

**DATA PACKAGE
SEMI-VOLATILE ORGANICS**

PROJECT NAME : CTO WE13

**TETRA TECH NUS, INC.
661 Andersen Drive
Suite 200
Pittsburgh, PA - 15220-2745
Phone No: 412-921-7090**

**ORDER ID : Q1225
ATTENTION : Ernie Wu**



Laboratory Certification ID # 20012



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Cover Page

Order ID : Q1225

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q1225-01
Q1225-02
Q1225-03

Client Sample Number

RW5-SP100-20250129
RW5-SP201-20250129
RW5-SP303-20250129

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 : _____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:58 am, Feb 12, 2025

Date: 2/10/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1225

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

3 Water samples were received on 01/30/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1. 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 RW5-SP100-20250129 [Terphenyl-d14 - 163%], RW5-SP100-20250129DL [Terphenyl-d14 - 136%], RW5-SP201-20250129 [Terphenyl-d14 - 140%] and RW5-SP303-20250129 [Terphenyl-d14 - 170%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

The Blank analysis did not indicate the presence of lab contamination.

The Initial Calibration met the requirements .

The Continuous Calibration File ID BN036303.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Continuous Calibration File ID BN036320.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.

Sample RW5-SP100-20250129 was diluted due to high concentration.

E. Additional Comments:

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

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

The not QT review data is reported in the Miscellaneous.

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

F. Manual Integration Comments:

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

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

Signature_____

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:58 am, Feb 12, 2025

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 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: Q1225

MATRIX: Water

METHOD: 8270-Modified/3510

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The Initial Calibration met the requirements . The Continuous Calibration File ID BN036303.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, therefore no corrective action was taken. The Continuous Calibration File ID BN036320.D met the requirements except for 2,4,6-Tribromophenol, The failure compound not associated with the client parameters list, therefore no corrective action was taken.		✓	
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges. The Surrogate recoveries met the acceptable criteria except for RW5-SP100-20250129 [Terphenyl-d14 - 163%], RW5-SP100-20250129DL [Terphenyl-d14 - 136%], RW5- SP201-20250129 [Terphenyl-d14 - 140%] and RW5-SP303-20250129 [Terphenyl-d14 - 170%], The failure surrogates not associated with the client parameters list, therefore no corrective action was 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 Blank Spike met requirements for all samples . The Blank Spike Duplicate met requirements for all samples .			
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
11.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is).”
 Sample RW5-SP100-20250129 was diluted due to high concentration.

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

The not QT review data is reported in the Miscellaneous

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

REVIEWED

QA REVIEW

By Sohil Jodhani, QA/QC Director at 9:29 am, Feb 12, 2025

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1225

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: 02/10/2025

LAB CHRONICLE

OrderID:	Q1225	OrderDate:	1/30/2025 10:30:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	N31

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1225-01	RW5-SP100-2025012 9	Water			01/29/25			01/30/25
			SVOC-SIMGroup1	8270-Modified		01/31/25	02/05/25	
Q1225-01DL	RW5-SP100-2025012 9DL	Water			01/29/25			01/30/25
			SVOC-SIMGroup1	8270-Modified		01/31/25	02/06/25	
Q1225-02	RW5-SP201-2025012 9	Water			01/29/25			01/30/25
			SVOC-SIMGroup1	8270-Modified		01/31/25	02/05/25	
Q1225-03	RW5-SP303-2025012 9	Water			01/29/25			01/30/25
			SVOC-SIMGroup1	8270-Modified		01/31/25	02/05/25	



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Fax : 908 789 8922

Hit Summary Sheet SW-846

SDG No.: Q1225

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : RW5-SP100-20250129								
Q1225-01	RW5-SP100-20250129	WATER	1,4-Dioxane	7.200	E	0.07	0.2	0.2 ug/L
			Total Svoc :	7.20				
			Total Concentration:	7.20				
Client ID : RW5-SP100-20250129DL								
Q1225-01DL	RW5-SP100-20250129DI	WATER	1,4-Dioxane	7.500	D	0.34	1	1 ug/L
			Total Svoc :	7.50				
			Total Concentration:	7.50				



QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: Q1225

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166419BL	PB166419BL	2-Methylnaphthalene-d10	0.4	0.41	103		30	150
		Fluoranthene-d10	0.4	0.41	101		30	150
		Nitrobenzene-d5	0.4	0.43	107		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
PB166419BS	PB166419BS	2-Methylnaphthalene-d10	0.4	0.55	137		30	150
		Fluoranthene-d10	0.4	0.42	106		30	150
		Nitrobenzene-d5	0.4	0.42	104		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.46	114		58	132
PB166419BSD	PB166419BSD	2-Methylnaphthalene-d10	0.4	0.55	137		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.43	108		55	111
		2-Fluorobiphenyl	0.4	0.38	96		53	106
		Terphenyl-d14	0.4	0.45	112		58	132
Q1225-01	RW5-SP100-20250129	2-Methylnaphthalene-d10	0.4	0.41	103		30	150
		Fluoranthene-d10	0.4	0.44	109		30	150
		Nitrobenzene-d5	0.4	0.40	100		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.65	163	*	58	132
Q1225-01DL	RW5-SP100-20250129DL	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.30	75		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.55	136	*	58	132
Q1225-02	RW5-SP201-20250129	2-Methylnaphthalene-d10	0.4	0.42	104		30	150
		Fluoranthene-d10	0.4	0.46	116		30	150
		Nitrobenzene-d5	0.4	0.41	103		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.56	140	*	58	132
Q1225-03	RW5-SP303-20250129	2-Methylnaphthalene-d10	0.4	0.42	106		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.42	104		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.68	170	*	58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1225

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036324.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166419BS	1,4-Dioxane	0.4	0.39	ug/L	98				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1225

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036328.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166419BSD	1,4-Dioxane	0.4	0.38	ug/L	95	3			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166419BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1225

SAS No.: Q1225 SDG NO.: Q1225

Lab File ID: BN036304.D

Lab Sample ID: PB166419BL

Instrument ID: BNA_N

Date Extracted: 01/31/2025

Matrix: (soil/water) Water

Date Analyzed: 02/05/2025

Level: (low/med) LOW

Time Analyzed: 19:23

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166419BS	PB166419BS	BN036324.D	02/06/2025
RW5-SP100-20250129	Q1225-01	BN036307.D	02/05/2025
RW5-SP201-20250129	Q1225-02	BN036308.D	02/05/2025
RW5-SP303-20250129	Q1225-03	BN036309.D	02/05/2025
PB166419BSD	PB166419BSD	BN036328.D	02/06/2025

COMMENTS: _____



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEMSAS No.: Q1225 SDG NO.: Q1225Lab File ID: BN036009.DDFTPP Injection Date: 01/22/2025Instrument ID: BNA_NDFTPP Injection Time: 09:44

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	48.9
68	Less than 2.0% of mass 69	0.5 (1.1) 1
69	Mass 69 relative abundance	45.7
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	47.7
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.4
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 (20.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN036010.D	01/22/2025	11:02
SSTDICC0.2	SSTDICC0.2	BN036011.D	01/22/2025	11:38
SSTDICCC0.4	SSTDICCC0.4	BN036012.D	01/22/2025	12:13
SSTDICC0.8	SSTDICC0.8	BN036013.D	01/22/2025	12:49
SSTDICC1.6	SSTDICC1.6	BN036014.D	01/22/2025	13:25
SSTDICC3.2	SSTDICC3.2	BN036015.D	01/22/2025	14:01
SSTDICC5.0	SSTDICC5.0	BN036016.D	01/22/2025	14:36



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEMSAS No.: Q1225SDG NO.: Q1225Lab File ID: BN036302.DDFTPP Injection Date: 02/05/2025Instrument ID: BNA_NDFTPP Injection Time: 18:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	49.1
68	Less than 2.0% of mass 69	0.1 (0.3) 1
69	Mass 69 relative abundance	45.4
70	Less than 2.0% of mass 69	0.3 (0.6) 1
127	10.0 - 80.0% of mass 198	47.2
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	26.2
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	9.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	11.5 (18.9) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN036303.D	02/05/2025	18:47
PB166419BL	PB166419BL	BN036304.D	02/05/2025	19:23
RW5-SP100-20250129	Q1225-01	BN036307.D	02/05/2025	21:11
RW5-SP201-20250129	Q1225-02	BN036308.D	02/05/2025	21:47
RW5-SP303-20250129	Q1225-03	BN036309.D	02/05/2025	22:22
SSTDCCC0.4EC	SSTDCCC0.4	BN036318.D	02/06/2025	03:45



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEMSAS No.: Q1225SDG NO.: Q1225Lab File ID: BN036319.DDFTPP Injection Date: 02/06/2025Instrument ID: BNA_NDFTPP Injection Time: 05:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	50.8
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	47
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	10.0 - 80.0% of mass 198	48
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	6.6
275	10.0 - 60.0% of mass 198	23.8
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	8.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	9.5 (18.3) 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	BN036320.D	02/06/2025	05:40
PB166419BS	PB166419BS	BN036324.D	02/06/2025	08:03
PB166419BSD	PB166419BSD	BN036328.D	02/06/2025	10:27
RW5-SP100-20250129DL	Q1225-01DL	BN036330.D	02/06/2025	11:39
SSTDCCC0.4EC	SSTDCCC0.4	BN036332.D	02/06/2025	12:54

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1225 SAS No.: Q1225 SDG NO.: Q1225

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/05/2025

Lab File ID: BN036303.D Time Analyzed: 18:47

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	2214	7.775	4864	10.56	2378	14.41
UPPER LIMIT	4428	8.275	9728	11.062	4756	14.909
LOWER LIMIT	1107	7.275	2432	10.062	1189	13.909
EPA SAMPLE NO.						
01 PB166419BL	2281	7.78	4739	10.57	2373	14.42
02 RW5-SP100-20250129	2193	7.78	4986	10.57	2696	14.41
03 RW5-SP201-20250129	1967	7.78	4239	10.57	2214	14.42
04 RW5-SP303-20250129	2187	7.78	4848	10.57	2688	14.41

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1225 SAS No.: Q1225 SDG NO.: Q1225

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/05/2025

Lab File ID: BN036303.D Time Analyzed: 18:47

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	4362	17.161	3774	21.34	4195	23.628
UPPER LIMIT	8724	17.661	7548	21.84	8390	24.128
LOWER LIMIT	2181	16.661	1887	20.84	2097.5	23.128
EPA SAMPLE NO.						
01 PB166419BL	4104	17.16	3515	21.35	3933	23.63
02 RW5-SP100-20250129	5157	17.16	3747	21.35	3848	23.63
03 RW5-SP201-20250129	4215	17.16	3734	21.35	3986	23.63
04 RW5-SP303-20250129	5486	17.16	4831	21.34	4945	23.63

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.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1225 SAS No.: Q1225 SDG NO.: Q1225

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/06/2025

Lab File ID: BN036320.D Time Analyzed: 05:40

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	2017	7.775	4328	10.56	2158	14.41
UPPER LIMIT	4034	8.275	8656	11.062	4316	14.909
LOWER LIMIT	1008.5	7.275	2164	10.062	1079	13.909
EPA SAMPLE NO.						
01 PB166419BS	2239	7.78	4945	10.56	2445	14.41
02 PB166419BSD	2144	7.77	4537	10.56	2141	14.41
03 RW5-SP100-20250129DL	2064	7.78	4355	10.57	2243	14.42

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.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: Q1225 SAS No.: Q1225 SDG NO.: Q1225

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 02/06/2025

Lab File ID: BN036320.D Time Analyzed: 05:40

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	4298	17.149	3803	21.34	4157	23.627
UPPER LIMIT	8596	17.649	7606	21.84	8314	24.127
LOWER LIMIT	2149	16.649	1901.5	20.84	2078.5	23.127
EPA SAMPLE NO.						
01 PB166419BS	4757	17.16	4475	21.34	4637	23.63
02 PB166419BSD	3969	17.16	3671	21.34	3973	23.63
03 RW5-SP100-20250129DL	4222	17.16	3765	21.35	4020	23.63

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

1
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Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	RW5-SP100-20250129	SDG No.:	Q1225
Lab Sample ID:	Q1225-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036307.D	1	01/31/25 08:30	02/05/25 21:11	PB166419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.20	E	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.41		30 - 150		103%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		100%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.65	*	58 - 132		163%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2190		7.775			
1146-65-2	Naphthalene-d8	4990		10.573			
15067-26-2	Acenaphthene-d10	2700		14.409			
1517-22-2	Phenanthrene-d10	5160		17.161			
1719-03-5	Chrysene-d12	3750		21.349			
1520-96-3	Perylene-d12	3850		23.628			

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\BN020525\
Data File : BN036307.D
Acq On : 05 Feb 2025 21:11
Operator : RC/JU
Sample : Q1225-01
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

Quant Time: Feb 06 01:06:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

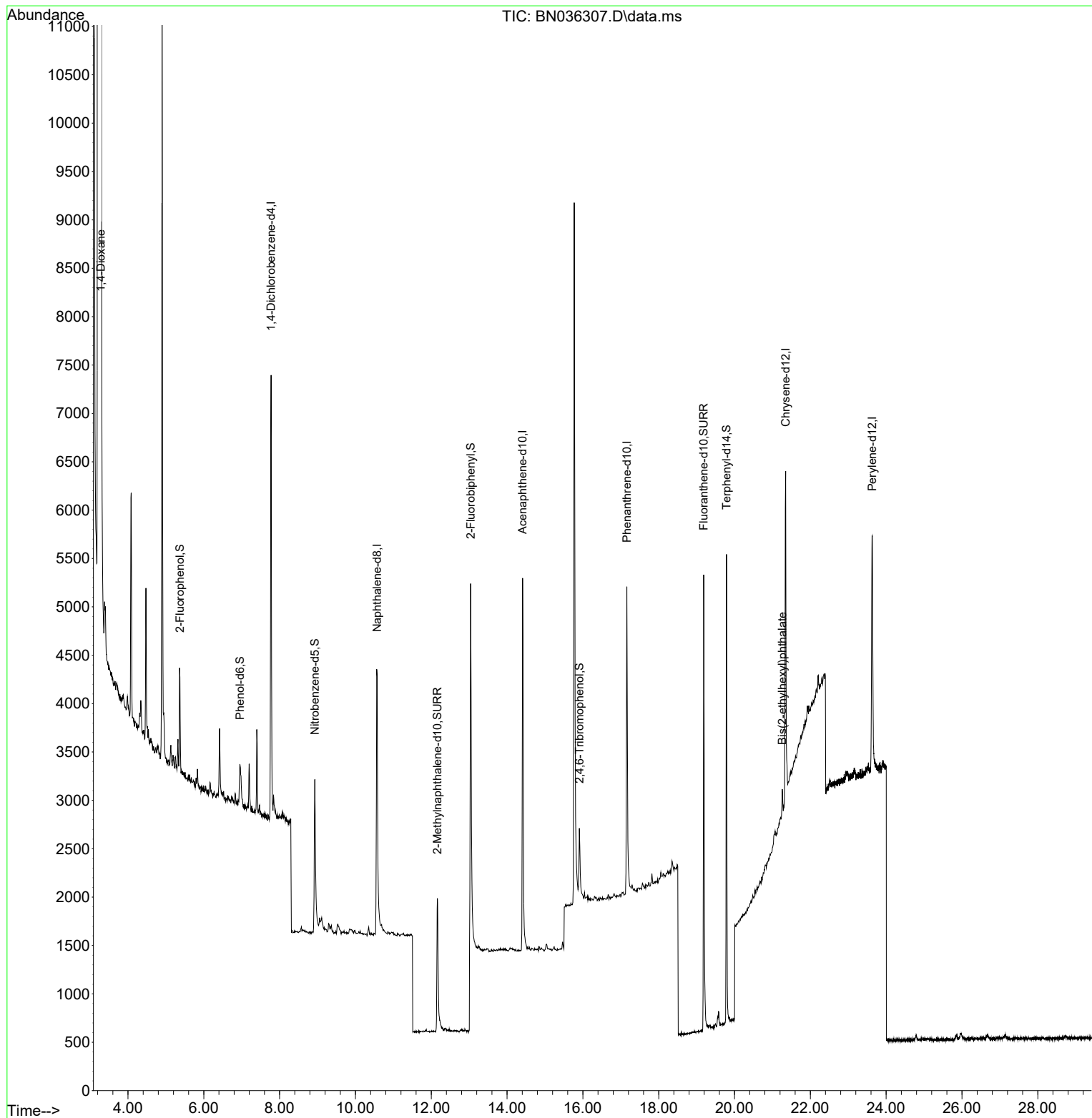
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2193	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	4986	0.400	ng	0.01
13) Acenaphthene-d10	14.409	164	2696	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	5157	0.400	ng	0.00
29) Chrysene-d12	21.349	240	3747	0.400	ng	0.00
35) Perylene-d12	23.628	264	3848	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.370	112	828	0.145	ng	0.00
5) Phenol-d6	6.952	99	500	0.075	ng	0.00
8) Nitrobenzene-d5	8.929	82	1875	0.398	ng	0.00
11) 2-Methylnaphthalene-d10	12.162	152	2783	0.411	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	497	0.287	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	4207	0.350	ng	0.00
27) Fluoranthene-d10	19.188	212	5816	0.435	ng	0.00
31) Terphenyl-d14	19.787	244	5065	0.651	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.283	88	17757	7.244	ng	95
34) Bis(2-ethylhexyl)phtha...	21.259	149	315	0.042	ng	# 85

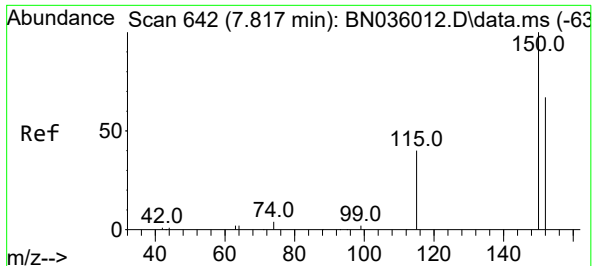
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036307.D
Acq On : 05 Feb 2025 21:11
Operator : RC/JU
Sample : Q1225-01
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

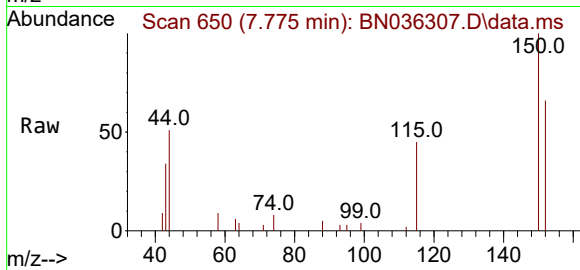
Quant Time: Feb 06 01:06:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration



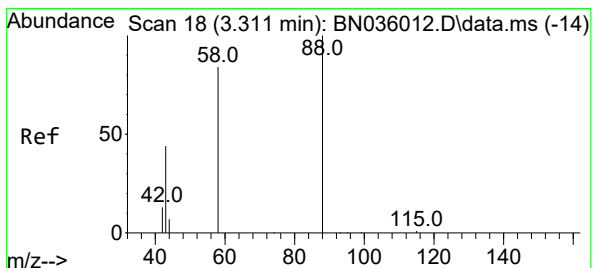
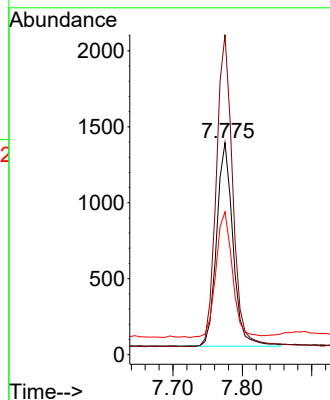
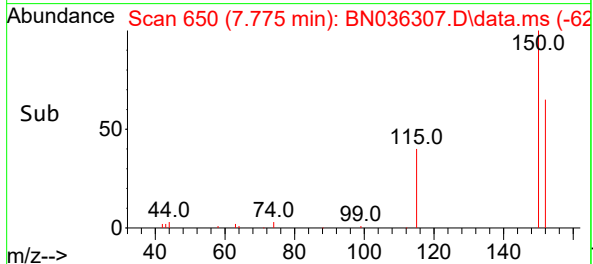


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

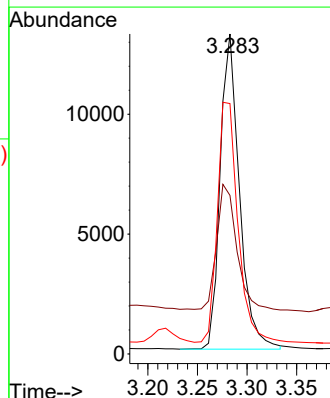
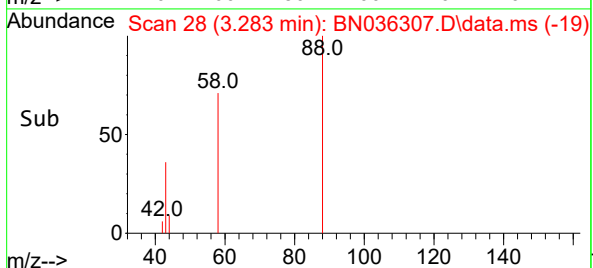
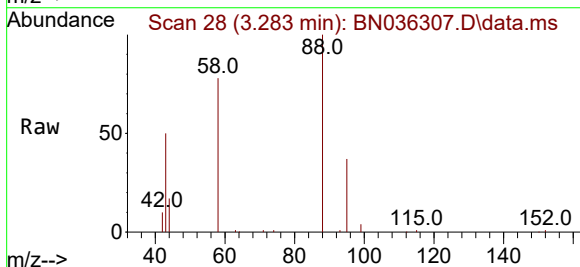


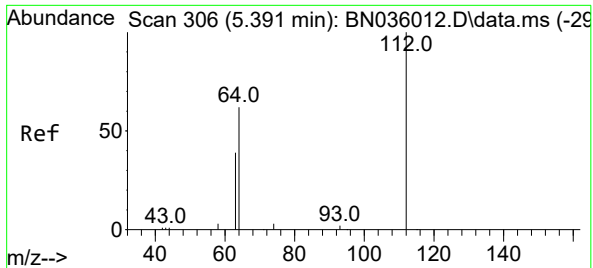
Tgt Ion: 152 Resp: 2193
Ion Ratio Lower Upper
152 100
150 151.0 117.4 176.2
115 67.4 51.0 76.4



#2
1,4-Dioxane
Concen: 7.244 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

Tgt Ion: 88 Resp: 17757
Ion Ratio Lower Upper
88 100
43 41.4 38.5 57.7
58 81.2 66.6 99.8

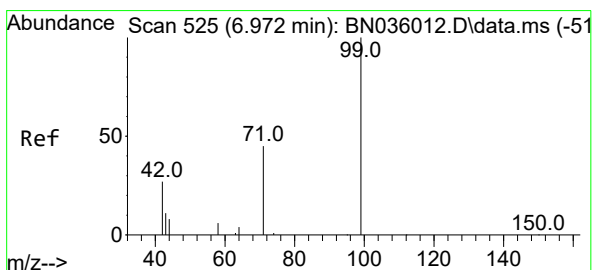
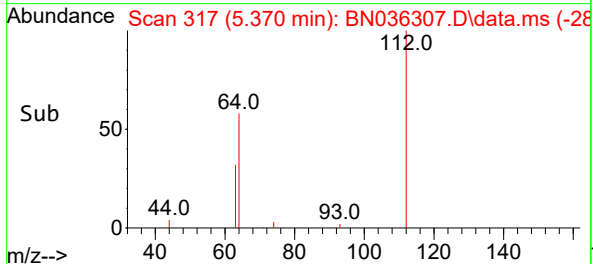
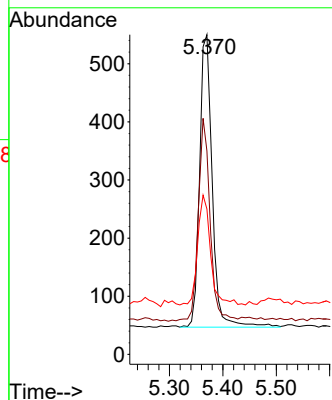
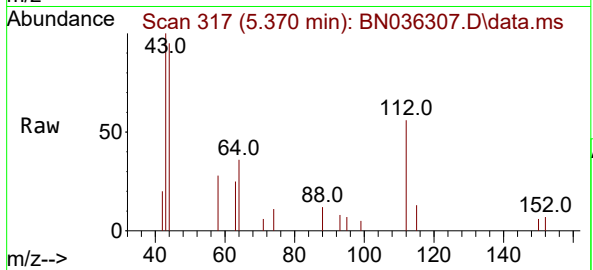




#4
2-Fluorophenol
Concen: 0.145 ng
RT: 5.370 min Scan# 317
Delta R.T. 0.007 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

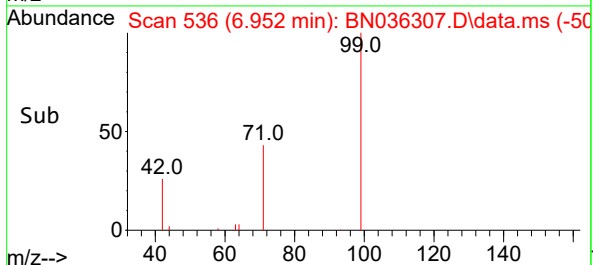
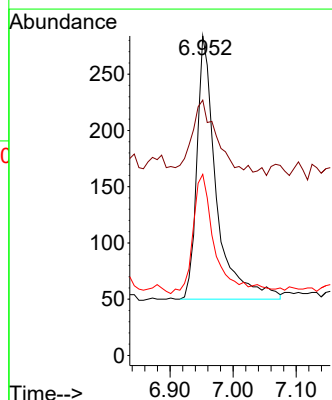
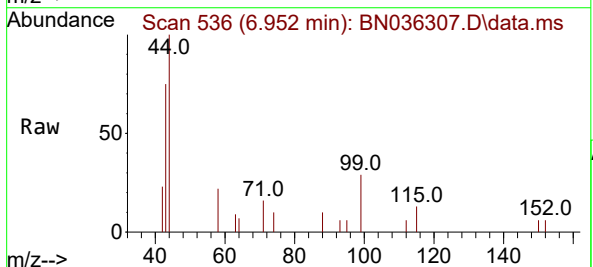
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

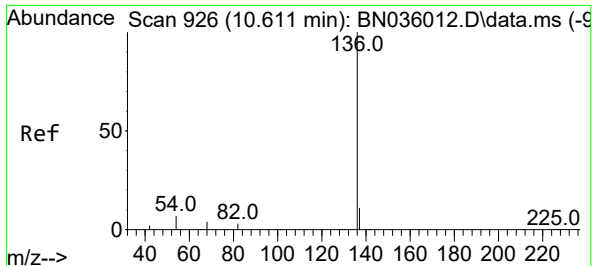
Tgt Ion:112 Resp: 828
Ion Ratio Lower Upper
112 100
64 64.9 50.0 75.0
63 39.0 30.7 46.1



#5
Phenol-d6
Concen: 0.075 ng
RT: 6.952 min Scan# 536
Delta R.T. 0.000 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

Tgt Ion: 99 Resp: 500
Ion Ratio Lower Upper
99 100
42 38.6 26.8 40.2
71 51.6 36.6 55.0

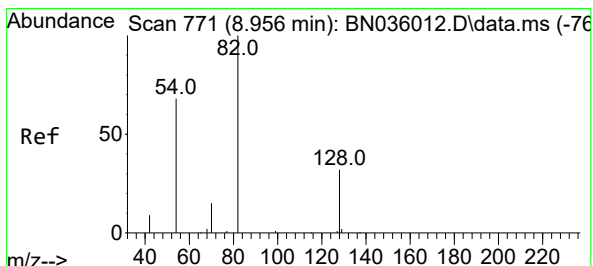
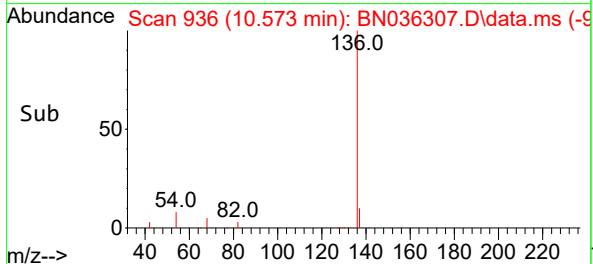
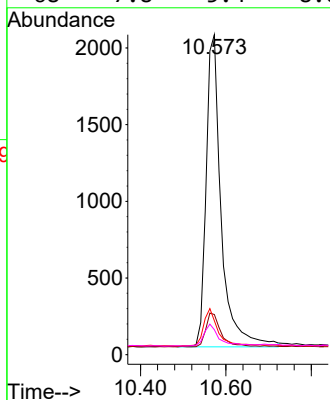
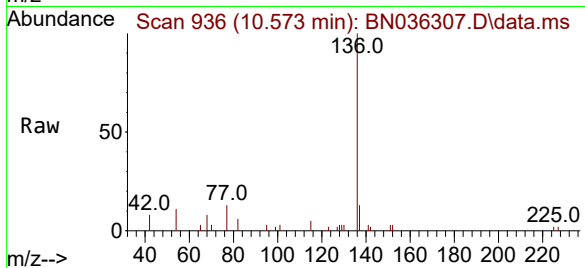




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 91
Delta R.T. 0.011 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

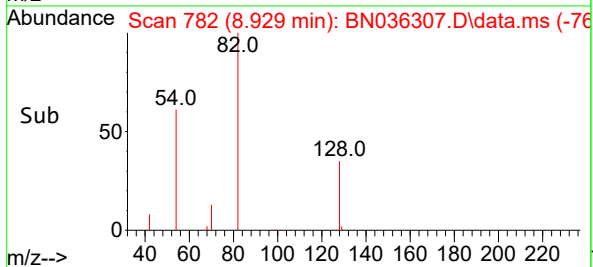
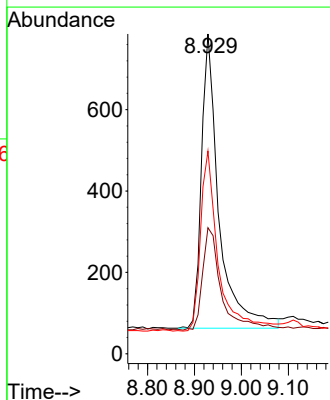
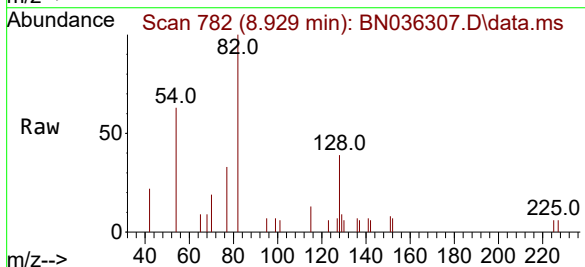
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

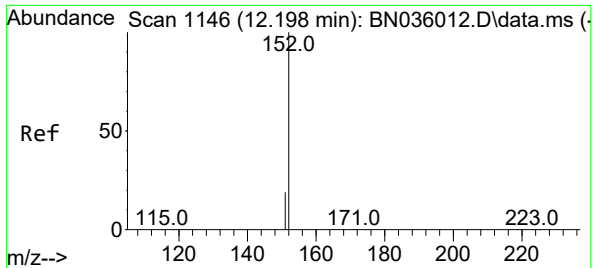
Tgt Ion:	136	Resp:	4986
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.4	15.6
54	10.6	7.7	11.5
68	7.8	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.398 ng
RT: 8.929 min Scan# 782
Delta R.T. 0.000 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

Tgt Ion:	82	Resp:	1875
Ion	Ratio	Lower	Upper
82	100		
128	39.4	28.8	43.2
54	63.4	55.8	83.8

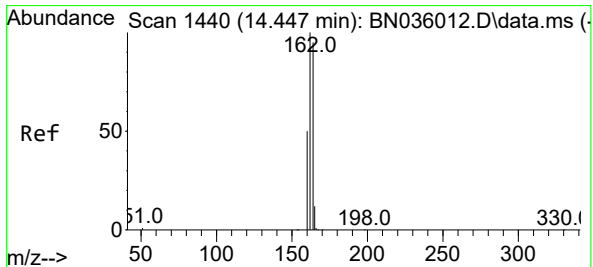
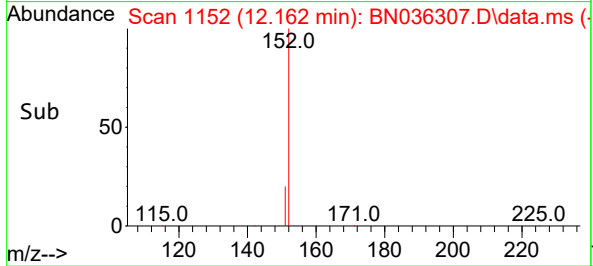
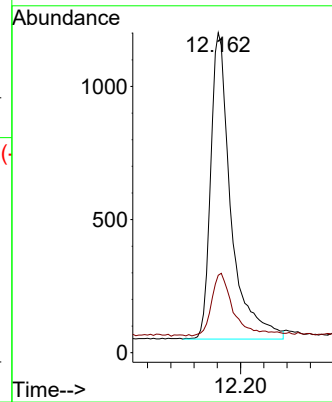
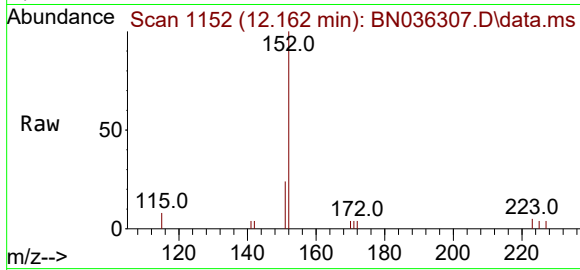




#11
2-Methylnaphthalene-d10
Concen: 0.411 ng
RT: 12.162 min Scan# 1146
Delta R.T. 0.005 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

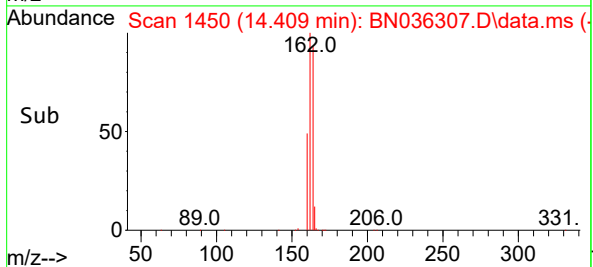
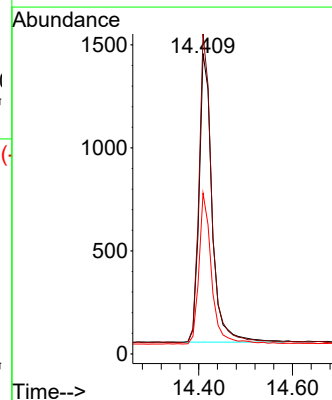
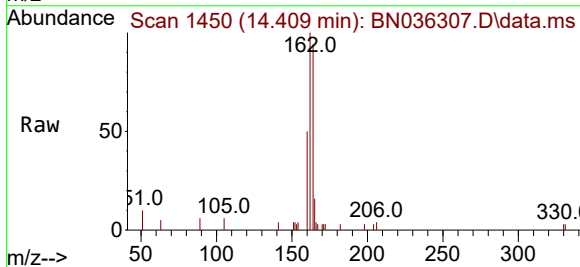
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

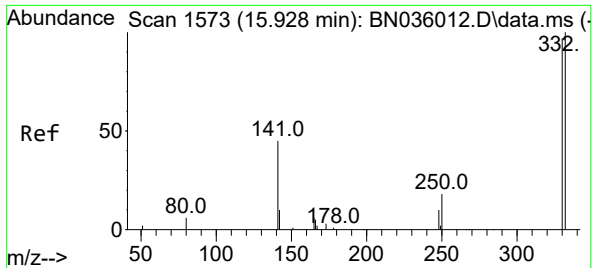
Tgt Ion:152 Resp: 2783
Ion Ratio Lower Upper
152 100
151 22.6 16.6 25.0



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 1450
Delta R.T. 0.000 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

Tgt Ion:164 Resp: 2696
Ion Ratio Lower Upper
164 100
162 106.5 84.1 126.1
160 53.5 43.8 65.8





#14

2,4,6-Tribromophenol

Concen: 0.287 ng

RT: 15.907 min Scan# 1585

Delta R.T. 0.000 min

Lab File: BN036307.D

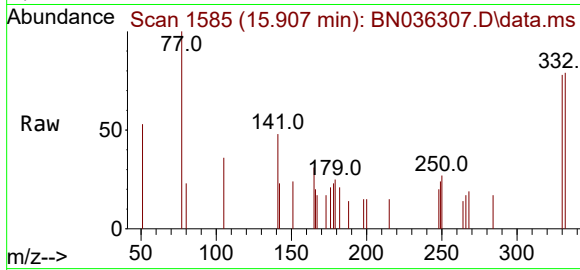
Acq: 05 Feb 2025 21:11

Instrument :

BNA_N

ClientSampleId :

RW5-SP100-20250129



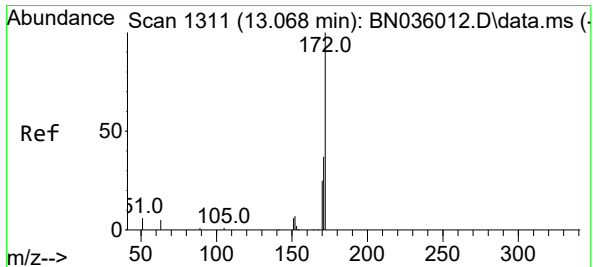
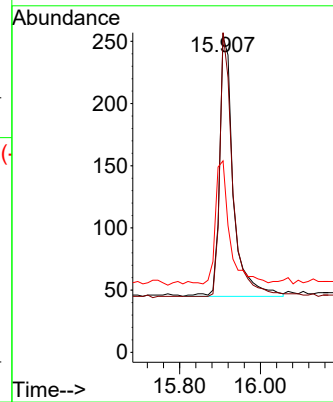
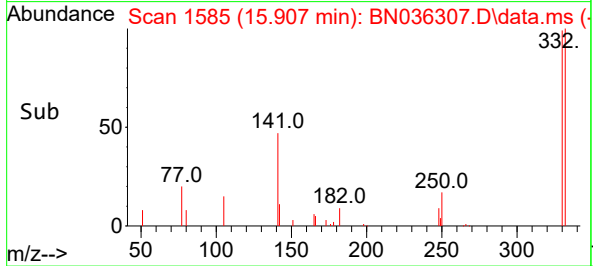
Tgt Ion:330 Resp: 497

Ion Ratio Lower Upper

330 100

332 95.0 81.0 121.4

141 48.5 36.7 55.1



#15

2-Fluorobiphenyl

Concen: 0.350 ng

RT: 13.041 min Scan# 1322

Delta R.T. 0.000 min

Lab File: BN036307.D

Acq: 05 Feb 2025 21:11

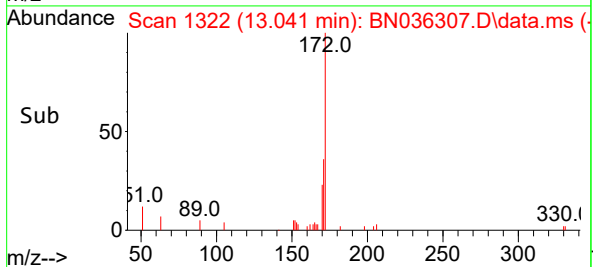
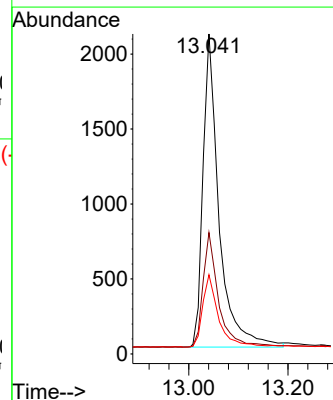
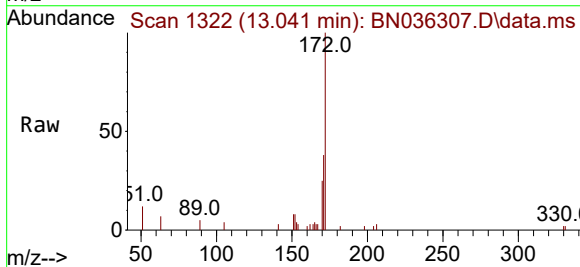
Tgt Ion:172 Resp: 4207

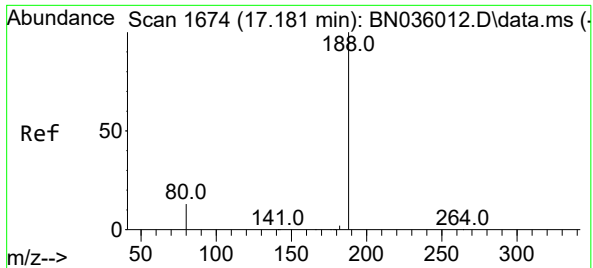
Ion Ratio Lower Upper

172 100

171 38.0 30.9 46.3

170 24.7 21.2 31.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.161 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036307.D

Acq: 05 Feb 2025 21:11

Instrument :

BNA_N

ClientSampleId :

RW5-SP100-20250129

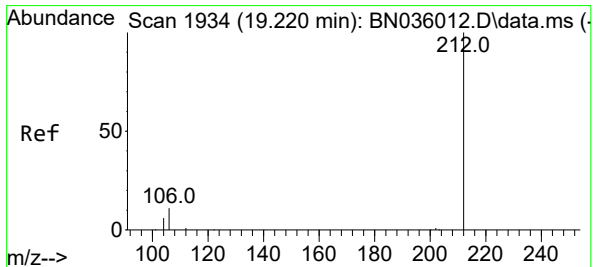
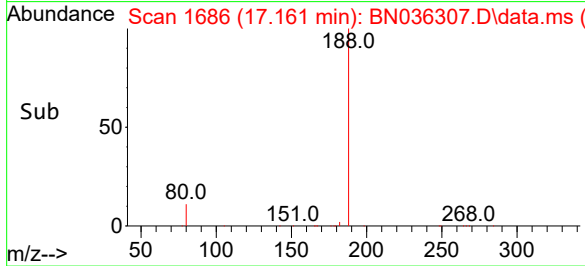
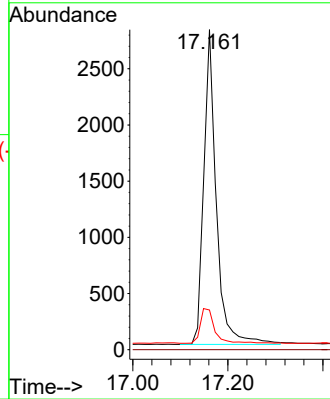
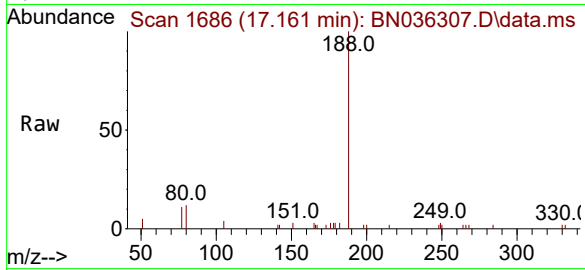
Tgt Ion:188 Resp: 5157

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.4 12.3 18.5



#27

Fluoranthene-d10

Concen: 0.435 ng

RT: 19.188 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036307.D

Acq: 05 Feb 2025 21:11

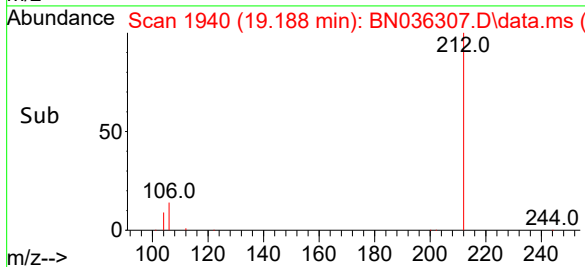
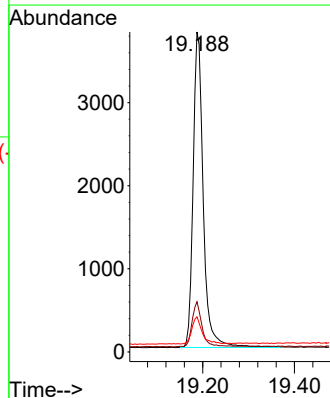
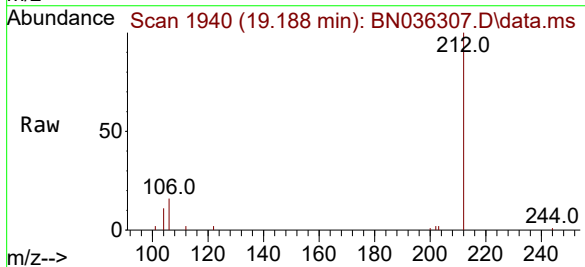
Tgt Ion:212 Resp: 5816

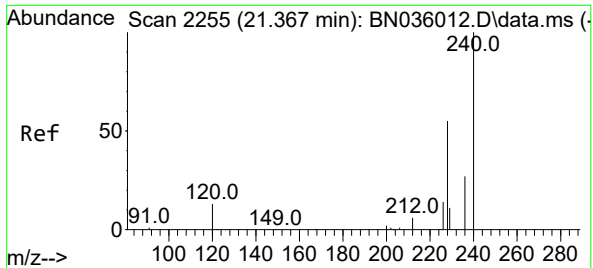
Ion Ratio Lower Upper

212 100

106 14.0 9.7 14.5

104 8.6 6.0 9.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.349 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN036307.D

Acq: 05 Feb 2025 21:11

Instrument :

BNA_N

ClientSampleId :

RW5-SP100-20250129

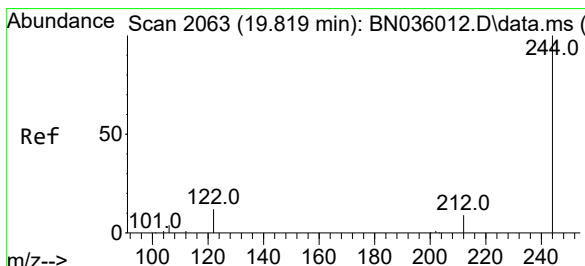
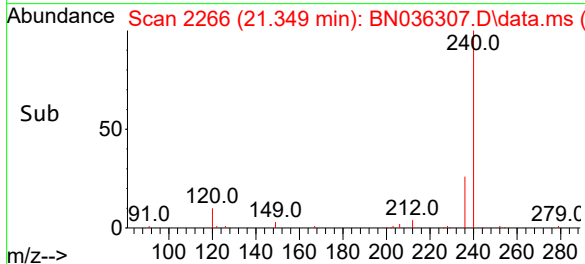
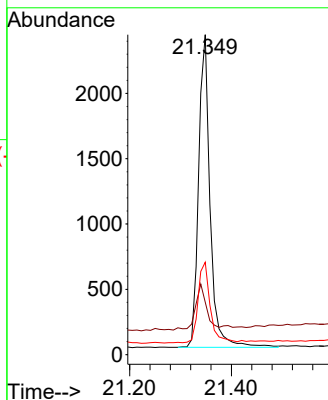
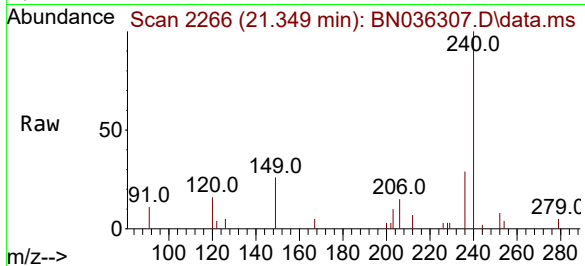
Tgt Ion:240 Resp: 3747

Ion Ratio Lower Upper

240 100

120 16.4 13.9 20.9

236 28.9 23.7 35.5



#31

Terphenyl-d14

Concen: 0.651 ng

RT: 19.787 min Scan# 2069

Delta R.T. -0.005 min

Lab File: BN036307.D

Acq: 05 Feb 2025 21:11

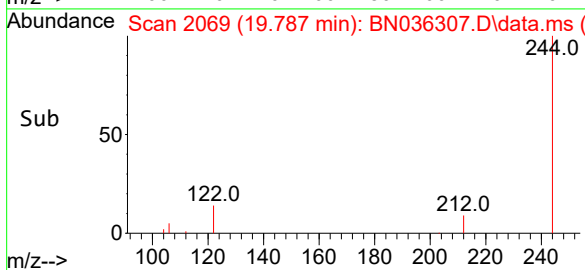
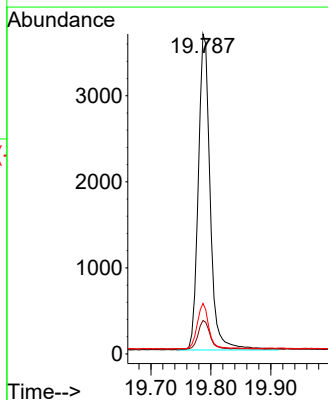
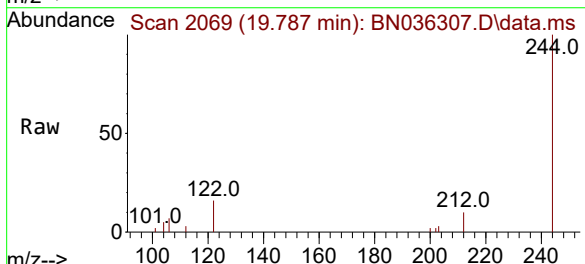
Tgt Ion:244 Resp: 5065

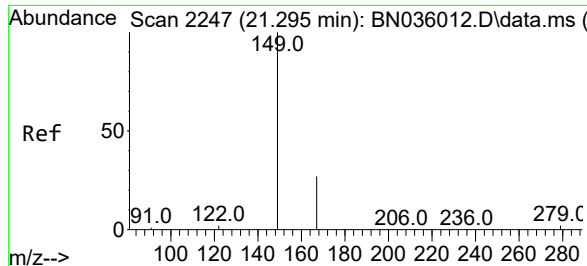
Ion Ratio Lower Upper

244 100

212 10.4 9.1 13.7

122 15.8 11.3 16.9

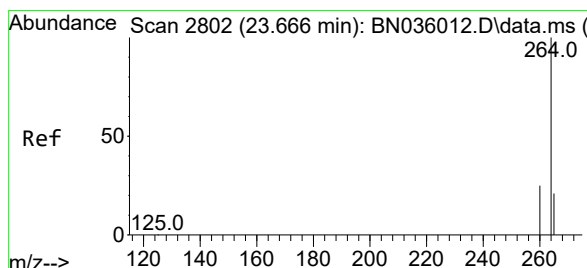
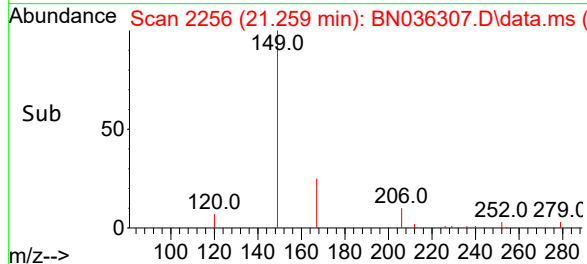
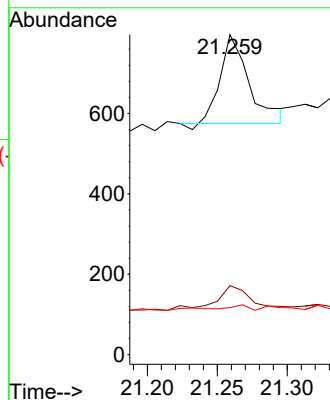
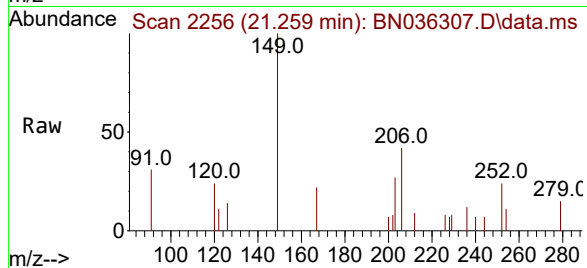




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.042 ng
RT: 21.259 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

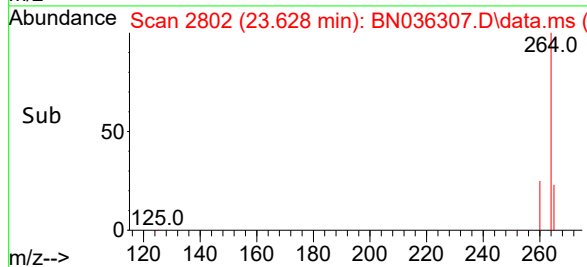
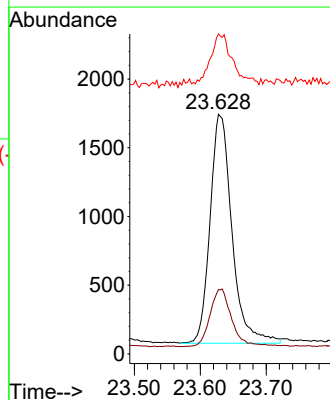
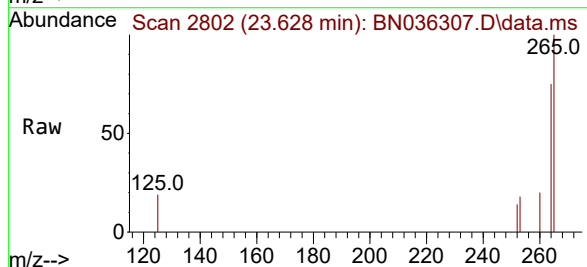
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129

Tgt Ion:149 Resp: 315
Ion Ratio Lower Upper
149 100
167 36.2 21.9 32.9#
279 3.5 3.0 4.6



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.628 min Scan# 2802
Delta R.T. 0.000 min
Lab File: BN036307.D
Acq: 05 Feb 2025 21:11

Tgt Ion:264 Resp: 3848
Ion Ratio Lower Upper
264 100
260 26.8 21.8 32.6
265 133.5 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	RW5-SP100-20250129DL	SDG No.:	Q1225
Lab Sample ID:	Q1225-01DL	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
BN036330.D	5	01/31/25 08:30	02/06/25 11:39	PB166419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	7.50	D	0.34	1.00	1.00	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		113%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.30		55 - 111		75%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		136%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2060		7.775			
1146-65-2	Naphthalene-d8	4360		10.573			
15067-26-2	Acenaphthene-d10	2240		14.42			
1517-22-2	Phenanthrene-d10	4220		17.161			
1719-03-5	Chrysene-d12	3770		21.348			
1520-96-3	Perylene-d12	4020		23.63			

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\BN020525\
Data File : BN036330.D
Acq On : 06 Feb 2025 11:39
Operator : RC/JU
Sample : Q1225-01DL 5X
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

Quant Time: Feb 06 12:09:09 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

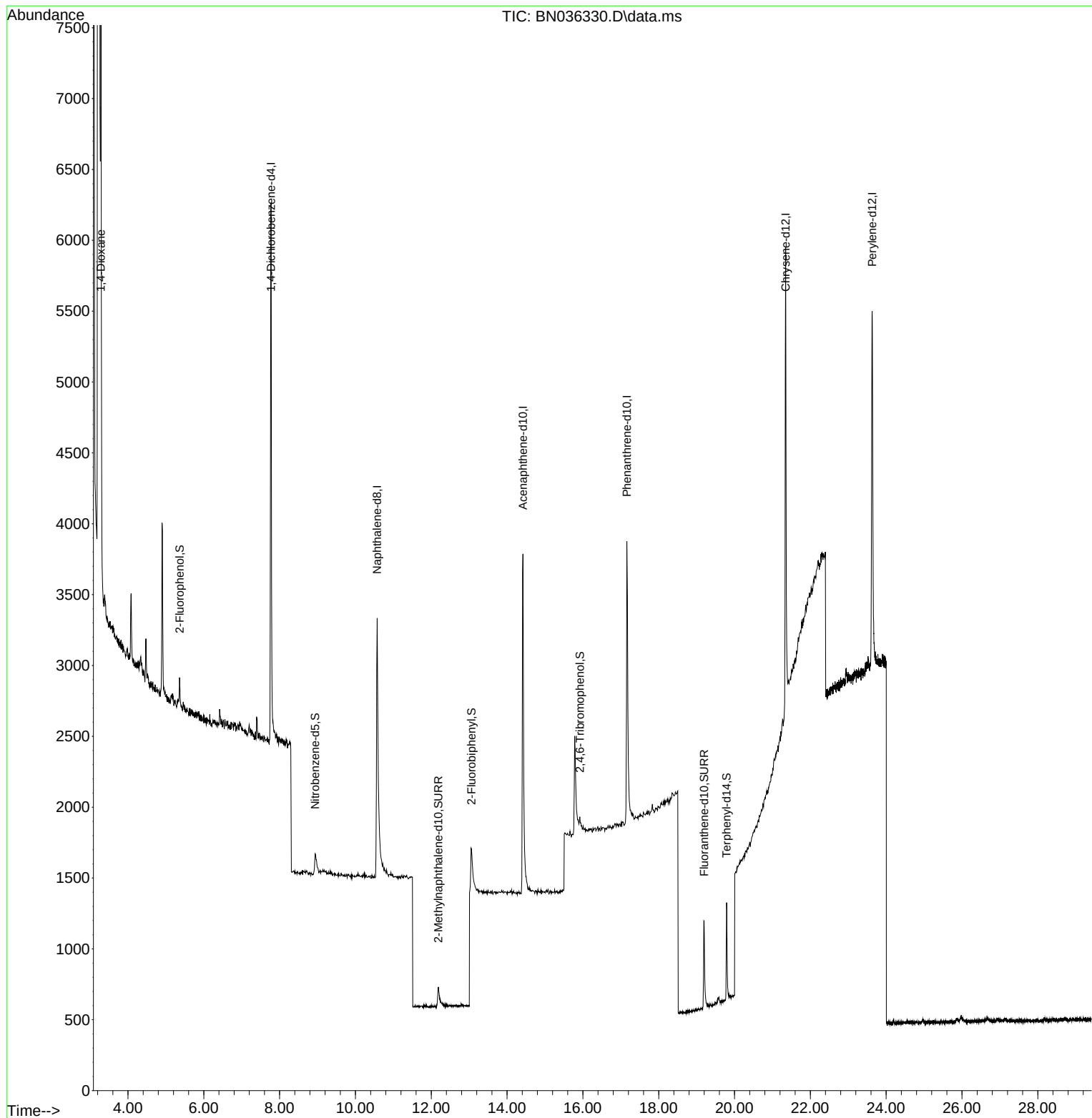
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2064	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	4355	0.400	ng	# 0.01
13) Acenaphthene-d10	14.420	164	2243	0.400	ng	0.01
19) Phenanthrene-d10	17.161	188	4222	0.400	ng	0.00
29) Chrysene-d12	21.348	240	3765	0.400	ng	0.00
35) Perylene-d12	23.630	264	4020	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	134	0.025	ng	0.00
5) Phenol-d6	6.952	99	76	0.012	ng	0.00
8) Nitrobenzene-d5	8.939	82	246	0.060	ng	0.01
11) 2-Methylnaphthalene-d10	12.187	152	405	0.068	ng	0.03
14) 2,4,6-Tribromophenol	15.920	330	87	0.060	ng	0.01
15) 2-Fluorobiphenyl	13.062	172	708	0.071	ng	0.02
27) Fluoranthene-d10	19.197	212	980	0.090	ng	0.00
31) Terphenyl-d14	19.791	244	855	0.109	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.283	88	3466	1.502	ng	Qvalue 96

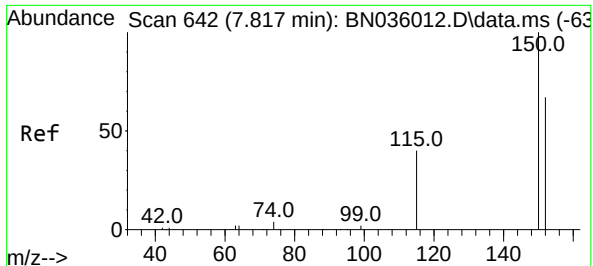
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036330.D
Acq On : 06 Feb 2025 11:39
Operator : RC/JU
Sample : Q1225-01DL 5X
Misc :
ALS Vial : 29 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

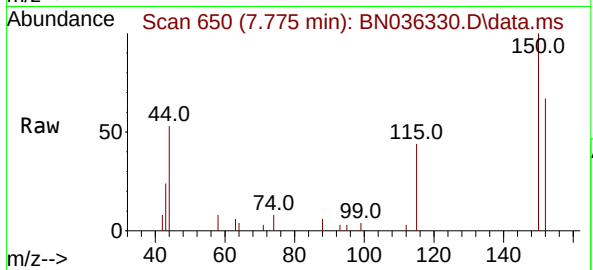
Quant Time: Feb 06 12:09:09 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration



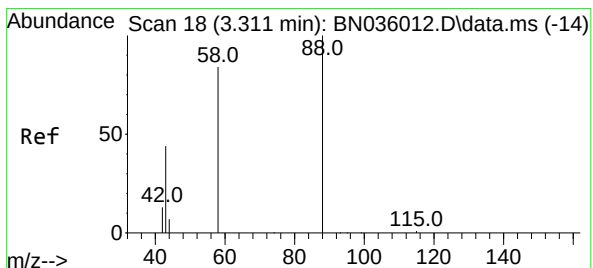
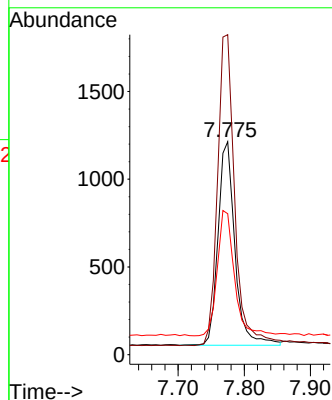
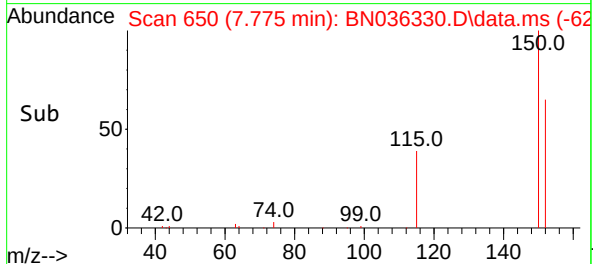


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

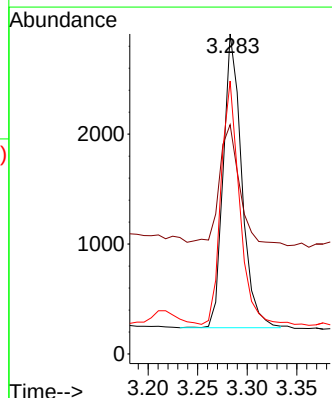
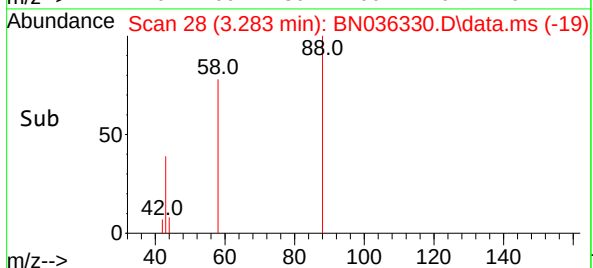
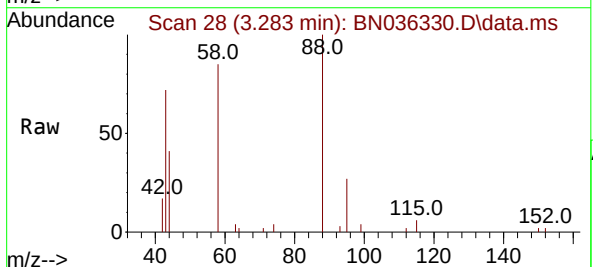


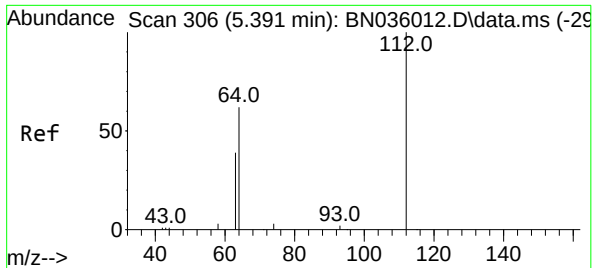
Tgt Ion:152 Resp: 2064
Ion Ratio Lower Upper
152 100
150 150.2 117.4 176.2
115 66.1 51.0 76.4



#2
1,4-Dioxane
Concen: 1.502 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Tgt Ion: 88 Resp: 3466
Ion Ratio Lower Upper
88 100
43 41.6 38.5 57.7
58 82.5 66.6 99.8

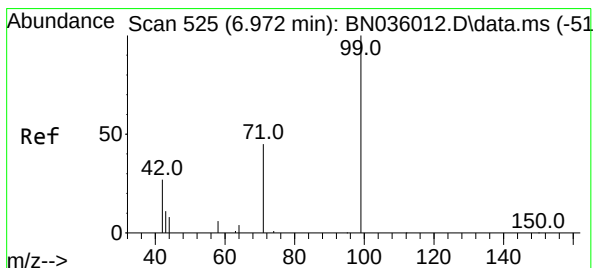
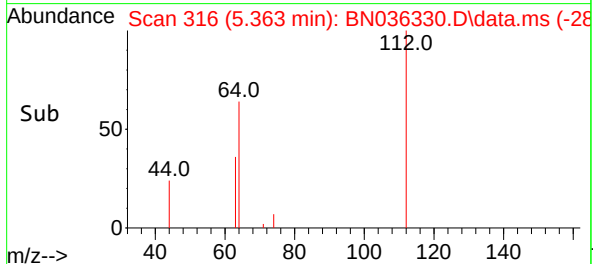
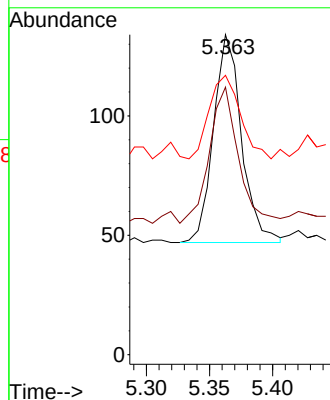
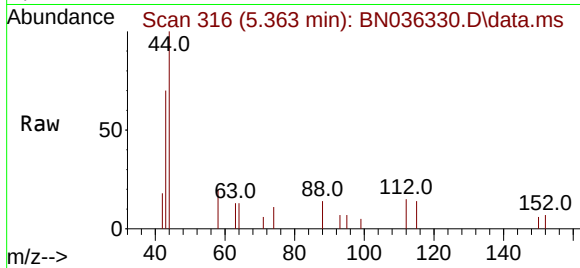




#4
2-Fluorophenol
Concen: 0.025 ng
RT: 5.363 min Scan# 316
Delta R.T. -0.000 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

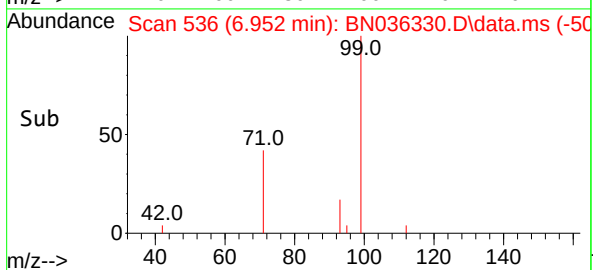
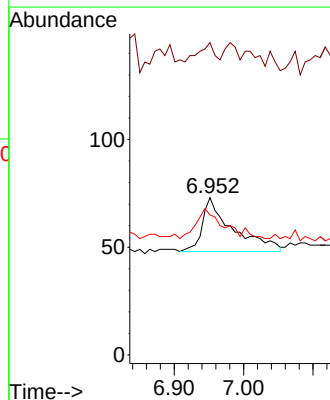
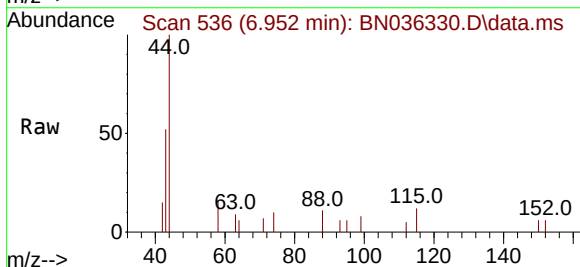
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

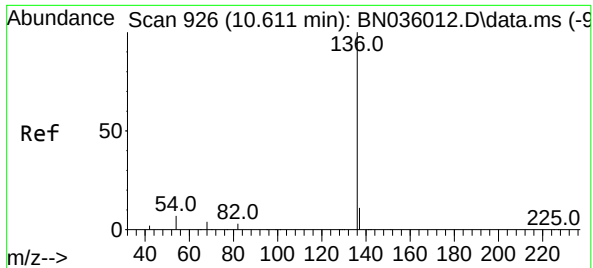
Tgt Ion:112 Resp: 134
Ion Ratio Lower Upper
112 100
64 69.4 50.0 75.0
63 44.8 30.7 46.1



#5
Phenol-d6
Concen: 0.012 ng
RT: 6.952 min Scan# 536
Delta R.T. -0.000 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Tgt Ion: 99 Resp: 76
Ion Ratio Lower Upper
99 100
42 19.7 26.8 40.2#
71 44.7 36.6 55.0

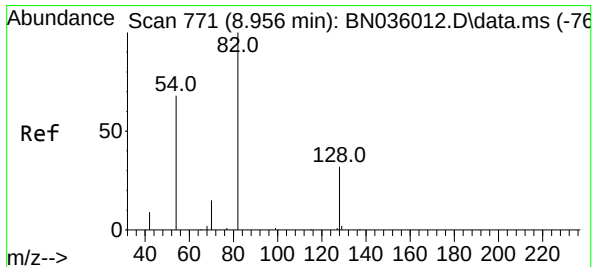
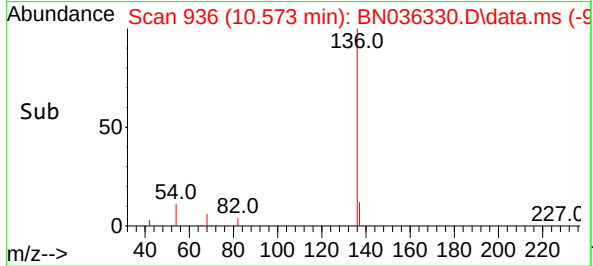
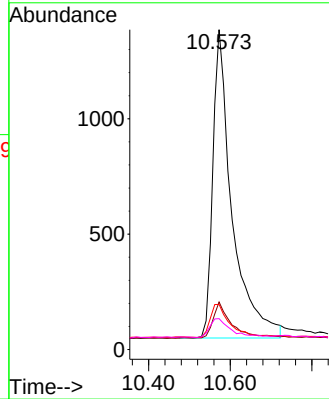
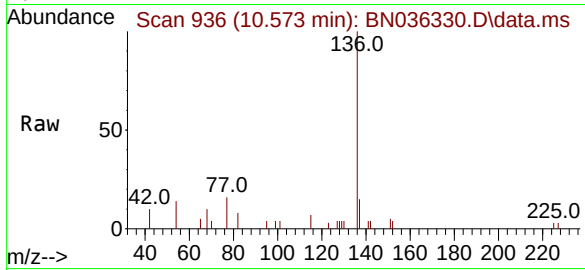




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 91
Delta R.T. 0.010 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

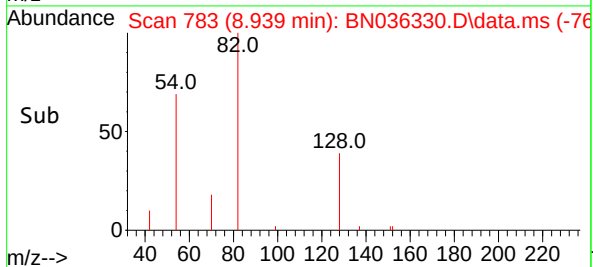
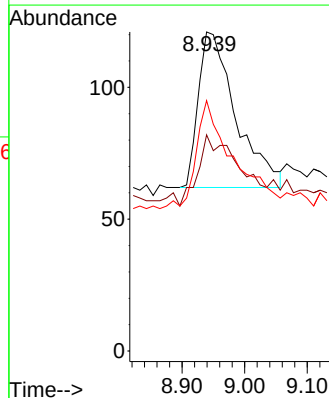
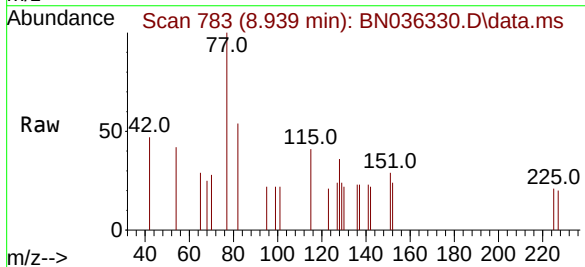
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

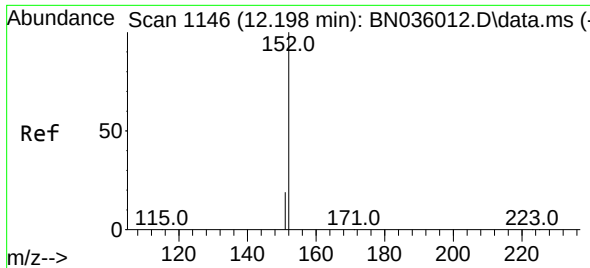
Tgt Ion:	136	Resp:	4355
Ion	Ratio	Lower	Upper
136	100		
137	14.9	10.4	15.6
54	14.1	7.7	11.5#
68	9.7	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.060 ng
RT: 8.939 min Scan# 783
Delta R.T. 0.010 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Tgt Ion:	82	Resp:	246
Ion	Ratio	Lower	Upper
82	100		
128	67.8	28.8	43.2#
54	78.5	55.8	83.8

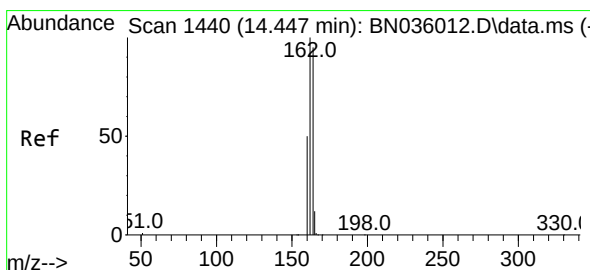
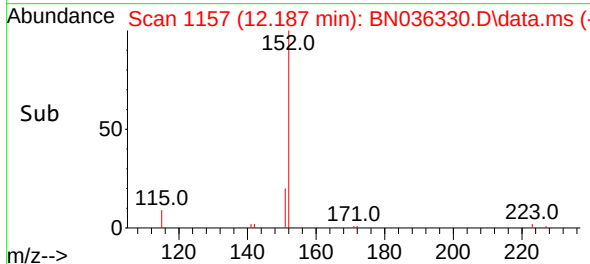
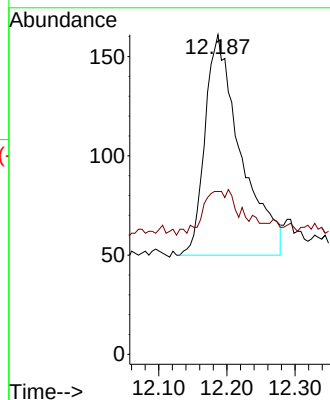
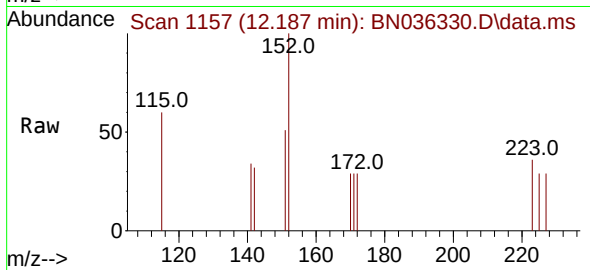




#11
2-Methylnaphthalene-d10
Concen: 0.068 ng
RT: 12.187 min Scan# 1146
Delta R.T. 0.030 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

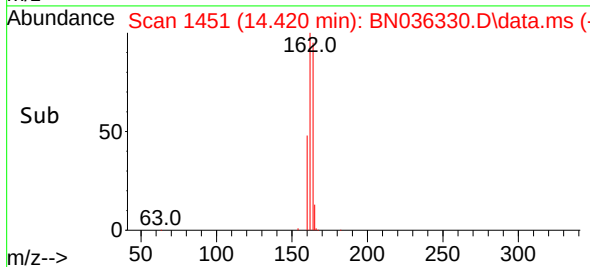
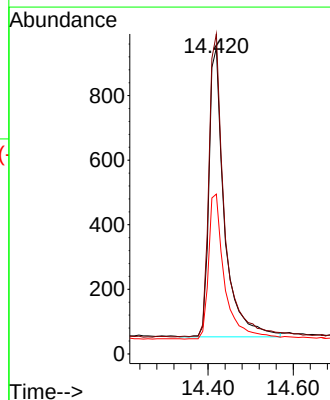
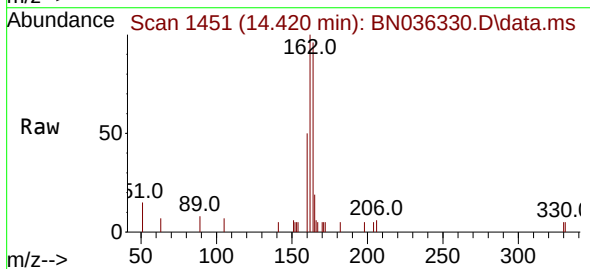
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

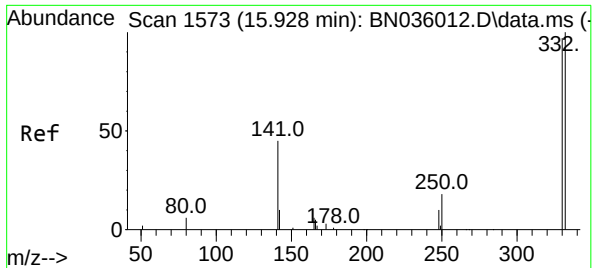
Tgt Ion:152 Resp: 405
Ion Ratio Lower Upper
152 100
151 19.8 16.6 25.0



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.420 min Scan# 1451
Delta R.T. 0.011 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Tgt Ion:164 Resp: 2243
Ion Ratio Lower Upper
164 100
162 104.5 84.1 126.1
160 52.2 43.8 65.8





#14

2,4,6-Tribromophenol

Concen: 0.060 ng

RT: 15.920 min Scan# 1

Delta R.T. 0.012 min

Lab File: BN036330.D

Acq: 06 Feb 2025 11:39

Instrument :

BNA_N

ClientSampleId :

RW5-SP100-20250129DL

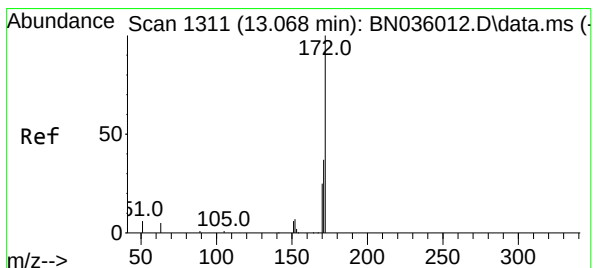
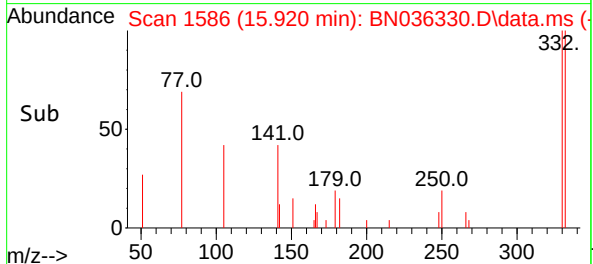
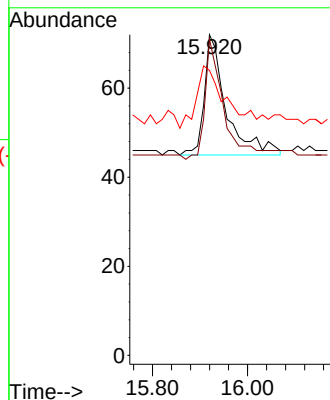
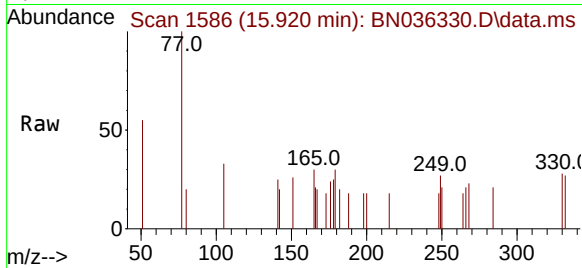
Tgt Ion:330 Resp: 87

Ion Ratio Lower Upper

330 100

332 88.5 81.0 121.4

141 63.2 36.7 55.1#



#15

2-Fluorobiphenyl

Concen: 0.071 ng

RT: 13.062 min Scan# 1324

Delta R.T. 0.021 min

Lab File: BN036330.D

Acq: 06 Feb 2025 11:39

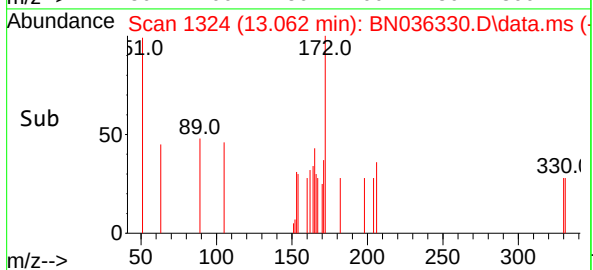
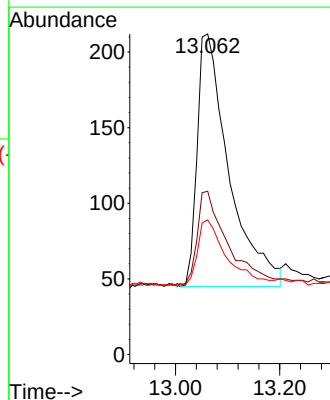
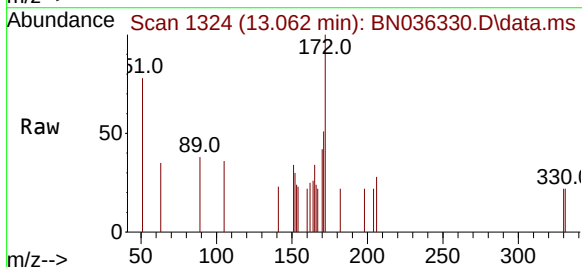
Tgt Ion:172 Resp: 708

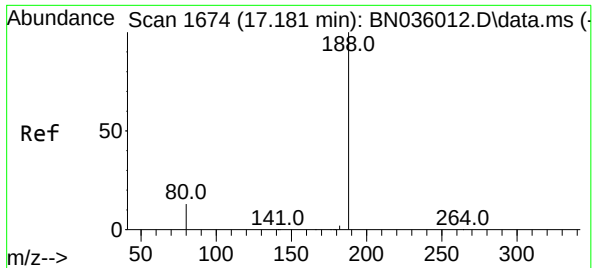
Ion Ratio Lower Upper

172 100

171 50.9 30.9 46.3#

170 42.0 21.2 31.8#

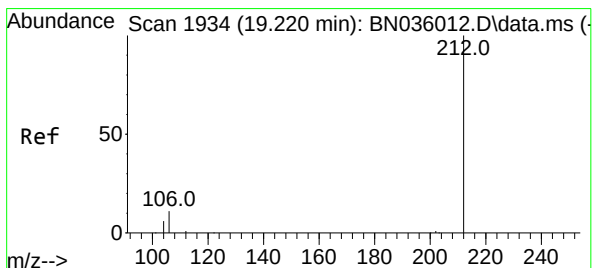
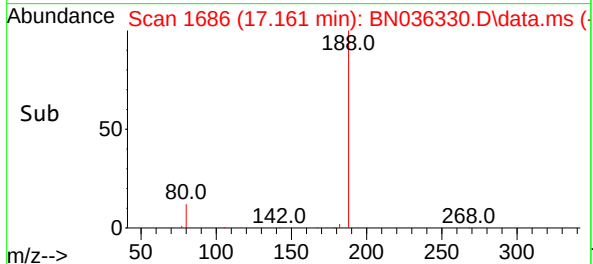
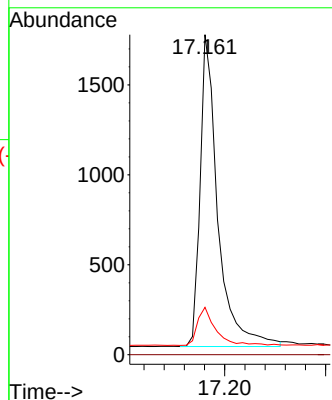
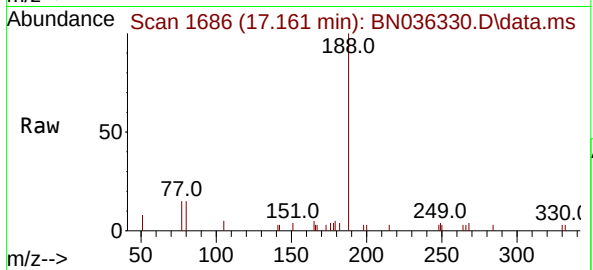




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

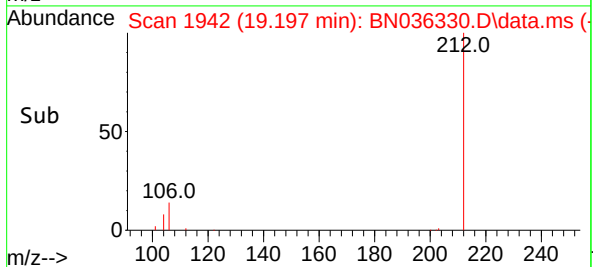
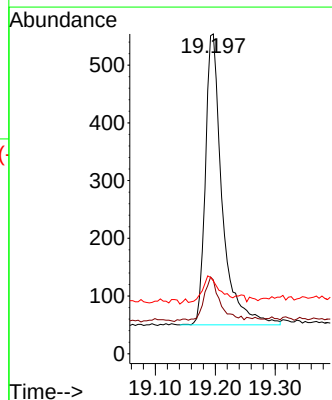
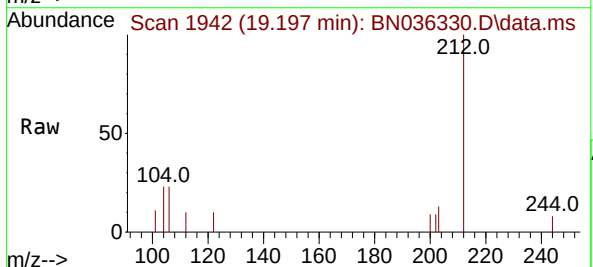
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

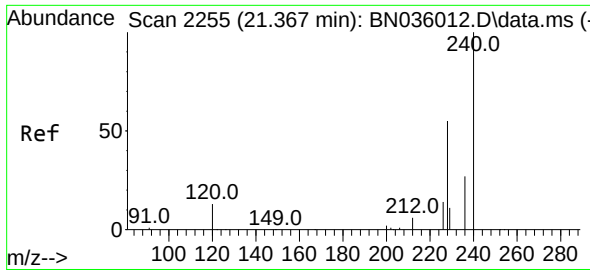
Tgt Ion:188 Resp: 4222
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 14.8 12.3 18.5



#27
Fluoranthene-d10
Concen: 0.090 ng
RT: 19.197 min Scan# 1942
Delta R.T. 0.009 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Tgt Ion:212 Resp: 980
Ion Ratio Lower Upper
212 100
106 13.6 9.7 14.5
104 8.6 6.0 9.0

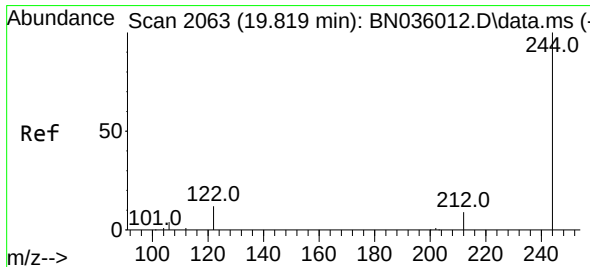
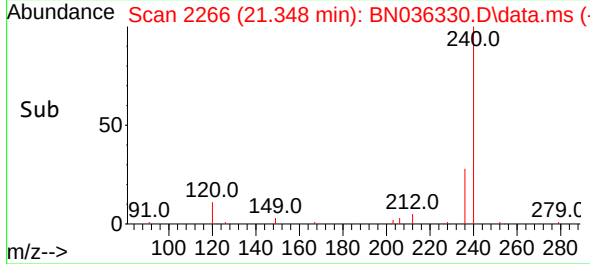
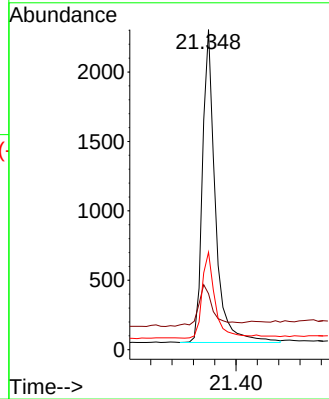
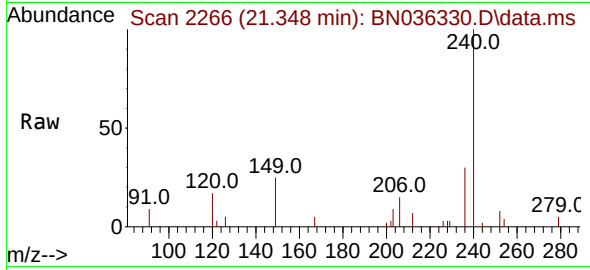




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.348 min Scan# 21
Delta R.T. 0.009 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

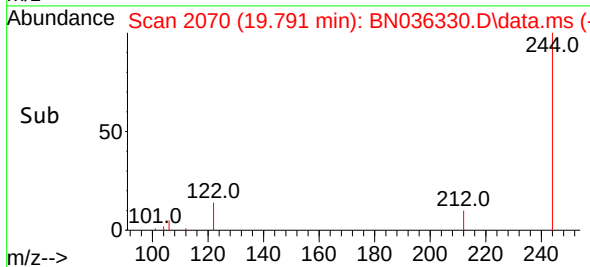
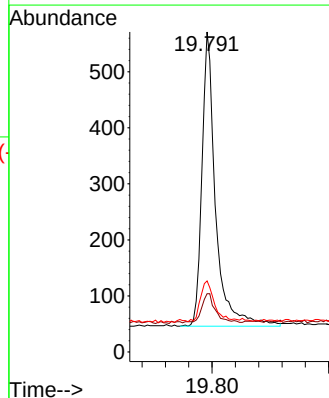
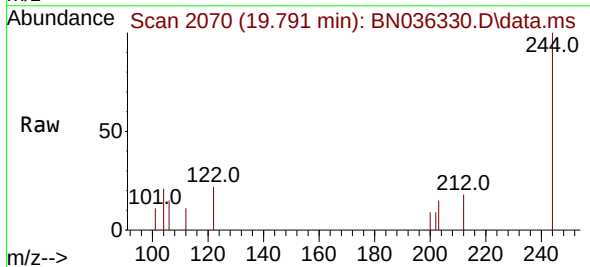
Instrument :
BNA_N
ClientSampleId :
RW5-SP100-20250129DL

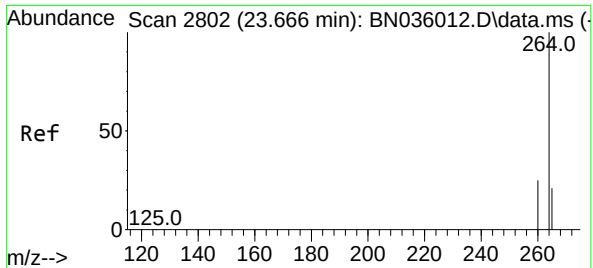
Tgt Ion:240 Resp: 3765
Ion Ratio Lower Upper
240 100
120 17.5 13.9 20.9
236 30.5 23.7 35.5



#31
Terphenyl-d14
Concen: 0.109 ng
RT: 19.791 min Scan# 2070
Delta R.T. -0.000 min
Lab File: BN036330.D
Acq: 06 Feb 2025 11:39

Tgt Ion:244 Resp: 855
Ion Ratio Lower Upper
244 100
212 18.2 9.1 13.7#
122 22.2 11.3 16.9#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.630 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036330.D

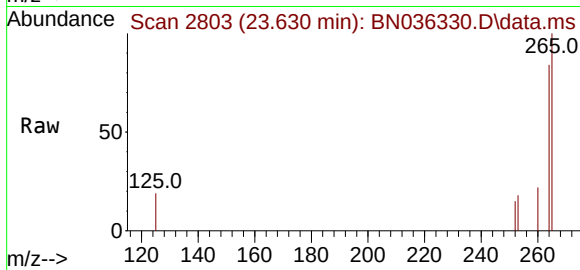
Acq: 06 Feb 2025 11:39

Instrument :

BNA_N

ClientSampleId :

RW5-SP100-20250129DL



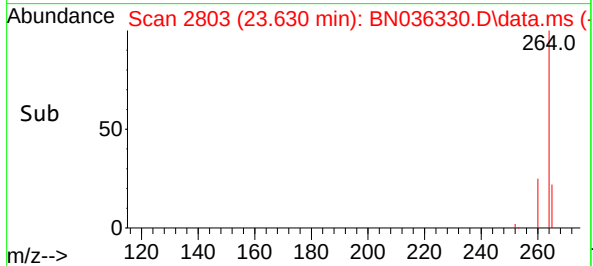
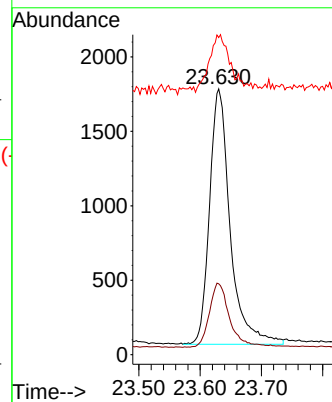
Tgt Ion:264 Resp: 4020

Ion	Ratio	Lower	Upper

264	100		

260	26.7	21.8	32.6

265	119.3	56.6	84.8



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	RW5-SP201-20250129	SDG No.:	Q1225
Lab Sample ID:	Q1225-02	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
BN036308.D	1	01/31/25 08:30	02/05/25 21:47	PB166419

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	0.42		30 - 150		104%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.46		30 - 150		116%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		55 - 111		103%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		140%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.775				
1146-65-2	Naphthalene-d8	4240	10.573				
15067-26-2	Acenaphthene-d10	2210	14.42				
1517-22-2	Phenanthrene-d10	4220	17.161				
1719-03-5	Chrysene-d12	3730	21.348				
1520-96-3	Perylene-d12	3990	23.627				

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\BN020525\
Data File : BN036308.D
Acq On : 05 Feb 2025 21:47
Operator : RC/JU
Sample : Q1225-02
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

Quant Time: Feb 06 01:06:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

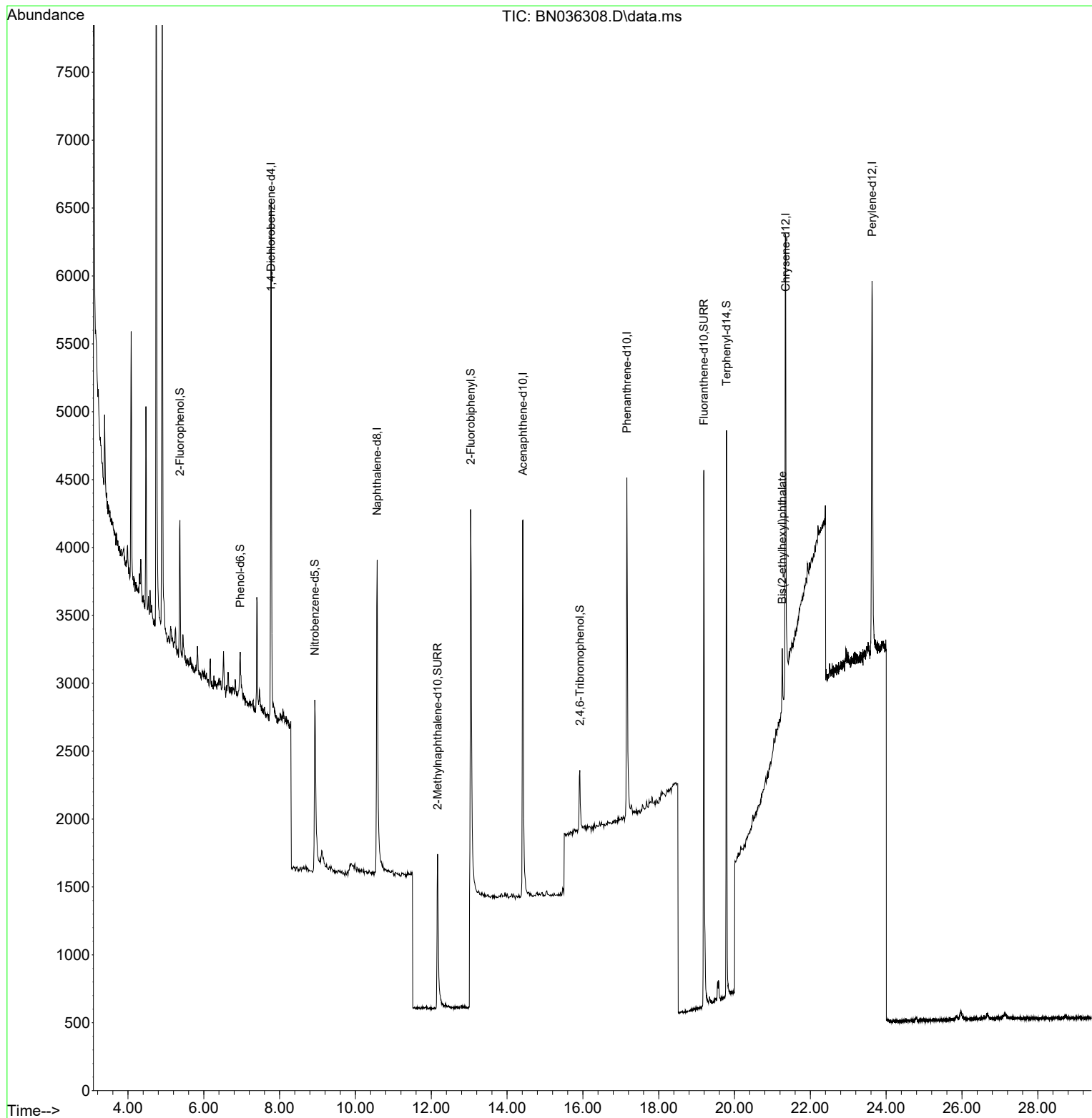
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	1967	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	4239	0.400	ng	# 0.01
13) Acenaphthene-d10	14.420	164	2214	0.400	ng	0.01
19) Phenanthrene-d10	17.161	188	4215	0.400	ng	0.00
29) Chrysene-d12	21.348	240	3734	0.400	ng	0.00
35) Perylene-d12	23.627	264	3986	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.370	112	745	0.146	ng	0.00
5) Phenol-d6	6.959	99	485	0.081	ng	0.00
8) Nitrobenzene-d5	8.929	82	1644	0.411	ng	0.00
11) 2-Methylnaphthalene-d10	12.167	152	2391	0.415	ng	0.00
14) 2,4,6-Tribromophenol	15.920	330	355	0.250	ng	0.01
15) 2-Fluorobiphenyl	13.040	172	3637	0.368	ng	0.00
27) Fluoranthene-d10	19.192	212	5050	0.463	ng	0.00
31) Terphenyl-d14	19.787	244	4358	0.562	ng	0.00
Target Compounds						
34) Bis(2-ethylhexyl)phtha...	21.259	149	524	0.071	ng	# 96

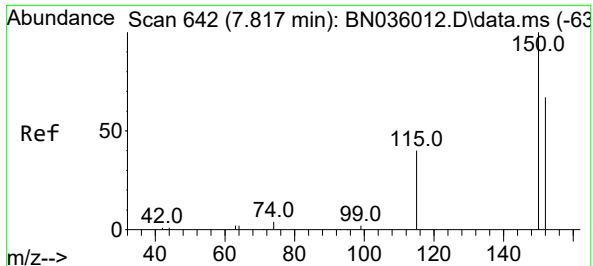
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036308.D
Acq On : 05 Feb 2025 21:47
Operator : RC/JU
Sample : Q1225-02
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

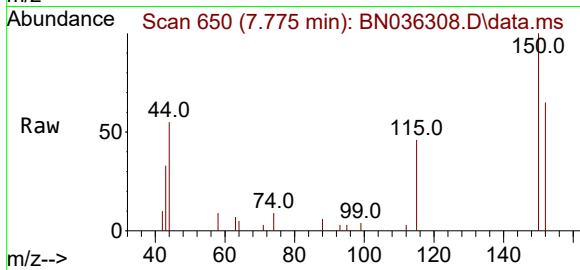
Quant Time: Feb 06 01:06:32 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration



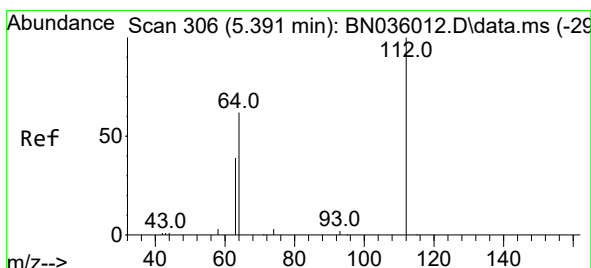
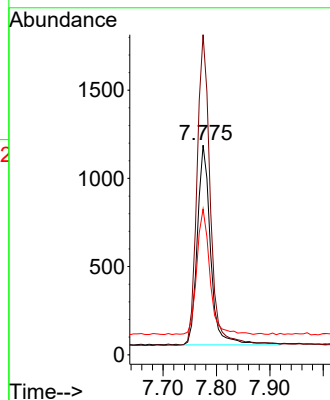
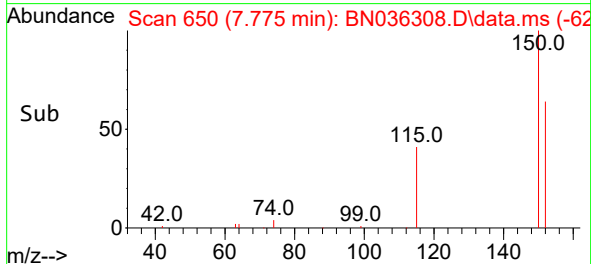


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

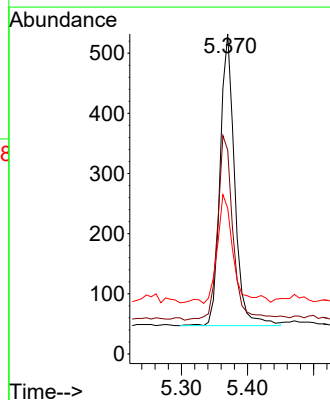
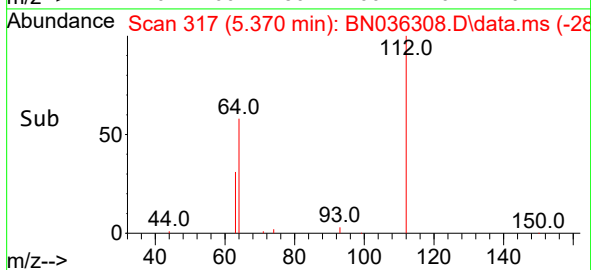
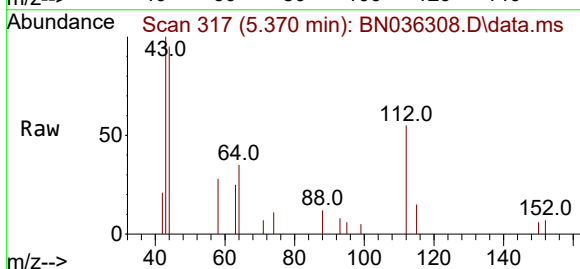


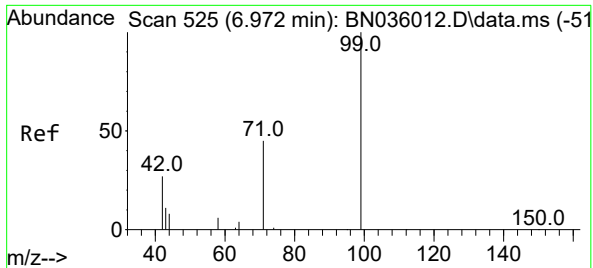
Tgt Ion:152 Resp: 1967
Ion Ratio Lower Upper
152 100
150 152.8 117.4 176.2
115 69.5 51.0 76.4



#4
2-Fluorophenol
Concen: 0.146 ng
RT: 5.370 min Scan# 317
Delta R.T. 0.007 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion:112 Resp: 745
Ion Ratio Lower Upper
112 100
64 67.9 50.0 75.0
63 40.4 30.7 46.1

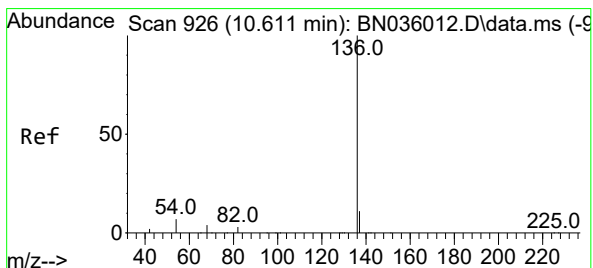
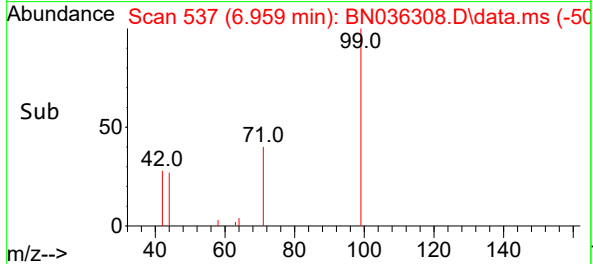
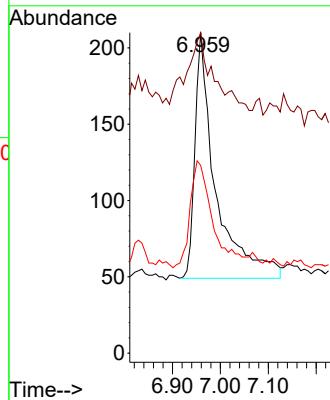
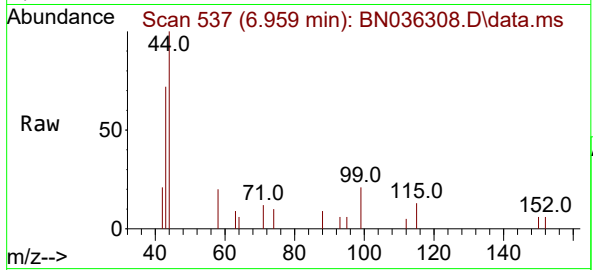




#5
Phenol-d6
Concen: 0.081 ng
RT: 6.959 min Scan# 51
Delta R.T. 0.007 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

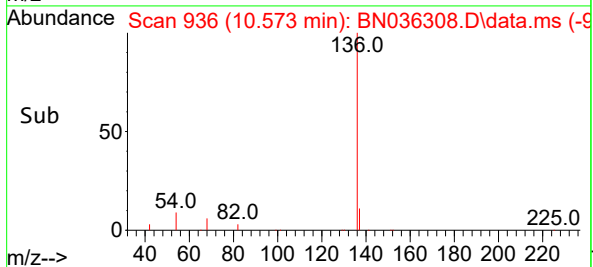
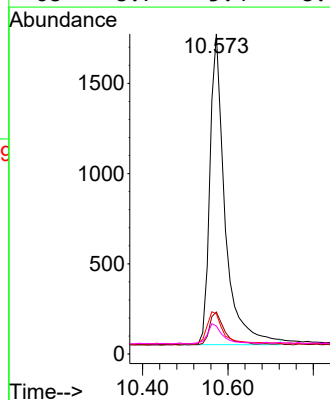
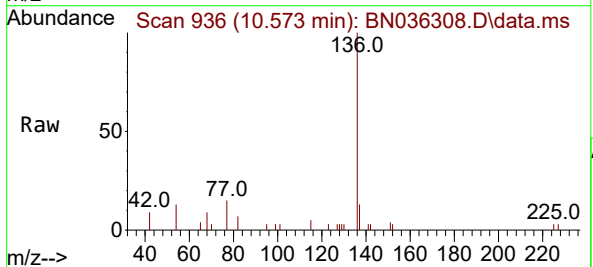
Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

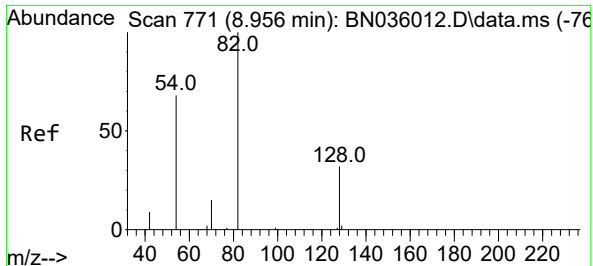
Tgt Ion: 99 Resp: 485
Ion Ratio Lower Upper
99 100
42 40.6 26.8 40.2#
71 47.4 36.6 55.0



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 936
Delta R.T. 0.010 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion: 136 Resp: 4239
Ion Ratio Lower Upper
136 100
137 13.1 10.4 15.6
54 12.6 7.7 11.5#
68 8.7 5.4 8.0#

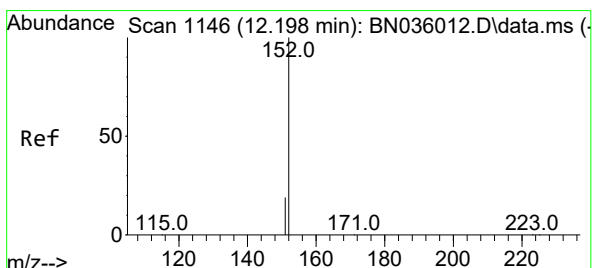
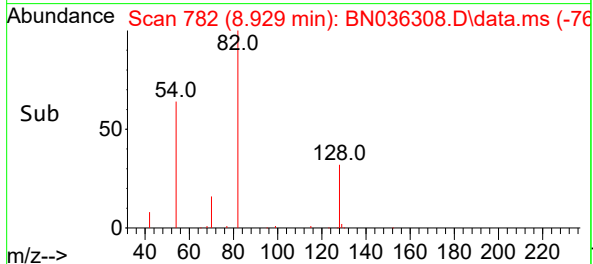
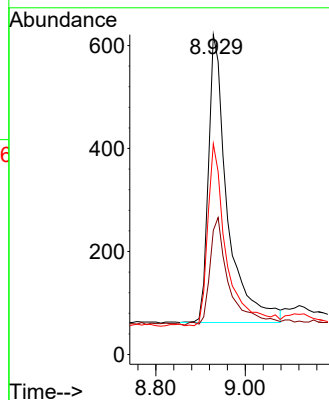
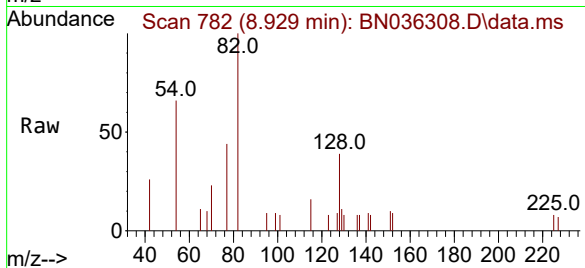




#8
Nitrobenzene-d5
Concen: 0.411 ng
RT: 8.929 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

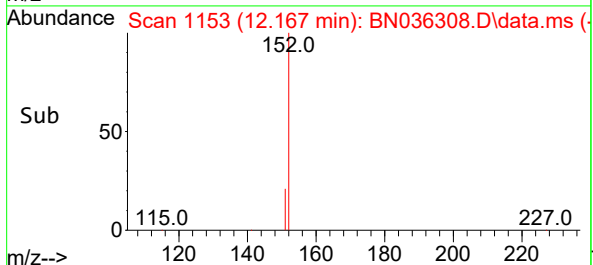
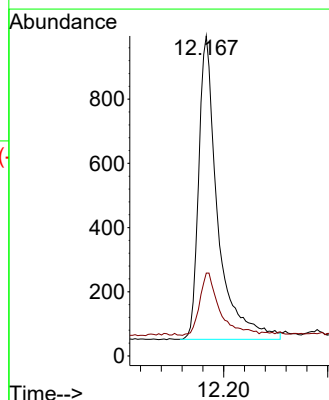
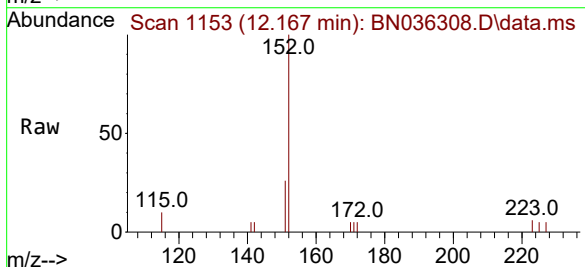
Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

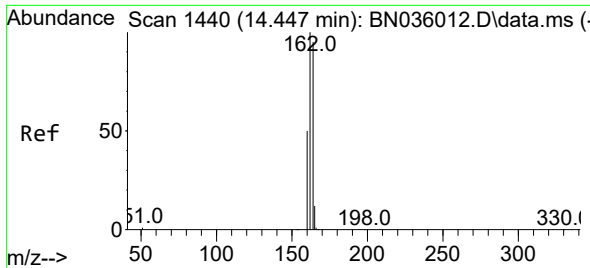
Tgt Ion	Ratio	Lower	Upper
82	100		
128	38.8	28.8	43.2
54	65.9	55.8	83.8



#11
2-Methylnaphthalene-d10
Concen: 0.415 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.010 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion	Ratio	Lower	Upper
152	100		
151	21.7	16.6	25.0

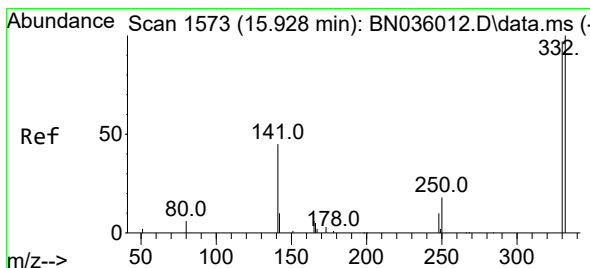
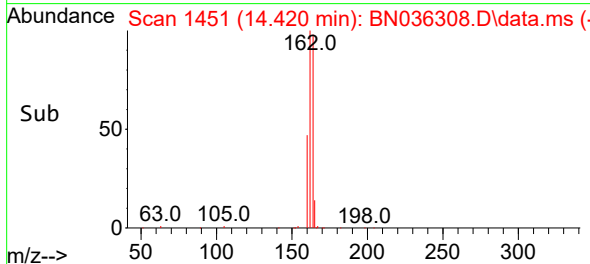
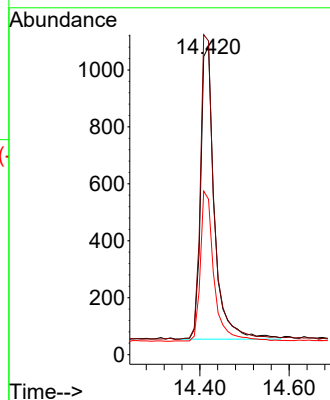
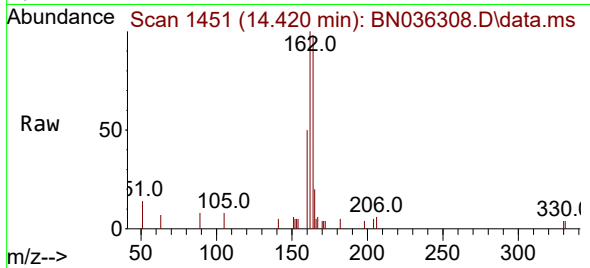




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.420 min Scan# 1440
Delta R.T. 0.010 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

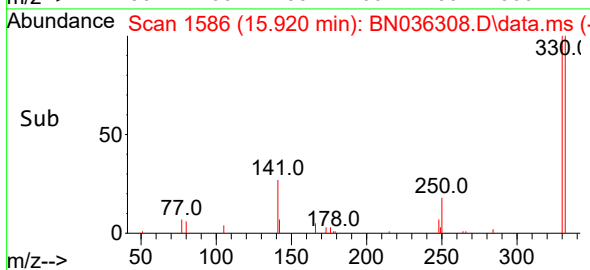
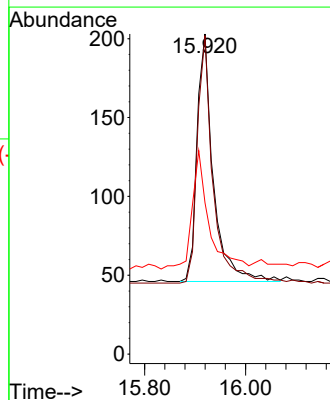
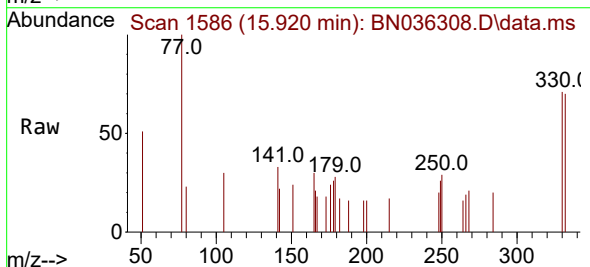
Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

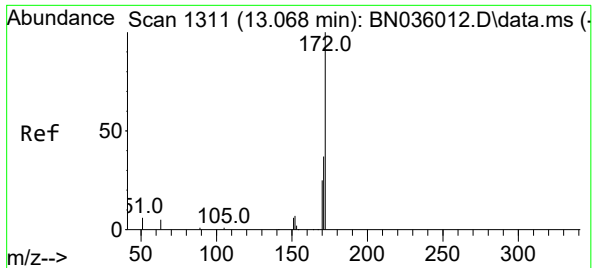
Tgt Ion:164 Resp: 2214
Ion Ratio Lower Upper
164 100
162 101.8 84.1 126.1
160 50.4 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.250 ng
RT: 15.920 min Scan# 1586
Delta R.T. 0.012 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion:330 Resp: 355
Ion Ratio Lower Upper
330 100
332 96.1 81.0 121.4
141 48.5 36.7 55.1

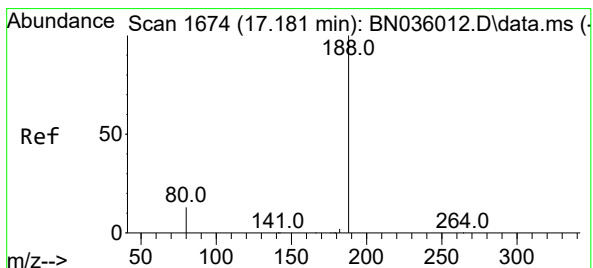
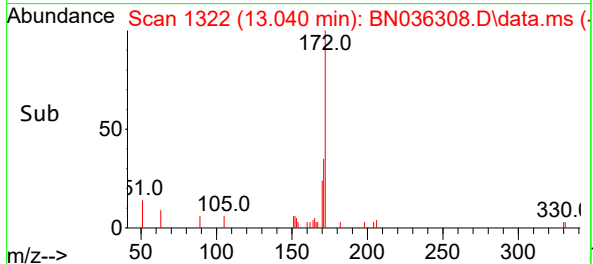
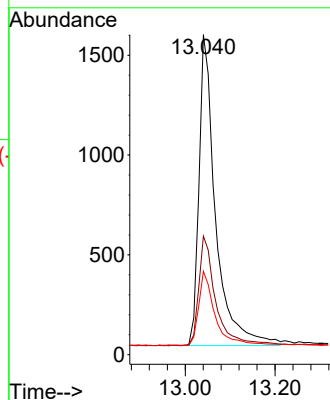
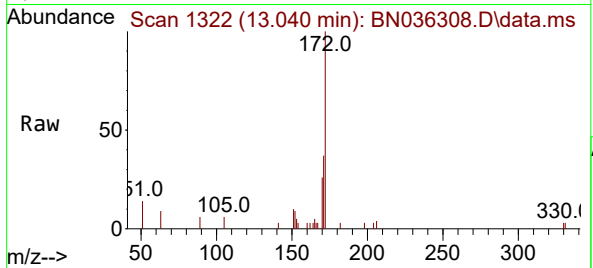




#15
2-Fluorobiphenyl
Concen: 0.368 ng
RT: 13.040 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

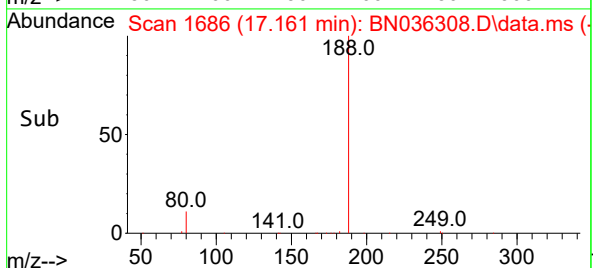
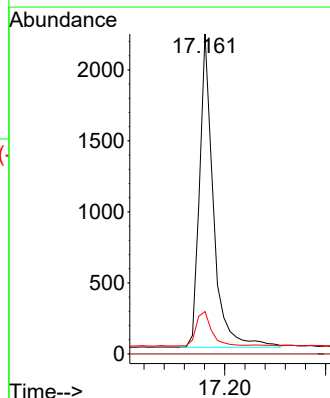
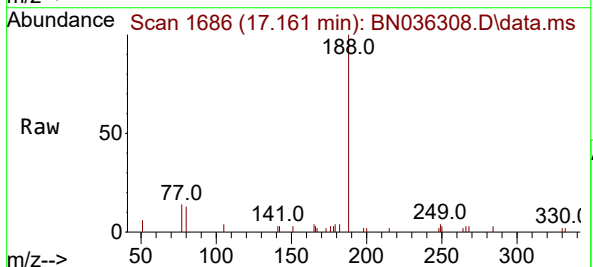
Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

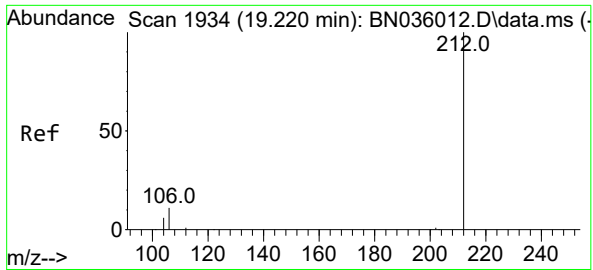
Tgt Ion	Ratio	Lower	Upper
172	100		
171	37.1	30.9	46.3
170	26.1	21.2	31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.2	12.3	18.5

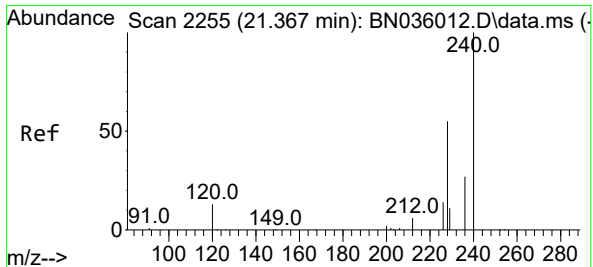
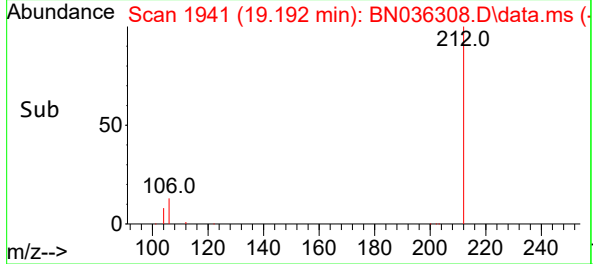
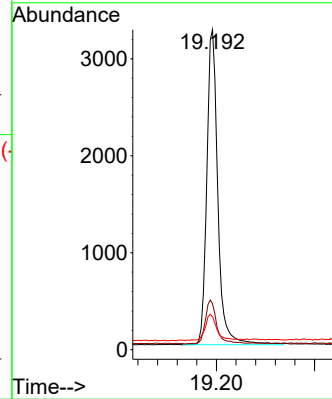
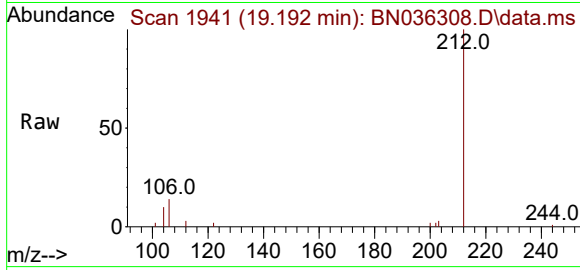




#27
Fluoranthene-d10
Concen: 0.463 ng
RT: 19.192 min Scan# 19
Delta R.T. 0.004 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

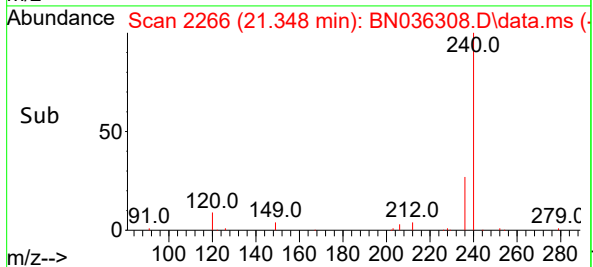
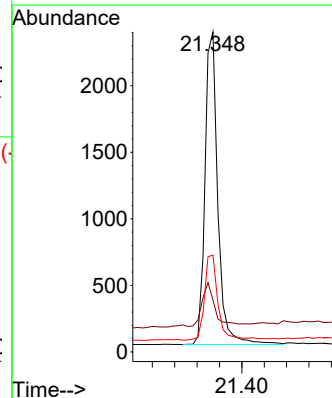
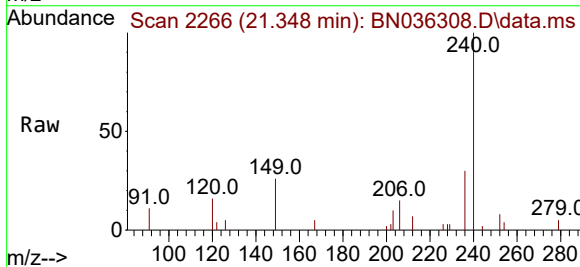
Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

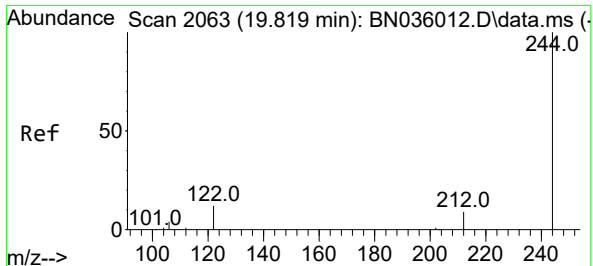
Tgt Ion:212 Resp: 5050
Ion Ratio Lower Upper
212 100
106 14.4 9.7 14.5
104 8.6 6.0 9.0



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.348 min Scan# 2266
Delta R.T. 0.009 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion:240 Resp: 3734
Ion Ratio Lower Upper
240 100
120 16.2 13.9 20.9
236 30.2 23.7 35.5

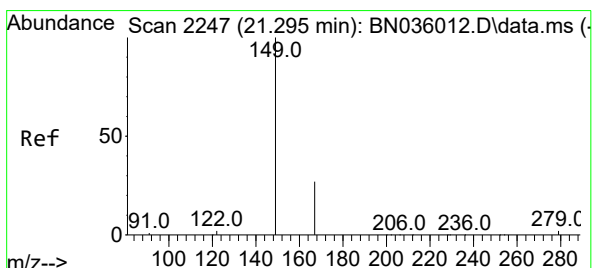
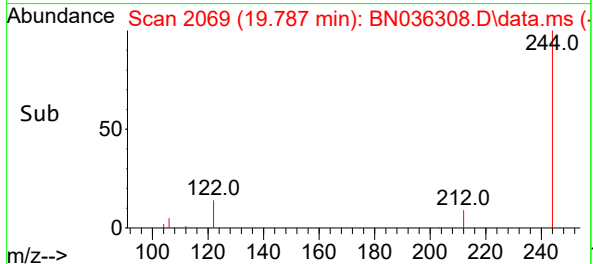
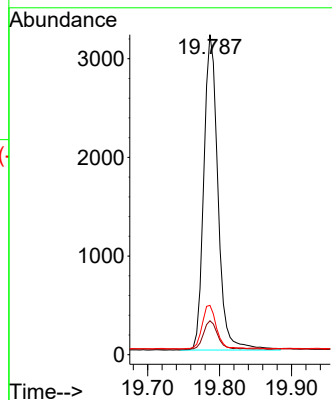
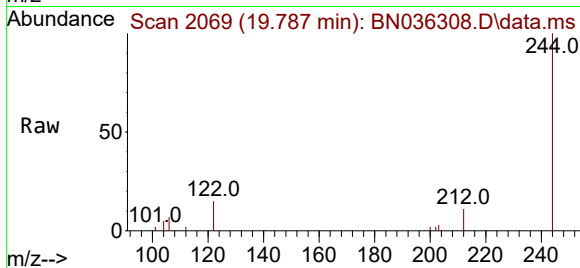




#31
Terphenyl-d14
Concen: 0.562 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

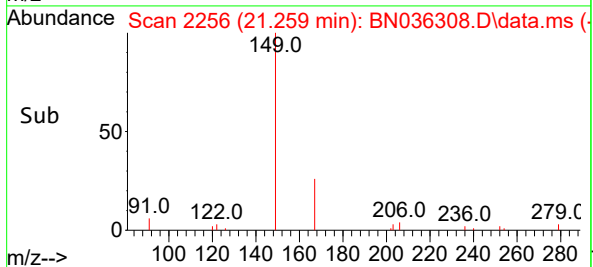
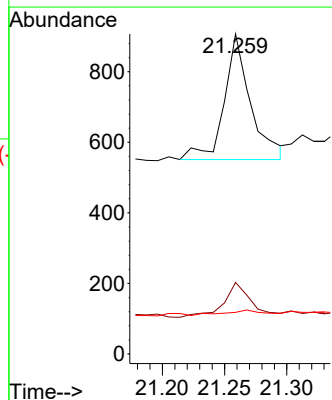
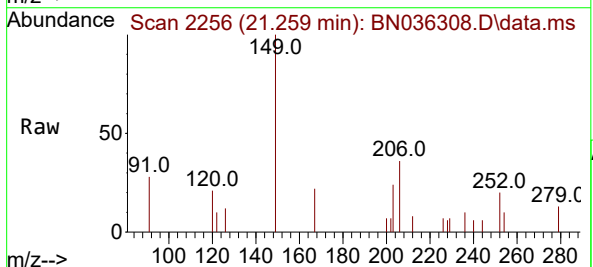
Instrument :
BNA_N
ClientSampleId :
RW5-SP201-20250129

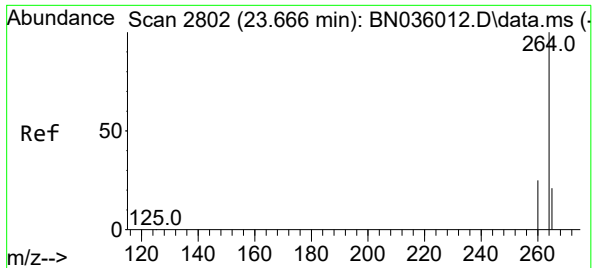
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.6	9.1	13.7
122	15.4	11.3	16.9



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.071 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.000 min
Lab File: BN036308.D
Acq: 05 Feb 2025 21:47

Tgt Ion	Ratio	Lower	Upper
149	100		
167	29.4	21.9	32.9
279	6.7	3.0	4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.627 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036308.D

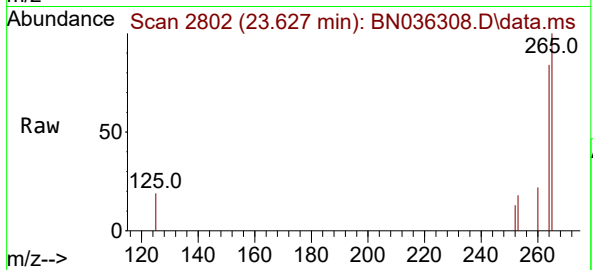
Acq: 05 Feb 2025 21:47

Instrument :

BNA_N

ClientSampleId :

RW5-SP201-20250129



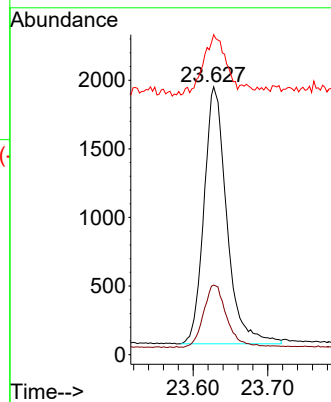
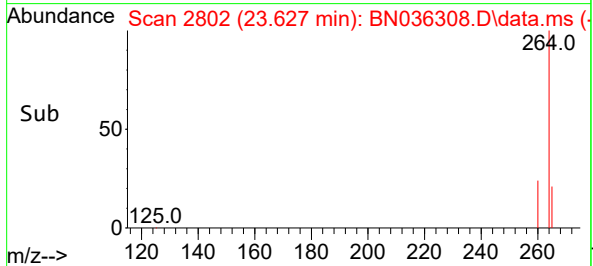
Tgt Ion:264 Resp: 3986

Ion Ratio Lower Upper

264 100

260 26.0 21.8 32.6

265 119.5 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/29/25
Project:	CTO WE13	Date Received:	01/30/25
Client Sample ID:	RW5-SP303-20250129	SDG No.:	Q1225
Lab Sample ID:	Q1225-03	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
BN036309.D	1	01/31/25 08:30	02/05/25 22:22	PB166419

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	0.42		30 - 150		106%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		113%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.68	*	58 - 132		170%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2190		7.775			
1146-65-2	Naphthalene-d8	4850		10.573			
15067-26-2	Acenaphthene-d10	2690		14.409			
1517-22-2	Phenanthrene-d10	5490		17.161			
1719-03-5	Chrysene-d12	4830		21.34			
1520-96-3	Perylene-d12	4950		23.627			

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\BN020525\
Data File : BN036309.D
Acq On : 05 Feb 2025 22:22
Operator : RC/JU
Sample : Q1225-03
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

Quant Time: Feb 06 01:06:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

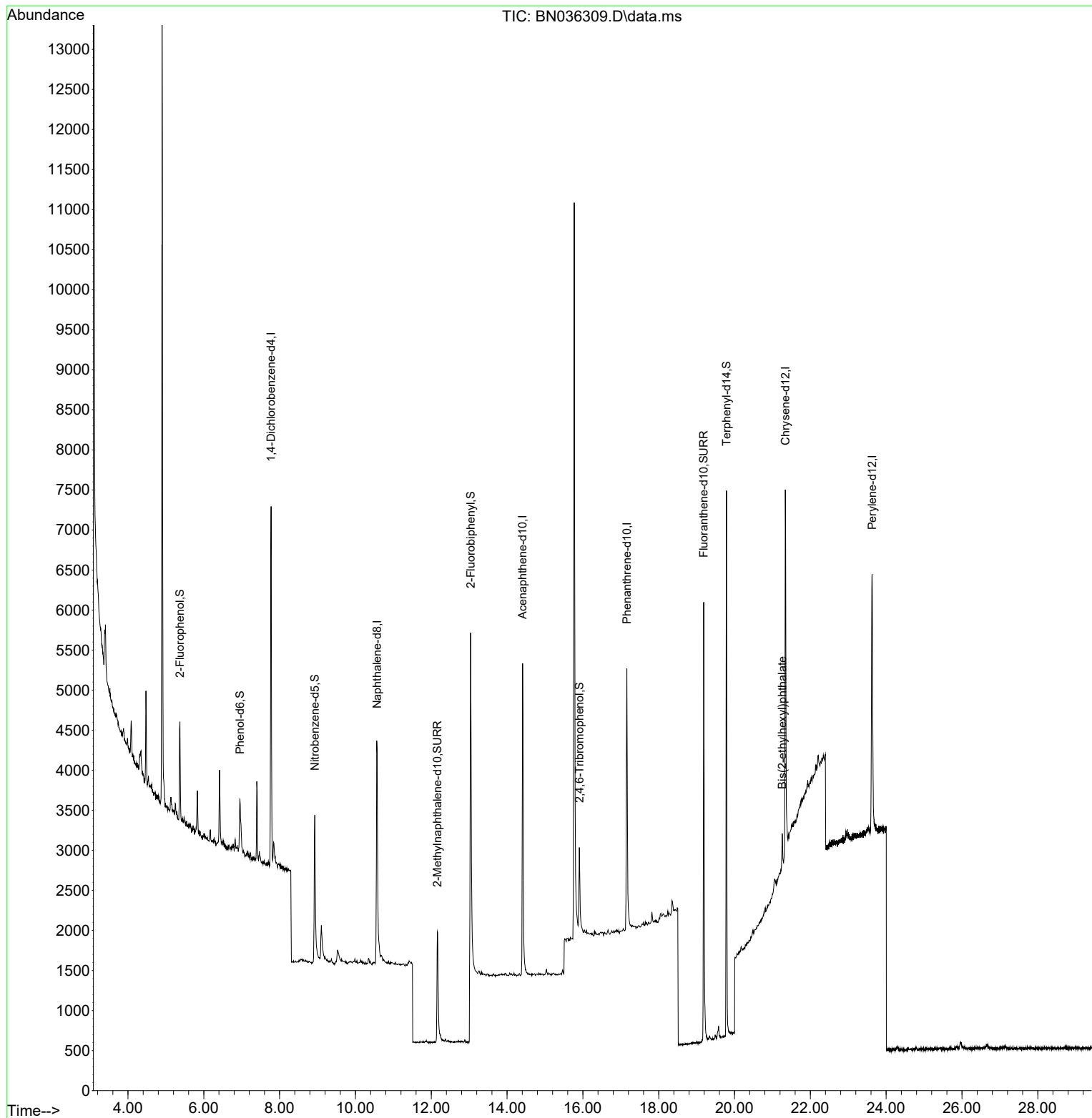
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2187	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	4848	0.400	ng	0.01
13) Acenaphthene-d10	14.409	164	2688	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	5486	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	4831	0.400	ng	0.00
35) Perylene-d12	23.627	264	4945	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.370	112	928	0.163	ng	0.00
5) Phenol-d6	6.952	99	600	0.090	ng	0.00
8) Nitrobenzene-d5	8.929	82	1908	0.417	ng	0.00
11) 2-Methylnaphthalene-d10	12.162	152	2793	0.424	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	693	0.402	ng	0.00
15) 2-Fluorobiphenyl	13.040	172	4785	0.399	ng	0.00
27) Fluoranthene-d10	19.187	212	6440	0.453	ng	0.00
31) Terphenyl-d14	19.787	244	6816	0.679	ng	0.00
Target Compounds						
34) Bis(2-ethylhexyl)phtha...	21.259	149	579	0.060	ng	# 93

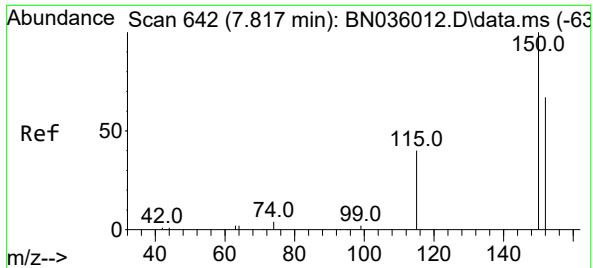
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036309.D
Acq On : 05 Feb 2025 22:22
Operator : RC/JU
Sample : Q1225-03
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

Quant Time: Feb 06 01:06:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

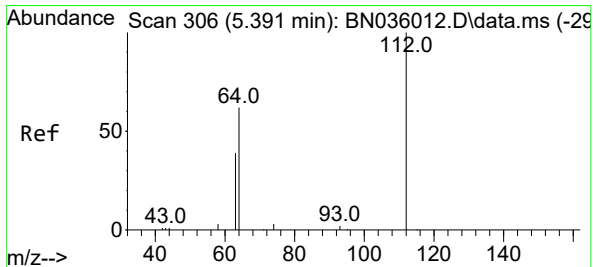
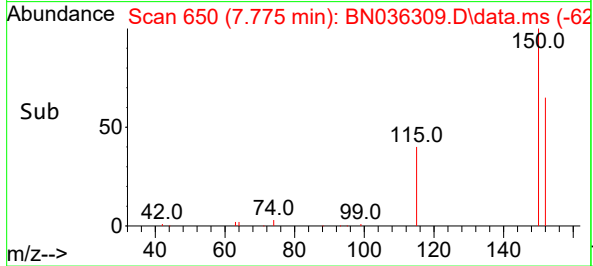
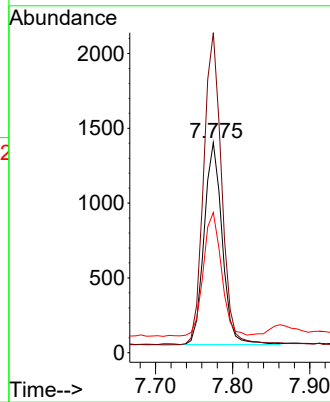
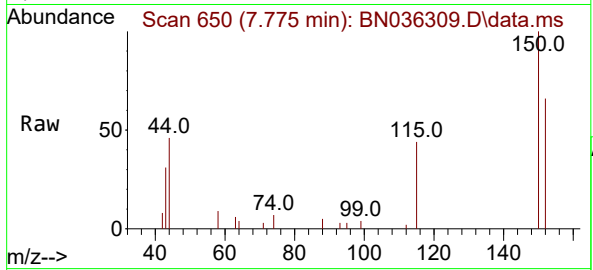




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

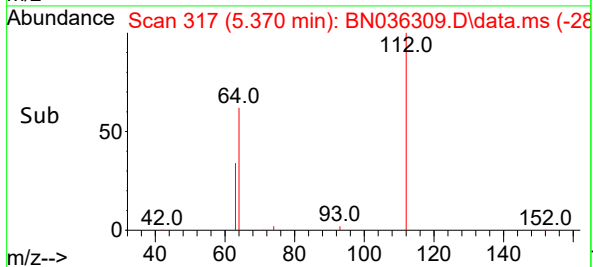
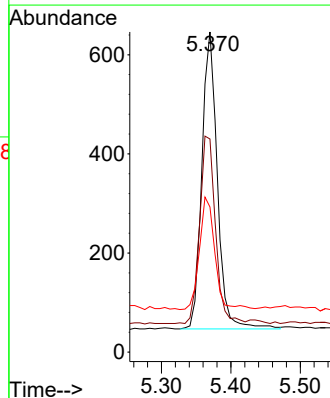
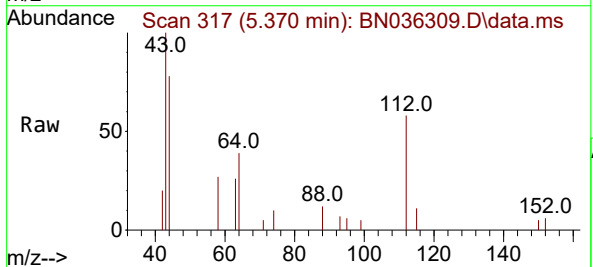
Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

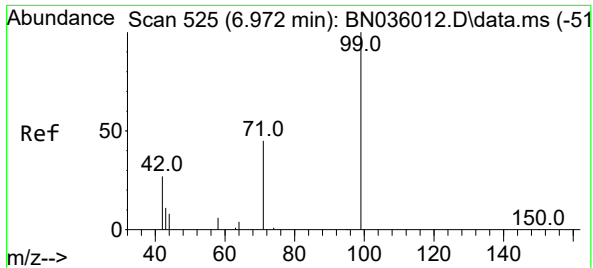
Tgt Ion:152 Resp: 2187
Ion Ratio Lower Upper
152 100
150 152.4 117.4 176.2
115 66.7 51.0 76.4



#4
2-Fluorophenol
Concen: 0.163 ng
RT: 5.370 min Scan# 317
Delta R.T. 0.007 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

Tgt Ion:112 Resp: 928
Ion Ratio Lower Upper
112 100
64 64.3 50.0 75.0
63 38.4 30.7 46.1

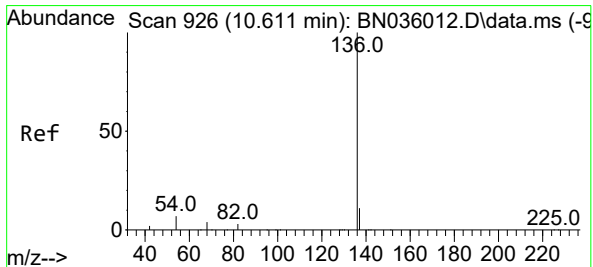
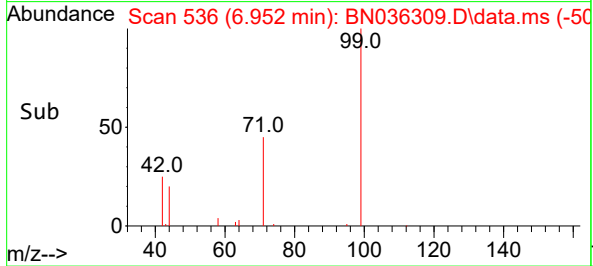
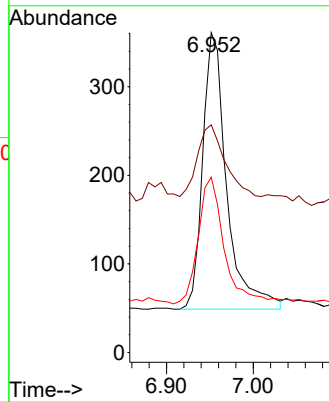
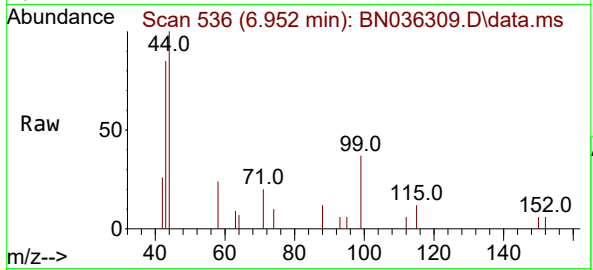




#5
Phenol-d6
Concen: 0.090 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

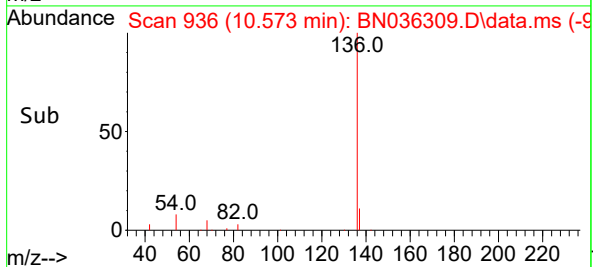
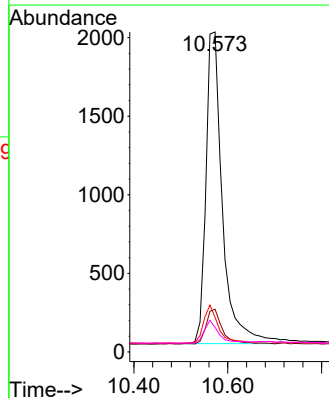
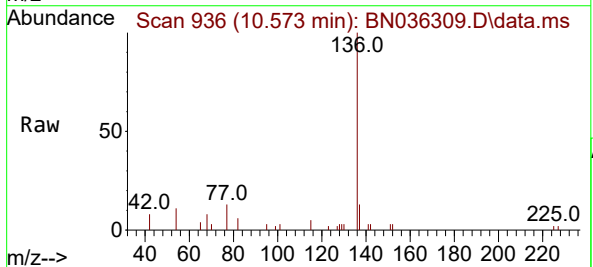
Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

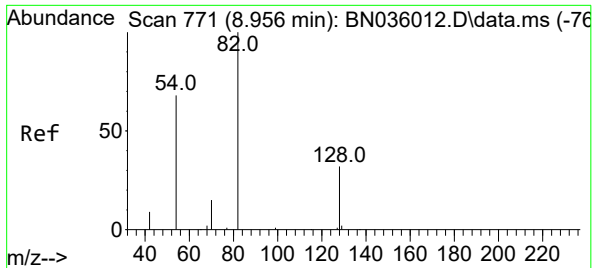
Tgt Ion: 99 Resp: 600
Ion Ratio Lower Upper
99 100
42 29.8 26.8 40.2
71 51.0 36.6 55.0



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 936
Delta R.T. 0.011 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

Tgt Ion: 136 Resp: 4848
Ion Ratio Lower Upper
136 100
137 13.4 10.4 15.6
54 10.9 7.7 11.5
68 7.7 5.4 8.0

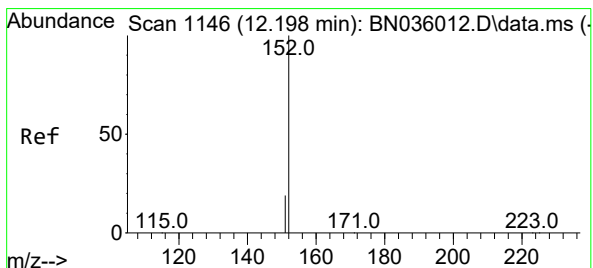
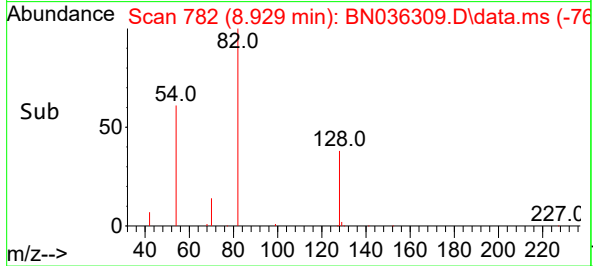
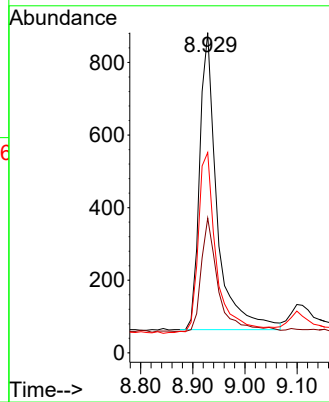
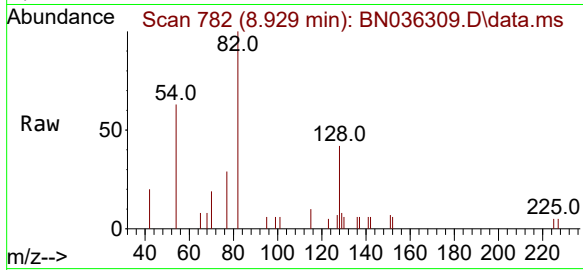




#8
Nitrobenzene-d5
Concen: 0.417 ng
RT: 8.929 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

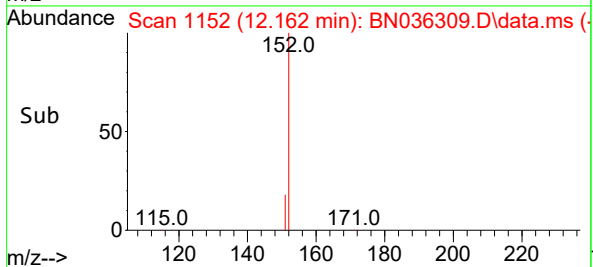
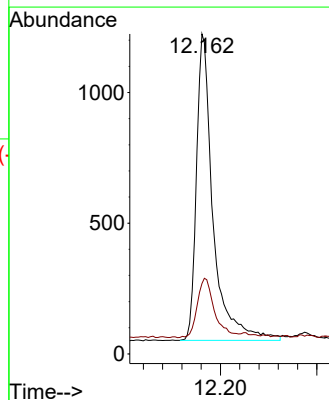
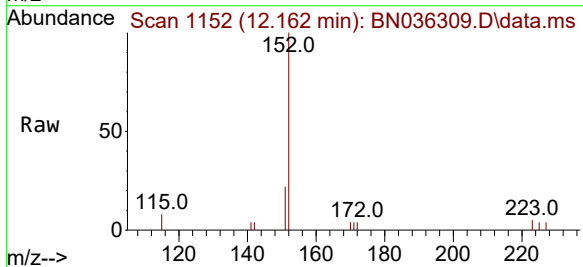
Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

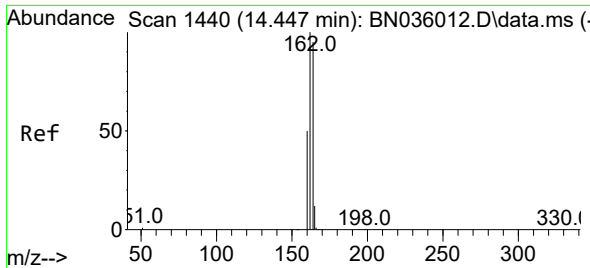
Tgt Ion: 82 Resp: 1908
Ion Ratio Lower Upper
82 100
128 42.1 28.8 43.2
54 62.6 55.8 83.8



#11
2-Methylnaphthalene-d10
Concen: 0.424 ng
RT: 12.162 min Scan# 1152
Delta R.T. 0.005 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

Tgt Ion: 152 Resp: 2793
Ion Ratio Lower Upper
152 100
151 20.3 16.6 25.0

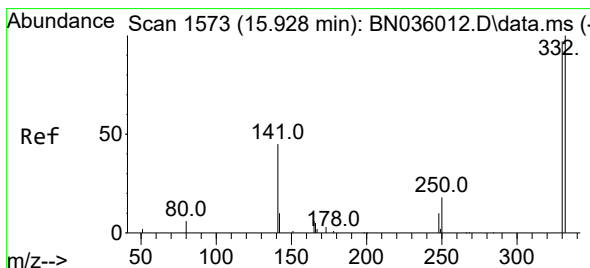
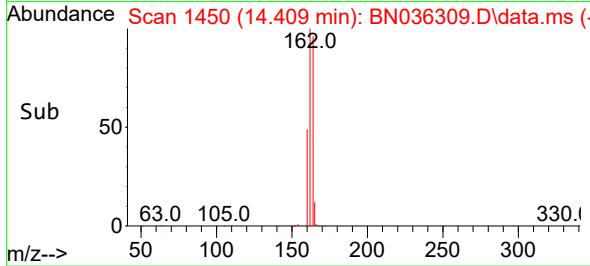
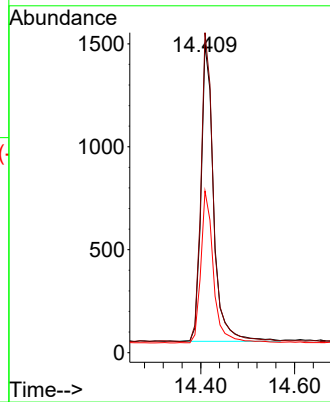
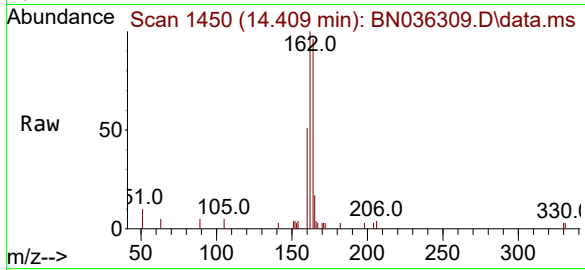




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

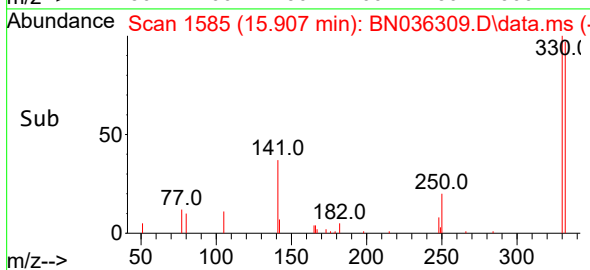
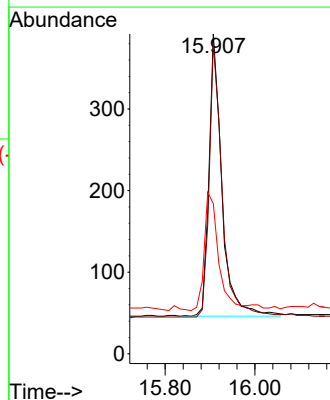
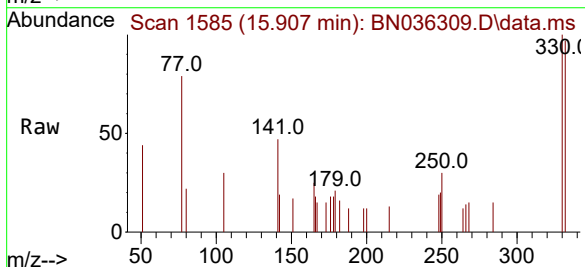
Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

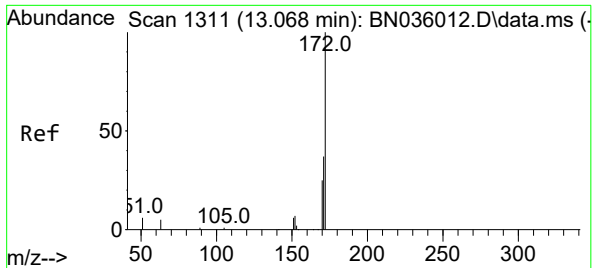
Tgt Ion:164 Resp: 2688
Ion Ratio Lower Upper
164 100
162 103.7 84.1 126.1
160 52.4 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.402 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

Tgt Ion:330 Resp: 693
Ion Ratio Lower Upper
330 100
332 97.3 81.0 121.4
141 46.5 36.7 55.1

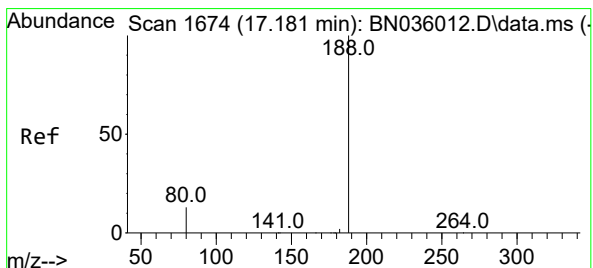
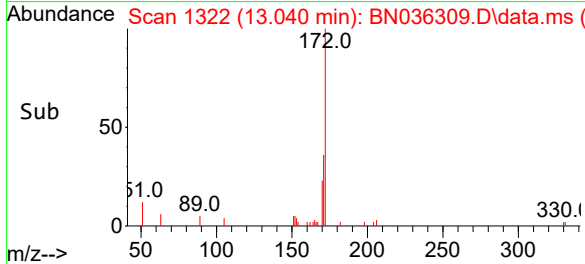
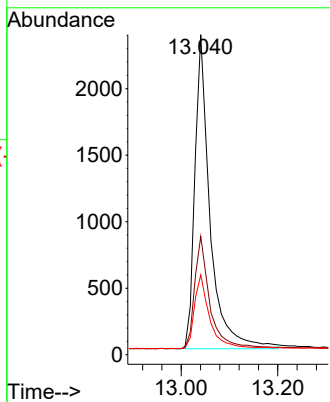
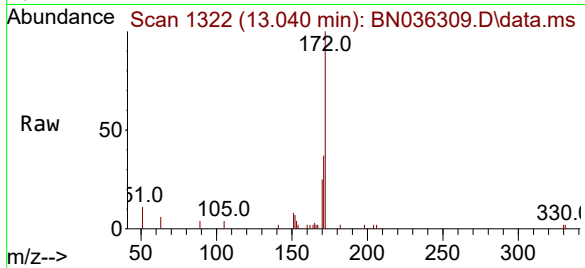




#15
2-Fluorobiphenyl
Concen: 0.399 ng
RT: 13.040 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

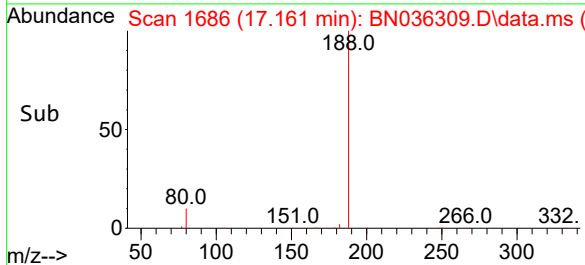
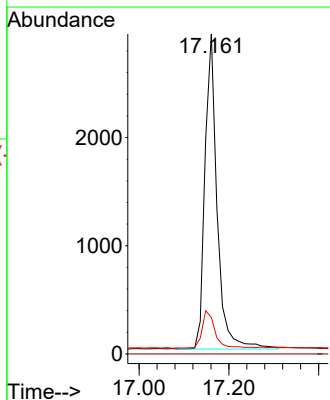
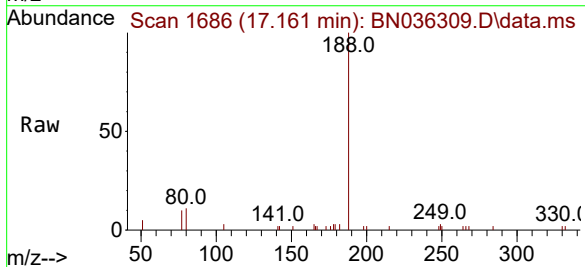
Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

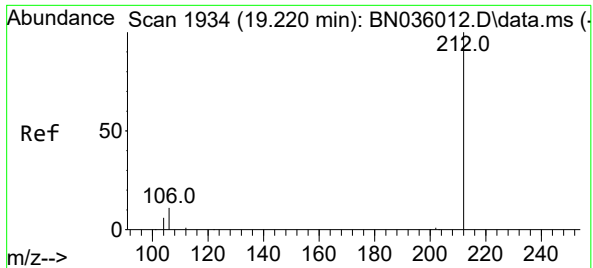
Tgt Ion:	172	Resp:	4785
Ion Ratio	Lower	Upper	
172	100		
171	36.9	30.9	46.3
170	24.9	21.2	31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

Tgt Ion:	188	Resp:	5486
Ion Ratio	Lower	Upper	
188	100		
94	0.0	0.0	0.0
80	11.4	12.3	18.5





#27

Fluoranthene-d10

Concen: 0.453 ng

RT: 19.187 min Scan# 1934

Delta R.T. -0.000 min

Lab File: BN036309.D

Acq: 05 Feb 2025 22:22

Instrument :

BNA_N

ClientSampleId :

RW5-SP303-20250129

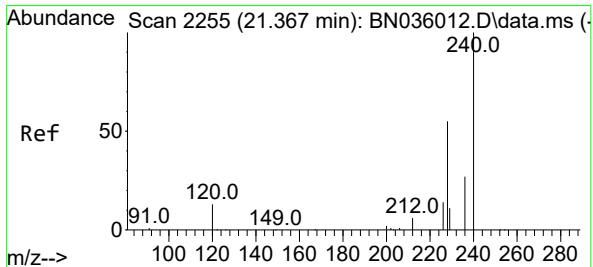
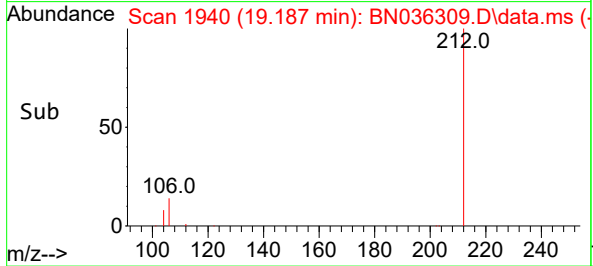
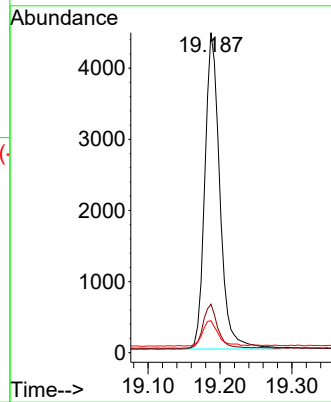
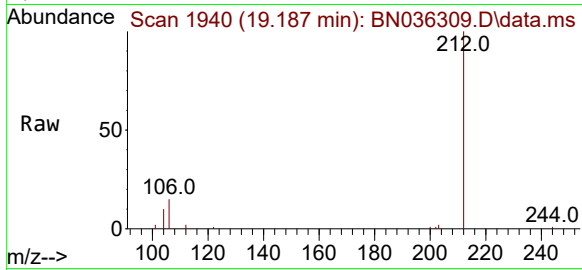
Tgt Ion:212 Resp: 6440

Ion Ratio Lower Upper

212 100

106 13.6 9.7 14.5

104 8.5 6.0 9.0



#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 2265

Delta R.T. -0.000 min

Lab File: BN036309.D

Acq: 05 Feb 2025 22:22

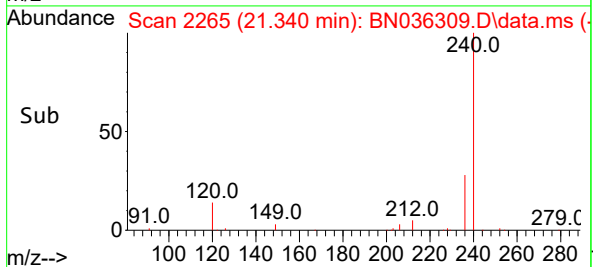
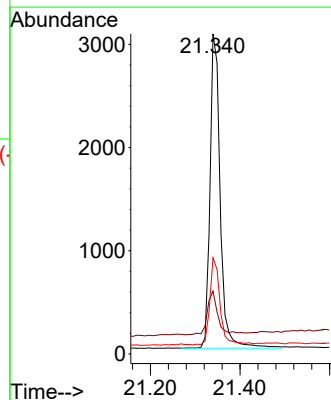
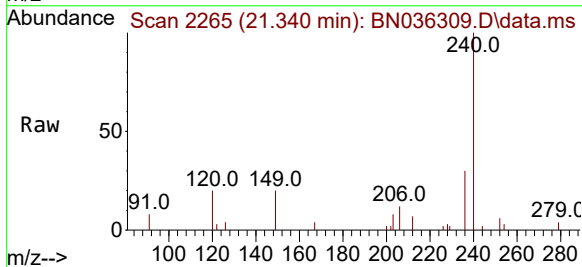
Tgt Ion:240 Resp: 4831

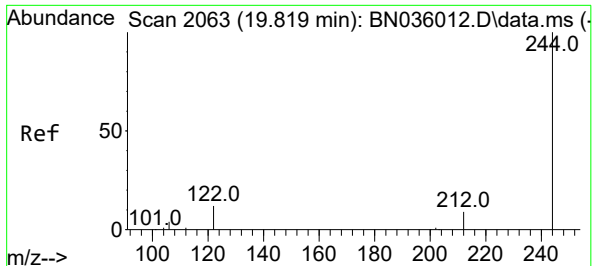
Ion Ratio Lower Upper

240 100

120 19.6 13.9 20.9

236 30.1 23.7 35.5

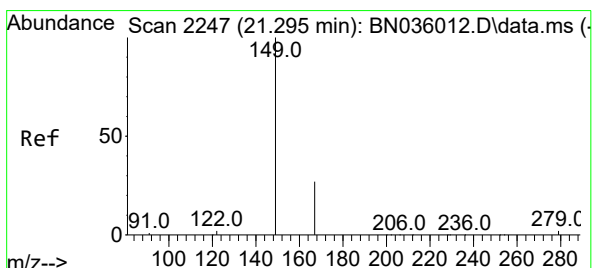
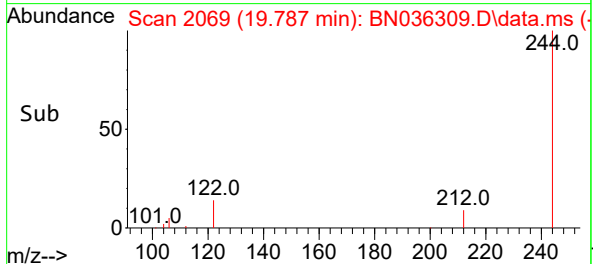
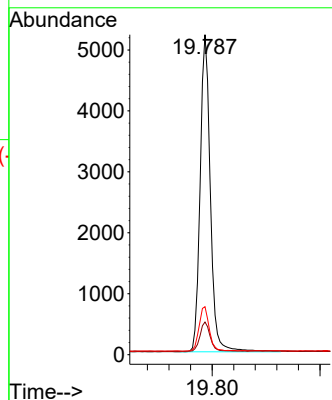
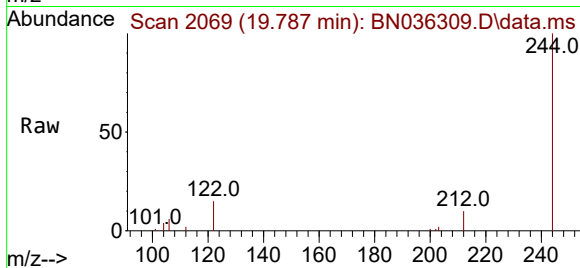




#31
Terphenyl-d14
Concen: 0.679 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

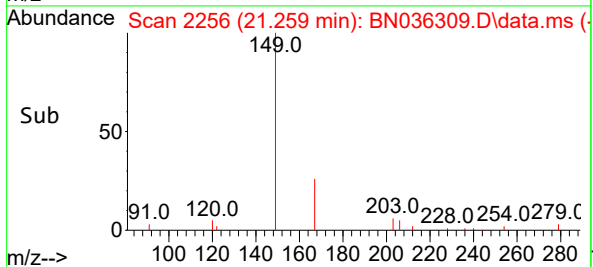
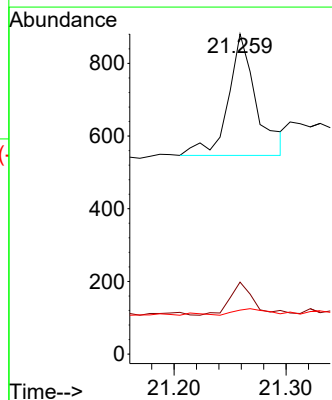
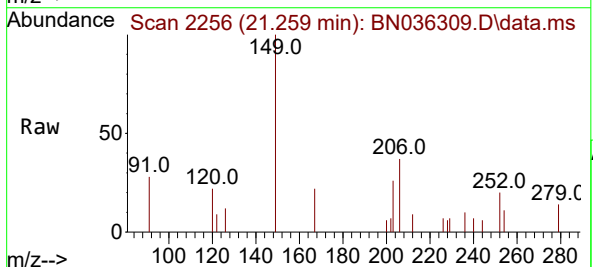
Instrument :
BNA_N
ClientSampleId :
RW5-SP303-20250129

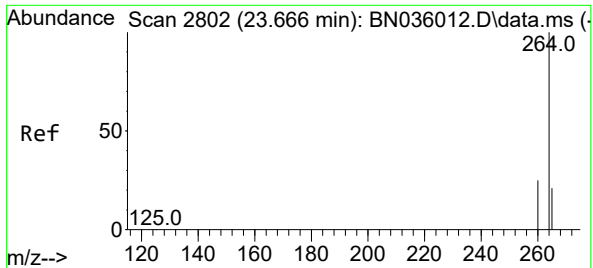
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.2	9.1	13.7
122	15.0	11.3	16.9



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.060 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.000 min
Lab File: BN036309.D
Acq: 05 Feb 2025 22:22

Tgt Ion	Ratio	Lower	Upper
149	100		
167	24.0	21.9	32.9
279	6.2	3.0	4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.627 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036309.D

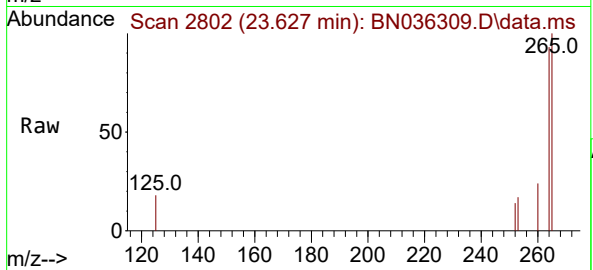
Acq: 05 Feb 2025 22:22

Instrument :

BNA_N

ClientSampleId :

RW5-SP303-20250129



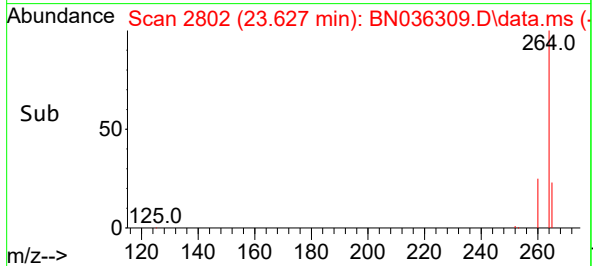
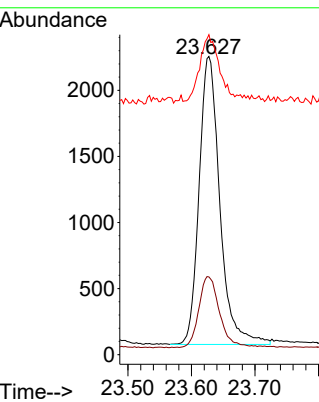
Tgt Ion:264 Resp: 4945

Ion Ratio Lower Upper

264 100

260 26.1 21.8 32.6

265 107.3 56.6 84.8#





CALIBRATION SUMMARY

- 1
- 2
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- 18

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN012225.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Thu Jan 23 00:34:56 2025
 Response Via : Initial Calibration

Calibration Files

0.1 =BN036010.D 0.2 =BN036011.D 0.4 =BN036012.D 0.8 =BN036013.D 1.6 =BN036014.D 3.2 =BN036015.D 5.0 =BN036016.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	0.452	0.460	0.469	0.477	0.447	0.408	0.417	0.447	5.81
3)	n-Nitrosodimet...	0.798	0.749	0.877	0.883	0.829	0.781	0.759	0.811	6.65
4) S	2-Fluorophenol	1.032	1.012	1.092	1.099	1.042	0.997	1.010	1.040	3.88
5) S	Phenol-d6	1.284	1.195	1.270	1.155	1.230	1.210	1.209	1.222	3.61
6)	bis(2-Chloroet...	1.024	0.979	1.056	0.929	0.993	0.952	0.952	0.984	4.53
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.377	0.356	0.399	0.333	0.397	0.388	0.394	0.378	6.55
9)	Naphthalene	1.149	1.141	1.250	1.137	1.184	1.141	1.131	1.162	3.68
10)	Hexachlorobuta...	0.383	0.369	0.404	0.371	0.388	0.359	0.353	0.375	4.74
11) SURR2	Methylnaphth...	0.522	0.527	0.578	0.528	0.556	0.550	0.545	0.544	3.66
12)	2-Methylnaphth...	0.702	0.688	0.760	0.700	0.741	0.735	0.721	0.721	3.58
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.240	0.238	0.256	0.238	0.268	0.275	0.282	0.257	7.32
15) S	2-Fluorobiphenyl	1.806	1.736	1.934	1.787	1.819	1.693	1.724	1.786	4.47
16)	Acenaphthylene	1.835	1.826	2.011	1.840	1.940	1.889	1.936	1.897	3.65
17)	Acenaphthene	1.248	1.236	1.365	1.266	1.338	1.310	1.327	1.299	3.78
18)	Fluorene	1.583	1.482	1.633	1.550	1.739	1.703	1.700	1.627	5.76
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.071	0.081	0.095	0.089	0.101	0.107	0.108	0.093	14.73
21)	4-Bromophenyl-...	0.285	0.269	0.307	0.287	0.293	0.273	0.281	0.285	4.42
22)	Hexachlorobenzene	0.391	0.358	0.407	0.374	0.380	0.355	0.361	0.375	5.08
23)	Atrazine	0.185	0.194	0.218	0.204	0.216	0.209	0.215	0.206	6.05
24)	Pentachlorophenol	0.131	0.131	0.164	0.155	0.179	0.185	0.192	0.162	15.18
25)	Phenanthrene	1.154	1.158	1.302	1.172	1.226	1.182	1.219	1.202	4.33
26)	Anthracene	1.019	1.016	1.151	1.064	1.128	1.123	1.151	1.093	5.42
27) SURR	Fluoranthene-d10	1.005	1.006	1.111	0.994	0.959	1.078	1.101	1.036	5.75
28)	Fluoranthene	1.312	1.350	1.507	1.357	1.317	1.506	1.533	1.412	6.99
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.657	1.588	1.693	1.636	1.646	1.552	1.575	1.621	3.12
31) S	Terphenyl-d14	0.821	0.807	0.871	0.831	0.860	0.804	0.822	0.831	3.09
32)	Benzo(a)anthra...	1.445	1.403	1.503	1.411	1.513	1.448	1.433	1.451	2.93
33)	Chrysene	1.501	1.476	1.545	1.448	1.515	1.435	1.463	1.483	2.63
34)	Bis(2-ethylhex...	0.919	0.793	0.798	0.748	0.791	0.748	0.768	0.795	7.36
35) I	Perylene-d12	-----ISTD-----								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\

Method File : 8270-SIM-BN012225.M

36)	Indeno(1,2,3-c...	1.525	1.477	1.621	1.585	1.669	1.668	1.692	1.605	5.03
37)	Benzo(b)fluora...	1.443	1.380	1.497	1.429	1.475	1.444	1.510	1.454	3.03
38)	Benzo(k)fluora...	1.427	1.378	1.486	1.427	1.519	1.496	1.524	1.465	3.76
39) C	Benzo(a)pyrene	1.237	1.164	1.263	1.203	1.264	1.265	1.296	1.242	3.61
40)	Dibenzo(a,h)an...	1.187	1.169	1.290	1.279	1.337	1.338	1.356	1.279	5.86
41)	Benzo(g,h,i)pe...	1.338	1.308	1.426	1.387	1.438	1.428	1.436	1.394	3.75

(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036010.D
 Acq On : 22 Jan 2025 11:02
 Operator : RC/JU
 Sample : SSTDICC0.1
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.1

Quant Time: Jan 23 00:27:16 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

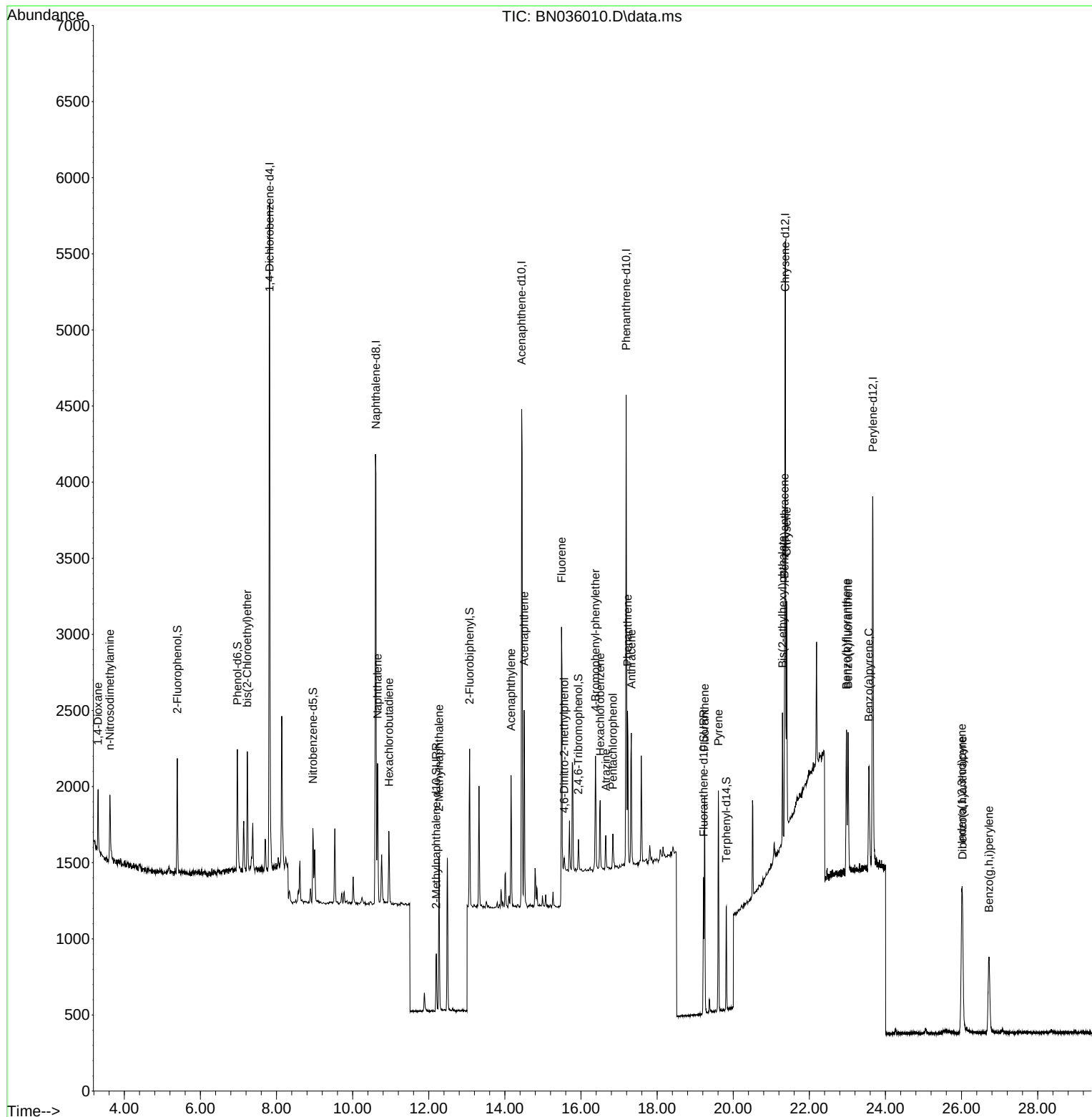
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2035	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3938	0.400	ng	0.00
13) Acenaphthene-d10	14.441	164	1936	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3874	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	3177	0.400	ng	0.00
35) Perylene-d12	23.666	264	3324	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.390	112	525	0.099	ng	0.00
5) Phenol-d6	6.972	99	653	0.105	ng	0.00
8) Nitrobenzene-d5	8.956	82	371	0.100	ng	0.00
11) 2-Methylnaphthalene-d10	12.197	152	514	0.096	ng	0.00
14) 2,4,6-Tribromophenol	15.933	330	116	0.093	ng	0.00
15) 2-Fluorobiphenyl	13.073	172	874	0.101	ng	0.00
27) Fluoranthene-d10	19.220	212	973	0.097	ng	0.00
31) Terphenyl-d14	19.820	244	652	0.099	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.310	88	230	0.101	ng	95
3) n-Nitrosodimethylamine	3.621	42	406	0.098	ng	# 96
6) bis(2-Chloroethyl)ether	7.232	93	521	0.104	ng	99
9) Naphthalene	10.654	128	1131	0.099	ng	# 88
10) Hexachlorobutadiene	10.953	225	377	0.102	ng	# 99
12) 2-Methylnaphthalene	12.268	142	691	0.097	ng	97
16) Acenaphthylene	14.163	152	888	0.097	ng	98
17) Acenaphthene	14.506	154	604	0.096	ng	95
18) Fluorene	15.489	166	766	0.097	ng	97
20) 4,6-Dinitro-2-methylph...	15.560	198	69	0.076	ng	# 48
21) 4-Bromophenyl-phenylether	16.379	248	276	0.100	ng	# 74
22) Hexachlorobenzene	16.504	284	379	0.104	ng	98
23) Atrazine	16.652	200	179	0.090	ng	# 85
24) Pentachlorophenol	16.839	266	127	0.081	ng	96
25) Phenanthrene	17.223	178	1118	0.096	ng	97
26) Anthracene	17.323	178	987	0.093	ng	97
28) Fluoranthene	19.248	202	1271	0.093	ng	98
30) Pyrene	19.611	202	1316	0.102	ng	99
32) Benzo(a)anthracene	21.349	228	1148	0.100	ng	92
33) Chrysene	21.403	228	1192	0.101	ng	95
34) Bis(2-ethylhexyl)phtha...	21.295	149	730	0.116	ng	97
36) Indeno(1,2,3-cd)pyrene	26.008	276	1267	0.095	ng	96
37) Benzo(b)fluoranthene	22.973	252	1199	0.099	ng	# 73
38) Benzo(k)fluoranthene	23.020	252	1186	0.097	ng	# 70
39) Benzo(a)pyrene	23.564	252	1028	0.100	ng	# 67
40) Dibenzo(a,h)anthracene	26.025	278	986	0.093	ng	# 73
41) Benzo(g,h,i)perylene	26.721	276	1112	0.096	ng	# 79

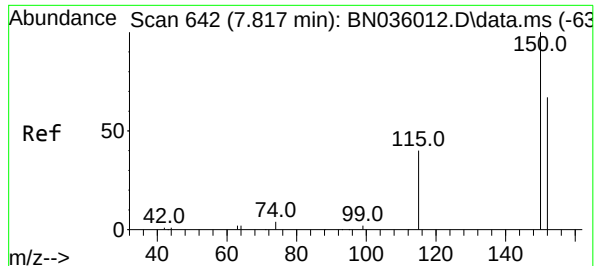
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN036010.D
Acq On : 22 Jan 2025 11:02
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Jan 23 00:27:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

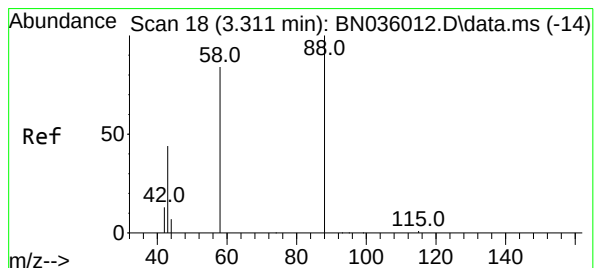
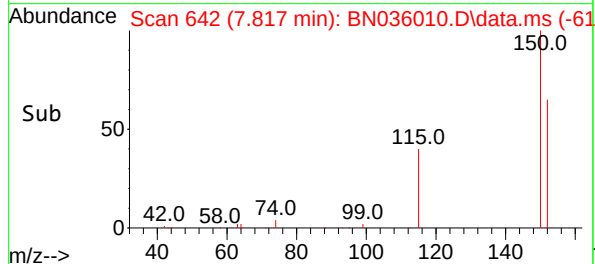
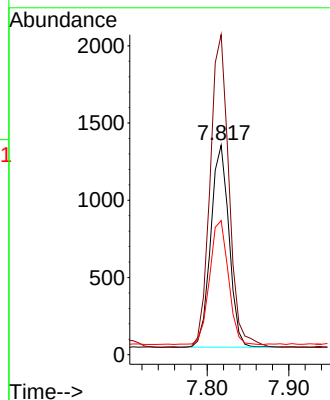
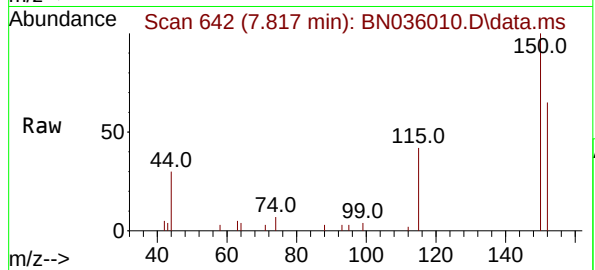




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

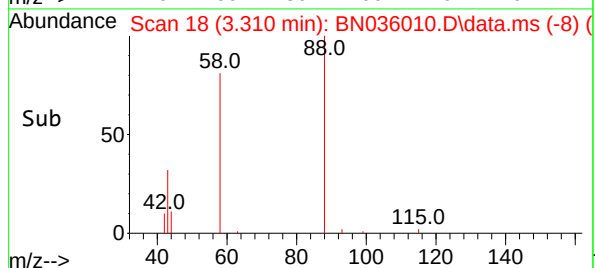
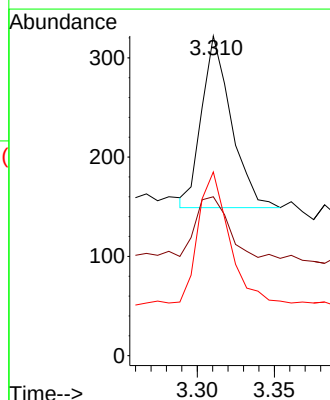
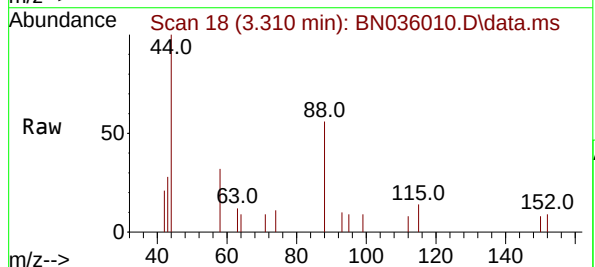
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

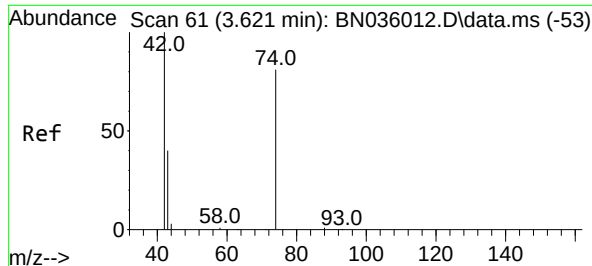
Tgt Ion:152 Resp: 2035
Ion Ratio Lower Upper
152 100
150 152.8 117.4 176.2
115 64.0 51.0 76.4



#2
1,4-Dioxane
Concen: 0.101 ng
RT: 3.310 min Scan# 18
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion: 88 Resp: 230
Ion Ratio Lower Upper
88 100
43 41.7 38.5 57.7
58 84.8 66.6 99.8

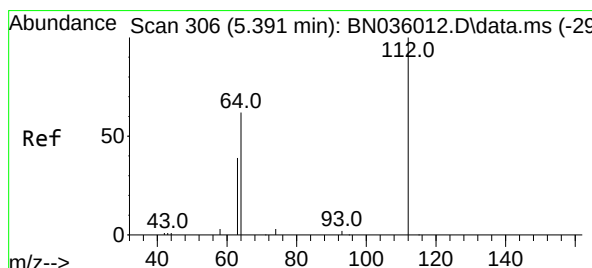
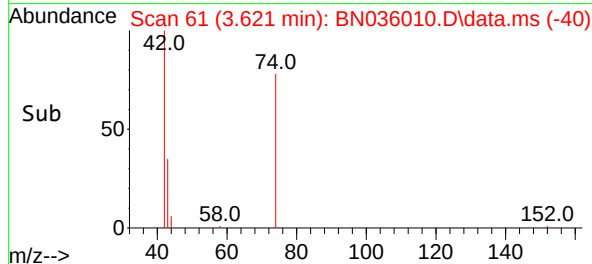
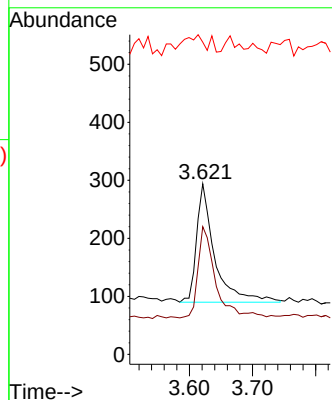
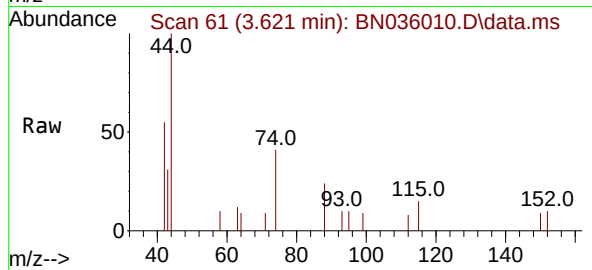




#3
n-Nitrosodimethylamine
Concen: 0.098 ng
RT: 3.621 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

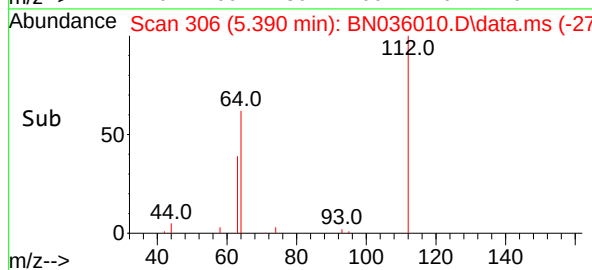
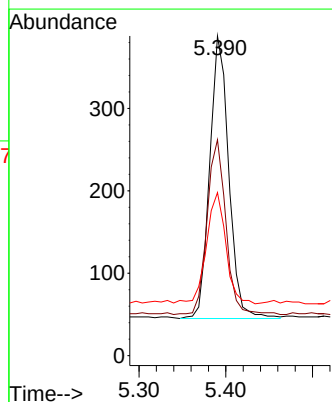
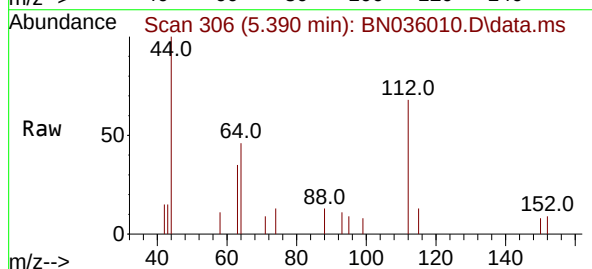
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

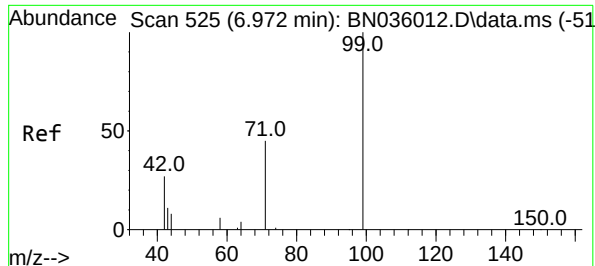
Tgt Ion: 42 Resp: 406
Ion Ratio Lower Upper
42 100
74 70.9 58.1 87.1
44 14.5 6.2 9.4#



#4
2-Fluorophenol
Concen: 0.099 ng
RT: 5.390 min Scan# 306
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion: 112 Resp: 525
Ion Ratio Lower Upper
112 100
64 60.8 50.0 75.0
63 40.0 30.7 46.1

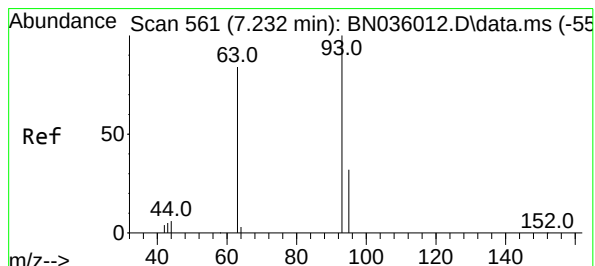
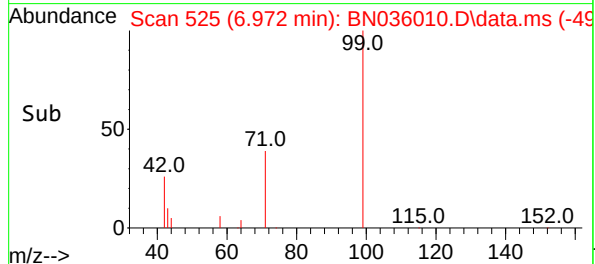
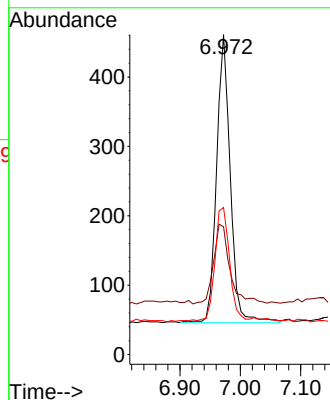
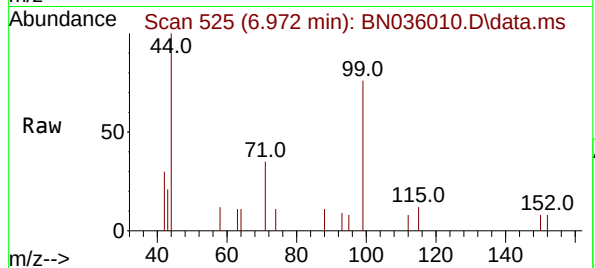




#5
Phenol-d6
Concen: 0.105 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

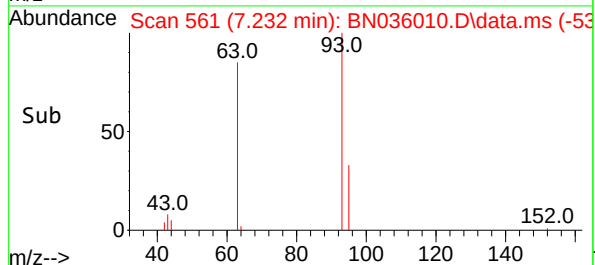
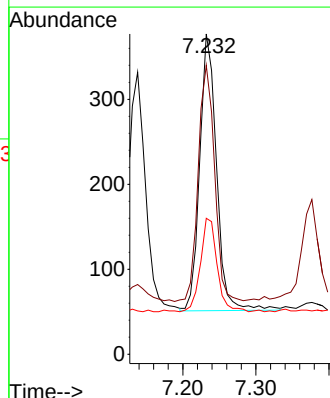
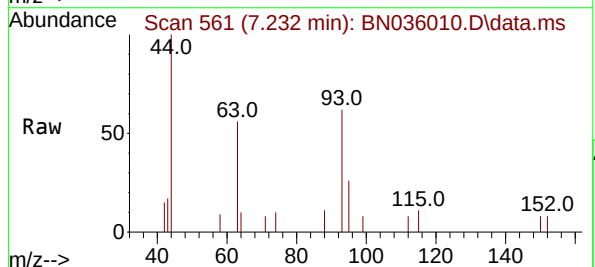
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

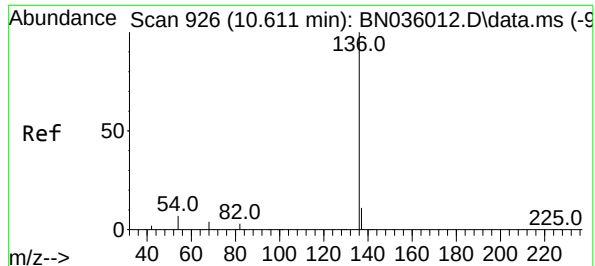
Tgt Ion: 99 Resp: 653
Ion Ratio Lower Upper
99 100
42 33.1 26.8 40.2
71 44.0 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.104 ng
RT: 7.232 min Scan# 561
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion: 93 Resp: 521
Ion Ratio Lower Upper
93 100
63 82.9 65.8 98.6
95 33.6 25.8 38.6

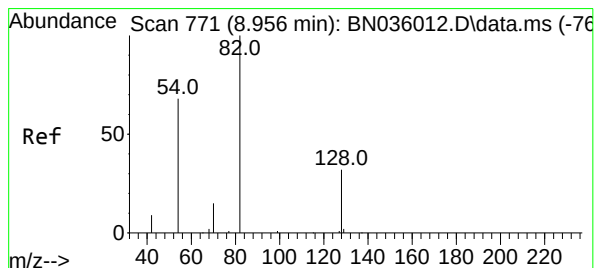
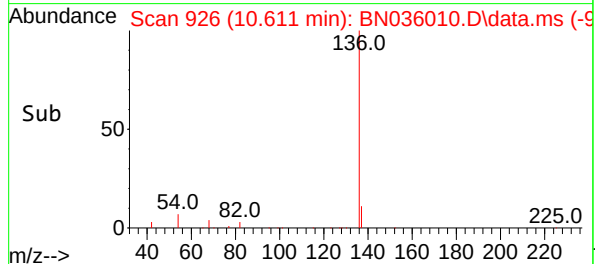
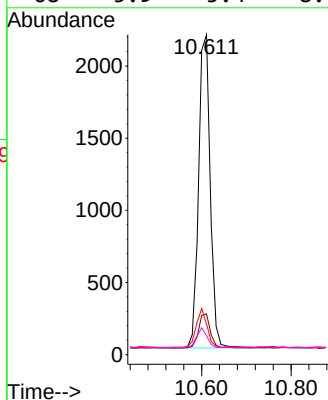
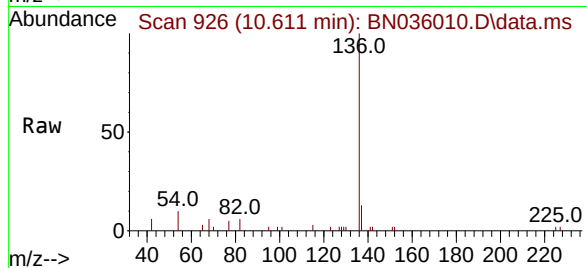




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.611 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

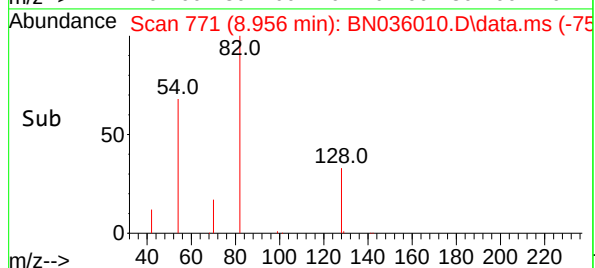
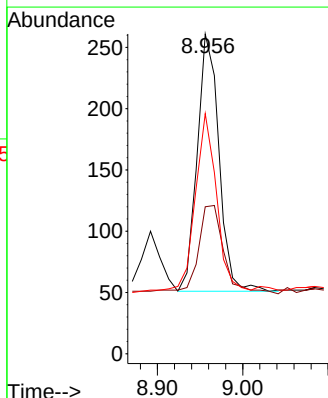
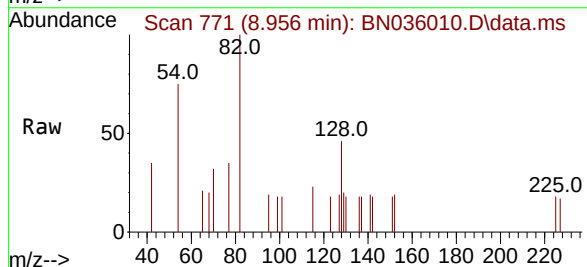
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

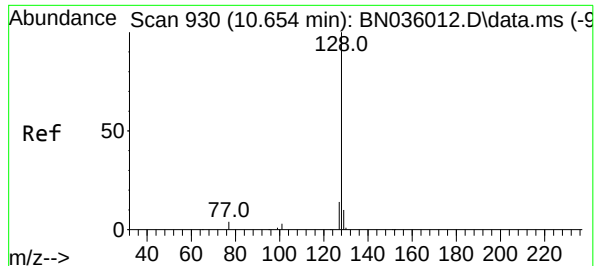
Tgt Ion:	136	Resp:	3938
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.4	15.6
54	9.6	7.7	11.5
68	5.9	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.100 ng
RT: 8.956 min Scan# 771
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion:	82	Resp:	371
Ion	Ratio	Lower	Upper
82	100		
128	46.0	28.8	43.2#
54	75.1	55.8	83.8

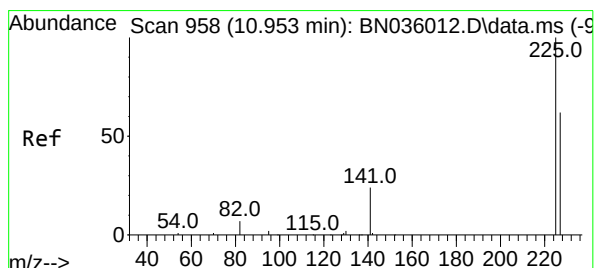
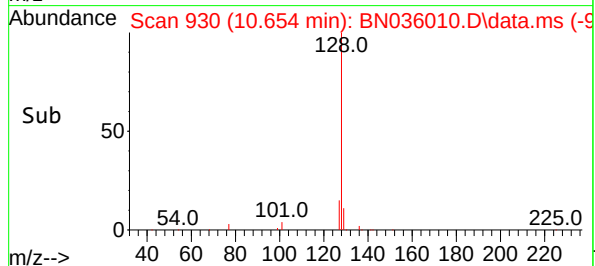
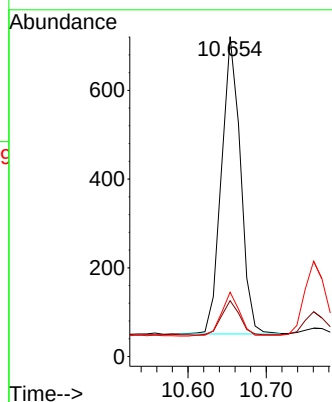
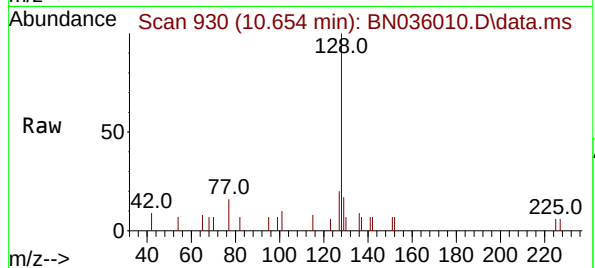




#9
Naphthalene
Concen: 0.099 ng
RT: 10.654 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

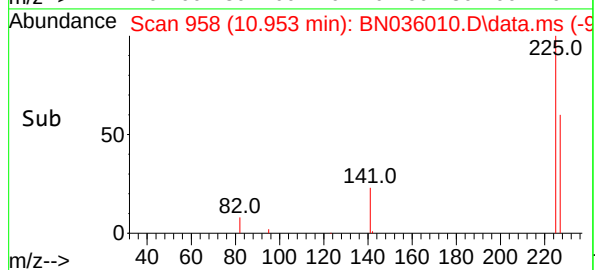
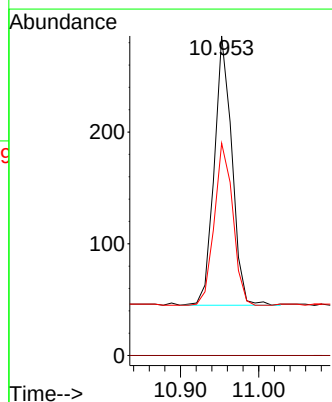
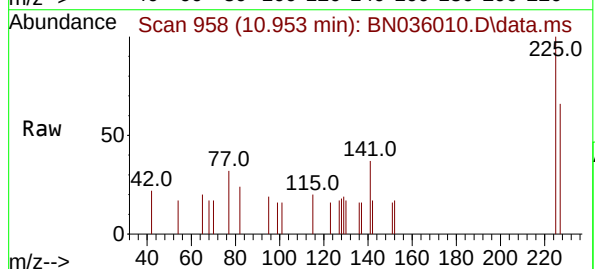
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

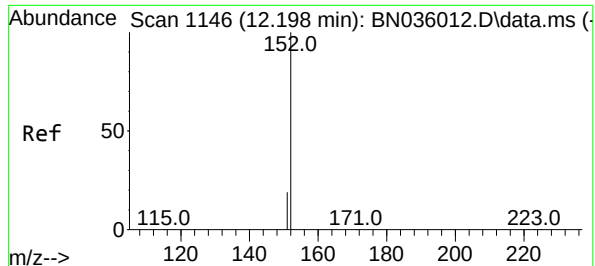
Tgt Ion:128 Resp: 1131
Ion Ratio Lower Upper
128 100
129 17.5 9.4 14.2#
127 20.1 12.6 19.0#



#10
Hexachlorobutadiene
Concen: 0.102 ng
RT: 10.953 min Scan# 958
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion:225 Resp: 377
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 62.9 51.0 76.6

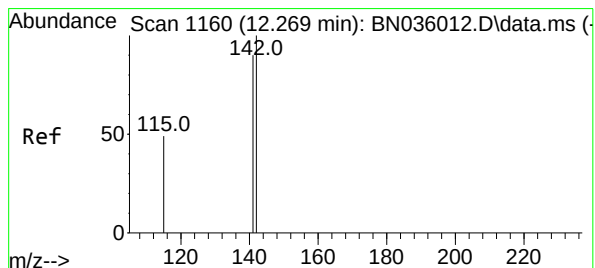
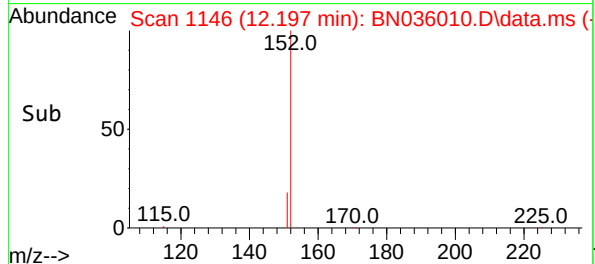
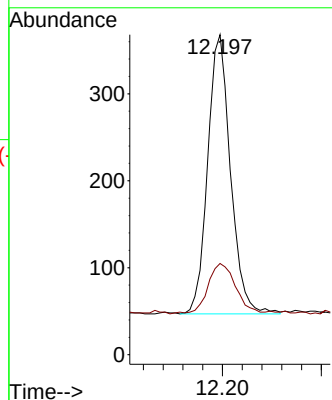
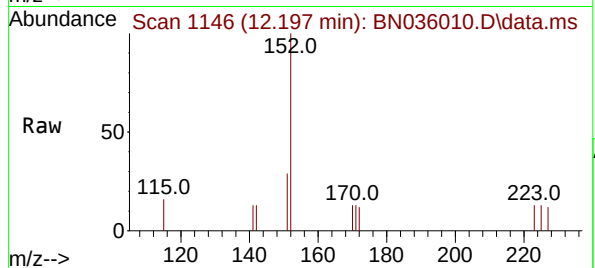




#11
2-Methylnaphthalene-d10
Concen: 0.096 ng
RT: 12.197 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

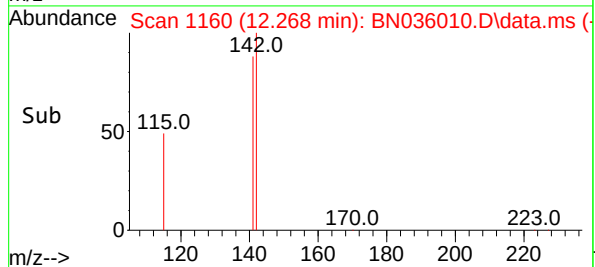
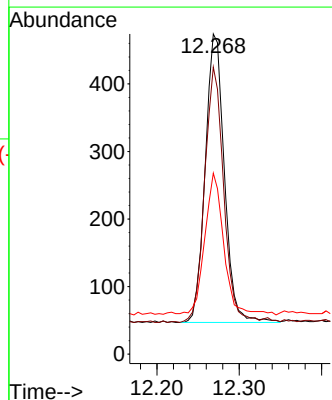
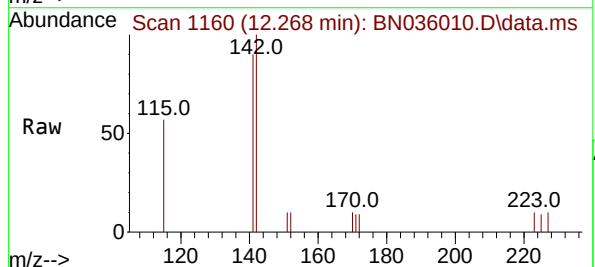
Instrument :
BNA_N
ClientSampleId :
SSTDIC0.1

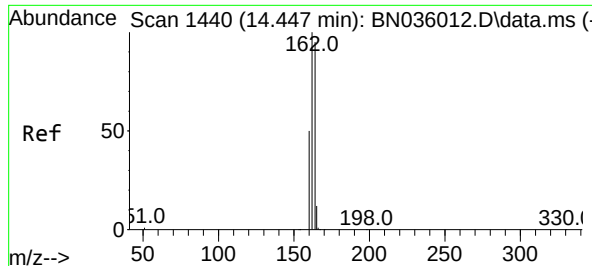
Tgt Ion:152 Resp: 514
Ion Ratio Lower Upper
152 100
151 22.0 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.097 ng
RT: 12.268 min Scan# 1160
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion:142 Resp: 691
Ion Ratio Lower Upper
142 100
141 89.7 72.2 108.2
115 56.5 41.2 61.8

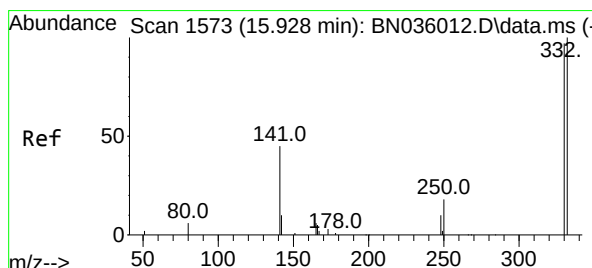
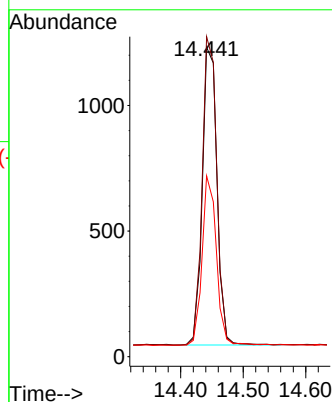
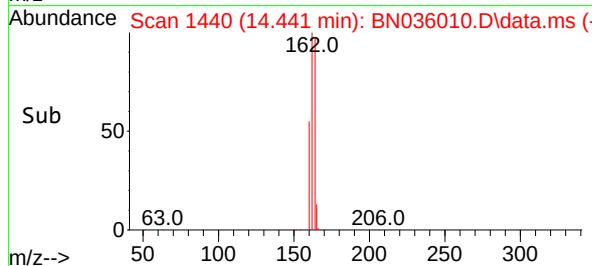
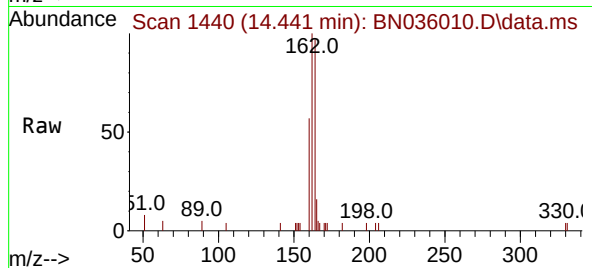




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

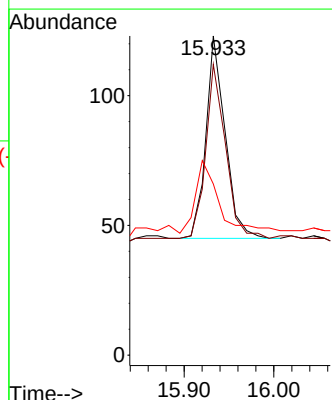
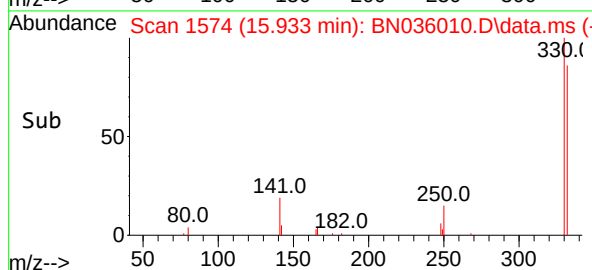
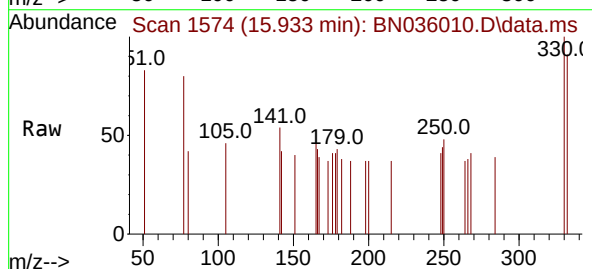
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

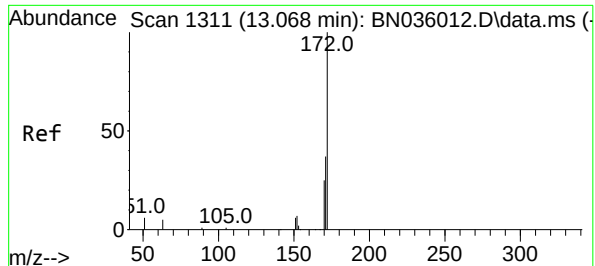
Tgt Ion:164 Resp: 1936
Ion Ratio Lower Upper
164 100
162 103.4 84.1 126.1
160 58.4 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.093 ng
RT: 15.933 min Scan# 1574
Delta R.T. 0.005 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion:330 Resp: 116
Ion Ratio Lower Upper
330 100
332 89.7 81.0 121.4
141 43.1 36.7 55.1





#15

2-Fluorobiphenyl

Concen: 0.101 ng

RT: 13.073 min Scan# 1311

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

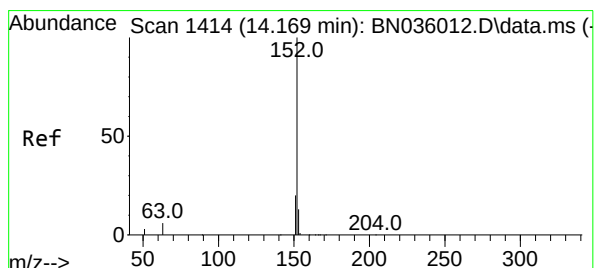
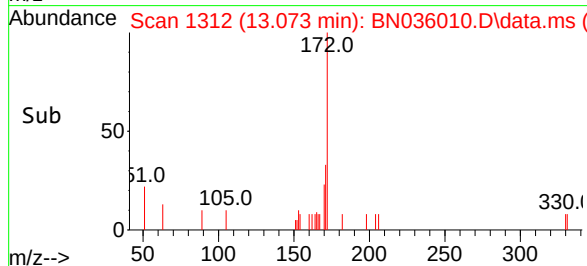
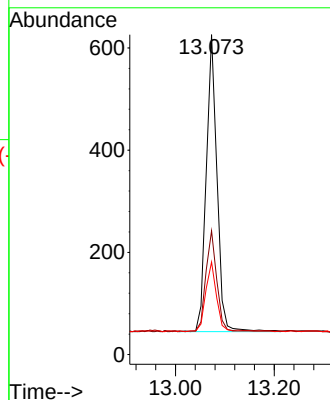
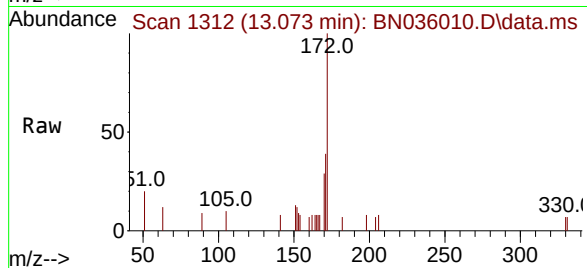
Tgt Ion:172 Resp: 874

Ion Ratio Lower Upper

172 100

171 38.7 30.9 46.3

170 28.9 21.2 31.8



#16

Acenaphthylene

Concen: 0.097 ng

RT: 14.163 min Scan# 1414

Delta R.T. -0.006 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

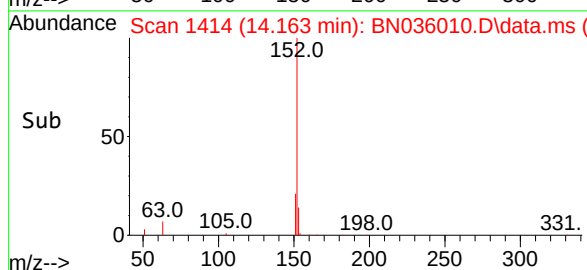
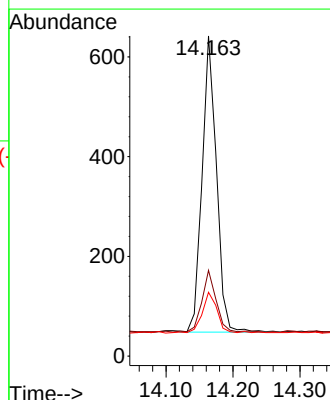
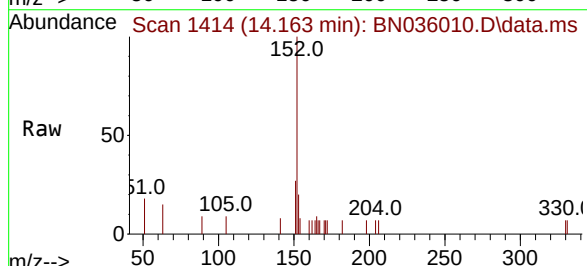
Tgt Ion:152 Resp: 888

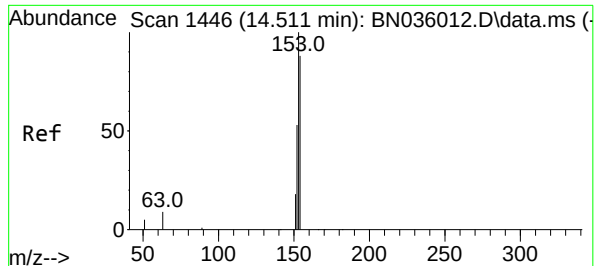
Ion Ratio Lower Upper

152 100

151 21.3 16.2 24.2

153 14.0 10.4 15.6





#17

Acenaphthene

Concen: 0.096 ng

RT: 14.506 min Scan# 1446

Delta R.T. -0.006 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

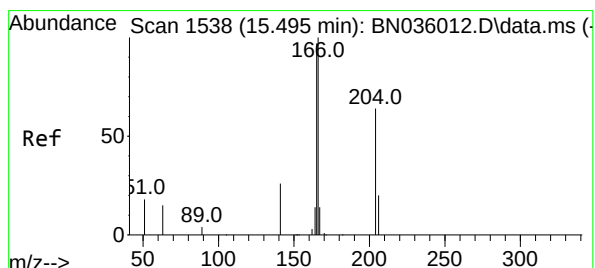
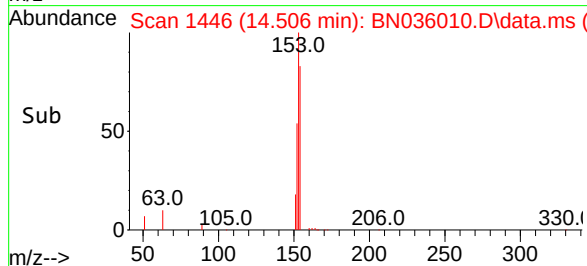
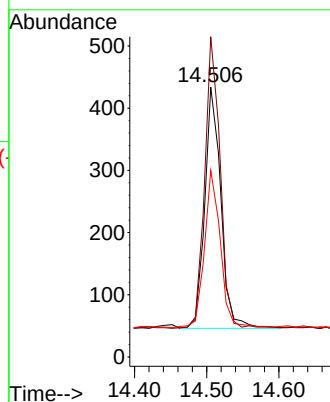
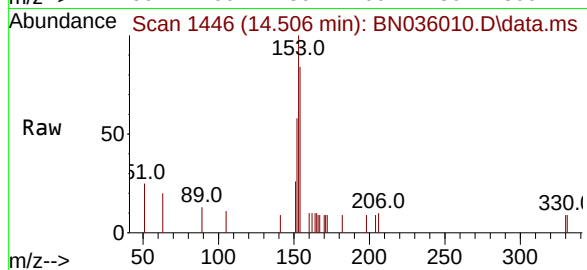
Tgt Ion:154 Resp: 604

Ion Ratio Lower Upper

154 100

153 116.6 88.9 133.3

152 64.2 48.1 72.1



#18

Fluorene

Concen: 0.097 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

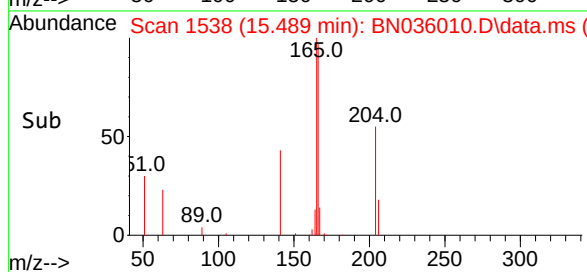
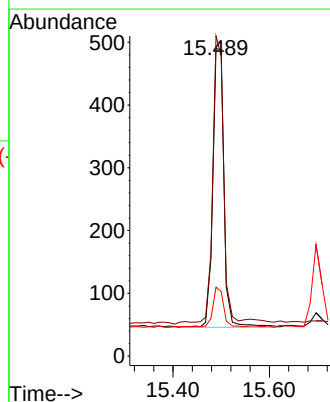
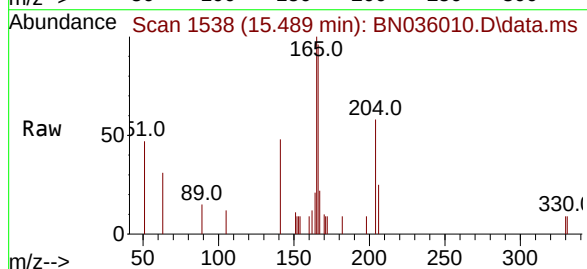
Tgt Ion:166 Resp: 766

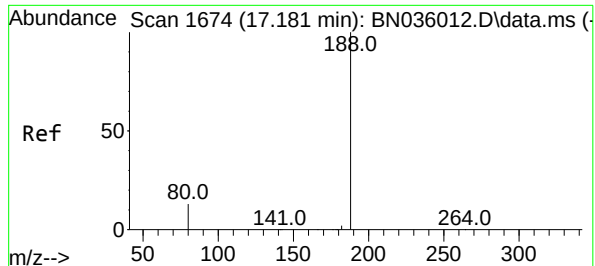
Ion Ratio Lower Upper

166 100

165 94.9 78.5 117.7

167 13.7 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

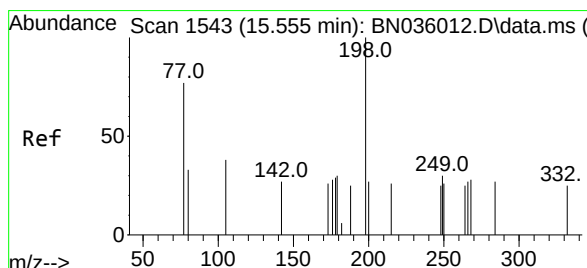
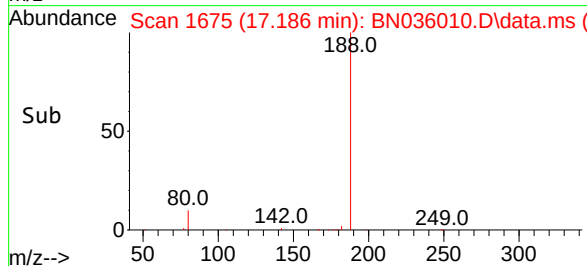
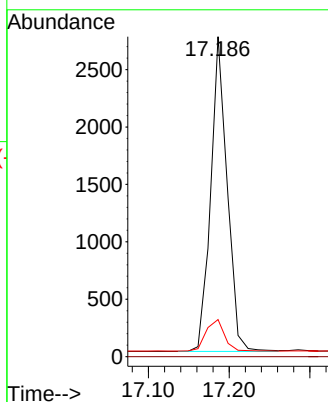
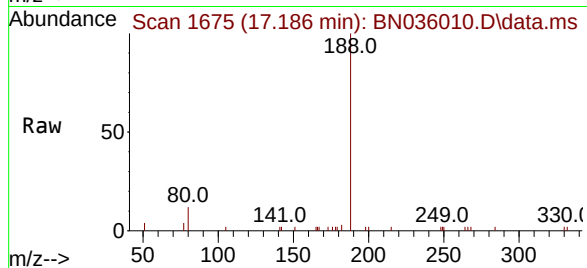
Tgt Ion:188 Resp: 3874

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.6 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.076 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

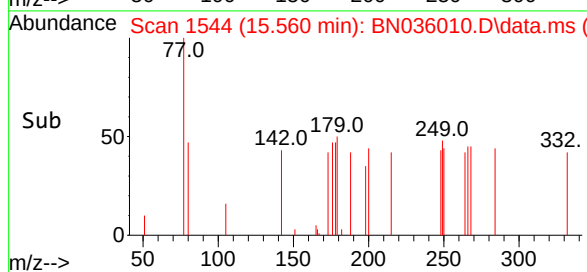
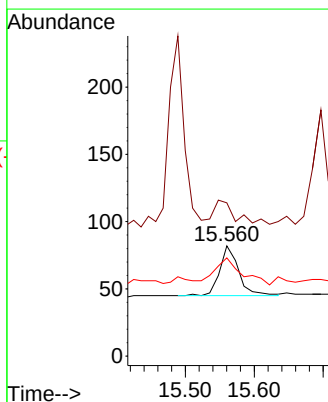
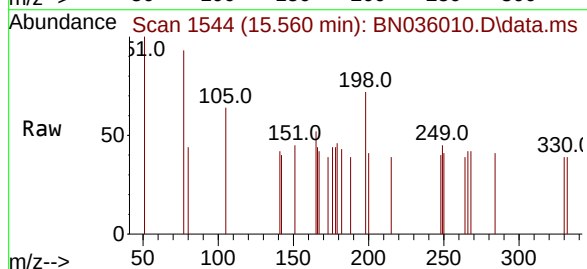
Tgt Ion:198 Resp: 69

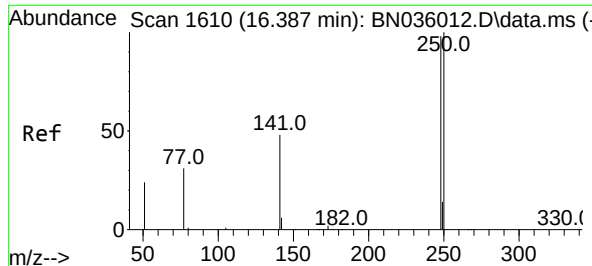
Ion Ratio Lower Upper

198 100

51 139.0 68.1 102.1#

105 89.0 46.5 69.7#

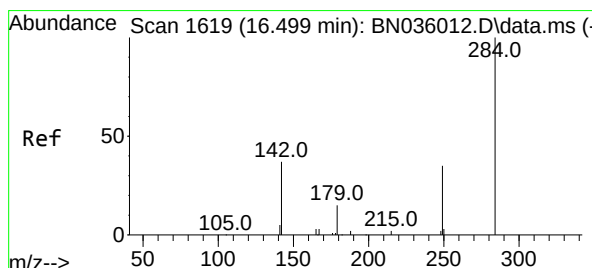
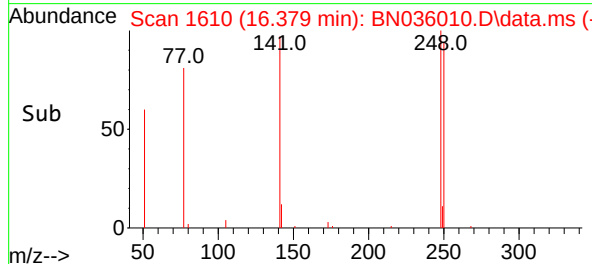
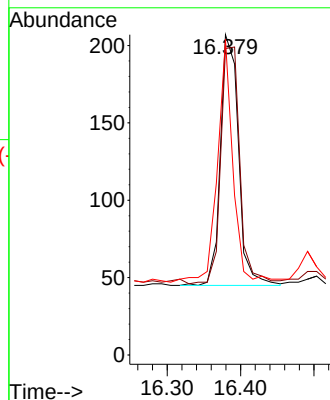
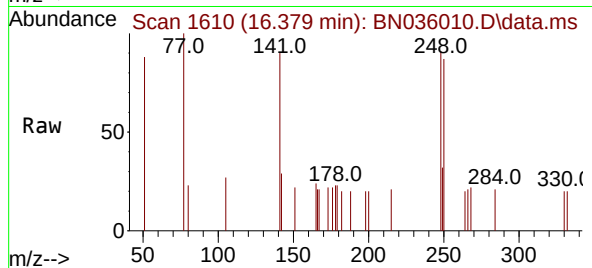




#21
4-Bromophenyl-phenylether
Concen: 0.100 ng
RT: 16.379 min Scan# 1610
Delta R.T. -0.007 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

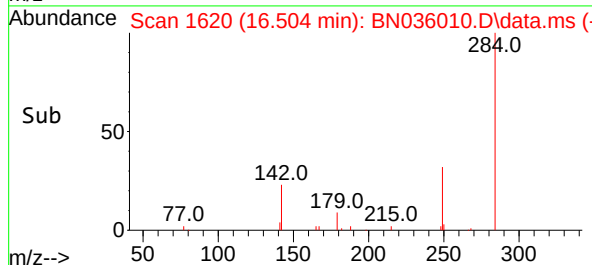
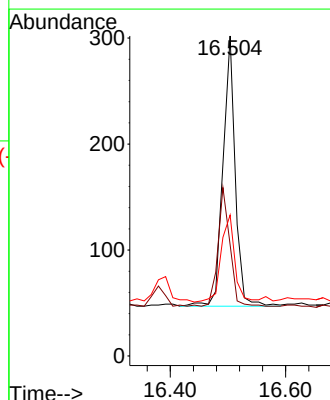
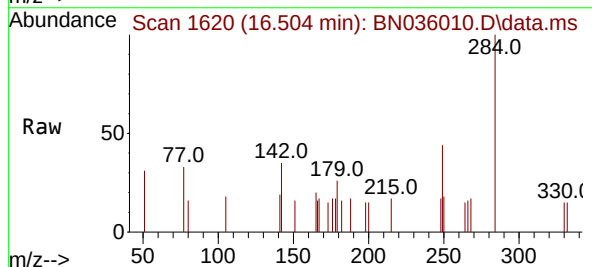
Instrument :
BNA_N
ClientSampleId :
SSTDIC0.1

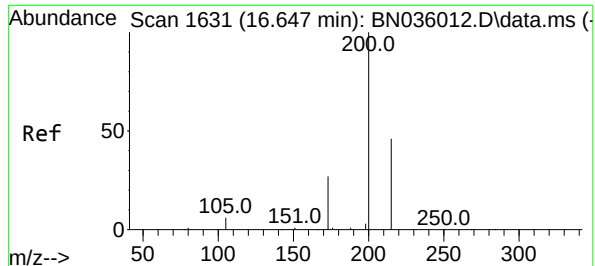
Tgt Ion:248 Resp: 276
Ion Ratio Lower Upper
248 100
250 95.7 81.5 122.3
141 98.6 41.8 62.6#



#22
Hexachlorobenzene
Concen: 0.104 ng
RT: 16.504 min Scan# 1620
Delta R.T. 0.005 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion:284 Resp: 379
Ion Ratio Lower Upper
284 100
142 43.3 33.6 50.4
249 35.4 28.8 43.2





#23

Atrazine

Concen: 0.090 ng

RT: 16.652 min Scan# 1632

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

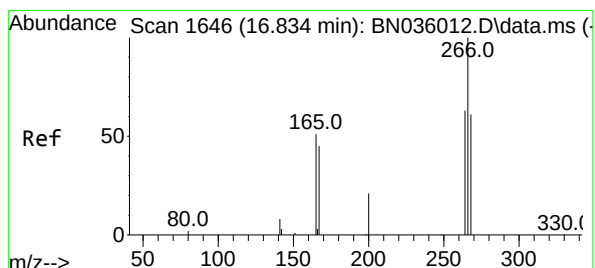
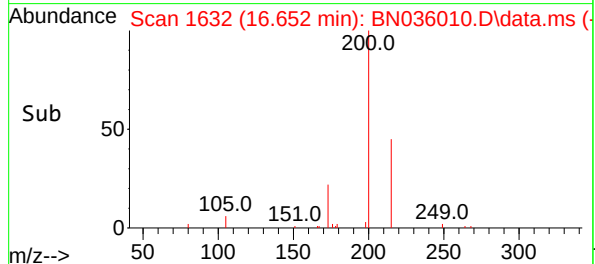
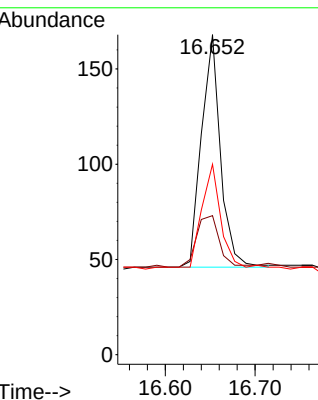
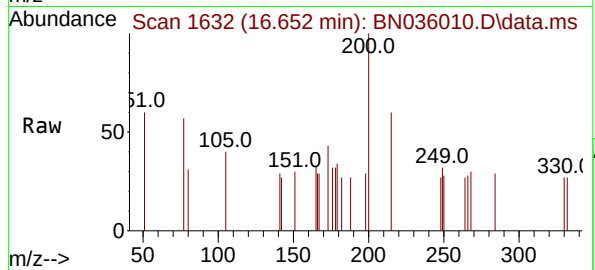
Tgt Ion:200 Resp: 179

Ion Ratio Lower Upper

200 100

173 43.5 26.6 40.0#

215 59.5 40.6 61.0



#24

Pentachlorophenol

Concen: 0.081 ng

RT: 16.839 min Scan# 1647

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

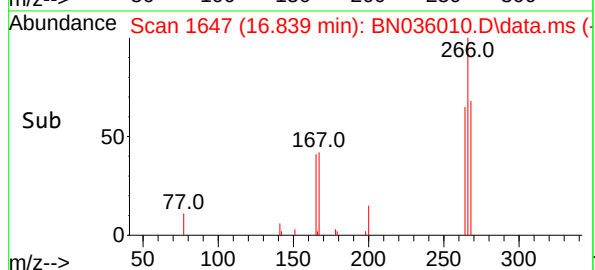
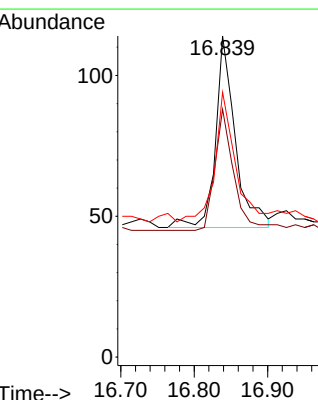
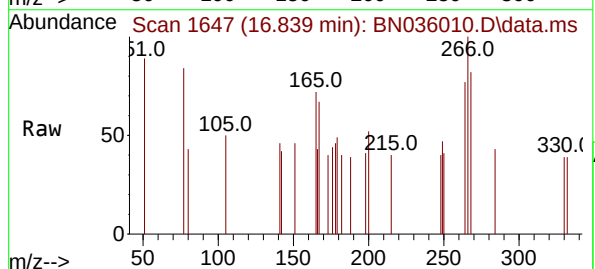
Tgt Ion:266 Resp: 127

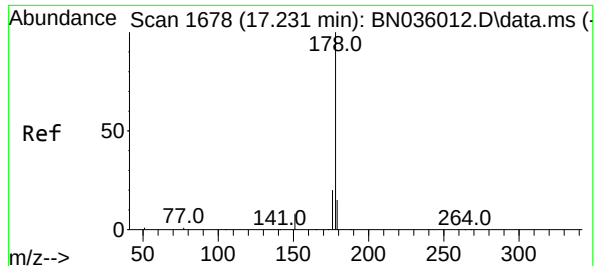
Ion Ratio Lower Upper

266 100

264 61.4 48.2 72.2

268 70.1 51.6 77.4





#25

Phenanthrene

Concen: 0.096 ng

RT: 17.223 min Scan# 1678

Delta R.T. -0.007 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

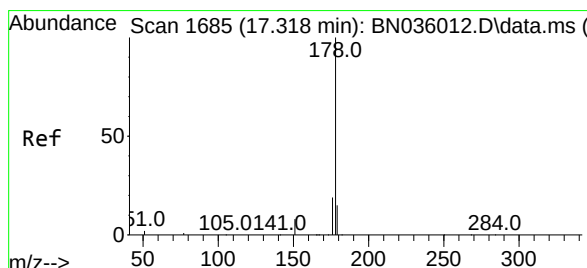
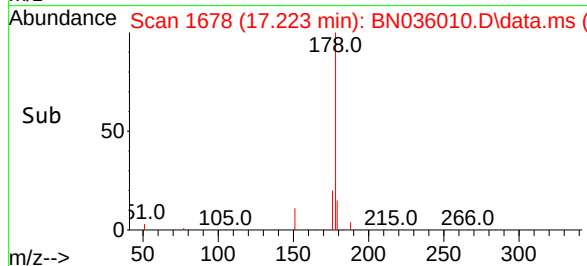
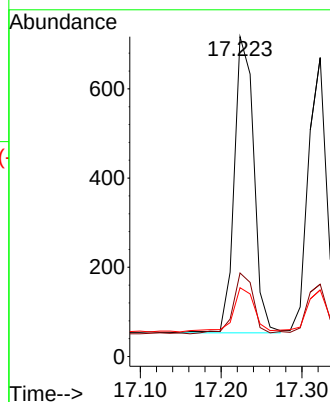
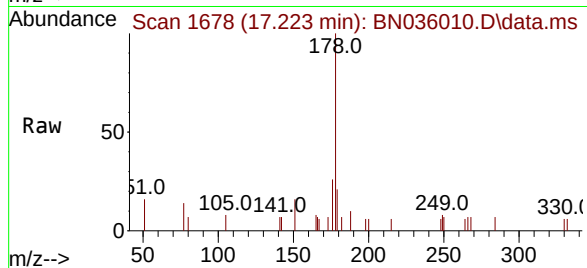
Tgt Ion:178 Resp: 1118

Ion Ratio Lower Upper

178 100

176 21.4 16.0 24.0

179 16.7 12.4 18.6



#26

Anthracene

Concen: 0.093 ng

RT: 17.323 min Scan# 1686

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

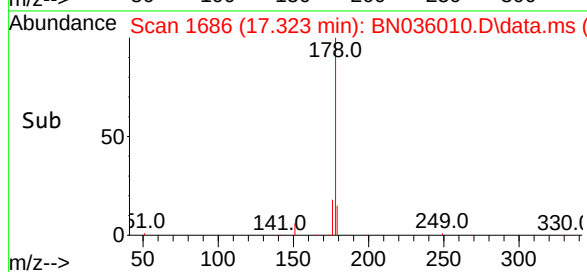
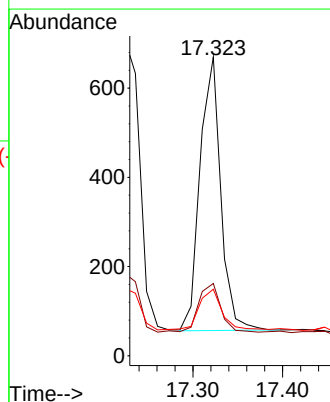
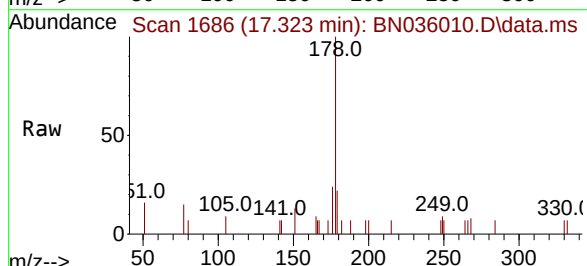
Tgt Ion:178 Resp: 987

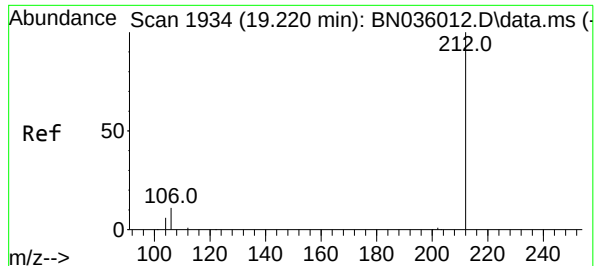
Ion Ratio Lower Upper

178 100

176 19.7 15.4 23.2

179 17.6 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.097 ng

RT: 19.220 min Scan# 1934

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

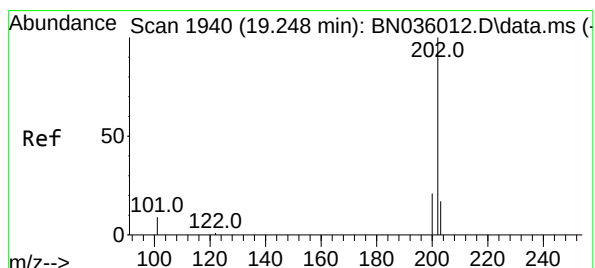
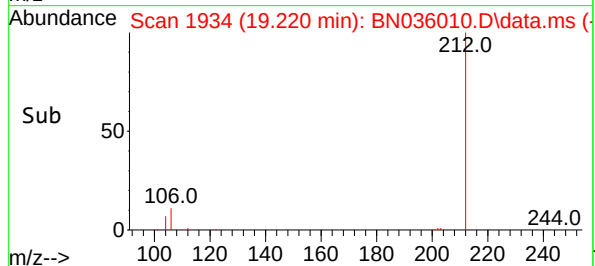
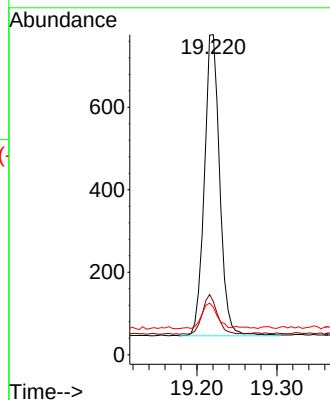
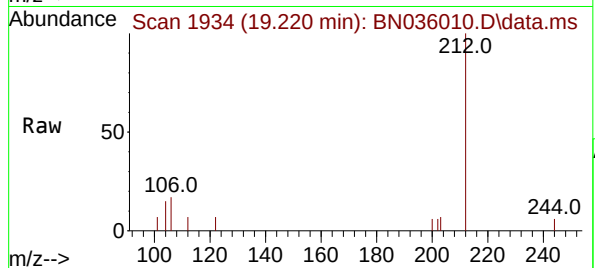
Tgt Ion:212 Resp: 973

Ion Ratio Lower Upper

212 100

106 12.6 9.7 14.5

104 8.6 6.0 9.0



#28

Fluoranthene

Concen: 0.093 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

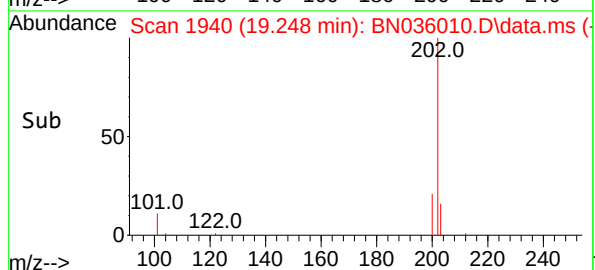
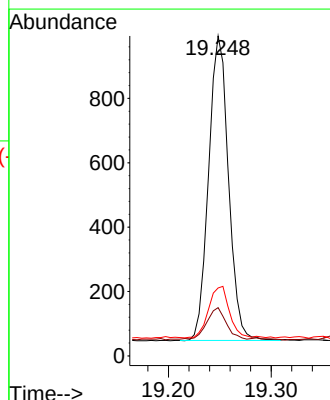
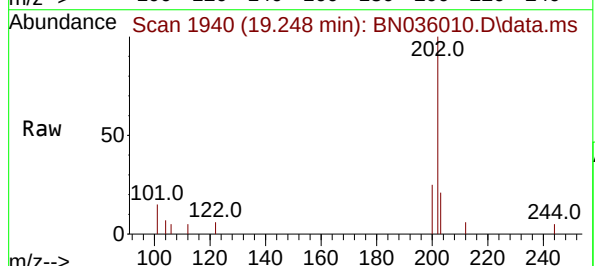
Tgt Ion:202 Resp: 1271

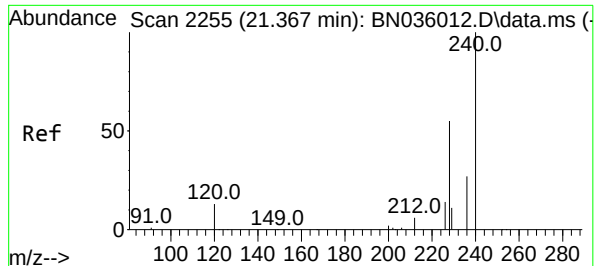
Ion Ratio Lower Upper

202 100

101 10.2 7.6 11.4

203 17.9 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

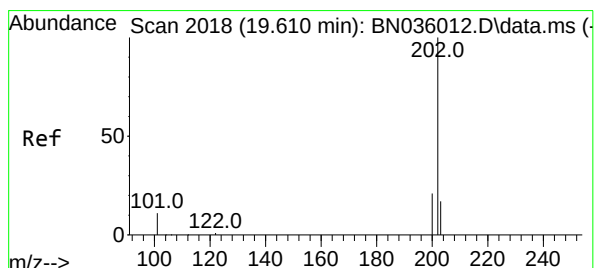
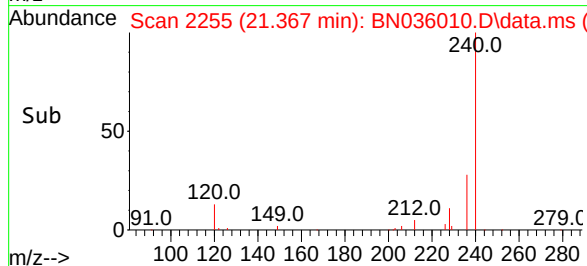
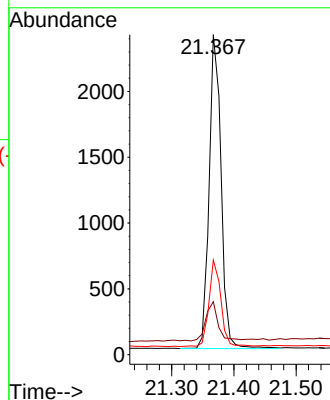
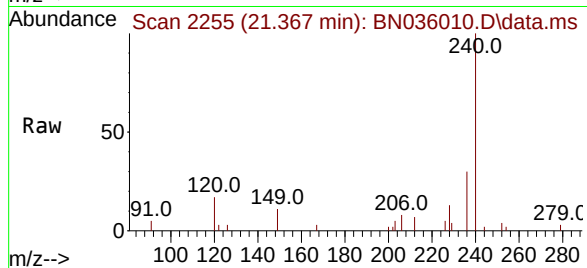
Tgt Ion:240 Resp: 3177

Ion Ratio Lower Upper

240 100

120 16.5 13.9 20.9

236 29.5 23.7 35.5



#30

Pyrene

Concen: 0.102 ng

RT: 19.611 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

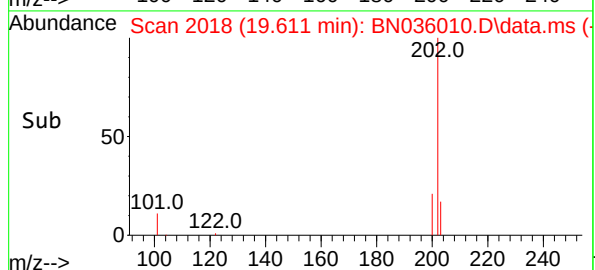
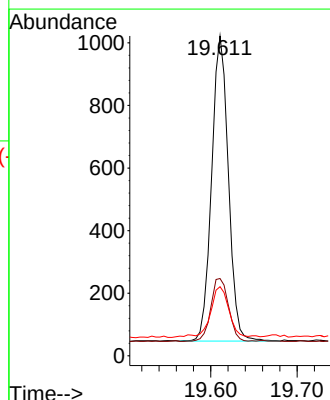
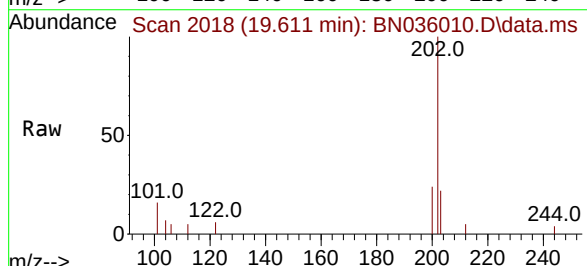
Tgt Ion:202 Resp: 1316

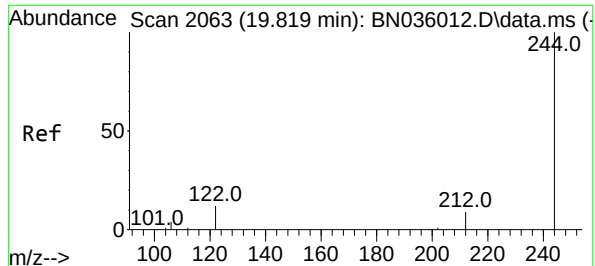
Ion Ratio Lower Upper

202 100

200 21.9 17.0 25.4

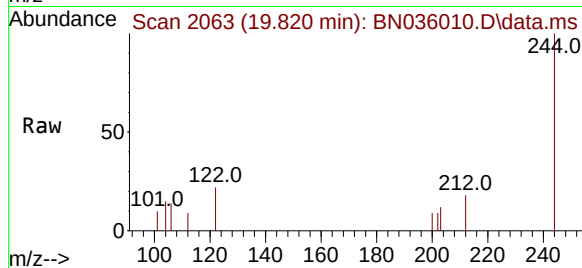
203 18.2 14.4 21.6



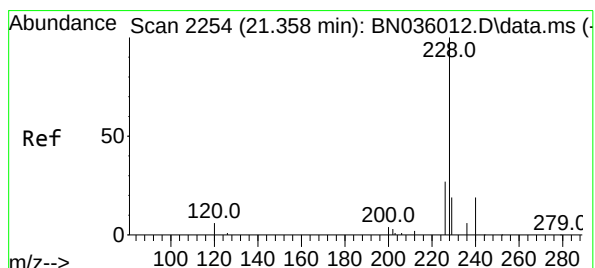
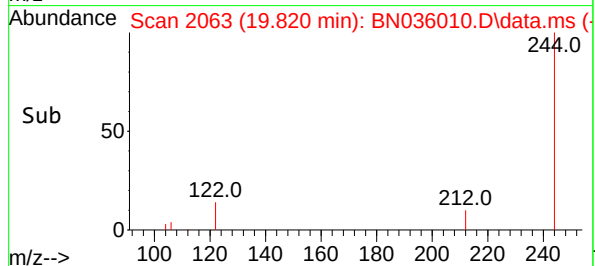
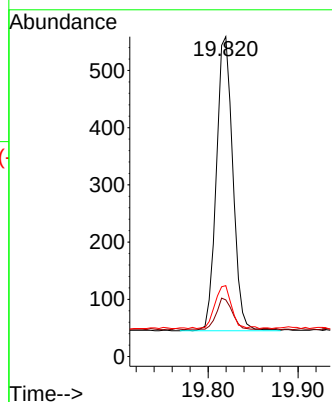


#31
Terphenyl-d14
Concen: 0.099 ng
RT: 19.820 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

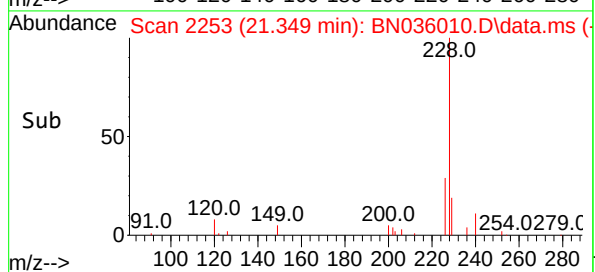
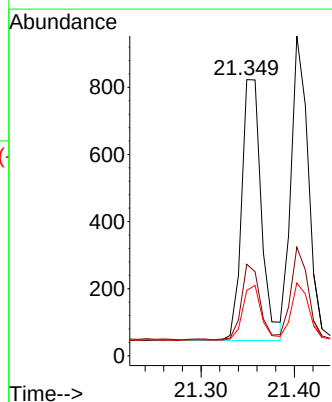
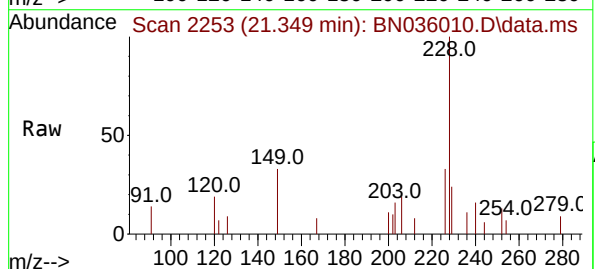


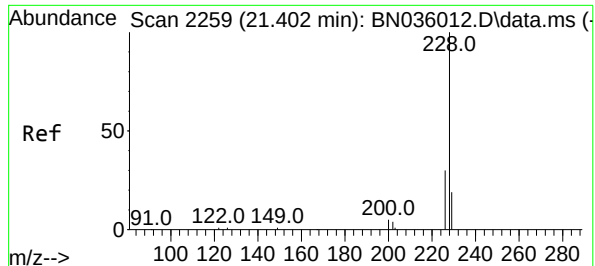
Tgt Ion:244 Resp: 652
Ion Ratio Lower Upper
244 100
212 17.7 9.1 13.7#
122 22.2 11.3 16.9#



#32
Benzo(a)anthracene
Concen: 0.100 ng
RT: 21.349 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Tgt Ion:228 Resp: 1148
Ion Ratio Lower Upper
228 100
226 33.2 22.6 34.0
229 23.7 16.5 24.7





#33

Chrysene

Concen: 0.101 ng

RT: 21.403 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

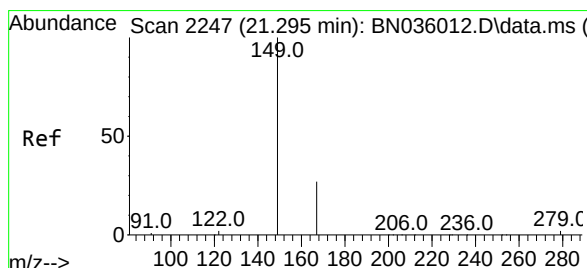
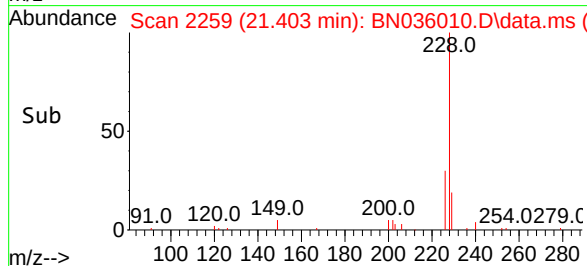
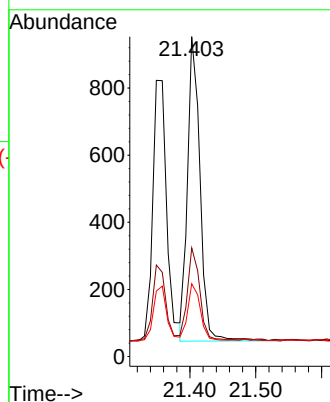
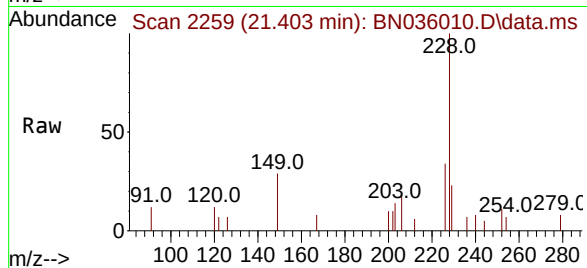
Tgt Ion:228 Resp: 1192

Ion Ratio Lower Upper

228 100

226 34.0 25.3 37.9

229 22.8 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.116 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

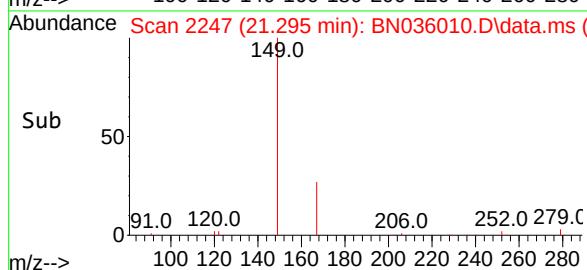
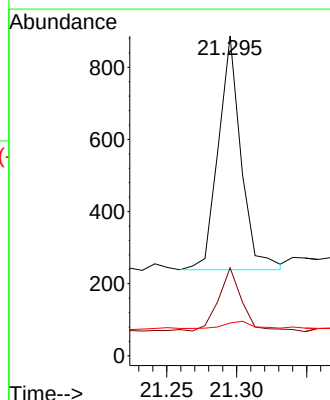
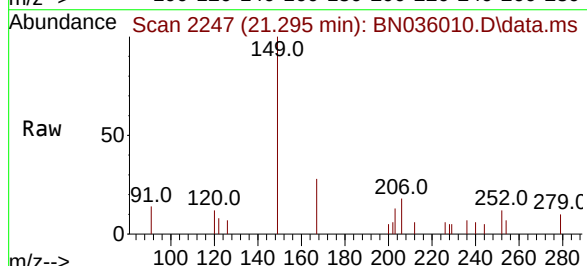
Tgt Ion:149 Resp: 730

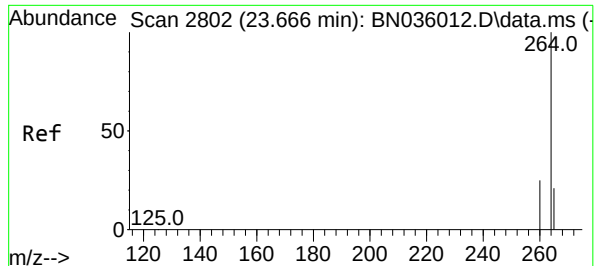
Ion Ratio Lower Upper

149 100

167 29.3 21.9 32.9

279 3.6 3.0 4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.666 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

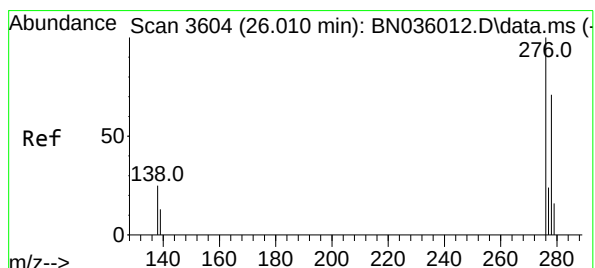
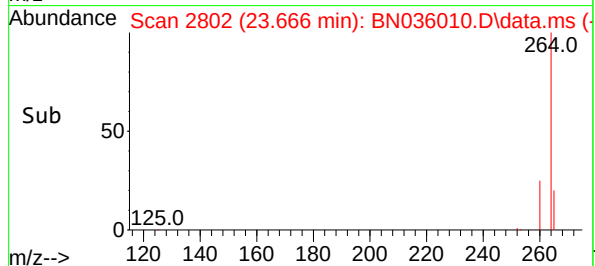
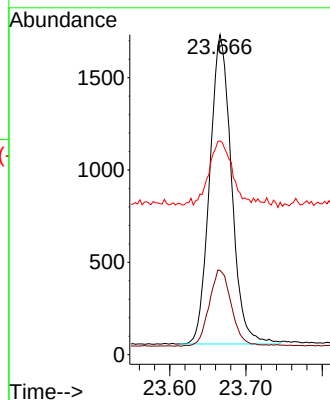
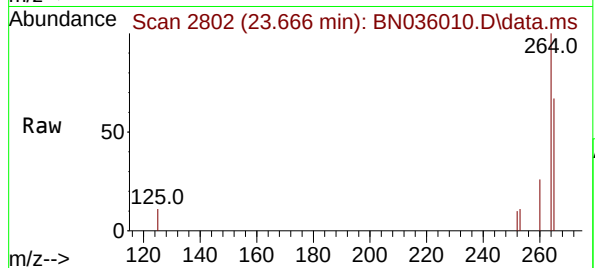
Tgt Ion:264 Resp: 3324

Ion Ratio Lower Upper

264 100

260 26.4 21.8 32.6

265 66.8 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.095 ng

RT: 26.008 min Scan# 3603

Delta R.T. -0.003 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

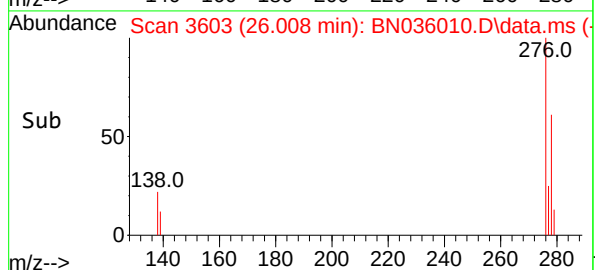
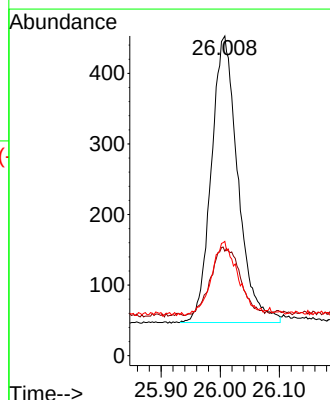
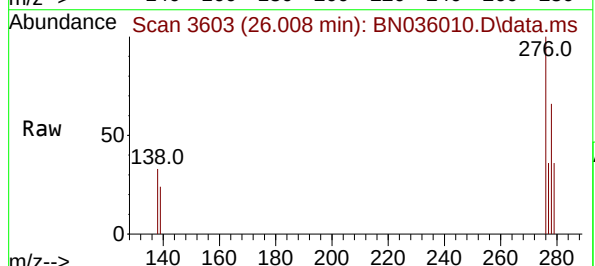
Tgt Ion:276 Resp: 1267

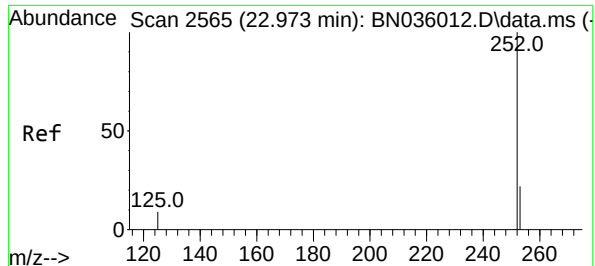
Ion Ratio Lower Upper

276 100

138 26.8 19.9 29.9

277 26.0 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.099 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

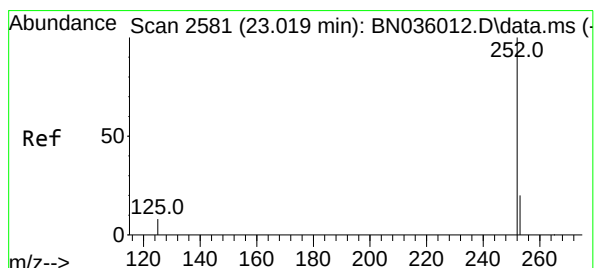
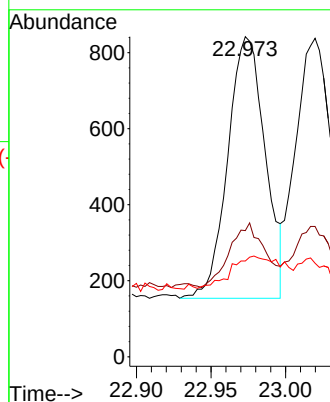
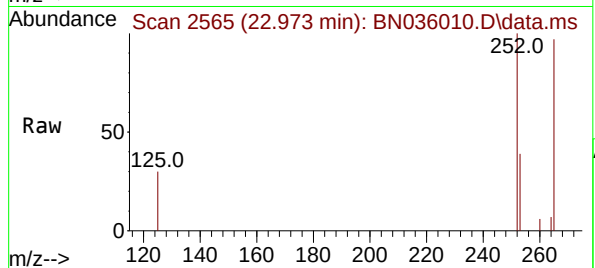
Tgt Ion:252 Resp: 1199

Ion Ratio Lower Upper

252 100

253 39.4 22.5 33.7#

125 29.9 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.097 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

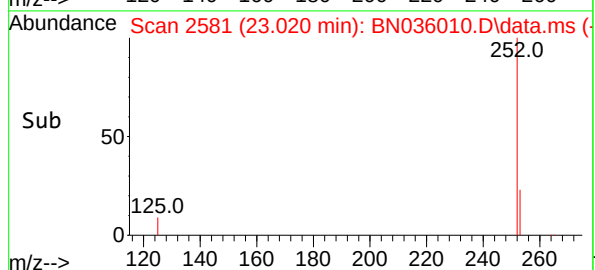
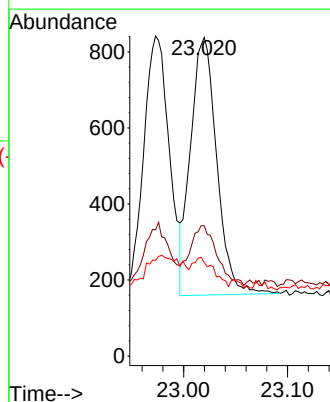
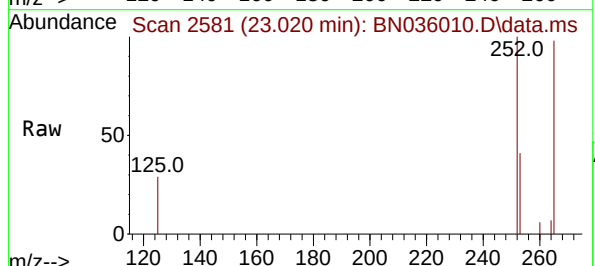
Tgt Ion:252 Resp: 1186

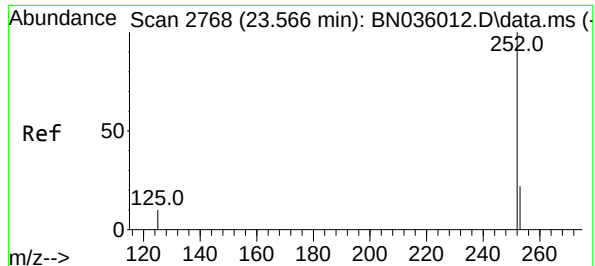
Ion Ratio Lower Upper

252 100

253 40.9 21.3 31.9#

125 29.4 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.100 ng

RT: 23.564 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036010.D

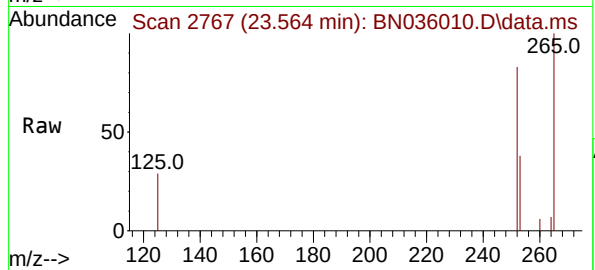
Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1



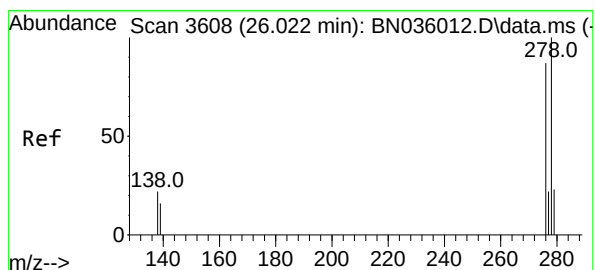
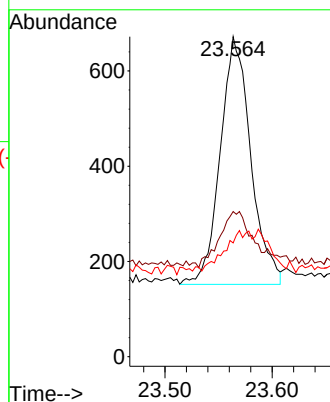
Tgt Ion:252 Resp: 1028

Ion Ratio Lower Upper

252 100

253 45.4 23.8 35.6#

125 35.6 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.093 ng

RT: 26.025 min Scan# 3609

Delta R.T. 0.003 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

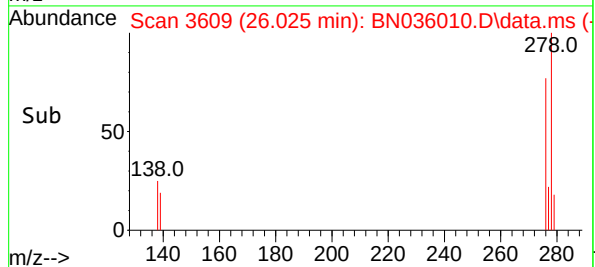
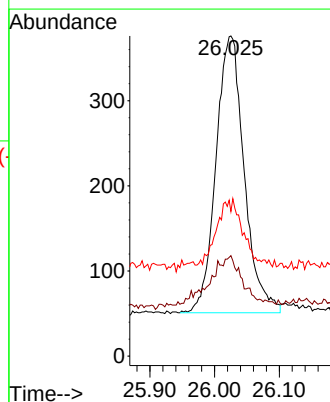
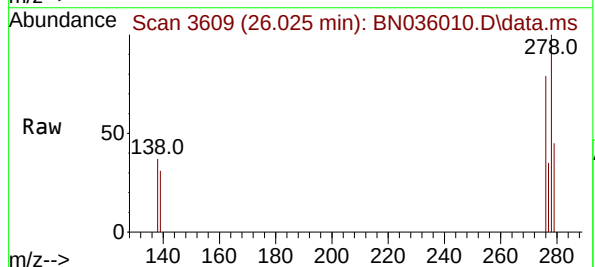
Tgt Ion:278 Resp: 986

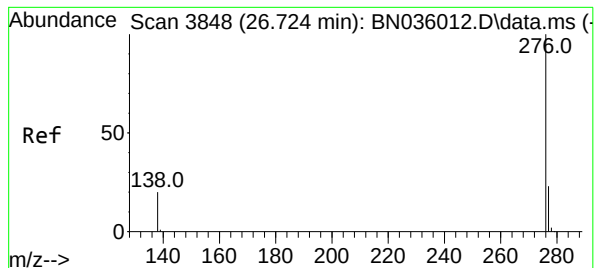
Ion Ratio Lower Upper

278 100

139 31.4 16.0 24.0#

279 45.2 23.8 35.8#





#41

Benzo(g,h,i)perylene

Concen: 0.096 ng

RT: 26.721 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN036010.D

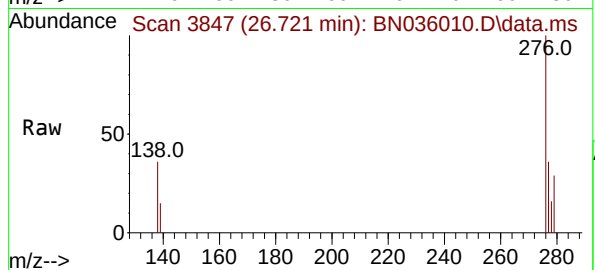
Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1



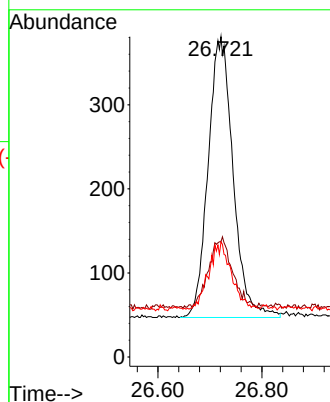
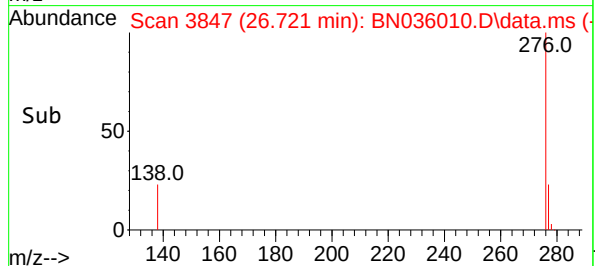
Tgt Ion:276 Resp: 1112

Ion Ratio Lower Upper

276 100

277 36.0 21.3 31.9#

138 36.0 19.2 28.8#



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036011.D
 Acq On : 22 Jan 2025 11:38
 Operator : RC/JU
 Sample : SSTDICC0.2
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.2

Quant Time: Jan 23 00:27:37 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

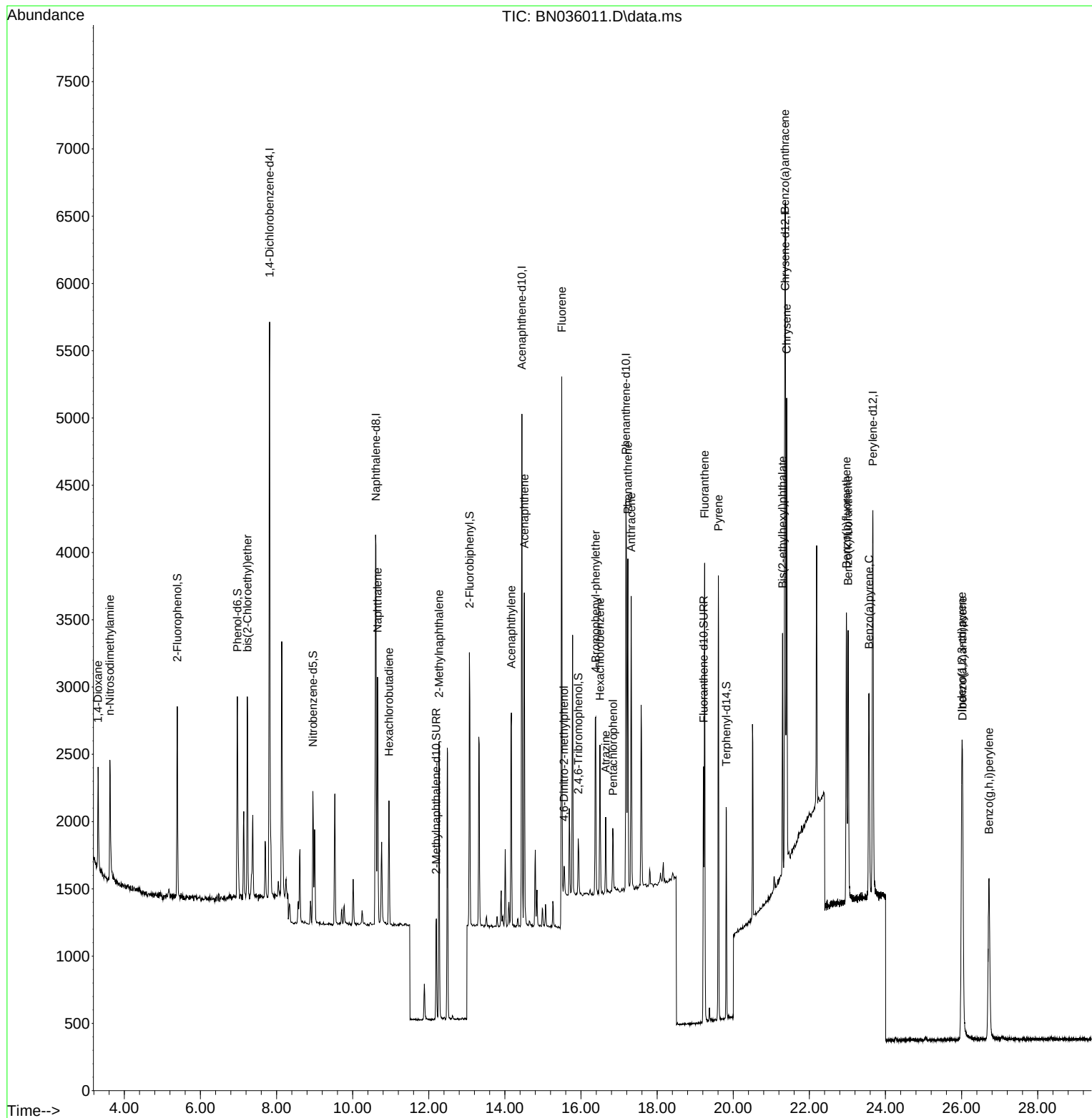
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2018	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3893	0.400	ng	0.00
13) Acenaphthene-d10	14.447	164	2029	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	4283	0.400	ng	0.00
29) Chrysene-d12	21.367	240	3716	0.400	ng	0.00
35) Perylene-d12	23.668	264	3953	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.391	112	1021	0.195	ng	0.00
5) Phenol-d6	6.972	99	1206	0.196	ng	0.00
8) Nitrobenzene-d5	8.956	82	692	0.188	ng	0.00
11) 2-Methylnaphthalene-d10	12.198	152	1026	0.194	ng	0.00
14) 2,4,6-Tribromophenol	15.928	330	241	0.185	ng	0.00
15) 2-Fluorobiphenyl	13.068	172	1761	0.194	ng	0.00
27) Fluoranthene-d10	19.220	212	2155	0.194	ng	0.00
31) Terphenyl-d14	19.819	244	1499	0.194	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.311	88	464	0.206	ng	93
3) n-Nitrosodimethylamine	3.621	42	756	0.185	ng	# 94
6) bis(2-Chloroethyl)ether	7.232	93	988	0.199	ng	99
9) Naphthalene	10.654	128	2221	0.196	ng	# 97
10) Hexachlorobutadiene	10.953	225	718	0.197	ng	# 100
12) 2-Methylnaphthalene	12.269	142	1339	0.191	ng	99
16) Acenaphthylene	14.169	152	1852	0.193	ng	99
17) Acenaphthene	14.511	154	1254	0.190	ng	99
18) Fluorene	15.495	166	1503	0.182	ng	98
20) 4,6-Dinitro-2-methylph...	15.555	198	174	0.174	ng	# 76
21) 4-Bromophenyl-phenylether	16.387	248	576	0.189	ng	98
22) Hexachlorobenzene	16.499	284	766	0.191	ng	99
23) Atrazine	16.647	200	415	0.188	ng	96
24) Pentachlorophenol	16.846	266	281	0.162	ng	97
25) Phenanthrene	17.231	178	2480	0.193	ng	98
26) Anthracene	17.318	178	2175	0.186	ng	99
28) Fluoranthene	19.248	202	2891	0.191	ng	99
30) Pyrene	19.610	202	2950	0.196	ng	100
32) Benzo(a)anthracene	21.358	228	2607	0.193	ng	99
33) Chrysene	21.402	228	2742	0.199	ng	98
34) Bis(2-ethylhexyl)phtha...	21.295	149	1473	0.199	ng	100
36) Indeno(1,2,3-cd)pyrene	26.007	276	2919	0.184	ng	98
37) Benzo(b)fluoranthene	22.973	252	2728	0.190	ng	# 94
38) Benzo(k)fluoranthene	23.019	252	2724	0.188	ng	# 91
39) Benzo(a)pyrene	23.566	252	2301	0.187	ng	# 92
40) Dibenzo(a,h)anthracene	26.025	278	2310	0.183	ng	94
41) Benzo(g,h,i)perylene	26.718	276	2585	0.188	ng	96

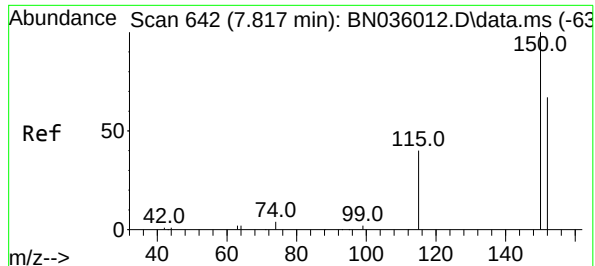
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036011.D
Acq On : 22 Jan 2025 11:38
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Jan 23 00:27:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

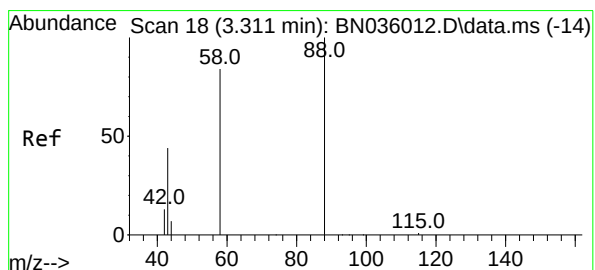
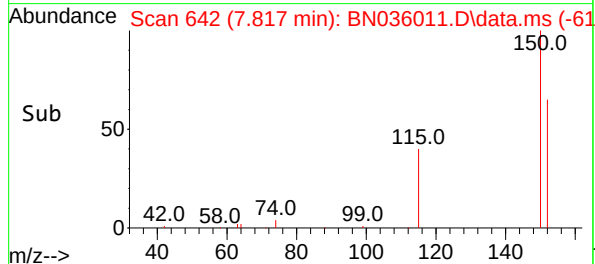
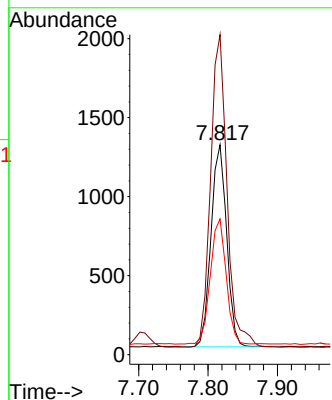
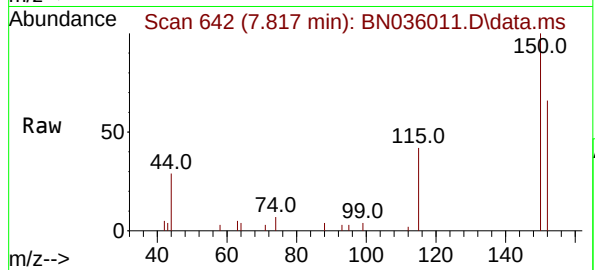




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

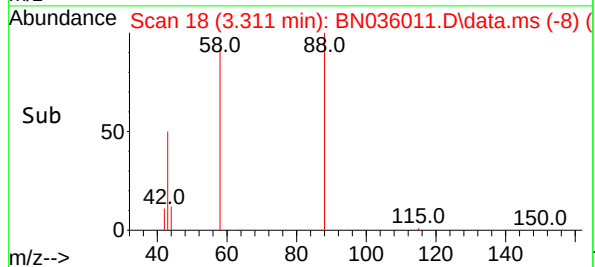
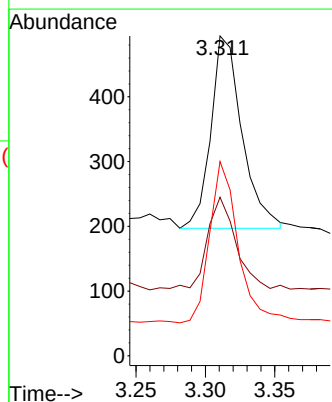
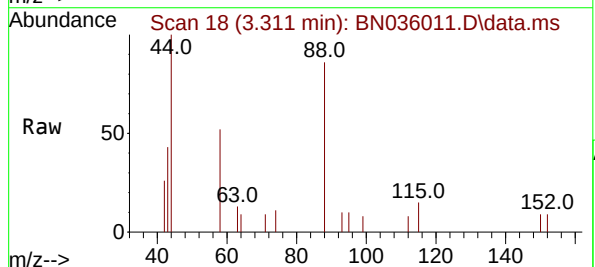
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

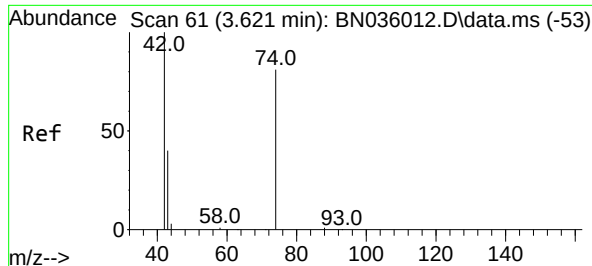
Tgt Ion:152 Resp: 2018
Ion Ratio Lower Upper
152 100
150 152.5 117.4 176.2
115 64.8 51.0 76.4



#2
1,4-Dioxane
Concen: 0.206 ng
RT: 3.311 min Scan# 18
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion: 88 Resp: 464
Ion Ratio Lower Upper
88 100
43 44.8 38.5 57.7
58 76.3 66.6 99.8

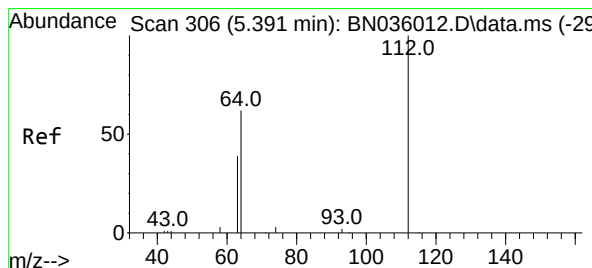
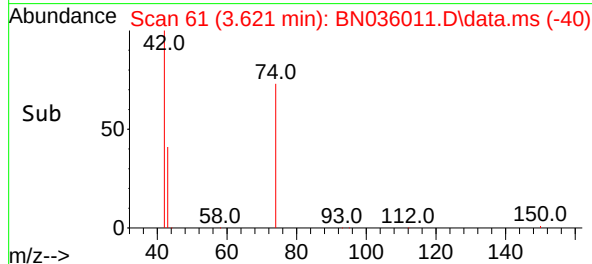
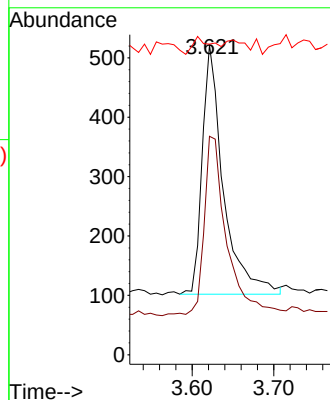
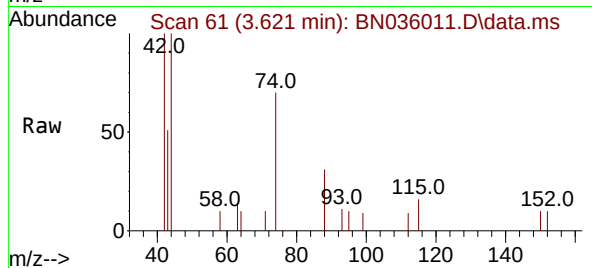




#3
n-Nitrosodimethylamine
Concen: 0.185 ng
RT: 3.621 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

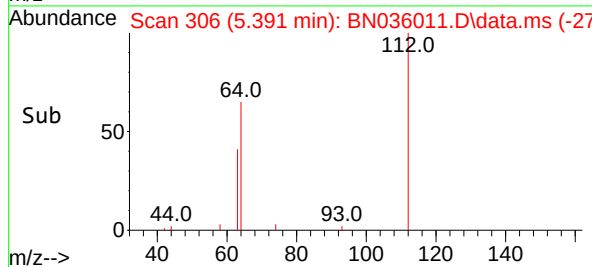
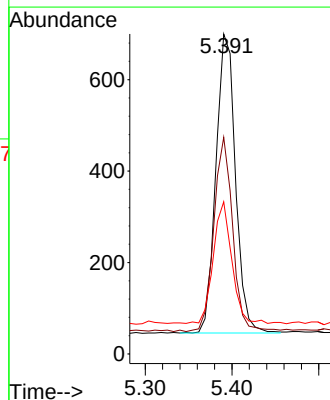
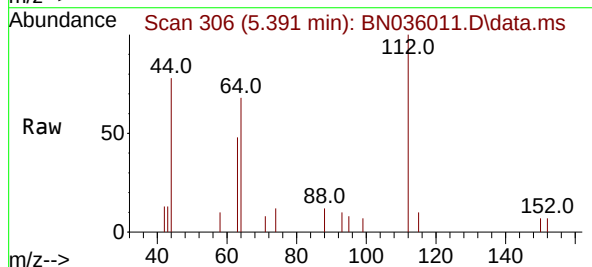
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

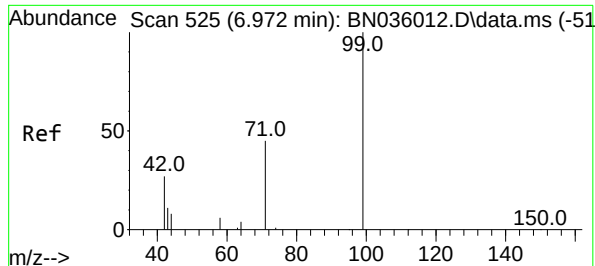
Tgt Ion: 42 Resp: 756
Ion Ratio Lower Upper
42 100
74 77.5 58.1 87.1
44 4.5 6.2 9.4#



#4
2-Fluorophenol
Concen: 0.195 ng
RT: 5.391 min Scan# 306
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion: 112 Resp: 1021
Ion Ratio Lower Upper
112 100
64 62.9 50.0 75.0
63 39.2 30.7 46.1

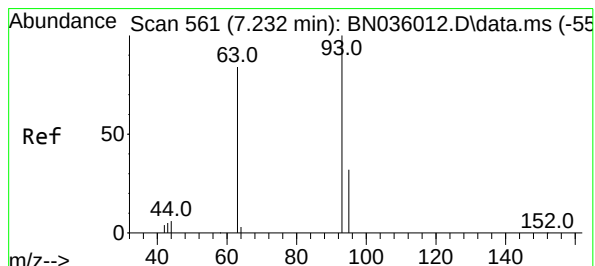
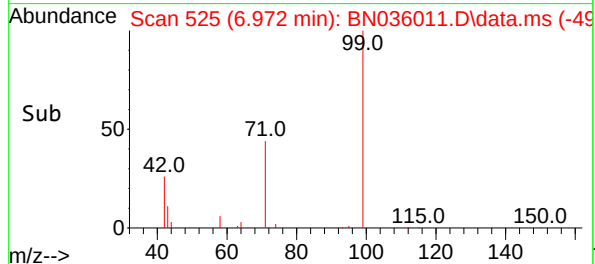
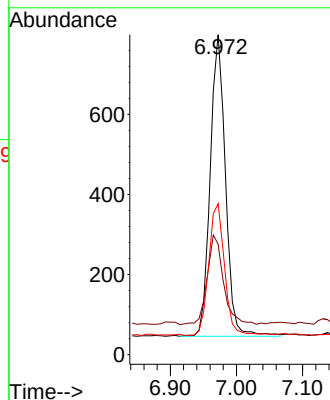
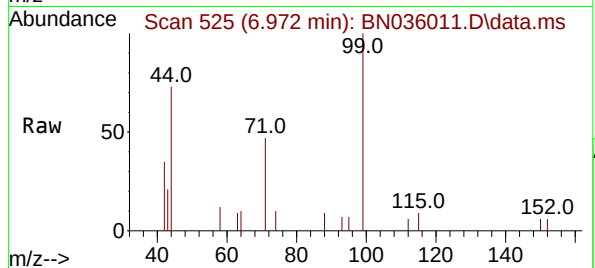




#5
Phenol-d6
Concen: 0.196 ng
RT: 6.972 min Scan# 511
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

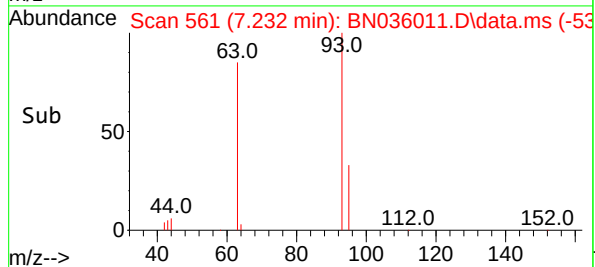
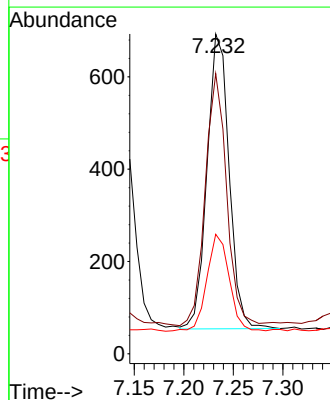
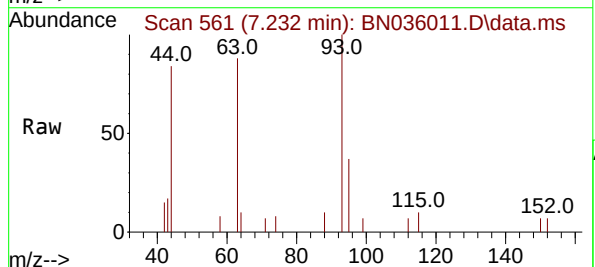
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

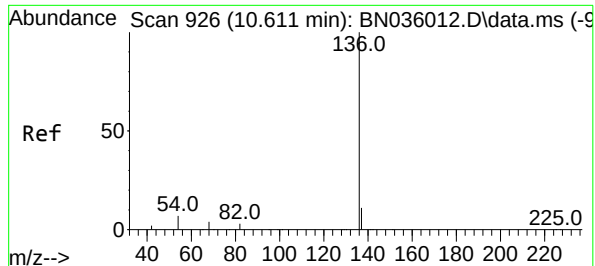
Tgt Ion: 99 Resp: 1206
Ion Ratio Lower Upper
99 100
42 31.6 26.8 40.2
71 45.4 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.199 ng
RT: 7.232 min Scan# 561
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion: 93 Resp: 988
Ion Ratio Lower Upper
93 100
63 83.2 65.8 98.6
95 33.4 25.8 38.6

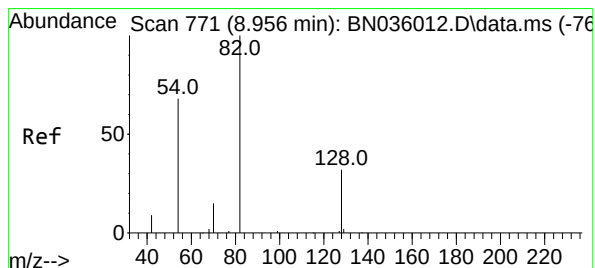
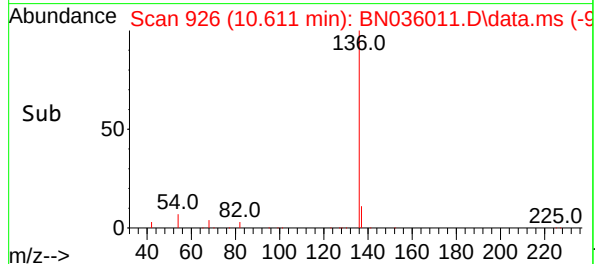
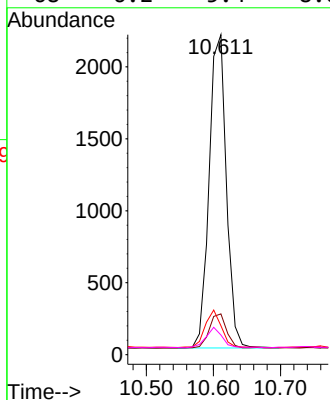
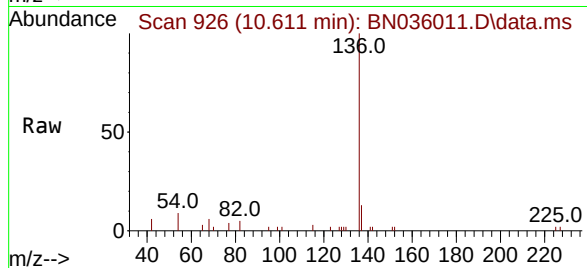




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.611 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

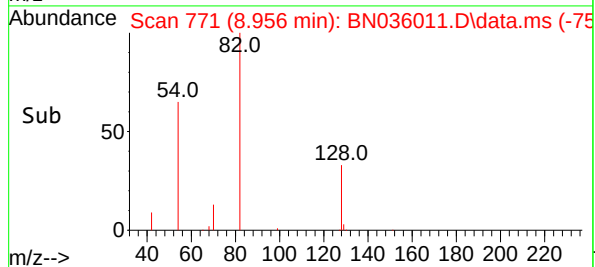
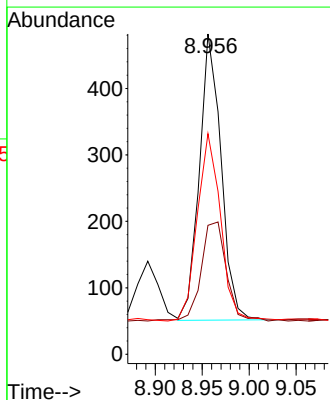
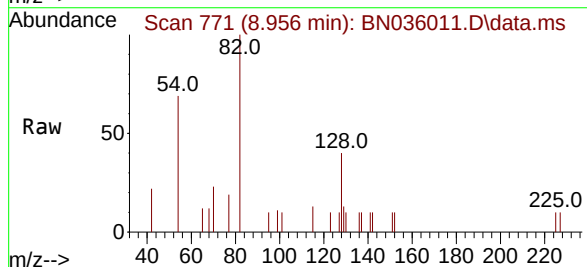
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

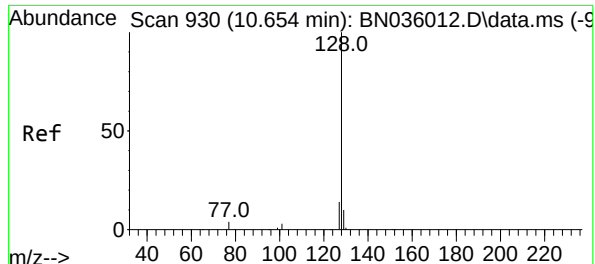
Tgt Ion:	136	Resp:	3893
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.4	15.6
54	9.0	7.7	11.5
68	6.2	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.188 ng
RT: 8.956 min Scan# 771
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion:	82	Resp:	692
Ion	Ratio	Lower	Upper
82	100		
128	40.2	28.8	43.2
54	68.9	55.8	83.8

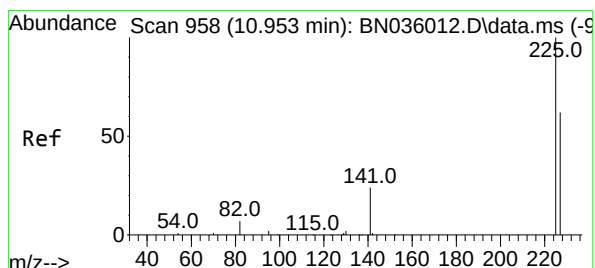
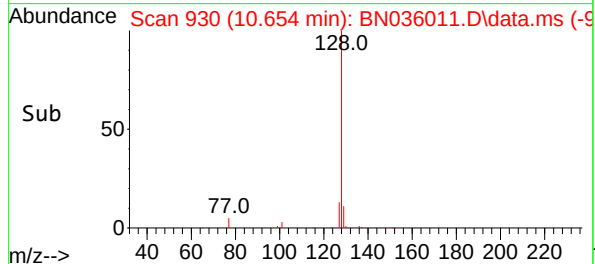
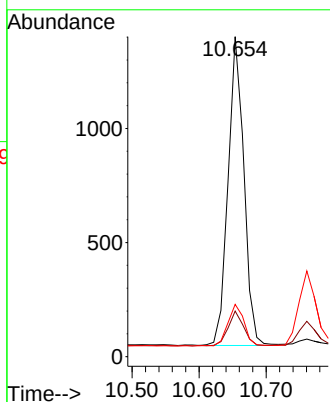
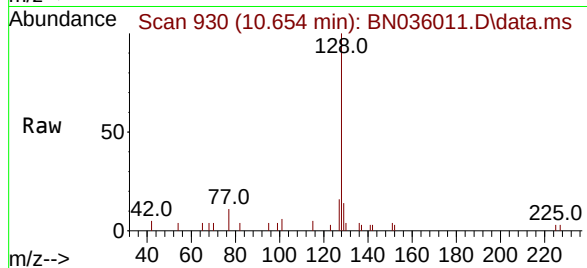




#9
Naphthalene
Concen: 0.196 ng
RT: 10.654 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

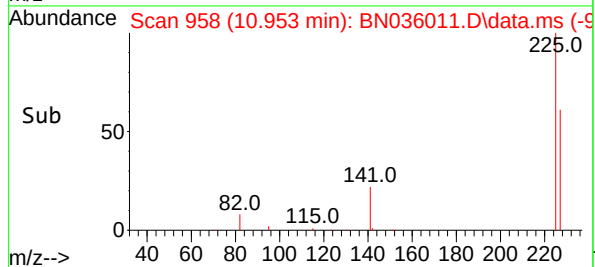
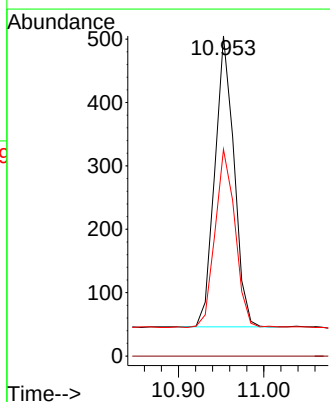
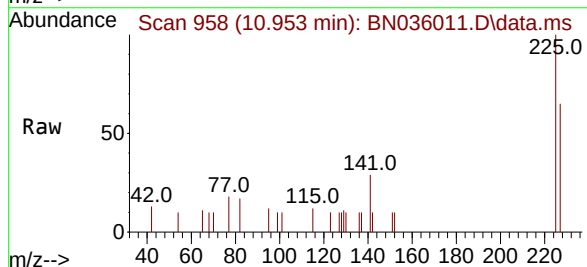
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

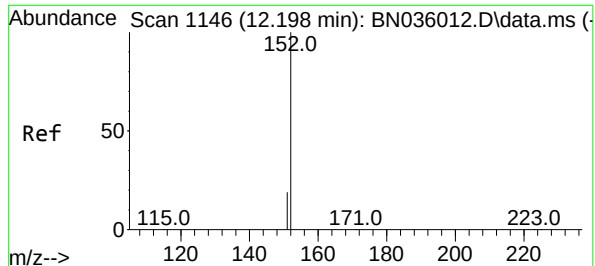
Tgt Ion:128 Resp: 2221
Ion Ratio Lower Upper
128 100
129 14.3 9.4 14.2#
127 16.3 12.6 19.0



#10
Hexachlorobutadiene
Concen: 0.197 ng
RT: 10.953 min Scan# 958
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion:225 Resp: 718
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 64.1 51.0 76.6

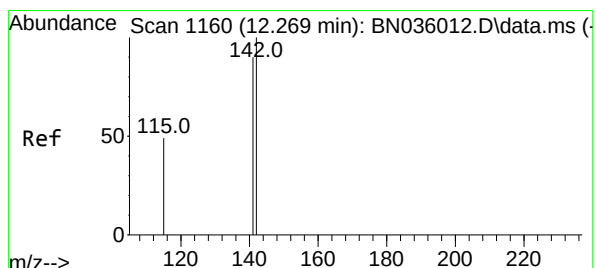
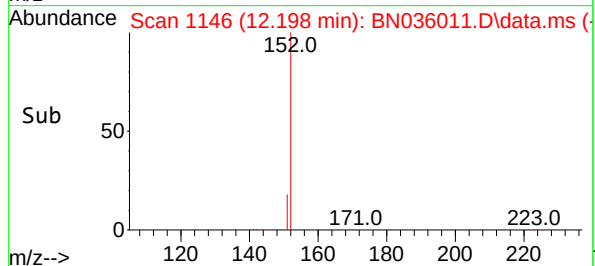
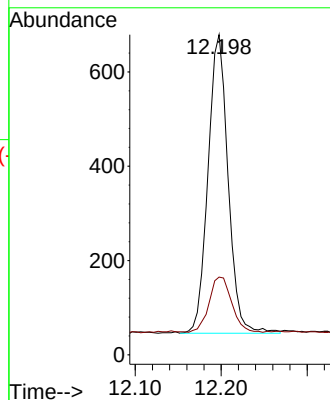
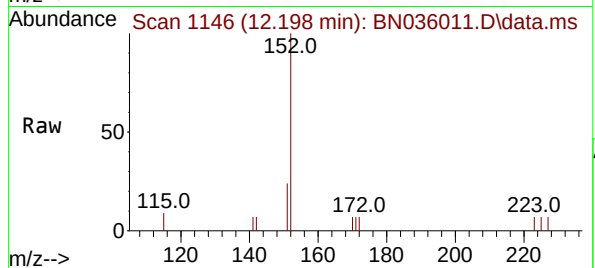




#11
2-Methylnaphthalene-d10
Concen: 0.194 ng
RT: 12.198 min Scan# 1146
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

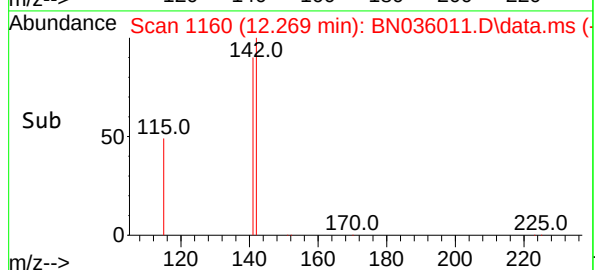
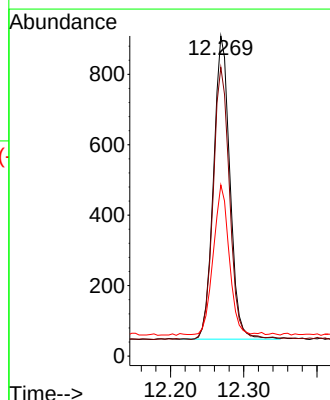
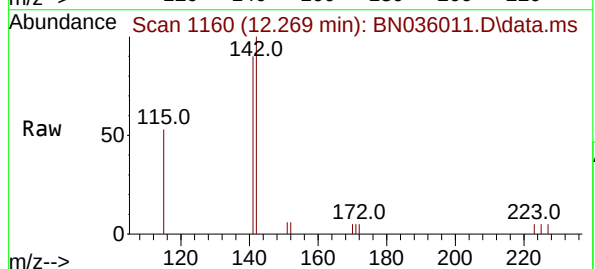
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

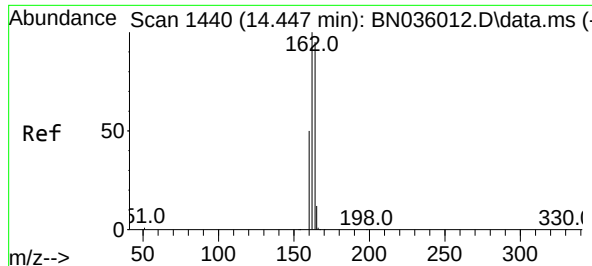
Tgt Ion:152 Resp: 1026
Ion Ratio Lower Upper
152 100
151 21.1 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.191 ng
RT: 12.269 min Scan# 1160
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion:142 Resp: 1339
Ion Ratio Lower Upper
142 100
141 90.2 72.2 108.2
115 53.5 41.2 61.8

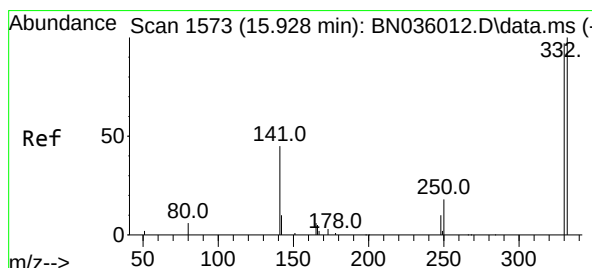
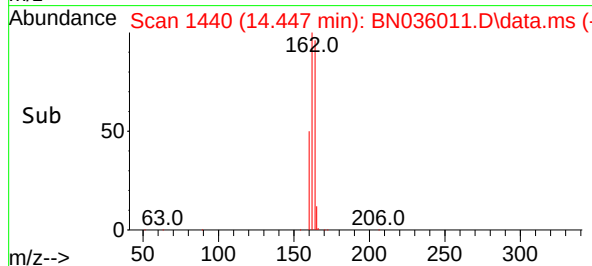
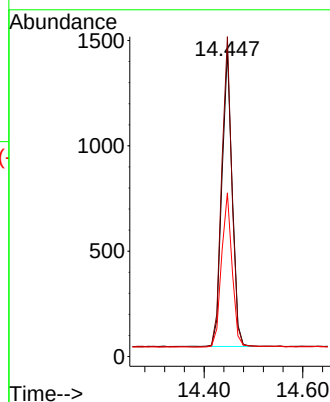
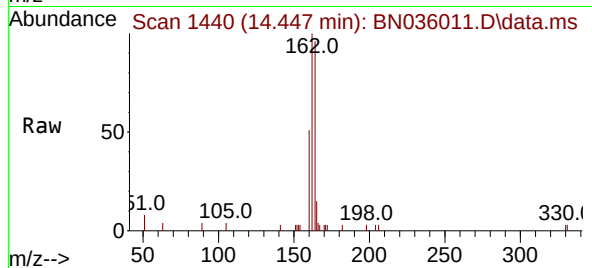




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.447 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

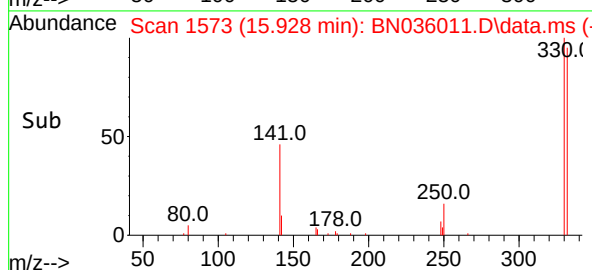
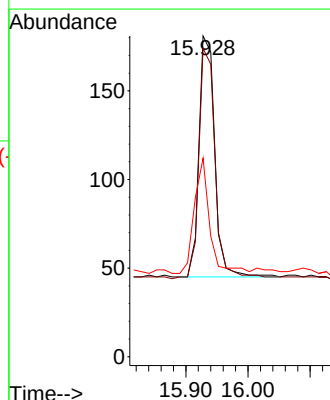
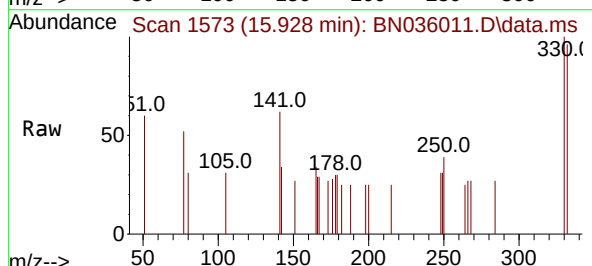
Instrument :
BNA_N
ClientSampleId :
SSTDIC0.2

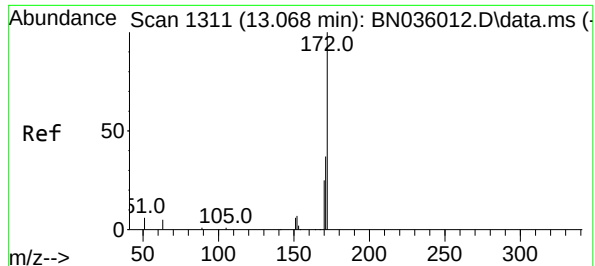
Tgt Ion:164 Resp: 2029
Ion Ratio Lower Upper
164 100
162 104.4 84.1 126.1
160 53.4 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.185 ng
RT: 15.928 min Scan# 1573
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion:330 Resp: 241
Ion Ratio Lower Upper
330 100
332 98.3 81.0 121.4
141 46.1 36.7 55.1

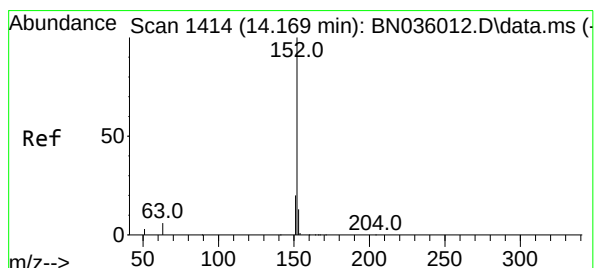
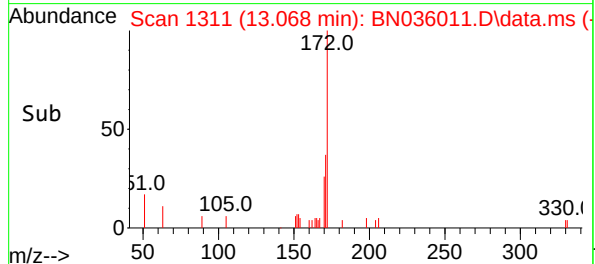
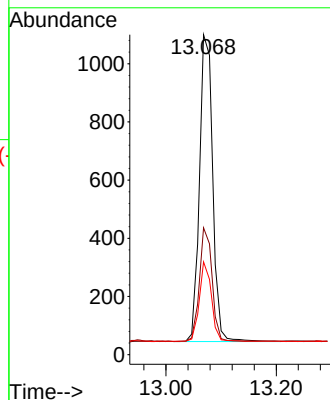
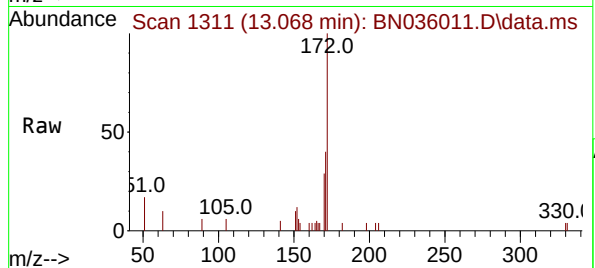




#15
2-Fluorobiphenyl
Concen: 0.194 ng
RT: 13.068 min Scan# 1311
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

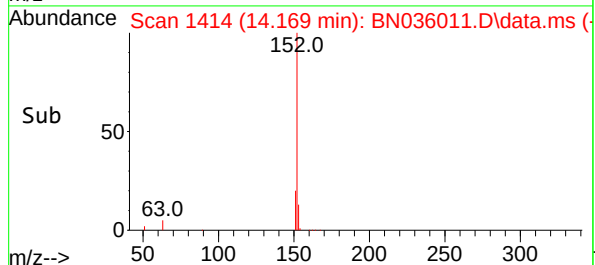
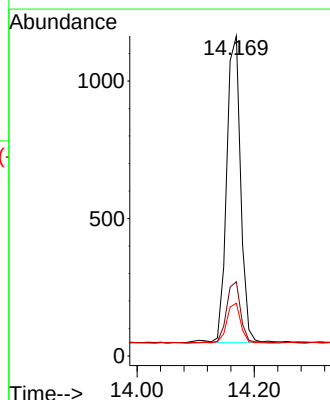
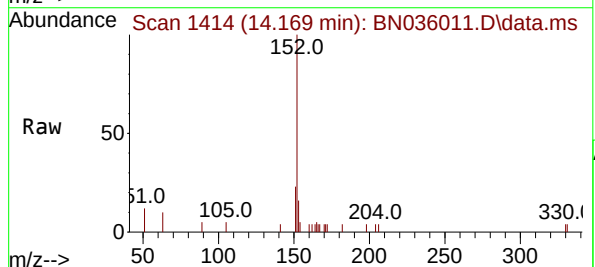
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

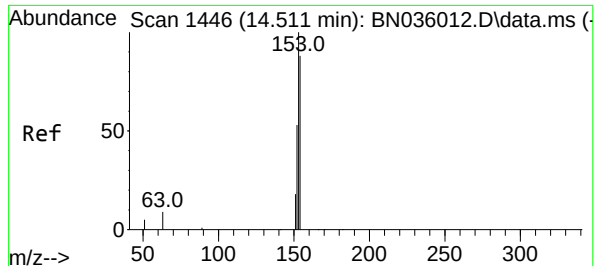
Tgt Ion:	172	Resp:	1761
Ion	Ratio	Lower	Upper
172	100		
171	39.6	30.9	46.3
170	29.0	21.2	31.8



#16
Acenaphthylene
Concen: 0.193 ng
RT: 14.169 min Scan# 1414
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion:	152	Resp:	1852
Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.2	24.2
153	13.4	10.4	15.6





#17

Acenaphthene

Concen: 0.190 ng

RT: 14.511 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

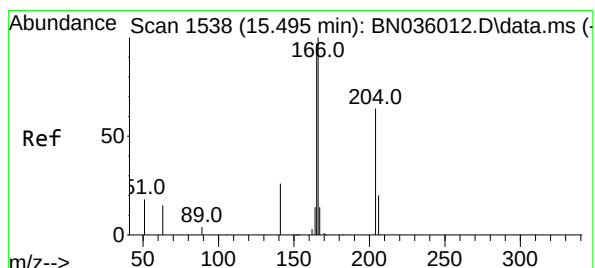
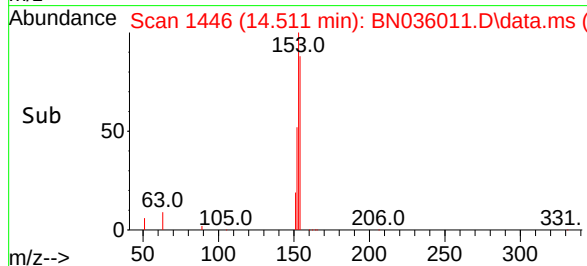
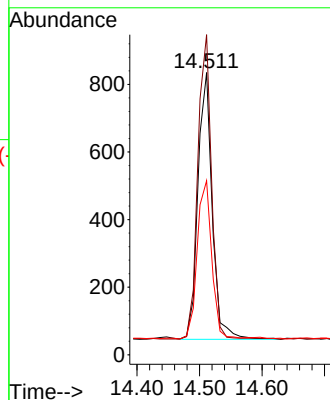
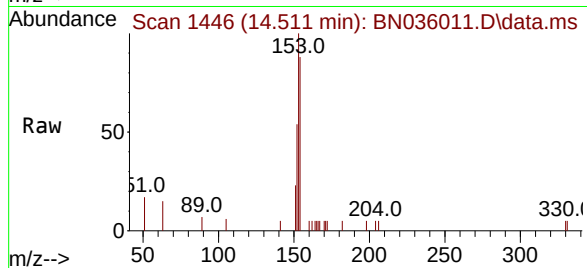
Tgt Ion:154 Resp: 1254

Ion Ratio Lower Upper

154 100

153 110.2 88.9 133.3

152 59.4 48.1 72.1



#18

Fluorene

Concen: 0.182 ng

RT: 15.495 min Scan# 1538

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

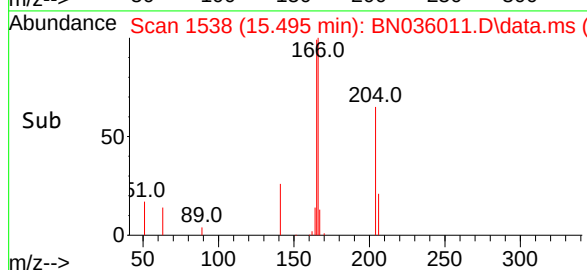
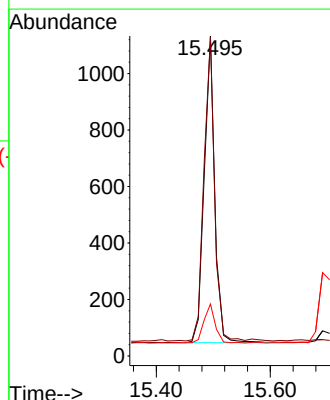
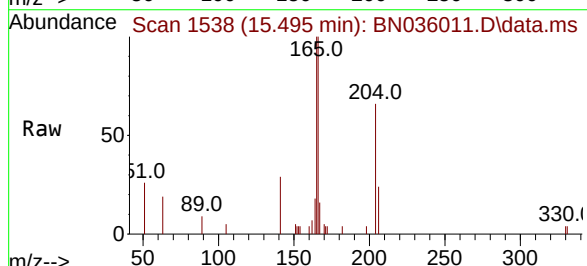
Tgt Ion:166 Resp: 1503

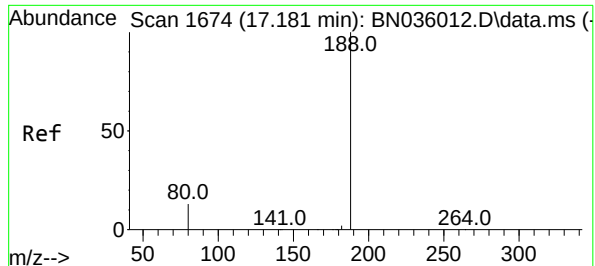
Ion Ratio Lower Upper

166 100

165 95.7 78.5 117.7

167 13.1 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.181 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

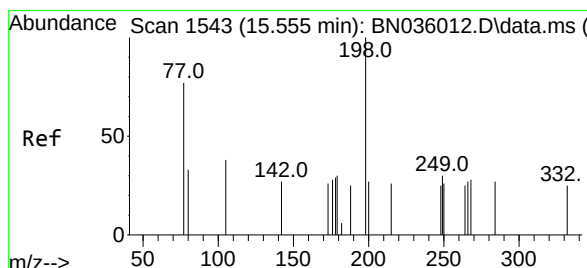
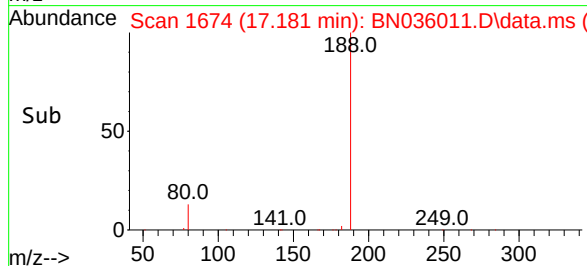
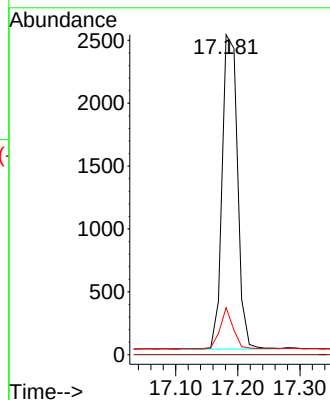
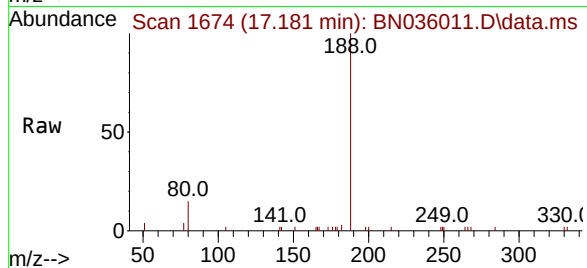
Tgt Ion:188 Resp: 4283

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 14.7 12.3 18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.174 ng

RT: 15.555 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

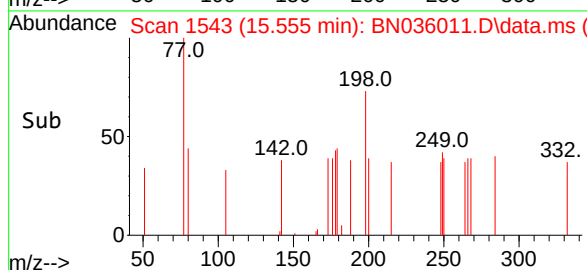
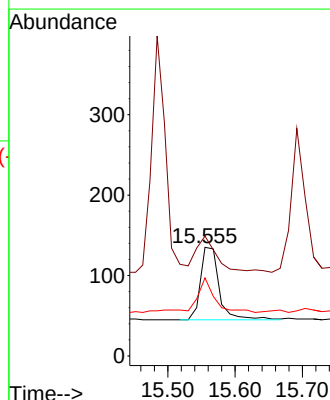
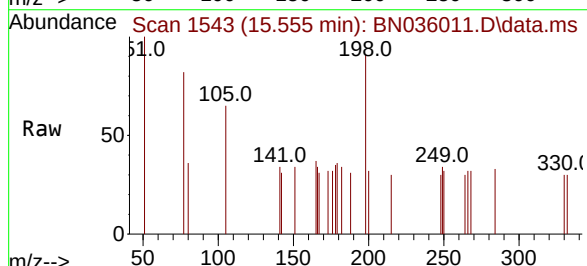
Tgt Ion:198 Resp: 174

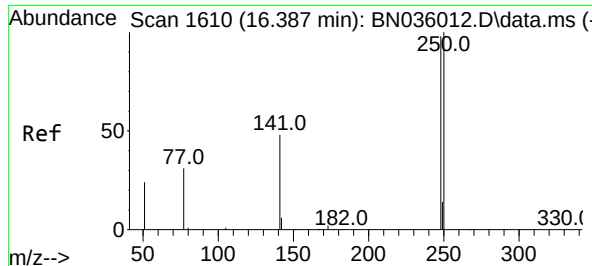
Ion Ratio Lower Upper

198 100

51 110.4 68.1 102.1#

105 71.9 46.5 69.7#

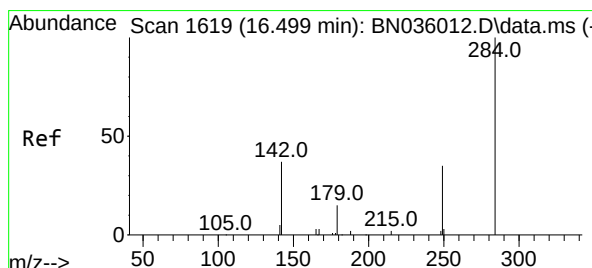
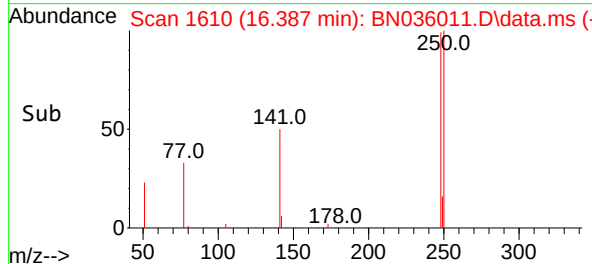
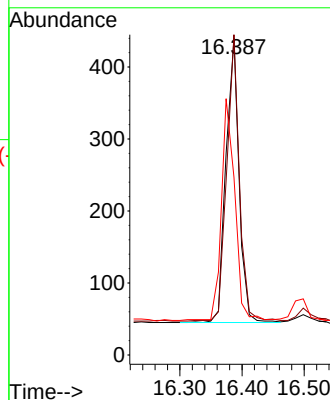
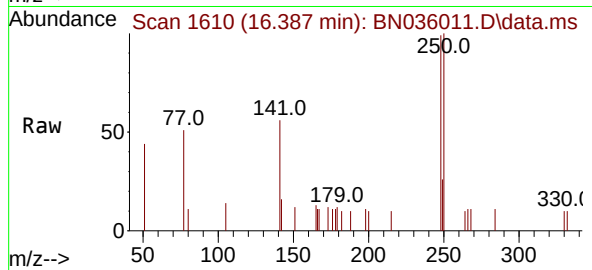




#21
4-Bromophenyl-phenylether
Concen: 0.189 ng
RT: 16.387 min Scan# 1610
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

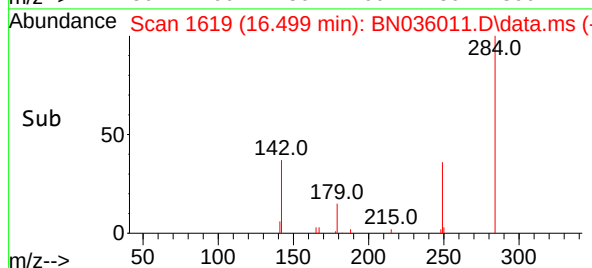
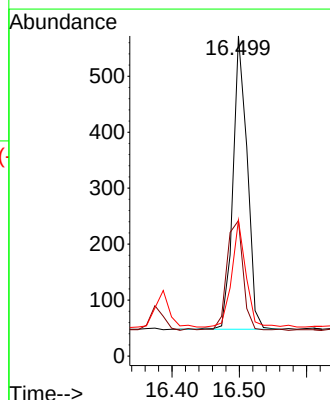
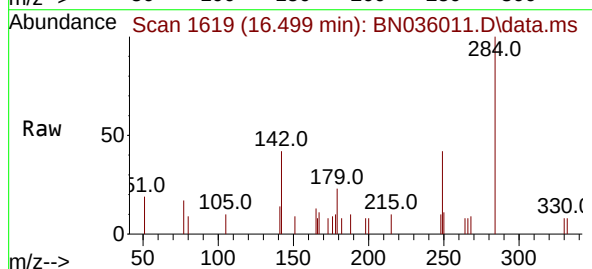
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

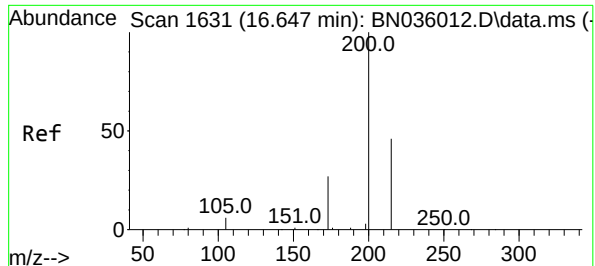
Tgt Ion	Ratio	Lower	Upper
248	100		
250	101.1	81.5	122.3
141	56.1	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.191 ng
RT: 16.499 min Scan# 1619
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion	Ratio	Lower	Upper
284	100		
142	42.3	33.6	50.4
249	37.1	28.8	43.2





#23

Atrazine

Concen: 0.188 ng

RT: 16.647 min Scan# 1631

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

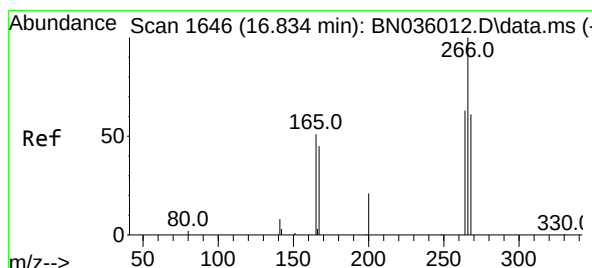
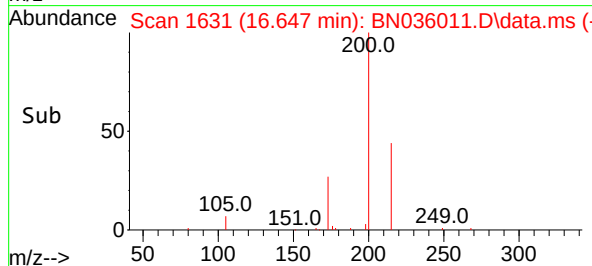
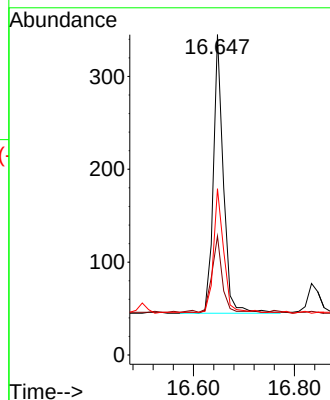
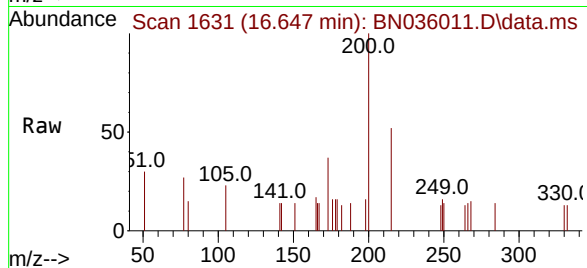
Tgt Ion:200 Resp: 415

Ion Ratio Lower Upper

200 100

173 37.1 26.6 40.0

215 51.9 40.6 61.0



#24

Pentachlorophenol

Concen: 0.162 ng

RT: 16.846 min Scan# 1647

Delta R.T. 0.012 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

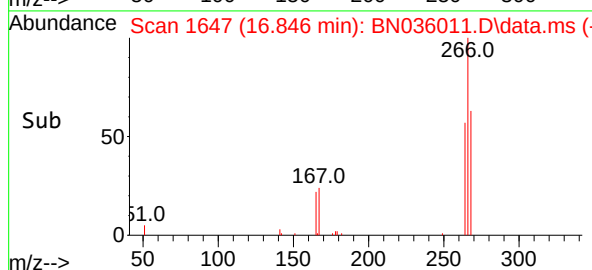
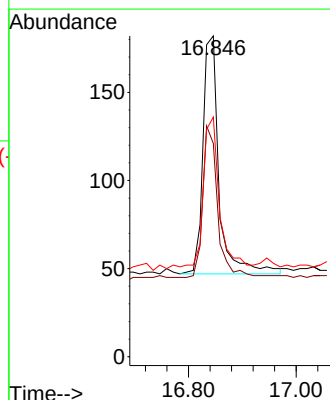
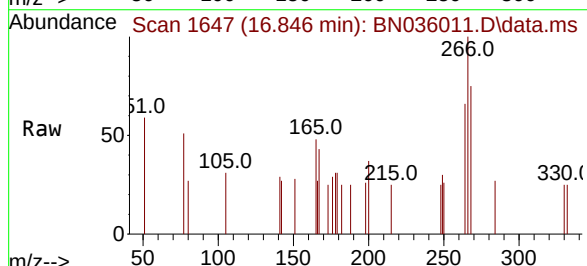
Tgt Ion:266 Resp: 281

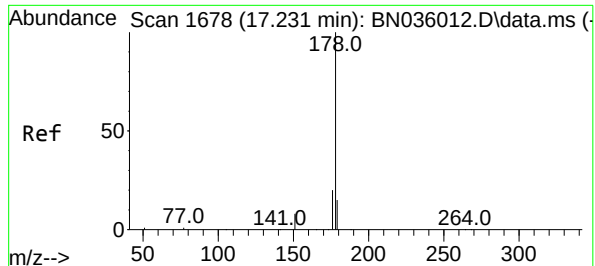
Ion Ratio Lower Upper

266 100

264 59.1 48.2 72.2

268 68.7 51.6 77.4

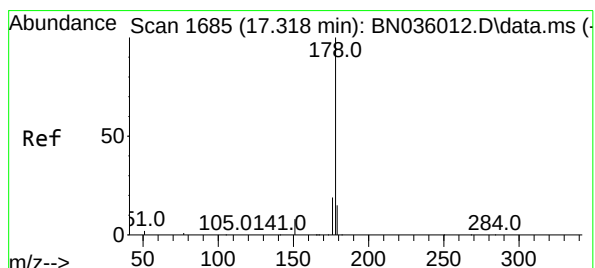
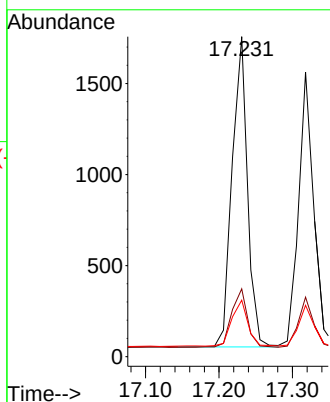
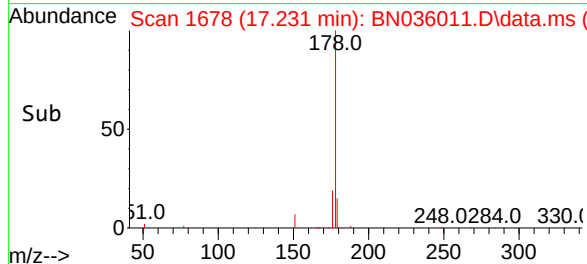
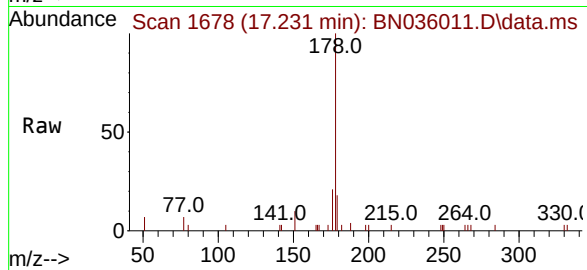




#25
Phenanthrene
Concen: 0.193 ng
RT: 17.231 min Scan# 1678
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

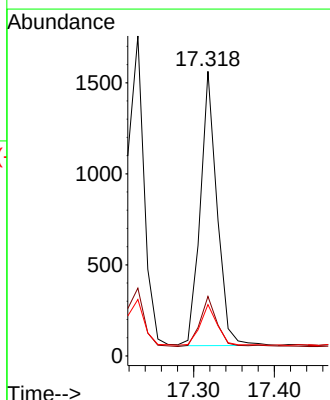
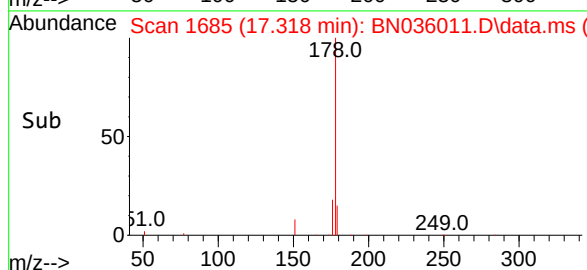
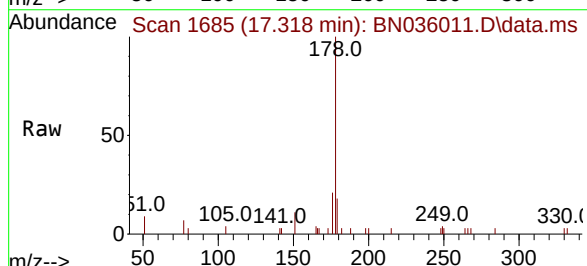
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

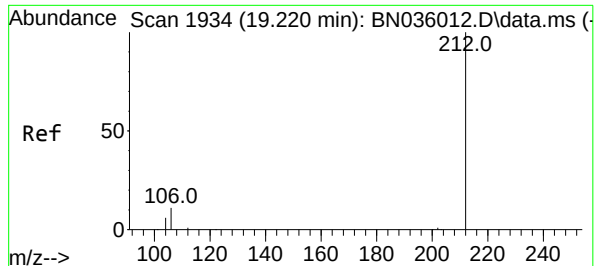
Tgt Ion:178 Resp: 2480
Ion Ratio Lower Upper
178 100
176 19.1 16.0 24.0
179 16.0 12.4 18.6



#26
Anthracene
Concen: 0.186 ng
RT: 17.318 min Scan# 1685
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion:178 Resp: 2175
Ion Ratio Lower Upper
178 100
176 18.7 15.4 23.2
179 15.4 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.194 ng

RT: 19.220 min Scan# 1934

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

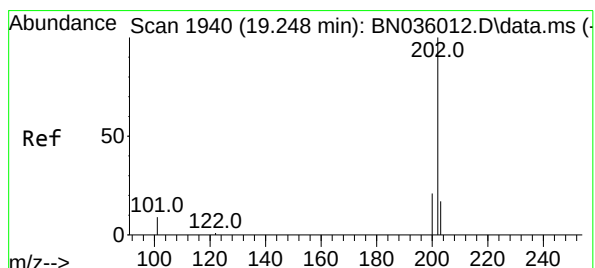
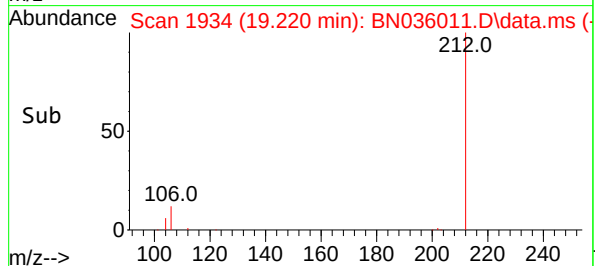
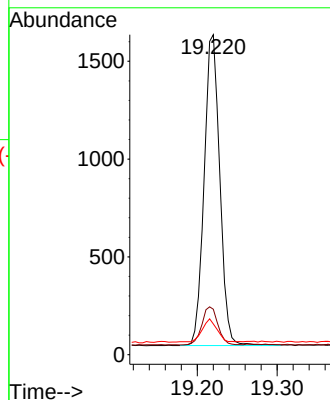
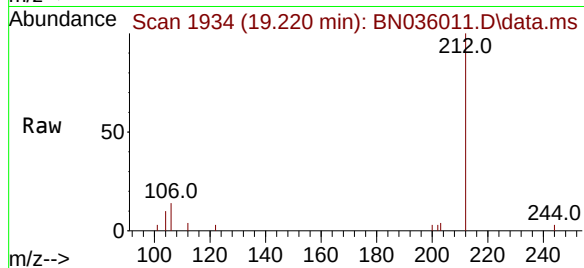
Tgt Ion:212 Resp: 2155

Ion Ratio Lower Upper

212 100

106 12.5 9.7 14.5

104 7.1 6.0 9.0



#28

Fluoranthene

Concen: 0.191 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

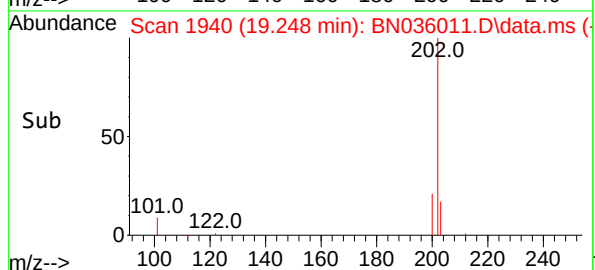
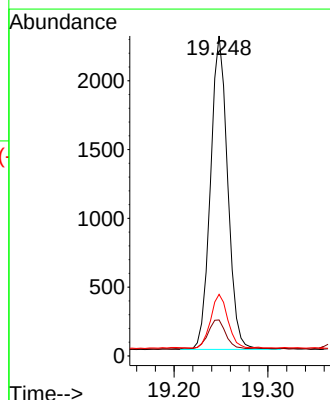
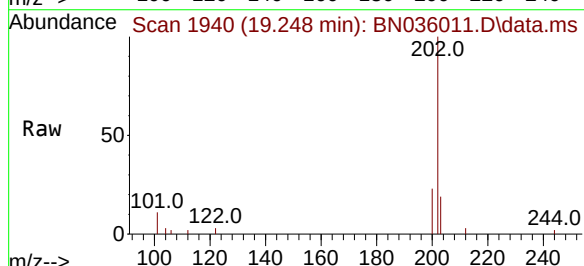
Tgt Ion:202 Resp: 2891

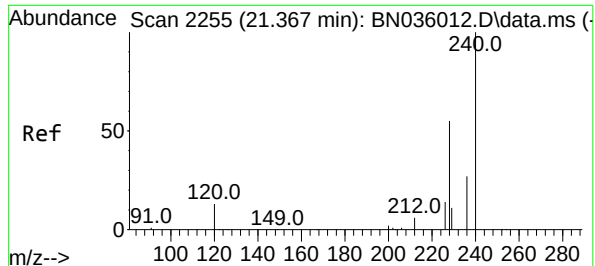
Ion Ratio Lower Upper

202 100

101 9.8 7.6 11.4

203 16.9 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

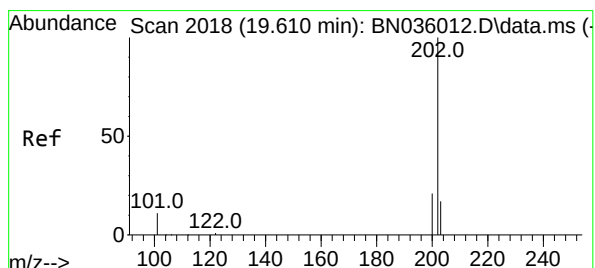
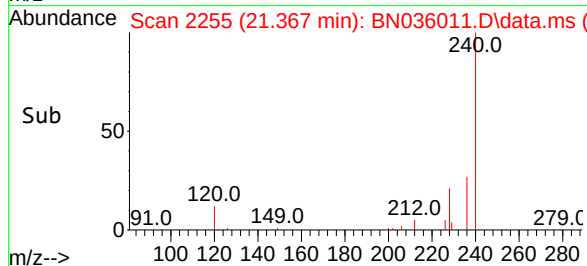
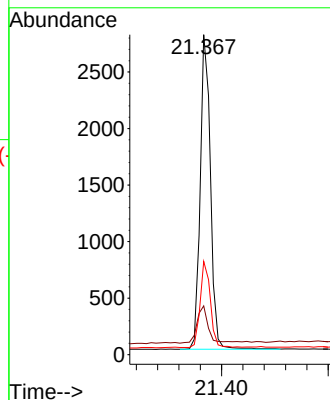
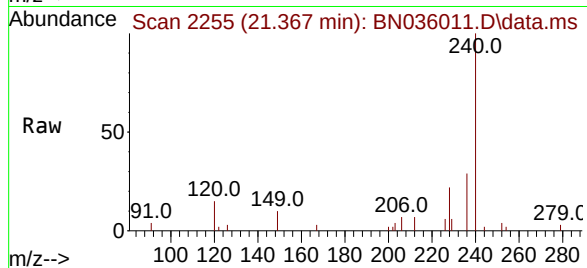
Tgt Ion:240 Resp: 3716

Ion Ratio Lower Upper

240 100

120 15.2 13.9 20.9

236 29.2 23.7 35.5



#30

Pyrene

Concen: 0.196 ng

RT: 19.610 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

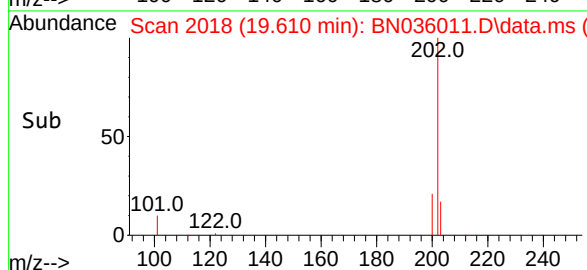
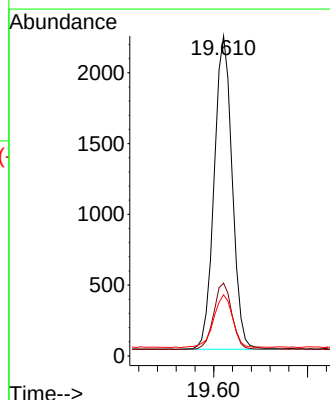
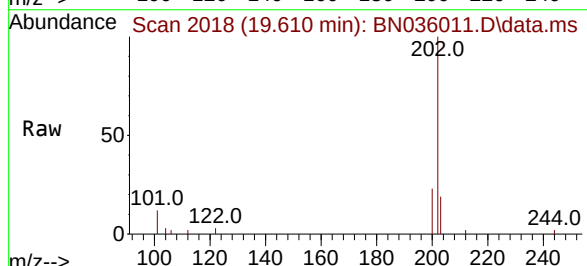
Tgt Ion:202 Resp: 2950

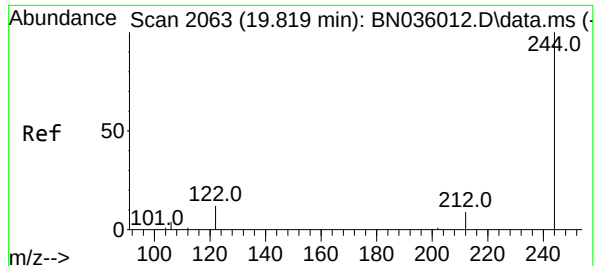
Ion Ratio Lower Upper

202 100

200 21.3 17.0 25.4

203 17.9 14.4 21.6

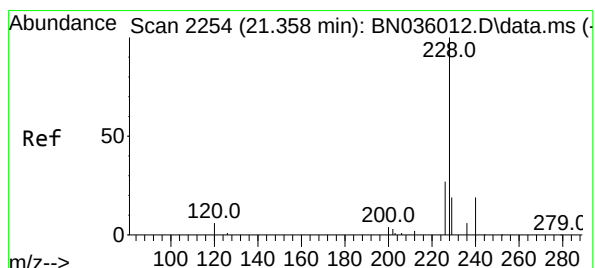
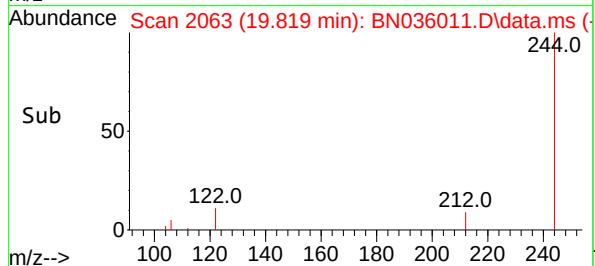
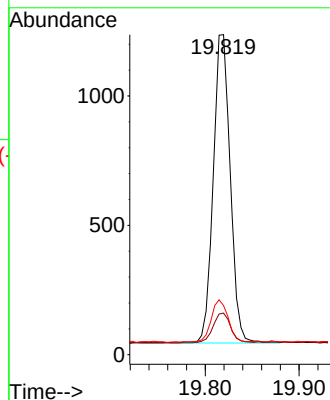
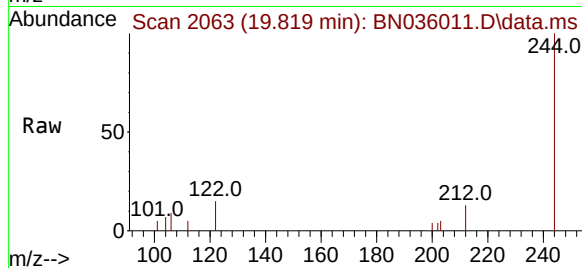




#31
Terphenyl-d14
Concen: 0.194 ng
RT: 19.819 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

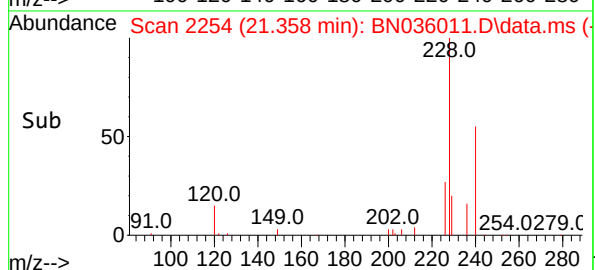
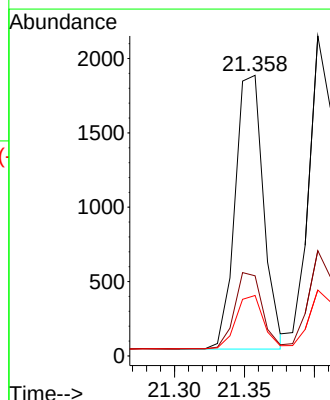
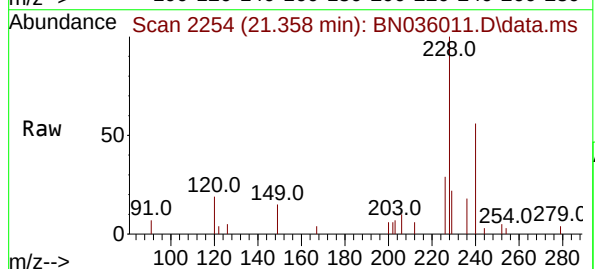
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

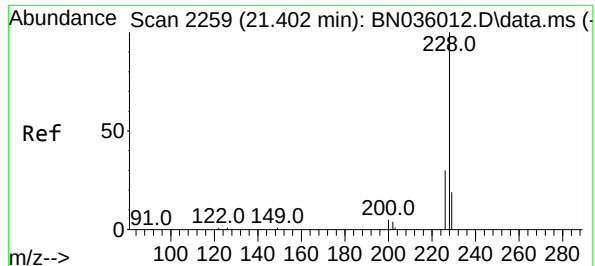
Tgt Ion	Ratio	Lower	Upper
244	100		
212	13.0	9.1	13.7
122	15.4	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.193 ng
RT: 21.358 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.6	22.6	34.0
229	21.5	16.5	24.7





#33

Chrysene

Concen: 0.199 ng

RT: 21.402 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

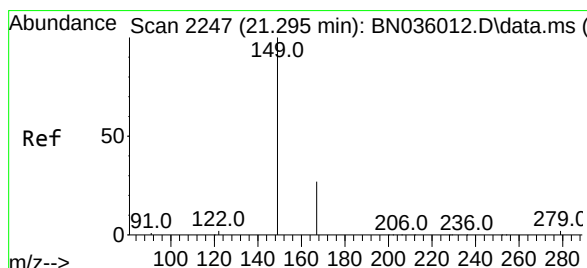
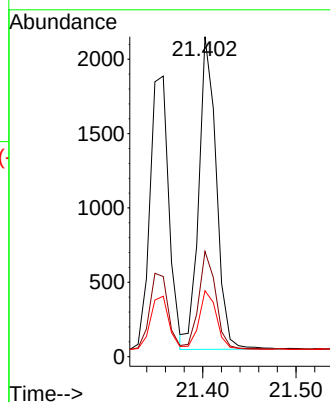
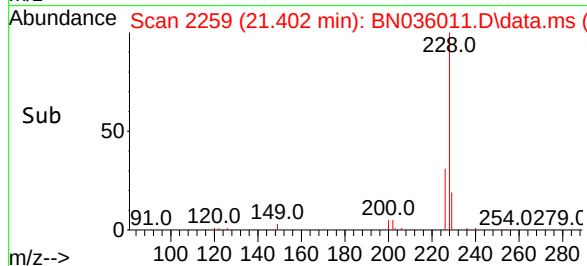
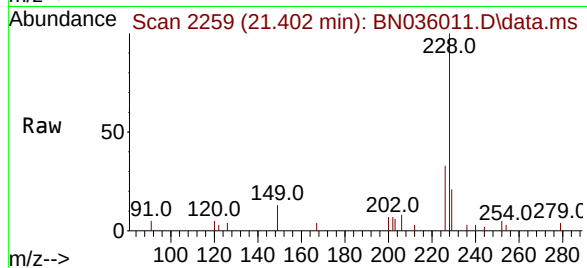
Tgt Ion:228 Resp: 2742

Ion Ratio Lower Upper

228 100

226 32.9 25.3 37.9

229 20.6 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.199 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

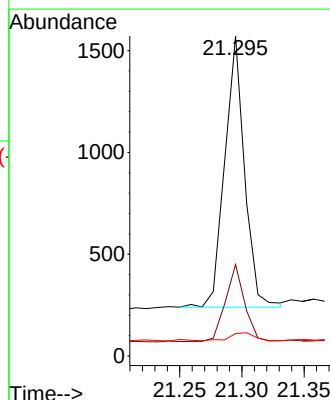
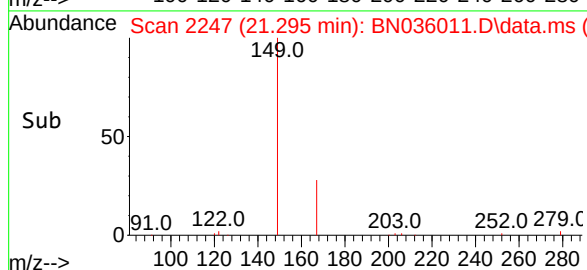
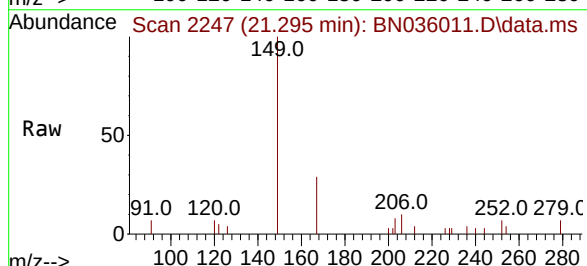
Tgt Ion:149 Resp: 1473

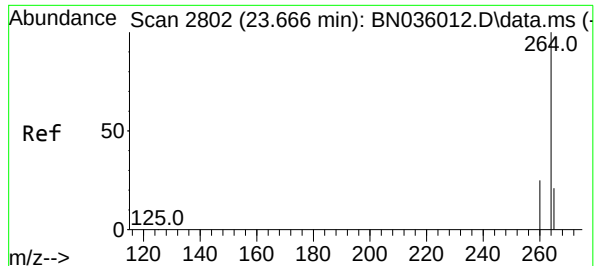
Ion Ratio Lower Upper

149 100

167 27.5 21.9 32.9

279 3.6 3.0 4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.668 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

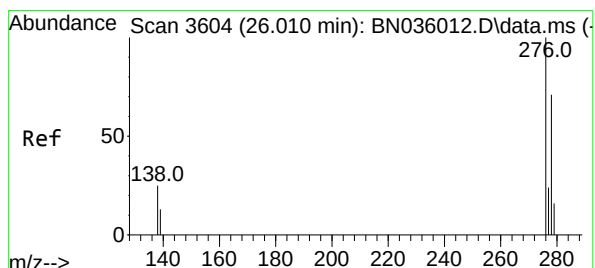
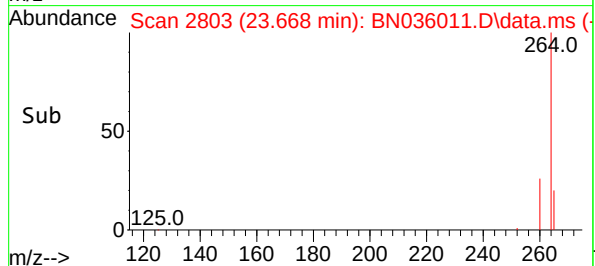
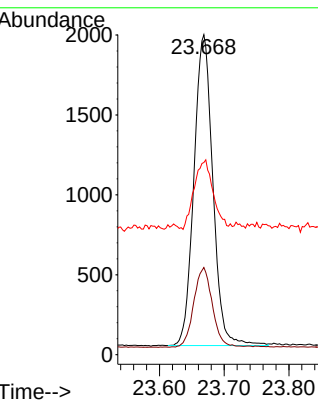
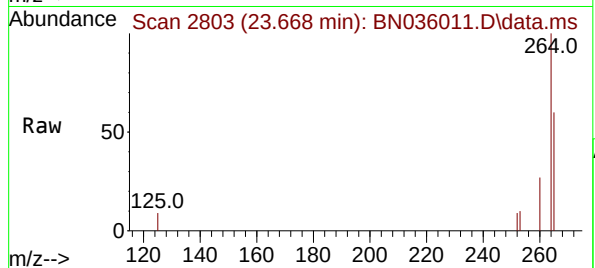
Tgt Ion:264 Resp: 3953

Ion Ratio Lower Upper

264 100

260 27.3 21.8 32.6

265 60.0 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.184 ng

RT: 26.007 min Scan# 3603

Delta R.T. -0.003 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

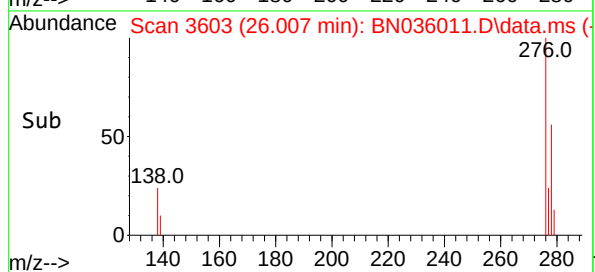
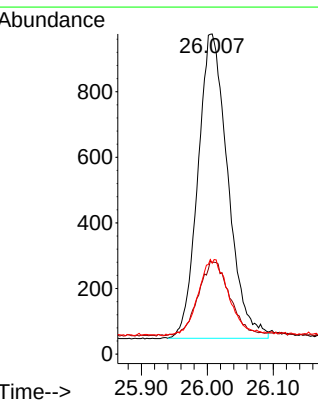
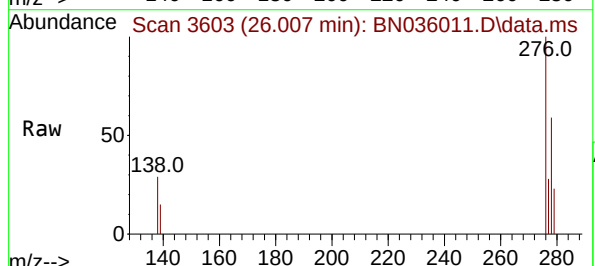
Tgt Ion:276 Resp: 2919

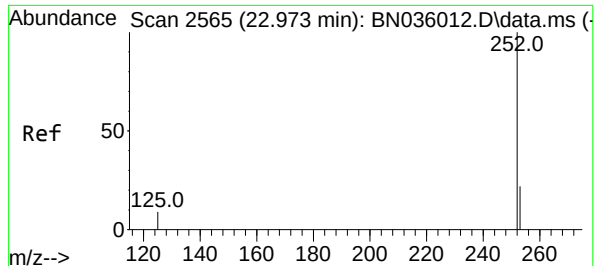
Ion Ratio Lower Upper

276 100

138 25.4 19.9 29.9

277 26.0 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.190 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

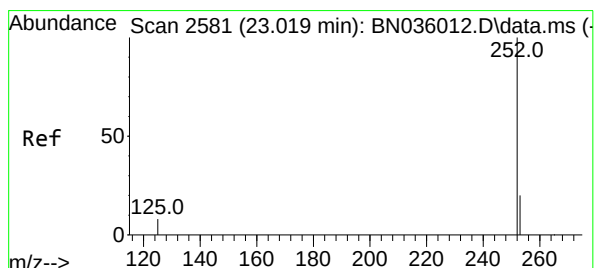
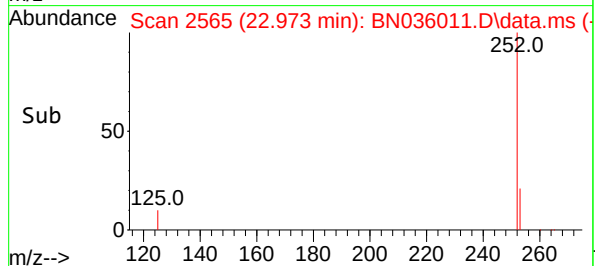
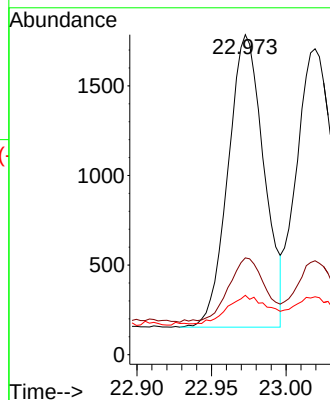
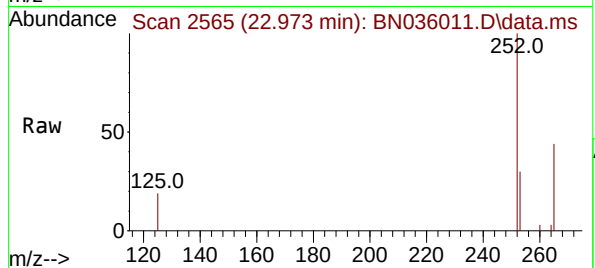
Tgt Ion:252 Resp: 2728

Ion Ratio Lower Upper

252 100

253 30.2 22.5 33.7

125 18.5 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.188 ng

RT: 23.019 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

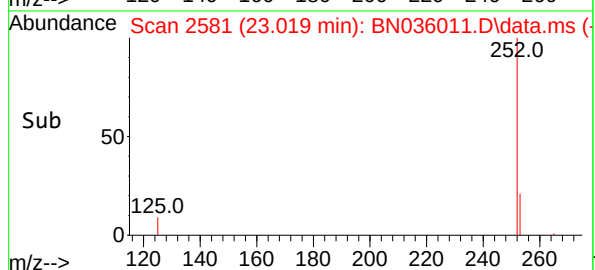
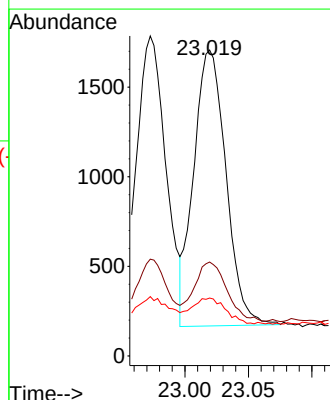
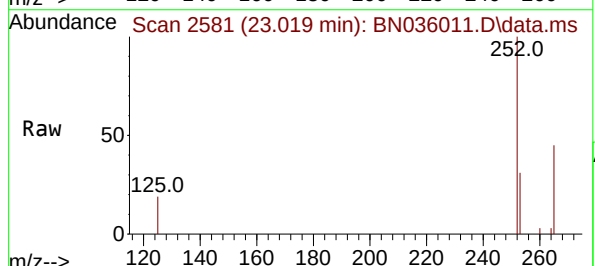
Tgt Ion:252 Resp: 2724

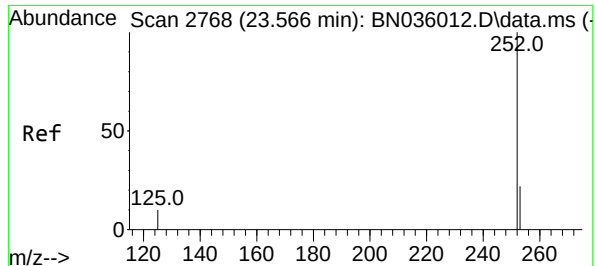
Ion Ratio Lower Upper

252 100

253 30.7 21.3 31.9

125 18.9 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.187 ng

RT: 23.566 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

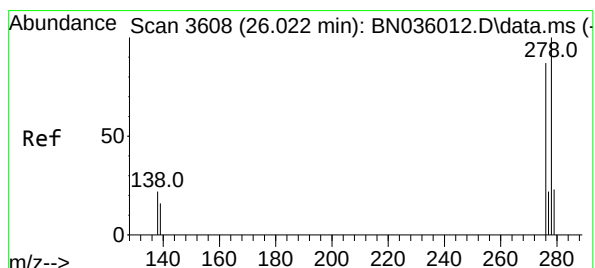
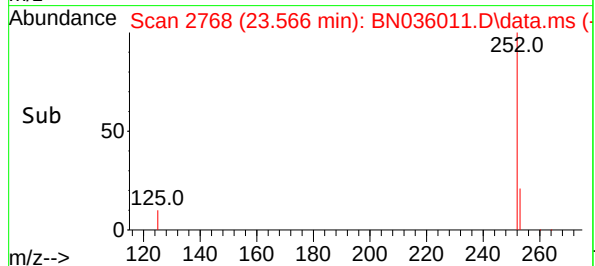
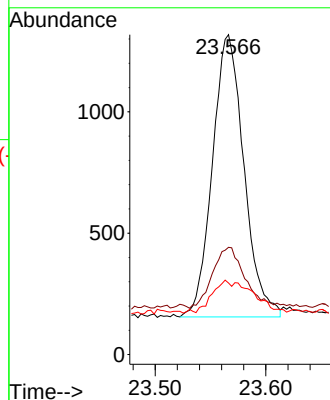
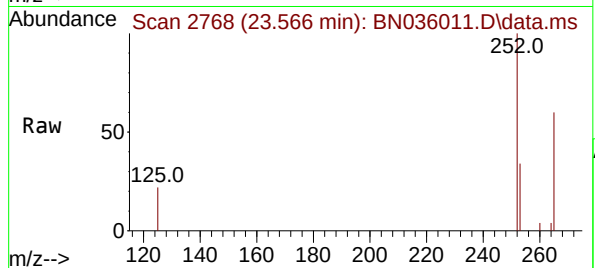
Tgt Ion:252 Resp: 2301

Ion Ratio Lower Upper

252 100

253 33.5 23.8 35.6

125 22.4 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.183 ng

RT: 26.025 min Scan# 3609

Delta R.T. 0.003 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

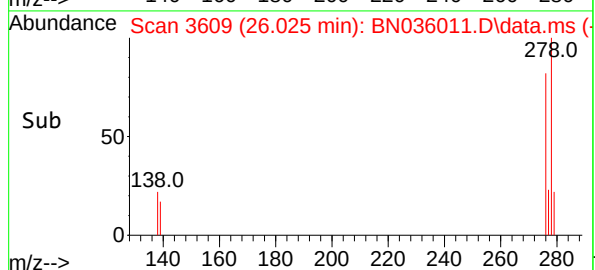
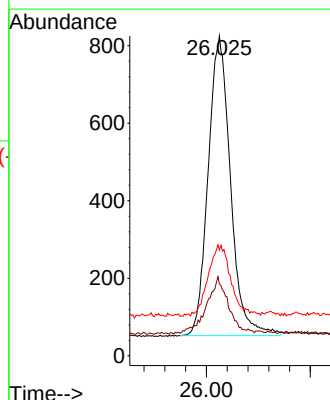
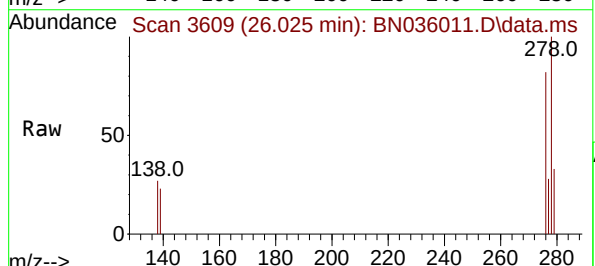
Tgt Ion:278 Resp: 2310

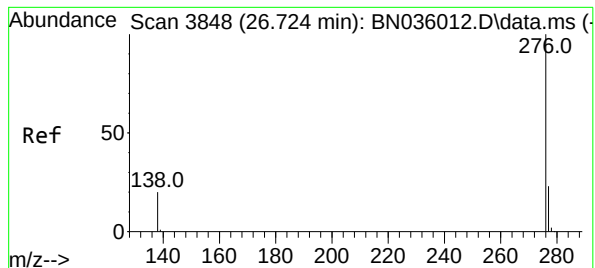
Ion Ratio Lower Upper

278 100

139 22.5 16.0 24.0

279 33.1 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.188 ng

RT: 26.718 min Scan# 31

Delta R.T. -0.006 min

Lab File: BN036011.D

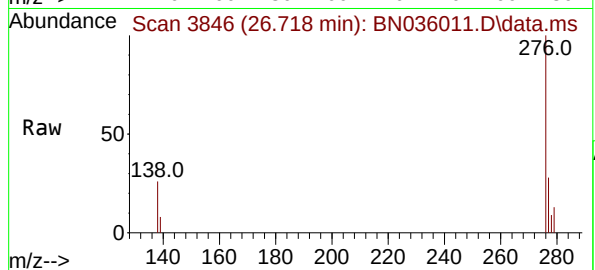
Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2



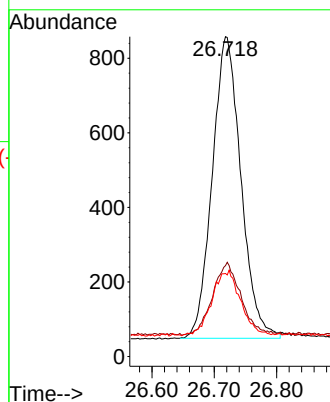
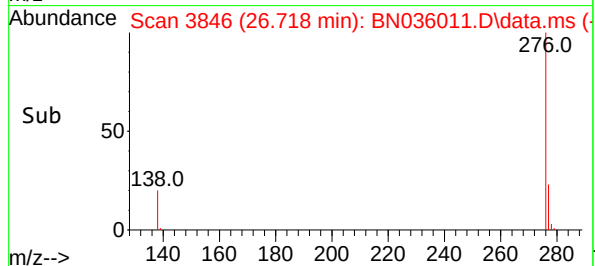
Tgt Ion:276 Resp: 2585

Ion Ratio Lower Upper

276 100

277 28.4 21.3 31.9

138 26.0 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036012.D
 Acq On : 22 Jan 2025 12:13
 Operator : RC/JU
 Sample : SSTDICCC0.4
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICCC0.4

Quant Time: Jan 23 00:27:58 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

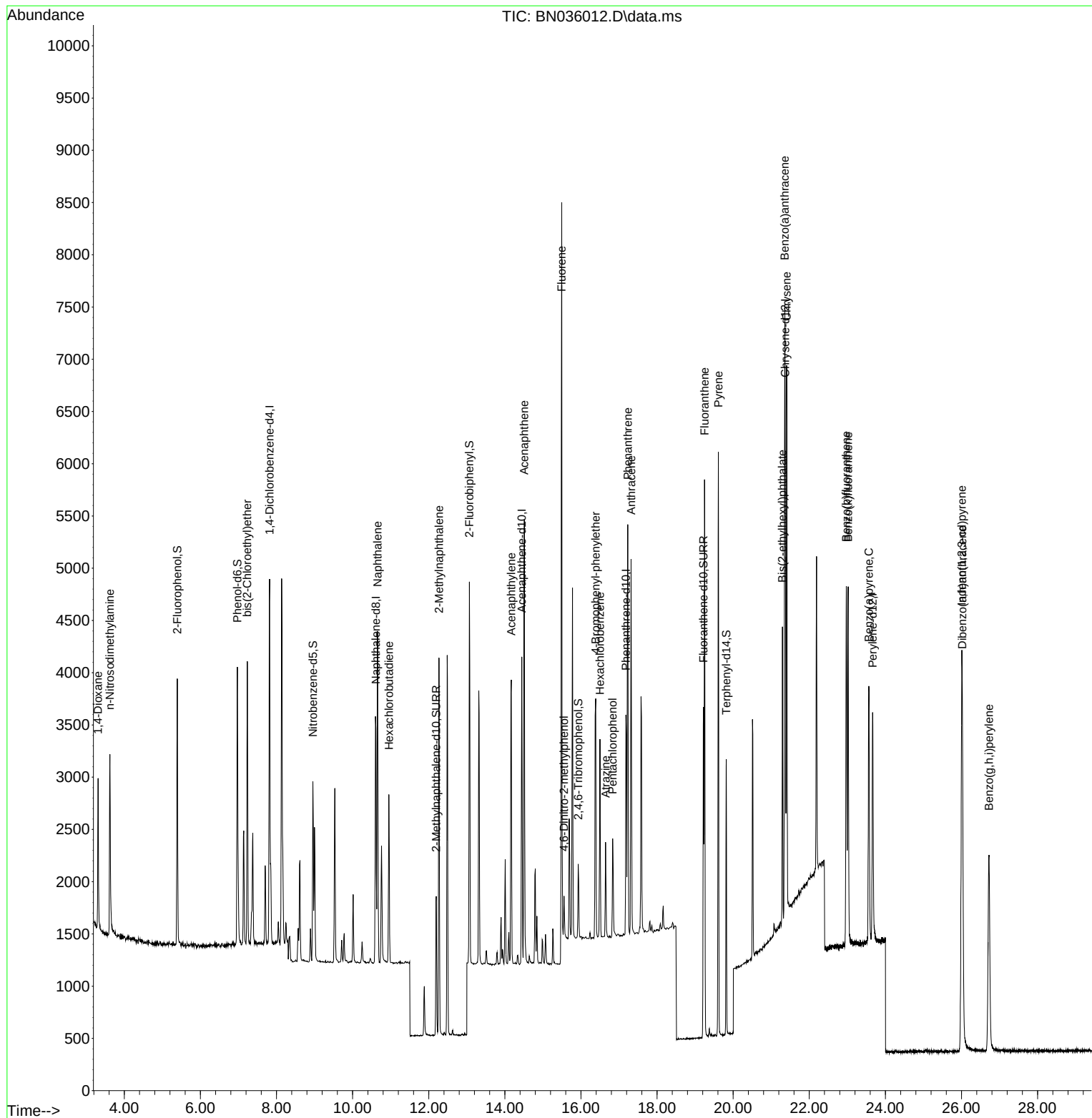
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1648	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3123	0.400	ng	0.00
13) Acenaphthene-d10	14.447	164	1581	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	3136	0.400	ng	0.00
29) Chrysene-d12	21.367	240	2848	0.400	ng	0.00
35) Perylene-d12	23.666	264	2976	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.391	112	1800	0.420	ng	0.00
5) Phenol-d6	6.972	99	2093	0.416	ng	0.00
8) Nitrobenzene-d5	8.956	82	1246	0.423	ng	0.00
11) 2-Methylnaphthalene-d10	12.198	152	1806	0.425	ng	0.00
14) 2,4,6-Tribromophenol	15.928	330	405	0.399	ng	0.00
15) 2-Fluorobiphenyl	13.068	172	3057	0.433	ng	0.00
27) Fluoranthene-d10	19.220	212	3484	0.429	ng	0.00
31) Terphenyl-d14	19.819	244	2482	0.420	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.311	88	773	0.420	ng	100
3) n-Nitrosodimethylamine	3.621	42	1446	0.433	ng	100
6) bis(2-Chloroethyl)ether	7.232	93	1740	0.429	ng	100
9) Naphthalene	10.654	128	3905	0.431	ng	100
10) Hexachlorobutadiene	10.953	225	1263	0.431	ng	# 100
12) 2-Methylnaphthalene	12.269	142	2372	0.421	ng	100
16) Acenaphthylene	14.169	152	3180	0.424	ng	100
17) Acenaphthene	14.511	154	2158	0.420	ng	100
18) Fluorene	15.495	166	2582	0.402	ng	100
20) 4,6-Dinitro-2-methylph...	15.555	198	298	0.408	ng	100
21) 4-Bromophenyl-phenylether	16.387	248	962	0.431	ng	100
22) Hexachlorobenzene	16.499	284	1276	0.434	ng	100
23) Atrazine	16.647	200	684	0.424	ng	100
24) Pentachlorophenol	16.834	266	513	0.403	ng	100
25) Phenanthrene	17.231	178	4082	0.433	ng	100
26) Anthracene	17.318	178	3608	0.421	ng	100
28) Fluoranthene	19.248	202	4727	0.427	ng	100
30) Pyrene	19.610	202	4821	0.418	ng	100
32) Benzo(a)anthracene	21.358	228	4281	0.414	ng	100
33) Chrysene	21.402	228	4399	0.417	ng	100
34) Bis(2-ethylhexyl)phtha...	21.295	149	2273	0.402	ng	100
36) Indeno(1,2,3-cd)pyrene	26.010	276	4823	0.404	ng	100
37) Benzo(b)fluoranthene	22.973	252	4454	0.412	ng	100
38) Benzo(k)fluoranthene	23.019	252	4423	0.406	ng	100
39) Benzo(a)pyrene	23.566	252	3759	0.407	ng	100
40) Dibenzo(a,h)anthracene	26.022	278	3838	0.403	ng	100
41) Benzo(g,h,i)perylene	26.724	276	4244	0.409	ng	100

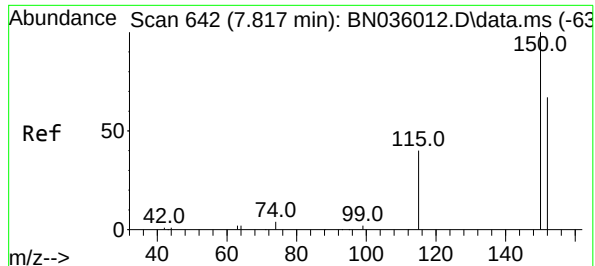
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036012.D
Acq On : 22 Jan 2025 12:13
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Jan 23 00:27:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

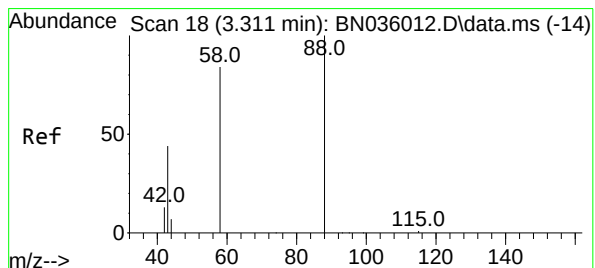
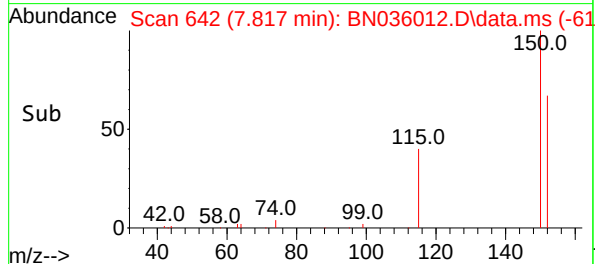
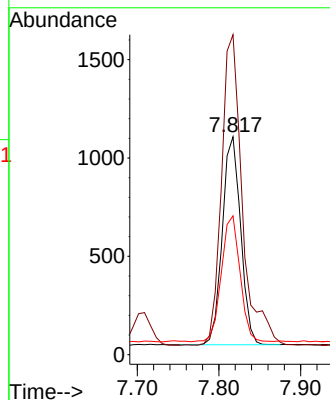
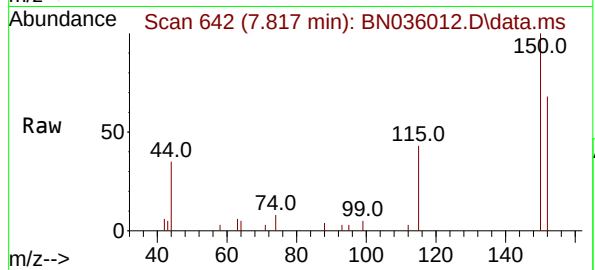




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

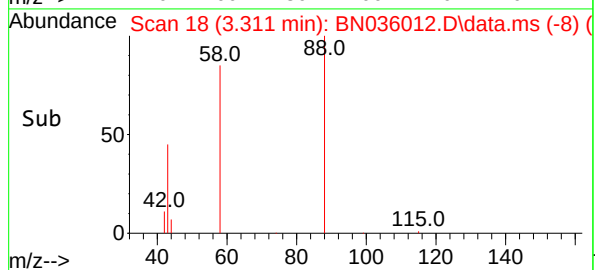
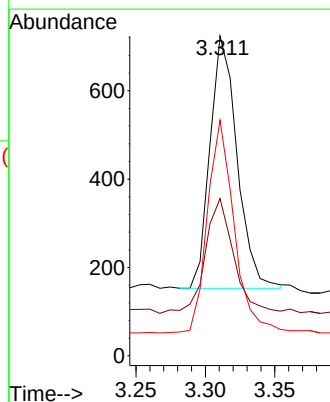
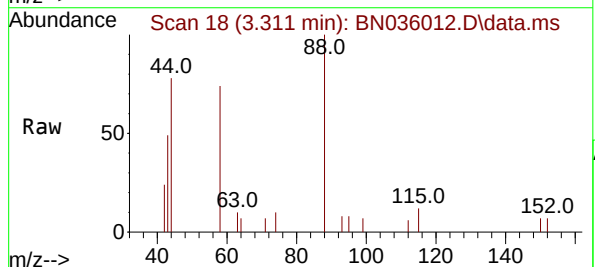
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

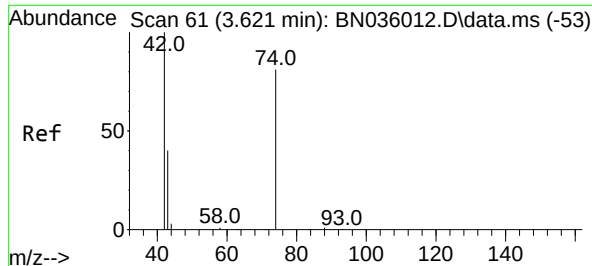
Tgt Ion:152 Resp: 1648
Ion Ratio Lower Upper
152 100
150 146.8 117.4 176.2
115 63.7 51.0 76.4



#2
1,4-Dioxane
Concen: 0.420 ng
RT: 3.311 min Scan# 18
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion: 88 Resp: 773
Ion Ratio Lower Upper
88 100
43 48.1 38.5 57.7
58 83.2 66.6 99.8

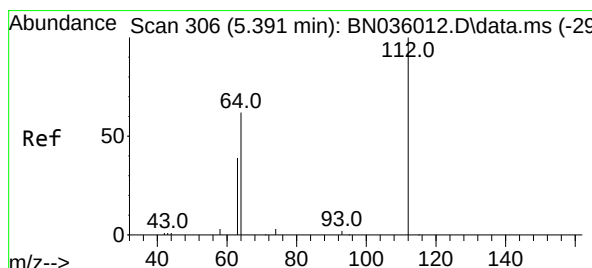
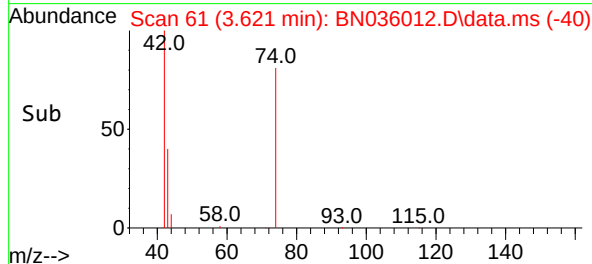
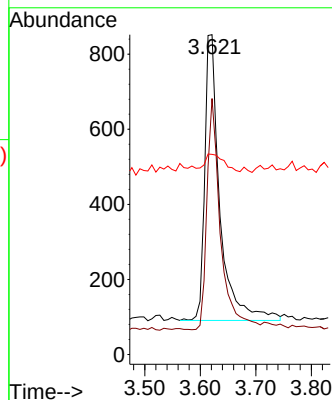
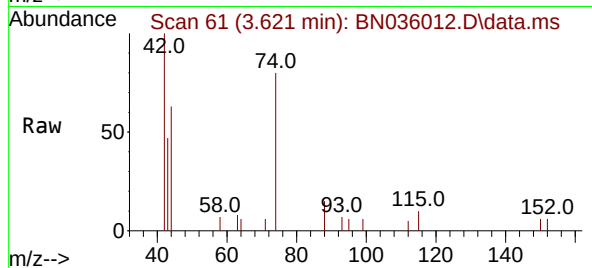




#3
n-Nitrosodimethylamine
Concen: 0.433 ng
RT: 3.621 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

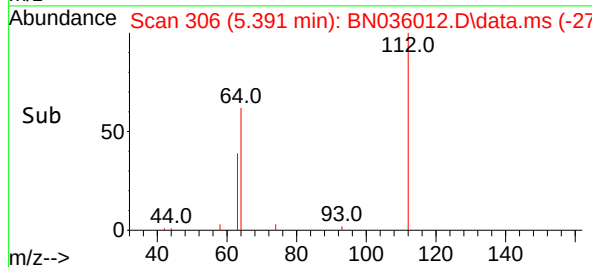
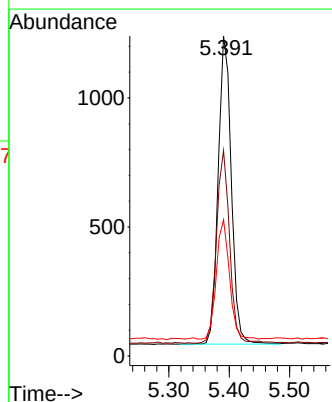
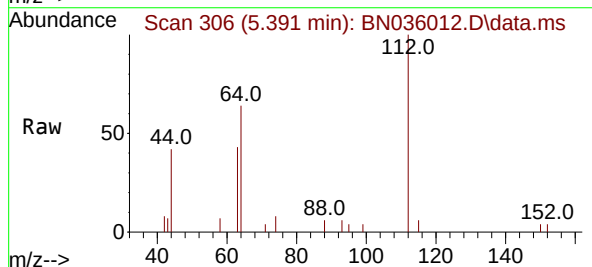
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

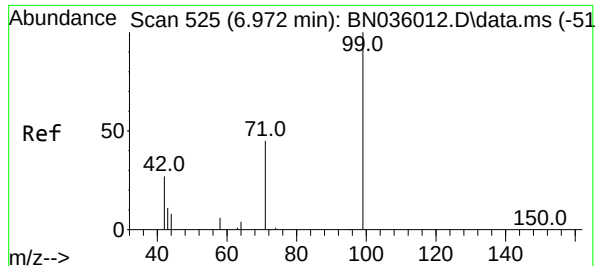
Tgt Ion: 42 Resp: 1446
Ion Ratio Lower Upper
42 100
74 72.6 58.1 87.1
44 7.8 6.2 9.4



#4
2-Fluorophenol
Concen: 0.420 ng
RT: 5.391 min Scan# 306
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion: 112 Resp: 1800
Ion Ratio Lower Upper
112 100
64 62.5 50.0 75.0
63 38.4 30.7 46.1

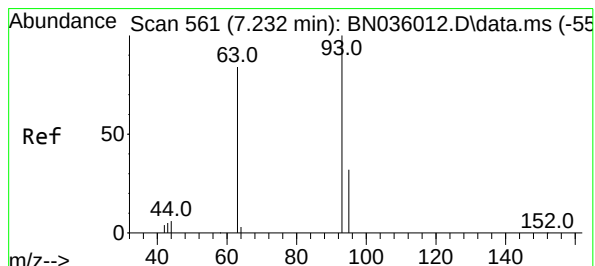
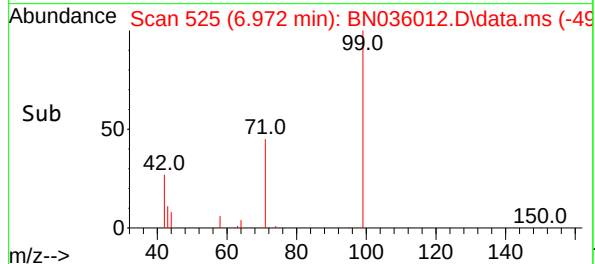
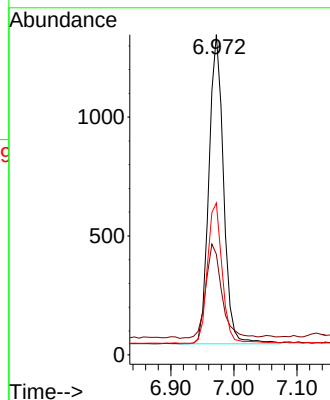
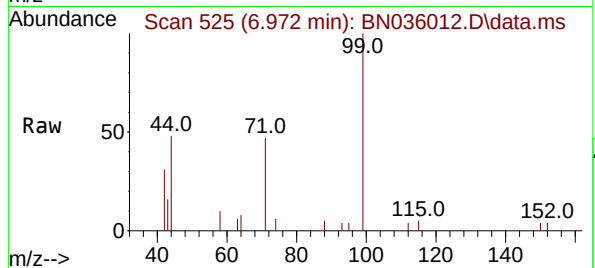




#5
Phenol-d6
Concen: 0.416 ng
RT: 6.972 min Scan# 511
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

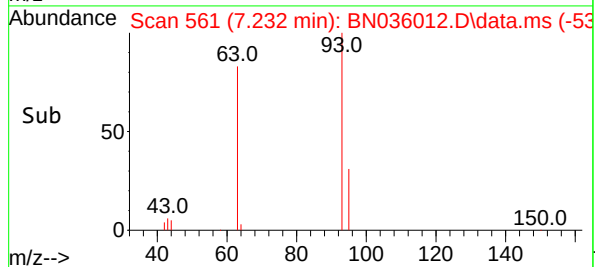
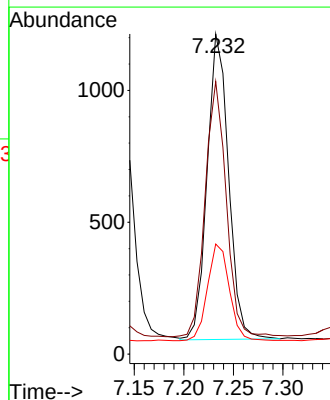
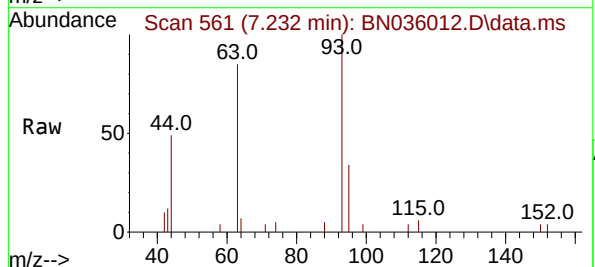
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

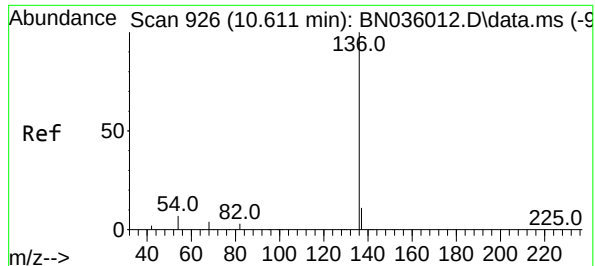
Tgt Ion: 99 Resp: 2093
Ion Ratio Lower Upper
99 100
42 33.5 26.8 40.2
71 45.8 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.429 ng
RT: 7.232 min Scan# 561
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion: 93 Resp: 1740
Ion Ratio Lower Upper
93 100
63 82.2 65.8 98.6
95 32.2 25.8 38.6

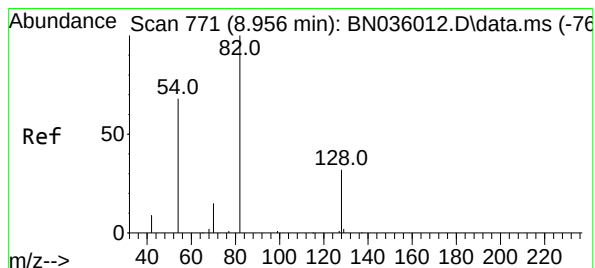
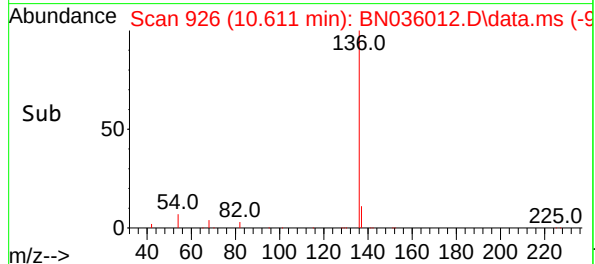
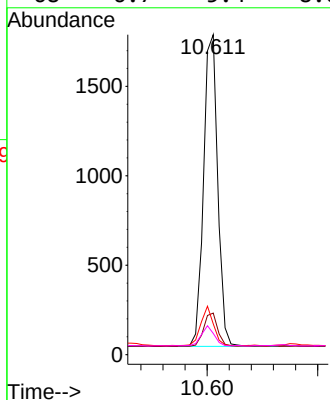
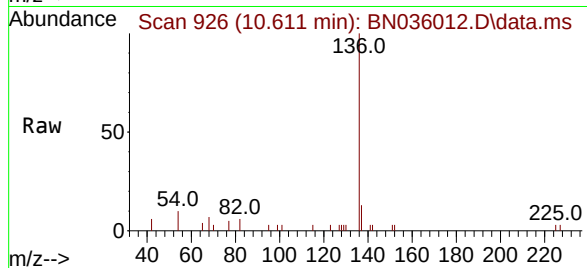




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.611 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

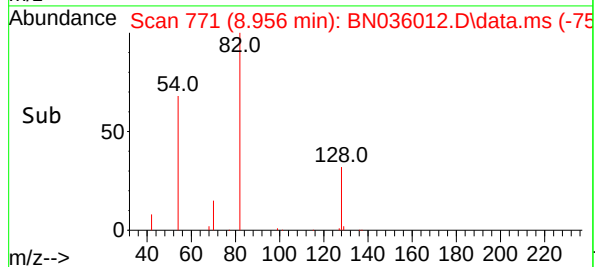
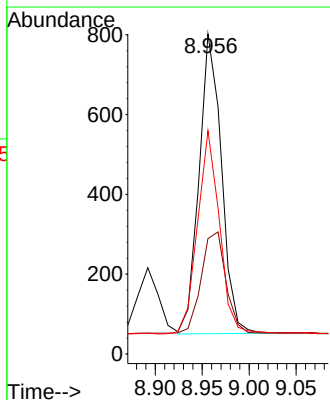
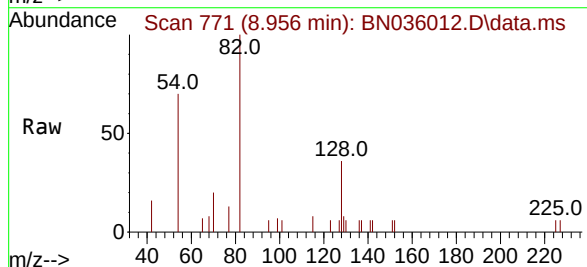
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

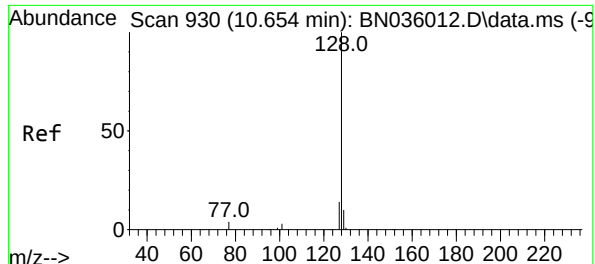
Tgt Ion:	136	Resp:	3123
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	9.6	7.7	11.5
68	6.7	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.423 ng
RT: 8.956 min Scan# 771
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion:	82	Resp:	1246
Ion	Ratio	Lower	Upper
82	100		
128	36.0	28.8	43.2
54	69.8	55.8	83.8





#9

Naphthalene

Concen: 0.431 ng

RT: 10.654 min Scan# 91

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

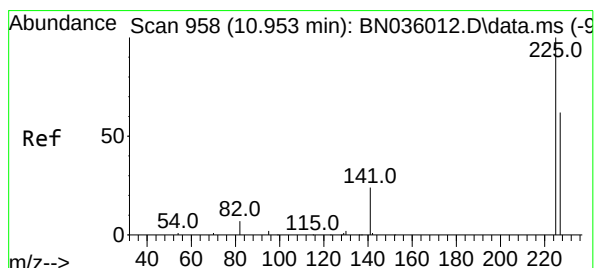
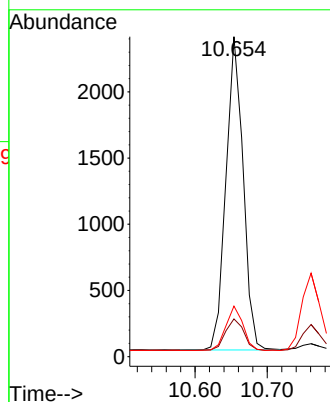
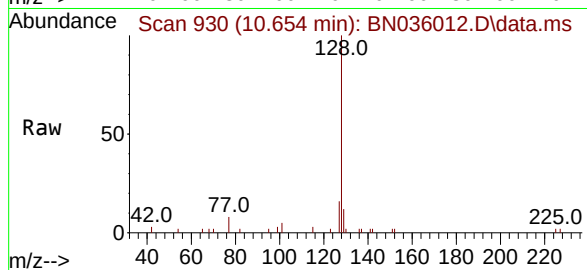
Tgt Ion:128 Resp: 3905

Ion Ratio Lower Upper

128 100

129 11.8 9.4 14.2

127 15.8 12.6 19.0



#10

Hexachlorobutadiene

Concen: 0.431 ng

RT: 10.953 min Scan# 958

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

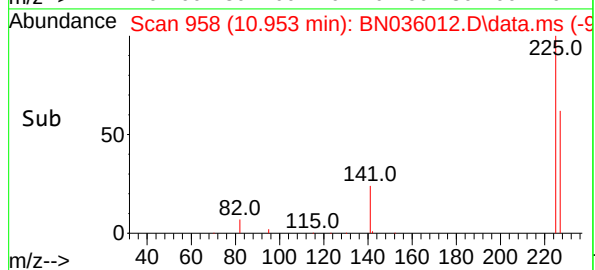
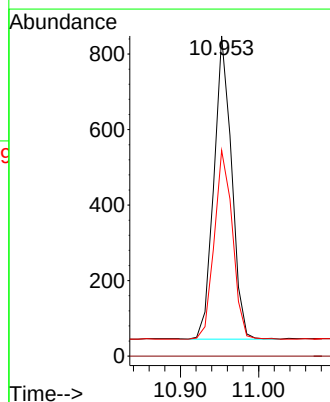
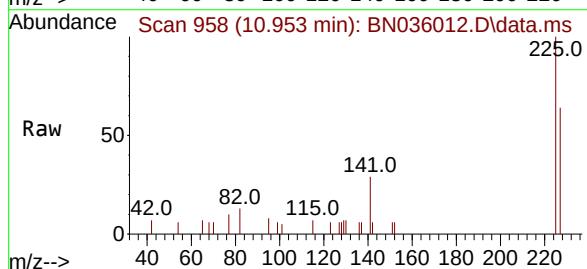
Tgt Ion:225 Resp: 1263

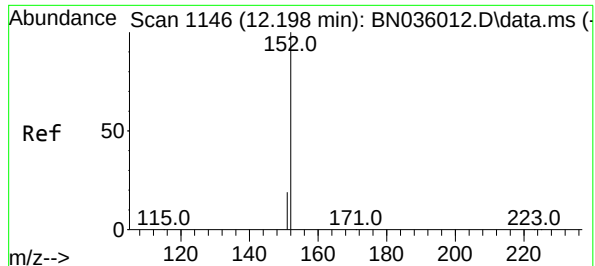
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.8 51.0 76.6

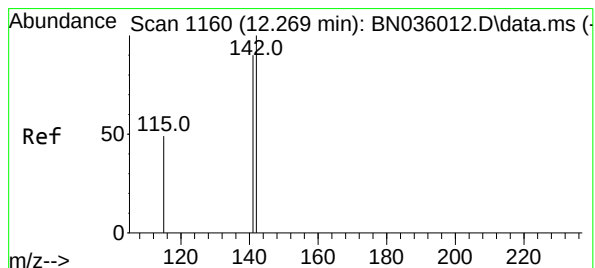
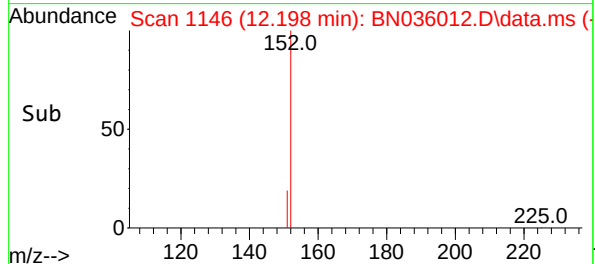
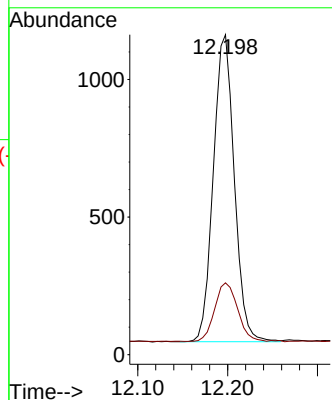
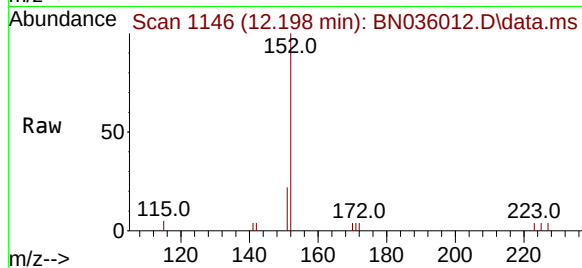




#11
2-Methylnaphthalene-d10
Concen: 0.425 ng
RT: 12.198 min Scan# 1146
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

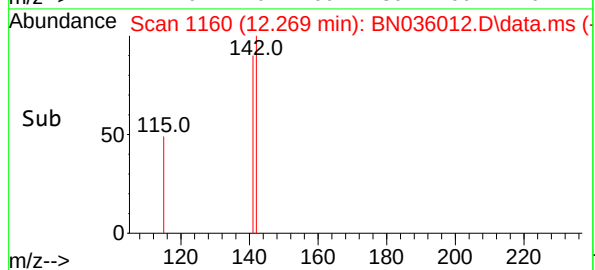
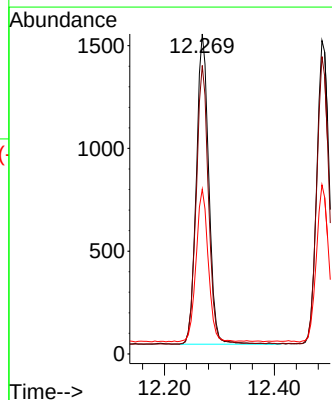
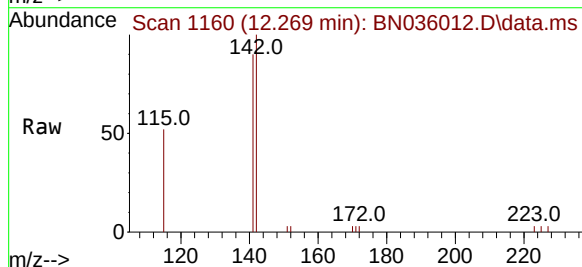
Instrument :
BNA_N
ClientSampleId :
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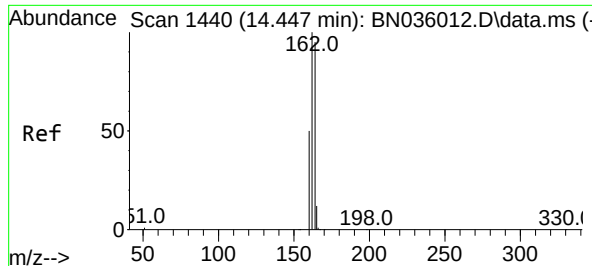
Tgt Ion:152 Resp: 1806
Ion Ratio Lower Upper
152 100
151 20.8 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.421 ng
RT: 12.269 min Scan# 1160
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion:142 Resp: 2372
Ion Ratio Lower Upper
142 100
141 90.2 72.2 108.2
115 51.5 41.2 61.8

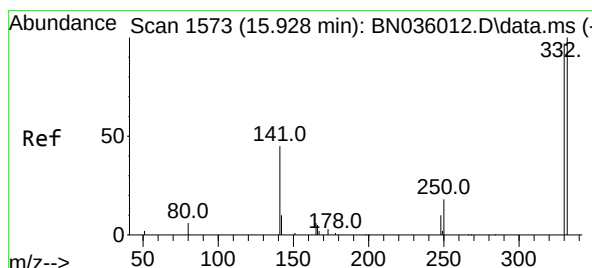
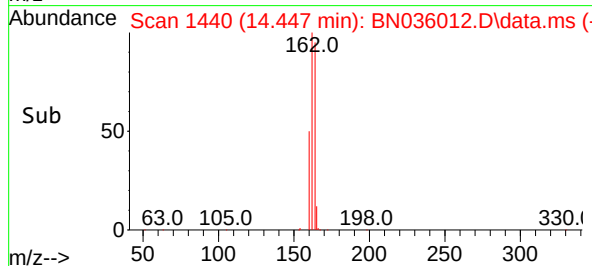
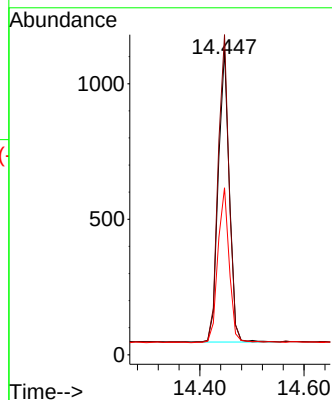
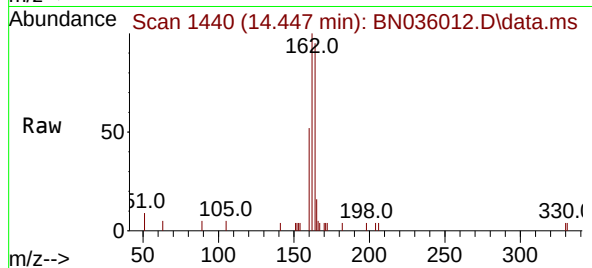




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.447 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

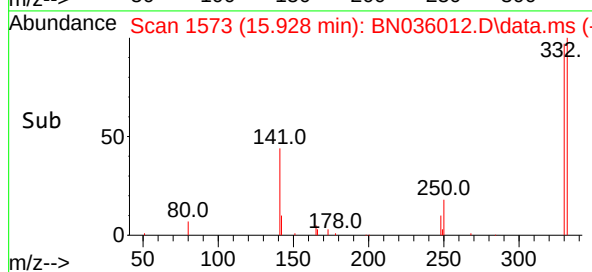
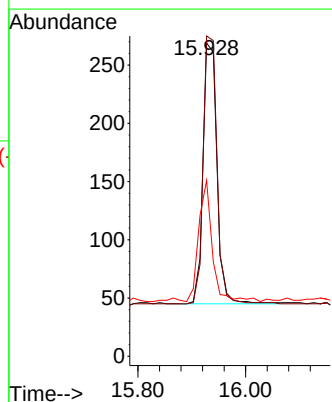
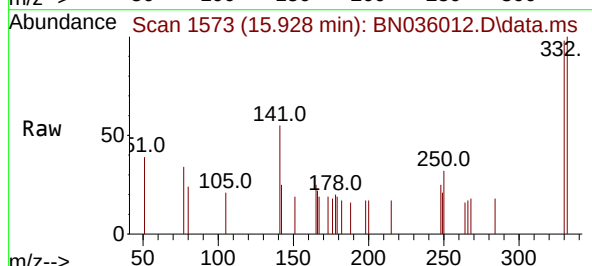
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

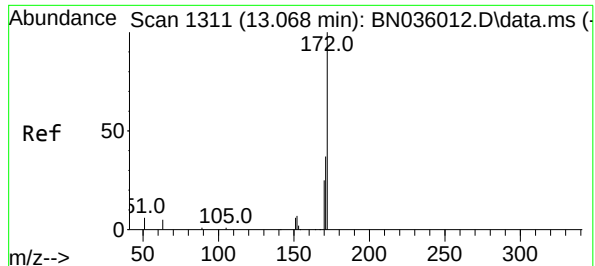
Tgt Ion:164 Resp: 1581
Ion Ratio Lower Upper
164 100
162 105.1 84.1 126.1
160 54.8 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.399 ng
RT: 15.928 min Scan# 1573
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion:330 Resp: 405
Ion Ratio Lower Upper
330 100
332 101.2 81.0 121.4
141 45.9 36.7 55.1

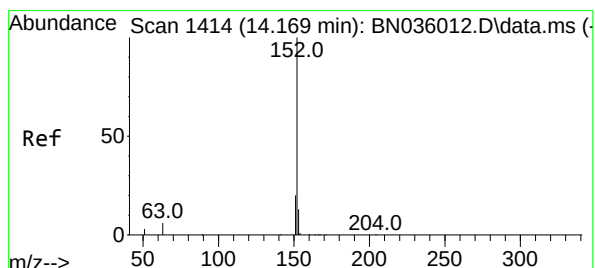
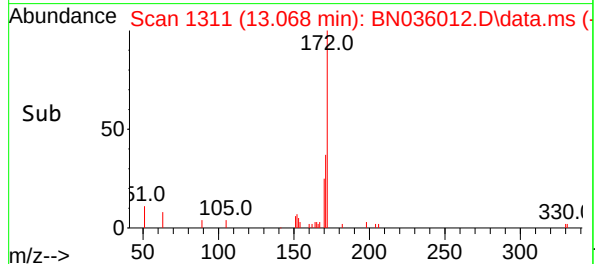
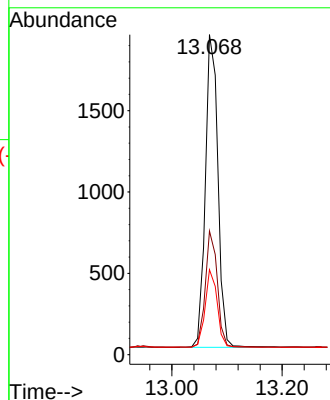
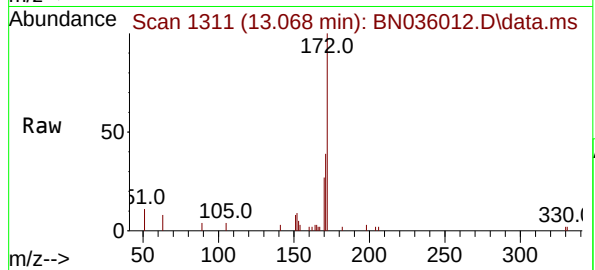




#15
2-Fluorobiphenyl
Concen: 0.433 ng
RT: 13.068 min Scan# 1311
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

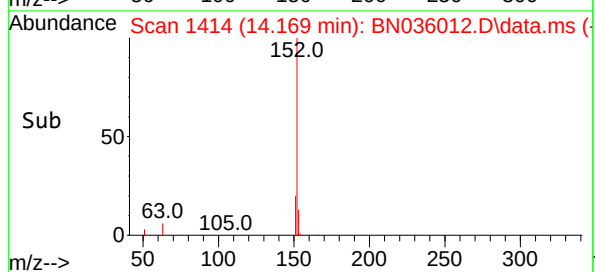
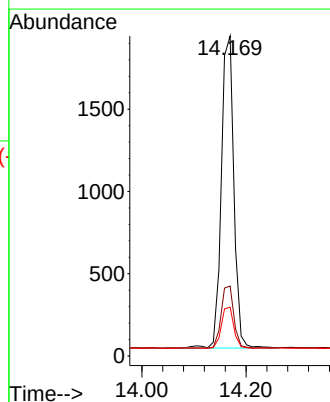
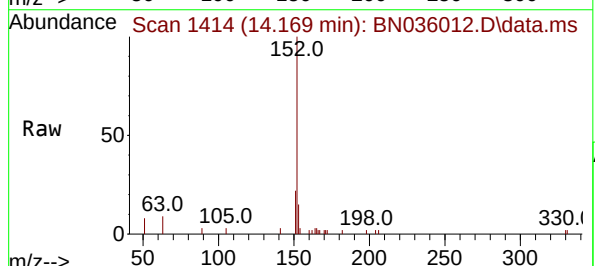
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

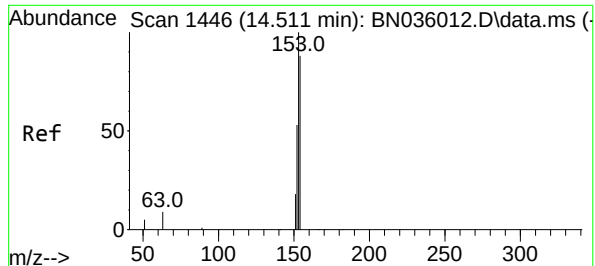
Tgt Ion:172 Resp: 3057
Ion Ratio Lower Upper
172 100
171 38.6 30.9 46.3
170 26.5 21.2 31.8



#16
Acenaphthylene
Concen: 0.424 ng
RT: 14.169 min Scan# 1414
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion:152 Resp: 3180
Ion Ratio Lower Upper
152 100
151 20.2 16.2 24.2
153 13.0 10.4 15.6





#17

Acenaphthene

Concen: 0.420 ng

RT: 14.511 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

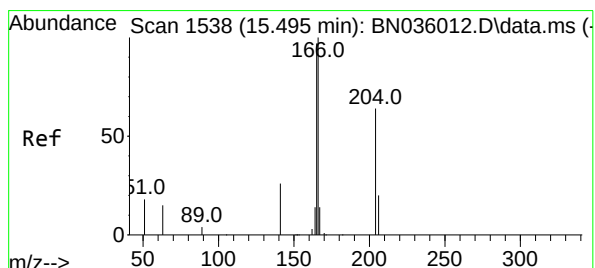
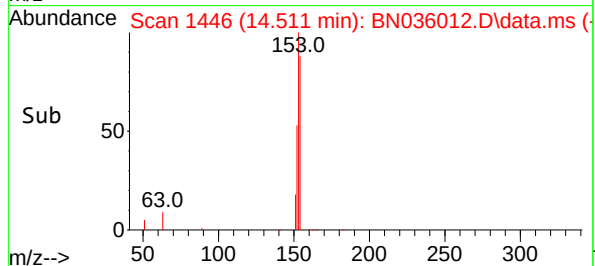
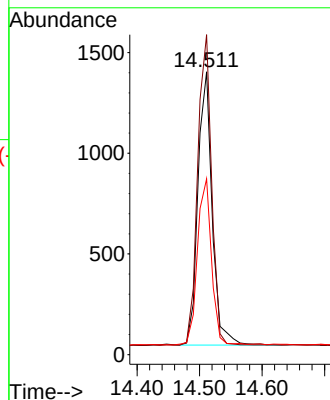
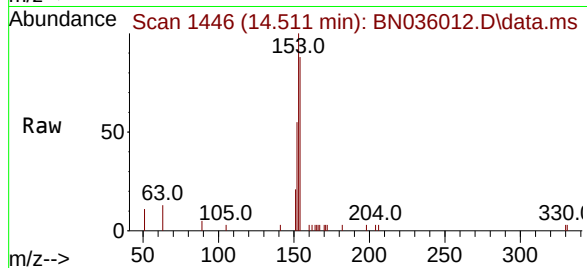
Tgt Ion:154 Resp: 2158

Ion Ratio Lower Upper

154 100

153 111.1 88.9 133.3

152 60.1 48.1 72.1



#18

Fluorene

Concen: 0.402 ng

RT: 15.495 min Scan# 1538

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

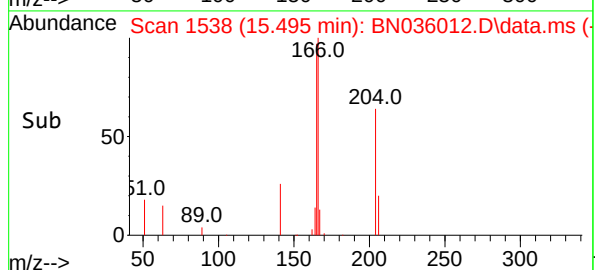
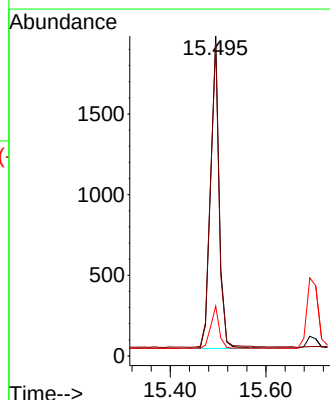
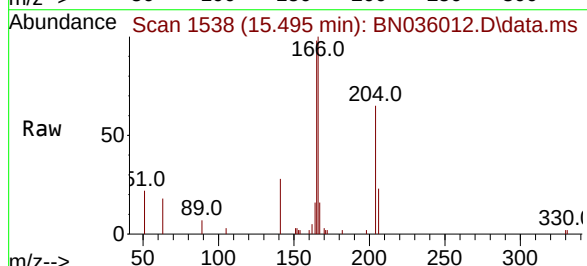
Tgt Ion:166 Resp: 2582

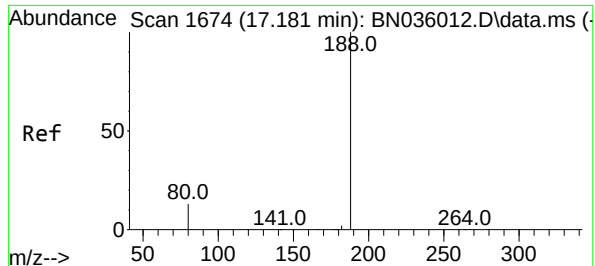
Ion Ratio Lower Upper

166 100

165 98.1 78.5 117.7

167 13.4 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.181 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

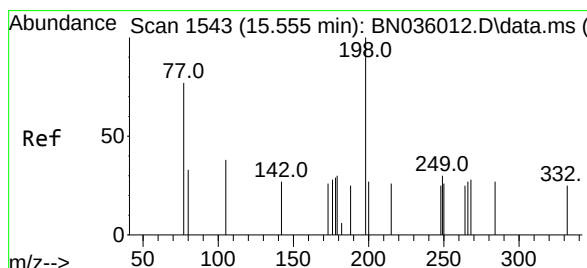
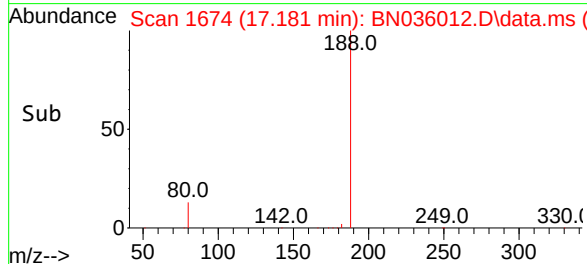
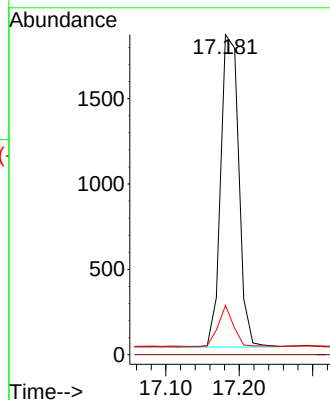
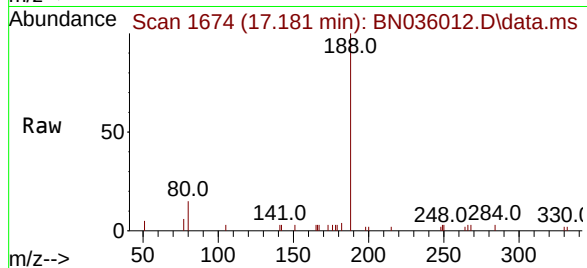
Tgt Ion:188 Resp: 3136

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 15.4 12.3 18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.408 ng

RT: 15.555 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

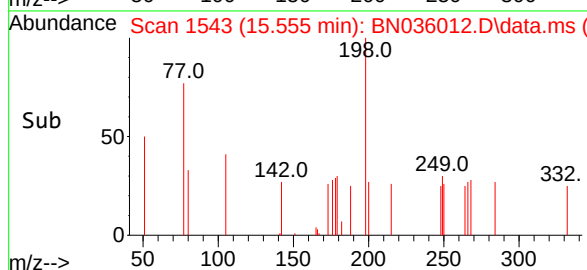
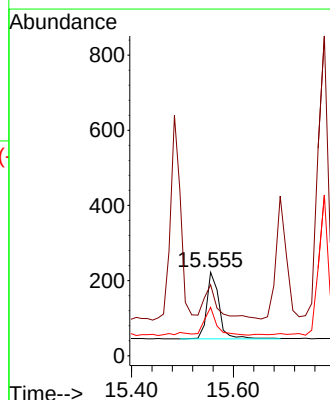
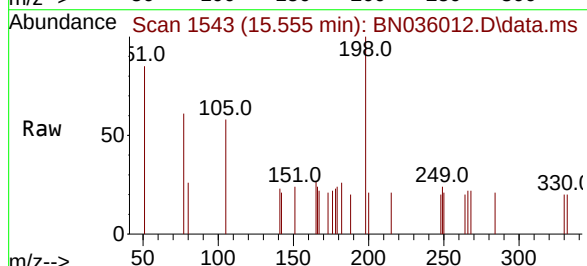
Tgt Ion:198 Resp: 298

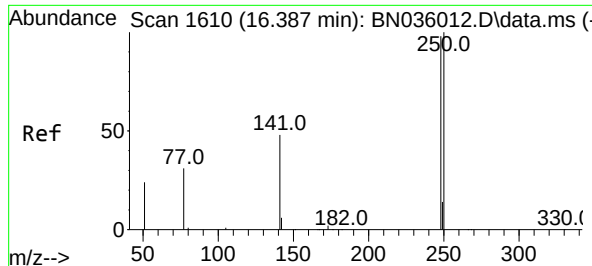
Ion Ratio Lower Upper

198 100

51 85.1 68.1 102.1

105 58.1 46.5 69.7

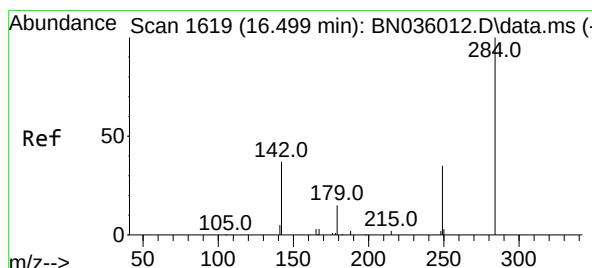
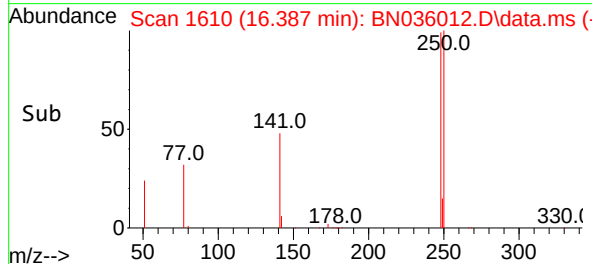
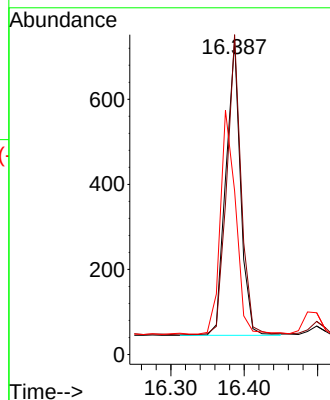
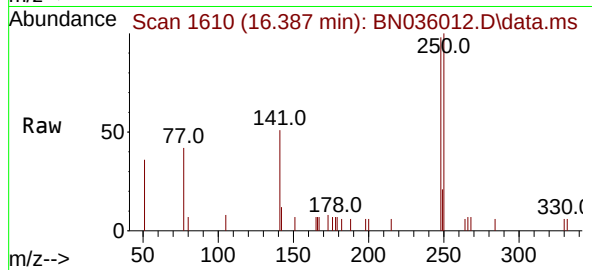




#21
4-Bromophenyl-phenylether
Concen: 0.431 ng
RT: 16.387 min Scan# 1610
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

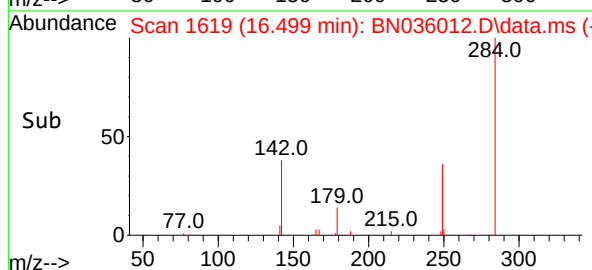
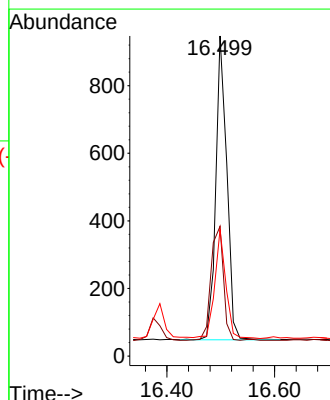
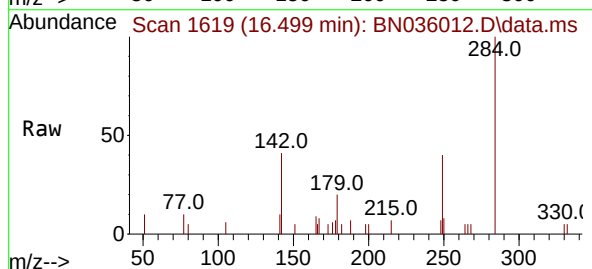
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

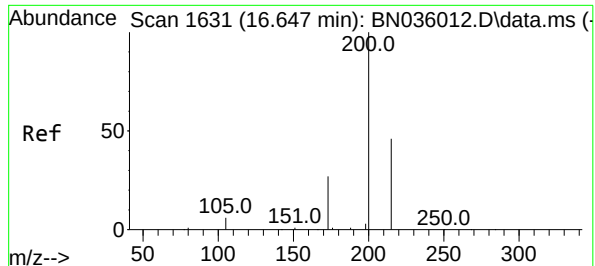
Tgt Ion:	248	Resp:	962
Ion Ratio	Lower	Upper	
248	100		
250	101.9	81.5	122.3
141	52.2	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.434 ng
RT: 16.499 min Scan# 1619
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion:	284	Resp:	1276
Ion Ratio	Lower	Upper	
284	100		
142	42.0	33.6	50.4
249	36.0	28.8	43.2





#23

Atrazine

Concen: 0.424 ng

RT: 16.647 min Scan# 1631

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

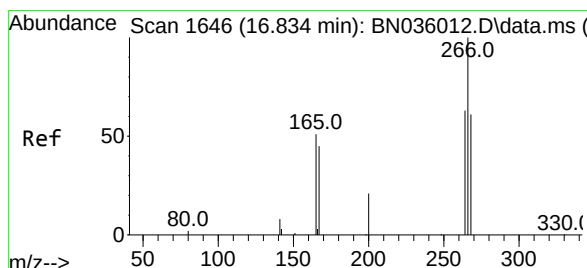
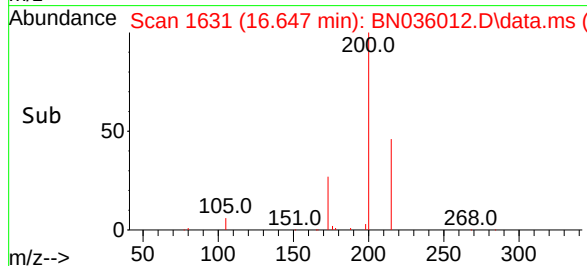
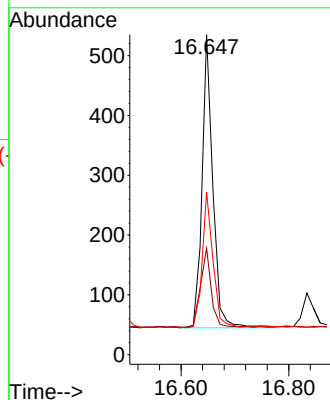
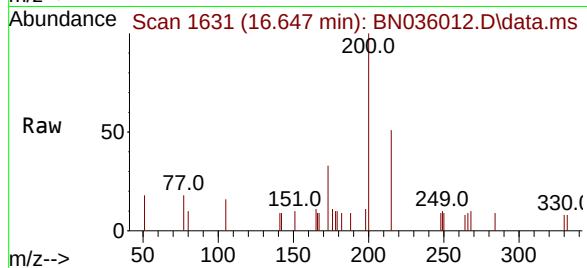
Tgt Ion:200 Resp: 684

Ion Ratio Lower Upper

200 100

173 33.3 26.6 40.0

215 50.8 40.6 61.0



#24

Pentachlorophenol

Concen: 0.403 ng

RT: 16.834 min Scan# 1646

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

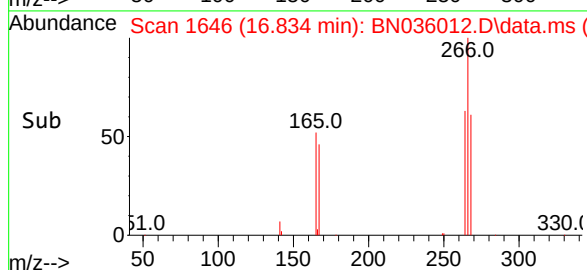
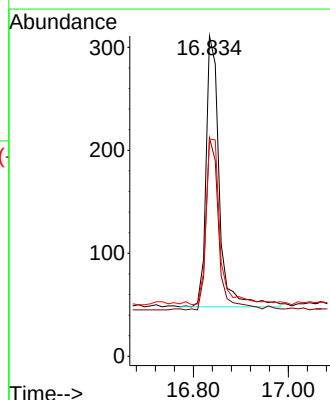
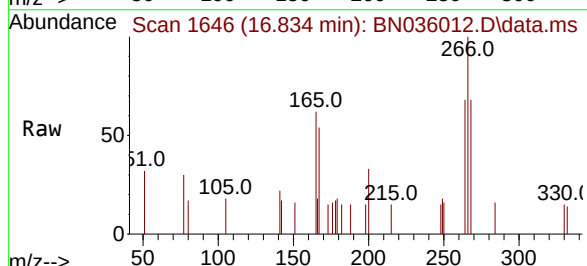
Tgt Ion:266 Resp: 513

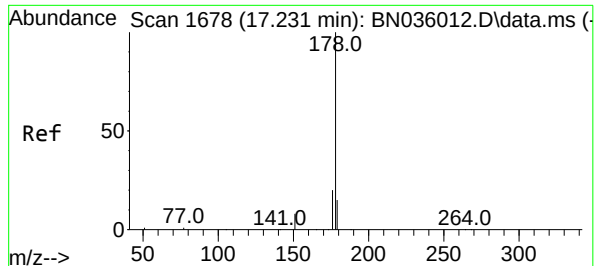
Ion Ratio Lower Upper

266 100

264 60.2 48.2 72.2

268 64.5 51.6 77.4

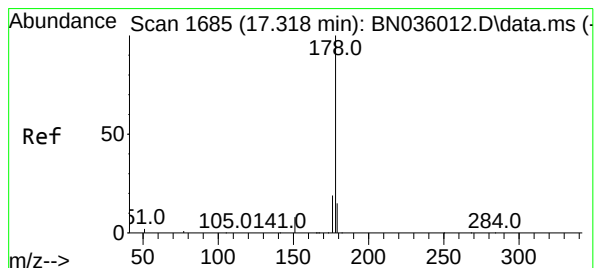
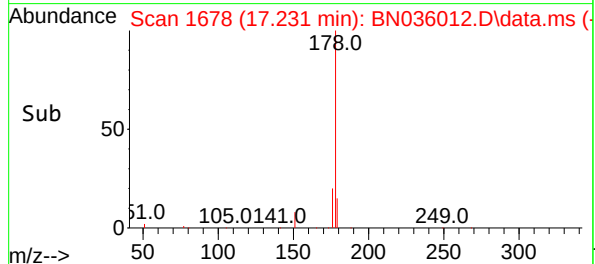
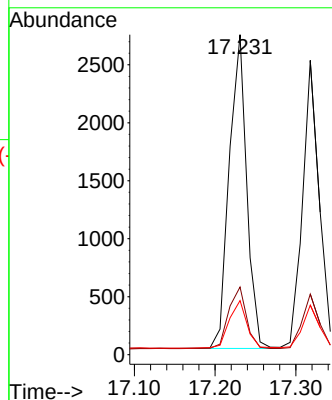
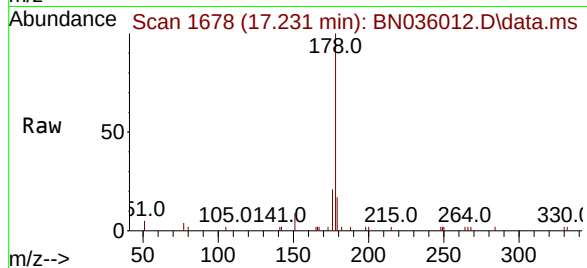




#25
Phenanthrene
Concen: 0.433 ng
RT: 17.231 min Scan# 1678
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

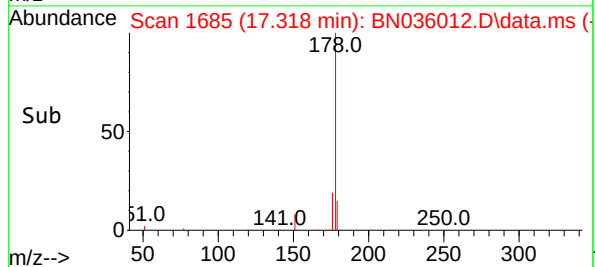
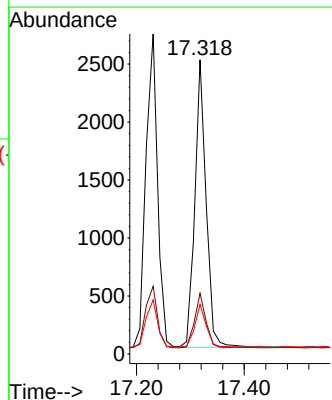
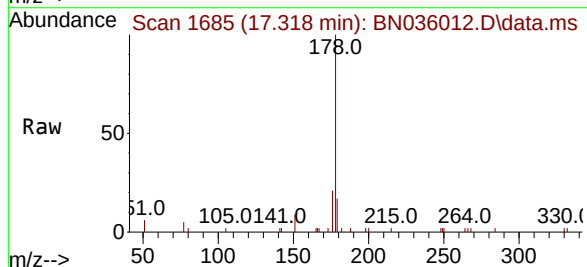
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

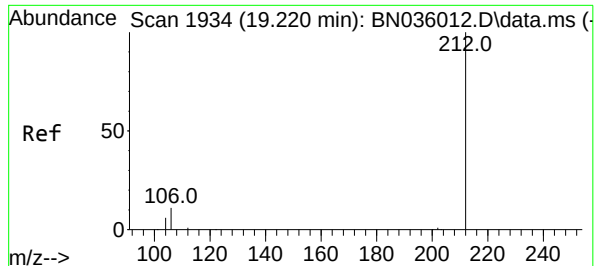
Tgt Ion:178 Resp: 4082
Ion Ratio Lower Upper
178 100
176 20.0 16.0 24.0
179 15.5 12.4 18.6



#26
Anthracene
Concen: 0.421 ng
RT: 17.318 min Scan# 1685
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

Tgt Ion:178 Resp: 3608
Ion Ratio Lower Upper
178 100
176 19.3 15.4 23.2
179 15.0 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.429 ng

RT: 19.220 min Scan# 1934

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

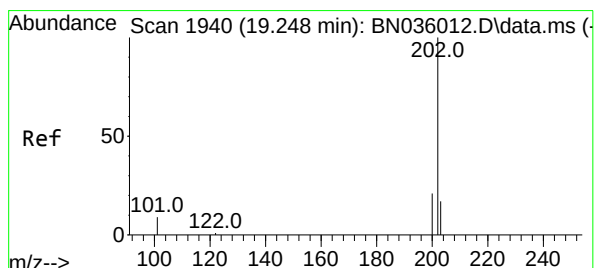
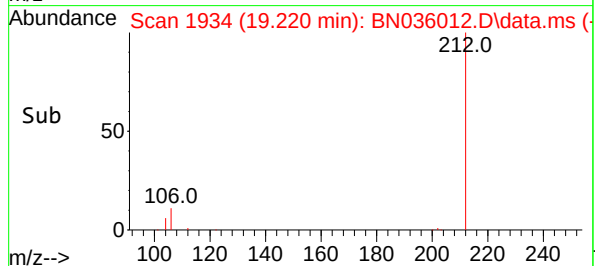
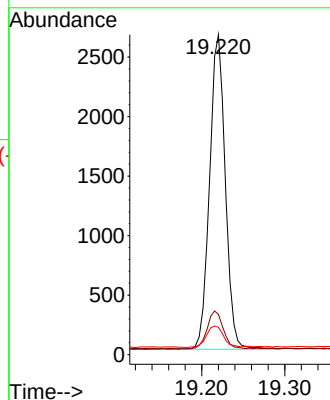
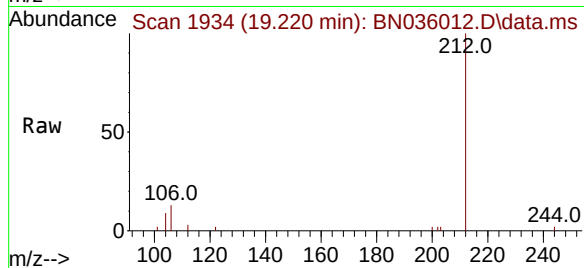
Tgt Ion:212 Resp: 3484

Ion Ratio Lower Upper

212 100

106 12.1 9.7 14.5

104 7.5 6.0 9.0



#28

Fluoranthene

Concen: 0.427 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

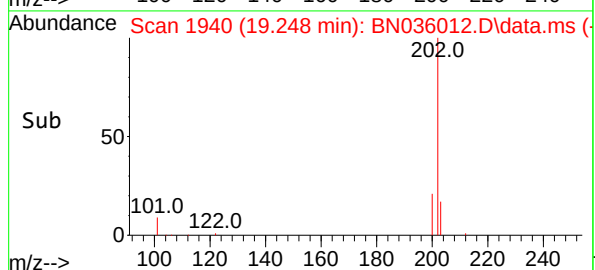
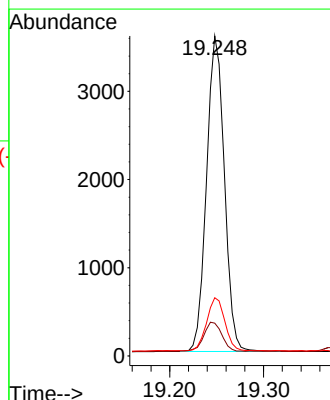
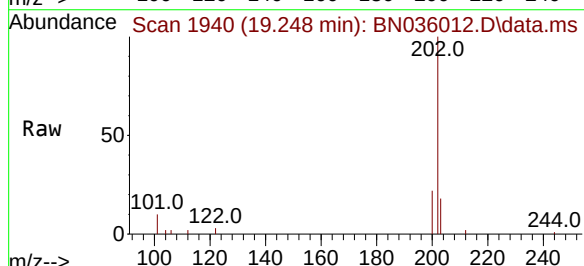
Tgt Ion:202 Resp: 4727

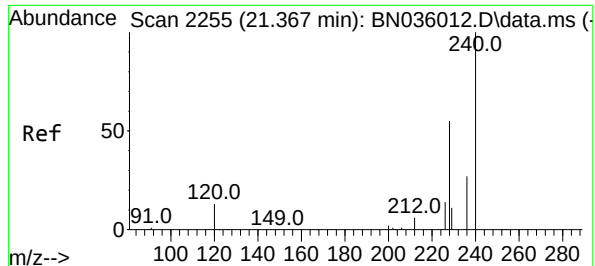
Ion Ratio Lower Upper

202 100

101 9.5 7.6 11.4

203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

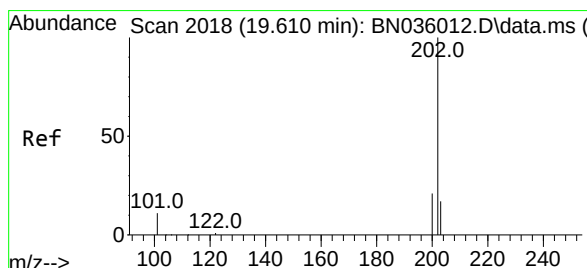
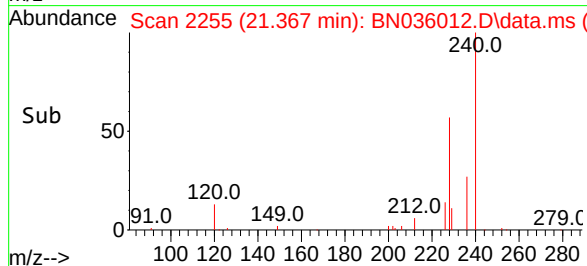
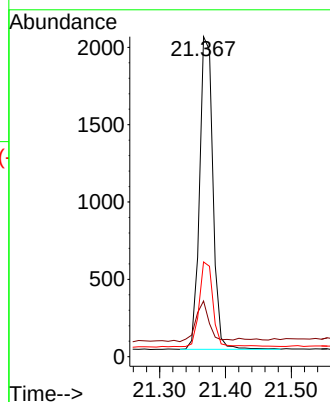
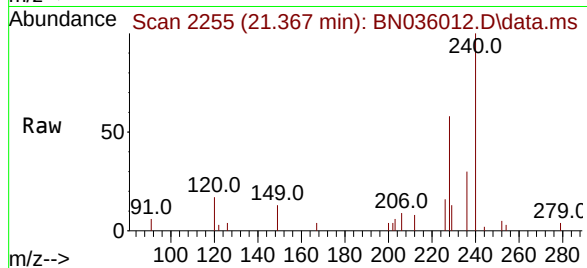
Tgt Ion:240 Resp: 2848

Ion Ratio Lower Upper

240 100

120 17.4 13.9 20.9

236 29.6 23.7 35.5



#30

Pyrene

Concen: 0.418 ng

RT: 19.610 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

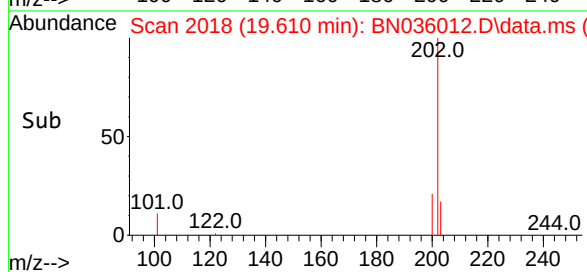
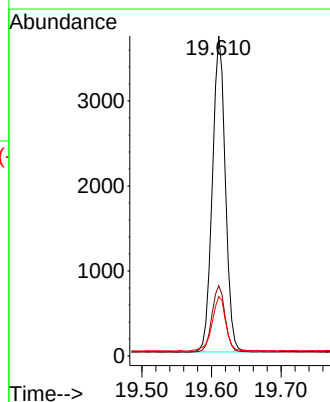
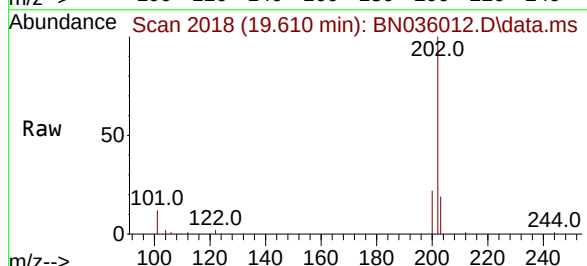
Tgt Ion:202 Resp: 4821

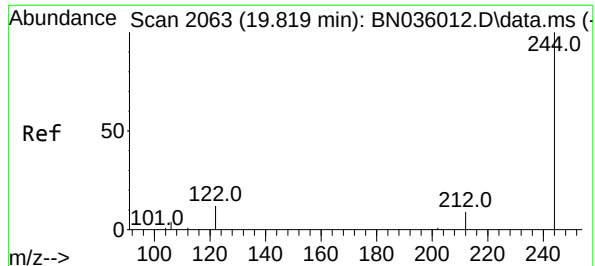
Ion Ratio Lower Upper

202 100

200 21.2 17.0 25.4

203 18.0 14.4 21.6





#31

Terphenyl-d14

Concen: 0.420 ng

RT: 19.819 min Scan# 2063

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

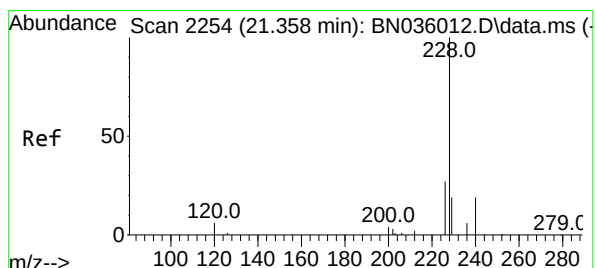
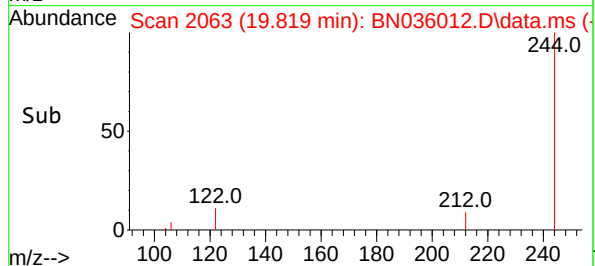
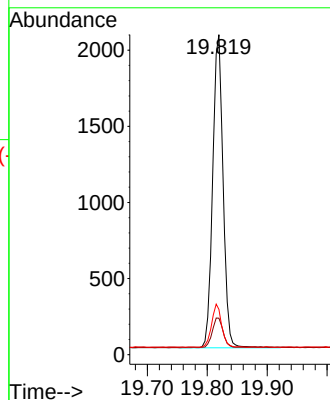
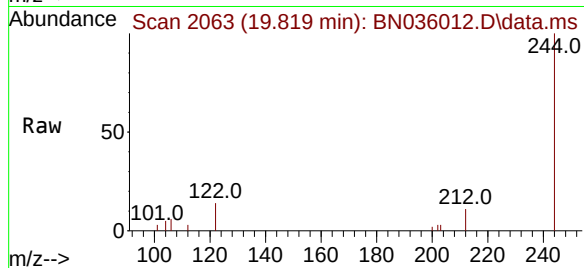
Tgt Ion:244 Resp: 2482

Ion Ratio Lower Upper

244 100

212 11.4 9.1 13.7

122 14.1 11.3 16.9



#32

Benzo(a)anthracene

Concen: 0.414 ng

RT: 21.358 min Scan# 2254

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

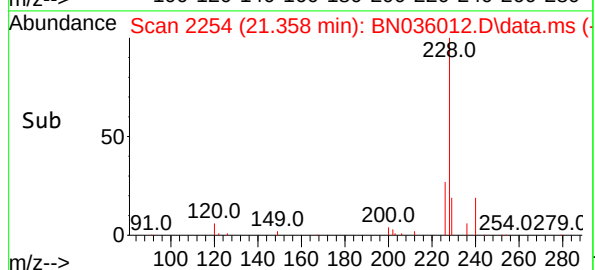
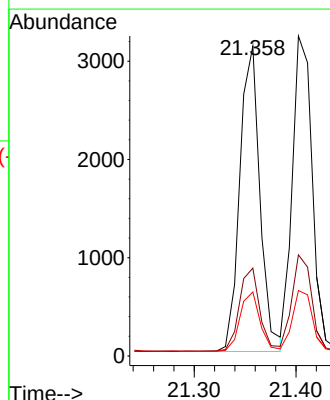
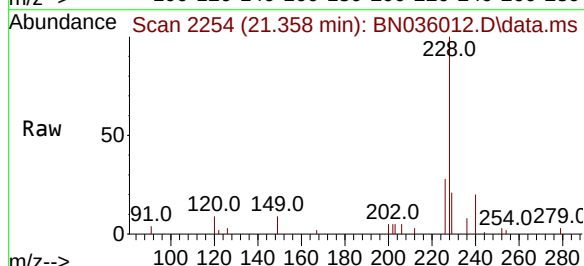
Tgt Ion:228 Resp: 4281

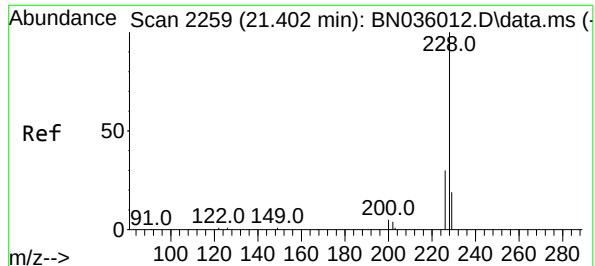
Ion Ratio Lower Upper

228 100

226 28.3 22.6 34.0

229 20.6 16.5 24.7





#33

Chrysene

Concen: 0.417 ng

RT: 21.402 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

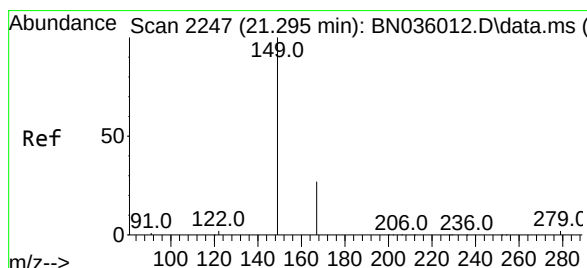
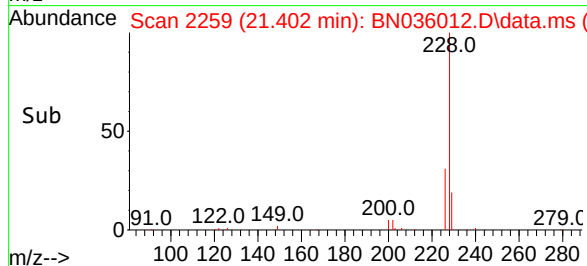
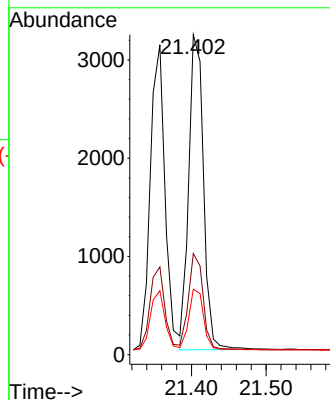
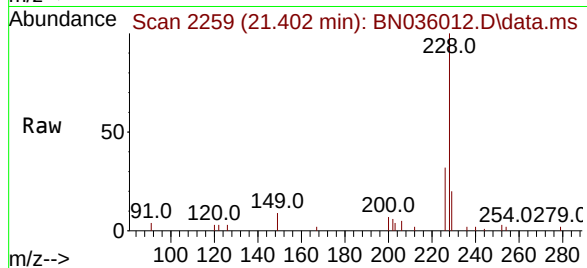
Tgt Ion:228 Resp: 4399

Ion Ratio Lower Upper

228 100

226 31.6 25.3 37.9

229 20.4 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.402 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

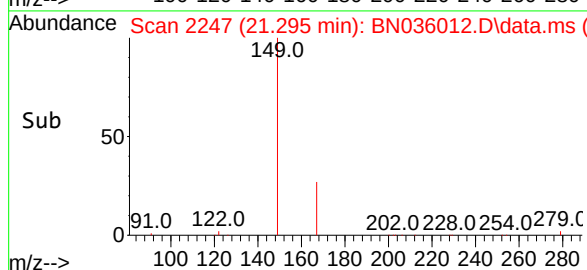
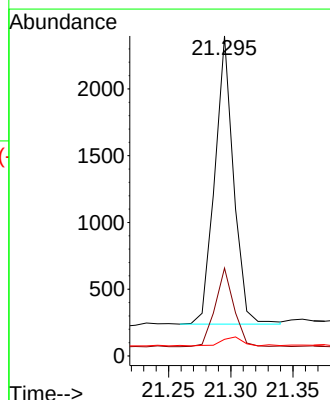
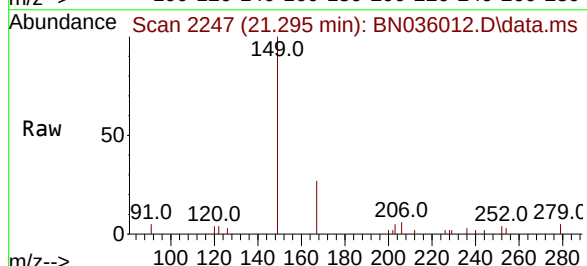
Tgt Ion:149 Resp: 2273

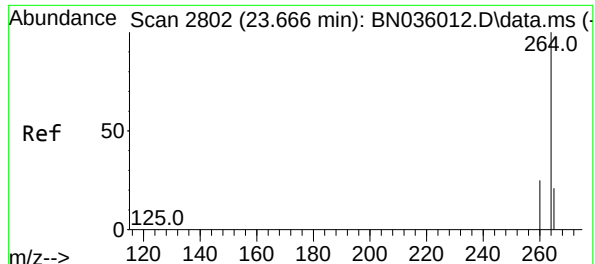
Ion Ratio Lower Upper

149 100

167 27.4 21.9 32.9

279 3.8 3.0 4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.666 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

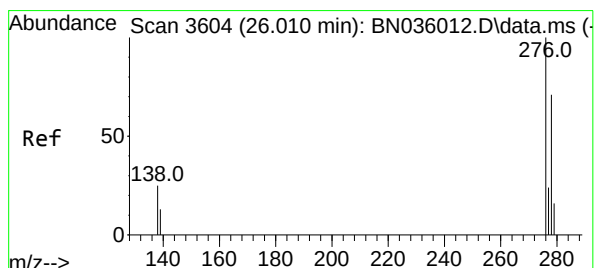
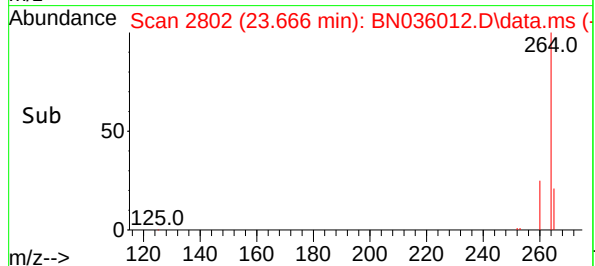
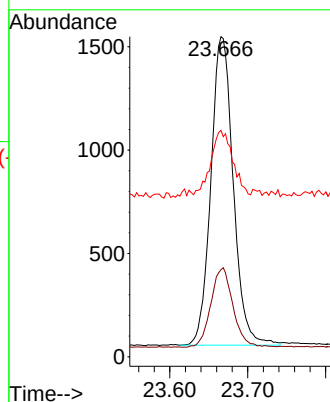
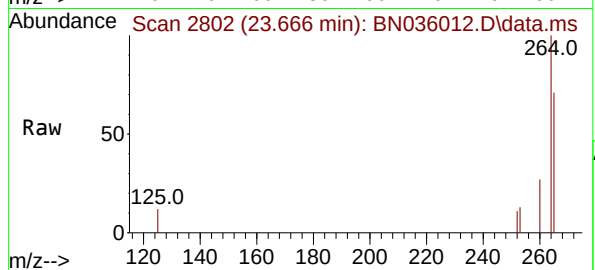
Tgt Ion:264 Resp: 2976

Ion Ratio Lower Upper

264 100

260 27.2 21.8 32.6

265 70.7 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.404 ng

RT: 26.010 min Scan# 3604

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

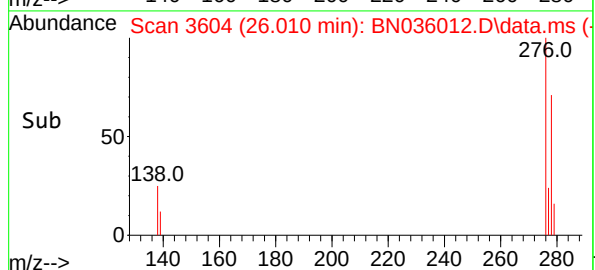
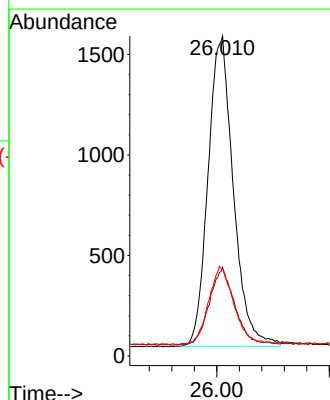
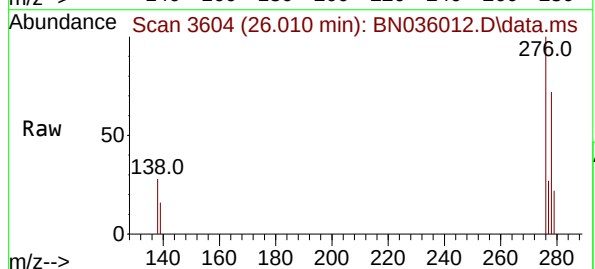
Tgt Ion:276 Resp: 4823

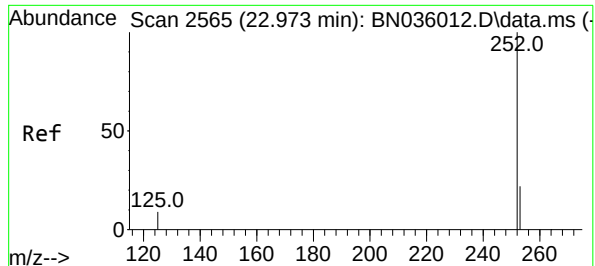
Ion Ratio Lower Upper

276 100

138 24.9 19.9 29.9

277 24.3 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.412 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

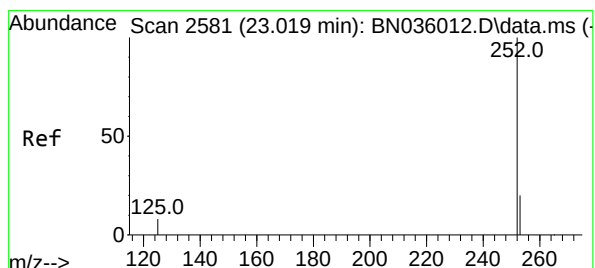
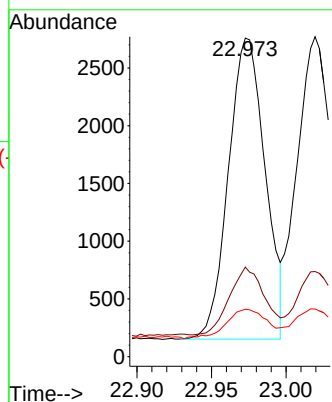
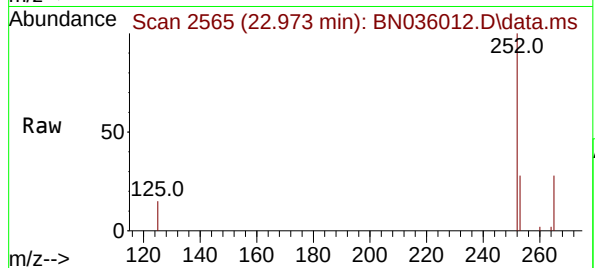
Tgt Ion:252 Resp: 4454

Ion Ratio Lower Upper

252 100

253 28.1 22.5 33.7

125 14.9 11.9 17.9



#38

Benzo(k)fluoranthene

Concen: 0.406 ng

RT: 23.019 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

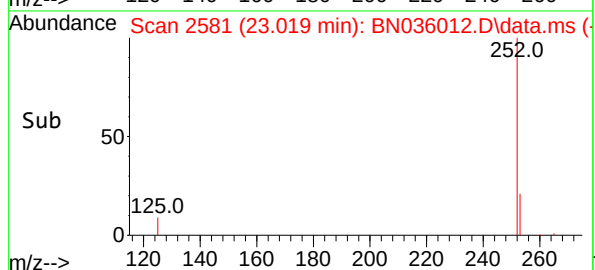
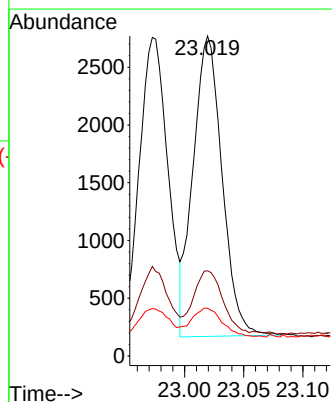
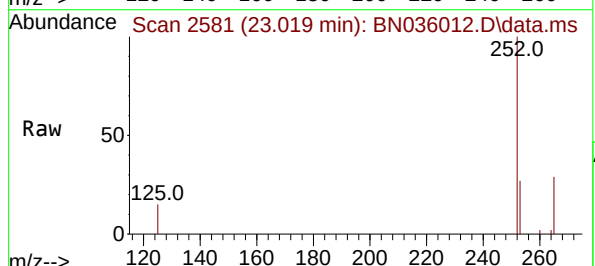
Tgt Ion:252 Resp: 4423

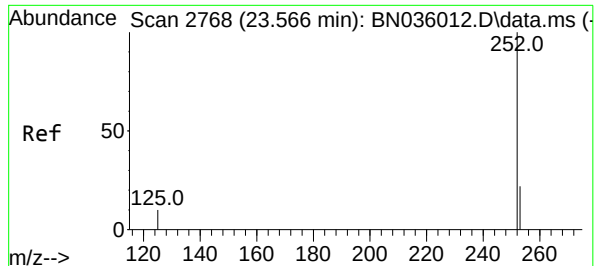
Ion Ratio Lower Upper

252 100

253 26.6 21.3 31.9

125 14.9 11.9 17.9





#39

Benzo(a)pyrene

Concen: 0.407 ng

RT: 23.566 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

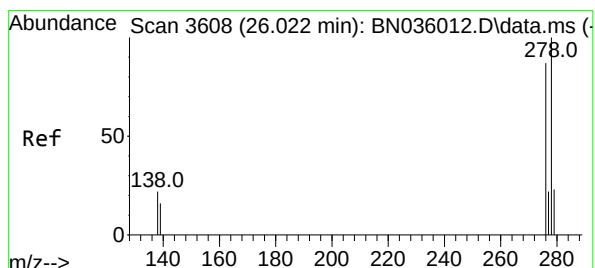
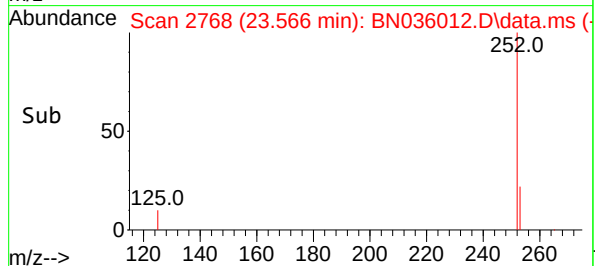
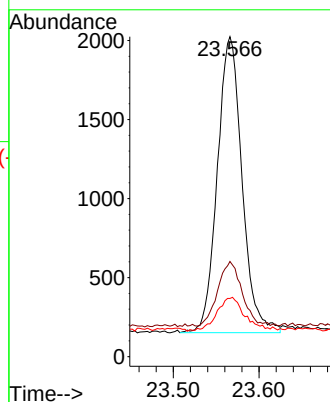
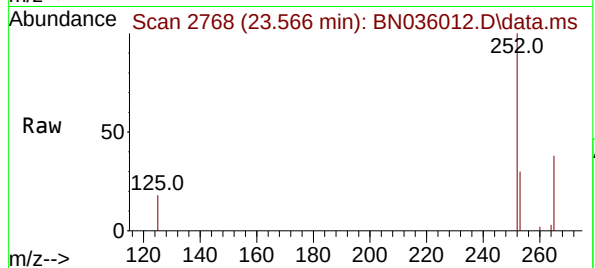
Tgt Ion:252 Resp: 3759

Ion Ratio Lower Upper

252 100

253 29.7 23.8 35.6

125 18.2 14.6 21.8



#40

Dibenzo(a,h)anthracene

Concen: 0.403 ng

RT: 26.022 min Scan# 3608

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

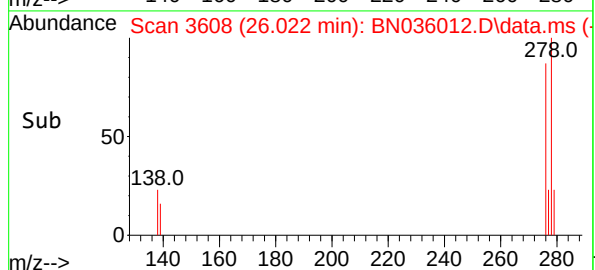
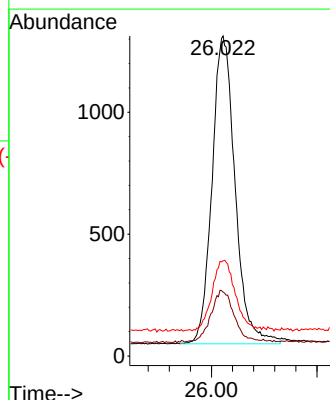
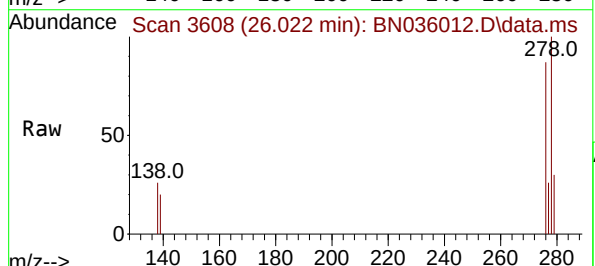
Tgt Ion:278 Resp: 3838

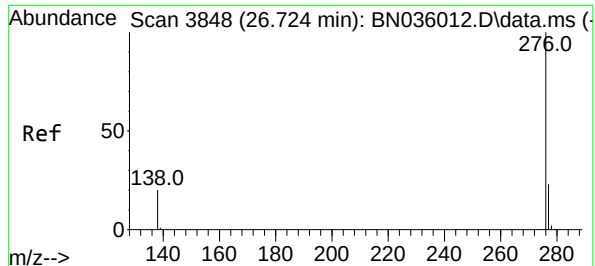
Ion Ratio Lower Upper

278 100

139 20.0 16.0 24.0

279 29.8 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.409 ng

RT: 26.724 min Scan# 3848

Delta R.T. 0.000 min

Lab File: BN036012.D

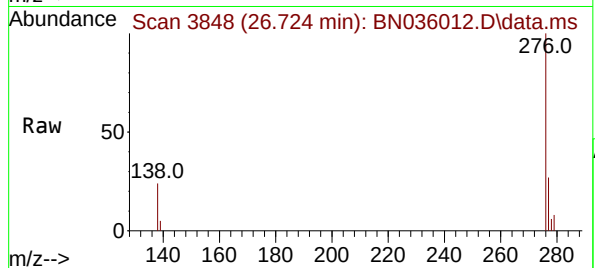
Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4



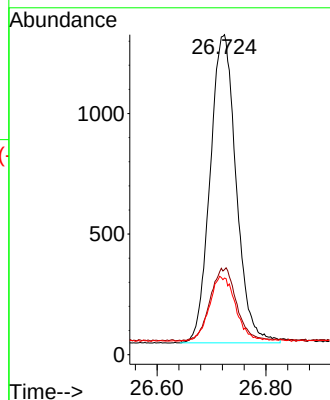
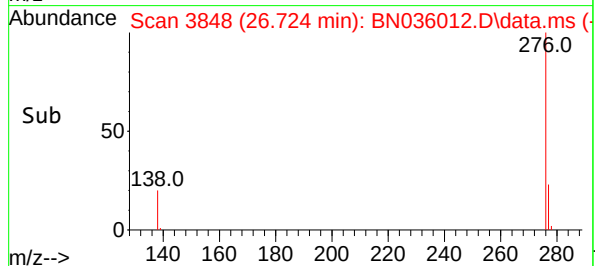
Tgt Ion:276 Resp: 4244

Ion Ratio Lower Upper

276 100

277 26.6 21.3 31.9

138 24.0 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036013.D
 Acq On : 22 Jan 2025 12:49
 Operator : RC/JU
 Sample : SSTDICC0.8
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.8

Quant Time: Jan 23 00:28:19 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

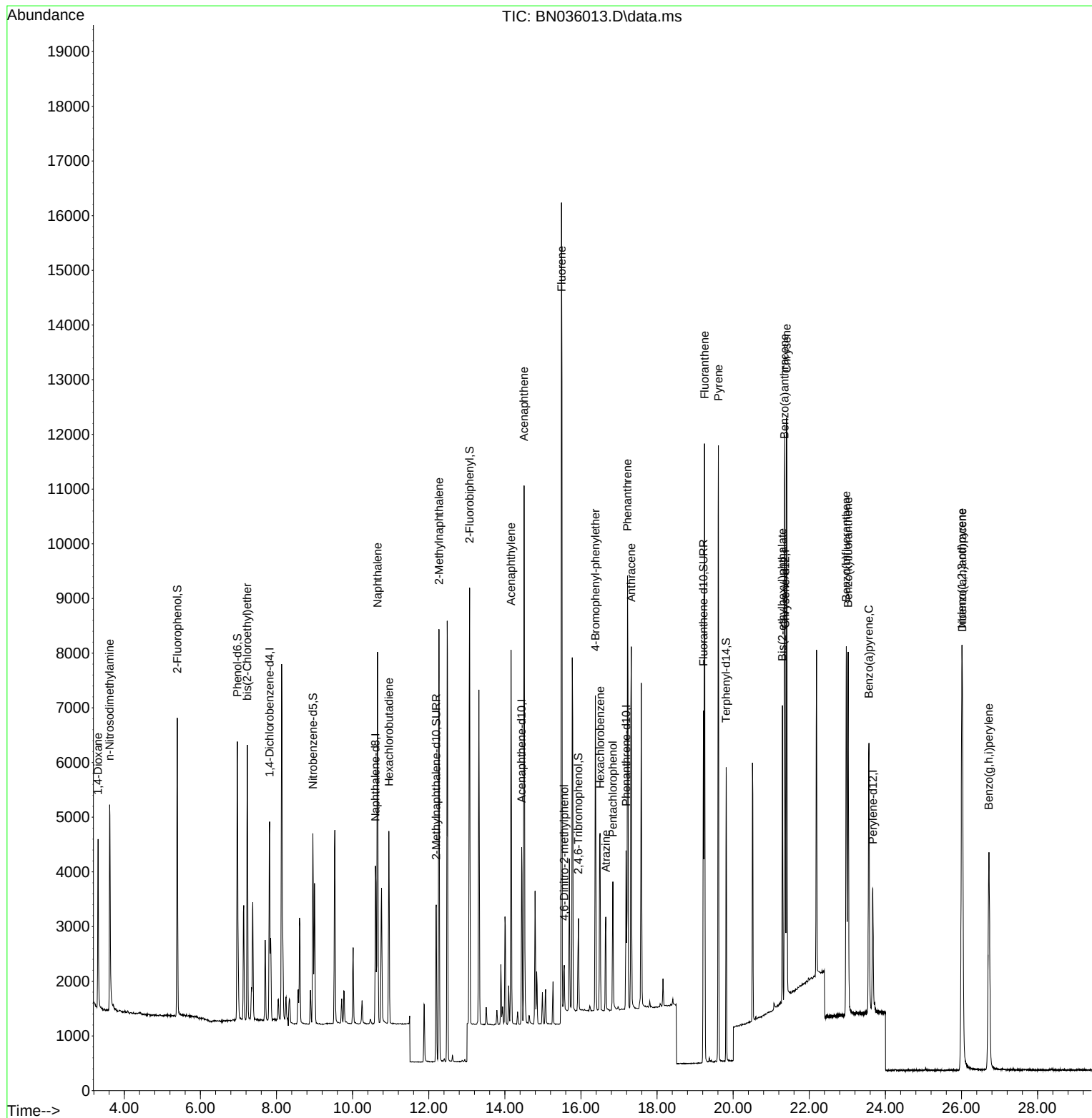
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1730	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3641	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	1841	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3559	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	2978	0.400	ng	0.00
35) Perylene-d12	23.669	264	3042	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.390	112	3801	0.845	ng	0.00
5) Phenol-d6	6.972	99	3996	0.756	ng	0.00
8) Nitrobenzene-d5	8.956	82	2426	0.706	ng	0.00
11) 2-Methylnaphthalene-d10	12.198	152	3847	0.777	ng	0.00
14) 2,4,6-Tribromophenol	15.933	330	875	0.741	ng	0.00
15) 2-Fluorobiphenyl	13.073	172	6581	0.801	ng	0.00
27) Fluoranthene-d10	19.220	212	7073	0.767	ng	0.00
31) Terphenyl-d14	19.815	244	4949	0.800	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.310	88	1651	0.854	ng	Qvalue 97
3) n-Nitrosodimethylamine	3.614	42	3054	0.871	ng	# 98
6) bis(2-Chloroethyl)ether	7.232	93	3216	0.756	ng	100
9) Naphthalene	10.654	128	8279	0.783	ng	97
10) Hexachlorobutadiene	10.953	225	2705	0.792	ng	# 99
12) 2-Methylnaphthalene	12.269	142	5096	0.777	ng	99
16) Acenaphthylene	14.164	152	6775	0.776	ng	99
17) Acenaphthene	14.506	154	4661	0.780	ng	99
18) Fluorene	15.489	166	5707	0.762	ng	97
20) 4,6-Dinitro-2-methylph...	15.560	198	632	0.762	ng	# 67
21) 4-Bromophenyl-phenylether	16.379	248	2040	0.805	ng	# 76
22) Hexachlorobenzene	16.504	284	2659	0.797	ng	98
23) Atrazine	16.652	200	1455	0.794	ng	# 93
24) Pentachlorophenol	16.839	266	1105	0.765	ng	98
25) Phenanthrene	17.223	178	8345	0.780	ng	99
26) Anthracene	17.323	178	7575	0.779	ng	99
28) Fluoranthene	19.248	202	9659	0.769	ng	100
30) Pyrene	19.611	202	9746	0.808	ng	100
32) Benzo(a)anthracene	21.349	228	8402	0.778	ng	98
33) Chrysene	21.403	228	8622	0.781	ng	99
34) Bis(2-ethylhexyl)phtha...	21.295	149	4455	0.753	ng	100
36) Indeno(1,2,3-cd)pyrene	26.008	276	9645	0.790	ng	99
37) Benzo(b)fluoranthene	22.973	252	8692	0.786	ng	93
38) Benzo(k)fluoranthene	23.020	252	8683	0.779	ng	95
39) Benzo(a)pyrene	23.566	252	7317	0.775	ng	92
40) Dibenzo(a,h)anthracene	26.022	278	7782	0.800	ng	94
41) Benzo(g,h,i)perylene	26.718	276	8439	0.796	ng	96

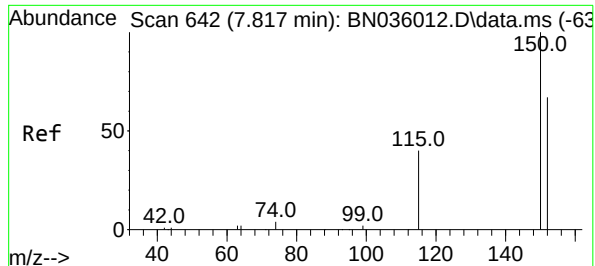
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036013.D
Acq On : 22 Jan 2025 12:49
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Jan 23 00:28:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

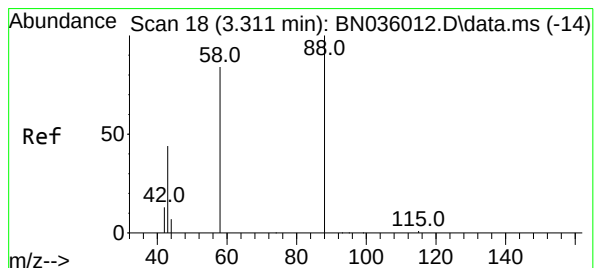
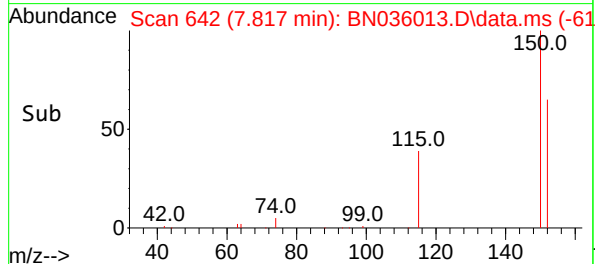
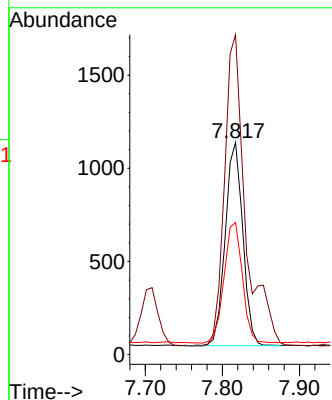
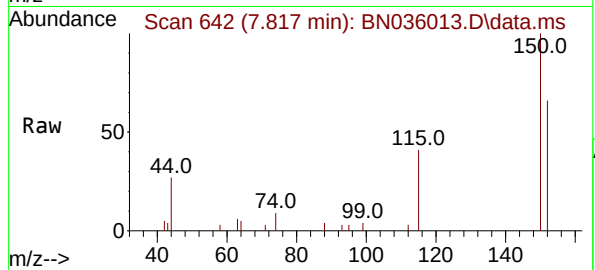




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

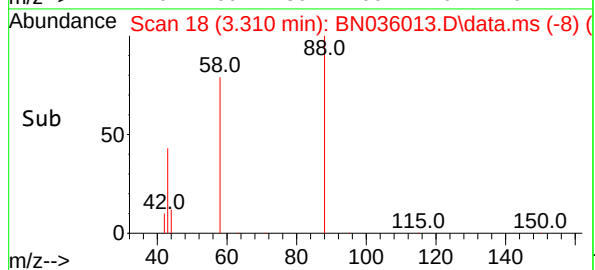
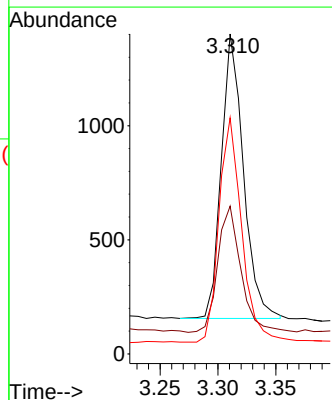
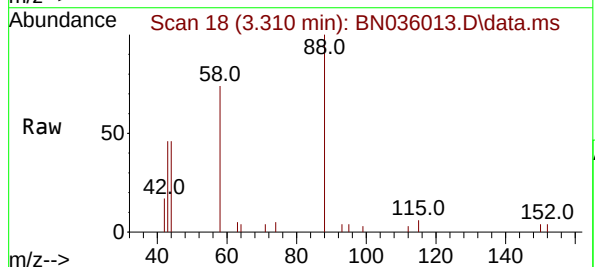
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

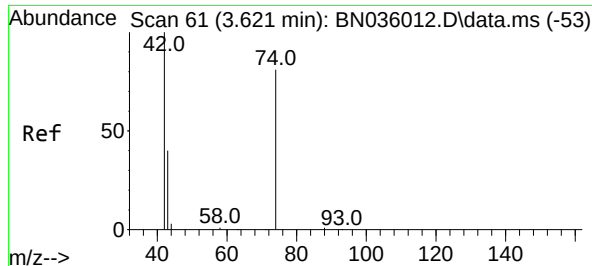
Tgt Ion:152 Resp: 1730
Ion Ratio Lower Upper
152 100
150 150.7 117.4 176.2
115 62.2 51.0 76.4



#2
1,4-Dioxane
Concen: 0.854 ng
RT: 3.310 min Scan# 18
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion: 88 Resp: 1651
Ion Ratio Lower Upper
88 100
43 46.4 38.5 57.7
58 80.8 66.6 99.8

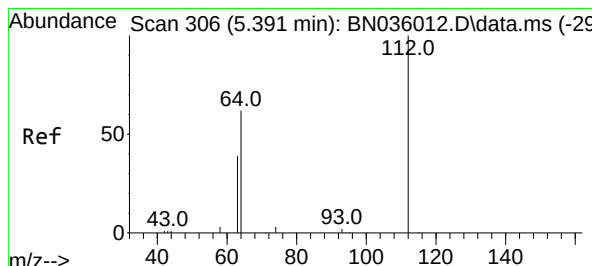
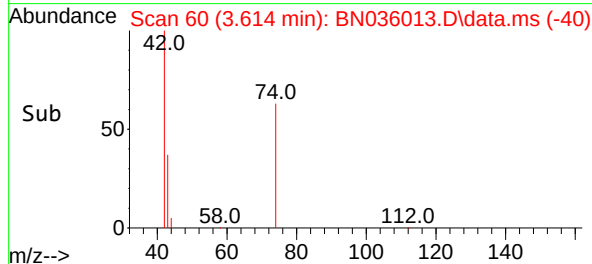
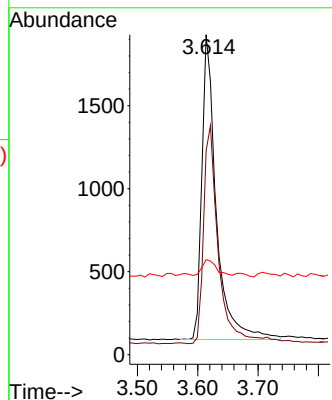
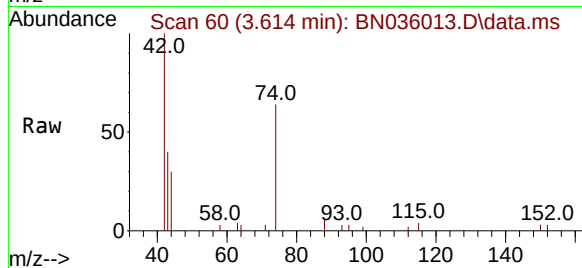




#3
n-Nitrosodimethylamine
Concen: 0.871 ng
RT: 3.614 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

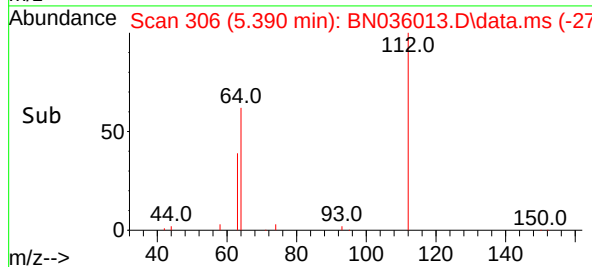
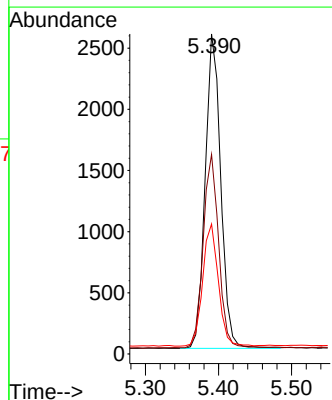
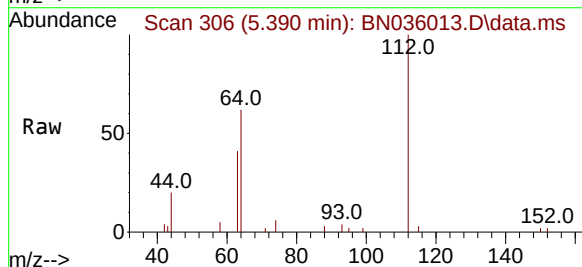
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

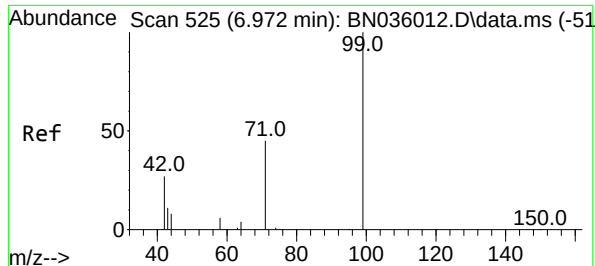
Tgt Ion: 42 Resp: 3054
Ion Ratio Lower Upper
42 100
74 73.9 58.1 87.1
44 5.5 6.2 9.4#



#4
2-Fluorophenol
Concen: 0.845 ng
RT: 5.390 min Scan# 306
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion: 112 Resp: 3801
Ion Ratio Lower Upper
112 100
64 62.1 50.0 75.0
63 39.1 30.7 46.1

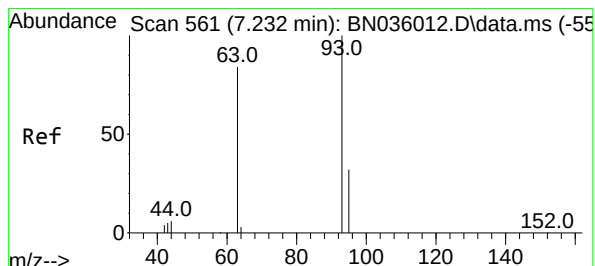
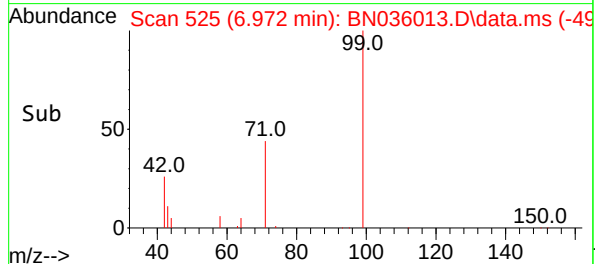
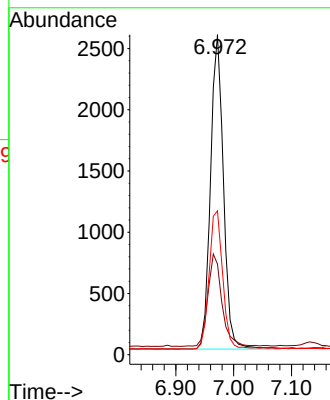
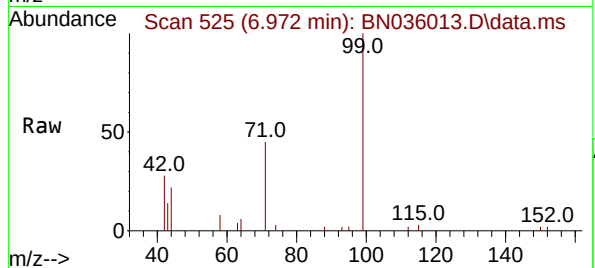




#5
Phenol-d6
Concen: 0.756 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

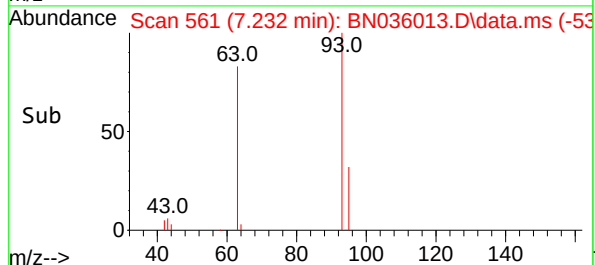
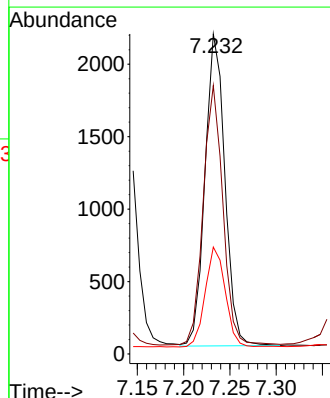
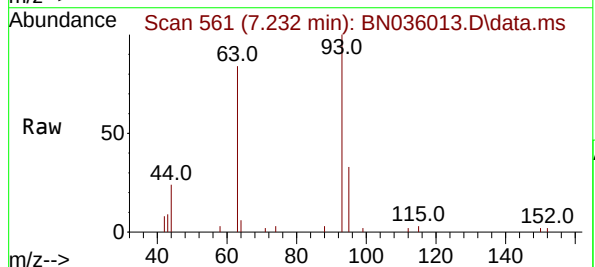
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

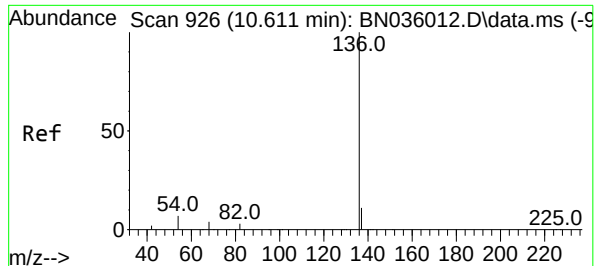
Tgt Ion: 99 Resp: 3996
Ion Ratio Lower Upper
99 100
42 31.9 26.8 40.2
71 46.0 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.756 ng
RT: 7.232 min Scan# 561
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion: 93 Resp: 3216
Ion Ratio Lower Upper
93 100
63 82.4 65.8 98.6
95 32.3 25.8 38.6

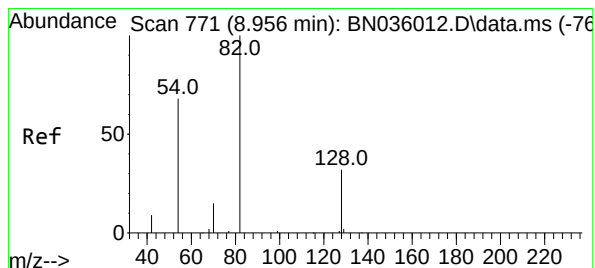
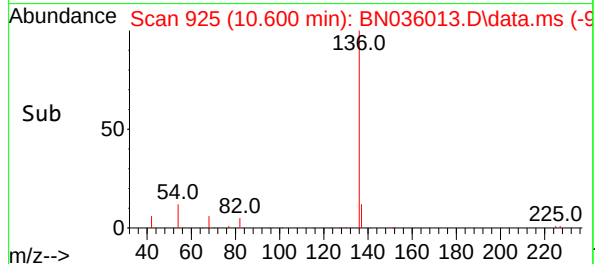
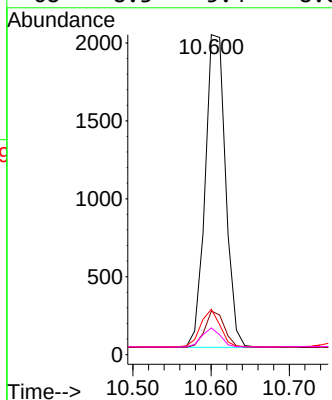
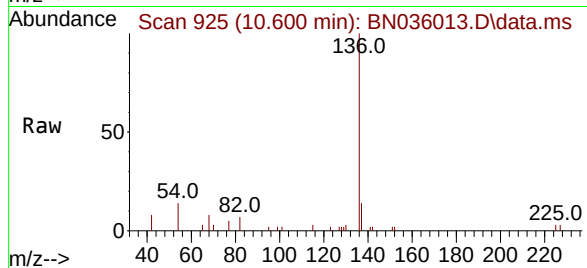




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

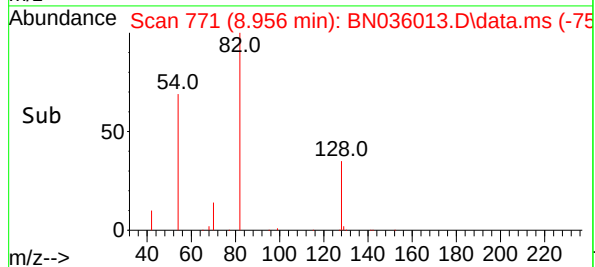
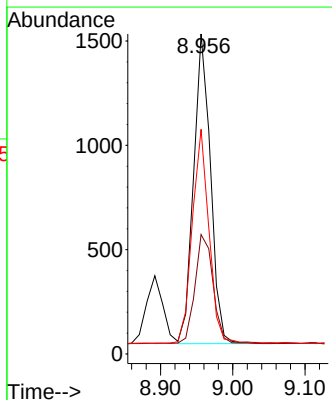
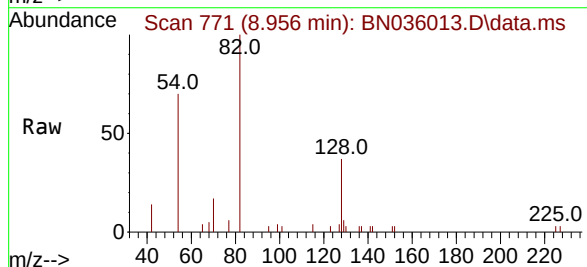
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

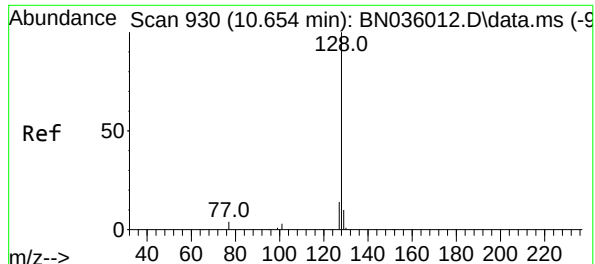
Tgt Ion:	136	Resp:	3641
Ion	Ratio	Lower	Upper
136	100		
137	13.6	10.4	15.6
54	14.2	7.7	11.5#
68	8.3	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.706 ng
RT: 8.956 min Scan# 771
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion:	82	Resp:	2426
Ion	Ratio	Lower	Upper
82	100		
128	37.3	28.8	43.2
54	70.2	55.8	83.8

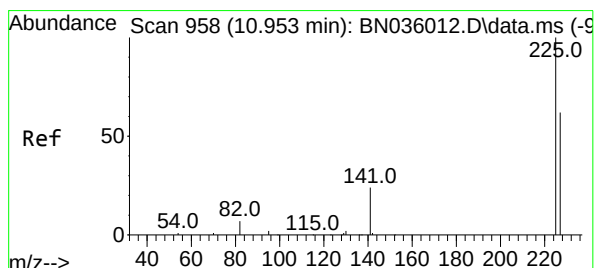
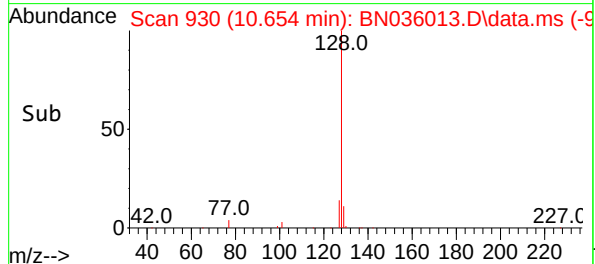
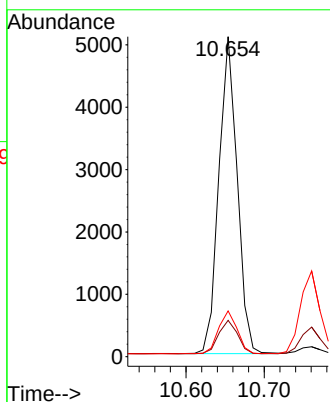
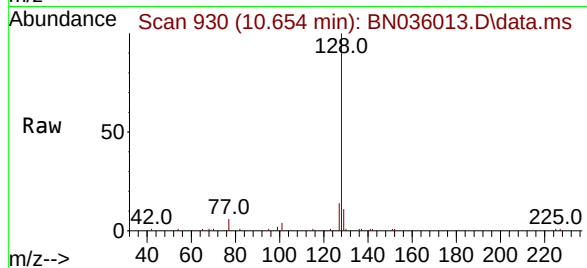




#9
Naphthalene
Concen: 0.783 ng
RT: 10.654 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

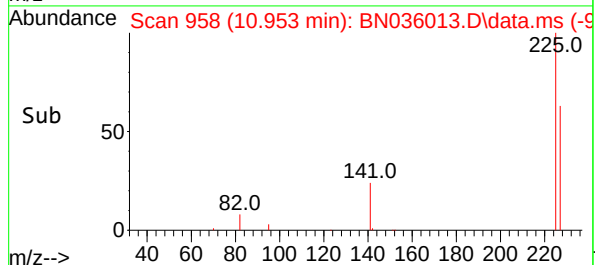
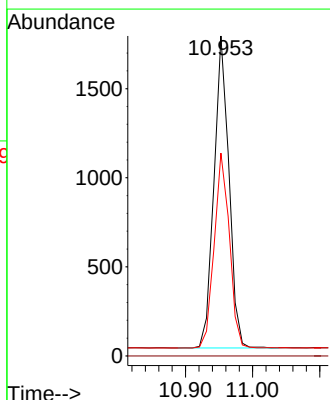
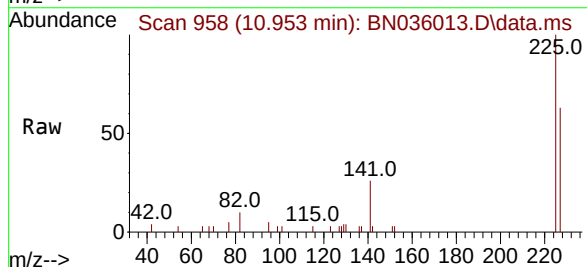
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

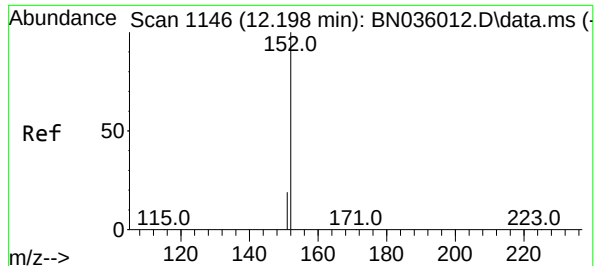
Tgt Ion	128	129	127
Resp:	8279		
Ion Ratio	100	11.4	14.3
Lower		9.4	12.6
Upper		14.2	19.0



#10
Hexachlorobutadiene
Concen: 0.792 ng
RT: 10.953 min Scan# 958
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion	225	223	227
Resp:	2705		
Ion Ratio	100	0.0	63.4
Lower		0.0	51.0
Upper		0.0	76.6

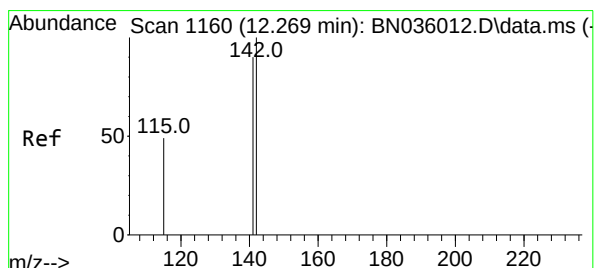
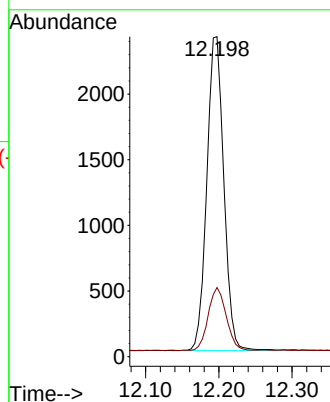
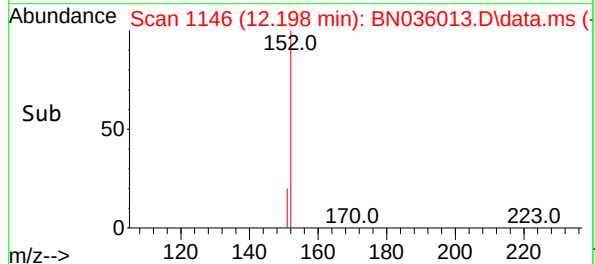
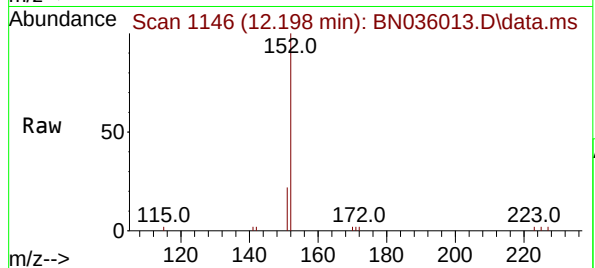




#11
2-Methylnaphthalene-d10
Concen: 0.777 ng
RT: 12.198 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

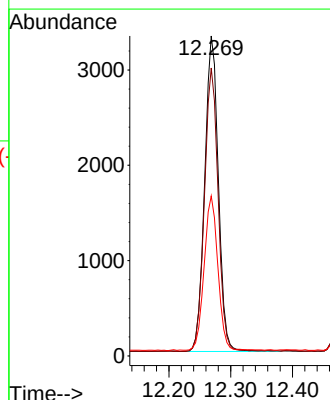
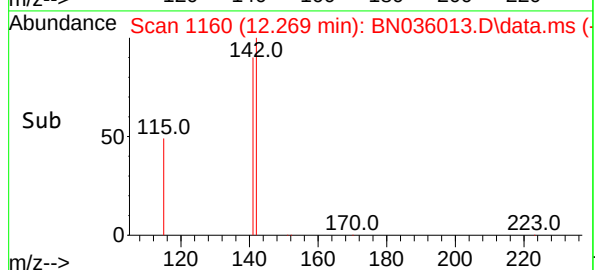
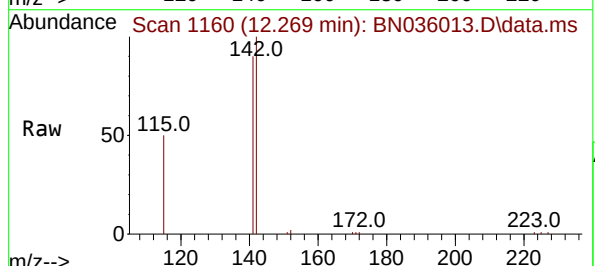
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

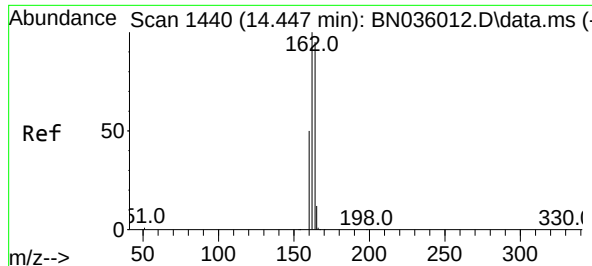
Tgt Ion:152 Resp: 3847
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.777 ng
RT: 12.269 min Scan# 1160
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion:142 Resp: 5096
Ion Ratio Lower Upper
142 100
141 90.0 72.2 108.2
115 50.0 41.2 61.8

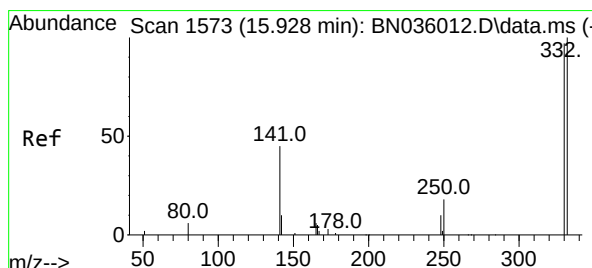
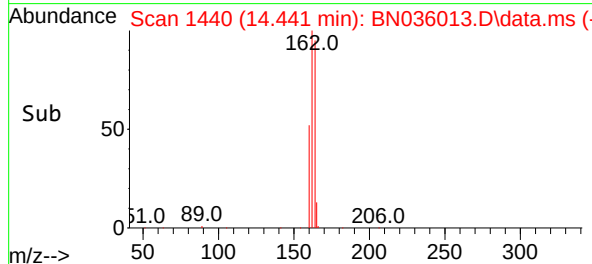
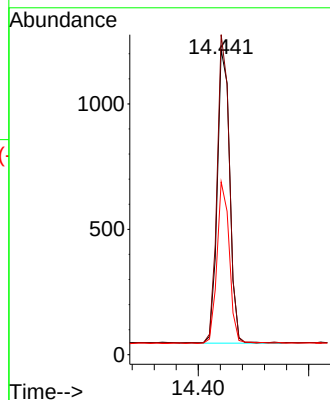
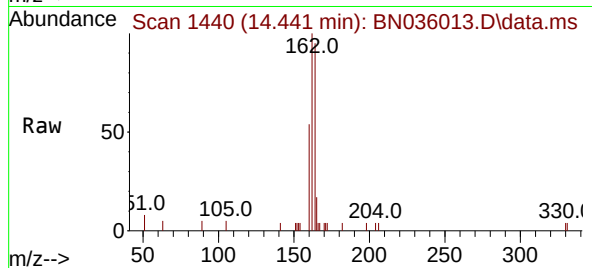




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

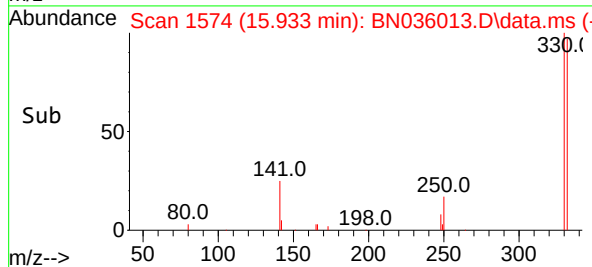
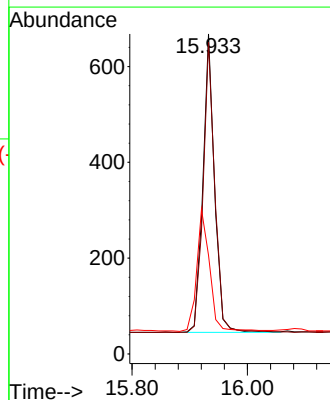
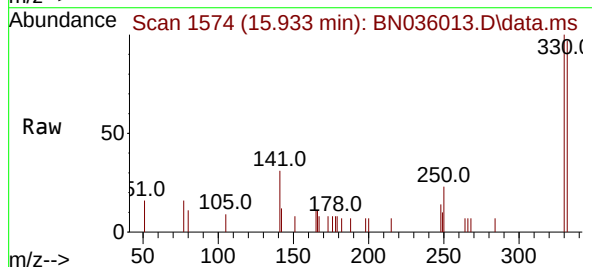
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

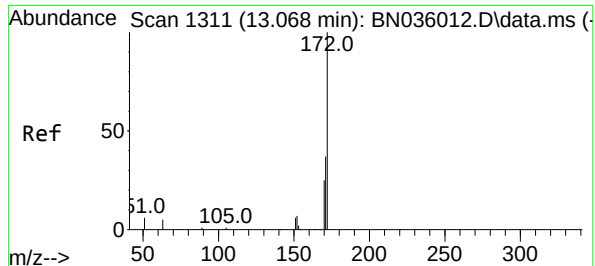
Tgt Ion	164	Resp:	1841
Ion Ratio	Lower	Upper	
164	100		
162	104.9	84.1	126.1
160	56.7	43.8	65.8



#14
2,4,6-Tribromophenol
Concen: 0.741 ng
RT: 15.933 min Scan# 1574
Delta R.T. 0.005 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion	330	Resp:	875
Ion Ratio	Lower	Upper	
330	100		
332	97.5	81.0	121.4
141	44.1	36.7	55.1





#15

2-Fluorobiphenyl

Concen: 0.801 ng

RT: 13.073 min Scan# 11

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

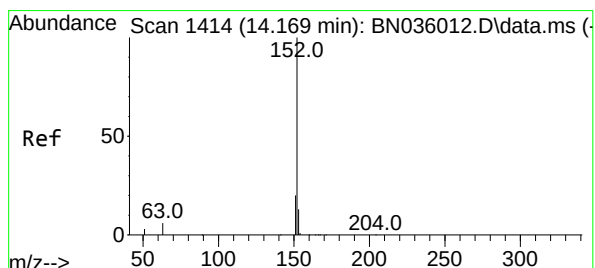
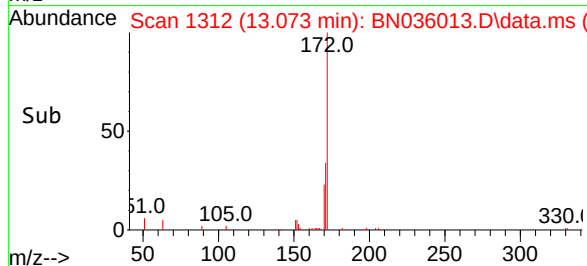
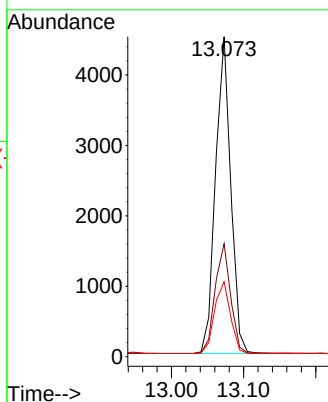
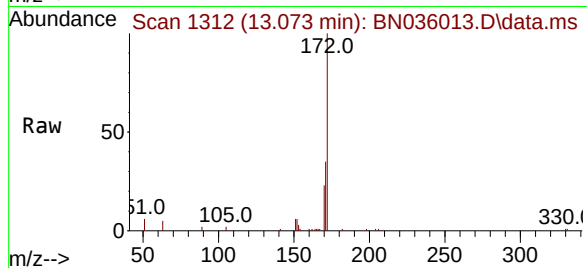
Tgt Ion:172 Resp: 6581

Ion Ratio Lower Upper

172 100

171 35.3 30.9 46.3

170 23.4 21.2 31.8



#16

Acenaphthylene

Concen: 0.776 ng

RT: 14.164 min Scan# 1414

Delta R.T. -0.006 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

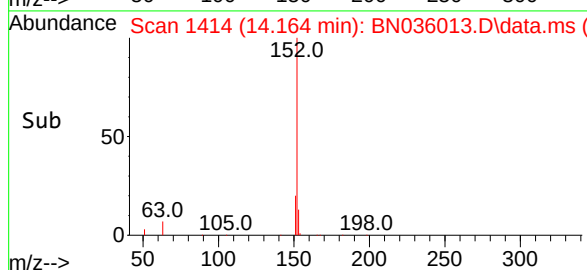
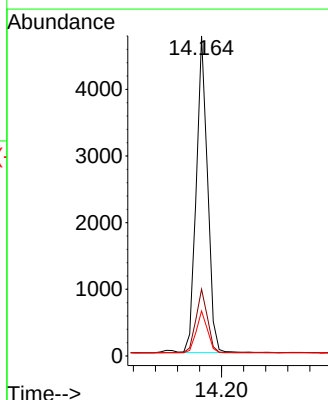
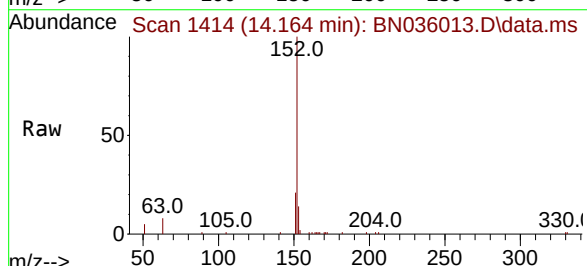
Tgt Ion:152 Resp: 6775

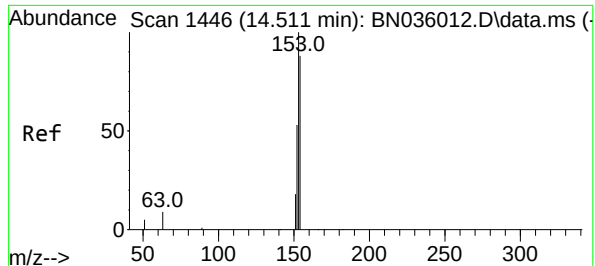
Ion Ratio Lower Upper

152 100

151 20.7 16.2 24.2

153 13.5 10.4 15.6

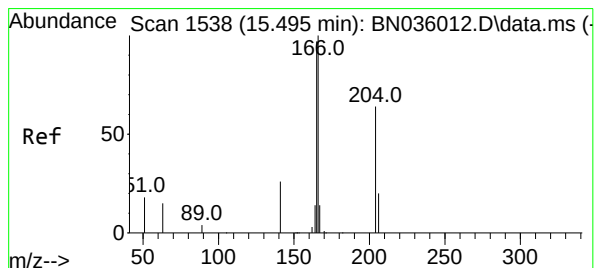
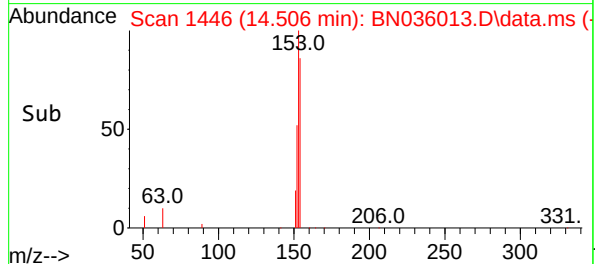
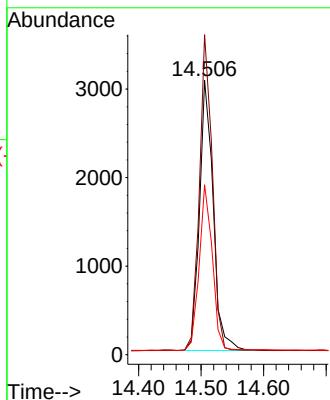
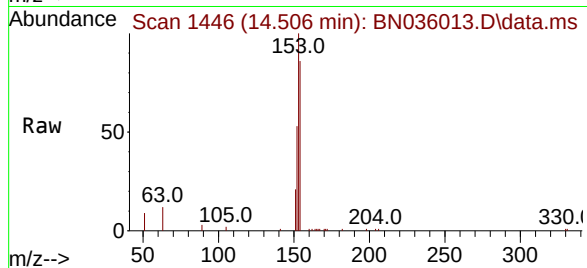




#17
Acenaphthene
Concen: 0.780 ng
RT: 14.506 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

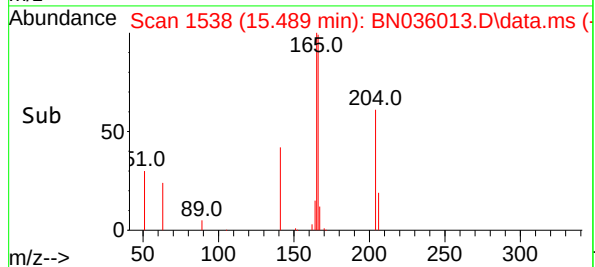
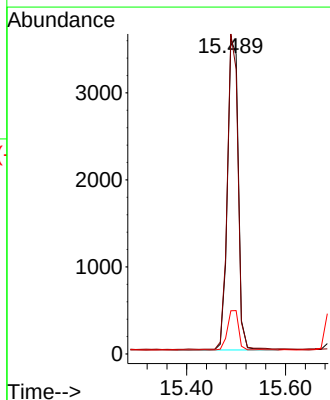
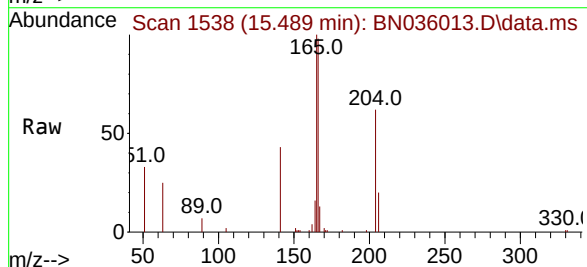
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

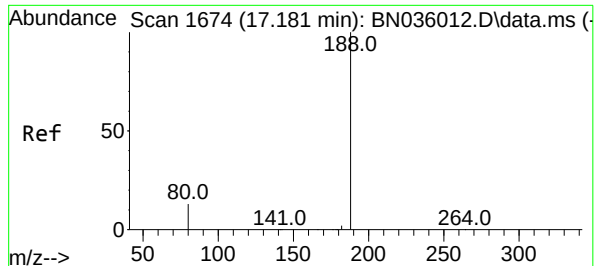
Tgt Ion:154 Resp: 4661
Ion Ratio Lower Upper
154 100
153 110.1 88.9 133.3
152 59.3 48.1 72.1



#18
Fluorene
Concen: 0.762 ng
RT: 15.489 min Scan# 1538
Delta R.T. -0.006 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion:166 Resp: 5707
Ion Ratio Lower Upper
166 100
165 101.9 78.5 117.7
167 13.2 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

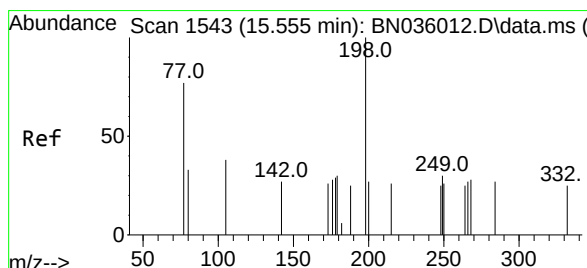
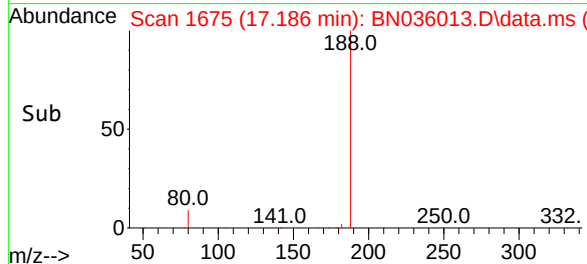
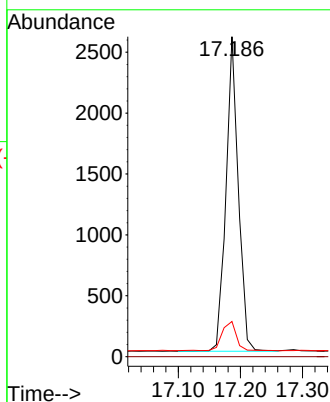
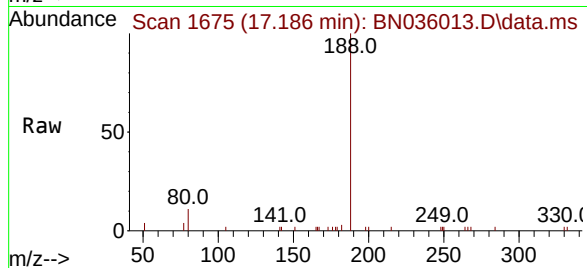
Tgt Ion:188 Resp: 3559

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.0 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.762 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

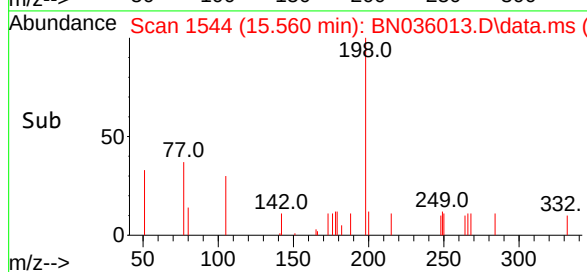
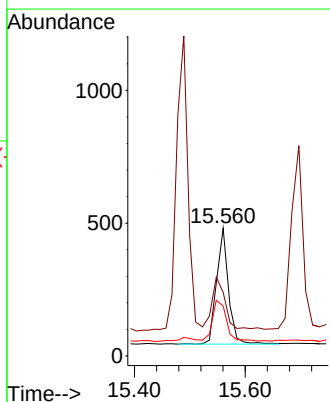
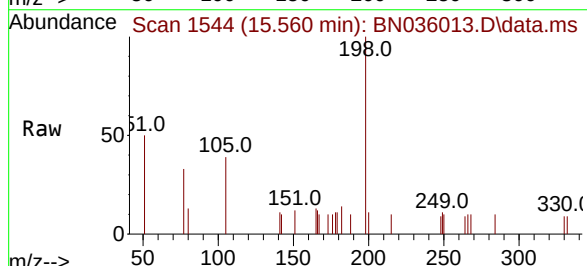
Tgt Ion:198 Resp: 632

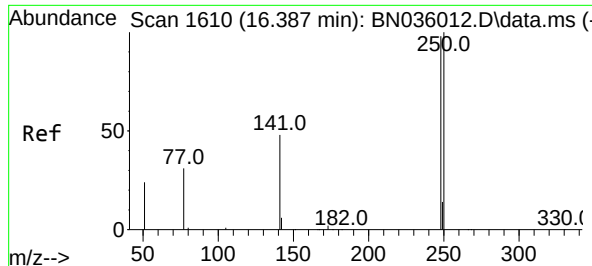
Ion Ratio Lower Upper

198 100

51 49.9 68.1 102.1#

105 39.1 46.5 69.7#

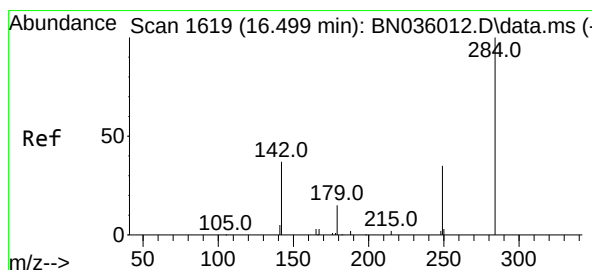
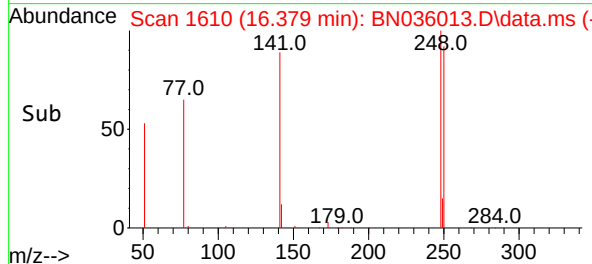
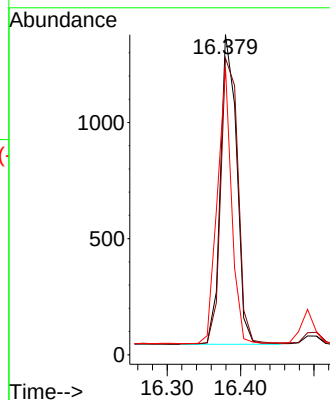
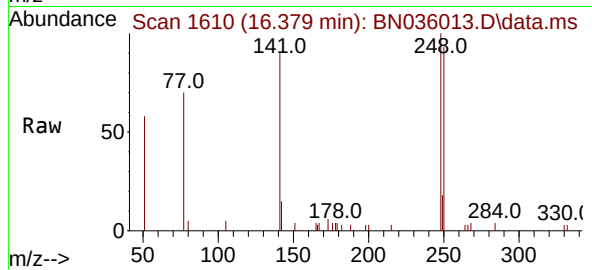




#21
4-Bromophenyl-phenylether
Concen: 0.805 ng
RT: 16.379 min Scan# 1610
Delta R.T. -0.007 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

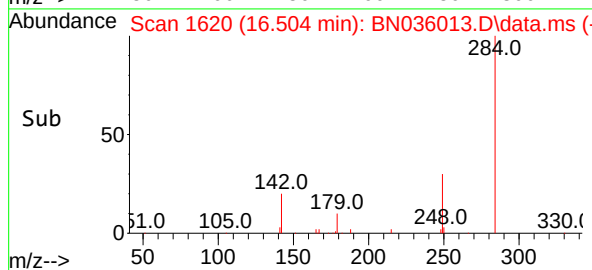
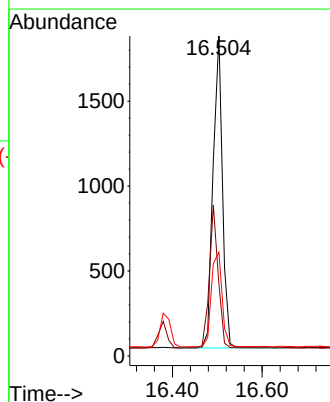
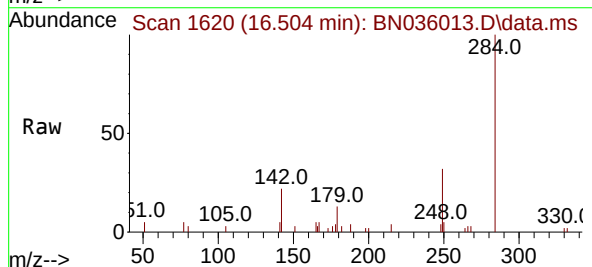
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

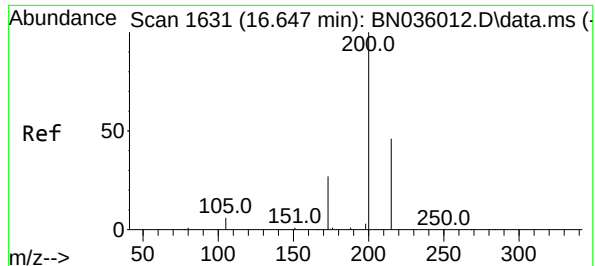
Tgt Ion	Ratio	Lower	Upper
248	100		
250	92.7	81.5	122.3
141	89.9	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.797 ng
RT: 16.504 min Scan# 1620
Delta R.T. 0.005 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion	Ratio	Lower	Upper
284	100		
142	42.9	33.6	50.4
249	34.6	28.8	43.2





#23

Atrazine

Concen: 0.794 ng

RT: 16.652 min Scan# 1632

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

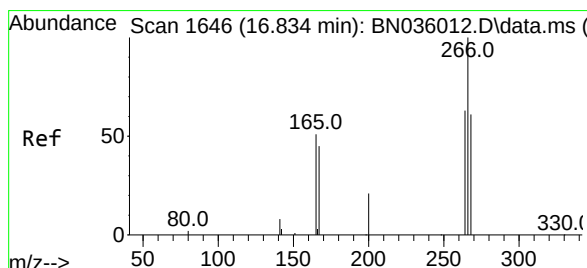
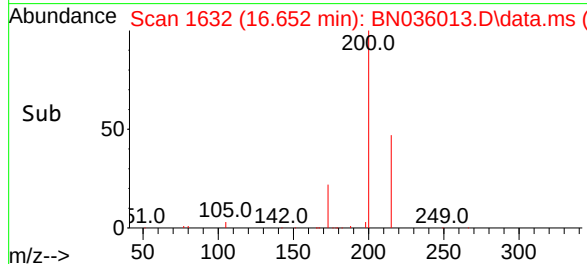
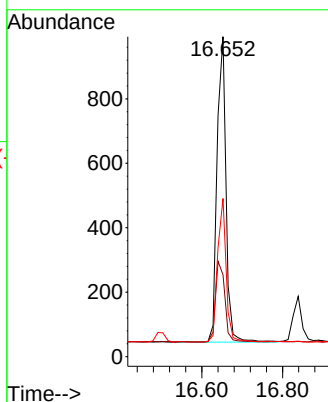
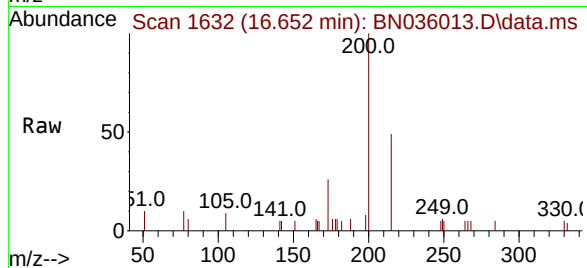
Tgt Ion:200 Resp: 1455

Ion Ratio Lower Upper

200 100

173 25.6 26.6 40.0#

215 49.4 40.6 61.0



#24

Pentachlorophenol

Concen: 0.765 ng

RT: 16.839 min Scan# 1647

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

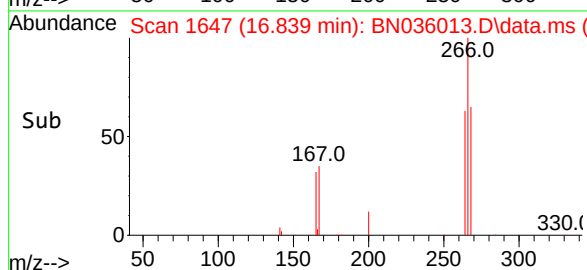
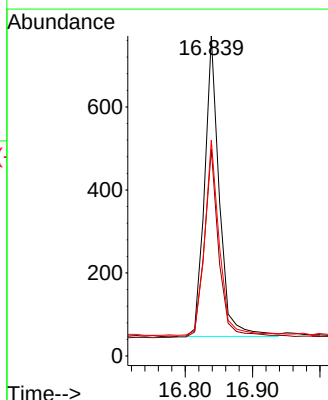
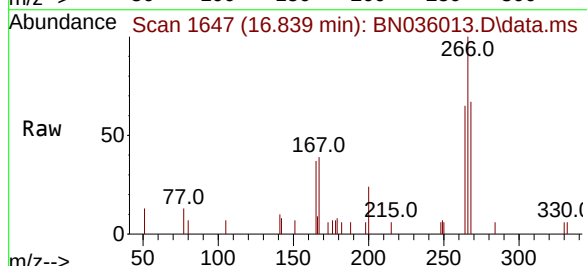
Tgt Ion:266 Resp: 1105

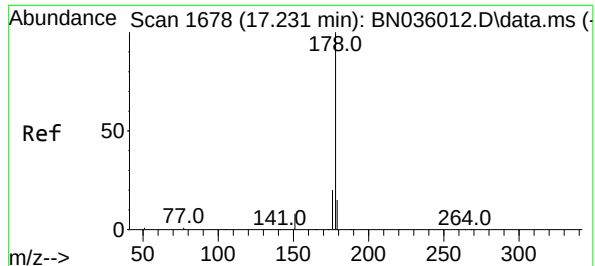
Ion Ratio Lower Upper

266 100

264 63.4 48.2 72.2

268 64.3 51.6 77.4

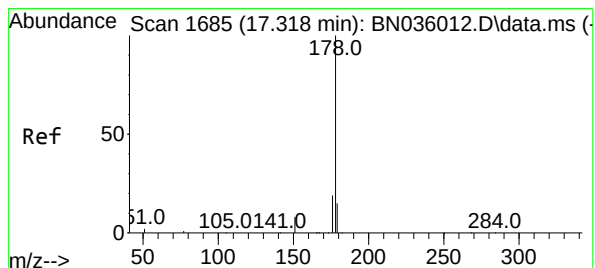
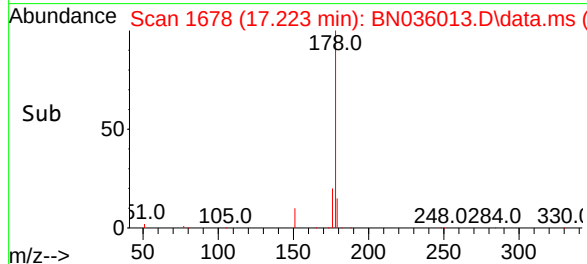
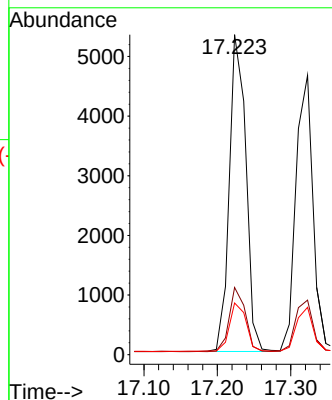
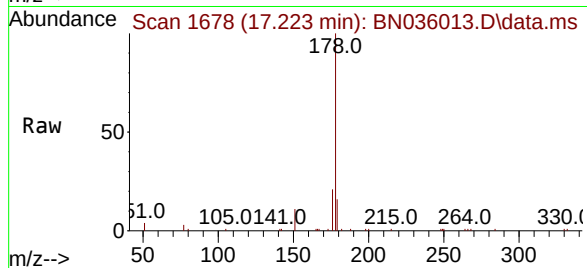




#25
Phenanthrene
Concen: 0.780 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.007 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

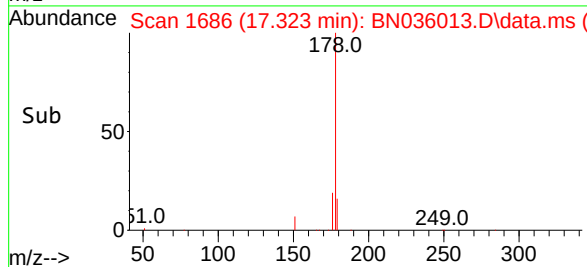
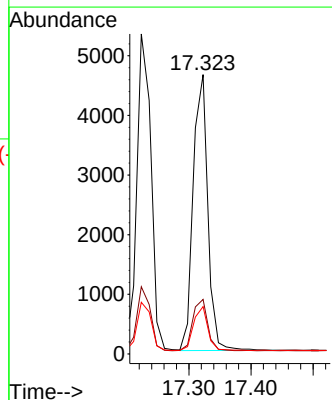
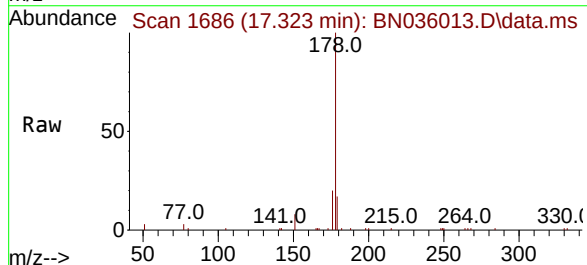
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

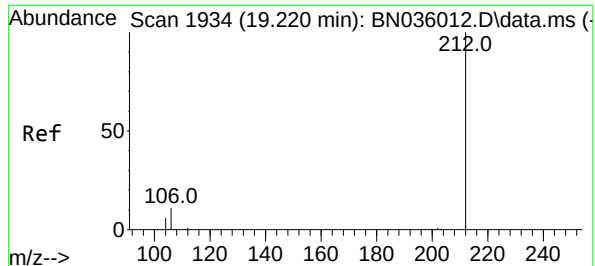
Tgt Ion:178 Resp: 8345
Ion Ratio Lower Upper
178 100
176 19.6 16.0 24.0
179 15.5 12.4 18.6



#26
Anthracene
Concen: 0.779 ng
RT: 17.323 min Scan# 1686
Delta R.T. 0.005 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion:178 Resp: 7575
Ion Ratio Lower Upper
178 100
176 19.2 15.4 23.2
179 15.4 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.767 ng

RT: 19.220 min Scan# 1934

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

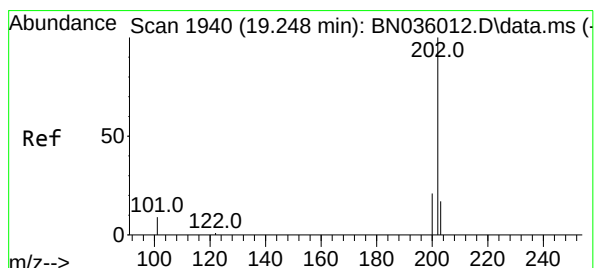
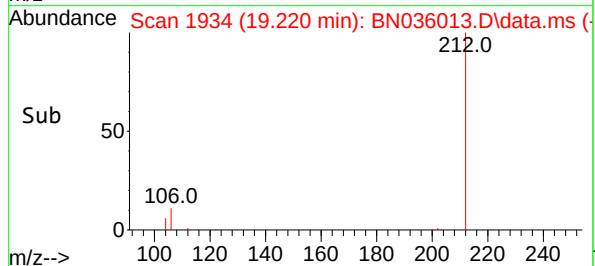
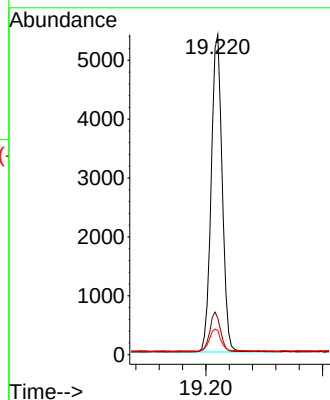
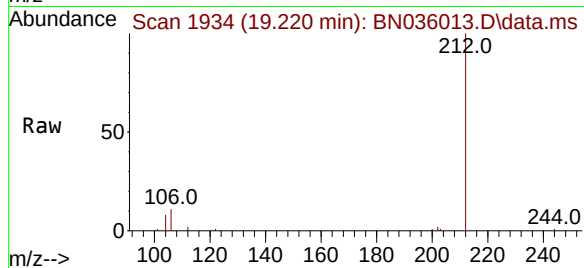
Tgt Ion:212 Resp: 7073

Ion Ratio Lower Upper

212 100

106 12.2 9.7 14.5

104 7.2 6.0 9.0



#28

Fluoranthene

Concen: 0.769 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

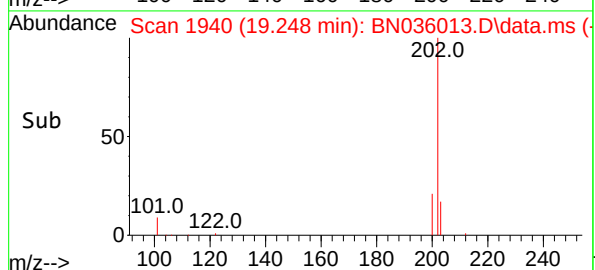
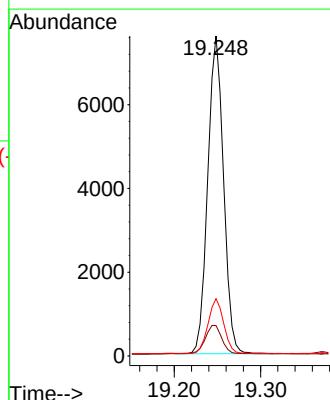
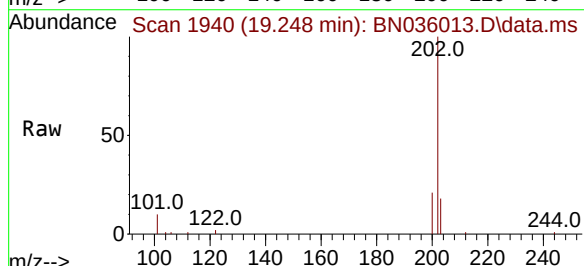
Tgt Ion:202 Resp: 9659

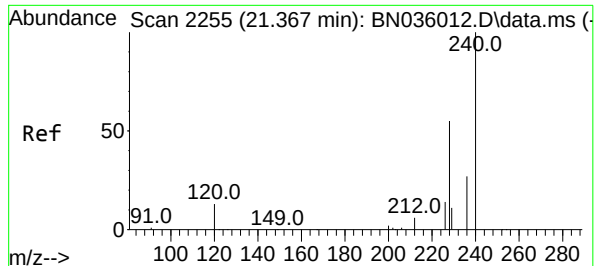
Ion Ratio Lower Upper

202 100

101 9.7 7.6 11.4

203 17.1 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

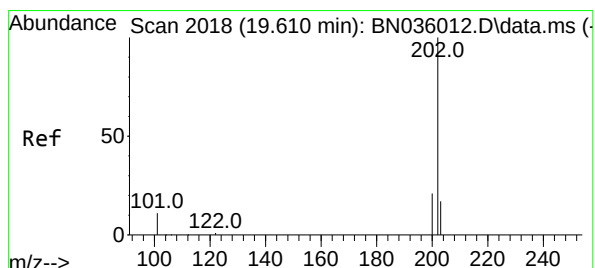
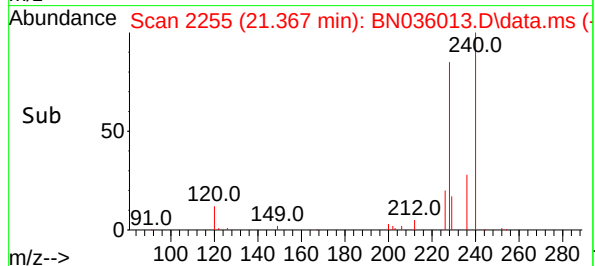
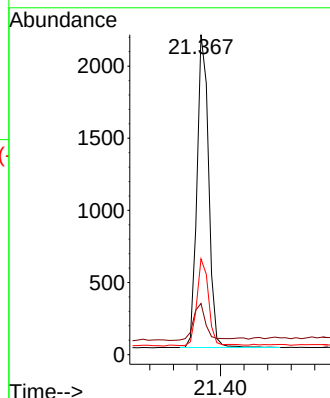
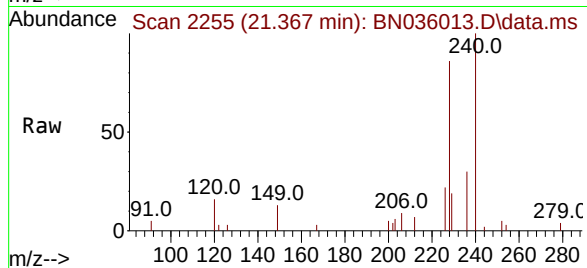
Tgt Ion:240 Resp: 2978

Ion Ratio Lower Upper

240 100

120 16.0 13.9 20.9

236 29.9 23.7 35.5



#30

Pyrene

Concen: 0.808 ng

RT: 19.611 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

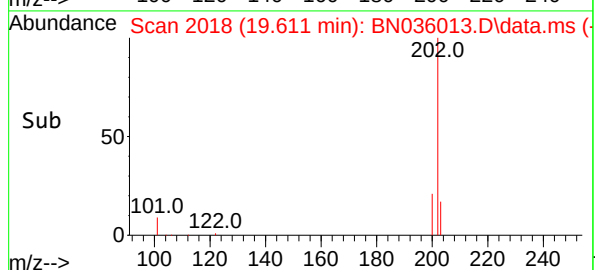
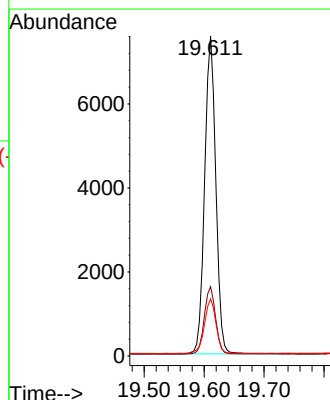
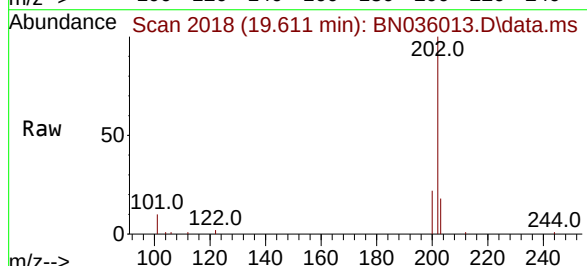
Tgt Ion:202 Resp: 9746

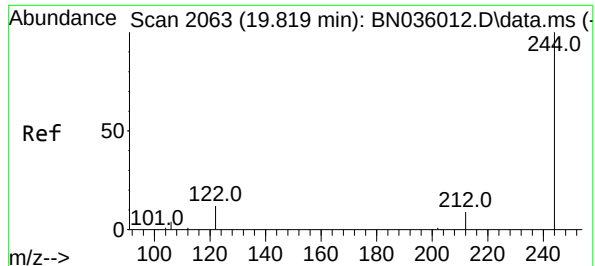
Ion Ratio Lower Upper

202 100

200 21.3 17.0 25.4

203 17.8 14.4 21.6

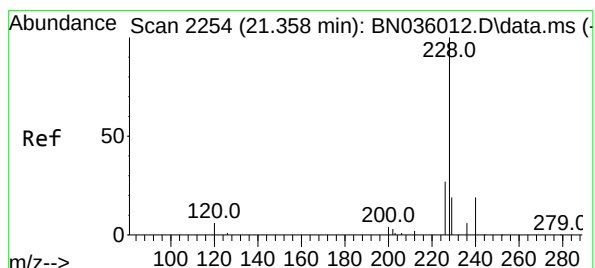
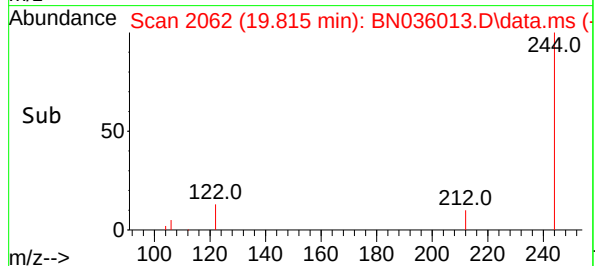
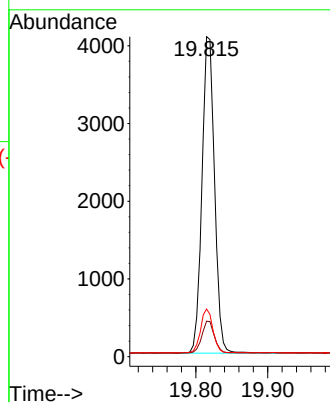
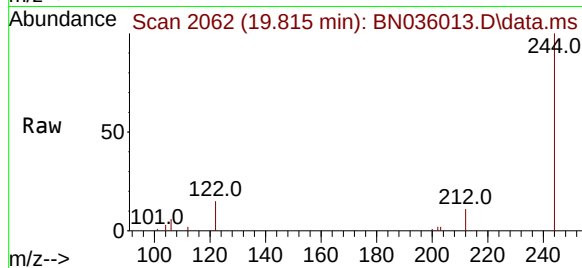




#31
Terphenyl-d14
Concen: 0.800 ng
RT: 19.815 min Scan# 2062
Delta R.T. -0.004 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

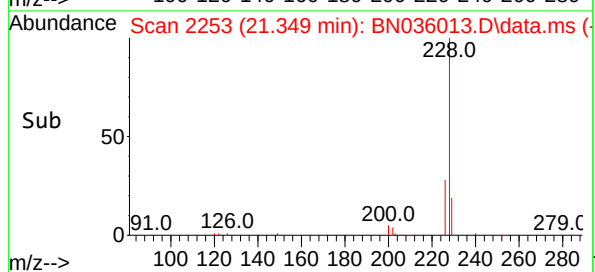
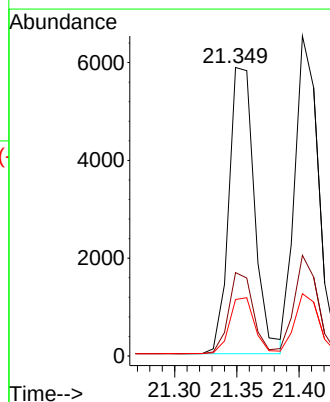
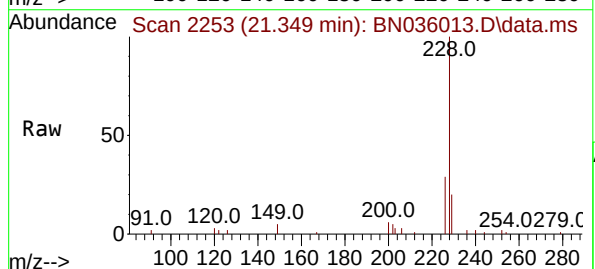
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

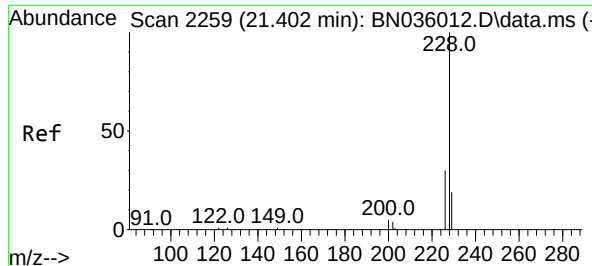
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.1	9.1	13.7
122	14.9	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.778 ng
RT: 21.349 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.9	22.6	34.0
229	19.6	16.5	24.7





#33

Chrysene

Concen: 0.781 ng

RT: 21.403 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

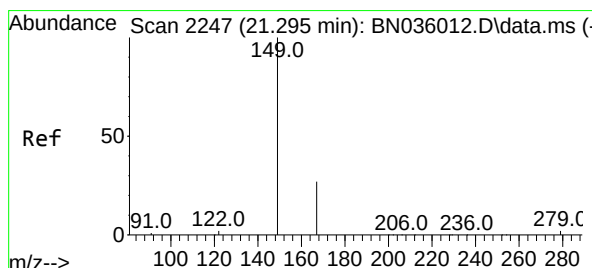
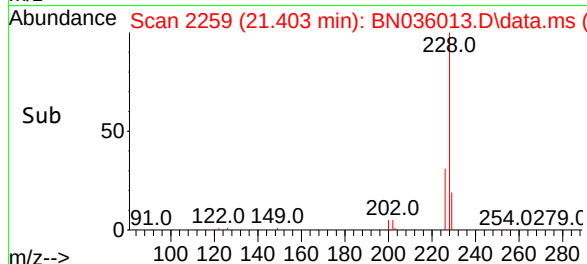
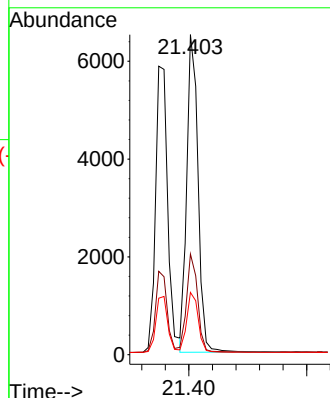
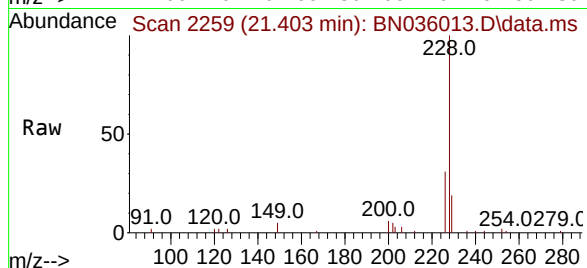
Tgt Ion:228 Resp: 8622

Ion Ratio Lower Upper

228 100

226 31.4 25.3 37.9

229 19.5 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.753 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

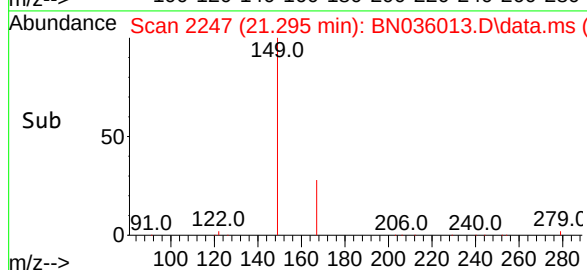
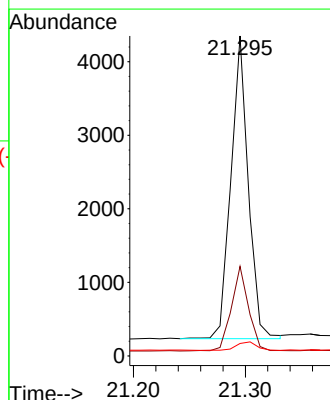
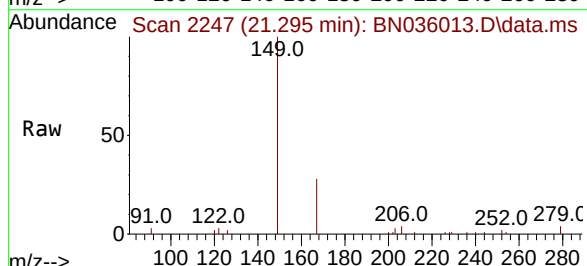
Tgt Ion:149 Resp: 4455

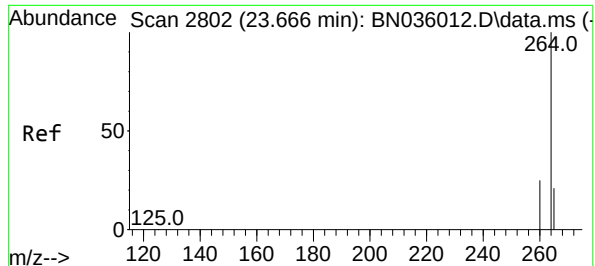
Ion Ratio Lower Upper

149 100

167 27.5 21.9 32.9

279 3.3 3.0 4.6

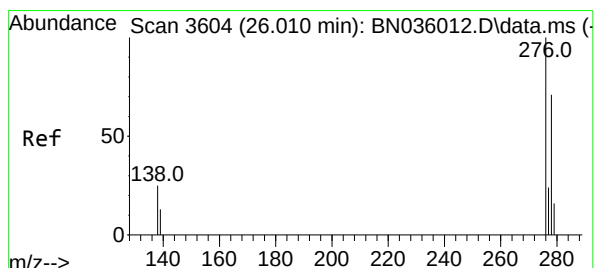
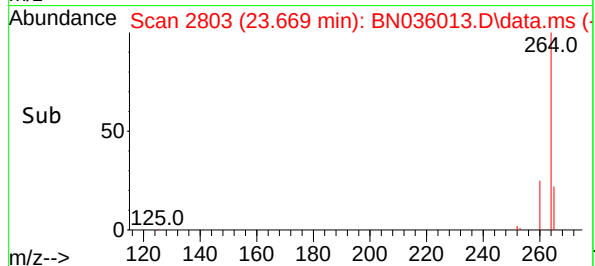
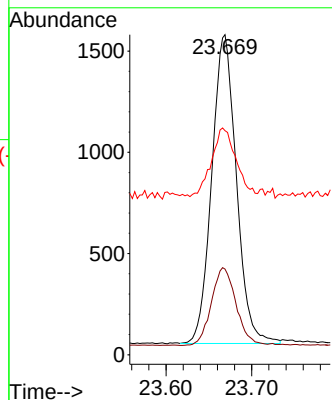
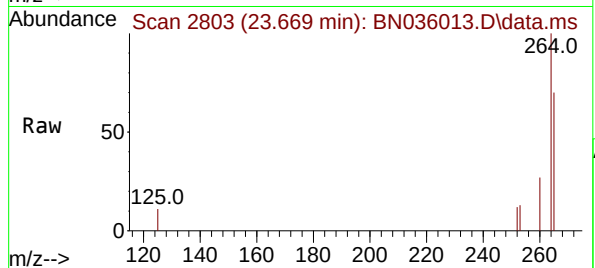




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.669 min Scan# 21
Delta R.T. 0.003 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

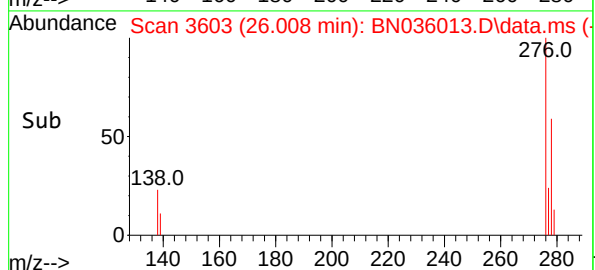
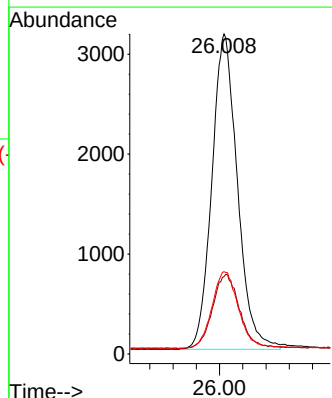
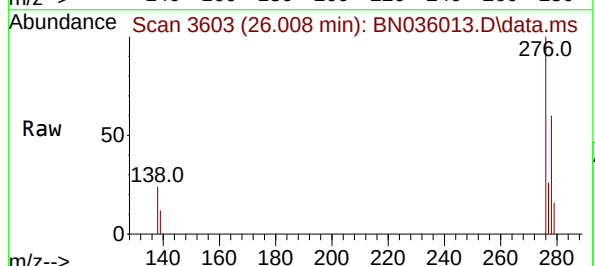
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

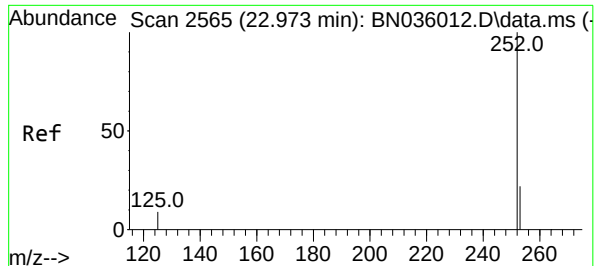
Tgt Ion:264 Resp: 3042
Ion Ratio Lower Upper
264 100
260 26.8 21.8 32.6
265 70.0 56.6 84.8



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.790 ng
RT: 26.008 min Scan# 3603
Delta R.T. -0.003 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Tgt Ion:276 Resp: 9645
Ion Ratio Lower Upper
276 100
138 24.7 19.9 29.9
277 25.4 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.786 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

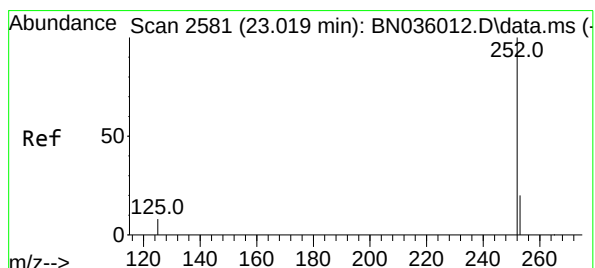
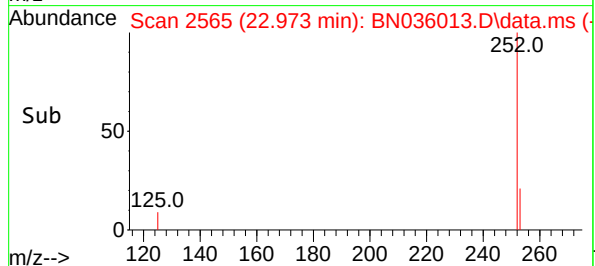
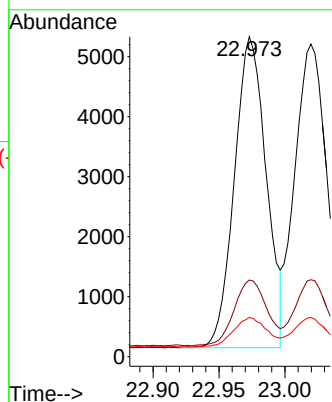
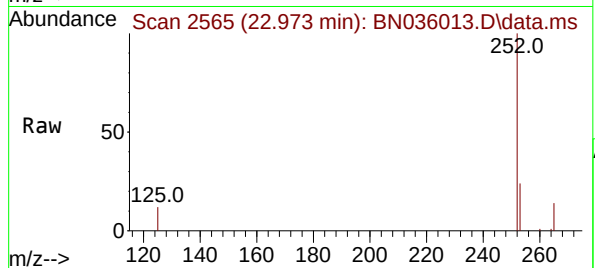
Tgt Ion:252 Resp: 8692

Ion Ratio Lower Upper

252 100

253 23.9 22.5 33.7

125 12.2 11.9 17.9



#38

Benzo(k)fluoranthene

Concen: 0.779 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

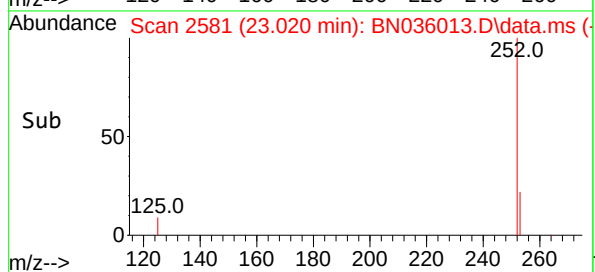
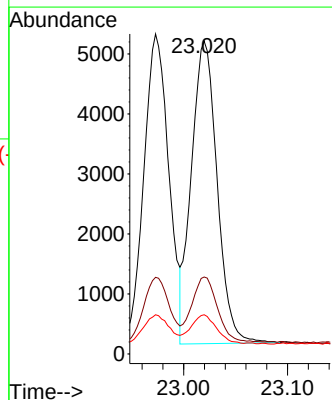
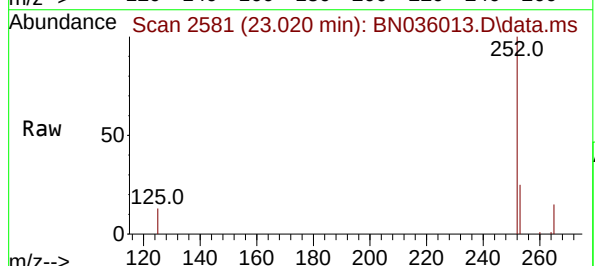
Tgt Ion:252 Resp: 8683

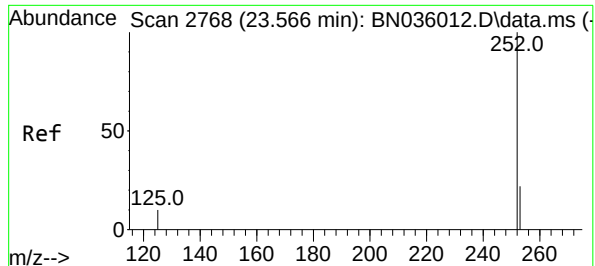
Ion Ratio Lower Upper

252 100

253 24.6 21.3 31.9

125 12.6 11.9 17.9





#39

Benzo(a)pyrene

Concen: 0.775 ng

RT: 23.566 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

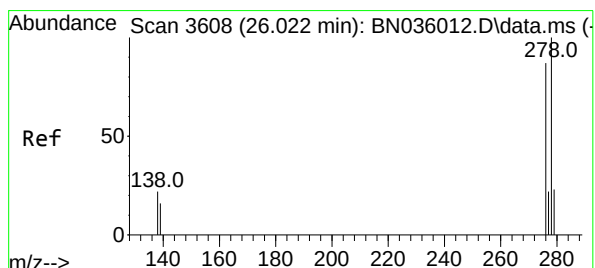
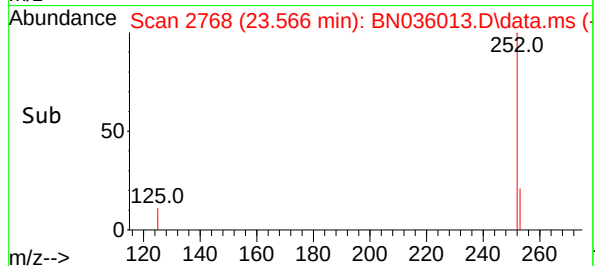
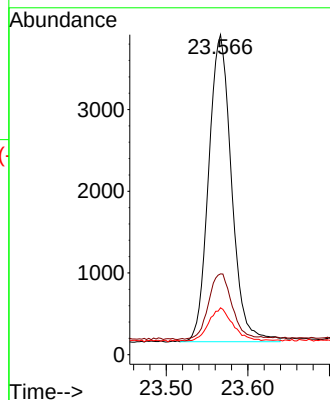
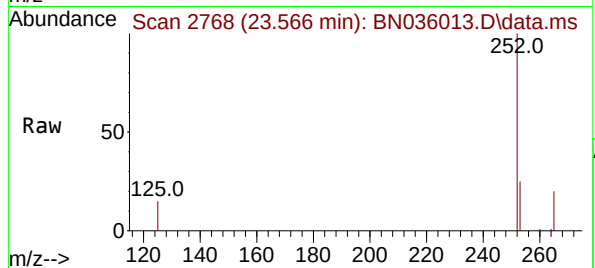
Tgt Ion:252 Resp: 7317

Ion Ratio Lower Upper

252 100

253 25.3 23.8 35.6

125 14.7 14.6 21.8



#40

Dibenzo(a,h)anthracene

Concen: 0.800 ng

RT: 26.022 min Scan# 3608

Delta R.T. 0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

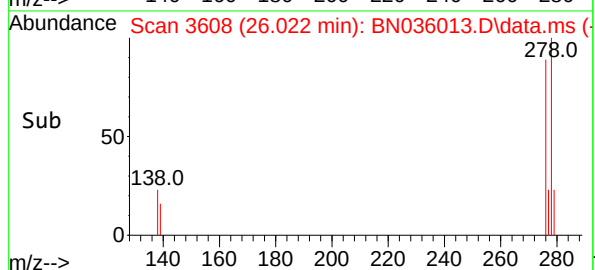
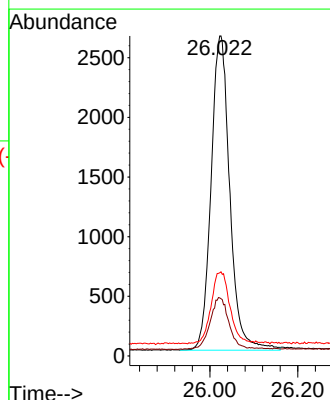
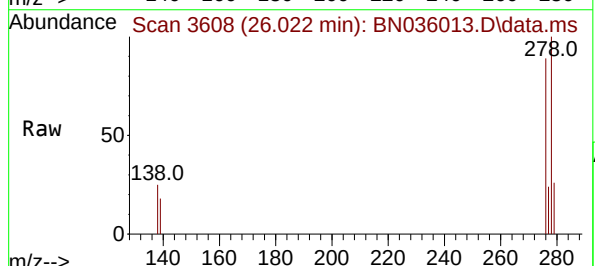
Tgt Ion:278 Resp: 7782

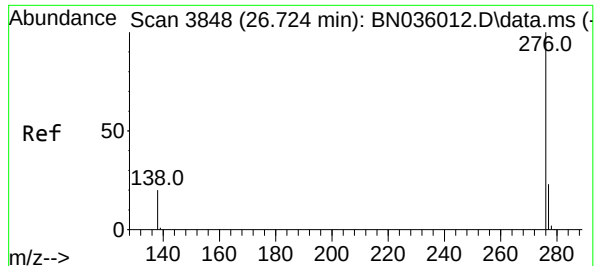
Ion Ratio Lower Upper

278 100

139 18.2 16.0 24.0

279 26.0 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.796 ng

RT: 26.718 min Scan# 3846

Delta R.T. -0.006 min

Lab File: BN036013.D

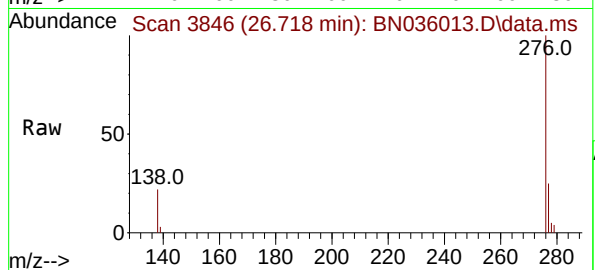
Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8



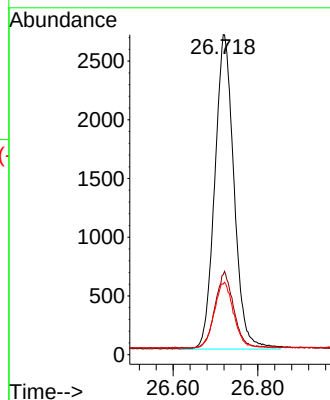
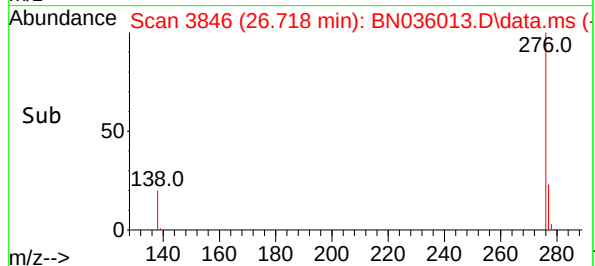
Tgt Ion:276 Resp: 8439

Ion Ratio Lower Upper

276 100

277 25.0 21.3 31.9

138 22.1 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036014.D
 Acq On : 22 Jan 2025 13:25
 Operator : RC/JU
 Sample : SSTDICC1.6
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC1.6

Quant Time: Jan 23 00:28:41 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

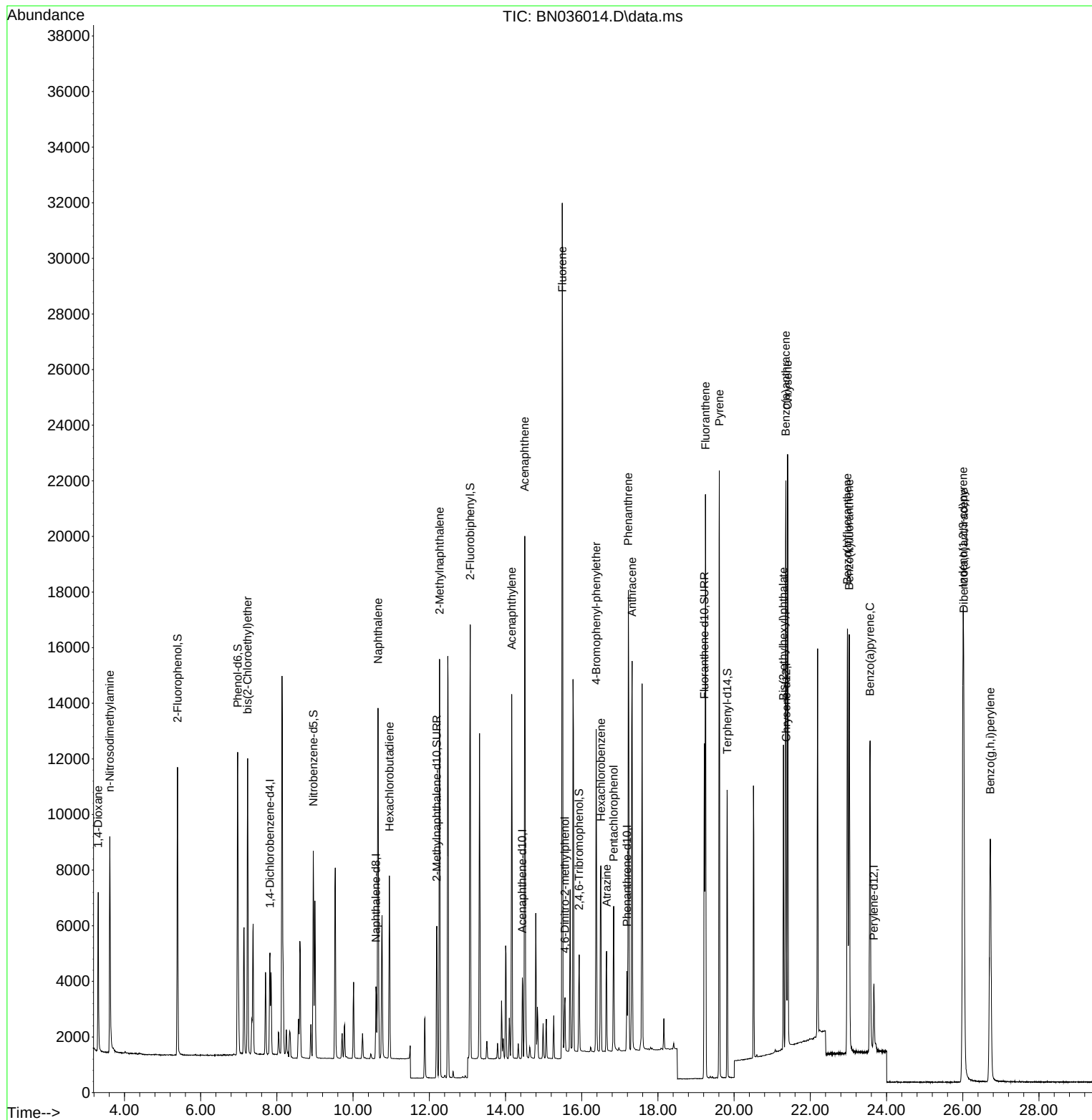
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1724	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3282	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	1710	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3501	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	2839	0.400	ng	0.00
35) Perylene-d12	23.666	264	3282	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.390	112	7183	1.602	ng	0.00
5) Phenol-d6	6.972	99	8484	1.611	ng	0.00
8) Nitrobenzene-d5	8.956	82	5214	1.683	ng	0.00
11) 2-Methylnaphthalene-d10	12.197	152	7300	1.636	ng	0.00
14) 2,4,6-Tribromophenol	15.932	330	1830	1.669	ng	0.00
15) 2-Fluorobiphenyl	13.073	172	12443	1.630	ng	0.00
27) Fluoranthene-d10	19.216	212	13423	1.480	ng	0.00
31) Terphenyl-d14	19.819	244	9765	1.656	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.310	88	3084	1.600	ng	Qvalue 95
3) n-Nitrosodimethylamine	3.614	42	5714	1.635	ng	# 98
6) bis(2-Chloroethyl)ether	7.232	93	6845	1.615	ng	100
9) Naphthalene	10.653	128	15537	1.630	ng	97
10) Hexachlorobutadiene	10.952	225	5090	1.653	ng	# 100
12) 2-Methylnaphthalene	12.268	142	9730	1.645	ng	99
16) Acenaphthylene	14.163	152	13268	1.636	ng	100
17) Acenaphthene	14.505	154	9155	1.649	ng	98
18) Fluorene	15.489	166	11896	1.710	ng	99
20) 4,6-Dinitro-2-methylph...	15.560	198	1416	1.735	ng	# 57
21) 4-Bromophenyl-phenylether	16.379	248	4105	1.646	ng	# 74
22) Hexachlorobenzene	16.503	284	5322	1.621	ng	98
23) Atrazine	16.652	200	3024	1.678	ng	# 88
24) Pentachlorophenol	16.838	266	2504	1.762	ng	99
25) Phenanthrene	17.223	178	17172	1.632	ng	99
26) Anthracene	17.322	178	15798	1.651	ng	99
28) Fluoranthene	19.248	202	18447	1.493	ng	99
30) Pyrene	19.610	202	18695	1.625	ng	99
32) Benzo(a)anthracene	21.358	228	17179	1.668	ng	98
33) Chrysene	21.402	228	17200	1.634	ng	98
34) Bis(2-ethylhexyl)phtha...	21.295	149	8981	1.592	ng	100
36) Indeno(1,2,3-cd)pyrene	26.007	276	21908	1.663	ng	99
37) Benzo(b)fluoranthene	22.973	252	19366	1.623	ng	# 90
38) Benzo(k)fluoranthene	23.020	252	19946	1.659	ng	# 92
39) Benzo(a)pyrene	23.566	252	16597	1.629	ng	# 88
40) Dibenzo(a,h)anthracene	26.025	278	17551	1.672	ng	93
41) Benzo(g,h,i)perylene	26.721	276	18875	1.650	ng	96

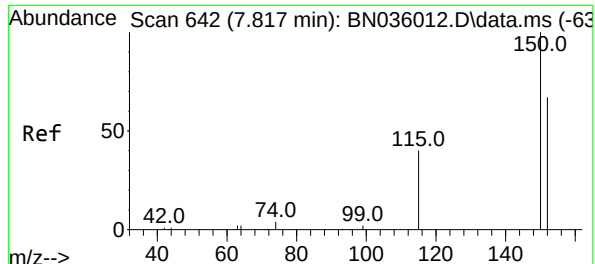
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036014.D
Acq On : 22 Jan 2025 13:25
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Jan 23 00:28:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

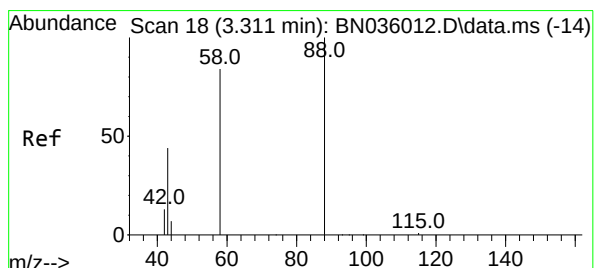
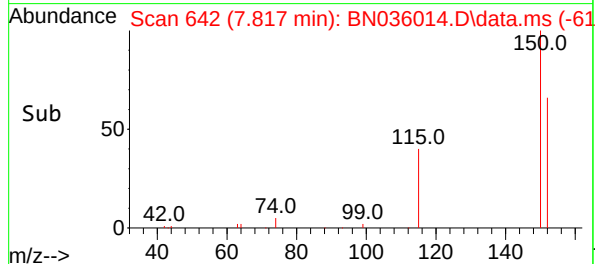
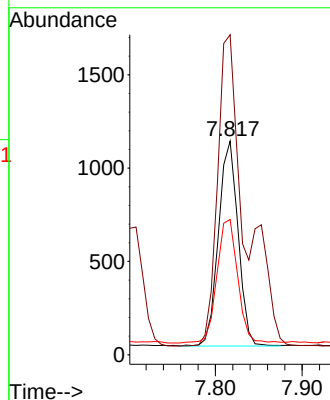
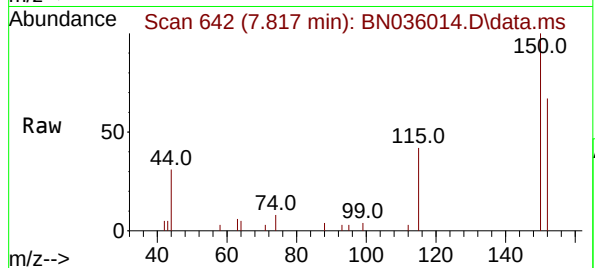




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

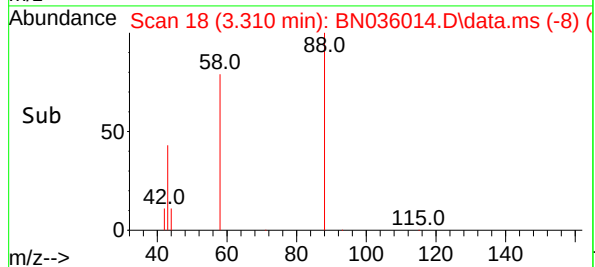
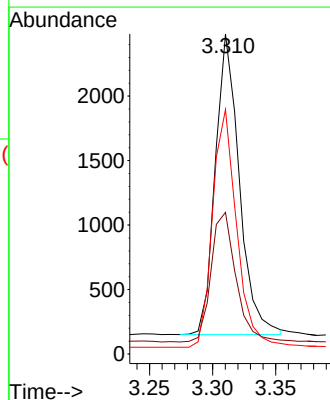
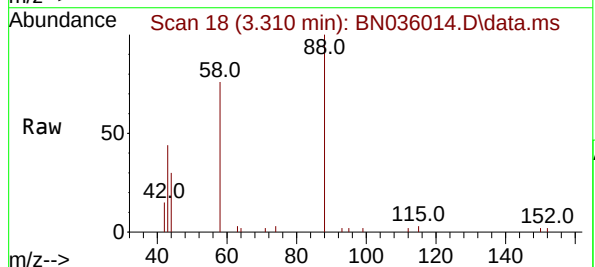
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

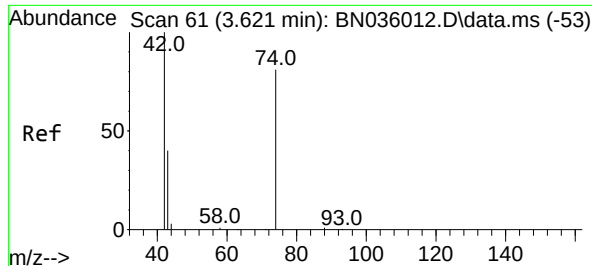
Tgt Ion:152 Resp: 1724
Ion Ratio Lower Upper
152 100
150 149.8 117.4 176.2
115 63.3 51.0 76.4



#2
1,4-Dioxane
Concen: 1.600 ng
RT: 3.310 min Scan# 18
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion: 88 Resp: 3084
Ion Ratio Lower Upper
88 100
43 44.6 38.5 57.7
58 79.4 66.6 99.8

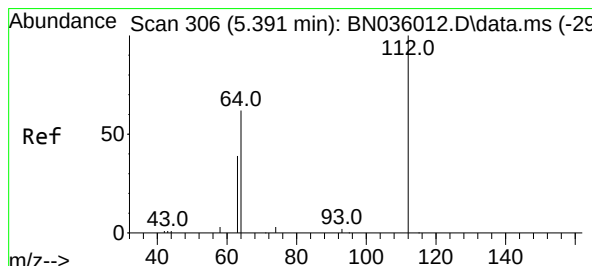
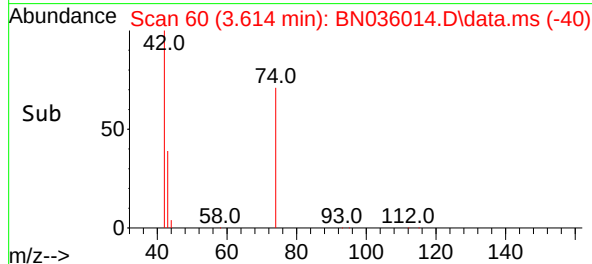
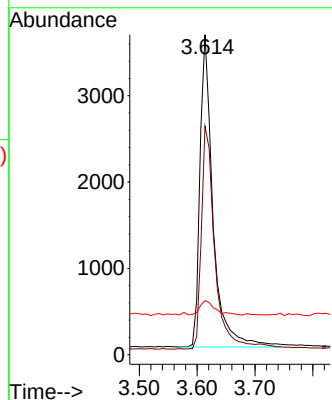
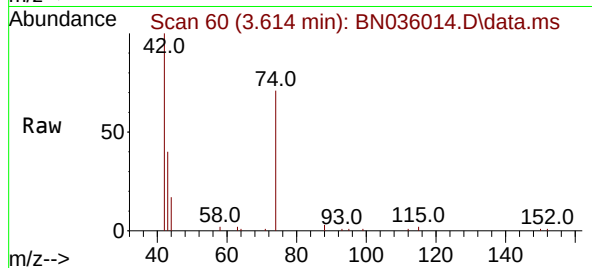




#3
n-Nitrosodimethylamine
Concen: 1.635 ng
RT: 3.614 min Scan# 60
Delta R.T. -0.008 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

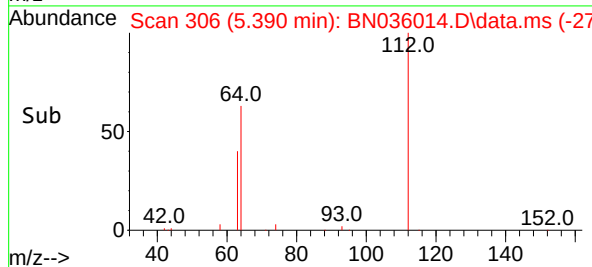
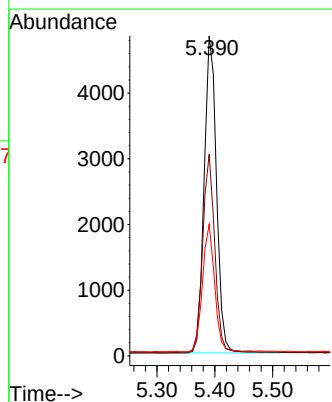
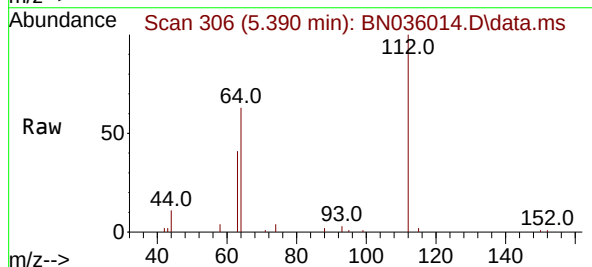
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

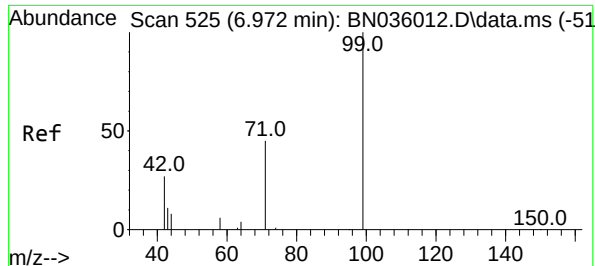
Tgt Ion: 42 Resp: 5714
Ion Ratio Lower Upper
42 100
74 73.7 58.1 87.1
44 5.4 6.2 9.4#



#4
2-Fluorophenol
Concen: 1.602 ng
RT: 5.390 min Scan# 306
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion: 112 Resp: 7183
Ion Ratio Lower Upper
112 100
64 61.4 50.0 75.0
63 39.4 30.7 46.1

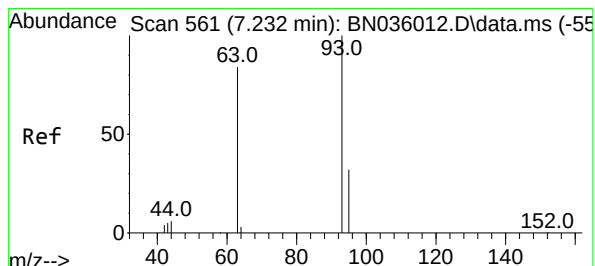
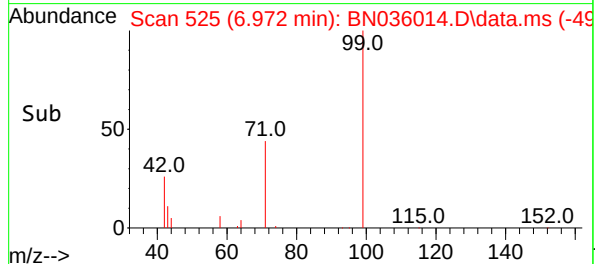
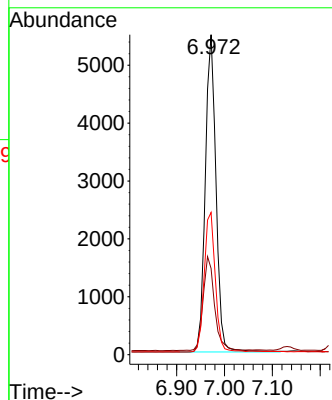
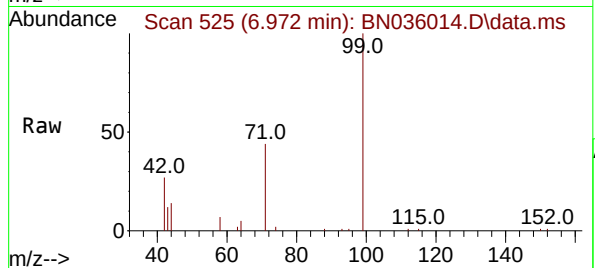




#5
Phenol-d6
Concen: 1.611 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

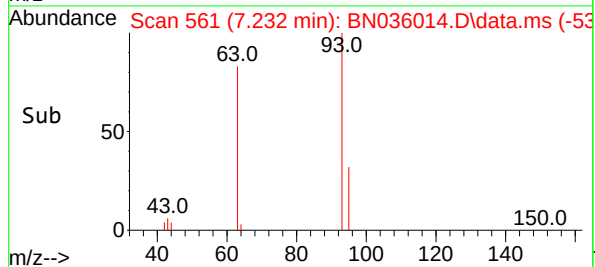
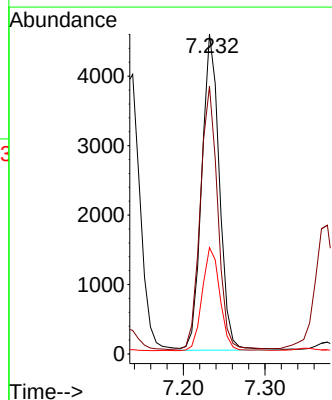
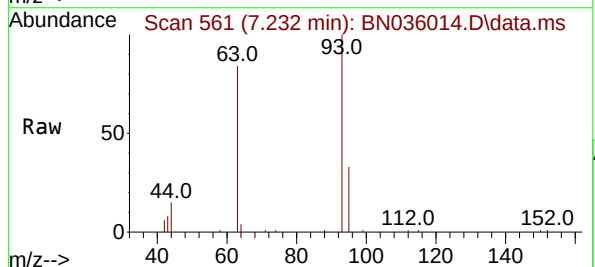
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

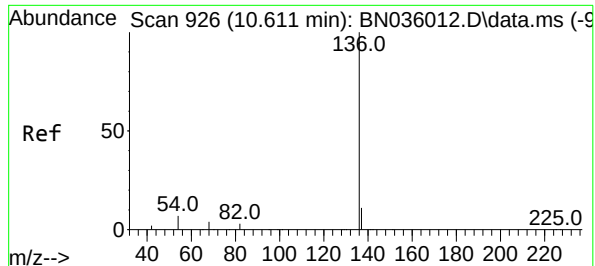
Tgt Ion: 99 Resp: 8484
Ion Ratio Lower Upper
99 100
42 32.0 26.8 40.2
71 45.6 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 1.615 ng
RT: 7.232 min Scan# 561
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion: 93 Resp: 6845
Ion Ratio Lower Upper
93 100
63 82.3 65.8 98.6
95 32.7 25.8 38.6

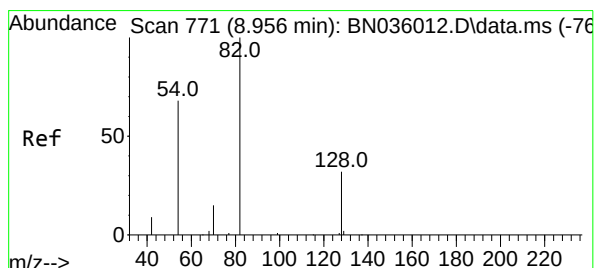
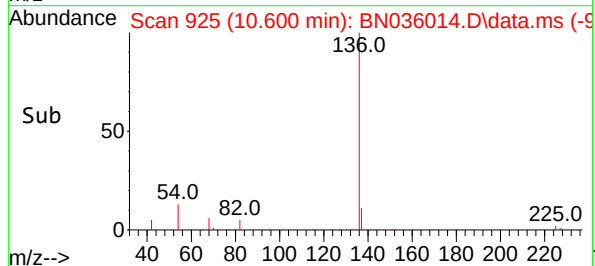
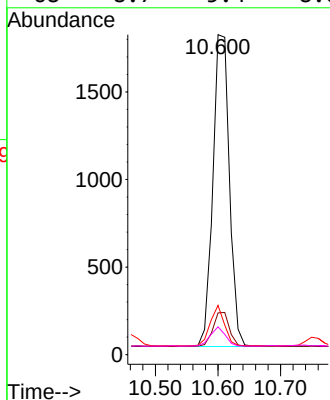
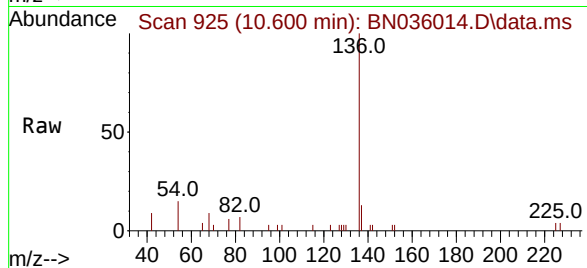




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

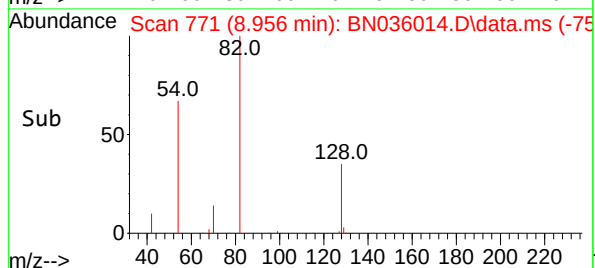
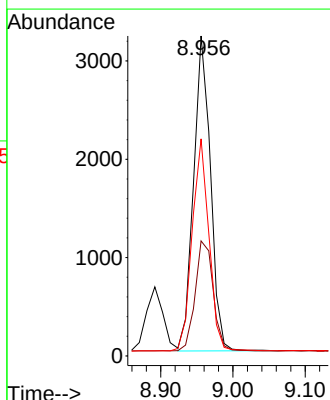
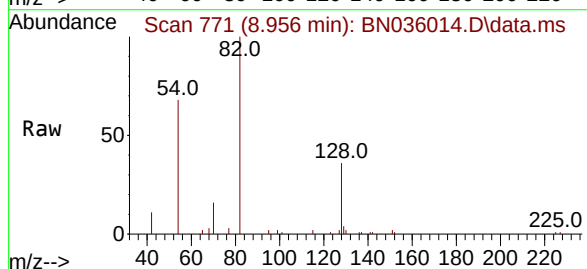
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

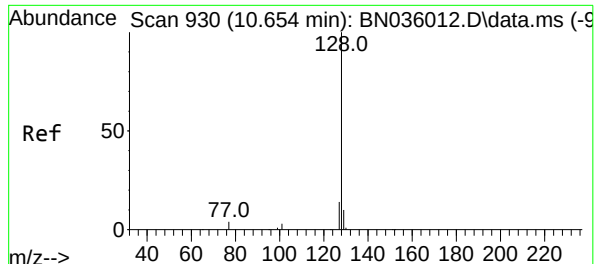
Tgt Ion:	136	Resp:	3282
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	15.4	7.7	11.5#
68	8.7	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 1.683 ng
RT: 8.956 min Scan# 771
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion:	82	Resp:	5214
Ion	Ratio	Lower	Upper
82	100		
128	36.0	28.8	43.2
54	67.9	55.8	83.8





#9

Naphthalene

Concen: 1.630 ng

RT: 10.653 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

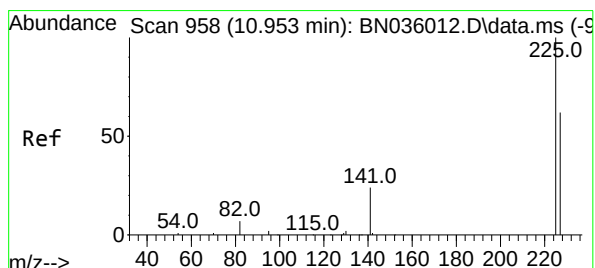
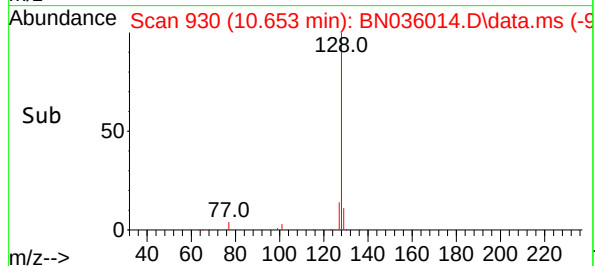
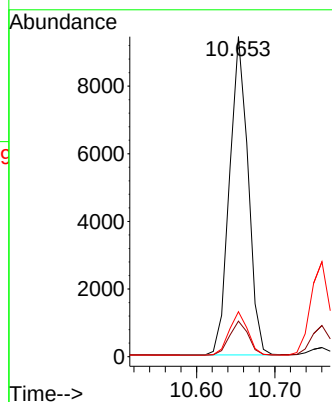
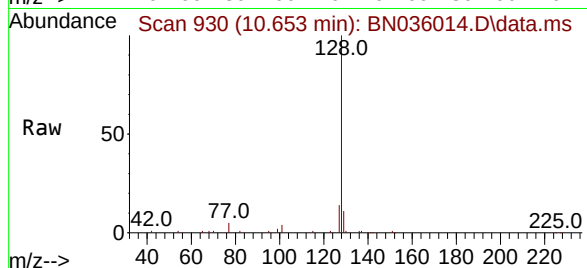
Tgt Ion:128 Resp: 15537

Ion Ratio Lower Upper

128 100

129 11.1 9.4 14.2

127 14.1 12.6 19.0



#10

Hexachlorobutadiene

Concen: 1.653 ng

RT: 10.952 min Scan# 958

Delta R.T. -0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

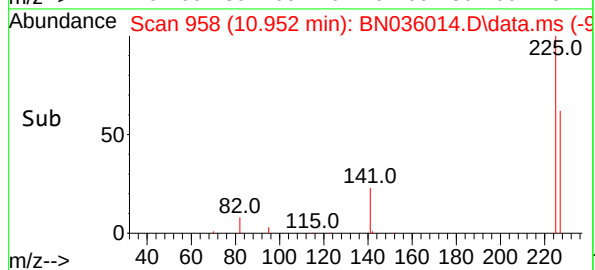
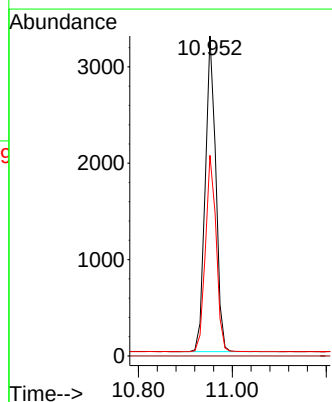
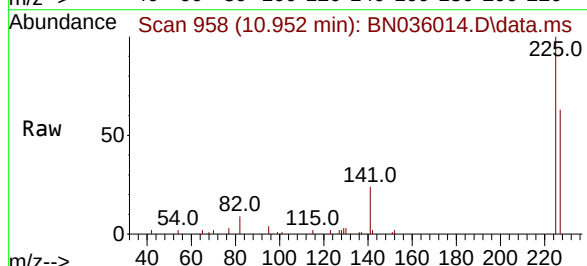
Tgt Ion:225 Resp: 5090

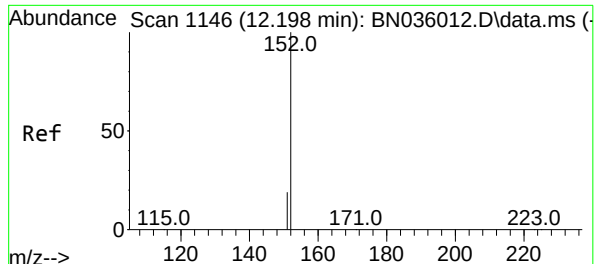
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.5 51.0 76.6

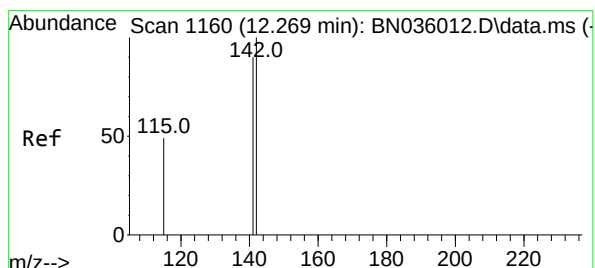
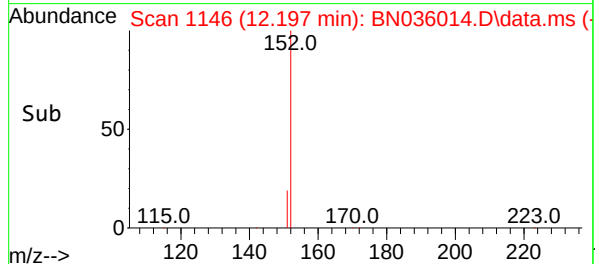
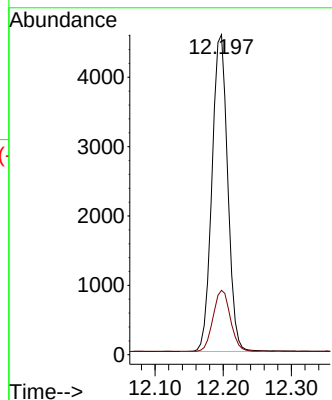
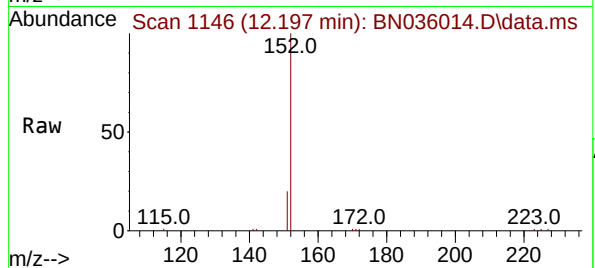




#11
2-Methylnaphthalene-d10
Concen: 1.636 ng
RT: 12.197 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

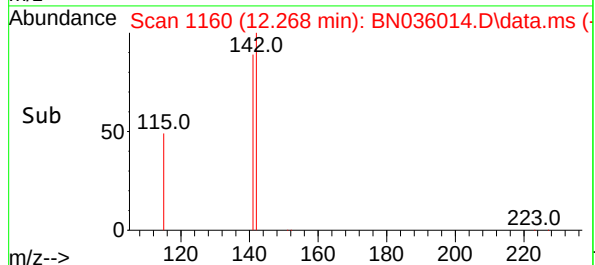
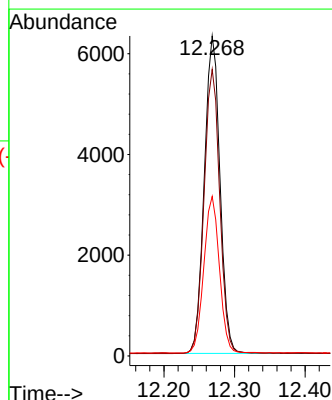
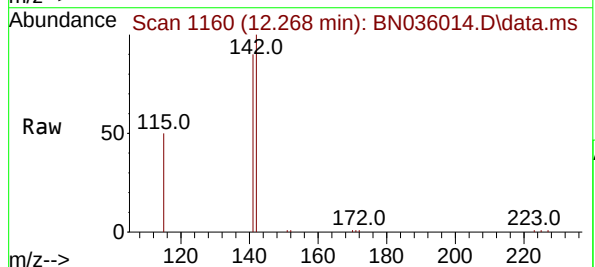
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

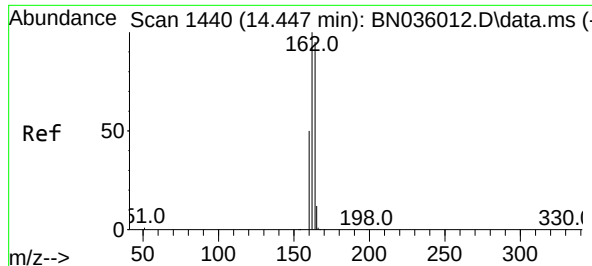
Tgt Ion:152 Resp: 7300
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#12
2-Methylnaphthalene
Concen: 1.645 ng
RT: 12.268 min Scan# 1160
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion:142 Resp: 9730
Ion Ratio Lower Upper
142 100
141 89.5 72.2 108.2
115 49.9 41.2 61.8

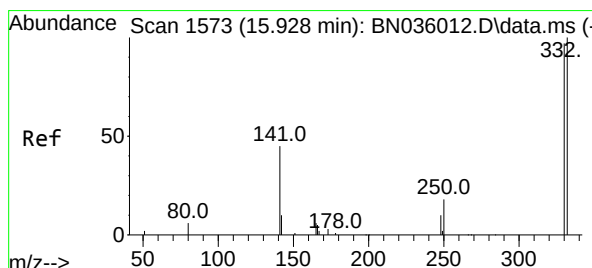
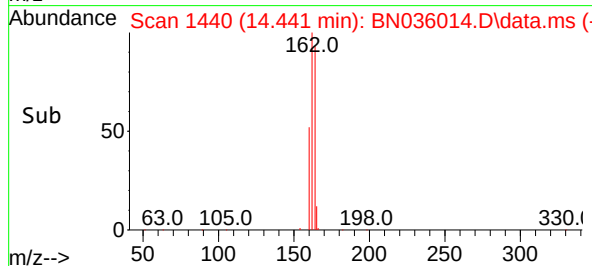
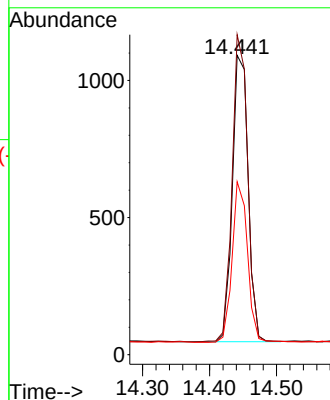
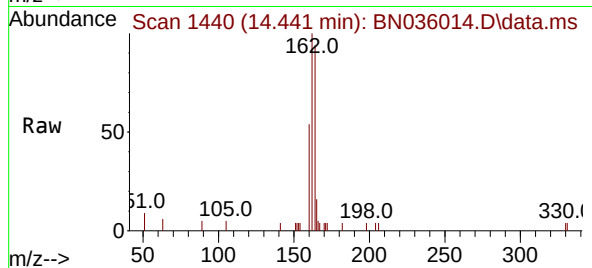




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

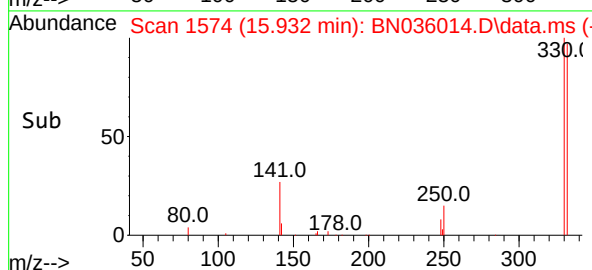
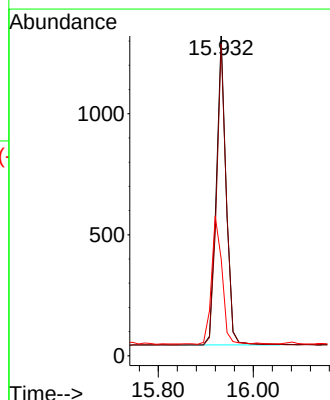
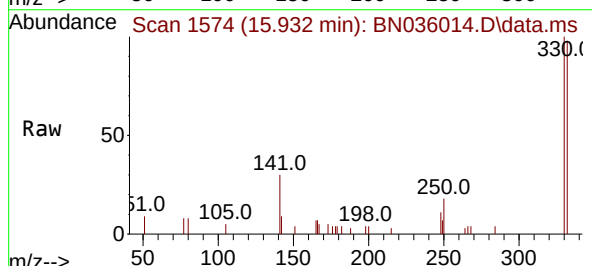
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

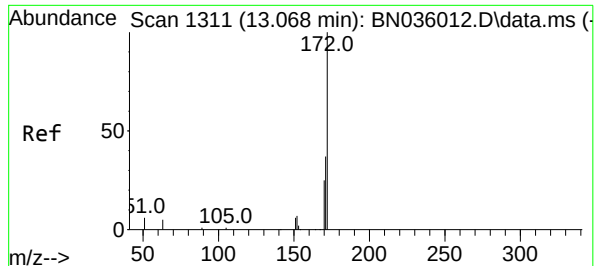
Tgt Ion:164 Resp: 1710
Ion Ratio Lower Upper
164 100
162 106.9 84.1 126.1
160 57.8 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 1.669 ng
RT: 15.932 min Scan# 1574
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion:330 Resp: 1830
Ion Ratio Lower Upper
330 100
332 96.1 81.0 121.4
141 44.4 36.7 55.1





#15

2-Fluorobiphenyl

Concen: 1.630 ng

RT: 13.073 min Scan# 1311

Delta R.T. 0.005 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

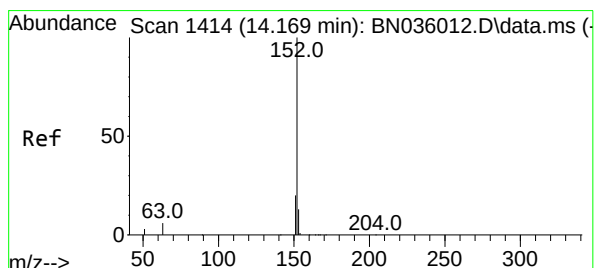
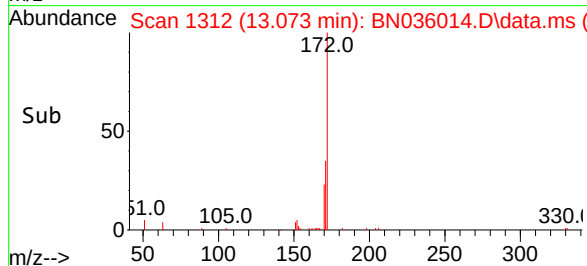
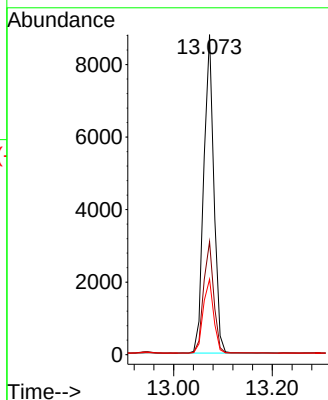
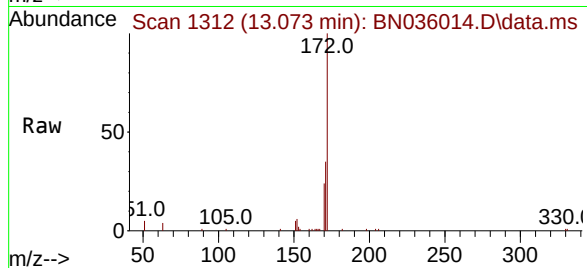
Tgt Ion:172 Resp: 12443

Ion Ratio Lower Upper

172 100

171 35.3 30.9 46.3

170 23.6 21.2 31.8



#16

Acenaphthylene

Concen: 1.636 ng

RT: 14.163 min Scan# 1414

Delta R.T. -0.006 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

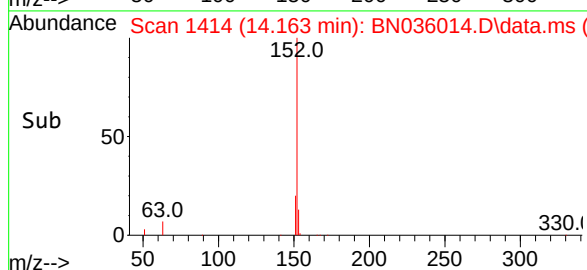
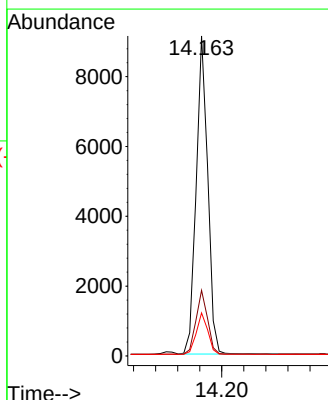
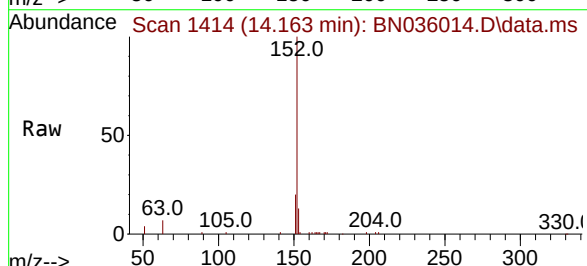
Tgt Ion:152 Resp: 13268

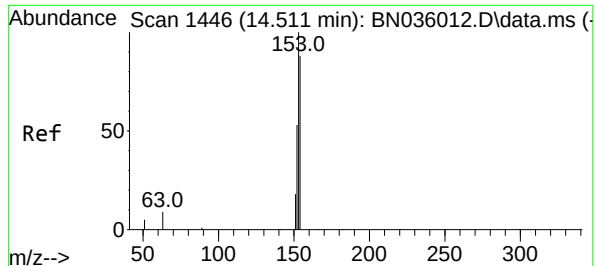
Ion Ratio Lower Upper

152 100

151 20.2 16.2 24.2

153 13.2 10.4 15.6

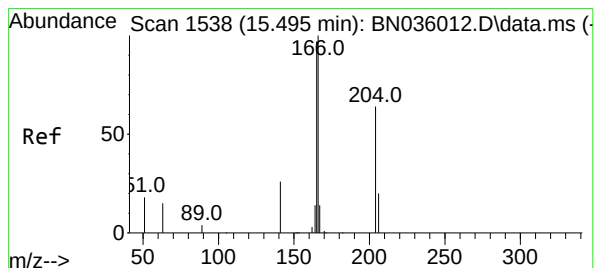
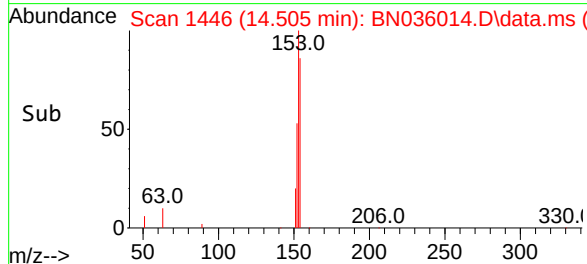
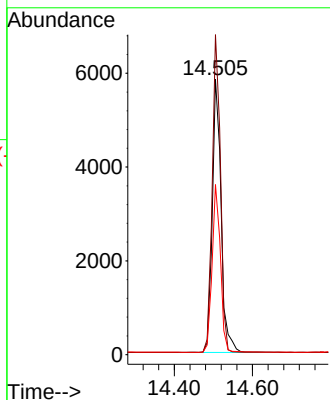
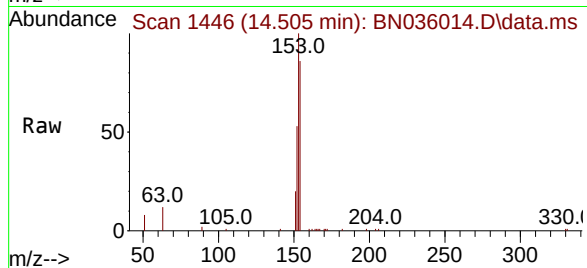




#17
Acenaphthene
Concen: 1.649 ng
RT: 14.505 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

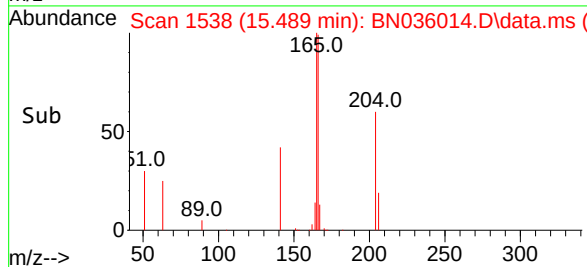
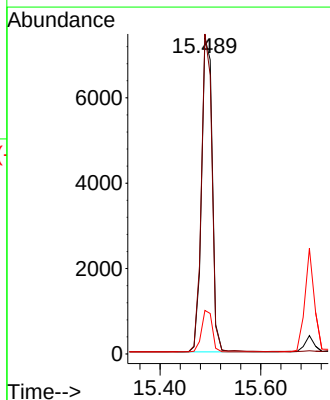
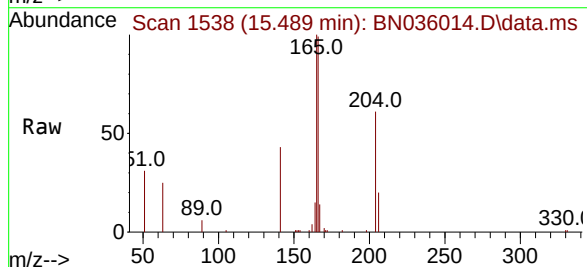
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

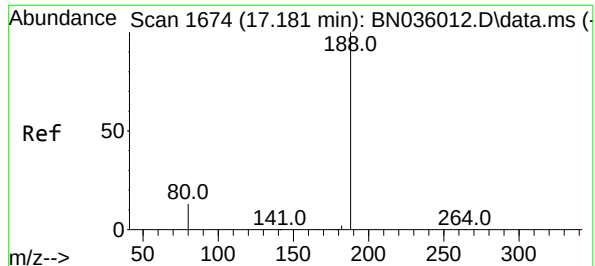
Tgt Ion	Ratio	Lower	Upper
154	100		
153	108.8	88.9	133.3
152	58.1	48.1	72.1



#18
Fluorene
Concen: 1.710 ng
RT: 15.489 min Scan# 1538
Delta R.T. -0.006 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion	Ratio	Lower	Upper
166	100		
165	97.5	78.5	117.7
167	13.1	10.7	16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

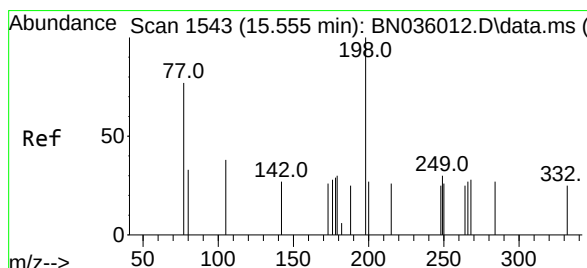
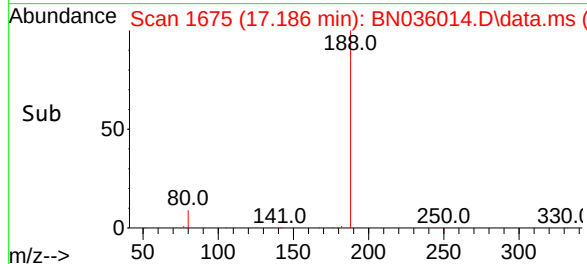
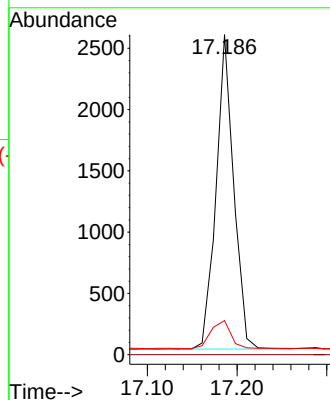
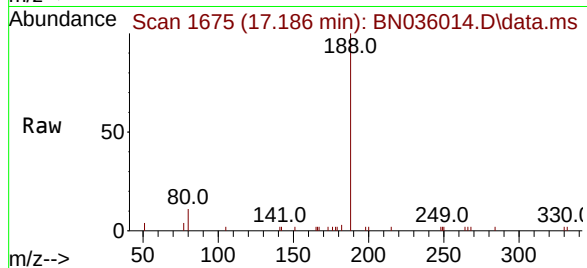
Tgt Ion:188 Resp: 3501

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.6 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 1.735 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

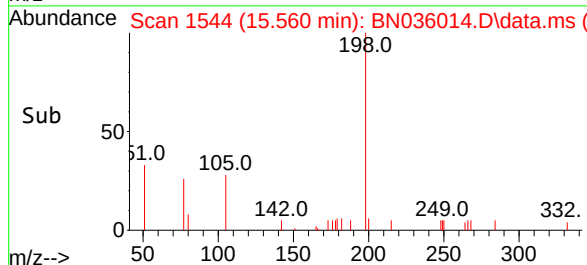
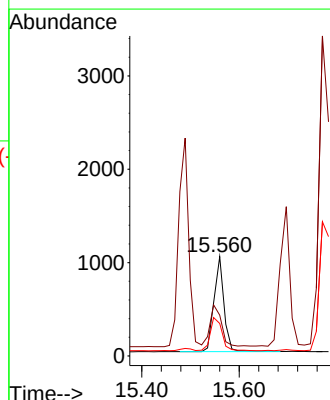
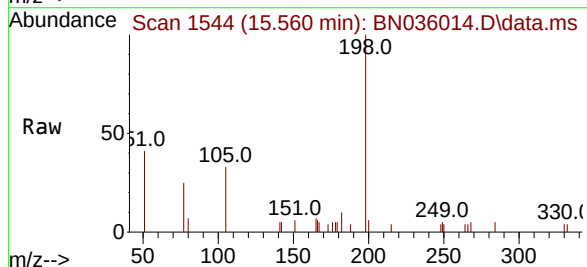
Tgt Ion:198 Resp: 1416

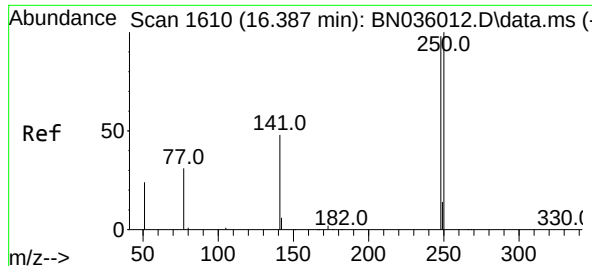
Ion Ratio Lower Upper

198 100

51 41.1 68.1 102.1#

105 32.7 46.5 69.7#

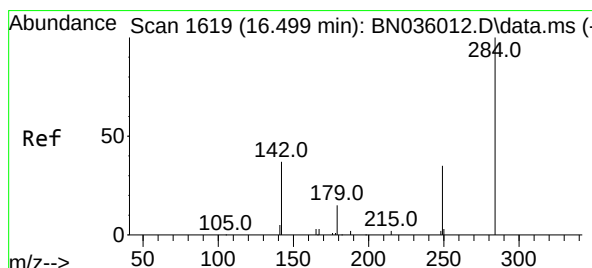
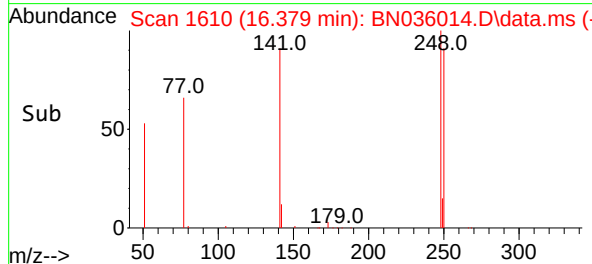
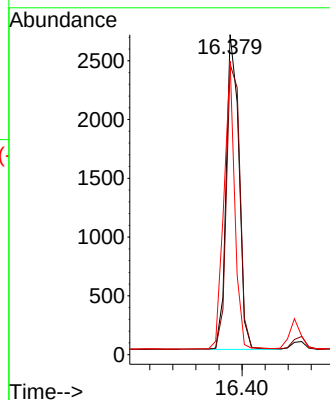
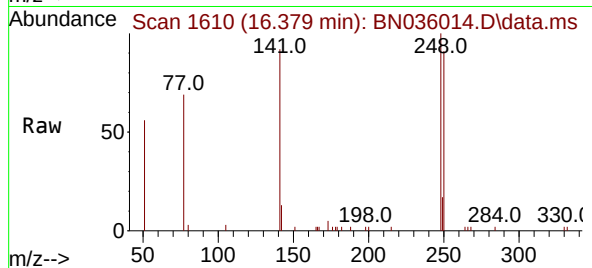




#21
4-Bromophenyl-phenylether
Concen: 1.646 ng
RT: 16.379 min Scan# 1610
Delta R.T. -0.008 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

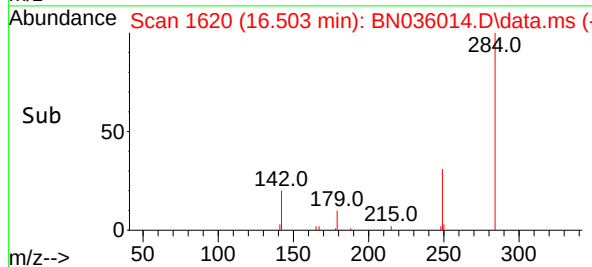
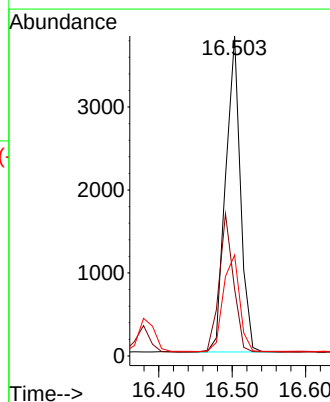
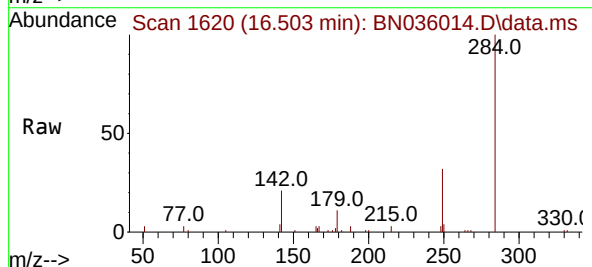
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

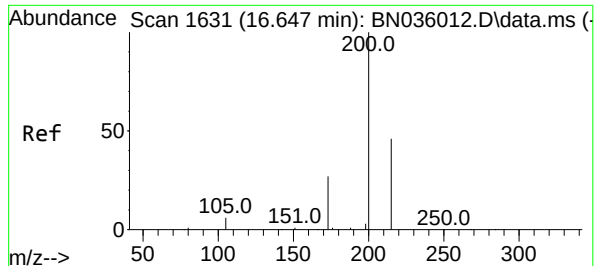
Tgt Ion	Ratio	Lower	Upper
248	100		
250	90.8	81.5	122.3
141	91.7	41.8	62.6



#22
Hexachlorobenzene
Concen: 1.621 ng
RT: 16.503 min Scan# 1620
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion	Ratio	Lower	Upper
284	100		
142	42.4	33.6	50.4
249	33.8	28.8	43.2

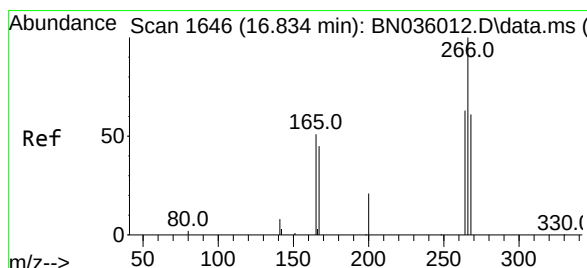
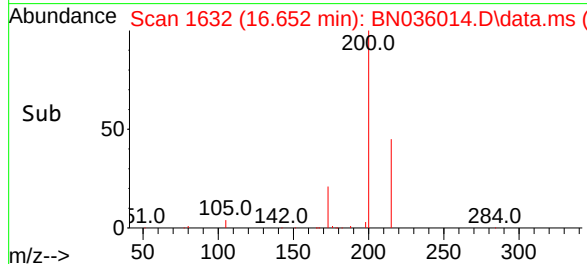
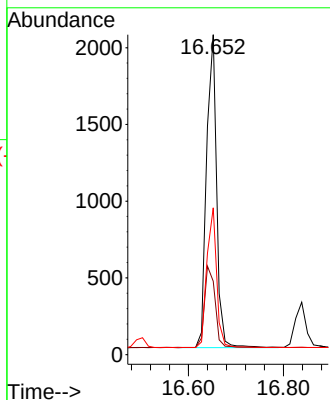
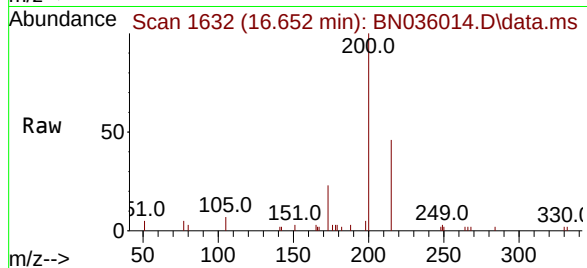




#23
Atrazine
Concen: 1.678 ng
RT: 16.652 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

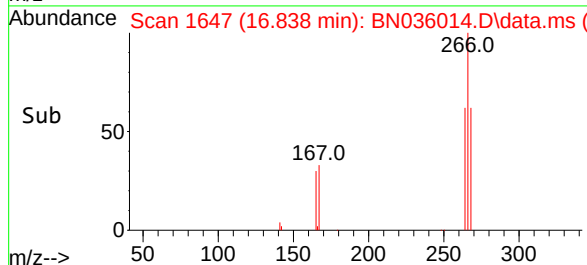
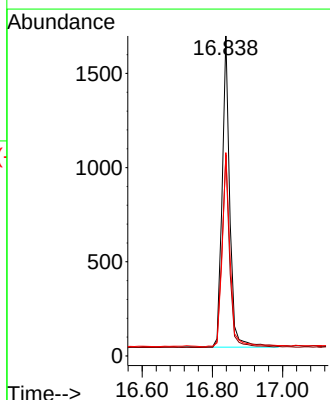
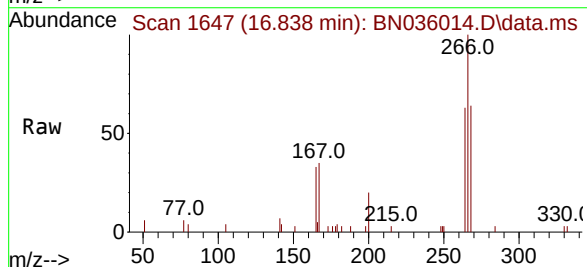
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

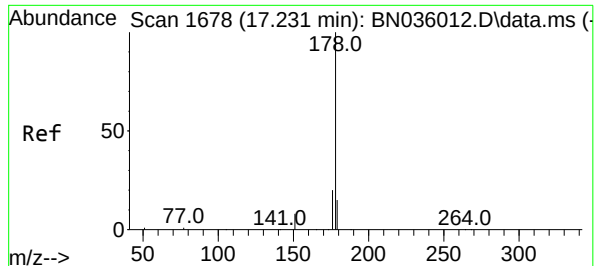
Tgt Ion:200 Resp: 3024
Ion Ratio Lower Upper
200 100
173 22.9 26.6 40.0#
215 45.9 40.6 61.0



#24
Pentachlorophenol
Concen: 1.762 ng
RT: 16.838 min Scan# 1647
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion:266 Resp: 2504
Ion Ratio Lower Upper
266 100
264 61.9 48.2 72.2
268 64.8 51.6 77.4

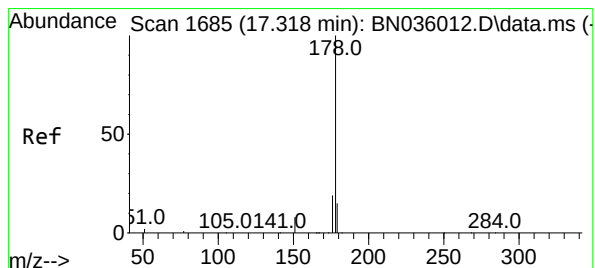
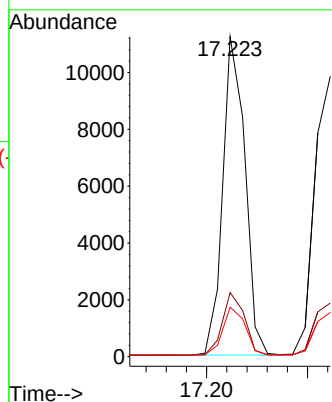
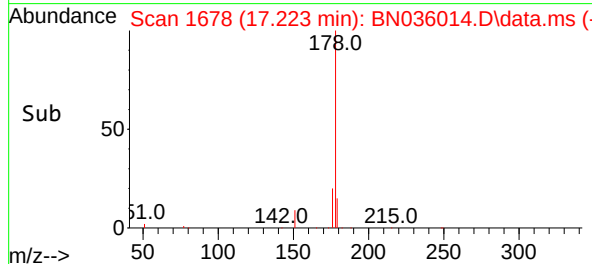
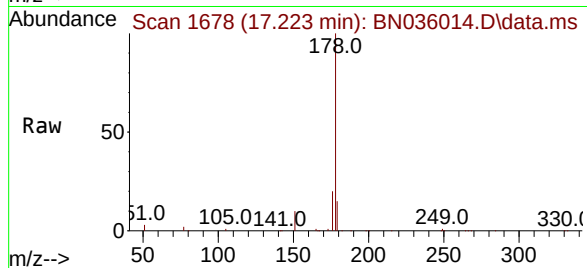




#25
Phenanthrene
Concen: 1.632 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.008 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

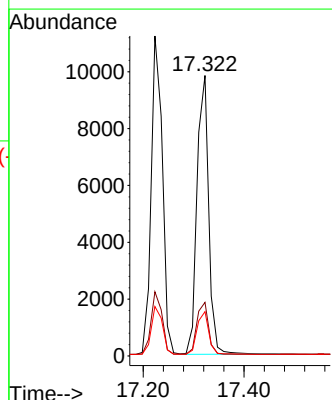
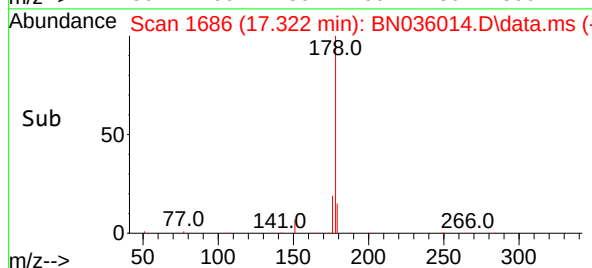
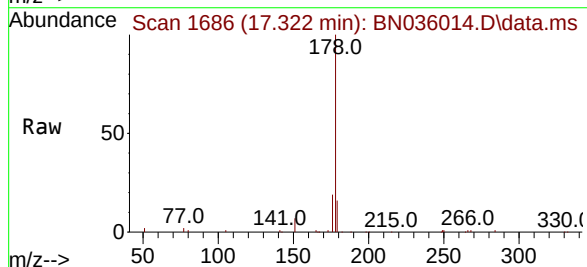
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

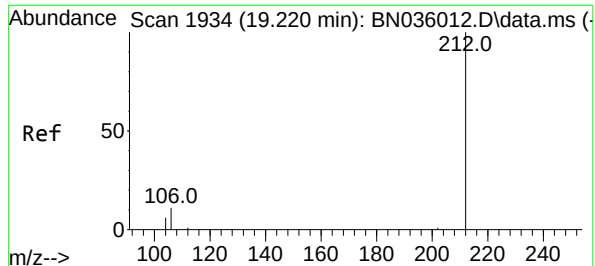
Tgt Ion:178 Resp: 17172
Ion Ratio Lower Upper
178 100
176 19.6 16.0 24.0
179 15.2 12.4 18.6



#26
Anthracene
Concen: 1.651 ng
RT: 17.322 min Scan# 1686
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion:178 Resp: 15798
Ion Ratio Lower Upper
178 100
176 18.9 15.4 23.2
179 15.2 12.0 18.0





#27

Fluoranthene-d10

Concen: 1.480 ng

RT: 19.216 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

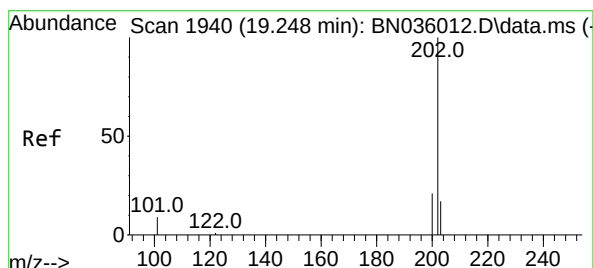
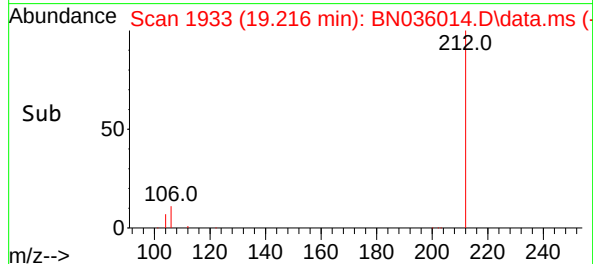
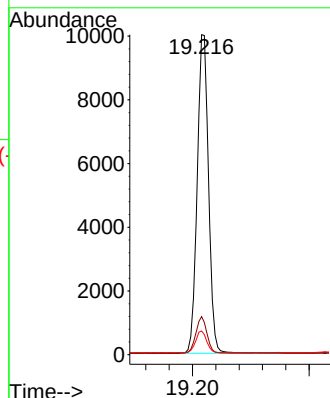
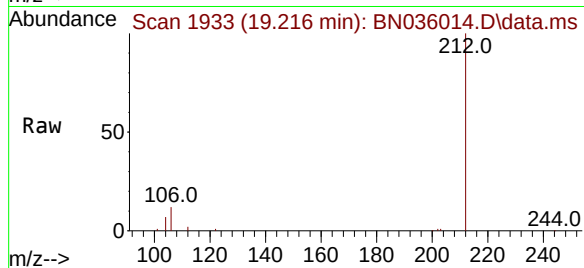
Tgt Ion:212 Resp: 13423

Ion Ratio Lower Upper

212 100

106 11.1 9.7 14.5

104 6.6 6.0 9.0



#28

Fluoranthene

Concen: 1.493 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

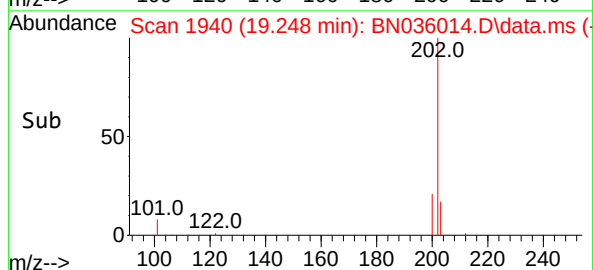
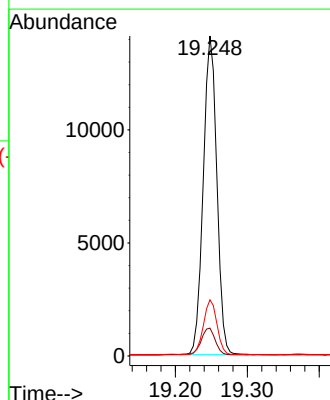
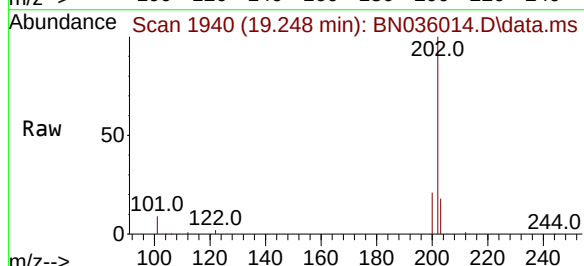
Tgt Ion:202 Resp: 18447

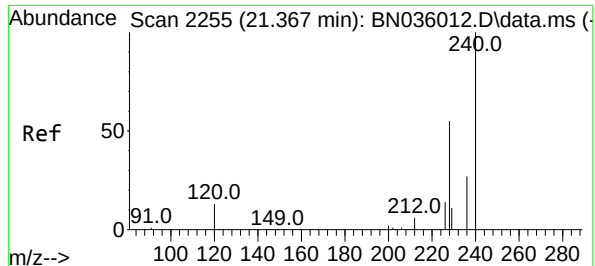
Ion Ratio Lower Upper

202 100

101 8.9 7.6 11.4

203 17.1 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

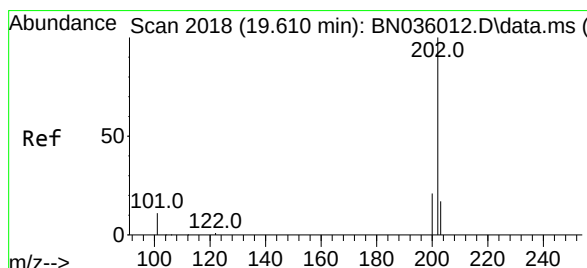
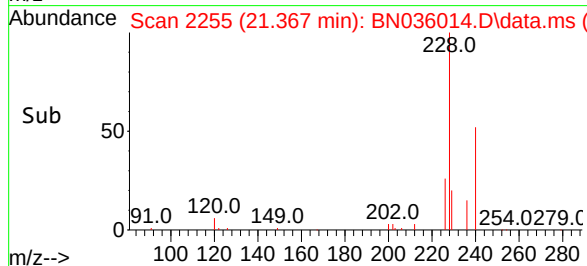
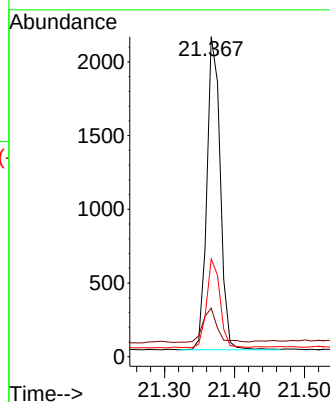
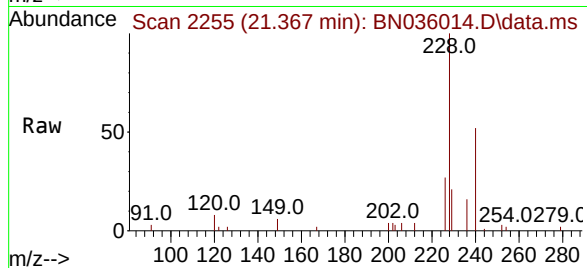
Tgt Ion:240 Resp: 2839

Ion Ratio Lower Upper

240 100

120 15.2 13.9 20.9

236 30.5 23.7 35.5



#30

Pyrene

Concen: 1.625 ng

RT: 19.610 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

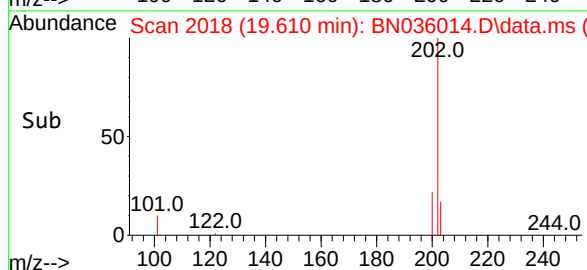
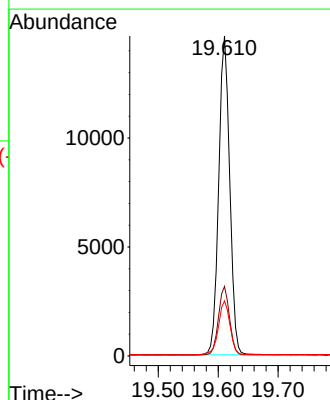
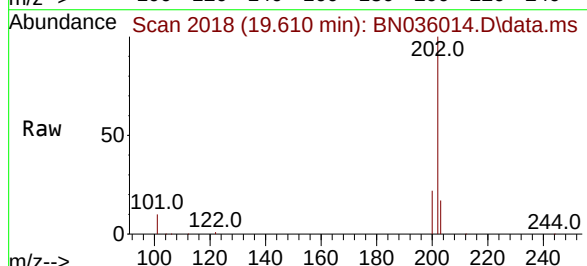
Tgt Ion:202 Resp: 18695

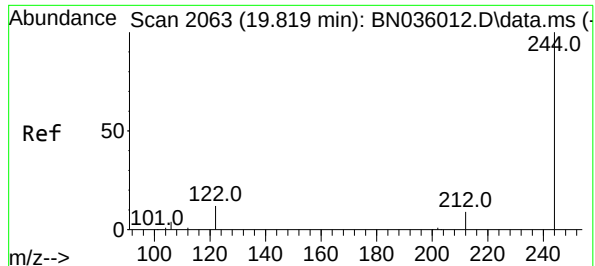
Ion Ratio Lower Upper

202 100

200 21.5 17.0 25.4

203 17.7 14.4 21.6

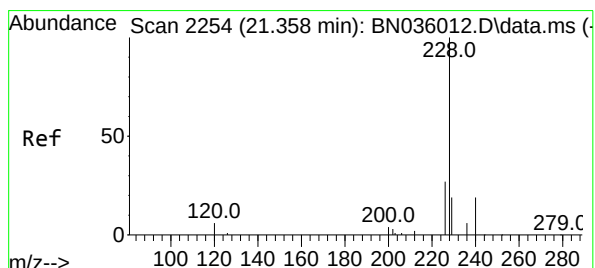
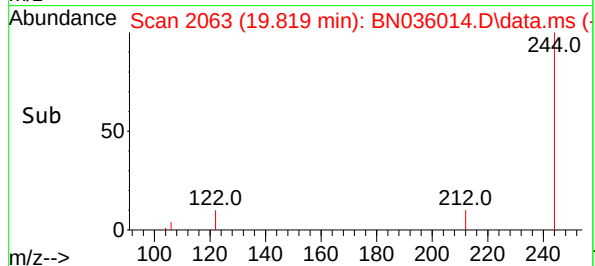
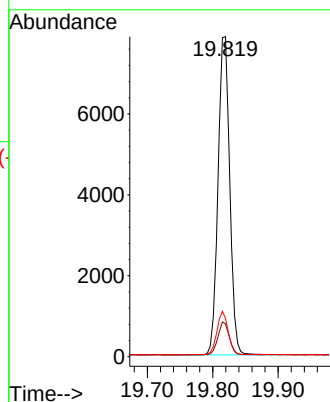
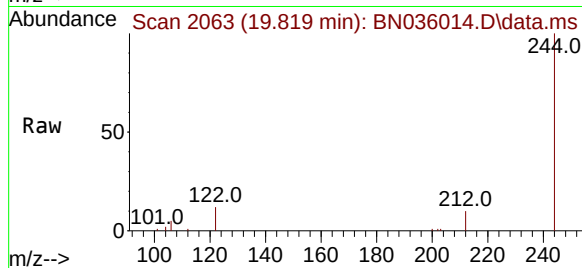




#31
Terphenyl-d14
Concen: 1.656 ng
RT: 19.819 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

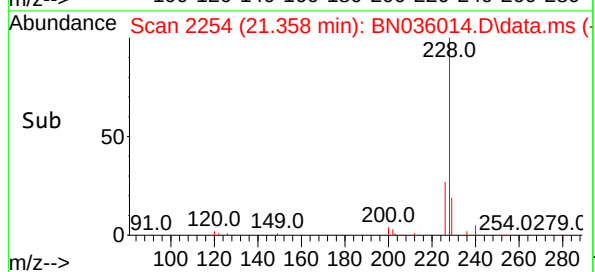
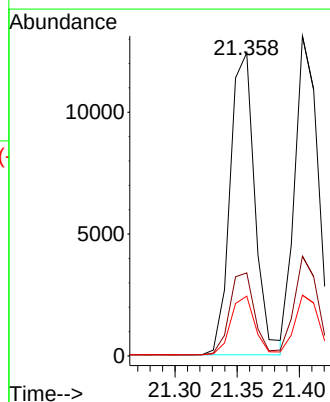
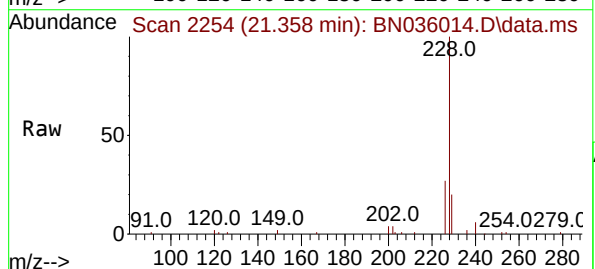
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

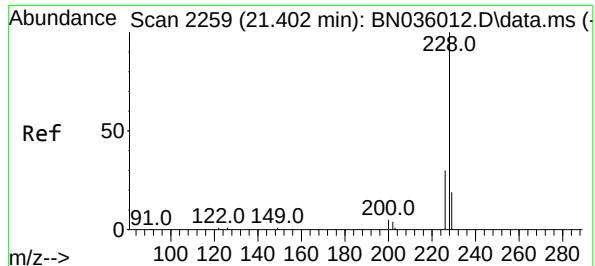
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.3	9.1	13.7
122	12.0	11.3	16.9



#32
Benzo(a)anthracene
Concen: 1.668 ng
RT: 21.358 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.4	22.6	34.0
229	19.7	16.5	24.7





#33

Chrysene

Concen: 1.634 ng

RT: 21.402 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

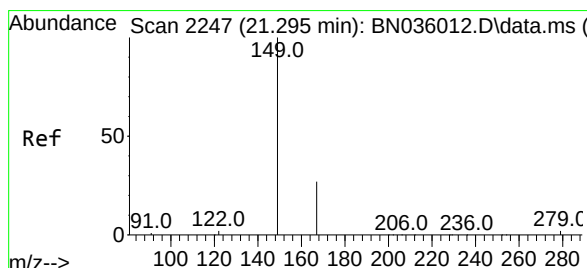
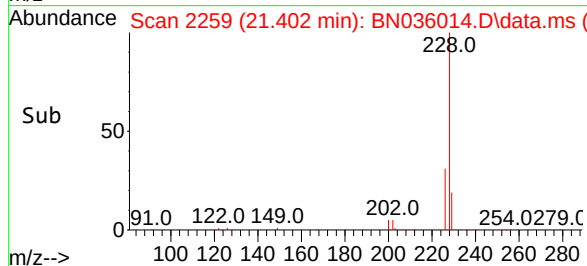
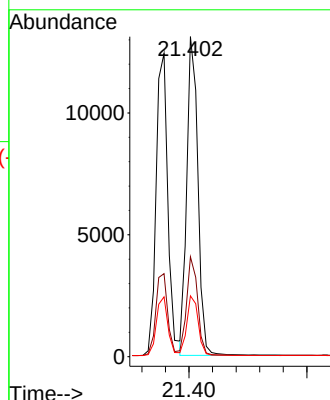
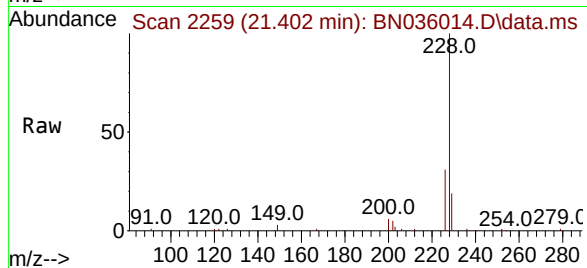
Tgt Ion:228 Resp: 17200

Ion Ratio Lower Upper

228 100

226 31.2 25.3 37.9

229 19.0 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.592 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

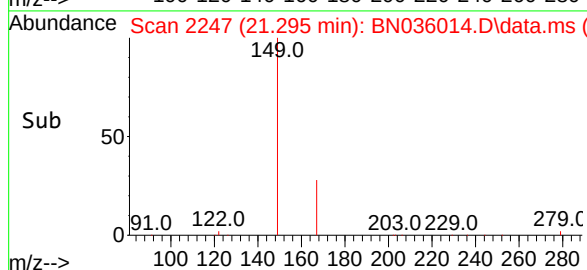
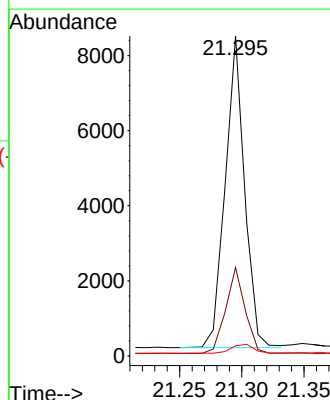
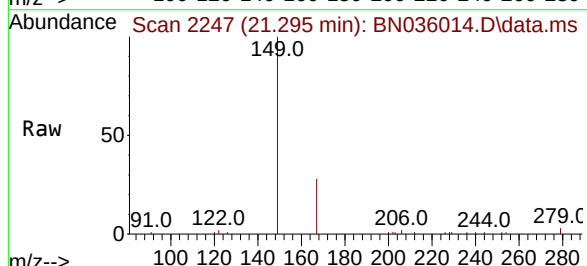
Tgt Ion:149 Resp: 8981

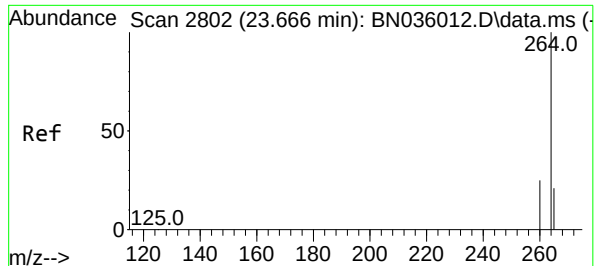
Ion Ratio Lower Upper

149 100

167 27.6 21.9 32.9

279 3.3 3.0 4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.666 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

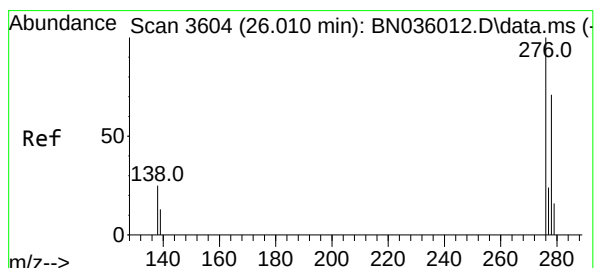
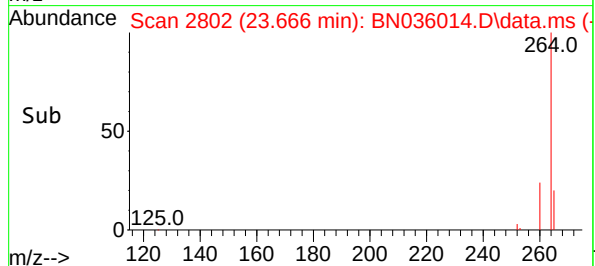
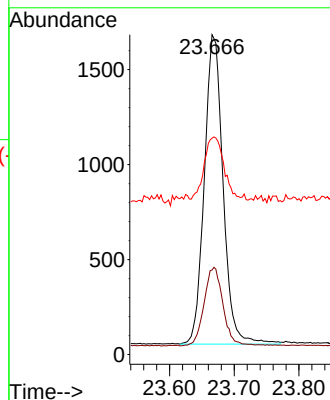
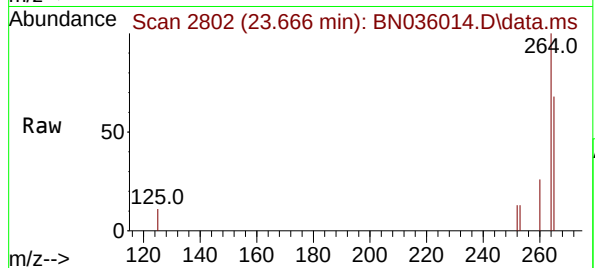
Tgt Ion:264 Resp: 3282

Ion Ratio Lower Upper

264 100

260 26.4 21.8 32.6

265 67.6 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 1.663 ng

RT: 26.007 min Scan# 3603

Delta R.T. -0.003 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

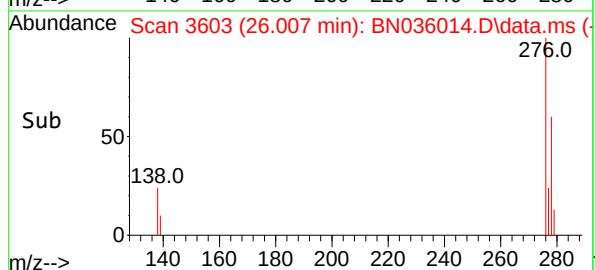
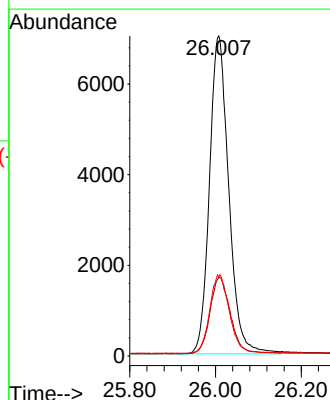
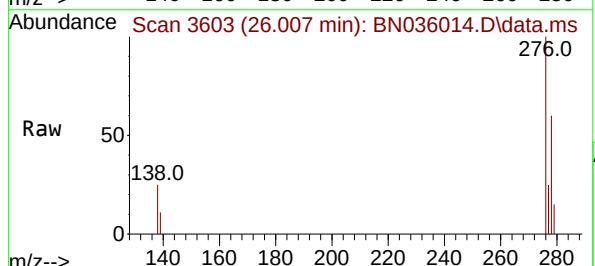
Tgt Ion:276 Resp: 21908

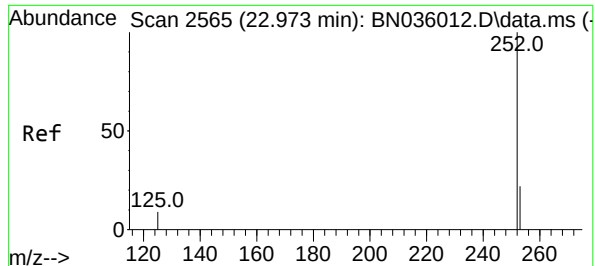
Ion Ratio Lower Upper

276 100

138 25.0 19.9 29.9

277 25.4 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 1.623 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

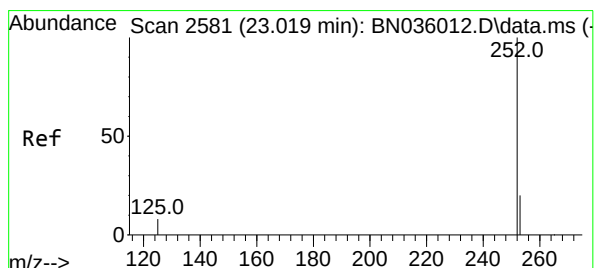
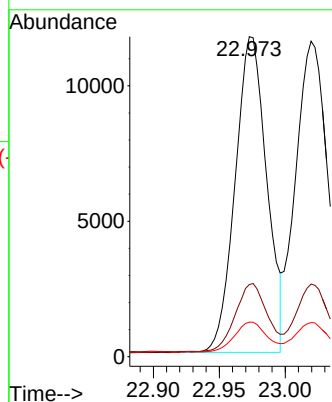
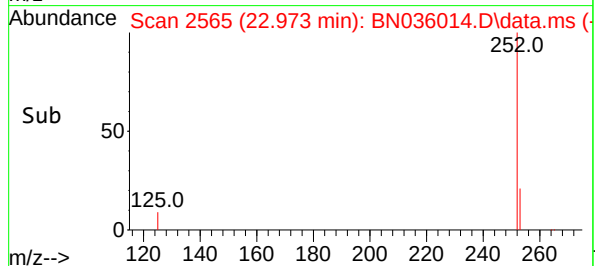
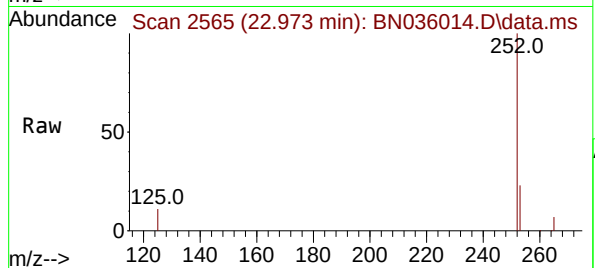
Tgt Ion:252 Resp: 19366

Ion Ratio Lower Upper

252 100

253 22.6 22.5 33.7

125 10.8 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 1.659 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

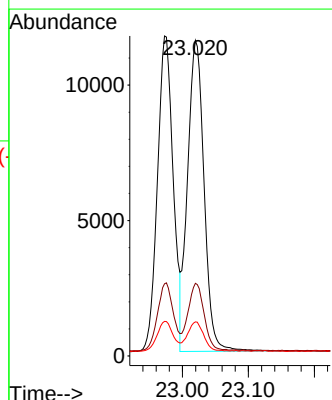
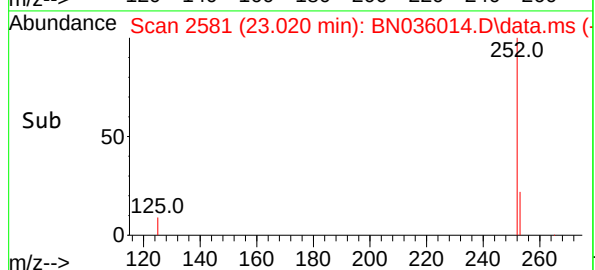
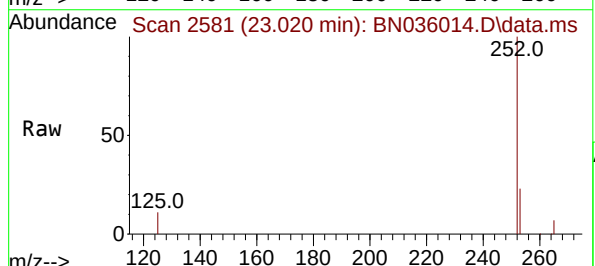
Tgt Ion:252 Resp: 19946

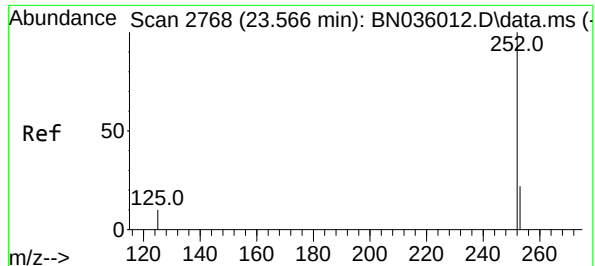
Ion Ratio Lower Upper

252 100

253 23.0 21.3 31.9

125 10.8 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 1.629 ng

RT: 23.566 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

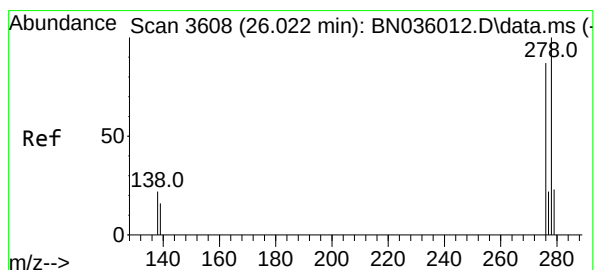
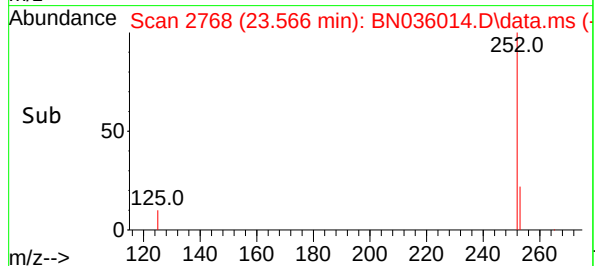
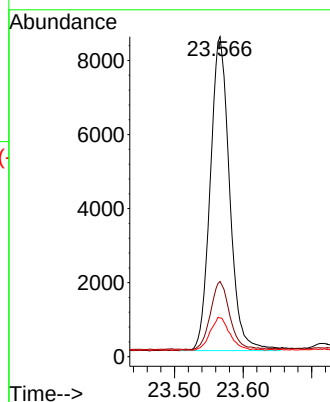
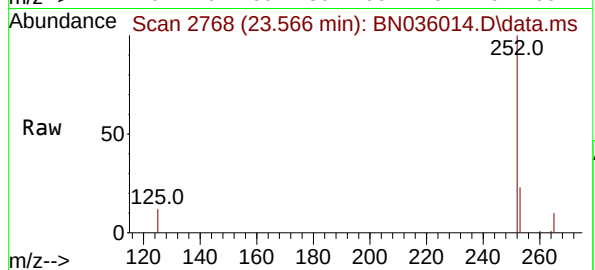
Tgt Ion:252 Resp: 16597

Ion Ratio Lower Upper

252 100

253 23.5 23.8 35.6#

125 12.1 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 1.672 ng

RT: 26.025 min Scan# 3609

Delta R.T. 0.003 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

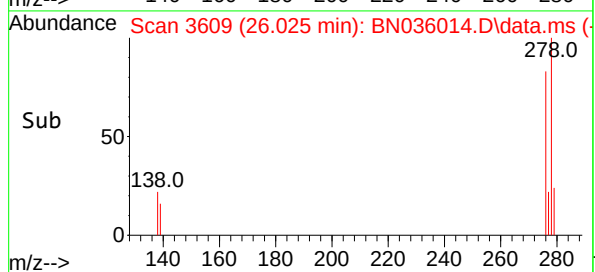
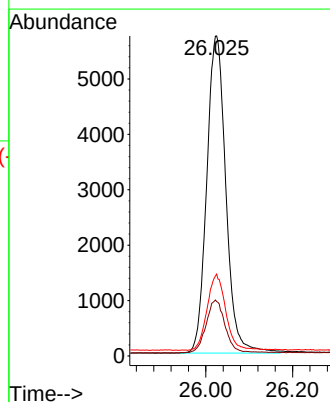
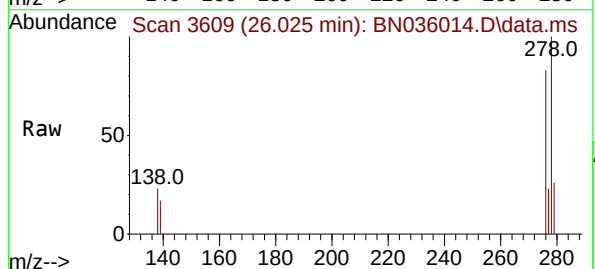
Tgt Ion:278 Resp: 17551

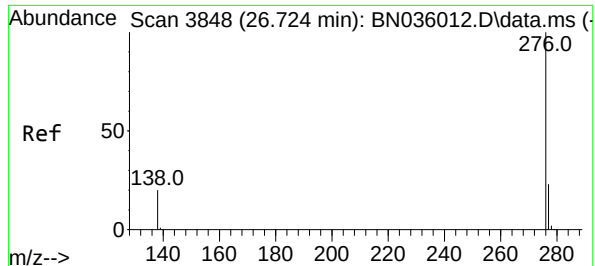
Ion Ratio Lower Upper

278 100

139 17.0 16.0 24.0

279 25.6 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 1.650 ng

RT: 26.721 min Scan# 3847

Delta R.T. -0.003 min

Lab File: BN036014.D

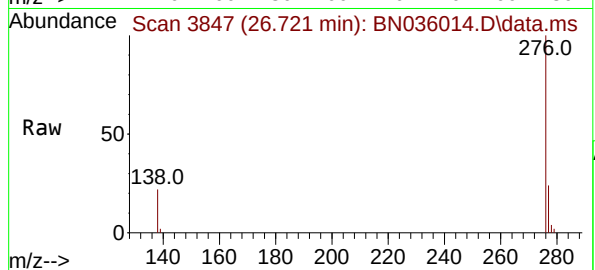
Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6



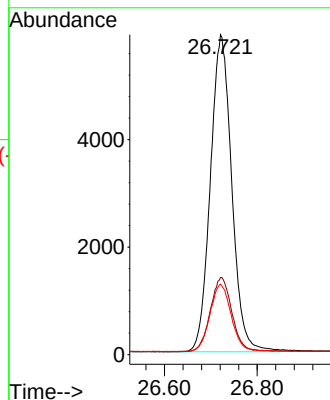
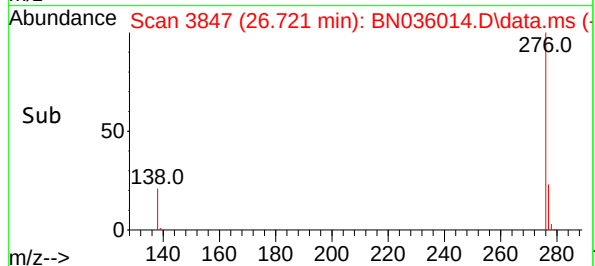
Tgt Ion:276 Resp: 18875

Ion Ratio Lower Upper

276 100

277 24.1 21.3 31.9

138 22.1 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036015.D
 Acq On : 22 Jan 2025 14:01
 Operator : RC/JU
 Sample : SSTDICC3.2
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC3.2

Quant Time: Jan 23 00:29:03 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

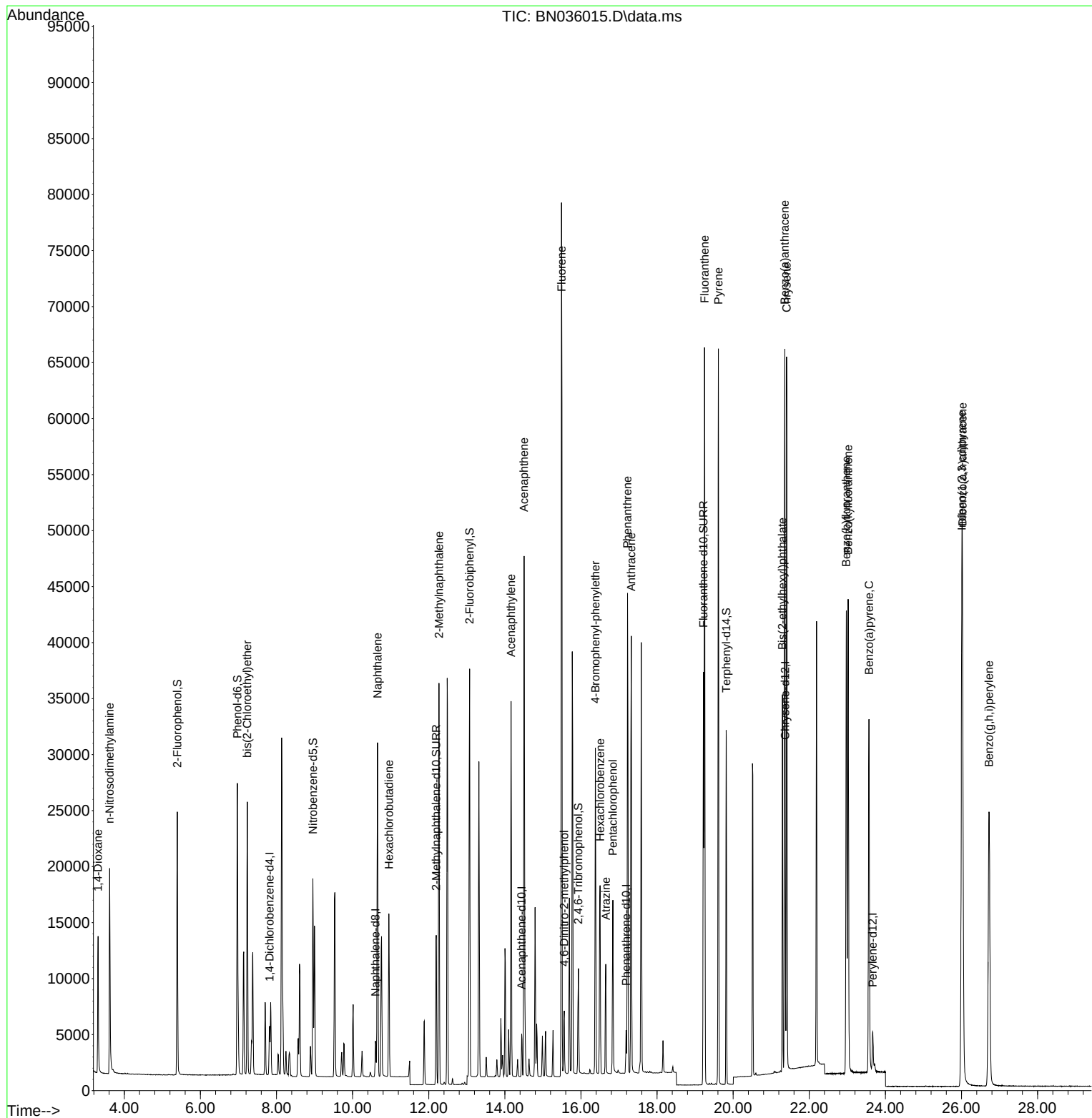
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2044	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3907	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	2182	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	4618	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	4560	0.400	ng	0.00
35) Perylene-d12	23.666	264	4591	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.390	112	16306	3.067	ng	0.00
5) Phenol-d6	6.972	99	19779	3.168	ng	0.00
8) Nitrobenzene-d5	8.956	82	12126	3.288	ng	0.00
11) 2-Methylnaphthalene-d10	12.197	152	17194	3.237	ng	0.00
14) 2,4,6-Tribromophenol	15.932	330	4795	3.427	ng	0.00
15) 2-Fluorobiphenyl	13.073	172	29561	3.035	ng	0.00
27) Fluoranthene-d10	19.220	212	39812	3.328	ng	0.00
31) Terphenyl-d14	19.820	244	29331	3.096	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.310	88	6668	2.918	ng	Qvalue 97
3) n-Nitrosodimethylamine	3.614	42	12771	3.082	ng	# 98
6) bis(2-Chloroethyl)ether	7.232	93	15564	3.097	ng	100
9) Naphthalene	10.654	128	35650	3.142	ng	96
10) Hexachlorobutadiene	10.953	225	11222	3.061	ng	# 100
12) 2-Methylnaphthalene	12.268	142	22982	3.264	ng	99
16) Acenaphthylene	14.163	152	32971	3.187	ng	100
17) Acenaphthene	14.506	154	22876	3.229	ng	95
18) Fluorene	15.489	166	29724	3.349	ng	98
20) 4,6-Dinitro-2-methylph...	15.560	198	3969	3.686	ng	# 54
21) 4-Bromophenyl-phenylether	16.379	248	10101	3.071	ng	# 75
22) Hexachlorobenzene	16.503	284	13128	3.031	ng	99
23) Atrazine	16.652	200	7739	3.256	ng	# 88
24) Pentachlorophenol	16.839	266	6833	3.645	ng	98
25) Phenanthrene	17.223	178	43683	3.148	ng	99
26) Anthracene	17.323	178	41492	3.288	ng	100
28) Fluoranthene	19.248	202	55650	3.414	ng	100
30) Pyrene	19.611	202	56603	3.063	ng	99
32) Benzo(a)anthracene	21.358	228	52836	3.194	ng	98
33) Chrysene	21.403	228	52334	3.095	ng	98
34) Bis(2-ethylhexyl)phtha...	21.295	149	27304	3.013	ng	# 100
36) Indeno(1,2,3-cd)pyrene	26.008	276	61268	3.326	ng	99
37) Benzo(b)fluoranthene	22.973	252	53035	3.178	ng	# 89
38) Benzo(k)fluoranthene	23.020	252	54959	3.268	ng	# 90
39) Benzo(a)pyrene	23.569	252	46474	3.261	ng	# 86
40) Dibenzo(a,h)anthracene	26.025	278	49160	3.348	ng	# 91
41) Benzo(g,h,i)perylene	26.721	276	52446	3.277	ng	95

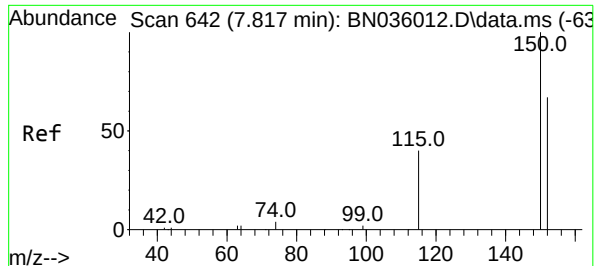
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036015.D
Acq On : 22 Jan 2025 14:01
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Jan 23 00:29:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

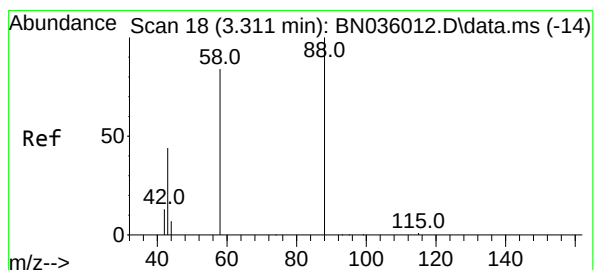
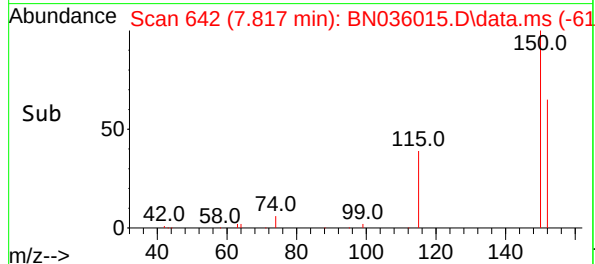
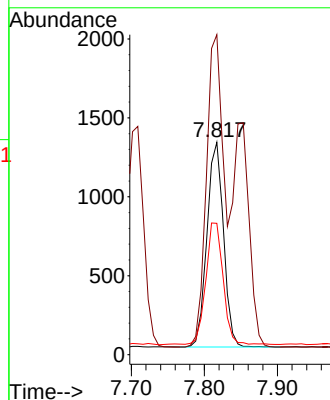
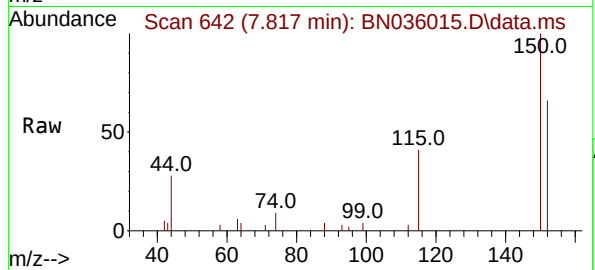




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

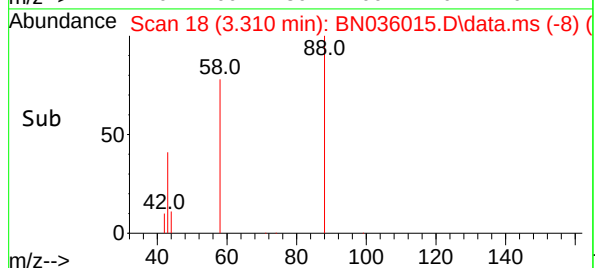
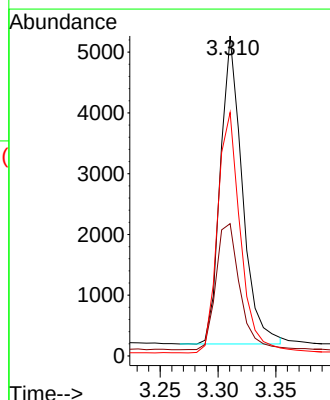
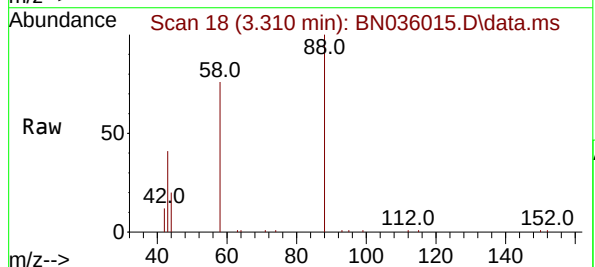
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

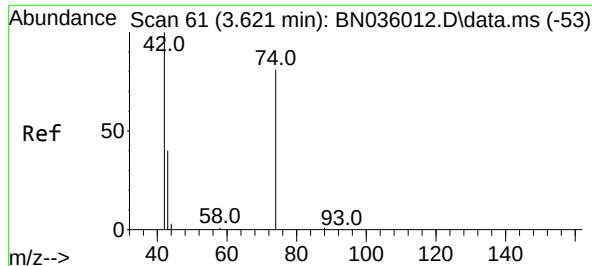
Tgt Ion:152 Resp: 2044
Ion Ratio Lower Upper
152 100
150 150.7 117.4 176.2
115 61.9 51.0 76.4



#2
1,4-Dioxane
Concen: 2.918 ng
RT: 3.310 min Scan# 18
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion: 88 Resp: 6668
Ion Ratio Lower Upper
88 100
43 44.6 38.5 57.7
58 81.3 66.6 99.8

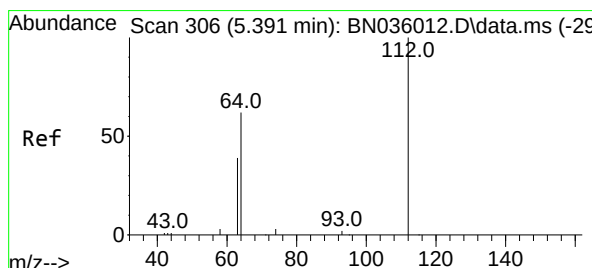
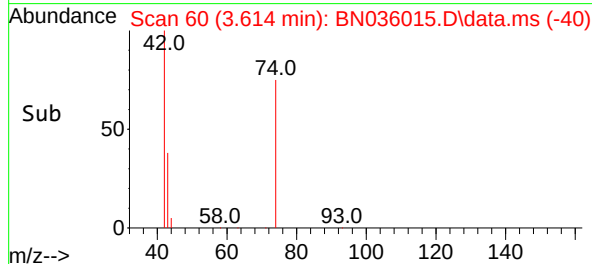
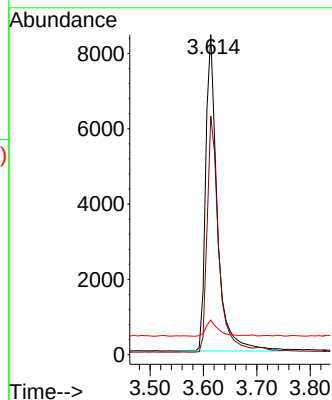
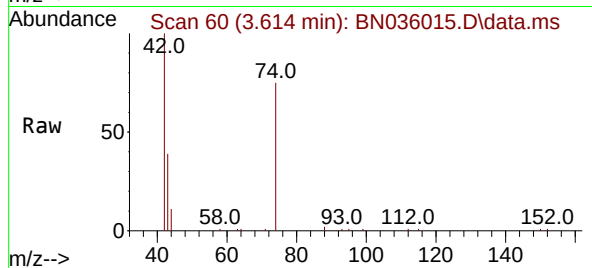




#3
n-Nitrosodimethylamine
Concen: 3.082 ng
RT: 3.614 min Scan# 60
Delta R.T. -0.007 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

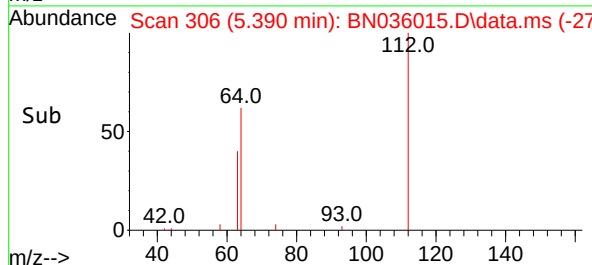
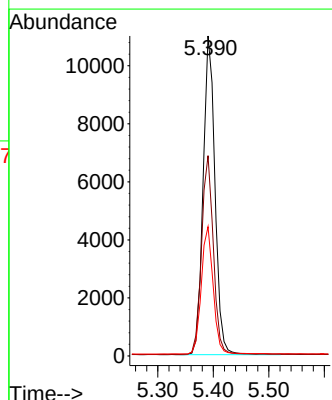
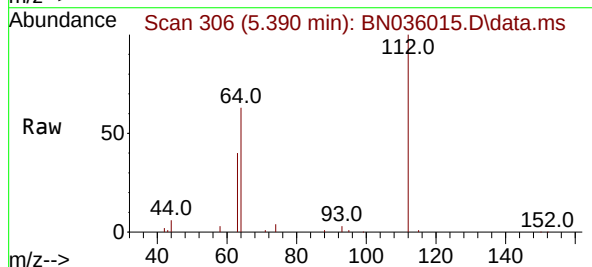
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

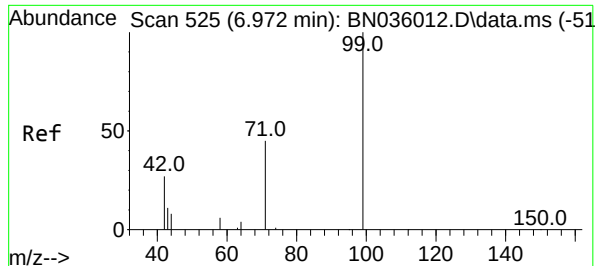
Tgt Ion: 42 Resp: 12771
Ion Ratio Lower Upper
42 100
74 73.6 58.1 87.1
44 5.3 6.2 9.4#



#4
2-Fluorophenol
Concen: 3.067 ng
RT: 5.390 min Scan# 306
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion: 112 Resp: 16306
Ion Ratio Lower Upper
112 100
64 62.2 50.0 75.0
63 39.7 30.7 46.1

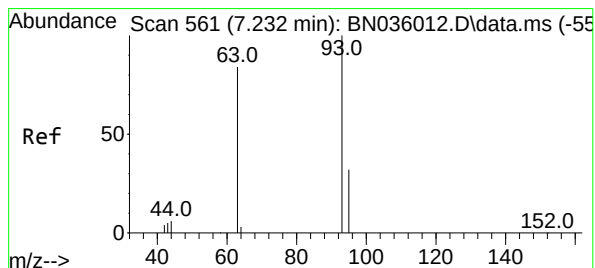
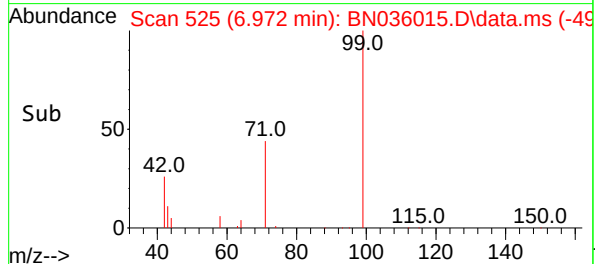
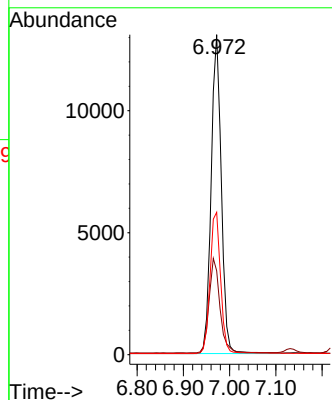
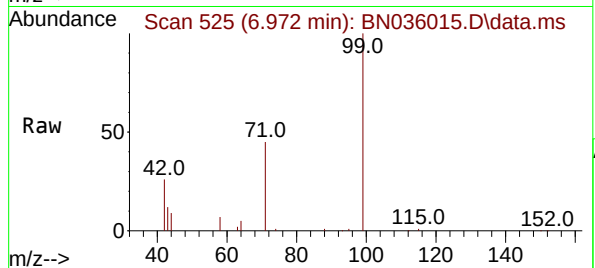




#5
Phenol-d6
Concen: 3.168 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

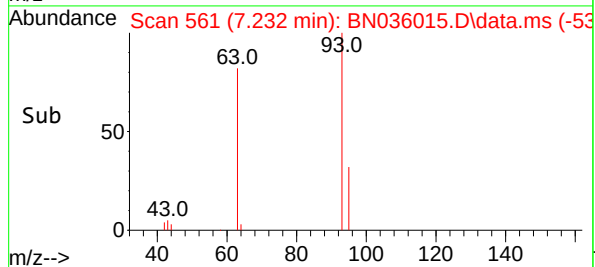
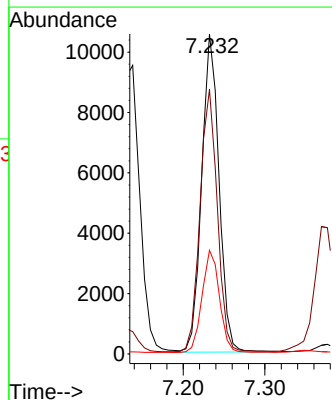
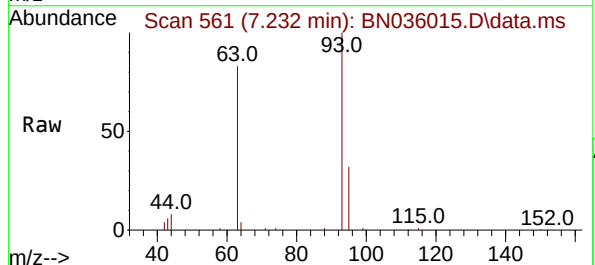
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

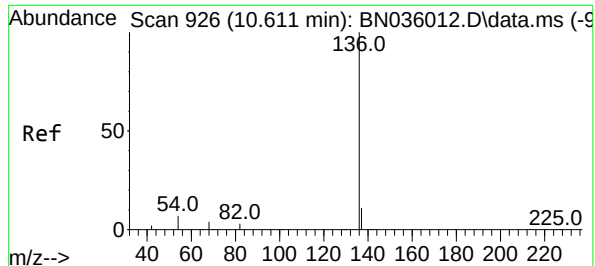
Tgt Ion: 99 Resp: 19779
Ion Ratio Lower Upper
99 100
42 31.9 26.8 40.2
71 46.2 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 3.097 ng
RT: 7.232 min Scan# 561
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion: 93 Resp: 15564
Ion Ratio Lower Upper
93 100
63 82.2 65.8 98.6
95 32.3 25.8 38.6

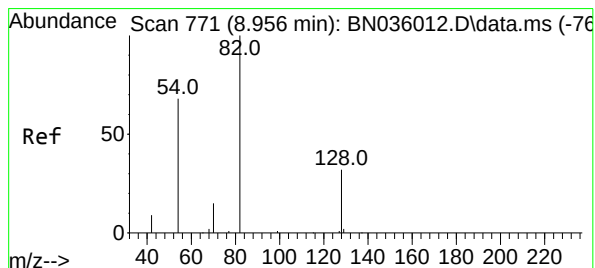
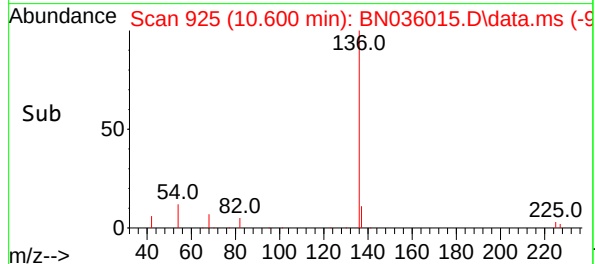
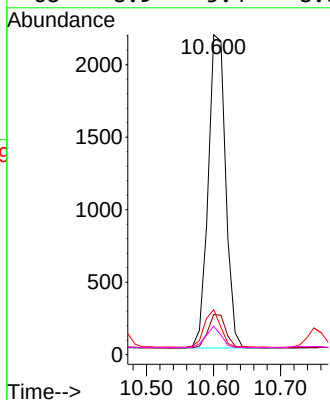
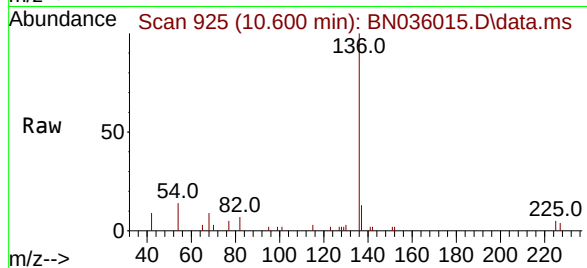




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

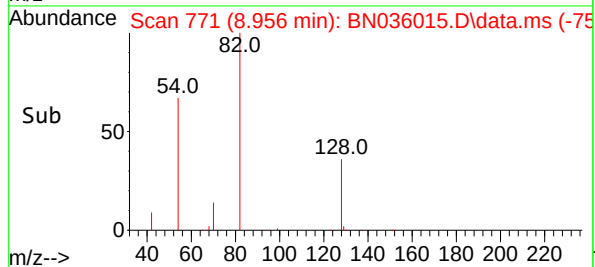
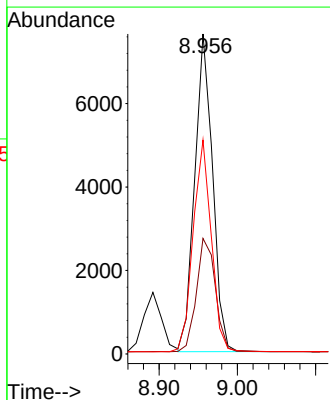
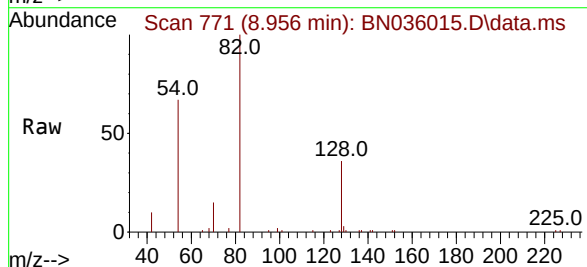
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

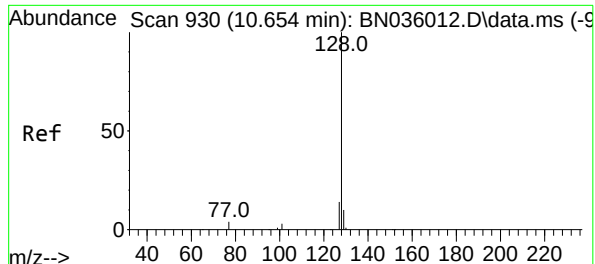
Tgt Ion:	136	Resp:	3907
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.4	15.6
54	14.0	7.7	11.5#
68	8.9	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 3.288 ng
RT: 8.956 min Scan# 771
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion:	82	Resp:	12126
Ion	Ratio	Lower	Upper
82	100		
128	36.1	28.8	43.2
54	66.8	55.8	83.8





#9

Naphthalene

Concen: 3.142 ng

RT: 10.654 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

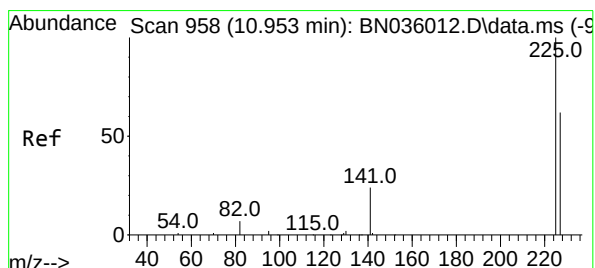
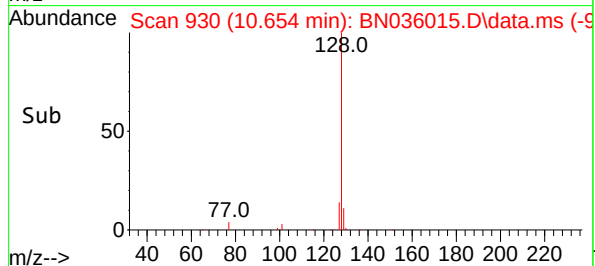
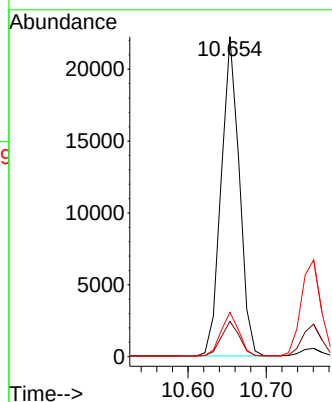
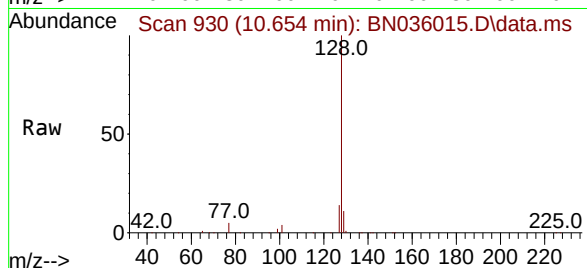
Tgt Ion:128 Resp: 35650

Ion Ratio Lower Upper

128 100

129 11.0 9.4 14.2

127 13.8 12.6 19.0



#10

Hexachlorobutadiene

Concen: 3.061 ng

RT: 10.953 min Scan# 958

Delta R.T. -0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

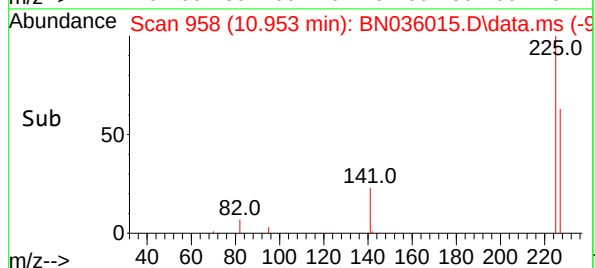
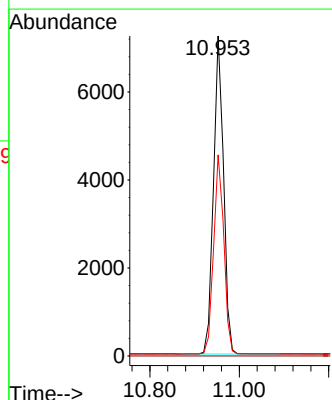
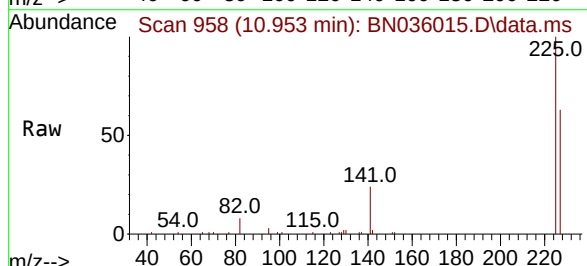
Tgt Ion:225 Resp: 11222

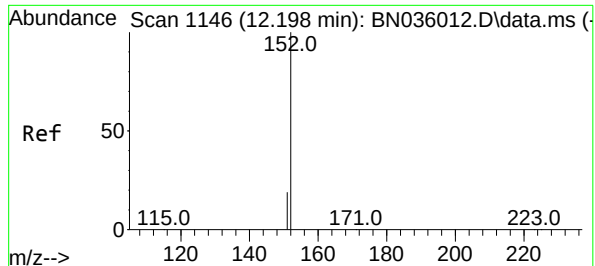
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.6 51.0 76.6

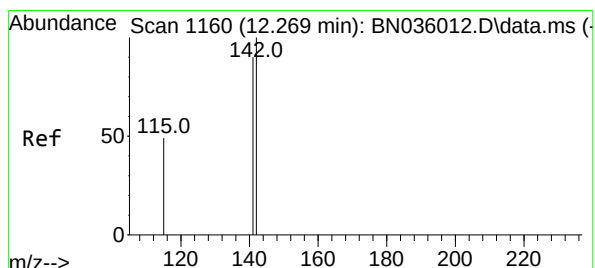
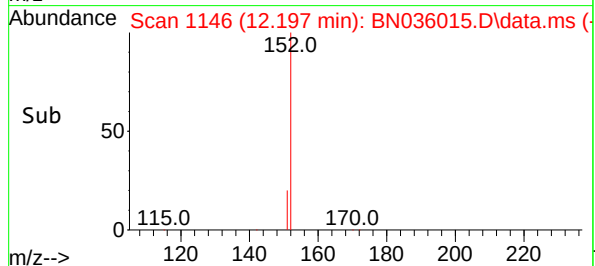
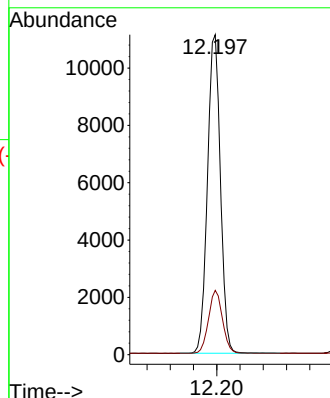
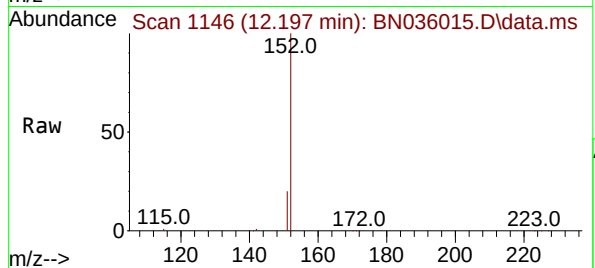




#11
2-Methylnaphthalene-d10
Concen: 3.237 ng
RT: 12.197 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

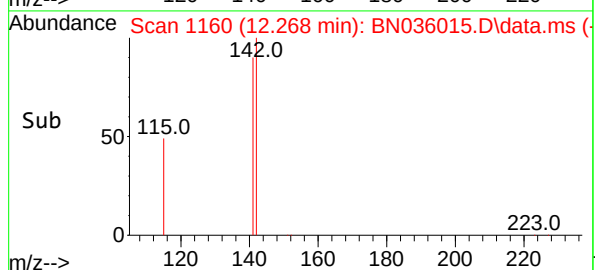
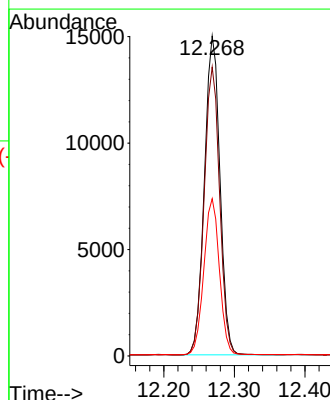
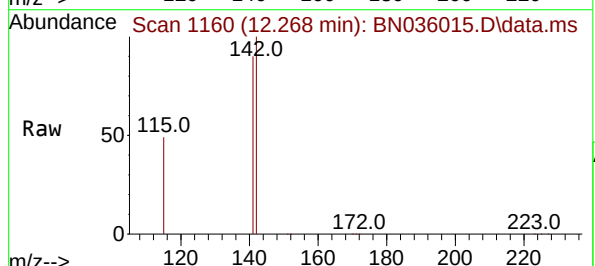
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

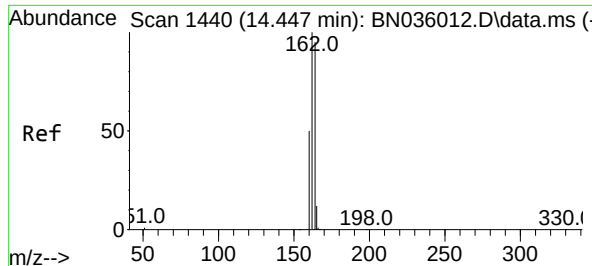
Tgt Ion:152 Resp: 17194
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#12
2-Methylnaphthalene
Concen: 3.264 ng
RT: 12.268 min Scan# 1160
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion:142 Resp: 22982
Ion Ratio Lower Upper
142 100
141 90.3 72.2 108.2
115 49.2 41.2 61.8

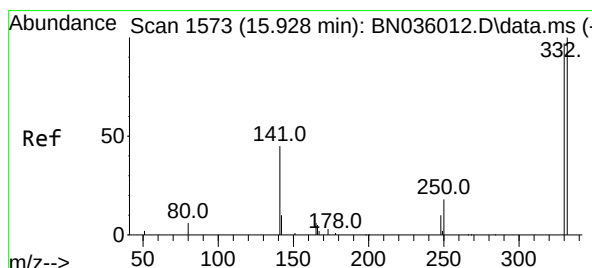
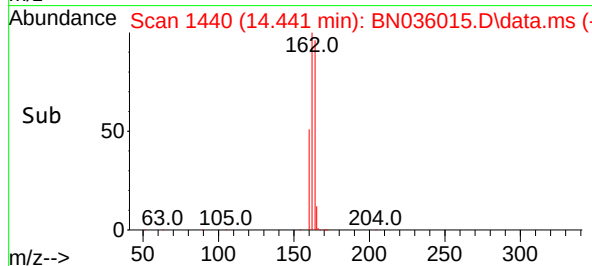
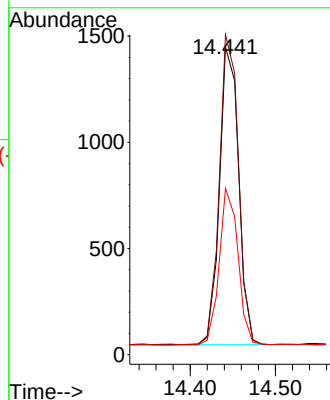
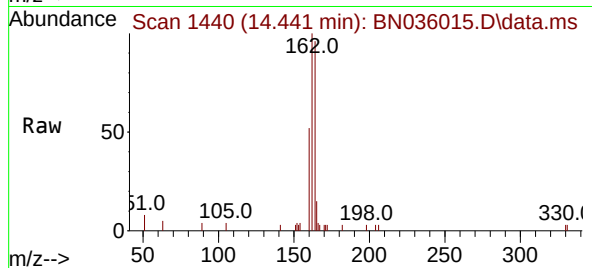




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 14
Delta R.T. -0.006 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

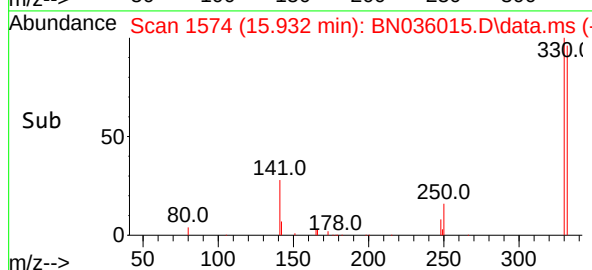
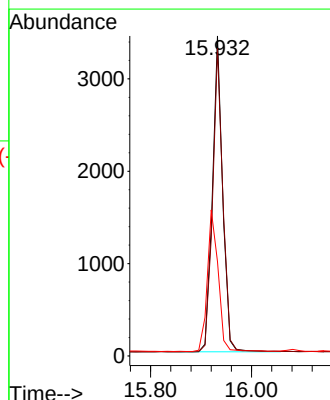
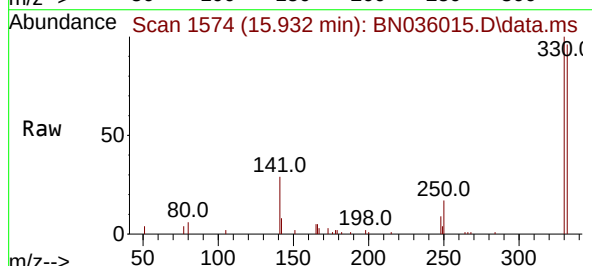
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

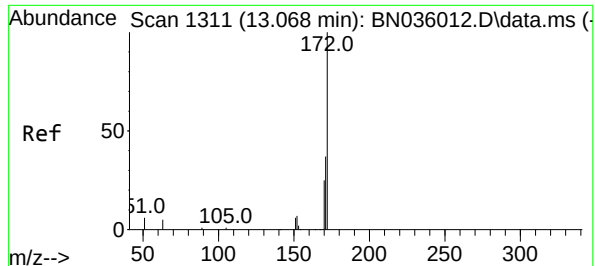
Tgt Ion:164 Resp: 2182
Ion Ratio Lower Upper
164 100
162 104.0 84.1 126.1
160 54.1 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 3.427 ng
RT: 15.932 min Scan# 1574
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion:330 Resp: 4795
Ion Ratio Lower Upper
330 100
332 97.1 81.0 121.4
141 47.9 36.7 55.1

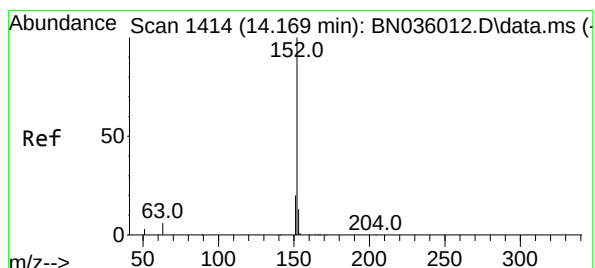
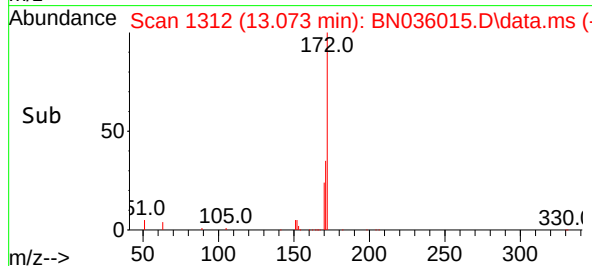
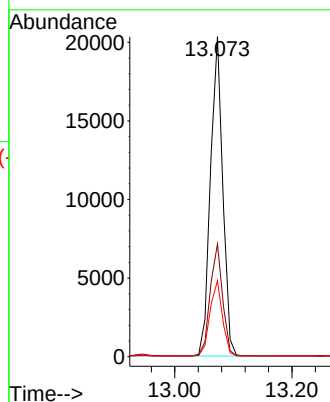
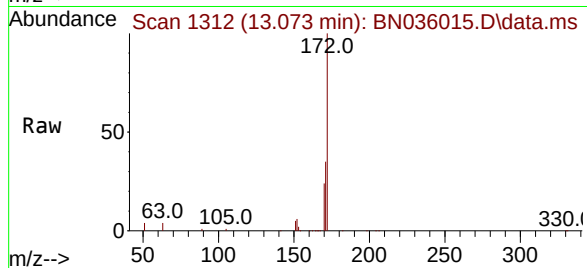




#15
2-Fluorobiphenyl
Concen: 3.035 ng
RT: 13.073 min Scan# 1311
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

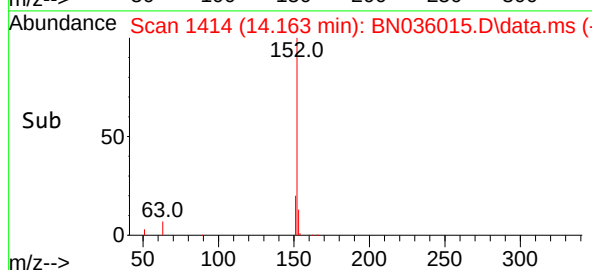
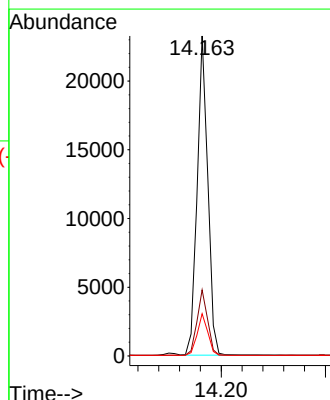
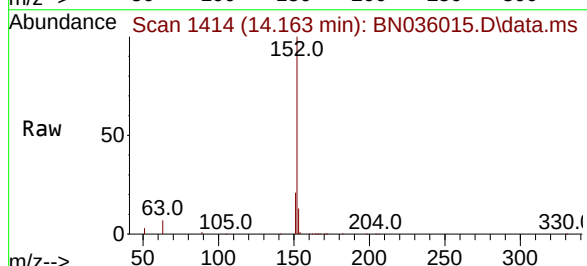
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

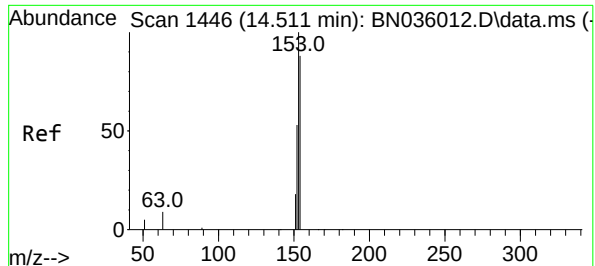
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.2	30.9	46.3
170	23.8	21.2	31.8



#16
Acenaphthylene
Concen: 3.187 ng
RT: 14.163 min Scan# 1414
Delta R.T. -0.006 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.4	16.2	24.2
153	12.9	10.4	15.6





#17

Acenaphthene

Concen: 3.229 ng

RT: 14.506 min Scan# 1446

Delta R.T. -0.006 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

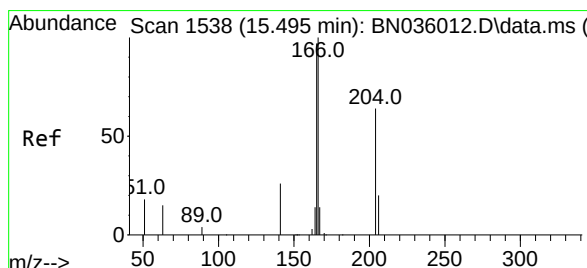
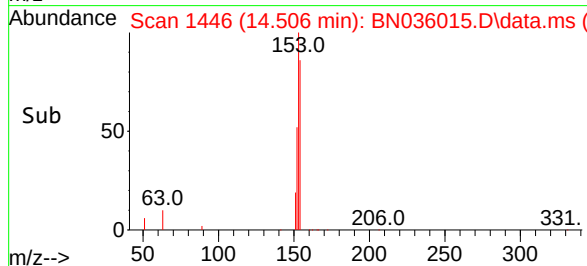
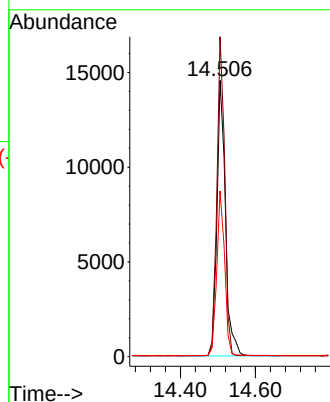
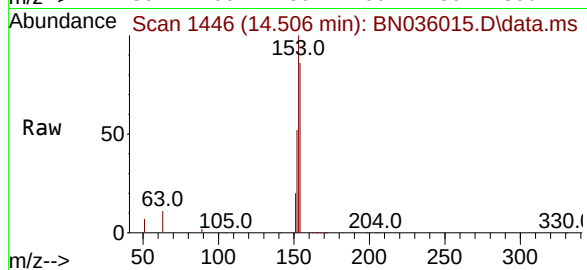
Tgt Ion:154 Resp: 22876

Ion Ratio Lower Upper

154 100

153 106.9 88.9 133.3

152 55.7 48.1 72.1



#18

Fluorene

Concen: 3.349 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

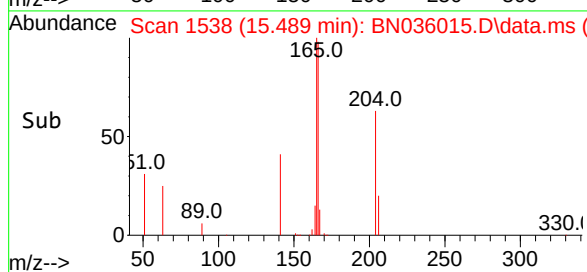
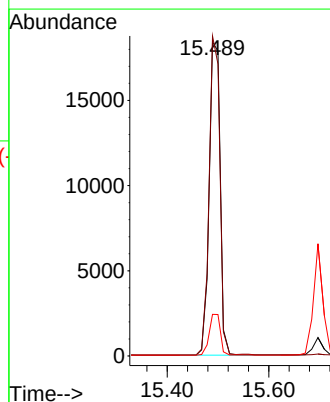
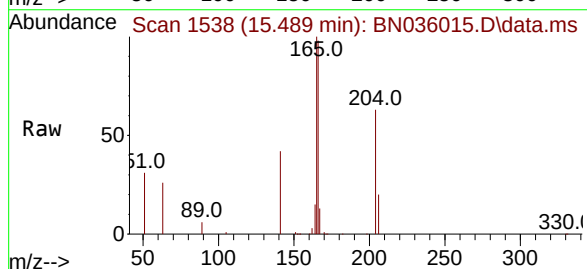
Tgt Ion:166 Resp: 29724

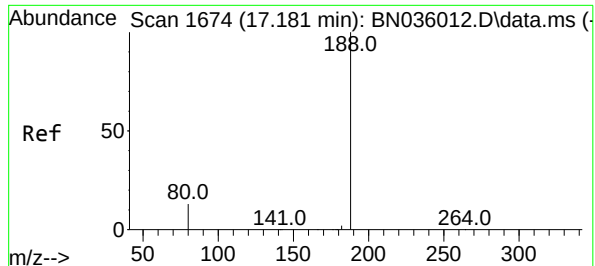
Ion Ratio Lower Upper

166 100

165 100.2 78.5 117.7

167 12.6 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

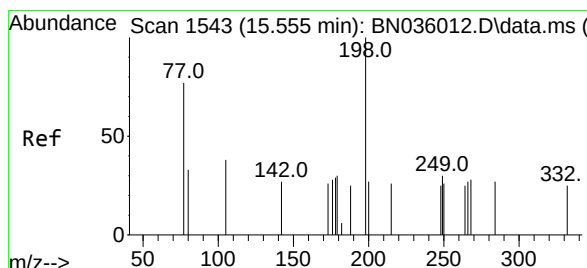
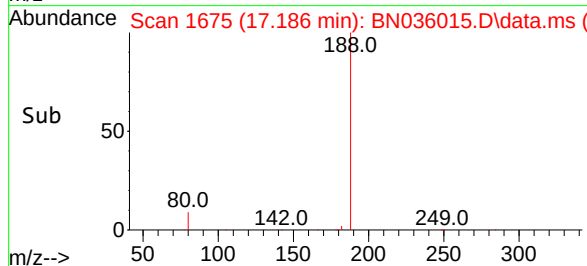
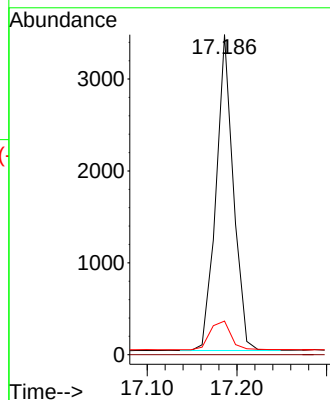
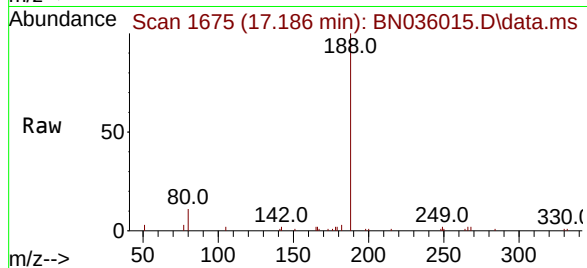
Tgt Ion:188 Resp: 4618

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.5 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 3.686 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

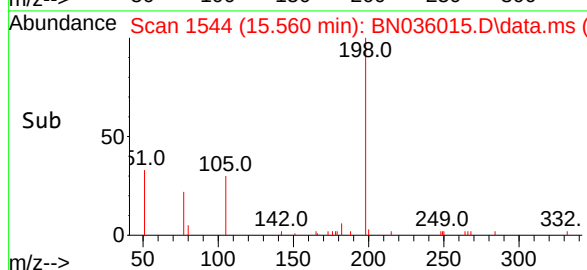
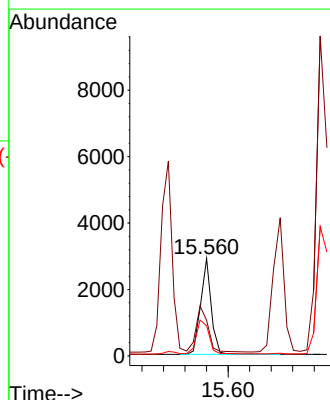
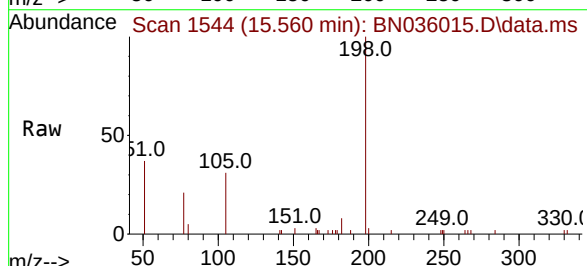
Tgt Ion:198 Resp: 3969

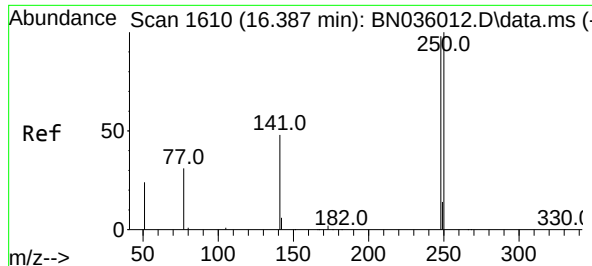
Ion Ratio Lower Upper

198 100

51 36.7 68.1 102.1#

105 31.1 46.5 69.7#

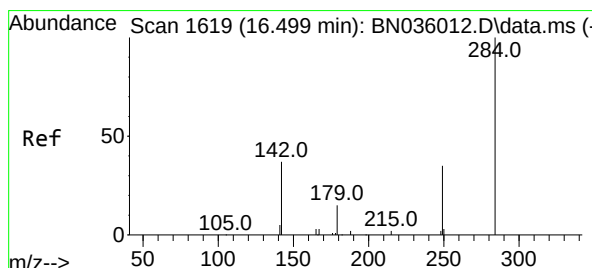
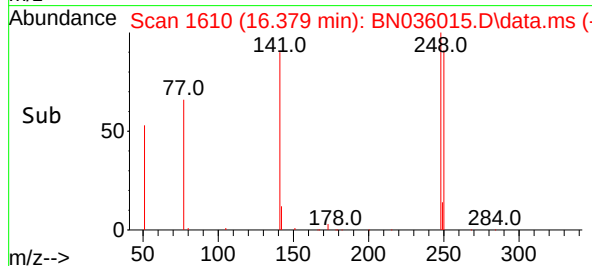
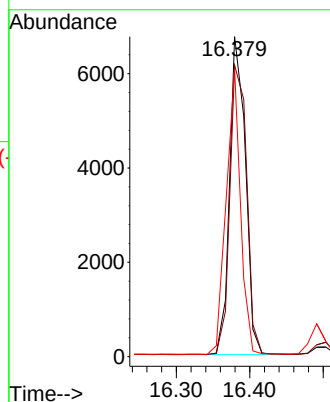
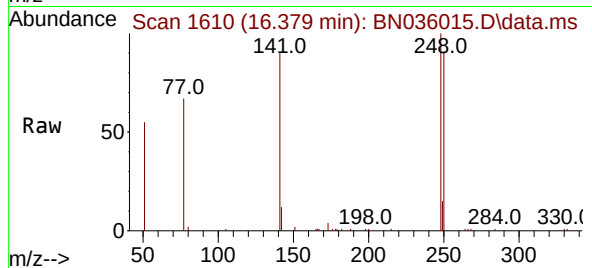




#21
4-Bromophenyl-phenylether
Concen: 3.071 ng
RT: 16.379 min Scan# 1610
Delta R.T. -0.008 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

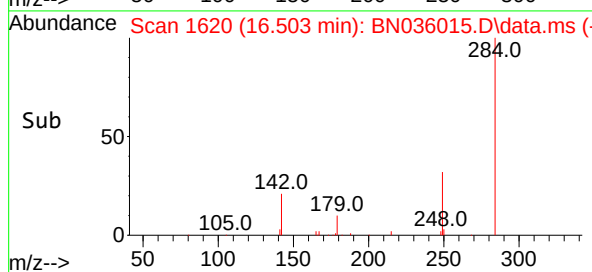
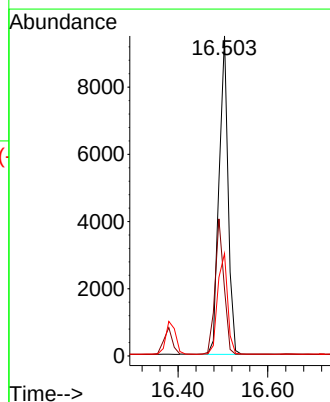
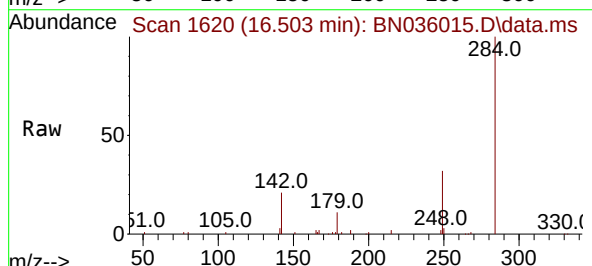
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

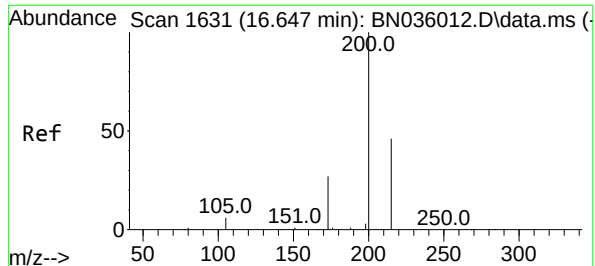
Tgt Ion	Ratio	Lower	Upper
248	100		
250	91.1	81.5	122.3
141	90.0	41.8	62.6



#22
Hexachlorobenzene
Concen: 3.031 ng
RT: 16.503 min Scan# 1620
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion	Ratio	Lower	Upper
284	100		
142	42.2	33.6	50.4
249	34.8	28.8	43.2

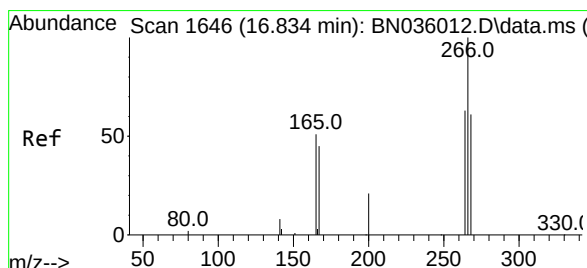
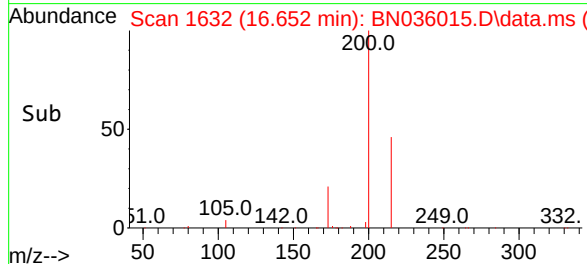
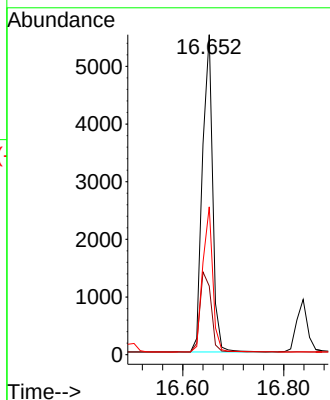
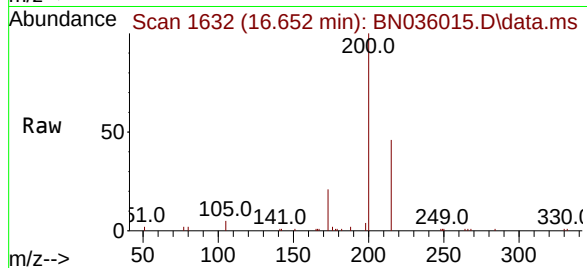




#23
Atrazine
Concen: 3.256 ng
RT: 16.652 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

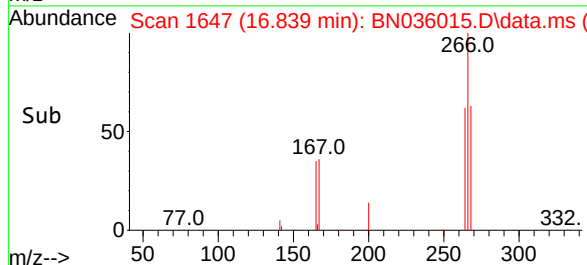
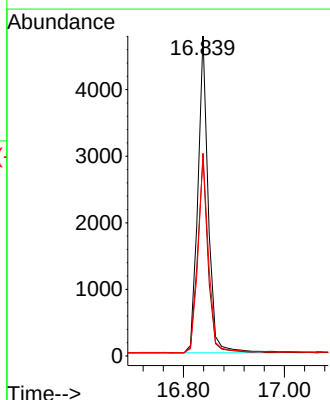
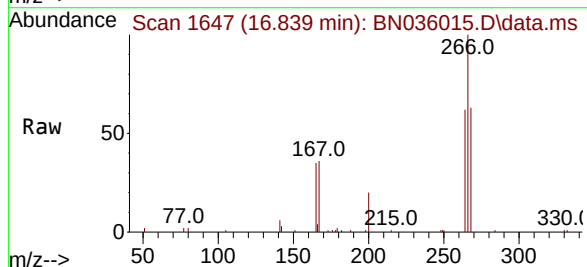
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

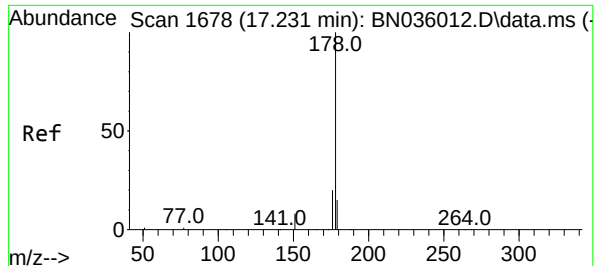
Tgt Ion:200 Resp: 7739
Ion Ratio Lower Upper
200 100
173 21.5 26.6 40.0#
215 46.2 40.6 61.0



#24
Pentachlorophenol
Concen: 3.645 ng
RT: 16.839 min Scan# 1647
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion:266 Resp: 6833
Ion Ratio Lower Upper
266 100
264 62.6 48.2 72.2
268 63.9 51.6 77.4

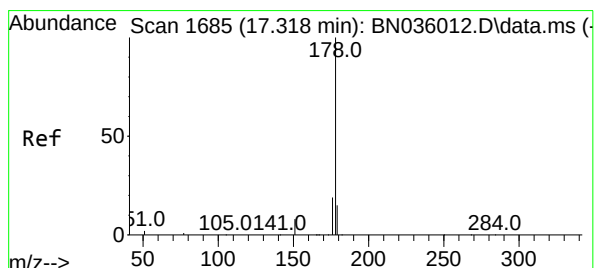
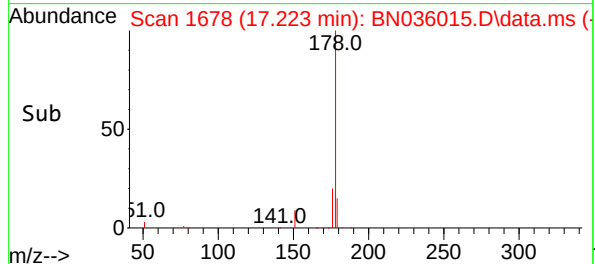
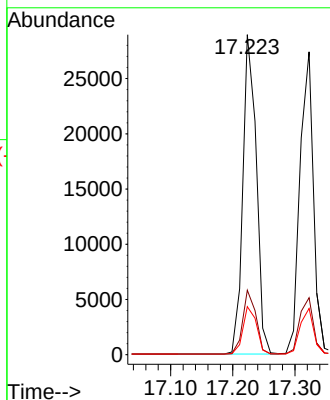
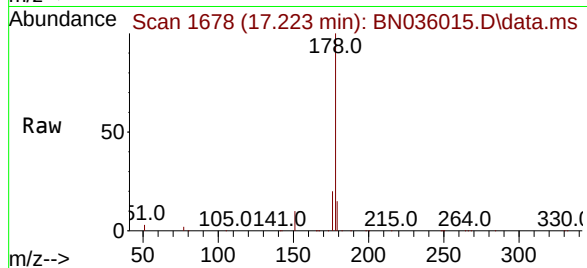




#25
Phenanthrene
Concen: 3.148 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.008 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

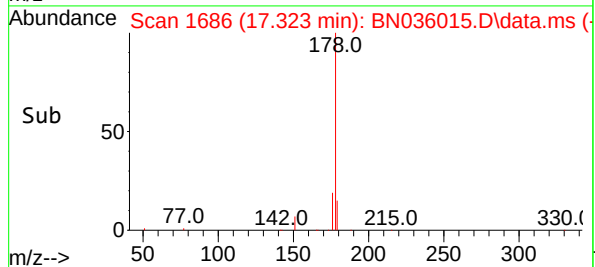
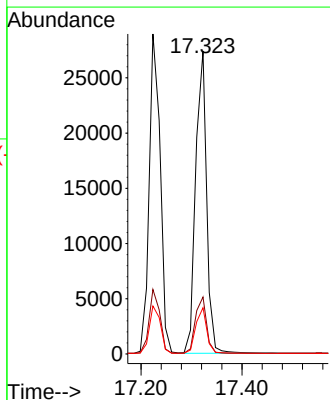
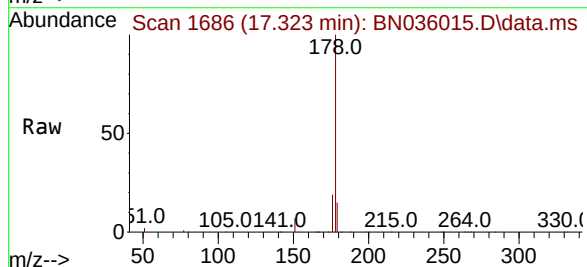
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

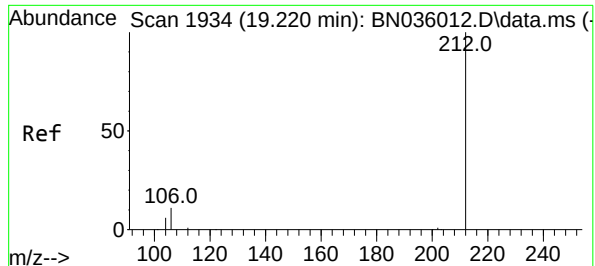
Tgt Ion:178 Resp: 43683
Ion Ratio Lower Upper
178 100
176 19.6 16.0 24.0
179 15.0 12.4 18.6



#26
Anthracene
Concen: 3.288 ng
RT: 17.323 min Scan# 1686
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion:178 Resp: 41492
Ion Ratio Lower Upper
178 100
176 19.0 15.4 23.2
179 15.1 12.0 18.0





#27

Fluoranthene-d10

Concen: 3.328 ng

RT: 19.220 min Scan# 1934

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

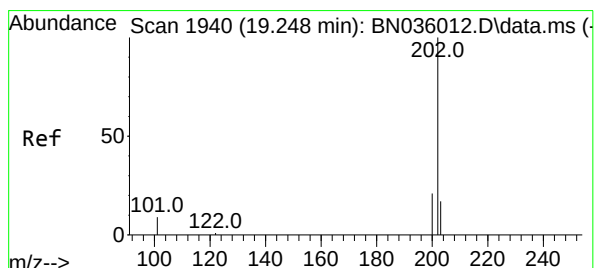
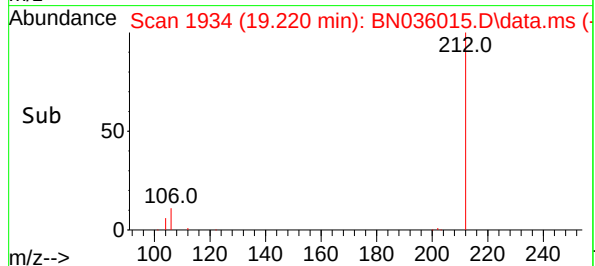
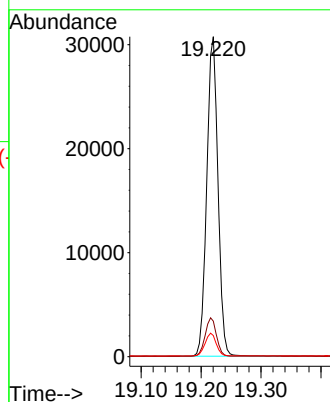
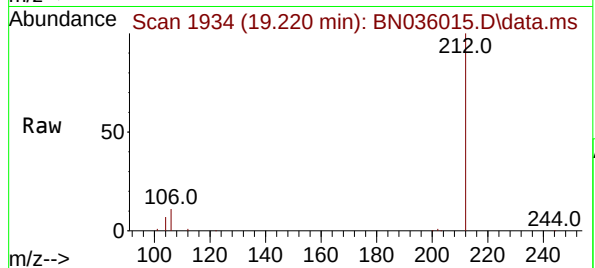
Tgt Ion:212 Resp: 39812

Ion Ratio Lower Upper

212 100

106 12.1 9.7 14.5

104 7.1 6.0 9.0



#28

Fluoranthene

Concen: 3.414 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

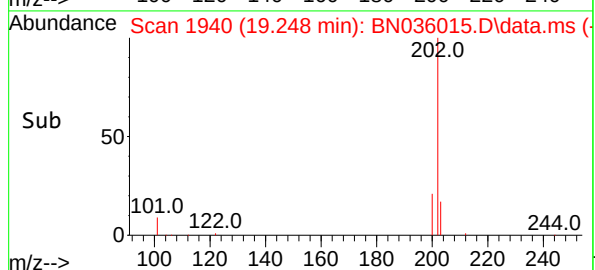
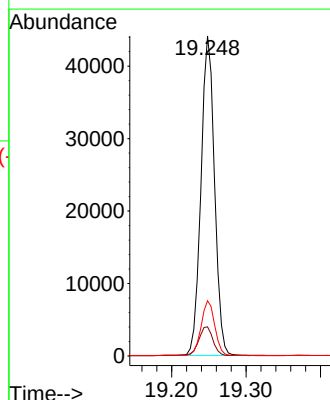
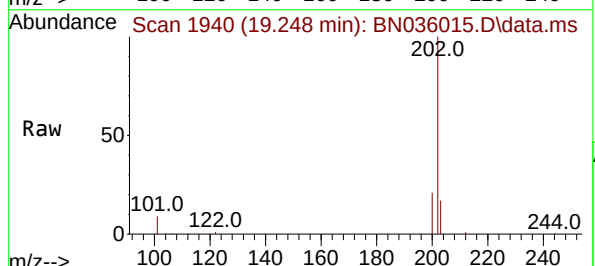
Tgt Ion:202 Resp: 55650

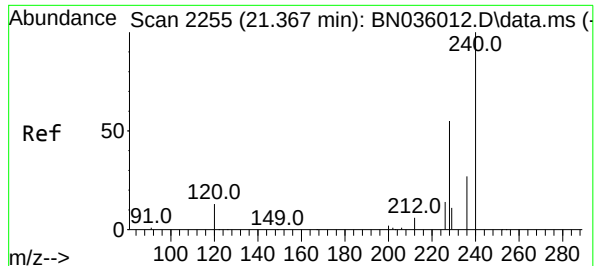
Ion Ratio Lower Upper

202 100

101 9.6 7.6 11.4

203 17.1 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

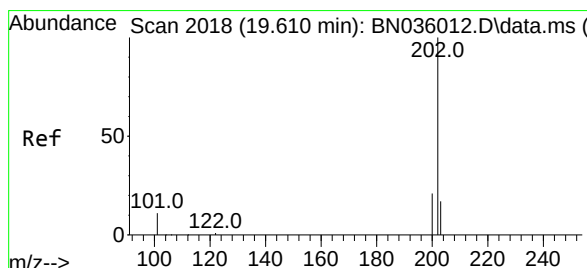
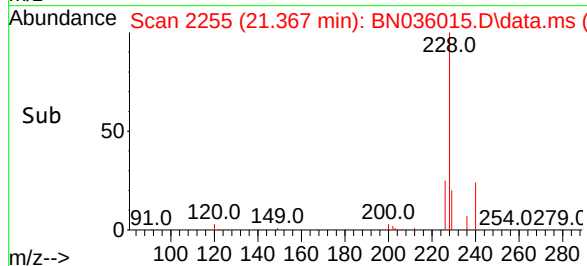
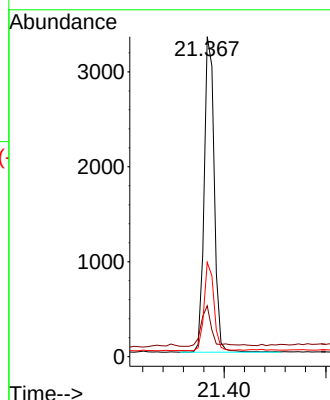
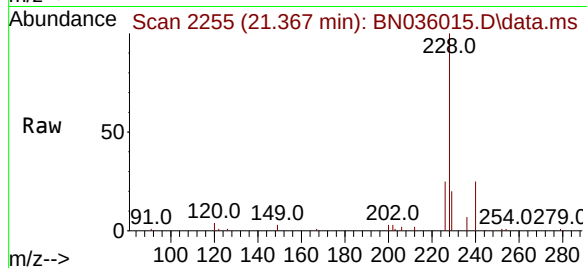
Tgt Ion:240 Resp: 4560

Ion Ratio Lower Upper

240 100

120 15.9 13.9 20.9

236 29.5 23.7 35.5



#30

Pyrene

Concen: 3.063 ng

RT: 19.611 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

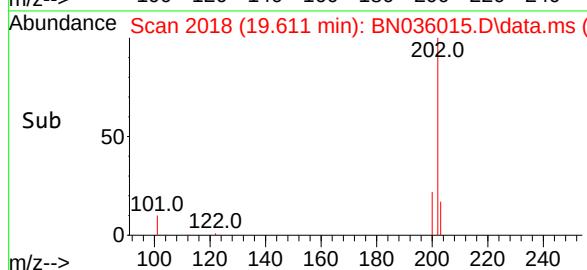
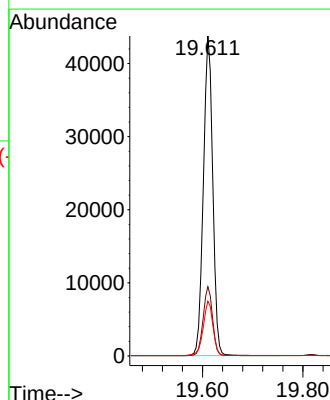
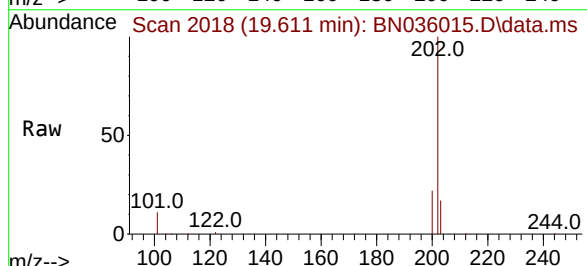
Tgt Ion:202 Resp: 56603

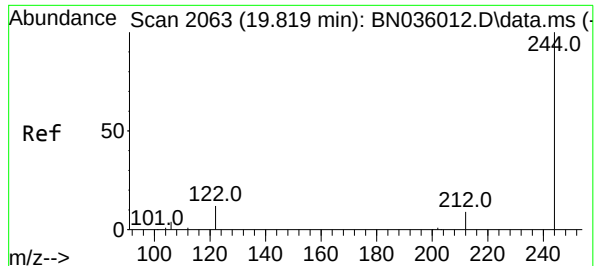
Ion Ratio Lower Upper

202 100

200 21.6 17.0 25.4

203 17.6 14.4 21.6

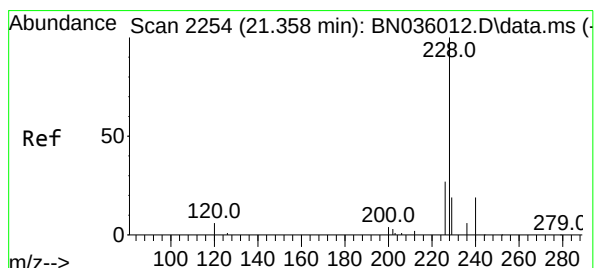
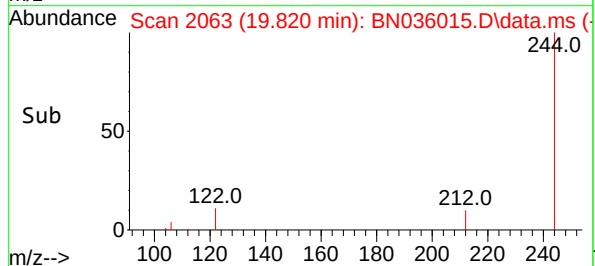
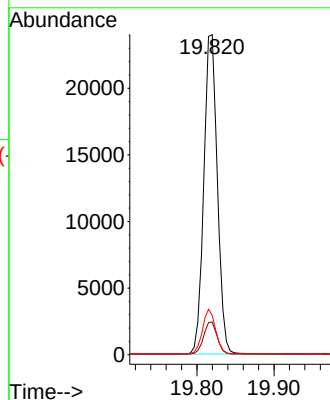
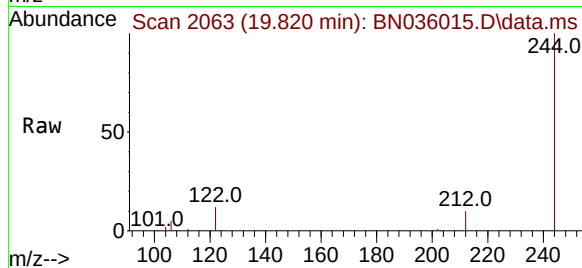




#31
Terphenyl-d14
Concen: 3.096 ng
RT: 19.820 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

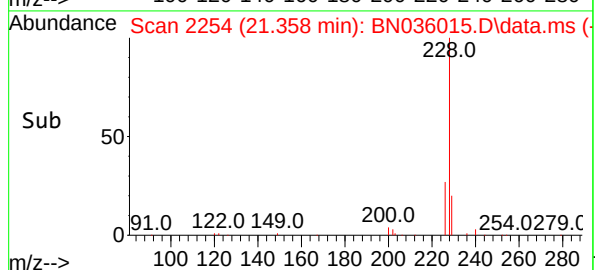
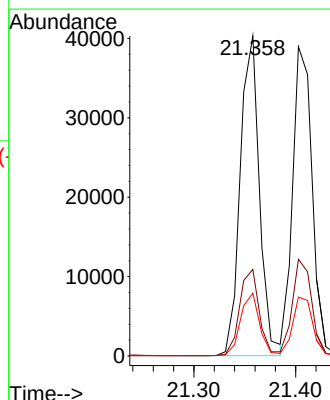
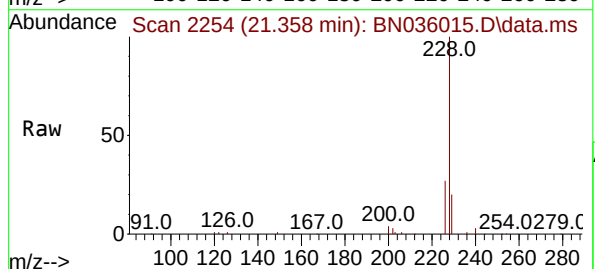
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

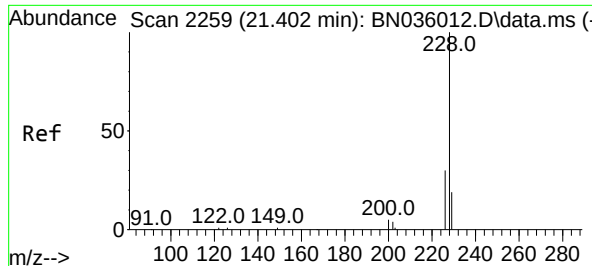
Tgt Ion:244 Resp: 29331
Ion Ratio Lower Upper
244 100
212 10.2 9.1 13.7
122 12.3 11.3 16.9



#32
Benzo(a)anthracene
Concen: 3.194 ng
RT: 21.358 min Scan# 2254
Delta R.T. 0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

Tgt Ion:228 Resp: 52836
Ion Ratio Lower Upper
228 100
226 27.0 22.6 34.0
229 19.6 16.5 24.7





#33

Chrysene

Concen: 3.095 ng

RT: 21.403 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

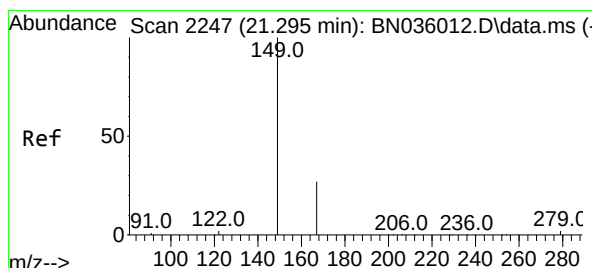
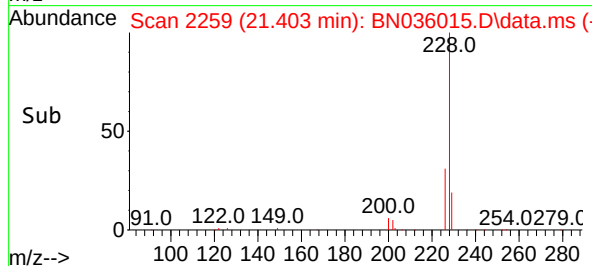
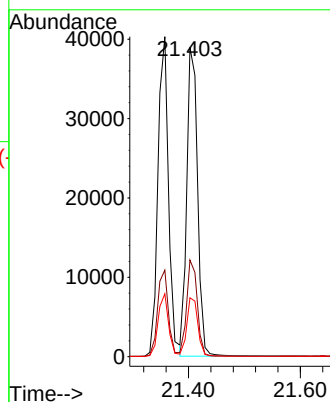
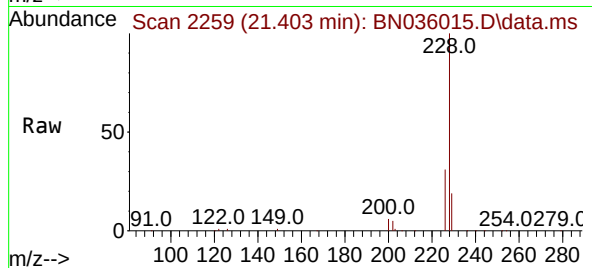
Tgt Ion:228 Resp: 52334

Ion Ratio Lower Upper

228 100

226 31.2 25.3 37.9

229 19.1 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 3.013 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

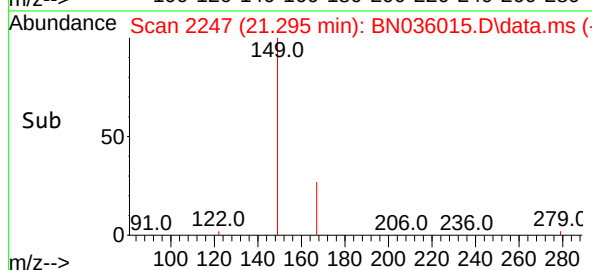
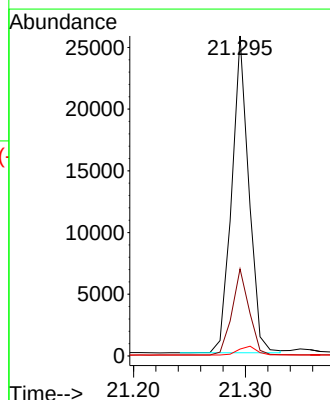
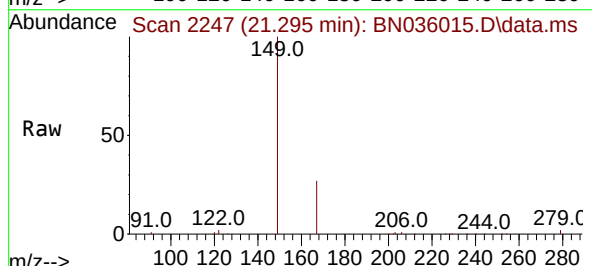
Tgt Ion:149 Resp: 27304

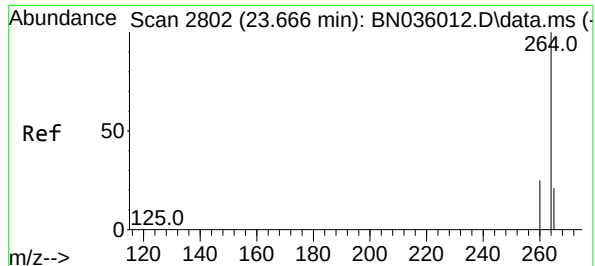
Ion Ratio Lower Upper

149 100

167 27.3 21.9 32.9

279 3.0 3.0 4.6#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.666 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

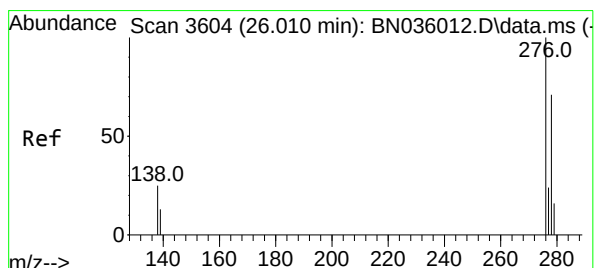
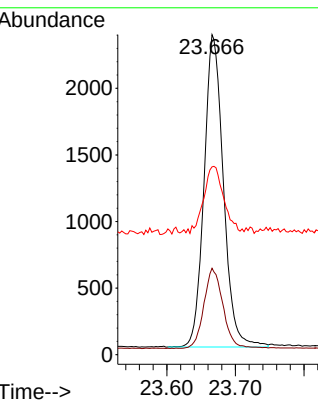
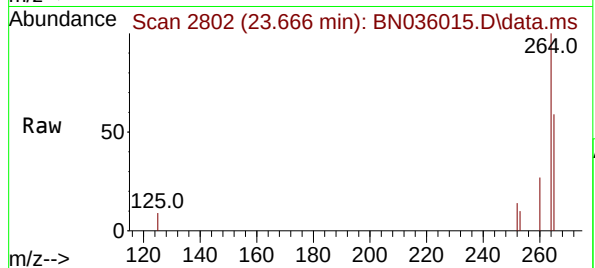
Tgt Ion:264 Resp: 4591

Ion Ratio Lower Upper

264 100

260 27.0 21.8 32.6

265 58.7 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 3.326 ng

RT: 26.008 min Scan# 3603

Delta R.T. -0.003 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

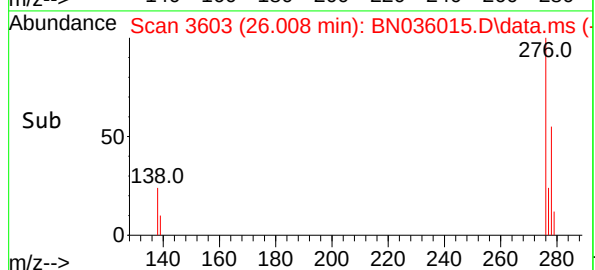
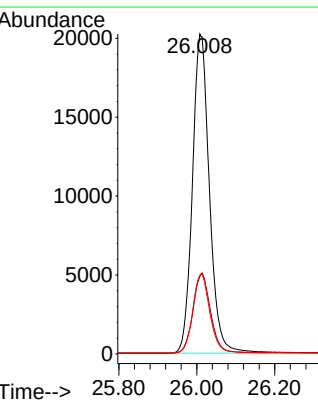
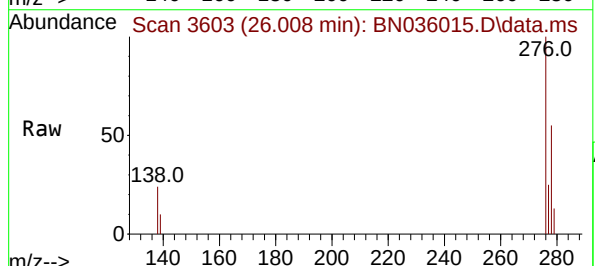
Tgt Ion:276 Resp: 61268

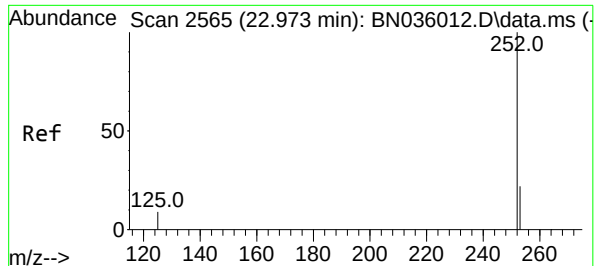
Ion Ratio Lower Upper

276 100

138 25.7 19.9 29.9

277 24.9 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 3.178 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

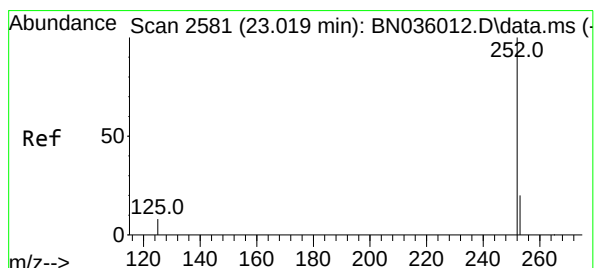
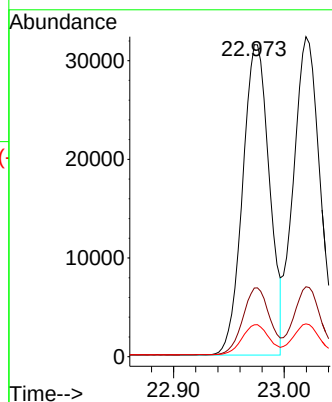
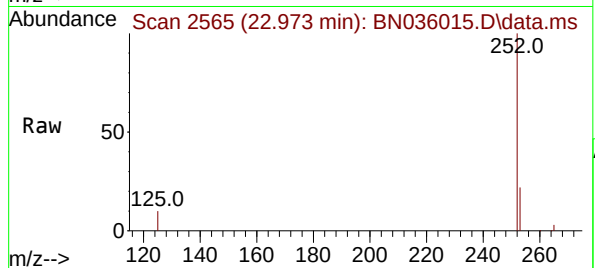
Tgt Ion:252 Resp: 53035

Ion Ratio Lower Upper

252 100

253 22.0 22.5 33.7#

125 10.2 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 3.268 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

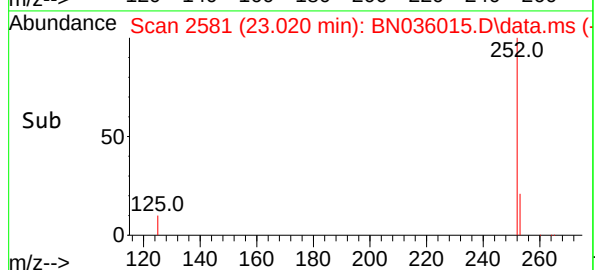
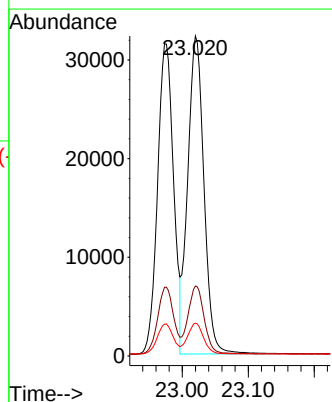
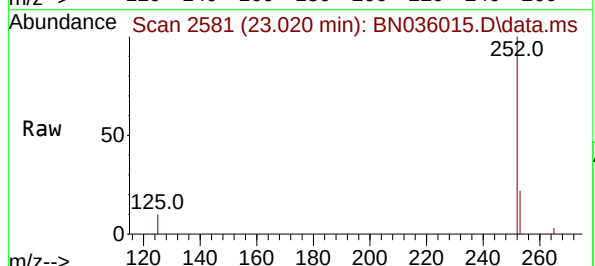
Tgt Ion:252 Resp: 54959

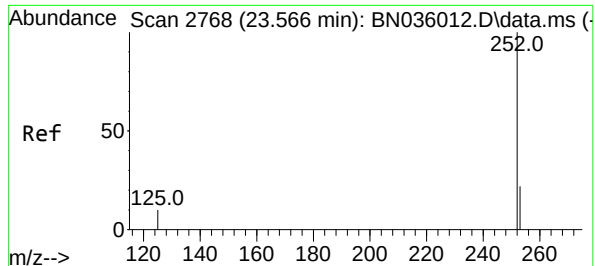
Ion Ratio Lower Upper

252 100

253 21.9 21.3 31.9

125 10.3 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 3.261 ng

RT: 23.569 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

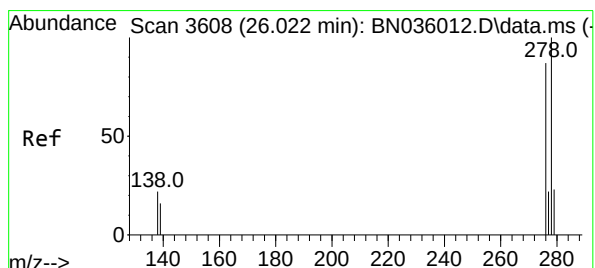
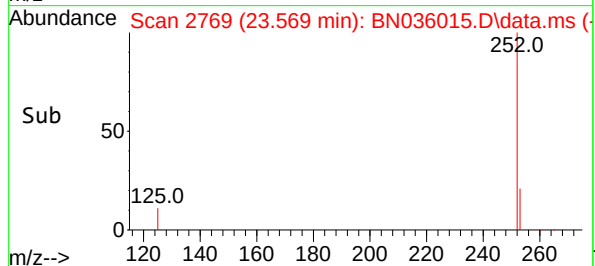
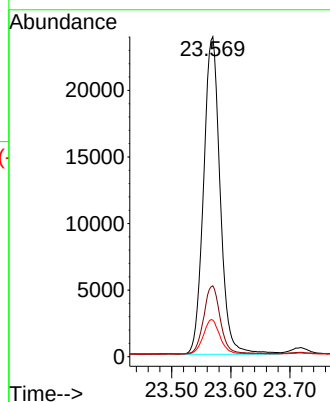
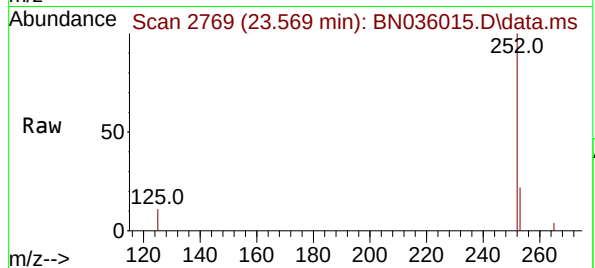
Tgt Ion:252 Resp: 46474

Ion Ratio Lower Upper

252 100

253 22.2 23.8 35.6#

125 11.5 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 3.348 ng

RT: 26.025 min Scan# 3609

Delta R.T. 0.003 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

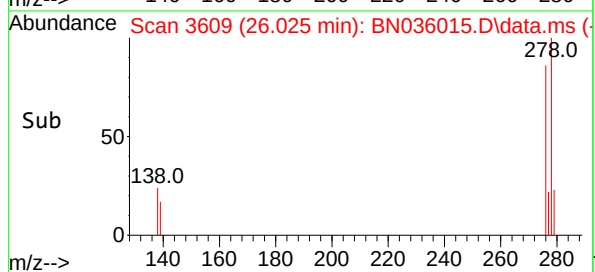
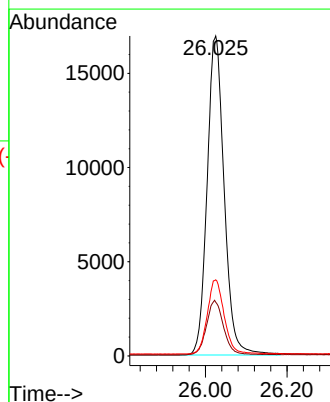
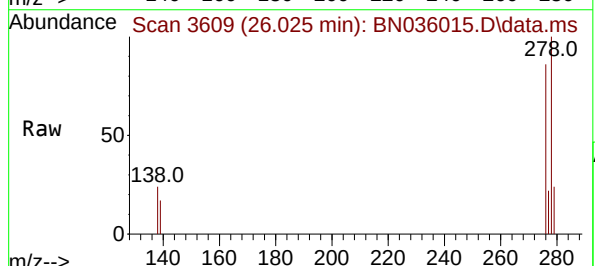
Tgt Ion:278 Resp: 49160

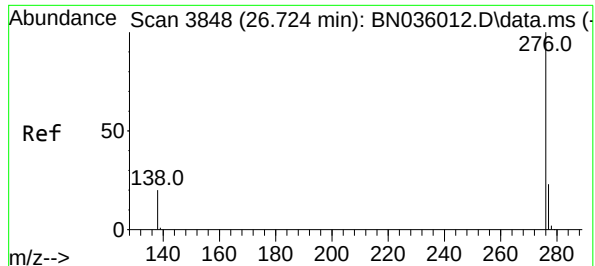
Ion Ratio Lower Upper

278 100

139 16.8 16.0 24.0

279 23.8 23.8 35.8#





#41

Benzo(g,h,i)perylene

Concen: 3.277 ng

RT: 26.721 min Scan# 3847

Delta R.T. -0.003 min

Lab File: BN036015.D

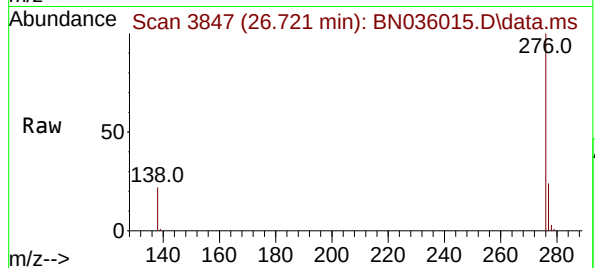
Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2



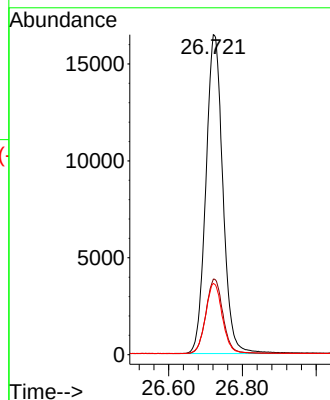
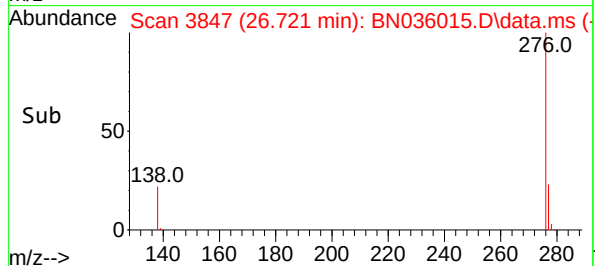
Tgt Ion:276 Resp: 52446

Ion Ratio Lower Upper

276 100

277 23.6 21.3 31.9

138 22.2 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036016.D
 Acq On : 22 Jan 2025 14:36
 Operator : RC/JU
 Sample : SSTDICC5.0
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC5.0

Quant Time: Jan 23 00:29:25 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:26:39 2025
 Response via : Initial Calibration

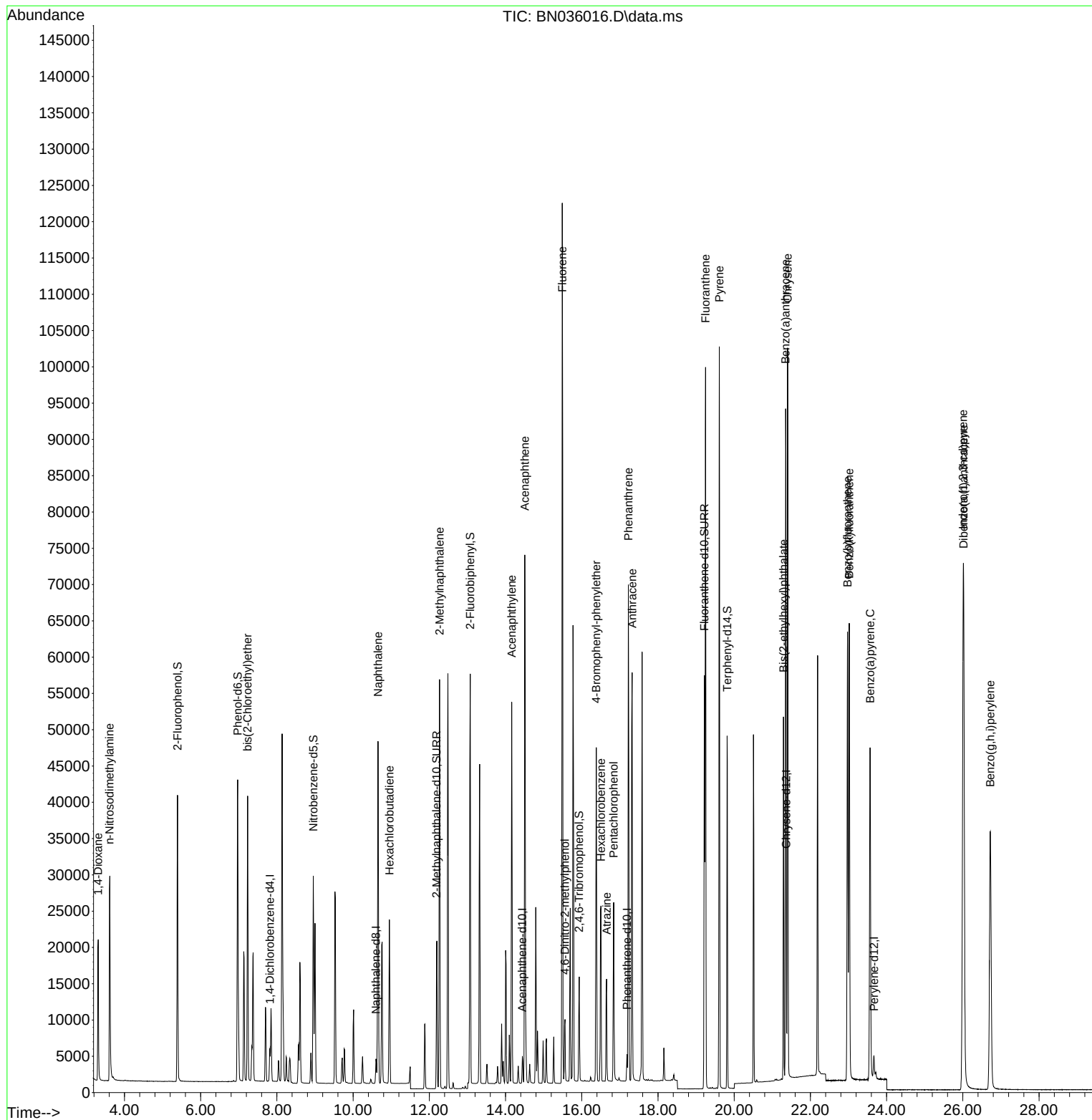
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2110	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3989	0.400	ng	#-0.01
13) Acenaphthene-d10	14.442	164	2132	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	4417	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	4348	0.400	ng	0.00
35) Perylene-d12	23.666	264	4175	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.391	112	26627	4.852	ng	0.00
5) Phenol-d6	6.972	99	31890	4.948	ng	0.00
8) Nitrobenzene-d5	8.956	82	19630	5.213	ng	0.00
11) 2-Methylnaphthalene-d10	12.193	152	27183	5.012	ng	0.00
14) 2,4,6-Tribromophenol	15.933	330	7524	5.503	ng	0.00
15) 2-Fluorobiphenyl	13.073	172	45936	4.827	ng	0.00
27) Fluoranthene-d10	19.216	212	60810	5.315	ng	0.00
31) Terphenyl-d14	19.815	244	44701	4.949	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.311	88	10991	4.660	ng	96
3) n-Nitrosodimethylamine	3.607	42	20013	4.679	ng	# 94
6) bis(2-Chloroethyl)ether	7.232	93	25098	4.838	ng	100
9) Naphthalene	10.654	128	56372	4.866	ng	96
10) Hexachlorobutadiene	10.953	225	17582	4.698	ng	# 100
12) 2-Methylnaphthalene	12.269	142	35942	4.999	ng	98
16) Acenaphthylene	14.164	152	51595	5.104	ng	100
17) Acenaphthene	14.506	154	35366	5.109	ng	96
18) Fluorene	15.489	166	45293	5.223	ng	98
20) 4,6-Dinitro-2-methylph...	15.560	198	5963	5.790	ng	# 54
21) 4-Bromophenyl-phenylether	16.380	248	15495	4.925	ng	# 76
22) Hexachlorobenzene	16.504	284	19953	4.816	ng	98
23) Atrazine	16.653	200	11848	5.212	ng	# 87
24) Pentachlorophenol	16.839	266	10589	5.905	ng	98
25) Phenanthrene	17.224	178	67322	5.072	ng	99
26) Anthracene	17.323	178	63551	5.265	ng	100
28) Fluoranthene	19.248	202	84644	5.429	ng	100
30) Pyrene	19.611	202	85587	4.858	ng	99
32) Benzo(a)anthracene	21.349	228	77897	4.939	ng	98
33) Chrysene	21.403	228	79531	4.933	ng	99
34) Bis(2-ethylhexyl)phtha...	21.295	149	41726	4.828	ng	# 99
36) Indeno(1,2,3-cd)pyrene	26.011	276	88295	5.270	ng	98
37) Benzo(b)fluoranthene	22.973	252	78788	5.192	ng	# 89
38) Benzo(k)fluoranthene	23.020	252	79510	5.198	ng	# 90
39) Benzo(a)pyrene	23.567	252	67637	5.218	ng	# 86
40) Dibenzo(a,h)anthracene	26.022	278	70778	5.300	ng	# 91
41) Benzo(g,h,i)perylene	26.718	276	74927	5.148	ng	96

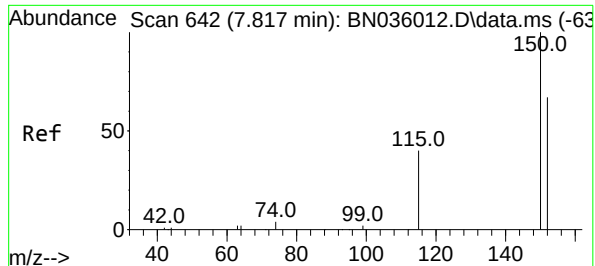
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN036016.D
Acq On : 22 Jan 2025 14:36
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Jan 23 00:29:25 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration

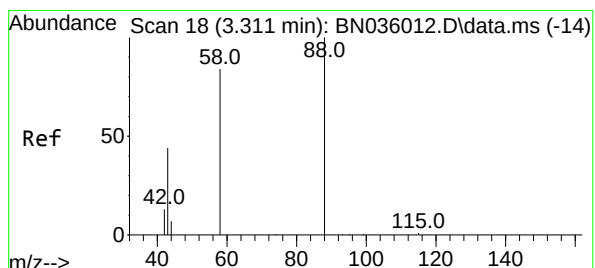
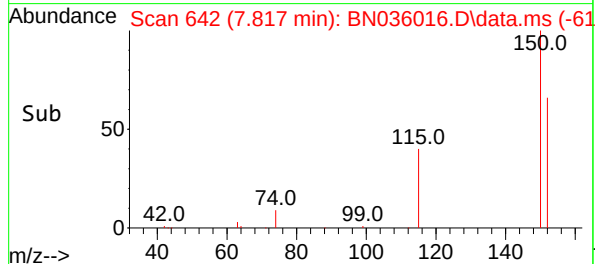
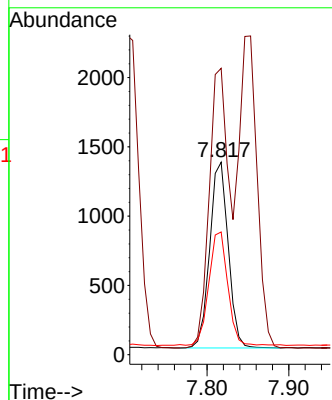
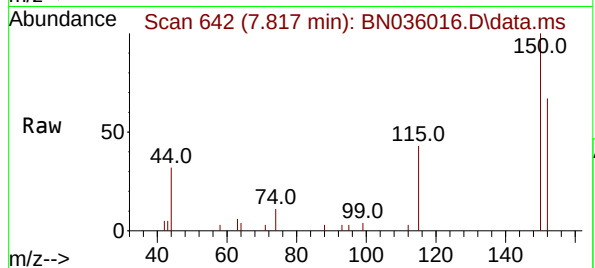




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

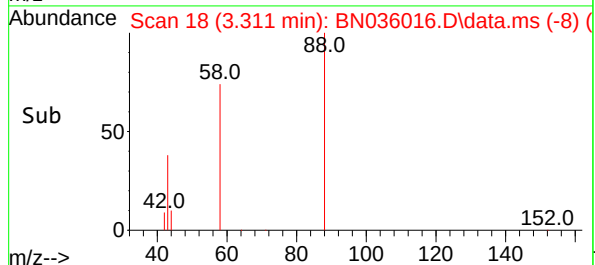
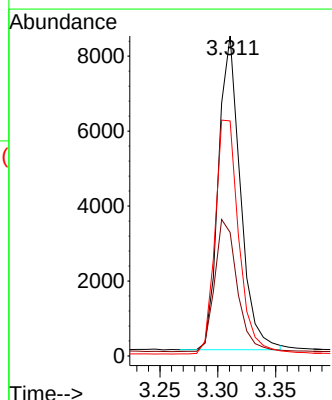
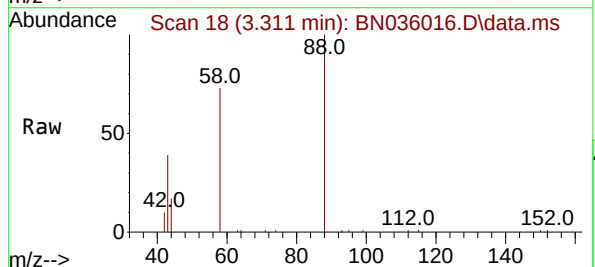
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

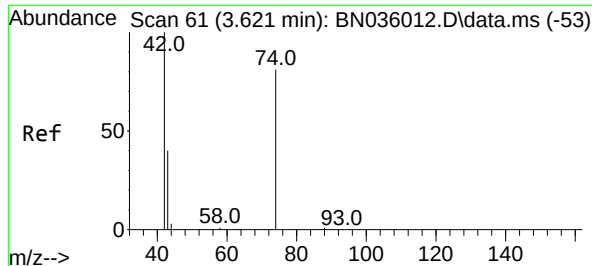
Tgt Ion:152 Resp: 2110
Ion Ratio Lower Upper
152 100
150 148.8 117.4 176.2
115 63.7 51.0 76.4



#2
1,4-Dioxane
Concen: 4.660 ng
RT: 3.311 min Scan# 18
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion: 88 Resp: 10991
Ion Ratio Lower Upper
88 100
43 43.4 38.5 57.7
58 81.0 66.6 99.8

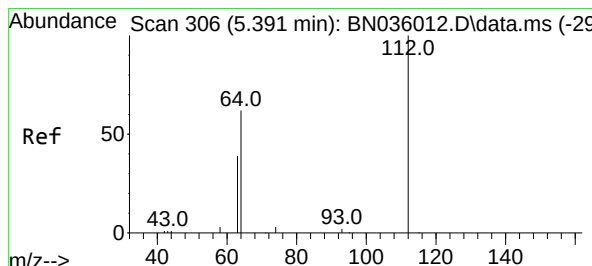
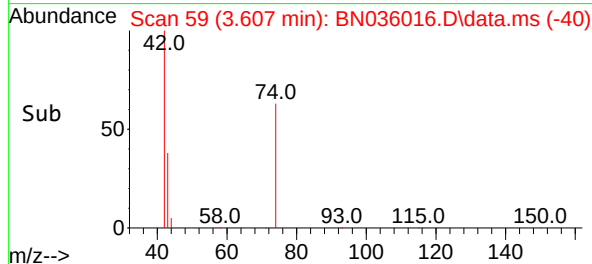
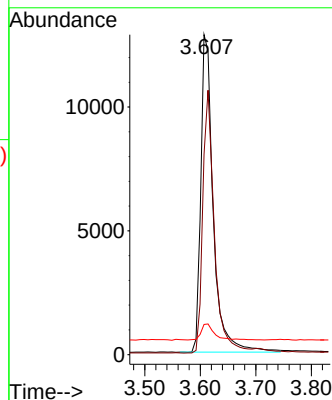
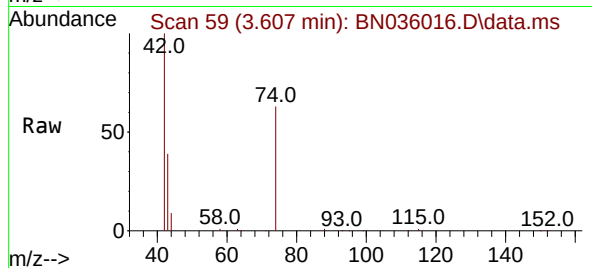




#3
n-Nitrosodimethylamine
Concen: 4.679 ng
RT: 3.607 min Scan# 51
Delta R.T. -0.014 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

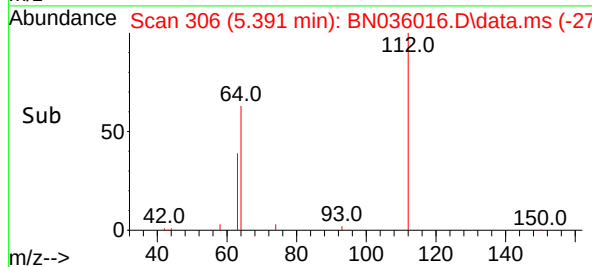
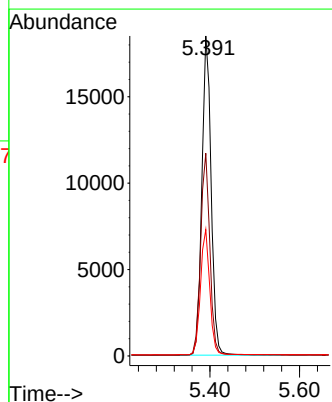
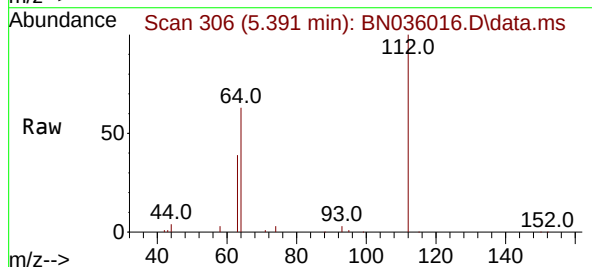
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

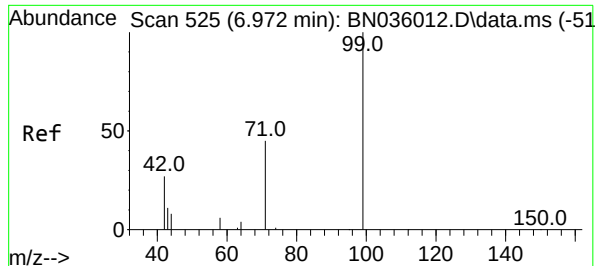
Tgt Ion: 42 Resp: 20013
Ion Ratio Lower Upper
42 100
74 77.4 58.1 87.1
44 5.5 6.2 9.4#



#4
2-Fluorophenol
Concen: 4.852 ng
RT: 5.391 min Scan# 306
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion: 112 Resp: 26627
Ion Ratio Lower Upper
112 100
64 63.1 50.0 75.0
63 39.2 30.7 46.1

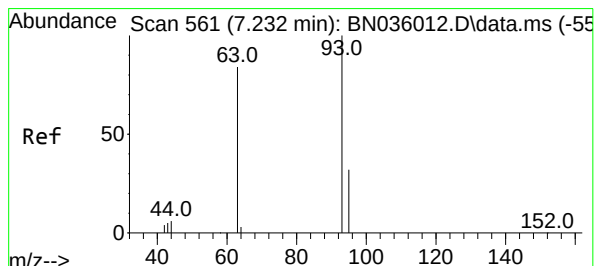
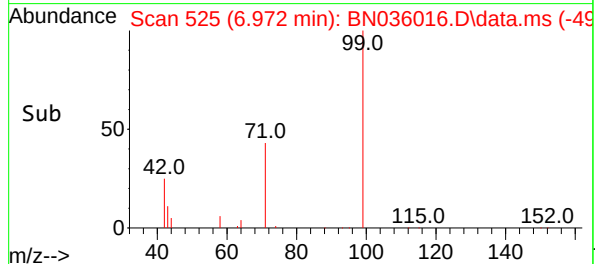
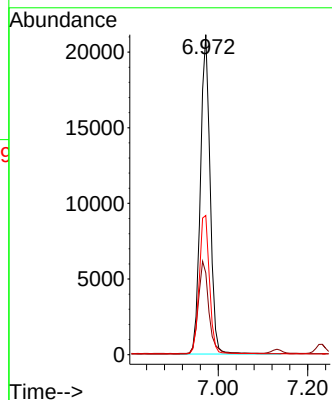
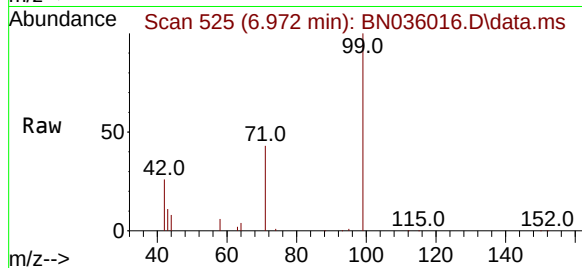




#5
Phenol-d6
Concen: 4.948 ng
RT: 6.972 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

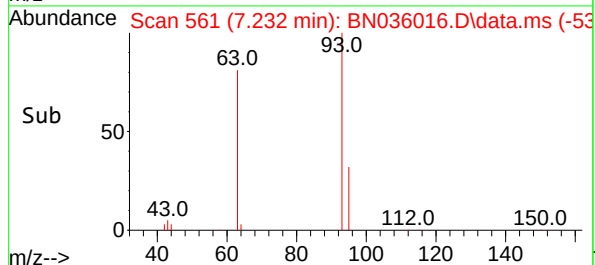
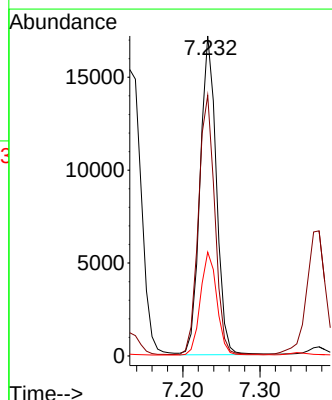
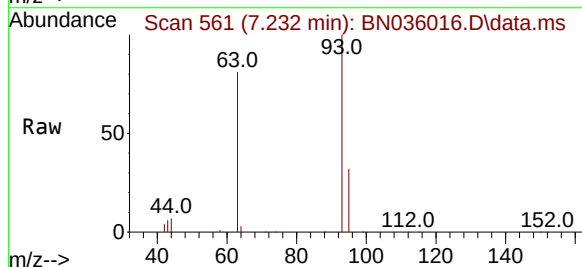
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

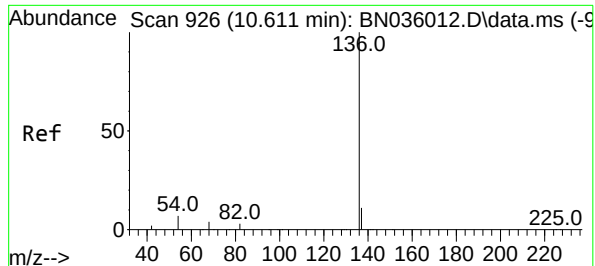
Tgt Ion: 99 Resp: 31890
Ion Ratio Lower Upper
99 100
42 31.1 26.8 40.2
71 45.9 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 4.838 ng
RT: 7.232 min Scan# 561
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion: 93 Resp: 25098
Ion Ratio Lower Upper
93 100
63 81.8 65.8 98.6
95 32.4 25.8 38.6

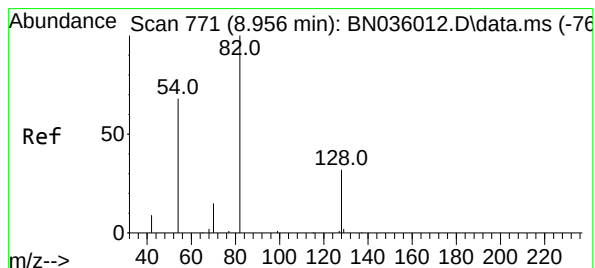
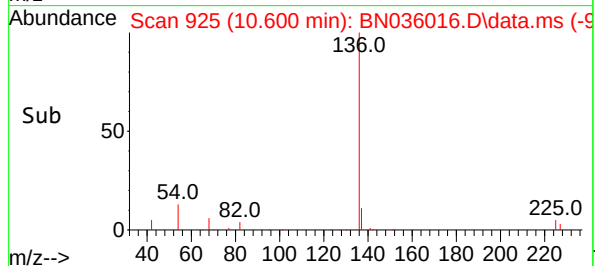
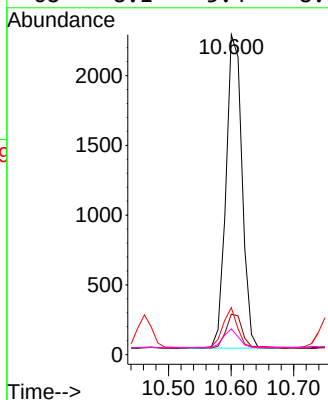
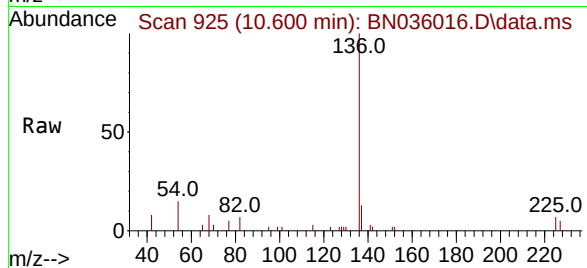




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

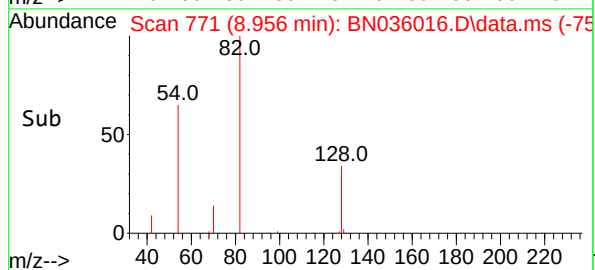
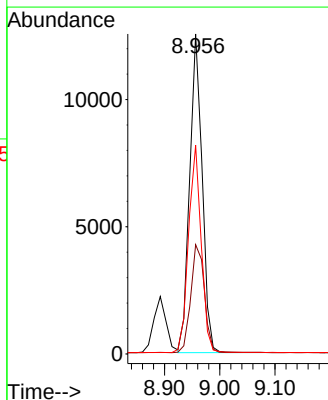
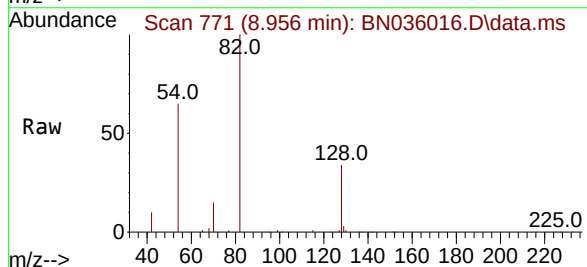
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

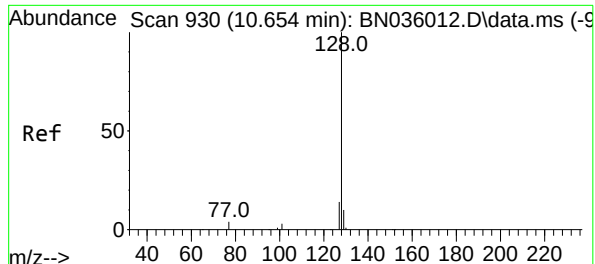
Tgt Ion:	136	Resp:	3989
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.4	15.6
54	14.7	7.7	11.5#
68	8.1	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 5.213 ng
RT: 8.956 min Scan# 771
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion:	82	Resp:	19630
Ion	Ratio	Lower	Upper
82	100		
128	34.1	28.8	43.2
54	65.2	55.8	83.8





#9

Naphthalene

Concen: 4.866 ng

RT: 10.654 min Scan# 91

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

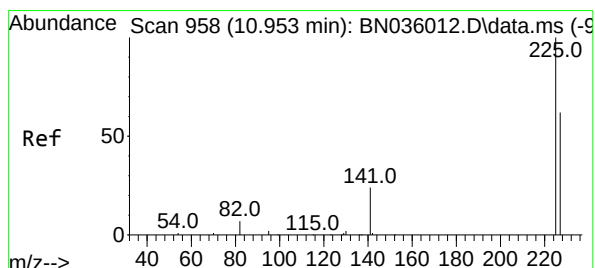
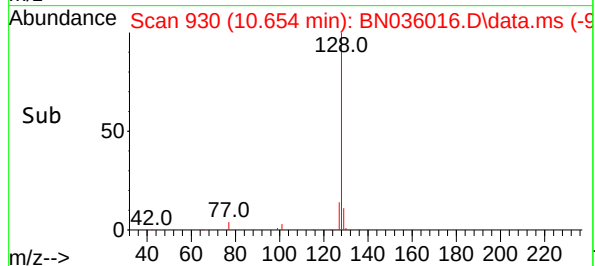
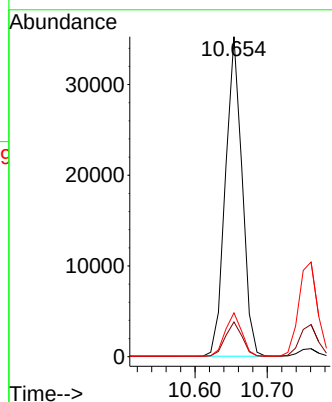
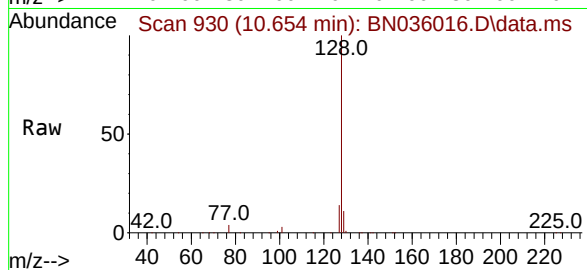
Tgt Ion:128 Resp: 56372

Ion Ratio Lower Upper

128 100

129 10.8 9.4 14.2

127 13.7 12.6 19.0



#10

Hexachlorobutadiene

Concen: 4.698 ng

RT: 10.953 min Scan# 958

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

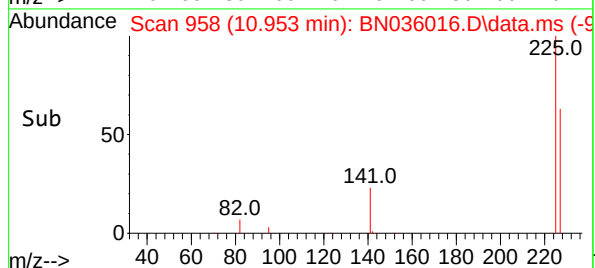
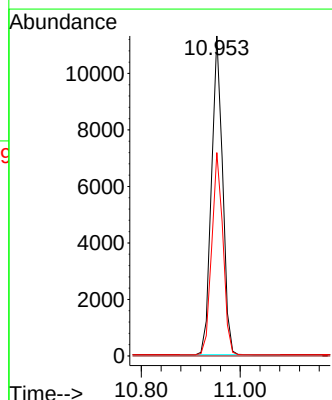
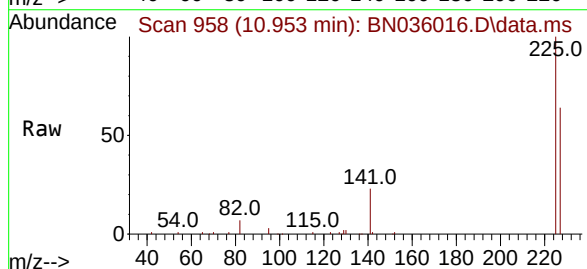
Tgt Ion:225 Resp: 17582

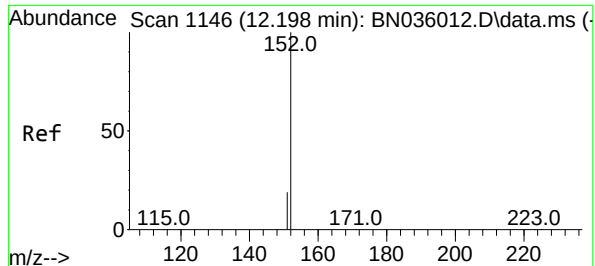
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.7 51.0 76.6

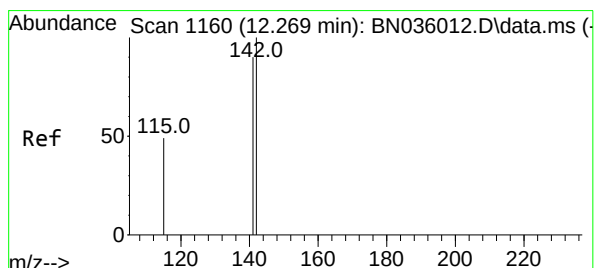
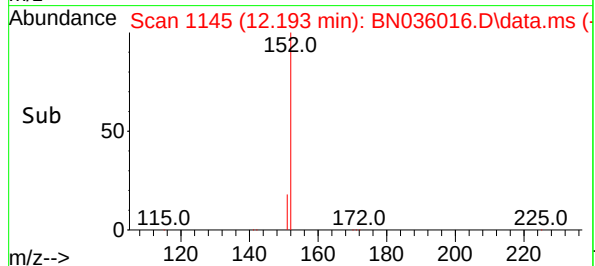
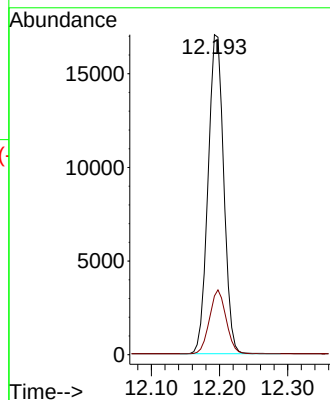
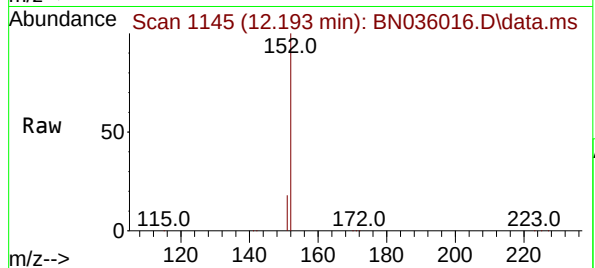




#11
2-Methylnaphthalene-d10
Concen: 5.012 ng
RT: 12.193 min Scan# 1145
Delta R.T. -0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

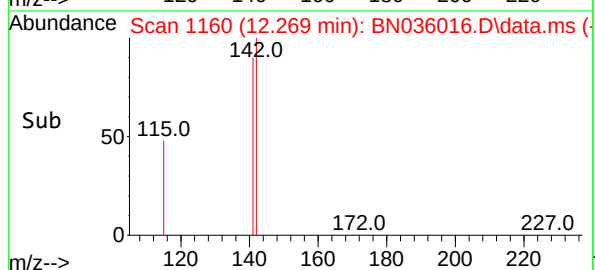
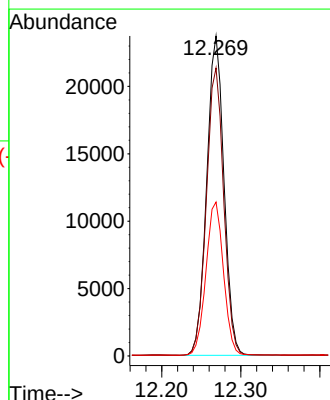
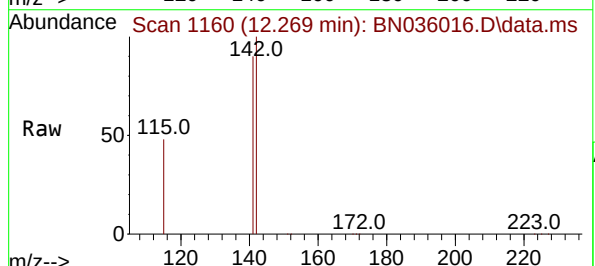
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

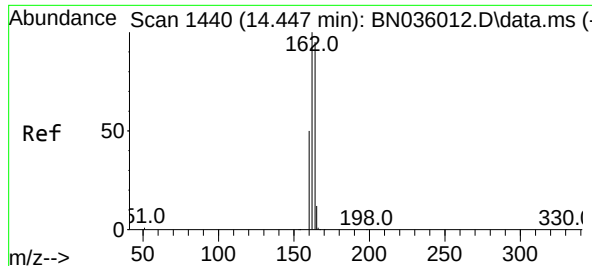
Tgt Ion:152 Resp: 27183
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#12
2-Methylnaphthalene
Concen: 4.999 ng
RT: 12.269 min Scan# 1160
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion:142 Resp: 35942
Ion Ratio Lower Upper
142 100
141 90.0 72.2 108.2
115 48.1 41.2 61.8

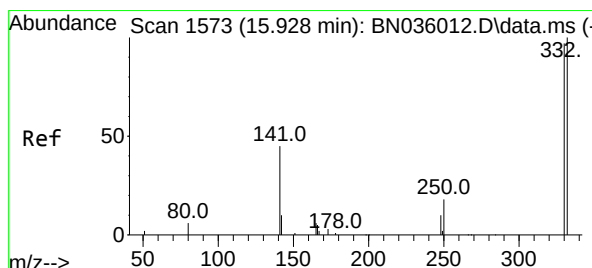
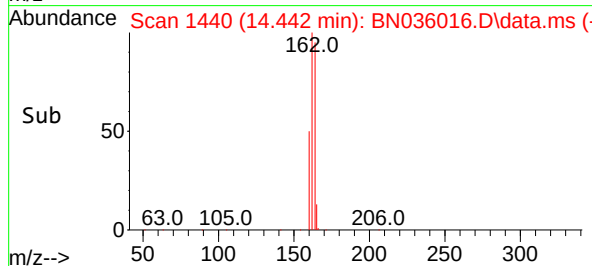
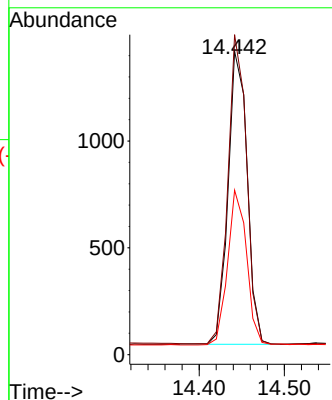
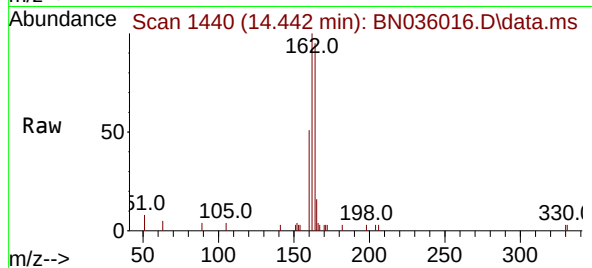




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.442 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

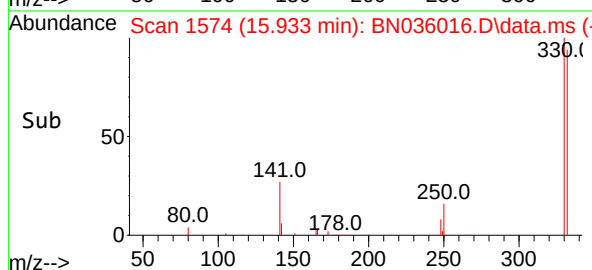
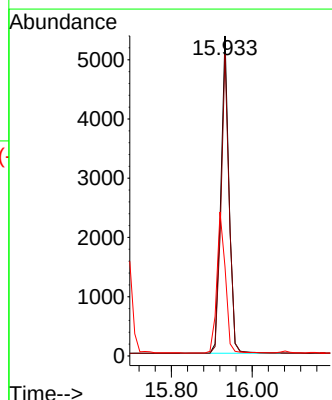
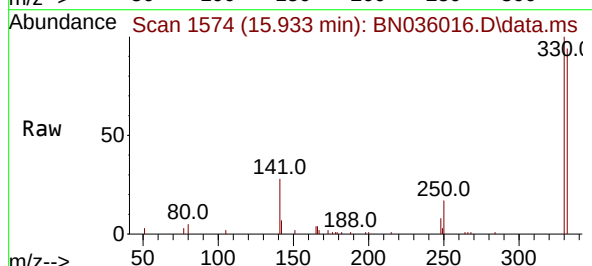
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

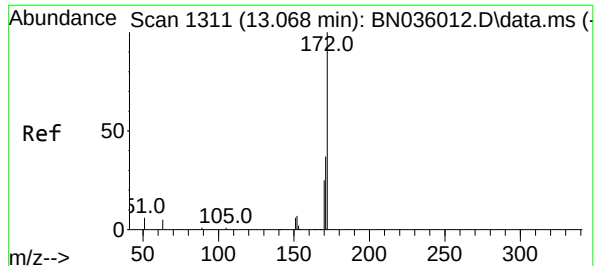
Tgt Ion:164 Resp: 2132
Ion Ratio Lower Upper
164 100
162 105.5 84.1 126.1
160 54.2 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 5.503 ng
RT: 15.933 min Scan# 1574
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion:330 Resp: 7524
Ion Ratio Lower Upper
330 100
332 93.5 81.0 121.4
141 46.5 36.7 55.1





#15

2-Fluorobiphenyl

Concen: 4.827 ng

RT: 13.073 min Scan# 1311

Delta R.T. 0.005 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

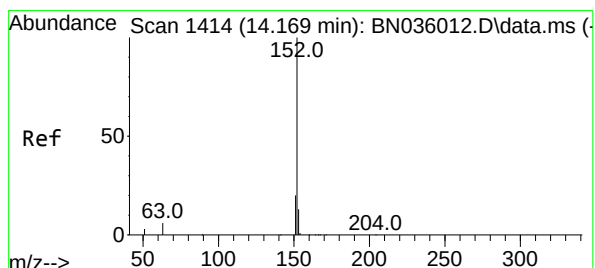
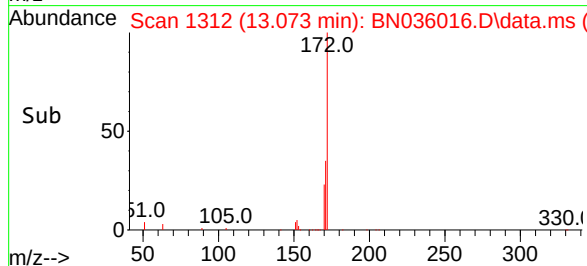
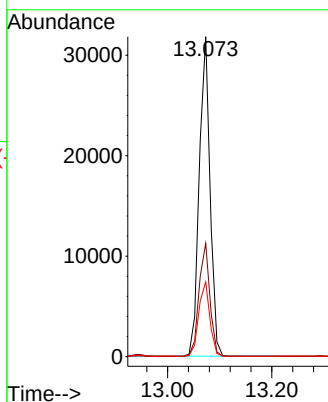
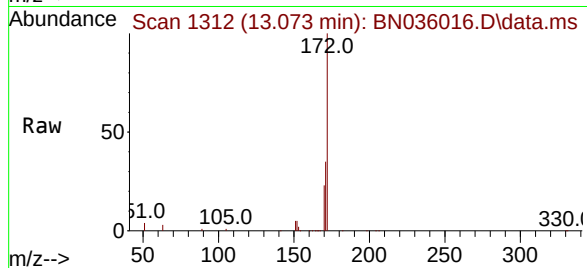
Tgt Ion:172 Resp: 45936

Ion Ratio Lower Upper

172 100

171 35.4 30.9 46.3

170 23.4 21.2 31.8



#16

Acenaphthylene

Concen: 5.104 ng

RT: 14.164 min Scan# 1414

Delta R.T. -0.006 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

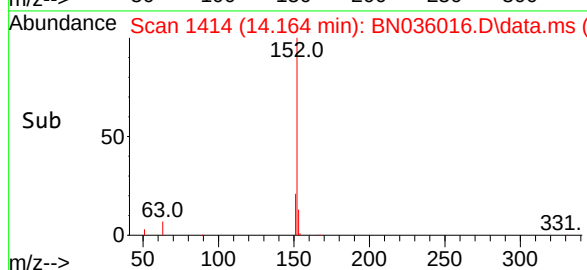
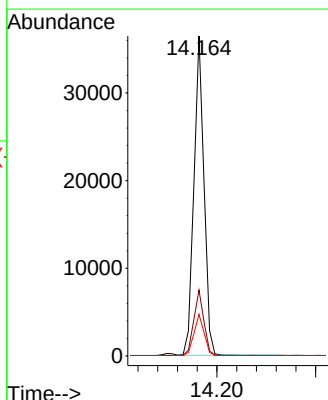
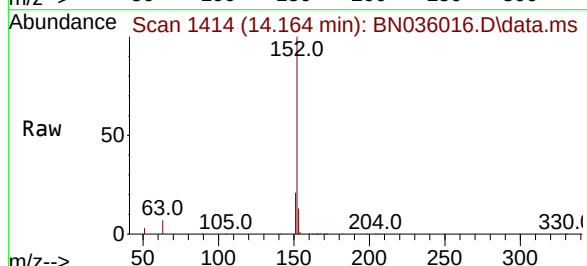
Tgt Ion:152 Resp: 51595

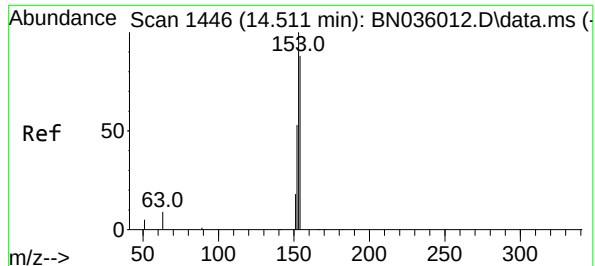
Ion Ratio Lower Upper

152 100

151 20.5 16.2 24.2

153 13.0 10.4 15.6





#17

Acenaphthene

Concen: 5.109 ng

RT: 14.506 min Scan# 1446

Delta R.T. -0.006 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

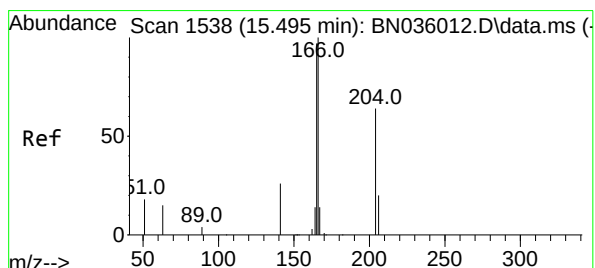
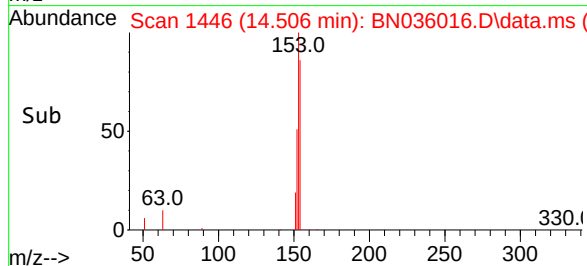
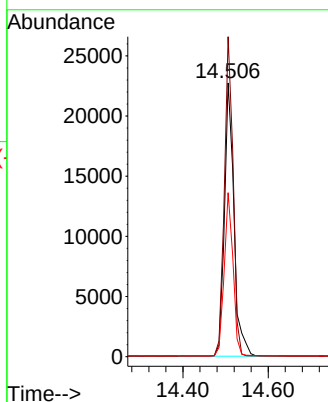
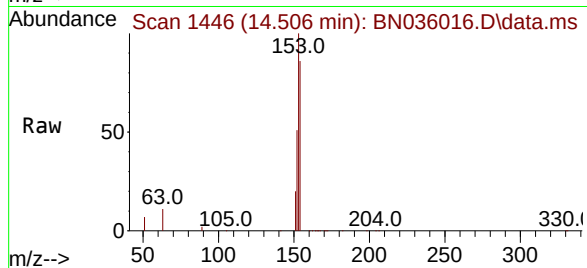
Tgt Ion:154 Resp: 35366

Ion Ratio Lower Upper

154 100

153 107.5 88.9 133.3

152 55.4 48.1 72.1



#18

Fluorene

Concen: 5.223 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

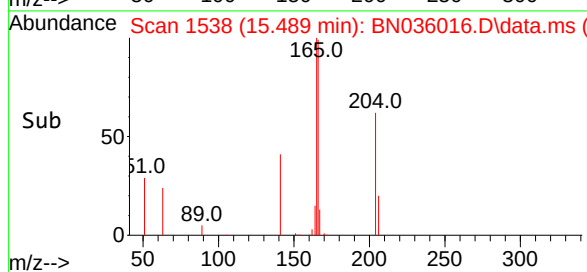
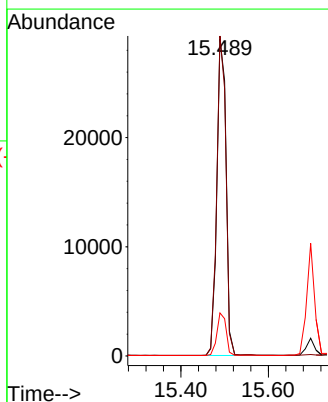
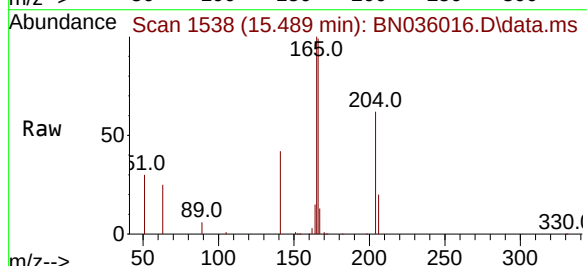
Tgt Ion:166 Resp: 45293

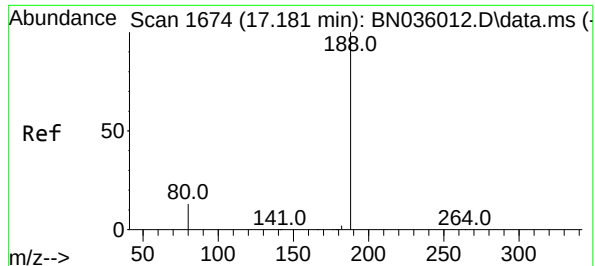
Ion Ratio Lower Upper

166 100

165 100.5 78.5 117.7

167 12.8 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

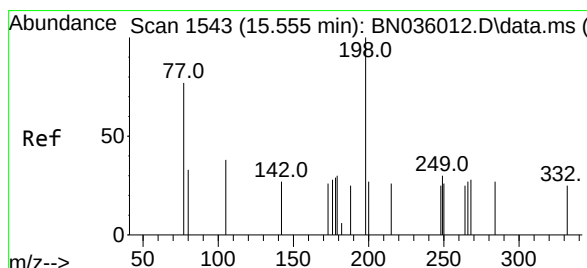
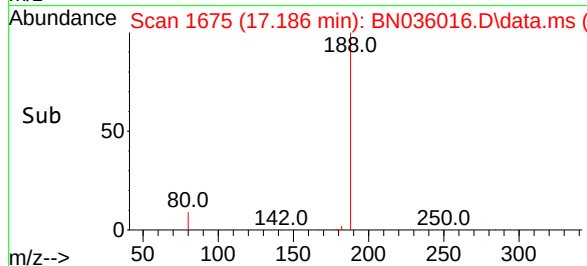
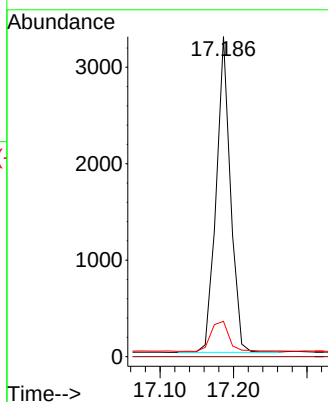
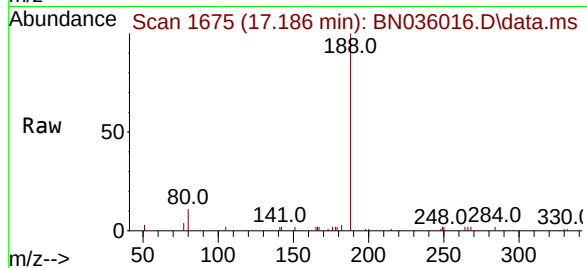
Tgt Ion:188 Resp: 4417

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.0 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 5.790 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

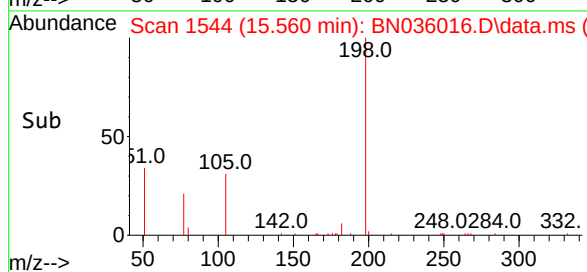
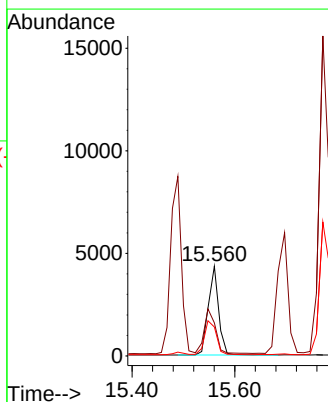
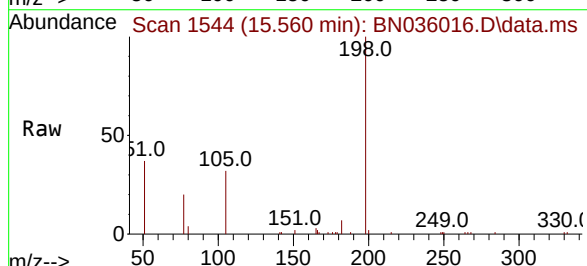
Tgt Ion:198 Resp: 5963

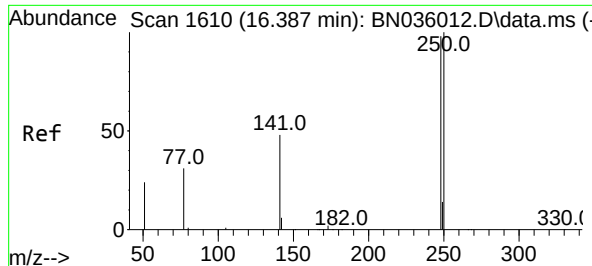
Ion Ratio Lower Upper

198 100

51 36.8 68.1 102.1#

105 32.2 46.5 69.7#

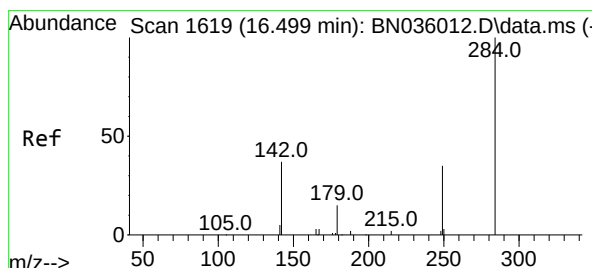
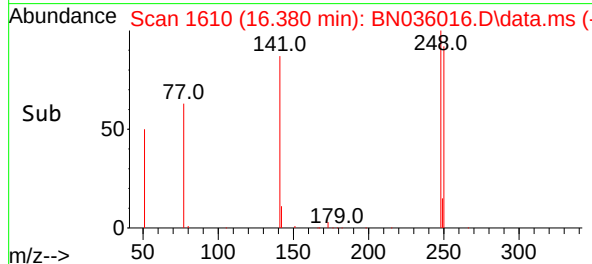
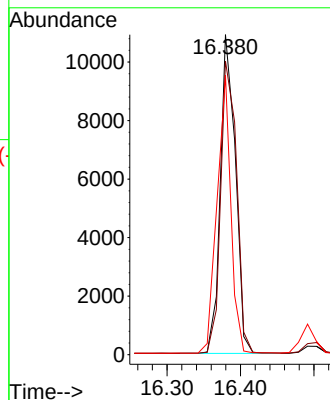
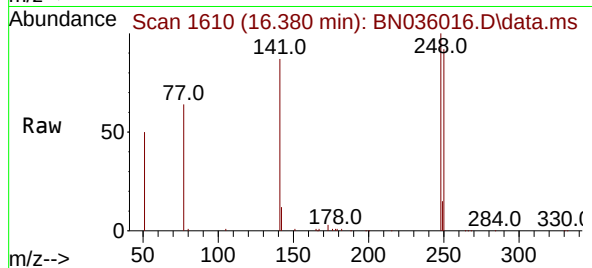




#21
4-Bromophenyl-phenylether
Concen: 4.925 ng
RT: 16.380 min Scan# 1610
Delta R.T. -0.007 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

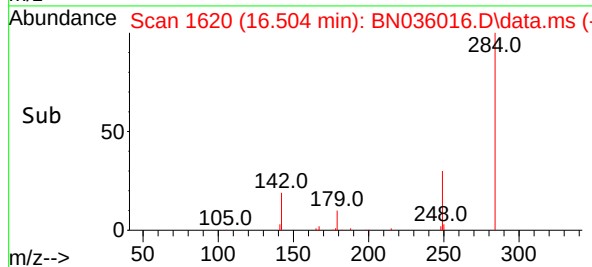
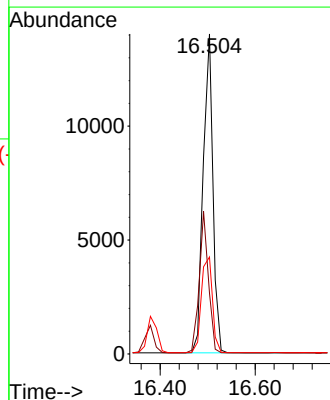
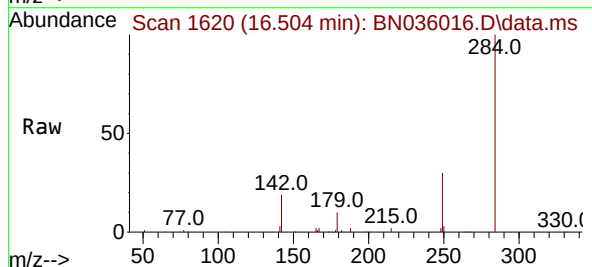
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

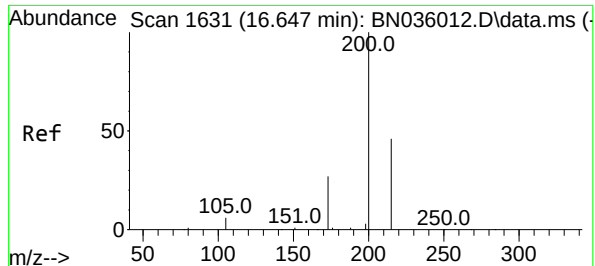
Tgt Ion	Ratio	Lower	Upper
248	100		
250	91.8	81.5	122.3
141	87.3	41.8	62.6



#22
Hexachlorobenzene
Concen: 4.816 ng
RT: 16.504 min Scan# 1620
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion	Ratio	Lower	Upper
284	100		
142	41.8	33.6	50.4
249	34.2	28.8	43.2

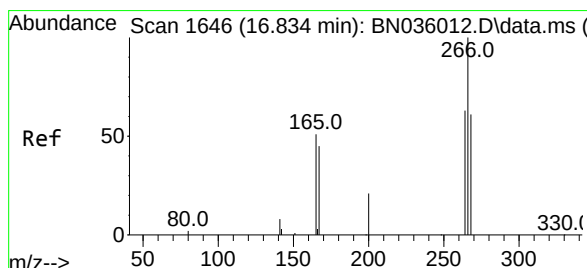
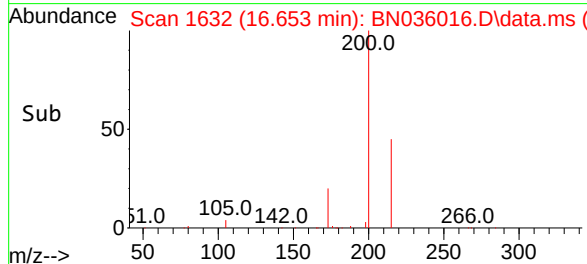
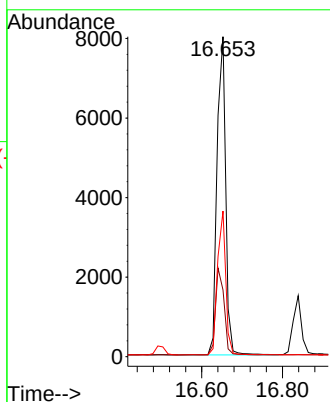
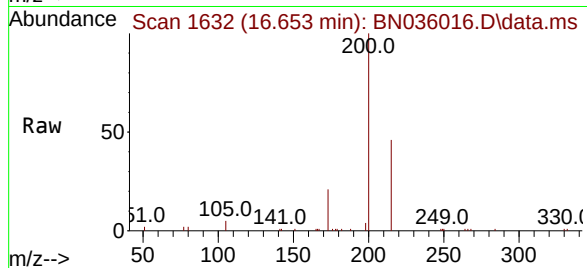




#23
Atrazine
Concen: 5.212 ng
RT: 16.653 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

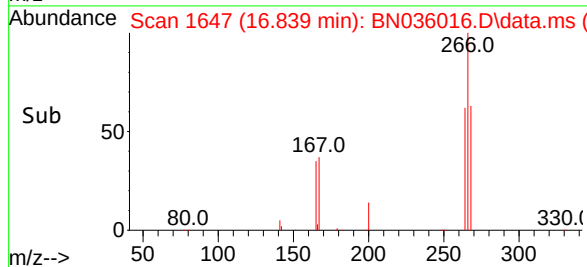
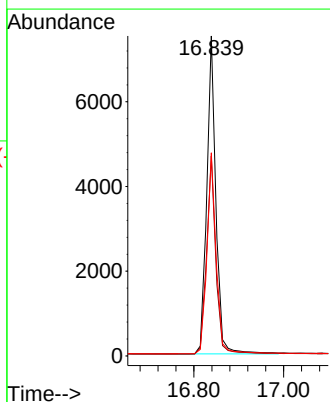
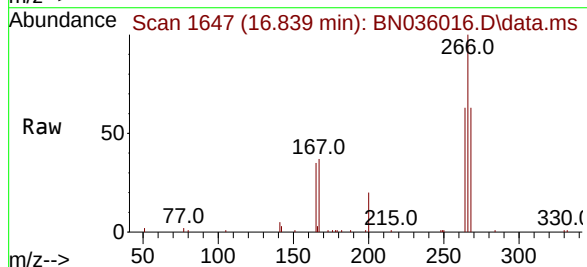
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

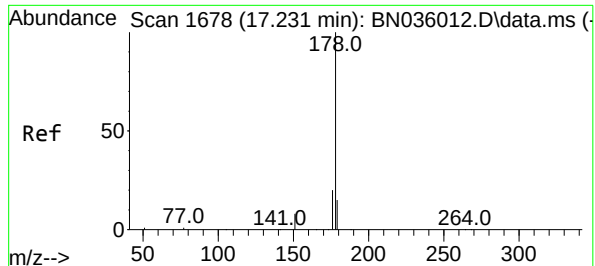
Tgt Ion:200 Resp: 11848
Ion Ratio Lower Upper
200 100
173 20.9 26.6 40.0#
215 45.5 40.6 61.0



#24
Pentachlorophenol
Concen: 5.905 ng
RT: 16.839 min Scan# 1647
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion:266 Resp: 10589
Ion Ratio Lower Upper
266 100
264 63.1 48.2 72.2
268 63.9 51.6 77.4

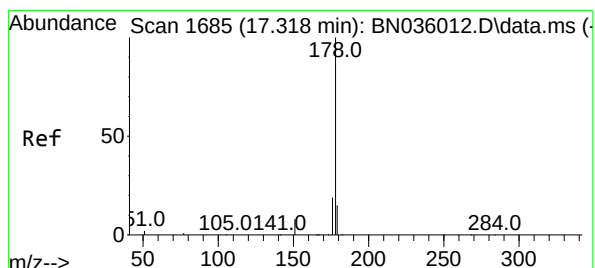
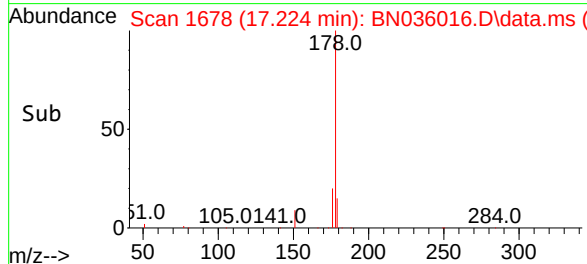
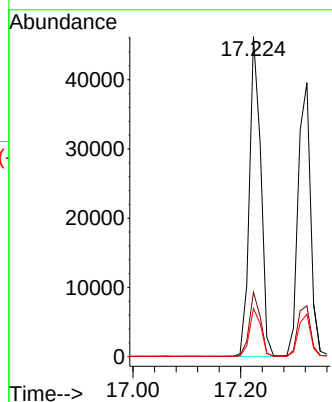
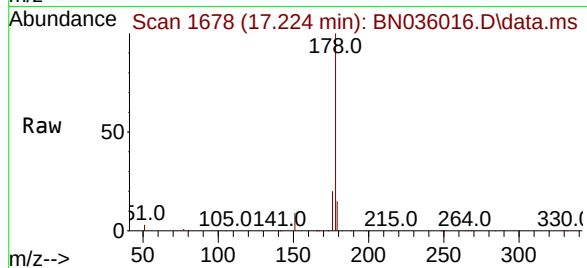




#25
Phenanthrene
Concen: 5.072 ng
RT: 17.224 min Scan# 1678
Delta R.T. -0.007 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

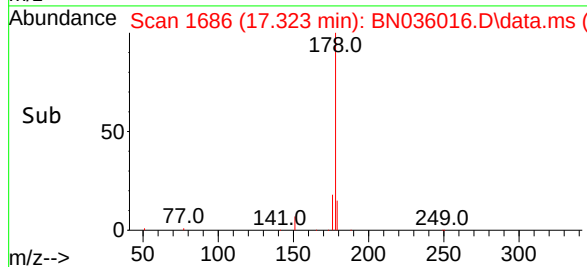
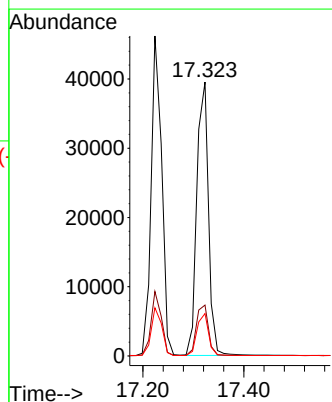
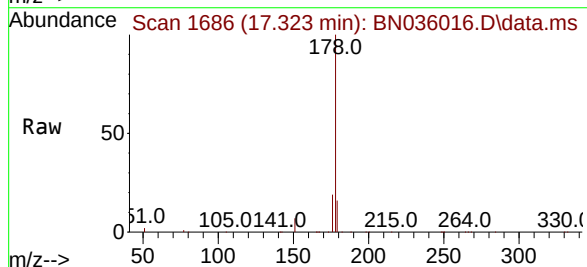
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

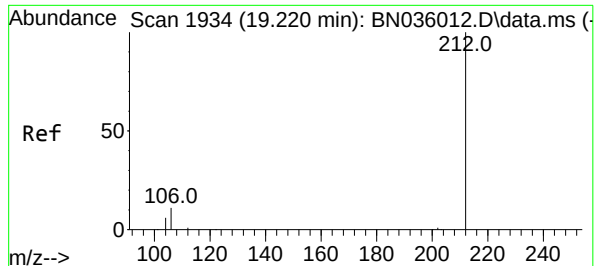
Tgt Ion:178 Resp: 67322
Ion Ratio Lower Upper
178 100
176 19.7 16.0 24.0
179 15.1 12.4 18.6



#26
Anthracene
Concen: 5.265 ng
RT: 17.323 min Scan# 1686
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion:178 Resp: 63551
Ion Ratio Lower Upper
178 100
176 19.2 15.4 23.2
179 15.2 12.0 18.0





#27

Fluoranthene-d10

Concen: 5.315 ng

RT: 19.216 min Scan# 1933

Delta R.T. -0.004 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

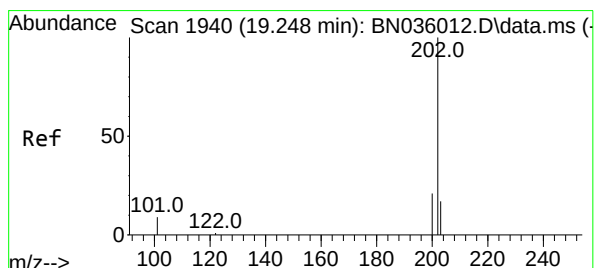
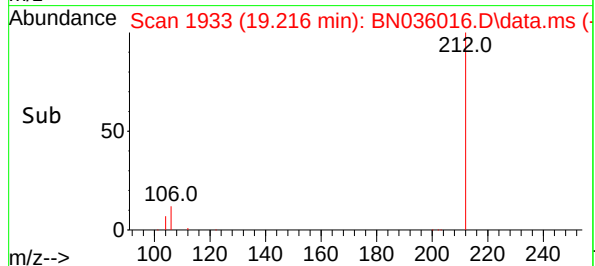
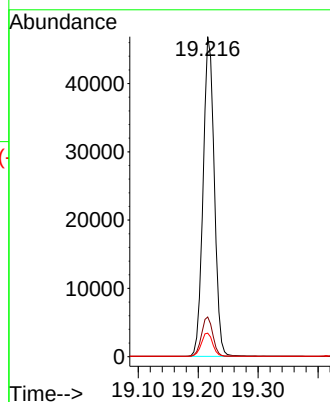
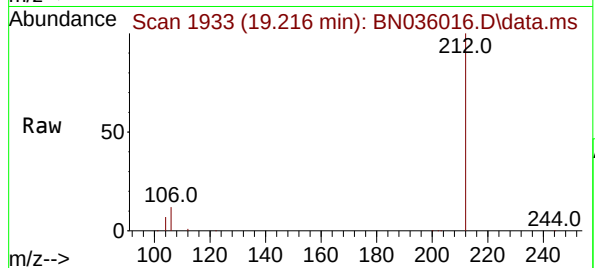
Tgt Ion:212 Resp: 60810

Ion Ratio Lower Upper

212 100

106 12.4 9.7 14.5

104 7.4 6.0 9.0



#28

Fluoranthene

Concen: 5.429 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

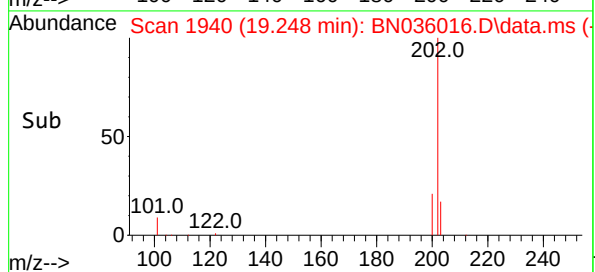
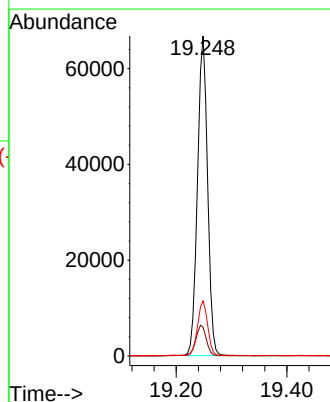
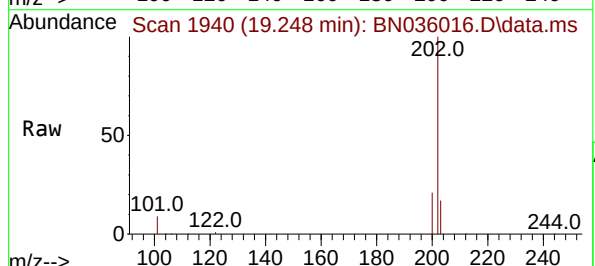
Tgt Ion:202 Resp: 84644

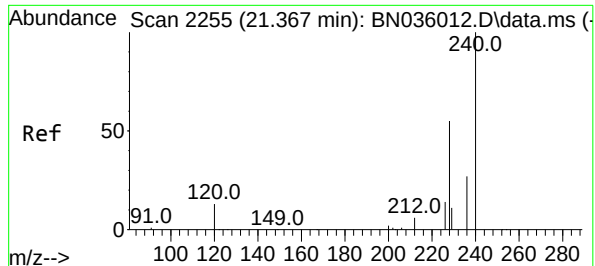
Ion Ratio Lower Upper

202 100

101 9.9 7.6 11.4

203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

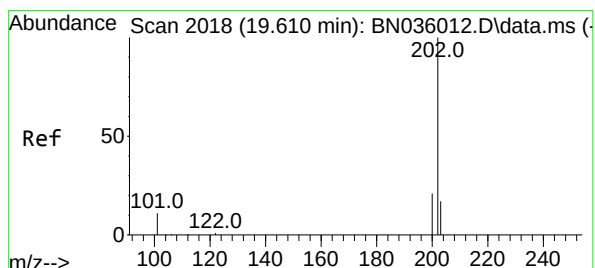
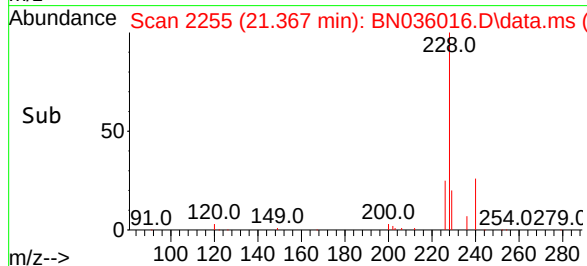
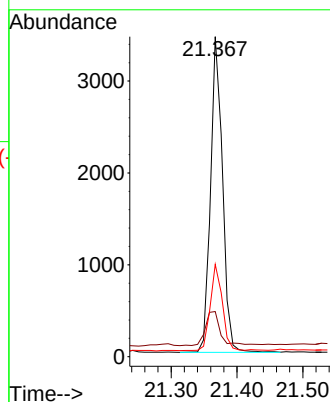
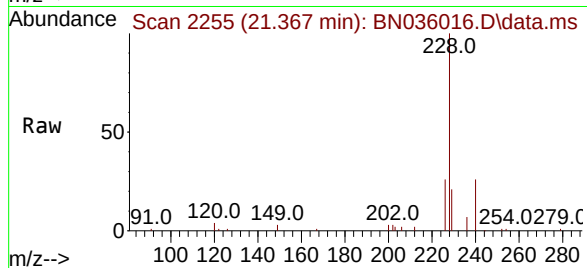
Tgt Ion:240 Resp: 4348

Ion Ratio Lower Upper

240 100

120 14.1 13.9 20.9

236 28.9 23.7 35.5



#30

Pyrene

Concen: 4.858 ng

RT: 19.611 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

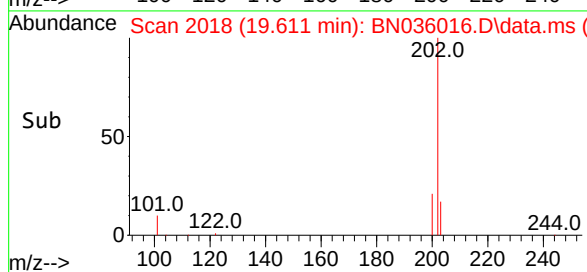
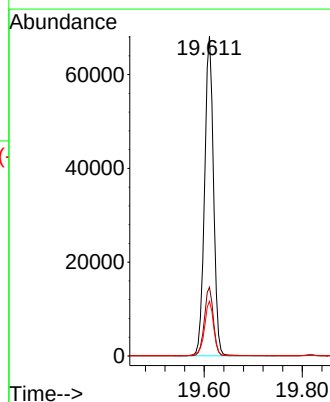
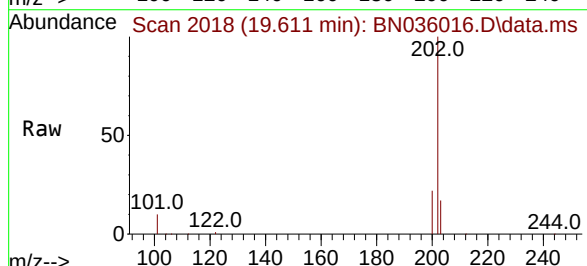
Tgt Ion:202 Resp: 85587

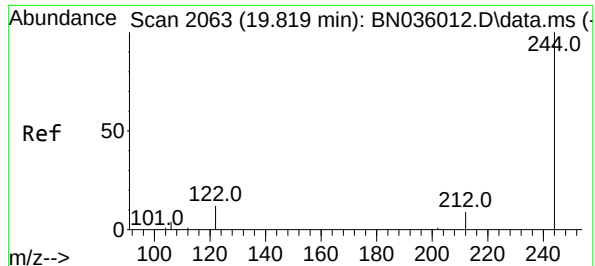
Ion Ratio Lower Upper

202 100

200 21.6 17.0 25.4

203 17.7 14.4 21.6

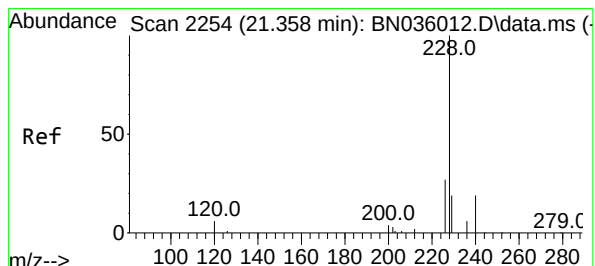
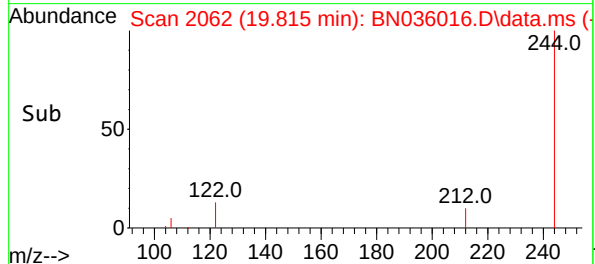
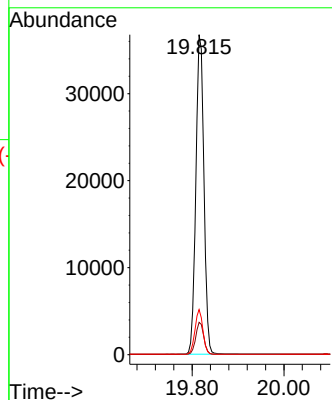
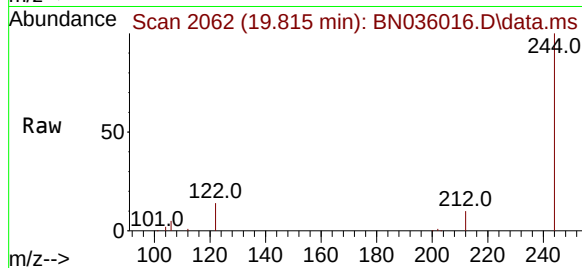




#31
Terphenyl-d14
Concen: 4.949 ng
RT: 19.815 min Scan# 2062
Delta R.T. -0.004 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

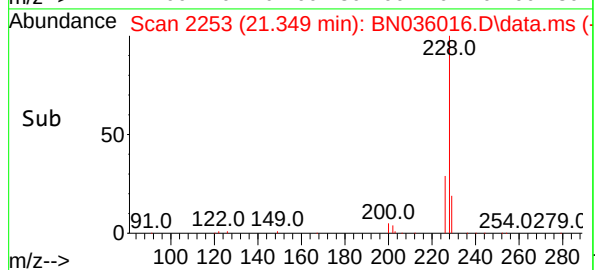
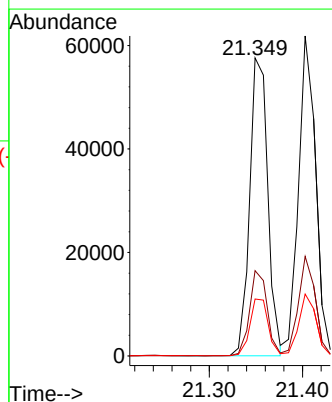
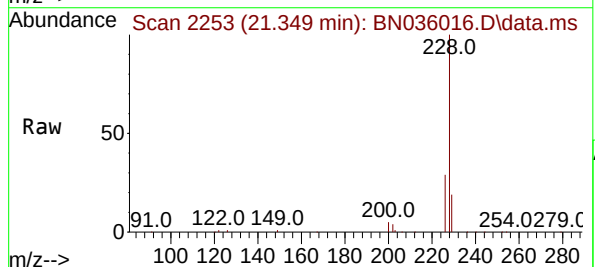
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

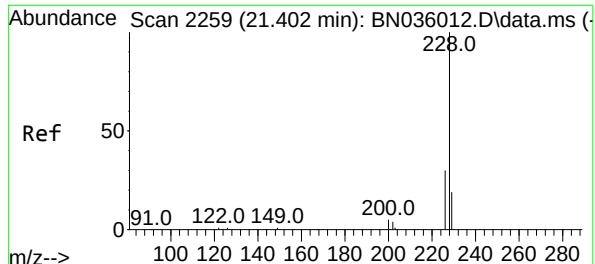
Tgt Ion:244 Resp: 44701
Ion Ratio Lower Upper
244 100
212 10.1 9.1 13.7
122 14.1 11.3 16.9



#32
Benzo(a)anthracene
Concen: 4.939 ng
RT: 21.349 min Scan# 2253
Delta R.T. -0.008 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion:228 Resp: 77897
Ion Ratio Lower Upper
228 100
226 28.6 22.6 34.0
229 19.1 16.5 24.7

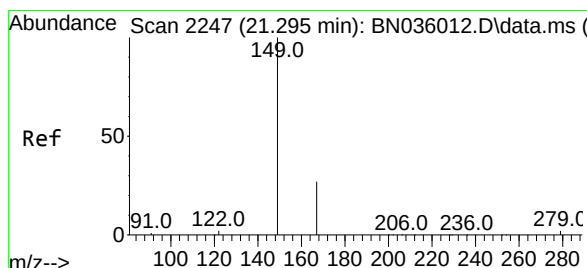
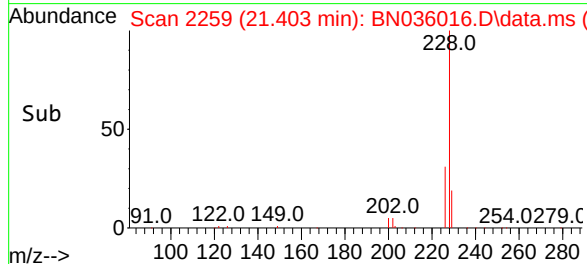
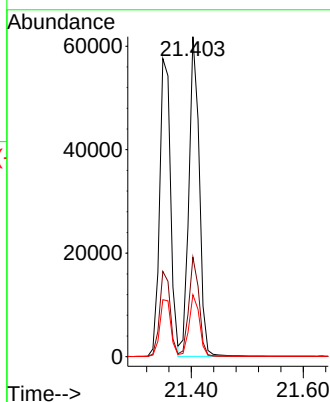
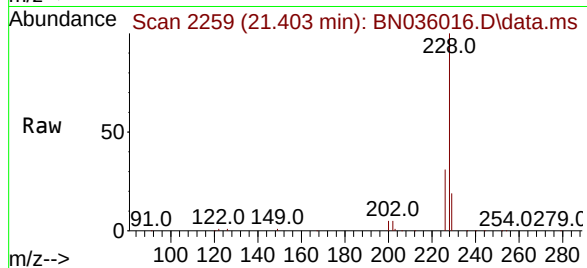




#33
Chrysene
Concen: 4.933 ng
RT: 21.403 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

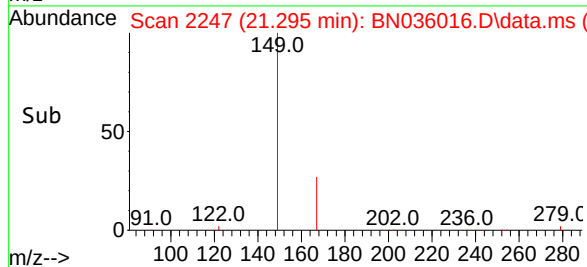
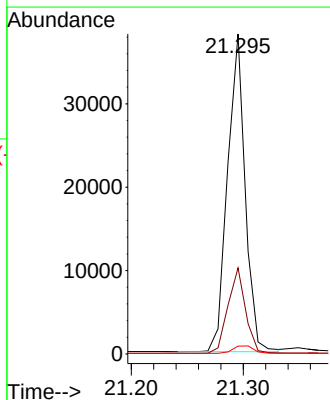
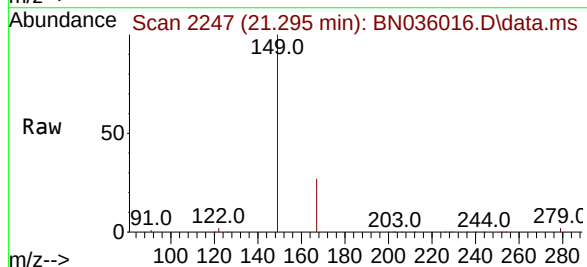
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

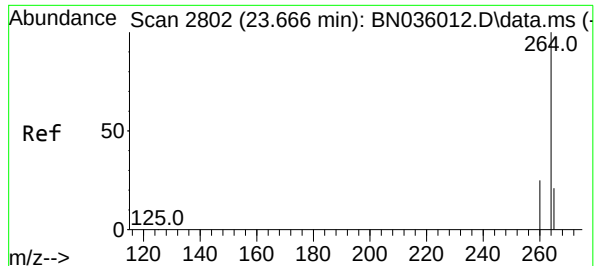
Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.1	25.3	37.9
229	19.3	16.3	24.5



#34
Bis(2-ethylhexyl)phthalate
Concen: 4.828 ng
RT: 21.295 min Scan# 2247
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

Tgt Ion	Ratio	Lower	Upper
149	100		
167	26.9	21.9	32.9
279	2.8	3.0	4.6#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.666 min Scan# 2802

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

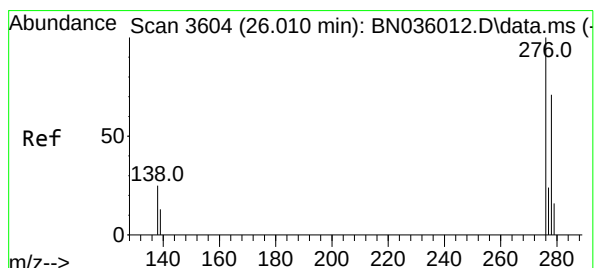
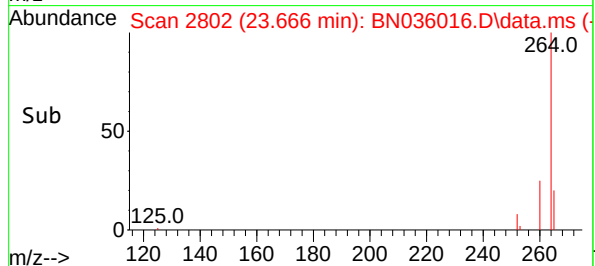
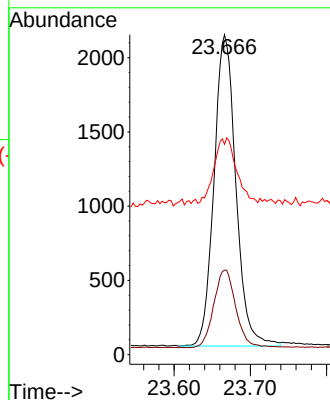
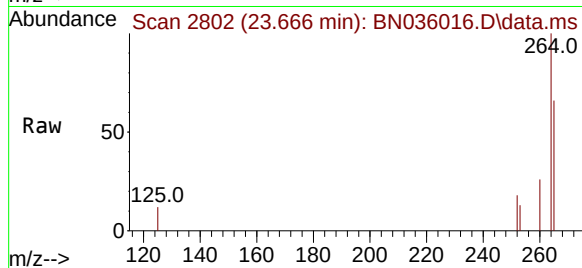
Tgt Ion:264 Resp: 4175

Ion Ratio Lower Upper

264 100

260 26.5 21.8 32.6

265 65.8 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 5.270 ng

RT: 26.011 min Scan# 3604

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

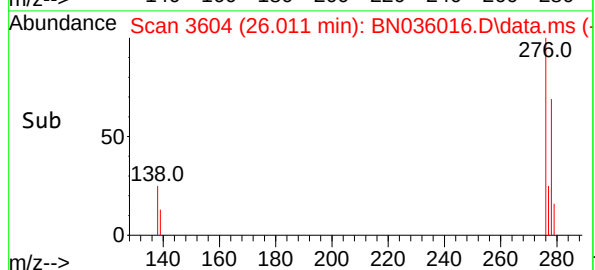
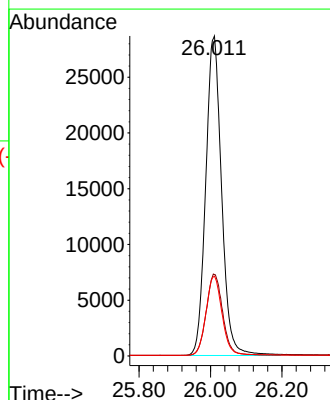
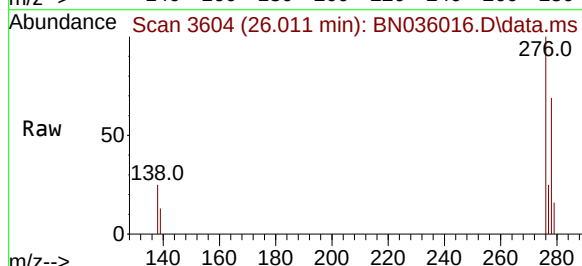
Tgt Ion:276 Resp: 88295

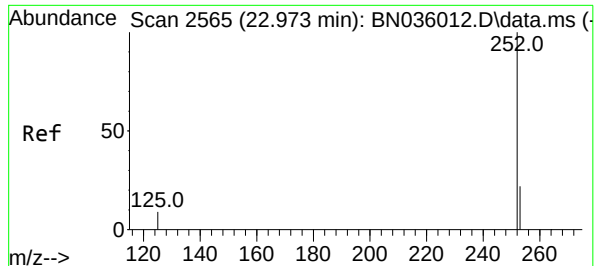
Ion Ratio Lower Upper

276 100

138 26.4 19.9 29.9

277 25.2 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 5.192 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

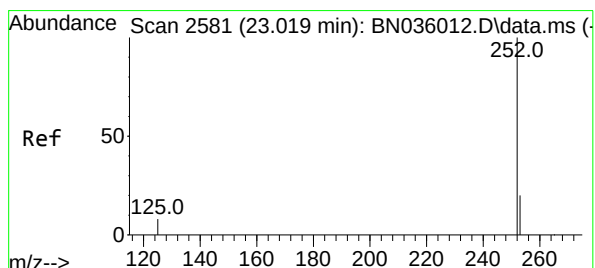
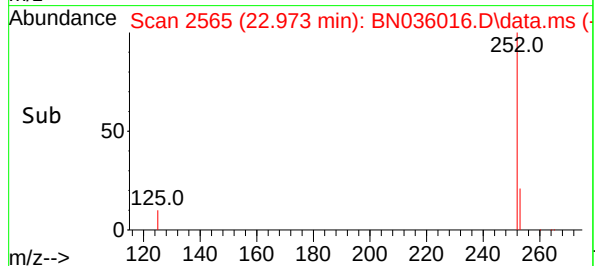
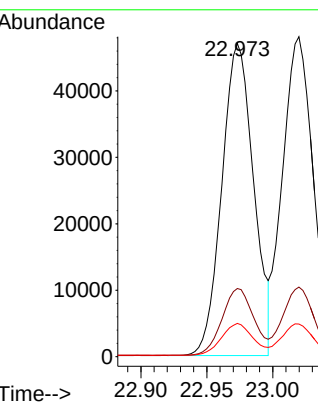
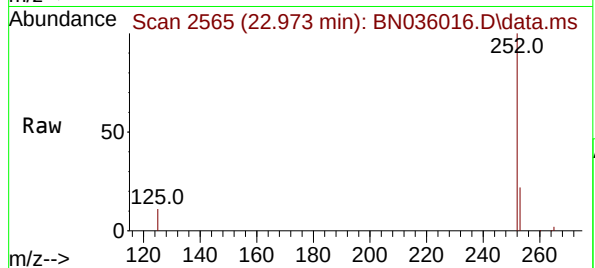
Tgt Ion:252 Resp: 78788

Ion Ratio Lower Upper

252 100

253 21.7 22.5 33.7#

125 10.6 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 5.198 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

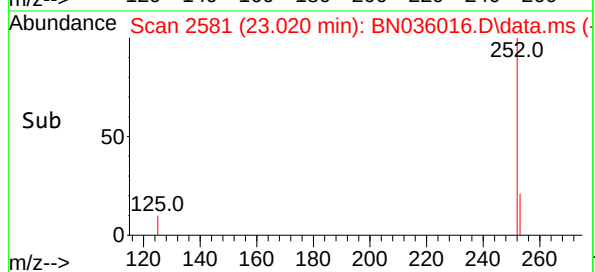
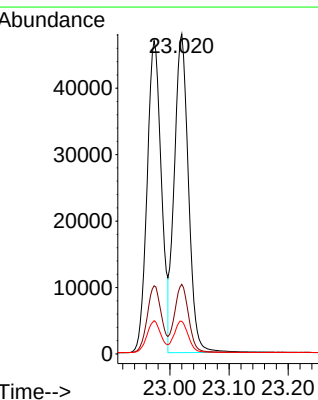
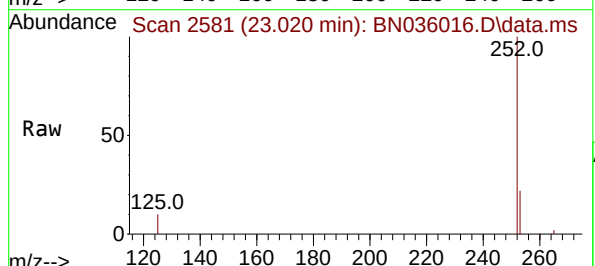
Tgt Ion:252 Resp: 79510

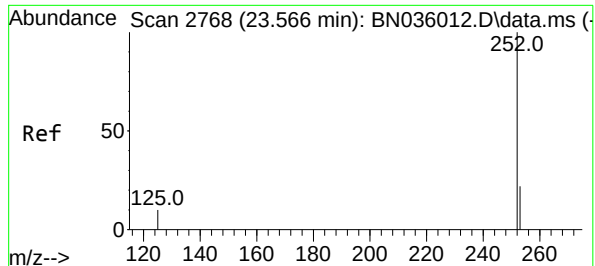
Ion Ratio Lower Upper

252 100

253 21.8 21.3 31.9

125 10.2 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 5.218 ng

RT: 23.567 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036016.D

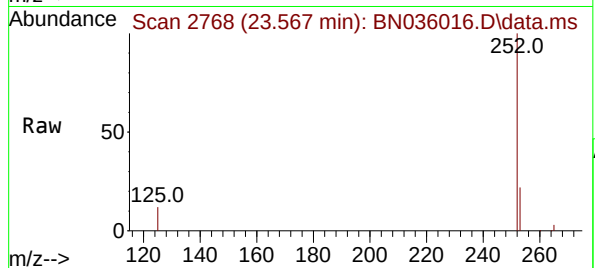
Acq: 22 Jan 2025 14:36

Instrument :

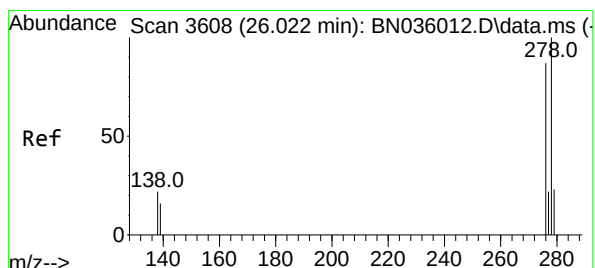
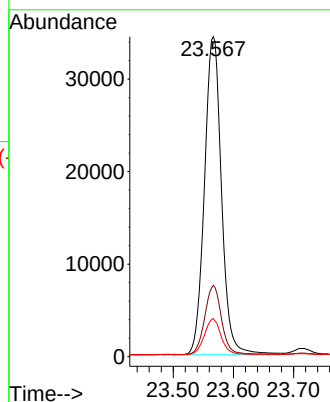
BNA_N

ClientSampleId :

SSTDICC5.0



Tgt Ion:	252	Resp:	67637
Ion Ratio	Lower	Upper	
252	100		
253	22.3	23.8	35.6#
125	11.9	14.6	21.8#



#40

Dibenzo(a,h)anthracene

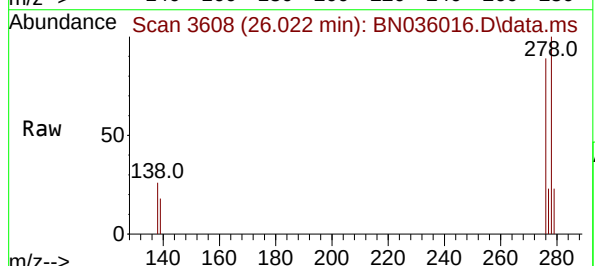
Concen: 5.300 ng

RT: 26.022 min Scan# 3608

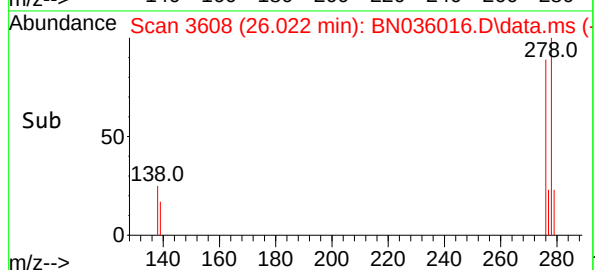
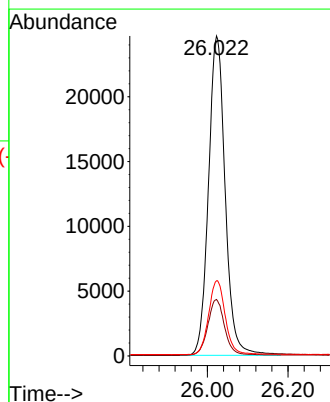
Delta R.T. 0.000 min

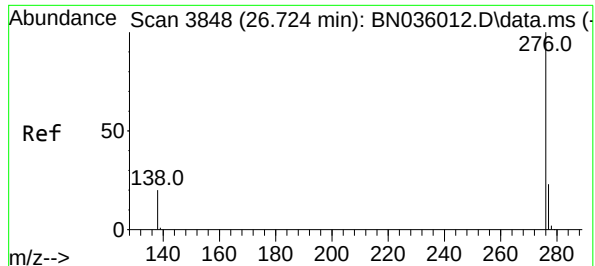
Lab File: BN036016.D

Acq: 22 Jan 2025 14:36



Tgt Ion:	278	Resp:	70778
Ion Ratio	Lower	Upper	
278	100		
139	17.7	16.0	24.0
279	23.5	23.8	35.8#





#41

Benzo(g,h,i)perylene

Concen: 5.148 ng

RT: 26.718 min Scan# 3846

Delta R.T. -0.005 min

Lab File: BN036016.D

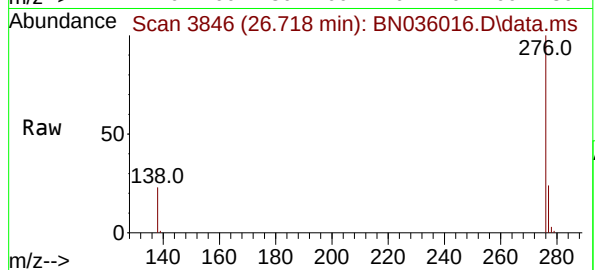
Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0



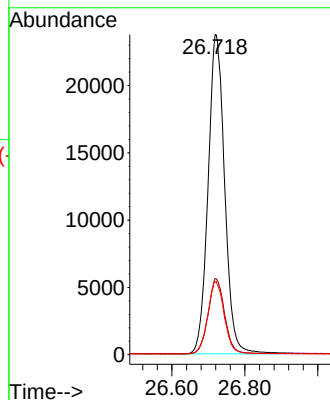
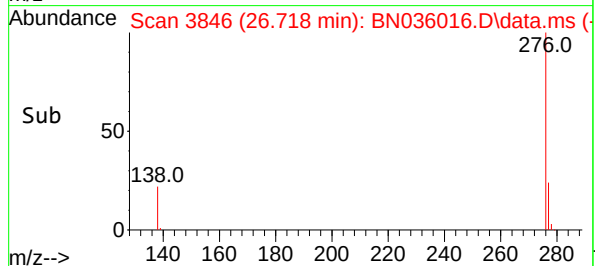
Tgt Ion:276 Resp: 74927

Ion Ratio Lower Upper

276 100

277 23.7 21.3 31.9

138 22.6 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036017.D
 Acq On : 22 Jan 2025 15:53
 Operator : RC/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN012225

Quant Time: Jan 23 00:35:35 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:34:56 2025
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

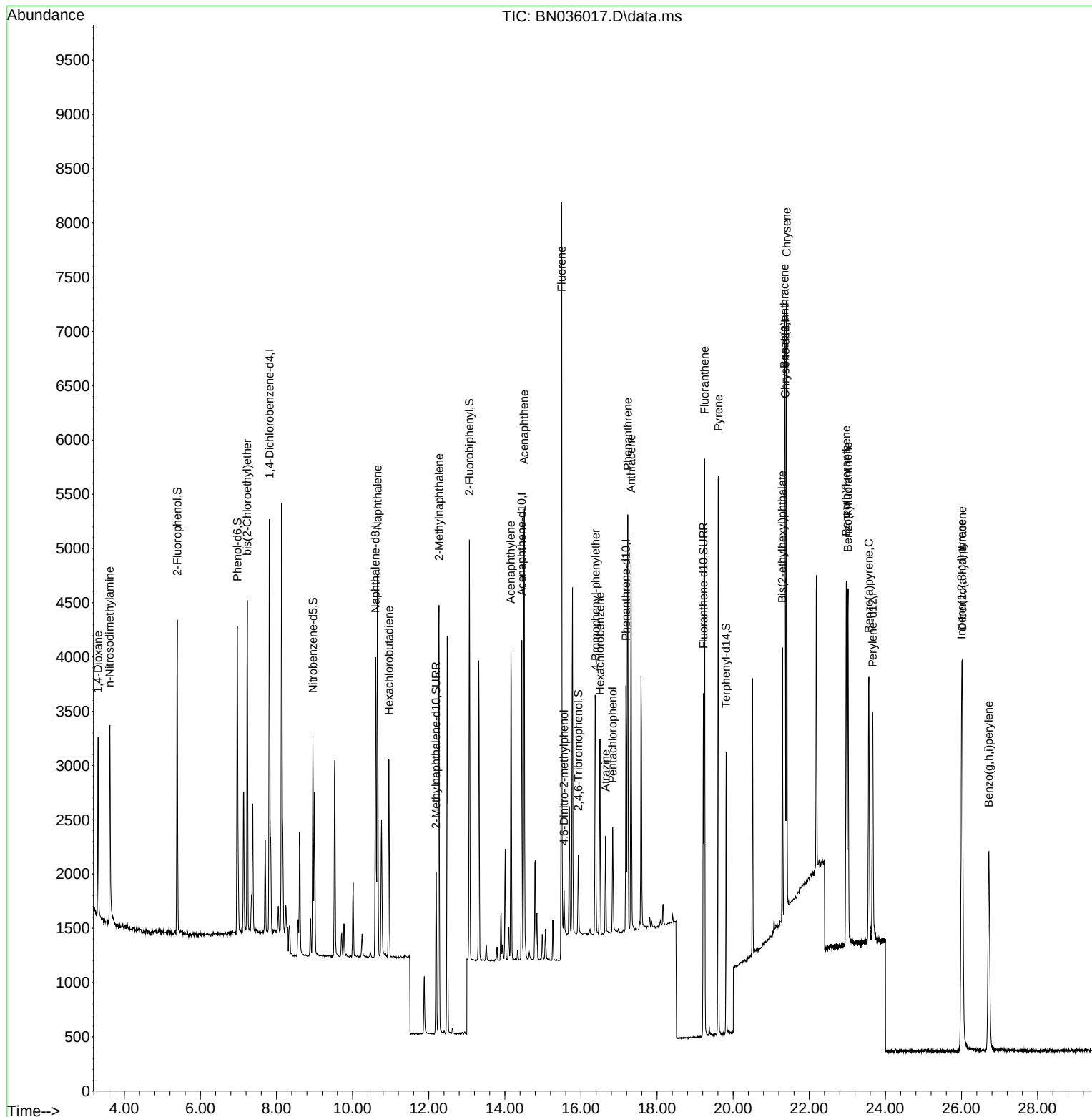
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1865	0.400	ng	0.00
7) Naphthalene-d8	10.601	136	3525	0.400	ng	#-0.01
13) Acenaphthene-d10	14.447	164	1598	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	3132	0.400	ng	0.00
29) Chrysene-d12	21.367	240	2762	0.400	ng	0.00
35) Perylene-d12	23.663	264	2873	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.391	112	2015	0.415	ng	0.00
5) Phenol-d6	6.972	99	2353	0.413	ng	0.00
8) Nitrobenzene-d5	8.956	82	1418	0.426	ng	0.00
11) 2-Methylnaphthalene-d10	12.193	152	2064	0.431	ng	0.00
14) 2,4,6-Tribromophenol	15.928	330	401	0.391	ng	0.00
15) 2-Fluorobiphenyl	13.068	172	3089	0.433	ng	0.00
27) Fluoranthene-d10	19.216	212	3474	0.428	ng	0.00
31) Terphenyl-d14	19.815	244	2392	0.417	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.311	88	922	0.442	ng	95
3) n-Nitrosodimethylamine	3.614	42	1560	0.413	ng	# 94
6) bis(2-Chloroethyl)ether	7.232	93	2015	0.439	ng	98
9) Naphthalene	10.654	128	4380	0.428	ng	99
10) Hexachlorobutadiene	10.953	225	1424	0.431	ng	# 100
12) 2-Methylnaphthalene	12.269	142	2606	0.410	ng	99
16) Acenaphthylene	14.159	152	3265	0.431	ng	99
17) Acenaphthene	14.511	154	2176	0.419	ng	99
18) Fluorene	15.495	166	2572	0.396	ng	94
20) 4,6-Dinitro-2-methylph...	15.555	198	302	0.414	ng	92
21) 4-Bromophenyl-phenylether	16.387	248	944	0.423	ng	98
22) Hexachlorobenzene	16.499	284	1229	0.418	ng	98
23) Atrazine	16.648	200	667	0.414	ng	99
24) Pentachlorophenol	16.834	266	479	0.377	ng	96
25) Phenanthrene	17.231	178	3969	0.422	ng	100
26) Anthracene	17.318	178	3591	0.420	ng	100
28) Fluoranthene	19.248	202	4697	0.425	ng	100
30) Pyrene	19.610	202	4702	0.420	ng	99
32) Benzo(a)anthracene	21.349	228	4028	0.402	ng	98
33) Chrysene	21.403	228	4317	0.422	ng	99
34) Bis(2-ethylhexyl)phtha...	21.295	149	2187	0.398	ng	98
36) Indeno(1,2,3-cd)pyrene	26.005	276	4726	0.410	ng	98
37) Benzo(b)fluoranthene	22.973	252	4364	0.418	ng	98
38) Benzo(k)fluoranthene	23.017	252	4219	0.401	ng	99
39) Benzo(a)pyrene	23.563	252	3611	0.405	ng	99
40) Dibenzo(a,h)anthracene	26.019	278	3789	0.412	ng	98
41) Benzo(g,h,i)perylene	26.718	276	4102	0.410	ng	99

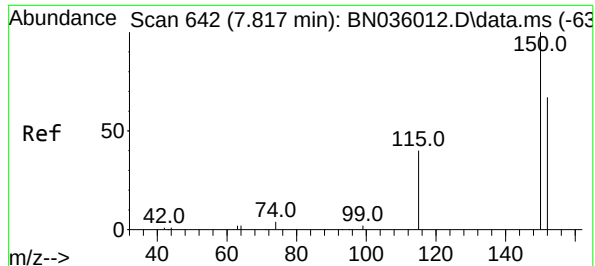
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036017.D
Acq On : 22 Jan 2025 15:53
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN012225

Quant Time: Jan 23 00:35:35 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:34:56 2025
Response via : Initial Calibration

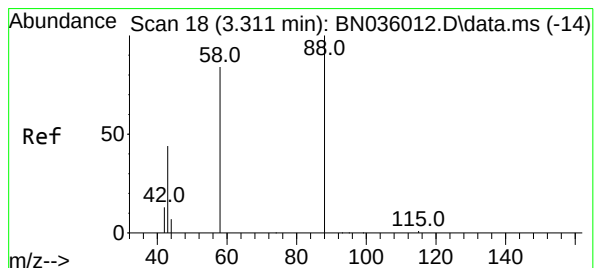
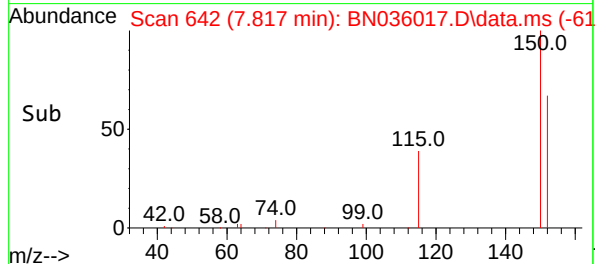
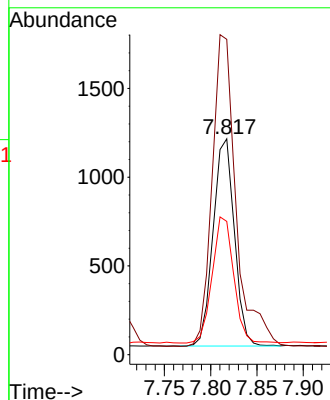
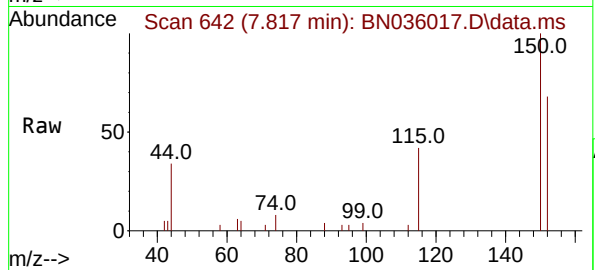




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

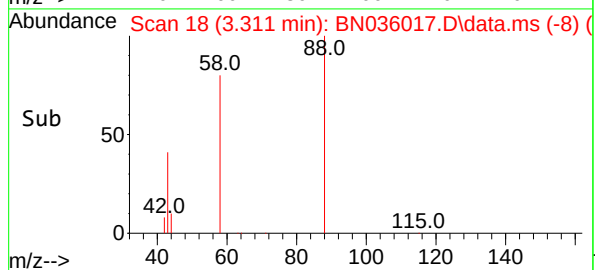
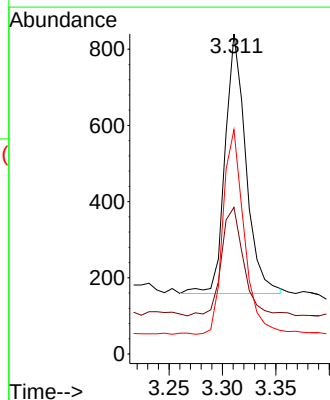
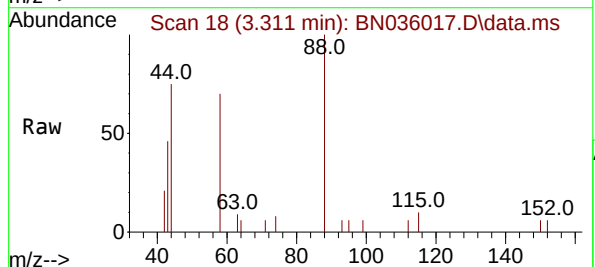
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

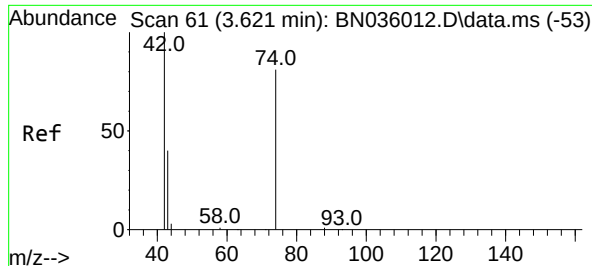
Tgt Ion:152 Resp: 1865
Ion Ratio Lower Upper
152 100
150 146.1 117.4 176.2
115 61.8 51.0 76.4



#2
1,4-Dioxane
Concen: 0.442 ng
RT: 3.311 min Scan# 18
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion: 88 Resp: 922
Ion Ratio Lower Upper
88 100
43 44.3 38.5 57.7
58 79.7 66.6 99.8

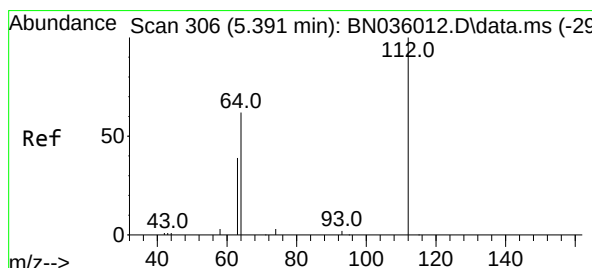
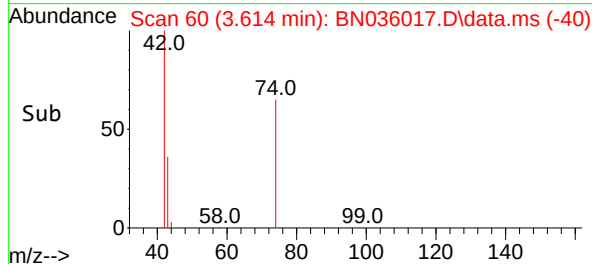
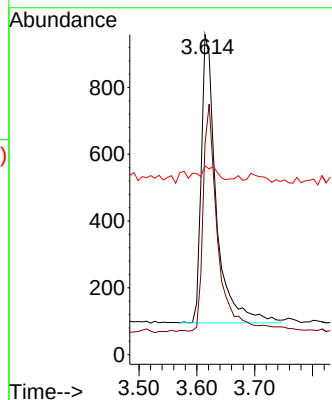
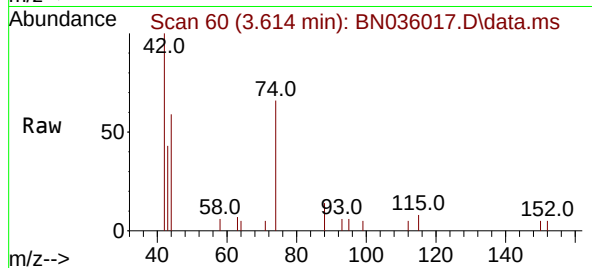




#3
n-Nitrosodimethylamine
Concen: 0.413 ng
RT: 3.614 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

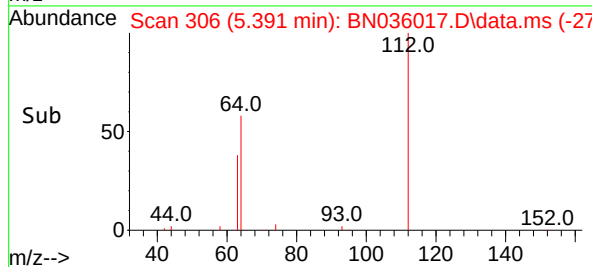
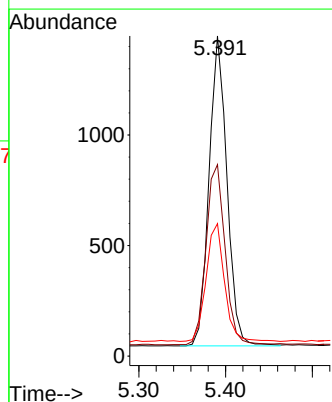
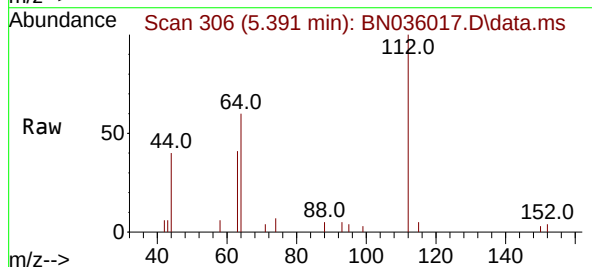
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

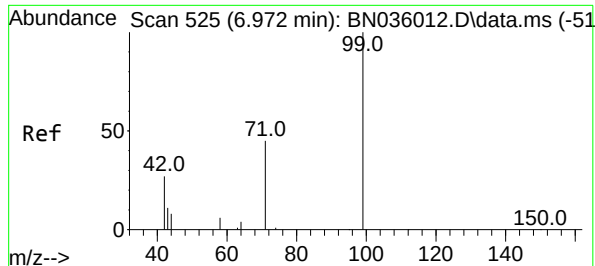
Tgt Ion: 42 Resp: 1560
Ion Ratio Lower Upper
42 100
74 76.9 58.1 87.1
44 4.4 6.2 9.4#



#4
2-Fluorophenol
Concen: 0.415 ng
RT: 5.391 min Scan# 306
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion: 112 Resp: 2015
Ion Ratio Lower Upper
112 100
64 62.3 50.0 75.0
63 39.1 30.7 46.1

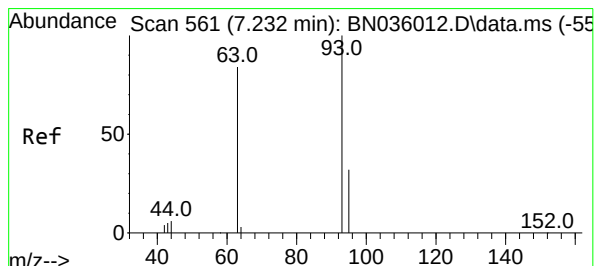
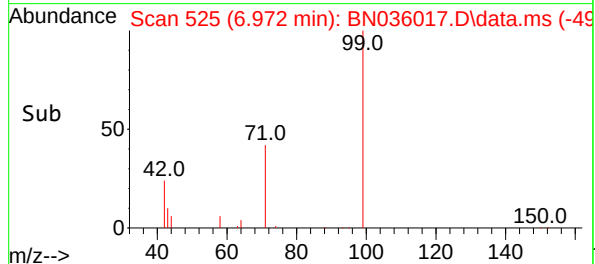
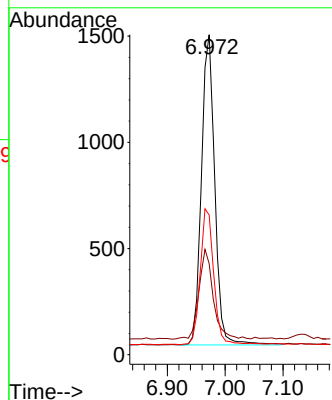
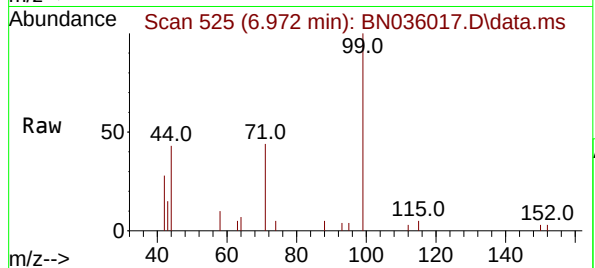




#5
Phenol-d6
Concen: 0.413 ng
RT: 6.972 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

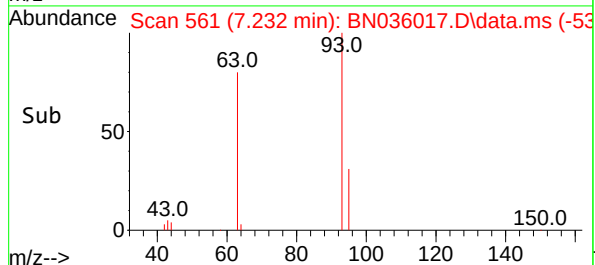
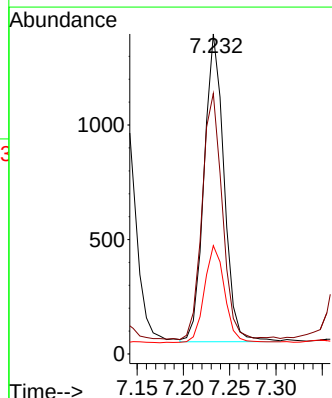
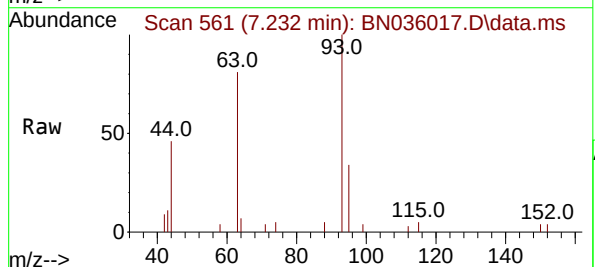
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

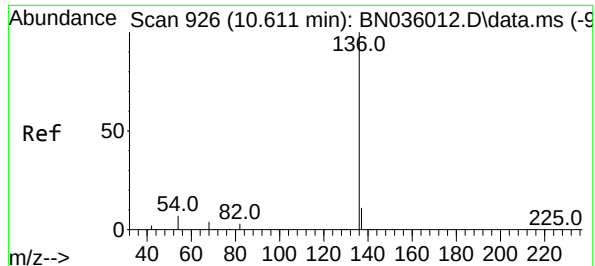
Tgt Ion: 99 Resp: 2353
Ion Ratio Lower Upper
99 100
42 31.0 26.8 40.2
71 44.4 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.439 ng
RT: 7.232 min Scan# 561
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion: 93 Resp: 2015
Ion Ratio Lower Upper
93 100
63 80.4 65.8 98.6
95 32.4 25.8 38.6

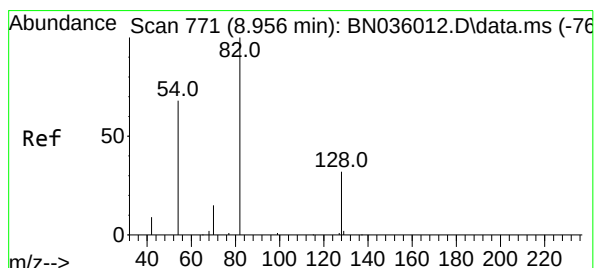
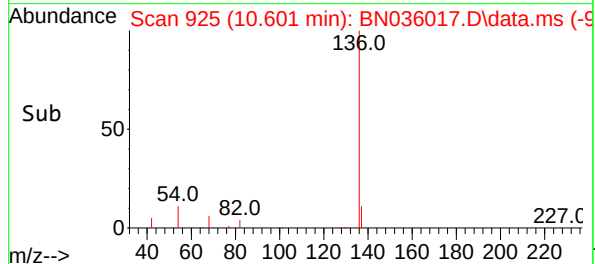
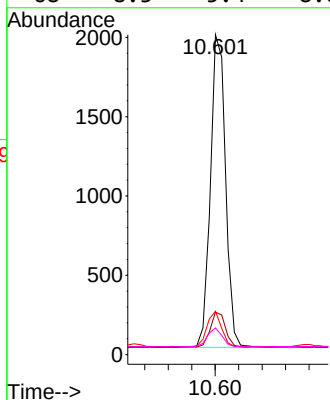
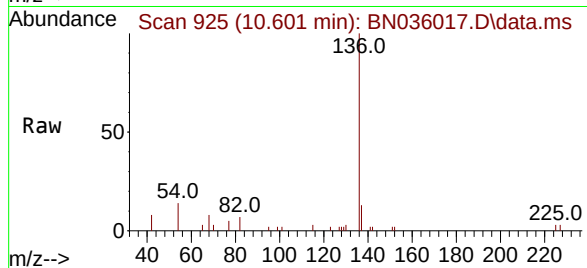




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.601 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

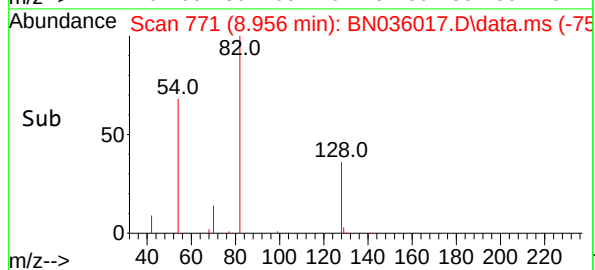
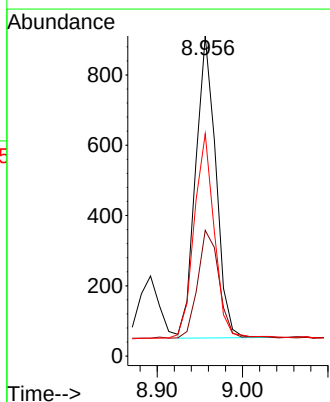
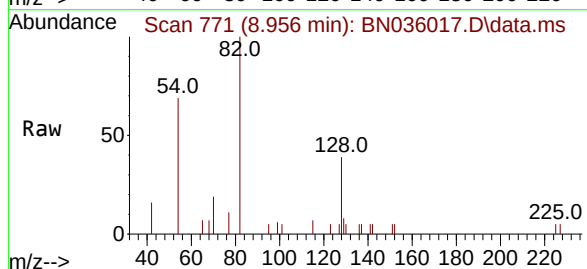
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

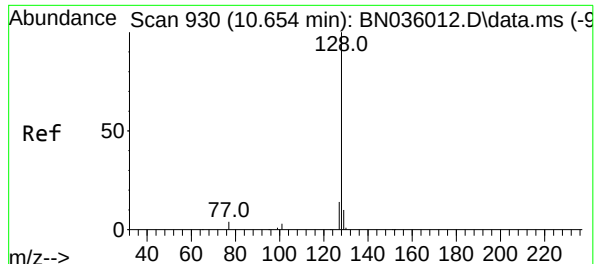
Tgt Ion:	136	Resp:	3525
Ion	Ratio	Lower	Upper
136	100		
137	13.3	10.4	15.6
54	13.6	7.7	11.5#
68	8.3	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.426 ng
RT: 8.956 min Scan# 771
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion:	82	Resp:	1418
Ion	Ratio	Lower	Upper
82	100		
128	39.3	28.8	43.2
54	69.5	55.8	83.8

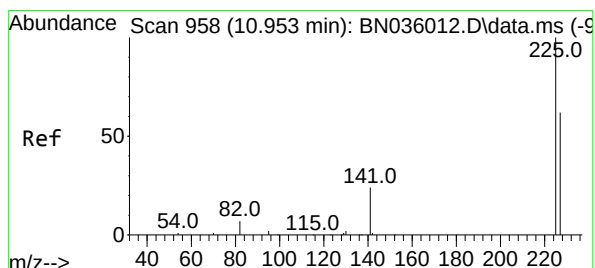
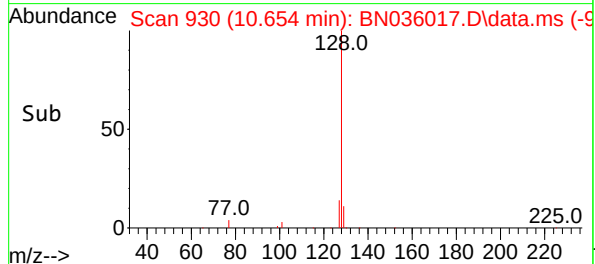
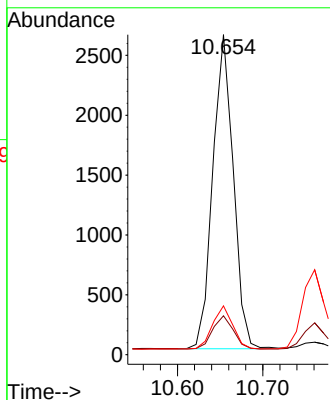
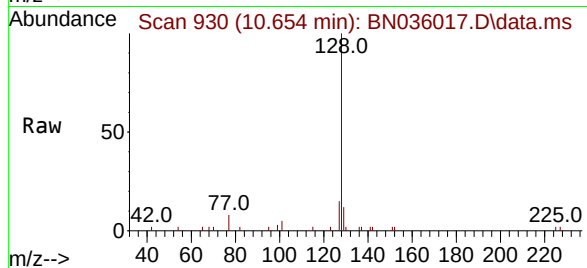




#9
Naphthalene
Concen: 0.428 ng
RT: 10.654 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

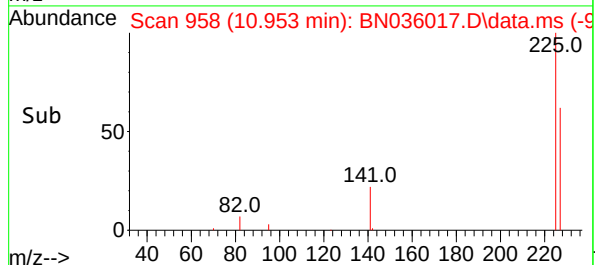
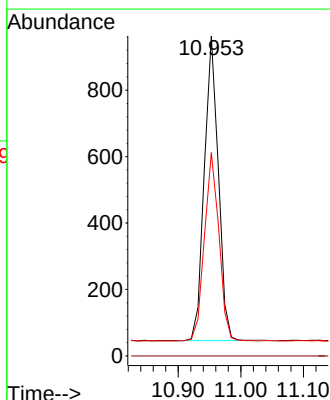
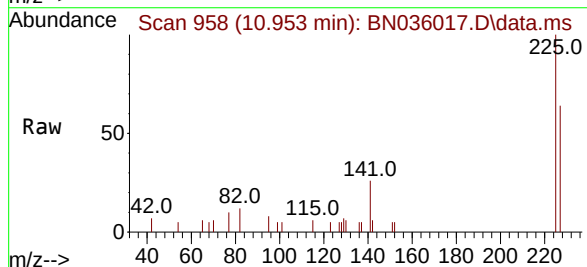
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

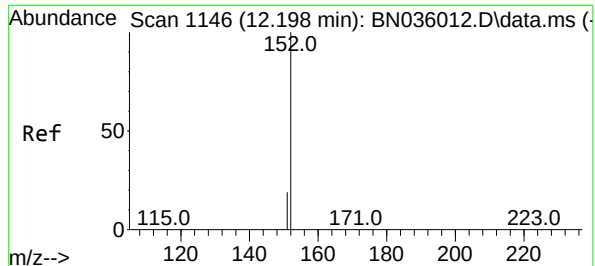
Tgt Ion	Ratio	Lower	Upper
128	100		
129	12.2	9.4	14.2
127	15.3	12.6	19.0



#10
Hexachlorobutadiene
Concen: 0.431 ng
RT: 10.953 min Scan# 958
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	51.0	76.6

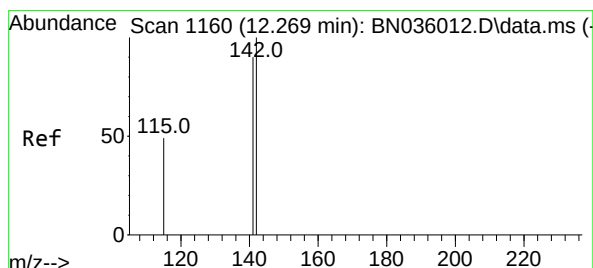
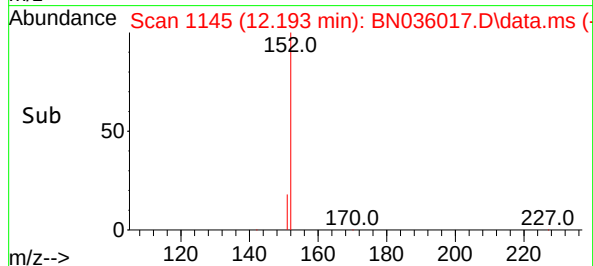
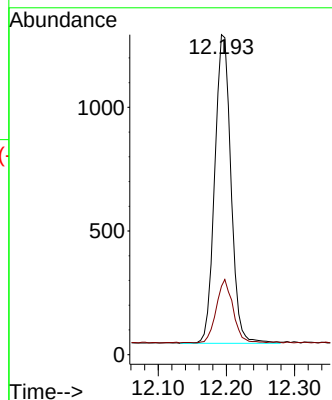
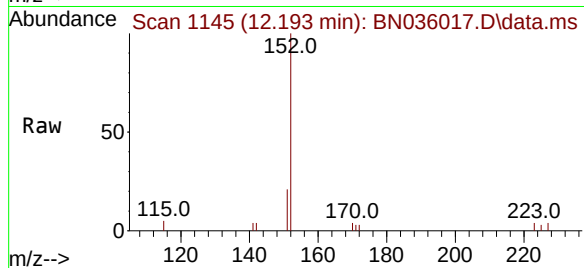




#11
2-Methylnaphthalene-d10
Concen: 0.431 ng
RT: 12.193 min Scan# 1145
Delta R.T. -0.005 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

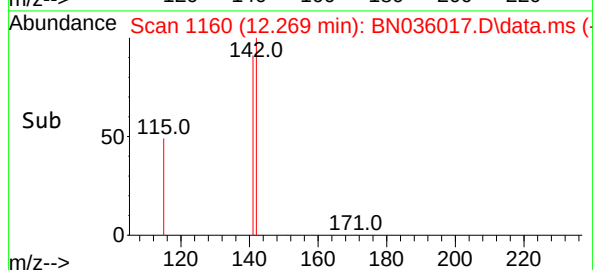
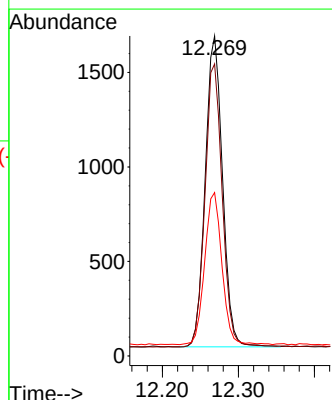
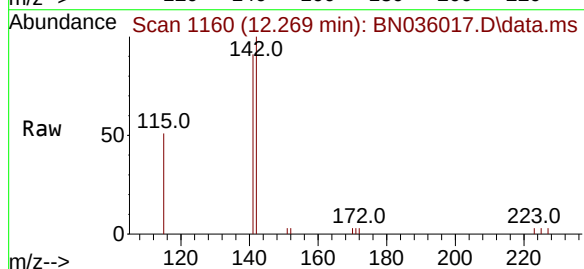
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

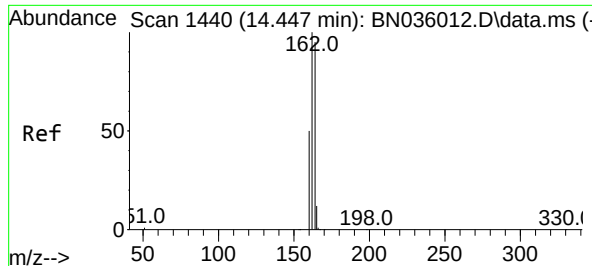
Tgt Ion:152 Resp: 2064
Ion Ratio Lower Upper
152 100
151 21.1 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.410 ng
RT: 12.269 min Scan# 1160
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion:142 Resp: 2606
Ion Ratio Lower Upper
142 100
141 91.3 72.2 108.2
115 51.0 41.2 61.8

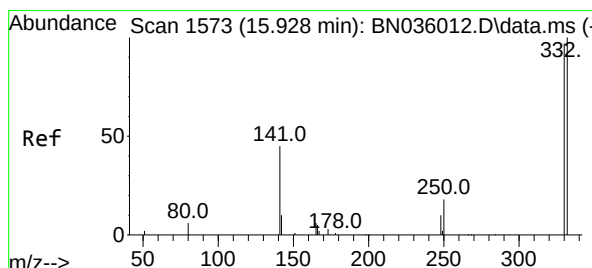
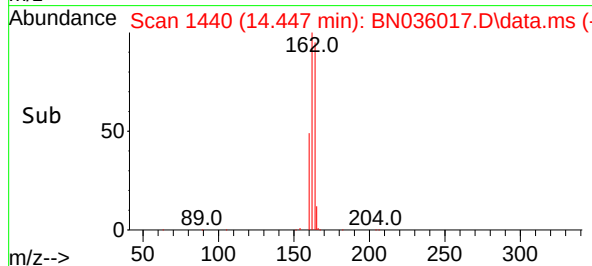
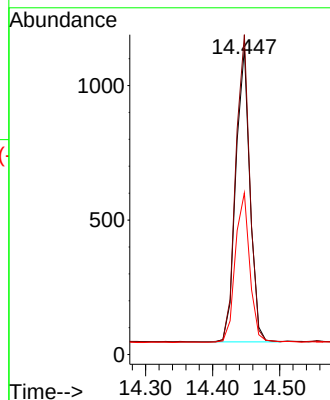
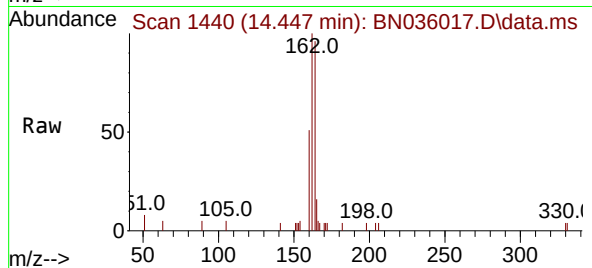




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.447 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

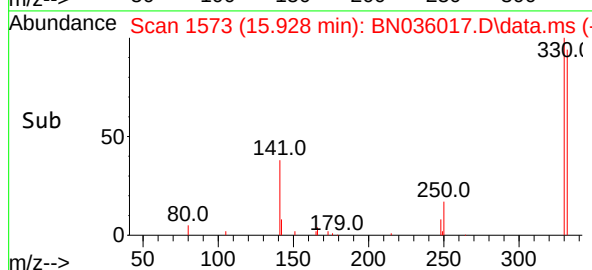
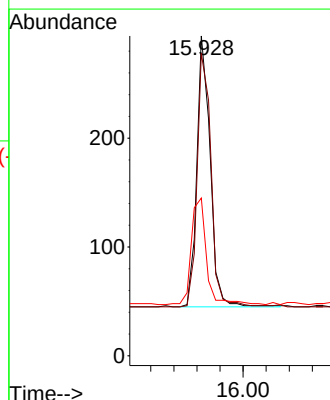
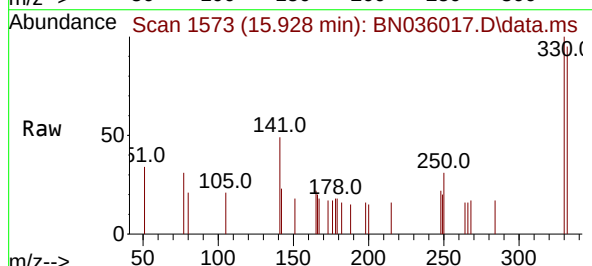
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

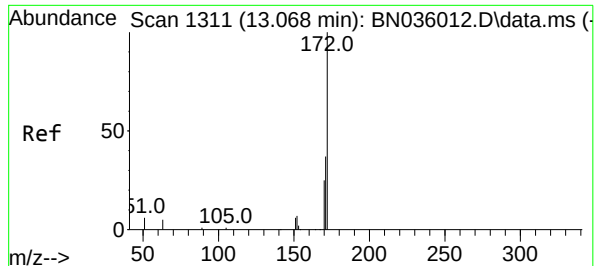
Tgt Ion	164	Resp	1598
Ion Ratio	Lower	Upper	
164	100		
162	104.5	84.1	126.1
160	52.8	43.8	65.8



#14
2,4,6-Tribromophenol
Concen: 0.391 ng
RT: 15.928 min Scan# 1573
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion	330	Resp	401
Ion Ratio	Lower	Upper	
330	100		
332	97.0	81.0	121.4
141	44.6	36.7	55.1

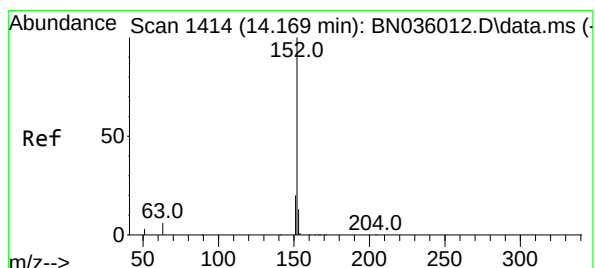
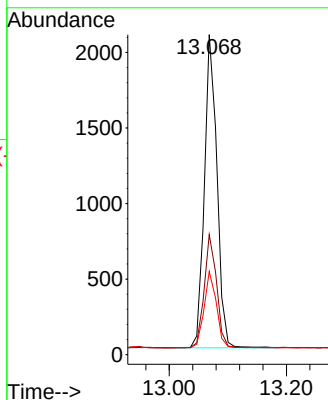
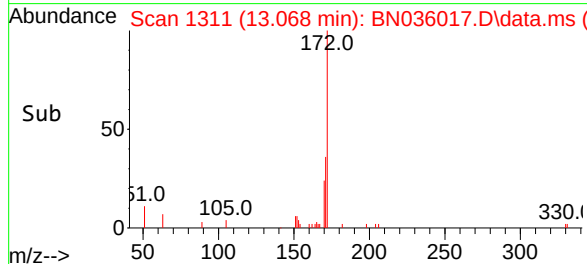
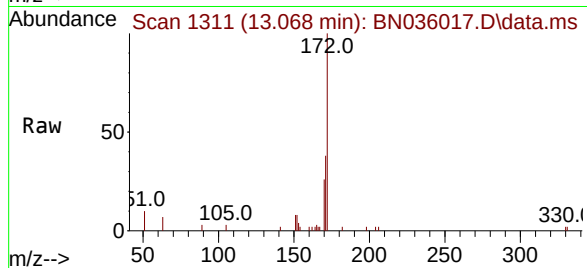




#15
2-Fluorobiphenyl
Concen: 0.433 ng
RT: 13.068 min Scan# 1413
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

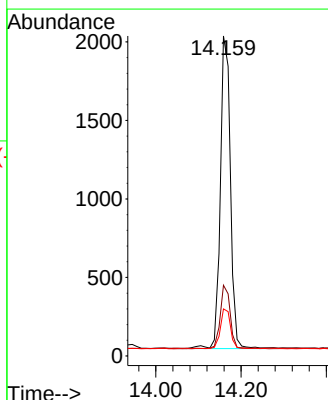
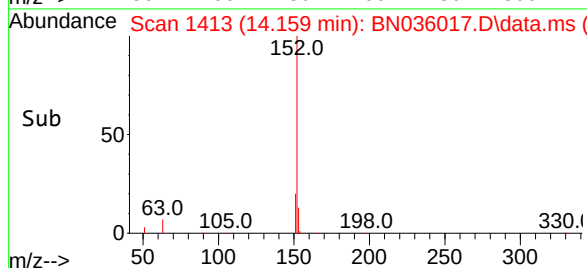
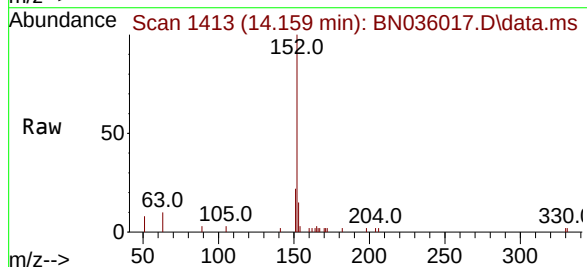
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

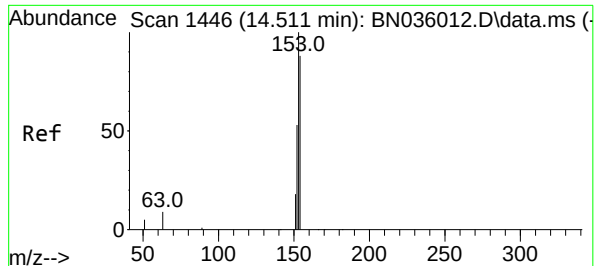
Tgt Ion:	172	Resp:	3089
Ion	Ratio	Lower	Upper
172	100		
171	37.5	30.9	46.3
170	26.0	21.2	31.8



#16
Acenaphthylene
Concen: 0.431 ng
RT: 14.159 min Scan# 1413
Delta R.T. -0.011 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion:	152	Resp:	3265
Ion	Ratio	Lower	Upper
152	100		
151	19.8	16.2	24.2
153	12.9	10.4	15.6





#17

Acenaphthene

Concen: 0.419 ng

RT: 14.511 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

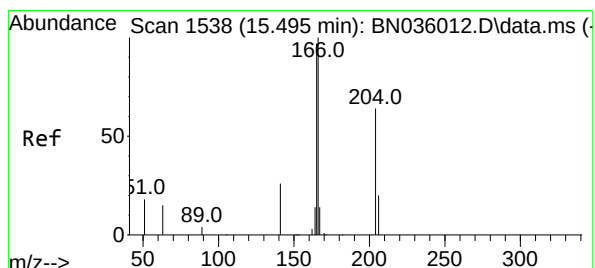
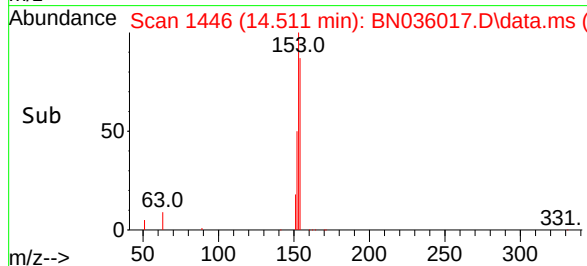
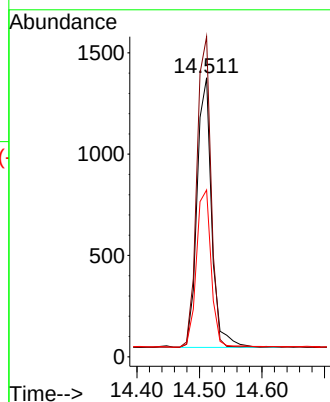
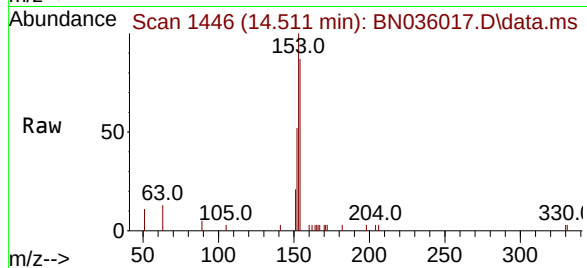
Tgt Ion:154 Resp: 2176

Ion Ratio Lower Upper

154 100

153 111.3 88.9 133.3

152 59.1 48.1 72.1



#18

Fluorene

Concen: 0.396 ng

RT: 15.495 min Scan# 1538

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

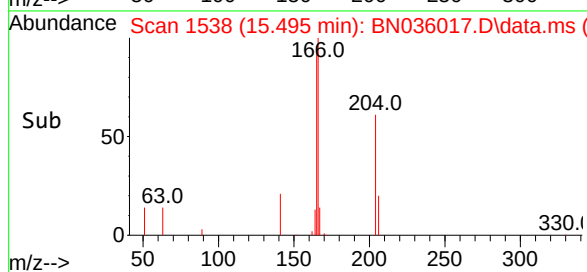
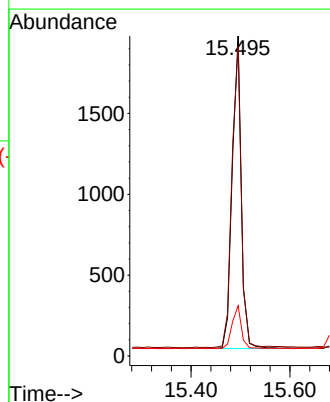
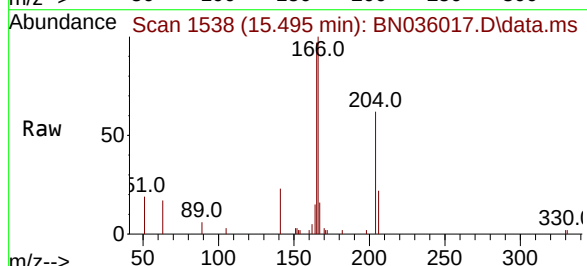
Tgt Ion:166 Resp: 2572

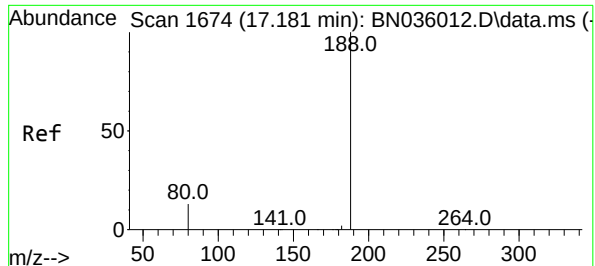
Ion Ratio Lower Upper

166 100

165 104.2 78.5 117.7

167 14.2 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.181 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

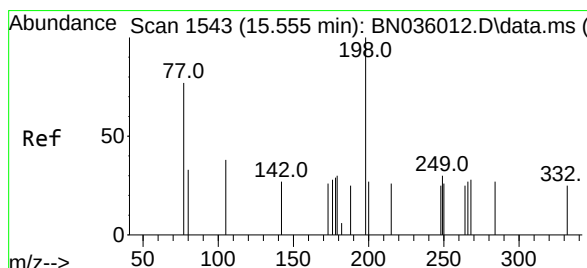
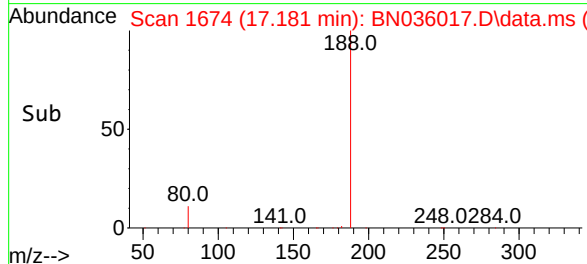
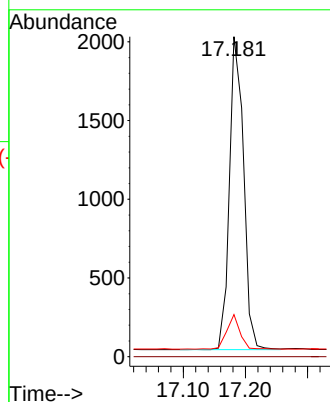
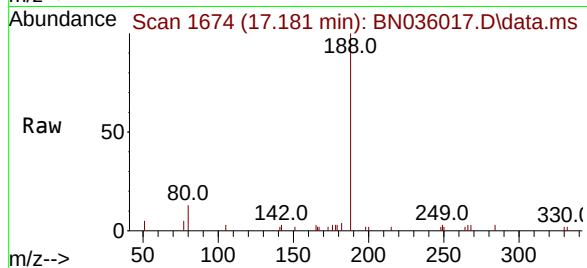
Tgt Ion:188 Resp: 3132

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.1 12.3 18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.414 ng

RT: 15.555 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

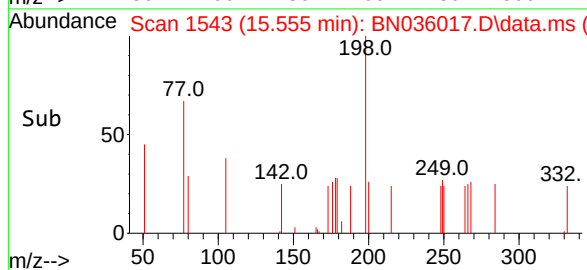
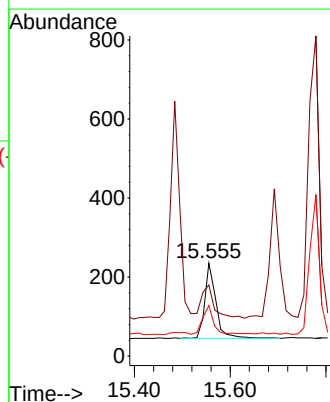
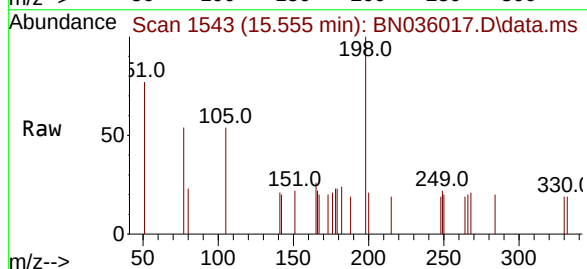
Tgt Ion:198 Resp: 302

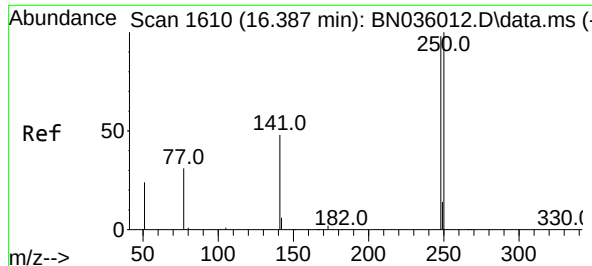
Ion Ratio Lower Upper

198 100

51 76.6 68.1 102.1

105 54.5 46.5 69.7

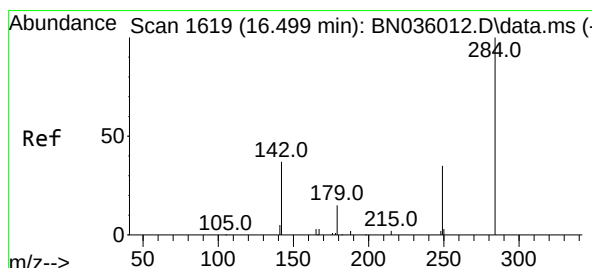
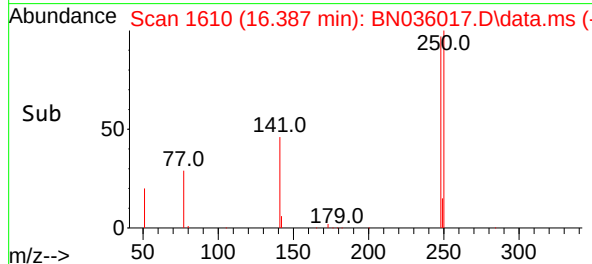
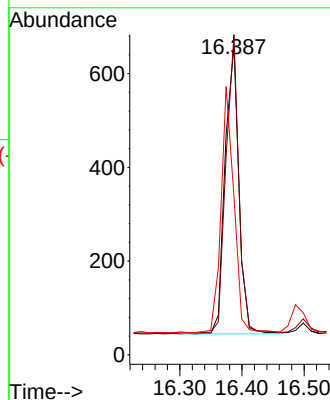
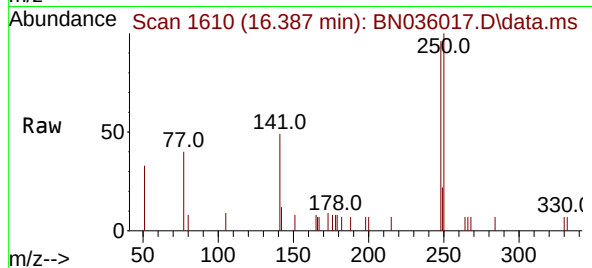




#21
4-Bromophenyl-phenylether
Concen: 0.423 ng
RT: 16.387 min Scan# 1610
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

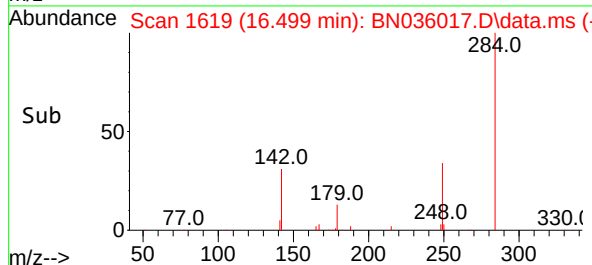
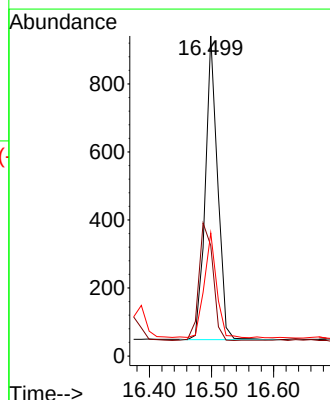
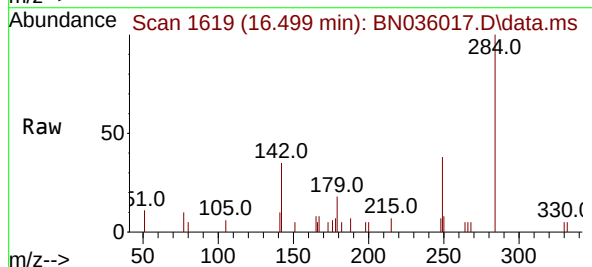
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

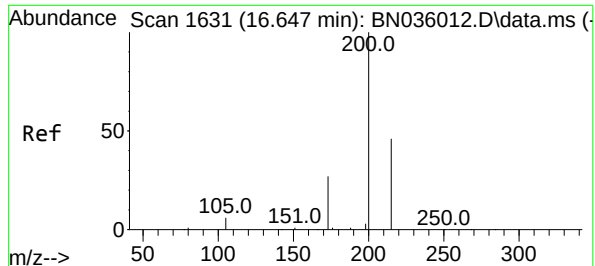
Tgt Ion	Ratio	Lower	Upper
248	100		
250	103.6	81.5	122.3
141	51.3	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.418 ng
RT: 16.499 min Scan# 1619
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion	Ratio	Lower	Upper
284	100		
142	43.9	33.6	50.4
249	35.0	28.8	43.2





#23

Atrazine

Concen: 0.414 ng

RT: 16.648 min Scan# 1631

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

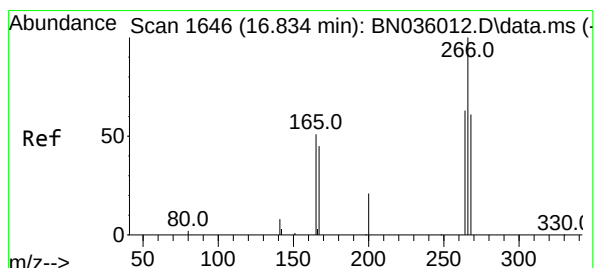
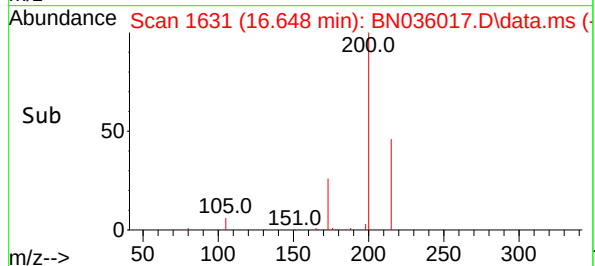
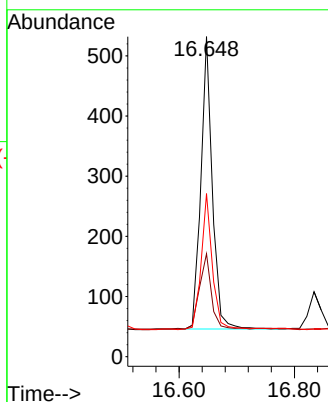
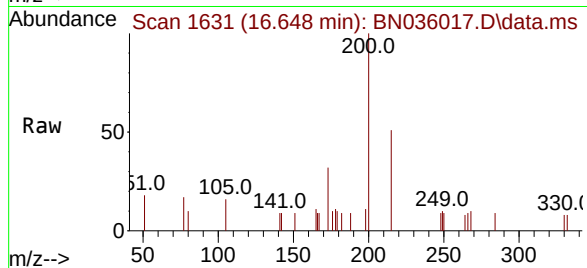
Tgt Ion:200 Resp: 667

Ion Ratio Lower Upper

200 100

173 32.1 26.6 40.0

215 50.9 40.6 61.0



#24

Pentachlorophenol

Concen: 0.377 ng

RT: 16.834 min Scan# 1646

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

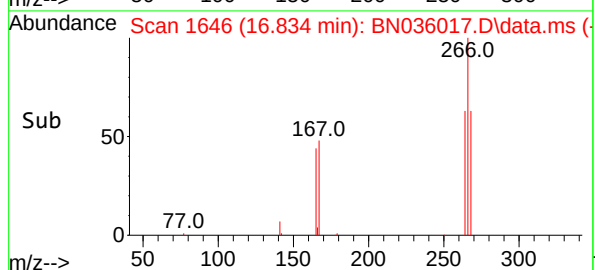
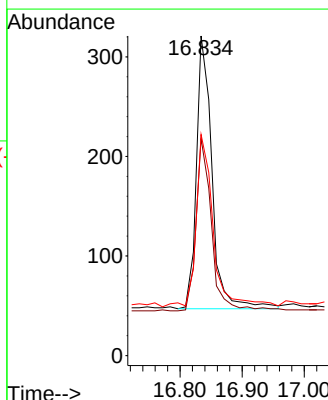
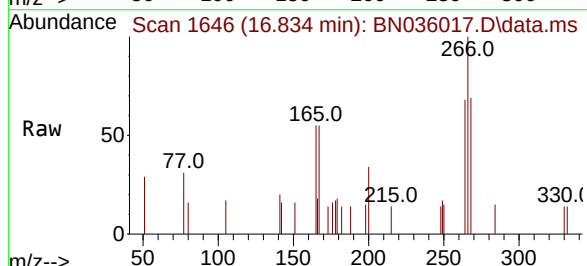
Tgt Ion:266 Resp: 479

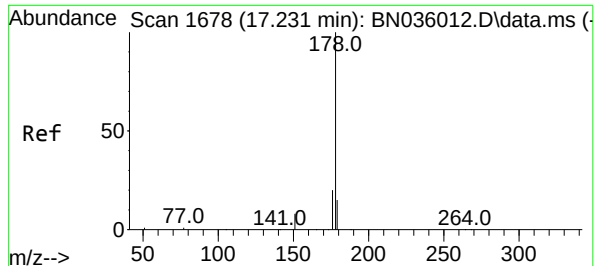
Ion Ratio Lower Upper

266 100

264 62.4 48.2 72.2

268 68.7 51.6 77.4

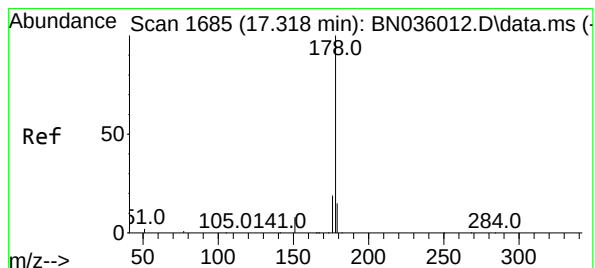
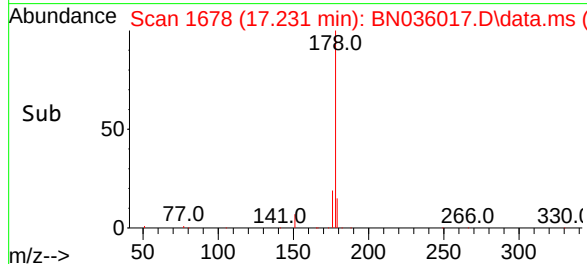
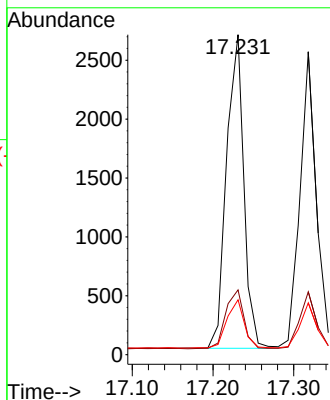
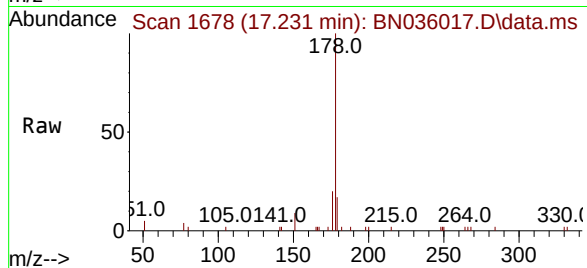




#25
Phenanthrene
Concen: 0.422 ng
RT: 17.231 min Scan# 1678
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

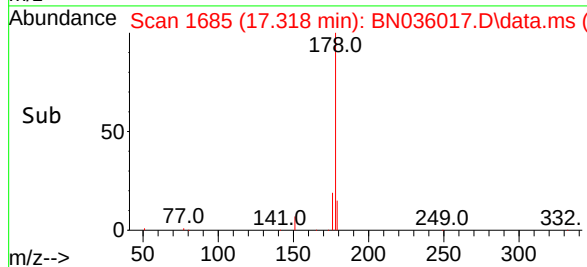
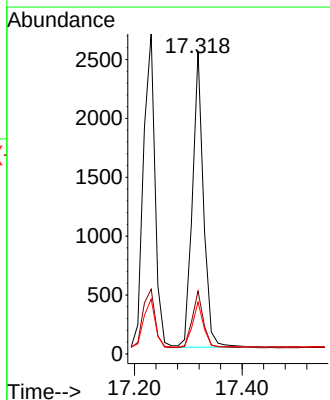
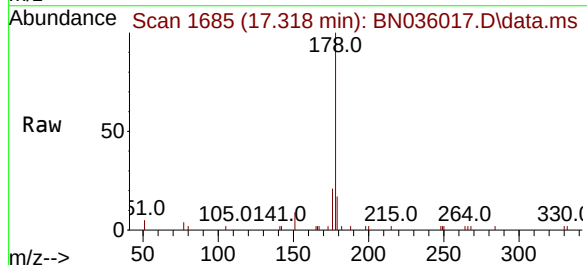
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

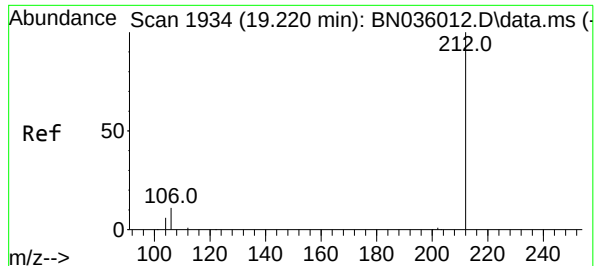
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.8	16.0	24.0
179	15.3	12.4	18.6



#26
Anthracene
Concen: 0.420 ng
RT: 17.318 min Scan# 1685
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.2	15.4	23.2
179	15.0	12.0	18.0





#27

Fluoranthene-d10

Concen: 0.428 ng

RT: 19.216 min Scan# 1933

Delta R.T. -0.005 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

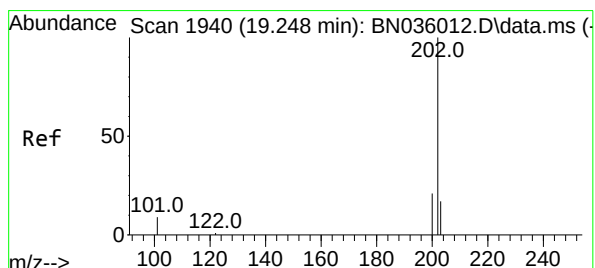
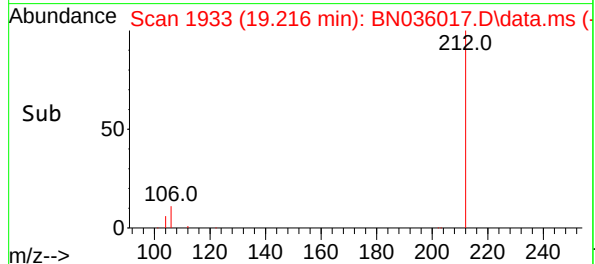
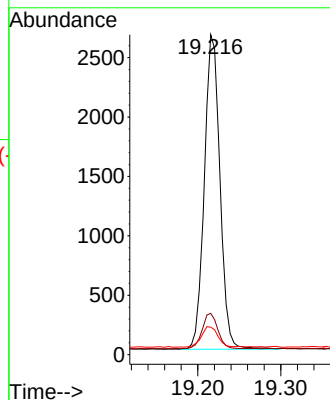
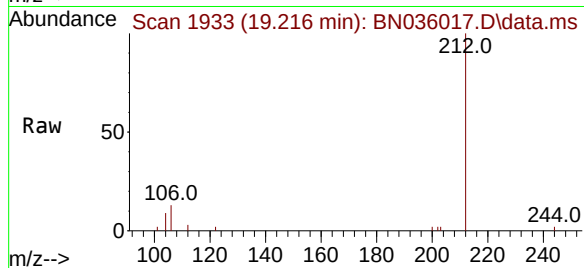
Tgt Ion:212 Resp: 3474

Ion Ratio Lower Upper

212 100

106 11.4 9.7 14.5

104 6.8 6.0 9.0



#28

Fluoranthene

Concen: 0.425 ng

RT: 19.248 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

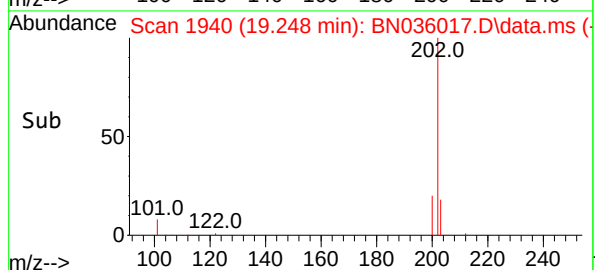
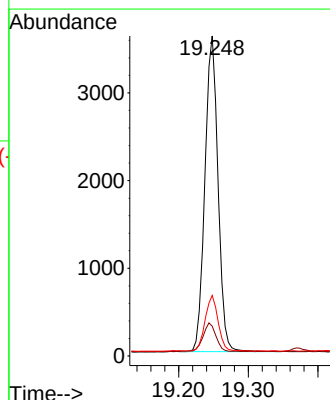
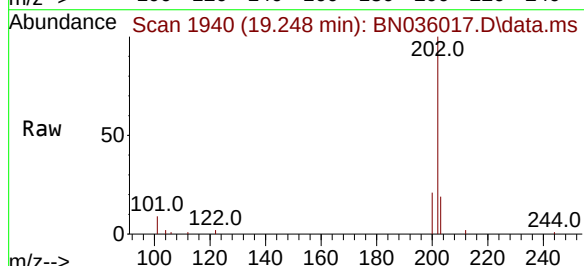
Tgt Ion:202 Resp: 4697

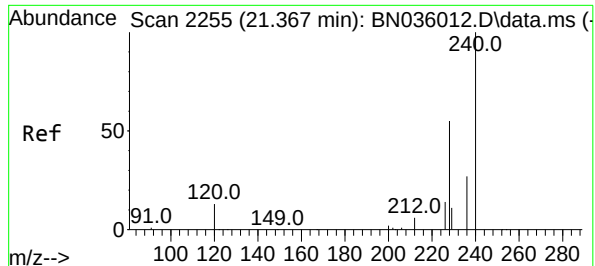
Ion Ratio Lower Upper

202 100

101 9.4 7.6 11.4

203 17.3 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.367 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

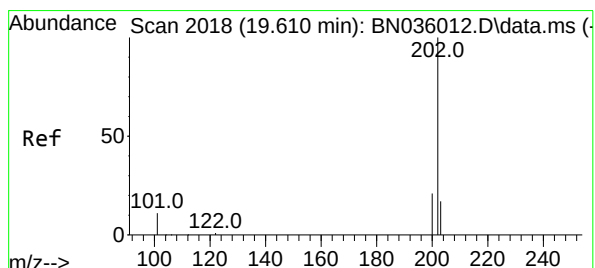
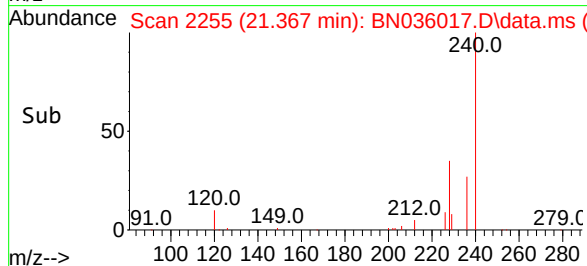
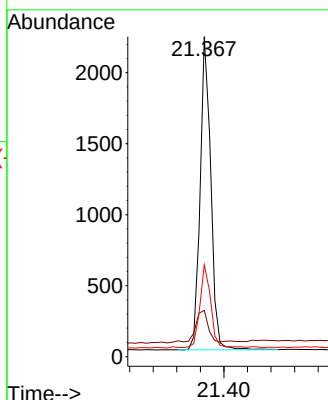
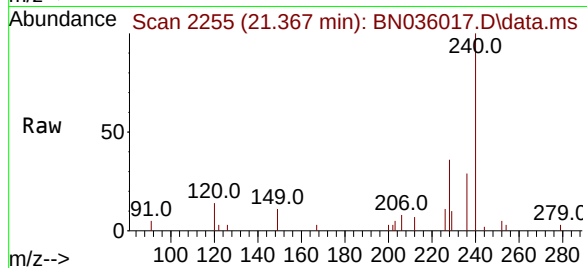
Tgt Ion:240 Resp: 2762

Ion Ratio Lower Upper

240 100

120 14.4 13.9 20.9

236 28.7 23.7 35.5



#30

Pyrene

Concen: 0.420 ng

RT: 19.610 min Scan# 2018

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

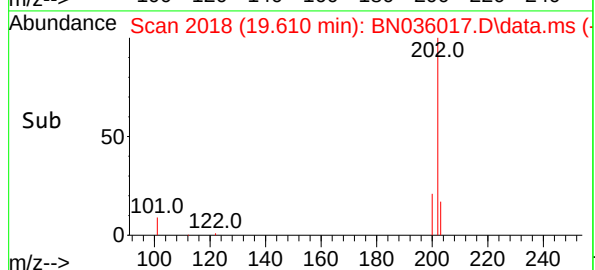
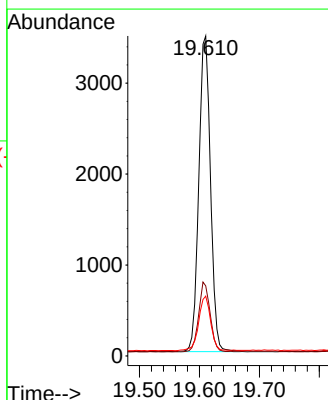
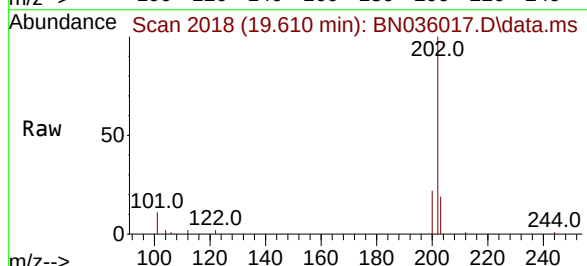
Tgt Ion:202 Resp: 4702

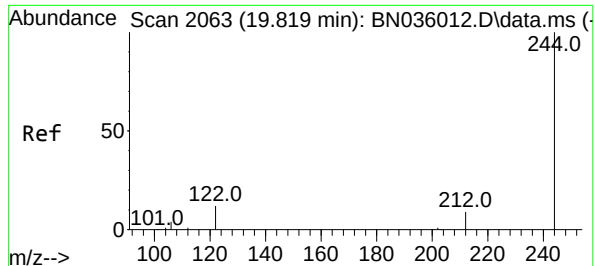
Ion Ratio Lower Upper

202 100

200 21.5 17.0 25.4

203 17.7 14.4 21.6

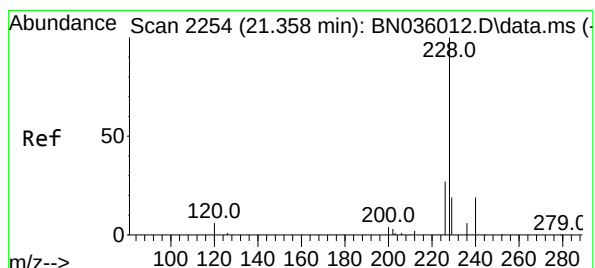
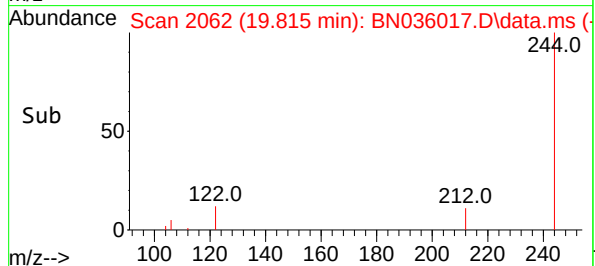
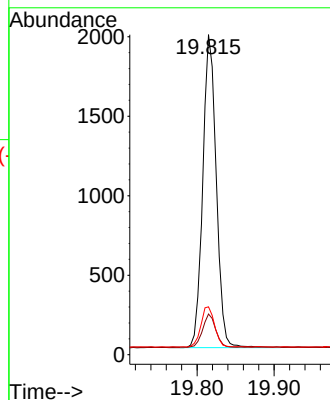
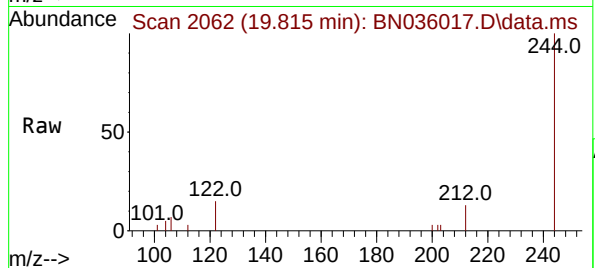




#31
Terphenyl-d14
Concen: 0.417 ng
RT: 19.815 min Scan# 2062
Delta R.T. -0.005 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

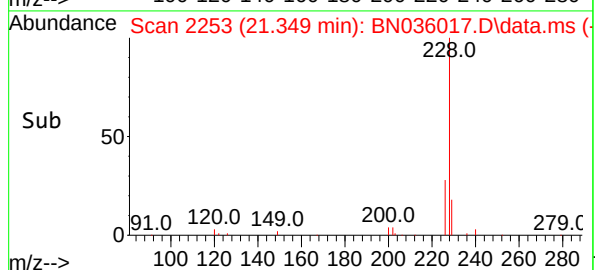
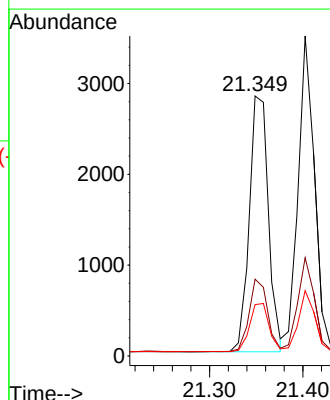
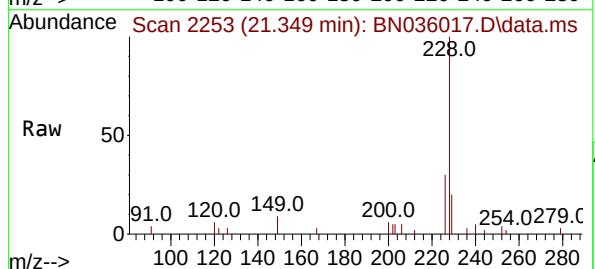
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

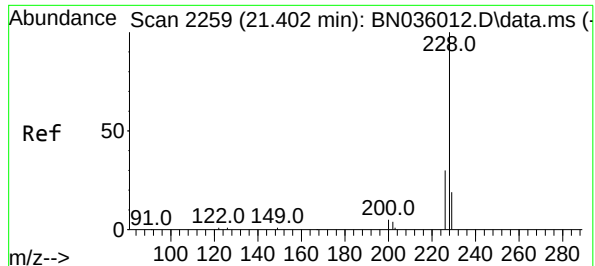
Tgt Ion:244 Resp: 2392
Ion Ratio Lower Upper
244 100
212 12.7 9.1 13.7
122 15.0 11.3 16.9



#32
Benzo(a)anthracene
Concen: 0.402 ng
RT: 21.349 min Scan# 2253
Delta R.T. -0.009 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Tgt Ion:228 Resp: 4028
Ion Ratio Lower Upper
228 100
226 29.5 22.6 34.0
229 19.8 16.5 24.7





#33

Chrysene

Concen: 0.422 ng

RT: 21.403 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

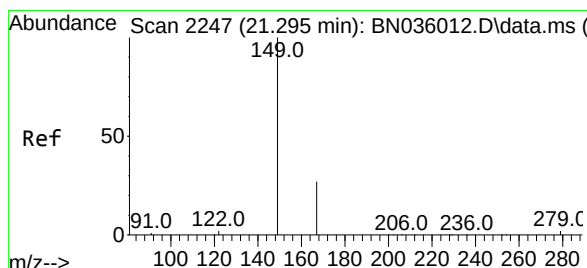
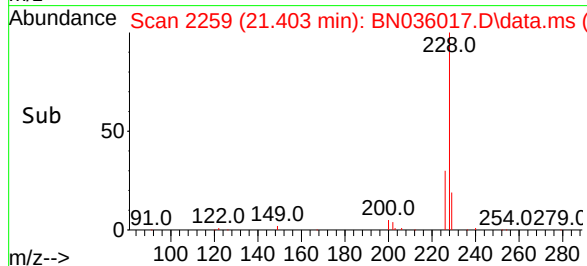
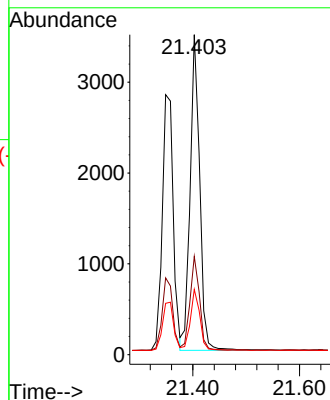
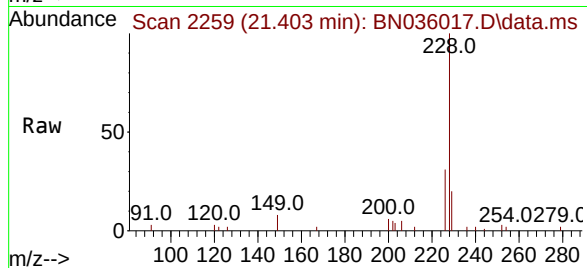
Tgt Ion:228 Resp: 4317

Ion Ratio Lower Upper

228 100

226 30.7 25.3 37.9

229 20.4 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.398 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

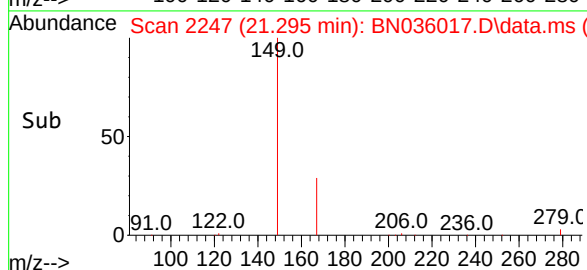
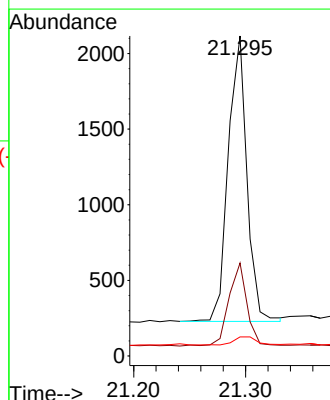
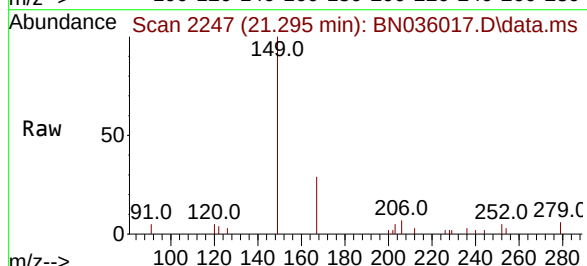
Tgt Ion:149 Resp: 2187

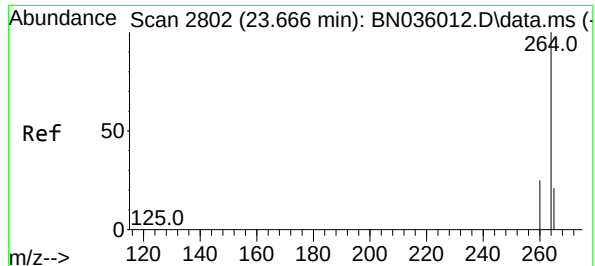
Ion Ratio Lower Upper

149 100

167 28.5 21.9 32.9

279 3.3 3.0 4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.663 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

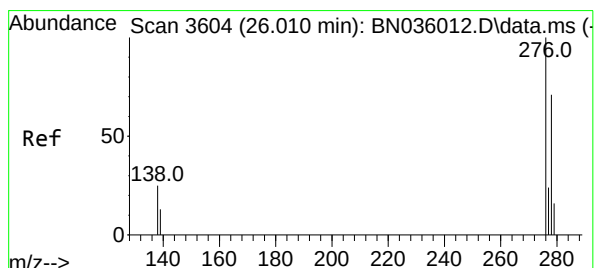
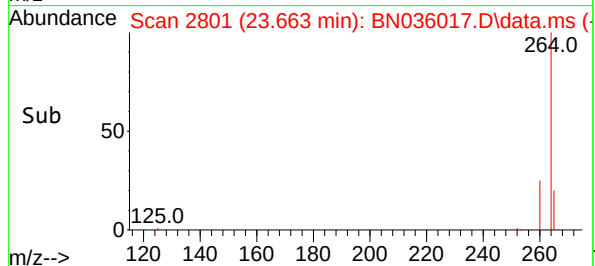
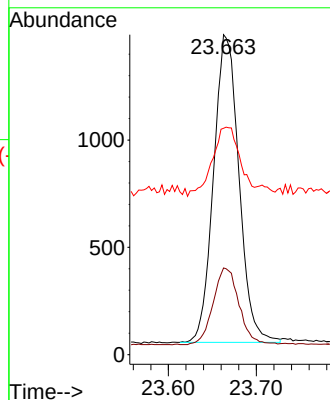
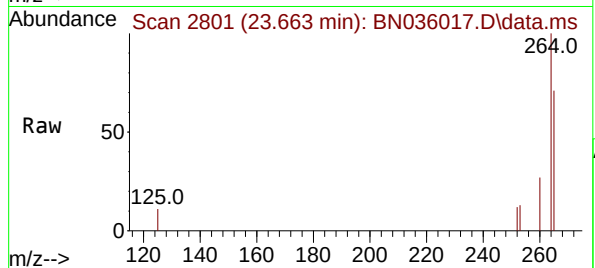
Tgt Ion:264 Resp: 2873

Ion Ratio Lower Upper

264 100

260 27.1 21.8 32.6

265 70.8 56.6 84.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.410 ng

RT: 26.005 min Scan# 3602

Delta R.T. -0.006 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

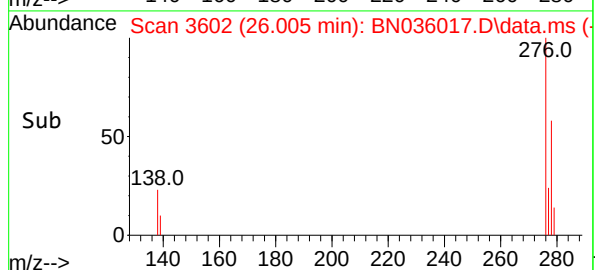
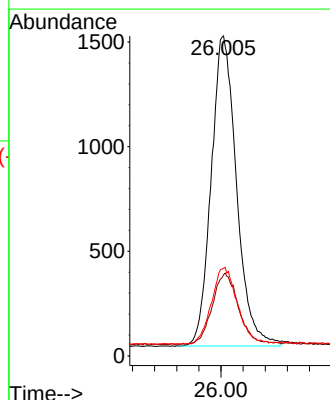
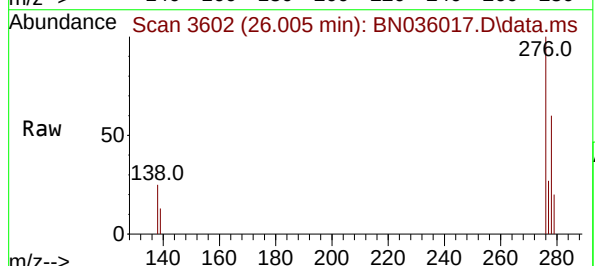
Tgt Ion:276 Resp: 4726

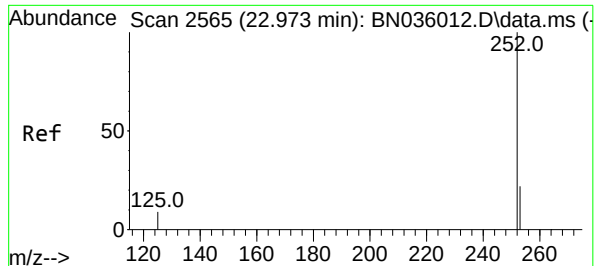
Ion Ratio Lower Upper

276 100

138 23.5 19.9 29.9

277 25.1 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.418 ng

RT: 22.973 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

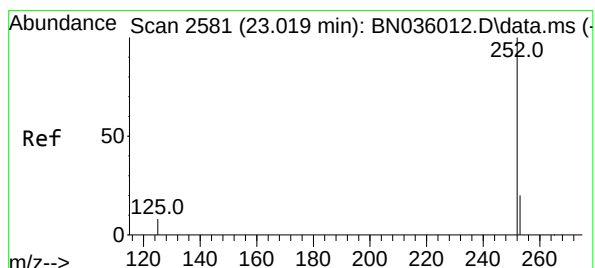
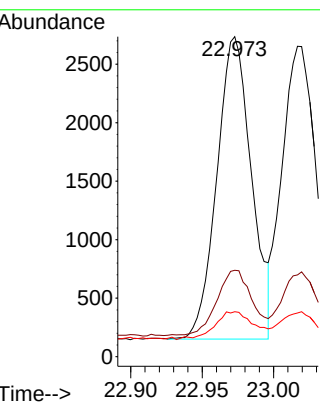
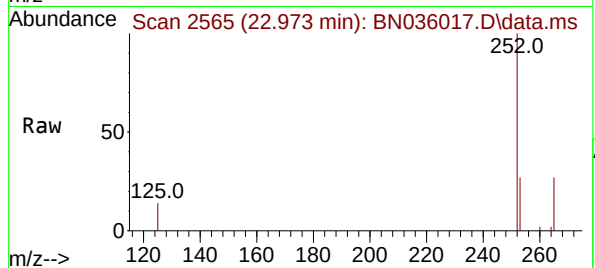
Tgt Ion:252 Resp: 4364

Ion Ratio Lower Upper

252 100

253 27.0 22.5 33.7

125 14.0 11.9 17.9



#38

Benzo(k)fluoranthene

Concen: 0.401 ng

RT: 23.017 min Scan# 2580

Delta R.T. -0.003 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

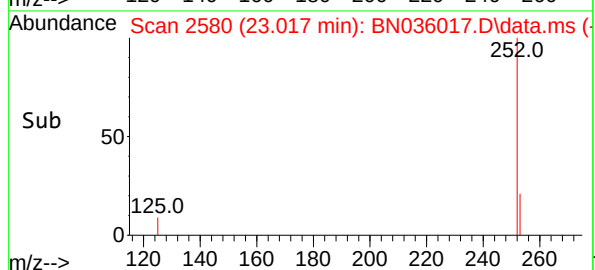
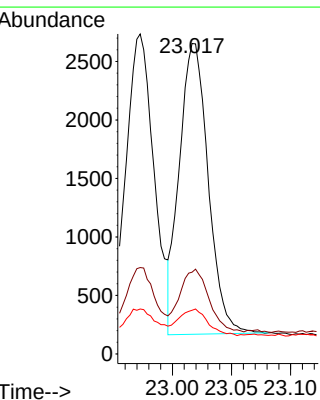
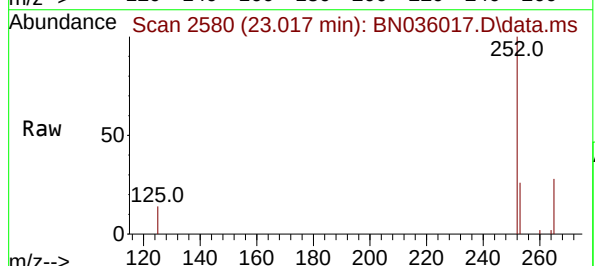
Tgt Ion:252 Resp: 4219

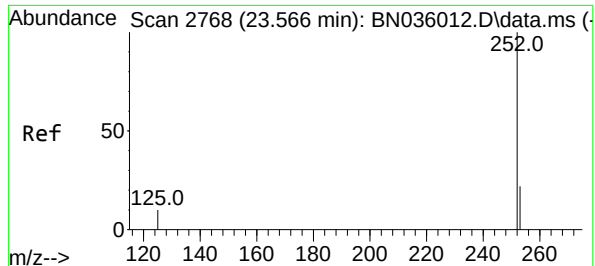
Ion Ratio Lower Upper

252 100

253 26.3 21.3 31.9

125 14.1 11.9 17.9





#39

Benzo(a)pyrene

Concen: 0.405 ng

RT: 23.563 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225

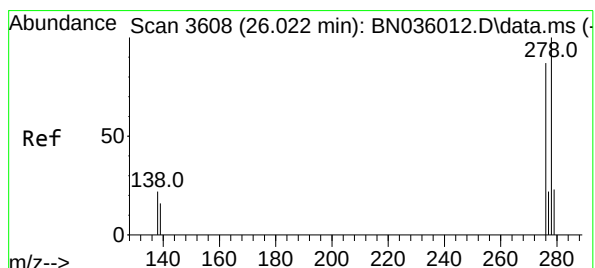
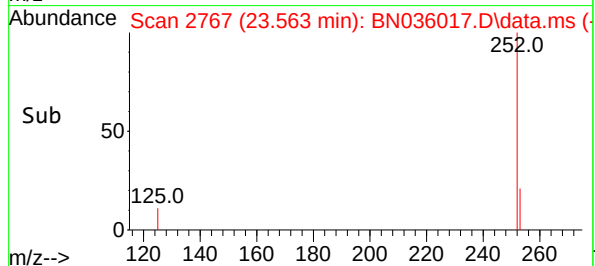
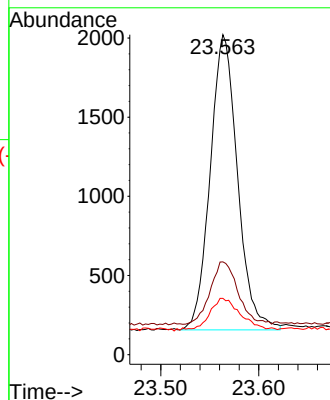
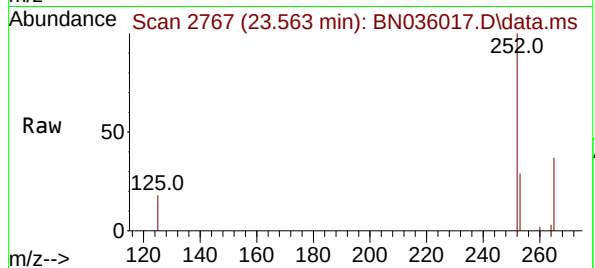
Tgt Ion:252 Resp: 3611

Ion Ratio Lower Upper

252 100

253 29.0 23.8 35.6

125 17.6 14.6 21.8



#40

Dibenzo(a,h)anthracene

Concen: 0.412 ng

RT: 26.019 min Scan# 3607

Delta R.T. -0.003 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

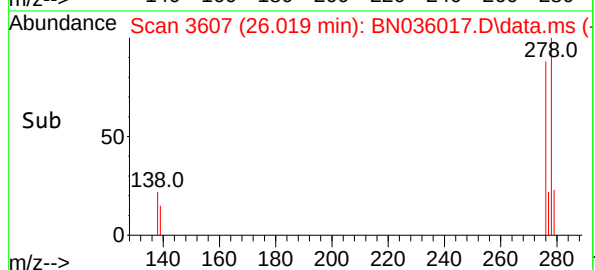
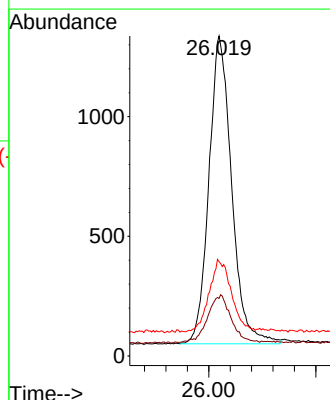
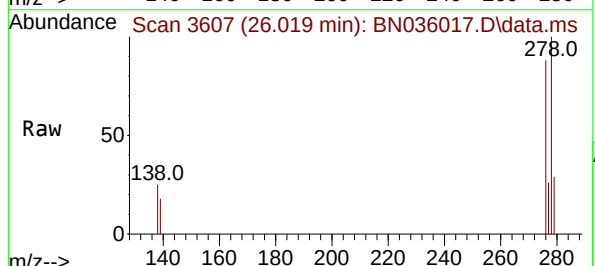
Tgt Ion:278 Resp: 3789

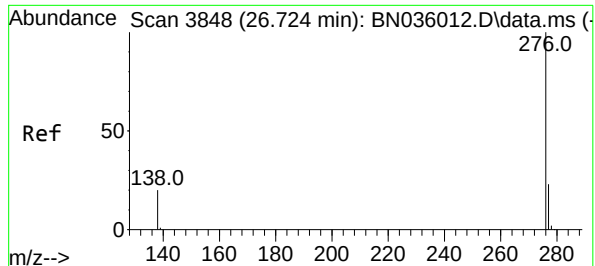
Ion Ratio Lower Upper

278 100

139 18.0 16.0 24.0

279 29.5 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.410 ng

RT: 26.718 min Scan# 3846

Delta R.T. -0.006 min

Lab File: BN036017.D

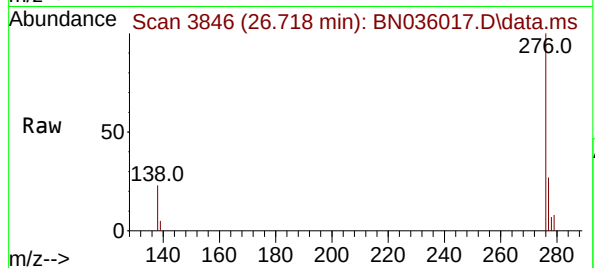
Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225



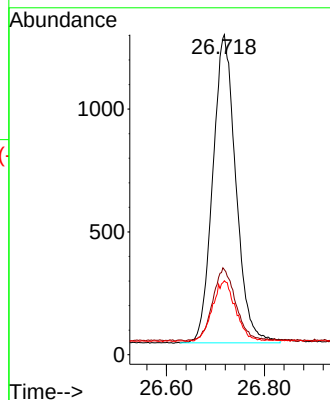
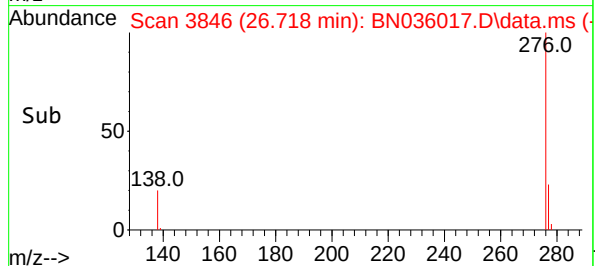
Tgt Ion:276 Resp: 4102

Ion Ratio Lower Upper

276 100

277 26.6 21.3 31.9

138 23.1 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036017.D
 Acq On : 22 Jan 2025 15:53
 Operator : RC/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN012225

Quant Time: Jan 23 00:35:35 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:34:56 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	113	0.00
2	1,4-Dioxane	0.447	0.494	-10.5	119	0.00
3	n-Nitrosodimethylamine	0.811	0.836	-3.1	108	0.00
4 S	2-Fluorophenol	1.040	1.080	-3.8	112	0.00
5 S	Phenol-d6	1.222	1.262	-3.3	112	0.00
6	bis(2-Chloroethyl)ether	0.984	1.080	-9.8	116	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	113	-0.01
8 S	Nitrobenzene-d5	0.378	0.402	-6.3	114	0.00
9	Naphthalene	1.162	1.243	-7.0	112	0.00
10	Hexachlorobutadiene	0.375	0.404	-7.7	113	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.586	-7.7	114	0.00
12	2-Methylnaphthalene	0.721	0.739	-2.5	110	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	101	0.00
14 S	2,4,6-Tribromophenol	0.257	0.251	2.3	99	0.00
15 S	2-Fluorobiphenyl	1.786	1.933	-8.2	101	0.00
16	Acenaphthylene	1.897	2.043	-7.7	103	-0.01
17	Acenaphthene	1.299	1.362	-4.8	101	0.00
18	Fluorene	1.627	1.610	1.0	100	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	100	0.00
20	4,6-Dinitro-2-methylphenol	0.093	0.096	-3.2	101	0.00
21	4-Bromophenyl-phenylether	0.285	0.301	-5.6	98	0.00
22	Hexachlorobenzene	0.375	0.392	-4.5	96	0.00
23	Atrazine	0.206	0.213	-3.4	98	0.00
24	Pentachlorophenol	0.162	0.153	5.6	93	0.00
25	Phenanthrene	1.202	1.267	-5.4	97	0.00
26	Anthracene	1.093	1.147	-4.9	100	0.00
27 SURR	Fluoranthene-d10	1.036	1.109	-7.0	100	0.00
28	Fluoranthene	1.412	1.500	-6.2	99	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	97	0.00
30	Pyrene	1.621	1.702	-5.0	98	0.00
31 S	Terphenyl-d14	0.831	0.866	-4.2	96	0.00
32	Benzo(a)anthracene	1.451	1.458	-0.5	94	0.00
33	Chrysene	1.483	1.563	-5.4	98	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	0.792	0.4	96	0.00
35 I	Perylene-d12	1.000	1.000	0.0	97	0.00
36	Indeno(1,2,3-cd)pyrene	1.605	1.645	-2.5	98	0.00
37	Benzo(b)fluoranthene	1.454	1.519	-4.5	98	0.00
38	Benzo(k)fluoranthene	1.465	1.468	-0.2	95	0.00
39 C	Benzo(a)pyrene	1.242	1.257	-1.2	96	0.00
40	Dibenzo(a,h)anthracene	1.279	1.319	-3.1	99	0.00
41	Benzo(g,h,i)perylene	1.394	1.428	-2.4	97	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
 Data File : BN036017.D
 Acq On : 22 Jan 2025 15:53
 Operator : RC/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN012225

Quant Time: Jan 23 00:35:35 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Jan 23 00:34:56 2025
 Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	113	0.00
2	1,4-Dioxane	0.400	0.442	-10.5	119	0.00
3	n-Nitrosodimethylamine	0.400	0.413	-3.2	108	0.00
4 S	2-Fluorophenol	0.400	0.415	-3.7	112	0.00
5 S	Phenol-d6	0.400	0.413	-3.2	112	0.00
6	bis(2-Chloroethyl)ether	0.400	0.439	-9.7	116	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	113	-0.01
8 S	Nitrobenzene-d5	0.400	0.426	-6.5	114	0.00
9	Naphthalene	0.400	0.428	-7.0	112	0.00
10	Hexachlorobutadiene	0.400	0.431	-7.7	113	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.431	-7.7	114	0.00
12	2-Methylnaphthalene	0.400	0.410	-2.5	110	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	101	0.00
14 S	2,4,6-Tribromophenol	0.400	0.391	2.3	99	0.00
15 S	2-Fluorobiphenyl	0.400	0.433	-8.2	101	0.00
16	Acenaphthylene	0.400	0.431	-7.7	103	-0.01
17	Acenaphthene	0.400	0.419	-4.7	101	0.00
18	Fluorene	0.400	0.396	1.0	100	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	100	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.414	-3.5	101	0.00
21	4-Bromophenyl-phenylether	0.400	0.423	-5.7	98	0.00
22	Hexachlorobenzene	0.400	0.418	-4.5	96	0.00
23	Atrazine	0.400	0.414	-3.5	98	0.00
24	Pentachlorophenol	0.400	0.377	5.8	93	0.00
25	Phenanthrene	0.400	0.422	-5.5	97	0.00
26	Anthracene	0.400	0.420	-5.0	100	0.00
27 SURR	Fluoranthene-d10	0.400	0.428	-7.0	100	0.00
28	Fluoranthene	0.400	0.425	-6.2	99	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	97	0.00
30	Pyrene	0.400	0.420	-5.0	98	0.00
31 S	Terphenyl-d14	0.400	0.417	-4.2	96	0.00
32	Benzo(a)anthracene	0.400	0.402	-0.5	94	0.00
33	Chrysene	0.400	0.422	-5.5	98	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.398	0.5	96	0.00
35 I	Perylene-d12	0.400	0.400	0.0	97	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.410	-2.5	98	0.00
37	Benzo(b)fluoranthene	0.400	0.418	-4.5	98	0.00
38	Benzo(k)fluoranthene	0.400	0.401	-0.3	95	0.00
39 C	Benzo(a)pyrene	0.400	0.405	-1.3	96	0.00
40	Dibenzo(a,h)anthracene	0.400	0.412	-3.0	99	0.00
41	Benzo(g,h,i)perylene	0.400	0.410	-2.5	97	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



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.: Q1225 SAS No.: Q1225 SDG No.: Q1225

Instrument ID: BNA_N Calibration Date/Time: 02/05/2025 18:47

Lab File ID: BN036303.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:02 14:36

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.565		3.9	20.0
Fluoranthene-d10	1.036	1.052		1.5	20.0
2-Fluorophenol	1.040	1.145		10.1	20.0
Phenol-d6	1.222	1.324		8.3	20.0
Nitrobenzene-d5	0.378	0.409		8.2	20.0
2-Fluorobiphenyl	1.786	1.693		-5.2	20.0
2,4,6-Tribromophenol	0.257	0.198		-23.0	20.0
Terphenyl-d14	0.831	0.860		3.5	20.0
1,4-Dioxane	0.447	0.491		9.8	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036303.D
 Acq On : 05 Feb 2025 18:47
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 01:05:21 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

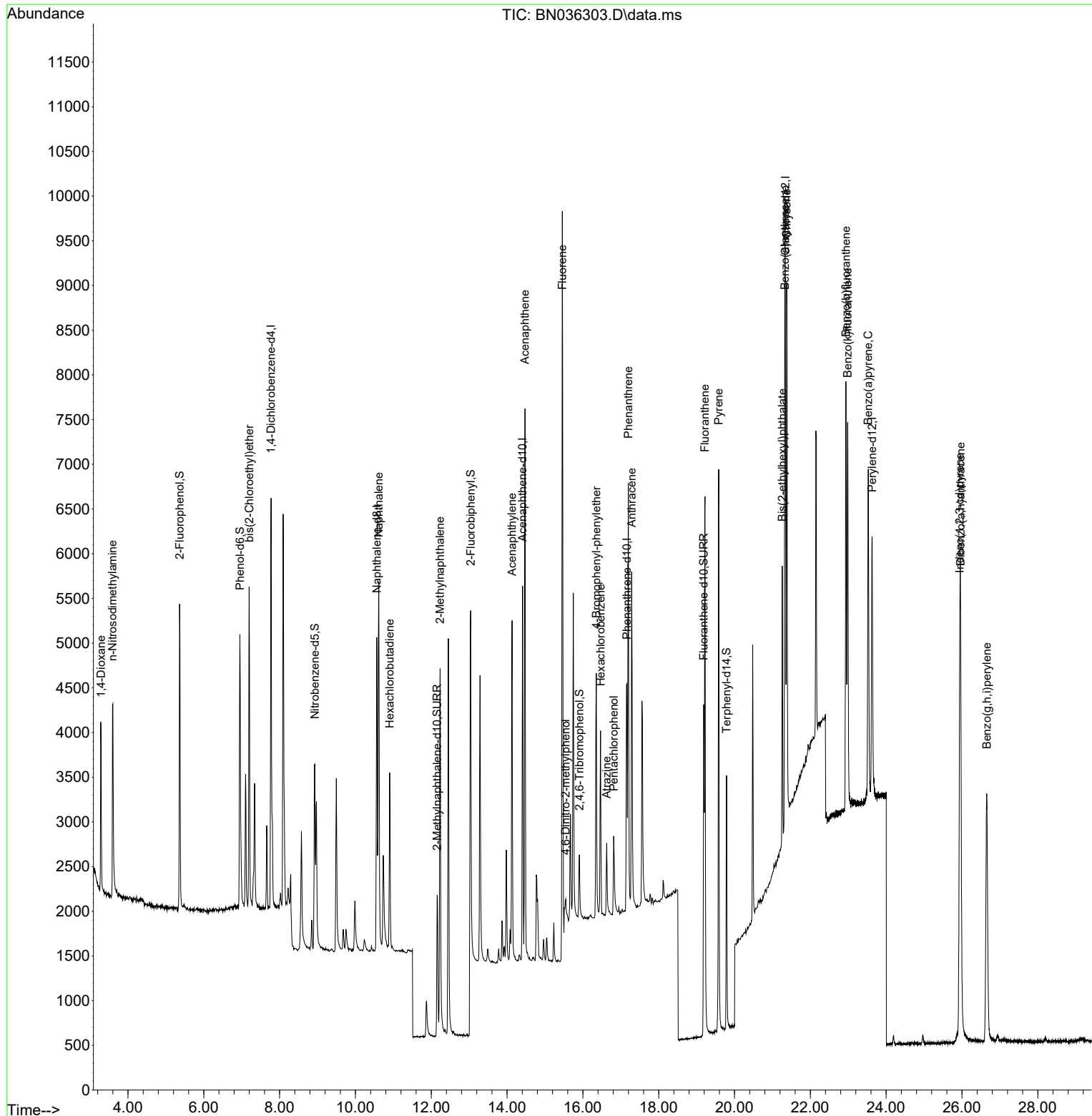
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2214	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4864	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2378	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4362	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	3774	0.400	ng	# 0.00
35) Perylene-d12	23.628	264	4195	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2536	0.440	ng	0.00
5) Phenol-d6	6.952	99	2931	0.433	ng	0.00
8) Nitrobenzene-d5	8.929	82	1987	0.433	ng	0.00
11) 2-Methylnaphthalene-d10	12.157	152	2748	0.416	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	471	0.309	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	4027	0.379	ng	0.00
27) Fluoranthene-d10	19.188	212	4587	0.406	ng	0.00
31) Terphenyl-d14	19.791	244	3246	0.414	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.290	88	1086	0.439	ng	96
3) n-Nitrosodimethylamine	3.593	42	1726	0.385	ng	# 79
6) bis(2-Chloroethyl)ether	7.197	93	2617	0.481	ng	100
9) Naphthalene	10.616	128	5781	0.409	ng	98
10) Hexachlorobutadiene	10.904	225	1637	0.359	ng	# 98
12) 2-Methylnaphthalene	12.233	142	3435	0.392	ng	96
16) Acenaphthylene	14.131	152	4405	0.391	ng	99
17) Acenaphthene	14.473	154	2998	0.388	ng	97
18) Fluorene	15.457	166	3871	0.400	ng	96
20) 4,6-Dinitro-2-methylph...	15.547	198	193	0.190	ng	# 33
21) 4-Bromophenyl-phenylether	16.354	248	1201	0.387	ng	95
22) Hexachlorobenzene	16.466	284	1607	0.393	ng	97
23) Atrazine	16.627	200	859	0.383	ng	97
24) Pentachlorophenol	16.813	266	597	0.337	ng	98
25) Phenanthrene	17.198	178	5245	0.400	ng	100
26) Anthracene	17.285	178	4643	0.390	ng	98
28) Fluoranthene	19.220	202	6022	0.391	ng	98
30) Pyrene	19.582	202	6158	0.403	ng	100
32) Benzo(a)anthracene	21.331	228	5232	0.382	ng	100
33) Chrysene	21.375	228	5571	0.398	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	2887	0.385	ng	99
36) Indeno(1,2,3-cd)pyrene	25.943	276	6925	0.411	ng	99
37) Benzo(b)fluoranthene	22.938	252	5941	0.390	ng	# 90
38) Benzo(k)fluoranthene	22.984	252	5944	0.387	ng	# 89
39) Benzo(a)pyrene	23.528	252	5255	0.404	ng	# 82
40) Dibenzo(a,h)anthracene	25.964	278	5468	0.408	ng	96
41) Benzo(g,h,i)perylene	26.654	276	6140	0.420	ng	96

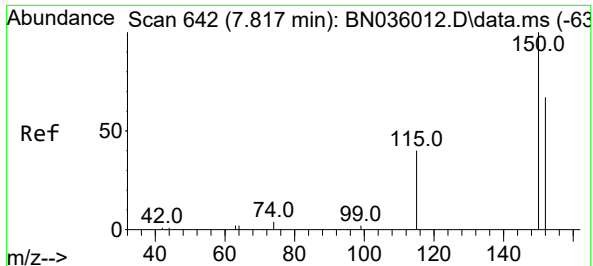
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036303.D
Acq On : 05 Feb 2025 18:47
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Feb 06 01:05:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

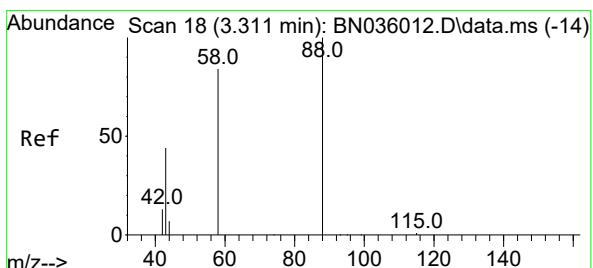
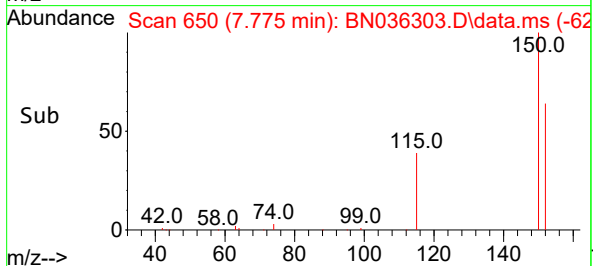
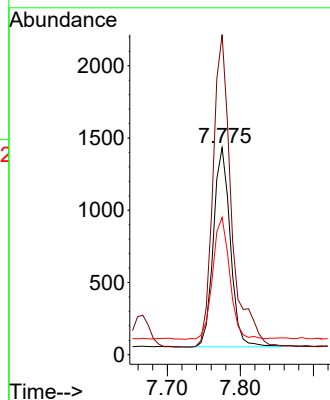
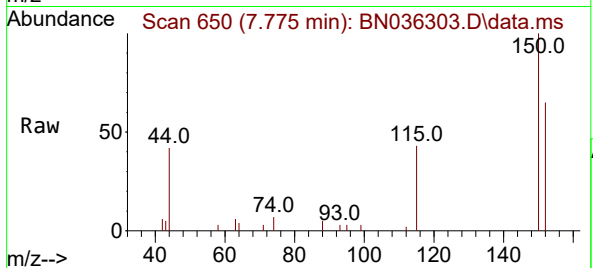




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

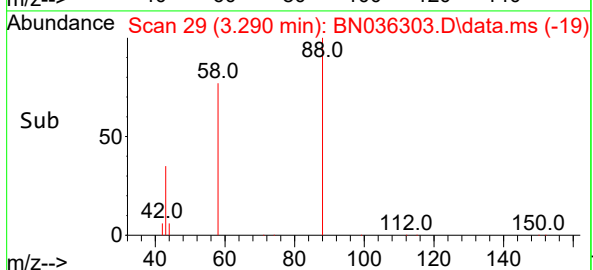
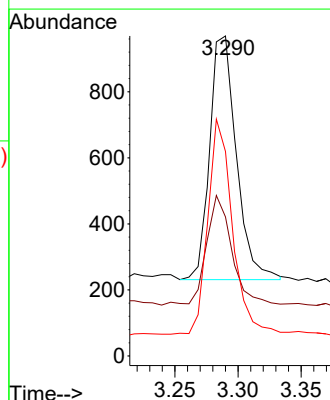
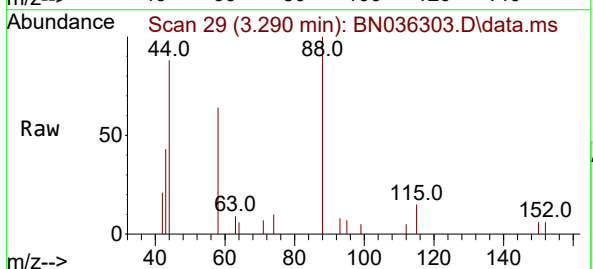
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 2214
Ion Ratio Lower Upper
152 100
150 154.6 117.4 176.2
115 66.3 51.0 76.4

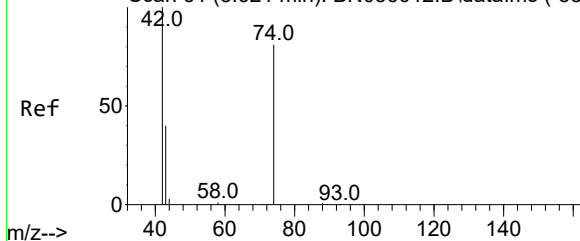


#2
1,4-Dioxane
Concen: 0.439 ng
RT: 3.290 min Scan# 29
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion: 88 Resp: 1086
Ion Ratio Lower Upper
88 100
43 43.0 38.5 57.7
58 80.9 66.6 99.8



Abundance Scan 61 (3.621 min): BN036012.D\data.ms (-53)



#3

n-Nitrosodimethylamine

Concen: 0.385 ng

RT: 3.593 min Scan# 71

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion: 42 Resp: 1726

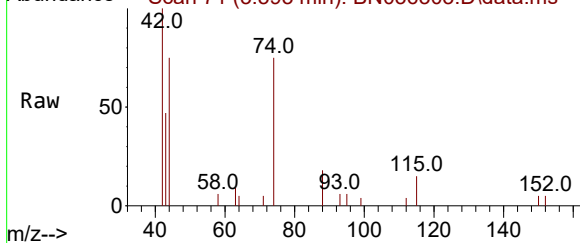
Ion Ratio Lower Upper

42 100

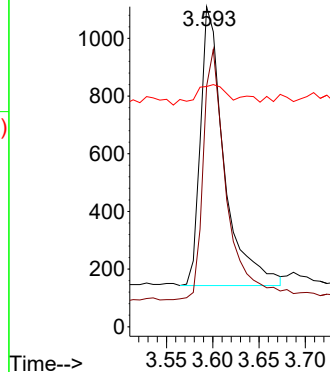
74 91.7 58.1 87.1#

44 9.2 6.2 9.4

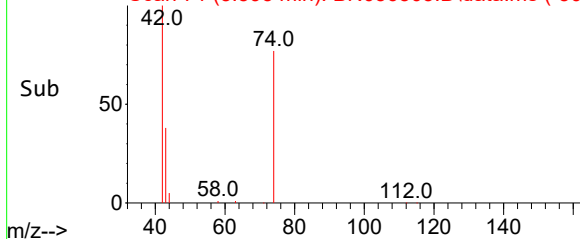
Abundance Scan 71 (3.593 min): BN036303.D\data.ms



Abundance

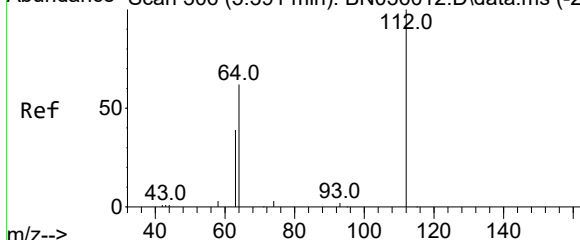


Abundance Scan 71 (3.593 min): BN036303.D\data.ms (-50)



Time-->

Abundance Scan 306 (5.391 min): BN036012.D\data.ms (-29)



#4

2-Fluorophenol

Concen: 0.440 ng

RT: 5.363 min Scan# 316

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Tgt Ion: 112 Resp: 2536

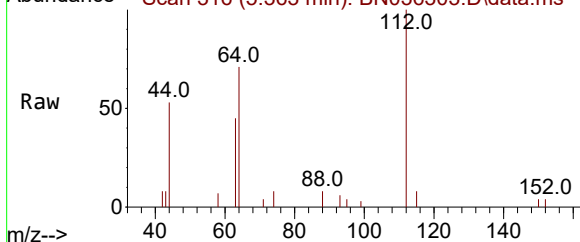
Ion Ratio Lower Upper

112 100

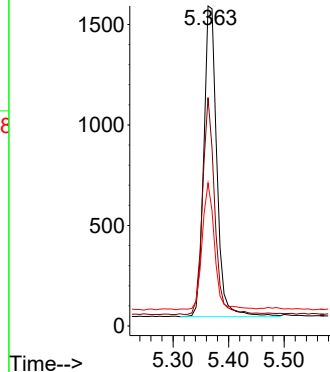
64 65.2 50.0 75.0

63 38.9 30.7 46.1

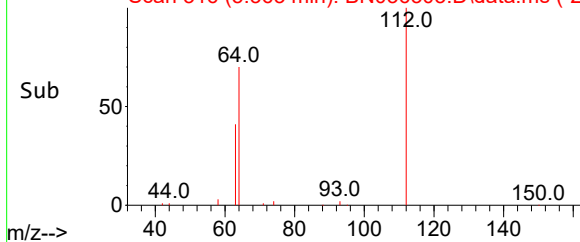
Abundance Scan 316 (5.363 min): BN036303.D\data.ms



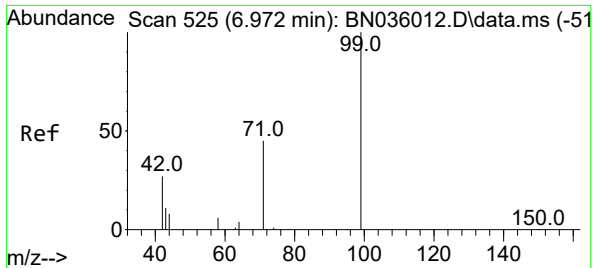
Abundance



Abundance Scan 316 (5.363 min): BN036303.D\data.ms (-28)



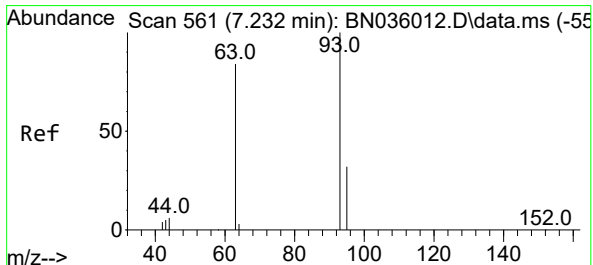
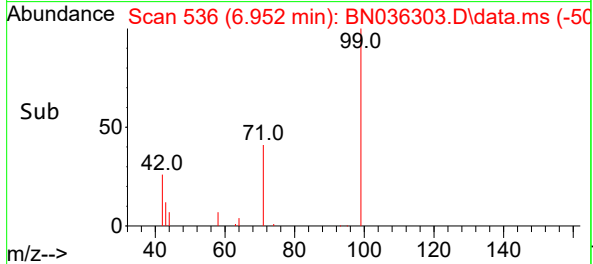
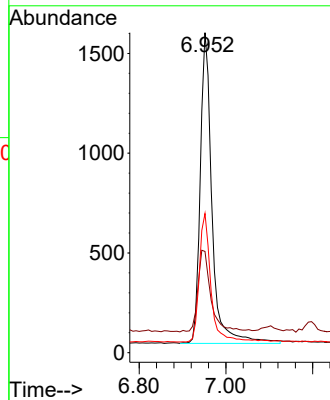
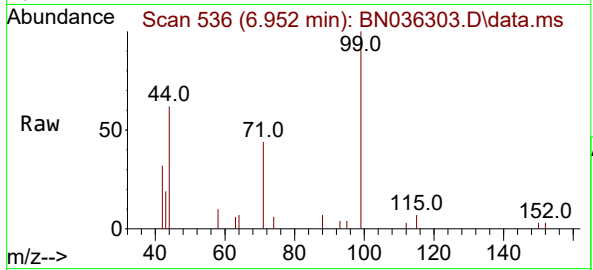
Time-->



#5
Phenol-d6
Concen: 0.433 ng
RT: 6.952 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

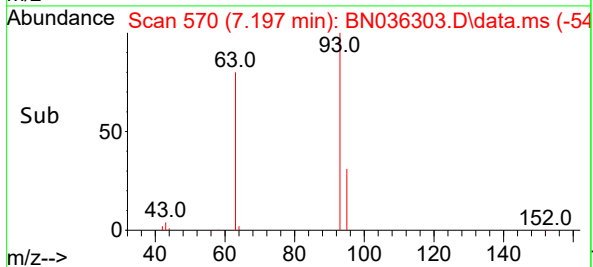
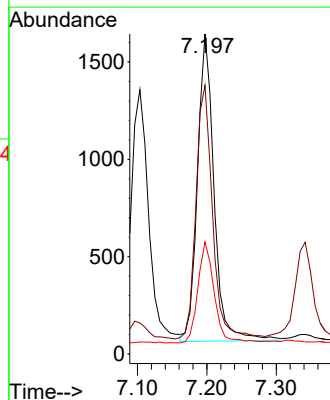
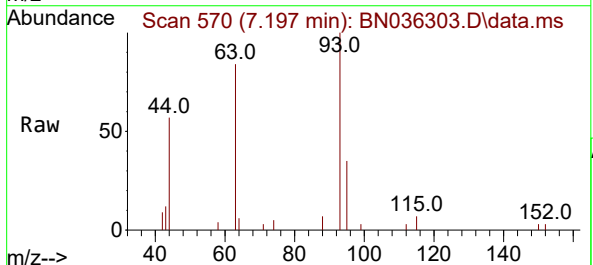
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

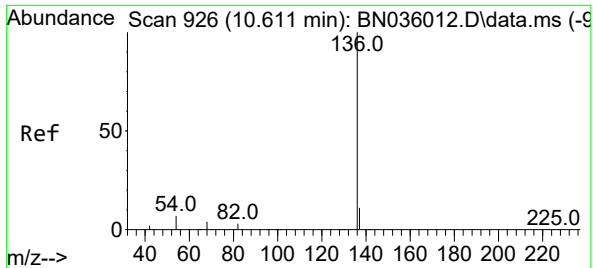
Tgt Ion:	99	Resp:	2931
Ion	Ratio	Lower	Upper
99	100		
42	29.3	26.8	40.2
71	40.7	36.6	55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.481 ng
RT: 7.197 min Scan# 570
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:	93	Resp:	2617
Ion	Ratio	Lower	Upper
93	100		
63	82.6	65.8	98.6
95	32.2	25.8	38.6

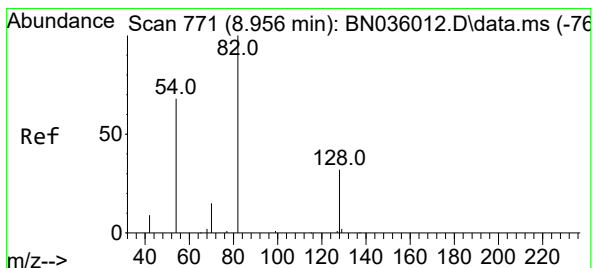
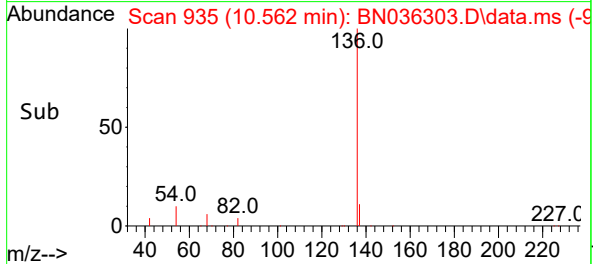
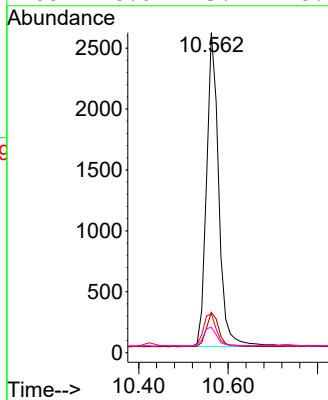
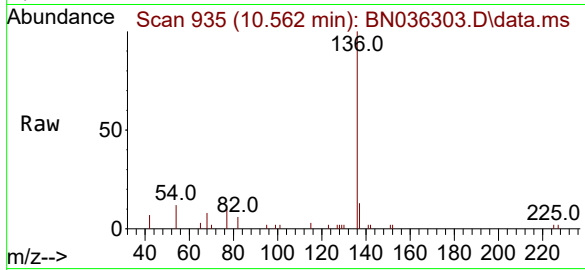




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

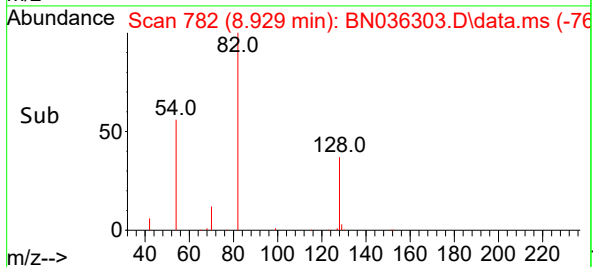
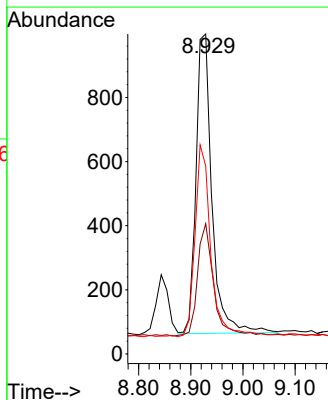
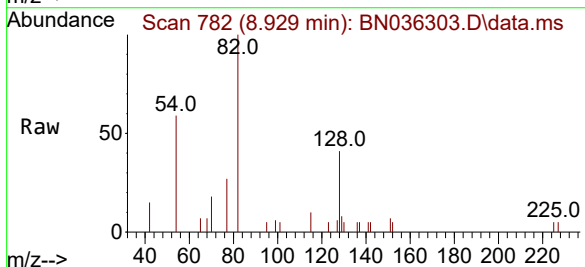
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

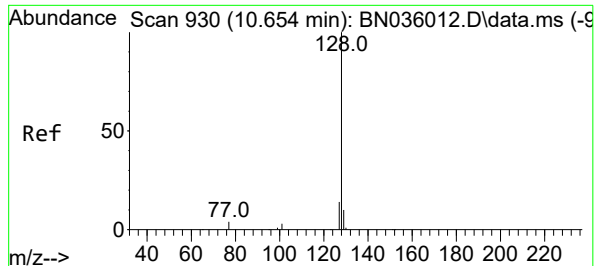
Tgt Ion:	136	Resp:	4864
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.4	15.6
54	12.2	7.7	11.5#
68	8.0	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.433 ng
RT: 8.929 min Scan# 782
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:	82	Resp:	1987
Ion	Ratio	Lower	Upper
82	100		
128	40.7	28.8	43.2
54	58.7	55.8	83.8

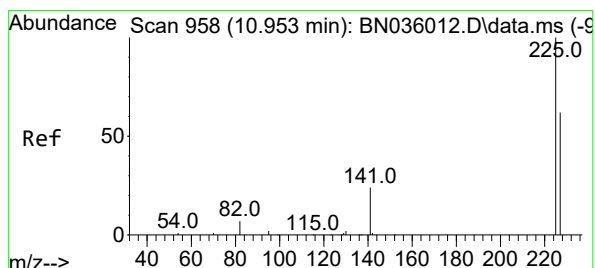
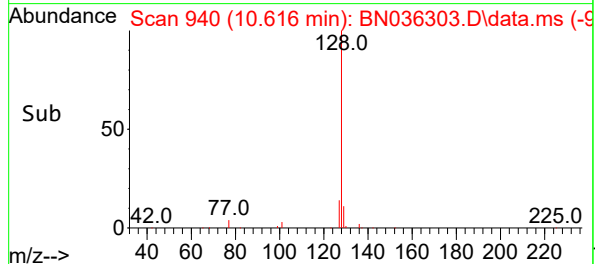
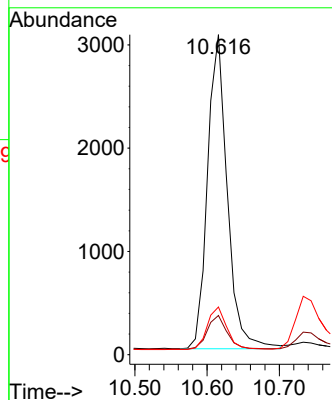
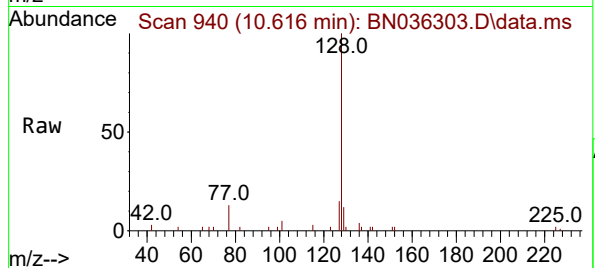




#9
Naphthalene
Concen: 0.409 ng
RT: 10.616 min Scan# 941
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

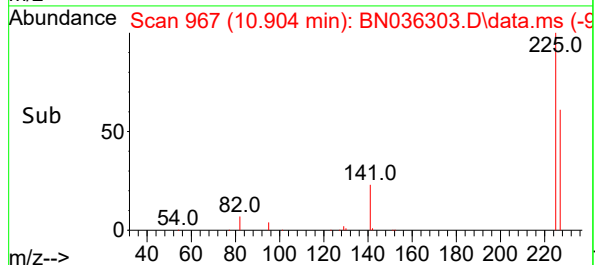
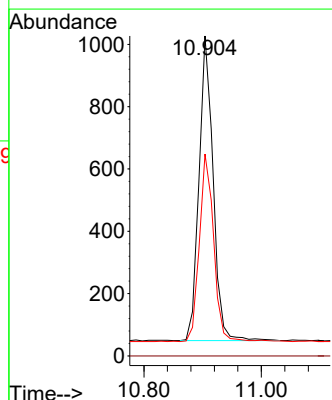
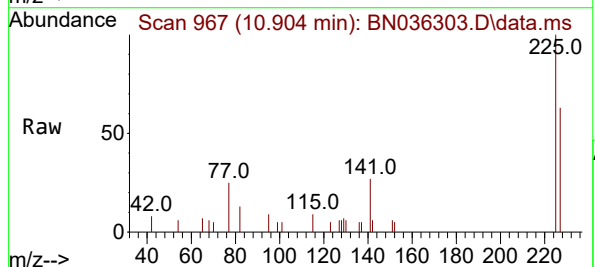
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

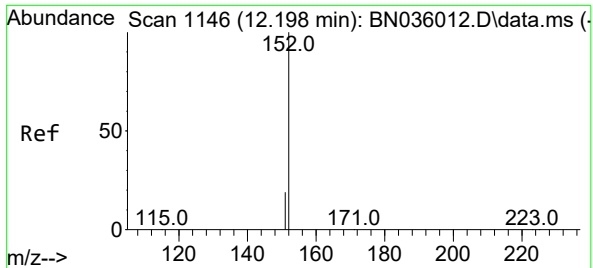
Tgt Ion:128 Resp: 5781
Ion Ratio Lower Upper
128 100
129 12.2 9.4 14.2
127 14.9 12.6 19.0



#10
Hexachlorobutadiene
Concen: 0.359 ng
RT: 10.904 min Scan# 967
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:225 Resp: 1637
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 62.2 51.0 76.6

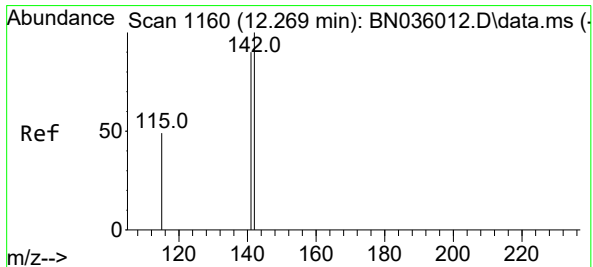
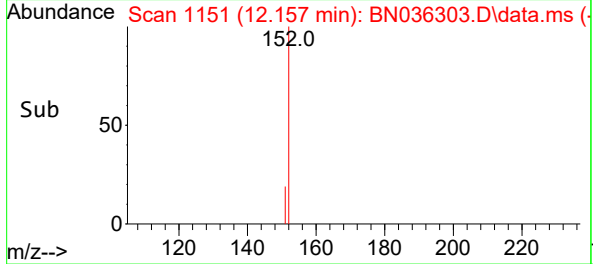
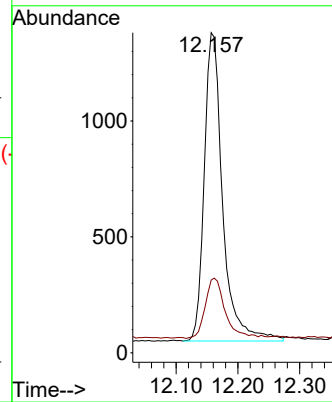
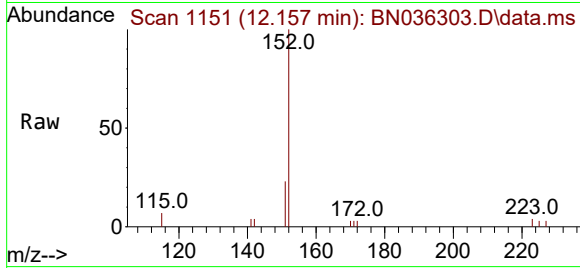




#11
2-Methylnaphthalene-d10
Concen: 0.416 ng
RT: 12.157 min Scan# 1151
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

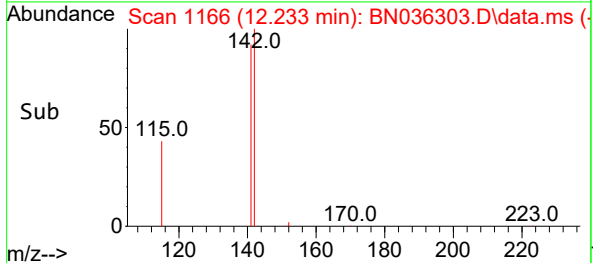
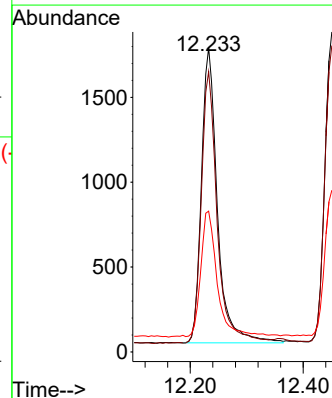
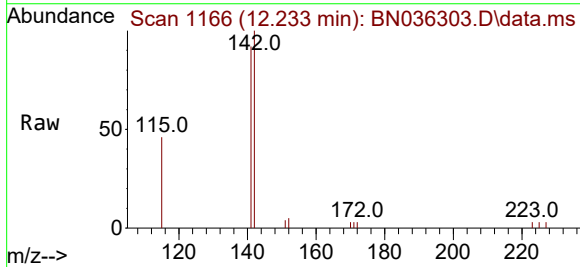
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

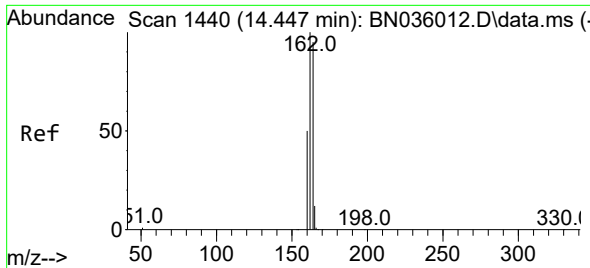
Tgt Ion:152 Resp: 2748
Ion Ratio Lower Upper
152 100
151 21.1 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.392 ng
RT: 12.233 min Scan# 1166
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:142 Resp: 3435
Ion Ratio Lower Upper
142 100
141 92.1 72.2 108.2
115 46.3 41.2 61.8

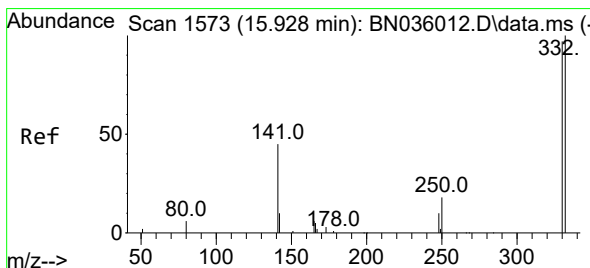
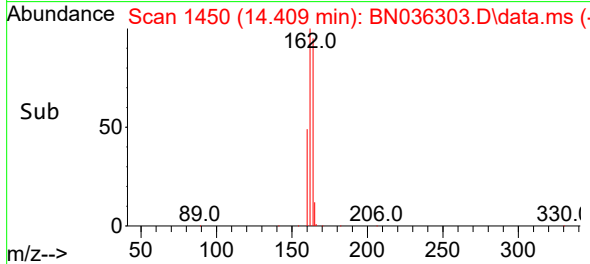
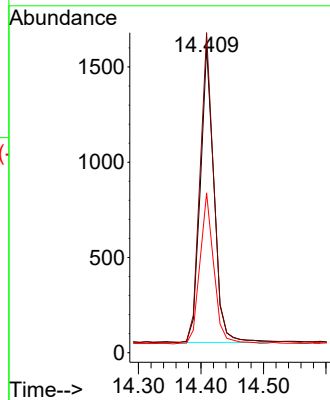
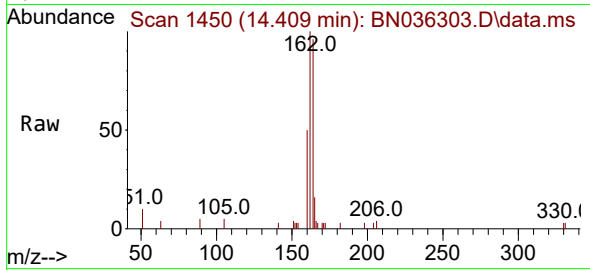




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

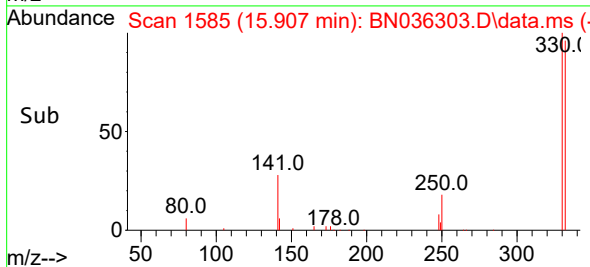
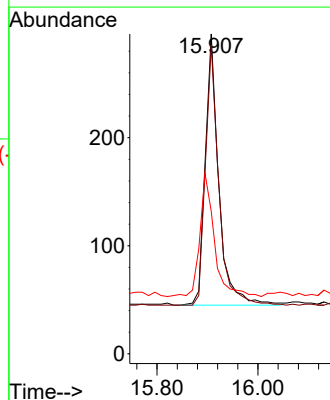
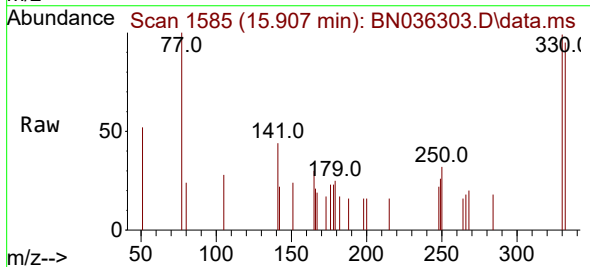
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

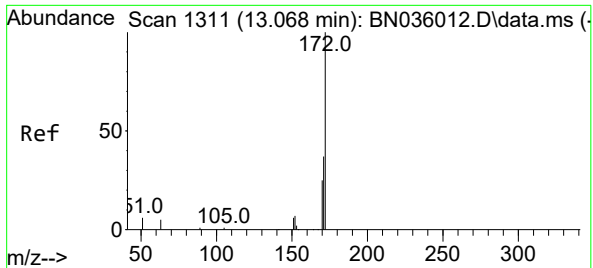
Tgt Ion:164 Resp: 2378
Ion Ratio Lower Upper
164 100
162 104.7 84.1 126.1
160 52.3 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.309 ng
RT: 15.907 min Scan# 1585
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:330 Resp: 471
Ion Ratio Lower Upper
330 100
332 94.7 81.0 121.4
141 48.6 36.7 55.1

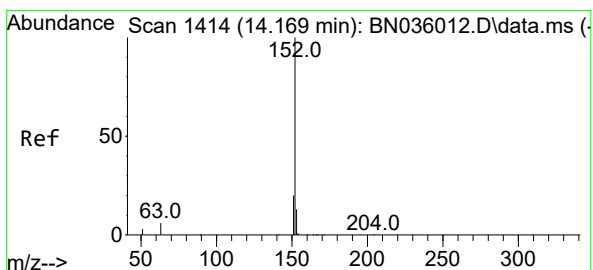
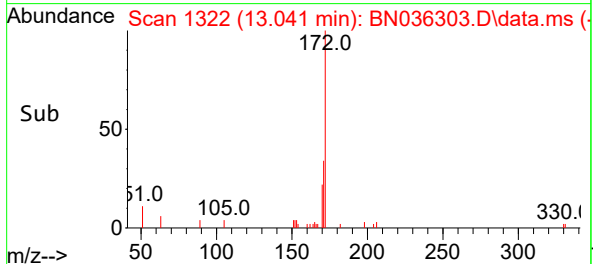
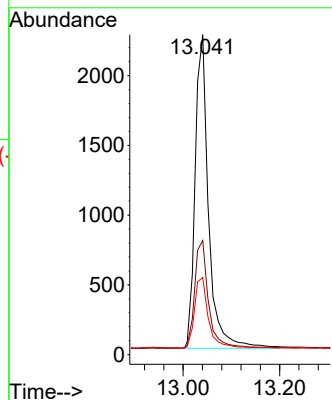
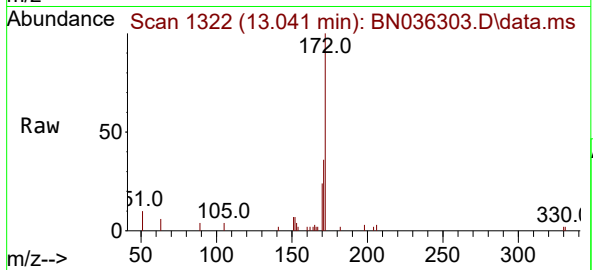




#15
2-Fluorobiphenyl
Concen: 0.379 ng
RT: 13.041 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

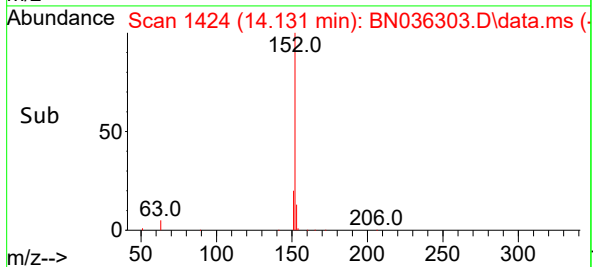
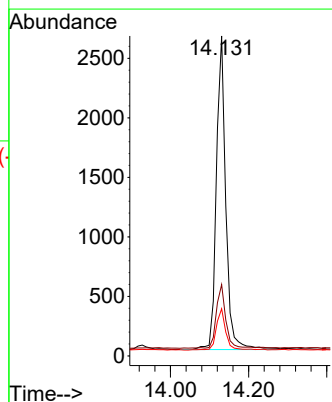
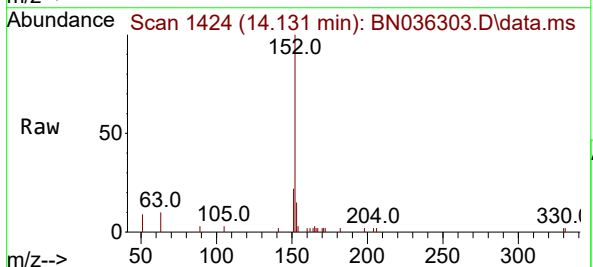
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

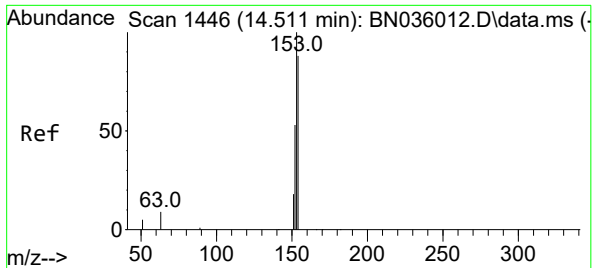
Tgt Ion:	172	Resp:	4027
Ion Ratio	Lower	Upper	
172	100		
171	35.6	30.9	46.3
170	24.1	21.2	31.8



#16
Acenaphthylene
Concen: 0.391 ng
RT: 14.131 min Scan# 1424
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:	152	Resp:	4405
Ion Ratio	Lower	Upper	
152	100		
151	20.9	16.2	24.2
153	13.5	10.4	15.6

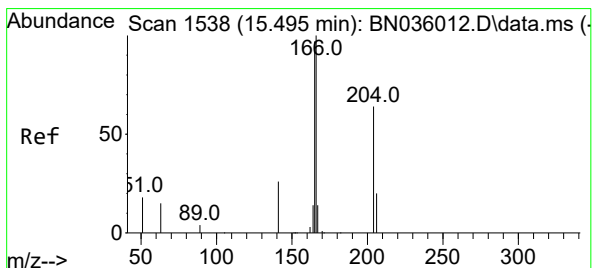
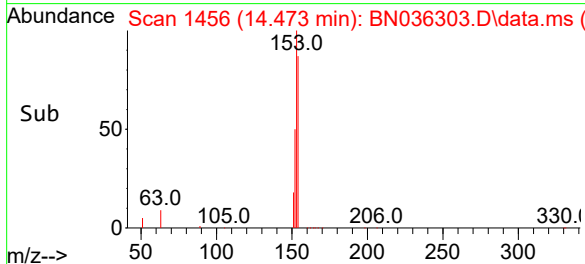
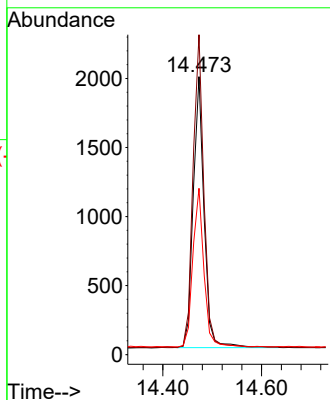
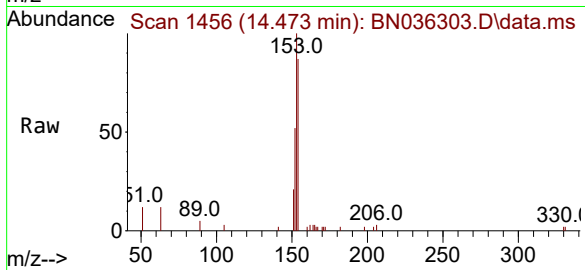




#17
Acenaphthene
Concen: 0.388 ng
RT: 14.473 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

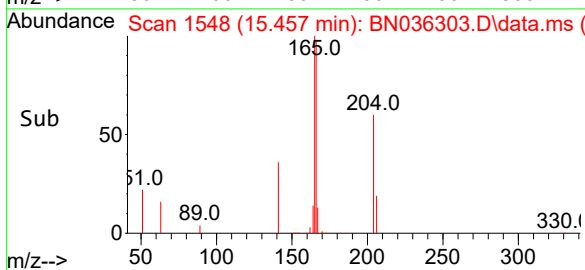
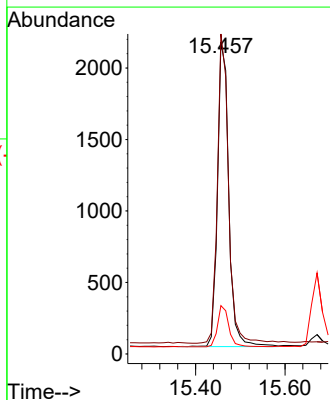
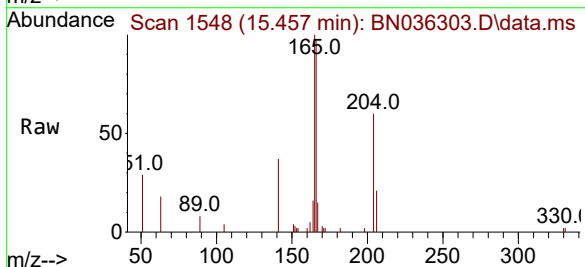
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

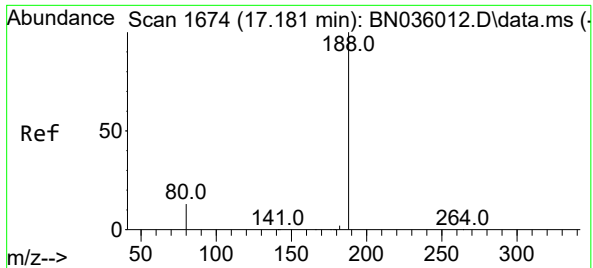
Tgt Ion:154 Resp: 2998
Ion Ratio Lower Upper
154 100
153 115.8 88.9 133.3
152 58.9 48.1 72.1



#18
Fluorene
Concen: 0.400 ng
RT: 15.457 min Scan# 1548
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:166 Resp: 3871
Ion Ratio Lower Upper
166 100
165 102.8 78.5 117.7
167 13.6 10.7 16.1

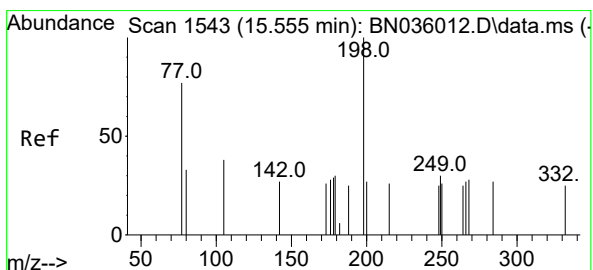
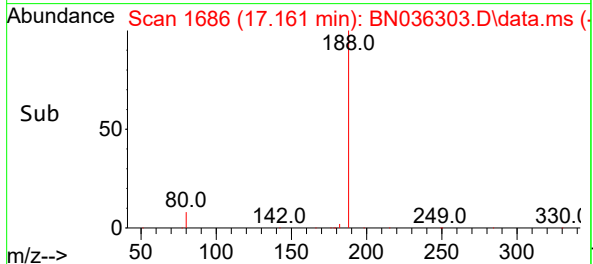
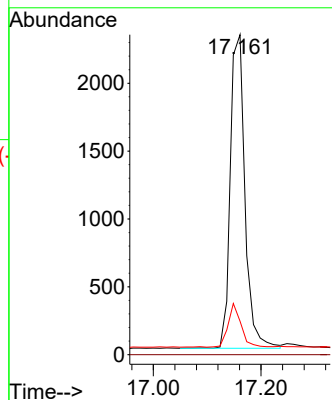
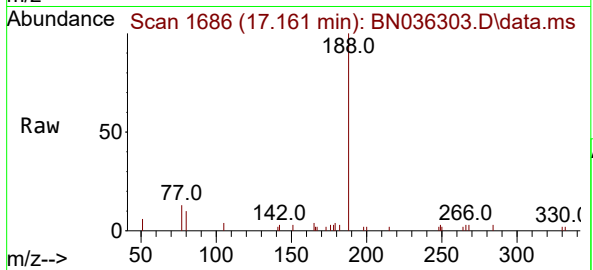




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

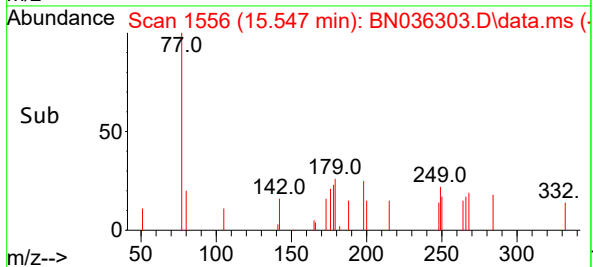
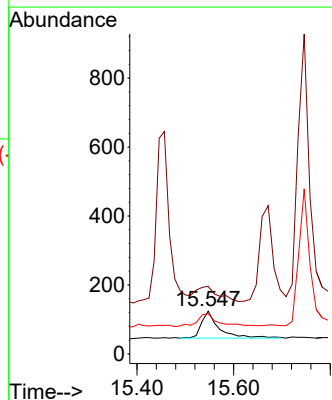
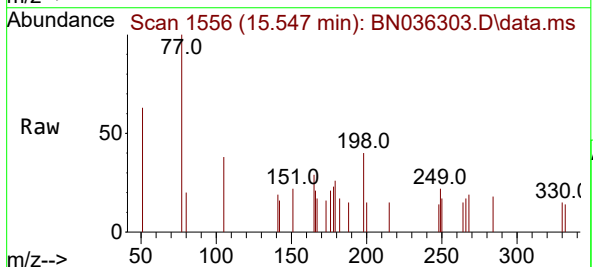
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

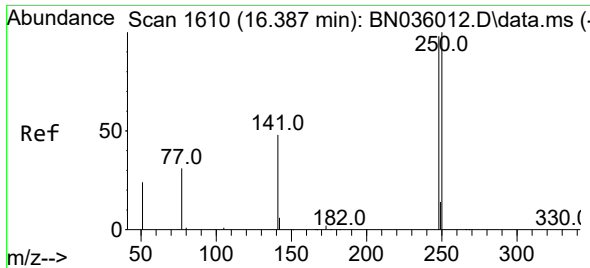
Tgt Ion:188 Resp: 4362
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.4 12.3 18.5#



#20
4,6-Dinitro-2-methylphenol
Concen: 0.190 ng
RT: 15.547 min Scan# 1556
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:198 Resp: 193
Ion Ratio Lower Upper
198 100
51 158.1 68.1 102.1#
105 94.4 46.5 69.7#

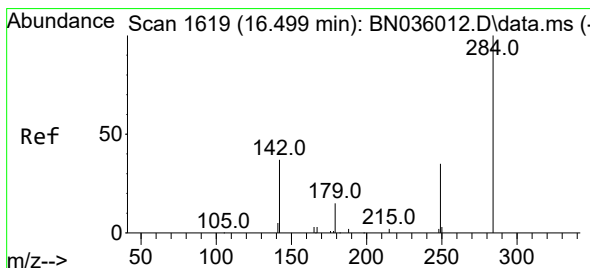
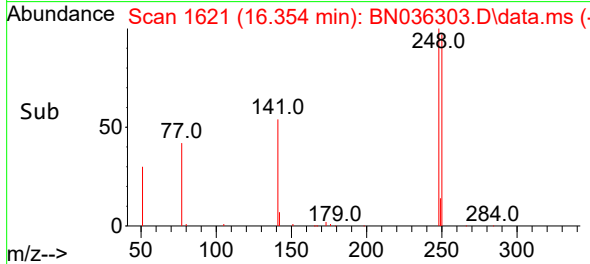
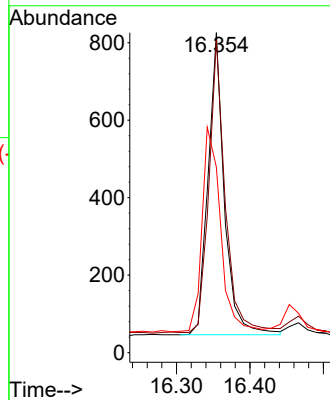
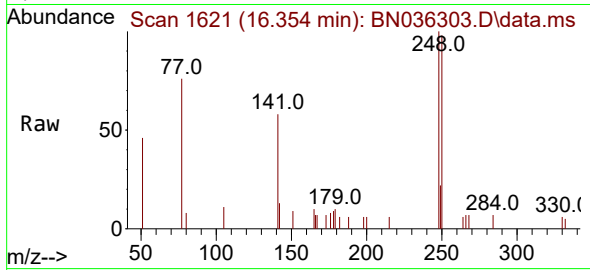




#21
4-Bromophenyl-phenylether
Concen: 0.387 ng
RT: 16.354 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

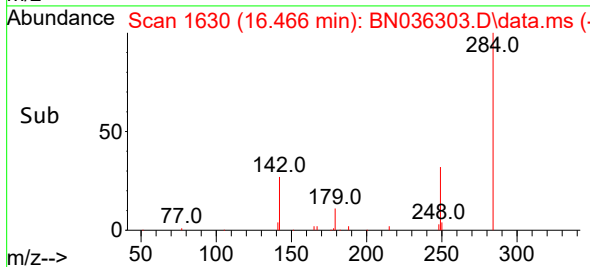
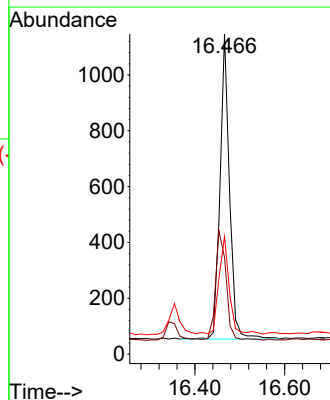
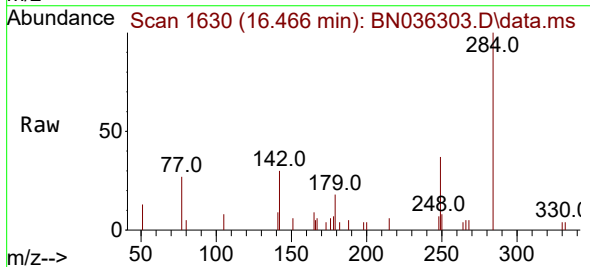
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

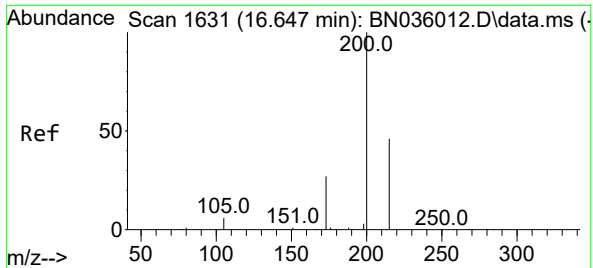
Tgt Ion:	248	Resp:	1201
Ion	Ratio	Lower	Upper
248	100		
250	97.8	81.5	122.3
141	58.0	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.393 ng
RT: 16.466 min Scan# 1630
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:	284	Resp:	1607
Ion	Ratio	Lower	Upper
284	100		
142	39.8	33.6	50.4
249	35.0	28.8	43.2

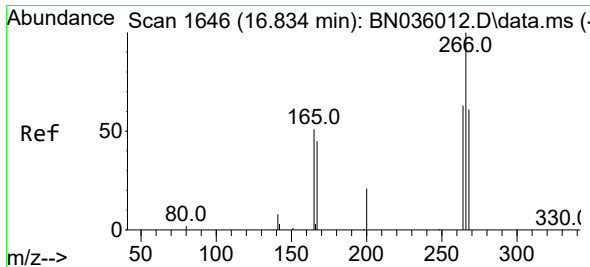
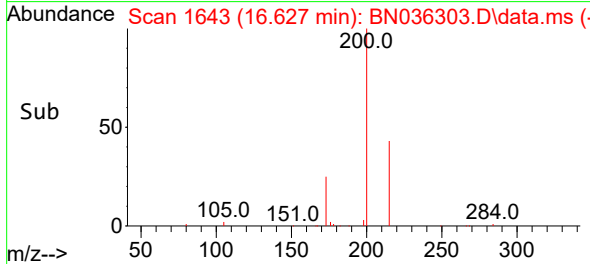
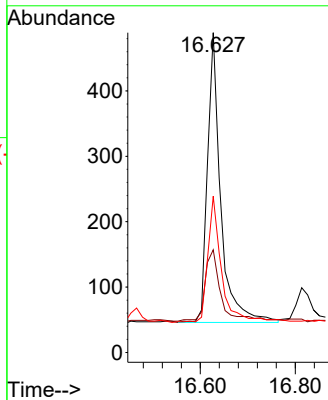
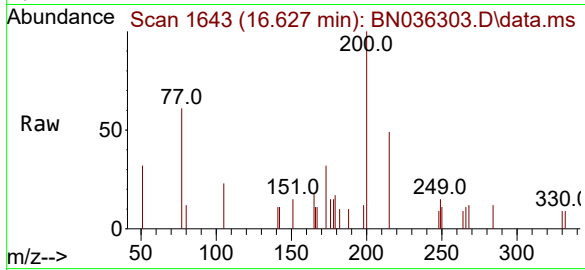




#23
Atrazine
Concen: 0.383 ng
RT: 16.627 min Scan# 1643
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

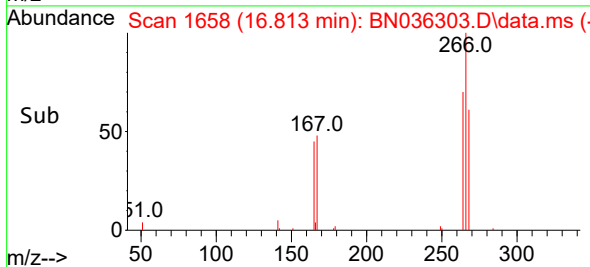
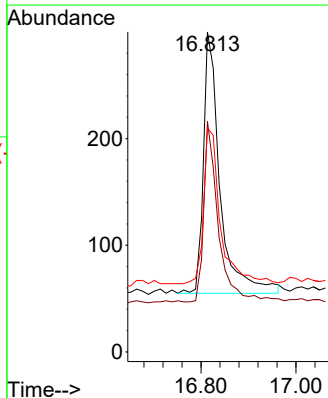
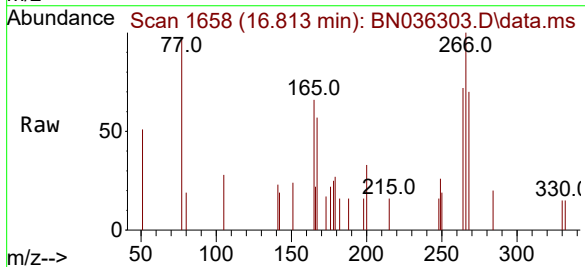
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

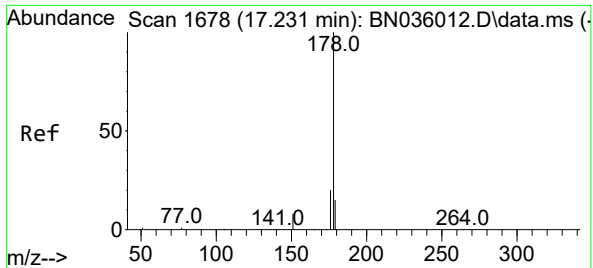
Tgt Ion	Ratio	Lower	Upper
200	100		
173	32.1	26.6	40.0
215	48.9	40.6	61.0



#24
Pentachlorophenol
Concen: 0.337 ng
RT: 16.813 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion	Ratio	Lower	Upper
266	100		
264	60.0	48.2	72.2
268	61.0	51.6	77.4

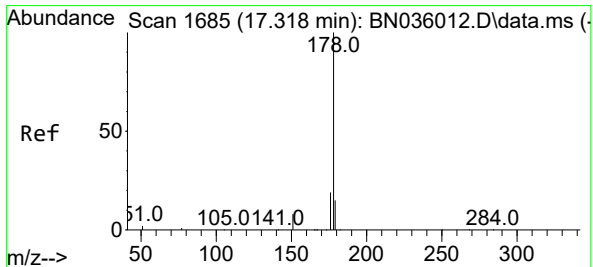
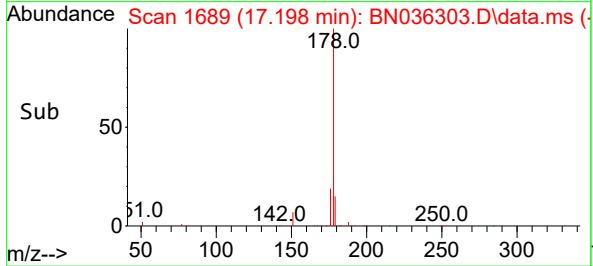
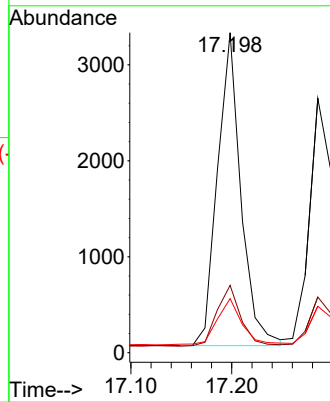
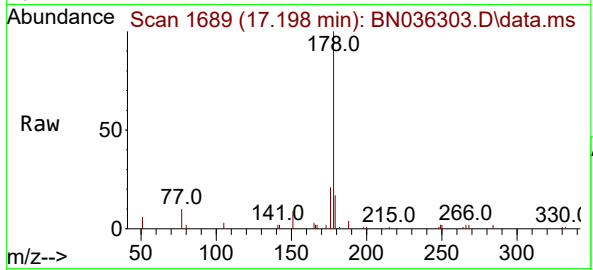




#25
Phenanthrene
Concen: 0.400 ng
RT: 17.198 min Scan# 1689
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

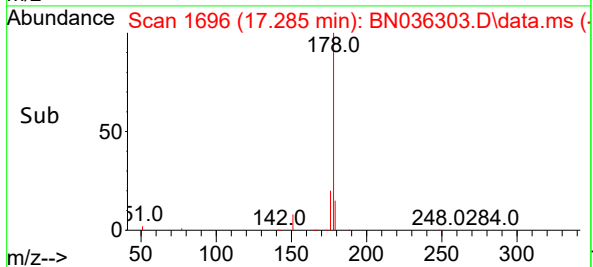
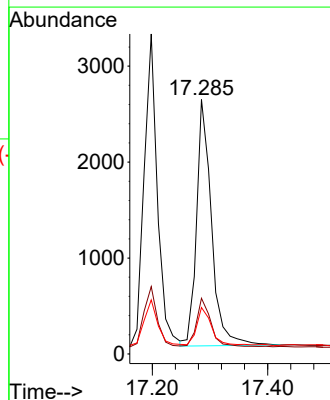
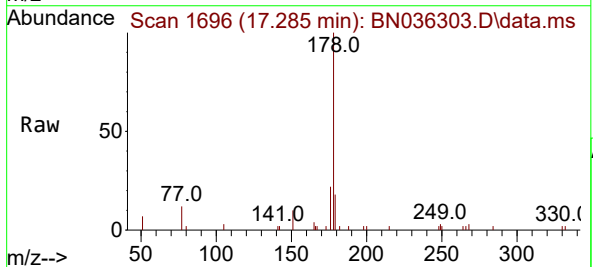
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

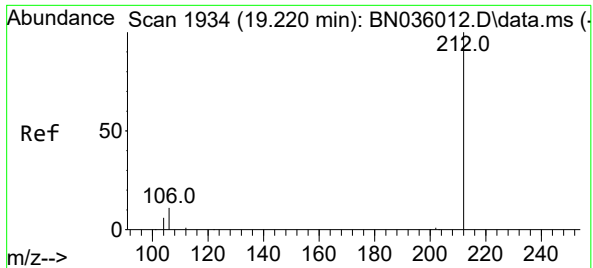
Tgt Ion:178 Resp: 5245
Ion Ratio Lower Upper
178 100
176 19.8 16.0 24.0
179 15.7 12.4 18.6



#26
Anthracene
Concen: 0.390 ng
RT: 17.285 min Scan# 1696
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:178 Resp: 4643
Ion Ratio Lower Upper
178 100
176 19.1 15.4 23.2
179 16.3 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.406 ng

RT: 19.188 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

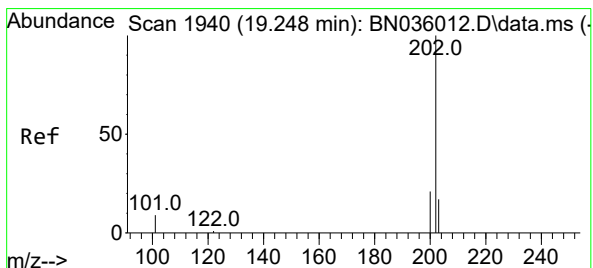
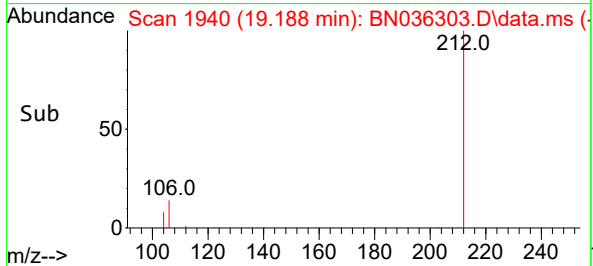
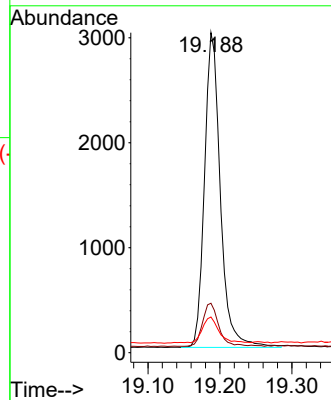
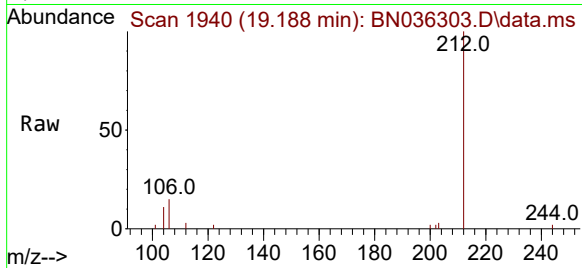
Tgt Ion:212 Resp: 4587

Ion Ratio Lower Upper

212 100

106 13.8 9.7 14.5

104 8.5 6.0 9.0



#28

Fluoranthene

Concen: 0.391 ng

RT: 19.220 min Scan# 1947

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

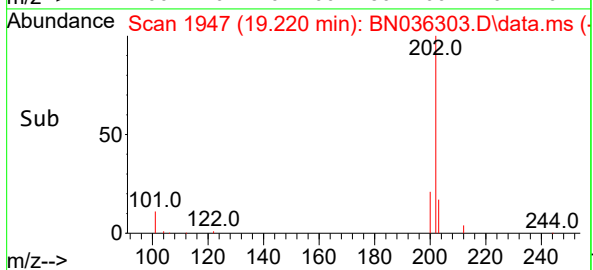
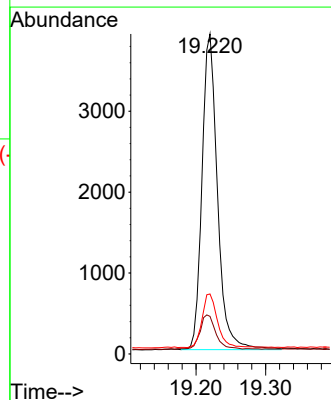
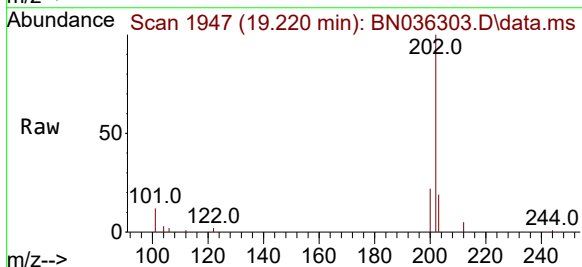
Tgt Ion:202 Resp: 6022

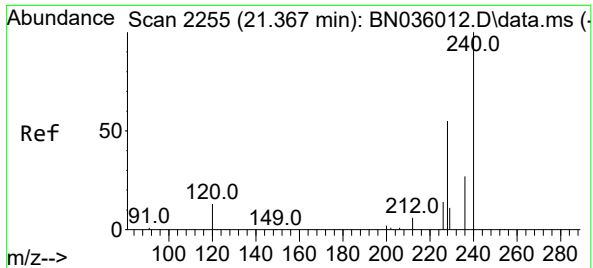
Ion Ratio Lower Upper

202 100

101 10.9 7.6 11.4

203 16.9 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

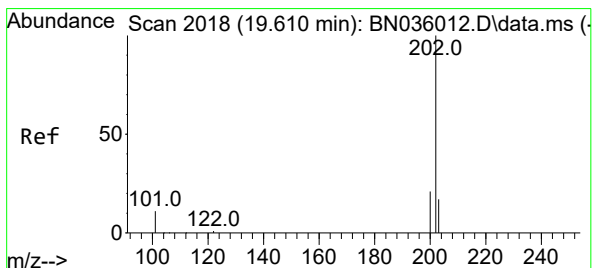
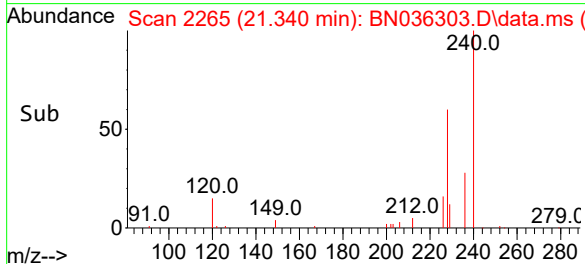
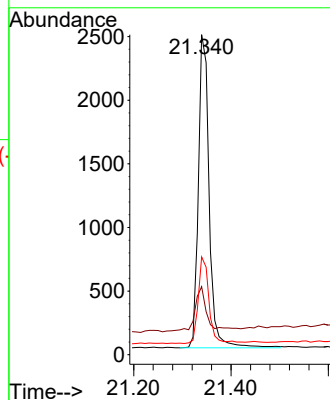
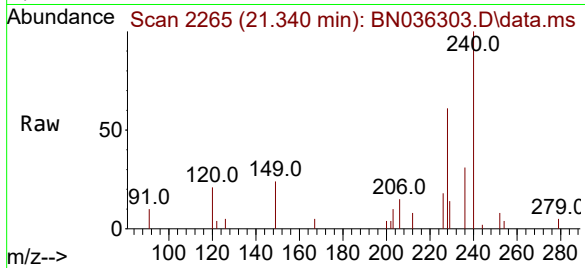
Tgt Ion:240 Resp: 3774

Ion Ratio Lower Upper

240 100

120 21.3 13.9 20.9#

236 30.6 23.7 35.5



#30

Pyrene

Concen: 0.403 ng

RT: 19.582 min Scan# 2025

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

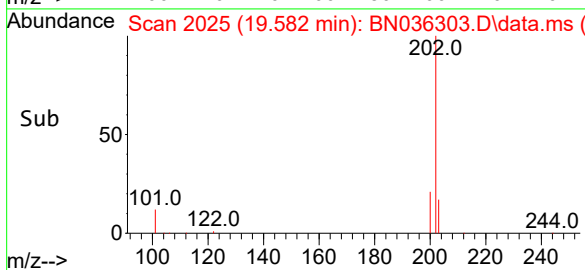
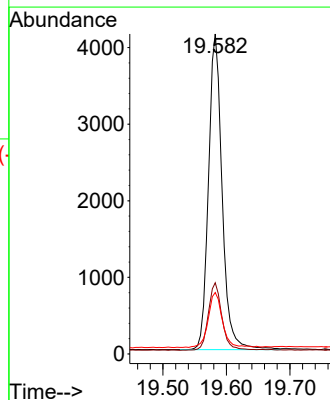
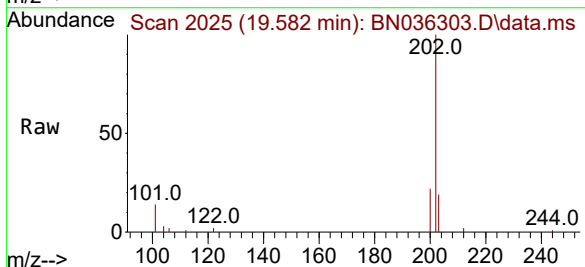
Tgt Ion:202 Resp: 6158

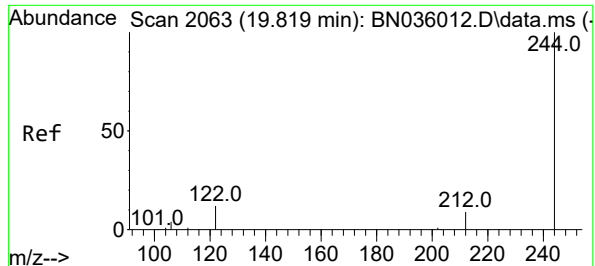
Ion Ratio Lower Upper

202 100

200 21.2 17.0 25.4

203 18.2 14.4 21.6

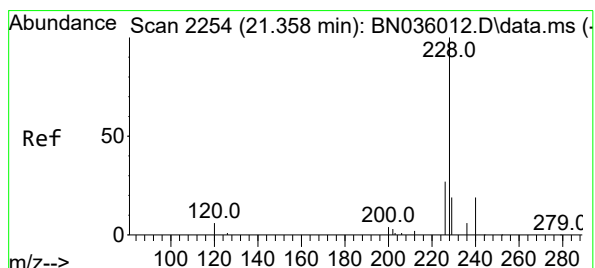
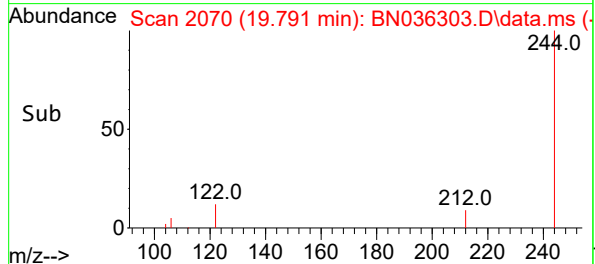
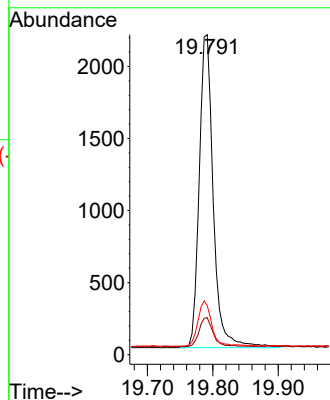
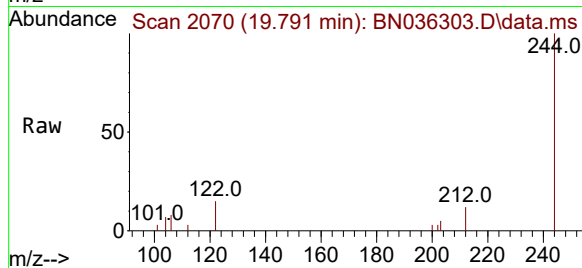




#31
Terphenyl-d14
Concen: 0.414 ng
RT: 19.791 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

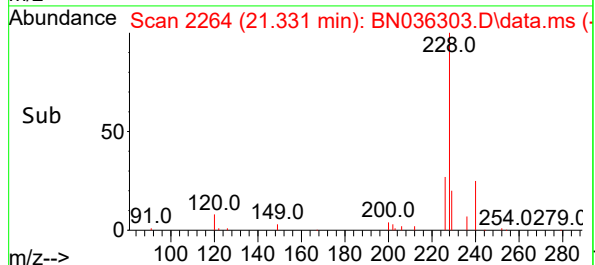
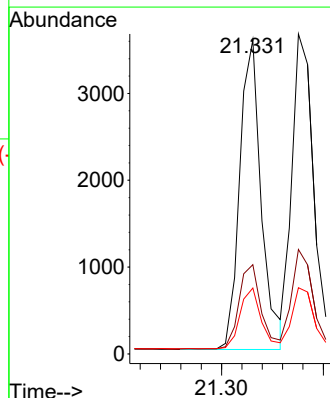
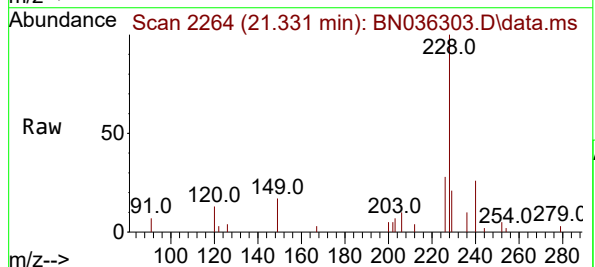
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

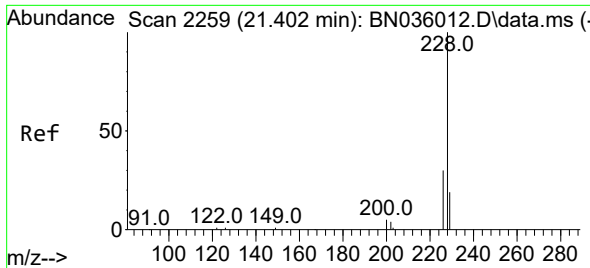
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.1	13.7
122	15.3	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.382 ng
RT: 21.331 min Scan# 2264
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.4	22.6	34.0
229	21.0	16.5	24.7

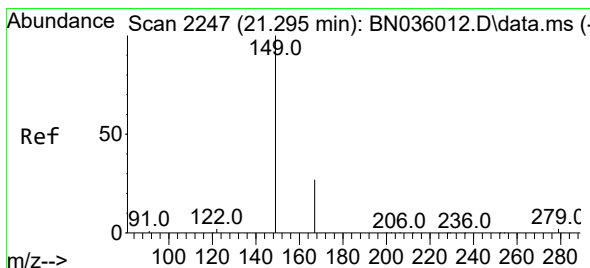
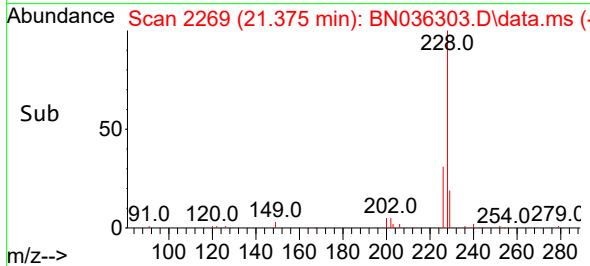
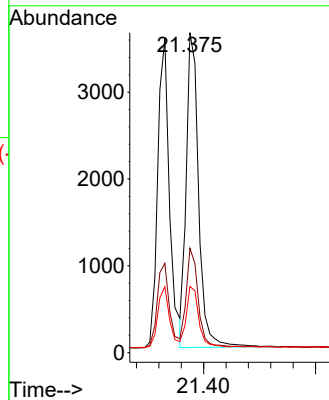
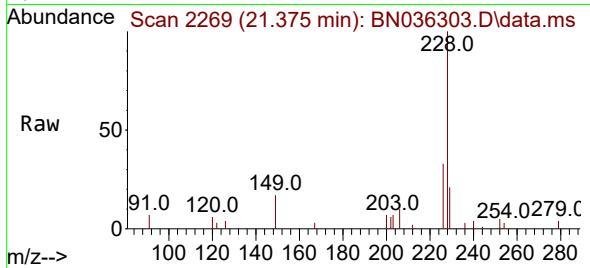




#33
Chrysene
Concen: 0.398 ng
RT: 21.375 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

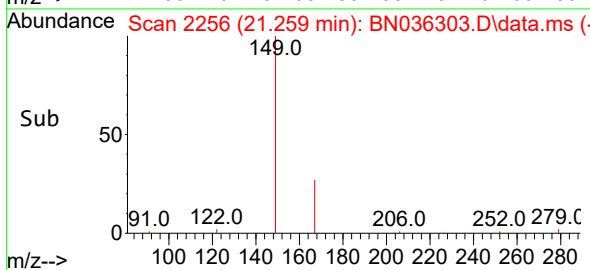
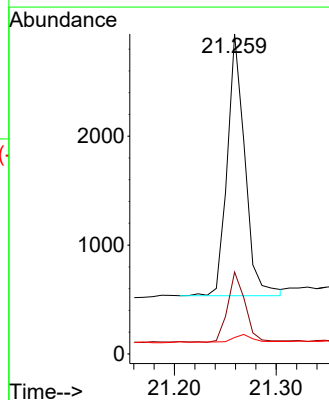
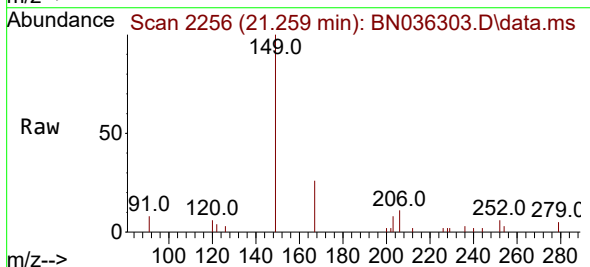
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

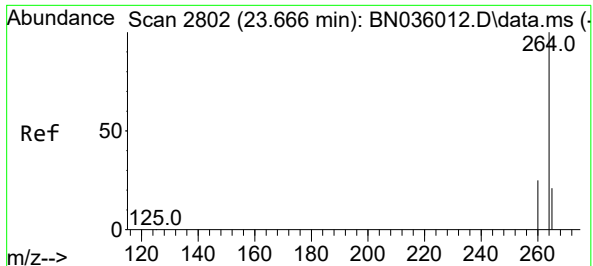
Tgt Ion:228 Resp: 5571
Ion Ratio Lower Upper
228 100
226 32.6 25.3 37.9
229 20.7 16.3 24.5



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.385 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:149 Resp: 2887
Ion Ratio Lower Upper
149 100
167 26.7 21.9 32.9
279 3.2 3.0 4.6

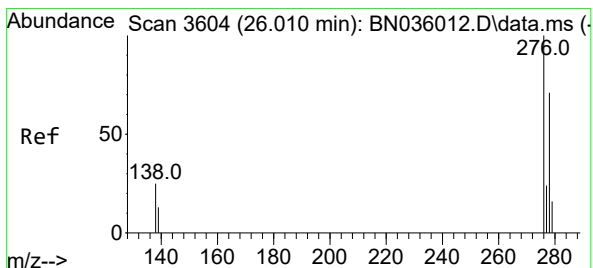
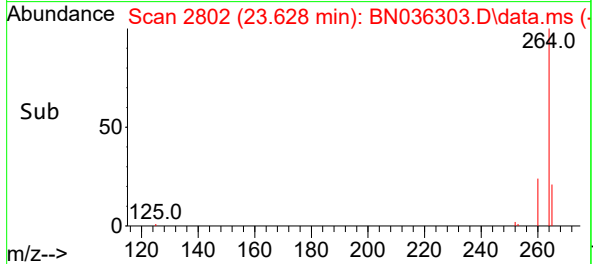
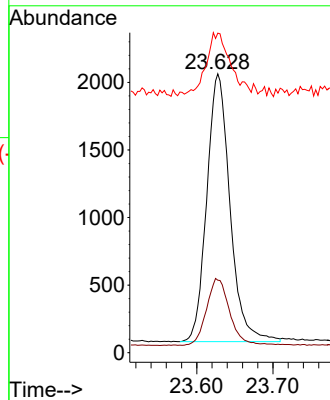
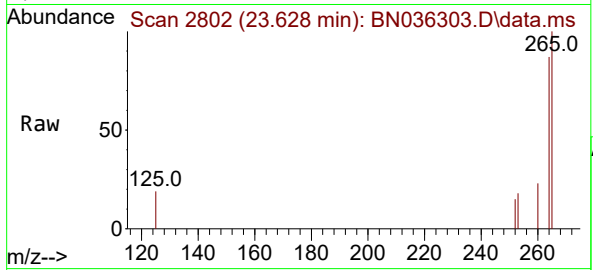




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.628 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

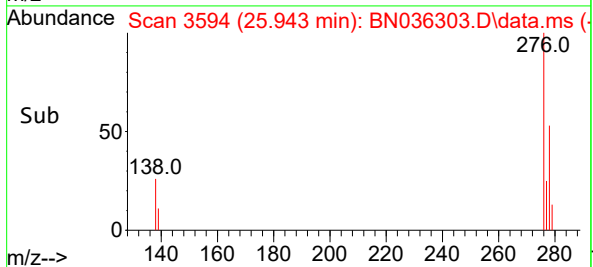
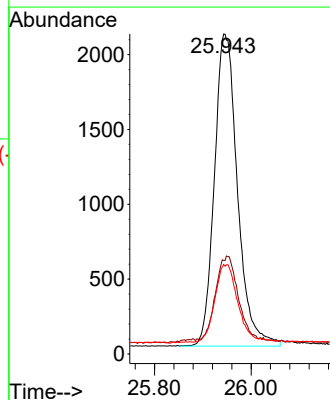
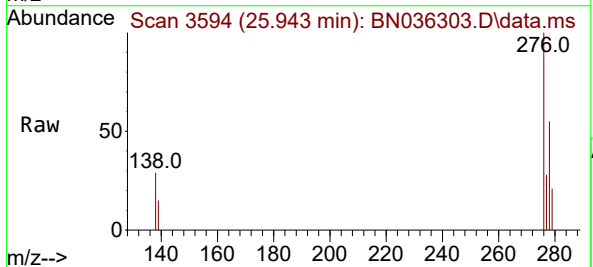
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

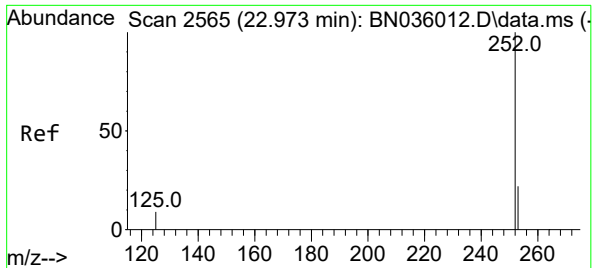
Tgt Ion:264 Resp: 4195
Ion Ratio Lower Upper
264 100
260 26.0 21.8 32.6
265 114.5 56.6 84.8#



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.411 ng
RT: 25.943 min Scan# 3594
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

Tgt Ion:276 Resp: 6925
Ion Ratio Lower Upper
276 100
138 25.6 19.9 29.9
277 25.0 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.390 ng

RT: 22.938 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

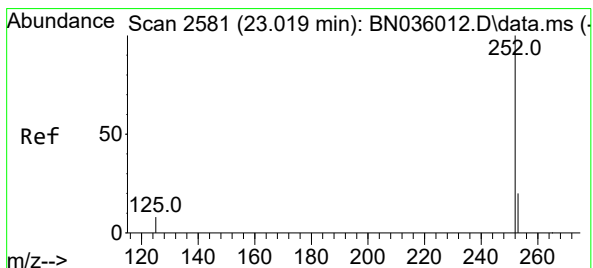
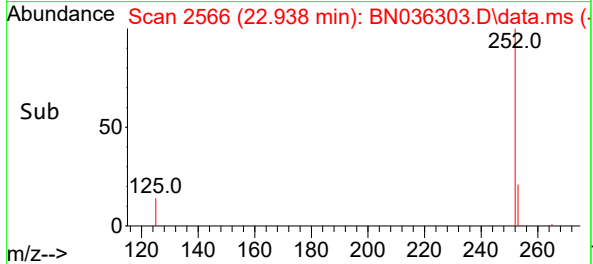
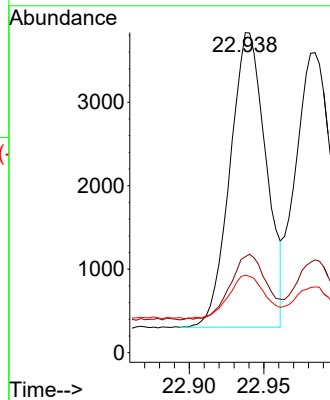
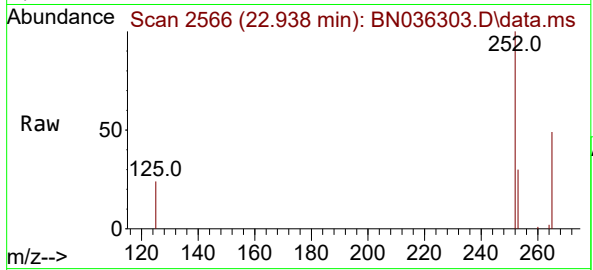
Tgt Ion:252 Resp: 5941

Ion Ratio Lower Upper

252 100

253 30.0 22.5 33.7

125 24.2 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.387 ng

RT: 22.984 min Scan# 2582

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

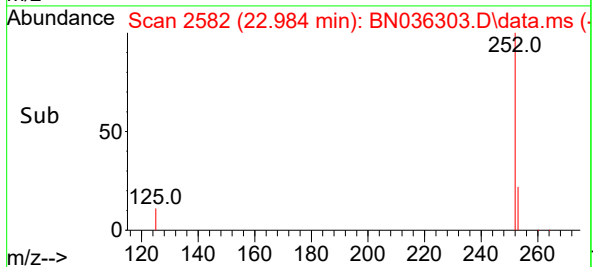
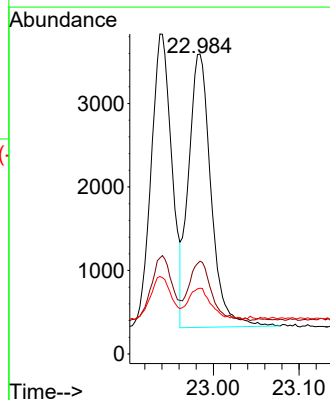
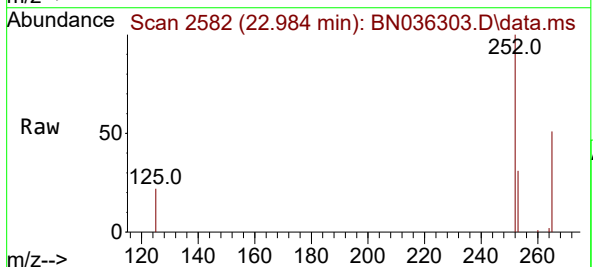
Tgt Ion:252 Resp: 5944

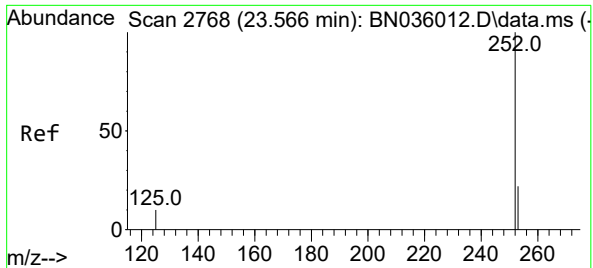
Ion Ratio Lower Upper

252 100

253 30.9 21.3 31.9

125 21.9 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.404 ng

RT: 23.528 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

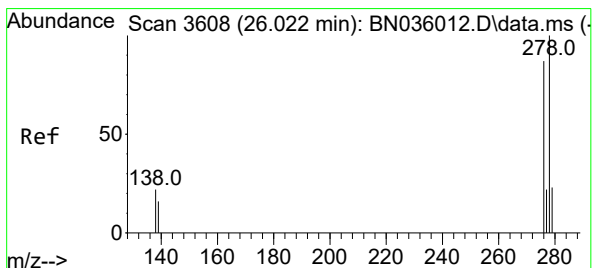
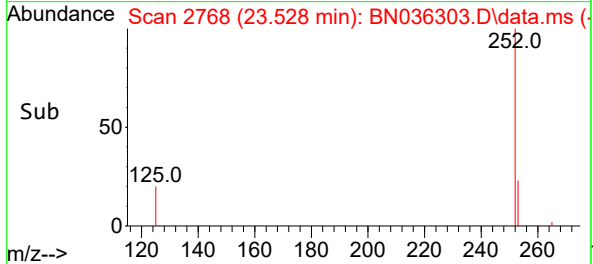
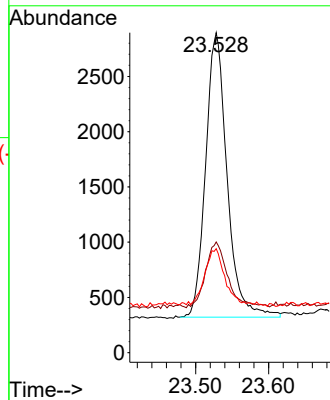
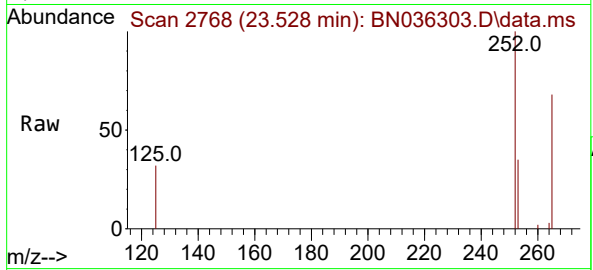
Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:252	Resp:	5255
Ion Ratio	Lower	Upper
252	100	
253	34.6	23.8 35.6
125	32.5	14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.408 ng

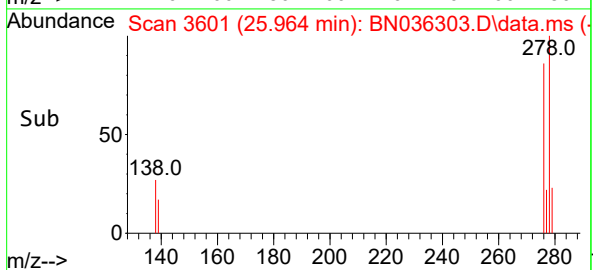
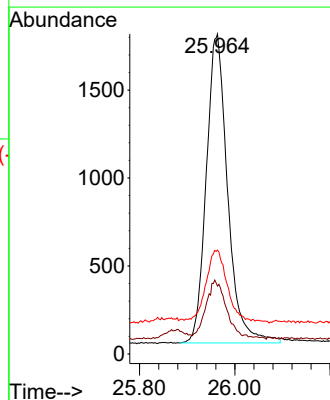
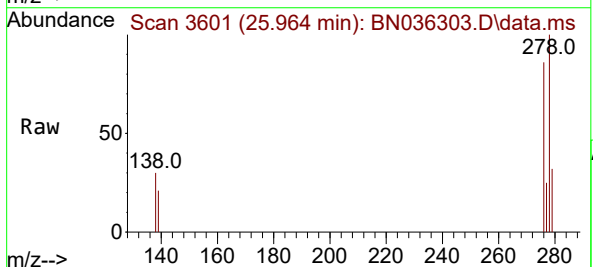
RT: 25.964 min Scan# 3601

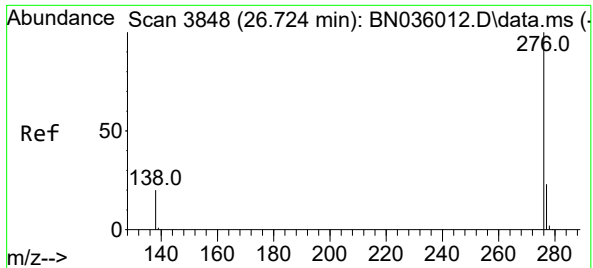
Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Tgt Ion:278	Resp:	5468
Ion Ratio	Lower	Upper
278	100	
139	21.2	16.0 24.0
279	32.4	23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.420 ng

RT: 26.654 min Scan# 3837

Delta R.T. 0.000 min

Lab File: BN036303.D

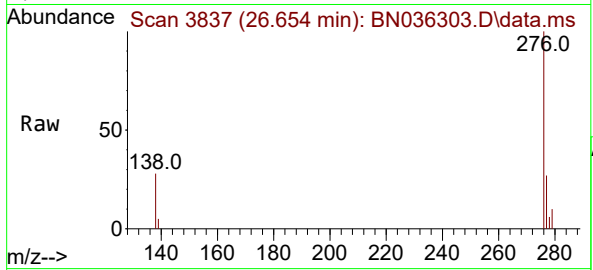
Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4



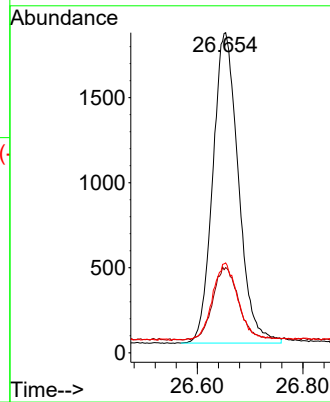
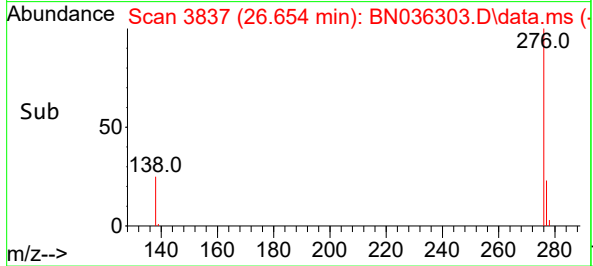
Tgt Ion:276 Resp: 6140

Ion Ratio Lower Upper

276 100

277 26.6 21.3 31.9

138 28.1 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036303.D
Acq On : 05 Feb 2025 18:47
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 06 01:05:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 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	134	0.00
2	1,4-Dioxane	0.400	0.439	-9.7	140	0.00
3	n-Nitrosodimethylamine	0.400	0.385	3.8	119	0.00
4 S	2-Fluorophenol	0.400	0.440	-10.0	141	0.00
5 S	Phenol-d6	0.400	0.433	-8.2	140	0.00
6	bis(2-Chloroethyl)ether	0.400	0.481	-20.2	150	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	156	0.00
8 S	Nitrobenzene-d5	0.400	0.433	-8.2	159	0.00
9	Naphthalene	0.400	0.409	-2.2	148	0.00
10	Hexachlorobutadiene	0.400	0.359	10.3	130	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.416	-4.0	152	0.00
12	2-Methylnaphthalene	0.400	0.392	2.0	145	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	150	0.00
14 S	2,4,6-Tribromophenol	0.400	0.309	22.8	116	0.00
15 S	2-Fluorobiphenyl	0.400	0.379	5.3	132	0.00
16	Acenaphthylene	0.400	0.391	2.3	139	0.00
17	Acenaphthene	0.400	0.388	3.0	139	0.00
18	Fluorene	0.400	0.400	0.0	150	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	139	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.190	52.5#	65	0.00
21	4-Bromophenyl-phenylether	0.400	0.387	3.3	125	0.00
22	Hexachlorobenzene	0.400	0.393	1.8	126	0.00
23	Atrazine	0.400	0.383	4.3	126	0.00
24	Pentachlorophenol	0.400	0.337	15.8	116	0.00
25	Phenanthrene	0.400	0.400	0.0	128	0.00
26	Anthracene	0.400	0.390	2.5	129	0.00
27 SURR	Fluoranthene-d10	0.400	0.406	-1.5	132	0.00
28	Fluoranthene	0.400	0.391	2.3	127	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	133	0.00
30	Pyrene	0.400	0.403	-0.8	128	0.00
31 S	Terphenyl-d14	0.400	0.414	-3.5	131	0.00
32	Benzo(a)anthracene	0.400	0.382	4.5	122	0.00
33	Chrysene	0.400	0.398	0.5	127	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.385	3.8	127	0.00
35 I	Perylene-d12	0.400	0.400	0.0	141	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.411	-2.7	144	0.00
37	Benzo(b)fluoranthene	0.400	0.390	2.5	133	0.00
38	Benzo(k)fluoranthene	0.400	0.387	3.3	134	0.00
39 C	Benzo(a)pyrene	0.400	0.404	-1.0	140	0.00
40	Dibenzo(a,h)anthracene	0.400	0.408	-2.0	142	0.00
41	Benzo(g,h,i)perylene	0.400	0.420	-5.0	145	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036303.D
 Acq On : 05 Feb 2025 18:47
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 01:05:21 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 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	134	0.00
2	1,4-Dioxane	0.447	0.491	-9.8	140	0.00
3	n-Nitrosodimethylamine	0.811	0.780	3.8	119	0.00
4 S	2-Fluorophenol	1.040	1.145	-10.1	141	0.00
5 S	Phenol-d6	1.222	1.324	-8.3	140	0.00
6	bis(2-Chloroethyl)ether	0.984	1.182	-20.1	150#	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	156#	0.00
8 S	Nitrobenzene-d5	0.378	0.409	-8.2	159#	0.00
9	Naphthalene	1.162	1.189	-2.3	148	0.00
10	Hexachlorobutadiene	0.375	0.337	10.1	130	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.565	-3.9	152#	0.00
12	2-Methylnaphthalene	0.721	0.706	2.1	145	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	150#	0.00
14 S	2,4,6-Tribromophenol	0.257	0.198	23.0	116	0.00
15 S	2-Fluorobiphenyl	1.786	1.693	5.2	132	0.00
16	Acenaphthylene	1.897	1.852	2.4	139	0.00
17	Acenaphthene	1.299	1.261	2.9	139	0.00
18	Fluorene	1.627	1.628	-0.1	150	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	139	0.00
20	4,6-Dinitro-2-methylphenol	0.093	0.044	52.7#	65	0.00
21	4-Bromophenyl-phenylether	0.285	0.275	3.5	125	0.00
22	Hexachlorobenzene	0.375	0.368	1.9	126	0.00
23	Atrazine	0.206	0.197	4.4	126	0.00
24	Pentachlorophenol	0.162	0.137	15.4	116	0.00
25	Phenanthrene	1.202	1.202	0.0	128	0.00
26	Anthracene	1.093	1.064	2.7	129	0.00
27 SURR	Fluoranthene-d10	1.036	1.052	-1.5	132	0.00
28	Fluoranthene	1.412	1.381	2.2	127	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	133	0.00
30	Pyrene	1.621	1.632	-0.7	128	0.00
31 S	Terphenyl-d14	0.831	0.860	-3.5	131	0.00
32	Benzo(a)anthracene	1.451	1.386	4.5	122	0.00
33	Chrysene	1.483	1.476	0.5	127	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	0.765	3.8	127	0.00
35 I	Perylene-d12	1.000	1.000	0.0	141	0.00
36	Indeno(1,2,3-cd)pyrene	1.605	1.651	-2.9	144	0.00
37	Benzo(b)fluoranthene	1.454	1.416	2.6	133	0.00
38	Benzo(k)fluoranthene	1.465	1.417	3.3	134	0.00
39 C	Benzo(a)pyrene	1.242	1.253	-0.9	140	0.00
40	Dibenzo(a,h)anthracene	1.279	1.303	-1.9	142	0.00
41	Benzo(g,h,i)perylene	1.394	1.464	-5.0	145	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



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.: Q1225 SAS No.: Q1225 SDG No.: Q1225

Instrument ID: BNA_N Calibration Date/Time: 02/06/2025 03:45

Lab File ID: BN036318.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:02 14:36

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.576		5.9	50.0
Fluoranthene-d10	1.036	1.061		2.4	50.0
2-Fluorophenol	1.040	1.175		13.0	50.0
Phenol-d6	1.222	1.328		8.7	50.0
Nitrobenzene-d5	0.378	0.397		5.0	50.0
2-Fluorobiphenyl	1.786	1.502		-15.9	50.0
2,4,6-Tribromophenol	0.257	0.194		-24.5	50.0
Terphenyl-d14	0.831	0.907		9.1	50.0
1,4-Dioxane	0.447	0.478		6.9	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036318.D
 Acq On : 06 Feb 2025 03:45
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

Quant Time: Feb 06 04:09:40 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

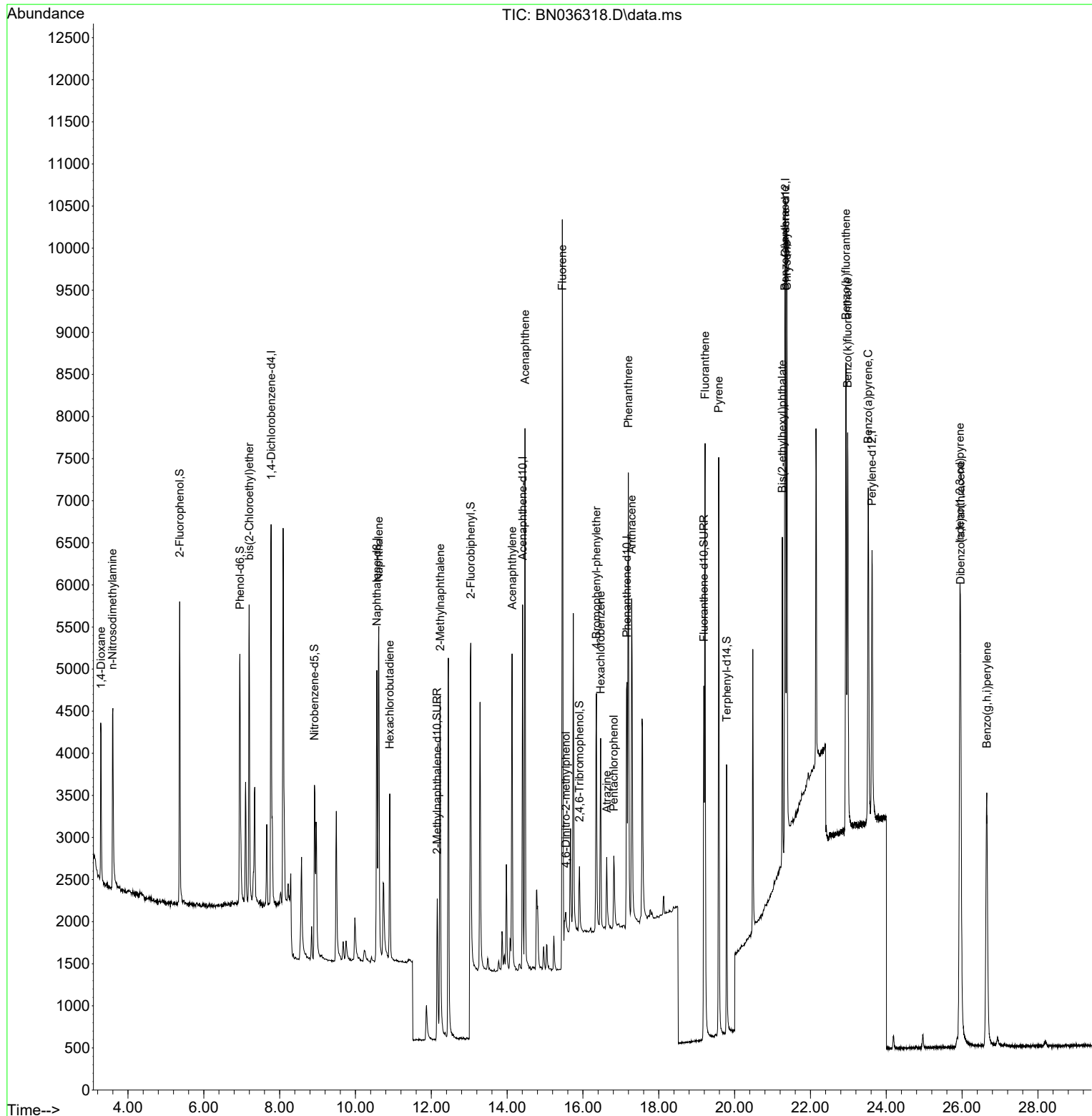
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2275	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	5023	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2525	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	5008	0.400	ng	# 0.00
29) Chrysene-d12	21.339	240	4233	0.400	ng	0.00
35) Perylene-d12	23.624	264	4647	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2673	0.452	ng	0.00
5) Phenol-d6	6.951	99	3021	0.435	ng	0.00
8) Nitrobenzene-d5	8.918	82	1993	0.420	ng	-0.01
11) 2-Methylnaphthalene-d10	12.156	152	2893	0.424	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	491	0.303	ng	0.00
15) 2-Fluorobiphenyl	13.040	172	3793	0.337	ng	0.00
27) Fluoranthene-d10	19.187	212	5315	0.410	ng	0.00
31) Terphenyl-d14	19.791	244	3838	0.436	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.290	88	1088	0.428	ng	96
3) n-Nitrosodimethylamine	3.593	42	1733	0.376	ng	# 80
6) bis(2-Chloroethyl)ether	7.197	93	2678	0.479	ng	98
9) Naphthalene	10.615	128	5951	0.408	ng	98
10) Hexachlorobutadiene	10.904	225	1673	0.355	ng	# 99
12) 2-Methylnaphthalene	12.232	142	3601	0.398	ng	96
16) Acenaphthylene	14.131	152	4592	0.384	ng	100
17) Acenaphthene	14.473	154	3176	0.387	ng	97
18) Fluorene	15.457	166	4205	0.409	ng	99
20) 4,6-Dinitro-2-methylph...	15.547	198	202	0.173	ng	# 27
21) 4-Bromophenyl-phenylether	16.354	248	1306	0.366	ng	# 93
22) Hexachlorobenzene	16.466	284	1733	0.369	ng	97
23) Atrazine	16.627	200	924	0.358	ng	99
24) Pentachlorophenol	16.813	266	644	0.317	ng	96
25) Phenanthrene	17.198	178	5940	0.395	ng	100
26) Anthracene	17.285	178	5257	0.384	ng	98
28) Fluoranthene	19.220	202	6949	0.393	ng	98
30) Pyrene	19.582	202	7157	0.417	ng	99
32) Benzo(a)anthracene	21.331	228	5994	0.390	ng	100
33) Chrysene	21.375	228	6420	0.409	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	3460	0.411	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.943	276	7429	0.398	ng	97
37) Benzo(b)fluoranthene	22.937	252	6642	0.393	ng	# 89
38) Benzo(k)fluoranthene	22.981	252	6402	0.376	ng	# 91
39) Benzo(a)pyrene	23.525	252	5889	0.408	ng	# 82
40) Dibenzo(a,h)anthracene	25.960	278	5771	0.388	ng	96
41) Benzo(g,h,i)perylene	26.650	276	6613	0.408	ng	96

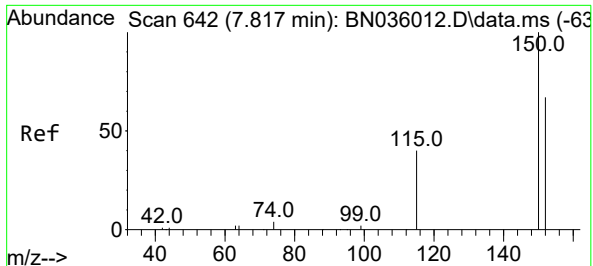
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036318.D
Acq On : 06 Feb 2025 03:45
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

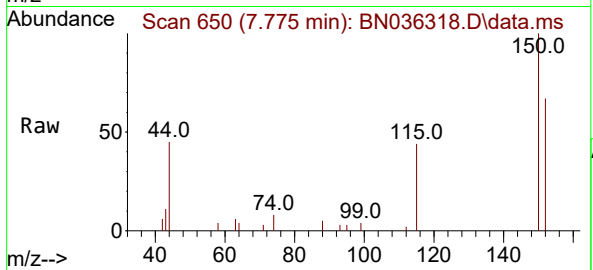
Quant Time: Feb 06 04:09:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration



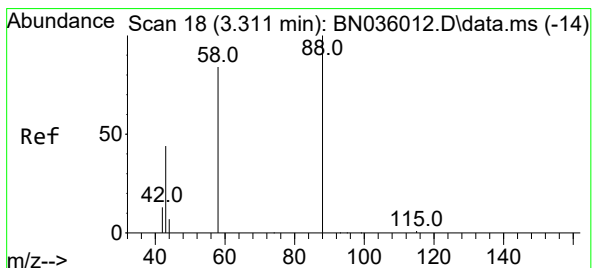
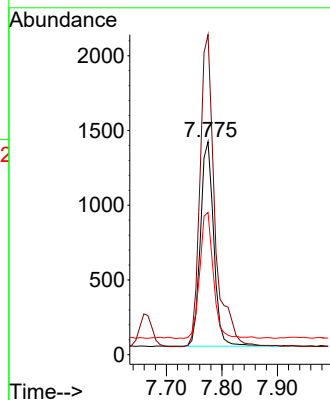
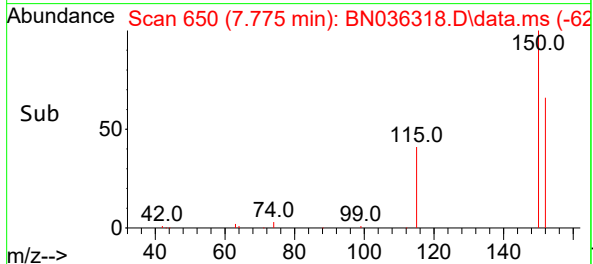


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

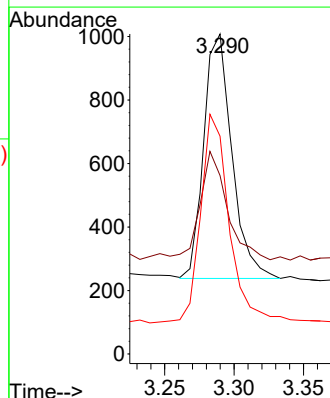
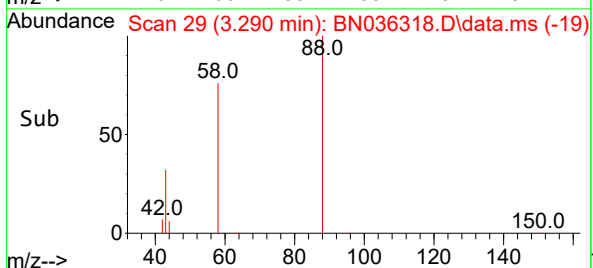
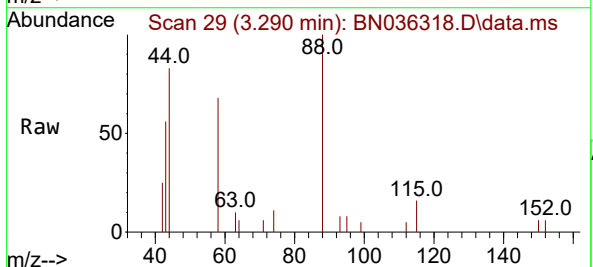


Tgt Ion:152 Resp: 2275
Ion Ratio Lower Upper
152 100
150 150.2 117.4 176.2
115 66.8 51.0 76.4

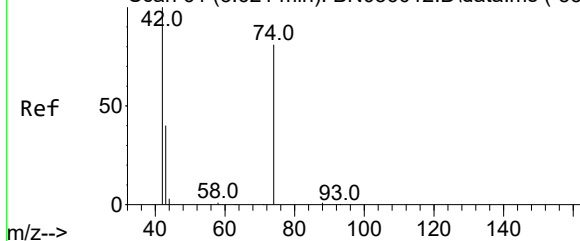


#2
1,4-Dioxane
Concen: 0.428 ng
RT: 3.290 min Scan# 29
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion: 88 Resp: 1088
Ion Ratio Lower Upper
88 100
43 43.8 38.5 57.7
58 85.6 66.6 99.8



Abundance Scan 61 (3.621 min): BN036012.D\data.ms (-53)



#3

n-Nitrosodimethylamine

Concen: 0.376 ng

RT: 3.593 min Scan# 71

Delta R.T. -0.000 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1733

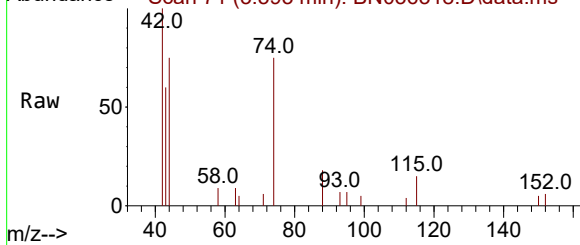
Ion Ratio Lower Upper

42 100

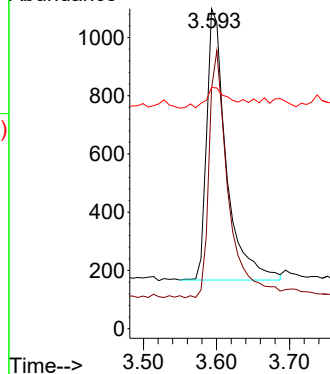
74 91.0 58.1 87.1#

44 8.4 6.2 9.4

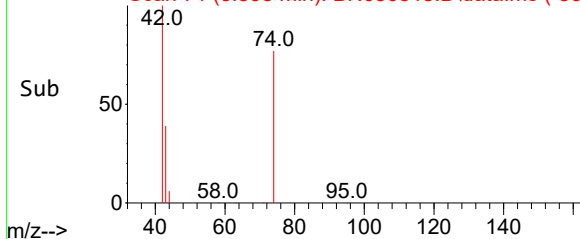
Abundance Scan 71 (3.593 min): BN036318.D\data.ms



Abundance

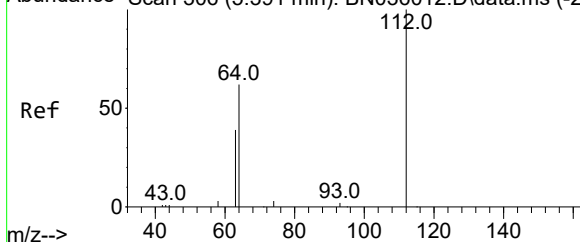


Abundance Scan 71 (3.593 min): BN036318.D\data.ms (-50)



Time-->

Abundance Scan 306 (5.391 min): BN036012.D\data.ms (-29)



#4

2-Fluorophenol

Concen: 0.452 ng

RT: 5.363 min Scan# 316

Delta R.T. -0.000 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

Tgt Ion: 112 Resp: 2673

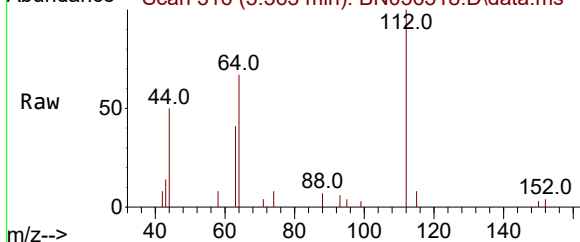
Ion Ratio Lower Upper

112 100

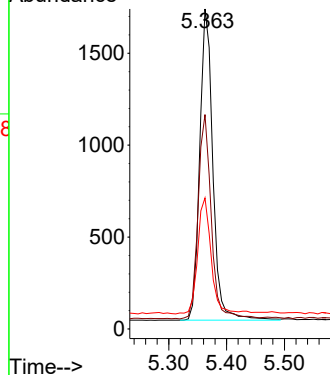
64 66.2 50.0 75.0

63 38.0 30.7 46.1

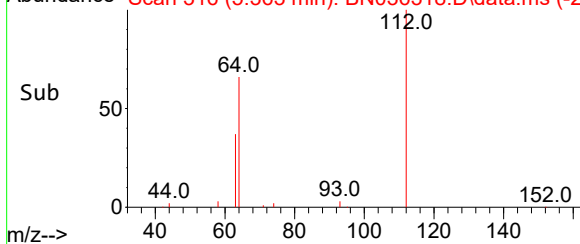
Abundance Scan 316 (5.363 min): BN036318.D\data.ms



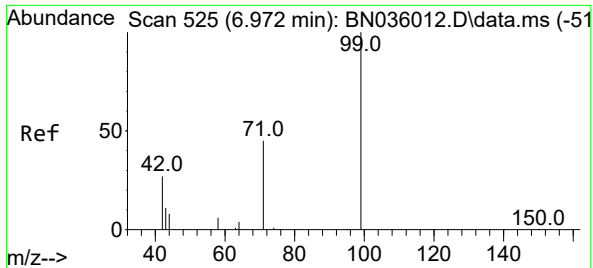
Abundance



Abundance Scan 316 (5.363 min): BN036318.D\data.ms (-28)



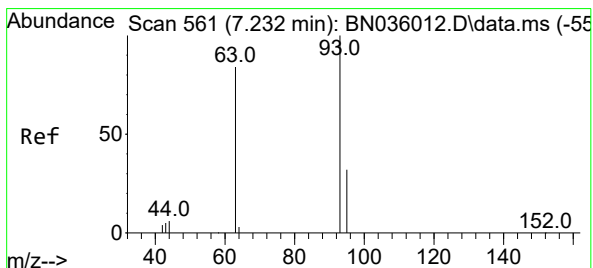
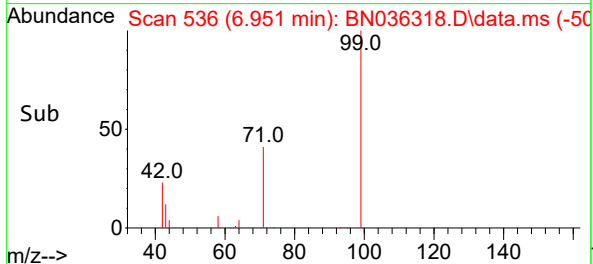
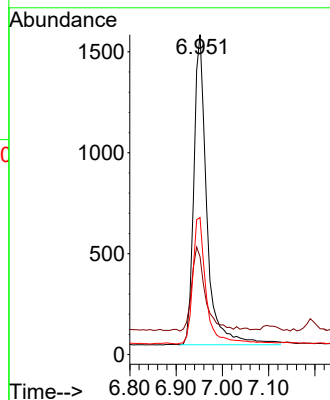
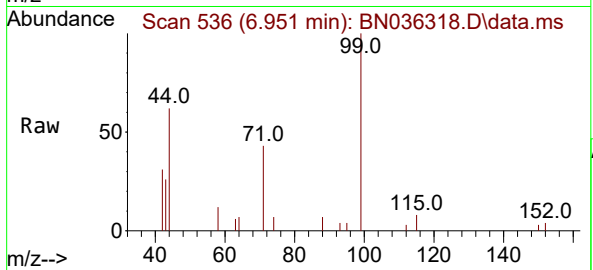
Time-->



#5
Phenol-d6
Concen: 0.435 ng
RT: 6.951 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

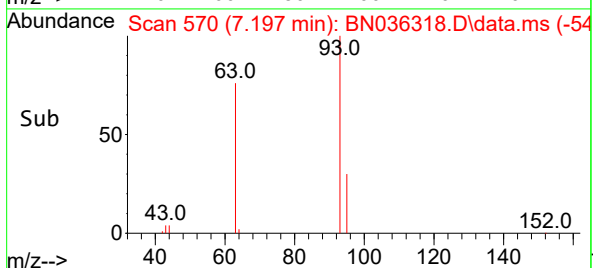
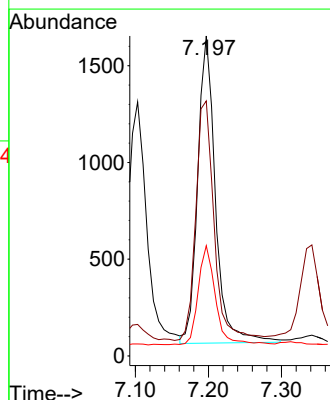
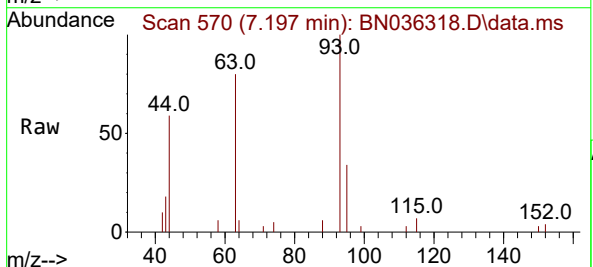
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

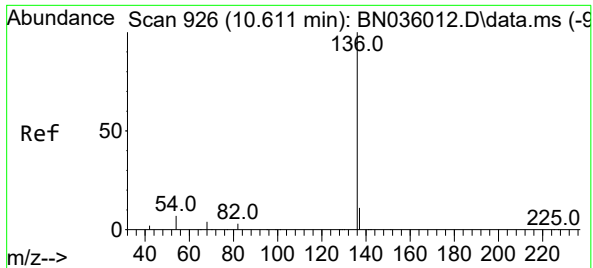
Tgt Ion: 99 Resp: 3021
Ion Ratio Lower Upper
99 100
42 28.0 26.8 40.2
71 42.1 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.479 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion: 93 Resp: 2678
Ion Ratio Lower Upper
93 100
63 80.8 65.8 98.6
95 31.3 25.8 38.6

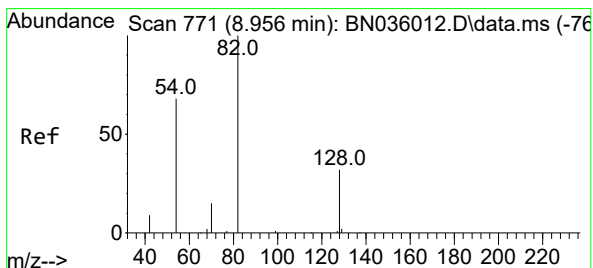
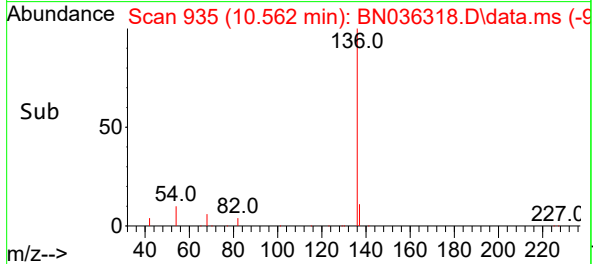
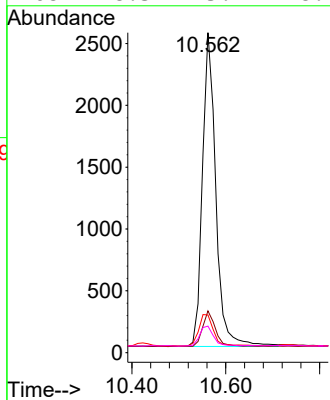
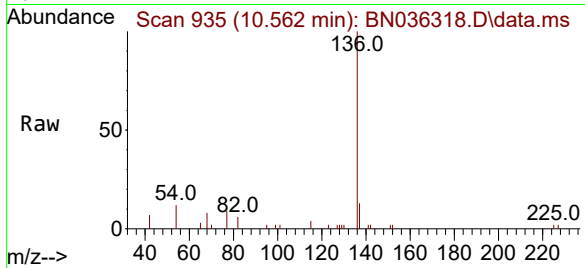




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

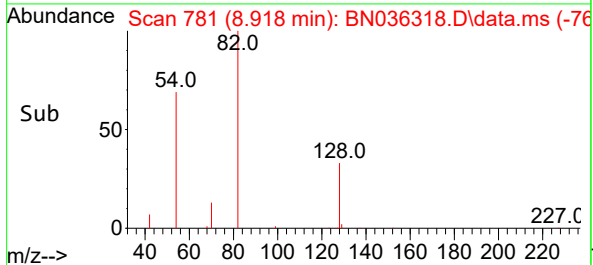
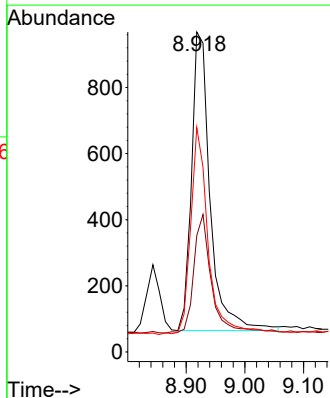
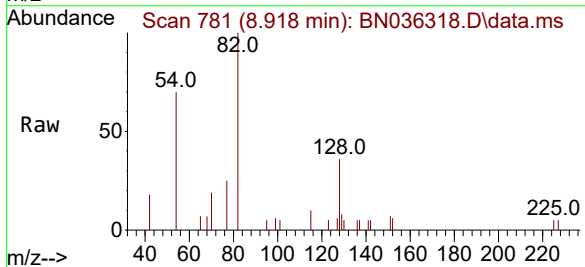
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

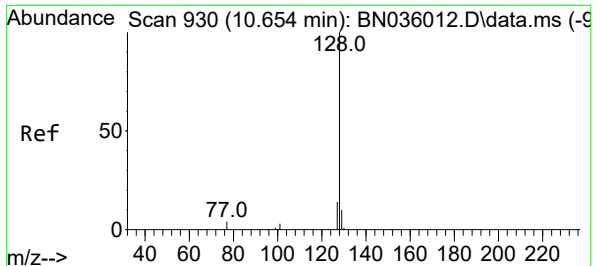
Tgt Ion:	136	Resp:	5023
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	11.8	7.7	11.5#
68	8.3	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.420 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:	82	Resp:	1993
Ion	Ratio	Lower	Upper
82	100		
128	36.4	28.8	43.2
54	70.1	55.8	83.8

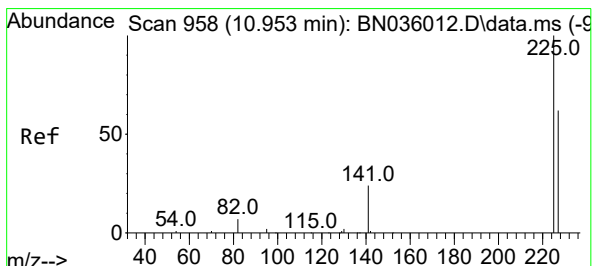
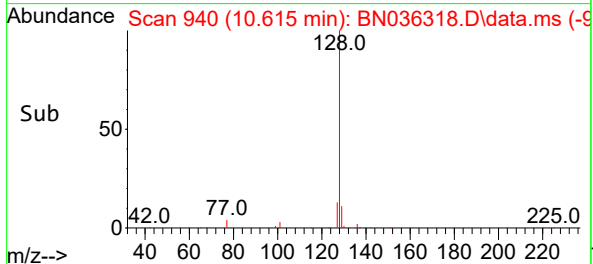
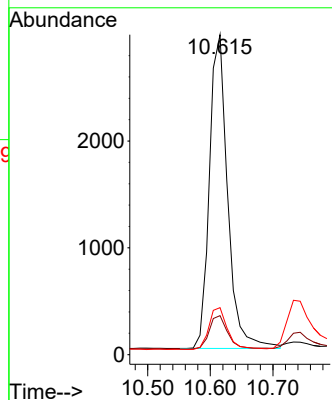
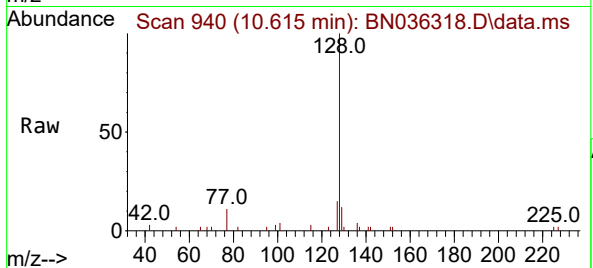




#9
Naphthalene
Concen: 0.408 ng
RT: 10.615 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

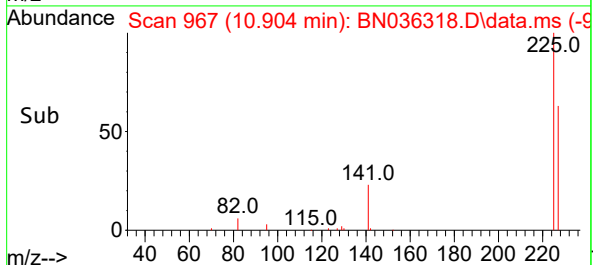
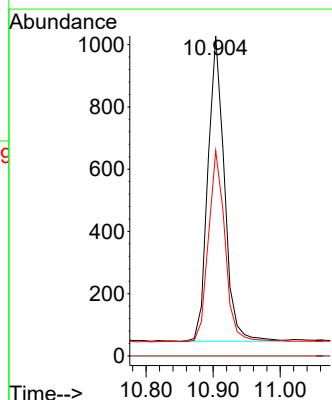
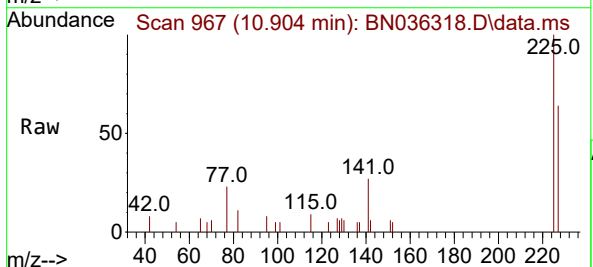
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

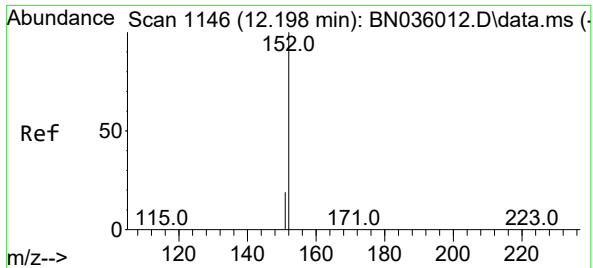
Tgt Ion:128 Resp: 5951
Ion Ratio Lower Upper
128 100
129 12.2 9.4 14.2
127 14.7 12.6 19.0



#10
Hexachlorobutadiene
Concen: 0.355 ng
RT: 10.904 min Scan# 967
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:225 Resp: 1673
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 62.6 51.0 76.6

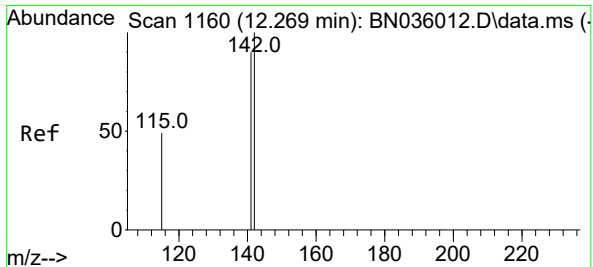
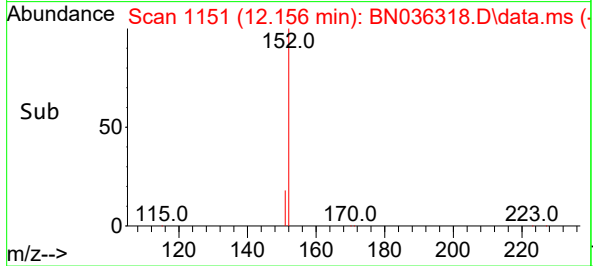
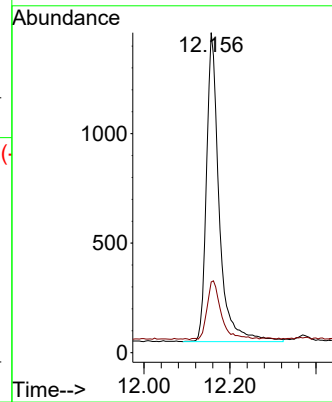
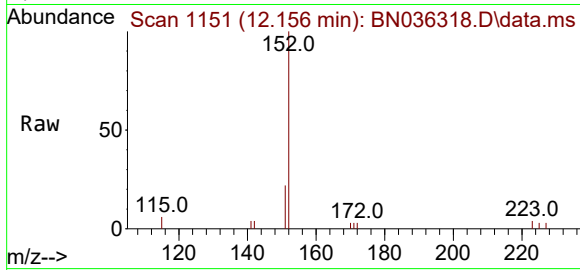




#11
2-Methylnaphthalene-d10
Concen: 0.424 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

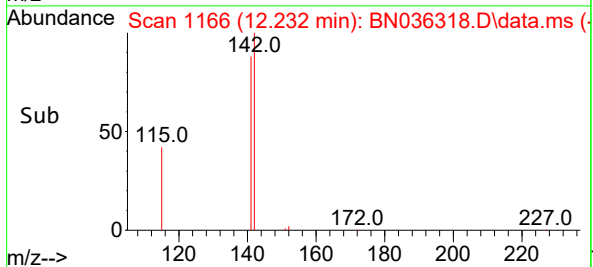
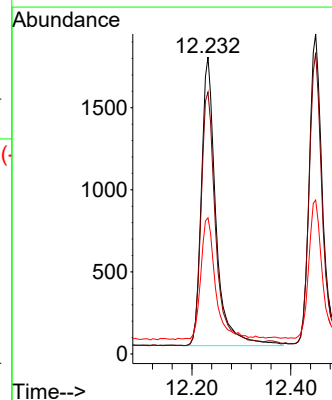
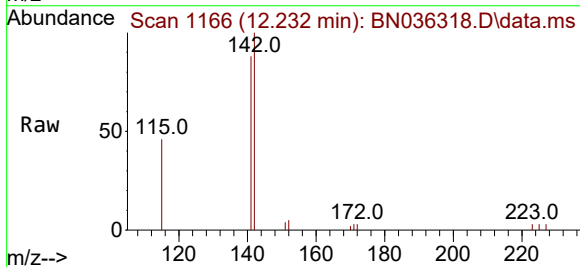
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

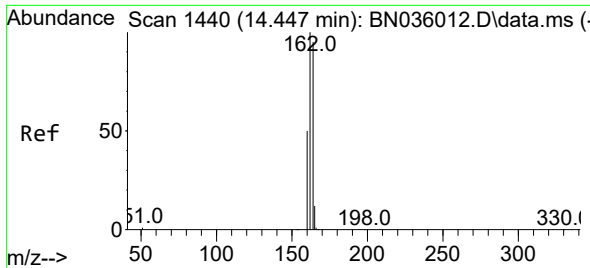
Tgt Ion:152 Resp: 2893
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.398 ng
RT: 12.232 min Scan# 1166
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:142 Resp: 3601
Ion Ratio Lower Upper
142 100
141 88.2 72.2 108.2
115 45.9 41.2 61.8

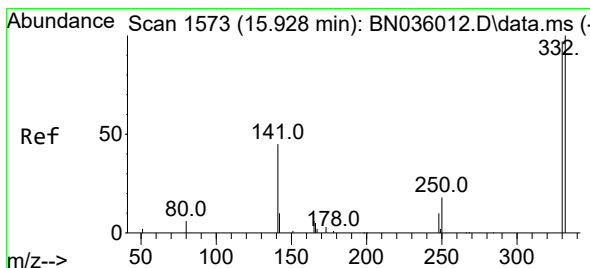
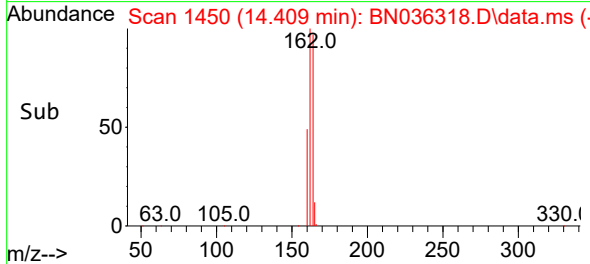
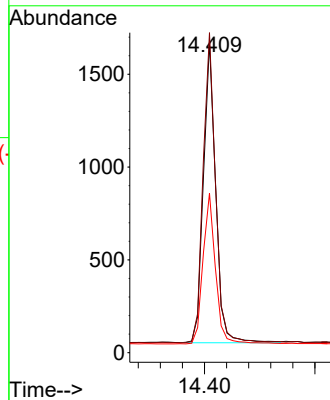
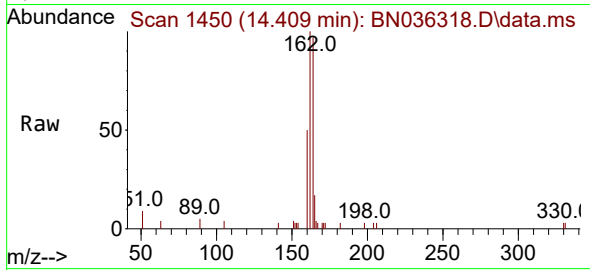




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

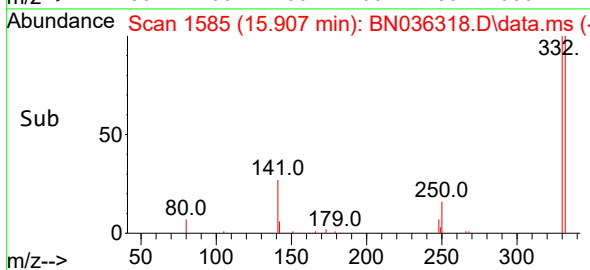
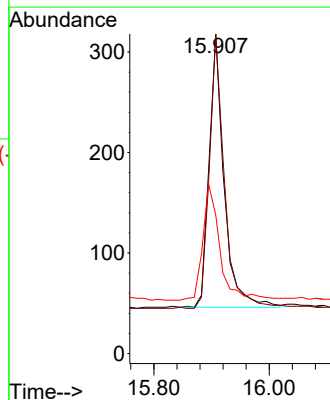
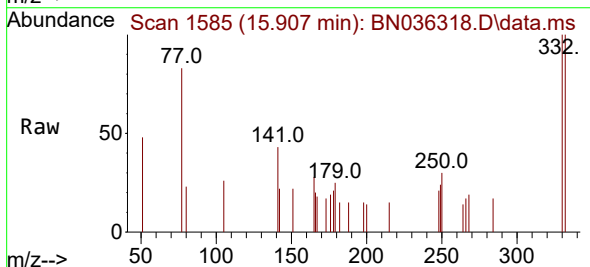
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

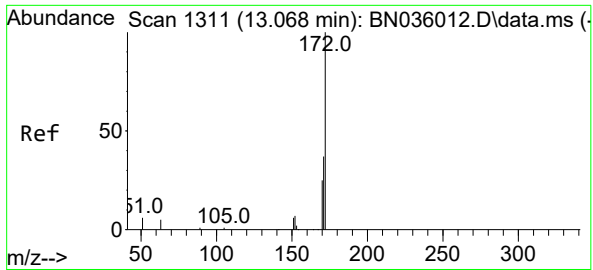
Tgt Ion:164 Resp: 2525
Ion Ratio Lower Upper
164 100
162 103.0 84.1 126.1
160 51.3 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.303 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:330 Resp: 491
Ion Ratio Lower Upper
330 100
332 101.0 81.0 121.4
141 48.7 36.7 55.1

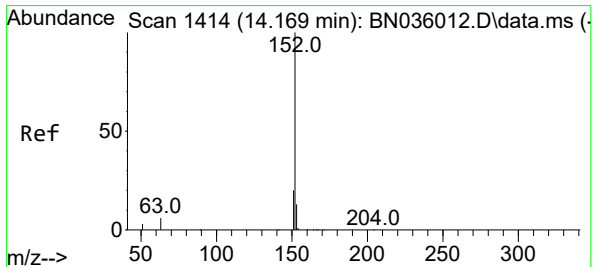
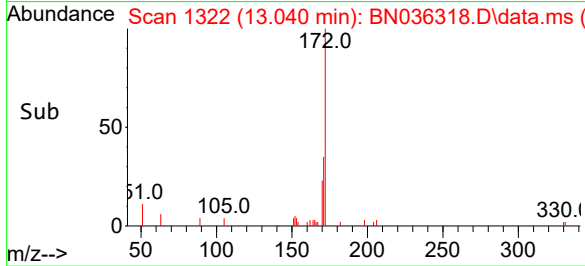
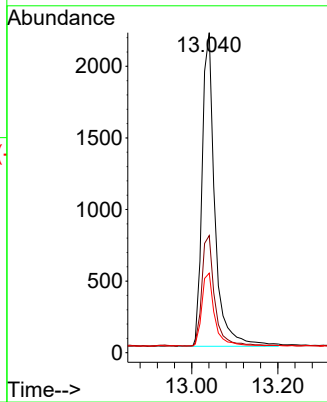
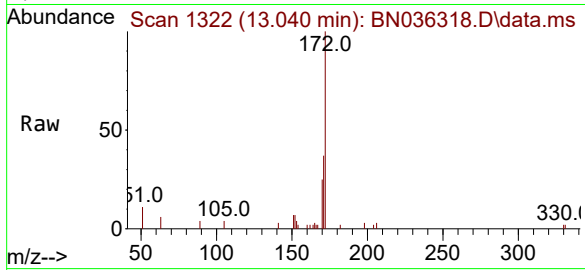




#15
2-Fluorobiphenyl
Concen: 0.337 ng
RT: 13.040 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

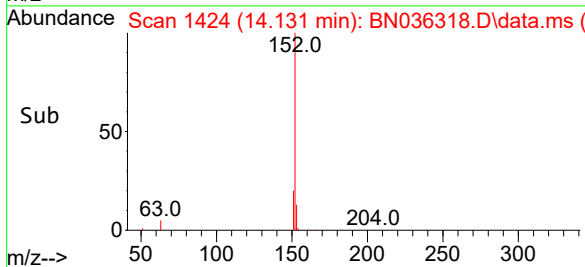
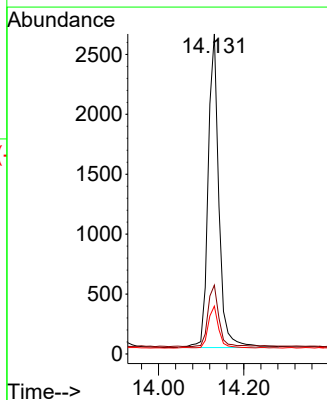
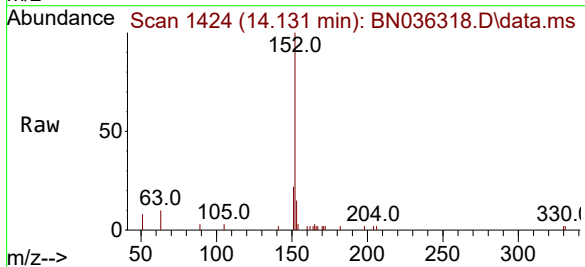
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

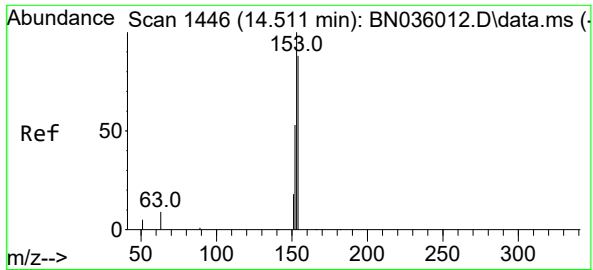
Tgt Ion:	172	Resp:	3793
Ion Ratio	Lower	Upper	
172	100		
171	36.6	30.9	46.3
170	24.9	21.2	31.8



#16
Acenaphthylene
Concen: 0.384 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:	152	Resp:	4592
Ion Ratio	Lower	Upper	
152	100		
151	20.1	16.2	24.2
153	12.7	10.4	15.6

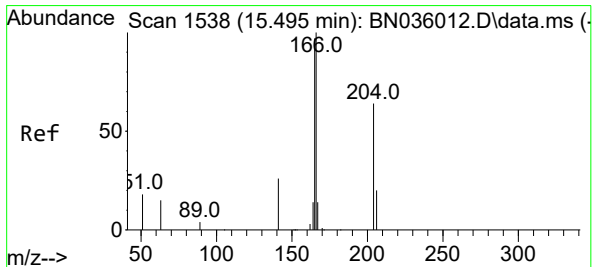
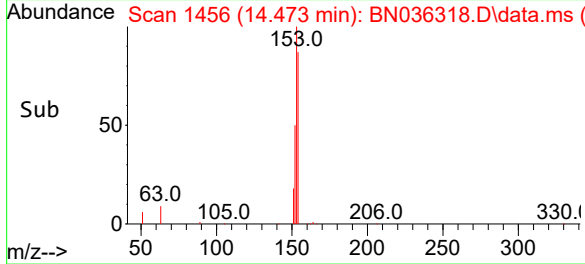
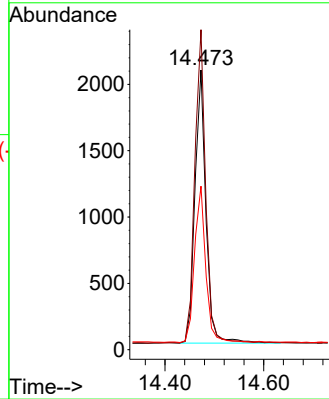
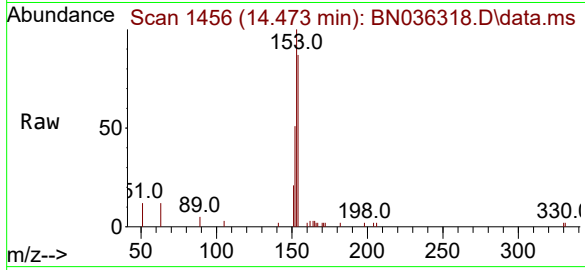




#17
Acenaphthene
Concen: 0.387 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

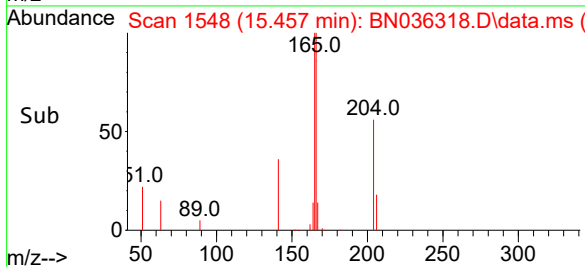
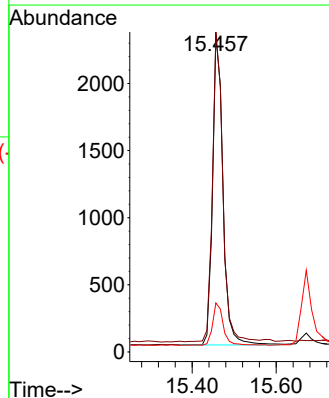
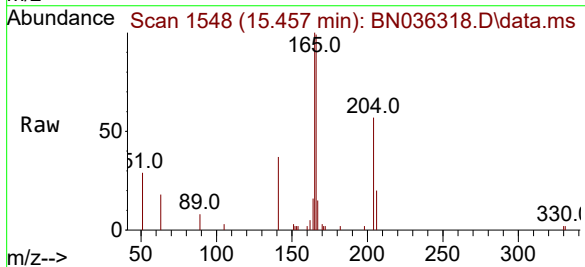
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

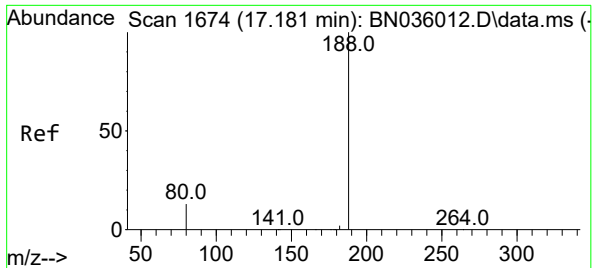
Tgt Ion:154 Resp: 3176
Ion Ratio Lower Upper
154 100
153 113.9 88.9 133.3
152 58.2 48.1 72.1



#18
Fluorene
Concen: 0.409 ng
RT: 15.457 min Scan# 1548
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:166 Resp: 4205
Ion Ratio Lower Upper
166 100
165 96.9 78.5 117.7
167 13.7 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.161 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

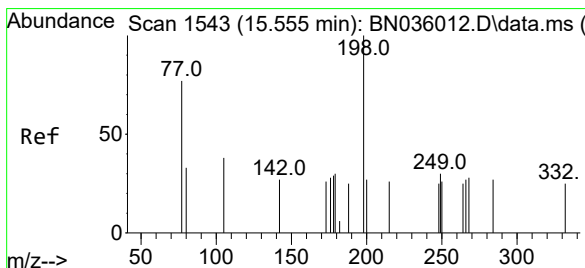
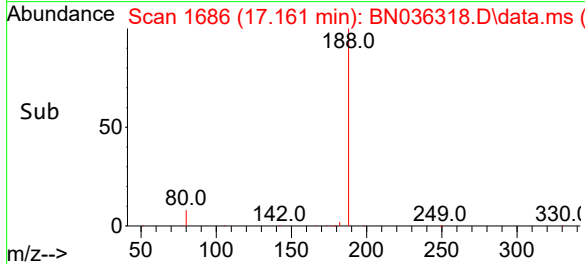
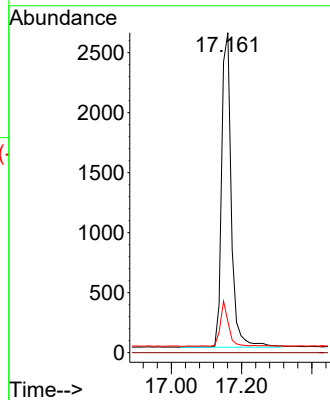
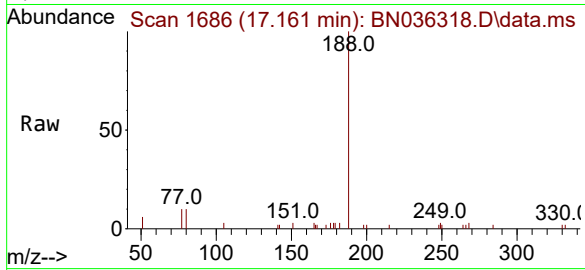
Tgt Ion:188 Resp: 5008

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.7 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.173 ng

RT: 15.547 min Scan# 1556

Delta R.T. -0.000 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

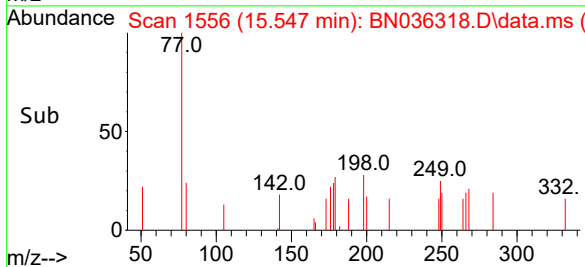
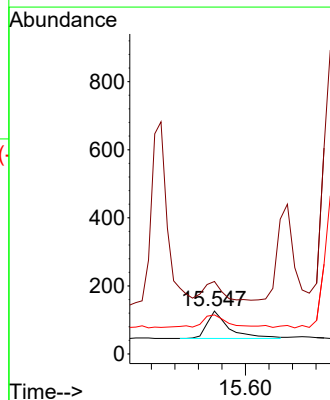
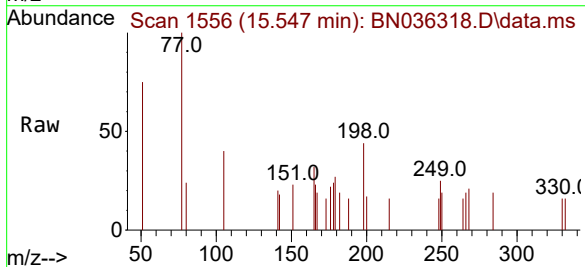
Tgt Ion:198 Resp: 202

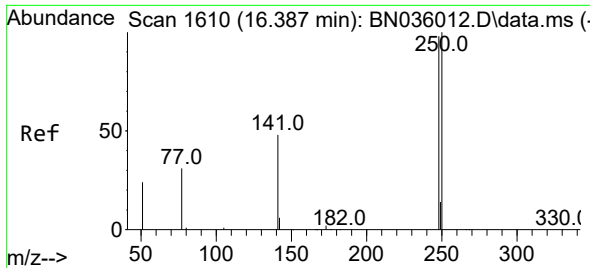
Ion Ratio Lower Upper

198 100

51 169.0 68.1 102.1#

105 91.3 46.5 69.7#

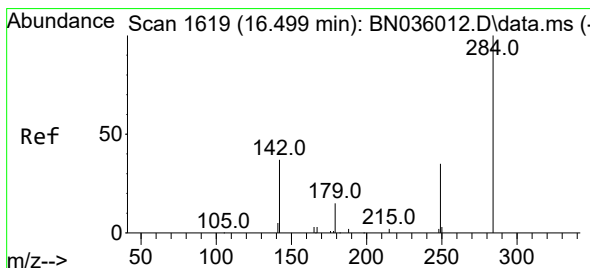
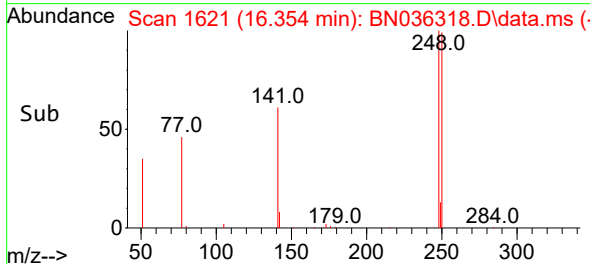
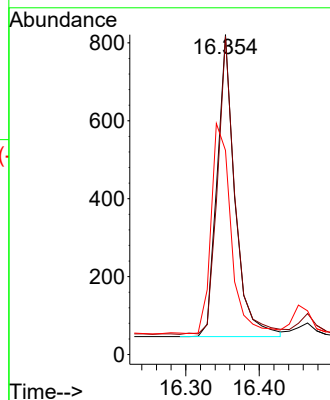
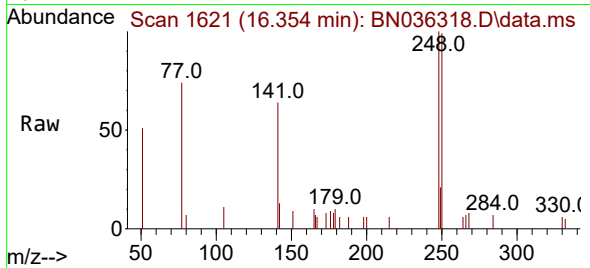




#21
4-Bromophenyl-phenylether
Concen: 0.366 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

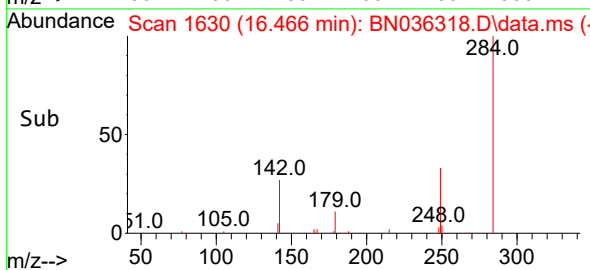
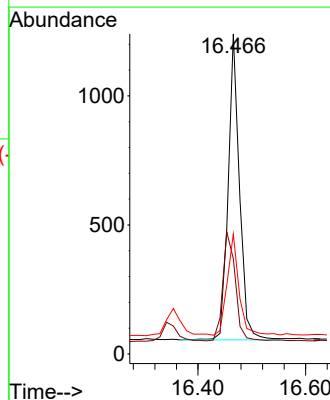
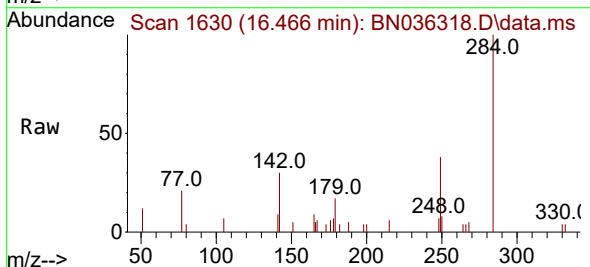
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

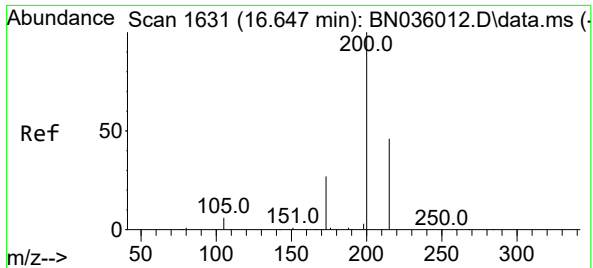
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.4	81.5	122.3
141	63.8	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.369 ng
RT: 16.466 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion	Ratio	Lower	Upper
284	100		
142	39.9	33.6	50.4
249	34.5	28.8	43.2

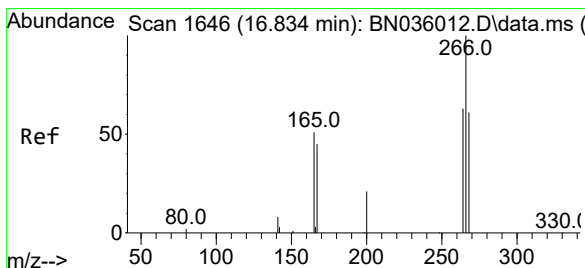
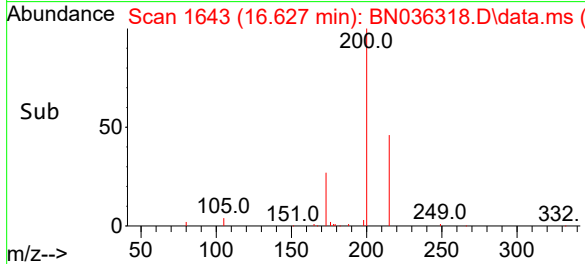
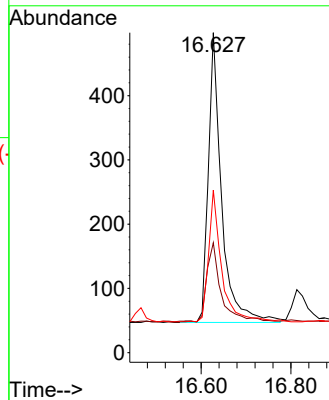
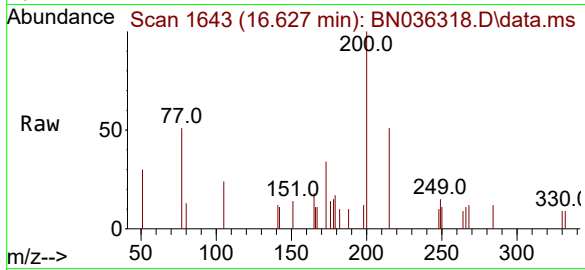




#23
Atrazine
Concen: 0.358 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

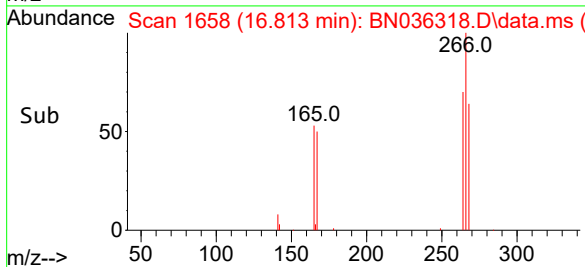
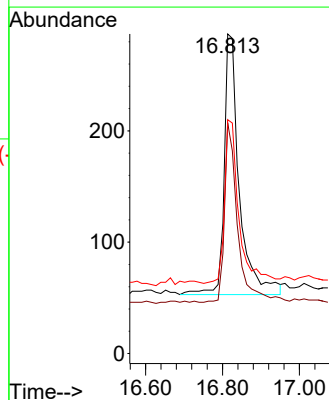
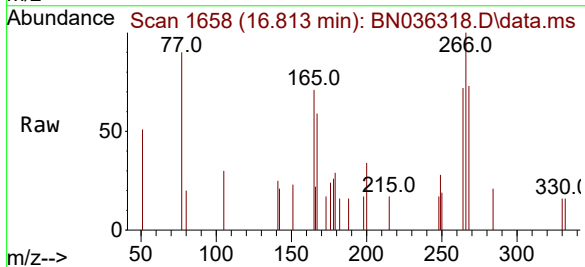
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

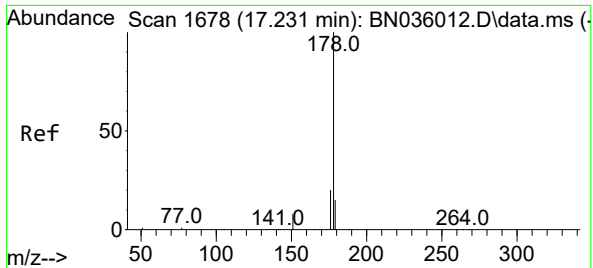
Tgt Ion	Ratio	Lower	Upper
200	100		
173	34.3	26.6	40.0
215	50.8	40.6	61.0



#24
Pentachlorophenol
Concen: 0.317 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion	Ratio	Lower	Upper
266	100		
264	59.5	48.2	72.2
268	59.3	51.6	77.4

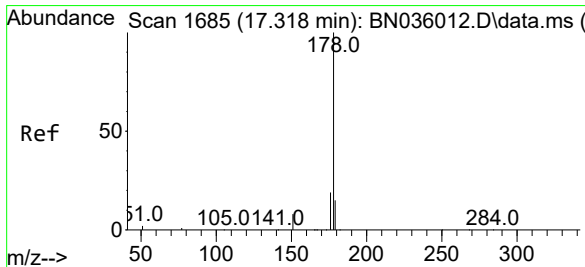
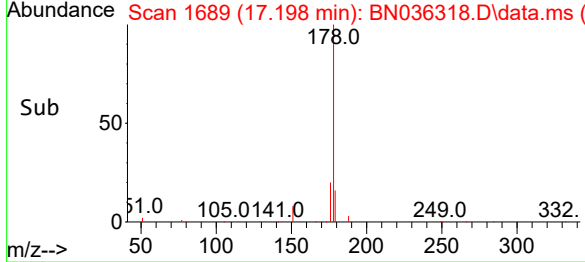
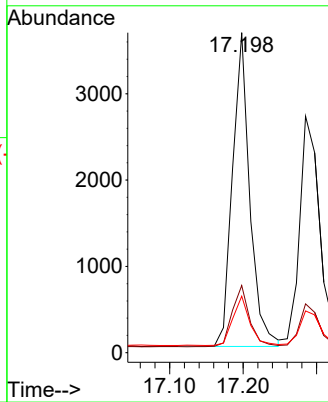
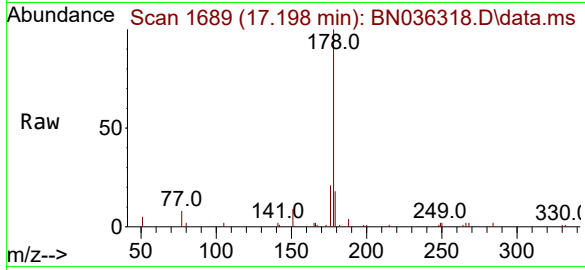




#25
Phenanthrene
Concen: 0.395 ng
RT: 17.198 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

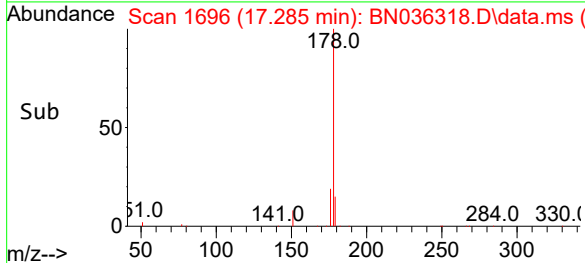
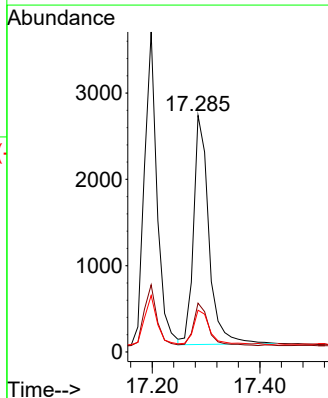
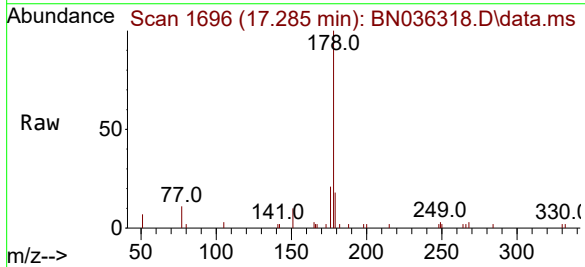
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

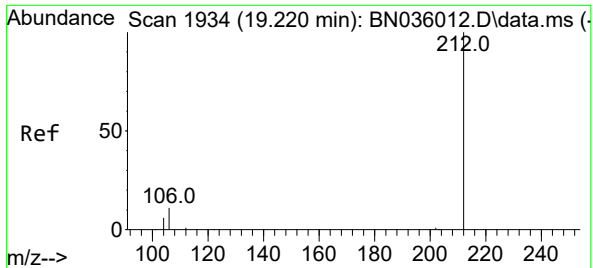
Tgt Ion:178 Resp: 5940
Ion Ratio Lower Upper
178 100
176 19.8 16.0 24.0
179 15.5 12.4 18.6



#26
Anthracene
Concen: 0.384 ng
RT: 17.285 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:178 Resp: 5257
Ion Ratio Lower Upper
178 100
176 18.4 15.4 23.2
179 16.1 12.0 18.0

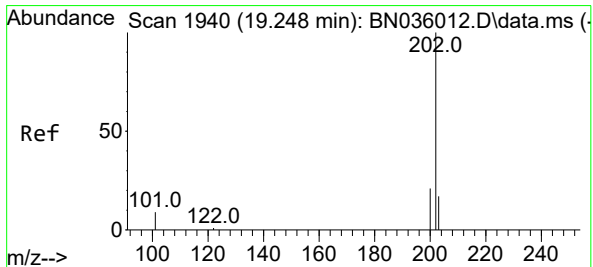
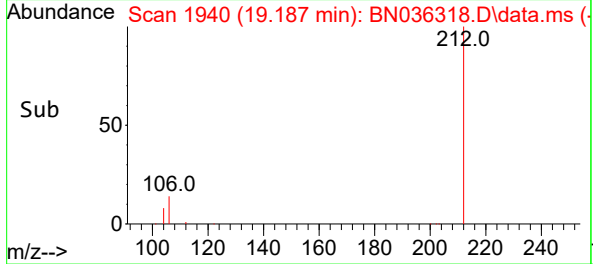
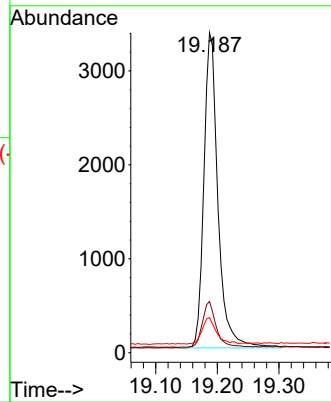
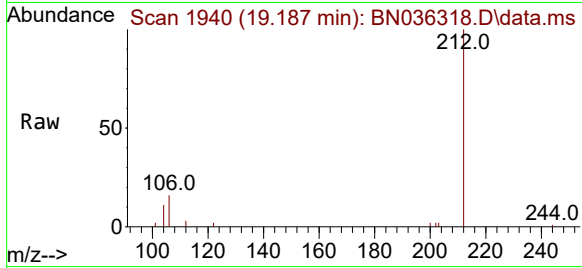




#27
Fluoranthene-d10
Concen: 0.410 ng
RT: 19.187 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

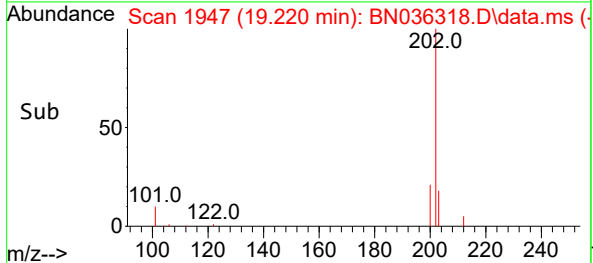
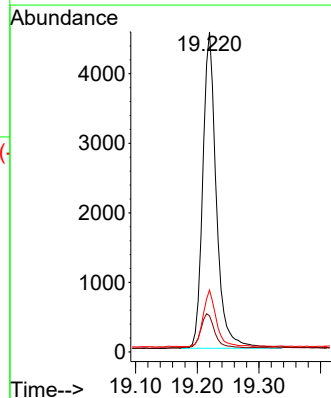
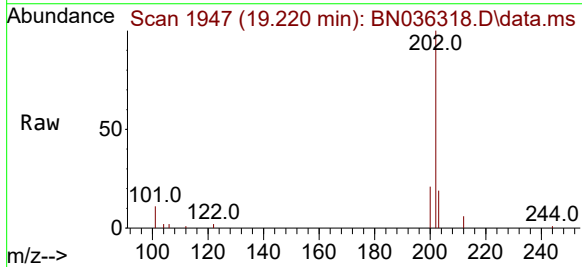
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

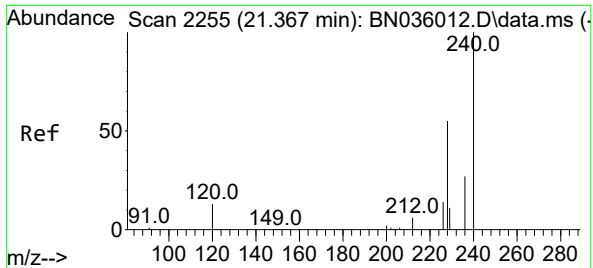
Tgt Ion	Ratio	Lower	Upper
212	100		
106	14.2	9.7	14.5
104	8.5	6.0	9.0



#28
Fluoranthene
Concen: 0.393 ng
RT: 19.220 min Scan# 1947
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion	Ratio	Lower	Upper
202	100		
101	11.3	7.6	11.4
203	17.2	13.8	20.6

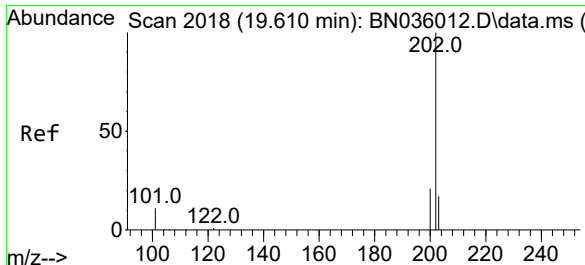
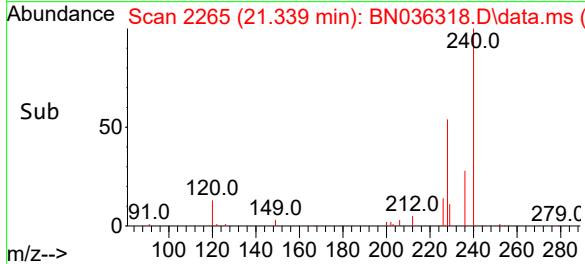
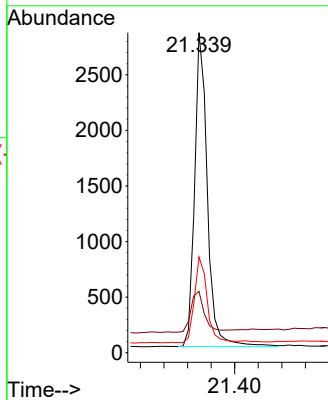
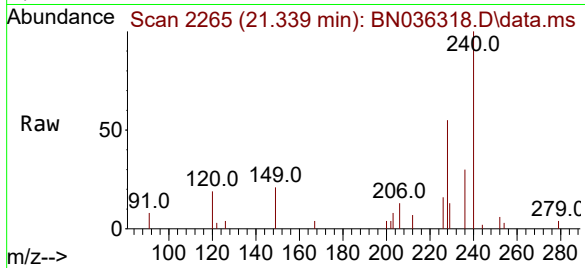




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.339 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

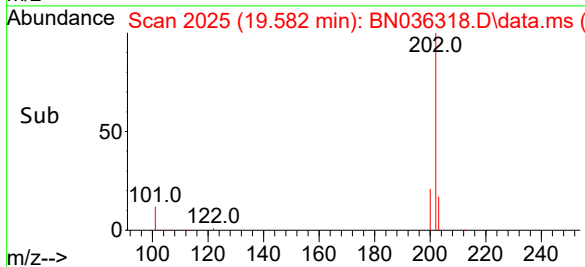
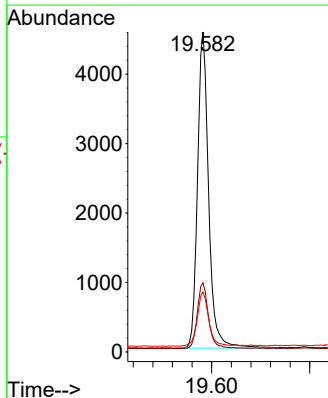
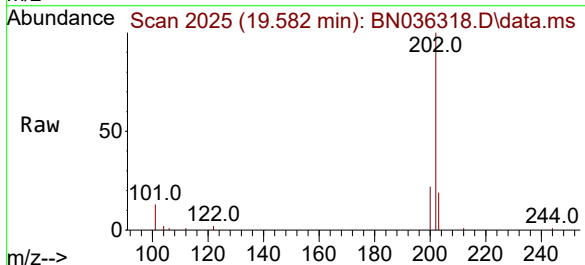
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

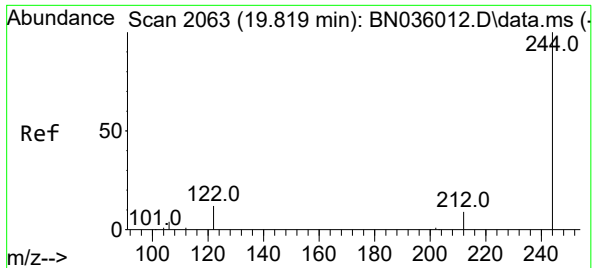
Tgt Ion:240 Resp: 4233
Ion Ratio Lower Upper
240 100
120 19.1 13.9 20.9
236 29.9 23.7 35.5



#30
Pyrene
Concen: 0.417 ng
RT: 19.582 min Scan# 2025
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:202 Resp: 7157
Ion Ratio Lower Upper
202 100
200 20.9 17.0 25.4
203 17.6 14.4 21.6

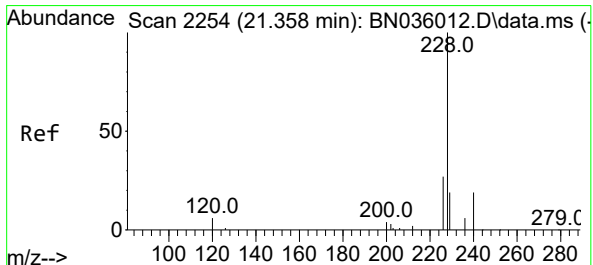
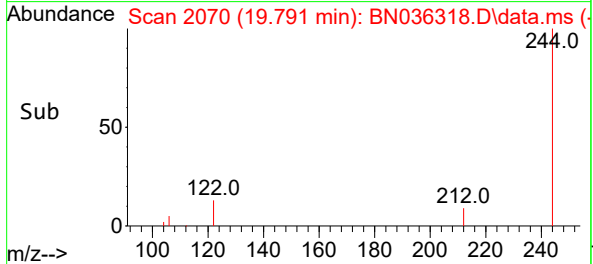
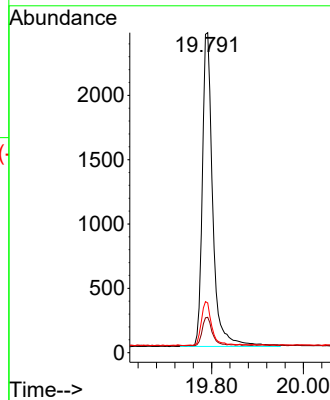
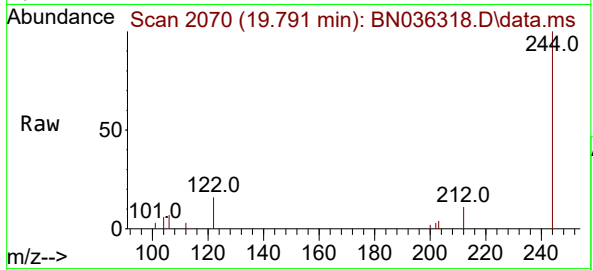




#31
Terphenyl-d14
Concen: 0.436 ng
RT: 19.791 min Scan# 2063
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

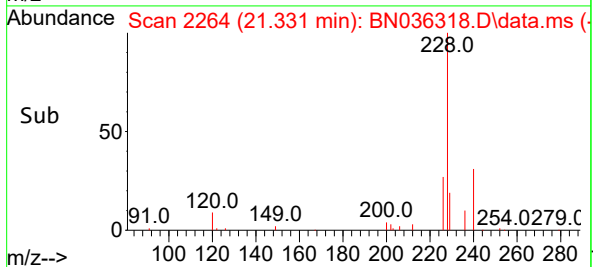
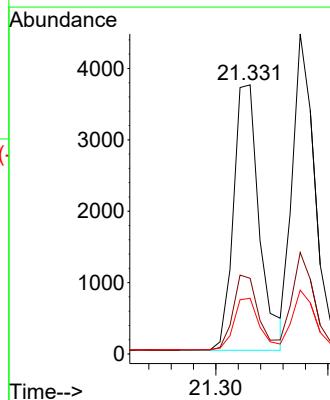
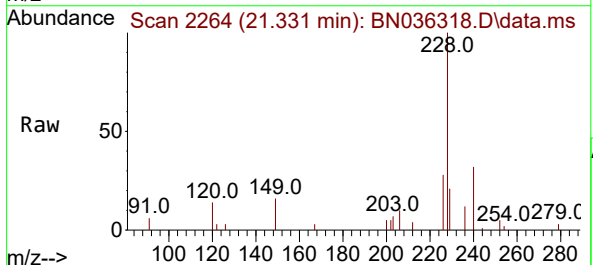
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

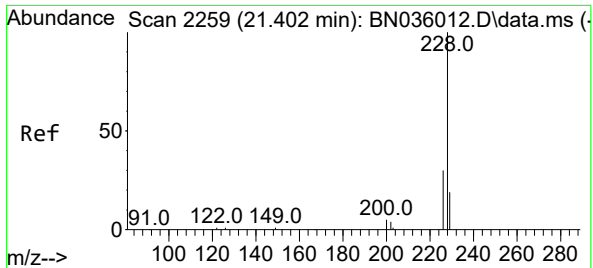
Tgt Ion:244 Resp: 3838
Ion Ratio Lower Upper
244 100
212 11.0 9.1 13.7
122 15.5 11.3 16.9



#32
Benzo(a)anthracene
Concen: 0.390 ng
RT: 21.331 min Scan# 2264
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:228 Resp: 5994
Ion Ratio Lower Upper
228 100
226 28.1 22.6 34.0
229 20.7 16.5 24.7

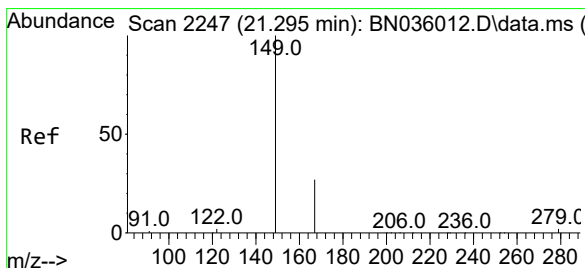
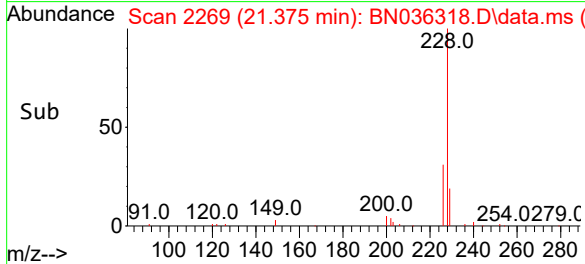
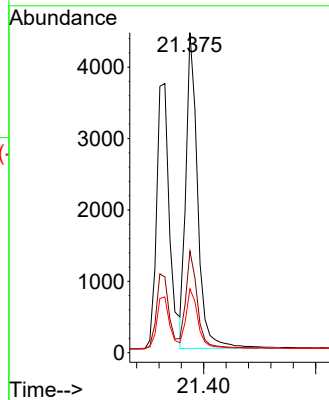
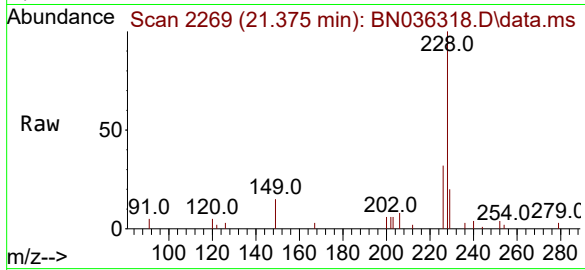




#33
Chrysene
Concen: 0.409 ng
RT: 21.375 min Scan# 2137
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

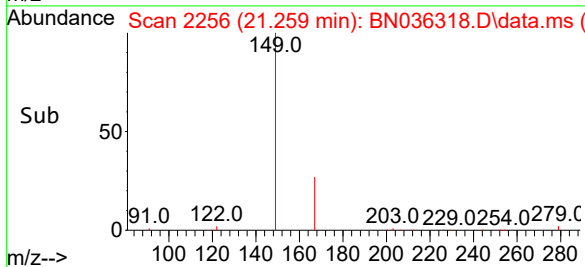
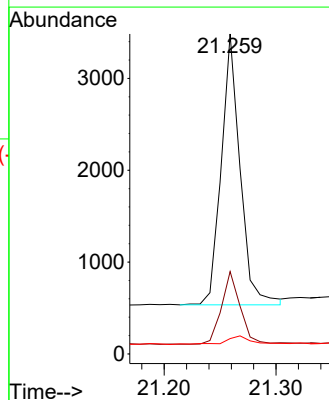
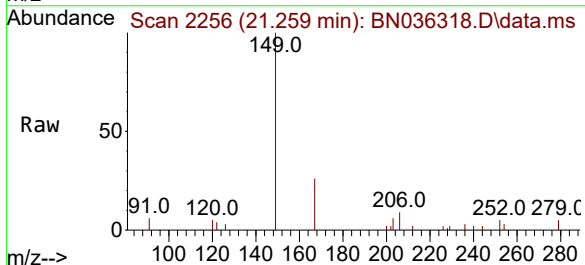
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

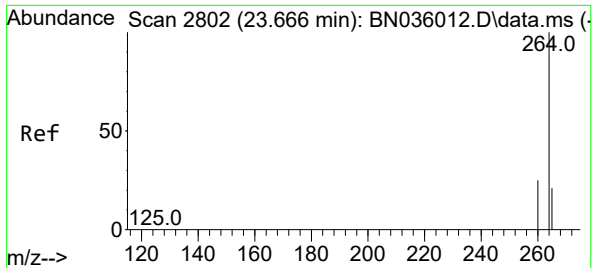
Tgt Ion:228 Resp: 6420
Ion Ratio Lower Upper
228 100
226 31.7 25.3 37.9
229 20.0 16.3 24.5



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.411 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:149 Resp: 3460
Ion Ratio Lower Upper
149 100
167 27.2 21.9 32.9
279 4.7 3.0 4.6#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.624 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

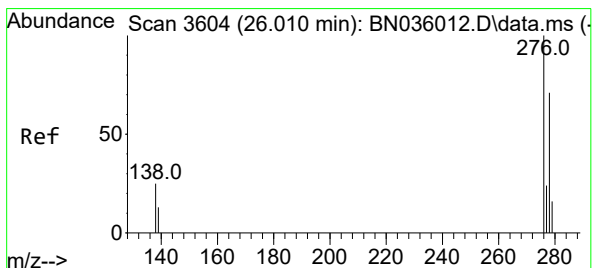
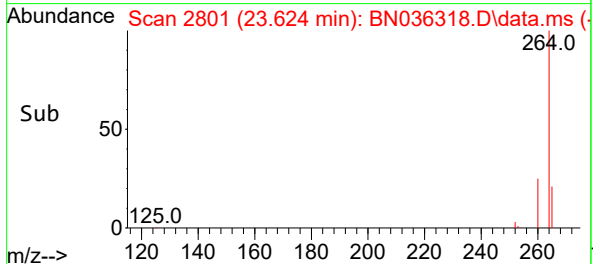
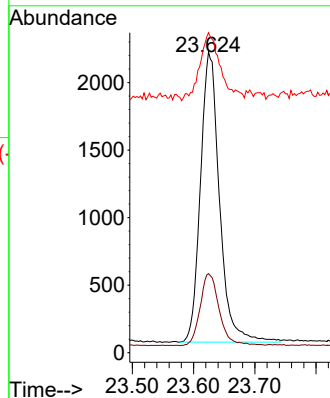
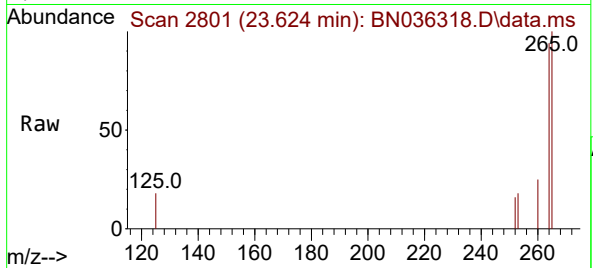
Tgt Ion:264 Resp: 4647

Ion Ratio Lower Upper

264 100

260 26.3 21.8 32.6

265 106.3 56.6 84.8#



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.398 ng

RT: 25.943 min Scan# 3594

Delta R.T. -0.000 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

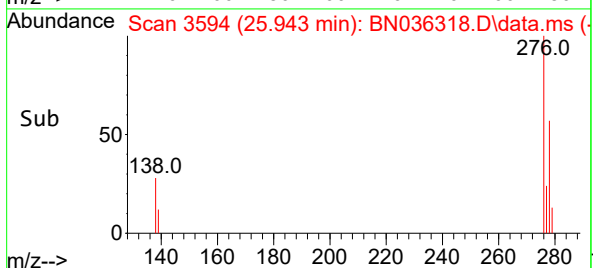
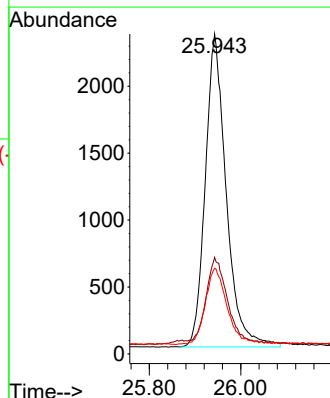
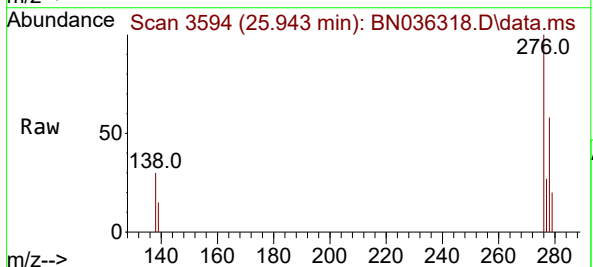
Tgt Ion:276 Resp: 7429

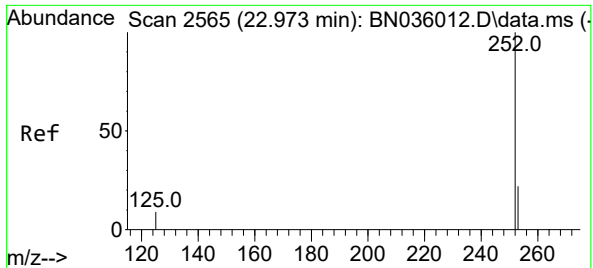
Ion Ratio Lower Upper

276 100

138 27.9 19.9 29.9

277 24.5 19.4 29.2

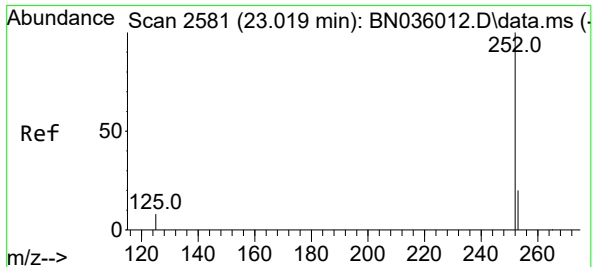
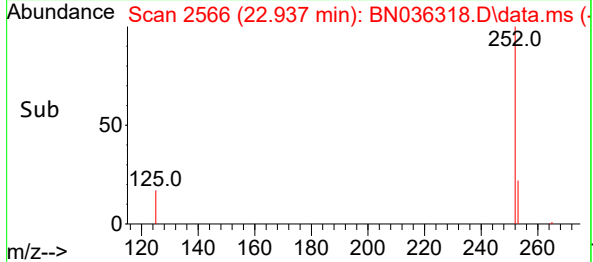
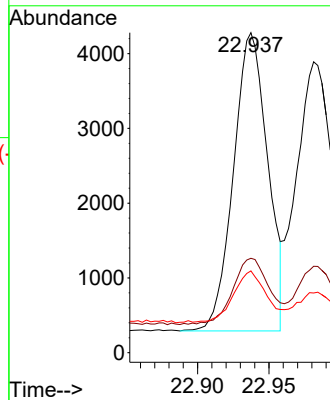
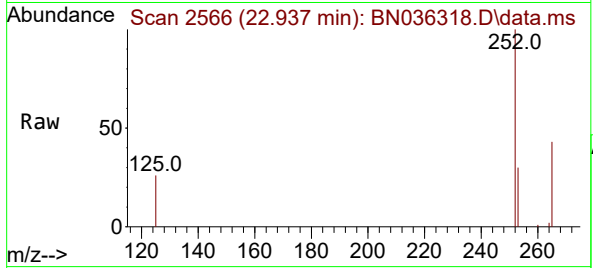




#37
Benzo(b)fluoranthene
Concen: 0.393 ng
RT: 22.937 min Scan# 2566
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

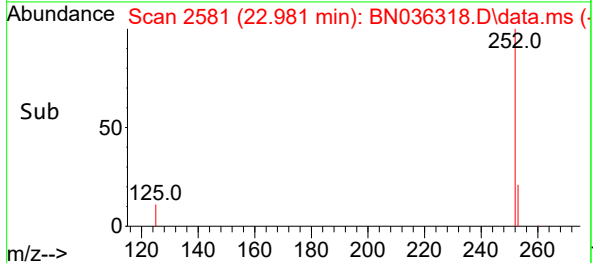
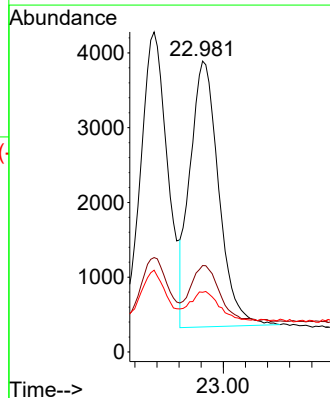
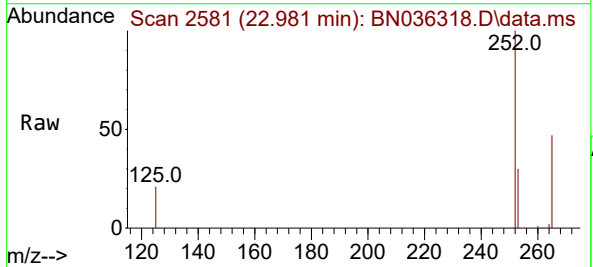
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

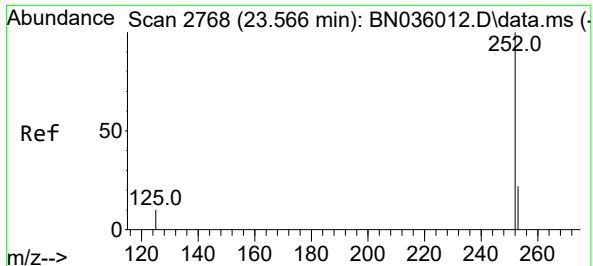
Tgt Ion:252 Resp: 6642
Ion Ratio Lower Upper
252 100
253 29.5 22.5 33.7
125 25.5 11.9 17.9#



#38
Benzo(k)fluoranthene
Concen: 0.376 ng
RT: 22.981 min Scan# 2581
Delta R.T. -0.003 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

Tgt Ion:252 Resp: 6402
Ion Ratio Lower Upper
252 100
253 29.7 21.3 31.9
125 20.5 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.408 ng

RT: 23.525 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

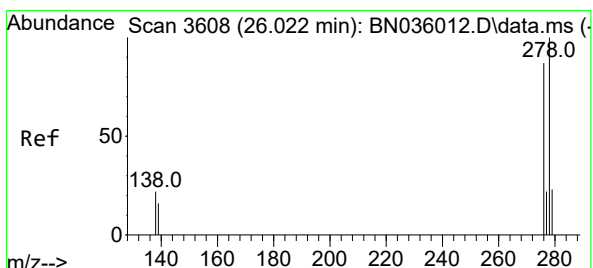
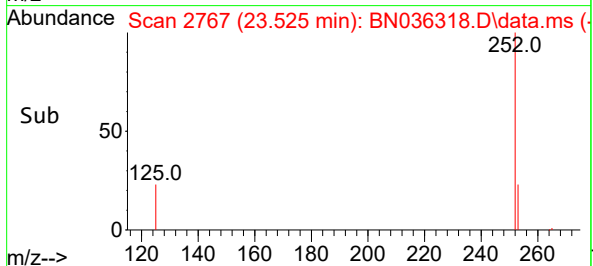
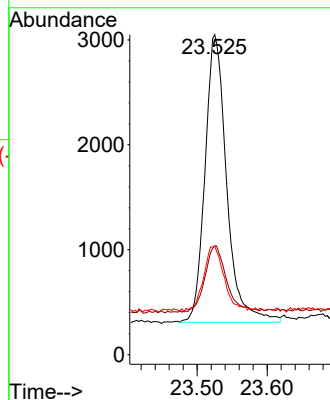
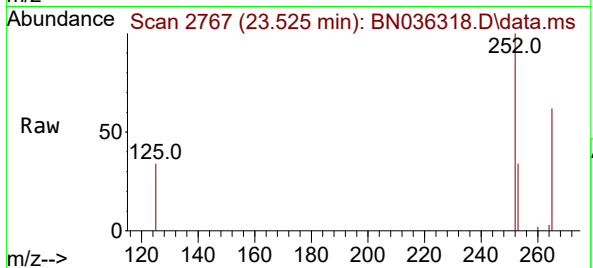
Tgt Ion:252 Resp: 5889

Ion Ratio Lower Upper

252 100

253 34.0 23.8 35.6

125 34.0 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.388 ng

RT: 25.960 min Scan# 3600

Delta R.T. -0.003 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

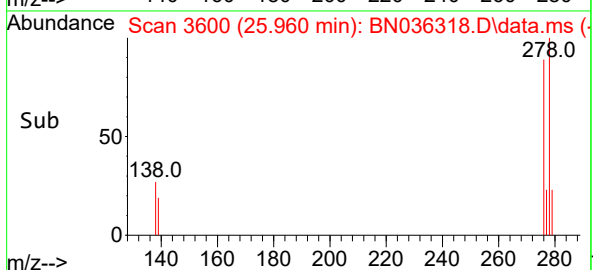
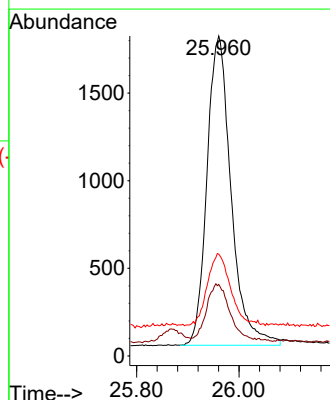
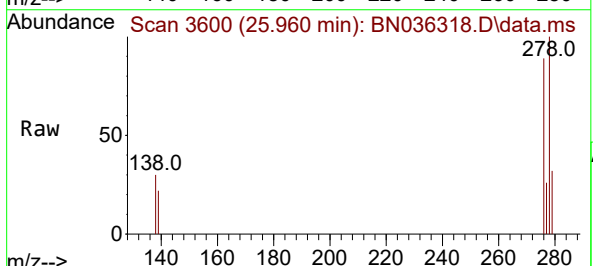
Tgt Ion:278 Resp: 5771

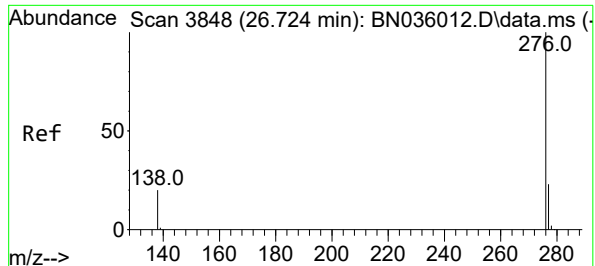
Ion Ratio Lower Upper

278 100

139 22.3 16.0 24.0

279 31.8 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.408 ng

RT: 26.650 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN036318.D

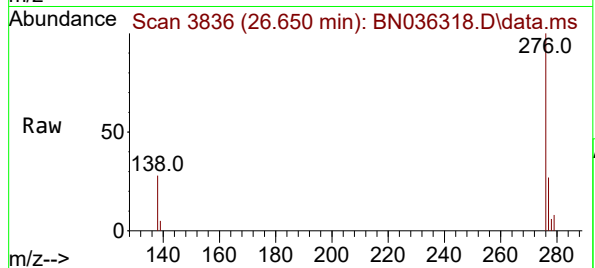
Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



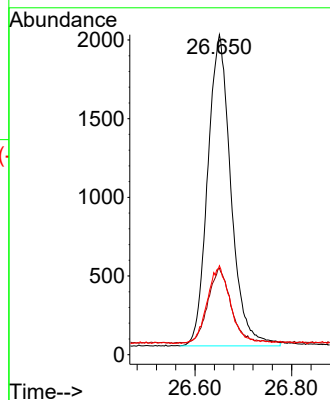
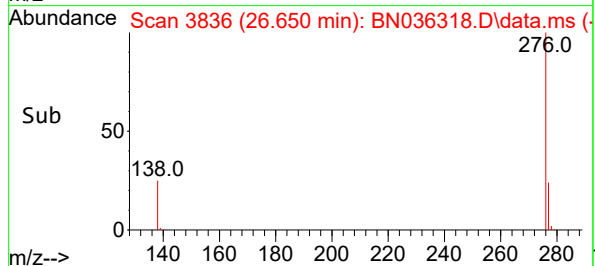
Tgt Ion:276 Resp: 6613

Ion Ratio Lower Upper

276 100

277 27.0 21.3 31.9

138 27.8 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036318.D
Acq On : 06 Feb 2025 03:45
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 17 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 06 04:09:40 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 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	138	0.00
2	1,4-Dioxane	0.400	0.428	-7.0	141	0.00
3	n-Nitrosodimethylamine	0.400	0.376	6.0	120	0.00
4 S	2-Fluorophenol	0.400	0.452	-13.0	149	0.00
5 S	Phenol-d6	0.400	0.435	-8.7	144	0.00
6	bis(2-Chloroethyl)ether	0.400	0.479	-19.7	154	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	161	0.00
8 S	Nitrobenzene-d5	0.400	0.420	-5.0	160	-0.01
9	Naphthalene	0.400	0.408	-2.0	152	0.00
10	Hexachlorobutadiene	0.400	0.355	11.3	132	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.424	-6.0	160	0.00
12	2-Methylnaphthalene	0.400	0.398	0.5	152	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	160	0.00
14 S	2,4,6-Tribromophenol	0.400	0.303	24.3	121	0.00
15 S	2-Fluorobiphenyl	0.400	0.337	15.8	124	0.00
16	Acenaphthylene	0.400	0.384	4.0	144	0.00
17	Acenaphthene	0.400	0.387	3.3	147	0.00
18	Fluorene	0.400	0.409	-2.2	163	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	160	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.173	56.8#	68	0.00
21	4-Bromophenyl-phenylether	0.400	0.366	8.5	136	0.00
22	Hexachlorobenzene	0.400	0.369	7.8	136	0.00
23	Atrazine	0.400	0.358	10.5	135	0.00
24	Pentachlorophenol	0.400	0.317	20.8	126	0.00
25	Phenanthrene	0.400	0.395	1.3	146	0.00
26	Anthracene	0.400	0.384	4.0	146	0.00
27 SURR	Fluoranthene-d10	0.400	0.410	-2.5	153	0.00
28	Fluoranthene	0.400	0.393	1.8	147	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	149	0.00
30	Pyrene	0.400	0.417	-4.2	148	0.00
31 S	Terphenyl-d14	0.400	0.436	-9.0	155	0.00
32	Benzo(a)anthracene	0.400	0.390	2.5	140	0.00
33	Chrysene	0.400	0.409	-2.2	146	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.411	-2.7	152	0.00
35 I	Perylene-d12	0.400	0.400	0.0	156	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.398	0.5	154	0.00
37	Benzo(b)fluoranthene	0.400	0.393	1.8	149	0.00
38	Benzo(k)fluoranthene	0.400	0.376	6.0	145	0.00
39 C	Benzo(a)pyrene	0.400	0.408	-2.0	157	0.00
40	Dibenzo(a,h)anthracene	0.400	0.388	3.0	150	0.00
41	Benzo(g,h,i)perylene	0.400	0.408	-2.0	156	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036318.D
 Acq On : 06 Feb 2025 03:45
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 17 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 04:09:40 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 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	138	0.00
2	1,4-Dioxane	0.447	0.478	-6.9	141	0.00
3	n-Nitrosodimethylamine	0.811	0.762	6.0	120	0.00
4 S	2-Fluorophenol	1.040	1.175	-13.0	149	0.00
5 S	Phenol-d6	1.222	1.328	-8.7	144	0.00
6	bis(2-Chloroethyl)ether	0.984	1.177	-19.6	154#	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	161#	0.00
8 S	Nitrobenzene-d5	0.378	0.397	-5.0	160#	-0.01
9	Naphthalene	1.162	1.185	-2.0	152#	0.00
10	Hexachlorobutadiene	0.375	0.333	11.2	132	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.576	-5.9	160#	0.00
12	2-Methylnaphthalene	0.721	0.717	0.6	152#	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	160#	0.00
14 S	2,4,6-Tribromophenol	0.257	0.194	24.5	121	0.00
15 S	2-Fluorobiphenyl	1.786	1.502	15.9	124	0.00
16	Acenaphthylene	1.897	1.819	4.1	144	0.00
17	Acenaphthene	1.299	1.258	3.2	147	0.00
18	Fluorene	1.627	1.665	-2.3	163#	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	160#	0.00
20	4,6-Dinitro-2-methylphenol	0.093	0.040	57.0#	68	0.00
21	4-Bromophenyl-phenylether	0.285	0.261	8.4	136	0.00
22	Hexachlorobenzene	0.375	0.346	7.7	136	0.00
23	Atrazine	0.206	0.185	10.2	135	0.00
24	Pentachlorophenol	0.162	0.129	20.4	126	0.00
25	Phenanthrene	1.202	1.186	1.3	146	0.00
26	Anthracene	1.093	1.050	3.9	146	0.00
27 SURR	Fluoranthene-d10	1.036	1.061	-2.4	153#	0.00
28	Fluoranthene	1.412	1.388	1.7	147	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	149	0.00
30	Pyrene	1.621	1.691	-4.3	148	0.00
31 S	Terphenyl-d14	0.831	0.907	-9.1	155#	0.00
32	Benzo(a)anthracene	1.451	1.416	2.4	140	0.00
33	Chrysene	1.483	1.517	-2.3	146	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	0.817	-2.8	152#	0.00
35 I	Perylene-d12	1.000	1.000	0.0	156#	0.00
36	Indeno(1,2,3-cd)pyrene	1.605	1.599	0.4	154#	0.00
37	Benzo(b)fluoranthene	1.454	1.429	1.7	149	0.00
38	Benzo(k)fluoranthene	1.465	1.378	5.9	145	0.00
39 C	Benzo(a)pyrene	1.242	1.267	-2.0	157#	0.00
40	Dibenzo(a,h)anthracene	1.279	1.242	2.9	150#	0.00
41	Benzo(g,h,i)perylene	1.394	1.423	-2.1	156#	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



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.: Q1225 SAS No.: Q1225 SDG No.: Q1225

Instrument ID: BNA_N Calibration Date/Time: 02/06/2025 05:40

Lab File ID: BN036320.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:02 14:36

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.575		5.7	20.0
Fluoranthene-d10	1.036	1.072		3.5	20.0
2-Fluorophenol	1.040	1.170		12.5	20.0
Phenol-d6	1.222	1.367		11.9	20.0
Nitrobenzene-d5	0.378	0.417		10.3	20.0
2-Fluorobiphenyl	1.786	1.611		-9.8	20.0
2,4,6-Tribromophenol	0.257	0.200		-22.2	20.0
Terphenyl-d14	0.831	0.874		5.2	20.0
1,4-Dioxane	0.447	0.518		15.9	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036320.D
 Acq On : 06 Feb 2025 05:40
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 06:02:16 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

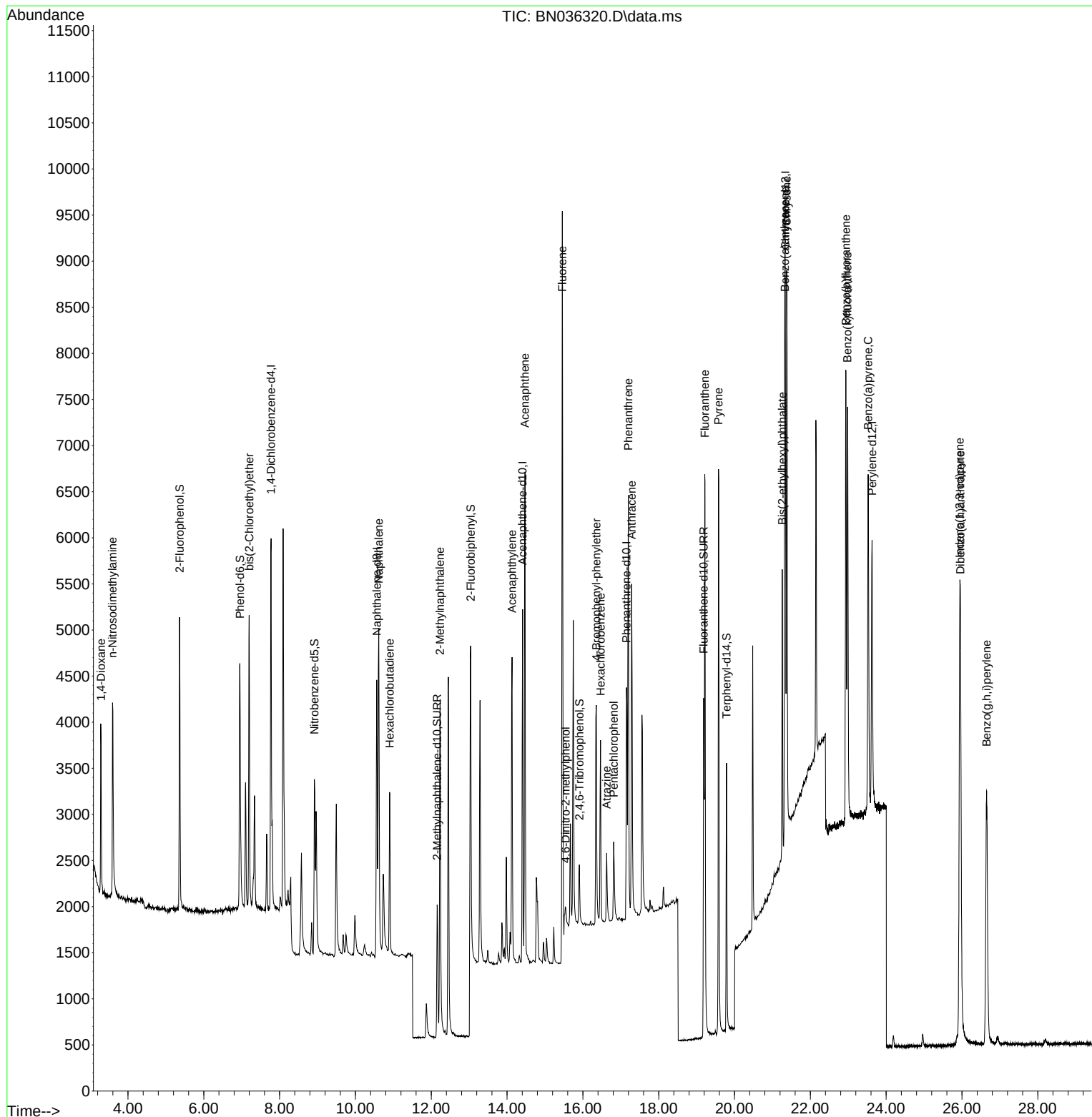
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2017	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4328	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2158	0.400	ng	0.00
19) Phenanthrene-d10	17.149	188	4298	0.400	ng	-0.01
29) Chrysene-d12	21.340	240	3803	0.400	ng	0.00
35) Perylene-d12	23.627	264	4157	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2359	0.450	ng	0.00
5) Phenol-d6	6.952	99	2757	0.447	ng	0.00
8) Nitrobenzene-d5	8.918	82	1805	0.442	ng	-0.01
11) 2-Methylnaphthalene-d10	12.156	152	2489	0.423	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	432	0.312	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3477	0.361	ng	0.00
27) Fluoranthene-d10	19.187	212	4606	0.414	ng	0.00
31) Terphenyl-d14	19.787	244	3323	0.421	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.290	88	1044	0.463	ng	Qvalue 96
3) n-Nitrosodimethylamine	3.593	42	1762	0.431	ng	88
6) bis(2-Chloroethyl)ether	7.197	93	2400	0.484	ng	99
9) Naphthalene	10.616	128	5202	0.414	ng	98
10) Hexachlorobutadiene	10.904	225	1498	0.369	ng	# 100
12) 2-Methylnaphthalene	12.233	142	3215	0.412	ng	97
16) Acenaphthylene	14.131	152	4105	0.401	ng	99
17) Acenaphthene	14.473	154	2804	0.400	ng	98
18) Fluorene	15.457	166	3728	0.425	ng	97
20) 4,6-Dinitro-2-methylph...	15.547	198	187	0.187	ng	# 49
21) 4-Bromophenyl-phenylether	16.354	248	1157	0.378	ng	96
22) Hexachlorobenzene	16.466	284	1519	0.377	ng	99
23) Atrazine	16.627	200	807	0.365	ng	98
24) Pentachlorophenol	16.813	266	590	0.338	ng	98
25) Phenanthrene	17.198	178	5153	0.399	ng	100
26) Anthracene	17.285	178	4593	0.391	ng	100
28) Fluoranthene	19.220	202	6122	0.404	ng	# 98
30) Pyrene	19.578	202	6276	0.407	ng	99
32) Benzo(a)anthracene	21.331	228	5315	0.385	ng	99
33) Chrysene	21.375	228	5700	0.404	ng	98
34) Bis(2-ethylhexyl)phtha...	21.259	149	2961	0.392	ng	99
36) Indeno(1,2,3-cd)pyrene	25.943	276	6820	0.409	ng	97
37) Benzo(b)fluoranthene	22.937	252	6184	0.409	ng	# 89
38) Benzo(k)fluoranthene	22.981	252	5953	0.391	ng	# 90
39) Benzo(a)pyrene	23.525	252	5266	0.408	ng	# 81
40) Dibenzo(a,h)anthracene	25.961	278	5258	0.395	ng	95
41) Benzo(g,h,i)perylene	26.651	276	6109	0.422	ng	96

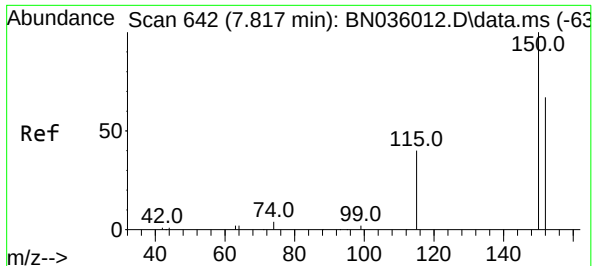
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036320.D
 Acq On : 06 Feb 2025 05:40
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 06:02:16 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

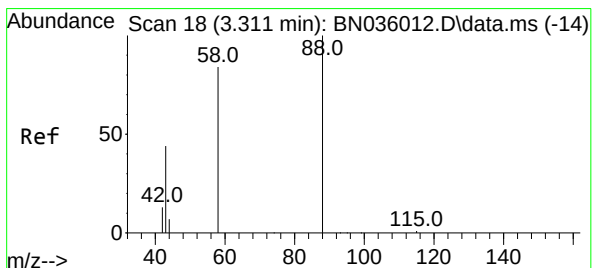
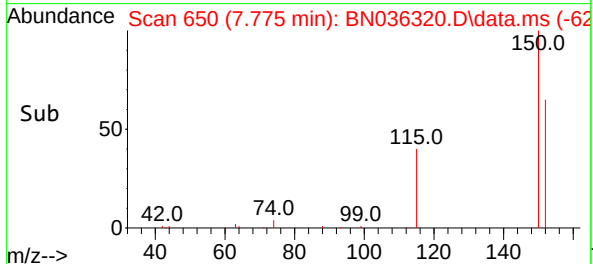
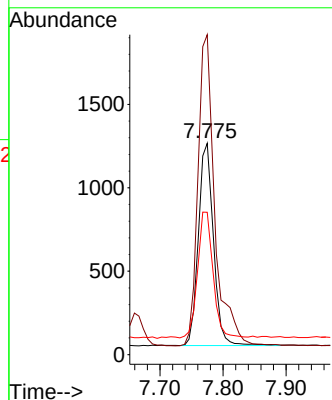
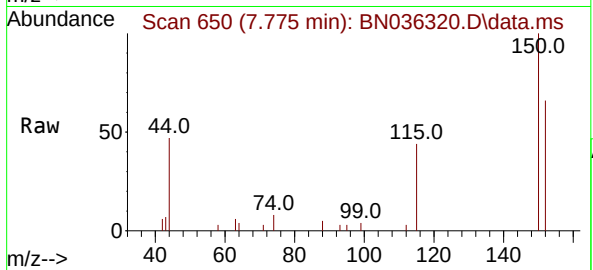




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

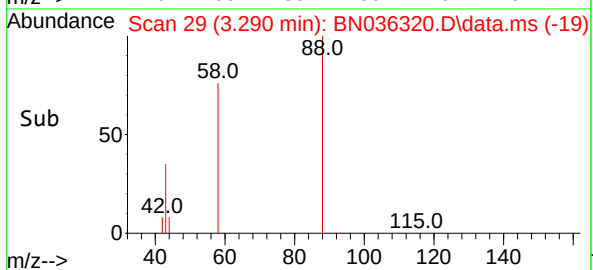
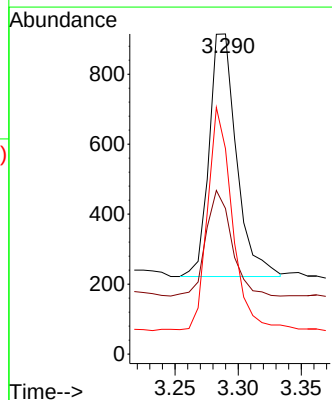
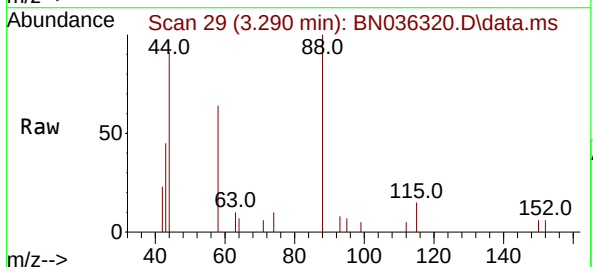
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 152 Resp: 2017
Ion Ratio Lower Upper
152 100
150 151.4 117.4 176.2
115 67.3 51.0 76.4

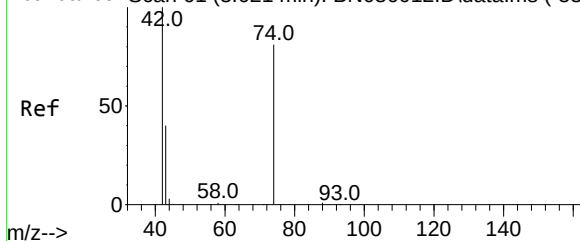


#2
1,4-Dioxane
Concen: 0.463 ng
RT: 3.290 min Scan# 29
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion: 88 Resp: 1044
Ion Ratio Lower Upper
88 100
43 41.2 38.5 57.7
58 83.2 66.6 99.8



Abundance Scan 61 (3.621 min): BN036012.D\data.ms (-53)



#3

n-Nitrosodimethylamine

Concen: 0.431 ng

RT: 3.593 min Scan# 71

Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

Instrument :

BNA_N

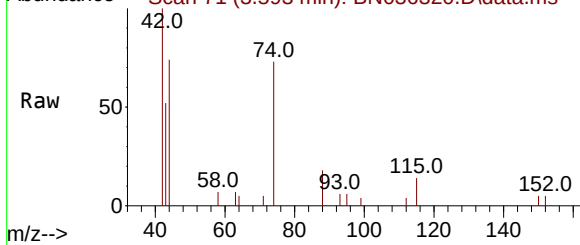
ClientSampleId :

SSTDCCC0.4

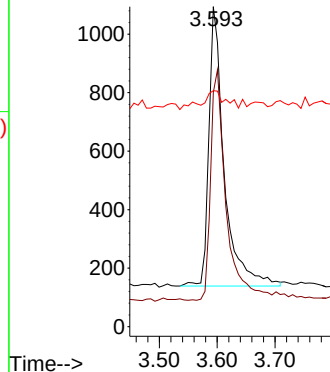
Tgt Ion: 42 Resp: 1762

Ion	Ratio	Lower	Upper
42	100		
74	83.2	58.1	87.1
44	6.9	6.2	9.4

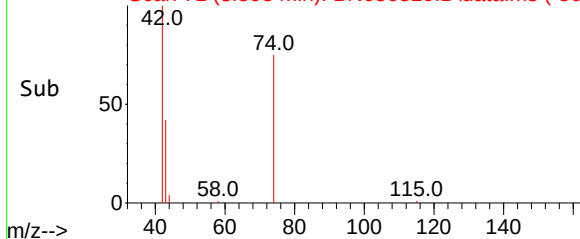
Abundance Scan 71 (3.593 min): BN036320.D\data.ms



Abundance

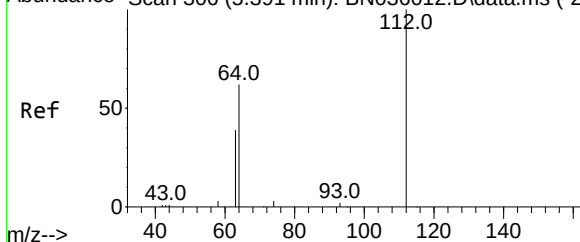


Abundance Scan 71 (3.593 min): BN036320.D\data.ms (-50)



Time-->

Abundance Scan 306 (5.391 min): BN036012.D\data.ms (-29)



#4

2-Fluorophenol

Concen: 0.450 ng

RT: 5.363 min Scan# 316

Delta R.T. -0.000 min

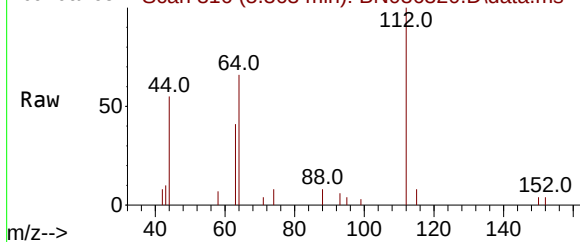
Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

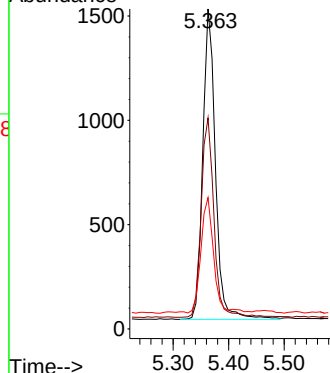
Tgt Ion: 112 Resp: 2359

Ion	Ratio	Lower	Upper
112	100		
64	65.1	50.0	75.0
63	37.4	30.7	46.1

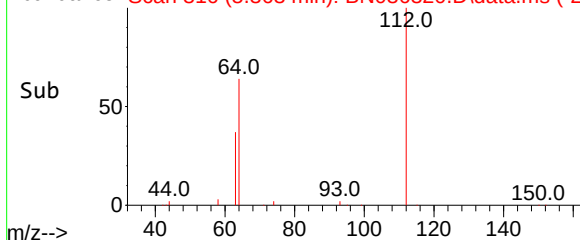
Abundance Scan 316 (5.363 min): BN036320.D\data.ms



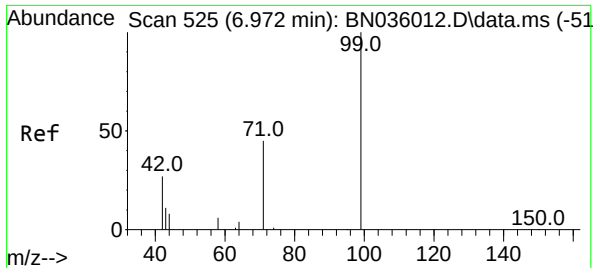
Abundance



Abundance Scan 316 (5.363 min): BN036320.D\data.ms (-28)



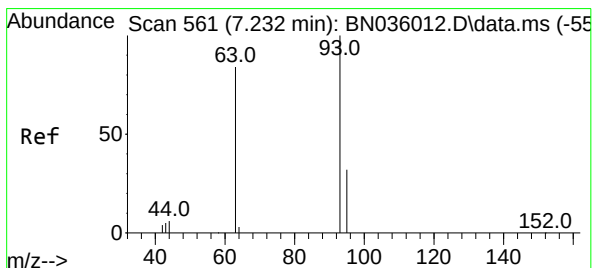
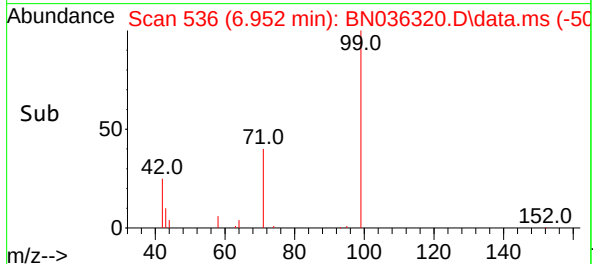
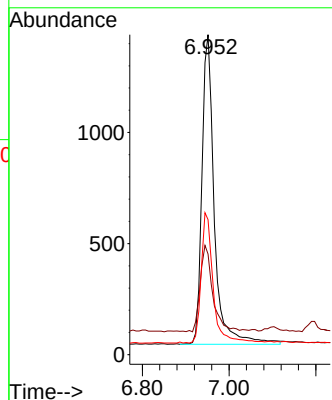
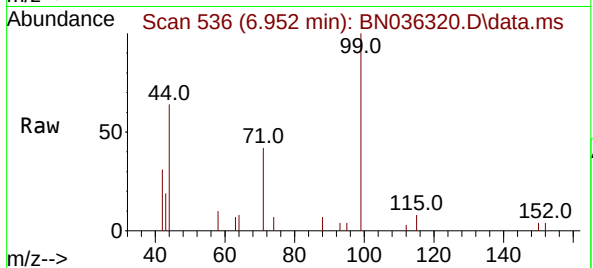
Time-->



#5
Phenol-d6
Concen: 0.447 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

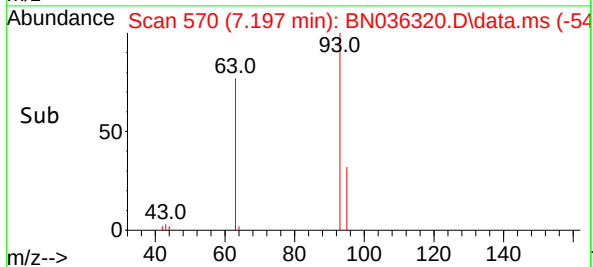
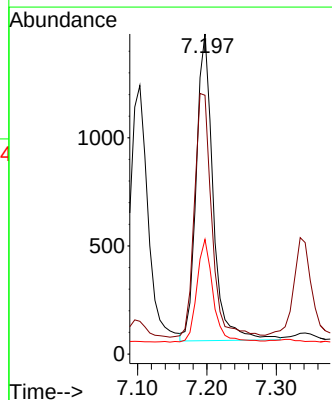
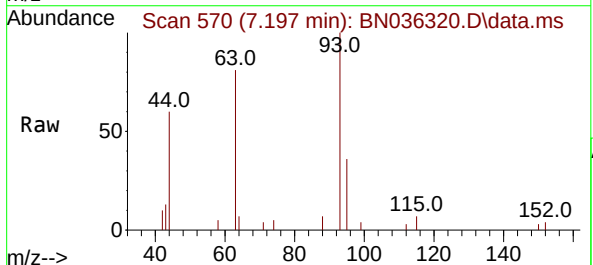
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

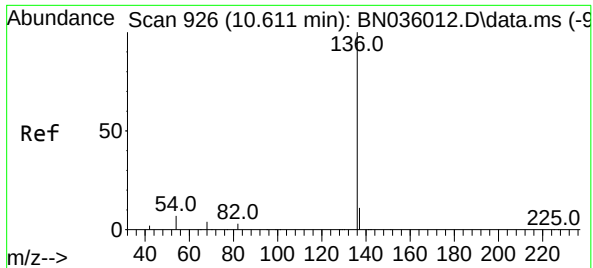
Tgt Ion: 99 Resp: 2757
Ion Ratio Lower Upper
99 100
42 28.5 26.8 40.2
71 40.6 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.484 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion: 93 Resp: 2400
Ion Ratio Lower Upper
93 100
63 81.6 65.8 98.6
95 32.0 25.8 38.6

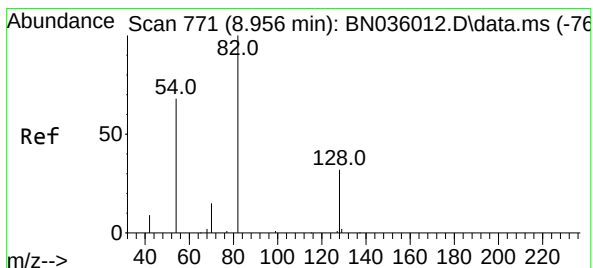
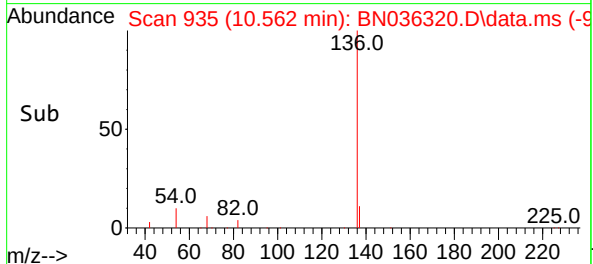
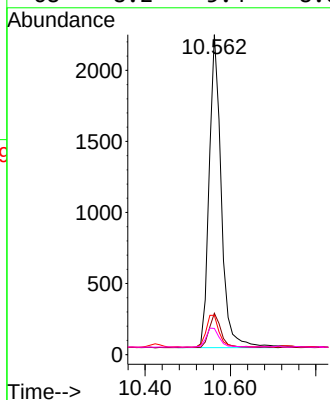
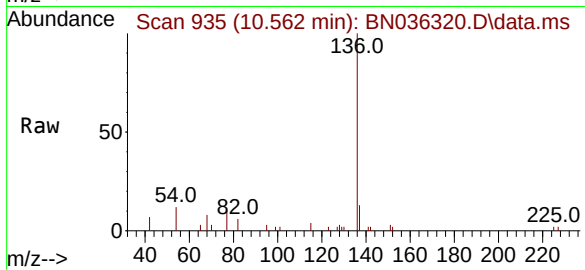




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

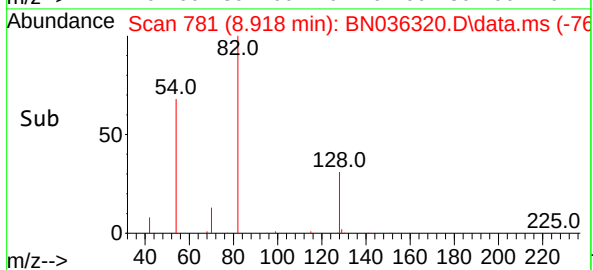
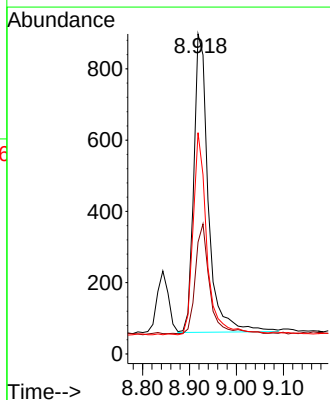
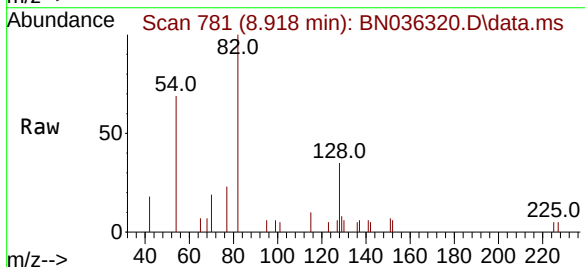
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

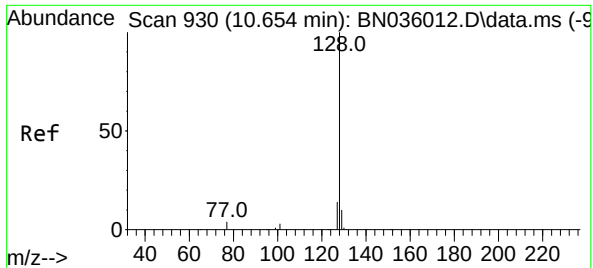
Tgt Ion:	136	Resp:	4328
Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.4	15.6
54	12.3	7.7	11.5#
68	8.2	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.442 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:	82	Resp:	1805
Ion	Ratio	Lower	Upper
82	100		
128	35.0	28.8	43.2
54	69.2	55.8	83.8

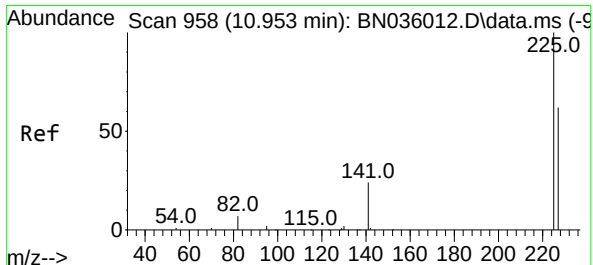
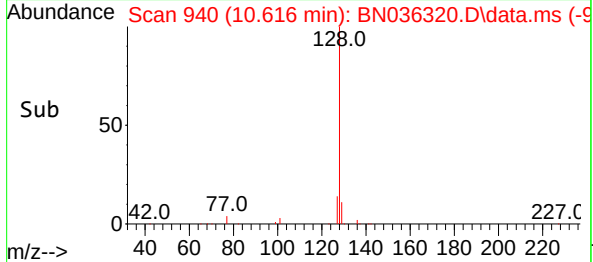
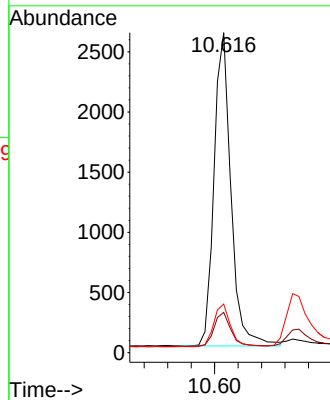
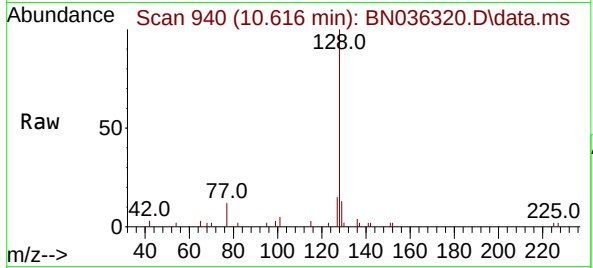




#9
Naphthalene
Concen: 0.414 ng
RT: 10.616 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

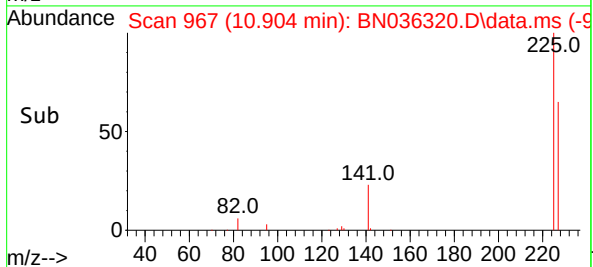
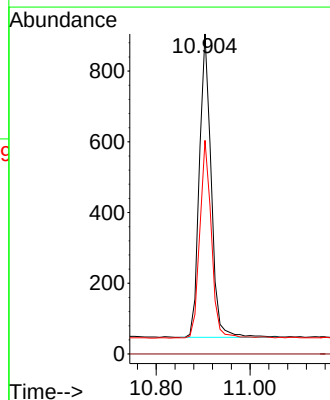
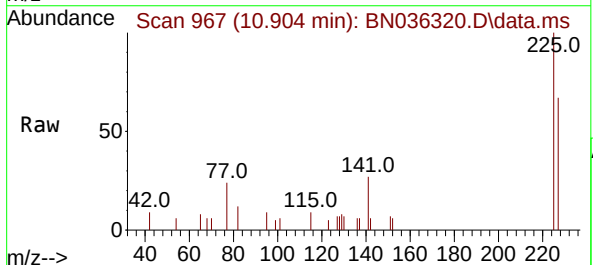
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

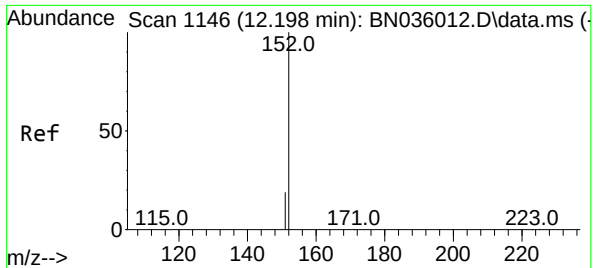
Tgt Ion:128 Resp: 5202
Ion Ratio Lower Upper
128 100
129 12.6 9.4 14.2
127 15.2 12.6 19.0



#10
Hexachlorobutadiene
Concen: 0.369 ng
RT: 10.904 min Scan# 967
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:225 Resp: 1498
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.9 51.0 76.6

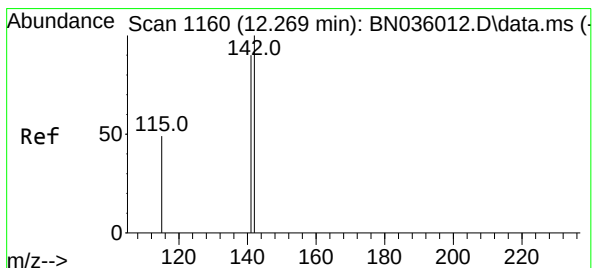
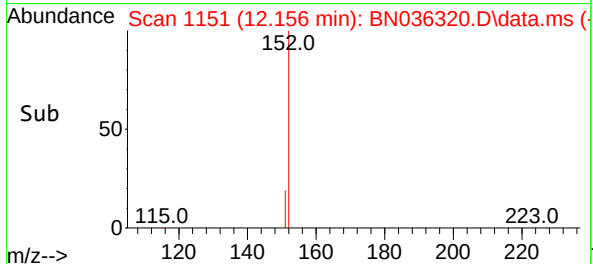
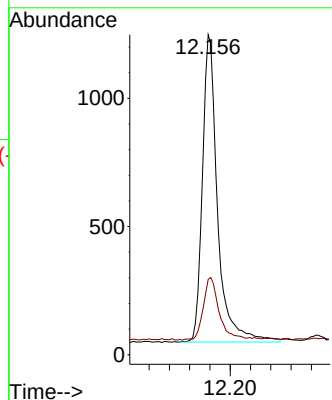
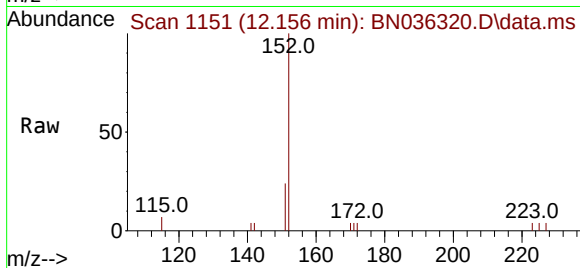




#11
2-Methylnaphthalene-d10
Concen: 0.423 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

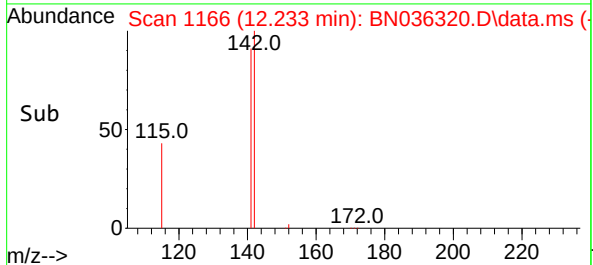
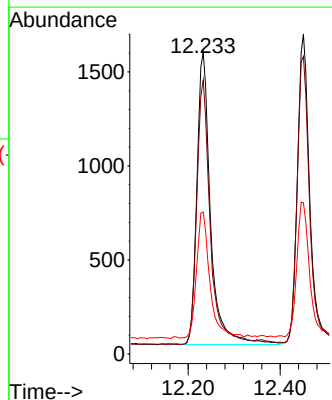
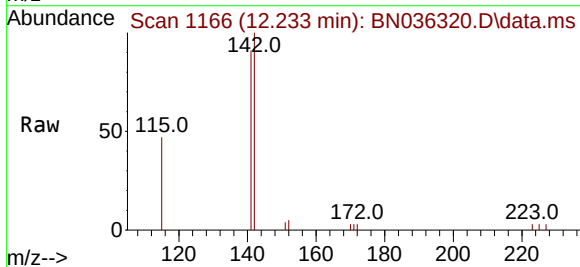
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

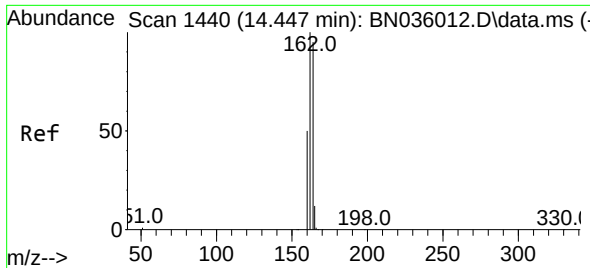
Tgt Ion:152 Resp: 2489
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.412 ng
RT: 12.233 min Scan# 1166
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:142 Resp: 3215
Ion Ratio Lower Upper
142 100
141 90.9 72.2 108.2
115 47.1 41.2 61.8

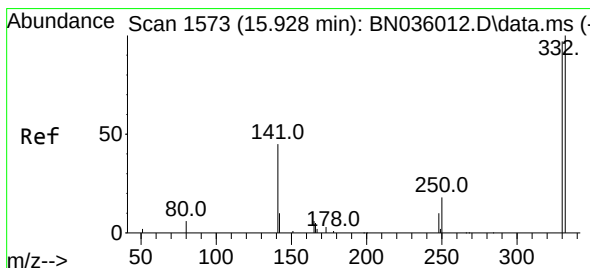
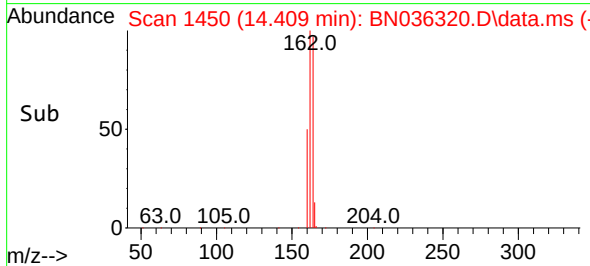
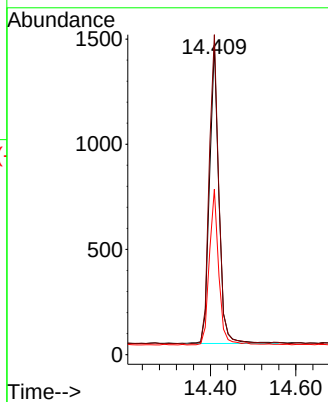
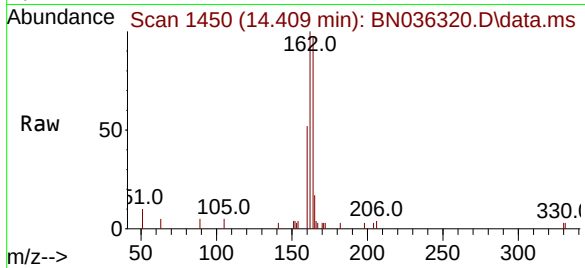




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

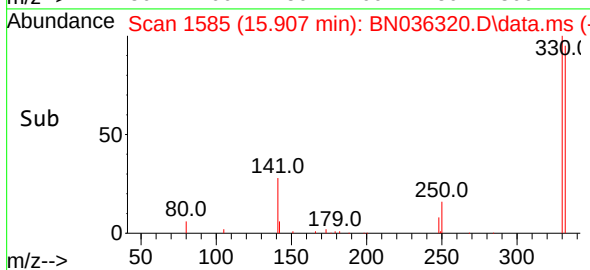
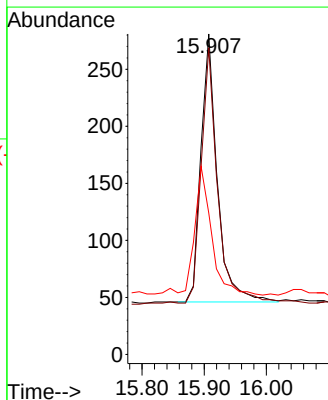
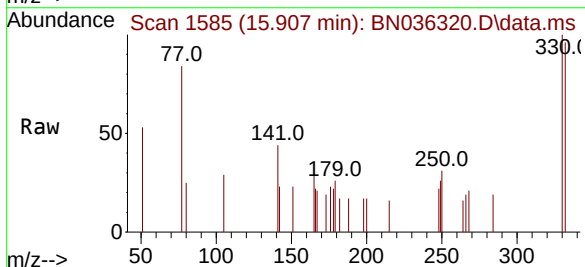
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

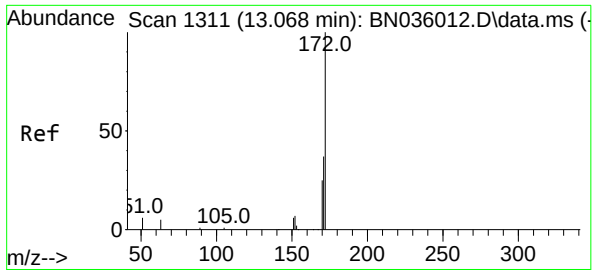
Tgt Ion	Ratio	Lower	Upper
164	100		
162	103.3	84.1	126.1
160	53.4	43.8	65.8



#14
2,4,6-Tribromophenol
Concen: 0.312 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion	Ratio	Lower	Upper
330	100		
332	100.2	81.0	121.4
141	50.5	36.7	55.1

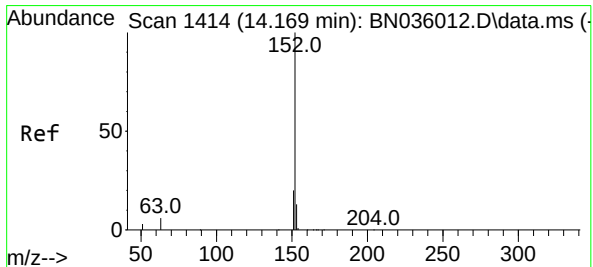
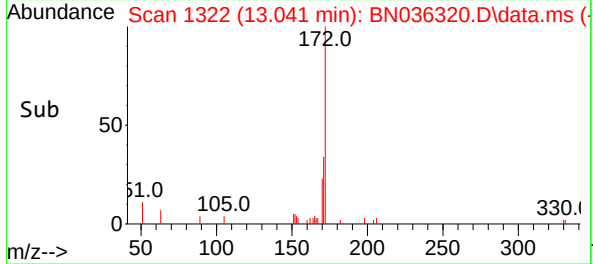
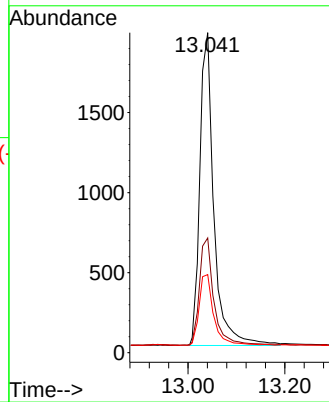
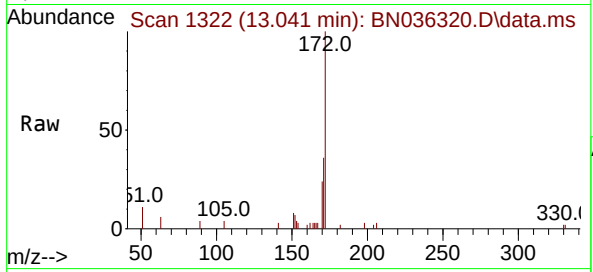




#15
2-Fluorobiphenyl
Concen: 0.361 ng
RT: 13.041 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

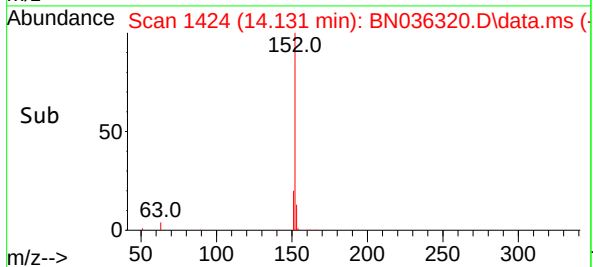
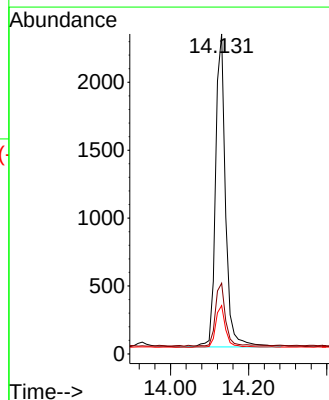
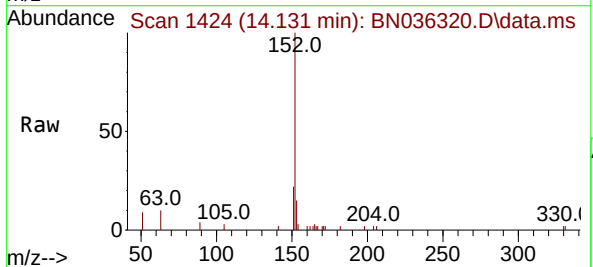
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

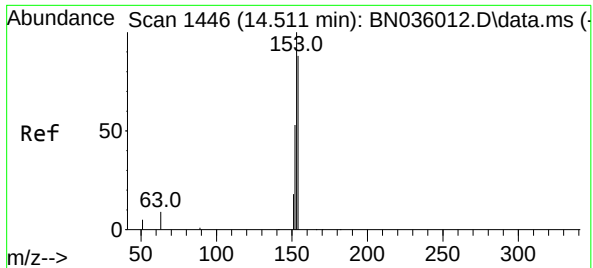
Tgt Ion:	172	Resp:	3477
Ion Ratio	Lower	Upper	
172	100		
171	35.9	30.9	46.3
170	24.4	21.2	31.8



#16
Acenaphthylene
Concen: 0.401 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:	152	Resp:	4105
Ion Ratio	Lower	Upper	
152	100		
151	20.6	16.2	24.2
153	13.3	10.4	15.6

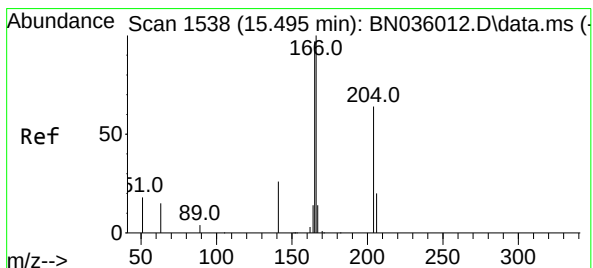
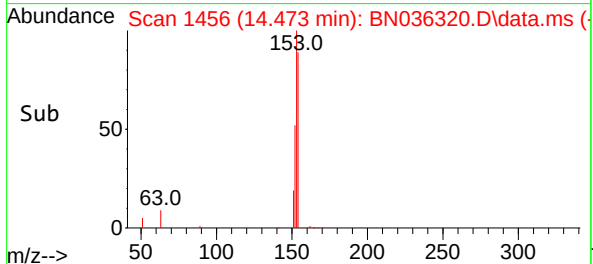
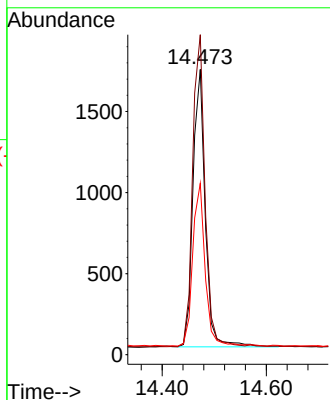
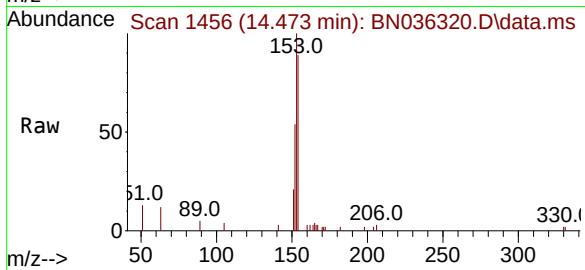




#17
Acenaphthene
Concen: 0.400 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

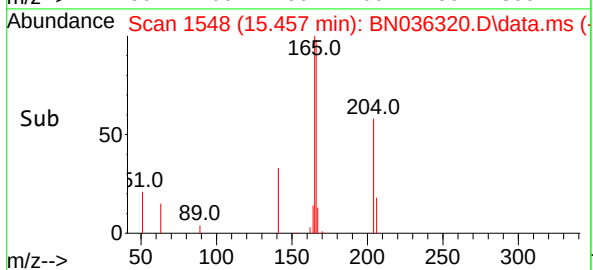
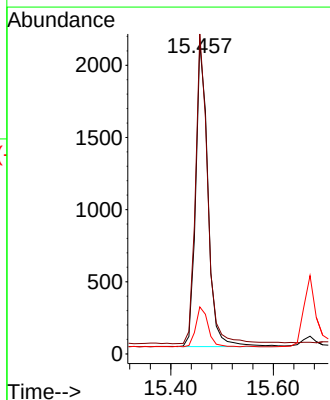
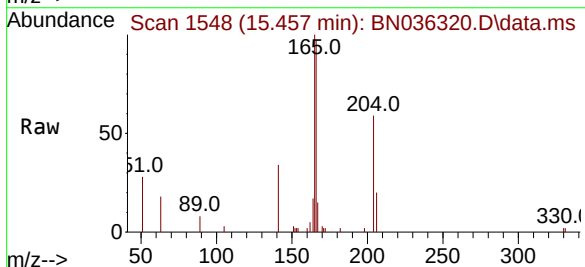
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

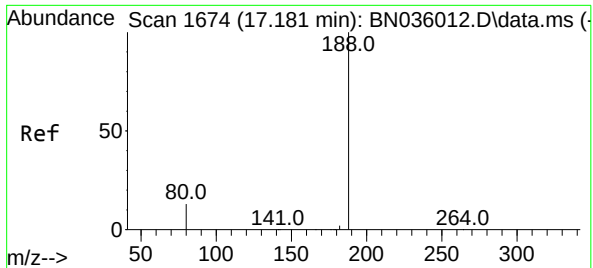
Tgt Ion	Ratio	Lower	Upper
154	100		
153	113.1	88.9	133.3
152	59.1	48.1	72.1



#18
Fluorene
Concen: 0.425 ng
RT: 15.457 min Scan# 1548
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion	Ratio	Lower	Upper
166	100		
165	100.7	78.5	117.7
167	12.6	10.7	16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.149 min Scan# 1

Delta R.T. -0.013 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

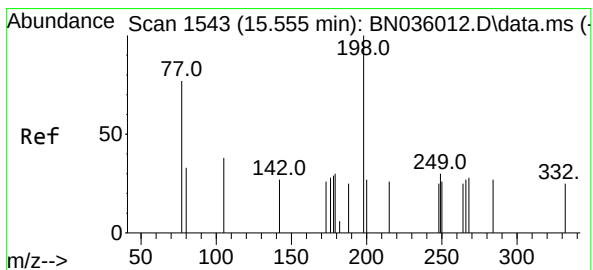
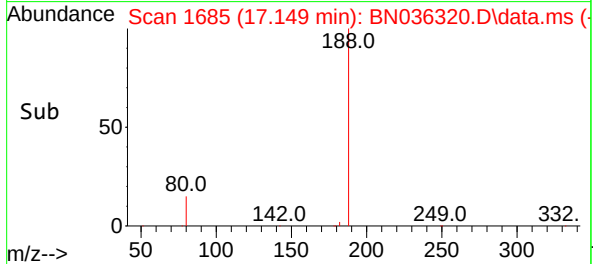
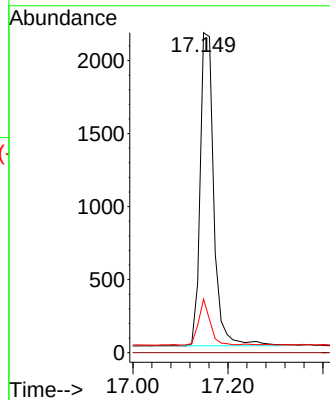
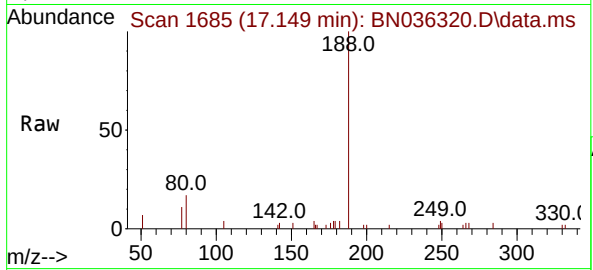
Tgt Ion:188 Resp: 4298

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 16.8 12.3 18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.187 ng

RT: 15.547 min Scan# 1556

Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

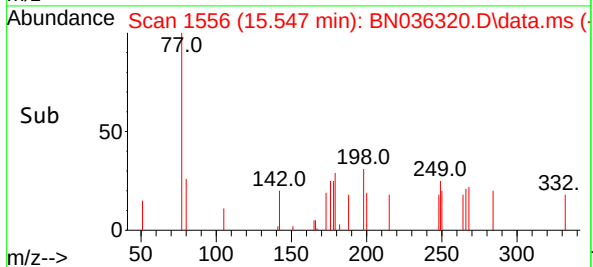
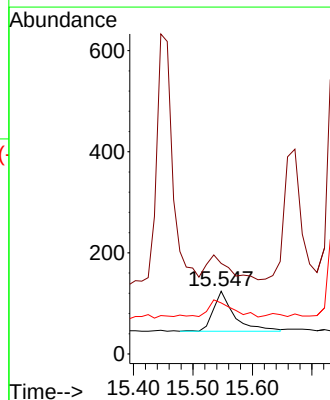
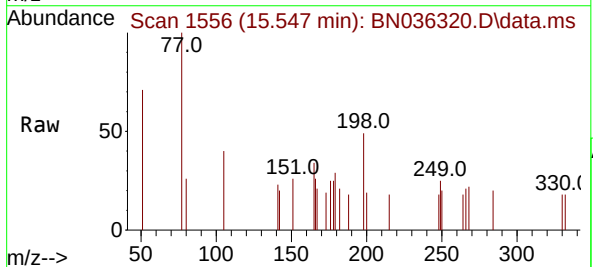
Tgt Ion:198 Resp: 187

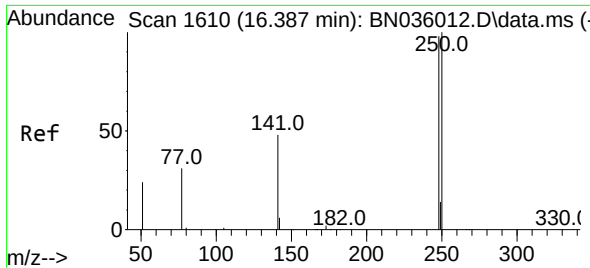
Ion Ratio Lower Upper

198 100

51 144.4 68.1 102.1#

105 81.5 46.5 69.7#

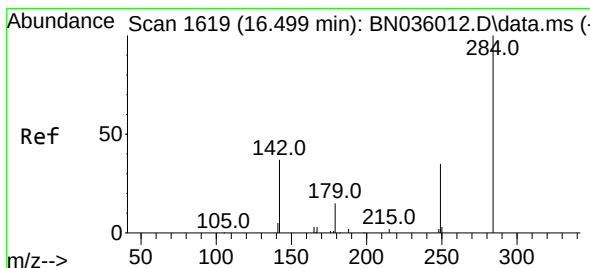
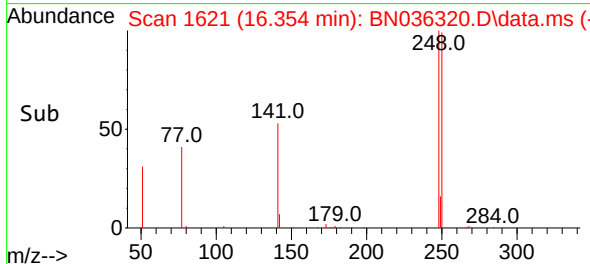
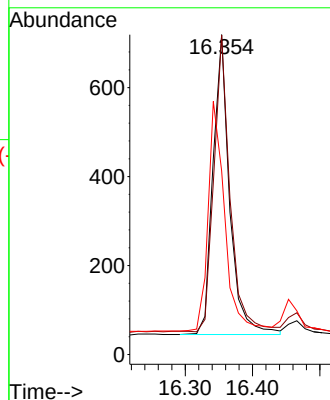
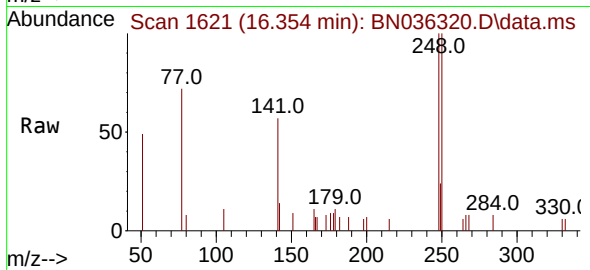




#21
4-Bromophenyl-phenylether
Concen: 0.378 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

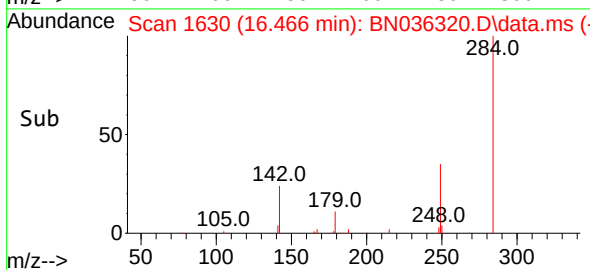
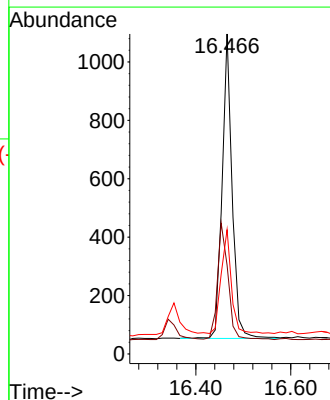
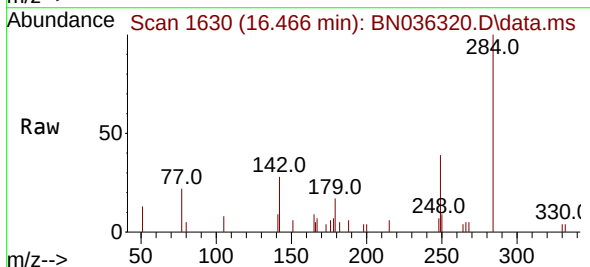
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

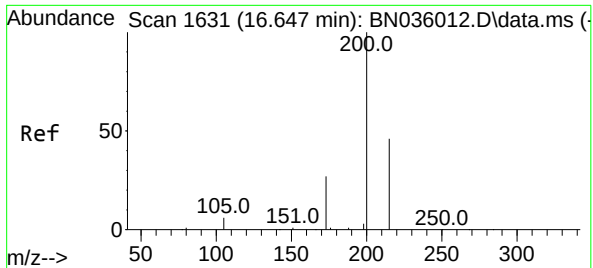
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.9	81.5	122.3
141	57.4	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.377 ng
RT: 16.466 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion	Ratio	Lower	Upper
284	100		
142	40.6	33.6	50.4
249	35.7	28.8	43.2

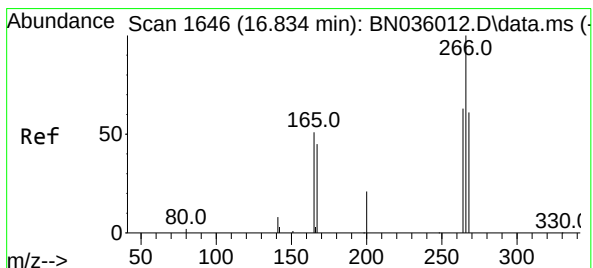
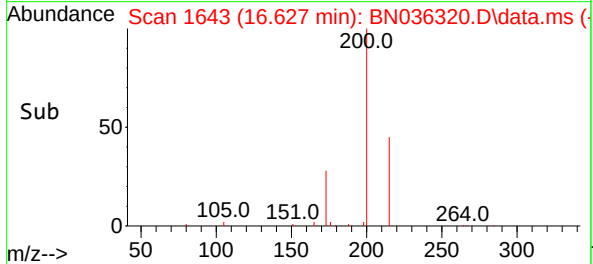
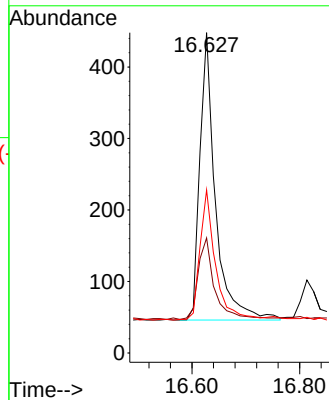
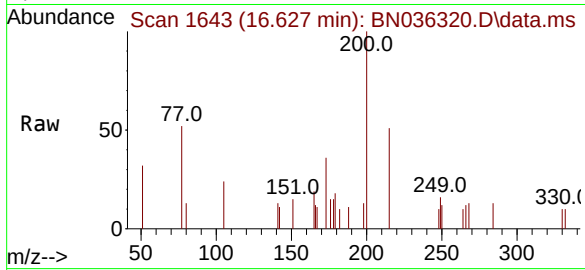




#23
Atrazine
Concen: 0.365 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

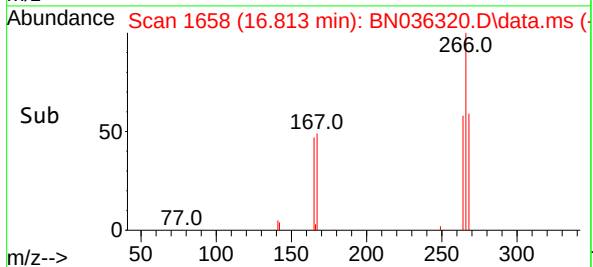
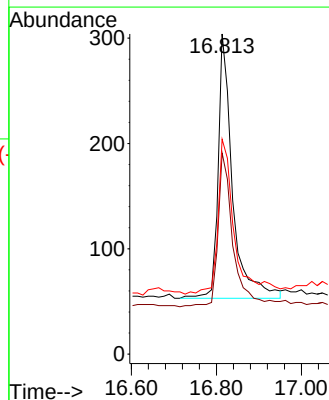
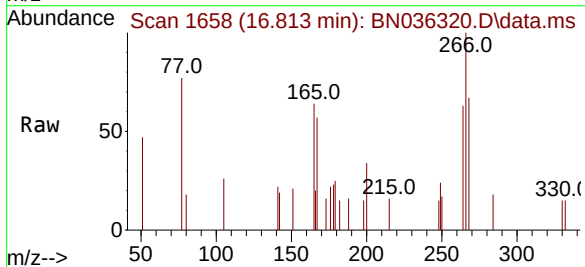
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

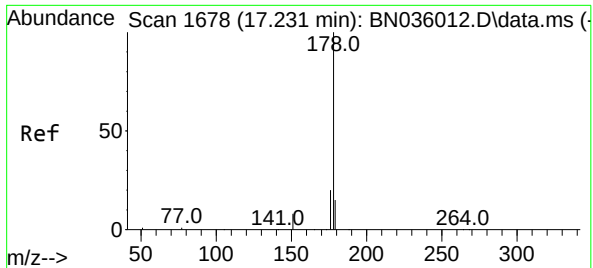
Tgt Ion:	200	Resp:	807
Ion Ratio	Lower	Upper	
200	100		
173	35.9	26.6	40.0
215	50.9	40.6	61.0



#24
Pentachlorophenol
Concen: 0.338 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:	266	Resp:	590
Ion Ratio	Lower	Upper	
266	100		
264	61.0	48.2	72.2
268	66.6	51.6	77.4

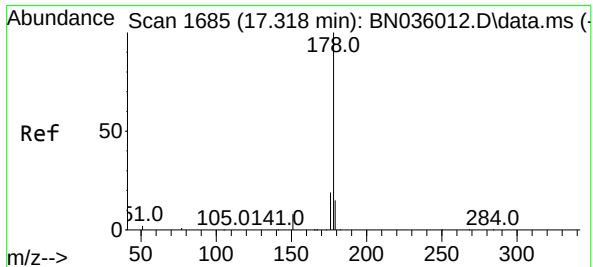
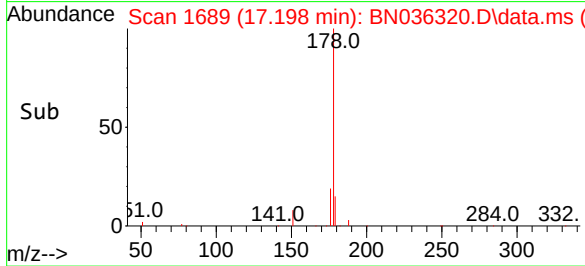
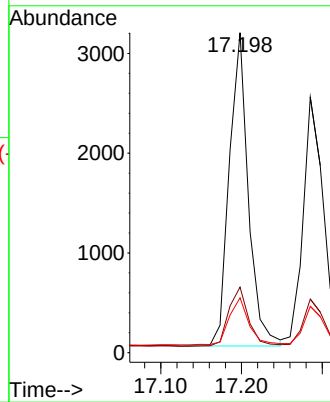
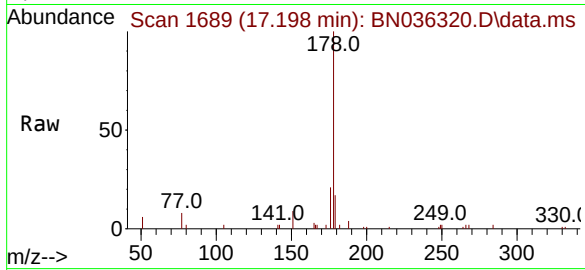




#25
Phenanthrene
Concen: 0.399 ng
RT: 17.198 min Scan# 1689
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

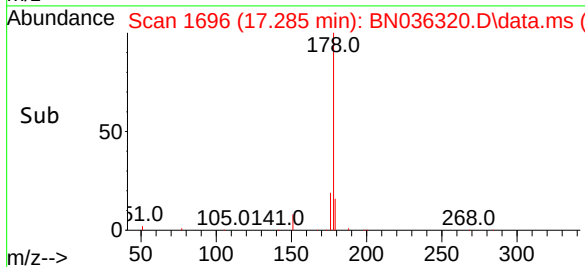
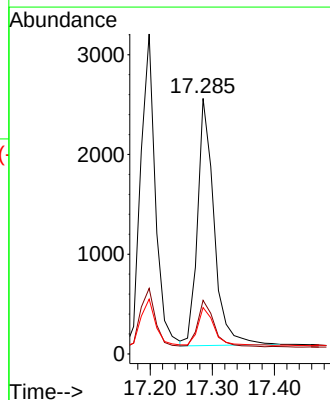
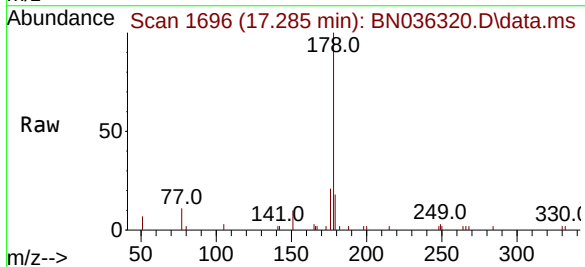
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

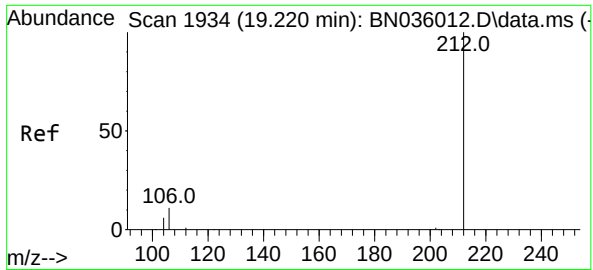
Tgt Ion:178 Resp: 5153
Ion Ratio Lower Upper
178 100
176 19.9 16.0 24.0
179 15.4 12.4 18.6



#26
Anthracene
Concen: 0.391 ng
RT: 17.285 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:178 Resp: 4593
Ion Ratio Lower Upper
178 100
176 19.2 15.4 23.2
179 15.2 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.414 ng

RT: 19.187 min Scan# 1940

Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

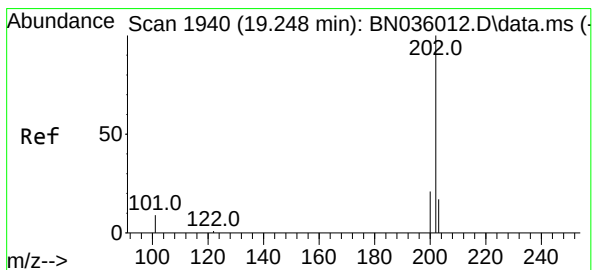
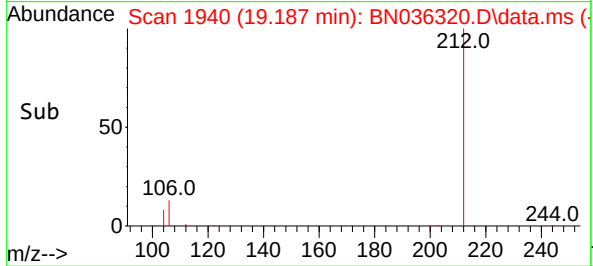
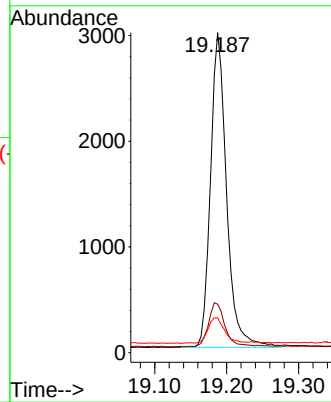
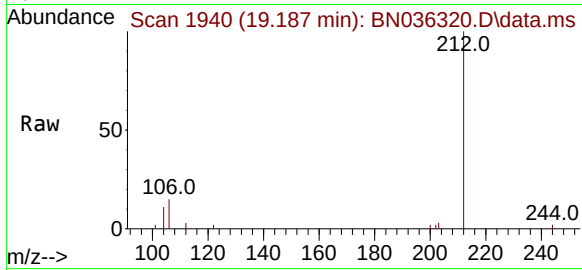
Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:212	Resp:	4606
Ion Ratio	Lower	Upper
212	100	
106	13.9	9.7 14.5
104	8.6	6.0 9.0



#28

Fluoranthene

Concen: 0.404 ng

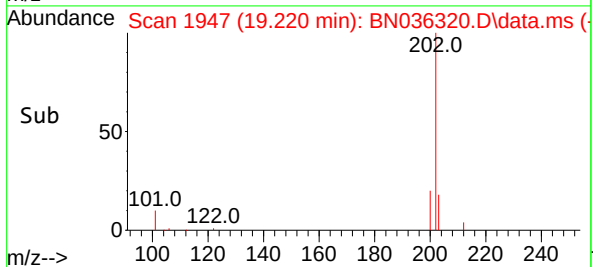
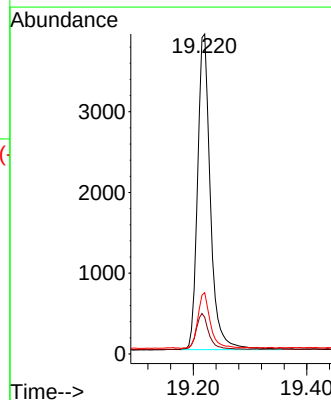
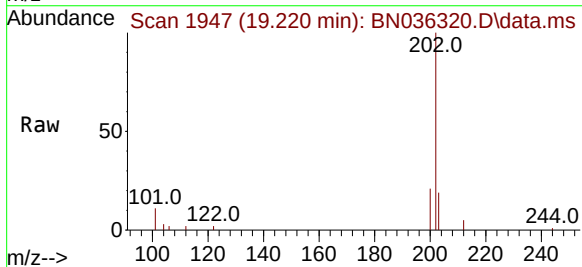
RT: 19.220 min Scan# 1947

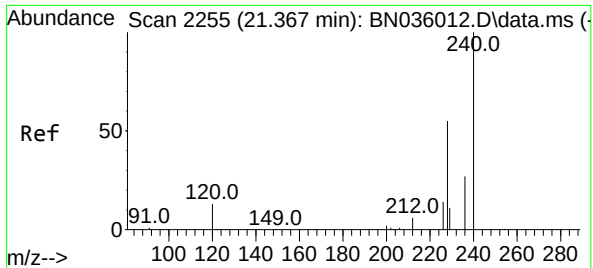
Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

Tgt Ion:202	Resp:	6122
Ion Ratio	Lower	Upper
202	100	
101	11.5	7.6 11.4#
203	17.4	13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

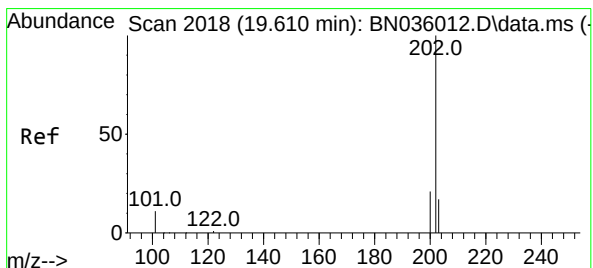
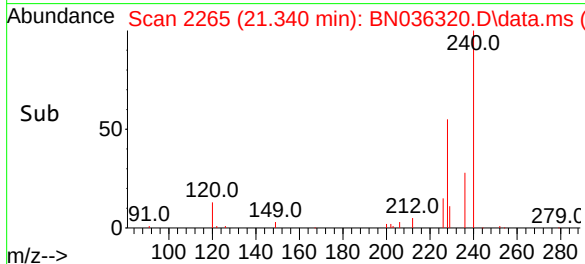
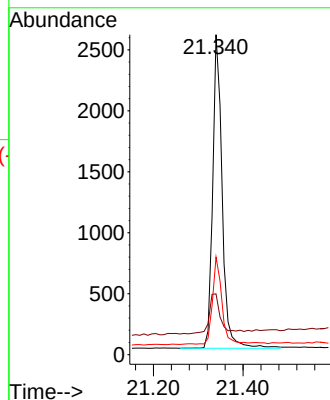
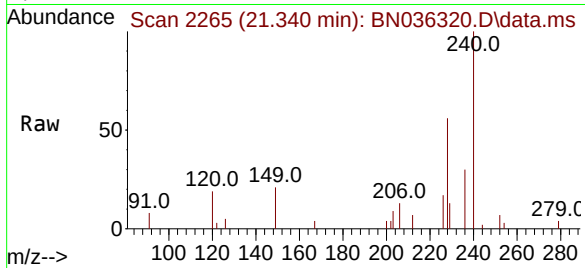
Tgt Ion:240 Resp: 3803

Ion Ratio Lower Upper

240 100

120 19.0 13.9 20.9

236 30.5 23.7 35.5



#30

Pyrene

Concen: 0.407 ng

RT: 19.578 min Scan# 2024

Delta R.T. -0.005 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

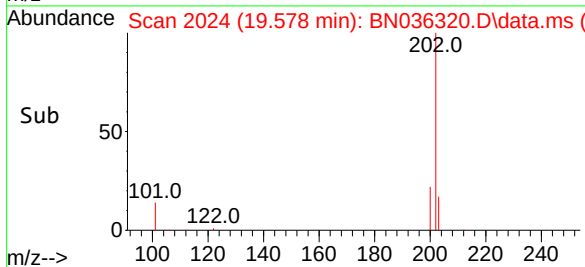
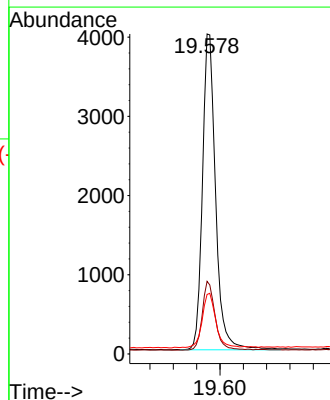
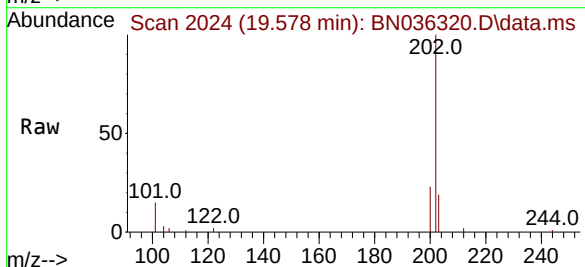
Tgt Ion:202 Resp: 6276

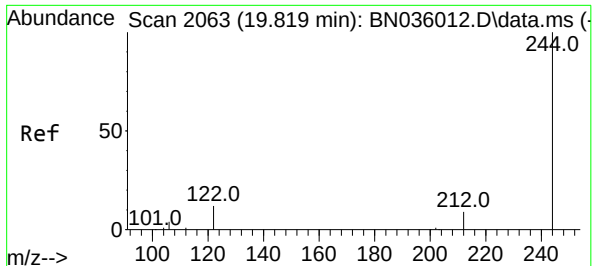
Ion Ratio Lower Upper

202 100

200 21.3 17.0 25.4

203 17.5 14.4 21.6

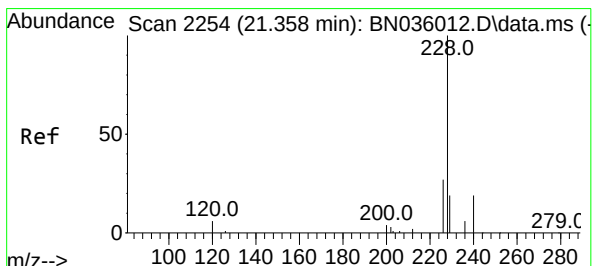
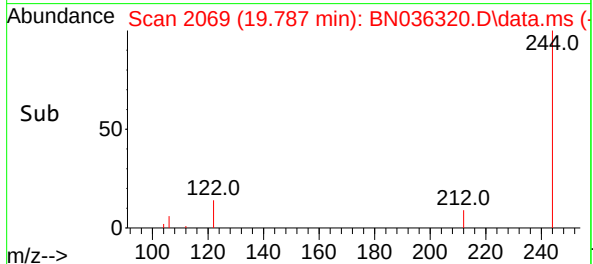
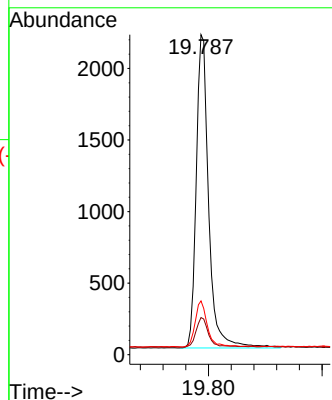
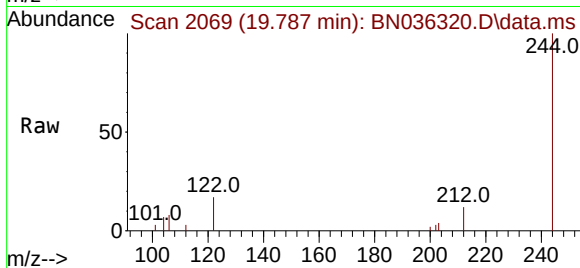




#31
Terphenyl-d14
Concen: 0.421 ng
RT: 19.787 min Scan# 2063
Delta R.T. -0.005 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

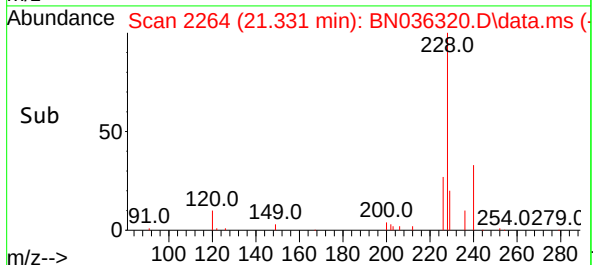
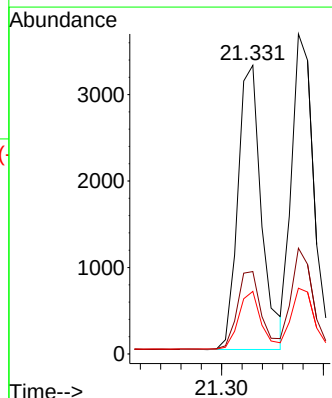
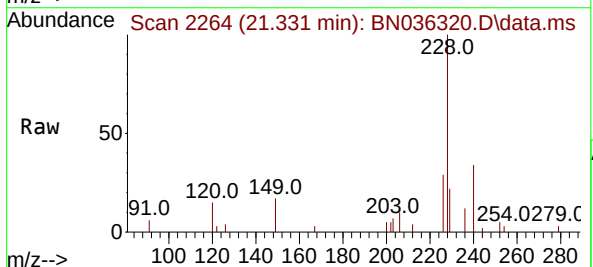
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

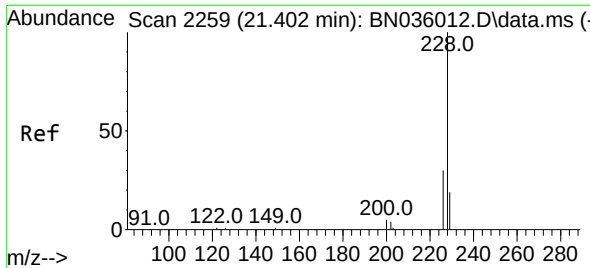
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.1	13.7
122	16.8	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.385 ng
RT: 21.331 min Scan# 2264
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.6	22.6	34.0
229	21.7	16.5	24.7

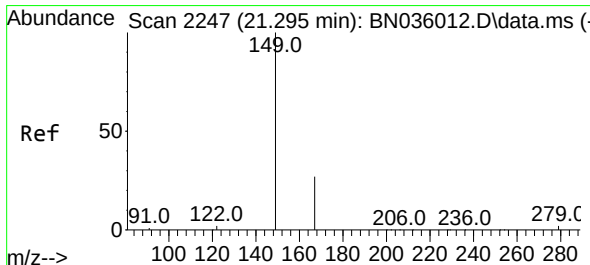
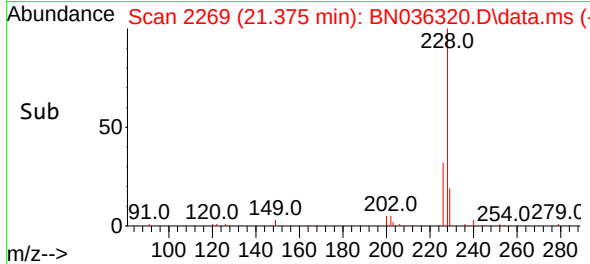
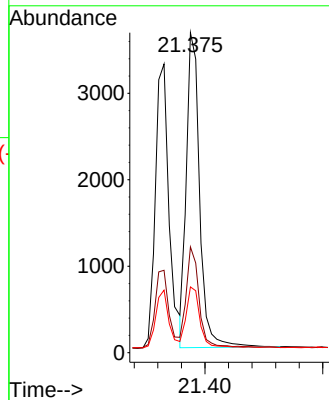
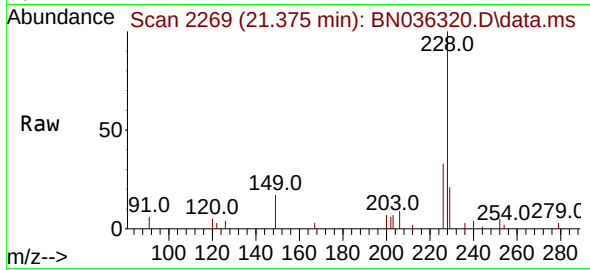




#33
Chrysene
Concen: 0.404 ng
RT: 21.375 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

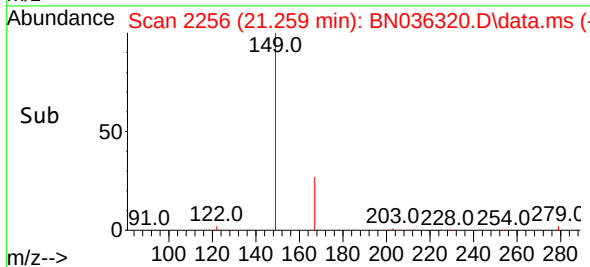
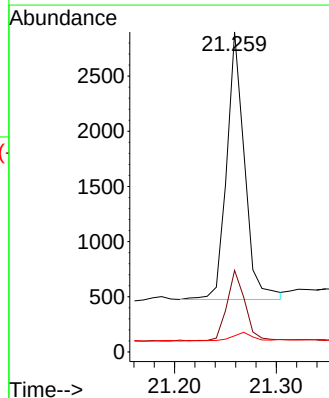
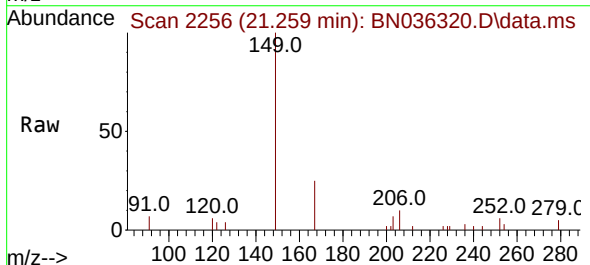
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

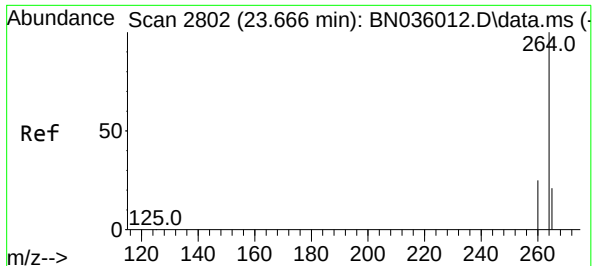
Tgt Ion	Ratio	Lower	Upper
228	100		
226	33.0	25.3	37.9
229	20.6	16.3	24.5



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.392 ng
RT: 21.259 min Scan# 2256
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion	Ratio	Lower	Upper
149	100		
167	27.0	21.9	32.9
279	3.9	3.0	4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.627 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

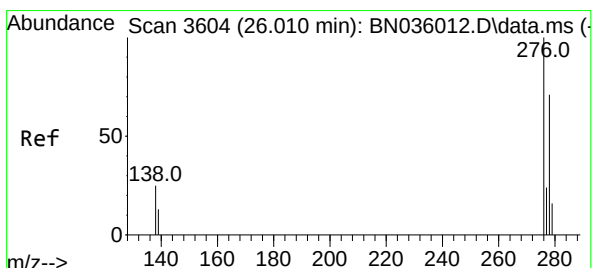
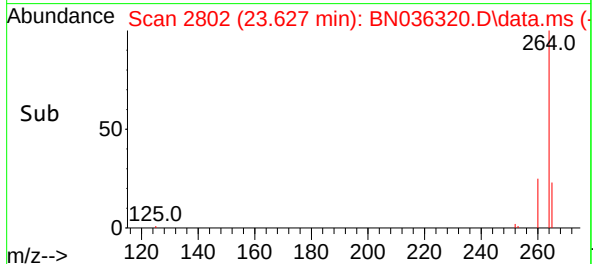
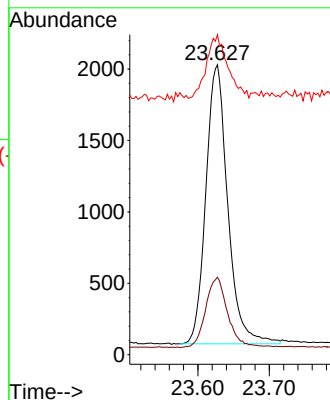
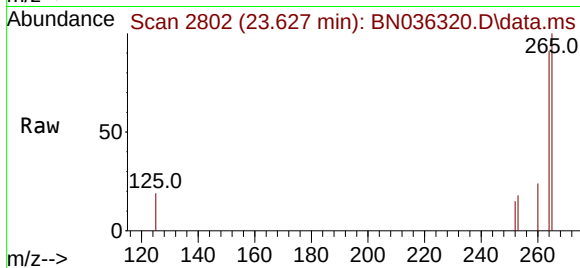
Tgt Ion:264 Resp: 4157

Ion Ratio Lower Upper

264 100

260 26.7 21.8 32.6

265 110.4 56.6 84.8#



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.409 ng

RT: 25.943 min Scan# 3594

Delta R.T. -0.000 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

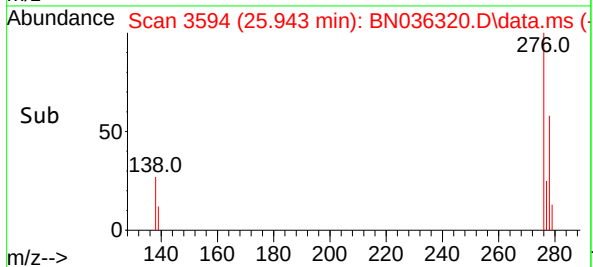
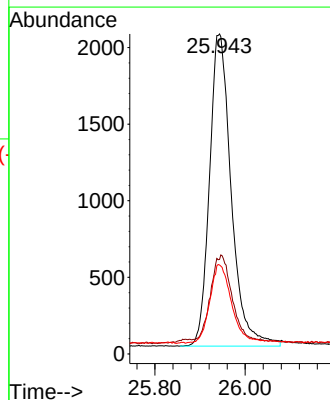
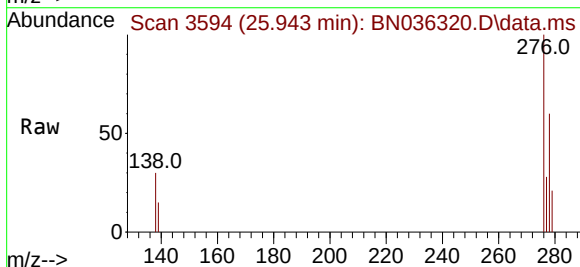
Tgt Ion:276 Resp: 6820

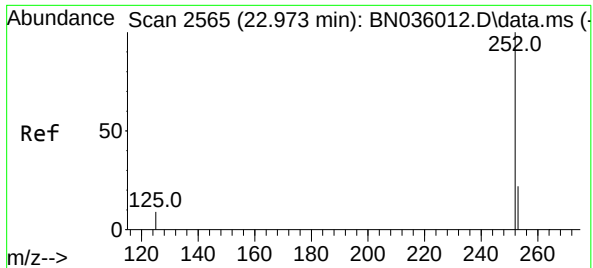
Ion Ratio Lower Upper

276 100

138 26.6 19.9 29.9

277 25.2 19.4 29.2

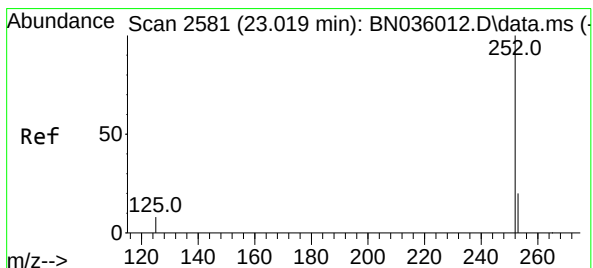
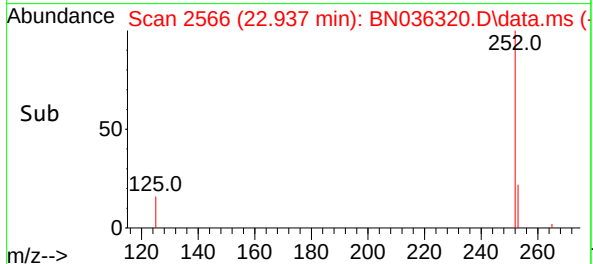
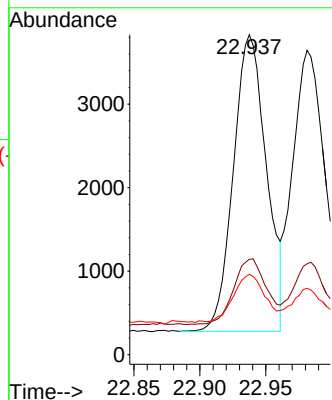
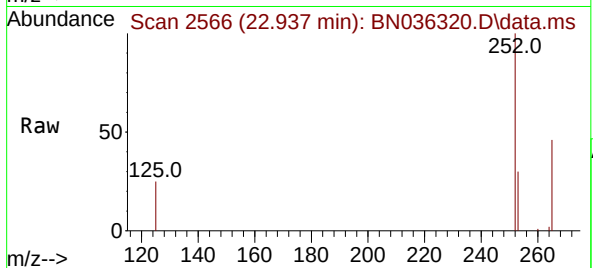




#37
Benzo(b)fluoranthene
Concen: 0.409 ng
RT: 22.937 min Scan# 2566
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

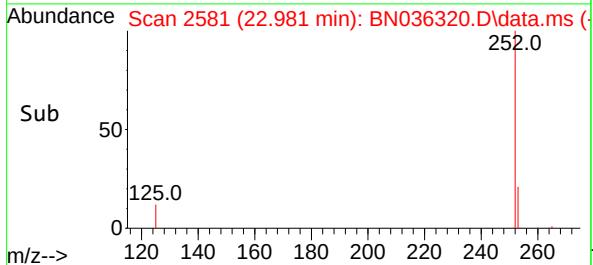
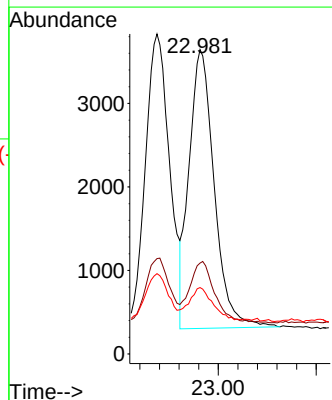
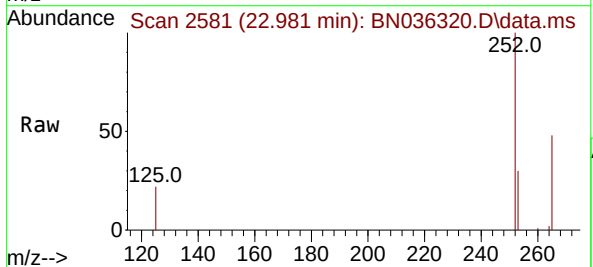
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

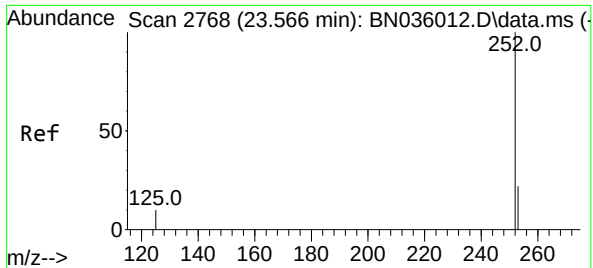
Tgt Ion:252 Resp: 6184
Ion Ratio Lower Upper
252 100
253 29.8 22.5 33.7
125 25.1 11.9 17.9#



#38
Benzo(k)fluoranthene
Concen: 0.391 ng
RT: 22.981 min Scan# 2581
Delta R.T. -0.003 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

Tgt Ion:252 Resp: 5953
Ion Ratio Lower Upper
252 100
253 29.9 21.3 31.9
125 21.8 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.408 ng

RT: 23.525 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

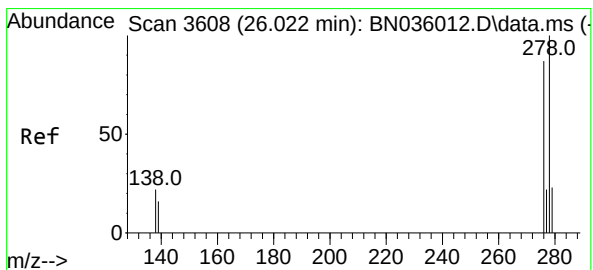
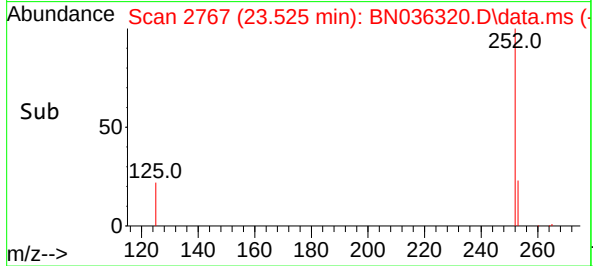
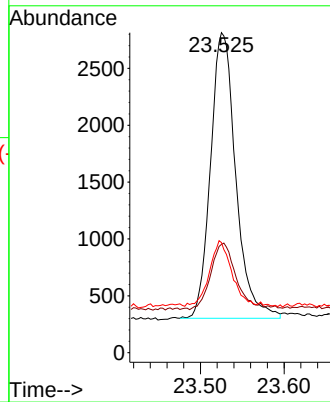
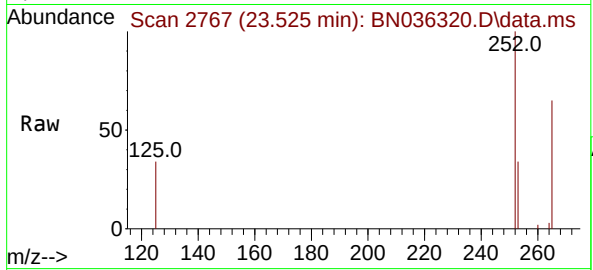
Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:	252	Resp:	5266
Ion Ratio	Lower	Upper	
252	100		
253	33.9	23.8	35.6
125	34.4	14.6	21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.395 ng

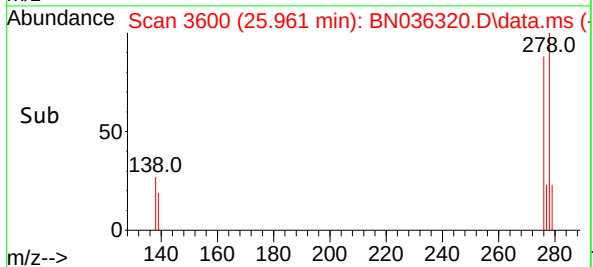
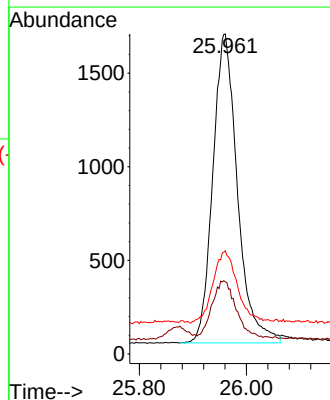
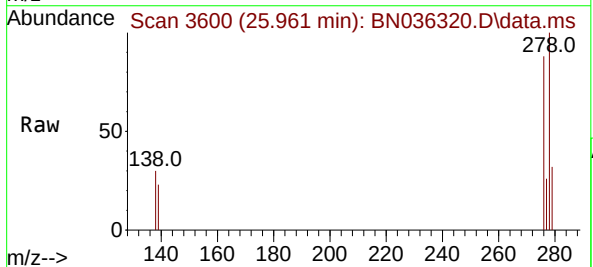
RT: 25.961 min Scan# 3600

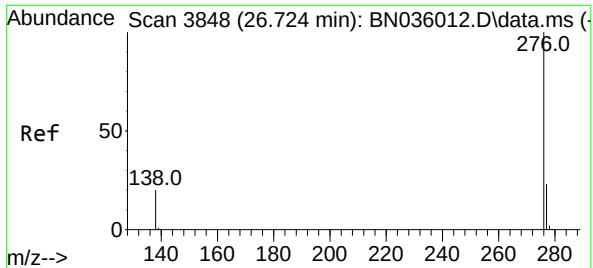
Delta R.T. -0.003 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40

Tgt Ion:	278	Resp:	5258
Ion Ratio	Lower	Upper	
278	100		
139	22.6	16.0	24.0
279	32.2	23.8	35.8





#41

Benzo(g,h,i)perylene

Concen: 0.422 ng

RT: 26.651 min Scan# 3836

Delta R.T. -0.003 min

Lab File: BN036320.D

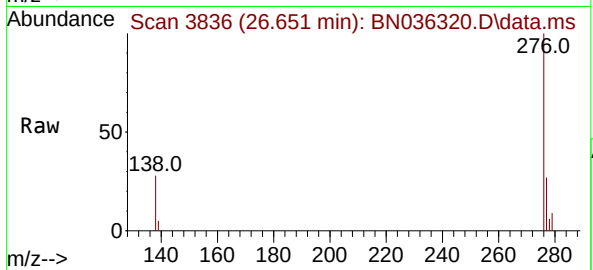
Acq: 06 Feb 2025 05:40

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4



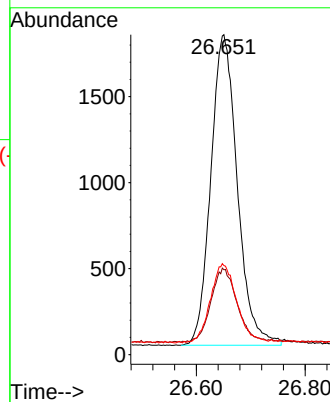
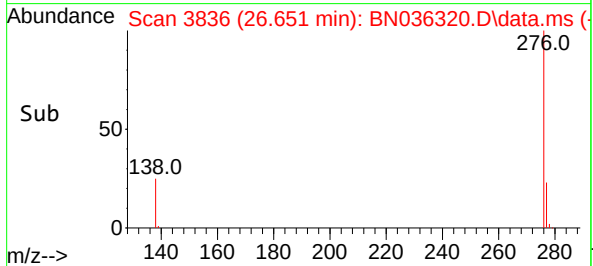
Tgt Ion:276 Resp: 6109

Ion Ratio Lower Upper

276 100

277 26.6 21.3 31.9

138 27.8 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036320.D
 Acq On : 06 Feb 2025 05:40
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 06:02:16 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 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	122	0.00
2	1,4-Dioxane	0.447	0.518	-15.9	135	0.00
3	n-Nitrosodimethylamine	0.811	0.874	-7.8	122	0.00
4 S	2-Fluorophenol	1.040	1.170	-12.5	131	0.00
5 S	Phenol-d6	1.222	1.367	-11.9	132	0.00
6	bis(2-Chloroethyl)ether	0.984	1.190	-20.9	138	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	139	0.00
8 S	Nitrobenzene-d5	0.378	0.417	-10.3	145	-0.01
9	Naphthalene	1.162	1.202	-3.4	133	0.00
10	Hexachlorobutadiene	0.375	0.346	7.7	119	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.575	-5.7	138	0.00
12	2-Methylnaphthalene	0.721	0.743	-3.1	136	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	136	0.00
14 S	2,4,6-Tribromophenol	0.257	0.200	22.2	107	0.00
15 S	2-Fluorobiphenyl	1.786	1.611	9.8	114	0.00
16	Acenaphthylene	1.897	1.902	-0.3	129	0.00
17	Acenaphthene	1.299	1.299	0.0	130	0.00
18	Fluorene	1.627	1.728	-6.2	144	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	137	-0.01
20	4,6-Dinitro-2-methylphenol	0.093	0.044	52.7#	63	0.00
21	4-Bromophenyl-phenylether	0.285	0.269	5.6	120	0.00
22	Hexachlorobenzene	0.375	0.353	5.9	119	0.00
23	Atrazine	0.206	0.188	8.7	118	0.00
24	Pentachlorophenol	0.162	0.137	15.4	115	0.00
25	Phenanthrene	1.202	1.199	0.2	126	0.00
26	Anthracene	1.093	1.069	2.2	127	0.00
27 SURR	Fluoranthene-d10	1.036	1.072	-3.5	132	0.00
28	Fluoranthene	1.412	1.424	-0.8	130	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	134	0.00
30	Pyrene	1.621	1.650	-1.8	130	0.00
31 S	Terphenyl-d14	0.831	0.874	-5.2	134	0.00
32	Benzo(a)anthracene	1.451	1.398	3.7	124	0.00
33	Chrysene	1.483	1.499	-1.1	130	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	0.779	2.0	130	0.00
35 I	Perylene-d12	1.000	1.000	0.0	140	0.00
36	Indeno(1,2,3-cd)pyrene	1.605	1.641	-2.2	141	0.00
37	Benzo(b)fluoranthene	1.454	1.488	-2.3	139	0.00
38	Benzo(k)fluoranthene	1.465	1.432	2.3	135	0.00
39 C	Benzo(a)pyrene	1.242	1.267	-2.0	140	0.00
40	Dibenzo(a,h)anthracene	1.279	1.265	1.1	137	0.00
41	Benzo(g,h,i)perylene	1.394	1.470	-5.5	144	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036320.D
 Acq On : 06 Feb 2025 05:40
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 19 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 06:02:16 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 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	122	0.00
2	1,4-Dioxane	0.400	0.463	-15.8	135	0.00
3	n-Nitrosodimethylamine	0.400	0.431	-7.7	122	0.00
4 S	2-Fluorophenol	0.400	0.450	-12.5	131	0.00
5 S	Phenol-d6	0.400	0.447	-11.7	132	0.00
6	bis(2-Chloroethyl)ether	0.400	0.484	-21.0	138	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	139	0.00
8 S	Nitrobenzene-d5	0.400	0.442	-10.5	145	-0.01
9	Naphthalene	0.400	0.414	-3.5	133	0.00
10	Hexachlorobutadiene	0.400	0.369	7.8	119	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.423	-5.7	138	0.00
12	2-Methylnaphthalene	0.400	0.412	-3.0	136	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	136	0.00
14 S	2,4,6-Tribromophenol	0.400	0.312	22.0	107	0.00
15 S	2-Fluorobiphenyl	0.400	0.361	9.8	114	0.00
16	Acenaphthylene	0.400	0.401	-0.3	129	0.00
17	Acenaphthene	0.400	0.400	0.0	130	0.00
18	Fluorene	0.400	0.425	-6.2	144	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	137	-0.01
20	4,6-Dinitro-2-methylphenol	0.400	0.187	53.3#	63	0.00
21	4-Bromophenyl-phenylether	0.400	0.378	5.5	120	0.00
22	Hexachlorobenzene	0.400	0.377	5.8	119	0.00
23	Atrazine	0.400	0.365	8.8	118	0.00
24	Pentachlorophenol	0.400	0.338	15.5	115	0.00
25	Phenanthrene	0.400	0.399	0.3	126	0.00
26	Anthracene	0.400	0.391	2.3	127	0.00
27 SURR	Fluoranthene-d10	0.400	0.414	-3.5	132	0.00
28	Fluoranthene	0.400	0.404	-1.0	130	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	134	0.00
30	Pyrene	0.400	0.407	-1.7	130	0.00
31 S	Terphenyl-d14	0.400	0.421	-5.2	134	0.00
32	Benzo(a)anthracene	0.400	0.385	3.8	124	0.00
33	Chrysene	0.400	0.404	-1.0	130	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.392	2.0	130	0.00
35 I	Perylene-d12	0.400	0.400	0.0	140	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.409	-2.2	141	0.00
37	Benzo(b)fluoranthene	0.400	0.409	-2.2	139	0.00
38	Benzo(k)fluoranthene	0.400	0.391	2.3	135	0.00
39 C	Benzo(a)pyrene	0.400	0.408	-2.0	140	0.00
40	Dibenzo(a,h)anthracene	0.400	0.395	1.3	137	0.00
41	Benzo(g,h,i)perylene	0.400	0.422	-5.5	144	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



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.: Q1225 SAS No.: Q1225 SDG No.: Q1225

Instrument ID: BNA_N Calibration Date/Time: 02/06/2025 12:54

Lab File ID: BN036332.D Init. Calib. Date(s): 01/22/2025 01/22/2025

EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:02 14:36

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.570		4.8	50.0
Fluoranthene-d10	1.036	1.077		4.0	50.0
2-Fluorophenol	1.040	1.162		11.7	50.0
Phenol-d6	1.222	1.293		5.8	50.0
Nitrobenzene-d5	0.378	0.409		8.2	50.0
2-Fluorobiphenyl	1.786	1.549		-13.3	50.0
2,4,6-Tribromophenol	0.257	0.188		-26.8	50.0
Terphenyl-d14	0.831	0.868		4.5	50.0
1,4-Dioxane	0.447	0.486		8.7	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036332.D
 Acq On : 06 Feb 2025 12:54
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 31 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

Quant Time: Feb 06 13:54:45 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

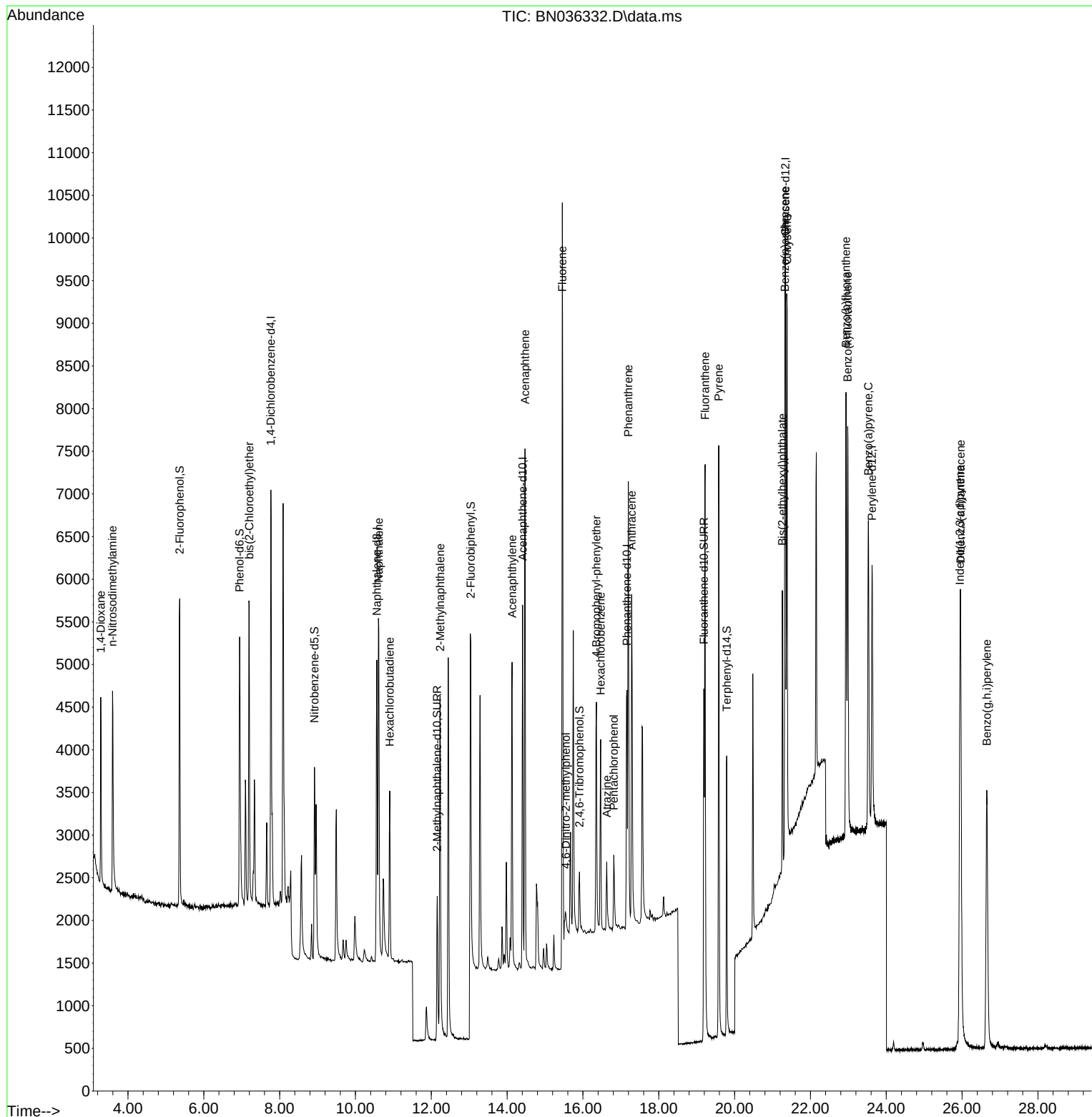
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.768	152	2400	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	5097	0.400	ng	0.00
13) Acenaphthene-d10	14.409	164	2512	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4814	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	4257	0.400	ng	# 0.00
35) Perylene-d12	23.625	264	4600	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2789	0.447	ng	0.00
5) Phenol-d6	6.944	99	3102	0.423	ng	0.00
8) Nitrobenzene-d5	8.918	82	2083	0.433	ng	-0.01
11) 2-Methylnaphthalene-d10	12.156	152	2904	0.419	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	471	0.292	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3891	0.347	ng	0.00
27) Fluoranthene-d10	19.187	212	5187	0.416	ng	0.00
31) Terphenyl-d14	19.791	244	3696	0.418	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.283	88	1166	0.435	ng	Qvalue 98
3) n-Nitrosodimethylamine	3.593	42	1891	0.389	ng	84
6) bis(2-Chloroethyl)ether	7.197	93	2795	0.474	ng	98
9) Naphthalene	10.616	128	6143	0.415	ng	98
10) Hexachlorobutadiene	10.904	225	1711	0.358	ng	# 99
12) 2-Methylnaphthalene	12.233	142	3613	0.393	ng	97
16) Acenaphthylene	14.131	152	4598	0.386	ng	99
17) Acenaphthene	14.473	154	3194	0.392	ng	98
18) Fluorene	15.457	166	4176	0.409	ng	99
20) 4,6-Dinitro-2-methylph...	15.547	198	220	0.196	ng	# 36
21) 4-Bromophenyl-phenylether	16.354	248	1293	0.377	ng	95
22) Hexachlorobenzene	16.466	284	1707	0.378	ng	98
23) Atrazine	16.627	200	885	0.357	ng	99
24) Pentachlorophenol	16.813	266	588	0.301	ng	99
25) Phenanthrene	17.198	178	5871	0.406	ng	98
26) Anthracene	17.285	178	5174	0.393	ng	99
28) Fluoranthene	19.220	202	6819	0.401	ng	# 98
30) Pyrene	19.582	202	7000	0.406	ng	100
32) Benzo(a)anthracene	21.331	228	5830	0.378	ng	99
33) Chrysene	21.384	228	6425	0.407	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	3081	0.364	ng	# 100
36) Indeno(1,2,3-cd)pyrene	25.946	276	7256	0.393	ng	98
37) Benzo(b)fluoranthene	22.937	252	6592	0.394	ng	# 90
38) Benzo(k)fluoranthene	22.984	252	6425	0.381	ng	# 91
39) Benzo(a)pyrene	23.528	252	5684	0.398	ng	# 84
40) Dibenzo(a,h)anthracene	25.961	278	5614	0.382	ng	95
41) Benzo(g,h,i)perylene	26.651	276	6609	0.412	ng	96

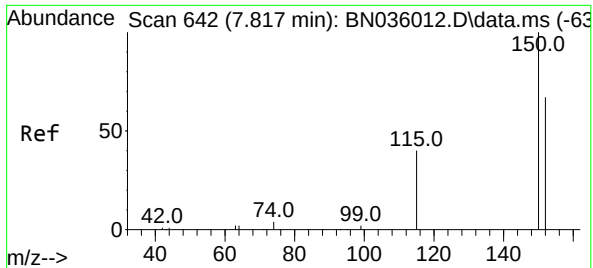
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036332.D
Acq On : 06 Feb 2025 12:54
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Feb 06 13:54:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

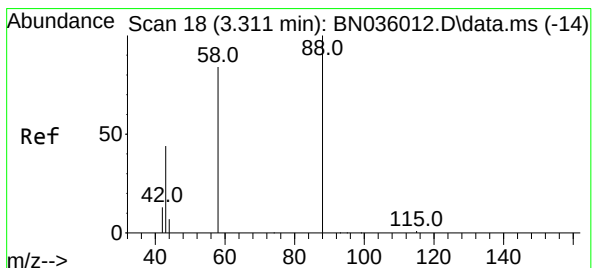
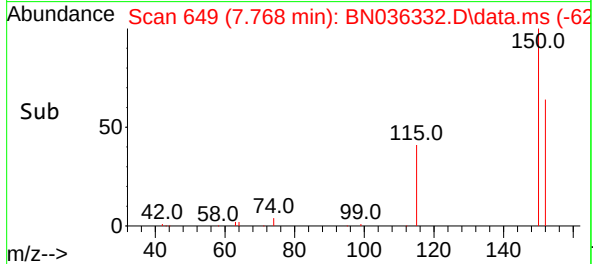
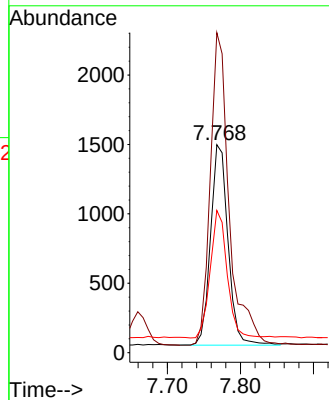
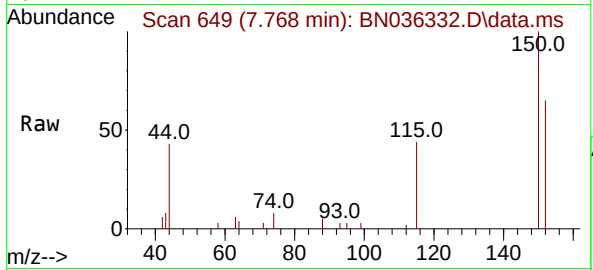




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.768 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

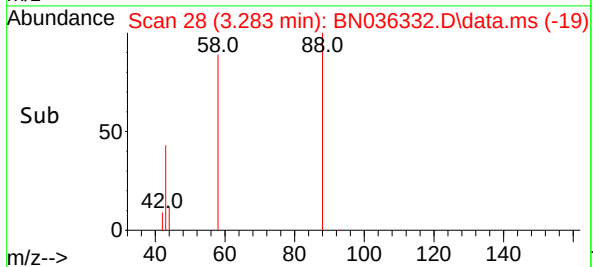
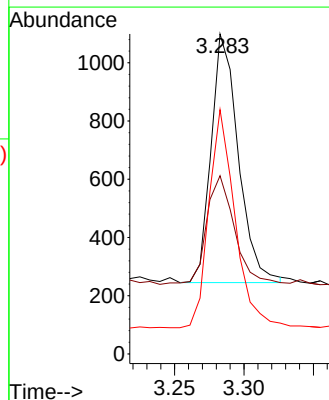
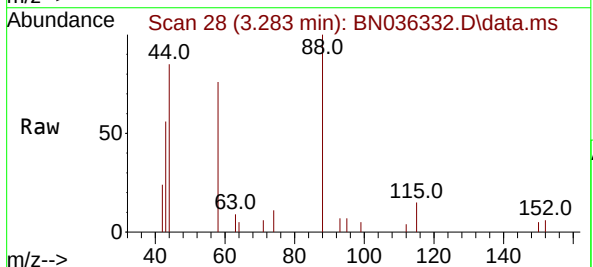
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2400
Ion Ratio Lower Upper
152 100
150 153.9 117.4 176.2
115 68.4 51.0 76.4

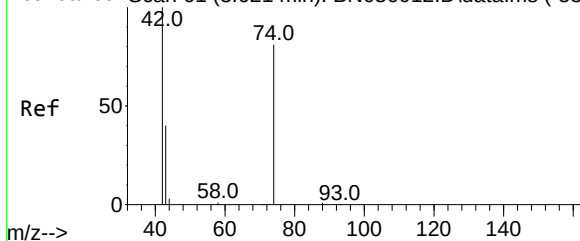


#2
1,4-Dioxane
Concen: 0.435 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion: 88 Resp: 1166
Ion Ratio Lower Upper
88 100
43 44.8 38.5 57.7
58 84.1 66.6 99.8



Abundance Scan 61 (3.621 min): BN036012.D\data.ms (-53)



#3

n-Nitrosodimethylamine

Concen: 0.389 ng

RT: 3.593 min Scan# 71

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1891

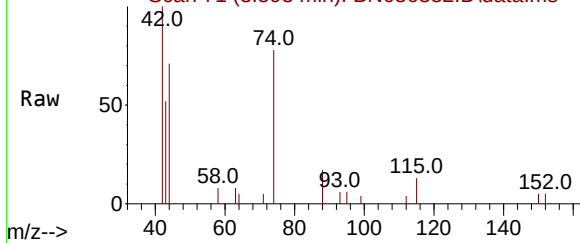
Ion Ratio Lower Upper

42 100

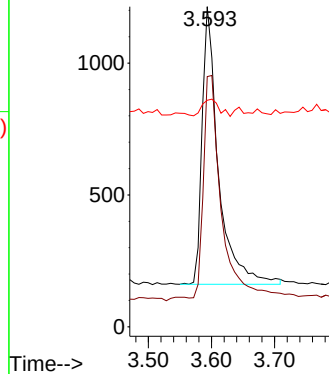
74 87.0 58.1 87.1

44 6.3 6.2 9.4

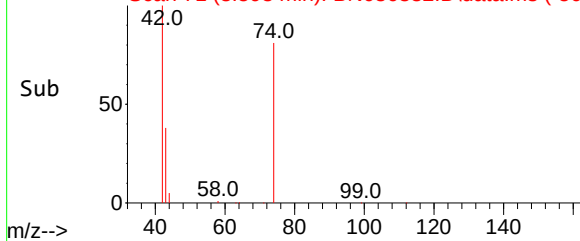
Abundance Scan 71 (3.593 min): BN036332.D\data.ms



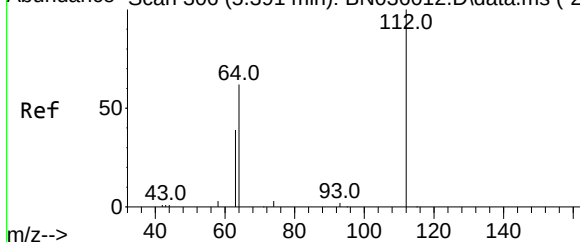
Abundance



Abundance Scan 71 (3.593 min): BN036332.D\data.ms (-50)



Abundance Scan 306 (5.391 min): BN036012.D\data.ms (-29)



#4

2-Fluorophenol

Concen: 0.447 ng

RT: 5.363 min Scan# 316

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Tgt Ion: 112 Resp: 2789

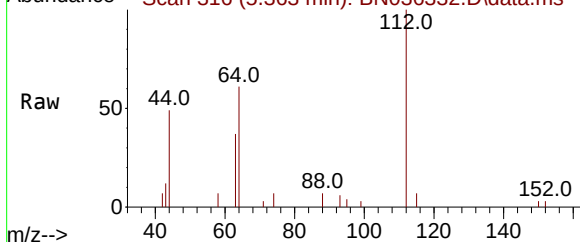
Ion Ratio Lower Upper

112 100

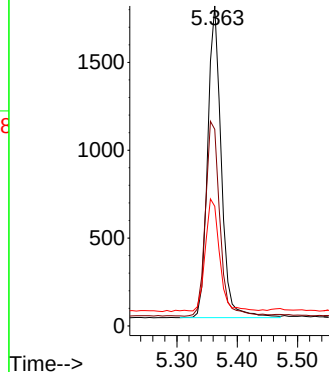
64 66.2 50.0 75.0

63 37.0 30.7 46.1

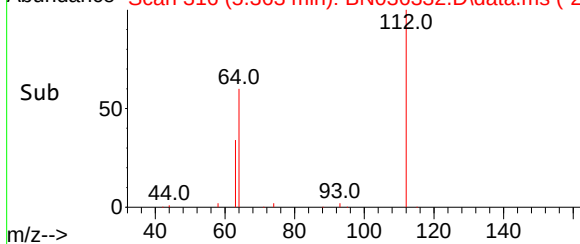
Abundance Scan 316 (5.363 min): BN036332.D\data.ms

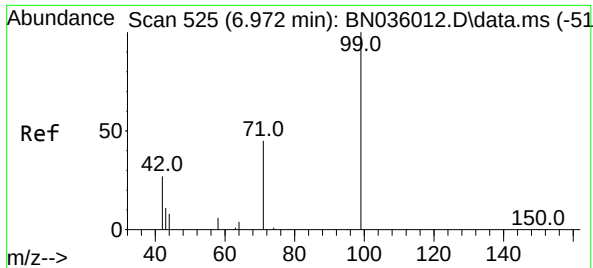


Abundance



Abundance Scan 316 (5.363 min): BN036332.D\data.ms (-28)

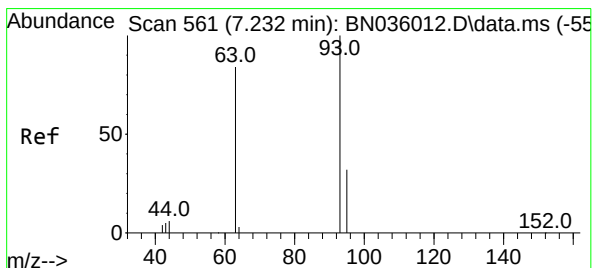
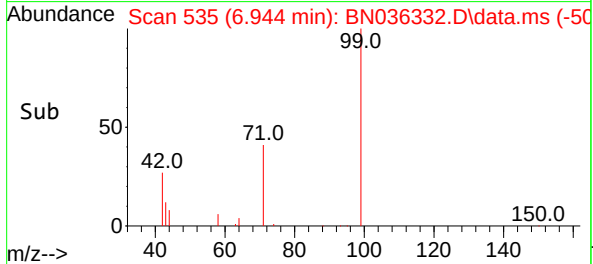
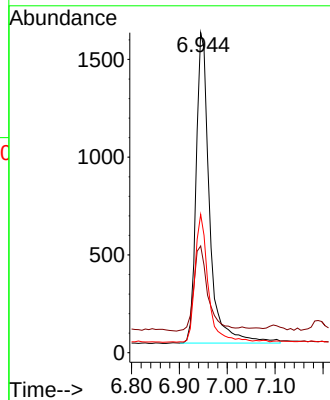
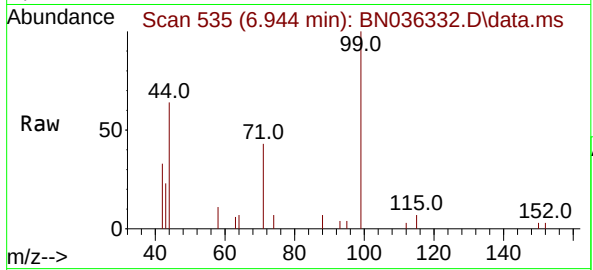




#5
Phenol-d6
Concen: 0.423 ng
RT: 6.944 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

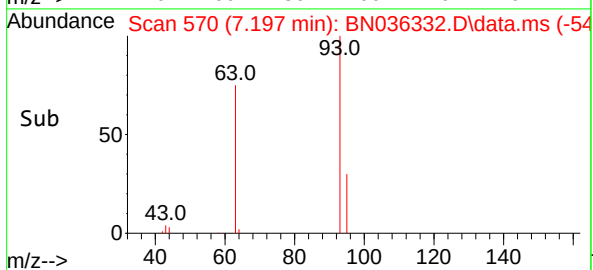
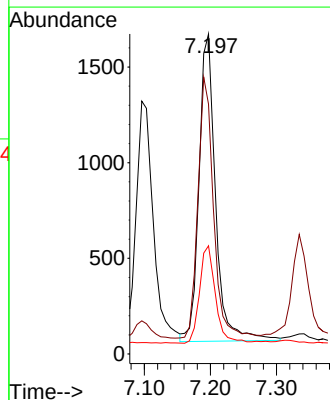
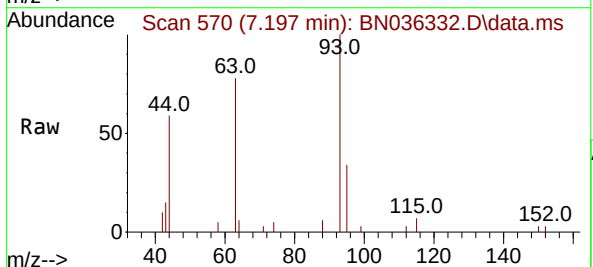
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

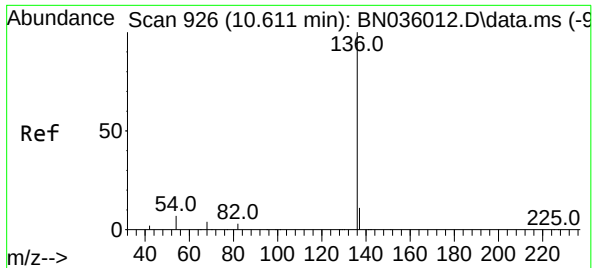
Tgt Ion: 99 Resp: 3102
Ion Ratio Lower Upper
99 100
42 28.9 26.8 40.2
71 40.3 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.474 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion: 93 Resp: 2795
Ion Ratio Lower Upper
93 100
63 80.4 65.8 98.6
95 30.6 25.8 38.6

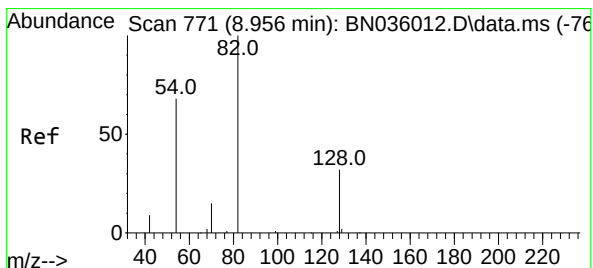
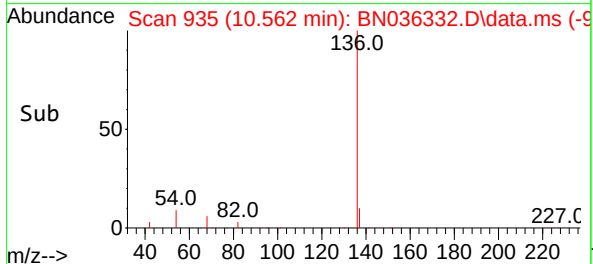
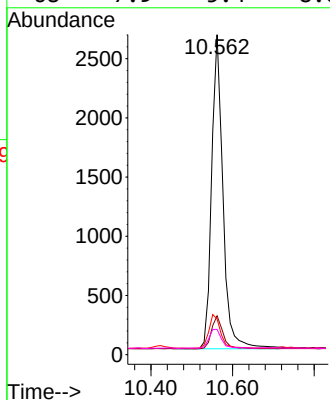
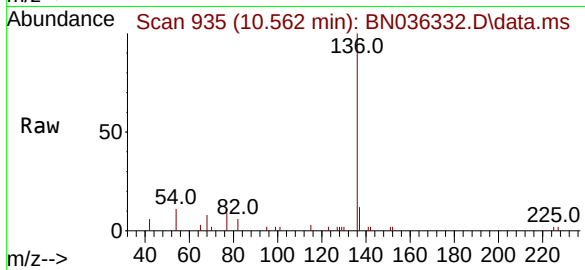




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

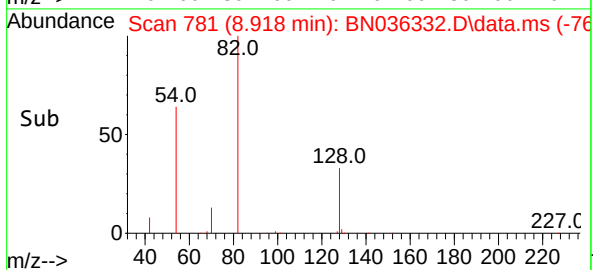
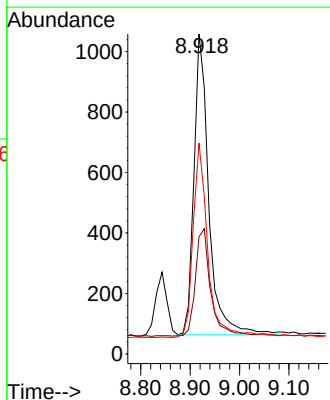
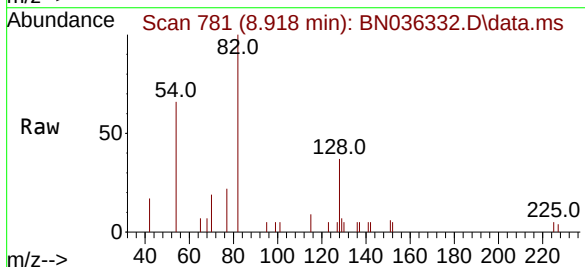
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

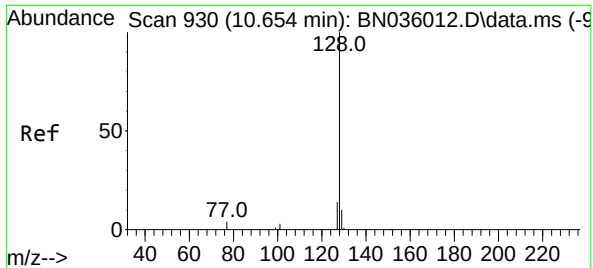
Tgt Ion:	136	Resp:	5097
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.4	15.6
54	11.2	7.7	11.5
68	7.9	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.433 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:	82	Resp:	2083
Ion	Ratio	Lower	Upper
82	100		
128	36.6	28.8	43.2
54	65.9	55.8	83.8

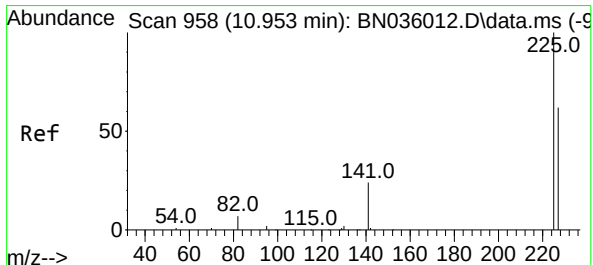
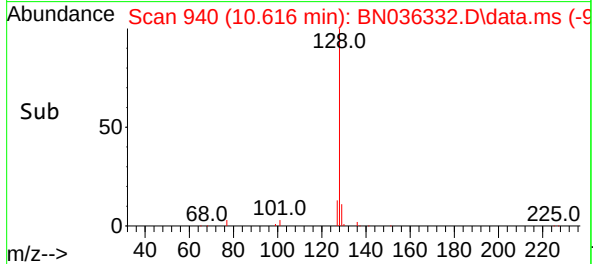
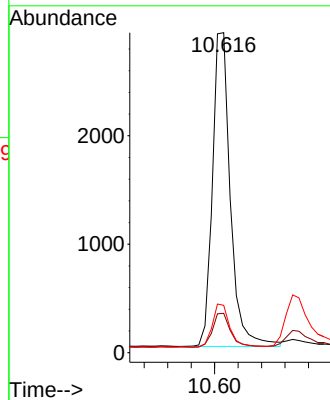
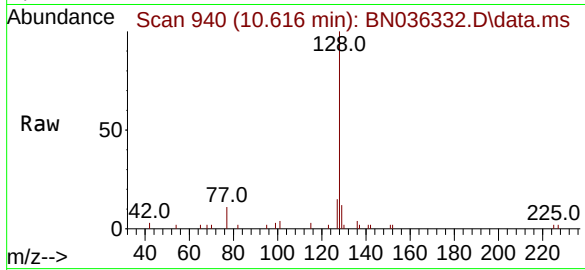




#9
Naphthalene
Concen: 0.415 ng
RT: 10.616 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

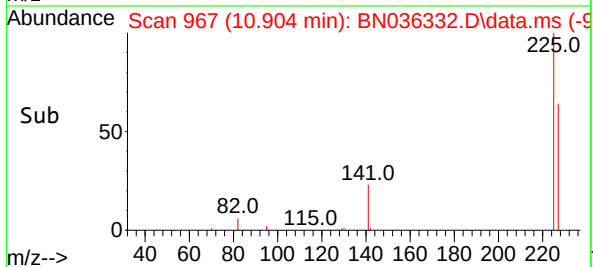
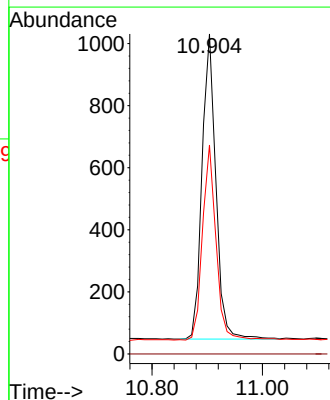
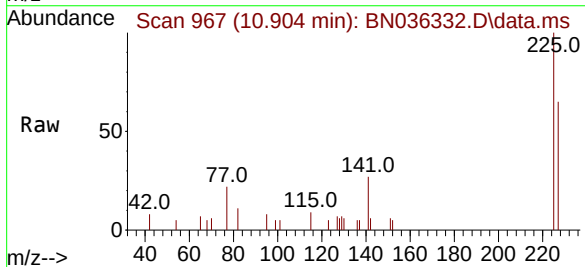
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

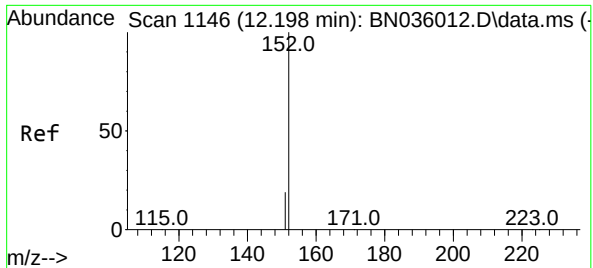
Tgt Ion:	128	Resp:	6143
Ion	Ratio	Lower	Upper
128	100		
129	12.3	9.4	14.2
127	14.8	12.6	19.0



#10
Hexachlorobutadiene
Concen: 0.358 ng
RT: 10.904 min Scan# 967
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:	225	Resp:	1711
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.1	51.0	76.6

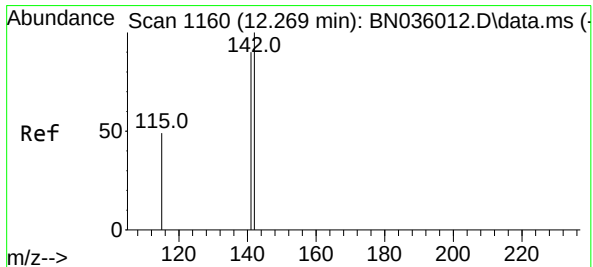
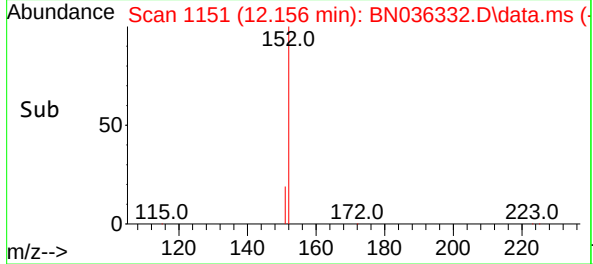
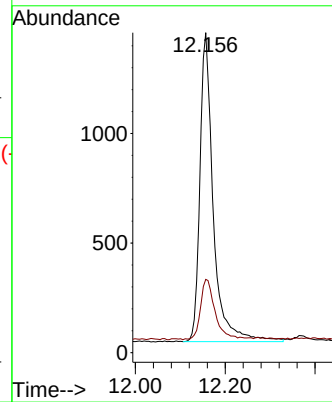
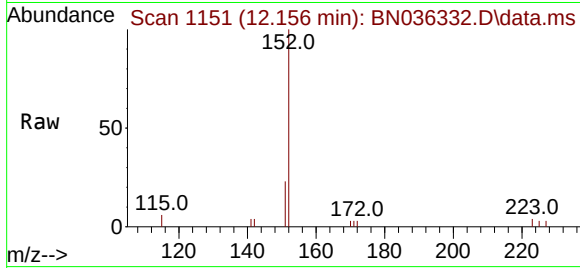




#11
2-Methylnaphthalene-d10
Concen: 0.419 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

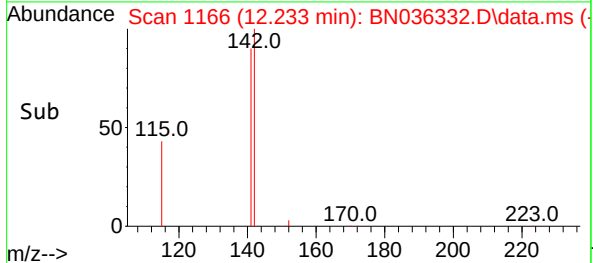
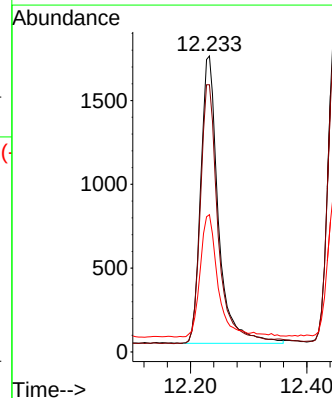
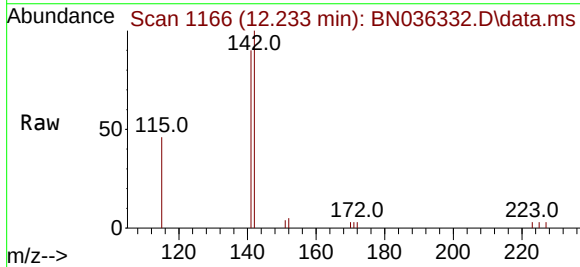
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

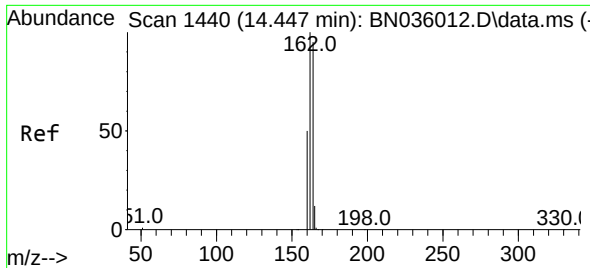
Tgt Ion:152 Resp: 2904
Ion Ratio Lower Upper
152 100
151 21.6 16.6 25.0



#12
2-Methylnaphthalene
Concen: 0.393 ng
RT: 12.233 min Scan# 1166
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:142 Resp: 3613
Ion Ratio Lower Upper
142 100
141 90.3 72.2 108.2
115 46.4 41.2 61.8

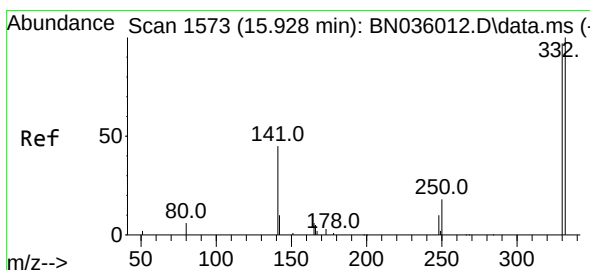
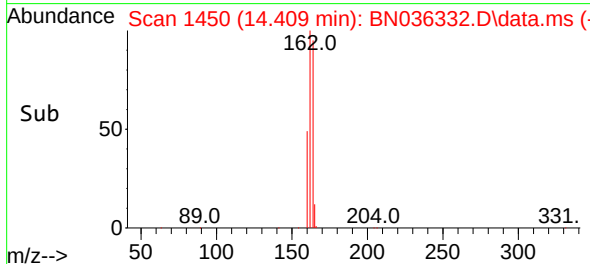
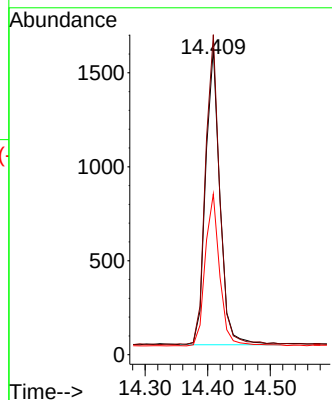
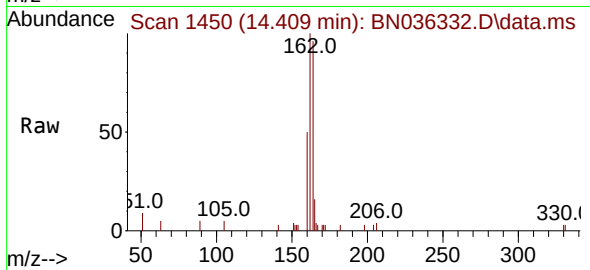




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

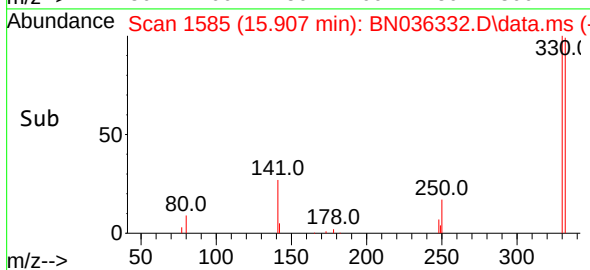
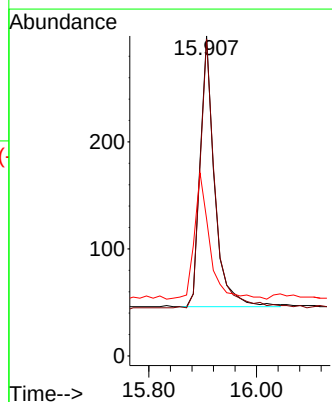
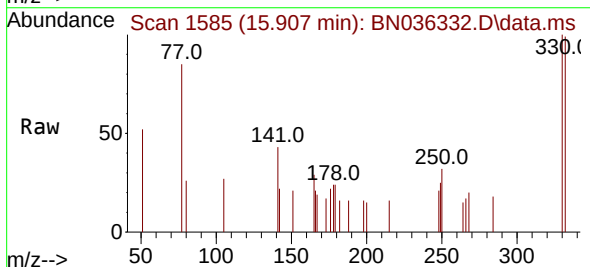
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

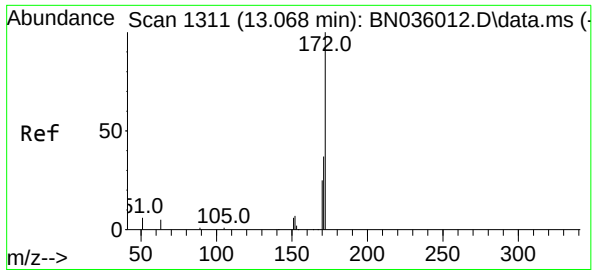
Tgt Ion:164 Resp: 2512
Ion Ratio Lower Upper
164 100
162 104.4 84.1 126.1
160 52.4 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.292 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:330 Resp: 471
Ion Ratio Lower Upper
330 100
332 101.5 81.0 121.4
141 49.5 36.7 55.1

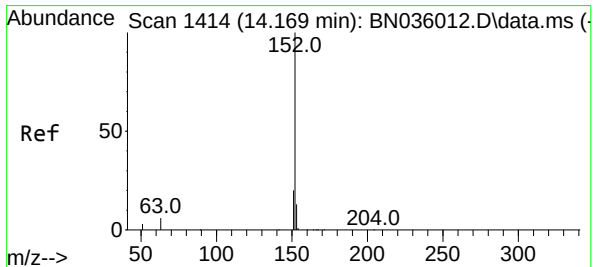
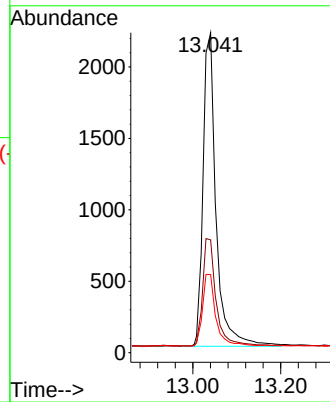
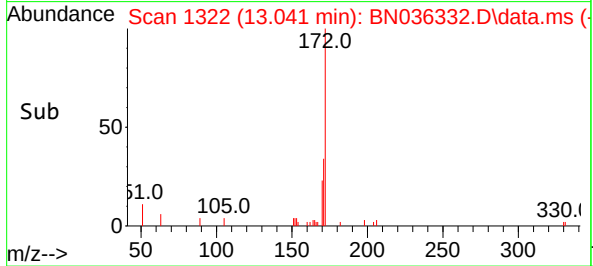
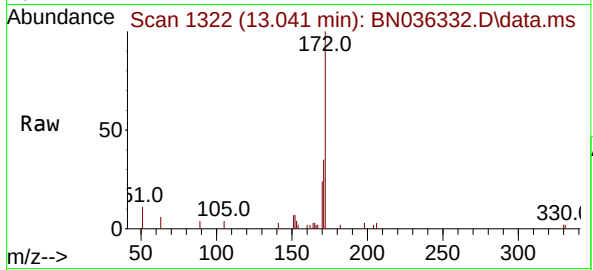




#15
2-Fluorobiphenyl
Concen: 0.347 ng
RT: 13.041 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

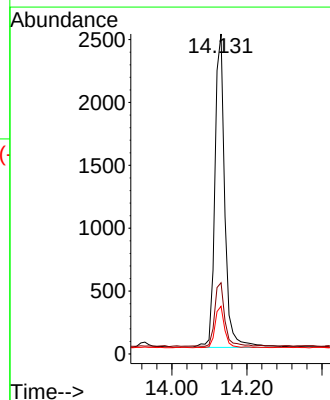
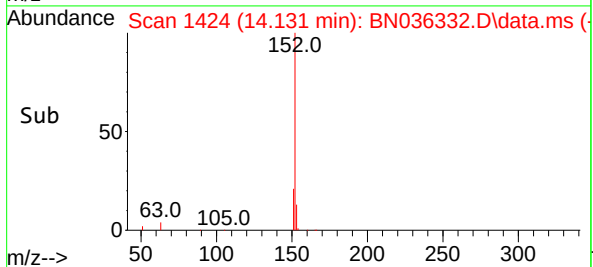
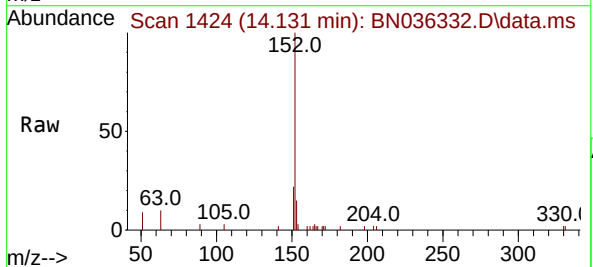
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

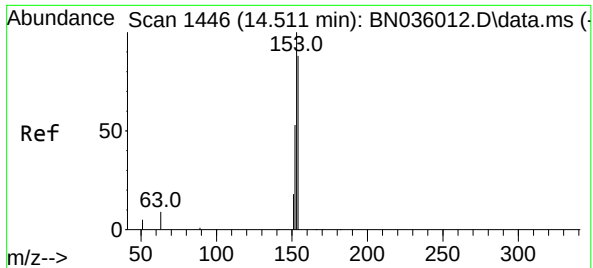
Tgt Ion:	172	Resp:	3891
Ion Ratio	Lower	Upper	
172	100		
171	35.3	30.9	46.3
170	24.4	21.2	31.8



#16
Acenaphthylene
Concen: 0.386 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:	152	Resp:	4598
Ion Ratio	Lower	Upper	
152	100		
151	20.6	16.2	24.2
153	13.0	10.4	15.6

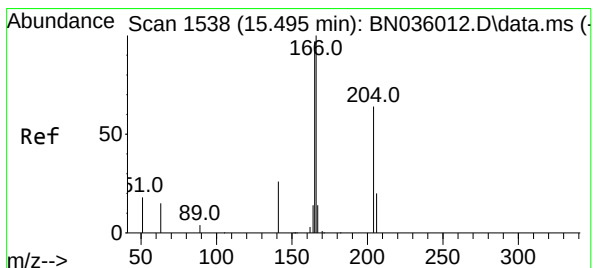
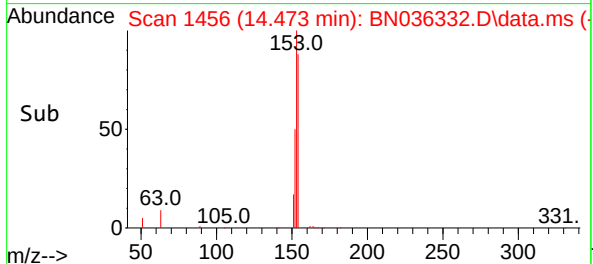
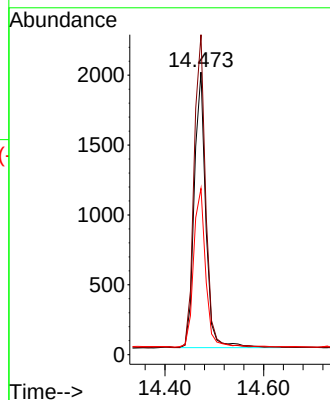
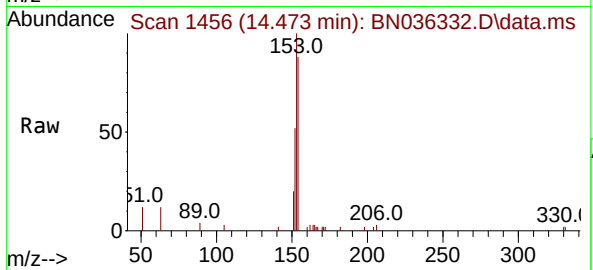




#17
Acenaphthene
Concen: 0.392 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

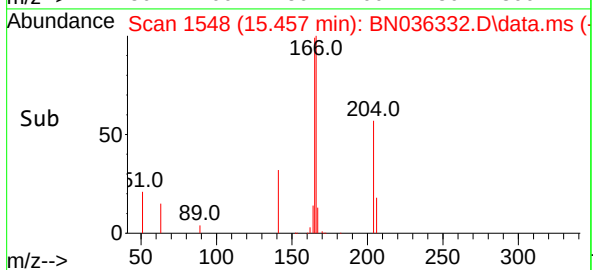
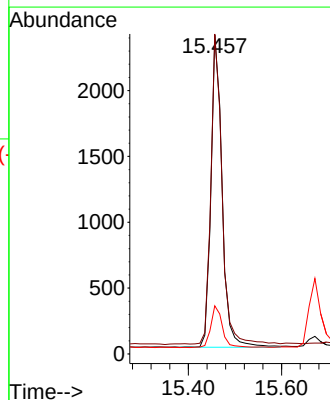
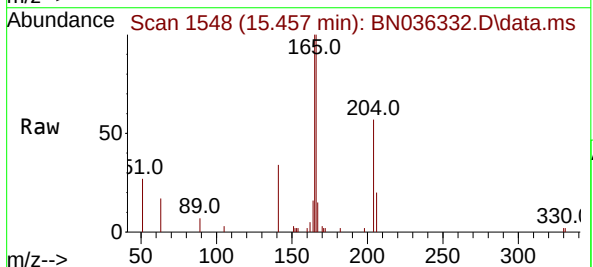
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

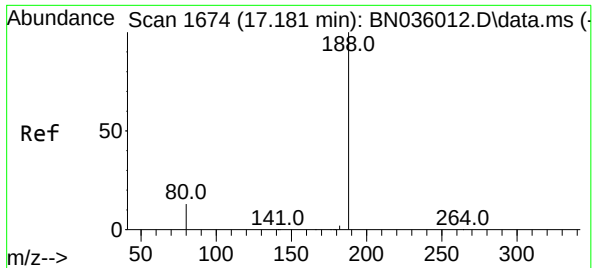
Tgt Ion:154 Resp: 3194
Ion Ratio Lower Upper
154 100
153 114.7 88.9 133.3
152 60.0 48.1 72.1



#18
Fluorene
Concen: 0.409 ng
RT: 15.457 min Scan# 1548
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:166 Resp: 4176
Ion Ratio Lower Upper
166 100
165 99.4 78.5 117.7
167 14.1 10.7 16.1

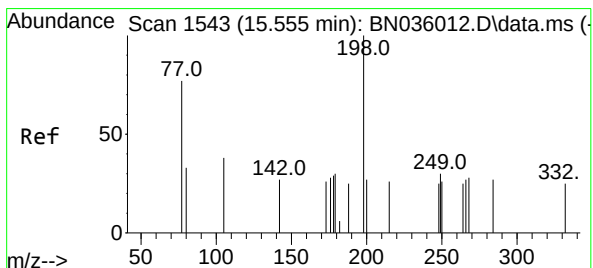
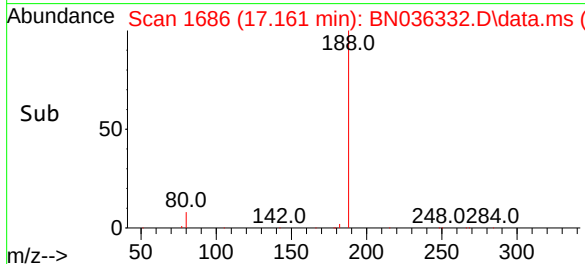
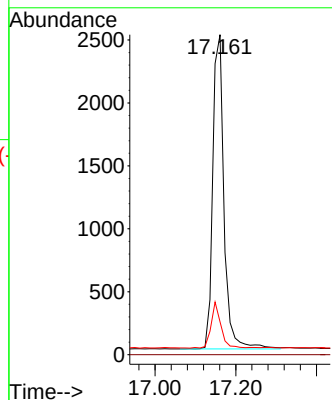
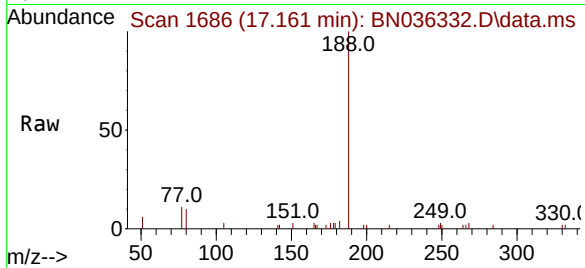




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

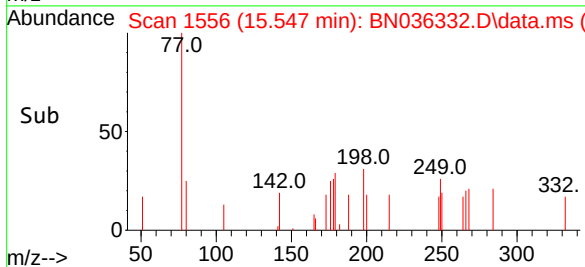
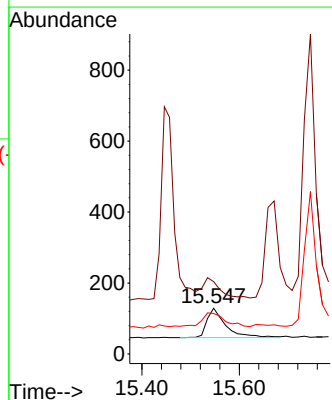
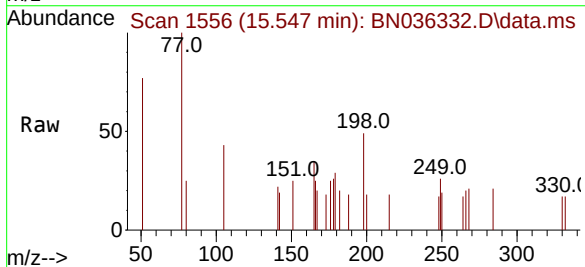
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

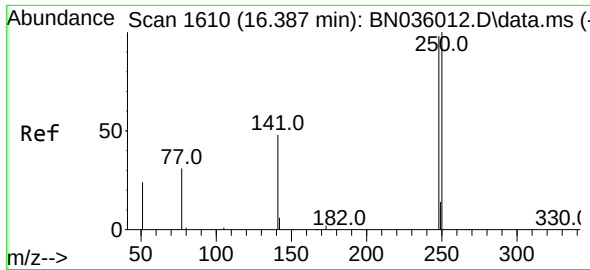
Tgt Ion:188 Resp: 4814
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.3 12.3 18.5#



#20
4,6-Dinitro-2-methylphenol
Concen: 0.196 ng
RT: 15.547 min Scan# 1556
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:198 Resp: 220
Ion Ratio Lower Upper
198 100
51 158.1 68.1 102.1#
105 88.4 46.5 69.7#

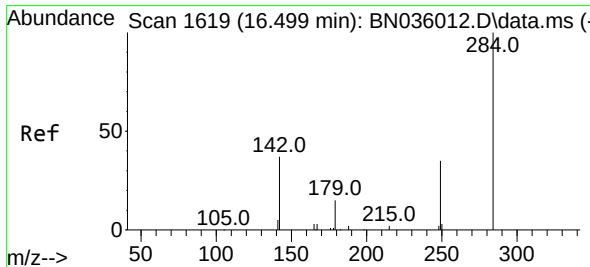
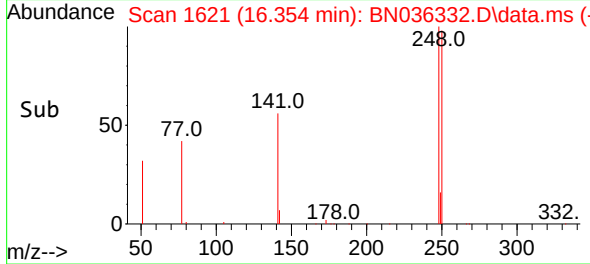
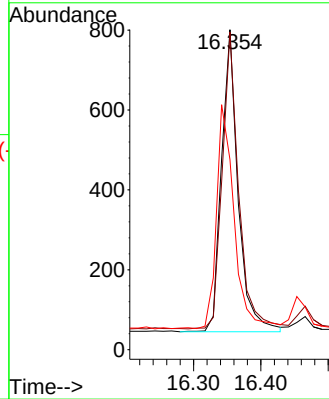
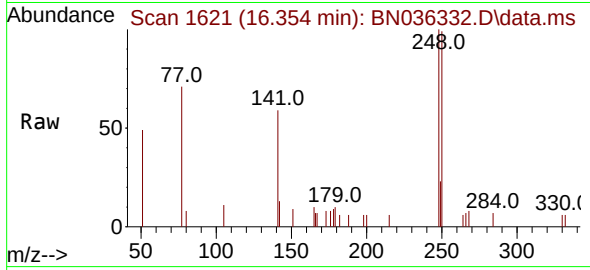




#21
4-Bromophenyl-phenylether
Concen: 0.377 ng
RT: 16.354 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

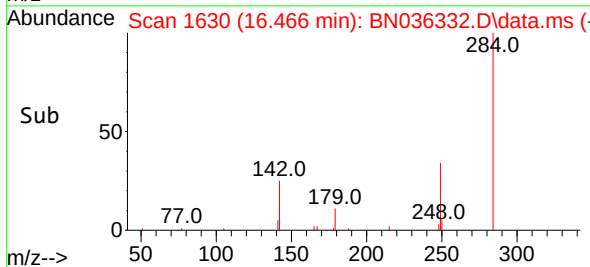
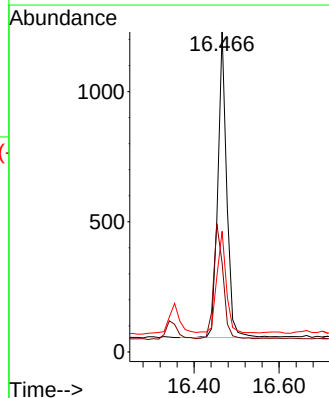
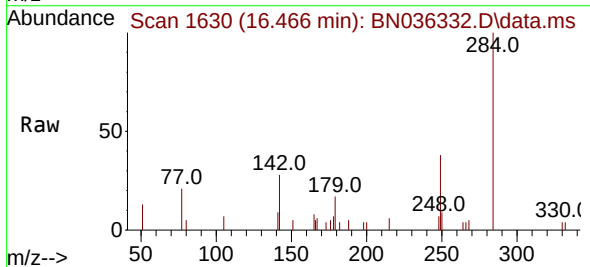
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

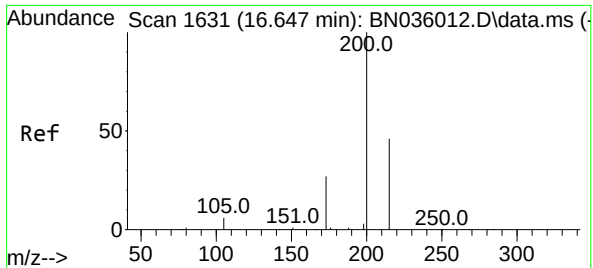
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.3	81.5	122.3
141	59.4	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.378 ng
RT: 16.466 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion	Ratio	Lower	Upper
284	100		
142	40.5	33.6	50.4
249	35.4	28.8	43.2

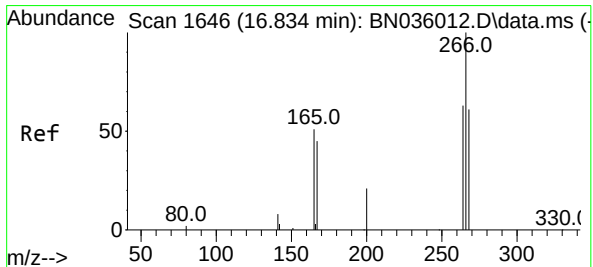
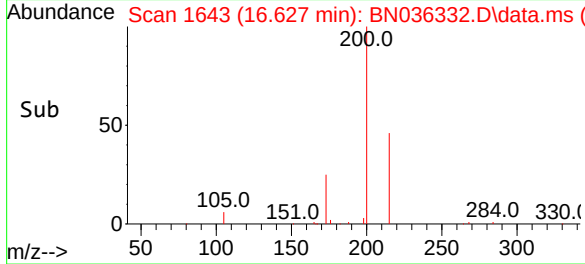
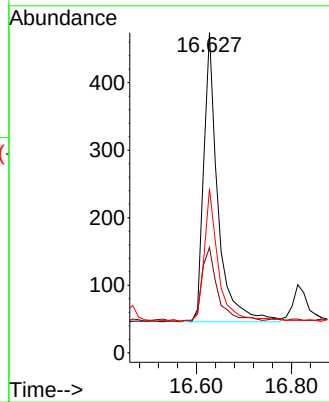
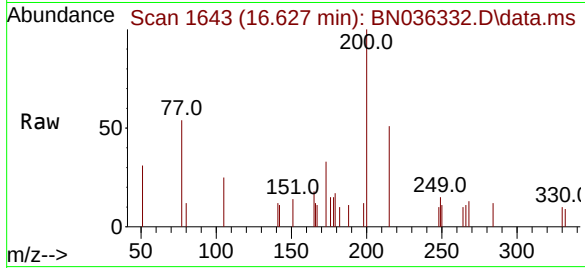




#23
Atrazine
Concen: 0.357 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

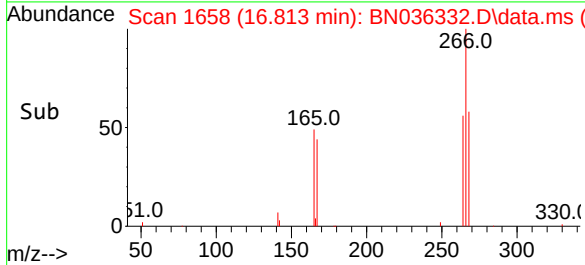
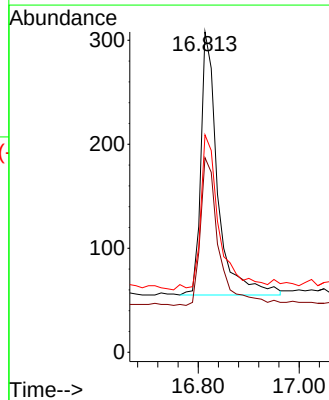
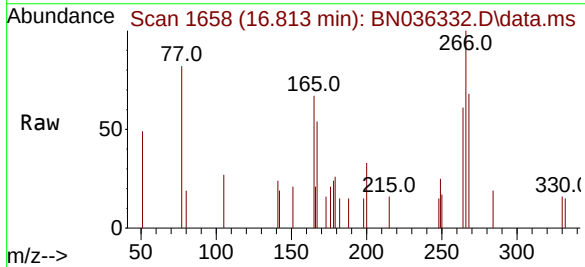
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

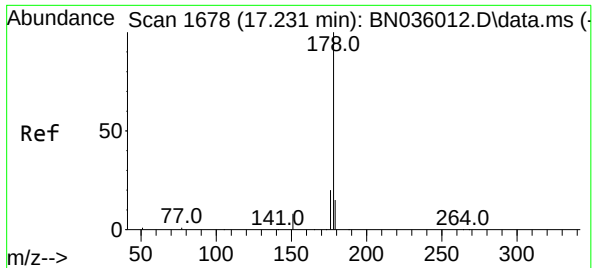
Tgt Ion:	200	Resp:	885
Ion Ratio	Lower	Upper	
200	100		
173	32.9	26.6	40.0
215	51.3	40.6	61.0



#24
Pentachlorophenol
Concen: 0.301 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:	266	Resp:	588
Ion Ratio	Lower	Upper	
266	100		
264	61.6	48.2	72.2
268	65.0	51.6	77.4

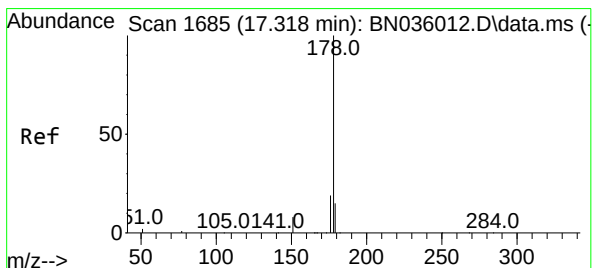
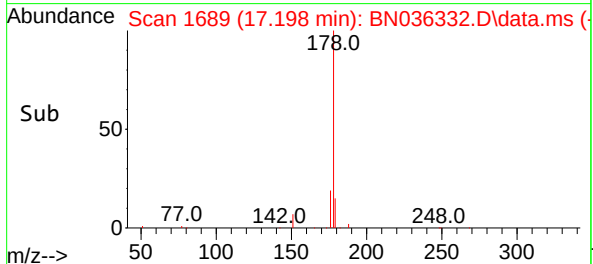
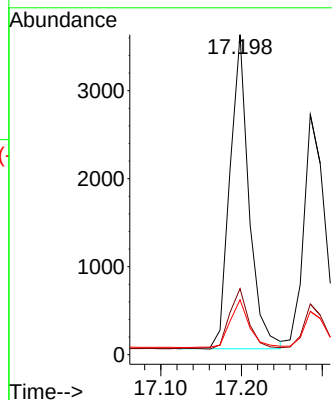
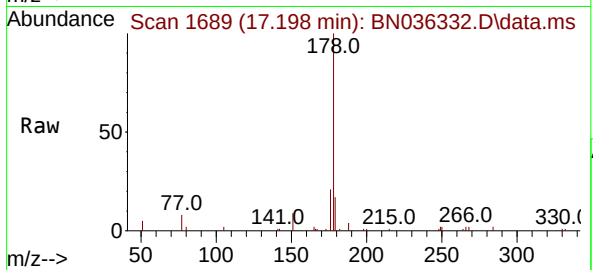




#25
Phenanthrene
Concen: 0.406 ng
RT: 17.198 min Scan# 1689
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

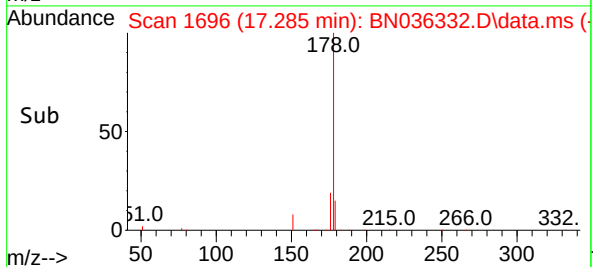
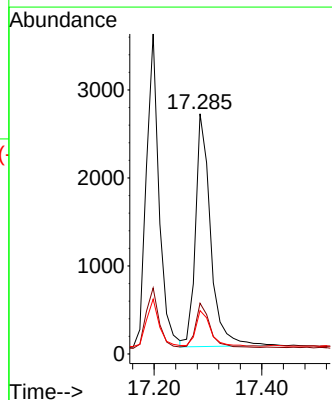
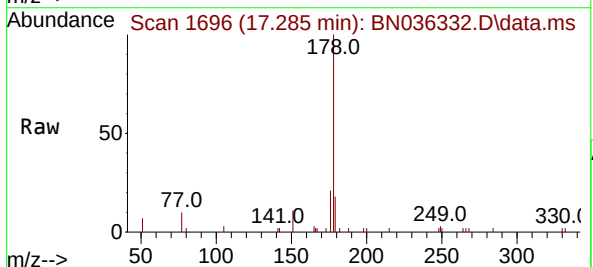
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

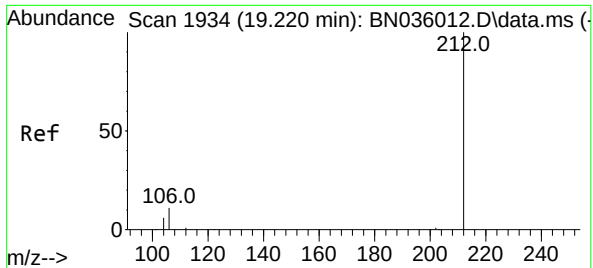
Tgt Ion:178 Resp: 5871
Ion Ratio Lower Upper
178 100
176 18.9 16.0 24.0
179 15.2 12.4 18.6



#26
Anthracene
Concen: 0.393 ng
RT: 17.285 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:178 Resp: 5174
Ion Ratio Lower Upper
178 100
176 18.3 15.4 23.2
179 15.2 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.416 ng

RT: 19.187 min Scan# 1940

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

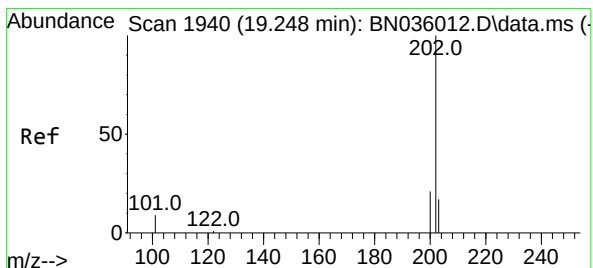
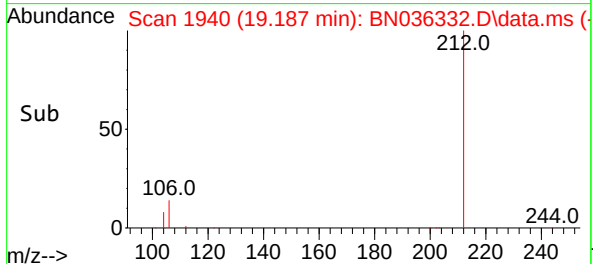
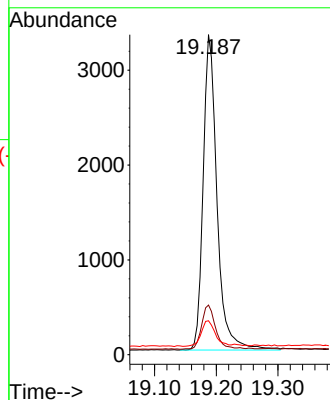
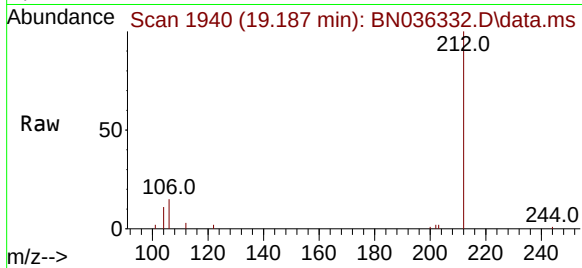
Tgt Ion:212 Resp: 5187

Ion Ratio Lower Upper

212 100

106 14.1 9.7 14.5

104 8.3 6.0 9.0



#28

Fluoranthene

Concen: 0.401 ng

RT: 19.220 min Scan# 1947

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

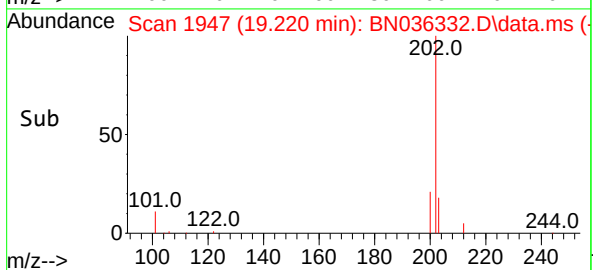
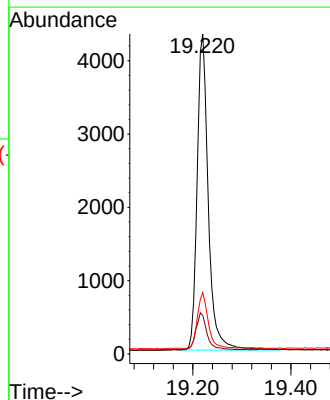
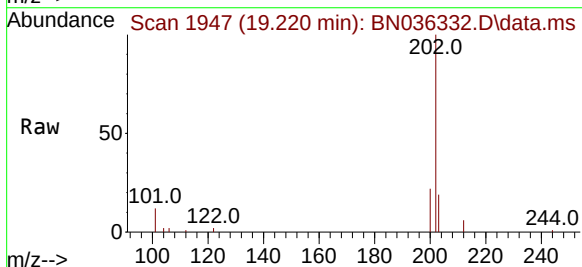
Tgt Ion:202 Resp: 6819

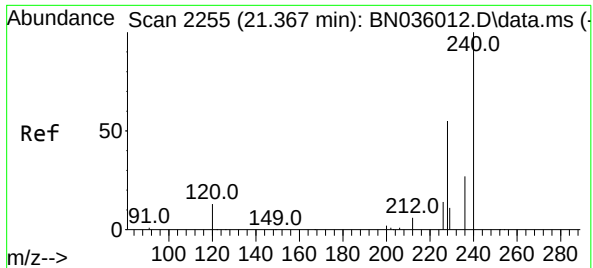
Ion Ratio Lower Upper

202 100

101 11.6 7.6 11.4#

203 16.9 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

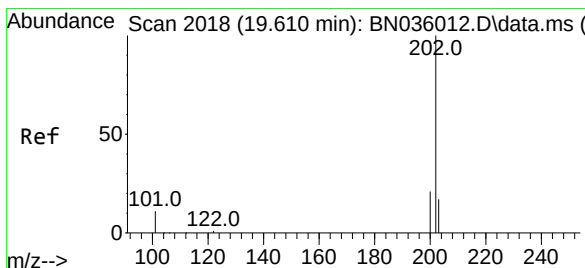
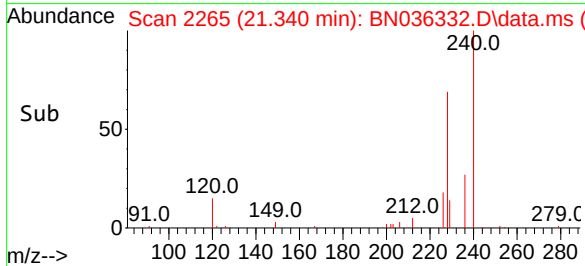
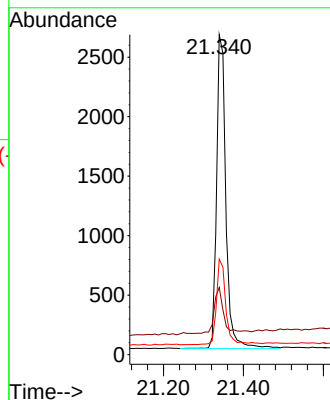
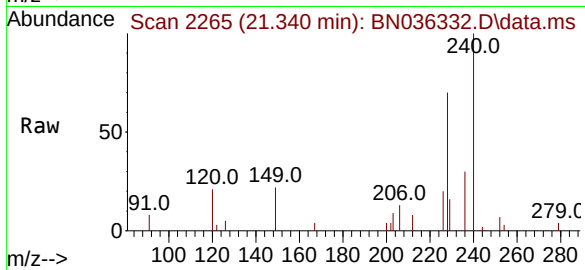
Tgt Ion:240 Resp: 4257

Ion Ratio Lower Upper

240 100

120 21.0 13.9 20.9#

236 29.9 23.7 35.5



#30

Pyrene

Concen: 0.406 ng

RT: 19.582 min Scan# 2025

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

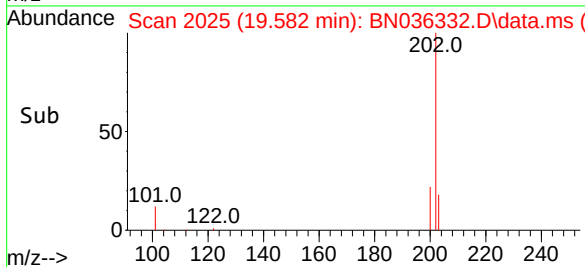
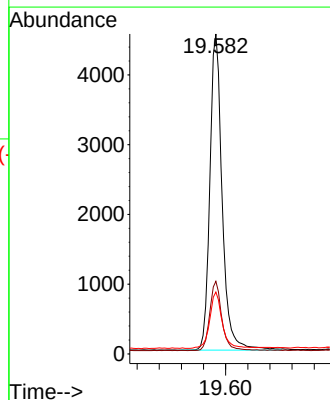
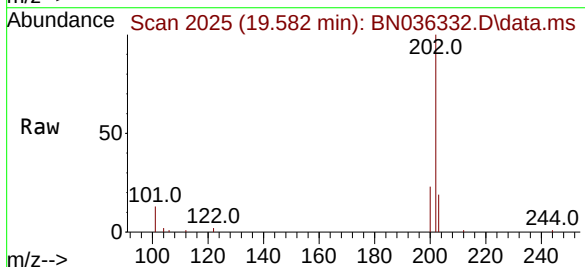
Tgt Ion:202 Resp: 7000

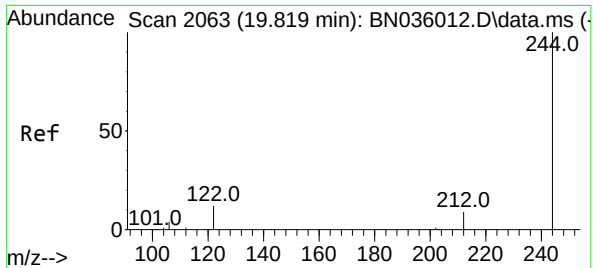
Ion Ratio Lower Upper

202 100

200 21.5 17.0 25.4

203 18.1 14.4 21.6

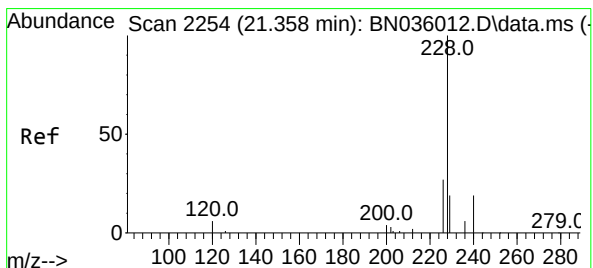
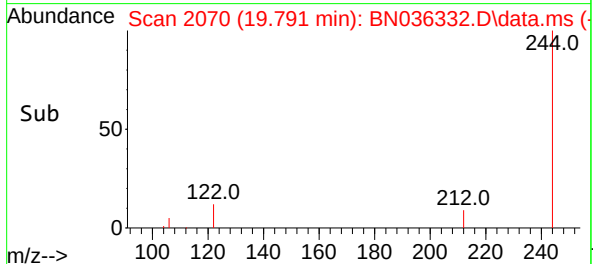
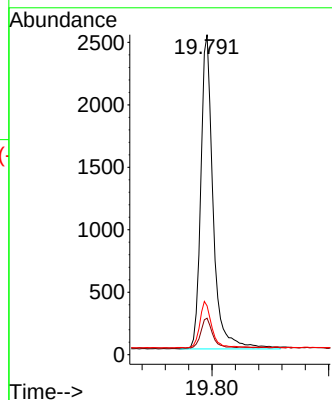
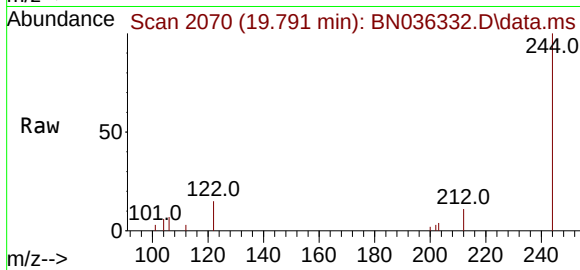




#31
Terphenyl-d14
Concen: 0.418 ng
RT: 19.791 min Scan# 2063
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

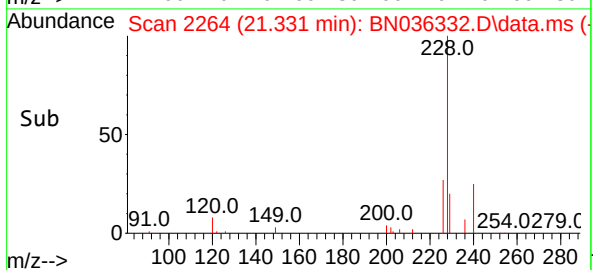
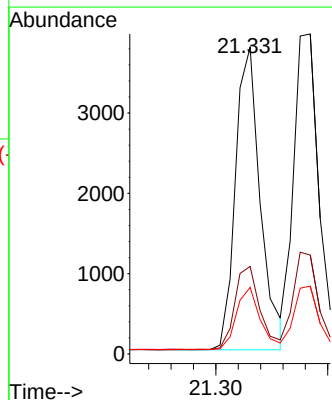
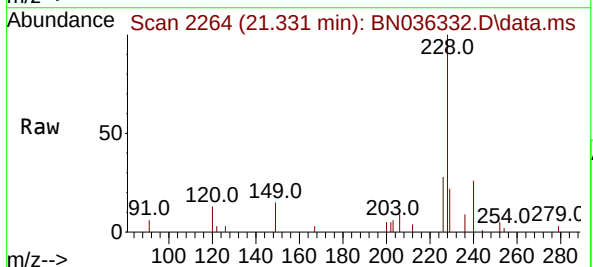
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

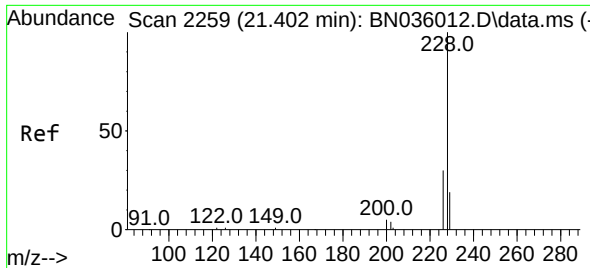
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.4	9.1	13.7
122	15.2	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.378 ng
RT: 21.331 min Scan# 2264
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.5	22.6	34.0
229	21.7	16.5	24.7





#33

Chrysene

Concen: 0.407 ng

RT: 21.384 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

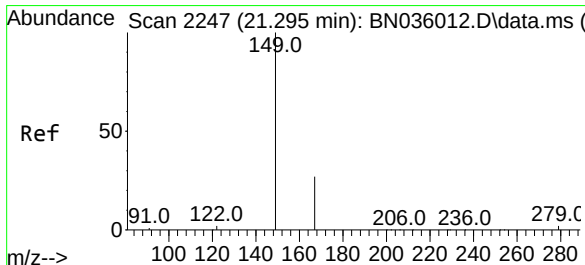
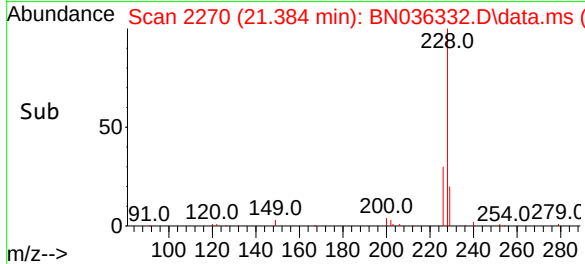
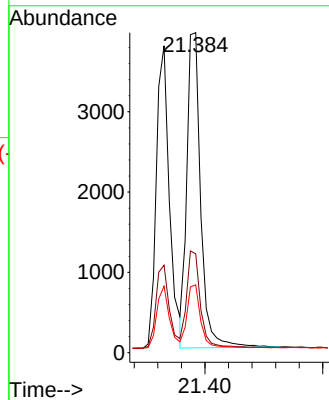
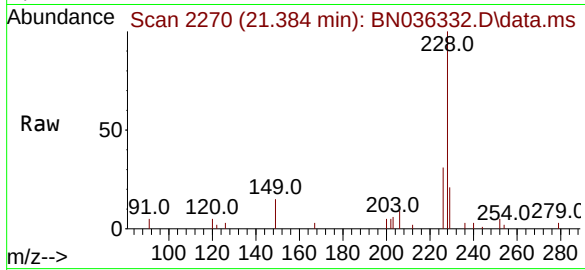
Tgt Ion:228 Resp: 6425

Ion Ratio Lower Upper

228 100

226 30.9 25.3 37.9

229 21.2 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.364 ng

RT: 21.259 min Scan# 2256

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

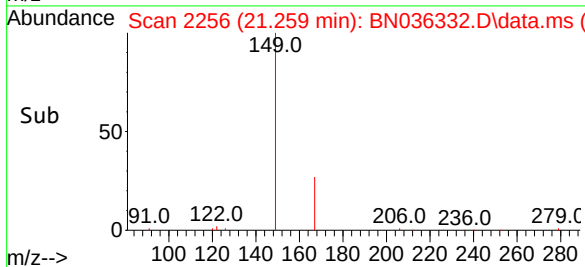
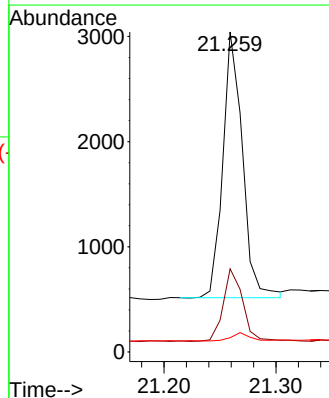
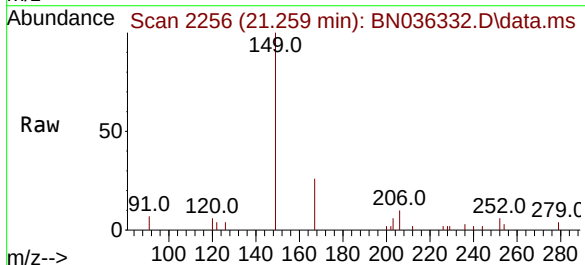
Tgt Ion:149 Resp: 3081

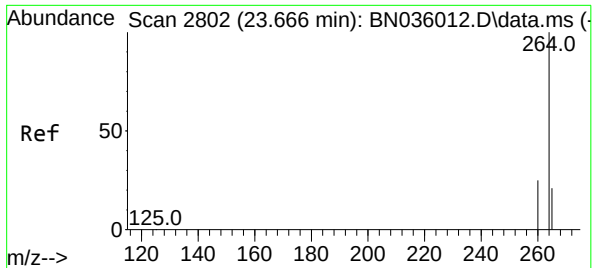
Ion Ratio Lower Upper

149 100

167 27.4 21.9 32.9

279 2.9 3.0 4.6#

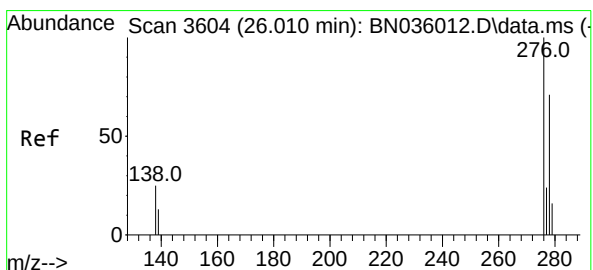
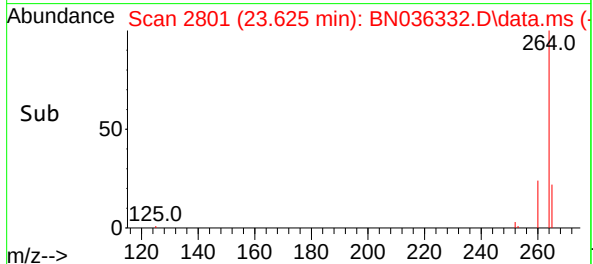
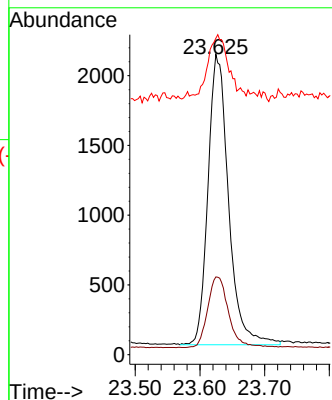
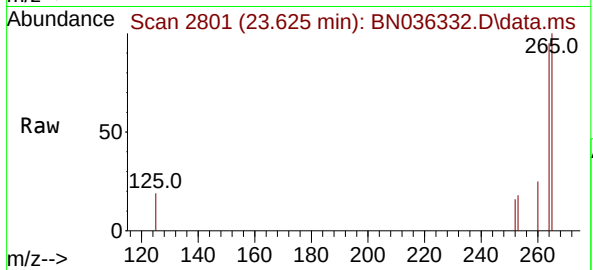




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.625 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

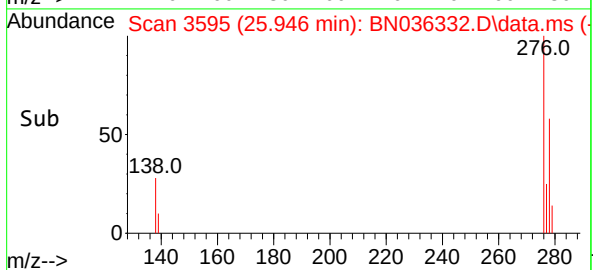
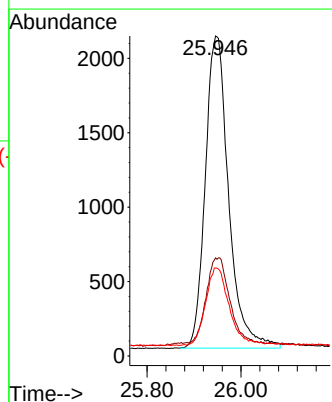
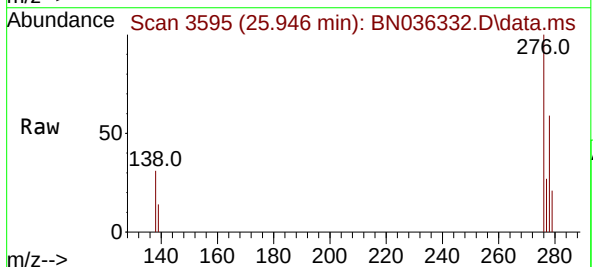
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

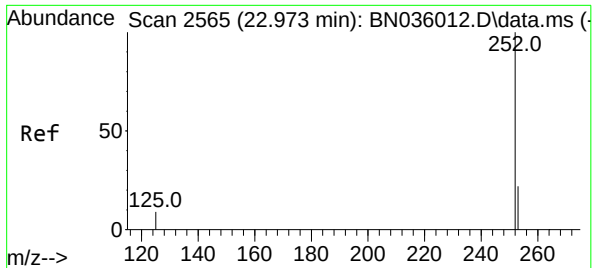
Tgt Ion:264 Resp: 4600
Ion Ratio Lower Upper
264 100
260 25.9 21.8 32.6
265 105.3 56.6 84.8#



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.393 ng
RT: 25.946 min Scan# 3595
Delta R.T. 0.003 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:276 Resp: 7256
Ion Ratio Lower Upper
276 100
138 26.7 19.9 29.9
277 24.9 19.4 29.2

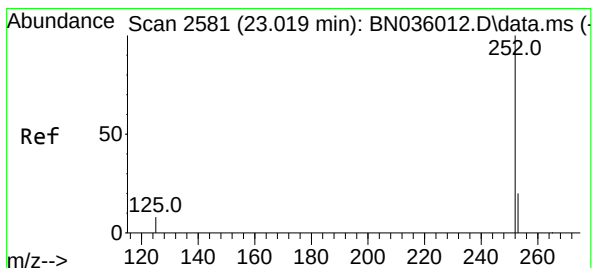
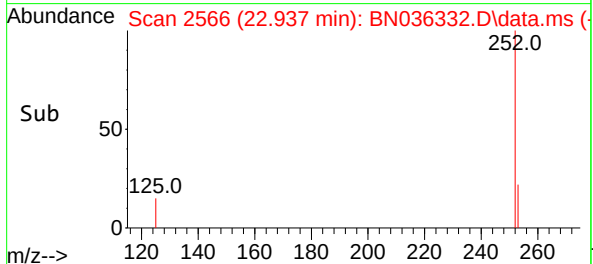
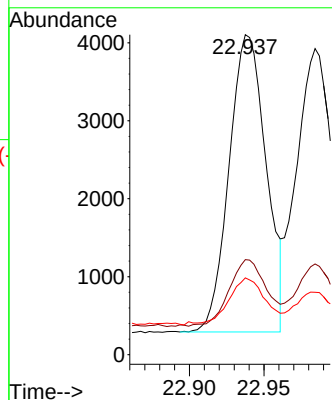
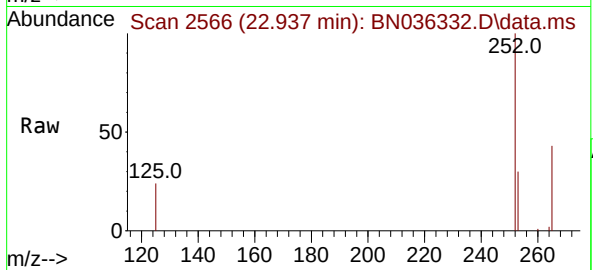




#37
Benzo(b)fluoranthene
Concen: 0.394 ng
RT: 22.937 min Scan# 2565
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

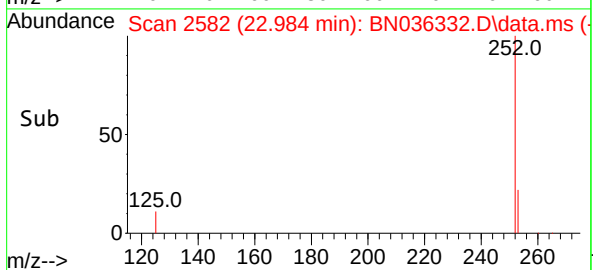
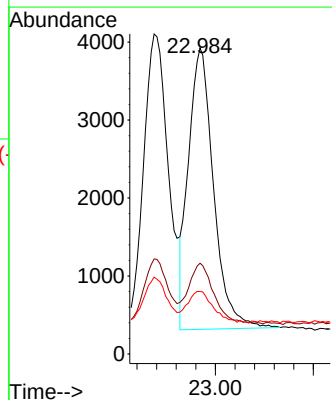
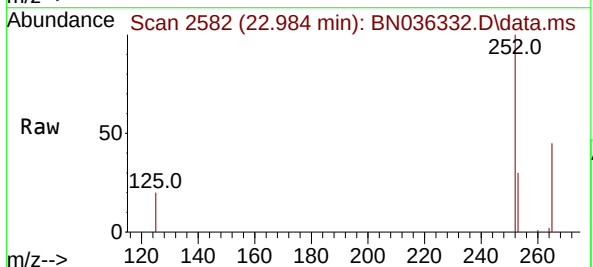
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

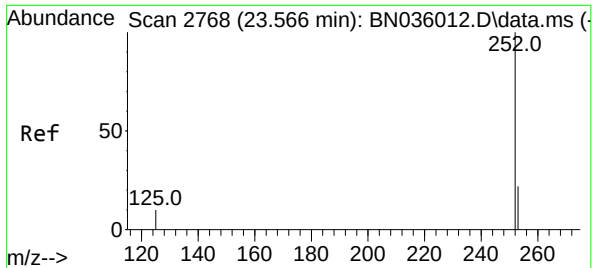
Tgt Ion:252 Resp: 6592
Ion Ratio Lower Upper
252 100
253 29.7 22.5 33.7
125 24.0 11.9 17.9#



#38
Benzo(k)fluoranthene
Concen: 0.381 ng
RT: 22.984 min Scan# 2582
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Tgt Ion:252 Resp: 6425
Ion Ratio Lower Upper
252 100
253 29.6 21.3 31.9
125 20.4 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.398 ng

RT: 23.528 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

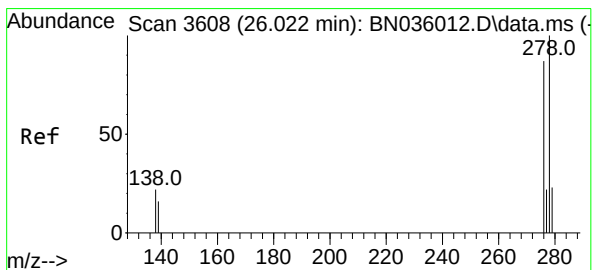
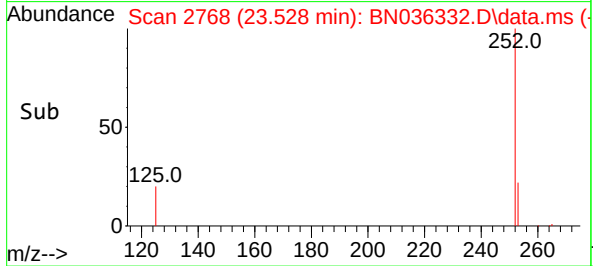
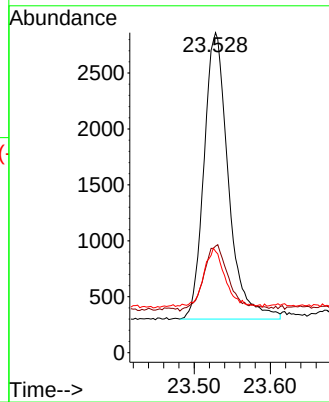
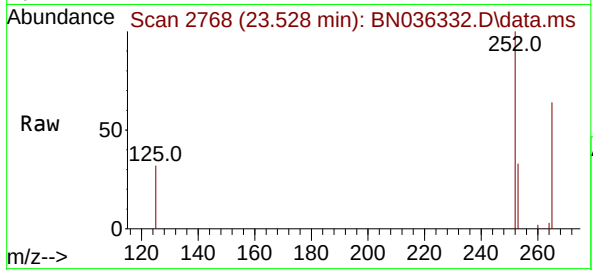
Tgt Ion:252 Resp: 5684

Ion Ratio Lower Upper

252 100

253 33.3 23.8 35.6

125 31.7 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.382 ng

RT: 25.961 min Scan# 3600

Delta R.T. -0.003 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

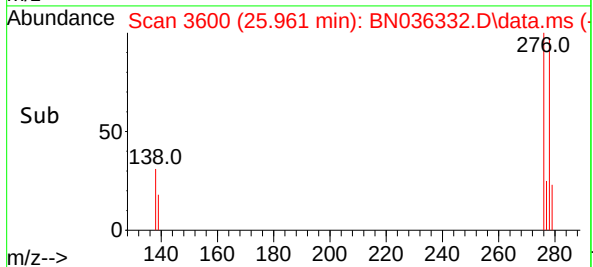
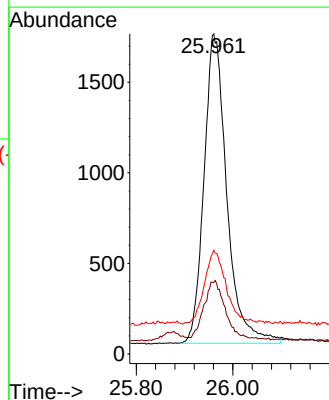
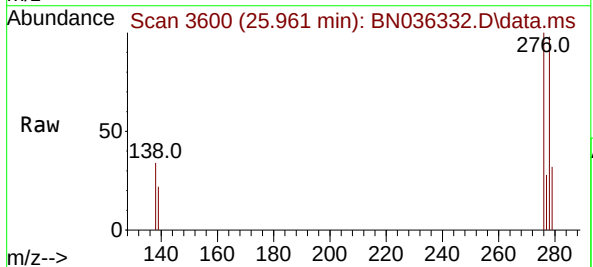
Tgt Ion:278 Resp: 5614

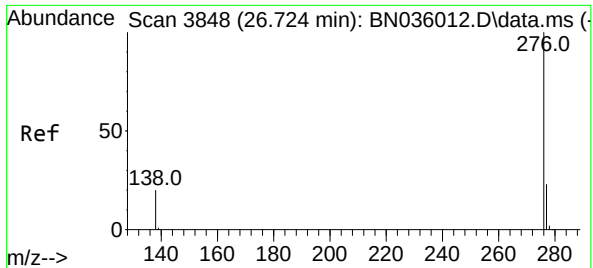
Ion Ratio Lower Upper

278 100

139 22.4 16.0 24.0

279 32.4 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.412 ng

RT: 26.651 min Scan# 3836

Delta R.T. -0.003 min

Lab File: BN036332.D

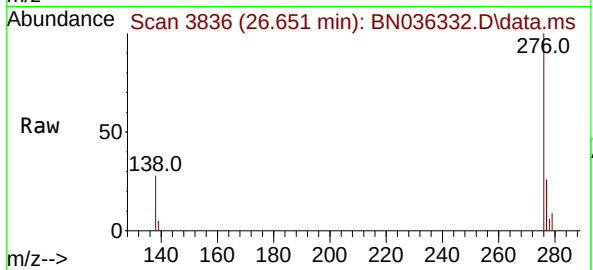
Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



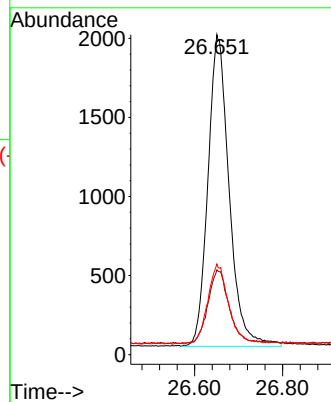
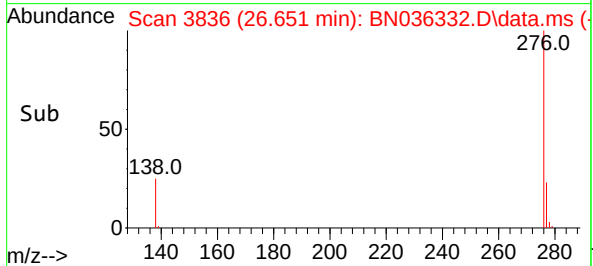
Tgt Ion:276 Resp: 6609

Ion Ratio Lower Upper

276 100

277 26.5 21.3 31.9

138 28.3 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036332.D
 Acq On : 06 Feb 2025 12:54
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 31 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Feb 06 13:54:45 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 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	146	0.00
2	1,4-Dioxane	0.447	0.486	-8.7	151#	0.00
3	n-Nitrosodimethylamine	0.811	0.788	2.8	131	0.00
4 S	2-Fluorophenol	1.040	1.162	-11.7	155#	0.00
5 S	Phenol-d6	1.222	1.293	-5.8	148	0.00
6	bis(2-Chloroethyl)ether	0.984	1.165	-18.4	161#	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	163#	0.00
8 S	Nitrobenzene-d5	0.378	0.409	-8.2	167#	-0.01
9	Naphthalene	1.162	1.205	-3.7	157#	0.00
10	Hexachlorobutadiene	0.375	0.336	10.4	135	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.570	-4.8	161#	0.00
12	2-Methylnaphthalene	0.721	0.709	1.7	152#	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	159#	0.00
14 S	2,4,6-Tribromophenol	0.257	0.188	26.8#	116	0.00
15 S	2-Fluorobiphenyl	1.786	1.549	13.3	127	0.00
16	Acenaphthylene	1.897	1.830	3.5	145	0.00
17	Acenaphthene	1.299	1.271	2.2	148	0.00
18	Fluorene	1.627	1.662	-2.2	162#	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	154#	0.00
20	4,6-Dinitro-2-methylphenol	0.093	0.046	50.5#	74	0.00
21	4-Bromophenyl-phenylether	0.285	0.269	5.6	134	0.00
22	Hexachlorobenzene	0.375	0.355	5.3	134	0.00
23	Atrazine	0.206	0.184	10.7	129	0.00
24	Pentachlorophenol	0.162	0.122	24.7	115	0.00
25	Phenanthrene	1.202	1.220	-1.5	144	0.00
26	Anthracene	1.093	1.075	1.6	143	0.00
27 SURR	Fluoranthene-d10	1.036	1.077	-4.0	149	0.00
28	Fluoranthene	1.412	1.416	-0.3	144	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	149	0.00
30	Pyrene	1.621	1.644	-1.4	145	0.00
31 S	Terphenyl-d14	0.831	0.868	-4.5	149	0.00
32	Benzo(a)anthracene	1.451	1.370	5.6	136	0.00
33	Chrysene	1.483	1.509	-1.8	146	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	0.724	8.9	136	0.00
35 I	Perylene-d12	1.000	1.000	0.0	155#	0.00
36	Indeno(1,2,3-cd)pyrene	1.605	1.577	1.7	150#	0.00
37	Benzo(b)fluoranthene	1.454	1.433	1.4	148	0.00
38	Benzo(k)fluoranthene	1.465	1.397	4.6	145	0.00
39 C	Benzo(a)pyrene	1.242	1.236	0.5	151#	0.00
40	Dibenzo(a,h)anthracene	1.279	1.220	4.6	146	0.00
41	Benzo(g,h,i)perylene	1.394	1.437	-3.1	156#	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036332.D
Acq On : 06 Feb 2025 12:54
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 31 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Feb 06 13:54:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 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	146	0.00
2	1,4-Dioxane	0.400	0.435	-8.7	151	0.00
3	n-Nitrosodimethylamine	0.400	0.389	2.8	131	0.00
4 S	2-Fluorophenol	0.400	0.447	-11.7	155	0.00
5 S	Phenol-d6	0.400	0.423	-5.7	148	0.00
6	bis(2-Chloroethyl)ether	0.400	0.474	-18.5	161	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	163	0.00
8 S	Nitrobenzene-d5	0.400	0.433	-8.2	167	-0.01
9	Naphthalene	0.400	0.415	-3.7	157	0.00
10	Hexachlorobutadiene	0.400	0.358	10.5	135	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.419	-4.7	161	0.00
12	2-Methylnaphthalene	0.400	0.393	1.8	152	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	159	0.00
14 S	2,4,6-Tribromophenol	0.400	0.292	27.0#	116	0.00
15 S	2-Fluorobiphenyl	0.400	0.347	13.3	127	0.00
16	Acenaphthylene	0.400	0.386	3.5	145	0.00
17	Acenaphthene	0.400	0.392	2.0	148	0.00
18	Fluorene	0.400	0.409	-2.2	162	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	154	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.196	51.0#	74	0.00
21	4-Bromophenyl-phenylether	0.400	0.377	5.8	134	0.00
22	Hexachlorobenzene	0.400	0.378	5.5	134	0.00
23	Atrazine	0.400	0.357	10.8	129	0.00
24	Pentachlorophenol	0.400	0.301	24.8	115	0.00
25	Phenanthrene	0.400	0.406	-1.5	144	0.00
26	Anthracene	0.400	0.393	1.8	143	0.00
27 SURR	Fluoranthene-d10	0.400	0.416	-4.0	149	0.00
28	Fluoranthene	0.400	0.401	-0.3	144	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	149	0.00
30	Pyrene	0.400	0.406	-1.5	145	0.00
31 S	Terphenyl-d14	0.400	0.418	-4.5	149	0.00
32	Benzo(a)anthracene	0.400	0.378	5.5	136	0.00
33	Chrysene	0.400	0.407	-1.7	146	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.364	9.0	136	0.00
35 I	Perylene-d12	0.400	0.400	0.0	155	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.393	1.8	150	0.00
37	Benzo(b)fluoranthene	0.400	0.394	1.5	148	0.00
38	Benzo(k)fluoranthene	0.400	0.381	4.8	145	0.00
39 C	Benzo(a)pyrene	0.400	0.398	0.5	151	0.00
40	Dibenzo(a,h)anthracene	0.400	0.382	4.5	146	0.00
41	Benzo(g,h,i)perylene	0.400	0.412	-3.0	156	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 0



QC SAMPLE DATA

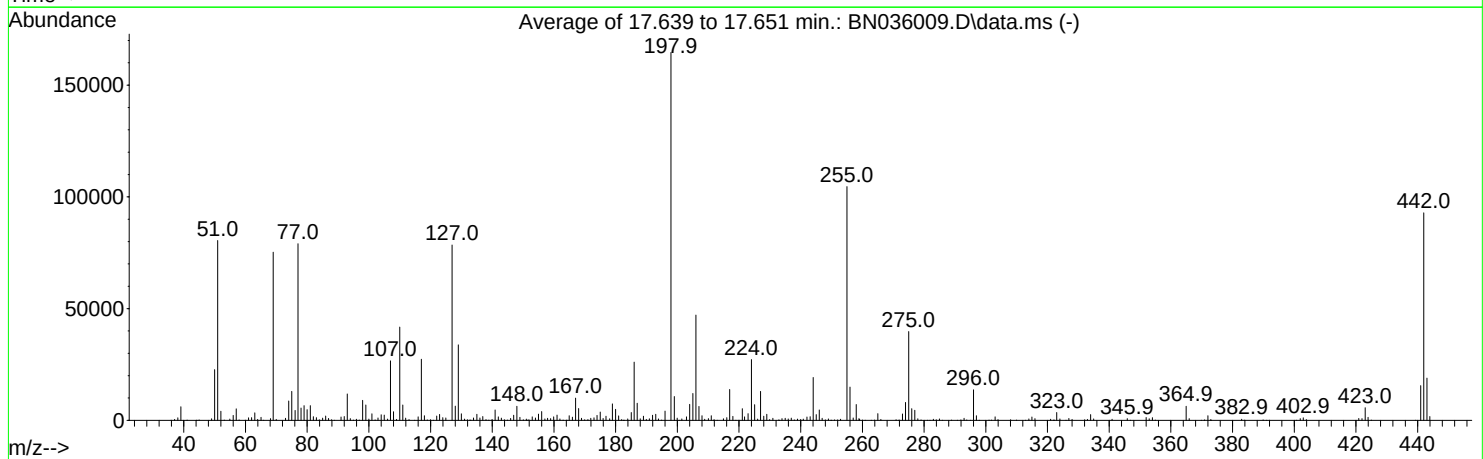
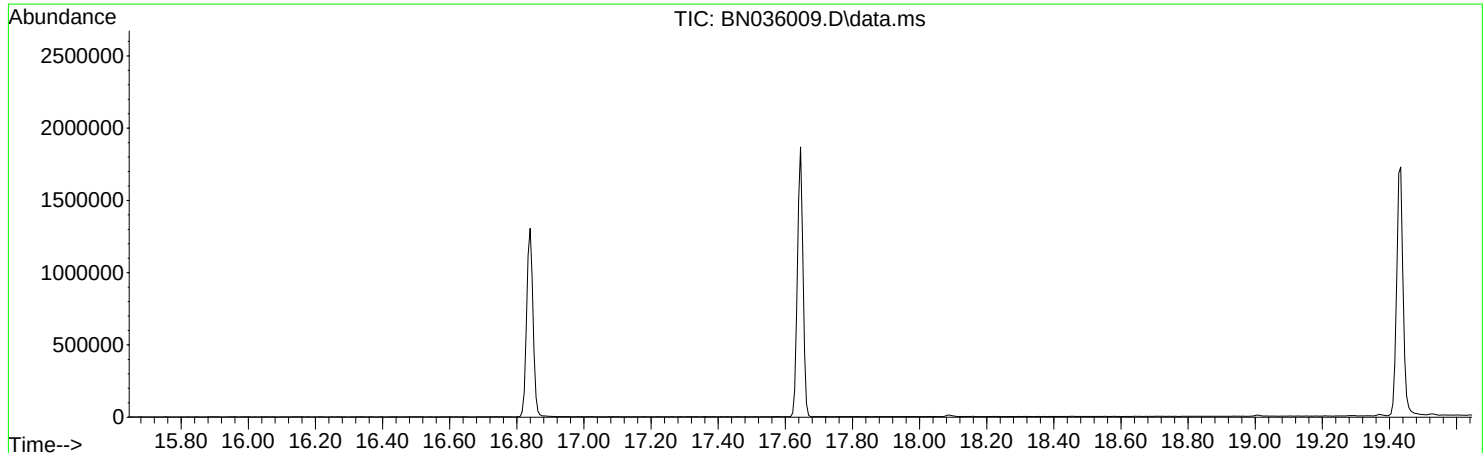
- 1
- 2
- 3
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- 10
- 11
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- 16
- 17
- 18

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036009.D
Acq On : 22 Jan 2025 09:44
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-BN012225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Jan 23 00:34:56 2025



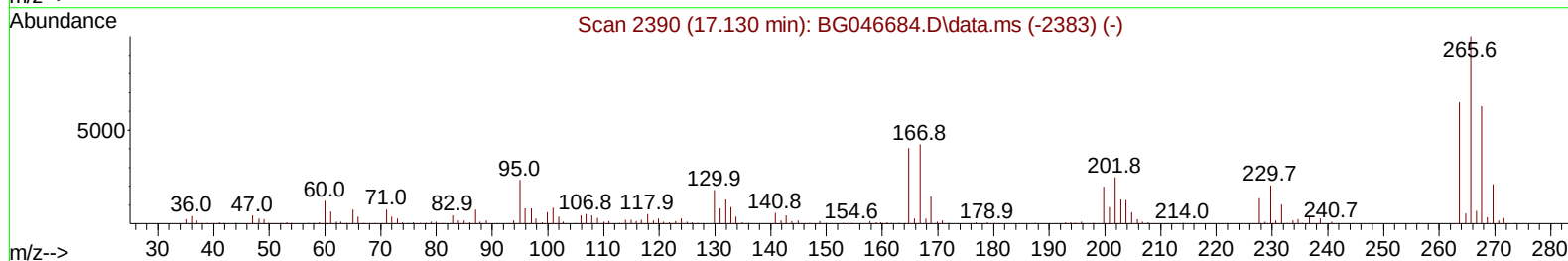
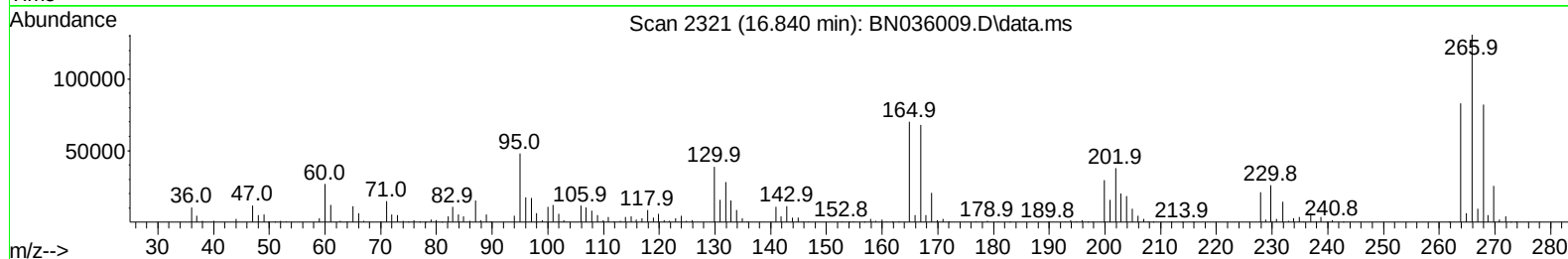
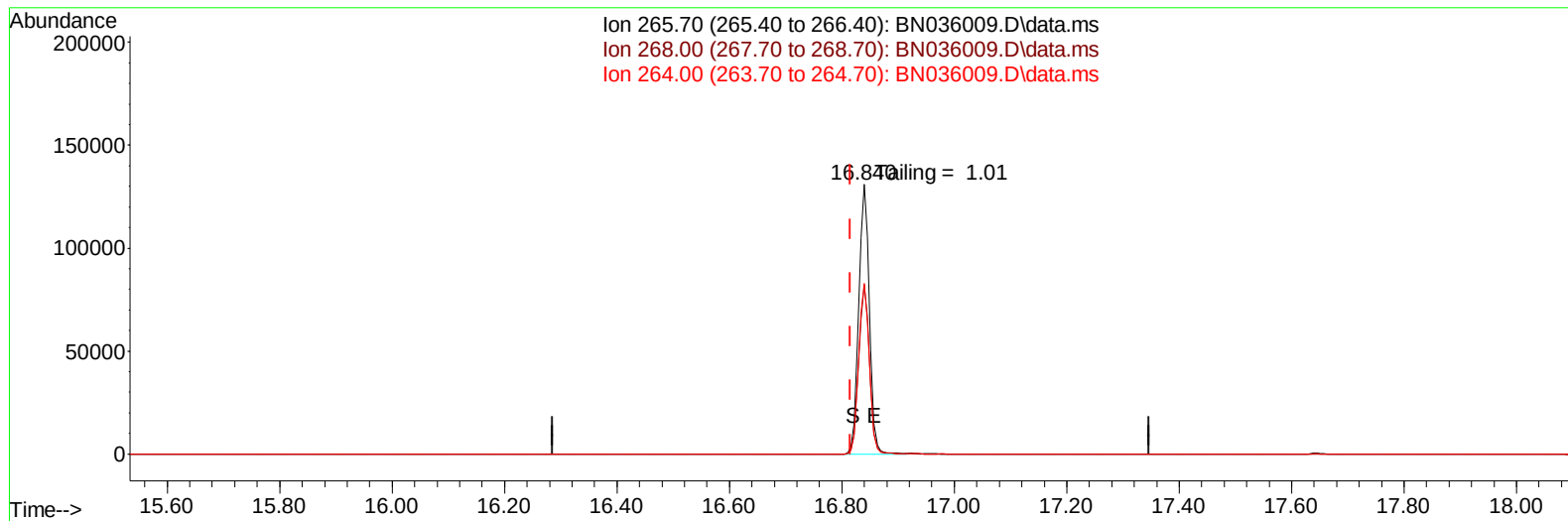
AutoFind: Scans 2457, 2458, 2459; Background Corrected with Scan 2450

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	48.9	80440	PASS
68	69	0.00	2	1.1	792	PASS
69	198	0.00	100	45.7	75224	PASS
70	69	0.00	2	0.6	433	PASS
127	198	10	80	47.7	78488	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	164608	PASS
199	198	5	9	6.5	10652	PASS
275	198	10	60	24.1	39749	PASS
365	198	1	100	3.8	6294	PASS
441	198	0.01	100	9.4	15532	PASS
442	442	50	100	100.0	92893	PASS
443	442	15	24	20.4	18924	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036009.D
Acq On : 22 Jan 2025 09:44
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Jan 23 00:54:46 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: BN036009.D\data.ms

(70) Pentachlorophenol (C)

16.840min (+ 0.024) 21048.35 ng

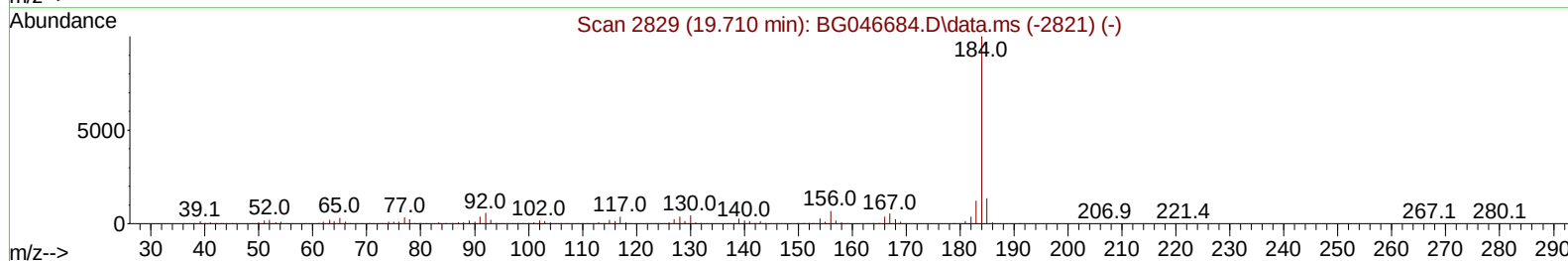
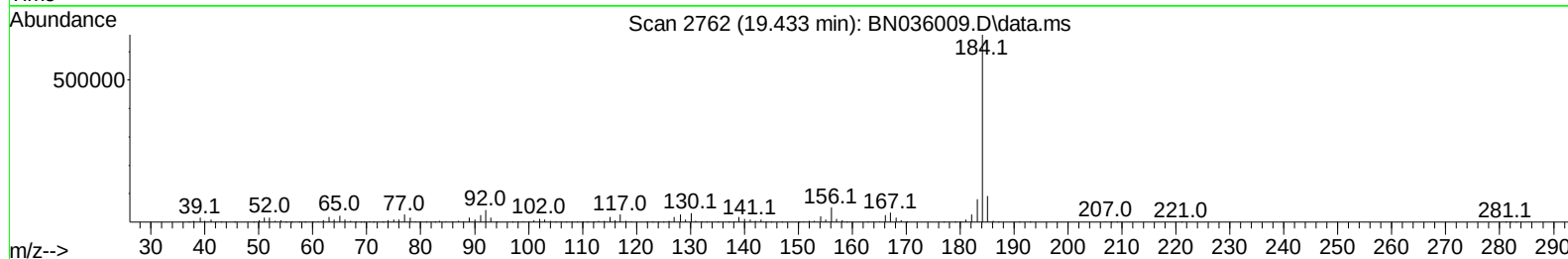
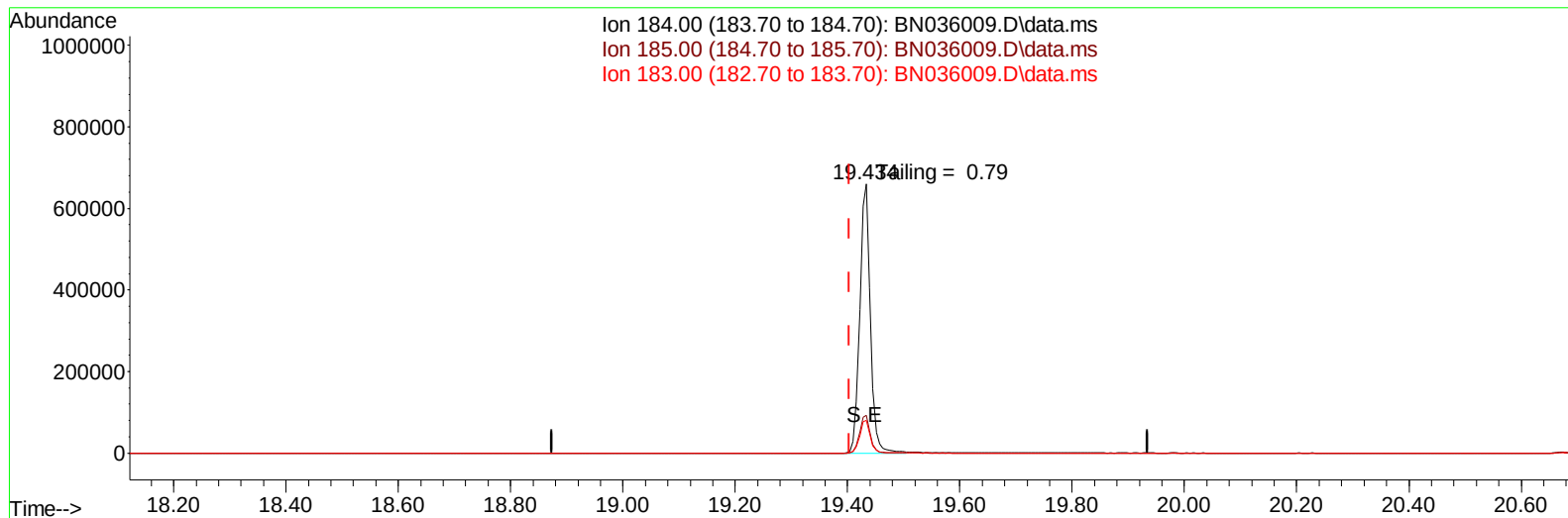
response 172285

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	62.84
264.00	61.60	63.34
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN012225\
Data File : BN036009.D
Acq On : 22 Jan 2025 09:44
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Jan 23 00:54:46 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: BN036009.D\data.ms

(77) Benzidine

19.433min (+ 0.029) 0.00 ng

response 875464

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.96
183.00	13.20	12.24
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

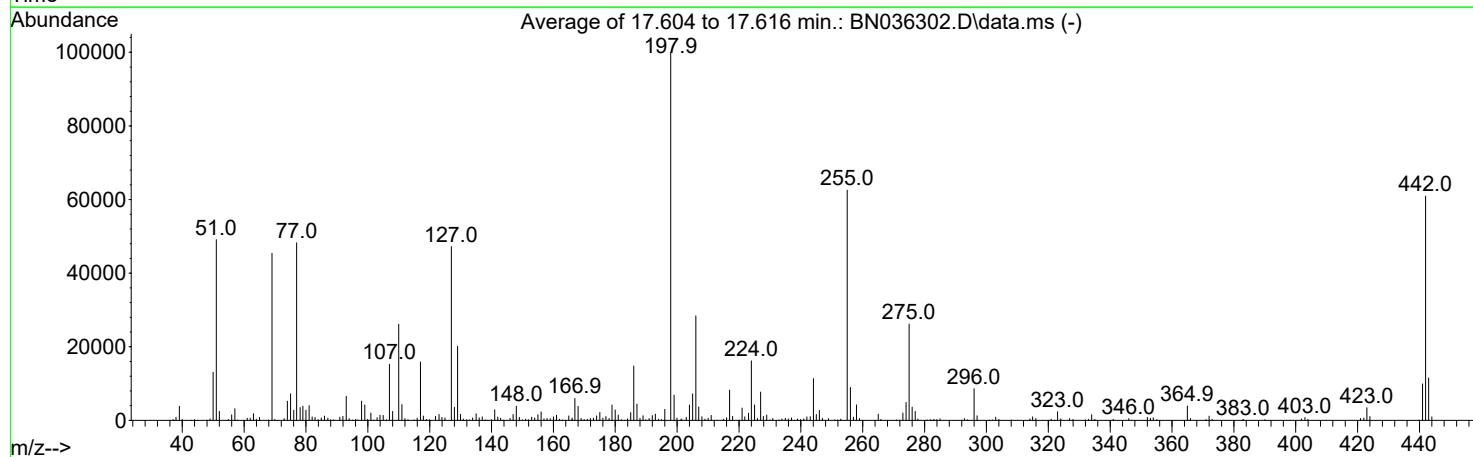
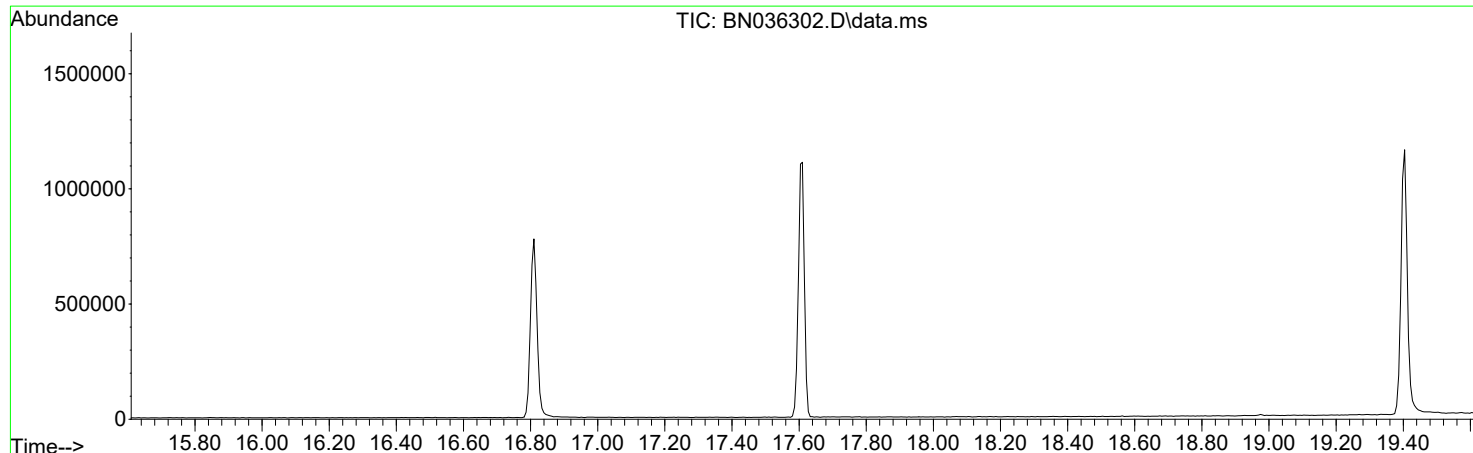
Date	Instrument Name	DFTPP Data File
1/22/2025	BNA_N	<u>BN036009.D</u>
Compound Name	Response	Retention Time
DDT	507361	20.675
DDD	11555	20.233
DDE	890	19.728
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
12445	519806	2.39

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036302.D
Acq On : 05 Feb 2025 18:08
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-BN012225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Feb 06 01:04:09 2025



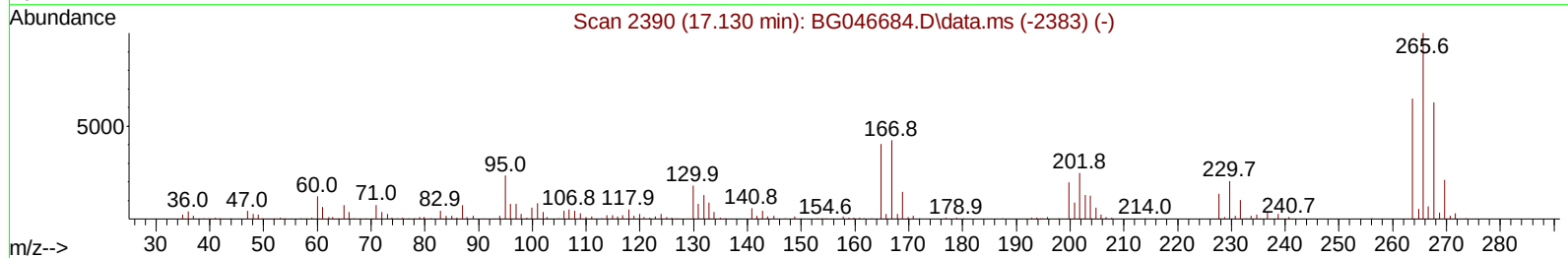
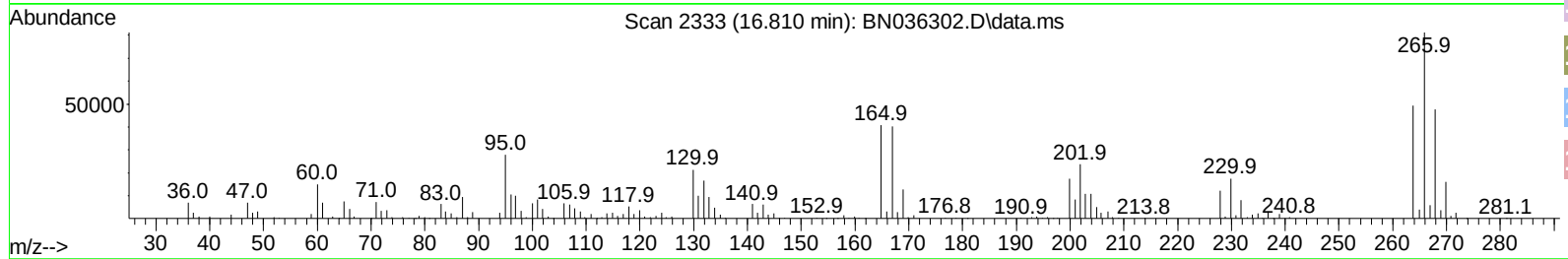
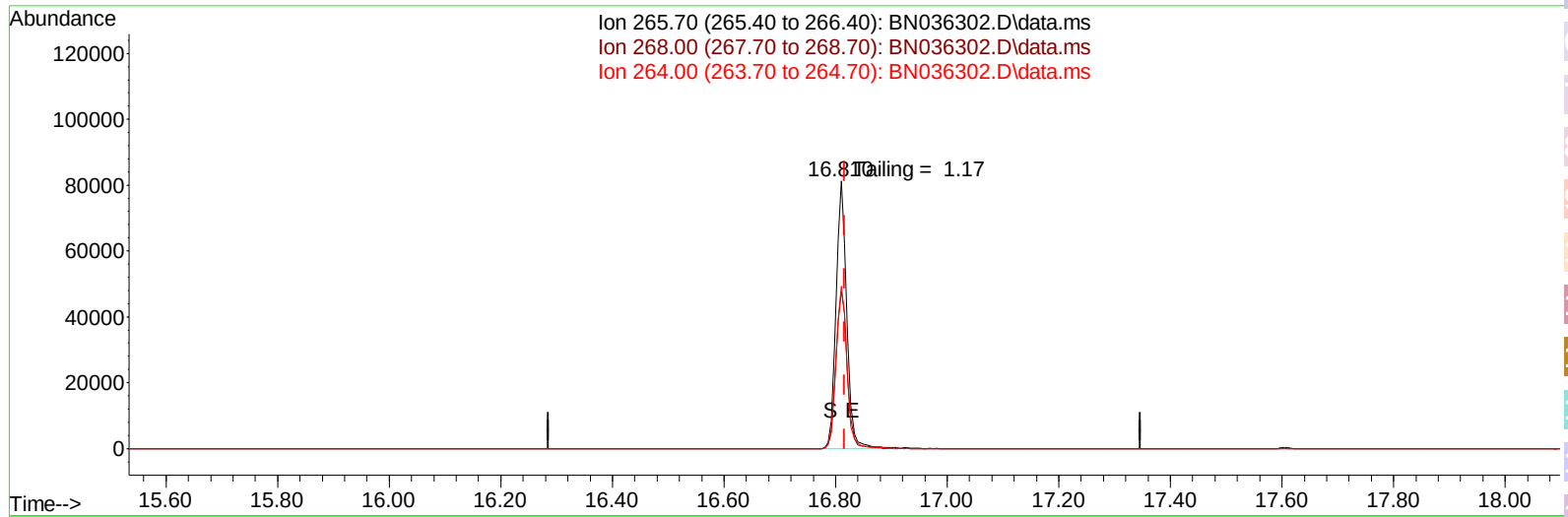
AutoFind: Scans 2468, 2469, 2470; Background Corrected with Scan 2461

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	49.1	49107	PASS
68	69	0.00	2	0.3	138	PASS
69	198	0.00	100	45.4	45403	PASS
70	69	0.00	2	0.6	277	PASS
127	198	10	80	47.2	47213	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	99936	PASS
199	198	5	9	6.9	6870	PASS
275	198	10	60	26.2	26165	PASS
365	198	1	100	3.9	3895	PASS
441	198	0.01	100	9.9	9921	PASS
442	442	50	100	100.0	60955	PASS
443	442	15	24	18.9	11502	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036302.D
Acq On : 05 Feb 2025 18:08
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 06 03:02:00 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: BN036302.D\data.ms

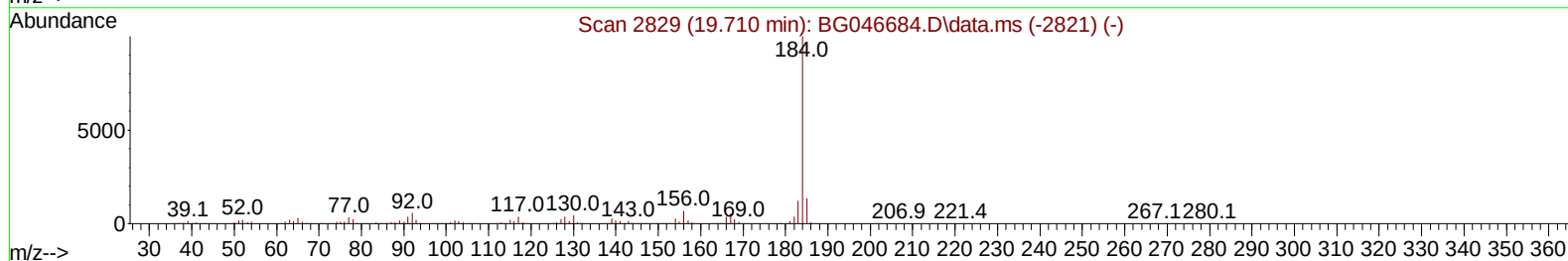
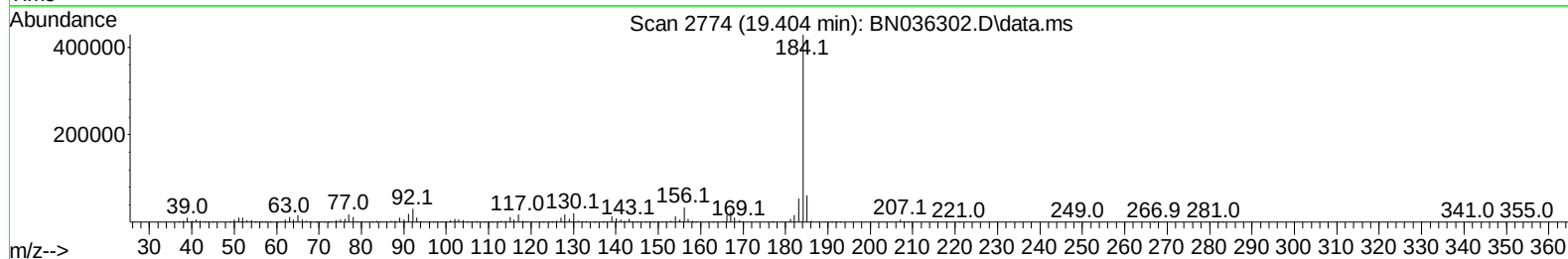
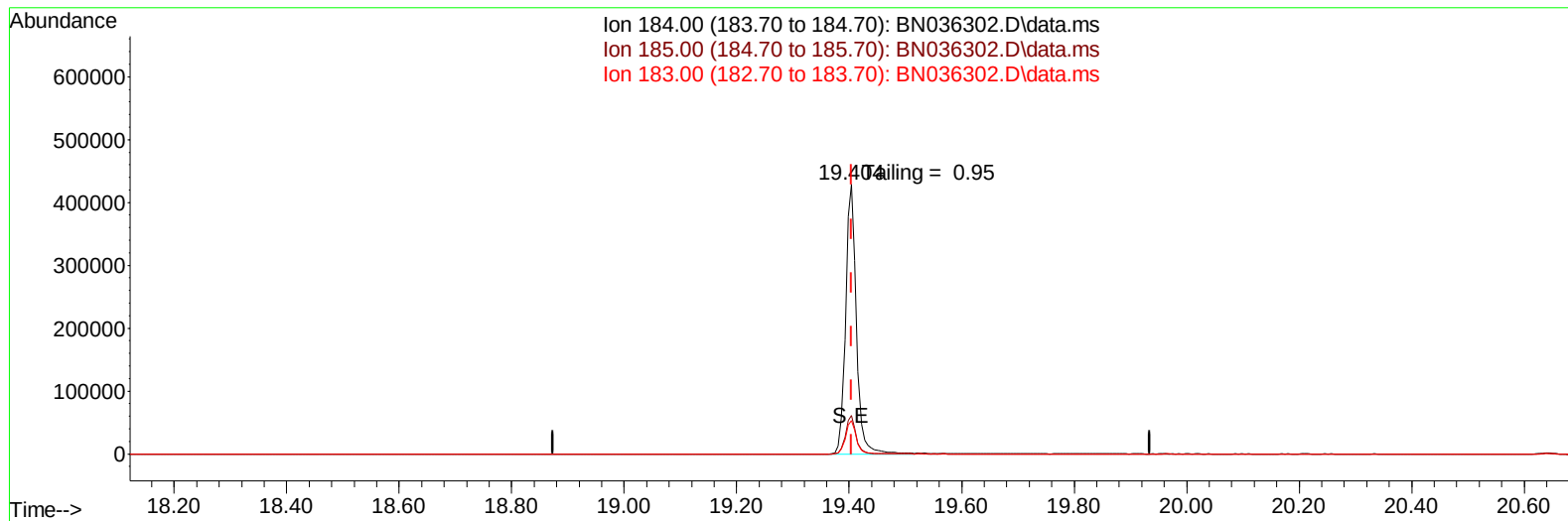
(70) Pentachlorophenol (C)**16.810min (-0.006) 17367.43 ng****response 108491**

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	58.74
264.00	61.60	60.64
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036302.D
Acq On : 05 Feb 2025 18:08
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 06 03:02:00 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: BN036302.D\data.ms

(77) Benzidine

19.404min (-0.000) 0.00 ng

response 576937

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.34
183.00	13.20	12.49
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

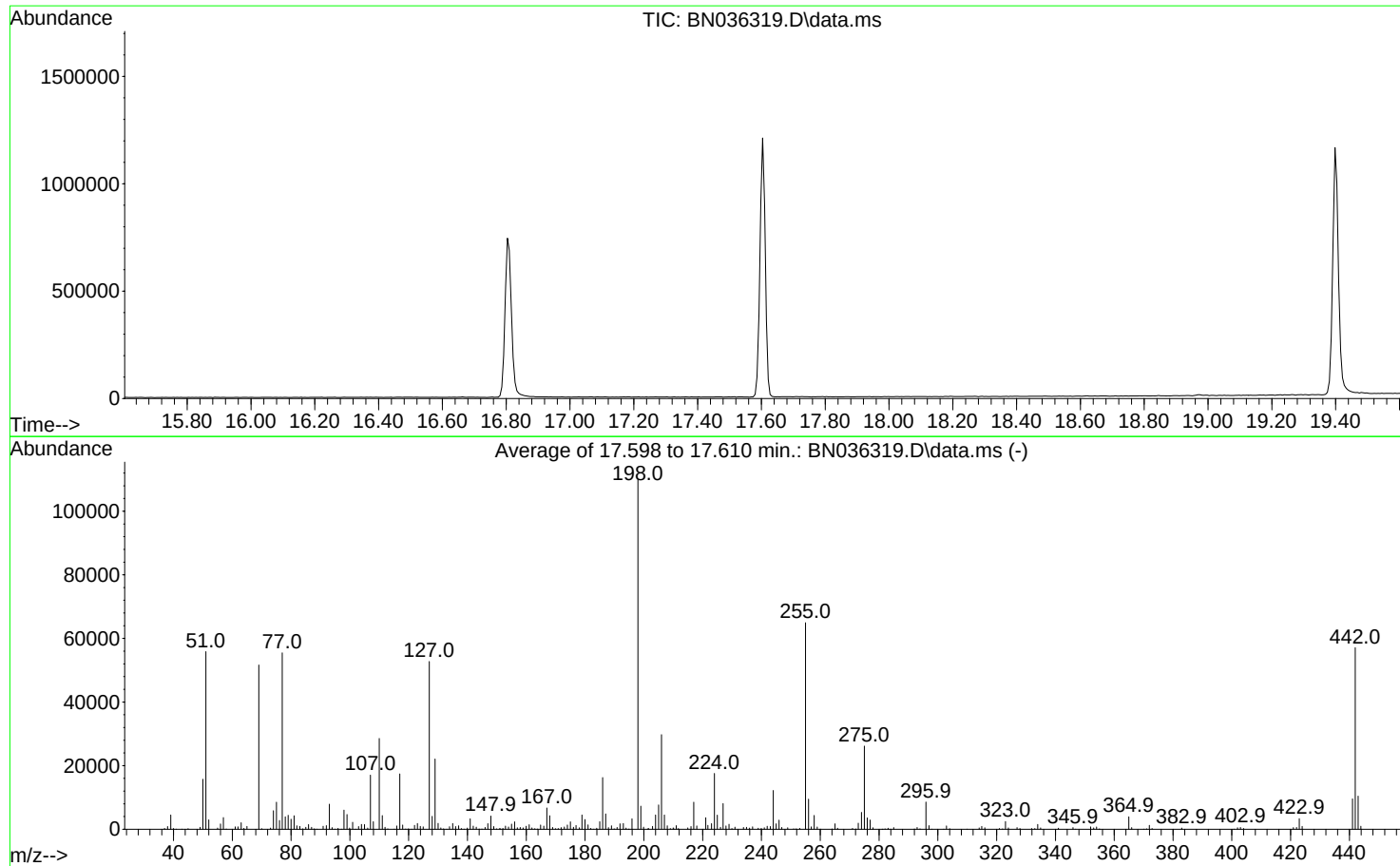
Date	Instrument Name	DFTPP Data File
2/5/2025	BNA_N	<u>BN036302.D</u>
Compound Name	Response	Retention Time
DDT	318276	20.645
DDD	25474	20.204
DDE	705	19.692
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
26179	344455	7.60

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036319.D
Acq On : 06 Feb 2025 05:01
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Thu Feb 06 01:04:09 2025



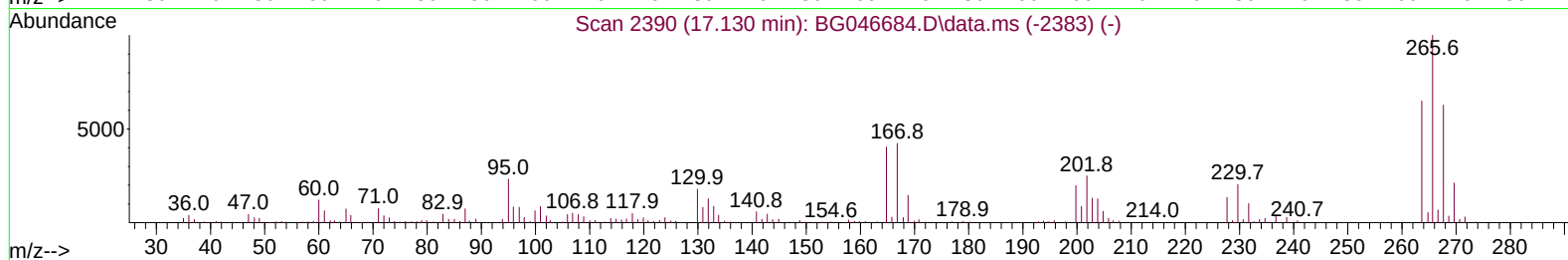
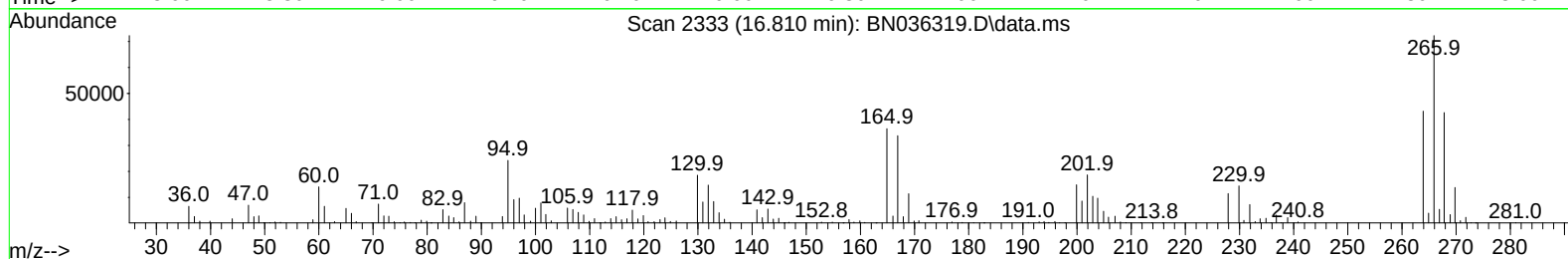
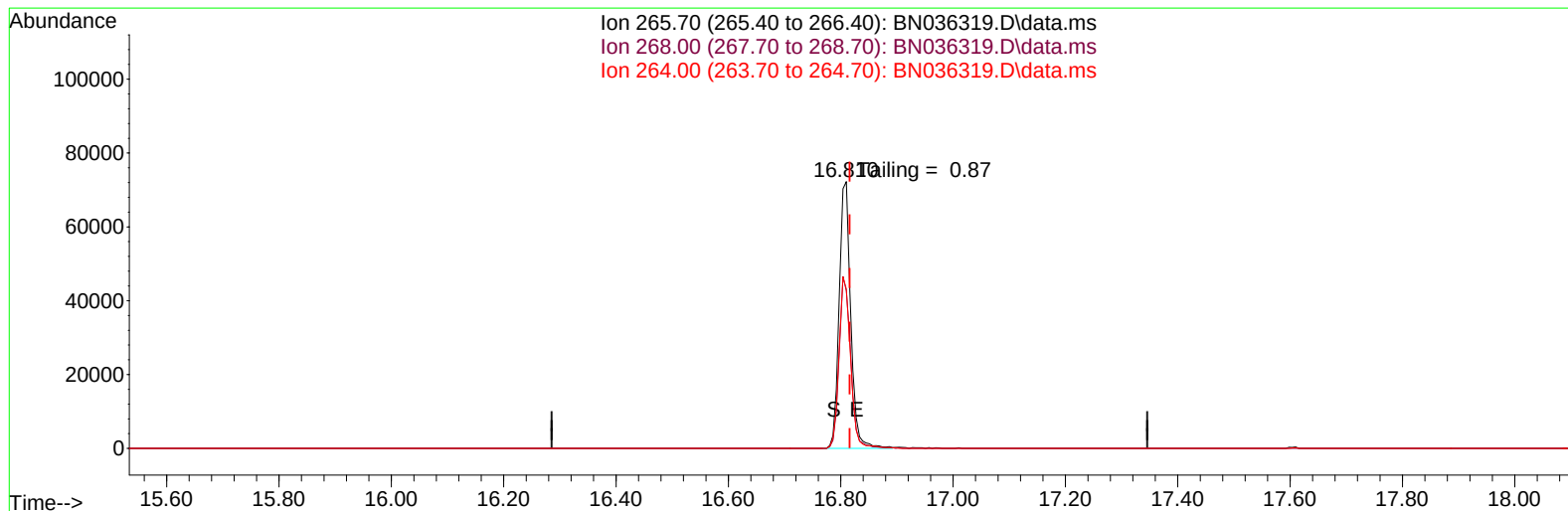
AutoFind: Scans 2467, 2468, 2469; Background Corrected with Scan 2461

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	50.8	55883	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	47.0	51659	PASS
70	69	0.00	2	0.4	209	PASS
127	198	10	80	48.0	52773	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	109947	PASS
199	198	5	9	6.6	7267	PASS
275	198	10	60	23.8	26152	PASS
365	198	1	100	3.6	3930	PASS
441	198	0.01	100	8.7	9577	PASS
442	442	50	100	100.0	57093	PASS
443	442	15	24	18.3	10429	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036319.D
Acq On : 06 Feb 2025 05:01
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 06 07:50:34 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: BN036319.D\data.ms

(70) Pentachlorophenol (C)

16.810min (-0.006) 17584.32 ng

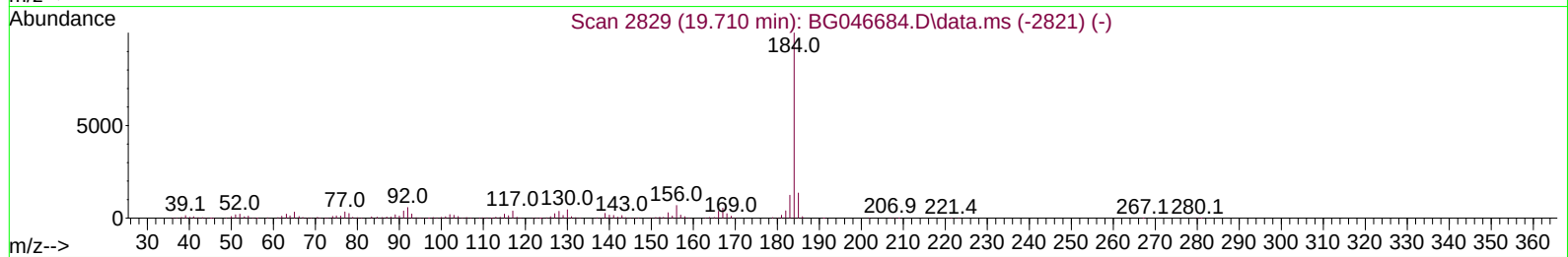
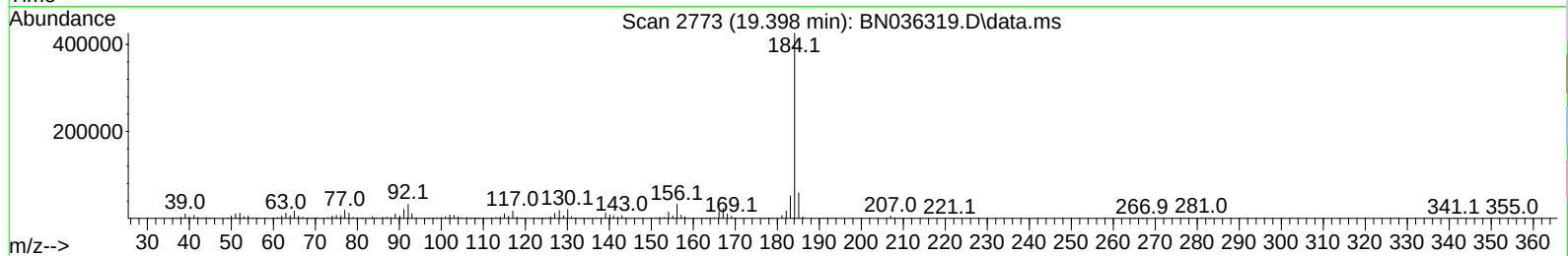
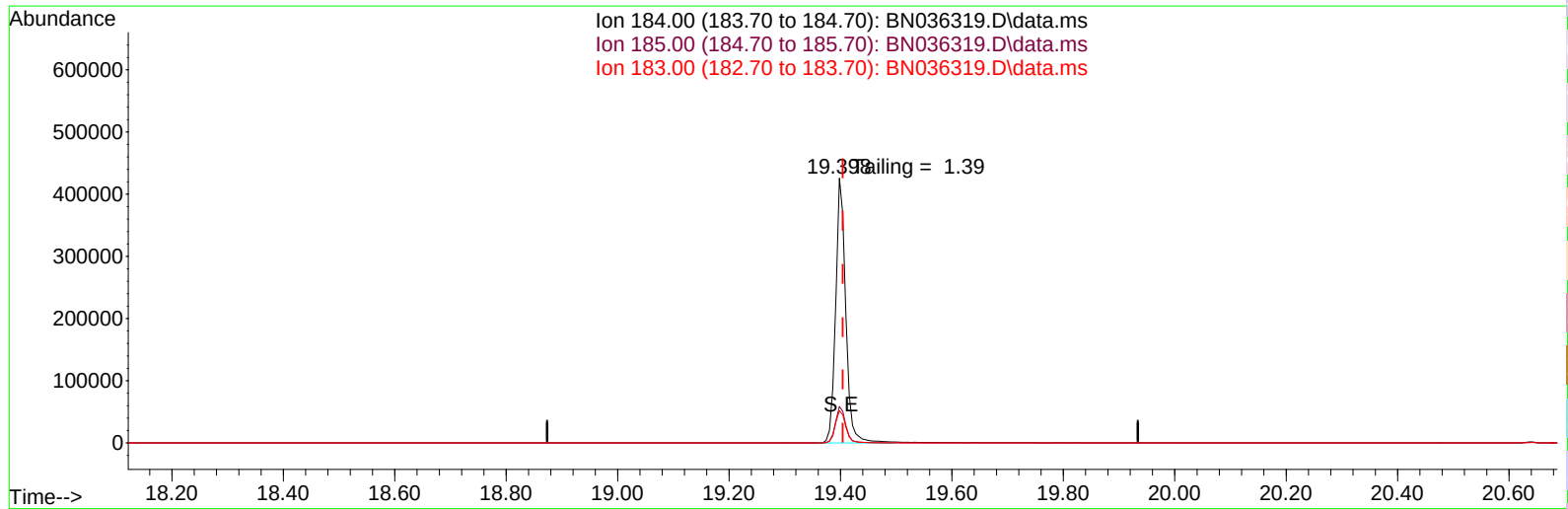
response 103084

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	59.02
264.00	61.60	59.76
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036319.D
Acq On : 06 Feb 2025 05:01
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Feb 06 07:50:34 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: BN036319.D\data.ms

(77) Benzdine

19.398min (-0.006) 0.00 ng

response 542068

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.79
183.00	13.20	12.17
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
2/5/2025	BNA_N	<u>BN036319.D</u>
Compound Name	Response	Retention Time
DDT	307936	20.639
DDD	16912	20.198
DDE	720	19.692
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
17632	325568	5.42

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB166419BL	SDG No.:	Q1225
Lab Sample ID:	PB166419BL	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
BN036304.D	1	01/31/25 08:30	02/05/25 19:23	PB166419

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	0.41		30 - 150		103%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		107%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2280	7.775				
1146-65-2	Naphthalene-d8	4740	10.573				
15067-26-2	Acenaphthene-d10	2370	14.42				
1517-22-2	Phenanthrene-d10	4100	17.161				
1719-03-5	Chrysene-d12	3520	21.349				
1520-96-3	Perylene-d12	3930	23.633				

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\BN020525\
Data File : BN036304.D
Acq On : 05 Feb 2025 19:23
Operator : RC/JU
Sample : PB166419BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166419BL

Quant Time: Feb 06 01:05:42 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2281	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	4739	0.400	ng	# 0.01
13) Acenaphthene-d10	14.420	164	2373	0.400	ng	0.01
19) Phenanthrene-d10	17.161	188	4104	0.400	ng	0.00
29) Chrysene-d12	21.349	240	3515	0.400	ng	0.00
35) Perylene-d12	23.633	264	3933	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.370	112	2309	0.389	ng	0.00
5) Phenol-d6	6.959	99	2366	0.340	ng	0.00
8) Nitrobenzene-d5	8.929	82	1910	0.427	ng	0.00
11) 2-Methylnaphthalene-d10	12.172	152	2668	0.414	ng	0.02
14) 2,4,6-Tribromophenol	15.920	330	302	0.198	ng	0.01
15) 2-Fluorobiphenyl	13.051	172	3732	0.352	ng	0.01
27) Fluoranthene-d10	19.192	212	4310	0.405	ng	0.00
31) Terphenyl-d14	19.791	244	3416	0.468	ng	0.00

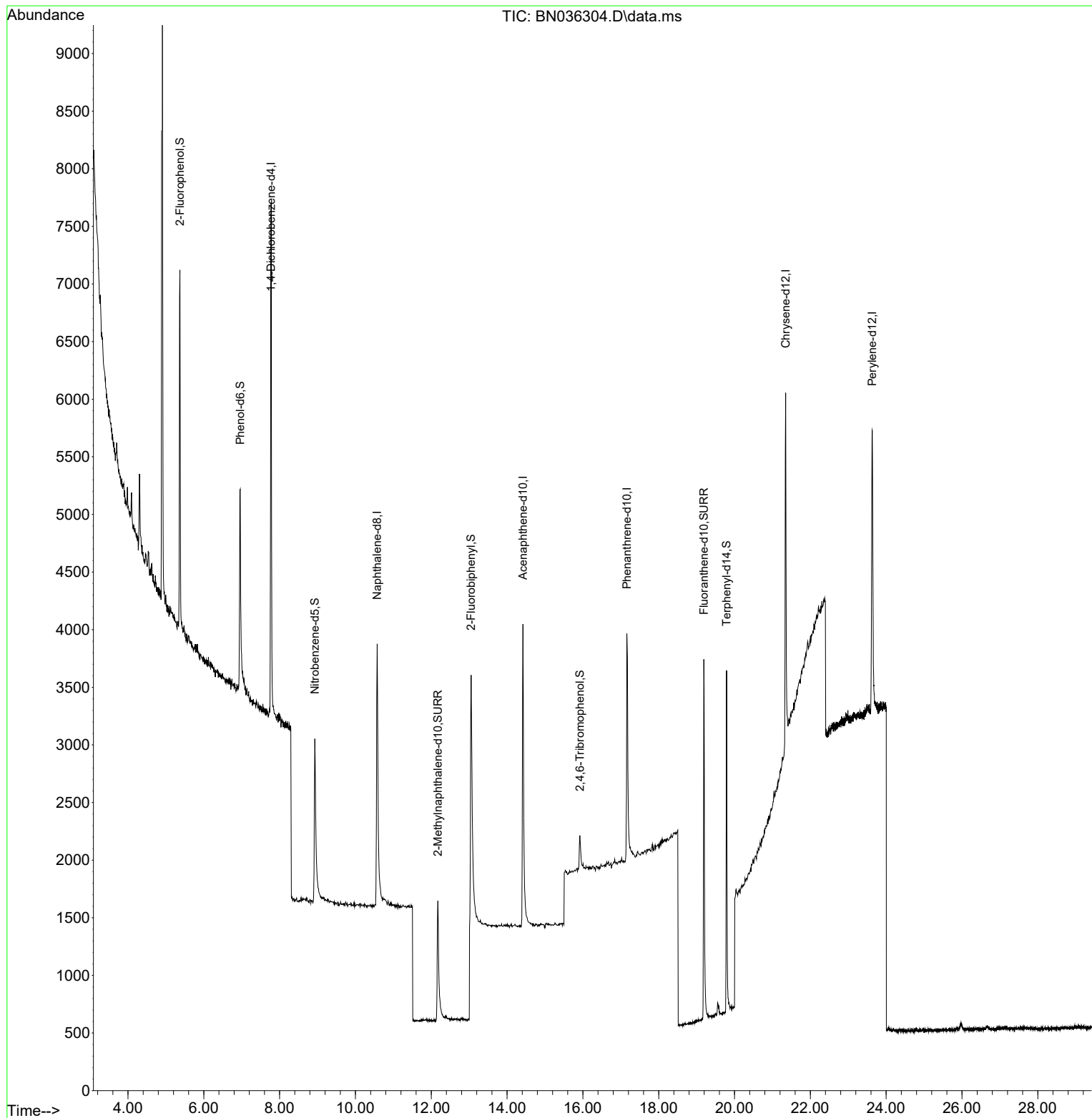
Target Compounds	Qvalue

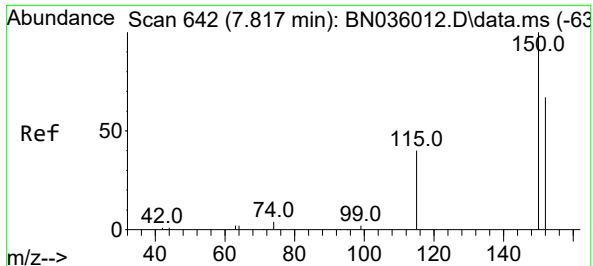
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036304.D
Acq On : 05 Feb 2025 19:23
Operator : RC/JU
Sample : PB166419BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166419BL

Quant Time: Feb 06 01:05:42 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

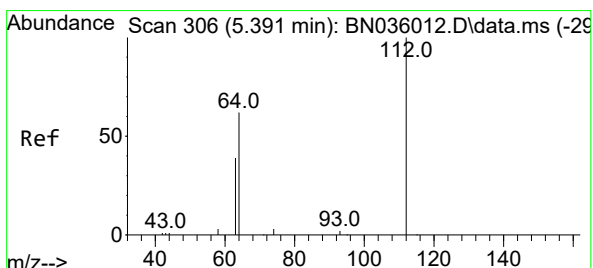
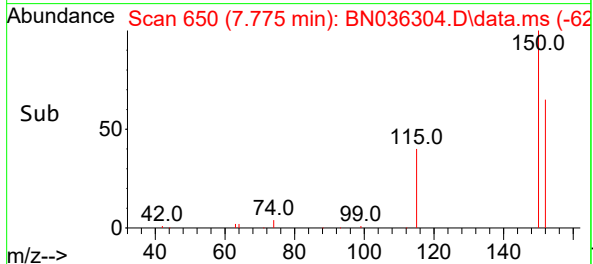
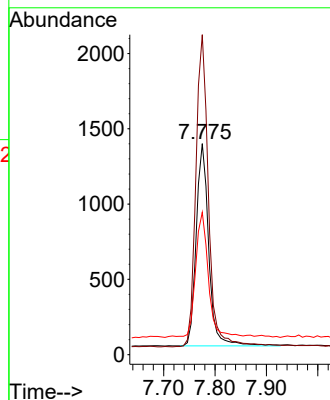
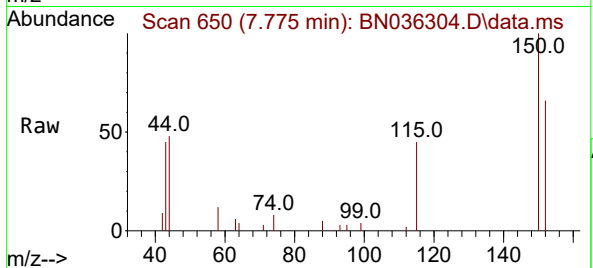




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

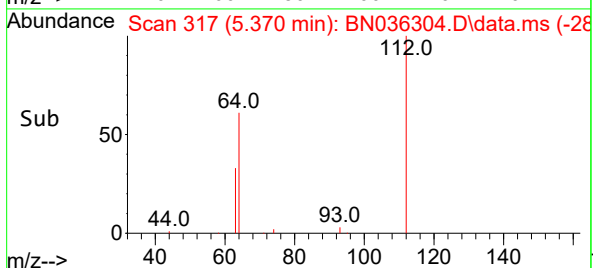
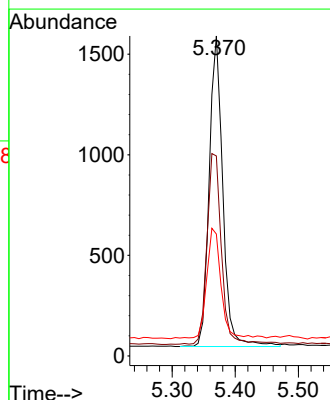
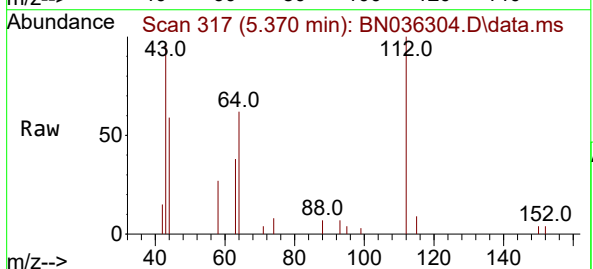
Instrument :
BNA_N
ClientSampleId :
PB166419BL

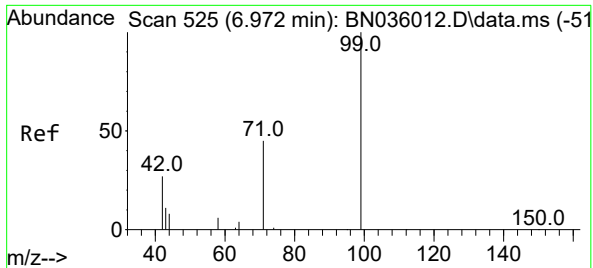
Tgt Ion:152 Resp: 2281
Ion Ratio Lower Upper
152 100
150 151.7 117.4 176.2
115 67.5 51.0 76.4



#4
2-Fluorophenol
Concen: 0.389 ng
RT: 5.370 min Scan# 317
Delta R.T. 0.007 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion:112 Resp: 2309
Ion Ratio Lower Upper
112 100
64 66.2 50.0 75.0
63 37.1 30.7 46.1

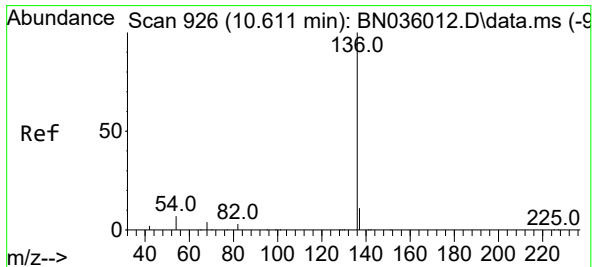
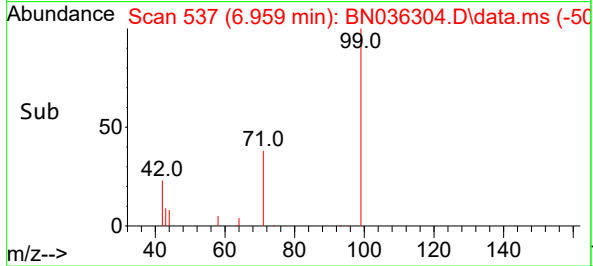
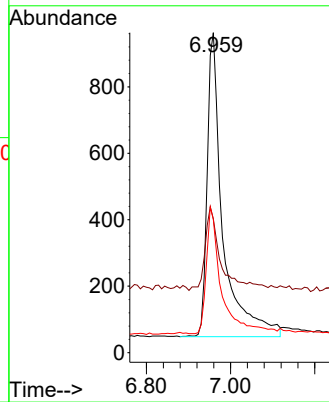
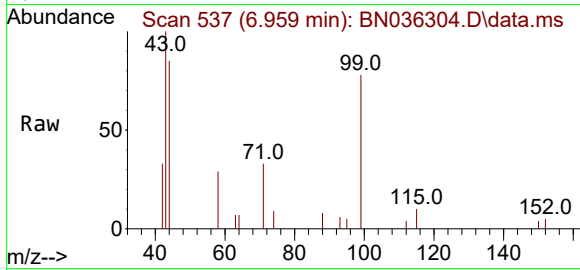




#5
Phenol-d6
Concen: 0.340 ng
RT: 6.959 min Scan# 51
Delta R.T. 0.007 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

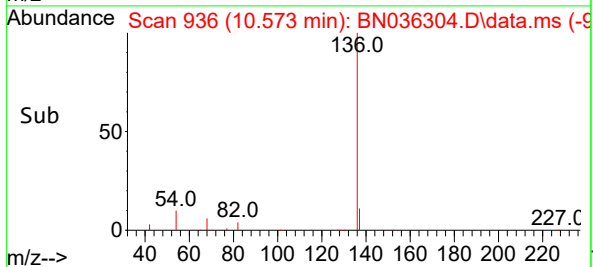
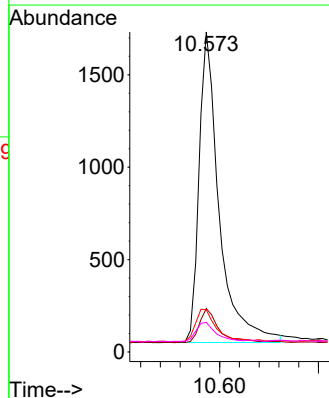
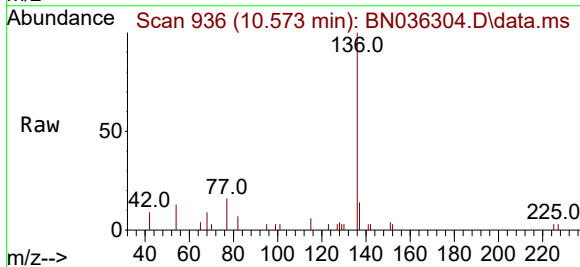
Instrument :
BNA_N
ClientSampleId :
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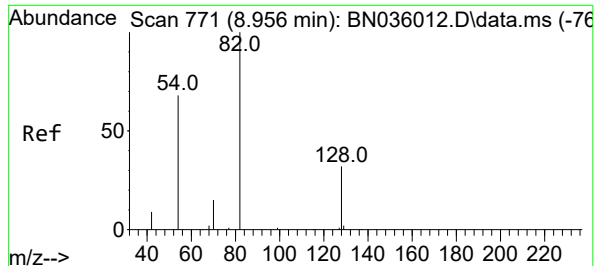
Tgt Ion:	99	Resp:	2366
Ion Ratio	Lower	Upper	
99	100		
42	27.9	26.8	40.2
71	39.9	36.6	55.0



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 936
Delta R.T. 0.011 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion:	136	Resp:	4739
Ion Ratio	Lower	Upper	
136	100		
137	13.6	10.4	15.6
54	13.2	7.7	11.5#
68	9.2	5.4	8.0#

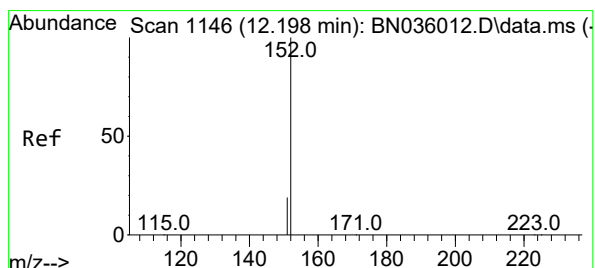
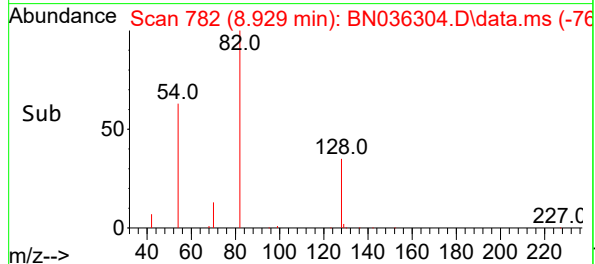
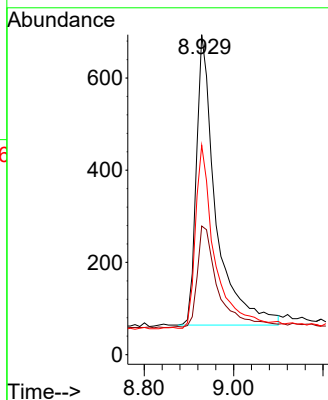
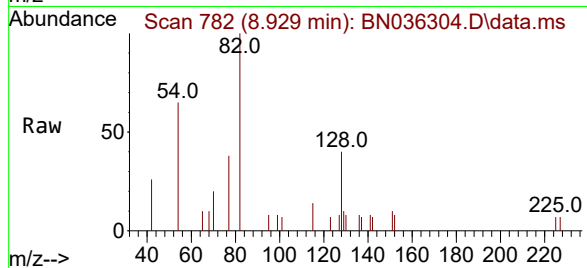




#8
Nitrobenzene-d5
Concen: 0.427 ng
RT: 8.929 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

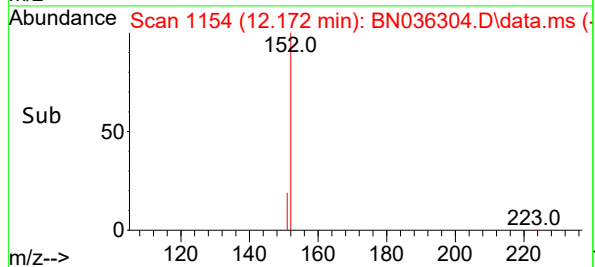
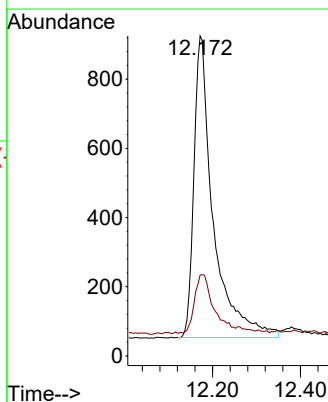
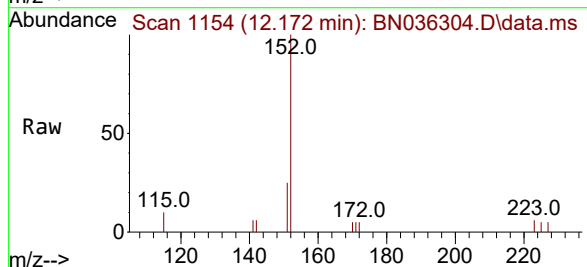
Instrument :
BNA_N
ClientSampleId :
PB166419BL

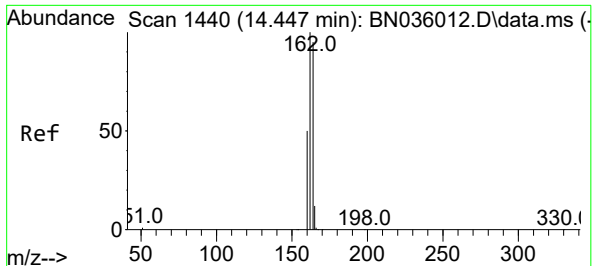
Tgt Ion: 82 Resp: 1910
Ion Ratio Lower Upper
82 100
128 40.2 28.8 43.2
54 65.4 55.8 83.8



#11
2-Methylnaphthalene-d10
Concen: 0.414 ng
RT: 12.172 min Scan# 1154
Delta R.T. 0.015 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion: 152 Resp: 2668
Ion Ratio Lower Upper
152 100
151 19.3 16.6 25.0

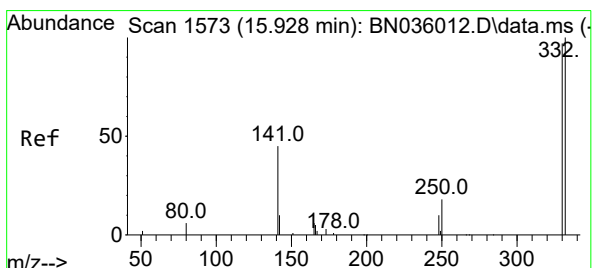
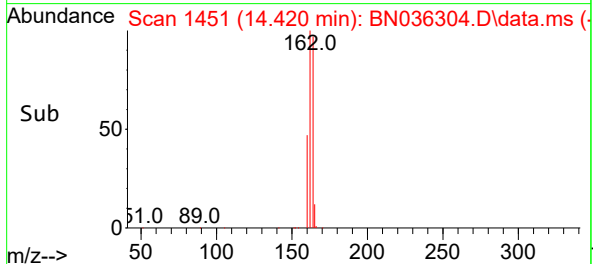
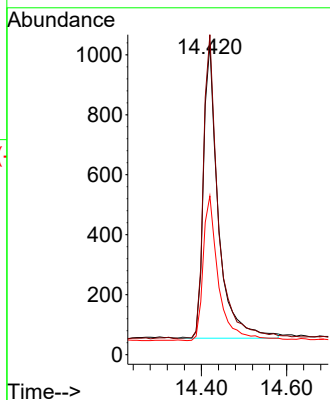
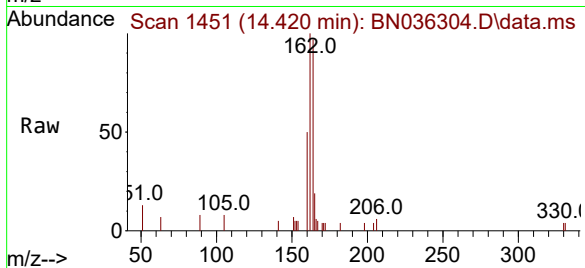




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.420 min Scan# 1440
Delta R.T. 0.011 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

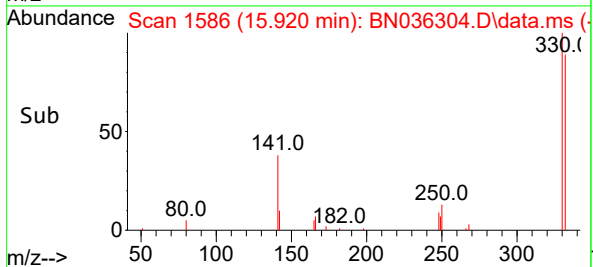
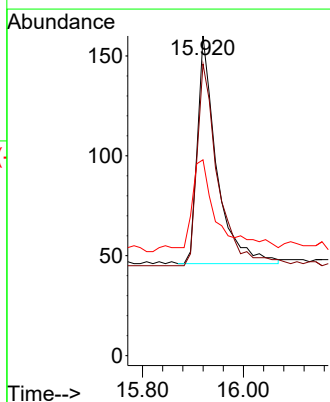
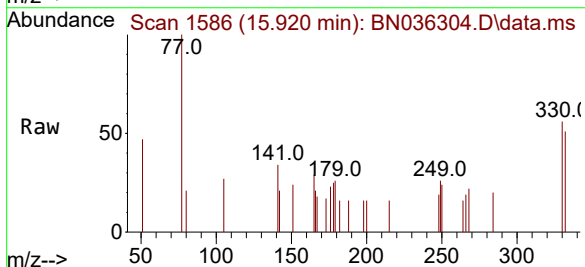
Instrument :
BNA_N
ClientSampleId :
PB166419BL

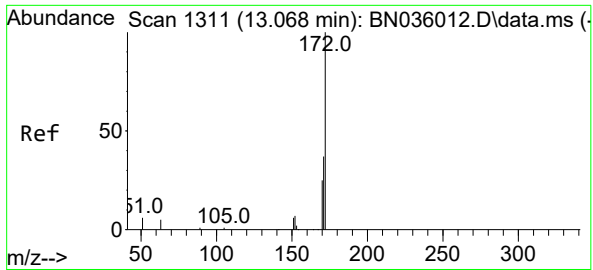
Tgt Ion:164 Resp: 2373
Ion Ratio Lower Upper
164 100
162 103.0 84.1 126.1
160 51.1 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.198 ng
RT: 15.920 min Scan# 1586
Delta R.T. 0.012 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion:330 Resp: 302
Ion Ratio Lower Upper
330 100
332 95.4 81.0 121.4
141 47.7 36.7 55.1

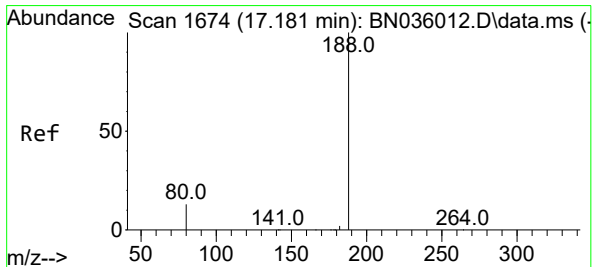
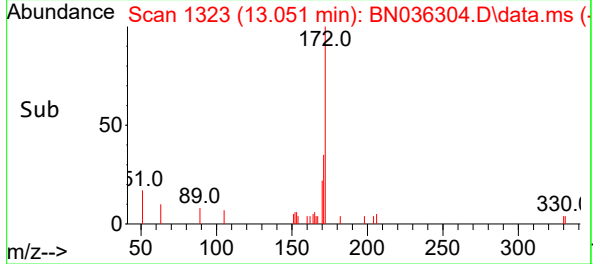
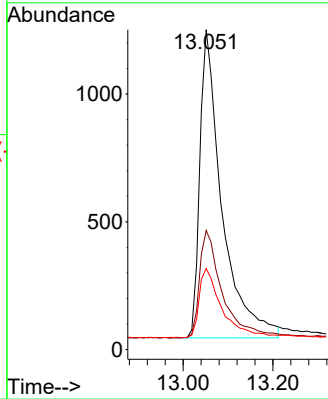
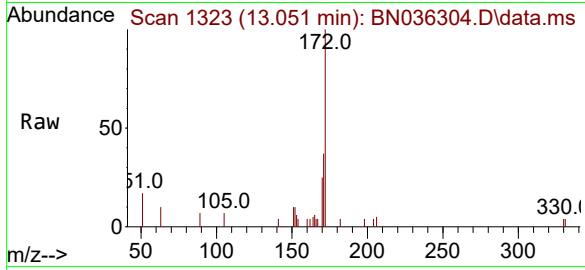




#15
2-Fluorobiphenyl
Concen: 0.352 ng
RT: 13.051 min Scan# 11
Delta R.T. 0.011 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

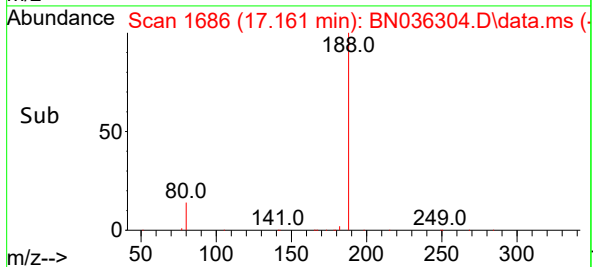
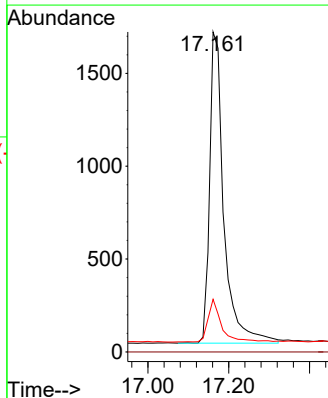
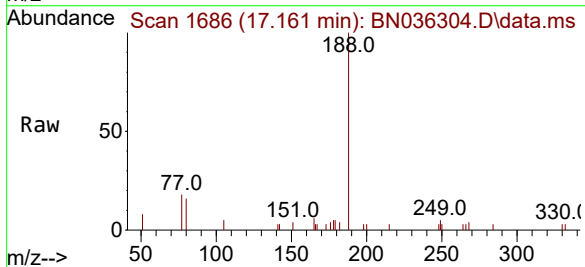
Instrument :
BNA_N
ClientSampleId :
PB166419BL

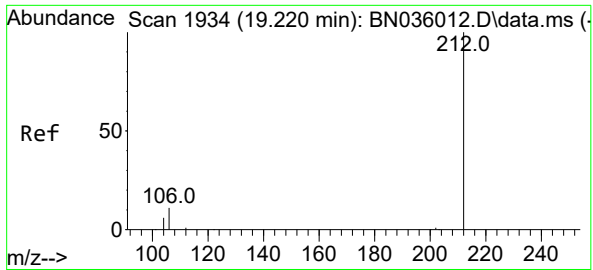
Tgt Ion:	172	Resp:	3732
Ion Ratio	Lower	Upper	
172	100		
171	37.2	30.9	46.3
170	25.3	21.2	31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion:	188	Resp:	4104
Ion Ratio	Lower	Upper	
188	100		
94	0.0	0.0	0.0
80	16.4	12.3	18.5

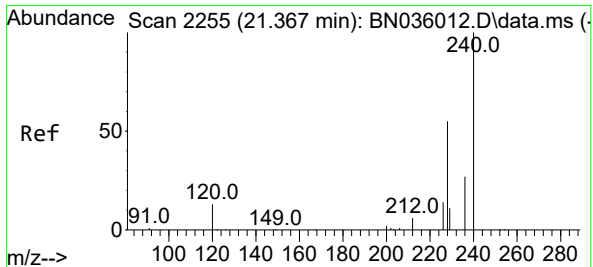
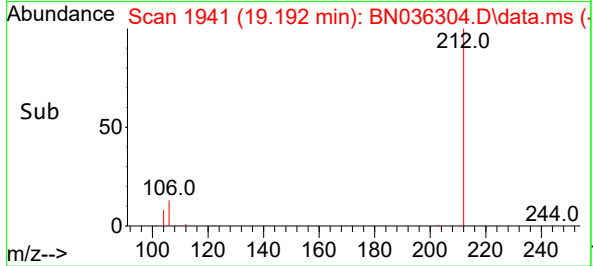
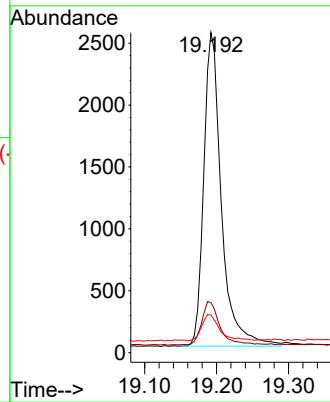
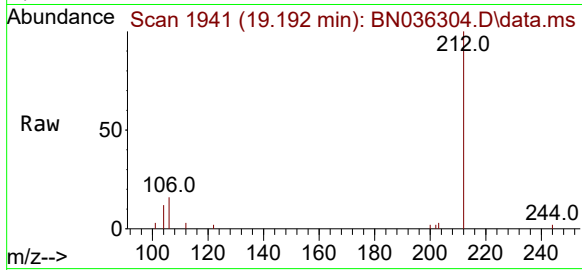




#27
Fluoranthene-d10
Concen: 0.405 ng
RT: 19.192 min Scan# 1941
Delta R.T. 0.005 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

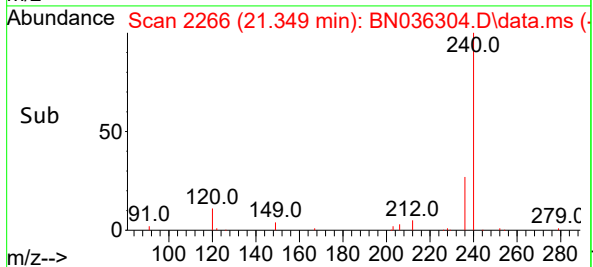
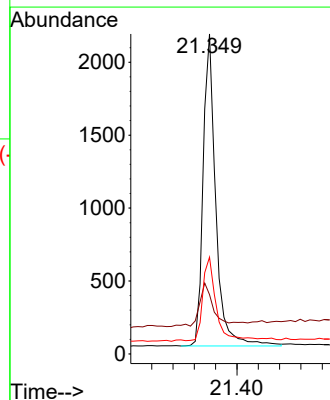
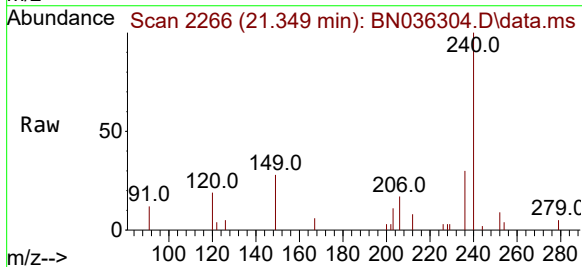
Instrument :
BNA_N
ClientSampleId :
PB166419BL

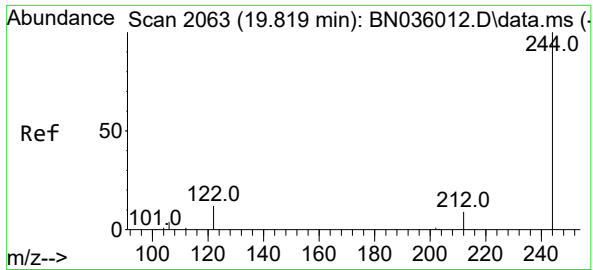
Tgt Ion	Ratio	Lower	Upper
212	100		
106	14.0	9.7	14.5
104	8.6	6.0	9.0



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.349 min Scan# 2266
Delta R.T. 0.009 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion	Ratio	Lower	Upper
240	100		
120	18.6	13.9	20.9
236	30.3	23.7	35.5

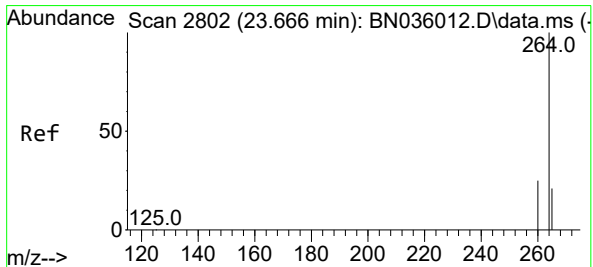
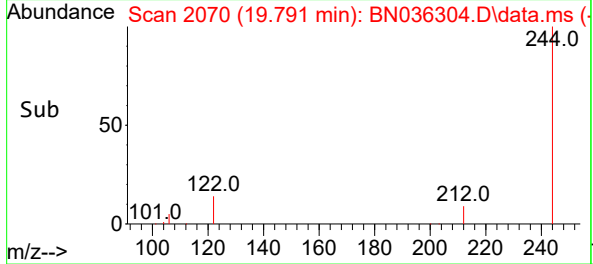
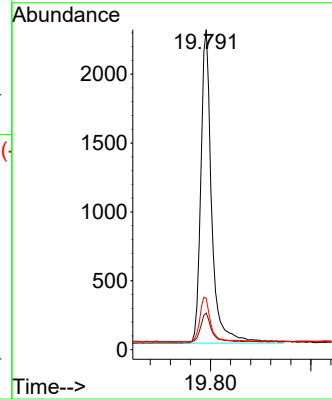
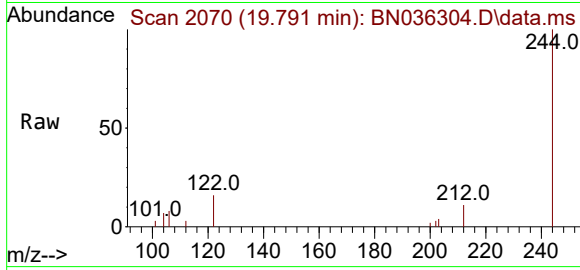




#31
Terphenyl-d14
Concen: 0.468 ng
RT: 19.791 min Scan# 2063
Delta R.T. -0.000 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

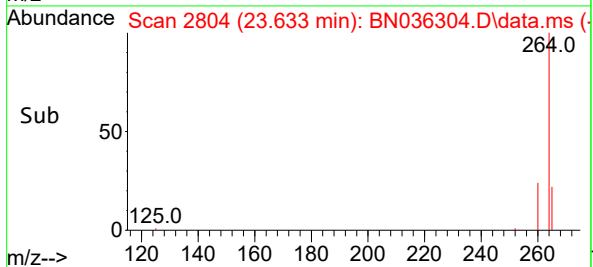
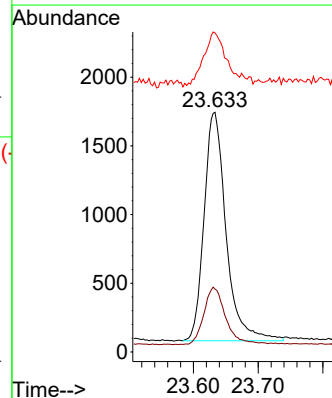
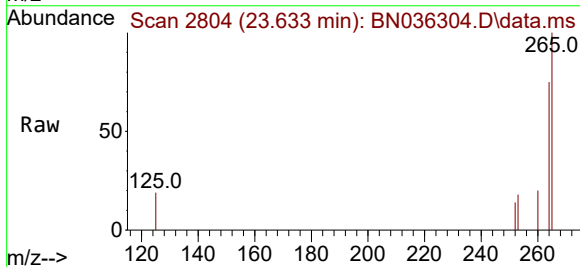
Instrument :
BNA_N
ClientSampleId :
PB166419BL

Tgt Ion:244 Resp: 3416
Ion Ratio Lower Upper
244 100
212 11.5 9.1 13.7
122 16.1 11.3 16.9



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.633 min Scan# 2804
Delta R.T. 0.006 min
Lab File: BN036304.D
Acq: 05 Feb 2025 19:23

Tgt Ion:264 Resp: 3933
Ion Ratio Lower Upper
264 100
260 26.3 21.8 32.6
265 133.1 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.		Date Collected:	
Project:	CTO WE13		Date Received:	
Client Sample ID:	PB166419BS		SDG No.:	Q1225
Lab Sample ID:	PB166419BS		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
BN036324.D	1	01/31/25 08:30	02/06/25 08:03	PB166419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.39		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.55		30 - 150		137%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		106%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2240	7.775				
1146-65-2	Naphthalene-d8	4950	10.562				
15067-26-2	Acenaphthene-d10	2450	14.409				
1517-22-2	Phenanthrene-d10	4760	17.161				
1719-03-5	Chrysene-d12	4480	21.34				
1520-96-3	Perylene-d12	4640	23.63				

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\BN020525\
 Data File : BN036324.D
 Acq On : 06 Feb 2025 08:03
 Operator : RC/JU
 Sample : PB166419BS
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :

BNA_N

ClientSampleId :

PB166419BS

Manual Integrations**APPROVED**

Reviewed By :Jagrut Upadhyay 02/06/2025
 Supervised By :mohammad ahmed 02/07/2025

Quant Time: Feb 06 08:30:24 2025

Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Thu Feb 06 01:04:09 2025

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2239	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4945	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2445	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4757	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	4475	0.400	ng	0.00
35) Perylene-d12	23.630	264	4637	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2184	0.375	ng	0.00
5) Phenol-d6	6.952	99	2459	0.360	ng	0.00
8) Nitrobenzene-d5	8.918	82	1952	0.418	ng	-0.01
11) 2-Methylnaphthalene-d10	12.157	152	3675	0.547	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	360	0.230	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3786	0.347	ng	0.00
27) Fluoranthene-d10	19.188	212	5217	0.423	ng	0.00
31) Terphenyl-d14	19.787	244	4237	0.456	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.283	88	969	0.387	ng	# 50
3) n-Nitrosodimethylamine	3.586	42	1616	0.356	ng	# 71
6) bis(2-Chloroethyl)ether	7.197	93	2674	0.486	ng	99
9) Naphthalene	10.616	128	5781	0.403	ng	98
10) Hexachlorobutadiene	10.904	225	1546	0.333	ng	# 99
12) 2-Methylnaphthalene	12.233	142	3571	0.401	ng	96
16) Acenaphthylene	14.131	152	4680	0.404	ng	99
17) Acenaphthene	14.473	154	3195	0.402	ng	98
18) Fluorene	15.457	166	3969	0.399	ng	99
20) 4,6-Dinitro-2-methylph...	15.547	198	162	0.146	ng	# 31
21) 4-Bromophenyl-phenylether	16.354	248	1193	0.352	ng	# 93
22) Hexachlorobenzene	16.466	284	1579	0.354	ng	96
23) Atrazine	16.627	200	904	0.369	ng	97
24) Pentachlorophenol	16.813	266	929	0.481	ng	98
25) Phenanthrene	17.198	178	5703	0.399	ng	100
26) Anthracene	17.285	178	5348	0.411	ng	99
28) Fluoranthene	19.220	202	6743	0.402	ng	98
30) Pyrene	19.582	202	7110	0.392	ng	100
32) Benzo(a)anthracene	21.331	228	6360	0.392	ng	99
33) Chrysene	21.375	228	6946	0.419	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	3331	0.375	ng	98
36) Indeno(1,2,3-cd)pyrene	25.949	276	7491	0.403	ng	96
37) Benzo(b)fluoranthene	22.940	252	6605	0.392	ng	# 92
38) Benzo(k)fluoranthene	22.987	252	6814m	0.401	ng	
39) Benzo(a)pyrene	23.528	252	6161	0.428	ng	# 89
40) Dibenzo(a,h)anthracene	25.964	278	5781	0.390	ng	95
41) Benzo(g,h,i)perylene	26.656	276	6020	0.372	ng	96

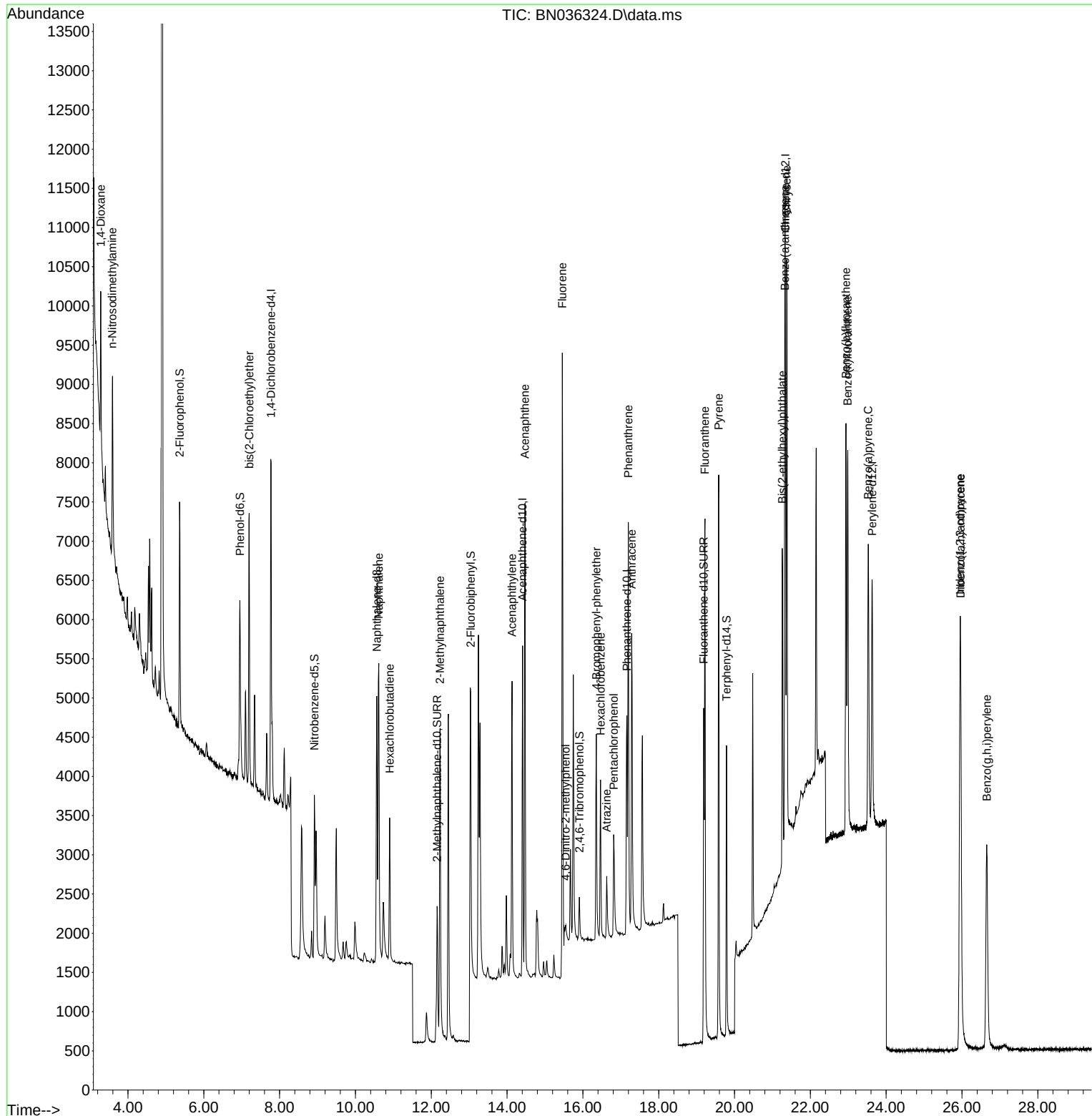
(#) = qualifier out of range (m) = manual integration (+) = signals summed

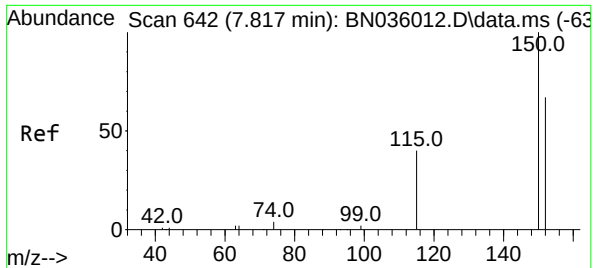
Instrument :
BNA_N
ClientSampleId :
PB166419BS

Quant Time: Feb 06 08:30:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Qlast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

Manual Integrations

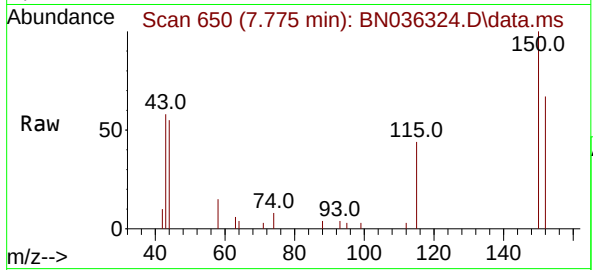
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

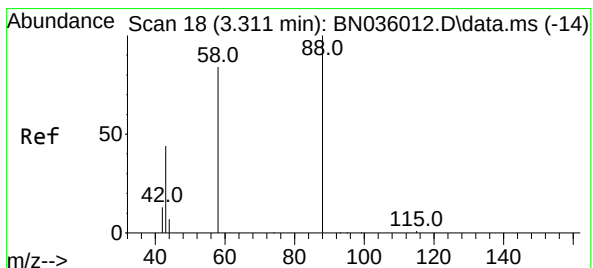
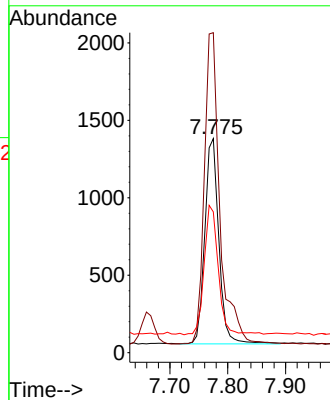
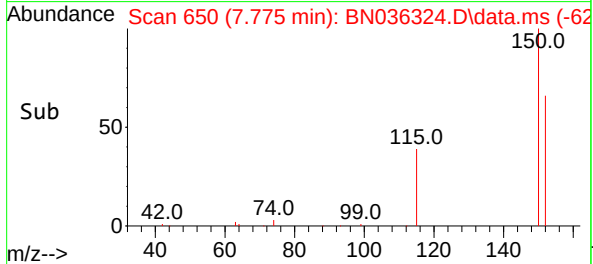
Instrument :
BNA_N
ClientSampleId :
PB166419BS



Tgt Ion: 152 Resp: 2239
Ion Ratio Lower Upper
152 100
150 149.5 117.4 176.2
115 65.8 51.0 76.4

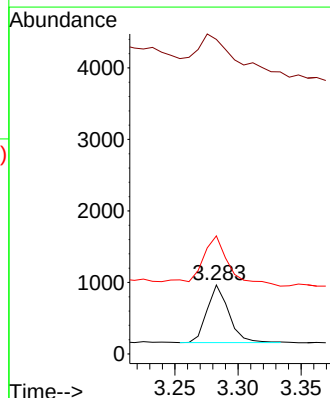
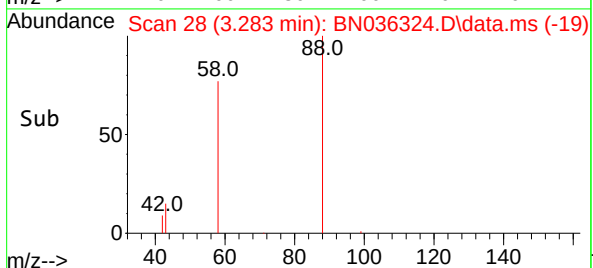
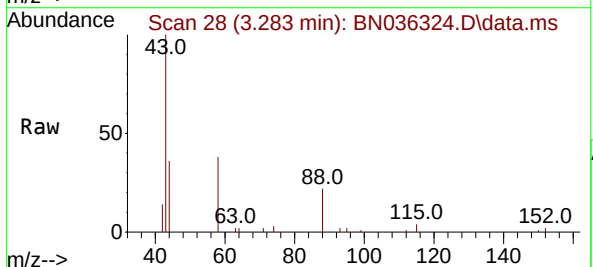
Manual Integrations
APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025

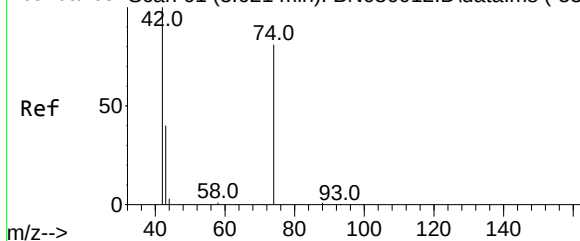


#2
1,4-Dioxane
Concen: 0.387 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion: 88 Resp: 969
Ion Ratio Lower Upper
88 100
43 101.9 38.5 57.7#
58 112.2 66.6 99.8#



Abundance Scan 61 (3.621 min): BN036012.D\data.ms (-53)



#3

n-Nitrosodimethylamine

Concen: 0.356 ng

RT: 3.586 min Scan# 70

Delta R.T. -0.007 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

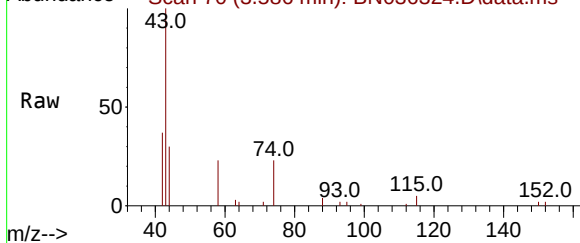
Instrument :

BNA_N

ClientSampleId :

PB166419BS

Abundance Scan 70 (3.586 min): BN036324.D\data.ms



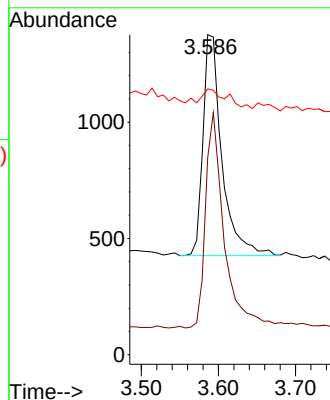
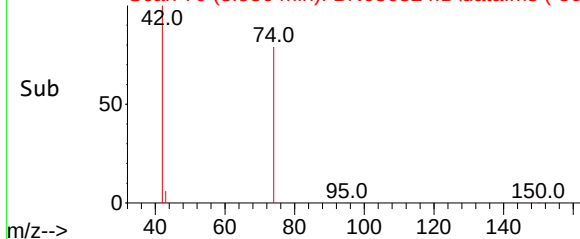
Tgt Ion:	42	Resp:	161
Ion Ratio	Lower	Upper	
42	100		
74	98.6	58.1	87.1
44	13.1	6.2	9.4

Manual Integrations

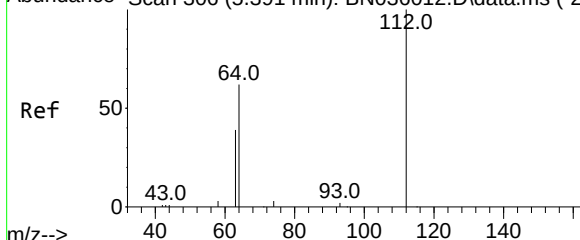
APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025

Abundance Scan 70 (3.586 min): BN036324.D\data.ms (-50)



Abundance Scan 306 (5.391 min): BN036012.D\data.ms (-29)



#4

2-Fluorophenol

Concen: 0.375 ng

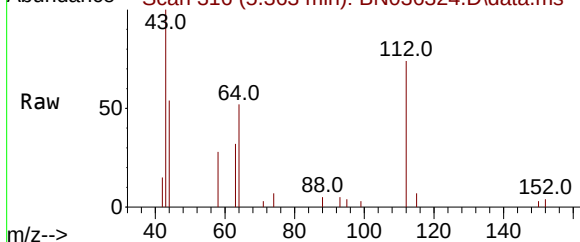
RT: 5.363 min Scan# 316

Delta R.T. 0.000 min

Lab File: BN036324.D

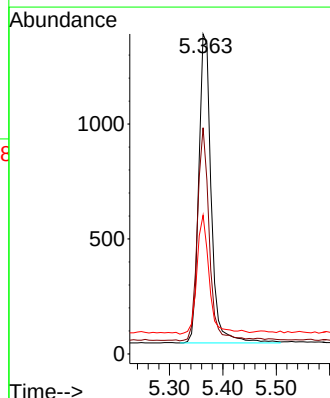
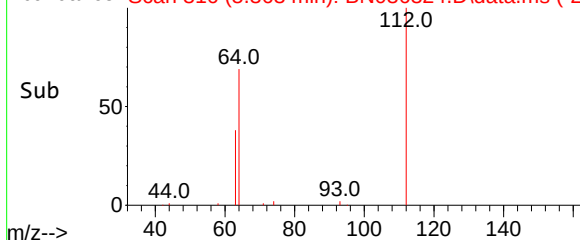
Acq: 06 Feb 2025 08:03

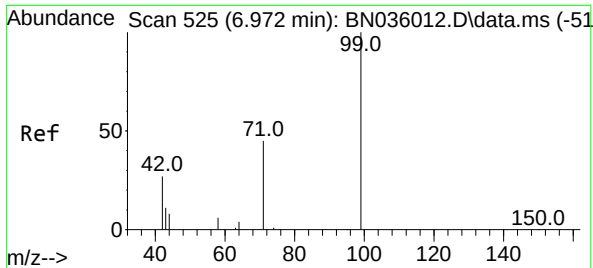
Abundance Scan 316 (5.363 min): BN036324.D\data.ms



Tgt Ion:	112	Resp:	2184
Ion Ratio	Lower	Upper	
112	100		
64	65.9	50.0	75.0
63	38.5	30.7	46.1

Abundance Scan 316 (5.363 min): BN036324.D\data.ms (-28)





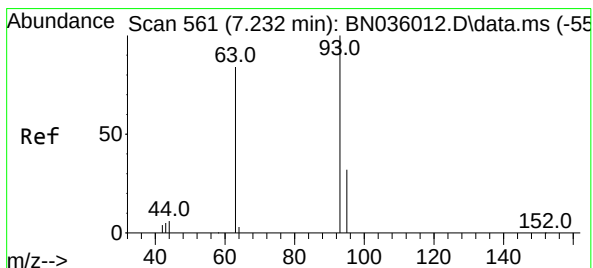
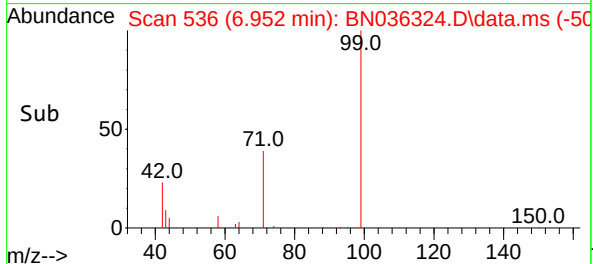
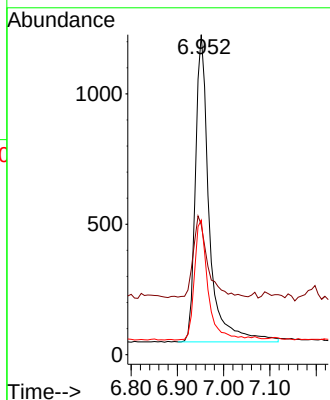
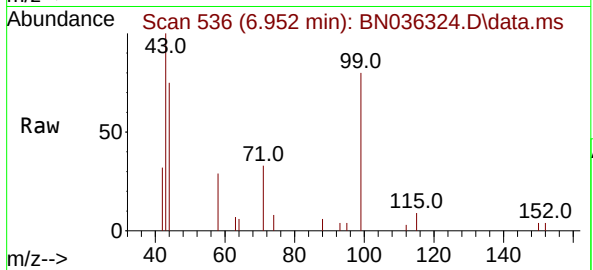
#5
Phenol-d6
Concen: 0.360 ng
RT: 6.952 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

Tgt Ion: 99 Resp: 245
Ion Ratio Lower Upper
99 100
42 27.0 26.8 40.2
71 38.1 36.6 55.0

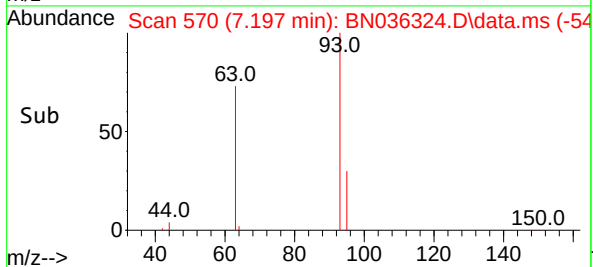
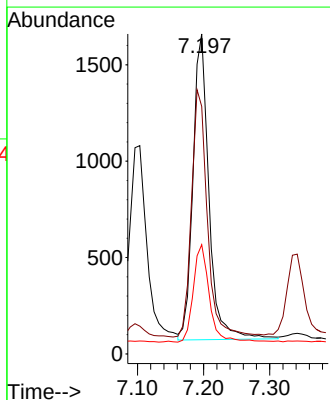
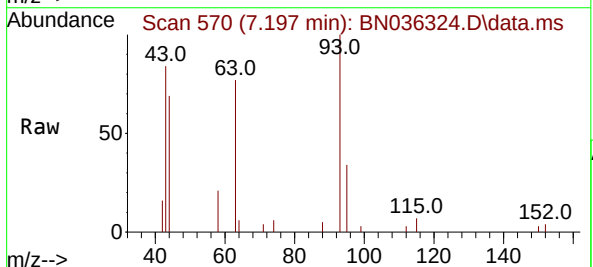
Manual Integrations
APPROVED

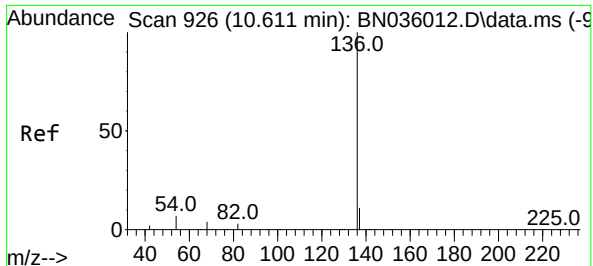
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#6
bis(2-Chloroethyl)ether
Concen: 0.486 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion: 93 Resp: 2674
Ion Ratio Lower Upper
93 100
63 80.4 65.8 98.6
95 32.2 25.8 38.6





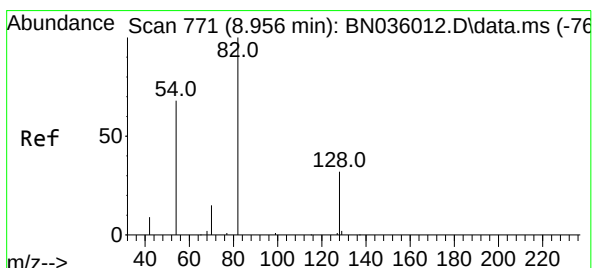
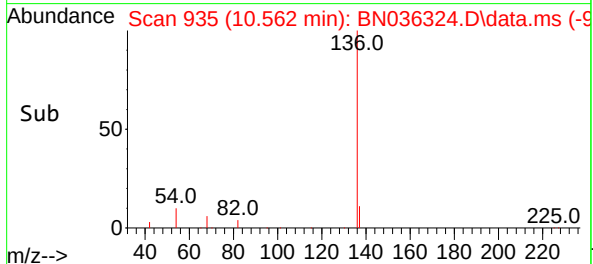
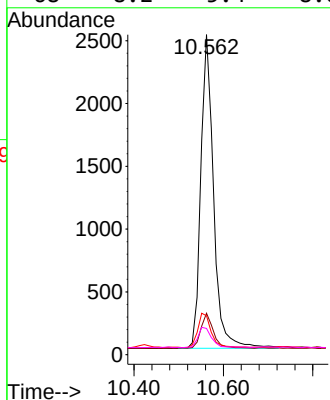
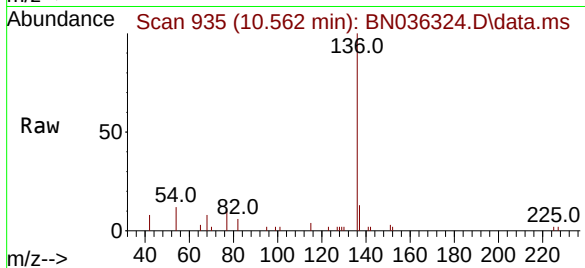
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

Tgt Ion:	136	Resp:	494
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	12.2	7.7	11.5
68	8.2	5.4	8.0

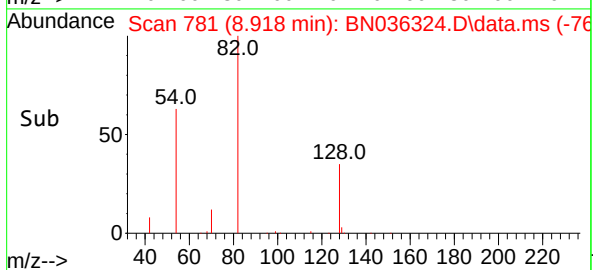
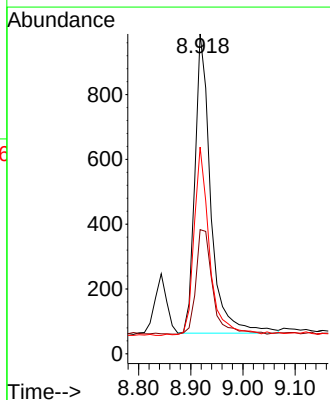
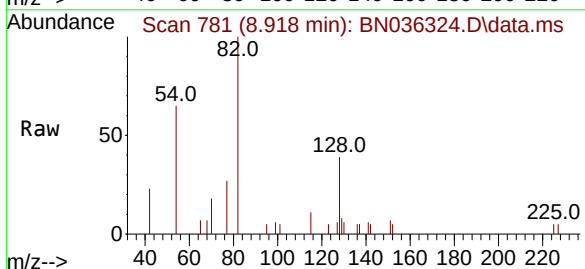
Manual Integrations
APPROVED

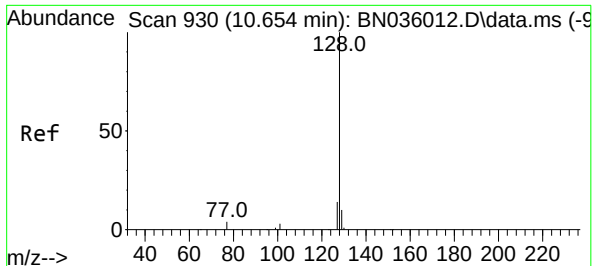
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#8
Nitrobenzene-d5
Concen: 0.418 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:	82	Resp:	1952
Ion	Ratio	Lower	Upper
82	100		
128	38.8	28.8	43.2
54	64.6	55.8	83.8





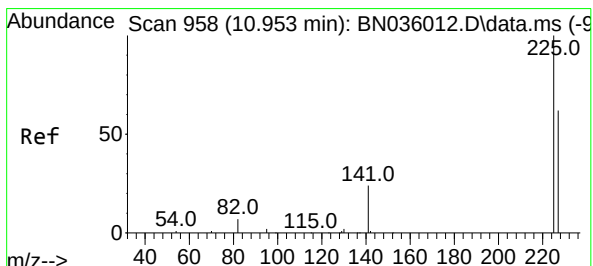
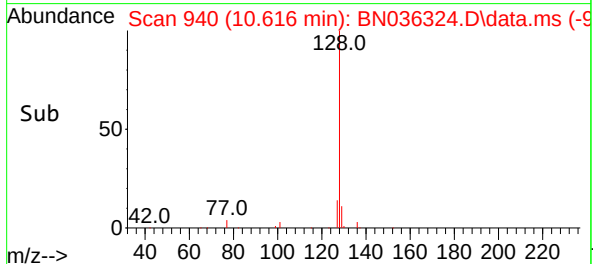
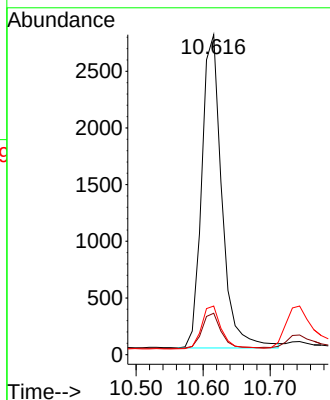
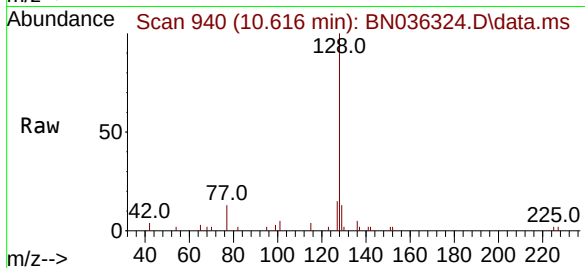
#9
Naphthalene
Concen: 0.403 ng
RT: 10.616 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

Tgt Ion:128 Resp: 578
Ion Ratio Lower Upper
128 100
129 13.0 9.4 14.2
127 15.2 12.6 19.0

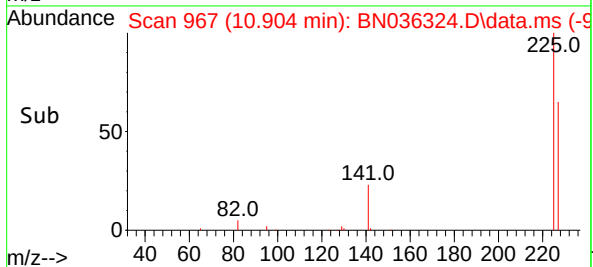
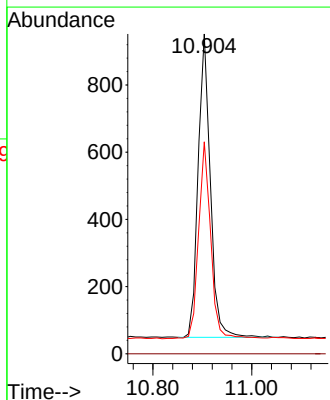
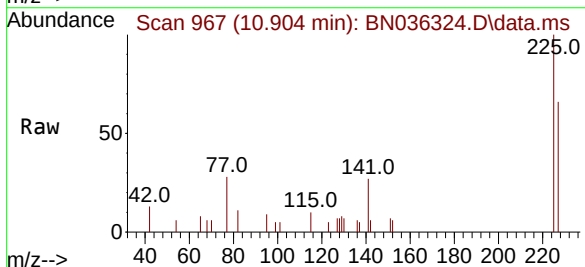
Manual Integrations
APPROVED

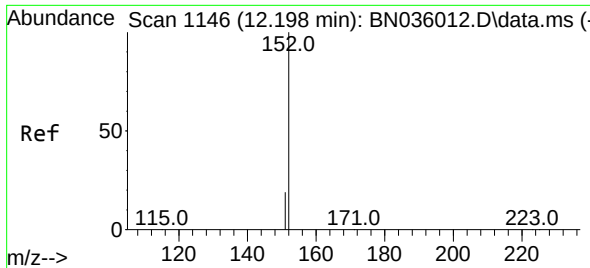
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#10
Hexachlorobutadiene
Concen: 0.333 ng
RT: 10.904 min Scan# 967
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

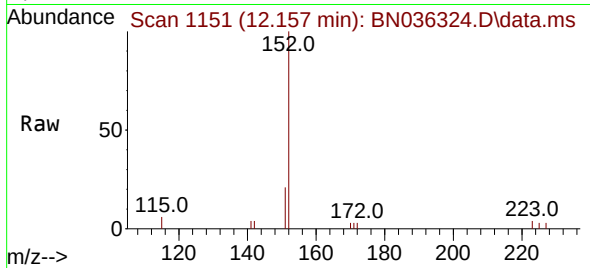
Tgt Ion:225 Resp: 1546
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 64.4 51.0 76.6





#11
2-Methylnaphthalene-d10
Concen: 0.547 ng
RT: 12.157 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

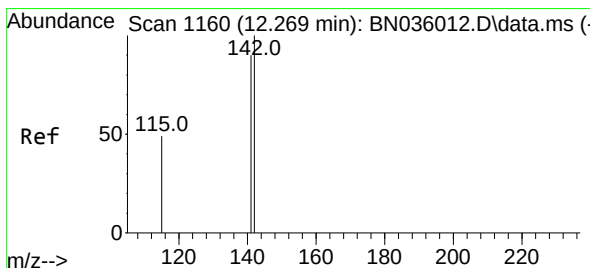
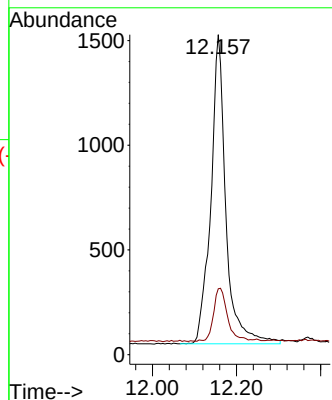
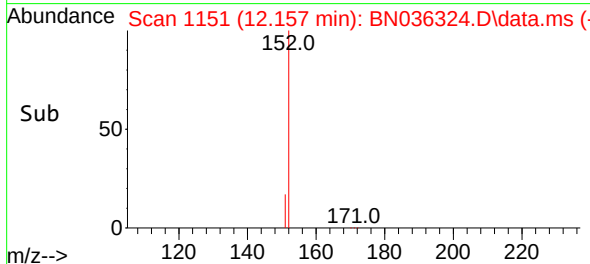
Instrument :
BNA_N
ClientSampleId :
PB166419BS



Tgt Ion:152 Resp: 3679
Ion Ratio Lower Upper
152 100
151 16.1 16.6 25.0

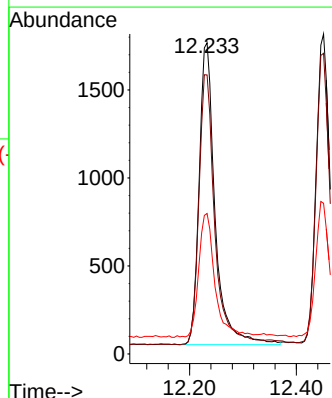
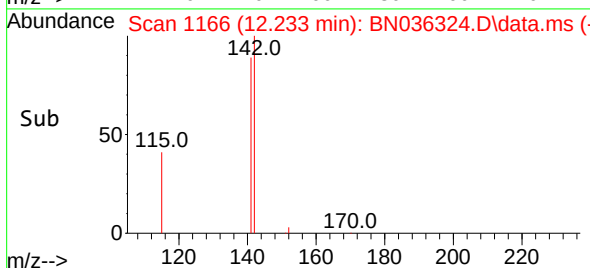
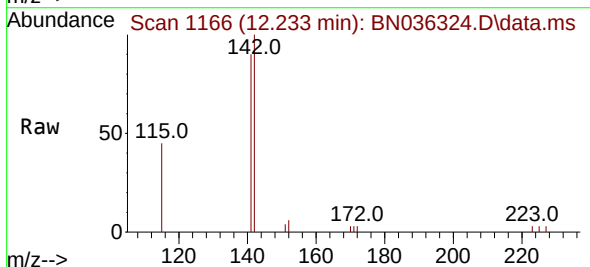
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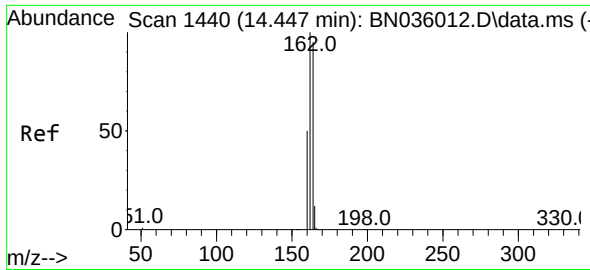
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#12
2-Methylnaphthalene
Concen: 0.401 ng
RT: 12.233 min Scan# 1166
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

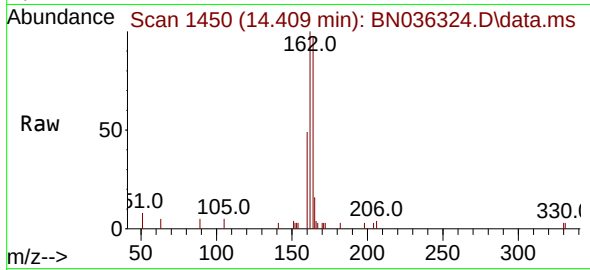
Tgt Ion:142 Resp: 3571
Ion Ratio Lower Upper
142 100
141 89.6 72.2 108.2
115 45.1 41.2 61.8





#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

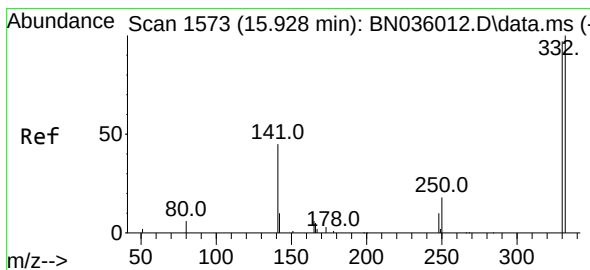
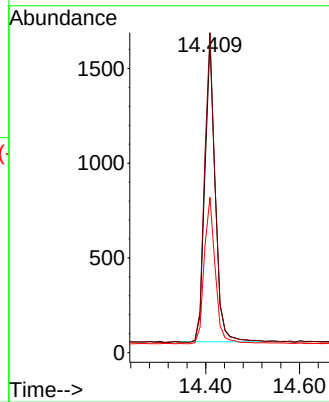
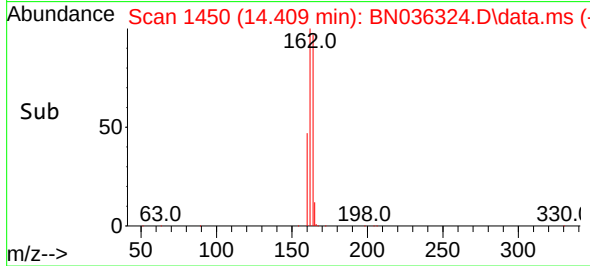
Instrument :
BNA_N
ClientSampleId :
PB166419BS



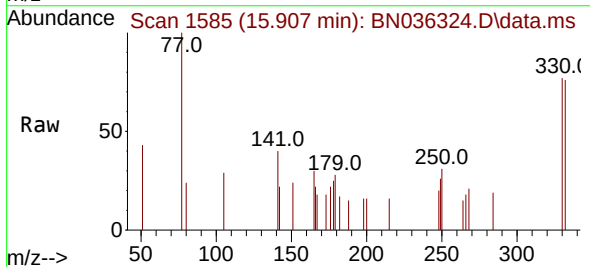
Tgt Ion:164 Resp: 244.9
Ion Ratio Lower Upper
164 100
162 102.8 84.1 126.1
160 49.9 43.8 65.8

Manual Integrations
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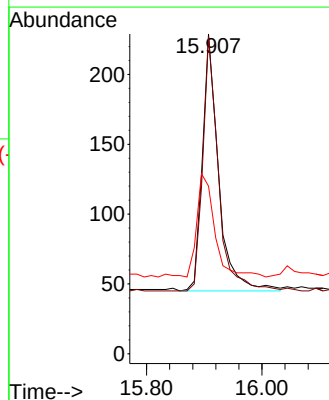
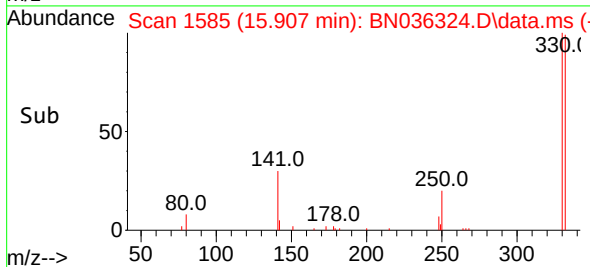
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025

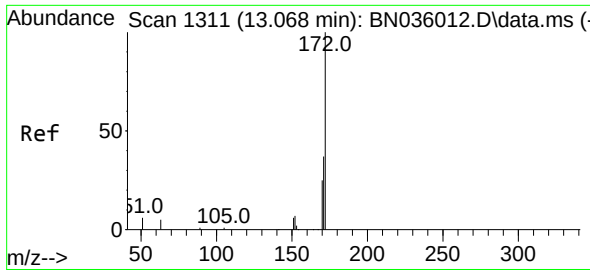


#14
2,4,6-Tribromophenol
Concen: 0.230 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03



Tgt Ion:330 Resp: 360
Ion Ratio Lower Upper
330 100
332 95.3 81.0 121.4
141 43.9 36.7 55.1





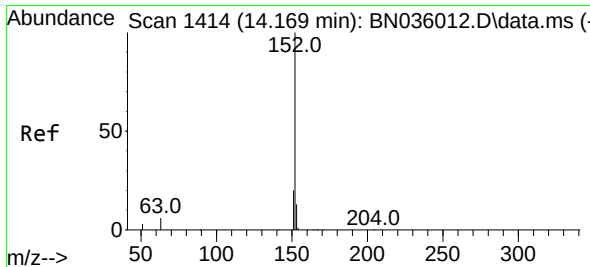
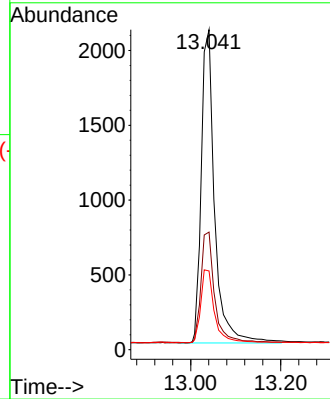
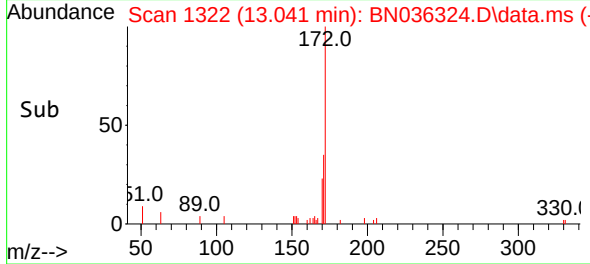
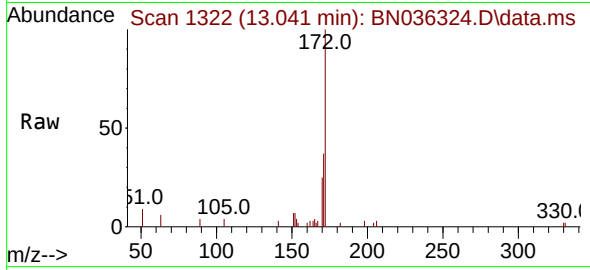
#15
2-Fluorobiphenyl
Concen: 0.347 ng
RT: 13.041 min Scan# 1311
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

Tgt Ion:172 Resp: 3780
Ion Ratio Lower Upper
172 100
171 36.7 30.9 46.3
170 24.6 21.2 31.8

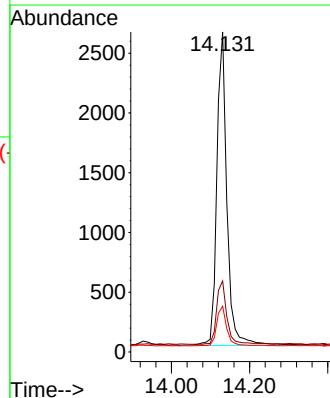
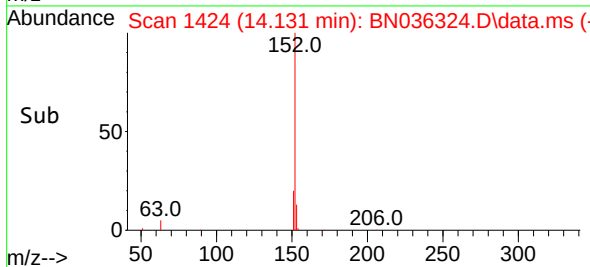
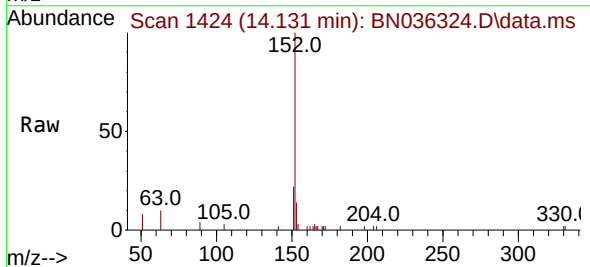
Manual Integrations
APPROVED

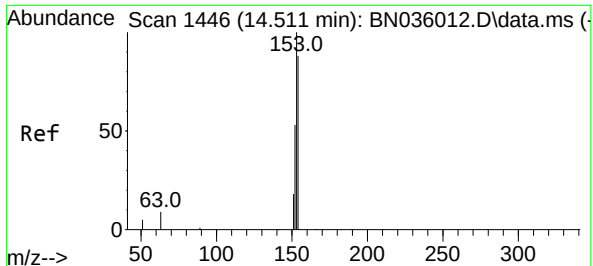
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#16
Acenaphthylene
Concen: 0.404 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:152 Resp: 4680
Ion Ratio Lower Upper
152 100
151 20.7 16.2 24.2
153 12.7 10.4 15.6





#17

Acenaphthene

Concen: 0.402 ng

RT: 14.473 min Scan# 1446

Delta R.T. -0.000 min

Lab File: BN036324.D

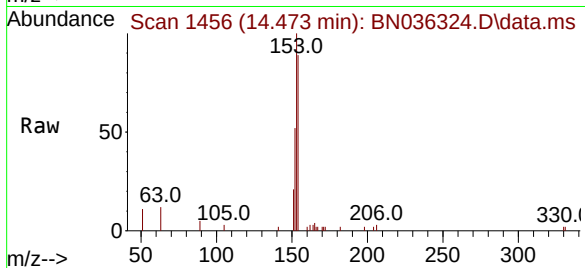
Acq: 06 Feb 2025 08:03

Instrument :

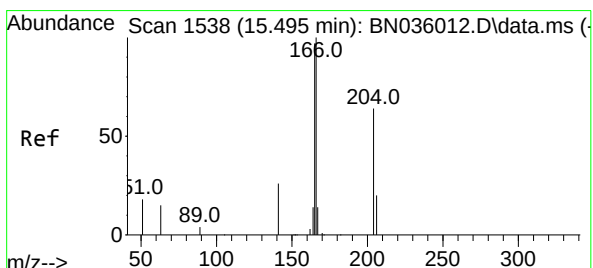
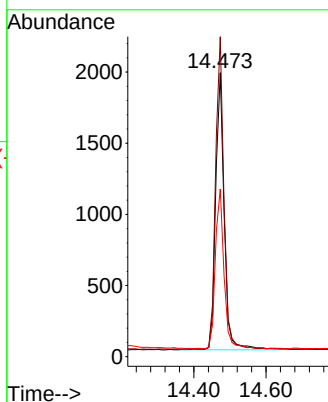
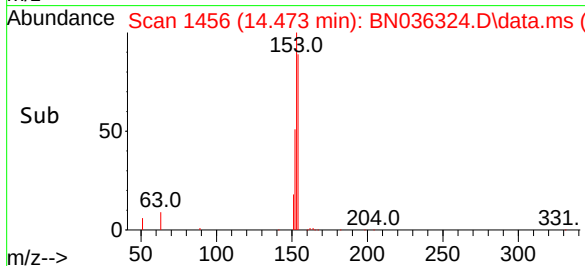
BNA_N

ClientSampleId :

PB166419BS



Tgt Ion	Ratio	Lower	Upper
154	100		
153	110.3	88.9	133.3
152	57.7	48.1	72.1

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Supervised By :mohammad ahmed 02/07/2025

#18

Fluorene

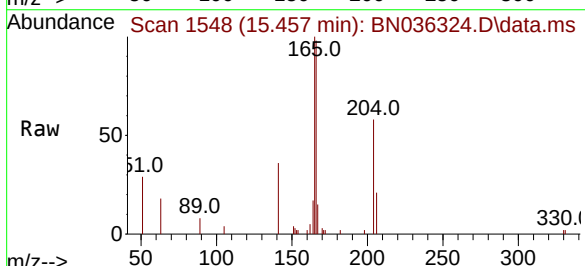
Concen: 0.399 ng

RT: 15.457 min Scan# 1548

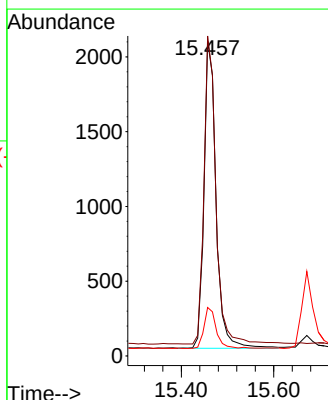
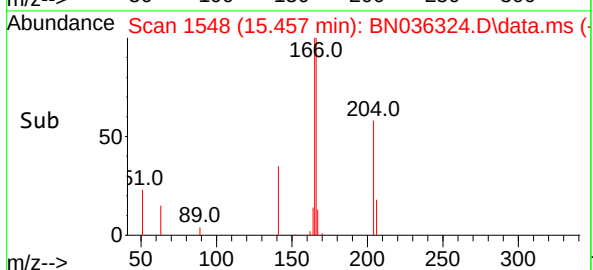
Delta R.T. -0.000 min

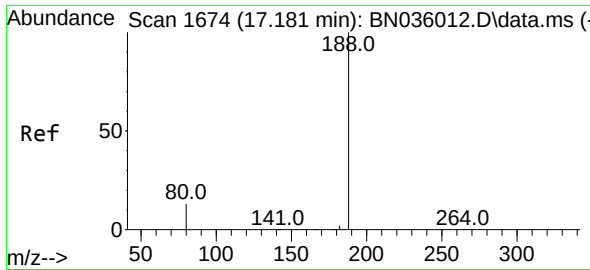
Lab File: BN036324.D

Acq: 06 Feb 2025 08:03



Tgt Ion	Ratio	Lower	Upper
166	100		
165	99.6	78.5	117.7
167	13.7	10.7	16.1





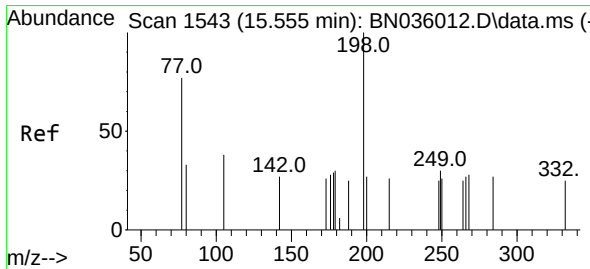
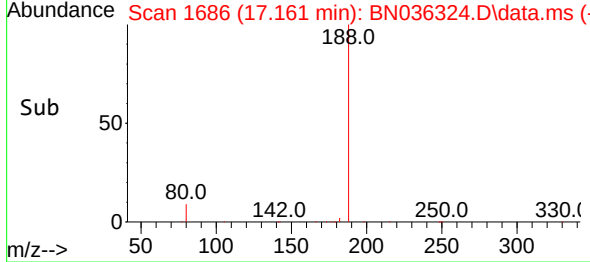
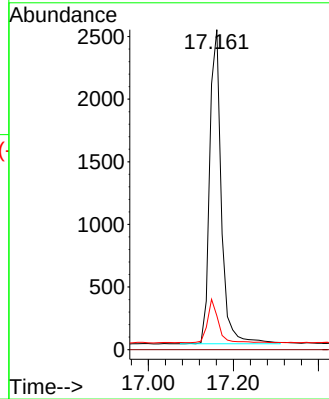
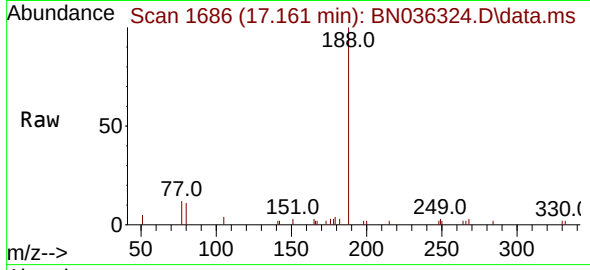
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

Tgt Ion:188 Resp: 475
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.6 12.3 18.5

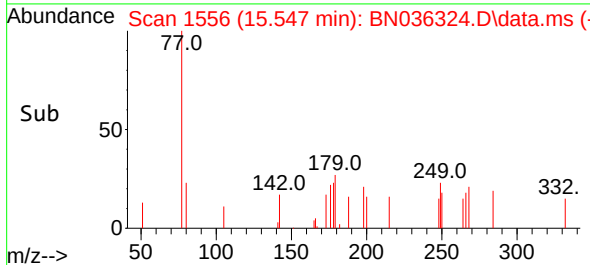
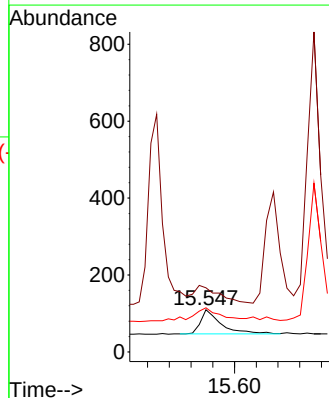
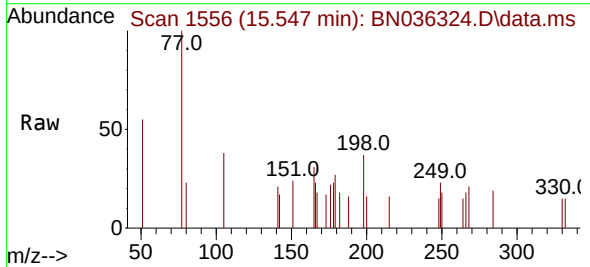
Manual Integrations
APPROVED

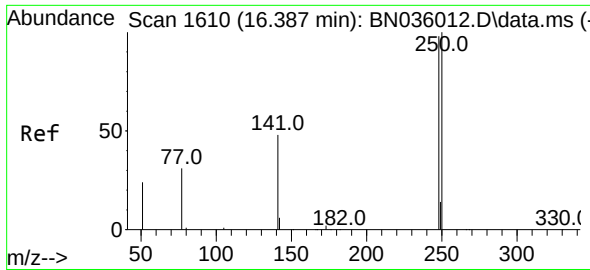
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#20
4,6-Dinitro-2-methylphenol
Concen: 0.146 ng
RT: 15.547 min Scan# 1556
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

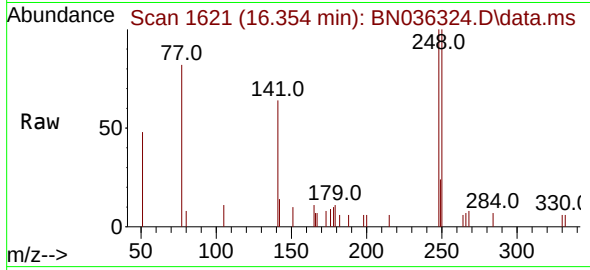
Tgt Ion:198 Resp: 162
Ion Ratio Lower Upper
198 100
51 151.8 68.1 102.1#
105 104.5 46.5 69.7#





#21
4-Bromophenyl-phenylether
Concen: 0.352 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

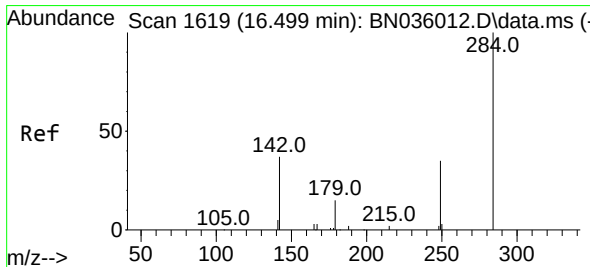
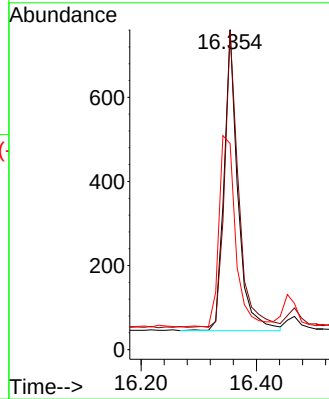
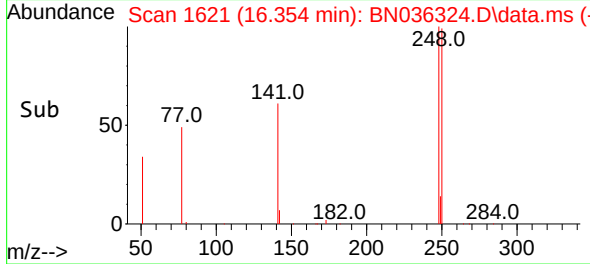
Instrument :
BNA_N
ClientSampleId :
PB166419BS



Tgt Ion:248 Resp: 119
Ion Ratio Lower Upper
248 100
250 99.6 81.5 122.3
141 64.4 41.8 62.6

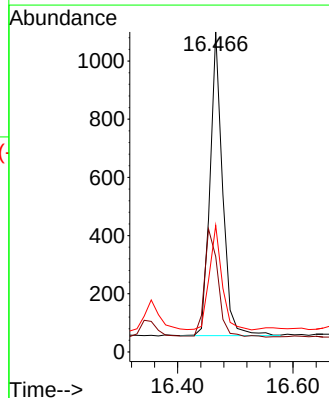
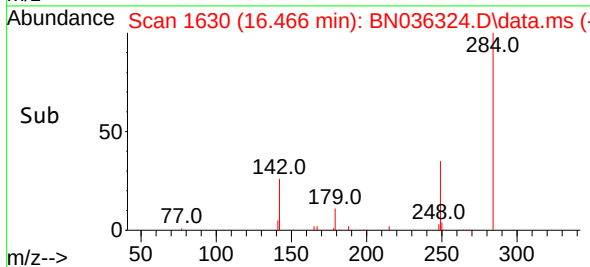
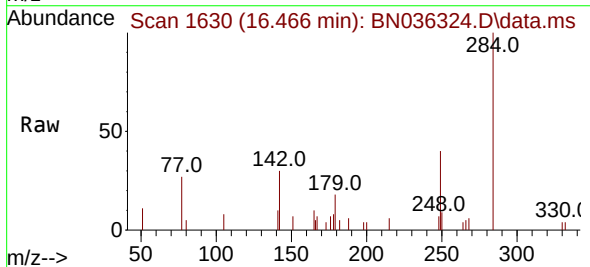
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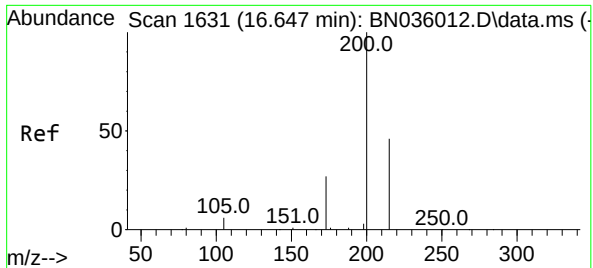
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#22
Hexachlorobenzene
Concen: 0.354 ng
RT: 16.466 min Scan# 1630
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

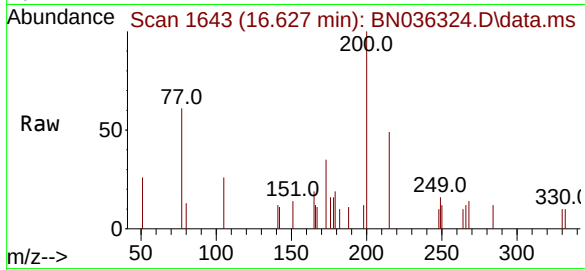
Tgt Ion:284 Resp: 1579
Ion Ratio Lower Upper
284 100
142 38.6 33.6 50.4
249 34.6 28.8 43.2





#23
Atrazine
Concen: 0.369 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

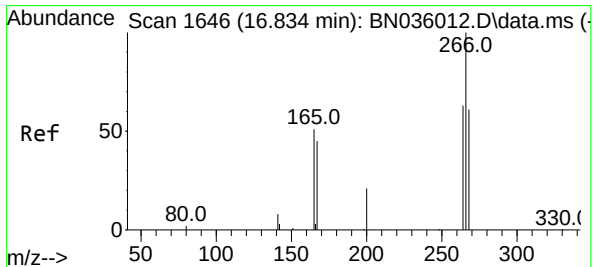
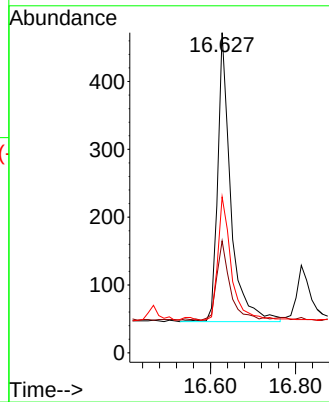
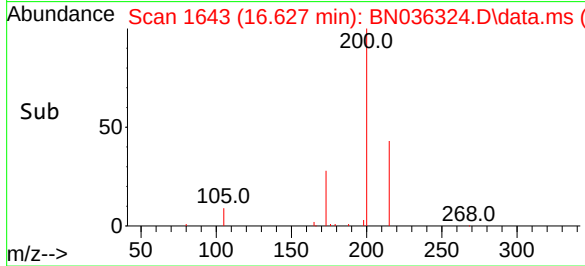
Instrument :
BNA_N
ClientSampleId :
PB166419BS



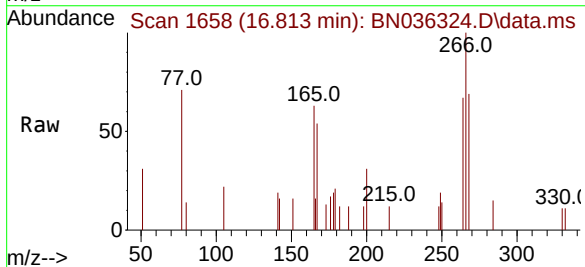
Tgt Ion:200 Resp: 904
Ion Ratio Lower Upper
200 100
173 35.0 26.6 40.0
215 48.7 40.6 61.0

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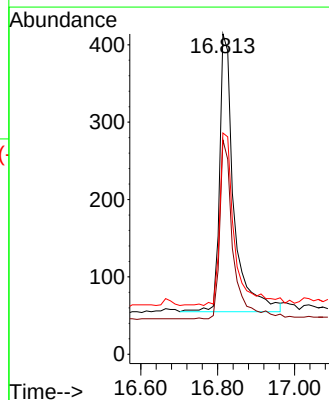
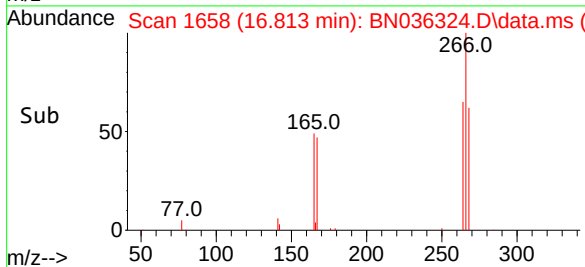
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025

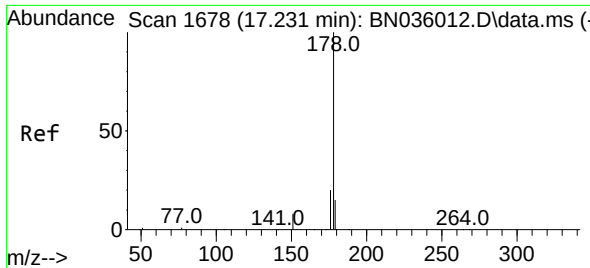


#24
Pentachlorophenol
Concen: 0.481 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03



Tgt Ion:266 Resp: 929
Ion Ratio Lower Upper
266 100
264 59.4 48.2 72.2
268 61.9 51.6 77.4





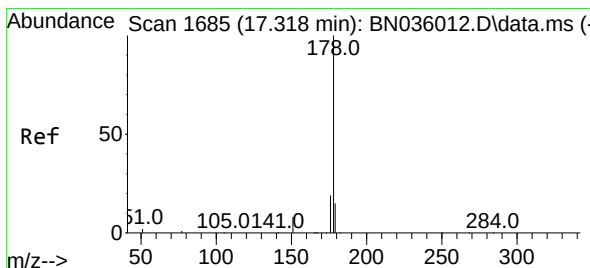
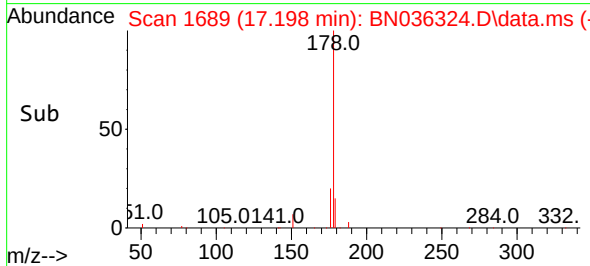
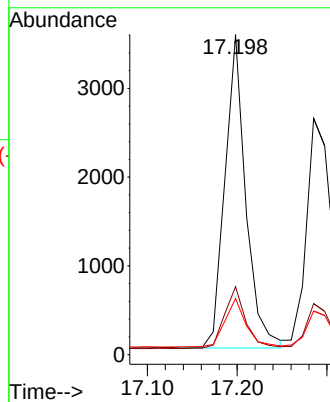
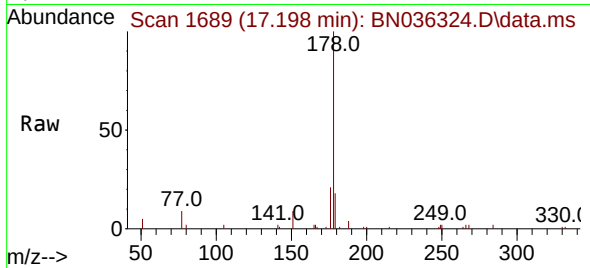
#25
Phenanthrene
Concen: 0.399 ng
RT: 17.198 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

Tgt Ion:178 Resp: 570
Ion Ratio Lower Upper
178 100
176 20.1 16.0 24.0
179 15.8 12.4 18.6

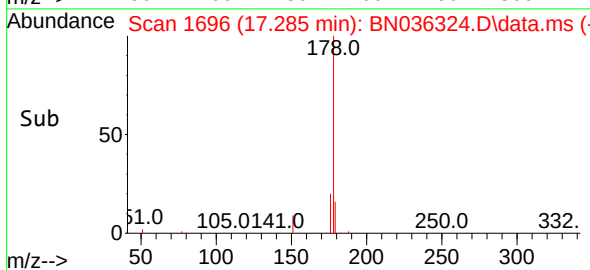
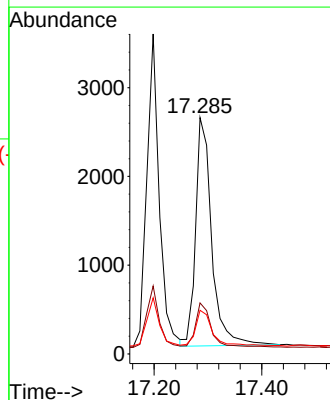
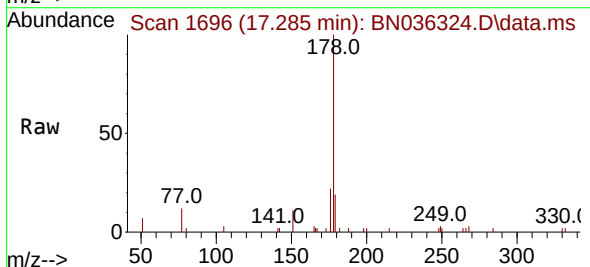
Manual Integrations
APPROVED

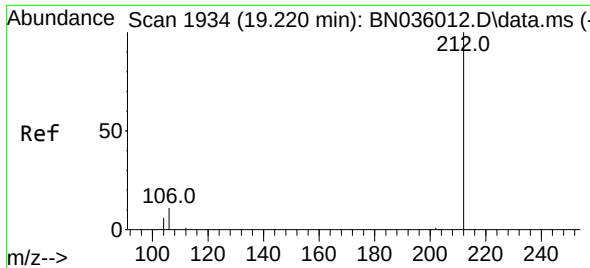
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#26
Anthracene
Concen: 0.411 ng
RT: 17.285 min Scan# 1696
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

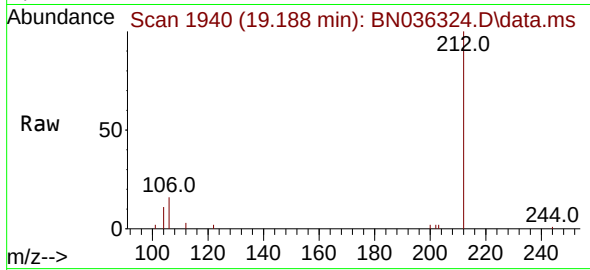
Tgt Ion:178 Resp: 5348
Ion Ratio Lower Upper
178 100
176 18.8 15.4 23.2
179 15.7 12.0 18.0





#27
Fluoranthene-d10
Concen: 0.423 ng
RT: 19.188 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

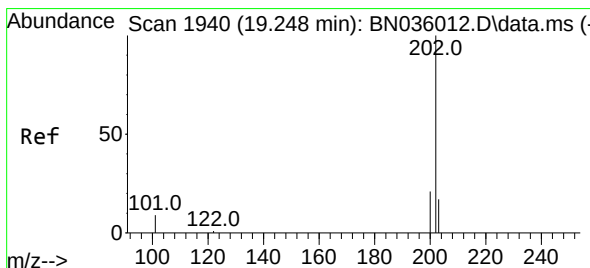
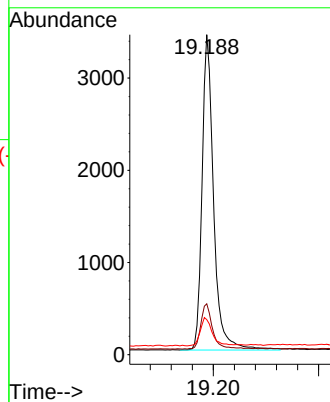
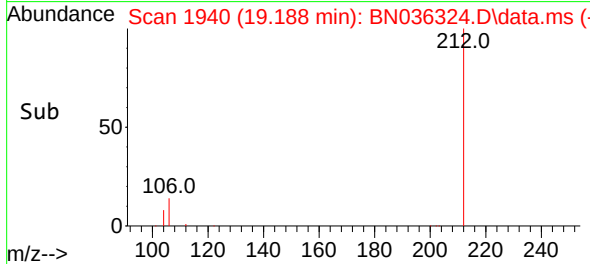
Instrument :
BNA_N
ClientSampleId :
PB166419BS



Tgt Ion:212 Resp: 521
Ion Ratio Lower Upper
212 100
106 14.7 9.7 14.5
104 9.2 6.0 9.0

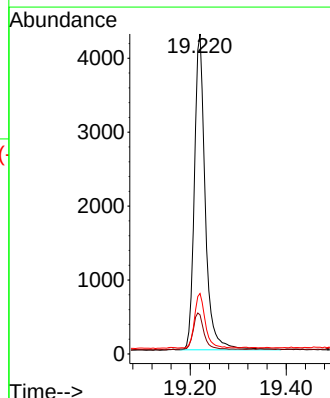
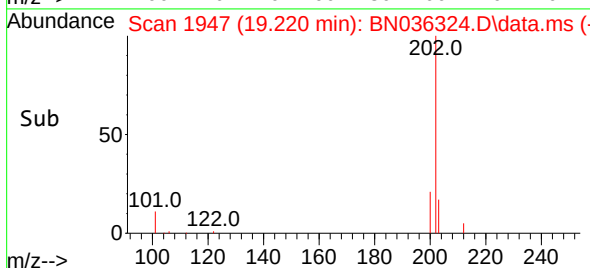
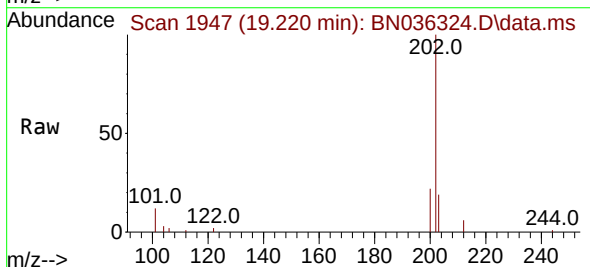
Manual Integrations
APPROVED

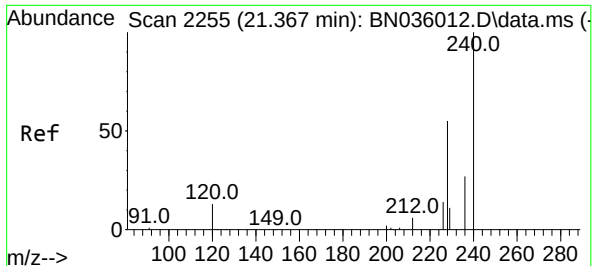
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#28
Fluoranthene
Concen: 0.402 ng
RT: 19.220 min Scan# 1947
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:202 Resp: 6743
Ion Ratio Lower Upper
202 100
101 11.4 7.6 11.4
203 17.0 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

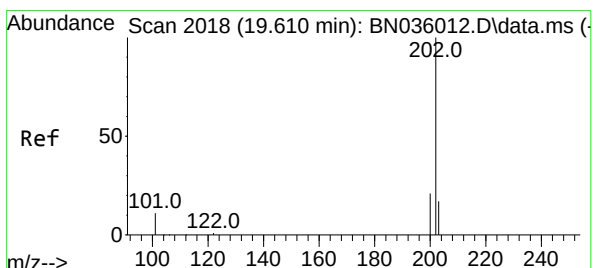
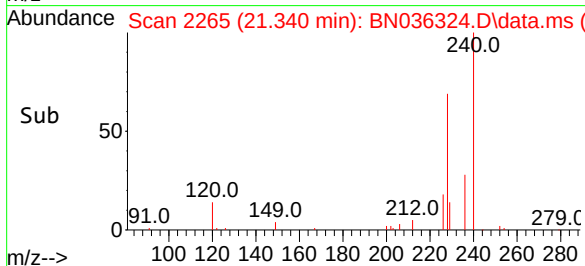
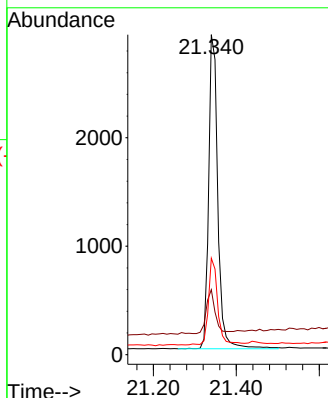
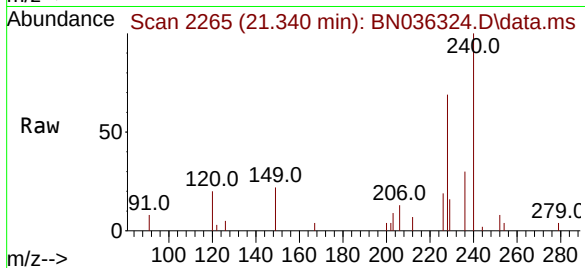
Instrument :

BNA_N

ClientSampleId :

PB166419BS

Tgt Ion:240	Resp:	447
Ion Ratio	Lower	Upper
240	100	
120	20.3	13.9 20.9
236	30.2	23.7 35.5

Manual Integrations
APPROVEDReviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025

#30

Pyrene

Concen: 0.392 ng

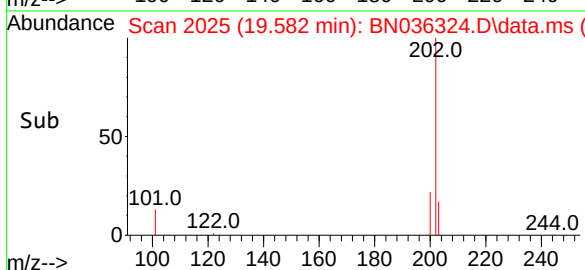
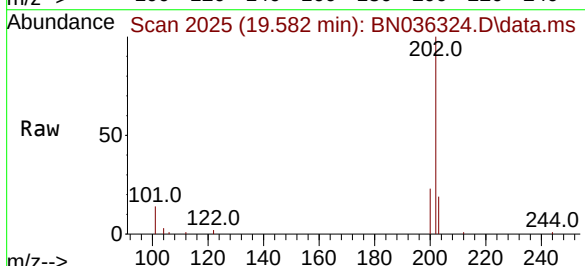
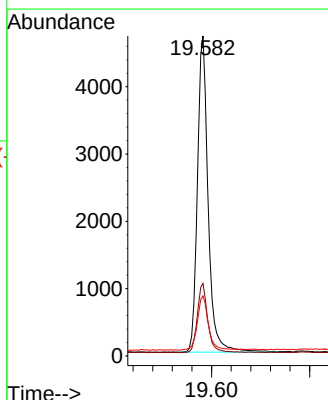
RT: 19.582 min Scan# 2025

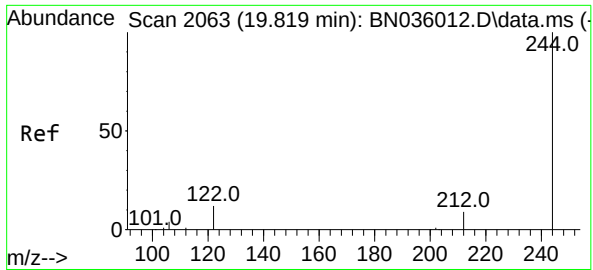
Delta R.T. 0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Tgt Ion:202	Resp:	7110
Ion Ratio	Lower	Upper
202	100	
200	21.3	17.0 25.4
203	17.8	14.4 21.6





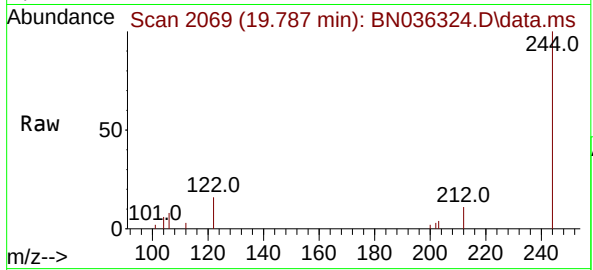
#31
Terphenyl-d14
Concen: 0.456 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS

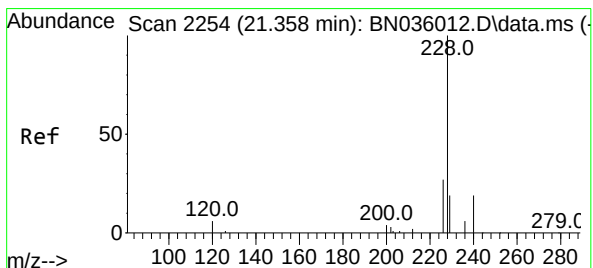
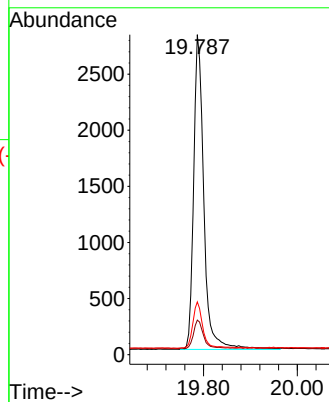
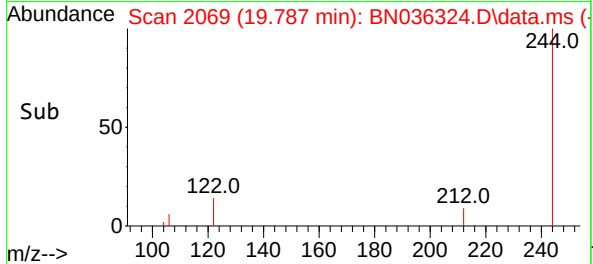


Tgt Ion:244 Resp: 423
Ion Ratio Lower Upper
244 100
212 10.8 9.1 13.7
122 16.5 11.3 16.9

Manual Integrations

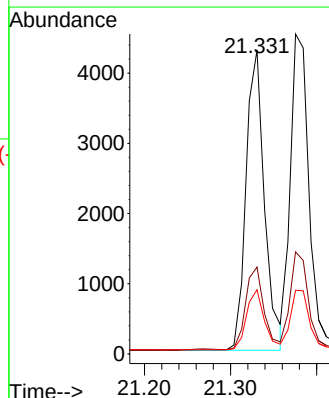
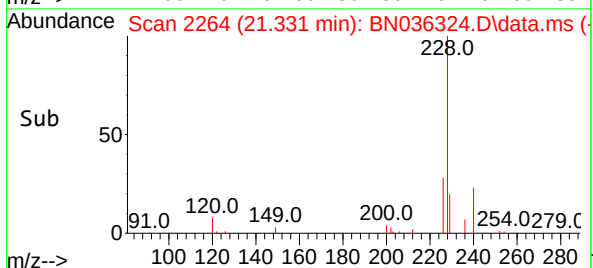
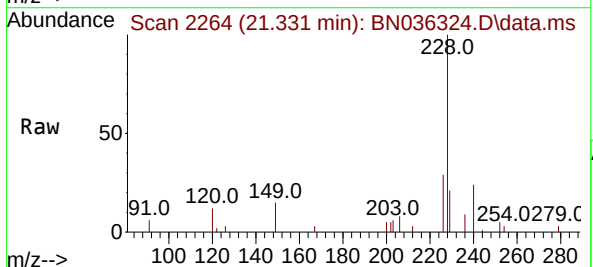
APPROVED

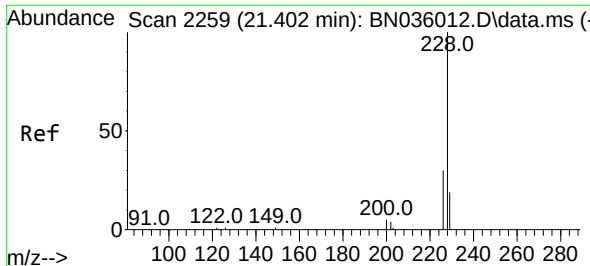
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#32
Benzo(a)anthracene
Concen: 0.392 ng
RT: 21.331 min Scan# 2264
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:228 Resp: 6360
Ion Ratio Lower Upper
228 100
226 28.6 22.6 34.0
229 21.1 16.5 24.7





#33

Chrysene

Concen: 0.419 ng

RT: 21.375 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

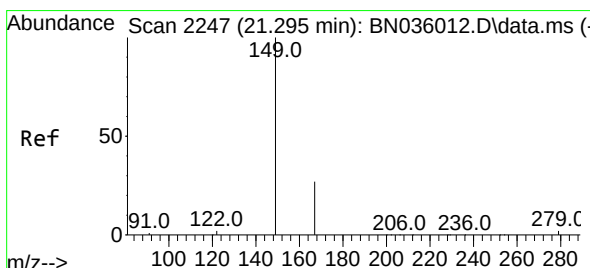
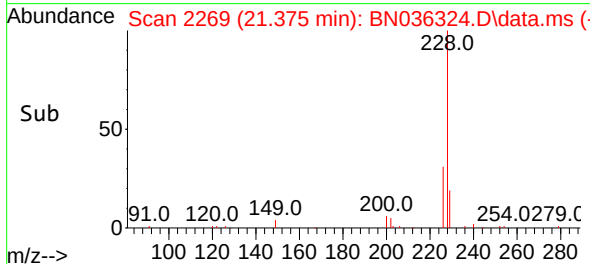
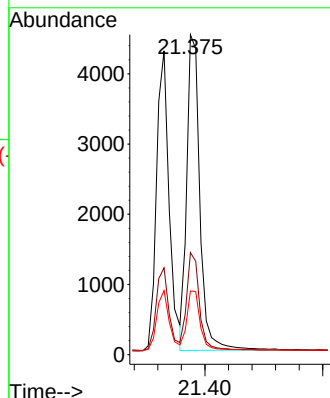
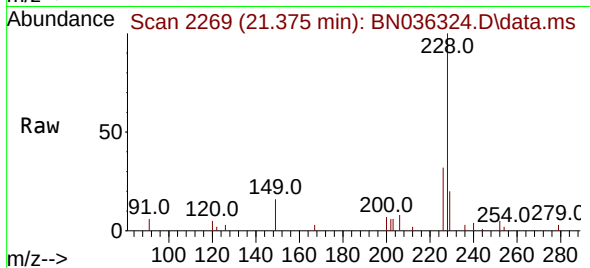
PB166419BS

Tgt Ion:	228	Resp:	6940
Ion Ratio	Lower	Upper	
228	100		
226	31.9	25.3	37.9
229	19.9	16.3	24.5

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.375 ng

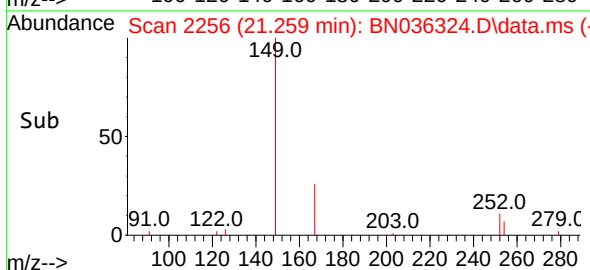
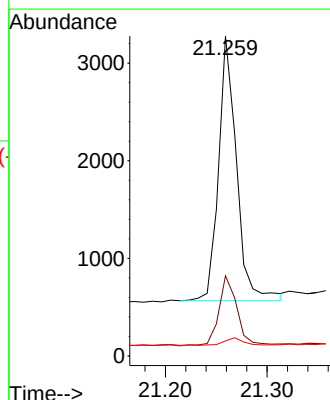
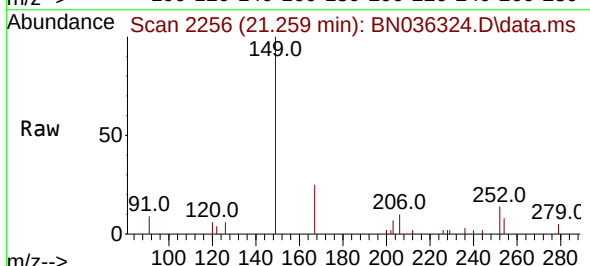
RT: 21.259 min Scan# 2256

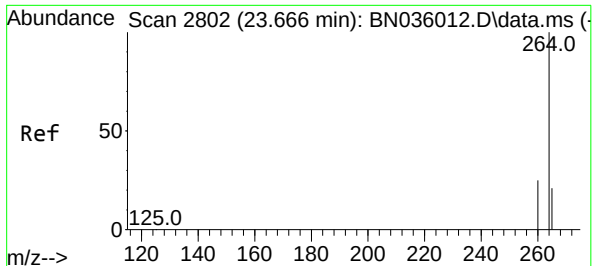
Delta R.T. 0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Tgt Ion:	149	Resp:	3331
Ion Ratio	Lower	Upper	
149	100		
167	26.5	21.9	32.9
279	3.9	3.0	4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.630 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

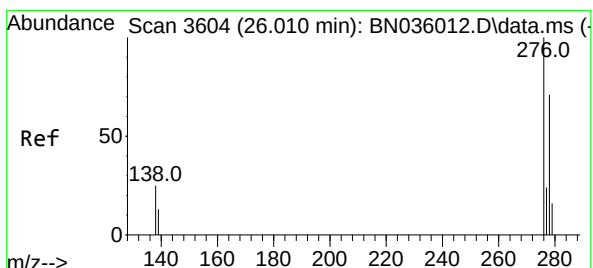
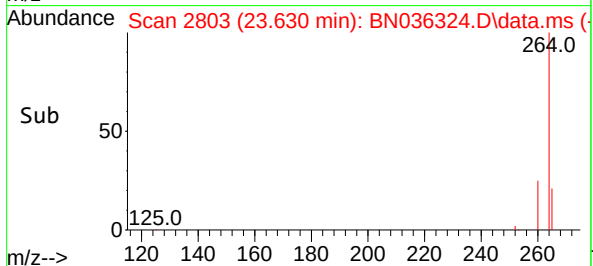
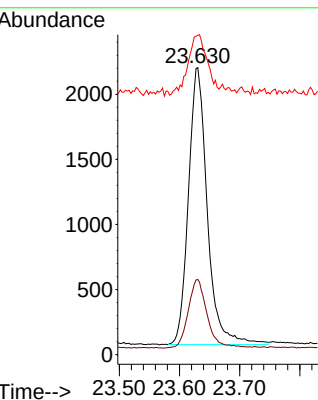
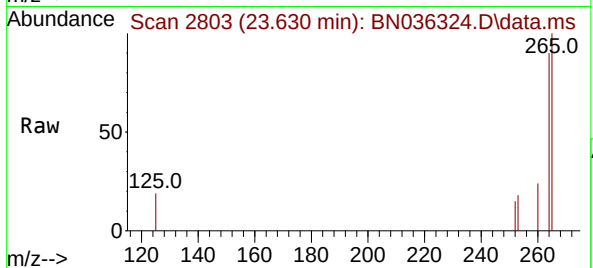
PB166419BS

Tgt Ion:264	Resp:	463
Ion Ratio	Lower	Upper
264	100	
260	26.2	21.8 32.6
265	111.3	56.6 84.8

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.403 ng

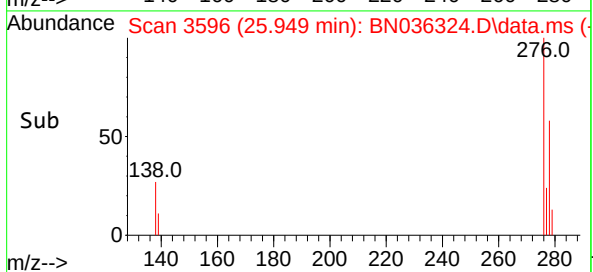
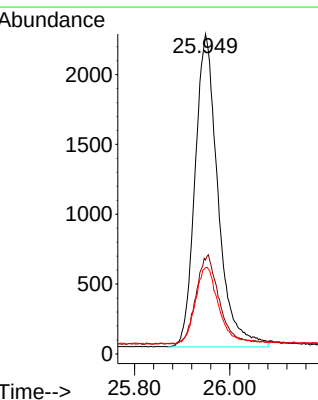
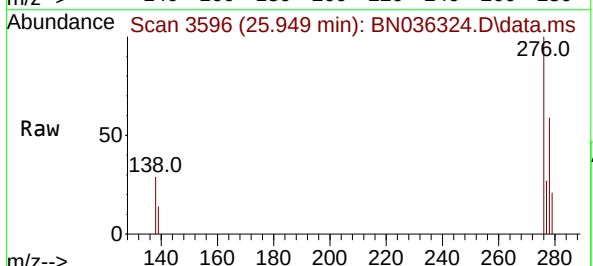
RT: 25.949 min Scan# 3596

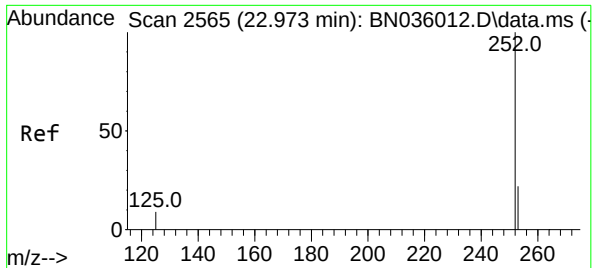
Delta R.T. 0.006 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

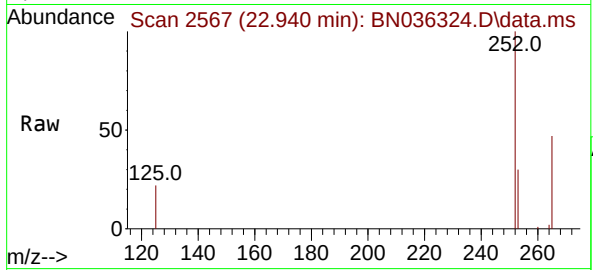
Tgt Ion:276	Resp:	7491
Ion Ratio	Lower	Upper
276	100	
138	28.5	19.9 29.9
277	24.2	19.4 29.2





#37
Benzo(b)fluoranthene
Concen: 0.392 ng
RT: 22.940 min Scan# 2565
Delta R.T. 0.003 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

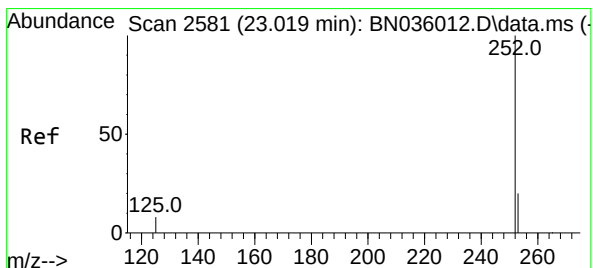
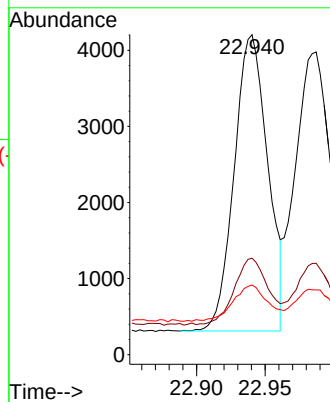
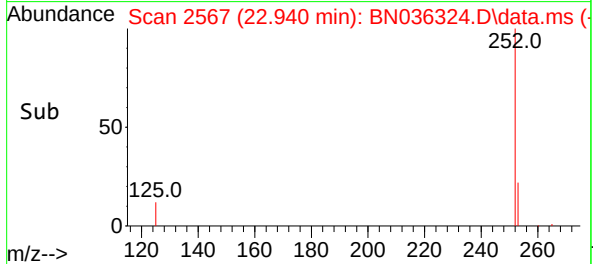
Instrument :
BNA_N
ClientSampleId :
PB166419BS



Tgt Ion:252 Resp: 660
Ion Ratio Lower Upper
252 100
253 30.1 22.5 33.7
125 21.8 11.9 17.9

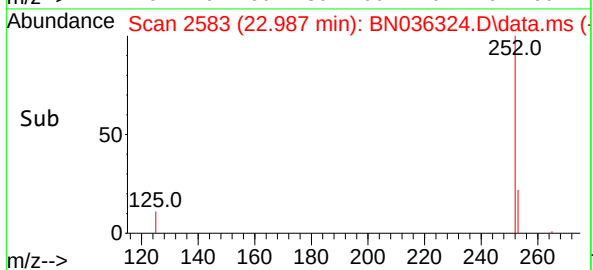
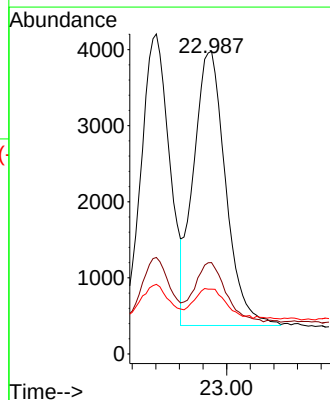
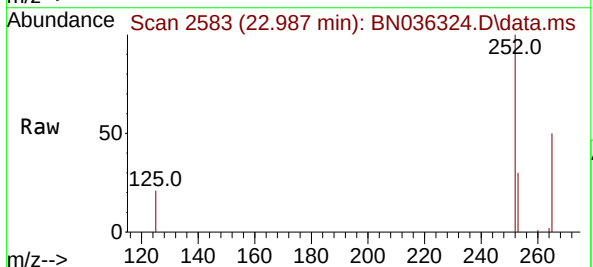
Manual Integrations
APPROVED

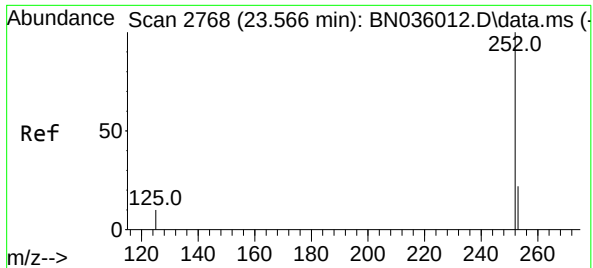
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#38
Benzo(k)fluoranthene
Concen: 0.401 ng m
RT: 22.987 min Scan# 2583
Delta R.T. 0.003 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:252 Resp: 6814
Ion Ratio Lower Upper
252 100
253 30.2 21.3 31.9
125 21.4 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.428 ng

RT: 23.528 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036324.D

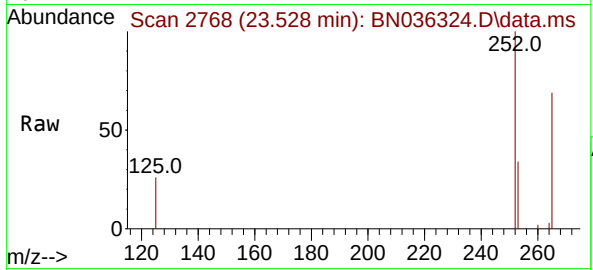
Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS



Tgt Ion:252 Resp: 616

Ion Ratio Lower Upper

252 100

253 33.5 23.8 35.6

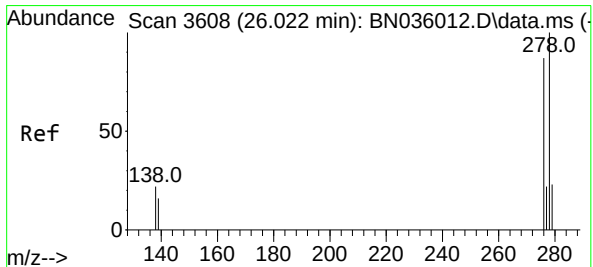
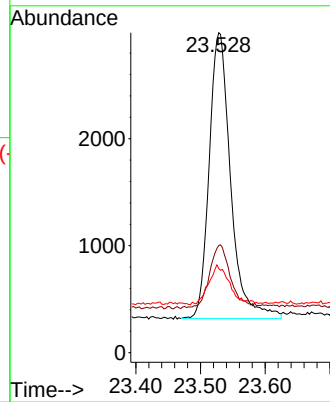
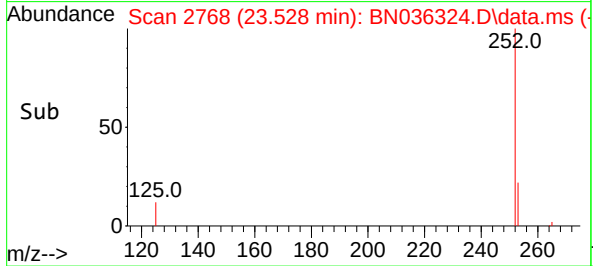
125 26.2 14.6 21.8

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025

Supervised By :mohammad ahmed 02/07/2025



#40

Dibenzo(a,h)anthracene

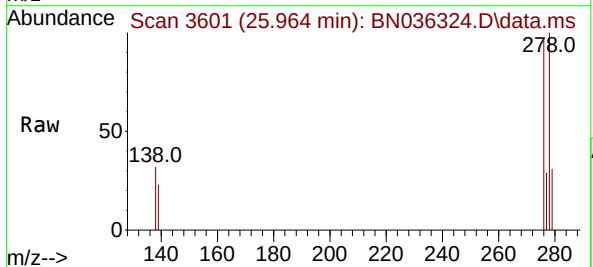
Concen: 0.390 ng

RT: 25.964 min Scan# 3601

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03



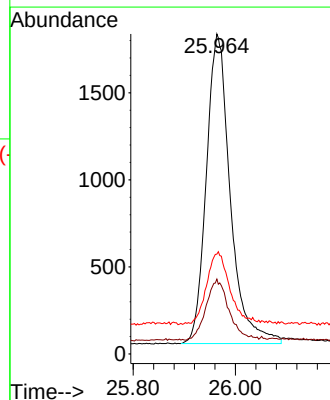
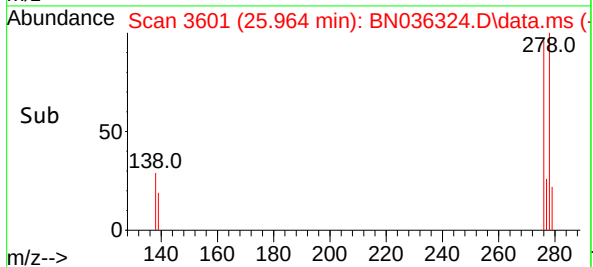
Tgt Ion:278 Resp: 5781

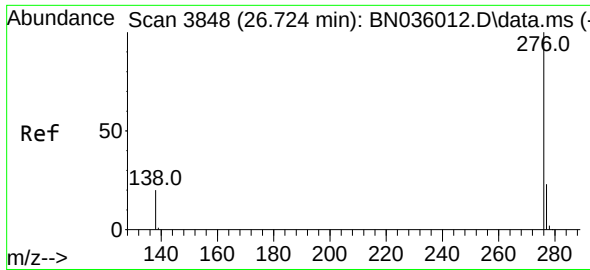
Ion Ratio Lower Upper

278 100

139 23.4 16.0 24.0

279 31.2 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.372 ng

RT: 26.656 min Scan# 3848

Delta R.T. 0.003 min

Lab File: BN036324.D

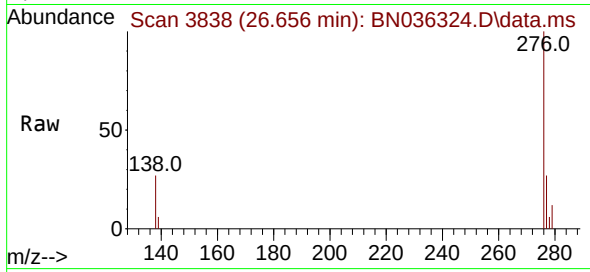
Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS



Tgt Ion:276 Resp: 6020

Ion Ratio Lower Upper

276 100

277 27.3 21.3 31.9

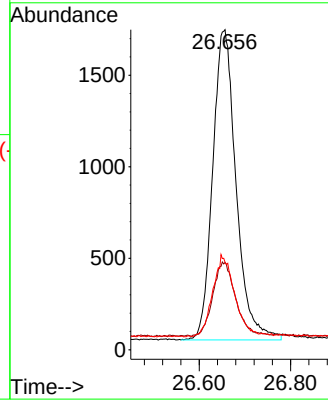
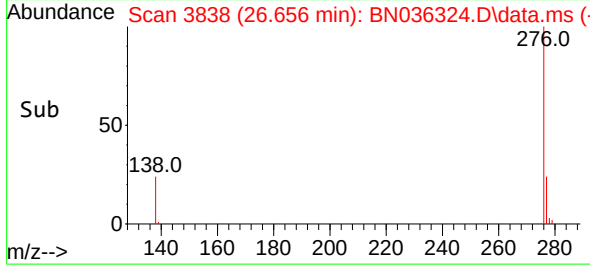
138 27.3 19.2 28.8

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025

Supervised By :mohammad ahmed 02/07/2025



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB166419BSD	SDG No.:	Q1225
Lab Sample ID:	PB166419BSD	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
BN036328.D	1	01/31/25 08:30	02/06/25 10:27	PB166419

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.38		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.55		30 - 150		137%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		108%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		96%	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	2140	7.768				
1146-65-2	Naphthalene-d8	4540	10.562				
15067-26-2	Acenaphthene-d10	2140	14.409				
1517-22-2	Phenanthrene-d10	3970	17.161				
1719-03-5	Chrysene-d12	3670	21.34				
1520-96-3	Perylene-d12	3970	23.63				

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\BN020525\
 Data File : BN036328.D
 Acq On : 06 Feb 2025 10:27
 Operator : RC/JU
 Sample : PB166419BSD
 Misc :
 ALS Vial : 27 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB166419BSD

Quant Time: Feb 06 11:37:34 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

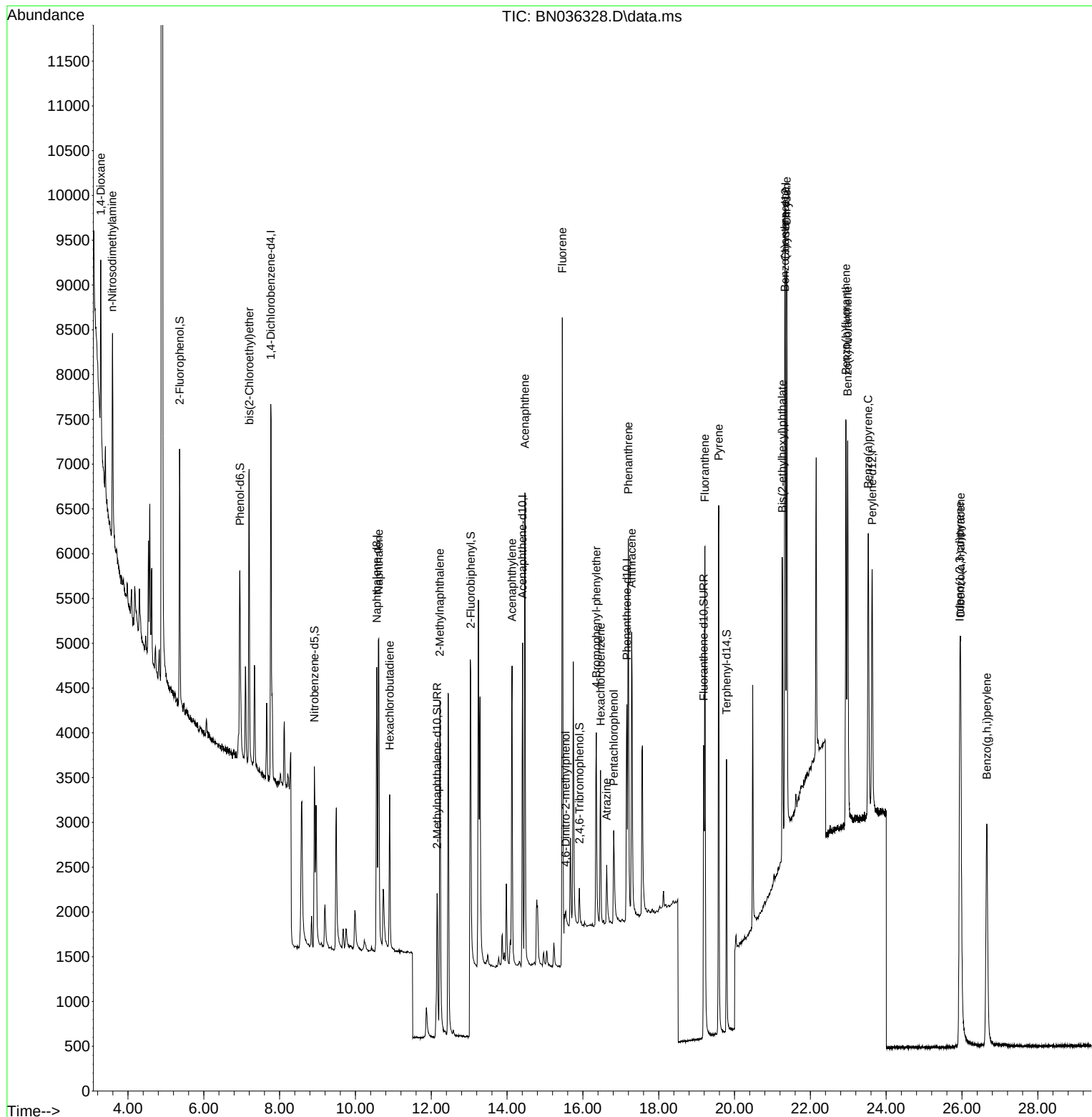
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.768	152	2144	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4537	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2141	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	3969	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	3671	0.400	ng	0.00
35) Perylene-d12	23.630	264	3973	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2094	0.375	ng	0.00
5) Phenol-d6	6.952	99	2296	0.351	ng	0.00
8) Nitrobenzene-d5	8.918	82	1858	0.434	ng	-0.01
11) 2-Methylnaphthalene-d10	12.157	152	3388	0.549	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	297	0.216	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3672	0.384	ng	0.00
27) Fluoranthene-d10	19.188	212	4292	0.417	ng	0.00
31) Terphenyl-d14	19.787	244	3413	0.448	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.283	88	901	0.376	ng	# 51
3) n-Nitrosodimethylamine	3.586	42	1670	0.384	ng	# 80
6) bis(2-Chloroethyl)ether	7.197	93	2568	0.487	ng	99
9) Naphthalene	10.616	128	5426	0.412	ng	98
10) Hexachlorobutadiene	10.904	225	1496	0.351	ng	# 96
12) 2-Methylnaphthalene	12.228	142	3308	0.405	ng	98
16) Acenaphthylene	14.131	152	4224	0.416	ng	99
17) Acenaphthene	14.473	154	2821	0.406	ng	97
18) Fluorene	15.457	166	3481	0.400	ng	97
20) 4,6-Dinitro-2-methylph...	15.547	198	140	0.151	ng	# 20
21) 4-Bromophenyl-phenylether	16.354	248	1024	0.362	ng	# 91
22) Hexachlorobenzene	16.466	284	1392	0.374	ng	99
23) Atrazine	16.627	200	765	0.374	ng	96
24) Pentachlorophenol	16.814	266	702	0.436	ng	95
25) Phenanthrene	17.198	178	4971	0.417	ng	99
26) Anthracene	17.285	178	4469	0.412	ng	99
28) Fluoranthene	19.220	202	5718	0.408	ng	97
30) Pyrene	19.582	202	5943	0.400	ng	99
32) Benzo(a)anthracene	21.331	228	5417	0.407	ng	99
33) Chrysene	21.376	228	5824	0.428	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	2749	0.377	ng	# 98
36) Indeno(1,2,3-cd)pyrene	25.943	276	6795	0.426	ng	96
37) Benzo(b)fluoranthene	22.938	252	5743	0.398	ng	# 92
38) Benzo(k)fluoranthene	22.984	252	5883	0.404	ng	# 89
39) Benzo(a)pyrene	23.528	252	5274	0.428	ng	# 88
40) Dibenzo(a,h)anthracene	25.964	278	5267	0.414	ng	94
41) Benzo(g,h,i)perylene	26.656	276	5646	0.408	ng	96

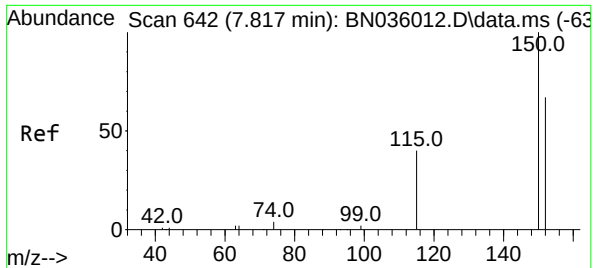
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036328.D
Acq On : 06 Feb 2025 10:27
Operator : RC/JU
Sample : PB166419BSD
Misc :
ALS Vial : 27 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166419BSD

Quant Time: Feb 06 11:37:34 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration

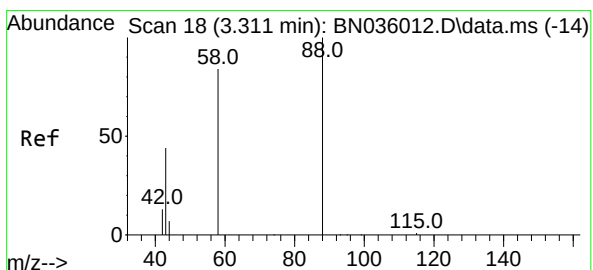
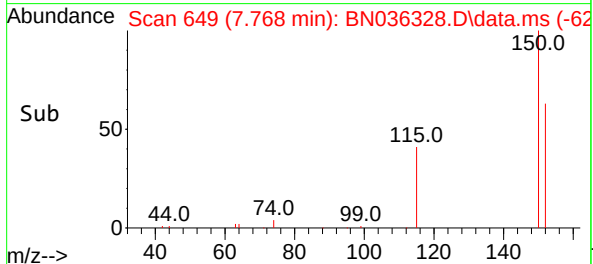
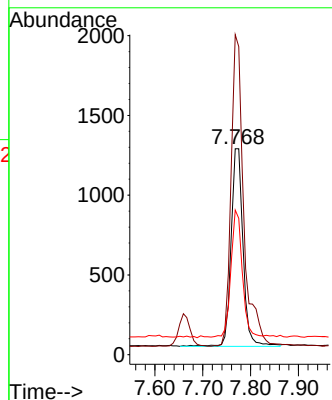
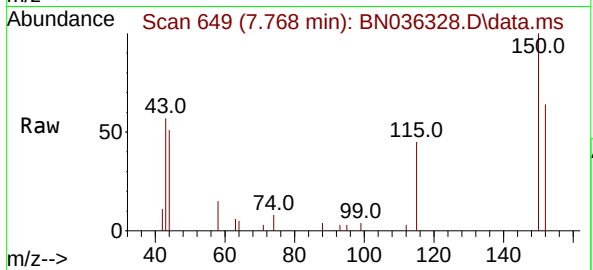




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.768 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

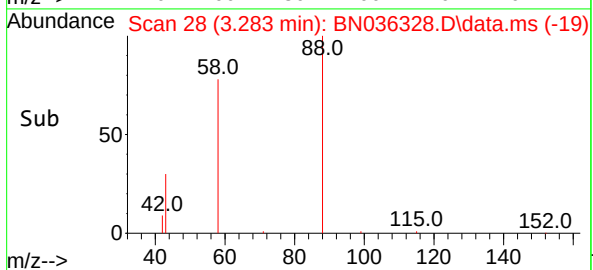
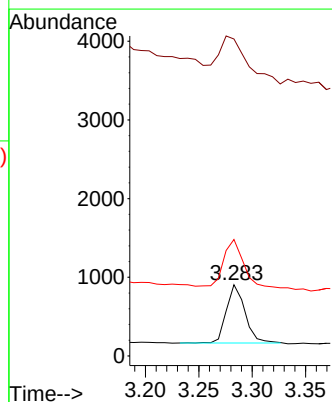
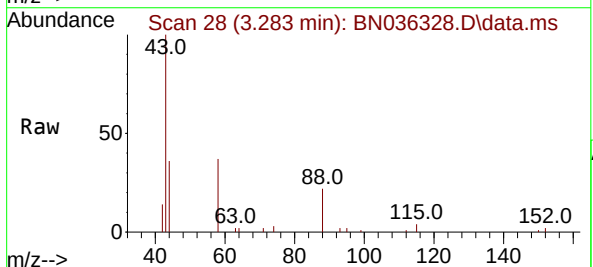
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

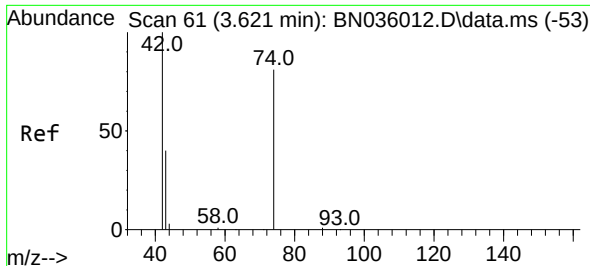
Tgt Ion:152 Resp: 2144
Ion Ratio Lower Upper
152 100
150 155.4 117.4 176.2
115 70.3 51.0 76.4



#2
1,4-Dioxane
Concen: 0.376 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion: 88 Resp: 901
Ion Ratio Lower Upper
88 100
43 132.1 38.5 57.7#
58 88.5 66.6 99.8

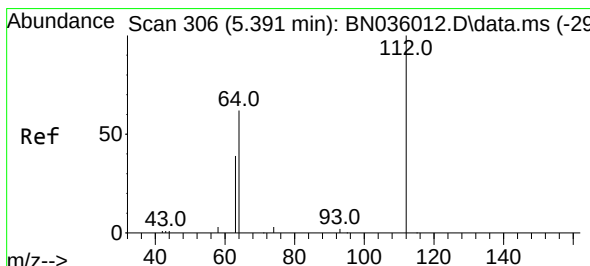
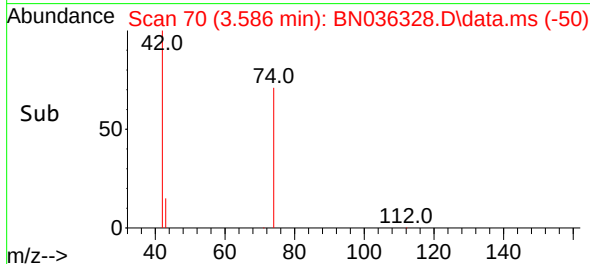
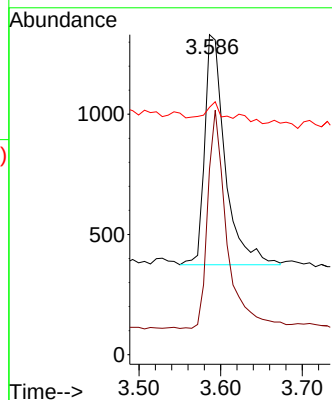
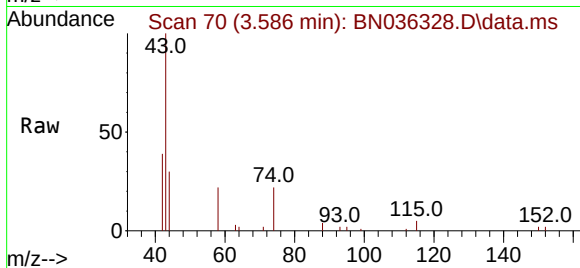




#3
n-Nitrosodimethylamine
Concen: 0.384 ng
RT: 3.586 min Scan# 70
Delta R.T. -0.007 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

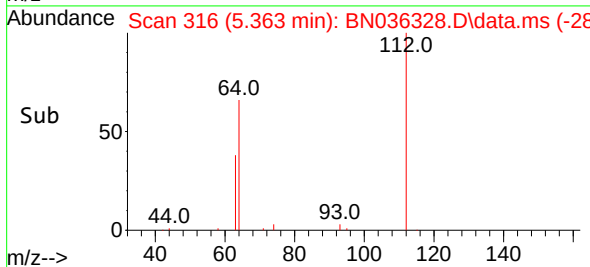
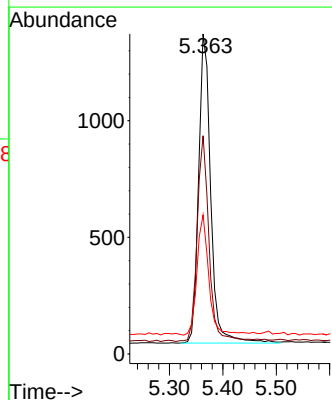
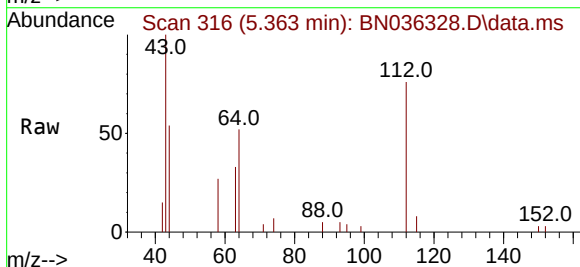
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

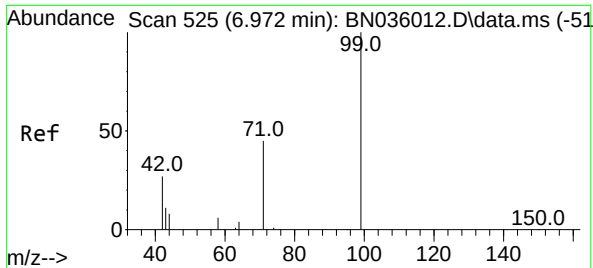
Tgt Ion: 42 Resp: 1670
Ion Ratio Lower Upper
42 100
74 89.7 58.1 87.1#
44 3.9 6.2 9.4#



#4
2-Fluorophenol
Concen: 0.375 ng
RT: 5.363 min Scan# 316
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion: 112 Resp: 2094
Ion Ratio Lower Upper
112 100
64 64.7 50.0 75.0
63 38.2 30.7 46.1

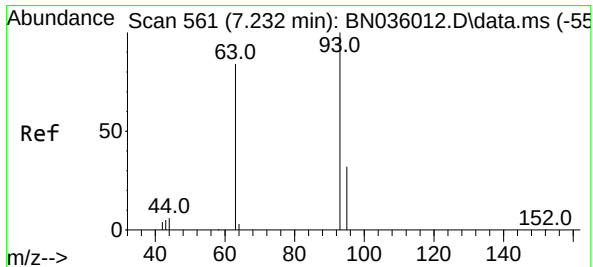
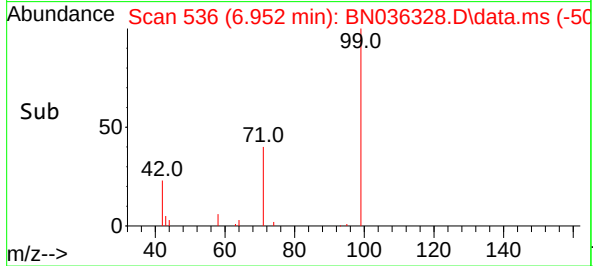
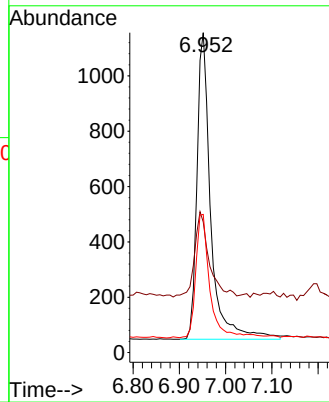
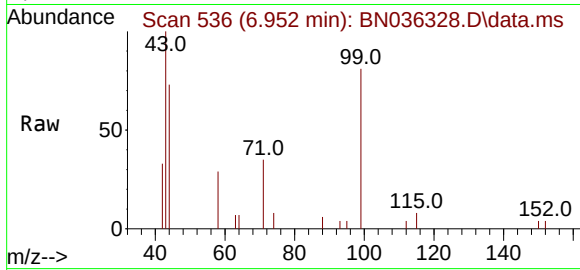




#5
Phenol-d6
Concen: 0.351 ng
RT: 6.952 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

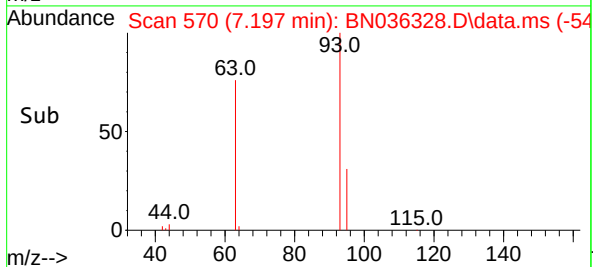
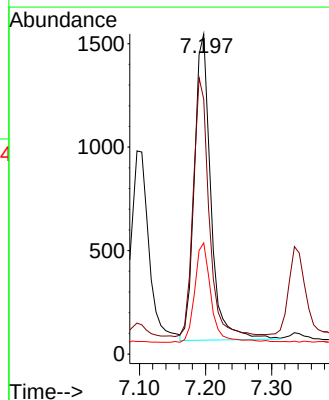
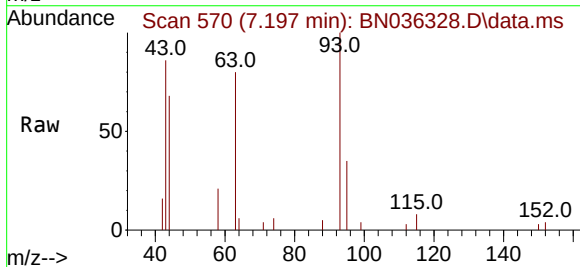
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

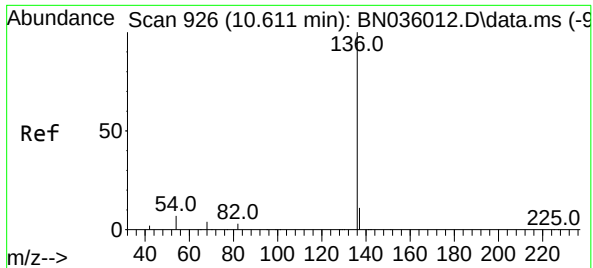
Tgt Ion:	99	Resp:	2296
Ion	Ratio	Lower	Upper
99	100		
42	29.4	26.8	40.2
71	40.9	36.6	55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.487 ng
RT: 7.197 min Scan# 570
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:	93	Resp:	2568
Ion	Ratio	Lower	Upper
93	100		
63	81.3	65.8	98.6
95	32.2	25.8	38.6

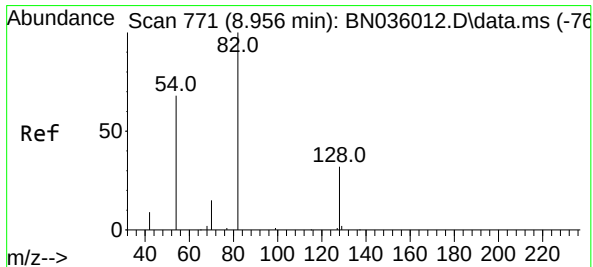
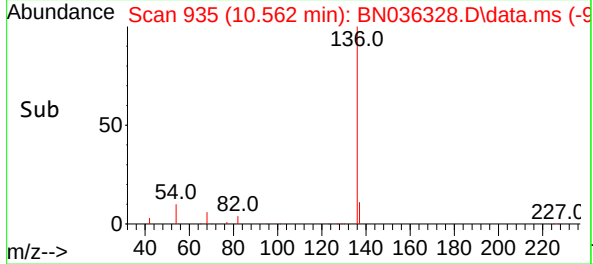
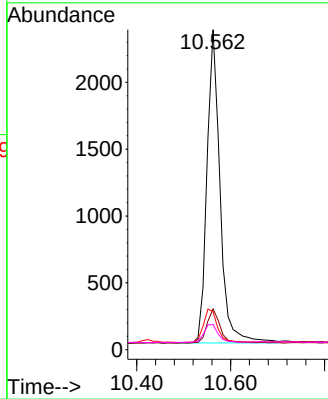
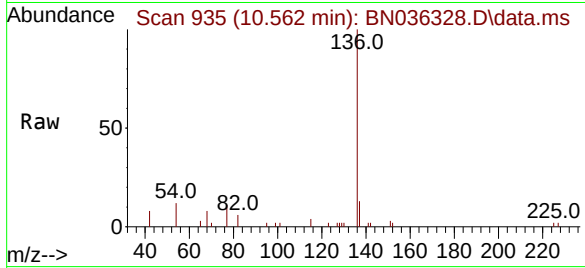




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

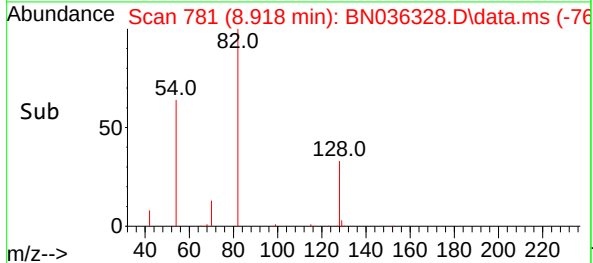
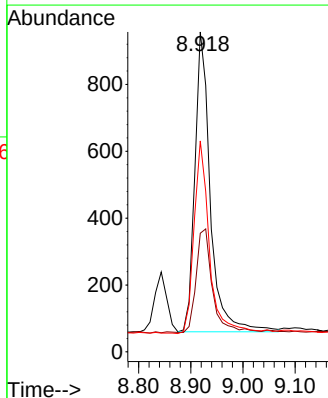
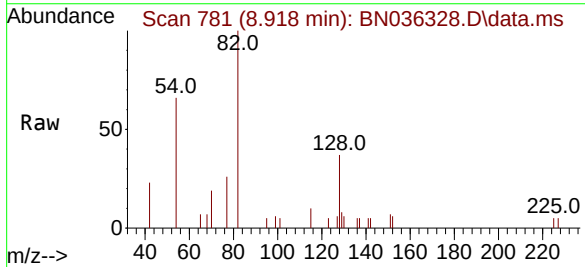
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

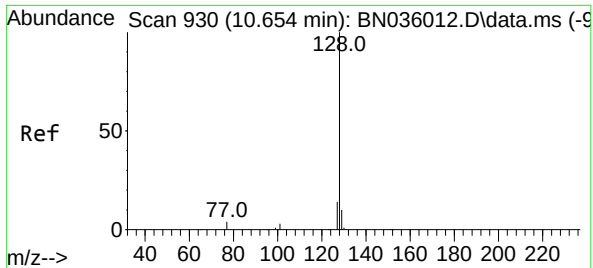
Tgt Ion:	136	Resp:	4537
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.4	15.6
54	11.8	7.7	11.5#
68	7.9	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.434 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:	82	Resp:	1858
Ion	Ratio	Lower	Upper
82	100		
128	37.1	28.8	43.2
54	65.9	55.8	83.8

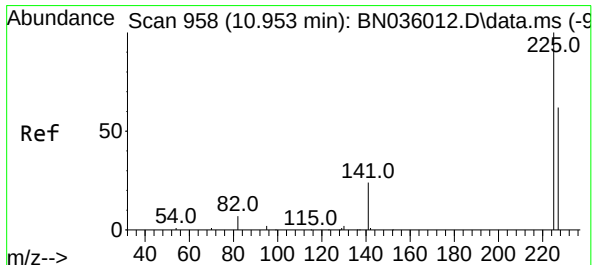
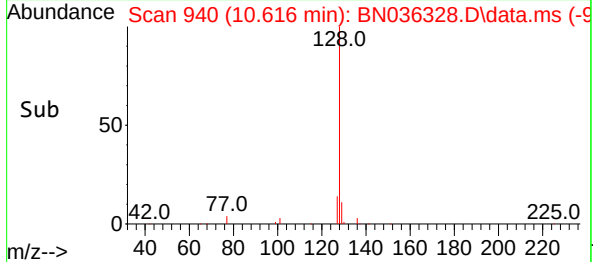
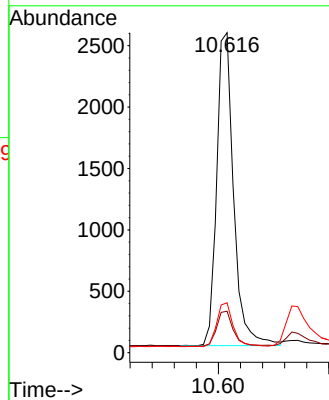
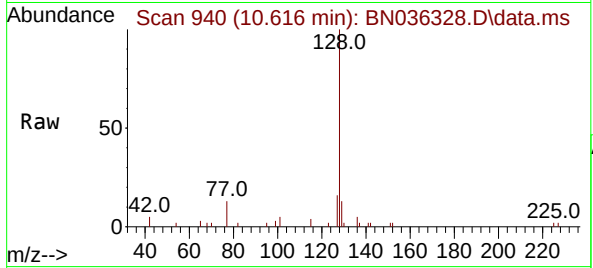




#9
Naphthalene
Concen: 0.412 ng
RT: 10.616 min Scan# 941
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

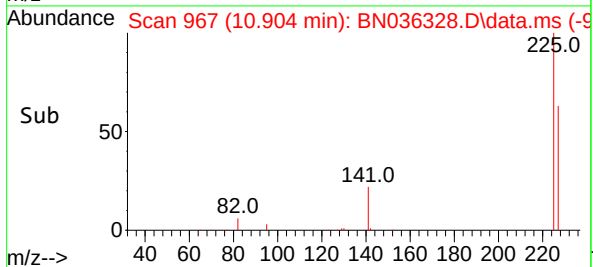
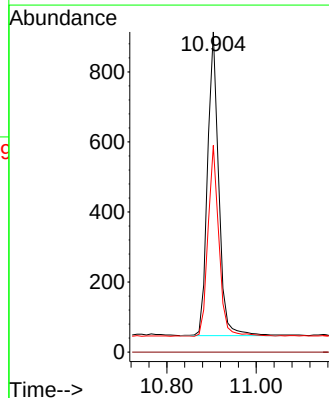
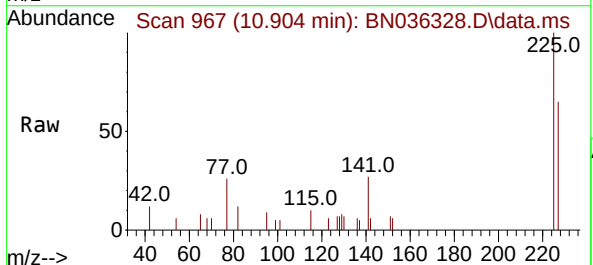
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

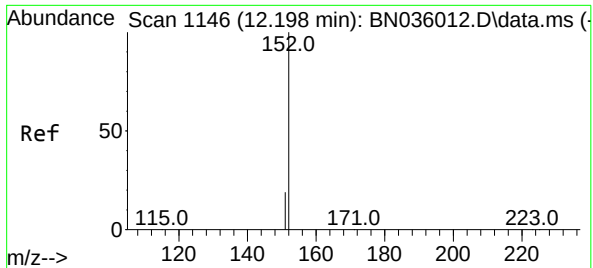
Tgt Ion:	128	Resp:	5426
Ion	Ratio	Lower	Upper
128	100		
129	13.0	9.4	14.2
127	15.6	12.6	19.0



#10
Hexachlorobutadiene
Concen: 0.351 ng
RT: 10.904 min Scan# 967
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:	225	Resp:	1496
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	61.0	51.0	76.6

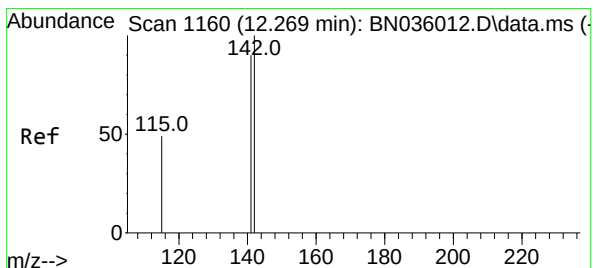
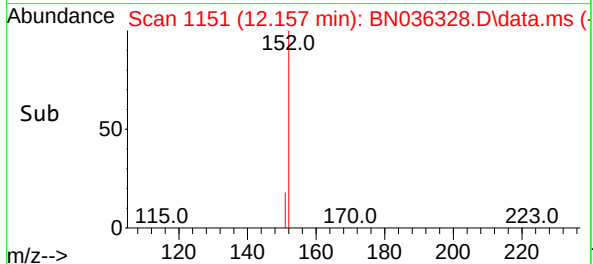
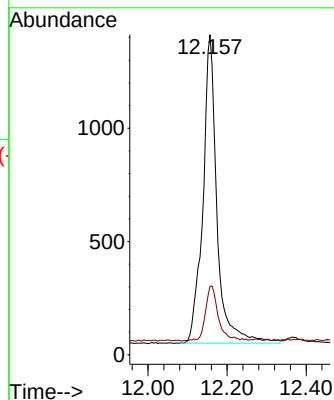
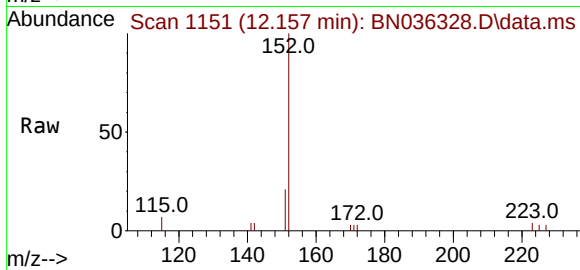




#11
2-Methylnaphthalene-d10
Concen: 0.549 ng
RT: 12.157 min Scan# 1151
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

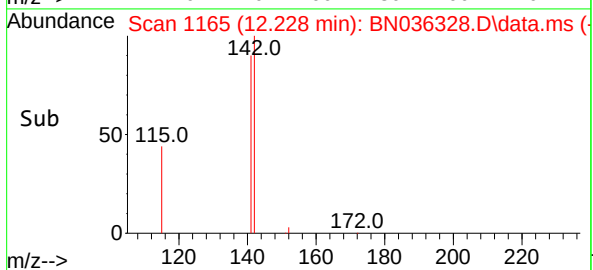
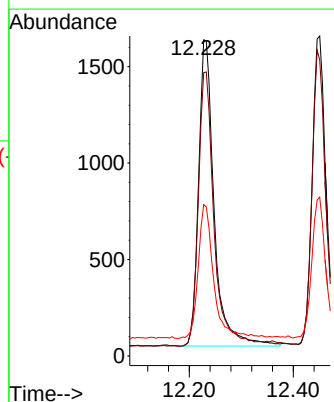
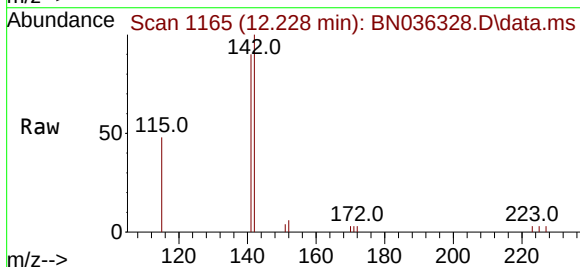
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

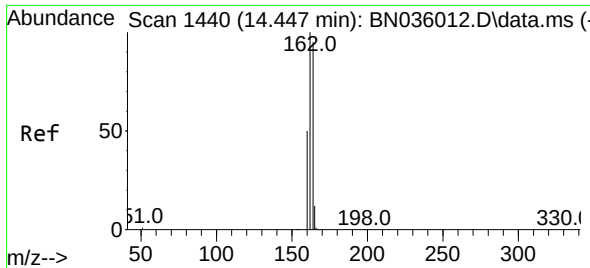
Tgt Ion:152 Resp: 3388
Ion Ratio Lower Upper
152 100
151 16.4 16.6 25.0#



#12
2-Methylnaphthalene
Concen: 0.405 ng
RT: 12.228 min Scan# 1165
Delta R.T. -0.005 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:142 Resp: 3308
Ion Ratio Lower Upper
142 100
141 89.6 72.2 108.2
115 47.9 41.2 61.8

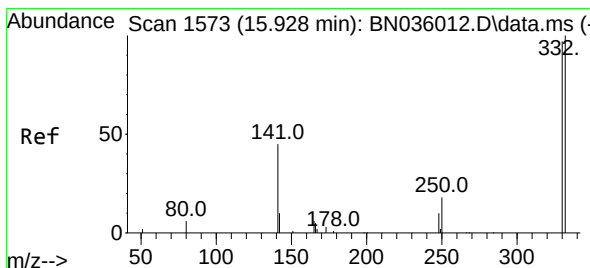
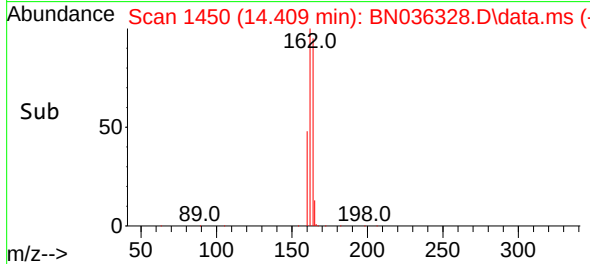
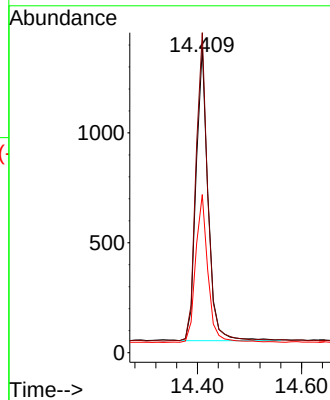
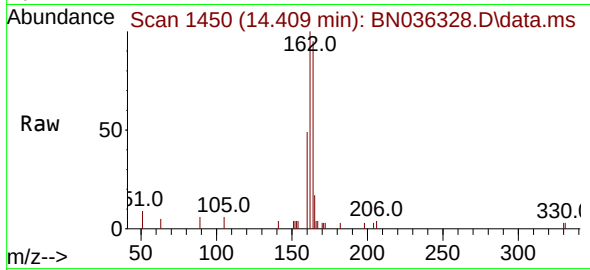




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

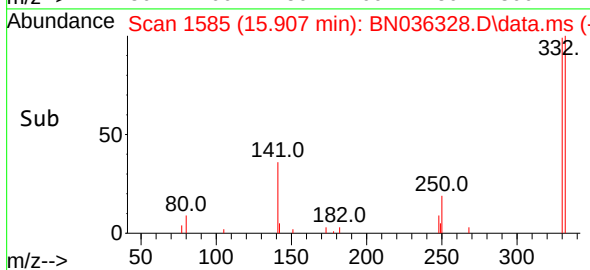
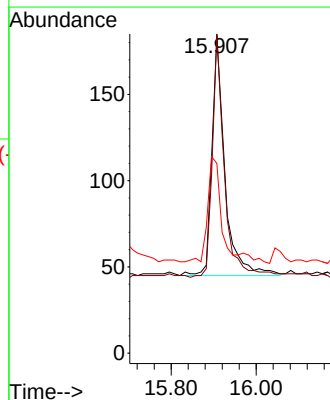
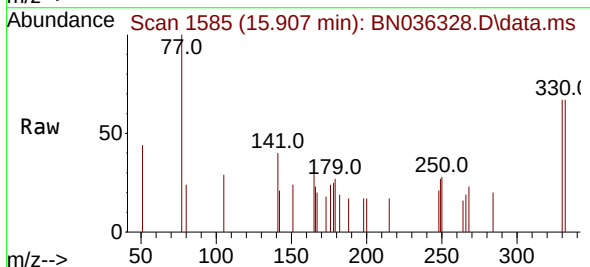
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

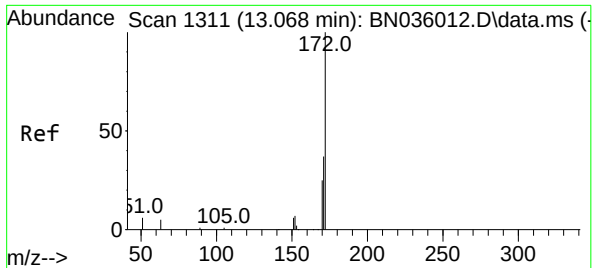
Tgt Ion	Ratio	Lower	Upper
164	100		
162	105.1	84.1	126.1
160	51.9	43.8	65.8



#14
2,4,6-Tribromophenol
Concen: 0.216 ng
RT: 15.907 min Scan# 1585
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion	Ratio	Lower	Upper
330	100		
332	93.3	81.0	121.4
141	50.5	36.7	55.1

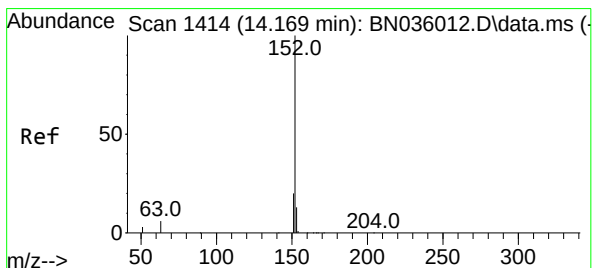
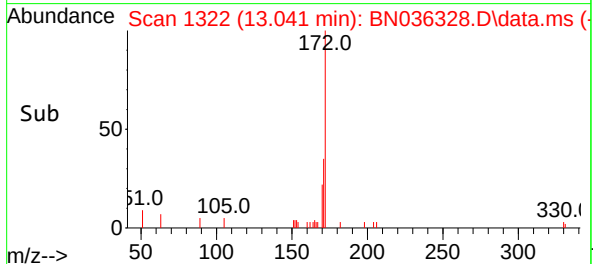
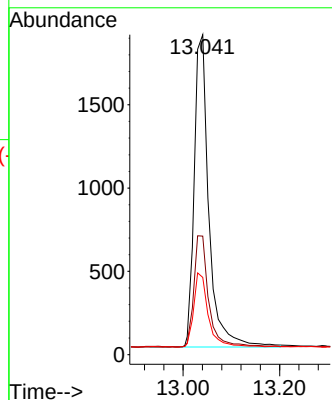
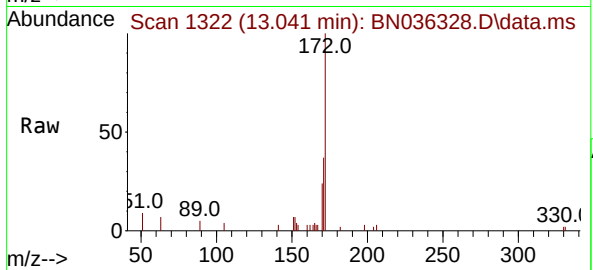




#15
2-Fluorobiphenyl
Concen: 0.384 ng
RT: 13.041 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

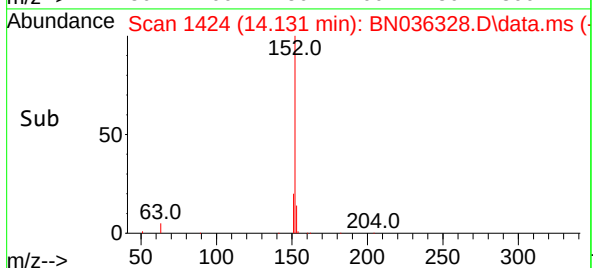
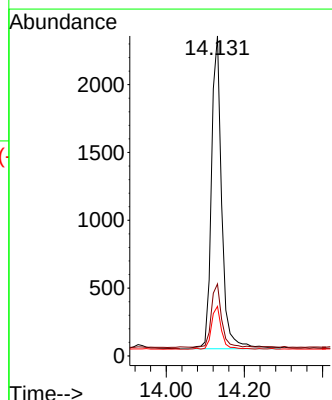
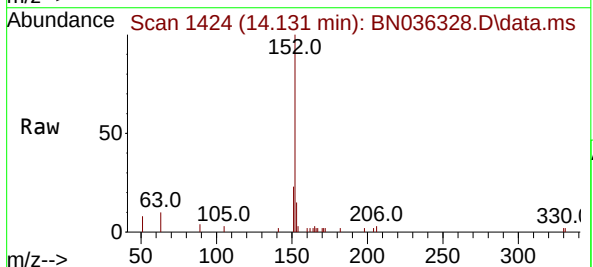
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

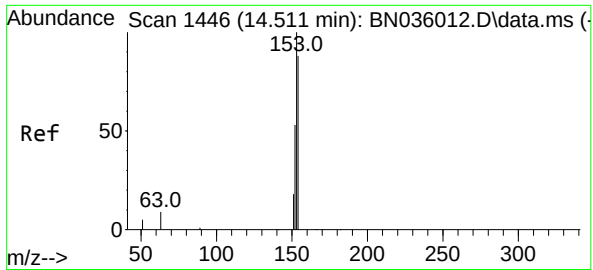
Tgt Ion	Ratio	Lower	Upper
172	100		
171	37.1	30.9	46.3
170	24.2	21.2	31.8



#16
Acenaphthylene
Concen: 0.416 ng
RT: 14.131 min Scan# 1424
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.9	16.2	24.2
153	13.3	10.4	15.6

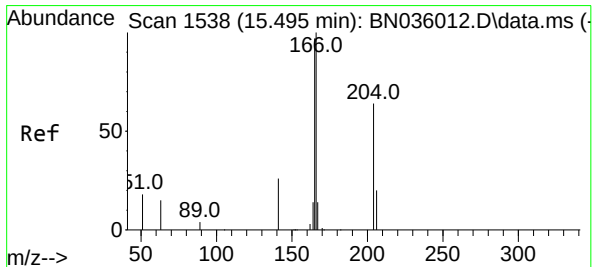
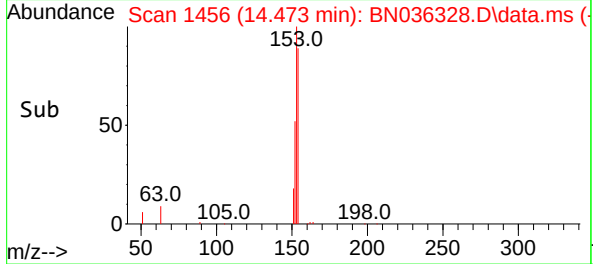
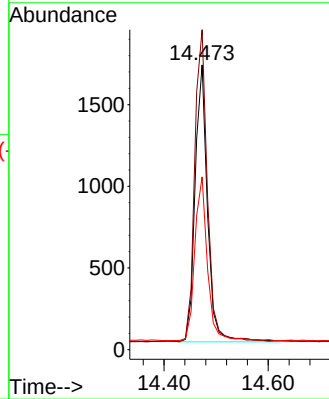
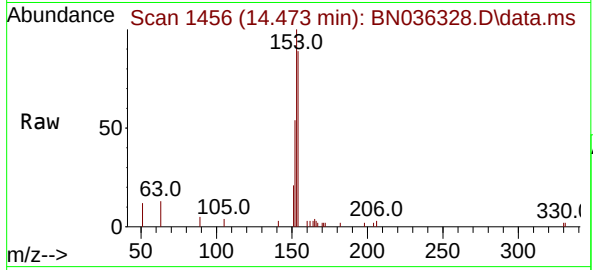




#17
Acenaphthene
Concen: 0.406 ng
RT: 14.473 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

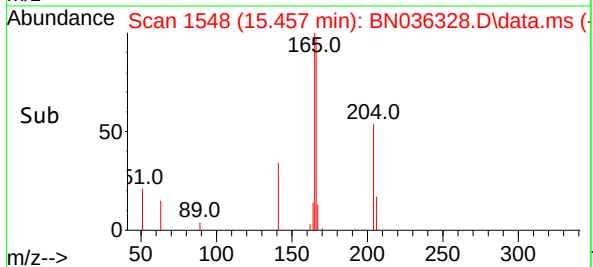
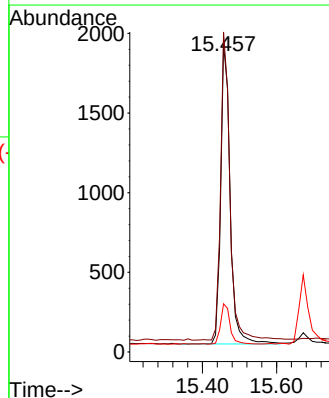
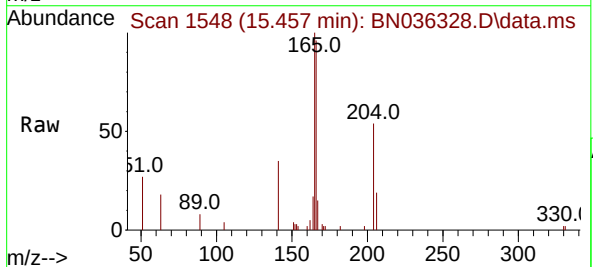
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

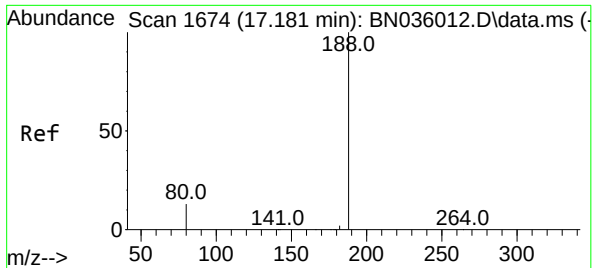
Tgt Ion:154 Resp: 2821
Ion Ratio Lower Upper
154 100
153 114.9 88.9 133.3
152 59.6 48.1 72.1



#18
Fluorene
Concen: 0.400 ng
RT: 15.457 min Scan# 1548
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:166 Resp: 3481
Ion Ratio Lower Upper
166 100
165 101.5 78.5 117.7
167 13.2 10.7 16.1

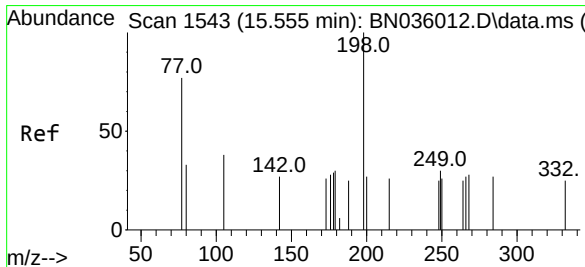
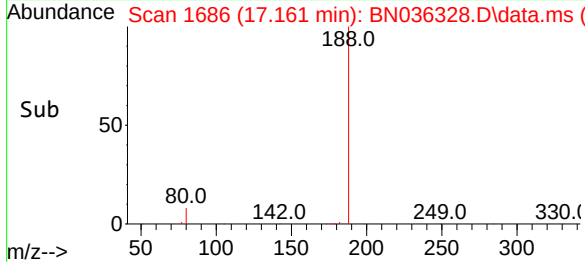
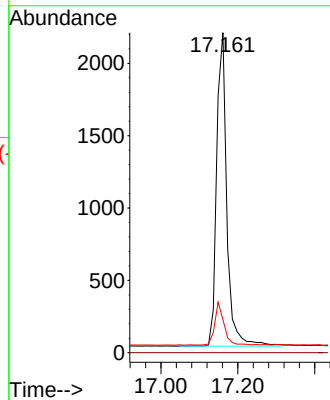
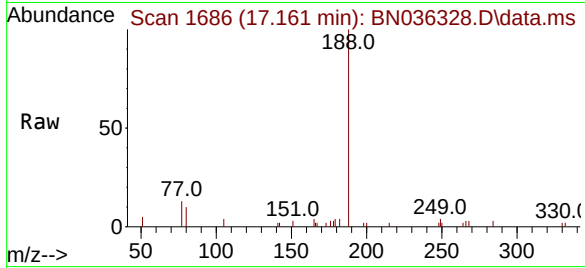




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

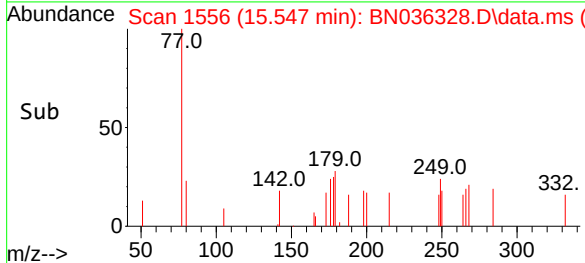
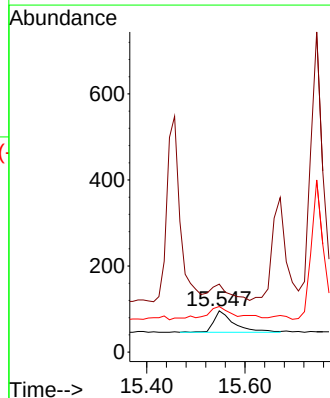
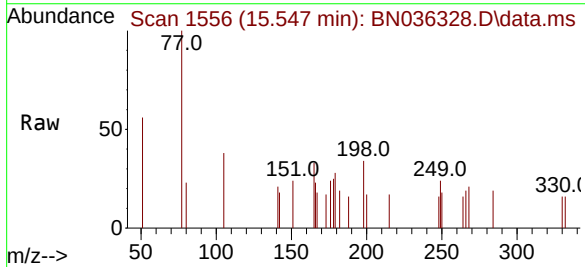
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

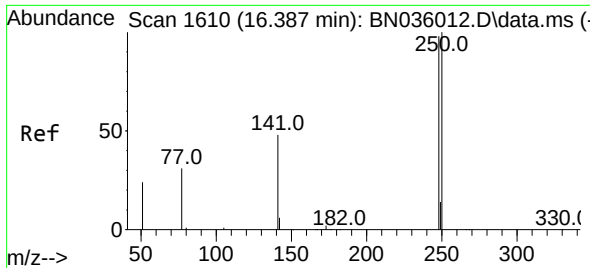
Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.4	12.3	18.5#



#20
4,6-Dinitro-2-methylphenol
Concen: 0.151 ng
RT: 15.547 min Scan# 1556
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion	Ratio	Lower	Upper
198	100		
51	164.6	68.1	102.1#
105	110.4	46.5	69.7#

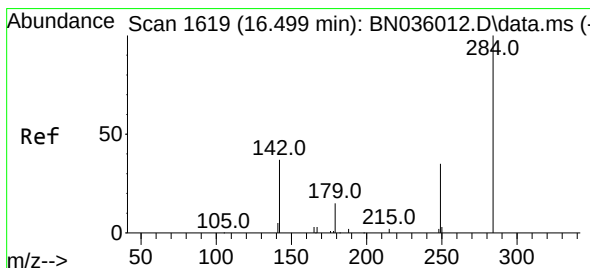
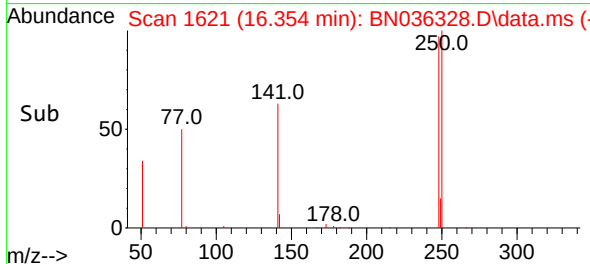
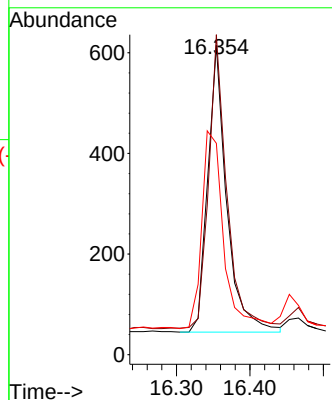
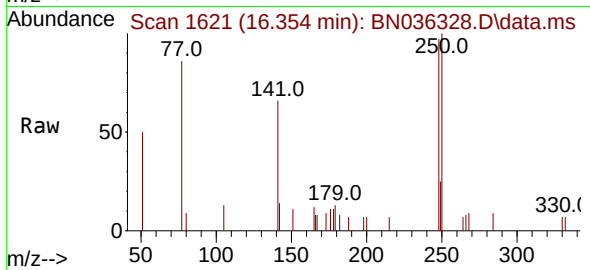




#21
4-Bromophenyl-phenylether
Concen: 0.362 ng
RT: 16.354 min Scan# 1630
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

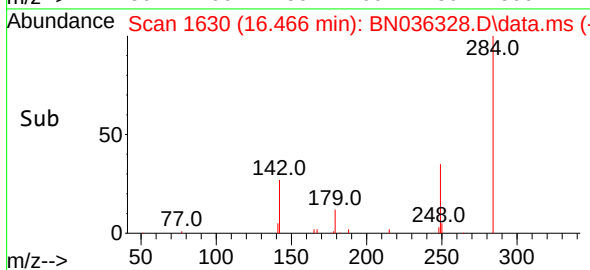
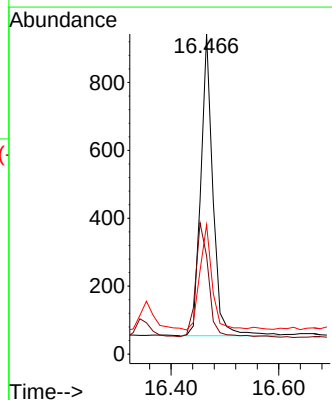
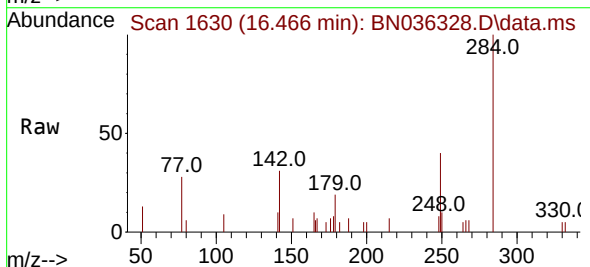
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

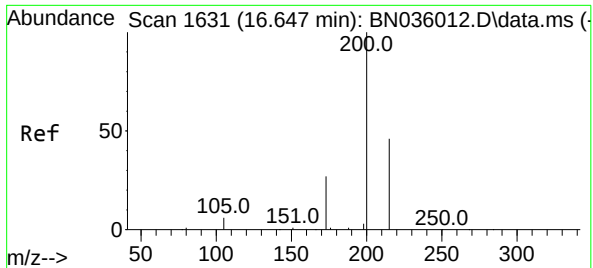
Tgt Ion	Ratio	Lower	Upper
248	100		
250	103.4	81.5	122.3
141	68.3	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.374 ng
RT: 16.466 min Scan# 1630
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion	Ratio	Lower	Upper
284	100		
142	40.9	33.6	50.4
249	35.3	28.8	43.2

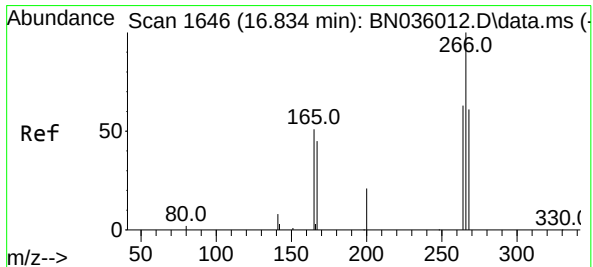
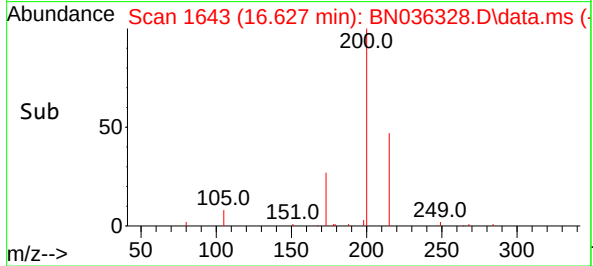
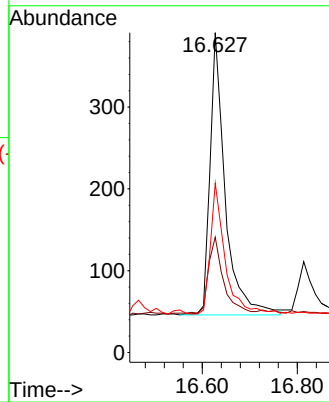
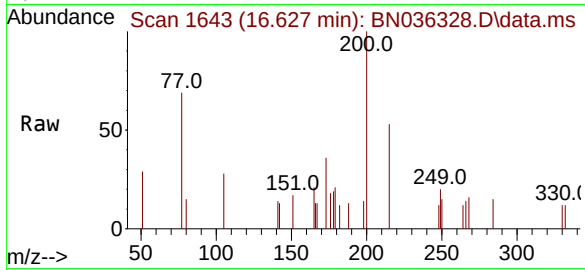




#23
Atrazine
Concen: 0.374 ng
RT: 16.627 min Scan# 1643
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

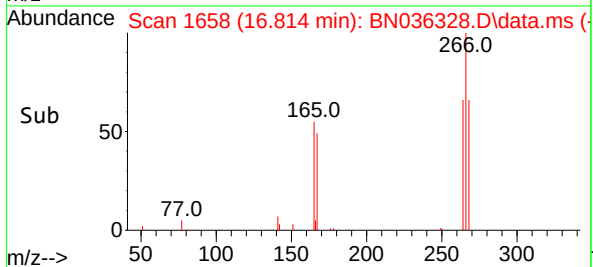
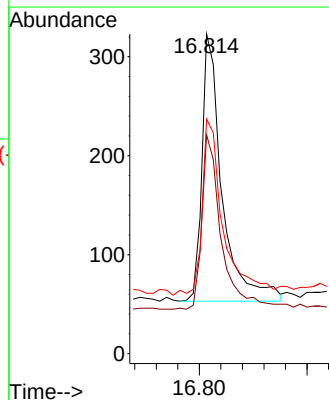
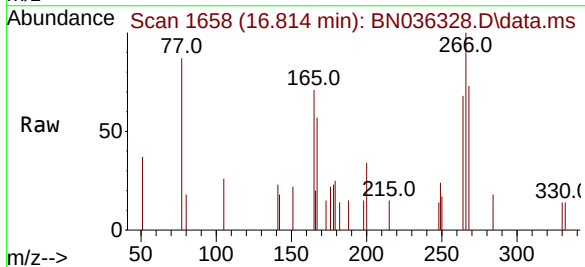
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

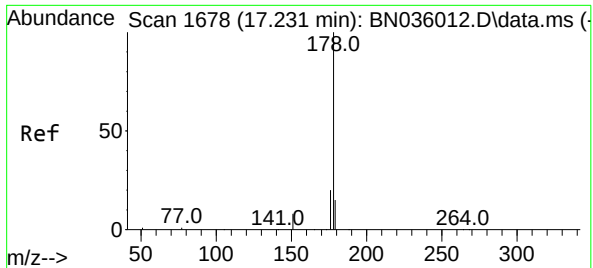
Tgt Ion:	200	Resp:	765
Ion Ratio	Lower	Upper	
200	100		
173	36.1	26.6	40.0
215	52.9	40.6	61.0



#24
Pentachlorophenol
Concen: 0.436 ng
RT: 16.814 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:	266	Resp:	702
Ion Ratio	Lower	Upper	
266	100		
264	62.8	48.2	72.2
268	69.8	51.6	77.4

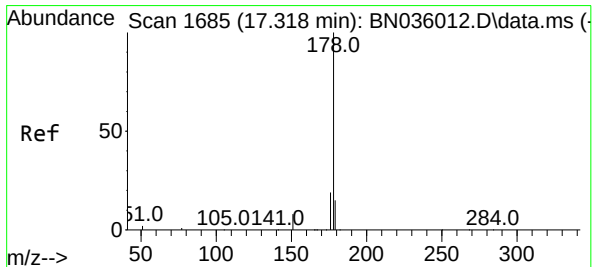
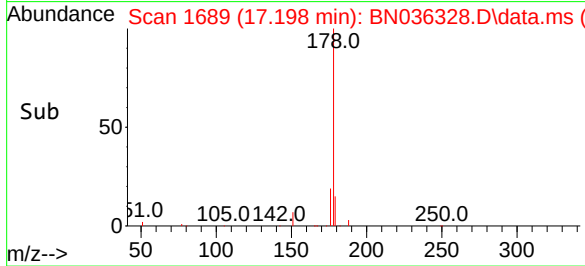
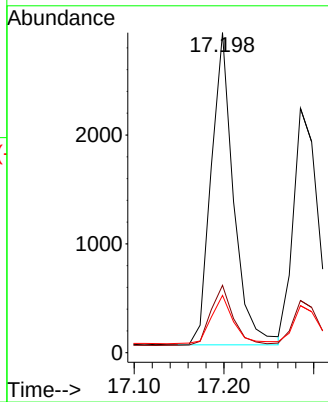
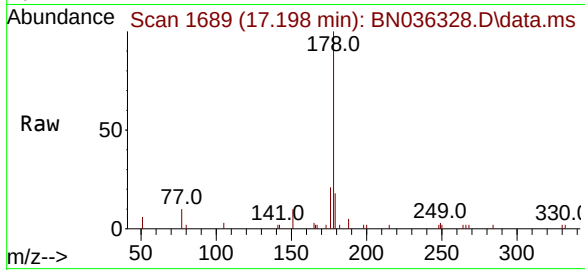




#25
Phenanthrene
Concen: 0.417 ng
RT: 17.198 min Scan# 1689
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

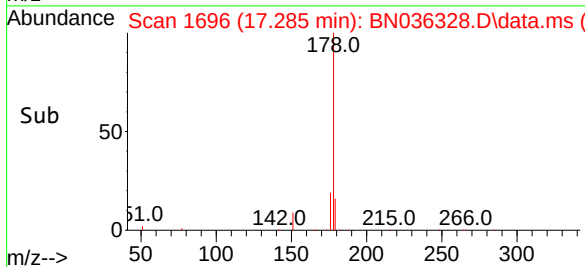
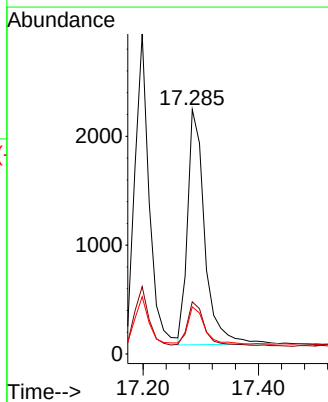
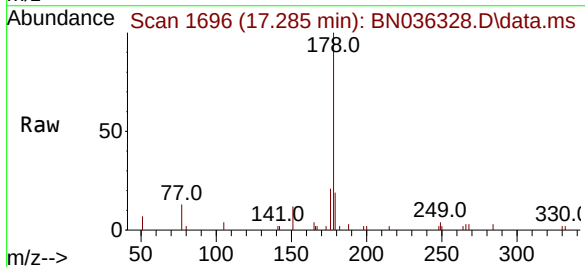
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

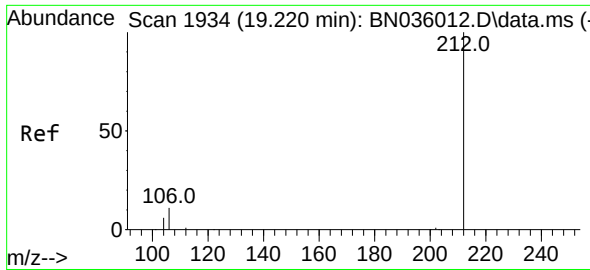
Tgt Ion:178 Resp: 4971
Ion Ratio Lower Upper
178 100
176 19.4 16.0 24.0
179 15.2 12.4 18.6



#26
Anthracene
Concen: 0.412 ng
RT: 17.285 min Scan# 1696
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:178 Resp: 4469
Ion Ratio Lower Upper
178 100
176 19.2 15.4 23.2
179 15.6 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.417 ng

RT: 19.188 min Scan# 1940

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD

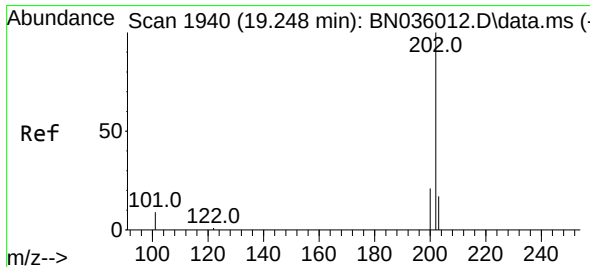
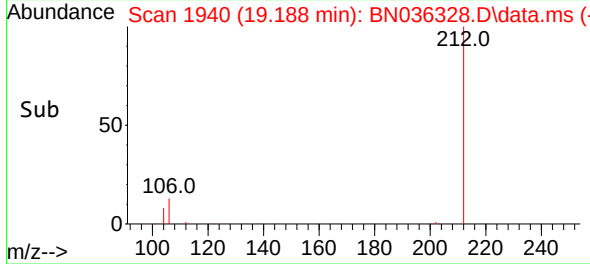
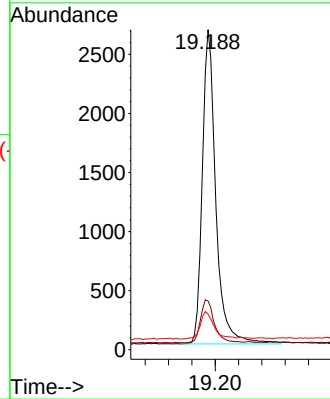
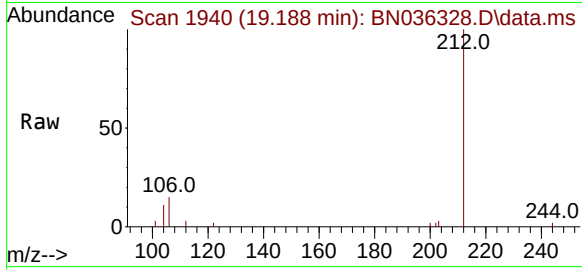
Tgt Ion:212 Resp: 4292

Ion Ratio Lower Upper

212 100

106 13.8 9.7 14.5

104 8.9 6.0 9.0



#28

Fluoranthene

Concen: 0.408 ng

RT: 19.220 min Scan# 1947

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

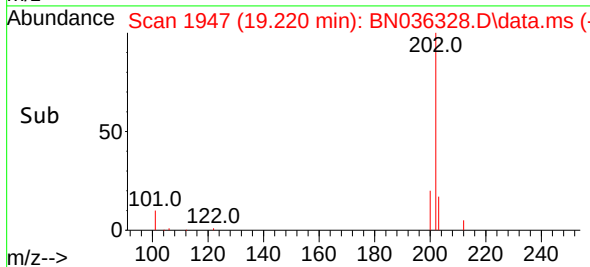
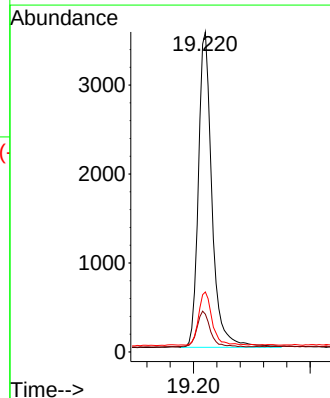
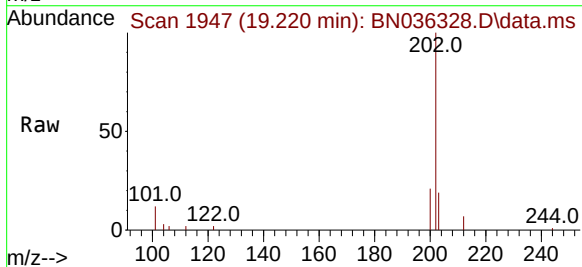
Tgt Ion:202 Resp: 5718

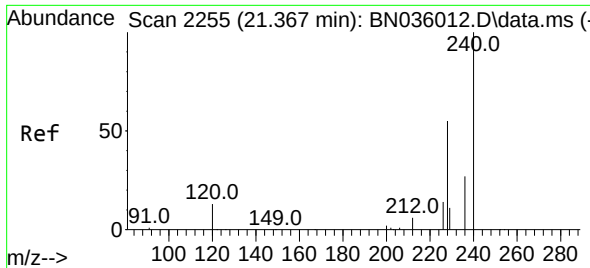
Ion Ratio Lower Upper

202 100

101 11.2 7.6 11.4

203 16.6 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD

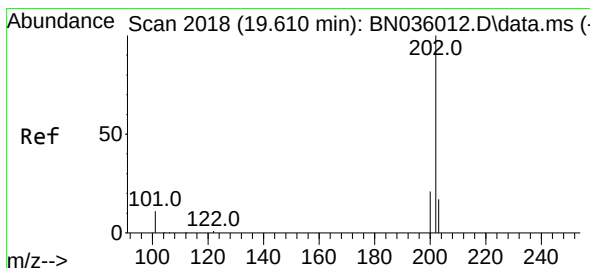
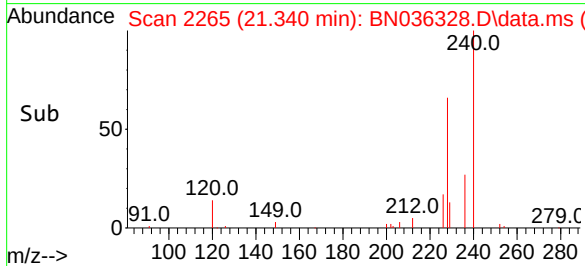
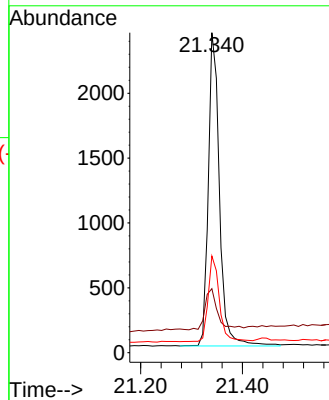
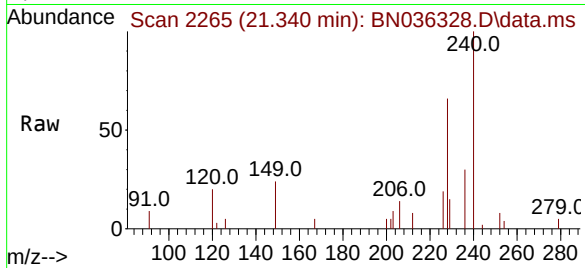
Tgt Ion:240 Resp: 3671

Ion Ratio Lower Upper

240 100

120 20.0 13.9 20.9

236 30.2 23.7 35.5



#30

Pyrene

Concen: 0.400 ng

RT: 19.582 min Scan# 2025

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

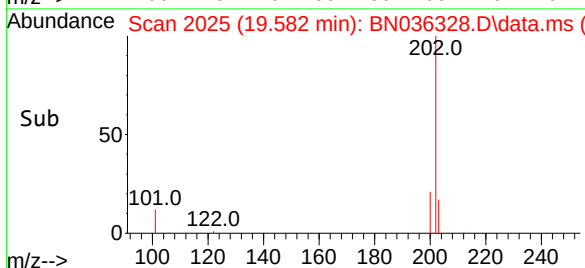
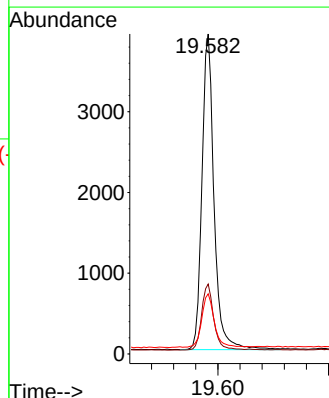
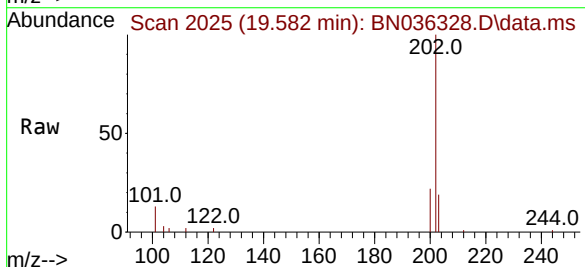
Tgt Ion:202 Resp: 5943

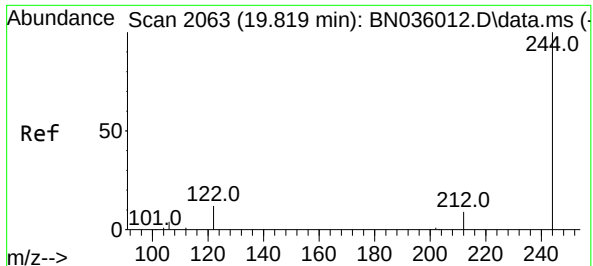
Ion Ratio Lower Upper

202 100

200 20.8 17.0 25.4

203 17.1 14.4 21.6

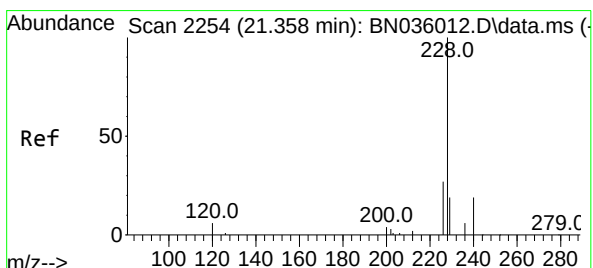
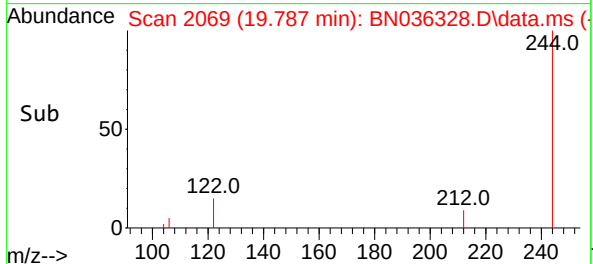
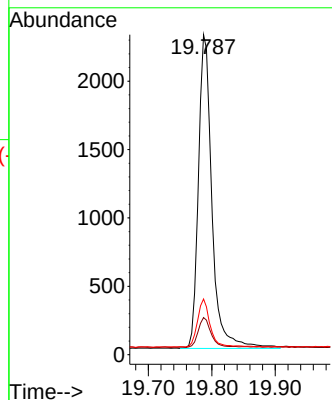
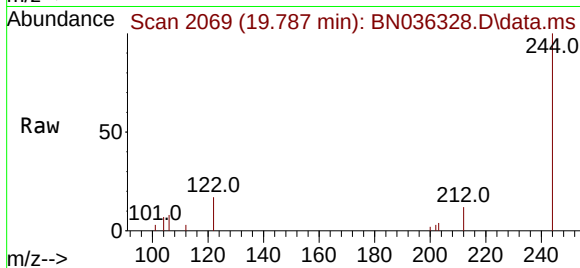




#31
Terphenyl-d14
Concen: 0.448 ng
RT: 19.787 min Scan# 2063
Delta R.T. -0.005 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

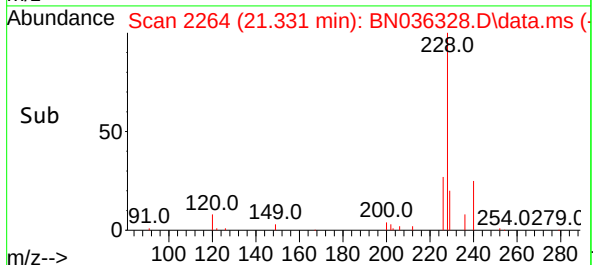
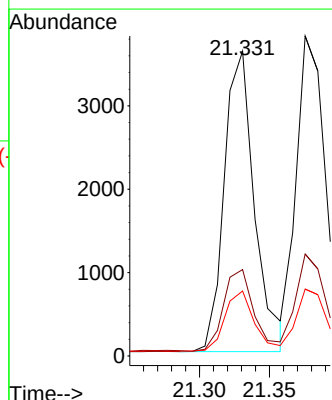
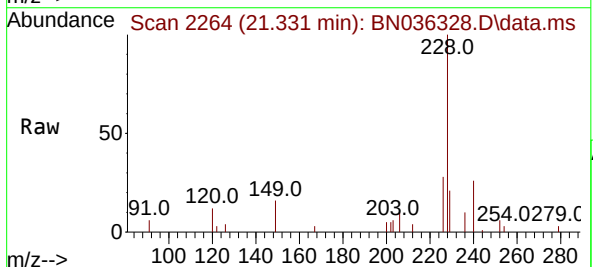
Instrument :
BNA_N
ClientSampleId :
PB166419BSD

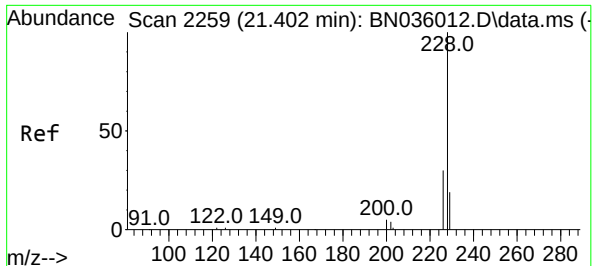
Tgt Ion:244 Resp: 3413
Ion Ratio Lower Upper
244 100
212 11.6 9.1 13.7
122 17.4 11.3 16.9#



#32
Benzo(a)anthracene
Concen: 0.407 ng
RT: 21.331 min Scan# 2264
Delta R.T. 0.000 min
Lab File: BN036328.D
Acq: 06 Feb 2025 10:27

Tgt Ion:228 Resp: 5417
Ion Ratio Lower Upper
228 100
226 28.3 22.6 34.0
229 21.3 16.5 24.7





#33

Chrysene

Concen: 0.428 ng

RT: 21.376 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD

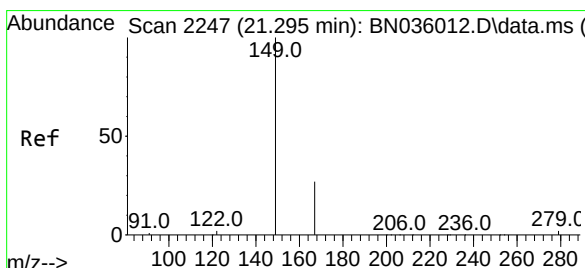
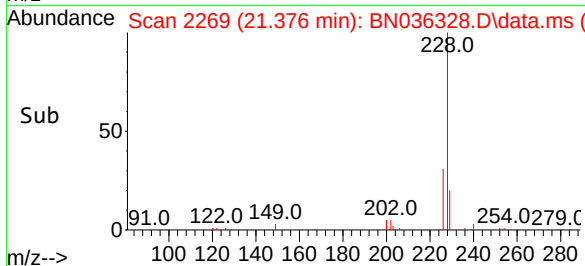
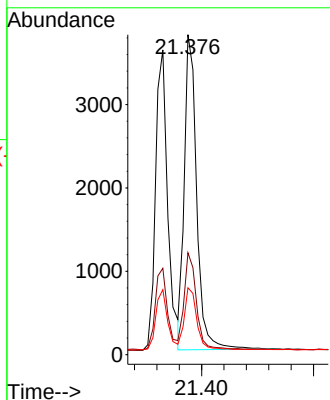
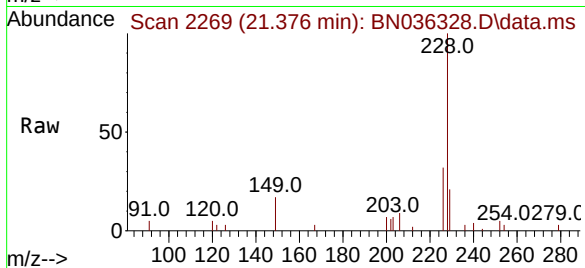
Tgt Ion:228 Resp: 5824

Ion Ratio Lower Upper

228 100

226 31.8 25.3 37.9

229 20.9 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.377 ng

RT: 21.259 min Scan# 2256

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

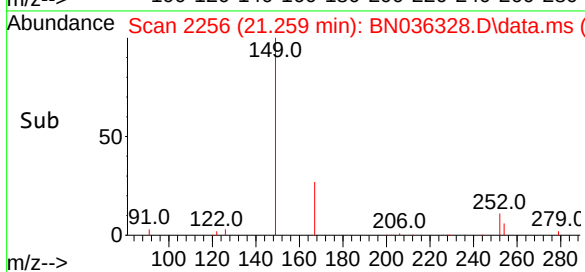
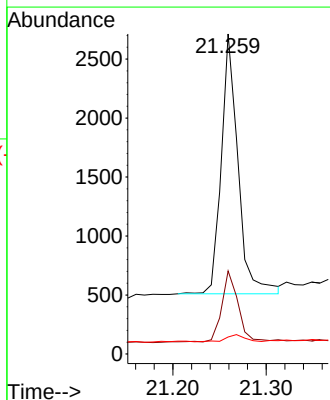
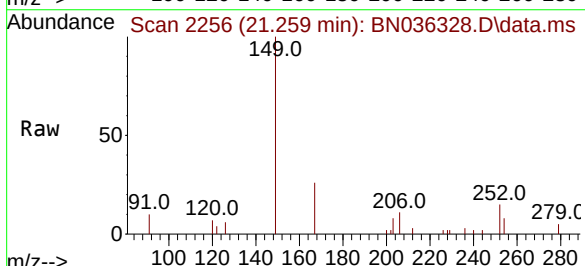
Tgt Ion:149 Resp: 2749

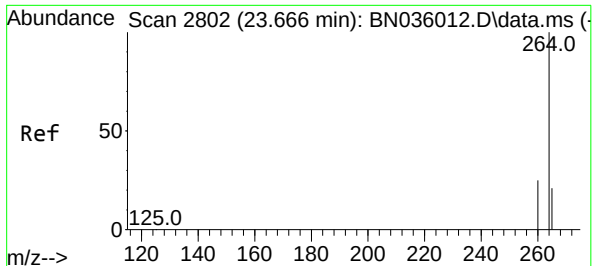
Ion Ratio Lower Upper

149 100

167 26.7 21.9 32.9

279 3.0 3.0 4.6#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.630 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD

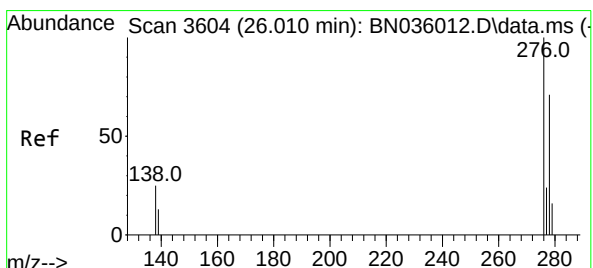
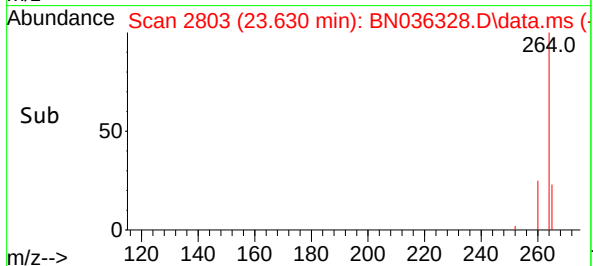
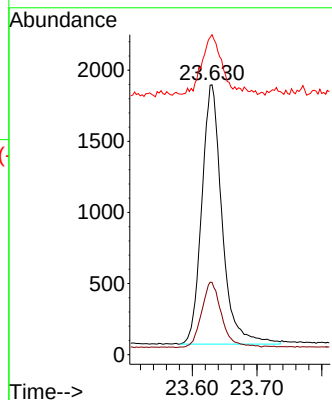
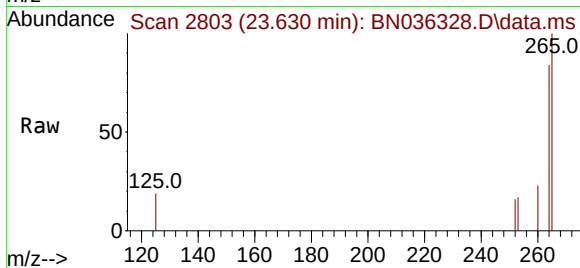
Tgt Ion:264 Resp: 3973

Ion Ratio Lower Upper

264 100

260 26.8 21.8 32.6

265 118.5 56.6 84.8#



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.426 ng

RT: 25.943 min Scan# 3594

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

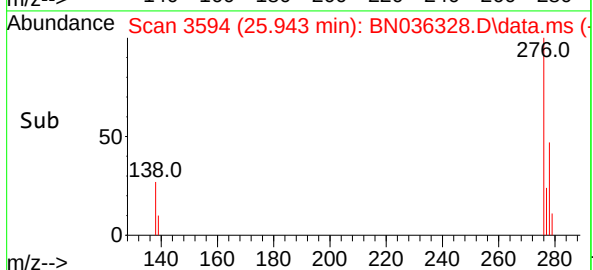
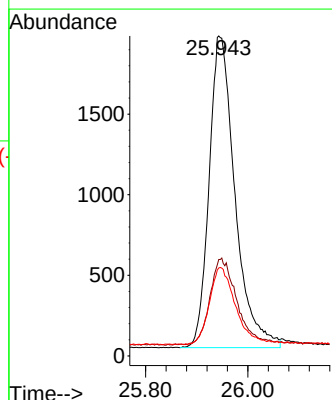
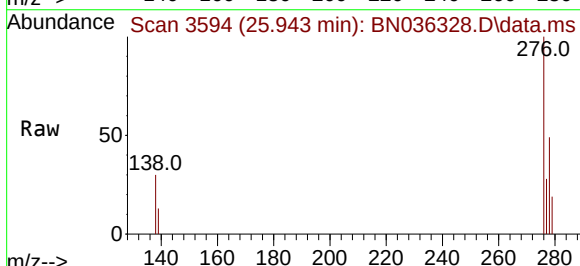
Tgt Ion:276 Resp: 6795

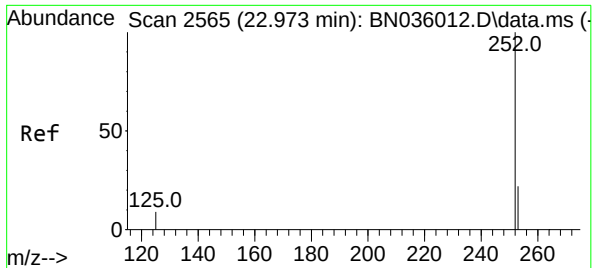
Ion Ratio Lower Upper

276 100

138 28.6 19.9 29.9

277 24.9 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.398 ng

RT: 22.938 min Scan# 2565

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD

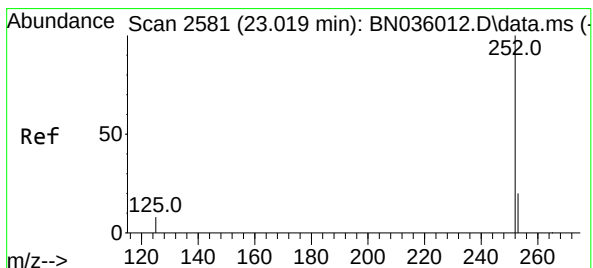
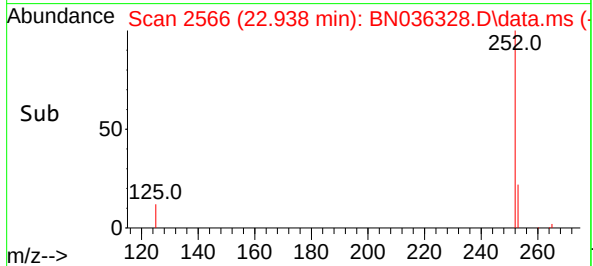
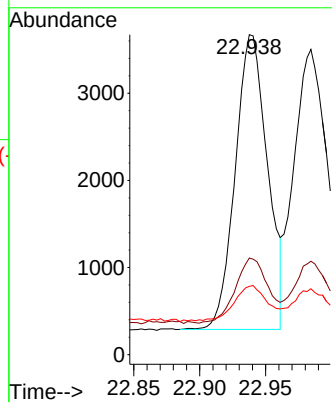
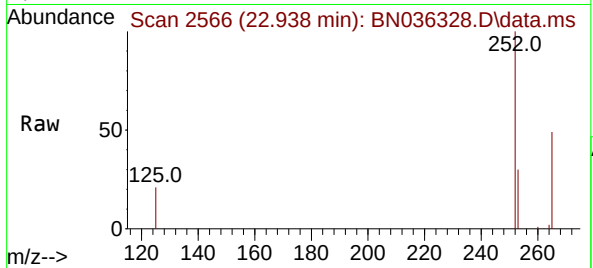
Tgt Ion:252 Resp: 5743

Ion Ratio Lower Upper

252 100

253 30.2 22.5 33.7

125 21.4 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.404 ng

RT: 22.984 min Scan# 2582

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

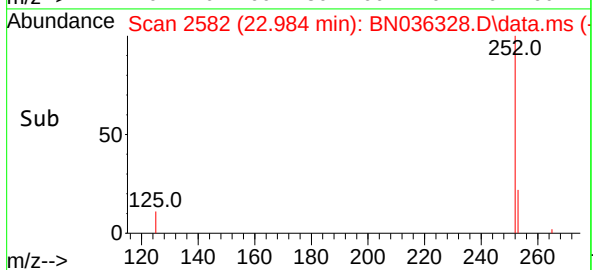
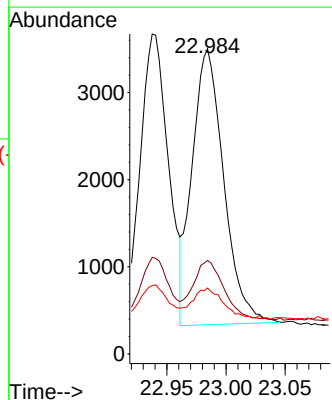
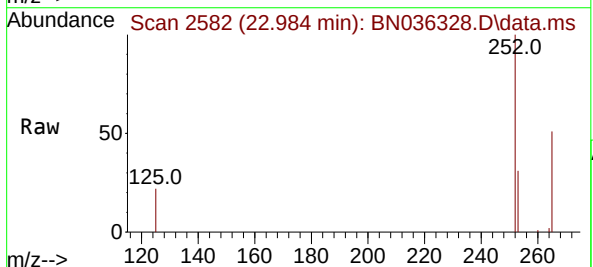
Tgt Ion:252 Resp: 5883

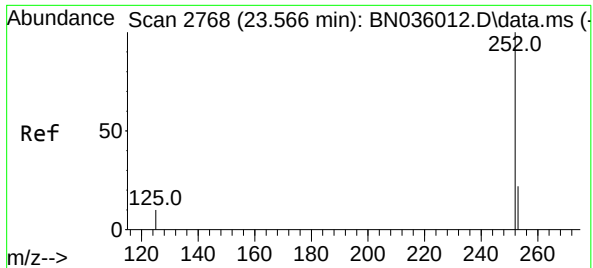
Ion Ratio Lower Upper

252 100

253 30.6 21.3 31.9

125 21.6 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.428 ng

RT: 23.528 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD

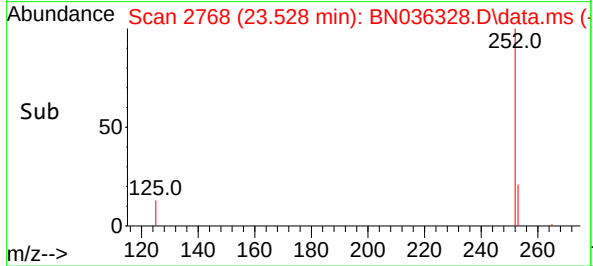
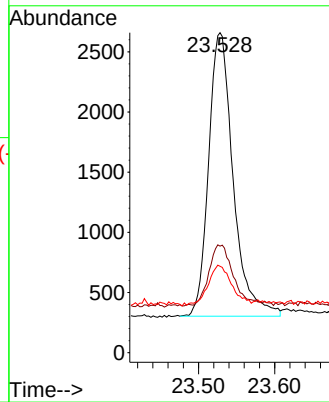
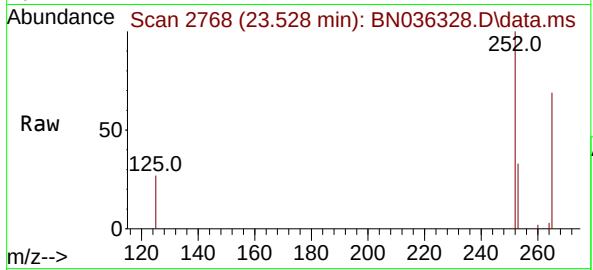
Tgt Ion:252 Resp: 5274

Ion Ratio Lower Upper

252 100

253 33.3 23.8 35.6

125 27.0 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.414 ng

RT: 25.964 min Scan# 3601

Delta R.T. 0.000 min

Lab File: BN036328.D

Acq: 06 Feb 2025 10:27

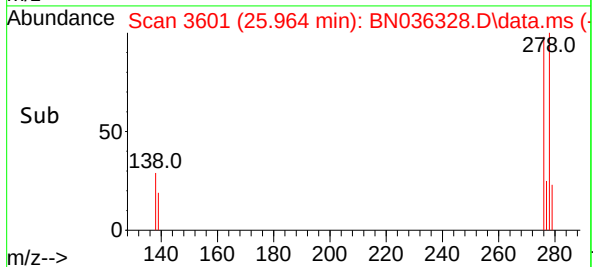
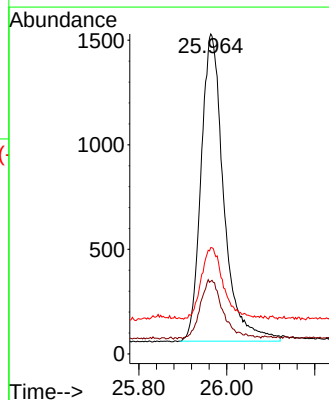
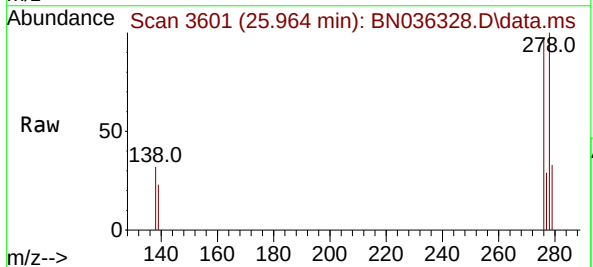
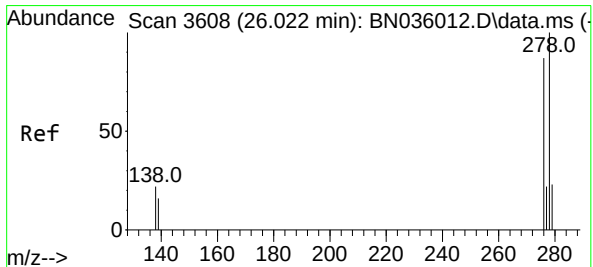
Tgt Ion:278 Resp: 5267

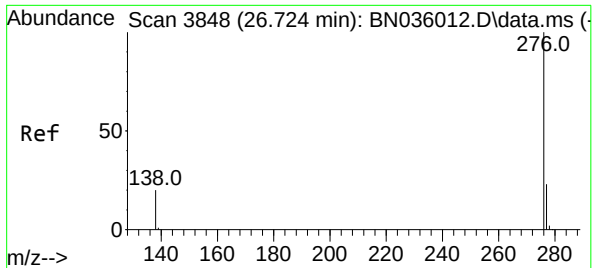
Ion Ratio Lower Upper

278 100

139 22.7 16.0 24.0

279 33.3 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.408 ng

RT: 26.656 min Scan# 3848

Delta R.T. 0.003 min

Lab File: BN036328.D

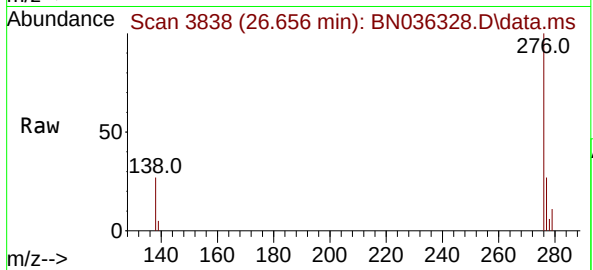
Acq: 06 Feb 2025 10:27

Instrument :

BNA_N

ClientSampleId :

PB166419BSD



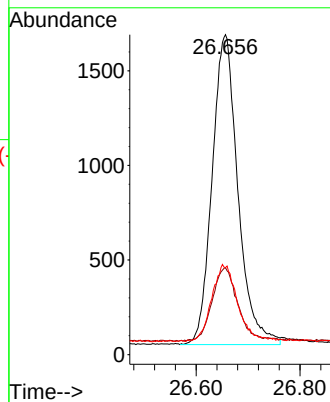
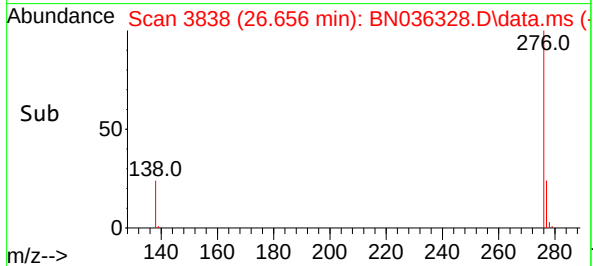
Tgt Ion:276 Resp: 5646

Ion Ratio Lower Upper

276 100

277 27.2 21.3 31.9

138 27.2 19.2 28.8





Manual Integration Report

Sequence:	BN012225	Instrument	BNA_n

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

Manual Integration Report

Sequence:

BN020525

Instrument

BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB166419BS	BN036324.D	Benzo(k)fluoranthene	Jagrut	2/6/2025 4:07:55 PM	mohammad	2/7/2025 8:32:26 AM	Peak Integrated by Software

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN012225

Review By	yogesh	Review On	1/24/2025 8:01:29 AM
Supervise By	mohammad	Supervise On	1/24/2025 8:08:50 AM
SubDirectory	BN012225	HP Acquire Method	BNA_N, 8270_SiM HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC	SP6661		
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	BN036009.D	22 Jan 2025 09:44	RC/JU	Ok
2	SSTDICC0.1	BN036010.D	22 Jan 2025 11:02	RC/JU	Ok
3	SSTDICC0.2	BN036011.D	22 Jan 2025 11:38	RC/JU	Ok
4	SSTDICCC0.4	BN036012.D	22 Jan 2025 12:13	RC/JU	Ok
5	SSTDICC0.8	BN036013.D	22 Jan 2025 12:49	RC/JU	Ok
6	SSTDICC1.6	BN036014.D	22 Jan 2025 13:25	RC/JU	Ok
7	SSTDICC3.2	BN036015.D	22 Jan 2025 14:01	RC/JU	Ok
8	SSTDICC5.0	BN036016.D	22 Jan 2025 14:36	RC/JU	Ok
9	SSTDICV0.4	BN036017.D	22 Jan 2025 15:53	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN020525

Review By	yogesh	Review On	2/6/2025 5:49:41 AM
Supervise By	mohammad	Supervise On	2/7/2025 8:32:26 AM
SubDirectory	BN020525	HP Acquire Method	BNA_N, 8270_SiM HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC	SP6661		
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	BN036302.D	05 Feb 2025 18:08	RC/JU	Ok
2	SSTDCCC0.4	BN036303.D	05 Feb 2025 18:47	RC/JU	Ok
3	PB166419BL	BN036304.D	05 Feb 2025 19:23	RC/JU	Ok
4	PB166470BL	BN036305.D	05 Feb 2025 19:59	RC/JU	Ok
5	Q1173-06RE	BN036306.D	05 Feb 2025 20:35	RC/JU	Confirms
6	Q1225-01	BN036307.D	05 Feb 2025 21:11	RC/JU	Dilution
7	Q1225-02	BN036308.D	05 Feb 2025 21:47	RC/JU	Ok
8	Q1225-03	BN036309.D	05 Feb 2025 22:22	RC/JU	Ok
9	Q1250-02	BN036310.D	05 Feb 2025 22:58	RC/JU	Ok
10	Q1250-03	BN036311.D	05 Feb 2025 23:34	RC/JU	Ok
11	Q1250-05	BN036312.D	06 Feb 2025 00:10	RC/JU	Ok
12	Q1250-09	BN036313.D	06 Feb 2025 00:46	RC/JU	Ok
13	Q1250-10	BN036314.D	06 Feb 2025 01:22	RC/JU	Ok
14	Q1249-01	BN036315.D	06 Feb 2025 01:58	RC/JU	Ok,M
15	Q1283-01	BN036316.D	06 Feb 2025 02:34	RC/JU	ReRun
16	PB166470BS	BN036317.D	06 Feb 2025 03:10	RC/JU	Ok
17	SSTDCCC0.4	BN036318.D	06 Feb 2025 03:45	RC/JU	Ok
18	DFTPP	BN036319.D	06 Feb 2025 05:01	RC/JU	Ok
19	SSTDCCC0.4	BN036320.D	06 Feb 2025 05:40	RC/JU	Ok
20	PB166533BL	BN036321.D	06 Feb 2025 06:15	RC/JU	Ok
21	Q1283-03	BN036322.D	06 Feb 2025 06:51	RC/JU	Ok

Instrument ID: **BNA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # BN020525

Review By	yogesh	Review On	2/6/2025 5:49:41 AM
Supervise By	mohammad	Supervise On	2/7/2025 8:32:26 AM
SubDirectory	BN020525	HP Acquire Method	BNA_N, 8270_SiM HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC	SP6661		
Internal Standard/PEM	SP6682,1ul/100ul sample		
ICV/I.BLK	SP6684		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

22	Q1283-05	BN036323.D	06 Feb 2025 07:27	RC/JU	Ok,M
23	PB166419BS	BN036324.D	06 Feb 2025 08:03	RC/JU	Ok,M
24	PB166470BSD	BN036325.D	06 Feb 2025 08:39	RC/JU	Ok,M
25	PB166533BS	BN036326.D	06 Feb 2025 09:15	RC/JU	Ok
26	PB166533BSD	BN036327.D	06 Feb 2025 09:51	RC/JU	Ok
27	PB166419BSD	BN036328.D	06 Feb 2025 10:27	RC/JU	Ok
28	PB166237BL	BN036329.D	06 Feb 2025 11:03	RC/JU	Ok
29	Q1225-01DL	BN036330.D	06 Feb 2025 11:39	RC/JU	Ok
30	Q1283-01RE	BN036331.D	06 Feb 2025 12:15	RC/JU	Confirms
31	SSTDCCC0.4	BN036332.D	06 Feb 2025 12:54	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN012225

Review By	yogesh	Review On	1/24/2025 8:01:29 AM
Supervise By	mohammad	Supervise On	1/24/2025 8:08:50 AM
SubDirectory	BN012225	HP Acquire Method	BNA_N, 8270_HP Processing Method bn012225

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657
CCC	SP6661
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	BN036009.D	22 Jan 2025 09:44		RC/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN036010.D	22 Jan 2025 11:02		RC/JU	Ok
3	SSTDICC0.2	SSTDICC0.2	BN036011.D	22 Jan 2025 11:38		RC/JU	Ok
4	SSTDICCC0.4	SSTDICCC0.4	BN036012.D	22 Jan 2025 12:13	The Calibration is Good For DOD	RC/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN036013.D	22 Jan 2025 12:49		RC/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN036014.D	22 Jan 2025 13:25		RC/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN036015.D	22 Jan 2025 14:01		RC/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN036016.D	22 Jan 2025 14:36		RC/JU	Ok
9	SSTDICV0.4	ICVBN012225	BN036017.D	22 Jan 2025 15:53		RC/JU	Ok

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN020525

Review By	yogesh	Review On	2/6/2025 5:49:41 AM
Supervise By	mohammad	Supervise On	2/7/2025 8:32:26 AM
SubDirectory	BN020525	HP Acquire Method	BNA_N, 8270_HP Processing Method bn012225

STD. NAME	STD REF.#
Tune/Reschk	SP6717
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657
CCC	SP6661
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	BN036302.D	05 Feb 2025 18:08		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036303.D	05 Feb 2025 18:47		RC/JU	Ok
3	PB166419BL	PB166419BL	BN036304.D	05 Feb 2025 19:23		RC/JU	Ok
4	PB166470BL	PB166470BL	BN036305.D	05 Feb 2025 19:59		RC/JU	Ok
5	Q1173-06RE	VPB-192-HYD-2025012	BN036306.D	05 Feb 2025 20:35	Surrogate Fail	RC/JU	Confirms
6	Q1225-01	RW5-SP100-20250129	BN036307.D	05 Feb 2025 21:11	Need 5X Dilution	RC/JU	Dilution
7	Q1225-02	RW5-SP201-20250129	BN036308.D	05 Feb 2025 21:47		RC/JU	Ok
8	Q1225-03	RW5-SP303-20250129	BN036309.D	05 Feb 2025 22:22		RC/JU	Ok
9	Q1250-02	BP-VPB-192-GW-420-4	BN036310.D	05 Feb 2025 22:58		RC/JU	Ok
10	Q1250-03	BP-VPB-192-GW-300-3	BN036311.D	05 Feb 2025 23:34		RC/JU	Ok
11	Q1250-05	BP-VPB-192-GW-340-3	BN036312.D	06 Feb 2025 00:10		RC/JU	Ok
12	Q1250-09	BP-VPB-192-DUP-2025	BN036313.D	06 Feb 2025 00:46		RC/JU	Ok
13	Q1250-10	BP-VPB-192-GW-380-3	BN036314.D	06 Feb 2025 01:22		RC/JU	Ok
14	Q1249-01	BP-VPB-192-GW-460-4	BN036315.D	06 Feb 2025 01:58		RC/JU	Ok,M
15	Q1283-01	VPB-192-HYD-2025013	BN036316.D	06 Feb 2025 02:34	Surrogate Fail	RC/JU	ReRun
16	PB166470BS	PB166470BS	BN036317.D	06 Feb 2025 03:10		RC/JU	Ok
17	SSTDCCC0.4	SSTDCCC0.4EC	BN036318.D	06 Feb 2025 03:45		RC/JU	Ok
18	DFTPP	DFTPP	BN036319.D	06 Feb 2025 05:01		RC/JU	Ok

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN020525

Review By	yogesh	Review On	2/6/2025 5:49:41 AM
Supervise By	mohammad	Supervise On	2/7/2025 8:32:26 AM
SubDirectory	BN020525	HP Acquire Method	BNA_N, 8270_HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC	SP6661		
Internal Standard/PEM	SP6682,1ul/100ul sample		
ICV/I.BLK	SP6684		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

19	SSTDCCC0.4	SSTDCCC0.4	BN036320.D	06 Feb 2025 05:40		RC/JU	Ok
20	PB166533BL	PB166533BL	BN036321.D	06 Feb 2025 06:15		RC/JU	Ok
21	Q1283-03	BP-VPB-192-EB-20250	BN036322.D	06 Feb 2025 06:51		RC/JU	Ok
22	Q1283-05	BP-VPB-192-GW-500-5	BN036323.D	06 Feb 2025 07:27		RC/JU	Ok,M
23	PB166419BS	PB166419BS	BN036324.D	06 Feb 2025 08:03		RC/JU	Ok,M
24	PB166470BSD	PB166470BSD	BN036325.D	06 Feb 2025 08:39		RC/JU	Ok,M
25	PB166533BS	PB166533BS	BN036326.D	06 Feb 2025 09:15		RC/JU	Ok
26	PB166533BSD	PB166533BSD	BN036327.D	06 Feb 2025 09:51		RC/JU	Ok
27	PB166419BSD	PB166419BSD	BN036328.D	06 Feb 2025 10:27		RC/JU	Ok
28	PB166237BL	PB166237BL	BN036329.D	06 Feb 2025 11:03		RC/JU	Ok
29	Q1225-01DL	RW5-SP100-20250129	BN036330.D	06 Feb 2025 11:39		RC/JU	Ok
30	Q1283-01RE	VPB-192-HYD-2025013	BN036331.D	06 Feb 2025 12:15	Surrogate Fail	RC/JU	Confirms
31	SSTDCCC0.4	SSTDCCC0.4EC	BN036332.D	06 Feb 2025 12:54		RC/JU	Ok

M : Manual Integration

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 Strlp Lot#: E3574

Extraction By: RS

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,5,6,7

Extraction Start Date : 01/31/2025

Extraction Start Time : 08:30

Extraction End Date : 01/31/2025

Extraction End Time : 13:25

Concentration By: EH

Supervisor By : rajesh

Extraction Method: ☒ Seperatory Funnel ☐ Continious Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	0.4 PPM	SP6616
Surrogate	1.0ML	0.4 PPM	SP6718
LOD	1.0ML	N/A	SP6711
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	E3874
Baked Na2SO4	N/A	EP2580
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
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

1.5 ML Vial lot# 2210673. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID: Water bath -01,02

KD Bath Temperature: 60 °C

Envap ID: NEVAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/31/25	RP (EPA-709)	RC/SWC
13:30	Preparation Group	Analysis Group

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 01/31/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Pr P
					AddedBy	VerifiedBy				
PB166419BL	SBLK419	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1			SE
PB166419BS	SLCS419	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1			
PB166419BS D	SLCSD419	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1			
Q1225-01	RW5-SP100-20250129	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1	C		
Q1225-02	RW5-SP201-20250129	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1	C		
Q1225-03	RW5-SP303-20250129	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1	C		

* Extracts relinquished on the same date as received.

1/31/25

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1225

WorkList ID : 187335

Department : Extraction

Date : 01-31-2025 08:21:47

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1225-01	RW5-SP100-20250129	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N31	01/29/2025	8270-Modified
Q1225-02	RW5-SP201-20250129	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N31	01/29/2025	8270-Modified
Q1225-03	RW5-SP303-20250129	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N31	01/29/2025	8270-Modified

Date/Time 01/31/25 8:25
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Date/Time 01/31/25 8:25
Raw Sample Received by: [Signature]
Raw Sample Relinquished by: [Signature]

Prep Standard - Chemical Standard Summary

Order ID : Q1225
Test : SVOC-SIMGroup1
Prepbatch ID : PB166419,
Sequence ID/Qc Batch ID: BN020525,

Standard ID :
EP2559,EP2565,EP2580,SP6616,SP6629,SP6656,SP6657,SP6658,SP6659,SP6660,SP6661,SP6662,SP6663,SP668
2,SP6683,SP6684,SP6705,SP6710,SP6711,SP6717,SP6718,

Chemical ID :
1ul/100ul
sample,E3551,E3657,E3788,E3791,E3817,E3828,E3846,E3848,E3871,E3874,M5173,S10103,S10246,S 11011,S11074,
S11097,S11494,S11781,S11792,S11831,S12077,S12079,S12105,S12113,S12126,S12142,S12189,S12208,S12314,S1
2328,S12453,S12469,S12470,S12517,S12518,W3112,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1874	10 N SODIUM HYDROXIDE SOLN	EP2559	11/14/2024	05/14/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 11/14/2024

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2580	01/17/2025	07/01/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/17/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3492	8270-SIM-Spike 0.4 PPM	SP6616	09/06/2024	02/12/2025	Rahul Chavli	None	None	mohammad ahmed 09/11/2024

FROM 0.00160ml of S11011 + 0.02000ml of S11792 + 0.04000ml of S12105 + 0.04000ml of S12126 + 0.04000ml of S12453 +
99.85840ml of E3788 = Final Quantity: 100.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	SP6629	09/12/2024	03/04/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								10/14/2024

FROM 0.10000ml of S12314 + 4.90000ml of E3791 = Final Quantity: 5.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3339	8270 sim calibration stock 10ppm (CPI)	SP6656	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.03350ml of S10103 + 0.05000ml of S11494 + 0.05000ml of S12079 + 0.12500ml of S11831 + 0.12500ml of S12113 + 0.20000ml of S12077 + 0.25000ml of S11097 + 24.16650ml of E3817 = Final Quantity: 25.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	SP6657	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.50000ml of E3817 + 0.01000ml of SP6629 + 0.50000ml of SP6656 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	SP6658	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.68000ml of E3817 + 0.01000ml of SP6629 + 0.32000ml of SP6656 = Final Quantity: 1.010 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	SP6659	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.84000ml of E3817 + 0.01000ml of SP6629 + 0.16000ml of SP6656 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	SP6660	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.92000ml of E3817 + 0.01000ml of SP6629 + 0.08000ml of SP6656 = Final Quantity: 1.010 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	SP6661	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.96000ml of E3817 + 0.01000ml of SP6629 + 0.04000ml of SP6656 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	SP6662	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.50000ml of E3817 + 0.01000ml of SP6629 + 0.50000ml of SP6661 = Final Quantity: 1.010 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	SP6663	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel
								11/28/2024

FROM 0.75000ml of E3817 + 0.01000ml of SP6629 + 0.25000ml of SP6661 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
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

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND	SP6683	11/15/2024	04/10/2025	Jagrut Upadhyay	None	None	Yogesh Patel
SOURCE 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								

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3356	8270-SIM MDL-0.4PPM CALIBRATION SOL ICV-2ND	SP6684	11/15/2024	04/10/2025	Jagrut Upadhyay	None	None	Yogesh Patel
SOURCE FROM 0.87500ml of E3828 + 0.01000ml of SP6682 + 0.12500ml of SP6683 = Final Quantity: 1.010 ml								

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1366	LOQ & LOD 20 PPM	SP6705	01/03/2025	04/30/2025	Jagrut Upadhyay	None	None	mohammad ahmed 01/03/2025

FROM 0.20000ml of S11781 + 0.40000ml of S12142 + 0.40000ml of S12470 + 0.40000ml of S12518 + 18.60000ml of E3848 = Final
Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1374	LOQ & LOD 1 PPM	SP6710	01/03/2025	04/30/2025	Jagrut Upadhyay	None	None	mohammad ahmed 01/03/2025

FROM 23.75000ml of E3848 + 1.25000ml of SP6705 = Final Quantity: 25.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2151	LOQ & LOD 0.1 PPM	SP6711	01/03/2025	04/30/2025	Jagrut Upadhyay	None	None	mohammad ahmed 01/03/2025

FROM 9.00000ml of E3848 + 1.00000ml of SP6710 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3895	50 ug/ml DFTTP 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

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3491	8270-SIM-Surrogate 0.4 PPM	SP6718	01/17/2025	04/10/2025	Rahul Chavli	None	None	Yogesh 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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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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G2362009	03/09/2025	09/09/2024 / Rajesh	09/03/2024 / Rajesh	E3791

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24H2762011	04/09/2025	10/09/2024 / Rajesh	10/09/2024 / Rajesh	E3817

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	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	06/18/2025	12/18/2024 / Rajesh	12/09/2024 / Rajesh	E3848

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-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-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	02/08/2025	08/08/2024 / Jagrut	12/09/2021 / Christian	S10103

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH ₂ Cl ₂ , 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	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0193449	02/20/2025	08/20/2024 / yogesh	01/13/2023 / Christian	S11011

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0187043	05/15/2025	11/15/2024 / Jagrut	02/06/2023 / Christian	S11074

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	495831	02/08/2025	08/08/2024 / Jagrut	02/07/2023 / Christian	S11097

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	02/08/2025	08/08/2024 / Jagrut	08/11/2023 / Yogesh	S11494

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	06/26/2025	12/26/2024 / Jagrut	11/21/2023 / Rahul	S11781

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	02/21/2025	08/21/2024 / Jagrut	11/21/2023 / Rahul	S11792

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 #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	02/08/2025	08/08/2024 / Jagrut	01/31/2024 / Rahul	S12077

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	04/24/2025	10/24/2024 / Jagrut	01/31/2024 / Rahul	S12079

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]	A0207706	02/12/2025	08/12/2024 / Rahul	02/05/2024 / Rahul	S12105

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	02/09/2025	08/09/2024 / Jagrut	03/08/2024 / Rahul	S12113

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, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0203726	02/12/2025	08/12/2024 / Rahul	03/15/2024 / Rahul	S12126

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	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, CH ₂ Cl ₂ , 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 #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH ₂ Cl ₂ , 1mL	A0206540	03/04/2025	09/04/2024 / anahy	05/30/2024 / Rahul	S12314

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, CH ₂ Cl ₂ , 1mL	A0206540	05/13/2025	11/13/2024 / anahy	05/30/2024 / Rahul	S12328

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]	A0214021	02/12/2025	08/12/2024 / Rahul	07/23/2024 / RAHUL	S12453

[CS 4978-1]

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]	A0214021	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12469

[CS 4978-1]

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]	A0214021	05/26/2025	11/26/2024 / Jagrut	07/23/2024 / RAHUL	S12470

[CS 4978-1]

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]	A0214017	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12517

[CS 4978-2]

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]	A0214017	07/03/2025	01/03/2025 / Jagrut	07/23/2024 / RAHUL	S12518

[CS 4978-2]

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



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

Page 1 of 1

Catalog No.: Lot No.: **Storage:** **Solvent:** **Exp. Date:** **Description:**
Z-112090 440246 $\leq -10^{\circ}\text{C}$ Methylene Chloride 2/16/2026 CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL
-04

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
2-chlorophenol-d ₄	93951-73-6	99.3	248.12.7P	7487 $\pm$ 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 $\pm$ 17.26
phenol-d ₆	13127-88-3	99.9	949.120.8P	7481 $\pm$ 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 $\pm$ 17.17

Received on

02/25/21

by
CG

S9236
to

S9240

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

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 gravimetrically.

Certified By: Erica Castiglione
Erica Castiglione
Chemist



5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Receivalon
02/07/23 by CG

Sheet 511096
to
511099

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Rev 0

Page 1 of 4

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110381-01	495831	≤ -10 °C	Methylene Chloride	10/30/2027	Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1003 ± 17.27
acenaphthylene	208-96-8	97.6	14.290.1P	999.8 ± 17.22
aniline	62-53-3	99.9	64.7.1P	995 ± 17.13
anthracene	120-12-7	99.5	15.7.1P	1001 ± 17.24
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 17.21
benzo[a]anthracene	56-55-3	100	16.7.3P	1001 ± 17.24
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1001 ± 19.91
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 17.92
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 19.88
benzo[a]pyrene	50-32-8	97	20.286.2P	999.1 ± 26.35
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 17.24
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	999.7 ± 17.89
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1001 ± 17.23
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.13P	999.5 ± 17.89
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 17.21
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 19.86
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1P	999.1 ± 17.2
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 19.58
carbazole	86-74-8	99.4	239.7.2P	1000 ± 17.22

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Brianna Smith

Certified By: _____

Brianna Smith
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 495831

Expiration Date: 10/30/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	1000 ± 17.22
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	1000 ± 17.22
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1002 ± 17.25

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:



Briana Smith
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 gravimetrically.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on
03/10/22
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)

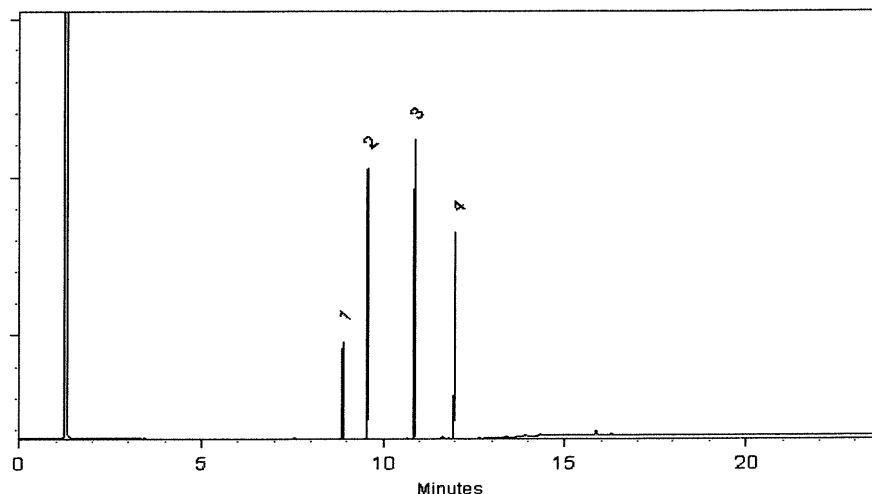
Carrier Gas:
hydrogen-constant pressure 10 psi.

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

Marlene Cowan - Operations Tech I

Date Passed: 10-Mar-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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Certificate of Analysis



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on
02/08/23

b1
CG

S 11071
to
S 11075

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 CAS # 123-91-1 Purity 99% (Lot SHBN5929)	2,019.0 µg/mL	+/- 11.8486 µg/mL Gravimetric +/- 43.2570 µg/mL Unstressed +/- 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:

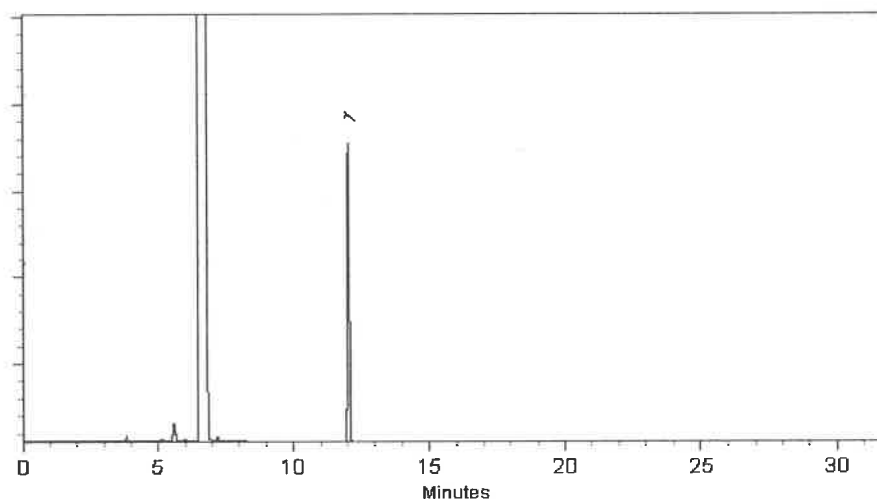
200°C

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



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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. : 555872 **Lot No.:** A0193449
Description : Custom Pentachlorophenol Standard
Custom Pentachlorophenol Standard 25,000µg/mL, Methanol,
1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : January 31, 2026 **Storage:** 10°C or colder
Ship: Ambient

Received on
01/13/23
by
CG
S11011
+0
S11015

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP221012	99%	25,050.0 µg/mL	+/- 778.6378

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Russ Bookhamer

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Jan-2023

Balance: B442140311

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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.



**PRODUCTOS
QUÍMICOS
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 ₂ SO ₄
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO 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 foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %
COMMENTS		
QC: PhC Irma Belmares		

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/24/23 E 3551

RC-02-01, Ed. 3



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:

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

Pellets

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	$\leq 0.005 \%$	$< 0.005 \%$	PASS
Chloride	$\leq 0.005 \%$	0.002 %	PASS
Heavy Metals	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Iron	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Magnesium	$\leq 0.002 \%$	$< 0.002 \%$	PASS
Mercury	$\leq 0.1 \text{ ppm}$	$< 0.1 \text{ ppm}$	PASS
Nickel	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Nitrogen Compounds	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Phosphate	$\leq 0.001 \%$	$< 0.001 \%$	PASS
Potassium	$\leq 0.02 \%$	$< 0.02 \%$	PASS
Purity	$\geq 97.0 \%$	99.2 %	PASS
Sodium Carbonate	$\leq 1.0 \%$	0.5 %	PASS
Sulfate	$\leq 0.003 \%$	$< 0.003 \%$	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

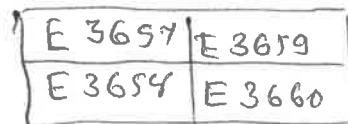
This document has been electronically produced and is valid without a signature.

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.



Acetone

BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

Avantor™



Material No.: 9254-03
Batch No.: 23H1462005
Manufactured Date: 2023-07-26
Expiration Date: 2026-07-25
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 8/13/24

E 3788

Ken Koehnlein
Sr. Manager, Quality Assurance

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 24G2362009
Manufactured Date: 2024-06-10
Expiration Date: 2025-09-09
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.3 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC
Manufacturer source batch: MG24F10024

E 3791

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)



Material No.: 9266-A4
Batch No.: 24H2762011
Manufactured Date: 2024-06-05
Expiration Date: 2025-09-04
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	5
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3817

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™



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)	$\geq 99.8\%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.2 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	$< 0.01\%$

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

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™



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) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	<= 0.3	0.2
Titration Base (μeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Rec'd by RP On 12/13/24

E 3846

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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



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 ₂ Cl 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
Titration 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 3848


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

12/27/24

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



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 Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0%
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid (μ eq/g)	≤ 0.3	0.0
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	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

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

Avantor

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)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	10
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.8 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	$< 5 \text{ ppm}$
Water (by KF, coulometric)	$\leq 0.02 \%$	$< 0.01 \%$

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

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

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



5580 Skyline 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

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Rev	Description:
Z-110094-02 506889	≤ -10 °C	Methylene Chloride	7/25/2028	0	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 } Y.P.
↓ 08/11/2023
511498

*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 gravimetrically.



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



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:

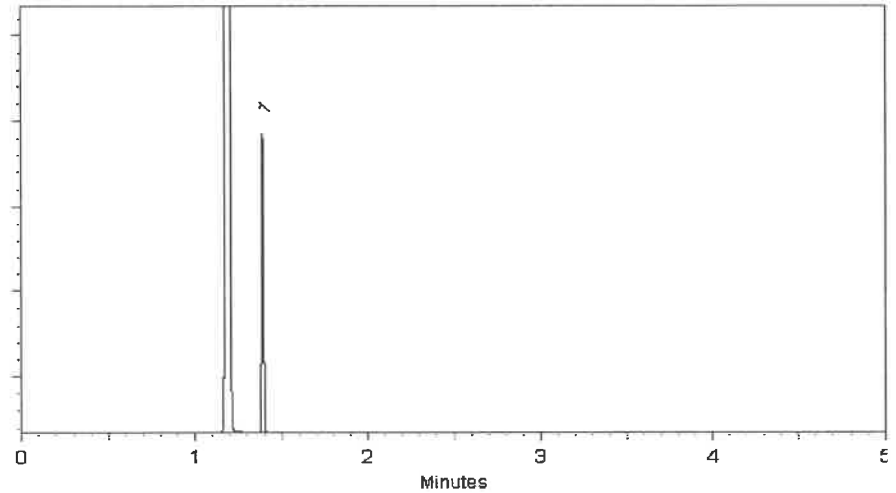
FID

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
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

Jennifer Pollino
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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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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



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:

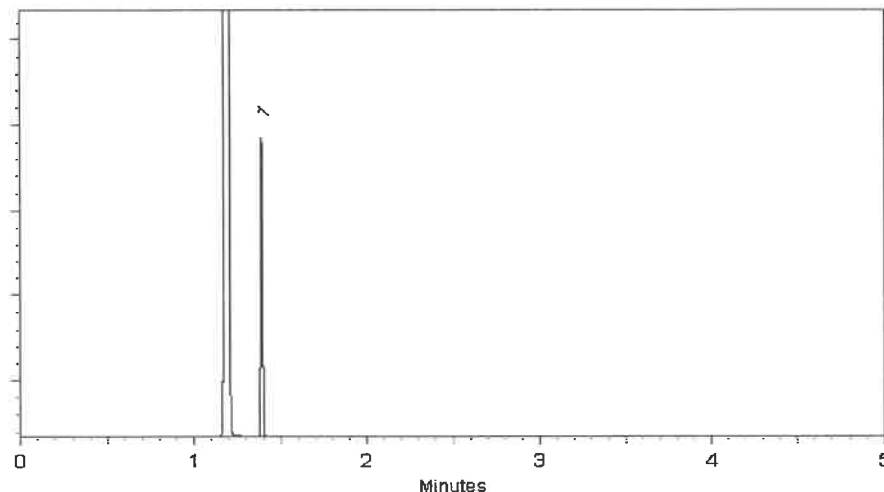
FID

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
Sam Moodler - Operations Tech I

Date Mixed: 30-Mar-2023

Balance Serial # B707717271

Jennifer Pollino
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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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. : 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:

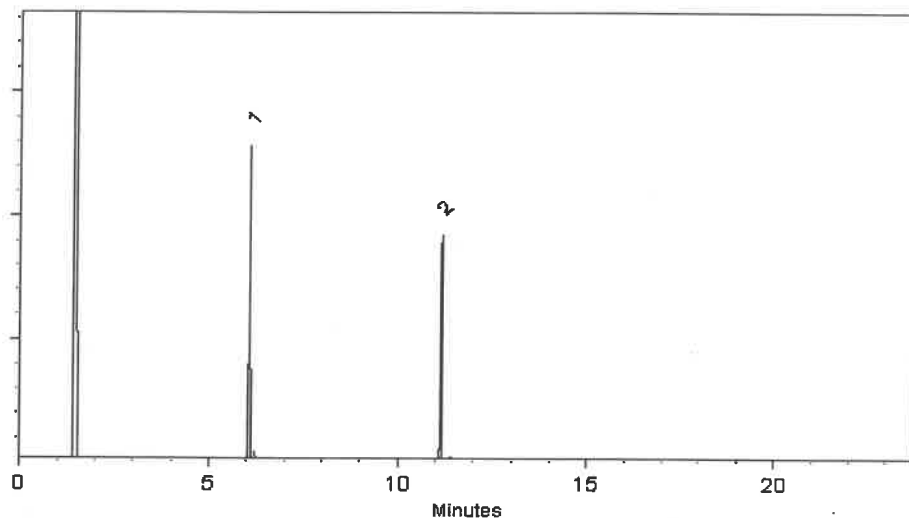
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl

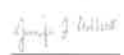


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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.



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

Page 1 of 1

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110816-01	414127	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine	1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

S12075 } RC
↓
S12079 } 02/01/24

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: _____

Shane Overcash
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
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Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110816-01	414127	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine	1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

S12075 } RC
↓
S12079 } 02/01/24

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: _____

Shane Overcash
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



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



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0207706

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : February 28, 2026 **Storage:** 10°C or colder

Ship: Ambient

512082 } RC/
↓ 02/22/24
512111 }

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,001.0 µg/mL	+/- 29.424320
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 µg/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,005.0 µg/mL	+/- 29.541899
4	Benzoic acid	65-85-0	MKCR2694	99%	1,003.0 µg/mL	+/- 29.483110
5	Biphenyl	92-52-4	MKCL6515	99%	1,006.0 µg/mL	+/- 29.571294

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024

Balance: B345965662



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

Page 1 of 1

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

512112 } RC/
↓
912116 } 03/08/24

*Not a certified value

Certified By: _____

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 gravimetrically.



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



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0203726

Description : 8270 MegaMix®
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

512117 } RC/
↓ 03/18/24
512146 }

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	1
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998	2
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200	3
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573	4
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180	5
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574	6
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837	7
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290	8
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829	9
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937	10
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505	11
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838	12
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909	13
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442	14
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512	15
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230	16
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876	17
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887	18
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	BCKK0887	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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110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

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CERTIFIED REFERENCE MATERIAL

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. : 31850 **Lot No.:** A0203726

Description : 8270 MegaMix®
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

512117 } RC/
↓ 03/18/24
512146 }

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	1
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998	2
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200	3
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573	4
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180	5
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574	6
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837	7
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290	8
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829	9
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937	10
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505	11
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838	12
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909	13
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442	14
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512	15
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230	16
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876	17
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887	18
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	BCKK0887	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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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31087 **Lot No.:** A0206206
Description : Acid Surrogate Mix (4/89 SOW)
Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul
Container Size : 5 mL **Pkg Amt:** > 5 mL
Expiration Date : January 31, 2032 **Storage:** 10°C or colder
Ship: Ambient

512187 } RC/
↓
512206 } 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorophenol	367-12-4	STBK1705	99%	10,005.3 µg/mL	+/- 302.5390
2	Phenol-d6	13127-88-3	PR-33287A	99%	10,005.5 µg/mL	+/- 302.5475
3	2,4,6-Tribromophenol	118-79-6	RP230831RSR	99%	10,006.6 µg/mL	+/- 302.5783

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

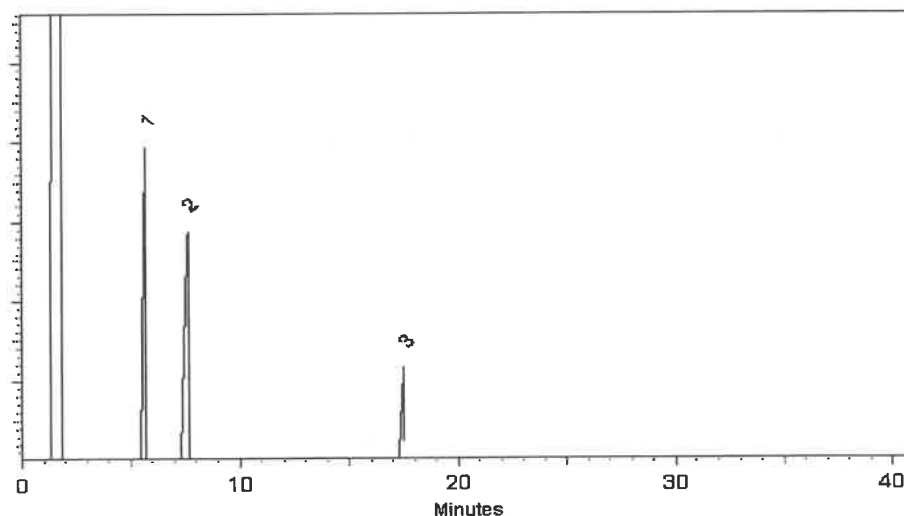
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope A. Riglin

Penelope Riglin - Operations Tech I

Date Mixed: 04-Jan-2024

Balance Serial # 1128360905

Christie Mills

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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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

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

S12207 } RC/
↓
S12221 } 03/18/24

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-S (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:

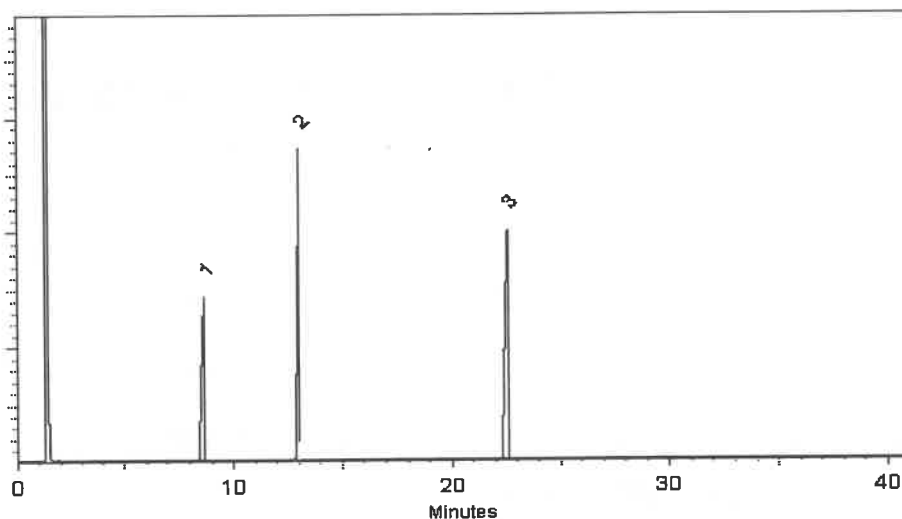
FID

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

Jennifer Pollino - Operations Tech III - ARM QC

Date Mixed: 09-Jan-2024

Balance Serial # 1128360905

Date Passed: 11-Jan-2024

Manufactured under Restek's ISO 9001:2015
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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. : 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

S12312 } RC/
↓ 05/30/24
S12331 }

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:

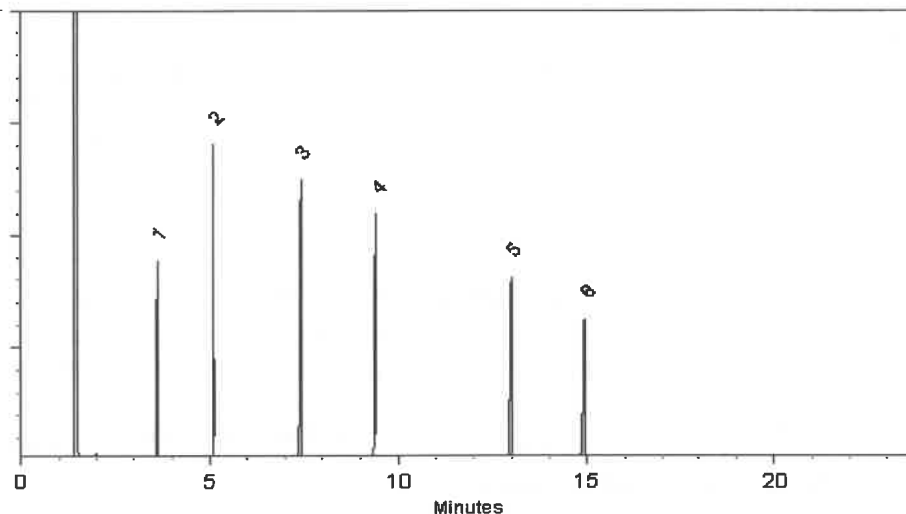
FID

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
Malina Homan - Operations Technician I

Date Mixed: 12-Jan-2024

Balance Serial # 1128360905

Jennifer Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jan-2024

Manufactured under Restek's ISO 9001:2015
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Certificate #FM 80397



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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

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

S12312 } RC/
↓ 05/30/24
S12331 }

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:

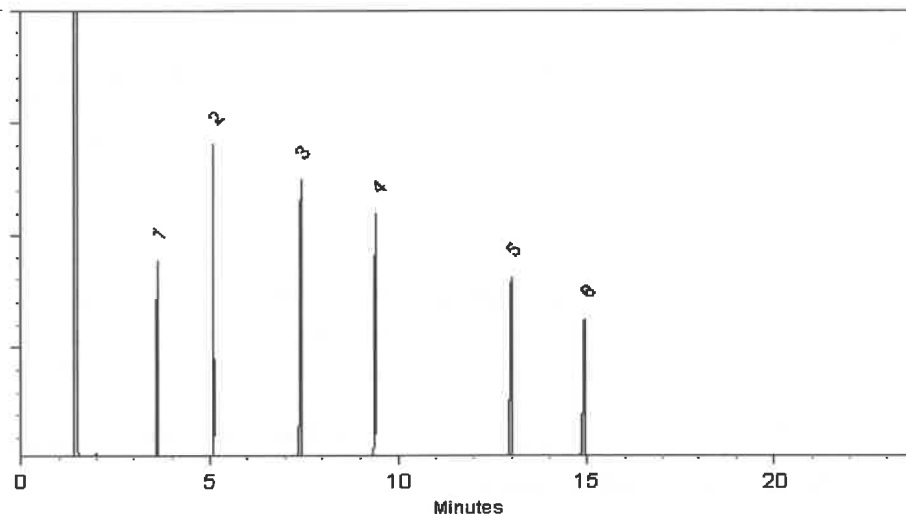
FID

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
Malina Homan - Operations Technician I

Date Mixed: 12-Jan-2024

Balance Serial # 1128360905

Jennifer J. Pollino
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jan-2024

Manufactured under Restek's ISO 9001:2015
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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 } RC/
↓
S12508 } 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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gravimetric



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0214021

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,3'-Dichlorobenzidine	91-94-1	S240326RSR	99%	1,004.0 µg/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 µg/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 µg/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 µg/mL	+/- 22.9569

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12449 } RC/
↓
S12508 } 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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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 } RC/
↓
S12508 } 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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.



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



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 } RC/
↓
S12568 } 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:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

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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

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Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12509 } RC/
↓
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Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024

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Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

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- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

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$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

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- 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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SHIPPING DOCUMENTS

- 1
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- 18

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION				PROJECT INFORMATION				BILLING INFORMATION							
COMPANY: Tetra Tech				PROJECT NAME: NWIRP Bethpage				BILL TO: PO#							
ADDRESS: 4433 Corporation Ln, Suite 300				PROJECT #: 112G08005-WE13 LOCATION: RW5B				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				DATA DELIVERABLE INFORMATION				ANALYSIS							
FAX: 10 DAYS* HARD COPY: 10 DAYS* EDD 10 DAYS* * TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS				☐ RESULTS ONLY ☐ RESULTS + QC ☐ New Jersey REDUCED ☐ New Jersey CLP ☐ EDD Format ☐ USEPA CLP ☐ New York State ASP "B" ☐ New York State ASP "A" ☐ Other				1,4-Dioxane SW846 8270 SIM							
CHEMTECH SAMPLE ID				PROJECT SAMPLE IDENTIFICATION		SAMPLE MATRIX		SAMPLE TYPE		SAMPLE COLLECTION		PRESERVATIVES		COMMENTS	
								COMP GRAB		DATE TIME		# of Bottles			
1.				RW5-SP100-20250129		GW		X		1/29/25 10:45		2		X	
2.				RW5-SP201-20250129		GW		X		1/29/25 10:47		1		X	
3.				RW5-SP303-20250129		GW		X		1/29/25 10:53		2		X	
4.															
5.															
6.															
7.															
8.															
9.															
10.															
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY															
RELINQUISHED BY SAMPLER				DATE/TIME		RECEIVED BY		Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp <u>2.0</u> MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler? <u>yes</u>							
RELINQUISHED BY <u>WFW</u>				DATE/TIME <u>1/29/25 15:00</u>		RECEIVED BY <u>[Signature]</u>		Comments:							
RELINQUISHED BY				DATE/TIME		RECEIVED FOR LAB BY									
3.								Page <u>3</u> of <u>3</u>							
SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight CHEMTECH: ☐ Picked Up ☐ Overnight															
SHIPMENT COMPLETE ☐ YES ☐ NO															
WHITE - CHEMTECH COPY FOR 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

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Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036324.D
 Acq On : 06 Feb 2025 08:03
 Operator : RC/JU
 Sample : PB166419BS
 Misc :
 ALS Vial : 23 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB166419BS

Quant Time: Feb 06 08:30:24 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration

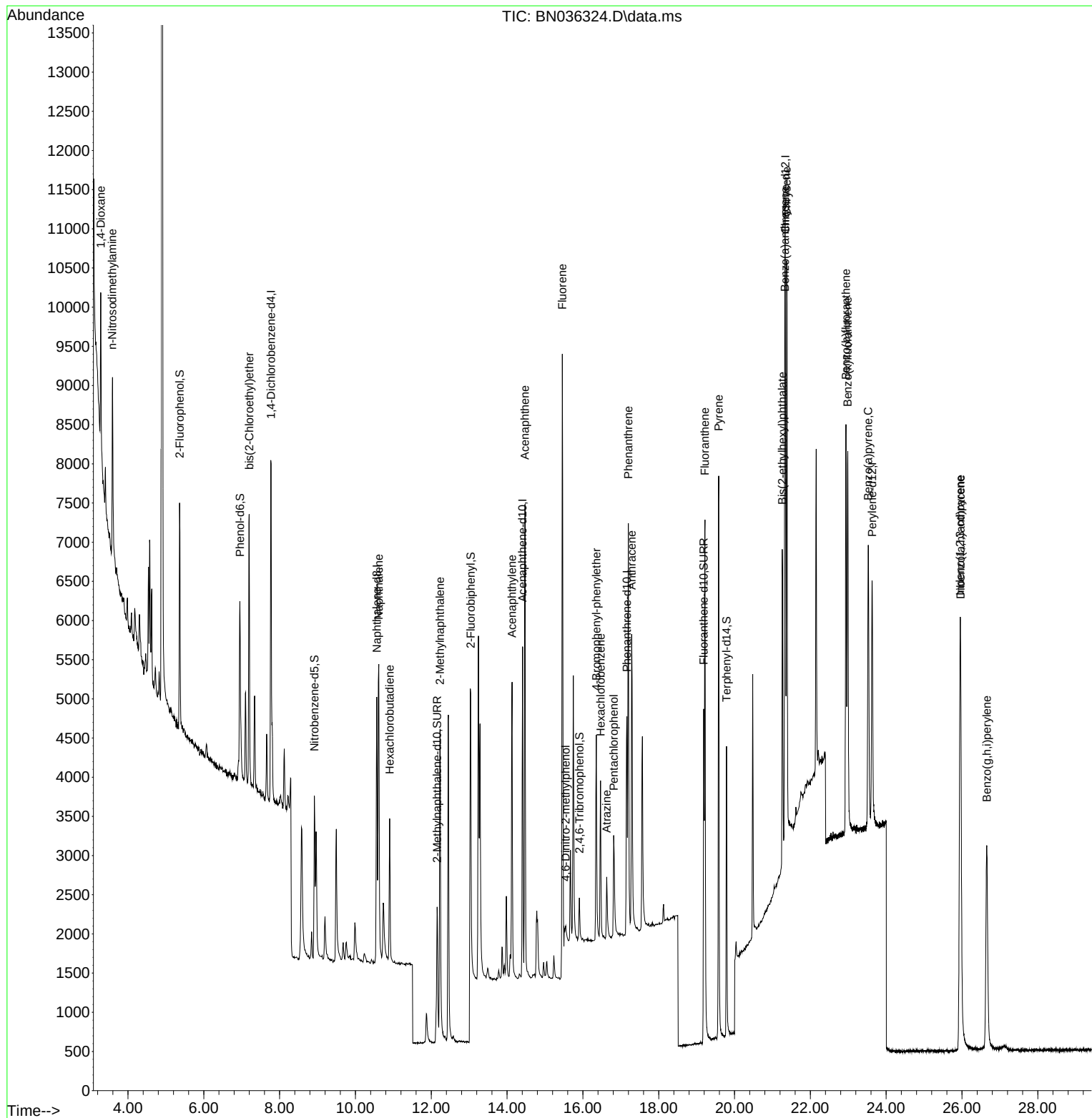
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2239	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4945	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2445	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4757	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	4475	0.400	ng	0.00
35) Perylene-d12	23.630	264	4637	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2184	0.375	ng	0.00
5) Phenol-d6	6.952	99	2459	0.360	ng	0.00
8) Nitrobenzene-d5	8.918	82	1952	0.418	ng	-0.01
11) 2-Methylnaphthalene-d10	12.157	152	3675	0.547	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	360	0.230	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3786	0.347	ng	0.00
27) Fluoranthene-d10	19.188	212	5217	0.423	ng	0.00
31) Terphenyl-d14	19.787	244	4237	0.456	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.283	88	969	0.387	ng	# 50
3) n-Nitrosodimethylamine	3.586	42	1616	0.356	ng	# 71
6) bis(2-Chloroethyl)ether	7.197	93	2674	0.486	ng	99
9) Naphthalene	10.616	128	5781	0.403	ng	98
10) Hexachlorobutadiene	10.904	225	1546	0.333	ng	# 99
12) 2-Methylnaphthalene	12.233	142	3571	0.401	ng	96
16) Acenaphthylene	14.131	152	4680	0.404	ng	99
17) Acenaphthene	14.473	154	3195	0.402	ng	98
18) Fluorene	15.457	166	3969	0.399	ng	99
20) 4,6-Dinitro-2-methylph...	15.547	198	162	0.146	ng	# 31
21) 4-Bromophenyl-phenylether	16.354	248	1193	0.352	ng	# 93
22) Hexachlorobenzene	16.466	284	1579	0.354	ng	96
23) Atrazine	16.627	200	904	0.369	ng	97
24) Pentachlorophenol	16.813	266	929	0.481	ng	98
25) Phenanthrene	17.198	178	5703	0.399	ng	100
26) Anthracene	17.285	178	5348	0.411	ng	99
28) Fluoranthene	19.220	202	6743	0.402	ng	98
30) Pyrene	19.582	202	7110	0.392	ng	100
32) Benzo(a)anthracene	21.331	228	6360	0.392	ng	99
33) Chrysene	21.375	228	6946	0.419	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	3331	0.375	ng	98
36) Indeno(1,2,3-cd)pyrene	25.949	276	7491	0.403	ng	96
37) Benzo(b)fluoranthene	22.940	252	6605	0.392	ng	# 92
38) Benzo(k)fluoranthene	22.987	252	6676	0.393	ng	# 90
39) Benzo(a)pyrene	23.528	252	6161	0.428	ng	# 89
40) Dibenzo(a,h)anthracene	25.964	278	5781	0.390	ng	95
41) Benzo(g,h,i)perylene	26.656	276	6020	0.372	ng	96

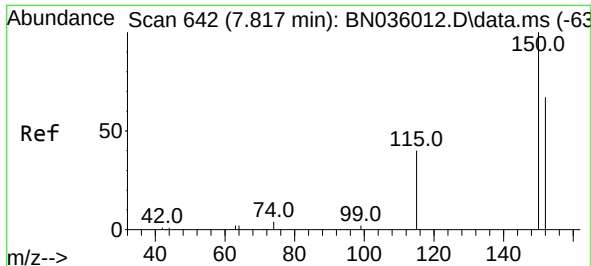
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036324.D
Acq On : 06 Feb 2025 08:03
Operator : RC/JU
Sample : PB166419BS
Misc :
ALS Vial : 23 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166419BS

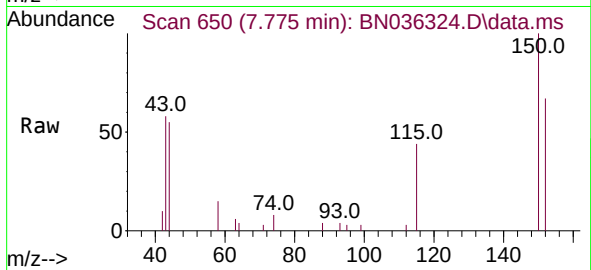
Quant Time: Feb 06 08:30:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration



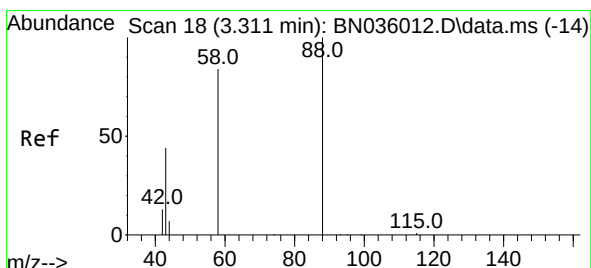
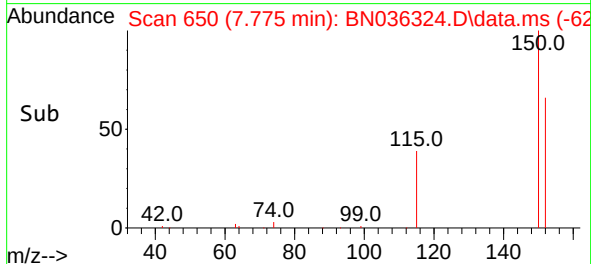
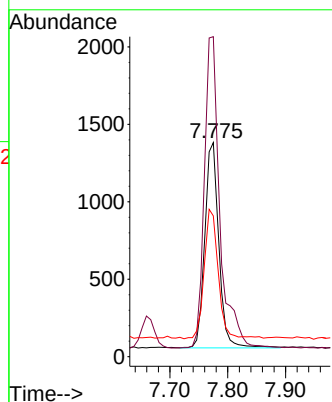


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

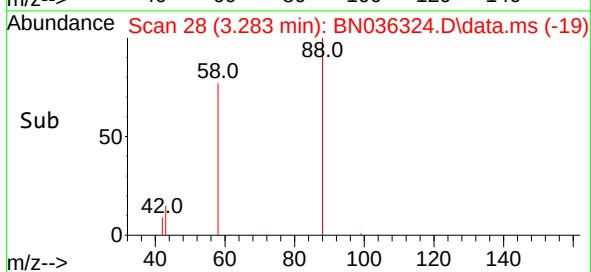
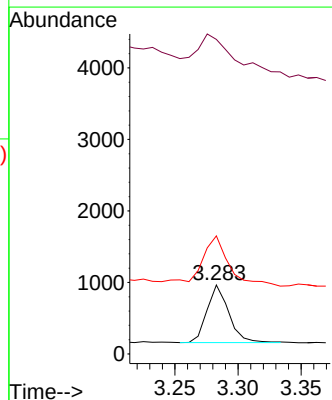
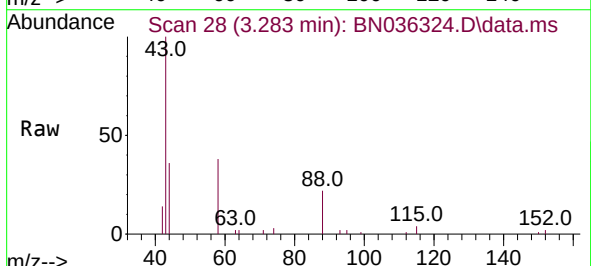


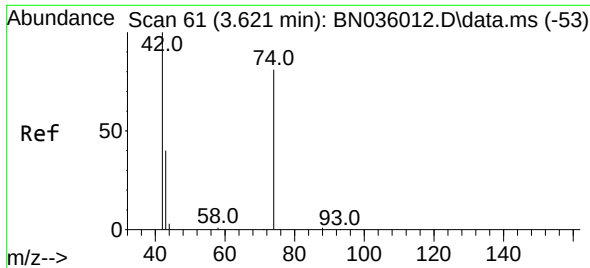
Tgt Ion: 152 Resp: 2239
Ion Ratio Lower Upper
152 100
150 149.5 117.4 176.2
115 65.8 51.0 76.4



#2
1,4-Dioxane
Concen: 0.387 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion: 88 Resp: 969
Ion Ratio Lower Upper
88 100
43 101.9 38.5 57.7#
58 112.2 66.6 99.8#

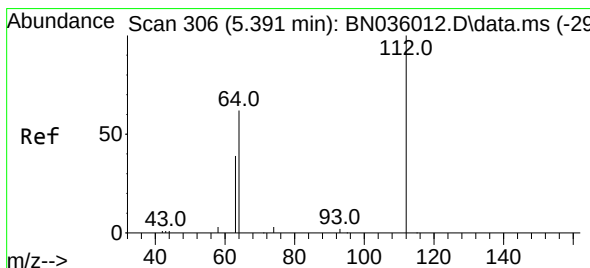
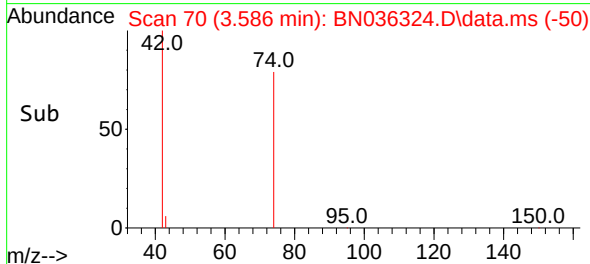
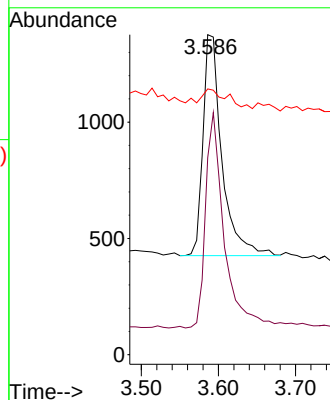
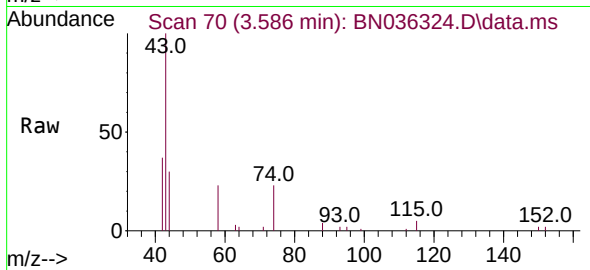




#3
 n-Nitrosodimethylamine
 Concen: 0.356 ng
 RT: 3.586 min Scan# 70
 Delta R.T. -0.007 min
 Lab File: BN036324.D
 Acq: 06 Feb 2025 08:03

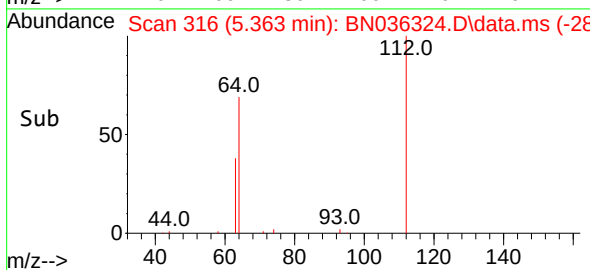
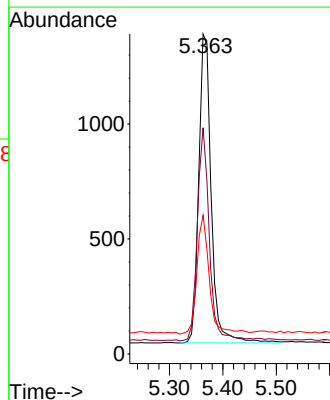
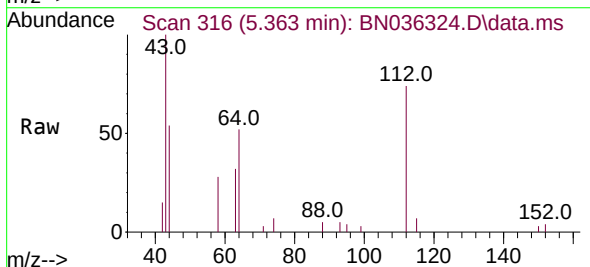
Instrument :
 BNA_N
 ClientSampleId :
 PB166419BS

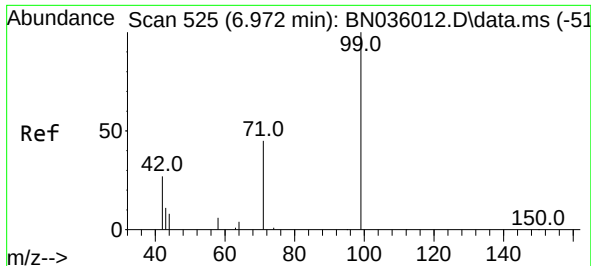
Tgt Ion: 42 Resp: 1616
 Ion Ratio Lower Upper
 42 100
 74 98.6 58.1 87.1#
 44 13.1 6.2 9.4#



#4
 2-Fluorophenol
 Concen: 0.375 ng
 RT: 5.363 min Scan# 316
 Delta R.T. 0.000 min
 Lab File: BN036324.D
 Acq: 06 Feb 2025 08:03

Tgt Ion: 112 Resp: 2184
 Ion Ratio Lower Upper
 112 100
 64 65.9 50.0 75.0
 63 38.5 30.7 46.1

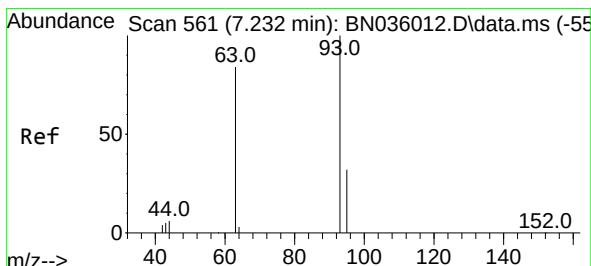
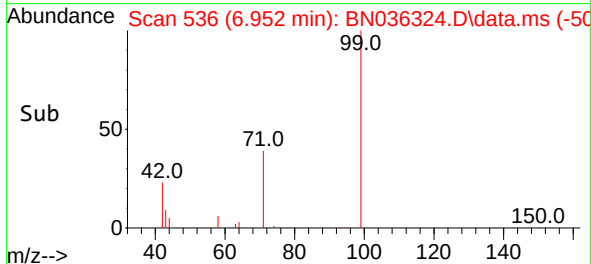
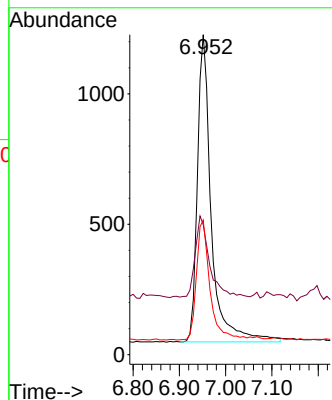
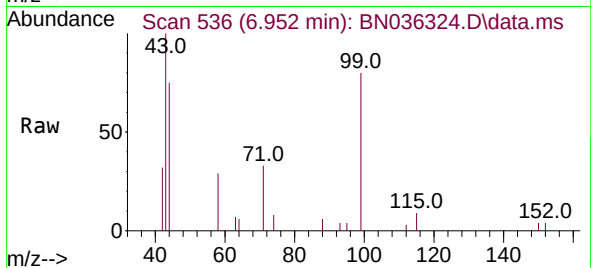




#5
Phenol-d6
Concen: 0.360 ng
RT: 6.952 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

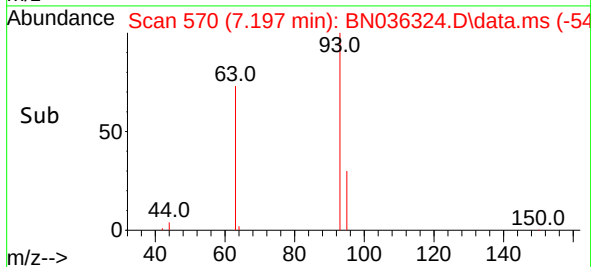
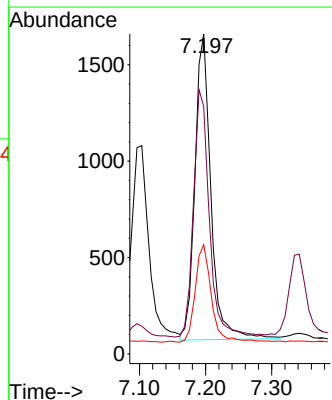
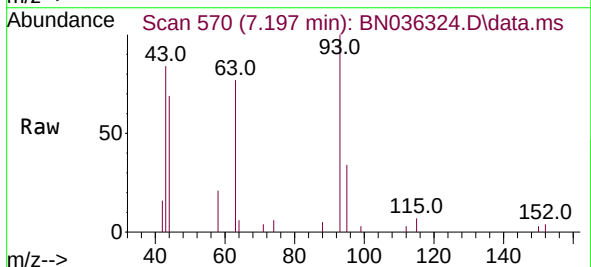
Instrument :
BNA_N
ClientSampleId :
PB166419BS

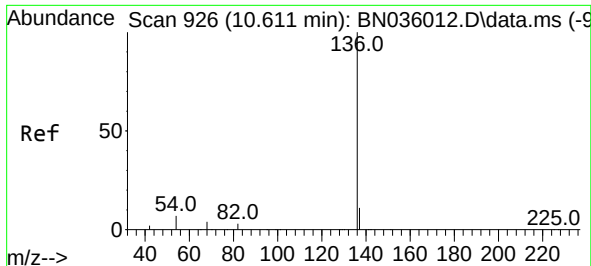
Tgt Ion: 99 Resp: 2459
Ion Ratio Lower Upper
99 100
42 27.0 26.8 40.2
71 38.1 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.486 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion: 93 Resp: 2674
Ion Ratio Lower Upper
93 100
63 80.4 65.8 98.6
95 32.2 25.8 38.6

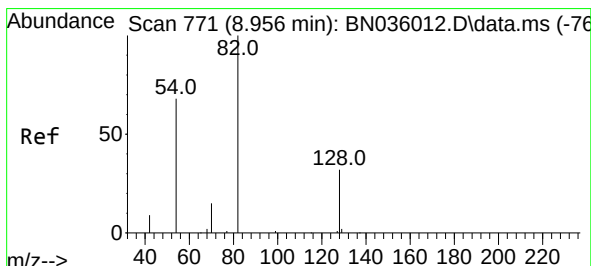
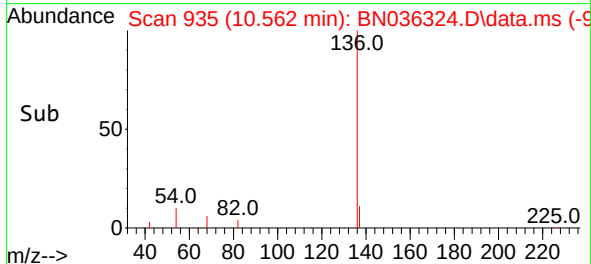
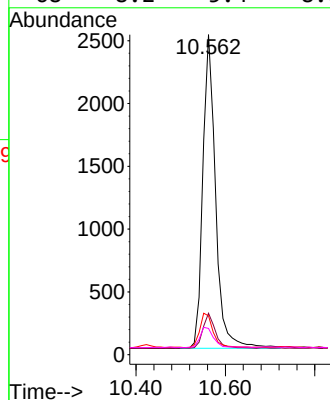
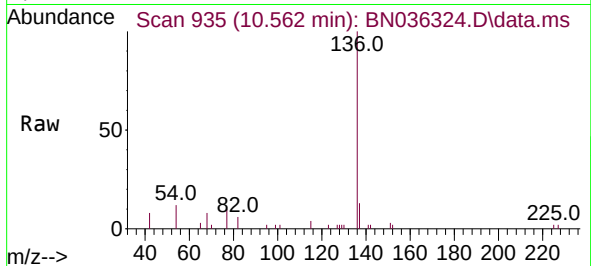




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

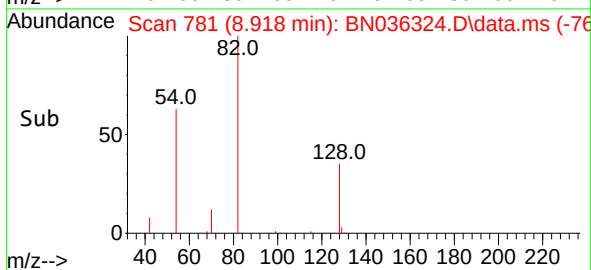
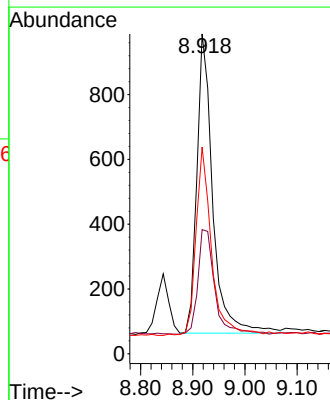
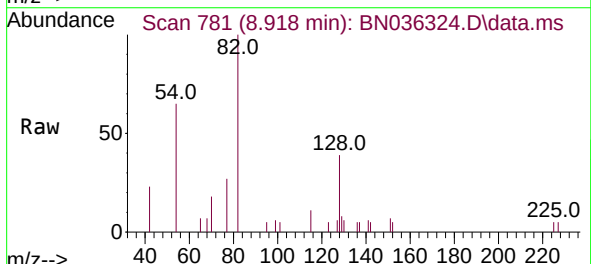
Instrument :
BNA_N
ClientSampleId :
PB166419BS

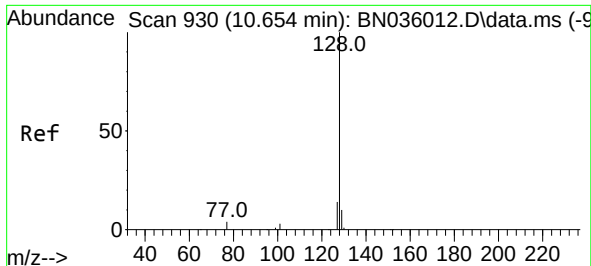
Tgt Ion:	136	Resp:	4945
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	12.2	7.7	11.5#
68	8.2	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.418 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:	82	Resp:	1952
Ion	Ratio	Lower	Upper
82	100		
128	38.8	28.8	43.2
54	64.6	55.8	83.8

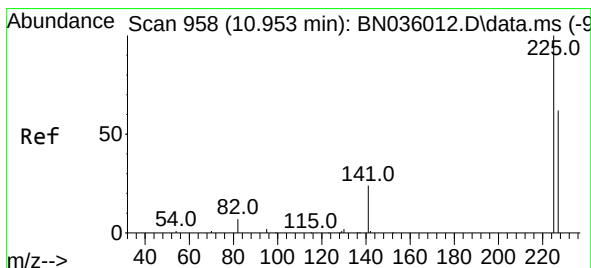
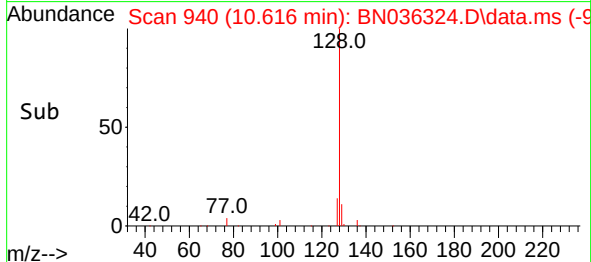
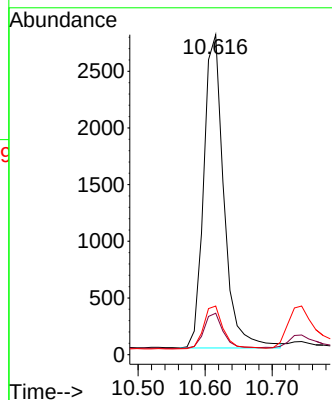
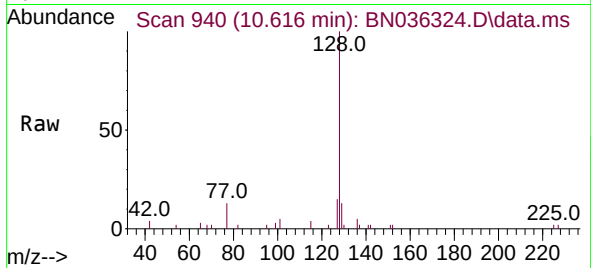




#9
Naphthalene
Concen: 0.403 ng
RT: 10.616 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

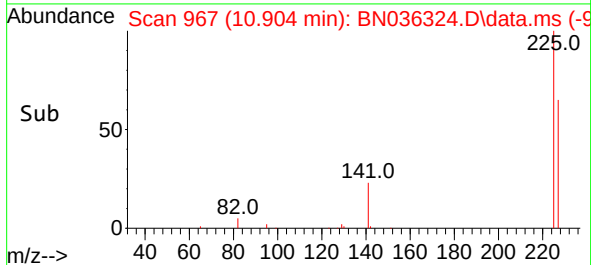
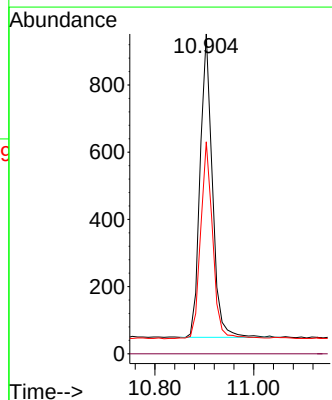
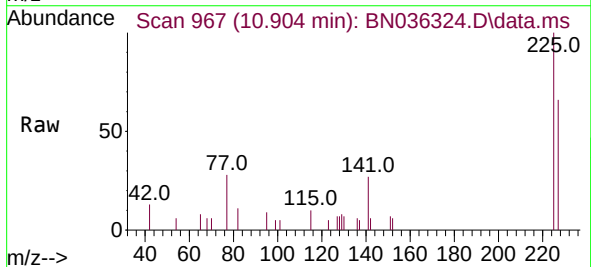
Instrument :
BNA_N
ClientSampleId :
PB166419BS

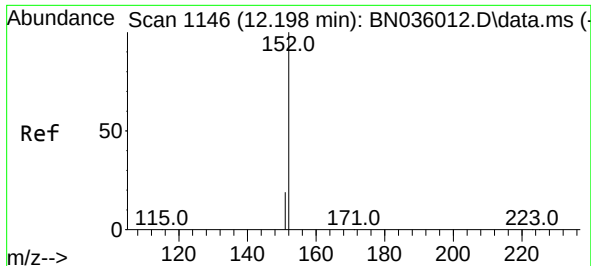
Tgt Ion:	128	Resp:	5781
Ion	Ratio	Lower	Upper
128	100		
129	13.0	9.4	14.2
127	15.2	12.6	19.0



#10
Hexachlorobutadiene
Concen: 0.333 ng
RT: 10.904 min Scan# 967
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:	225	Resp:	1546
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.4	51.0	76.6

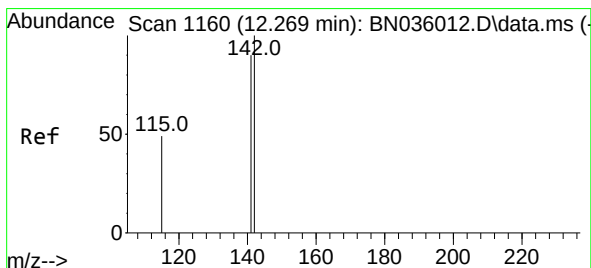
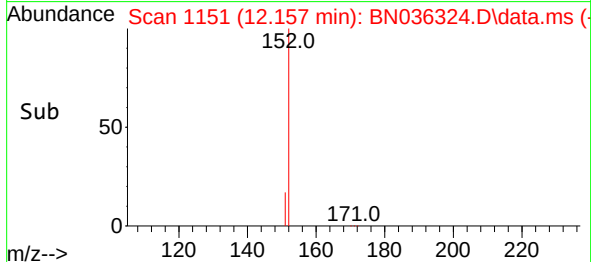
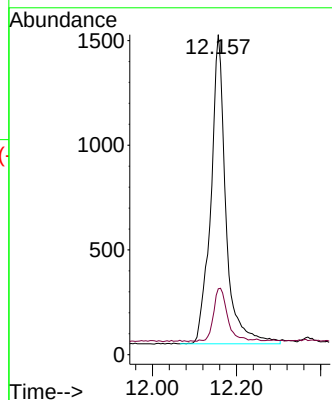
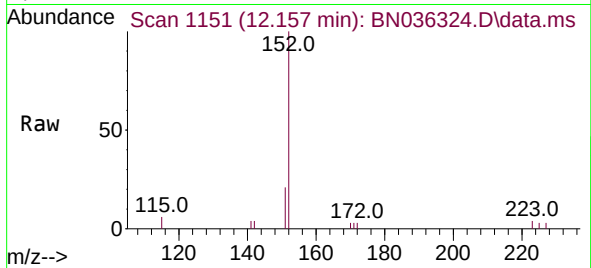




#11
2-Methylnaphthalene-d10
Concen: 0.547 ng
RT: 12.157 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

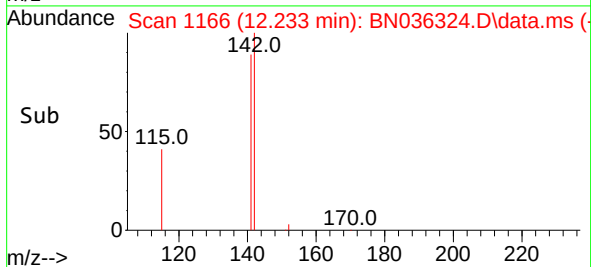
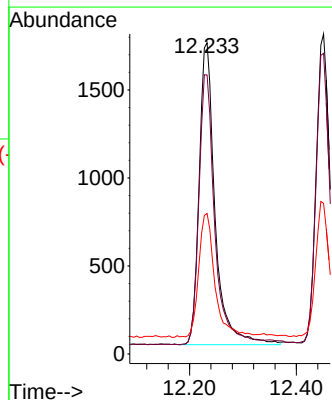
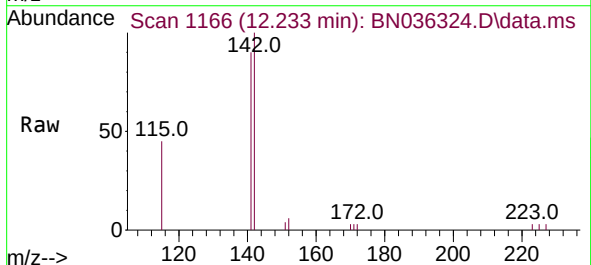
Instrument :
BNA_N
ClientSampleId :
PB166419BS

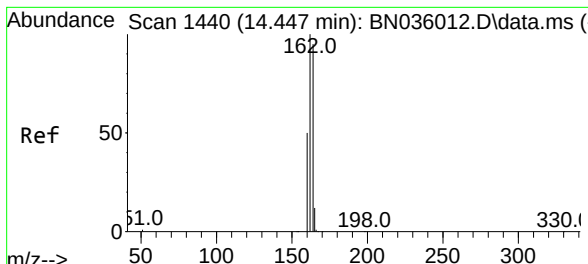
Tgt Ion:152 Resp: 3675
Ion Ratio Lower Upper
152 100
151 16.1 16.6 25.0#



#12
2-Methylnaphthalene
Concen: 0.401 ng
RT: 12.233 min Scan# 1166
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:142 Resp: 3571
Ion Ratio Lower Upper
142 100
141 89.6 72.2 108.2
115 45.1 41.2 61.8

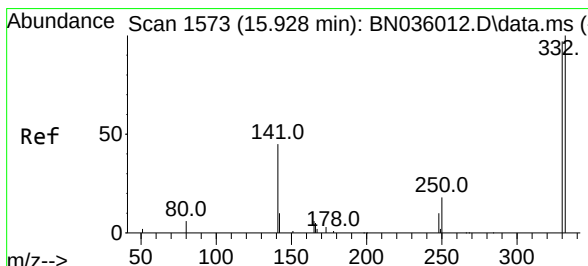
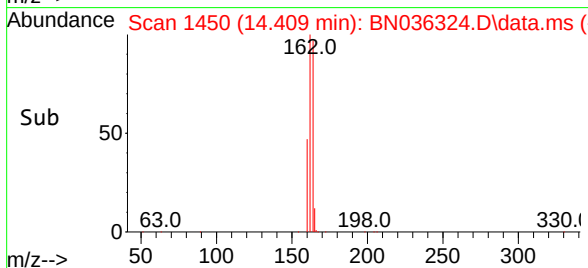
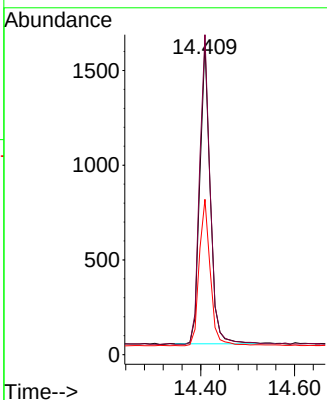
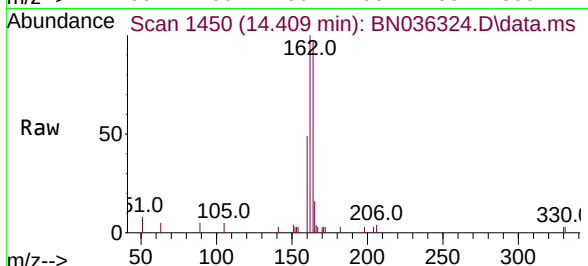




#13
 Acenaphthene-d10
 Concen: 0.400 ng
 RT: 14.409 min Scan# 14
 Delta R.T. 0.000 min
 Lab File: BN036324.D
 Acq: 06 Feb 2025 08:03

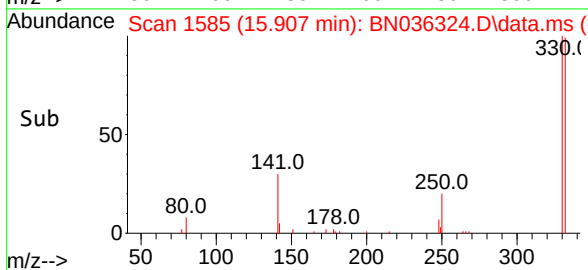
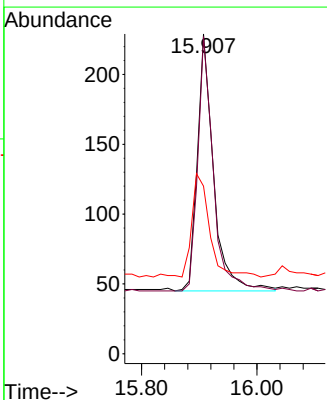
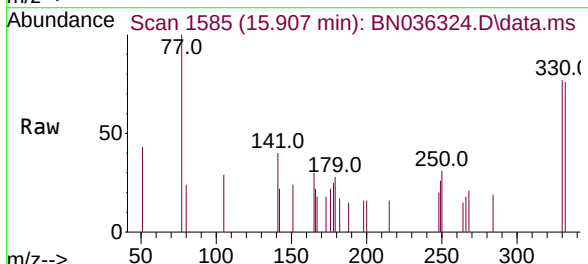
Instrument :
 BNA_N
 ClientSampleId :
 PB166419BS

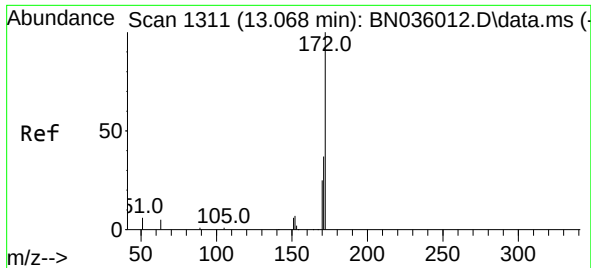
Tgt Ion:	164	Resp:	2445
Ion	Ratio	Lower	Upper
164	100		
162	102.8	84.1	126.1
160	49.9	43.8	65.8



#14
 2,4,6-Tribromophenol
 Concen: 0.230 ng
 RT: 15.907 min Scan# 1585
 Delta R.T. -0.000 min
 Lab File: BN036324.D
 Acq: 06 Feb 2025 08:03

Tgt Ion:	330	Resp:	360
Ion	Ratio	Lower	Upper
330	100		
332	95.3	81.0	121.4
141	43.9	36.7	55.1

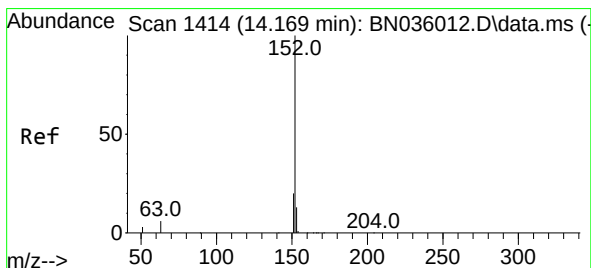
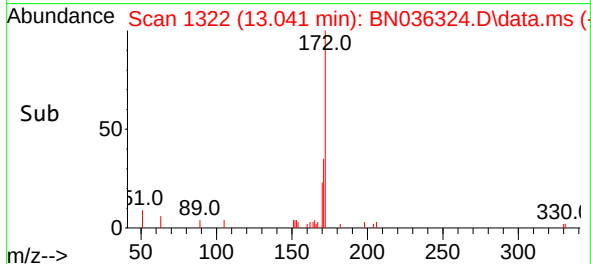
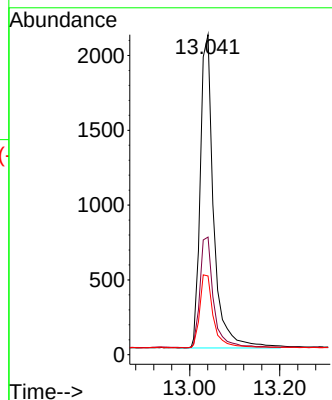
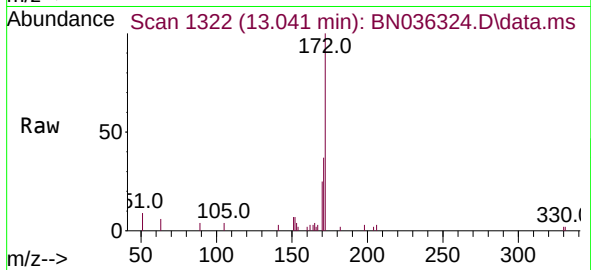




#15
2-Fluorobiphenyl
Concen: 0.347 ng
RT: 13.041 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

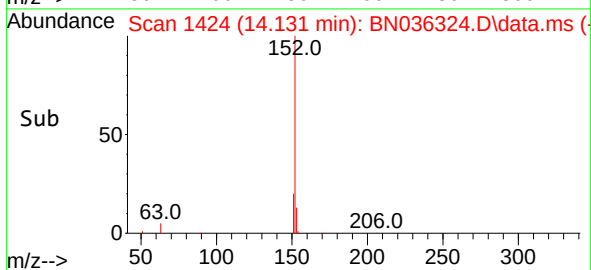
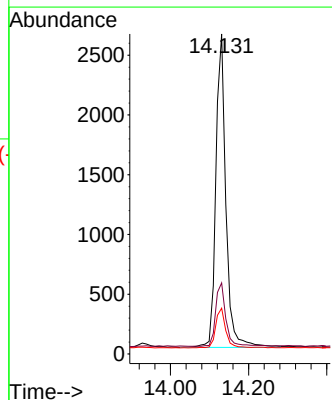
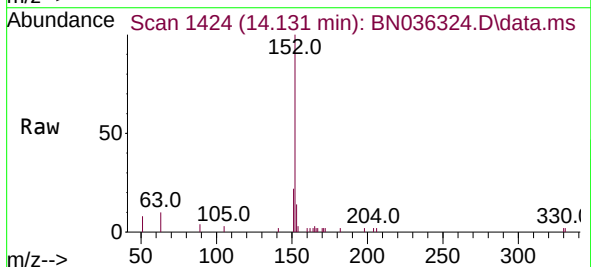
Instrument :
BNA_N
ClientSampleId :
PB166419BS

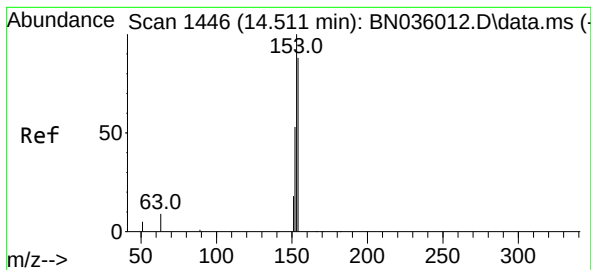
Tgt Ion:172 Resp: 3786
Ion Ratio Lower Upper
172 100
171 36.7 30.9 46.3
170 24.6 21.2 31.8



#16
Acenaphthylene
Concen: 0.404 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:152 Resp: 4680
Ion Ratio Lower Upper
152 100
151 20.7 16.2 24.2
153 12.7 10.4 15.6





#17

Acenaphthene

Concen: 0.402 ng

RT: 14.473 min Scan# 1446

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS

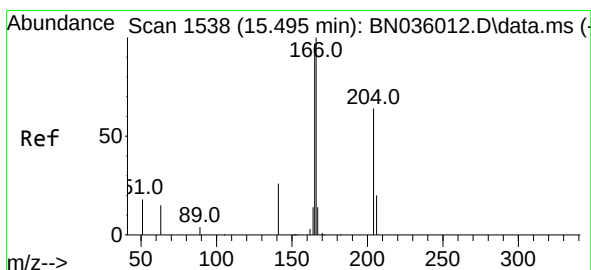
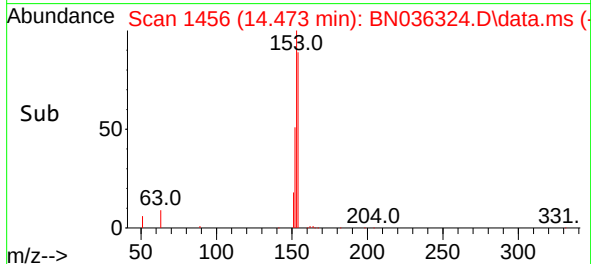
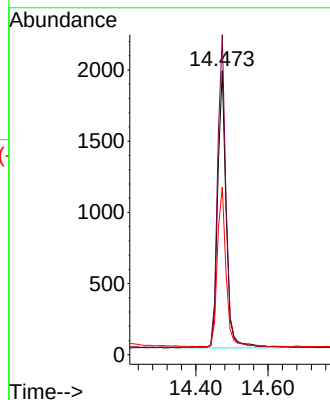
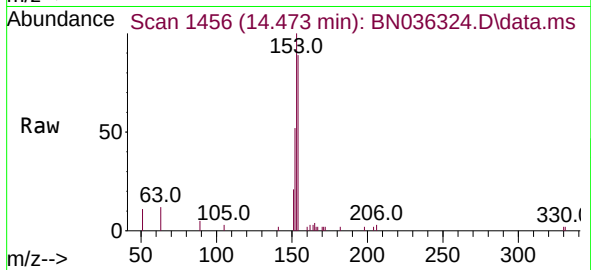
Tgt Ion:154 Resp: 3195

Ion Ratio Lower Upper

154 100

153 110.3 88.9 133.3

152 57.7 48.1 72.1



#18

Fluorene

Concen: 0.399 ng

RT: 15.457 min Scan# 1548

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

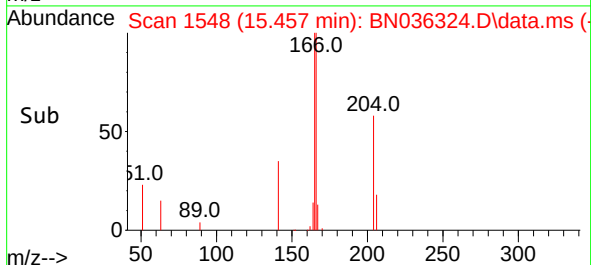
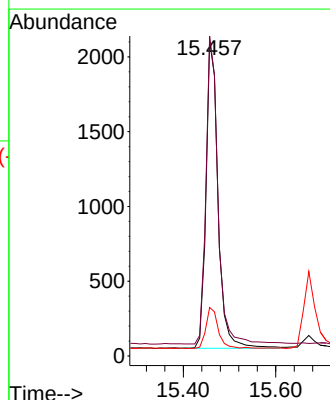
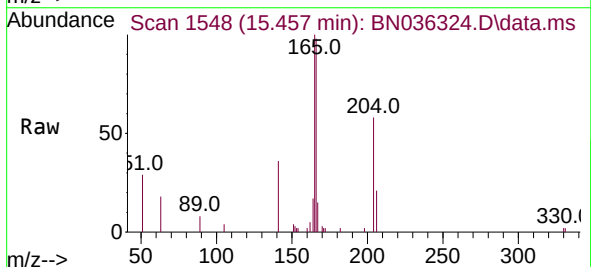
Tgt Ion:166 Resp: 3969

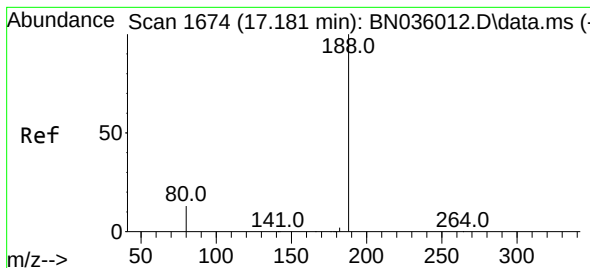
Ion Ratio Lower Upper

166 100

165 99.6 78.5 117.7

167 13.7 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.161 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS

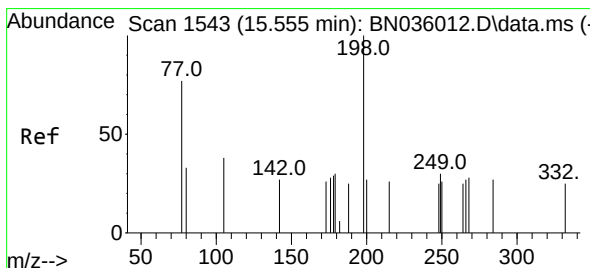
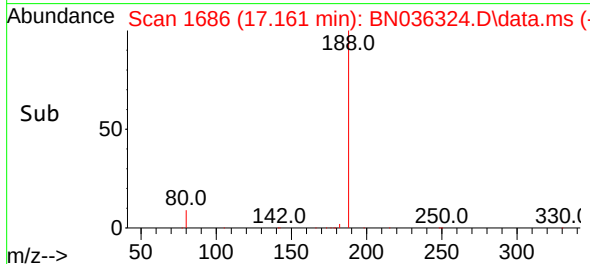
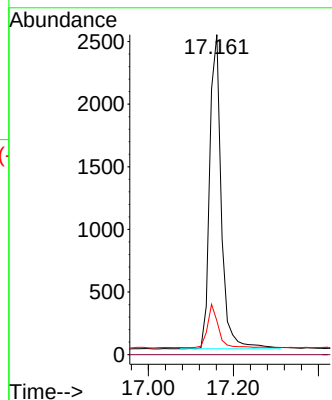
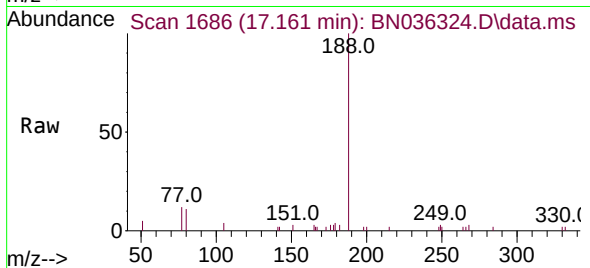
Tgt Ion:188 Resp: 4757

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.6 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.146 ng

RT: 15.547 min Scan# 1556

Delta R.T. 0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

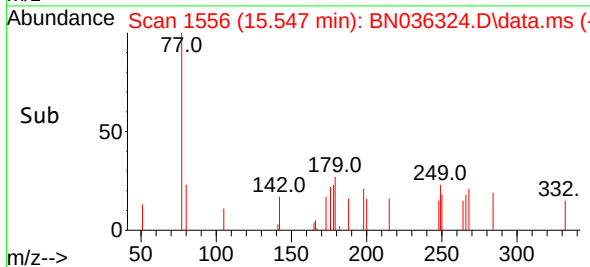
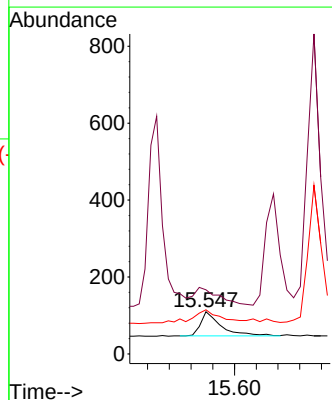
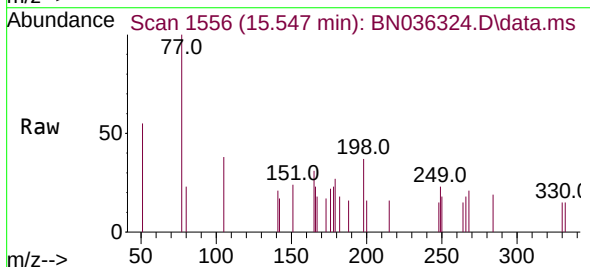
Tgt Ion:198 Resp: 162

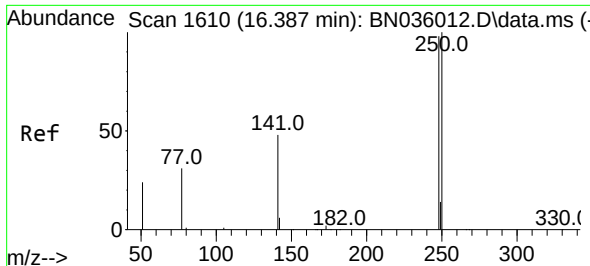
Ion Ratio Lower Upper

198 100

51 151.8 68.1 102.1#

105 104.5 46.5 69.7#

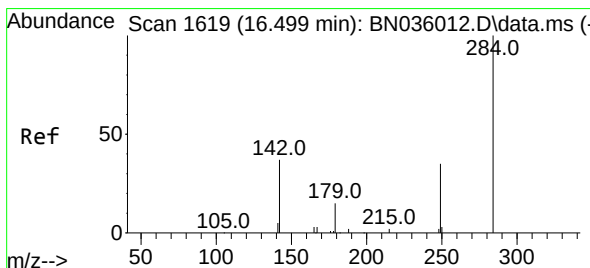
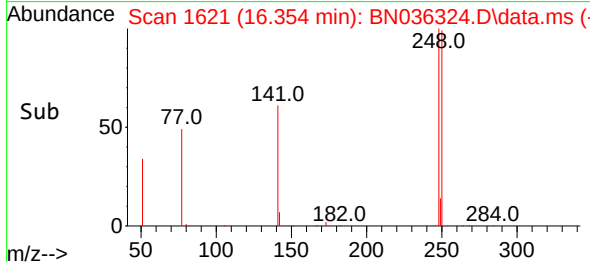
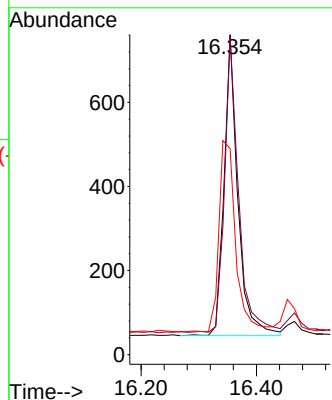
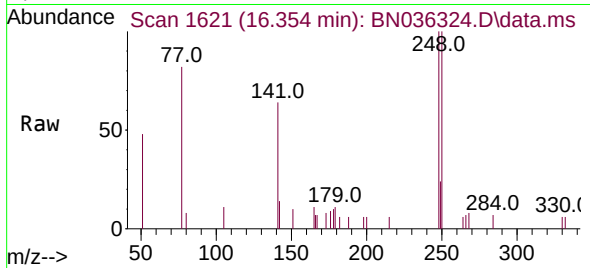




#21
4-Bromophenyl-phenylether
Concen: 0.352 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

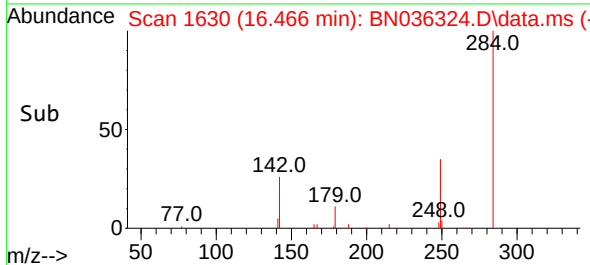
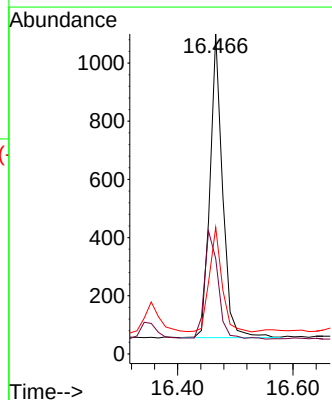
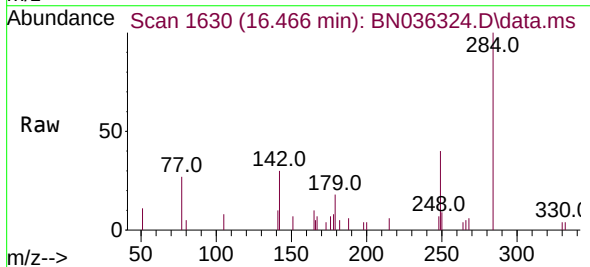
Instrument :
BNA_N
ClientSampleId :
PB166419BS

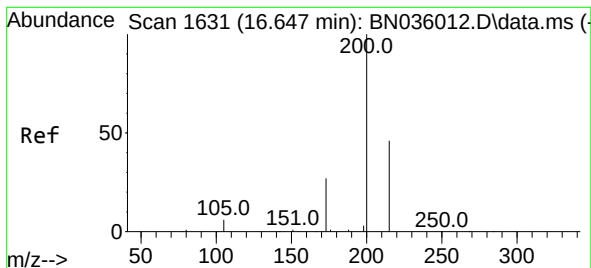
Tgt Ion:248 Resp: 1193
Ion Ratio Lower Upper
248 100
250 99.6 81.5 122.3
141 64.4 41.8 62.6#



#22
Hexachlorobenzene
Concen: 0.354 ng
RT: 16.466 min Scan# 1630
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:284 Resp: 1579
Ion Ratio Lower Upper
284 100
142 38.6 33.6 50.4
249 34.6 28.8 43.2





#23

Atrazine

Concen: 0.369 ng

RT: 16.627 min Scan# 1643

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS

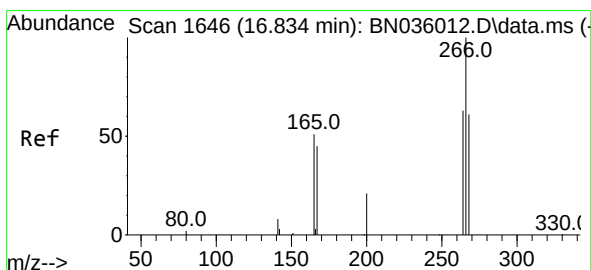
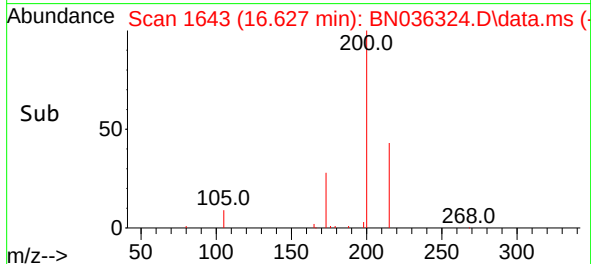
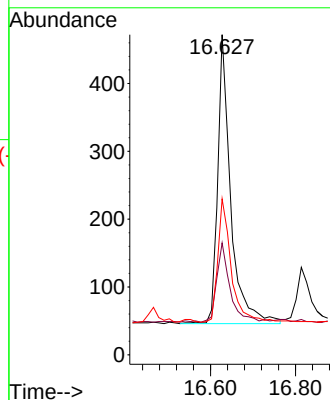
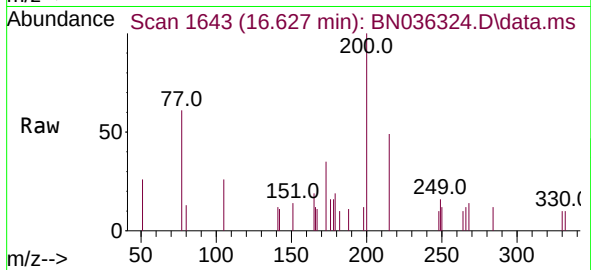
Tgt Ion:200 Resp: 904

Ion Ratio Lower Upper

200 100

173 35.0 26.6 40.0

215 48.7 40.6 61.0



#24

Pentachlorophenol

Concen: 0.481 ng

RT: 16.813 min Scan# 1658

Delta R.T. -0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

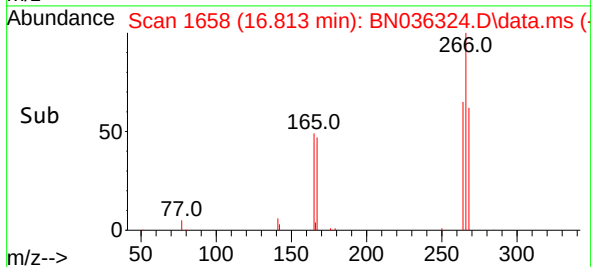
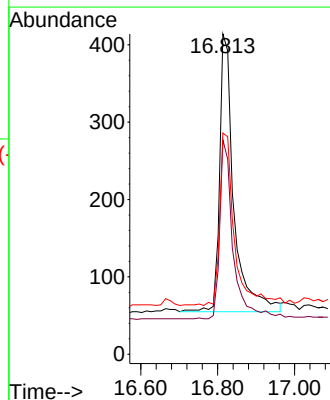
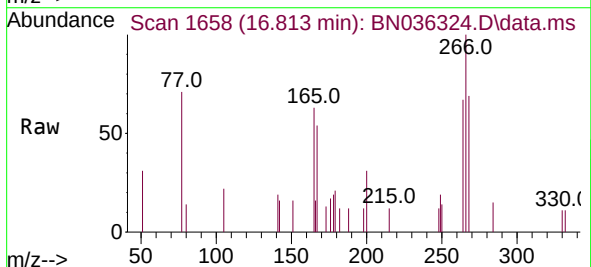
Tgt Ion:266 Resp: 929

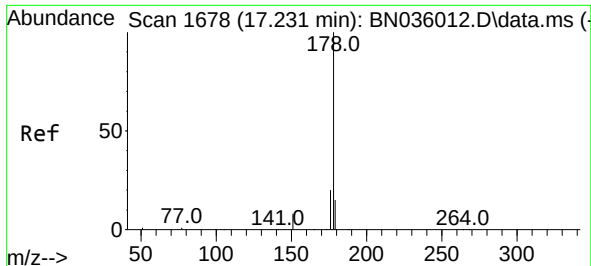
Ion Ratio Lower Upper

266 100

264 59.4 48.2 72.2

268 61.9 51.6 77.4

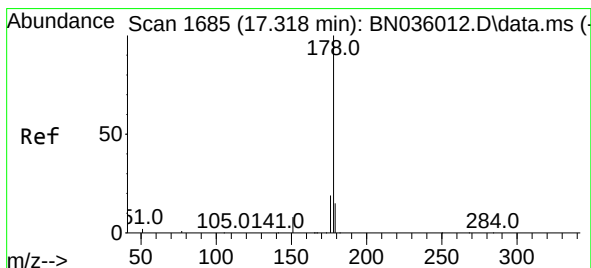
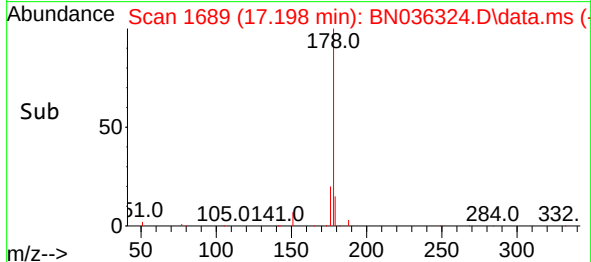
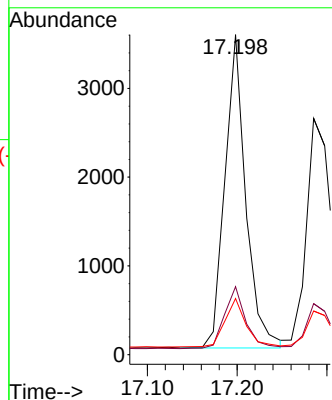
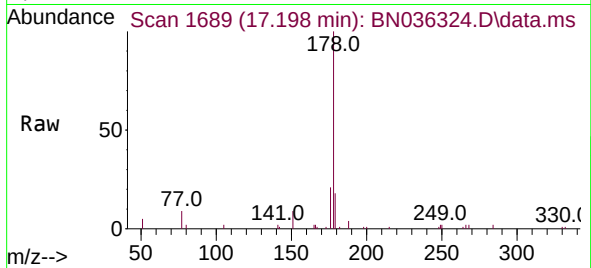




#25
Phenanthrene
Concen: 0.399 ng
RT: 17.198 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

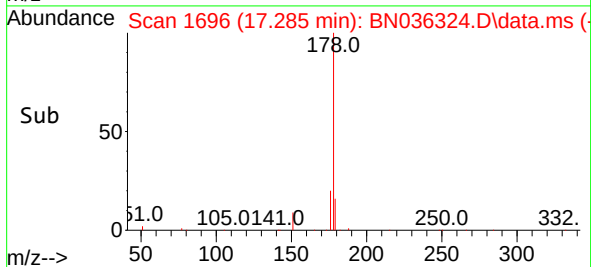
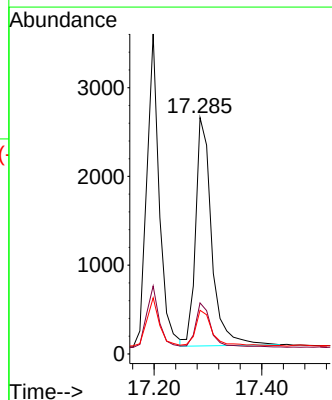
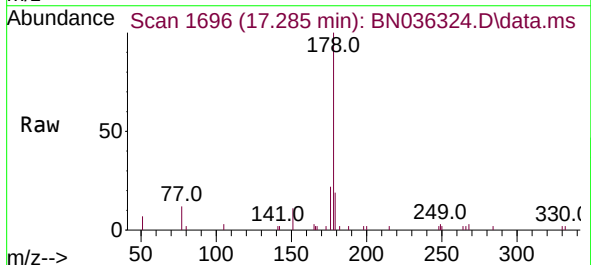
Instrument :
BNA_N
ClientSampleId :
PB166419BS

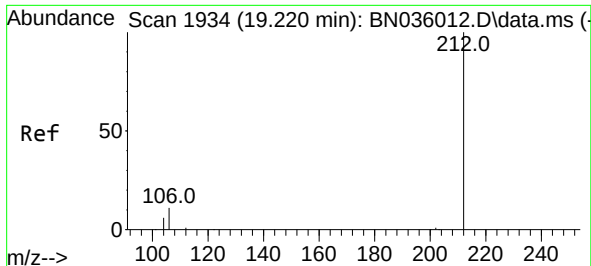
Tgt Ion:178 Resp: 5703
Ion Ratio Lower Upper
178 100
176 20.1 16.0 24.0
179 15.8 12.4 18.6



#26
Anthracene
Concen: 0.411 ng
RT: 17.285 min Scan# 1696
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:178 Resp: 5348
Ion Ratio Lower Upper
178 100
176 18.8 15.4 23.2
179 15.7 12.0 18.0

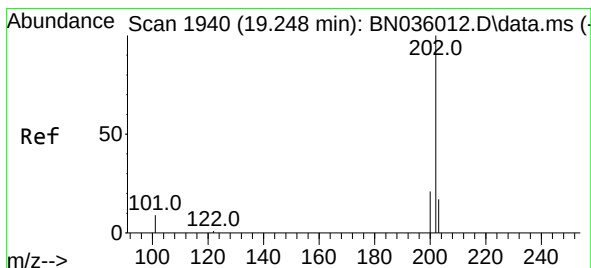
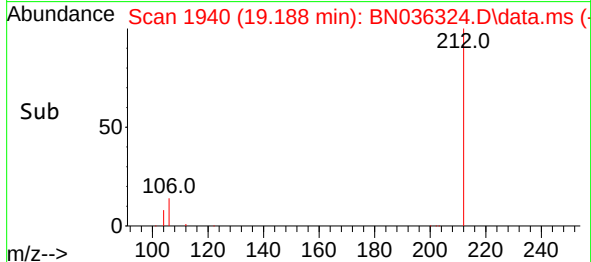
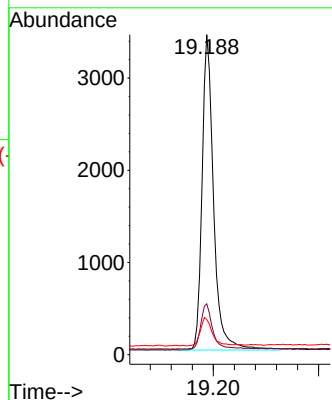
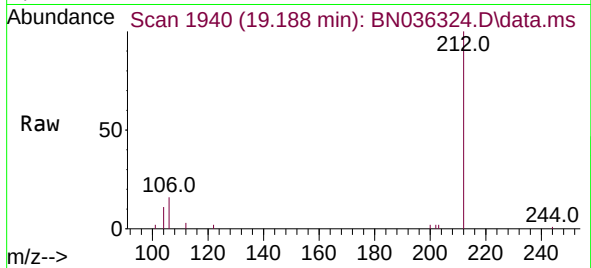




#27
Fluoranthene-d10
Concen: 0.423 ng
RT: 19.188 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

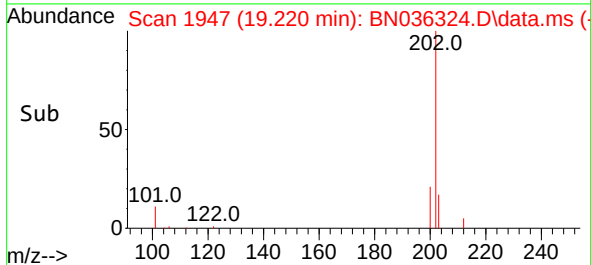
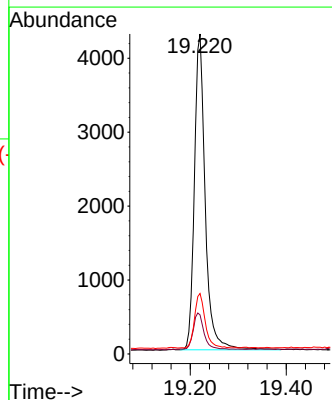
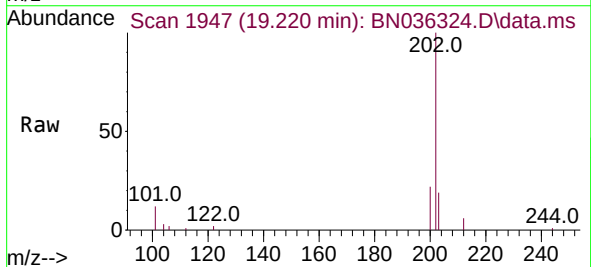
Instrument :
BNA_N
ClientSampleId :
PB166419BS

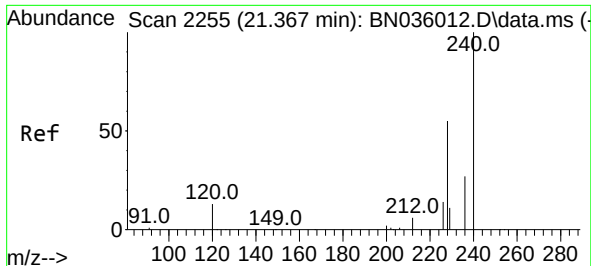
Tgt Ion:212 Resp: 5217
Ion Ratio Lower Upper
212 100
106 14.7 9.7 14.5#
104 9.2 6.0 9.0#



#28
Fluoranthene
Concen: 0.402 ng
RT: 19.220 min Scan# 1947
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

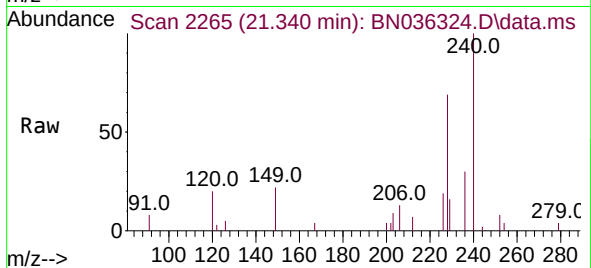
Tgt Ion:202 Resp: 6743
Ion Ratio Lower Upper
202 100
101 11.4 7.6 11.4
203 17.0 13.8 20.6



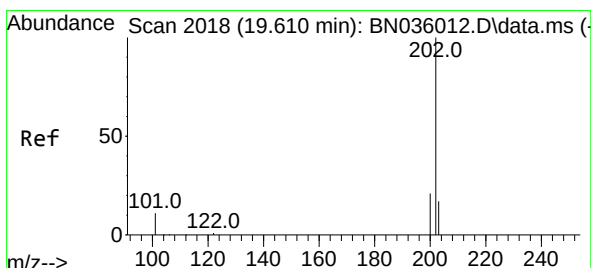
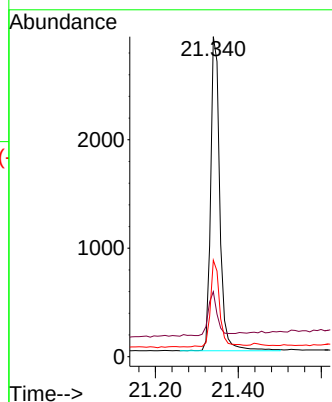
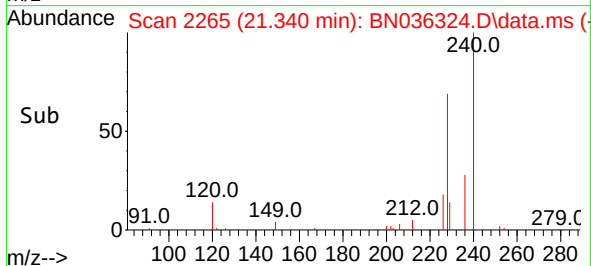


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.340 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

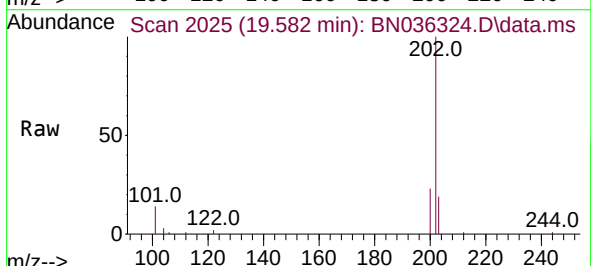
Instrument :
BNA_N
ClientSampleId :
PB166419BS



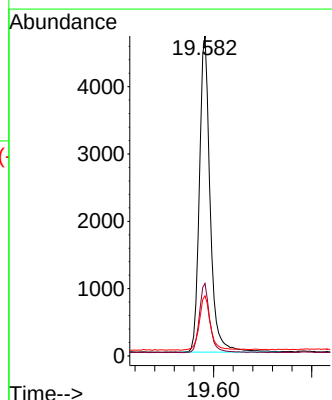
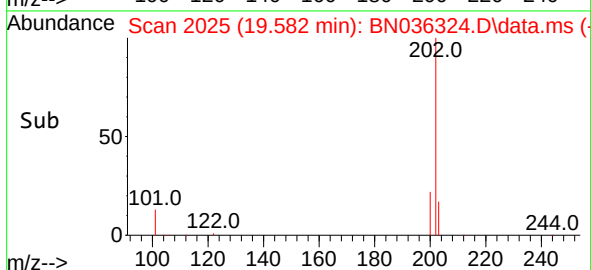
Tgt Ion:240 Resp: 4475
Ion Ratio Lower Upper
240 100
120 20.3 13.9 20.9
236 30.2 23.7 35.5

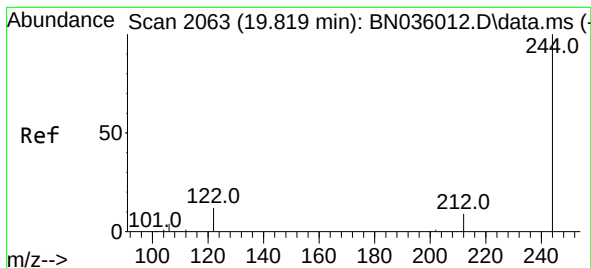


#30
Pyrene
Concen: 0.392 ng
RT: 19.582 min Scan# 2025
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03



Tgt Ion:202 Resp: 7110
Ion Ratio Lower Upper
202 100
200 21.3 17.0 25.4
203 17.8 14.4 21.6





#31

Terphenyl-d14

Concen: 0.456 ng

RT: 19.787 min Scan# 2069

Delta R.T. -0.005 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS

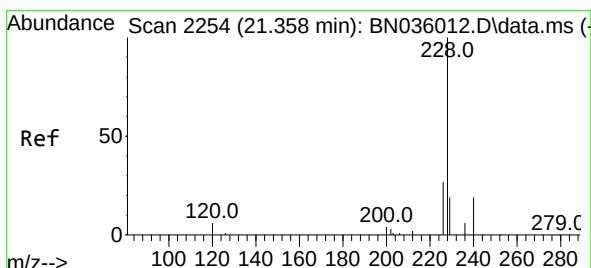
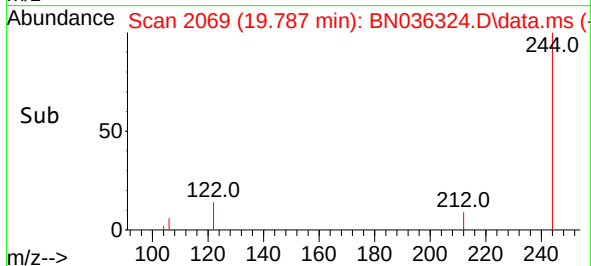
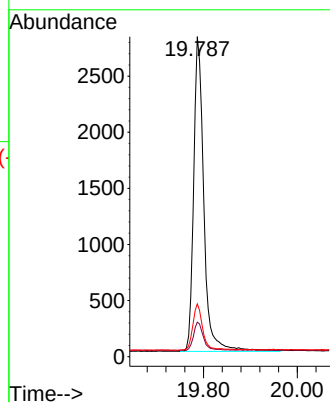
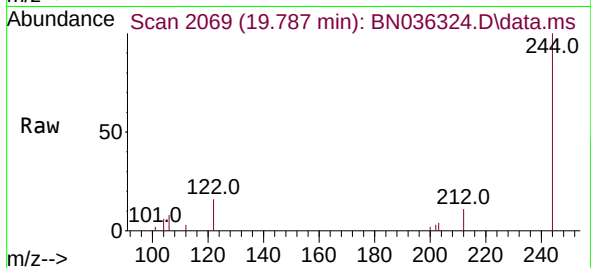
Tgt Ion:244 Resp: 4237

Ion Ratio Lower Upper

244 100

212 10.8 9.1 13.7

122 16.5 11.3 16.9



#32

Benzo(a)anthracene

Concen: 0.392 ng

RT: 21.331 min Scan# 2264

Delta R.T. 0.000 min

Lab File: BN036324.D

Acq: 06 Feb 2025 08:03

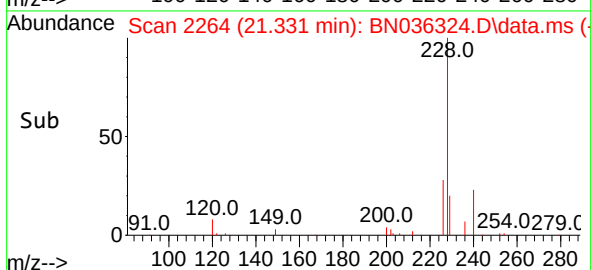
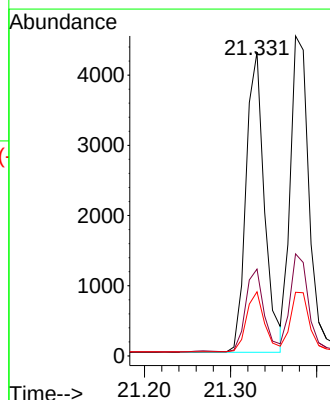
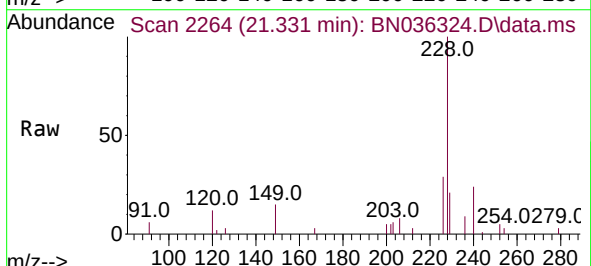
Tgt Ion:228 Resp: 6360

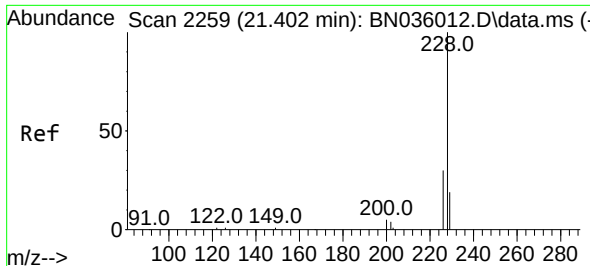
Ion Ratio Lower Upper

228 100

226 28.6 22.6 34.0

229 21.1 16.5 24.7

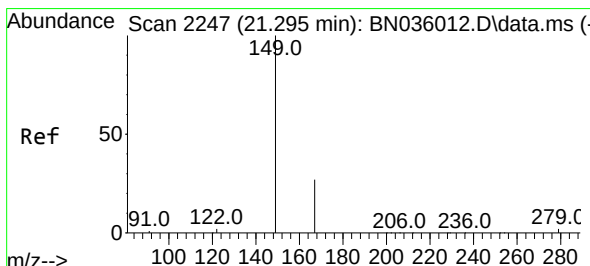
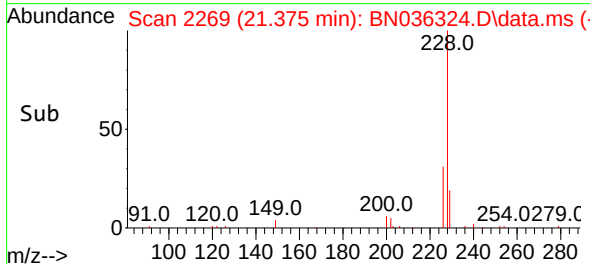
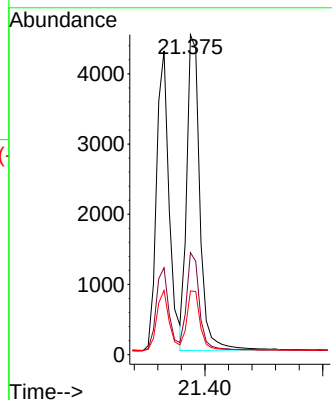
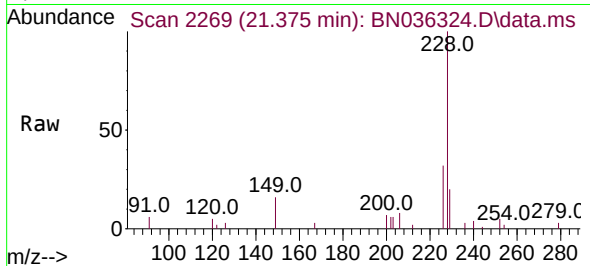




#33
Chrysene
Concen: 0.419 ng
RT: 21.375 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

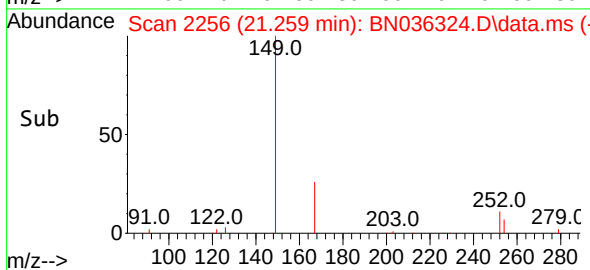
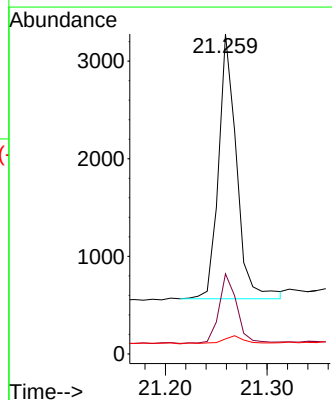
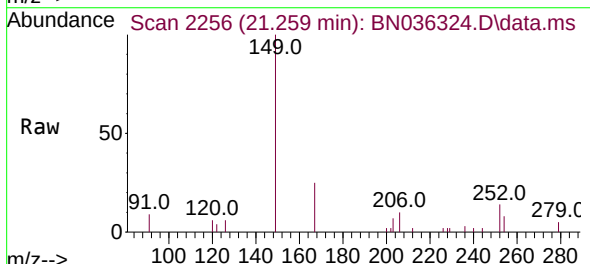
Instrument :
BNA_N
ClientSampleId :
PB166419BS

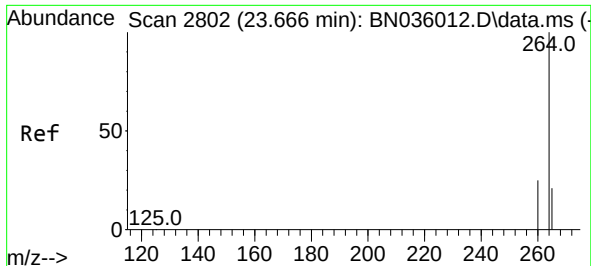
Tgt Ion:228 Resp: 6946
Ion Ratio Lower Upper
228 100
226 31.9 25.3 37.9
229 19.9 16.3 24.5



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.375 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:149 Resp: 3331
Ion Ratio Lower Upper
149 100
167 26.5 21.9 32.9
279 3.9 3.0 4.6

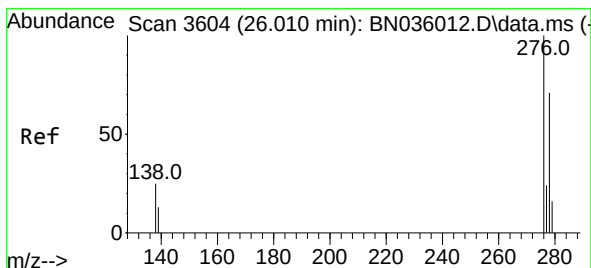
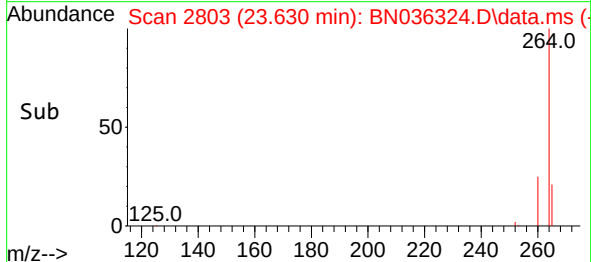
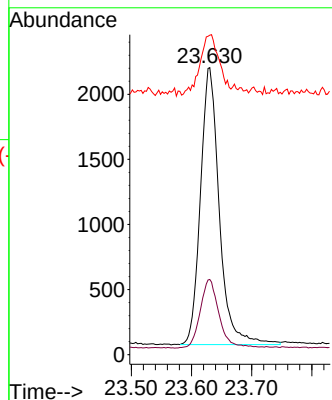
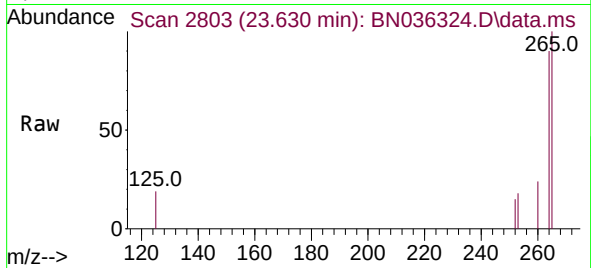




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.630 min Scan# 21
Delta R.T. 0.003 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

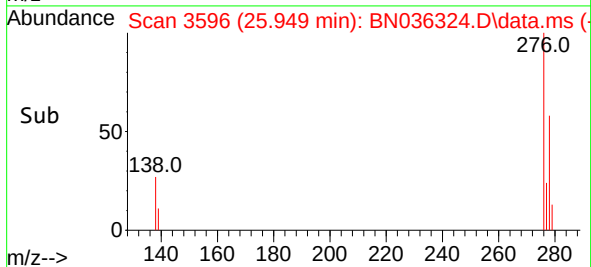
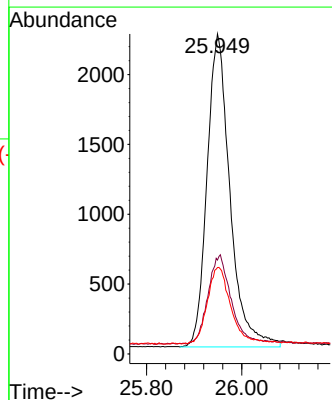
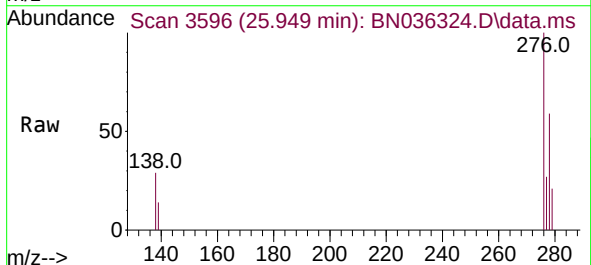
Instrument :
BNA_N
ClientSampleId :
PB166419BS

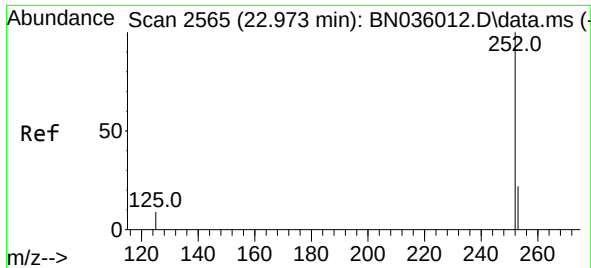
Tgt Ion:264 Resp: 4637
Ion Ratio Lower Upper
264 100
260 26.2 21.8 32.6
265 111.3 56.6 84.8#



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.403 ng
RT: 25.949 min Scan# 3596
Delta R.T. 0.006 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

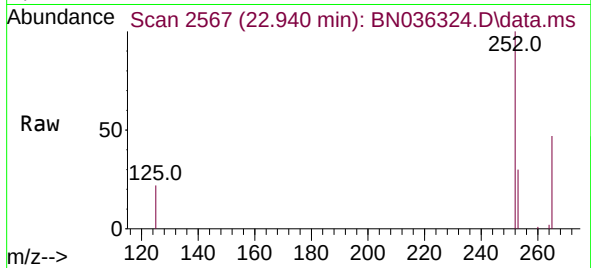
Tgt Ion:276 Resp: 7491
Ion Ratio Lower Upper
276 100
138 28.5 19.9 29.9
277 24.2 19.4 29.2



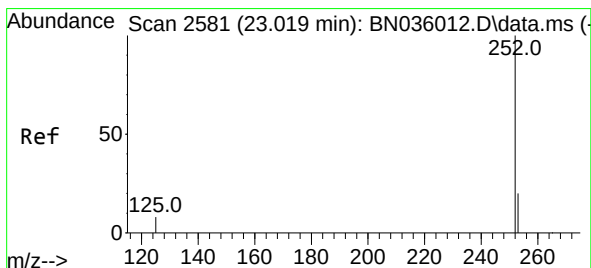
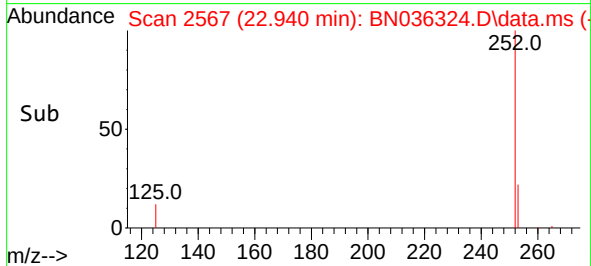
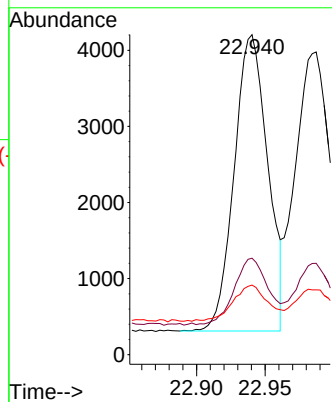


#37
Benzo(b)fluoranthene
Concen: 0.392 ng
RT: 22.940 min Scan# 2567
Delta R.T. 0.003 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

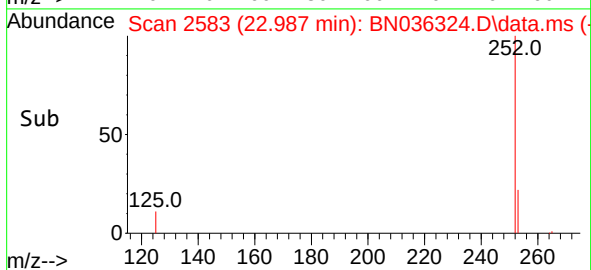
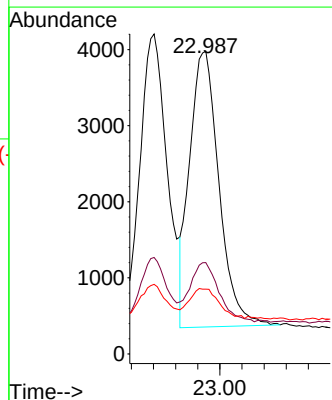
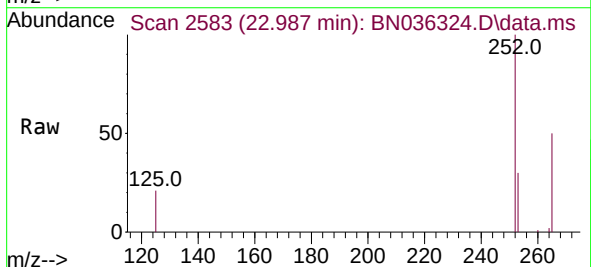


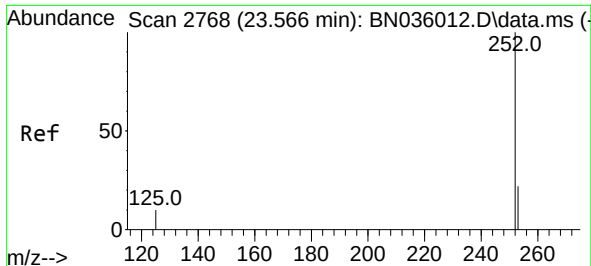
Tgt Ion:252 Resp: 6605
Ion Ratio Lower Upper
252 100
253 30.1 22.5 33.7
125 21.8 11.9 17.9#



#38
Benzo(k)fluoranthene
Concen: 0.393 ng
RT: 22.987 min Scan# 2583
Delta R.T. 0.003 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

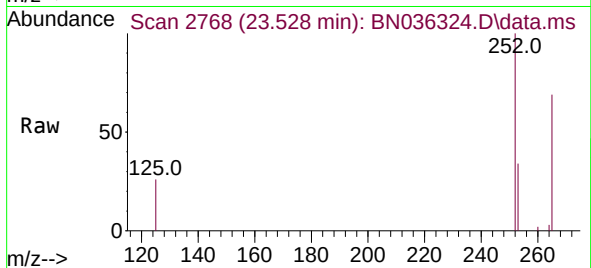
Tgt Ion:252 Resp: 6676
Ion Ratio Lower Upper
252 100
253 30.2 21.3 31.9
125 21.4 11.9 17.9#



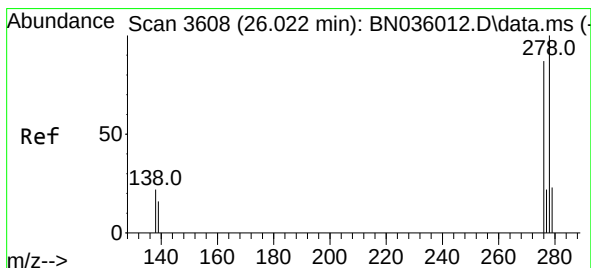
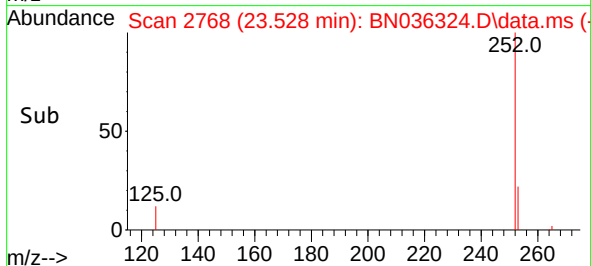
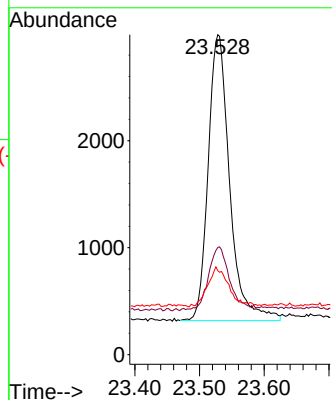


#39
Benzo(a)pyrene
Concen: 0.428 ng
RT: 23.528 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Instrument :
BNA_N
ClientSampleId :
PB166419BS

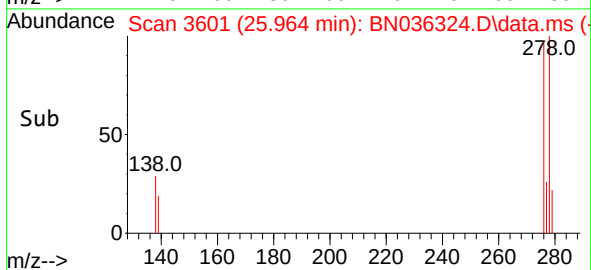
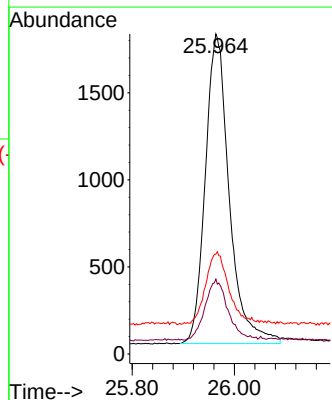
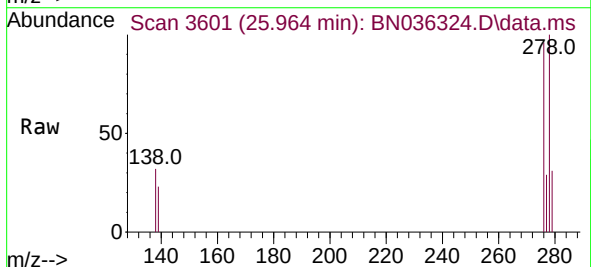


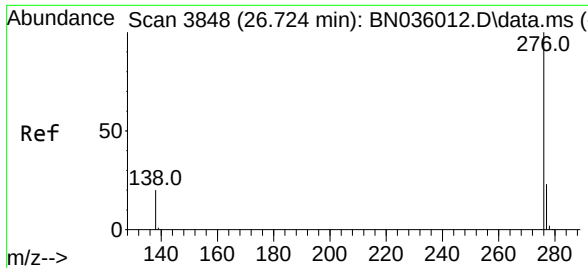
Tgt Ion:252 Resp: 6161
Ion Ratio Lower Upper
252 100
253 33.5 23.8 35.6
125 26.2 14.6 21.8#



#40
Dibenzo(a,h)anthracene
Concen: 0.390 ng
RT: 25.964 min Scan# 3601
Delta R.T. -0.000 min
Lab File: BN036324.D
Acq: 06 Feb 2025 08:03

Tgt Ion:278 Resp: 5781
Ion Ratio Lower Upper
278 100
139 23.4 16.0 24.0
279 31.2 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.372 ng

RT: 26.656 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN036324.D

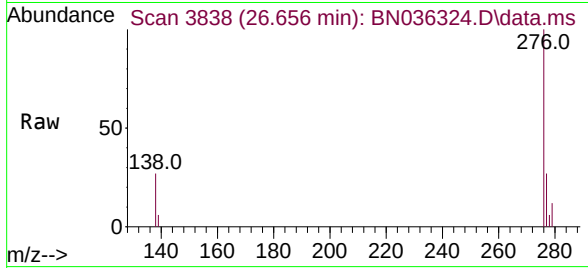
Acq: 06 Feb 2025 08:03

Instrument :

BNA_N

ClientSampleId :

PB166419BS



Tgt Ion:276 Resp: 6020

Ion Ratio Lower Upper

276 100

277 27.3 21.3 31.9

138 27.3 19.2 28.8

