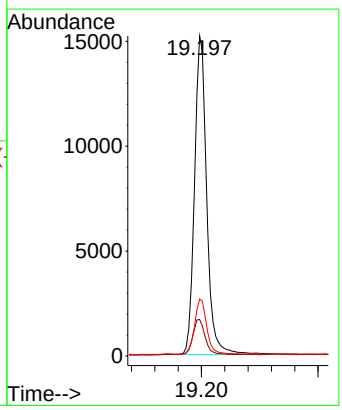


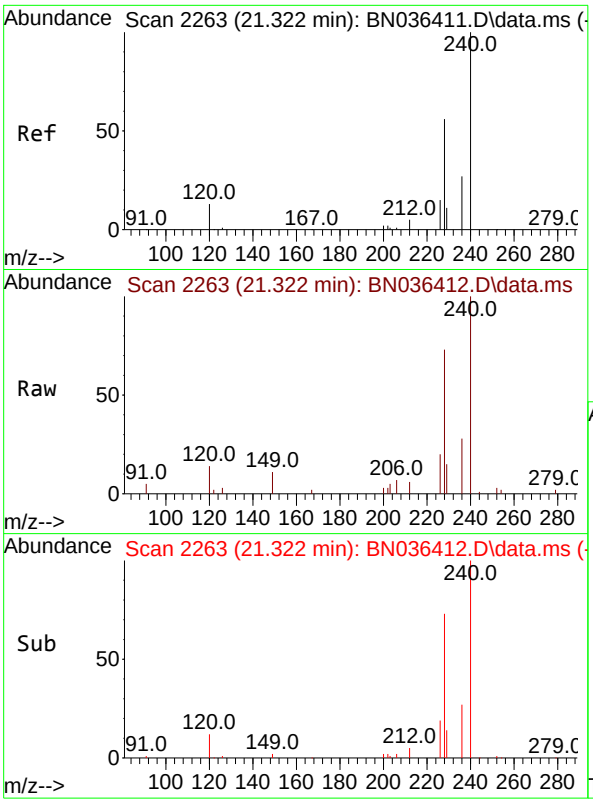


#28
Fluoranthene
Concen: 0.781 ng
RT: 19.197 min Scan# 1942
Delta R.T. -0.005 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:202 Resp: 22075

Ion	Ratio	Lower	Upper
202	100		
101	11.4	9.2	13.8
203	17.0	13.4	20.0



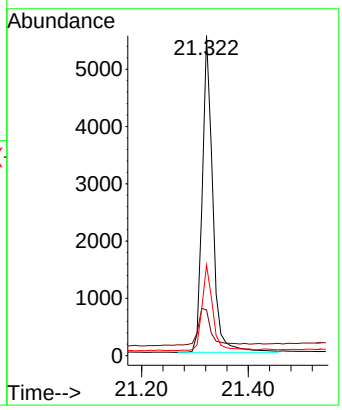


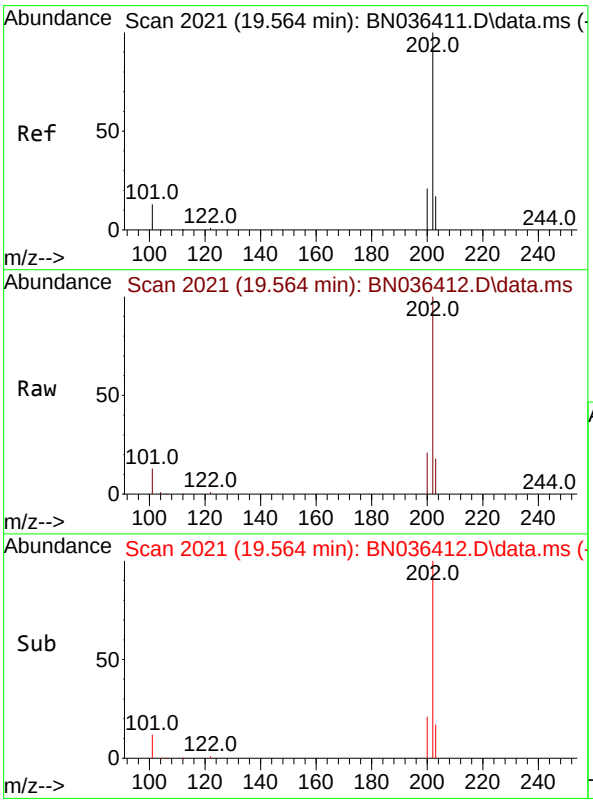
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:240 Resp: 7521

Ion	Ratio	Lower	Upper
240	100		
120	14.3	13.3	19.9
236	28.3	23.0	34.6

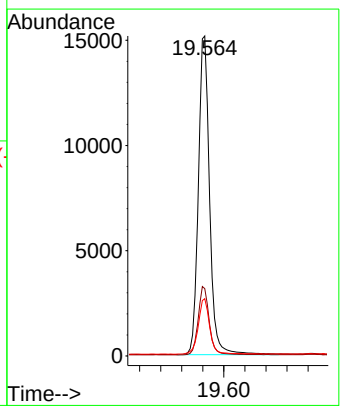


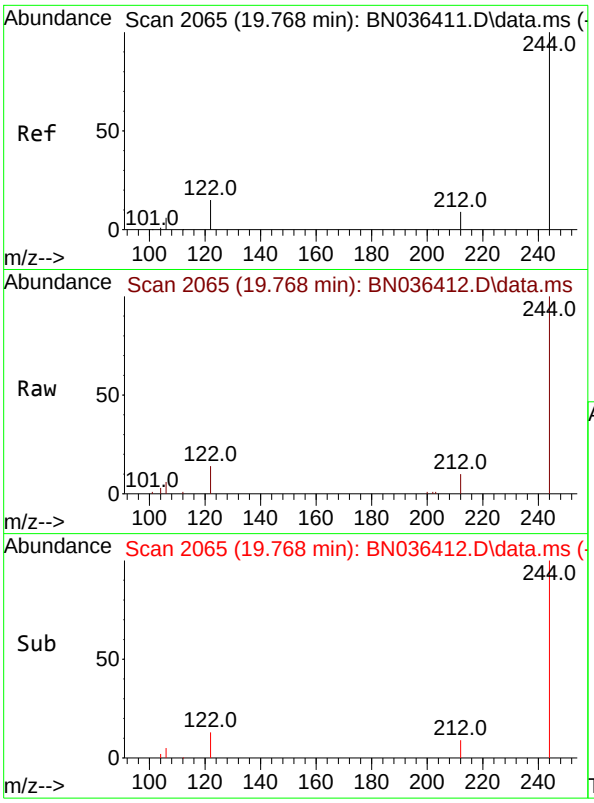


#30
Pyrene
Concen: 0.746 ng
RT: 19.564 min Scan# 2021
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:202 Resp: 22410

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.9	13.9	20.9



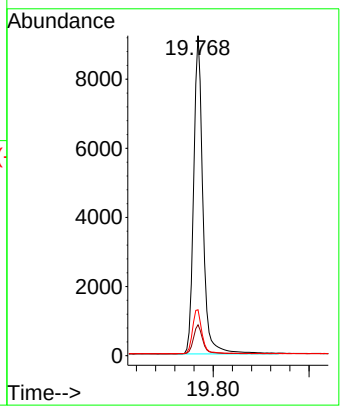


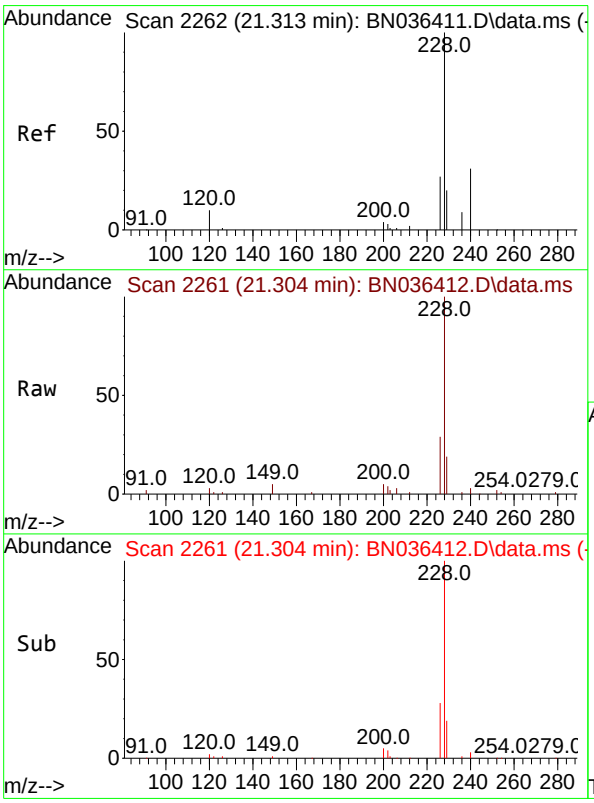
#31
Terphenyl-d14
Concen: 0.800 ng
RT: 19.768 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:244 Resp: 12467

Ion	Ratio	Lower	Upper
244	100		
212	9.6	8.1	12.1
122	14.3	12.8	19.2

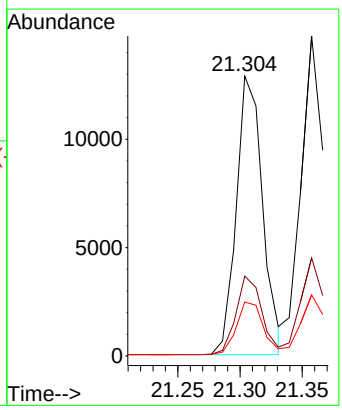


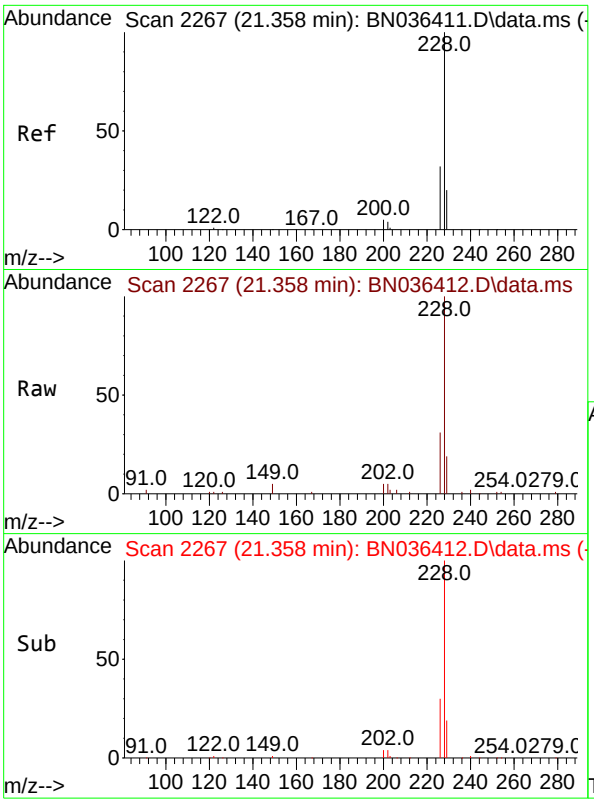


#32
Benzo(a)anthracene
Concen: 0.707 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:228 Resp: 18881

Ion	Ratio	Lower	Upper
228	100		
226	28.5	22.2	33.2
229	19.3	16.5	24.7



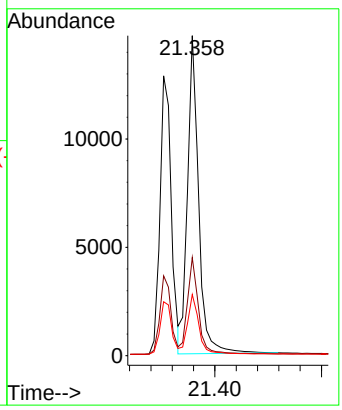


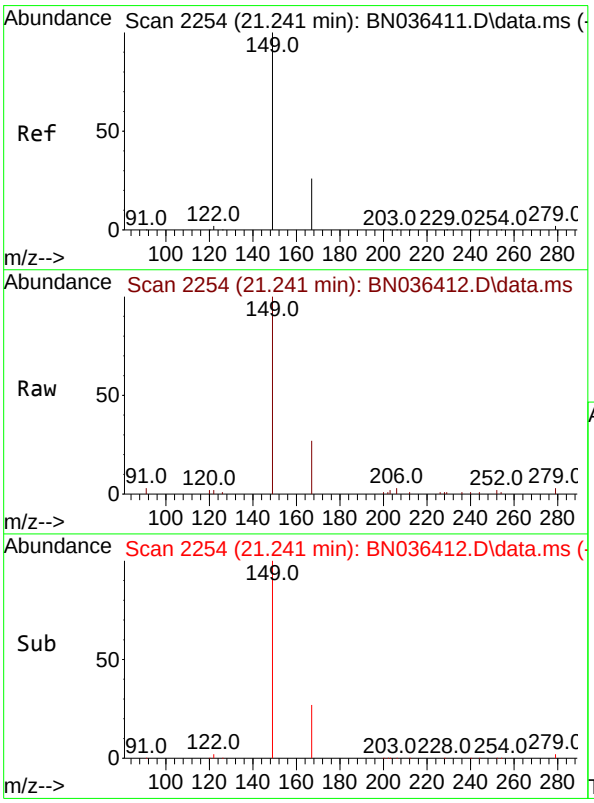
#33
Chrysene
Concen: 0.776 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:228 Resp: 21269

Ion	Ratio	Lower	Upper
228	100		
226	30.6	25.5	38.3
229	19.1	16.4	24.6

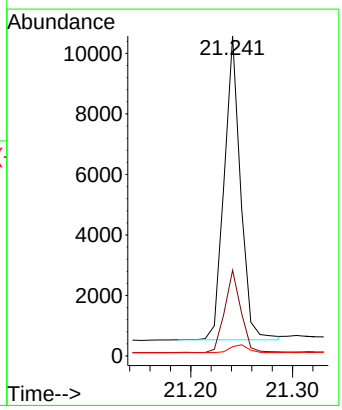


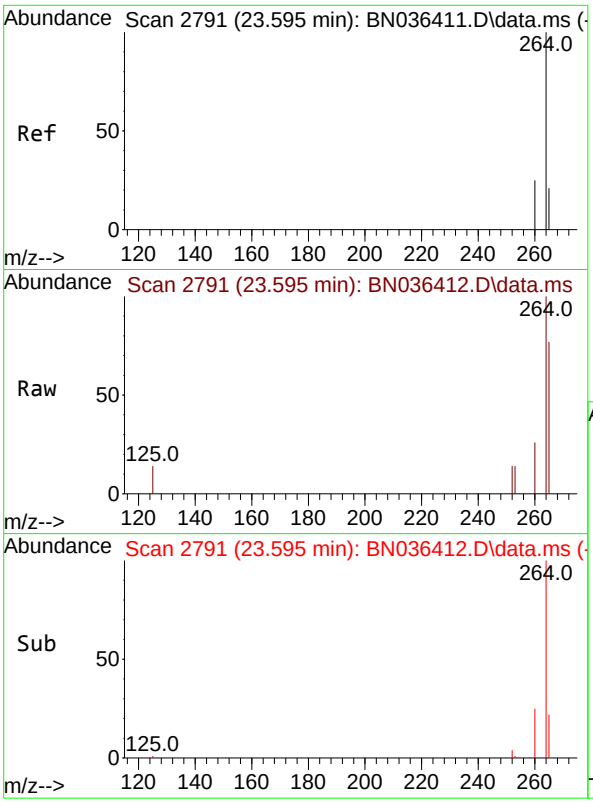


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.752 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:149 Resp: 11207

Ion	Ratio	Lower	Upper
149	100		
167	27.0	21.2	31.8
279	2.9	2.7	4.1



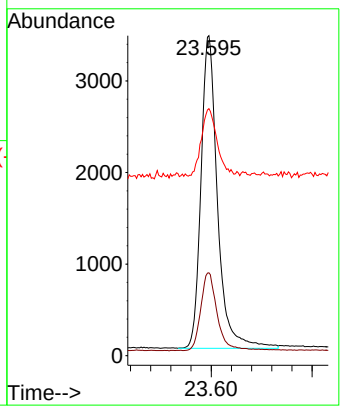


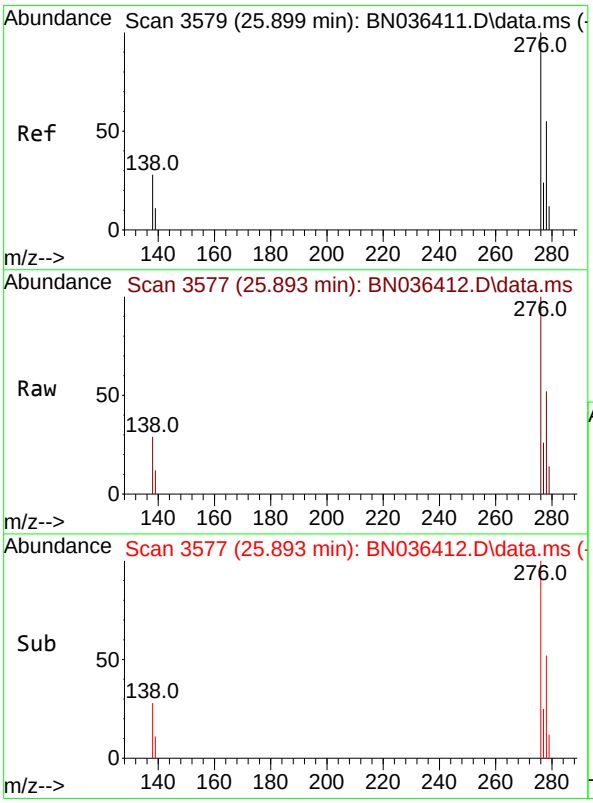
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.595 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:264 Resp: 7758

Ion	Ratio	Lower	Upper
264	100		
260	25.9	20.9	31.3
265	77.2	60.7	91.1

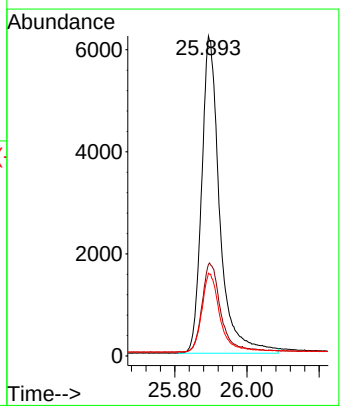


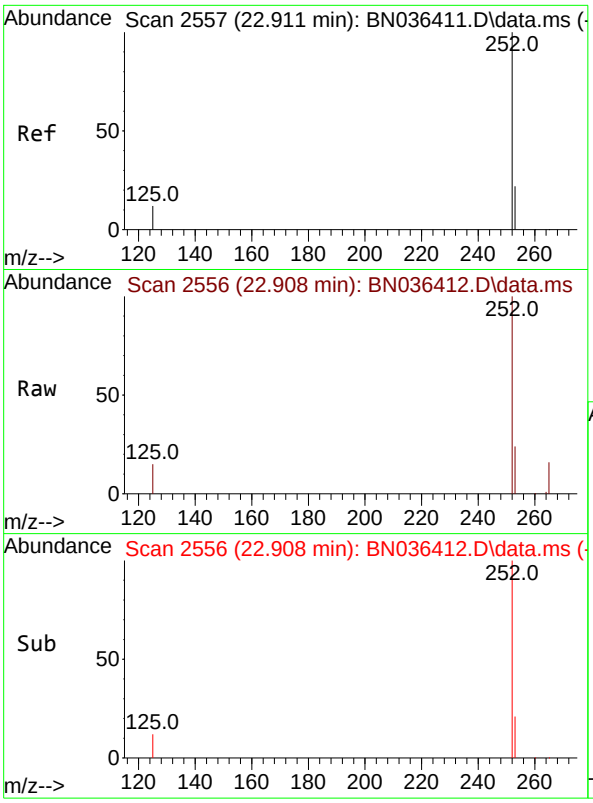


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.708 ng
RT: 25.893 min Scan# 3577
Delta R.T. -0.006 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:276 Resp: 21570

Ion	Ratio	Lower	Upper
276	100		
138	28.9	22.2	33.2
277	23.9	19.8	29.6



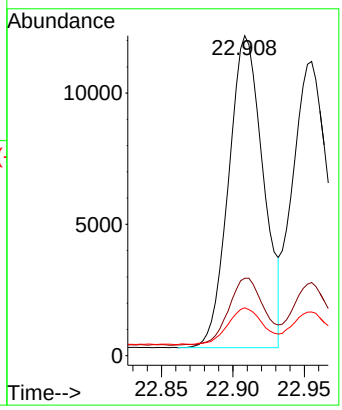


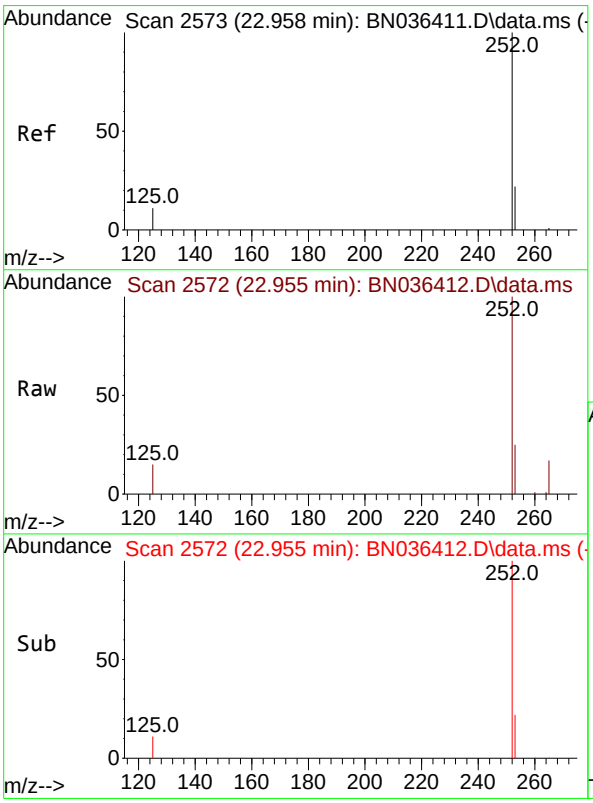
#37
Benzo(b)fluoranthene
Concen: 0.727 ng
RT: 22.908 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 20019

Ion	Ratio	Lower	Upper
252	100		
253	24.2	21.9	32.9
125	15.0	15.0	22.6#

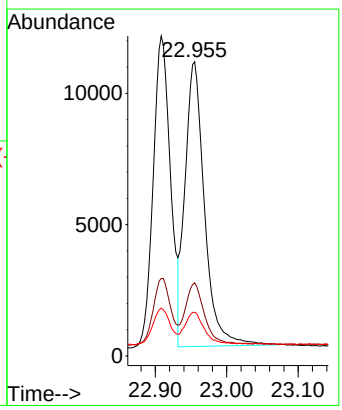


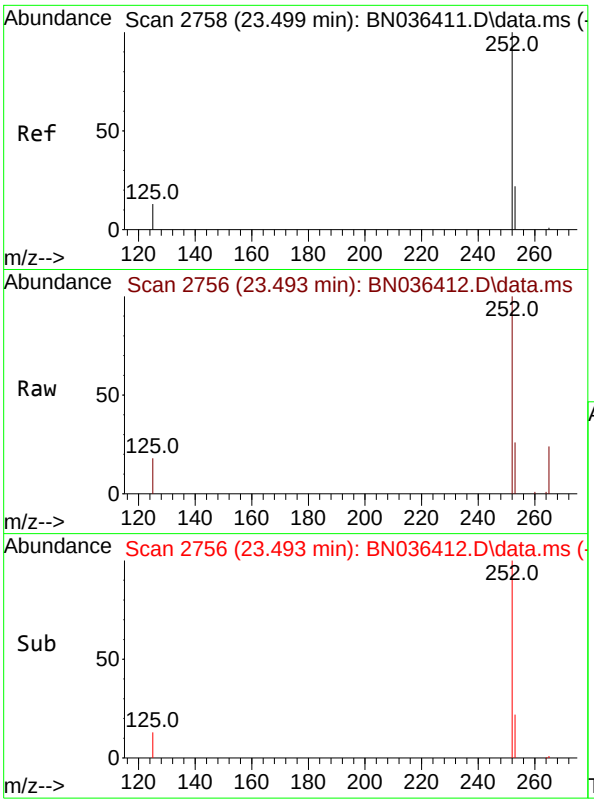


#38
Benzo(k)fluoranthene
Concen: 0.733 ng
RT: 22.955 min Scan# 2572
Delta R.T. -0.003 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:252 Resp: 20570

Ion	Ratio	Lower	Upper
252	100		
253	24.9	22.2	33.4
125	14.8	15.0	22.4#



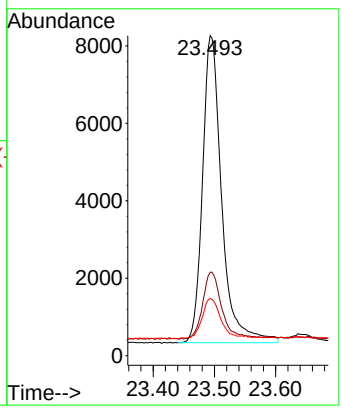


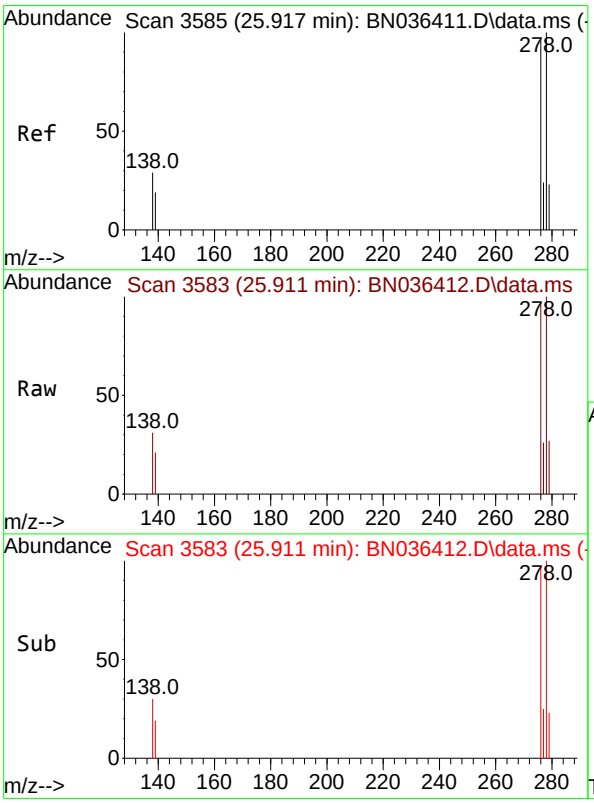
#39
Benzo(a)pyrene
Concen: 0.731 ng
RT: 23.493 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 17289

Ion	Ratio	Lower	Upper
252	100		
253	26.0	24.4	36.6
125	17.9	18.2	27.2#

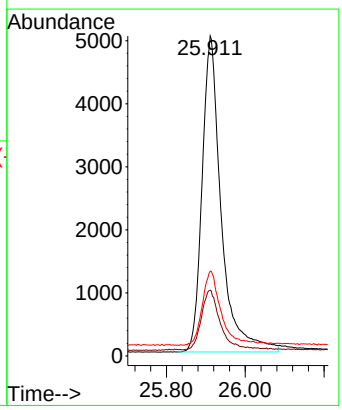


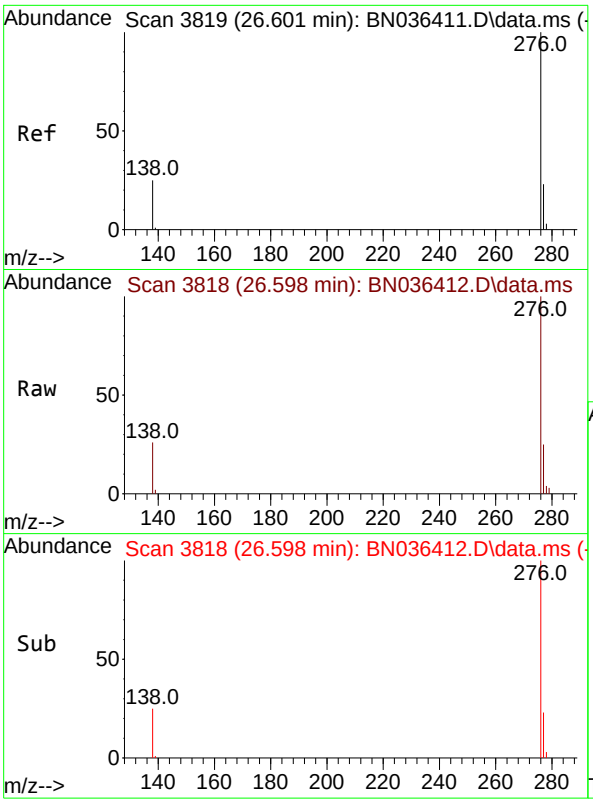


#40
Dibenzo(a,h)anthracene
Concen: 0.697 ng
RT: 25.911 min Scan# 3583
Delta R.T. -0.006 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Tgt Ion:278 Resp: 16872

Ion	Ratio	Lower	Upper
278	100		
139	20.6	18.5	27.7
279	26.5	24.8	37.2



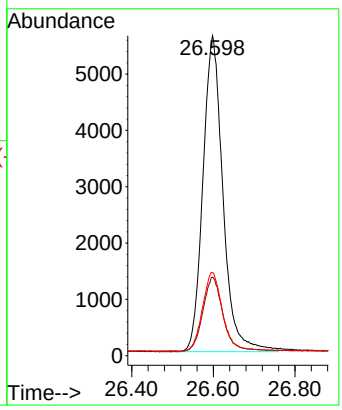


#41
Benzo(g,h,i)perylene
Concen: 0.718 ng
RT: 26.598 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN036412.D
Acq: 10 Feb 2025 14:12

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:276 Resp: 19078

Ion	Ratio	Lower	Upper
276	100		
277	24.6	20.7	31.1
138	26.0	21.8	32.6



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036413.D
Acq On : 10 Feb 2025 14:48
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Feb 11 00:36:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

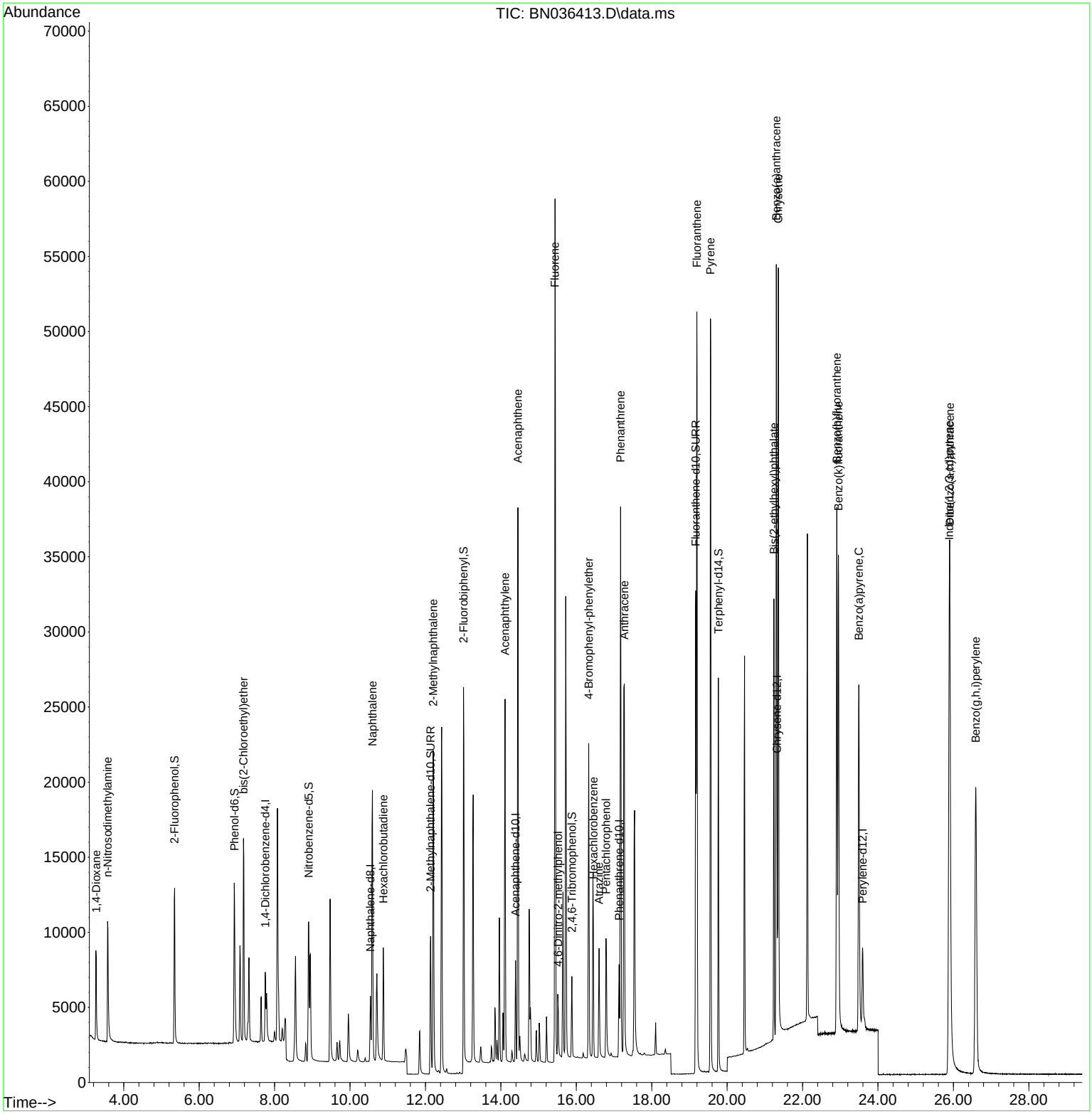
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2193	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	5625	0.400	ng		0.00
13) Acenaphthene-d10	14.388	164	3645	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	8137	0.400	ng		0.00
29) Chrysene-d12	21.322	240	7773	0.400	ng	#	0.00
35) Perylene-d12	23.592	264	7967	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	8016	1.436	ng		0.00
5) Phenol-d6	6.937	99	9644	1.481	ng		0.00
8) Nitrobenzene-d5	8.907	82	8250	1.574	ng		0.00
11) 2-Methylnaphthalene-d10	12.136	152	13436	1.746	ng		0.00
14) 2,4,6-Tribromophenol	15.882	330	2844	1.266	ng		0.00
15) 2-Fluorobiphenyl	13.008	172	22810	1.467	ng		-0.01
27) Fluoranthene-d10	19.169	212	35740	1.707	ng		0.00
31) Terphenyl-d14	19.768	244	25927	1.611	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	3606	1.487	ng		98
3) n-Nitrosodimethylamine	3.572	42	6208	1.425	ng		99
6) bis(2-Chloroethyl)ether	7.175	93	9821	1.813	ng		98
9) Naphthalene	10.594	128	24185	1.505	ng		97
10) Hexachlorobutadiene	10.882	225	5933	1.178	ng	#	100
12) 2-Methylnaphthalene	12.207	142	16325	1.617	ng		99
16) Acenaphthylene	14.110	152	25289	1.499	ng		100
17) Acenaphthene	14.452	154	17130	1.483	ng		97
18) Fluorene	15.435	166	24341	1.638	ng		100
20) 4,6-Dinitro-2-methylph...	15.522	198	2725	1.497	ng	#	47
21) 4-Bromophenyl-phenylether	16.329	248	7690	1.379	ng		91
22) Hexachlorobenzene	16.453	284	9401	1.292	ng		97
23) Atrazine	16.602	200	6316	1.541	ng		95
24) Pentachlorophenol	16.789	266	4352	1.368	ng		99
25) Phenanthrene	17.173	178	37027	1.552	ng		100
26) Anthracene	17.273	178	33031	1.524	ng		99
28) Fluoranthene	19.197	202	45708	1.617	ng		99
30) Pyrene	19.559	202	46256	1.489	ng		100
32) Benzo(a)anthracene	21.304	228	40416	1.463	ng		99
33) Chrysene	21.357	228	43661	1.542	ng		97
34) Bis(2-ethylhexyl)phtha...	21.241	149	23672	1.538	ng		99
36) Indeno(1,2,3-cd)pyrene	25.890	276	46083	1.472	ng		98
37) Benzo(b)fluoranthene	22.908	252	42491	1.502	ng	#	89
38) Benzo(k)fluoranthene	22.952	252	42933	1.489	ng	#	89
39) Benzo(a)pyrene	23.493	252	36490	1.503	ng	#	86
40) Dibenzo(a,h)anthracene	25.905	278	36765	1.478	ng	#	90
41) Benzo(g,h,i)perylene	26.592	276	40441	1.482	ng		98

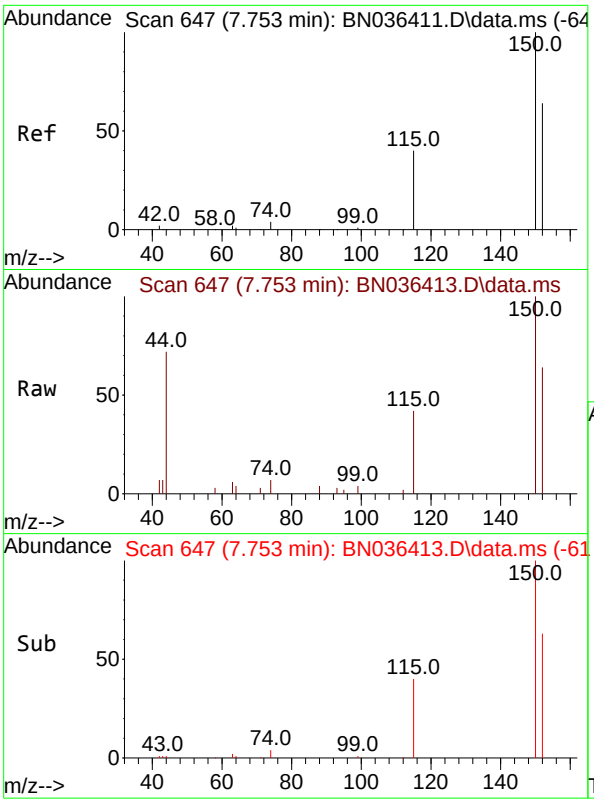
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036413.D
Acq On : 10 Feb 2025 14:48
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Feb 11 00:36:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



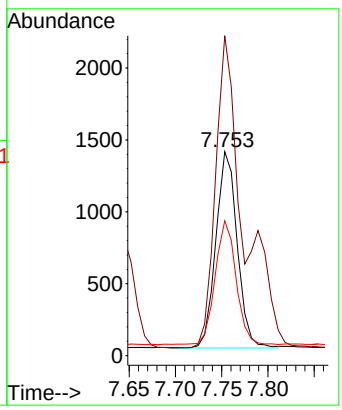


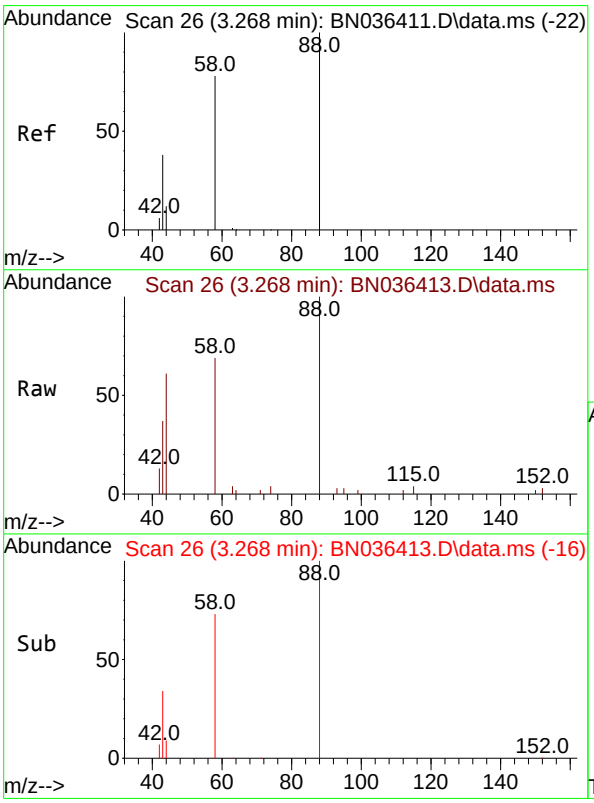
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 2193

Ion	Ratio	Lower	Upper
152	100		
150	156.9	123.7	185.5
115	66.1	52.5	78.7

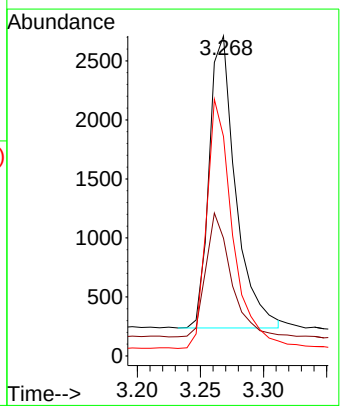


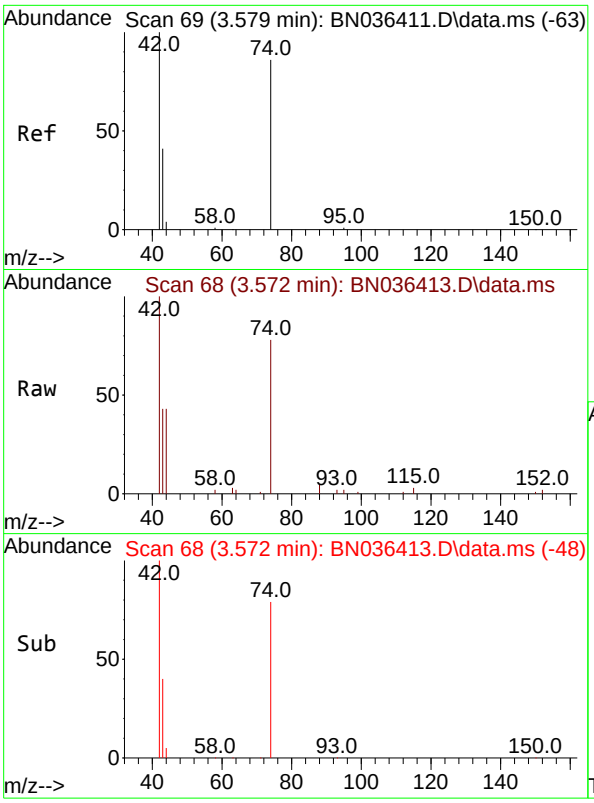


#2
1,4-Dioxane
Concen: 1.487 ng
RT: 3.268 min Scan# 26
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion: 88 Resp: 3606

Ion	Ratio	Lower	Upper
88	100		
43	40.7	33.7	50.5
58	84.0	68.9	103.3



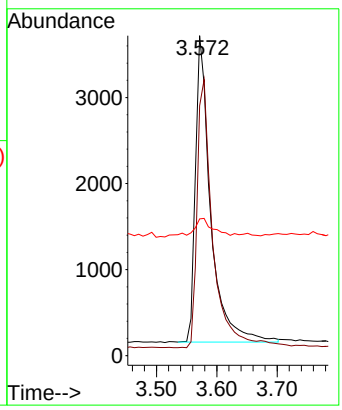


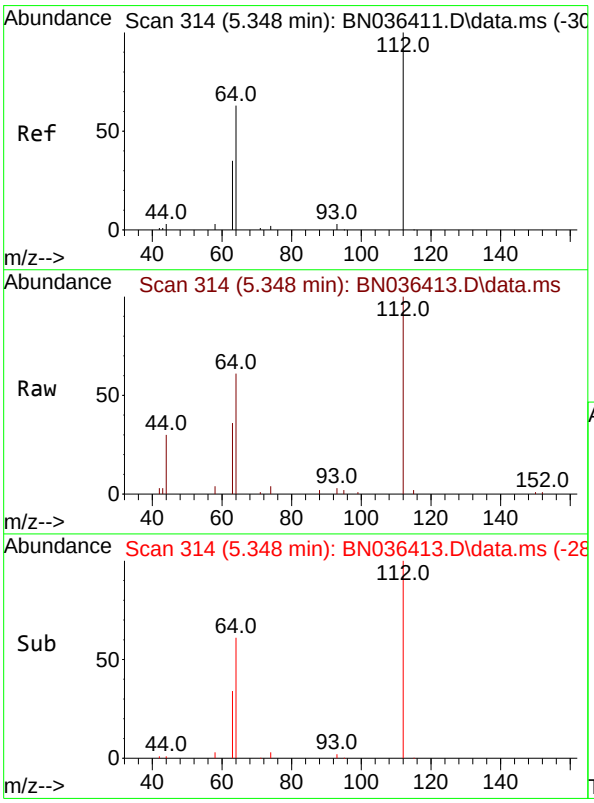
#3
n-Nitrosodimethylamine
Concen: 1.425 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 6208

Ion	Ratio	Lower	Upper
42	100		
74	90.8	71.8	107.6
44	7.9	7.8	11.6

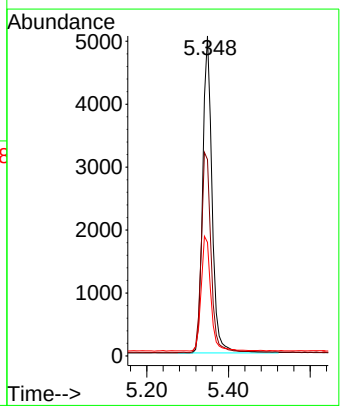


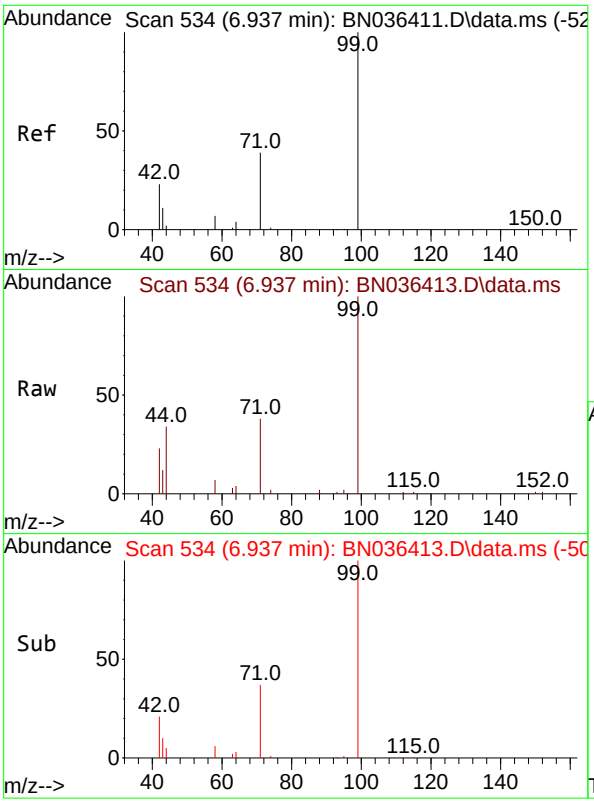


#4
2-Fluorophenol
Concen: 1.436 ng
RT: 5.348 min Scan# 314
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:112 Resp: 8016

Ion	Ratio	Lower	Upper
112	100		
64	65.9	53.4	80.0
63	37.6	30.3	45.5



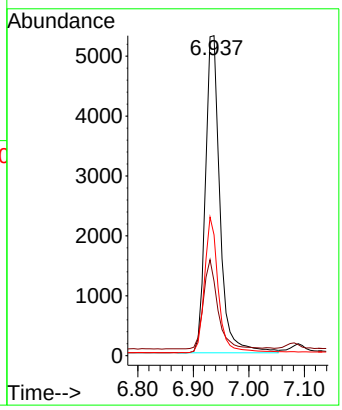


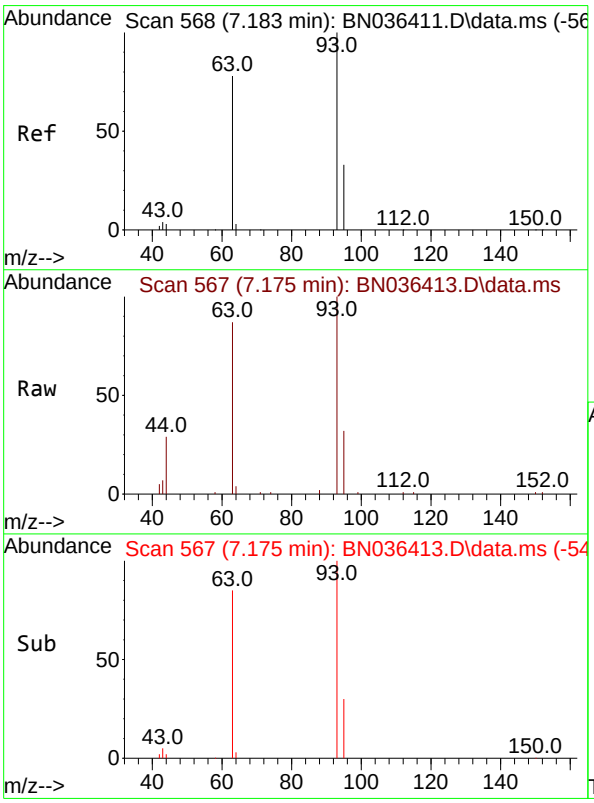
#5
Phenol-d6
Concen: 1.481 ng
RT: 6.937 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 9644

Ion	Ratio	Lower	Upper
99	100		
42	27.7	21.7	32.5
71	41.1	32.6	49.0

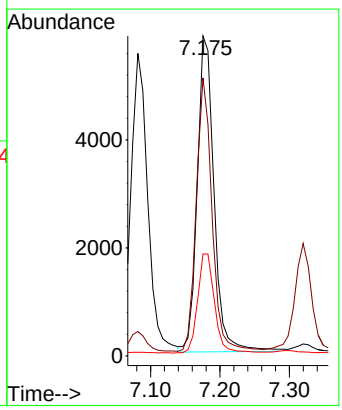


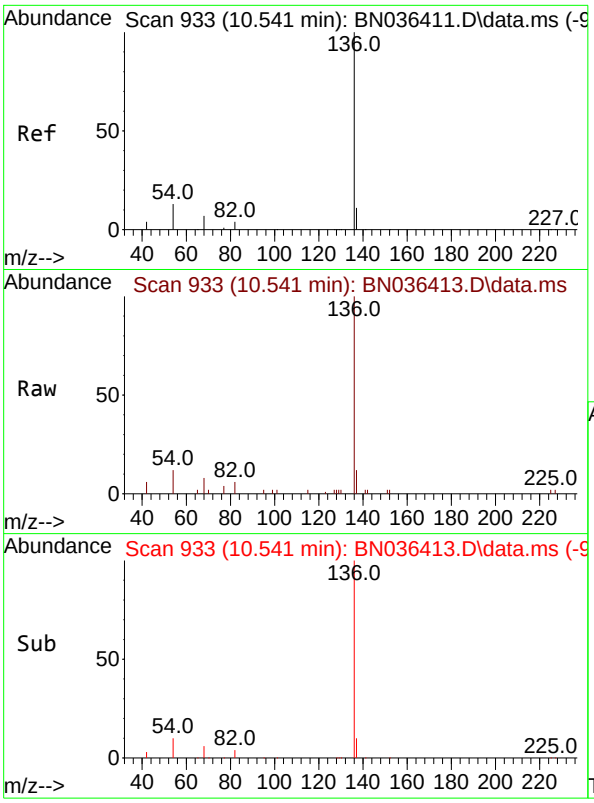


#6
bis(2-Chloroethyl)ether
Concen: 1.813 ng
RT: 7.175 min Scan# 567
Delta R.T. -0.007 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion: 93 Resp: 9821

Ion	Ratio	Lower	Upper
93	100		
63	81.0	66.3	99.5
95	31.5	26.2	39.4



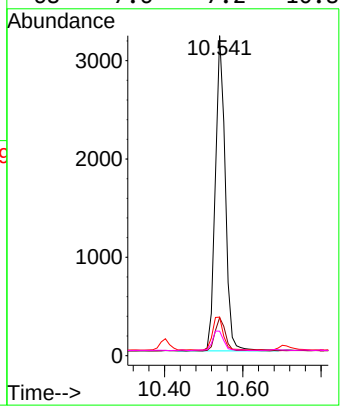


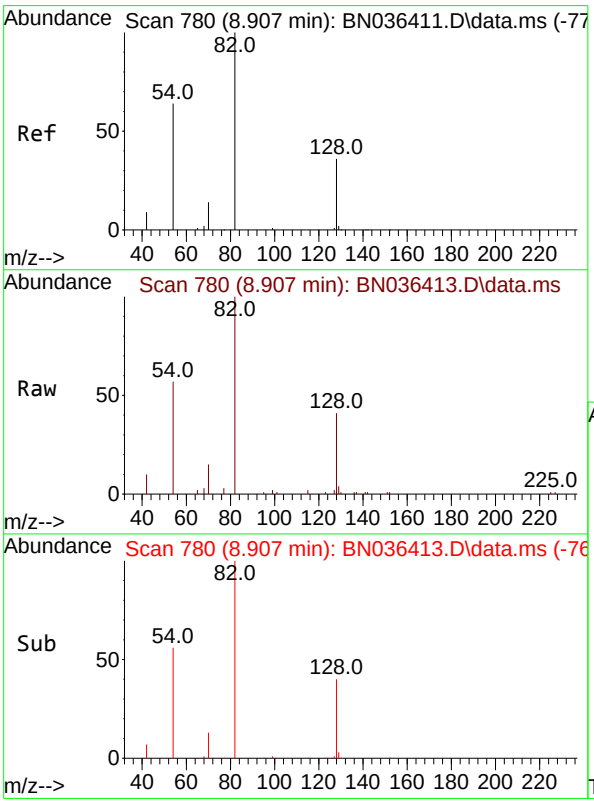
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 5625

Ion	Ratio	Lower	Upper
136	100		
137	11.9	10.1	15.1
54	12.0	11.8	17.6
68	7.6	7.2	10.8

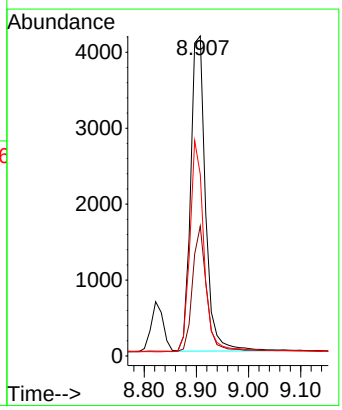


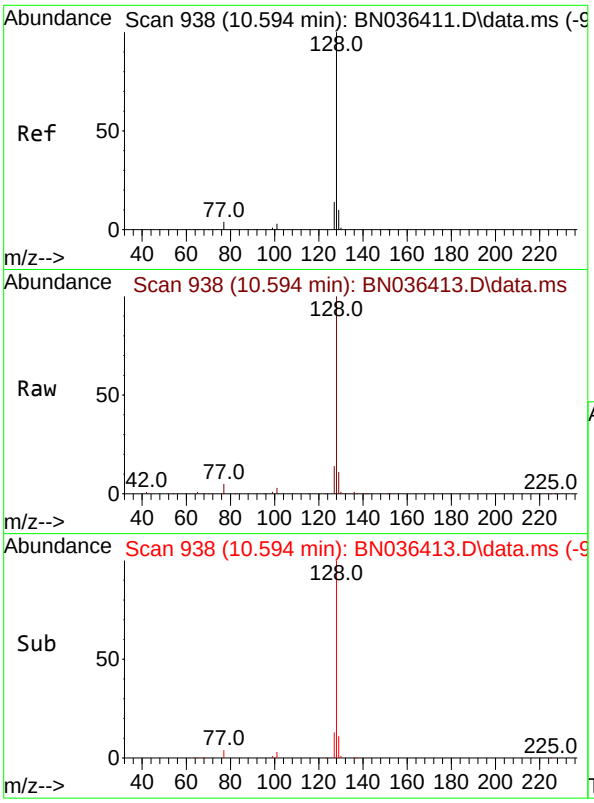


#8
Nitrobenzene-d5
Concen: 1.574 ng
RT: 8.907 min Scan# 780
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion: 82 Resp: 8250

Ion	Ratio	Lower	Upper
82	100		
128	40.6	31.9	47.9
54	56.8	53.1	79.7



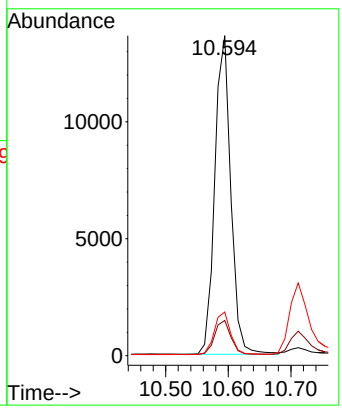


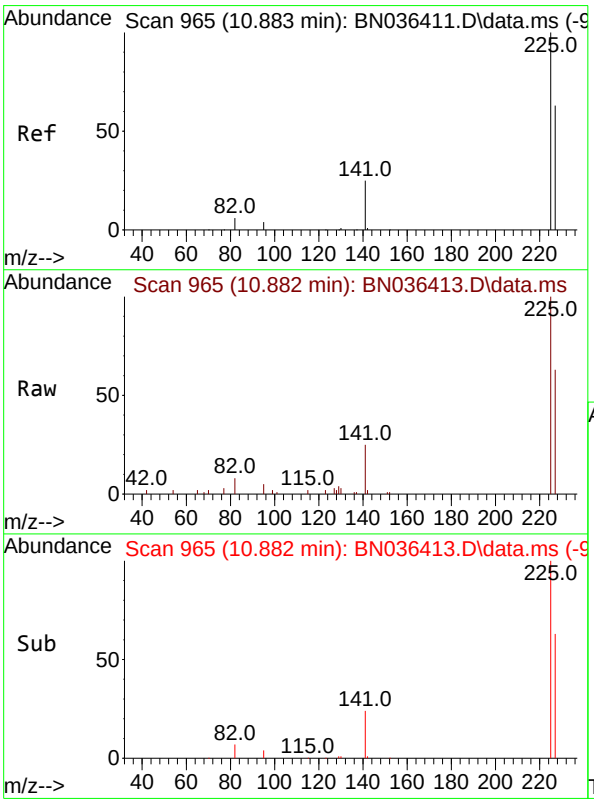
#9
Naphthalene
Concen: 1.505 ng
RT: 10.594 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 24185

Ion	Ratio	Lower	Upper
128	100		
129	11.0	9.6	14.4
127	13.7	12.0	18.0

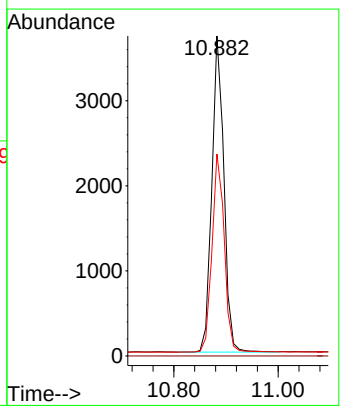


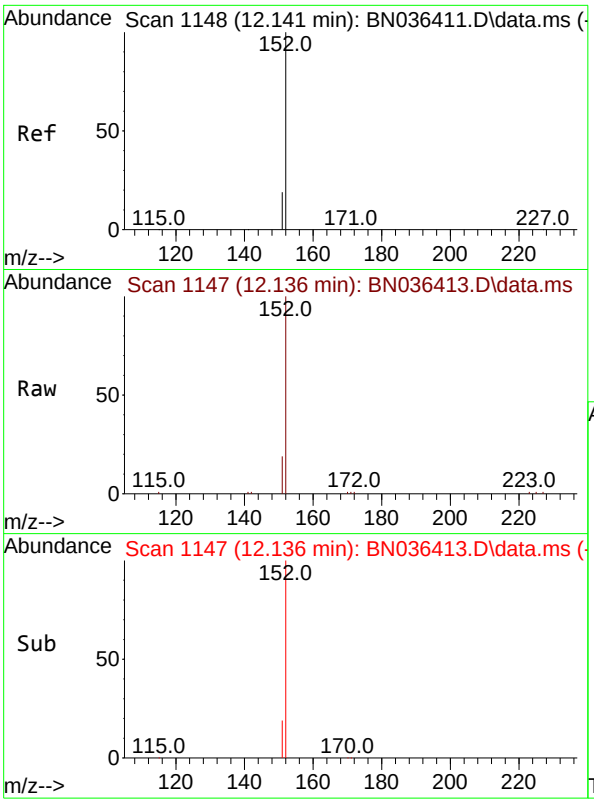


#10
Hexachlorobutadiene
Concen: 1.178 ng
RT: 10.882 min Scan# 965
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:225 Resp: 5933

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	50.9	76.3



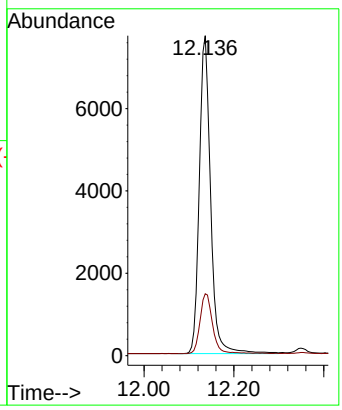


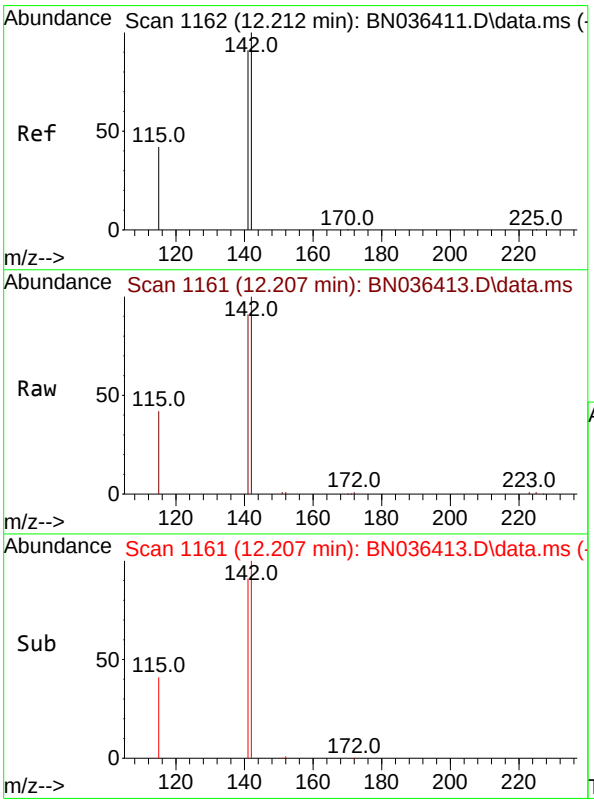
#11
2-Methylnaphthalene-d10
Concen: 1.746 ng
RT: 12.136 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 13436

Ion	Ratio	Lower	Upper
152	100		
151	20.8	16.6	25.0

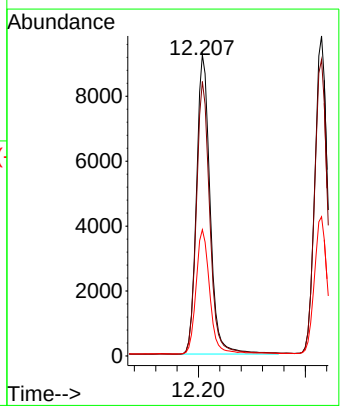


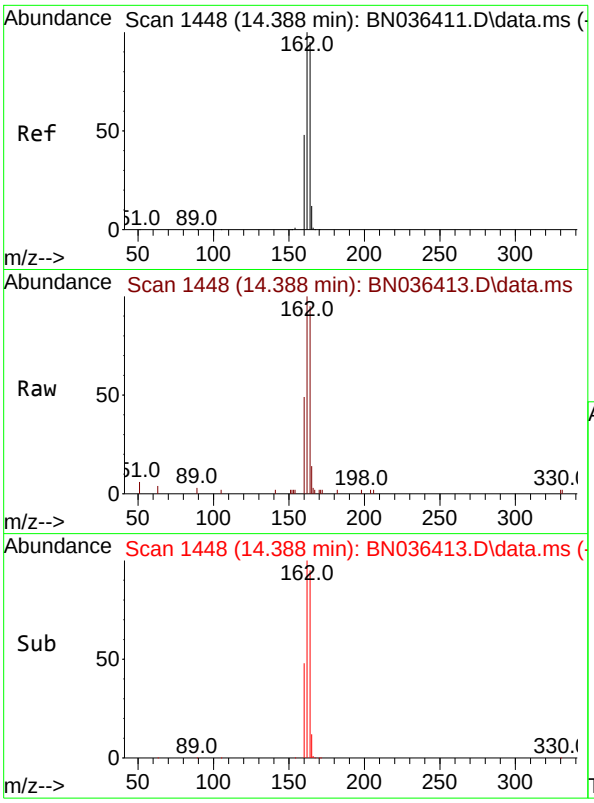


#12
2-Methylnaphthalene
Concen: 1.617 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:142 Resp: 16325

Ion	Ratio	Lower	Upper
142	100		
141	91.0	72.8	109.2
115	41.9	35.5	53.3



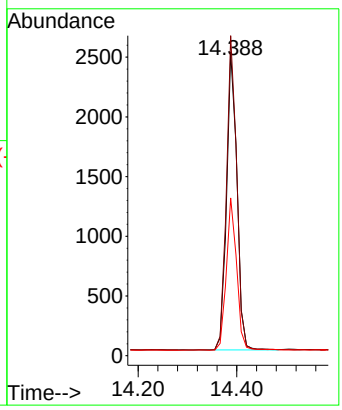


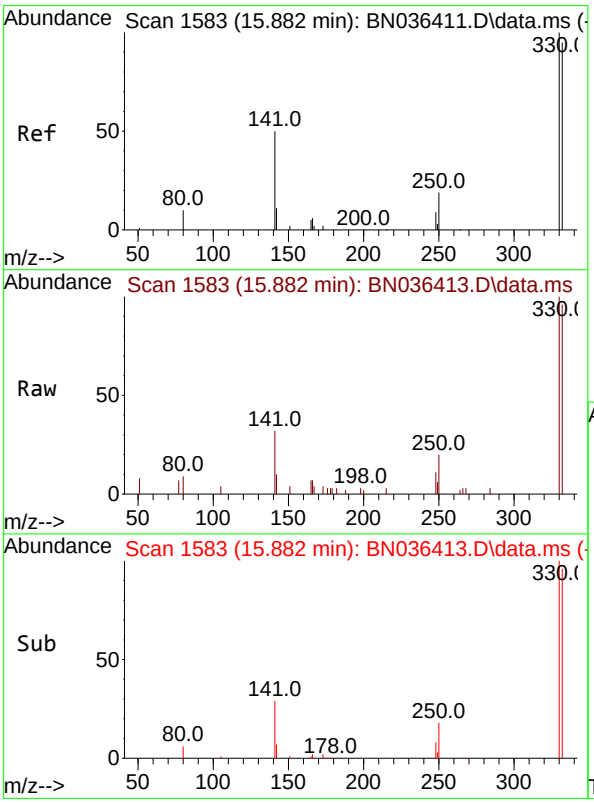
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 3645

Ion	Ratio	Lower	Upper
164	100		
162	105.5	84.1	126.1
160	52.0	41.4	62.0

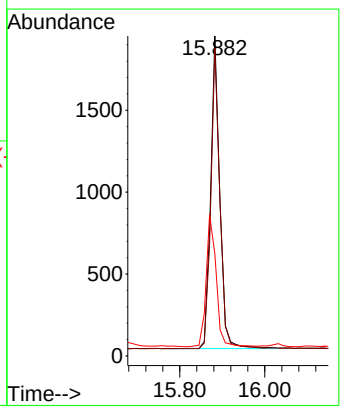


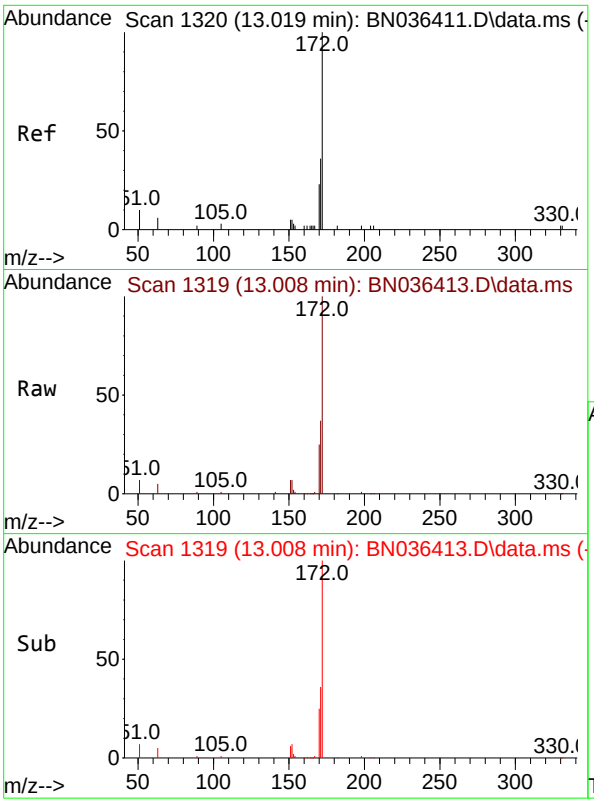


#14
2,4,6-Tribromophenol
Concen: 1.266 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:330 Resp: 2844

Ion	Ratio	Lower	Upper
330	100		
332	94.6	76.6	114.8
141	46.0	37.8	56.8



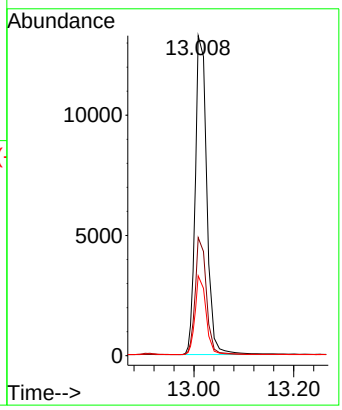


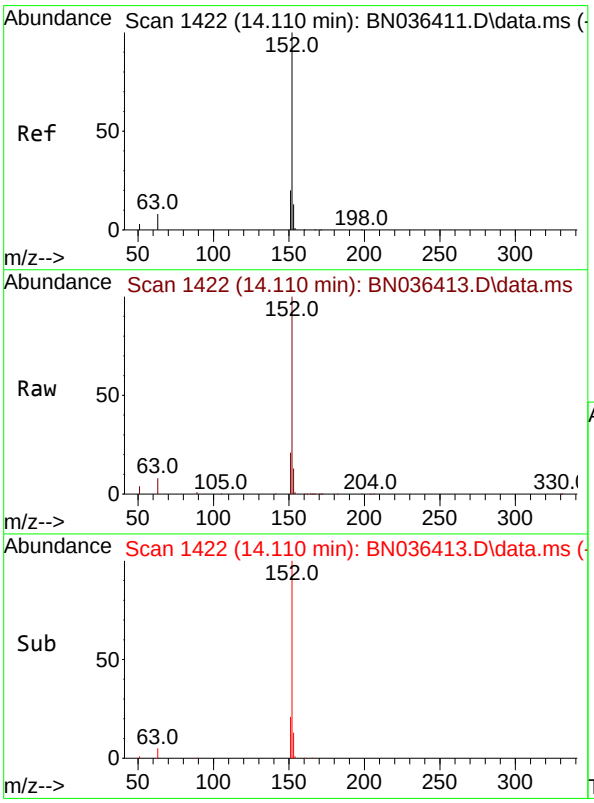
#15
2-Fluorobiphenyl
Concen: 1.467 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 22810

Ion	Ratio	Lower	Upper
172	100		
171	36.9	29.6	44.4
170	25.0	19.8	29.6

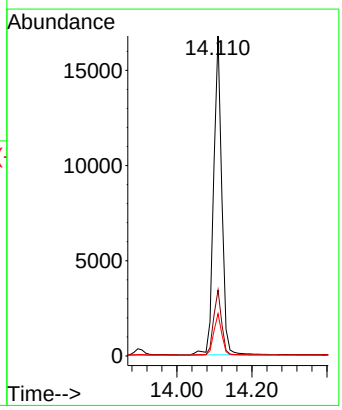


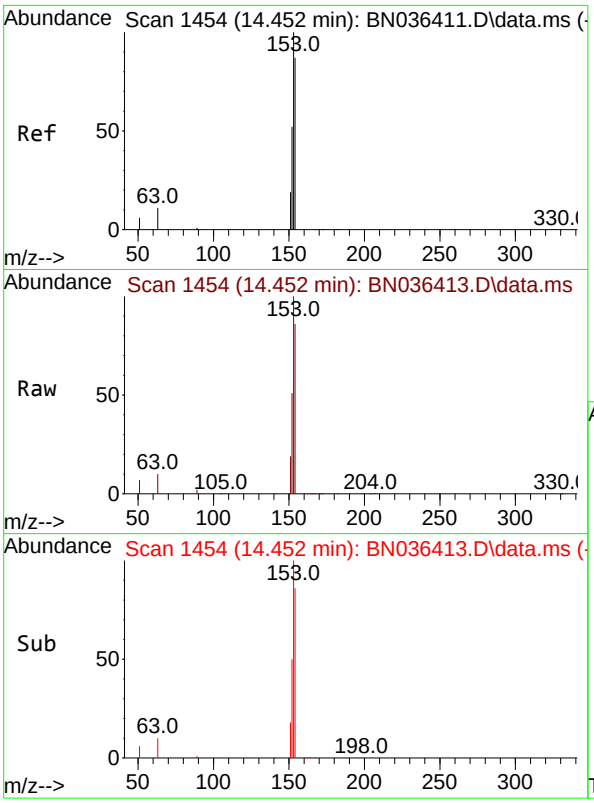


#16
Acenaphthylene
Concen: 1.499 ng
RT: 14.110 min Scan# 1422
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:152 Resp: 25289

Ion	Ratio	Lower	Upper
152	100		
151	20.0	15.8	23.8
153	12.9	10.2	15.2



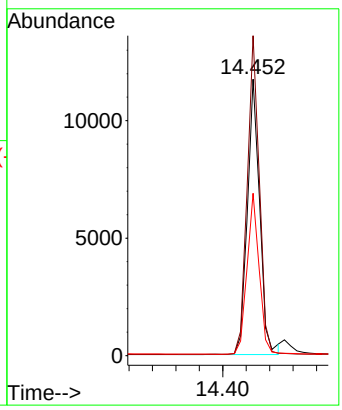


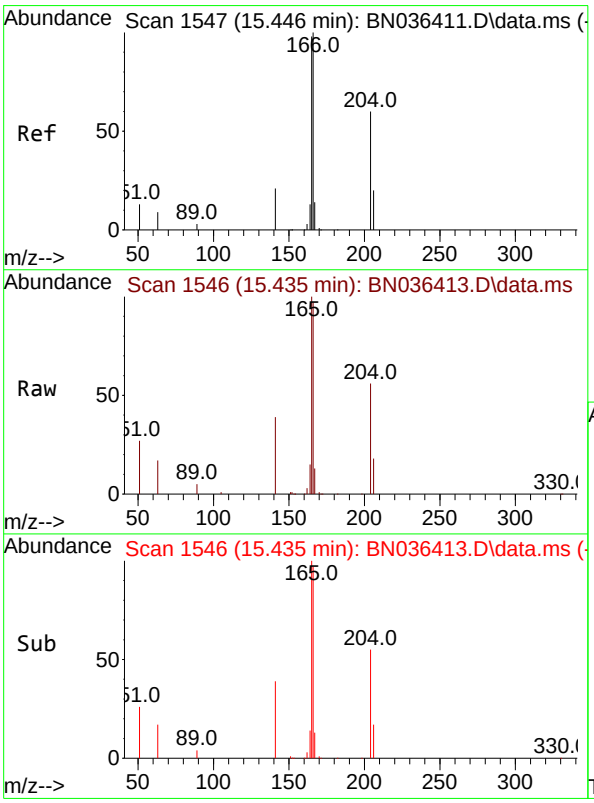
#17
Acenaphthene
Concen: 1.483 ng
RT: 14.452 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 17130

Ion	Ratio	Lower	Upper
154	100		
153	114.1	93.3	139.9
152	58.1	48.8	73.2

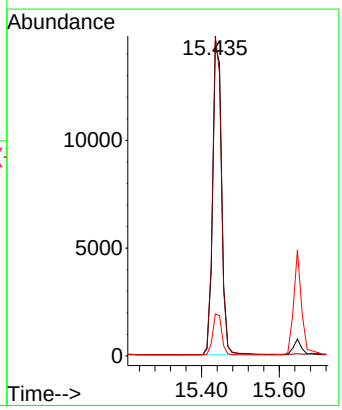


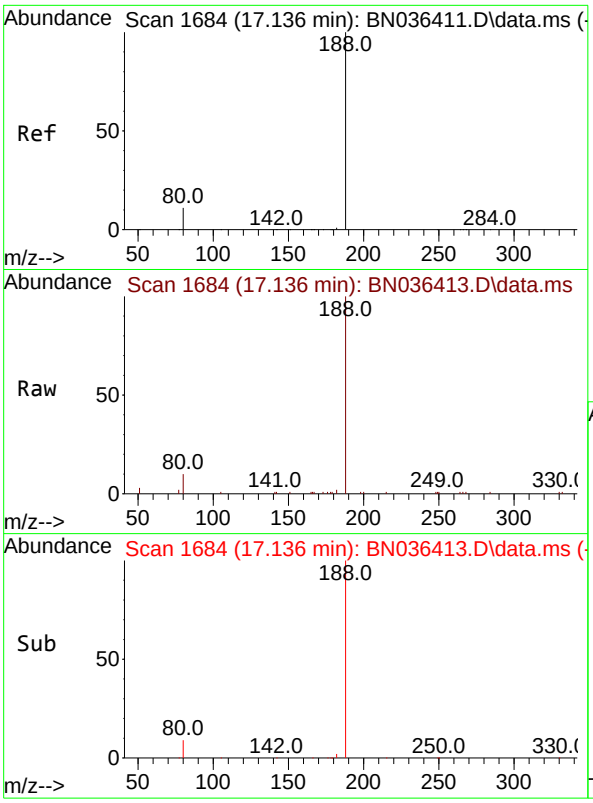


#18
Fluorene
Concen: 1.638 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:166 Resp: 24341

Ion	Ratio	Lower	Upper
166	100		
165	99.5	79.5	119.3
167	13.2	10.4	15.6



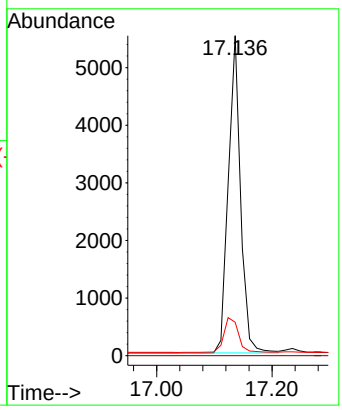


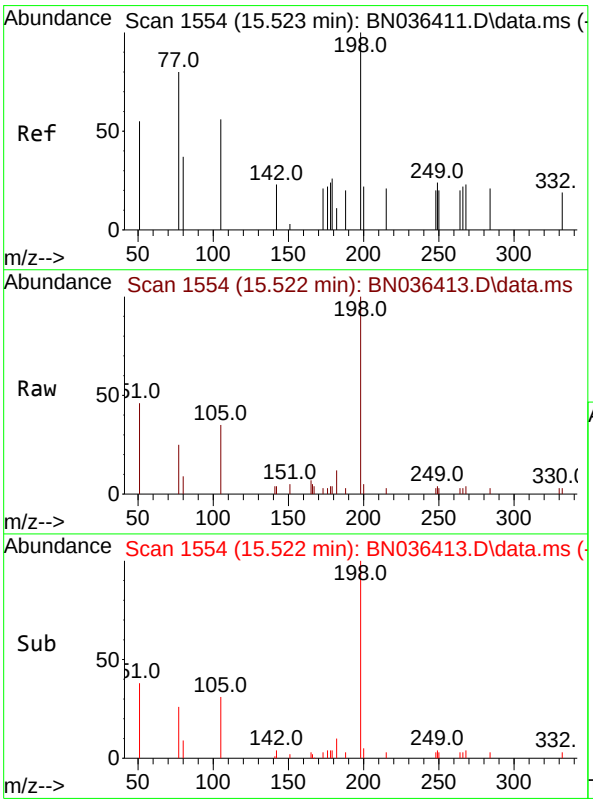
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 8137

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.5	9.8	14.6

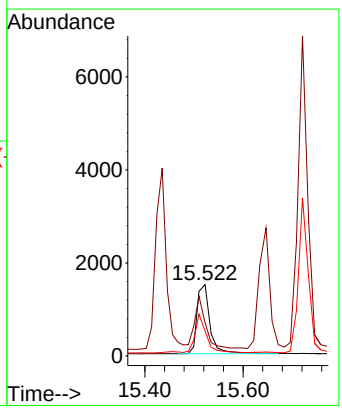


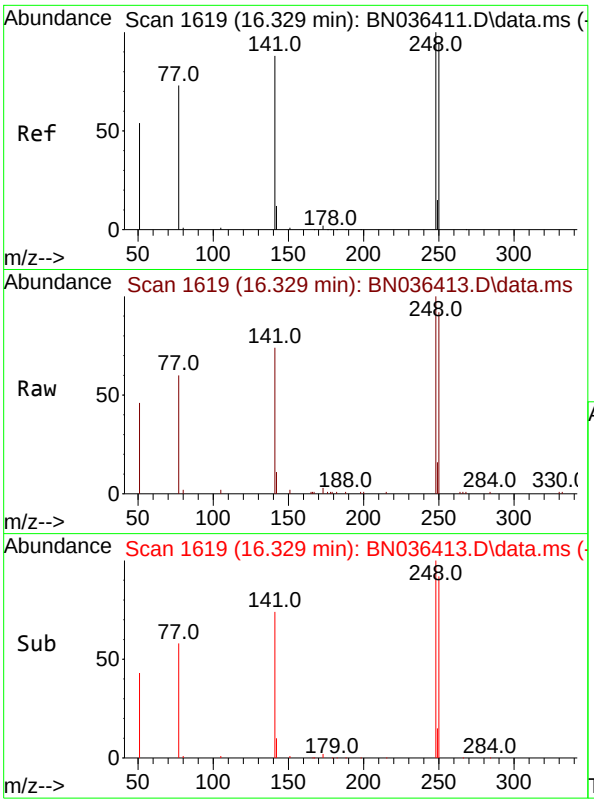


#20
4,6-Dinitro-2-methylphenol
Concen: 1.497 ng
RT: 15.522 min Scan# 1554
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:198 Resp: 2725

Ion	Ratio	Lower	Upper
198	100		
51	46.4	86.6	129.8#
105	34.9	57.5	86.3#



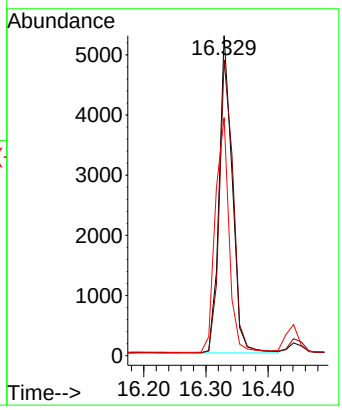


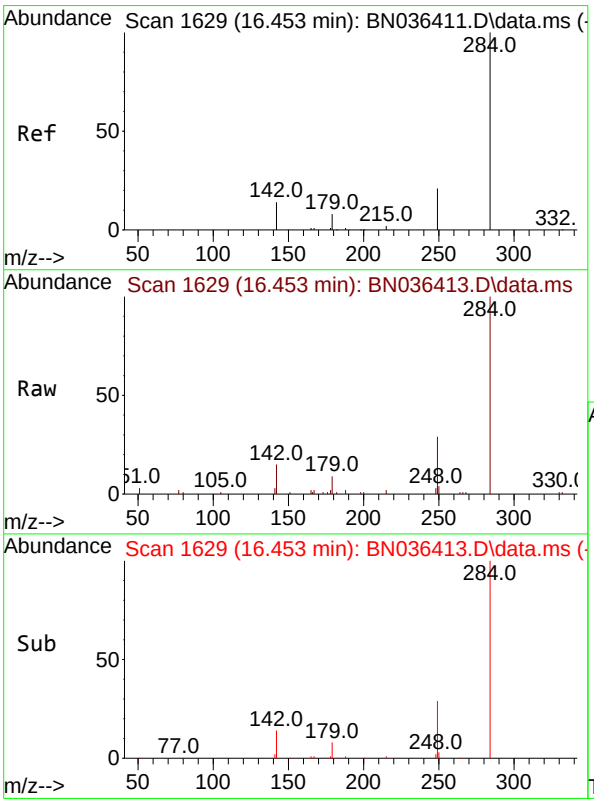
#21
4-Bromophenyl-phenylether
Concen: 1.379 ng
RT: 16.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 7690

Ion	Ratio	Lower	Upper
248	100		
250	92.4	76.1	114.1
141	74.4	71.7	107.5

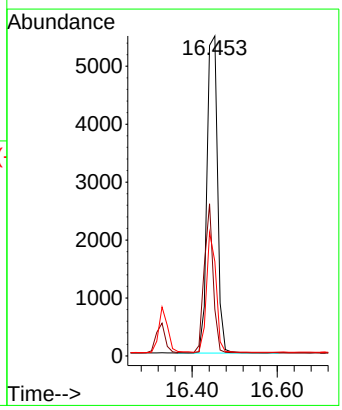


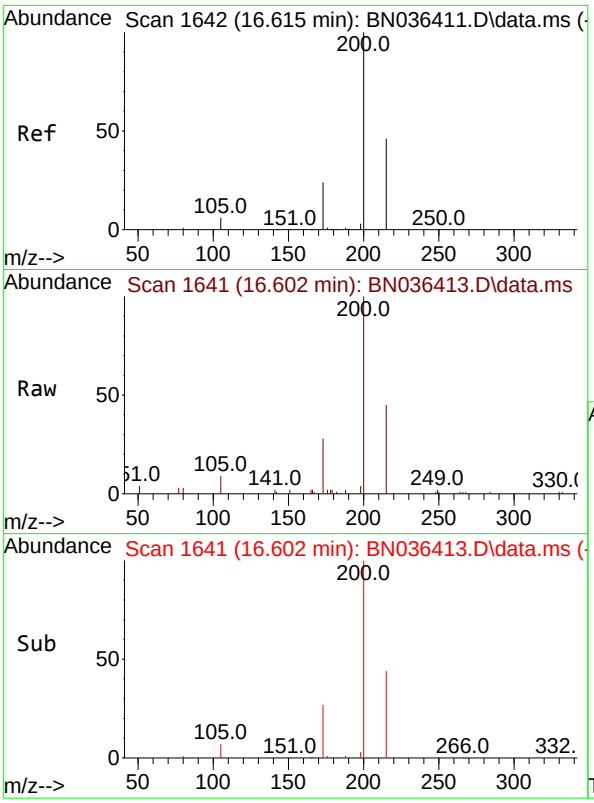


#22
Hexachlorobenzene
Concen: 1.292 ng
RT: 16.453 min Scan# 1629
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:284 Resp: 9401

Ion	Ratio	Lower	Upper
284	100		
142	39.9	33.4	50.0
249	34.3	28.6	43.0



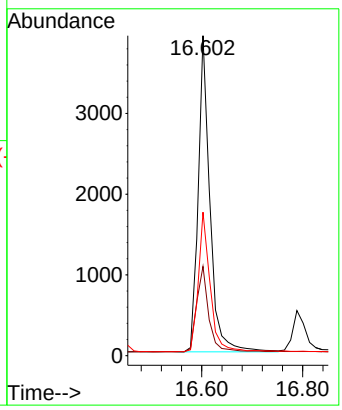


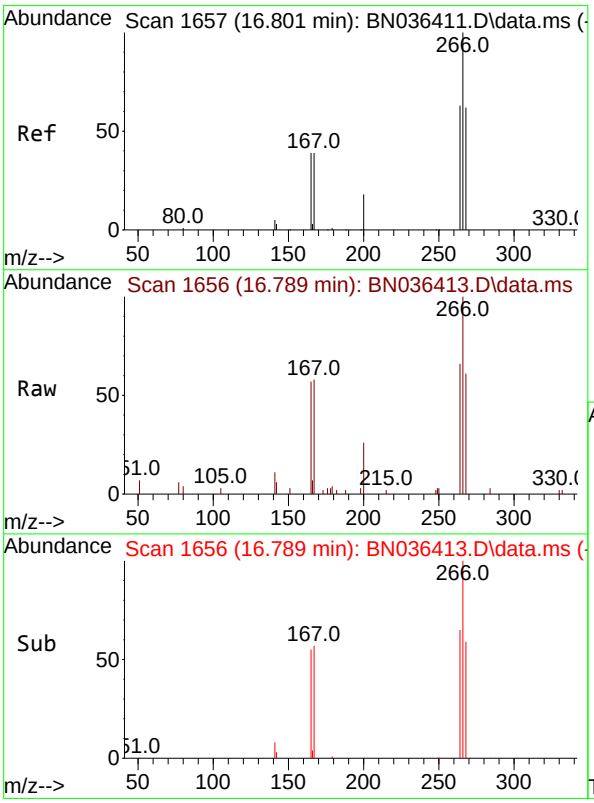
#23
Atrazine
Concen: 1.541 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 6316

Ion	Ratio	Lower	Upper
200	100		
173	27.9	23.2	34.8
215	44.8	40.0	60.0

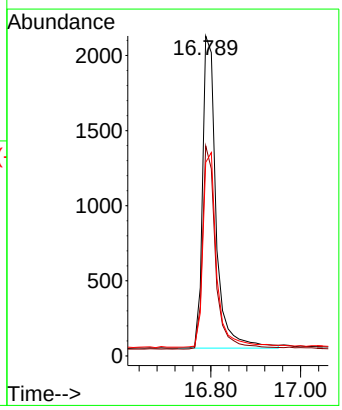


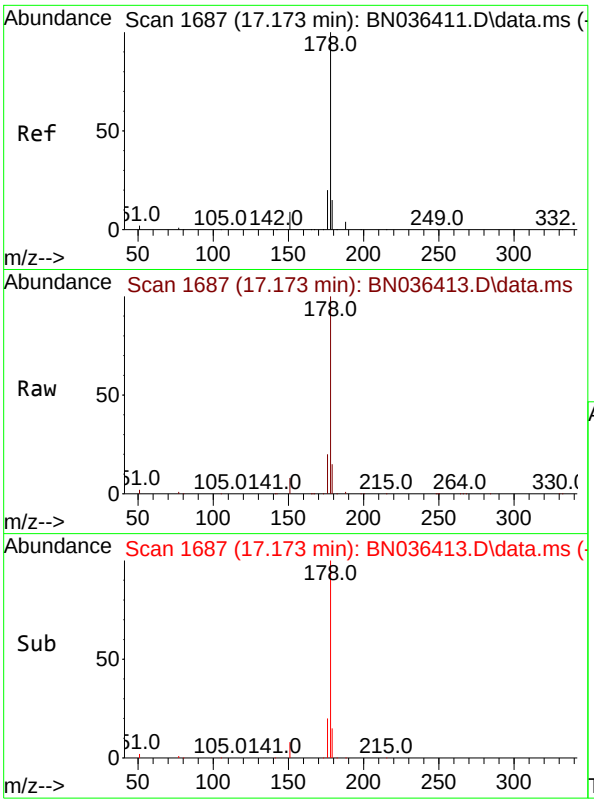


#24
Pentachlorophenol
Concen: 1.368 ng
RT: 16.789 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:266 Resp: 4352

Ion	Ratio	Lower	Upper
266	100		
264	63.3	50.6	76.0
268	63.3	51.9	77.9



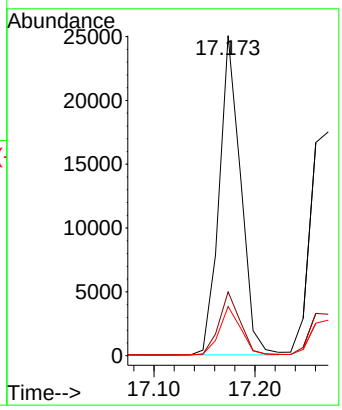


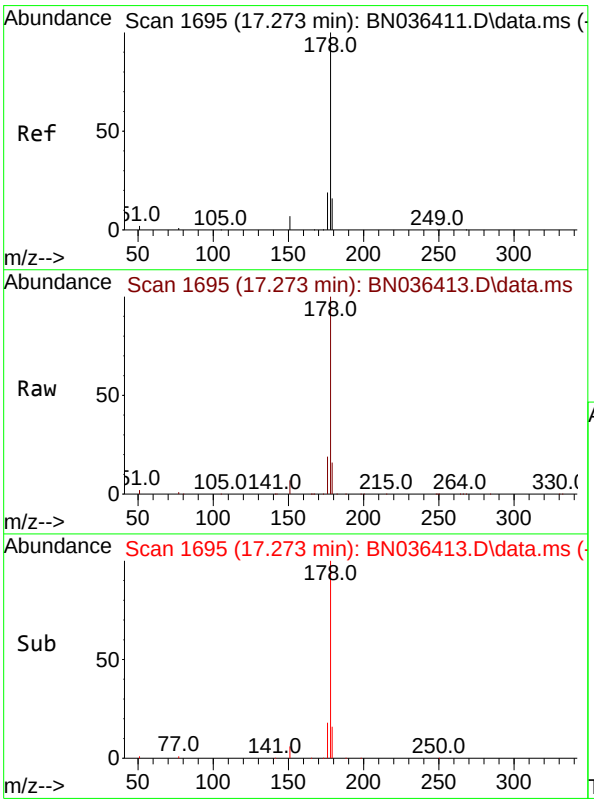
#25
Phenanthrene
Concen: 1.552 ng
RT: 17.173 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 37027

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.7	23.5
179	15.1	12.4	18.6

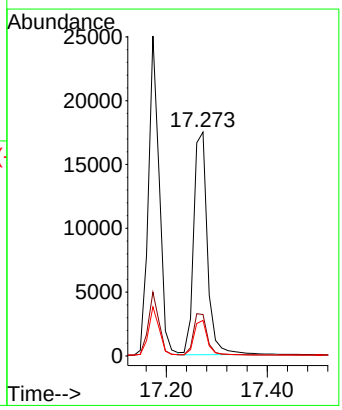


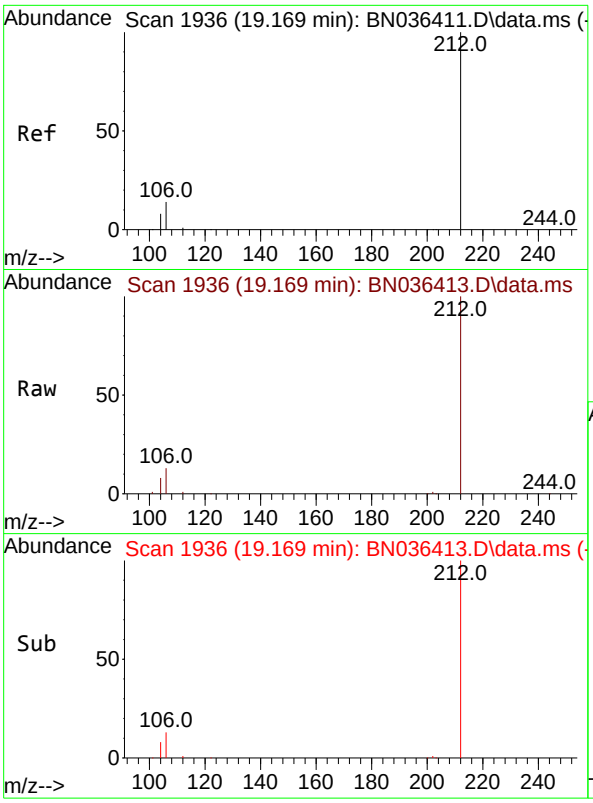


#26
Anthracene
Concen: 1.524 ng
RT: 17.273 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:178 Resp: 33031

Ion	Ratio	Lower	Upper
178	100		
176	18.9	14.9	22.3
179	15.2	12.4	18.6



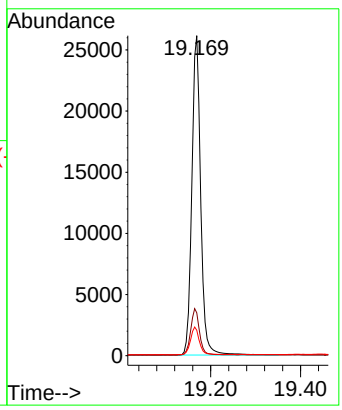


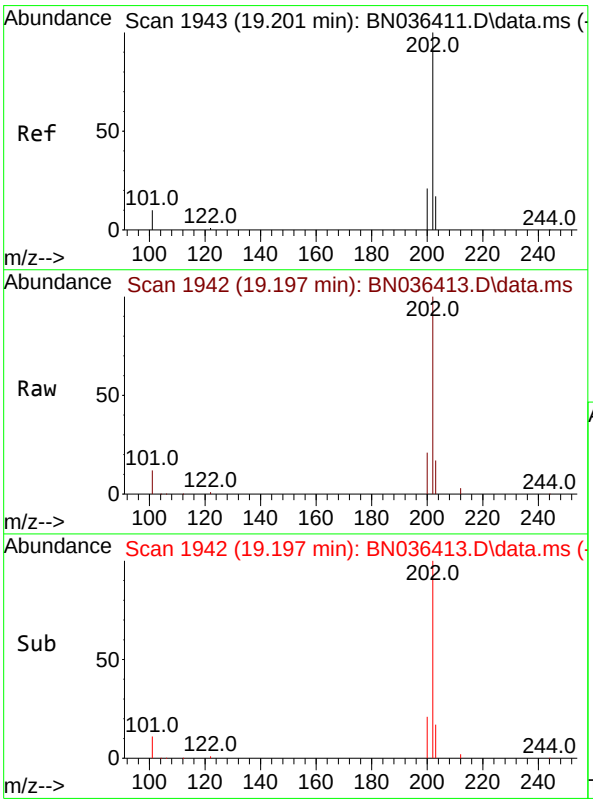
#27
Fluoranthene-d10
Concen: 1.707 ng
RT: 19.169 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 35740

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.5	17.3
104	8.5	7.1	10.7

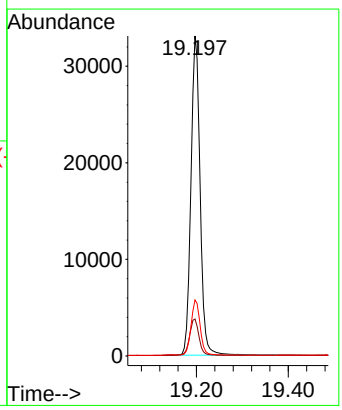


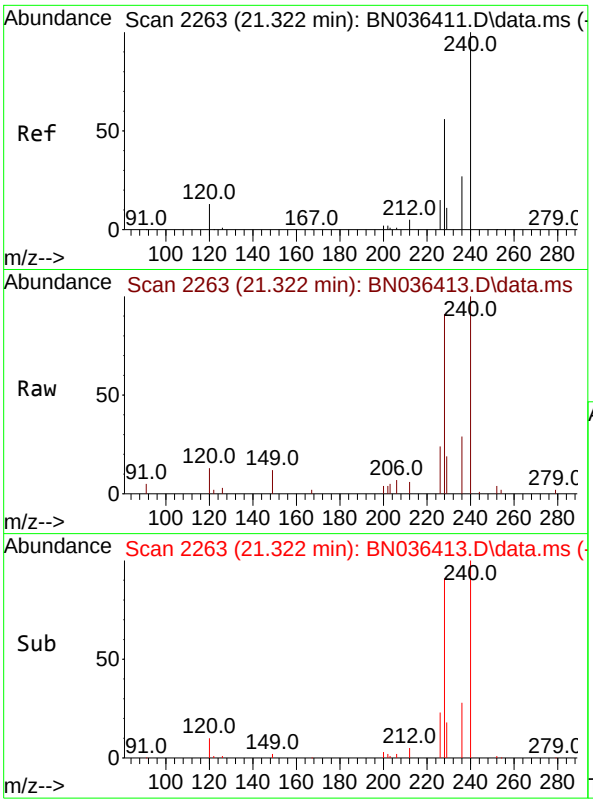


#28
Fluoranthene
Concen: 1.617 ng
RT: 19.197 min Scan# 1942
Delta R.T. -0.005 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:202 Resp: 45708

Ion	Ratio	Lower	Upper
202	100		
101	11.8	9.2	13.8
203	17.0	13.4	20.0



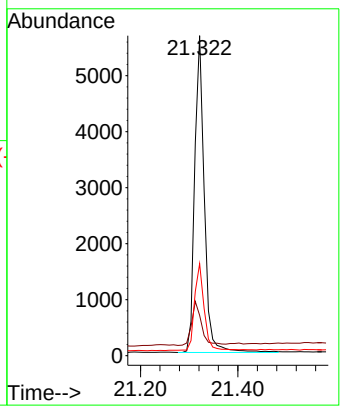


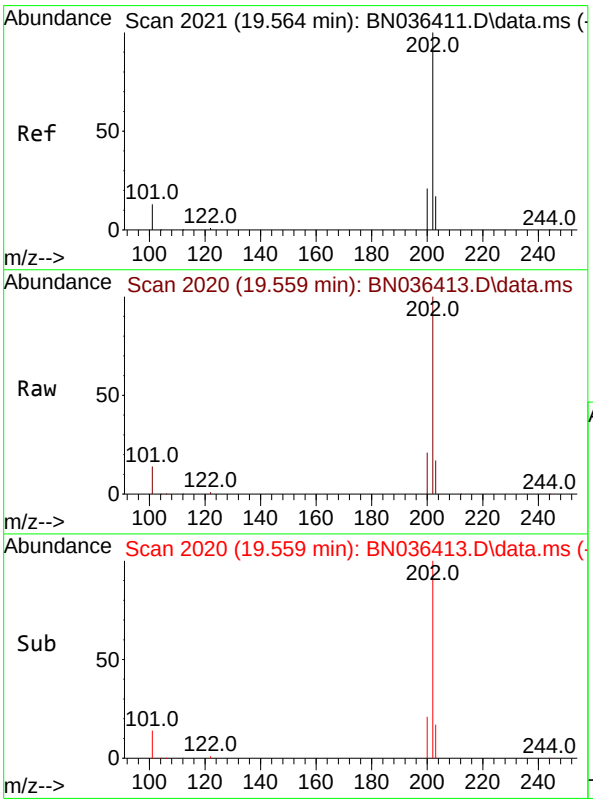
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 7773

Ion	Ratio	Lower	Upper
240	100		
120	12.6	13.3	19.9#
236	28.8	23.0	34.6

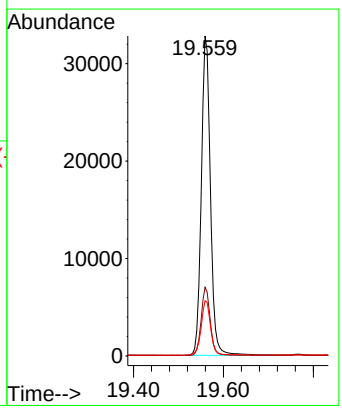


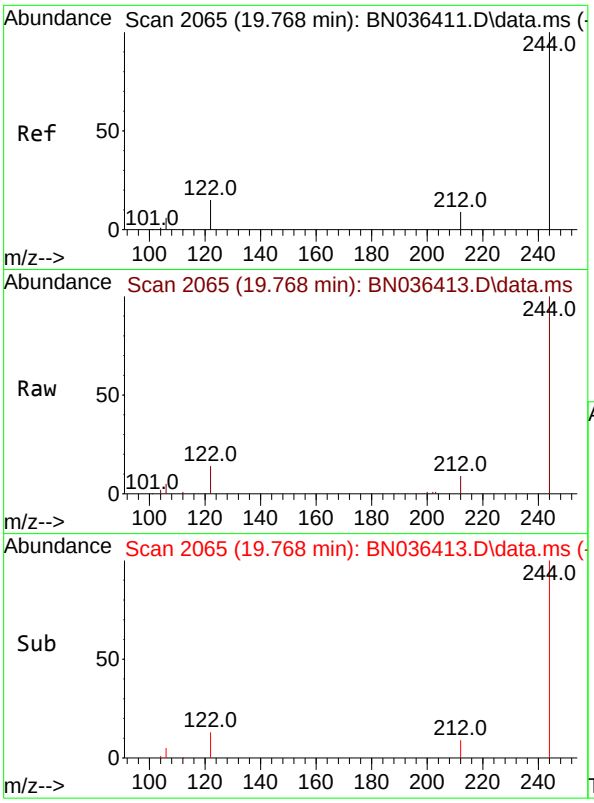


#30
Pyrene
Concen: 1.489 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:202 Resp: 46256

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.7	13.9	20.9



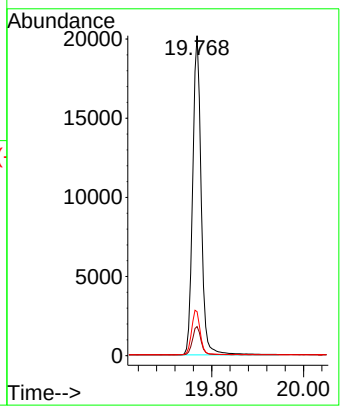


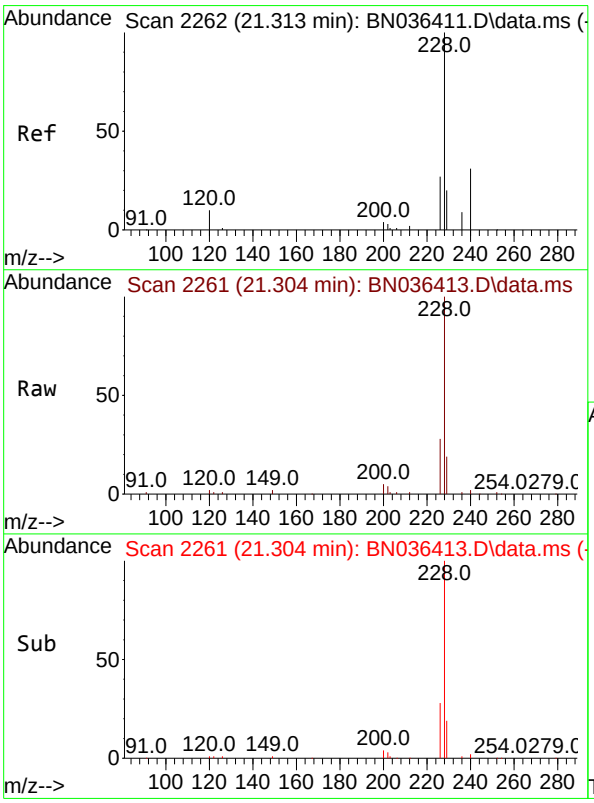
#31
Terphenyl-d14
Concen: 1.611 ng
RT: 19.768 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 25927

Ion	Ratio	Lower	Upper
244	100		
212	9.1	8.1	12.1
122	13.8	12.8	19.2

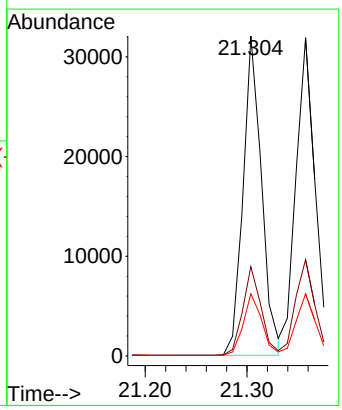


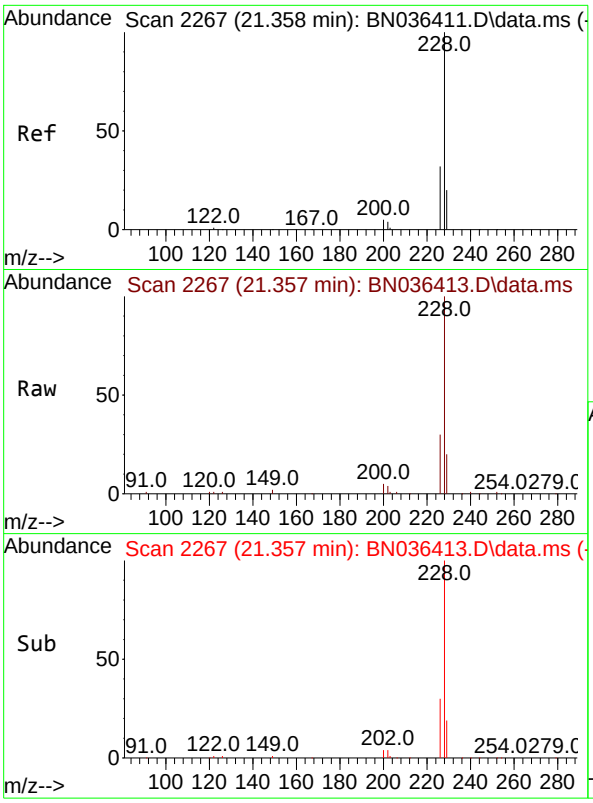


#32
Benzo(a)anthracene
Concen: 1.463 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:228 Resp: 40416

Ion	Ratio	Lower	Upper
228	100		
226	27.9	22.2	33.2
229	19.5	16.5	24.7



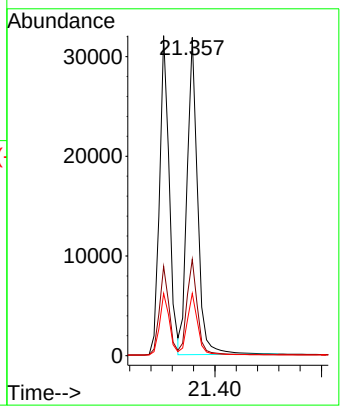


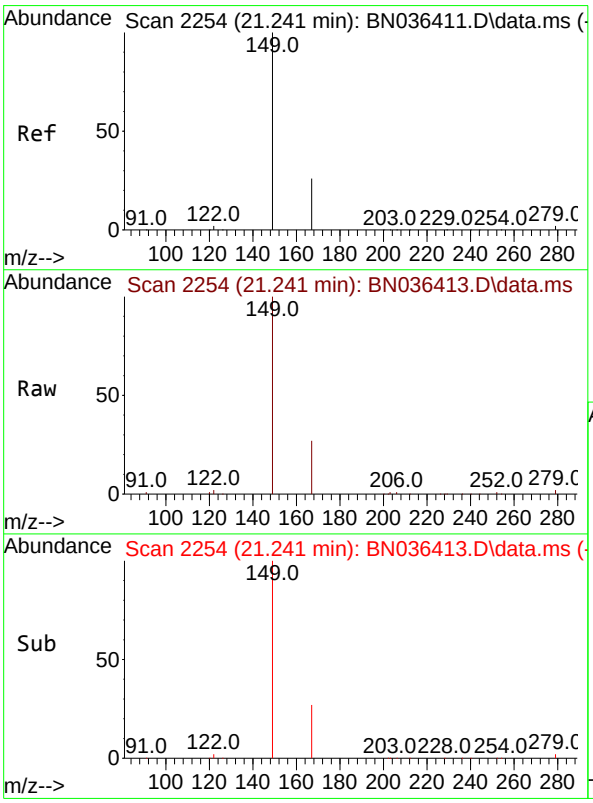
#33
Chrysene
Concen: 1.542 ng
RT: 21.357 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 43661

Ion	Ratio	Lower	Upper
228	100		
226	30.3	25.5	38.3
229	19.5	16.4	24.6

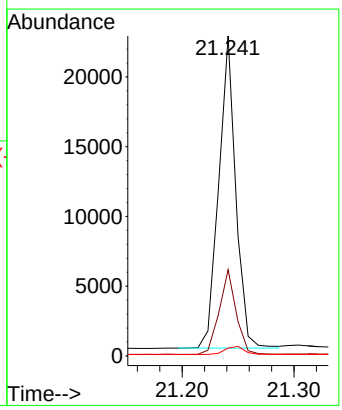


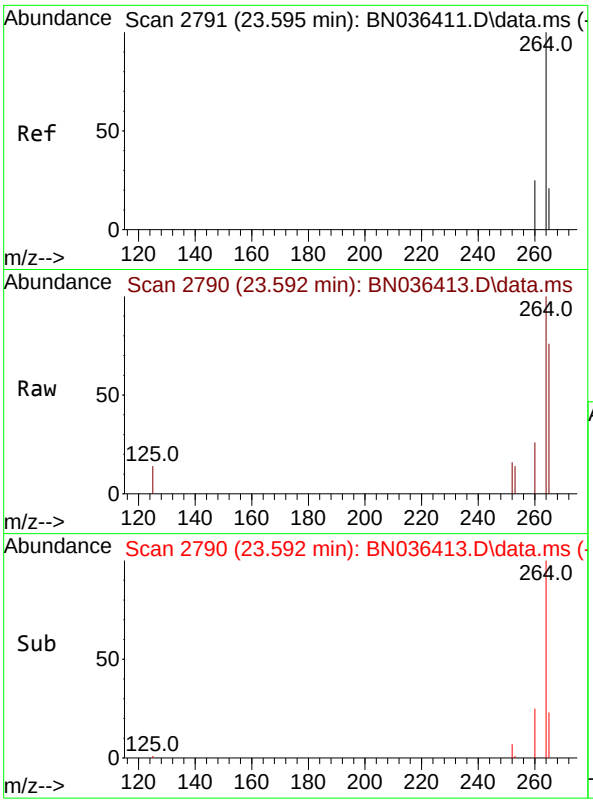


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.538 ng
RT: 21.241 min Scan# 2254
Delta R.T. -0.000 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:149 Resp: 23672

Ion	Ratio	Lower	Upper
149	100		
167	26.9	21.2	31.8
279	3.0	2.7	4.1



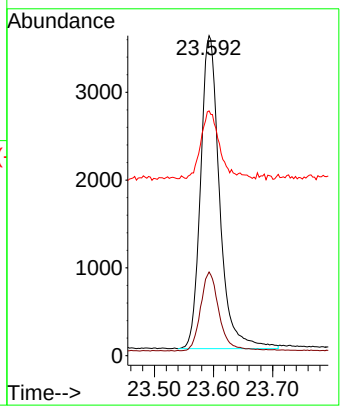


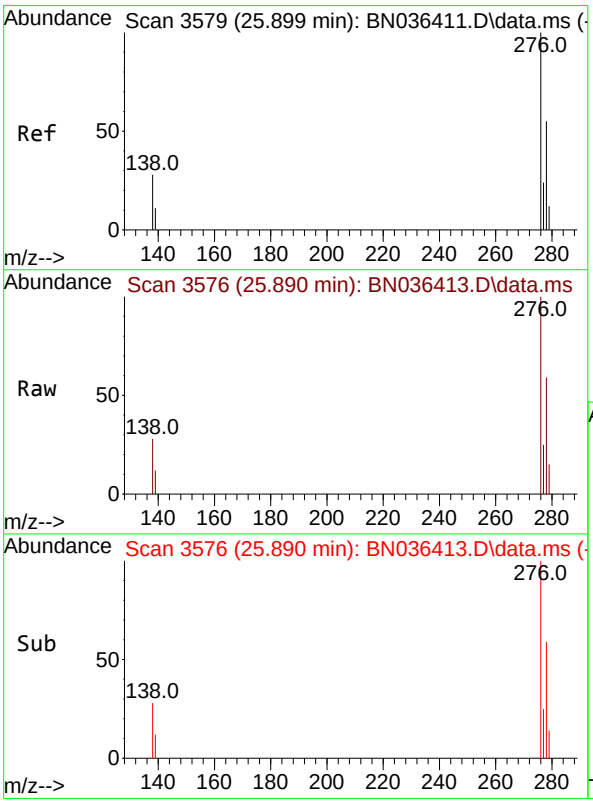
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.592 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 7967

Ion	Ratio	Lower	Upper
264	100		
260	26.1	20.9	31.3
265	76.5	60.7	91.1

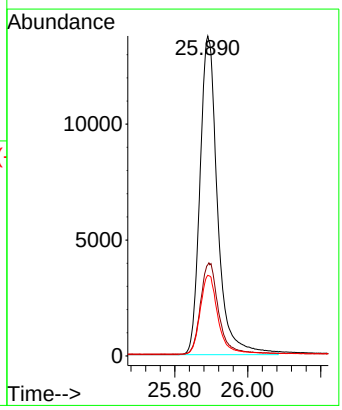


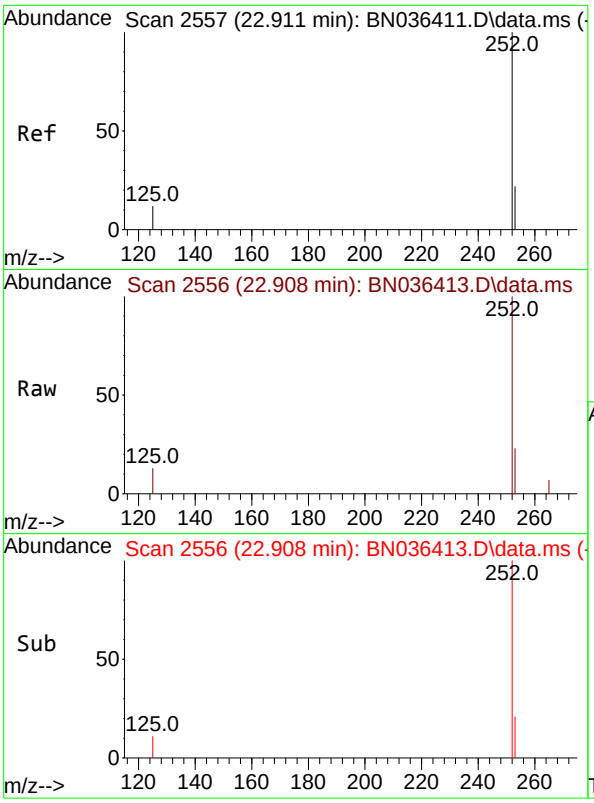


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.472 ng
RT: 25.890 min Scan# 3576
Delta R.T. -0.009 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:276 Resp: 46083

Ion	Ratio	Lower	Upper
276	100		
138	29.4	22.2	33.2
277	25.3	19.8	29.6



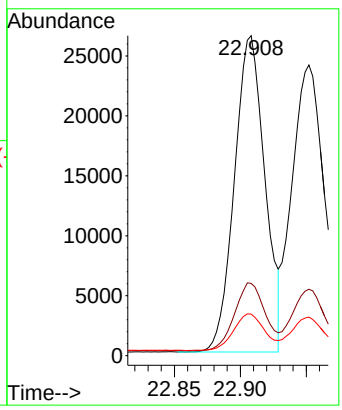


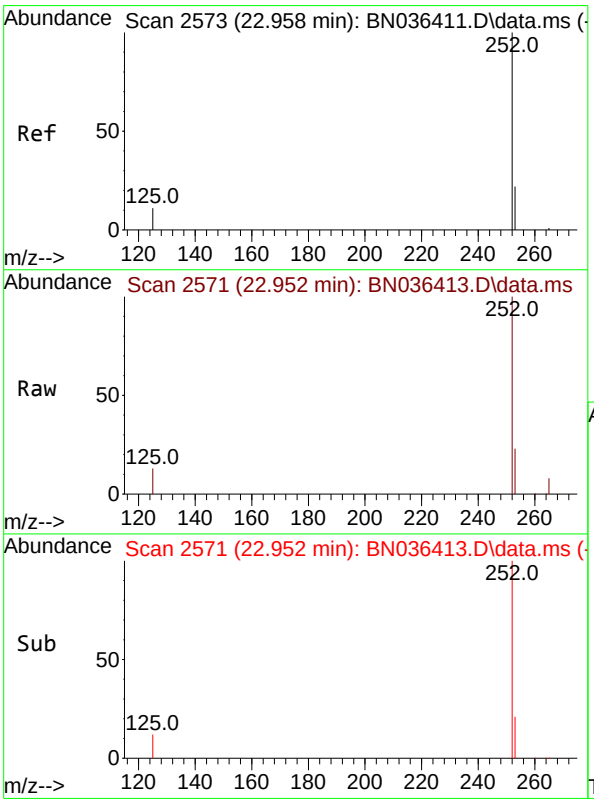
#37
Benzo(b)fluoranthene
Concen: 1.502 ng
RT: 22.908 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 42491

Ion	Ratio	Lower	Upper
252	100		
253	22.6	21.9	32.9
125	13.0	15.0	22.6#

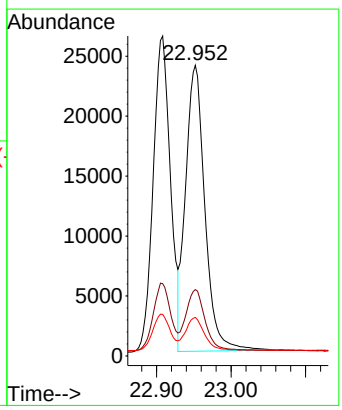


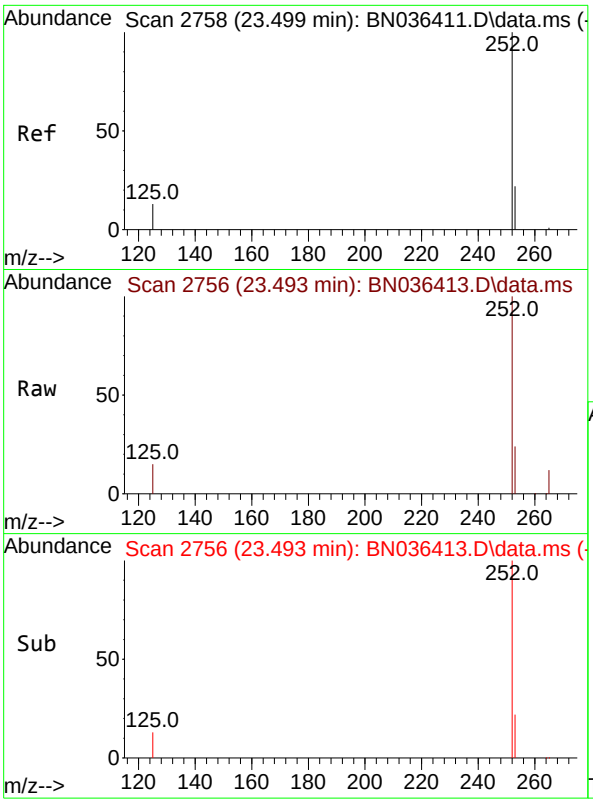


#38
Benzo(k)fluoranthene
Concen: 1.489 ng
RT: 22.952 min Scan# 2571
Delta R.T. -0.006 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:252 Resp: 42933

Ion	Ratio	Lower	Upper
252	100		
253	22.8	22.2	33.4
125	13.2	15.0	22.4#



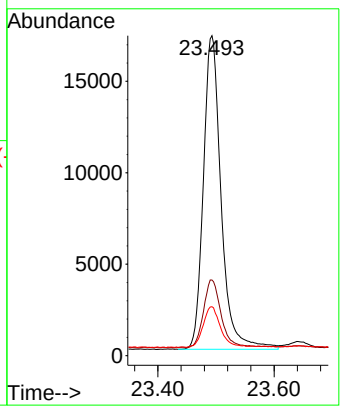


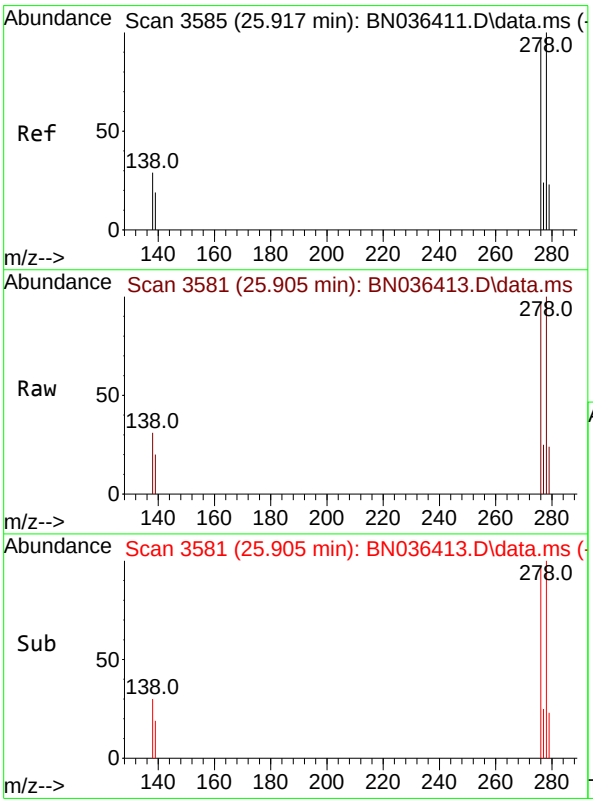
#39
Benzo(a)pyrene
Concen: 1.503 ng
RT: 23.493 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 36490

Ion	Ratio	Lower	Upper
252	100		
253	23.7	24.4	36.6#
125	15.3	18.2	27.2#

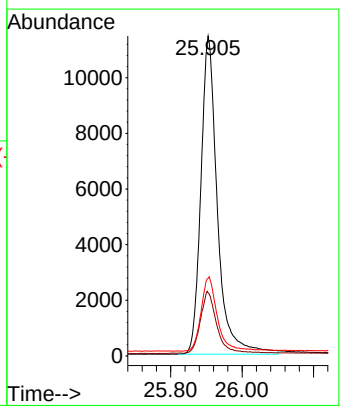


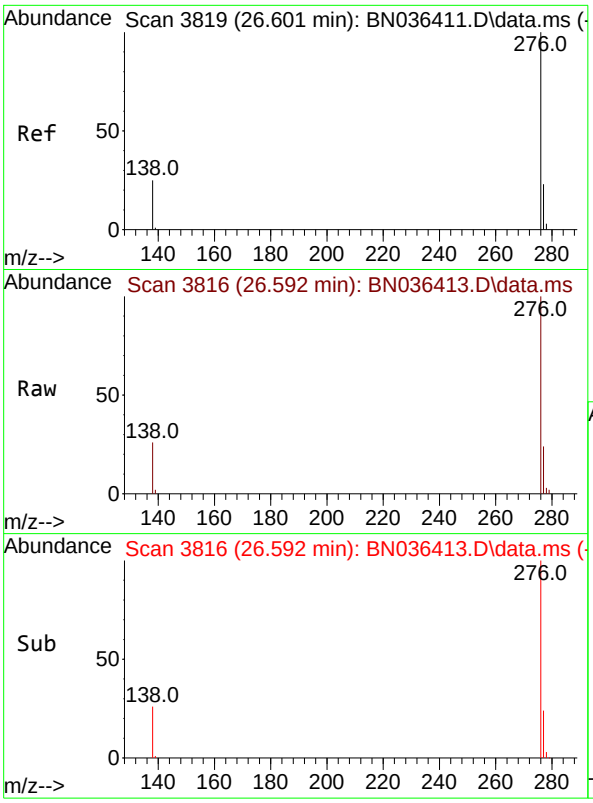


#40
Dibenzo(a,h)anthracene
Concen: 1.478 ng
RT: 25.905 min Scan# 3581
Delta R.T. -0.012 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Tgt Ion:278 Resp: 36765

Ion	Ratio	Lower	Upper
278	100		
139	19.7	18.5	27.7
279	24.3	24.8	37.2#



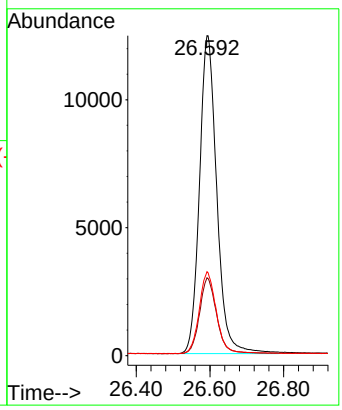


#41
Benzo(g,h,i)perylene
Concen: 1.482 ng
RT: 26.592 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN036413.D
Acq: 10 Feb 2025 14:48

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 40441

Ion	Ratio	Lower	Upper
276	100		
277	24.3	20.7	31.1
138	26.3	21.8	32.6



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036414.D
Acq On : 10 Feb 2025 15:24
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Feb 11 00:37:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

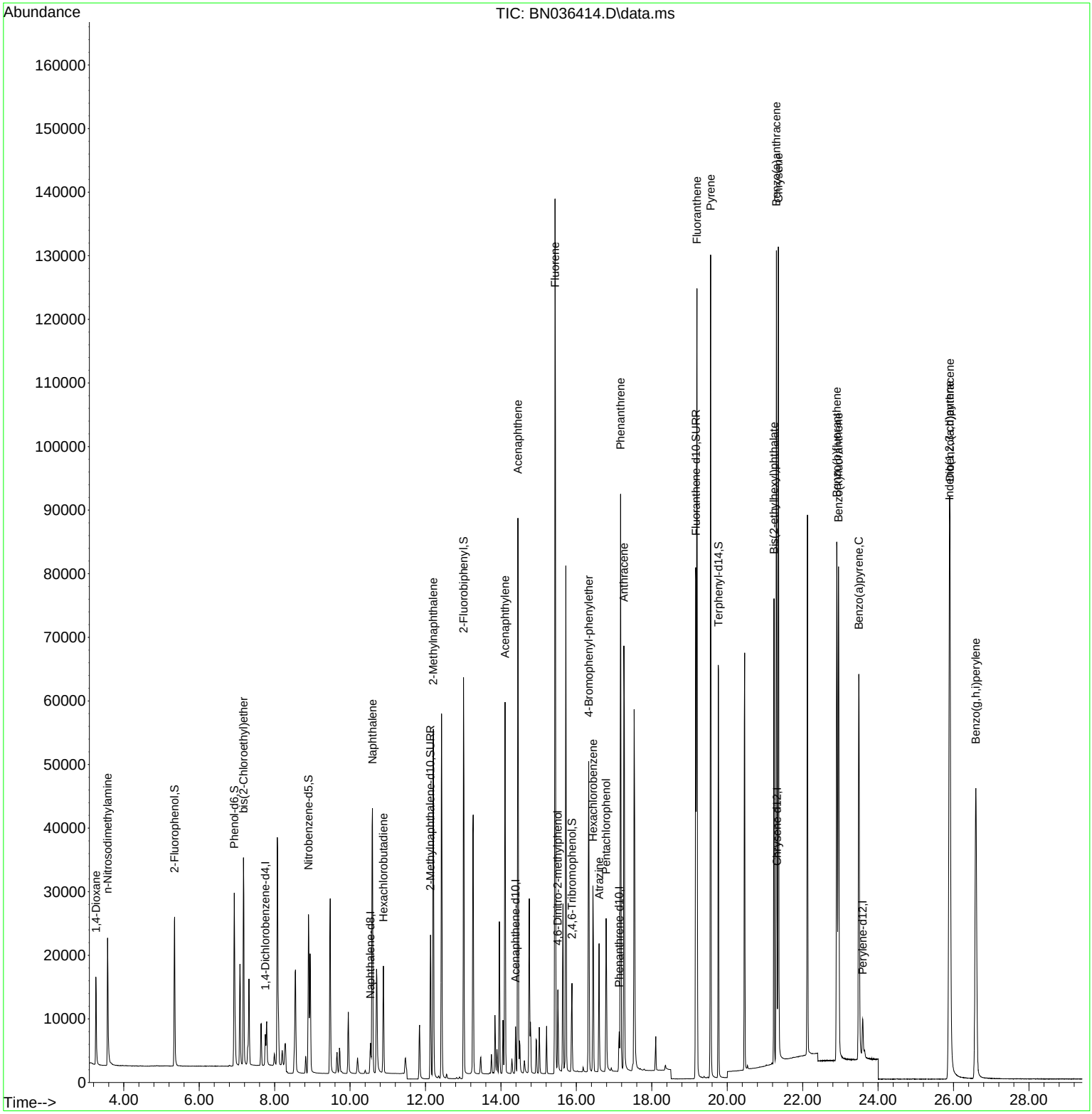
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2264	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	5888	0.400	ng	#	0.00
13) Acenaphthene-d10	14.388	164	3870	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	8443	0.400	ng		0.00
29) Chrysene-d12	21.322	240	8450	0.400	ng	#	0.00
35) Perylene-d12	23.592	264	8327	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	18096	3.140	ng		0.00
5) Phenol-d6	6.930	99	22949	3.414	ng		0.00
8) Nitrobenzene-d5	8.897	82	19636	3.579	ng		-0.01
11) 2-Methylnaphthalene-d10	12.131	152	31489	3.909	ng		-0.01
14) 2,4,6-Tribromophenol	15.883	330	7004	2.937	ng		0.00
15) 2-Fluorobiphenyl	13.009	172	53807	3.260	ng		-0.01
27) Fluoranthene-d10	19.169	212	84968	3.911	ng		0.00
31) Terphenyl-d14	19.768	244	61695	3.526	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.261	88	7842	3.133	ng		97
3) n-Nitrosodimethylamine	3.572	42	13931	3.098	ng	#	98
6) bis(2-Chloroethyl)ether	7.176	93	22184	3.968	ng		99
9) Naphthalene	10.594	128	55857	3.321	ng		97
10) Hexachlorobutadiene	10.883	225	13261	2.516	ng	#	100
12) 2-Methylnaphthalene	12.207	142	38458	3.640	ng		98
16) Acenaphthylene	14.110	152	60797	3.395	ng		100
17) Acenaphthene	14.452	154	39414	3.214	ng		98
18) Fluorene	15.435	166	56634	3.589	ng		100
20) 4,6-Dinitro-2-methylph...	15.510	198	7256	3.841	ng	#	74
21) 4-Bromophenyl-phenylether	16.329	248	17824	3.081	ng	#	86
22) Hexachlorobenzene	16.441	284	21378	2.832	ng		97
23) Atrazine	16.602	200	15456	3.634	ng		92
24) Pentachlorophenol	16.789	266	11492	3.481	ng		100
25) Phenanthrene	17.173	178	85950	3.473	ng		99
26) Anthracene	17.260	178	78802	3.504	ng		99
28) Fluoranthene	19.197	202	108527	3.700	ng		99
30) Pyrene	19.559	202	110153	3.262	ng		100
32) Benzo(a)anthracene	21.304	228	99445	3.312	ng		99
33) Chrysene	21.358	228	103234	3.354	ng		97
34) Bis(2-ethylhexyl)phtha...	21.241	149	58234	3.480	ng		99
36) Indeno(1,2,3-cd)pyrene	25.890	276	108596	3.320	ng		97
37) Benzo(b)fluoranthene	22.905	252	101833	3.445	ng	#	88
38) Benzo(k)fluoranthene	22.952	252	102040	3.385	ng	#	88
39) Benzo(a)pyrene	23.490	252	87191	3.437	ng	#	84
40) Dibenzo(a,h)anthracene	25.905	278	86887	3.343	ng	#	90
41) Benzo(g,h,i)perylene	26.592	276	93260	3.269	ng		97

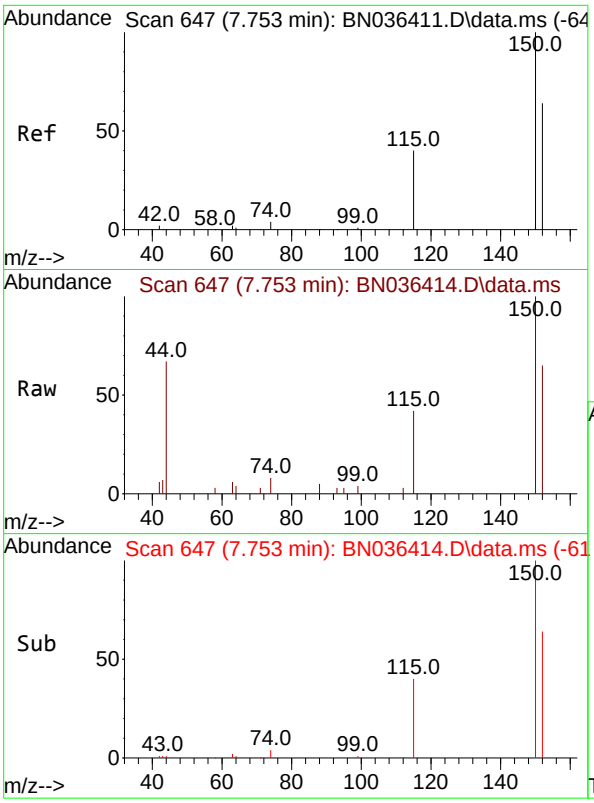
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036414.D
Acq On : 10 Feb 2025 15:24
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Feb 11 00:37:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



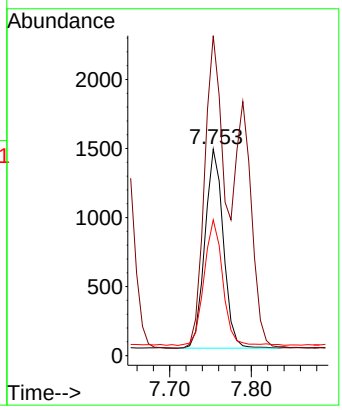


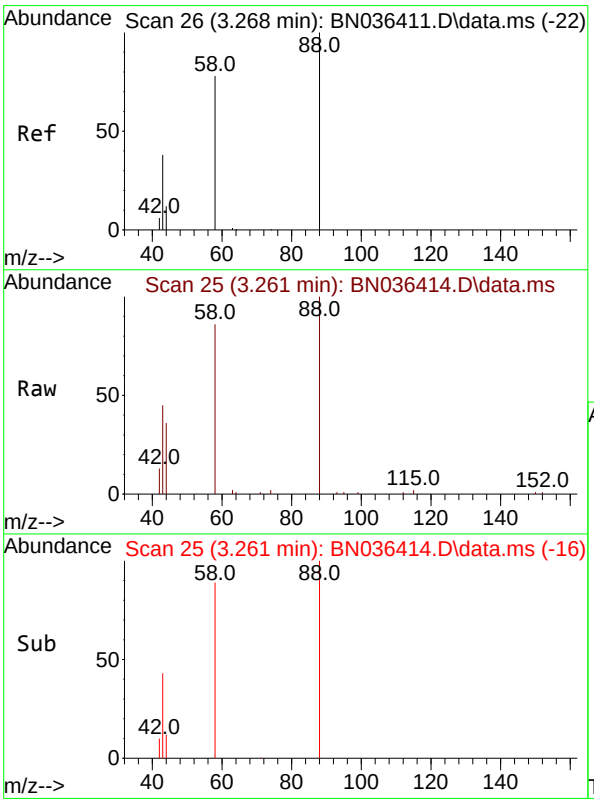
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 2264

Ion	Ratio	Lower	Upper
152	100		
150	154.9	123.7	185.5
115	65.7	52.5	78.7

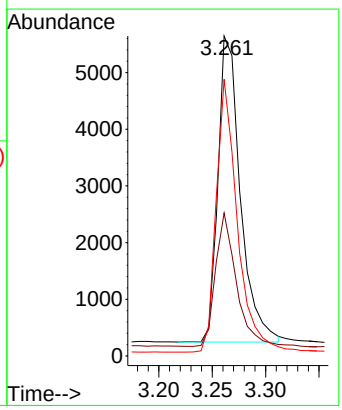


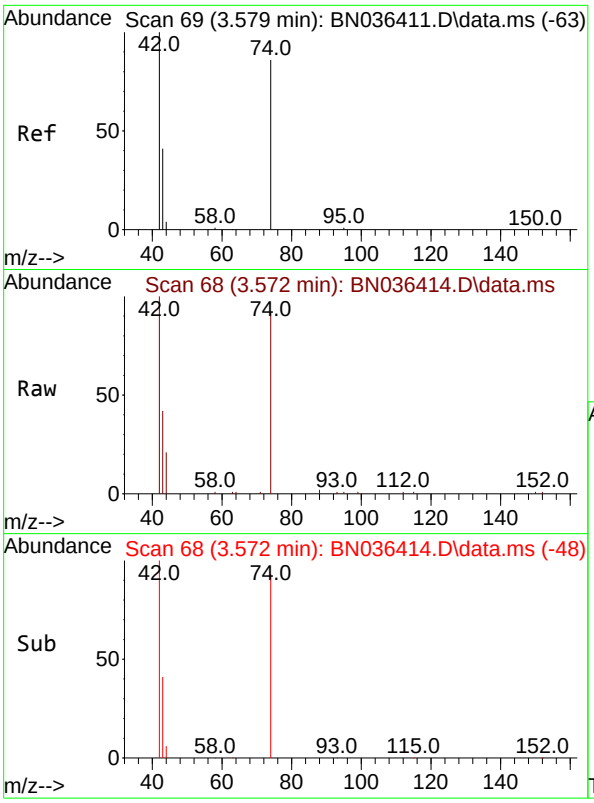


#2
1,4-Dioxane
Concen: 3.133 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion: 88 Resp: 7842

Ion	Ratio	Lower	Upper
88	100		
43	40.6	33.7	50.5
58	83.7	68.9	103.3



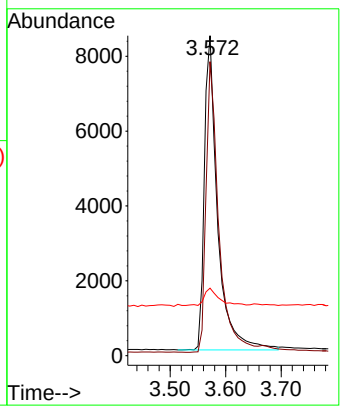


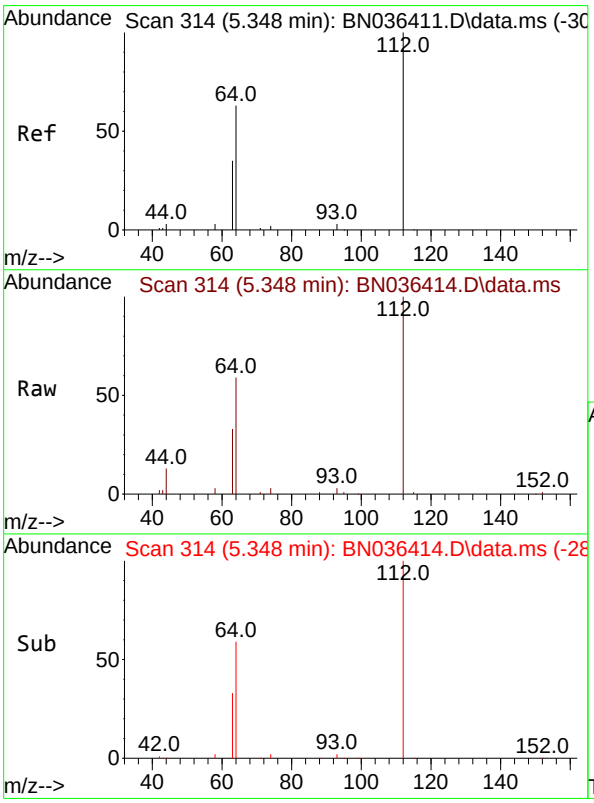
#3
n-Nitrosodimethylamine
Concen: 3.098 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 42 Resp: 13931

Ion	Ratio	Lower	Upper
42	100		
74	91.3	71.8	107.6
44	6.4	7.8	11.6#

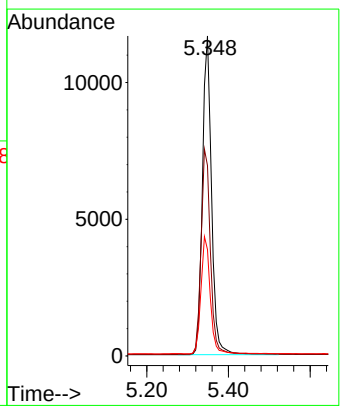


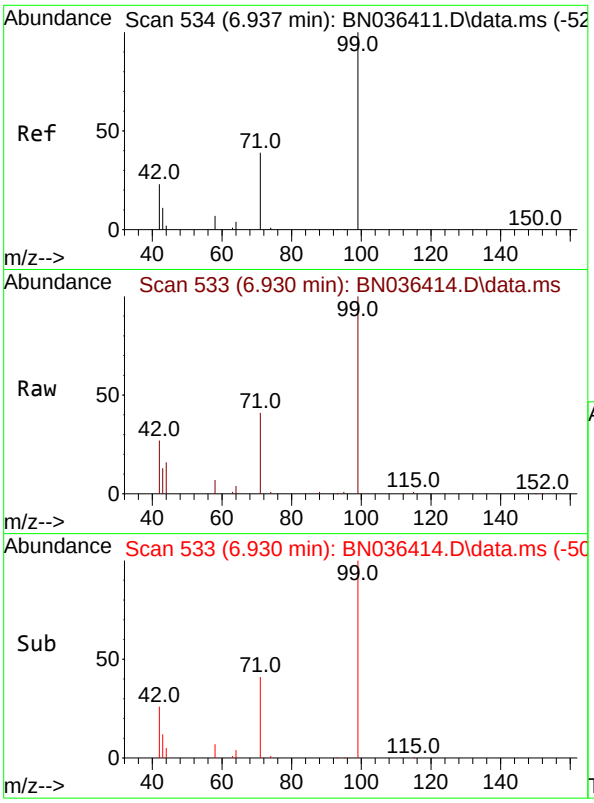


#4
2-Fluorophenol
Concen: 3.140 ng
RT: 5.348 min Scan# 314
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:112 Resp: 18096

Ion	Ratio	Lower	Upper
112	100		
64	66.2	53.4	80.0
63	36.9	30.3	45.5



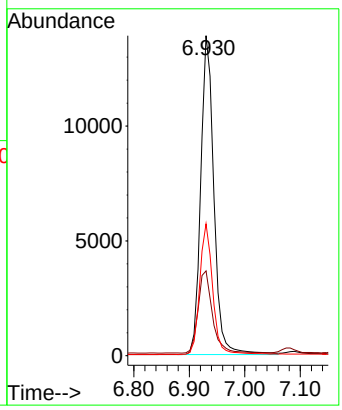


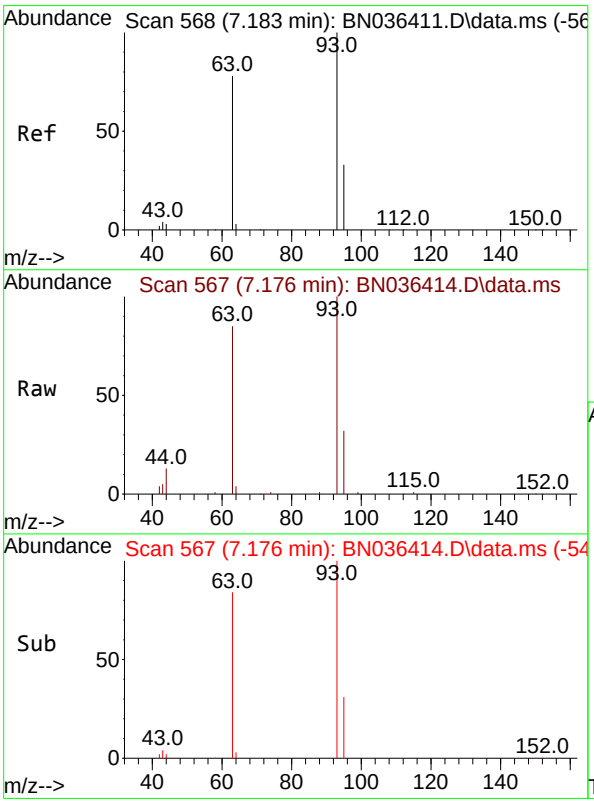
#5
Phenol-d6
Concen: 3.414 ng
RT: 6.930 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 99 Resp: 22949

Ion	Ratio	Lower	Upper
99	100		
42	28.0	21.7	32.5
71	40.5	32.6	49.0

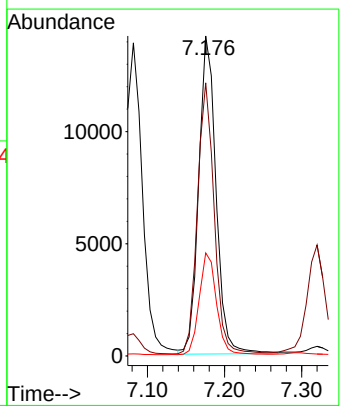


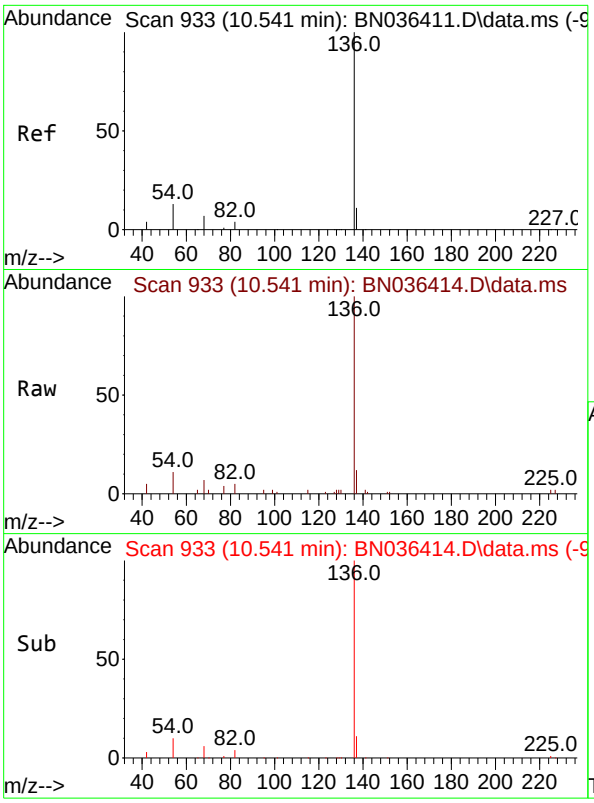


#6
bis(2-Chloroethyl)ether
Concen: 3.968 ng
RT: 7.176 min Scan# 567
Delta R.T. -0.007 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion: 93 Resp: 22184

Ion	Ratio	Lower	Upper
93	100		
63	82.3	66.3	99.5
95	31.7	26.2	39.4



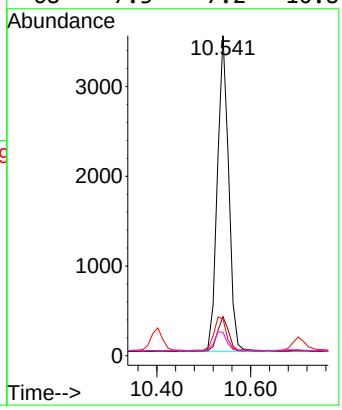


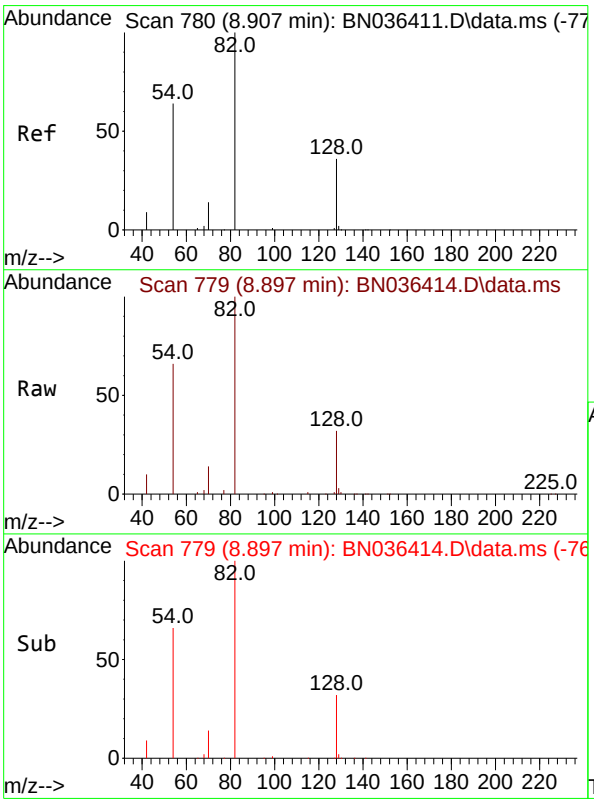
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:136 Resp: 5888

Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.1	15.1
54	11.4	11.8	17.6#
68	7.3	7.2	10.8

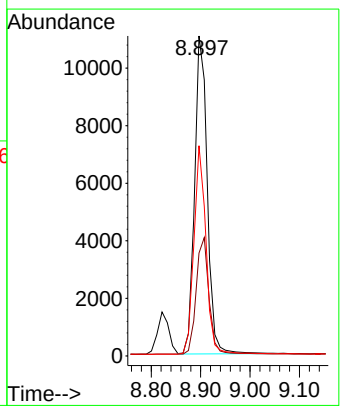


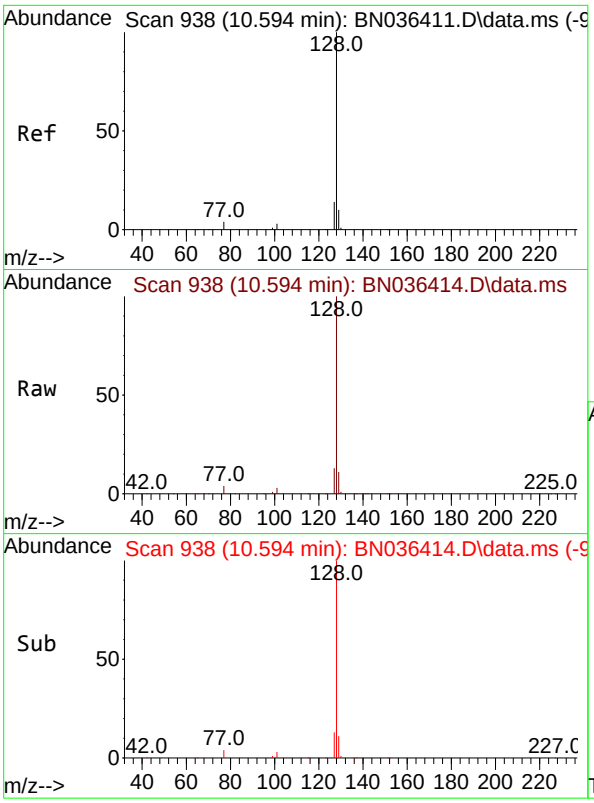


#8
Nitrobenzene-d5
Concen: 3.579 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion: 82 Resp: 19636

Ion	Ratio	Lower	Upper
82	100		
128	32.1	31.9	47.9
54	65.7	53.1	79.7



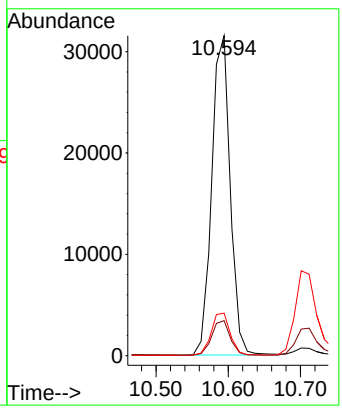


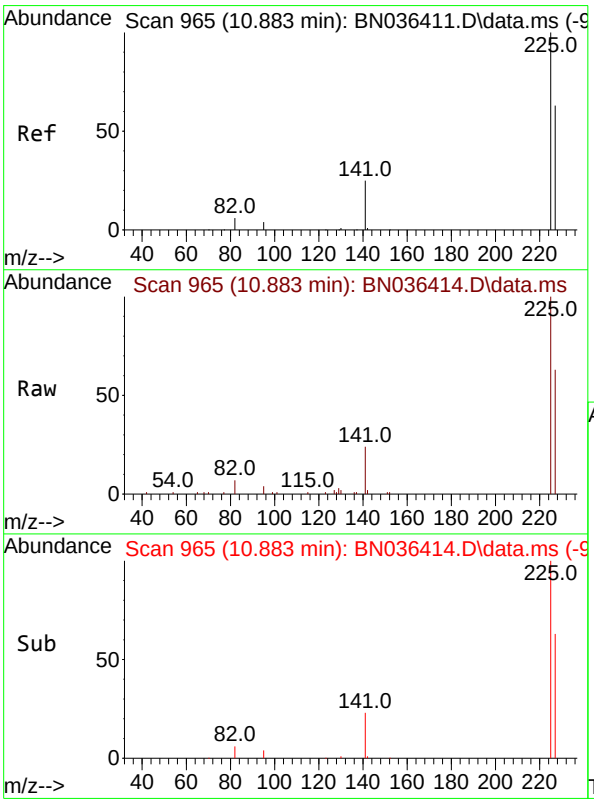
#9
Naphthalene
Concen: 3.321 ng
RT: 10.594 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:128 Resp: 55857

Ion	Ratio	Lower	Upper
128	100		
129	11.0	9.6	14.4
127	13.3	12.0	18.0

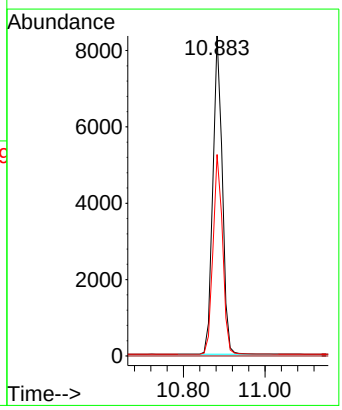


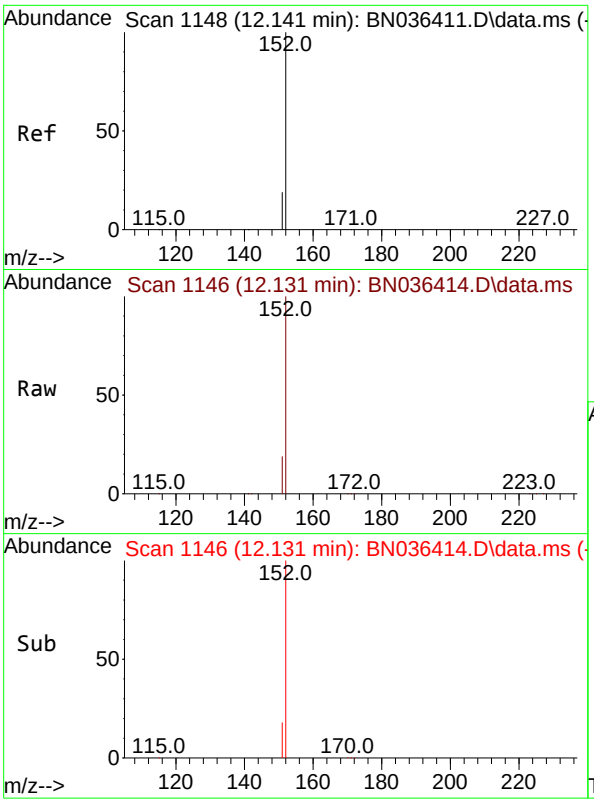


#10
Hexachlorobutadiene
Concen: 2.516 ng
RT: 10.883 min Scan# 965
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:225 Resp: 13261

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	50.9	76.3



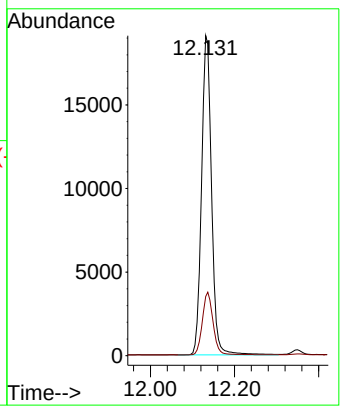


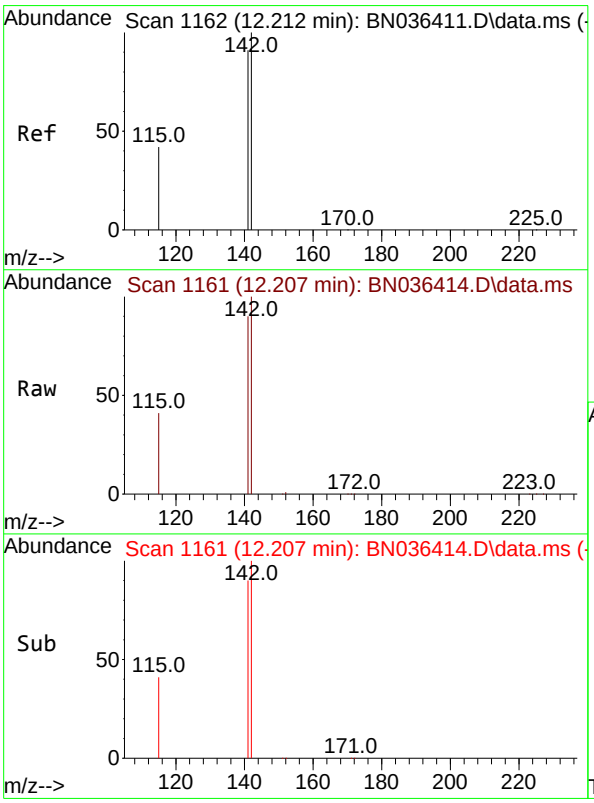
#11
2-Methylnaphthalene-d10
Concen: 3.909 ng
RT: 12.131 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 31489

Ion	Ratio	Lower	Upper
152	100		
151	21.0	16.6	25.0

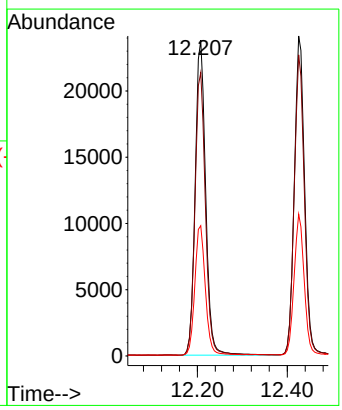


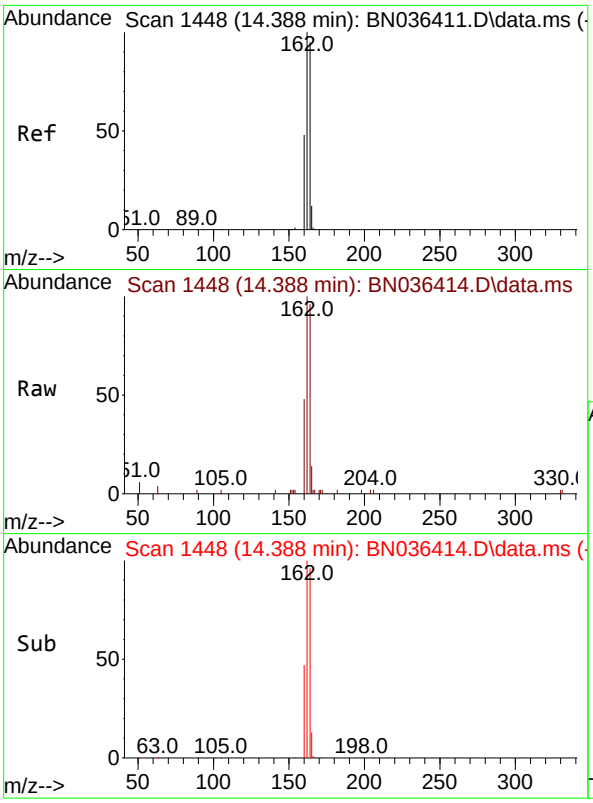


#12
2-Methylnaphthalene
Concen: 3.640 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:142 Resp: 38458

Ion	Ratio	Lower	Upper
142	100		
141	89.8	72.8	109.2
115	41.3	35.5	53.3



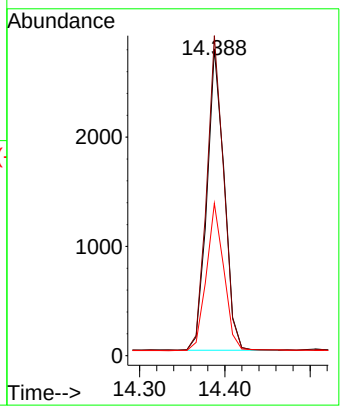


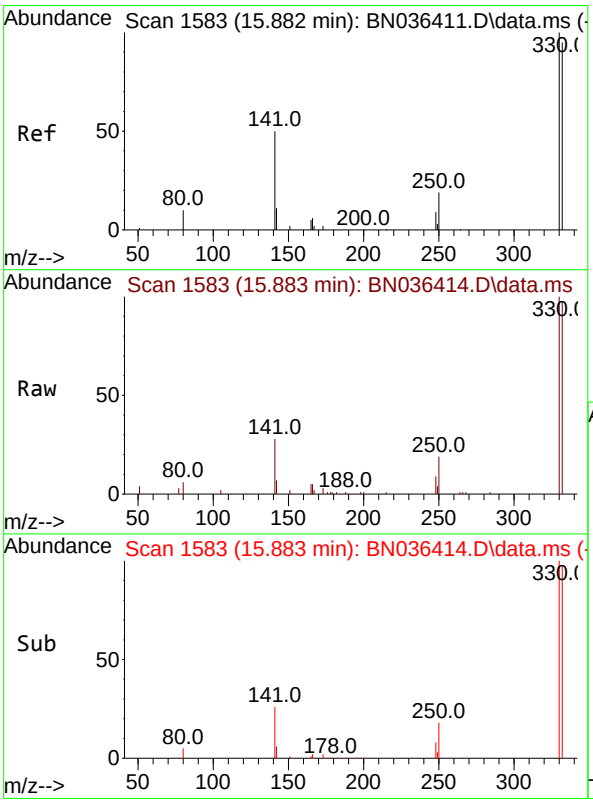
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:164 Resp: 3870

Ion	Ratio	Lower	Upper
164	100		
162	104.3	84.1	126.1
160	49.6	41.4	62.0

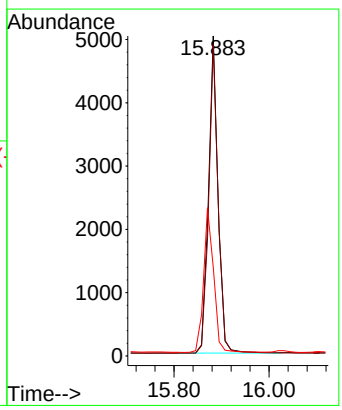


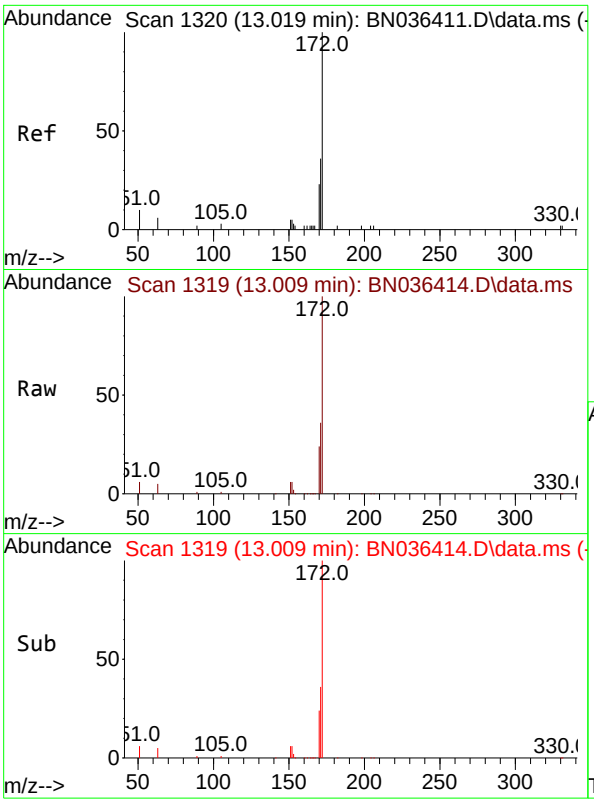


#14
2,4,6-Tribromophenol
Concen: 2.937 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:330 Resp: 7004

Ion	Ratio	Lower	Upper
330	100		
332	96.5	76.6	114.8
141	48.2	37.8	56.8



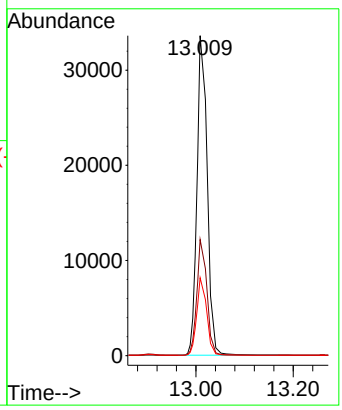


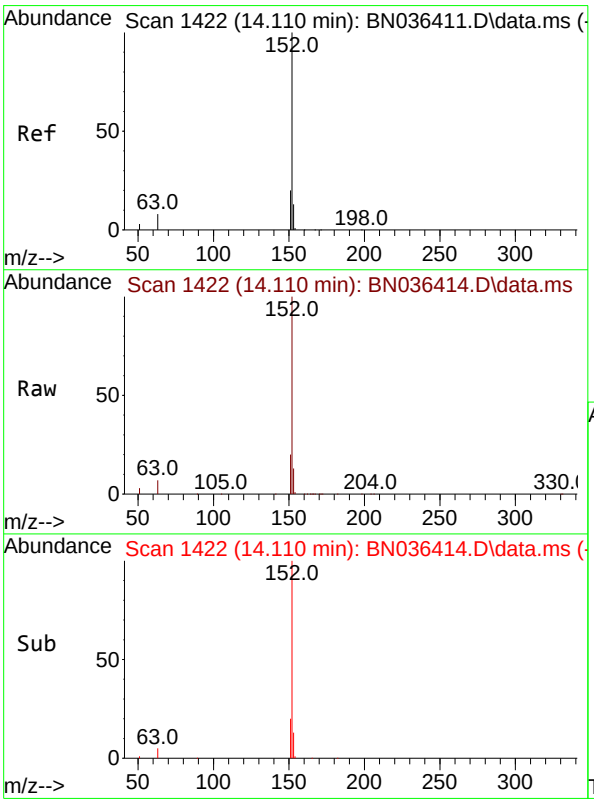
#15
2-Fluorobiphenyl
Concen: 3.260 ng
RT: 13.009 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:172 Resp: 53807

Ion	Ratio	Lower	Upper
172	100		
171	36.3	29.6	44.4
170	24.4	19.8	29.6

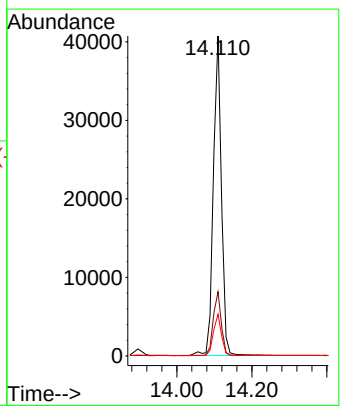


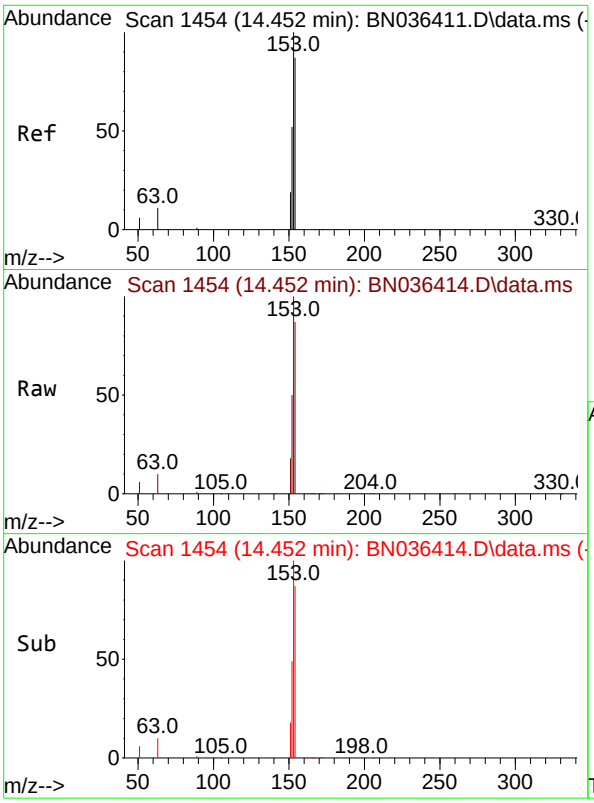


#16
Acenaphthylene
Concen: 3.395 ng
RT: 14.110 min Scan# 1422
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:152 Resp: 60797

Ion	Ratio	Lower	Upper
152	100		
151	19.8	15.8	23.8
153	12.9	10.2	15.2



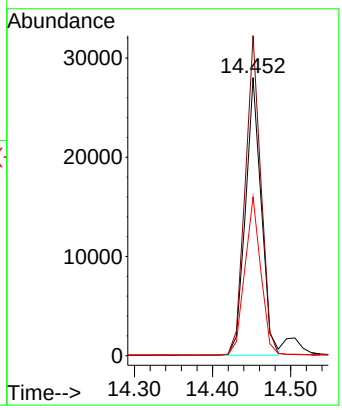


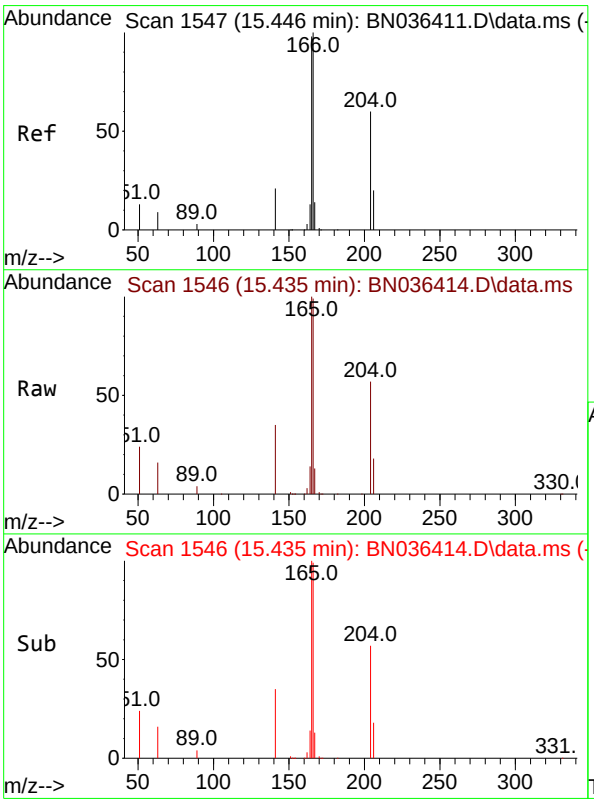
#17
Acenaphthene
Concen: 3.214 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:154 Resp: 39414

Ion	Ratio	Lower	Upper
154	100		
153	115.0	93.3	139.9
152	57.9	48.8	73.2

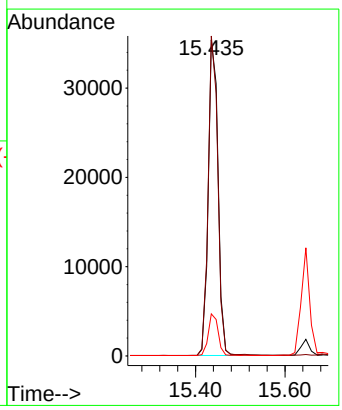


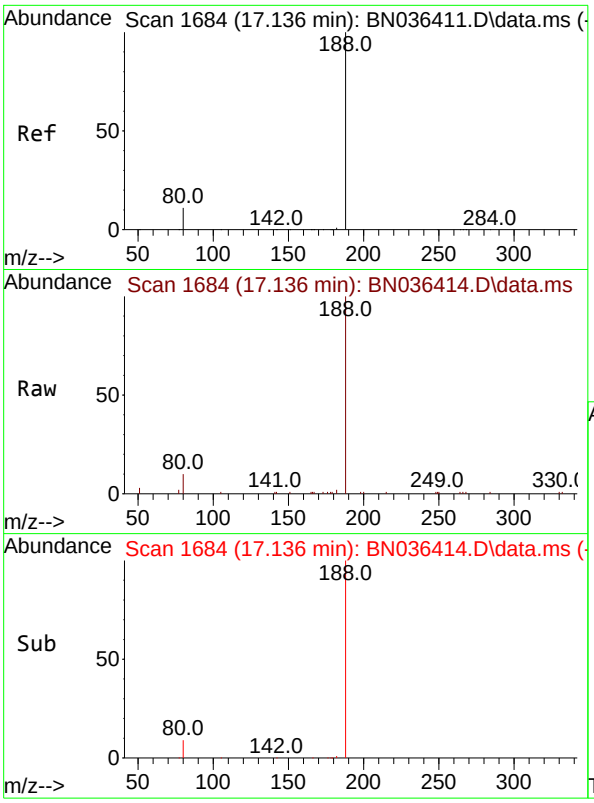


#18
Fluorene
Concen: 3.589 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:166 Resp: 56634

Ion	Ratio	Lower	Upper
166	100		
165	99.4	79.5	119.3
167	12.6	10.4	15.6



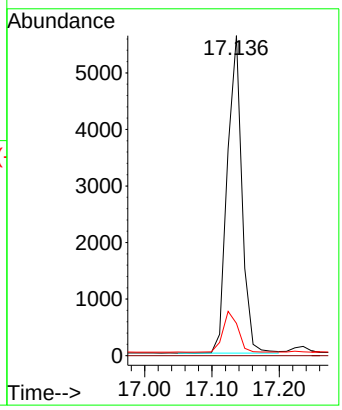


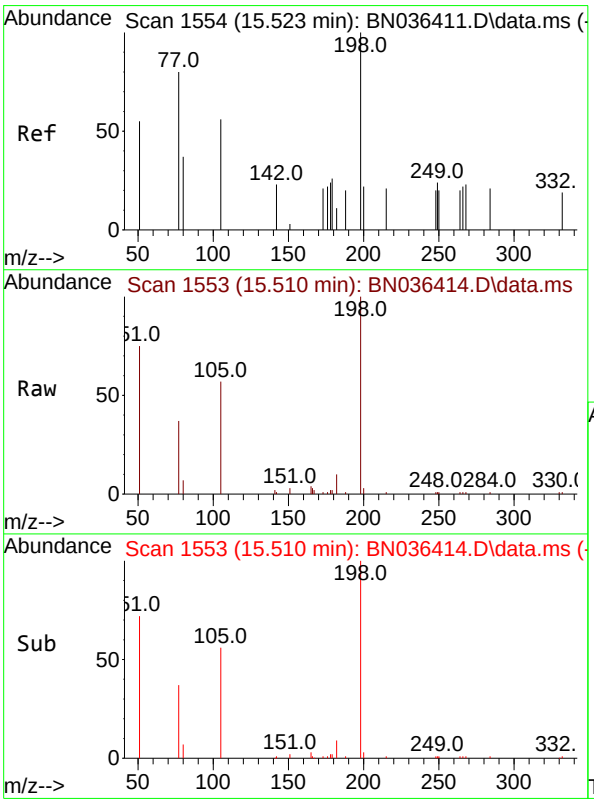
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:188 Resp: 8443

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.1	9.8	14.6

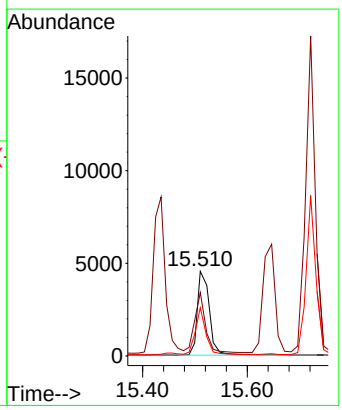


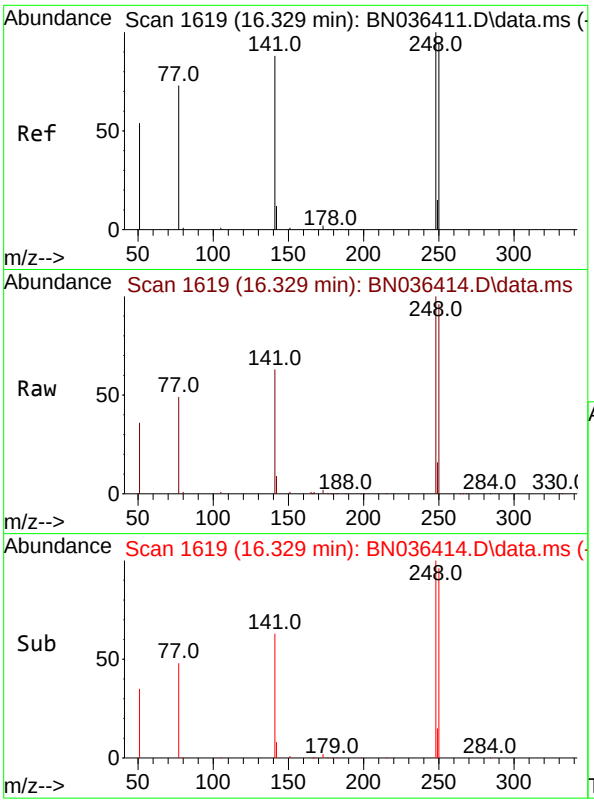


#20
4,6-Dinitro-2-methylphenol
Concen: 3.841 ng
RT: 15.510 min Scan# 1553
Delta R.T. -0.012 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:198 Resp: 7256

Ion	Ratio	Lower	Upper
198	100		
51	74.8	86.6	129.8#
105	57.0	57.5	86.3#



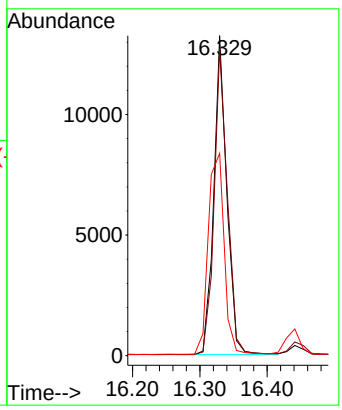


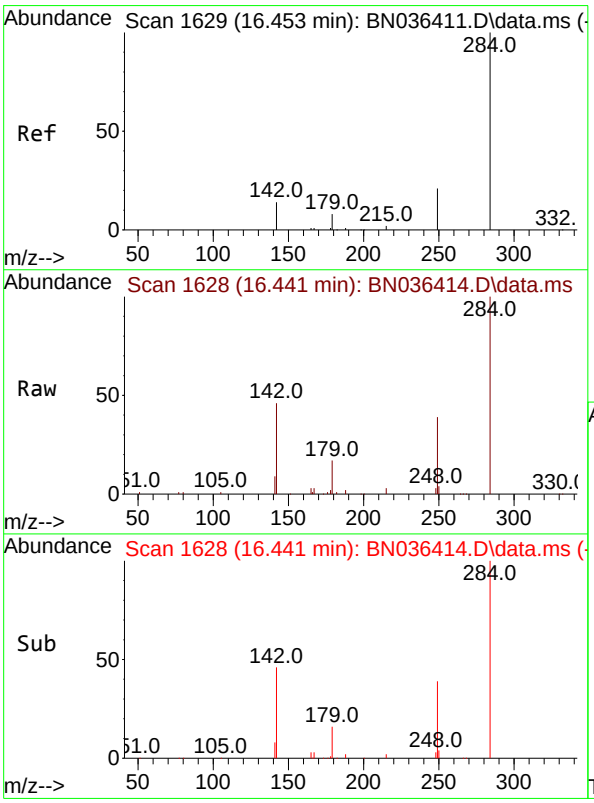
#21
4-Bromophenyl-phenylether
Concen: 3.081 ng
RT: 16.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:248 Resp: 17824

Ion	Ratio	Lower	Upper
248	100		
250	95.9	76.1	114.1
141	63.3	71.7	107.5#

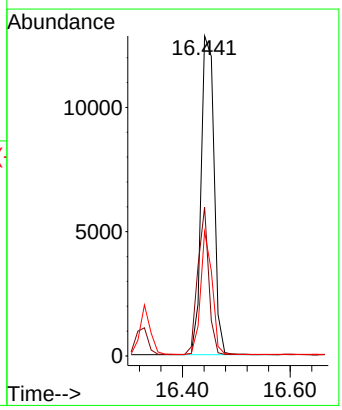


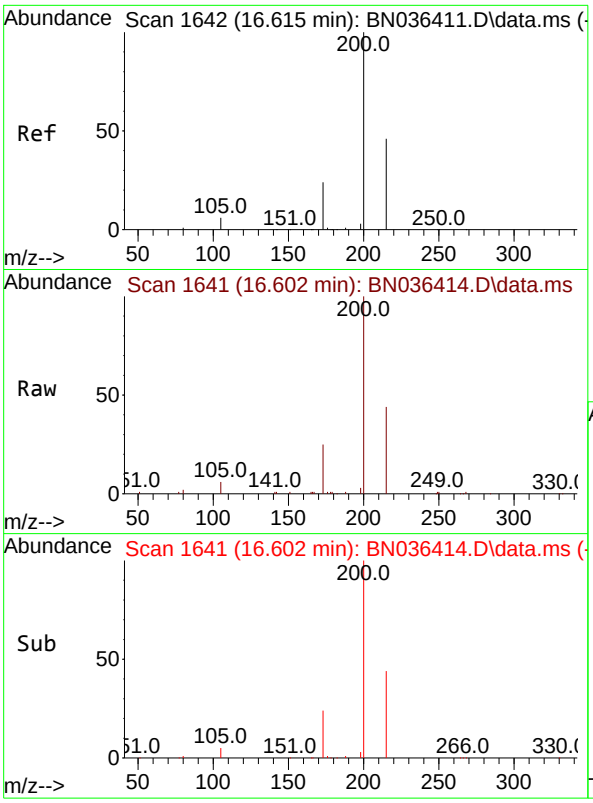


#22
Hexachlorobenzene
Concen: 2.832 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:284 Resp: 21378

Ion	Ratio	Lower	Upper
284	100		
142	39.4	33.4	50.0
249	34.3	28.6	43.0



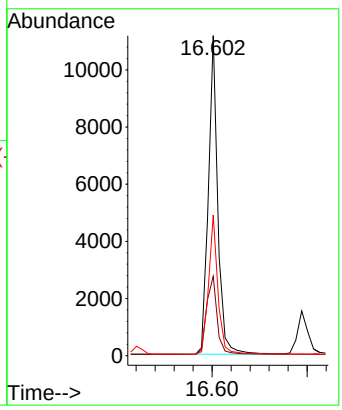


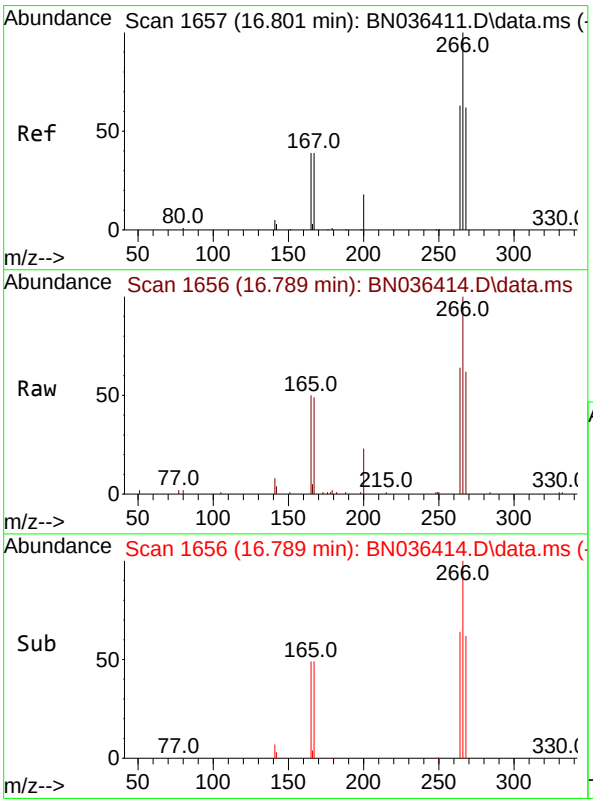
#23
Atrazine
Concen: 3.634 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:200 Resp: 15456

Ion	Ratio	Lower	Upper
200	100		
173	24.8	23.2	34.8
215	44.0	40.0	60.0

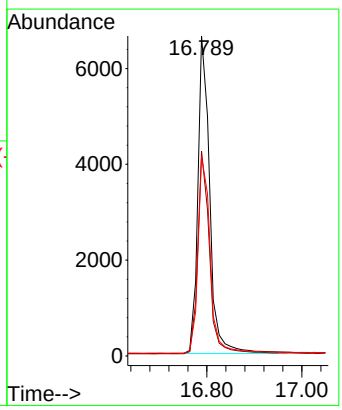


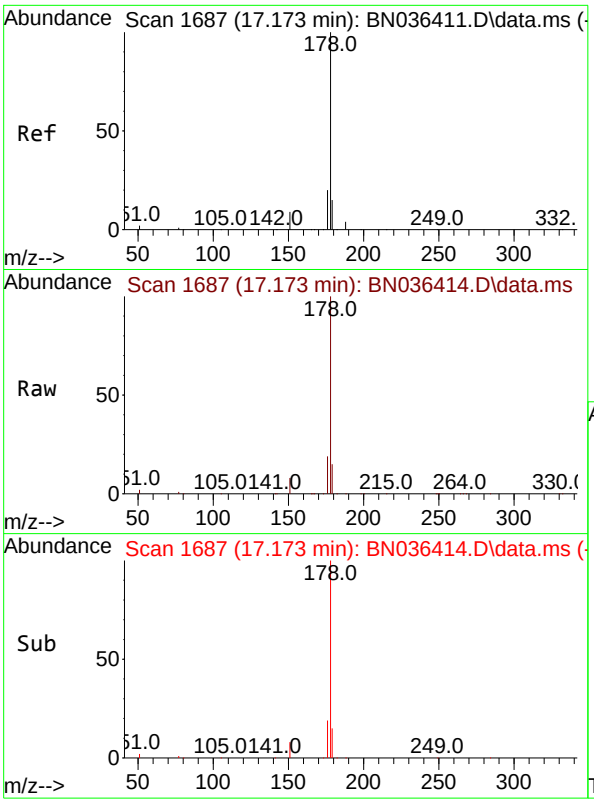


#24
Pentachlorophenol
Concen: 3.481 ng
RT: 16.789 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:266 Resp: 11492

Ion	Ratio	Lower	Upper
266	100		
264	63.3	50.6	76.0
268	64.3	51.9	77.9



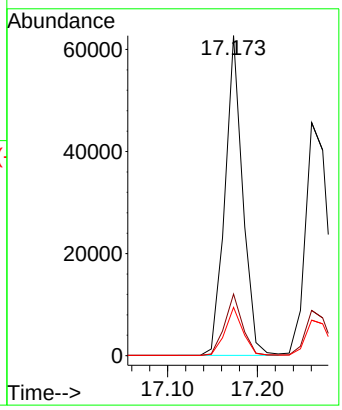


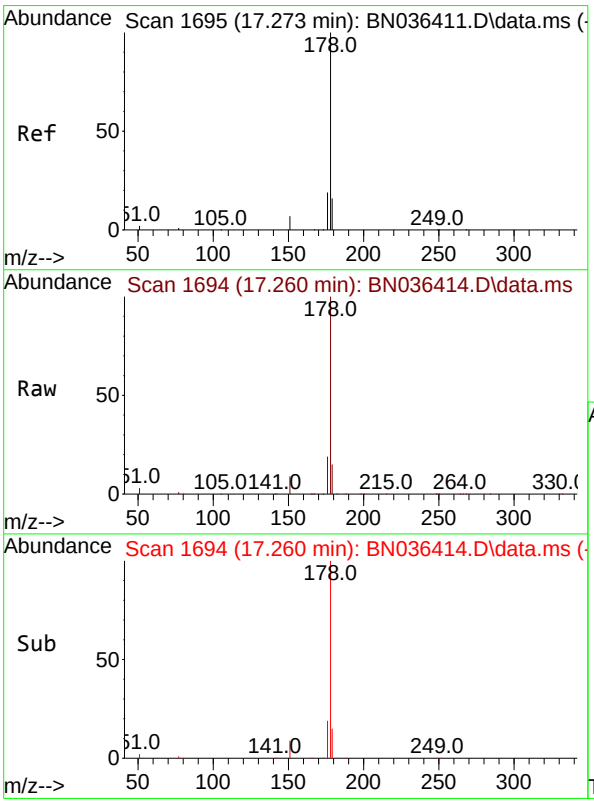
#25
Phenanthrene
Concen: 3.473 ng
RT: 17.173 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:178 Resp: 85950

Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.7	23.5
179	15.1	12.4	18.6

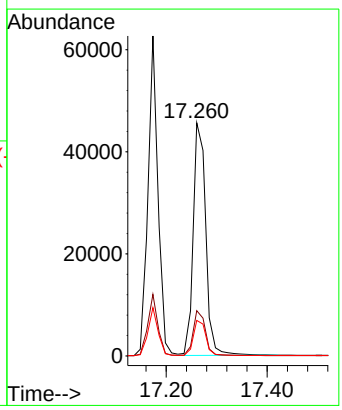


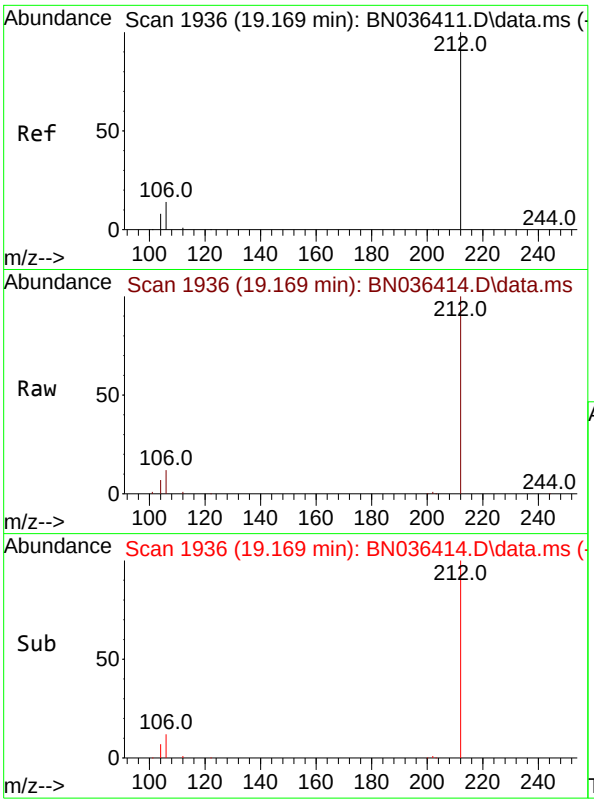


#26
Anthracene
Concen: 3.504 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:178 Resp: 78802

Ion	Ratio	Lower	Upper
178	100		
176	18.9	14.9	22.3
179	15.2	12.4	18.6



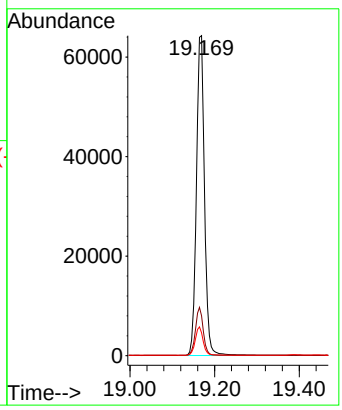


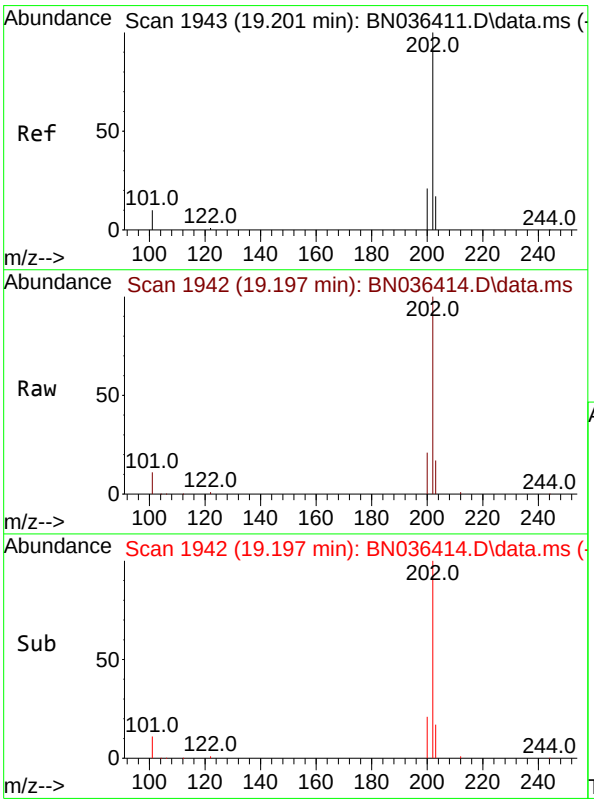
#27
Fluoranthene-d10
Concen: 3.911 ng
RT: 19.169 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:212 Resp: 84968

Ion	Ratio	Lower	Upper
212	100		
106	14.5	11.5	17.3
104	8.6	7.1	10.7

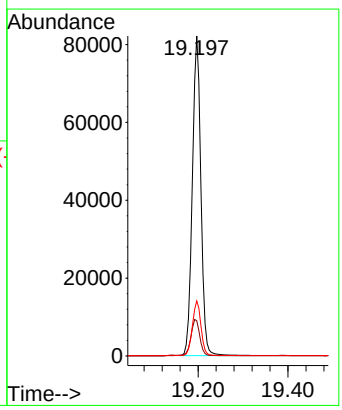


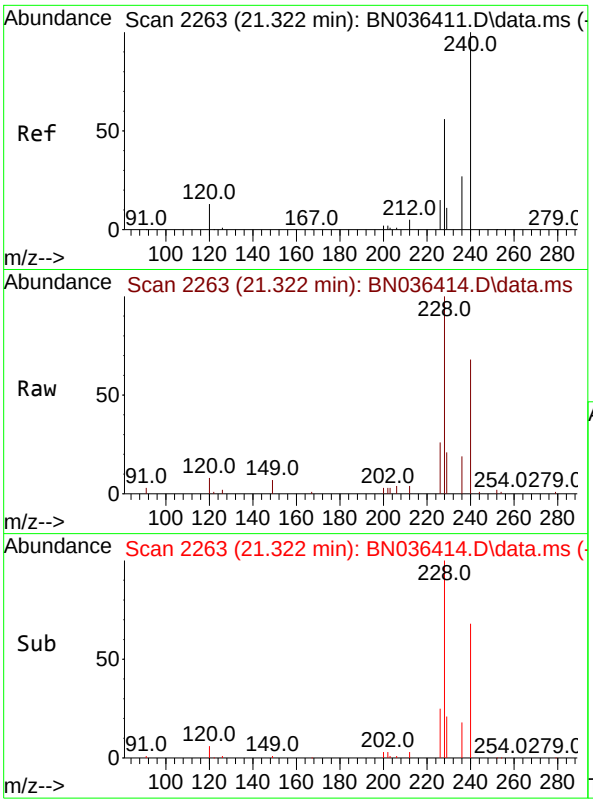


#28
Fluoranthene
Concen: 3.700 ng
RT: 19.197 min Scan# 1942
Delta R.T. -0.005 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:202 Resp: 108527

Ion	Ratio	Lower	Upper
202	100		
101	11.9	9.2	13.8
203	17.1	13.4	20.0



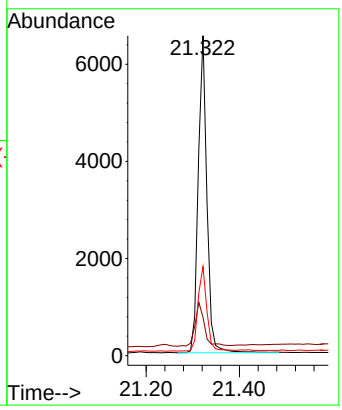


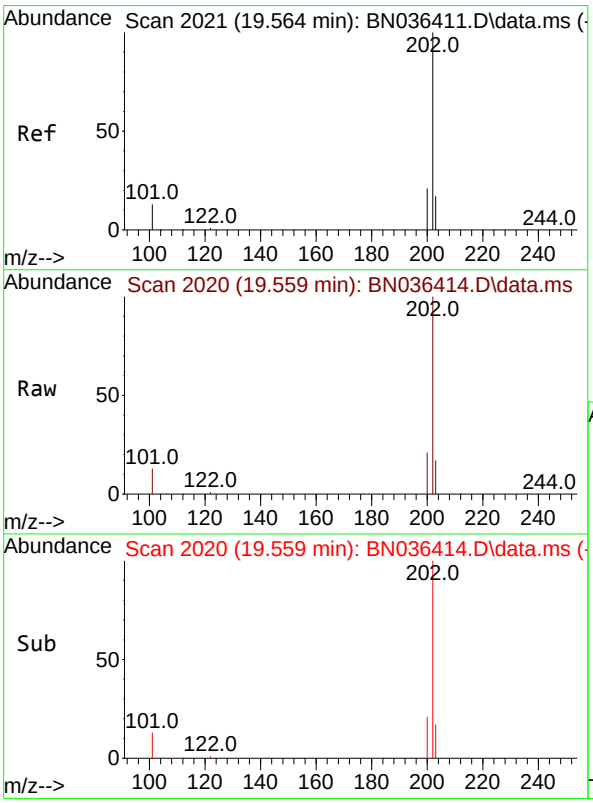
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:240 Resp: 8450

Ion	Ratio	Lower	Upper
240	100		
120	12.0	13.3	19.9#
236	27.8	23.0	34.6

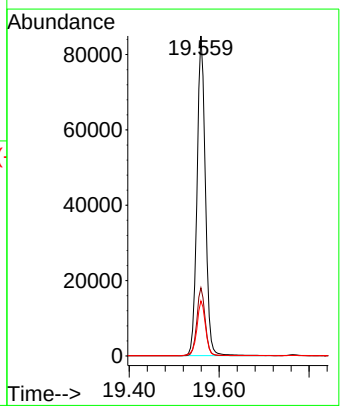


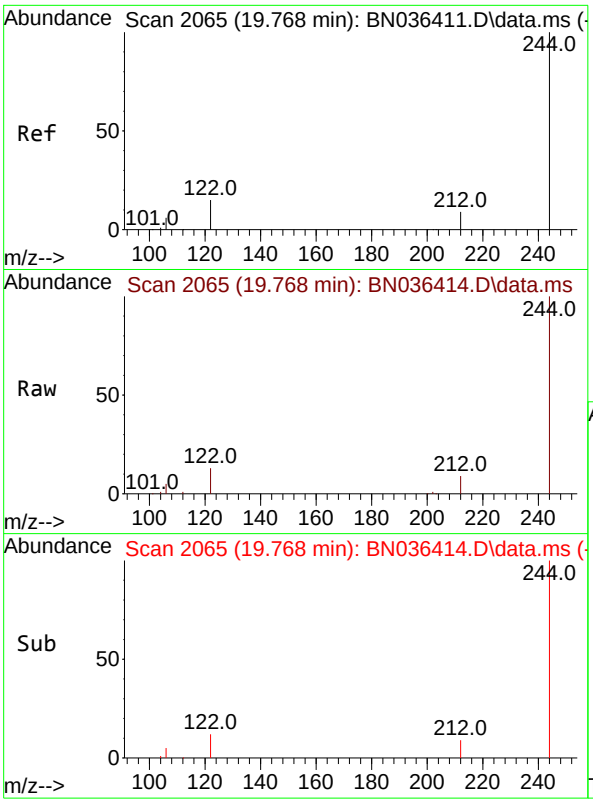


#30
Pyrene
Concen: 3.262 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:202 Resp: 110153

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.7	13.9	20.9



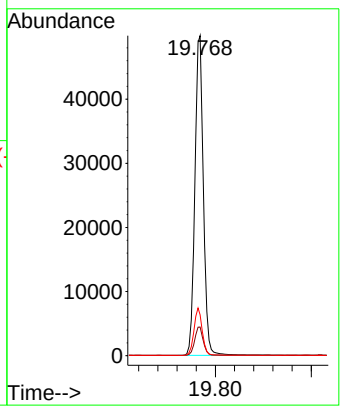


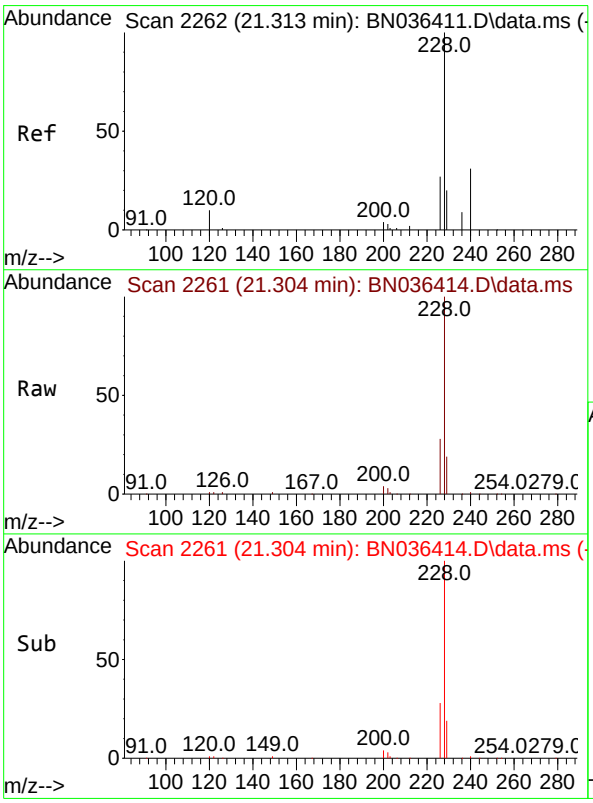
#31
Terphenyl-d14
Concen: 3.526 ng
RT: 19.768 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:244 Resp: 61695

Ion	Ratio	Lower	Upper
244	100		
212	8.9	8.1	12.1
122	12.8	12.8	19.2#

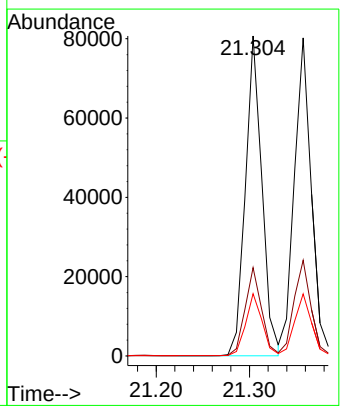


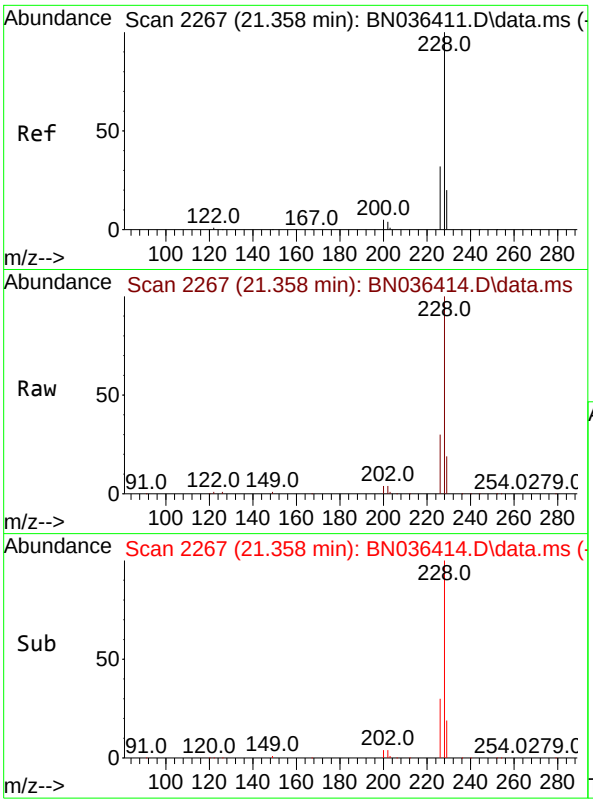


#32
Benzo(a)anthracene
Concen: 3.312 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:228 Resp: 99445

Ion	Ratio	Lower	Upper
228	100		
226	27.6	22.2	33.2
229	19.5	16.5	24.7



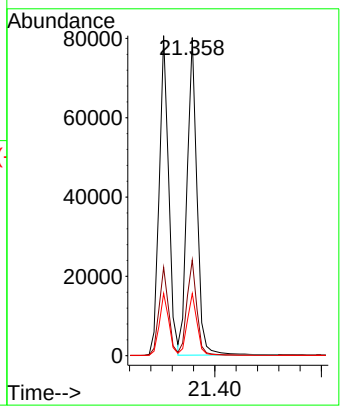


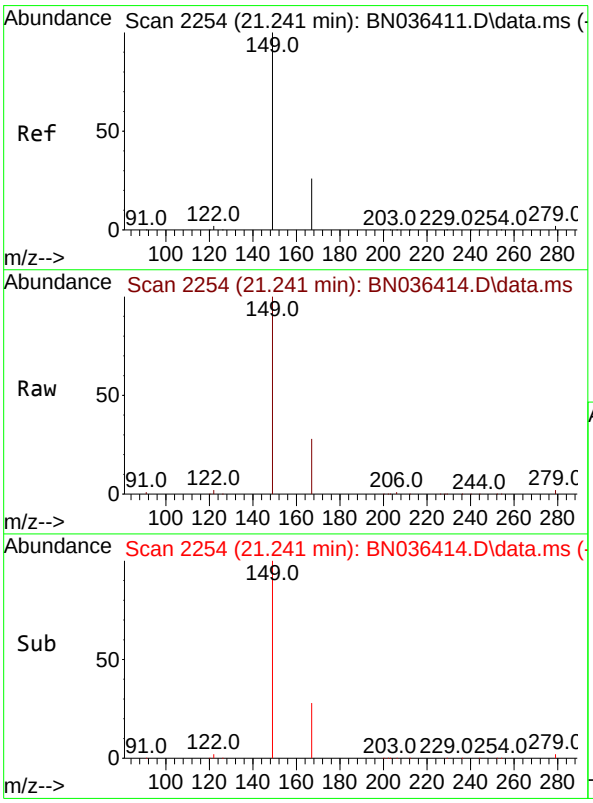
#33
Chrysene
Concen: 3.354 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:228 Resp: 103234

Ion	Ratio	Lower	Upper
228	100		
226	30.1	25.5	38.3
229	19.5	16.4	24.6

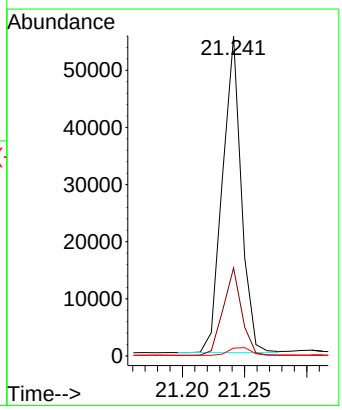


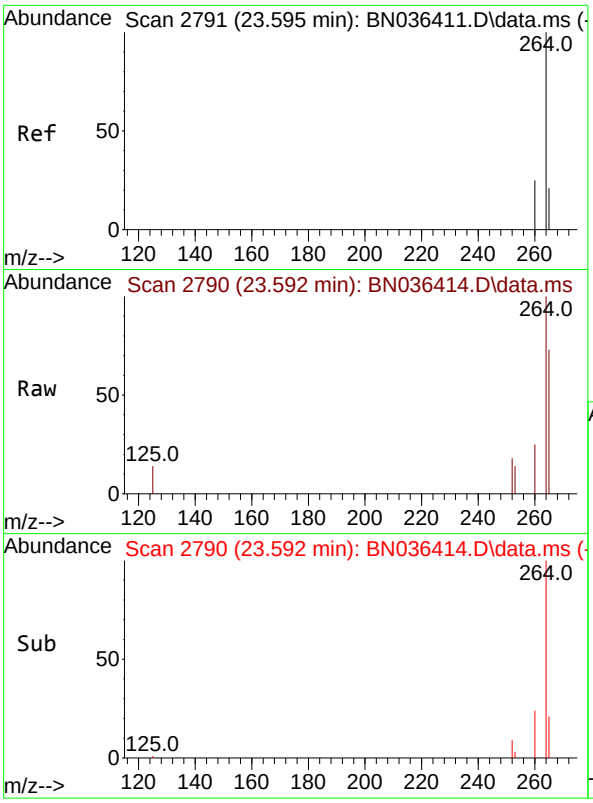


#34
Bis(2-ethylhexyl)phthalate
Concen: 3.480 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:149 Resp: 58234

Ion	Ratio	Lower	Upper
149	100		
167	27.1	21.2	31.8
279	3.0	2.7	4.1



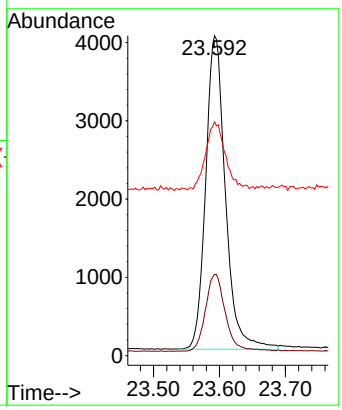


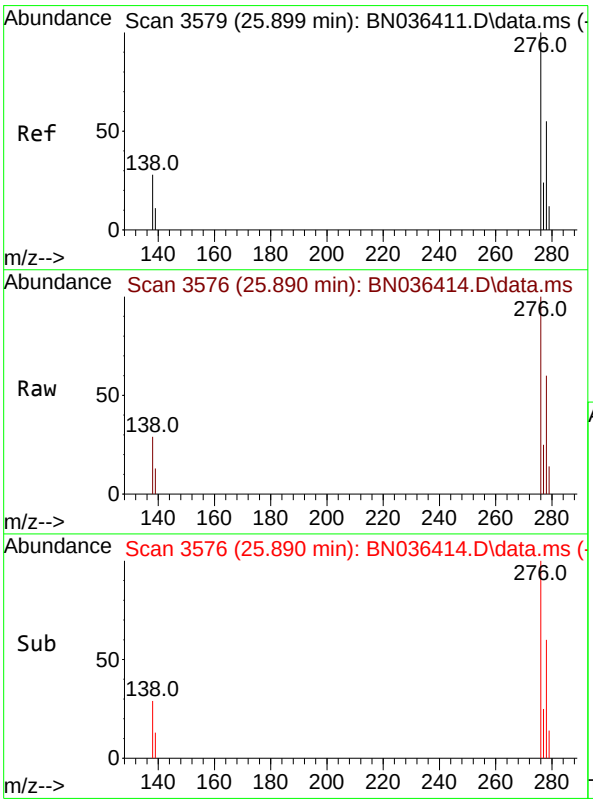
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.592 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:264 Resp: 8327

Ion	Ratio	Lower	Upper
264	100		
260	25.4	20.9	31.3
265	73.1	60.7	91.1

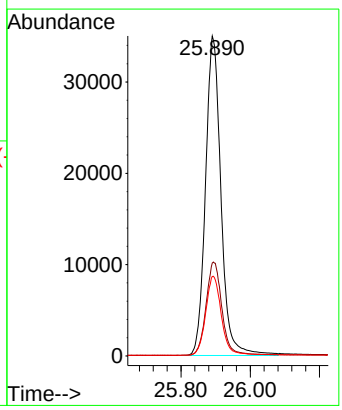


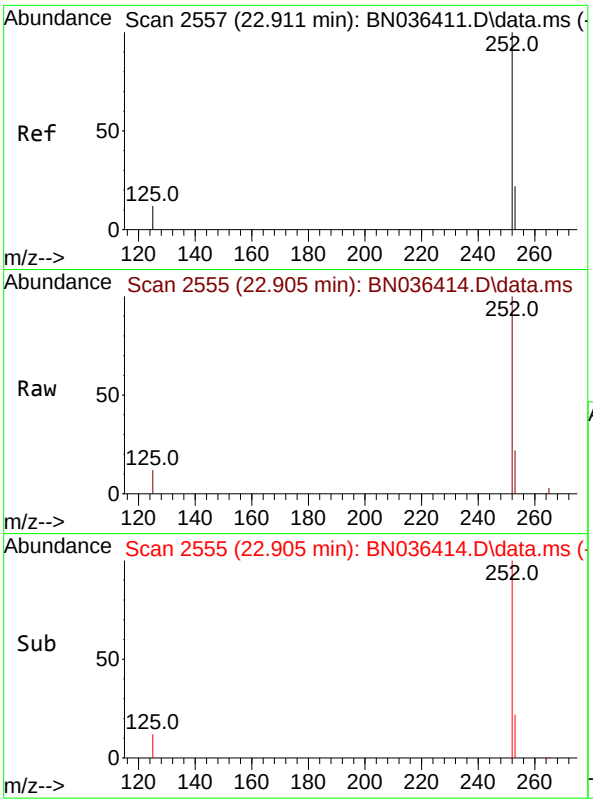


#36
Indeno(1,2,3-cd)pyrene
Concen: 3.320 ng
RT: 25.890 min Scan# 3576
Delta R.T. -0.009 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:276 Resp: 108596

Ion	Ratio	Lower	Upper
276	100		
138	29.9	22.2	33.2
277	25.1	19.8	29.6



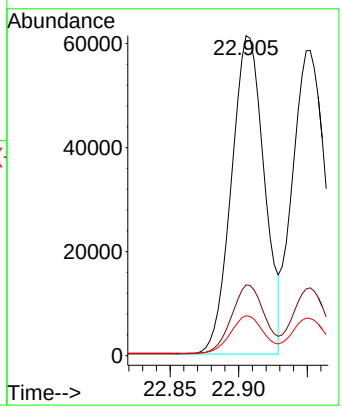


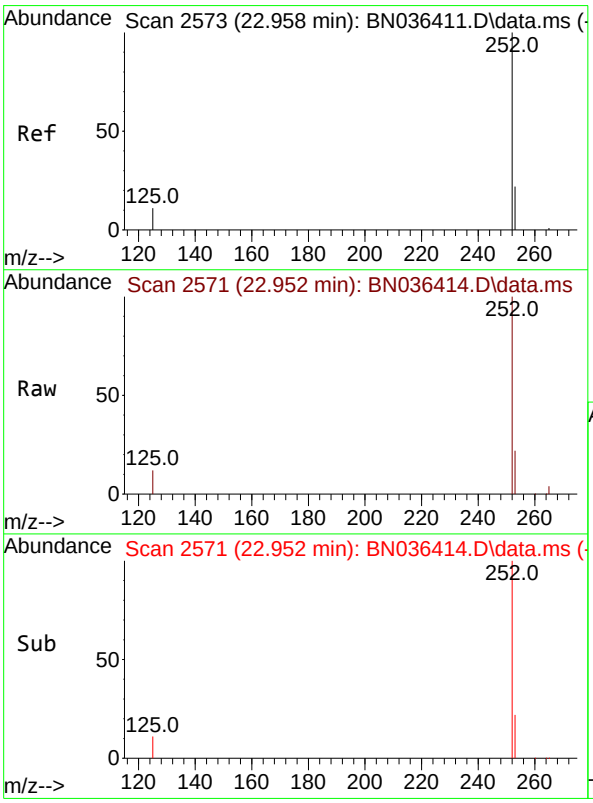
#37
Benzo(b)fluoranthene
Concen: 3.445 ng
RT: 22.905 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 101833

Ion	Ratio	Lower	Upper
252	100		
253	22.1	21.9	32.9
125	12.5	15.0	22.6#

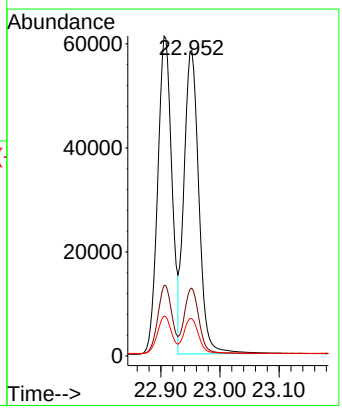


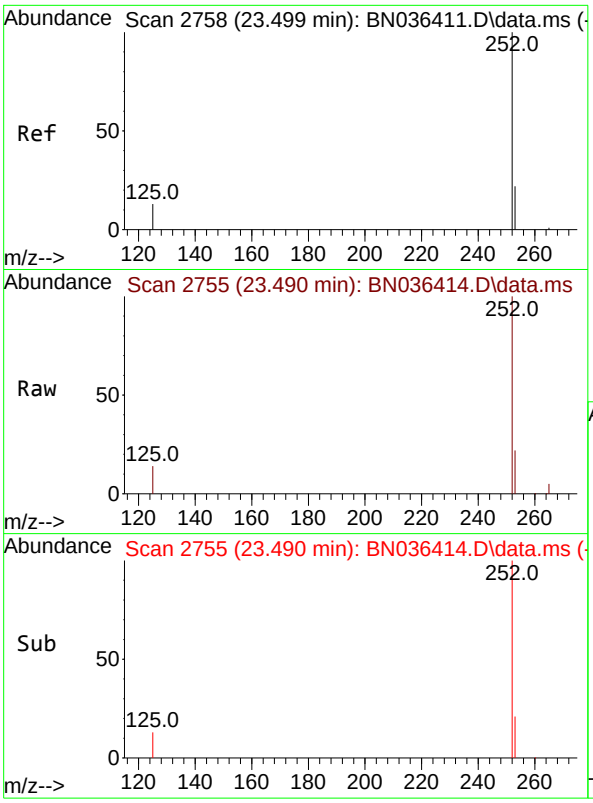


#38
Benzo(k)fluoranthene
Concen: 3.385 ng
RT: 22.952 min Scan# 2571
Delta R.T. -0.006 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:252 Resp: 102040

Ion	Ratio	Lower	Upper
252	100		
253	22.2	22.2	33.4#
125	12.2	15.0	22.4#



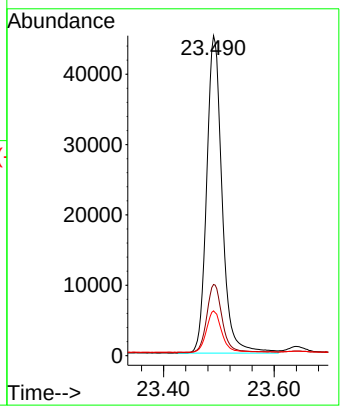


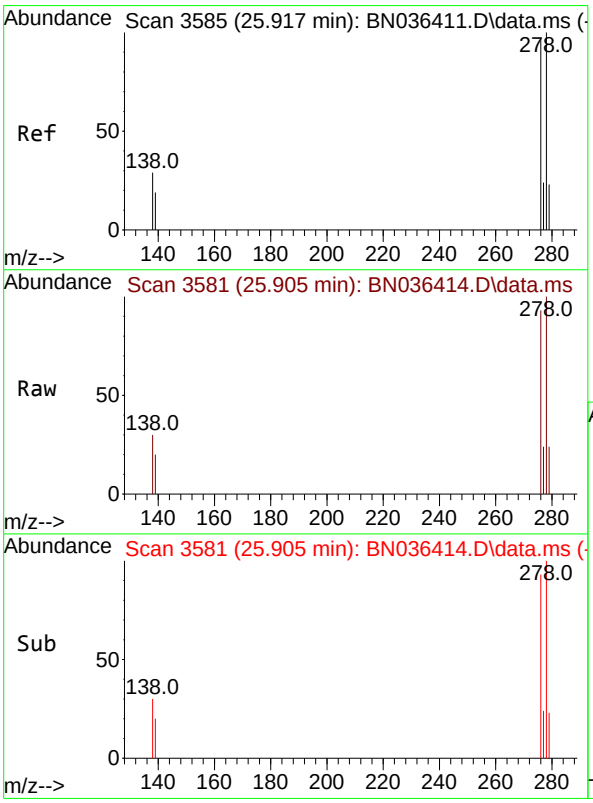
#39
Benzo(a)pyrene
Concen: 3.437 ng
RT: 23.490 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 87191

Ion	Ratio	Lower	Upper
252	100		
253	22.2	24.4	36.6#
125	14.0	18.2	27.2#

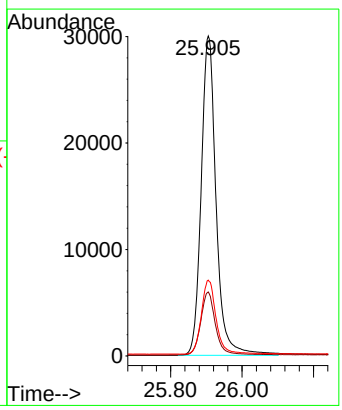


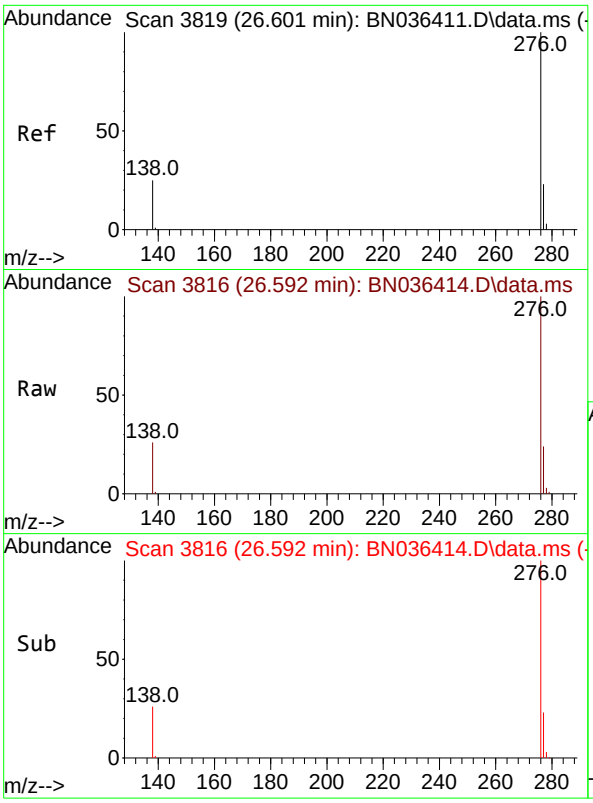


#40
Dibenzo(a,h)anthracene
Concen: 3.343 ng
RT: 25.905 min Scan# 3581
Delta R.T. -0.012 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Tgt Ion:278 Resp: 86887

Ion	Ratio	Lower	Upper
278	100		
139	20.0	18.5	27.7
279	23.7	24.8	37.2#



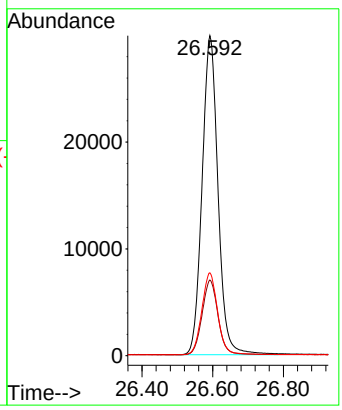


#41
Benzo(g,h,i)perylene
Concen: 3.269 ng
RT: 26.592 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN036414.D
Acq: 10 Feb 2025 15:24

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:276 Resp: 93260

Ion	Ratio	Lower	Upper
276	100		
277	23.7	20.7	31.1
138	25.9	21.8	32.6



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036415.D
Acq On : 10 Feb 2025 16:00
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Feb 11 00:37:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration

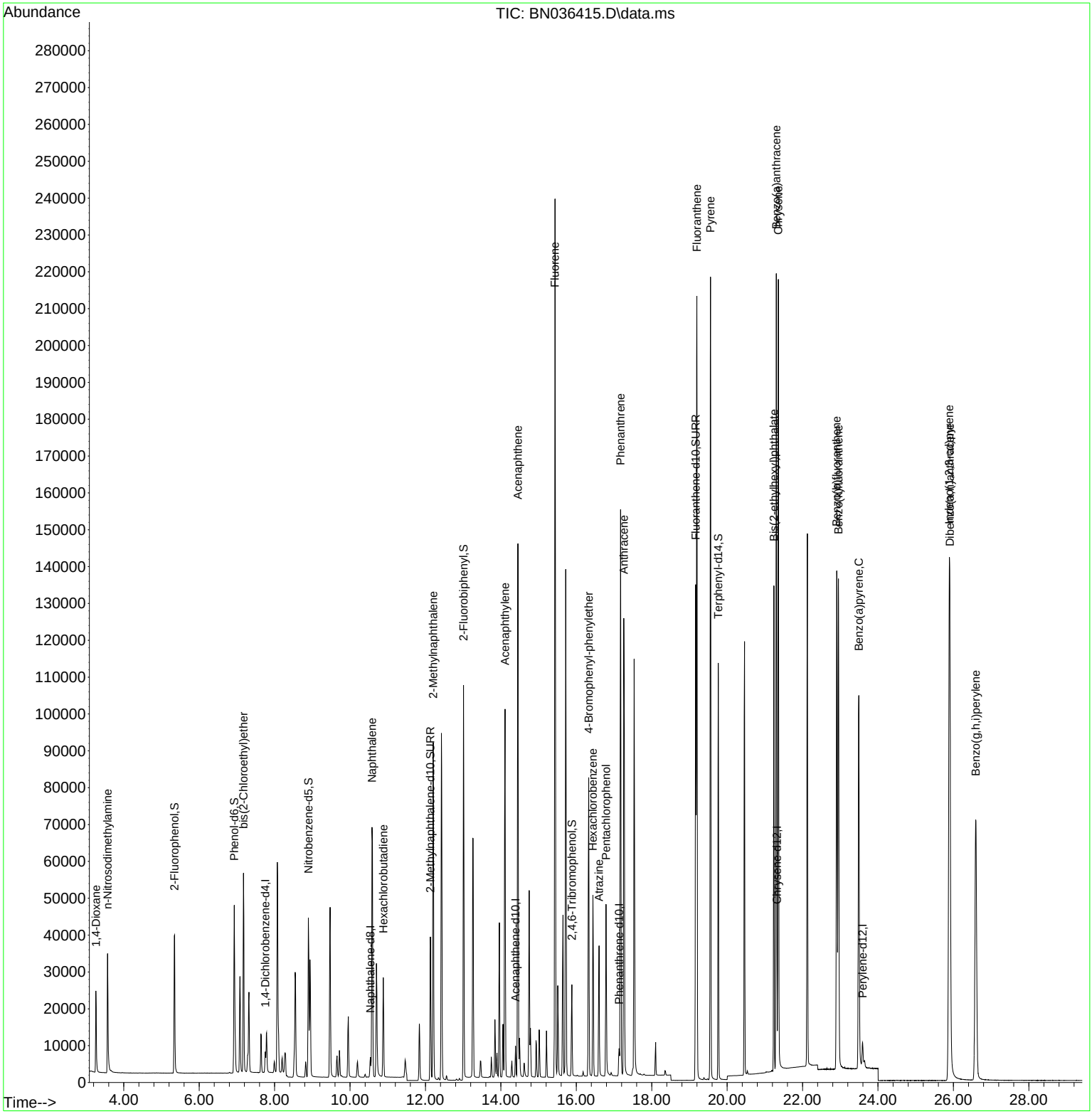
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2586	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	6761	0.400	ng	#	0.00
13) Acenaphthene-d10	14.388	164	4542	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	9953	0.400	ng	#	0.00
29) Chrysene-d12	21.322	240	9960	0.400	ng	#	0.00
35) Perylene-d12	23.592	264	9411	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	28619	4.348	ng		0.00
5) Phenol-d6	6.930	99	37616	4.898	ng		0.00
8) Nitrobenzene-d5	8.897	82	32241	5.118	ng		-0.01
11) 2-Methylnaphthalene-d10	12.131	152	52187	5.642	ng		-0.01
14) 2,4,6-Tribromophenol	15.883	330	12444	4.447	ng		0.00
15) 2-Fluorobiphenyl	13.009	172	88478	4.567	ng		-0.01
27) Fluoranthene-d10	19.164	212	143795	5.615	ng		0.00
31) Terphenyl-d14	19.764	244	104936	5.088	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.261	88	12303	4.303	ng		97
3) n-Nitrosodimethylamine	3.572	42	21660	4.216	ng	#	99
6) bis(2-Chloroethyl)ether	7.176	93	35791	5.604	ng		99
9) Naphthalene	10.584	128	90689	4.696	ng		97
10) Hexachlorobutadiene	10.883	225	21383	3.534	ng	#	100
12) 2-Methylnaphthalene	12.207	142	63405	5.226	ng		97
16) Acenaphthylene	14.110	152	103358	4.917	ng		99
17) Acenaphthene	14.452	154	66375	4.612	ng		97
18) Fluorene	15.435	166	93442	5.045	ng		96
21) 4-Bromophenyl-phenylether	16.329	248	29550	4.334	ng	#	86
22) Hexachlorobenzene	16.441	284	35446	3.983	ng		97
23) Atrazine	16.602	200	26508	5.288	ng		92
24) Pentachlorophenol	16.789	266	20784	5.340	ng		99
25) Phenanthrene	17.173	178	143424	4.916	ng		100
26) Anthracene	17.260	178	135332	5.105	ng		100
28) Fluoranthene	19.197	202	181794	5.257	ng		99
30) Pyrene	19.559	202	185711	4.666	ng		100
32) Benzo(a)anthracene	21.304	228	169514	4.790	ng		99
33) Chrysene	21.358	228	170028	4.687	ng		97
34) Bis(2-ethylhexyl)phtha...	21.241	149	101929	5.168	ng		99
36) Indeno(1,2,3-cd)pyrene	25.890	276	172989	4.679	ng		97
37) Benzo(b)fluoranthene	22.905	252	166596	4.986	ng	#	88
38) Benzo(k)fluoranthene	22.952	252	166186	4.879	ng	#	88
39) Benzo(a)pyrene	23.490	252	141837	4.947	ng	#	83
40) Dibenzo(a,h)anthracene	25.905	278	138330	4.709	ng	#	89
41) Benzo(g,h,i)perylene	26.595	276	146932	4.557	ng		96

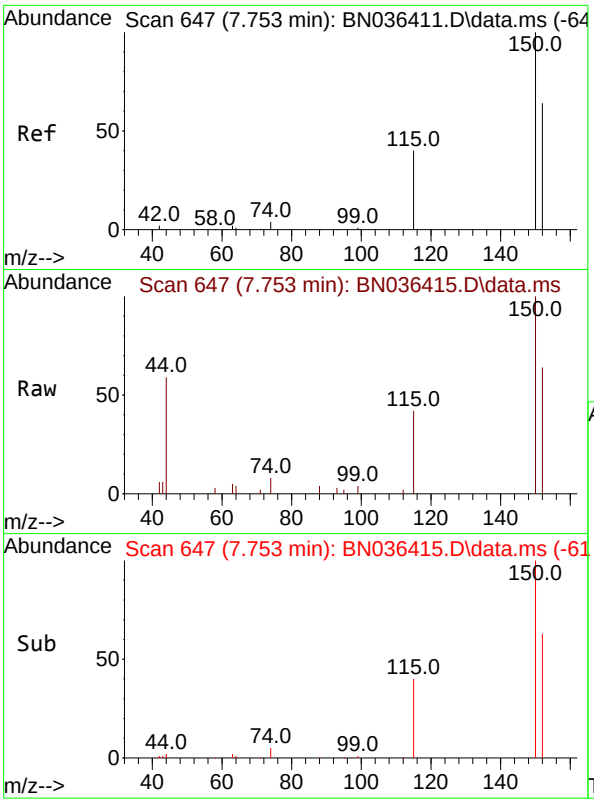
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036415.D
Acq On : 10 Feb 2025 16:00
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Feb 11 00:37:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 00:33:05 2025
Response via : Initial Calibration



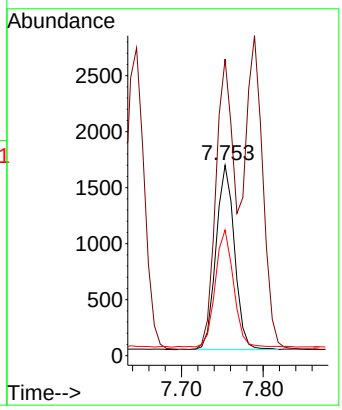


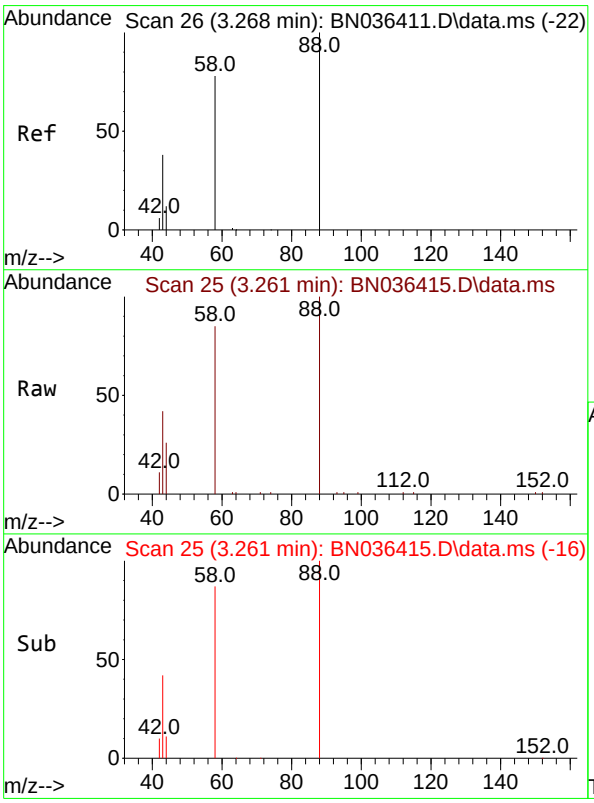
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 2586

Ion	Ratio	Lower	Upper
152	100		
150	155.8	123.7	185.5
115	66.1	52.5	78.7

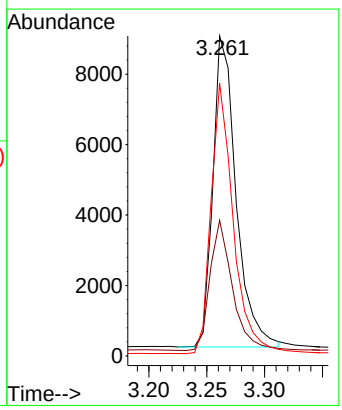


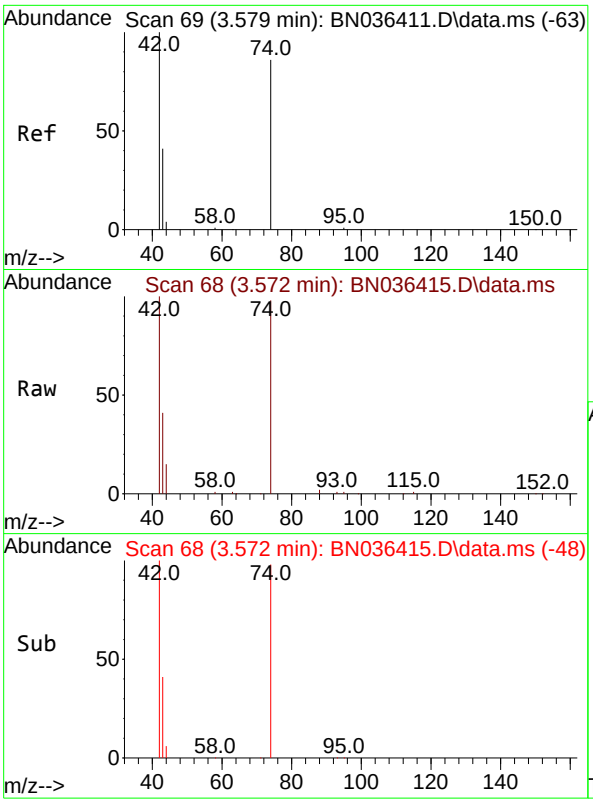


#2
1,4-Dioxane
Concen: 4.303 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion: 88 Resp: 12303

Ion	Ratio	Lower	Upper
88	100		
43	40.4	33.7	50.5
58	82.9	68.9	103.3



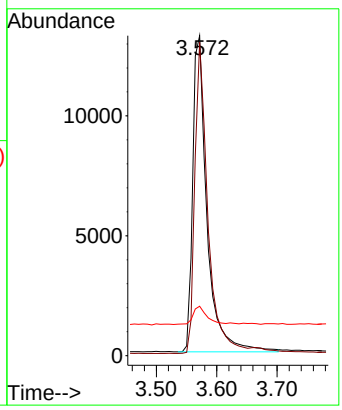


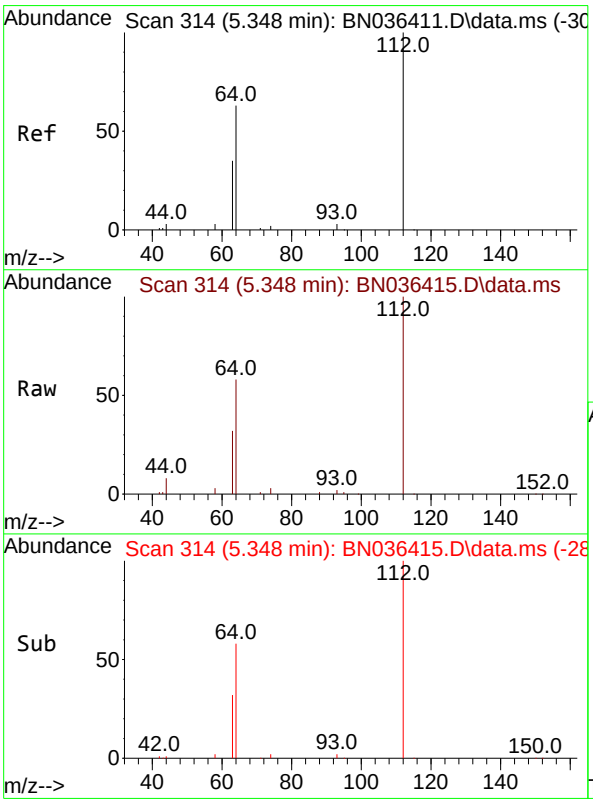
#3
n-Nitrosodimethylamine
Concen: 4.216 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 21660

Ion	Ratio	Lower	Upper
42	100		
74	89.7	71.8	107.6
44	5.6	7.8	11.6#

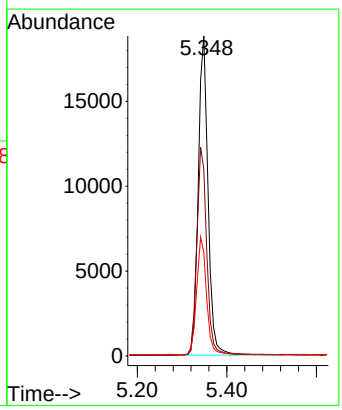


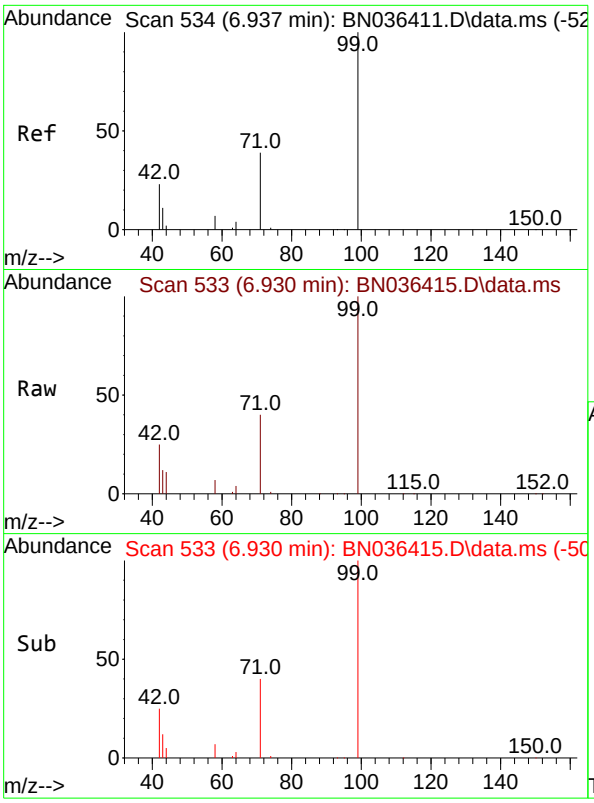


#4
2-Fluorophenol
Concen: 4.348 ng
RT: 5.348 min Scan# 314
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:112 Resp: 28619

Ion	Ratio	Lower	Upper
112	100		
64	66.1	53.4	80.0
63	37.1	30.3	45.5



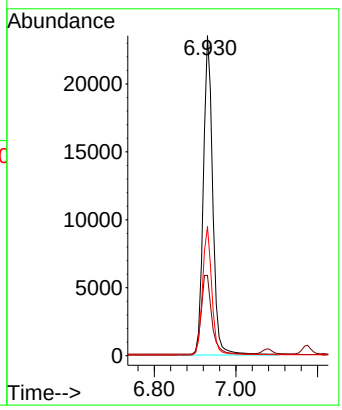


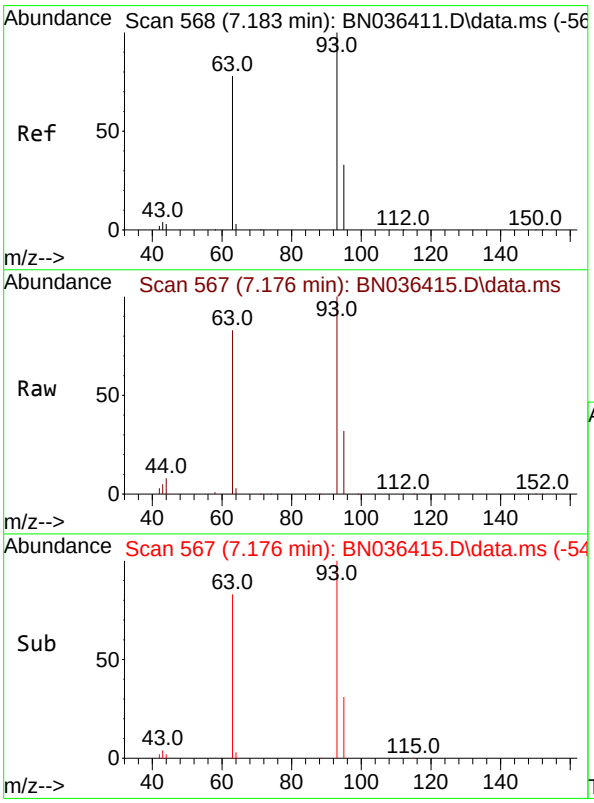
#5
Phenol-d6
Concen: 4.898 ng
RT: 6.930 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 99 Resp: 37616

Ion	Ratio	Lower	Upper
99	100		
42	27.6	21.7	32.5
71	40.0	32.6	49.0

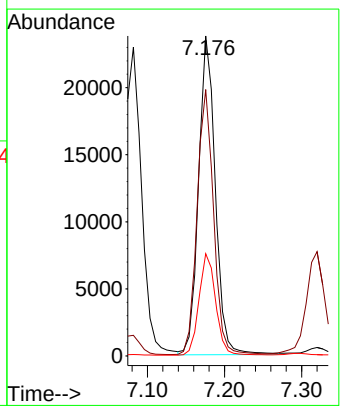


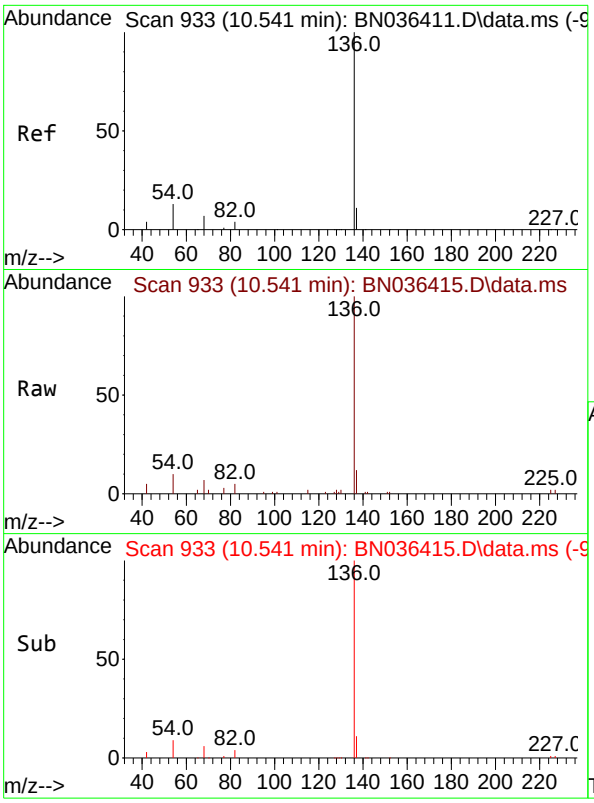


#6
bis(2-Chloroethyl)ether
Concen: 5.604 ng
RT: 7.176 min Scan# 567
Delta R.T. -0.007 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion: 93 Resp: 35791

Ion	Ratio	Lower	Upper
93	100		
63	81.8	66.3	99.5
95	31.7	26.2	39.4



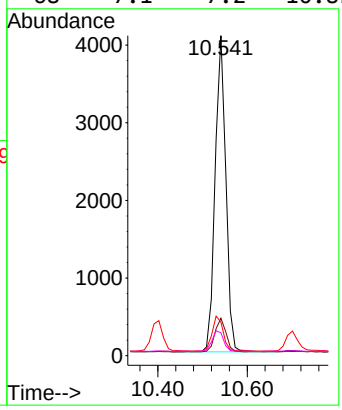


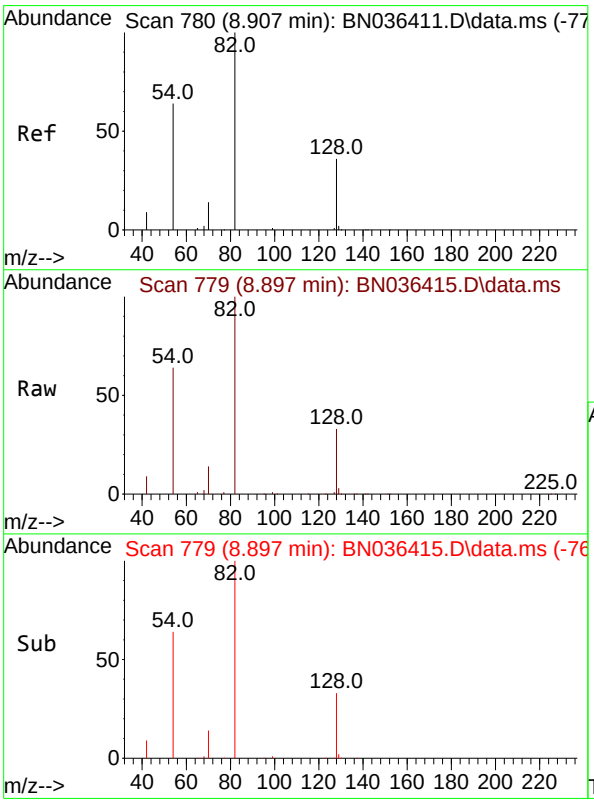
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:136 Resp: 6761

Ion	Ratio	Lower	Upper
136	100		
137	11.7	10.1	15.1
54	10.5	11.8	17.6#
68	7.1	7.2	10.8#

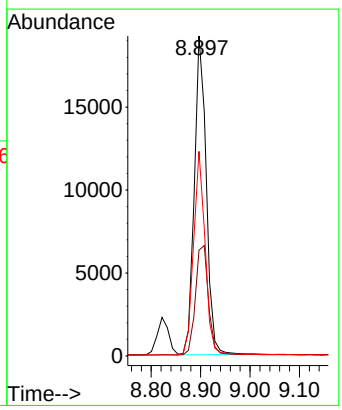


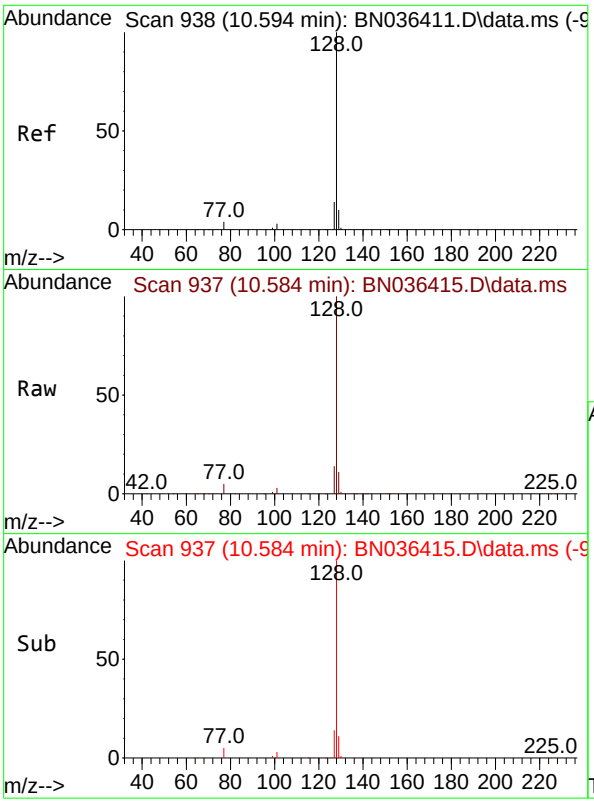


#8
Nitrobenzene-d5
Concen: 5.118 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion: 82 Resp: 32241

Ion	Ratio	Lower	Upper
82	100		
128	33.1	31.9	47.9
54	64.0	53.1	79.7



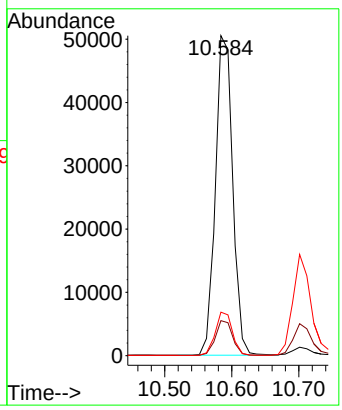


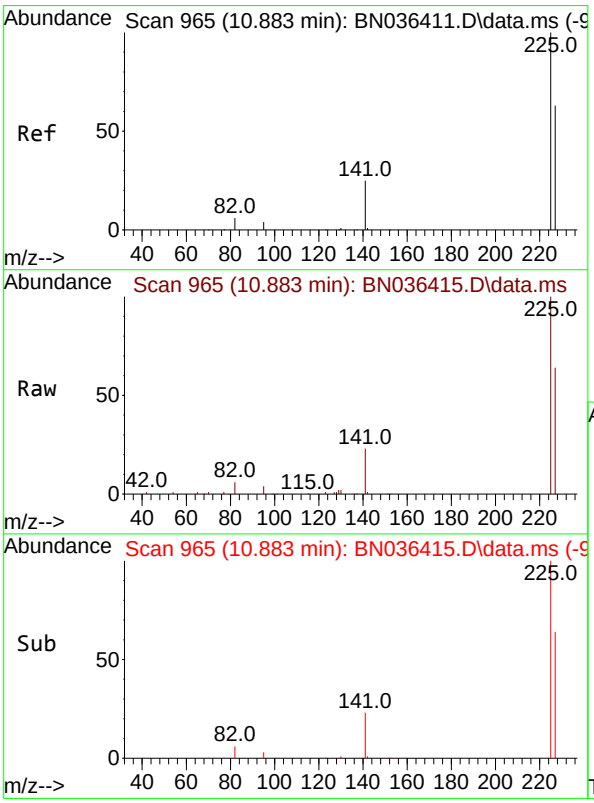
#9
Naphthalene
Concen: 4.696 ng
RT: 10.584 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 90689

Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.6	14.4
127	13.6	12.0	18.0

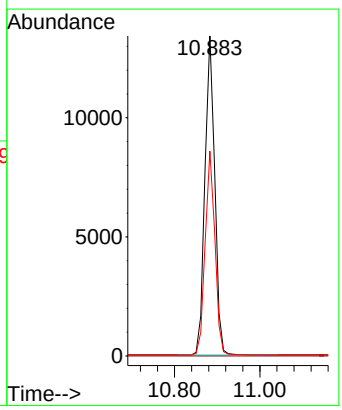


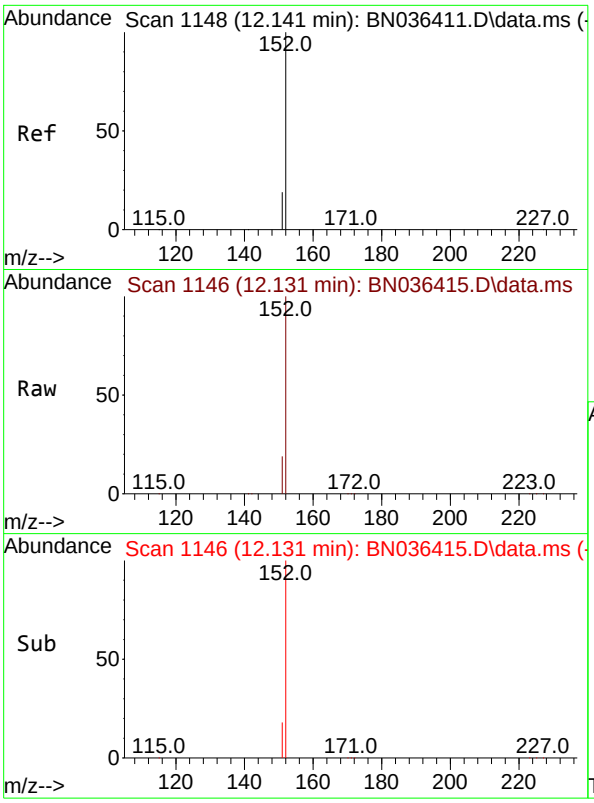


#10
Hexachlorobutadiene
Concen: 3.534 ng
RT: 10.883 min Scan# 965
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:225 Resp: 21383

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	50.9	76.3



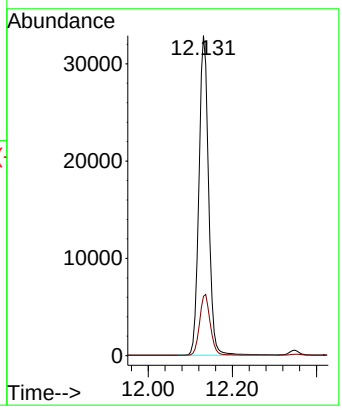


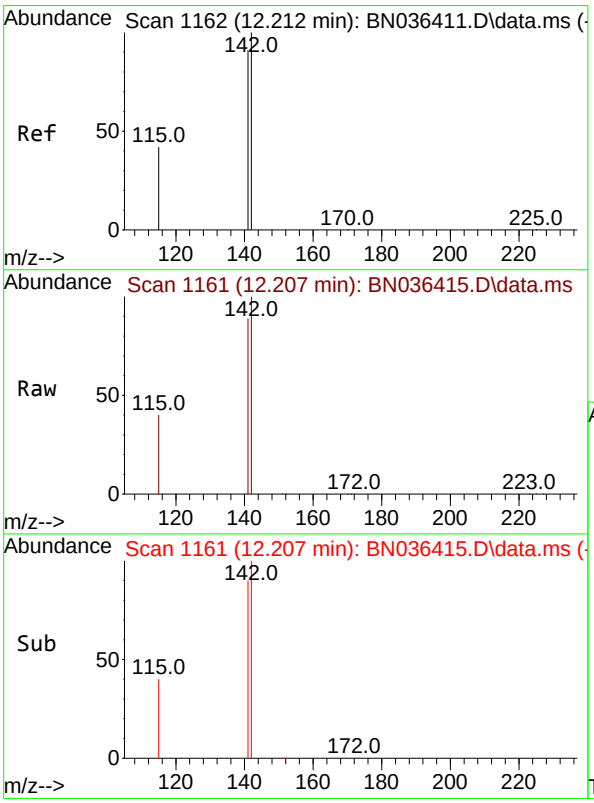
#11
2-Methylnaphthalene-d10
Concen: 5.642 ng
RT: 12.131 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 52187

Ion	Ratio	Lower	Upper
152	100		
151	21.0	16.6	25.0

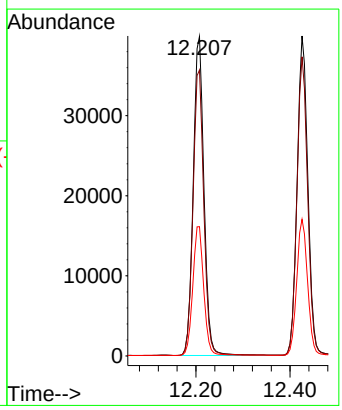


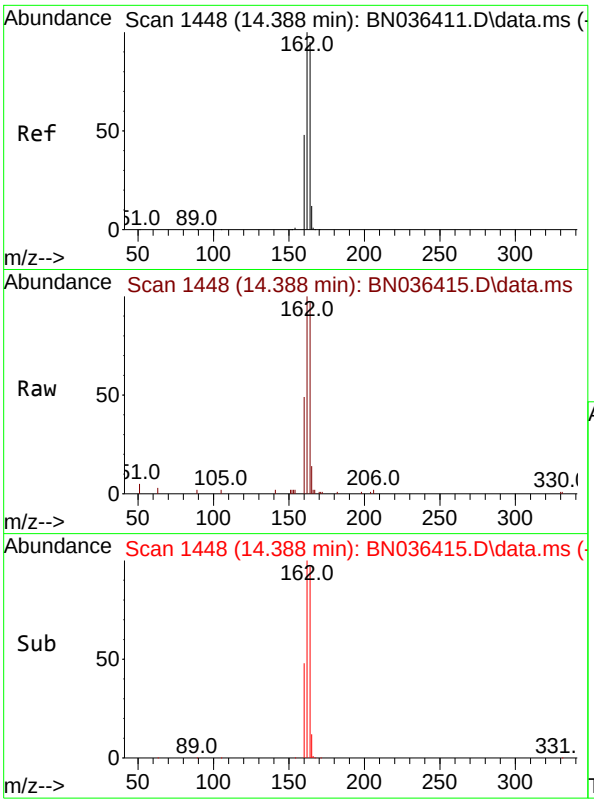


#12
2-Methylnaphthalene
Concen: 5.226 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:142 Resp: 63405

Ion	Ratio	Lower	Upper
142	100		
141	89.5	72.8	109.2
115	40.5	35.5	53.3



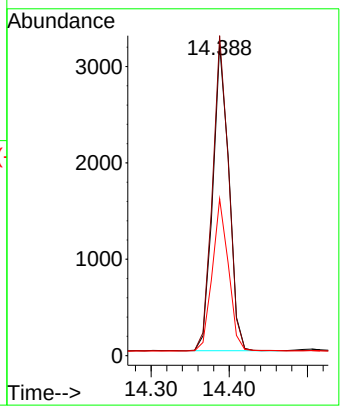


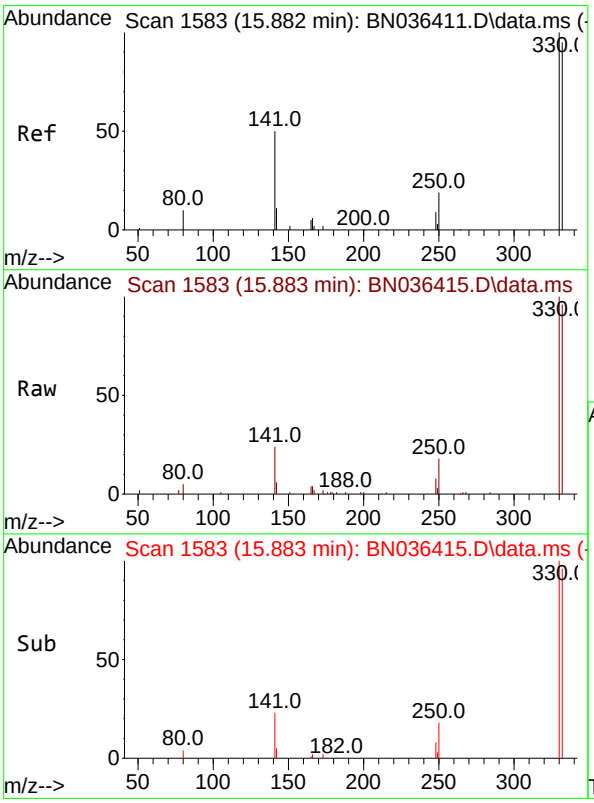
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:164 Resp: 4542

Ion	Ratio	Lower	Upper
164	100		
162	102.9	84.1	126.1
160	50.4	41.4	62.0

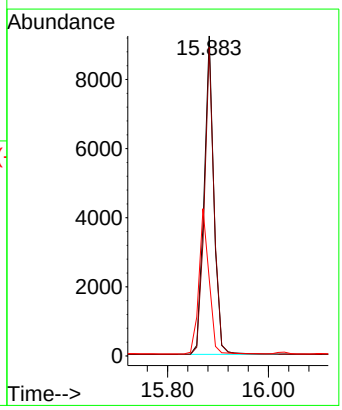


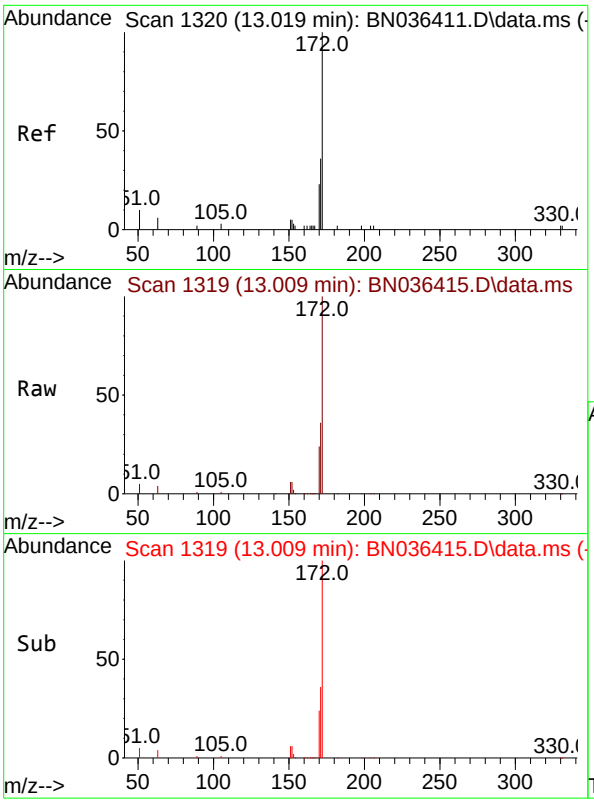


#14
2,4,6-Tribromophenol
Concen: 4.447 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:330 Resp: 12444

Ion	Ratio	Lower	Upper
330	100		
332	95.6	76.6	114.8
141	46.6	37.8	56.8



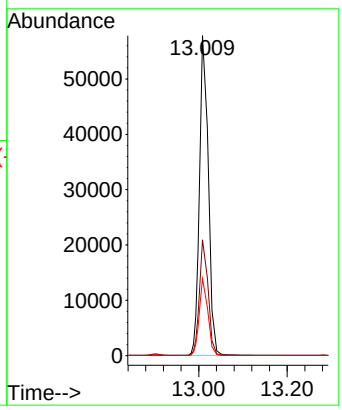


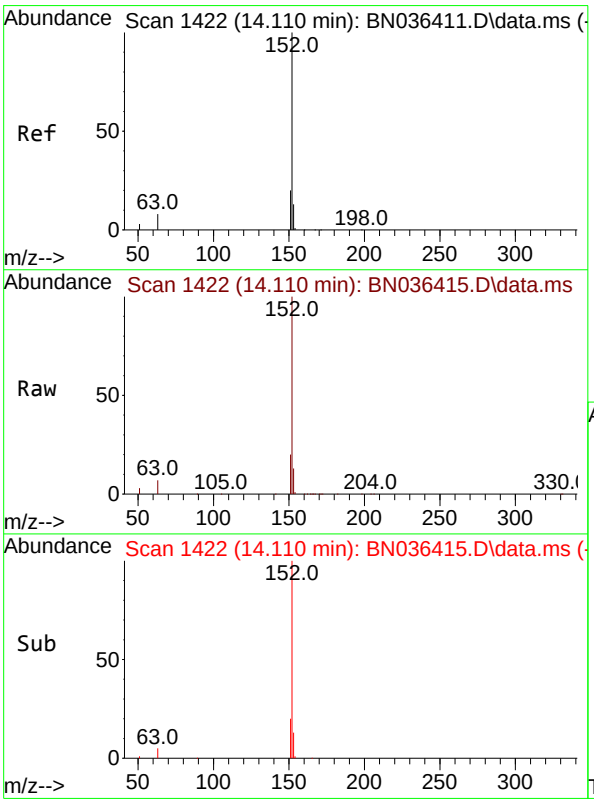
#15
2-Fluorobiphenyl
Concen: 4.567 ng
RT: 13.009 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:172 Resp: 88478

Ion	Ratio	Lower	Upper
172	100		
171	36.2	29.6	44.4
170	24.0	19.8	29.6

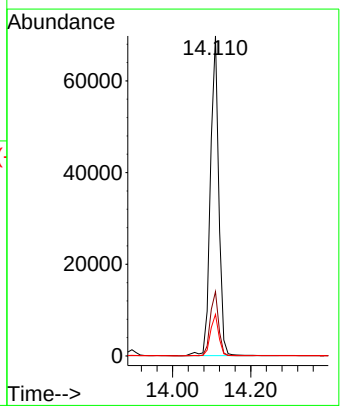


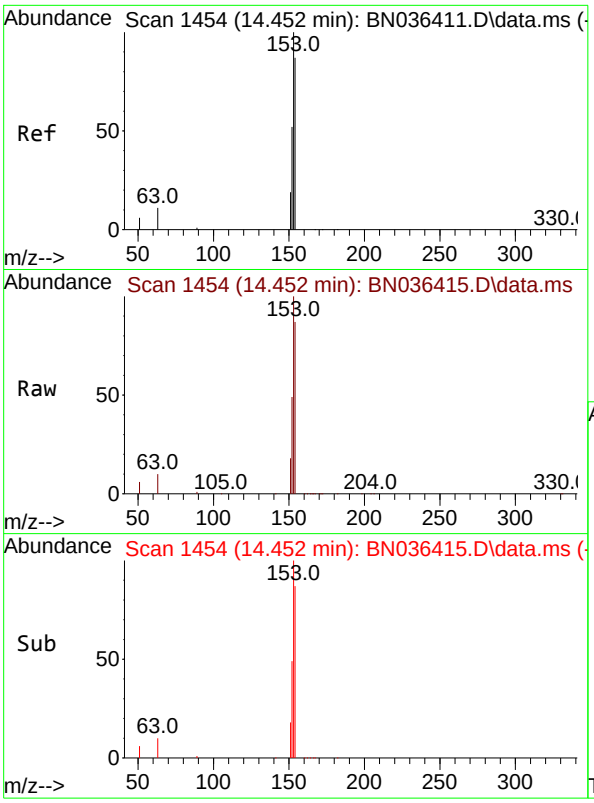


#16
Acenaphthylene
Concen: 4.917 ng
RT: 14.110 min Scan# 1422
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:152 Resp: 103358

Ion	Ratio	Lower	Upper
152	100		
151	20.1	15.8	23.8
153	12.9	10.2	15.2



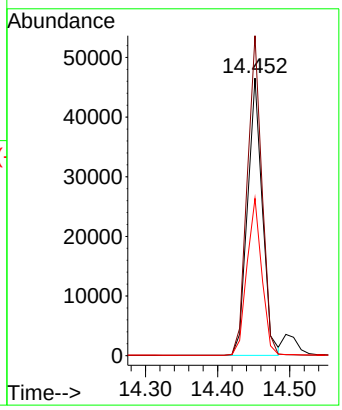


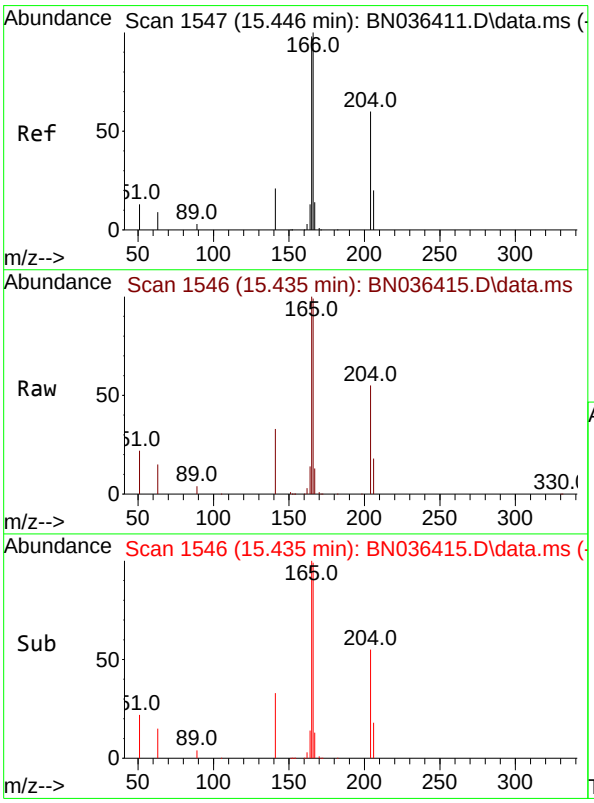
#17
Acenaphthene
Concen: 4.612 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:154 Resp: 66375

Ion	Ratio	Lower	Upper
154	100		
153	114.4	93.3	139.9
152	57.1	48.8	73.2

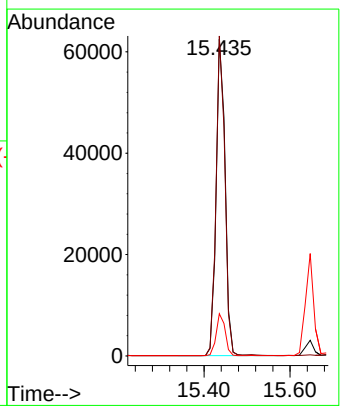


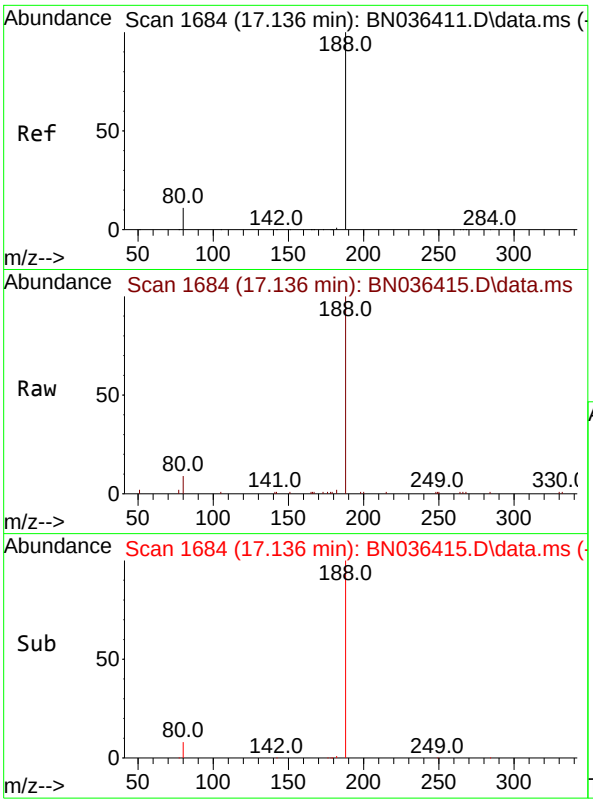


#18
Fluorene
Concen: 5.045 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:166 Resp: 93442

Ion	Ratio	Lower	Upper
166	100		
165	95.5	79.5	119.3
167	12.8	10.4	15.6



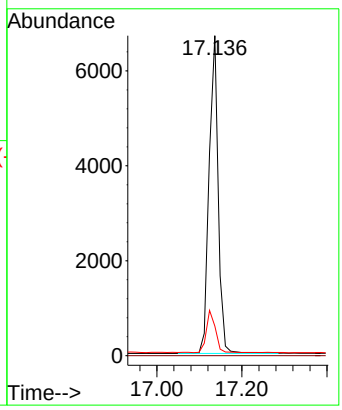


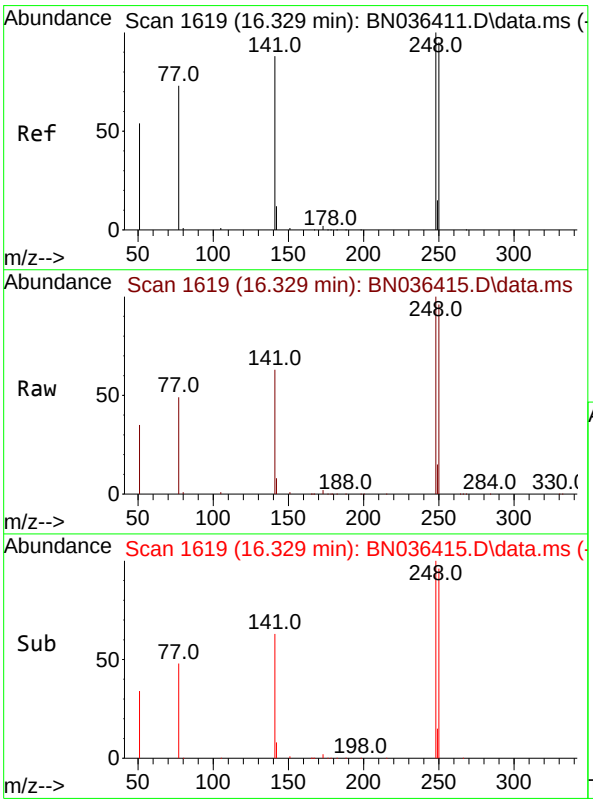
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:188 Resp: 9953

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.3	9.8	14.6#

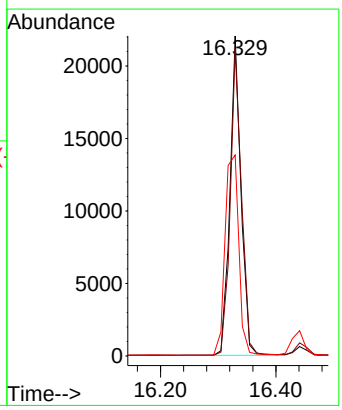


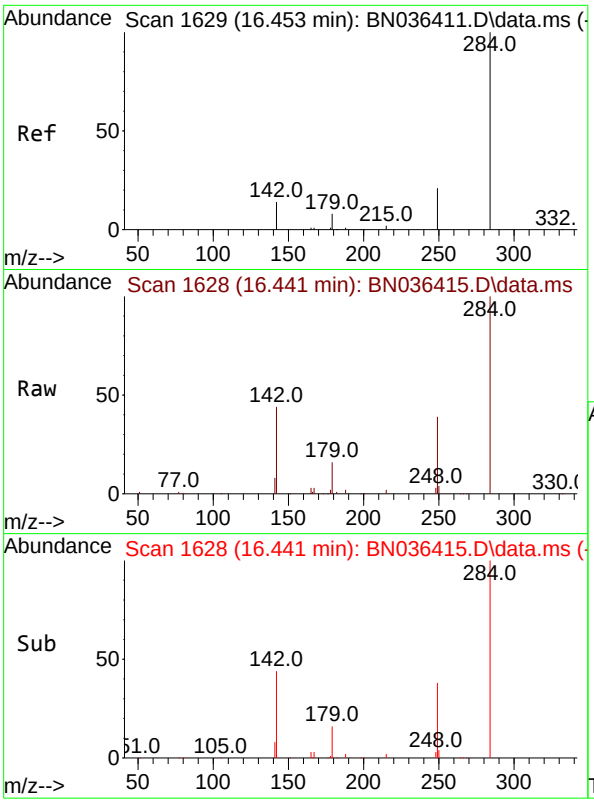


#21
4-Bromophenyl-phenylether
Concen: 4.334 ng
RT: 16.329 min Scan# 1619
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:248 Resp: 29550

Ion	Ratio	Lower	Upper
248	100		
250	95.8	76.1	114.1
141	62.8	71.7	107.5#



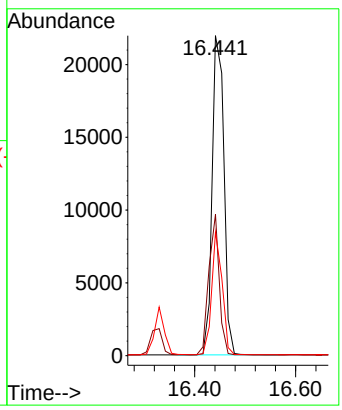


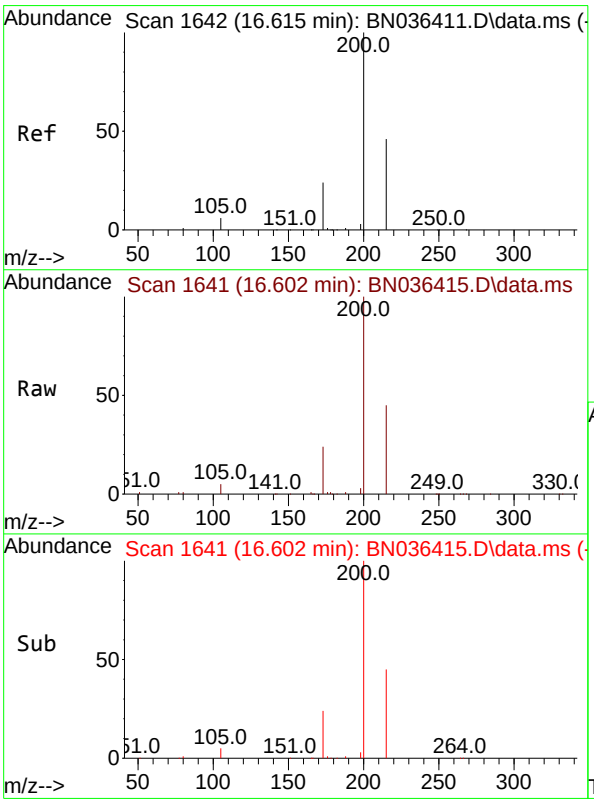
#22
Hexachlorobenzene
Concen: 3.983 ng
RT: 16.441 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:284 Resp: 35446

Ion	Ratio	Lower	Upper
284	100		
142	39.2	33.4	50.0
249	34.2	28.6	43.0

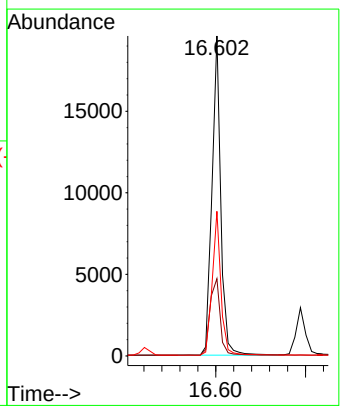


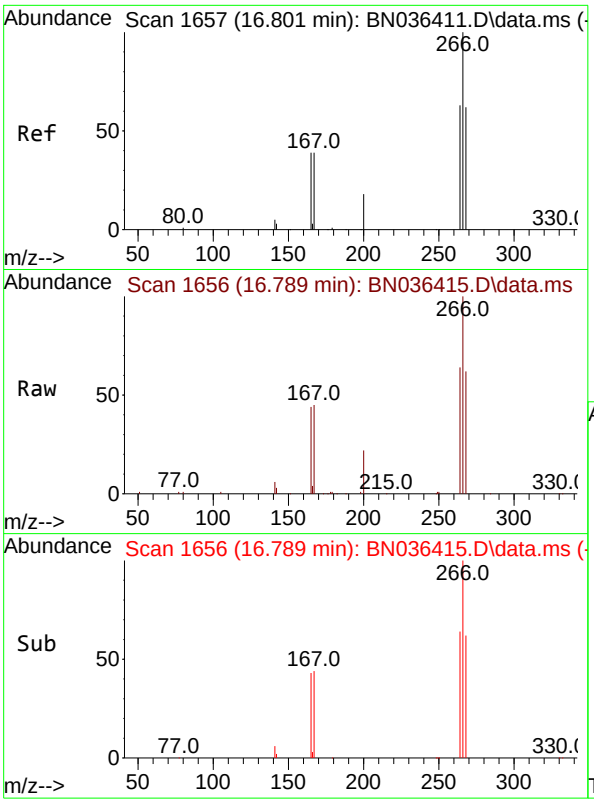


#23
Atrazine
Concen: 5.288 ng
RT: 16.602 min Scan# 1641
Delta R.T. -0.012 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:200 Resp: 26508

Ion	Ratio	Lower	Upper
200	100		
173	24.1	23.2	34.8
215	45.2	40.0	60.0



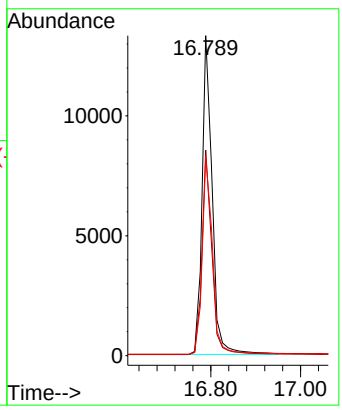


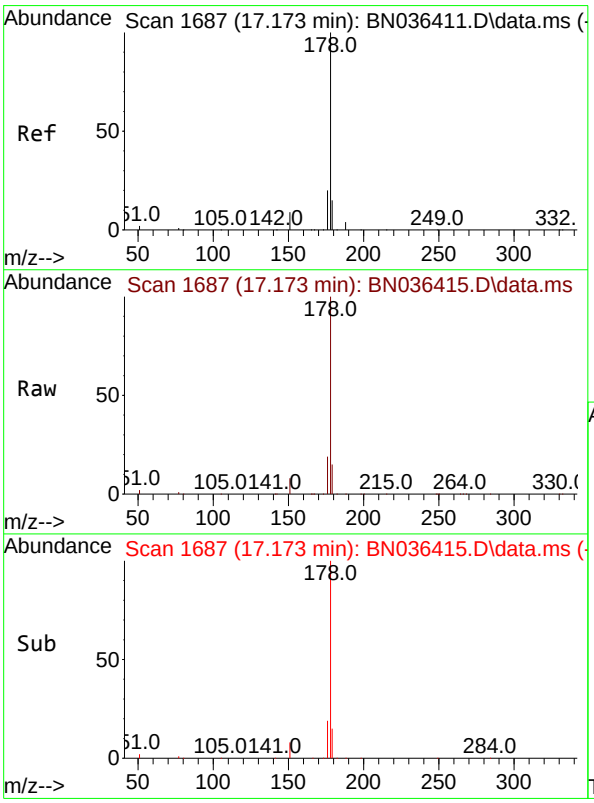
#24
Pentachlorophenol
Concen: 5.340 ng
RT: 16.789 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:266 Resp: 20784

Ion	Ratio	Lower	Upper
266	100		
264	63.1	50.6	76.0
268	63.4	51.9	77.9

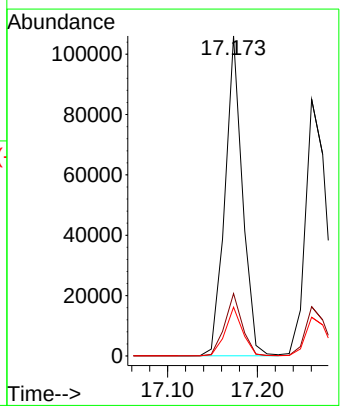


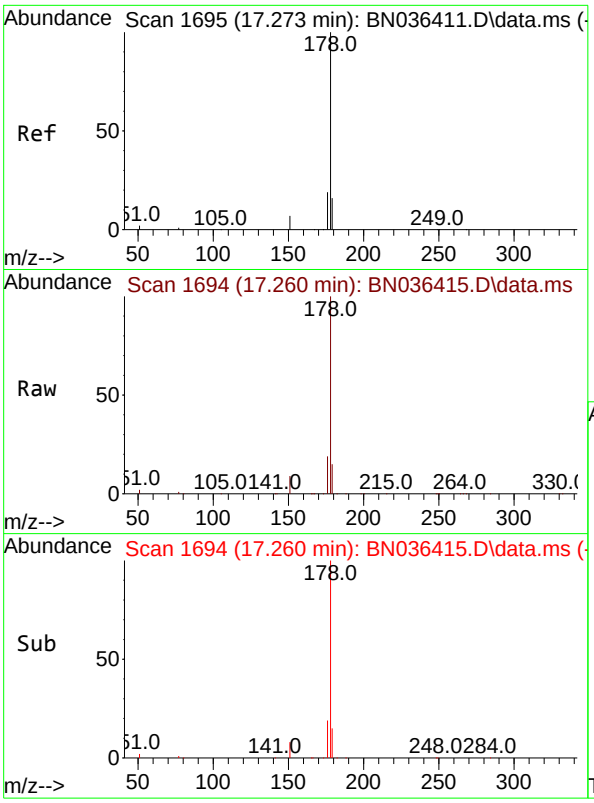


#25
Phenanthrene
Concen: 4.916 ng
RT: 17.173 min Scan# 1687
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:178 Resp: 143424

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.7	23.5
179	15.2	12.4	18.6



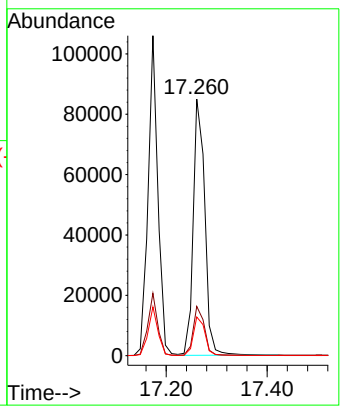


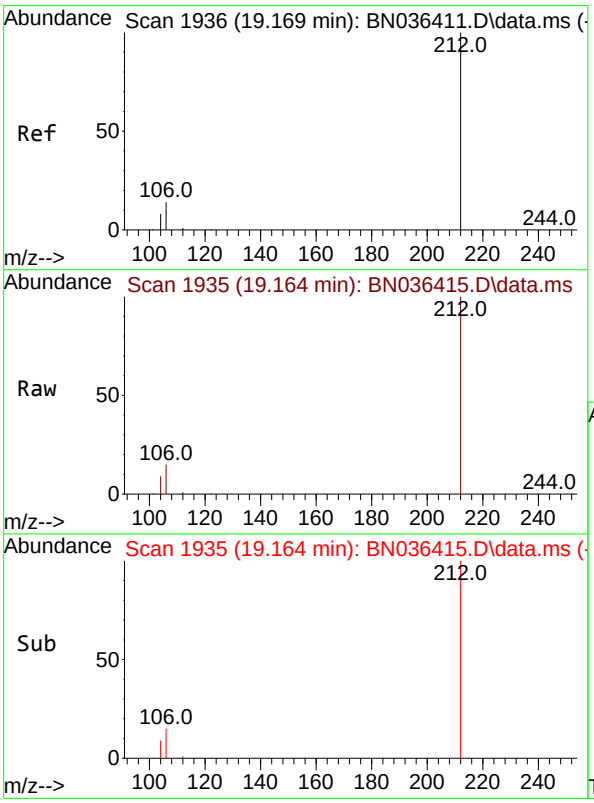
#26
Anthracene
Concen: 5.105 ng
RT: 17.260 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:178 Resp: 135332

Ion	Ratio	Lower	Upper
178	100		
176	18.7	14.9	22.3
179	15.2	12.4	18.6

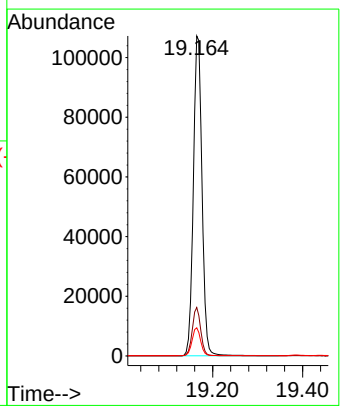


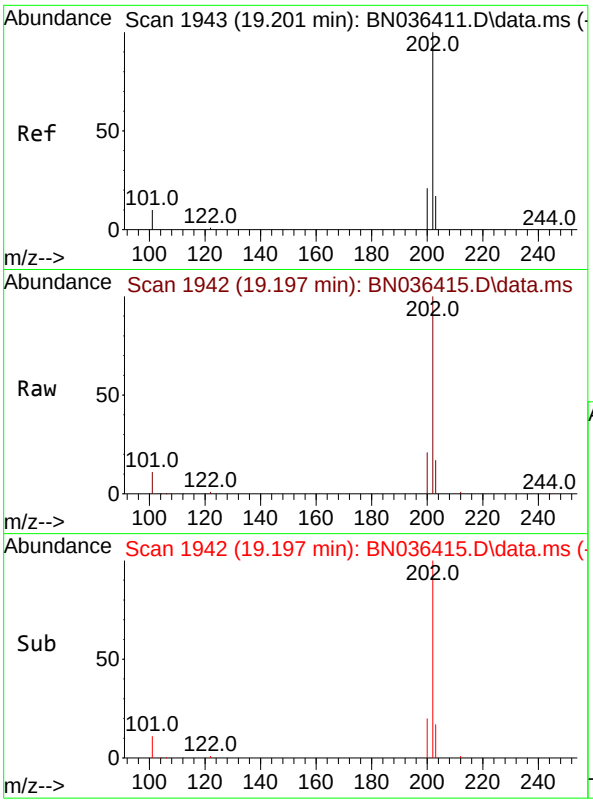


#27
Fluoranthene-d10
Concen: 5.615 ng
RT: 19.164 min Scan# 1935
Delta R.T. -0.005 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:212 Resp: 143795

Ion	Ratio	Lower	Upper
212	100		
106	14.7	11.5	17.3
104	8.6	7.1	10.7



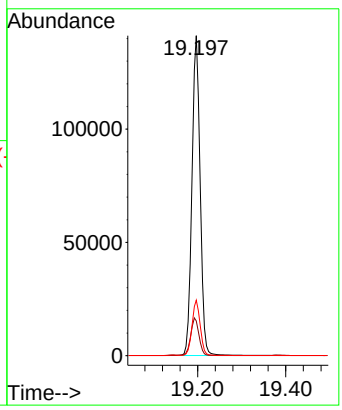


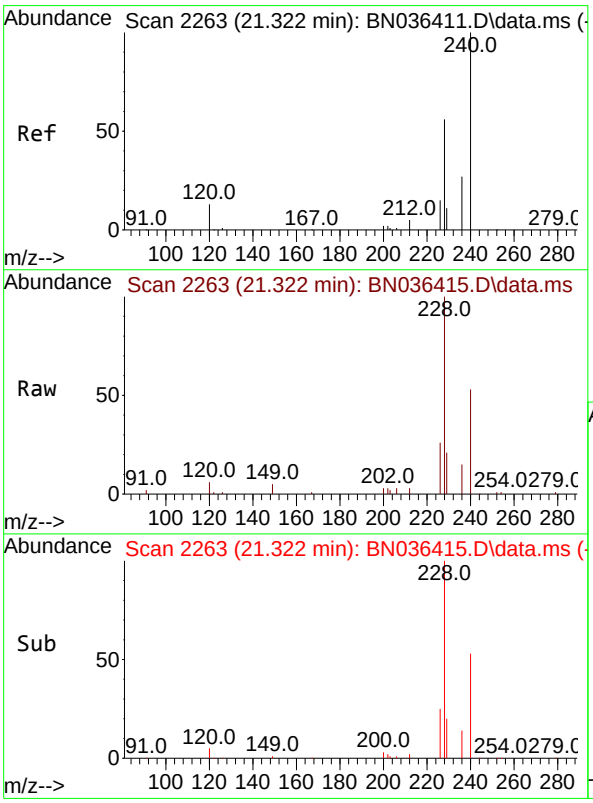
#28
Fluoranthene
Concen: 5.257 ng
RT: 19.197 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:202 Resp: 181794

Ion	Ratio	Lower	Upper
202	100		
101	12.0	9.2	13.8
203	17.3	13.4	20.0

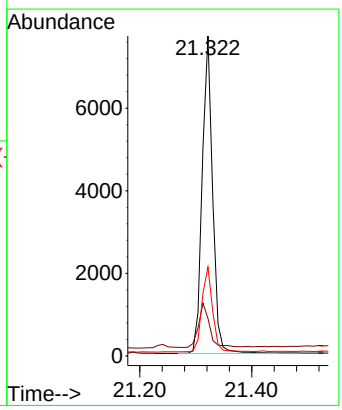


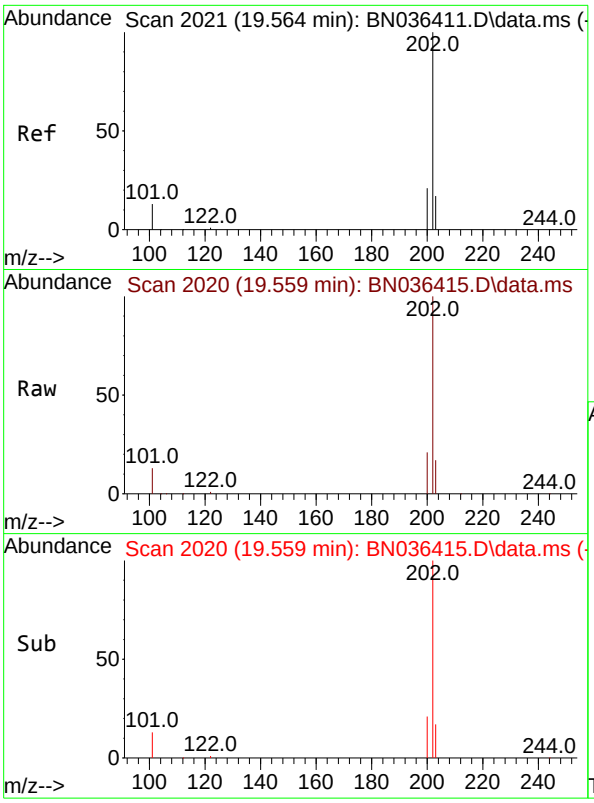


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2263
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:240 Resp: 9960

Ion	Ratio	Lower	Upper
240	100		
120	11.8	13.3	19.9#
236	27.8	23.0	34.6



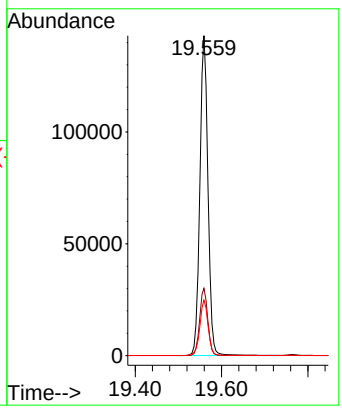


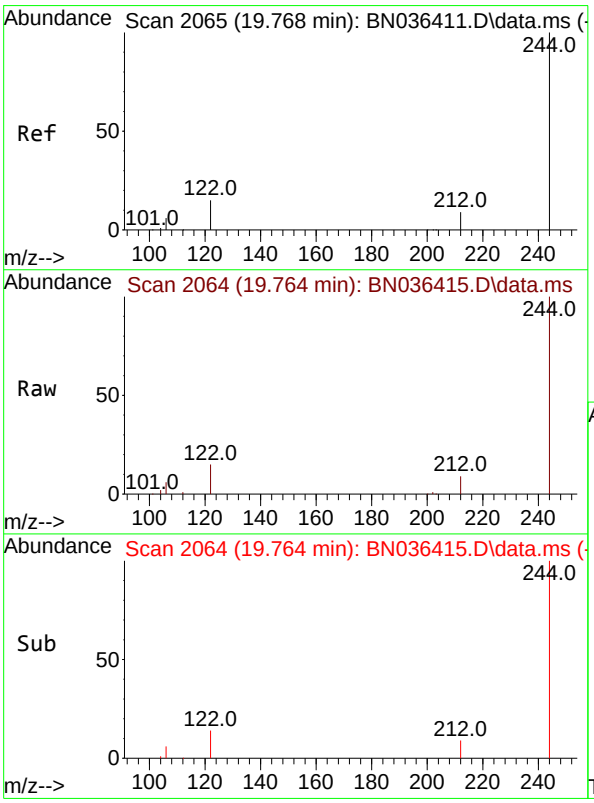
#30
Pyrene
Concen: 4.666 ng
RT: 19.559 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:202 Resp: 185711

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.7	13.9	20.9

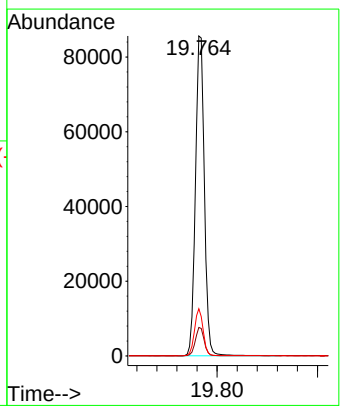


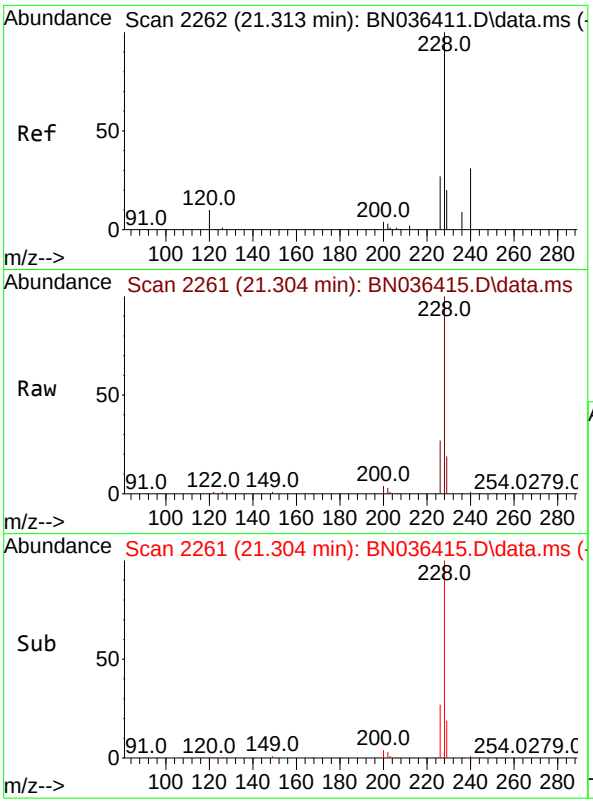


#31
Terphenyl-d14
Concen: 5.088 ng
RT: 19.764 min Scan# 2064
Delta R.T. -0.005 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:244 Resp: 104936

Ion	Ratio	Lower	Upper
244	100		
212	8.9	8.1	12.1
122	14.8	12.8	19.2



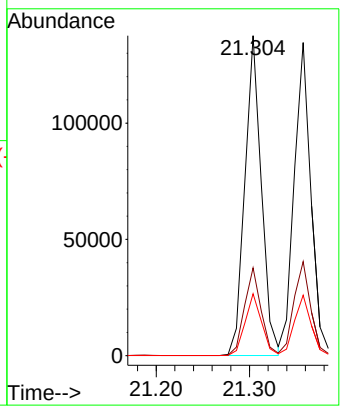


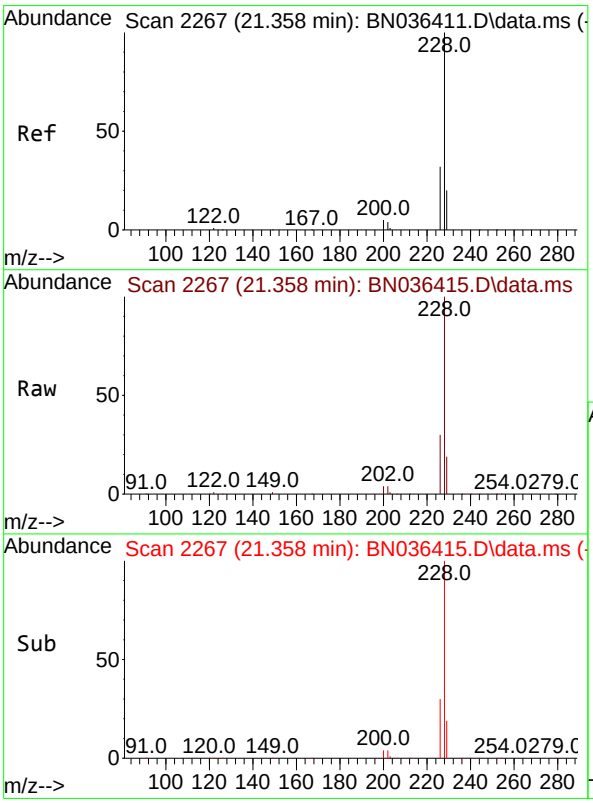
#32
Benzo(a)anthracene
Concen: 4.790 ng
RT: 21.304 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 169514

Ion	Ratio	Lower	Upper
228	100		
226	27.5	22.2	33.2
229	19.4	16.5	24.7

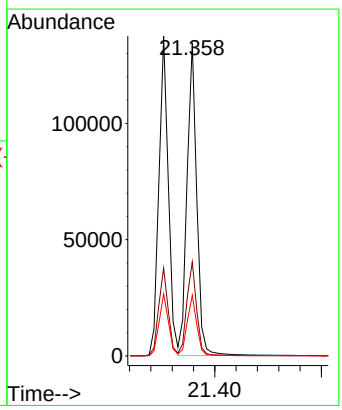


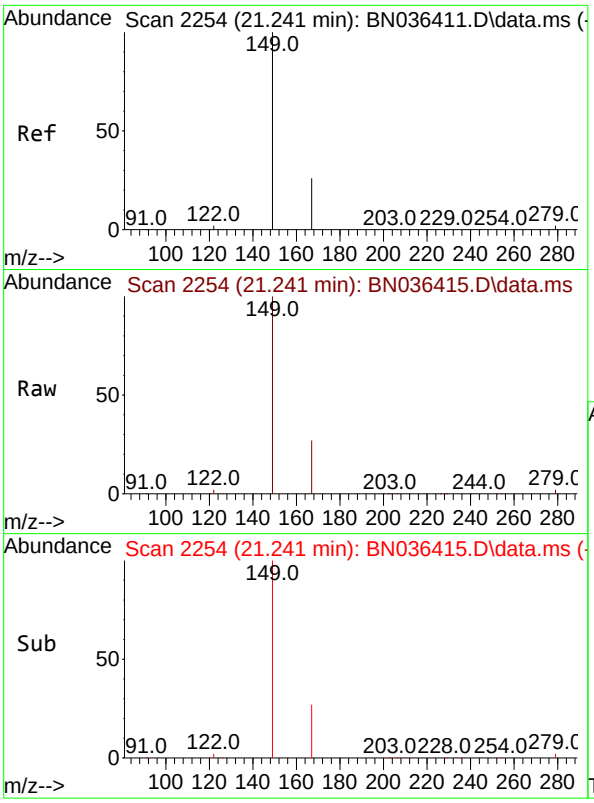


#33
Chrysene
Concen: 4.687 ng
RT: 21.358 min Scan# 2267
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:228 Resp: 170028

Ion	Ratio	Lower	Upper
228	100		
226	30.0	25.5	38.3
229	19.3	16.4	24.6



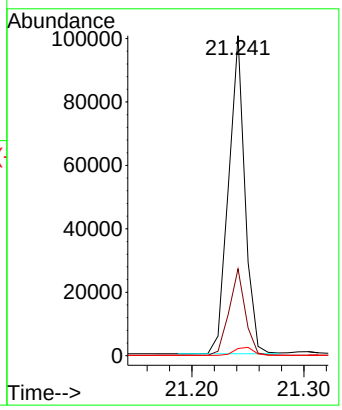


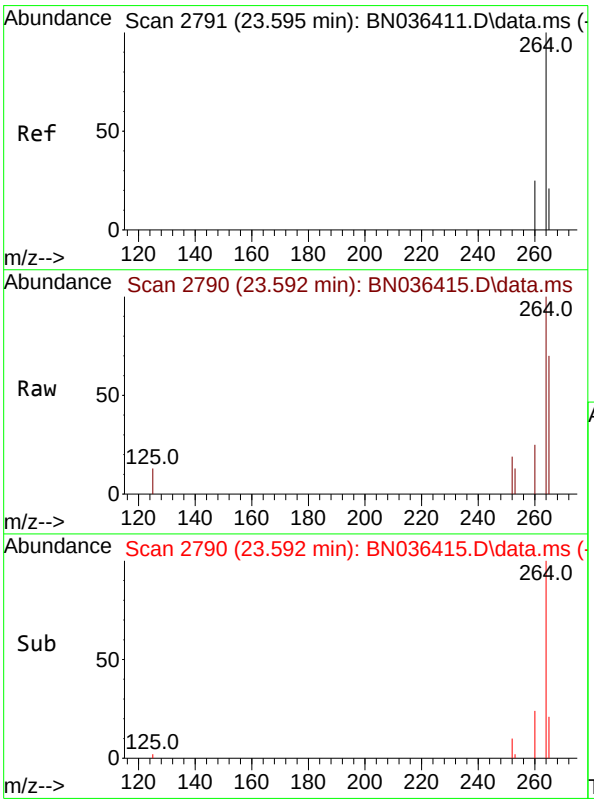
#34
Bis(2-ethylhexyl)phthalate
Concen: 5.168 ng
RT: 21.241 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:149 Resp: 101929

Ion	Ratio	Lower	Upper
149	100		
167	26.9	21.2	31.8
279	2.9	2.7	4.1

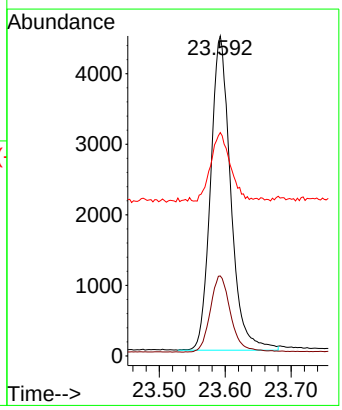


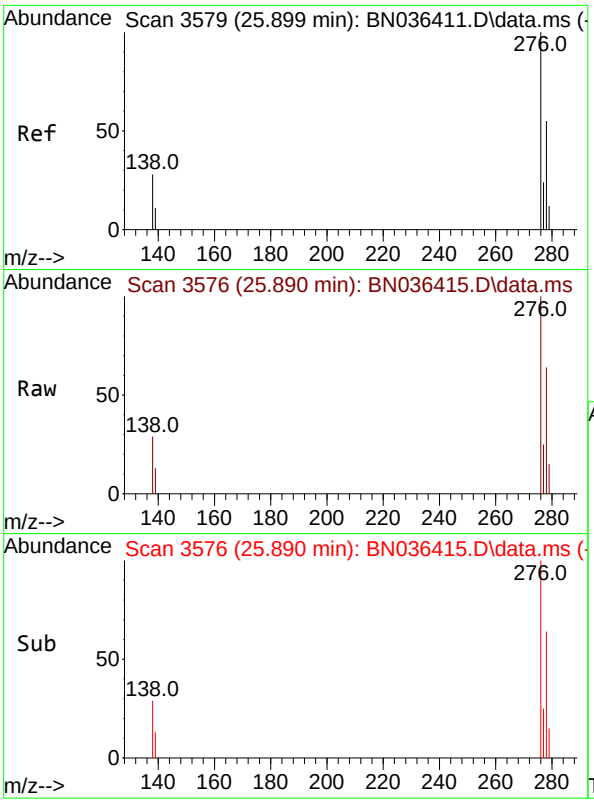


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.592 min Scan# 2790
Delta R.T. -0.003 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:264 Resp: 9411

Ion	Ratio	Lower	Upper
264	100		
260	25.0	20.9	31.3
265	69.8	60.7	91.1



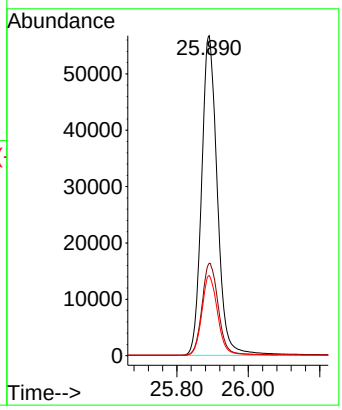


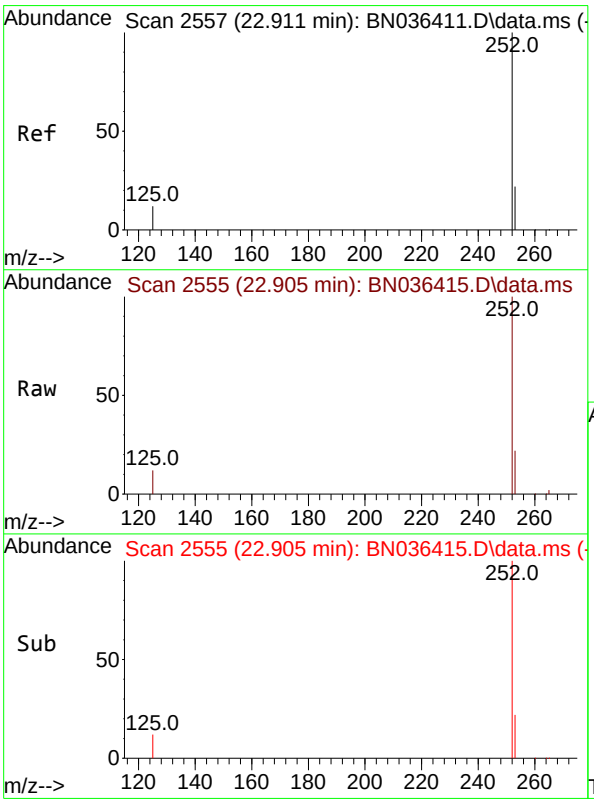
#36
Indeno(1,2,3-cd)pyrene
Concen: 4.679 ng
RT: 25.890 min Scan# 3
Delta R.T. -0.009 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:276 Resp: 172989

Ion	Ratio	Lower	Upper
276	100		
138	30.0	22.2	33.2
277	25.2	19.8	29.6

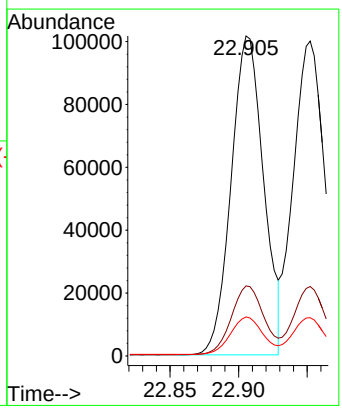


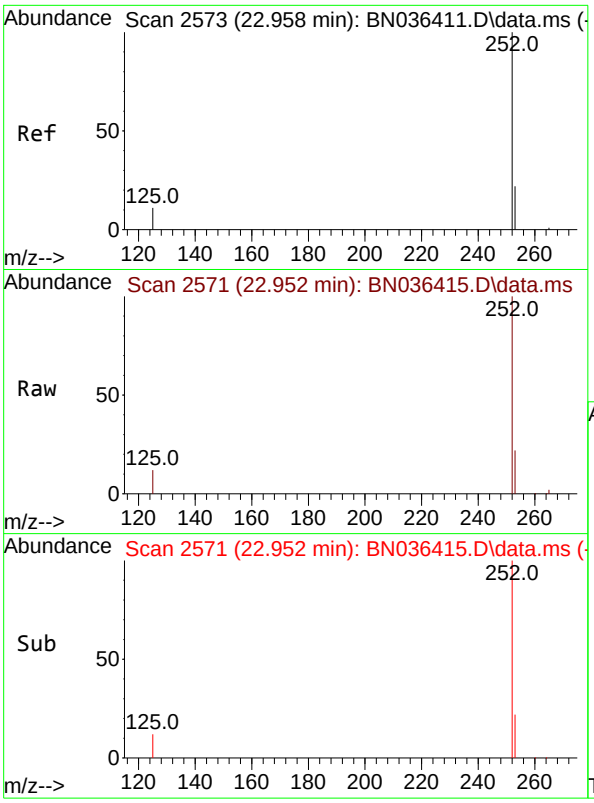


#37
Benzo(b)fluoranthene
Concen: 4.986 ng
RT: 22.905 min Scan# 2555
Delta R.T. -0.006 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:252 Resp: 166596

Ion	Ratio	Lower	Upper
252	100		
253	21.9	21.9	32.9#
125	12.2	15.0	22.6#



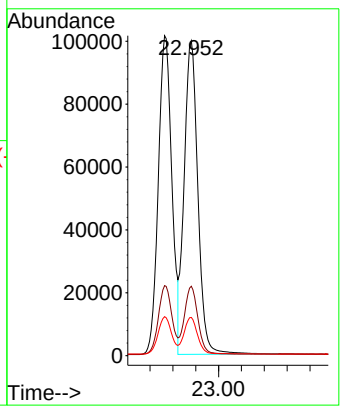


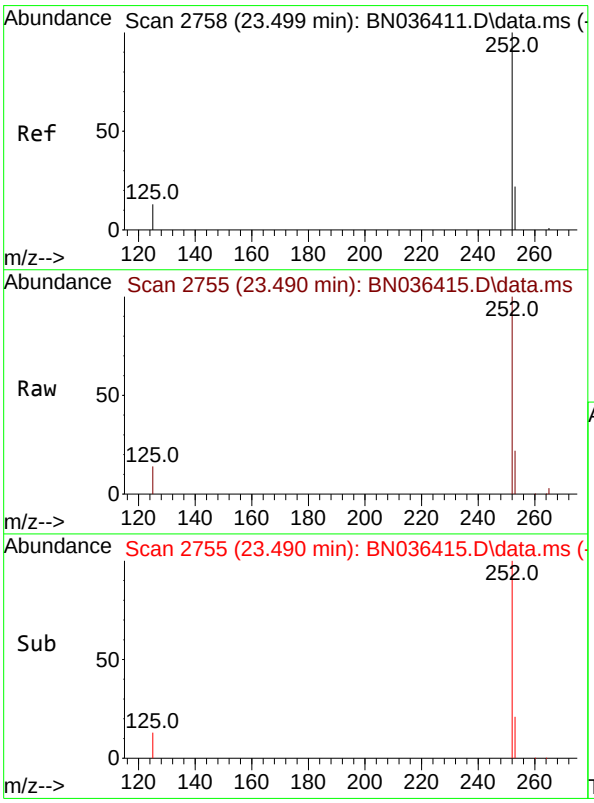
#38
Benzo(k)fluoranthene
Concen: 4.879 ng
RT: 22.952 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 166186

Ion	Ratio	Lower	Upper
252	100		
253	22.0	22.2	33.4#
125	12.1	15.0	22.4#

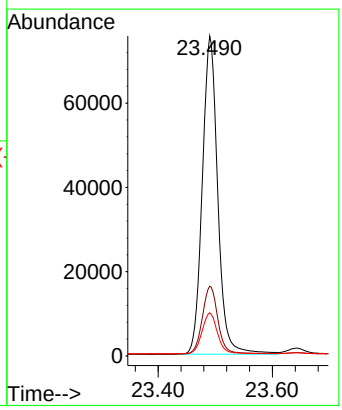


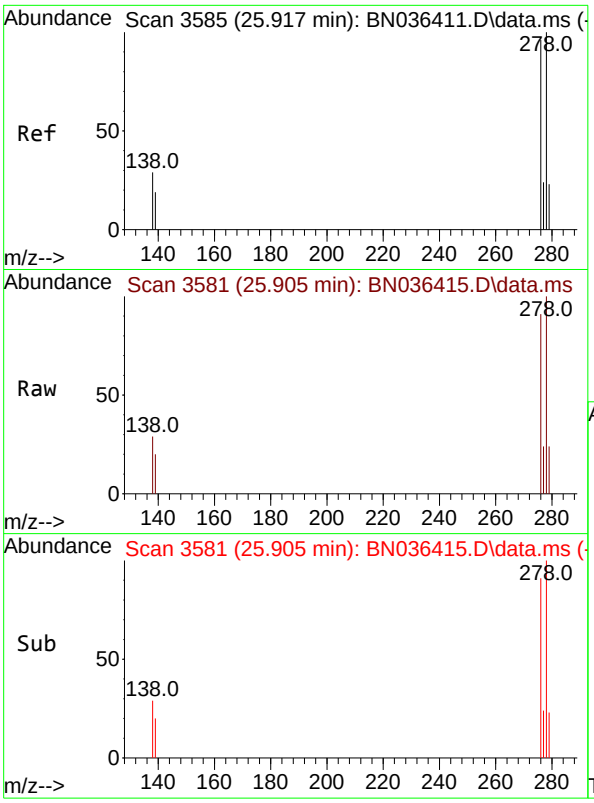


#39
Benzo(a)pyrene
Concen: 4.947 ng
RT: 23.490 min Scan# 2755
Delta R.T. -0.009 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:252 Resp: 141837

Ion	Ratio	Lower	Upper
252	100		
253	21.8	24.4	36.6#
125	13.5	18.2	27.2#



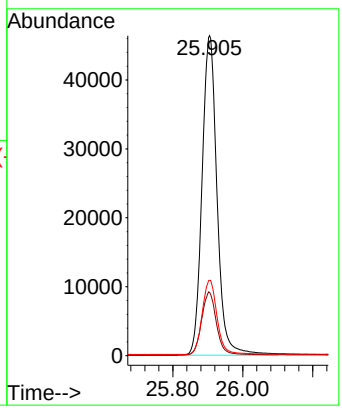


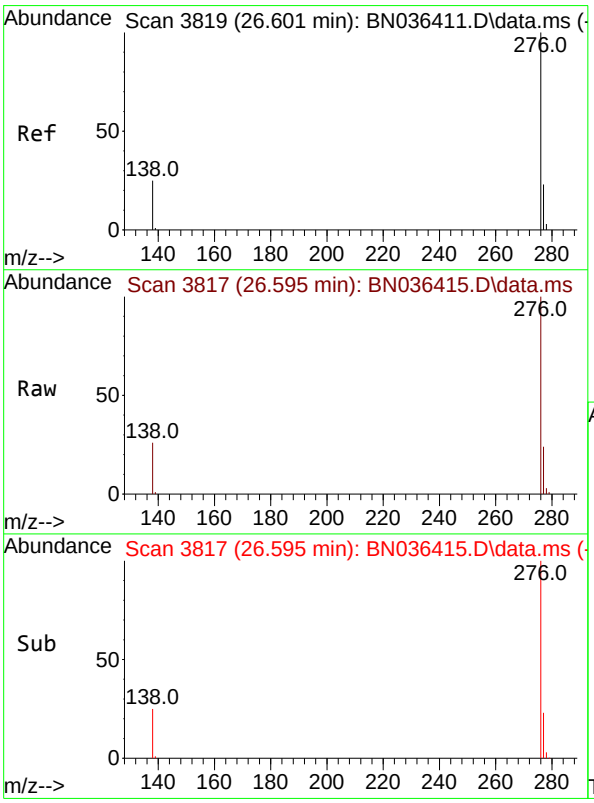
#40
Dibenzo(a,h)anthracene
Concen: 4.709 ng
RT: 25.905 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:278 Resp: 138330

Ion	Ratio	Lower	Upper
278	100		
139	19.8	18.5	27.7
279	23.5	24.8	37.2#

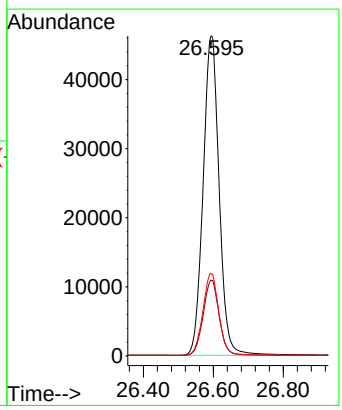




#41
Benzo(g,h,i)perylene
Concen: 4.557 ng
RT: 26.595 min Scan# 3817
Delta R.T. -0.006 min
Lab File: BN036415.D
Acq: 10 Feb 2025 16:00

Tgt Ion:276 Resp: 146932

Ion	Ratio	Lower	Upper
276	100		
277	23.6	20.7	31.1
138	25.5	21.8	32.6



Quantitation Report (QT Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036416.D
Acq On : 10 Feb 2025 16:36
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Quant Time: Feb 11 01:25:46 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

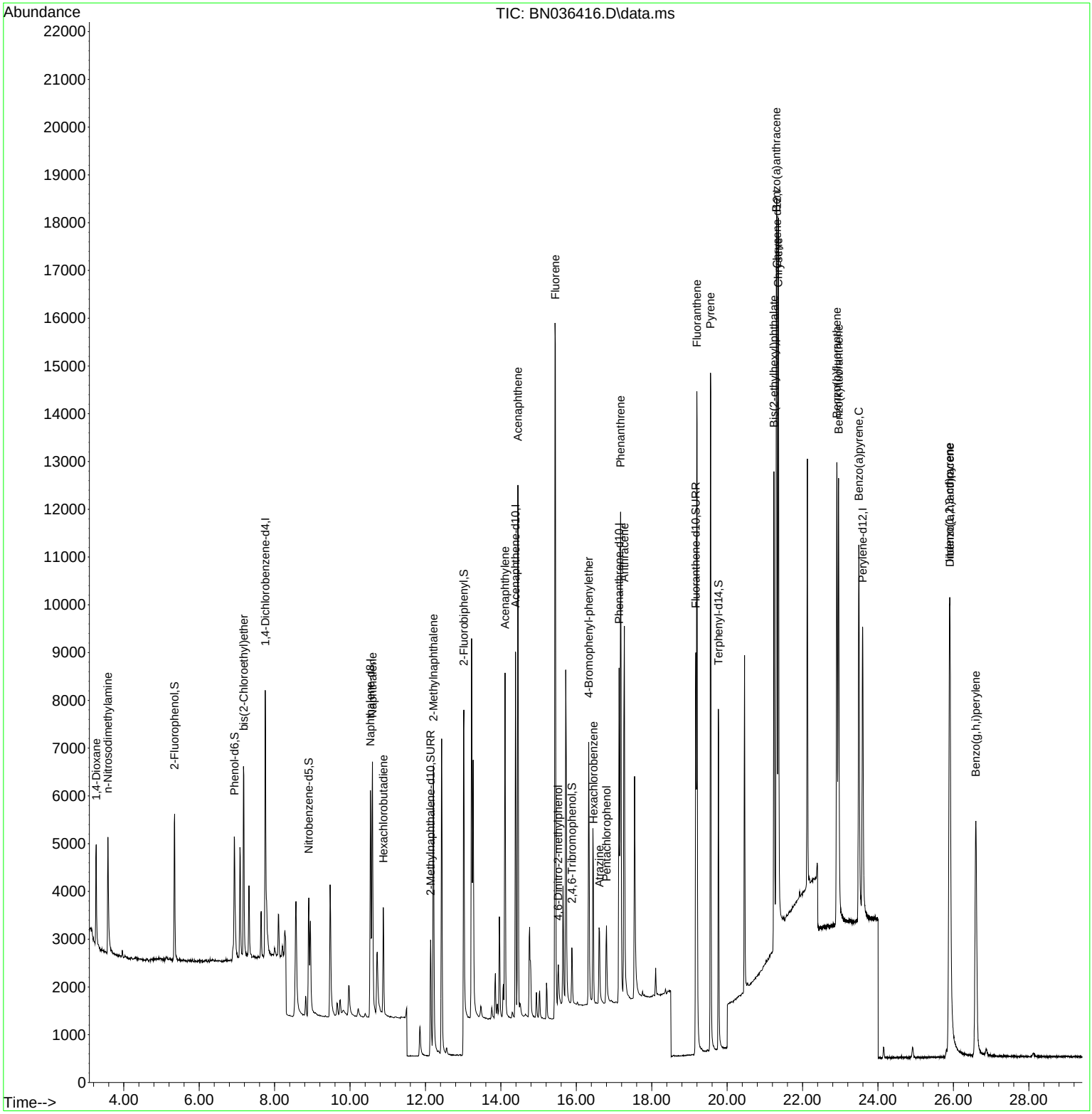
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.753	152	2722	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	6737	0.400	ng		0.00
13) Acenaphthene-d10	14.388	164	4328	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	9717	0.400	ng		0.00
29) Chrysene-d12	21.322	240	8903	0.400	ng		0.00
35) Perylene-d12	23.592	264	8977	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.348	112	2386	0.371	ng		0.00
5) Phenol-d6	6.937	99	2616	0.347	ng		0.00
8) Nitrobenzene-d5	8.907	82	2386	0.359	ng		0.00
11) 2-Methylnaphthalene-d10	12.136	152	4026	0.389	ng		0.00
14) 2,4,6-Tribromophenol	15.882	330	713	0.332	ng		0.00
15) 2-Fluorobiphenyl	13.019	172	6616	0.407	ng		0.00
27) Fluoranthene-d10	19.169	212	10243	0.379	ng		0.00
31) Terphenyl-d14	19.768	244	7744	0.407	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.268	88	1221	0.410	ng		98
3) n-Nitrosodimethylamine	3.579	42	1993	0.385	ng		96
6) bis(2-Chloroethyl)ether	7.183	93	3230	0.409	ng		96
9) Naphthalene	10.594	128	7554	0.389	ng		99
10) Hexachlorobutadiene	10.882	225	1910	0.404	ng	#	99
12) 2-Methylnaphthalene	12.212	142	5146	0.404	ng		98
16) Acenaphthylene	14.110	152	8061	0.422	ng		100
17) Acenaphthene	14.452	154	5199	0.407	ng		99
18) Fluorene	15.446	166	7222	0.397	ng		98
20) 4,6-Dinitro-2-methylph...	15.522	198	664	0.348	ng		92
21) 4-Bromophenyl-phenylether	16.329	248	2290	0.395	ng		96
22) Hexachlorobenzene	16.453	284	2904	0.406	ng		97
23) Atrazine	16.615	200	1916	0.396	ng		98
24) Pentachlorophenol	16.801	266	1075	0.316	ng		99
25) Phenanthrene	17.173	178	11446	0.408	ng		100
26) Anthracene	17.273	178	10171	0.411	ng		99
28) Fluoranthene	19.197	202	13415	0.389	ng		100
30) Pyrene	19.559	202	13881	0.405	ng		100
32) Benzo(a)anthracene	21.304	228	11819	0.403	ng		99
33) Chrysene	21.357	228	13425	0.423	ng		98
34) Bis(2-ethylhexyl)phtha...	21.241	149	6985	0.383	ng		98
36) Indeno(1,2,3-cd)pyrene	25.896	276	13738	0.438	ng		100
37) Benzo(b)fluoranthene	22.908	252	12283	0.415	ng		97
38) Benzo(k)fluoranthene	22.955	252	13099	0.430	ng		97
39) Benzo(a)pyrene	23.493	252	11703	0.454	ng		95
40) Dibenzo(a,h)anthracene	25.908	278	10585	0.427	ng		96
41) Benzo(g,h,i)perylene	26.595	276	10921	0.389	ng		98

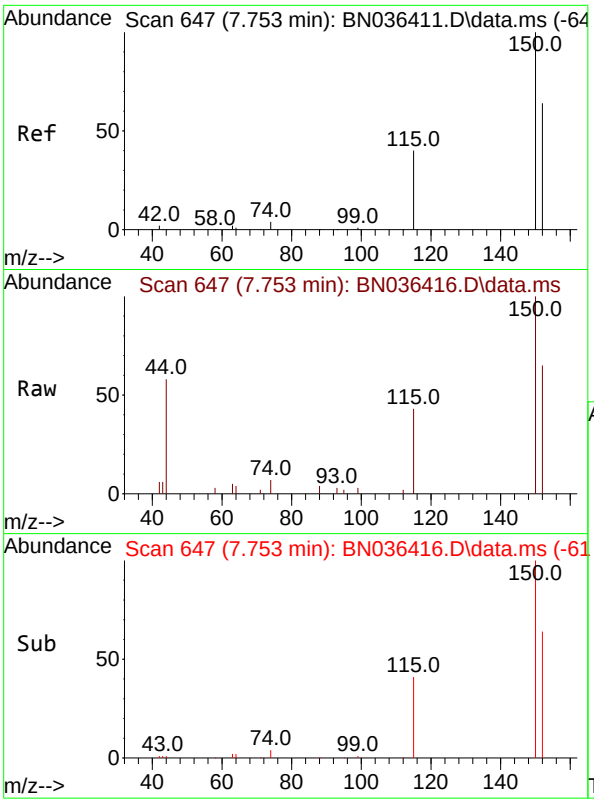
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036416.D
Acq On : 10 Feb 2025 16:36
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Quant Time: Feb 11 01:25:46 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



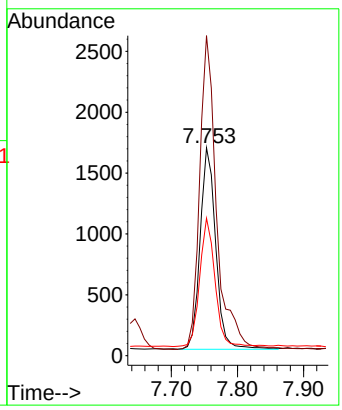


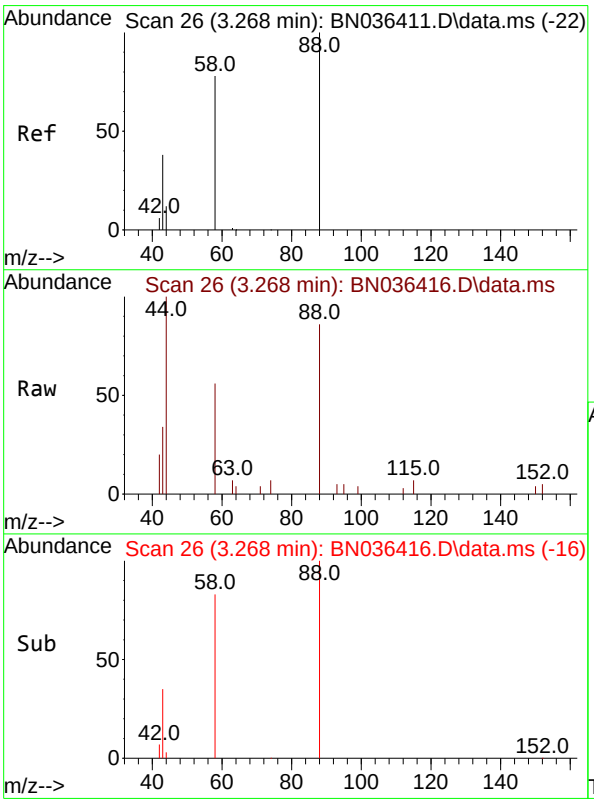
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.753 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:152 Resp: 2722

Ion	Ratio	Lower	Upper
152	100		
150	154.0	123.7	185.5
115	66.1	52.5	78.7

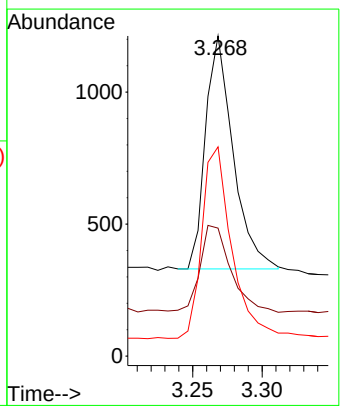


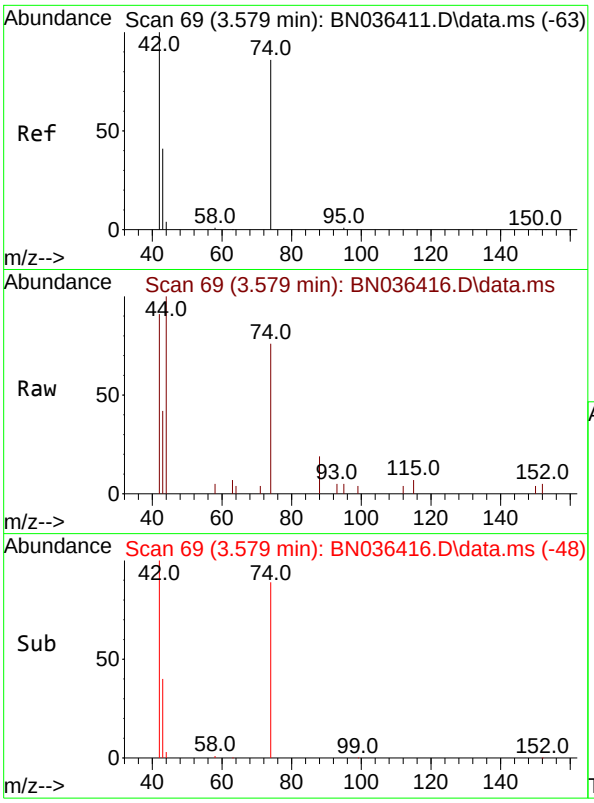


#2
1,4-Dioxane
Concen: 0.410 ng
RT: 3.268 min Scan# 26
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion: 88 Resp: 1221

Ion	Ratio	Lower	Upper
88	100		
43	41.8	33.7	50.5
58	89.2	68.9	103.3



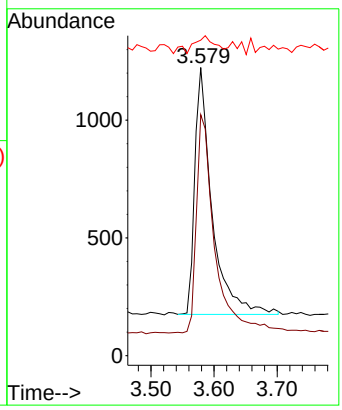


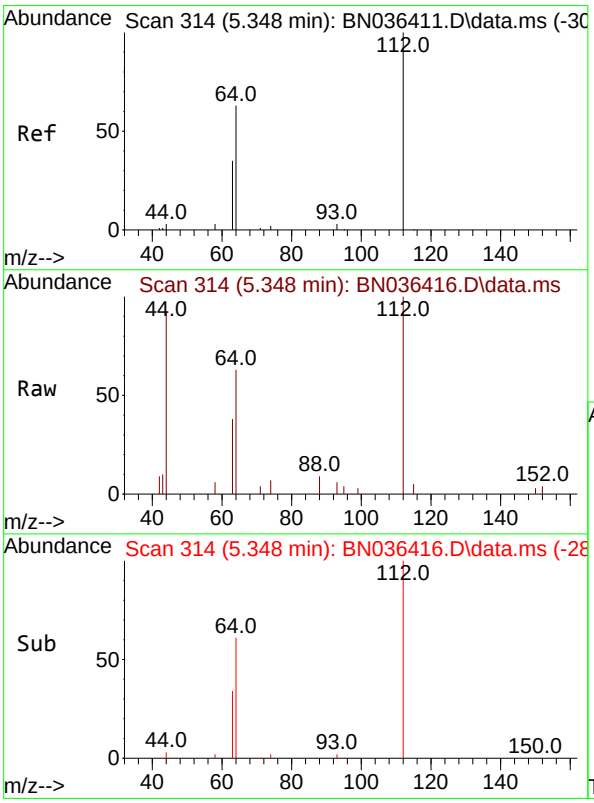
#3
n-Nitrosodimethylamine
Concen: 0.385 ng
RT: 3.579 min Scan# 6
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion: 42 Resp: 1993

Ion	Ratio	Lower	Upper
42	100		
74	93.5	71.8	107.6
44	7.9	7.8	11.6

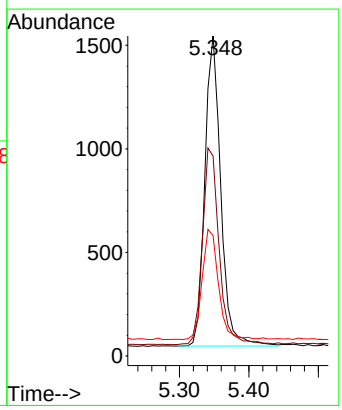


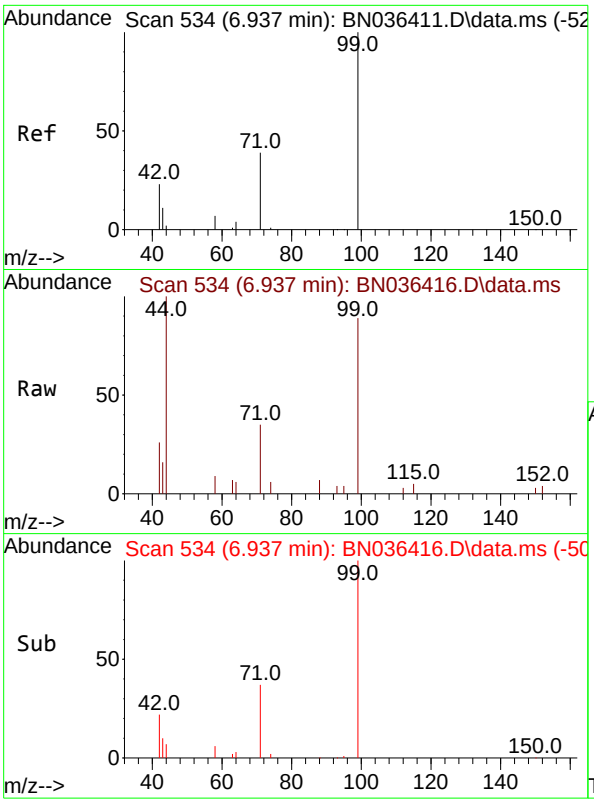


#4
2-Fluorophenol
Concen: 0.371 ng
RT: 5.348 min Scan# 314
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:112 Resp: 2386

Ion	Ratio	Lower	Upper
112	100		
64	66.4	53.4	80.0
63	36.3	30.3	45.5



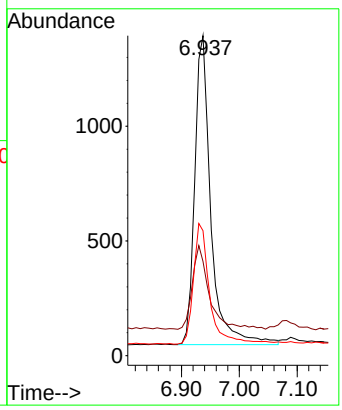


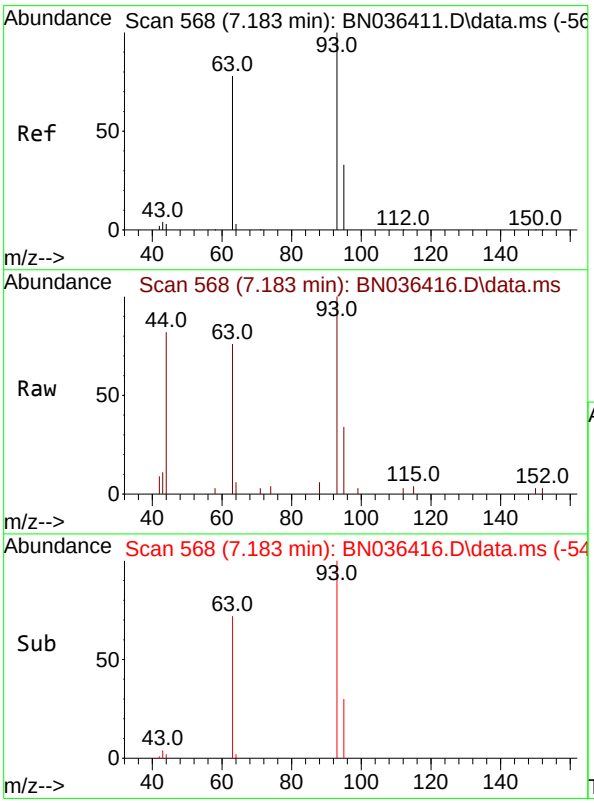
#5
Phenol-d6
Concen: 0.347 ng
RT: 6.937 min Scan# 5
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion: 99 Resp: 2616

Ion	Ratio	Lower	Upper
99	100		
42	28.4	21.7	32.5
71	39.6	32.6	49.0

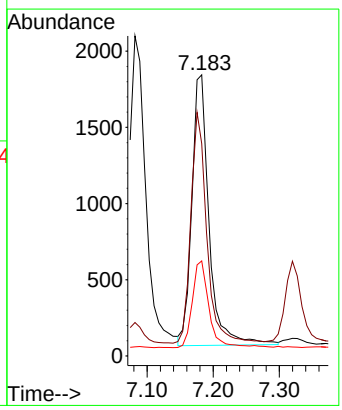


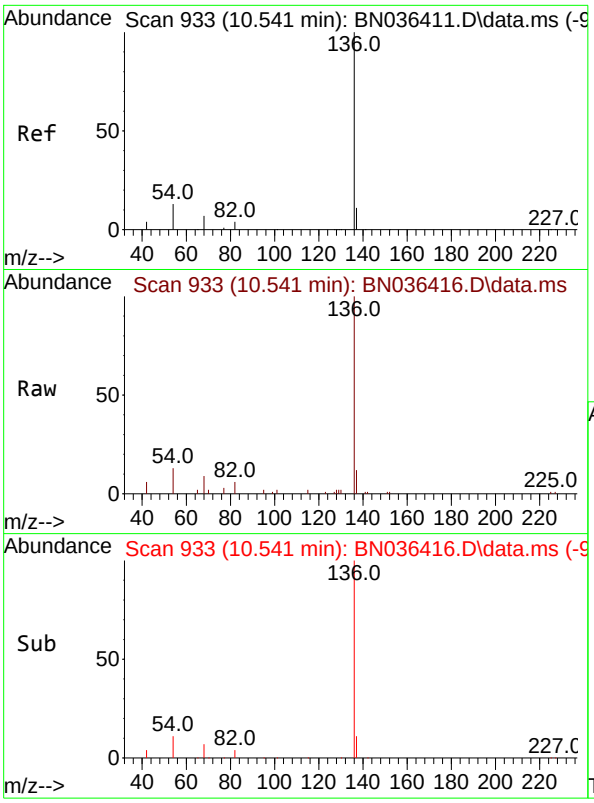


#6
bis(2-Chloroethyl)ether
Concen: 0.409 ng
RT: 7.183 min Scan# 568
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion: 93 Resp: 3230

Ion	Ratio	Lower	Upper
93	100		
63	78.7	66.3	99.5
95	31.0	26.2	39.4



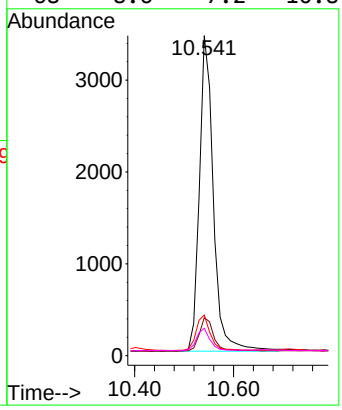


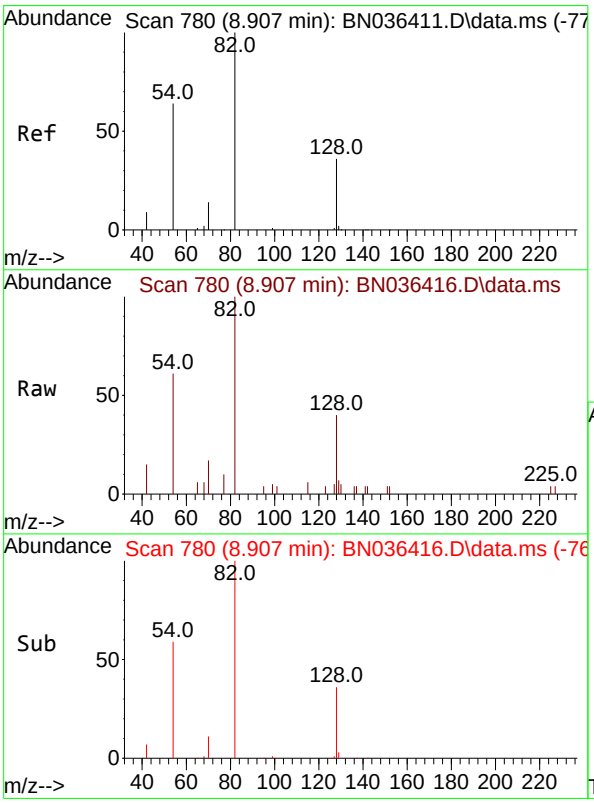
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:136 Resp: 6737

Ion	Ratio	Lower	Upper
136	100		
137	11.9	10.1	15.1
54	12.7	11.8	17.6
68	8.6	7.2	10.8

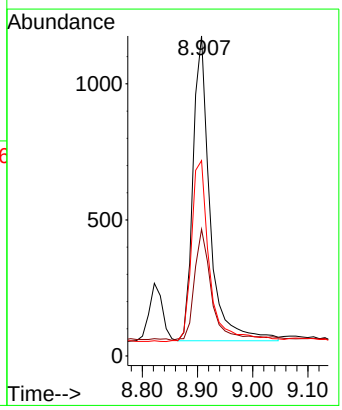


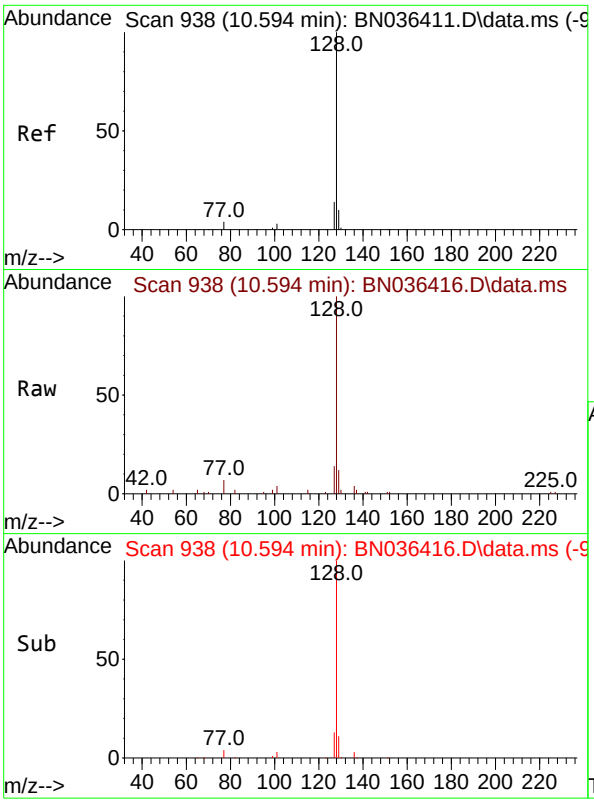


#8
Nitrobenzene-d5
Concen: 0.359 ng
RT: 8.907 min Scan# 780
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion: 82 Resp: 2386

Ion	Ratio	Lower	Upper
82	100		
128	39.6	31.9	47.9
54	61.1	53.1	79.7



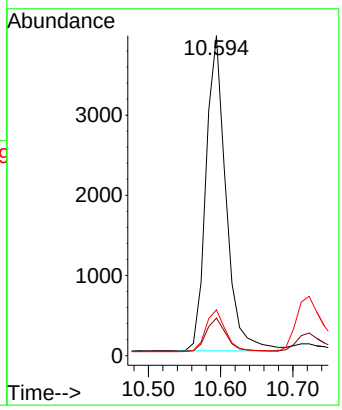


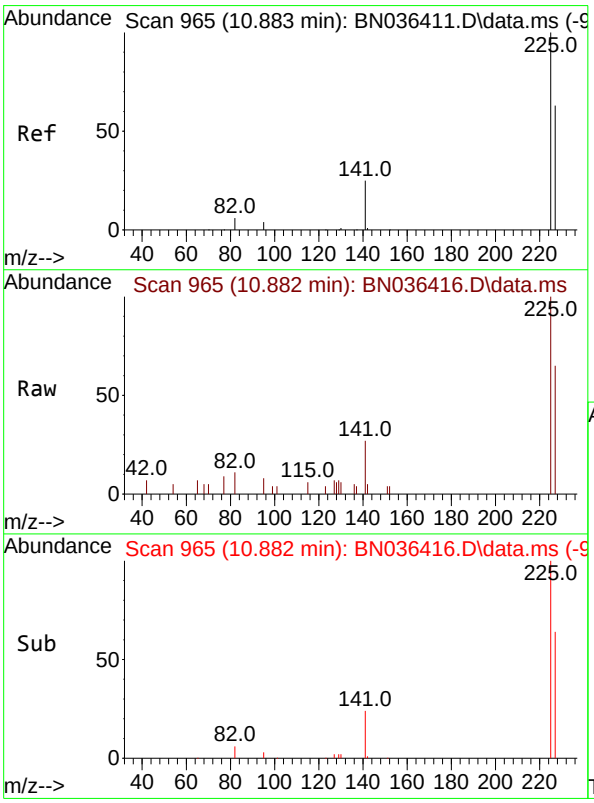
#9
Naphthalene
Concen: 0.389 ng
RT: 10.594 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:128 Resp: 7554

Ion	Ratio	Lower	Upper
128	100		
129	11.8	9.6	14.4
127	14.3	12.0	18.0

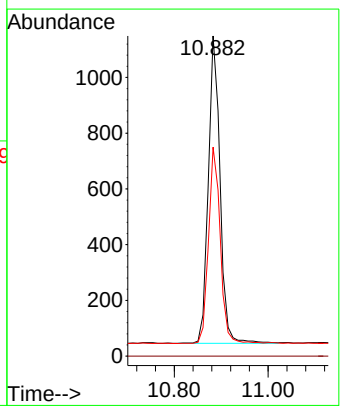


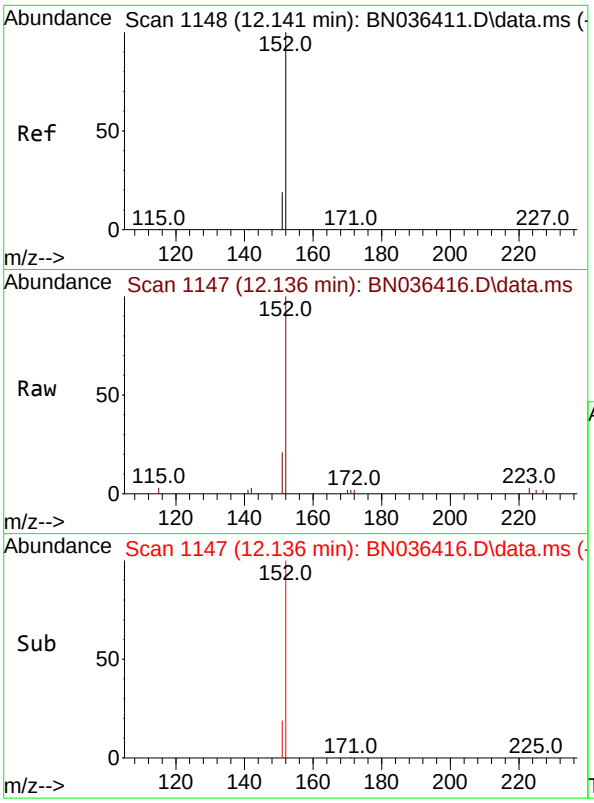


#10
Hexachlorobutadiene
Concen: 0.404 ng
RT: 10.882 min Scan# 965
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:225 Resp: 1910

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.6	50.9	76.3



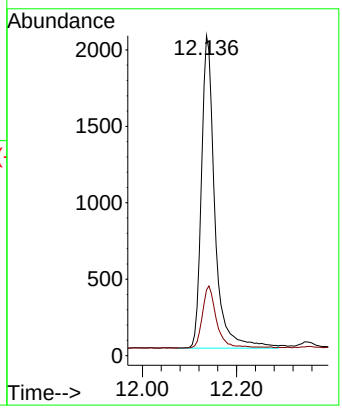


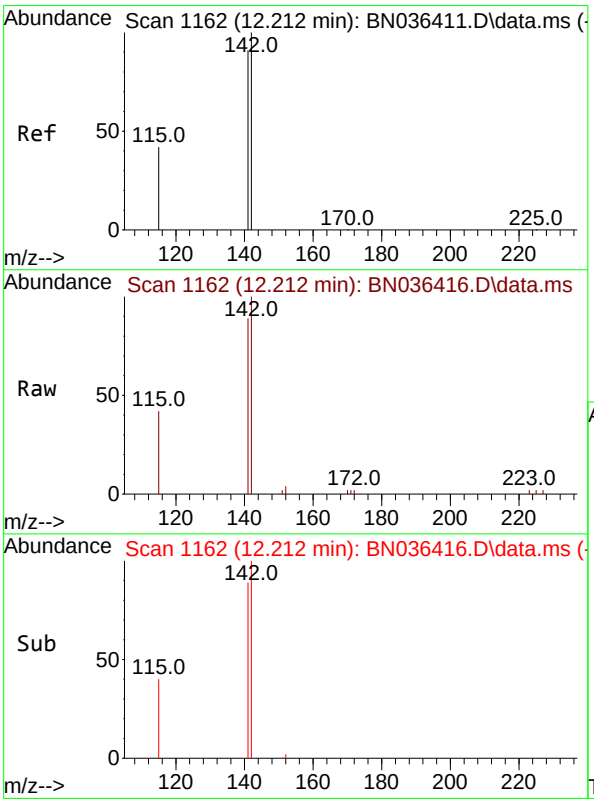
#11
2-Methylnaphthalene-d10
Concen: 0.389 ng
RT: 12.136 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:152 Resp: 4026

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.6	25.0

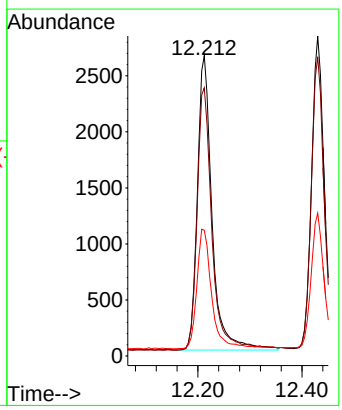


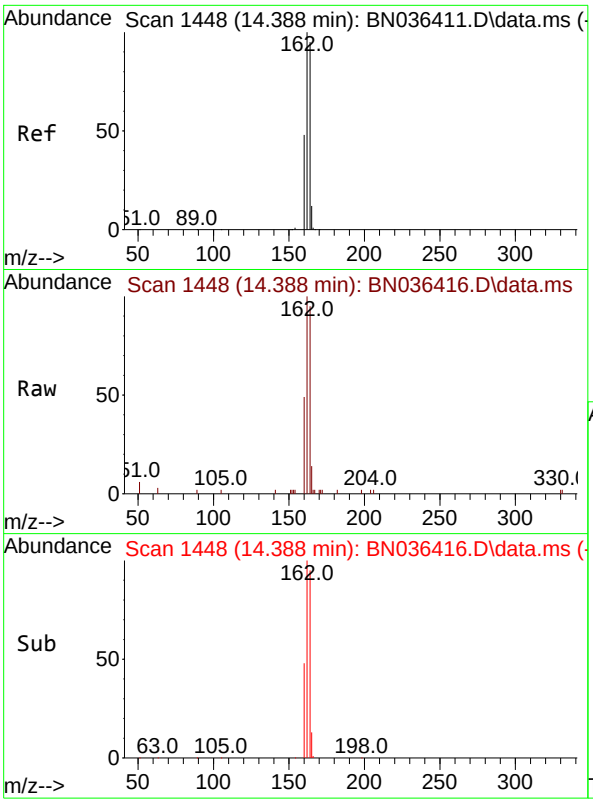


#12
2-Methylnaphthalene
Concen: 0.404 ng
RT: 12.212 min Scan# 1162
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:142 Resp: 5146

Ion	Ratio	Lower	Upper
142	100		
141	89.3	72.8	109.2
115	41.9	35.5	53.3



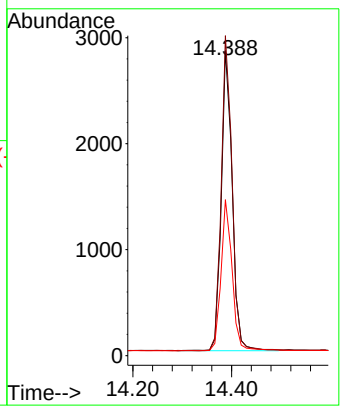


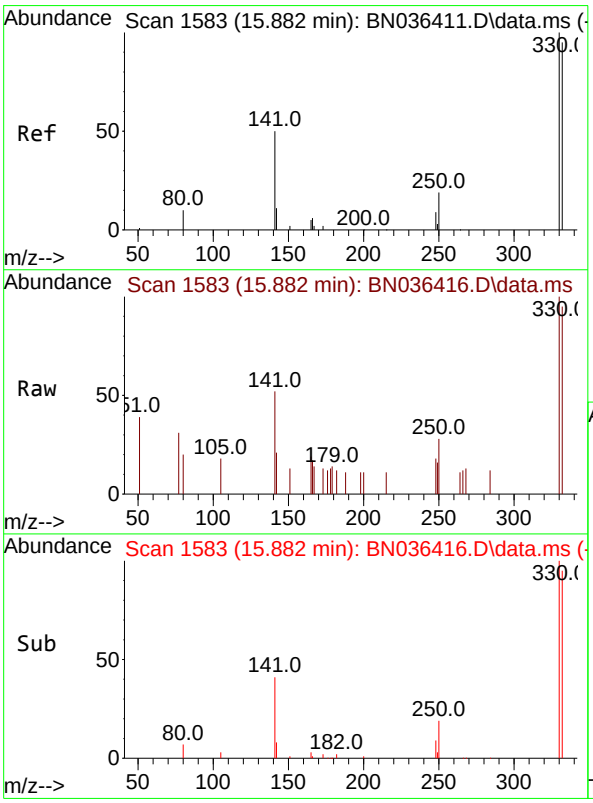
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:164 Resp: 4328

Ion	Ratio	Lower	Upper
164	100		
162	104.9	84.1	126.1
160	51.1	41.4	62.0

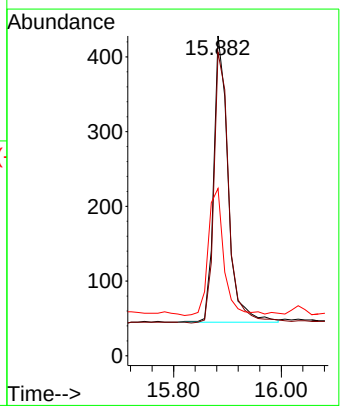


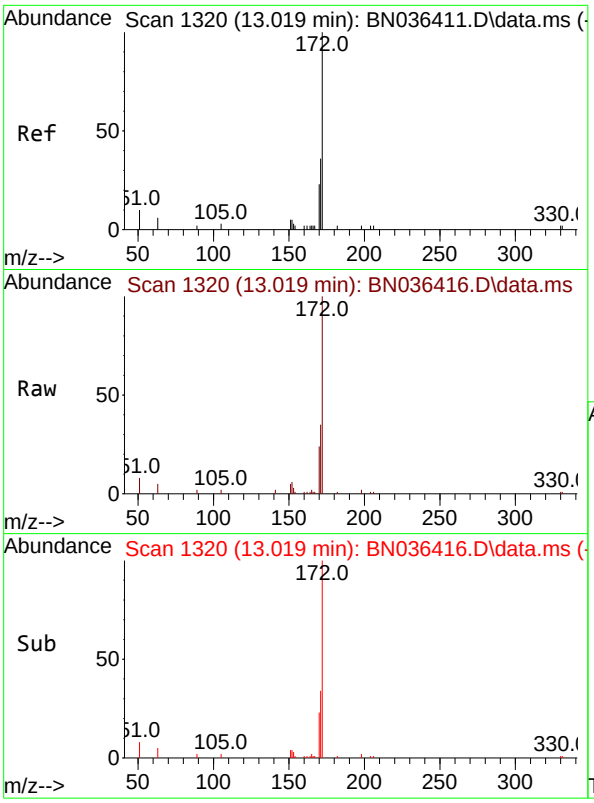


#14
2,4,6-Tribromophenol
Concen: 0.332 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:330 Resp: 713

Ion	Ratio	Lower	Upper
330	100		
332	97.6	76.6	114.8
141	48.9	37.8	56.8



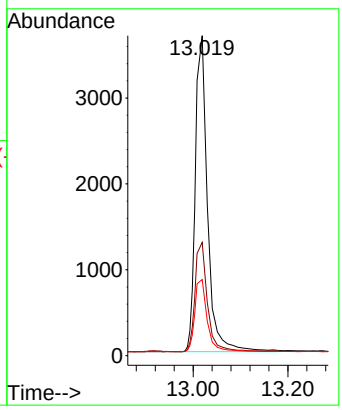


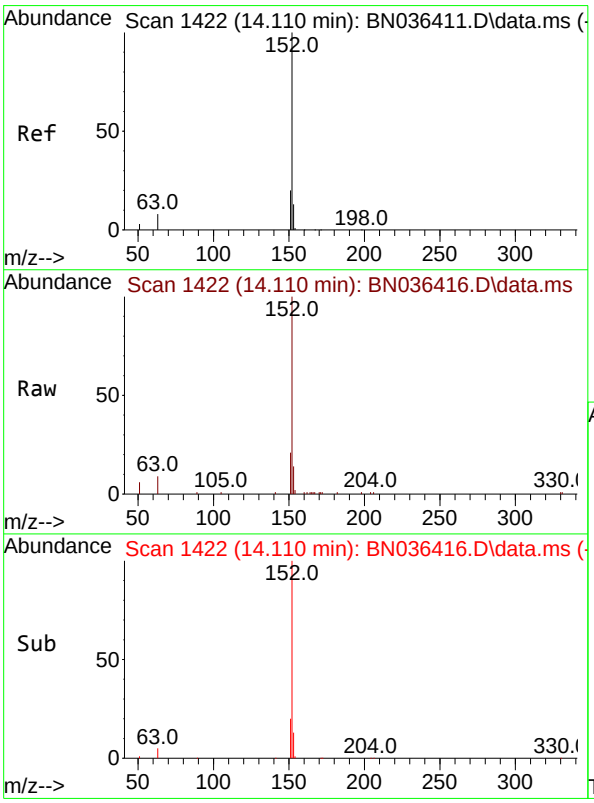
#15
2-Fluorobiphenyl
Concen: 0.407 ng
RT: 13.019 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:172 Resp: 6616

Ion	Ratio	Lower	Upper
172	100		
171	35.4	29.6	44.4
170	23.8	19.8	29.6

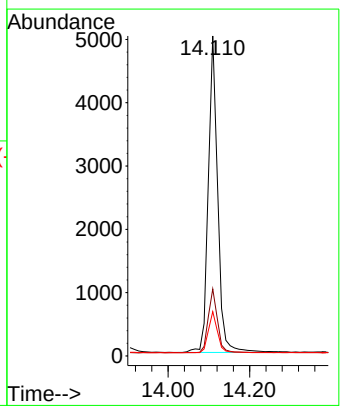


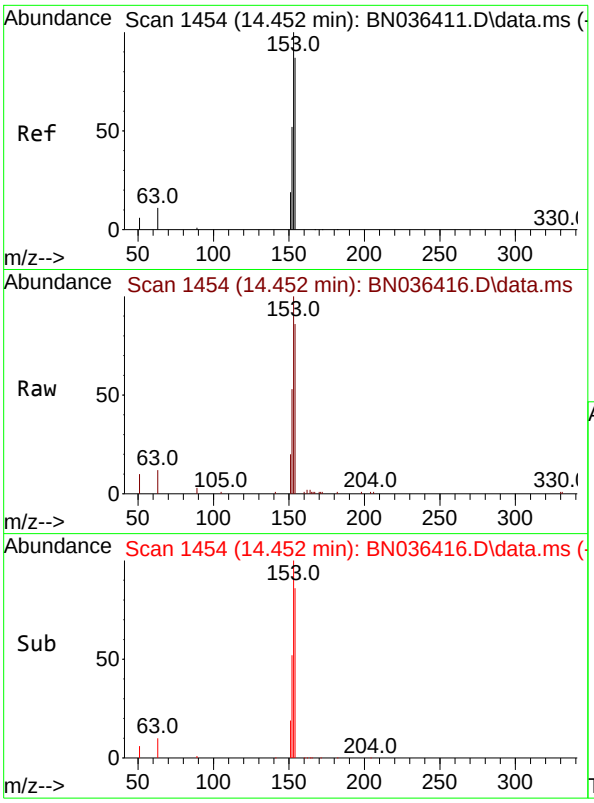


#16
Acenaphthylene
Concen: 0.422 ng
RT: 14.110 min Scan# 1422
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:152 Resp: 8061

Ion	Ratio	Lower	Upper
152	100		
151	19.8	15.8	23.8
153	12.9	10.2	15.2



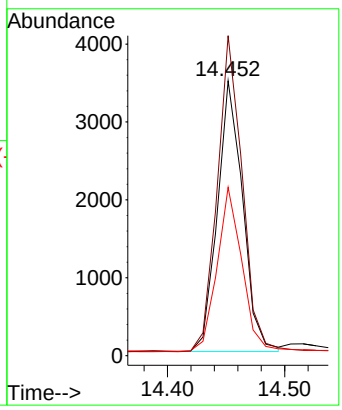


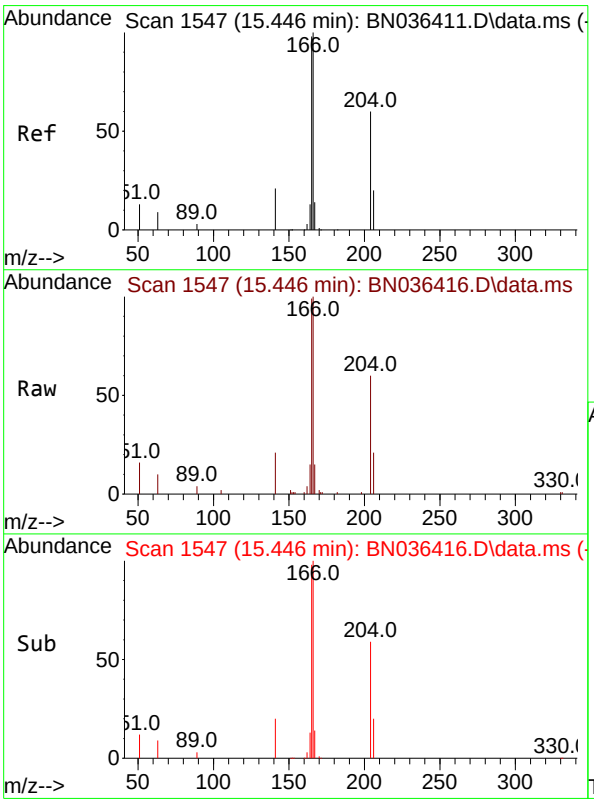
#17
Acenaphthene
Concen: 0.407 ng
RT: 14.452 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:154 Resp: 5199

Ion	Ratio	Lower	Upper
154	100		
153	117.1	93.3	139.9
152	60.5	48.8	73.2

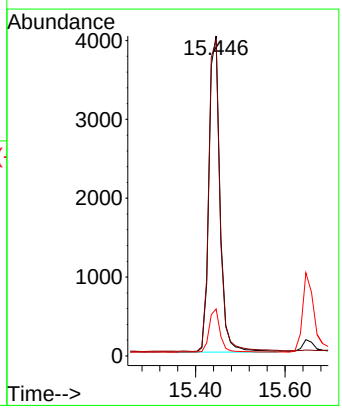


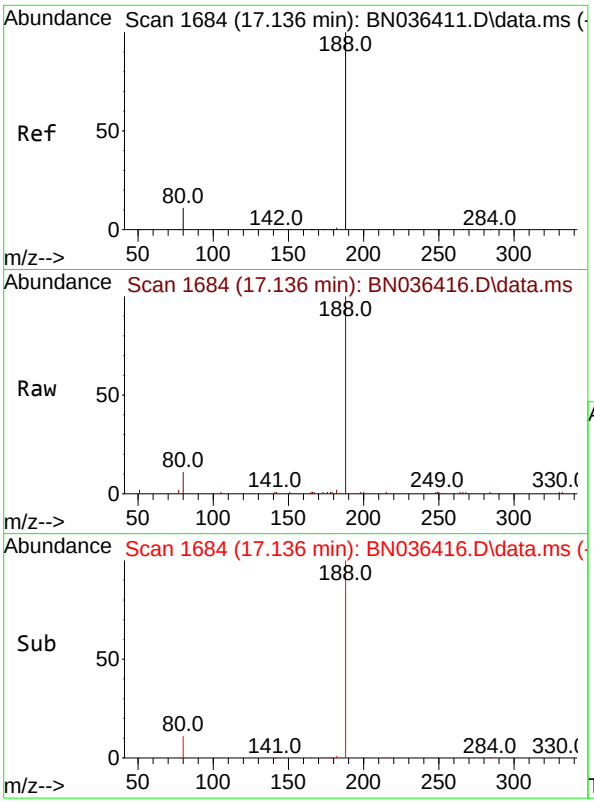


#18
Fluorene
Concen: 0.397 ng
RT: 15.446 min Scan# 1547
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:166 Resp: 7222

Ion	Ratio	Lower	Upper
166	100		
165	101.4	79.5	119.3
167	13.7	10.4	15.6



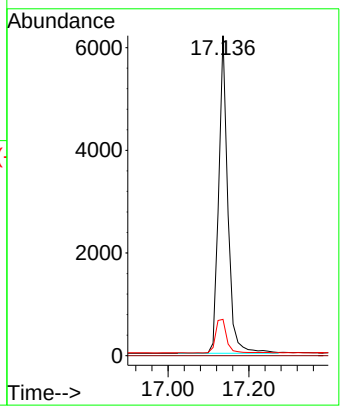


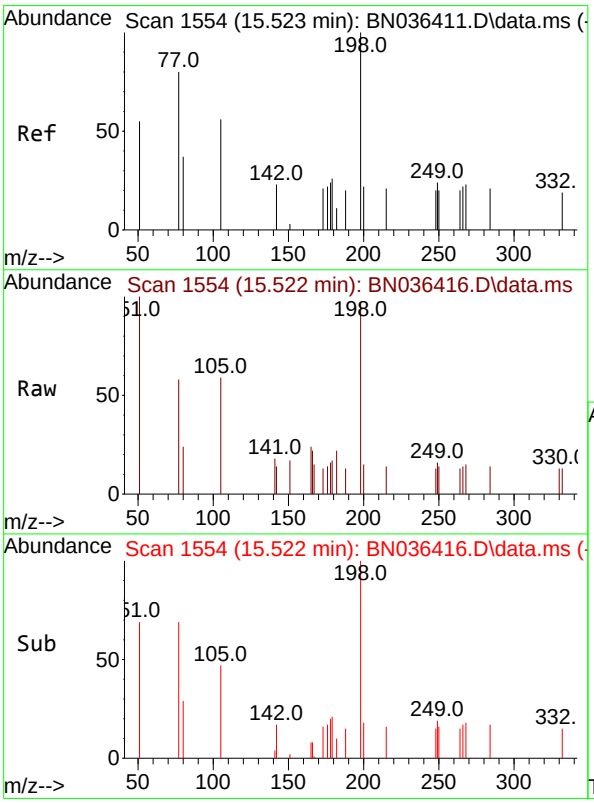
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:188 Resp: 9717

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	9.8	14.6

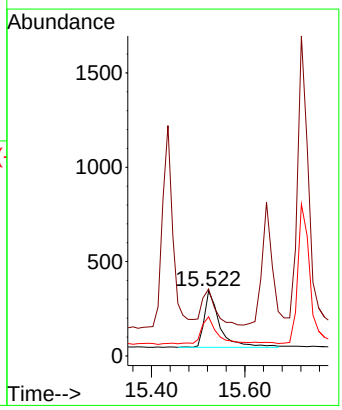


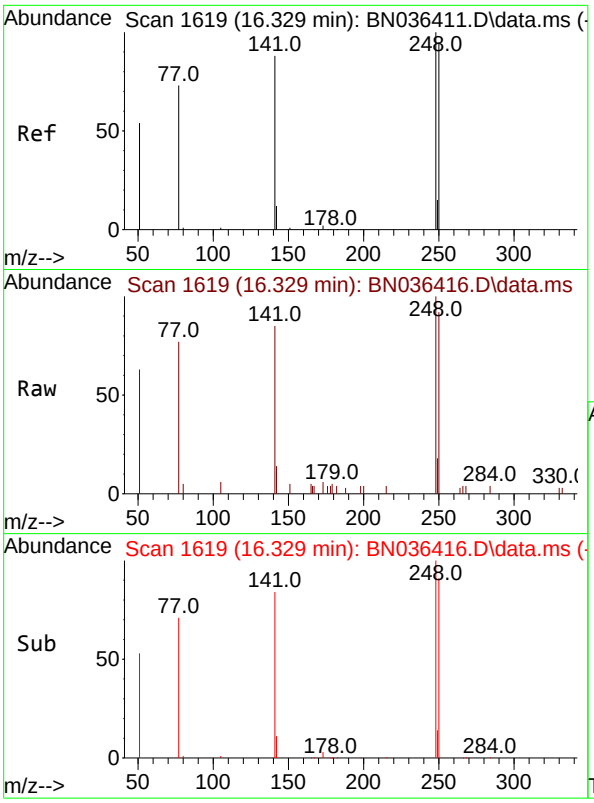


#20
4,6-Dinitro-2-methylphenol
Concen: 0.348 ng
RT: 15.522 min Scan# 1554
Delta R.T. -0.001 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:198 Resp: 664

Ion	Ratio	Lower	Upper
198	100		
51	103.2	86.6	129.8
105	60.5	57.5	86.3



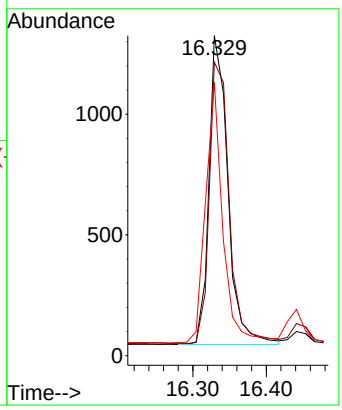


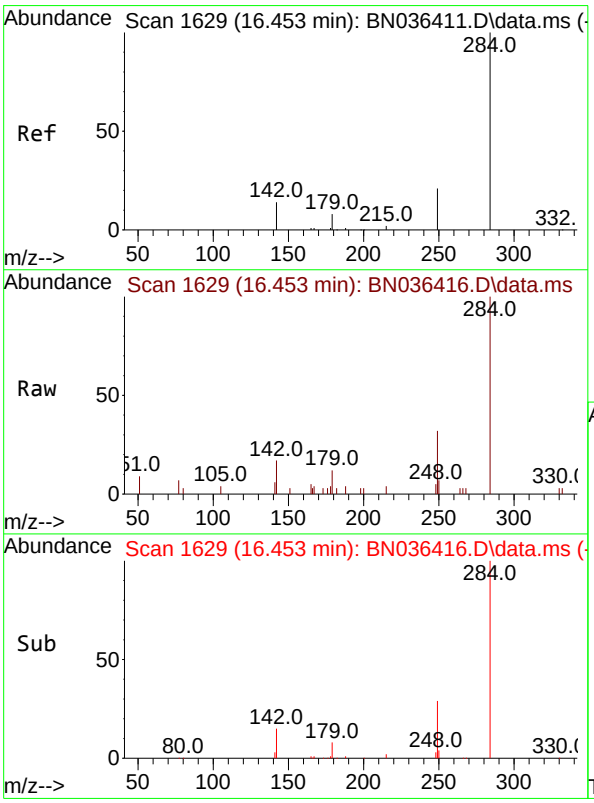
#21
4-Bromophenyl-phenylether
Concen: 0.395 ng
RT: 16.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:248 Resp: 2290

Ion	Ratio	Lower	Upper
248	100		
250	91.7	76.1	114.1
141	85.4	71.7	107.5

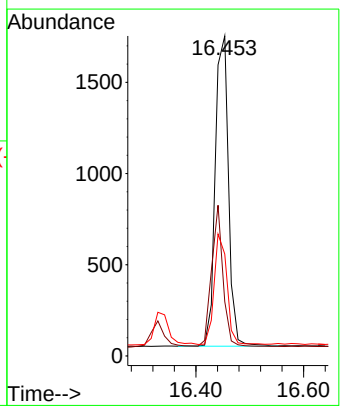


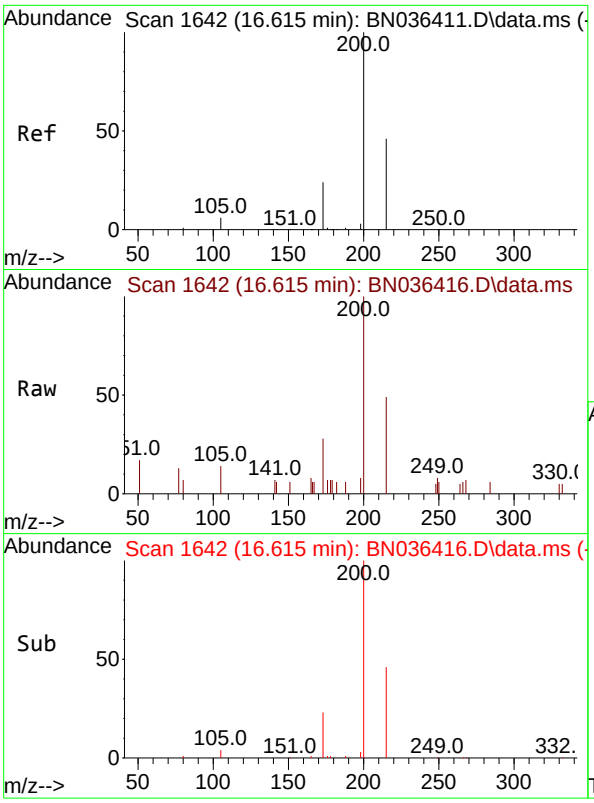


#22
Hexachlorobenzene
Concen: 0.406 ng
RT: 16.453 min Scan# 1629
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:284 Resp: 2904

Ion	Ratio	Lower	Upper
284	100		
142	39.4	33.4	50.0
249	34.2	28.6	43.0



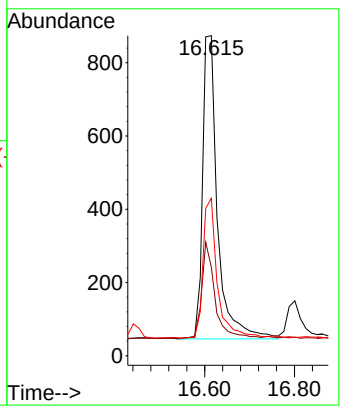


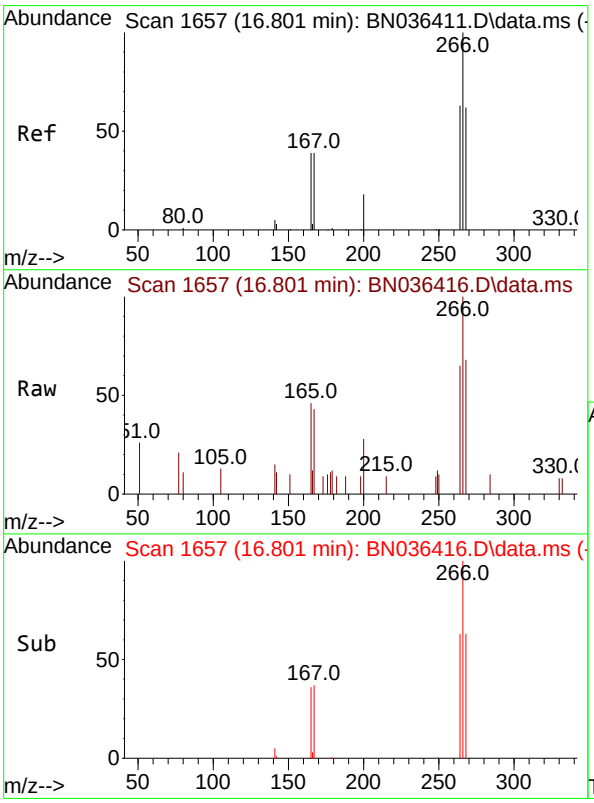
#23
Atrazine
Concen: 0.396 ng
RT: 16.615 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:200 Resp: 1916

Ion	Ratio	Lower	Upper
200	100		
173	27.7	23.2	34.8
215	49.2	40.0	60.0

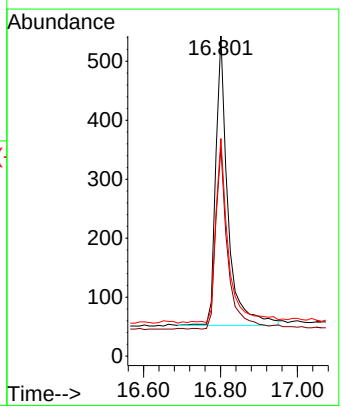


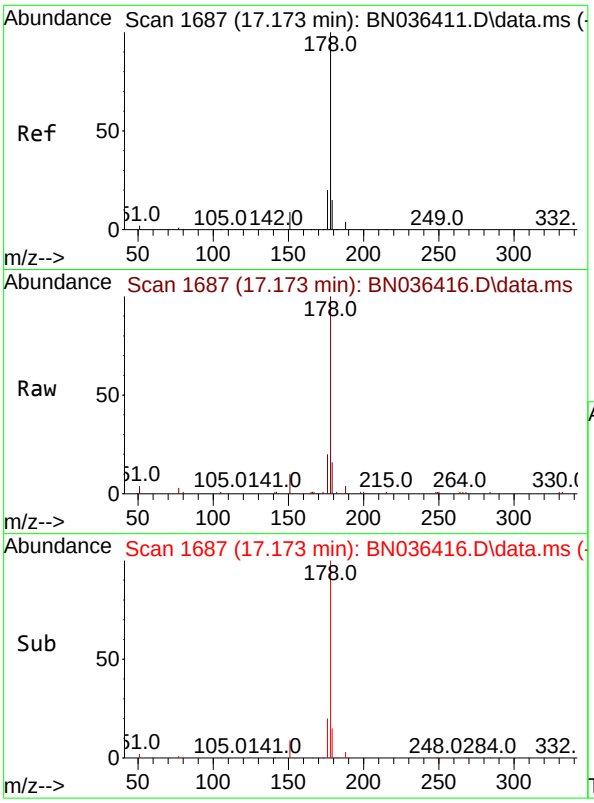


#24
Pentachlorophenol
Concen: 0.316 ng
RT: 16.801 min Scan# 1657
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:266 Resp: 1075

Ion	Ratio	Lower	Upper
266	100		
264	62.2	50.6	76.0
268	63.9	51.9	77.9



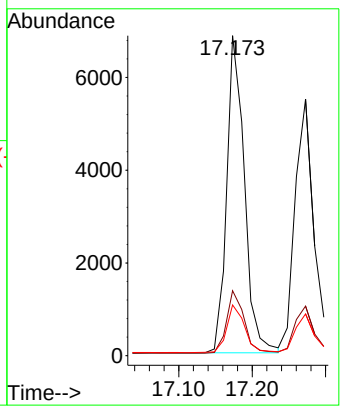


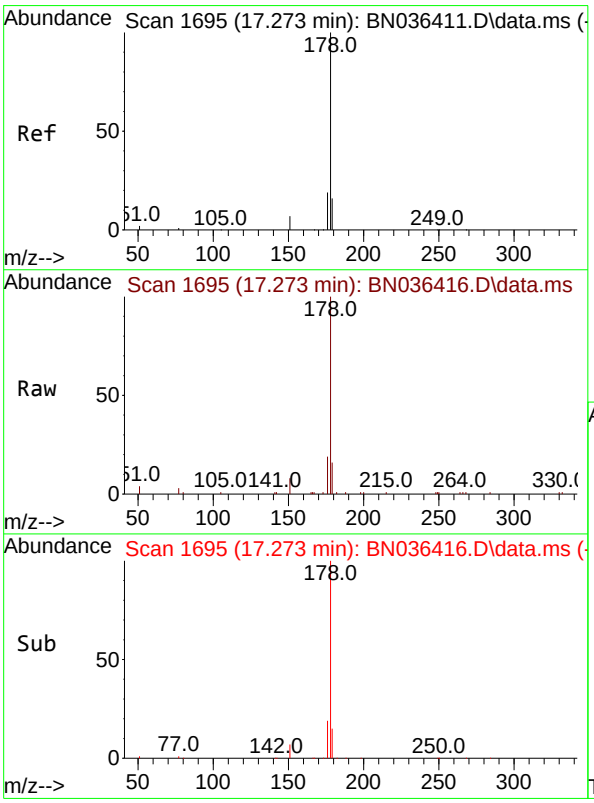
#25
Phenanthrene
Concen: 0.408 ng
RT: 17.173 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:178 Resp: 11446

Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.7	23.5
179	15.3	12.4	18.6

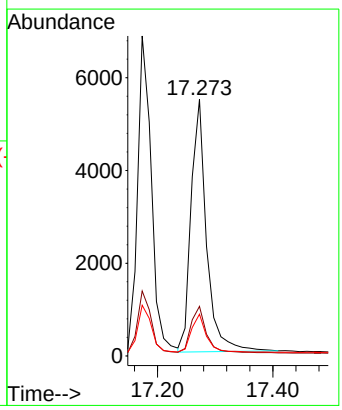


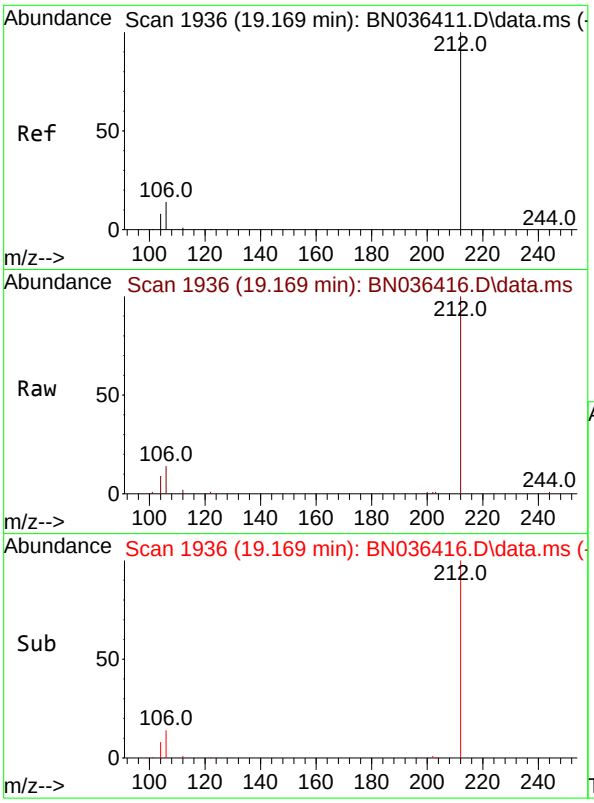


#26
Anthracene
Concen: 0.411 ng
RT: 17.273 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:178 Resp: 10171

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.2	12.4	18.6



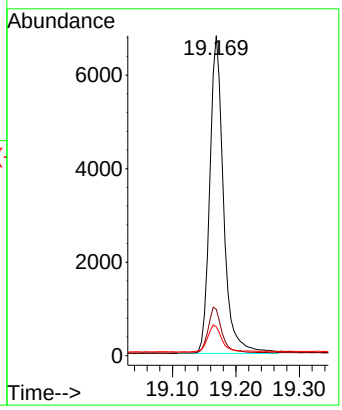


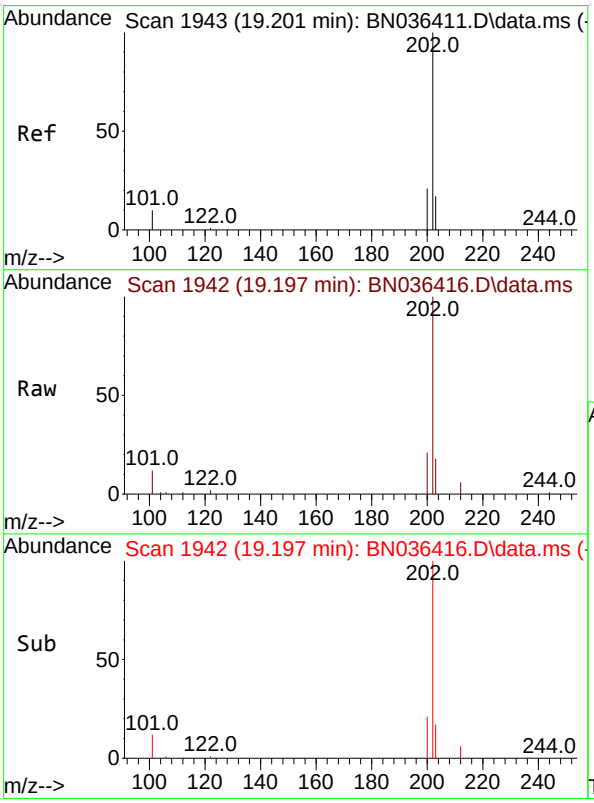
#27
Fluoranthene-d10
Concen: 0.379 ng
RT: 19.169 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:212 Resp: 10243

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.5	17.3
104	8.6	7.1	10.7

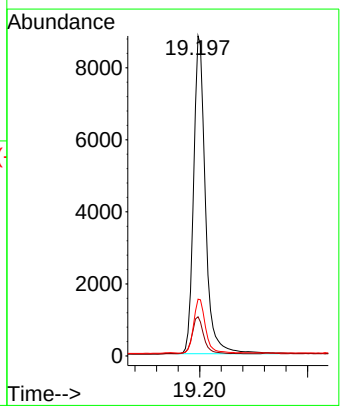


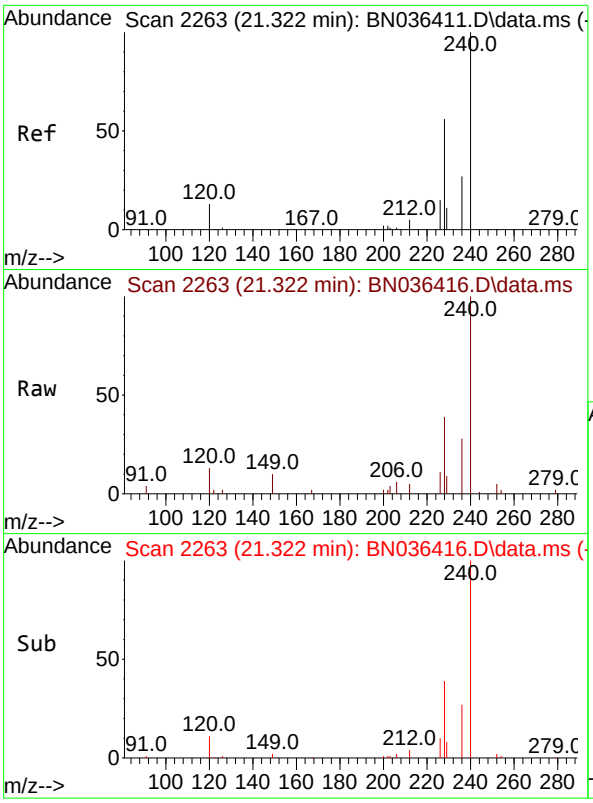


#28
Fluoranthene
Concen: 0.389 ng
RT: 19.197 min Scan# 1942
Delta R.T. -0.005 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:202 Resp: 13415

Ion	Ratio	Lower	Upper
202	100		
101	11.4	9.2	13.8
203	16.9	13.4	20.0



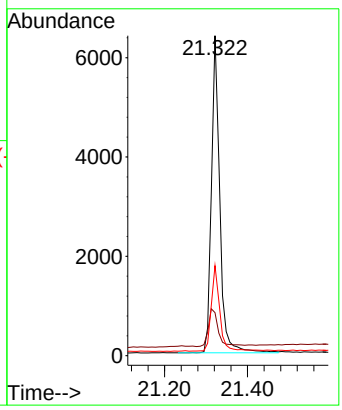


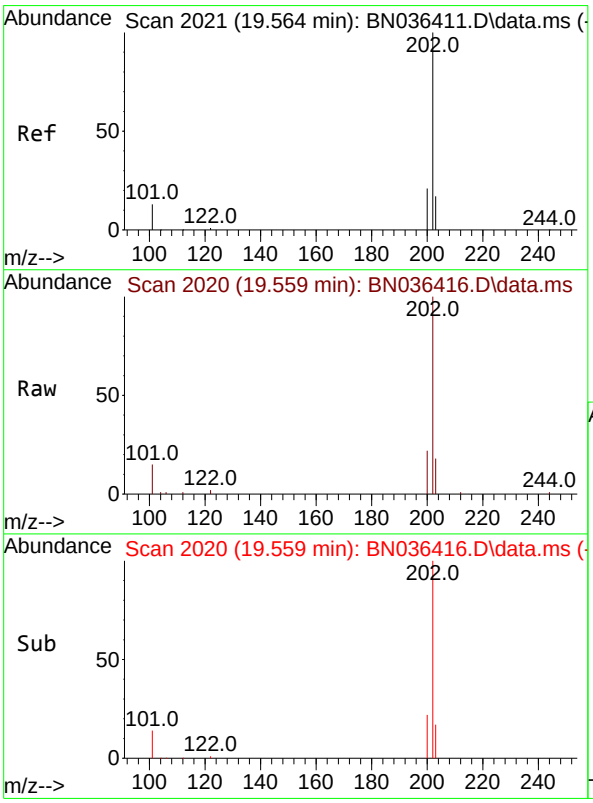
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:240 Resp: 8903

Ion	Ratio	Lower	Upper
240	100		
120	13.4	13.3	19.9
236	28.2	23.0	34.6

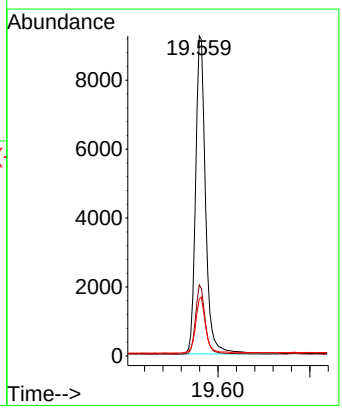


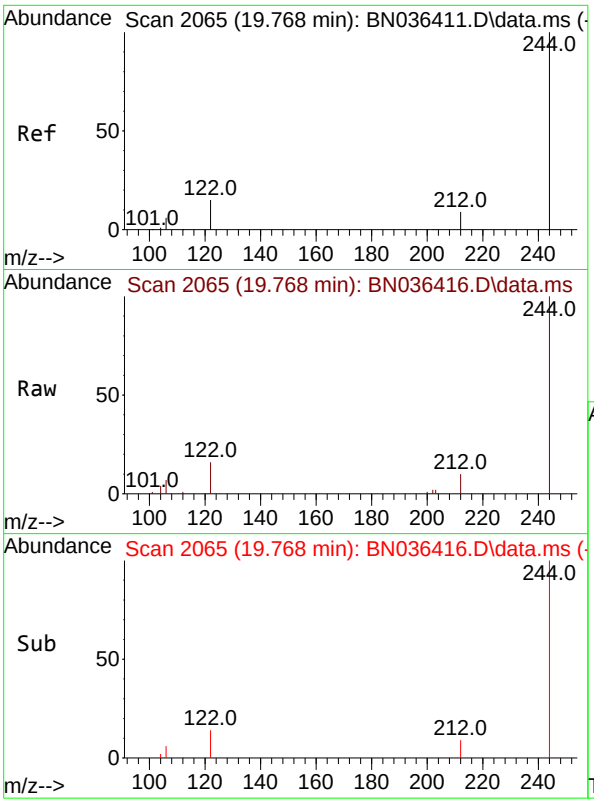


#30
Pyrene
Concen: 0.405 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:202 Resp: 13881

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.4	13.9	20.9



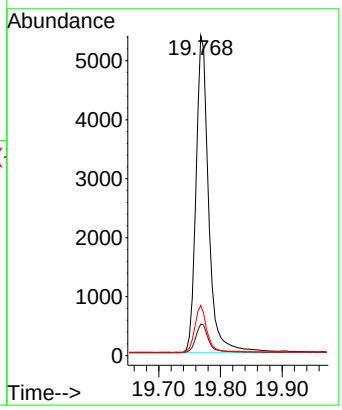


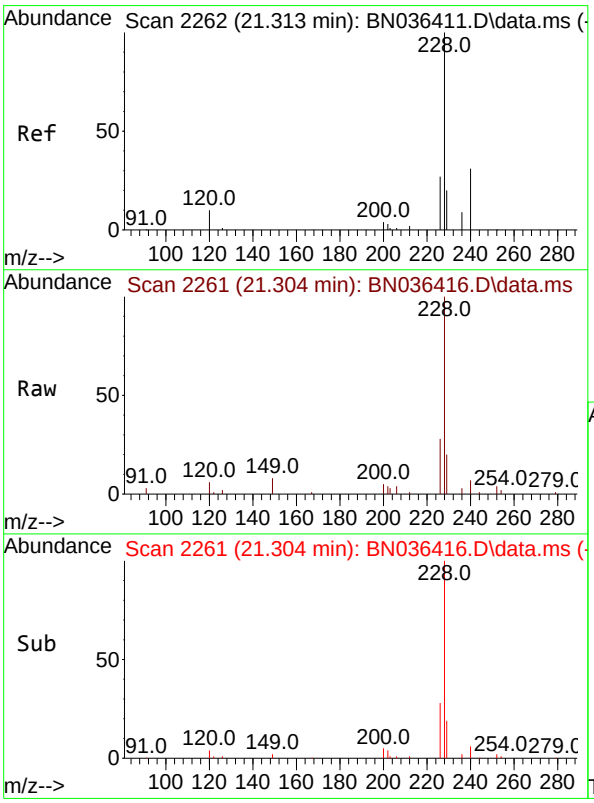
#31
Terphenyl-d14
Concen: 0.407 ng
RT: 19.768 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:244 Resp: 7744

Ion	Ratio	Lower	Upper
244	100		
212	9.8	8.1	12.1
122	15.7	12.8	19.2

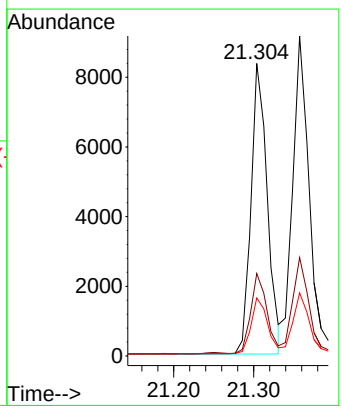


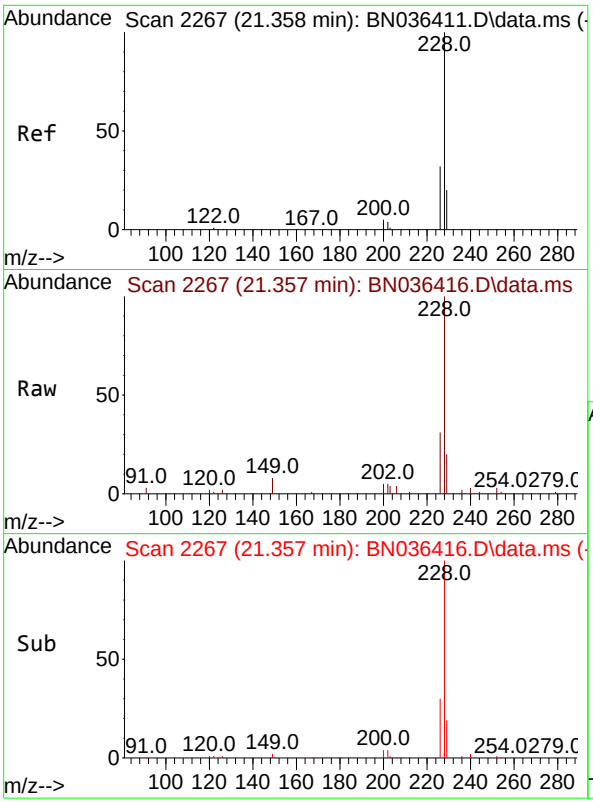


#32
Benzo(a)anthracene
Concen: 0.403 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:228 Resp: 11819

Ion	Ratio	Lower	Upper
228	100		
226	28.2	22.2	33.2
229	19.9	16.5	24.7



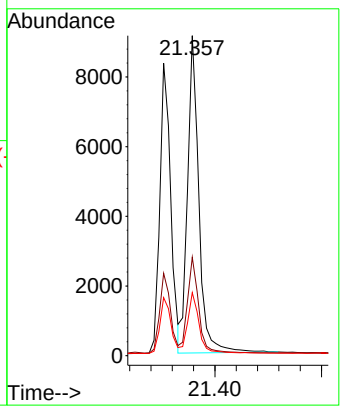


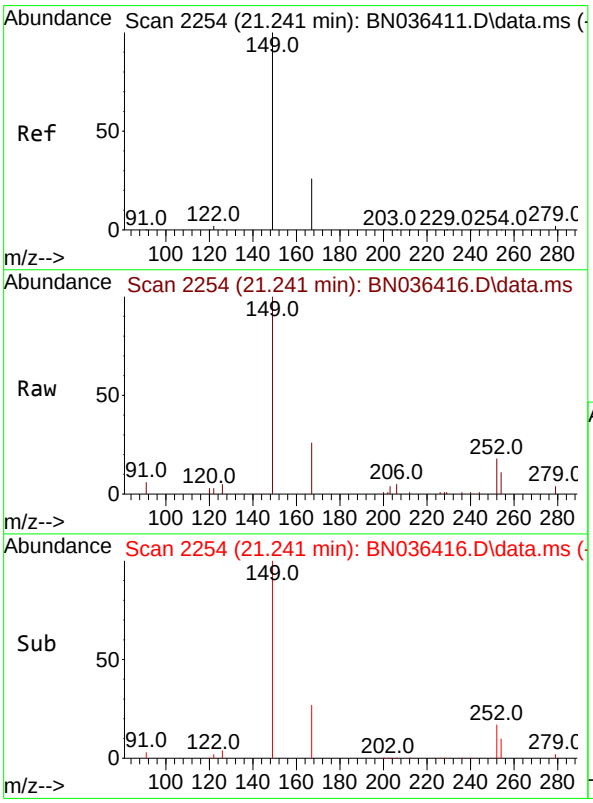
#33
Chrysene
Concen: 0.423 ng
RT: 21.357 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:228 Resp: 13425

Ion	Ratio	Lower	Upper
228	100		
226	30.7	25.5	38.3
229	19.7	16.4	24.6

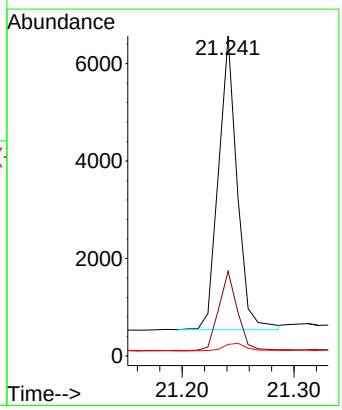


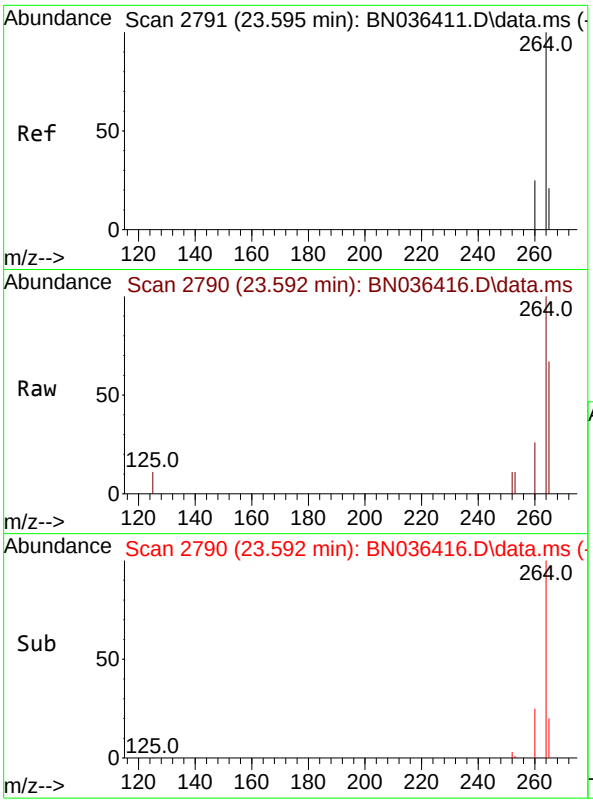


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.383 ng
RT: 21.241 min Scan# 2254
Delta R.T. -0.000 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:149 Resp: 6985

Ion	Ratio	Lower	Upper
149	100		
167	27.5	21.2	31.8
279	3.5	2.7	4.1



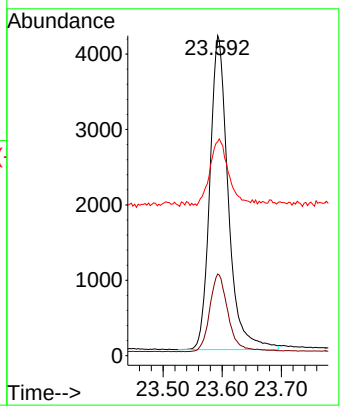


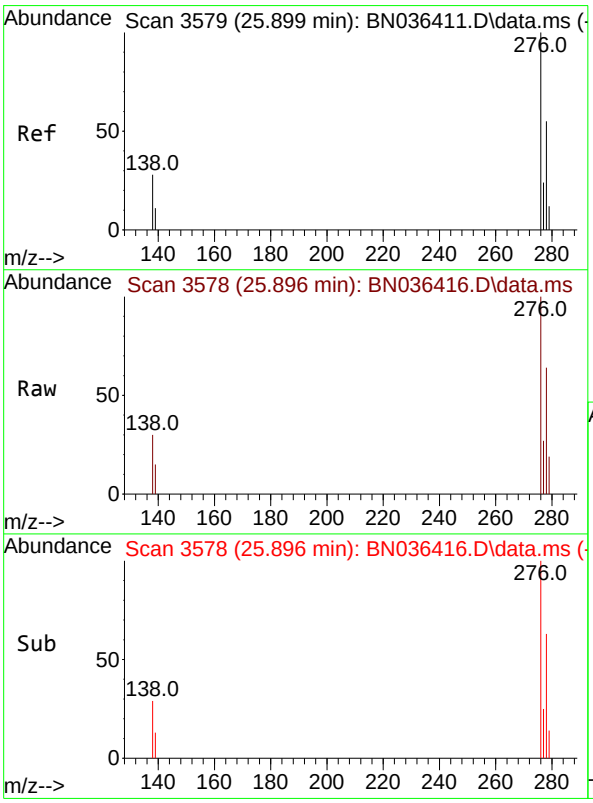
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.592 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:264 Resp: 8977

Ion	Ratio	Lower	Upper
264	100		
260	25.5	20.9	31.3
265	66.9	60.7	91.1

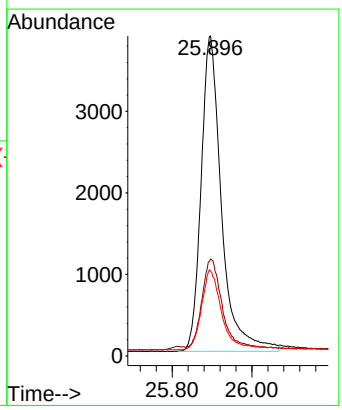


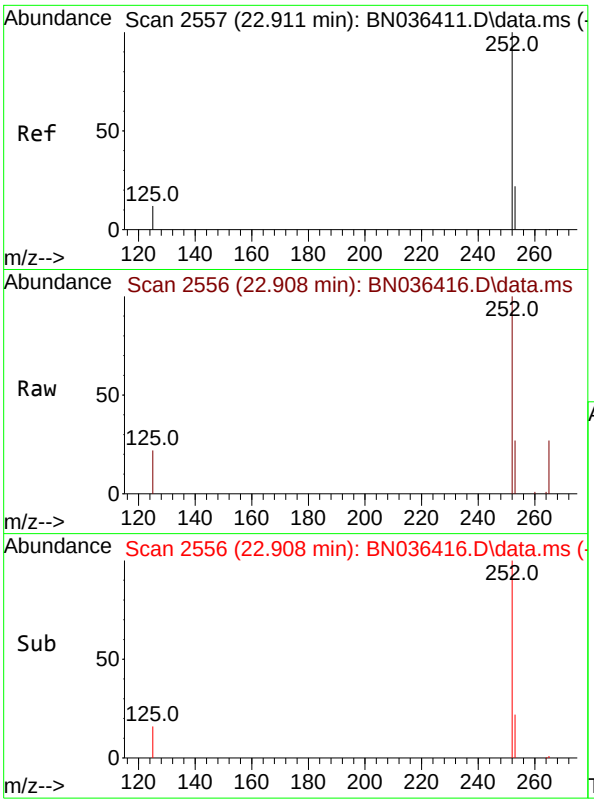


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.438 ng
RT: 25.896 min Scan# 3578
Delta R.T. -0.003 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:276 Resp: 13738

Ion	Ratio	Lower	Upper
276	100		
138	27.6	22.2	33.2
277	24.3	19.8	29.6



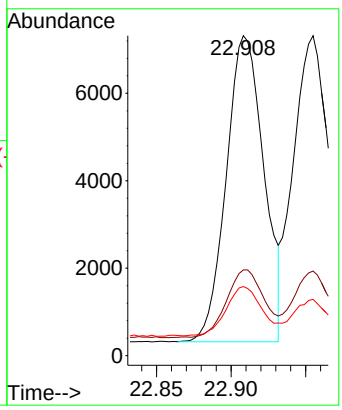


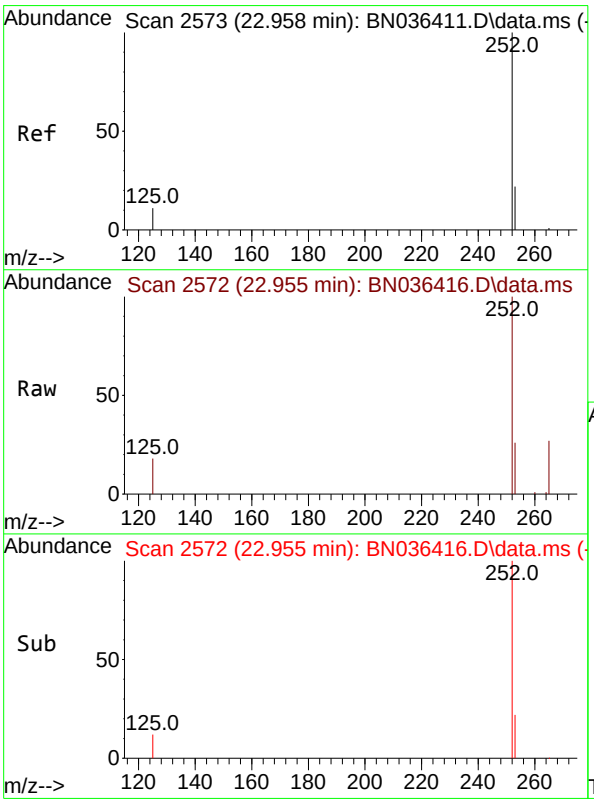
#37
Benzo(b)fluoranthene
Concen: 0.415 ng
RT: 22.908 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:252 Resp: 12283

Ion	Ratio	Lower	Upper
252	100		
253	26.8	21.9	32.9
125	21.6	15.0	22.6

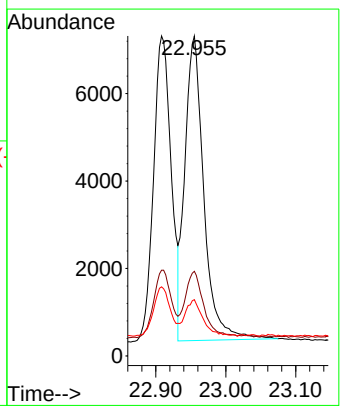


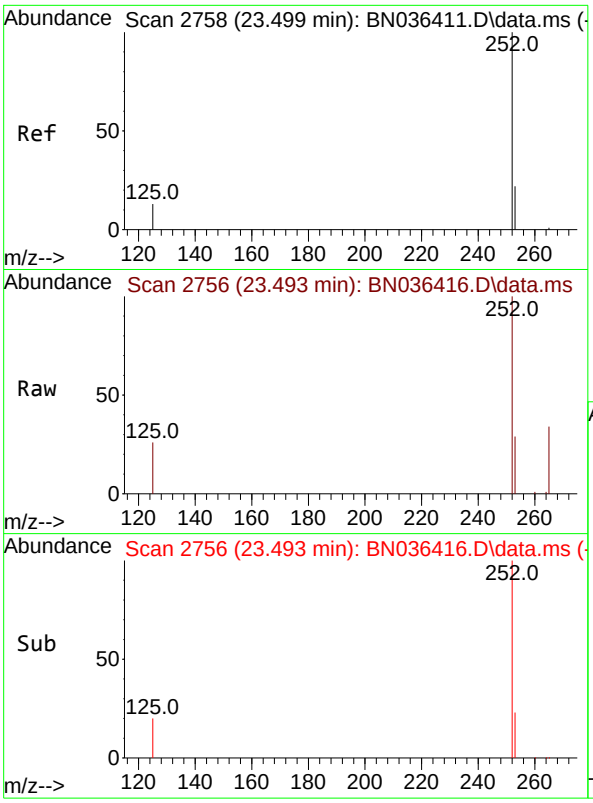


#38
Benzo(k)fluoranthene
Concen: 0.430 ng
RT: 22.955 min Scan# 2572
Delta R.T. -0.003 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:252 Resp: 13099

Ion	Ratio	Lower	Upper
252	100		
253	26.5	22.2	33.4
125	17.6	15.0	22.4



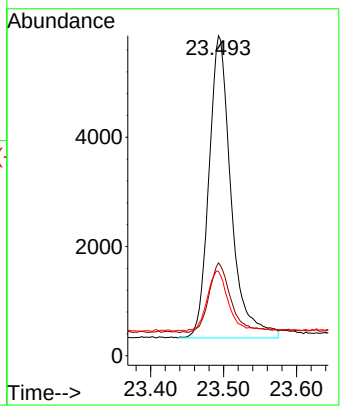


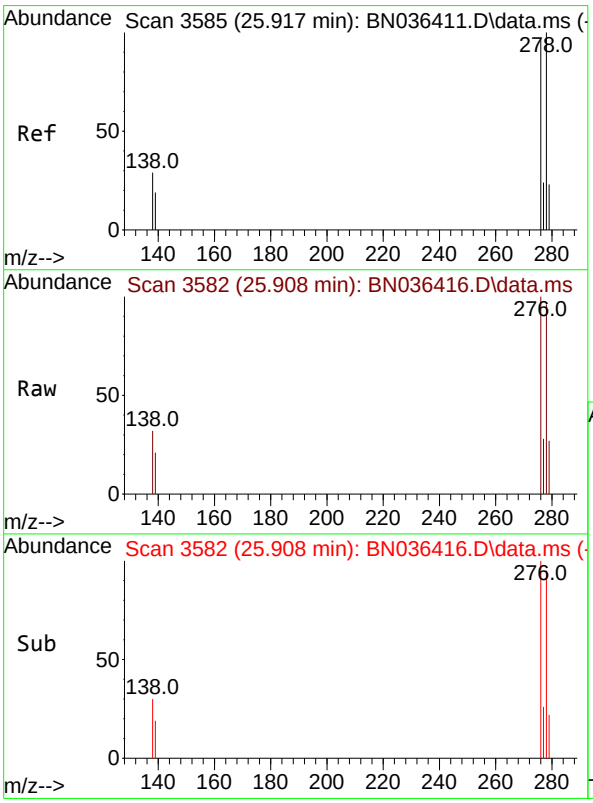
#39
Benzo(a)pyrene
Concen: 0.454 ng
RT: 23.493 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:252 Resp: 11703

Ion	Ratio	Lower	Upper
252	100		
253	29.0	24.4	36.6
125	26.4	18.2	27.2

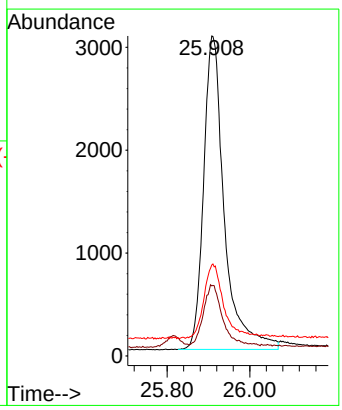


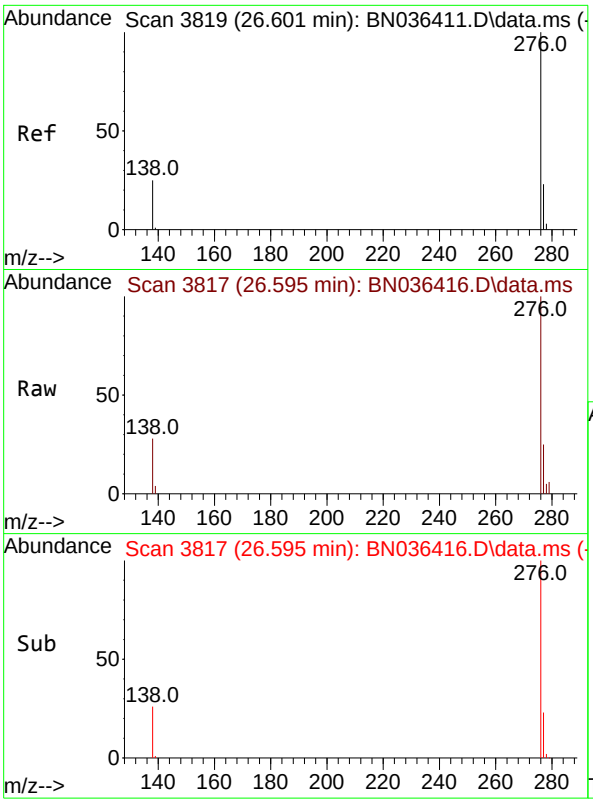


#40
Dibenzo(a,h)anthracene
Concen: 0.427 ng
RT: 25.908 min Scan# 3582
Delta R.T. -0.009 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Tgt Ion:278 Resp: 10585

Ion	Ratio	Lower	Upper
278	100		
139	21.9	18.5	27.7
279	28.4	24.8	37.2



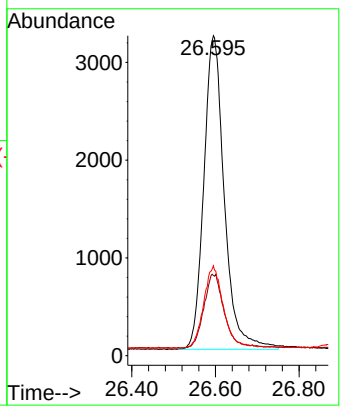


#41
Benzo(g,h,i)perylene
Concen: 0.389 ng
RT: 26.595 min Scan# 3
Delta R.T. -0.006 min
Lab File: BN036416.D
Acq: 10 Feb 2025 16:36

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Tgt Ion:276 Resp: 10921

Ion	Ratio	Lower	Upper
276	100		
277	25.1	20.7	31.1
138	28.1	21.8	32.6



Evaluate Continuing Calibration Report

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036416.D
Acq On : 10 Feb 2025 16:36
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Quant Time: Feb 11 01:25:46 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 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	123	0.00
2		1,4-Dioxane	0.438	0.449	-2.5	127	0.00
3		n-Nitrosodimethylamine	0.760	0.732	3.7	118	0.00
4	S	2-Fluorophenol	0.945	0.877	7.2	115	0.00
5	S	Phenol-d6	1.109	0.961	13.3	114	0.00
6		bis(2-Chloroethyl)ether	1.160	1.187	-2.3	134	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	122	0.00
8	S	Nitrobenzene-d5	0.395	0.354	10.4	118	0.00
9		Naphthalene	1.154	1.121	2.9	122	0.00
10		Hexachlorobutadiene	0.281	0.284	-1.1	122	0.00
11	SURR	2-Methylnaphthalene-d10	0.615	0.598	2.8	121	0.00
12		2-Methylnaphthalene	0.757	0.764	-0.9	126	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	120	0.00
14	S	2,4,6-Tribromophenol	0.198	0.165	16.7	106	0.00
15	S	2-Fluorobiphenyl	1.504	1.529	-1.7	133	0.00
16		Acenaphthylene	1.767	1.863	-5.4	132	0.00
17		Acenaphthene	1.180	1.201	-1.8	126	0.00
18		Fluorene	1.680	1.669	0.7	121	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	117	0.00
20		4,6-Dinitro-2-methylphenol	0.078	0.068	12.8	116	0.00
21		4-Bromophenyl-phenylether	0.239	0.236	1.3	119	0.00
22		Hexachlorobenzene	0.295	0.299	-1.4	123	0.00
23		Atrazine	0.199	0.197	1.0	123	0.00
24		Pentachlorophenol	0.140	0.111	20.7	106	0.00
25		Phenanthrene	1.156	1.178	-1.9	126	0.00
26		Anthracene	1.020	1.047	-2.6	126	0.00
27	SURR	Fluoranthene-d10	1.112	1.054	5.2	116	0.00
28		Fluoranthene	1.421	1.381	2.8	119	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	119	0.00
30		Pyrene	1.541	1.559	-1.2	121	0.00
31	S	Terphenyl-d14	0.854	0.870	-1.9	121	0.00
32		Benzo(a)anthracene	1.316	1.328	-0.9	122	0.00
33		Chrysene	1.425	1.508	-5.8	132	0.00
34		Bis(2-ethylhexyl)phthalate	0.820	0.785	4.3	120	0.00
35	I	Perylene-d12	1.000	1.000	0.0	116	0.00
36		Indeno(1,2,3-cd)pyrene	1.398	1.530	-9.4	129	0.00
37		Benzo(b)fluoranthene	1.317	1.368	-3.9	126	0.00
38		Benzo(k)fluoranthene	1.356	1.459	-7.6	124	0.00
39	C	Benzo(a)pyrene	1.150	1.304	-13.4	137	0.00
40		Dibenzo(a,h)anthracene	1.103	1.179	-6.9	127	0.00
41		Benzo(g,h,i)perylene	1.250	1.217	2.6	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036416.D
Acq On : 10 Feb 2025 16:36
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN021025

Quant Time: Feb 11 01:25:46 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 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	123	0.00
2		1,4-Dioxane	0.400	0.410	-2.5	127	0.00
3		n-Nitrosodimethylamine	0.400	0.385	3.8	118	0.00
4	S	2-Fluorophenol	0.400	0.371	7.3	115	0.00
5	S	Phenol-d6	0.400	0.347	13.3	114	0.00
6		bis(2-Chloroethyl)ether	0.400	0.409	-2.2	134	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	122	0.00
8	S	Nitrobenzene-d5	0.400	0.359	10.3	118	0.00
9		Naphthalene	0.400	0.389	2.8	122	0.00
10		Hexachlorobutadiene	0.400	0.404	-1.0	122	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.389	2.8	121	0.00
12		2-Methylnaphthalene	0.400	0.404	-1.0	126	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	120	0.00
14	S	2,4,6-Tribromophenol	0.400	0.332	17.0	106	0.00
15	S	2-Fluorobiphenyl	0.400	0.407	-1.7	133	0.00
16		Acenaphthylene	0.400	0.422	-5.5	132	0.00
17		Acenaphthene	0.400	0.407	-1.7	126	0.00
18		Fluorene	0.400	0.397	0.8	121	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	117	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.348	13.0	116	0.00
21		4-Bromophenyl-phenylether	0.400	0.395	1.3	119	0.00
22		Hexachlorobenzene	0.400	0.406	-1.5	123	0.00
23		Atrazine	0.400	0.396	1.0	123	0.00
24		Pentachlorophenol	0.400	0.316	21.0	106	0.00
25		Phenanthrene	0.400	0.408	-2.0	126	0.00
26		Anthracene	0.400	0.411	-2.7	126	0.00
27	SURR	Fluoranthene-d10	0.400	0.379	5.3	116	0.00
28		Fluoranthene	0.400	0.389	2.8	119	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	119	0.00
30		Pyrene	0.400	0.405	-1.3	121	0.00
31	S	Terphenyl-d14	0.400	0.407	-1.7	121	0.00
32		Benzo(a)anthracene	0.400	0.403	-0.8	122	0.00
33		Chrysene	0.400	0.423	-5.7	132	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.383	4.3	120	0.00
35	I	Perylene-d12	0.400	0.400	0.0	116	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.438	-9.5	129	0.00
37		Benzo(b)fluoranthene	0.400	0.415	-3.7	126	0.00
38		Benzo(k)fluoranthene	0.400	0.430	-7.5	124	0.00
39	C	Benzo(a)pyrene	0.400	0.454	-13.5	137	0.00
40		Dibenzo(a,h)anthracene	0.400	0.427	-6.7	127	0.00
41		Benzo(g,h,i)perylene	0.400	0.389	2.8	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1380 SAS No.: Q1380 SDG No.: Q1380

Instrument ID: BNA_N Calibration Date/Time: 02/20/2025 10:11

Lab File ID: BN036473.D Init. Calib. Date(s): 02/10/2025 02/10/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 12:25 16:00

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.615	0.585		-4.9	20.0
Fluoranthene-d10	1.112	1.062		-4.5	20.0
2-Fluorophenol	0.945	0.879		-7.0	20.0
Phenol-d6	1.109	1.046		-5.7	20.0
Nitrobenzene-d5	0.395	0.399		1.0	20.0
2-Fluorobiphenyl	1.504	1.478		-1.7	20.0
2,4,6-Tribromophenol	0.198	0.165		-16.7	20.0
Terphenyl-d14	0.854	0.795		-6.9	20.0
1,4-Dioxane	0.438	0.446		1.8	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036473.D
Acq On : 20 Feb 2025 10:11
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 21 00:08:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

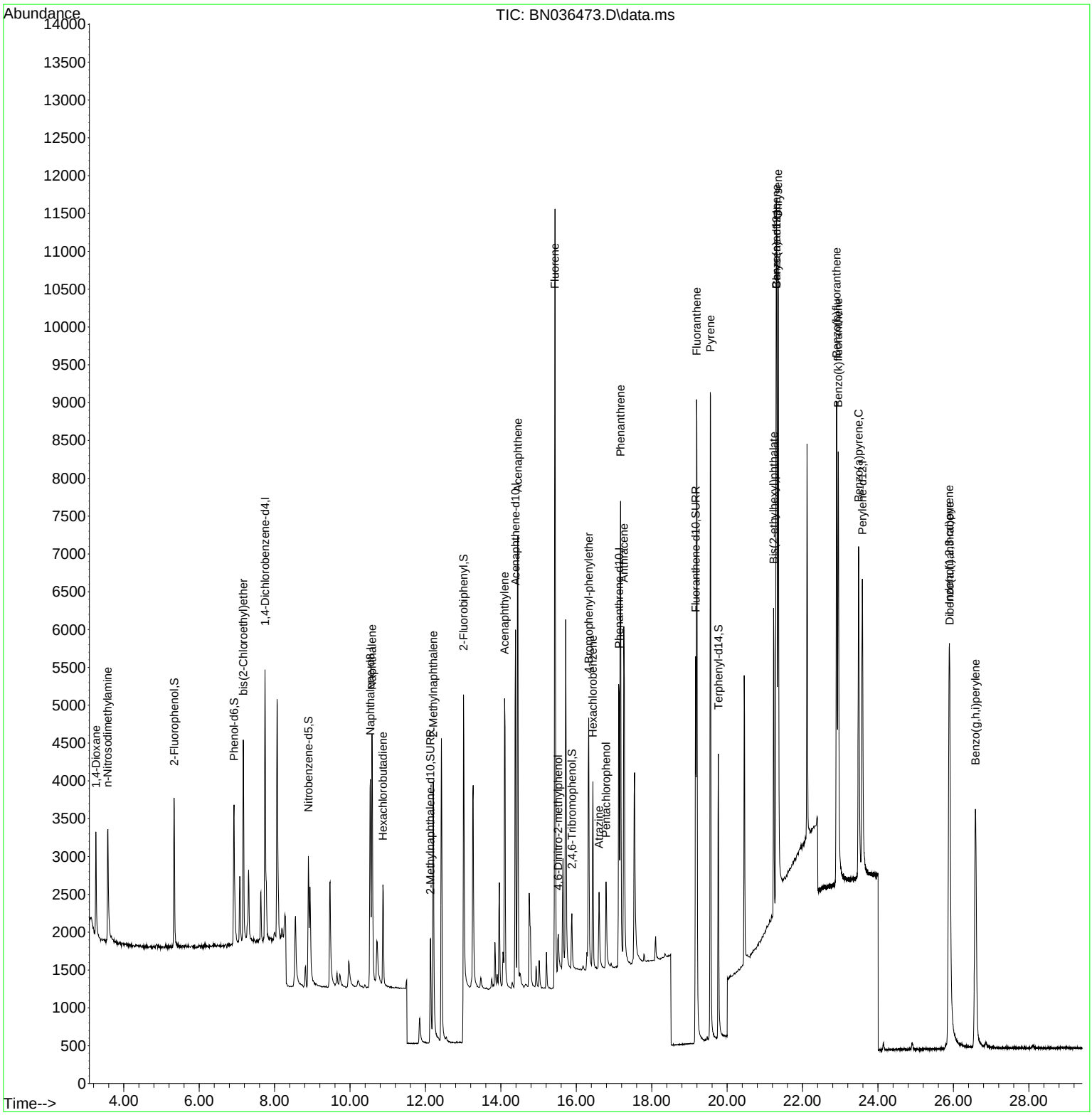
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.746	152	1766	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	4292	0.400	ng	#	0.00
13) Acenaphthene-d10	14.387	164	2899	0.400	ng		0.00
19) Phenanthrene-d10	17.136	188	6167	0.400	ng		0.00
29) Chrysene-d12	21.313	240	5687	0.400	ng	#	0.00
35) Perylene-d12	23.586	264	5826	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.341	112	1553	0.372	ng		0.00
5) Phenol-d6	6.923	99	1848	0.377	ng		-0.01
8) Nitrobenzene-d5	8.896	82	1714	0.405	ng		-0.01
11) 2-Methylnaphthalene-d10	12.131	152	2509	0.380	ng		-0.01
14) 2,4,6-Tribromophenol	15.882	330	478	0.333	ng		0.00
15) 2-Fluorobiphenyl	13.008	172	4284	0.393	ng		-0.01
27) Fluoranthene-d10	19.164	212	6549	0.382	ng		0.00
31) Terphenyl-d14	19.768	244	4524	0.373	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.261	88	788	0.408	ng		98
3) n-Nitrosodimethylamine	3.571	42	1397	0.416	ng	#	98
6) bis(2-Chloroethyl)ether	7.168	93	2055	0.401	ng		99
9) Naphthalene	10.583	128	4883	0.394	ng		99
10) Hexachlorobutadiene	10.872	225	1213	0.403	ng	#	100
12) 2-Methylnaphthalene	12.207	142	3149	0.388	ng		97
16) Acenaphthylene	14.099	152	4699	0.367	ng		98
17) Acenaphthene	14.452	154	3240	0.379	ng		99
18) Fluorene	15.435	166	4564	0.375	ng		98
20) 4,6-Dinitro-2-methylph...	15.522	198	394	0.326	ng		96
21) 4-Bromophenyl-phenylether	16.329	248	1446	0.393	ng	#	85
22) Hexachlorobenzene	16.441	284	1837	0.404	ng		98
23) Atrazine	16.602	200	1102	0.359	ng		94
24) Pentachlorophenol	16.788	266	753	0.349	ng		99
25) Phenanthrene	17.173	178	6947	0.390	ng		99
26) Anthracene	17.260	178	6132	0.390	ng		99
28) Fluoranthene	19.192	202	8510	0.389	ng		99
30) Pyrene	19.559	202	8707	0.398	ng		99
32) Benzo(a)anthracene	21.304	228	7305	0.390	ng		99
33) Chrysene	21.348	228	8493	0.419	ng		100
34) Bis(2-ethylhexyl)phtha...	21.232	149	3979	0.341	ng		100
36) Indeno(1,2,3-cd)pyrene	25.887	276	8094	0.397	ng		98
37) Benzo(b)fluoranthene	22.902	252	8146	0.425	ng		98
38) Benzo(k)fluoranthene	22.946	252	8381	0.424	ng		99
39) Benzo(a)pyrene	23.487	252	7017	0.419	ng		96
40) Dibenzo(a,h)anthracene	25.902	278	6114	0.380	ng		99
41) Benzo(g,h,i)perylene	26.586	276	7190	0.395	ng		98

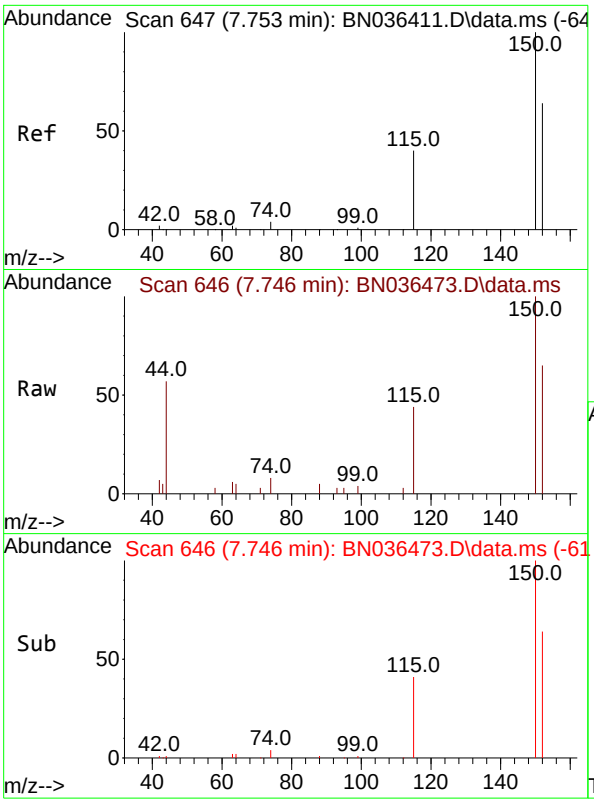
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036473.D
Acq On : 20 Feb 2025 10:11
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 21 00:08:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



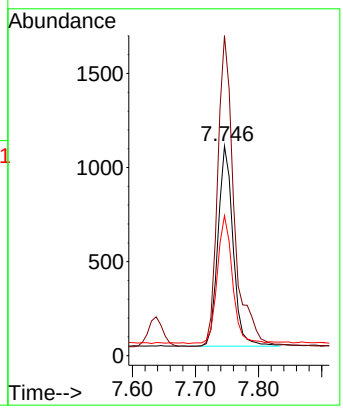


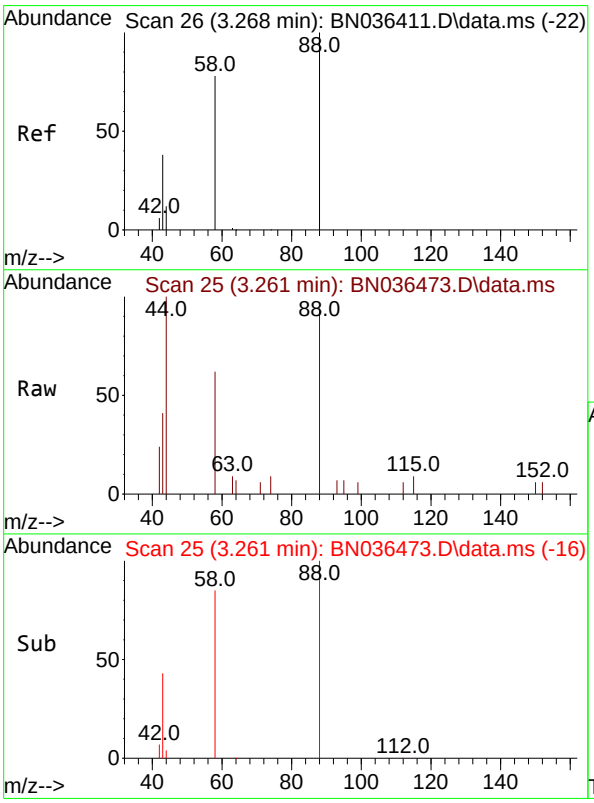
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 1766

Ion	Ratio	Lower	Upper
152	100		
150	152.7	123.7	185.5
115	66.8	52.5	78.7

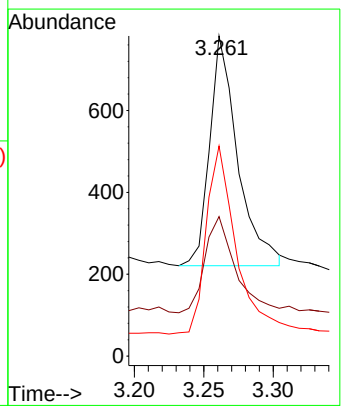


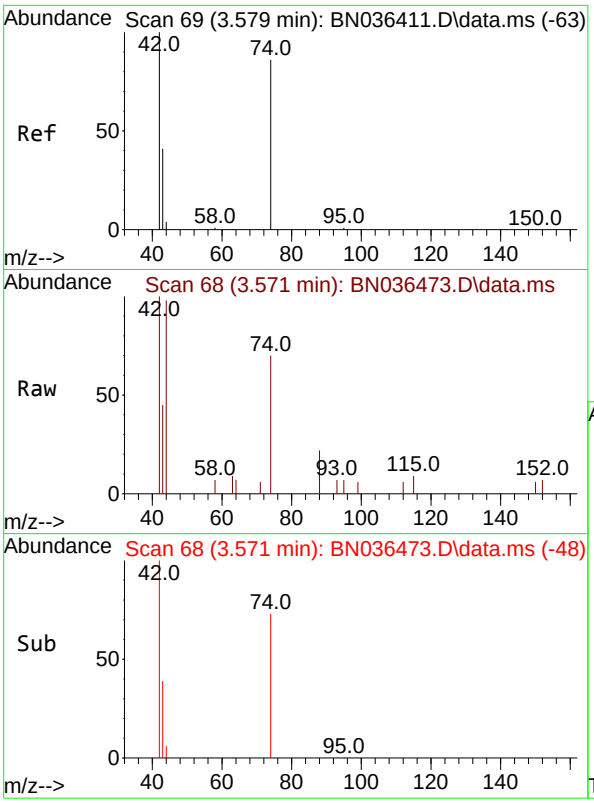


#2
1,4-Dioxane
Concen: 0.408 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion: 88 Resp: 788

Ion	Ratio	Lower	Upper
88	100		
43	45.8	33.7	50.5
58	86.5	68.9	103.3



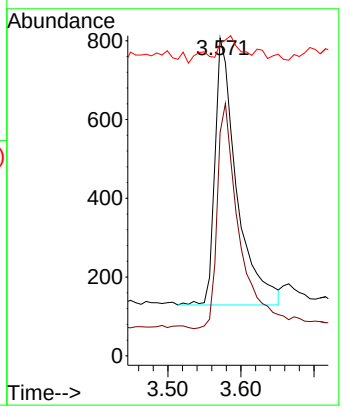


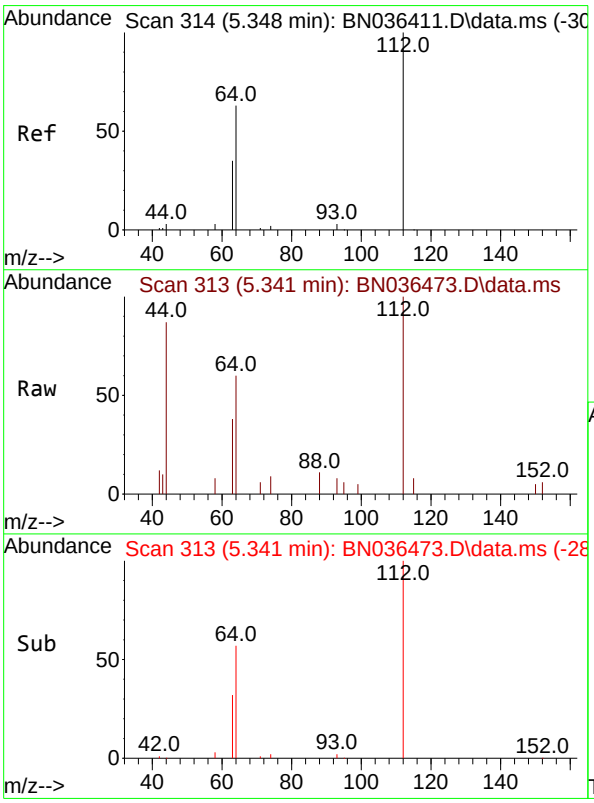
#3
n-Nitrosodimethylamine
Concen: 0.416 ng
RT: 3.571 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 1397

Ion	Ratio	Lower	Upper
42	100		
74	89.1	71.8	107.6
44	6.1	7.8	11.6#

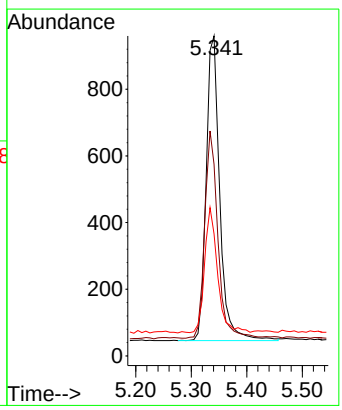


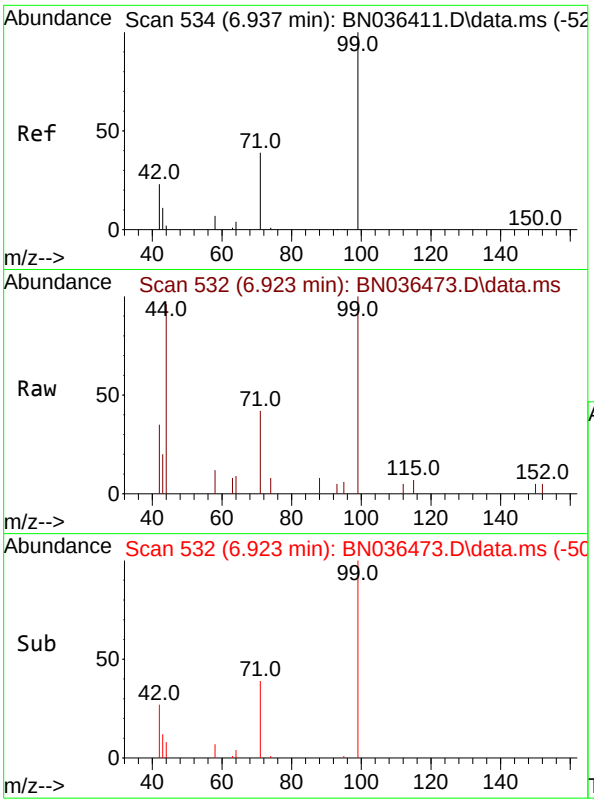


#4
2-Fluorophenol
Concen: 0.372 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:112 Resp: 1553

Ion	Ratio	Lower	Upper
112	100		
64	66.1	53.4	80.0
63	38.9	30.3	45.5



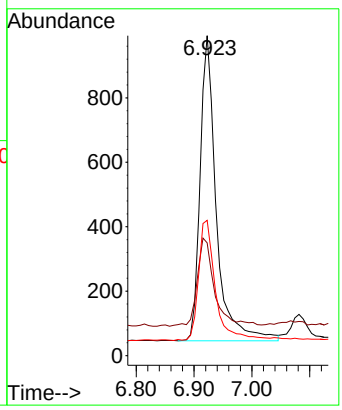


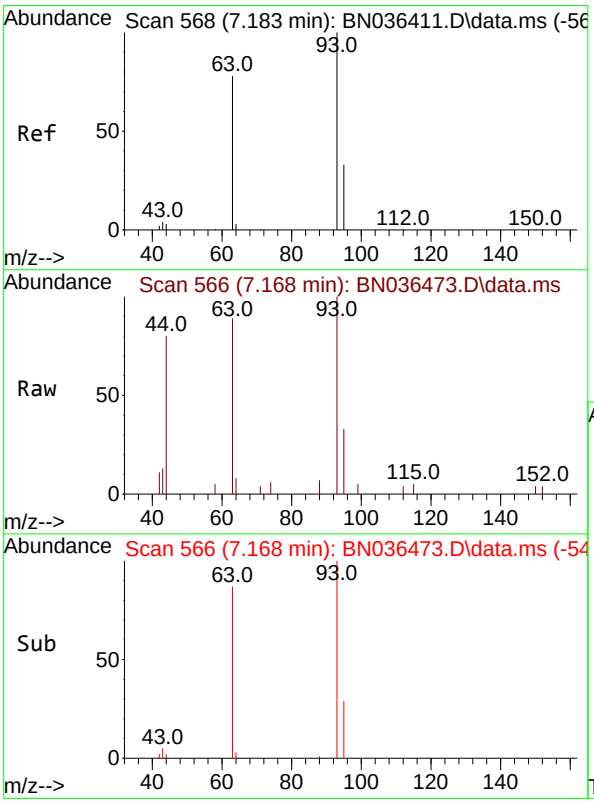
#5
Phenol-d6
Concen: 0.377 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.015 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 1848

Ion	Ratio	Lower	Upper
99	100		
42	31.0	21.7	32.5
71	41.3	32.6	49.0

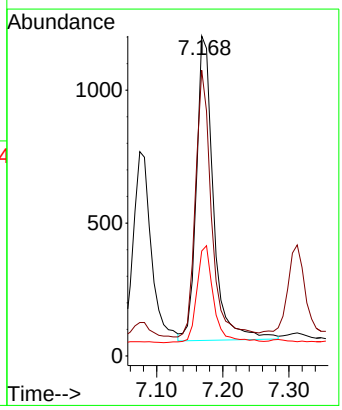


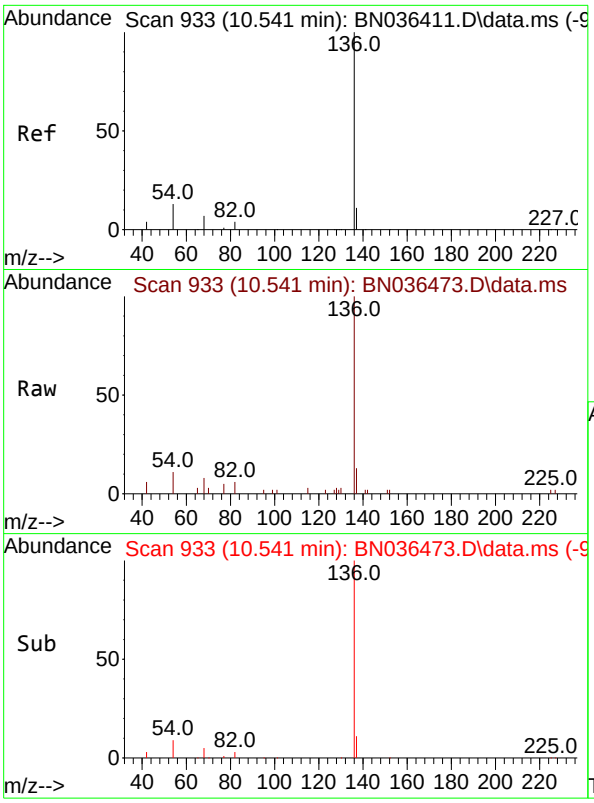


#6
bis(2-Chloroethyl)ether
Concen: 0.401 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.015 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion: 93 Resp: 2055

Ion	Ratio	Lower	Upper
93	100		
63	82.0	66.3	99.5
95	31.6	26.2	39.4



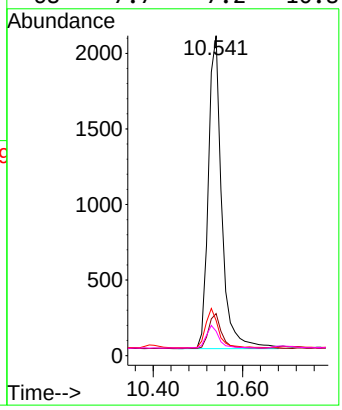


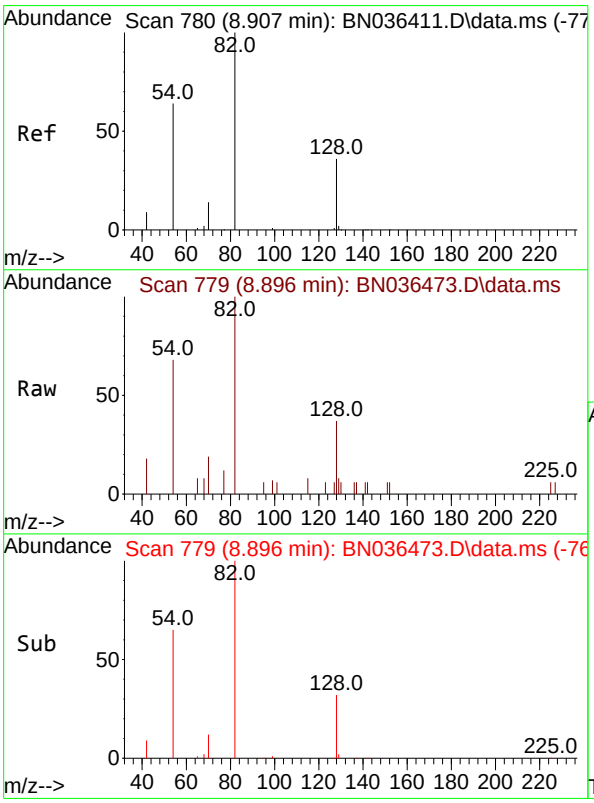
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 4292

Ion	Ratio	Lower	Upper
136	100		
137	13.1	10.1	15.1
54	11.0	11.8	17.6#
68	7.7	7.2	10.8

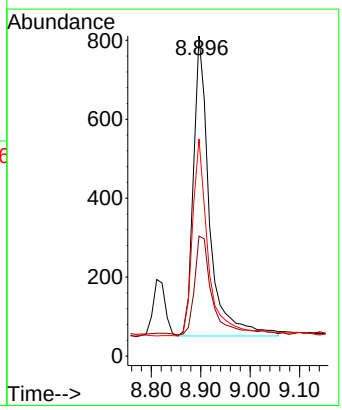


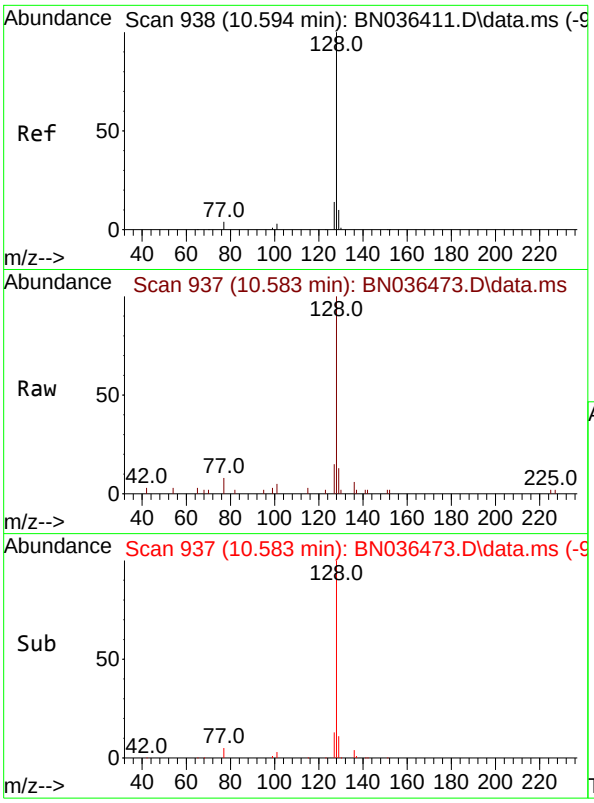


#8
Nitrobenzene-d5
Concen: 0.405 ng
RT: 8.896 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion: 82 Resp: 1714

Ion	Ratio	Lower	Upper
82	100		
128	37.5	31.9	47.9
54	67.8	53.1	79.7



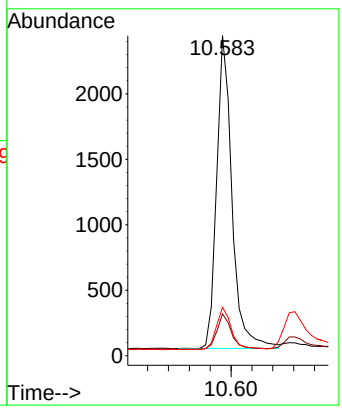


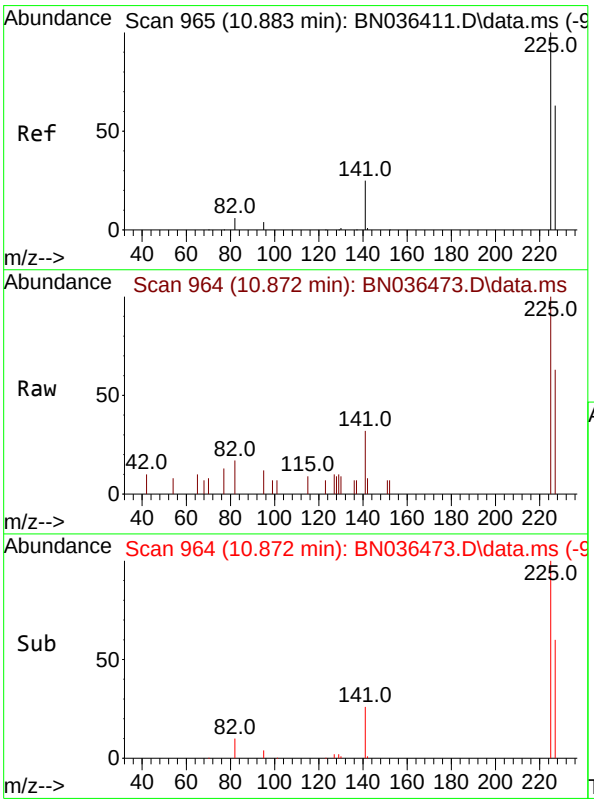
#9
Naphthalene
Concen: 0.394 ng
RT: 10.583 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 4883

Ion	Ratio	Lower	Upper
128	100		
129	13.0	9.6	14.4
127	15.1	12.0	18.0

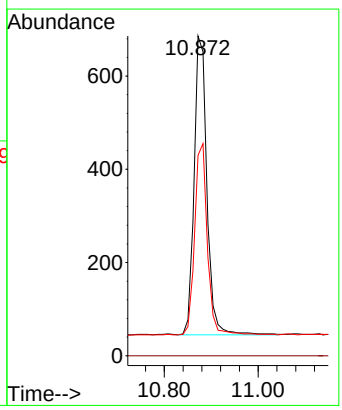


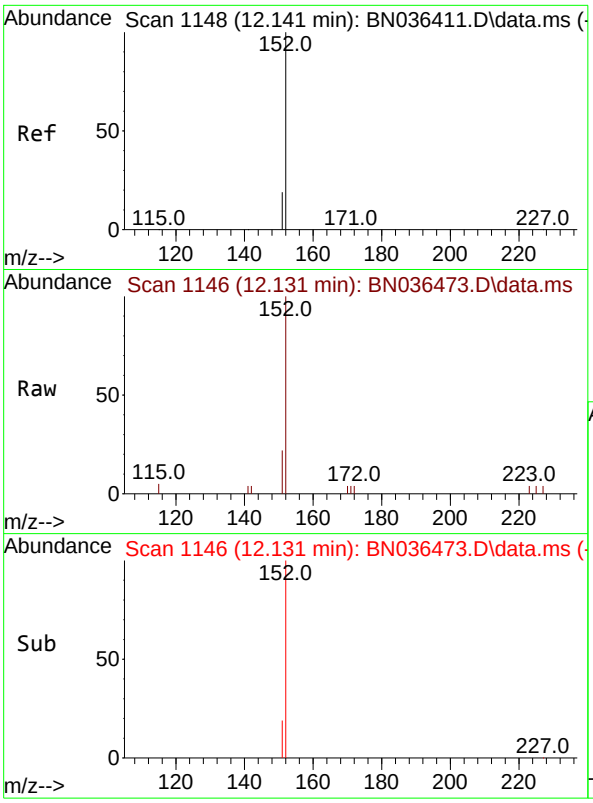


#10
Hexachlorobutadiene
Concen: 0.403 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:225 Resp: 1213

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	50.9	76.3



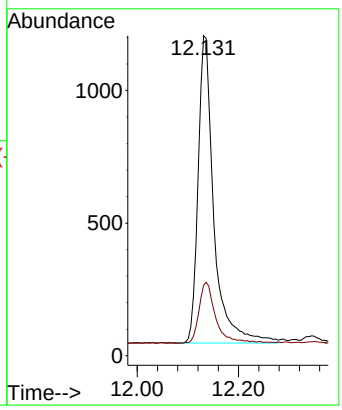


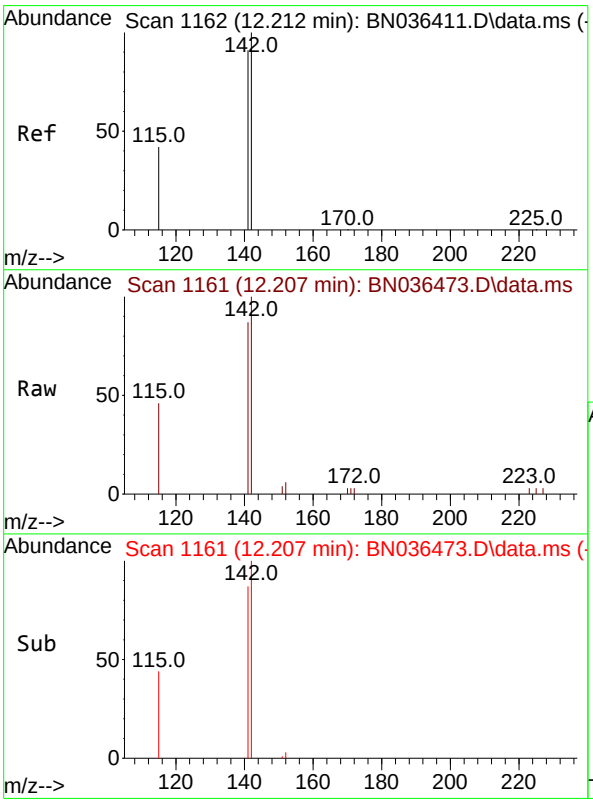
#11
2-Methylnaphthalene-d10
Concen: 0.380 ng
RT: 12.131 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 2509

Ion	Ratio	Lower	Upper
152	100		
151	20.9	16.6	25.0

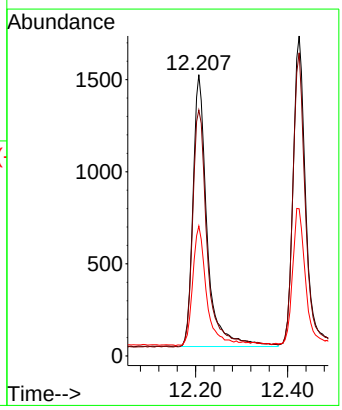


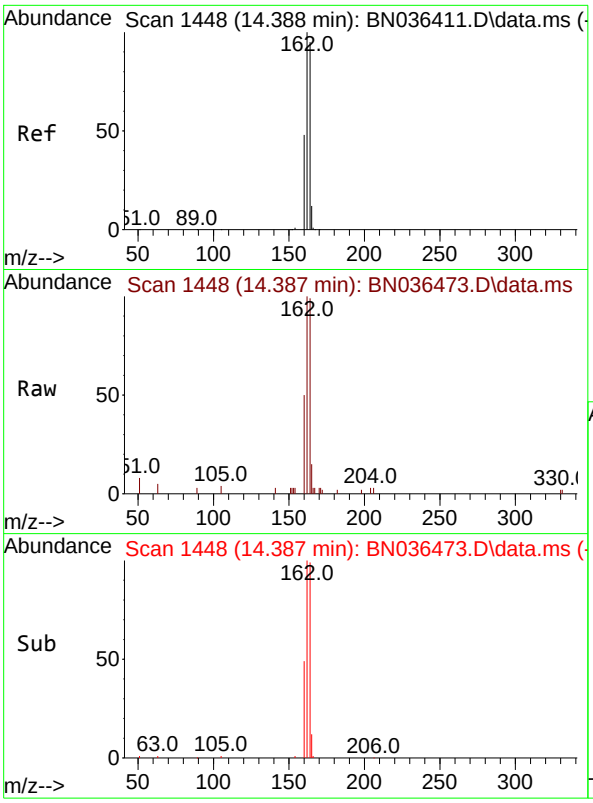


#12
2-Methylnaphthalene
Concen: 0.388 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:142 Resp: 3149

Ion	Ratio	Lower	Upper
142	100		
141	87.4	72.8	109.2
115	46.2	35.5	53.3



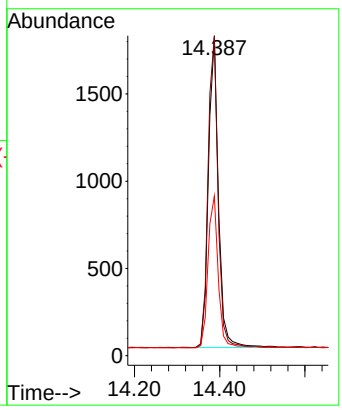


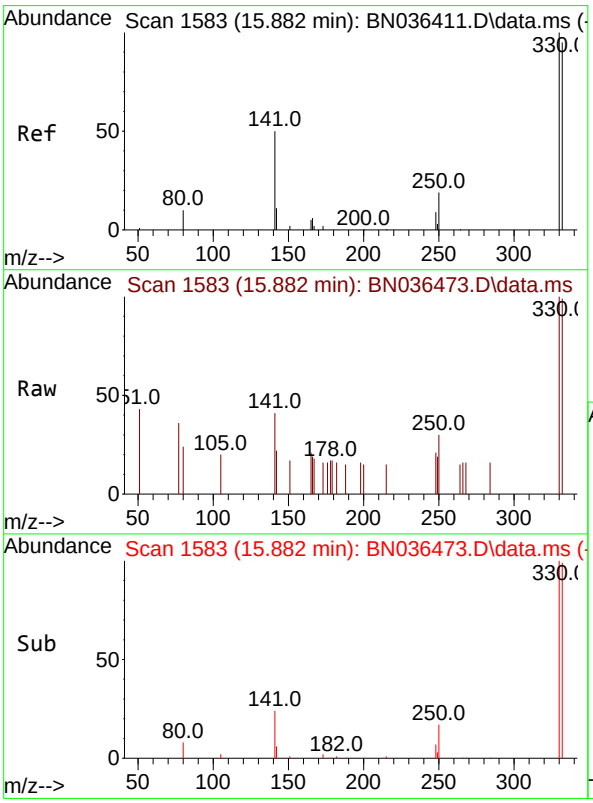
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.387 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 2899

Ion	Ratio	Lower	Upper
164	100		
162	100.6	84.1	126.1
160	50.2	41.4	62.0

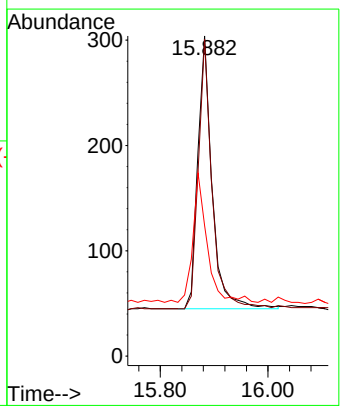


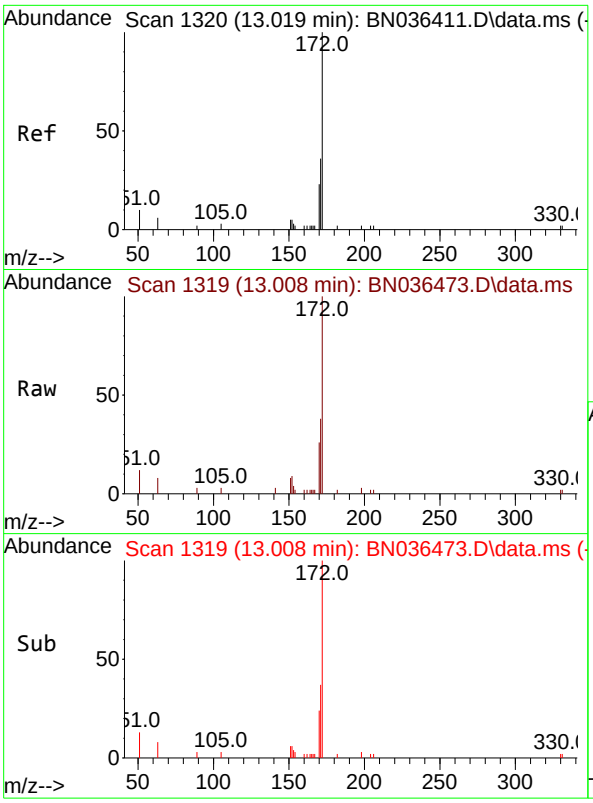


#14
2,4,6-Tribromophenol
Concen: 0.333 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:330 Resp: 478

Ion	Ratio	Lower	Upper
330	100		
332	94.4	76.6	114.8
141	47.3	37.8	56.8



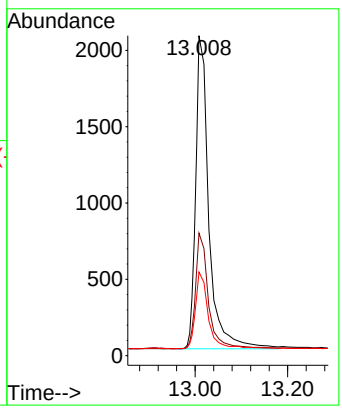


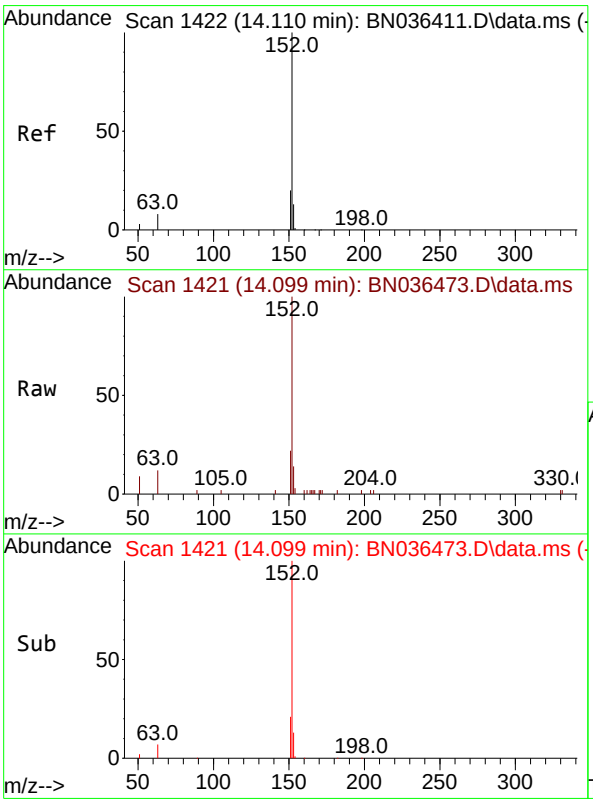
#15
2-Fluorobiphenyl
Concen: 0.393 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 4284

Ion	Ratio	Lower	Upper
172	100		
171	38.3	29.6	44.4
170	26.1	19.8	29.6

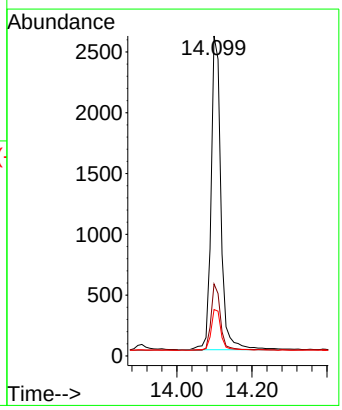


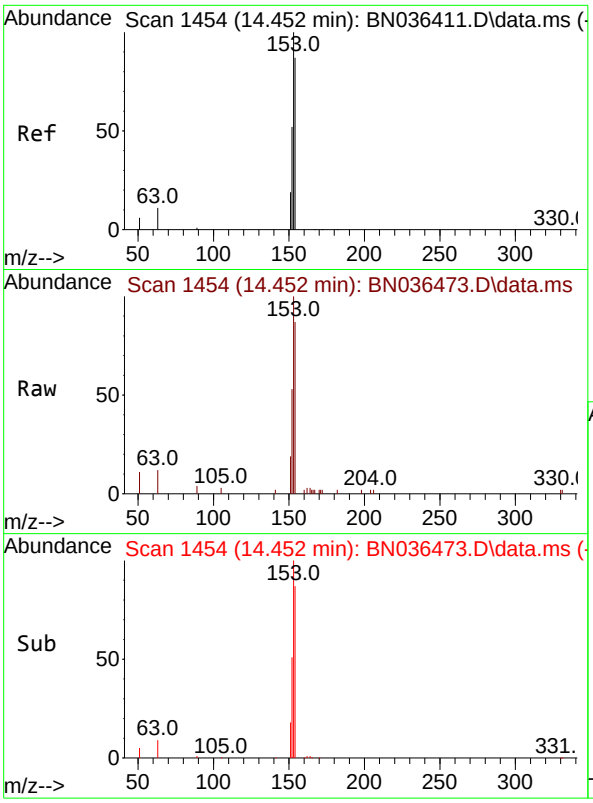


#16
Acenaphthylene
Concen: 0.367 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:152 Resp: 4699

Ion	Ratio	Lower	Upper
152	100		
151	20.6	15.8	23.8
153	13.3	10.2	15.2



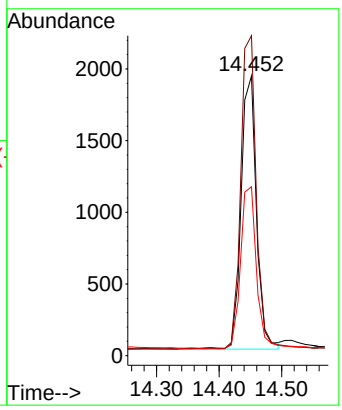


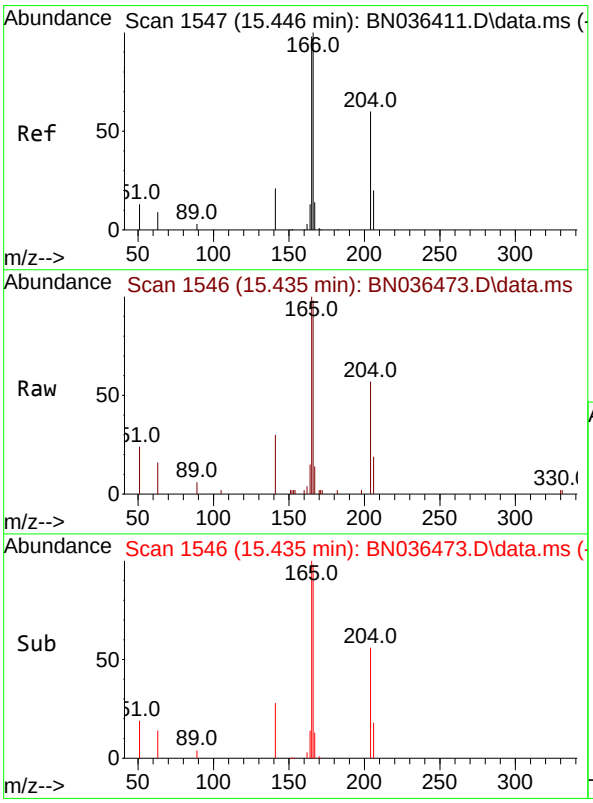
#17
Acenaphthene
Concen: 0.379 ng
RT: 14.452 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 3240

Ion	Ratio	Lower	Upper
154	100		
153	117.2	93.3	139.9
152	62.6	48.8	73.2

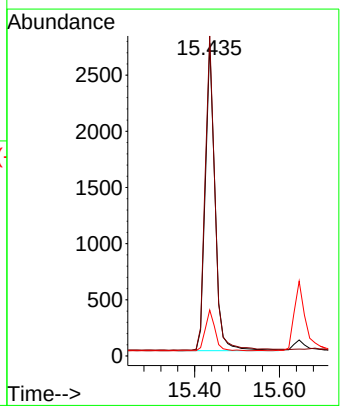


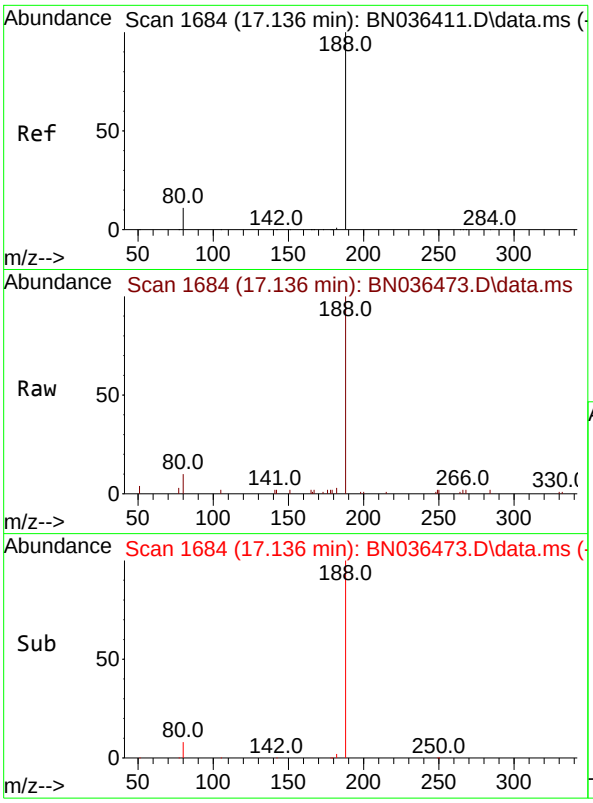


#18
Fluorene
Concen: 0.375 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:166 Resp: 4564

Ion	Ratio	Lower	Upper
166	100		
165	101.9	79.5	119.3
167	12.9	10.4	15.6



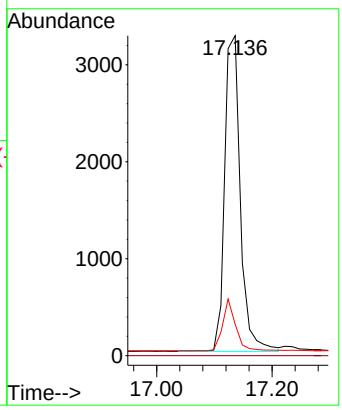


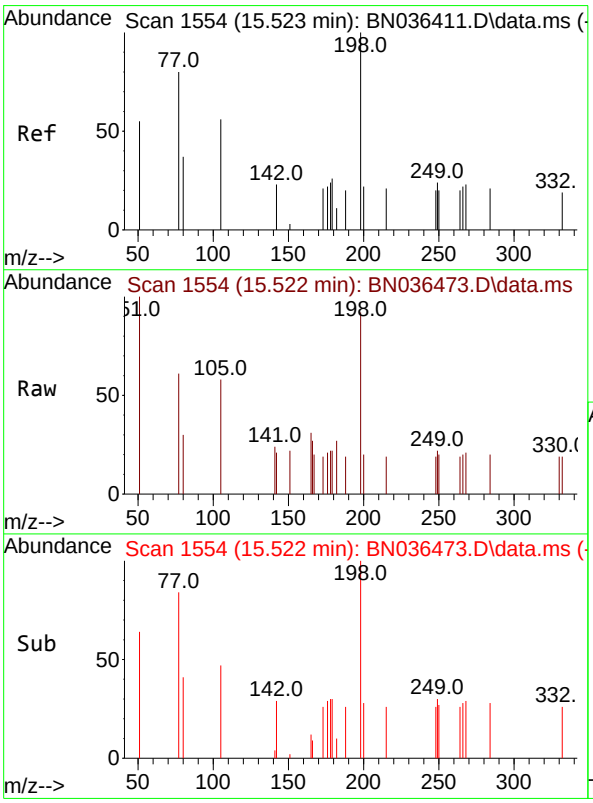
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 6167

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.8	9.8	14.6

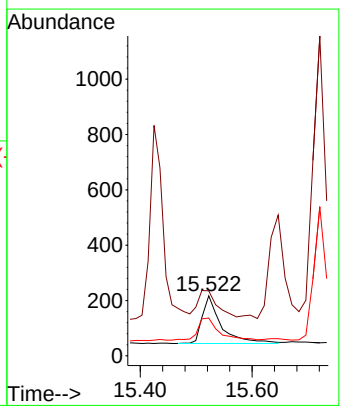


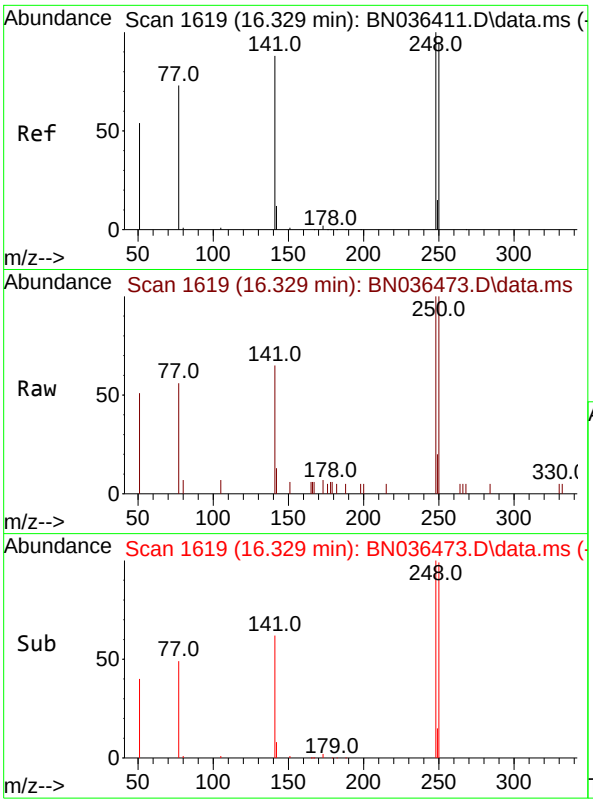


#20
4,6-Dinitro-2-methylphenol
Concen: 0.326 ng
RT: 15.522 min Scan# 1554
Delta R.T. -0.001 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:198 Resp: 394

Ion	Ratio	Lower	Upper
198	100		
51	108.3	86.6	129.8
105	63.1	57.5	86.3



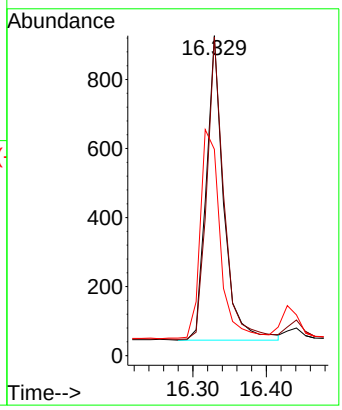


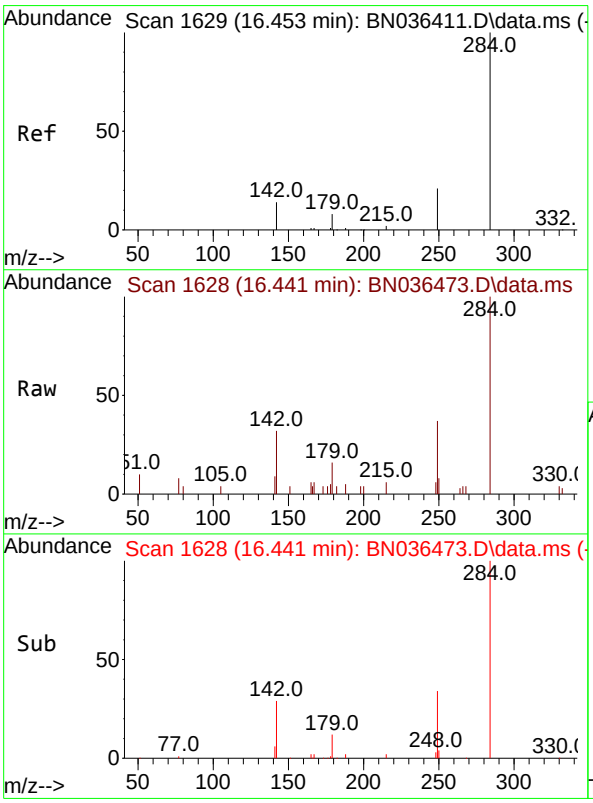
#21
4-Bromophenyl-phenylether
Concen: 0.393 ng
RT: 16.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 1446

Ion	Ratio	Lower	Upper
248	100		
250	99.6	76.1	114.1
141	64.5	71.7	107.5#

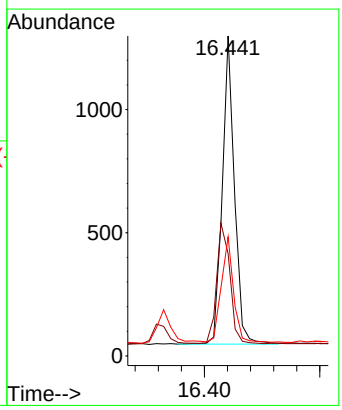


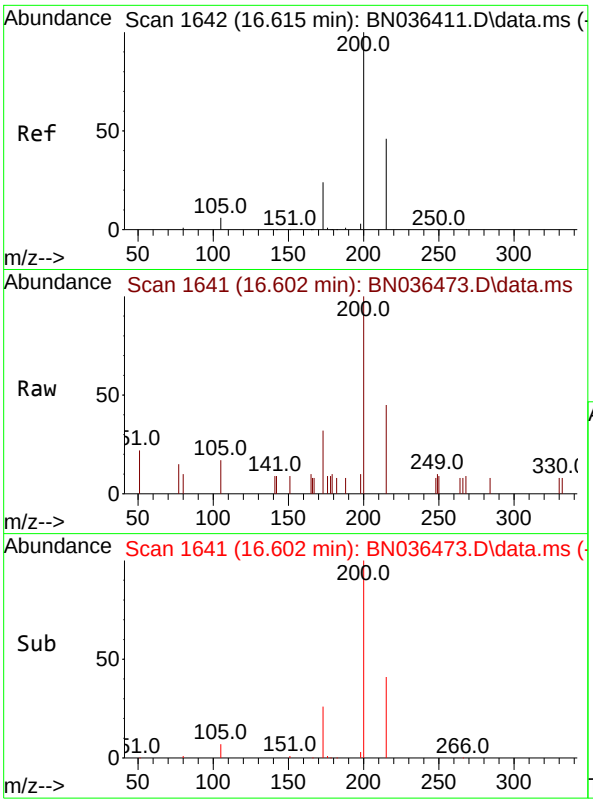


#22
Hexachlorobenzene
Concen: 0.404 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.013 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:284 Resp: 1837

Ion	Ratio	Lower	Upper
284	100		
142	42.5	33.4	50.0
249	34.7	28.6	43.0



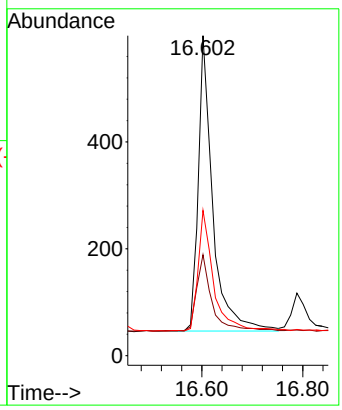


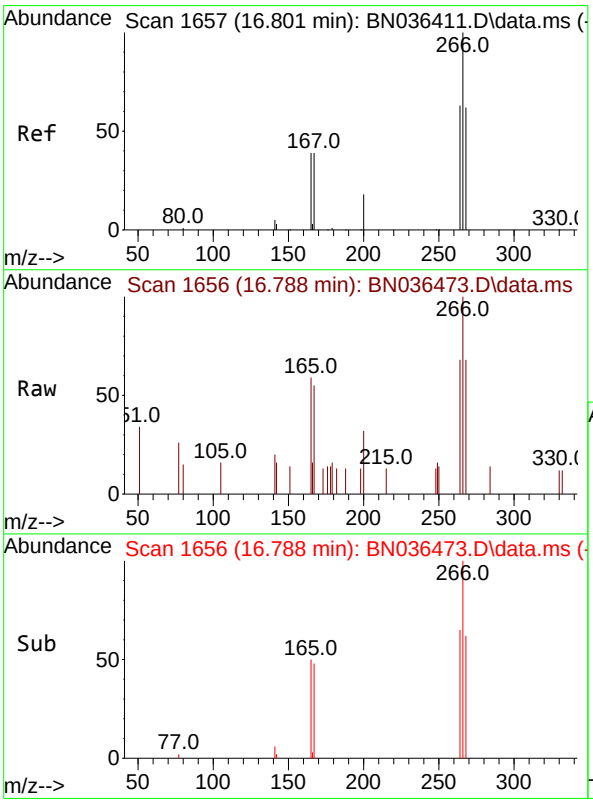
#23
Atrazine
Concen: 0.359 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.013 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 1102

Ion	Ratio	Lower	Upper
200	100		
173	31.6	23.2	34.8
215	45.4	40.0	60.0

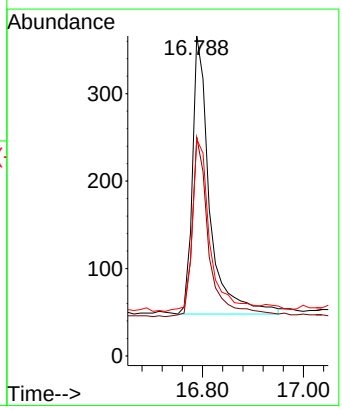


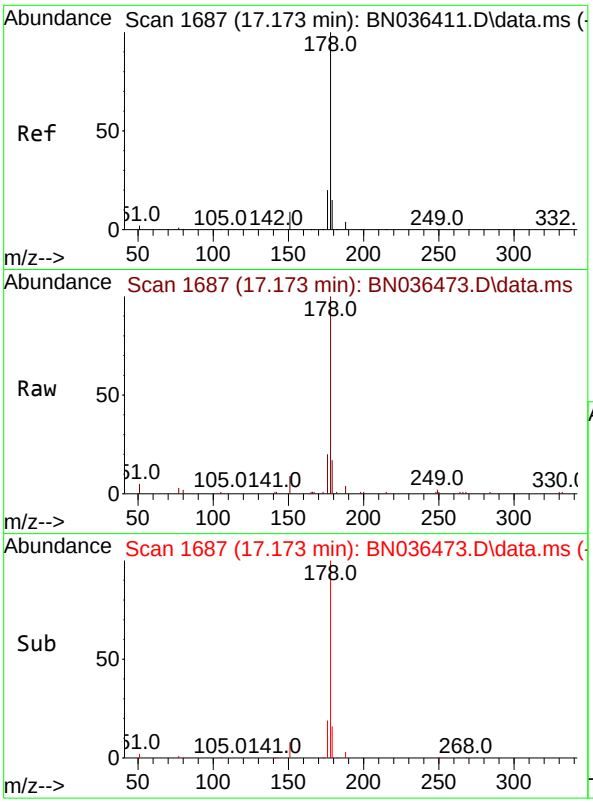


#24
Pentachlorophenol
Concen: 0.349 ng
RT: 16.788 min Scan# 1656
Delta R.T. -0.013 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:266 Resp: 753

Ion	Ratio	Lower	Upper
266	100		
264	62.5	50.6	76.0
268	63.7	51.9	77.9



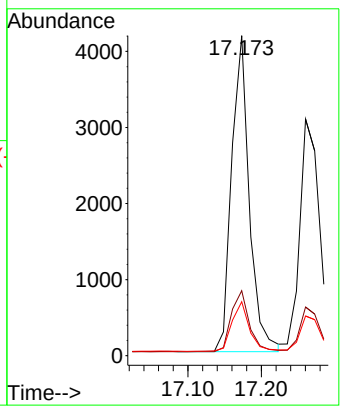


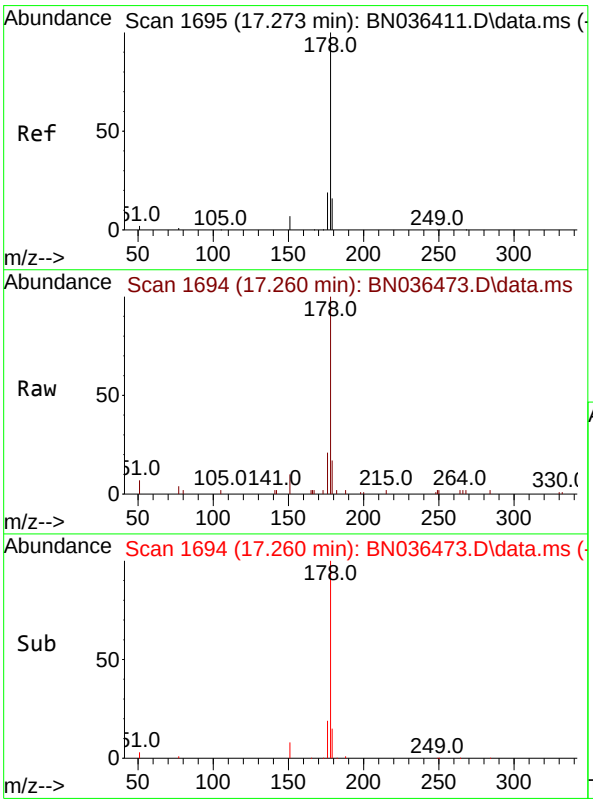
#25
Phenanthrene
Concen: 0.390 ng
RT: 17.173 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 6947

Ion	Ratio	Lower	Upper
178	100		
176	19.9	15.7	23.5
179	15.6	12.4	18.6

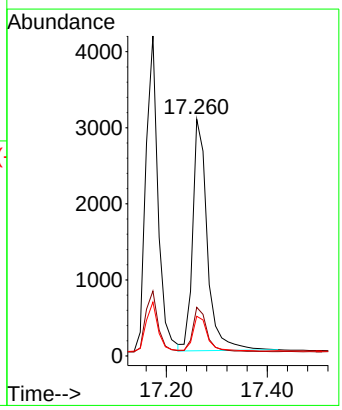


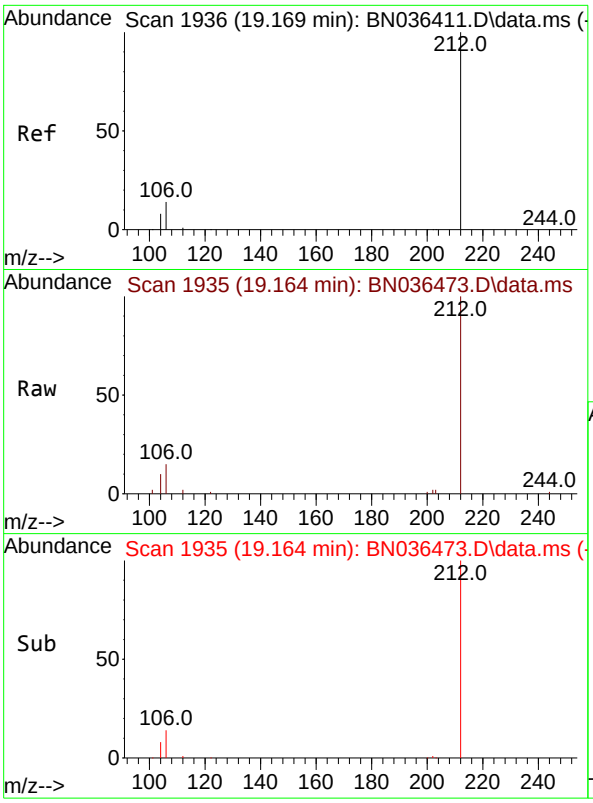


#26
Anthracene
Concen: 0.390 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.013 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:178 Resp: 6132

Ion	Ratio	Lower	Upper
178	100		
176	19.0	14.9	22.3
179	15.3	12.4	18.6



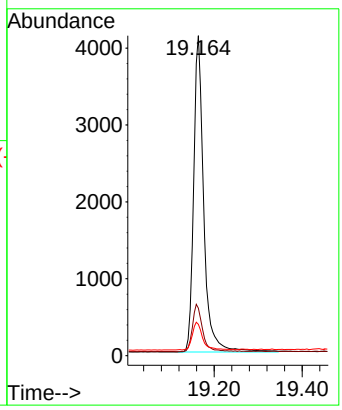


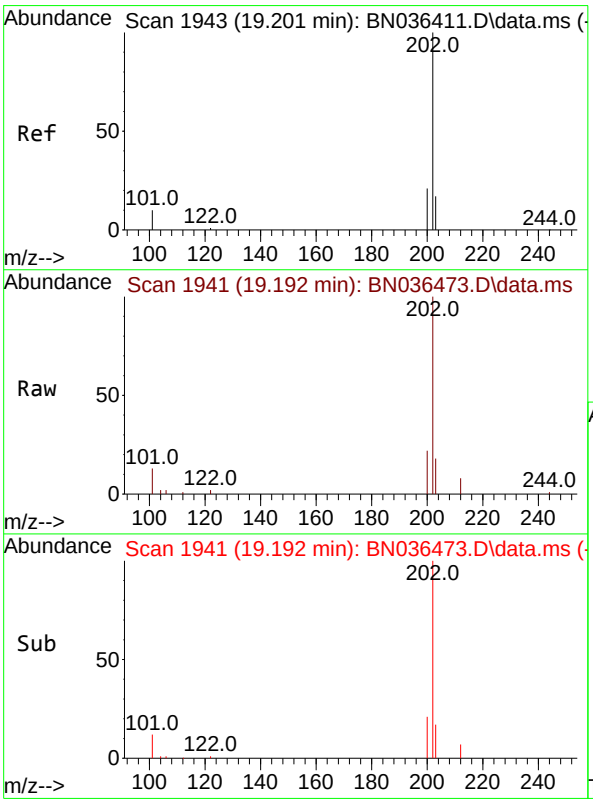
#27
Fluoranthene-d10
Concen: 0.382 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 6549

Ion	Ratio	Lower	Upper
212	100		
106	15.0	11.5	17.3
104	9.1	7.1	10.7

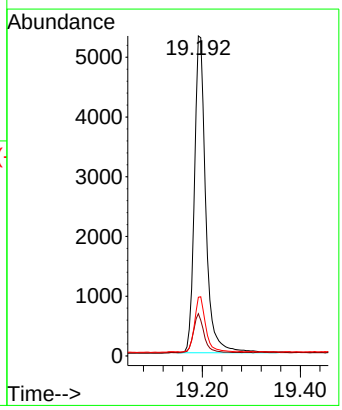


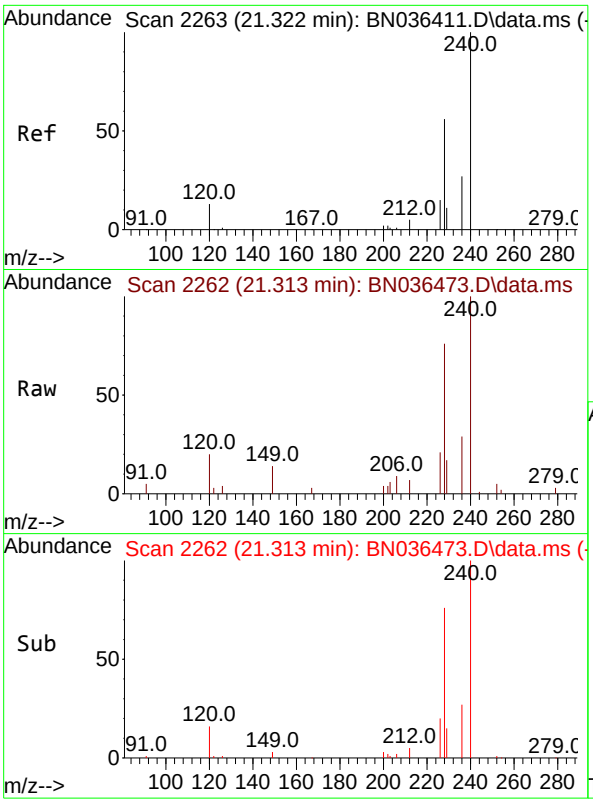


#28
Fluoranthene
Concen: 0.389 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:202 Resp: 8510

Ion	Ratio	Lower	Upper
202	100		
101	12.0	9.2	13.8
203	16.9	13.4	20.0



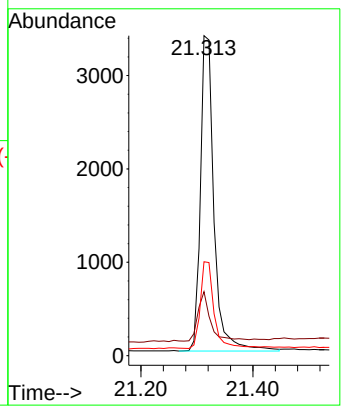


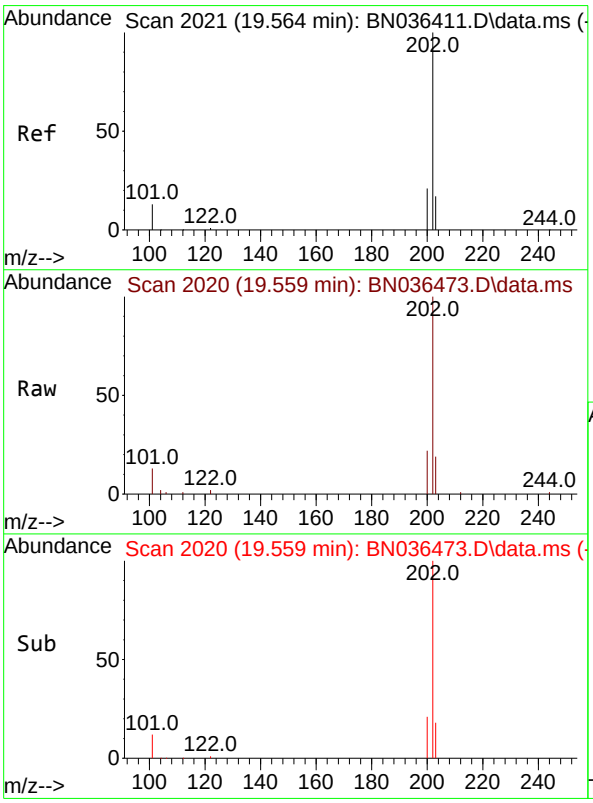
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 5687

Ion	Ratio	Lower	Upper
240	100		
120	20.0	13.3	19.9#
236	29.3	23.0	34.6

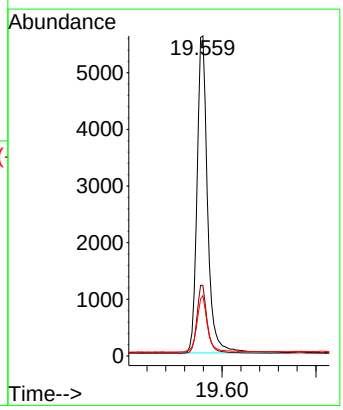


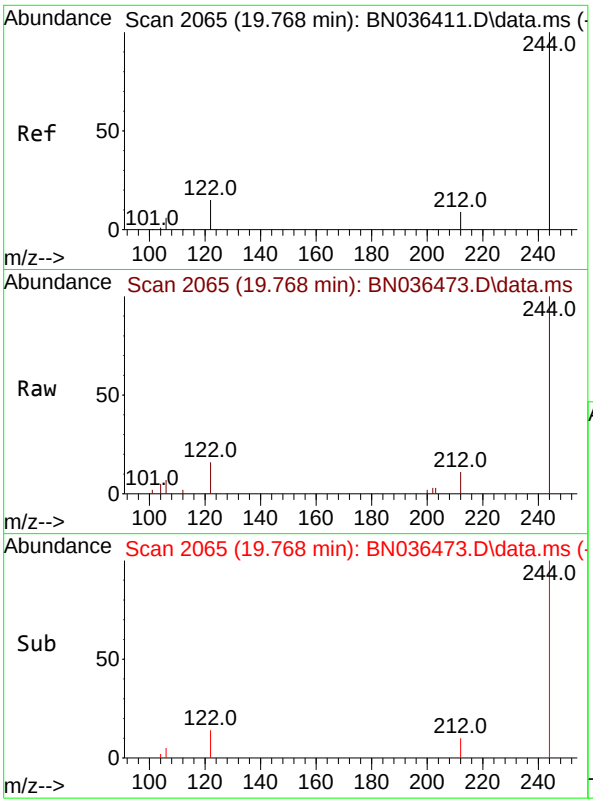


#30
Pyrene
Concen: 0.398 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:202 Resp: 8707

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.8	13.9	20.9



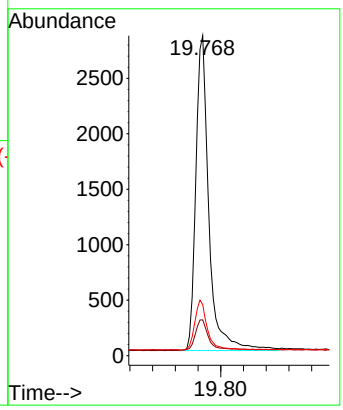


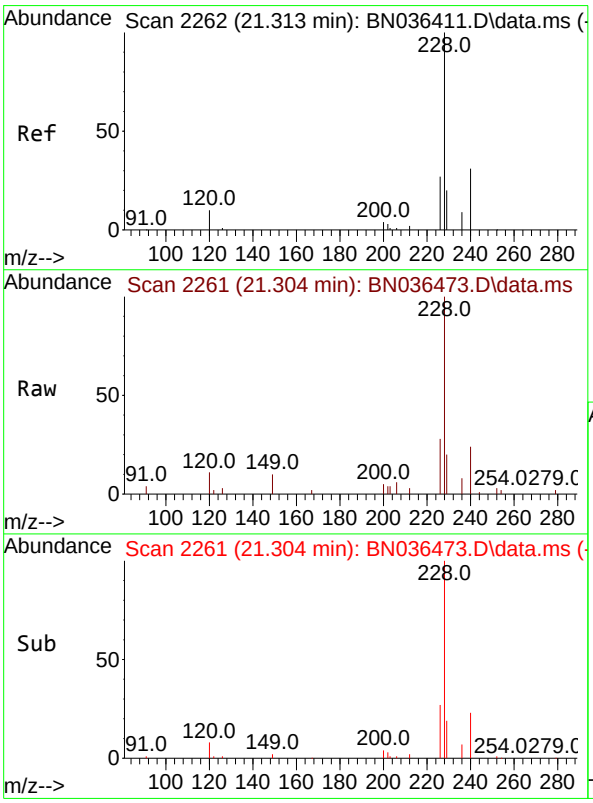
#31
Terphenyl-d14
Concen: 0.373 ng
RT: 19.768 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 4524

Ion	Ratio	Lower	Upper
244	100		
212	11.2	8.1	12.1
122	15.9	12.8	19.2

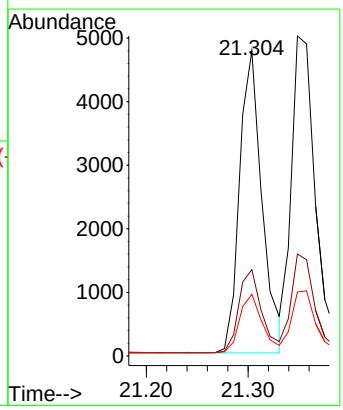


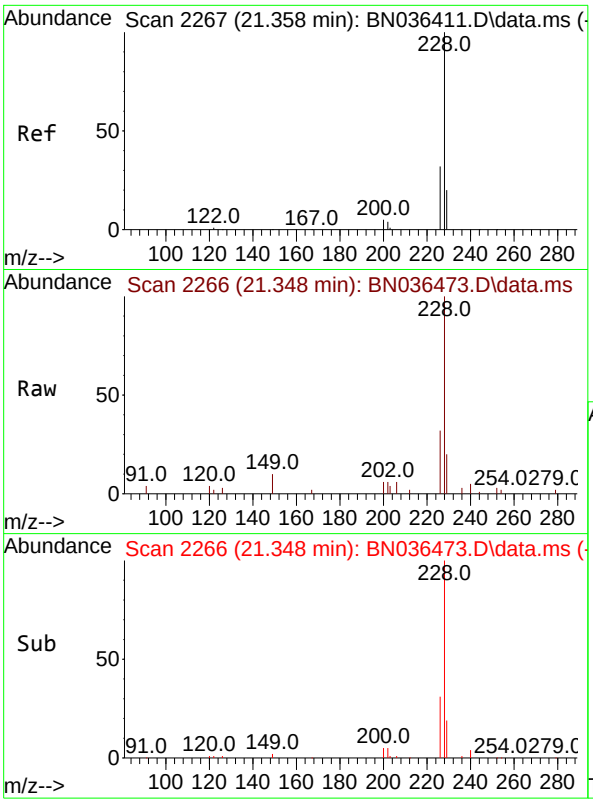


#32
Benzo(a)anthracene
Concen: 0.390 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:228 Resp: 7305

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.2	33.2
229	20.2	16.5	24.7



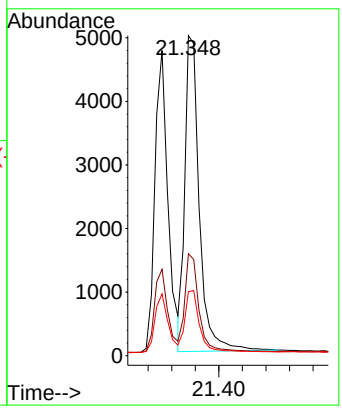


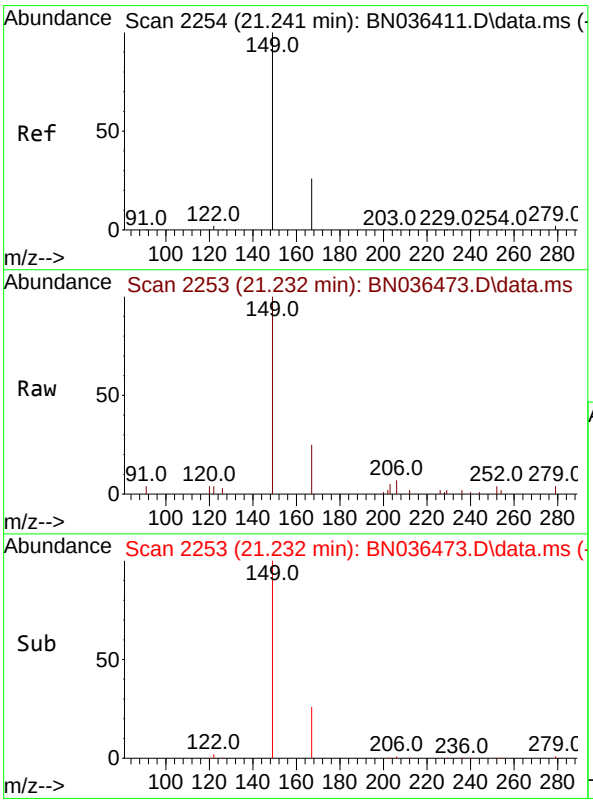
#33
Chrysene
Concen: 0.419 ng
RT: 21.348 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 8493

Ion	Ratio	Lower	Upper
228	100		
226	31.8	25.5	38.3
229	20.0	16.4	24.6

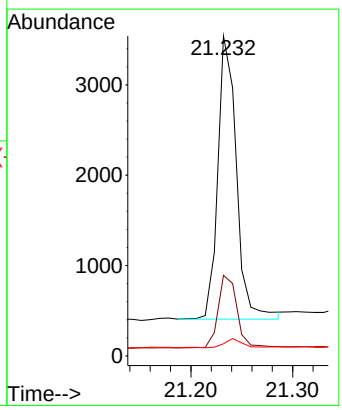


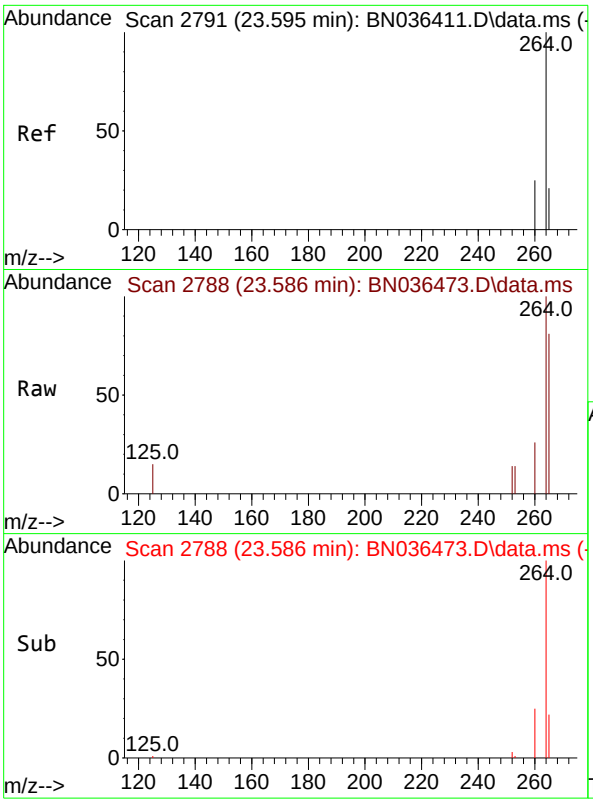


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.341 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:149 Resp: 3979

Ion	Ratio	Lower	Upper
149	100		
167	26.3	21.2	31.8
279	3.1	2.7	4.1



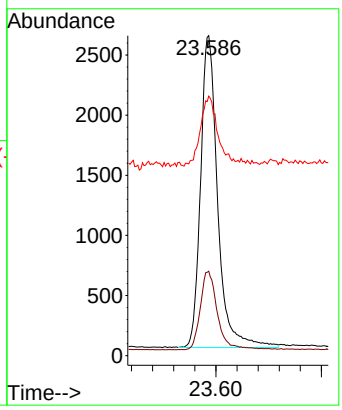


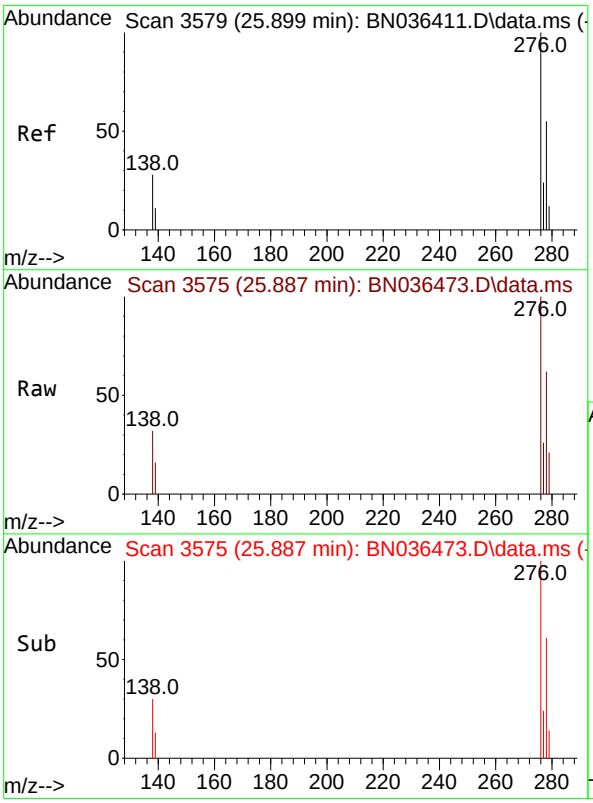
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.586 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 5826

Ion	Ratio	Lower	Upper
264	100		
260	26.4	20.9	31.3
265	81.1	60.7	91.1

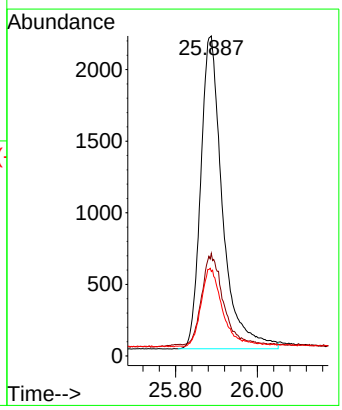


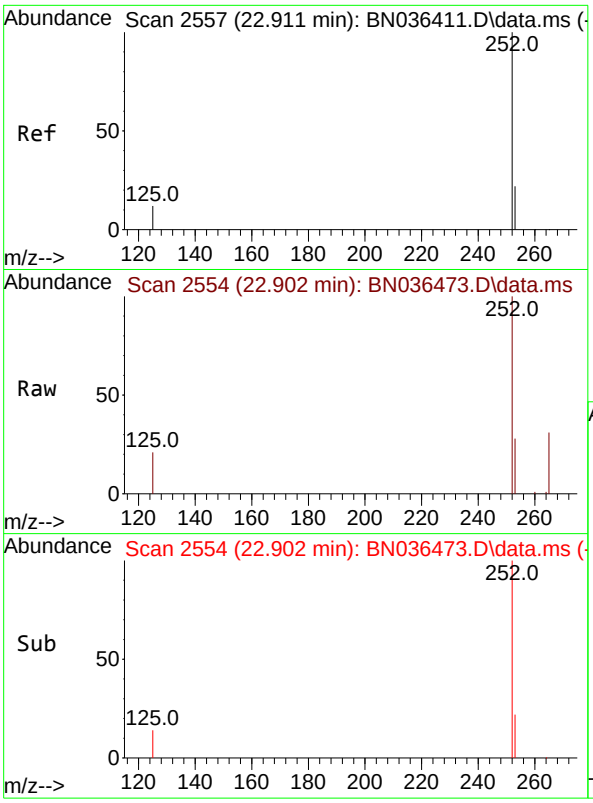


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.397 ng
RT: 25.887 min Scan# 3575
Delta R.T. -0.012 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:276 Resp: 8094

Ion	Ratio	Lower	Upper
276	100		
138	28.7	22.2	33.2
277	23.6	19.8	29.6



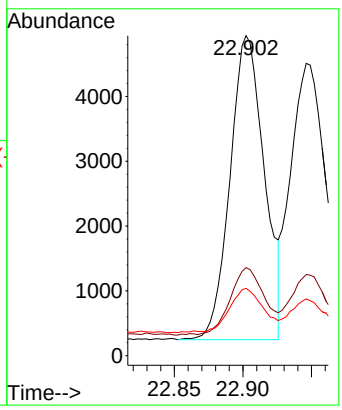


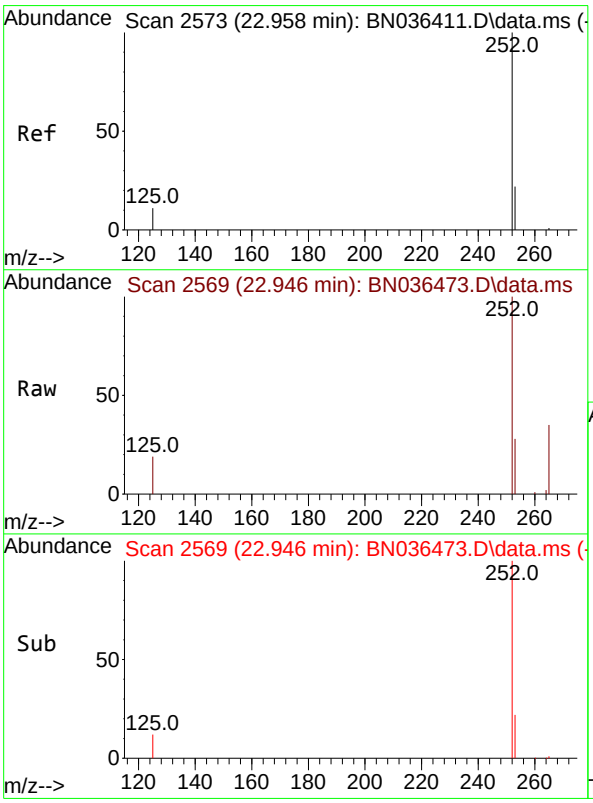
#37
Benzo(b)fluoranthene
Concen: 0.425 ng
RT: 22.902 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 8146

Ion	Ratio	Lower	Upper
252	100		
253	27.5	21.9	32.9
125	21.1	15.0	22.6

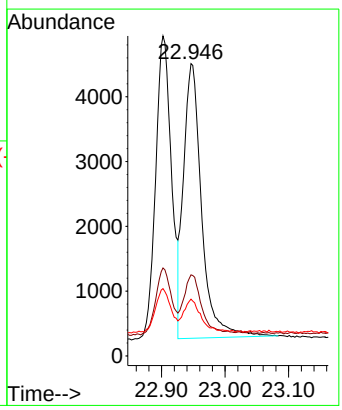


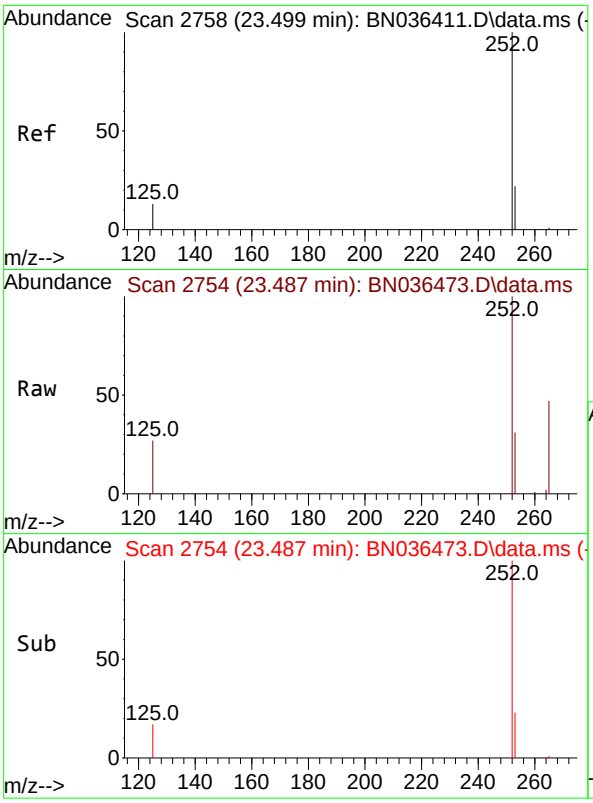


#38
Benzo(k)fluoranthene
Concen: 0.424 ng
RT: 22.946 min Scan# 2569
Delta R.T. -0.012 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:252 Resp: 8381

Ion	Ratio	Lower	Upper
252	100		
253	27.8	22.2	33.4
125	19.4	15.0	22.4



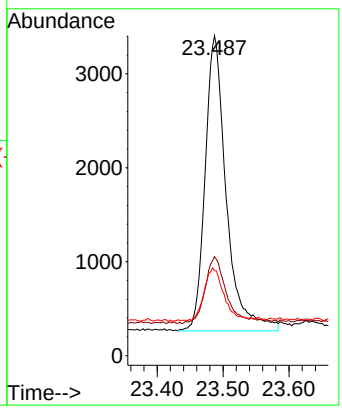


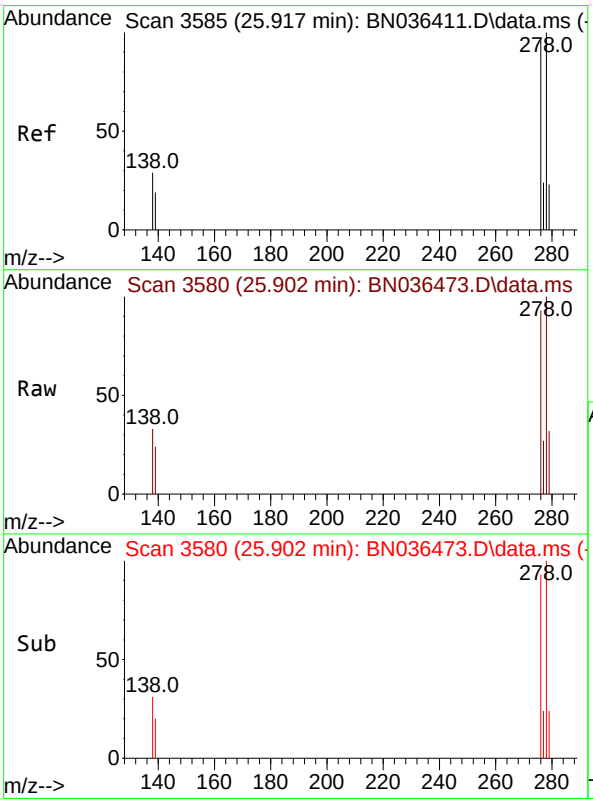
#39
Benzo(a)pyrene
Concen: 0.419 ng
RT: 23.487 min Scan# 2
Delta R.T. -0.012 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 7017

Ion	Ratio	Lower	Upper
252	100		
253	30.9	24.4	36.6
125	26.6	18.2	27.2

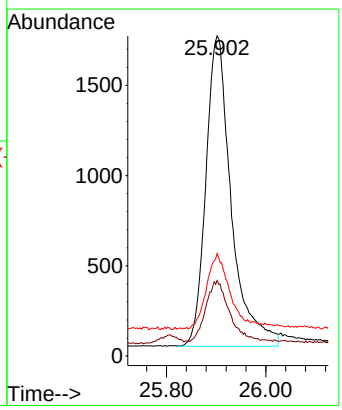


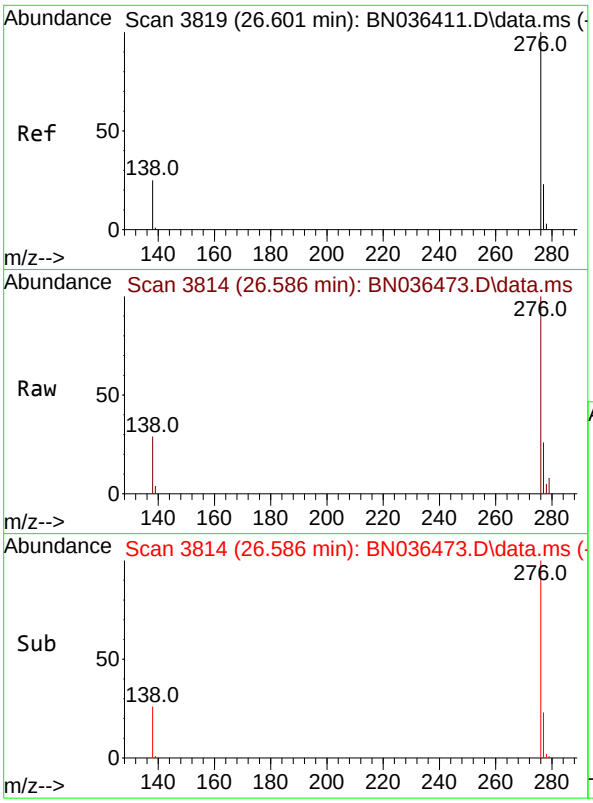


#40
Dibenzo(a,h)anthracene
Concen: 0.380 ng
RT: 25.902 min Scan# 3580
Delta R.T. -0.015 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Tgt Ion:278 Resp: 6114

Ion	Ratio	Lower	Upper
278	100		
139	23.6	18.5	27.7
279	32.0	24.8	37.2



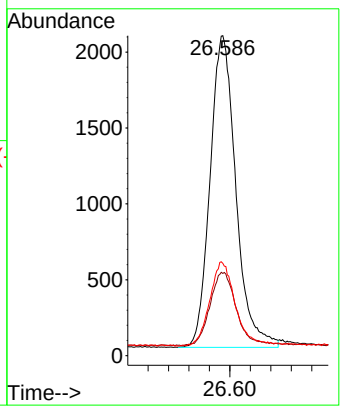


#41
Benzo(g,h,i)perylene
Concen: 0.395 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036473.D
Acq: 20 Feb 2025 10:11

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 7190

Ion	Ratio	Lower	Upper
276	100		
277	25.7	20.7	31.1
138	28.8	21.8	32.6



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036473.D
Acq On : 20 Feb 2025 10:11
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 21 00:08:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 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	80	0.00
2		1,4-Dioxane	0.438	0.446	-1.8	82	0.00
3		n-Nitrosodimethylamine	0.760	0.791	-4.1	82	0.00
4	S	2-Fluorophenol	0.945	0.879	7.0	75	0.00
5	S	Phenol-d6	1.109	1.046	5.7	81	-0.01
6		bis(2-Chloroethyl)ether	1.160	1.164	-0.3	85	-0.01
7	I	Naphthalene-d8	1.000	1.000	0.0	78	0.00
8	S	Nitrobenzene-d5	0.395	0.399	-1.0	85	-0.01
9		Naphthalene	1.154	1.138	1.4	79	-0.01
10		Hexachlorobutadiene	0.281	0.283	-0.7	77	-0.01
11	SURR	2-Methylnaphthalene-d10	0.615	0.585	4.9	75	-0.01
12		2-Methylnaphthalene	0.757	0.734	3.0	77	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	80	0.00
14	S	2,4,6-Tribromophenol	0.198	0.165	16.7	71	0.00
15	S	2-Fluorobiphenyl	1.504	1.478	1.7	86	-0.01
16		Acenaphthylene	1.767	1.621	8.3	77	-0.01
17		Acenaphthene	1.180	1.118	5.3	78	0.00
18		Fluorene	1.680	1.574	6.3	76	-0.01
19	I	Phenanthrene-d10	1.000	1.000	0.0	74	0.00
20		4,6-Dinitro-2-methylphenol	0.078	0.064	17.9	69	0.00
21		4-Bromophenyl-phenylether	0.239	0.234	2.1	75	0.00
22		Hexachlorobenzene	0.295	0.298	-1.0	78	-0.01
23		Atrazine	0.199	0.179	10.1	71	-0.01
24		Pentachlorophenol	0.140	0.122	12.9	74	-0.01
25		Phenanthrene	1.156	1.126	2.6	76	0.00
26		Anthracene	1.020	0.994	2.5	76	-0.01
27	SURR	Fluoranthene-d10	1.112	1.062	4.5	74	0.00
28		Fluoranthene	1.421	1.380	2.9	76	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	76	0.00
30		Pyrene	1.541	1.531	0.6	76	0.00
31	S	Terphenyl-d14	0.854	0.795	6.9	71	0.00
32		Benzo(a)anthracene	1.316	1.285	2.4	75	0.00
33		Chrysene	1.425	1.493	-4.8	83	0.00
34		Bis(2-ethylhexyl)phthalate	0.820	0.700	14.6	68	0.00
35	I	Perylene-d12	1.000	1.000	0.0	75	0.00
36		Indeno(1,2,3-cd)pyrene	1.398	1.389	0.6	76	-0.01
37		Benzo(b)fluoranthene	1.317	1.398	-6.2	84	0.00
38		Benzo(k)fluoranthene	1.356	1.439	-6.1	79	-0.01
39	C	Benzo(a)pyrene	1.150	1.204	-4.7	82	-0.01
40		Dibenzo(a,h)anthracene	1.103	1.049	4.9	74	-0.01
41		Benzo(g,h,i)perylene	1.250	1.234	1.3	74	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036473.D
Acq On : 20 Feb 2025 10:11
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 21 00:08:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 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	80	0.00
2		1,4-Dioxane	0.400	0.408	-2.0	82	0.00
3		n-Nitrosodimethylamine	0.400	0.416	-4.0	82	0.00
4	S	2-Fluorophenol	0.400	0.372	7.0	75	0.00
5	S	Phenol-d6	0.400	0.377	5.8	81	-0.01
6		bis(2-Chloroethyl)ether	0.400	0.401	-0.3	85	-0.01
7	I	Naphthalene-d8	0.400	0.400	0.0	78	0.00
8	S	Nitrobenzene-d5	0.400	0.405	-1.3	85	-0.01
9		Naphthalene	0.400	0.394	1.5	79	-0.01
10		Hexachlorobutadiene	0.400	0.403	-0.8	77	-0.01
11	SURR	2-Methylnaphthalene-d10	0.400	0.380	5.0	75	-0.01
12		2-Methylnaphthalene	0.400	0.388	3.0	77	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	80	0.00
14	S	2,4,6-Tribromophenol	0.400	0.333	16.8	71	0.00
15	S	2-Fluorobiphenyl	0.400	0.393	1.8	86	-0.01
16		Acenaphthylene	0.400	0.367	8.3	77	-0.01
17		Acenaphthene	0.400	0.379	5.3	78	0.00
18		Fluorene	0.400	0.375	6.3	76	-0.01
19	I	Phenanthrene-d10	0.400	0.400	0.0	74	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.326	18.5	69	0.00
21		4-Bromophenyl-phenylether	0.400	0.393	1.8	75	0.00
22		Hexachlorobenzene	0.400	0.404	-1.0	78	-0.01
23		Atrazine	0.400	0.359	10.3	71	-0.01
24		Pentachlorophenol	0.400	0.349	12.8	74	-0.01
25		Phenanthrene	0.400	0.390	2.5	76	0.00
26		Anthracene	0.400	0.390	2.5	76	-0.01
27	SURR	Fluoranthene-d10	0.400	0.382	4.5	74	0.00
28		Fluoranthene	0.400	0.389	2.8	76	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	76	0.00
30		Pyrene	0.400	0.398	0.5	76	0.00
31	S	Terphenyl-d14	0.400	0.373	6.8	71	0.00
32		Benzo(a)anthracene	0.400	0.390	2.5	75	0.00
33		Chrysene	0.400	0.419	-4.7	83	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.341	14.8	68	0.00
35	I	Perylene-d12	0.400	0.400	0.0	75	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.397	0.8	76	-0.01
37		Benzo(b)fluoranthene	0.400	0.425	-6.2	84	0.00
38		Benzo(k)fluoranthene	0.400	0.424	-6.0	79	-0.01
39	C	Benzo(a)pyrene	0.400	0.419	-4.7	82	-0.01
40		Dibenzo(a,h)anthracene	0.400	0.380	5.0	74	-0.01
41		Benzo(g,h,i)perylene	0.400	0.395	1.3	74	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: TETR06

Lab Code: CHEM Case No.: Q1380 SAS No.: Q1380 SDG No.: Q1380

Instrument ID: BNA_N Calibration Date/Time: 02/20/2025 16:08

Lab File ID: BN036482.D Init. Calib. Date(s): 02/10/2025 02/10/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 12:25 16:00

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.615	0.590		-4.1	50.0
Fluoranthene-d10	1.112	1.050		-5.6	50.0
2-Fluorophenol	0.945	0.903		-4.4	50.0
Phenol-d6	1.109	1.067		-3.8	50.0
Nitrobenzene-d5	0.395	0.392		-0.8	50.0
2-Fluorobiphenyl	1.504	1.565		4.1	50.0
2,4,6-Tribromophenol	0.198	0.163		-17.7	50.0
Terphenyl-d14	0.854	0.801		-6.2	50.0
1,4-Dioxane	0.438	0.416		-5.0	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\BN022025\
Data File : BN036482.D
Acq On : 20 Feb 2025 16:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Feb 21 00:12:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	2017	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	4822	0.400	ng	# 0.00
13) Acenaphthene-d10	14.388	164	3262	0.400	ng	0.00
19) Phenanthrene-d10	17.124	188	6914	0.400	ng	#-0.01
29) Chrysene-d12	21.322	240	6182	0.400	ng	# 0.00
35) Perylene-d12	23.587	264	6375	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.334	112	1821	0.382	ng	-0.01
5) Phenol-d6	6.923	99	2152	0.385	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1892	0.398	ng	-0.01
11) 2-Methylnaphthalene-d10	12.131	152	2847	0.384	ng	-0.01
14) 2,4,6-Tribromophenol	15.883	330	533	0.330	ng	0.00
15) 2-Fluorobiphenyl	13.009	172	5105	0.416	ng	-0.01
27) Fluoranthene-d10	19.164	212	7260	0.378	ng	0.00
31) Terphenyl-d14	19.768	244	4950	0.375	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.261	88	839	0.380	ng	97
3) n-Nitrosodimethylamine	3.579	42	1556	0.406	ng	96
6) bis(2-Chloroethyl)ether	7.168	93	2310	0.395	ng	99
9) Naphthalene	10.584	128	5486	0.394	ng	99
10) Hexachlorobutadiene	10.872	225	1352	0.399	ng	# 99
12) 2-Methylnaphthalene	12.207	142	3576	0.392	ng	98
16) Acenaphthylene	14.099	152	5339	0.371	ng	100
17) Acenaphthene	14.441	154	3586	0.373	ng	99
18) Fluorene	15.435	166	5179	0.378	ng	99
20) 4,6-Dinitro-2-methylph...	15.523	198	443	0.327	ng	93
21) 4-Bromophenyl-phenylether	16.329	248	1615	0.392	ng	# 84
22) Hexachlorobenzene	16.441	284	2053	0.403	ng	98
23) Atrazine	16.602	200	1254	0.364	ng	96
24) Pentachlorophenol	16.789	266	845	0.349	ng	95
25) Phenanthrene	17.173	178	7909	0.396	ng	100
26) Anthracene	17.260	178	6847	0.388	ng	100
28) Fluoranthene	19.192	202	9570	0.390	ng	99
30) Pyrene	19.559	202	9761	0.410	ng	99
32) Benzo(a)anthracene	21.304	228	7952	0.391	ng	99
33) Chrysene	21.358	228	9374	0.426	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	4422	0.349	ng	99
36) Indeno(1,2,3-cd)pyrene	25.885	276	8878	0.398	ng	99
37) Benzo(b)fluoranthene	22.902	252	8760	0.417	ng	98
38) Benzo(k)fluoranthene	22.949	252	9091m	0.421	ng	
39) Benzo(a)pyrene	23.490	252	7583	0.414	ng	96
40) Dibenzo(a,h)anthracene	25.905	278	6854	0.390	ng	99
41) Benzo(g,h,i)perylene	26.586	276	7966	0.400	ng	98

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

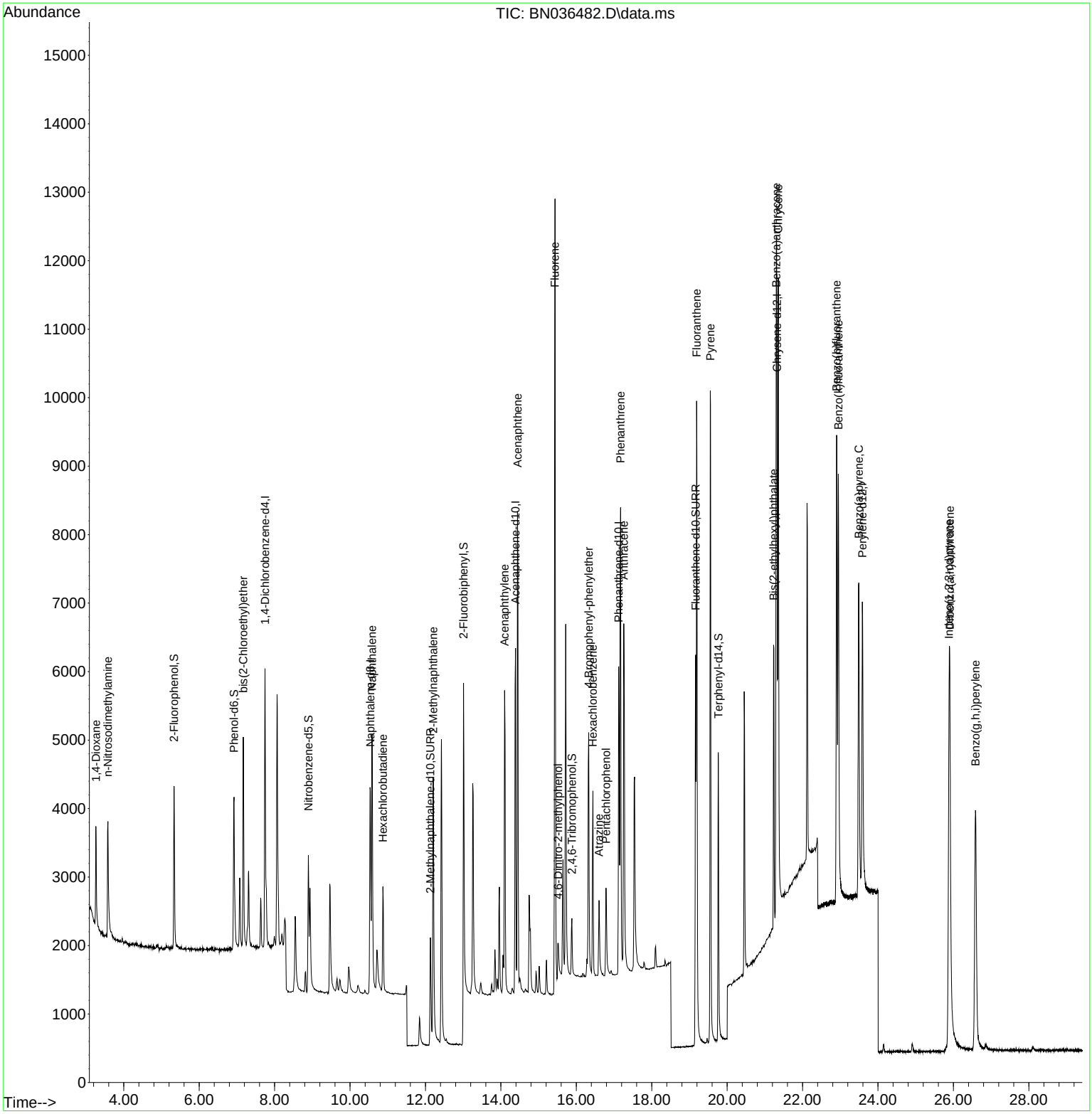
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036482.D
Acq On : 20 Feb 2025 16:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

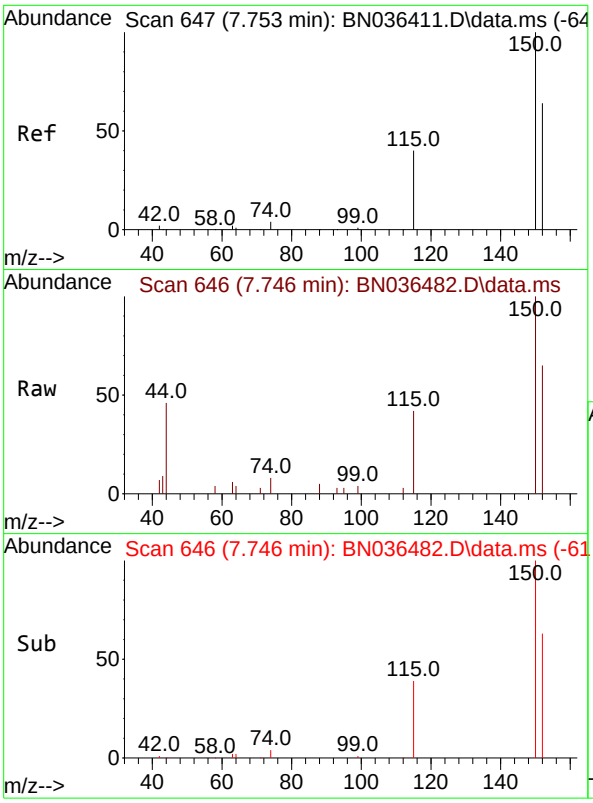
Quant Time: Feb 21 00:12:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

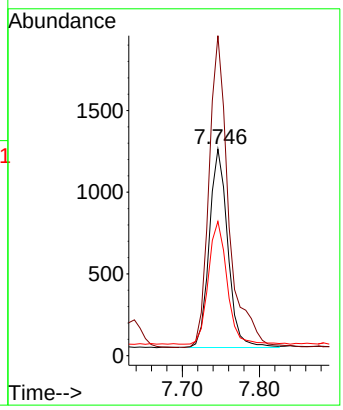




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:152 Resp: 201

Ion	Ratio	Lower	Upper
152	100		
150	154.9	123.7	185.5
115	65.0	52.5	78.7



Instrument :
BNA_N
ClientSampleId :
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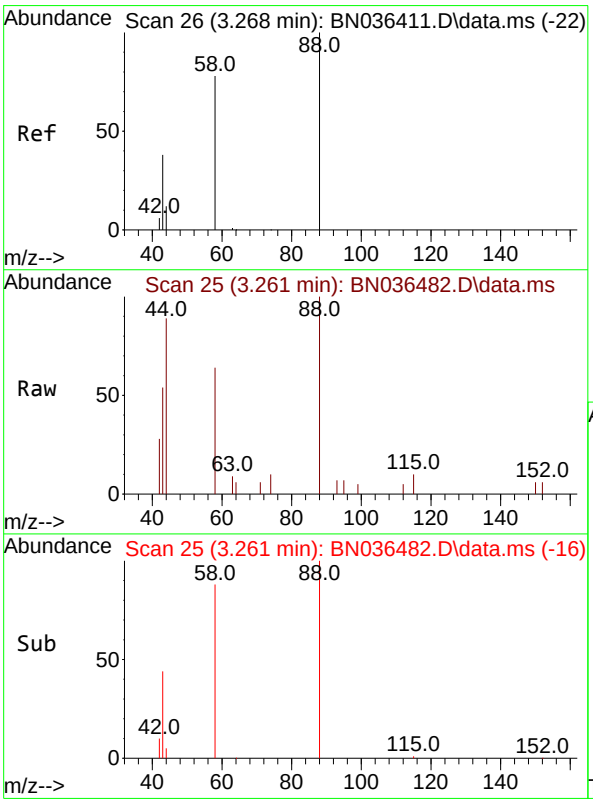
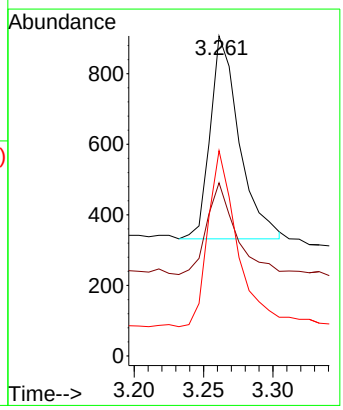
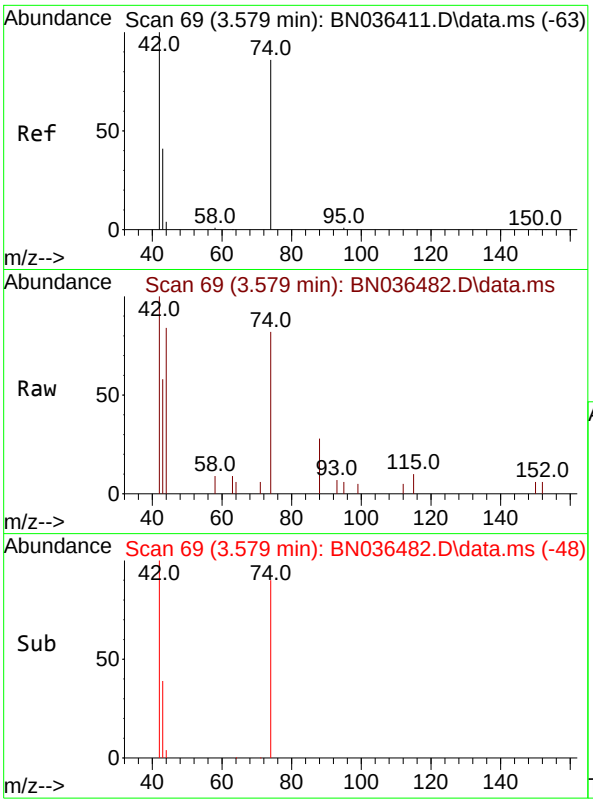


#2
1,4-Dioxane
Concen: 0.380 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 88 Resp: 839

Ion	Ratio	Lower	Upper
88	100		
43	45.4	33.7	50.5
58	88.0	68.9	103.3

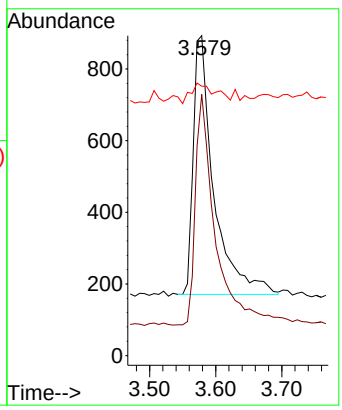




#3
n-Nitrosodimethylamine
Concen: 0.406 ng
RT: 3.579 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 42 Resp: 155

Ion	Ratio	Lower	Upper
42	100		
74	85.9	71.8	107.6
44	9.6	7.8	11.6



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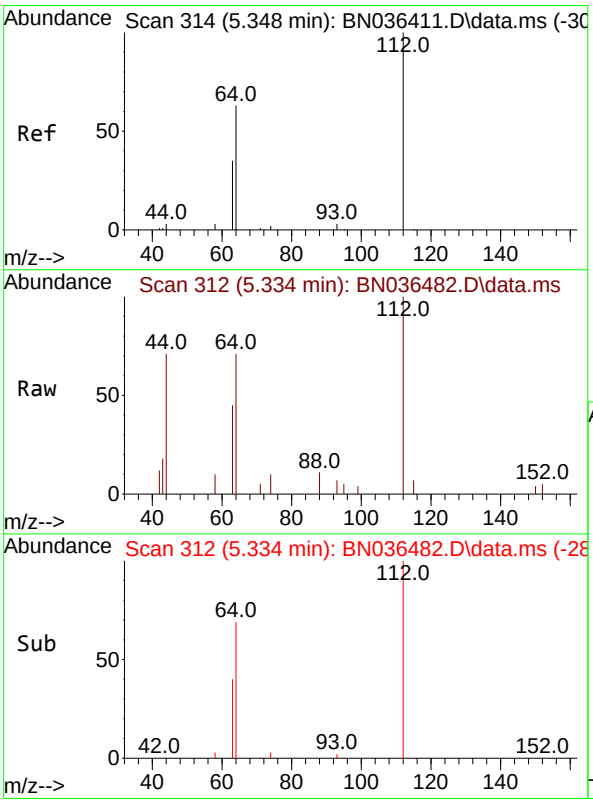
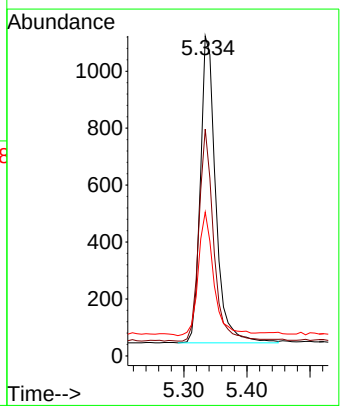
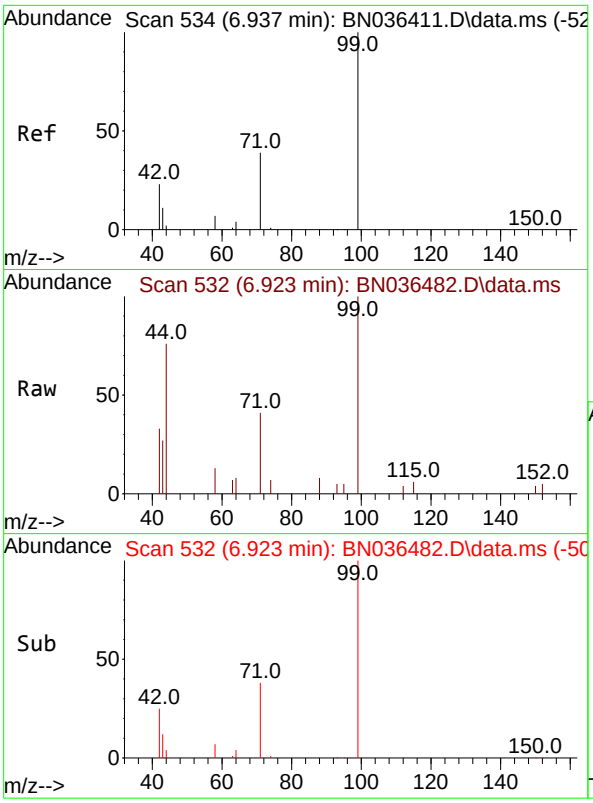


#4
2-Fluorophenol
Concen: 0.382 ng
RT: 5.334 min Scan# 312
Delta R.T. -0.014 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:112 Resp: 1821

Ion	Ratio	Lower	Upper
112	100		
64	66.1	53.4	80.0
63	40.9	30.3	45.5





#5
Phenol-d6
Concen: 0.385 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.014 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 99 Resp: 215

Ion	Ratio	Lower	Upper
99	100		
42	30.4	21.7	32.5
71	41.6	32.6	49.0

Instrument :
BNA_N
ClientSampleId :
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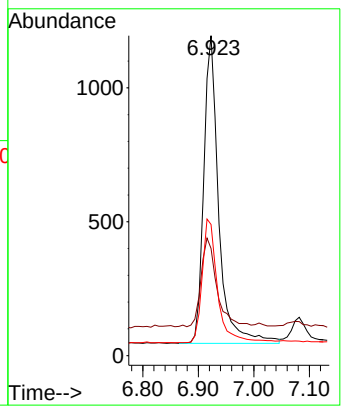
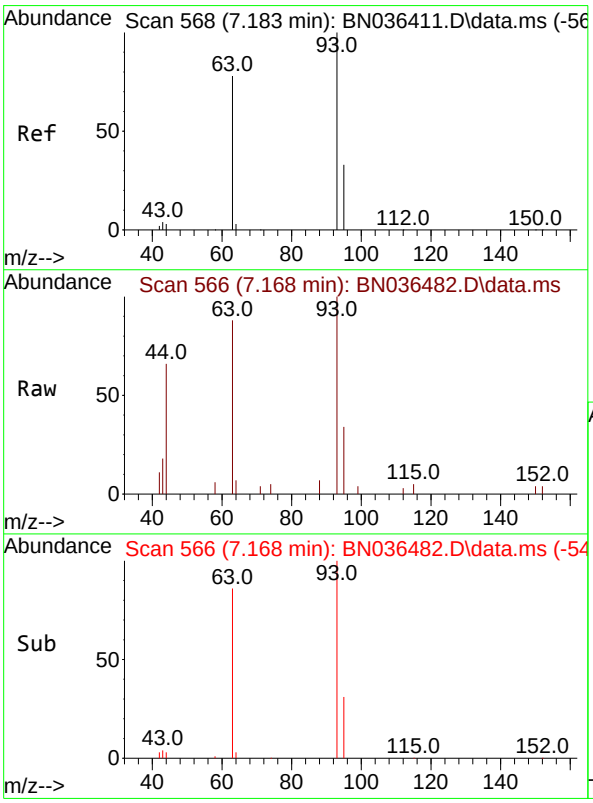
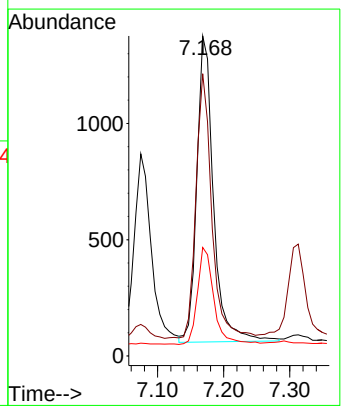


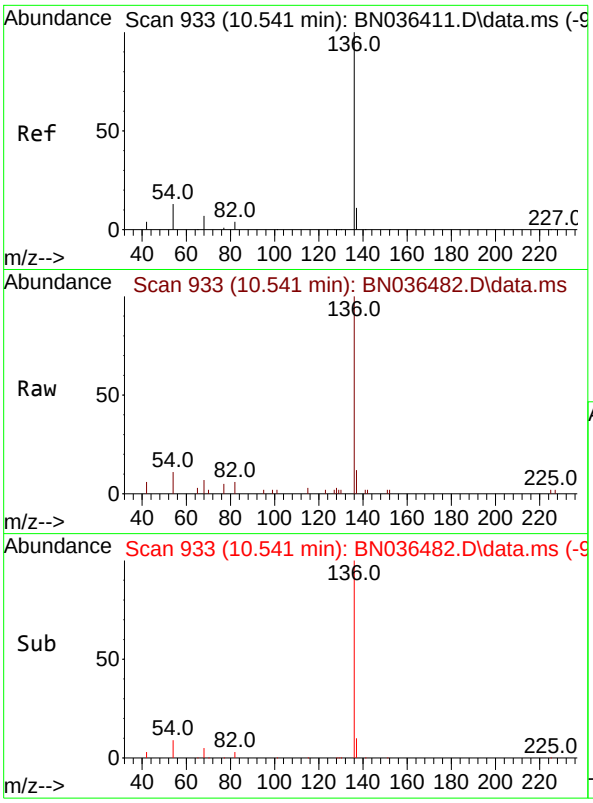


#6
bis(2-Chloroethyl)ether
Concen: 0.395 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.014 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 93 Resp: 2310

Ion	Ratio	Lower	Upper
93	100		
63	82.3	66.3	99.5
95	31.2	26.2	39.4

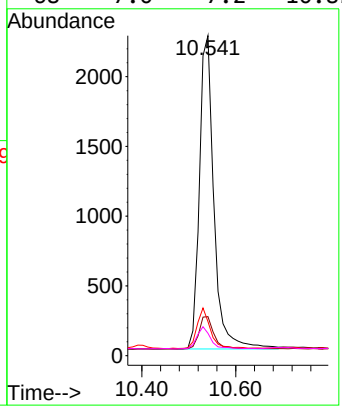




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:136 Resp: 482

Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.1	15.1
54	10.6	11.8	17.6#
68	7.0	7.2	10.8#



Instrument :
BNA_N
ClientSampleId :
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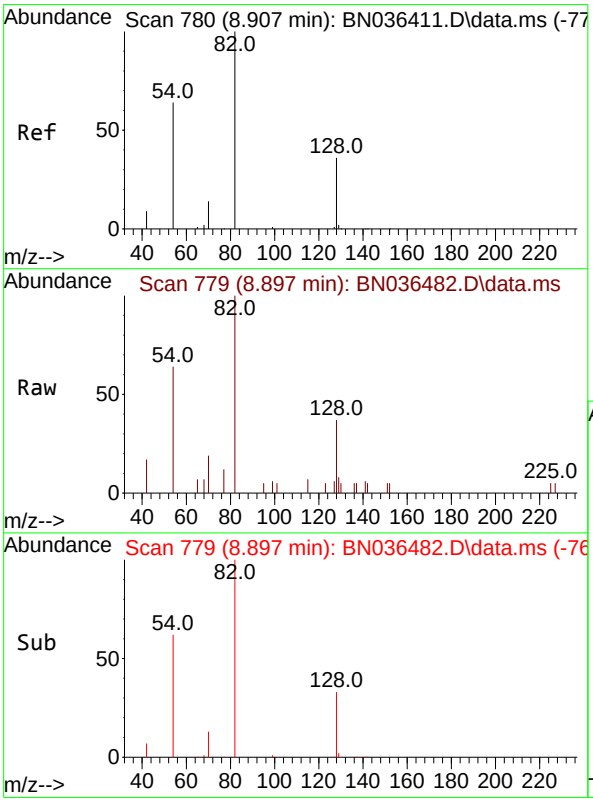
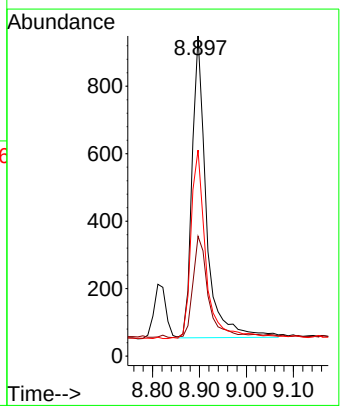
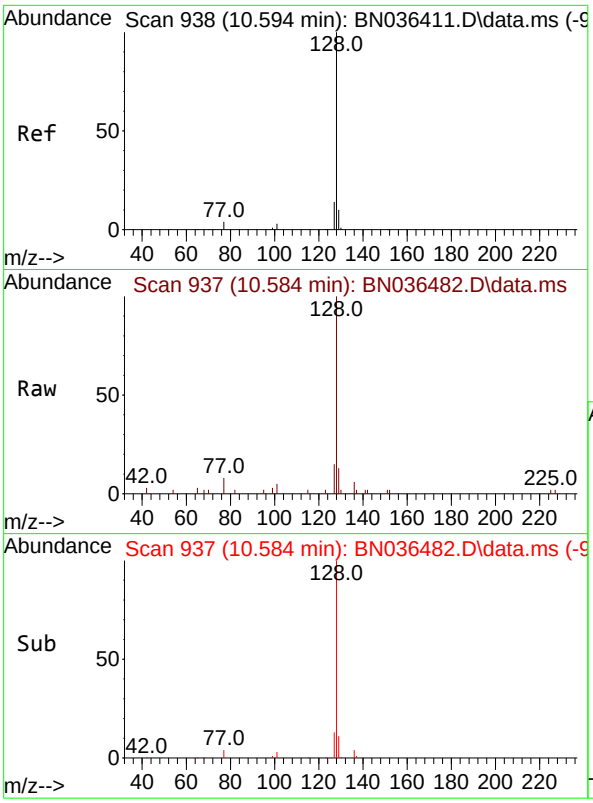


#8
Nitrobenzene-d5
Concen: 0.398 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 82 Resp: 1892

Ion	Ratio	Lower	Upper
82	100		
128	37.4	31.9	47.9
54	64.4	53.1	79.7

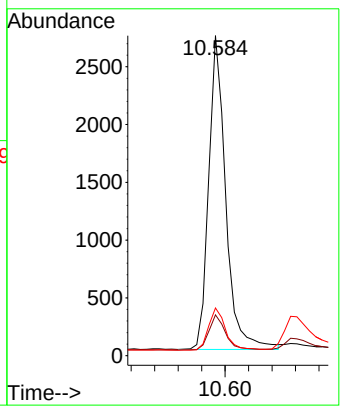




#9
Naphthalene
Concen: 0.394 ng
RT: 10.584 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:128 Resp: 548

Ion	Ratio	Lower	Upper
128	100		
129	12.7	9.6	14.4
127	14.9	12.0	18.0



Instrument :
BNA_N
ClientSampleId :
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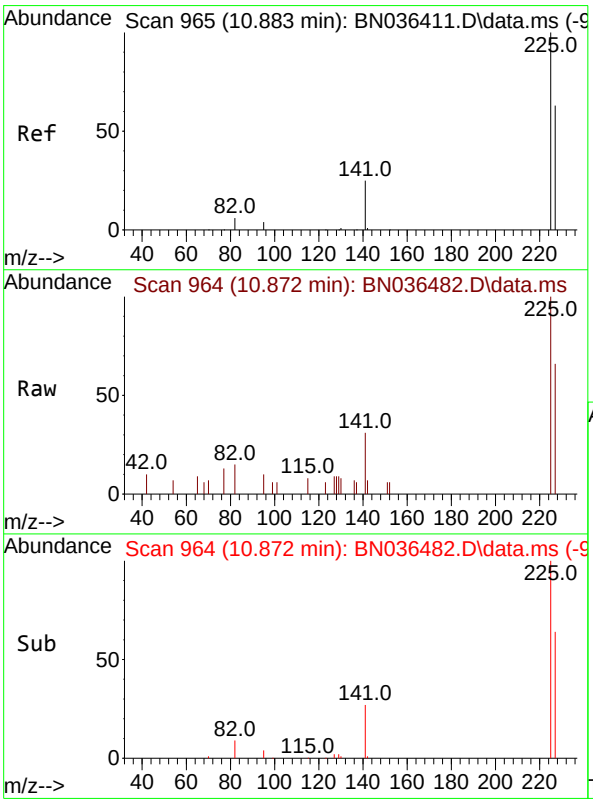
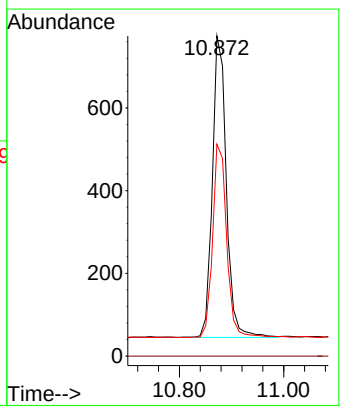
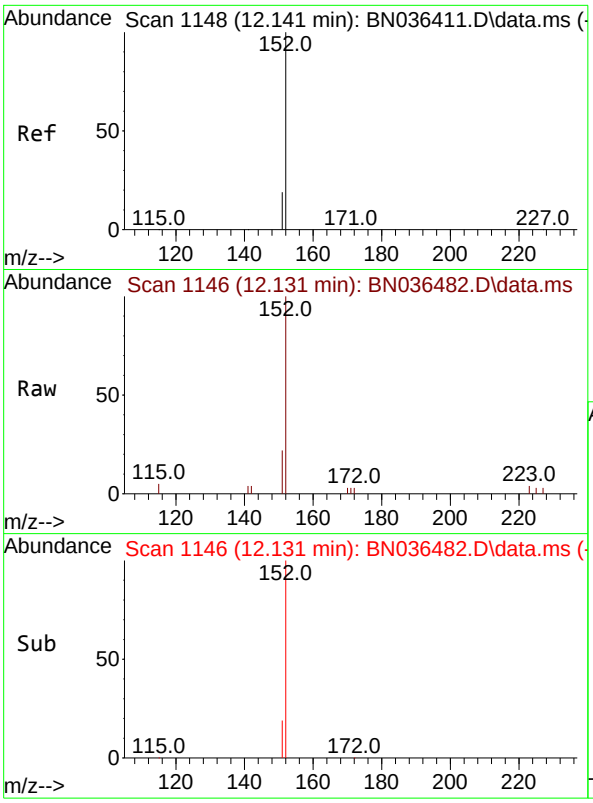


#10
Hexachlorobutadiene
Concen: 0.399 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:225 Resp: 1352

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.6	50.9	76.3

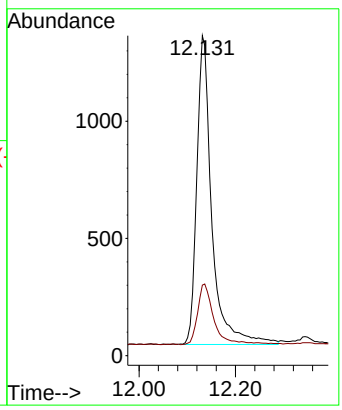




#11
2-Methylnaphthalene-d10
Concen: 0.384 ng
RT: 12.131 min Scan# 1
Delta R.T. -0.010 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:152 Resp: 284

Ion	Ratio	Lower	Upper
152	100		
151	21.8	16.6	25.0



Instrument :
BNA_N
ClientSampleId :
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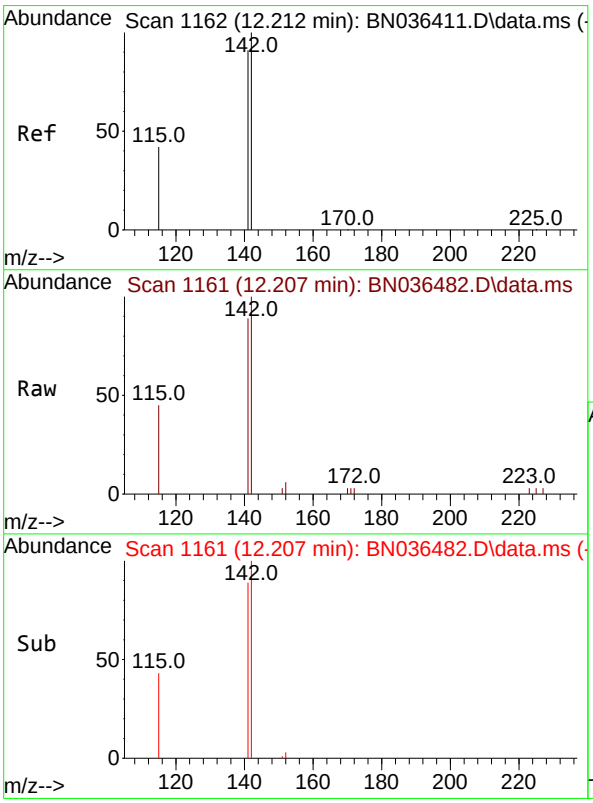
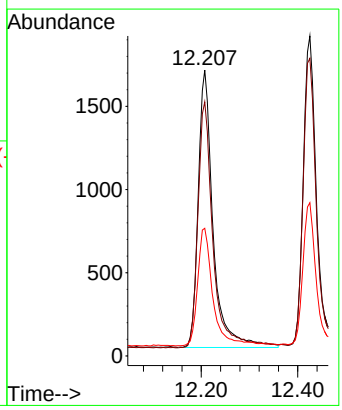
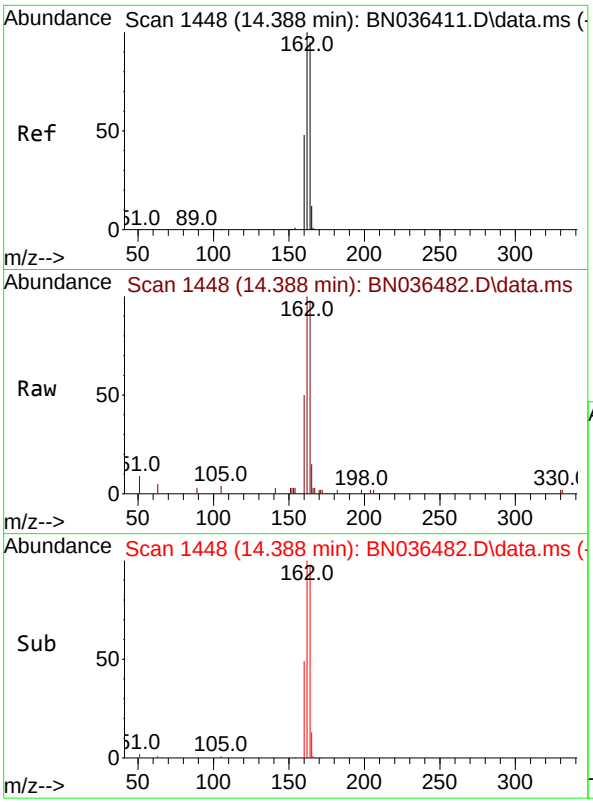


#12
2-Methylnaphthalene
Concen: 0.392 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:142 Resp: 3576

Ion	Ratio	Lower	Upper
142	100		
141	88.9	72.8	109.2
115	44.6	35.5	53.3

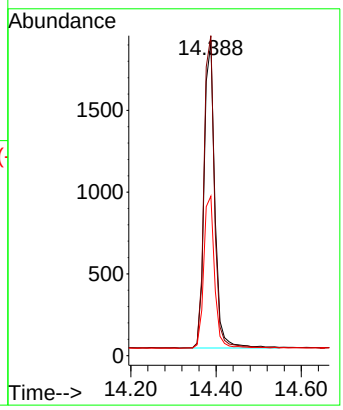




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:164 Resp: 326

Ion	Ratio	Lower	Upper
164	100		
162	102.1	84.1	126.1
160	50.9	41.4	62.0



Instrument :
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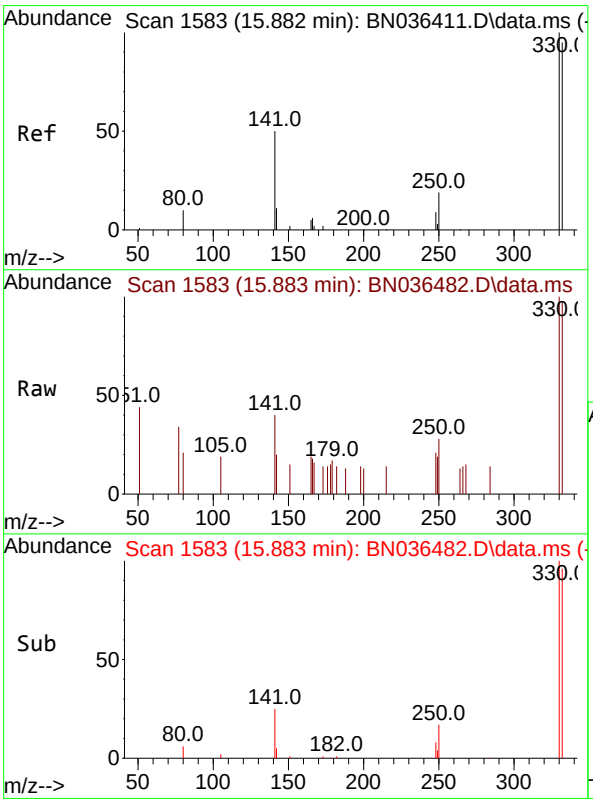
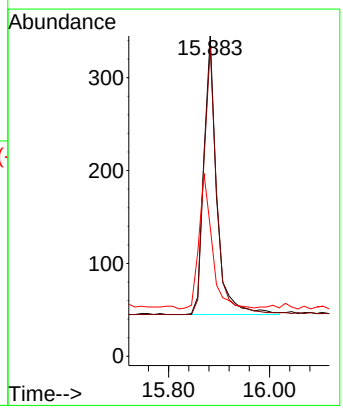
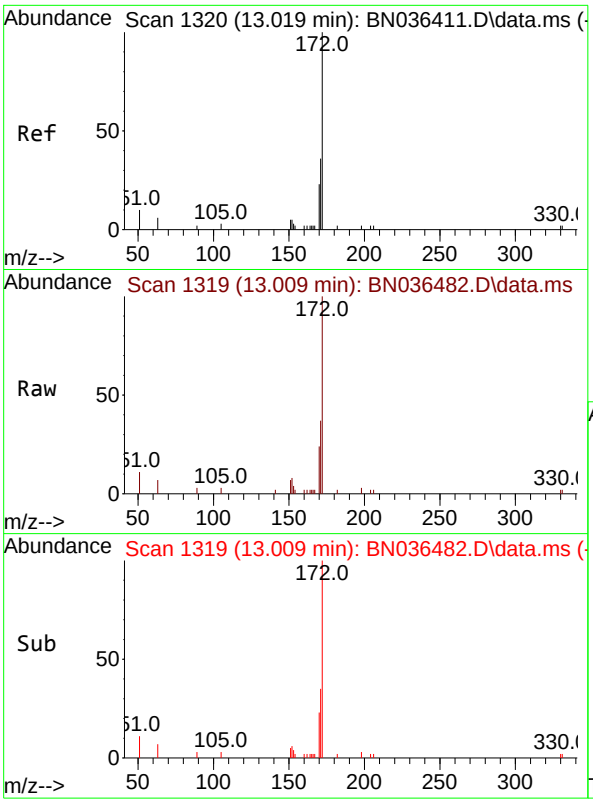


#14
2,4,6-Tribromophenol
Concen: 0.330 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:330 Resp: 533

Ion	Ratio	Lower	Upper
330	100		
332	96.6	76.6	114.8
141	49.9	37.8	56.8

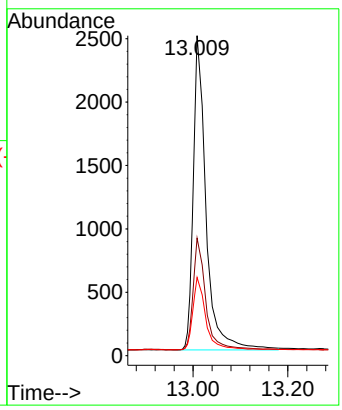




#15
2-Fluorobiphenyl
Concen: 0.416 ng
RT: 13.009 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:172 Resp: 510

Ion	Ratio	Lower	Upper
172	100		
171	36.7	29.6	44.4
170	24.4	19.8	29.6



Instrument :
BNA_N
ClientSampleId :
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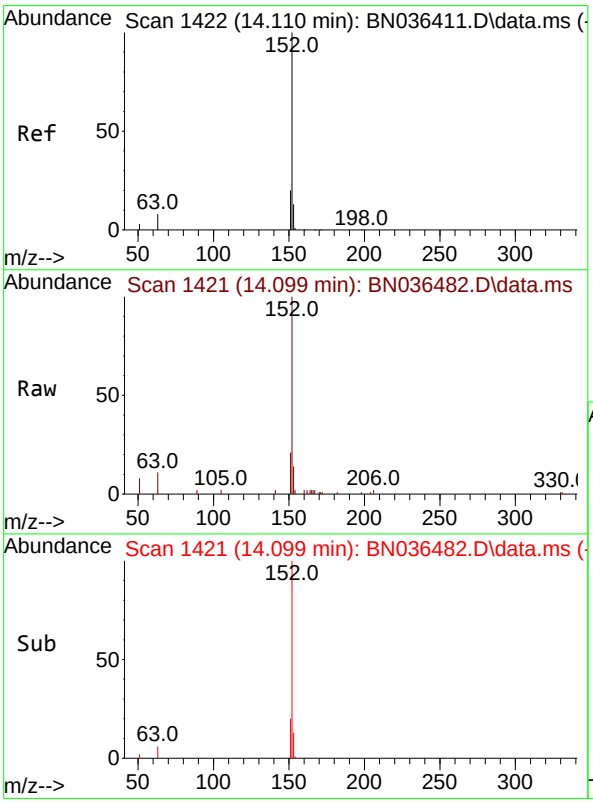
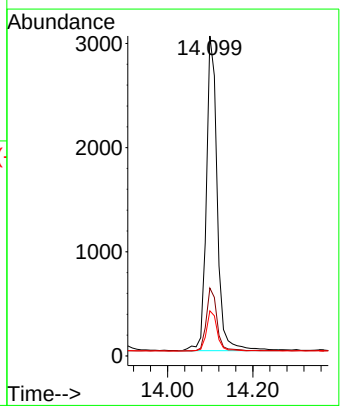
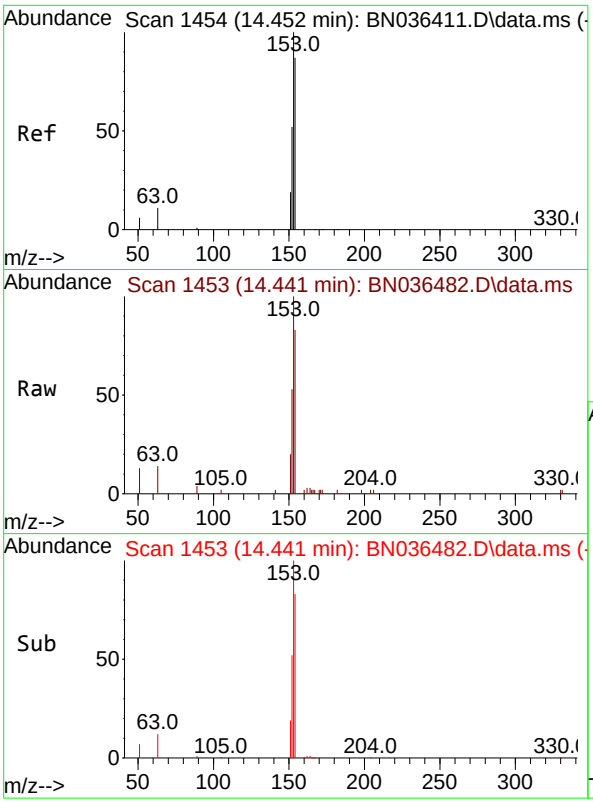


#16
Acenaphthylene
Concen: 0.371 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:152 Resp: 5339

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.8	23.8
153	12.6	10.2	15.2

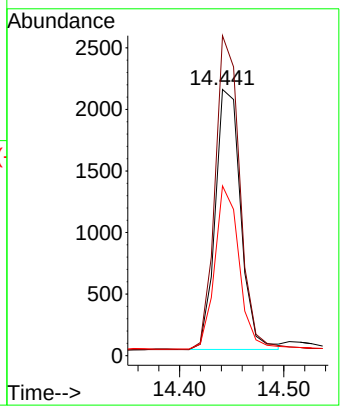




#17
Acenaphthene
Concen: 0.373 ng
RT: 14.441 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:154 Resp: 358

Ion	Ratio	Lower	Upper
154	100		
153	118.5	93.3	139.9
152	61.0	48.8	73.2



Instrument :
BNA_N
ClientSampleId :
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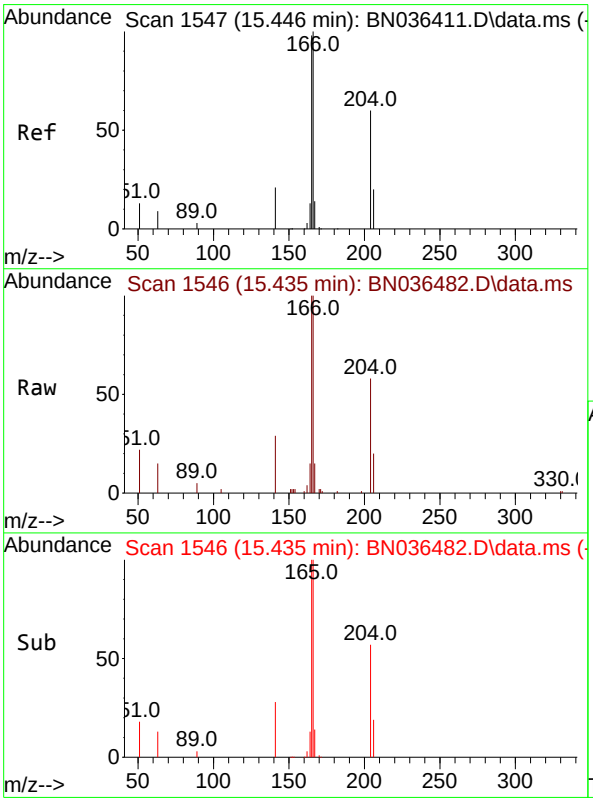
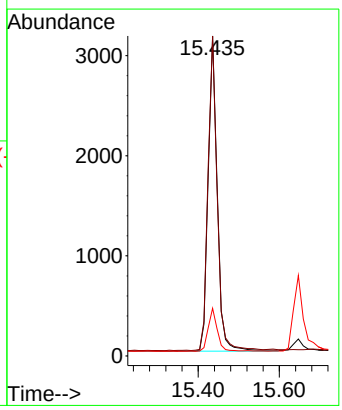
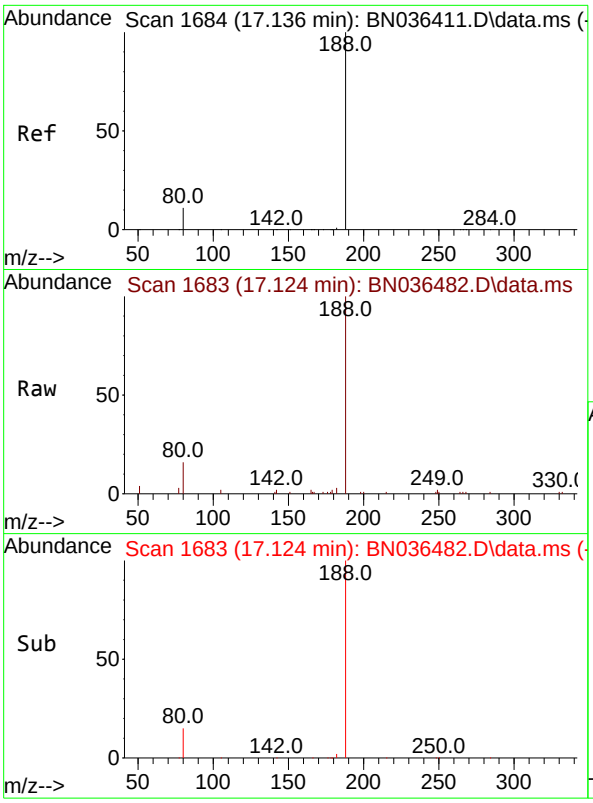


#18
Fluorene
Concen: 0.378 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:166 Resp: 5179

Ion	Ratio	Lower	Upper
166	100		
165	99.0	79.5	119.3
167	13.8	10.4	15.6

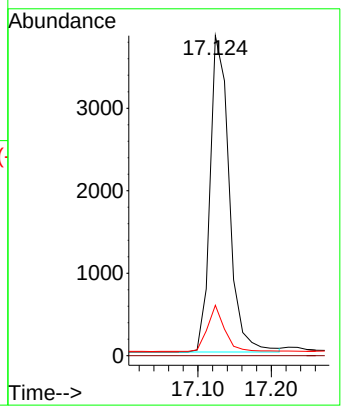




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1(
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:188 Resp: 691

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.8	9.8	14.6



Instrument :
BNA_N
ClientSampleId :
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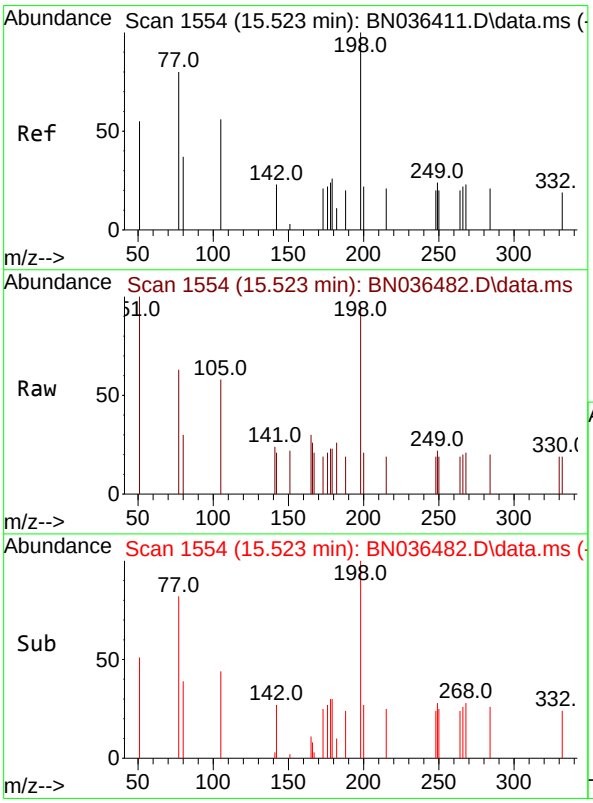
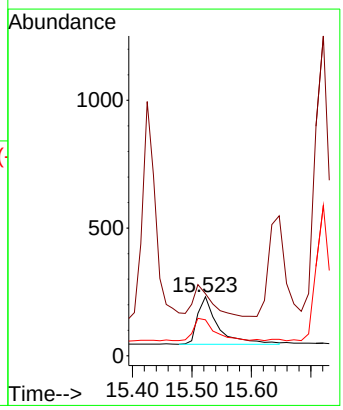
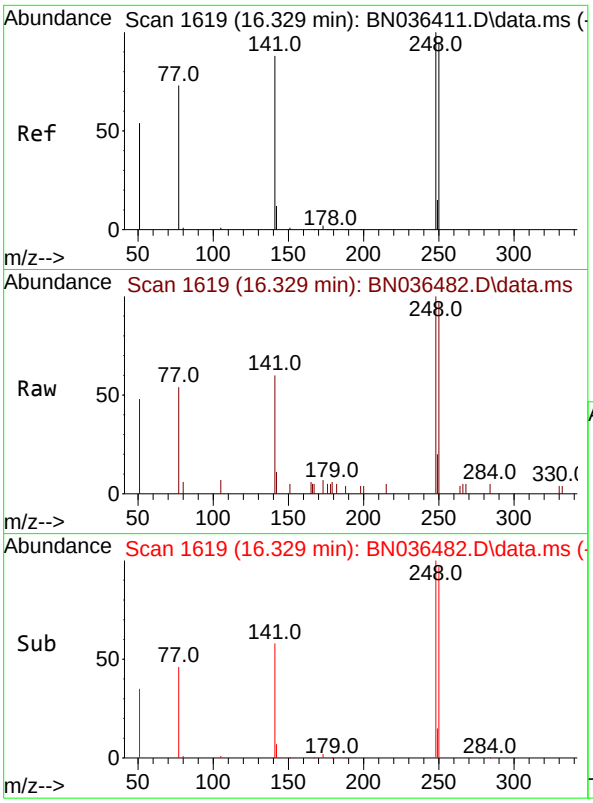


#20
4,6-Dinitro-2-methylphenol
Concen: 0.327 ng
RT: 15.523 min Scan# 1554
Delta R.T. -0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:198 Resp: 443

Ion	Ratio	Lower	Upper
198	100		
51	105.2	86.6	129.8
105	61.0	57.5	86.3

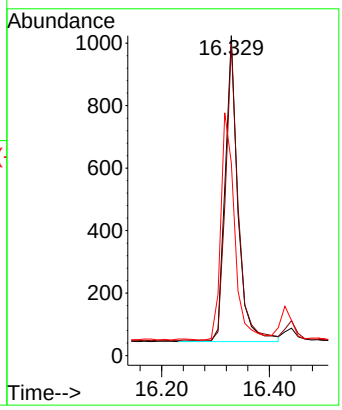




#21
4-Bromophenyl-phenylether
Concen: 0.392 ng
RT: 16.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:248 Resp: 161

Ion	Ratio	Lower	Upper
248	100		
250	97.5	76.1	114.1
141	60.3	71.7	107.5#



Instrument :
BNA_N
ClientSampleId :
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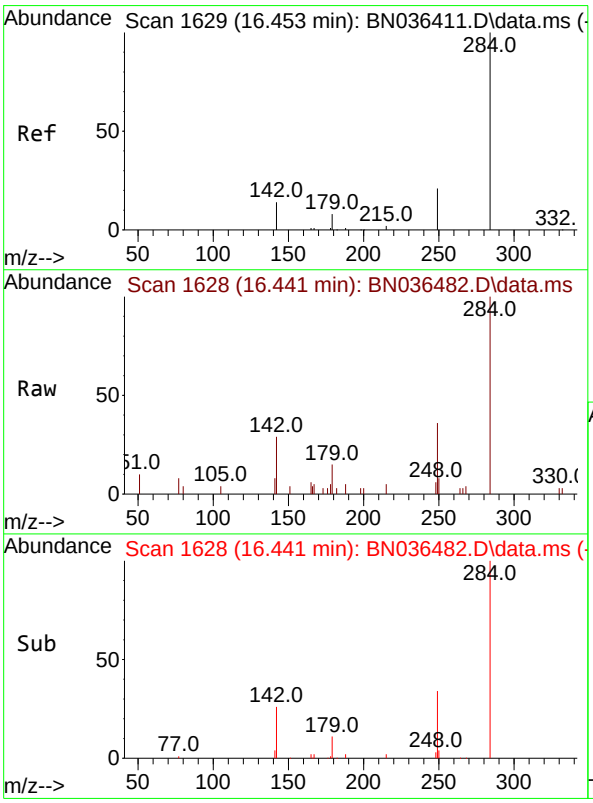
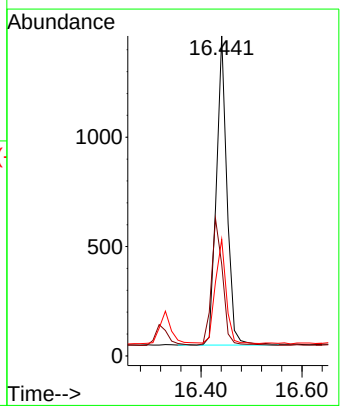
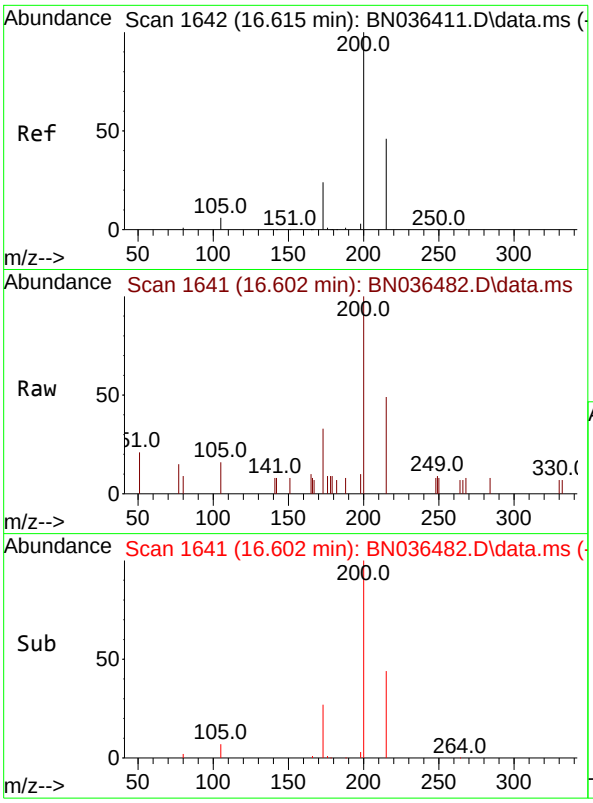


#22
Hexachlorobenzene
Concen: 0.403 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:284 Resp: 2053

Ion	Ratio	Lower	Upper
284	100		
142	43.4	33.4	50.0
249	34.5	28.6	43.0

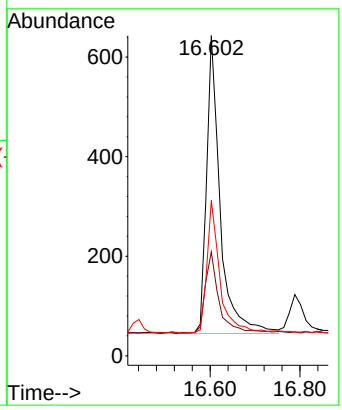




#23
Atrazine
Concen: 0.364 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:200 Resp: 125

Ion	Ratio	Lower	Upper
200	100		
173	32.5	23.2	34.8
215	48.5	40.0	60.0



Instrument :
BNA_N
ClientSampleId :
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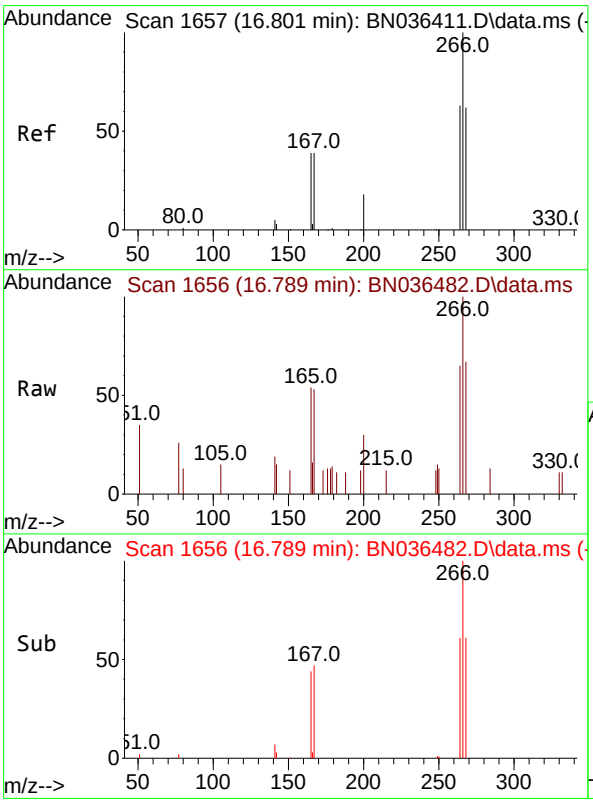
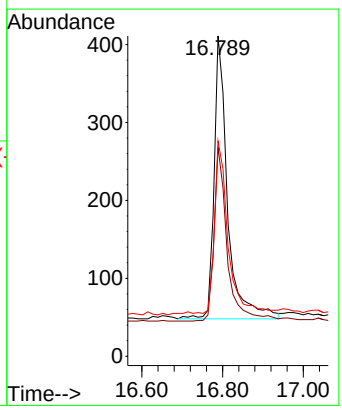
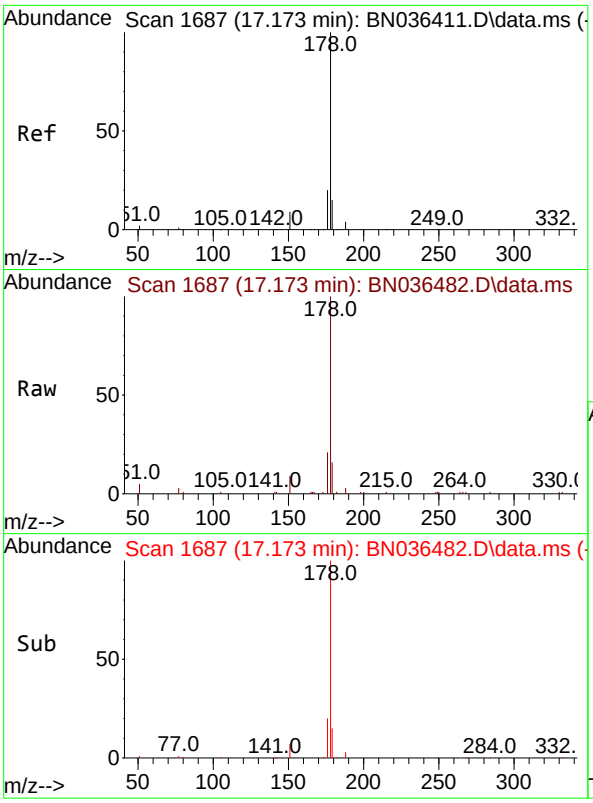


#24
Pentachlorophenol
Concen: 0.349 ng
RT: 16.789 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:266 Resp: 845

Ion	Ratio	Lower	Upper
266	100		
264	59.2	50.6	76.0
268	60.7	51.9	77.9

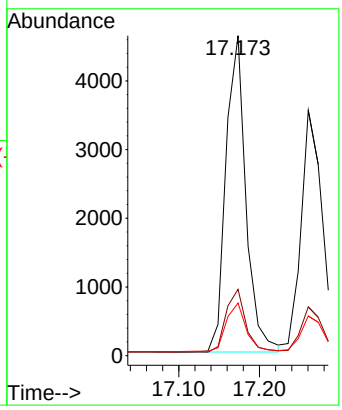




#25
Phenanthrene
Concen: 0.396 ng
RT: 17.173 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:178 Resp: 790

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.7	23.5
179	15.5	12.4	18.6



Instrument :
BNA_N
ClientSampleId :
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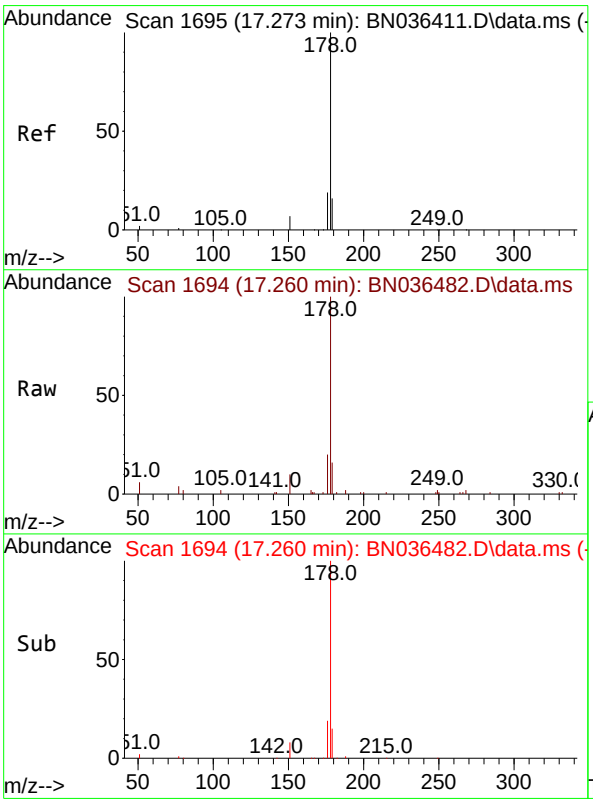
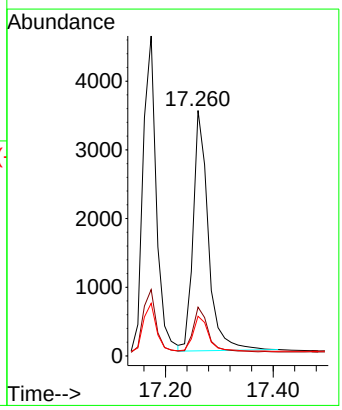
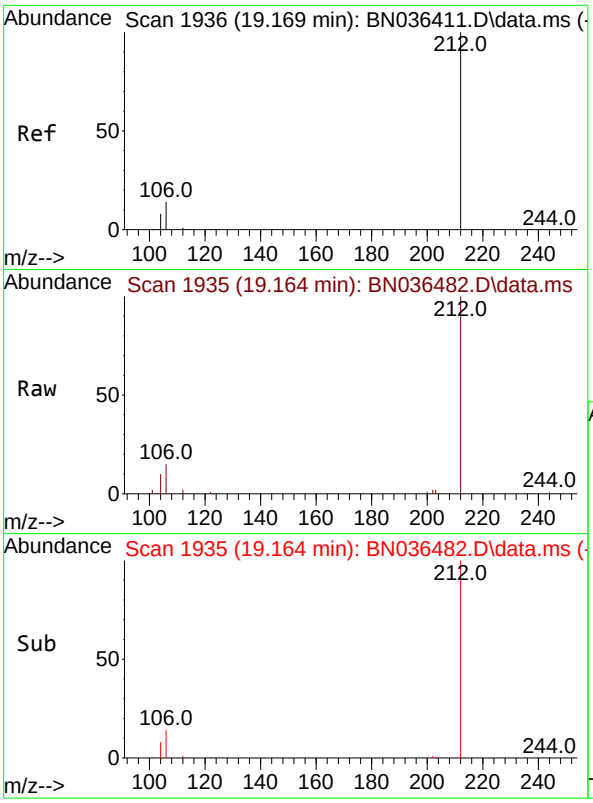


#26
Anthracene
Concen: 0.388 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:178 Resp: 6847

Ion	Ratio	Lower	Upper
178	100		
176	19.0	14.9	22.3
179	15.5	12.4	18.6

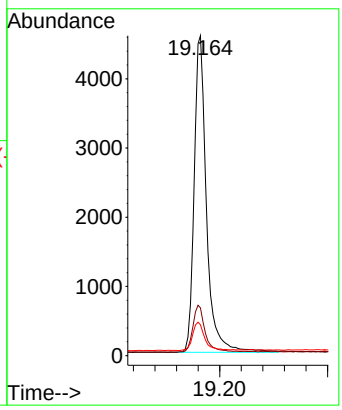




#27
Fluoranthene-d10
Concen: 0.378 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:212 Resp: 726

Ion	Ratio	Lower	Upper
212	100		
106	14.5	11.5	17.3
104	8.8	7.1	10.7



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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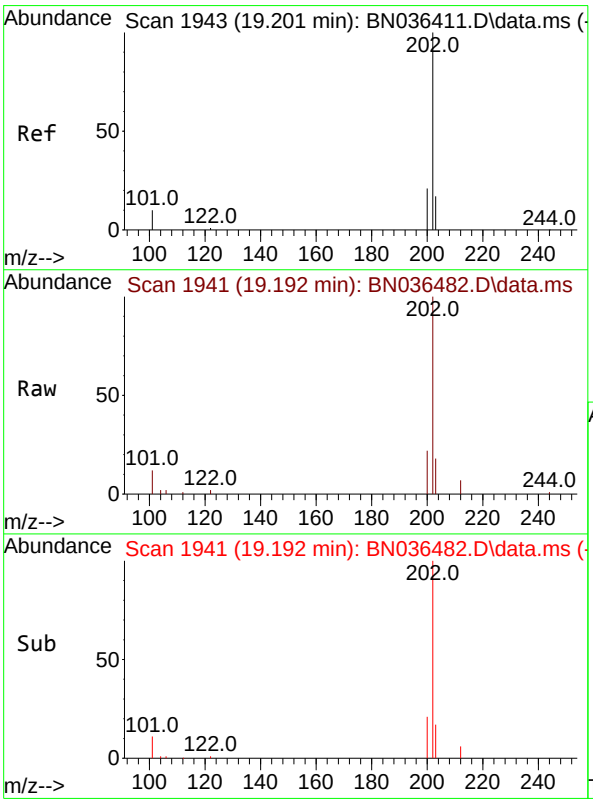
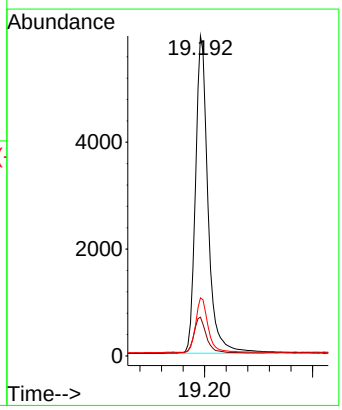
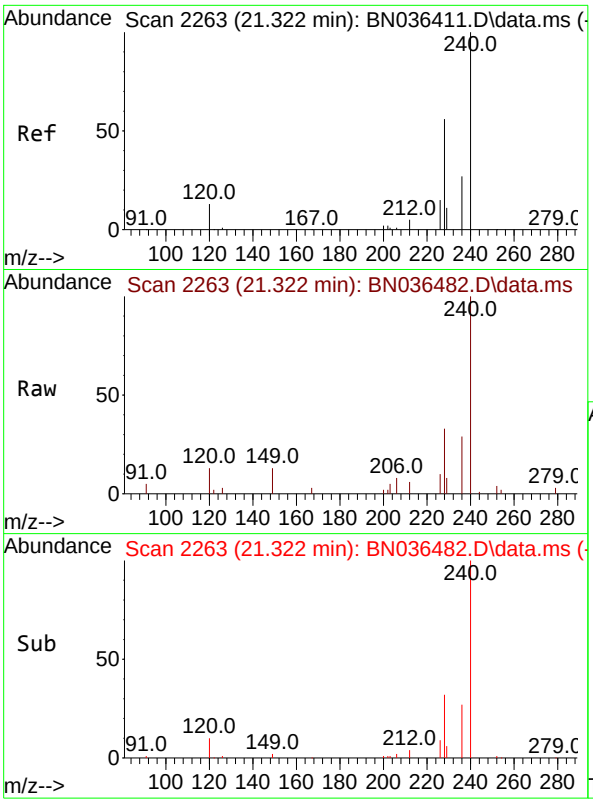


#28
Fluoranthene
Concen: 0.390 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:202 Resp: 9570

Ion	Ratio	Lower	Upper
202	100		
101	11.3	9.2	13.8
203	17.0	13.4	20.0

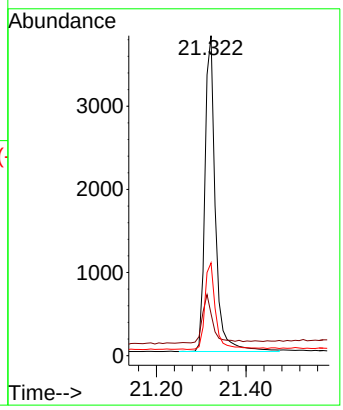




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:240 Resp: 618

Ion	Ratio	Lower	Upper
240	100		
120	13.1	13.3	19.9
236	29.0	23.0	34.6



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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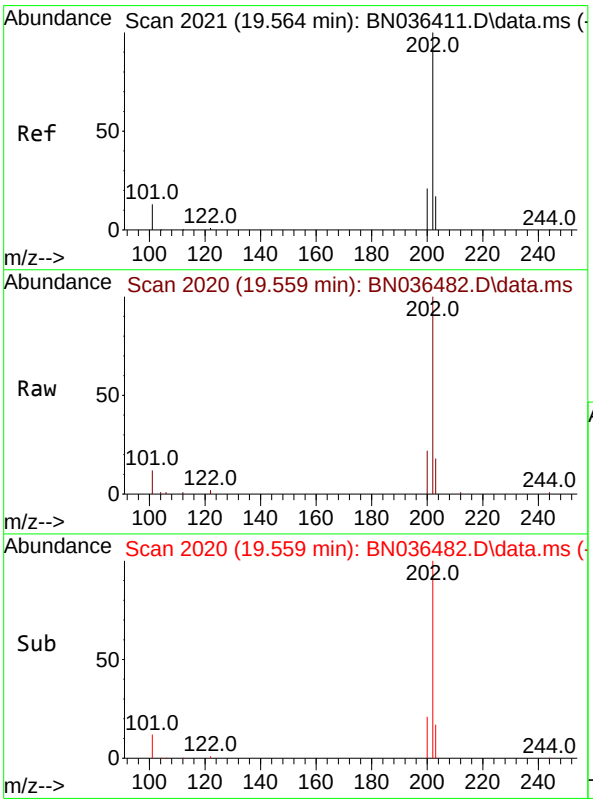
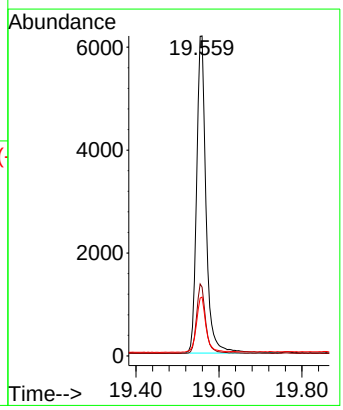
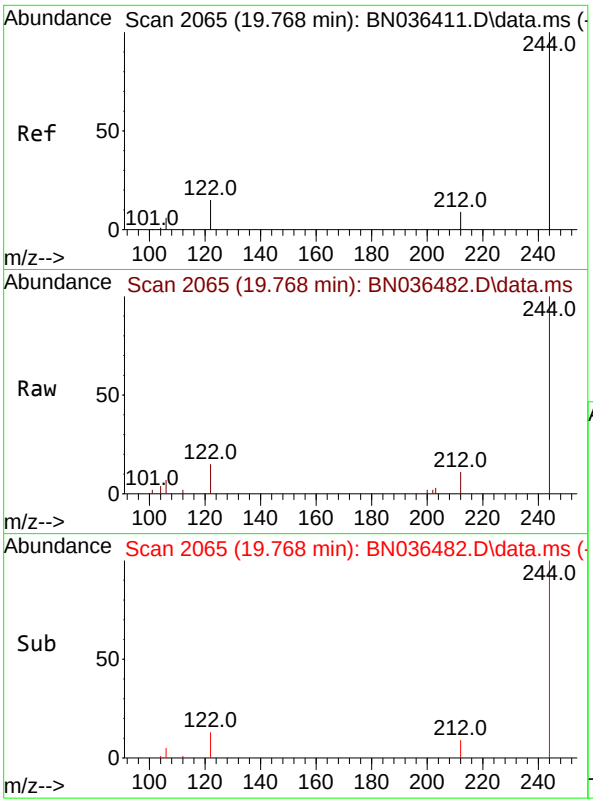


#30
Pyrene
Concen: 0.410 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:202 Resp: 9761

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	18.0	13.9	20.9

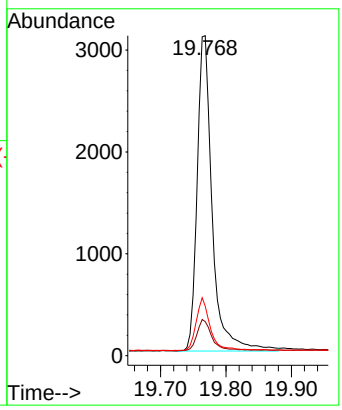




#31
Terphenyl-d14
Concen: 0.375 ng
RT: 19.768 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:244 Resp: 495

Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.1	12.1
122	15.5	12.8	19.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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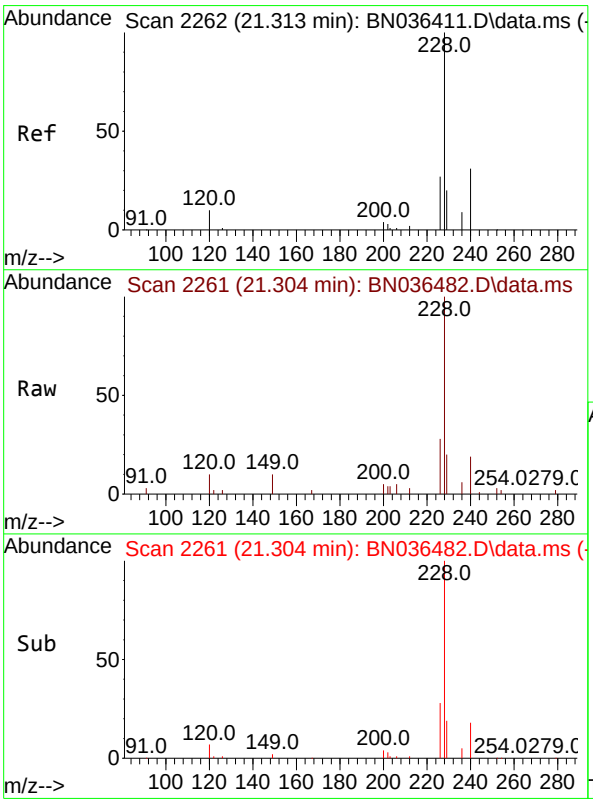
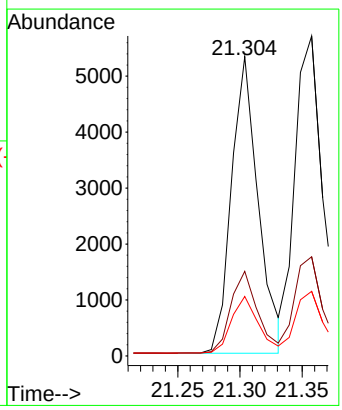
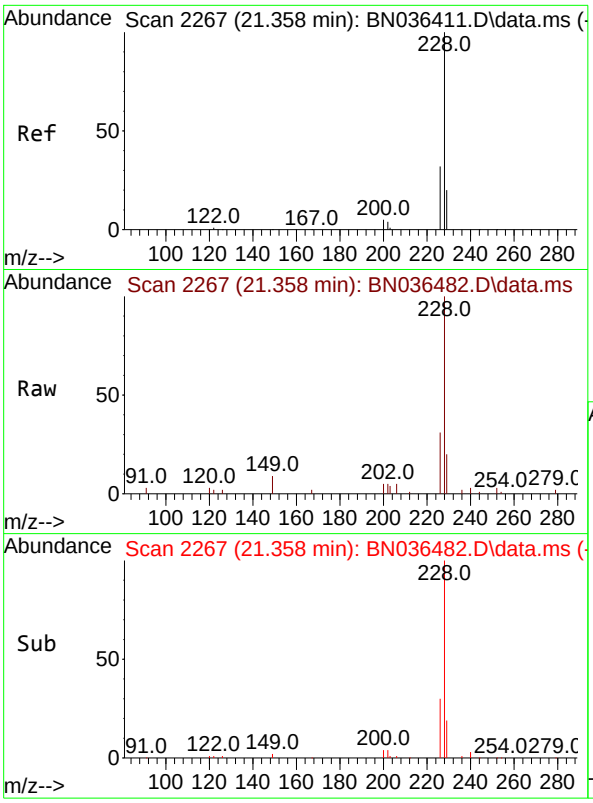


#32
Benzo(a)anthracene
Concen: 0.391 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:228 Resp: 7952

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.2	33.2
229	19.9	16.5	24.7

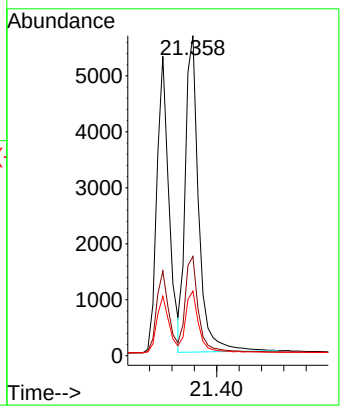




#33
Chrysene
Concen: 0.426 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:228 Resp: 937

Ion	Ratio	Lower	Upper
228	100		
226	31.0	25.5	38.3
229	20.2	16.4	24.6



Instrument :
BNA_N
ClientSampleId :
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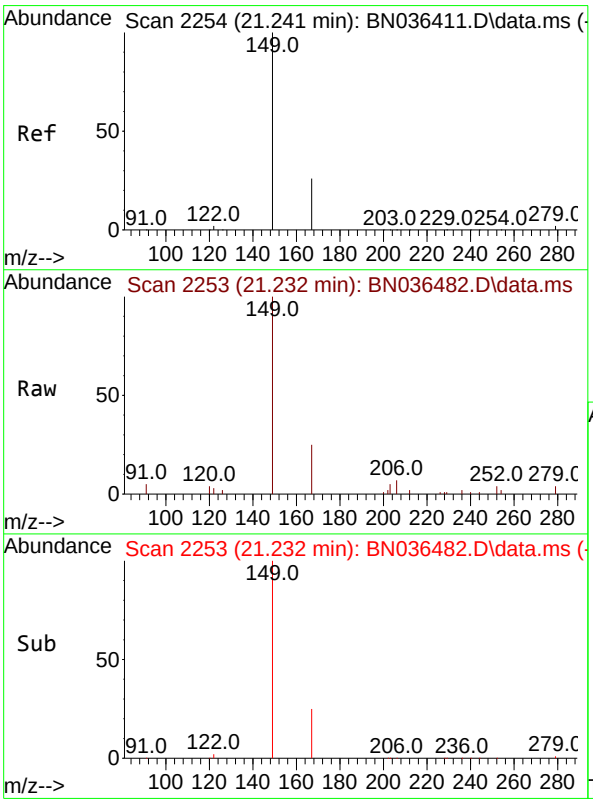
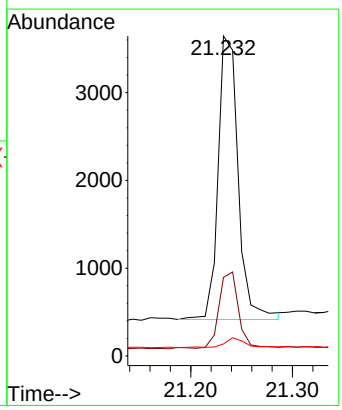
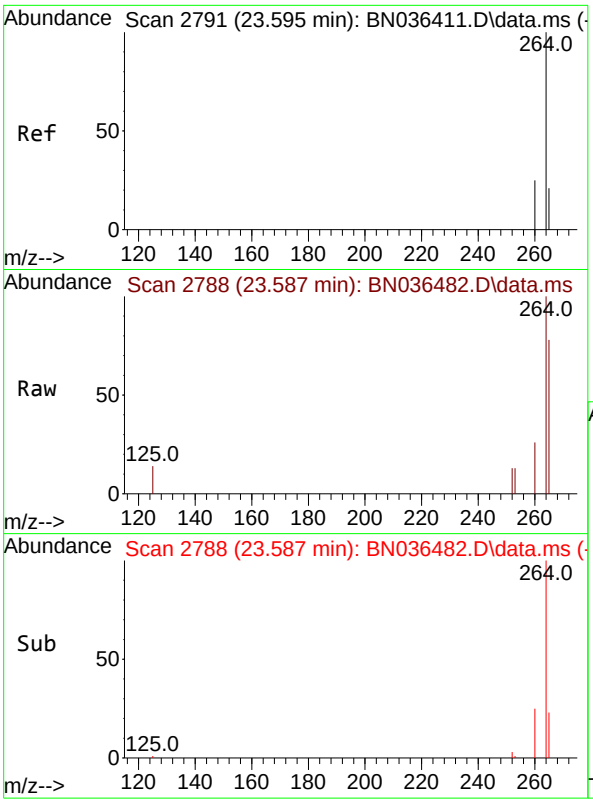


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:149 Resp: 4422

Ion	Ratio	Lower	Upper
149	100		
167	26.1	21.2	31.8
279	4.0	2.7	4.1





#35
Perylene-d12
Concen: 0.400 ng
RT: 23.587 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:264 Resp: 637

Ion	Ratio	Lower	Upper
264	100		
260	26.5	20.9	31.3
265	78.5	60.7	91.1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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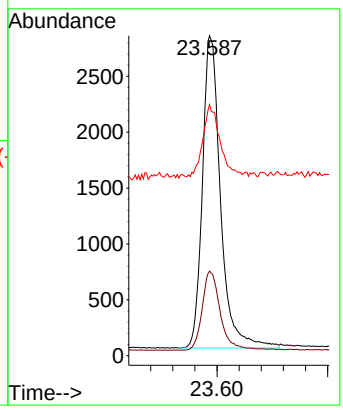
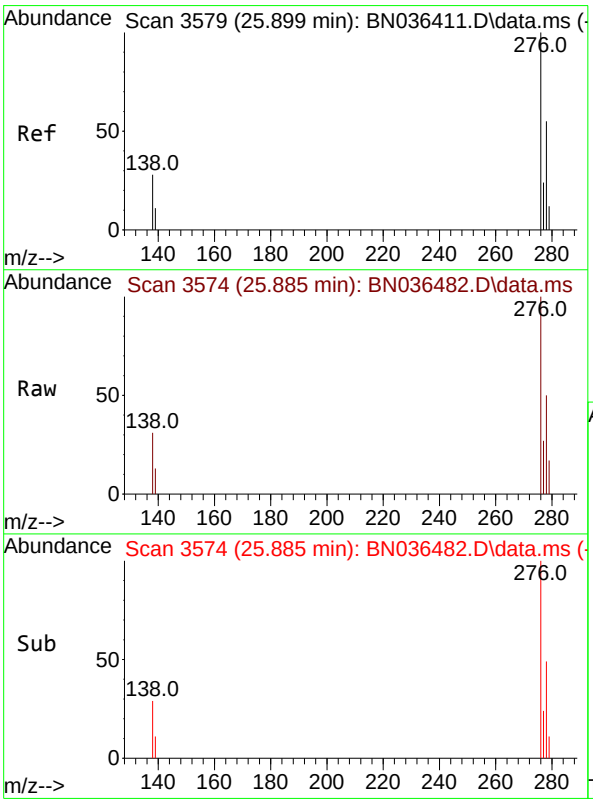
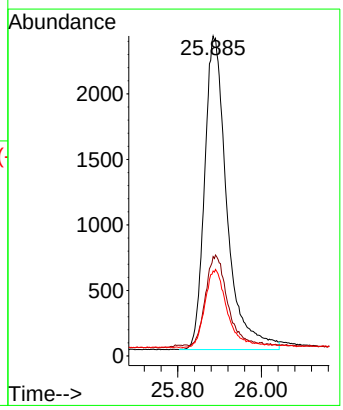


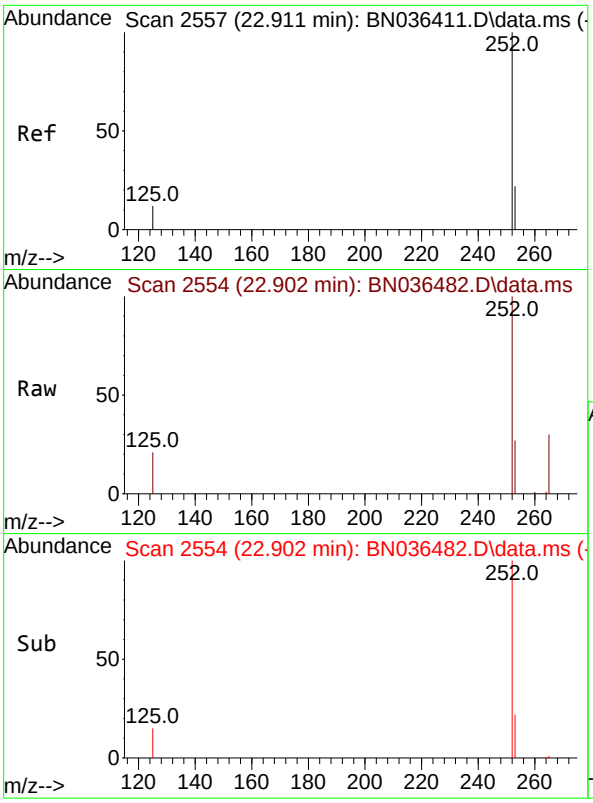


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.398 ng
RT: 25.885 min Scan# 3574
Delta R.T. -0.015 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:276 Resp: 8878

Ion	Ratio	Lower	Upper
276	100		
138	28.2	22.2	33.2
277	24.6	19.8	29.6

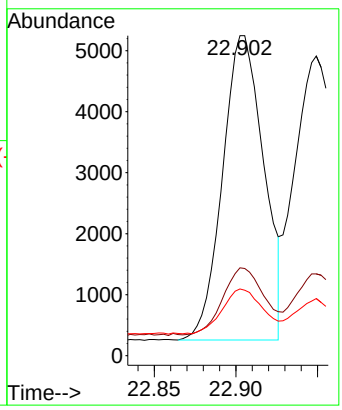




#37
Benzo(b)fluoranthene
Concen: 0.417 ng
RT: 22.902 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:252 Resp: 876

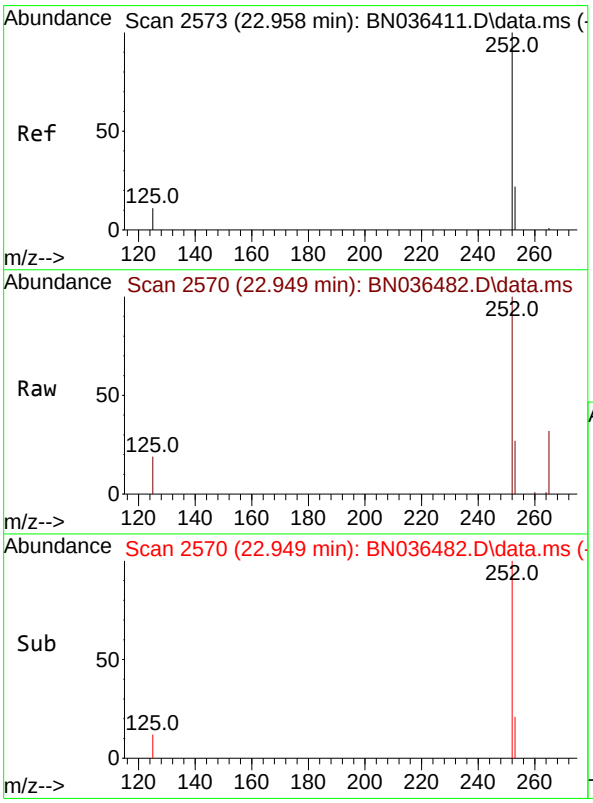
Ion	Ratio	Lower	Upper
252	100		
253	27.4	21.9	32.9
125	20.9	15.0	22.6



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

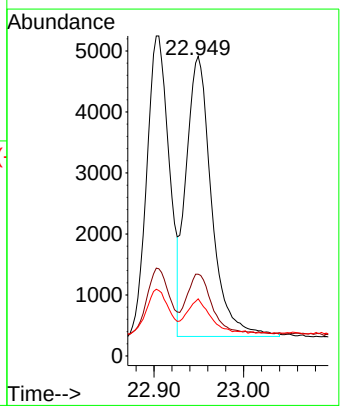
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

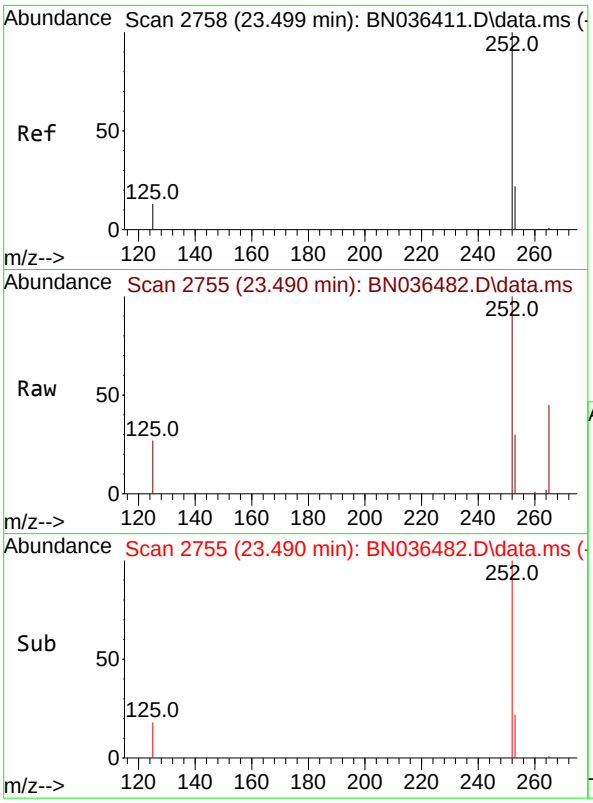


#38
Benzo(k)fluoranthene
Concen: 0.421 ng m
RT: 22.949 min Scan# 2570
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:252 Resp: 9091

Ion	Ratio	Lower	Upper
252	100		
253	27.3	22.2	33.4
125	19.1	15.0	22.4

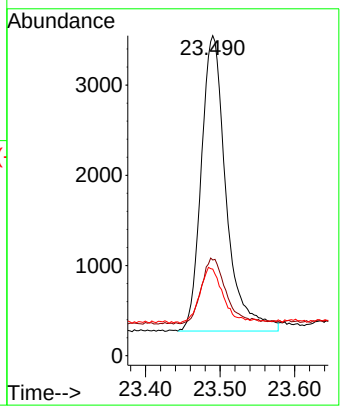




#39
Benzo(a)pyrene
Concen: 0.414 ng
RT: 23.490 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:252 Resp: 758

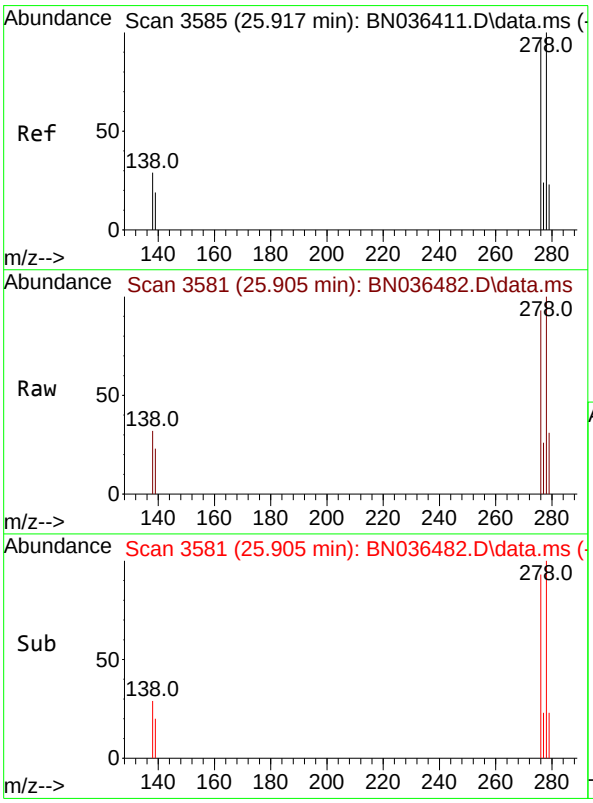
Ion	Ratio	Lower	Upper
252	100		
253	29.9	24.4	36.6
125	27.1	18.2	27.2



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

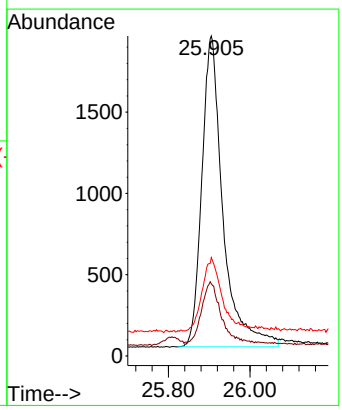
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

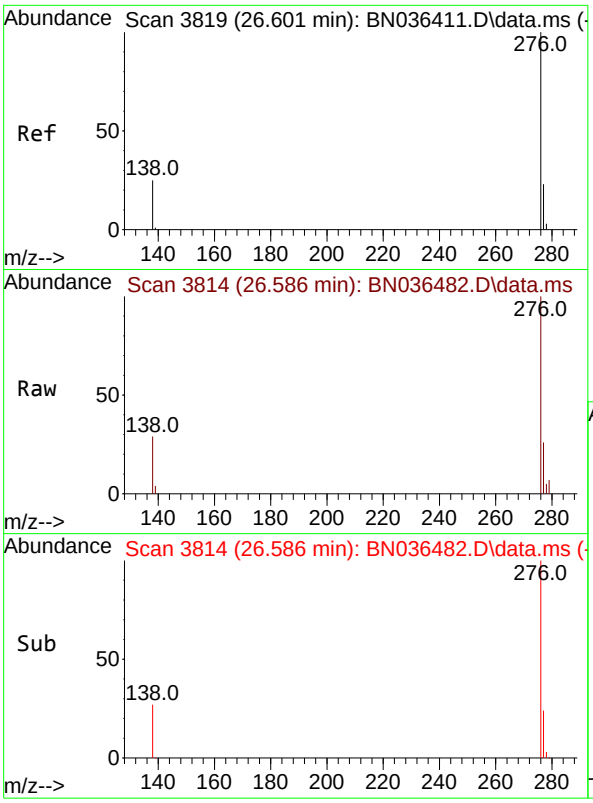


#40
Dibenzo(a,h)anthracene
Concen: 0.390 ng
RT: 25.905 min Scan# 3581
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:278 Resp: 6854

Ion	Ratio	Lower	Upper
278	100		
139	22.5	18.5	27.7
279	30.8	24.8	37.2

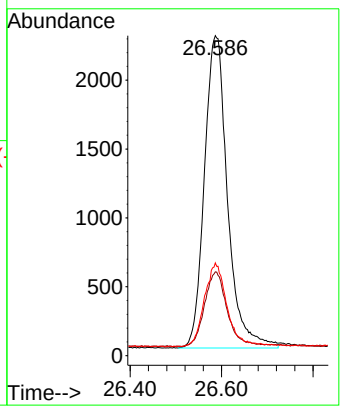




#41
Benzo(g,h,i)perylene
Concen: 0.400 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:276 Resp: 796

Ion	Ratio	Lower	Upper
276	100		
277	26.2	20.7	31.1
138	29.0	21.8	32.6



Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036482.D
Acq On : 20 Feb 2025 16:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 21 00:12:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 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	91	0.00
2		1,4-Dioxane	0.438	0.416	5.0	87	0.00
3		n-Nitrosodimethylamine	0.760	0.771	-1.4	92	0.00
4	S	2-Fluorophenol	0.945	0.903	4.4	88	-0.01
5	S	Phenol-d6	1.109	1.067	3.8	94	-0.01
6		bis(2-Chloroethyl)ether	1.160	1.145	1.3	96	-0.01
7	I	Naphthalene-d8	1.000	1.000	0.0	87	0.00
8	S	Nitrobenzene-d5	0.395	0.392	0.8	94	-0.01
9		Naphthalene	1.154	1.138	1.4	89	-0.01
10		Hexachlorobutadiene	0.281	0.280	0.4	86	-0.01
11	SURR	2-Methylnaphthalene-d10	0.615	0.590	4.1	86	-0.01
12		2-Methylnaphthalene	0.757	0.742	2.0	88	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	90	0.00
14	S	2,4,6-Tribromophenol	0.198	0.163	17.7	80	0.00
15	S	2-Fluorobiphenyl	1.504	1.565	-4.1	103	-0.01
16		Acenaphthylene	1.767	1.637	7.4	87	-0.01
17		Acenaphthene	1.180	1.099	6.9	87	-0.01
18		Fluorene	1.680	1.588	5.5	86	-0.01
19	I	Phenanthrene-d10	1.000	1.000	0.0	83	-0.01
20		4,6-Dinitro-2-methylphenol	0.078	0.064	17.9	77	0.00
21		4-Bromophenyl-phenylether	0.239	0.234	2.1	84	0.00
22		Hexachlorobenzene	0.295	0.297	-0.7	87	-0.01
23		Atrazine	0.199	0.181	9.0	80	-0.01
24		Pentachlorophenol	0.140	0.122	12.9	83	-0.01
25		Phenanthrene	1.156	1.144	1.0	87	0.00
26		Anthracene	1.020	0.990	2.9	85	-0.01
27	SURR	Fluoranthene-d10	1.112	1.050	5.6	82	0.00
28		Fluoranthene	1.421	1.384	2.6	85	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	83	0.00
30		Pyrene	1.541	1.579	-2.5	85	0.00
31	S	Terphenyl-d14	0.854	0.801	6.2	78	0.00
32		Benzo(a)anthracene	1.316	1.286	2.3	82	0.00
33		Chrysene	1.425	1.516	-6.4	92	0.00
34		Bis(2-ethylhexyl)phthalate	0.820	0.715	12.8	76	0.00
35	I	Perylene-d12	1.000	1.000	0.0	82	0.00
36		Indeno(1,2,3-cd)pyrene	1.398	1.393	0.4	83	-0.01
37		Benzo(b)fluoranthene	1.317	1.374	-4.3	90	0.00
38		Benzo(k)fluoranthene	1.356	1.426	-5.2	86	0.00
39	C	Benzo(a)pyrene	1.150	1.189	-3.4	89	0.00
40		Dibenzo(a,h)anthracene	1.103	1.075	2.5	82	-0.01
41		Benzo(g,h,i)perylene	1.250	1.250	0.0	82	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036482.D
Acq On : 20 Feb 2025 16:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 21 00:12:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 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	91	0.00
2		1,4-Dioxane	0.400	0.380	5.0	87	0.00
3		n-Nitrosodimethylamine	0.400	0.406	-1.5	92	0.00
4	S	2-Fluorophenol	0.400	0.382	4.5	88	-0.01
5	S	Phenol-d6	0.400	0.385	3.8	94	-0.01
6		bis(2-Chloroethyl)ether	0.400	0.395	1.3	96	-0.01
7	I	Naphthalene-d8	0.400	0.400	0.0	87	0.00
8	S	Nitrobenzene-d5	0.400	0.398	0.5	94	-0.01
9		Naphthalene	0.400	0.394	1.5	89	-0.01
10		Hexachlorobutadiene	0.400	0.399	0.3	86	-0.01
11	SURR	2-Methylnaphthalene-d10	0.400	0.384	4.0	86	-0.01
12		2-Methylnaphthalene	0.400	0.392	2.0	88	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	90	0.00
14	S	2,4,6-Tribromophenol	0.400	0.330	17.5	80	0.00
15	S	2-Fluorobiphenyl	0.400	0.416	-4.0	103	-0.01
16		Acenaphthylene	0.400	0.371	7.3	87	-0.01
17		Acenaphthene	0.400	0.373	6.8	87	-0.01
18		Fluorene	0.400	0.378	5.5	86	-0.01
19	I	Phenanthrene-d10	0.400	0.400	0.0	83	-0.01
20		4,6-Dinitro-2-methylphenol	0.400	0.327	18.3	77	0.00
21		4-Bromophenyl-phenylether	0.400	0.392	2.0	84	0.00
22		Hexachlorobenzene	0.400	0.403	-0.8	87	-0.01
23		Atrazine	0.400	0.364	9.0	80	-0.01
24		Pentachlorophenol	0.400	0.349	12.8	83	-0.01
25		Phenanthrene	0.400	0.396	1.0	87	0.00
26		Anthracene	0.400	0.388	3.0	85	-0.01
27	SURR	Fluoranthene-d10	0.400	0.378	5.5	82	0.00
28		Fluoranthene	0.400	0.390	2.5	85	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	83	0.00
30		Pyrene	0.400	0.410	-2.5	85	0.00
31	S	Terphenyl-d14	0.400	0.375	6.3	78	0.00
32		Benzo(a)anthracene	0.400	0.391	2.3	82	0.00
33		Chrysene	0.400	0.426	-6.5	92	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.349	12.8	76	0.00
35	I	Perylene-d12	0.400	0.400	0.0	82	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.398	0.5	83	-0.01
37		Benzo(b)fluoranthene	0.400	0.417	-4.2	90	0.00
38		Benzo(k)fluoranthene	0.400	0.421	-5.2	86	0.00
39	C	Benzo(a)pyrene	0.400	0.414	-3.5	89	0.00
40		Dibenzo(a,h)anthracene	0.400	0.390	2.5	82	-0.01
41		Benzo(g,h,i)perylene	0.400	0.400	0.0	82	-0.01

(#) = Out of Range SPCC's out = 0 CCC's out = 0

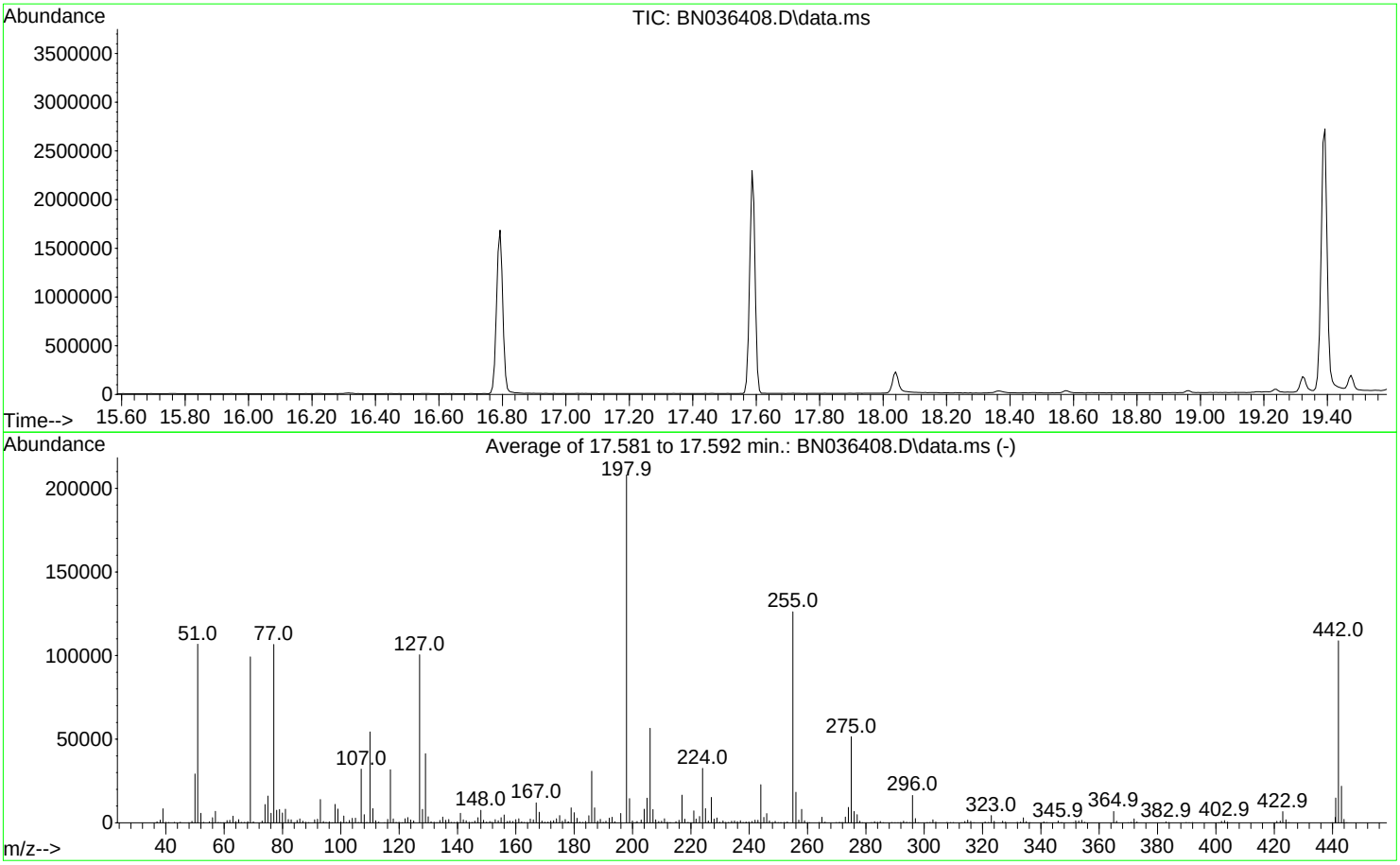
QC SAMPLE DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036408.D
Acq On : 10 Feb 2025 11:46
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-BN021025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue Feb 11 01:17:14 2025



AutoFind: Scans 2464, 2465, 2466; Background Corrected with Scan 2458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	51.4	106809	PASS
68	69	0.00	2	0.7	724	PASS
69	198	0.00	100	47.7	99211	PASS
70	69	0.00	2	0.6	601	PASS
127	198	10	80	48.3	100501	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	207936	PASS
199	198	5	9	7.0	14493	PASS
275	198	10	60	24.7	51437	PASS
365	198	1	100	3.3	6829	PASS
441	198	0.01	100	7.1	14816	PASS
442	442	50	100	100.0	108824	PASS
443	442	15	24	20.1	21911	PASS

Instrument :
BNA_N
ClientSampleId :
DFTPP

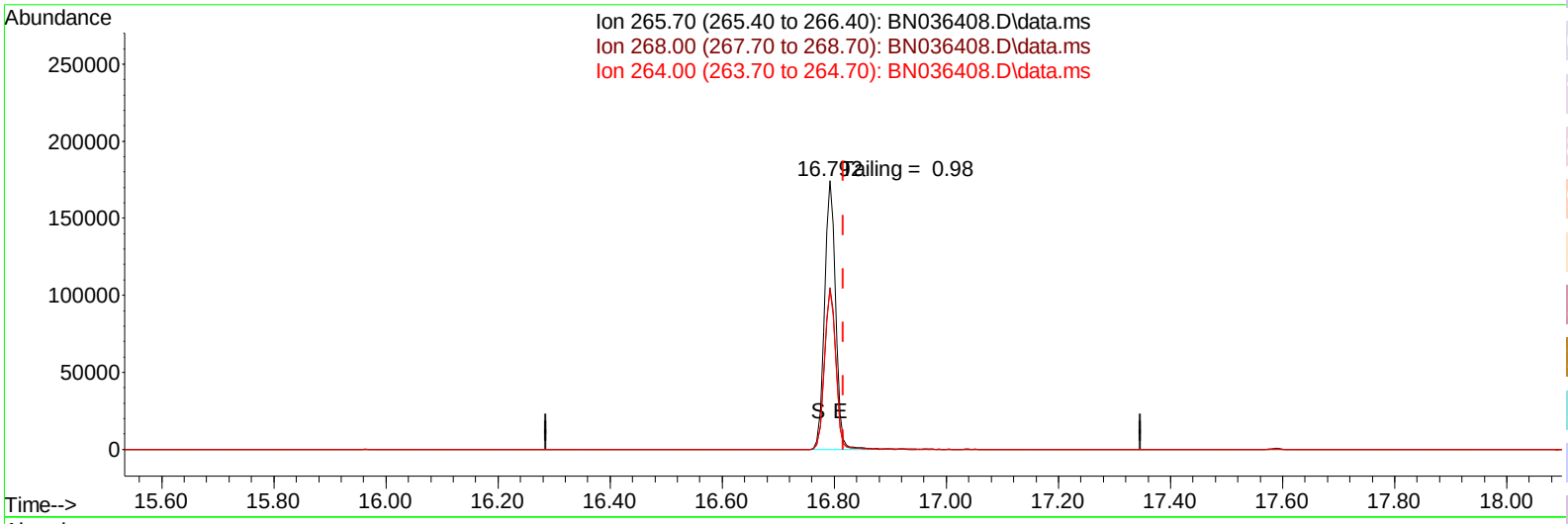
DDT Breakdown

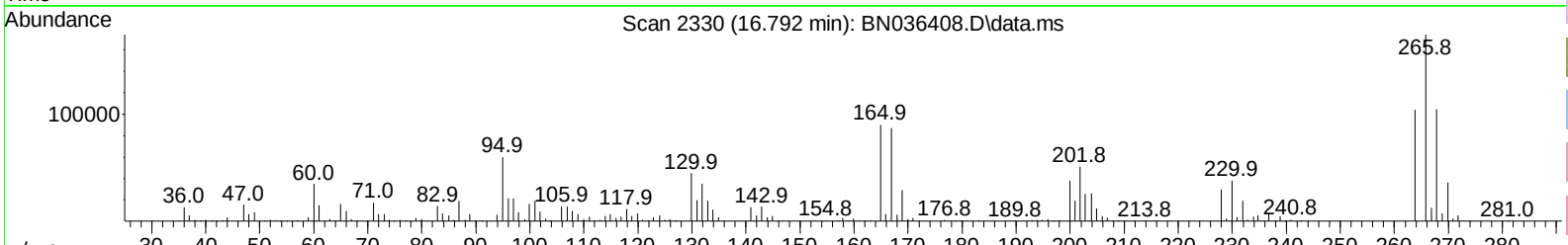
Date	Instrument Name	DFTPP Data File
2/10/2025	BNA_N	BN036408.D
Compound Name	**Response**	**Retention Time**
DDT	740190	20.628
DDD	8470	20.239
DDE	0	19.728
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
8470	748660	1.13

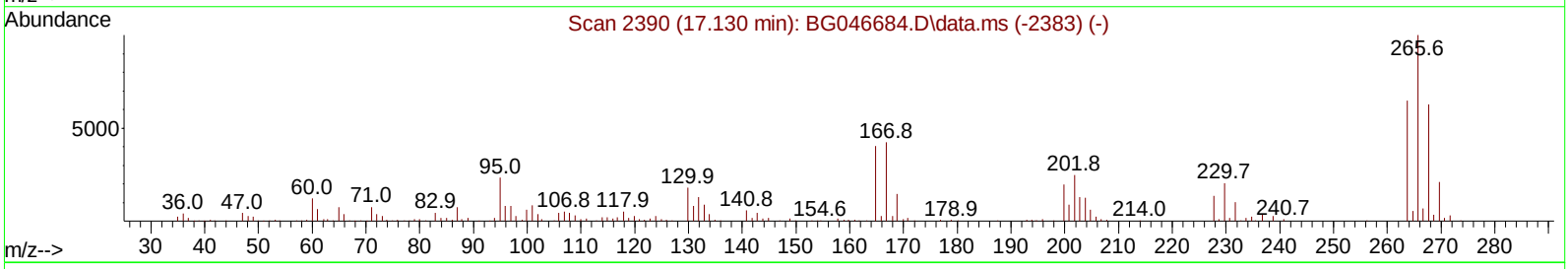
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036408.D
Acq On : 10 Feb 2025 11:46
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 11 01:55:02 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: BN036408.D\data.ms

(70) Pentachlorophenol (C)

16.792min (-0.024) 22697.76 ng

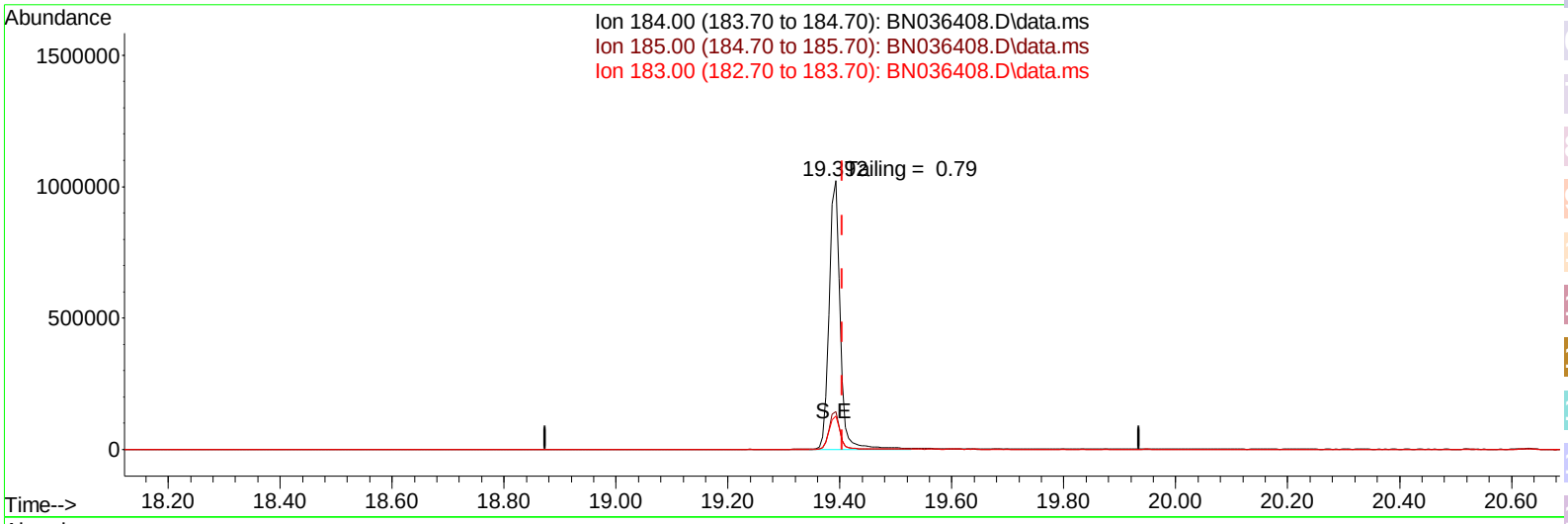
response 239758

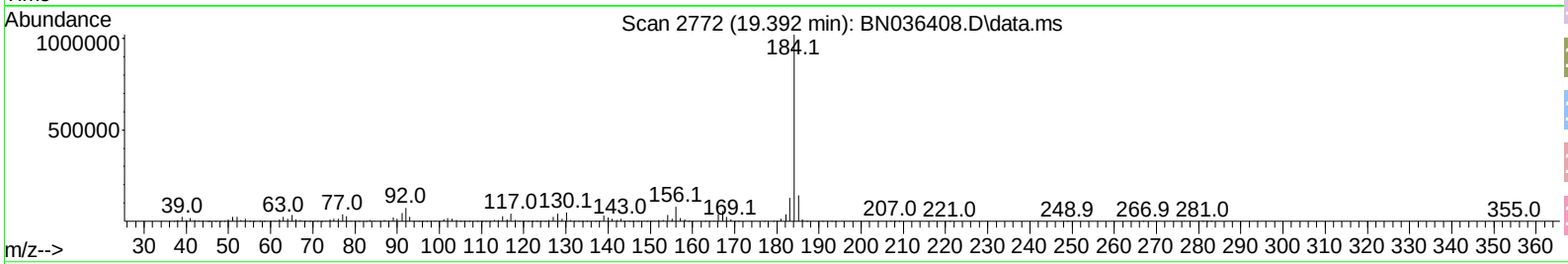
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	60.20
264.00	61.60	59.58
0.00	0.00	0.00

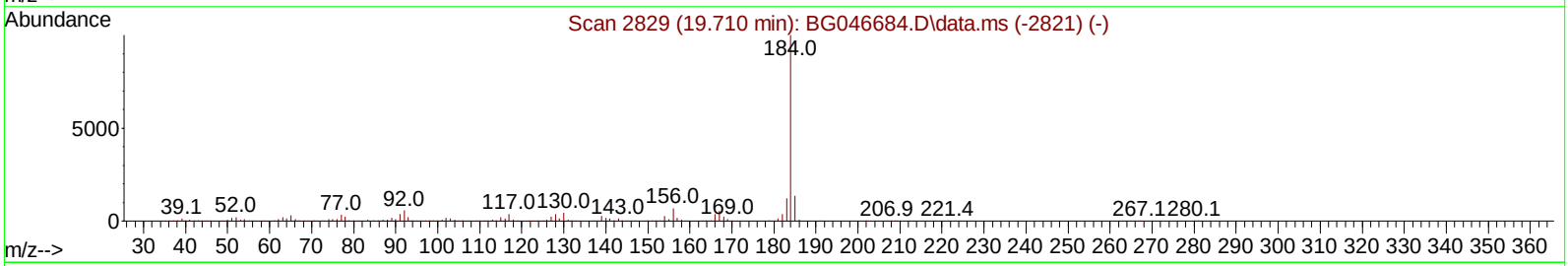
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN021025\
Data File : BN036408.D
Acq On : 10 Feb 2025 11:46
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 11 01:55:02 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: BN036408.D\data.ms

(77) Benzidine

19.392min (-0.012) 0.00 ng

response 1390167

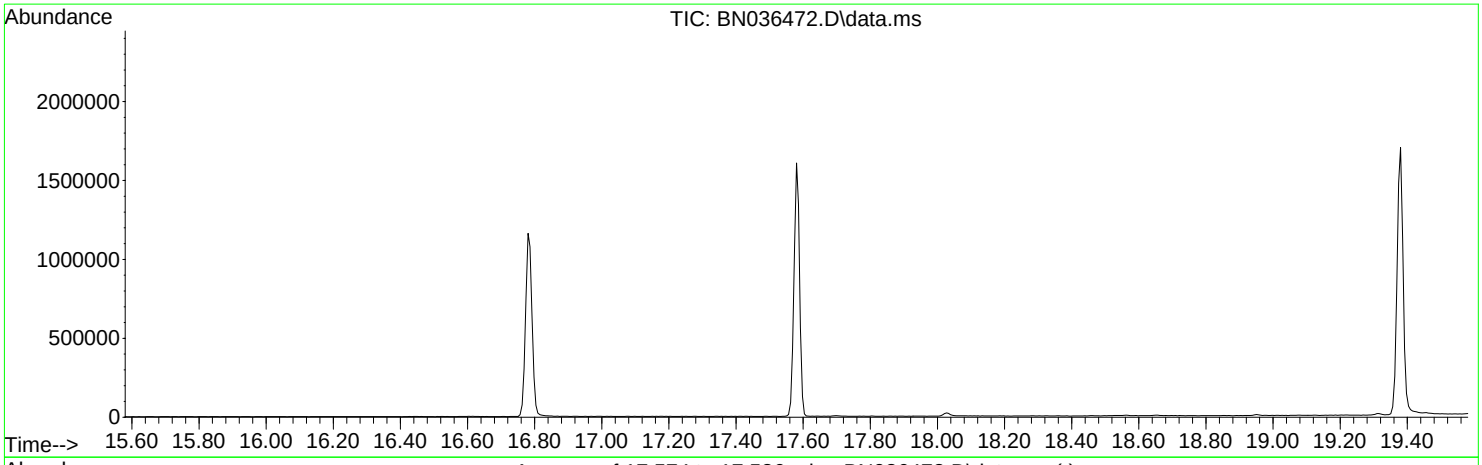
Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.06
183.00	13.20	12.43
0.00	0.00	0.00

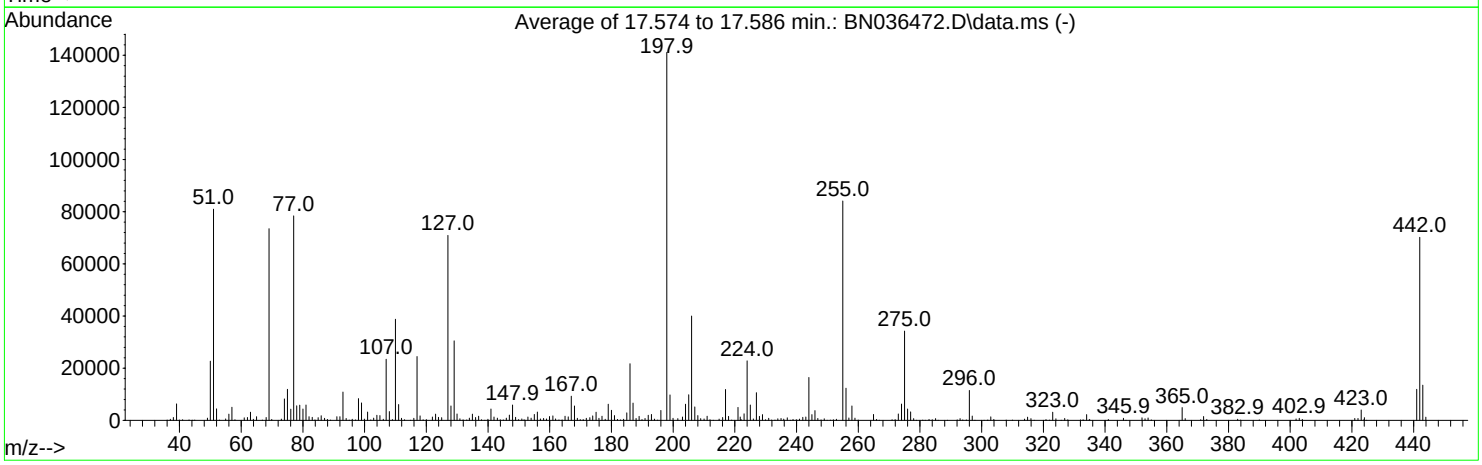
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036472.D
Acq On : 20 Feb 2025 09:32
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Tue Feb 11 01:17:14 2025





AutoFind: Scans 2463, 2464, 2465; Background Corrected with Scan 2457

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	57.4	80973	PASS
68	69	0.00	2	1.5	1126	PASS
69	198	0.00	100	52.1	73475	PASS
70	69	0.00	2	0.5	370	PASS
127	198	10	80	50.3	70957	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	141053	PASS
199	198	5	9	6.9	9758	PASS
275	198	10	60	24.3	34267	PASS
365	198	1	100	3.5	4912	PASS
441	198	0.01	100	8.4	11880	PASS
442	442	50	100	100.0	70216	PASS
443	442	15	24	19.3	13522	PASS

Instrument :
BNA_N
ClientSampleId :
DFTPP

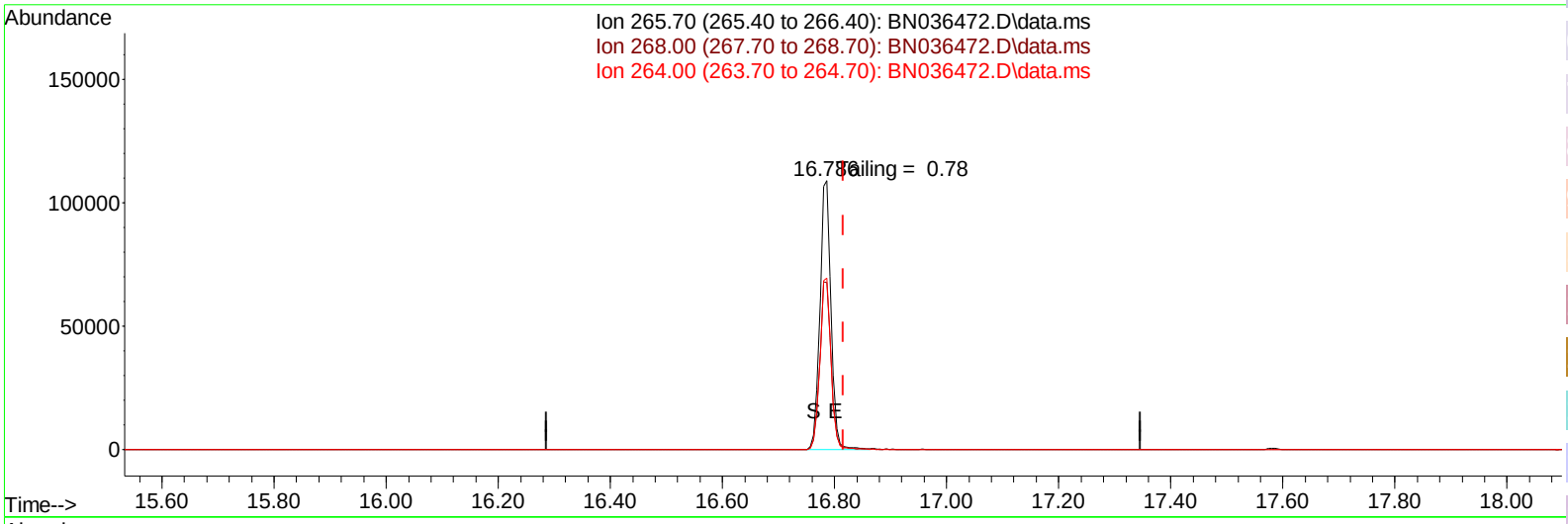
DDT Breakdown

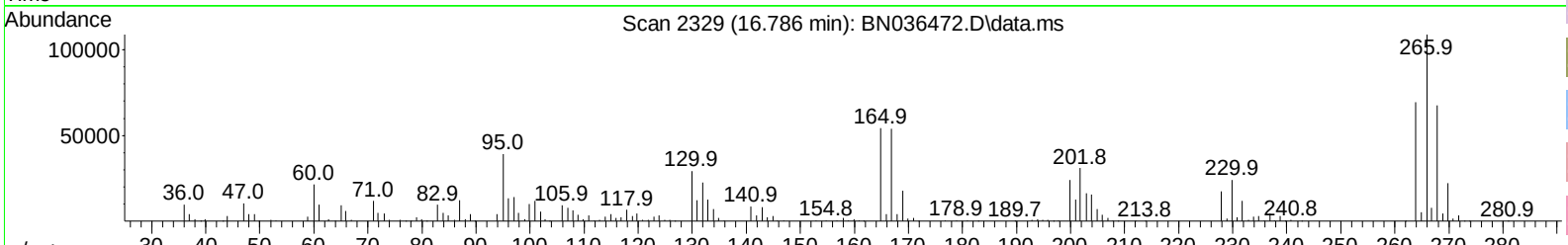
Date	Instrument Name	DFTPP Data File
2/20/2025	BNA_N	BN036472.D
Compound Name	**Response**	**Retention Time**
DDT	465194	20.621
DDD	5607	20.227
DDE	141	19.674
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
5748	470942	1.22

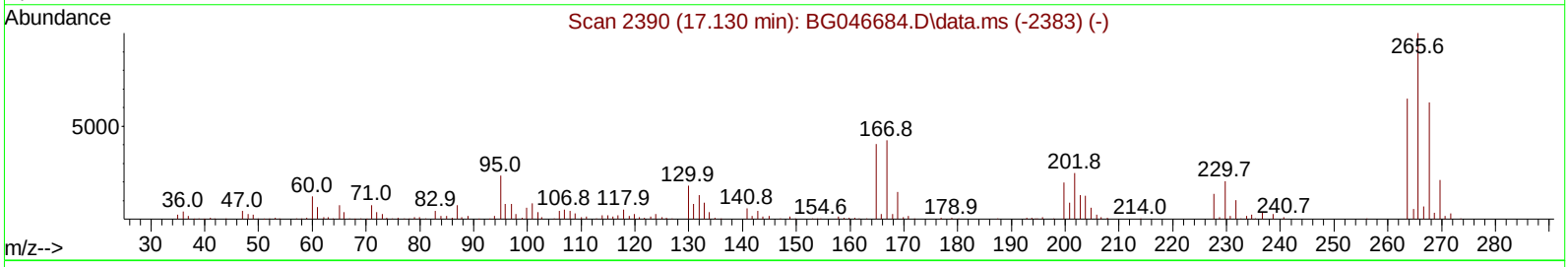
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036472.D
Acq On : 20 Feb 2025 09:32
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 21 02:03:38 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: BN036472.D\data.ms

(70) Pentachlorophenol (C)

16.786min (-0.030) 19225.56 ng

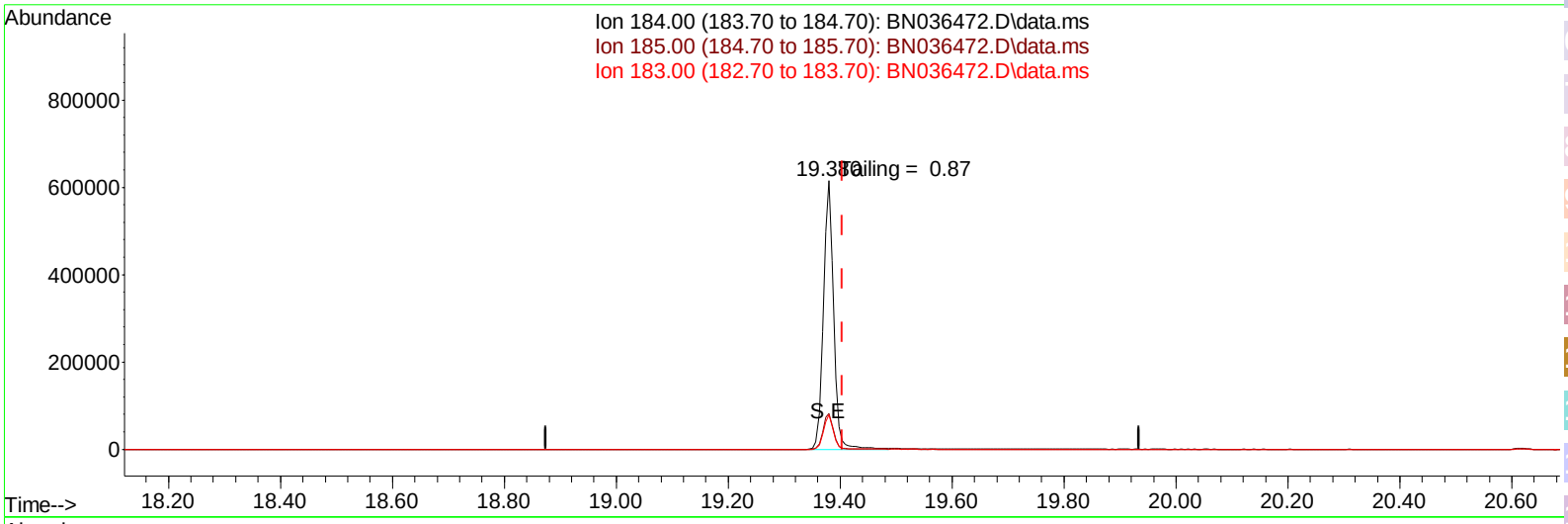
response 150123

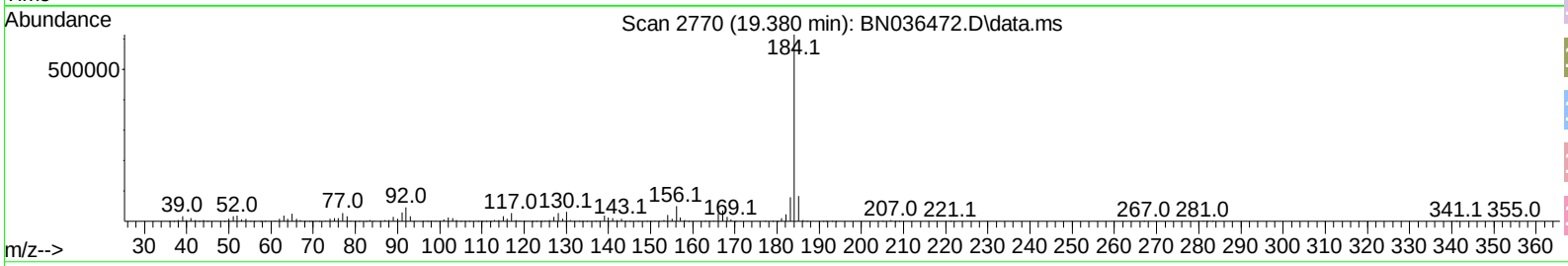
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	62.22
264.00	61.60	63.77
0.00	0.00	0.00

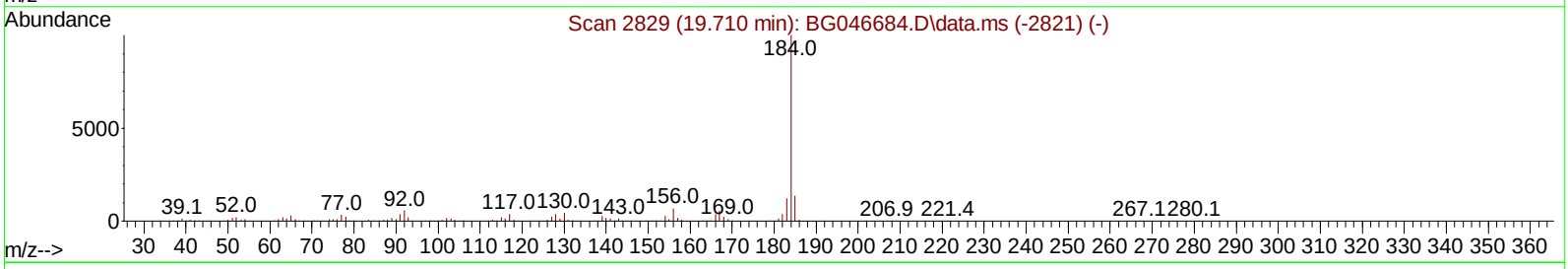
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036472.D
Acq On : 20 Feb 2025 09:32
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 21 02:03:38 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: BN036472.D\data.ms

(77) Benzidine

19.380min (-0.024) 0.00 ng

response 787833

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.45
183.00	13.20	12.84
0.00	0.00	0.00

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	
Client Sample ID:	PB166758BL	SDG No.:	Q1380
Lab Sample ID:	PB166758BL	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
BN036474.D	1	02/18/25 11:40	02/20/25 10:47	PB166758

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	0.35		30 - 150		87%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		93%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1870	7.746				
1146-65-2	Naphthalene-d8	3910	10.551				
15067-26-2	Acenaphthene-d10	2310	14.398				
1517-22-2	Phenanthrene-d10	4890	17.148				
1719-03-5	Chrysene-d12	4490	21.331				
1520-96-3	Perylene-d12	3910	23.595				

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\BN022025\
Data File : BN036474.D
Acq On : 20 Feb 2025 10:47
Operator : RC/JU
Sample : PB166758BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Quant Time: Feb 21 00:09:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

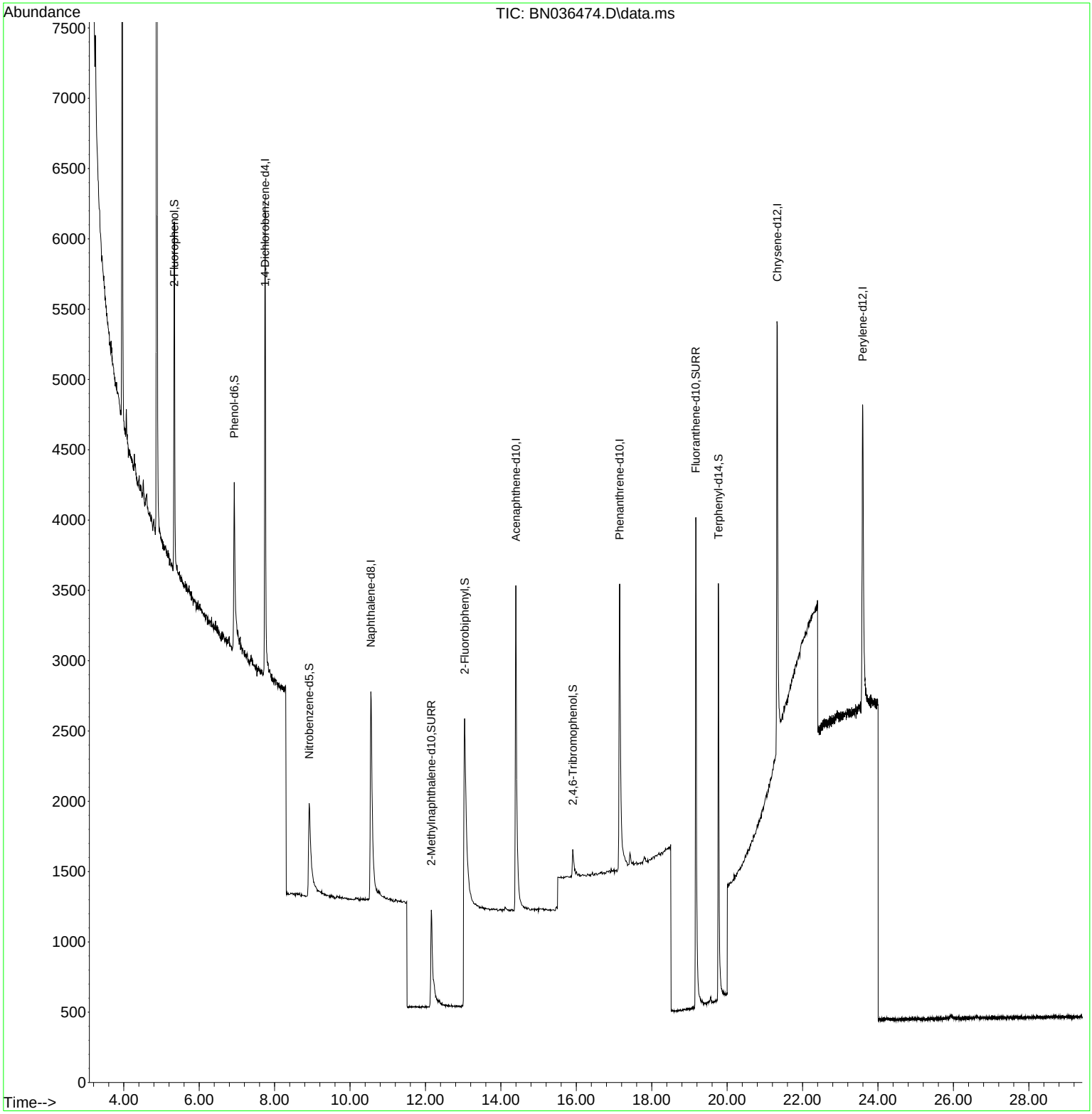
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1874	0.400	ng	0.00
7) Naphthalene-d8	10.551	136	3905	0.400	ng	# 0.01
13) Acenaphthene-d10	14.398	164	2305	0.400	ng	0.01
19) Phenanthrene-d10	17.148	188	4889	0.400	ng	# 0.01
29) Chrysene-d12	21.331	240	4485	0.400	ng	0.00
35) Perylene-d12	23.595	264	3907	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	1773	0.400	ng	0.00
5) Phenol-d6	6.930	99	1793	0.345	ng	0.00
8) Nitrobenzene-d5	8.918	82	1432	0.372	ng	0.01
11) 2-Methylnaphthalene-d10	12.156	152	2086	0.348	ng	0.02
14) 2,4,6-Tribromophenol	15.907	330	220	0.193	ng	0.02
15) 2-Fluorobiphenyl	13.040	172	3041	0.351	ng	0.02
27) Fluoranthene-d10	19.169	212	5645	0.415	ng	0.00
31) Terphenyl-d14	19.768	244	3980	0.416	ng	0.00
Target Compounds						Qvalue

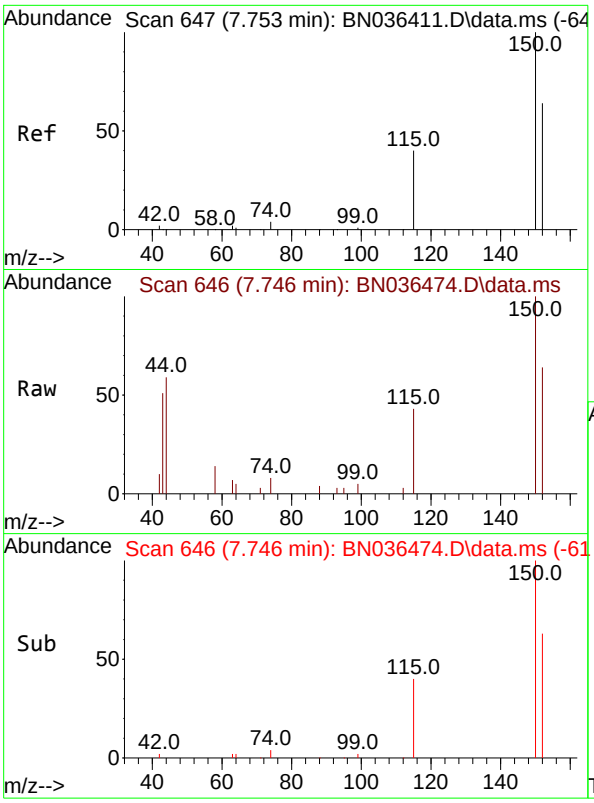
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036474.D
Acq On : 20 Feb 2025 10:47
Operator : RC/JU
Sample : PB166758BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Quant Time: Feb 21 00:09:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



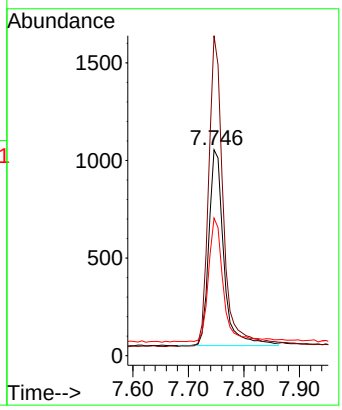


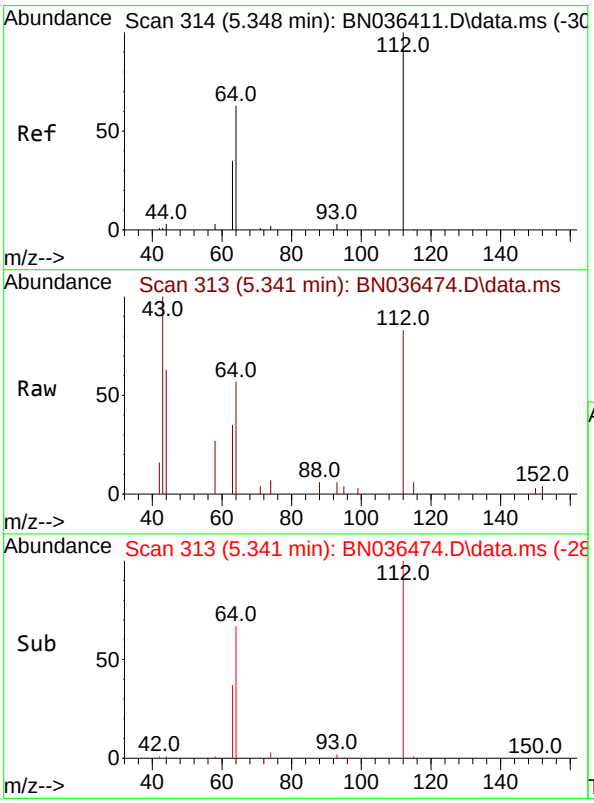
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion:152 Resp: 1874

Ion	Ratio	Lower	Upper
152	100		
150	155.4	123.7	185.5
115	66.8	52.5	78.7

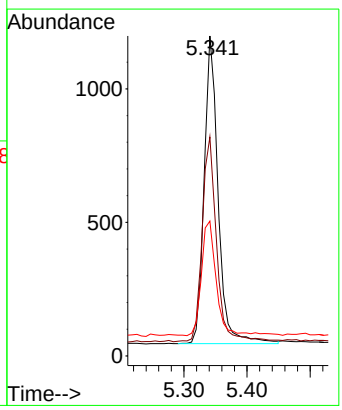


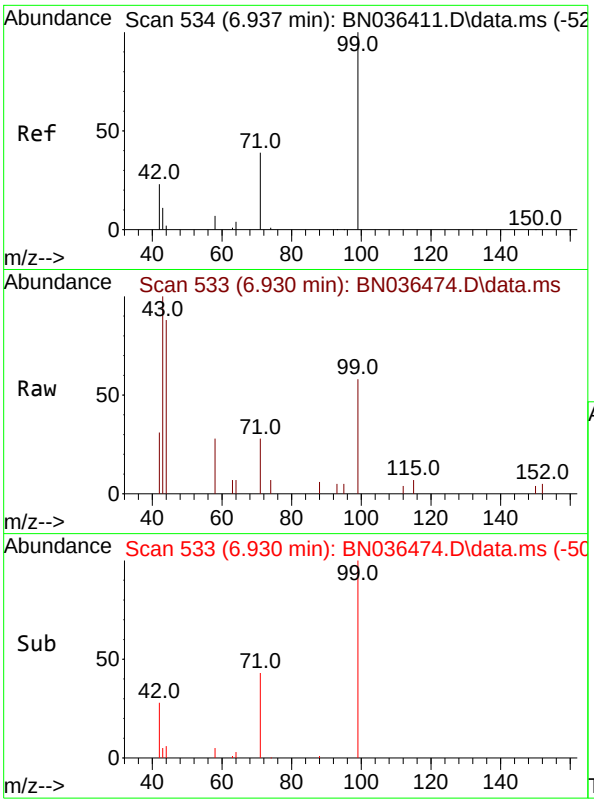


#4
2-Fluorophenol
Concen: 0.400 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:112 Resp: 1773

Ion	Ratio	Lower	Upper
112	100		
64	68.7	53.4	80.0
63	39.0	30.3	45.5



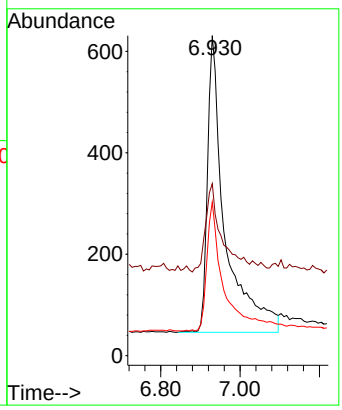


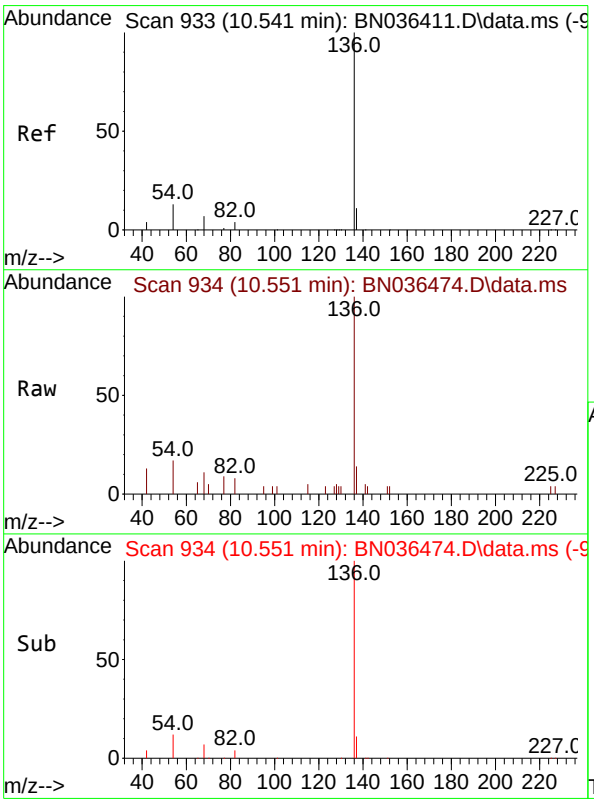
#5
Phenol-d6
Concen: 0.345 ng
RT: 6.930 min Scan# 5
Delta R.T. -0.007 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion: 99 Resp: 1793

Ion	Ratio	Lower	Upper
99	100		
42	27.4	21.7	32.5
71	41.9	32.6	49.0

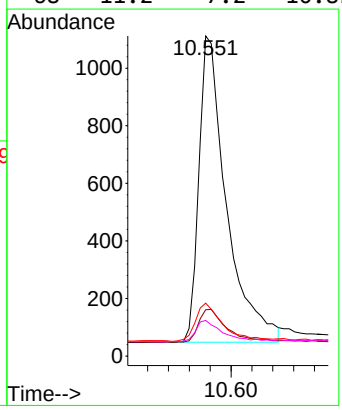


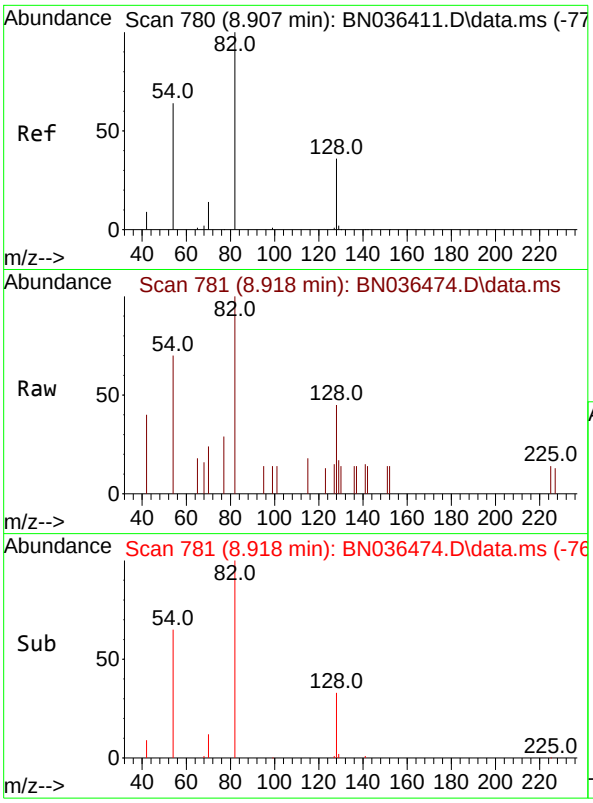


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.551 min Scan# 934
Delta R.T. 0.011 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:136 Resp: 3905

Ion	Ratio	Lower	Upper
136	100		
137	14.5	10.1	15.1
54	16.5	11.8	17.6
68	11.2	7.2	10.8#



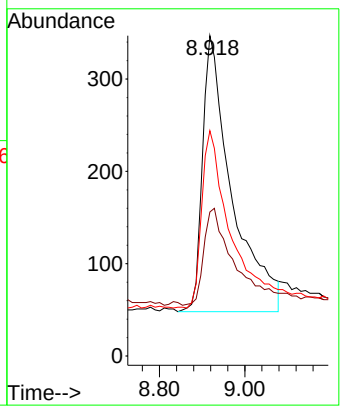


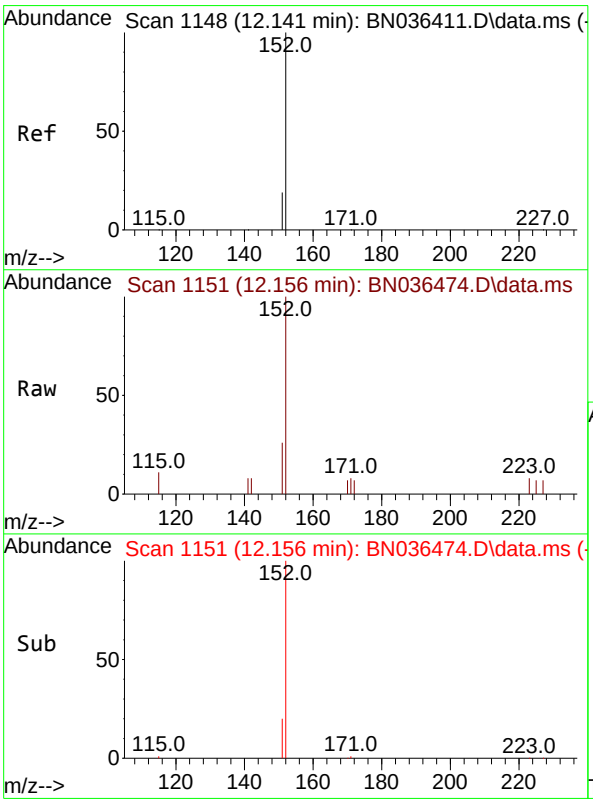
#8
Nitrobenzene-d5
Concen: 0.372 ng
RT: 8.918 min Scan# 7
Delta R.T. 0.011 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion: 82 Resp: 1432

Ion	Ratio	Lower	Upper
82	100		
128	45.0	31.9	47.9
54	70.3	53.1	79.7

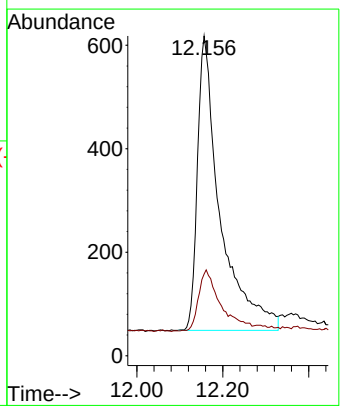


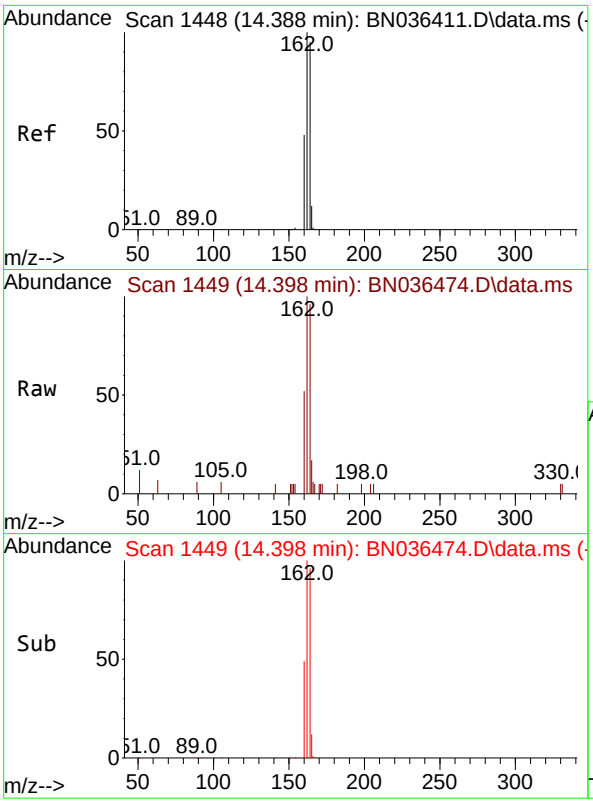


#11
2-Methylnaphthalene-d10
Concen: 0.348 ng
RT: 12.156 min Scan# 1151
Delta R.T. 0.015 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:152 Resp: 2086

Ion	Ratio	Lower	Upper
152	100		
151	20.8	16.6	25.0



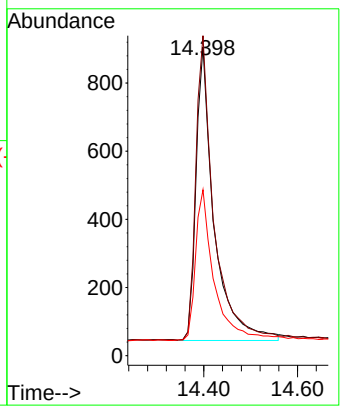


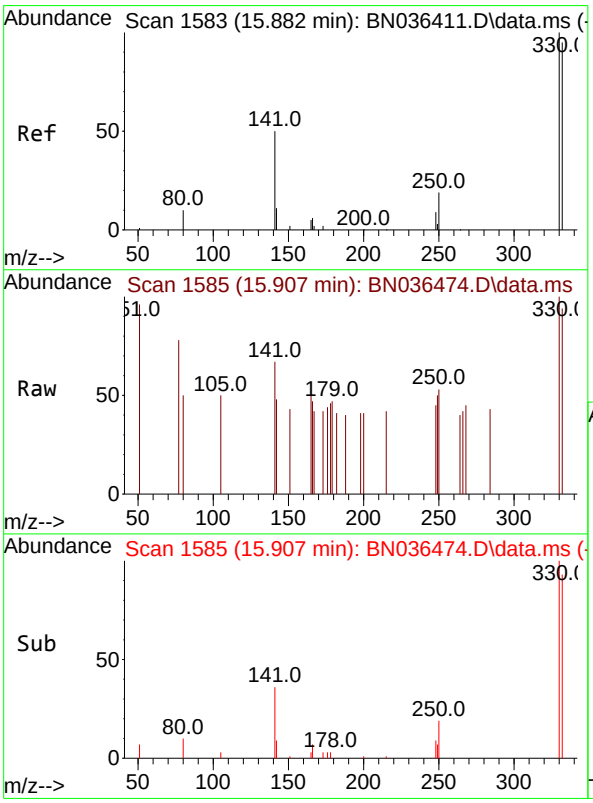
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.398 min Scan# 14
Delta R.T. 0.011 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion:164 Resp: 2305

Ion	Ratio	Lower	Upper
164	100		
162	103.6	84.1	126.1
160	53.8	41.4	62.0

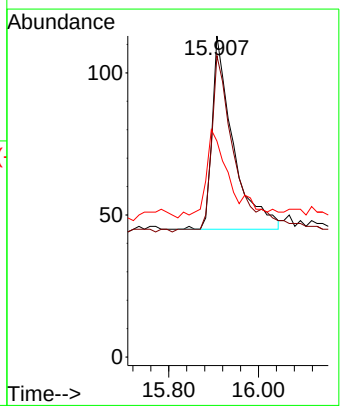


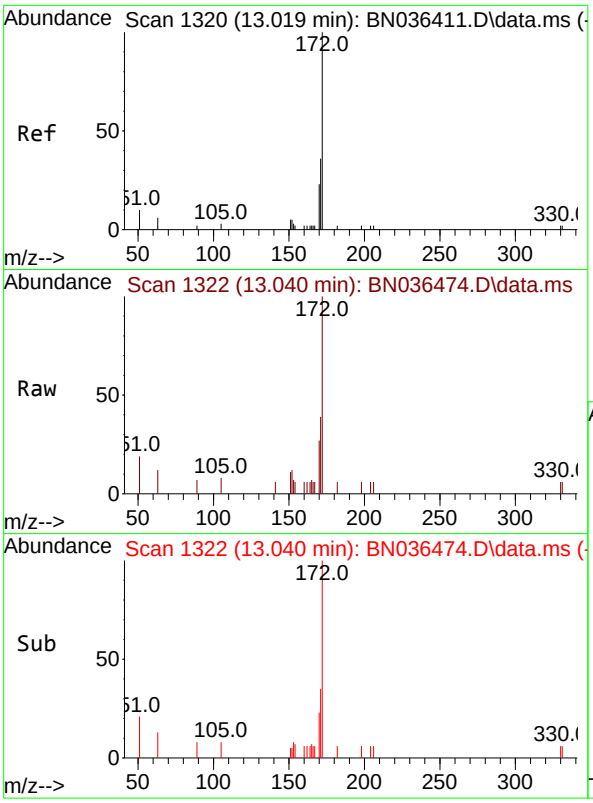


#14
2,4,6-Tribromophenol
Concen: 0.193 ng
RT: 15.907 min Scan# 1585
Delta R.T. 0.025 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:330 Resp: 220

Ion	Ratio	Lower	Upper
330	100		
332	93.2	76.6	114.8
141	53.2	37.8	56.8



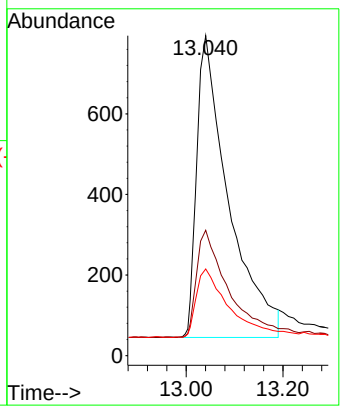


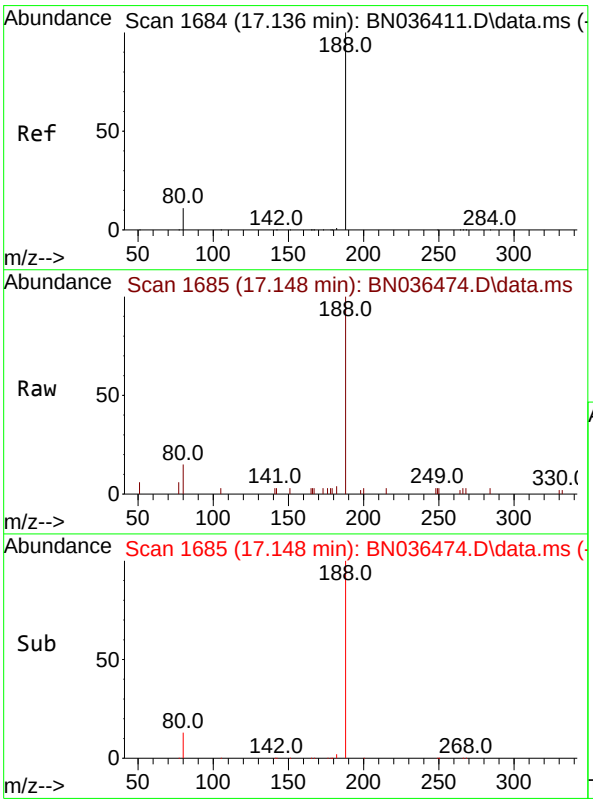
#15
2-Fluorobiphenyl
Concen: 0.351 ng
RT: 13.040 min Scan# 1
Delta R.T. 0.021 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion:172 Resp: 3041

Ion	Ratio	Lower	Upper
172	100		
171	39.2	29.6	44.4
170	27.1	19.8	29.6

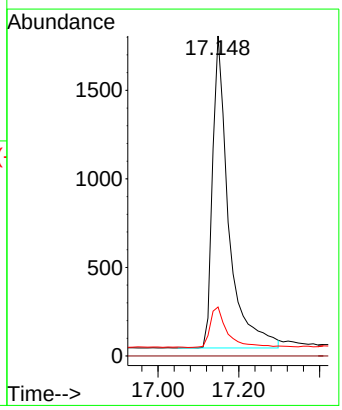


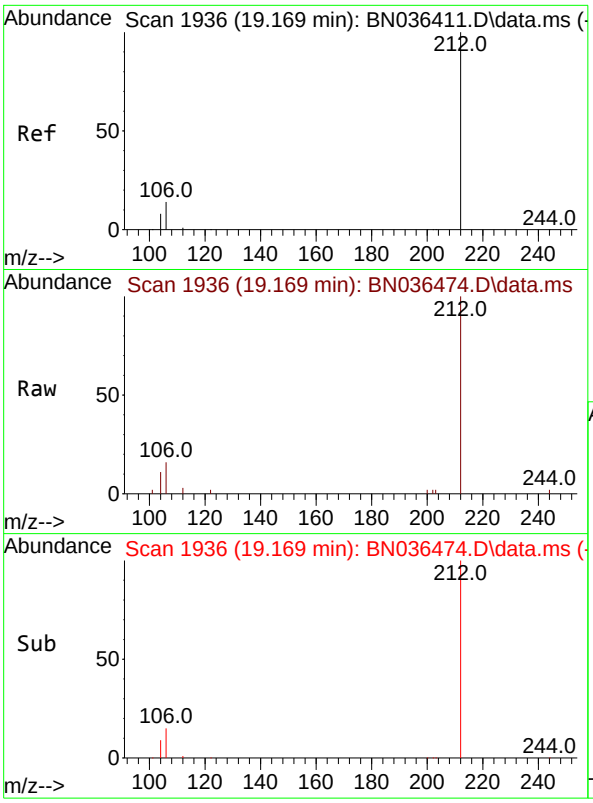


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.148 min Scan# 1685
Delta R.T. 0.012 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:188 Resp: 4889

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.3	9.8	14.6#



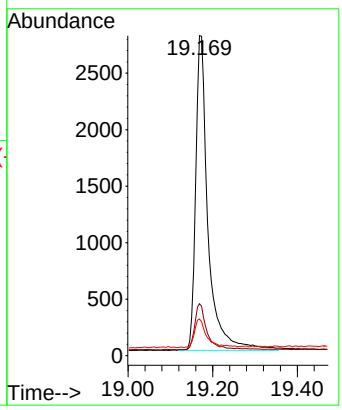


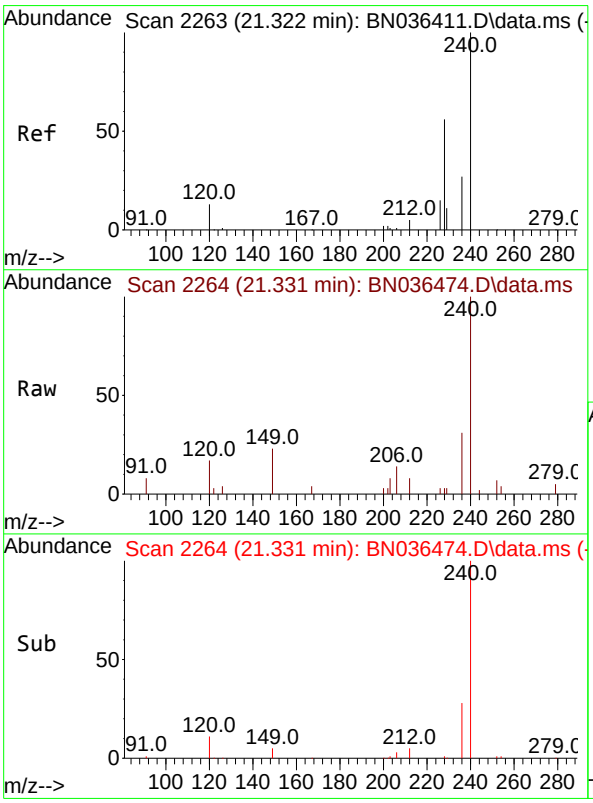
#27
Fluoranthene-d10
Concen: 0.415 ng
RT: 19.169 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion:212 Resp: 5645

Ion	Ratio	Lower	Upper
212	100		
106	14.0	11.5	17.3
104	9.2	7.1	10.7

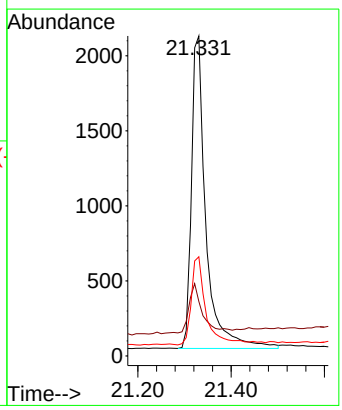


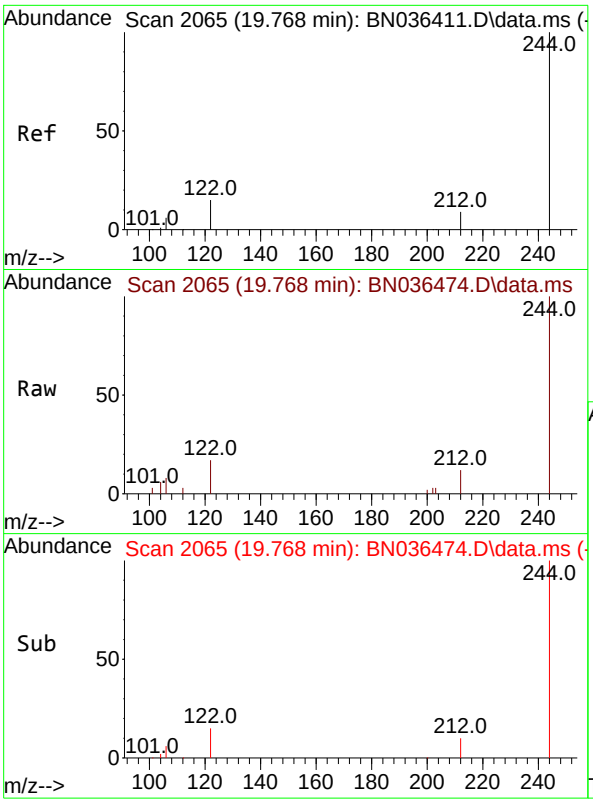


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.331 min Scan# 2264
Delta R.T. 0.009 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:240 Resp: 4485

Ion	Ratio	Lower	Upper
240	100		
120	17.0	13.3	19.9
236	31.0	23.0	34.6



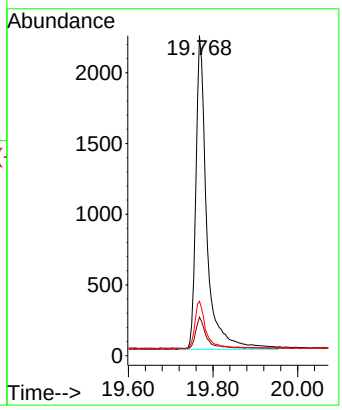


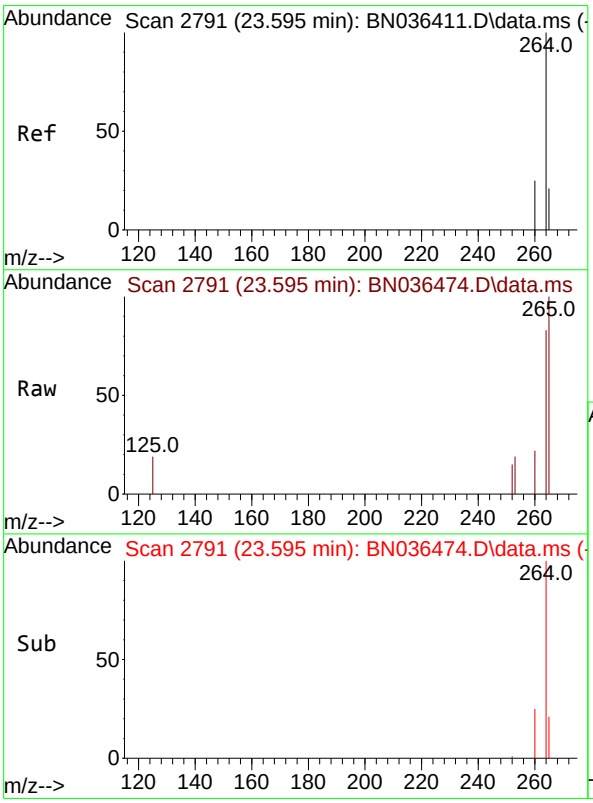
#31
Terphenyl-d14
Concen: 0.416 ng
RT: 19.768 min Scan# 2
Delta R.T. -0.000 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Instrument :
BNA_N
ClientSampleId :
PB166758BL

Tgt Ion:244 Resp: 3980

Ion	Ratio	Lower	Upper
244	100		
212	12.0	8.1	12.1
122	17.0	12.8	19.2

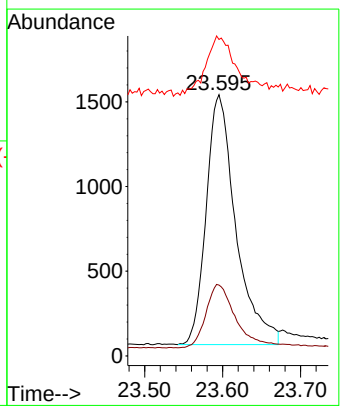




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.595 min Scan# 2791
Delta R.T. -0.000 min
Lab File: BN036474.D
Acq: 20 Feb 2025 10:47

Tgt Ion:264 Resp: 3907

Ion	Ratio	Lower	Upper
264	100		
260	27.1	20.9	31.3
265	121.1	60.7	91.1#



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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	
Client Sample ID:	PB166758BS	SDG No.:	Q1380
Lab Sample ID:	PB166758BS	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
BN036480.D	1	02/18/25 11:40	02/20/25 14:24	PB166758

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.35		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.52		30 - 150		129%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.39		55 - 111		97%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.47	*	53 - 106		118%	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	1830	7.746				
1146-65-2	Naphthalene-d8	4130	10.541				
15067-26-2	Acenaphthene-d10	2360	14.388				
1517-22-2	Phenanthrene-d10	5260	17.136				
1719-03-5	Chrysene-d12	4820	21.322				
1520-96-3	Perylene-d12	4360	23.589				

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\BN022025\
Data File : BN036480.D
Acq On : 20 Feb 2025 14:24
Operator : RC/JU
Sample : PB166758BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 21 00:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1827	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	4127	0.400	ng	# 0.00
13) Acenaphthene-d10	14.388	164	2357	0.400	ng	0.00
19) Phenanthrene-d10	17.136	188	5256	0.400	ng	0.00
29) Chrysene-d12	21.322	240	4823	0.400	ng	0.00
35) Perylene-d12	23.589	264	4362	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	1752	0.406	ng	0.00
5) Phenol-d6	6.923	99	1995	0.394	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1572	0.386	ng	-0.01
11) 2-Methylnaphthalene-d10	12.131	152	3269	0.515	ng	-0.01
14) 2,4,6-Tribromophenol	15.882	330	432	0.370	ng	0.00
15) 2-Fluorobiphenyl	13.008	172	4173	0.471	ng	-0.01
27) Fluoranthene-d10	19.164	212	5915	0.405	ng	0.00
31) Terphenyl-d14	19.764	244	4423	0.430	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.261	88	699	0.350	ng	# 51
3) n-Nitrosodimethylamine	3.572	42	1437	0.414	ng	# 97
6) bis(2-Chloroethyl)ether	7.168	93	2058	0.388	ng	98
9) Naphthalene	10.584	128	4763	0.400	ng	99
10) Hexachlorobutadiene	10.872	225	1195	0.412	ng	# 100
12) 2-Methylnaphthalene	12.207	142	3110	0.398	ng	98
16) Acenaphthylene	14.099	152	4781	0.459	ng	100
17) Acenaphthene	14.452	154	3067	0.441	ng	99
18) Fluorene	15.435	166	4315	0.436	ng	99
20) 4,6-Dinitro-2-methylph...	15.523	198	393	0.381	ng	92
21) 4-Bromophenyl-phenylether	16.329	248	1336	0.426	ng	# 88
22) Hexachlorobenzene	16.441	284	1675	0.433	ng	98
23) Atrazine	16.602	200	1144	0.437	ng	95
24) Pentachlorophenol	16.789	266	915	0.498	ng	99
25) Phenanthrene	17.173	178	6880	0.453	ng	99
26) Anthracene	17.260	178	6286	0.469	ng	99
28) Fluoranthene	19.192	202	8127	0.435	ng	99
30) Pyrene	19.559	202	8425	0.454	ng	100
32) Benzo(a)anthracene	21.304	228	7065	0.445	ng	99
33) Chrysene	21.358	228	8131	0.473	ng	99
34) Bis(2-ethylhexyl)phtha...	21.241	149	3779	0.382	ng	100
36) Indeno(1,2,3-cd)pyrene	25.890	276	7355	0.482	ng	99
37) Benzo(b)fluoranthene	22.902	252	6950	0.484	ng	97
38) Benzo(k)fluoranthene	22.949	252	7857m	0.531	ng	
39) Benzo(a)pyrene	23.490	252	6505	0.519	ng	97
40) Dibenzo(a,h)anthracene	25.908	278	5603m	0.466	ng	
41) Benzo(g,h,i)perylene	26.589	276	5921	0.434	ng	97

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036480.D
Acq On : 20 Feb 2025 14:24
Operator : RC/JU
Sample : PB166758BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Feb 21 00:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Manual Integrations APPROVED

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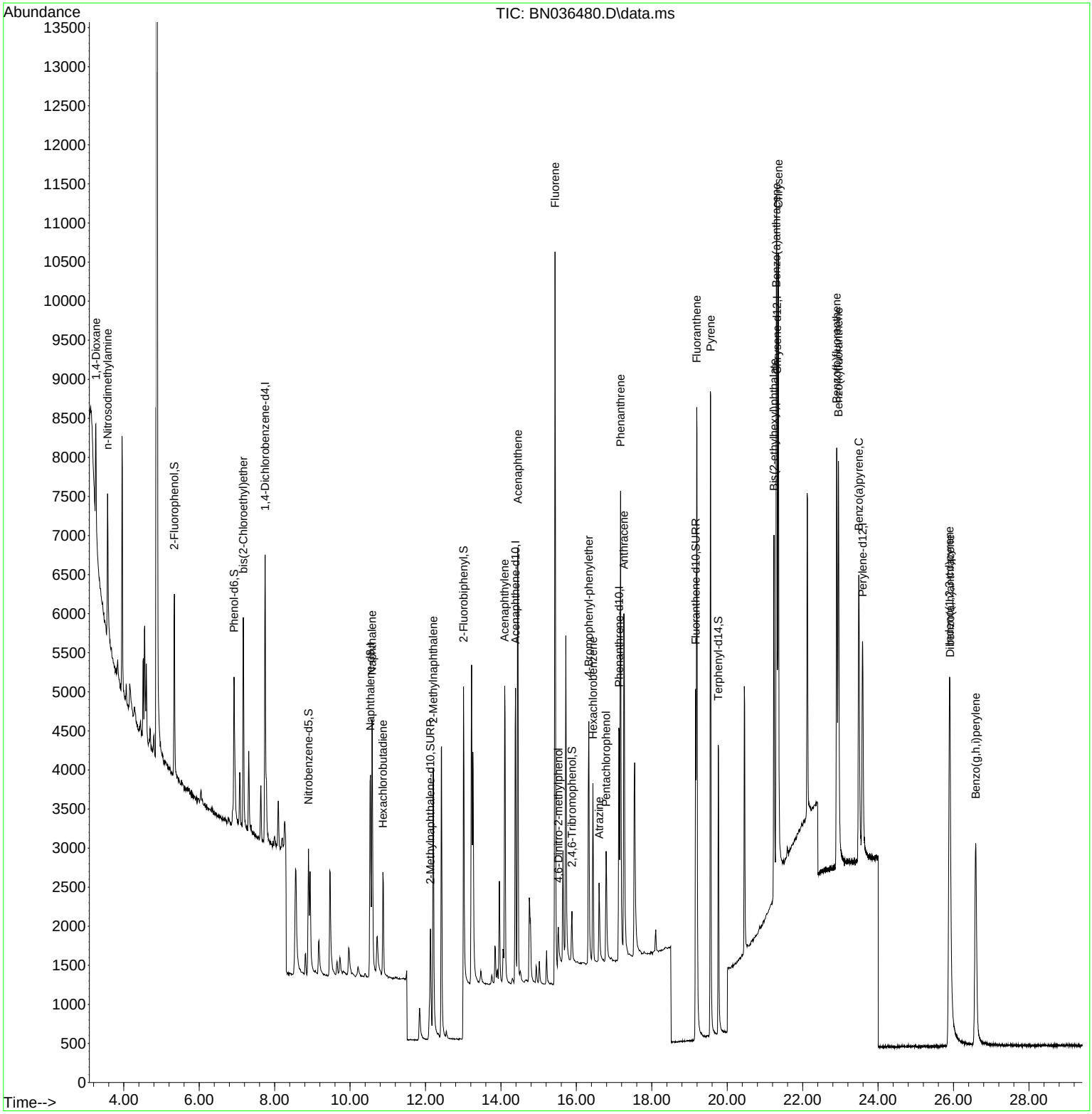
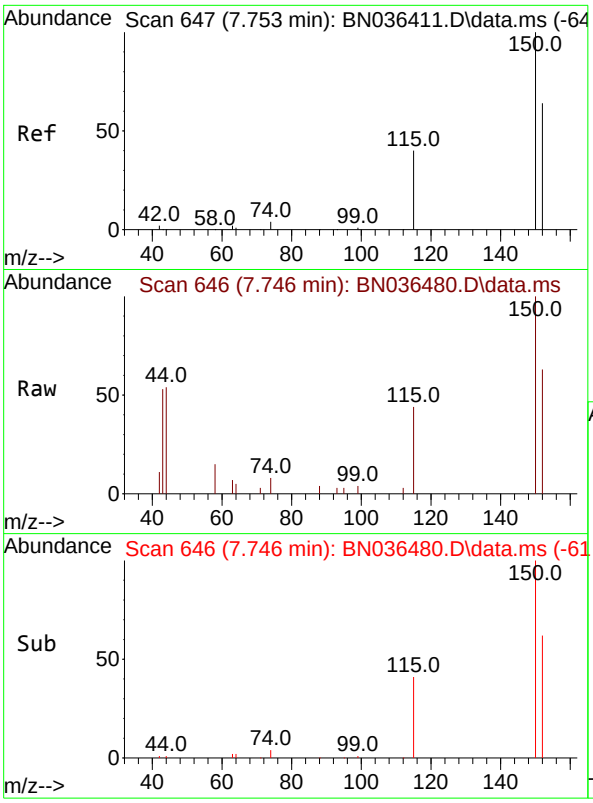
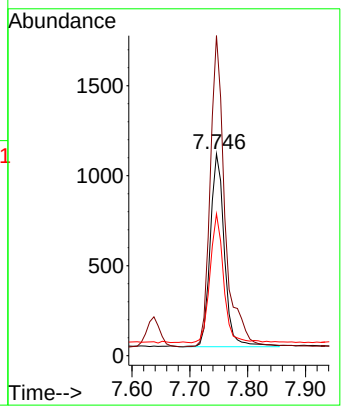




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:152 Resp: 182

Ion	Ratio	Lower	Upper
152	100		
150	158.6	123.7	185.5
115	70.3	52.5	78.7



Instrument :
BNA_N
ClientSampleId :
PB166758BS

Manual Integrations
APPROVED

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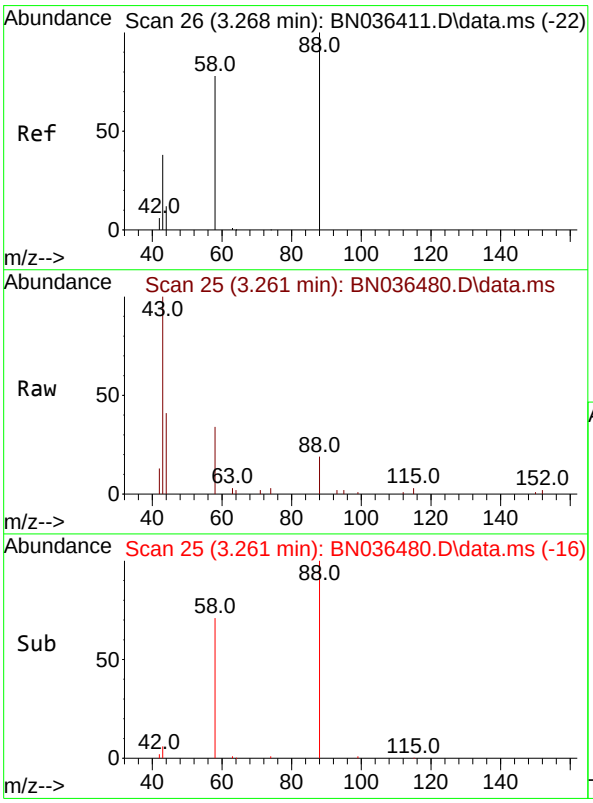
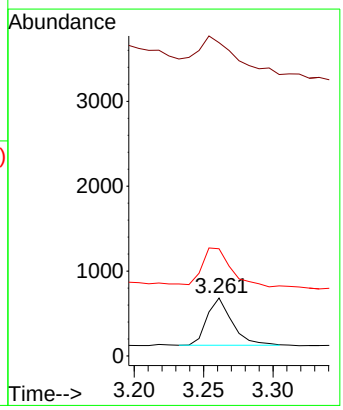
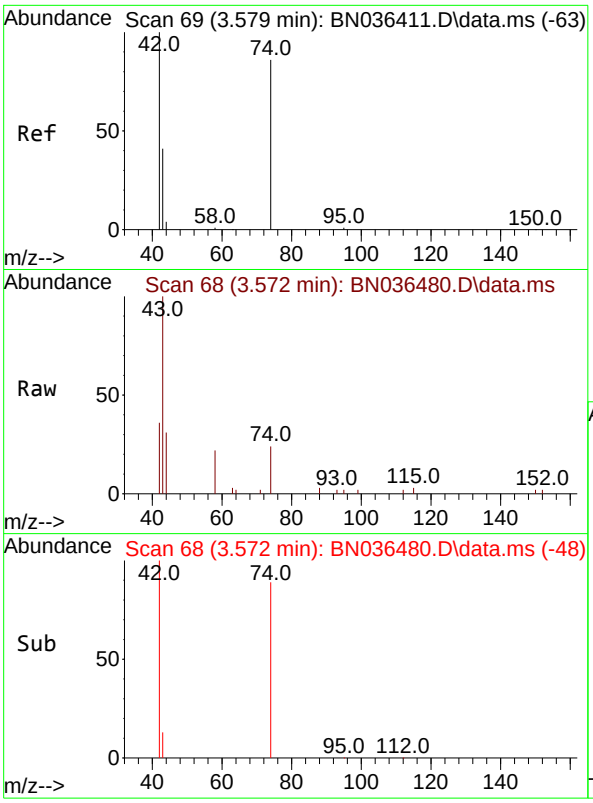


#2
1,4-Dioxane
Concen: 0.350 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 88 Resp: 699

Ion	Ratio	Lower	Upper
88	100		
43	125.0	33.7	50.5#
58	94.6	68.9	103.3

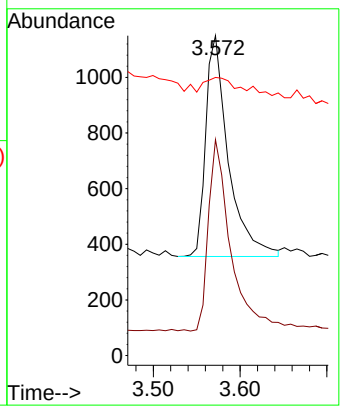




#3
n-Nitrosodimethylamine
Concen: 0.414 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 42 Resp: 143

Ion	Ratio	Lower	Upper
42	100		
74	88.9	71.8	107.6
44	17.9	7.8	11.6



Instrument :
BNA_N
ClientSampleId :
PB166758BS

Manual Integrations APPROVED

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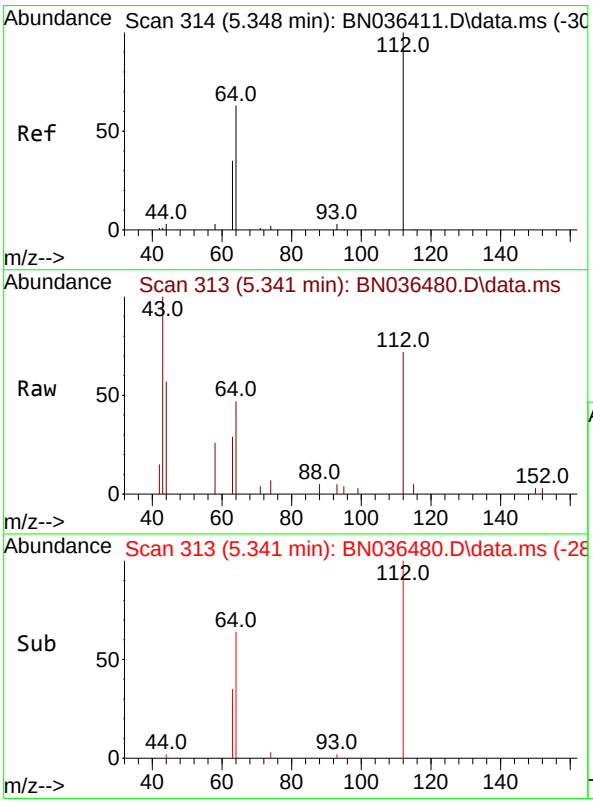
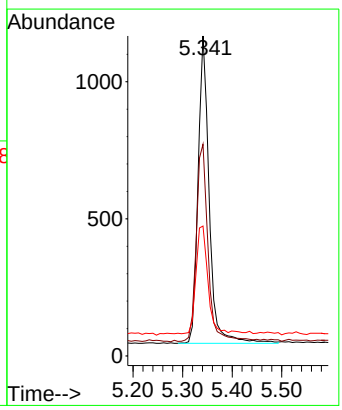
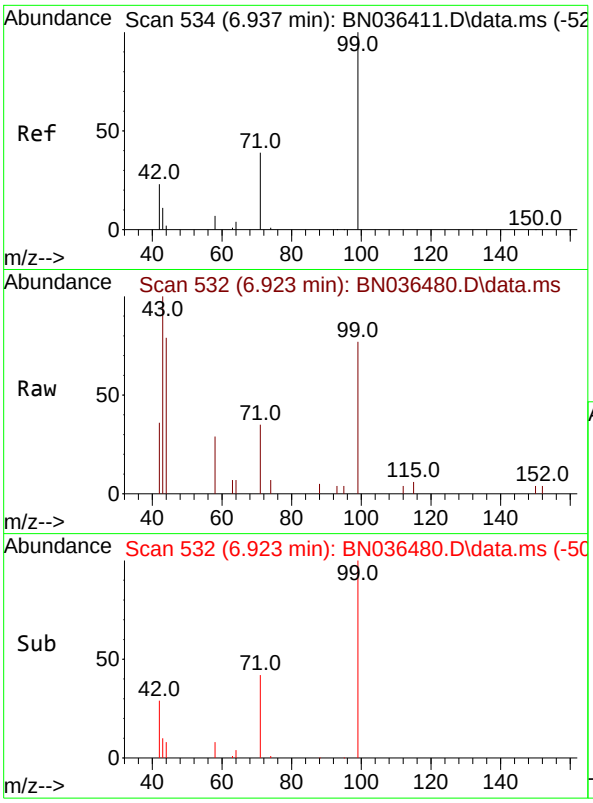


#4
2-Fluorophenol
Concen: 0.406 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:112 Resp: 1752

Ion	Ratio	Lower	Upper
112	100		
64	67.2	53.4	80.0
63	37.0	30.3	45.5





#5
Phenol-d6
Concen: 0.394 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.014 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 99 Resp: 199

Ion	Ratio	Lower	Upper
99	100		
42	31.6	21.7	32.5
71	42.0	32.6	49.0

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Manual Integrations
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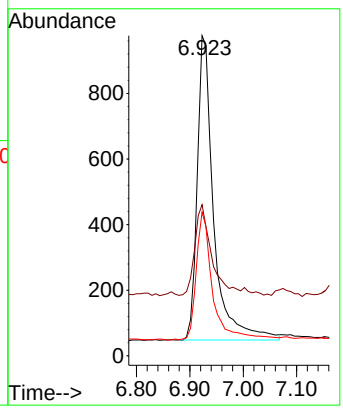
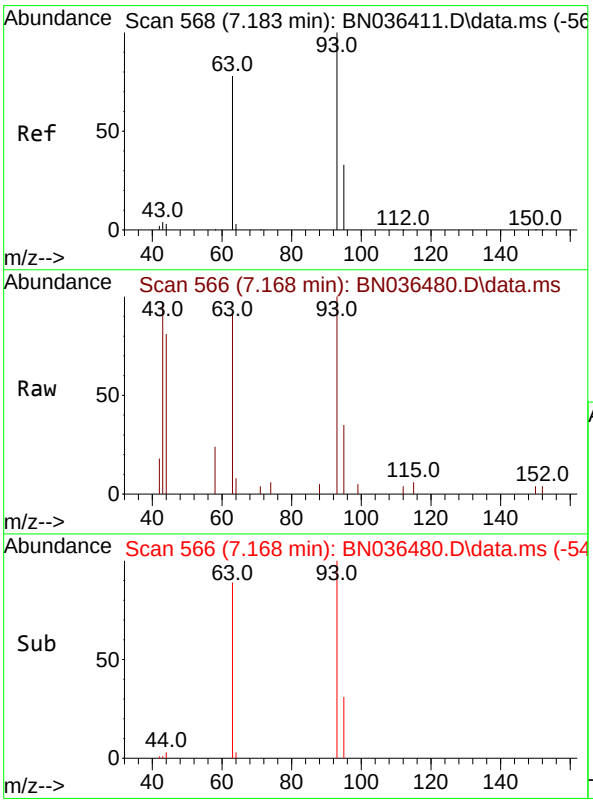
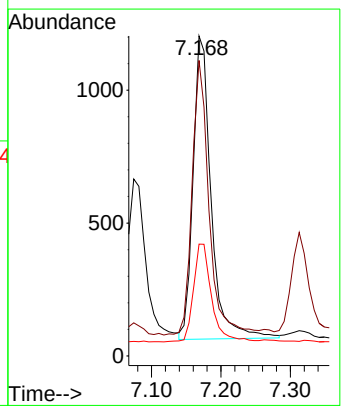


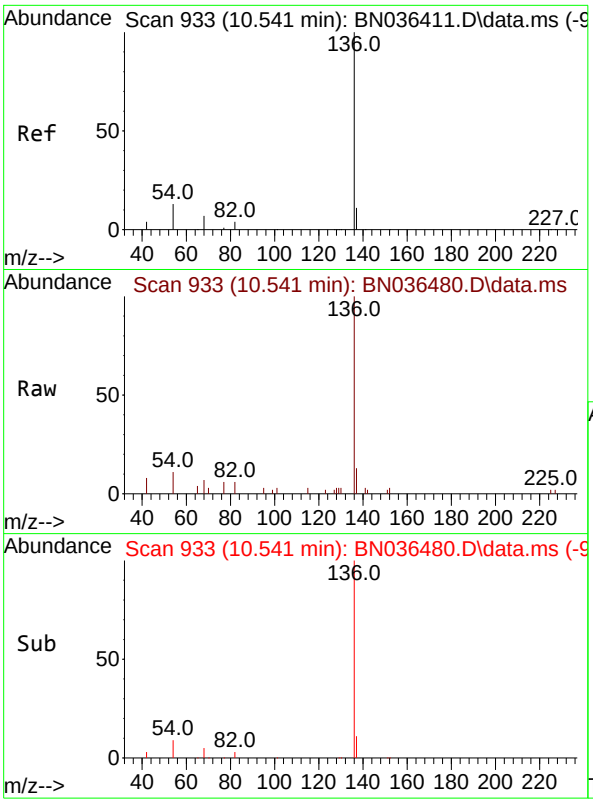


#6
bis(2-Chloroethyl)ether
Concen: 0.388 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.014 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 93 Resp: 2058

Ion	Ratio	Lower	Upper
93	100		
63	84.9	66.3	99.5
95	32.0	26.2	39.4

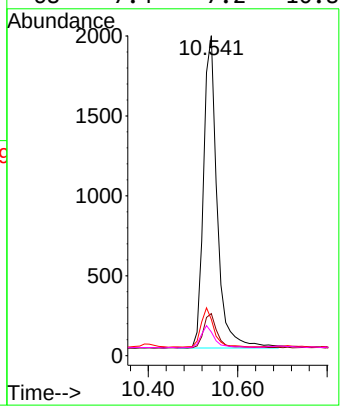




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:136 Resp: 412

Ion	Ratio	Lower	Upper
136	100		
137	13.1	10.1	15.1
54	11.3	11.8	17.6#
68	7.4	7.2	10.8



Instrument :
BNA_N
ClientSampleId :
PB166758BS

Manual Integrations APPROVED

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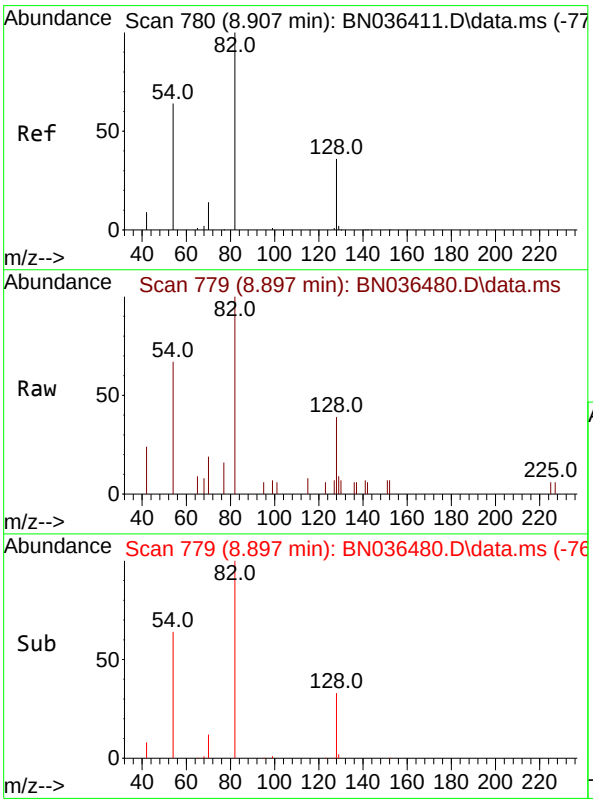
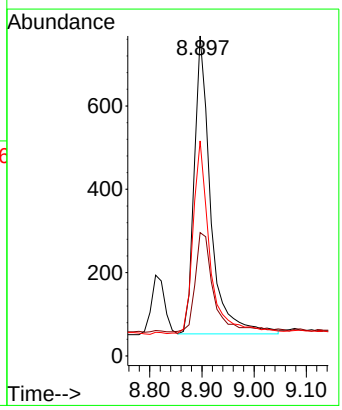
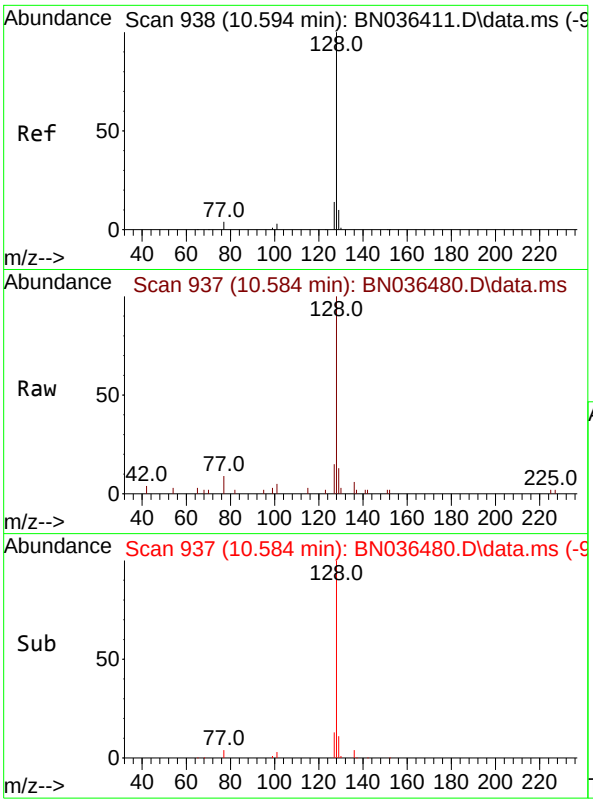


#8
Nitrobenzene-d5
Concen: 0.386 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 82 Resp: 1572

Ion	Ratio	Lower	Upper
82	100		
128	38.5	31.9	47.9
54	67.2	53.1	79.7

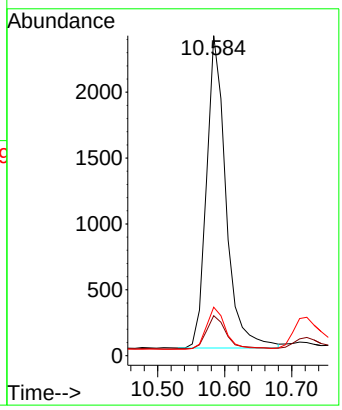




#9
Naphthalene
Concen: 0.400 ng
RT: 10.584 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:128 Resp: 476

Ion	Ratio	Lower	Upper
128	100		
129	12.5	9.6	14.4
127	15.2	12.0	18.0



Instrument :
BNA_N
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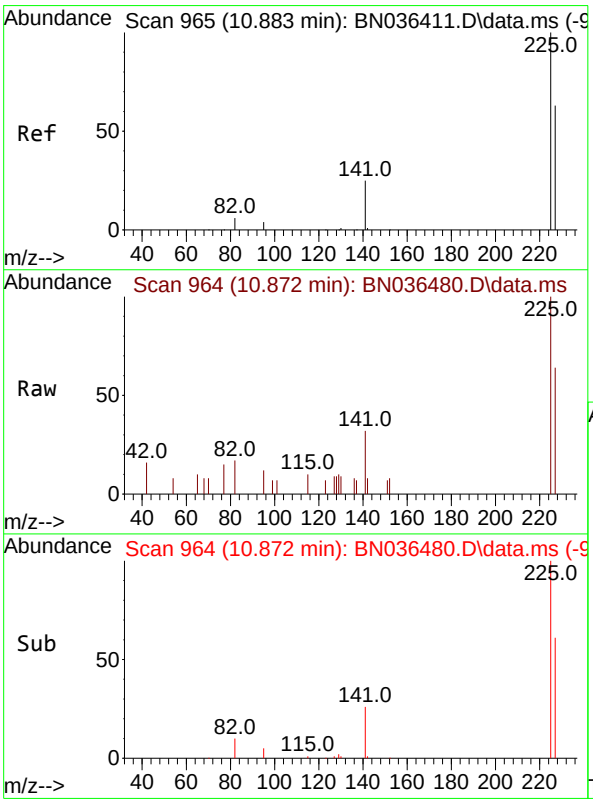
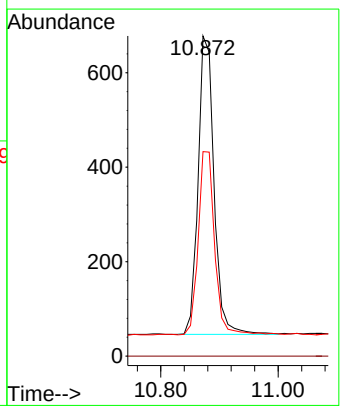
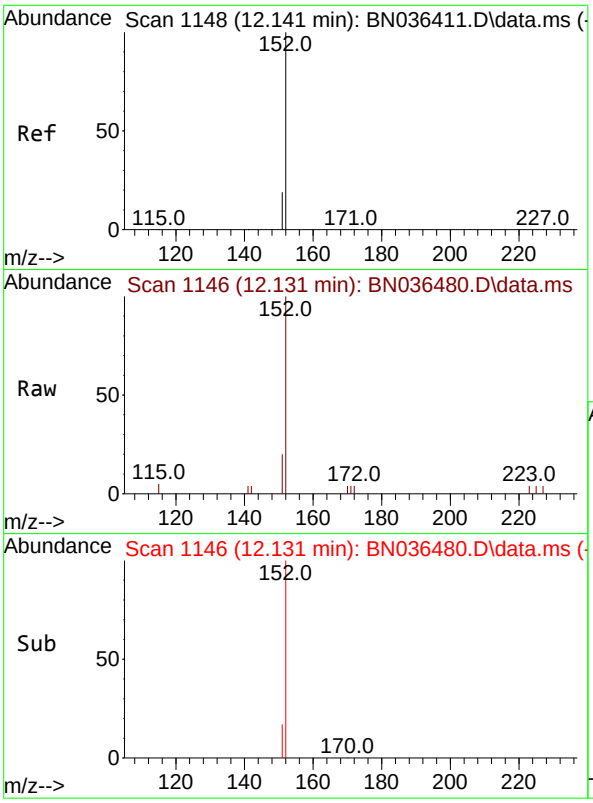


#10
Hexachlorobutadiene
Concen: 0.412 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:225 Resp: 1195

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.4	50.9	76.3





#11
2-Methylnaphthalene-d10
Concen: 0.515 ng
RT: 12.131 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:152 Resp: 326

Ion	Ratio	Lower	Upper
152	100		
151	15.2	16.6	25.0#

Instrument :
BNA_N
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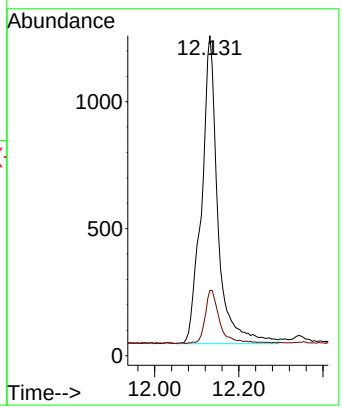
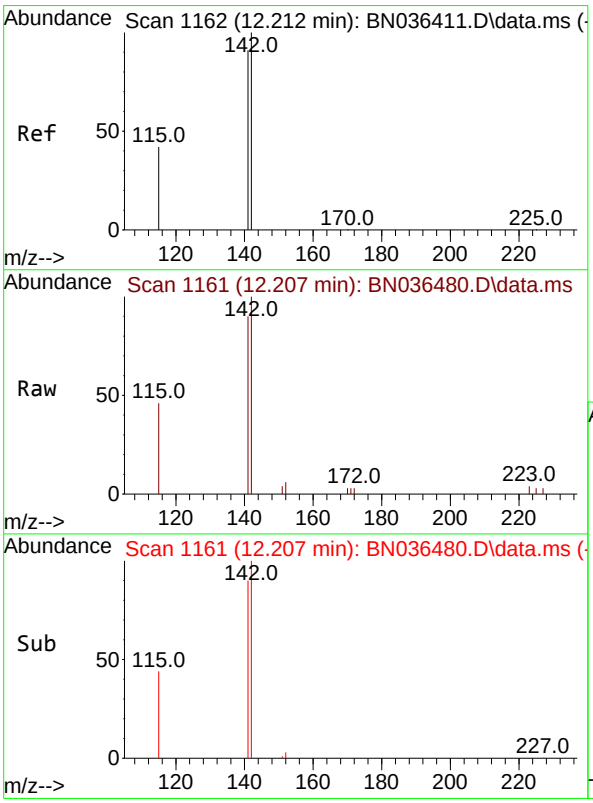
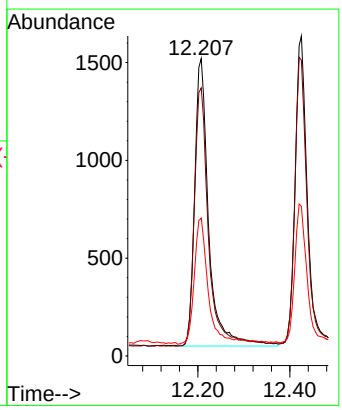


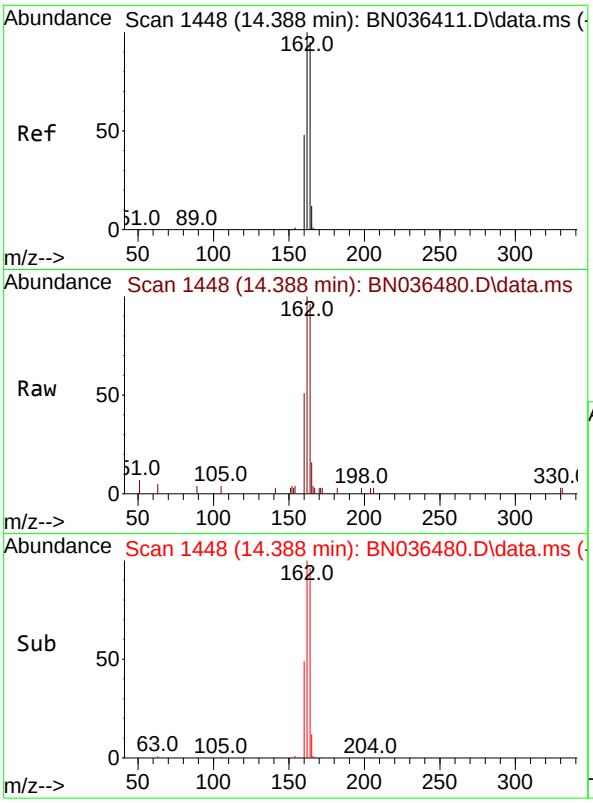


#12
2-Methylnaphthalene
Concen: 0.398 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:142 Resp: 3110

Ion	Ratio	Lower	Upper
142	100		
141	90.1	72.8	109.2
115	46.4	35.5	53.3





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:164 Resp: 235

Ion	Ratio	Lower	Upper
164	100		
162	104.0	84.1	126.1
160	52.6	41.4	62.0

Instrument :
BNA_N
ClientSampleId :
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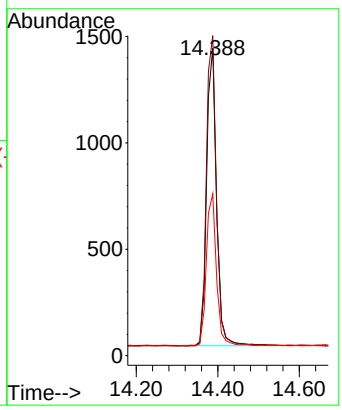
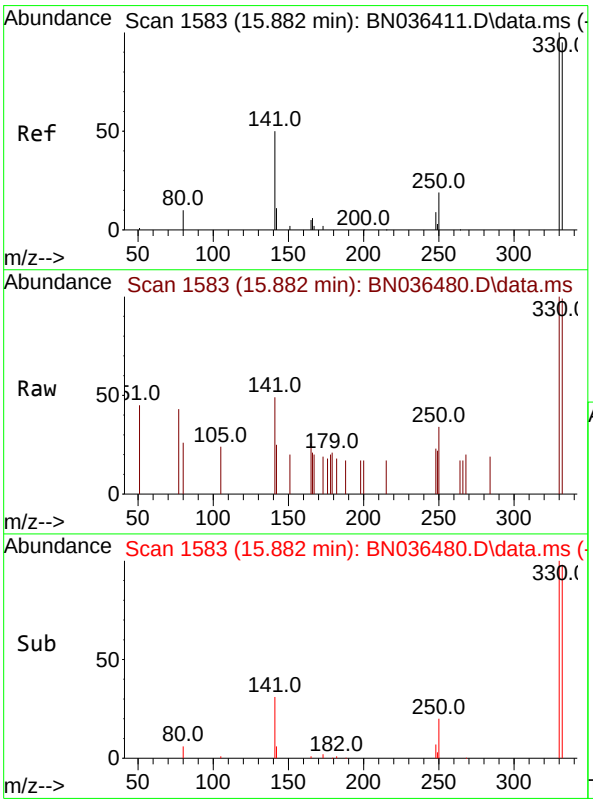
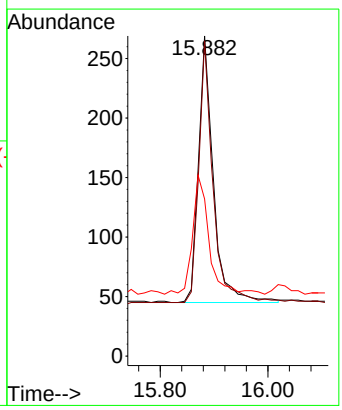


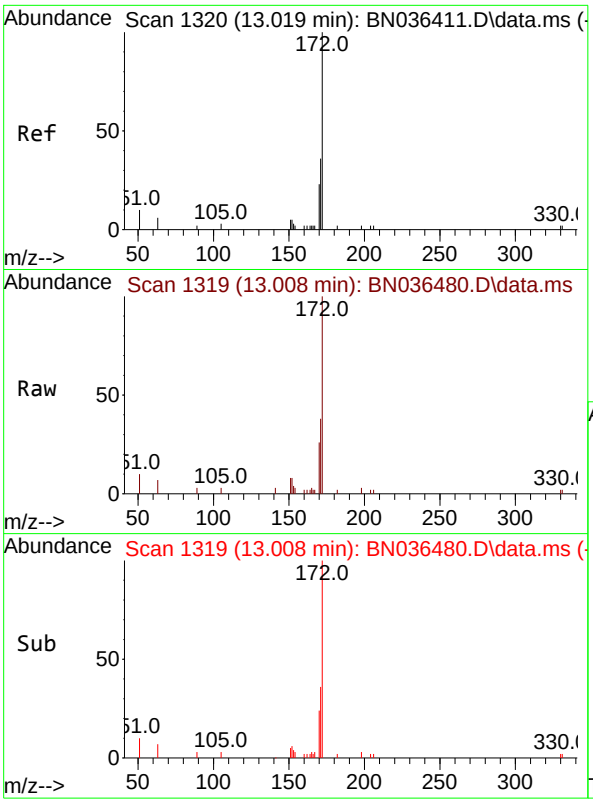


#14
2,4,6-Tribromophenol
Concen: 0.370 ng
RT: 15.882 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:330 Resp: 432

Ion	Ratio	Lower	Upper
330	100		
332	93.8	76.6	114.8
141	49.5	37.8	56.8

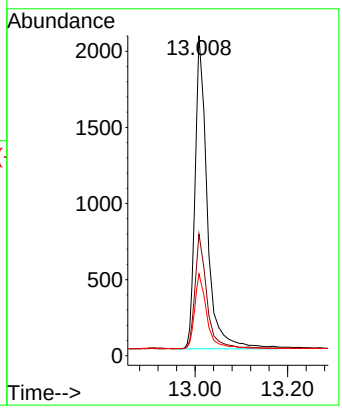




#15
2-Fluorobiphenyl
Concen: 0.471 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:172 Resp: 417

Ion	Ratio	Lower	Upper
172	100		
171	38.0	29.6	44.4
170	25.5	19.8	29.6



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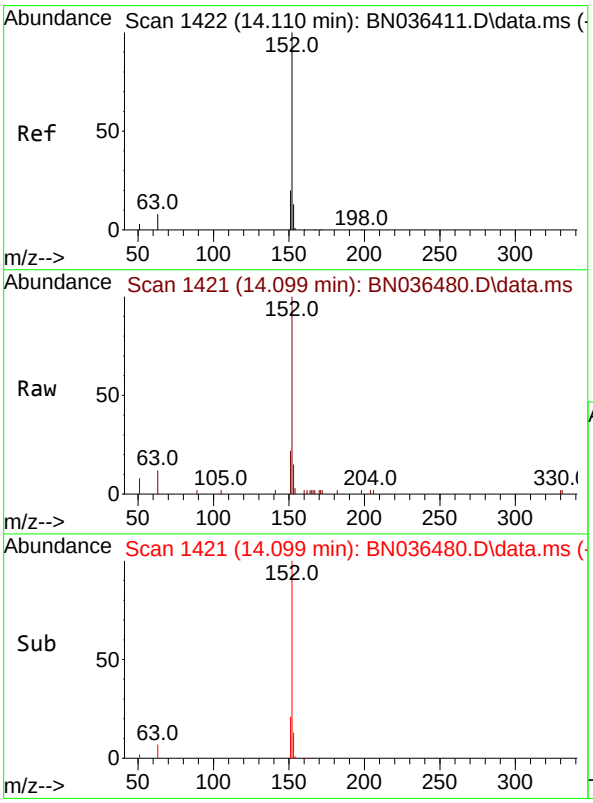
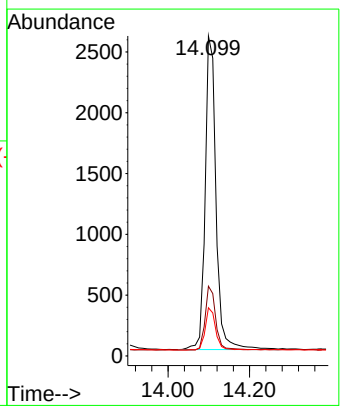
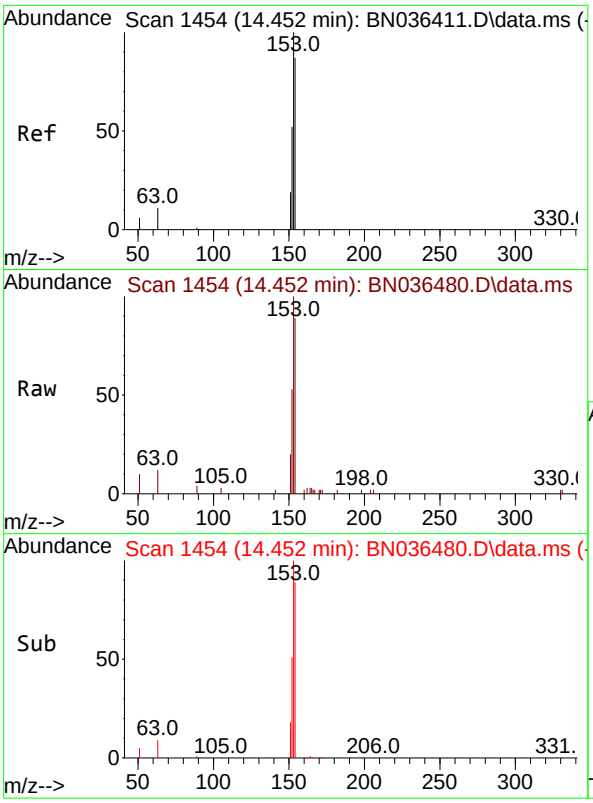


#16
Acenaphthylene
Concen: 0.459 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:152 Resp: 4781

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.8	23.8
153	12.9	10.2	15.2

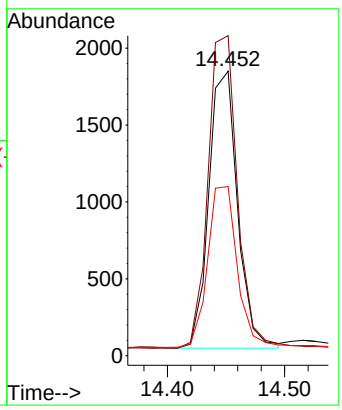




#17
Acenaphthene
Concen: 0.441 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:154 Resp: 306

Ion	Ratio	Lower	Upper
154	100		
153	117.2	93.3	139.9
152	61.5	48.8	73.2



Instrument :
BNA_N
ClientSampleId :
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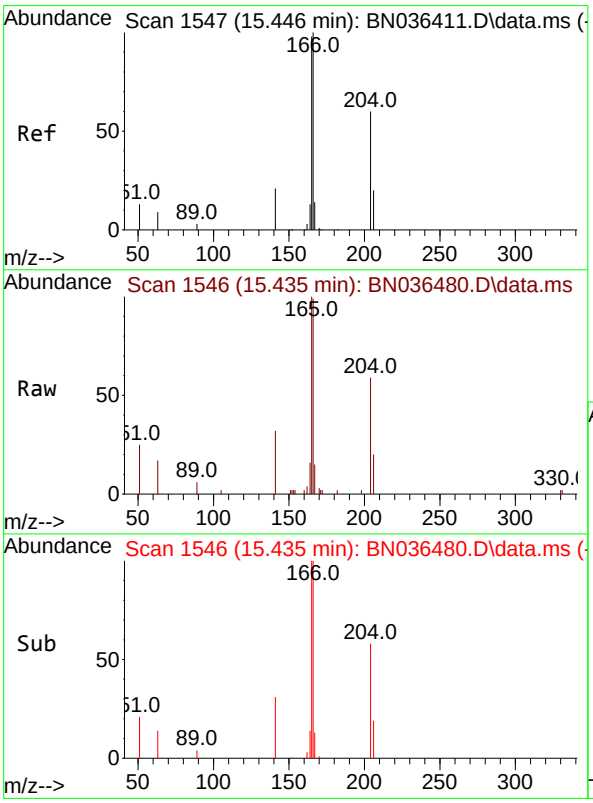
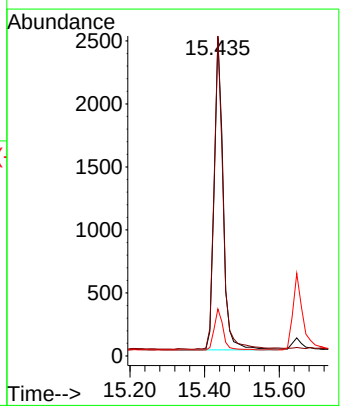
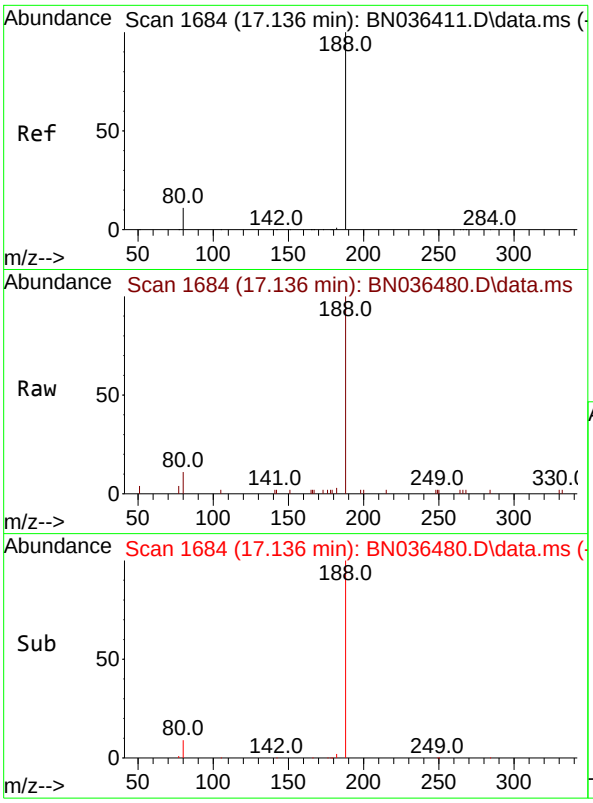


#18
Fluorene
Concen: 0.436 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:166 Resp: 4315

Ion	Ratio	Lower	Upper
166	100		
165	100.1	79.5	119.3
167	13.5	10.4	15.6

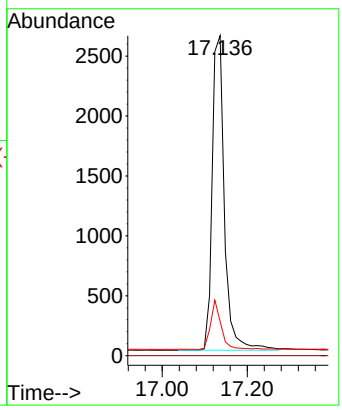




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:188 Resp: 525(

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.7	9.8	14.6



Instrument :
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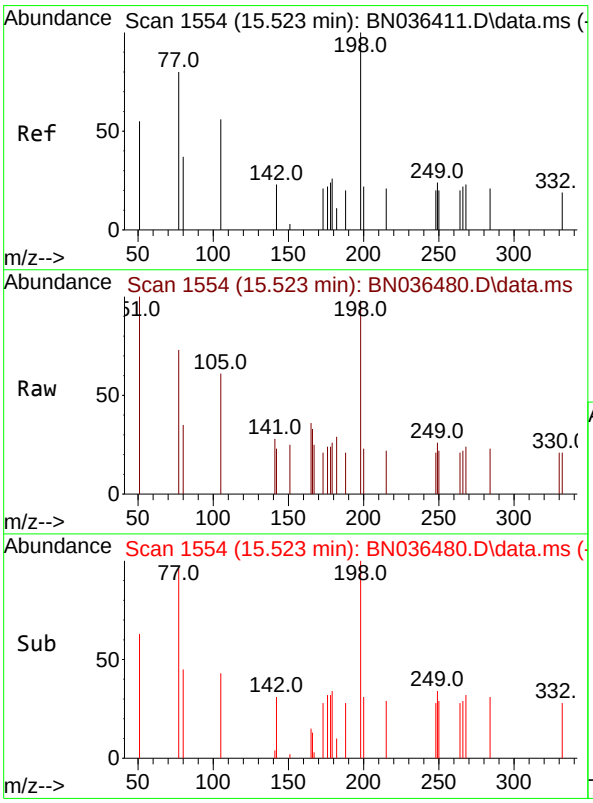
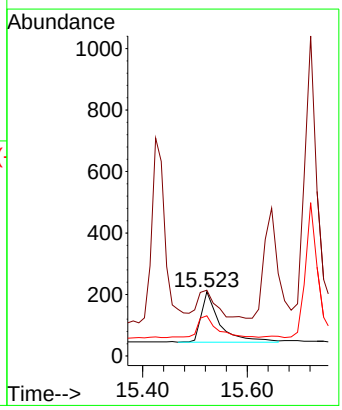
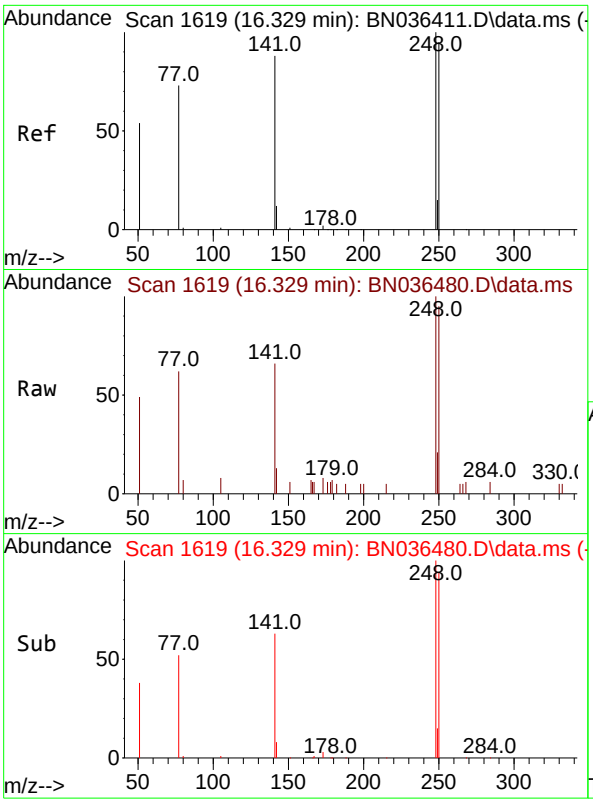


#20
4,6-Dinitro-2-methylphenol
Concen: 0.381 ng
RT: 15.523 min Scan# 1554
Delta R.T. -0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:198 Resp: 393

Ion	Ratio	Lower	Upper
198	100		
51	102.4	86.6	129.8
105	62.7	57.5	86.3





#21
4-Bromophenyl-phenylether
Concen: 0.426 ng
RT: 16.329 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:248 Resp: 133(

Ion	Ratio	Lower	Upper
248	100		
250	94.7	76.1	114.1
141	65.9	71.7	107.5#

Instrument :
BNA_N
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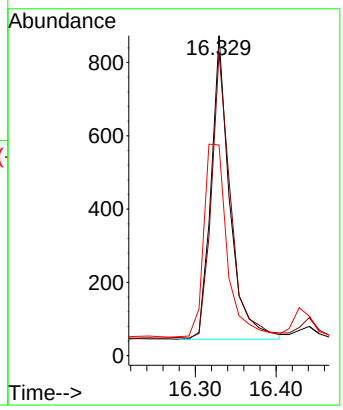
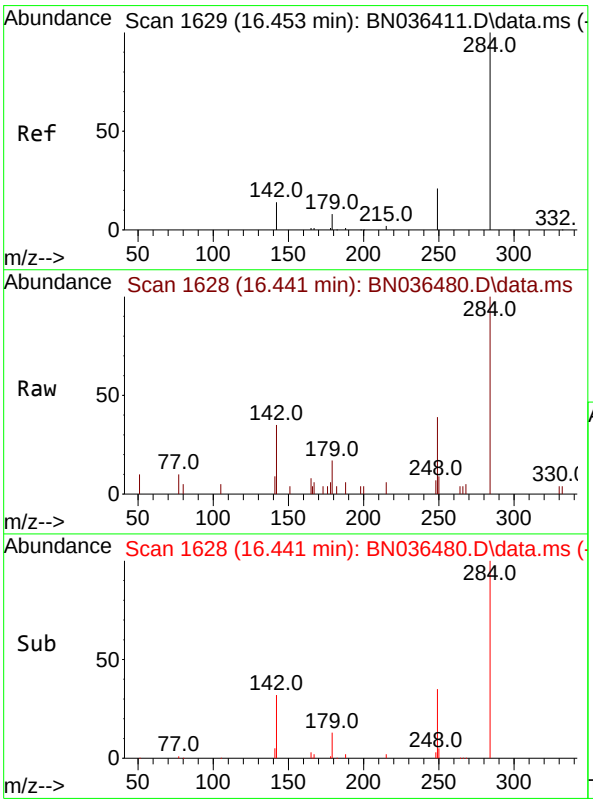
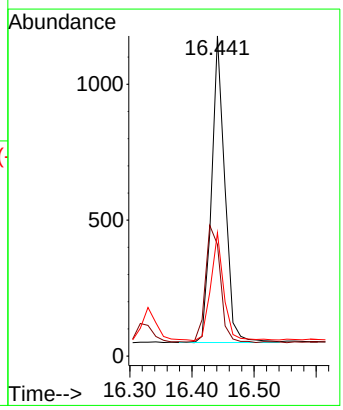


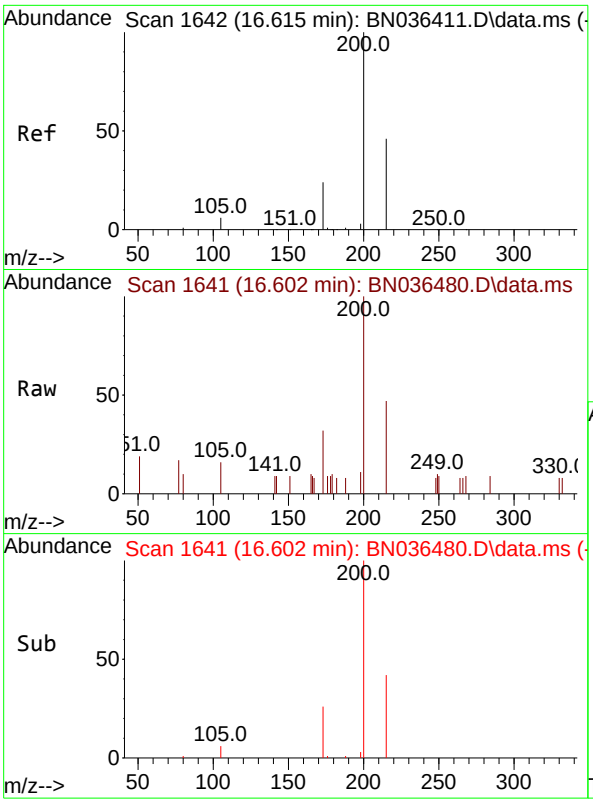


#22
Hexachlorobenzene
Concen: 0.433 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:284 Resp: 1675

Ion	Ratio	Lower	Upper
284	100		
142	42.7	33.4	50.0
249	34.7	28.6	43.0





#23
Atrazine
Concen: 0.437 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:200 Resp: 1144

Ion	Ratio	Lower	Upper
200	100		
173	32.2	23.2	34.8
215	47.2	40.0	60.0

Instrument :
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ClientSampleId :
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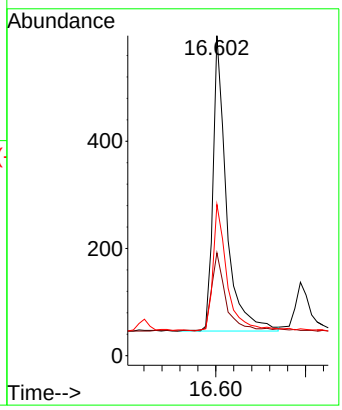
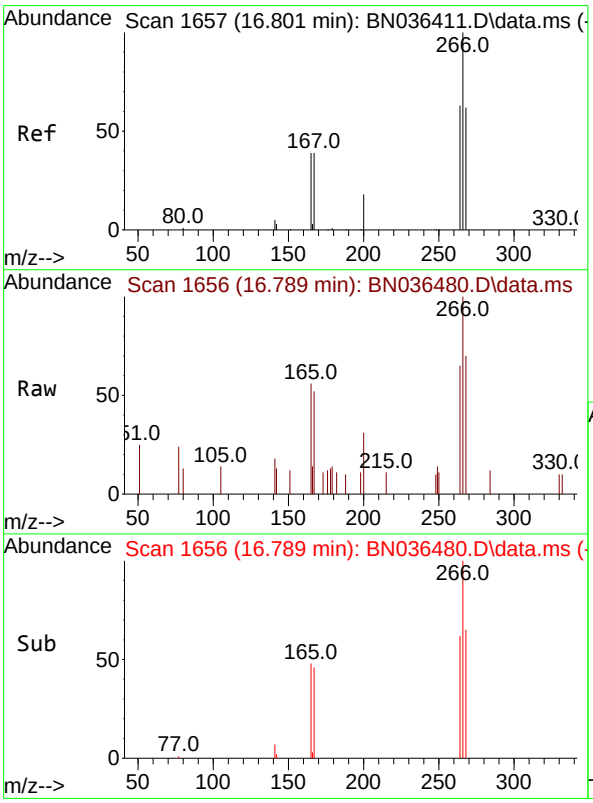
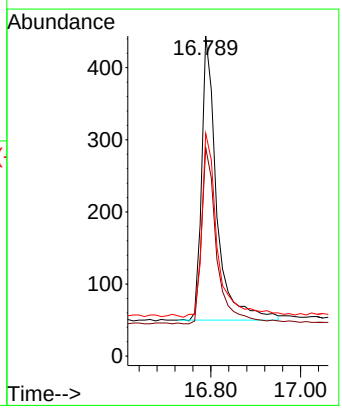


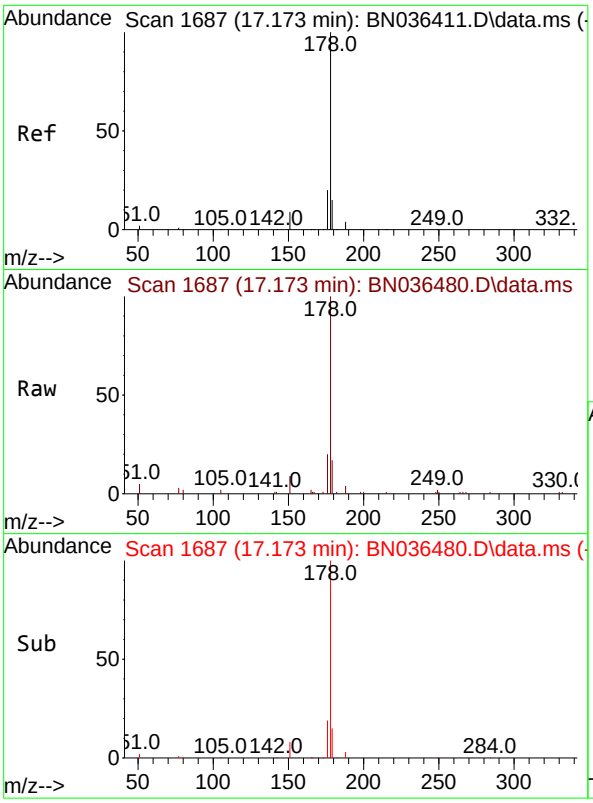


#24
Pentachlorophenol
Concen: 0.498 ng
RT: 16.789 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:266 Resp: 915

Ion	Ratio	Lower	Upper
266	100		
264	63.0	50.6	76.0
268	66.7	51.9	77.9

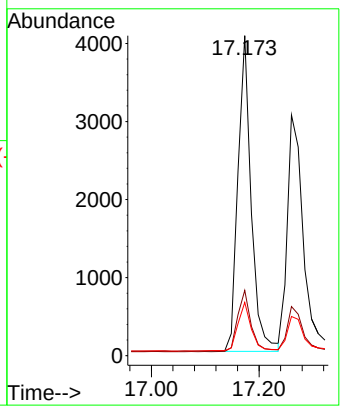




#25
Phenanthrene
Concen: 0.453 ng
RT: 17.173 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:178 Resp: 688(

Ion	Ratio	Lower	Upper
178	100		
176	19.8	15.7	23.5
179	15.8	12.4	18.6



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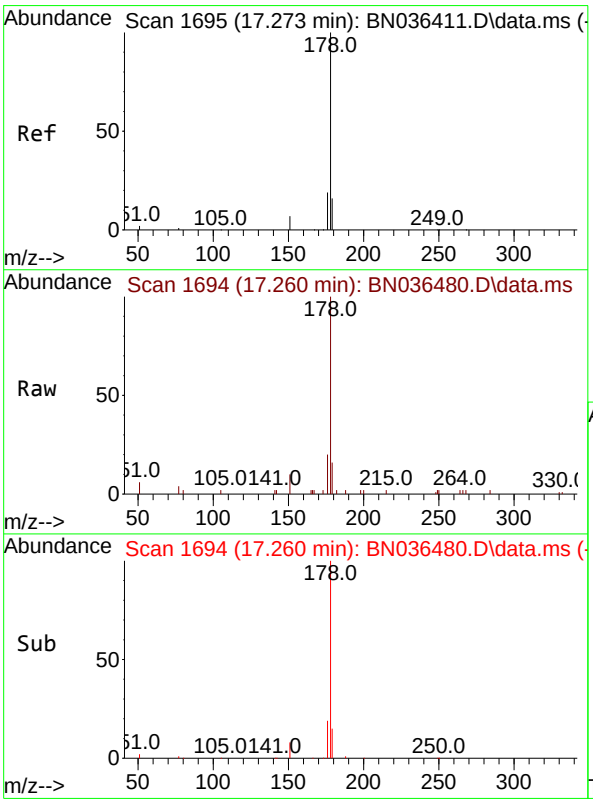
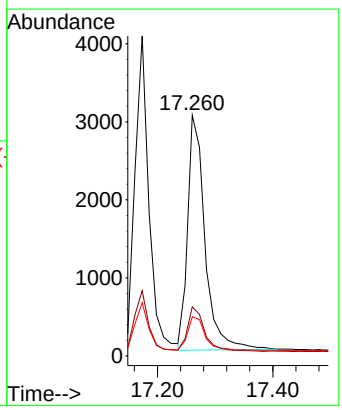
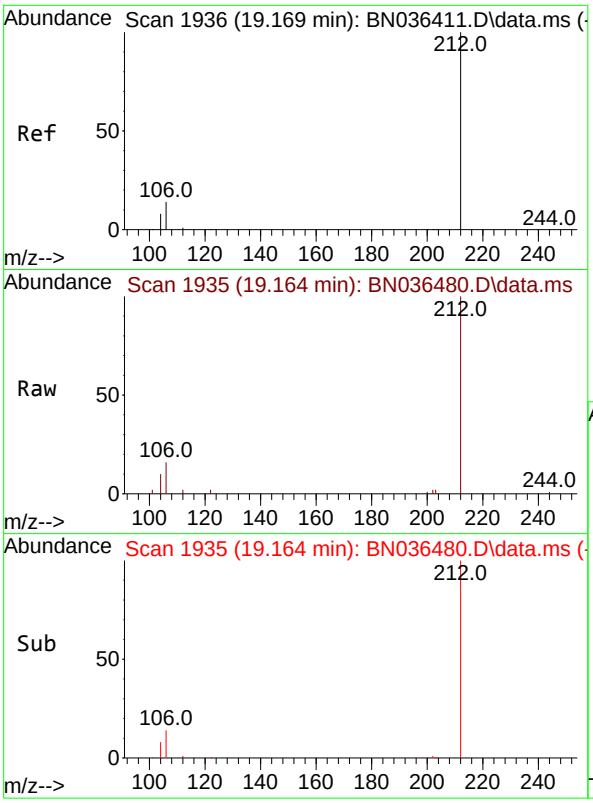


#26
Anthracene
Concen: 0.469 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:178 Resp: 6286

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.0	12.4	18.6

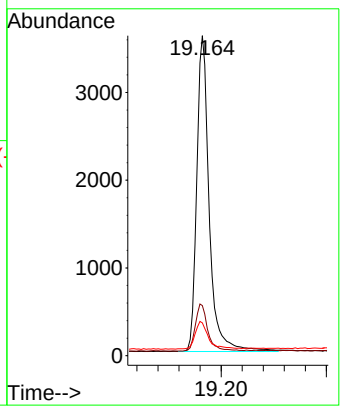




#27
Fluoranthene-d10
Concen: 0.405 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:212 Resp: 591

Ion	Ratio	Lower	Upper
212	100		
106	14.7	11.5	17.3
104	9.4	7.1	10.7



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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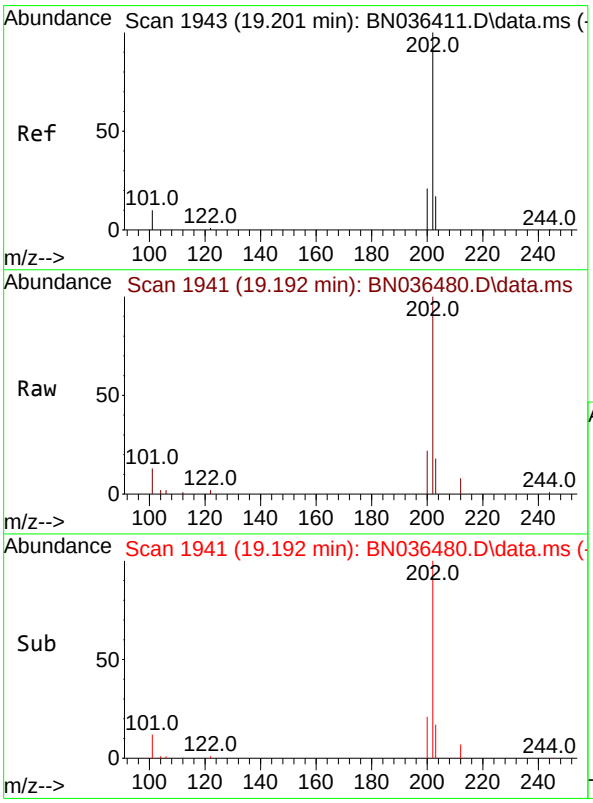
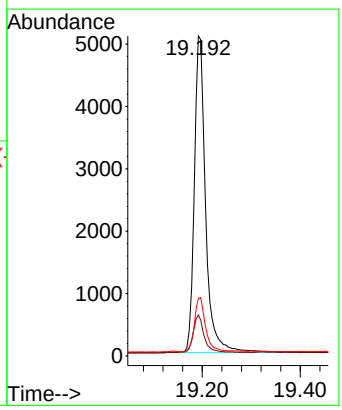
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

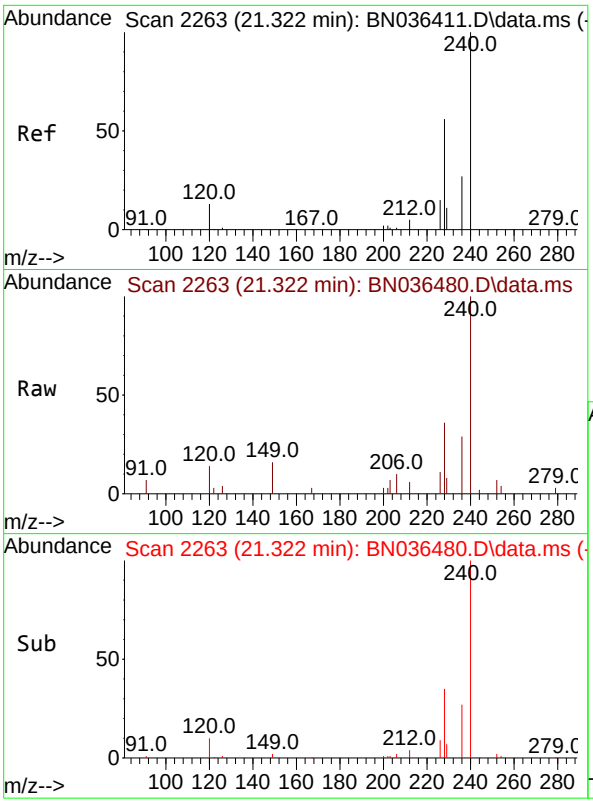


#28
Fluoranthene
Concen: 0.435 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:202 Resp: 8127

Ion	Ratio	Lower	Upper
202	100		
101	11.2	9.2	13.8
203	17.0	13.4	20.0

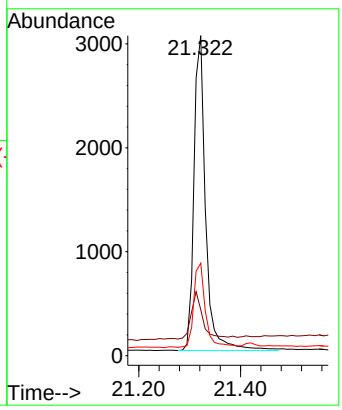




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:240 Resp: 482

Ion	Ratio	Lower	Upper
240	100		
120	14.4	13.3	19.9
236	28.9	23.0	34.6



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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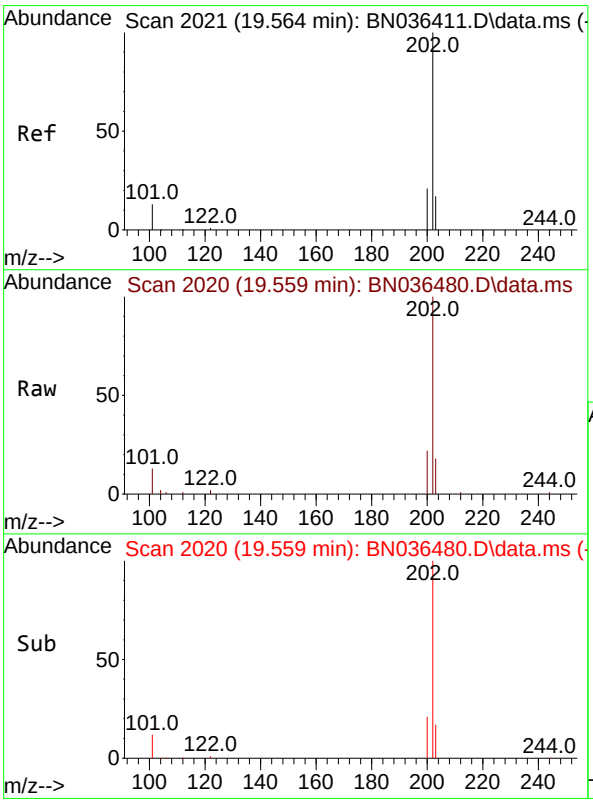
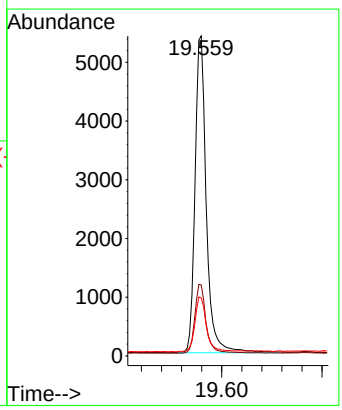
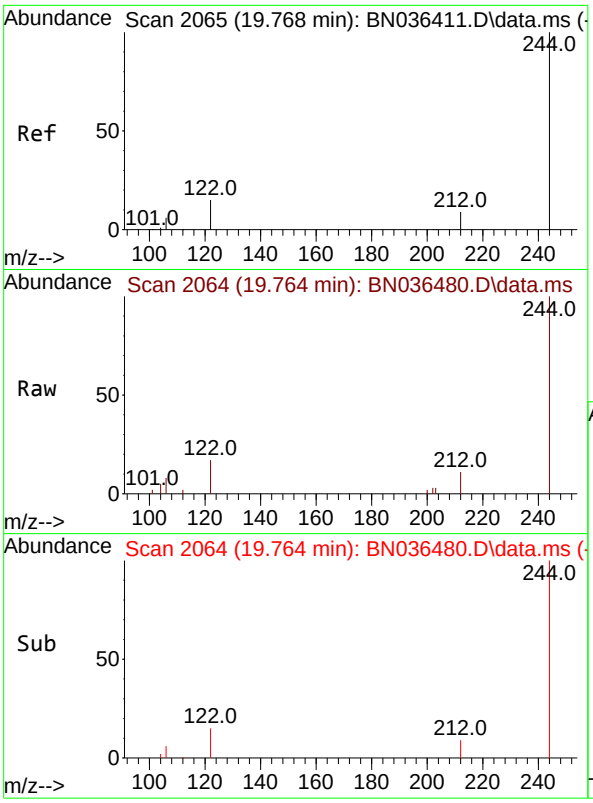


#30
Pyrene
Concen: 0.454 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:202 Resp: 8425

Ion	Ratio	Lower	Upper
202	100		
200	21.3	16.9	25.3
203	17.7	13.9	20.9

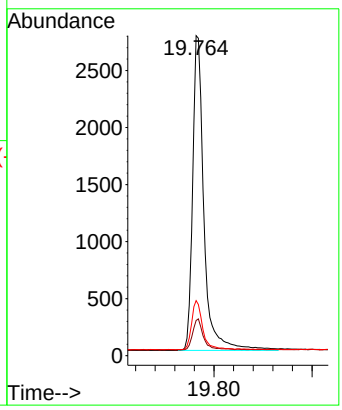




#31
Terphenyl-d14
Concen: 0.430 ng
RT: 19.764 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:244 Resp: 442

Ion	Ratio	Lower	Upper
244	100		
212	11.0	8.1	12.1
122	17.2	12.8	19.2



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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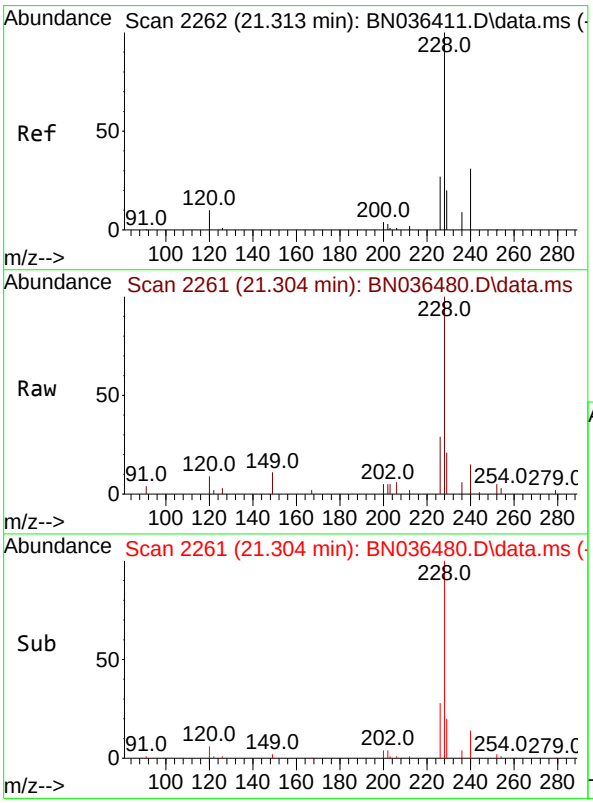
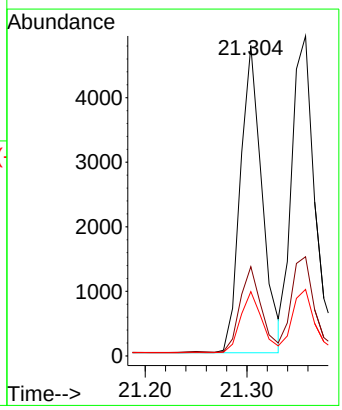
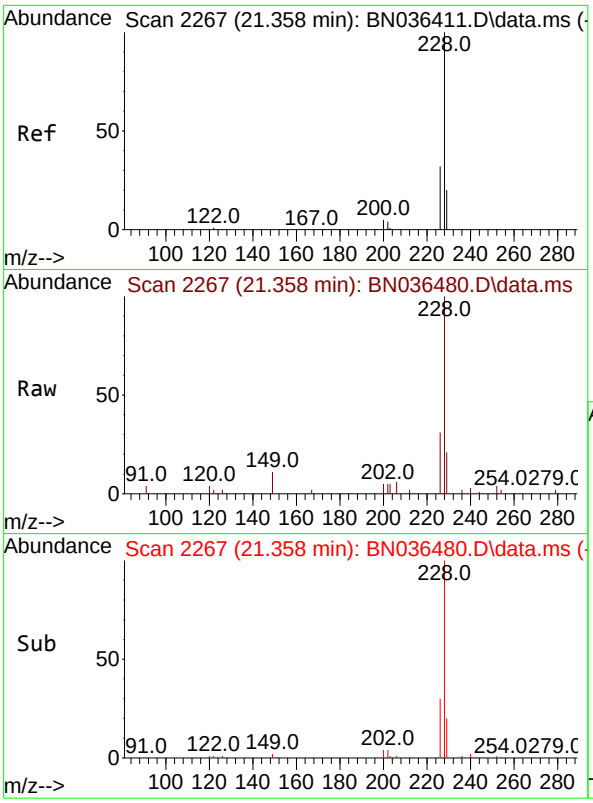


#32
Benzo(a)anthracene
Concen: 0.445 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:228 Resp: 7065

Ion	Ratio	Lower	Upper
228	100		
226	28.8	22.2	33.2
229	20.7	16.5	24.7

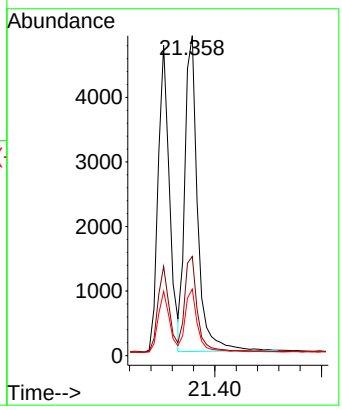




#33
Chrysene
Concen: 0.473 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:228 Resp: 813

Ion	Ratio	Lower	Upper
228	100		
226	31.0	25.5	38.3
229	20.8	16.4	24.6



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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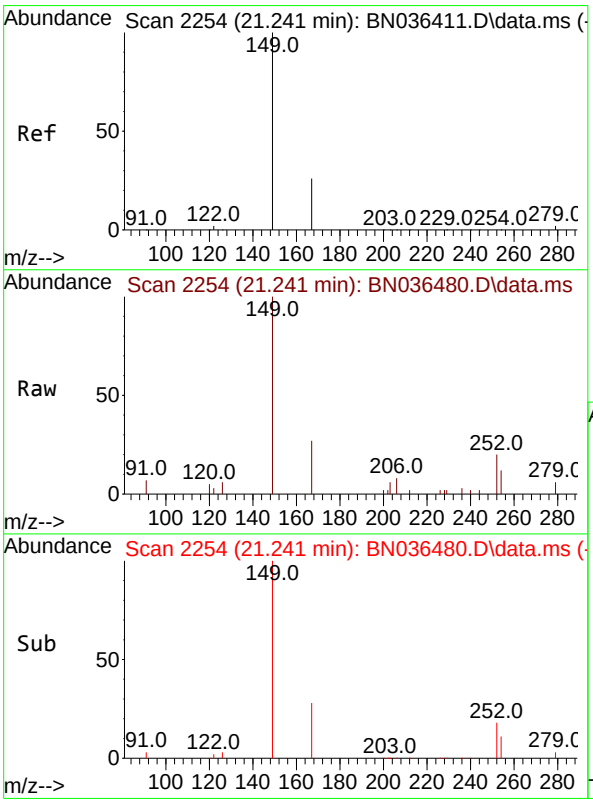
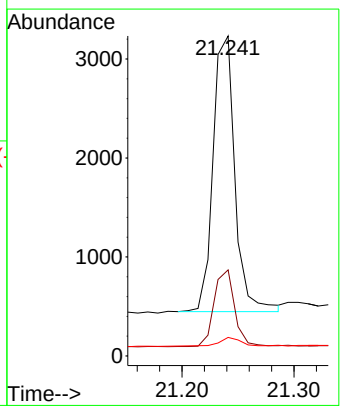
Supervised By :Jagrut Upadhyay 02/21/2025

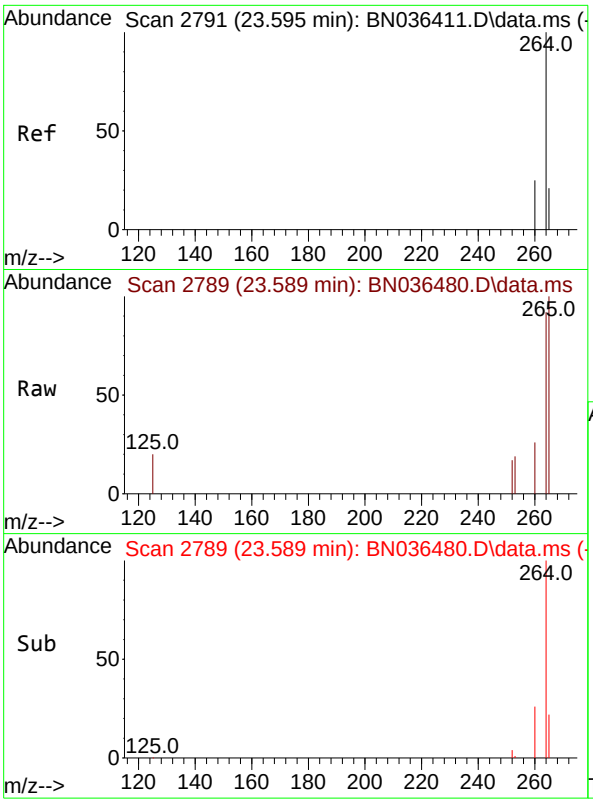


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.382 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:149 Resp: 3779

Ion	Ratio	Lower	Upper
149	100		
167	26.6	21.2	31.8
279	3.3	2.7	4.1

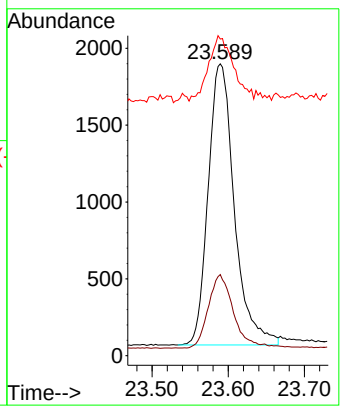




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.589 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:264 Resp: 436

Ion	Ratio	Lower	Upper
264	100		
260	27.8	20.9	31.3
265	108.5	60.7	91.1



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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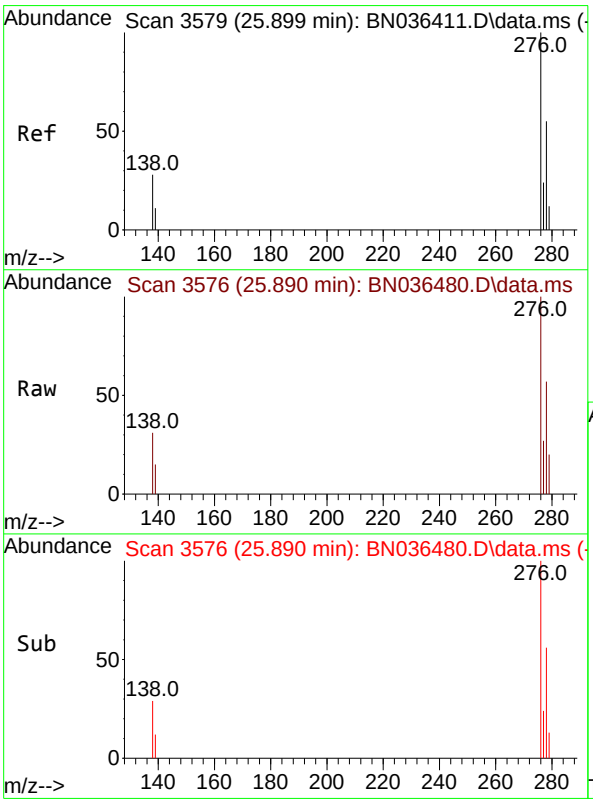
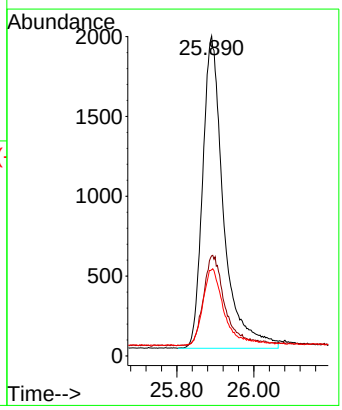
Supervised By :Jagrut Upadhyay 02/21/2025

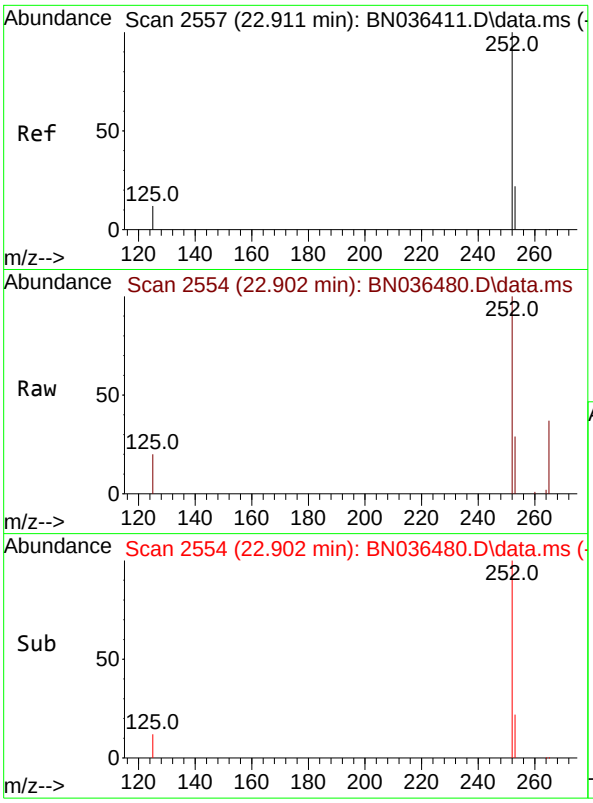


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.482 ng
RT: 25.890 min Scan# 3576
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:276 Resp: 7355

Ion	Ratio	Lower	Upper
276	100		
138	28.6	22.2	33.2
277	24.1	19.8	29.6

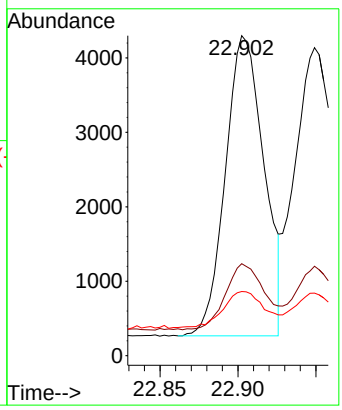




#37
Benzo(b)fluoranthene
Concen: 0.484 ng
RT: 22.902 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:252 Resp: 695

Ion	Ratio	Lower	Upper
252	100		
253	28.8	21.9	32.9
125	20.1	15.0	22.6



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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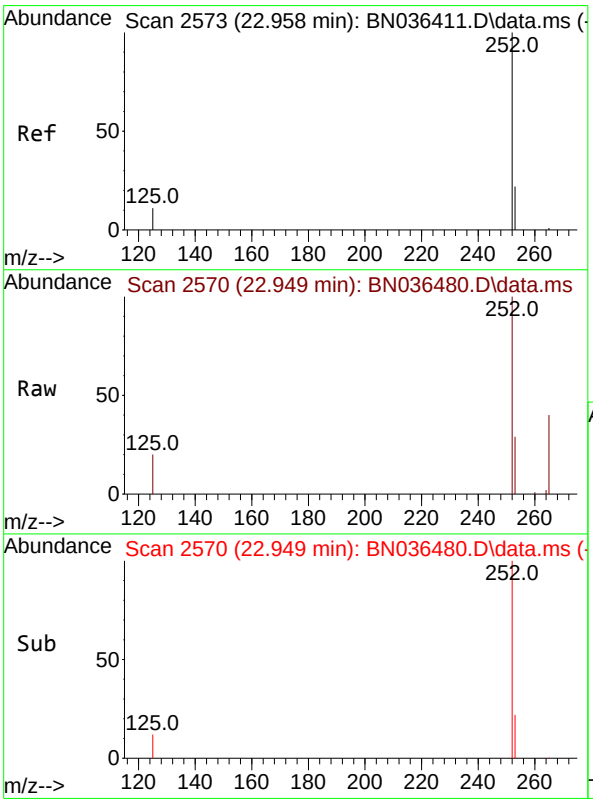
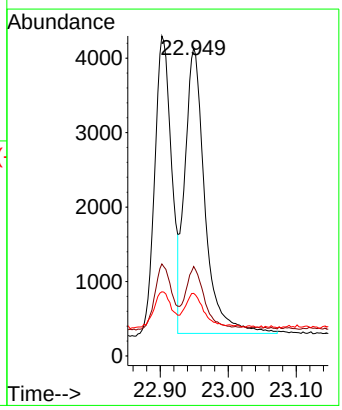
Supervised By :Jagrut Upadhyay 02/21/2025

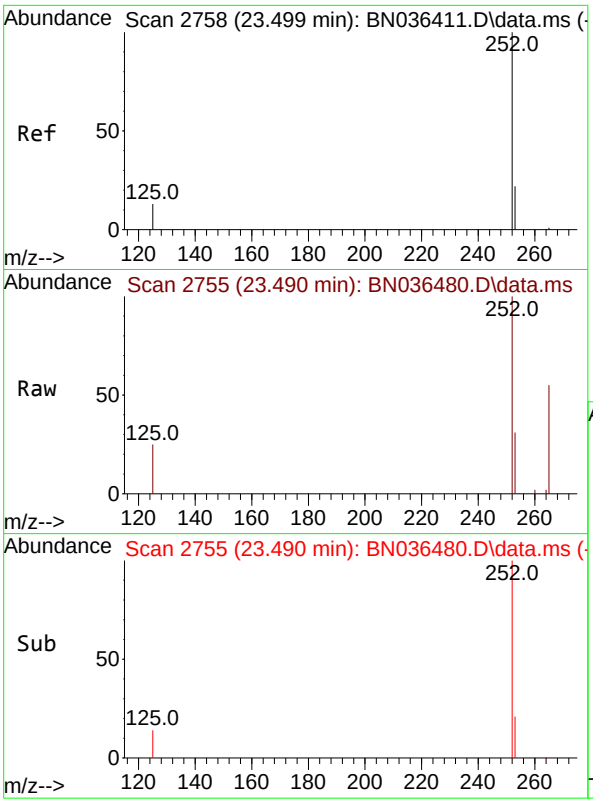


#38
Benzo(k)fluoranthene
Concen: 0.531 ng m
RT: 22.949 min Scan# 2570
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:252 Resp: 7857

Ion	Ratio	Lower	Upper
252	100		
253	29.0	22.2	33.4
125	20.3	15.0	22.4

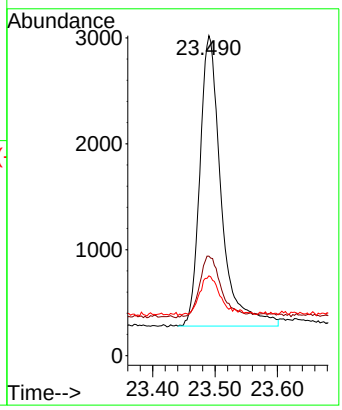




#39
Benzo(a)pyrene
Concen: 0.519 ng
RT: 23.490 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:252 Resp: 650

Ion	Ratio	Lower	Upper
252	100		
253	31.1	24.4	36.6
125	25.0	18.2	27.2



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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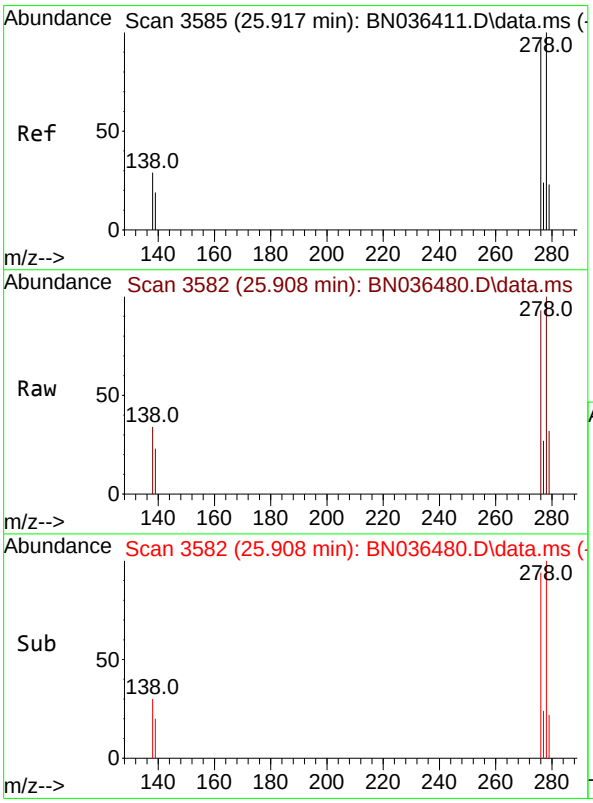
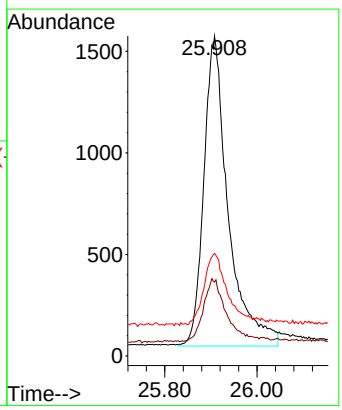
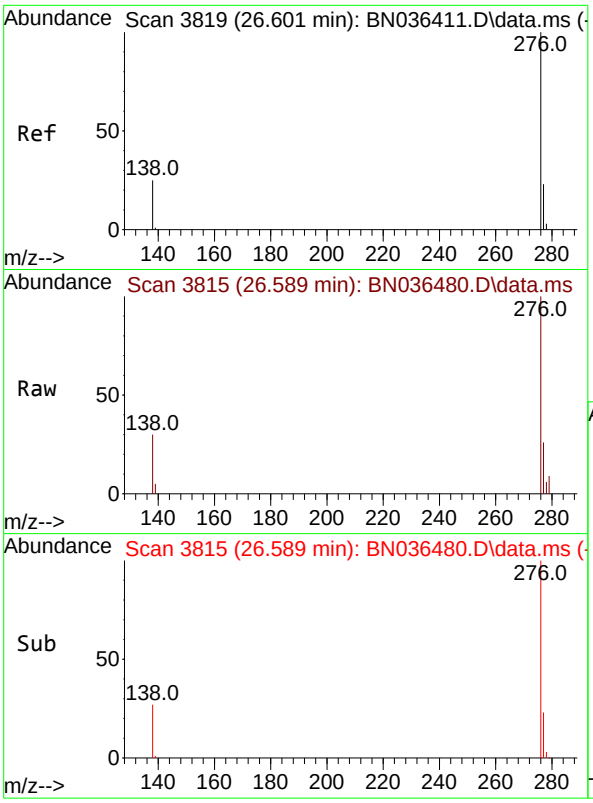


#40
Dibenzo(a,h)anthracene
Concen: 0.466 ng m
RT: 25.908 min Scan# 3582
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:278 Resp: 5603

Ion	Ratio	Lower	Upper
278	100		
139	23.1	18.5	27.7
279	32.0	24.8	37.2

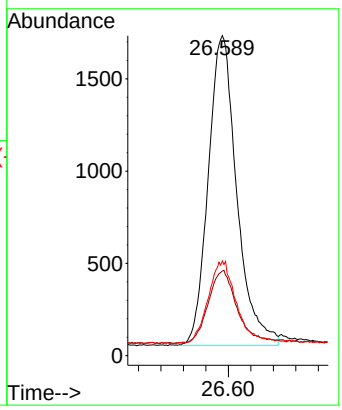




#41
Benzo(g,h,i)perylene
Concen: 0.434 ng
RT: 26.589 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:276 Resp: 592

Ion	Ratio	Lower	Upper
276	100		
277	26.5	20.7	31.1
138	29.6	21.8	32.6



Instrument :
BNA_N
ClientSampleId :
PB166758BS

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/13/25
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	02/17/25
Client Sample ID:	BP-VPB-192-GW-780-782MS	SDG No.:	Q1380
Lab Sample ID:	Q1380-10MS	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	320 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
BN036477.D	1	02/18/25 11:40	02/20/25 12:36	PB166758

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.83		0.21	0.63	0.63	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		112%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.44	*	53 - 106		110%	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	1710	7.746				
1146-65-2	Naphthalene-d8	4000	10.541				
15067-26-2	Acenaphthene-d10	2500	14.387				
1517-22-2	Phenanthrene-d10	5570	17.124				
1719-03-5	Chrysene-d12	5520	21.313				
1520-96-3	Perylene-d12	5300	23.586				

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\BN022025\
Data File : BN036477.D
Acq On : 20 Feb 2025 12:36
Operator : RC/JU
Sample : Q1380-10MS
Misc :
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Feb 21 00:10:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations APPROVED
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1709	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	3995	0.400	ng	# 0.00
13) Acenaphthene-d10	14.387	164	2495	0.400	ng	0.00
19) Phenanthrene-d10	17.124	188	5565	0.400	ng	#-0.01
29) Chrysene-d12	21.313	240	5523	0.400	ng	0.00
35) Perylene-d12	23.586	264	5300	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	974	0.241	ng	0.00
5) Phenol-d6	6.923	99	1025	0.216	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1261	0.320	ng	-0.01
11) 2-Methylnaphthalene-d10	12.126	152	1968	0.321	ng	-0.02
14) 2,4,6-Tribromophenol	15.882	330	500	0.404	ng	0.00
15) 2-Fluorobiphenyl	13.008	172	4139	0.441	ng	-0.01
27) Fluoranthene-d10	19.160	212	6898	0.446	ng	0.00
31) Terphenyl-d14	19.763	244	6357	0.539	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.261	88	493	0.264	ng	# 50
3) n-Nitrosodimethylamine	3.572	42	905	0.279	ng	# 93
6) bis(2-Chloroethyl)ether	7.168	93	1675	0.338	ng	98
9) Naphthalene	10.583	128	3881	0.337	ng	98
10) Hexachlorobutadiene	10.872	225	805	0.287	ng	# 98
12) 2-Methylnaphthalene	12.202	142	2609	0.345	ng	97
16) Acenaphthylene	14.099	152	4341	0.394	ng	99
17) Acenaphthene	14.441	154	2787	0.379	ng	98
18) Fluorene	15.435	166	4131	0.394	ng	97
20) 4,6-Dinitro-2-methylph...	15.522	198	376	0.344	ng	# 81
21) 4-Bromophenyl-phenylether	16.329	248	1426	0.430	ng	# 74
22) Hexachlorobenzene	16.441	284	1658	0.404	ng	99
23) Atrazine	16.590	200	1195	0.431	ng	# 92
24) Pentachlorophenol	16.788	266	1439	0.739	ng	97
25) Phenanthrene	17.173	178	7646	0.475	ng	99
26) Anthracene	17.260	178	6840	0.482	ng	99
28) Fluoranthene	19.192	202	9601	0.486	ng	98
30) Pyrene	19.554	202	10137	0.477	ng	100
32) Benzo(a)anthracene	21.304	228	8882	0.489	ng	99
33) Chrysene	21.348	228	9509	0.483	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	5246	0.463	ng	99
36) Indeno(1,2,3-cd)pyrene	25.884	276	8360	0.451	ng	97
37) Benzo(b)fluoranthene	22.899	252	8647	0.495	ng	99
38) Benzo(k)fluoranthene	22.946	252	8912m	0.496	ng	
39) Benzo(a)pyrene	23.484	252	7527	0.494	ng	97
40) Dibenzo(a,h)anthracene	25.899	278	6349	0.434	ng	99
41) Benzo(g,h,i)perylene	26.586	276	6415	0.387	ng	97

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

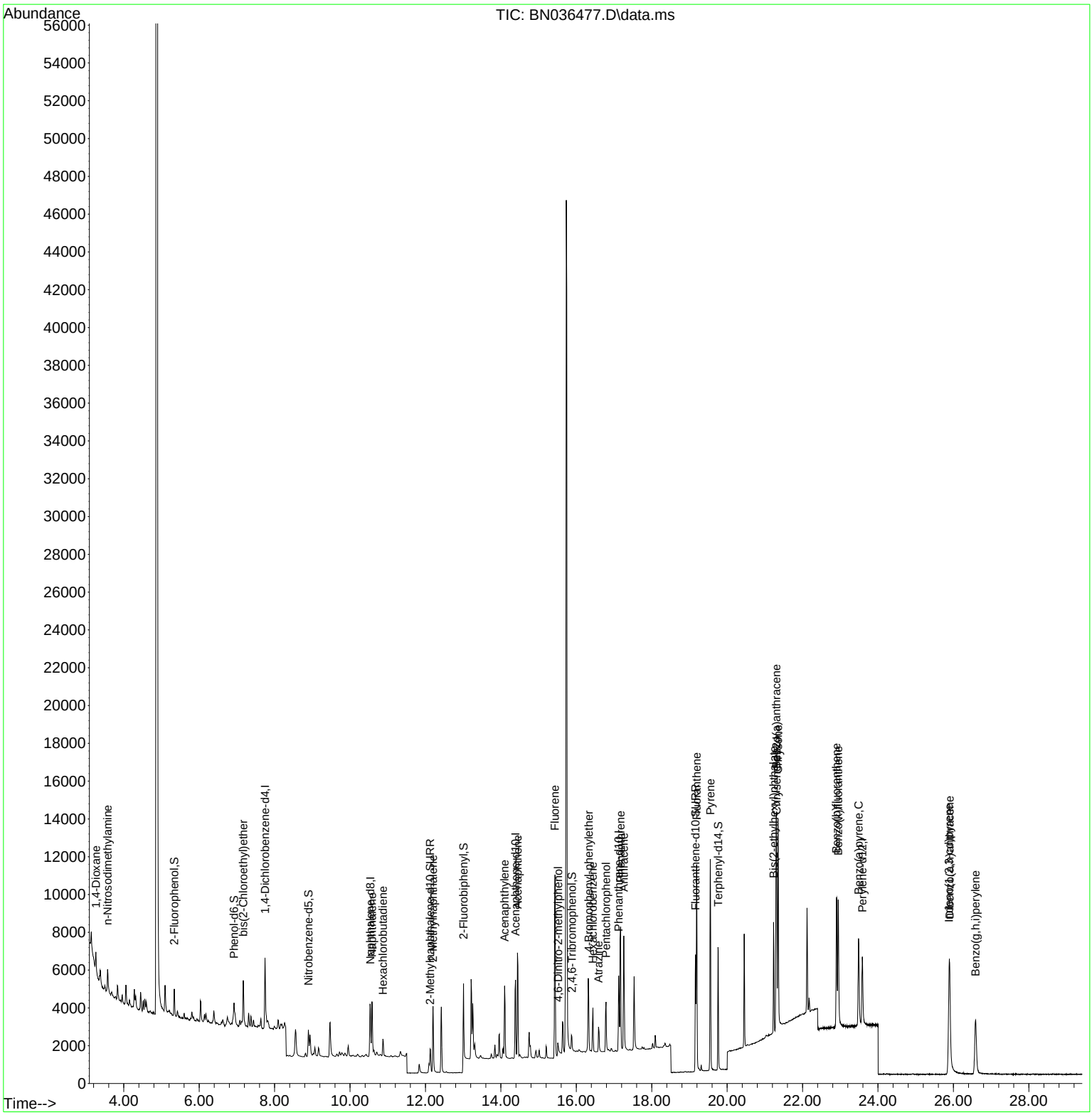
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036477.D
Acq On : 20 Feb 2025 12:36
Operator : RC/JU
Sample : Q1380-10MS
Misc :
ALS Vial : 6 Sample Multiplier: 1

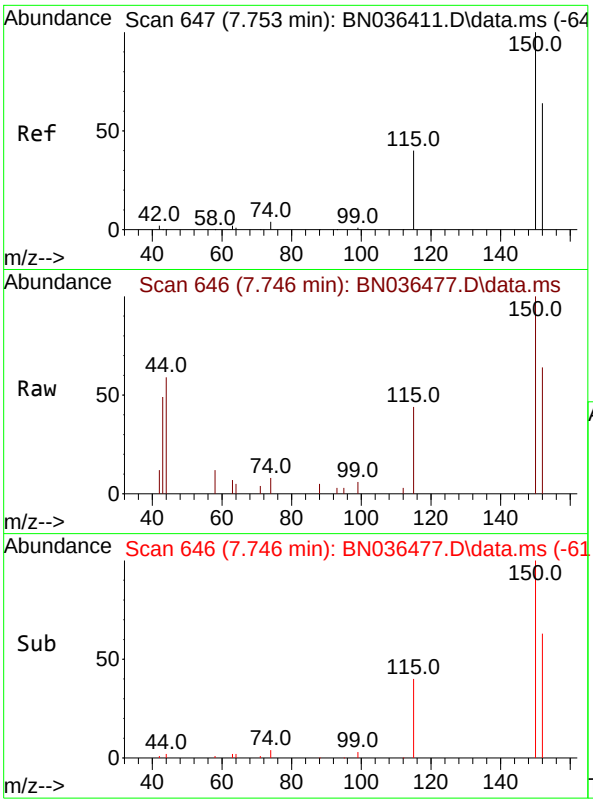
Quant Time: Feb 21 00:10:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations APPROVED

Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

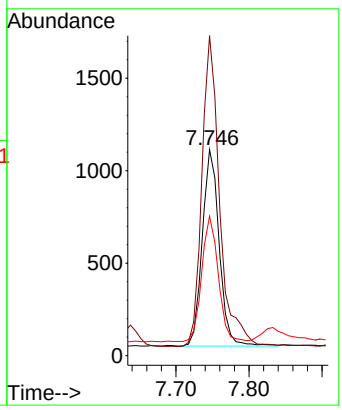




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:152 Resp: 170

Ion	Ratio	Lower	Upper
152	100		
150	155.3	123.7	185.5
115	67.7	52.5	78.7



Instrument :
BNA_N
ClientSampleId :
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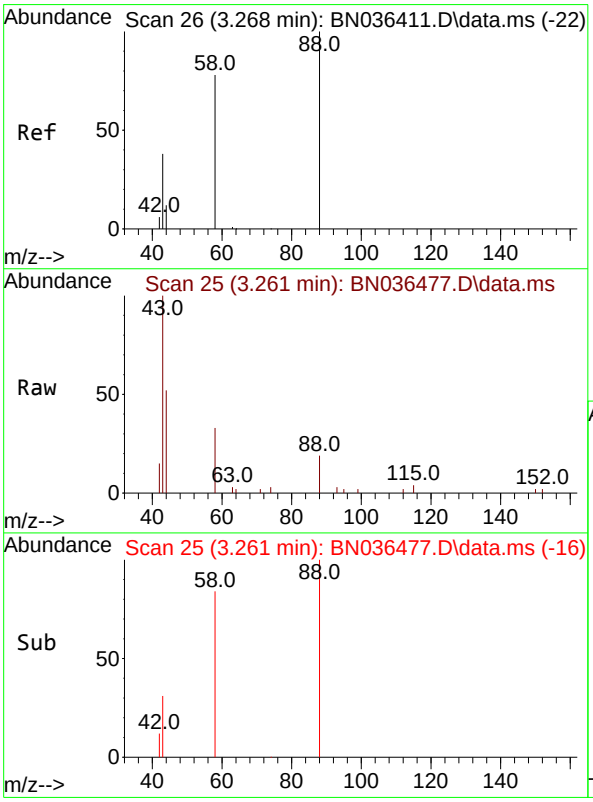
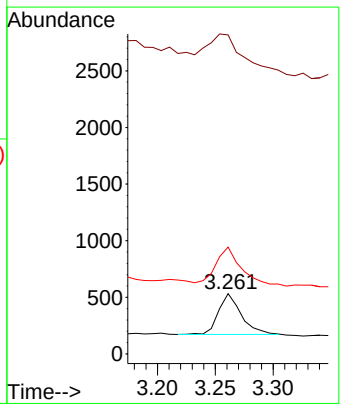
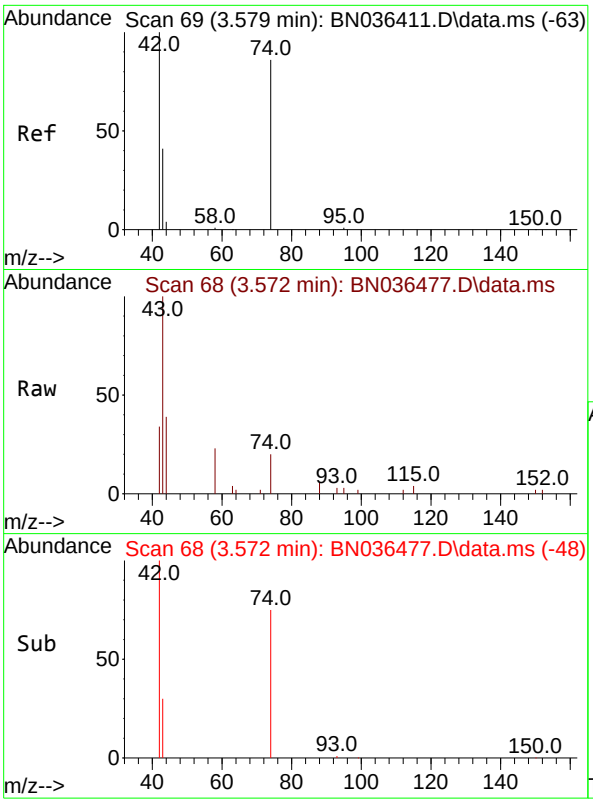


#2
1,4-Dioxane
Concen: 0.264 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 88 Resp: 493

Ion	Ratio	Lower	Upper
88	100		
43	128.0	33.7	50.5#
58	93.9	68.9	103.3

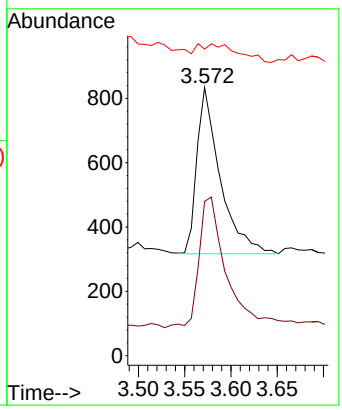




#3
n-Nitrosodimethylamine
Concen: 0.279 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 42 Resp: 90

Ion	Ratio	Lower	Upper
42	100		
74	94.6	71.8	107.6
44	18.8	7.8	11.6



Instrument :
BNA_N
ClientSampleId :
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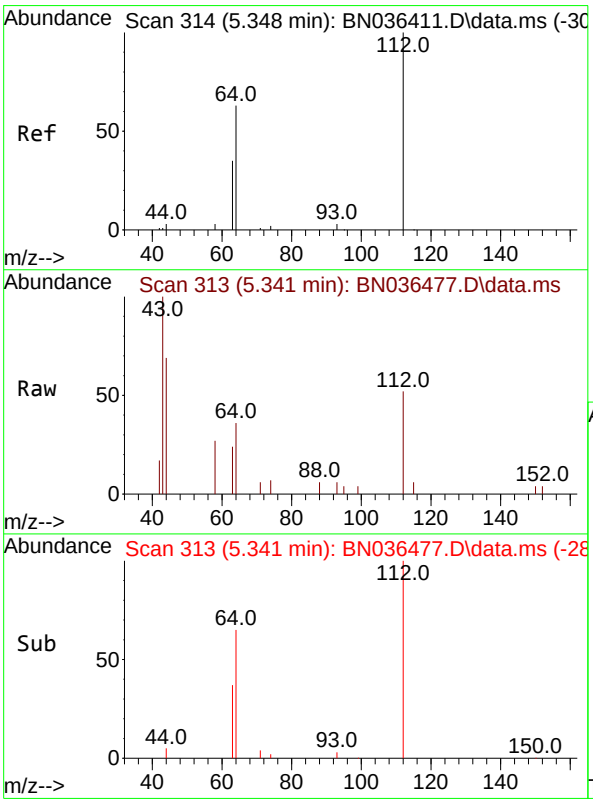
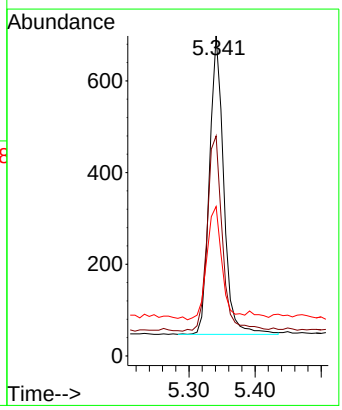
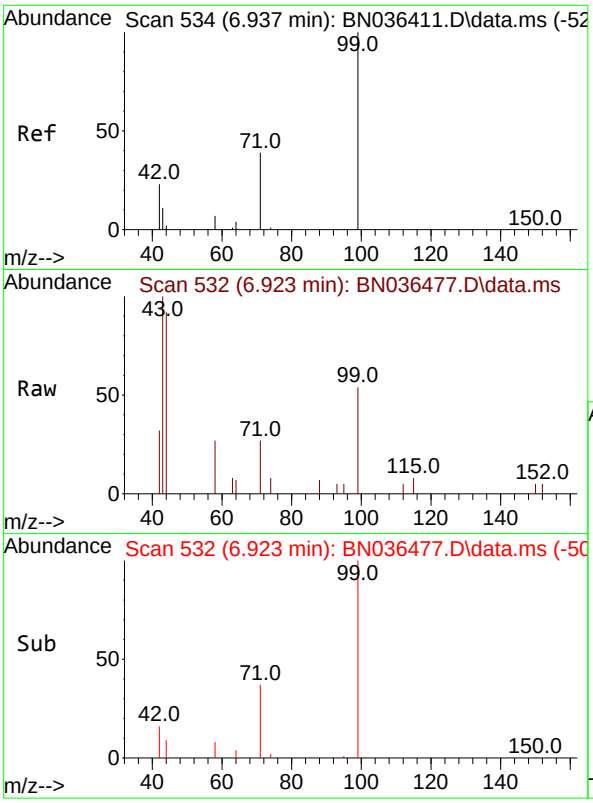


#4
2-Fluorophenol
Concen: 0.241 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:112 Resp: 974

Ion	Ratio	Lower	Upper
112	100		
64	69.7	53.4	80.0
63	40.5	30.3	45.5





#5
Phenol-d6
Concen: 0.216 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 99 Resp: 102

Ion	Ratio	Lower	Upper
99	100		
42	39.0	21.7	32.5
71	43.8	32.6	49.0

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

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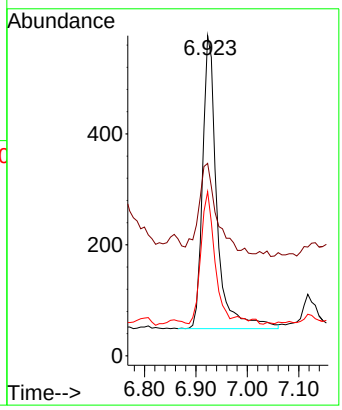
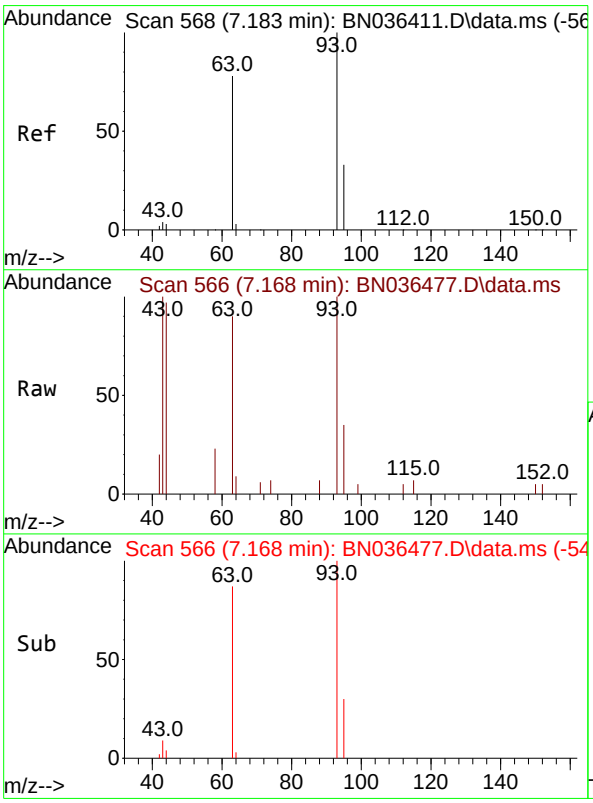
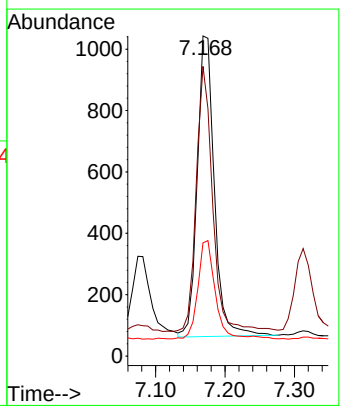


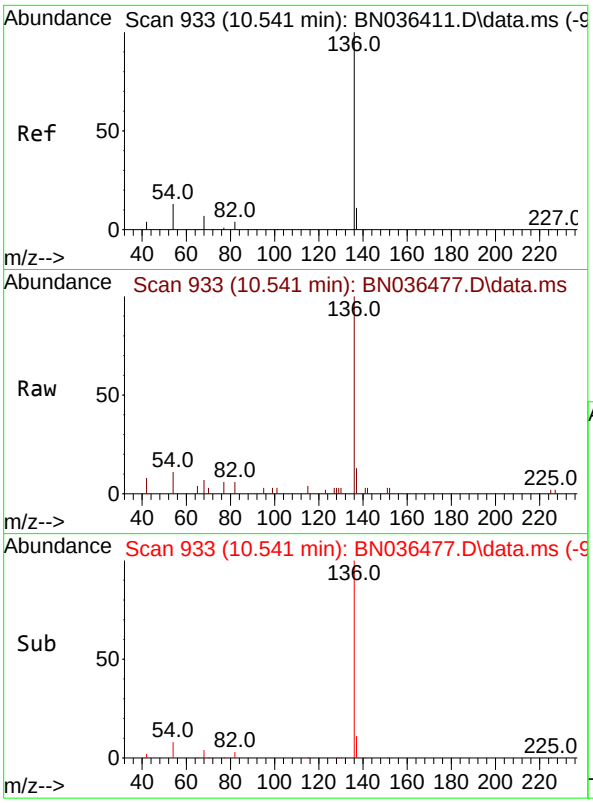


#6
bis(2-Chloroethyl)ether
Concen: 0.338 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 93 Resp: 1675

Ion	Ratio	Lower	Upper
93	100		
63	84.7	66.3	99.5
95	34.0	26.2	39.4

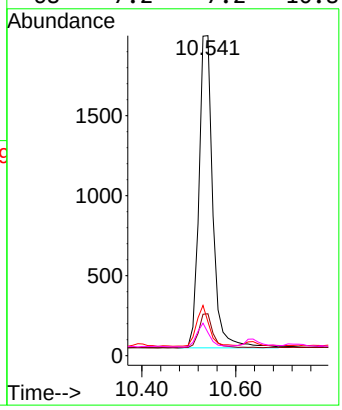




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:136 Resp: 399

Ion	Ratio	Lower	Upper
136	100		
137	13.1	10.1	15.1
54	10.6	11.8	17.6
68	7.2	7.2	10.8



Instrument :
BNA_N
ClientSampleId :
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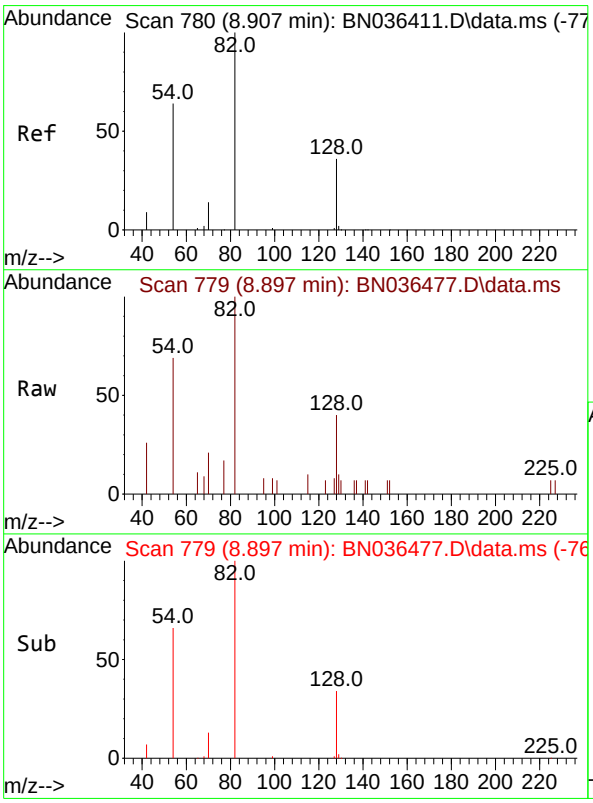
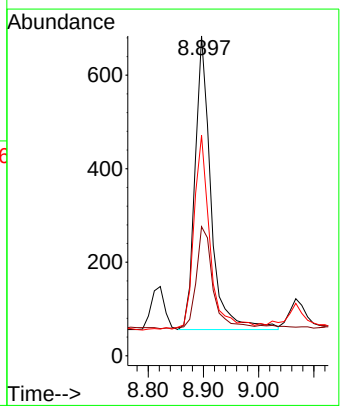
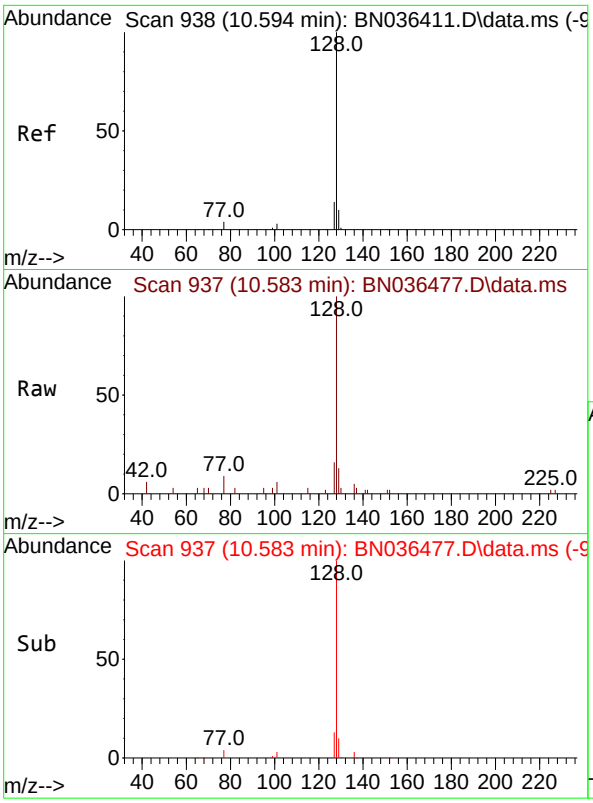


#8
Nitrobenzene-d5
Concen: 0.320 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 82 Resp: 1261

Ion	Ratio	Lower	Upper
82	100		
128	40.4	31.9	47.9
54	68.9	53.1	79.7

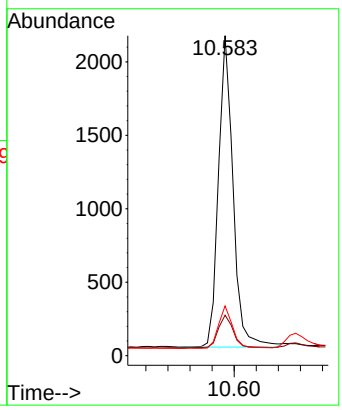




#9
Naphthalene
Concen: 0.337 ng
RT: 10.583 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:128 Resp: 388

Ion	Ratio	Lower	Upper
128	100		
129	12.7	9.6	14.4
127	15.6	12.0	18.0



Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

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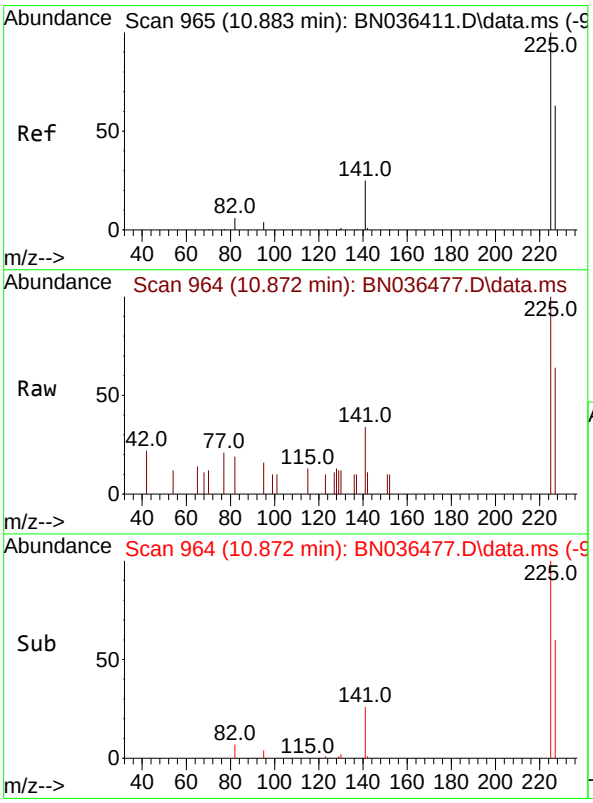
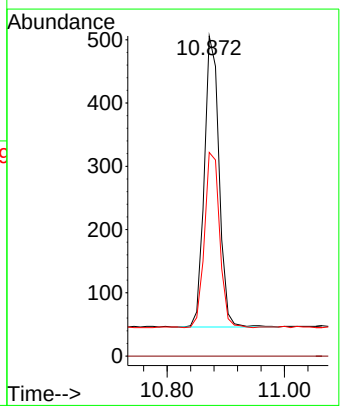
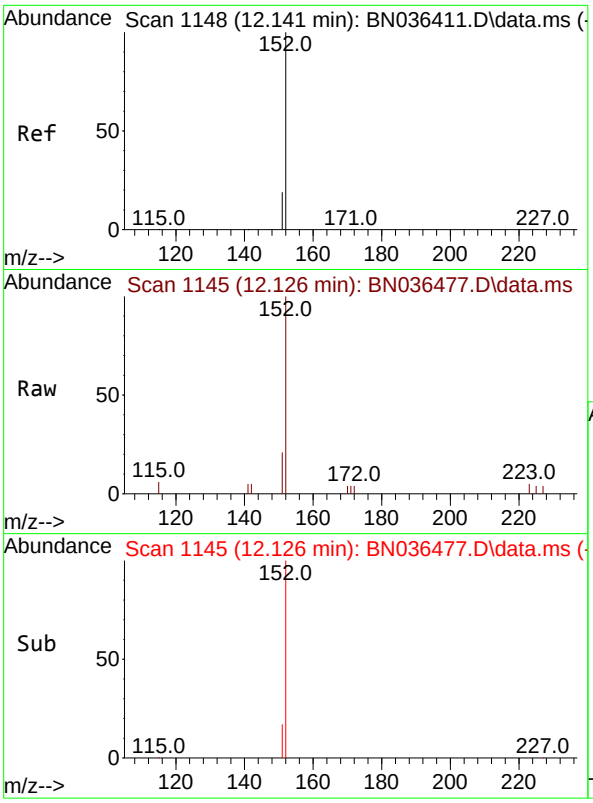


#10
Hexachlorobutadiene
Concen: 0.287 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:225 Resp: 805

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.0	50.9	76.3





#11
2-Methylnaphthalene-d10
Concen: 0.321 ng
RT: 12.126 min Scan# 11
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:152 Resp: 196

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.6	25.0

Instrument :
BNA_N
ClientSampleId :
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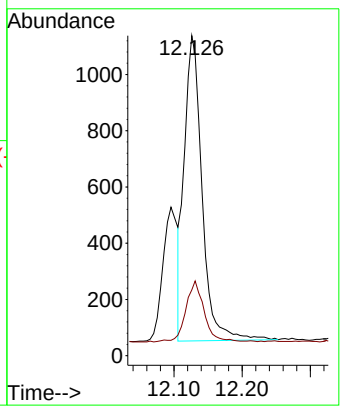
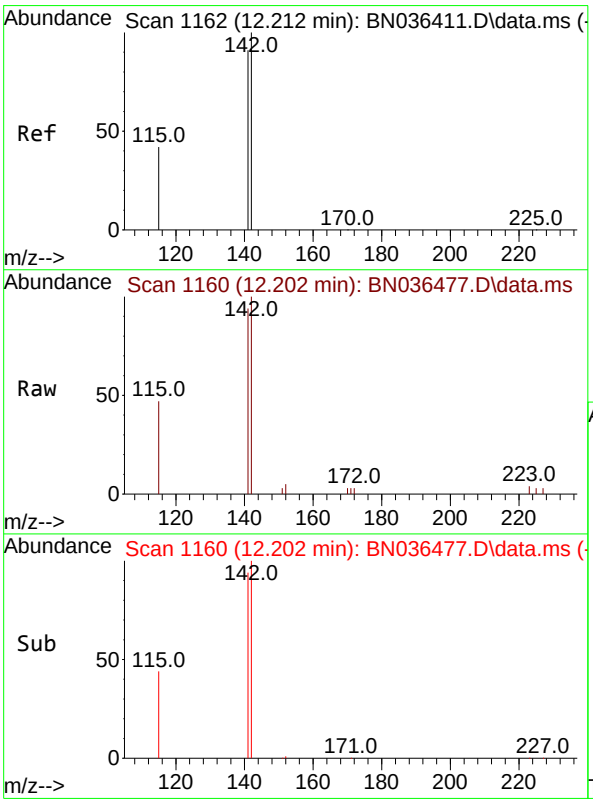
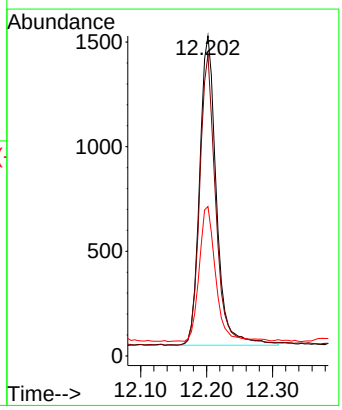


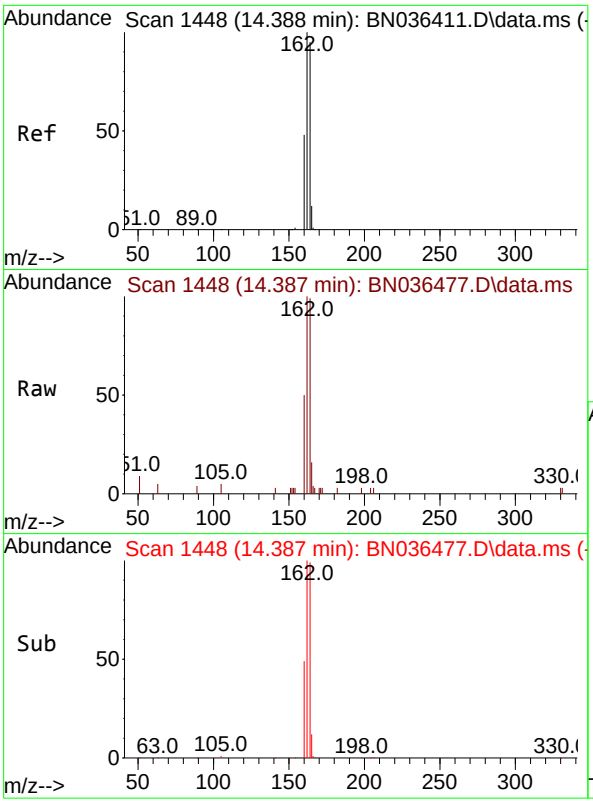


#12
2-Methylnaphthalene
Concen: 0.345 ng
RT: 12.202 min Scan# 1160
Delta R.T. -0.010 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:142 Resp: 2609

Ion	Ratio	Lower	Upper
142	100		
141	94.2	72.8	109.2
115	46.7	35.5	53.3

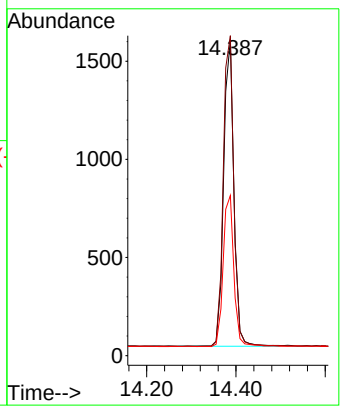




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.387 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:164 Resp: 249

Ion	Ratio	Lower	Upper
164	100		
162	101.2	84.1	126.1
160	50.7	41.4	62.0



Instrument :
BNA_N
ClientSampleId :
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Manual Integrations
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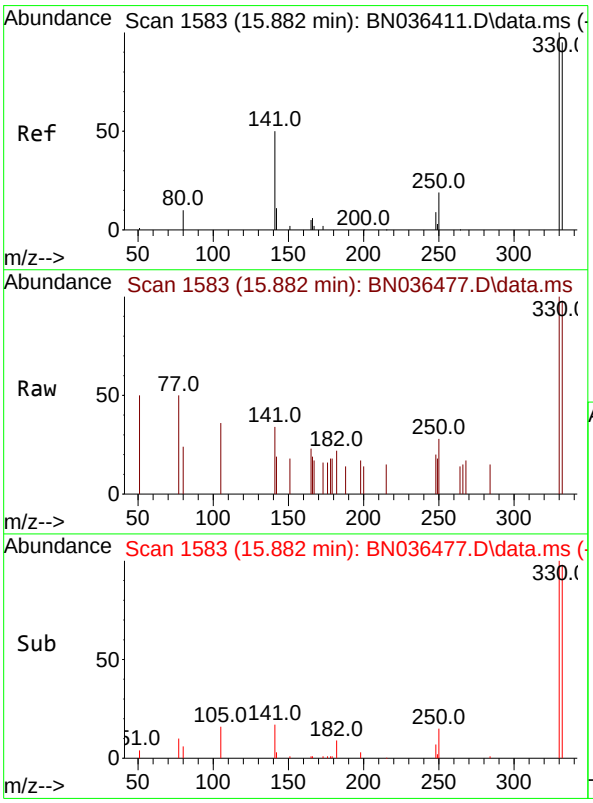
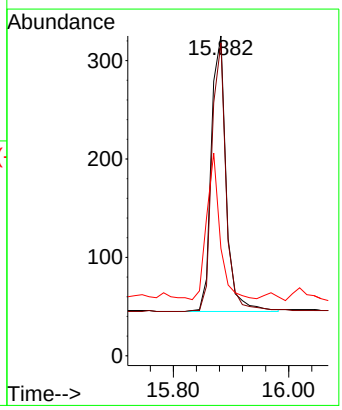
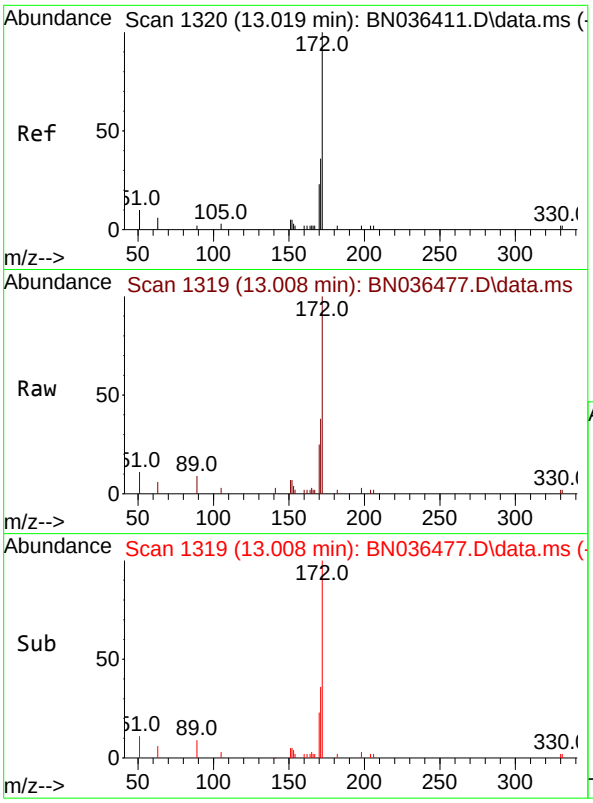


#14
2,4,6-Tribromophenol
Concen: 0.404 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:330 Resp: 500

Ion	Ratio	Lower	Upper
330	100		
332	94.0	76.6	114.8
141	48.0	37.8	56.8

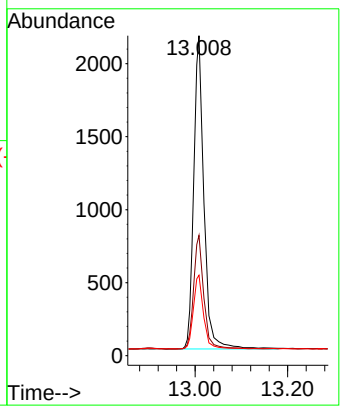




#15
2-Fluorobiphenyl
Concen: 0.441 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:172 Resp: 413

Ion	Ratio	Lower	Upper
172	100		
171	37.6	29.6	44.4
170	25.1	19.8	29.6



Instrument :
BNA_N
ClientSampleId :
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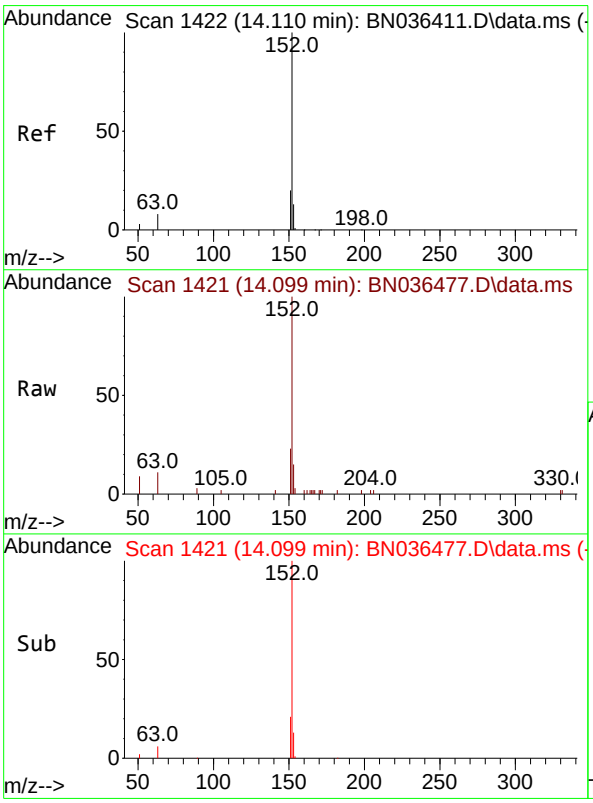
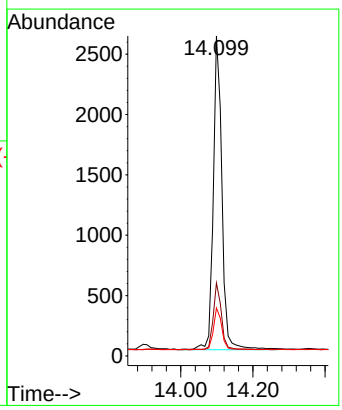
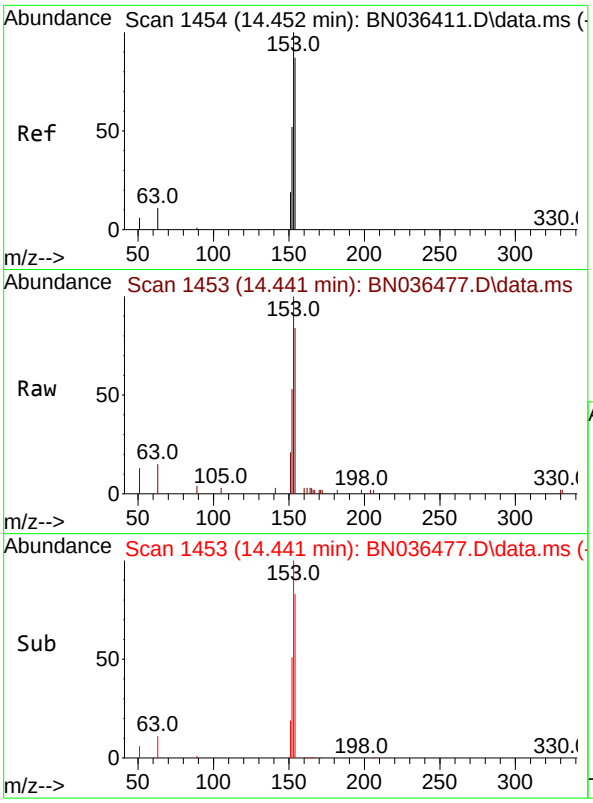


#16
Acenaphthylene
Concen: 0.394 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:152 Resp: 4341

Ion	Ratio	Lower	Upper
152	100		
151	20.3	15.8	23.8
153	13.3	10.2	15.2

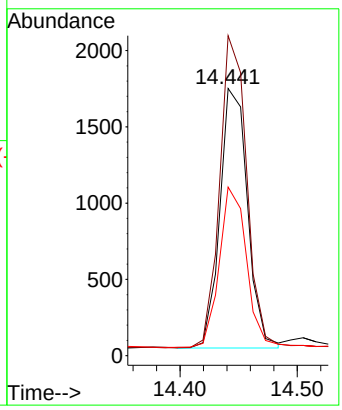




#17
Acenaphthene
Concen: 0.379 ng
RT: 14.441 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:154 Resp: 278

Ion	Ratio	Lower	Upper
154	100		
153	119.2	93.3	139.9
152	61.4	48.8	73.2



Instrument :
BNA_N
ClientSampleId :
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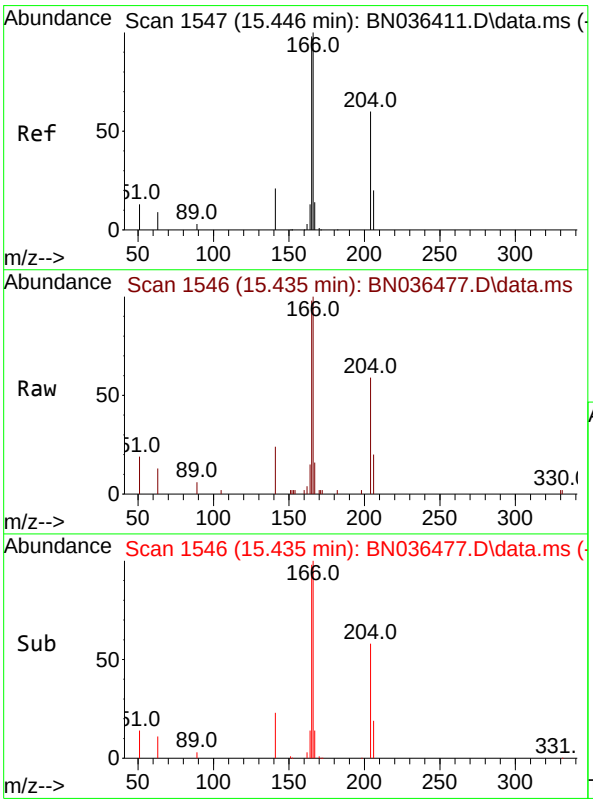
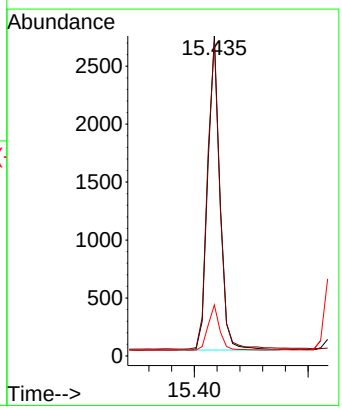
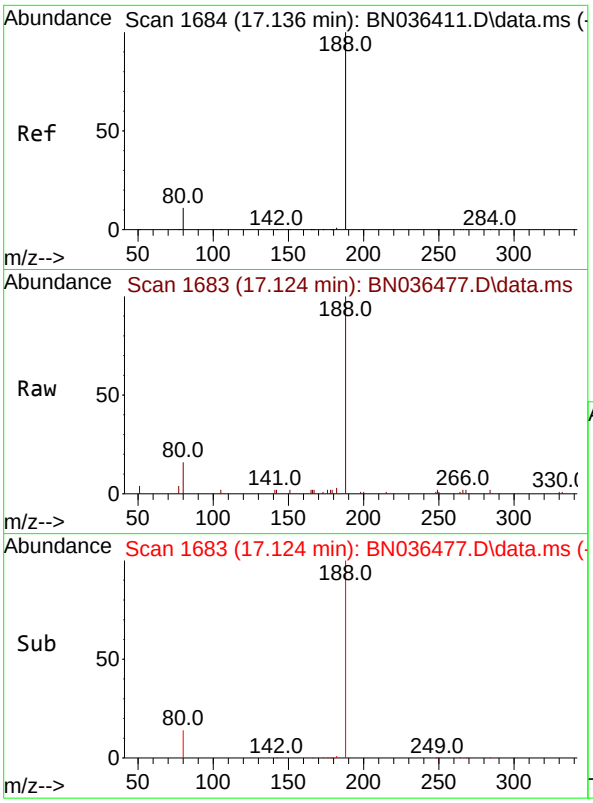


#18
Fluorene
Concen: 0.394 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:166 Resp: 4131

Ion	Ratio	Lower	Upper
166	100		
165	102.8	79.5	119.3
167	13.5	10.4	15.6

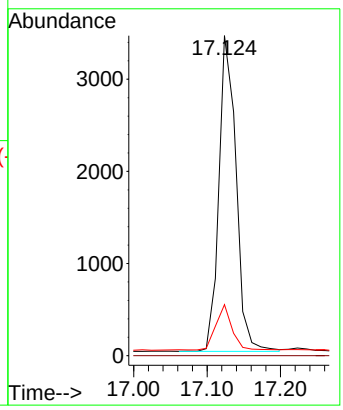




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:188 Resp: 556

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.0	9.8	14.6#



Instrument :
BNA_N
ClientSampleId :
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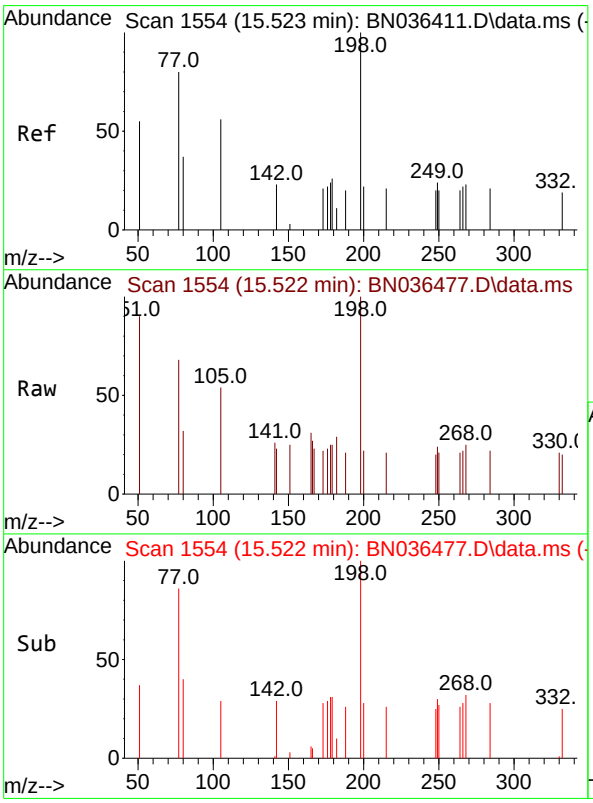
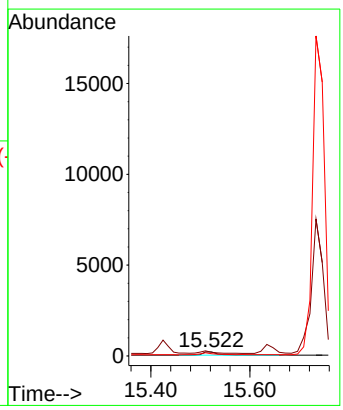
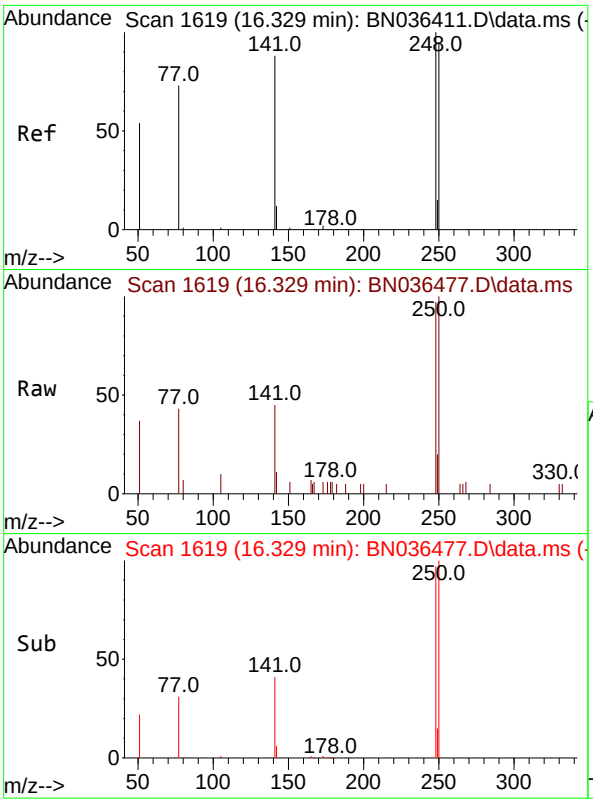


#20
4,6-Dinitro-2-methylphenol
Concen: 0.344 ng
RT: 15.522 min Scan# 1554
Delta R.T. -0.001 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:198 Resp: 376

Ion	Ratio	Lower	Upper
198	100		
51	90.2	86.6	129.8
105	54.5	57.5	86.3#





#21
4-Bromophenyl-phenylether
Concen: 0.430 ng
RT: 16.329 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:248 Resp: 142(

Ion	Ratio	Lower	Upper
248	100		
250	103.2	76.1	114.1
141	46.7	71.7	107.5#

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

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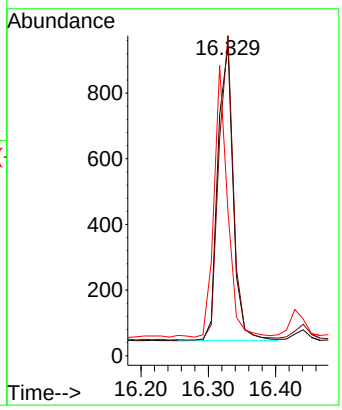
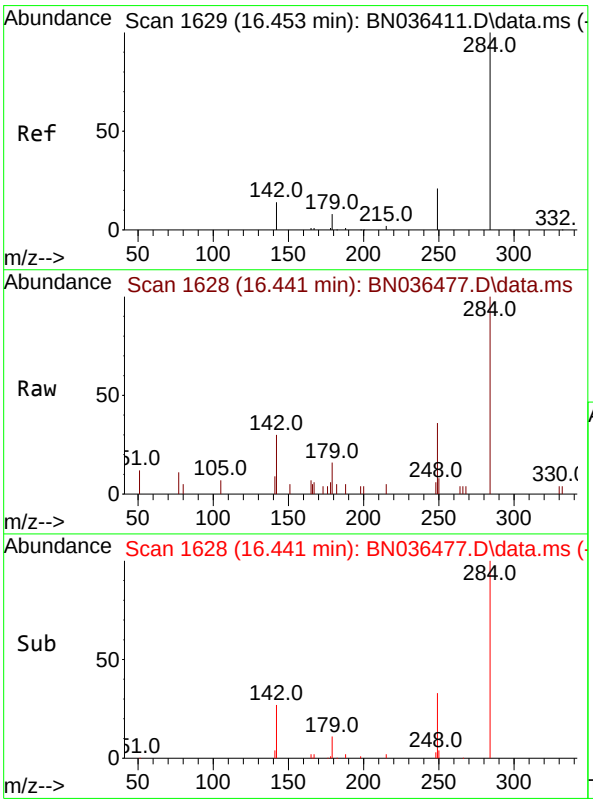
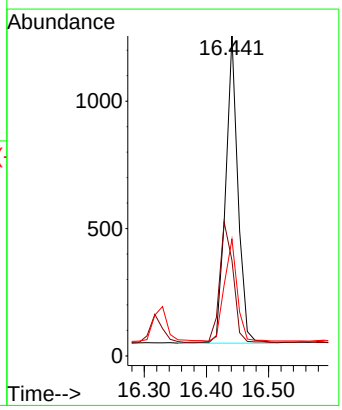


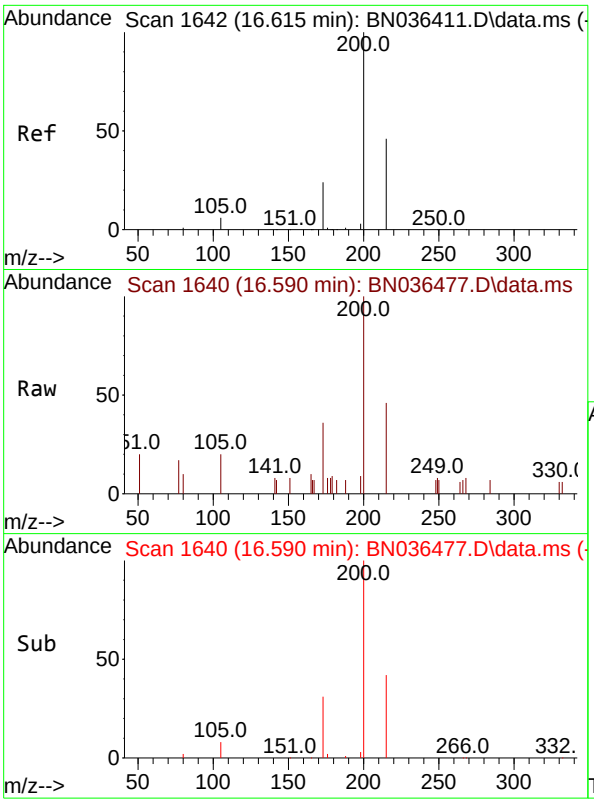


#22
Hexachlorobenzene
Concen: 0.404 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:284 Resp: 1658

Ion	Ratio	Lower	Upper
284	100		
142	42.2	33.4	50.0
249	34.9	28.6	43.0

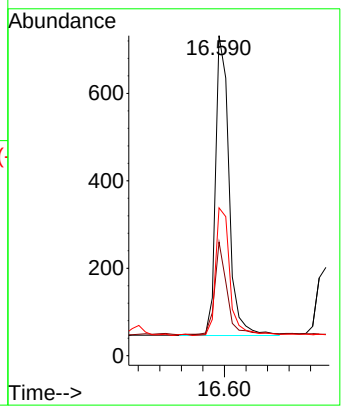




#23
Atrazine
Concen: 0.431 ng
RT: 16.590 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:200 Resp: 119

Ion	Ratio	Lower	Upper
200	100		
173	35.5	23.2	34.8
215	46.2	40.0	60.0



Instrument :
BNA_N
ClientSampleId :
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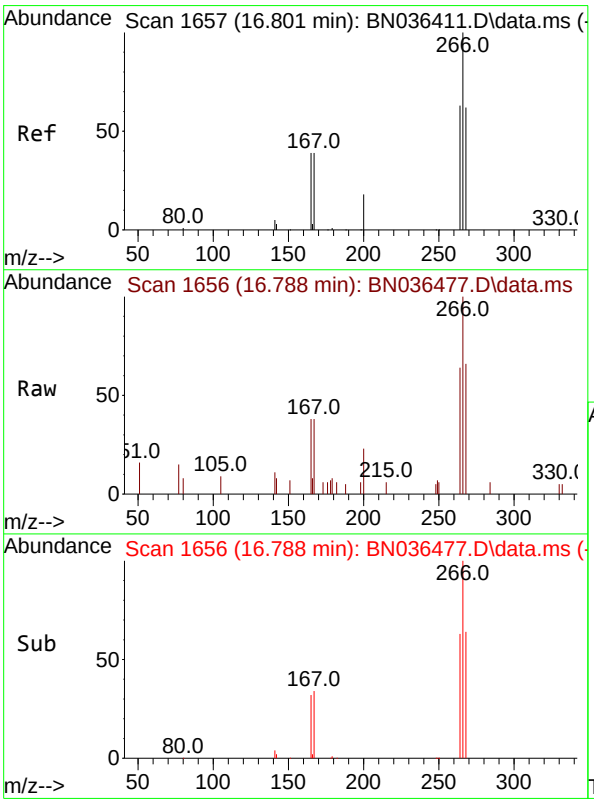
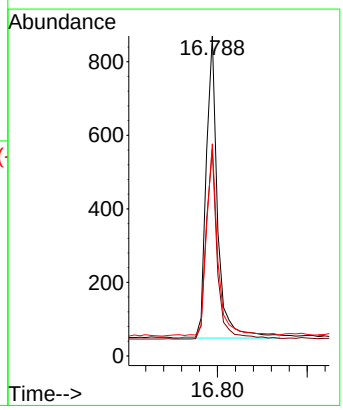
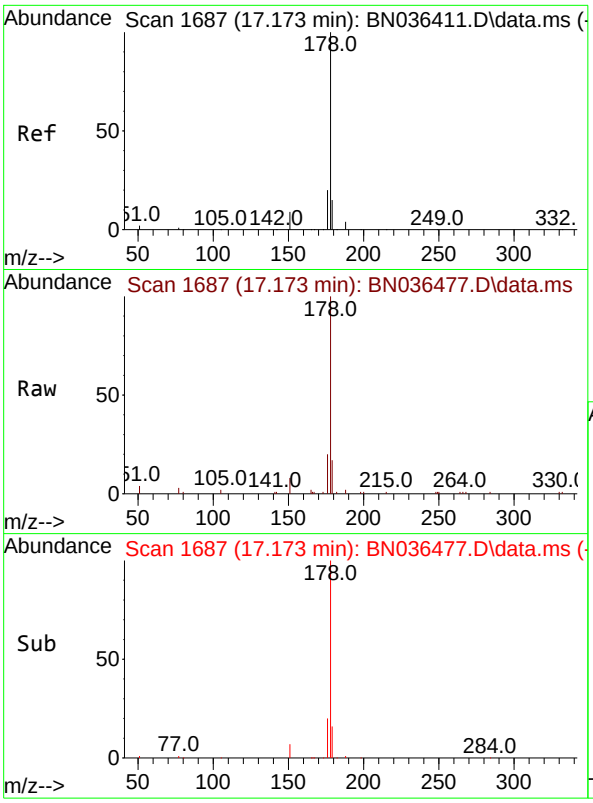


#24
Pentachlorophenol
Concen: 0.739 ng
RT: 16.788 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:266 Resp: 1439

Ion	Ratio	Lower	Upper
266	100		
264	61.4	50.6	76.0
268	62.2	51.9	77.9

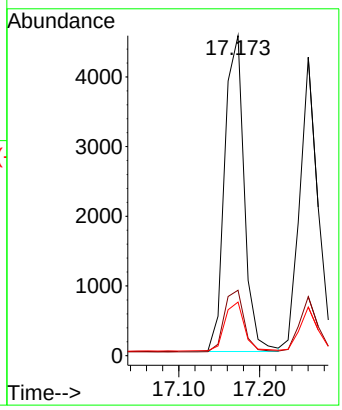




#25
Phenanthrene
Concen: 0.475 ng
RT: 17.173 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:178 Resp: 764(

Ion	Ratio	Lower	Upper
178	100		
176	20.2	15.7	23.5
179	15.6	12.4	18.6



Instrument :
BNA_N
ClientSampleId :
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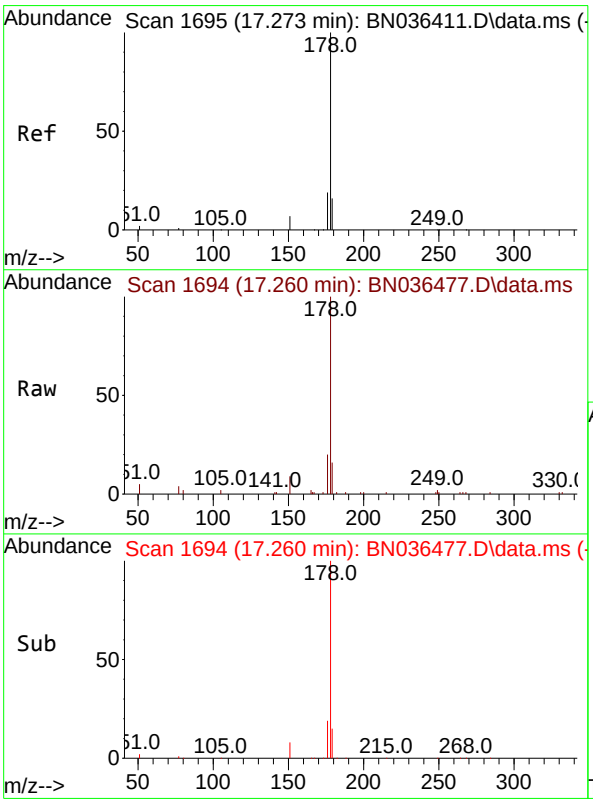
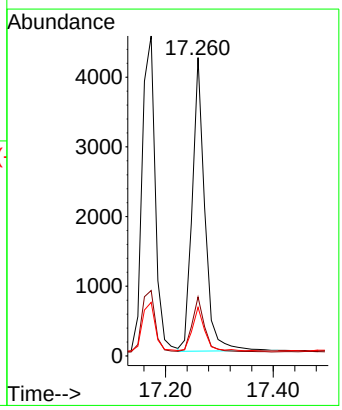
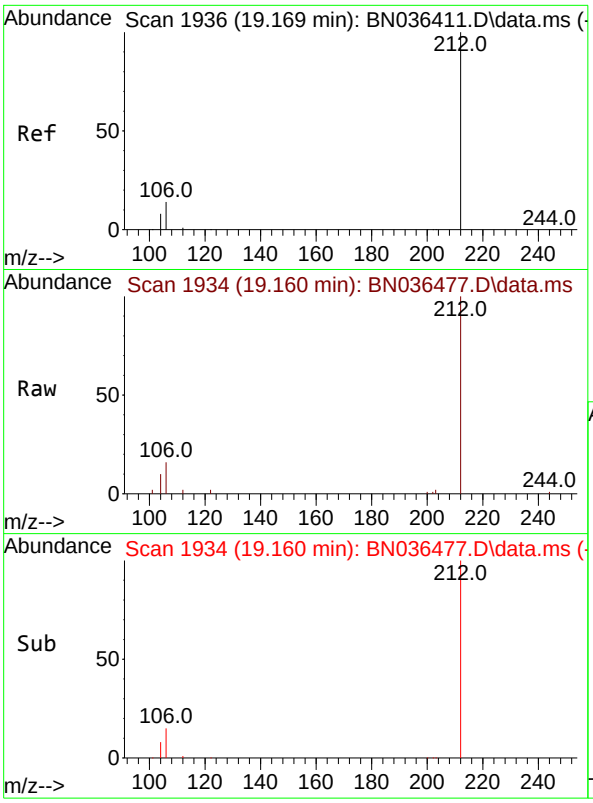


#26
Anthracene
Concen: 0.482 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:178 Resp: 6840

Ion	Ratio	Lower	Upper
178	100		
176	19.0	14.9	22.3
179	14.9	12.4	18.6

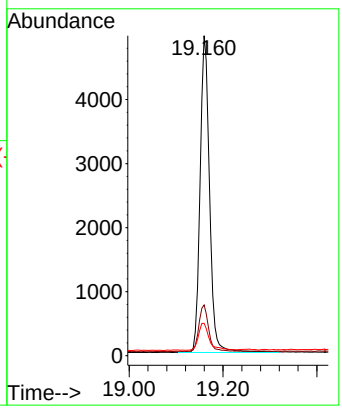




#27
Fluoranthene-d10
Concen: 0.446 ng
RT: 19.160 min Scan# 1
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:212 Resp: 689

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.5	17.3
104	9.8	7.1	10.7



Instrument :
BNA_N
ClientSampleId :
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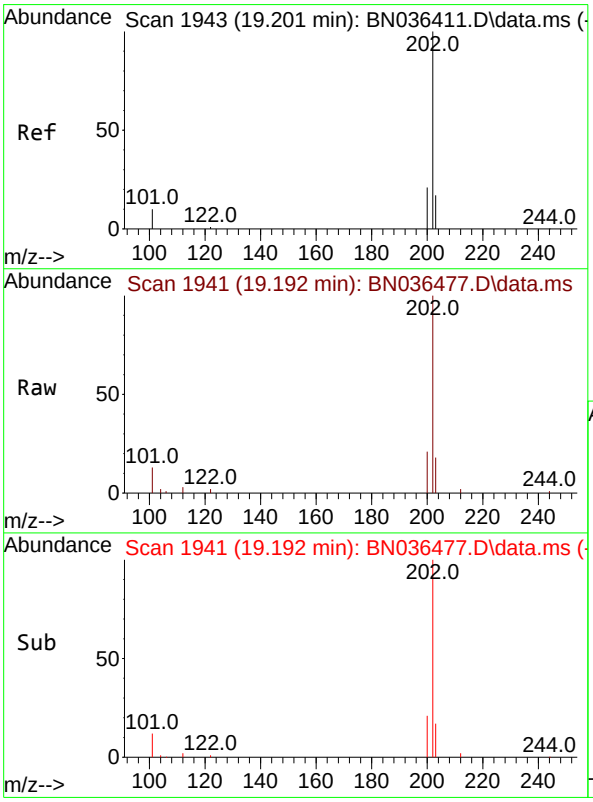
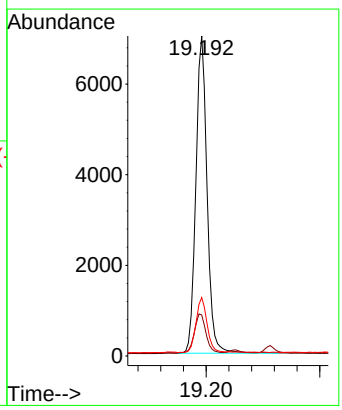
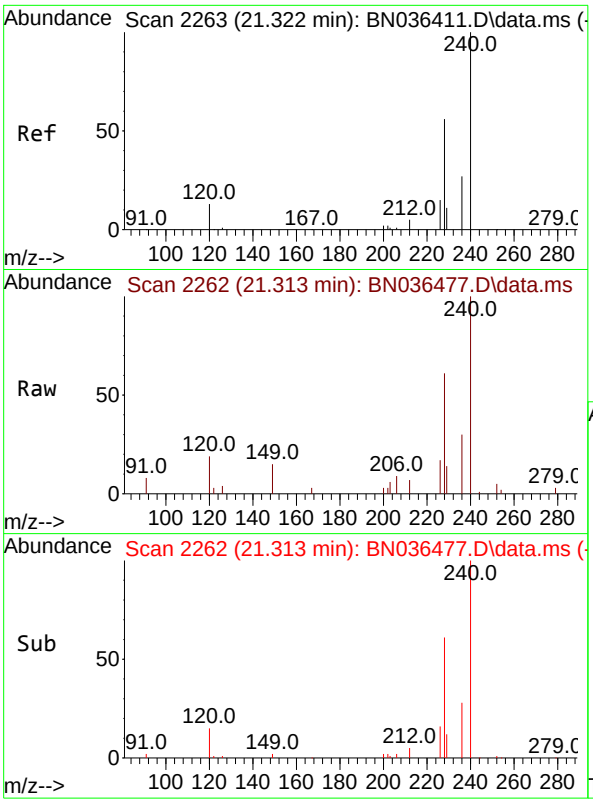


#28
Fluoranthene
Concen: 0.486 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:202 Resp: 9601

Ion	Ratio	Lower	Upper
202	100		
101	12.7	9.2	13.8
203	17.3	13.4	20.0





#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:240 Resp: 552

Ion	Ratio	Lower	Upper
240	100		
120	19.3	13.3	19.9
236	29.6	23.0	34.6

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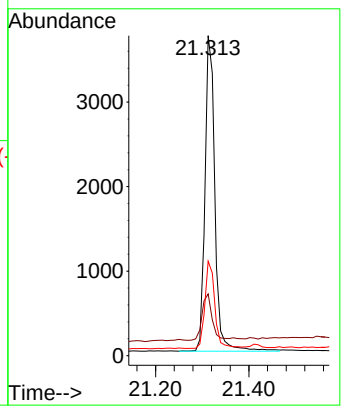
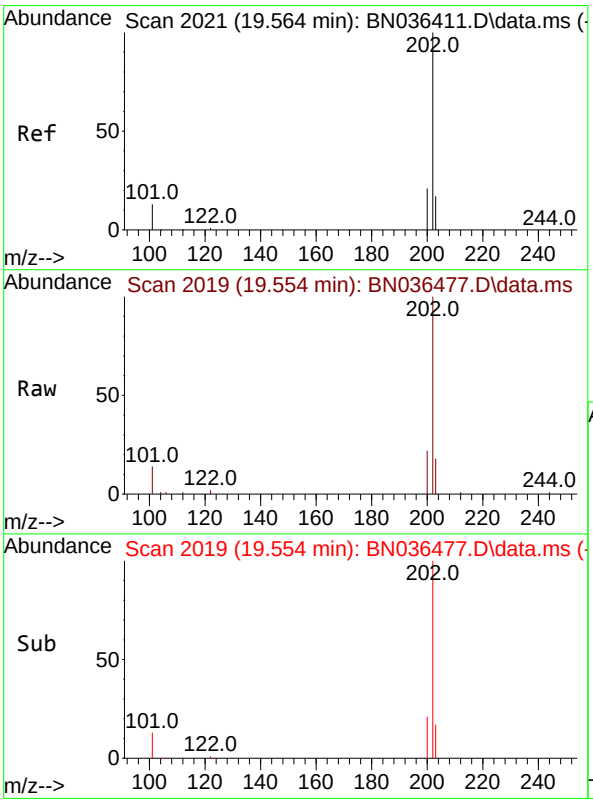
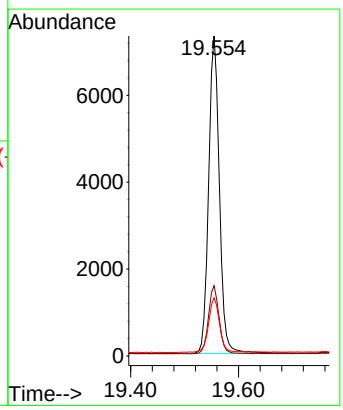


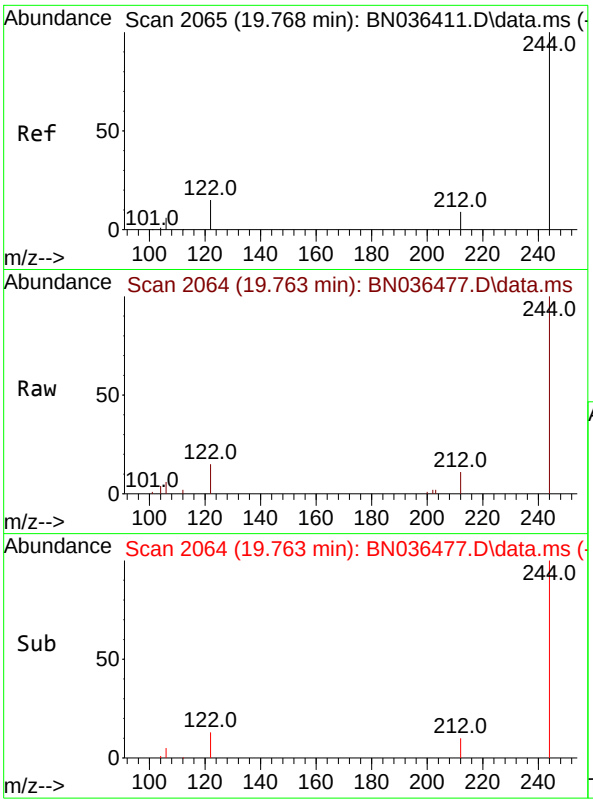


#30
Pyrene
Concen: 0.477 ng
RT: 19.554 min Scan# 2019
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:202 Resp: 10137

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.6	13.9	20.9

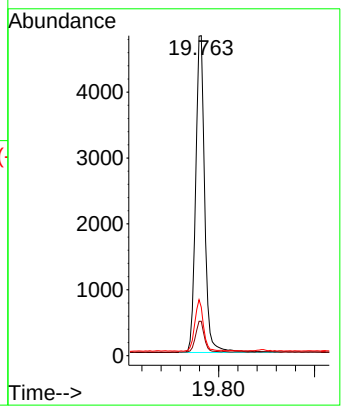




#31
Terphenyl-d14
Concen: 0.539 ng
RT: 19.763 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:244 Resp: 635

Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.1	12.1
122	15.1	12.8	19.2



Instrument :
BNA_N
ClientSampleId :
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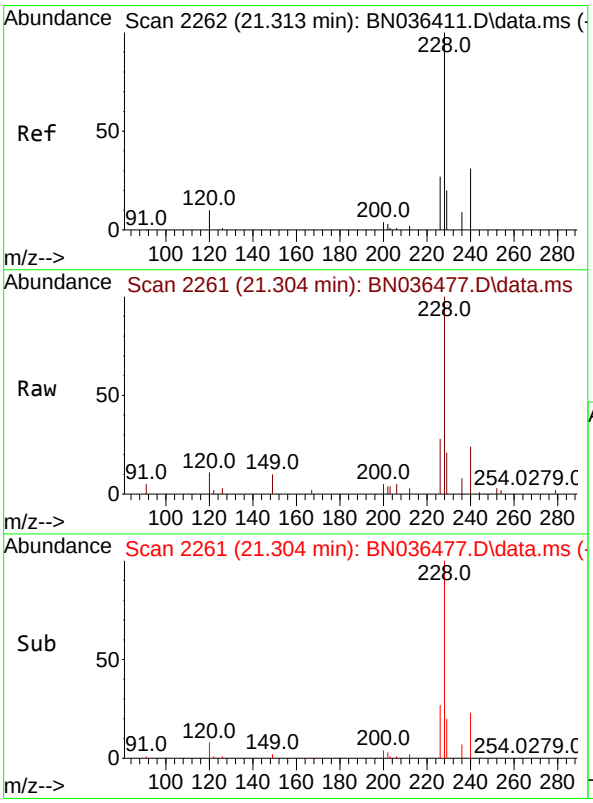
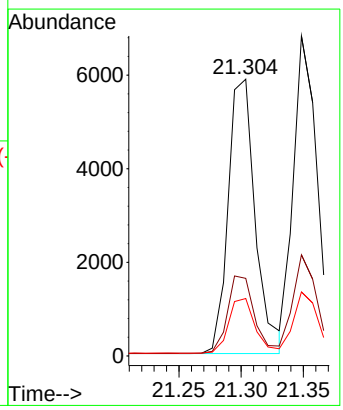
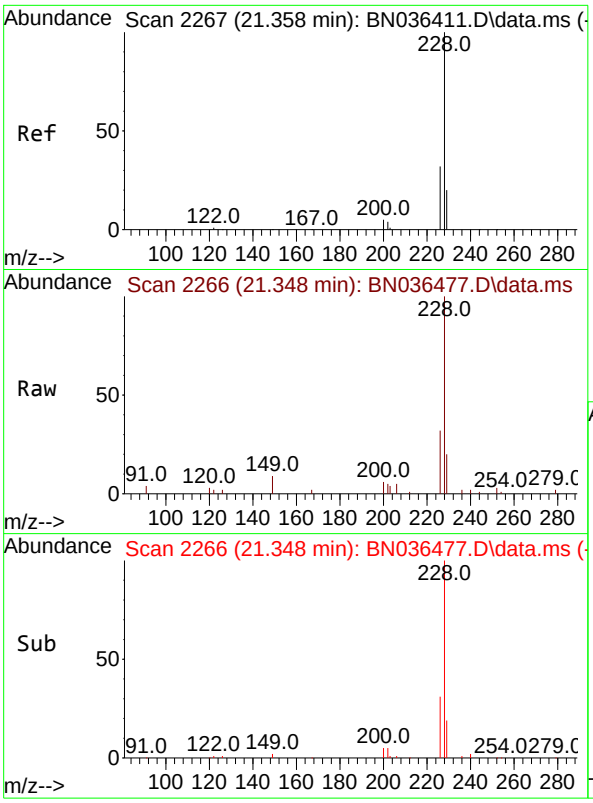


#32
Benzo(a)anthracene
Concen: 0.489 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:228 Resp: 8882

Ion	Ratio	Lower	Upper
228	100		
226	28.0	22.2	33.2
229	20.7	16.5	24.7

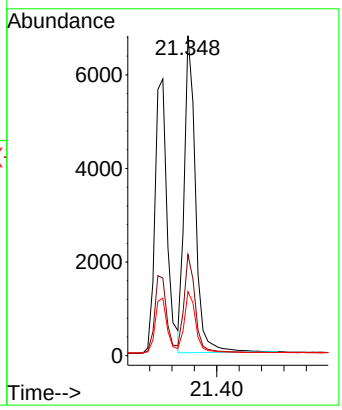




#33
Chrysene
Concen: 0.483 ng
RT: 21.348 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:228 Resp: 950

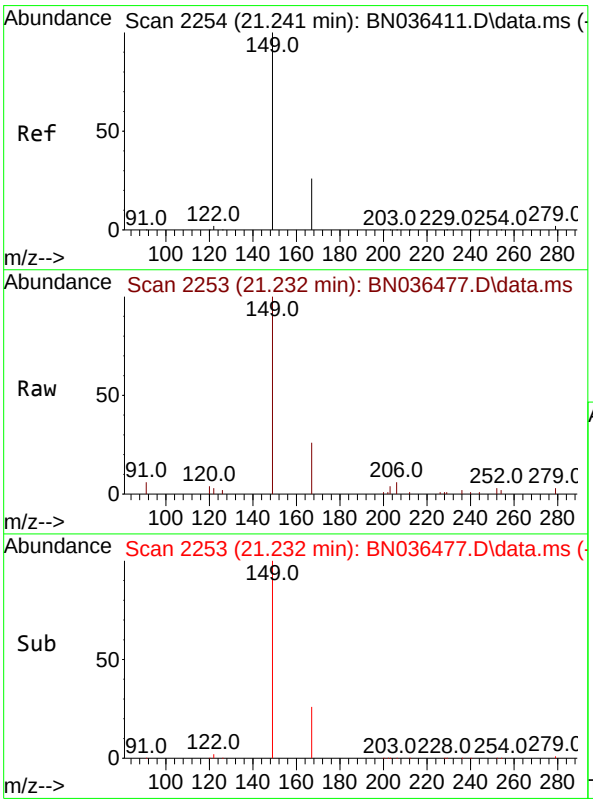
Ion	Ratio	Lower	Upper
228	100		
226	31.6	25.5	38.3
229	20.0	16.4	24.6



Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations
APPROVED

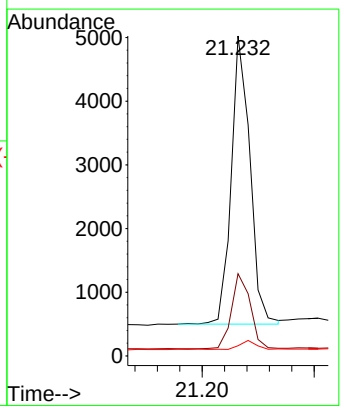
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

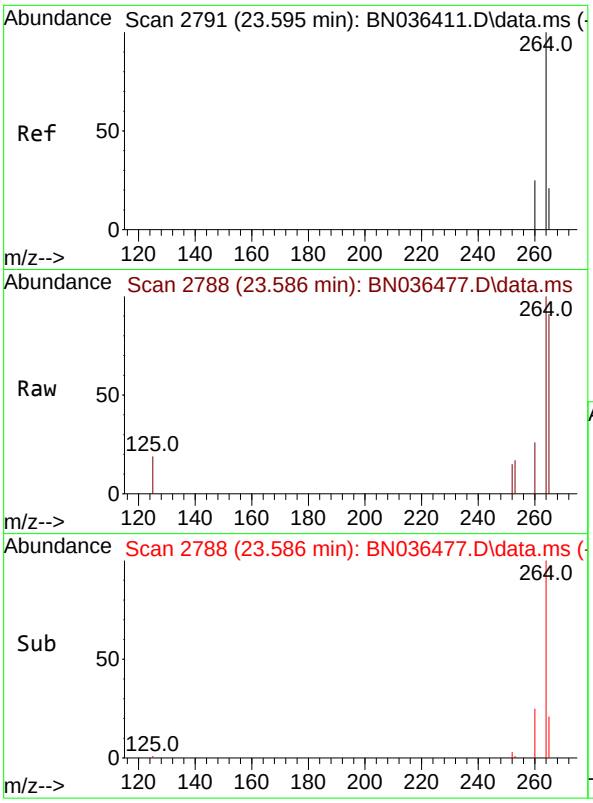


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.463 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:149 Resp: 5246

Ion	Ratio	Lower	Upper
149	100		
167	26.2	21.2	31.8
279	2.9	2.7	4.1

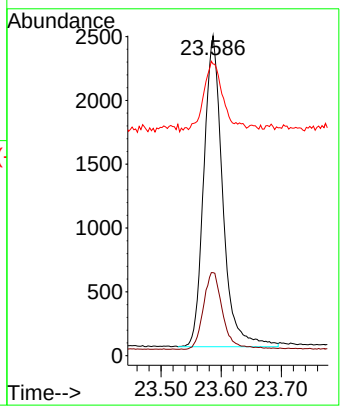




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.586 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:264 Resp: 530

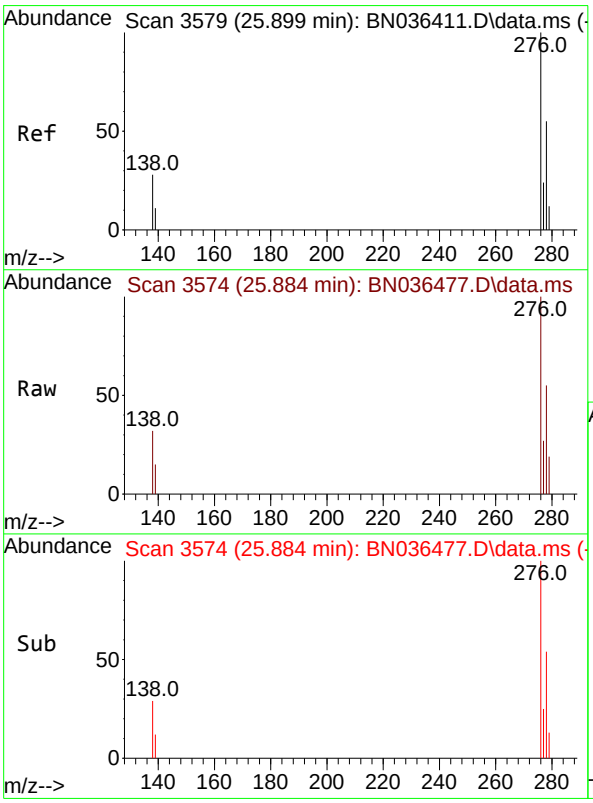
Ion	Ratio	Lower	Upper
264	100		
260	26.0	20.9	31.3
265	91.1	60.7	91.1



Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations
APPROVED

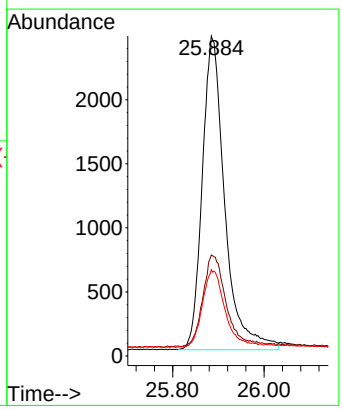
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

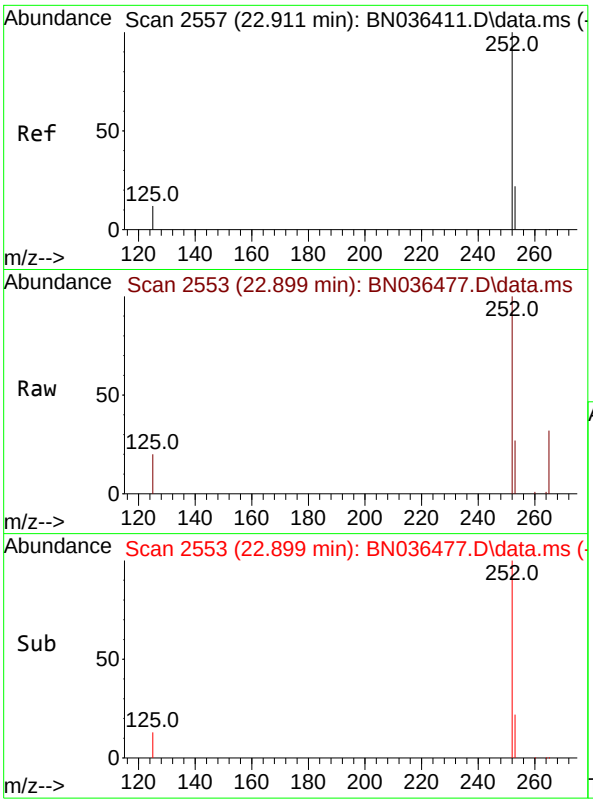


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.451 ng
RT: 25.884 min Scan# 3574
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:276 Resp: 8360

Ion	Ratio	Lower	Upper
276	100		
138	30.2	22.2	33.2
277	24.7	19.8	29.6

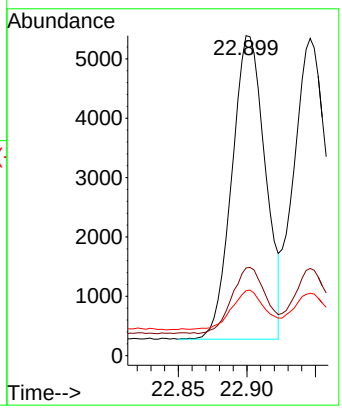




#37
Benzo(b)fluoranthene
Concen: 0.495 ng
RT: 22.899 min Scan# 2
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:252 Resp: 864

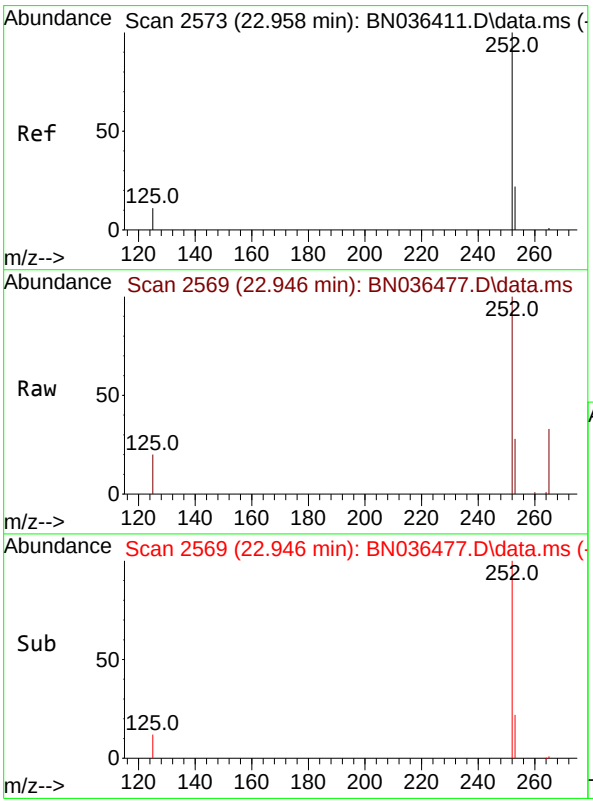
Ion	Ratio	Lower	Upper
252	100		
253	27.4	21.9	32.9
125	20.3	15.0	22.6



Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations
APPROVED

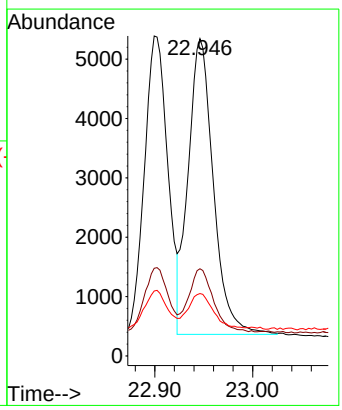
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

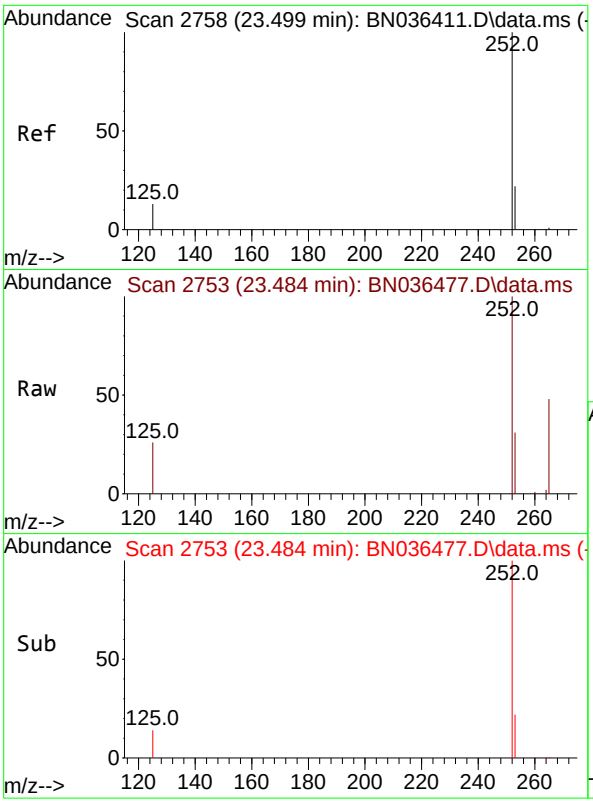


#38
Benzo(k)fluoranthene
Concen: 0.496 ng m
RT: 22.946 min Scan# 2569
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:252 Resp: 8912

Ion	Ratio	Lower	Upper
252	100		
253	27.5	22.2	33.4
125	19.6	15.0	22.4

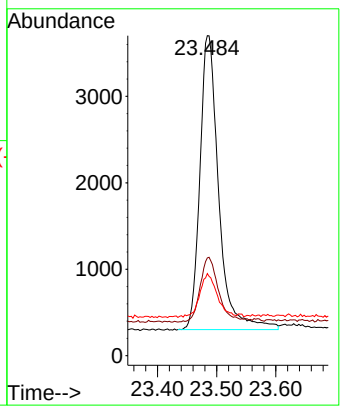




#39
Benzo(a)pyrene
Concen: 0.494 ng
RT: 23.484 min Scan# 2
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:252 Resp: 752

Ion	Ratio	Lower	Upper
252	100		
253	30.6	24.4	36.6
125	25.6	18.2	27.2



Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations
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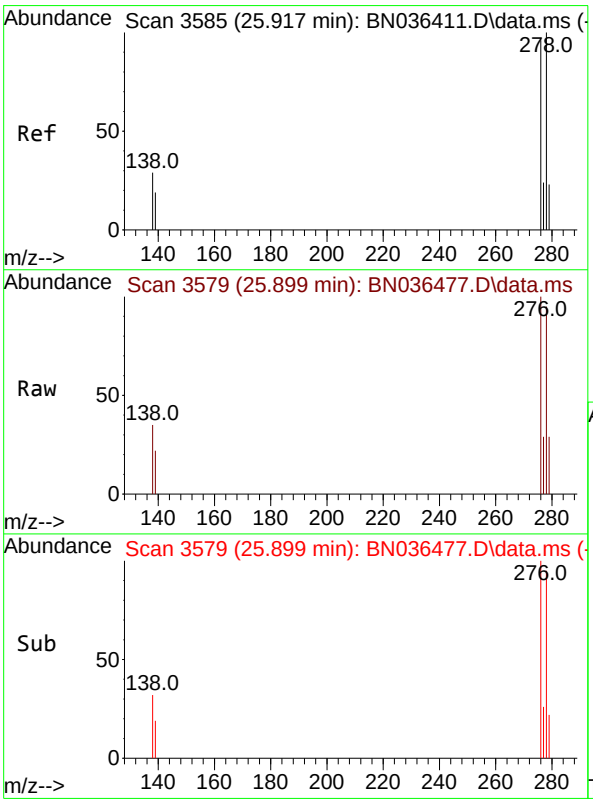
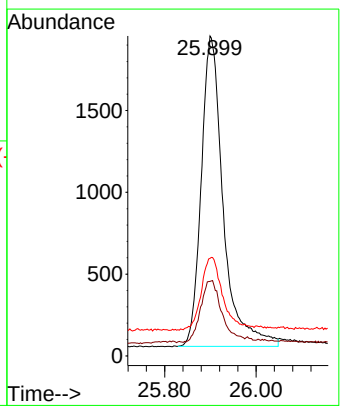
Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

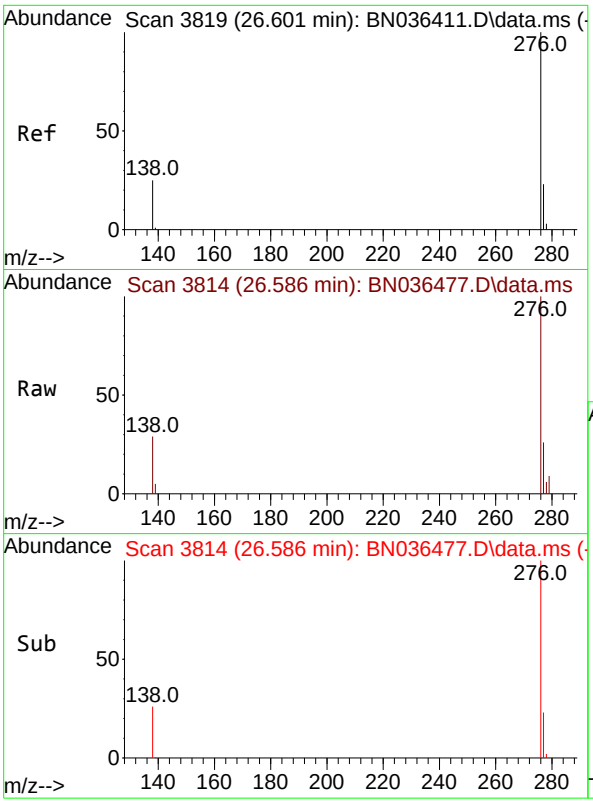


#40
Dibenzo(a,h)anthracene
Concen: 0.434 ng
RT: 25.899 min Scan# 3579
Delta R.T. -0.018 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:278 Resp: 6349

Ion	Ratio	Lower	Upper
278	100		
139	23.3	18.5	27.7
279	30.5	24.8	37.2

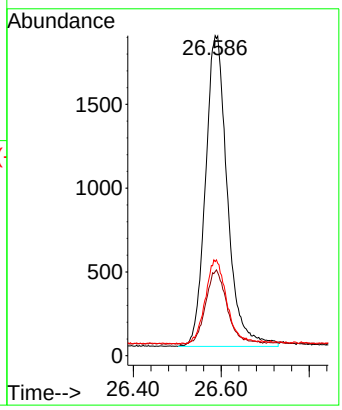




#41
Benzo(g,h,i)perylene
Concen: 0.387 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:276 Resp: 641

Ion	Ratio	Lower	Upper
276	100		
277	26.3	20.7	31.1
138	29.4	21.8	32.6



Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Manual Integrations
APPROVED

Reviewed By :Rahul Chavli 02/21/2025
Supervised By :Jagrut Upadhyay 02/21/2025

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	02/13/25
Project:	NWIRP Bethpage CTO WE13 - VPB-192 #112G08005	Date Received:	02/17/25
Client Sample ID:	BP-VPB-192-GW-780-782MSD	SDG No.:	Q1380
Lab Sample ID:	Q1380-11MSD	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	300 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
BN036478.D	1	02/18/25 11:40	02/20/25 13:12	PB166758

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.92		0.23	0.67	0.67	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		116%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.45	*	53 - 106		113%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		138%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1790	7.746				
1146-65-2	Naphthalene-d8	4250	10.53				
15067-26-2	Acenaphthene-d10	2640	14.387				
1517-22-2	Phenanthrene-d10	5810	17.124				
1719-03-5	Chrysene-d12	5870	21.313				
1520-96-3	Perylene-d12	5480	23.584				

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\BN022025\
Data File : BN036478.D
Acq On : 20 Feb 2025 13:12
Operator : RC/JU
Sample : Q1380-11MSD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Quant Time: Feb 21 00:10:48 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

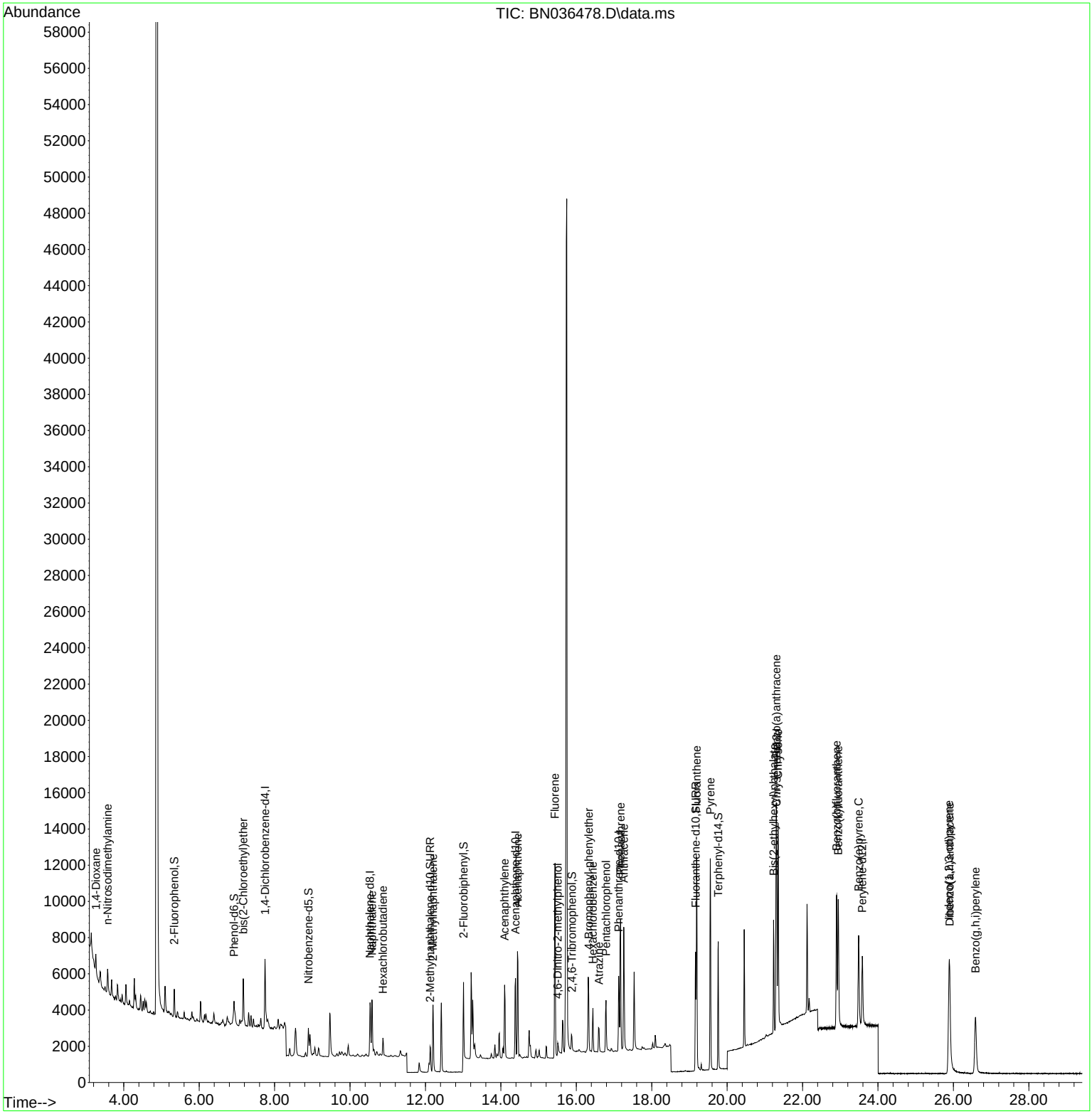
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1787	0.400	ng	0.00
7) Naphthalene-d8	10.530	136	4250	0.400	ng	-0.01
13) Acenaphthene-d10	14.387	164	2636	0.400	ng	0.00
19) Phenanthrene-d10	17.124	188	5810	0.400	ng	#-0.01
29) Chrysene-d12	21.313	240	5865	0.400	ng	0.00
35) Perylene-d12	23.584	264	5479	0.400	ng	-0.01
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	1045	0.247	ng	0.00
5) Phenol-d6	6.923	99	1140	0.230	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1342	0.320	ng	-0.01
11) 2-Methylnaphthalene-d10	12.126	152	2100	0.321	ng	-0.02
14) 2,4,6-Tribromophenol	15.882	330	527	0.403	ng	0.00
15) 2-Fluorobiphenyl	13.008	172	4503	0.454	ng	-0.01
27) Fluoranthene-d10	19.164	212	7507	0.465	ng	0.00
31) Terphenyl-d14	19.763	244	6922	0.553	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.261	88	542	0.277	ng	# 40
3) n-Nitrosodimethylamine	3.572	42	979	0.288	ng	# 97
6) bis(2-Chloroethyl)ether	7.168	93	1774	0.342	ng	99
9) Naphthalene	10.583	128	4190	0.342	ng	99
10) Hexachlorobutadiene	10.872	225	844	0.283	ng	# 99
12) 2-Methylnaphthalene	12.202	142	2829	0.352	ng	99
16) Acenaphthylene	14.099	152	4650	0.399	ng	99
17) Acenaphthene	14.441	154	3020	0.388	ng	98
18) Fluorene	15.435	166	4515	0.408	ng	95
20) 4,6-Dinitro-2-methylph...	15.510	198	396	0.347	ng	97
21) 4-Bromophenyl-phenylether	16.329	248	1544	0.446	ng	# 75
22) Hexachlorobenzene	16.441	284	1773	0.414	ng	97
23) Atrazine	16.602	200	1299	0.449	ng	96
24) Pentachlorophenol	16.788	266	1498	0.737	ng	99
25) Phenanthrene	17.173	178	8339	0.497	ng	100
26) Anthracene	17.260	178	7296	0.493	ng	99
28) Fluoranthene	19.192	202	10396	0.504	ng	98
30) Pyrene	19.554	202	10879	0.482	ng	99
32) Benzo(a)anthracene	21.304	228	9605	0.498	ng	99
33) Chrysene	21.348	228	10250	0.491	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	5656	0.470	ng	100
36) Indeno(1,2,3-cd)pyrene	25.884	276	8831	0.461	ng	97
37) Benzo(b)fluoranthene	22.902	252	9474	0.525	ng	99
38) Benzo(k)fluoranthene	22.946	252	9481	0.510	ng	99
39) Benzo(a)pyrene	23.487	252	7896	0.501	ng	98
40) Dibenzo(a,h)anthracene	25.902	278	6691	0.443	ng	99
41) Benzo(g,h,i)perylene	26.586	276	6735	0.393	ng	98

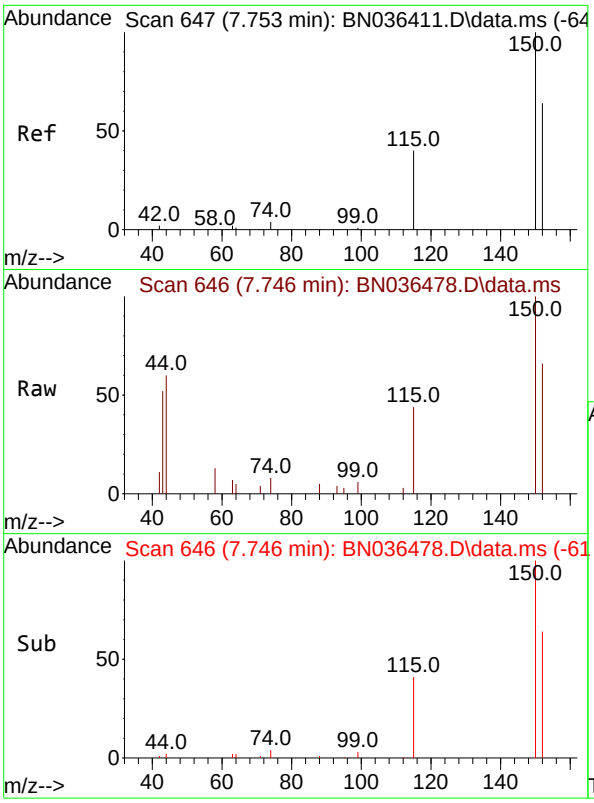
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036478.D
Acq On : 20 Feb 2025 13:12
Operator : RC/JU
Sample : Q1380-11MSD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Quant Time: Feb 21 00:10:48 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



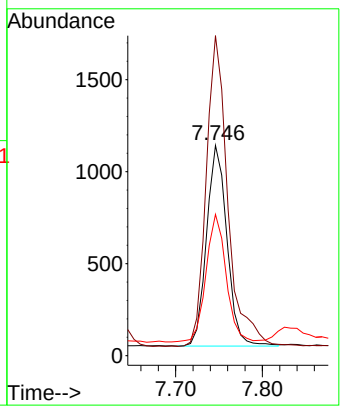


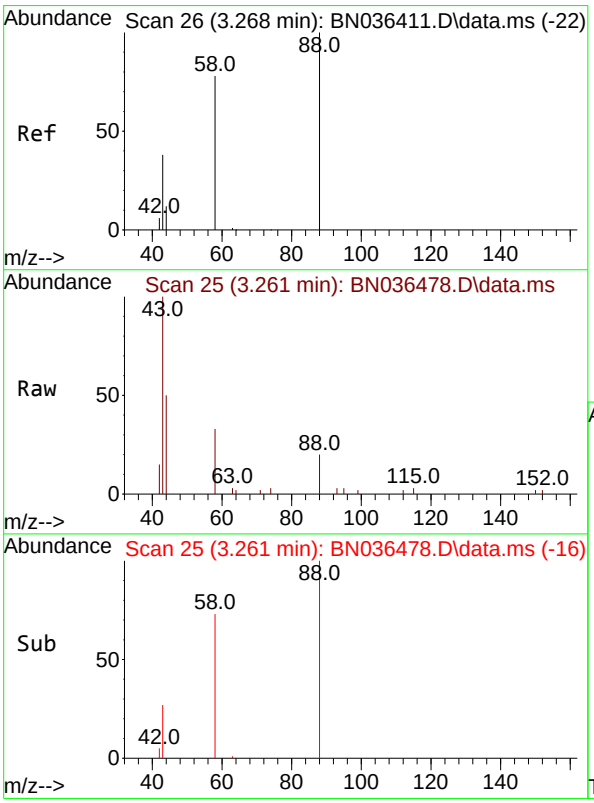
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:152 Resp: 1787

Ion	Ratio	Lower	Upper
152	100		
150	152.1	123.7	185.5
115	67.2	52.5	78.7

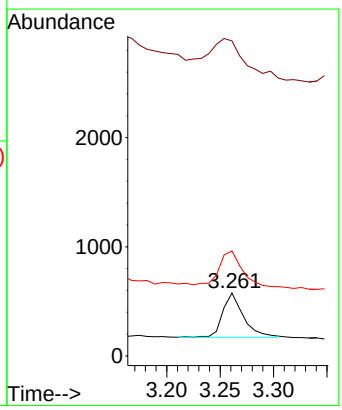


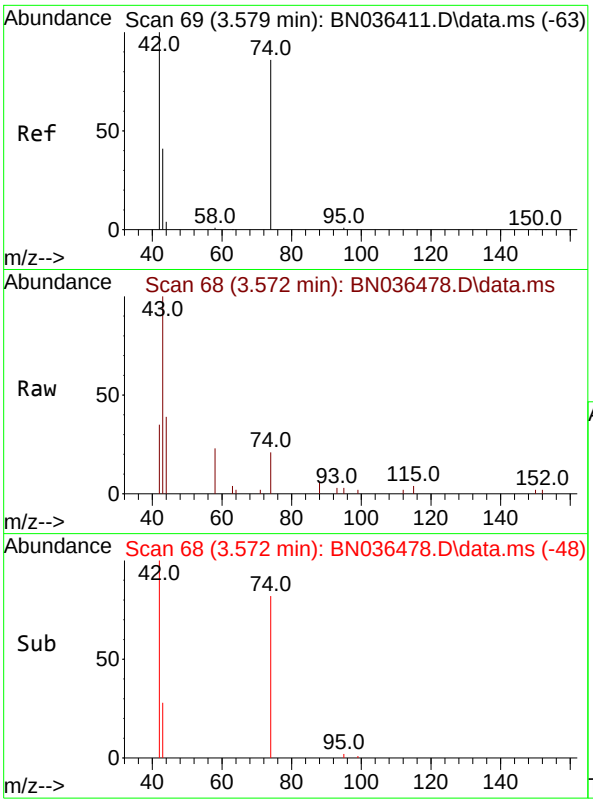


#2
1,4-Dioxane
Concen: 0.277 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion: 88 Resp: 542

Ion	Ratio	Lower	Upper
88	100		
43	153.0	33.7	50.5#
58	89.1	68.9	103.3



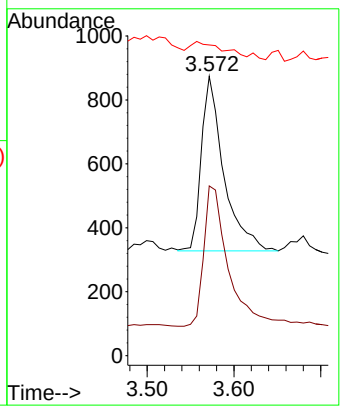


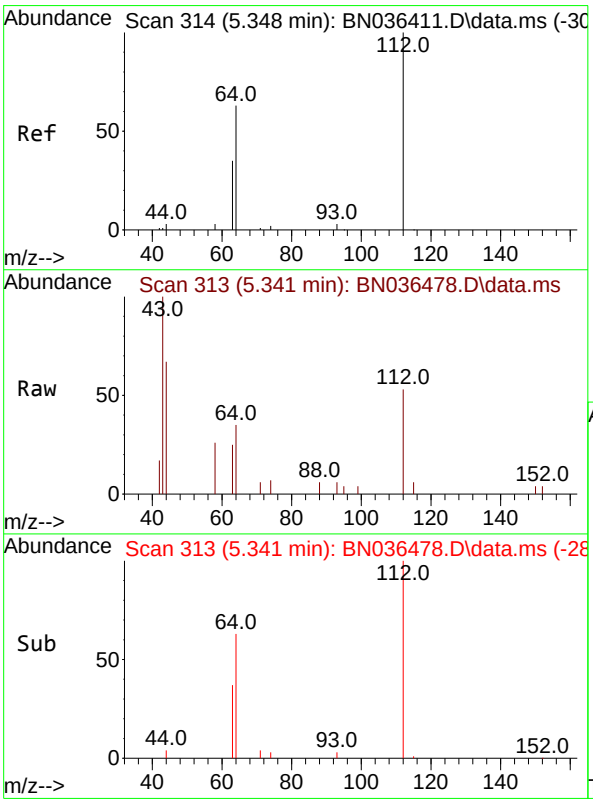
#3
n-Nitrosodimethylamine
Concen: 0.288 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion: 42 Resp: 979

Ion	Ratio	Lower	Upper
42	100		
74	90.6	71.8	107.6
44	16.6	7.8	11.6#

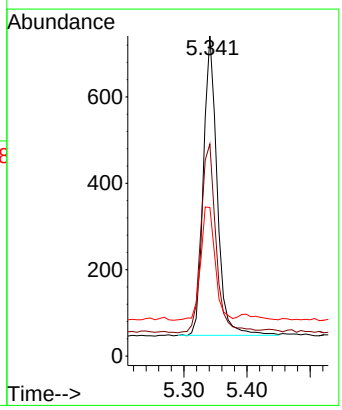


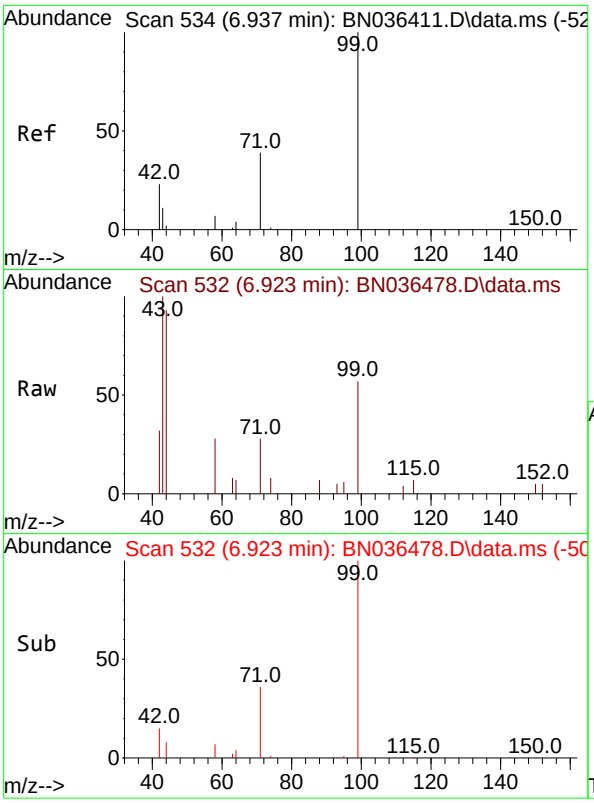


#4
2-Fluorophenol
Concen: 0.247 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:112 Resp: 1045

Ion	Ratio	Lower	Upper
112	100		
64	69.5	53.4	80.0
63	39.5	30.3	45.5



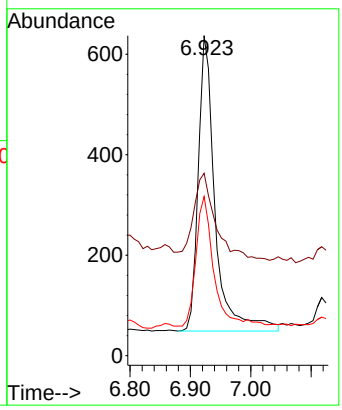


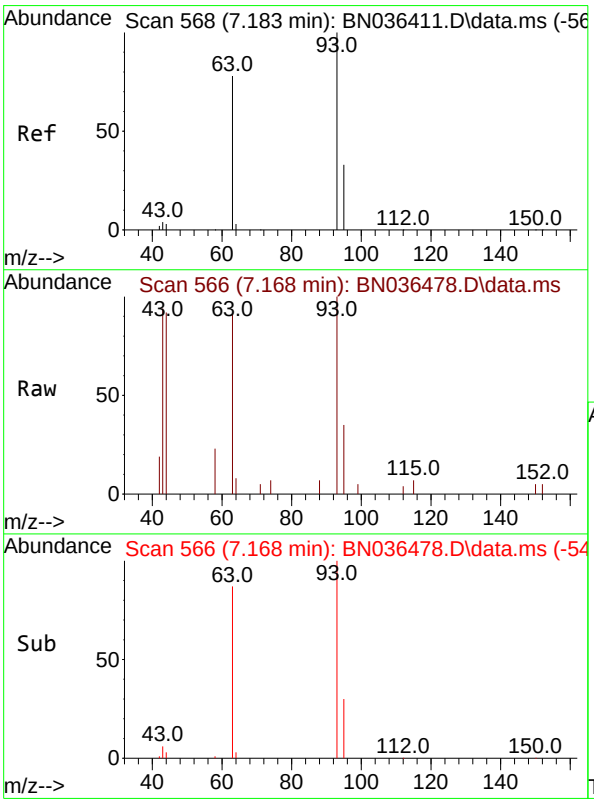
#5
Phenol-d6
Concen: 0.230 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.015 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion: 99 Resp: 1140

Ion	Ratio	Lower	Upper
99	100		
42	39.7	21.7	32.5#
71	46.6	32.6	49.0

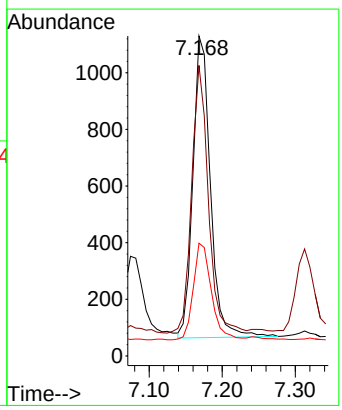


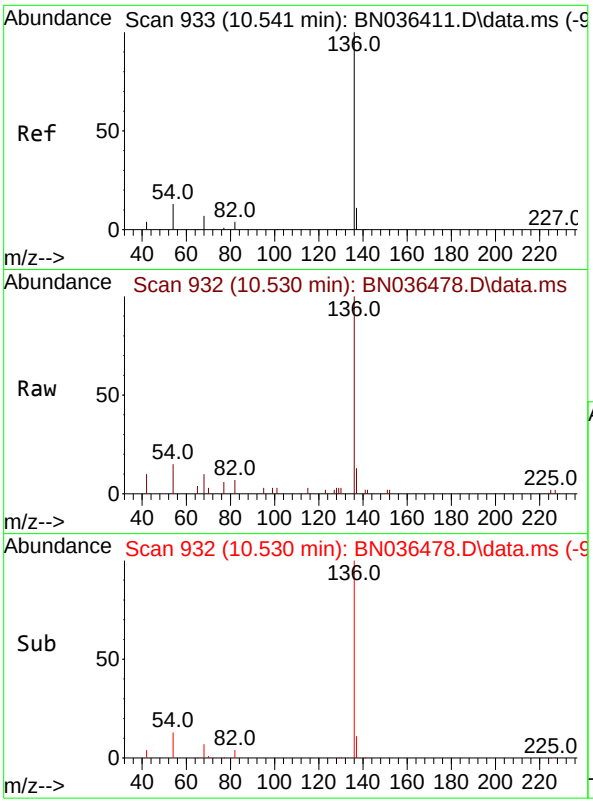


#6
bis(2-Chloroethyl)ether
Concen: 0.342 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.015 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion: 93 Resp: 1774

Ion	Ratio	Lower	Upper
93	100		
63	84.4	66.3	99.5
95	32.9	26.2	39.4



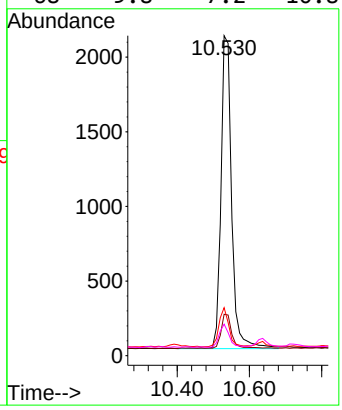


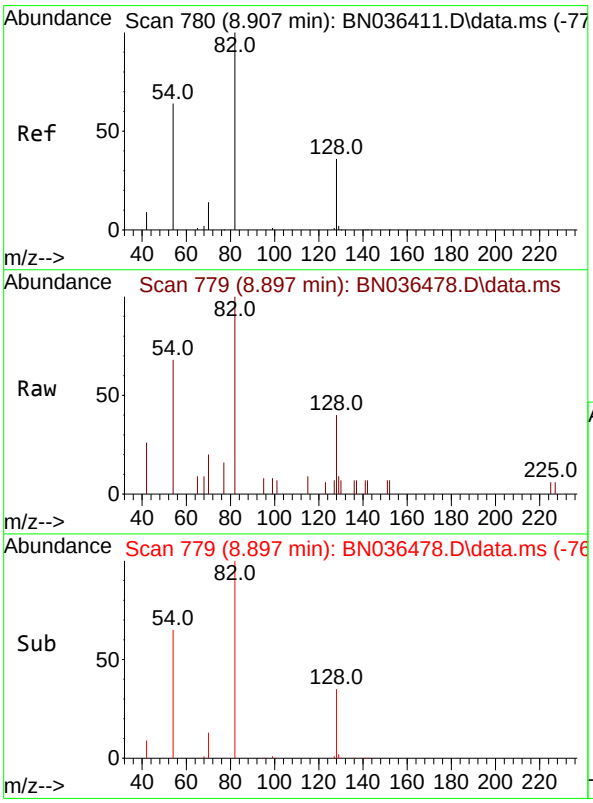
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.530 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:136 Resp: 4250

Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.1	15.1
54	15.0	11.8	17.6
68	9.8	7.2	10.8

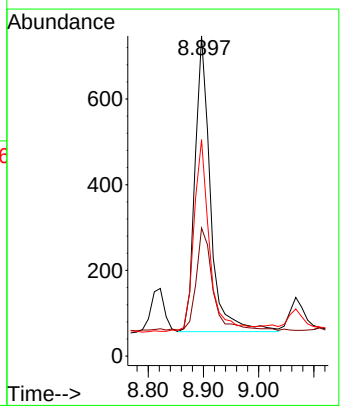


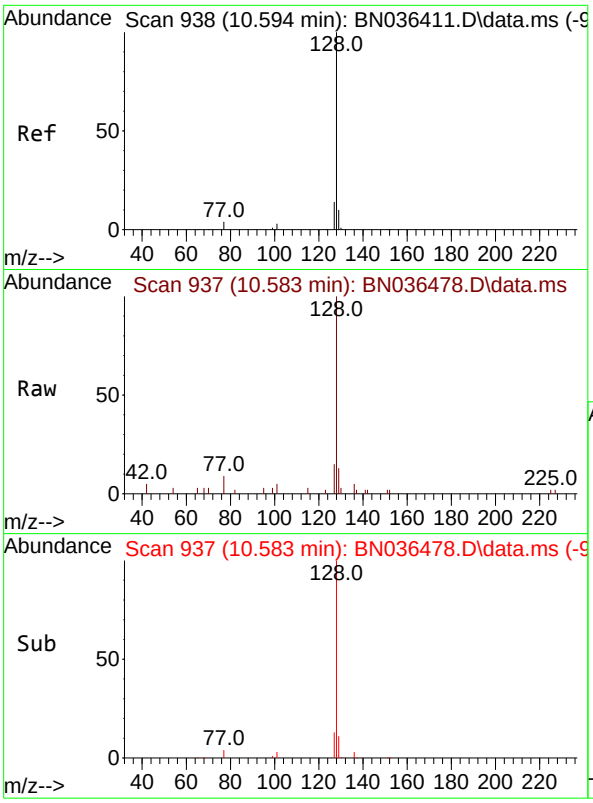


#8
Nitrobenzene-d5
Concen: 0.320 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion: 82 Resp: 1342

Ion	Ratio	Lower	Upper
82	100		
128	40.0	31.9	47.9
54	67.6	53.1	79.7



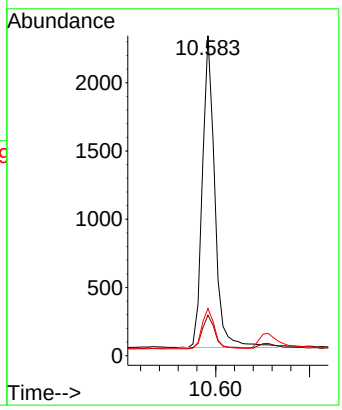


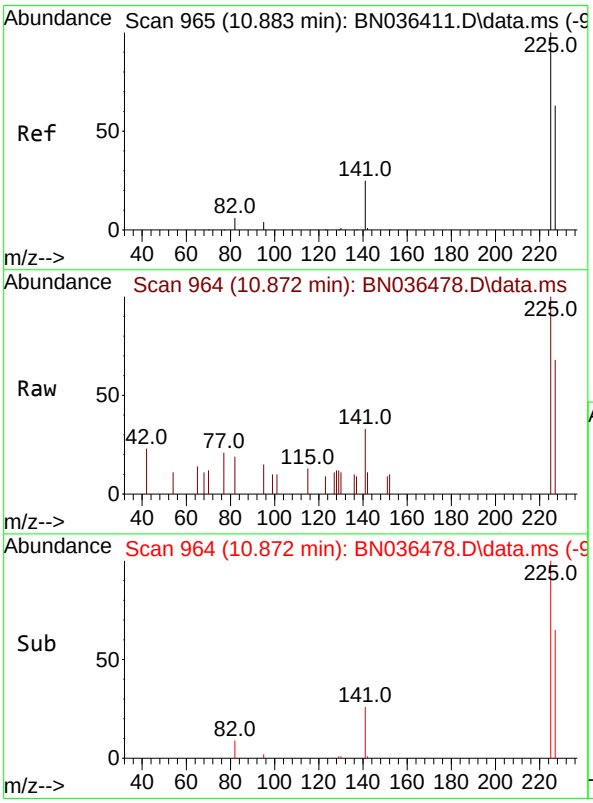
#9
Naphthalene
Concen: 0.342 ng
RT: 10.583 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:128 Resp: 4190

Ion	Ratio	Lower	Upper
128	100		
129	12.7	9.6	14.4
127	14.8	12.0	18.0

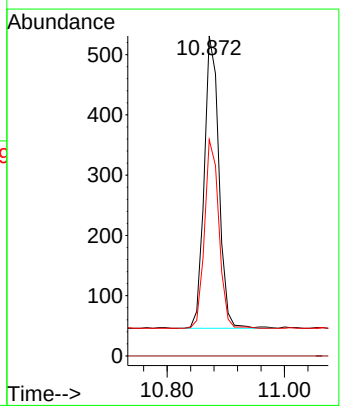


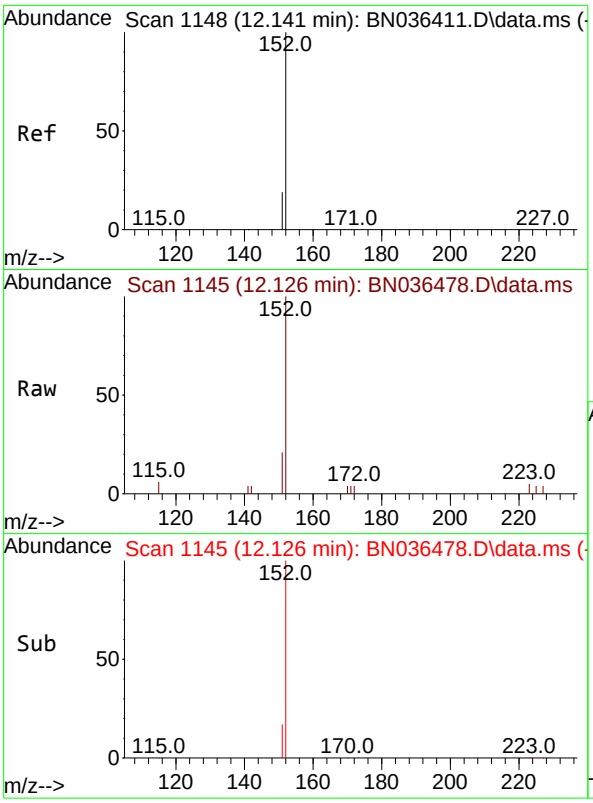


#10
Hexachlorobutadiene
Concen: 0.283 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:225 Resp: 844

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.8	50.9	76.3



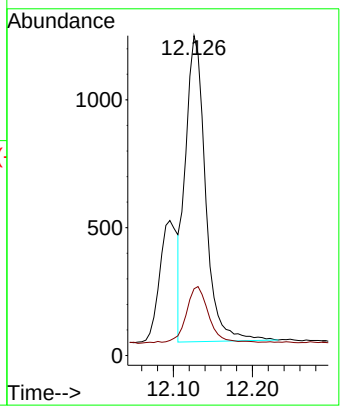


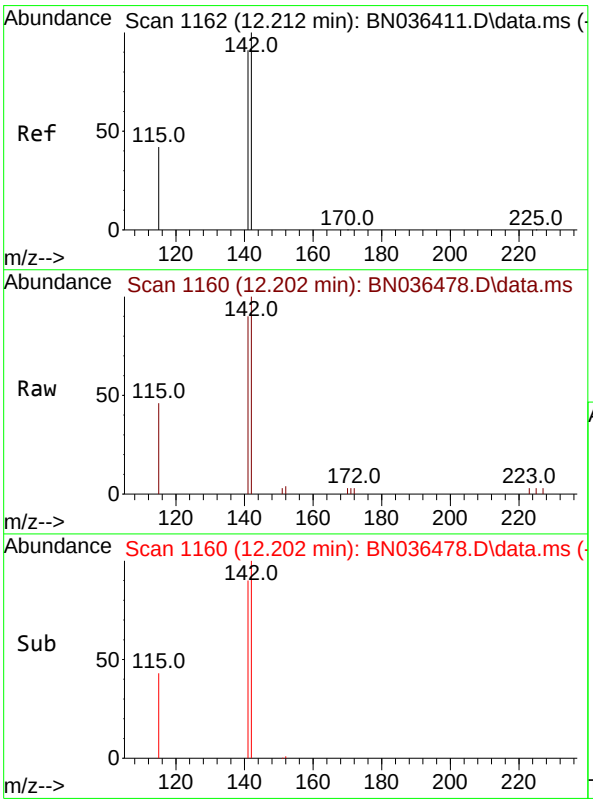
#11
2-Methylnaphthalene-d10
Concen: 0.321 ng
RT: 12.126 min Scan# 11
Delta R.T. -0.015 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:152 Resp: 2100

Ion	Ratio	Lower	Upper
152	100		
151	21.5	16.6	25.0

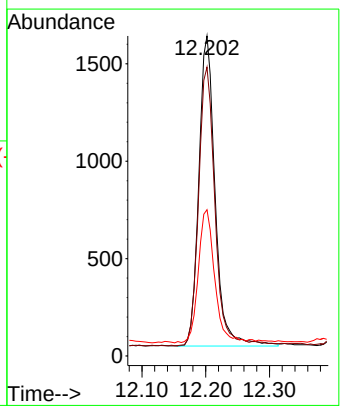


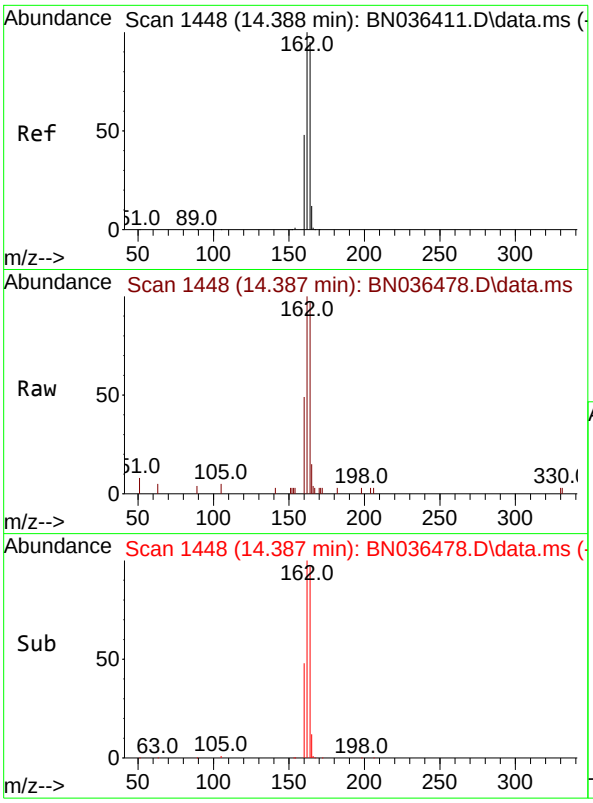


#12
2-Methylnaphthalene
Concen: 0.352 ng
RT: 12.202 min Scan# 1160
Delta R.T. -0.010 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:142 Resp: 2829

Ion	Ratio	Lower	Upper
142	100		
141	90.3	72.8	109.2
115	45.7	35.5	53.3



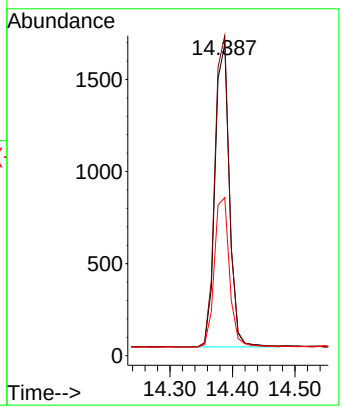


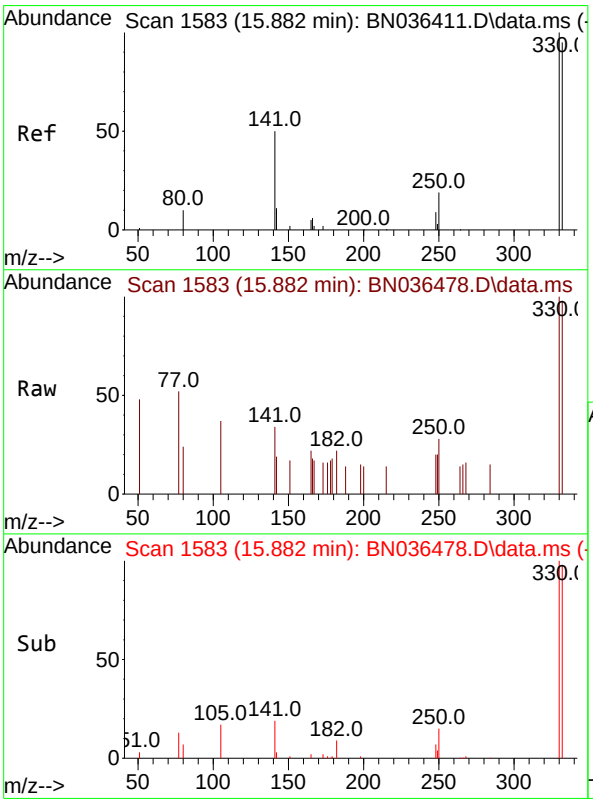
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.387 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:164 Resp: 2636

Ion	Ratio	Lower	Upper
164	100		
162	102.7	84.1	126.1
160	50.7	41.4	62.0

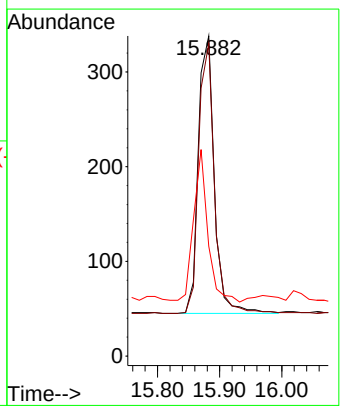


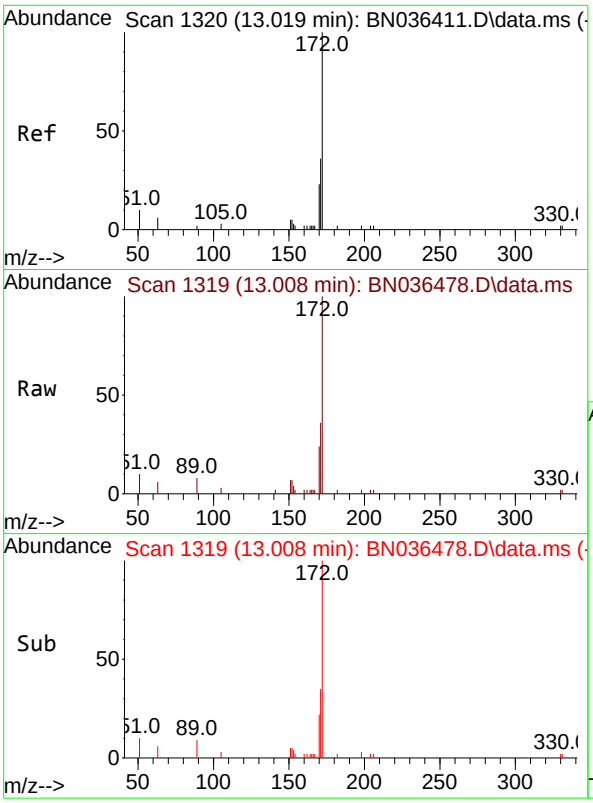


#14
2,4,6-Tribromophenol
Concen: 0.403 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:330 Resp: 527

Ion	Ratio	Lower	Upper
330	100		
332	96.0	76.6	114.8
141	48.4	37.8	56.8



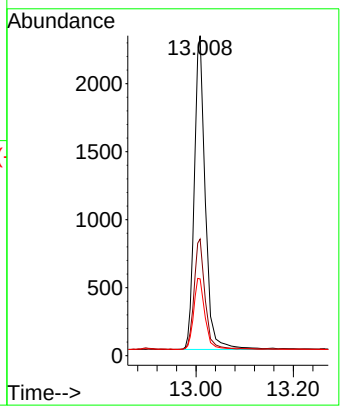


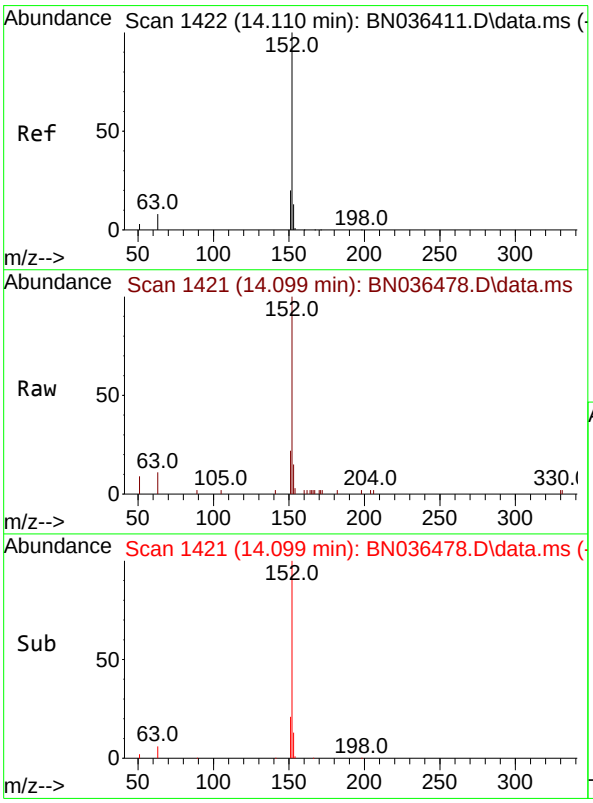
#15
2-Fluorobiphenyl
Concen: 0.454 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:172 Resp: 4503

Ion	Ratio	Lower	Upper
172	100		
171	36.4	29.6	44.4
170	24.0	19.8	29.6

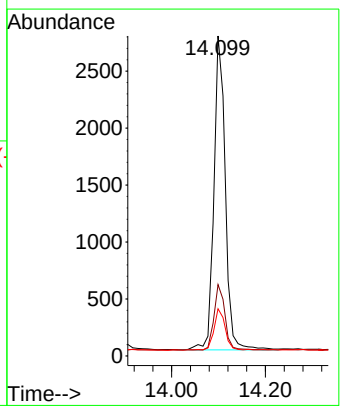


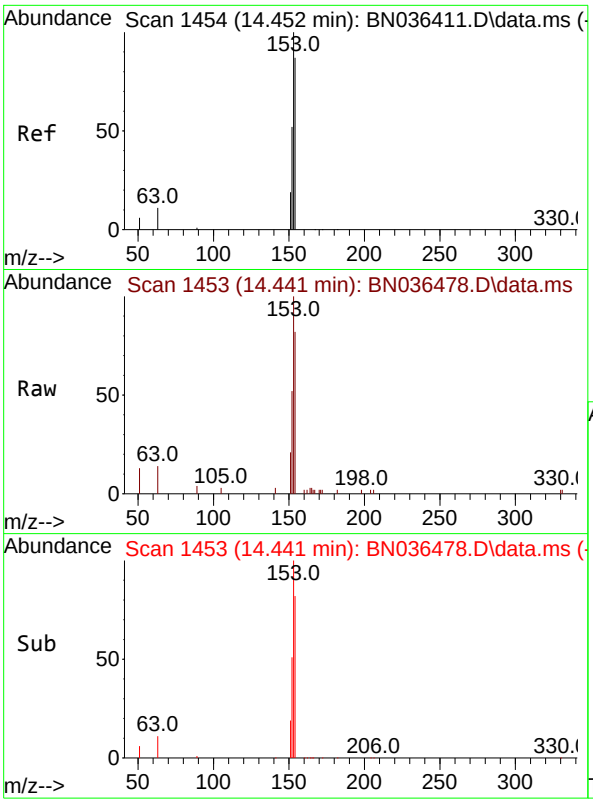


#16
Acenaphthylene
Concen: 0.399 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:152 Resp: 4650

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.8
153	13.4	10.2	15.2



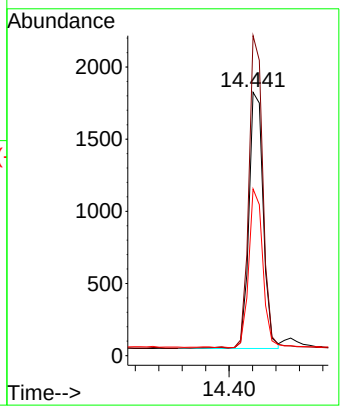


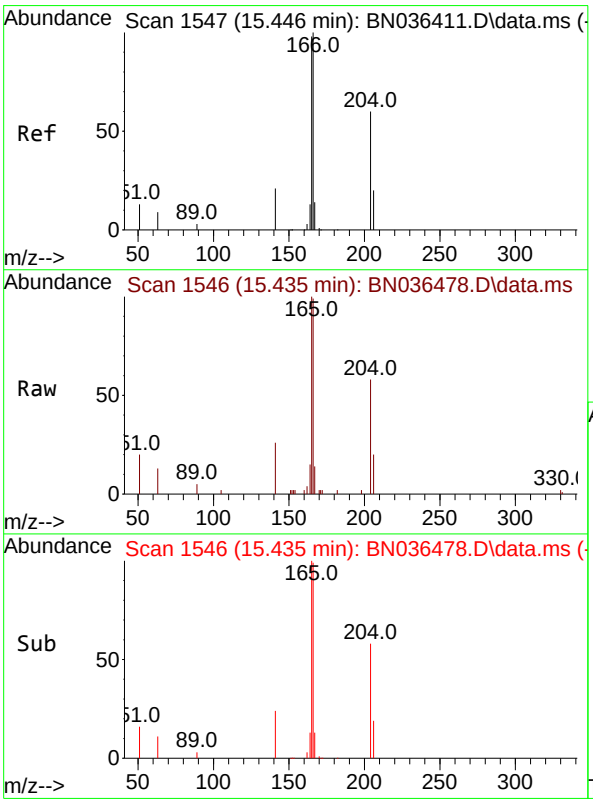
#17
Acenaphthene
Concen: 0.388 ng
RT: 14.441 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:154 Resp: 3020

Ion	Ratio	Lower	Upper
154	100		
153	119.4	93.3	139.9
152	61.4	48.8	73.2

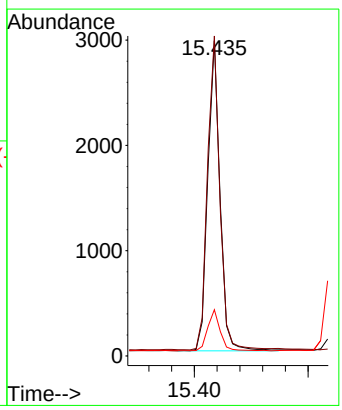


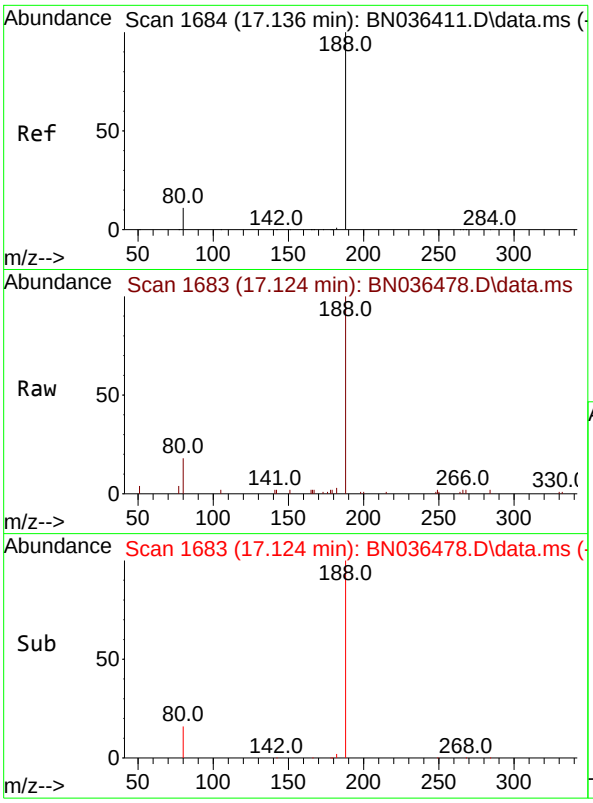


#18
Fluorene
Concen: 0.408 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:166 Resp: 4515

Ion	Ratio	Lower	Upper
166	100		
165	104.8	79.5	119.3
167	13.5	10.4	15.6



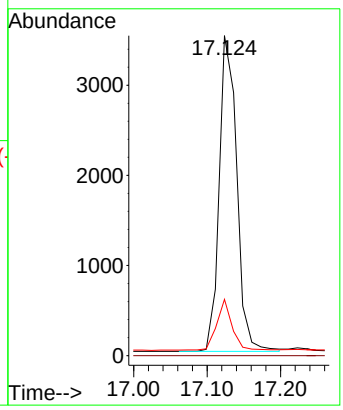


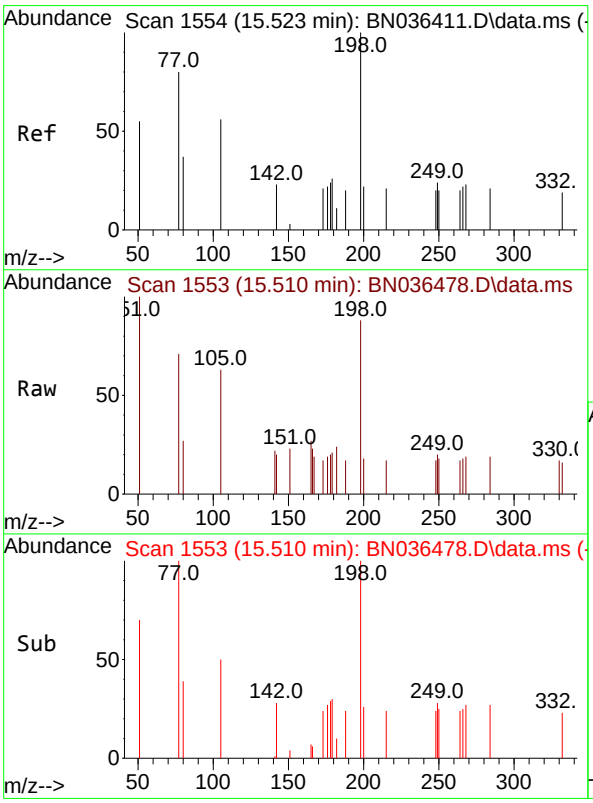
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.013 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:188 Resp: 5810

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	17.6	9.8	14.6#

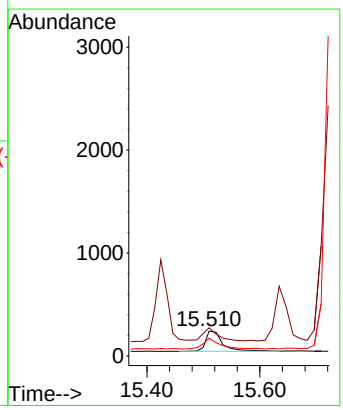


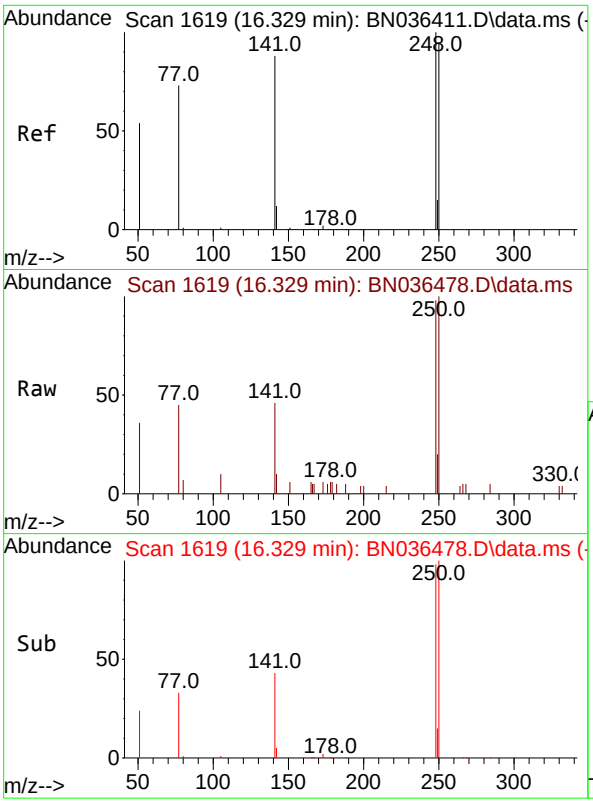


#20
4,6-Dinitro-2-methylphenol
Concen: 0.347 ng
RT: 15.510 min Scan# 1553
Delta R.T. -0.013 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:198 Resp: 396

Ion	Ratio	Lower	Upper
198	100		
51	113.7	86.6	129.8
105	71.8	57.5	86.3



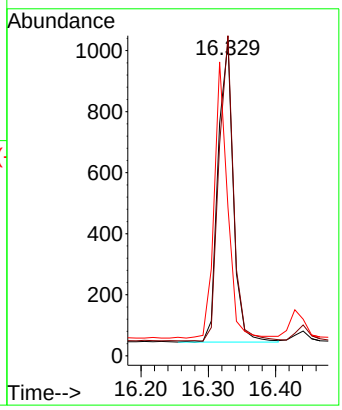


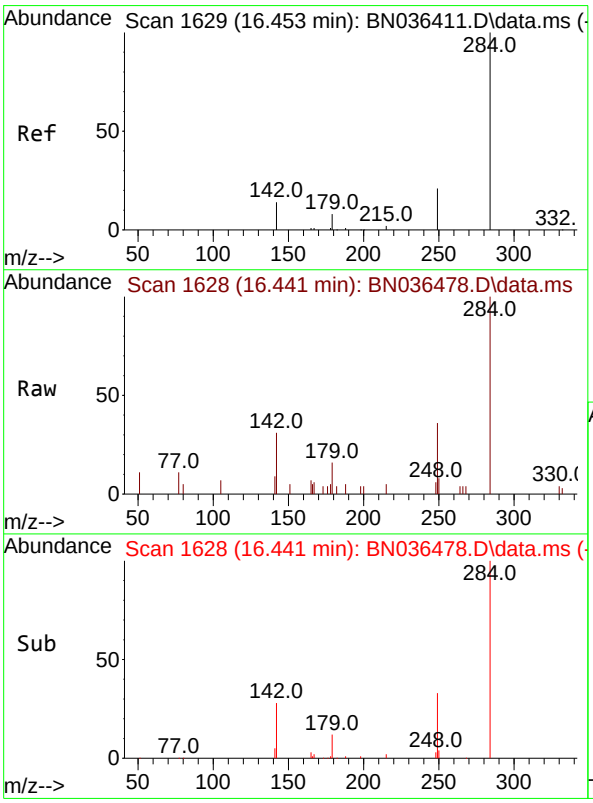
#21
4-Bromophenyl-phenylether
Concen: 0.446 ng
RT: 16.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:248 Resp: 1544

Ion	Ratio	Lower	Upper
248	100		
250	102.0	76.1	114.1
141	47.4	71.7	107.5#

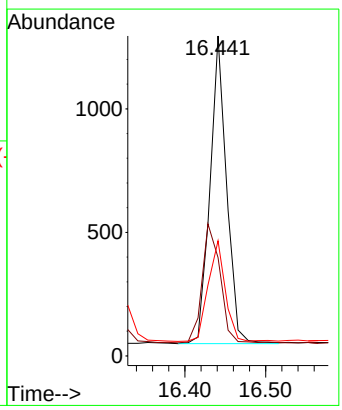


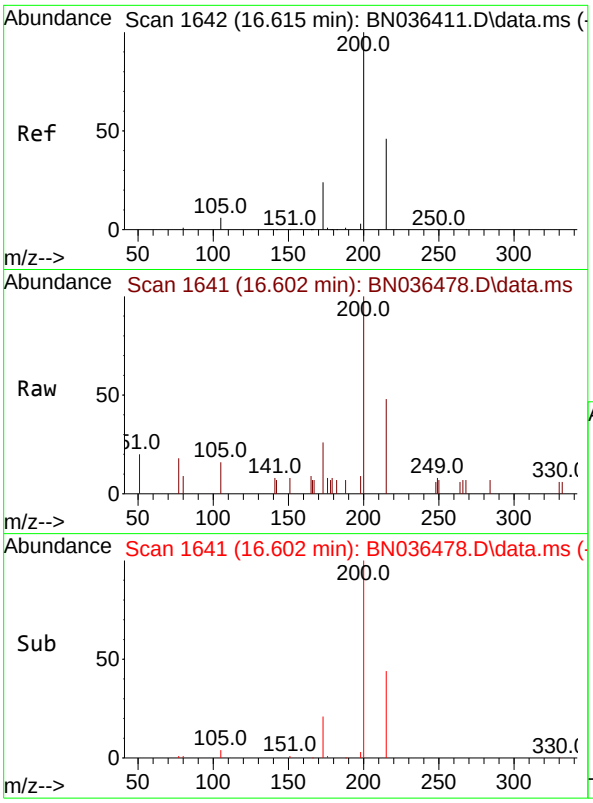


#22
Hexachlorobenzene
Concen: 0.414 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.013 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:284 Resp: 1773

Ion	Ratio	Lower	Upper
284	100		
142	42.9	33.4	50.0
249	33.6	28.6	43.0



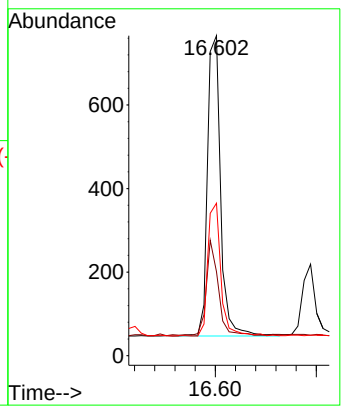


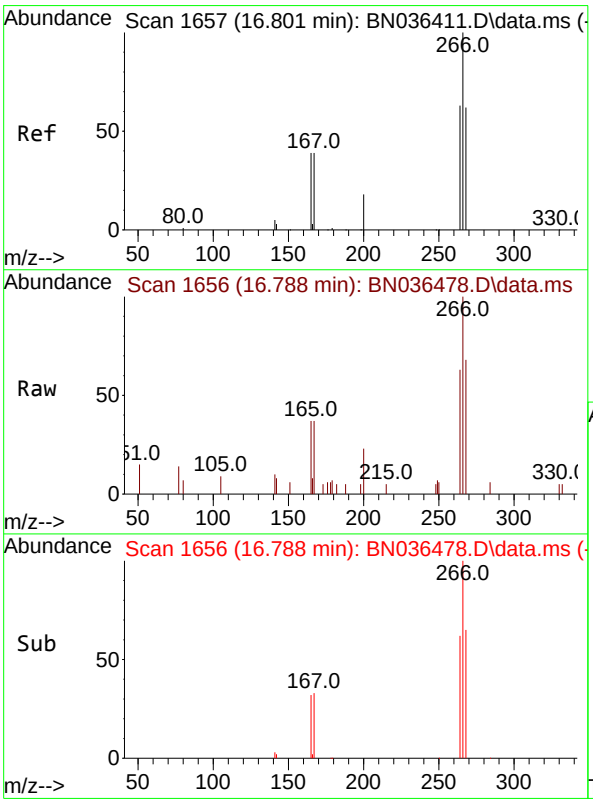
#23
Atrazine
Concen: 0.449 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.013 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:200 Resp: 1299

Ion	Ratio	Lower	Upper
200	100		
173	26.2	23.2	34.8
215	47.7	40.0	60.0

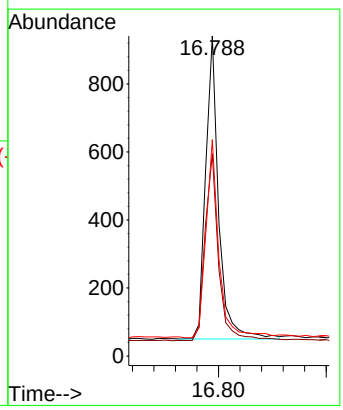


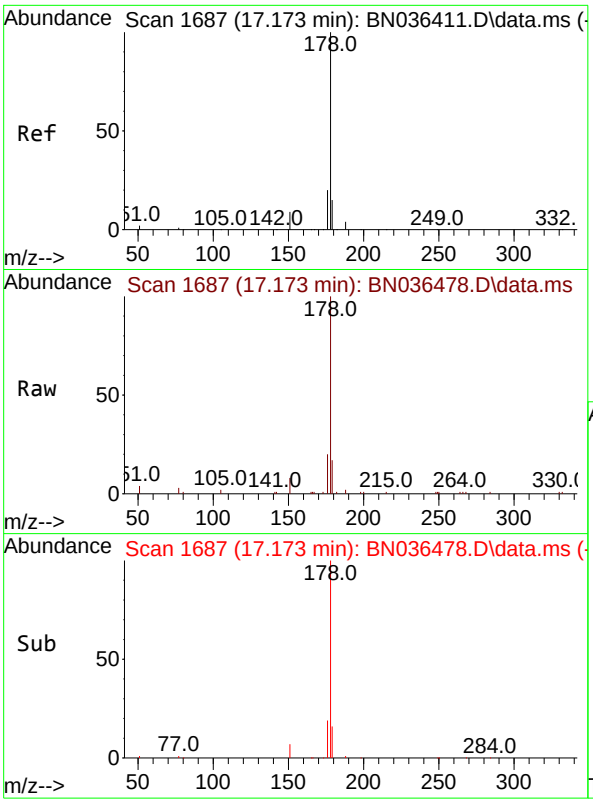


#24
Pentachlorophenol
Concen: 0.737 ng
RT: 16.788 min Scan# 1656
Delta R.T. -0.013 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:266 Resp: 1498

Ion	Ratio	Lower	Upper
266	100		
264	63.4	50.6	76.0
268	66.0	51.9	77.9



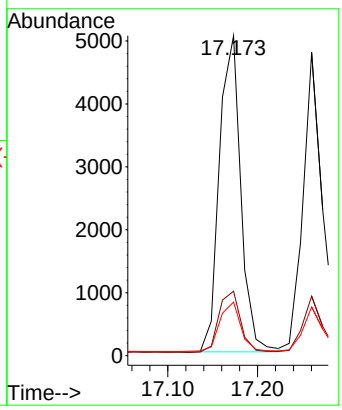


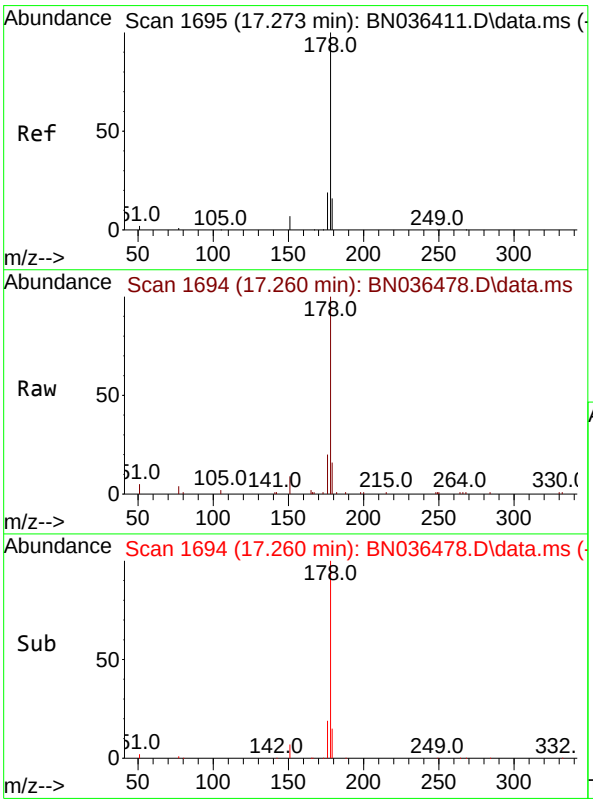
#25
Phenanthrene
Concen: 0.497 ng
RT: 17.173 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:178 Resp: 8339

Ion	Ratio	Lower	Upper
178	100		
176	19.9	15.7	23.5
179	15.6	12.4	18.6

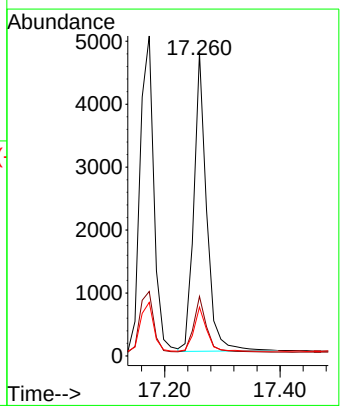


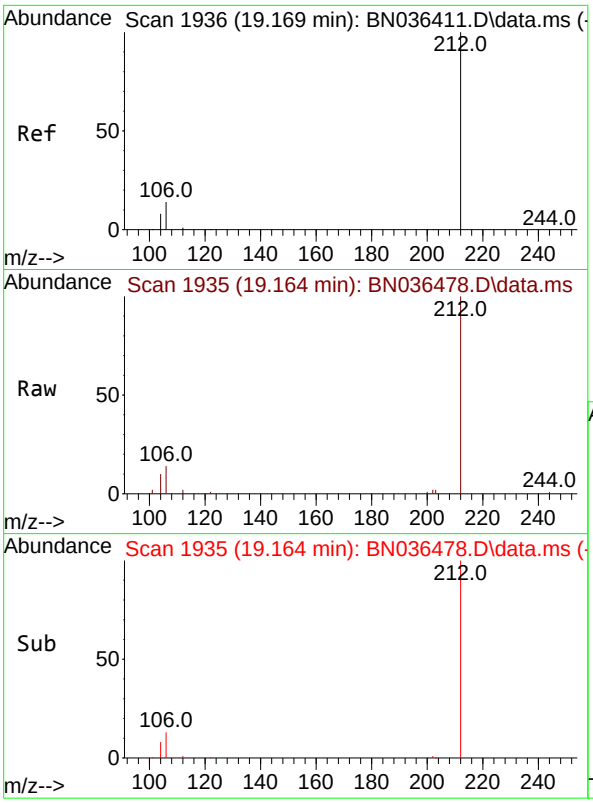


#26
Anthracene
Concen: 0.493 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.013 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:178 Resp: 7296

Ion	Ratio	Lower	Upper
178	100		
176	19.2	14.9	22.3
179	14.9	12.4	18.6



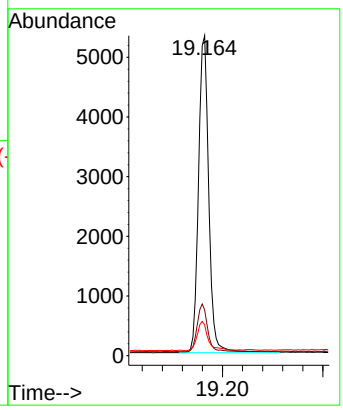


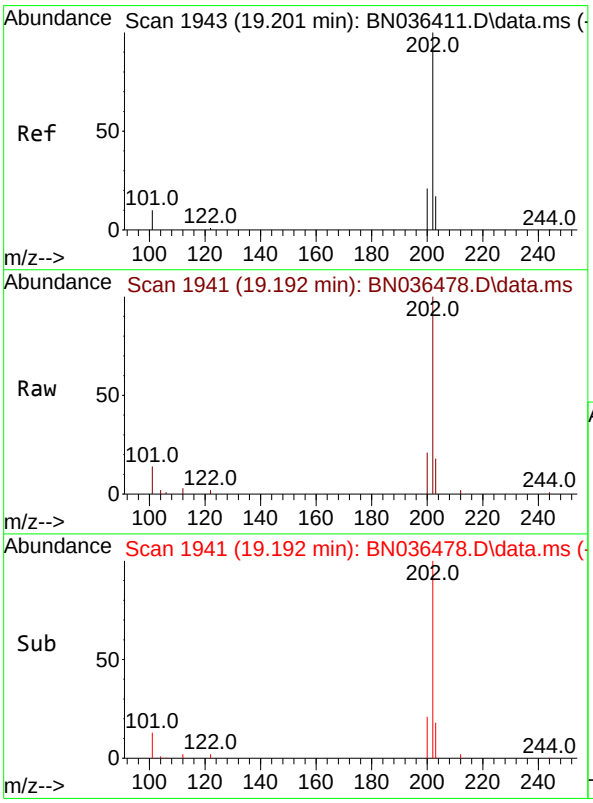
#27
Fluoranthene-d10
Concen: 0.465 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:212 Resp: 7507

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.5	17.3
104	9.7	7.1	10.7

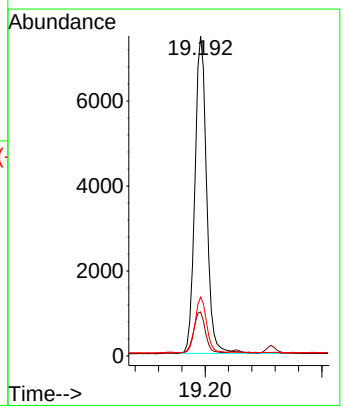


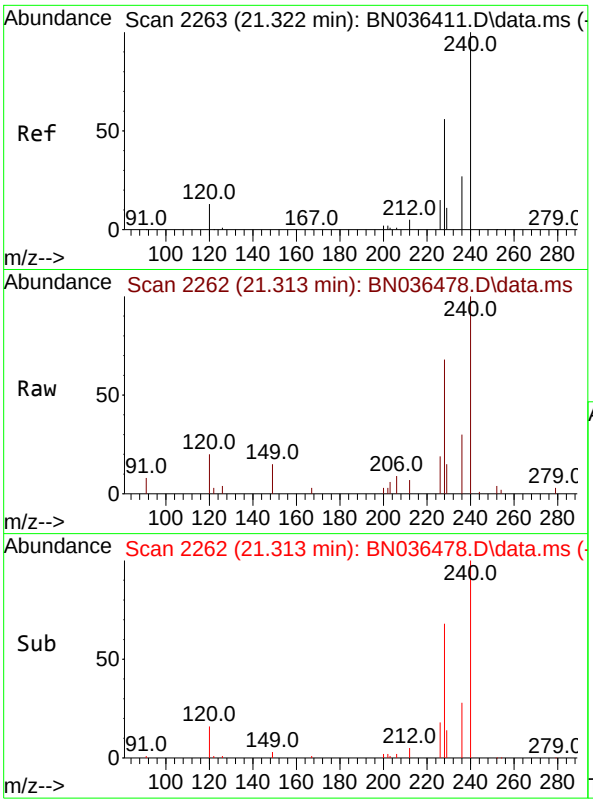


#28
Fluoranthene
Concen: 0.504 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:202 Resp: 10396

Ion	Ratio	Lower	Upper
202	100		
101	13.1	9.2	13.8
203	17.0	13.4	20.0



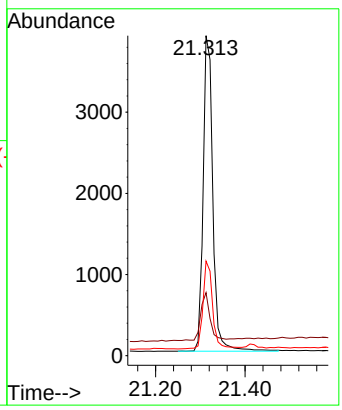


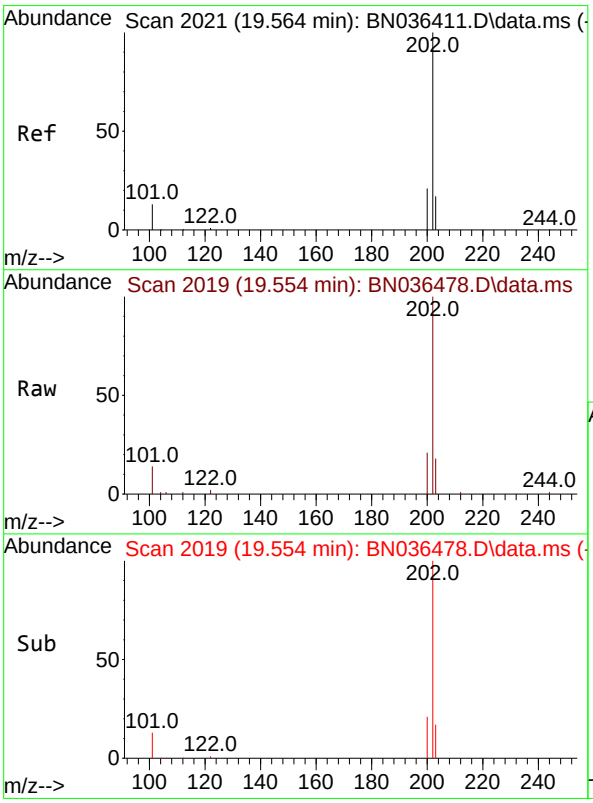
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:240 Resp: 5865

Ion	Ratio	Lower	Upper
240	100		
120	19.7	13.3	19.9
236	29.6	23.0	34.6

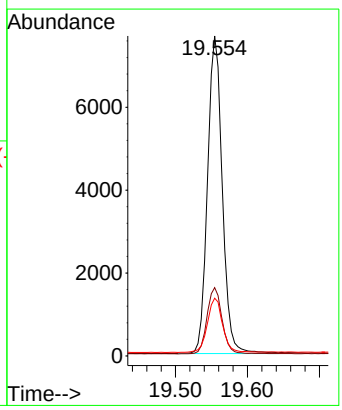


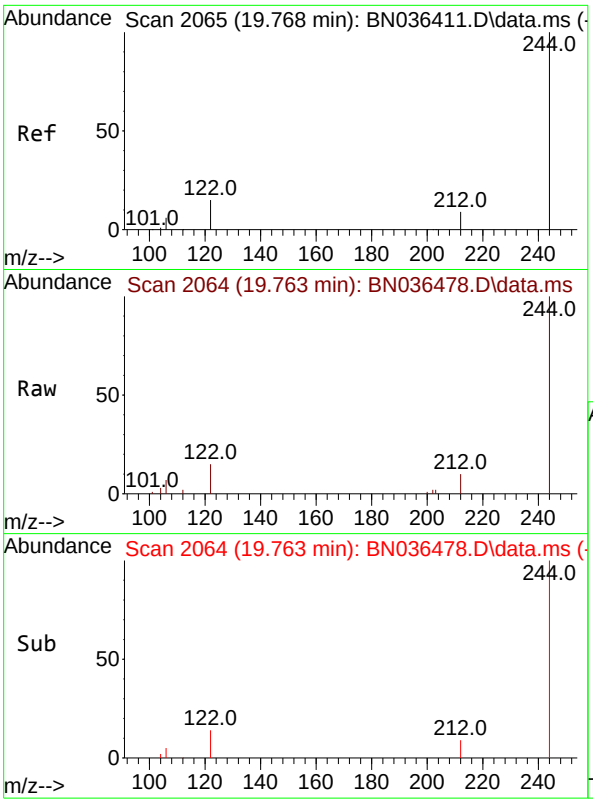


#30
Pyrene
Concen: 0.482 ng
RT: 19.554 min Scan# 2019
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:202 Resp: 10879

Ion	Ratio	Lower	Upper
202	100		
200	21.4	16.9	25.3
203	17.7	13.9	20.9



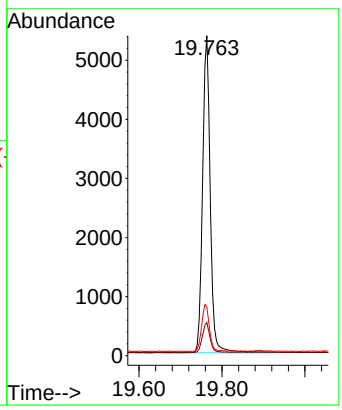


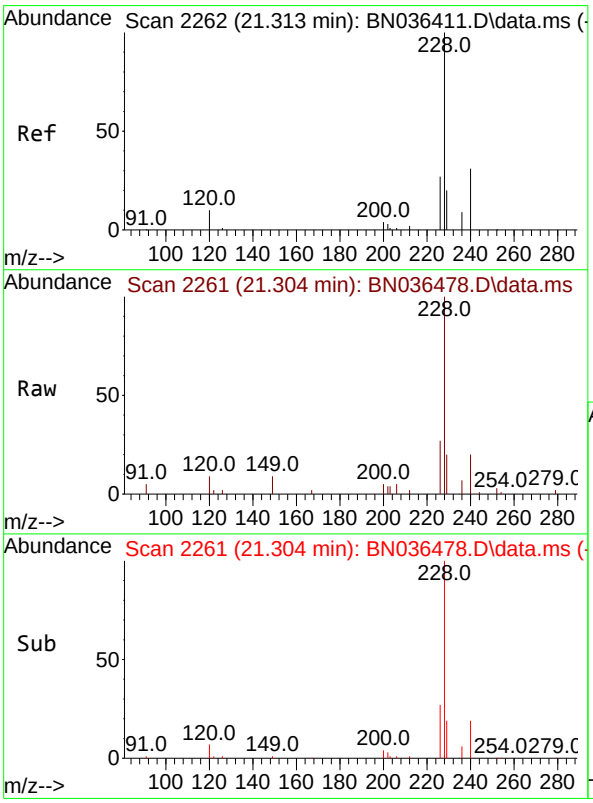
#31
Terphenyl-d14
Concen: 0.553 ng
RT: 19.763 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:244 Resp: 6922

Ion	Ratio	Lower	Upper
244	100		
212	10.3	8.1	12.1
122	15.3	12.8	19.2

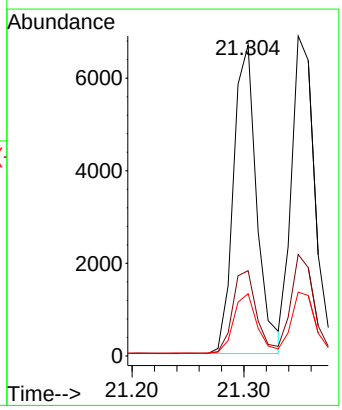


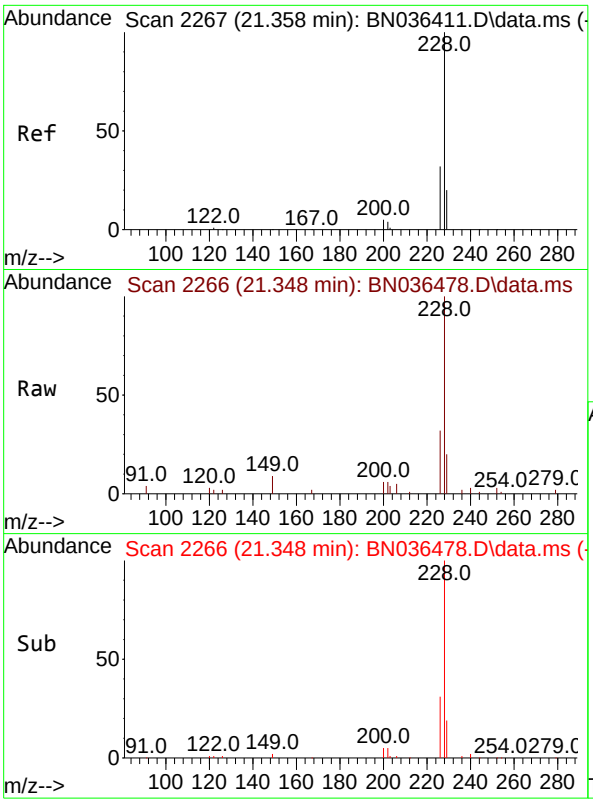


#32
Benzo(a)anthracene
Concen: 0.498 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:228 Resp: 9605

Ion	Ratio	Lower	Upper
228	100		
226	27.4	22.2	33.2
229	20.0	16.5	24.7



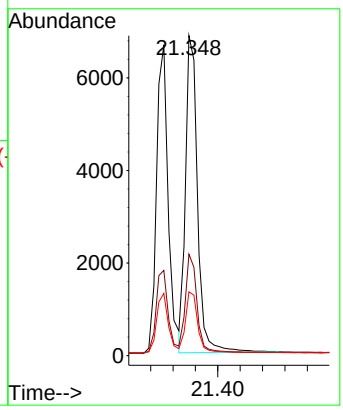


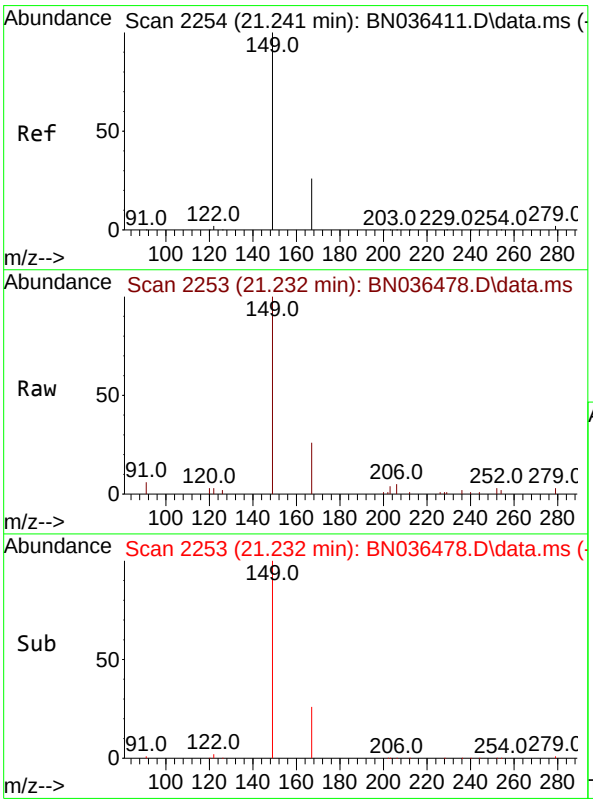
#33
Chrysene
Concen: 0.491 ng
RT: 21.348 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:228 Resp: 10250

Ion	Ratio	Lower	Upper
228	100		
226	31.7	25.5	38.3
229	19.9	16.4	24.6

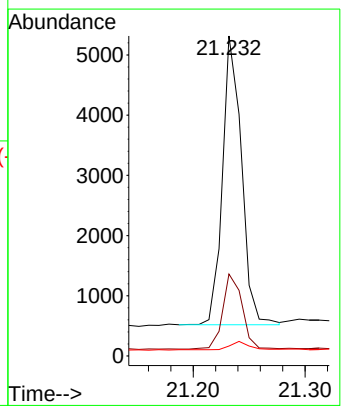


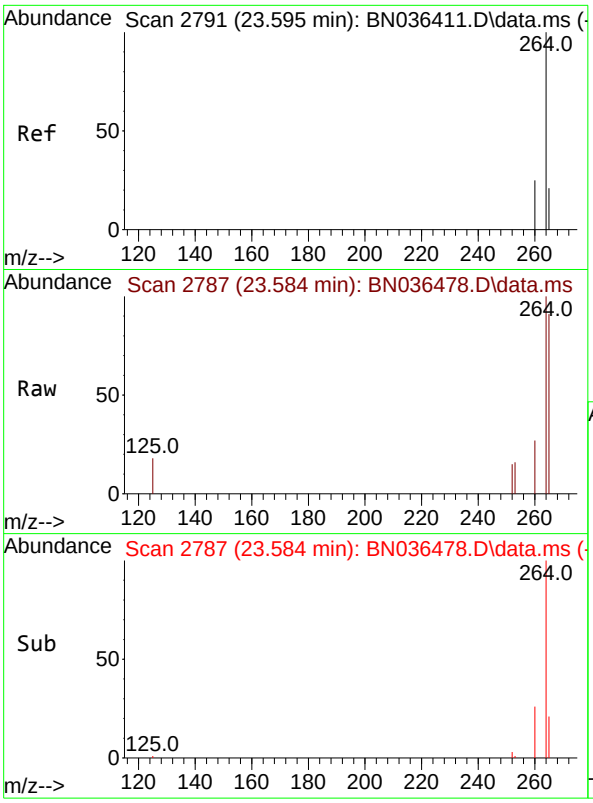


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.470 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:149 Resp: 5656

Ion	Ratio	Lower	Upper
149	100		
167	26.5	21.2	31.8
279	3.3	2.7	4.1



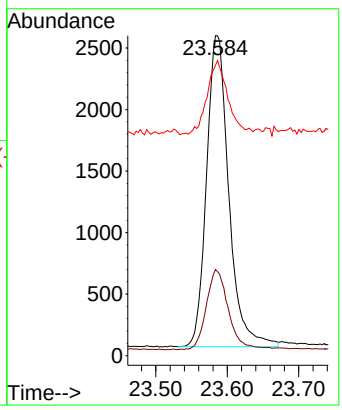


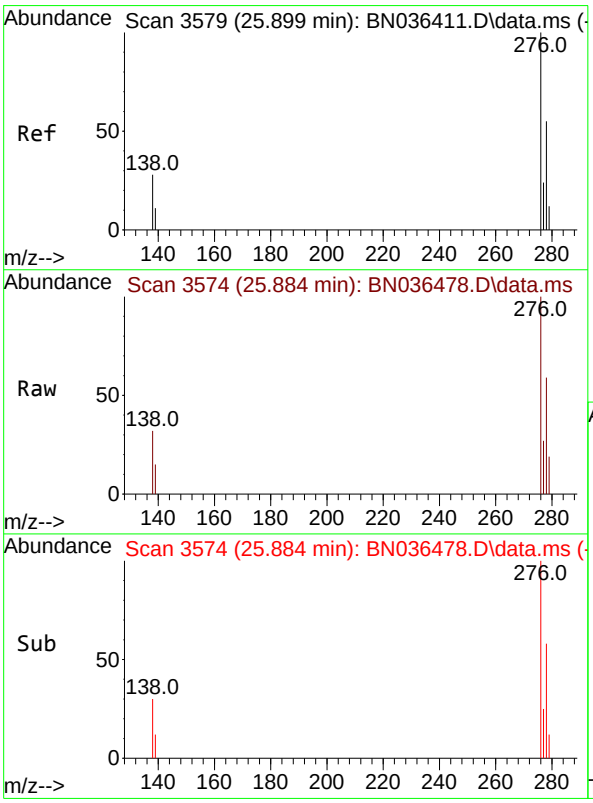
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.584 min Scan# 2
Delta R.T. -0.012 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:264 Resp: 5479

Ion	Ratio	Lower	Upper
264	100		
260	26.9	20.9	31.3
265	90.7	60.7	91.1

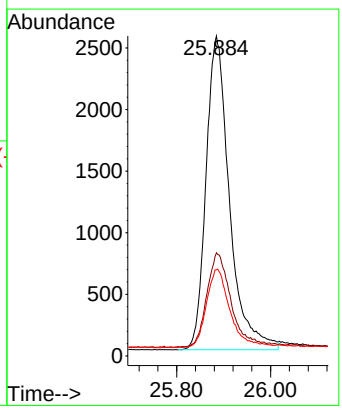


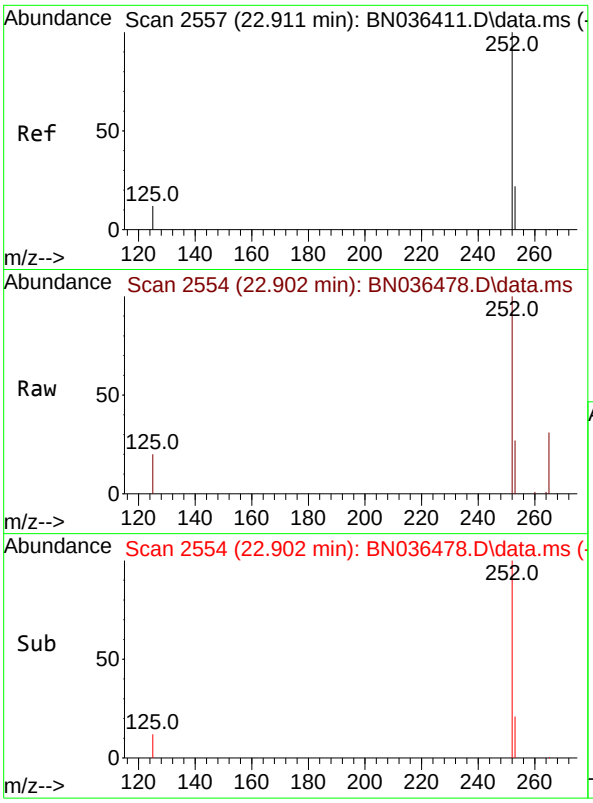


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.461 ng
RT: 25.884 min Scan# 3574
Delta R.T. -0.015 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:276 Resp: 8831

Ion	Ratio	Lower	Upper
276	100		
138	30.5	22.2	33.2
277	24.8	19.8	29.6



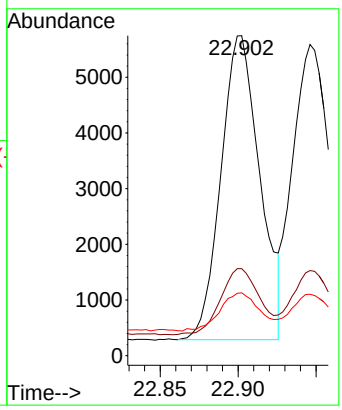


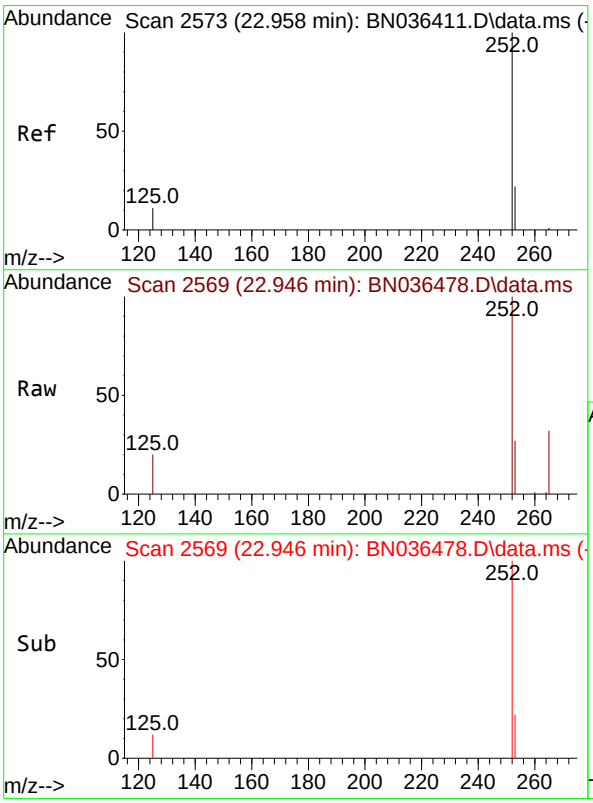
#37
Benzo(b)fluoranthene
Concen: 0.525 ng
RT: 22.902 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:252 Resp: 9474

Ion	Ratio	Lower	Upper
252	100		
253	27.2	21.9	32.9
125	19.7	15.0	22.6

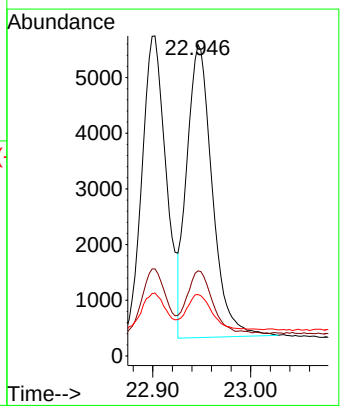


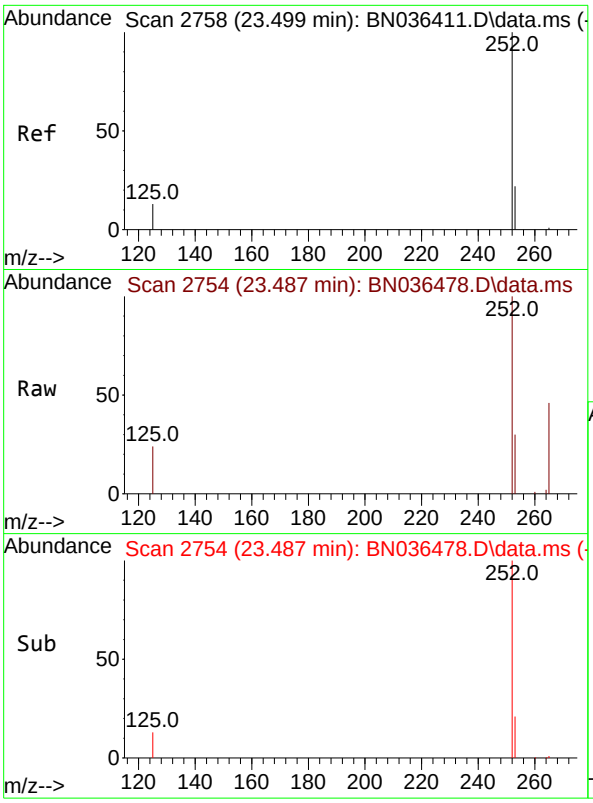


#38
Benzo(k)fluoranthene
Concen: 0.510 ng
RT: 22.946 min Scan# 2569
Delta R.T. -0.012 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:252 Resp: 9481

Ion	Ratio	Lower	Upper
252	100		
253	27.3	22.2	33.4
125	19.8	15.0	22.4



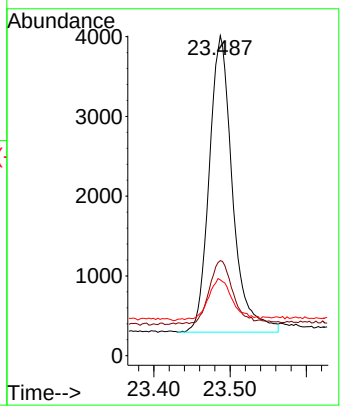


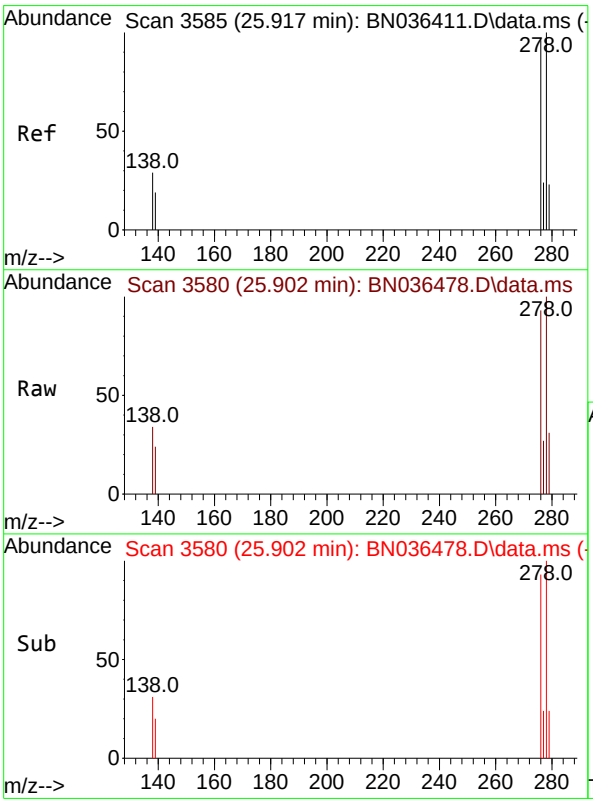
#39
Benzo(a)pyrene
Concen: 0.501 ng
RT: 23.487 min Scan# 2
Delta R.T. -0.012 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:252 Resp: 7896

Ion	Ratio	Lower	Upper
252	100		
253	29.7	24.4	36.6
125	23.7	18.2	27.2

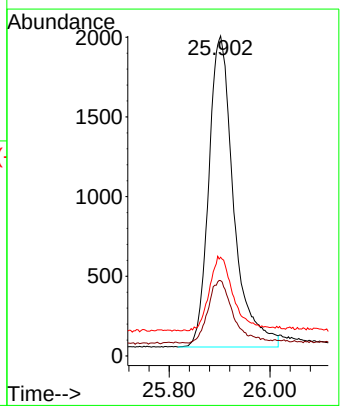


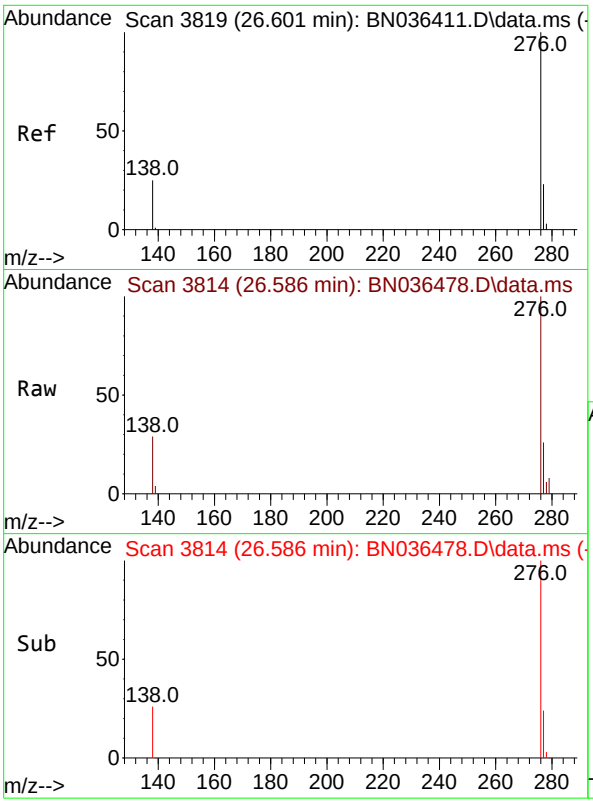


#40
Dibenzo(a,h)anthracene
Concen: 0.443 ng
RT: 25.902 min Scan# 3580
Delta R.T. -0.015 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Tgt Ion:278 Resp: 6691

Ion	Ratio	Lower	Upper
278	100		
139	23.6	18.5	27.7
279	30.9	24.8	37.2



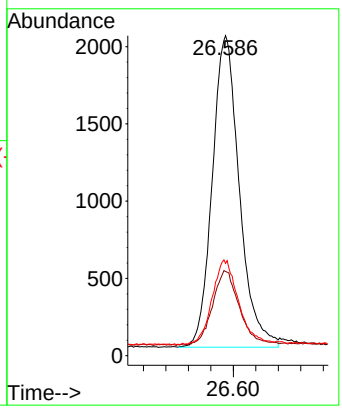


#41
Benzo(g,h,i)perylene
Concen: 0.393 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036478.D
Acq: 20 Feb 2025 13:12

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MSD

Tgt Ion:276 Resp: 6735

Ion	Ratio	Lower	Upper
276	100		
277	26.3	20.7	31.1
138	28.9	21.8	32.6



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

Manual Integration Report

Sequence:	BN021025	Instrument	BNA_n

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

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

Manual Integration Report

Sequence:	bn022025	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1380-10MS	BN036477.D	Benzo(k)fluoranthene	Rahul	2/21/2025 10:56:50 AM	Jagrut	2/21/2025 11:16:44 AM	Peak Integrated by Software
PB166758BS	BN036480.D	Benzo(k)fluoranthene	Rahul	2/21/2025 10:56:55 AM	Jagrut	2/21/2025 11:16:47 AM	Peak Integrated by Software
PB166758BS	BN036480.D	Dibenzo(a,h)anthracene	Rahul	2/21/2025 10:56:55 AM	Jagrut	2/21/2025 11:16:47 AM	Peak Integrated by Software
SSTDCCC0.4	BN036482.D	Benzo(k)fluoranthene	Rahul	2/21/2025 10:57:01 AM	Jagrut	2/21/2025 11:16:50 AM	Peak Integrated by Software

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN021025

Review By	Rahul	Review On	2/11/2025 4:21:36 PM		
Supervise By	Jagrut	Supervise On	2/11/2025 6:22:45 PM		
SubDirectory	BN021025	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn021025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6682,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036408.D	10 Feb 2025 11:46	RC/JU	Ok
2	SSTDICC0.1	BN036409.D	10 Feb 2025 12:25	RC/JU	Ok
3	SSTDICC0.2	BN036410.D	10 Feb 2025 13:01	RC/JU	Ok
4	SSTDICCC0.4	BN036411.D	10 Feb 2025 13:36	RC/JU	Ok
5	SSTDICC0.8	BN036412.D	10 Feb 2025 14:12	RC/JU	Ok
6	SSTDICC1.6	BN036413.D	10 Feb 2025 14:48	RC/JU	Ok
7	SSTDICC3.2	BN036414.D	10 Feb 2025 15:24	RC/JU	Ok
8	SSTDICC5.0	BN036415.D	10 Feb 2025 16:00	RC/JU	Ok
9	SSTDICV0.4	BN036416.D	10 Feb 2025 16:36	RC/JU	Ok
10	PB166297BL	BN036417.D	10 Feb 2025 17:48	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN022025

Review By	Rahul	Review On	2/21/2025 10:57:17 AM		
Supervise By	Jagrut	Supervise On	2/21/2025 11:17:01 AM		
SubDirectory	BN022025	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn021025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6682,1ul/100ul sample
ICV/I.BLK	SP6684
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036472.D	20 Feb 2025 09:32	RC/JU	Ok
2	SSTDCCC0.4	BN036473.D	20 Feb 2025 10:11	RC/JU	Ok
3	PB166758BL	BN036474.D	20 Feb 2025 10:47	RC/JU	Ok
4	Q1380-01	BN036475.D	20 Feb 2025 11:24	RC/JU	Ok
5	Q1380-09	BN036476.D	20 Feb 2025 12:00	RC/JU	Ok
6	Q1380-10MS	BN036477.D	20 Feb 2025 12:36	RC/JU	Ok,M
7	Q1380-11MSD	BN036478.D	20 Feb 2025 13:12	RC/JU	Ok
8	Q1380-12	BN036479.D	20 Feb 2025 13:48	RC/JU	Ok
9	PB166758BS	BN036480.D	20 Feb 2025 14:24	RC/JU	Ok,M
10	SP6741	BN036481.D	20 Feb 2025 15:32	RC/JU	Ok
11	SSTDCCC0.4	BN036482.D	20 Feb 2025 16:08	RC/JU	Ok,M

M : Manual Integration

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN021025

Review By	Rahul	Review On	2/11/2025 4:21:36 PM	
Supervise By	Jagrut	Supervise On	2/11/2025 6:22:45 PM	
SubDirectory	BN021025	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn021025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6682,1ul/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	BN036408.D	10 Feb 2025 11:46		RC/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN036409.D	10 Feb 2025 12:25		RC/JU	Ok
3	SSTDICC0.2	SSTDICC0.2	BN036410.D	10 Feb 2025 13:01		RC/JU	Ok
4	SSTDICCC0.4	SSTDICCC0.4	BN036411.D	10 Feb 2025 13:36	The Calibration is Good For DOD	RC/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN036412.D	10 Feb 2025 14:12		RC/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN036413.D	10 Feb 2025 14:48		RC/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN036414.D	10 Feb 2025 15:24		RC/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN036415.D	10 Feb 2025 16:00	Compound #20 removed from 5.0ppm	RC/JU	Ok
9	SSTDICV0.4	ICVBN021025	BN036416.D	10 Feb 2025 16:36		RC/JU	Ok
10	PB166297BL	PB166297BL	BN036417.D	10 Feb 2025 17:48	Analyzed for contamination check	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN022025

Review By	Rahul	Review On	2/21/2025 10:57:17 AM	
Supervise By	Jagrut	Supervise On	2/21/2025 11:17:01 AM	
SubDirectory	BN022025	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn021025

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731
CCC	SP6735
Internal Standard/PEM	SP6682,1ul/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	BN036472.D	20 Feb 2025 09:32		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036473.D	20 Feb 2025 10:11		RC/JU	Ok
3	PB166758BL	PB166758BL	BN036474.D	20 Feb 2025 10:47		RC/JU	Ok
4	Q1380-01	BP-VPB-192-EB-20250	BN036475.D	20 Feb 2025 11:24		RC/JU	Ok
5	Q1380-09	BP-VPB-192-GW-780-7	BN036476.D	20 Feb 2025 12:00		RC/JU	Ok
6	Q1380-10MS	BP-VPB-192-GW-780-7	BN036477.D	20 Feb 2025 12:36		RC/JU	Ok,M
7	Q1380-11MSD	BP-VPB-192-GW-780-7	BN036478.D	20 Feb 2025 13:12		RC/JU	Ok
8	Q1380-12	VPB192-HYD-2025021	BN036479.D	20 Feb 2025 13:48	Surrogate Fail	RC/JU	Ok
9	PB166758BS	PB166758BS	BN036480.D	20 Feb 2025 14:24		RC/JU	Ok,M
10	SP6741	SP6741	BN036481.D	20 Feb 2025 15:32	8270 Sim Surrogate	RC/JU	Ok
11	SSTDCCC0.4	SSTDCCC0.4EC	BN036482.D	20 Feb 2025 16:08		RC/JU	Ok,M

M : Manual Integration

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/19/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 16:40
In Date: 02/18/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:11
Out Date: 02/19/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134739

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments
Q1380-06	BP-VPB-192-GW-725-727	1	1.15	8.48	9.63	1.78	7.4	SLUDGE SAMPLE
Q1380-07	Q1380-06MS	2	1.15	8.48	9.63	1.78	7.4	SLUDGE SAMPLE
Q1380-08	Q1380-06MSD	3	1.15	8.48	9.63	1.78	7.4	SLUDGE SAMPLE
Q1382-01	OU4-PCS-TC-01-021725	4	1.15	8.56	9.71	9.02	91.9	
Q1382-03	OU4-PCS-TC-02-021725	5	1.15	8.59	9.74	9.03	91.7	
Q1382-05	OU4-PCS-TC-03-021725	6	1.15	8.56	9.71	9.06	92.4	
Q1382-07	OU4-PCS-TC-04-021725	7	1.16	8.80	9.96	9.3	92.5	
Q1382-09	OU4-PCS-TC-05-021725	8	1.16	8.65	9.81	9.12	92.0	
Q1382-11	OU4-PCS-TC-06-021725	9	1.12	8.76	9.88	9.2	92.2	
Q1382-13	OU4-PCS-TC-07-021725	10	1.11	8.67	9.78	9.1	92.2	
Q1382-15	OU4-PCS-TC-08-021725	11	1.19	8.61	9.8	9.16	92.6	
Q1382-17	OU4-PCS-TC-09-021725	12	1.14	8.66	9.8	9.16	92.6	
Q1382-19	OU4-PCS-TC-10-021725	13	1.14	8.84	9.98	9.4	93.4	
Q1383-01	OU4-PCS-TC-11-021725	14	1.17	8.74	9.91	9.26	92.6	
Q1383-03	OU4-PCS-TC-12-021725	15	1.15	8.73	9.88	9.2	92.2	
Q1383-05	OU4-PCS-TC-13-021725	16	1.12	8.76	9.88	9.22	92.5	
Q1383-07	OU4-PCS-TC-14-021725	17	1.18	8.58	9.76	9.08	92.1	
Q1383-09	OU4-PCS-TC-15-021725	18	1.13	8.77	9.9	9.24	92.5	
Q1383-11	OU4-PCS-TC-16-021725	19	1.16	8.61	9.77	9.09	92.1	
Q1383-13	OU4-PCS-TC-17-021725	20	1.19	8.58	9.77	9.03	91.4	
Q1383-15	OU4-PCS-TC-18-021725	21	1.15	8.60	9.75	9.05	91.9	
Q1383-17	OU4-PCS-TC-19-021725	22	1.15	8.84	9.99	9.29	92.1	
Q1383-19	OU4-PCS-TC-20-021725	23	1.13	8.67	9.8	9.12	92.2	
Q1383-21	OU4-CF-15-021725	24	1.16	8.50	9.66	9.02	92.5	
Q1384-01	OR-03-021823025	25	1.15	8.81	9.96	8.96	88.6	
Q1384-02	OR-03-021823025-E2	26	1.17	8.82	9.99	9.04	89.2	
Q1385-01	ST-1	27	1.00	1.00	2.00	2.00	100.0	CONCRETE sample
Q1385-02	ST-1-E2	28	1.00	1.00	2.00	2.00	100.0	CONCRETE sample

PERCENT SOLID

Supervisor: Iwona
Analyst: jignesh
Date: 2/19/2025

OVENTEMP IN Celsius(°C): 107
Time IN: 16:40
In Date: 02/18/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
OvenID: M OVEN#1

OVENTEMP OUT Celsius(°C): 103
Time OUT: 08:11
Out Date: 02/19/2025
Weight Check 1.0g: 1.00
Weight Check 10g: 10.00
BalanceID: M SC-4
Thermometer ID: % SOLID- OVEN

QC: LB134739

Lab ID	Client SampleID	Dish #	Dish Wt(g) (A)	Sample Wt(g)	Dish + Sample Wt(g) (B)	Dish+Dry Sample Wt(g) (C)	% Solid	Comments

$$\% \text{ Solid} = \frac{(C-A) * 100}{(B-A)}$$

WORKLIST(Hardcopy Internal Chain)

VB 134739

WorkList Name : %1-021825 **WorkList ID :** 187742 **Department :** Wet-Chemistry **Date :** 02-18-2025 08:35:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1380-06	BP-VPB-192-GW-725-727	Solid	Percent Solids	Cool 4 deg C	TETR06	H31	02/10/2025	Chemtech -SO
Q1380-07	Q1380-06MS	Solid	Percent Solids	Cool 4 deg C	TETR06	H31	02/10/2025	Chemtech -SO
Q1380-08	Q1380-06MSD	Solid	Percent Solids	Cool 4 deg C	TETR06	H31	02/10/2025	Chemtech -SO
Q1382-01	OU4-PCS-TC-01-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-03	OU4-PCS-TC-02-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-05	OU4-PCS-TC-03-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-07	OU4-PCS-TC-04-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-09	OU4-PCS-TC-05-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-11	OU4-PCS-TC-06-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-13	OU4-PCS-TC-07-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-15	OU4-PCS-TC-08-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-17	OU4-PCS-TC-09-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1382-19	OU4-PCS-TC-10-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-01	OU4-PCS-TC-11-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-03	OU4-PCS-TC-12-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-05	OU4-PCS-TC-13-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-07	OU4-PCS-TC-14-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-09	OU4-PCS-TC-15-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-11	OU4-PCS-TC-16-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-13	OU4-PCS-TC-17-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-15	OU4-PCS-TC-18-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO

Date/Time 02/18/25 15:00

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

Date/Time 02/18/25 17:00

Raw Sample Received by: [signature]

Raw Sample Relinquished by: [signature]

VB134739

WORKLIST(Hardcopy Internal Chain)

WorkList Name : %1-021825 **WorkList ID :** 187742 **Department :** Wet-Chemistry **Date :** 02-18-2025 08:35:18

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1383-17	OU4-PCS-TC-19-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-19	OU4-PCS-TC-20-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1383-21	OU4-CF-15-021725	Solid	Percent Solids	Cool 4 deg C	NOBI03	H31	02/17/2025	Chemtech -SO
Q1384-01	OR-03-021823025	Solid	Percent Solids	Cool 4 deg C	PSEG05	N41	02/18/2025	Chemtech -SO
Q1384-02	OR-03-021823025-E2	Solid	Percent Solids	Cool 4 deg C	PSEG05	N41	02/18/2025	Chemtech -SO
Q1385-01	ST-1	Solid	Percent Solids	Cool 4 deg C	PSEG03	H21	02/18/2025	Chemtech -SO
Q1385-02	ST-1-E2	Solid	Percent Solids	Cool 4 deg C	PSEG03	H21	02/18/2025	Chemtech -SO

Date/Time 02/18/25 15:00

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Date/Time 02/18/25 17:00

Raw Sample Received by: [illegible]

Raw Sample Relinquished by: [illegible]

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB166758

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 : 02/18/2025

Extraction Start Time : 11:40

Extraction End Date : 02/18/2025

Extraction End Time : 16:35

Concentration By: EH

Supervisor By : rajesh

Extraction Method: [√] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [ ] Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	0.4 PPM	SP6739
Surrogate	1.0ML	0.4 PPM	SP6718
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	EP2589
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. Q1380-09,10,11 Limited volume Recd.

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
02/18/25	RP (Ext-Tech)	RC/SVOC
16:40	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB166758

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 02/18/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166758BL	SBLK758	SVOC-SIMGroup1	1000	6	RUPESH	rajesh	1			SEP-01
PB166758BS	SLCS758	SVOC-SIMGroup1	1000	6	RUPESH	rajesh	1			2
Q1380-01	BP-VPB-192-EB-20250212	SVOC-SIMGroup1	890	6	RUPESH	rajesh	1	C		3
Q1380-09	BP-VPB-192-GW-780-~~727~~ 782	SVOC-SIMGroup1	380	6	RUPESH	rajesh	1	C	Muddy	4
Q1380-10	Q1380-09MS	SVOC-SIMGroup1	320	6	RUPESH	rajesh	1		Muddy	5
Q1380-11	Q1380-09MSD	SVOC-SIMGroup1	300	6	RUPESH	rajesh	1		Muddy	6
Q1380-12	VPB192-HYD-20250214	SVOC-SIMGroup1	940	6	RUPESH	rajesh	1	C		7

RJ 2/19

* **Extracts relinquished on the same date as received.**

2/18/25

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1380 **WorkList ID :** 187746 **Department :** Extraction **Date :** 02-18-2025 11:35:43

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1380-01	BP-VPB-192-EB-20250212	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	H31	02/12/2025	8270-Modified
Q1380-09	BP-VPB-192-GW-780-782	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	H31	02/13/2025	8270-Modified
Q1380-10	Q1380-09MS	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	H31	02/13/2025	8270-Modified
Q1380-11	Q1380-09MSD	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	H31	02/13/2025	8270-Modified
Q1380-12	VPB192-HYD-20250214	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	H31	02/14/2025	8270-Modified

Date/Time 02/18/25 11:37
Raw Sample Received by: RS (Ext-lab)
Raw Sample Relinquished by: [signature]

Date/Time 02/18/25 12:00
Raw Sample Received by: [signature]
Raw Sample Relinquished by: RS (Ext-lab)

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

Prep Standard - Chemical Standard Summary

Order ID : Q1380

Test : SVOC-SIMGroup1

Prepbatch ID : PB166758,

Sequence ID/Qc Batch ID: BN022025,

Standard ID :
EP2559,EP2565,EP2589,SP6682,SP6683,SP6684,SP6717,SP6718,SP6730,SP6731,SP6732,SP6733,SP6734,SP6735,SP6736,SP6738,SP6739,

Chemical ID :
1ul/100ul sample,E3551,E3657,E3828,E3846,E3871,E3873,E3874,E3878,M5173,S10104,S10246,S11074,S11495,S11650,S11785,S11831,S11832,S12114,S12142,S12189,S12208,S12270,S12328,S12469,S12478,S12517,S12525,S12791,S12966,W3112,

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Fax : 908 789 8922

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	EP2589	02/14/2025	07/01/2025	Rajesh Parikh	Extraction_SCALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 02/14/2025

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
3491	8270-SIM-Surrogate 0.4 PPM	SP6718	01/17/2025	04/10/2025	Rahul Chavli	None	None	Shreena Patel 02/07/2025

FROM 0.00400ml of S12189 + 0.00800ml of S12208 + 0.02000ml of S11831 + 99.96800ml of E3846 = Final Quantity: 100.000 ml

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SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3339	8270 sim calibration stock 10ppm (CPI)	SP6730	02/04/2025	05/12/2025	Jagrut Upadhyay	None	None	Shreena 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

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	Shreena Patel 02/07/2025

FROM 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml 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
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	SP6732	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.68000ml of E3874 + 0.01000ml of SP6682 + 0.32000ml of SP6730 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	SP6733	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.84000ml of E3874 + 0.01000ml of SP6682 + 0.16000ml 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
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	SP6734	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.92000ml of E3874 + 0.01000ml of SP6682 + 0.08000ml of SP6730 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	SP6735	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.96000ml of E3874 + 0.01000ml of SP6682 + 0.04000ml 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
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	SP6736	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6735 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	SP6738	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Shreena Patel 02/07/2025

FROM 0.75000ml of E3874 + 0.01000ml of SP6682 + 0.25000ml 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
3492	8270-SIM-Spike 0.4 PPM	SP6739	02/05/2025	07/29/2025	Jagrut Upadhyay	None	None	Shreena 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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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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	06/26/2025	12/26/2024 / Rajesh	12/13/2024 / Rajesh	E3846

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874

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 /	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

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CHEMICAL RECEIPT LOG BOOK

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

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0203726	04/30/2025	11/14/2024 / anahy	03/15/2024 / Rahul	S12142

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

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CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at $100 per ampul if requested - contact ARM with Request] [CS 4978-1]	A0214021	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12478

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 #
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 / lwona	07/03/2024 / lwona	W3112

CPI INTERNATIONAL

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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

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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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Certificate #3222.01

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ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 03/18/22 by CG S10242 to S10247

Catalog No. : 31615 **Lot No.:** A0182667

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2025 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachlorophenol **CAS #** 87-86-5 (Lot 211229RSR) **Purity** 99%	1,003.6 µg/mL	+/- 5.8897 µg/mL +/- 45.7132 µg/mL +/- 66.0037 µg/mL	Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) **CAS #** 5074-71-5 (Lot Q117-147) **Purity** 95%	1,006.6 µg/mL	+/- 5.9074 µg/mL +/- 45.8508 µg/mL +/- 66.2023 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine **CAS #** 92-87-5 (Lot 211228JLM) **Purity** 99%	1,008.4 µg/mL	+/- 5.9179 µg/mL +/- 45.9318 µg/mL +/- 66.3193 µg/mL	Gravimetric Unstressed Stressed
4	4,4'-DDT **CAS #** 50-29-3 (Lot 210916JLM) **Purity** 99%	1,007.6 µg/mL	+/- 5.9132 µg/mL +/- 45.8954 µg/mL +/- 66.2667 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

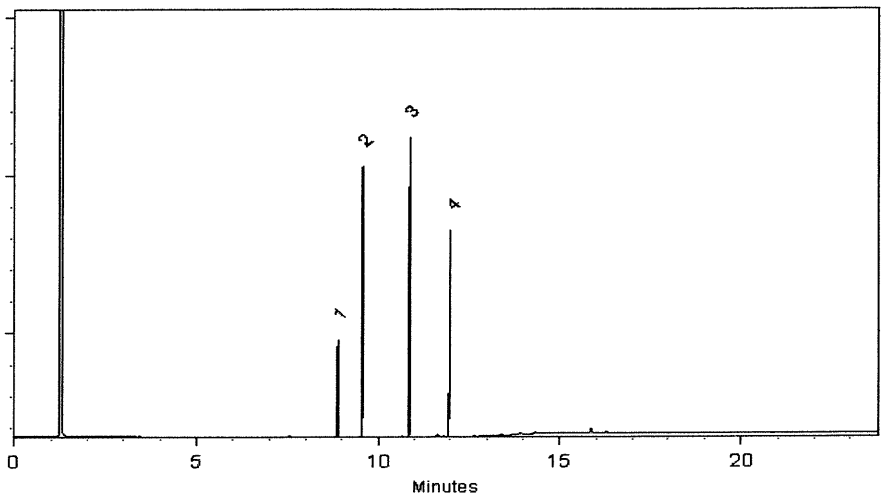
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 08-Mar-2022 **Balance:** B345965662

Merlina Cowan - Operations Tech I

Date Passed: 10-Mar-2022

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 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)

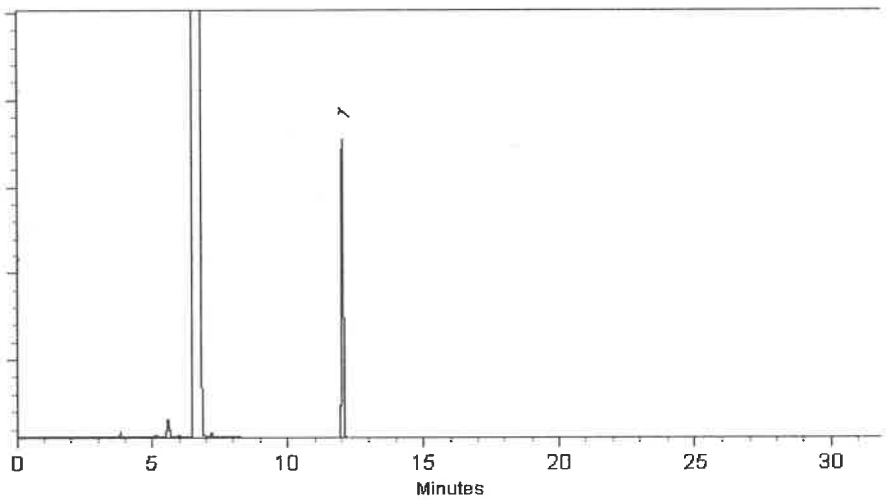
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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

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 12/13/24

E 3846

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

Page 1 of 1

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

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
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0196453

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : March 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

S11749 ↓ S11794 RC 11/30/23

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBN3770	99%	2,013.0 µg/mL	+/- 25.0521

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

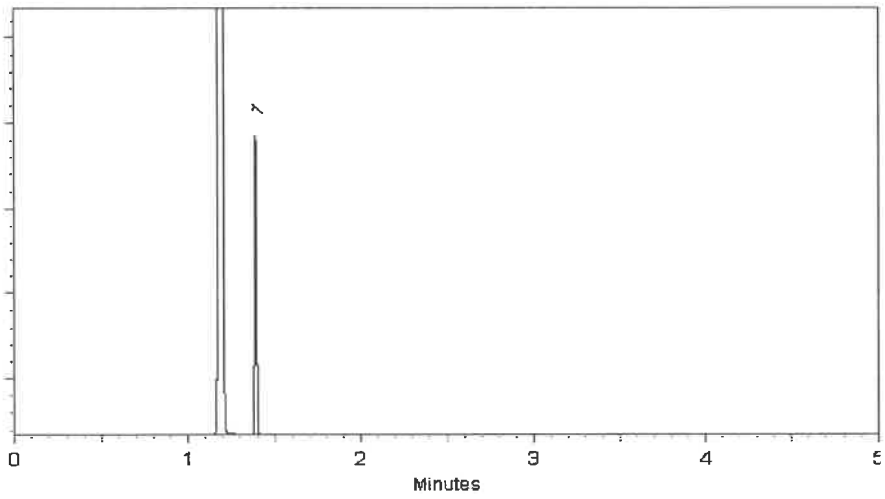
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023 **Balance Serial #** B707717271

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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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. : 33913 **Lot No.:** A0201976

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S11828 ↓ S11832 } RC/ 11/30/23

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.)

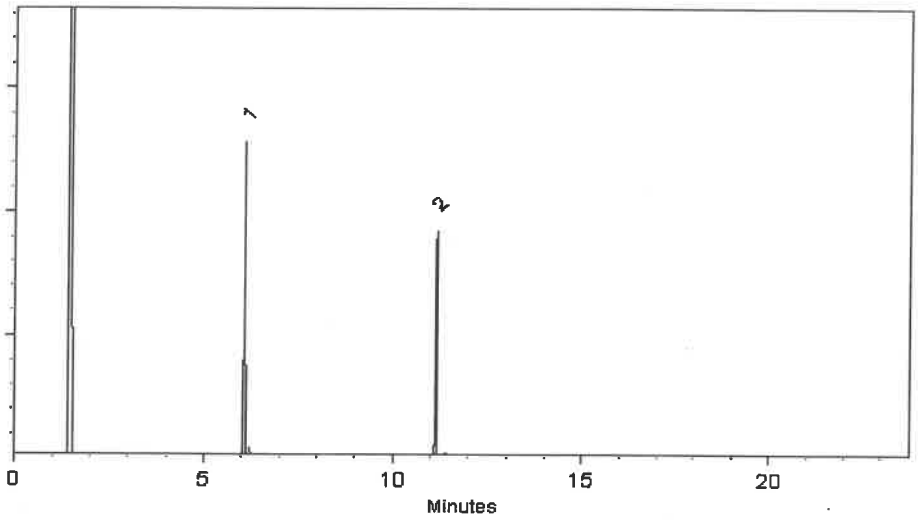
Inj. Temp:
250°C

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.
- 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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ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0201976

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S11828 ↓ S11832 RC/ 11/30/23

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.)

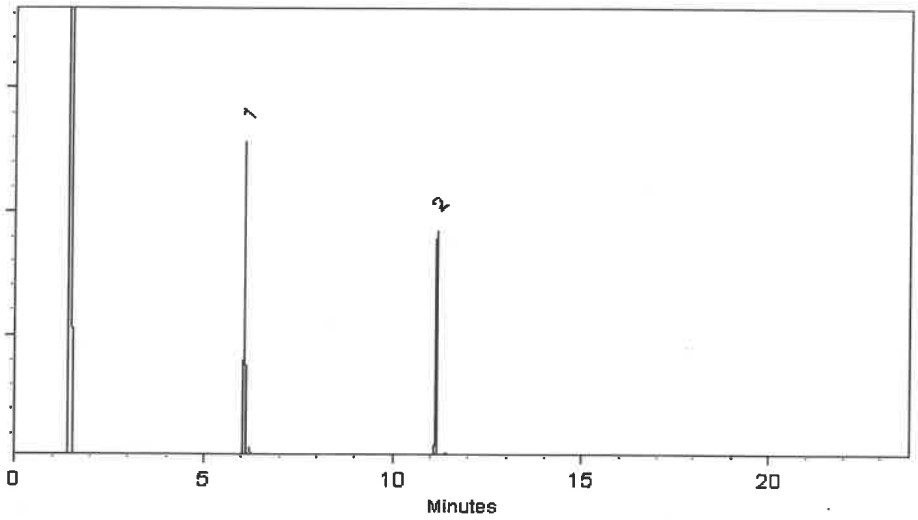
Inj. Temp:
250°C

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.
- 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.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026	1,4-Dioxane Solution, 2000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane	123-91-1	100	223.1.3P	1997 ± 57.08

S12112 ↓ S12116 } RC/ 03/08/24

*Not a certified value

Certified By: Melissa Workoff

Melissa Workoff
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

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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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Tel: 1-814-353-1300
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ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31087 **Lot No.:** A0206206

S12187 ↓ S12206 } RC/ 03/18/24

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

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.)

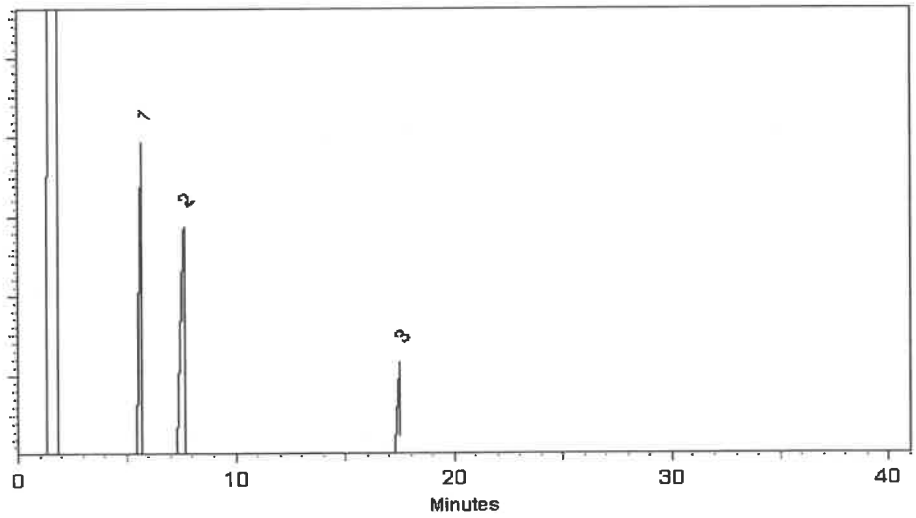
Inj. Temp:
250°C

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

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110 Benner Circle
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Fax: 1-814-353-1309

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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.)

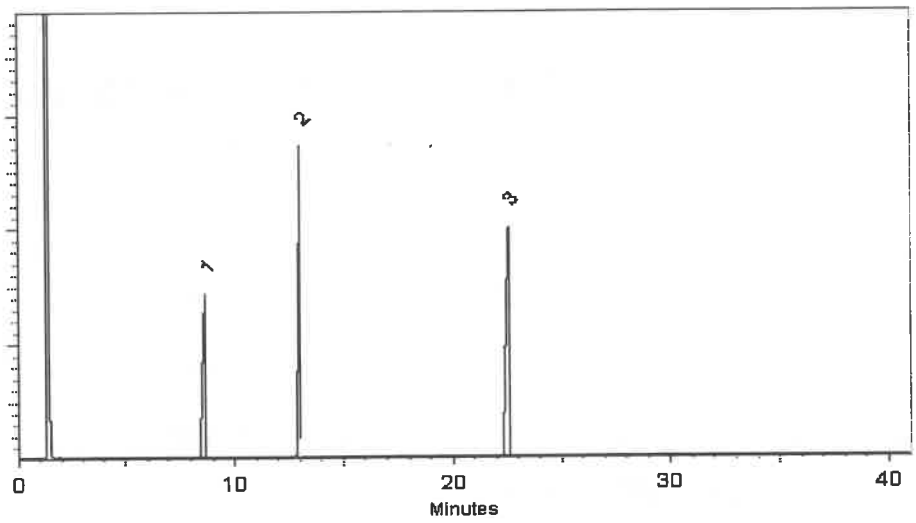
Inj. Temp:
250°C

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

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-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.

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
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

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Certificate of Analysis

chromatographic plus

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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.)

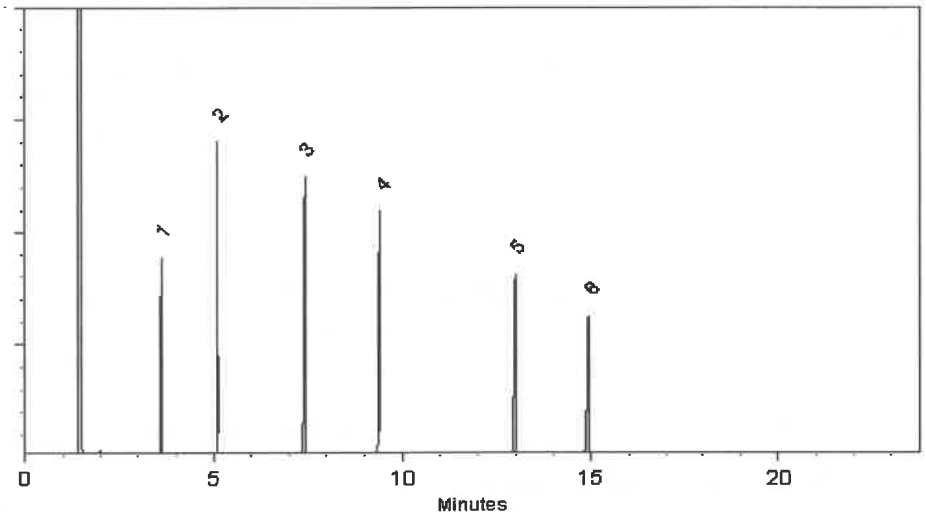
Inj. Temp:
250°C

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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CERTIFIED REFERENCE MATERIAL

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. : 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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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

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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. : 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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CERTIFIED REFERENCE MATERIAL

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

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. : 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 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

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. : 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
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.

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-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.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0219438

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

S12963 → S12992 AC 12/17/24

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

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) 78-8922
www.chemtech.net

Chemtech Project Number: Q1380

COC Number:

CLIENT INFORMATION	PROJECT INFORMATION	BILLING INFORMATION
COMPANY: Tetra Tech	PROJECT NAME: NWIRP Bethpage	BILL TO: SEE CONTRACT PO#
ADDRESS: 4433 Corporation Lane Suite 300	PROJECT #: 112G08005-WE13 LOCATION: VPB-192	ADDRESS:
CITY: Virginia Beach STATE: VA ZIP: 23462	PROJECT MANAGER: Ernie Wu	CITY: STATE: ZIP:
ATTENTION: Ernie Wu	E-MAIL: ernie.wu@tetratech.com	ATTENTION: PHONE:
PHONE: 757-466-4901 FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148	

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESEULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other
- ☐ EDD Format

ANALYSIS

	1	2	3	4	5	6	7	8	9
	VOC(SW846-8260B)	1,4 Dioxane (8270 SIM)							

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES A	1	2	3	4	5	6	7	8	9	COMMENTS
1.	BP-VPB-192-EB-20250212	QA		X	2/12/25	15:00	3		2	1								
2.	BP-VPB-192-TB-20250210	QA		X	2/10/25	9:00	2		2									Trip blank
3.	BP-VPB-192-GW-725-727	AQ		X	2/10/25	15:00	6		6									8260B MS/MSD
4.	BP-VPB-192-GW-780-782	AQ		X	2/13/25	10:05	5		2	3								8270SIM MS/MSD
5.	VPB-192-HYD-20250214	AQ		X	2/14/25	13:30	3		2	1								
6.																		
7.																		
8.																		
9.																		
10.																		

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	2/17/25 1530	1. 1530 2-17-25
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.		2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.	1801 2-17-25	3.

Conditions of bottles or coolers at receipt: q Compliant q Non Compliant q Cooler Temp 2.4C
MeOH extraction requires an additional 4oz. Jar for percent solid q Ice in Cooler?:_____
Comments: Standard TAT

Page 1 of 1

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

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 : Q1380 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 2/17/2025 3:59:00 PM
Project Name : ~~CTO WE13~~ NWIRP Bethpage CTO WE13 - VPB-192 #112G08005
Receive DateTime : 2/18/2025 6:01:00 PM
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1380-01	BP-VPB-192-EB-20250212	Water	02/12/2025	15:00					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1380-02	BP-VPB-192-TB-20250210	Water	02/10/2025	09:00					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1380-06	BP-VPB-192-GW-725-727	Solid	02/10/2025	15:00					
					VOCMS Group1		8260D		10 Bus. Days
Q1380-07	Q1380-06MS	Solid	02/10/2025	15:00					
					VOCMS Group1		8260D		10 Bus. Days
Q1380-08	Q1380-06MSD	Solid	02/10/2025	15:00					
					VOCMS Group1		8260D		10 Bus. Days
Q1380-09	~~BP-VPB-192-GW-780-727~~ BP-VPB-192-GW-780-782	Water	02/13/2025	10:05					
					VOCMS Group1		8260-Low		10 Bus. Days
Q1380-12	VPB192-HYD-20250214	Water	02/14/2025	13:30					
					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 : Q1380 TETR06
Client Name : Tetra Tech NUS, Inc.
Client Contact : Ernie Wu
Invoice Name : Tetra Tech NUS, Inc.
Invoice Contact : Ernie Wu

Order Date : 2/17/2025 3:59:00 PM
Project Name : ~~CTO WE13~~ NWIRP Bethpage CTO WE13 - VPB-192 #112G08005
Receive DateTime : 2/18/2025 6:01:00 PM
Purchase Order :

Project Mgr :
Report Type : Level 4
EDD Type : ADAPT
Hard Copy Date :
Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES

Relinguished By :
Date / Time : 2-18-25 1110

Received By :
Date / Time : 02/18/25 11:00
Storage Area : VOA Refridgerator Room

Dy # 6
FZ 2
Dy # 4

Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036477.D
Acq On : 20 Feb 2025 12:36
Operator : RC/JU
Sample : Q1380-10MS
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Quant Time: Feb 21 00:10:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1709	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	3995	0.400	ng	# 0.00
13) Acenaphthene-d10	14.387	164	2495	0.400	ng	0.00
19) Phenanthrene-d10	17.124	188	5565	0.400	ng	#-0.01
29) Chrysene-d12	21.313	240	5523	0.400	ng	0.00
35) Perylene-d12	23.586	264	5300	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	974	0.241	ng	0.00
5) Phenol-d6	6.923	99	1025	0.216	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1261	0.320	ng	-0.01
11) 2-Methylnaphthalene-d10	12.126	152	1968	0.321	ng	-0.02
14) 2,4,6-Tribromophenol	15.882	330	500	0.404	ng	0.00
15) 2-Fluorobiphenyl	13.008	172	4139	0.441	ng	-0.01
27) Fluoranthene-d10	19.160	212	6898	0.446	ng	0.00
31) Terphenyl-d14	19.763	244	6357	0.539	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.261	88	493	0.264	ng	# 50
3) n-Nitrosodimethylamine	3.572	42	905	0.279	ng	# 93
6) bis(2-Chloroethyl)ether	7.168	93	1675	0.338	ng	98
9) Naphthalene	10.583	128	3881	0.337	ng	98
10) Hexachlorobutadiene	10.872	225	805	0.287	ng	# 98
12) 2-Methylnaphthalene	12.202	142	2609	0.345	ng	97
16) Acenaphthylene	14.099	152	4341	0.394	ng	99
17) Acenaphthene	14.441	154	2787	0.379	ng	98
18) Fluorene	15.435	166	4131	0.394	ng	97
20) 4,6-Dinitro-2-methylph...	15.522	198	376	0.344	ng	# 81
21) 4-Bromophenyl-phenylether	16.329	248	1426	0.430	ng	# 74
22) Hexachlorobenzene	16.441	284	1658	0.404	ng	99
23) Atrazine	16.590	200	1195	0.431	ng	# 92
24) Pentachlorophenol	16.788	266	1439	0.739	ng	97
25) Phenanthrene	17.173	178	7646	0.475	ng	99
26) Anthracene	17.260	178	6840	0.482	ng	99
28) Fluoranthene	19.192	202	9601	0.486	ng	98
30) Pyrene	19.554	202	10137	0.477	ng	100
32) Benzo(a)anthracene	21.304	228	8882	0.489	ng	99
33) Chrysene	21.348	228	9509	0.483	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	5246	0.463	ng	99
36) Indeno(1,2,3-cd)pyrene	25.884	276	8360	0.451	ng	97
37) Benzo(b)fluoranthene	22.899	252	8647	0.495	ng	99
38) Benzo(k)fluoranthene	22.946	252	8871	0.494	ng	99
39) Benzo(a)pyrene	23.484	252	7527	0.494	ng	97
40) Dibenzo(a,h)anthracene	25.899	278	6349	0.434	ng	99
41) Benzo(g,h,i)perylene	26.586	276	6415	0.387	ng	97

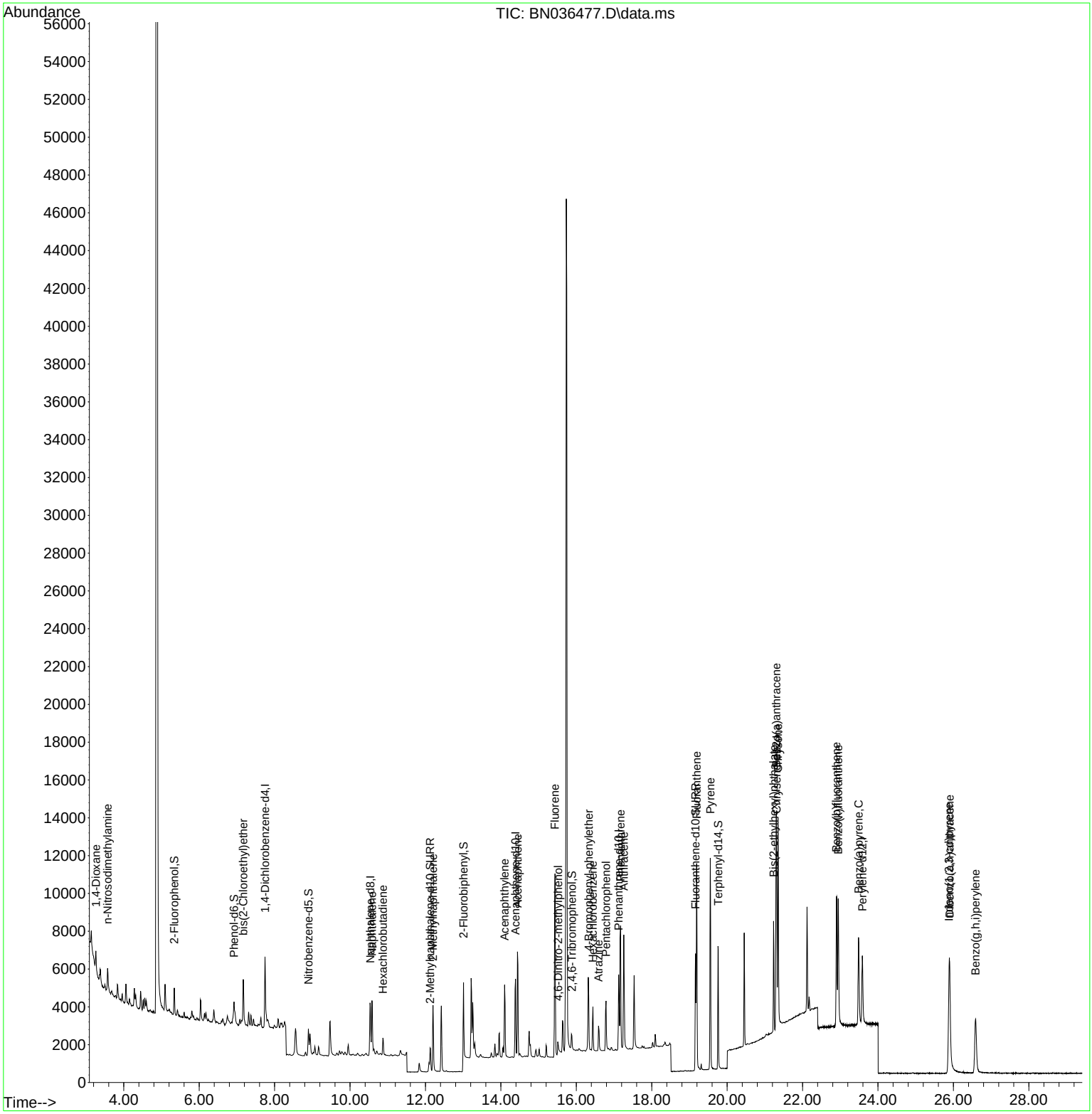
(#) = qualifier out of range (m) = manual integration (+) = signals summed

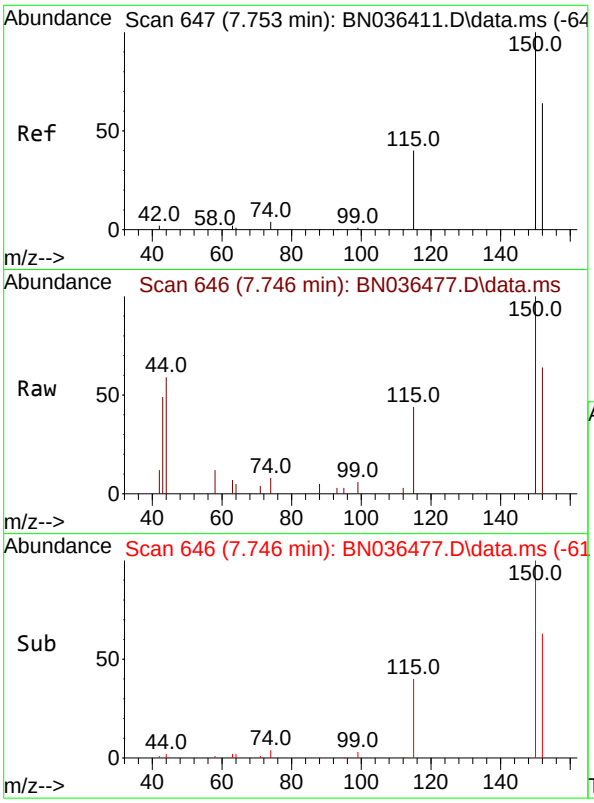
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036477.D
Acq On : 20 Feb 2025 12:36
Operator : RC/JU
Sample : Q1380-10MS
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Quant Time: Feb 21 00:10:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



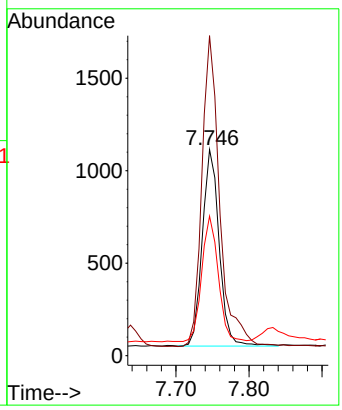


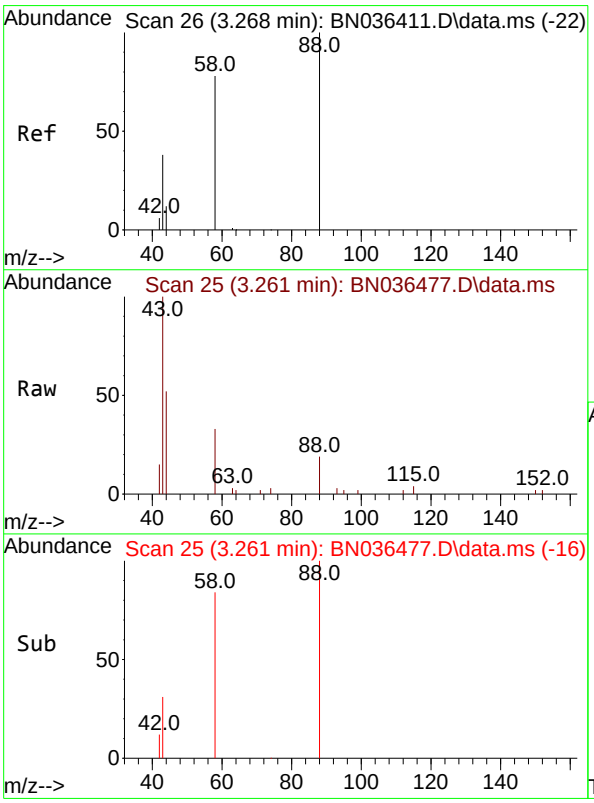
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:152 Resp: 1709

Ion	Ratio	Lower	Upper
152	100		
150	155.3	123.7	185.5
115	67.7	52.5	78.7

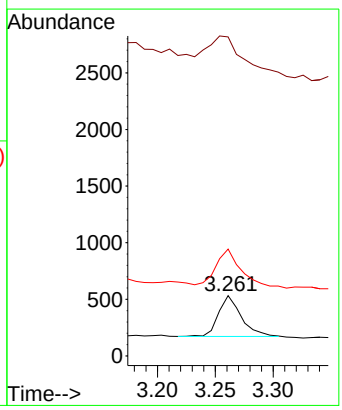


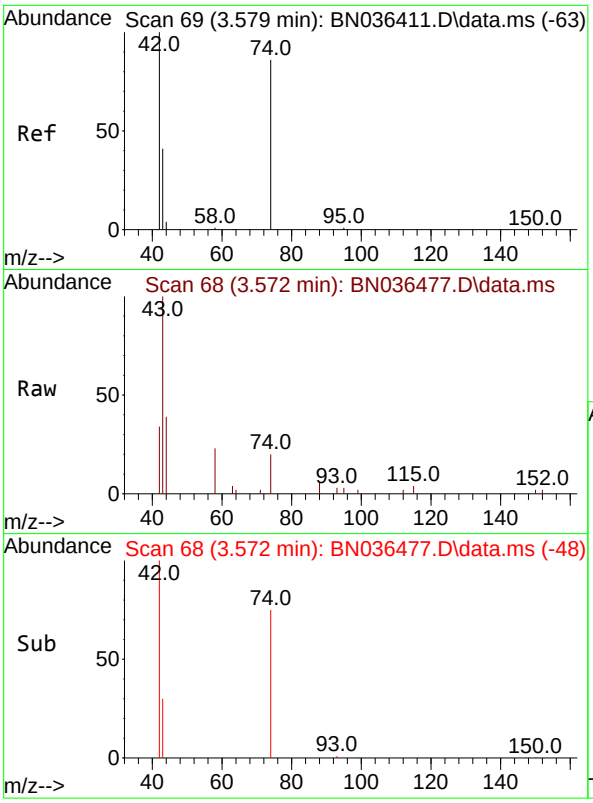


#2
1,4-Dioxane
Concen: 0.264 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 88 Resp: 493

Ion	Ratio	Lower	Upper
88	100		
43	128.0	33.7	50.5#
58	93.9	68.9	103.3



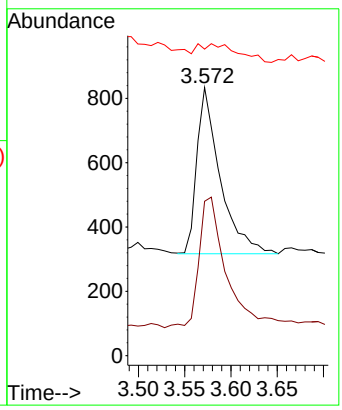


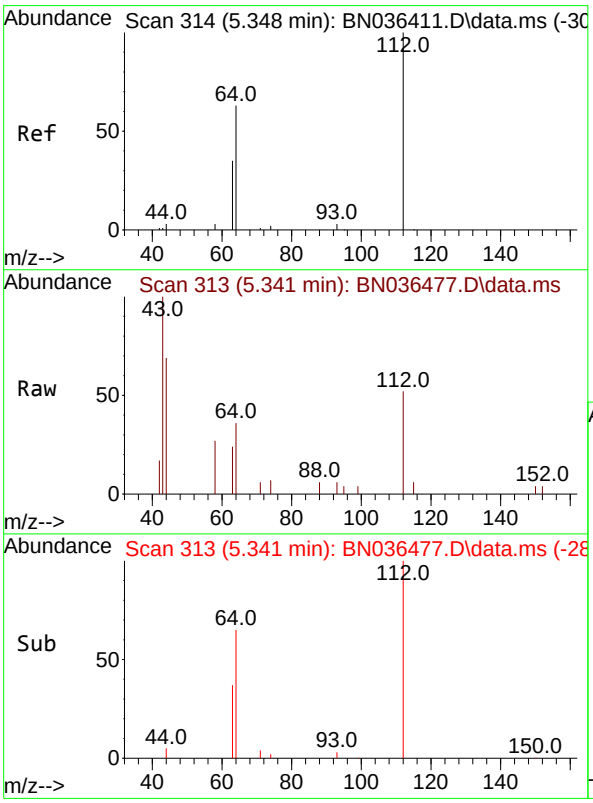
#3
n-Nitrosodimethylamine
Concen: 0.279 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion: 42 Resp: 905

Ion	Ratio	Lower	Upper
42	100		
74	94.6	71.8	107.6
44	18.8	7.8	11.6#

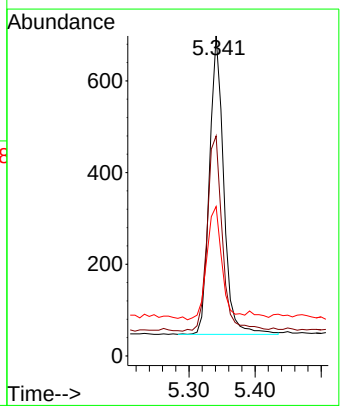


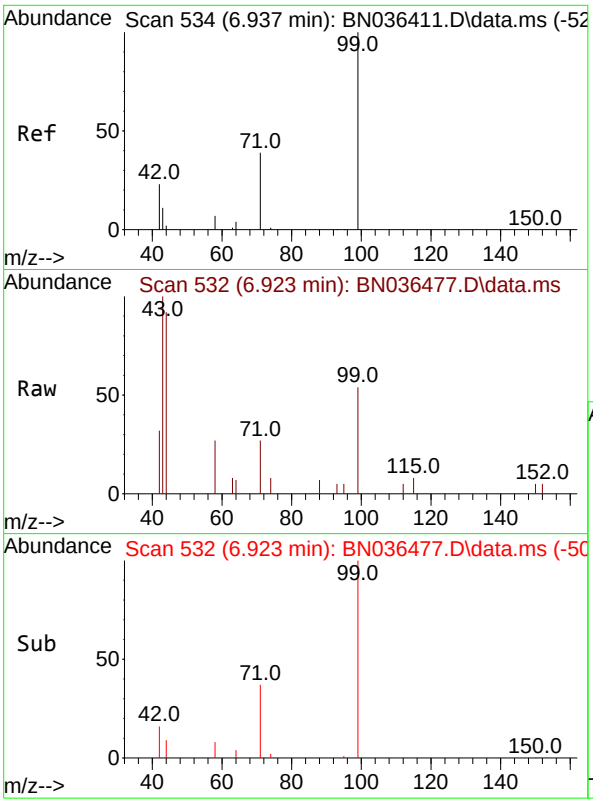


#4
2-Fluorophenol
Concen: 0.241 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:112 Resp: 974

Ion	Ratio	Lower	Upper
112	100		
64	69.7	53.4	80.0
63	40.5	30.3	45.5



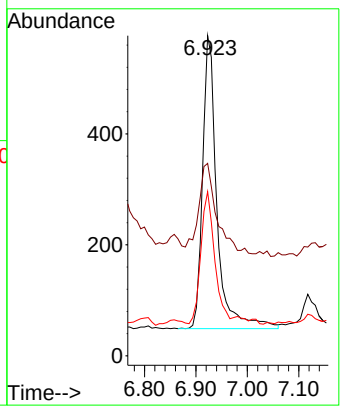


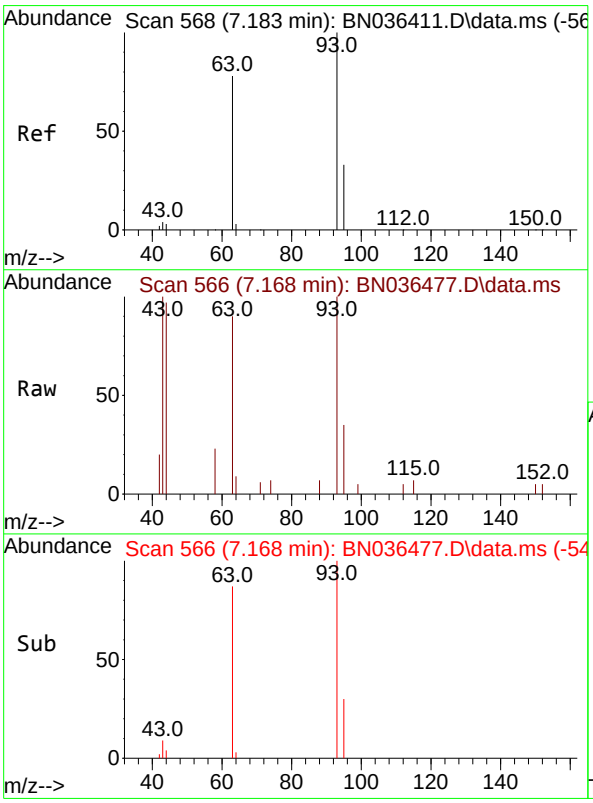
#5
Phenol-d6
Concen: 0.216 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion: 99 Resp: 1025

Ion	Ratio	Lower	Upper
99	100		
42	39.0	21.7	32.5#
71	43.8	32.6	49.0

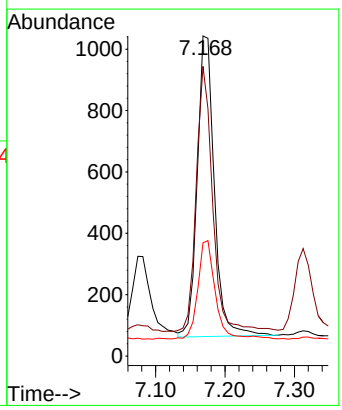


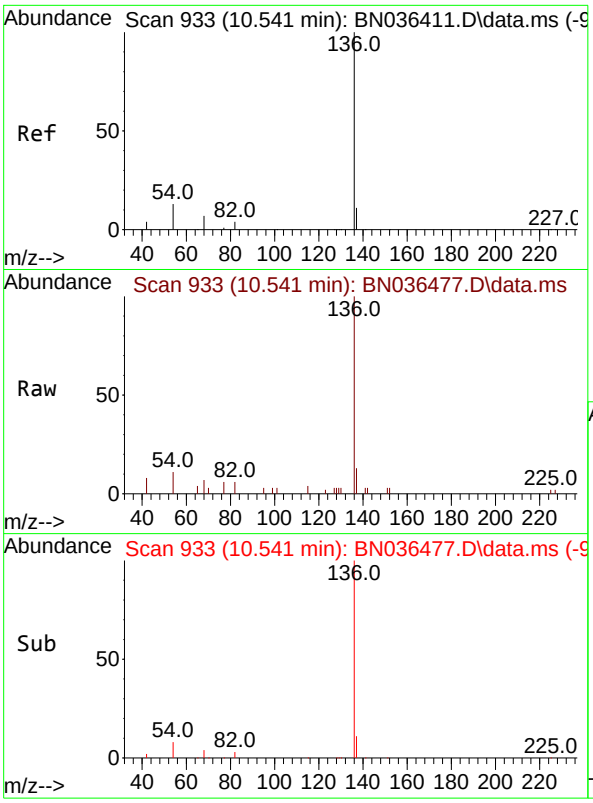


#6
bis(2-Chloroethyl)ether
Concen: 0.338 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 93 Resp: 1675

Ion	Ratio	Lower	Upper
93	100		
63	84.7	66.3	99.5
95	34.0	26.2	39.4



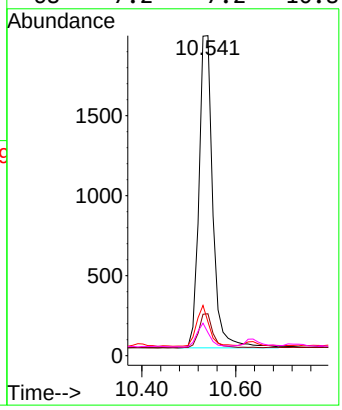


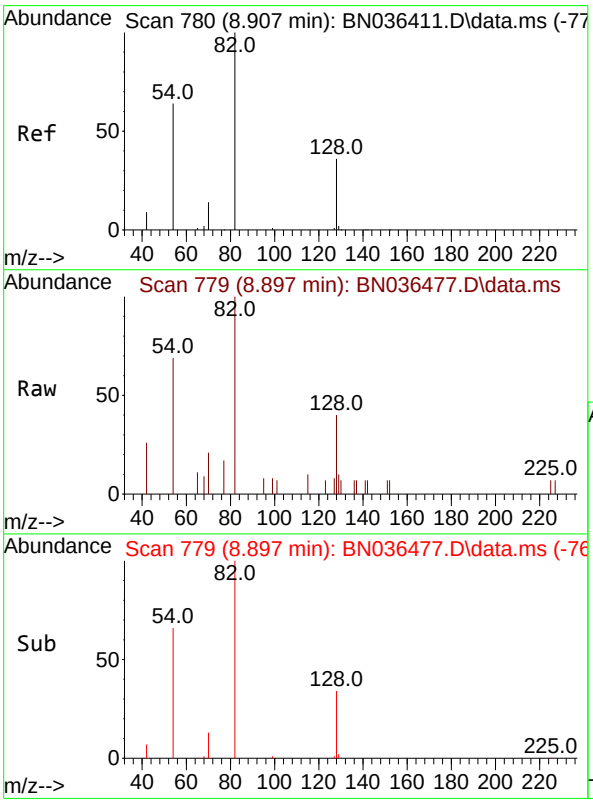
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:136 Resp: 3995

Ion	Ratio	Lower	Upper
136	100		
137	13.1	10.1	15.1
54	10.6	11.8	17.6#
68	7.2	7.2	10.8

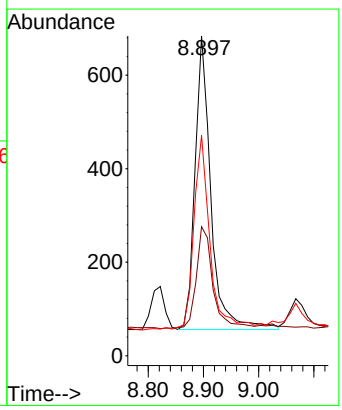


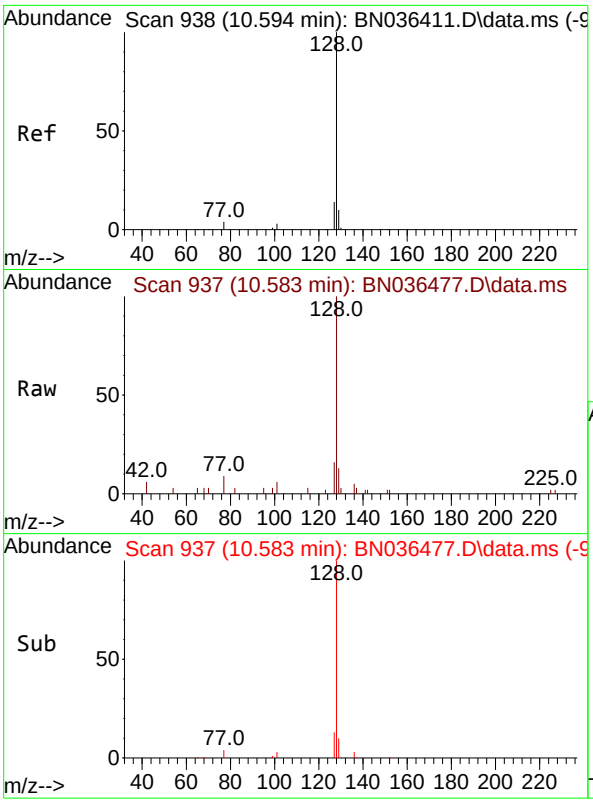


#8
Nitrobenzene-d5
Concen: 0.320 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion: 82 Resp: 1261

Ion	Ratio	Lower	Upper
82	100		
128	40.4	31.9	47.9
54	68.9	53.1	79.7



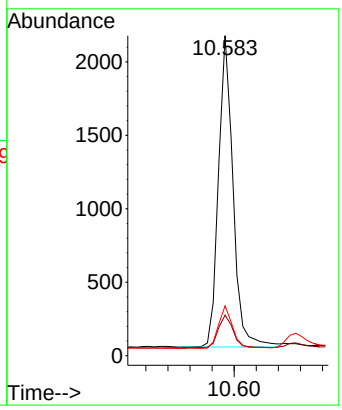


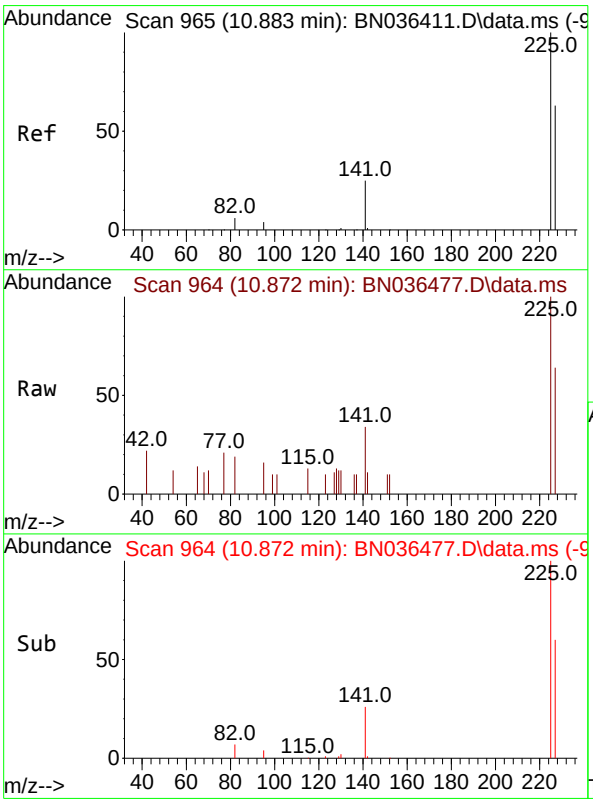
#9
Naphthalene
Concen: 0.337 ng
RT: 10.583 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:128 Resp: 3881

Ion	Ratio	Lower	Upper
128	100		
129	12.7	9.6	14.4
127	15.6	12.0	18.0

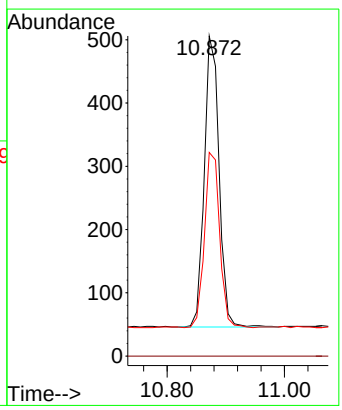


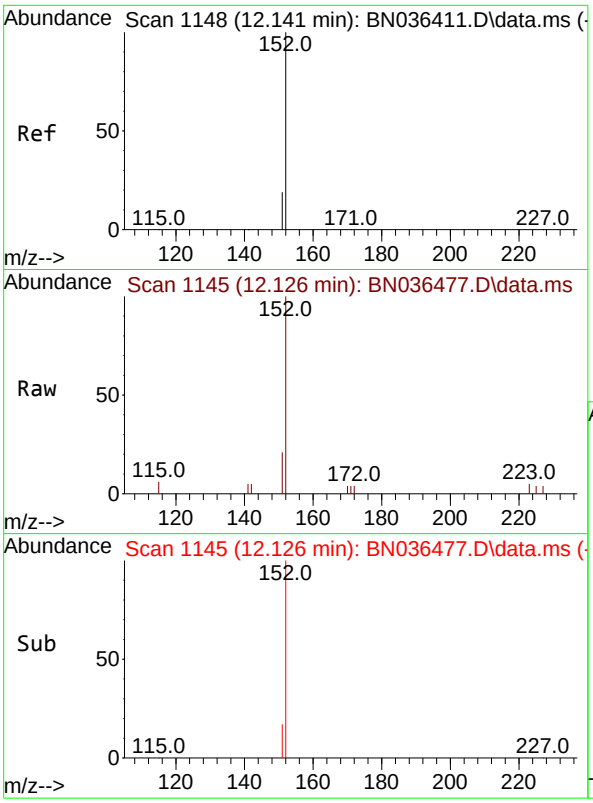


#10
Hexachlorobutadiene
Concen: 0.287 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:225 Resp: 805

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	62.0	50.9	76.3



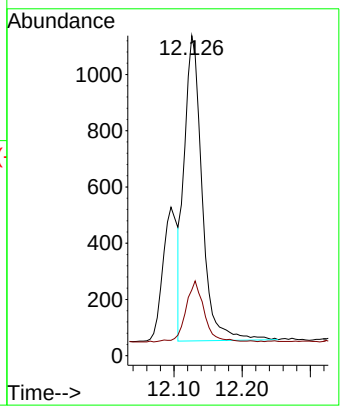


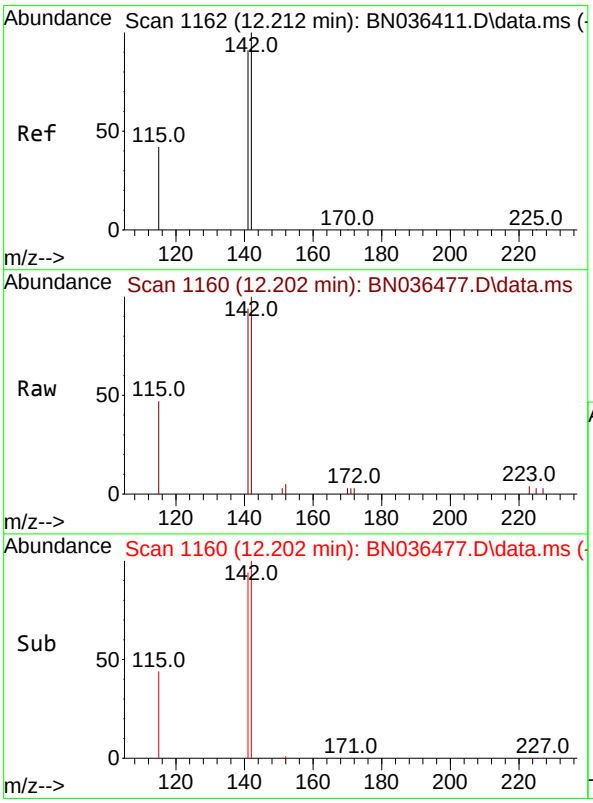
#11
2-Methylnaphthalene-d10
Concen: 0.321 ng
RT: 12.126 min Scan# 11
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:152 Resp: 1968

Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.6	25.0

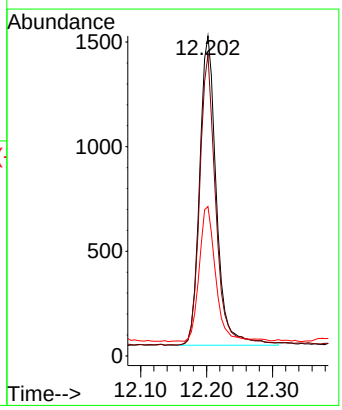


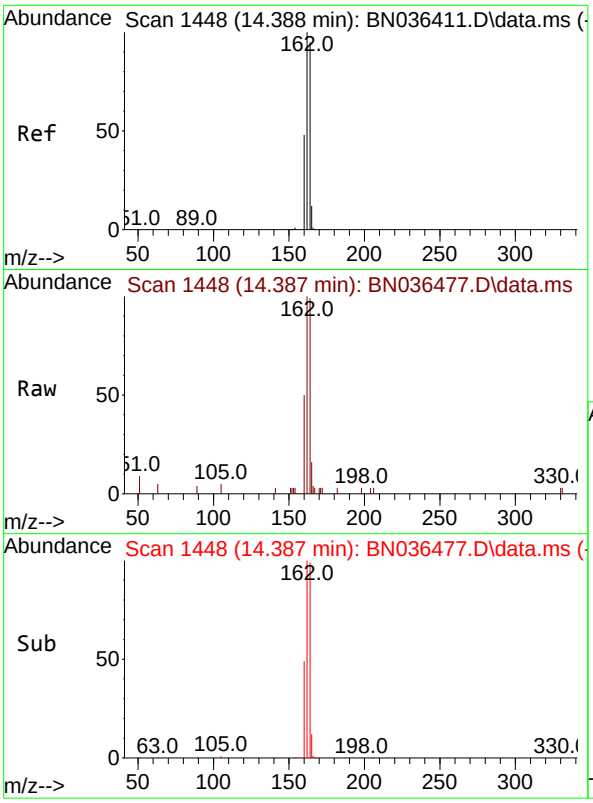


#12
2-Methylnaphthalene
Concen: 0.345 ng
RT: 12.202 min Scan# 1160
Delta R.T. -0.010 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:142 Resp: 2609

Ion	Ratio	Lower	Upper
142	100		
141	94.2	72.8	109.2
115	46.7	35.5	53.3



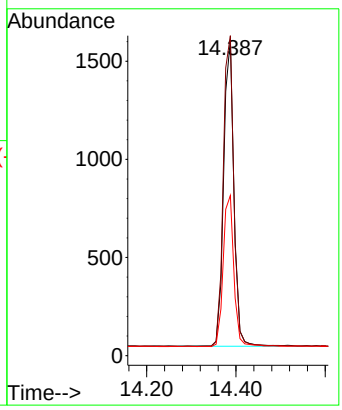


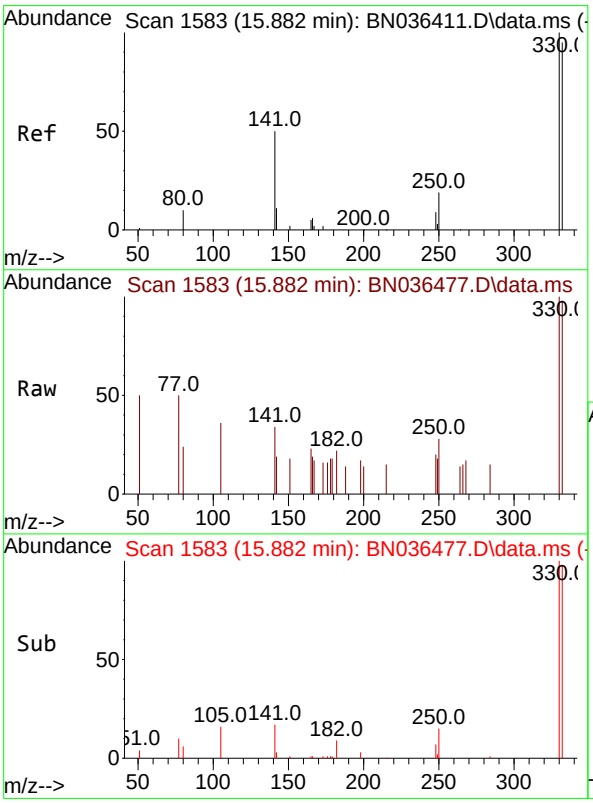
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.387 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:164 Resp: 2495

Ion	Ratio	Lower	Upper
164	100		
162	101.2	84.1	126.1
160	50.7	41.4	62.0

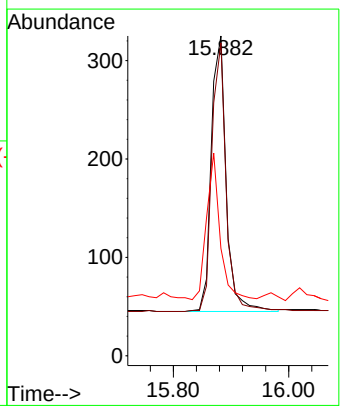


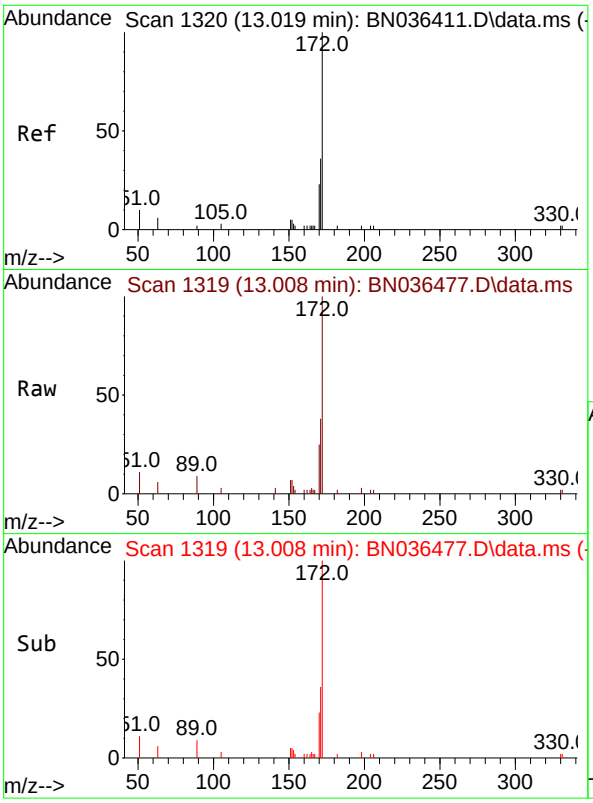


#14
2,4,6-Tribromophenol
Concen: 0.404 ng
RT: 15.882 min Scan# 1583
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:330 Resp: 500

Ion	Ratio	Lower	Upper
330	100		
332	94.0	76.6	114.8
141	48.0	37.8	56.8



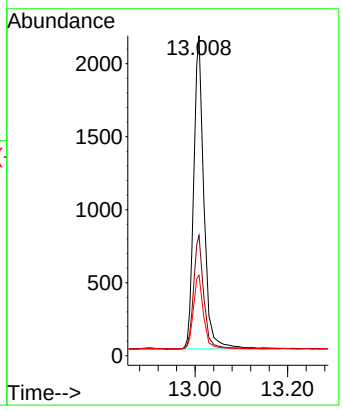


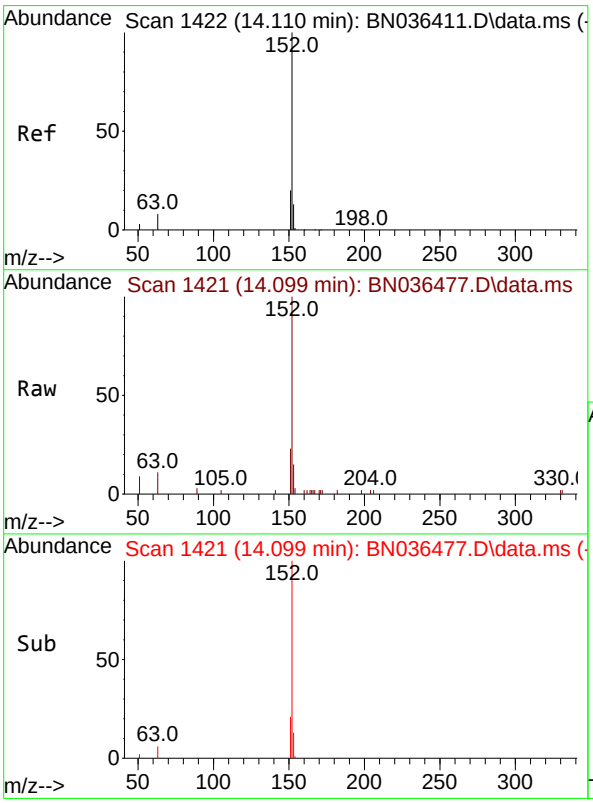
#15
2-Fluorobiphenyl
Concen: 0.441 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:172 Resp: 4139

Ion	Ratio	Lower	Upper
172	100		
171	37.6	29.6	44.4
170	25.1	19.8	29.6

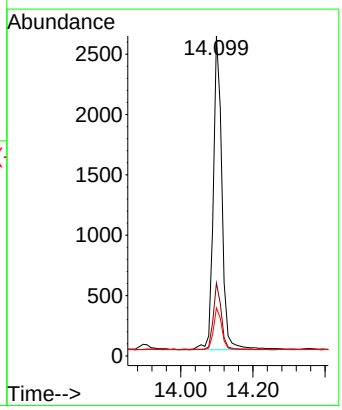


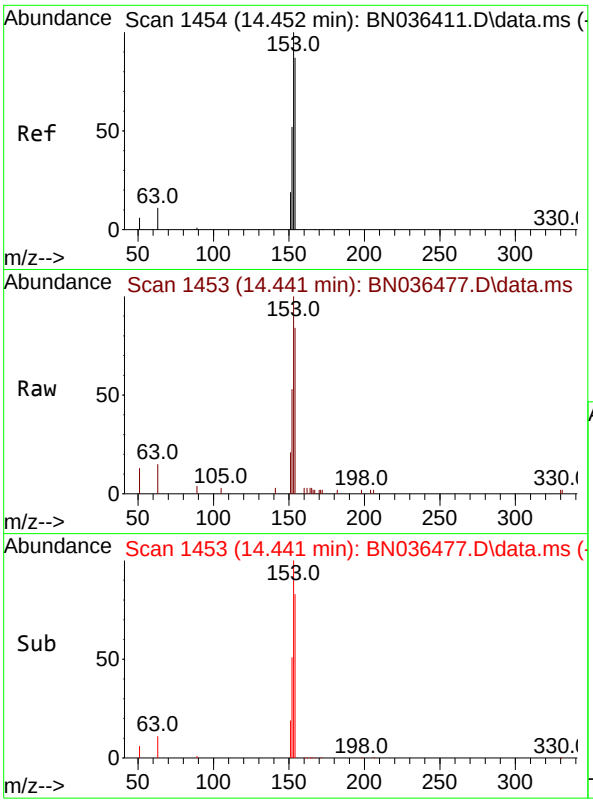


#16
Acenaphthylene
Concen: 0.394 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:152 Resp: 4341

Ion	Ratio	Lower	Upper
152	100		
151	20.3	15.8	23.8
153	13.3	10.2	15.2



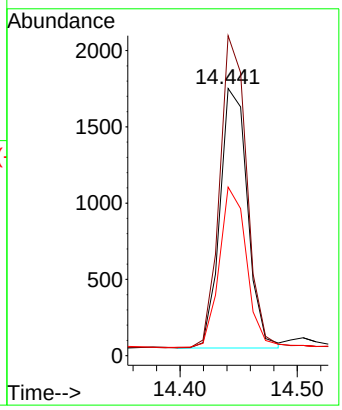


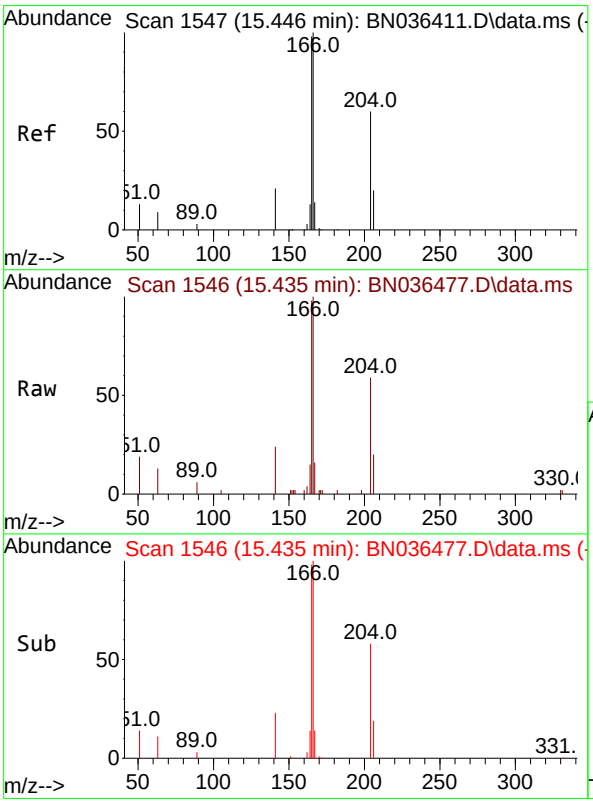
#17
Acenaphthene
Concen: 0.379 ng
RT: 14.441 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:154 Resp: 2787

Ion	Ratio	Lower	Upper
154	100		
153	119.2	93.3	139.9
152	61.4	48.8	73.2

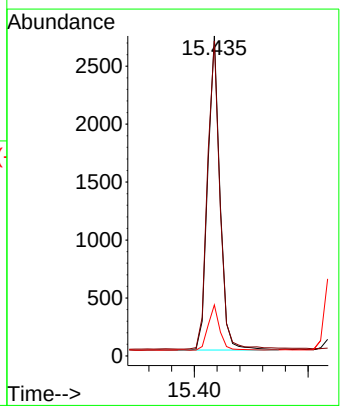


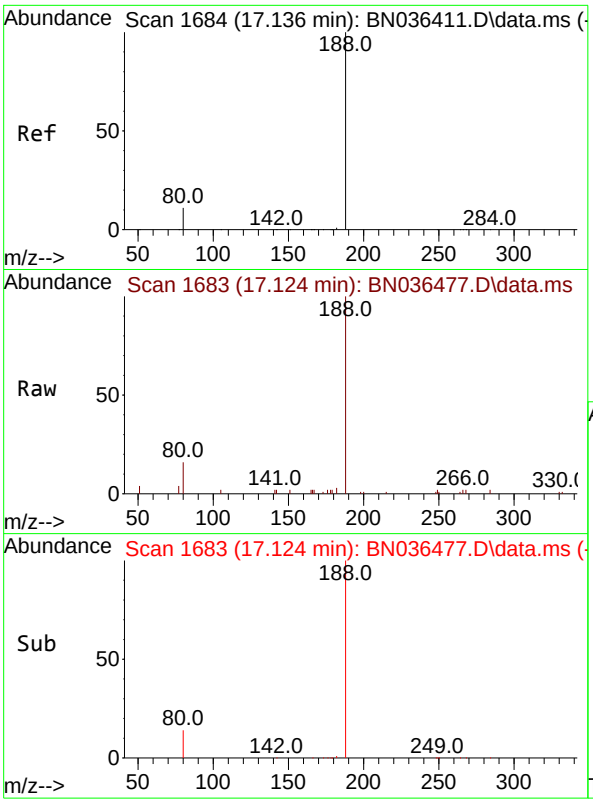


#18
Fluorene
Concen: 0.394 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:166 Resp: 4131

Ion	Ratio	Lower	Upper
166	100		
165	102.8	79.5	119.3
167	13.5	10.4	15.6



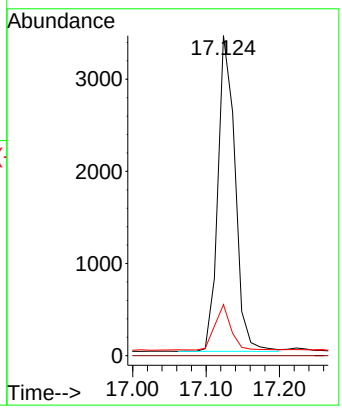


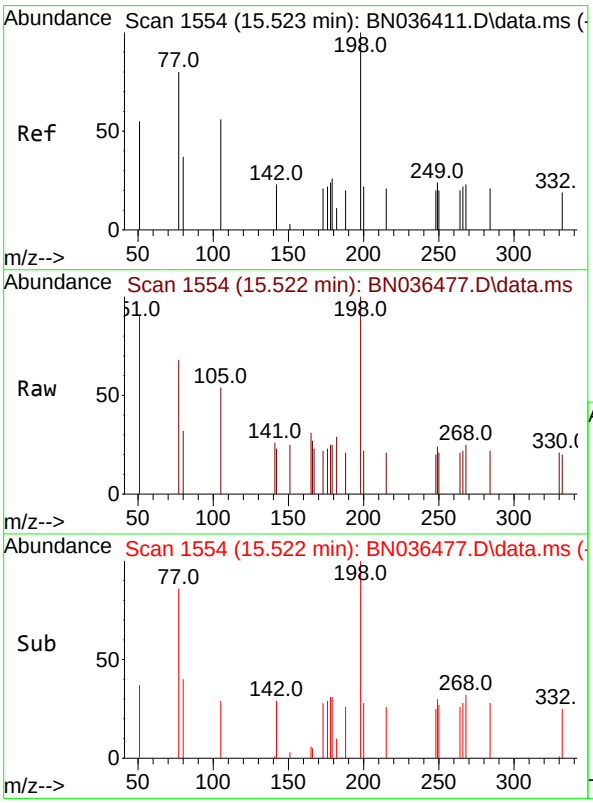
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:188 Resp: 5565

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.0	9.8	14.6#

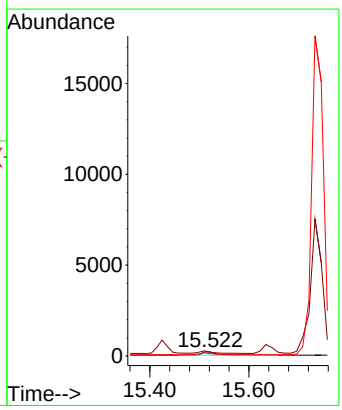


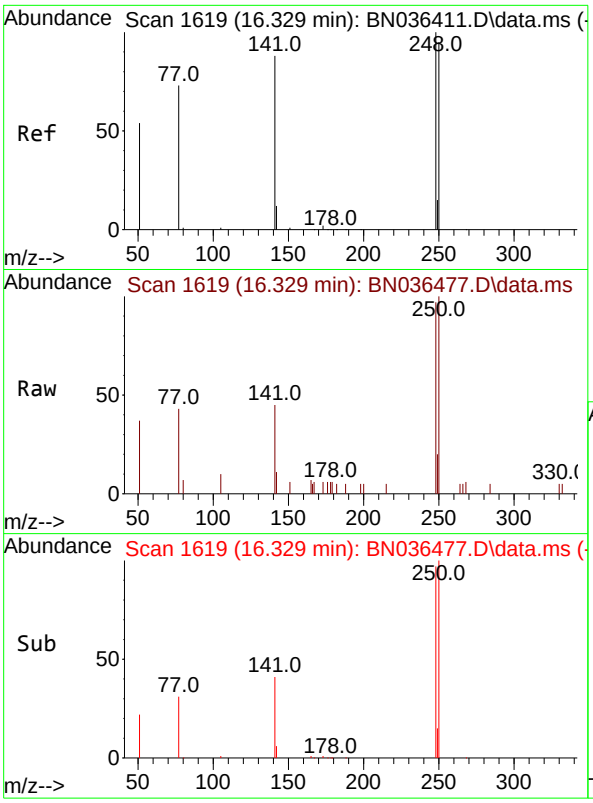


#20
4,6-Dinitro-2-methylphenol
Concen: 0.344 ng
RT: 15.522 min Scan# 1554
Delta R.T. -0.001 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:198 Resp: 376

Ion	Ratio	Lower	Upper
198	100		
51	90.2	86.6	129.8
105	54.5	57.5	86.3#



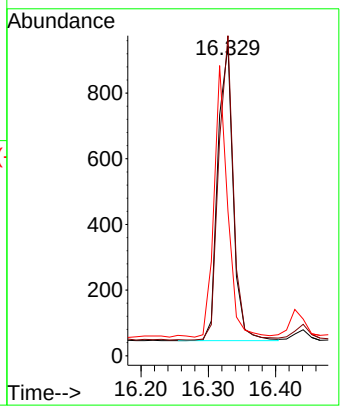


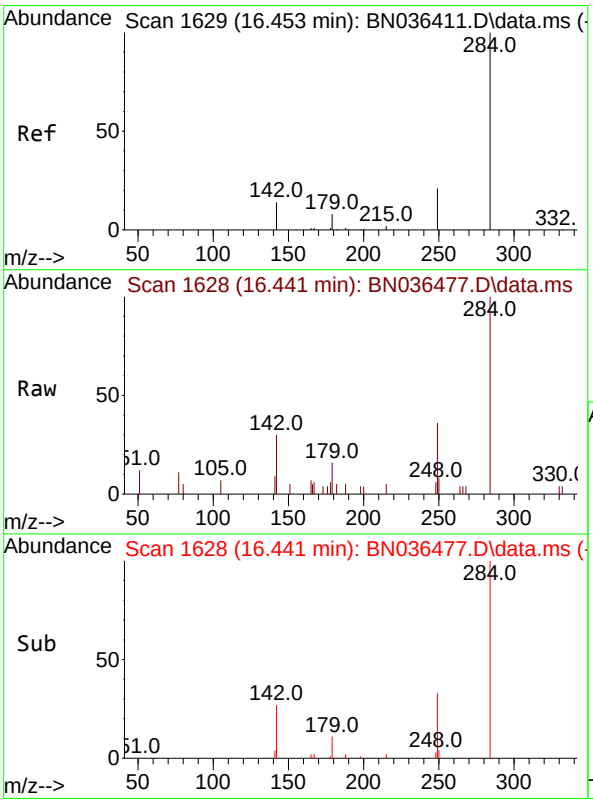
#21
4-Bromophenyl-phenylether
Concen: 0.430 ng
RT: 16.329 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:248 Resp: 1426

Ion	Ratio	Lower	Upper
248	100		
250	103.2	76.1	114.1
141	46.7	71.7	107.5#

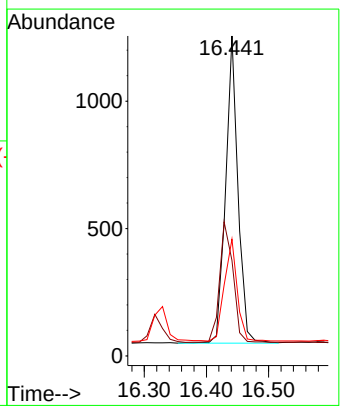


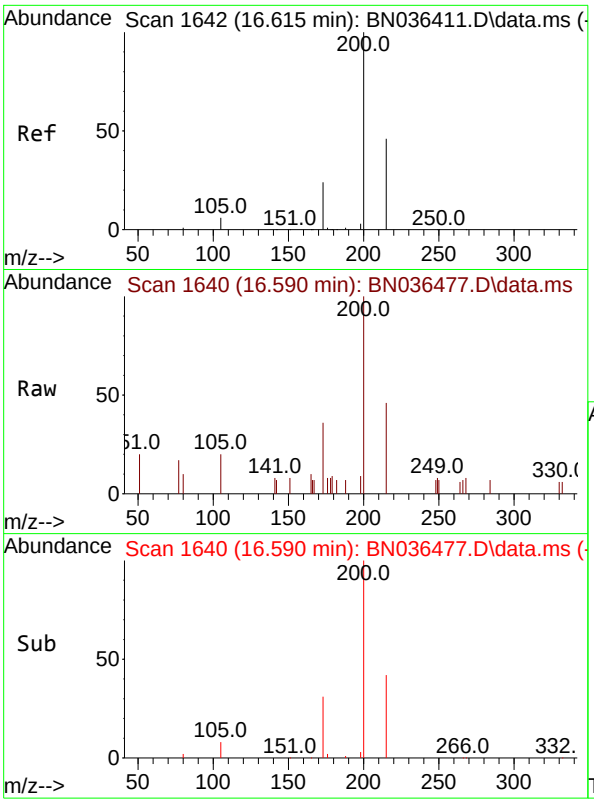


#22
Hexachlorobenzene
Concen: 0.404 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:284 Resp: 1658

Ion	Ratio	Lower	Upper
284	100		
142	42.2	33.4	50.0
249	34.9	28.6	43.0



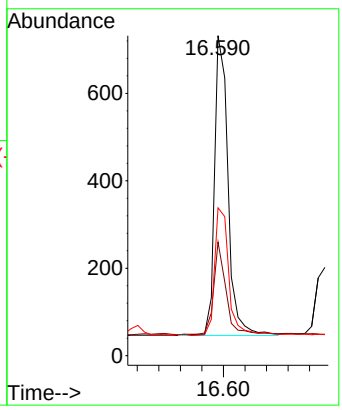


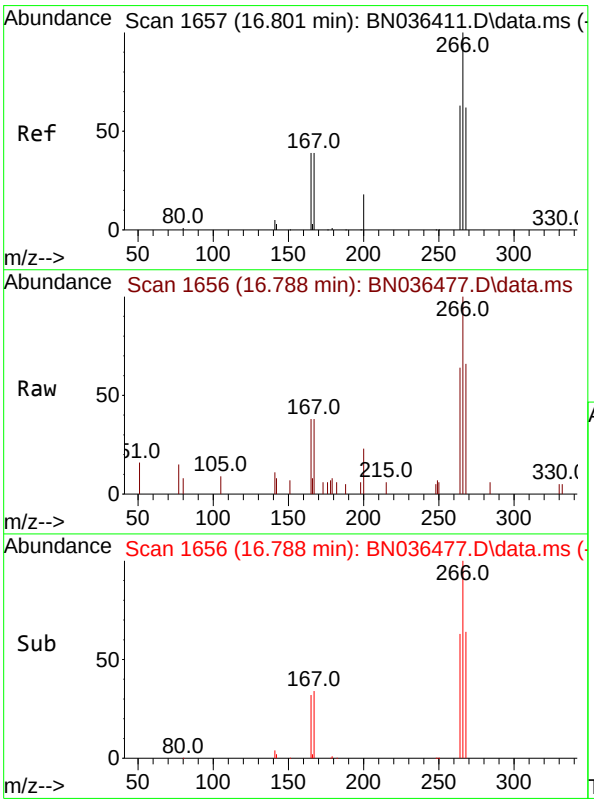
#23
Atrazine
Concen: 0.431 ng
RT: 16.590 min Scan# 1
Delta R.T. -0.025 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:200 Resp: 1195

Ion	Ratio	Lower	Upper
200	100		
173	35.5	23.2	34.8#
215	46.2	40.0	60.0

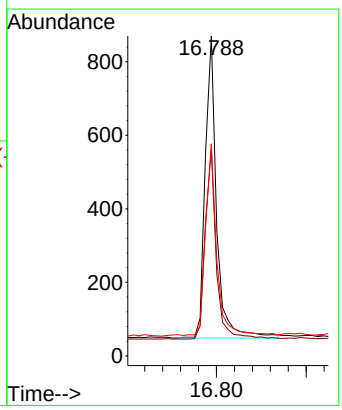


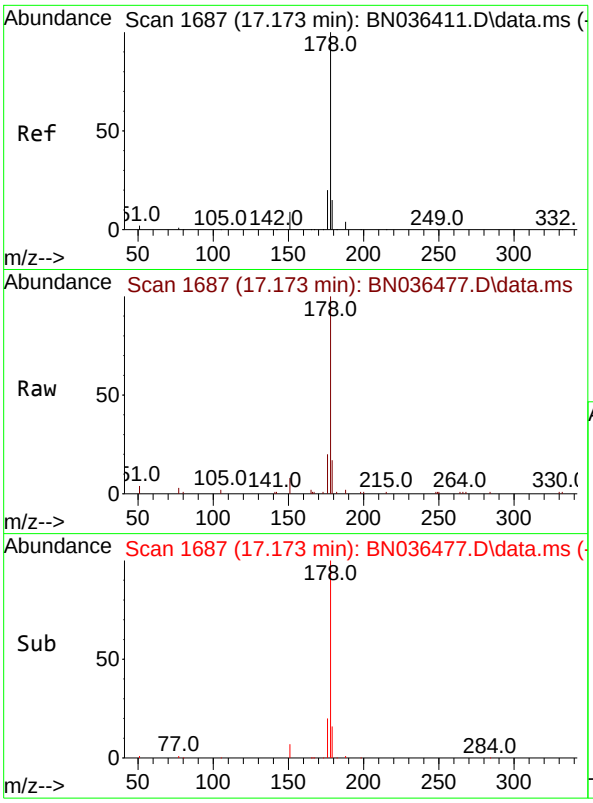


#24
Pentachlorophenol
Concen: 0.739 ng
RT: 16.788 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:266 Resp: 1439

Ion	Ratio	Lower	Upper
266	100		
264	61.4	50.6	76.0
268	62.2	51.9	77.9



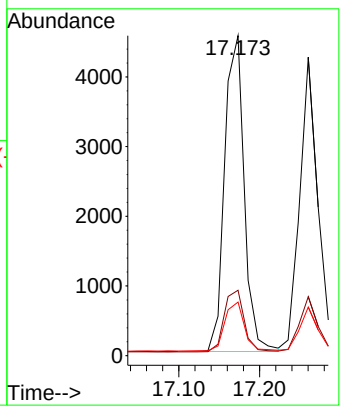


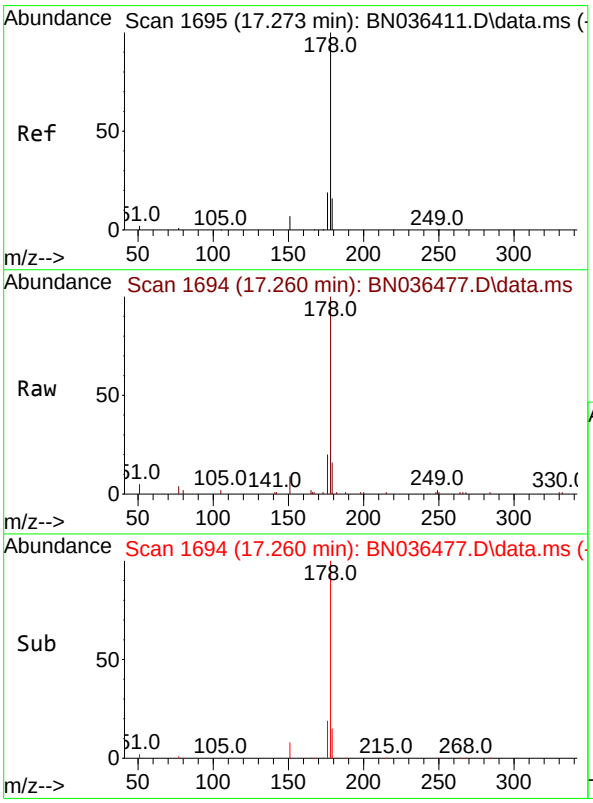
#25
Phenanthrene
Concen: 0.475 ng
RT: 17.173 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:178 Resp: 7646

Ion	Ratio	Lower	Upper
178	100		
176	20.2	15.7	23.5
179	15.6	12.4	18.6

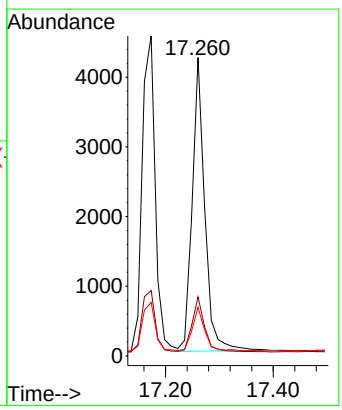


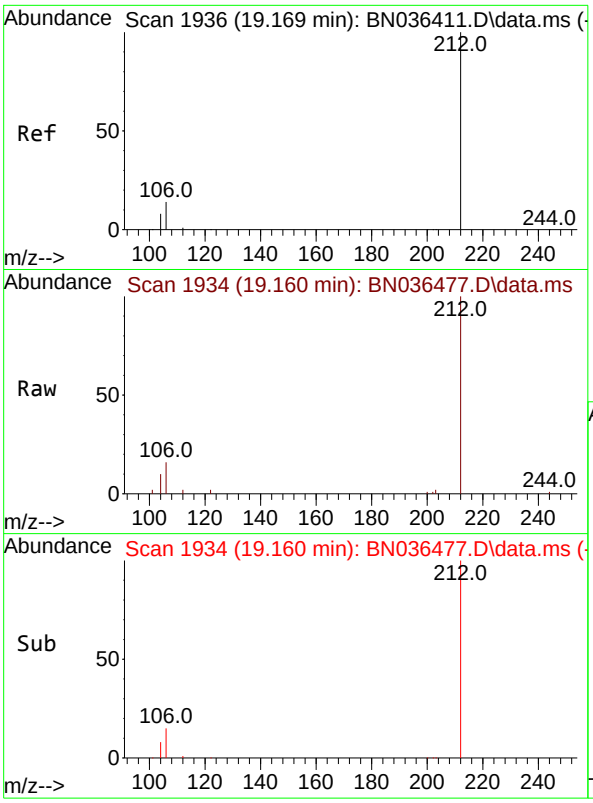


#26
Anthracene
Concen: 0.482 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:178 Resp: 6840

Ion	Ratio	Lower	Upper
178	100		
176	19.0	14.9	22.3
179	14.9	12.4	18.6



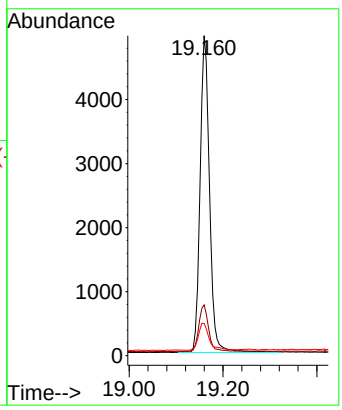


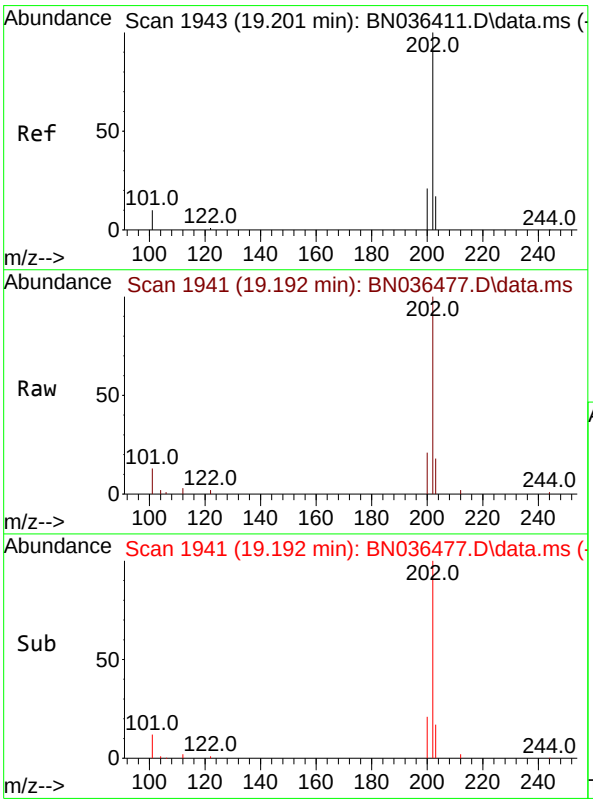
#27
Fluoranthene-d10
Concen: 0.446 ng
RT: 19.160 min Scan# 1
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:212 Resp: 6898

Ion	Ratio	Lower	Upper
212	100		
106	15.1	11.5	17.3
104	9.8	7.1	10.7

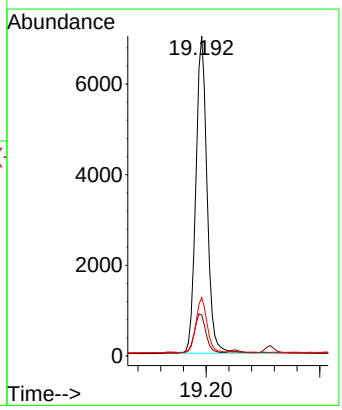


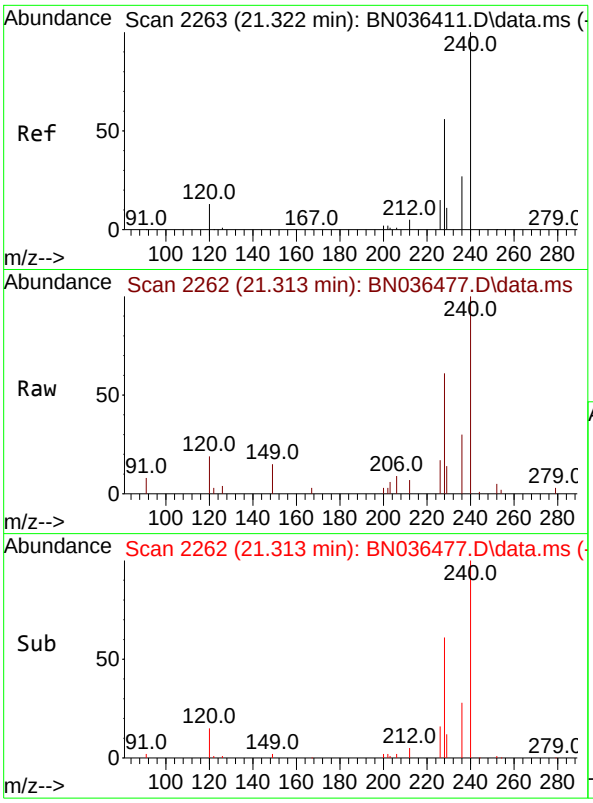


#28
Fluoranthene
Concen: 0.486 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:202 Resp: 9601

Ion	Ratio	Lower	Upper
202	100		
101	12.7	9.2	13.8
203	17.3	13.4	20.0



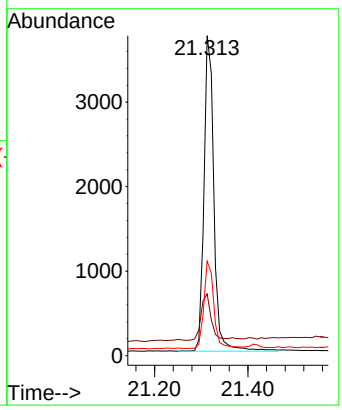


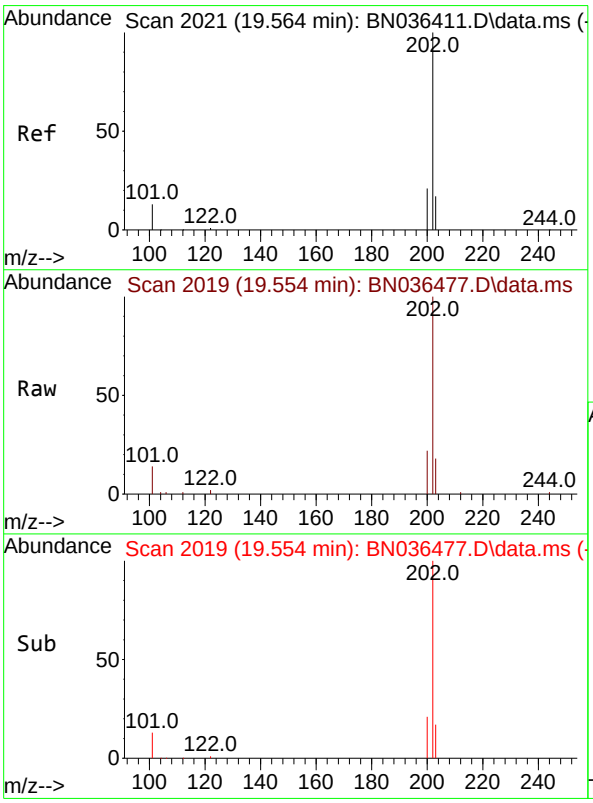
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.313 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:240 Resp: 5523

Ion	Ratio	Lower	Upper
240	100		
120	19.3	13.3	19.9
236	29.6	23.0	34.6

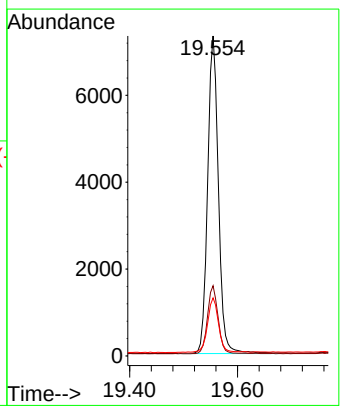


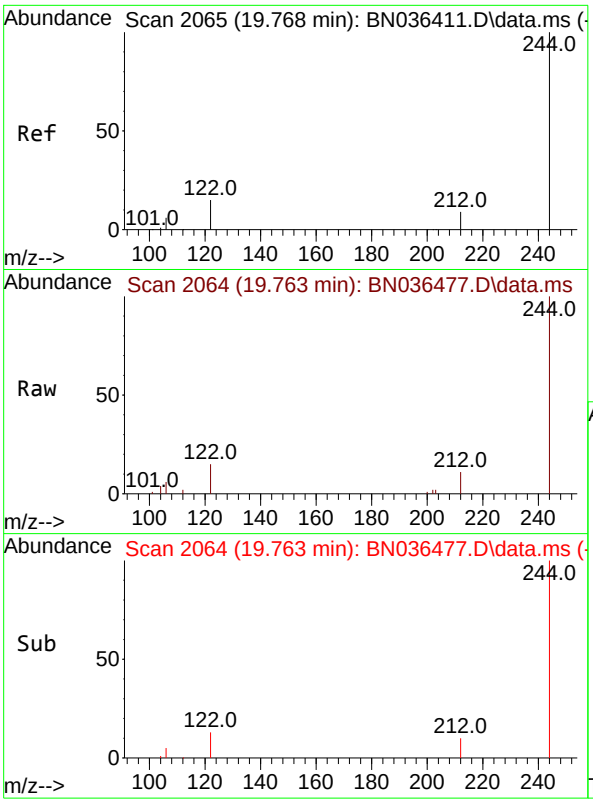


#30
Pyrene
Concen: 0.477 ng
RT: 19.554 min Scan# 2019
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:202 Resp: 10137

Ion	Ratio	Lower	Upper
202	100		
200	21.2	16.9	25.3
203	17.6	13.9	20.9



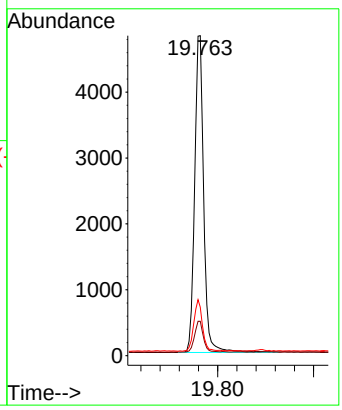


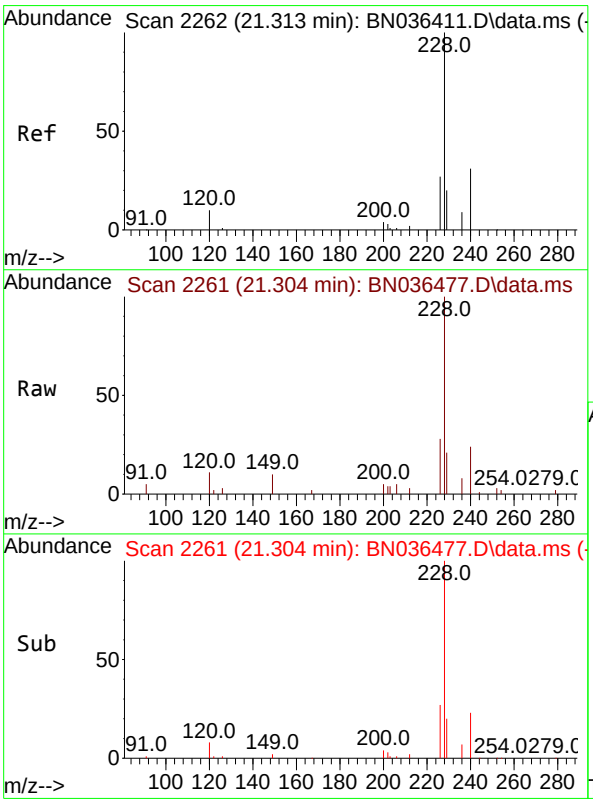
#31
Terphenyl-d14
Concen: 0.539 ng
RT: 19.763 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:244 Resp: 6357

Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.1	12.1
122	15.1	12.8	19.2

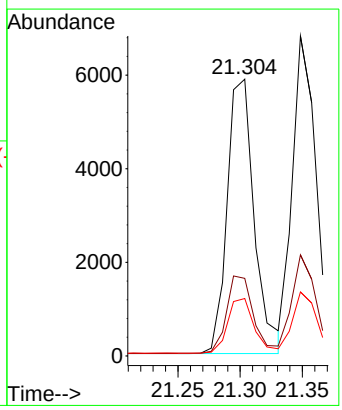


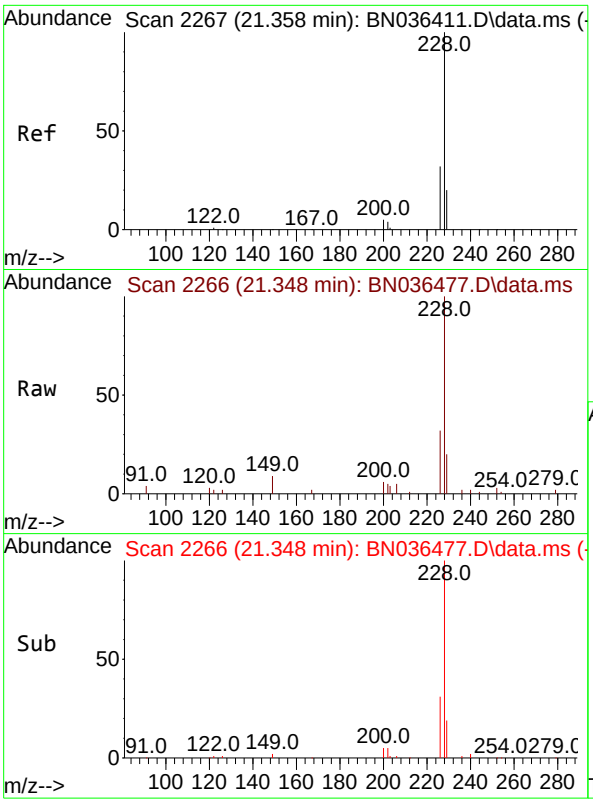


#32
Benzo(a)anthracene
Concen: 0.489 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:228 Resp: 8882

Ion	Ratio	Lower	Upper
228	100		
226	28.0	22.2	33.2
229	20.7	16.5	24.7



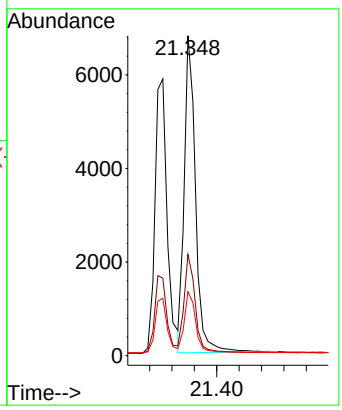


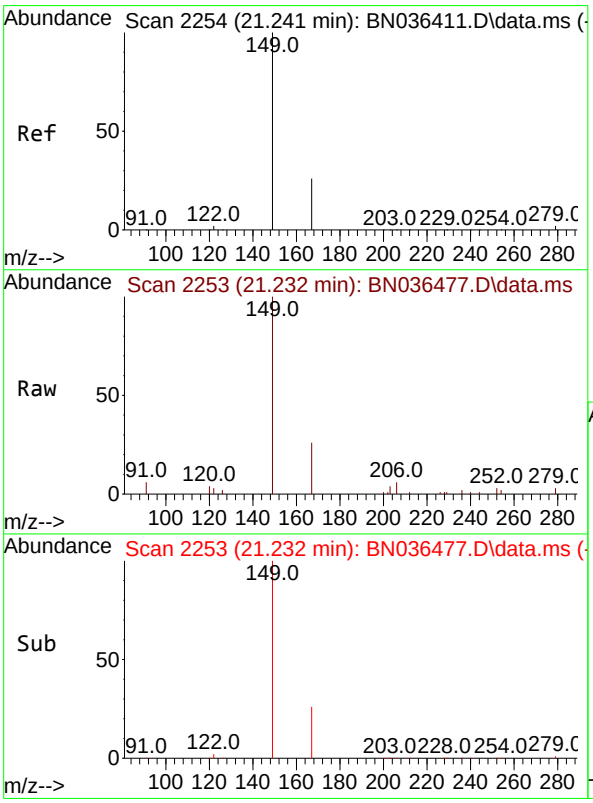
#33
Chrysene
Concen: 0.483 ng
RT: 21.348 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:228 Resp: 9509

Ion	Ratio	Lower	Upper
228	100		
226	31.6	25.5	38.3
229	20.0	16.4	24.6

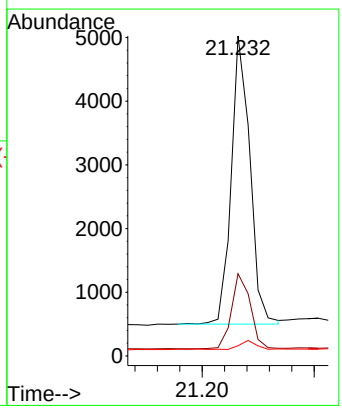


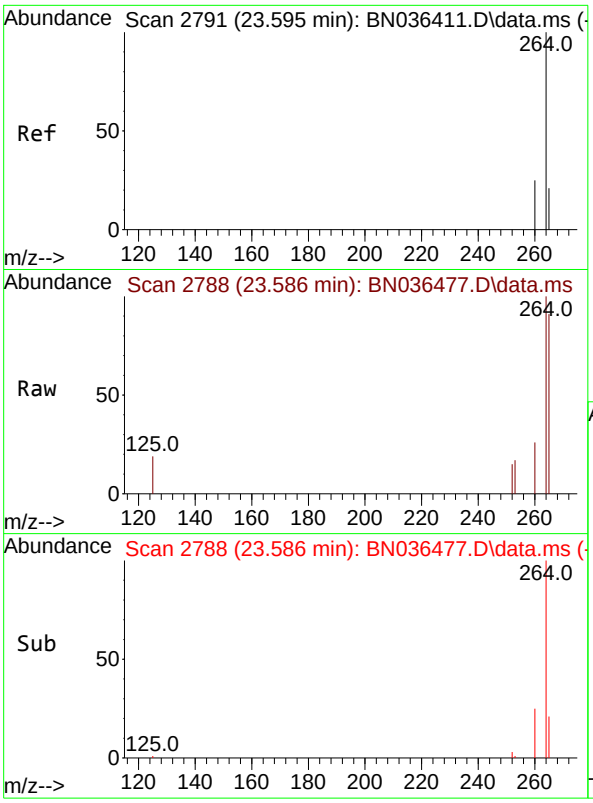


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.463 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:149 Resp: 5246

Ion	Ratio	Lower	Upper
149	100		
167	26.2	21.2	31.8
279	2.9	2.7	4.1



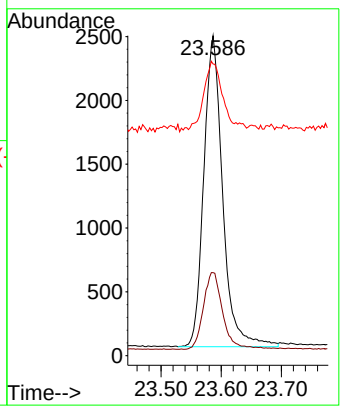


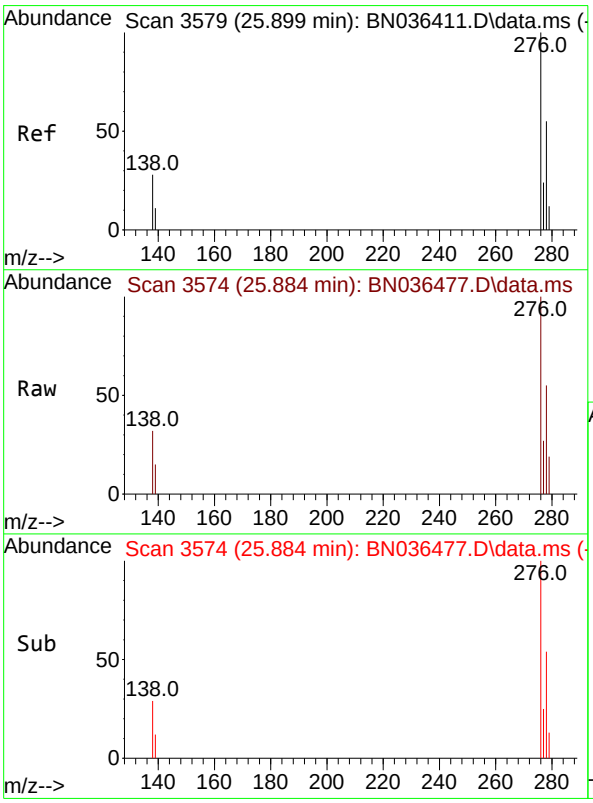
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.586 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:264 Resp: 5300

Ion	Ratio	Lower	Upper
264	100		
260	26.0	20.9	31.3
265	91.1	60.7	91.1#

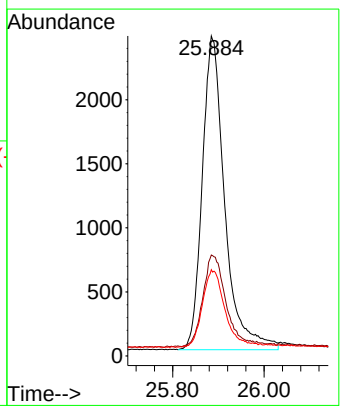


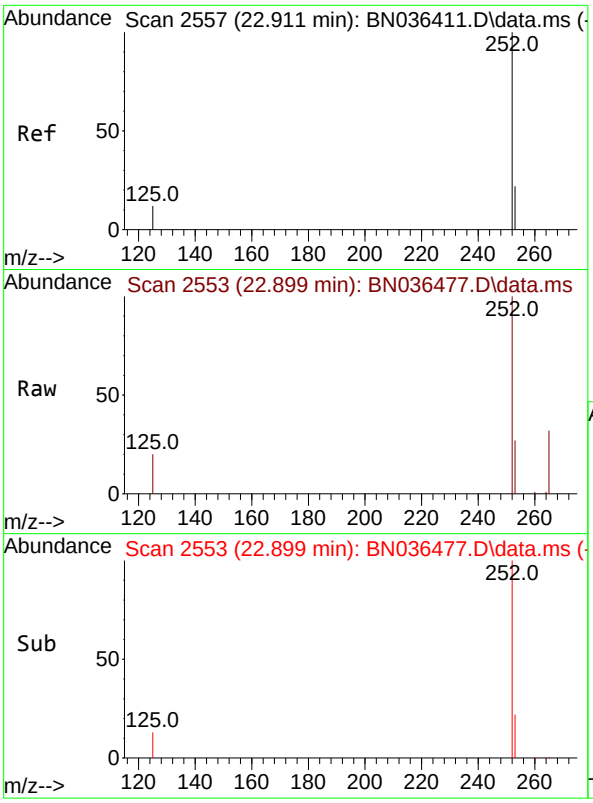


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.451 ng
RT: 25.884 min Scan# 3574
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:276 Resp: 8360

Ion	Ratio	Lower	Upper
276	100		
138	30.2	22.2	33.2
277	24.7	19.8	29.6



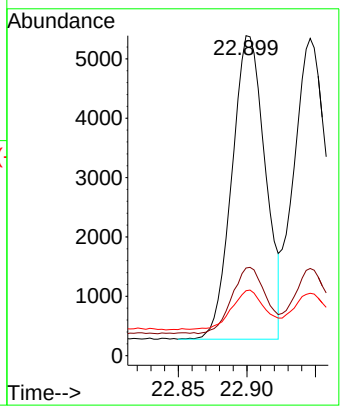


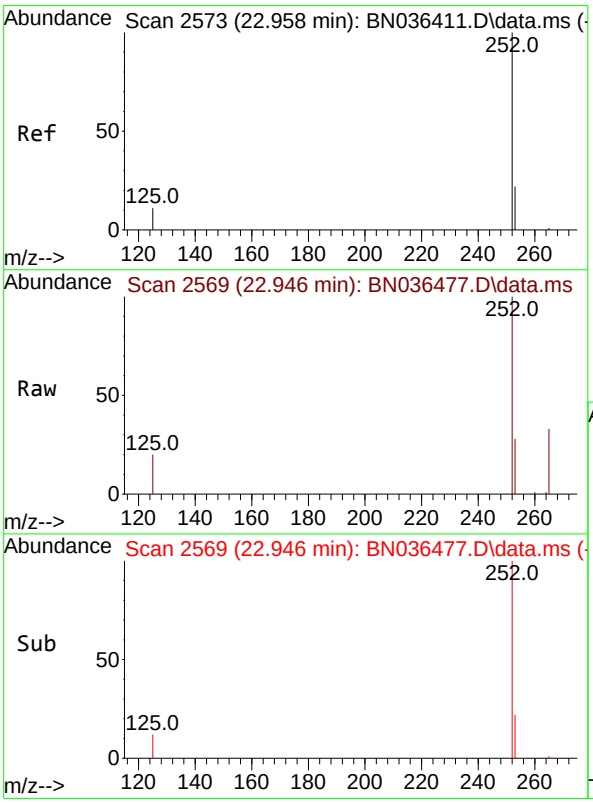
#37
Benzo(b)fluoranthene
Concen: 0.495 ng
RT: 22.899 min Scan# 2
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:252 Resp: 8647

Ion	Ratio	Lower	Upper
252	100		
253	27.4	21.9	32.9
125	20.3	15.0	22.6

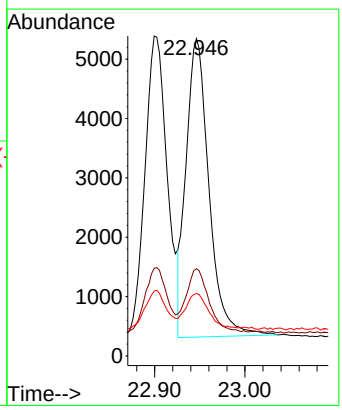


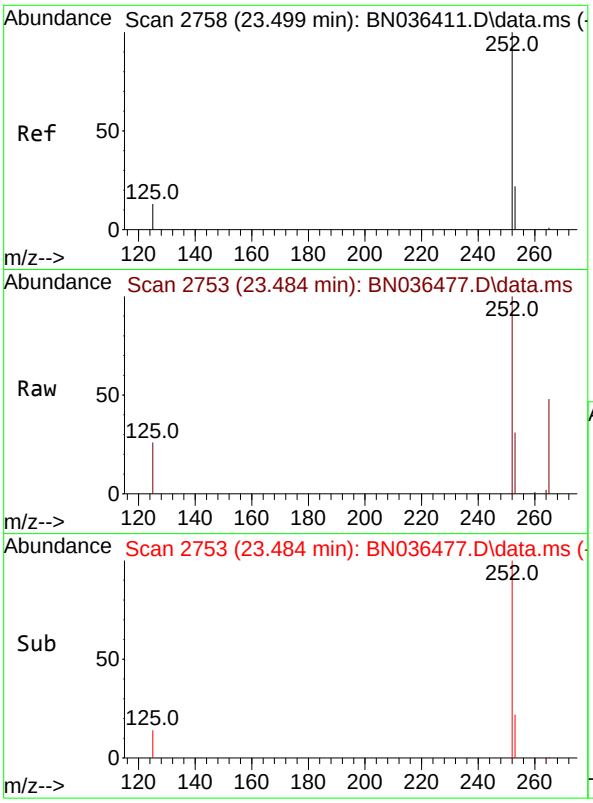


#38
Benzo(k)fluoranthene
Concen: 0.494 ng
RT: 22.946 min Scan# 2569
Delta R.T. -0.012 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:252 Resp: 8871

Ion	Ratio	Lower	Upper
252	100		
253	27.5	22.2	33.4
125	19.6	15.0	22.4



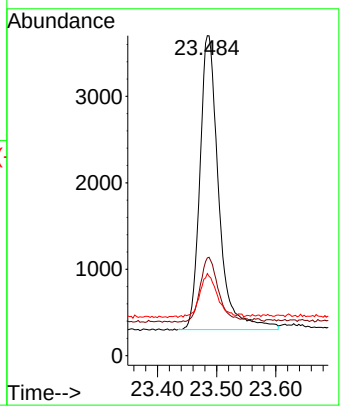


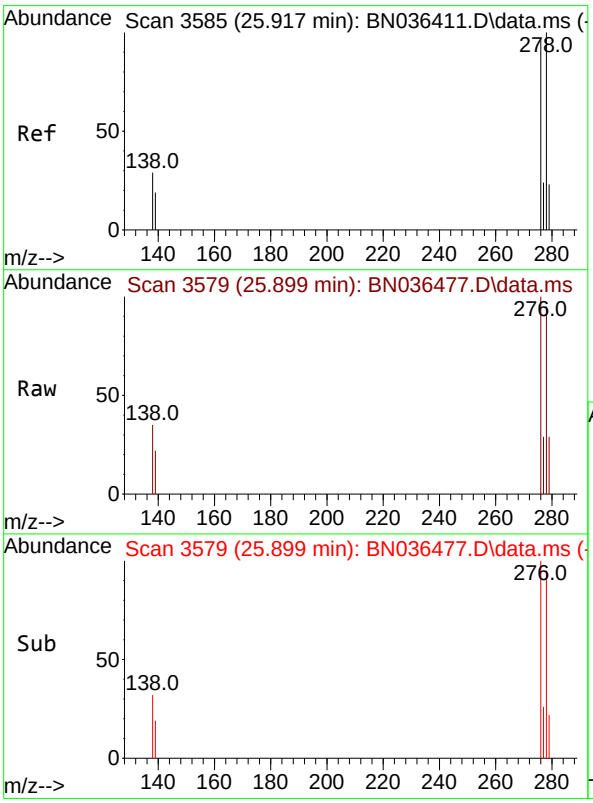
#39
Benzo(a)pyrene
Concen: 0.494 ng
RT: 23.484 min Scan# 2
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:252 Resp: 7527

Ion	Ratio	Lower	Upper
252	100		
253	30.6	24.4	36.6
125	25.6	18.2	27.2

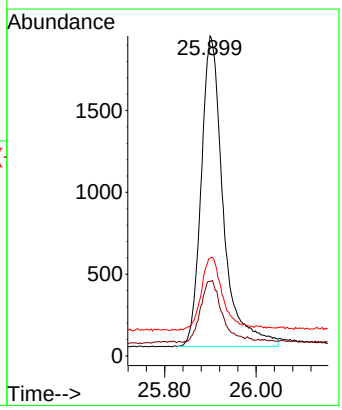


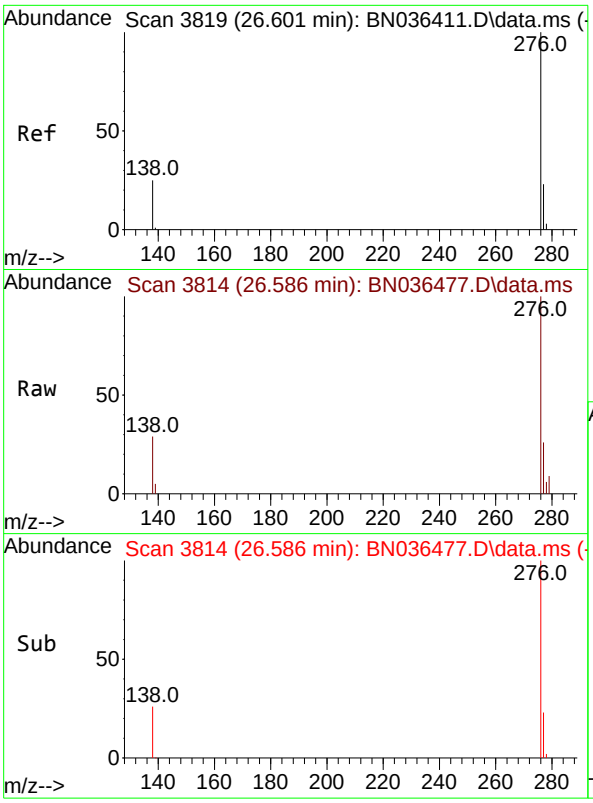


#40
Dibenzo(a,h)anthracene
Concen: 0.434 ng
RT: 25.899 min Scan# 3579
Delta R.T. -0.018 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Tgt Ion:278 Resp: 6349

Ion	Ratio	Lower	Upper
278	100		
139	23.3	18.5	27.7
279	30.5	24.8	37.2



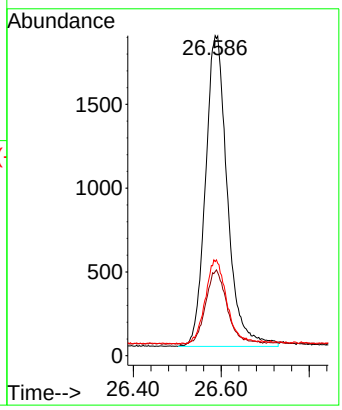


#41
Benzo(g,h,i)perylene
Concen: 0.387 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036477.D
Acq: 20 Feb 2025 12:36

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-780-782MS

Tgt Ion:276 Resp: 6415

Ion	Ratio	Lower	Upper
276	100		
277	26.3	20.7	31.1
138	29.4	21.8	32.6



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036480.D
Acq On : 20 Feb 2025 14:24
Operator : RC/JU
Sample : PB166758BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Quant Time: Feb 21 00:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.746	152	1827	0.400	ng	0.00
7) Naphthalene-d8	10.541	136	4127	0.400	ng	# 0.00
13) Acenaphthene-d10	14.388	164	2357	0.400	ng	0.00
19) Phenanthrene-d10	17.136	188	5256	0.400	ng	0.00
29) Chrysene-d12	21.322	240	4823	0.400	ng	0.00
35) Perylene-d12	23.589	264	4362	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.341	112	1752	0.406	ng	0.00
5) Phenol-d6	6.923	99	1995	0.394	ng	-0.01
8) Nitrobenzene-d5	8.897	82	1572	0.386	ng	-0.01
11) 2-Methylnaphthalene-d10	12.131	152	3269	0.515	ng	-0.01
14) 2,4,6-Tribromophenol	15.882	330	432	0.370	ng	0.00
15) 2-Fluorobiphenyl	13.008	172	4173	0.471	ng	-0.01
27) Fluoranthene-d10	19.164	212	5915	0.405	ng	0.00
31) Terphenyl-d14	19.764	244	4423	0.430	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.261	88	699	0.350	ng	# 51
3) n-Nitrosodimethylamine	3.572	42	1437	0.414	ng	# 97
6) bis(2-Chloroethyl)ether	7.168	93	2058	0.388	ng	98
9) Naphthalene	10.584	128	4763	0.400	ng	99
10) Hexachlorobutadiene	10.872	225	1195	0.412	ng	# 100
12) 2-Methylnaphthalene	12.207	142	3110	0.398	ng	98
16) Acenaphthylene	14.099	152	4781	0.459	ng	100
17) Acenaphthene	14.452	154	3067	0.441	ng	99
18) Fluorene	15.435	166	4315	0.436	ng	99
20) 4,6-Dinitro-2-methylph...	15.523	198	393	0.381	ng	92
21) 4-Bromophenyl-phenylether	16.329	248	1336	0.426	ng	# 88
22) Hexachlorobenzene	16.441	284	1675	0.433	ng	98
23) Atrazine	16.602	200	1144	0.437	ng	95
24) Pentachlorophenol	16.789	266	915	0.498	ng	99
25) Phenanthrene	17.173	178	6880	0.453	ng	99
26) Anthracene	17.260	178	6286	0.469	ng	99
28) Fluoranthene	19.192	202	8127	0.435	ng	99
30) Pyrene	19.559	202	8425	0.454	ng	100
32) Benzo(a)anthracene	21.304	228	7065	0.445	ng	99
33) Chrysene	21.358	228	8131	0.473	ng	99
34) Bis(2-ethylhexyl)phtha...	21.241	149	3779	0.382	ng	100
36) Indeno(1,2,3-cd)pyrene	25.890	276	7355	0.482	ng	99
37) Benzo(b)fluoranthene	22.902	252	6950	0.484	ng	97
38) Benzo(k)fluoranthene	22.949	252	7711	0.521	ng	97
39) Benzo(a)pyrene	23.490	252	6505	0.519	ng	97
40) Dibenzo(a,h)anthracene	25.908	278	5331	0.443	ng	99
41) Benzo(g,h,i)perylene	26.589	276	5921	0.434	ng	97

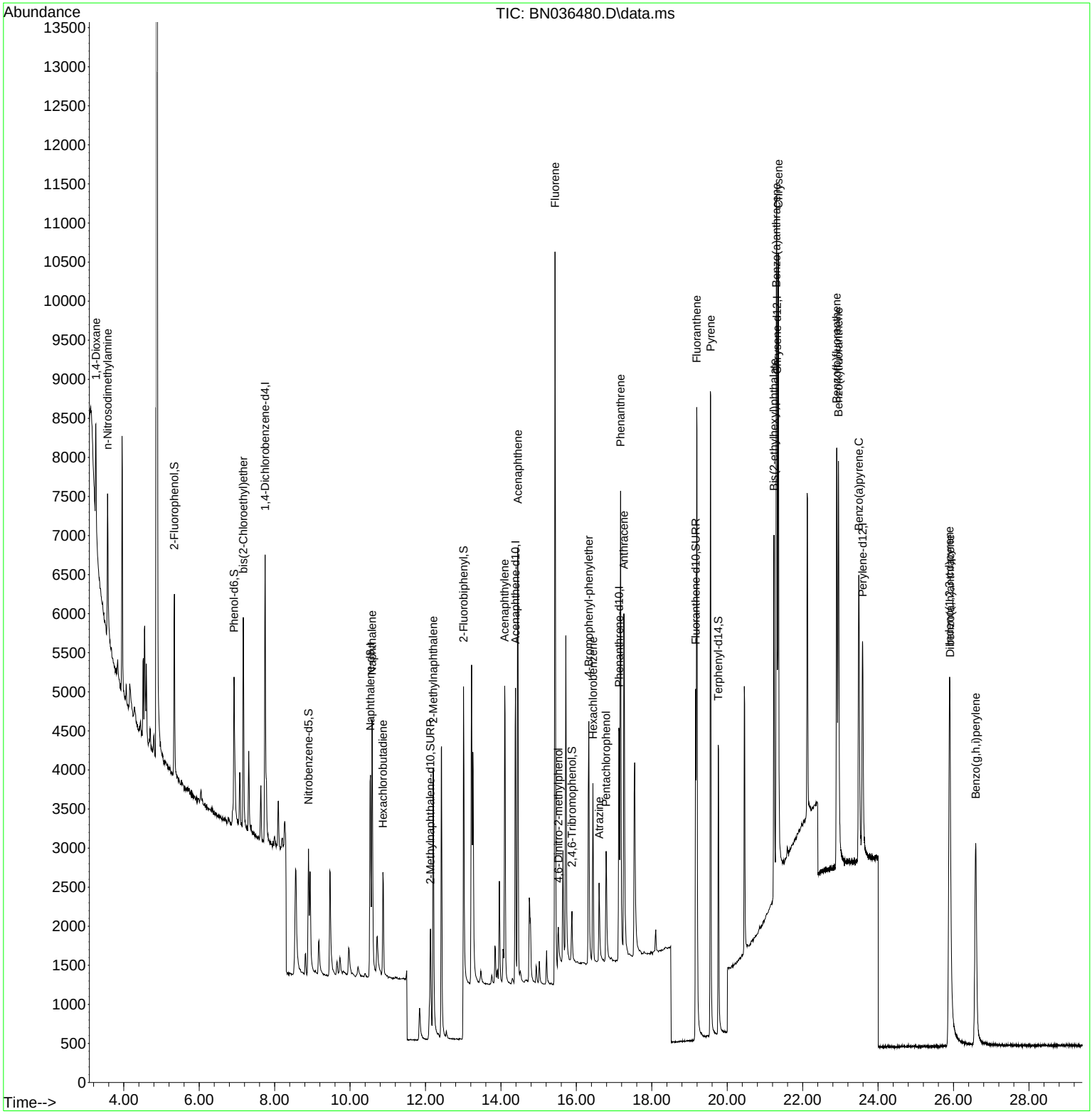
(#) = qualifier out of range (m) = manual integration (+) = signals summed

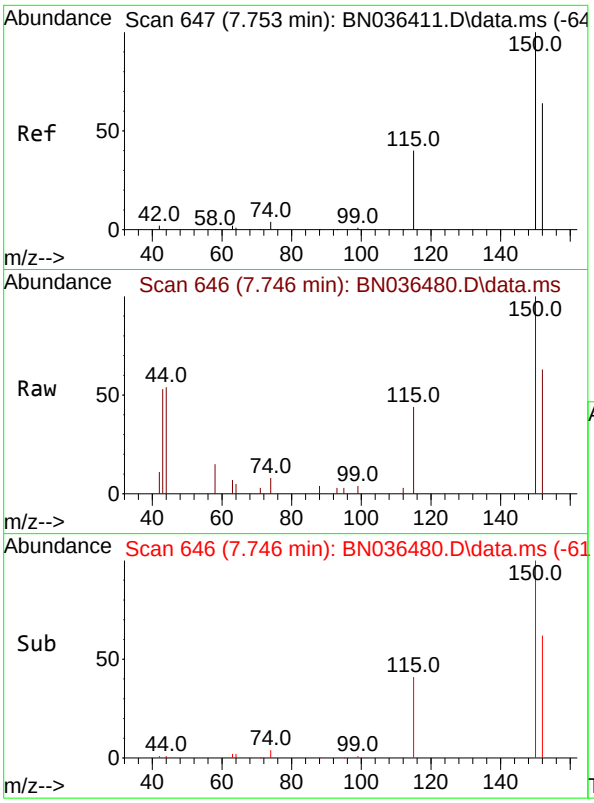
Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036480.D
Acq On : 20 Feb 2025 14:24
Operator : RC/JU
Sample : PB166758BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Quant Time: Feb 21 00:11:38 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



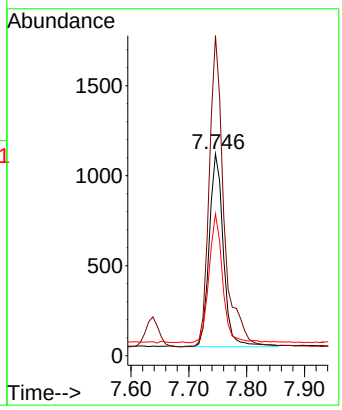


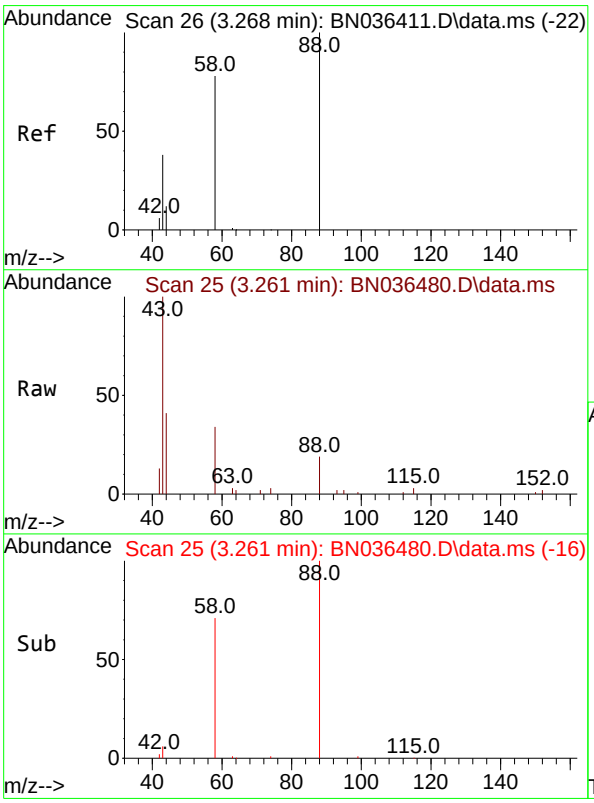
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:152 Resp: 1827

Ion	Ratio	Lower	Upper
152	100		
150	158.6	123.7	185.5
115	70.3	52.5	78.7

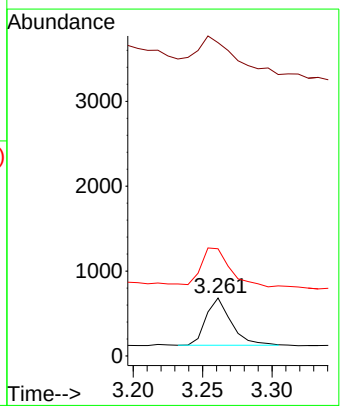


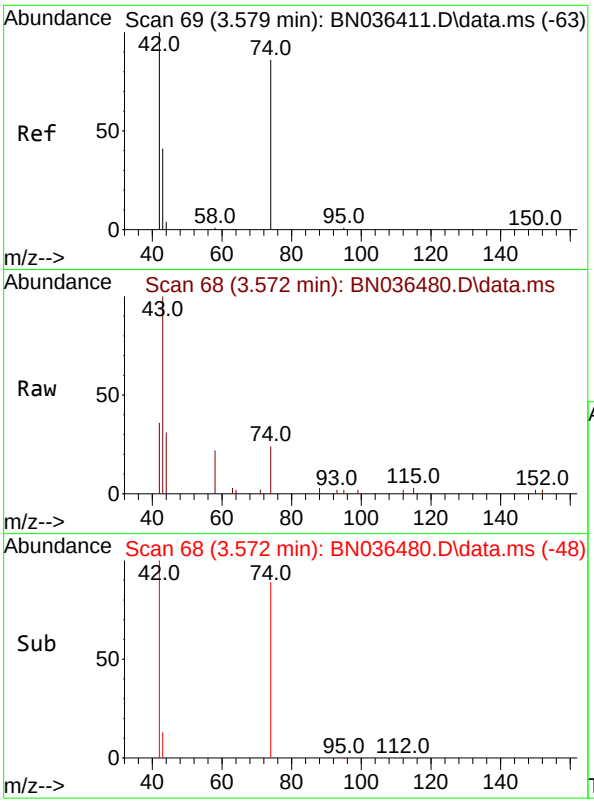


#2
1,4-Dioxane
Concen: 0.350 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 88 Resp: 699

Ion	Ratio	Lower	Upper
88	100		
43	125.0	33.7	50.5#
58	94.6	68.9	103.3



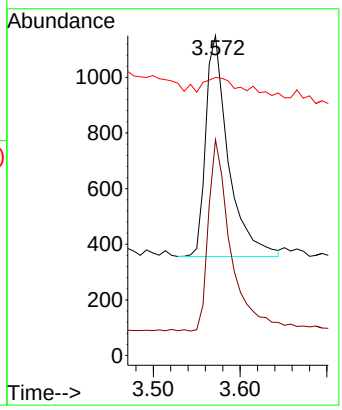


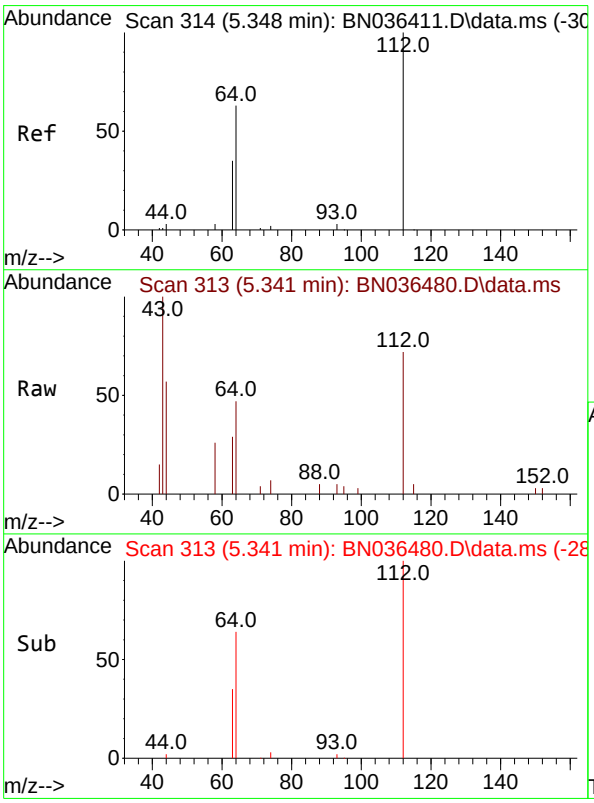
#3
n-Nitrosodimethylamine
Concen: 0.414 ng
RT: 3.572 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion: 42 Resp: 1437

Ion	Ratio	Lower	Upper
42	100		
74	88.9	71.8	107.6
44	17.9	7.8	11.6#

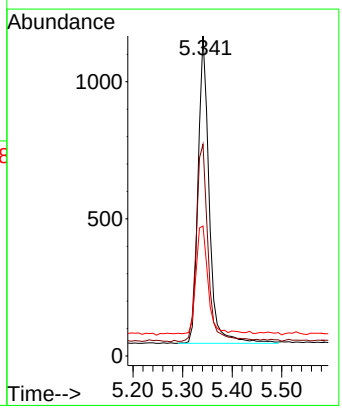


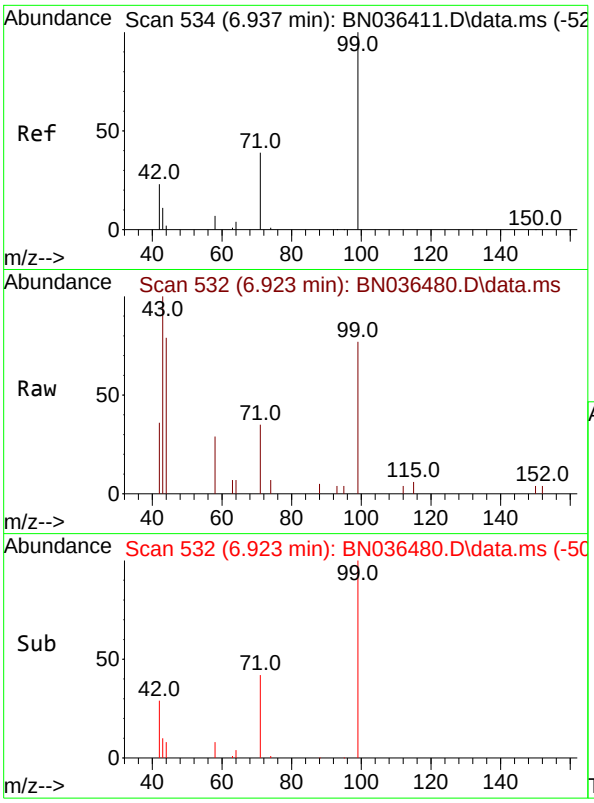


#4
2-Fluorophenol
Concen: 0.406 ng
RT: 5.341 min Scan# 313
Delta R.T. -0.007 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:112 Resp: 1752

Ion	Ratio	Lower	Upper
112	100		
64	67.2	53.4	80.0
63	37.0	30.3	45.5



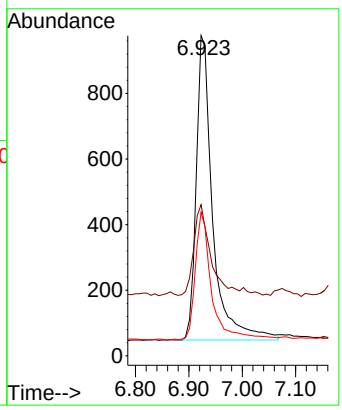


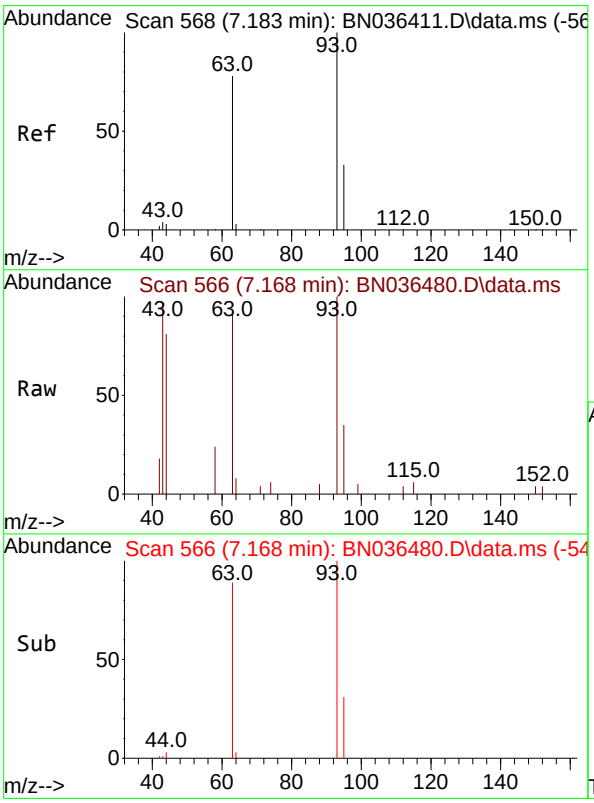
#5
Phenol-d6
Concen: 0.394 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.014 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion: 99 Resp: 1995

Ion	Ratio	Lower	Upper
99	100		
42	31.6	21.7	32.5
71	42.0	32.6	49.0

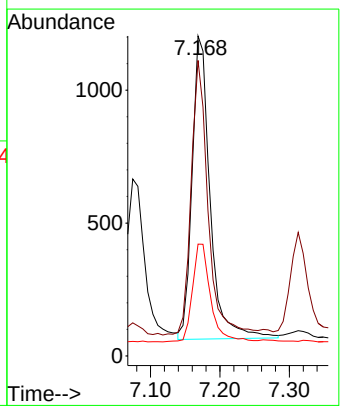


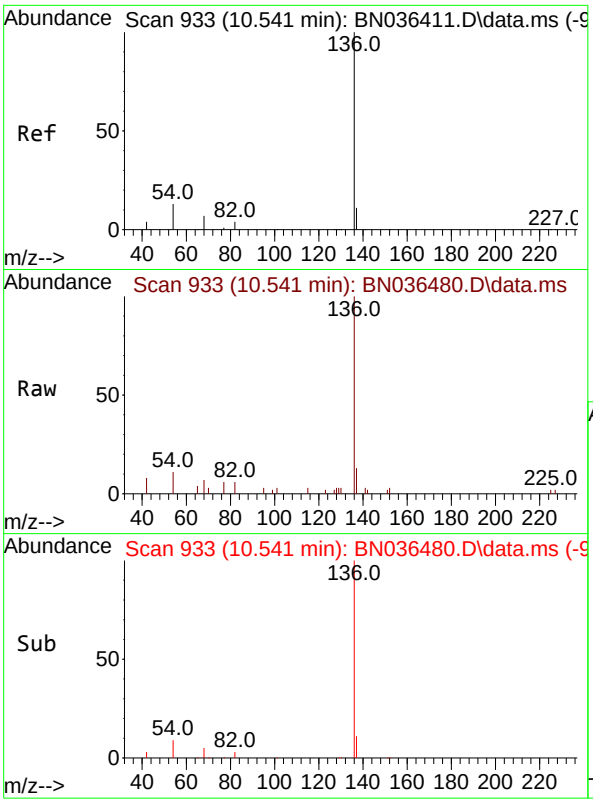


#6
bis(2-Chloroethyl)ether
Concen: 0.388 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.014 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 93 Resp: 2058

Ion	Ratio	Lower	Upper
93	100		
63	84.9	66.3	99.5
95	32.0	26.2	39.4



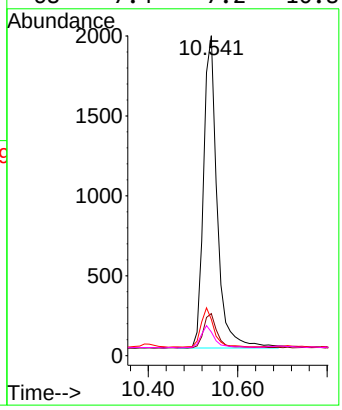


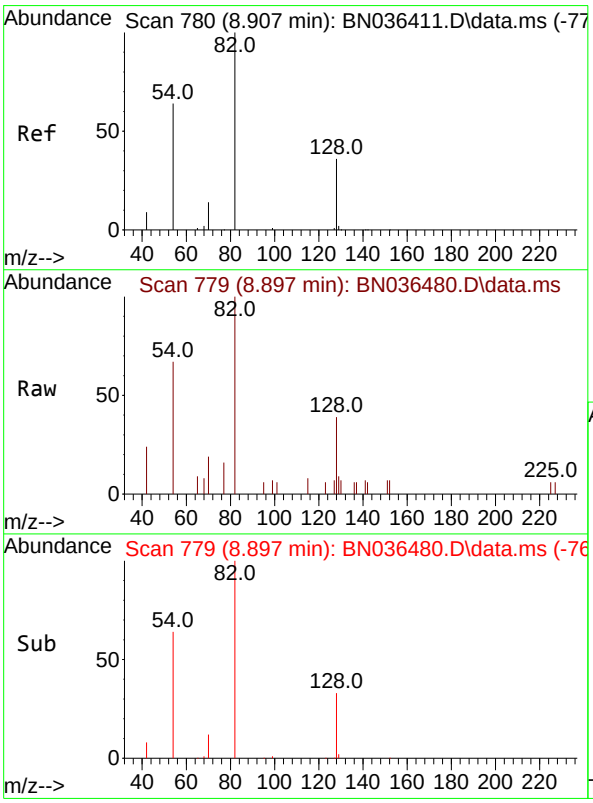
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:136 Resp: 4127

Ion	Ratio	Lower	Upper
136	100		
137	13.1	10.1	15.1
54	11.3	11.8	17.6#
68	7.4	7.2	10.8

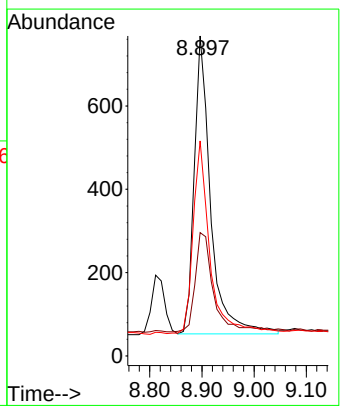


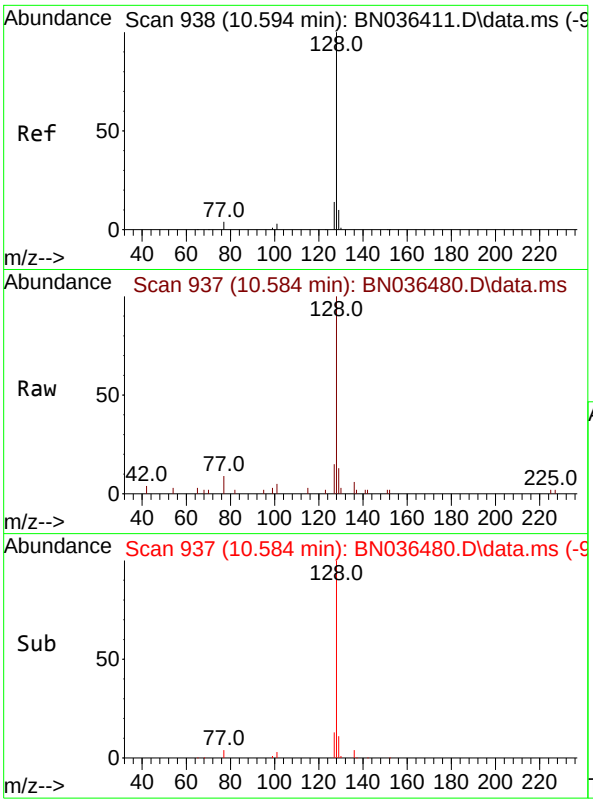


#8
Nitrobenzene-d5
Concen: 0.386 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion: 82 Resp: 1572

Ion	Ratio	Lower	Upper
82	100		
128	38.5	31.9	47.9
54	67.2	53.1	79.7



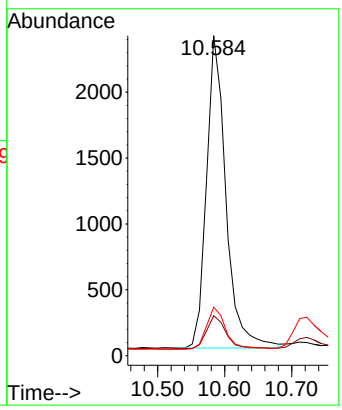


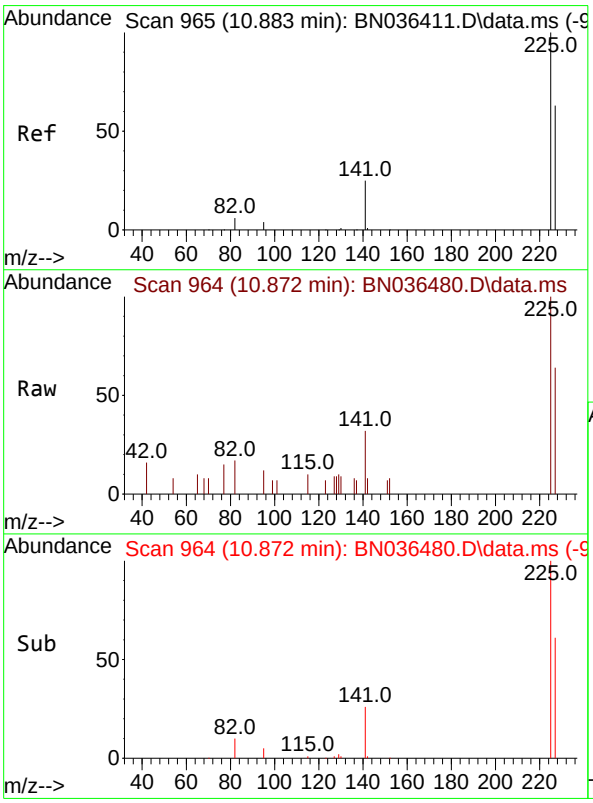
#9
Naphthalene
Concen: 0.400 ng
RT: 10.584 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:128 Resp: 4763

Ion	Ratio	Lower	Upper
128	100		
129	12.5	9.6	14.4
127	15.2	12.0	18.0

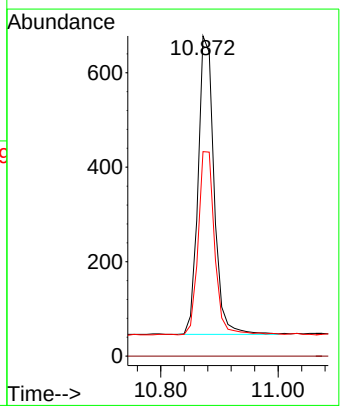


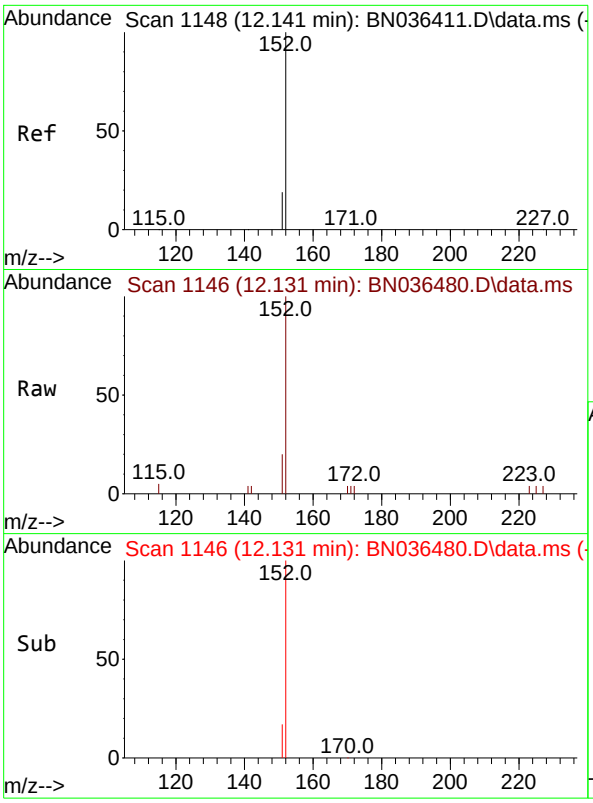


#10
Hexachlorobutadiene
Concen: 0.412 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:225 Resp: 1195

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.4	50.9	76.3



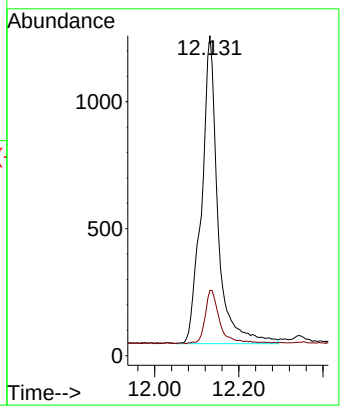


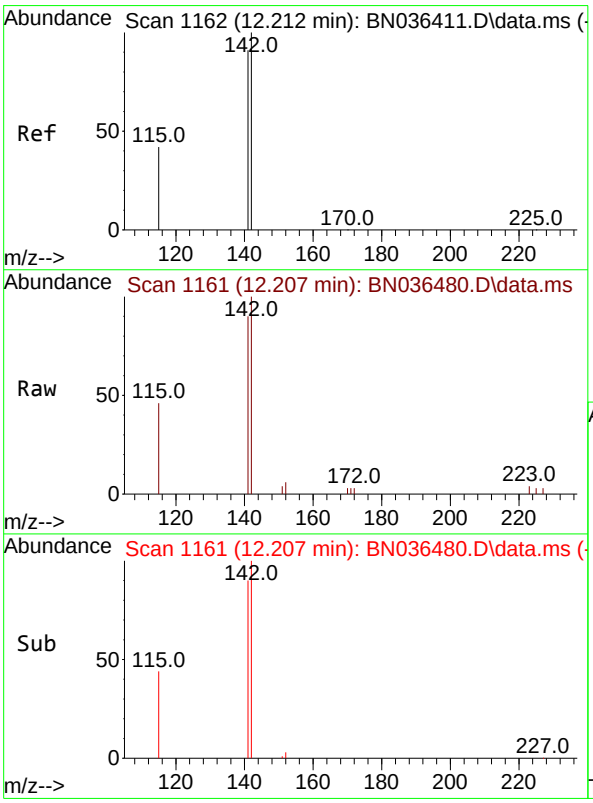
#11
2-Methylnaphthalene-d10
Concen: 0.515 ng
RT: 12.131 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:152 Resp: 3269

Ion	Ratio	Lower	Upper
152	100		
151	15.2	16.6	25.0#

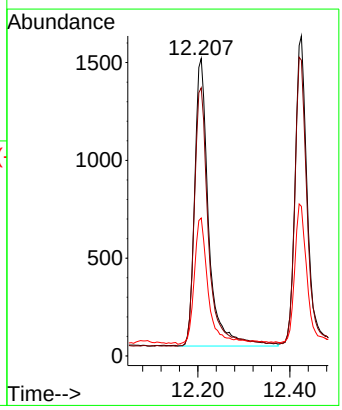


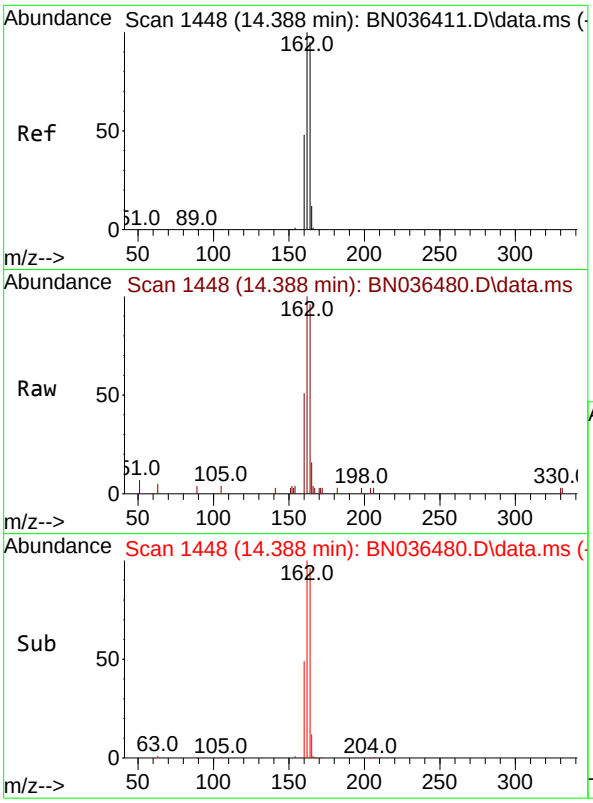


#12
2-Methylnaphthalene
Concen: 0.398 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:142 Resp: 3110

Ion	Ratio	Lower	Upper
142	100		
141	90.1	72.8	109.2
115	46.4	35.5	53.3



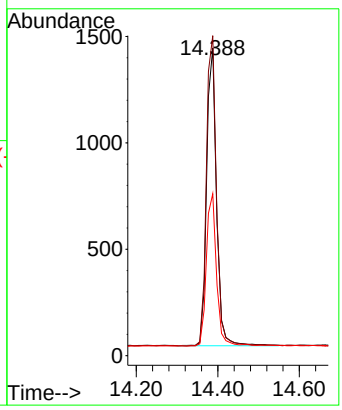


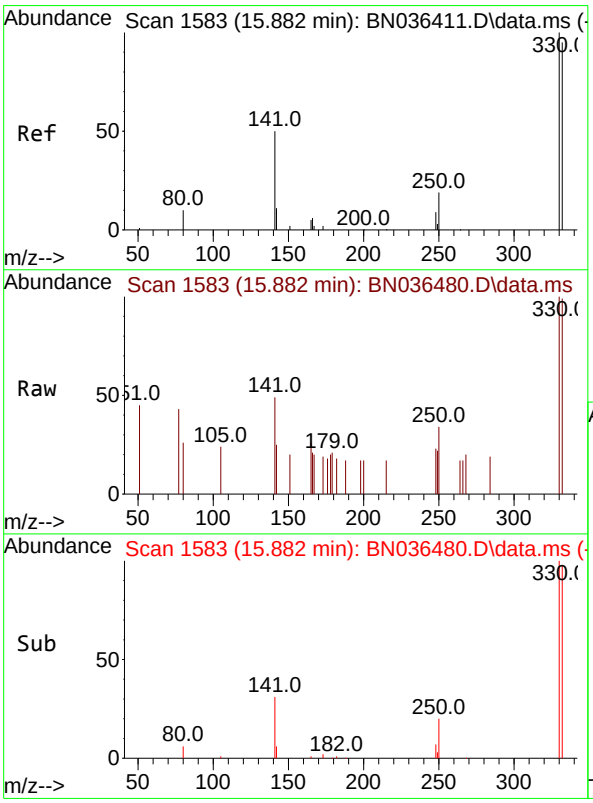
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:164 Resp: 2357

Ion	Ratio	Lower	Upper
164	100		
162	104.0	84.1	126.1
160	52.6	41.4	62.0

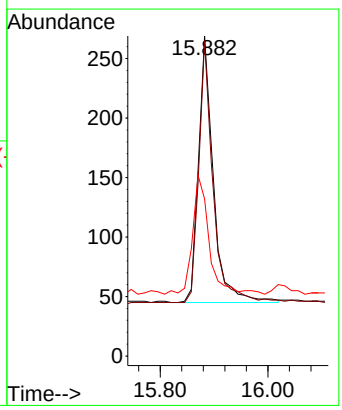


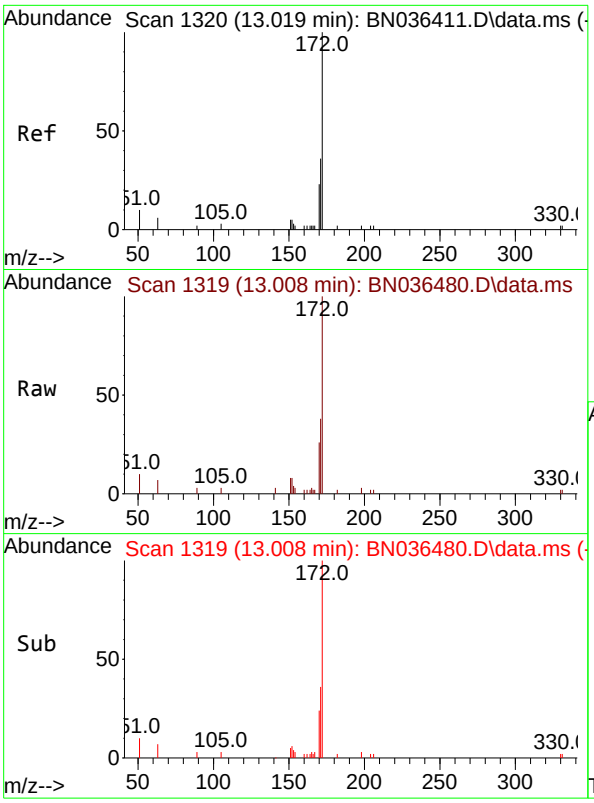


#14
2,4,6-Tribromophenol
Concen: 0.370 ng
RT: 15.882 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:330 Resp: 432

Ion	Ratio	Lower	Upper
330	100		
332	93.8	76.6	114.8
141	49.5	37.8	56.8



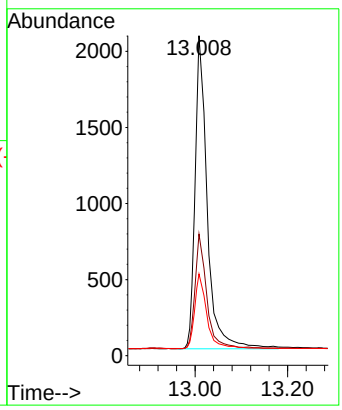


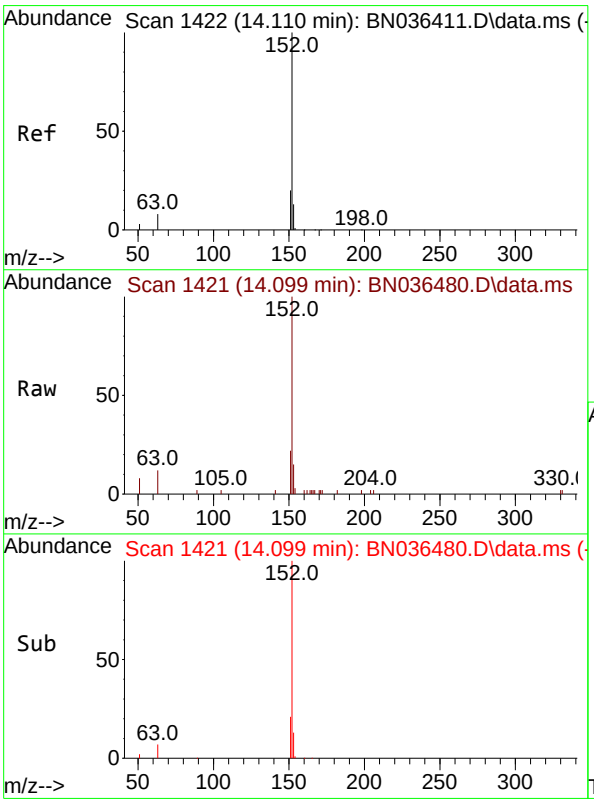
#15
2-Fluorobiphenyl
Concen: 0.471 ng
RT: 13.008 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:172 Resp: 4173

Ion	Ratio	Lower	Upper
172	100		
171	38.0	29.6	44.4
170	25.5	19.8	29.6

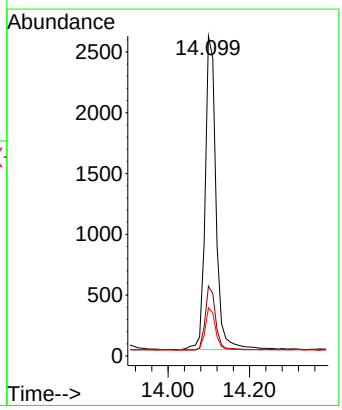


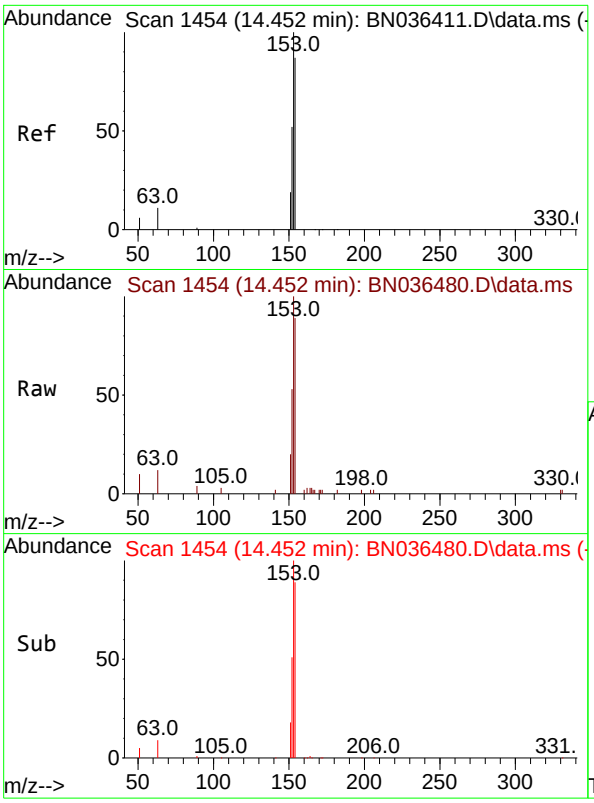


#16
Acenaphthylene
Concen: 0.459 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:152 Resp: 4781

Ion	Ratio	Lower	Upper
152	100		
151	19.7	15.8	23.8
153	12.9	10.2	15.2



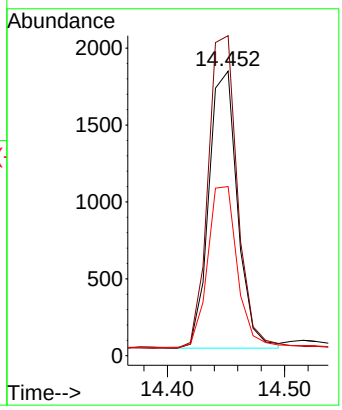


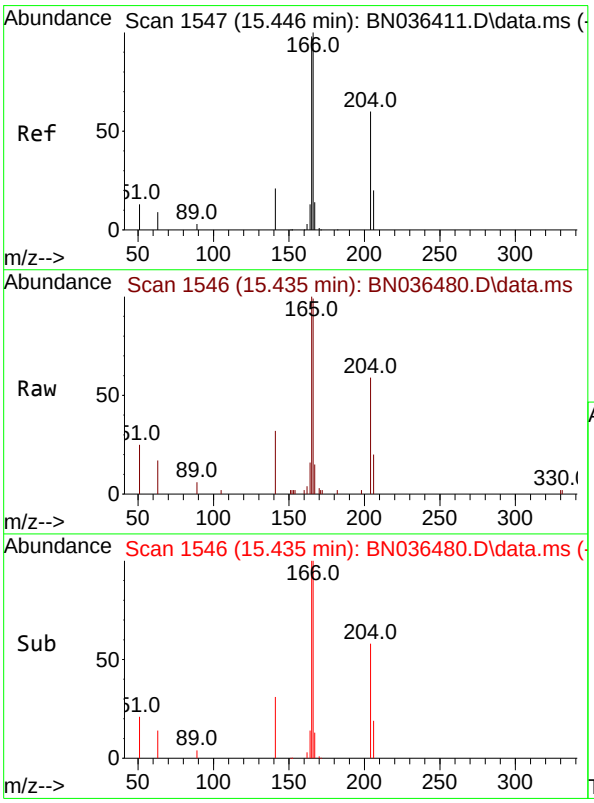
#17
Acenaphthene
Concen: 0.441 ng
RT: 14.452 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:154 Resp: 3067

Ion	Ratio	Lower	Upper
154	100		
153	117.2	93.3	139.9
152	61.5	48.8	73.2

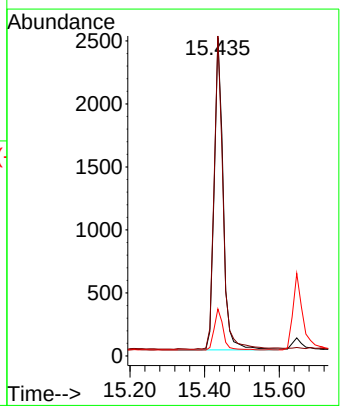


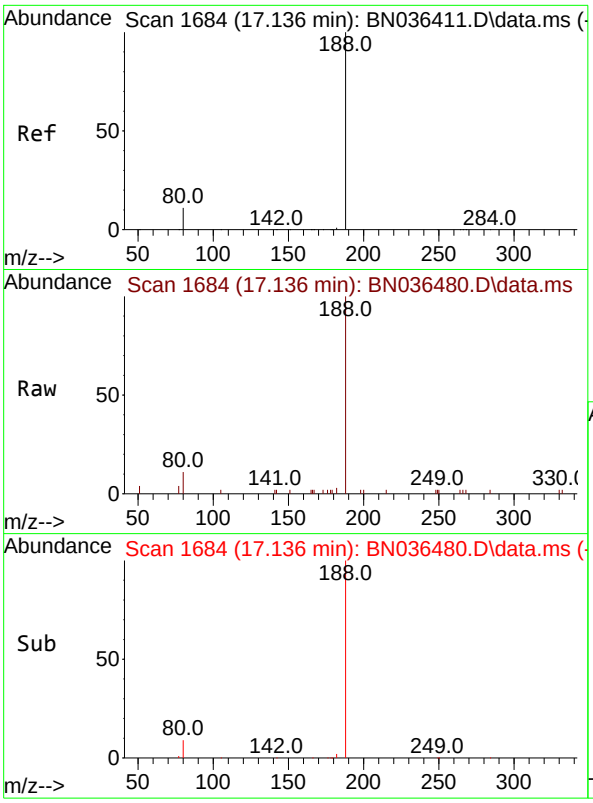


#18
Fluorene
Concen: 0.436 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:166 Resp: 4315

Ion	Ratio	Lower	Upper
166	100		
165	100.1	79.5	119.3
167	13.5	10.4	15.6



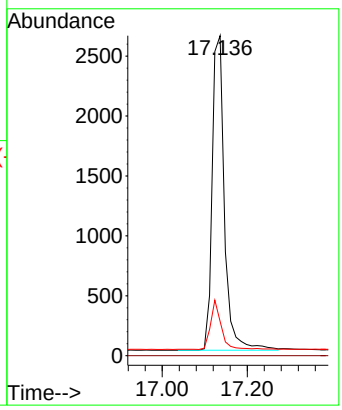


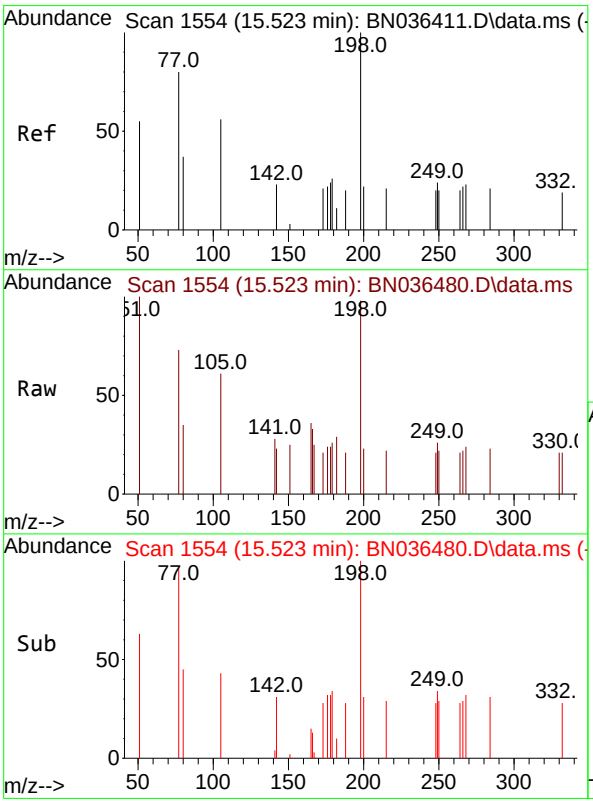
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.136 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:188 Resp: 5256

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.7	9.8	14.6

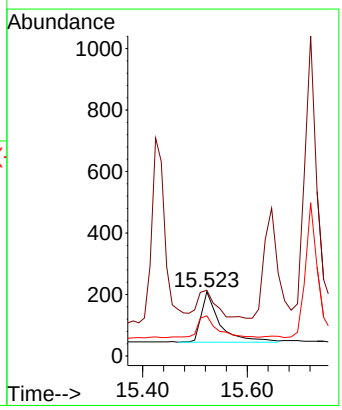


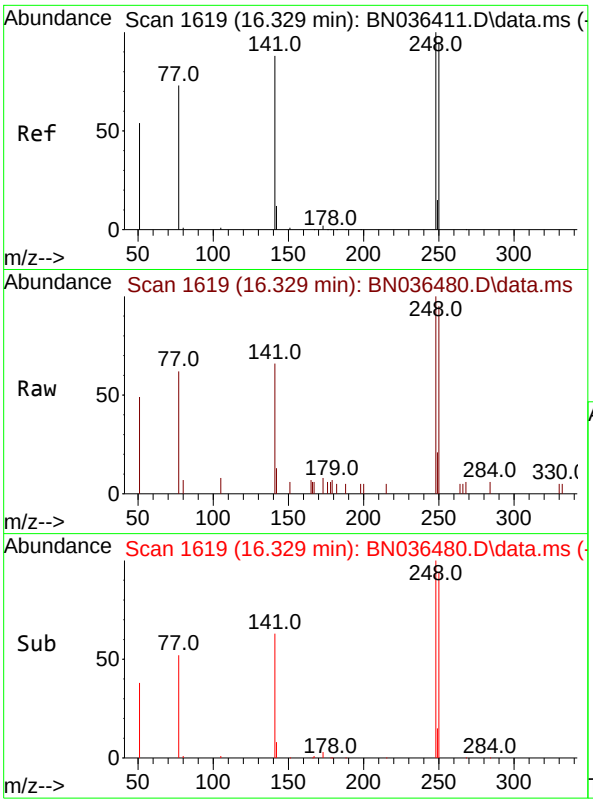


#20
4,6-Dinitro-2-methylphenol
Concen: 0.381 ng
RT: 15.523 min Scan# 1554
Delta R.T. -0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:198 Resp: 393

Ion	Ratio	Lower	Upper
198	100		
51	102.4	86.6	129.8
105	62.7	57.5	86.3



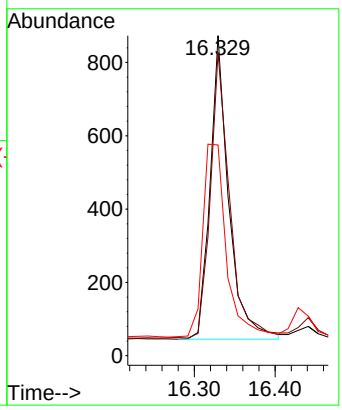


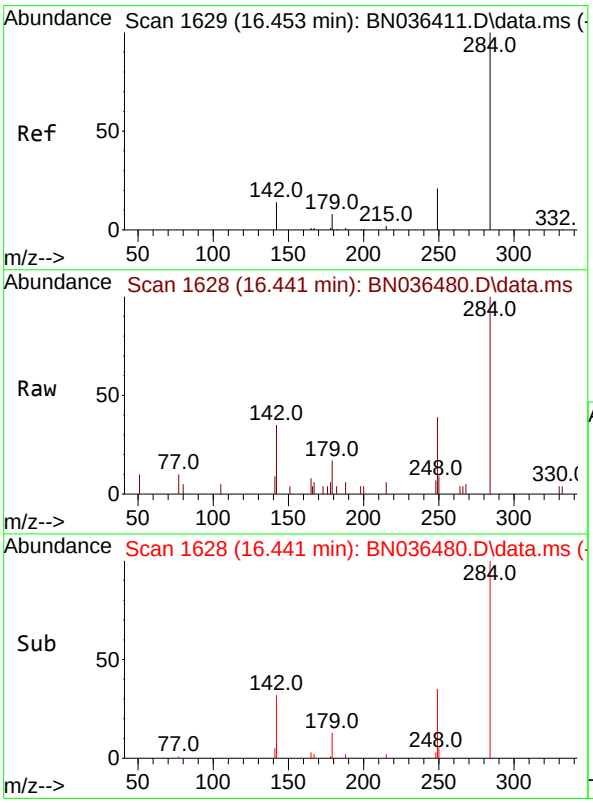
#21
4-Bromophenyl-phenylether
Concen: 0.426 ng
RT: 16.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:248 Resp: 1336

Ion	Ratio	Lower	Upper
248	100		
250	94.7	76.1	114.1
141	65.9	71.7	107.5#

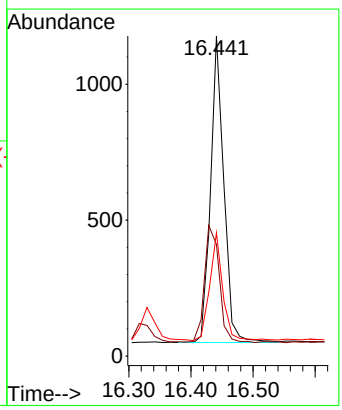


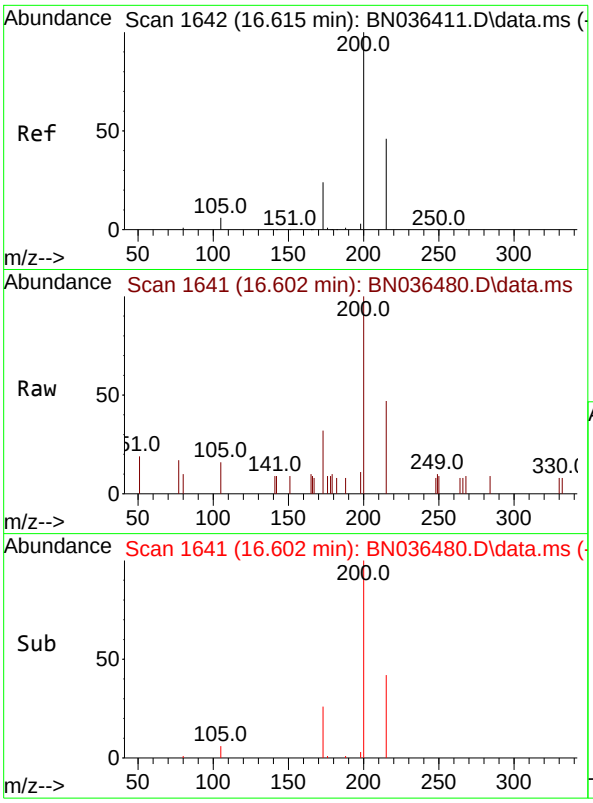


#22
Hexachlorobenzene
Concen: 0.433 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:284 Resp: 1675

Ion	Ratio	Lower	Upper
284	100		
142	42.7	33.4	50.0
249	34.7	28.6	43.0



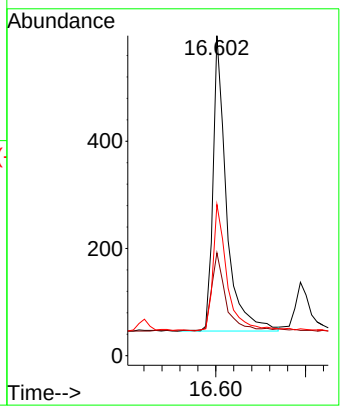


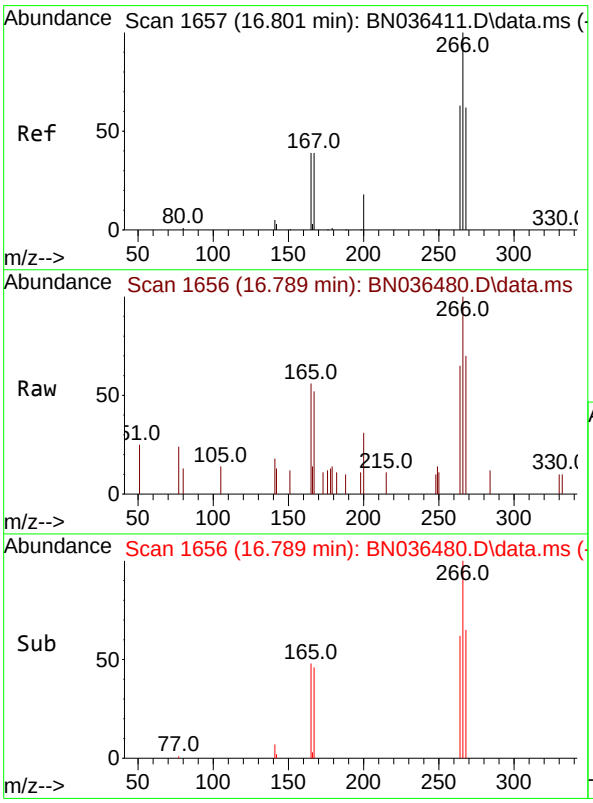
#23
Atrazine
Concen: 0.437 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:200 Resp: 1144

Ion	Ratio	Lower	Upper
200	100		
173	32.2	23.2	34.8
215	47.2	40.0	60.0

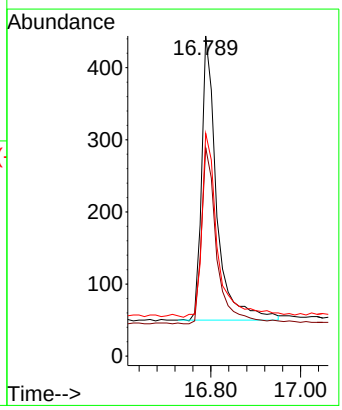


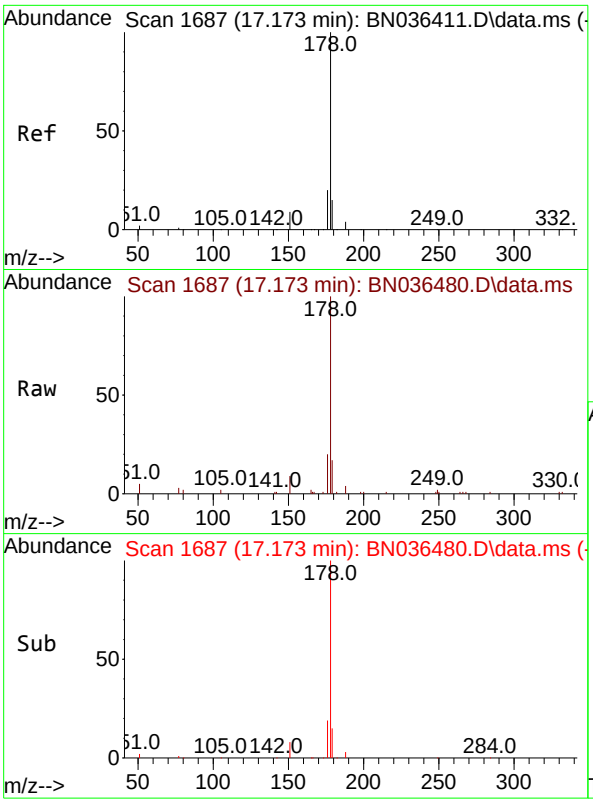


#24
Pentachlorophenol
Concen: 0.498 ng
RT: 16.789 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:266 Resp: 915

Ion	Ratio	Lower	Upper
266	100		
264	63.0	50.6	76.0
268	66.7	51.9	77.9



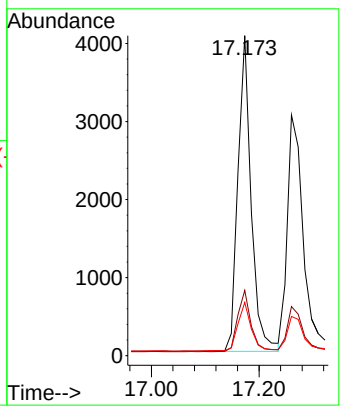


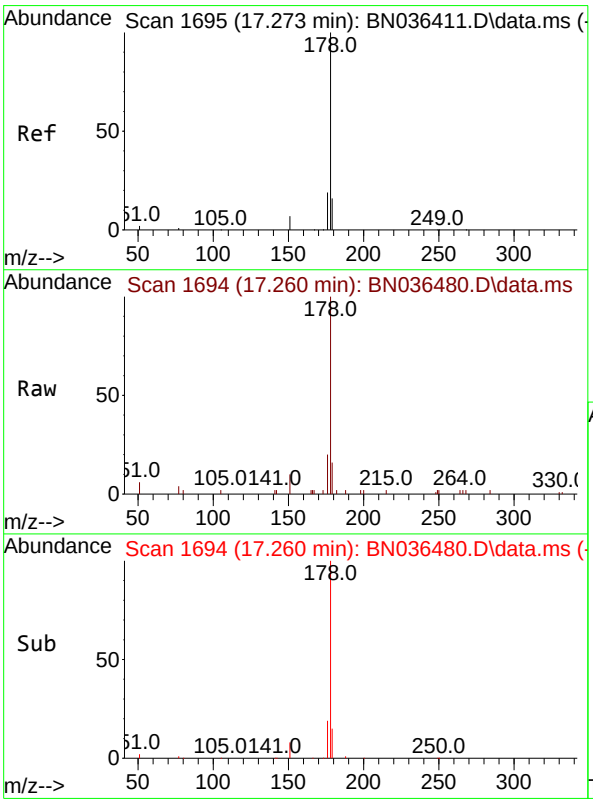
#25
Phenanthrene
Concen: 0.453 ng
RT: 17.173 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:178 Resp: 6880

Ion	Ratio	Lower	Upper
178	100		
176	19.8	15.7	23.5
179	15.8	12.4	18.6

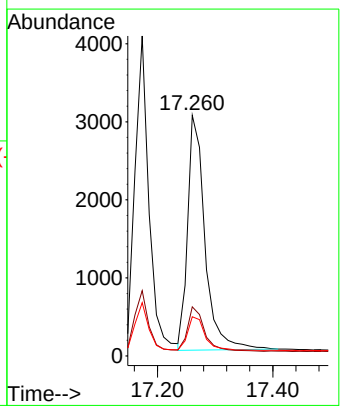


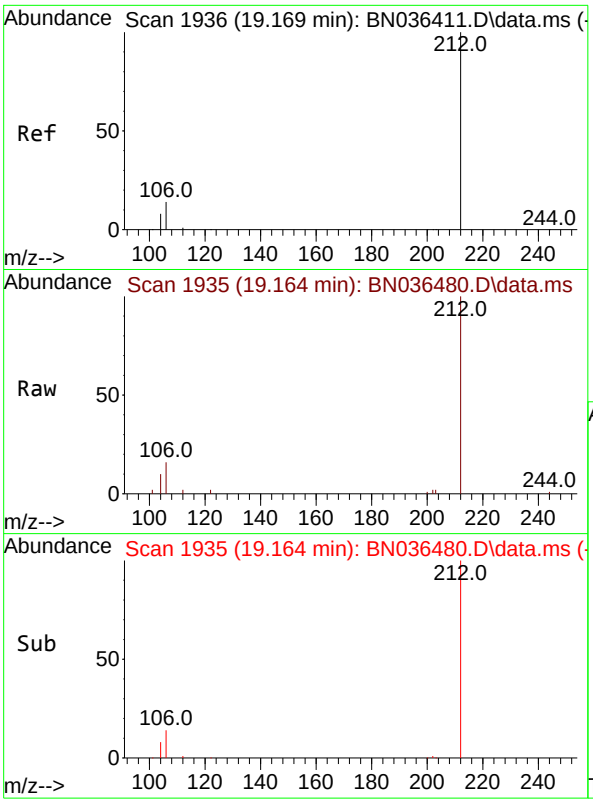


#26
Anthracene
Concen: 0.469 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:178 Resp: 6286

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.9	22.3
179	15.0	12.4	18.6





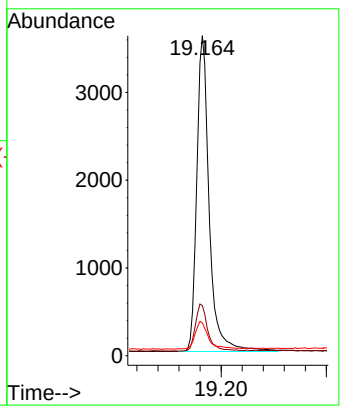
#27
Fluoranthene-d10
Concen: 0.405 ng
RT: 19.164 min Scan# 1

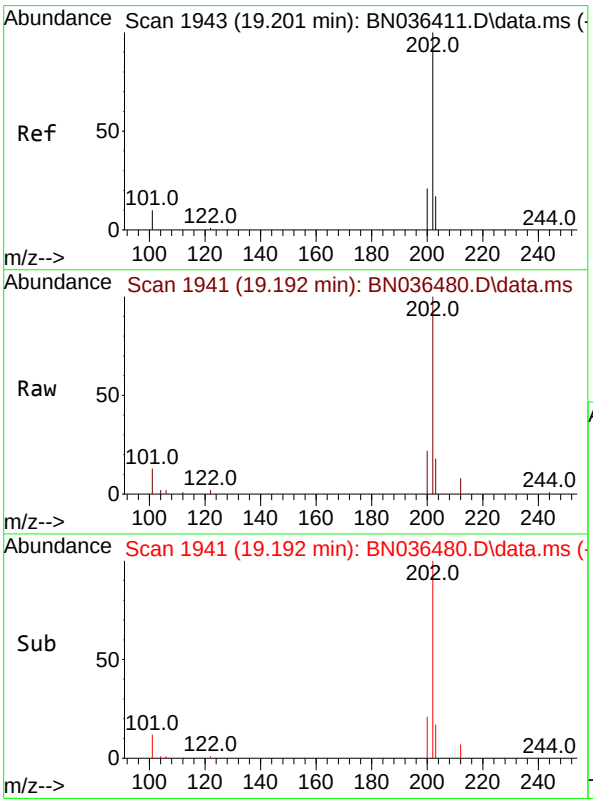
Instrument :
BNA_N
ClientSampleId :
PB166758BS

Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:212 Resp: 5915

Ion	Ratio	Lower	Upper
212	100		
106	14.7	11.5	17.3
104	9.4	7.1	10.7

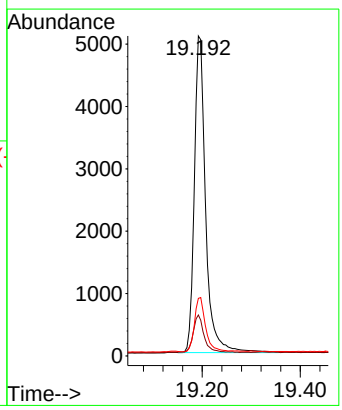


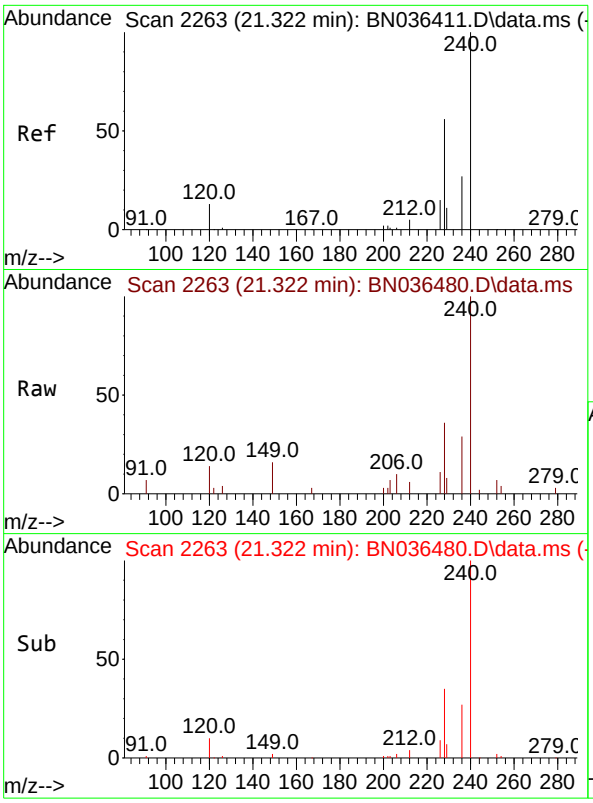


#28
Fluoranthene
Concen: 0.435 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:202 Resp: 8127

Ion	Ratio	Lower	Upper
202	100		
101	11.2	9.2	13.8
203	17.0	13.4	20.0



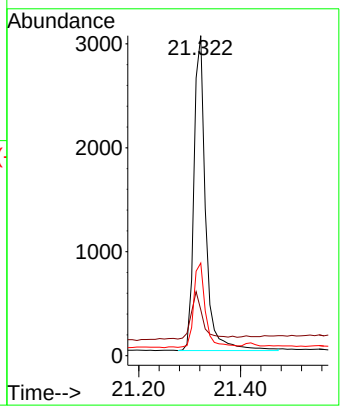


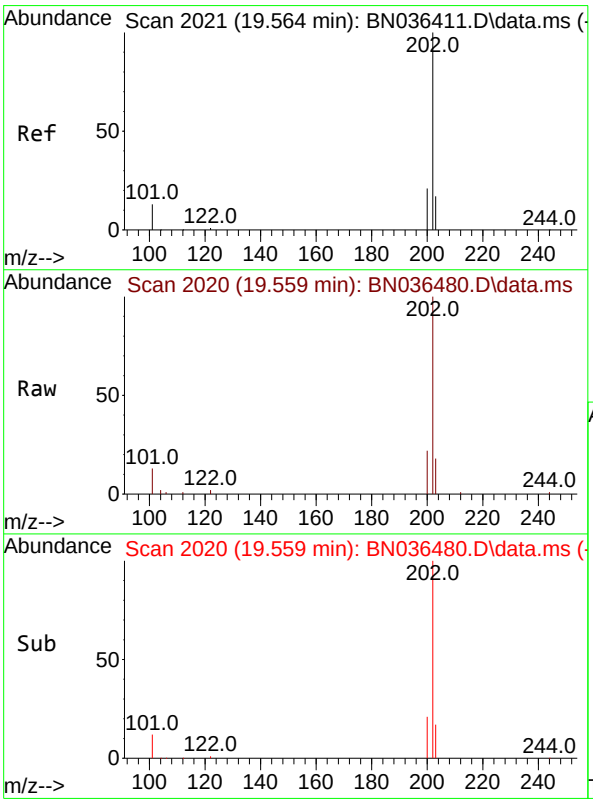
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:240 Resp: 4823

Ion	Ratio	Lower	Upper
240	100		
120	14.4	13.3	19.9
236	28.9	23.0	34.6

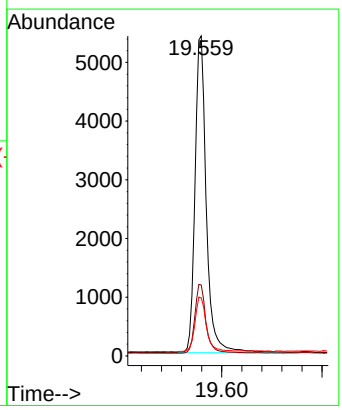


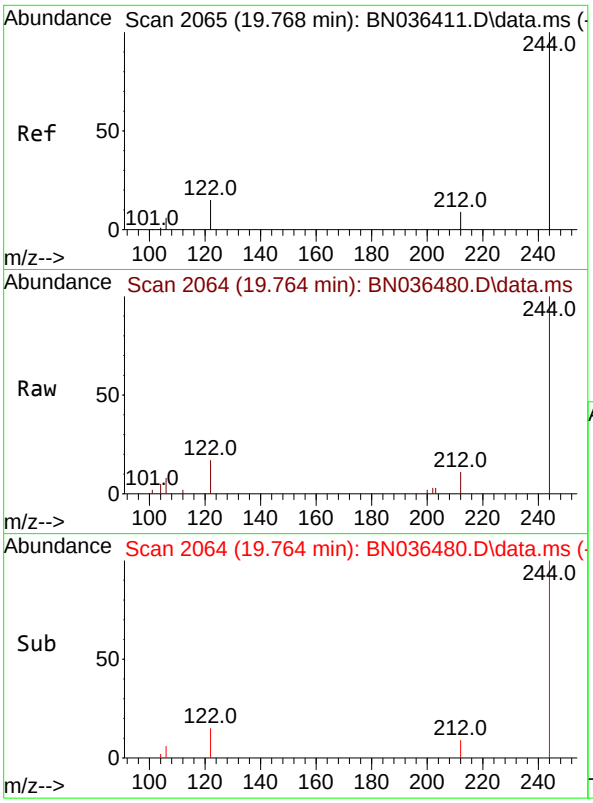


#30
Pyrene
Concen: 0.454 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:202 Resp: 8425

Ion	Ratio	Lower	Upper
202	100		
200	21.3	16.9	25.3
203	17.7	13.9	20.9



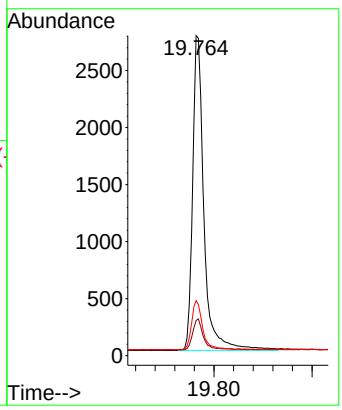


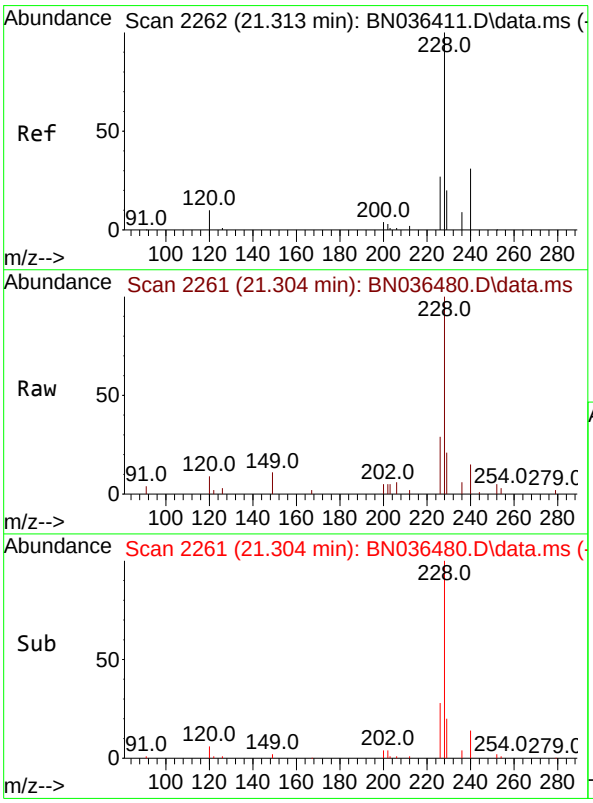
#31
Terphenyl-d14
Concen: 0.430 ng
RT: 19.764 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:244 Resp: 4423

Ion	Ratio	Lower	Upper
244	100		
212	11.0	8.1	12.1
122	17.2	12.8	19.2

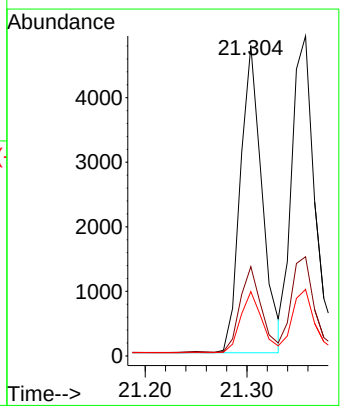


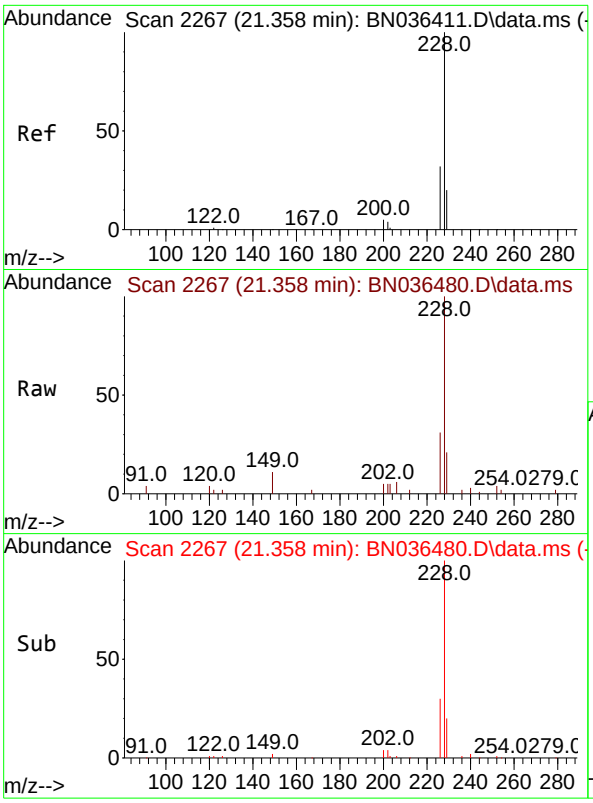


#32
Benzo(a)anthracene
Concen: 0.445 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:228 Resp: 7065

Ion	Ratio	Lower	Upper
228	100		
226	28.8	22.2	33.2
229	20.7	16.5	24.7



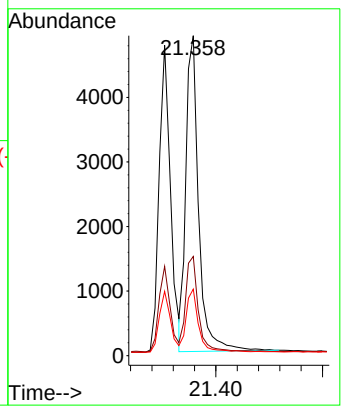


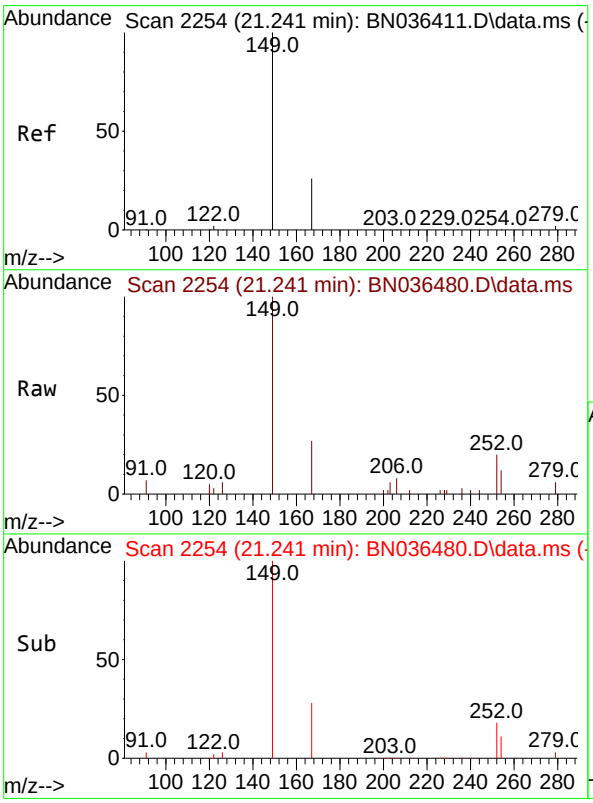
#33
Chrysene
Concen: 0.473 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:228 Resp: 8131

Ion	Ratio	Lower	Upper
228	100		
226	31.0	25.5	38.3
229	20.8	16.4	24.6

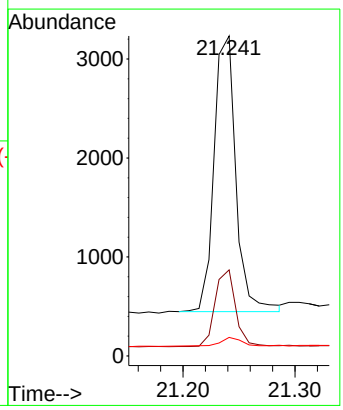


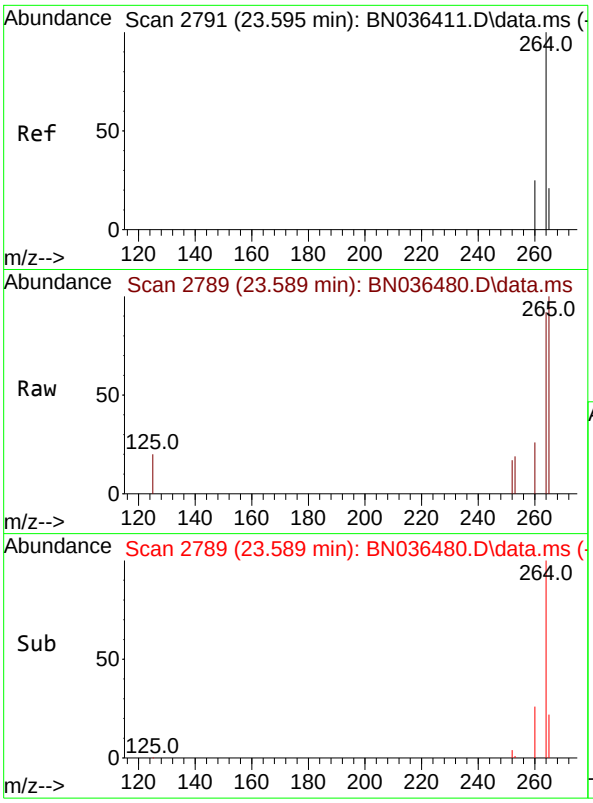


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.382 ng
RT: 21.241 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:149 Resp: 3779

Ion	Ratio	Lower	Upper
149	100		
167	26.6	21.2	31.8
279	3.3	2.7	4.1



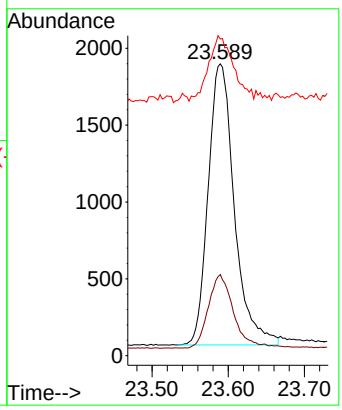


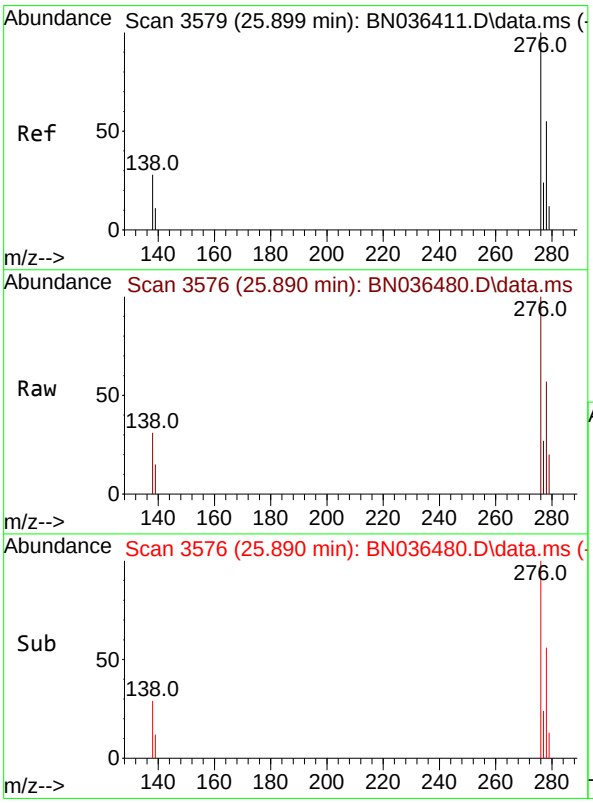
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.589 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:264 Resp: 4362

Ion	Ratio	Lower	Upper
264	100		
260	27.8	20.9	31.3
265	108.5	60.7	91.1#

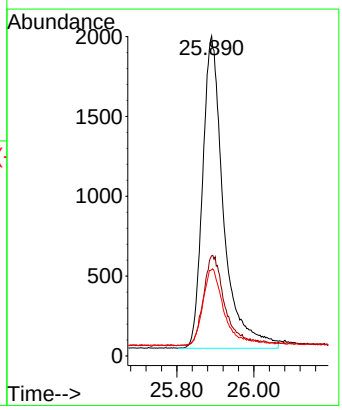


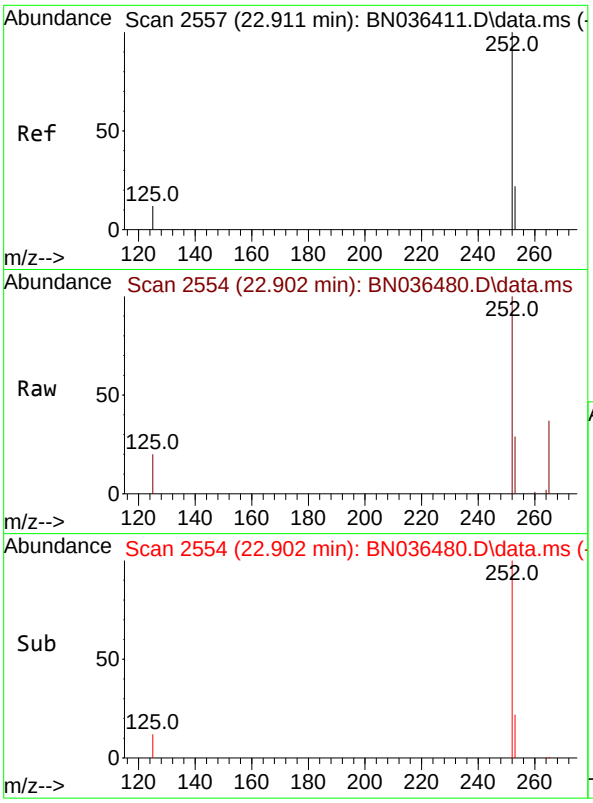


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.482 ng
RT: 25.890 min Scan# 3576
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:276 Resp: 7355

Ion	Ratio	Lower	Upper
276	100		
138	28.6	22.2	33.2
277	24.1	19.8	29.6



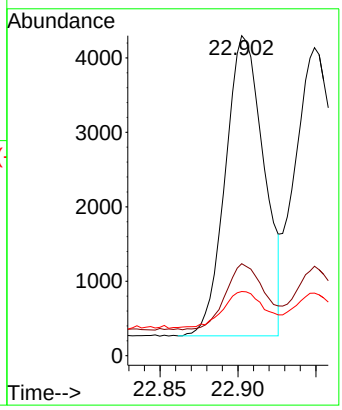


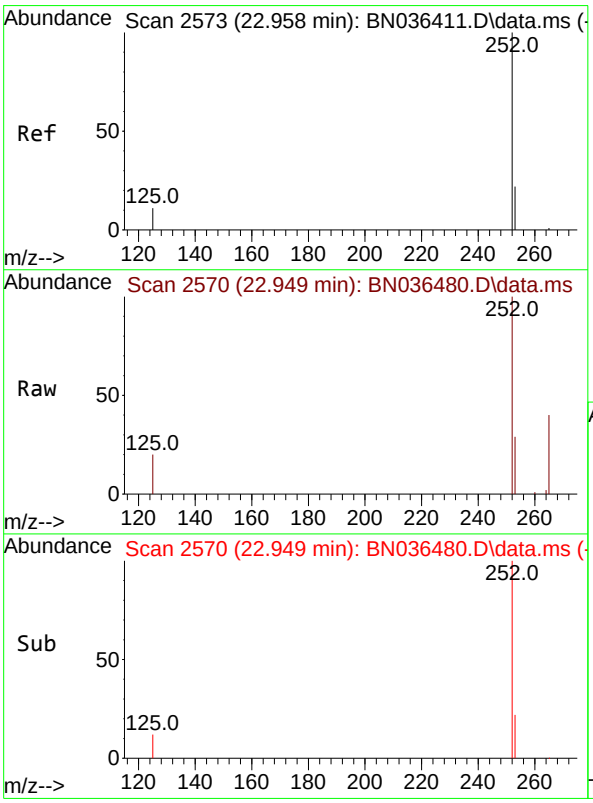
#37
Benzo(b)fluoranthene
Concen: 0.484 ng
RT: 22.902 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:252 Resp: 6950

Ion	Ratio	Lower	Upper
252	100		
253	28.8	21.9	32.9
125	20.1	15.0	22.6

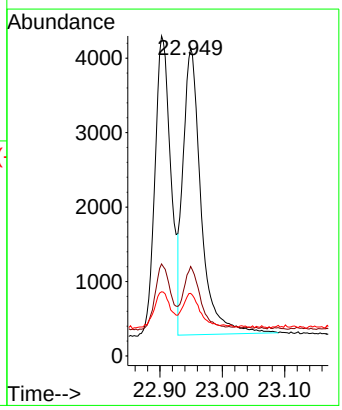


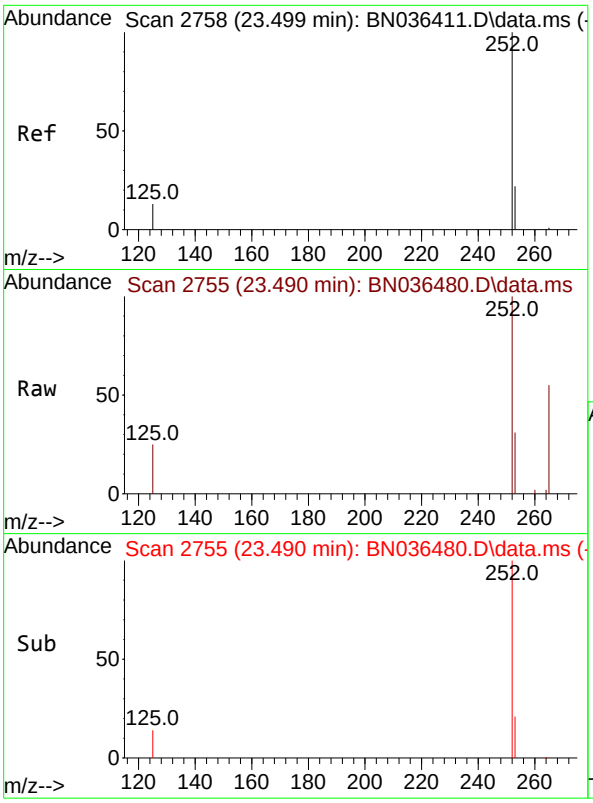


#38
Benzo(k)fluoranthene
Concen: 0.521 ng
RT: 22.949 min Scan# 2570
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:252 Resp: 7711

Ion	Ratio	Lower	Upper
252	100		
253	29.0	22.2	33.4
125	20.3	15.0	22.4



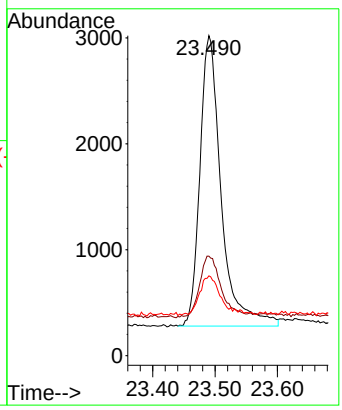


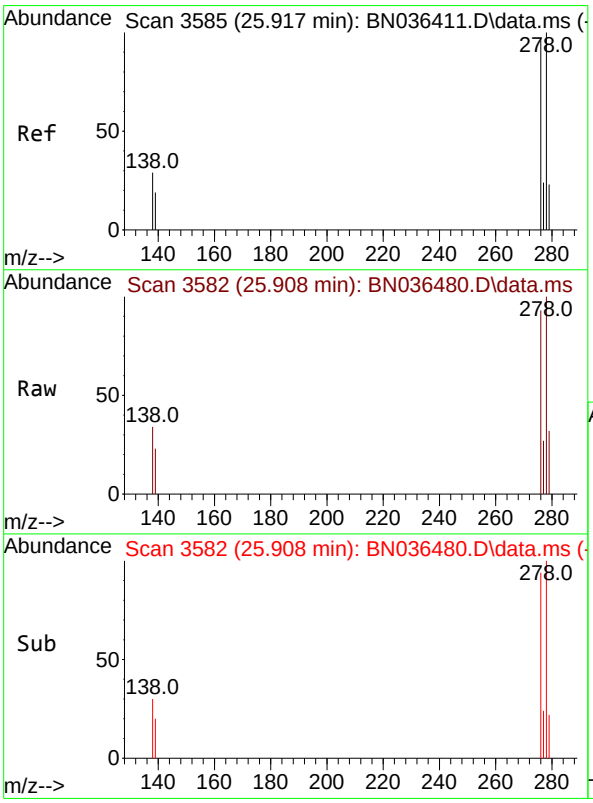
#39
Benzo(a)pyrene
Concen: 0.519 ng
RT: 23.490 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:252 Resp: 6505

Ion	Ratio	Lower	Upper
252	100		
253	31.1	24.4	36.6
125	25.0	18.2	27.2

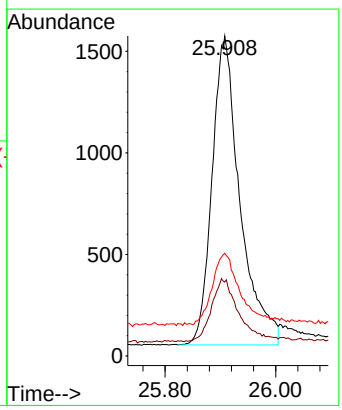


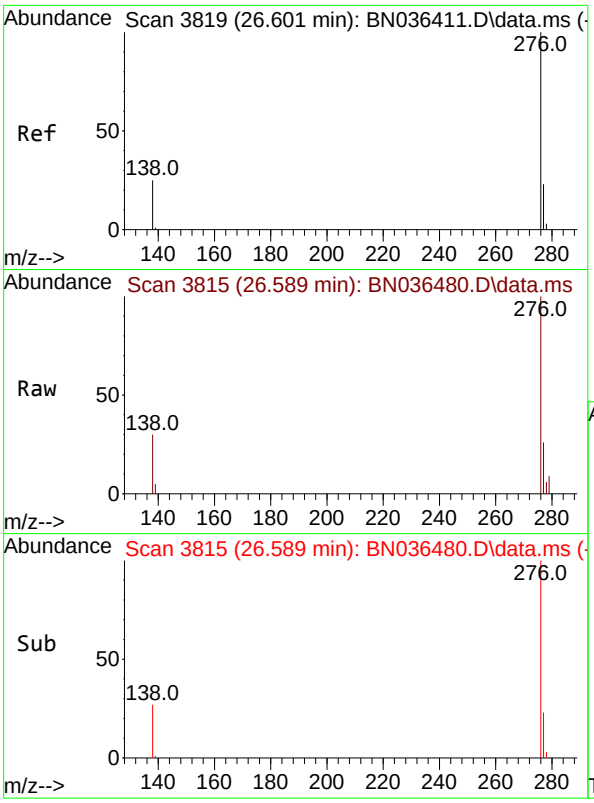


#40
Dibenzo(a,h)anthracene
Concen: 0.443 ng
RT: 25.908 min Scan# 3582
Delta R.T. -0.009 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Tgt Ion:278 Resp: 5331

Ion	Ratio	Lower	Upper
278	100		
139	23.1	18.5	27.7
279	32.0	24.8	37.2



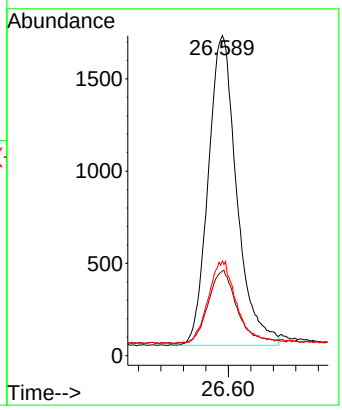


#41
Benzo(g,h,i)perylene
Concen: 0.434 ng
RT: 26.589 min Scan# 3
Delta R.T. -0.012 min
Lab File: BN036480.D
Acq: 20 Feb 2025 14:24

Instrument :
BNA_N
ClientSampleId :
PB166758BS

Tgt Ion:276 Resp: 5921

Ion	Ratio	Lower	Upper
276	100		
277	26.5	20.7	31.1
138	29.6	21.8	32.6



Quantitation Report (Not Reviewed)

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036482.D
Acq On : 20 Feb 2025 16:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Feb 21 00:12:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration

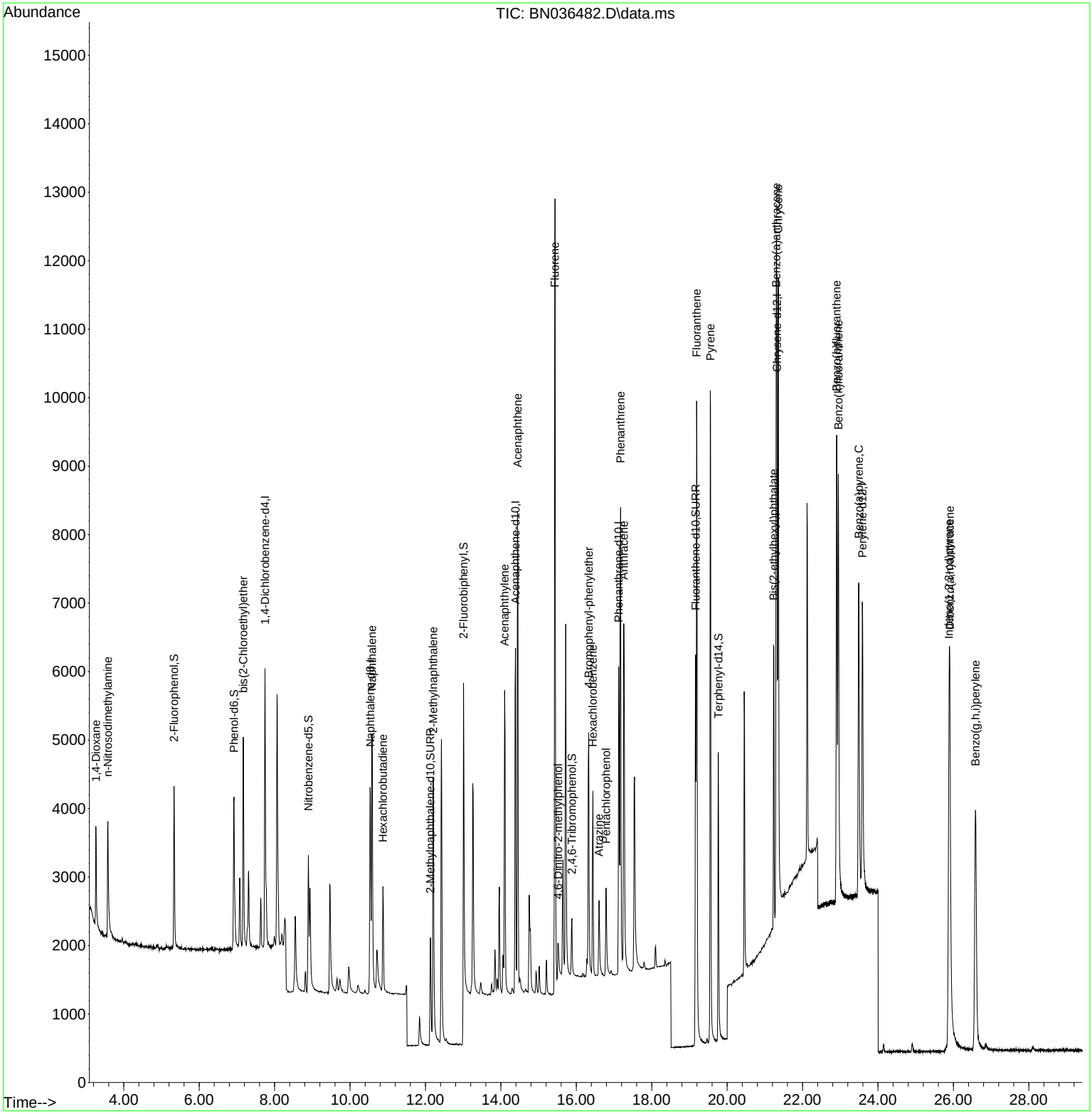
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.746	152	2017	0.400	ng		0.00
7) Naphthalene-d8	10.541	136	4822	0.400	ng	#	0.00
13) Acenaphthene-d10	14.388	164	3262	0.400	ng		0.00
19) Phenanthrene-d10	17.124	188	6914	0.400	ng	#	-0.01
29) Chrysene-d12	21.322	240	6182	0.400	ng	#	0.00
35) Perylene-d12	23.587	264	6375	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.334	112	1821	0.382	ng		-0.01
5) Phenol-d6	6.923	99	2152	0.385	ng		-0.01
8) Nitrobenzene-d5	8.897	82	1892	0.398	ng		-0.01
11) 2-Methylnaphthalene-d10	12.131	152	2847	0.384	ng		-0.01
14) 2,4,6-Tribromophenol	15.883	330	533	0.330	ng		0.00
15) 2-Fluorobiphenyl	13.009	172	5105	0.416	ng		-0.01
27) Fluoranthene-d10	19.164	212	7260	0.378	ng		0.00
31) Terphenyl-d14	19.768	244	4950	0.375	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.261	88	839	0.380	ng		97
3) n-Nitrosodimethylamine	3.579	42	1556	0.406	ng		96
6) bis(2-Chloroethyl)ether	7.168	93	2310	0.395	ng		99
9) Naphthalene	10.584	128	5486	0.394	ng		99
10) Hexachlorobutadiene	10.872	225	1352	0.399	ng	#	99
12) 2-Methylnaphthalene	12.207	142	3576	0.392	ng		98
16) Acenaphthylene	14.099	152	5339	0.371	ng		100
17) Acenaphthene	14.441	154	3586	0.373	ng		99
18) Fluorene	15.435	166	5179	0.378	ng		99
20) 4,6-Dinitro-2-methylph...	15.523	198	443	0.327	ng		93
21) 4-Bromophenyl-phenylether	16.329	248	1615	0.392	ng	#	84
22) Hexachlorobenzene	16.441	284	2053	0.403	ng		98
23) Atrazine	16.602	200	1254	0.364	ng		96
24) Pentachlorophenol	16.789	266	845	0.349	ng		95
25) Phenanthrene	17.173	178	7909	0.396	ng		100
26) Anthracene	17.260	178	6847	0.388	ng		100
28) Fluoranthene	19.192	202	9570	0.390	ng		99
30) Pyrene	19.559	202	9761	0.410	ng		99
32) Benzo(a)anthracene	21.304	228	7952	0.391	ng		99
33) Chrysene	21.358	228	9374	0.426	ng		99
34) Bis(2-ethylhexyl)phtha...	21.232	149	4422	0.349	ng		99
36) Indeno(1,2,3-cd)pyrene	25.885	276	8878	0.398	ng		99
37) Benzo(b)fluoranthene	22.902	252	8760	0.417	ng		98
38) Benzo(k)fluoranthene	22.949	252	8815	0.408	ng		99
39) Benzo(a)pyrene	23.490	252	7583	0.414	ng		96
40) Dibenzo(a,h)anthracene	25.905	278	6854	0.390	ng		99
41) Benzo(g,h,i)perylene	26.586	276	7966	0.400	ng		98

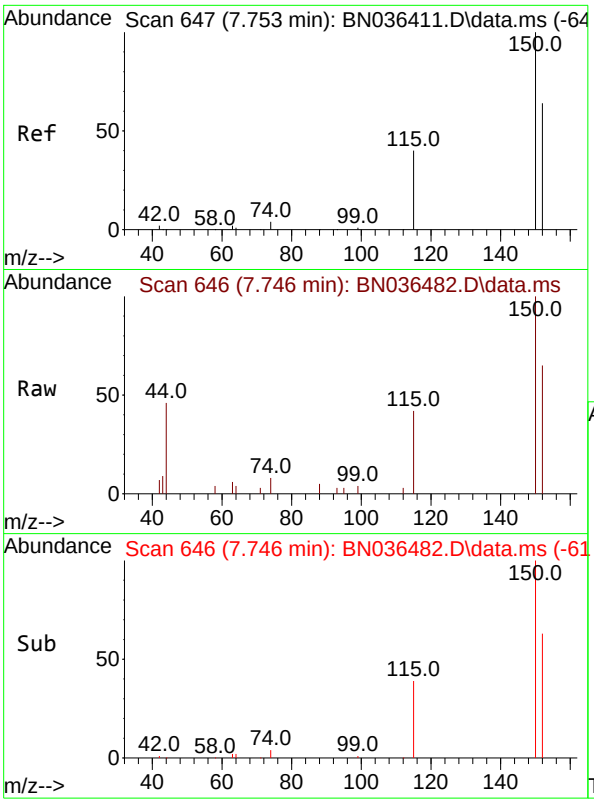
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN022025\
Data File : BN036482.D
Acq On : 20 Feb 2025 16:08
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Feb 21 00:12:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN021025.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Feb 11 01:17:14 2025
Response via : Initial Calibration



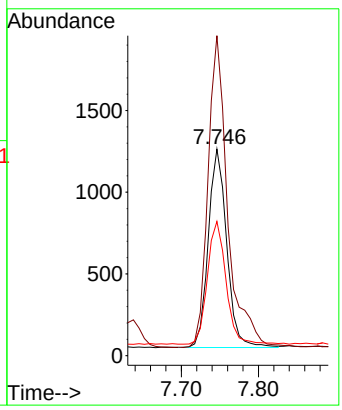


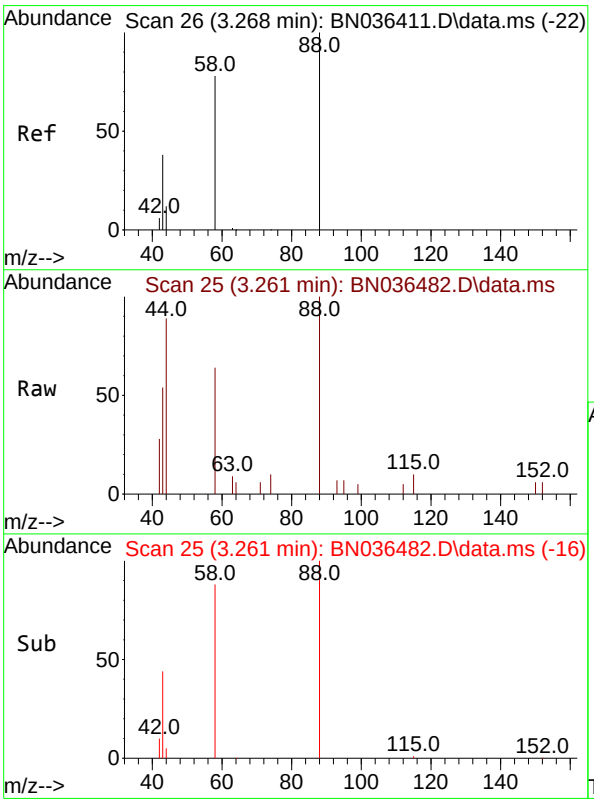
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.746 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2017

Ion	Ratio	Lower	Upper
152	100		
150	154.9	123.7	185.5
115	65.0	52.5	78.7

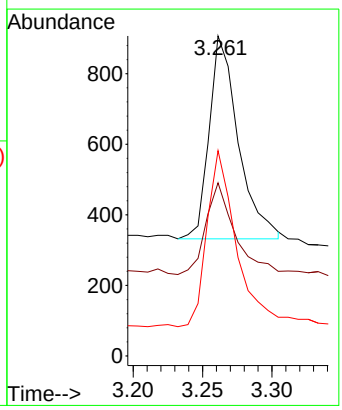


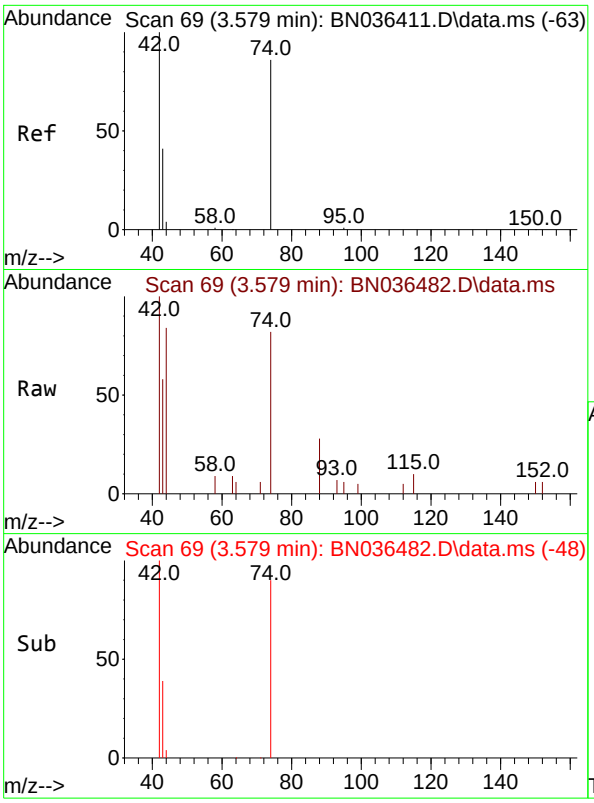


#2
1,4-Dioxane
Concen: 0.380 ng
RT: 3.261 min Scan# 25
Delta R.T. -0.007 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 88 Resp: 839

Ion	Ratio	Lower	Upper
88	100		
43	45.4	33.7	50.5
58	88.0	68.9	103.3



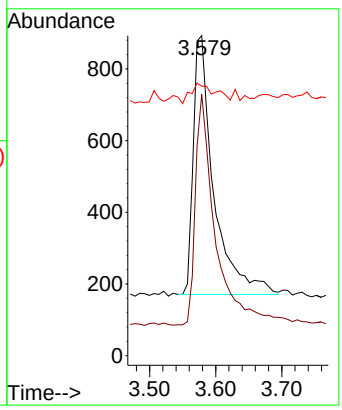


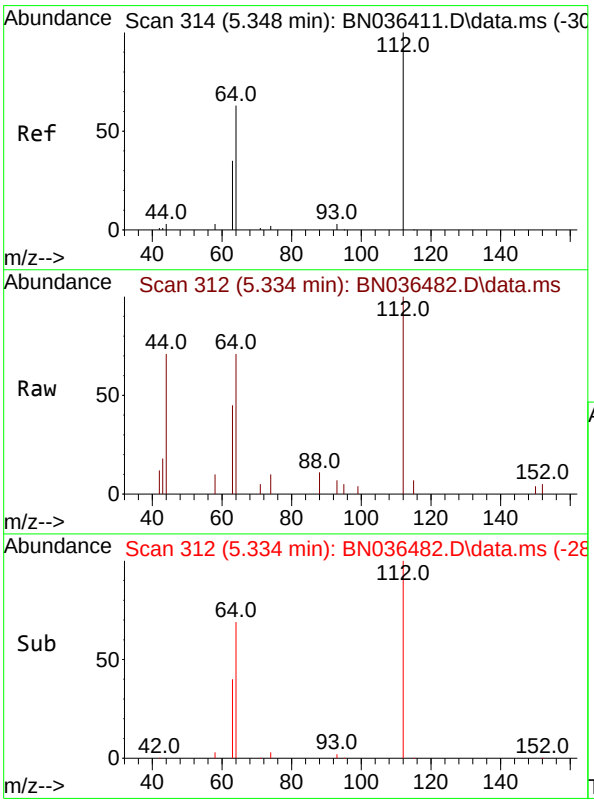
#3
n-Nitrosodimethylamine
Concen: 0.406 ng
RT: 3.579 min Scan# 6
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1556

Ion	Ratio	Lower	Upper
42	100		
74	85.9	71.8	107.6
44	9.6	7.8	11.6

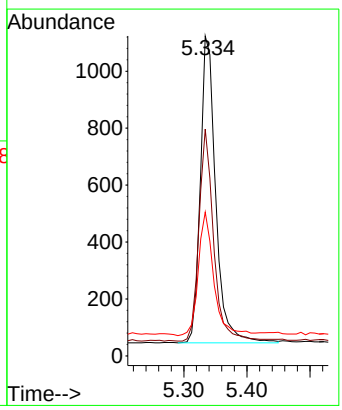


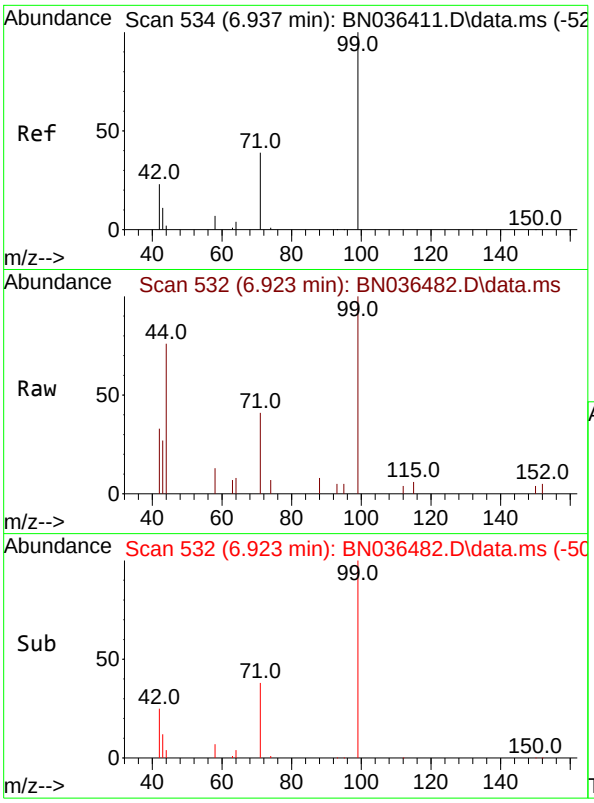


#4
2-Fluorophenol
Concen: 0.382 ng
RT: 5.334 min Scan# 312
Delta R.T. -0.014 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:112 Resp: 1821

Ion	Ratio	Lower	Upper
112	100		
64	66.1	53.4	80.0
63	40.9	30.3	45.5



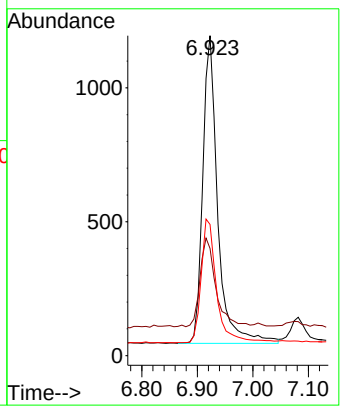


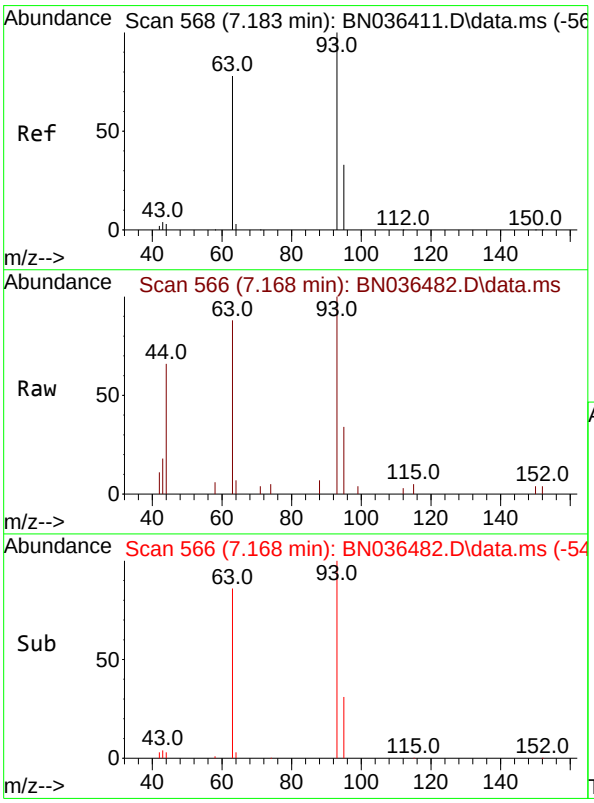
#5
Phenol-d6
Concen: 0.385 ng
RT: 6.923 min Scan# 5
Delta R.T. -0.014 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 2152

Ion	Ratio	Lower	Upper
99	100		
42	30.4	21.7	32.5
71	41.6	32.6	49.0

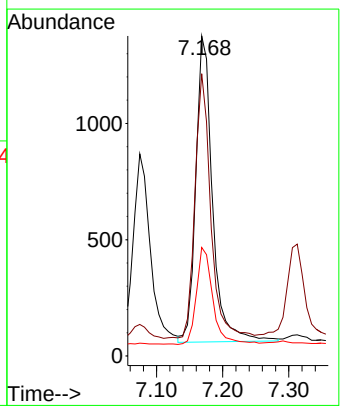


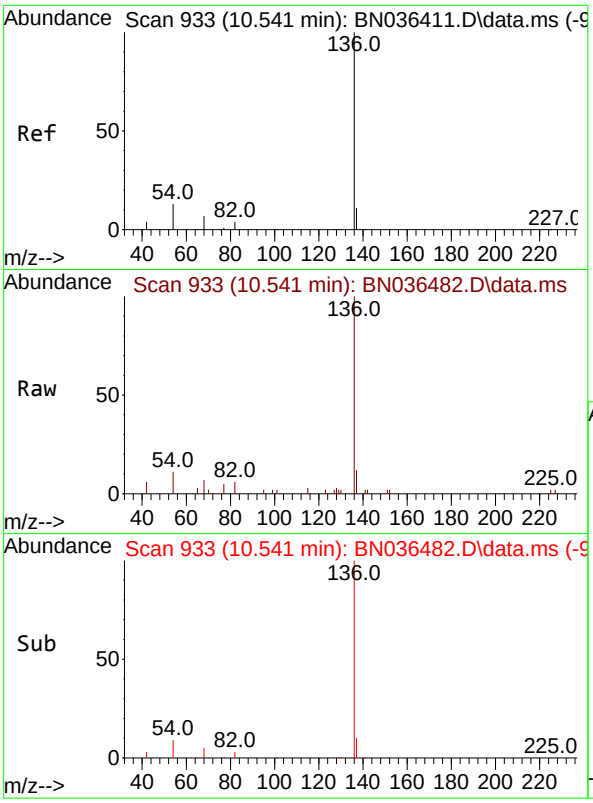


#6
bis(2-Chloroethyl)ether
Concen: 0.395 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.014 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 93 Resp: 2310

Ion	Ratio	Lower	Upper
93	100		
63	82.3	66.3	99.5
95	31.2	26.2	39.4



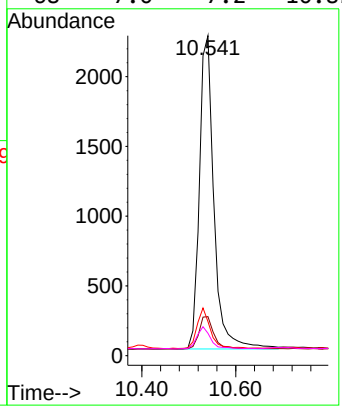


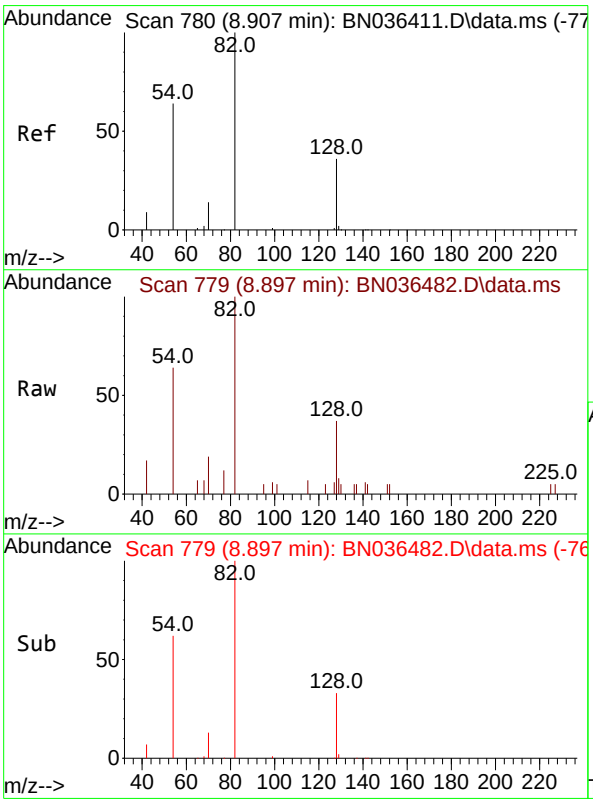
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.541 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 4822

Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.1	15.1
54	10.6	11.8	17.6#
68	7.0	7.2	10.8#

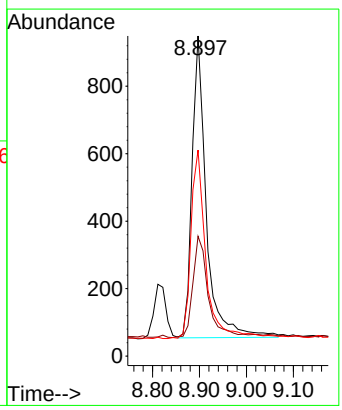


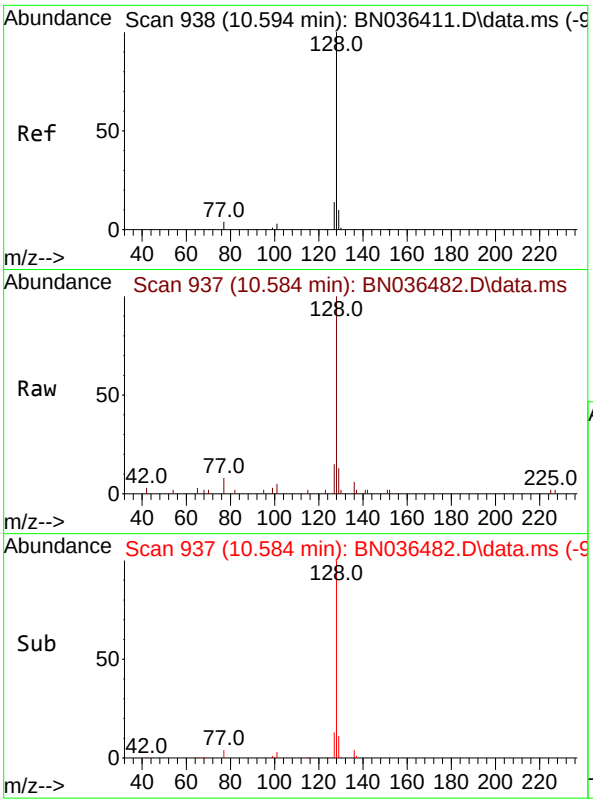


#8
Nitrobenzene-d5
Concen: 0.398 ng
RT: 8.897 min Scan# 779
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion: 82 Resp: 1892

Ion	Ratio	Lower	Upper
82	100		
128	37.4	31.9	47.9
54	64.4	53.1	79.7



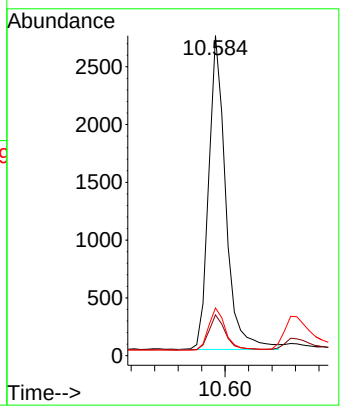


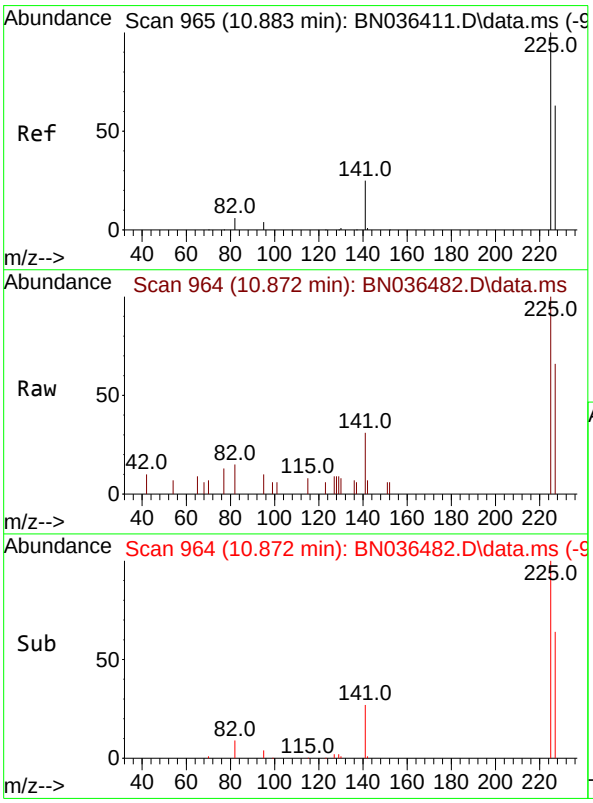
#9
Naphthalene
Concen: 0.394 ng
RT: 10.584 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 5486

Ion	Ratio	Lower	Upper
128	100		
129	12.7	9.6	14.4
127	14.9	12.0	18.0

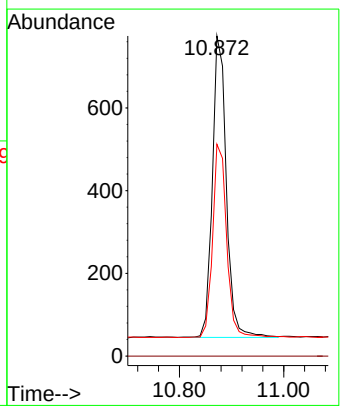


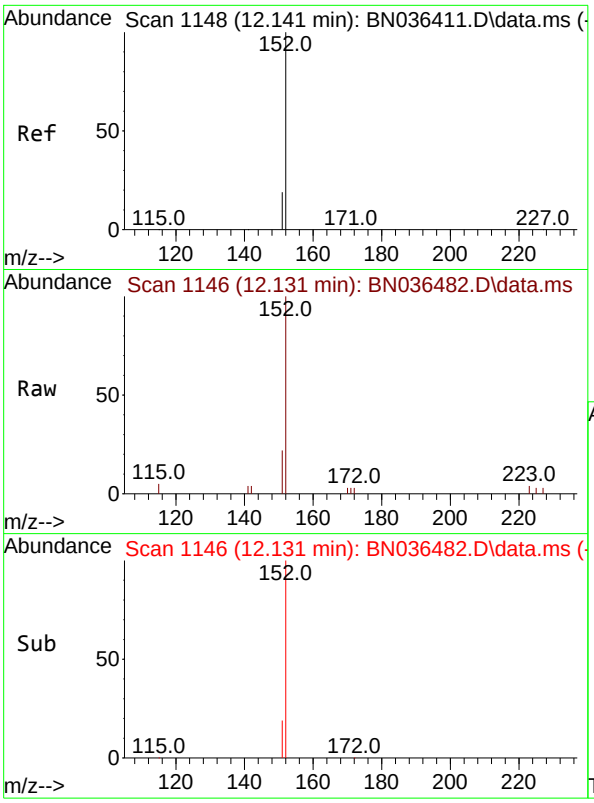


#10
Hexachlorobutadiene
Concen: 0.399 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:225 Resp: 1352

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.6	50.9	76.3



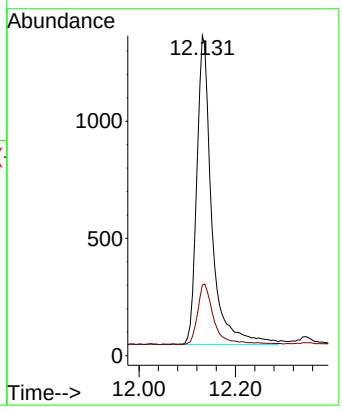


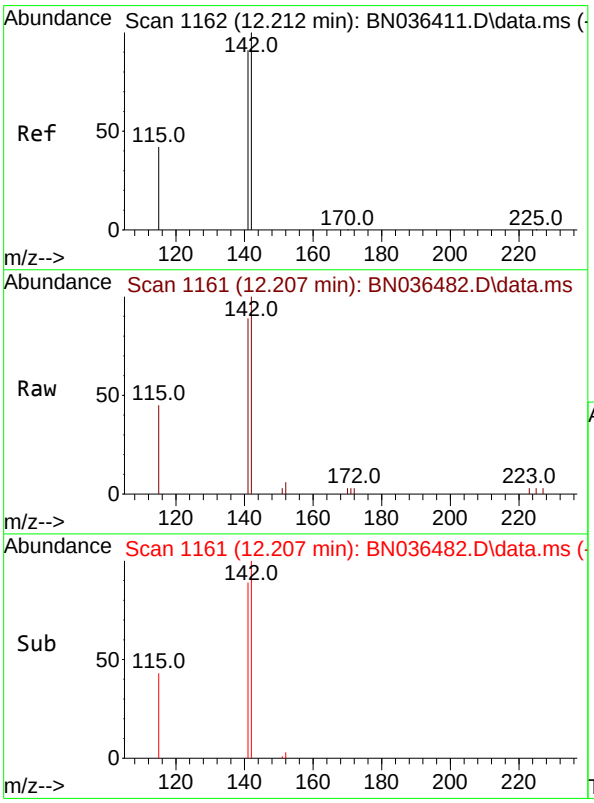
#11
2-Methylnaphthalene-d10
Concen: 0.384 ng
RT: 12.131 min Scan# 11
Delta R.T. -0.010 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2847

Ion	Ratio	Lower	Upper
152	100		
151	21.8	16.6	25.0

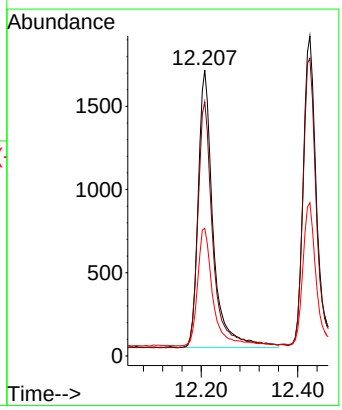


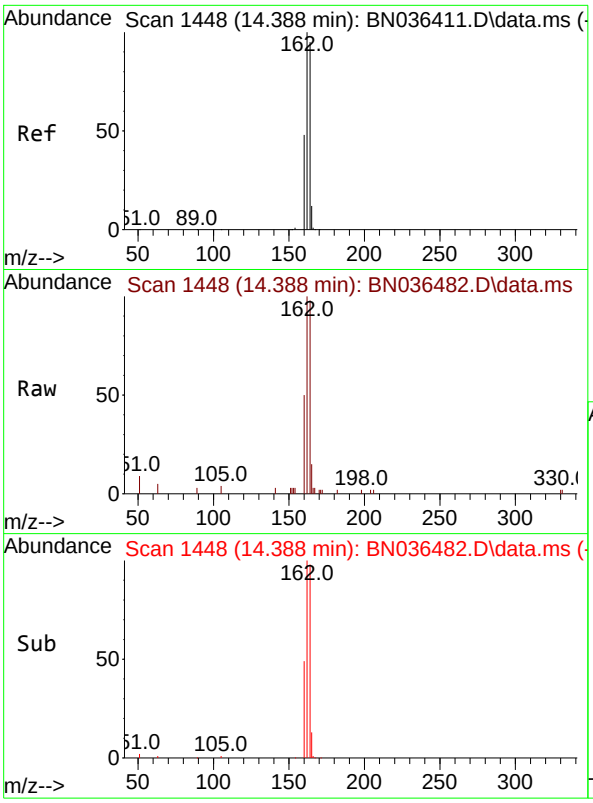


#12
2-Methylnaphthalene
Concen: 0.392 ng
RT: 12.207 min Scan# 1161
Delta R.T. -0.005 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:142 Resp: 3576

Ion	Ratio	Lower	Upper
142	100		
141	88.9	72.8	109.2
115	44.6	35.5	53.3



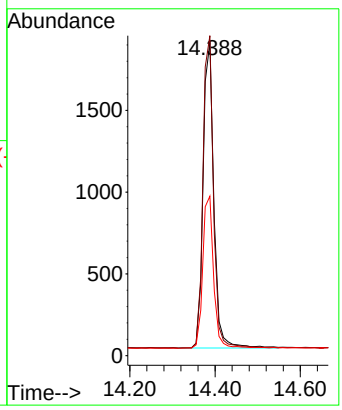


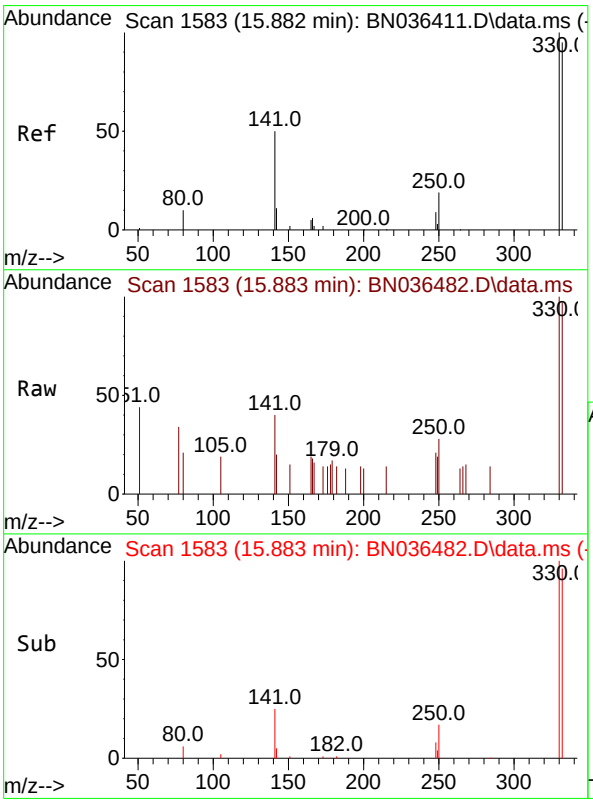
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.388 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 3262

Ion	Ratio	Lower	Upper
164	100		
162	102.1	84.1	126.1
160	50.9	41.4	62.0

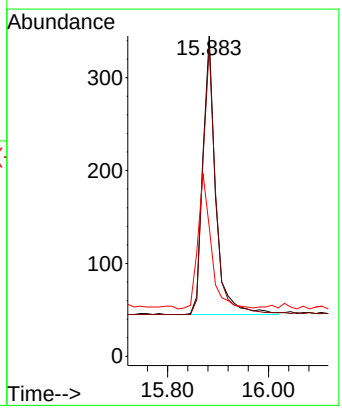


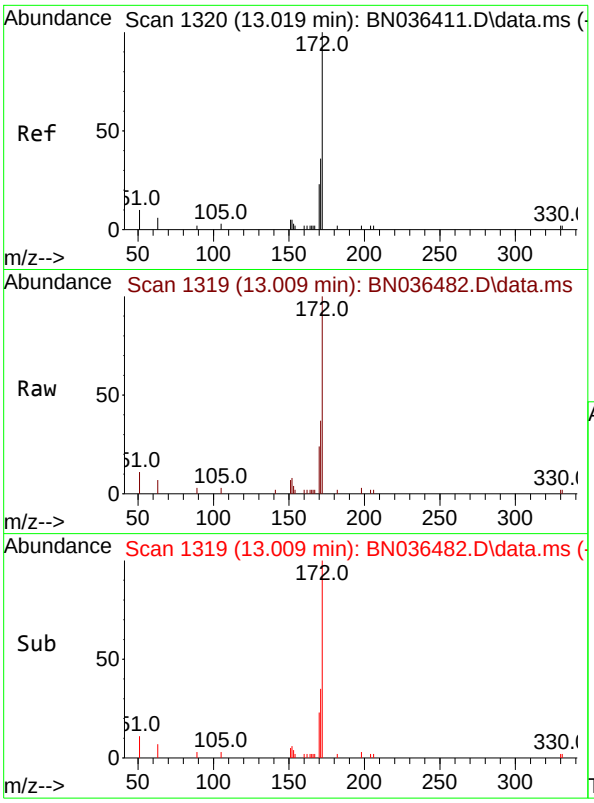


#14
2,4,6-Tribromophenol
Concen: 0.330 ng
RT: 15.883 min Scan# 1583
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:330 Resp: 533

Ion	Ratio	Lower	Upper
330	100		
332	96.6	76.6	114.8
141	49.9	37.8	56.8



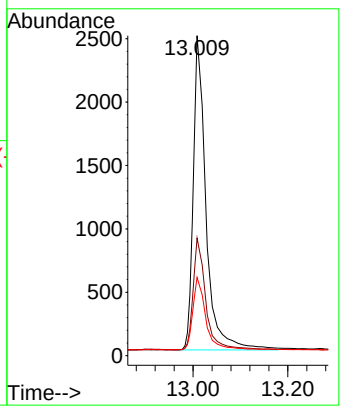


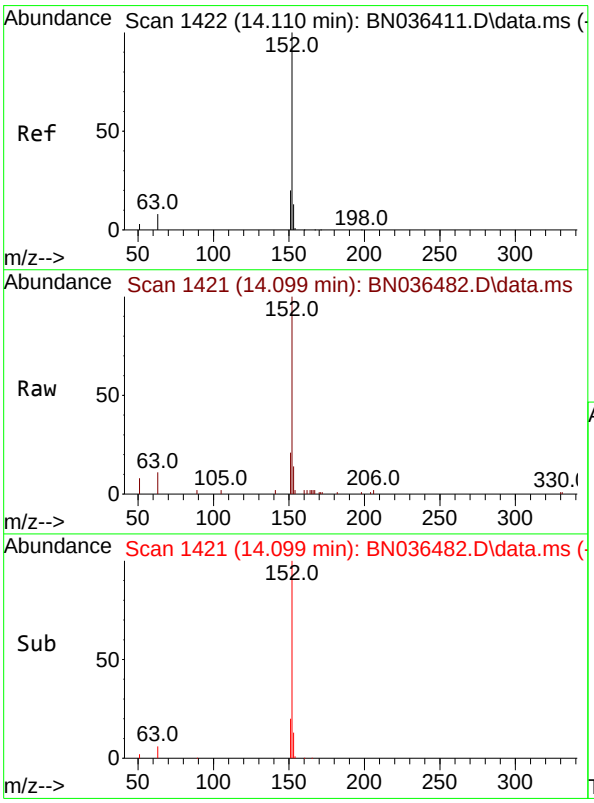
#15
2-Fluorobiphenyl
Concen: 0.416 ng
RT: 13.009 min Scan# 1
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 5105

Ion	Ratio	Lower	Upper
172	100		
171	36.7	29.6	44.4
170	24.4	19.8	29.6

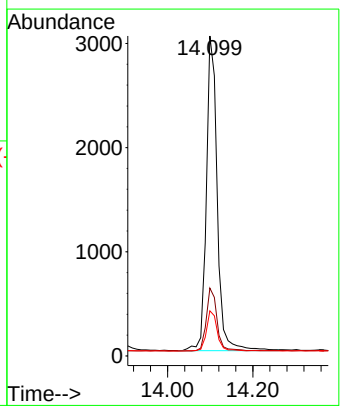


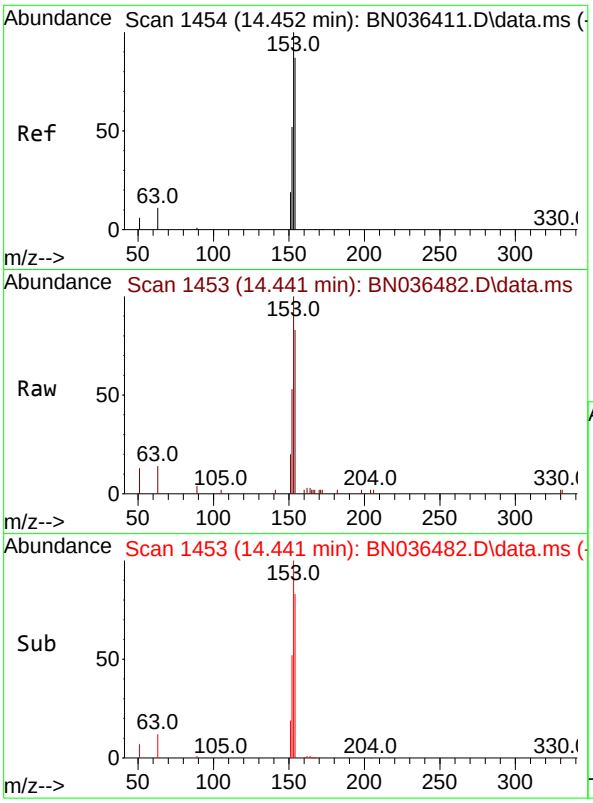


#16
Acenaphthylene
Concen: 0.371 ng
RT: 14.099 min Scan# 1421
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:152 Resp: 5339

Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.8	23.8
153	12.6	10.2	15.2



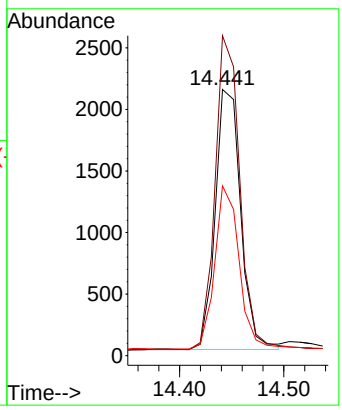


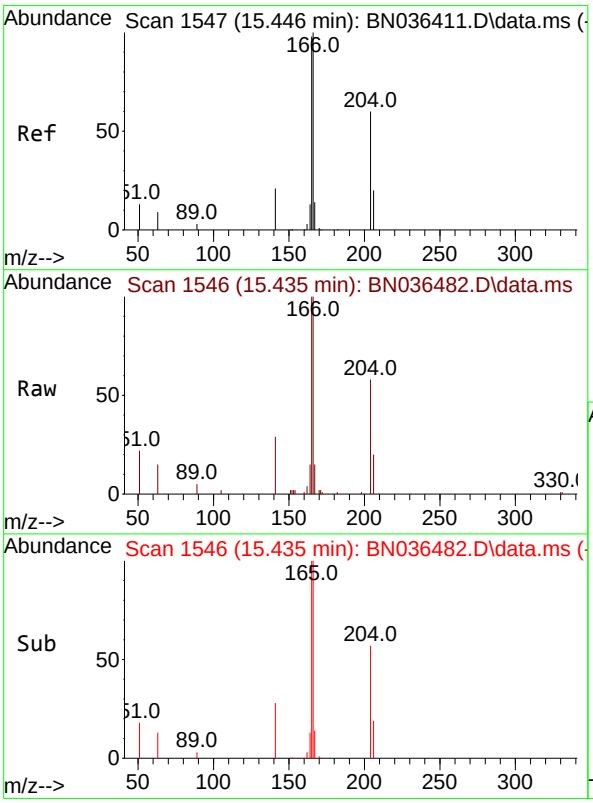
#17
Acenaphthene
Concen: 0.373 ng
RT: 14.441 min Scan# 14
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3586

Ion	Ratio	Lower	Upper
154	100		
153	118.5	93.3	139.9
152	61.0	48.8	73.2

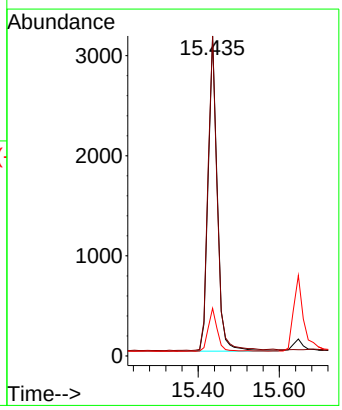


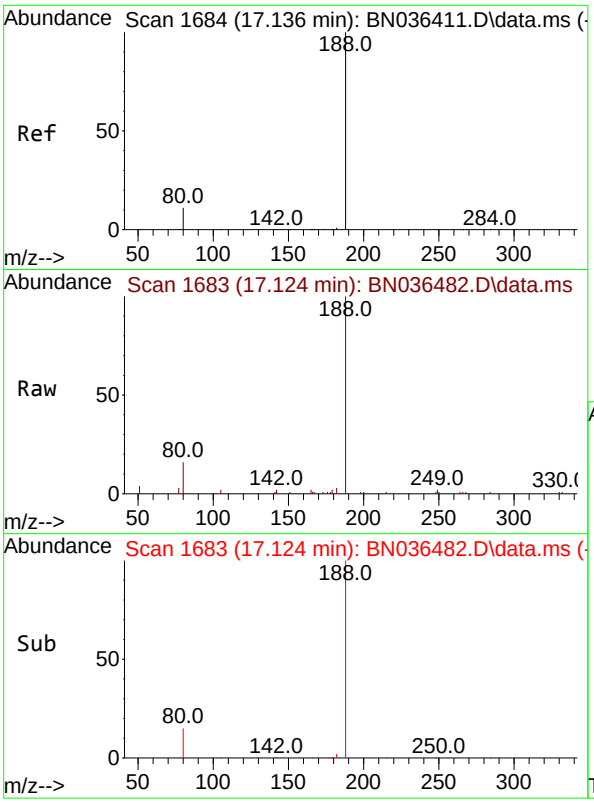


#18
Fluorene
Concen: 0.378 ng
RT: 15.435 min Scan# 1546
Delta R.T. -0.011 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:166 Resp: 5179

Ion	Ratio	Lower	Upper
166	100		
165	99.0	79.5	119.3
167	13.8	10.4	15.6



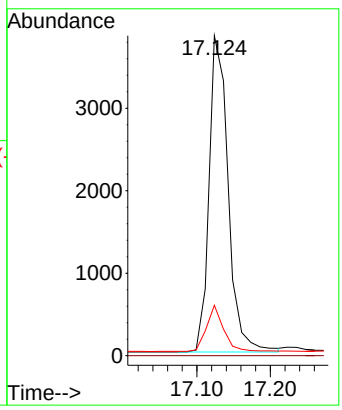


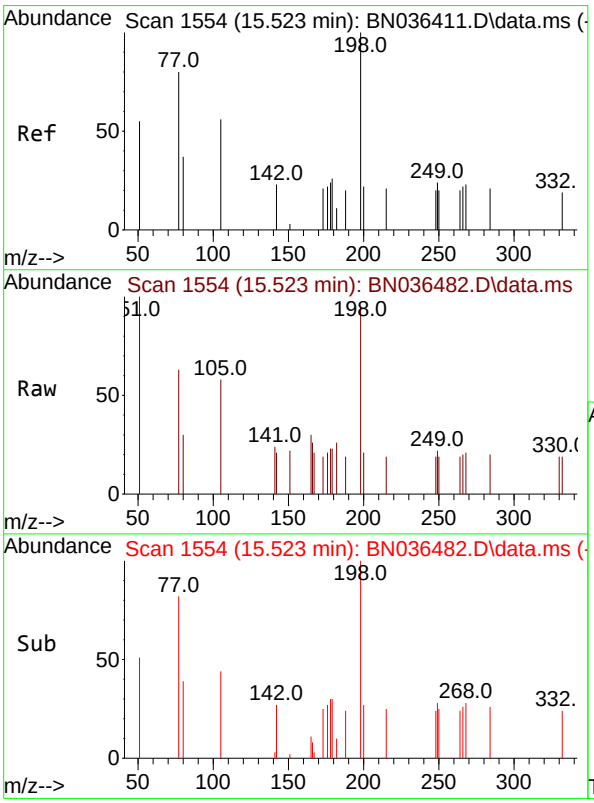
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.124 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 6914

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	15.8	9.8	14.6#

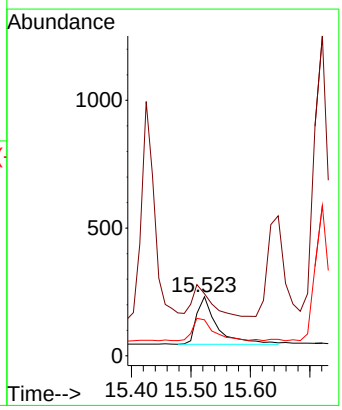


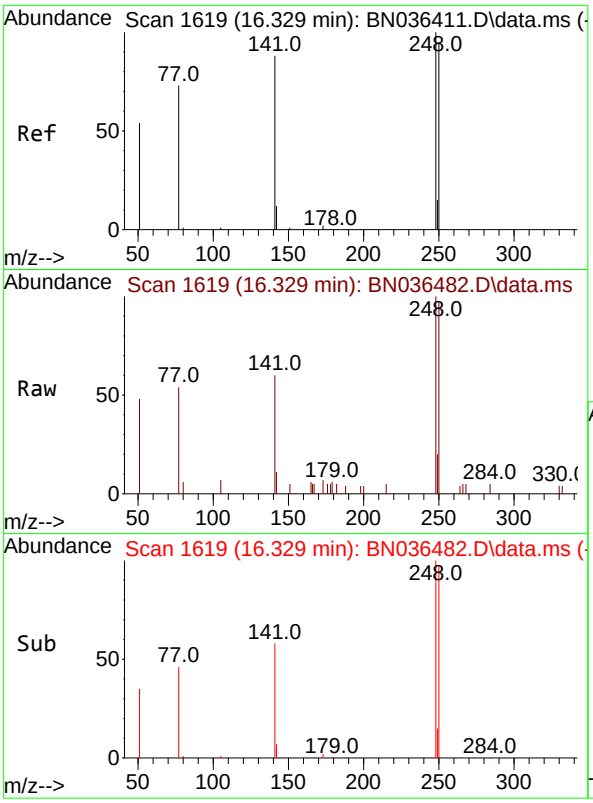


#20
4,6-Dinitro-2-methylphenol
Concen: 0.327 ng
RT: 15.523 min Scan# 1554
Delta R.T. -0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:198 Resp: 443

Ion	Ratio	Lower	Upper
198	100		
51	105.2	86.6	129.8
105	61.0	57.5	86.3



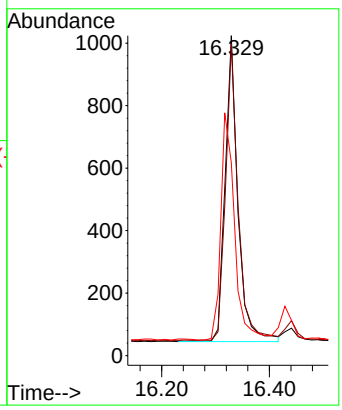


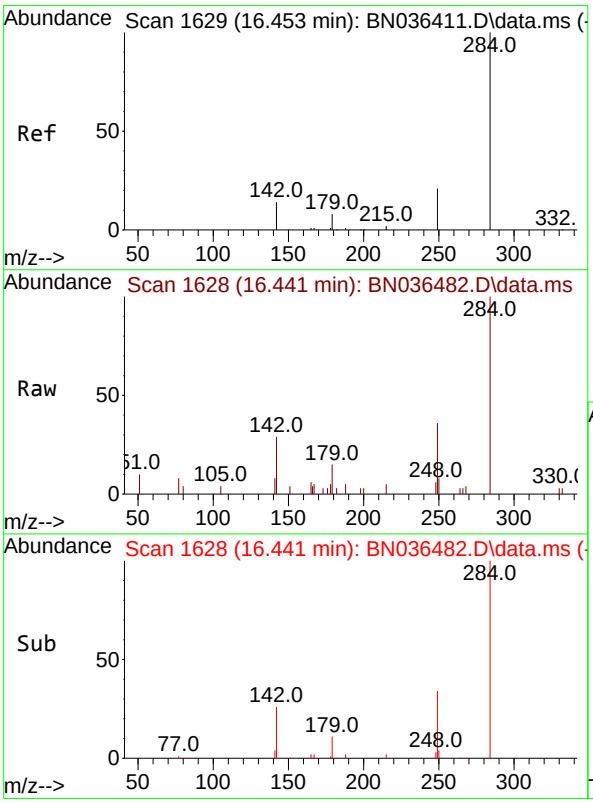
#21
4-Bromophenyl-phenylether
Concen: 0.392 ng
RT: 16.329 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1615

Ion	Ratio	Lower	Upper
248	100		
250	97.5	76.1	114.1
141	60.3	71.7	107.5#

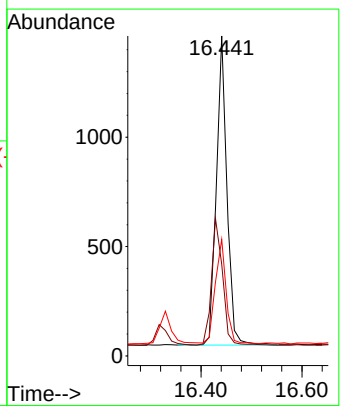


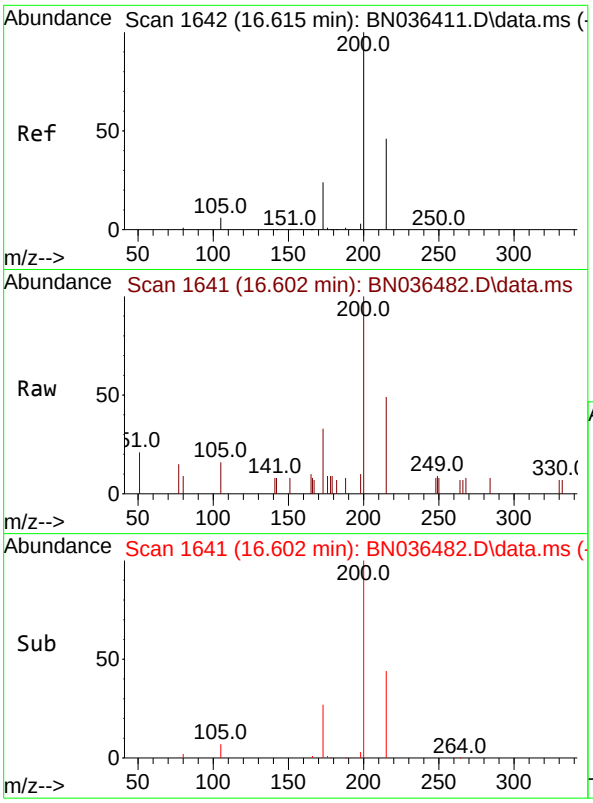


#22
Hexachlorobenzene
Concen: 0.403 ng
RT: 16.441 min Scan# 1628
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:284 Resp: 2053

Ion	Ratio	Lower	Upper
284	100		
142	43.4	33.4	50.0
249	34.5	28.6	43.0



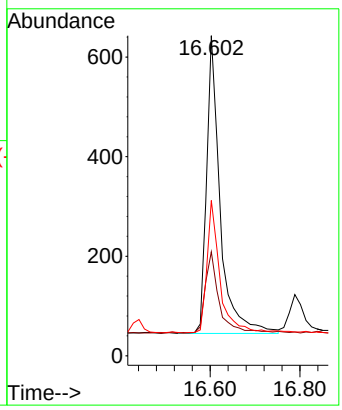


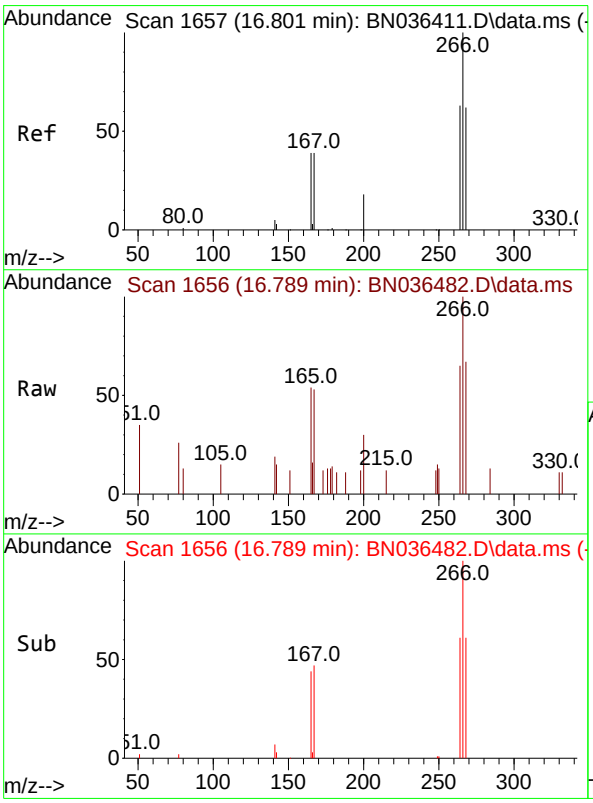
#23
Atrazine
Concen: 0.364 ng
RT: 16.602 min Scan# 1
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 1254

Ion	Ratio	Lower	Upper
200	100		
173	32.5	23.2	34.8
215	48.5	40.0	60.0

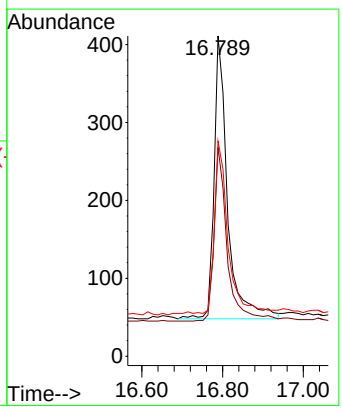


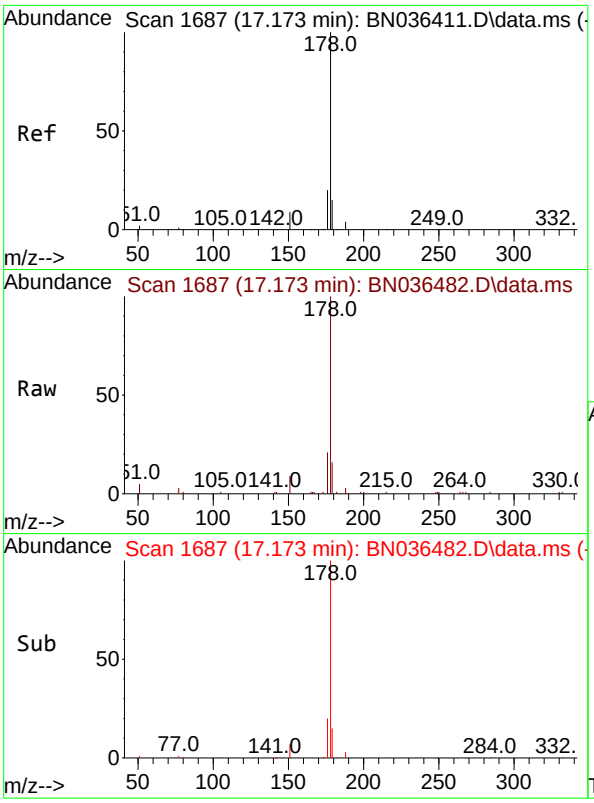


#24
Pentachlorophenol
Concen: 0.349 ng
RT: 16.789 min Scan# 1656
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:266 Resp: 845

Ion	Ratio	Lower	Upper
266	100		
264	59.2	50.6	76.0
268	60.7	51.9	77.9



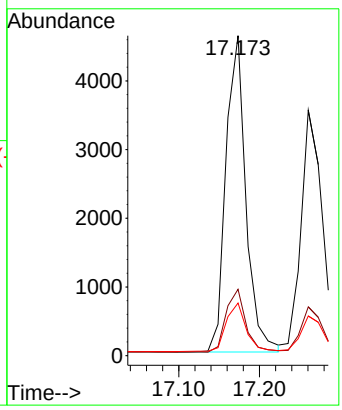


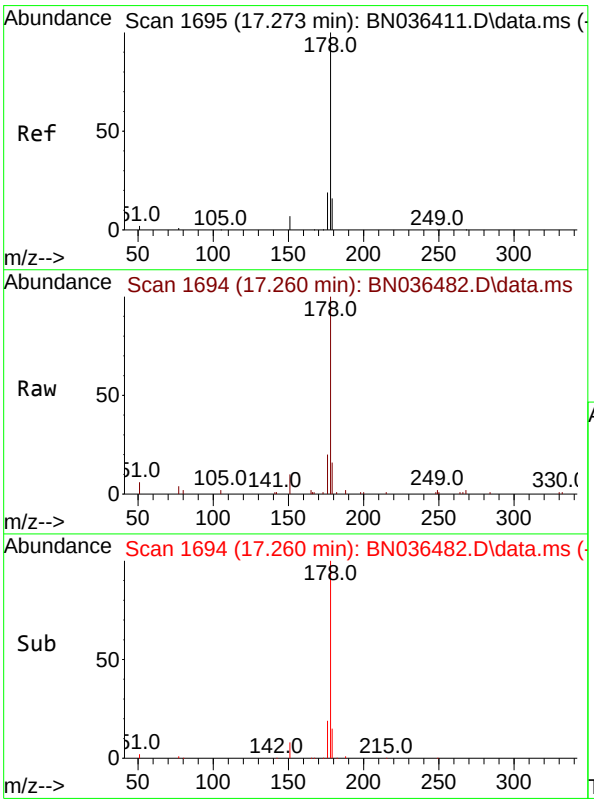
#25
Phenanthrene
Concen: 0.396 ng
RT: 17.173 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 7909

Ion	Ratio	Lower	Upper
178	100		
176	19.6	15.7	23.5
179	15.5	12.4	18.6

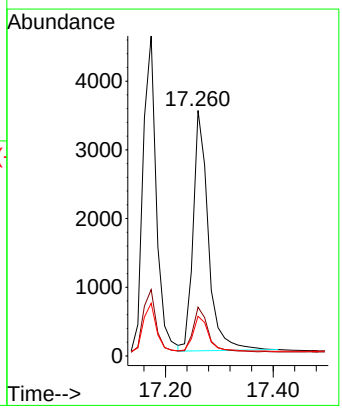


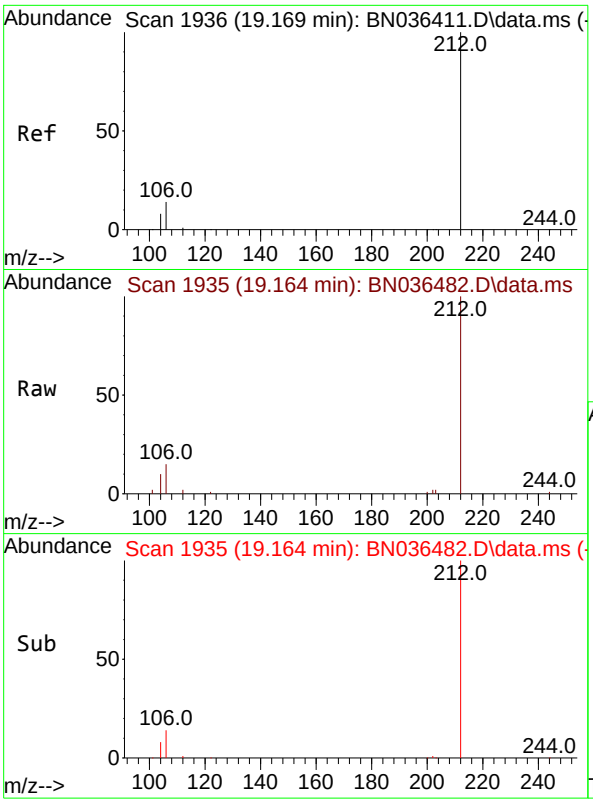


#26
Anthracene
Concen: 0.388 ng
RT: 17.260 min Scan# 1694
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:178 Resp: 6847

Ion	Ratio	Lower	Upper
178	100		
176	19.0	14.9	22.3
179	15.5	12.4	18.6



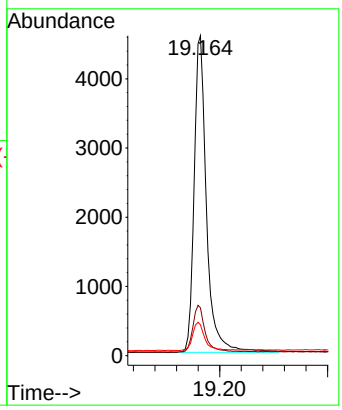


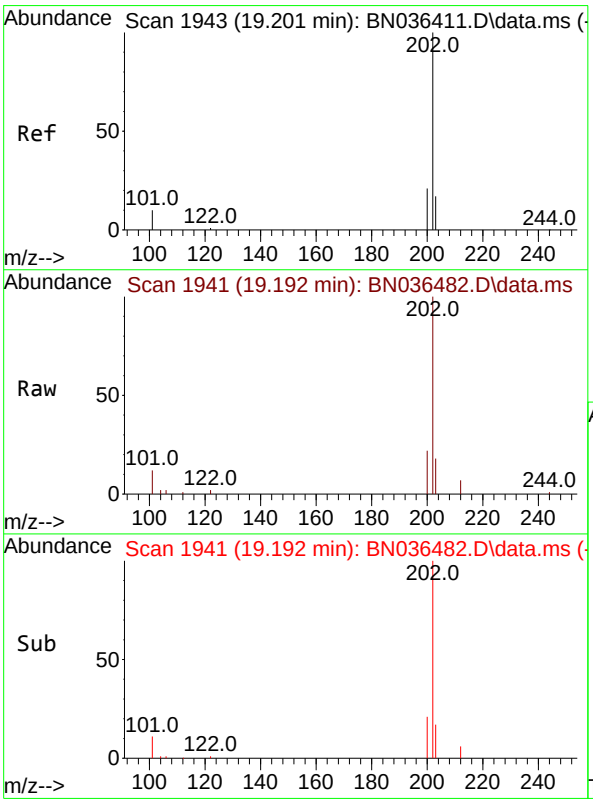
#27
Fluoranthene-d10
Concen: 0.378 ng
RT: 19.164 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:212 Resp: 7260

Ion	Ratio	Lower	Upper
212	100		
106	14.5	11.5	17.3
104	8.8	7.1	10.7

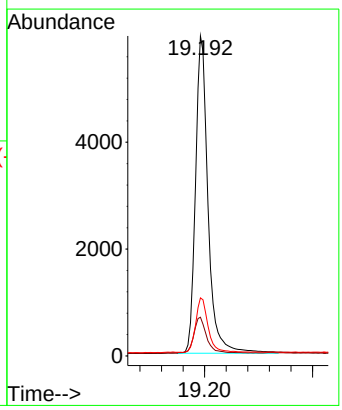


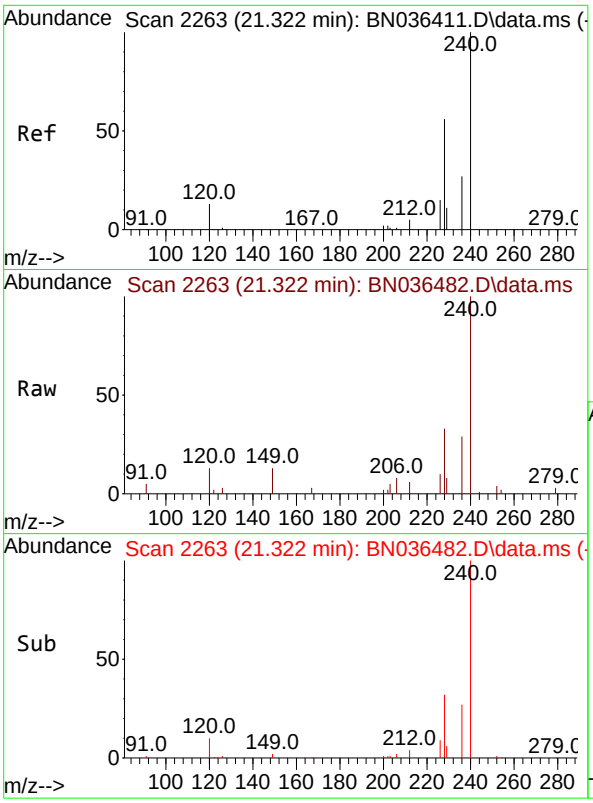


#28
Fluoranthene
Concen: 0.390 ng
RT: 19.192 min Scan# 1941
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:202 Resp: 9570

Ion	Ratio	Lower	Upper
202	100		
101	11.3	9.2	13.8
203	17.0	13.4	20.0



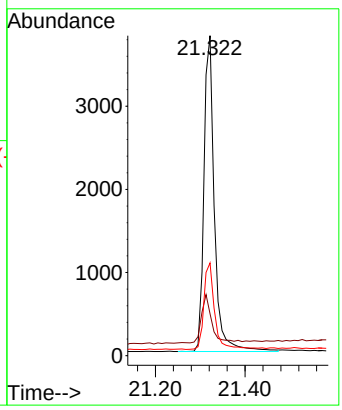


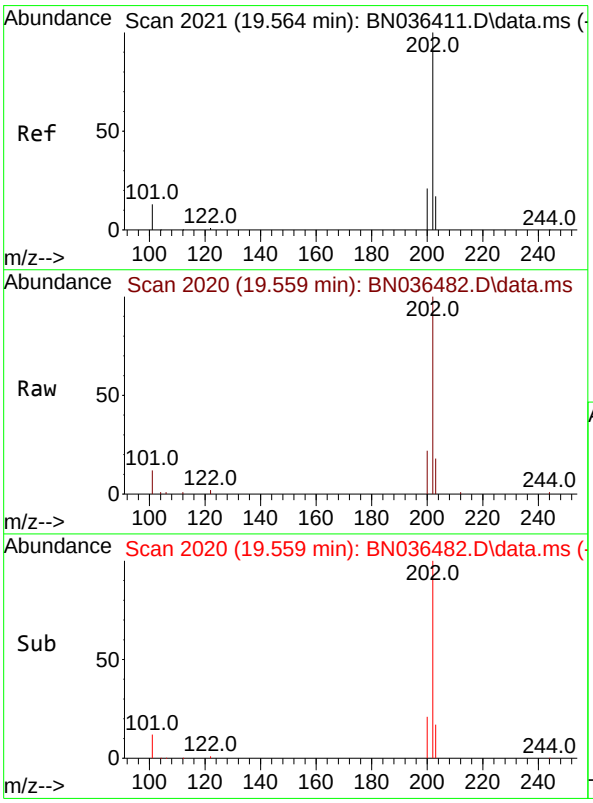
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.322 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 6182

Ion	Ratio	Lower	Upper
240	100		
120	13.1	13.3	19.9#
236	29.0	23.0	34.6

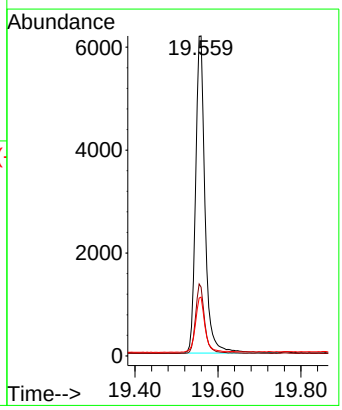


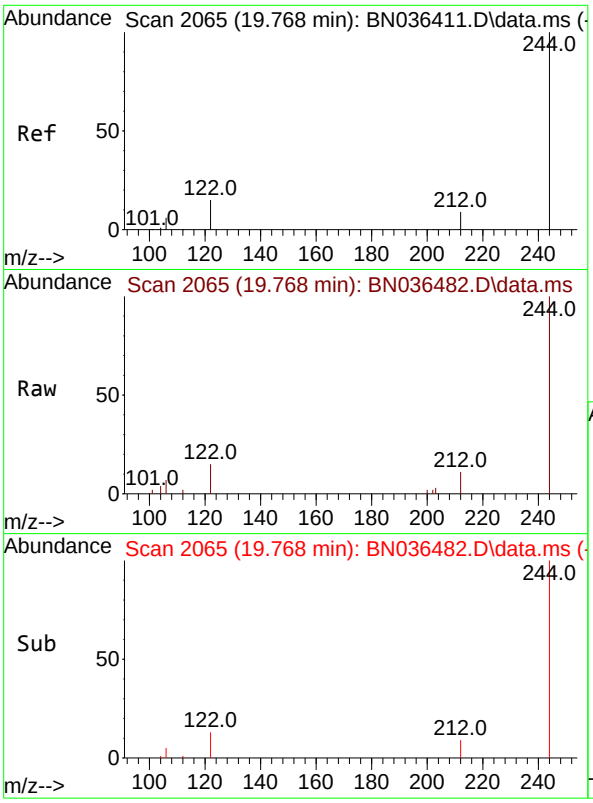


#30
Pyrene
Concen: 0.410 ng
RT: 19.559 min Scan# 2020
Delta R.T. -0.005 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:202 Resp: 9761

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	18.0	13.9	20.9



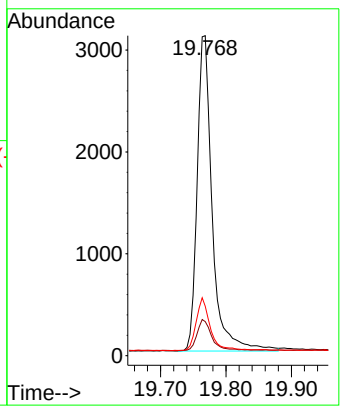


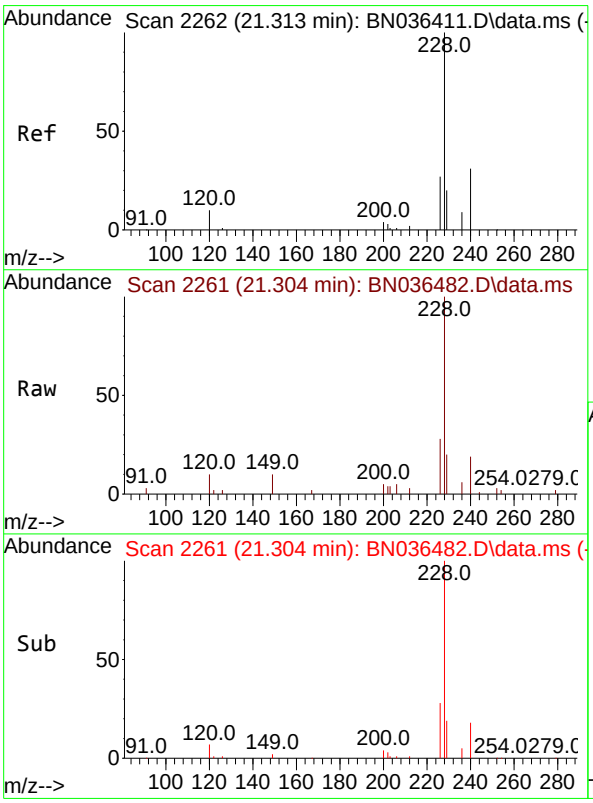
#31
Terphenyl-d14
Concen: 0.375 ng
RT: 19.768 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 4950

Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.1	12.1
122	15.5	12.8	19.2

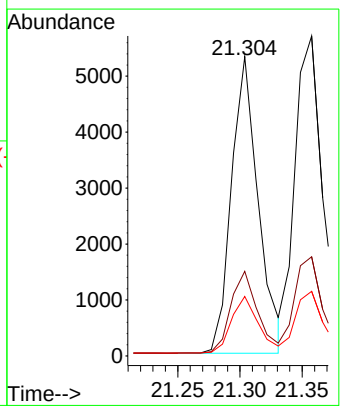


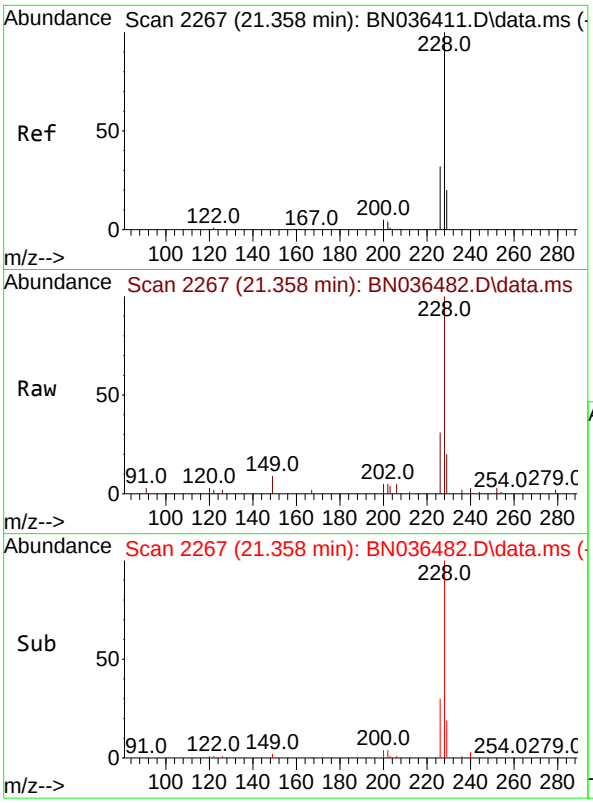


#32
Benzo(a)anthracene
Concen: 0.391 ng
RT: 21.304 min Scan# 2261
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:228 Resp: 7952

Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.2	33.2
229	19.9	16.5	24.7



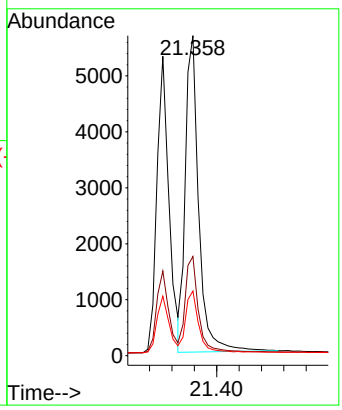


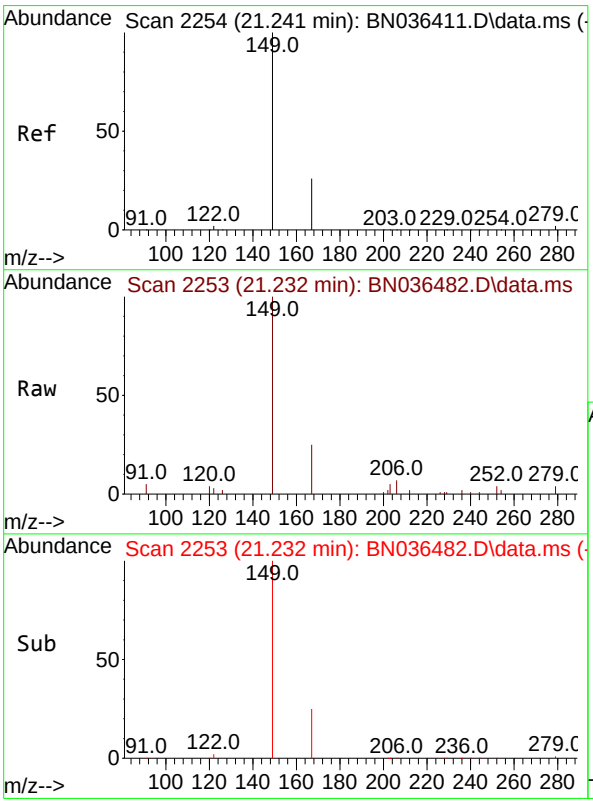
#33
Chrysene
Concen: 0.426 ng
RT: 21.358 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 9374

Ion	Ratio	Lower	Upper
228	100		
226	31.0	25.5	38.3
229	20.2	16.4	24.6

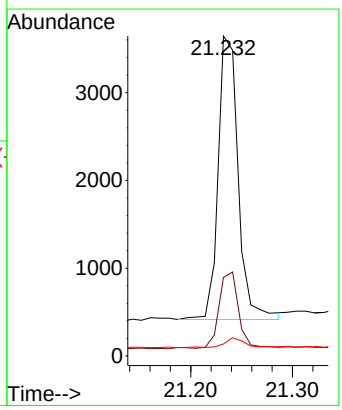


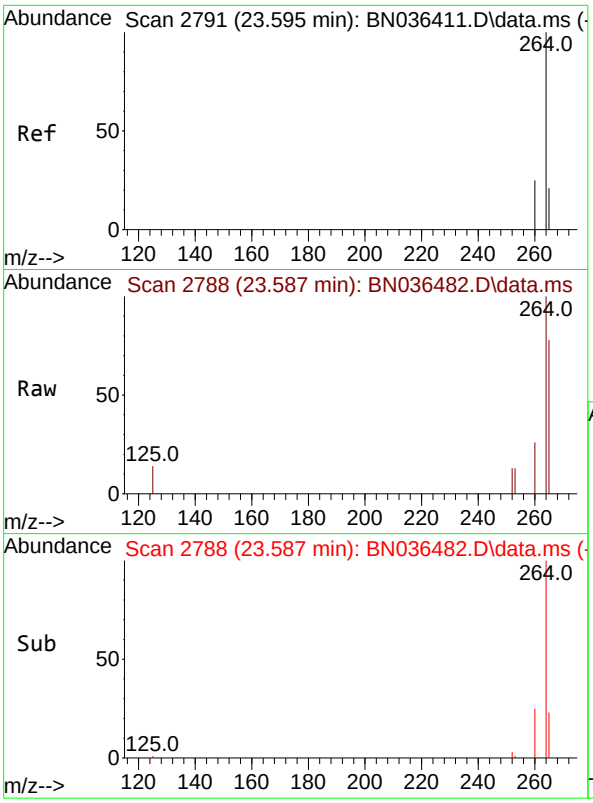


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.349 ng
RT: 21.232 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:149 Resp: 4422

Ion	Ratio	Lower	Upper
149	100		
167	26.1	21.2	31.8
279	4.0	2.7	4.1



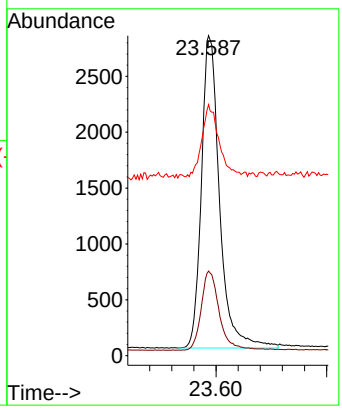


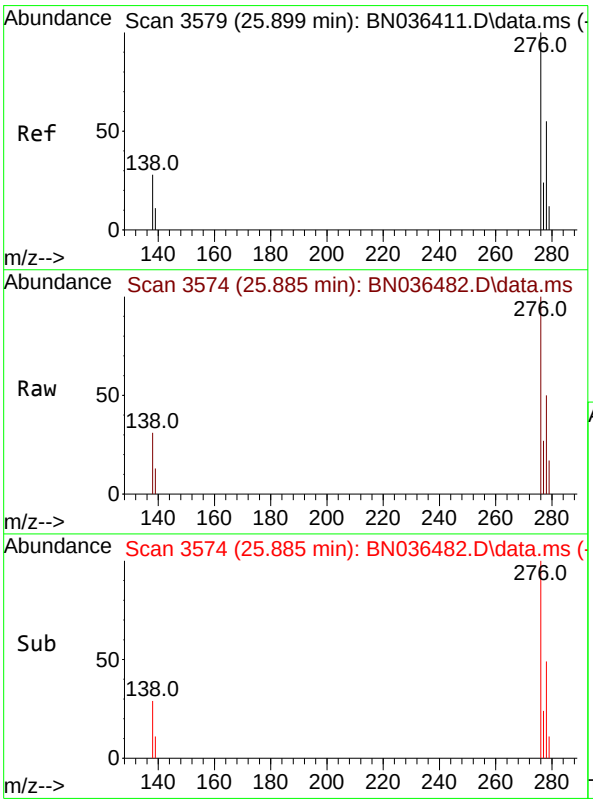
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.587 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 6375

Ion	Ratio	Lower	Upper
264	100		
260	26.5	20.9	31.3
265	78.5	60.7	91.1

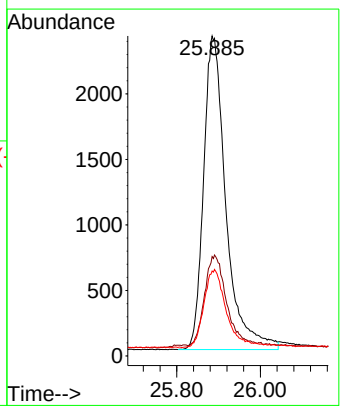


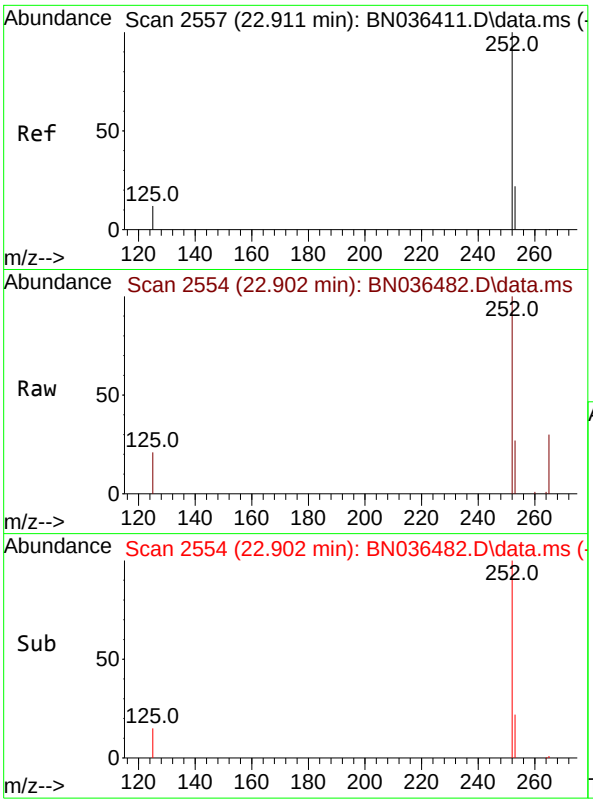


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.398 ng
RT: 25.885 min Scan# 3574
Delta R.T. -0.015 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:276 Resp: 8878

Ion	Ratio	Lower	Upper
276	100		
138	28.2	22.2	33.2
277	24.6	19.8	29.6



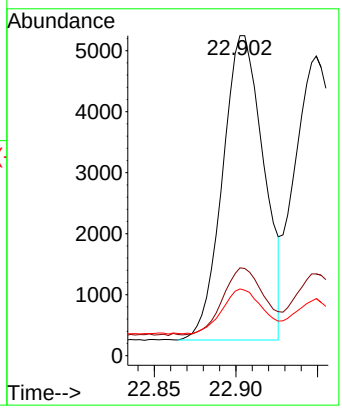


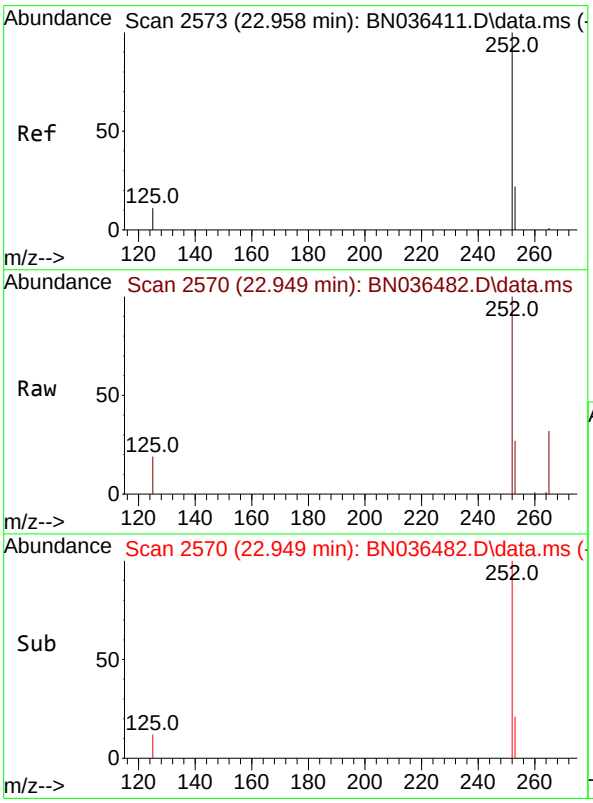
#37
Benzo(b)fluoranthene
Concen: 0.417 ng
RT: 22.902 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 8760

Ion	Ratio	Lower	Upper
252	100		
253	27.4	21.9	32.9
125	20.9	15.0	22.6

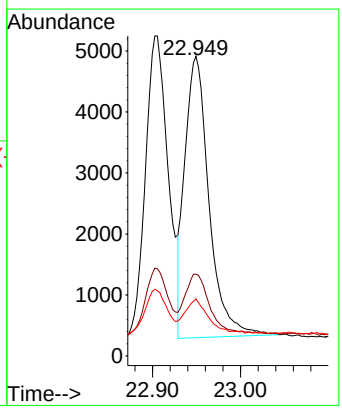


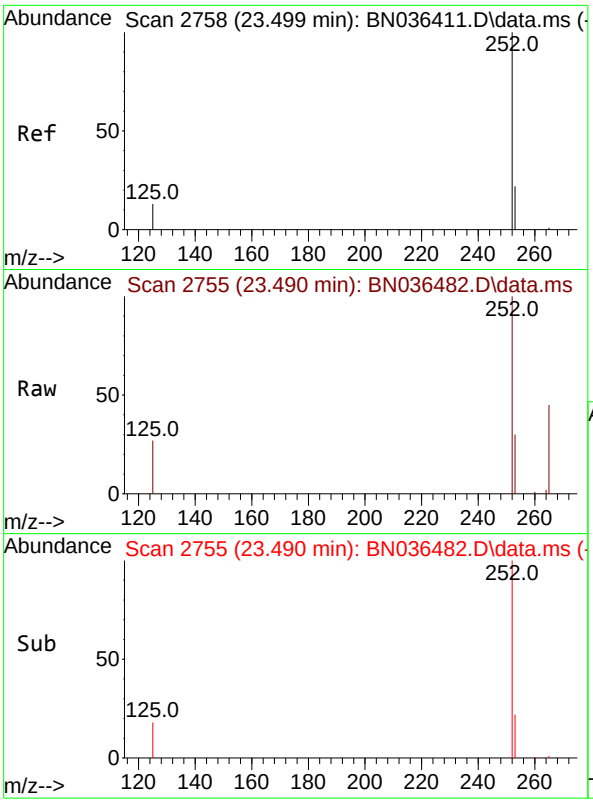


#38
Benzo(k)fluoranthene
Concen: 0.408 ng
RT: 22.949 min Scan# 2570
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:252 Resp: 8815

Ion	Ratio	Lower	Upper
252	100		
253	27.3	22.2	33.4
125	19.1	15.0	22.4



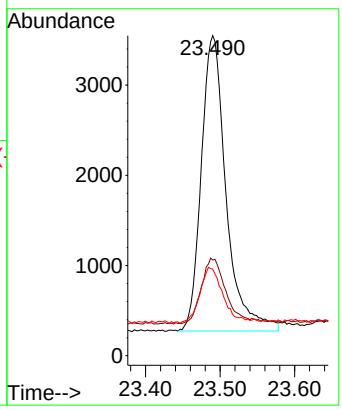


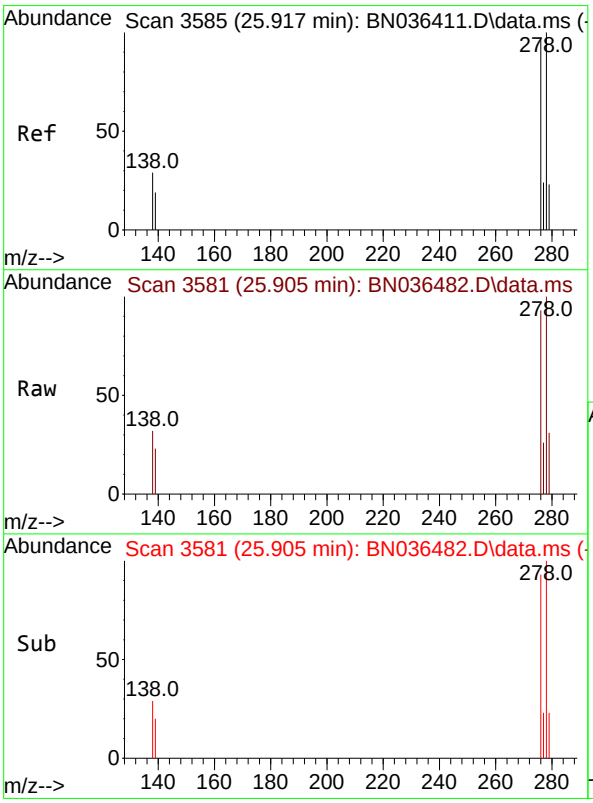
#39
Benzo(a)pyrene
Concen: 0.414 ng
RT: 23.490 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 7583

Ion	Ratio	Lower	Upper
252	100		
253	29.9	24.4	36.6
125	27.1	18.2	27.2

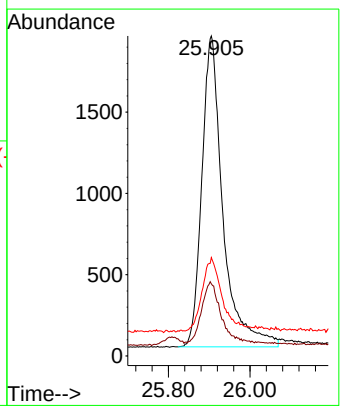


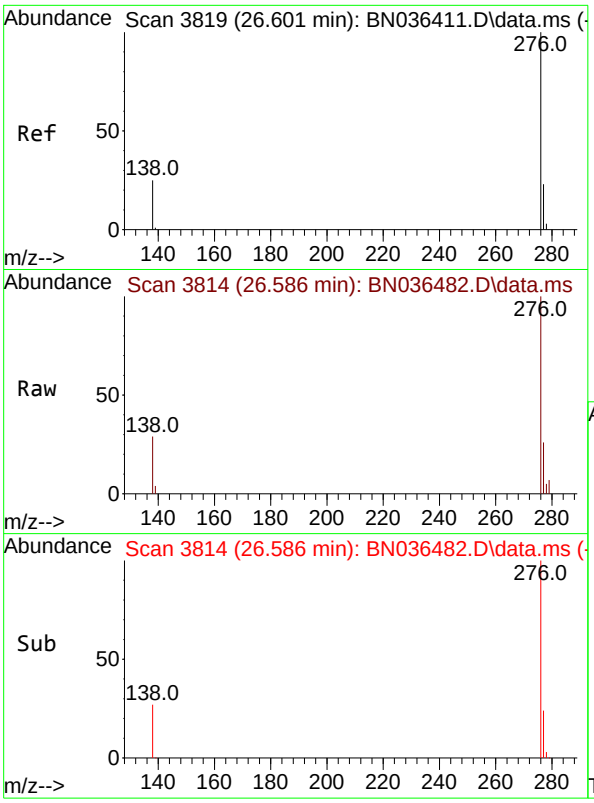


#40
Dibenzo(a,h)anthracene
Concen: 0.390 ng
RT: 25.905 min Scan# 3581
Delta R.T. -0.012 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Tgt Ion:278 Resp: 6854

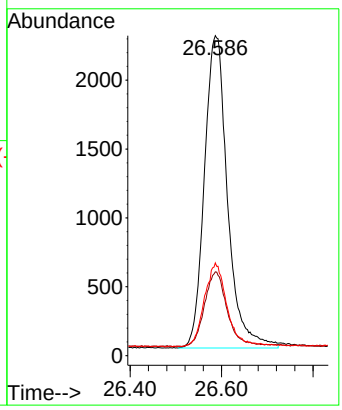
Ion	Ratio	Lower	Upper
278	100		
139	22.5	18.5	27.7
279	30.8	24.8	37.2





#41
Benzo(g,h,i)perylene
Concen: 0.400 ng
RT: 26.586 min Scan# 3
Delta R.T. -0.015 min
Lab File: BN036482.D
Acq: 20 Feb 2025 16:08

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 7966

Ion	Ratio	Lower	Upper
276	100		
277	26.2	20.7	31.1
138	29.0	21.8	32.6