

Cover Page

Order ID : Q1283

Project ID : CTO WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q1283-01
Q1283-02
Q1283-03
Q1283-04
Q1283-05

Client Sample Number

VPB192-HYD-20250131
BP-VPB-192-TB-20250130
BP-VPB-192-EB-20250131
BP-VPB-192-GW-480-482
BP-VPB-192-GW-500-502

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

Signature : _____

Date: 2/15/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: CTO WE13

Project Manager: Ernie Wu

Chemtech Project # Q1283

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

5 Water samples were received on 02/03/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group1. This data package contains results for SVOC-SIMGroup1.

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for PB166533BSD [Nitrobenzene-d5 - 114%] failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken also VPB192-HYD-20250131 [2-Methylnaphthalene-d10 - 16%], VPB192-HYD-20250131RE [2-Methylnaphthalene-d10 - 15%], All the failure samples in surrogates were reanalyzed to confirm the results as per method and reported in the data.

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 , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.



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

The Continuous Calibration File ID BN036320.D met the requirements except for 2,4,6-Tribromophenol, failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken.

The Tuning criteria met requirements.

E. Additional Comments:

This Data Package has been revised due to client ID changed for sam#01 as per client request.

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_____

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

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

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

CHEMTECH PROJECT NUMBER: Q1283

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 , failure surrogate is not associated with the client list, as per
criteria affected surrogates were passing, therefore no corrective action was taken.

The Continuous Calibration File ID BN036320.D met the requirements except for
2,4,6-Tribromophenol , failure surrogate is not associated with the client list, as per
criteria affected surrogates were passing, therefore no corrective action was taken.

6.	Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
7.	Surrogate Recoveries Meet Criteria			✓

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

The Surrogate recoveries met the acceptable criteria except for PB166533BSD
[Nitrobenzene-d5 - 114%] failure surrogate is not associated with the client list, as per
criteria affected surrogates were passing, therefore no corrective action was taken also
VPB192-HYD-20250131 [2-Methylnaphthalene-d10 - 16%], VPB192-HYD-
20250131RE [2-Methylnaphthalene-d10 - 15%], All the failure samples in surrogates
were reanalyzed to confirm the results as per method and reported in the data.

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

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

(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:

This Data Package has been revised due to client ID changed for sam#01 as per client request.

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

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

The not QT review data is reported in the Miscellaneous.

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

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q1283

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 Custody

✓

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: 02/15/2025

LAB CHRONICLE

OrderID:	Q1283	OrderDate:	2/3/2025 4:41:00 PM
Client:	Tetra Tech NUS, Inc.	Project:	CTO WE13
Contact:	Ernie Wu	Location:	D11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1283-01	VPB192-HYD-202501 31	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	
Q1283-01RE	VPB192-HYD-202501 31RE	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	
Q1283-03	BP-VPB-192-EB-2025 0131	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	
Q1283-05	BP-VPB-192-GW-500- 502	Water			01/31/25			02/03/25
			SVOC-SIMGroup1	8270-Modified		02/04/25	02/06/25	



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

Hit Summary Sheet SW-846

SDG No.: Q1283
Client: Tetra Tech NUS, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID : BP-VPB-192-GW-500-502								
Q1283-05	BP-VPB-192-GW-500-500 WATER	1,4-Dioxane	3.200		0.07	0.21	0.21	ug/L
Total Svoc :				3.20				
Total Concentration:				3.20				



QC SUMMARY

Surrogate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166533BL	PB166533BL	2-Methylnaphthalene-d10	0.4	0.42	105		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.44	111		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.42	106		58	132
PB166533BS	PB166533BS	2-Methylnaphthalene-d10	0.4	0.54	134		30	150
		Fluoranthene-d10	0.4	0.40	101		30	150
		Nitrobenzene-d5	0.4	0.42	104		55	111
		2-Fluorobiphenyl	0.4	0.36	91		53	106
		Terphenyl-d14	0.4	0.40	99		58	132
PB166533BSD	PB166533BSD	2-Methylnaphthalene-d10	0.4	0.57	143		30	150
		Fluoranthene-d10	0.4	0.43	106		30	150
		Nitrobenzene-d5	0.4	0.46	114	*	55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.42	105		58	132
Q1283-01	VPB192-HYD-20250131	2-Methylnaphthalene-d10	0.4	0.062	16	*	30	150
		Fluoranthene-d10	0.4	0.41	102		30	150
		Nitrobenzene-d5	0.4	0.40	99		55	111
		2-Fluorobiphenyl	0.4	0.34	86		53	106
		Terphenyl-d14	0.4	0.43	108		58	132
Q1283-01RE	VPB192-HYD-20250131RE	2-Methylnaphthalene-d10	0.4	0.061	15	*	30	150
		Fluoranthene-d10	0.4	0.38	96		30	150
		Nitrobenzene-d5	0.4	0.40	99		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.44	109		58	132
Q1283-03	BP-VPB-192-EB-20250131	2-Methylnaphthalene-d10	0.4	0.37	93		30	150
		Fluoranthene-d10	0.4	0.42	106		30	150
		Nitrobenzene-d5	0.4	0.37	93		55	111
		2-Fluorobiphenyl	0.4	0.34	84		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
Q1283-05	BP-VPB-192-GW-500-502	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.42	104		30	150
		Nitrobenzene-d5	0.4	0.36	90		55	111
		2-Fluorobiphenyl	0.4	0.29	73		53	106
		Terphenyl-d14	0.4	0.40	99		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036326.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166533BS	1,4-Dioxane	0.4	0.38	ug/L	95				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q1283

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036327.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Low	Limits	RPD
								Qual		High	
PB166533BSD	1,4-Dioxane	0.4	0.40	ug/L	100	5			70	130	20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166533BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1283

SAS No.: Q1283 SDG NO.: Q1283

Lab File ID: BN036321.D

Lab Sample ID: PB166533BL

Instrument ID: BNA_N

Date Extracted: 02/04/2025

Matrix: (soil/water) Water

Date Analyzed: 02/06/2025

Level: (low/med) LOW

Time Analyzed: 06:15

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166533BS	PB166533BS	BN036326.D	02/06/2025
VPB192-HYD-20250131	Q1283-01	BN036316.D	02/06/2025
BP-VPB-192-EB-20250131	Q1283-03	BN036322.D	02/06/2025
BP-VPB-192-GW-500-502	Q1283-05	BN036323.D	02/06/2025
PB166533BSD	PB166533BSD	BN036327.D	02/06/2025

COMMENTS: _____



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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEMSAS No.: Q1283SDG NO.: Q1283Lab 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



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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEMSAS No.: Q1283 SDG NO.: Q1283Lab 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
VPB192-HYD-20250131	Q1283-01	BN036316.D	02/06/2025	02:34
SSTDCCC0.4EC	SSTDCCC0.4	BN036318.D	02/06/2025	03:45



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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEMSAS No.: Q1283 SDG NO.: Q1283Lab 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
PB166533BL	PB166533BL	BN036321.D	02/06/2025	06:15
BP-VPB-192-EB-20250131	Q1283-03	BN036322.D	02/06/2025	06:51
BP-VPB-192-GW-500-502	Q1283-05	BN036323.D	02/06/2025	07:27
PB166533BS	PB166533BS	BN036326.D	02/06/2025	09:15
PB166533BSD	PB166533BSD	BN036327.D	02/06/2025	09:51
VPB192-HYD-20250131RE	Q1283-01RE	BN036331.D	02/06/2025	12:15
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.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

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 VPB192-HYD-20250131	2355	7.78	5280	10.56	2768	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.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

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 VPB192-HYD-20250131	5326	17.16	5009	21.34	4931	23.62

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.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

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 PB166533BL	2306	7.78	4718	10.57	2285	14.42
02 PB166533BS	2094	7.78	4542	10.56	2195	14.41
03 PB166533BSD	2075	7.78	4387	10.56	2054	14.41
04 VPB192-HYD-20250131RE	2278	7.78	4837	10.56	2451	14.41
05 BP-VPB-192-EB-20250131	2015	7.78	4469	10.56	2232	14.41
06 BP-VPB-192-GW-500-502	2177	7.78	4873	10.56	2591	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.: Q1283 SAS No.: Q1283 SDG NO.: Q1283

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 PB166533BL	4231	17.16	3945	21.35	4266	23.63
02 PB166533BS	4114	17.16	3845	21.34	4110	23.63
03 PB166533BSD	3795	17.16	3518	21.34	3845	23.63
04 VPB192-HYD-20250131RE	4214	17.16	3676	21.34	3493	23.63
05 BP-VPB-192-EB-20250131	4322	17.15	3942	21.34	4427	23.62
06 BP-VPB-192-GW-500-502	5153	17.15	5130	21.34	5436	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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	VPB192-HYD-20250131	SDG No.:	Q1283
Lab Sample ID:	Q1283-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036316.D	1	02/04/25 11:00	02/06/25 02:34	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.062	*	30 - 150		16%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 - 150		102%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		99%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2360	7.775				
1146-65-2	Naphthalene-d8	5280	10.562				
15067-26-2	Acenaphthene-d10	2770	14.409				
1517-22-2	Phenanthrene-d10	5330	17.161				
1719-03-5	Chrysene-d12	5010	21.339				
1520-96-3	Perylene-d12	4930	23.622				

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 : BN036316.D
 Acq On : 06 Feb 2025 02:34
 Operator : RC/JU
 Sample : Q1283-01
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 VPB192-HYD-20250131

Quant Time: Feb 06 03:28:39 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)

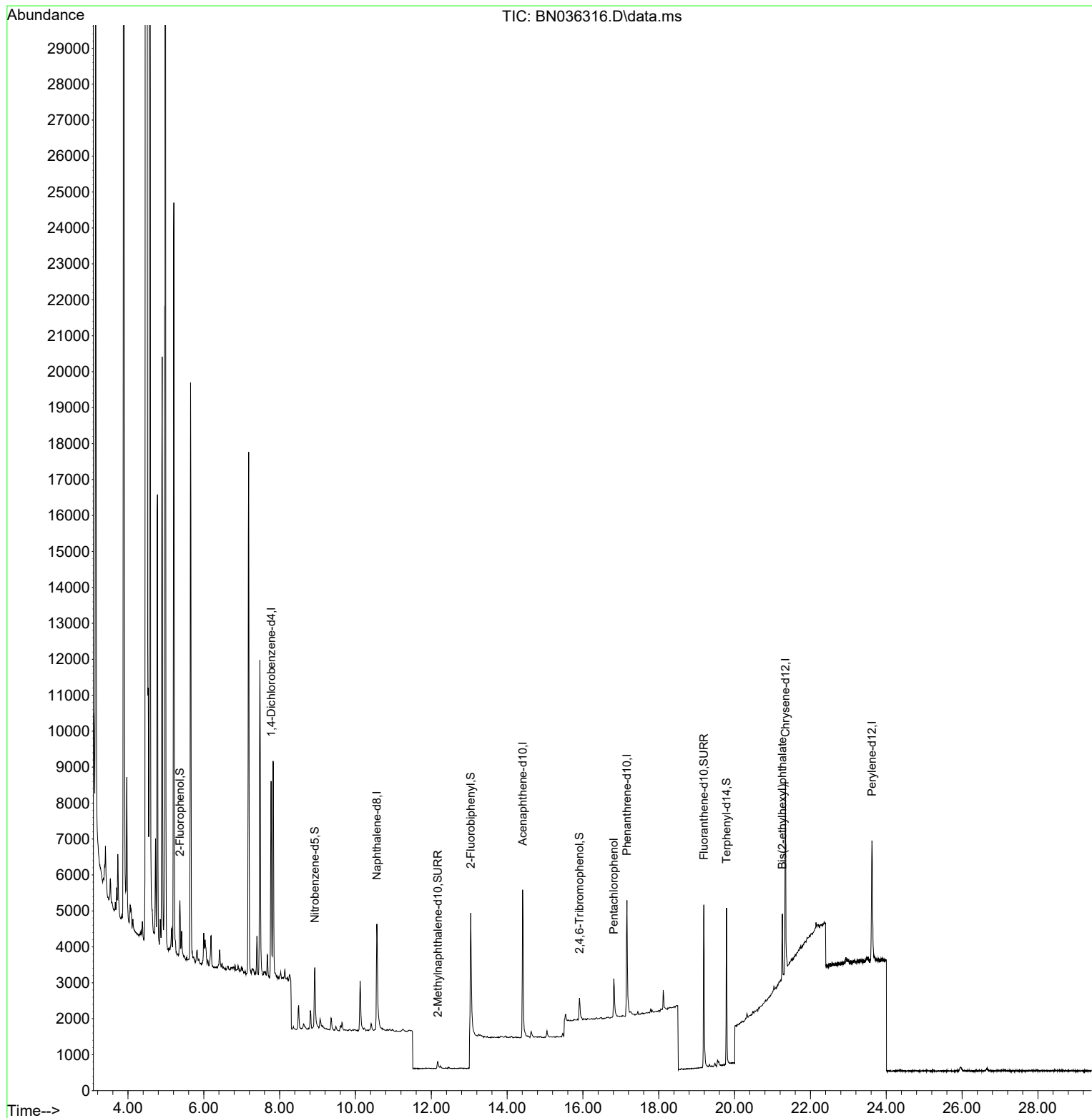
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2355	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	5280	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2768	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	5326	0.400	ng	# 0.00
29) Chrysene-d12	21.339	240	5009	0.400	ng	0.00
35) Perylene-d12	23.622	264	4931	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.370	112	760	0.124	ng	0.00
5) Phenol-d6	6.952	99	16	0.002	ng	0.00
8) Nitrobenzene-d5	8.929	82	1971	0.395	ng	0.00
11) 2-Methylnaphthalene-d10	12.172	152	444	0.062	ng	0.02
14) 2,4,6-Tribromophenol	15.907	330	442	0.249	ng	0.00
15) 2-Fluorobiphenyl	13.040	172	4239	0.343	ng	0.00
27) Fluoranthene-d10	19.187	212	5656	0.410	ng	0.00
31) Terphenyl-d14	19.787	244	4494	0.432	ng	0.00
Target Compounds						Qvalue
24) Pentachlorophenol	16.813	266	722	0.334	ng	95
34) Bis(2-ethylhexyl)phtha...	21.259	149	1745	0.175	ng	100

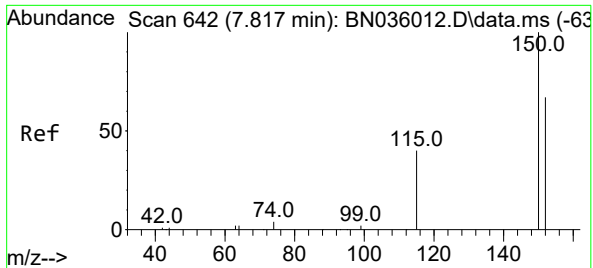
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036316.D
Acq On : 06 Feb 2025 02:34
Operator : RC/JU
Sample : Q1283-01
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

Quant Time: Feb 06 03:28:39 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

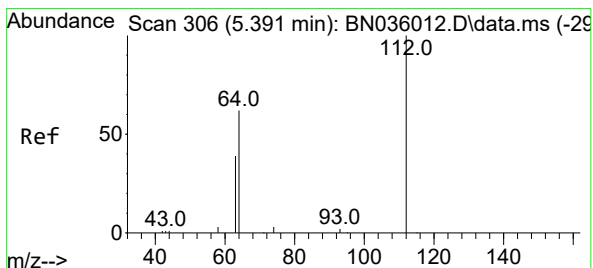
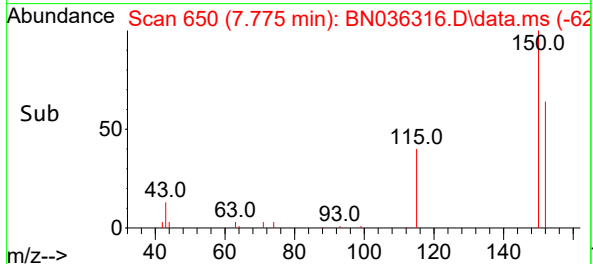
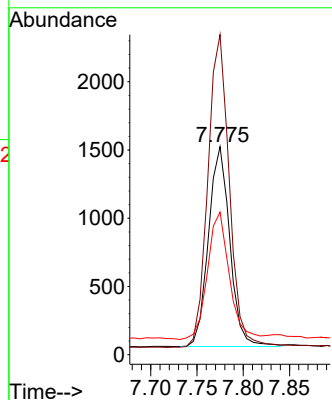
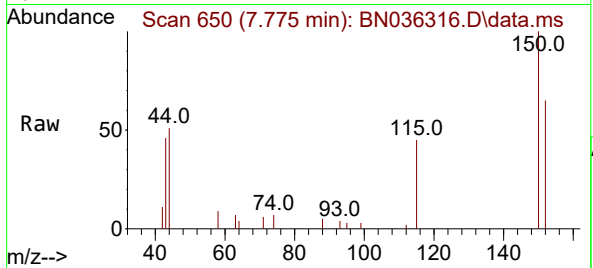




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

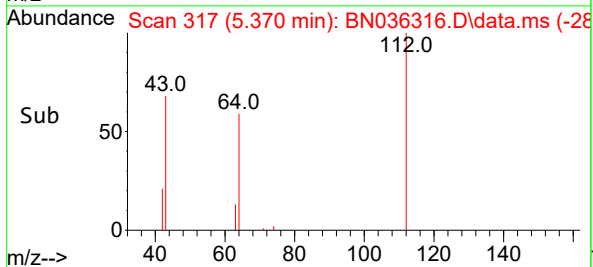
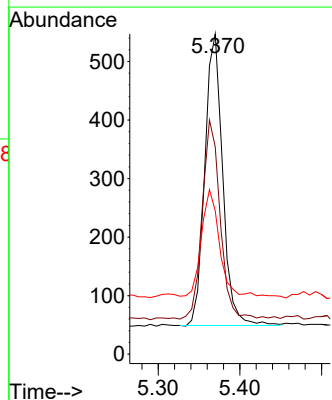
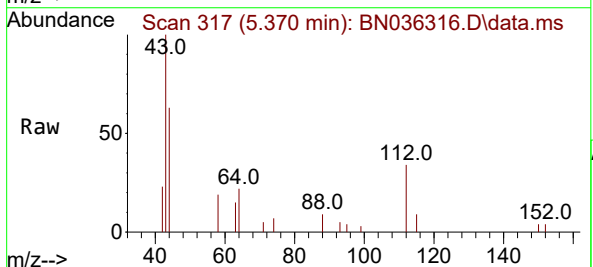
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

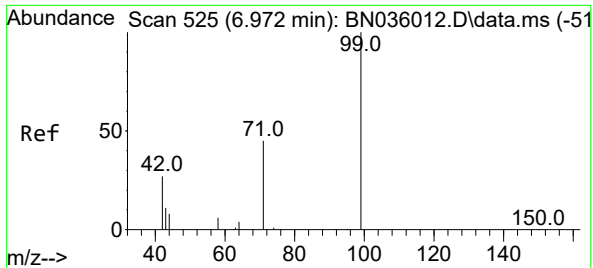
Tgt Ion:152 Resp: 2355
Ion Ratio Lower Upper
152 100
150 153.9 117.4 176.2
115 68.6 51.0 76.4



#4
2-Fluorophenol
Concen: 0.124 ng
RT: 5.370 min Scan# 317
Delta R.T. 0.007 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:112 Resp: 760
Ion Ratio Lower Upper
112 100
64 67.6 50.0 75.0
63 39.9 30.7 46.1

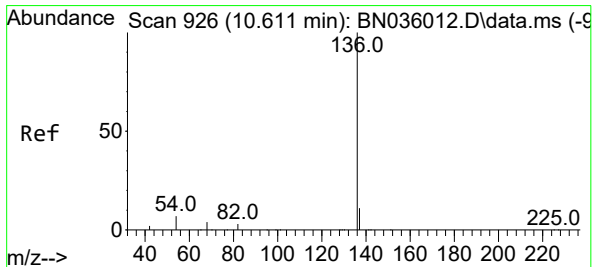
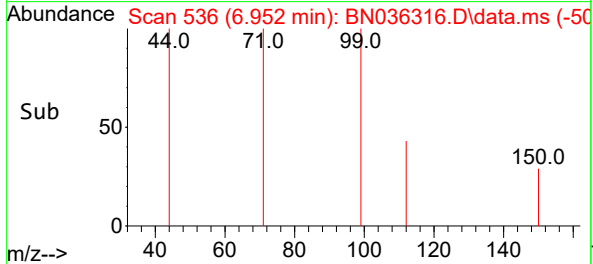
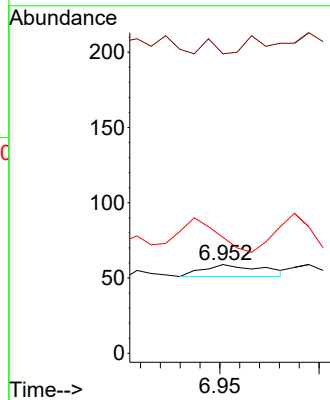
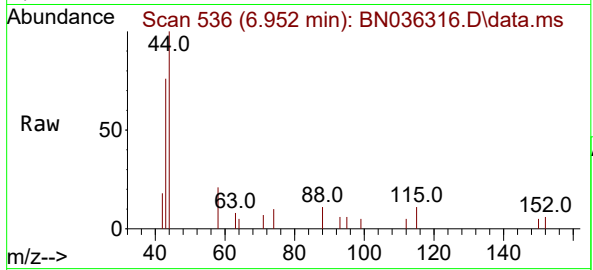




#5
Phenol-d6
Concen: 0.002 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

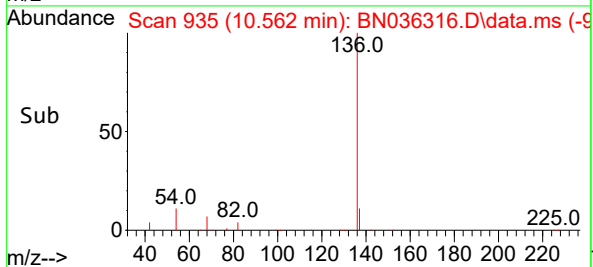
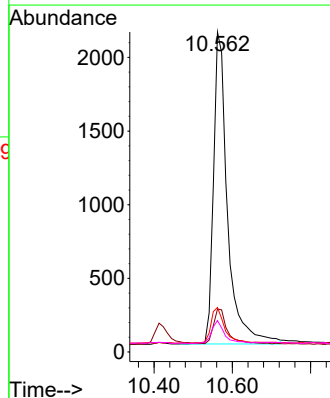
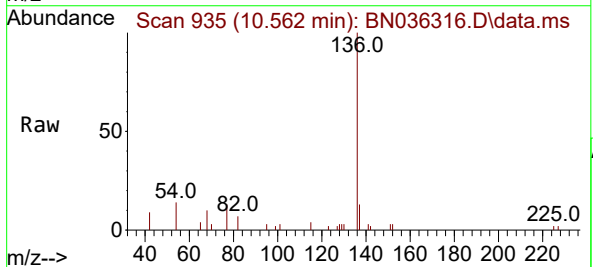
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

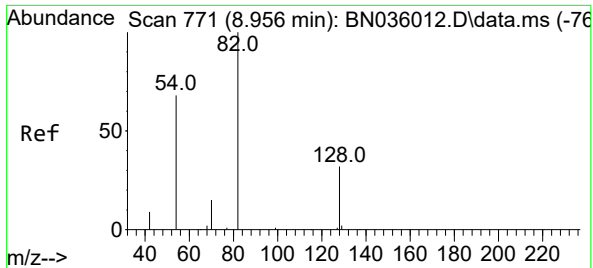
Tgt Ion: 99 Resp: 16
Ion Ratio Lower Upper
99 100
42 43.8 26.8 40.2#
71 0.0 36.6 55.0#



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 935
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:136 Resp: 5280
Ion Ratio Lower Upper
136 100
137 13.4 10.4 15.6
54 13.9 7.7 11.5#
68 9.8 5.4 8.0#

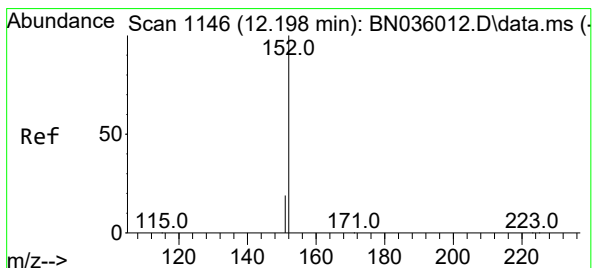
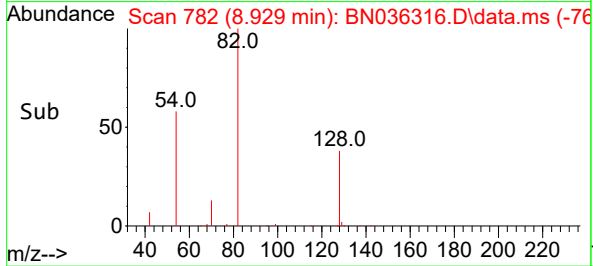
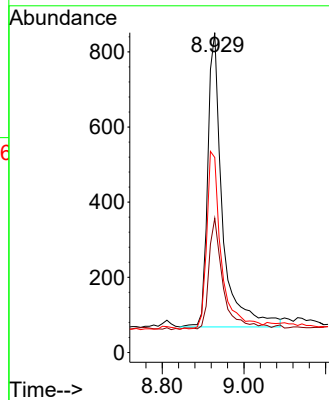
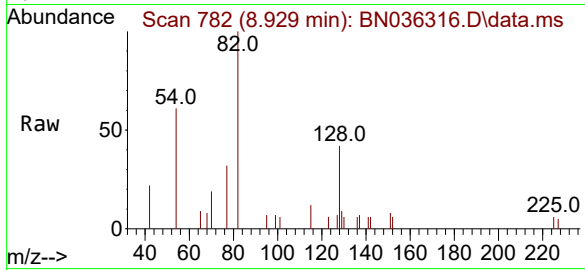




#8
Nitrobenzene-d5
Concen: 0.395 ng
RT: 8.929 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

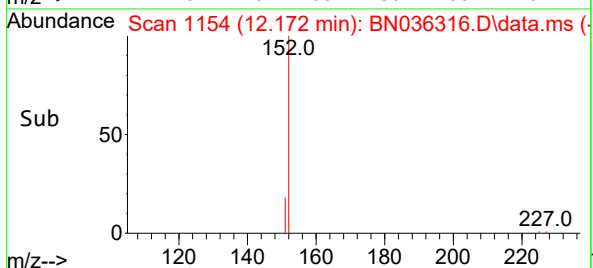
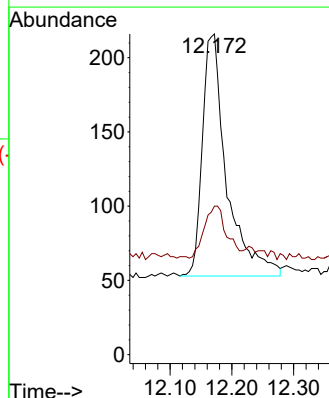
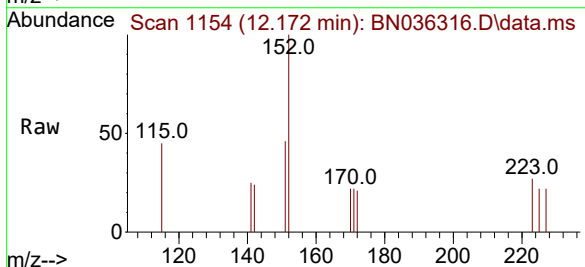
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

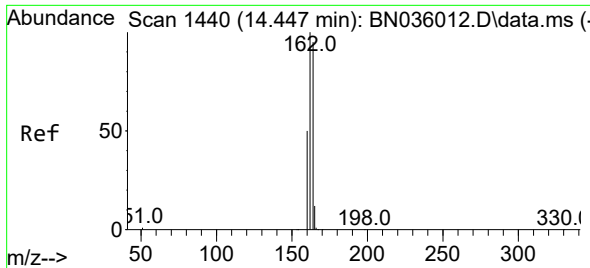
Tgt Ion:	82	Resp:	1971
Ion	Ratio	Lower	Upper
82	100		
128	42.0	28.8	43.2
54	61.0	55.8	83.8



#11
2-Methylnaphthalene-d10
Concen: 0.062 ng
RT: 12.172 min Scan# 1154
Delta R.T. 0.015 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:	152	Resp:	444
Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.6	25.0

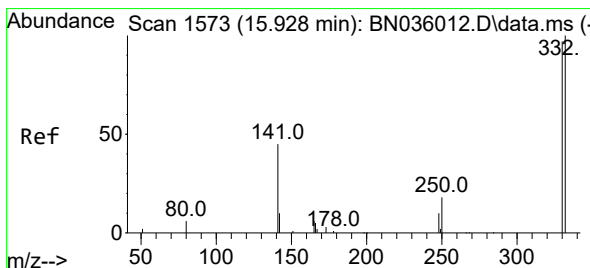
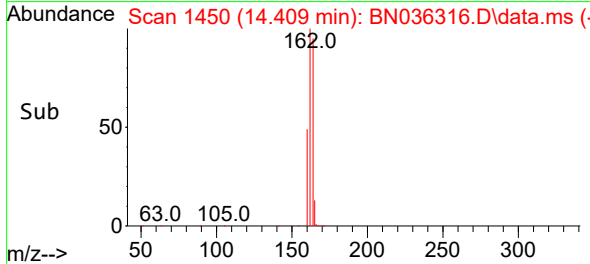
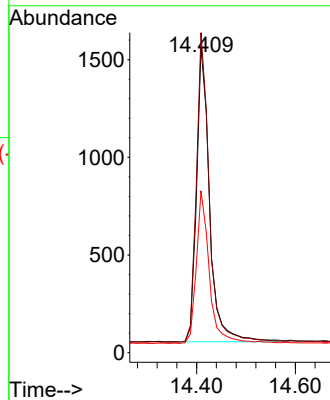
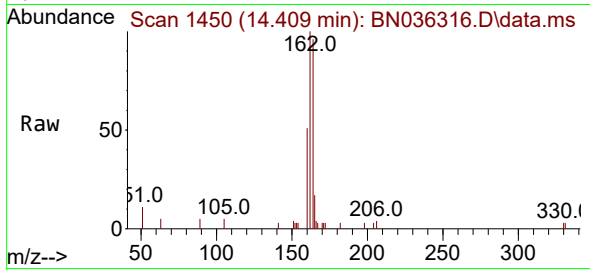




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

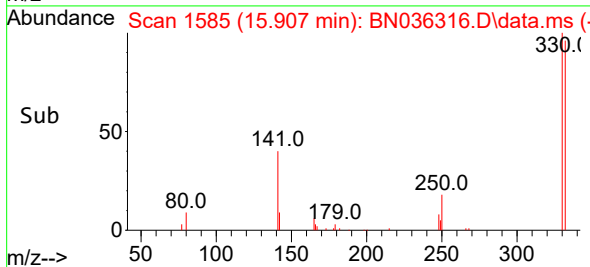
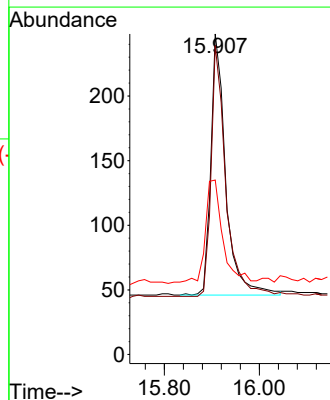
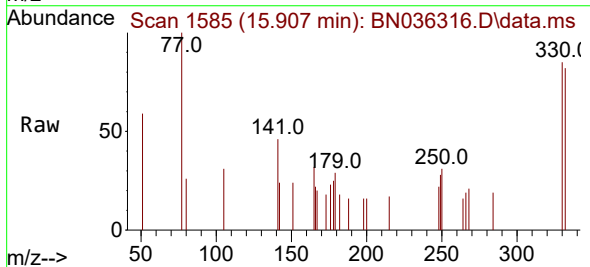
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

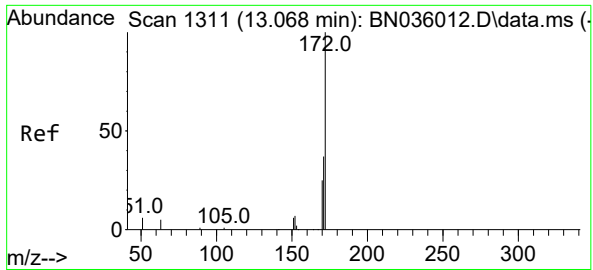
Tgt Ion:164 Resp: 2768
Ion Ratio Lower Upper
164 100
162 104.5 84.1 126.1
160 52.9 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.249 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:330 Resp: 442
Ion Ratio Lower Upper
330 100
332 95.5 81.0 121.4
141 46.8 36.7 55.1

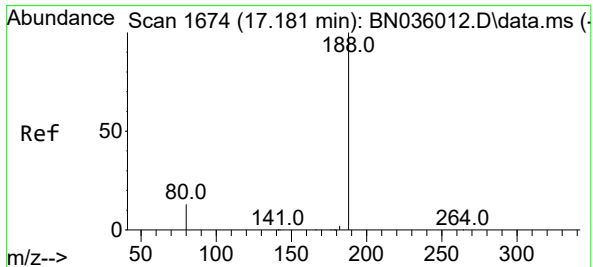
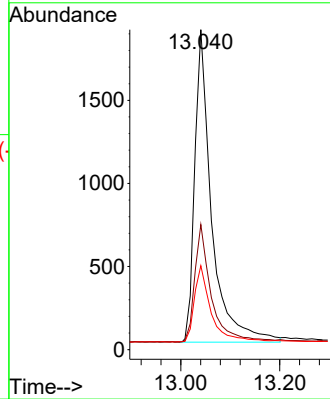
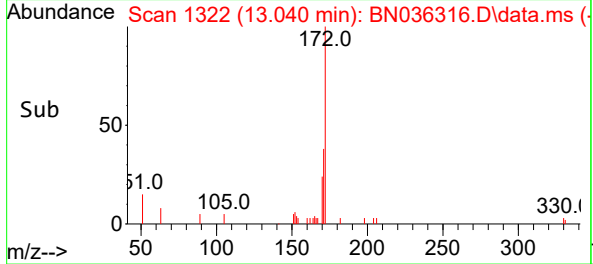
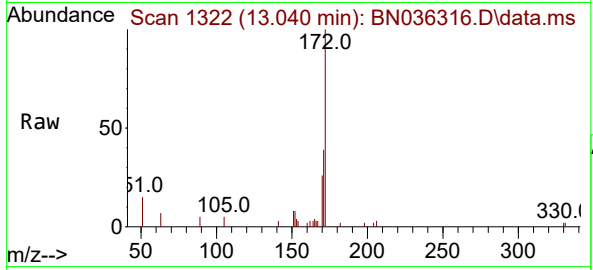




#15
2-Fluorobiphenyl
Concen: 0.343 ng
RT: 13.040 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

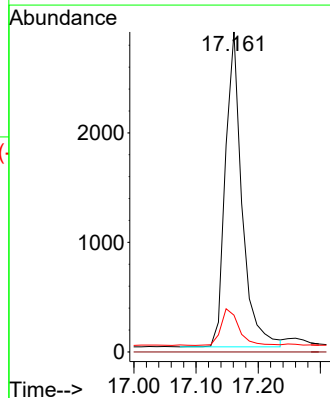
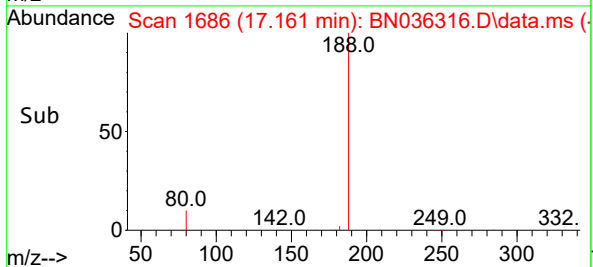
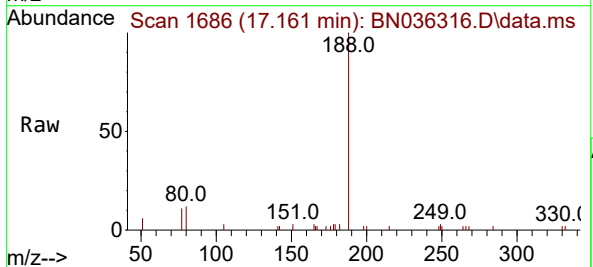
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

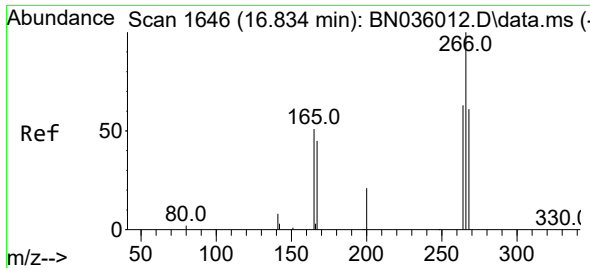
Tgt Ion:172 Resp: 4239
Ion Ratio Lower Upper
172 100
171 39.1 30.9 46.3
170 26.2 21.2 31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:188 Resp: 5326
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 11.5 12.3 18.5#

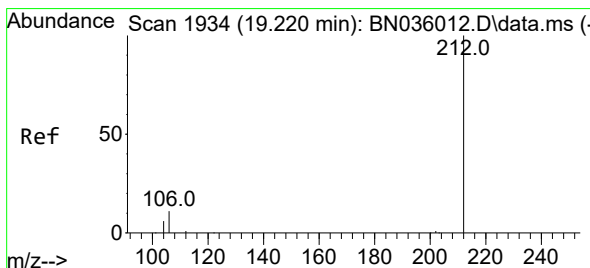
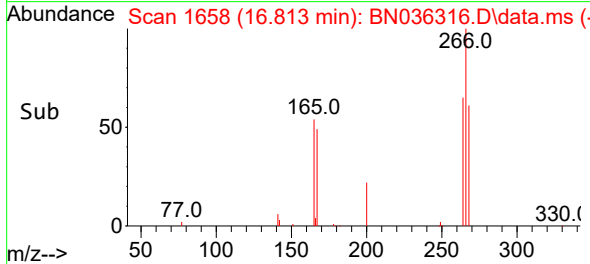
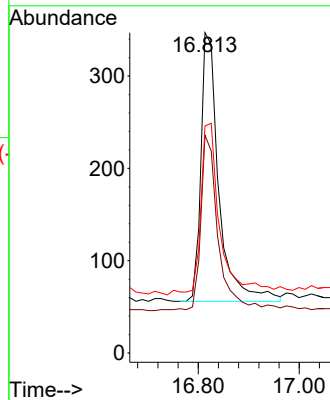
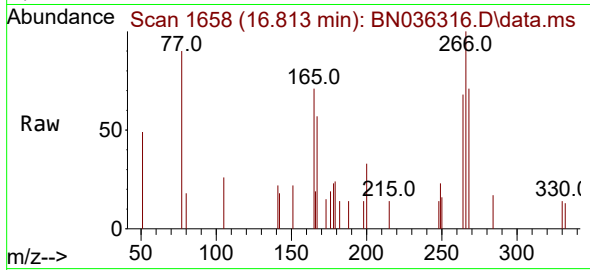




#24
Pentachlorophenol
Concen: 0.334 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

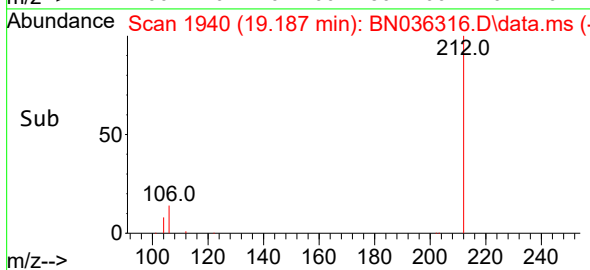
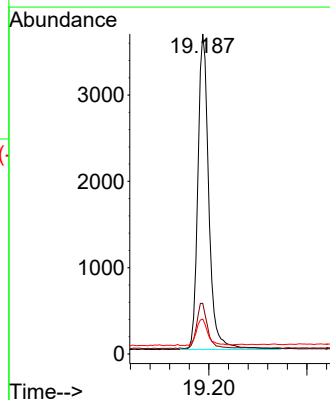
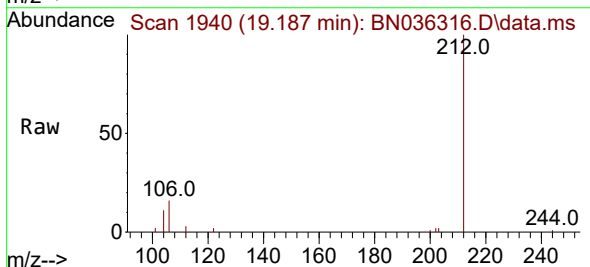
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

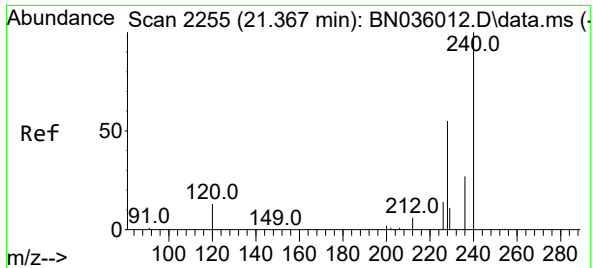
Tgt Ion:266 Resp: 722
Ion Ratio Lower Upper
266 100
264 64.1 48.2 72.2
268 69.0 51.6 77.4



#27
Fluoranthene-d10
Concen: 0.410 ng
RT: 19.187 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:212 Resp: 5656
Ion Ratio Lower Upper
212 100
106 14.4 9.7 14.5
104 9.1 6.0 9.0#

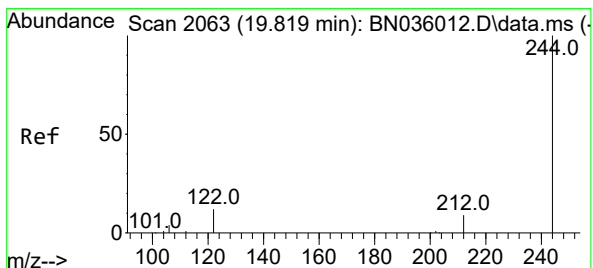
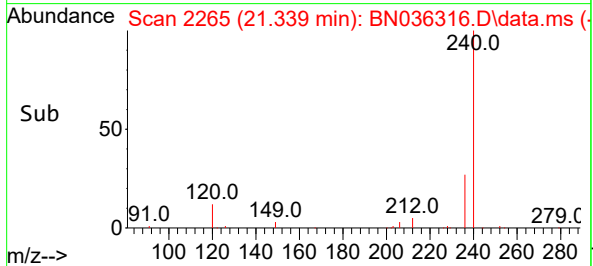
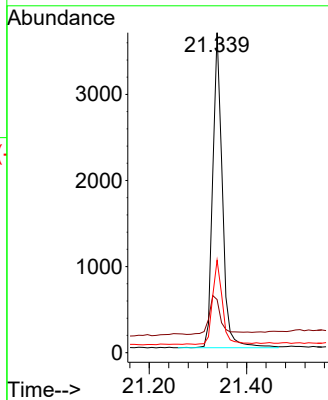
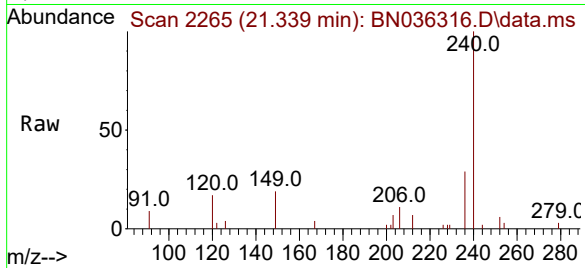




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.339 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

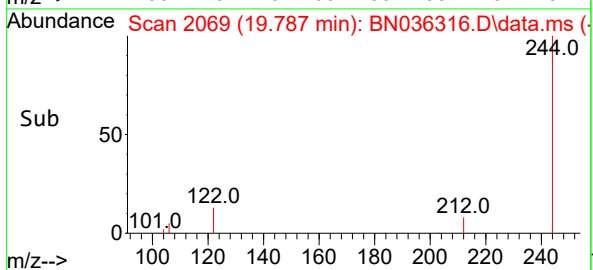
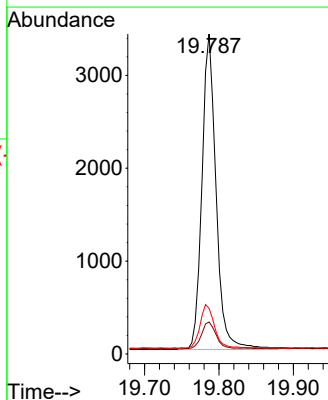
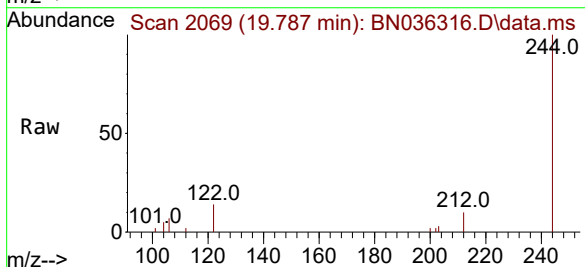
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

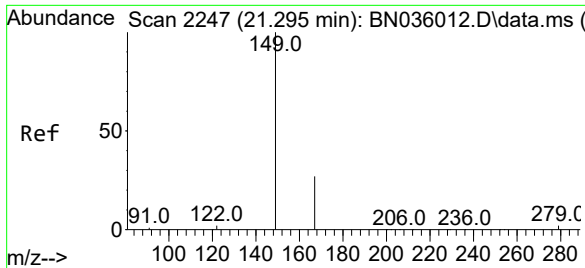
Tgt Ion	Ratio	Lower	Upper
240	100		
120	16.6	13.9	20.9
236	28.9	23.7	35.5



#31
Terphenyl-d14
Concen: 0.432 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.0	9.1	13.7
122	14.2	11.3	16.9

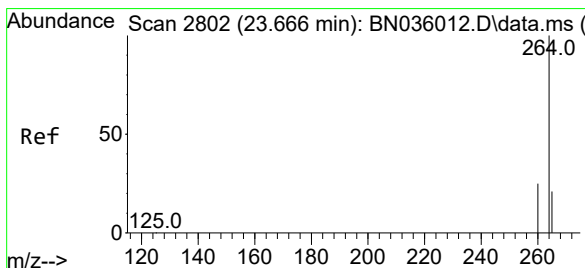
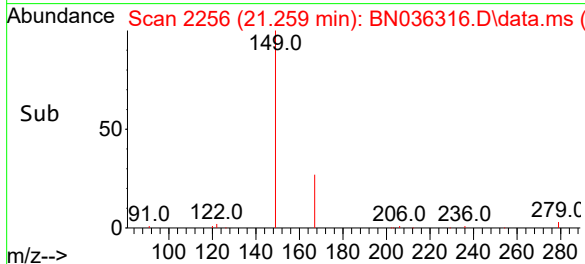
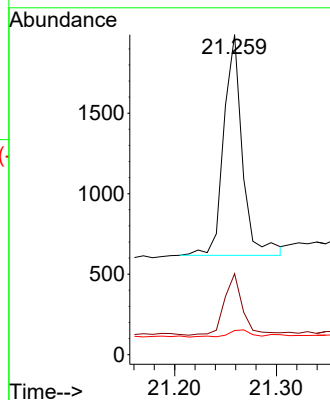
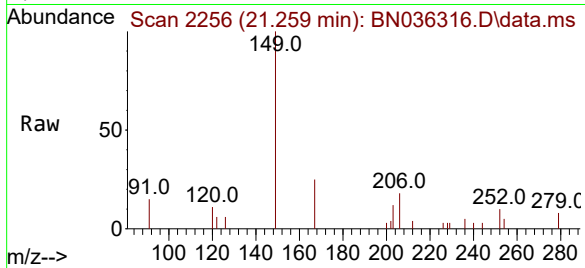




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.175 ng
RT: 21.259 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

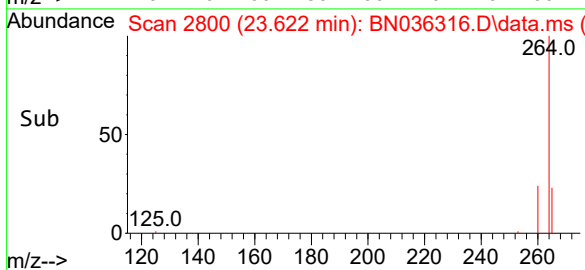
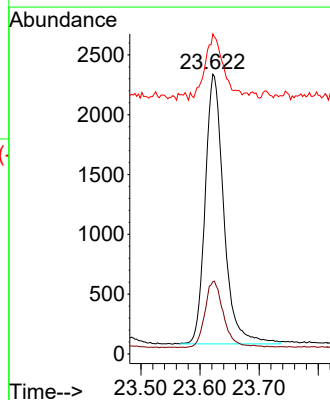
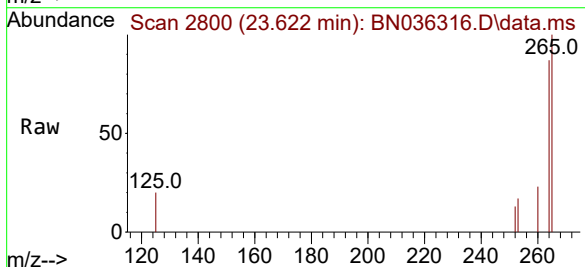
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131

Tgt Ion:149 Resp: 1745
Ion Ratio Lower Upper
149 100
167 27.4 21.9 32.9
279 4.0 3.0 4.6



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.622 min Scan# 2800
Delta R.T. -0.006 min
Lab File: BN036316.D
Acq: 06 Feb 2025 02:34

Tgt Ion:264 Resp: 4931
Ion Ratio Lower Upper
264 100
260 25.9 21.8 32.6
265 114.4 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	VPB192-HYD-20250131RE	SDG No.:	Q1283
Lab Sample ID:	Q1283-01RE	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036331.D	1	02/04/25 11:00	02/06/25 12:15	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.061	*	30 - 150		15%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.40		55 - 111		99%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		109%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2280	7.775				
1146-65-2	Naphthalene-d8	4840	10.562				
15067-26-2	Acenaphthene-d10	2450	14.409				
1517-22-2	Phenanthrene-d10	4210	17.161				
1719-03-5	Chrysene-d12	3680	21.34				
1520-96-3	Perylene-d12	3490	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 : BN036331.D
 Acq On : 06 Feb 2025 12:15
 Operator : RC/JU
 Sample : Q1283-01RE
 Misc :
 ALS Vial : 30 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 VPB192-HYD-20250131RE

Quant Time: Feb 06 13:04:47 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)

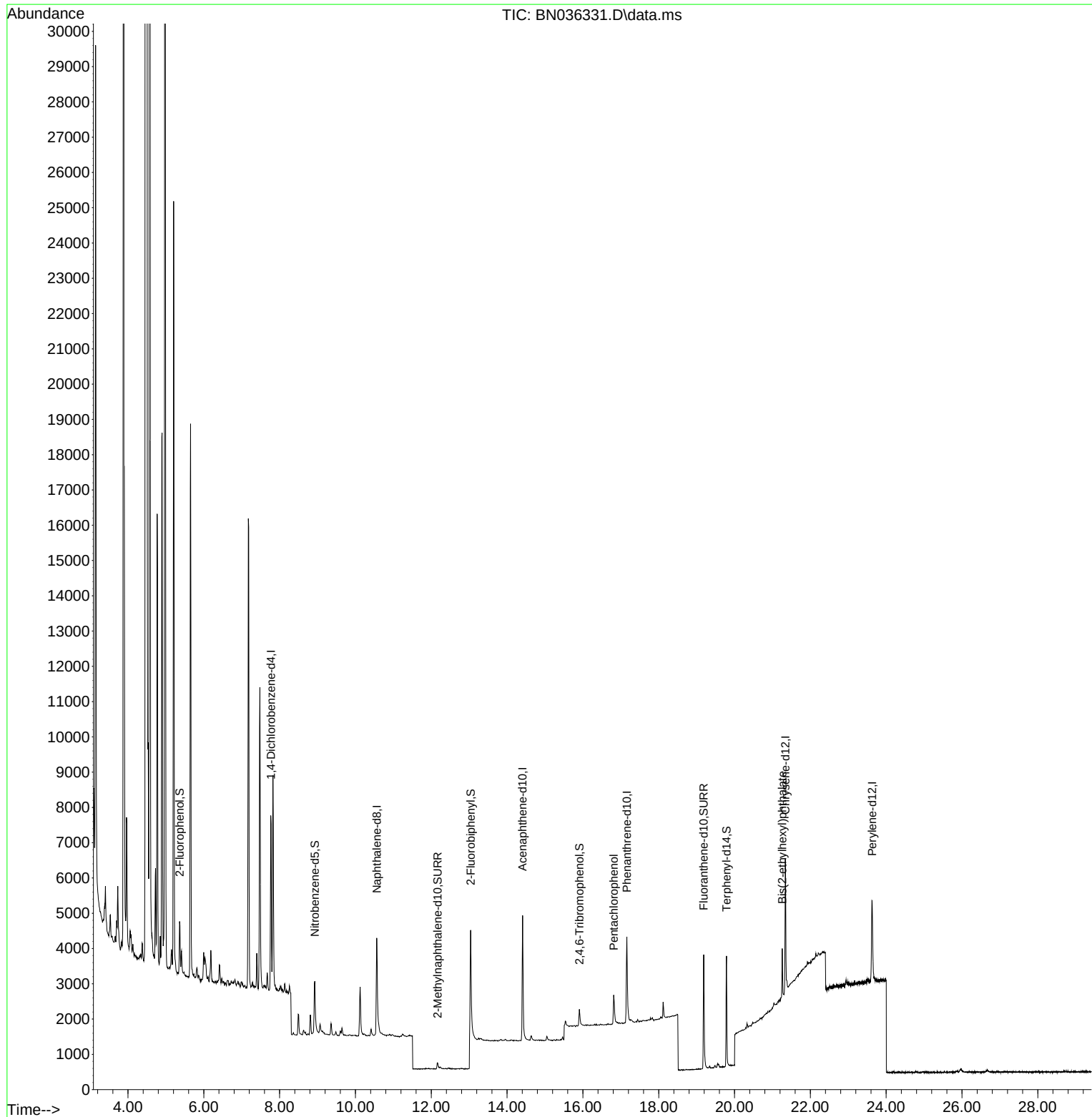
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2278	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4837	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2451	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4214	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	3676	0.400	ng	0.00
35) Perylene-d12	23.627	264	3493	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	708	0.119	ng	0.00
5) Phenol-d6	0.000	99	0d	0.000	ng	
8) Nitrobenzene-d5	8.929	82	1803	0.395	ng	0.00
11) 2-Methylnaphthalene-d10	12.167	152	403	0.061	ng	0.01
14) 2,4,6-Tribromophenol	15.907	330	348	0.221	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3683	0.337	ng	0.00
27) Fluoranthene-d10	19.188	212	4185	0.383	ng	0.00
31) Terphenyl-d14	19.787	244	3333	0.436	ng	0.00
Target Compounds						
24) Pentachlorophenol	16.813	266	558	0.326	ng	96
34) Bis(2-ethylhexyl)phtha...	21.259	149	1263	0.173	ng	# 98

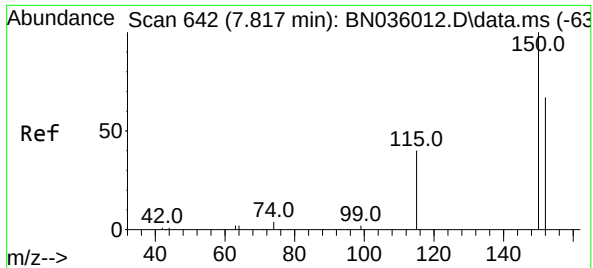
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036331.D
Acq On : 06 Feb 2025 12:15
Operator : RC/JU
Sample : Q1283-01RE
Misc :
ALS Vial : 30 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

Quant Time: Feb 06 13:04:47 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

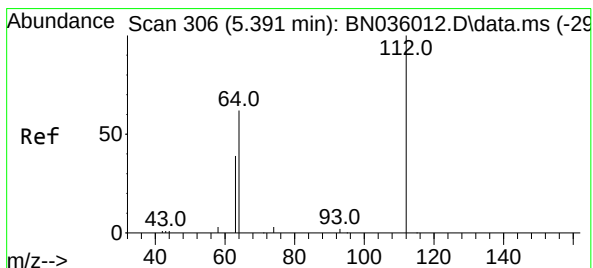
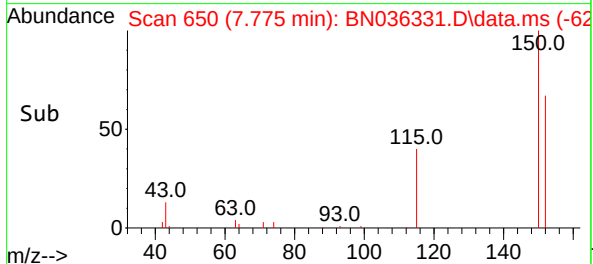
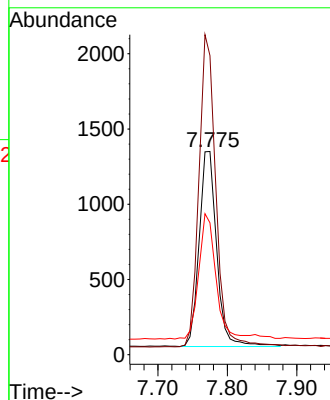
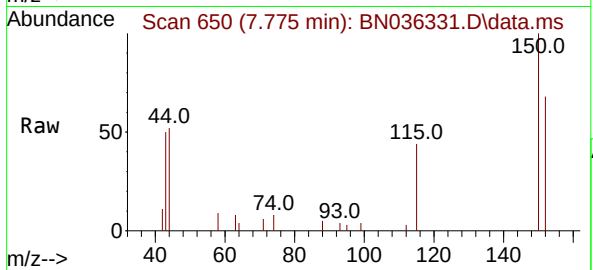




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

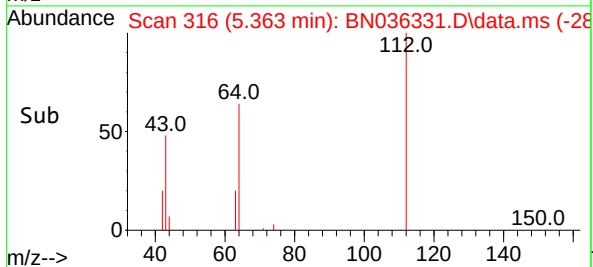
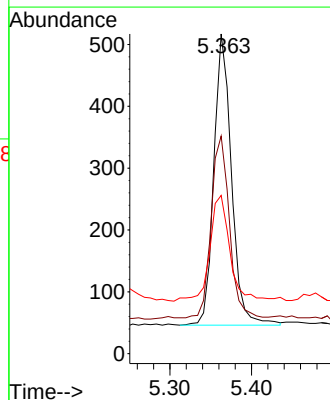
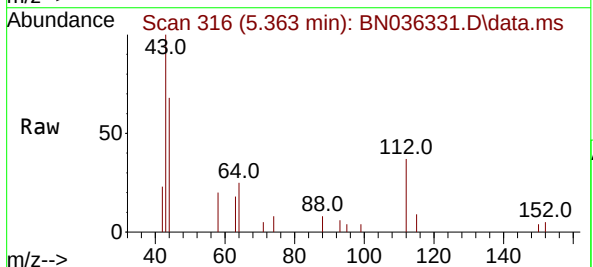
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

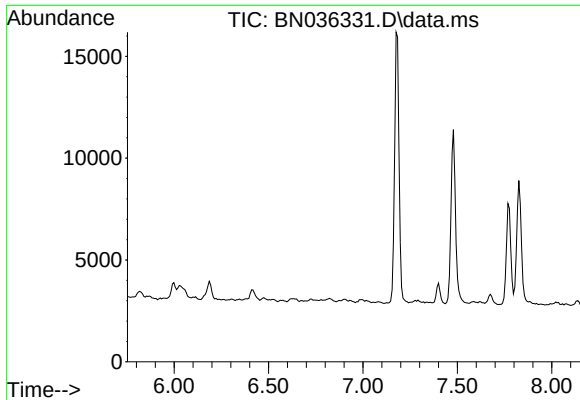
Tgt Ion:152 Resp: 2278
Ion Ratio Lower Upper
152 100
150 147.2 117.4 176.2
115 64.8 51.0 76.4



#4
2-Fluorophenol
Concen: 0.119 ng
RT: 5.363 min Scan# 316
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

Tgt Ion:112 Resp: 708
Ion Ratio Lower Upper
112 100
64 64.0 50.0 75.0
63 42.8 30.7 46.1





#5

Phenol-d6

Concen: 0.000 ng

Expected RT: 6.95 min

Lab File: BN036331.D

Acq: 06 Feb 2025 12:15

Instrument :

BNA_N

ClientSampleId :

VPB192-HYD-20250131RE

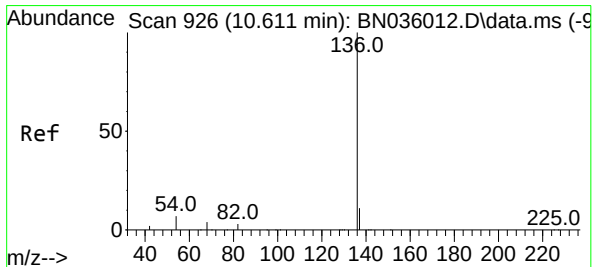
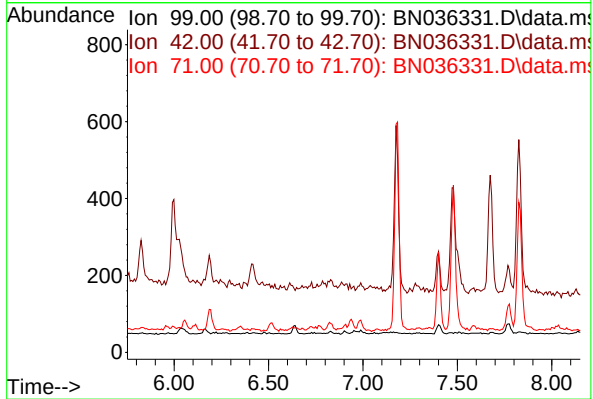
Tgt Ion: 99

Sig Exp Ratio

99 100

42 33.5

71 45.8



#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.562 min Scan# 935

Delta R.T. -0.000 min

Lab File: BN036331.D

Acq: 06 Feb 2025 12:15

Tgt Ion:136 Resp: 4837

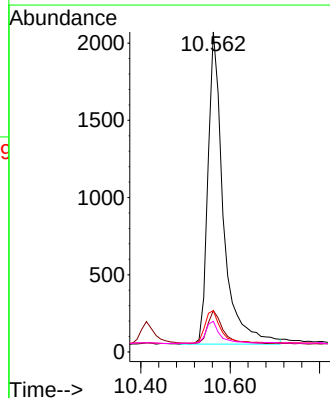
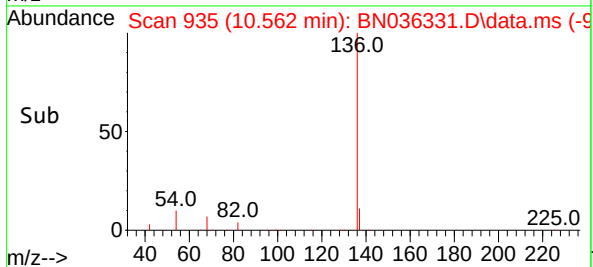
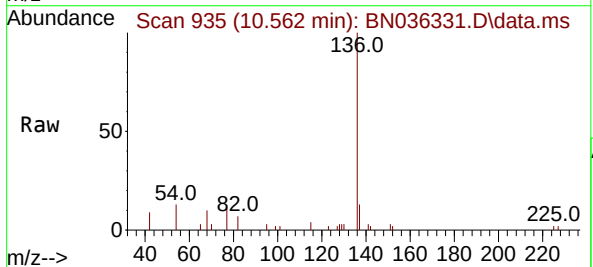
Ion Ratio Lower Upper

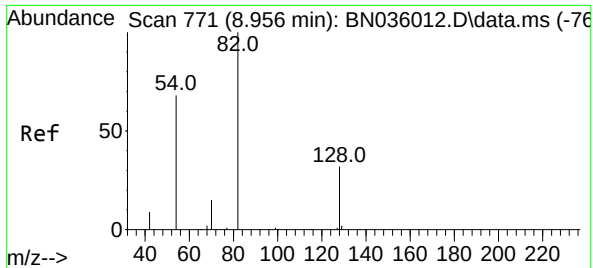
136 100

137 12.9 10.4 15.6

54 12.9 7.7 11.5#

68 9.6 5.4 8.0#

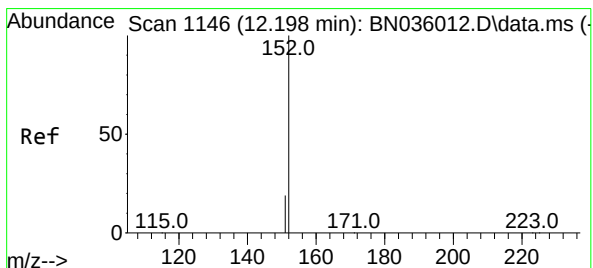
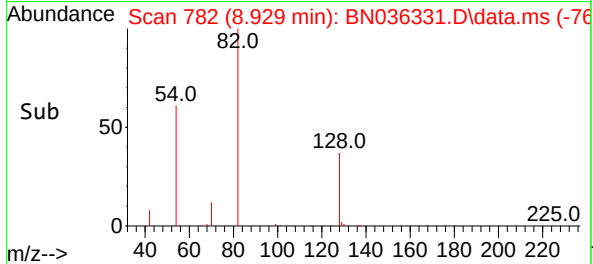
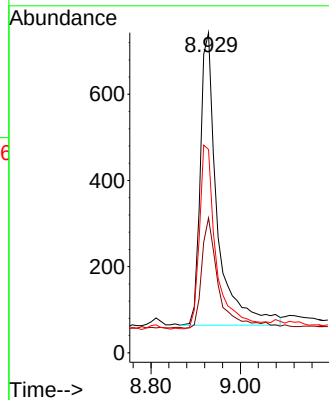
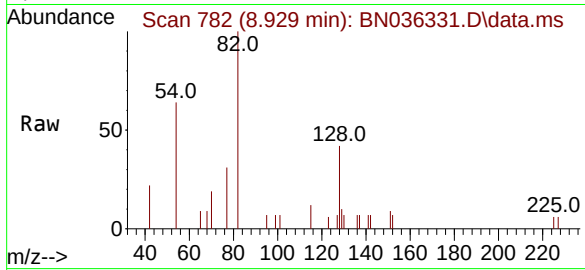




#8
Nitrobenzene-d5
Concen: 0.395 ng
RT: 8.929 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

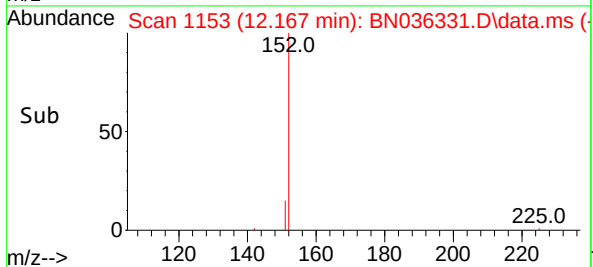
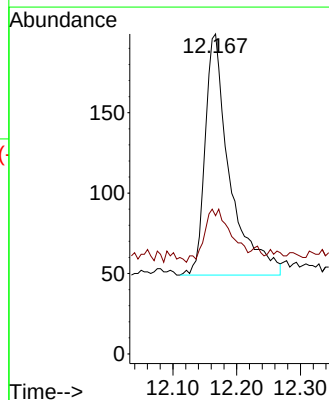
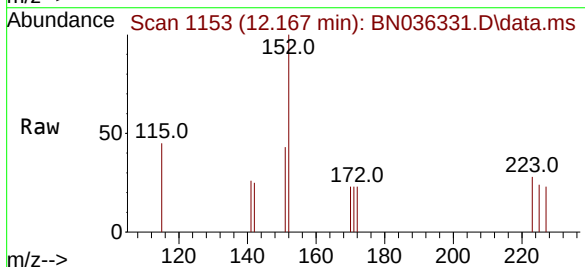
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

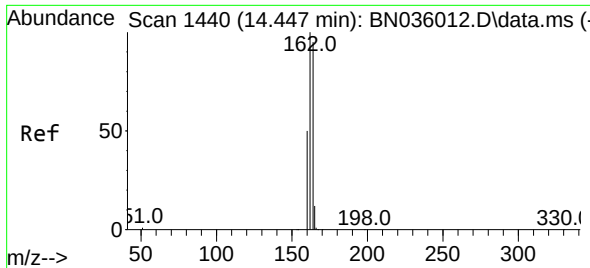
Tgt Ion:	82	Resp:	1803
Ion	Ratio	Lower	Upper
82	100		
128	42.1	28.8	43.2
54	63.5	55.8	83.8



#11
2-Methylnaphthalene-d10
Concen: 0.061 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.010 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

Tgt Ion:	152	Resp:	403
Ion	Ratio	Lower	Upper
152	100		
151	23.8	16.6	25.0

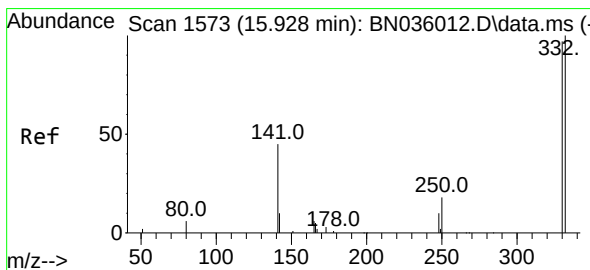
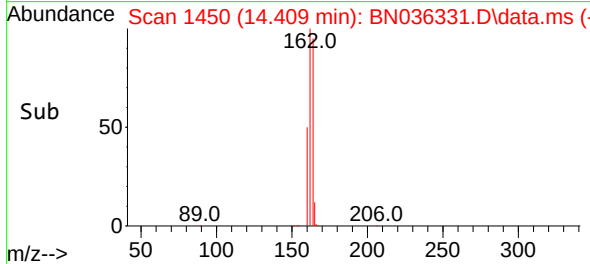
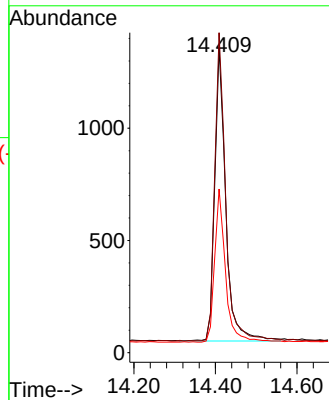
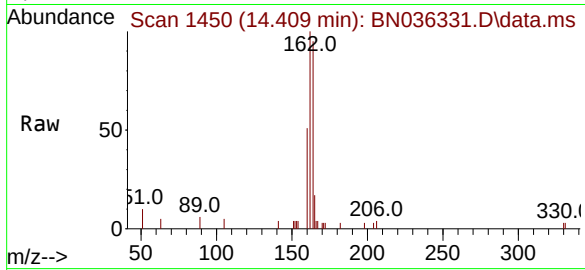




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

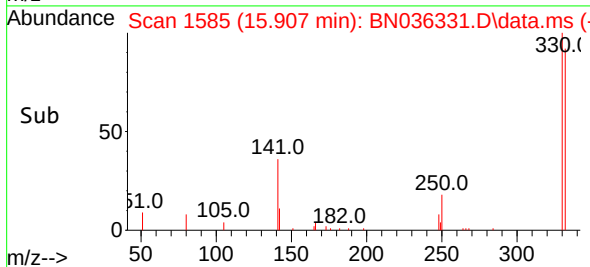
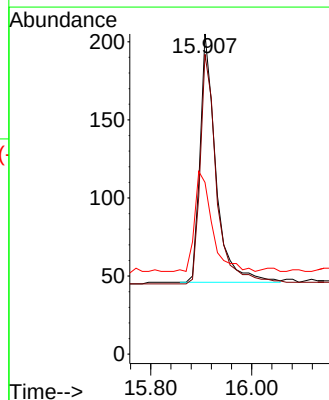
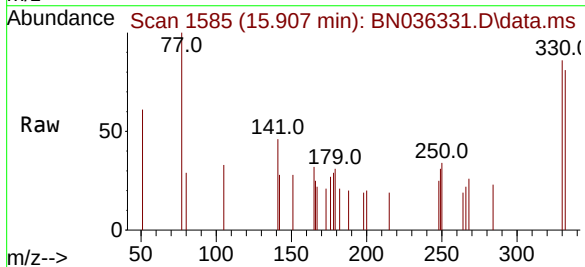
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

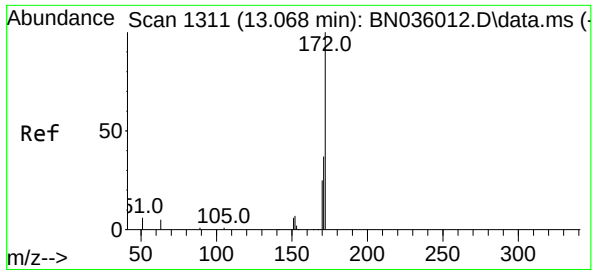
Tgt Ion	Ratio	Lower	Upper
164	100		
162	104.9	84.1	126.1
160	53.6	43.8	65.8



#14
2,4,6-Tribromophenol
Concen: 0.221 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

Tgt Ion	Ratio	Lower	Upper
330	100		
332	95.4	81.0	121.4
141	45.4	36.7	55.1

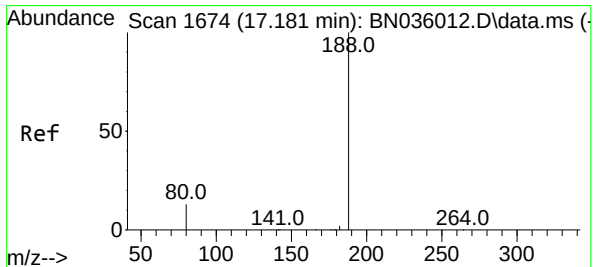
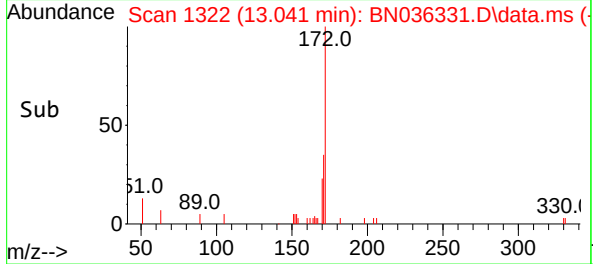
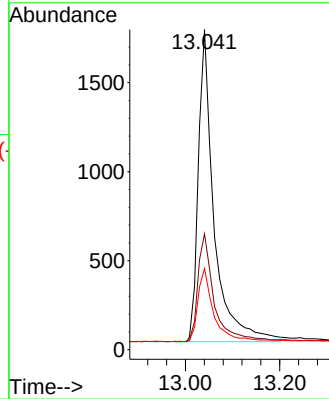
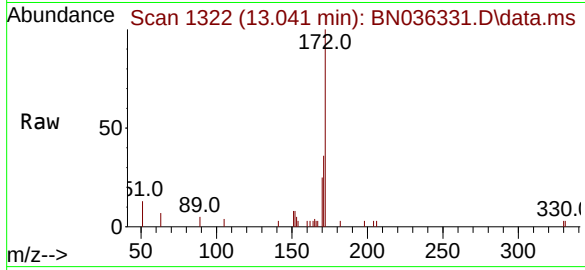




#15
2-Fluorobiphenyl
Concen: 0.337 ng
RT: 13.041 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

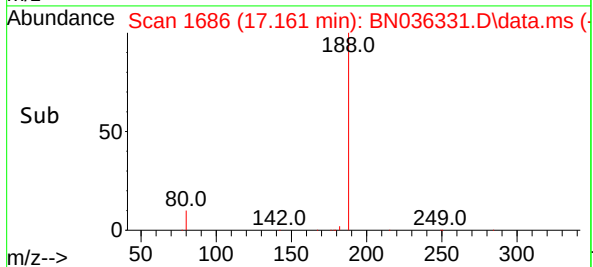
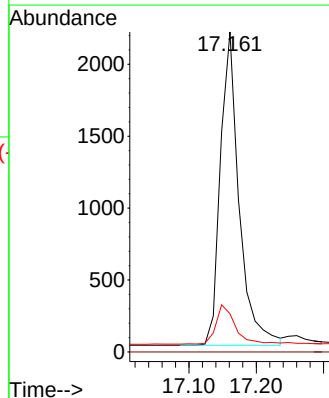
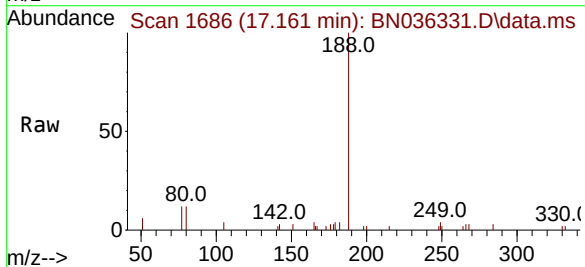
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

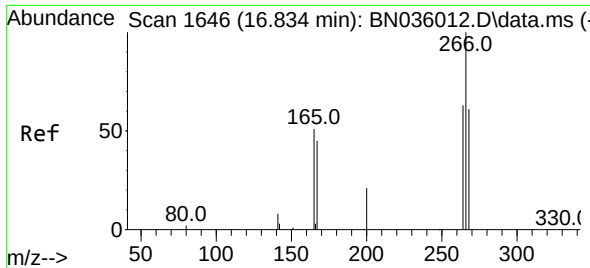
Tgt Ion:	172	Resp:	3683
Ion Ratio	Lower	Upper	
172	100		
171	36.2	30.9	46.3
170	25.4	21.2	31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

Tgt Ion:	188	Resp:	4214
Ion Ratio	Lower	Upper	
188	100		
94	0.0	0.0	0.0
80	12.0	12.3	18.5

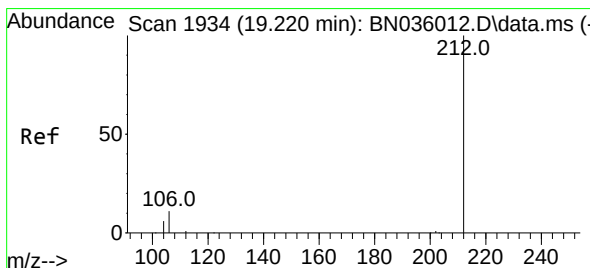
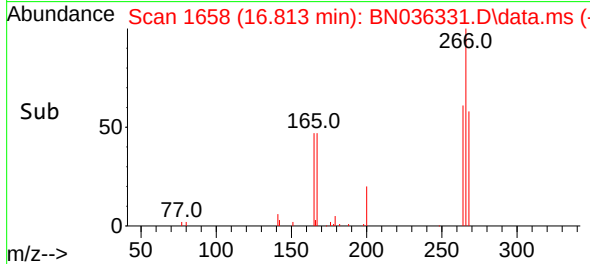
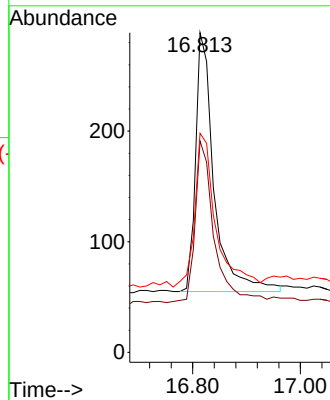
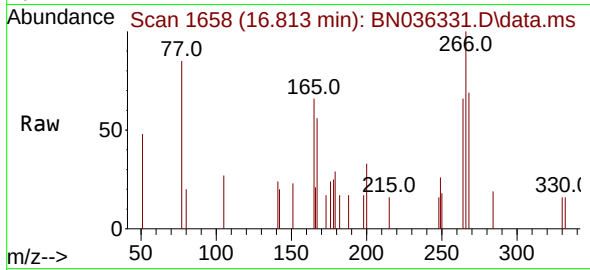




#24
Pentachlorophenol
Concen: 0.326 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

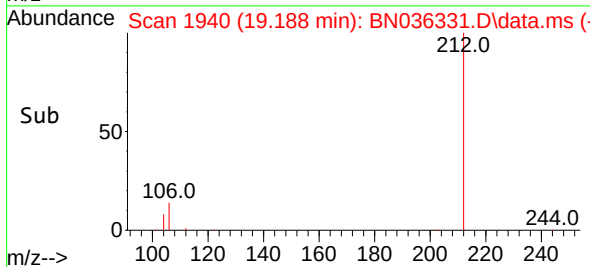
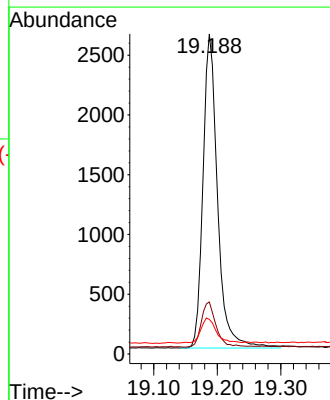
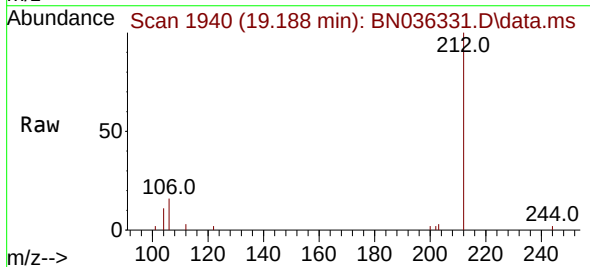
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

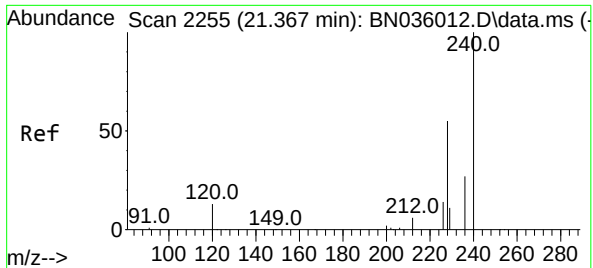
Tgt Ion:266 Resp: 558
Ion Ratio Lower Upper
266 100
264 64.0 48.2 72.2
268 67.6 51.6 77.4



#27
Fluoranthene-d10
Concen: 0.383 ng
RT: 19.188 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

Tgt Ion:212 Resp: 4185
Ion Ratio Lower Upper
212 100
106 14.5 9.7 14.5
104 8.5 6.0 9.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.340 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036331.D

Acq: 06 Feb 2025 12:15

Instrument :

BNA_N

ClientSampleId :

VPB192-HYD-20250131RE

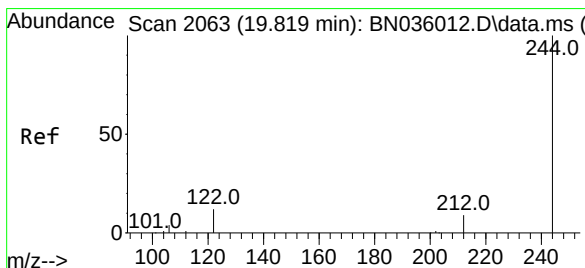
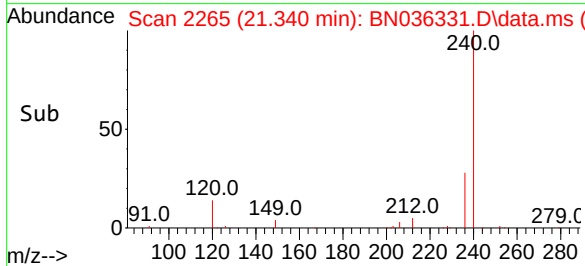
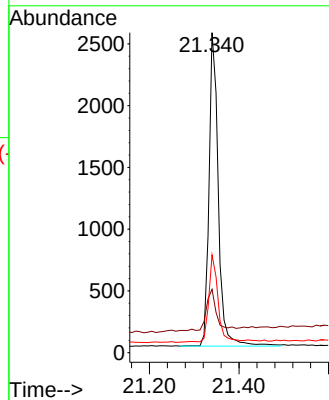
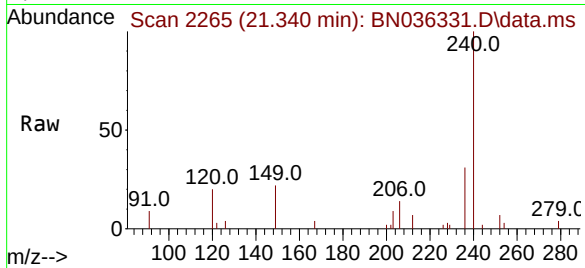
Tgt Ion:240 Resp: 3676

Ion Ratio Lower Upper

240 100

120 19.8 13.9 20.9

236 30.6 23.7 35.5



#31

Terphenyl-d14

Concen: 0.436 ng

RT: 19.787 min Scan# 2069

Delta R.T. -0.005 min

Lab File: BN036331.D

Acq: 06 Feb 2025 12:15

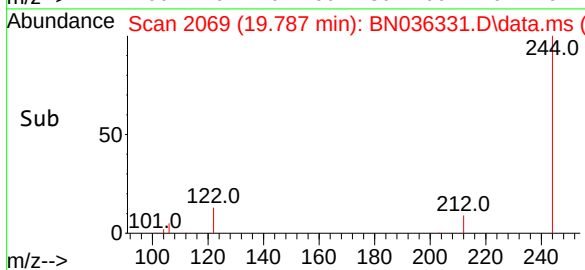
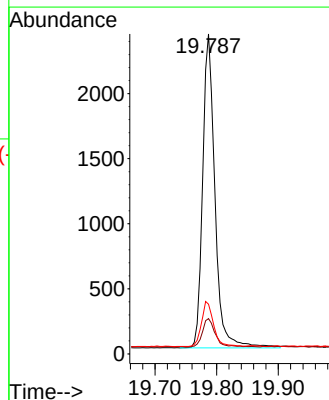
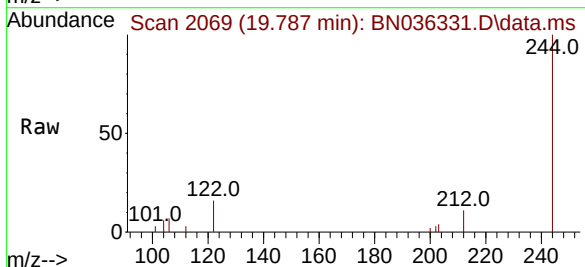
Tgt Ion:244 Resp: 3333

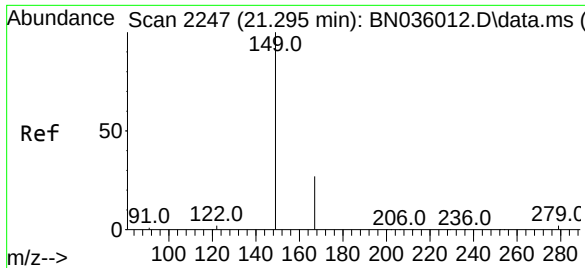
Ion Ratio Lower Upper

244 100

212 11.1 9.1 13.7

122 15.5 11.3 16.9

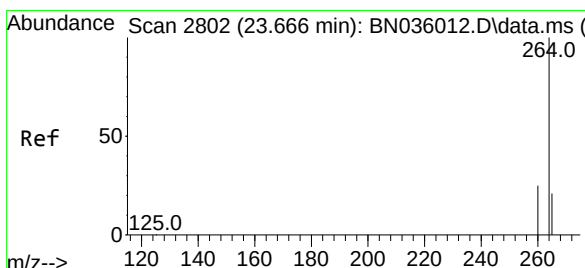
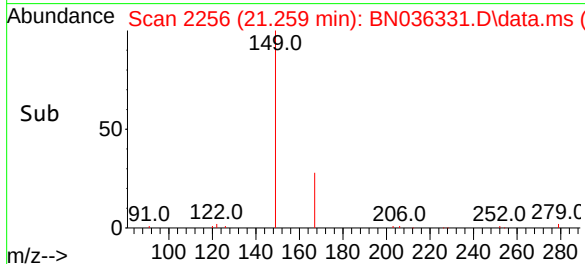
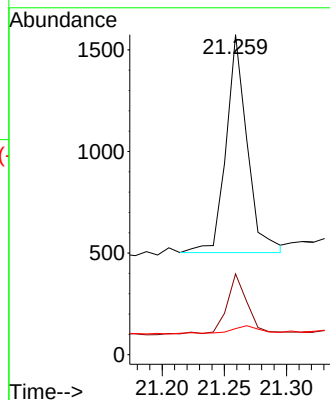
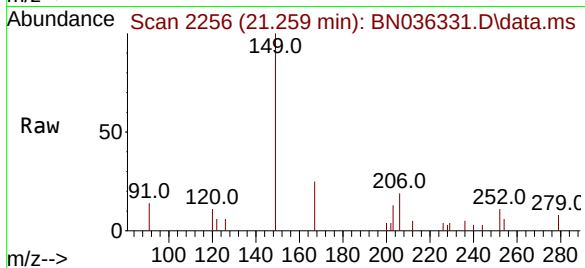




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.173 ng
RT: 21.259 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

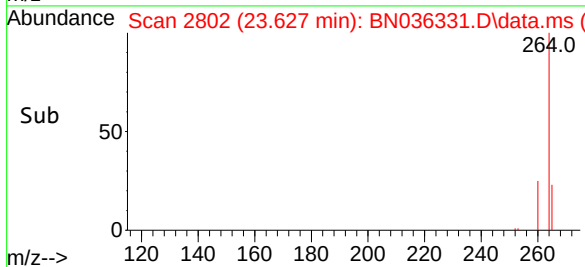
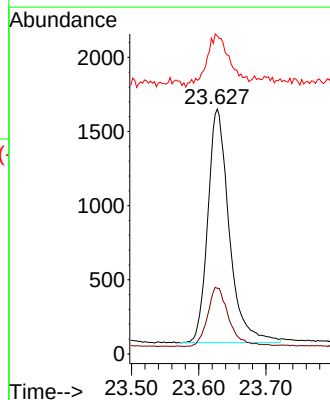
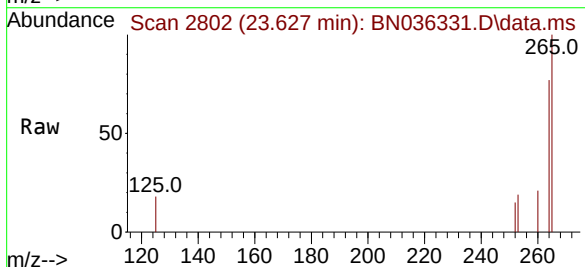
Instrument :
BNA_N
ClientSampleId :
VPB192-HYD-20250131RE

Tgt Ion:149 Resp: 1263
Ion Ratio Lower Upper
149 100
167 26.8 21.9 32.9
279 5.9 3.0 4.6#



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.627 min Scan# 2802
Delta R.T. -0.000 min
Lab File: BN036331.D
Acq: 06 Feb 2025 12:15

Tgt Ion:264 Resp: 3493
Ion Ratio Lower Upper
264 100
260 26.8 21.8 32.6
265 129.8 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	BP-VPB-192-EB-20250131	SDG No.:	Q1283
Lab Sample ID:	Q1283-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	970 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036322.D	1	02/04/25 11:00	02/06/25 06:51	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.21	U	0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.37		30 - 150		93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		106%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		93%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		84%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2020	7.775				
1146-65-2	Naphthalene-d8	4470	10.562				
15067-26-2	Acenaphthene-d10	2230	14.409				
1517-22-2	Phenanthrene-d10	4320	17.148				
1719-03-5	Chrysene-d12	3940	21.339				
1520-96-3	Perylene-d12	4430	23.624				

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 : BN036322.D
Acq On : 06 Feb 2025 06:51
Operator : RC/JU
Sample : Q1283-03
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

Quant Time: Feb 06 07:47:56 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

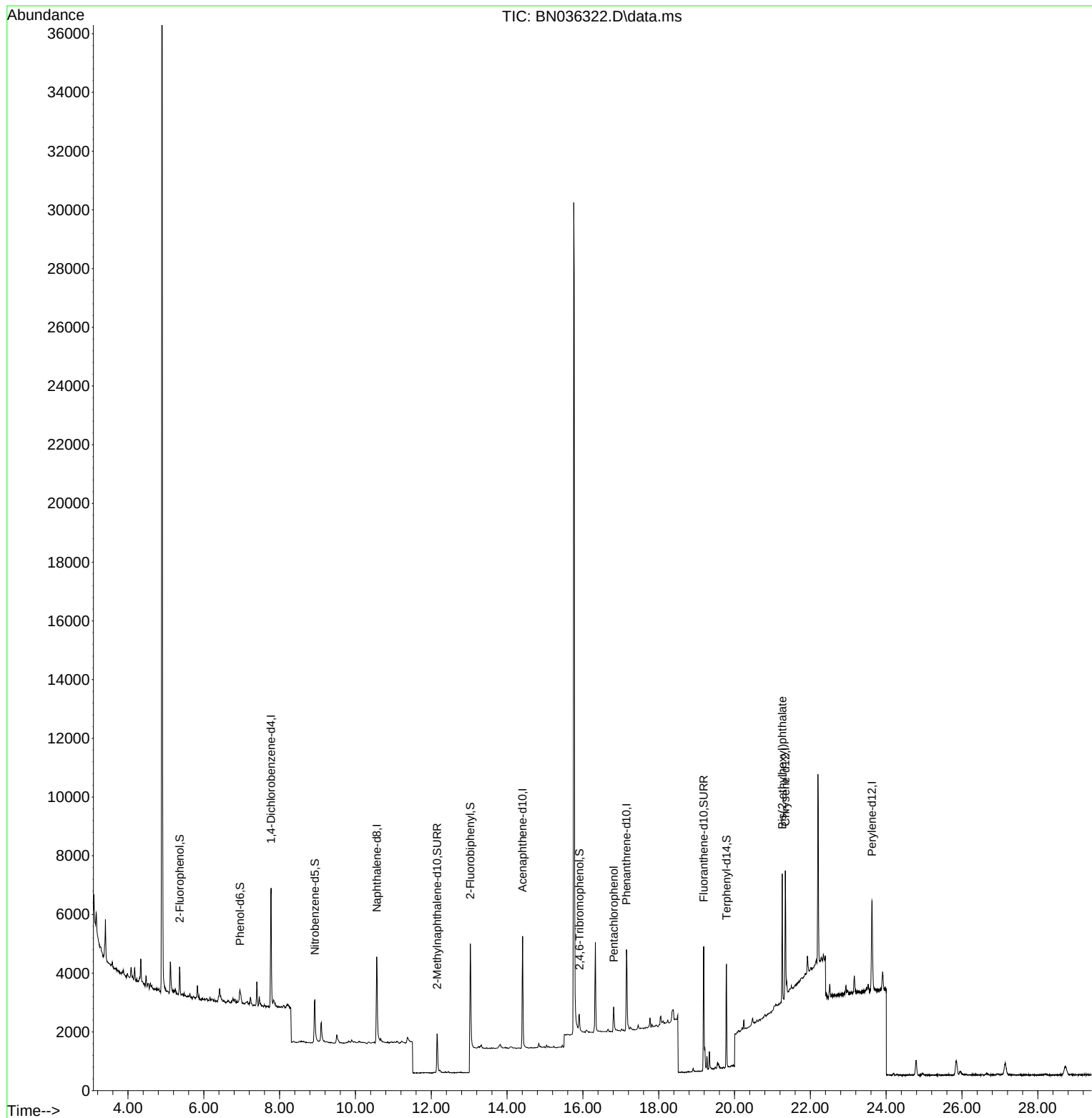
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2015	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4469	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2232	0.400	ng	0.00
19) Phenanthrene-d10	17.148	188	4322	0.400	ng	-0.01
29) Chrysene-d12	21.339	240	3942	0.400	ng	0.00
35) Perylene-d12	23.624	264	4427	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	694	0.132	ng	0.00
5) Phenol-d6	6.952	99	426	0.069	ng	0.00
8) Nitrobenzene-d5	8.929	82	1563	0.370	ng	0.00
11) 2-Methylnaphthalene-d10	12.156	152	2248	0.370	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	365	0.255	ng	0.00
15) 2-Fluorobiphenyl	13.030	172	3358	0.337	ng	-0.01
27) Fluoranthene-d10	19.187	212	4751	0.424	ng	0.00
31) Terphenyl-d14	19.787	244	3412	0.417	ng	0.00
Target Compounds						Qvalue
24) Pentachlorophenol	16.813	266	477	0.272	ng	95
34) Bis(2-ethylhexyl)phtha...	21.259	149	3677	0.469	ng	99

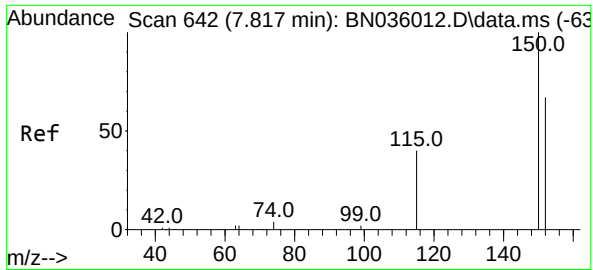
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036322.D
Acq On : 06 Feb 2025 06:51
Operator : RC/JU
Sample : Q1283-03
Misc :
ALS Vial : 21 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

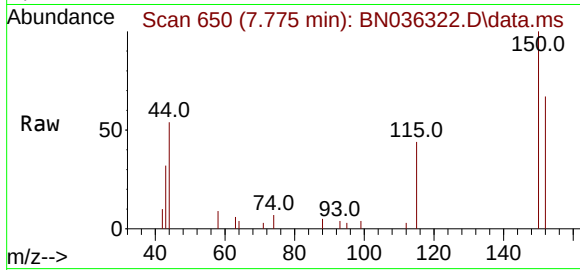
Quant Time: Feb 06 07:47:56 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration



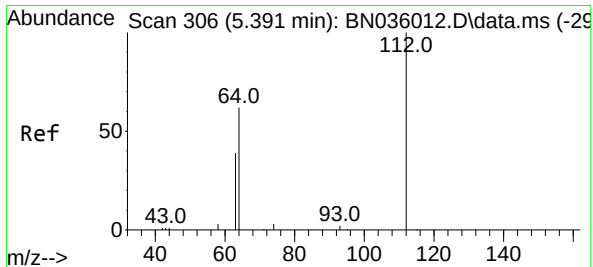
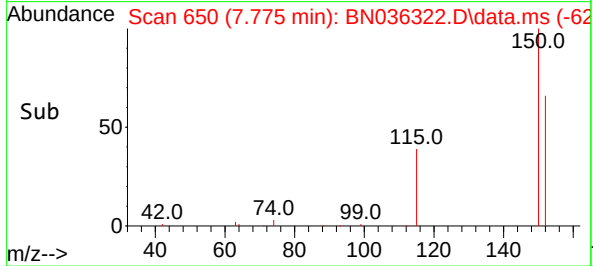
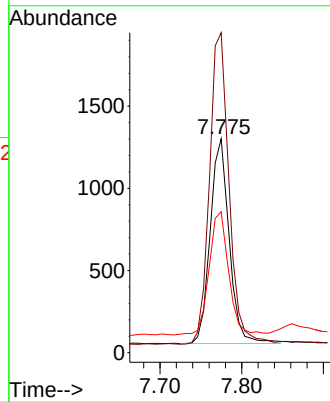


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

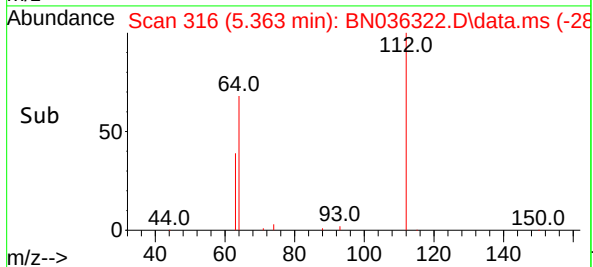
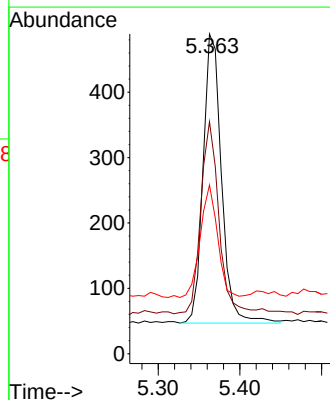
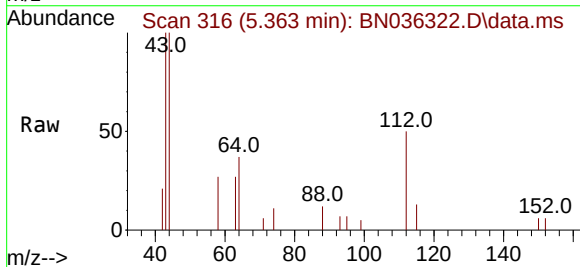


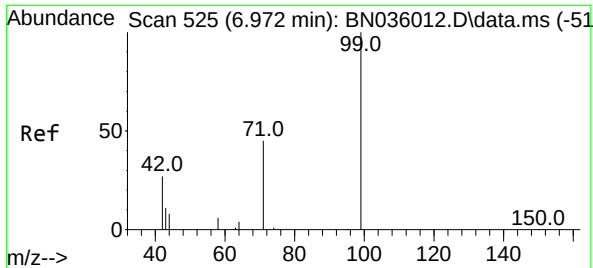
Tgt Ion:152 Resp: 2015
Ion Ratio Lower Upper
152 100
150 149.5 117.4 176.2
115 65.9 51.0 76.4



#4
2-Fluorophenol
Concen: 0.132 ng
RT: 5.363 min Scan# 316
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion:112 Resp: 694
Ion Ratio Lower Upper
112 100
64 68.2 50.0 75.0
63 37.0 30.7 46.1

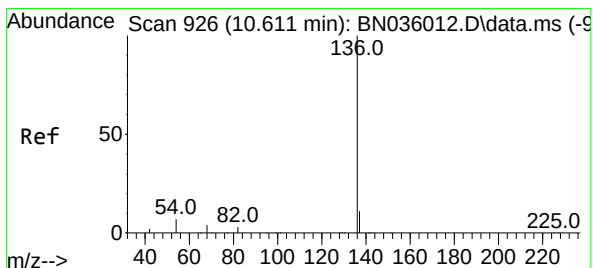
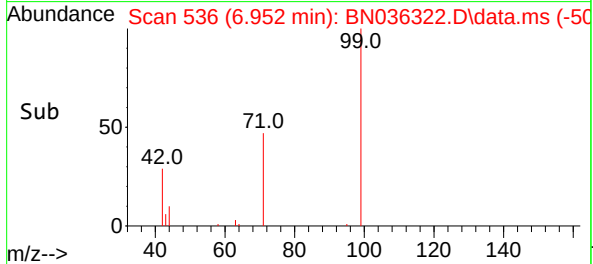
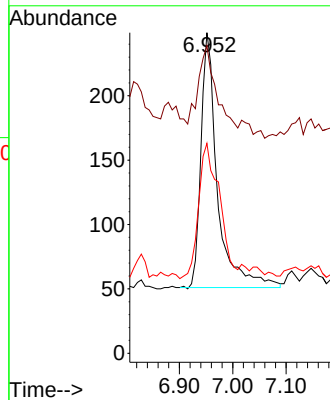
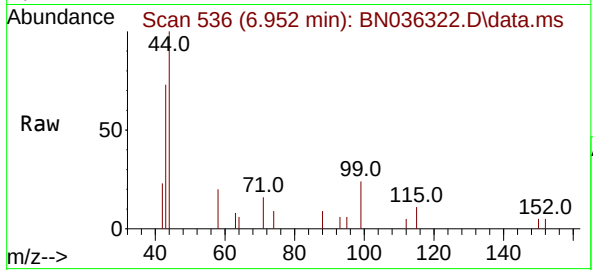




#5
Phenol-d6
Concen: 0.069 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

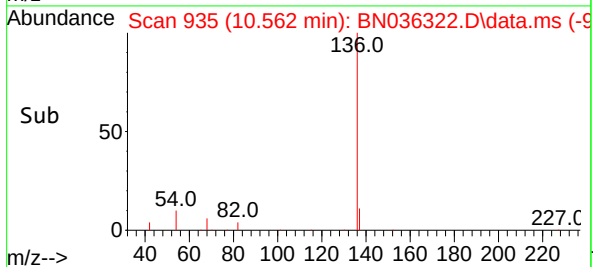
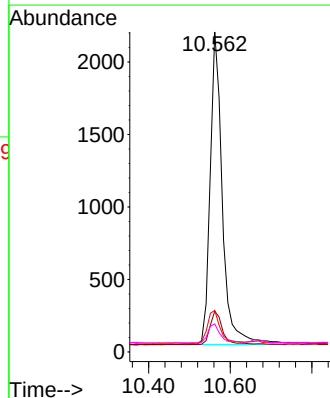
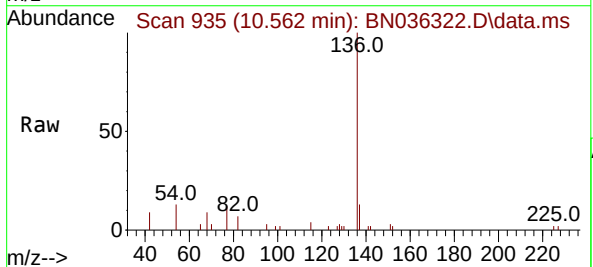
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

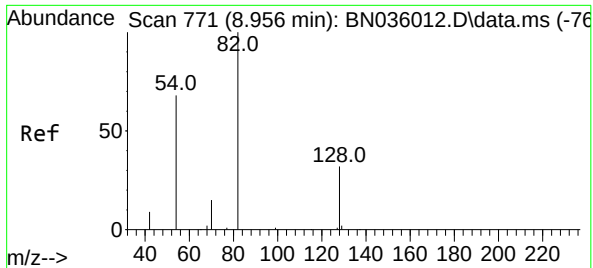
Tgt Ion: 99 Resp: 426
Ion Ratio Lower Upper
99 100
42 33.3 26.8 40.2
71 67.1 36.6 55.0#



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 935
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion: 136 Resp: 4469
Ion Ratio Lower Upper
136 100
137 12.8 10.4 15.6
54 13.0 7.7 11.5#
68 8.7 5.4 8.0#

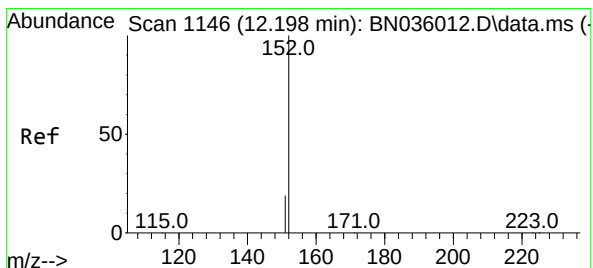
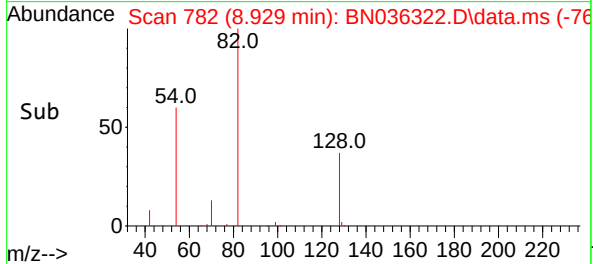
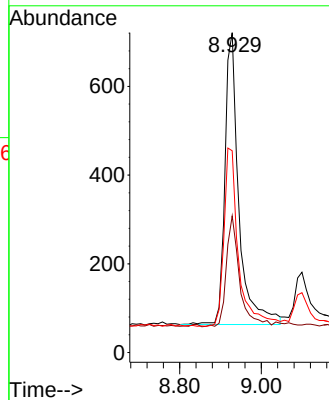
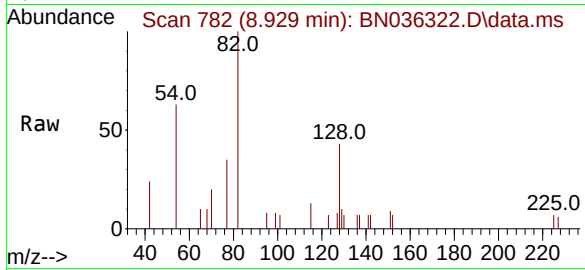




#8
Nitrobenzene-d5
Concen: 0.370 ng
RT: 8.929 min Scan# 711
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

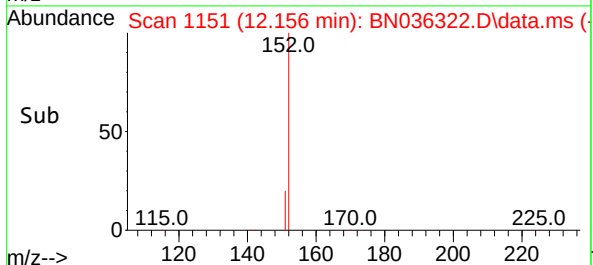
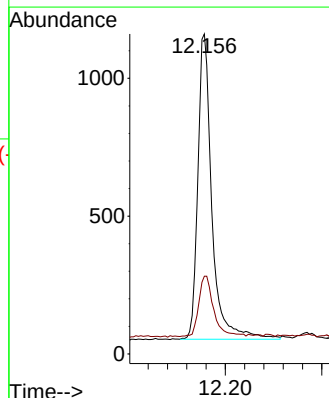
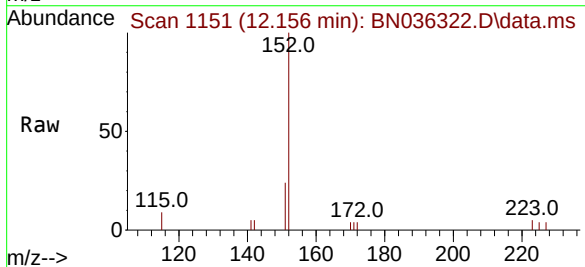
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

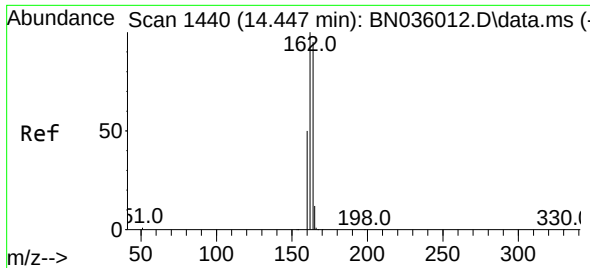
Tgt Ion: 82 Resp: 1563
Ion Ratio Lower Upper
82 100
128 42.7 28.8 43.2
54 63.1 55.8 83.8



#11
2-Methylnaphthalene-d10
Concen: 0.370 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion: 152 Resp: 2248
Ion Ratio Lower Upper
152 100
151 21.0 16.6 25.0

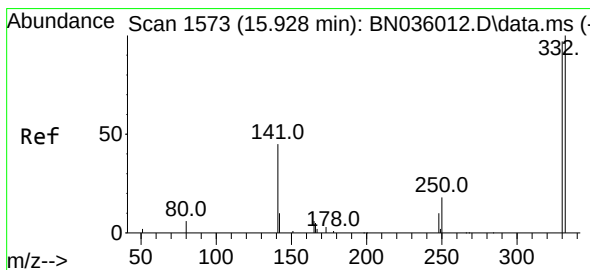
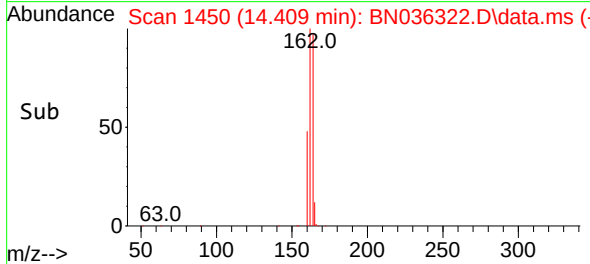
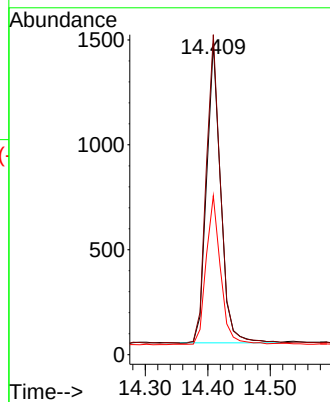
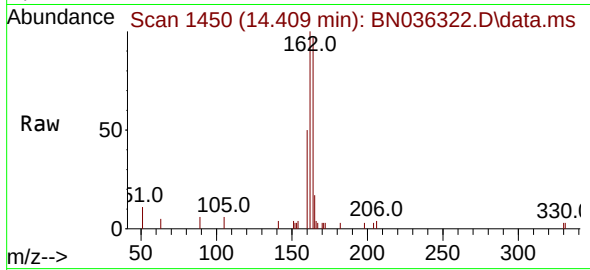




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

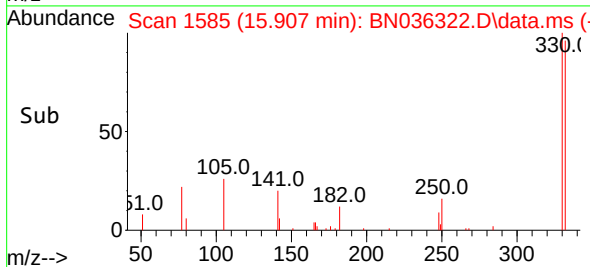
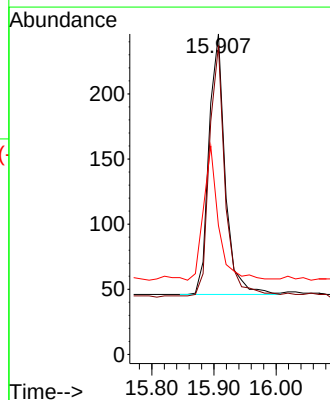
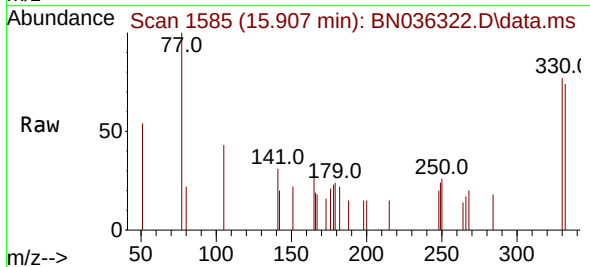
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

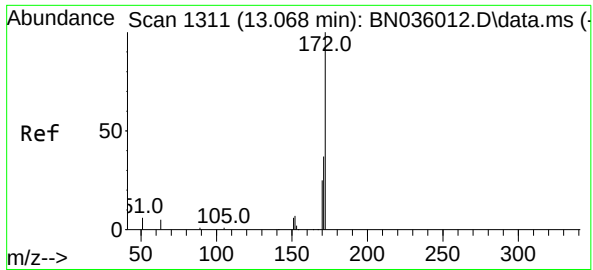
Tgt Ion:164 Resp: 2232
Ion Ratio Lower Upper
164 100
162 102.9 84.1 126.1
160 51.1 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.255 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion:330 Resp: 365
Ion Ratio Lower Upper
330 100
332 97.0 81.0 121.4
141 48.5 36.7 55.1

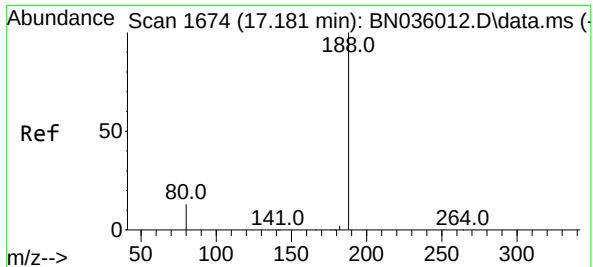
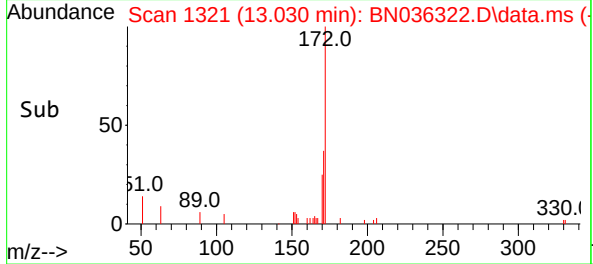
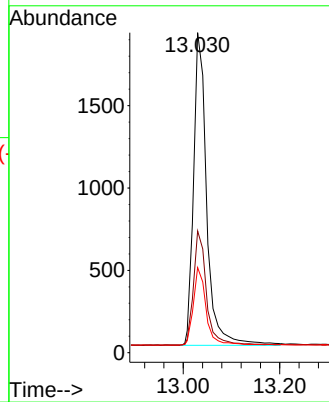
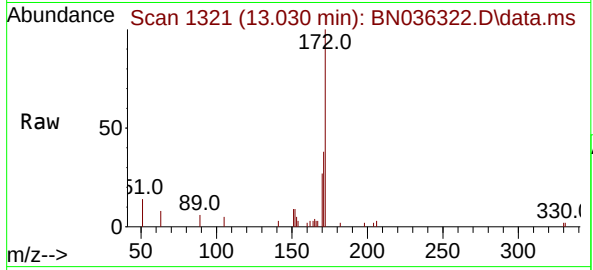




#15
2-Fluorobiphenyl
Concen: 0.337 ng
RT: 13.030 min Scan# 11
Delta R.T. -0.011 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

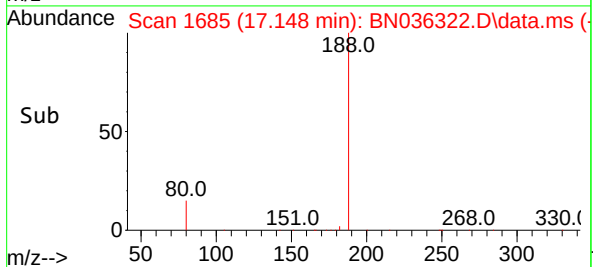
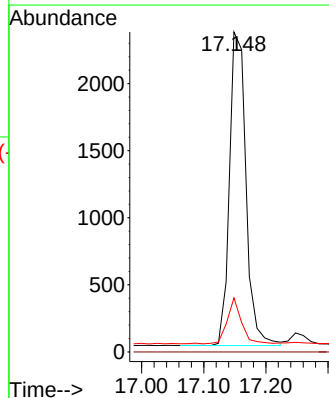
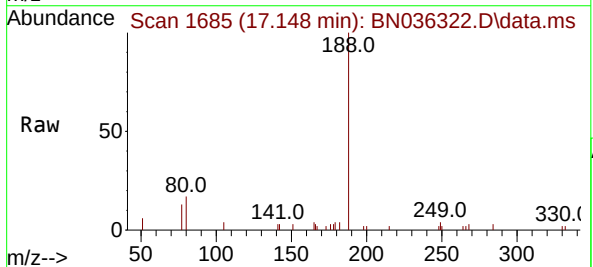
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

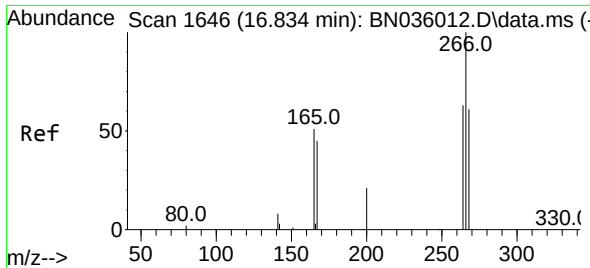
Tgt Ion	Ratio	Lower	Upper
172	100		
171	38.1	30.9	46.3
170	26.6	21.2	31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.148 min Scan# 1685
Delta R.T. -0.013 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.9	12.3	18.5

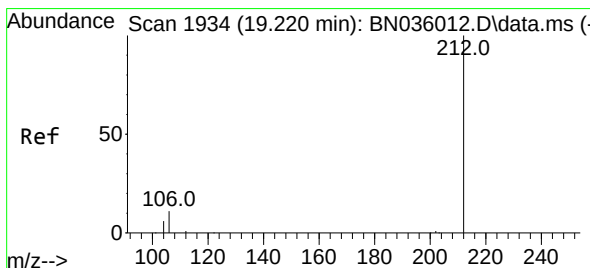
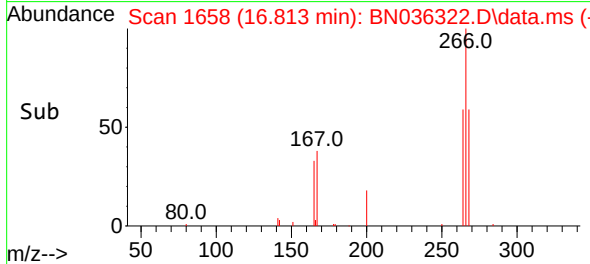
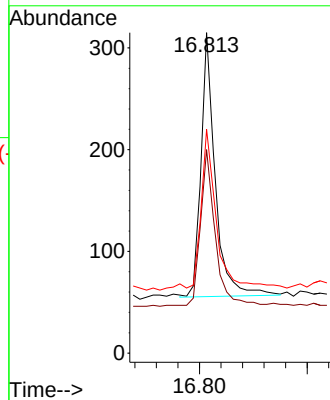
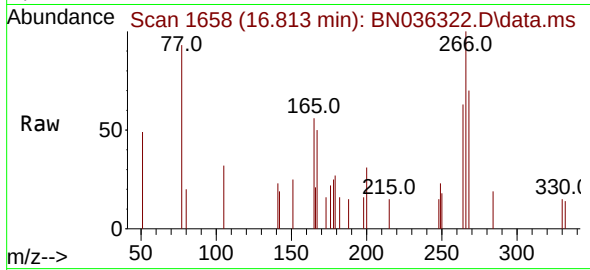




#24
Pentachlorophenol
Concen: 0.272 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

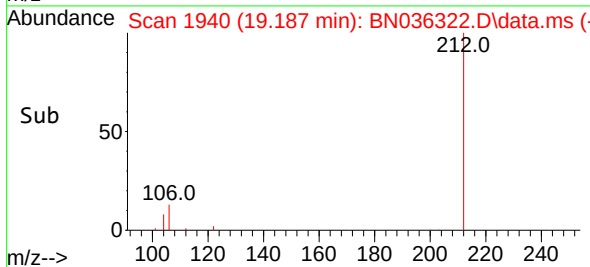
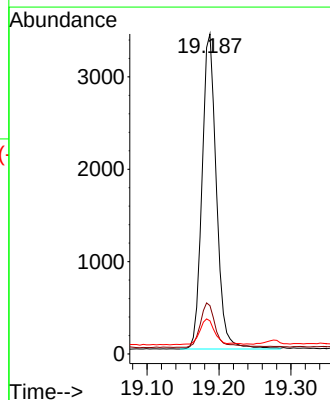
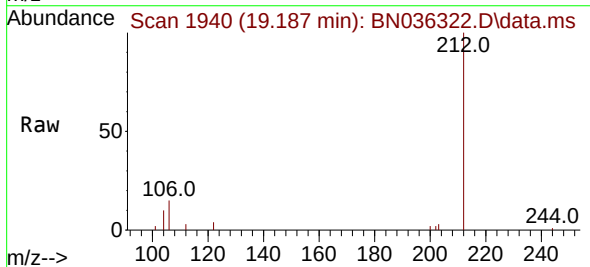
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

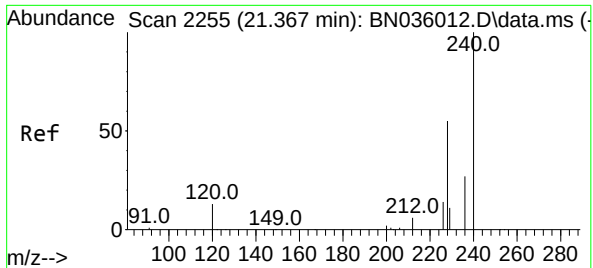
Tgt Ion:266 Resp: 477
Ion Ratio Lower Upper
266 100
264 62.5 48.2 72.2
268 69.4 51.6 77.4



#27
Fluoranthene-d10
Concen: 0.424 ng
RT: 19.187 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion:212 Resp: 4751
Ion Ratio Lower Upper
212 100
106 15.1 9.7 14.5#
104 8.6 6.0 9.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.339 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036322.D

Acq: 06 Feb 2025 06:51

Instrument :

BNA_N

ClientSampleId :

BP-VPB-192-EB-20250131

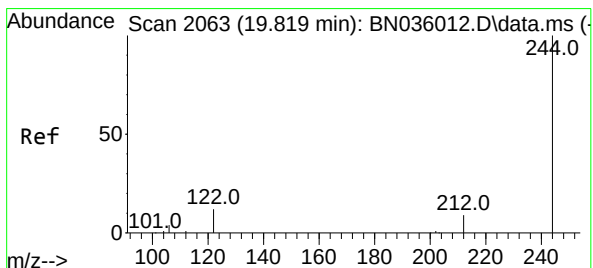
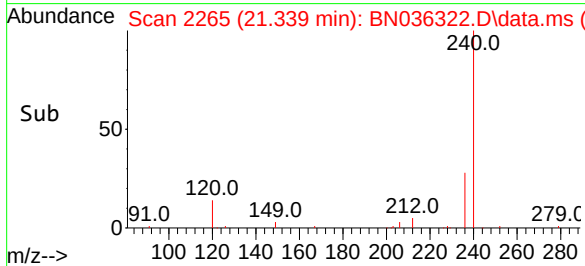
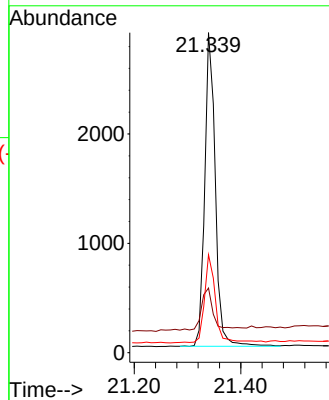
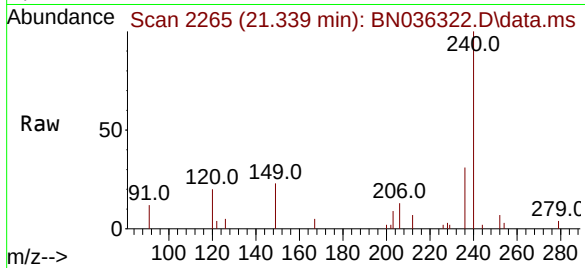
Tgt Ion:240 Resp: 3942

Ion Ratio Lower Upper

240 100

120 20.2 13.9 20.9

236 30.6 23.7 35.5



#31

Terphenyl-d14

Concen: 0.417 ng

RT: 19.787 min Scan# 2069

Delta R.T. -0.005 min

Lab File: BN036322.D

Acq: 06 Feb 2025 06:51

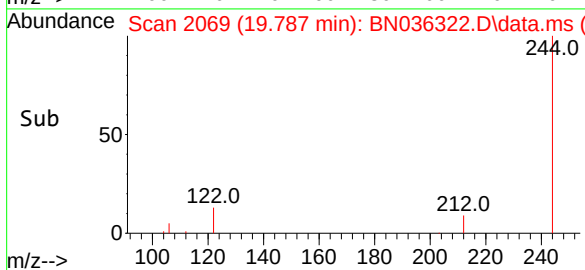
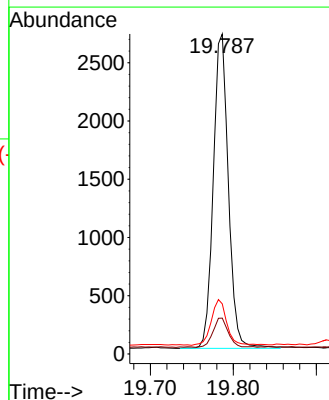
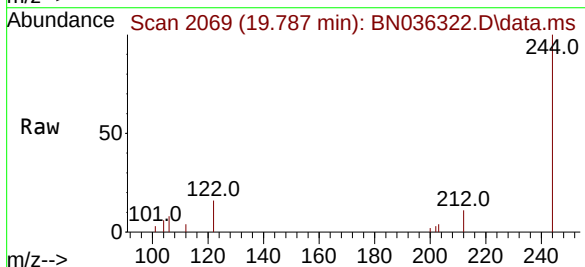
Tgt Ion:244 Resp: 3412

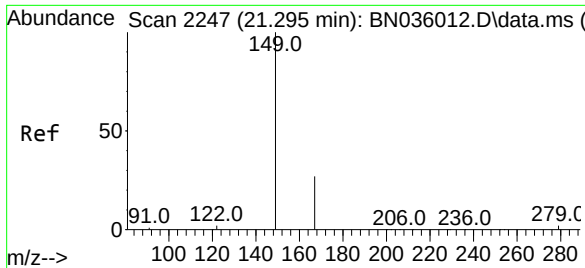
Ion Ratio Lower Upper

244 100

212 11.2 9.1 13.7

122 15.7 11.3 16.9

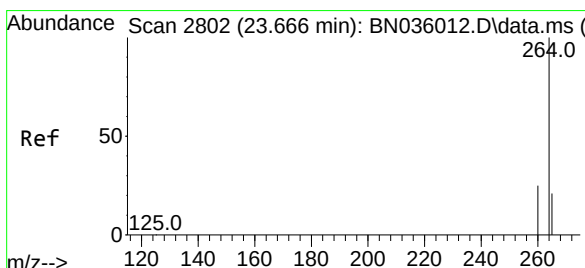
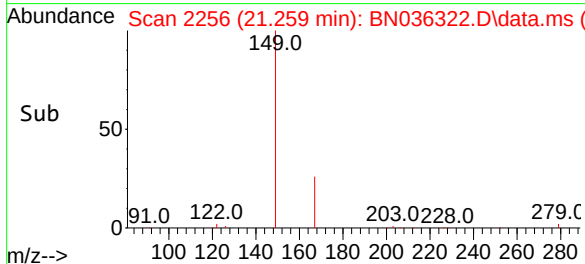
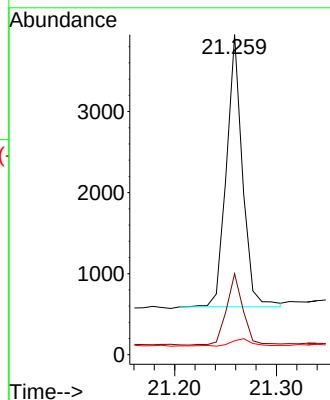
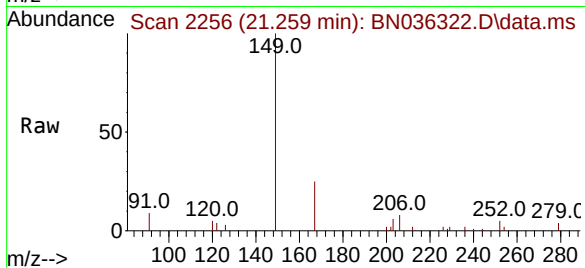




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.469 ng
RT: 21.259 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

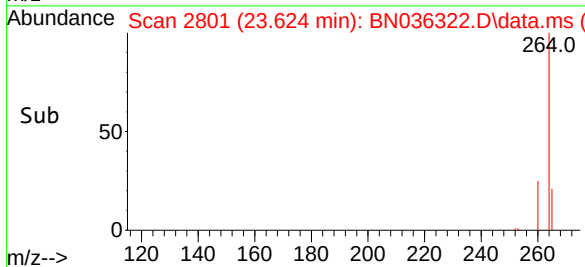
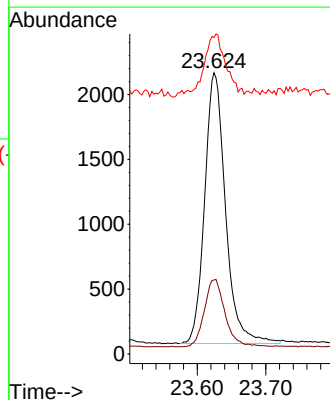
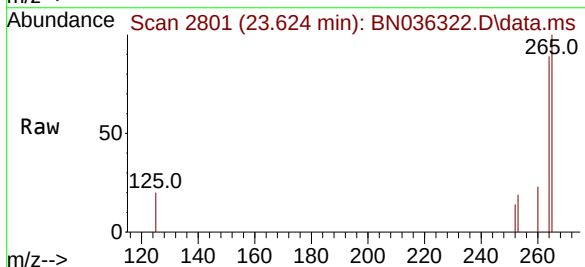
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-EB-20250131

Tgt Ion:149 Resp: 3677
Ion Ratio Lower Upper
149 100
167 26.8 21.9 32.9
279 3.2 3.0 4.6



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.624 min Scan# 2801
Delta R.T. -0.003 min
Lab File: BN036322.D
Acq: 06 Feb 2025 06:51

Tgt Ion:264 Resp: 4427
Ion Ratio Lower Upper
264 100
260 26.3 21.8 32.6
265 112.6 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	01/31/25
Project:	CTO WE13	Date Received:	02/03/25
Client Sample ID:	BP-VPB-192-GW-500-502	SDG No.:	Q1283
Lab Sample ID:	Q1283-05	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036323.D	1	02/04/25 11:00	02/06/25 07:27	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.20		0.070	0.21	0.21	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.42		30 - 150		104%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		90%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		53 - 106		73%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		99%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2180	7.775				
1146-65-2	Naphthalene-d8	4870	10.562				
15067-26-2	Acenaphthene-d10	2590	14.409				
1517-22-2	Phenanthrene-d10	5150	17.149				
1719-03-5	Chrysene-d12	5130	21.34				
1520-96-3	Perylene-d12	5440	23.625				

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 : BN036323.D
 Acq On : 06 Feb 2025 07:27
 Operator : RC/JU
 Sample : Q1283-05
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 BP-VPB-192-GW-500-502

Manual Integrations
APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
 Supervised By :mohammad ahmed 02/07/2025

Quant Time: Feb 06 08:02:19 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 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	2177	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4873	0.400	ng	0.00
13) Acenaphthene-d10	14.409	164	2591	0.400	ng	0.00
19) Phenanthrene-d10	17.149	188	5153	0.400	ng	-0.01
29) Chrysene-d12	21.340	240	5130	0.400	ng	0.00
35) Perylene-d12	23.625	264	5436	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	927	0.164	ng	0.00
5) Phenol-d6	6.952	99	651	0.098	ng	0.00
8) Nitrobenzene-d5	8.918	82	1663	0.362	ng	-0.01
11) 2-Methylnaphthalene-d10	12.152	152	2399	0.362	ng	0.00
14) 2,4,6-Tribromophenol	15.895	330	437	0.263	ng	-0.01
15) 2-Fluorobiphenyl	13.030	172	3375	0.292	ng	-0.01
27) Fluoranthene-d10	19.188	212	5569	0.417	ng	0.00
31) Terphenyl-d14	19.782	244	4207	0.395	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.283	88	7529m	3.094	ng	Qvalue
24) Pentachlorophenol	16.813	266	1017	0.486	ng	95
34) Bis(2-ethylhexyl)phtha...	21.259	149	3005	0.295	ng	99

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

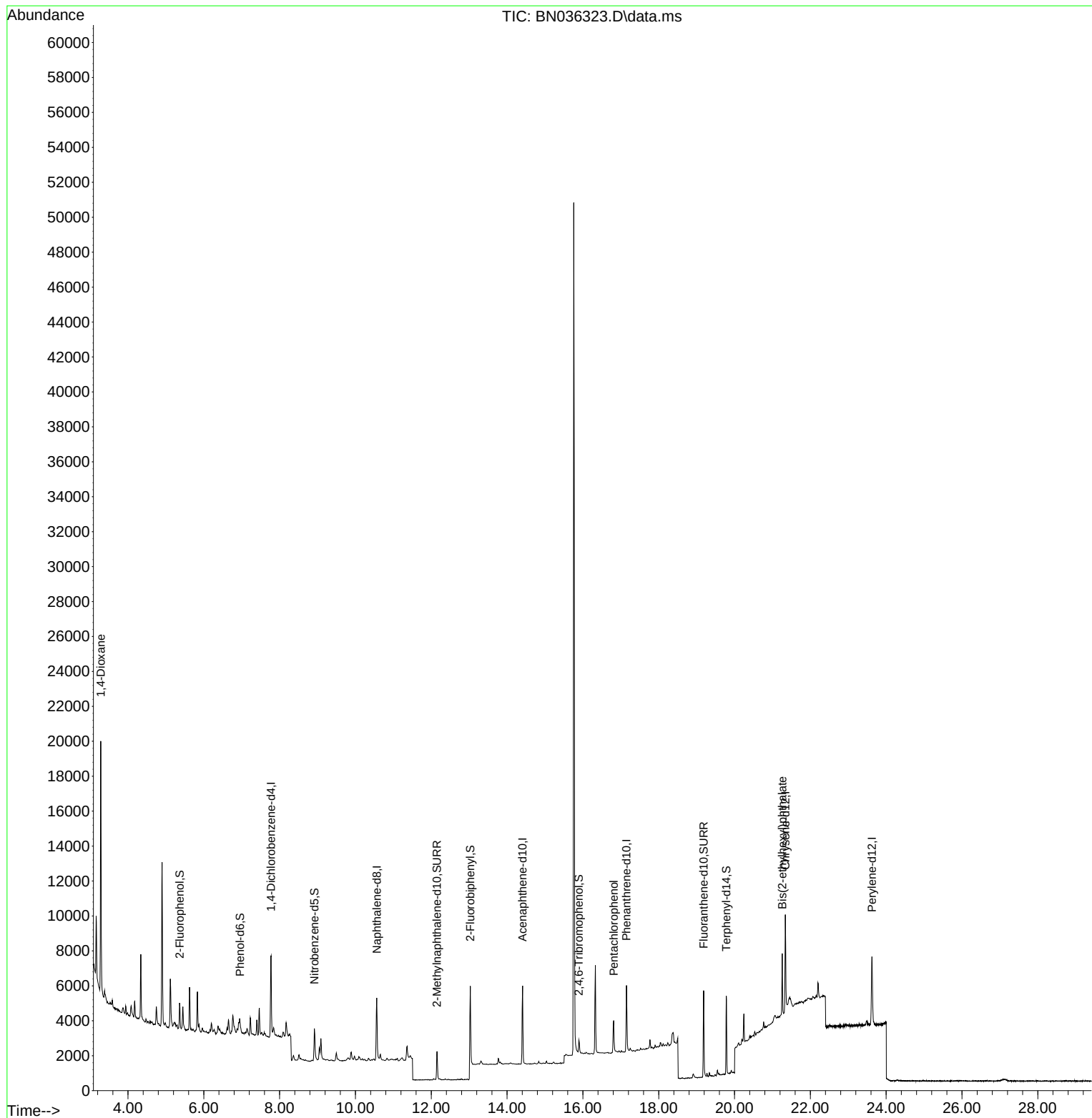
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036323.D
Acq On : 06 Feb 2025 07:27
Operator : RC/JU
Sample : Q1283-05
Misc :
ALS Vial : 22 Sample Multiplier: 1

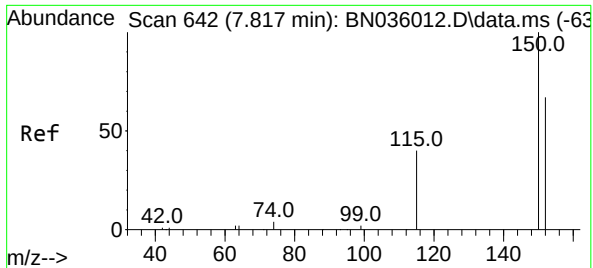
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

Manual Integrations
APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025

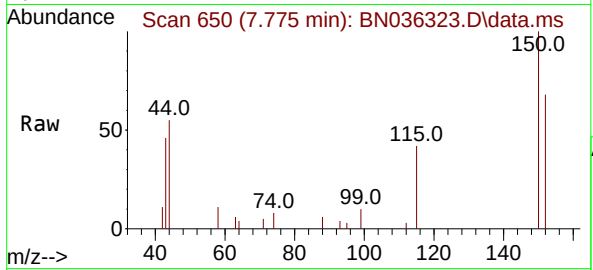
Quant Time: Feb 06 08:02:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

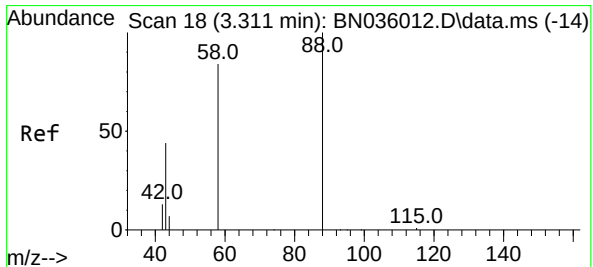
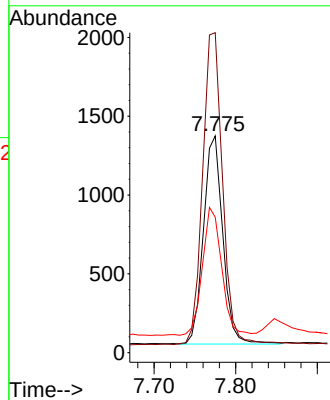
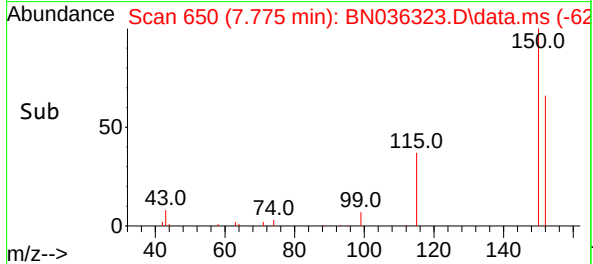
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502



Tgt Ion: 152 Resp: 217
Ion Ratio Lower Upper
152 100
150 147.6 117.4 176.2
115 62.5 51.0 76.4

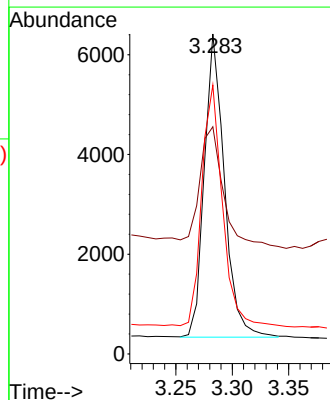
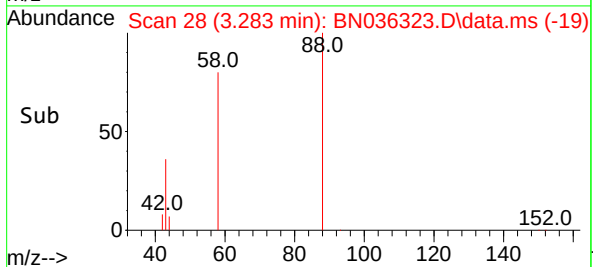
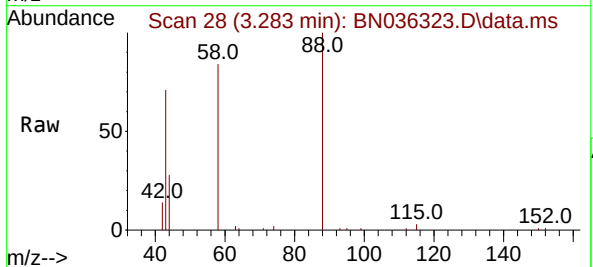
Manual Integrations
APPROVED

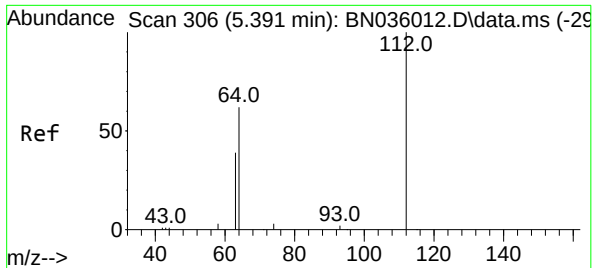
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#2
1,4-Dioxane
Concen: 3.094 ng m
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion: 88 Resp: 7529
Ion Ratio Lower Upper
88 100
43 44.1 38.5 57.7
58 81.0 66.6 99.8





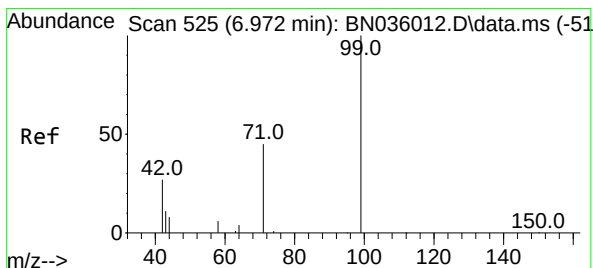
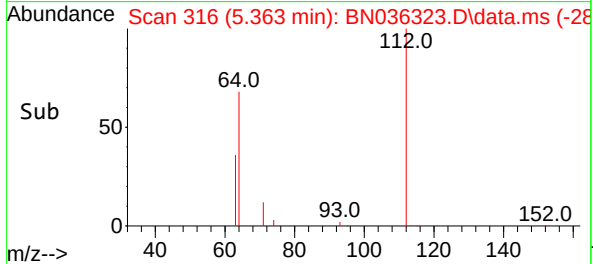
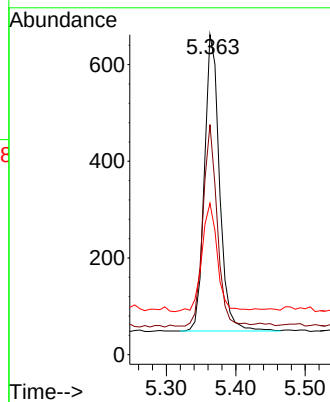
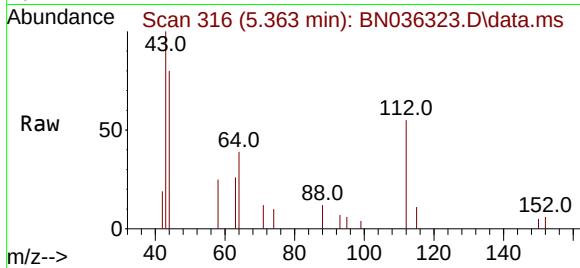
#4
2-Fluorophenol
Concen: 0.164 ng
RT: 5.363 min Scan# 316
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

Tgt Ion:112 Resp: 92
Ion Ratio Lower Upper
112 100
64 64.1 50.0 75.0
63 37.5 30.7 46.1

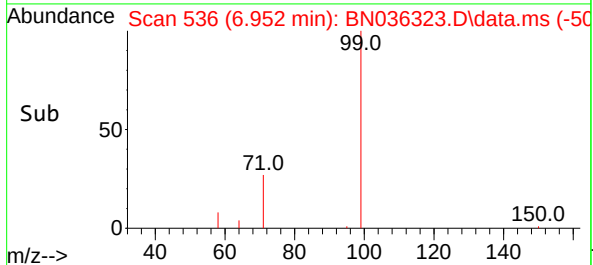
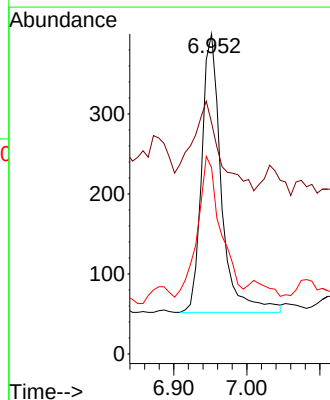
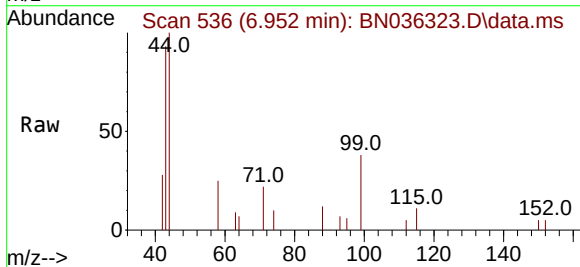
Manual Integrations
APPROVED

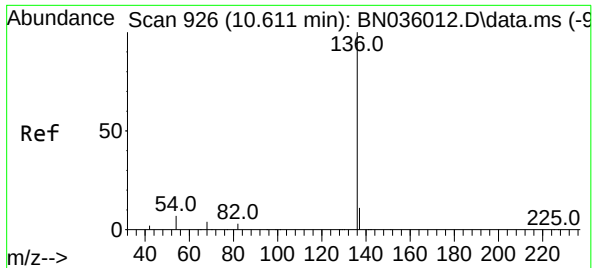
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#5
Phenol-d6
Concen: 0.098 ng
RT: 6.952 min Scan# 536
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

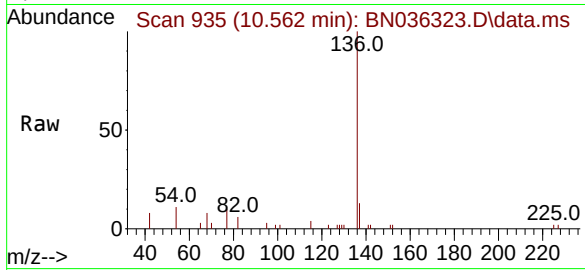
Tgt Ion: 99 Resp: 651
Ion Ratio Lower Upper
99 100
42 44.7 26.8 40.2#
71 60.8 36.6 55.0#





#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

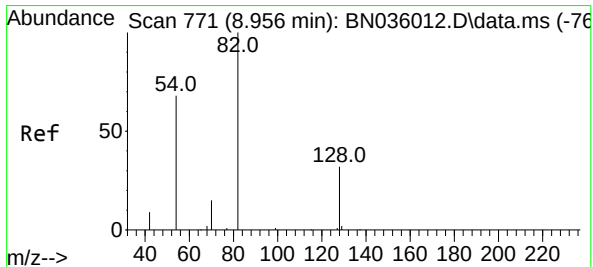
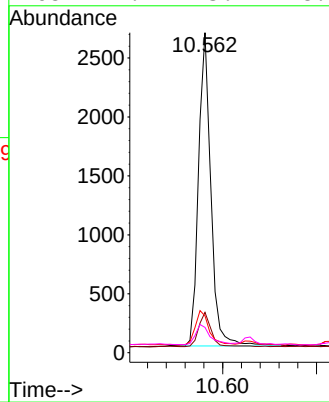
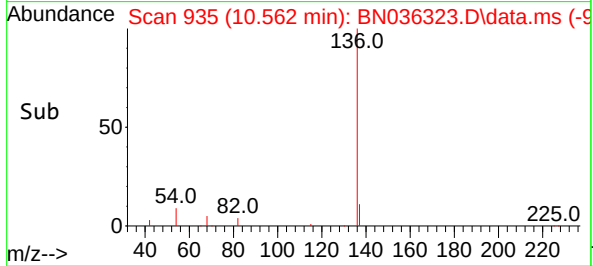
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502



Tgt Ion: 136 Resp: 487
Ion Ratio Lower Upper
136 100
137 12.6 10.4 15.6
54 11.5 7.7 11.5
68 7.9 5.4 8.0

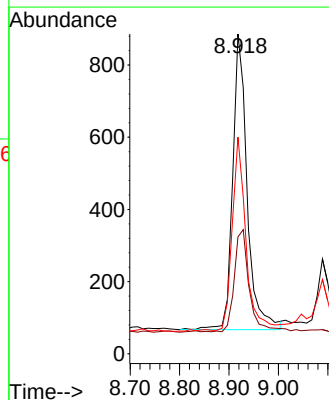
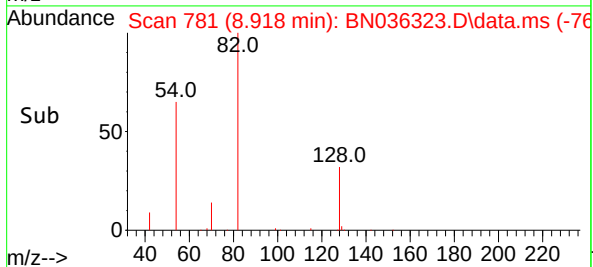
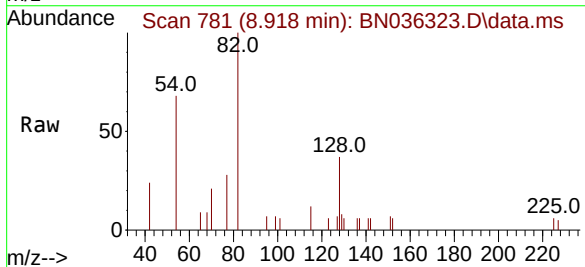
Manual Integrations
APPROVED

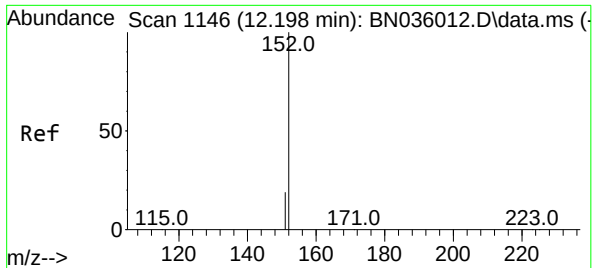
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#8
Nitrobenzene-d5
Concen: 0.362 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

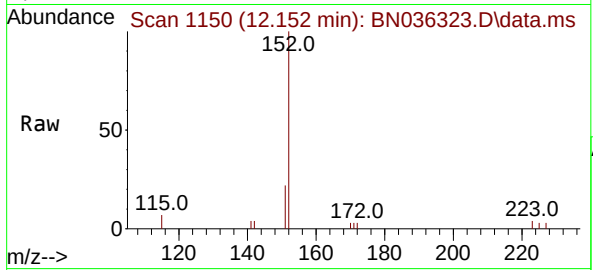
Tgt Ion: 82 Resp: 1663
Ion Ratio Lower Upper
82 100
128 36.6 28.8 43.2
54 67.7 55.8 83.8





#11
2-Methylnaphthalene-d10
Concen: 0.362 ng
RT: 12.152 min Scan# 1146
Delta R.T. -0.005 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

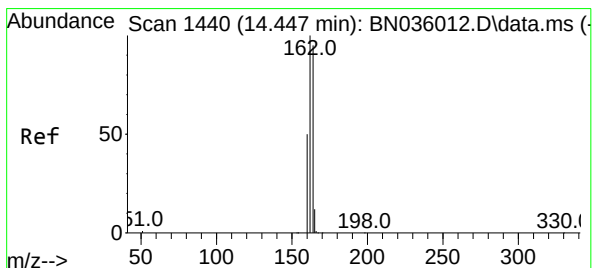
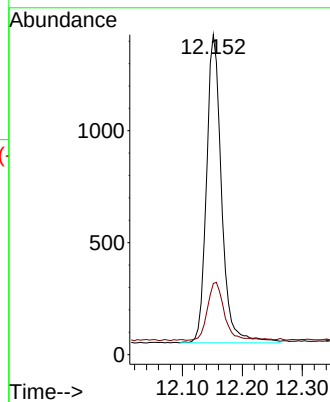
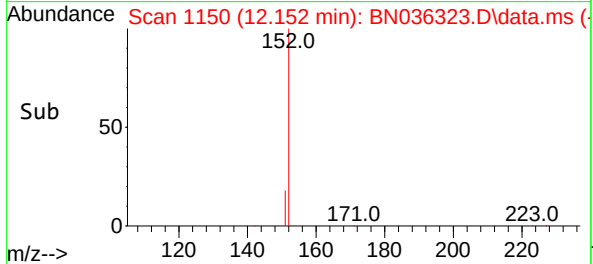
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502



Tgt Ion:152 Resp: 2398
Ion Ratio Lower Upper
152 100
151 21.0 16.6 25.0

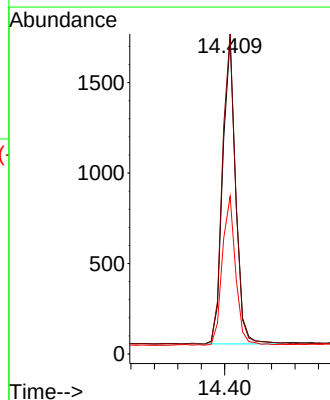
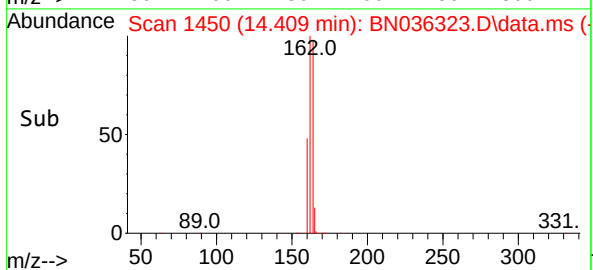
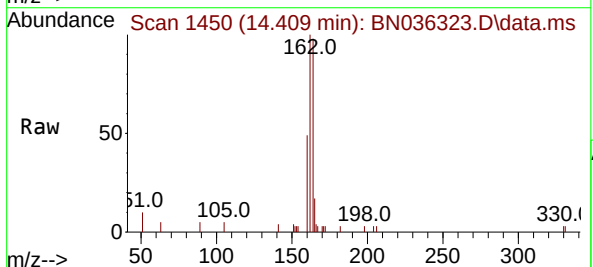
Manual Integrations
APPROVED

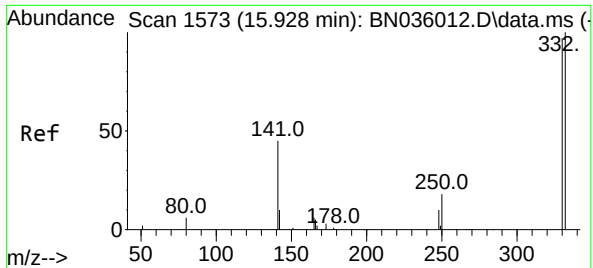
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 1450
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

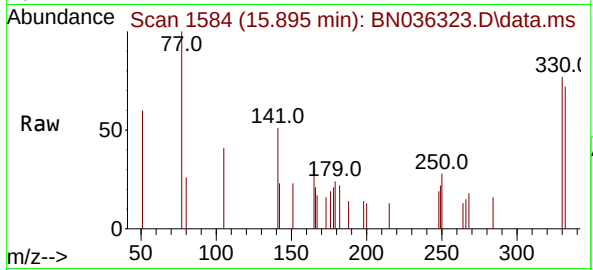
Tgt Ion:164 Resp: 2591
Ion Ratio Lower Upper
164 100
162 101.5 84.1 126.1
160 50.0 43.8 65.8





#14
2,4,6-Tribromophenol
Concen: 0.263 ng
RT: 15.895 min Scan# 1584
Delta R.T. -0.012 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

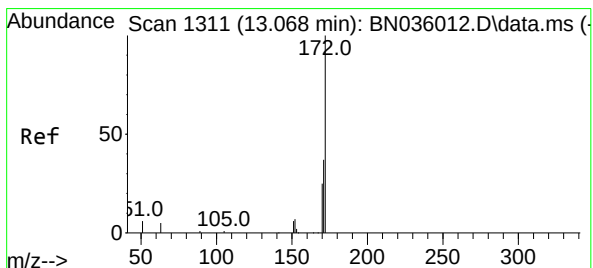
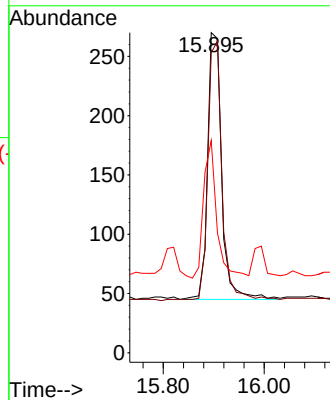
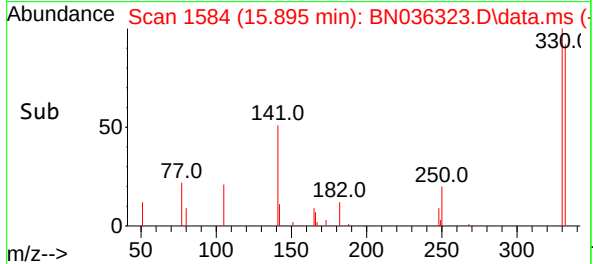
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502



Tgt Ion:330 Resp: 437
Ion Ratio Lower Upper
330 100
332 95.7 81.0 121.4
141 47.8 36.7 55.1

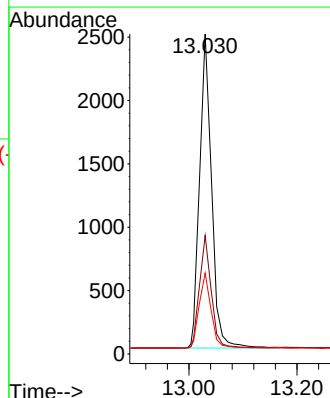
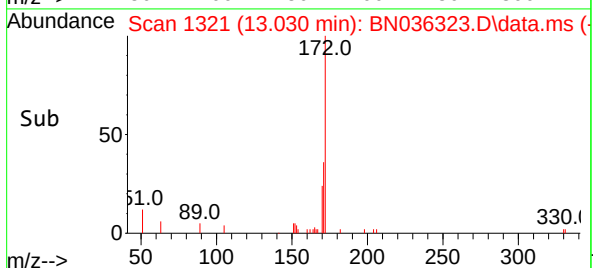
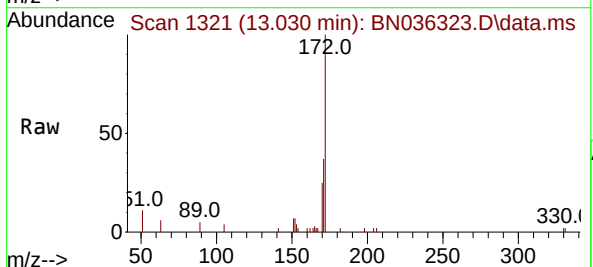
Manual Integrations
APPROVED

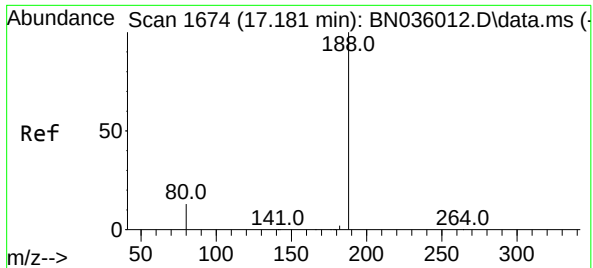
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#15
2-Fluorobiphenyl
Concen: 0.292 ng
RT: 13.030 min Scan# 1321
Delta R.T. -0.011 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion:172 Resp: 3375
Ion Ratio Lower Upper
172 100
171 37.0 30.9 46.3
170 25.3 21.2 31.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.149 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN036323.D

Acq: 06 Feb 2025 07:27

Instrument :

BNA_N

ClientSampleId :

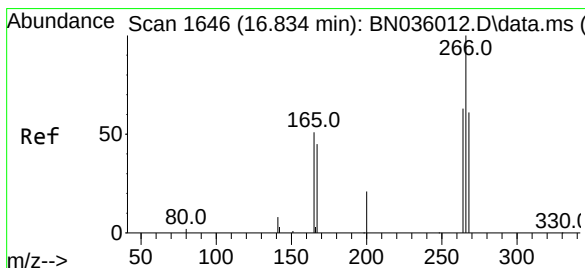
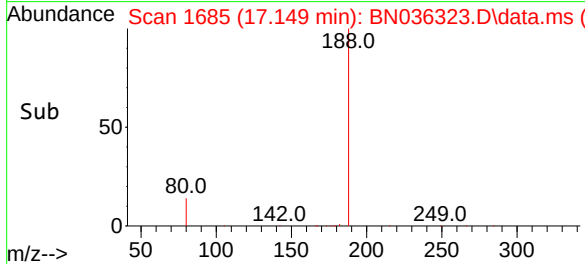
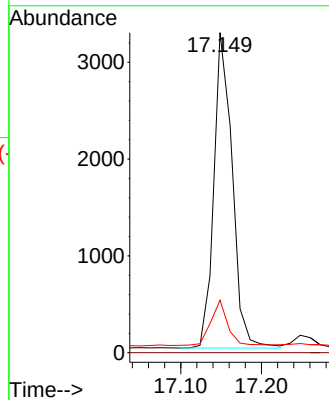
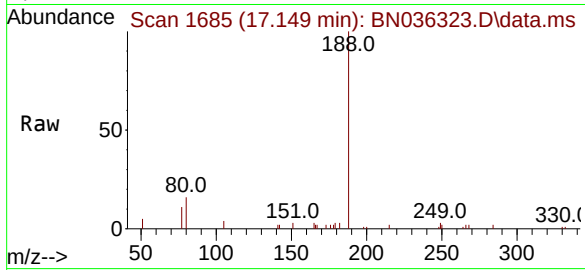
BP-VPB-192-GW-500-502

Tgt Ion:	188	Resp:	515
Ion Ratio	Lower	Upper	
188	100		
94	0.0	0.0	0.0
80	16.4	12.3	18.5

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#24

Pentachlorophenol

Concen: 0.486 ng

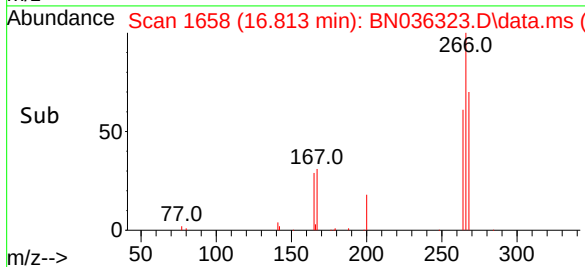
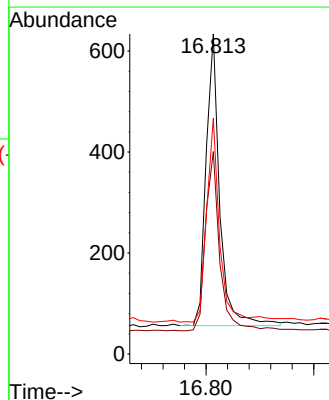
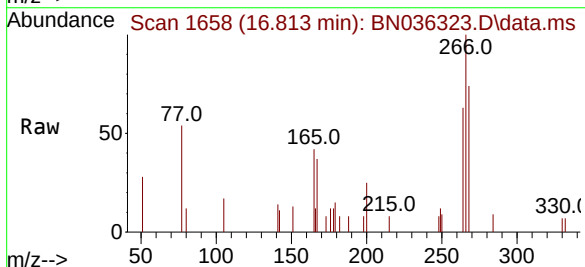
RT: 16.813 min Scan# 1658

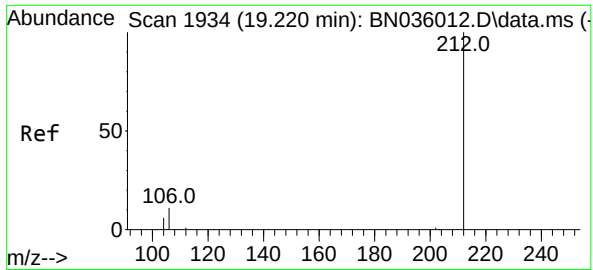
Delta R.T. 0.000 min

Lab File: BN036323.D

Acq: 06 Feb 2025 07:27

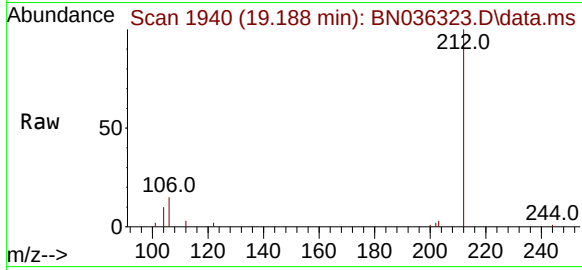
Tgt Ion:	266	Resp:	1017
Ion Ratio	Lower	Upper	
266	100		
264	63.8	48.2	72.2
268	67.8	51.6	77.4





#27
Fluoranthene-d10
Concen: 0.417 ng
RT: 19.188 min Scan# 1940
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

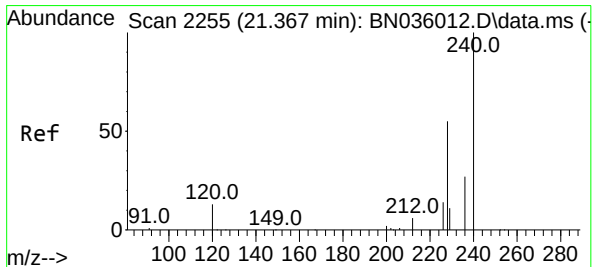
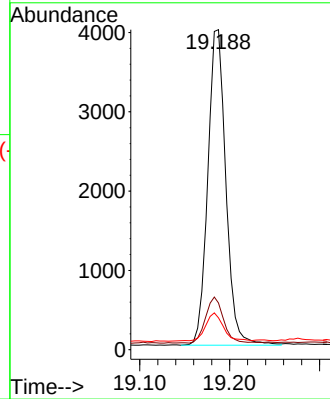
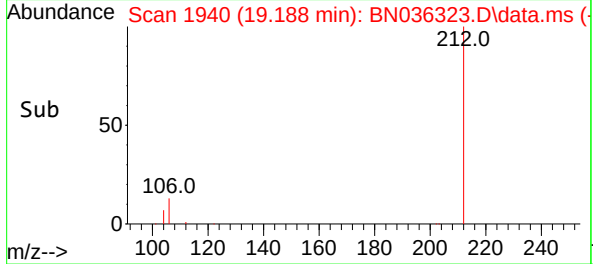
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502



Tgt Ion:212 Resp: 5569
Ion Ratio Lower Upper
212 100
106 14.1 9.7 14.5
104 9.0 6.0 9.0

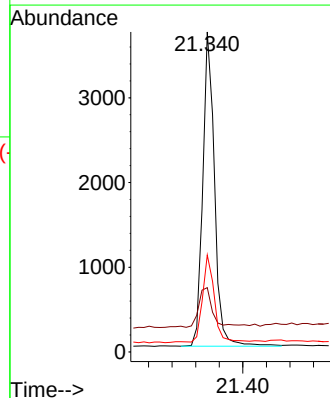
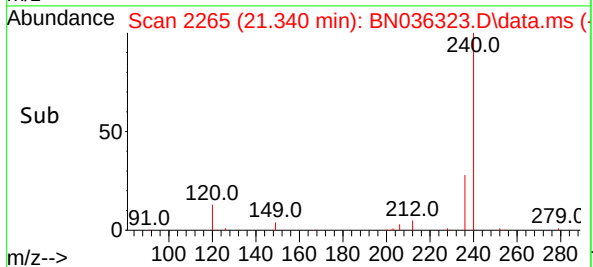
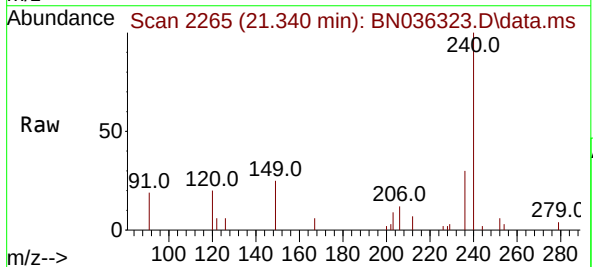
Manual Integrations
APPROVED

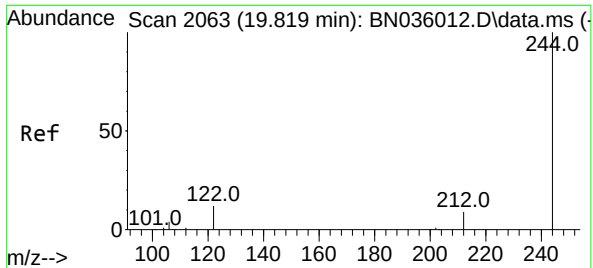
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.340 min Scan# 2265
Delta R.T. -0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

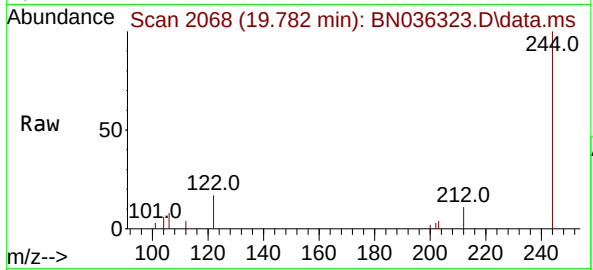
Tgt Ion:240 Resp: 5130
Ion Ratio Lower Upper
240 100
120 20.1 13.9 20.9
236 30.3 23.7 35.5





#31
Terphenyl-d14
Concen: 0.395 ng
RT: 19.782 min Scan# 2063
Delta R.T. -0.009 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

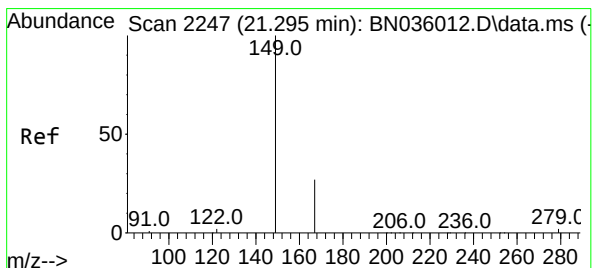
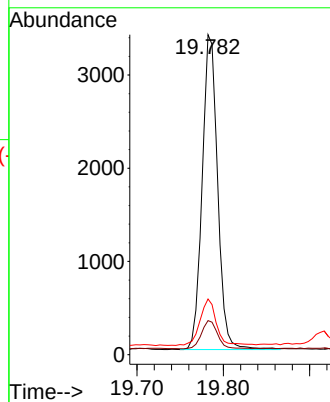
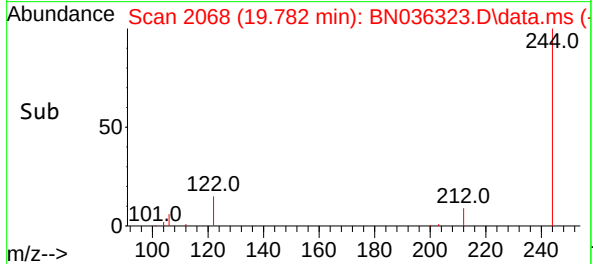
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502



Tgt Ion:244 Resp: 420
Ion Ratio Lower Upper
244 100
212 10.7 9.1 13.7
122 17.4 11.3 16.9

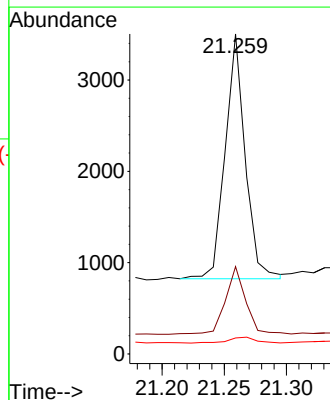
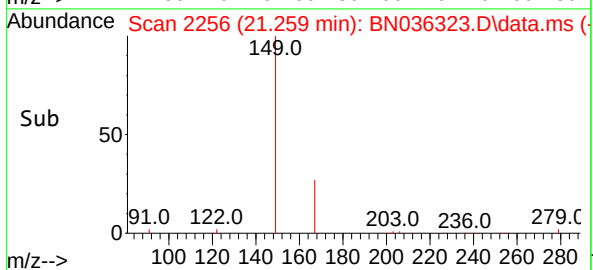
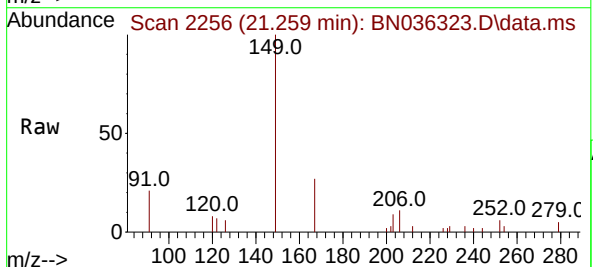
Manual Integrations
APPROVED

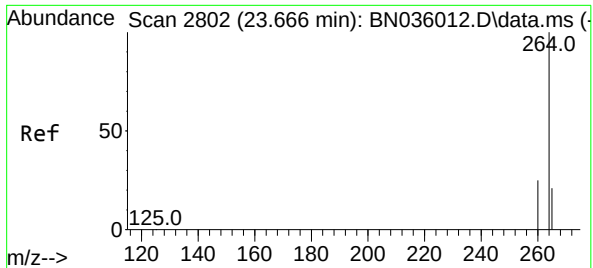
Reviewed By :Jagrut Upadhyay 02/06/2025
Supervised By :mohammad ahmed 02/07/2025



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.295 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion:149 Resp: 3005
Ion Ratio Lower Upper
149 100
167 28.1 21.9 32.9
279 3.2 3.0 4.6





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.625 min Scan# 24

Delta R.T. -0.003 min

Lab File: BN036323.D

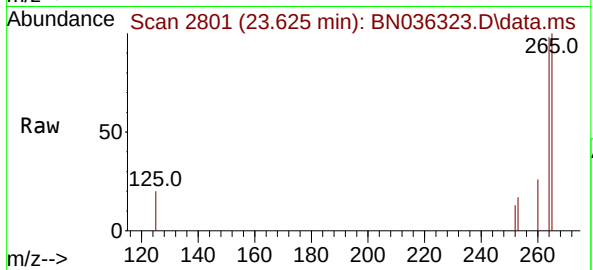
Acq: 06 Feb 2025 07:27

Instrument :

BNA_N

ClientSampleId :

BP-VPB-192-GW-500-502



Tgt Ion:264 Resp: 5430

Ion Ratio Lower Upper

264 100

260 26.5 21.8 32.6

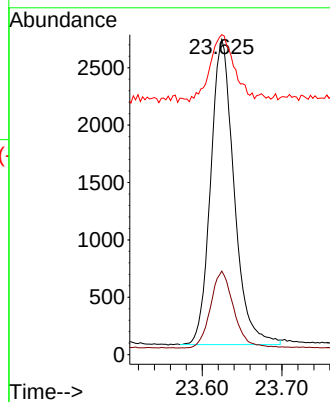
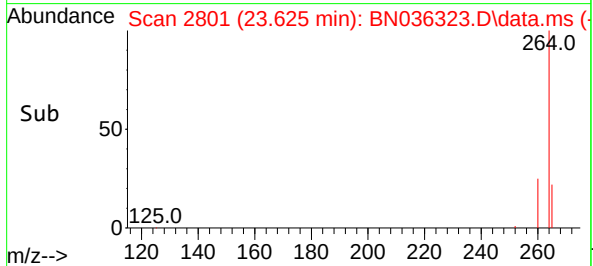
265 101.6 56.6 84.8

Manual Integrations

APPROVED

Reviewed By :Jagrut Upadhyay 02/06/2025

Supervised By :mohammad ahmed 02/07/2025





CALIBRATION SUMMARY

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) SURR	2-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)

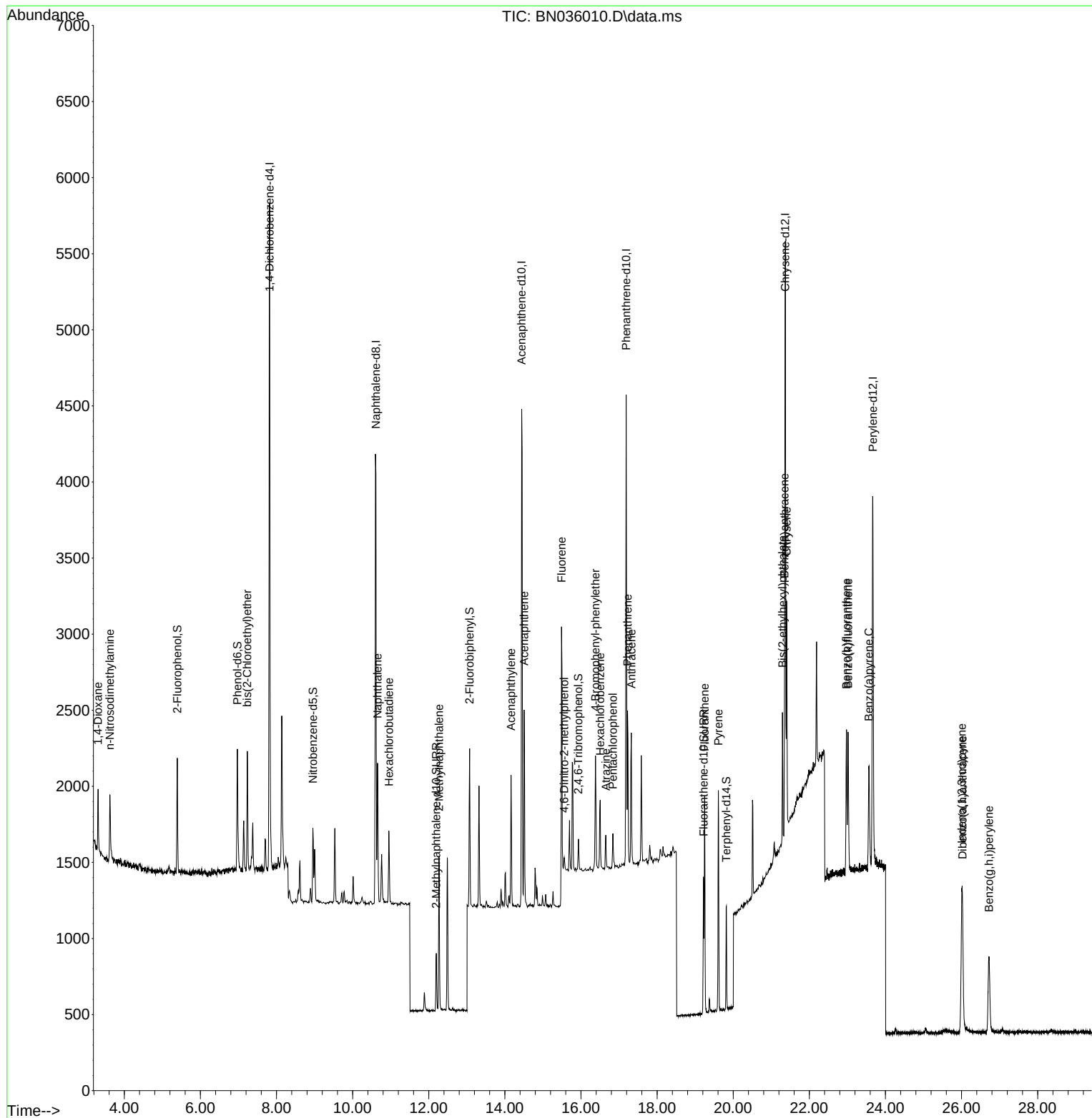
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2035	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3938	0.400	ng	0.00
13) Acenaphthene-d10	14.441	164	1936	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3874	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	3177	0.400	ng	0.00
35) Perylene-d12	23.666	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						Qvalue
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

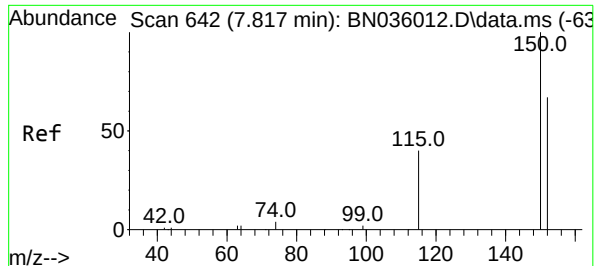
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

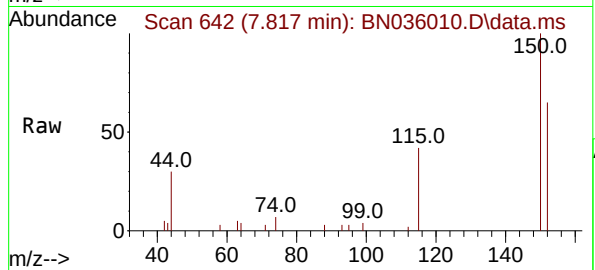
Quant Time: Jan 23 00:27:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration



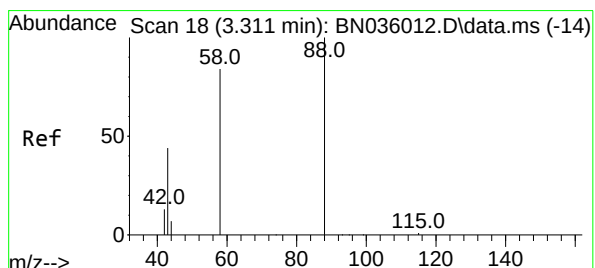
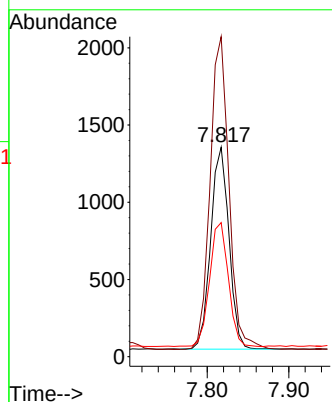
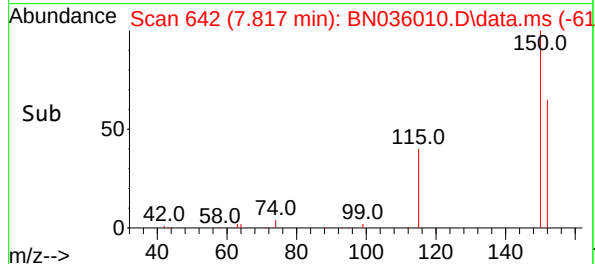


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

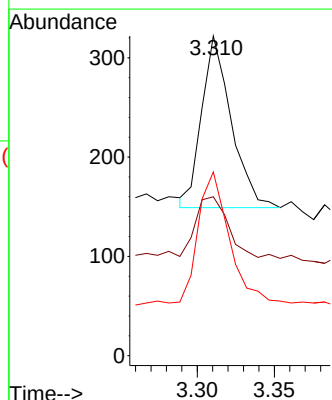
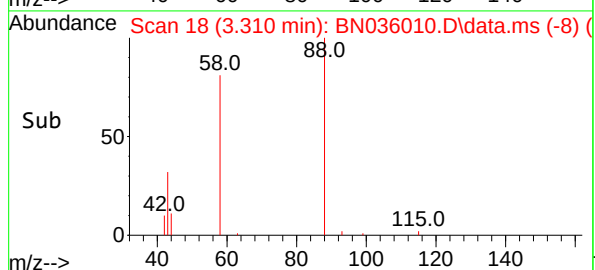
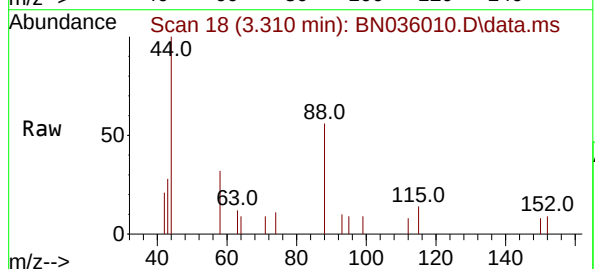


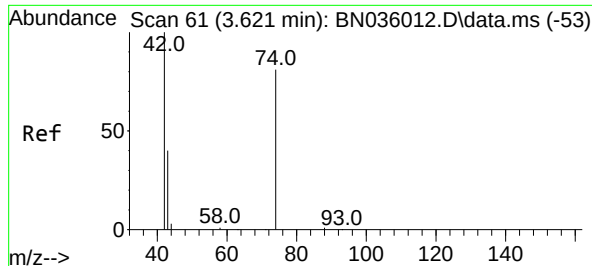
Tgt Ion:152 Resp: 2035
Ion Ratio Lower Upper
152 100
150 152.8 117.4 176.2
115 64.0 51.0 76.4



#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

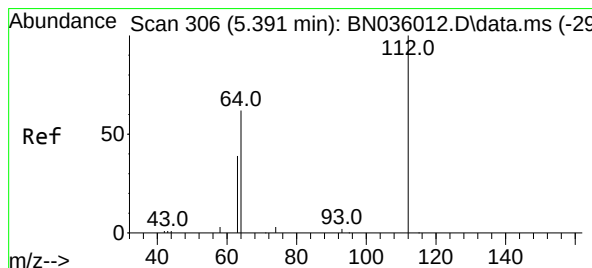
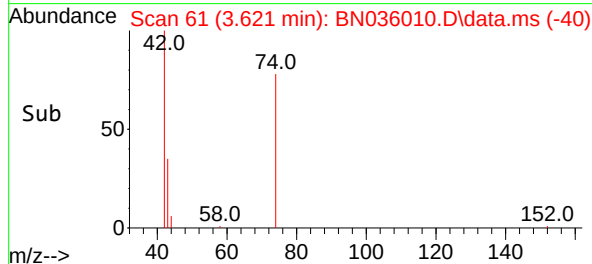
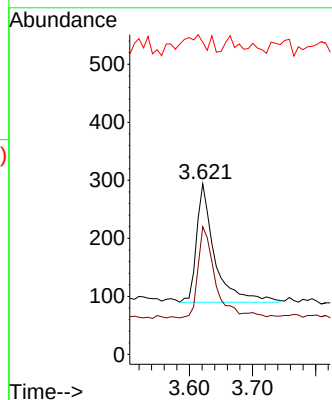
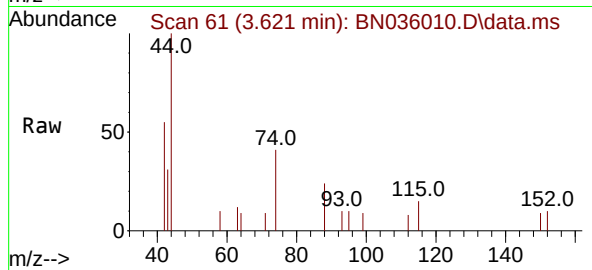




#3
n-Nitrosodimethylamine
Concen: 0.098 ng
RT: 3.621 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

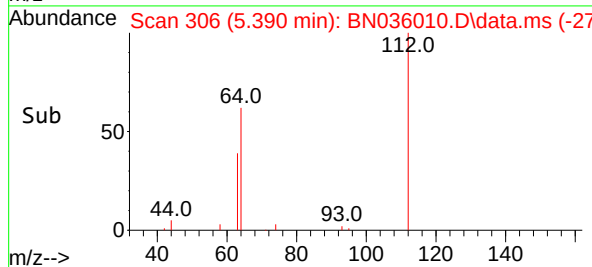
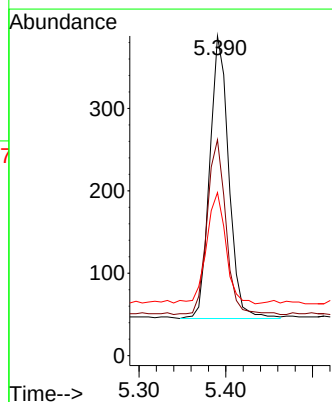
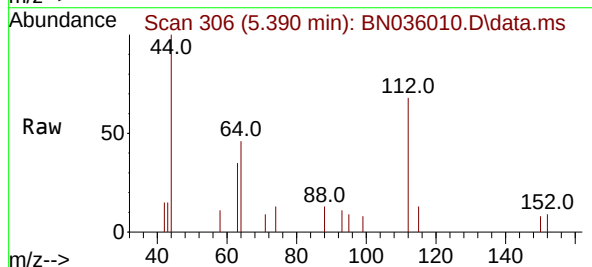
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

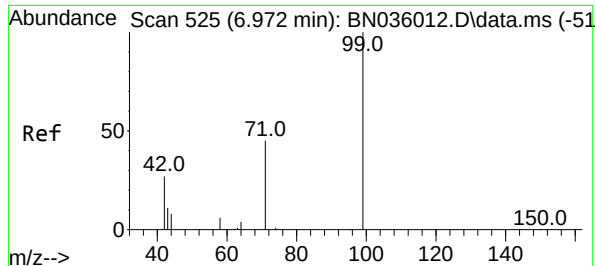
Tgt Ion: 42 Resp: 406
Ion Ratio Lower Upper
42 100
74 70.9 58.1 87.1
44 14.5 6.2 9.4#



#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

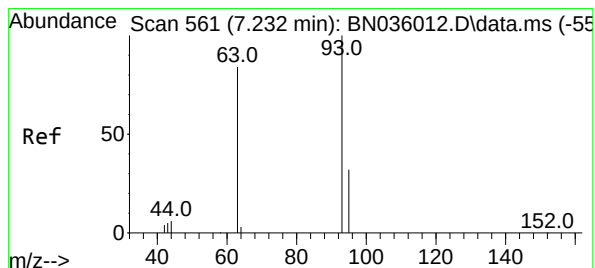
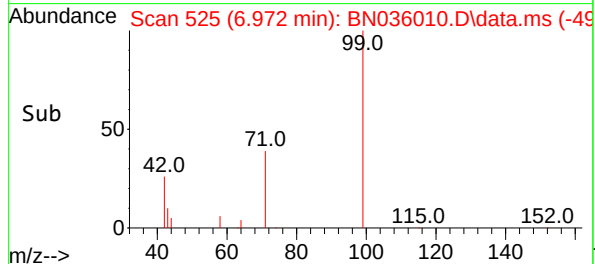
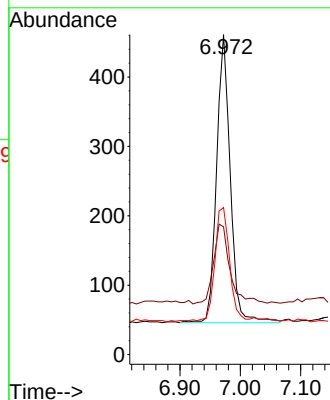
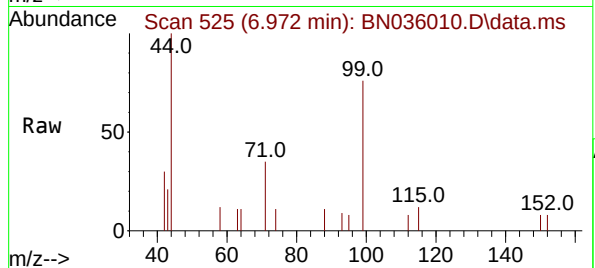




#5
Phenol-d6
Concen: 0.105 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

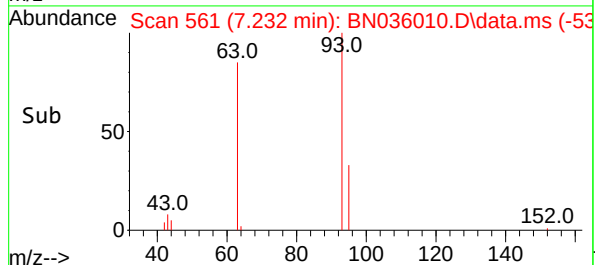
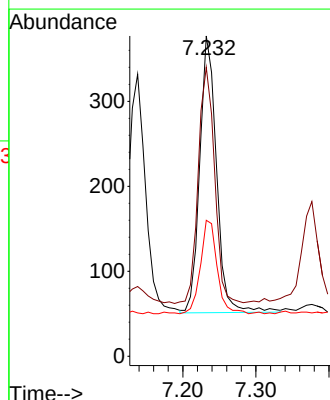
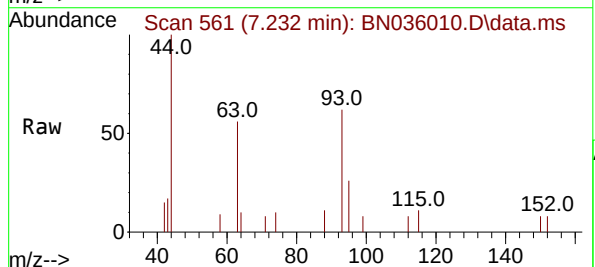
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

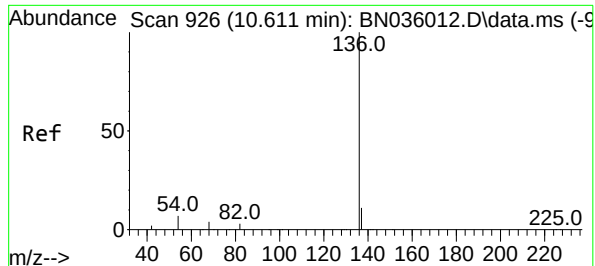
Tgt Ion: 99 Resp: 653
Ion Ratio Lower Upper
99 100
42 33.1 26.8 40.2
71 44.0 36.6 55.0



#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

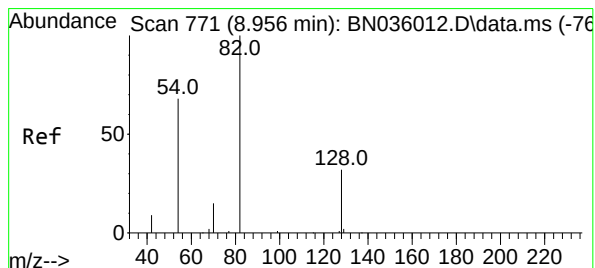
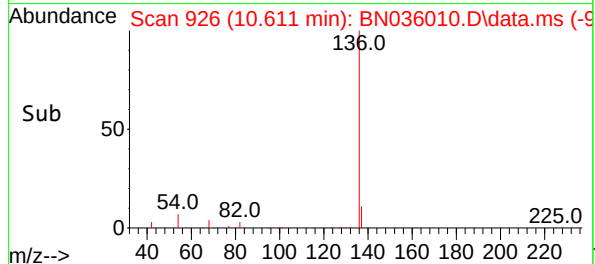
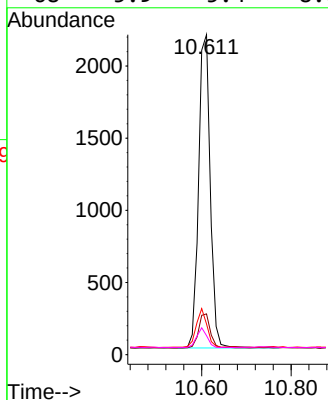
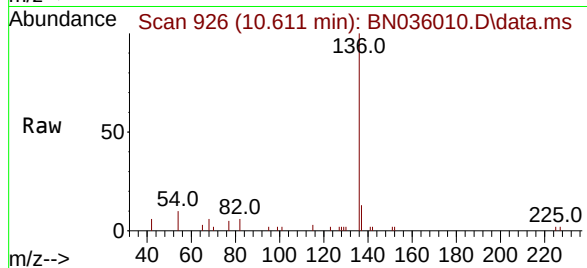




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.611 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

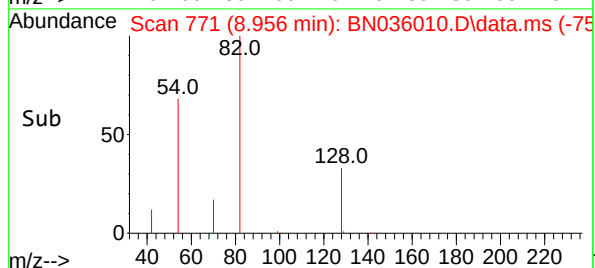
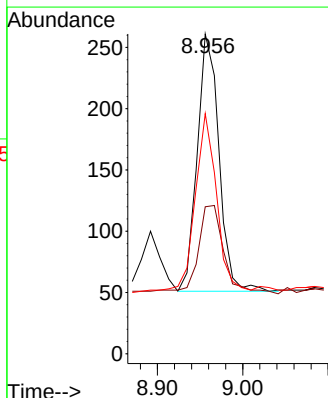
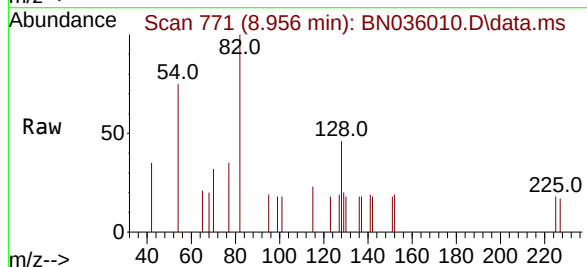
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

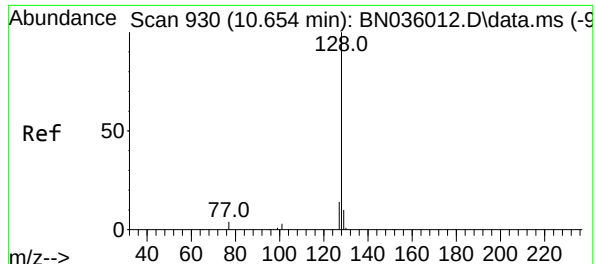
Tgt Ion:	136	Resp:	3938
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.4	15.6
54	9.6	7.7	11.5
68	5.9	5.4	8.0



#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

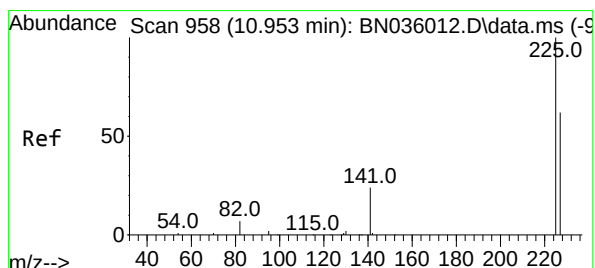
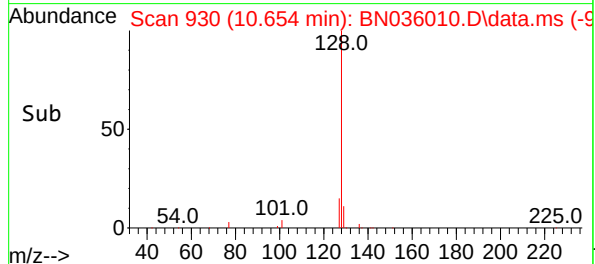
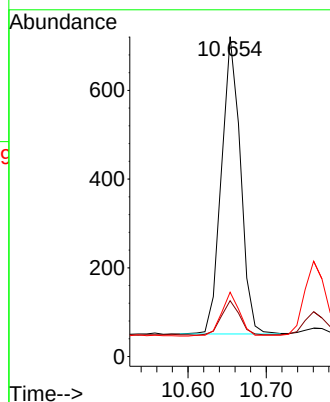
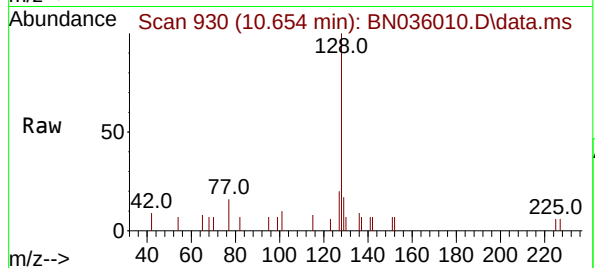




#9
Naphthalene
Concen: 0.099 ng
RT: 10.654 min Scan# 910
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

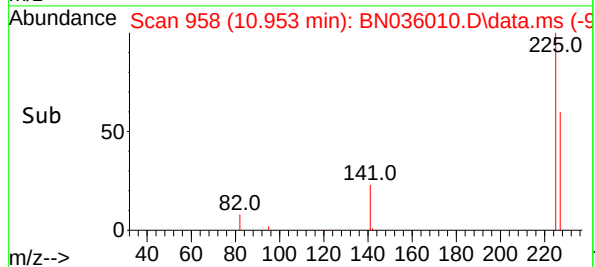
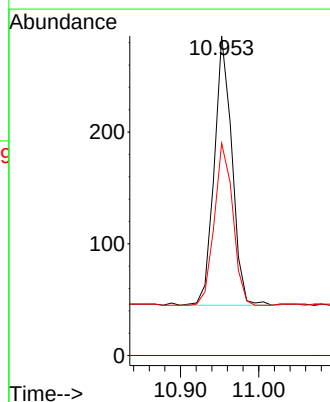
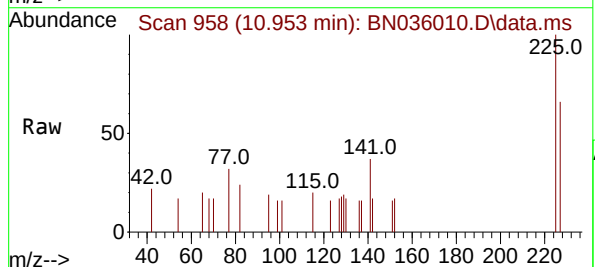
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

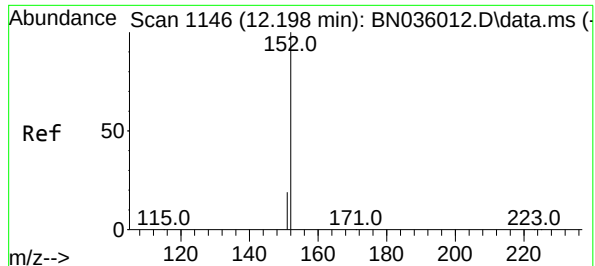
Tgt Ion:128 Resp: 1131
Ion Ratio Lower Upper
128 100
129 17.5 9.4 14.2#
127 20.1 12.6 19.0#



#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

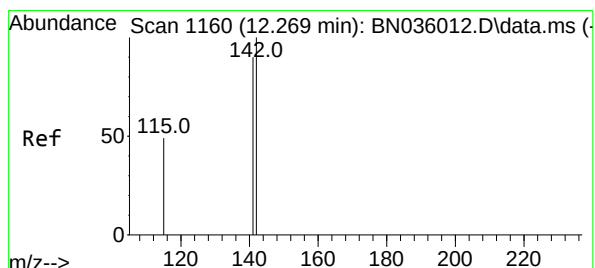
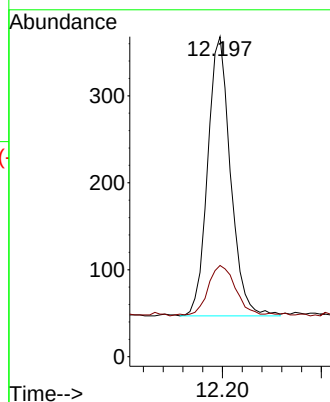
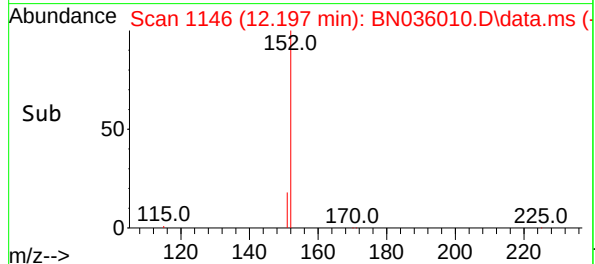
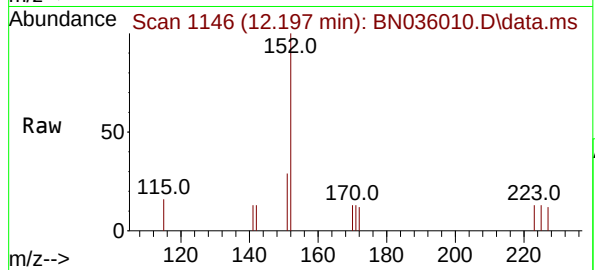




#11
2-Methylnaphthalene-d10
Concen: 0.096 ng
RT: 12.197 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

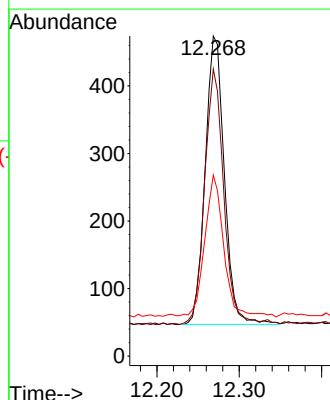
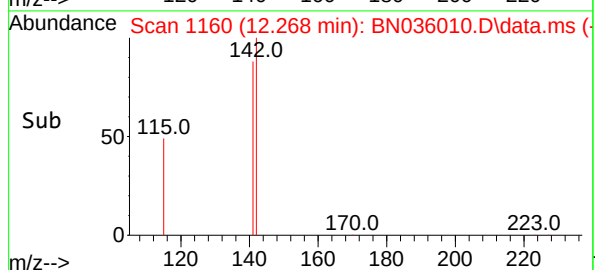
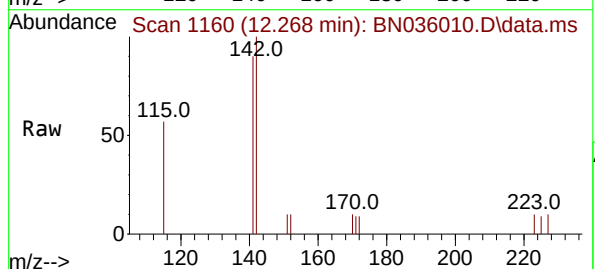
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

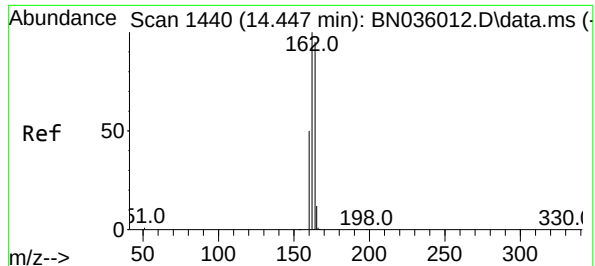
Tgt Ion:152 Resp: 514
Ion Ratio Lower Upper
152 100
151 22.0 16.6 25.0



#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

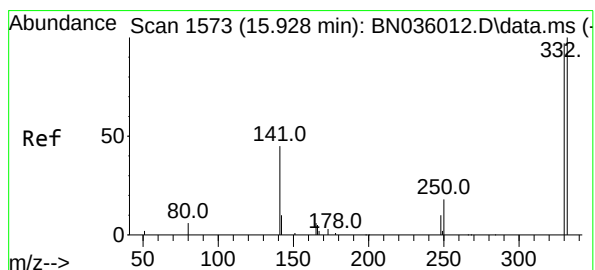
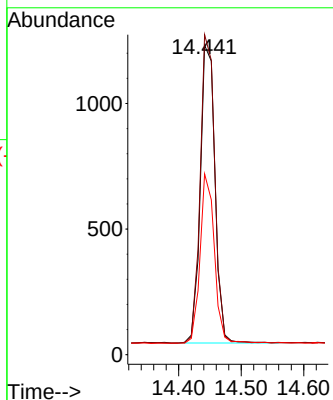
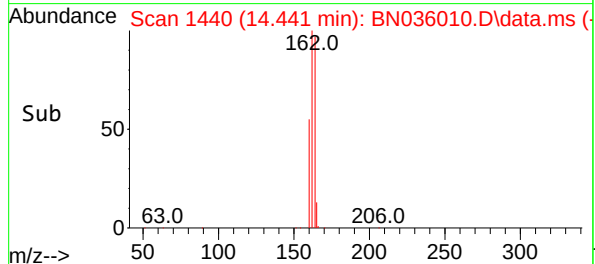
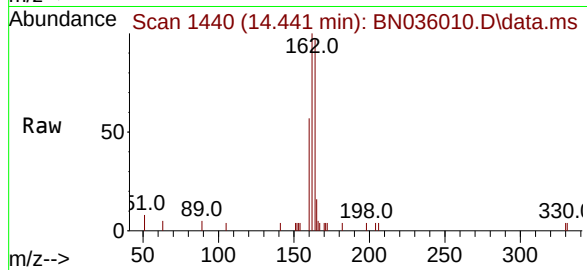




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

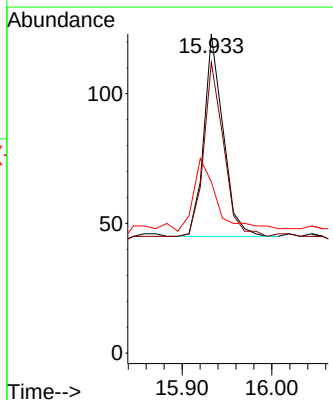
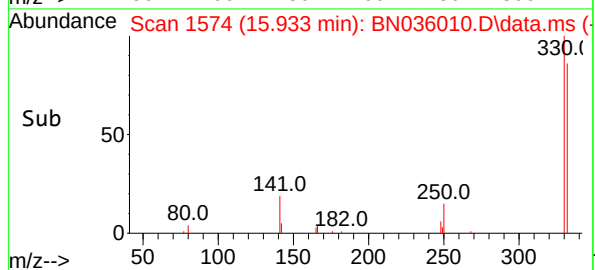
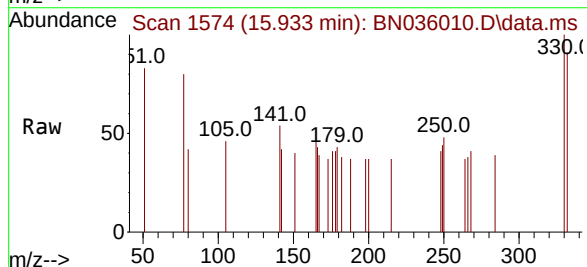
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

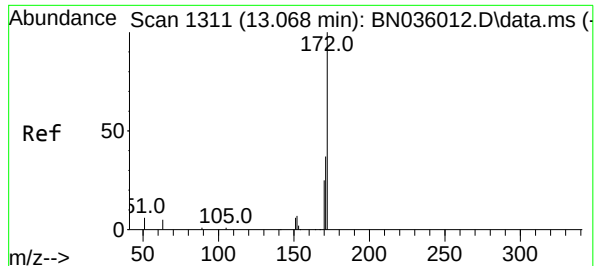
Tgt Ion:164 Resp: 1936
Ion Ratio Lower Upper
164 100
162 103.4 84.1 126.1
160 58.4 43.8 65.8



#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

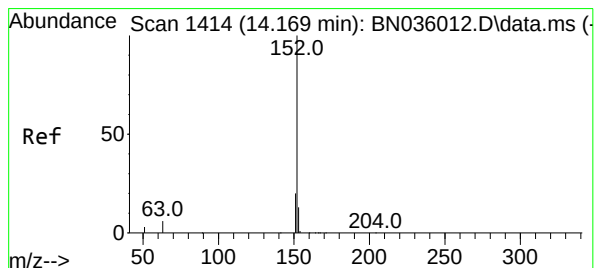
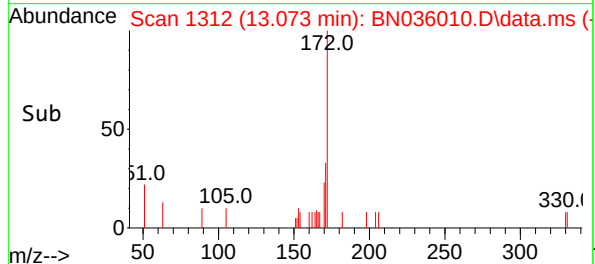
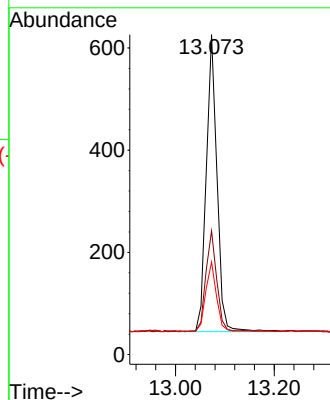
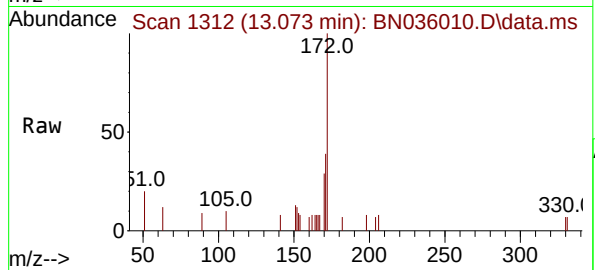




#15
2-Fluorobiphenyl
Concen: 0.101 ng
RT: 13.073 min Scan# 1311
Delta R.T. 0.005 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

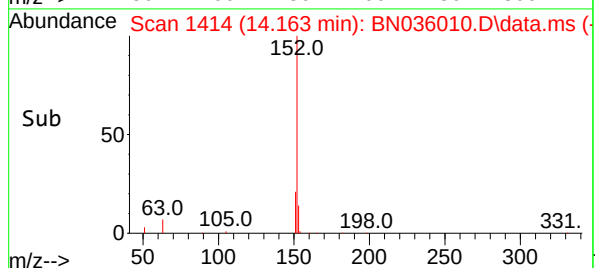
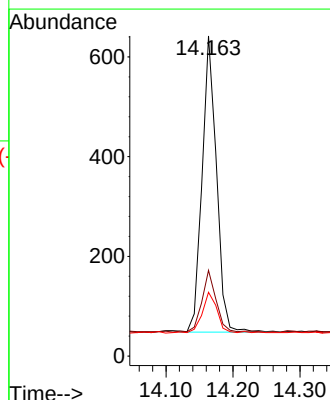
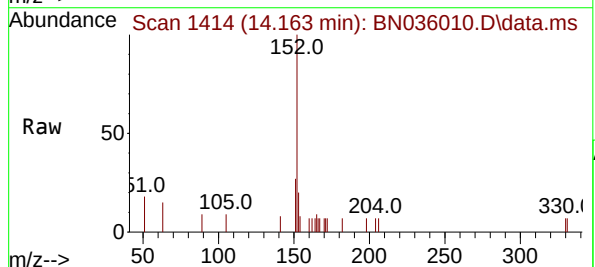
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

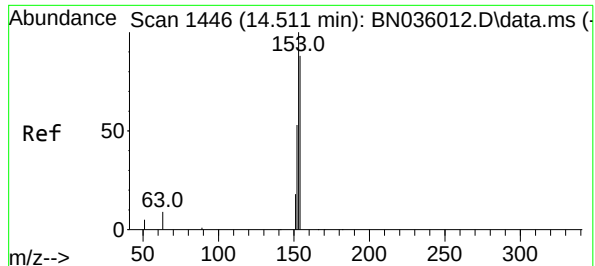
Tgt Ion	Ratio	Lower	Upper
172	100		
171	38.7	30.9	46.3
170	28.9	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	21.3	16.2	24.2
153	14.0	10.4	15.6

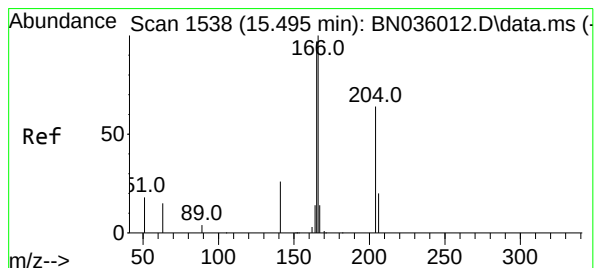
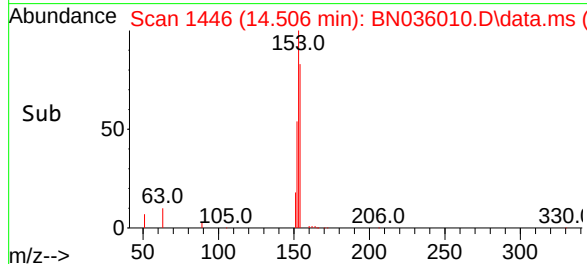
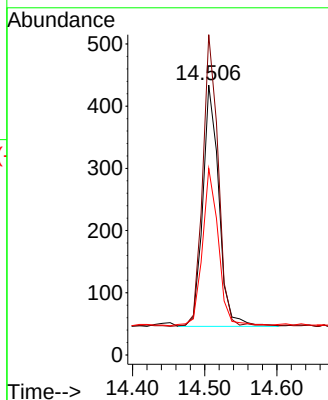
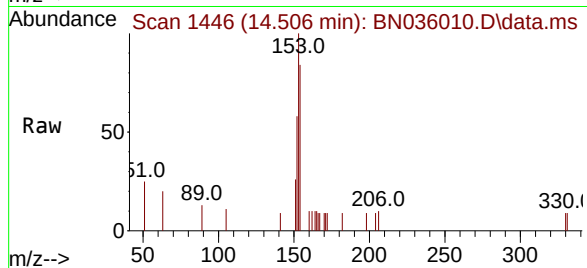




#17
Acenaphthene
Concen: 0.096 ng
RT: 14.506 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

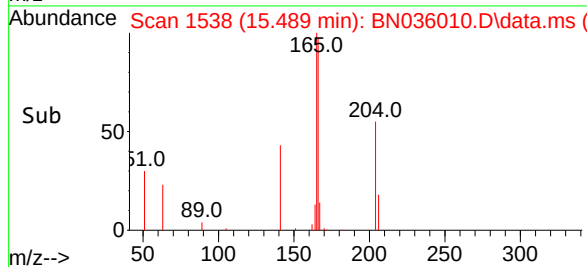
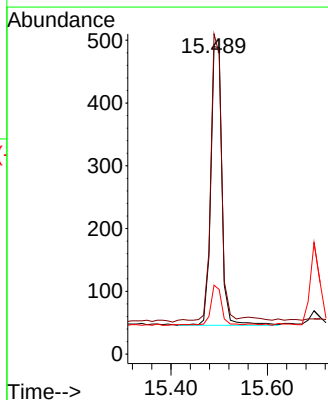
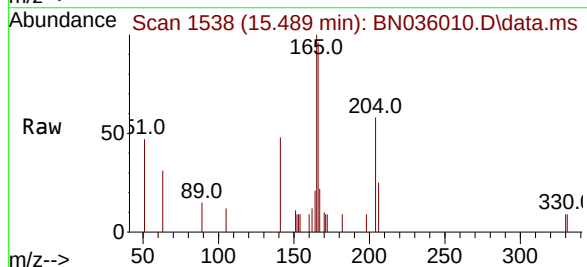
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

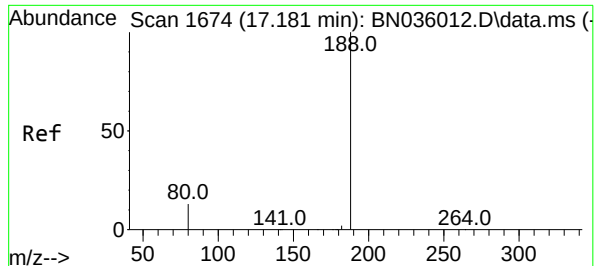
Tgt Ion	154	153	152
Resp:	604		
Ratio	100	116.6	64.2
Lower		88.9	48.1
Upper		133.3	72.1



#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	165	167
Resp:	766		
Ratio	100	94.9	13.7
Lower		78.5	10.7
Upper		117.7	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

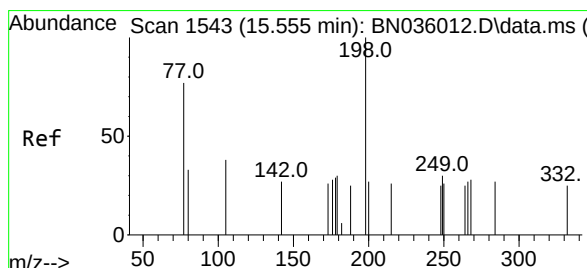
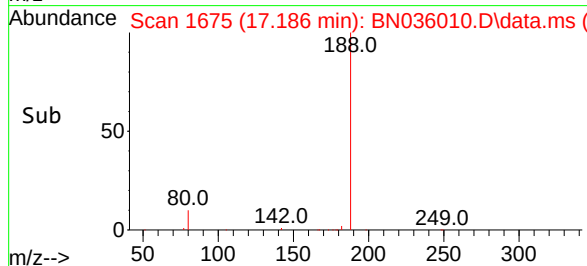
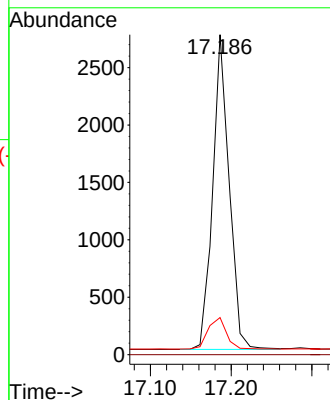
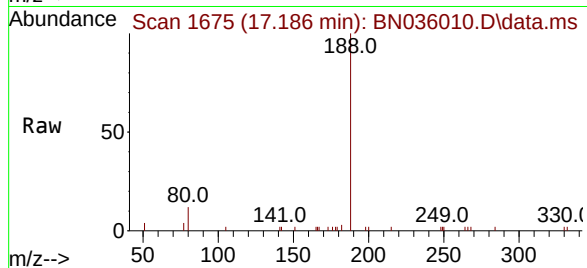
Tgt Ion:188 Resp: 3874

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

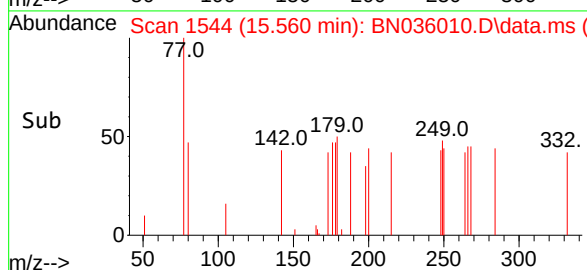
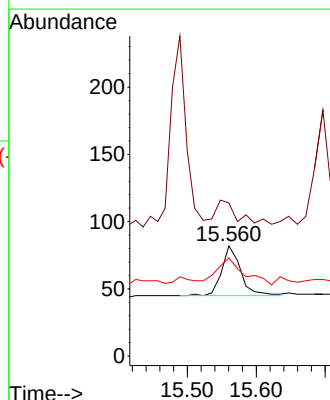
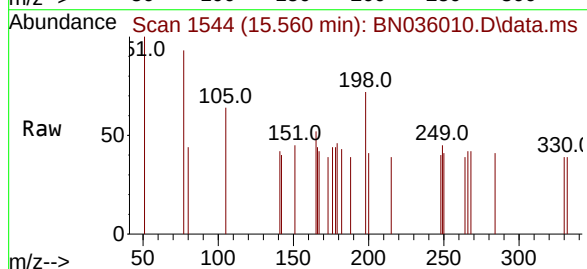
Tgt Ion:198 Resp: 69

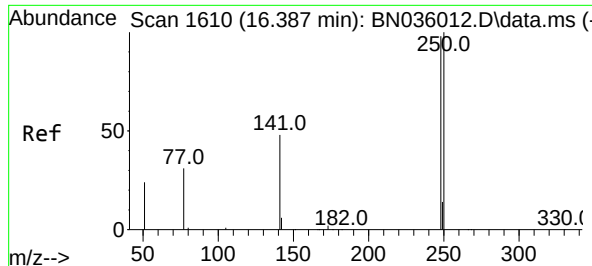
Ion Ratio Lower Upper

198 100

51 139.0 68.1 102.1#

105 89.0 46.5 69.7#

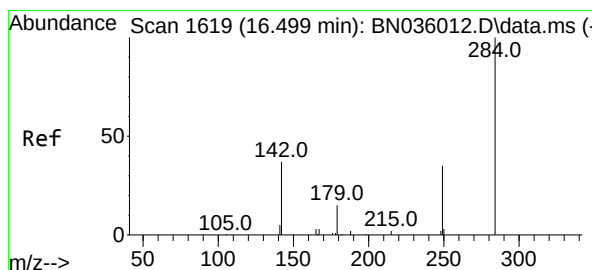
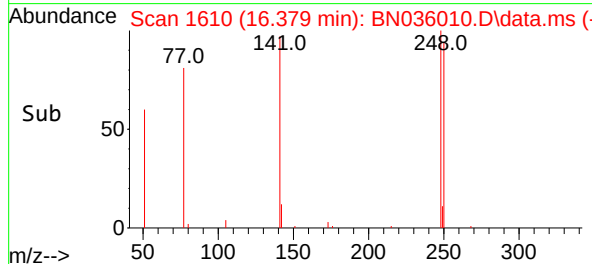
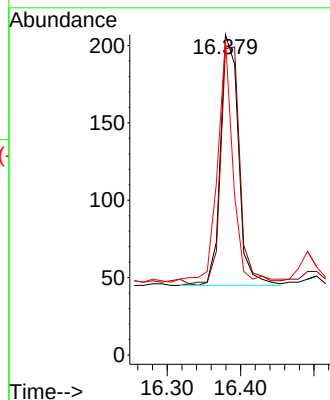
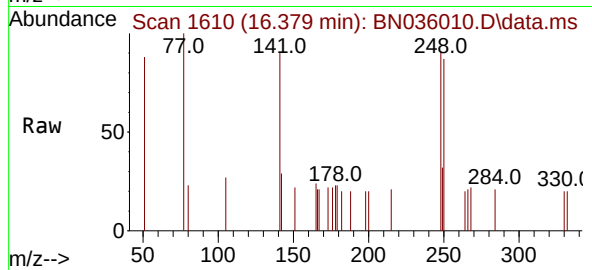




#21
4-Bromophenyl-phenylether
Concen: 0.100 ng
RT: 16.379 min Scan# 1620
Delta R.T. -0.007 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

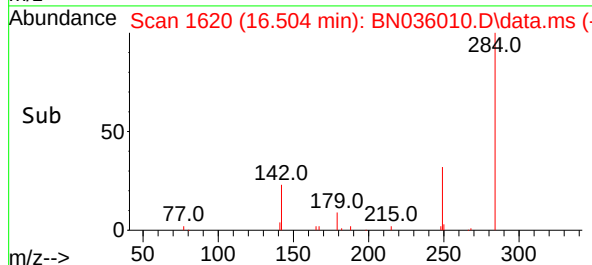
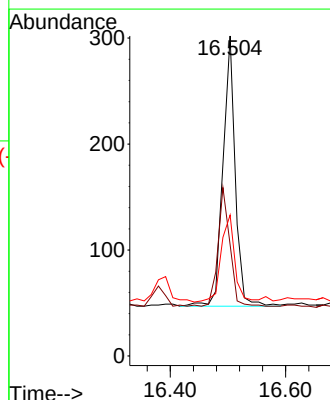
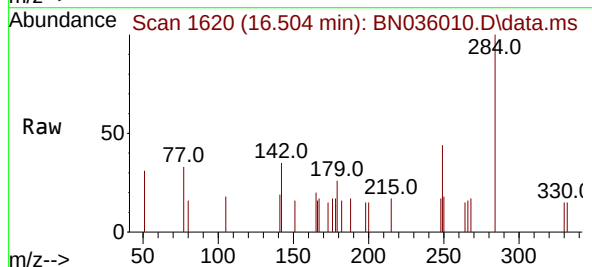
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

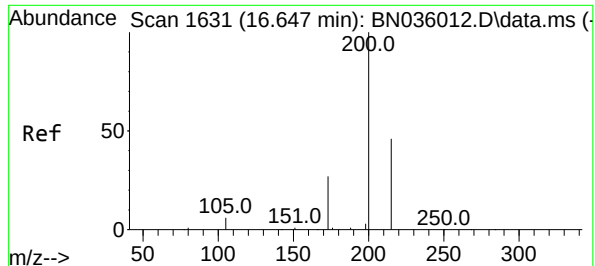
Tgt Ion:248 Resp: 276
Ion Ratio Lower Upper
248 100
250 95.7 81.5 122.3
141 98.6 41.8 62.6#



#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

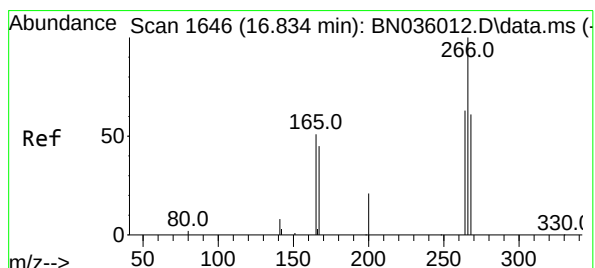
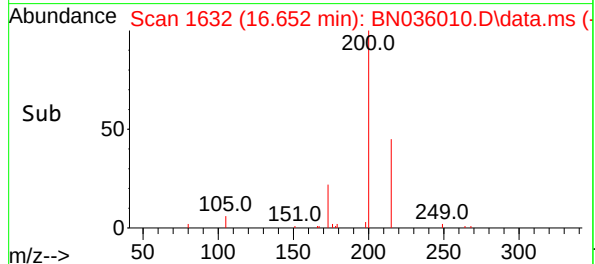
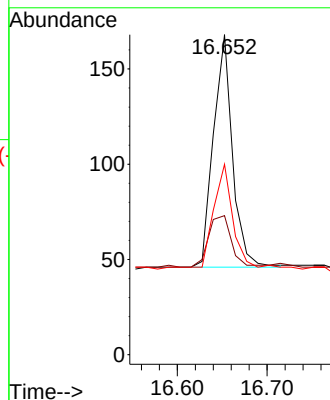
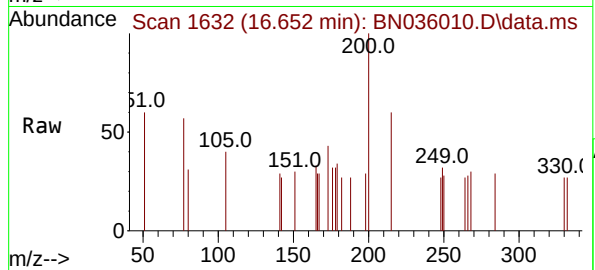




#23
Atrazine
Concen: 0.090 ng
RT: 16.652 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

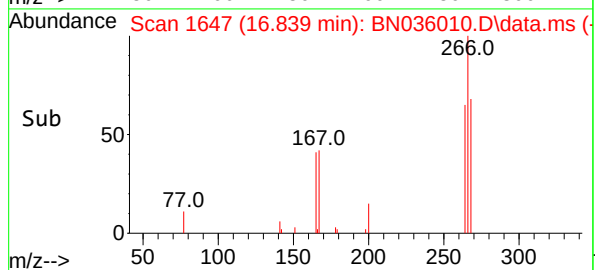
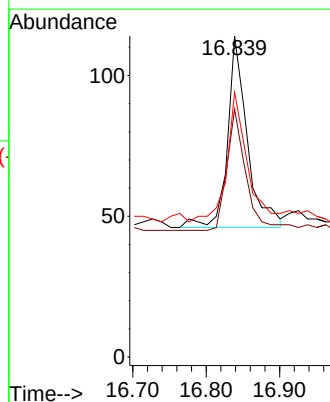
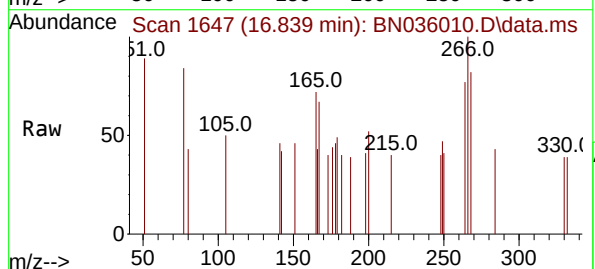
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

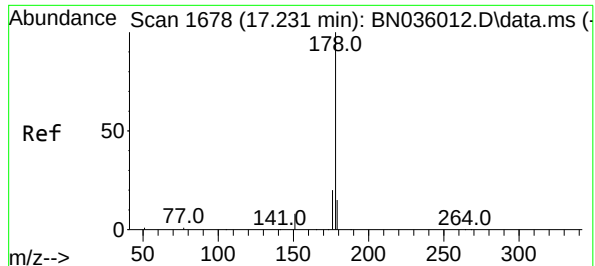
Tgt Ion:200 Resp: 179
Ion Ratio Lower Upper
200 100
173 43.5 26.6 40.0#
215 59.5 40.6 61.0



#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

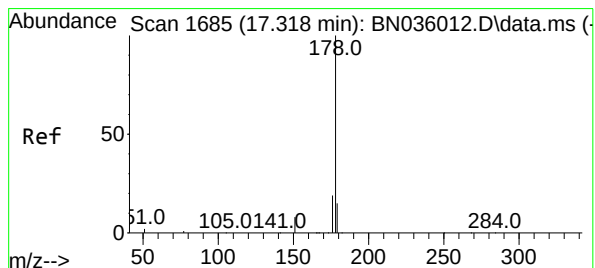
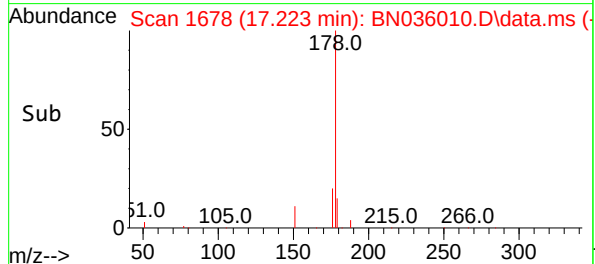
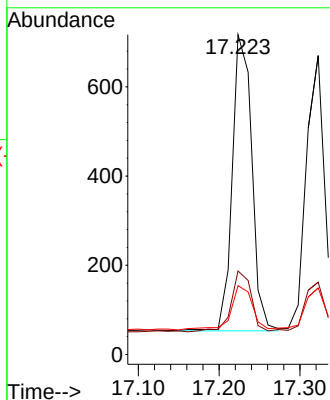
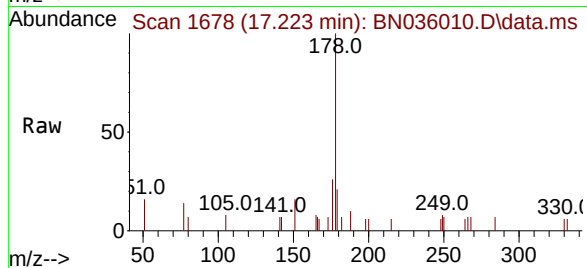




#25
Phenanthrene
Concen: 0.096 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.007 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

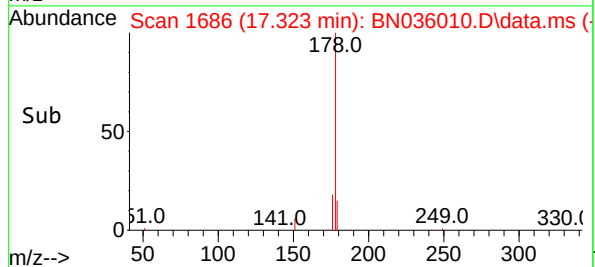
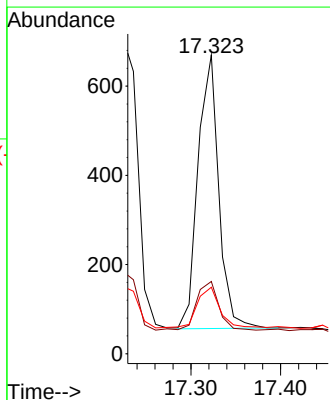
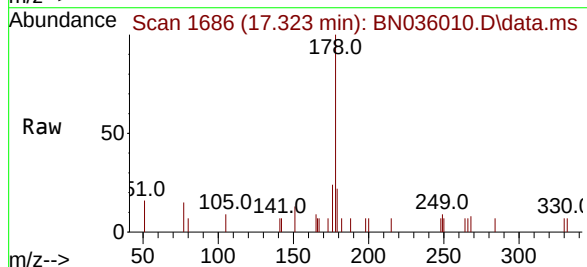
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

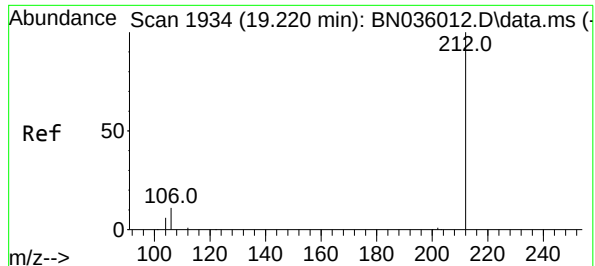
Tgt Ion:178 Resp: 1118
Ion Ratio Lower Upper
178 100
176 21.4 16.0 24.0
179 16.7 12.4 18.6



#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

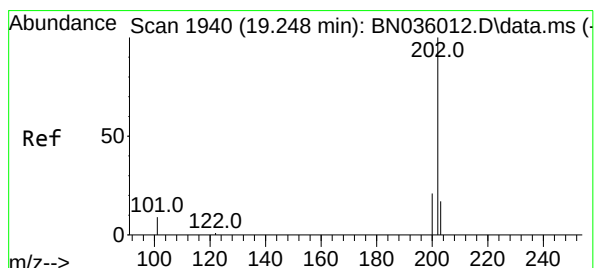
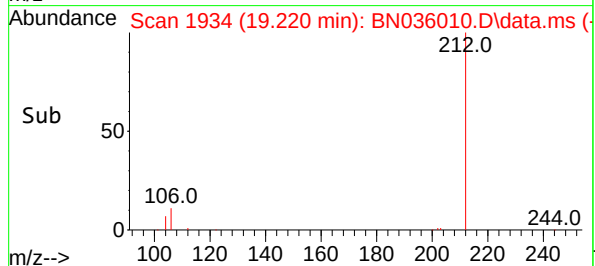
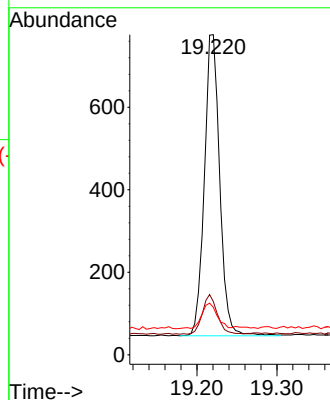
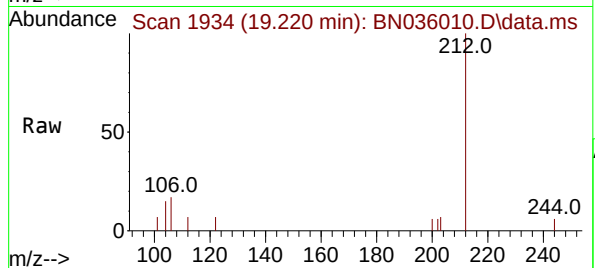
Tgt Ion:212 Resp: 973

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

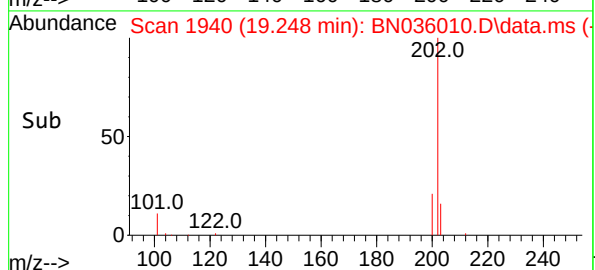
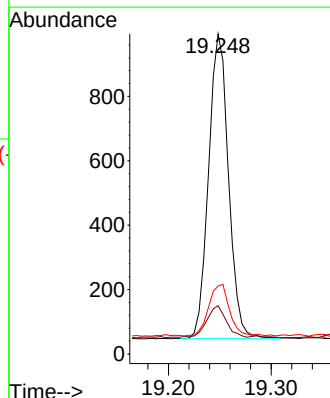
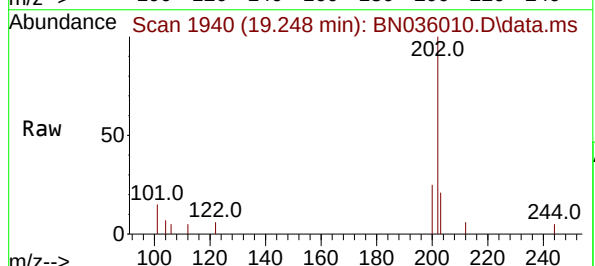
Tgt Ion:202 Resp: 1271

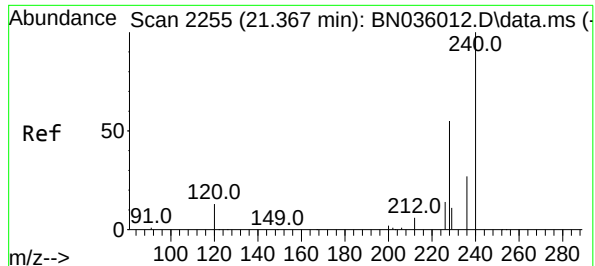
Ion Ratio Lower Upper

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 :

SSTDICC0.1

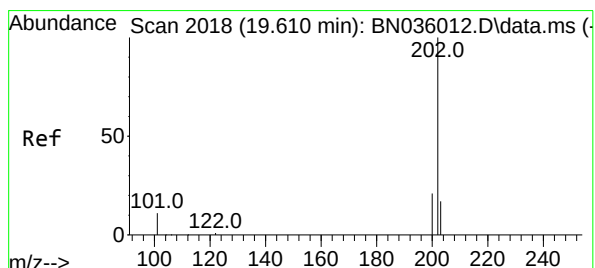
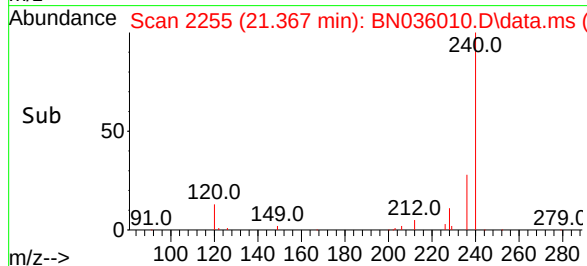
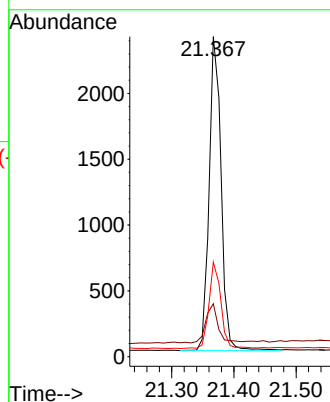
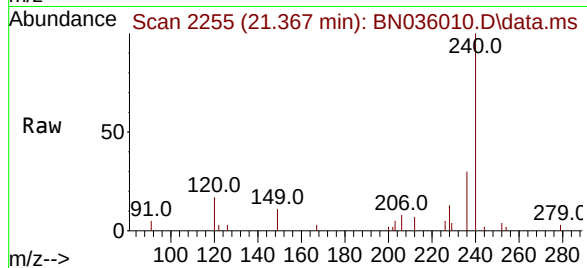
Tgt Ion:240 Resp: 3177

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

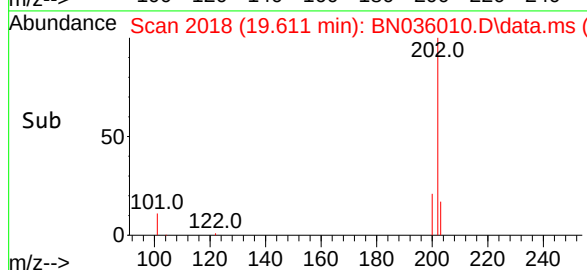
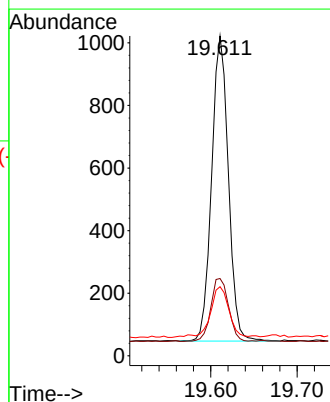
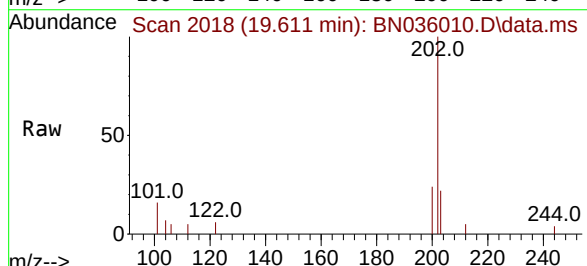
Tgt Ion:202 Resp: 1316

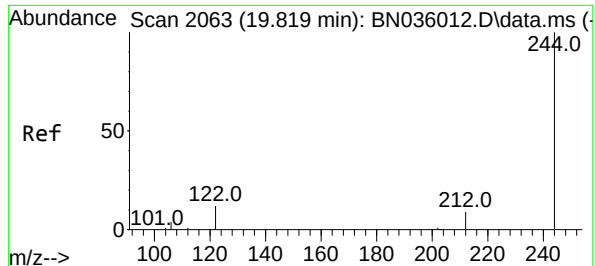
Ion Ratio Lower Upper

202 100

200 21.9 17.0 25.4

203 18.2 14.4 21.6

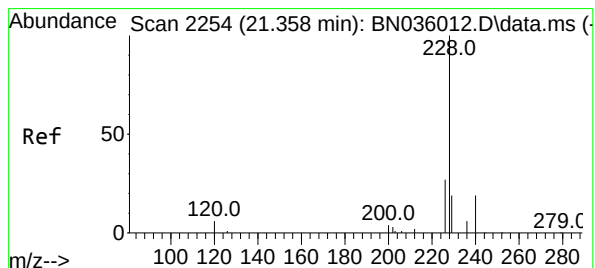
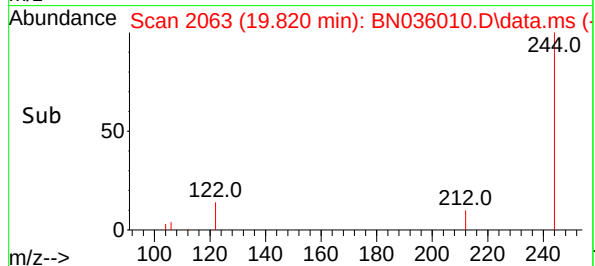
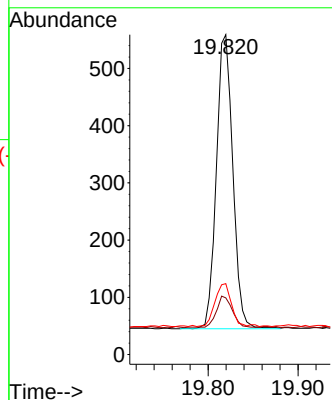
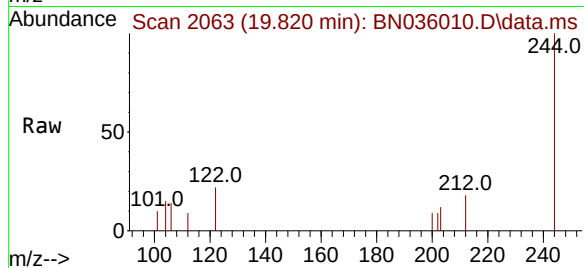




#31
Terphenyl-d14
Concen: 0.099 ng
RT: 19.820 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

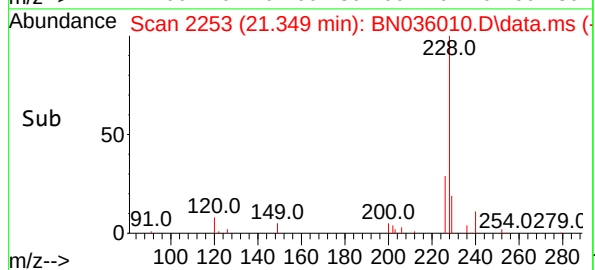
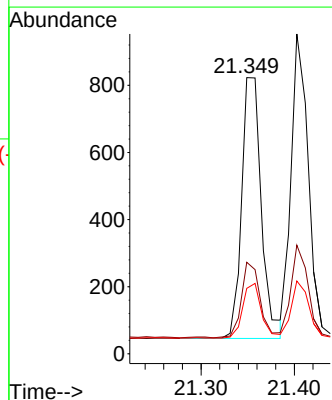
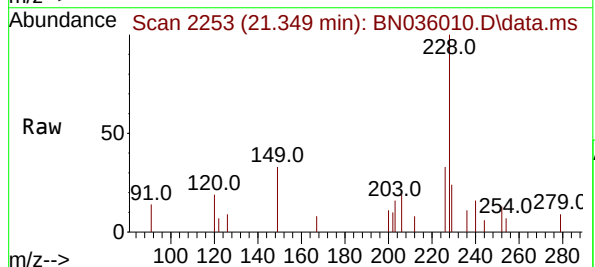
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

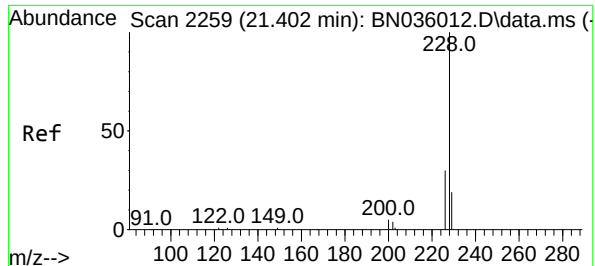
Tgt Ion:244 Resp: 652
Ion Ratio Lower Upper
244 100
212 17.7 9.1 13.7#
122 22.2 11.3 16.9#



#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

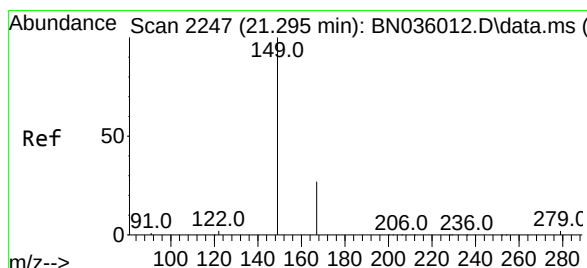
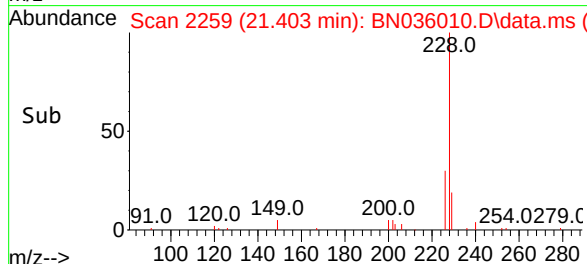
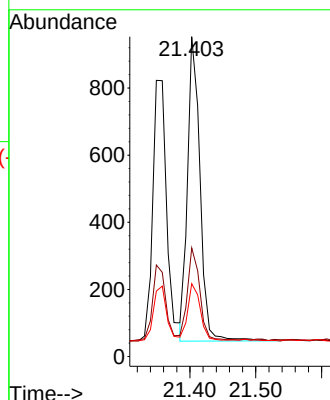
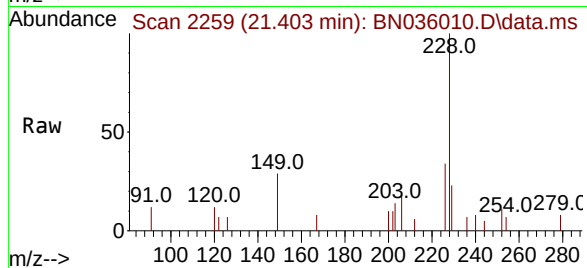
Tgt Ion:228 Resp: 1192

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

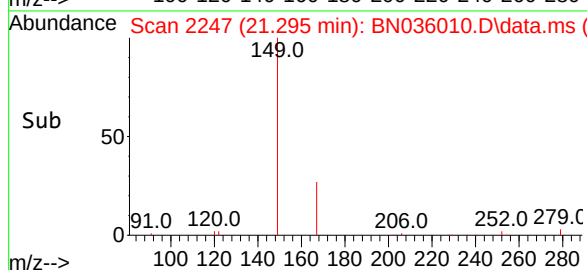
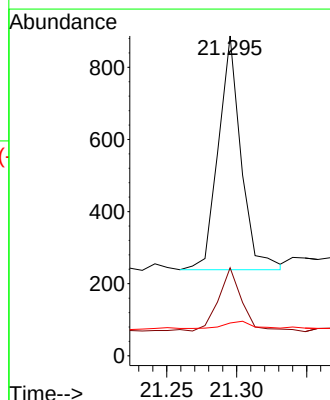
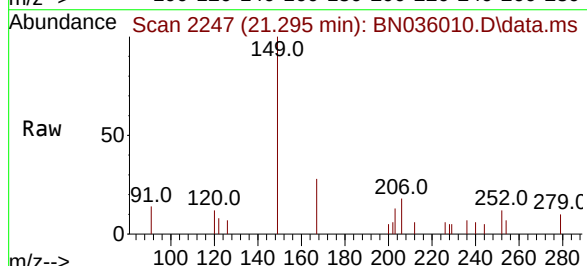
Tgt Ion:149 Resp: 730

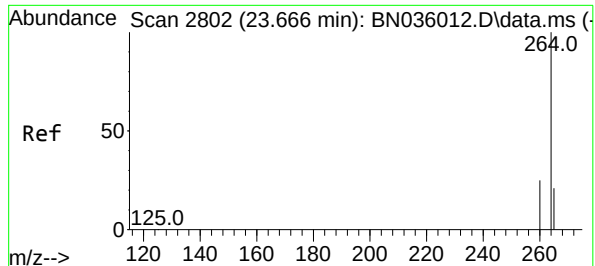
Ion Ratio Lower Upper

149 100

167 29.3 21.9 32.9

279 3.6 3.0 4.6



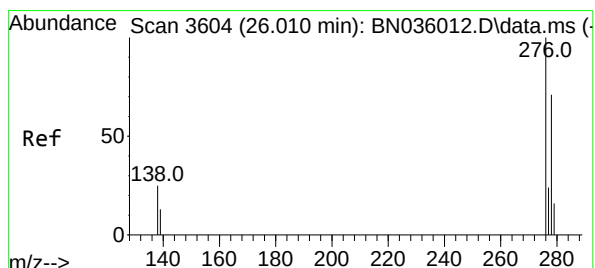
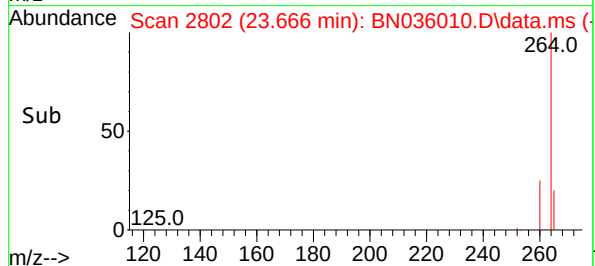
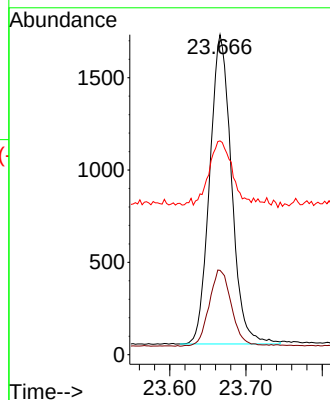
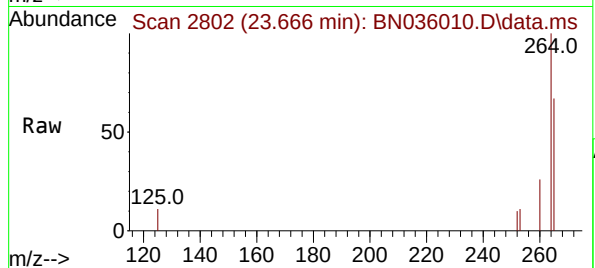


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.666 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:264 Resp: 3324

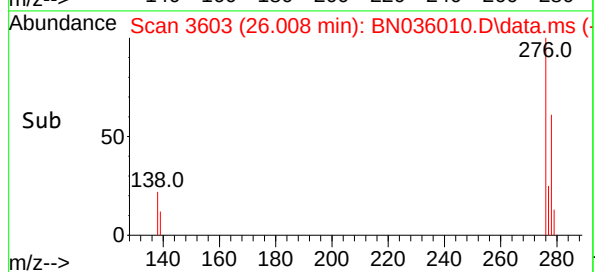
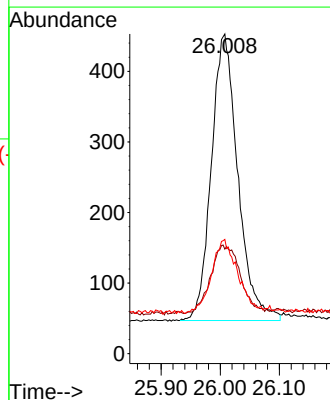
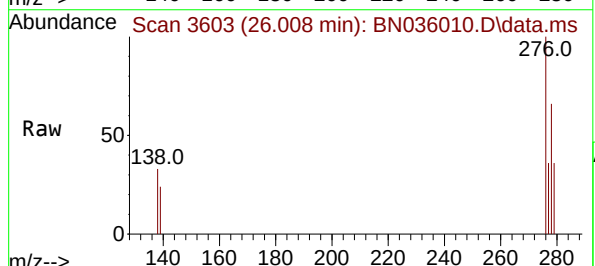
Ion	Ratio	Lower	Upper
264	100		
260	26.4	21.8	32.6
265	66.8	56.6	84.8

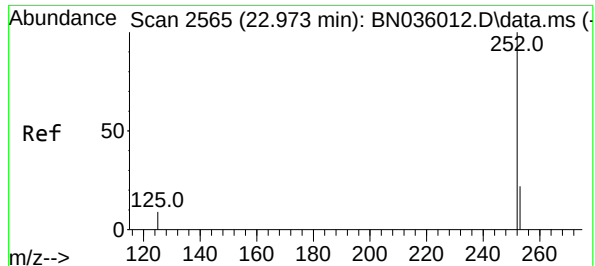


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.095 ng
RT: 26.008 min Scan# 3603
Delta R.T. -0.003 min
Lab File: BN036010.D
Acq: 22 Jan 2025 11:02

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

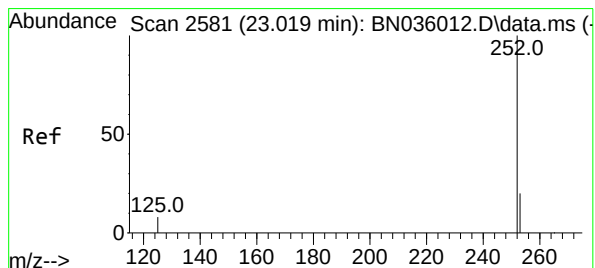
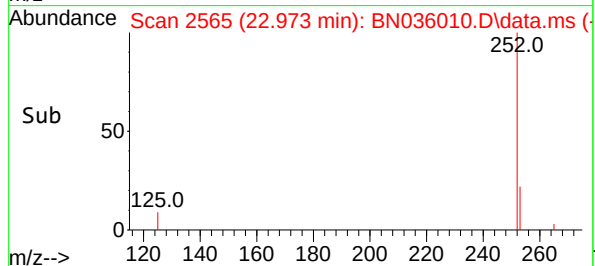
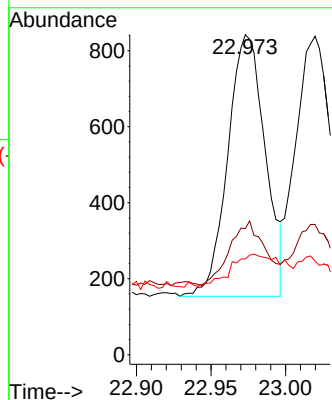
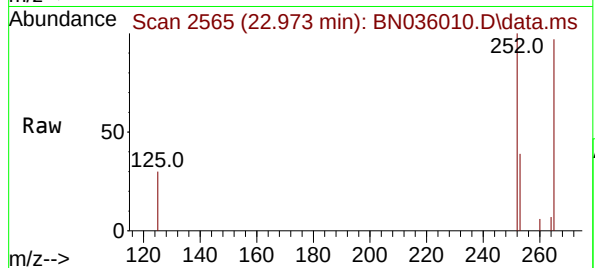
Tgt Ion:252 Resp: 1199

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

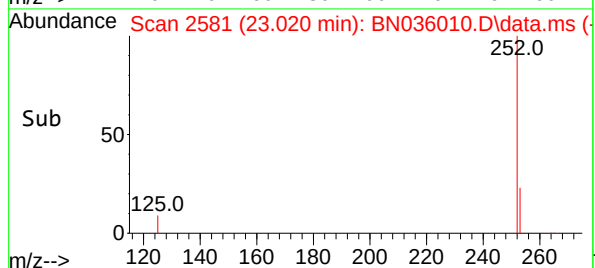
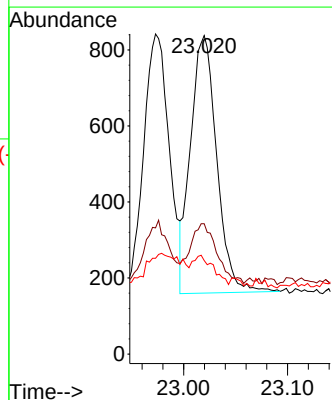
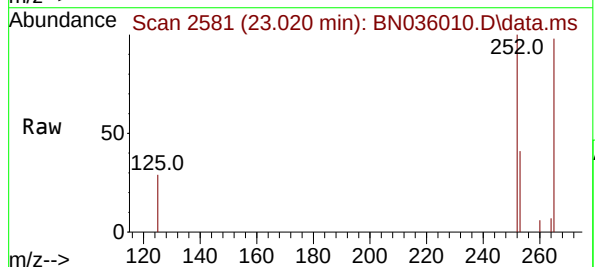
Tgt Ion:252 Resp: 1186

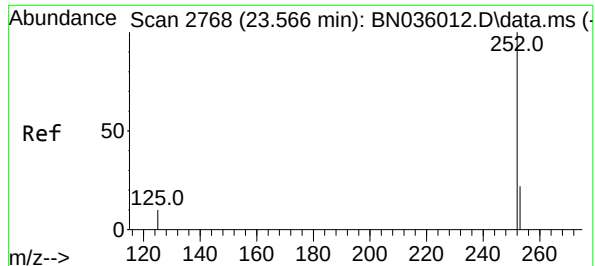
Ion Ratio Lower Upper

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

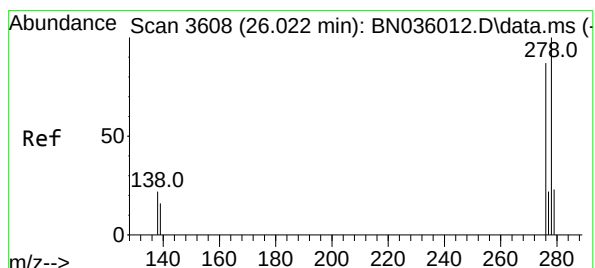
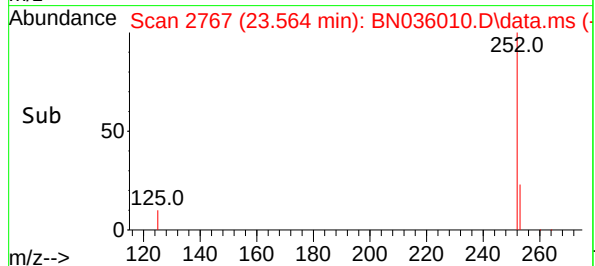
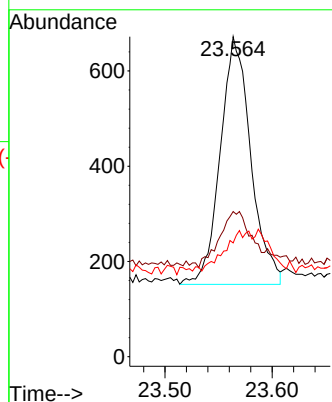
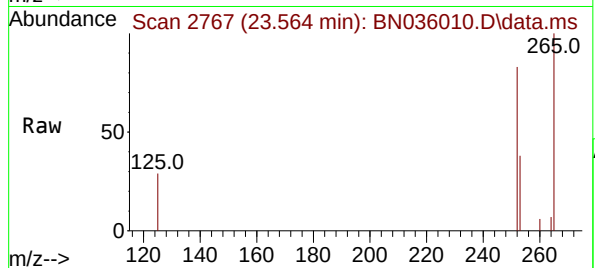
Tgt Ion:252 Resp: 1028

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

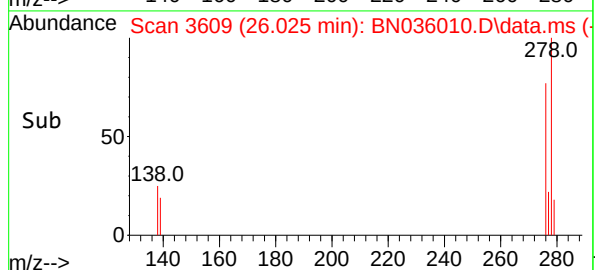
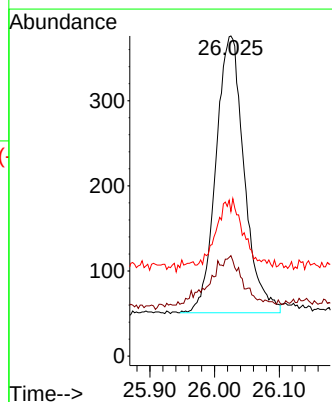
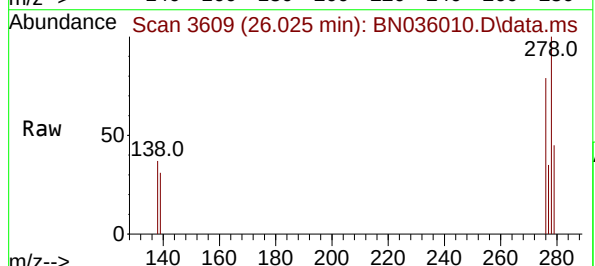
Tgt Ion:278 Resp: 986

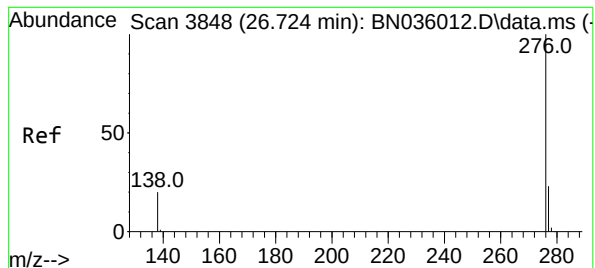
Ion Ratio Lower Upper

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# 3847

Delta R.T. -0.003 min

Lab File: BN036010.D

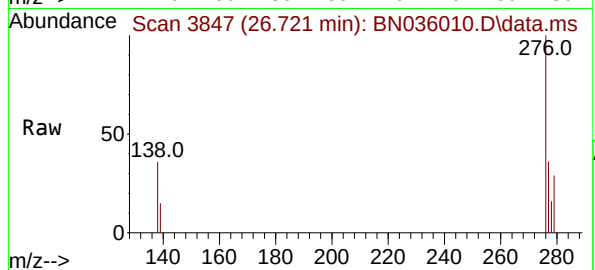
Acq: 22 Jan 2025 11:02

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1



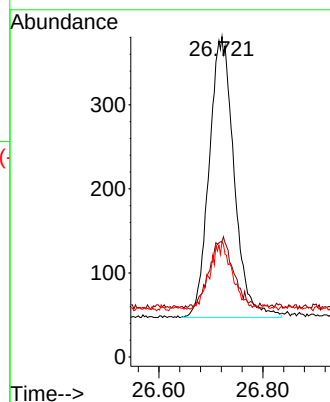
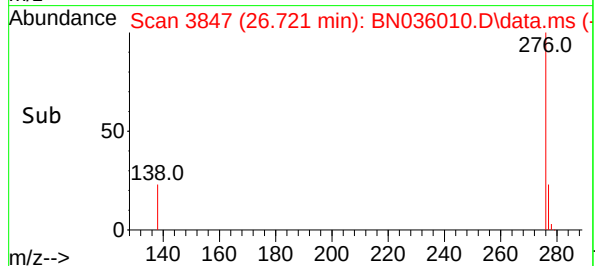
Tgt Ion:276 Resp: 1112

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)

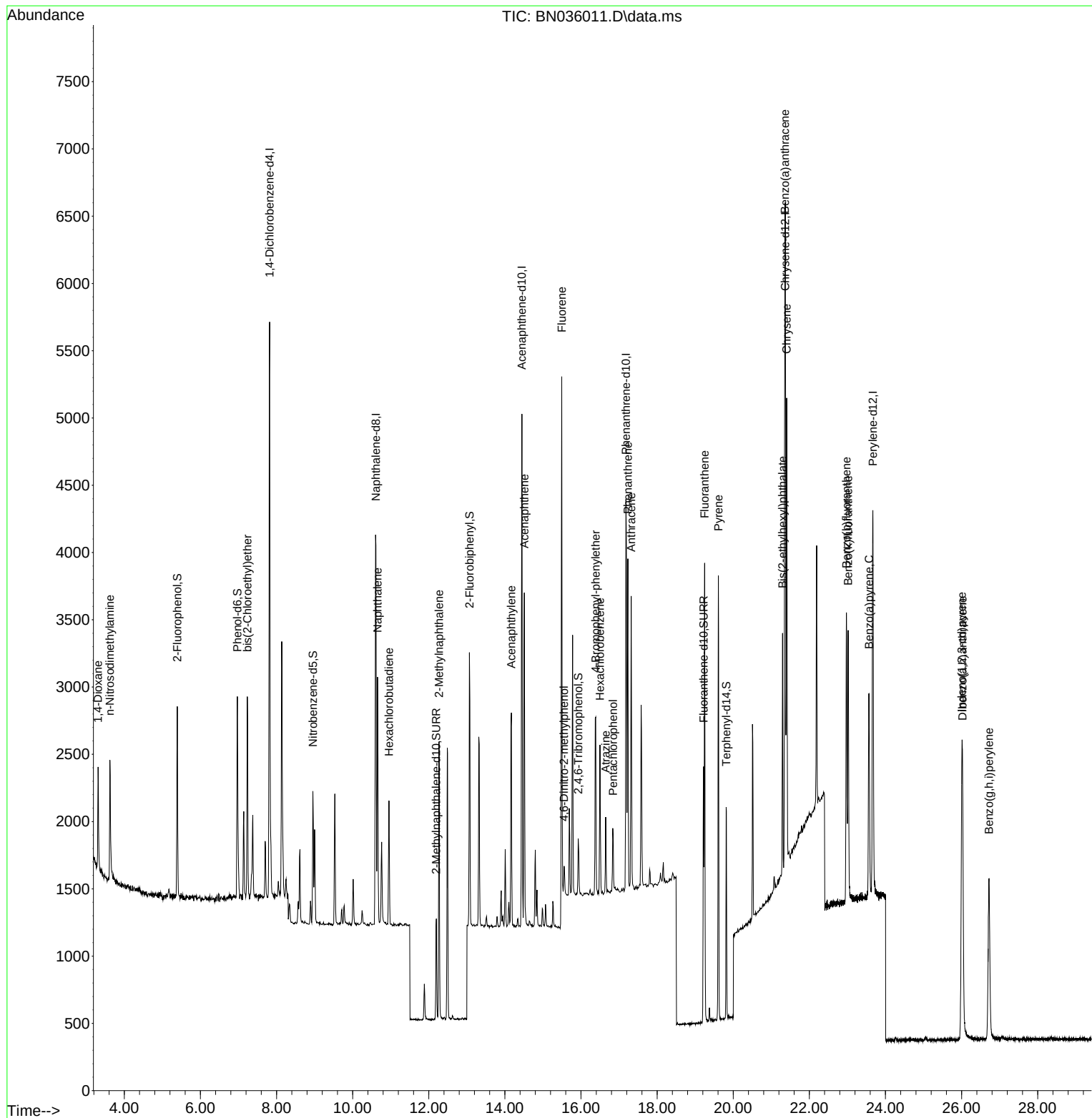
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2018	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3893	0.400	ng	0.00
13) Acenaphthene-d10	14.447	164	2029	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	4283	0.400	ng	0.00
29) Chrysene-d12	21.367	240	3716	0.400	ng	0.00
35) Perylene-d12	23.668	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						
						Qvalue
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

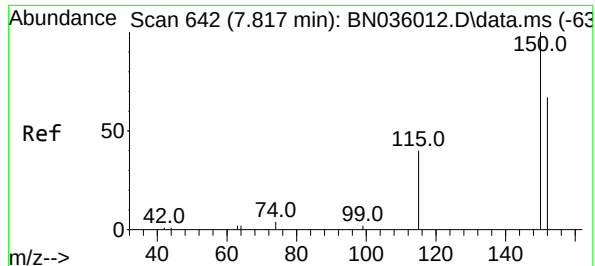
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

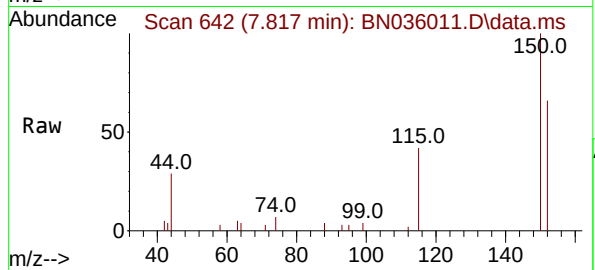
Quant Time: Jan 23 00:27:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:26:39 2025
Response via : Initial Calibration



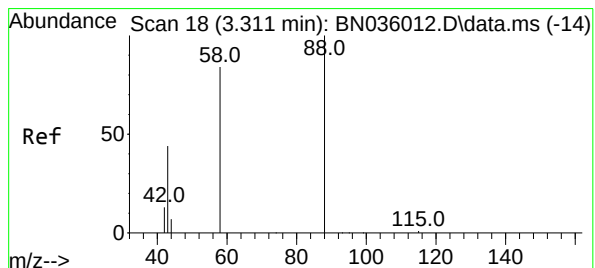
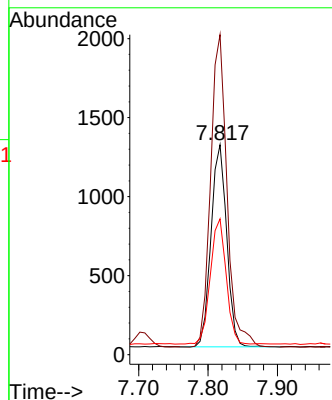
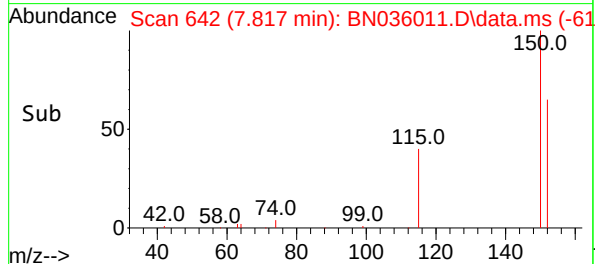


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

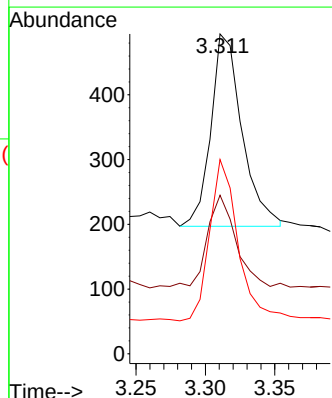
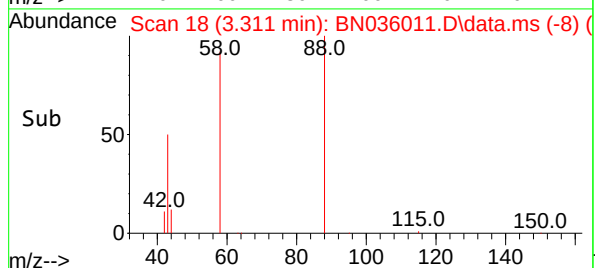
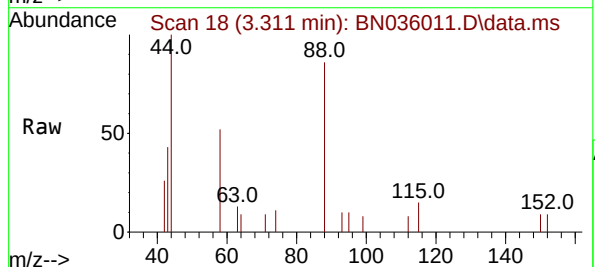


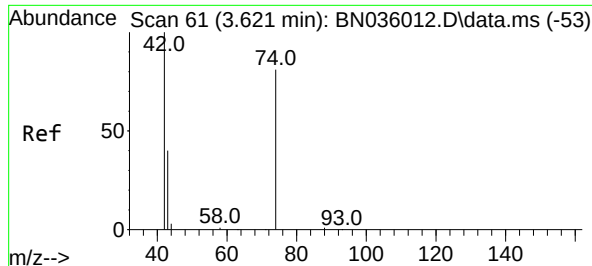
Tgt Ion:152 Resp: 2018
Ion Ratio Lower Upper
152 100
150 152.5 117.4 176.2
115 64.8 51.0 76.4



#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

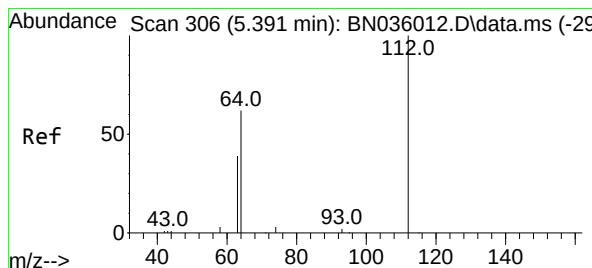
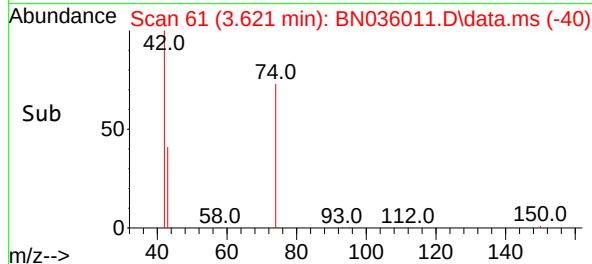
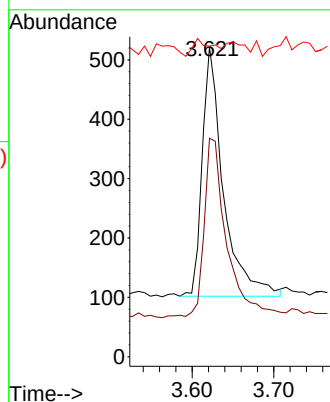
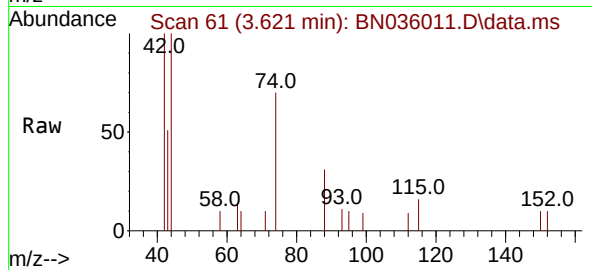




#3
n-Nitrosodimethylamine
Concen: 0.185 ng
RT: 3.621 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

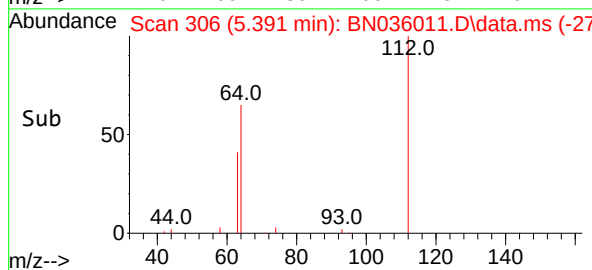
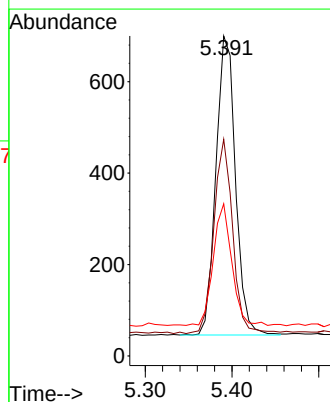
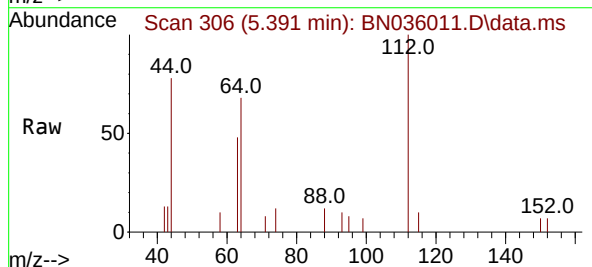
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

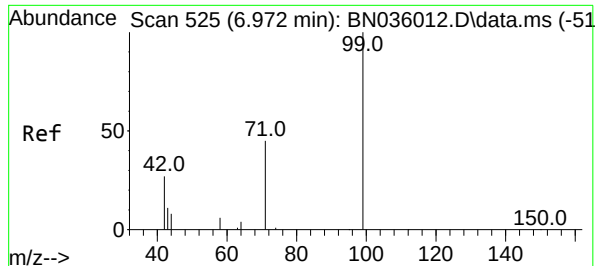
Tgt Ion: 42 Resp: 756
Ion Ratio Lower Upper
42 100
74 77.5 58.1 87.1
44 4.5 6.2 9.4#



#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

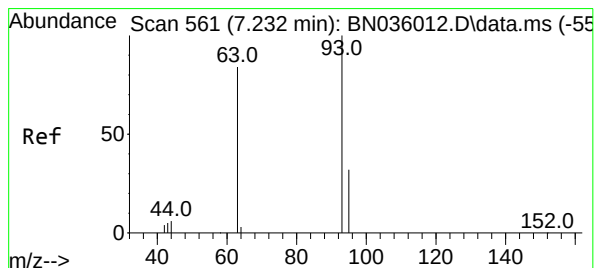
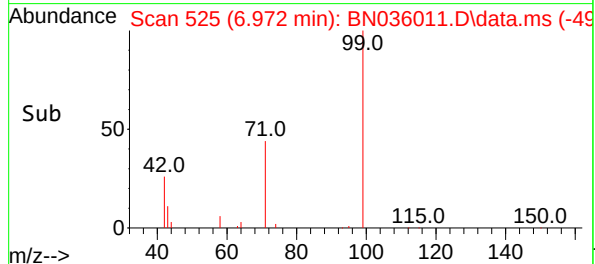
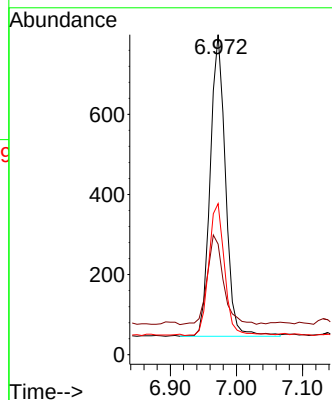
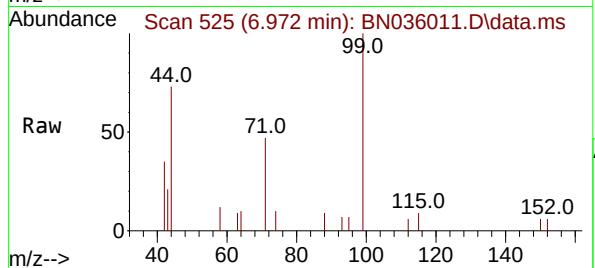




#5
Phenol-d6
Concen: 0.196 ng
RT: 6.972 min Scan# 511
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

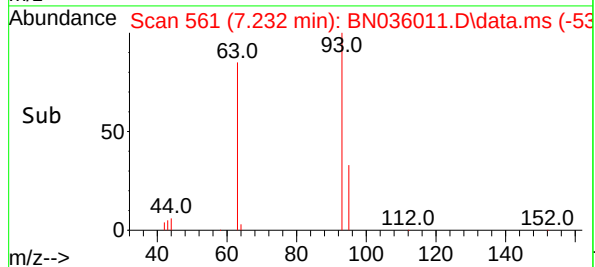
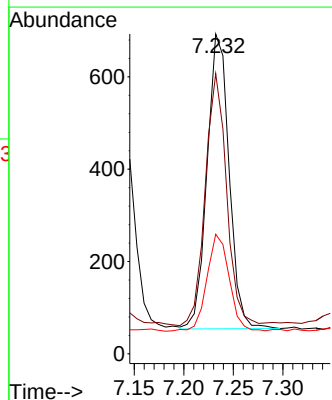
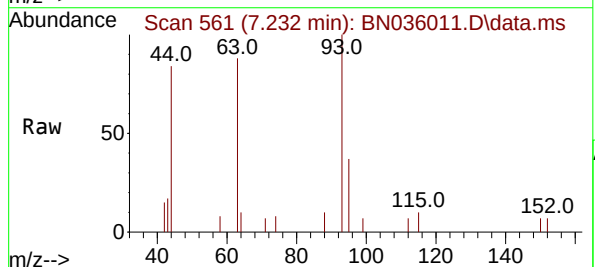
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

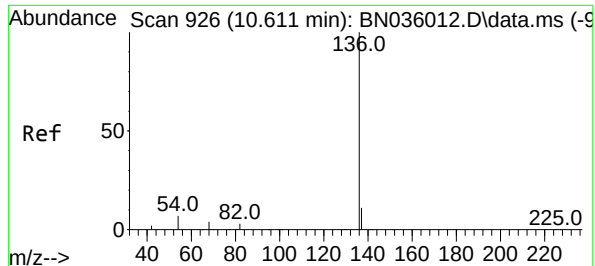
Tgt Ion: 99 Resp: 1206
Ion Ratio Lower Upper
99 100
42 31.6 26.8 40.2
71 45.4 36.6 55.0



#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

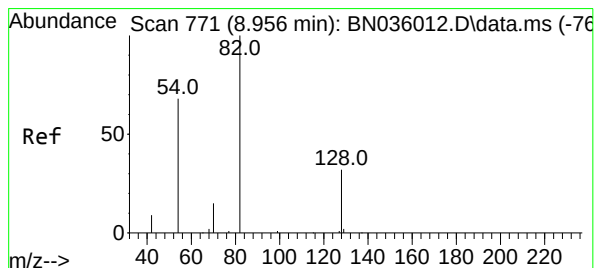
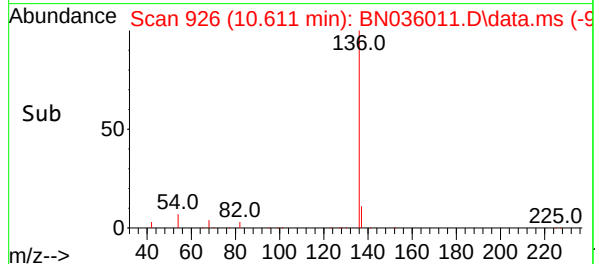
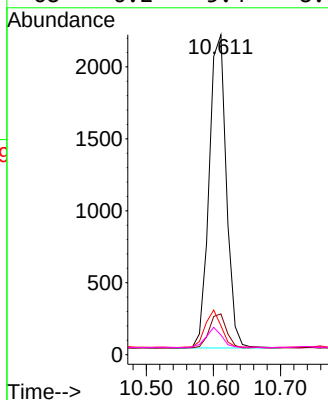
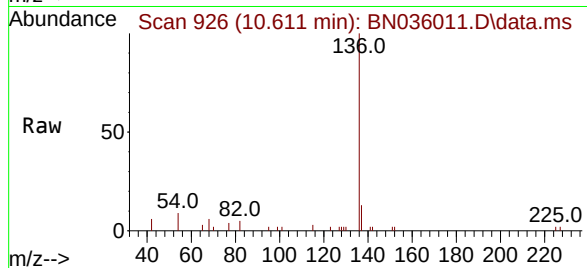




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.611 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

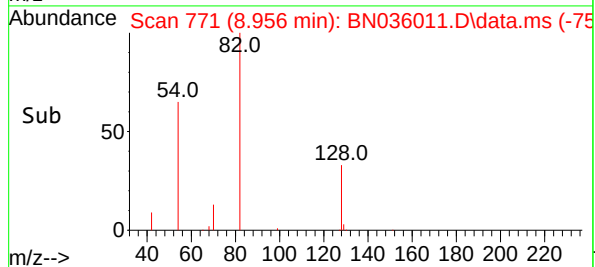
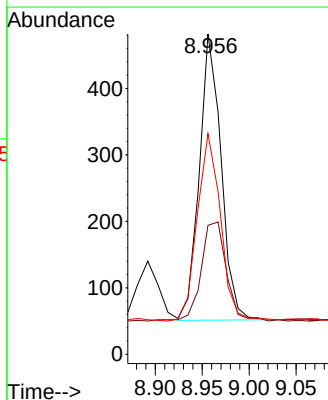
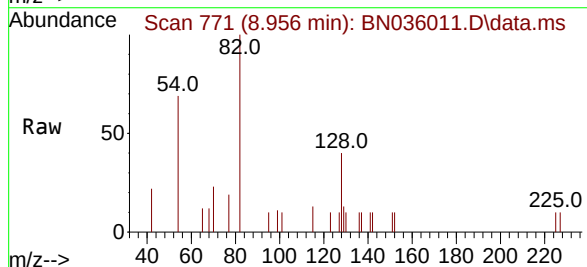
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

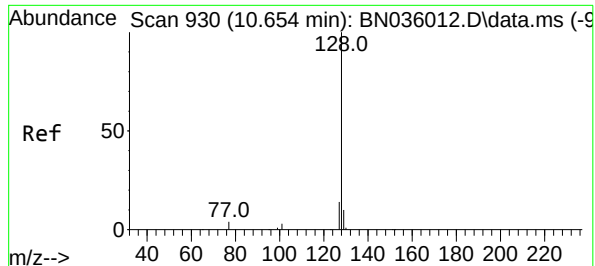
Tgt Ion:	136	Resp:	3893
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.4	15.6
54	9.0	7.7	11.5
68	6.2	5.4	8.0



#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

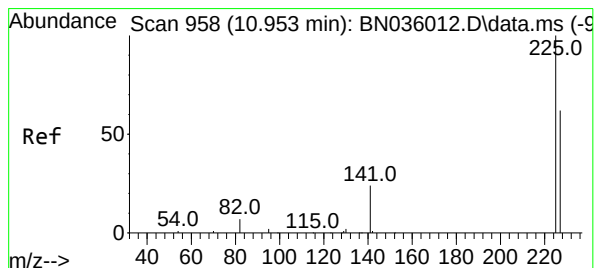
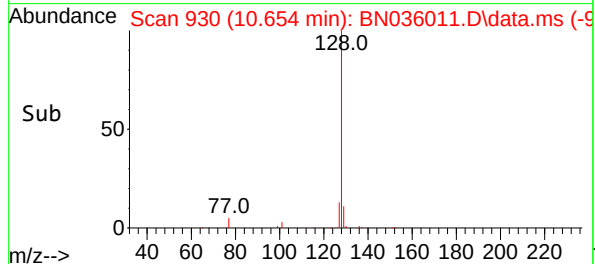
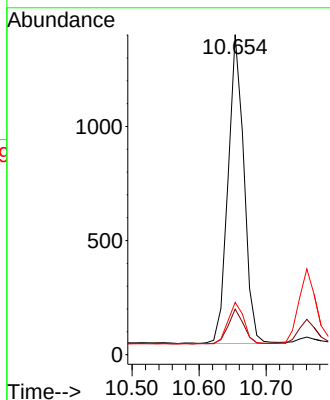
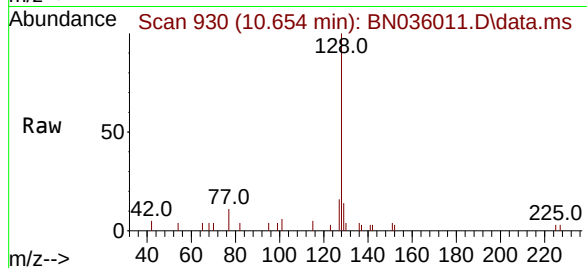


#9
Naphthalene

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

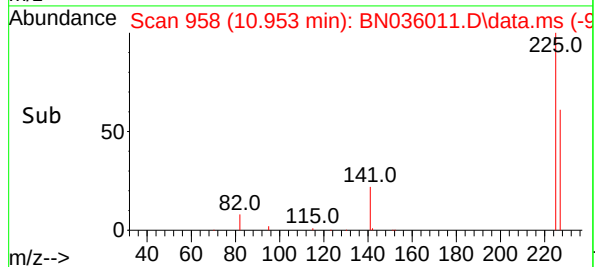
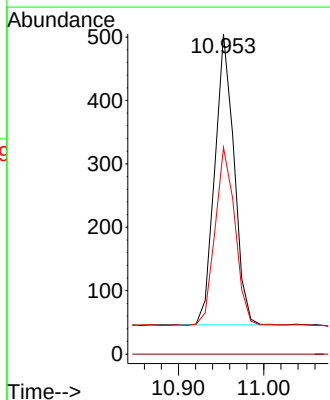
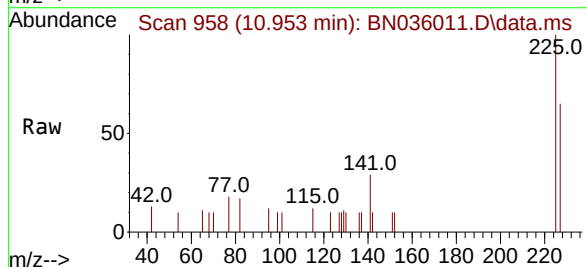


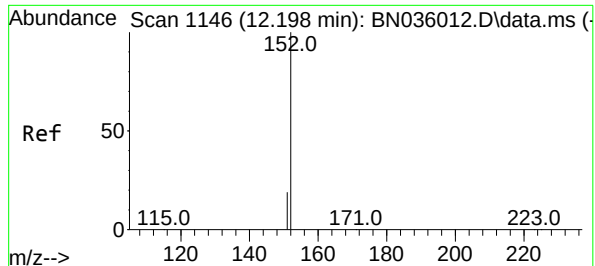
#10

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

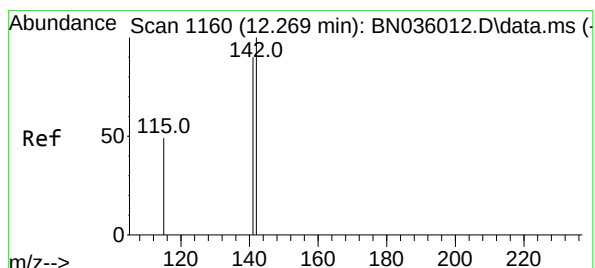
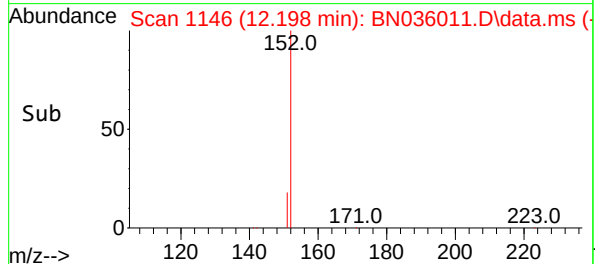
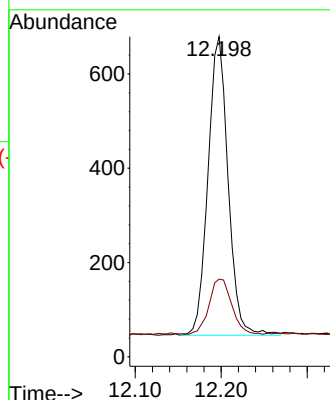
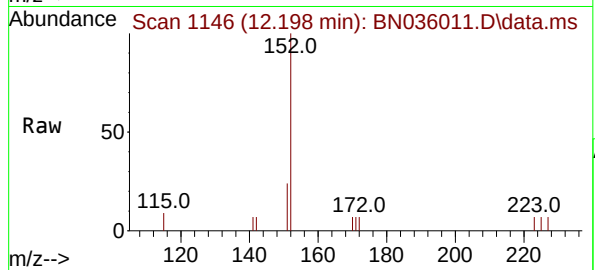




#11
2-Methylnaphthalene-d10
Concen: 0.194 ng
RT: 12.198 min Scan# 1146
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

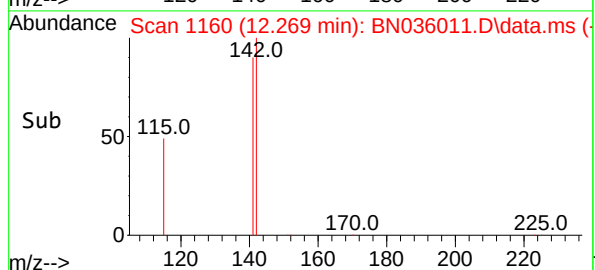
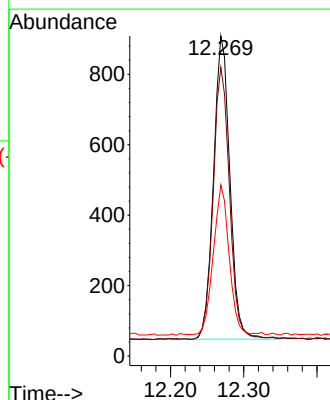
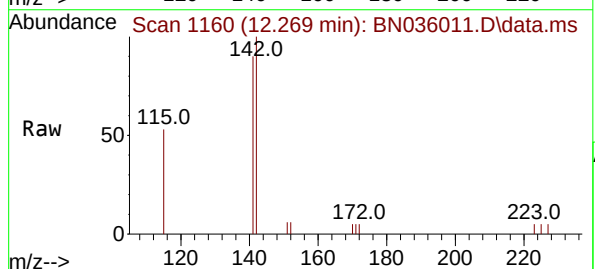
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

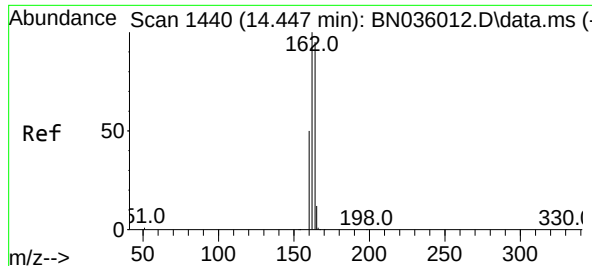
Tgt Ion:152 Resp: 1026
Ion Ratio Lower Upper
152 100
151 21.1 16.6 25.0



#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

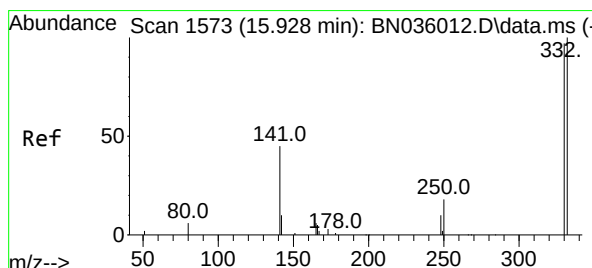
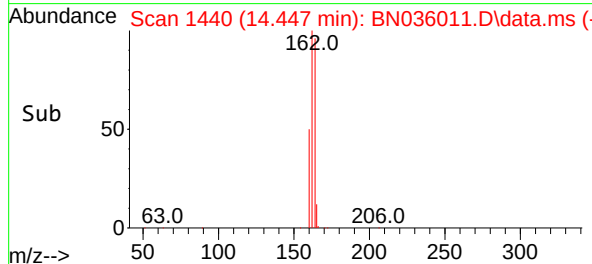
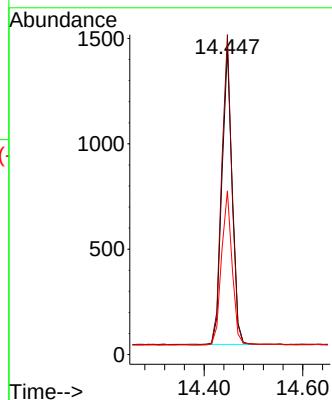
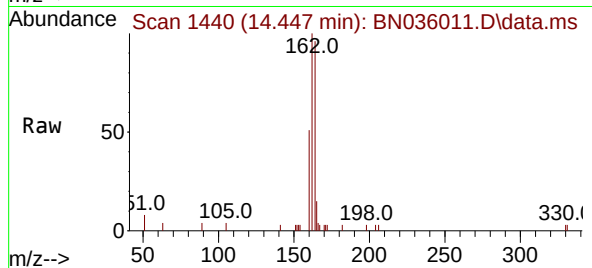




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.447 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

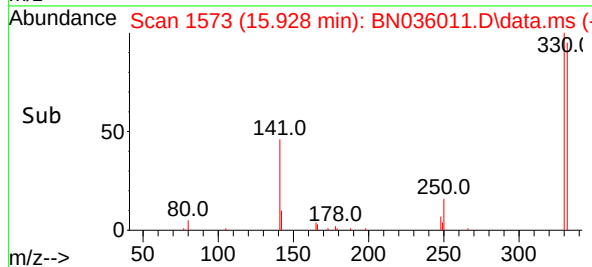
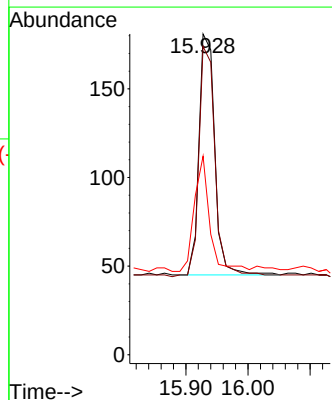
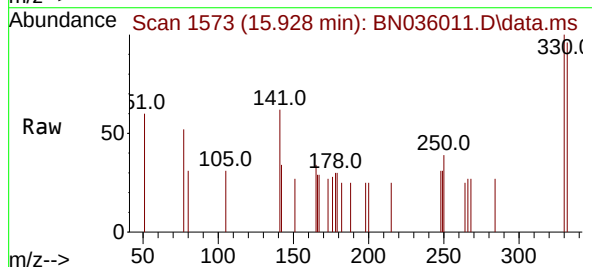
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

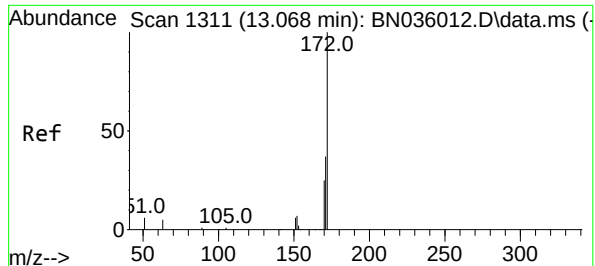
Tgt Ion	164	Resp	2029
Ion Ratio	Lower	Upper	
164	100		
162	104.4	84.1	126.1
160	53.4	43.8	65.8



#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

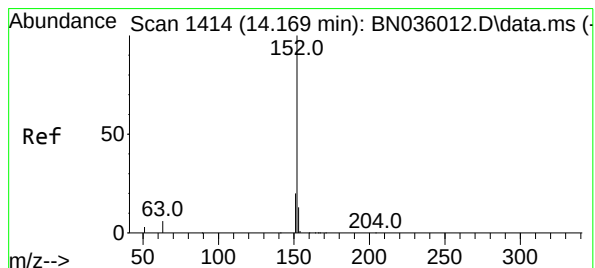
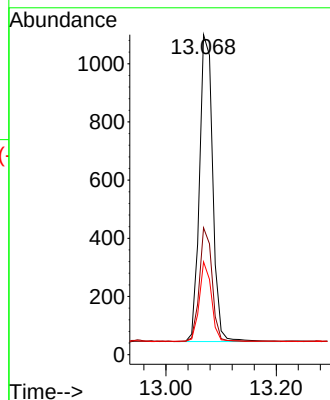
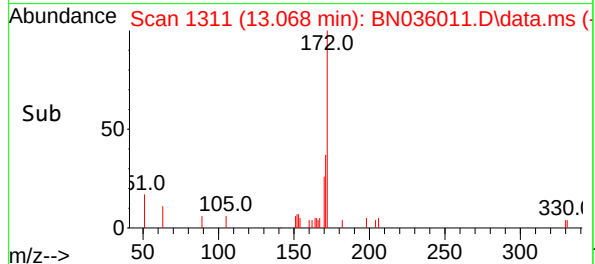
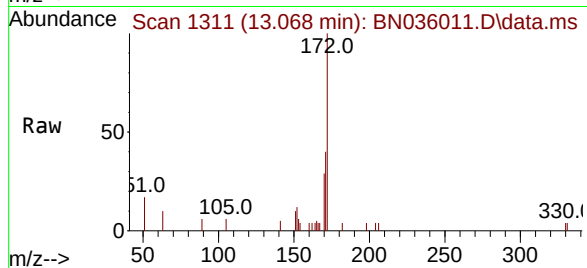




#15
2-Fluorobiphenyl
Concen: 0.194 ng
RT: 13.068 min Scan# 1311
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

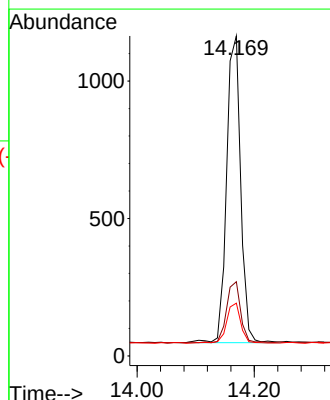
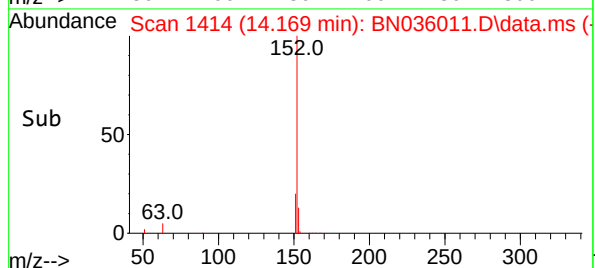
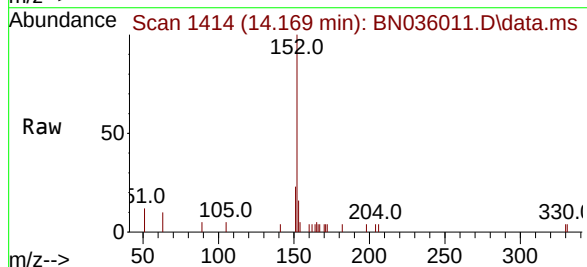
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

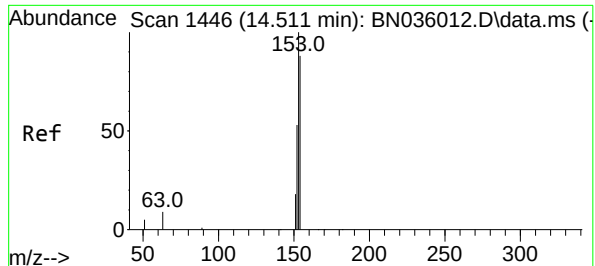
Tgt Ion	Ratio	Lower	Upper
172	100		
171	39.6	30.9	46.3
170	29.0	21.2	31.8



#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	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 :

SSTDICC0.2

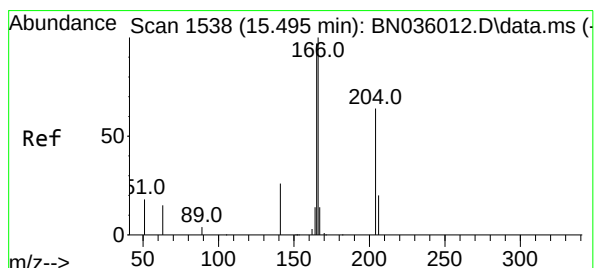
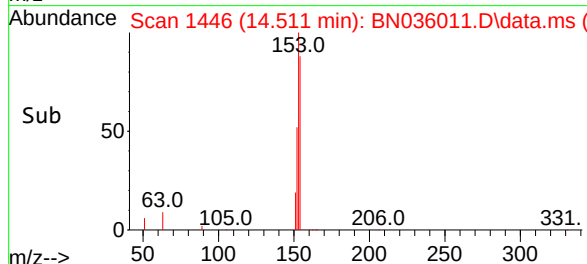
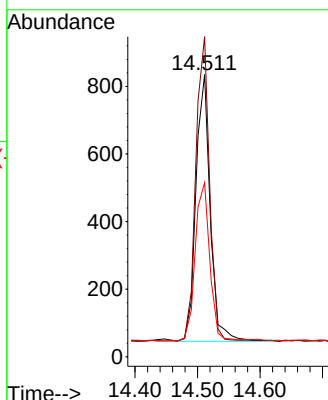
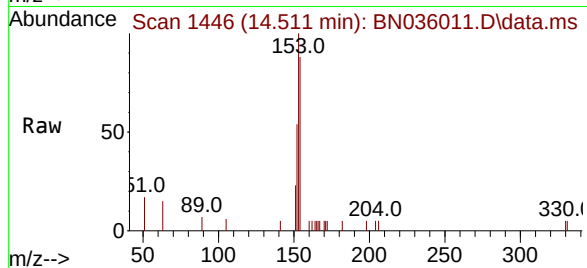
Tgt Ion:154 Resp: 1254

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

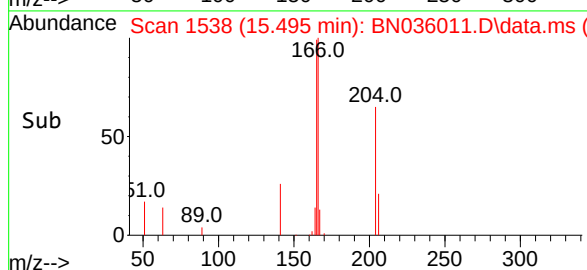
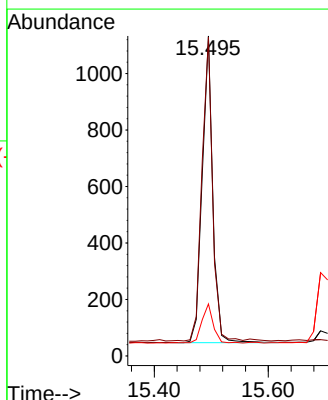
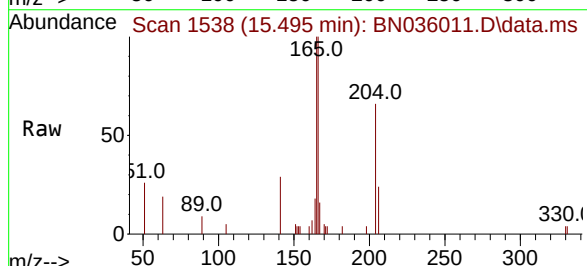
Tgt Ion:166 Resp: 1503

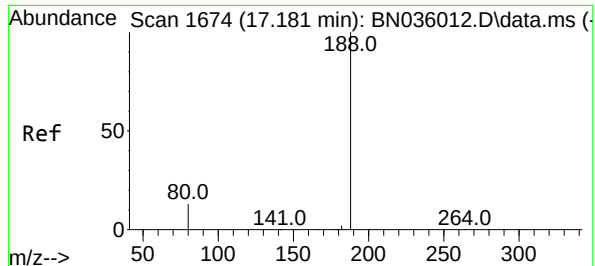
Ion Ratio Lower Upper

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

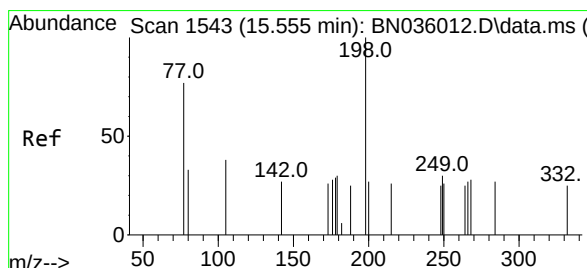
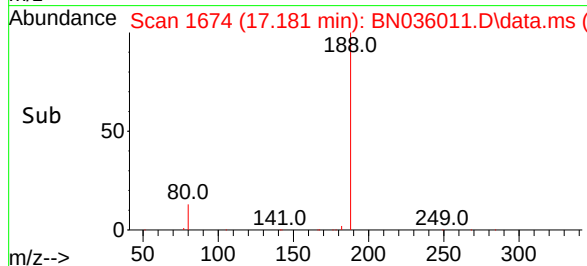
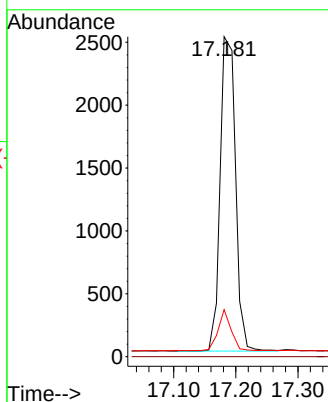
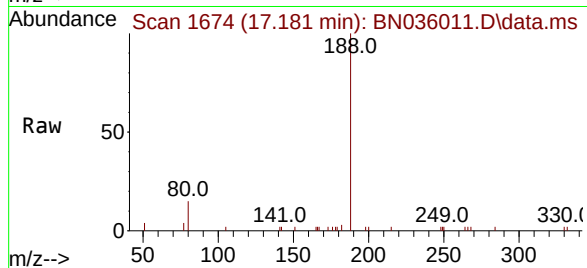
Tgt Ion:188 Resp: 4283

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

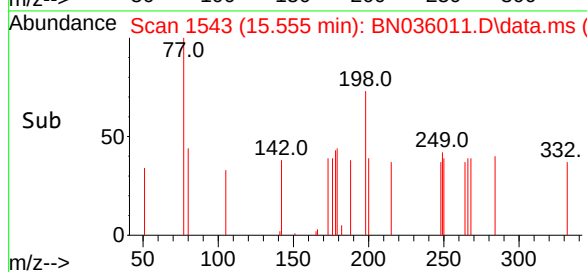
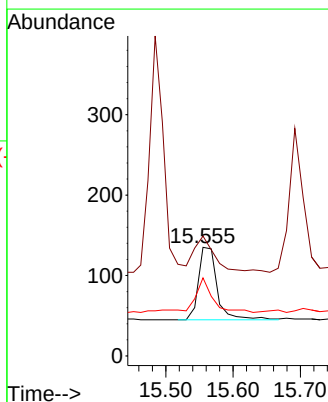
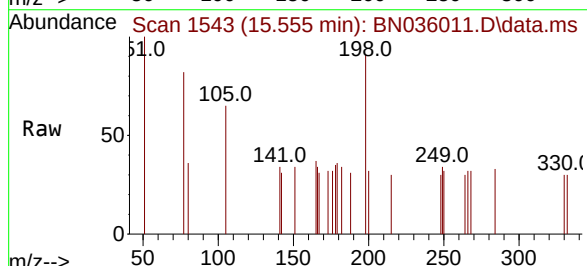
Tgt Ion:198 Resp: 174

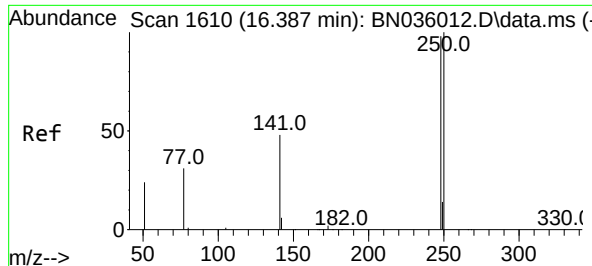
Ion Ratio Lower Upper

198 100

51 110.4 68.1 102.1#

105 71.9 46.5 69.7#

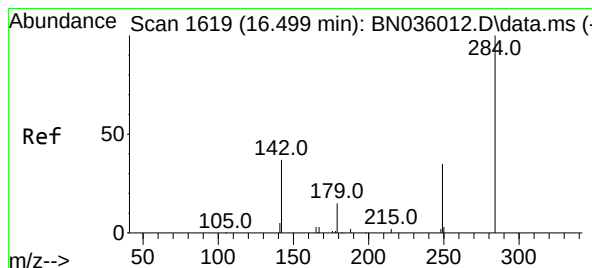
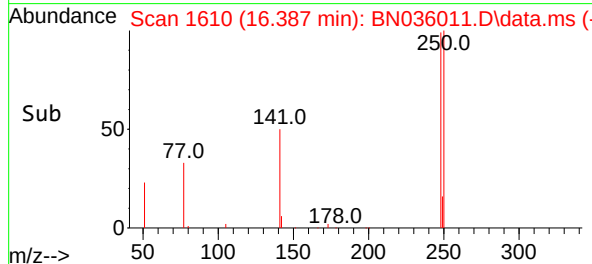
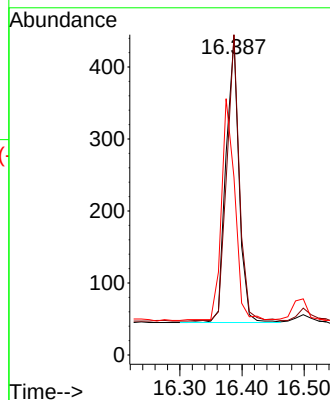
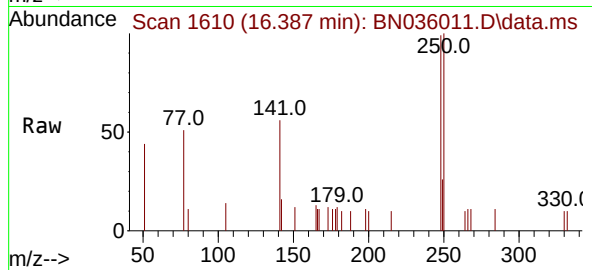




#21
4-Bromophenyl-phenylether
Concen: 0.189 ng
RT: 16.387 min Scan# 1610
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

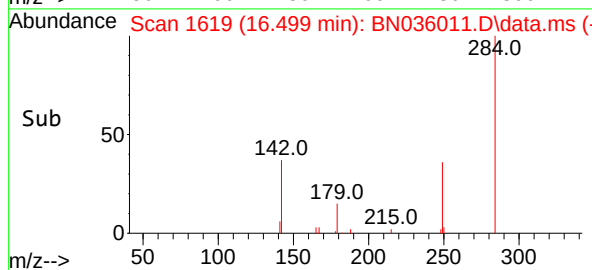
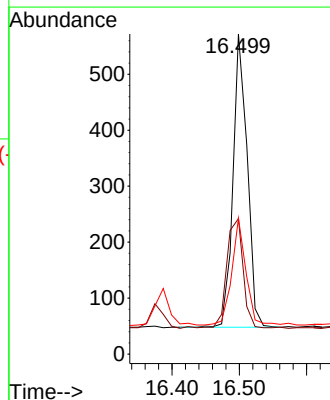
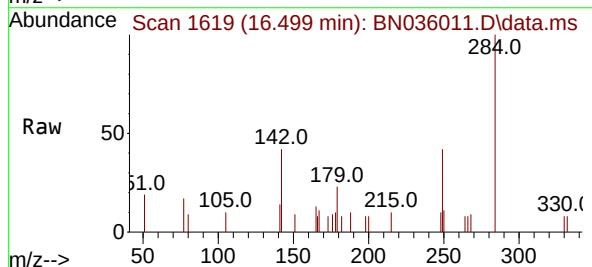
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

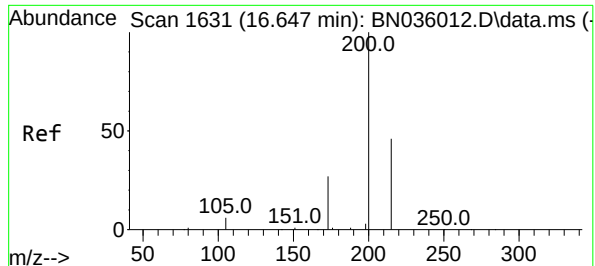
Tgt Ion	Ratio	Lower	Upper
248	100		
250	101.1	81.5	122.3
141	56.1	41.8	62.6



#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

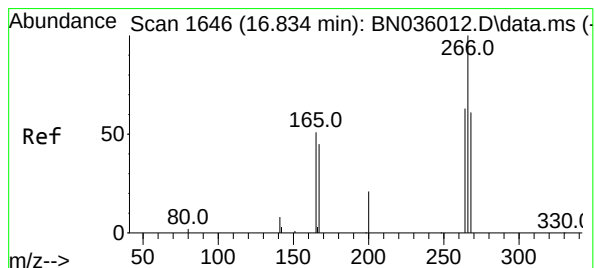
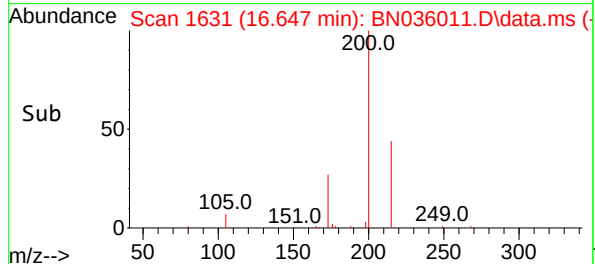
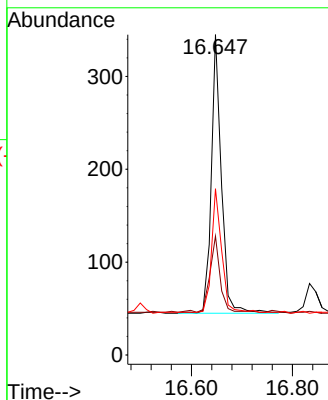
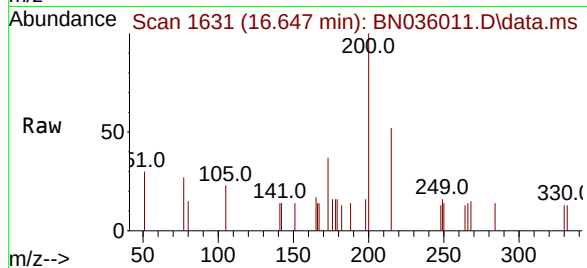




#23
Atrazine
Concen: 0.188 ng
RT: 16.647 min Scan# 1631
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

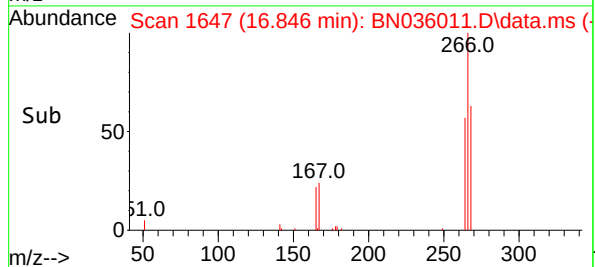
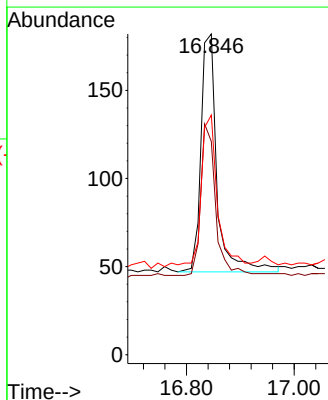
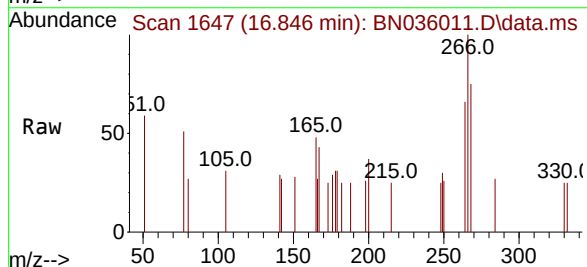
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

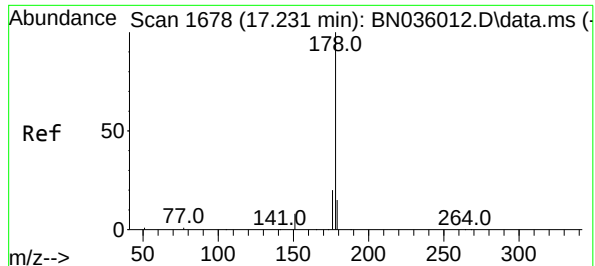
Tgt Ion	Ratio	Lower	Upper
200	100		
173	37.1	26.6	40.0
215	51.9	40.6	61.0



#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	Ratio	Lower	Upper
266	100		
264	59.1	48.2	72.2
268	68.7	51.6	77.4

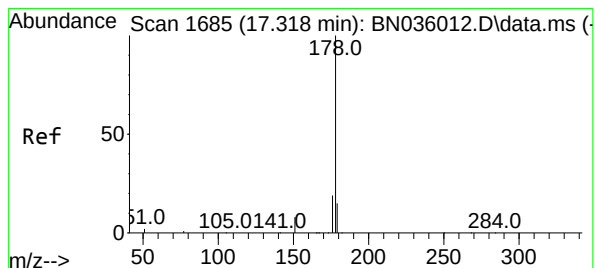
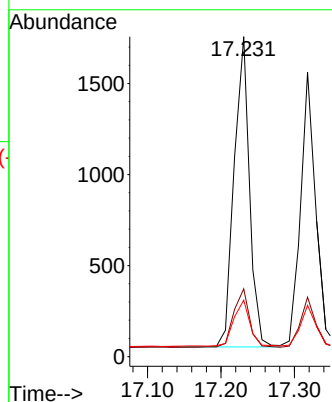
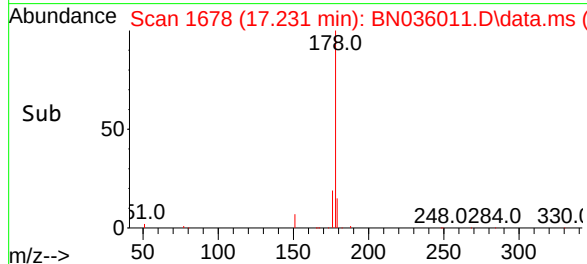
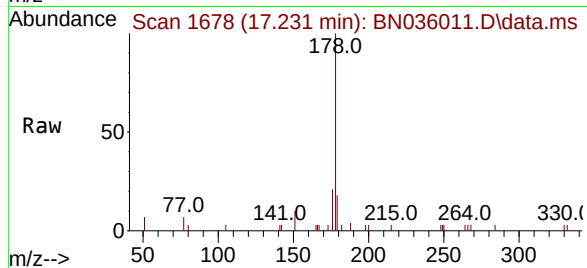




#25
Phenanthrene
Concen: 0.193 ng
RT: 17.231 min Scan# 1678
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

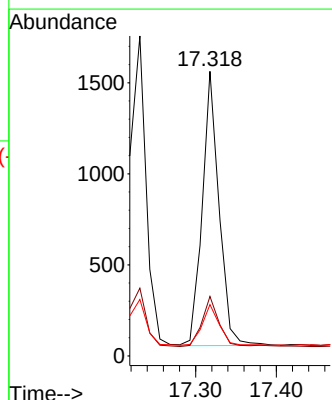
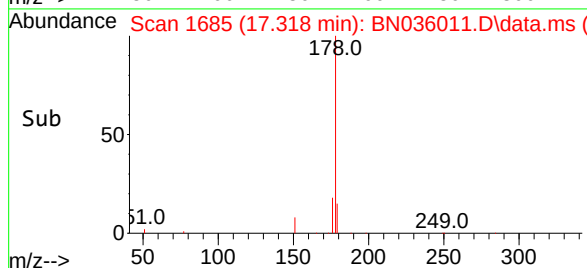
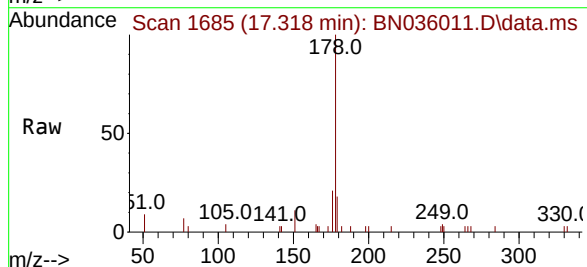
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

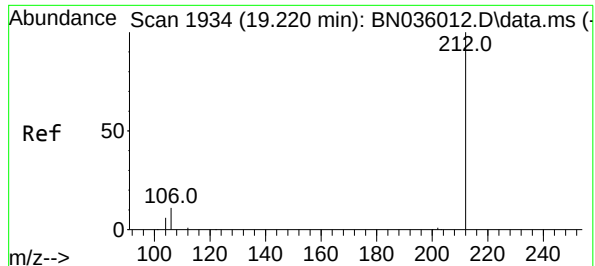
Tgt Ion:178 Resp: 2480
Ion Ratio Lower Upper
178 100
176 19.1 16.0 24.0
179 16.0 12.4 18.6



#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 :

SSTDICC0.2

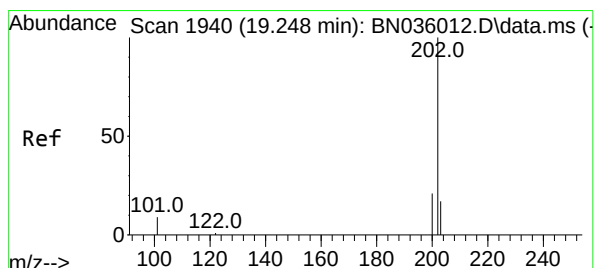
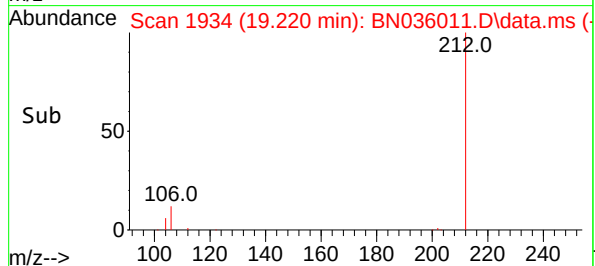
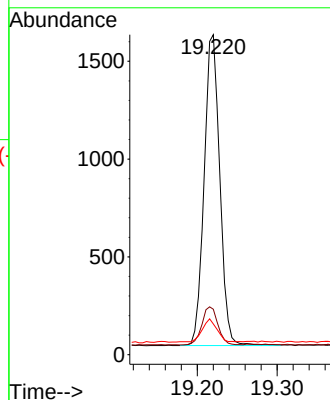
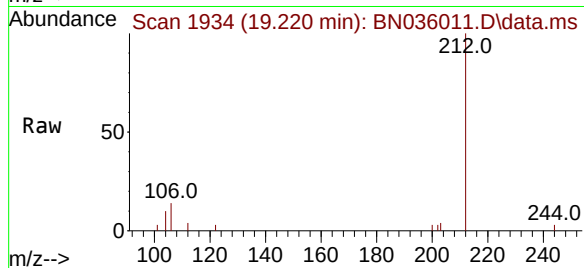
Tgt Ion:212 Resp: 2155

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

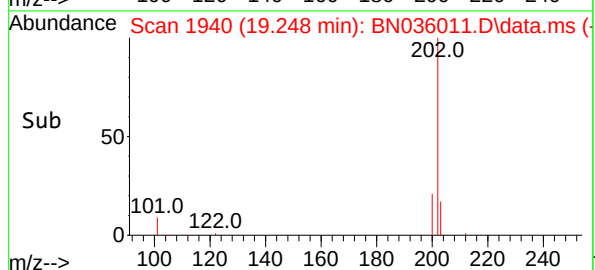
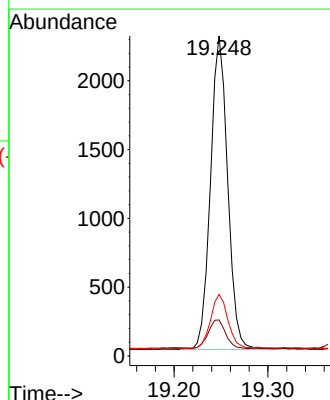
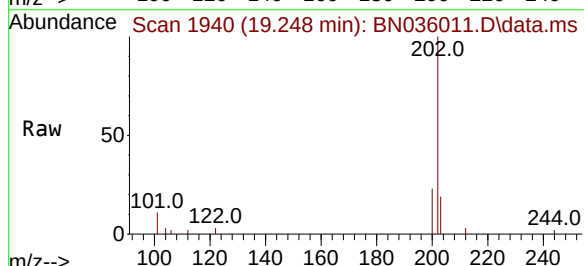
Tgt Ion:202 Resp: 2891

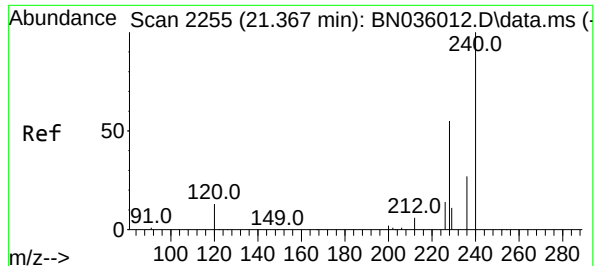
Ion Ratio Lower Upper

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

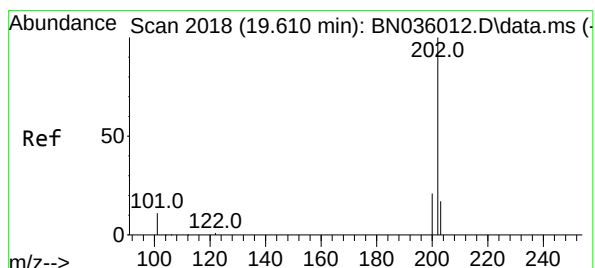
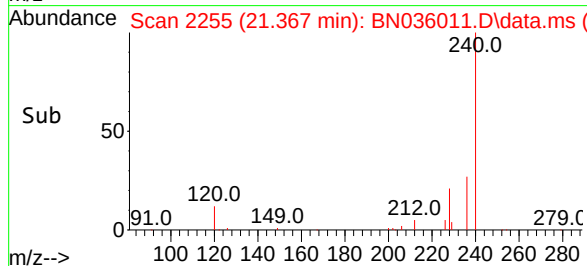
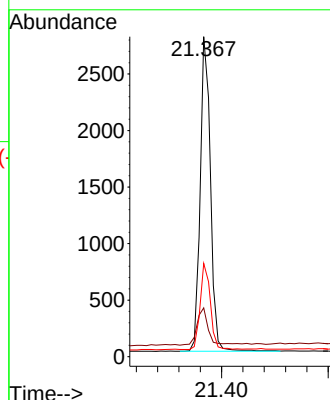
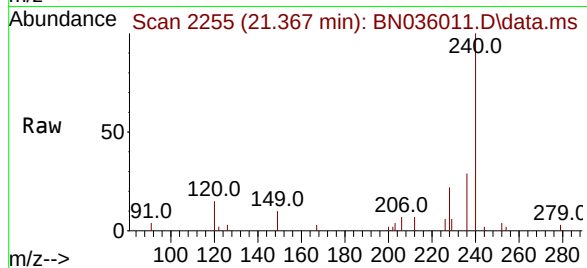
Tgt Ion:240 Resp: 3716

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

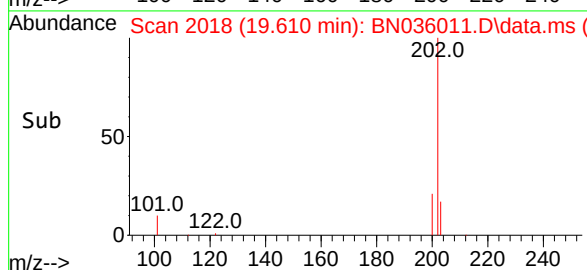
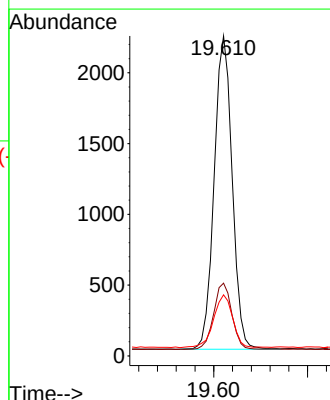
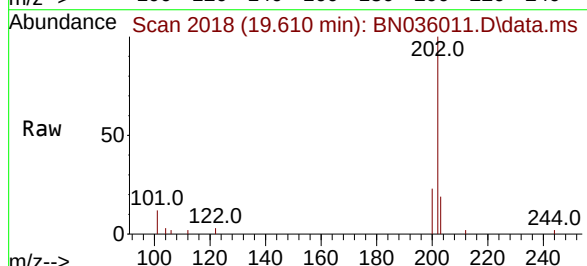
Tgt Ion:202 Resp: 2950

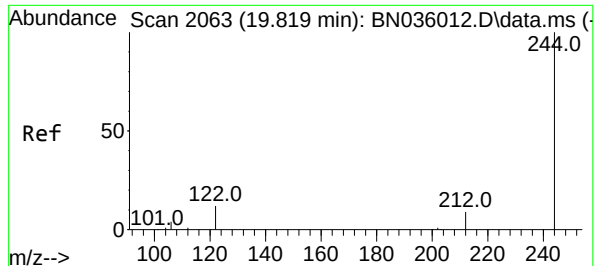
Ion Ratio Lower Upper

202 100

200 21.3 17.0 25.4

203 17.9 14.4 21.6

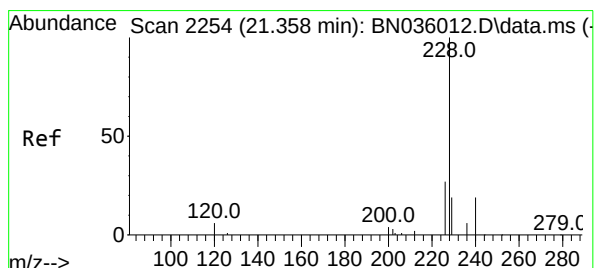
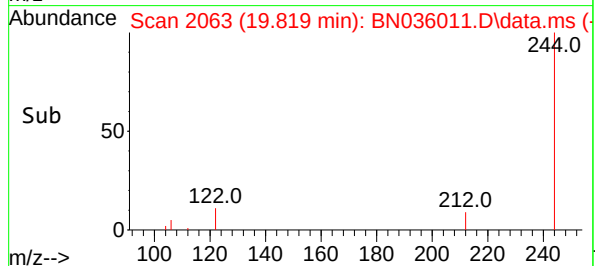
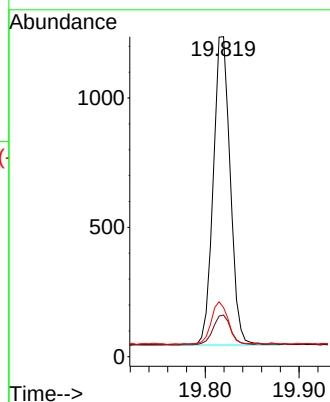
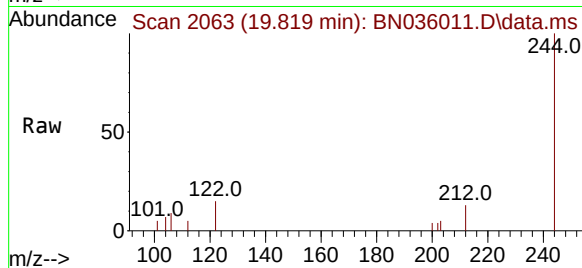




#31
Terphenyl-d14
Concen: 0.194 ng
RT: 19.819 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

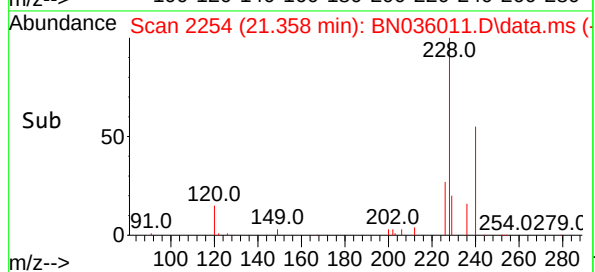
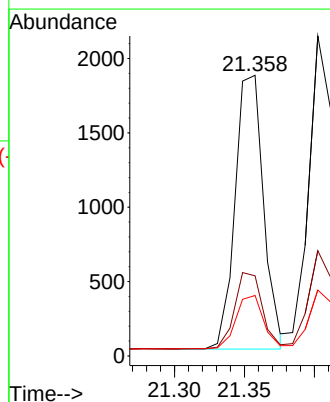
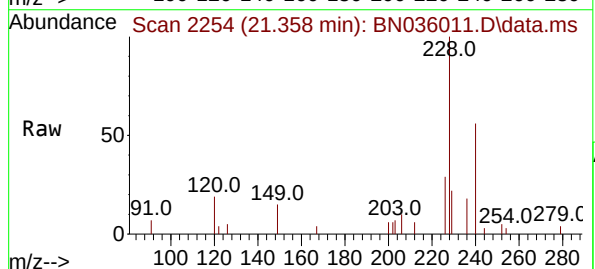
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

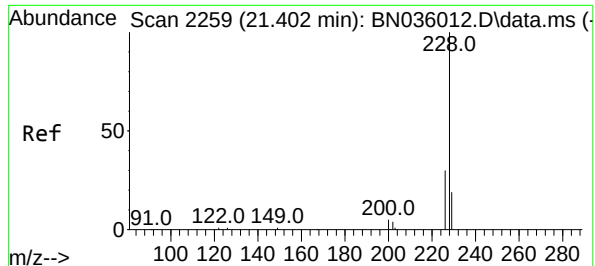
Tgt Ion	Ratio	Lower	Upper
244	100		
212	13.0	9.1	13.7
122	15.4	11.3	16.9



#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

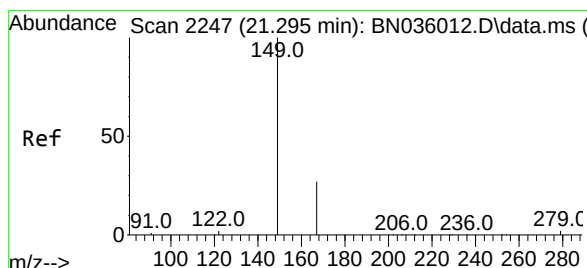
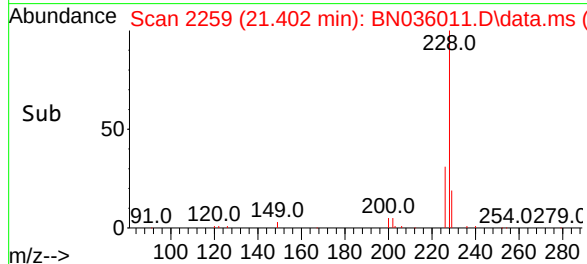
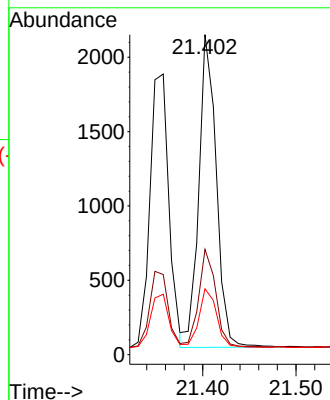
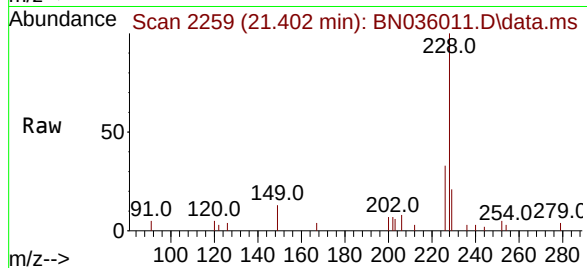




#33
Chrysene
Concen: 0.199 ng
RT: 21.402 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

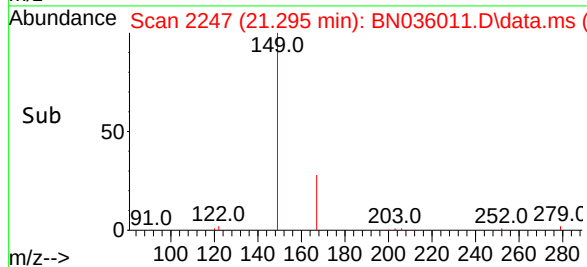
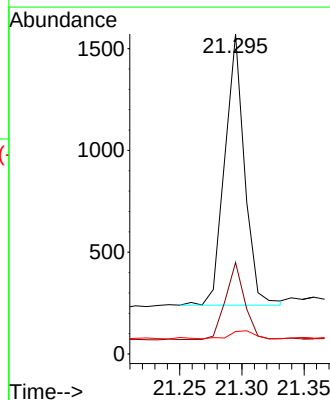
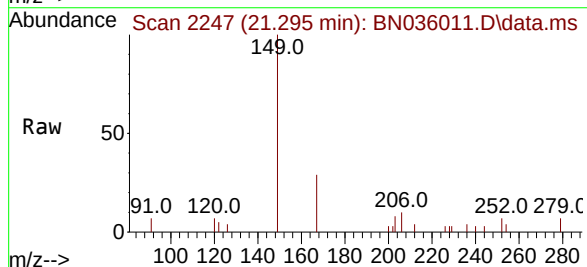
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

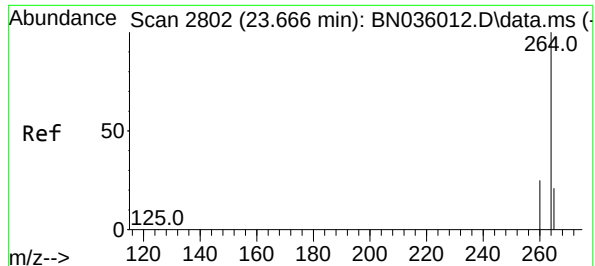
Tgt Ion	Ratio	Lower	Upper
228	100		
226	32.9	25.3	37.9
229	20.6	16.3	24.5



#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	Ratio	Lower	Upper
149	100		
167	27.5	21.9	32.9
279	3.6	3.0	4.6

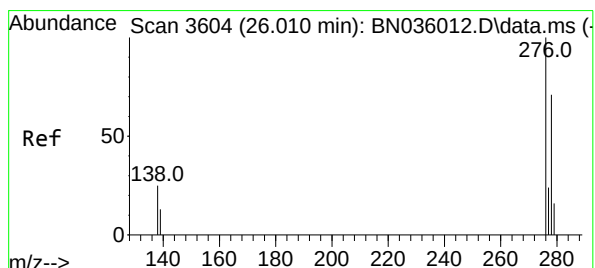
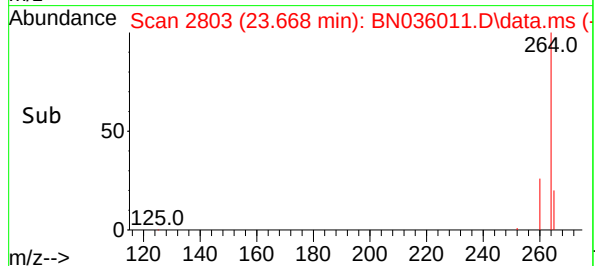
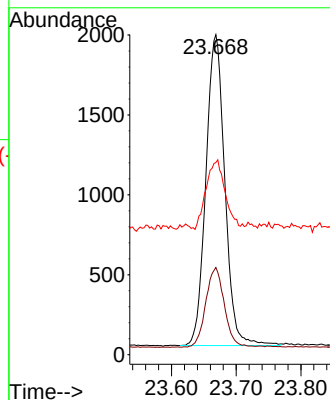
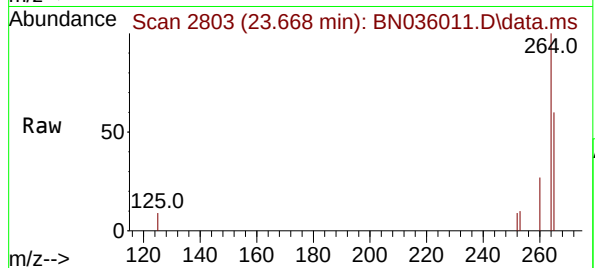




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.668 min Scan# 21
Delta R.T. 0.003 min
Lab File: BN036011.D
Acq: 22 Jan 2025 11:38

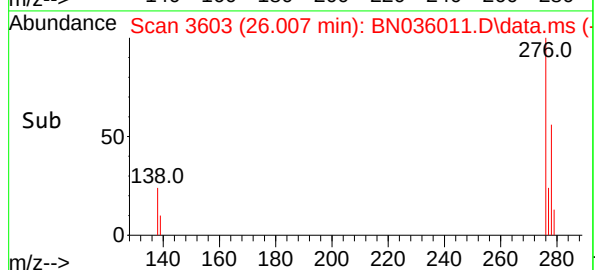
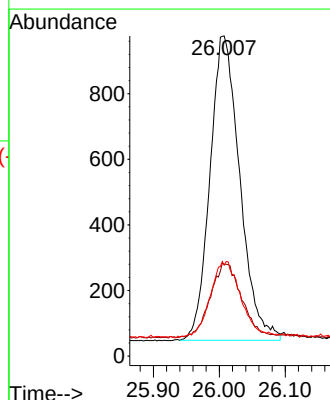
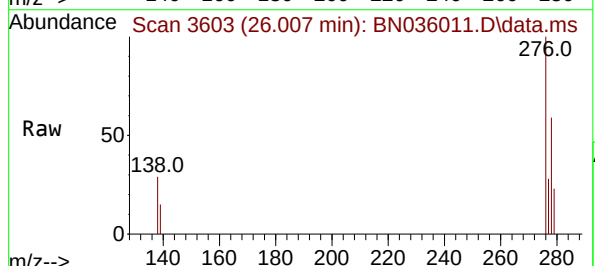
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

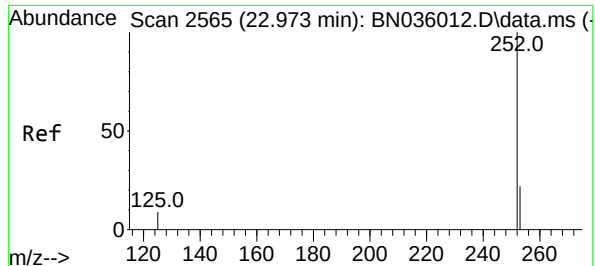
Tgt Ion:264 Resp: 3953
Ion Ratio Lower Upper
264 100
260 27.3 21.8 32.6
265 60.0 56.6 84.8



#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

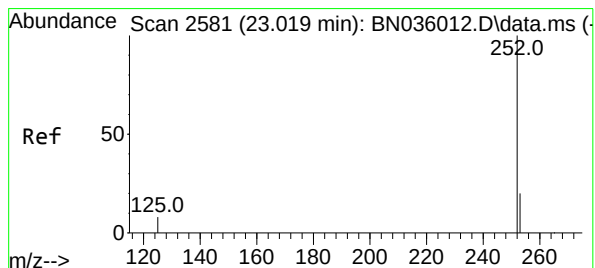
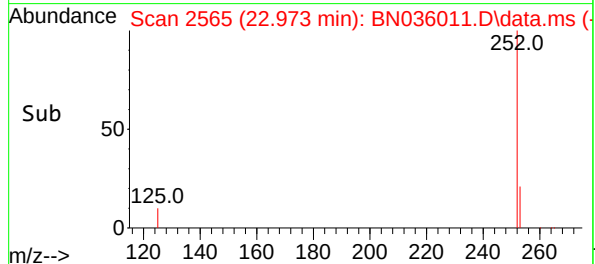
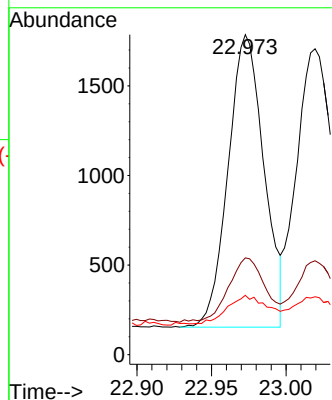
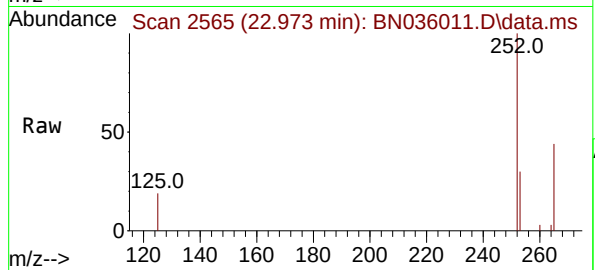
Tgt Ion:252 Resp: 2728

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

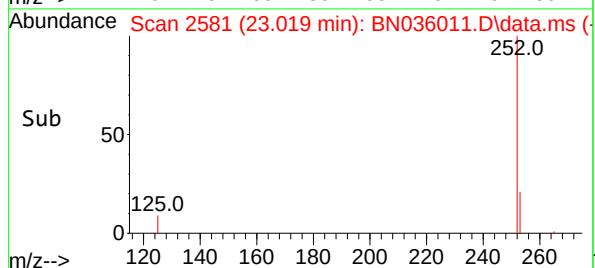
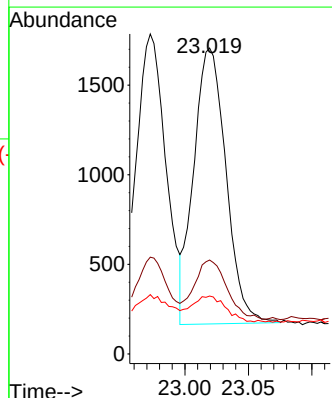
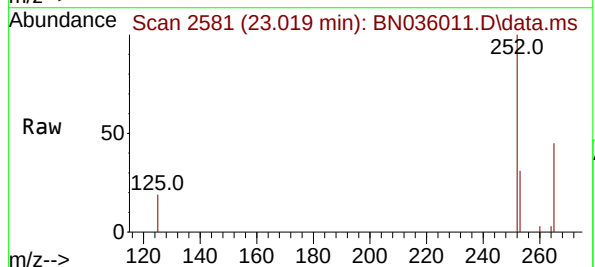
Tgt Ion:252 Resp: 2724

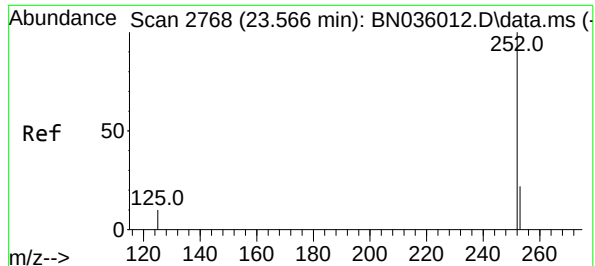
Ion Ratio Lower Upper

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 :

SSTDICC0.2

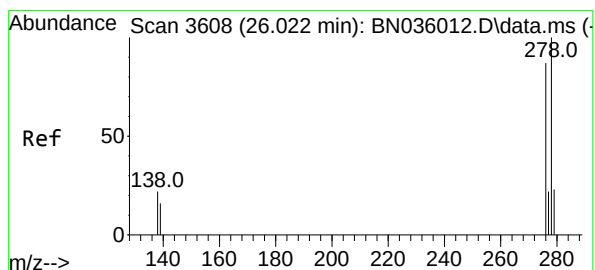
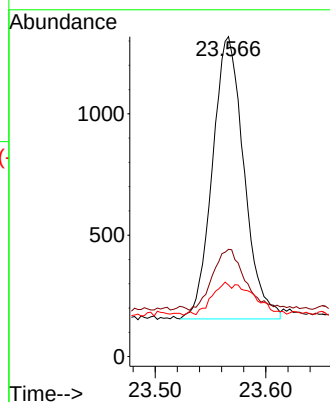
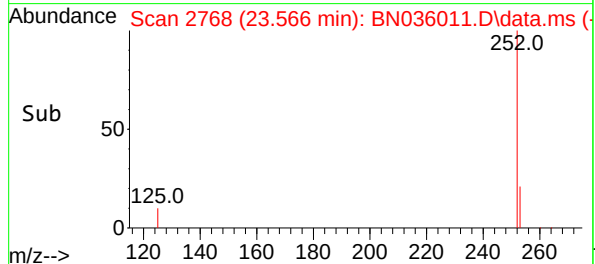
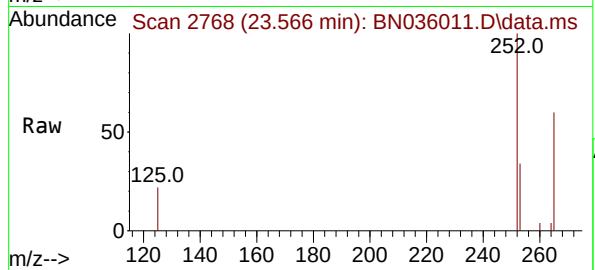
Tgt Ion:252 Resp: 2301

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

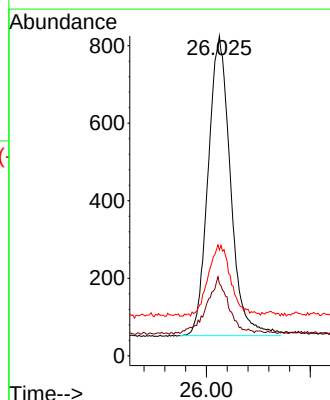
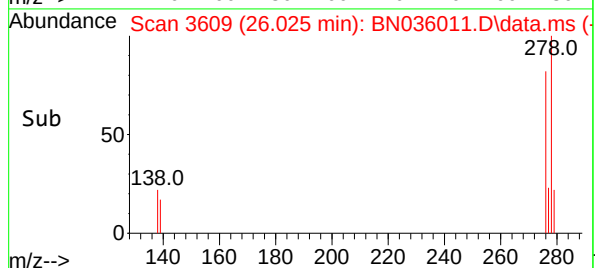
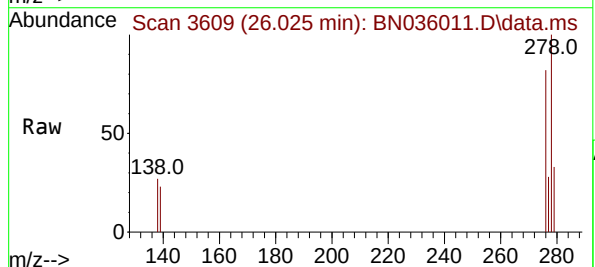
Tgt Ion:278 Resp: 2310

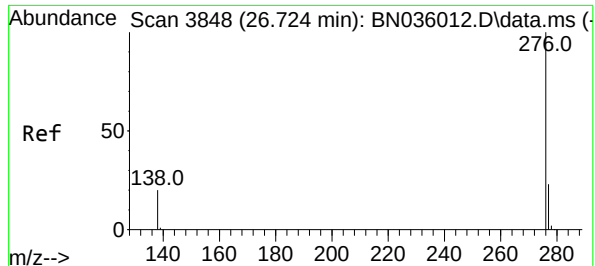
Ion Ratio Lower Upper

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# 3846

Delta R.T. -0.006 min

Lab File: BN036011.D

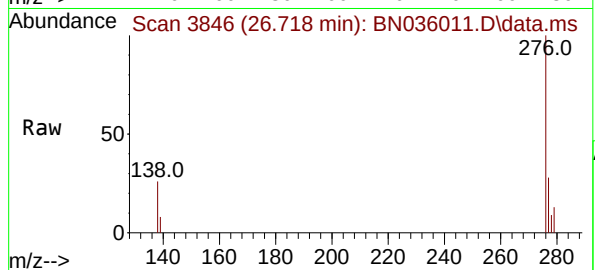
Acq: 22 Jan 2025 11:38

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2



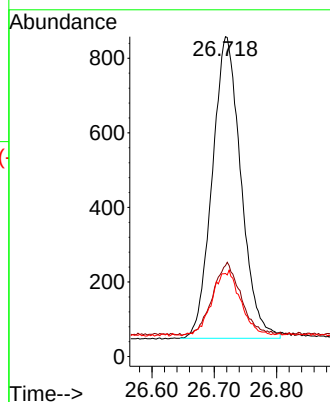
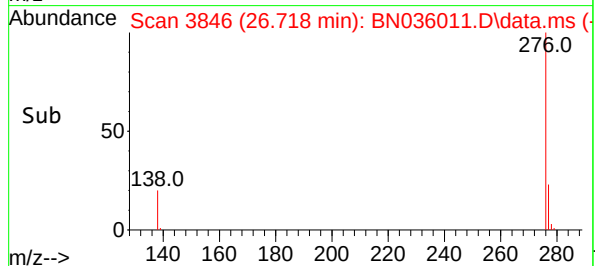
Tgt Ion:276 Resp: 2585

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)

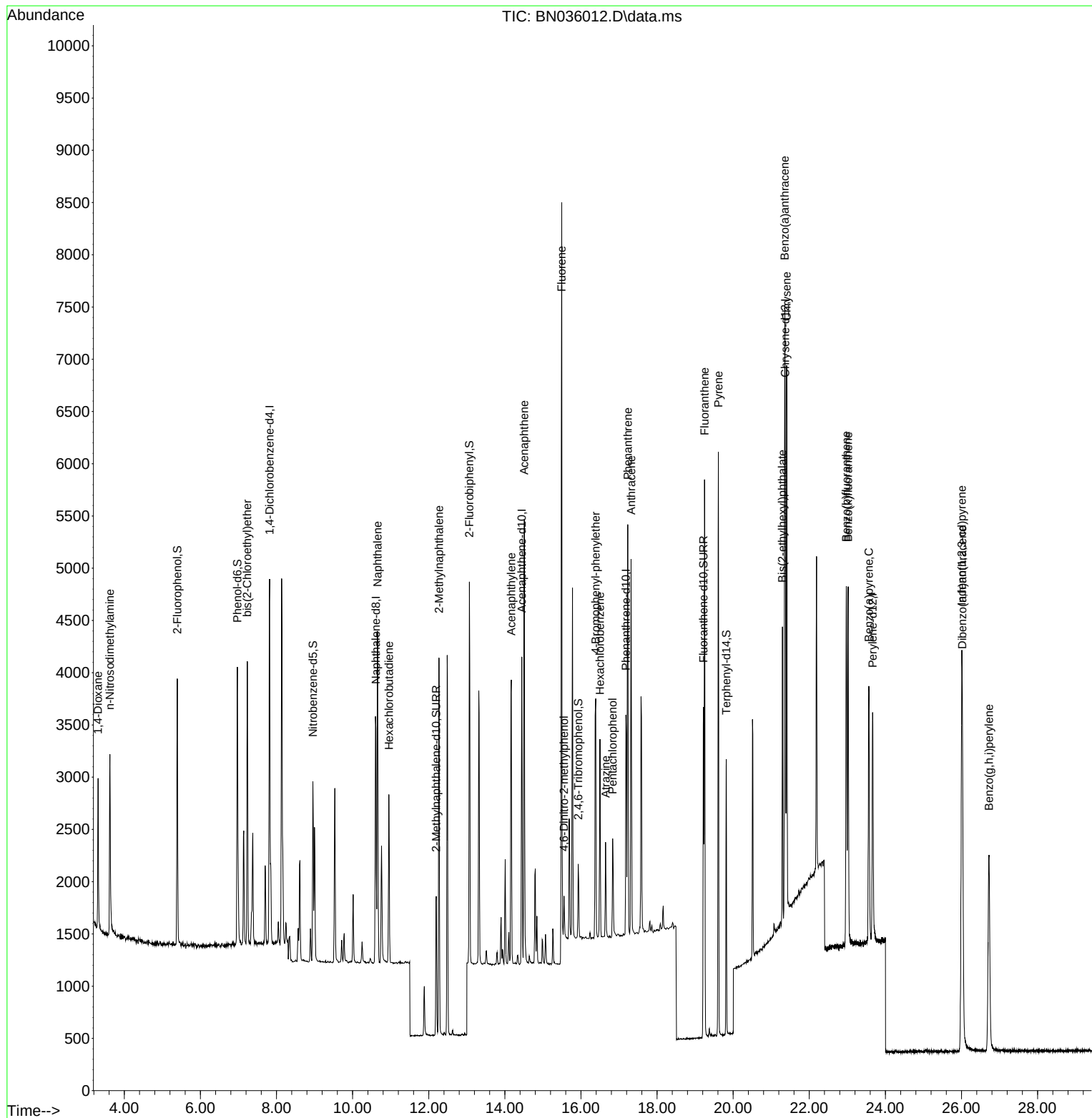
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1648	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3123	0.400	ng	0.00
13) Acenaphthene-d10	14.447	164	1581	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	3136	0.400	ng	0.00
29) Chrysene-d12	21.367	240	2848	0.400	ng	0.00
35) Perylene-d12	23.666	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

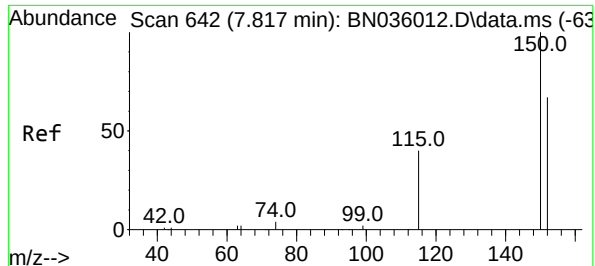
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

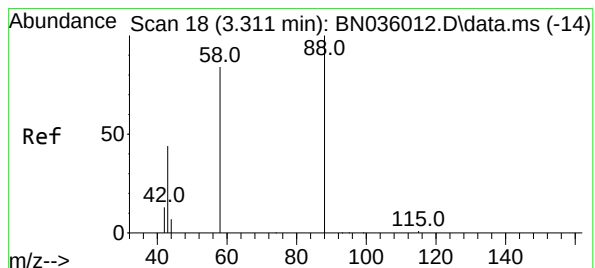
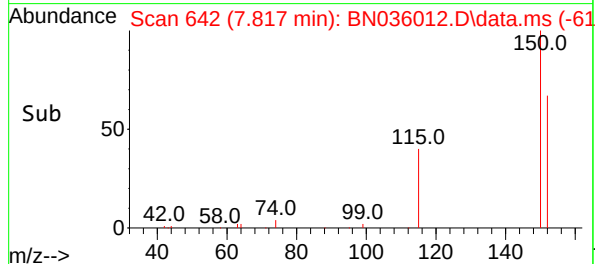
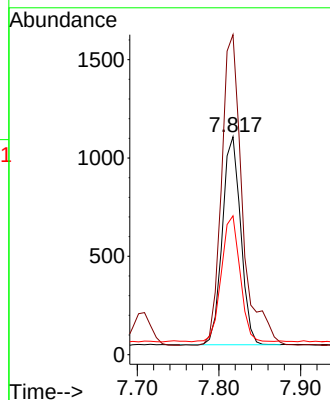
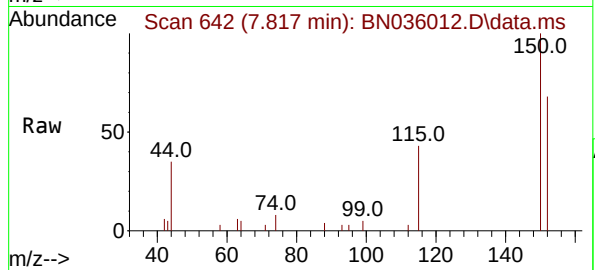




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

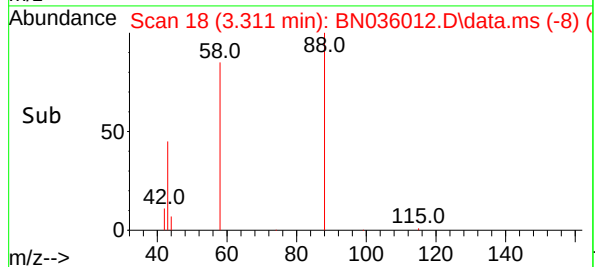
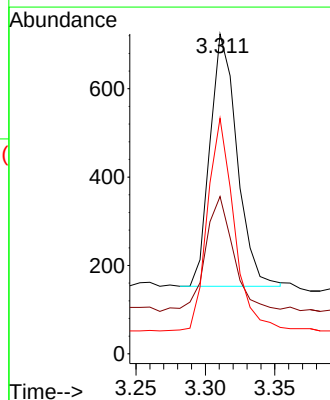
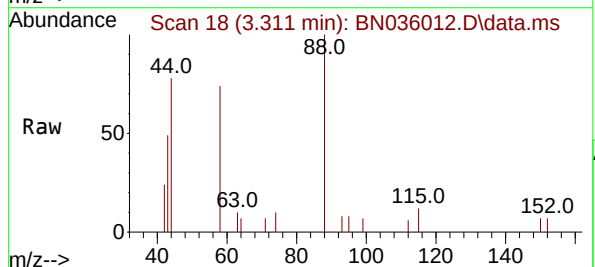
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

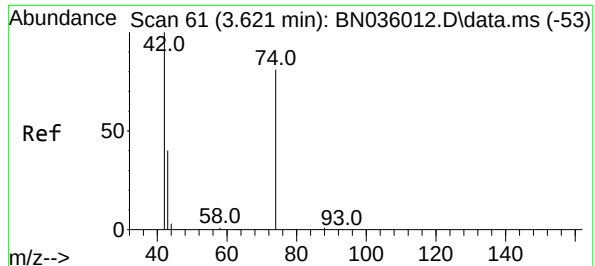
Tgt Ion:152 Resp: 1648
Ion Ratio Lower Upper
152 100
150 146.8 117.4 176.2
115 63.7 51.0 76.4



#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

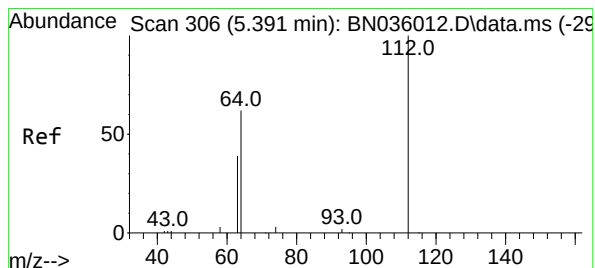
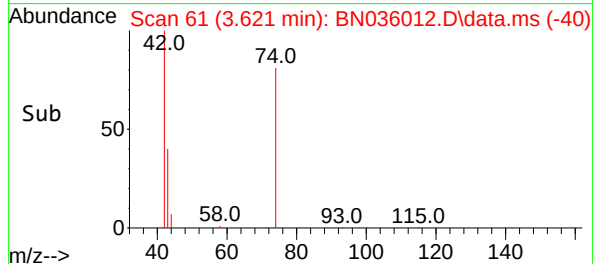
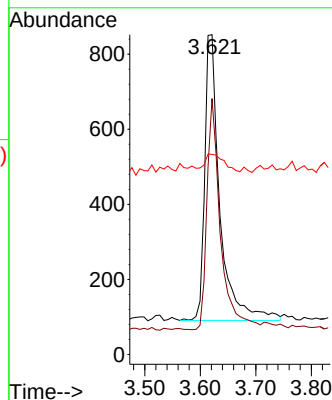
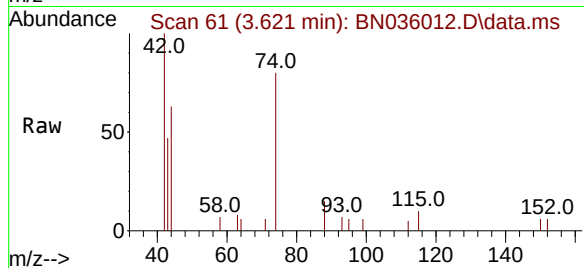




#3
n-Nitrosodimethylamine
Concen: 0.433 ng
RT: 3.621 min Scan# 61
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

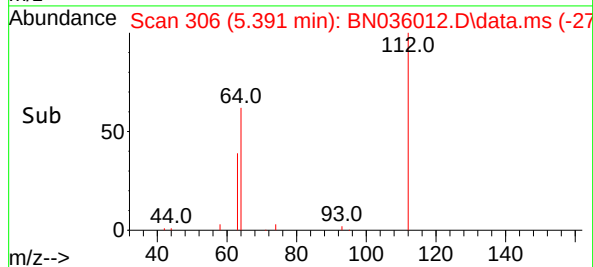
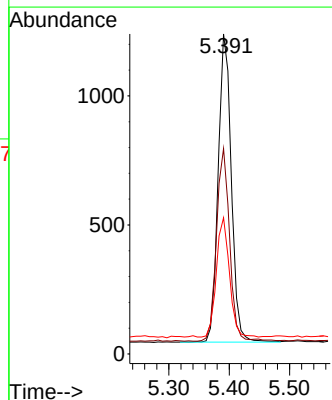
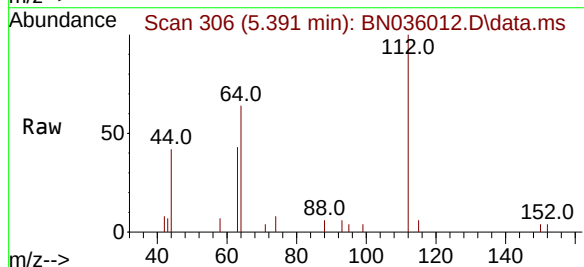
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

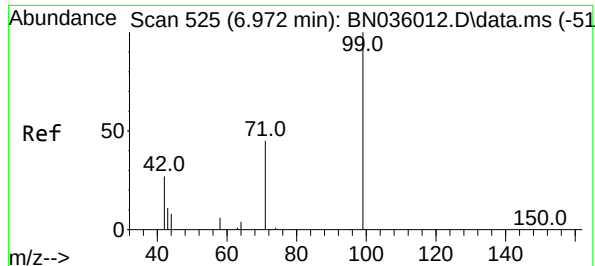
Tgt Ion: 42 Resp: 1446
Ion Ratio Lower Upper
42 100
74 72.6 58.1 87.1
44 7.8 6.2 9.4



#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

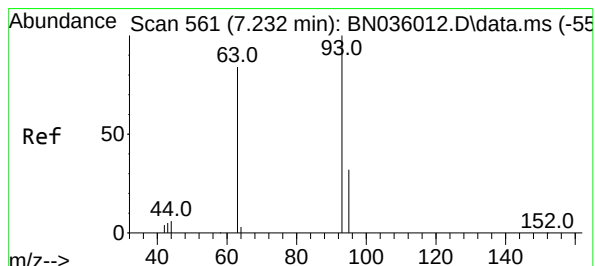
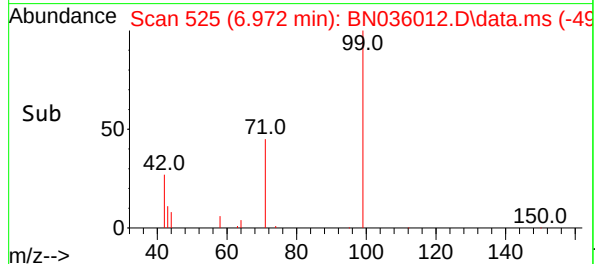
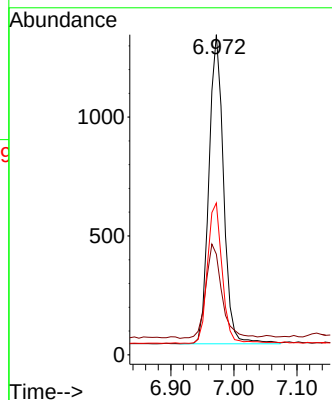
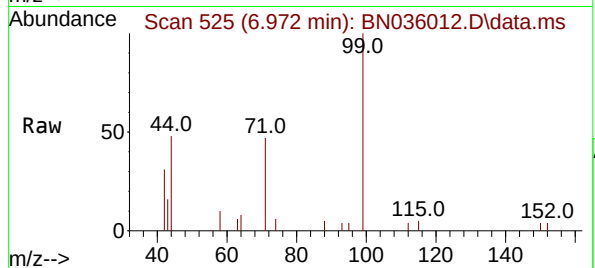




#5
Phenol-d6
Concen: 0.416 ng
RT: 6.972 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

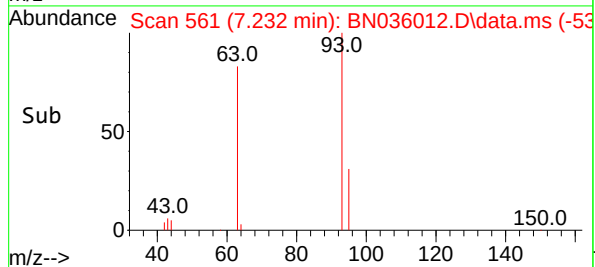
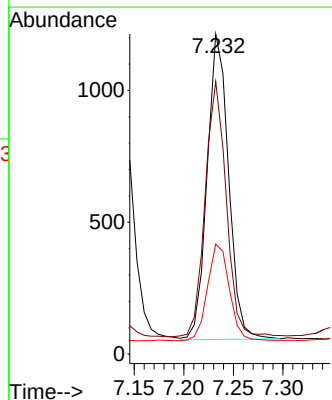
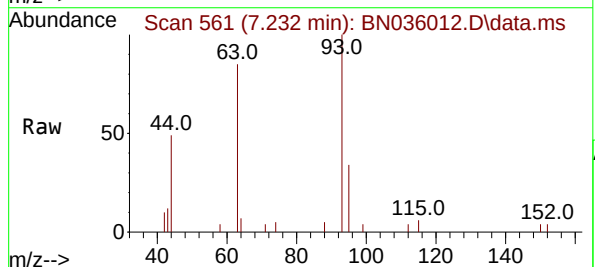
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

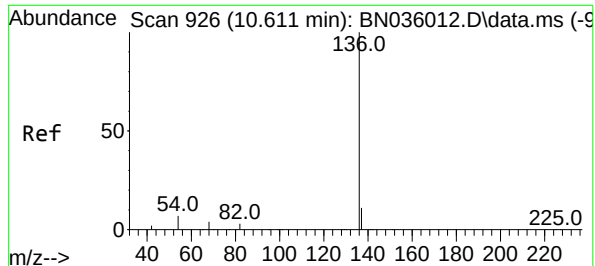
Tgt Ion: 99 Resp: 2093
Ion Ratio Lower Upper
99 100
42 33.5 26.8 40.2
71 45.8 36.6 55.0



#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

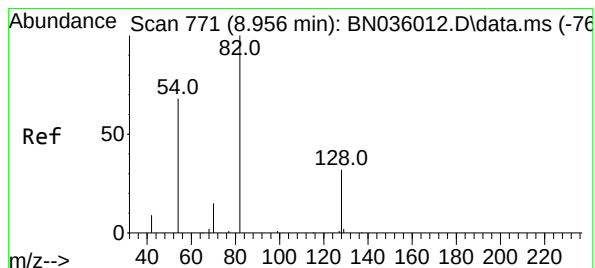
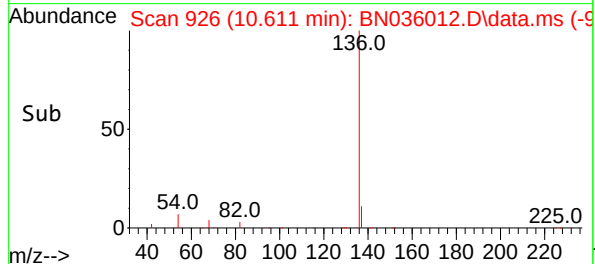
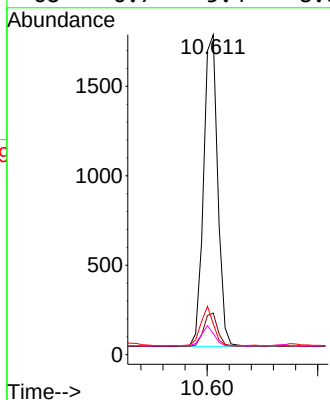
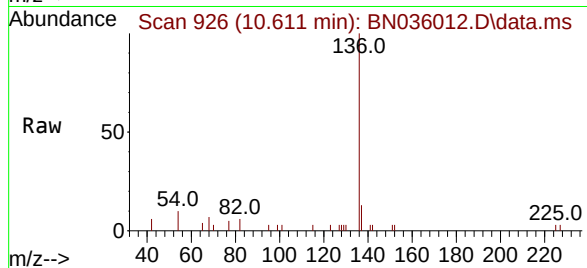




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.611 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

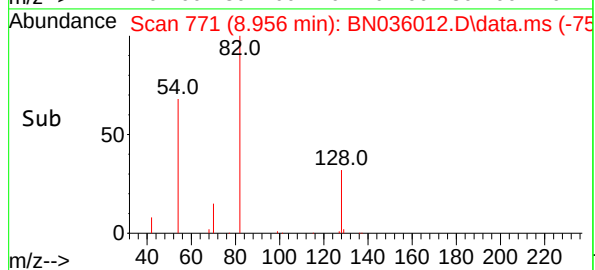
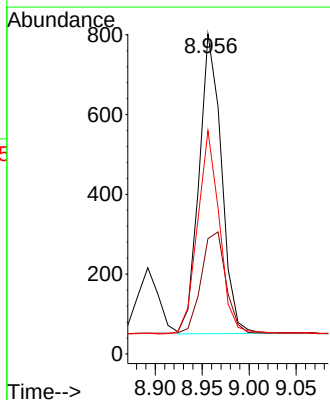
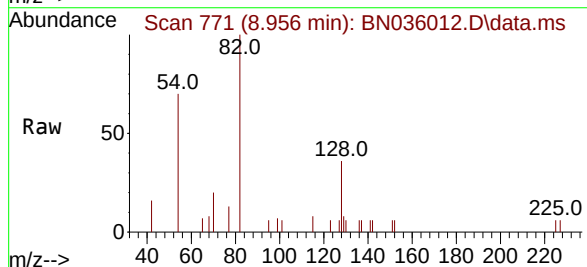
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

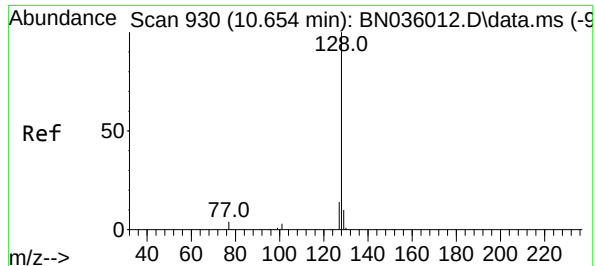
Tgt Ion:	136	Resp:	3123
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	9.6	7.7	11.5
68	6.7	5.4	8.0



#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

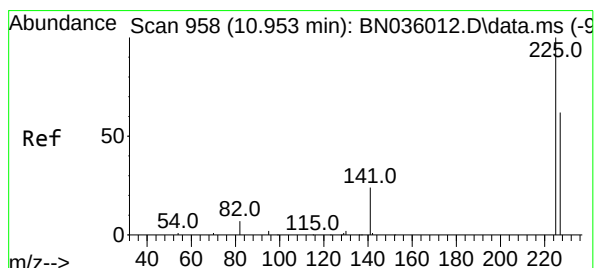
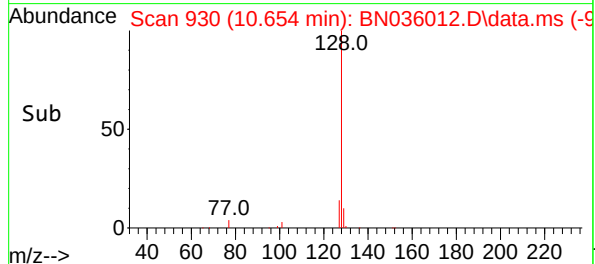
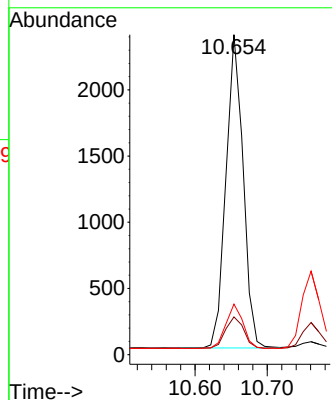
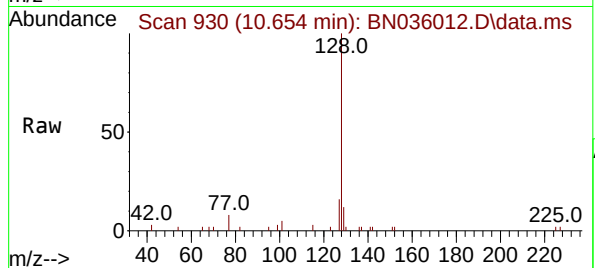




#9
Naphthalene
Concen: 0.431 ng
RT: 10.654 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

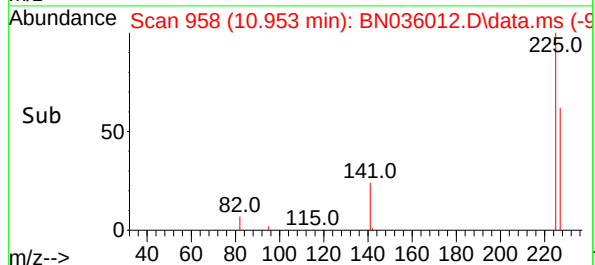
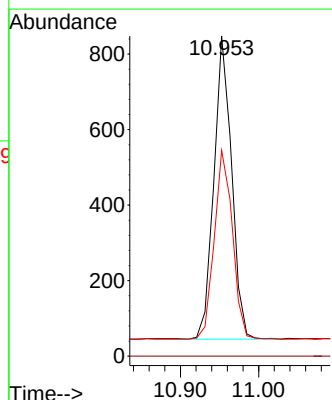
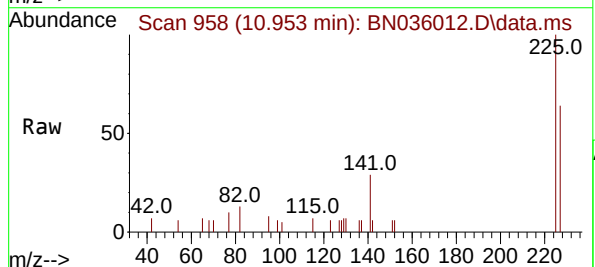
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

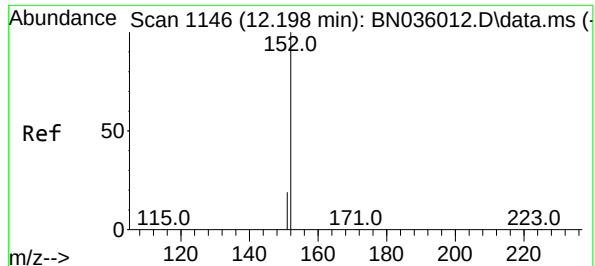
Tgt Ion	128	129	127
Resp:	3905		
Ion Ratio	100	11.8	15.8
Lower		9.4	12.6
Upper		14.2	19.0



#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	223	227
Resp:	1263		
Ion Ratio	100	0.0	63.8
Lower		0.0	51.0
Upper		0.0	76.6

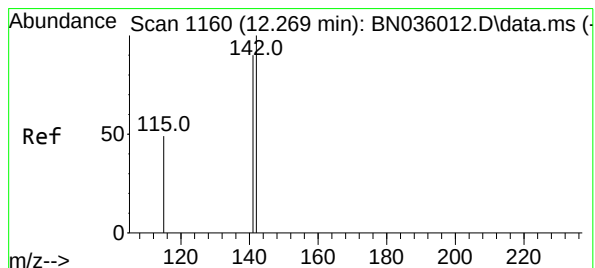
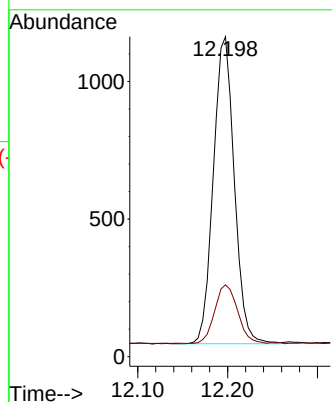
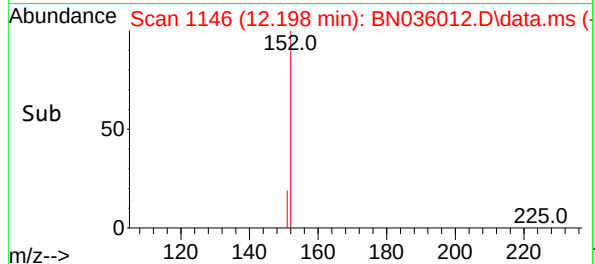
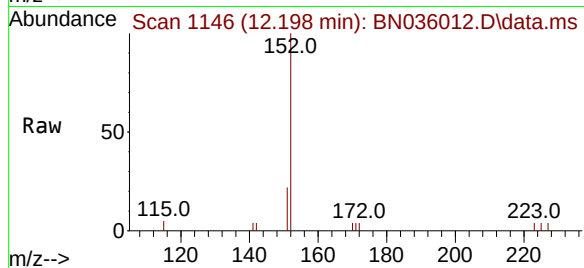




#11
2-Methylnaphthalene-d10
Concen: 0.425 ng
RT: 12.198 min Scan# 1146
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

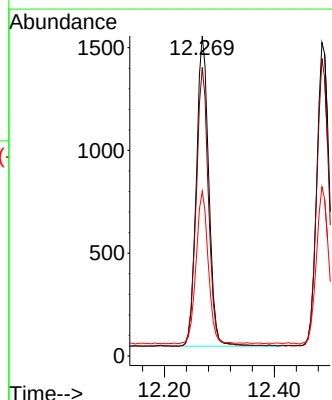
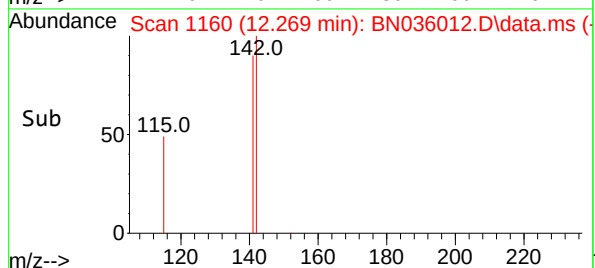
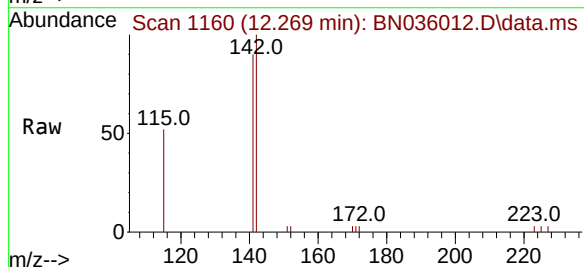
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

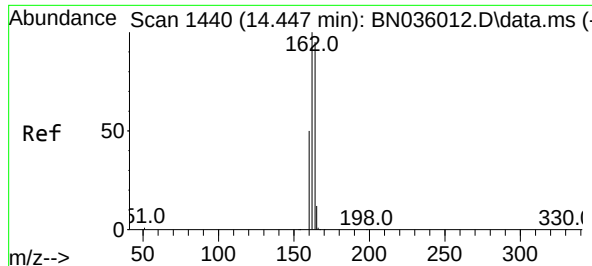
Tgt Ion:152 Resp: 1806
Ion Ratio Lower Upper
152 100
151 20.8 16.6 25.0



#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

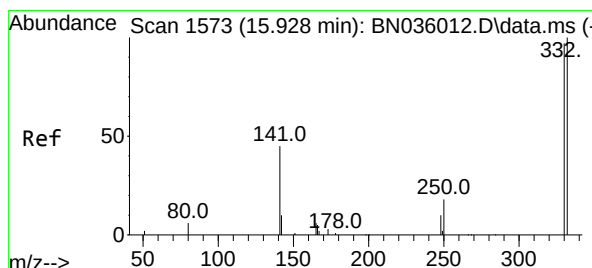
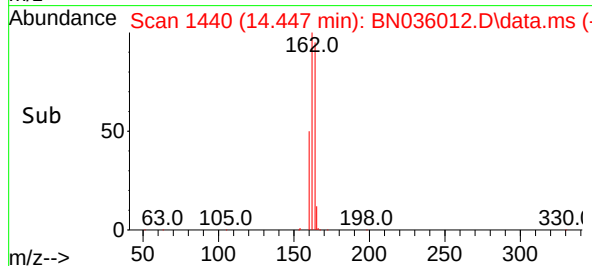
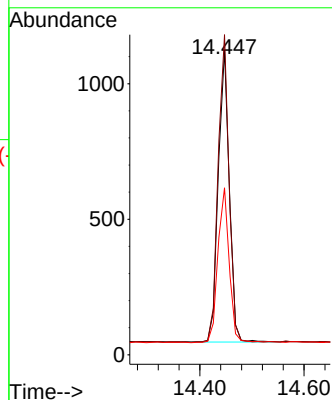
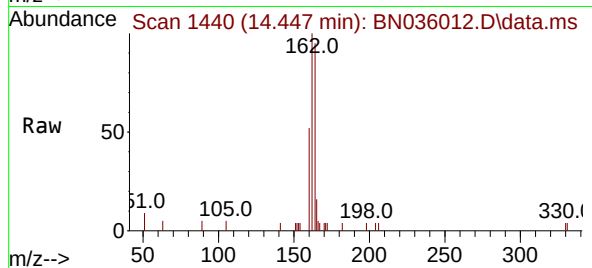




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.447 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

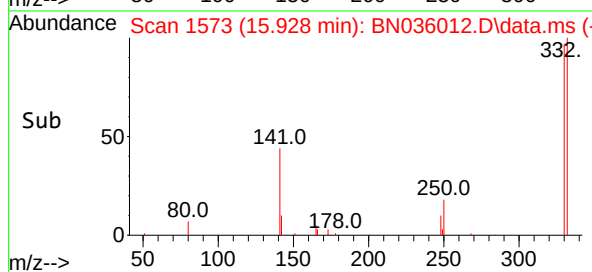
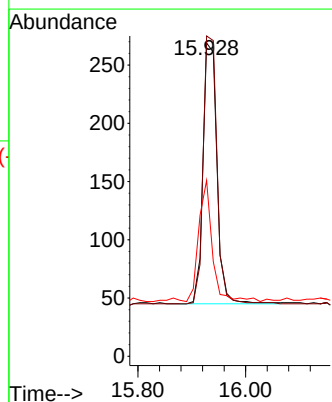
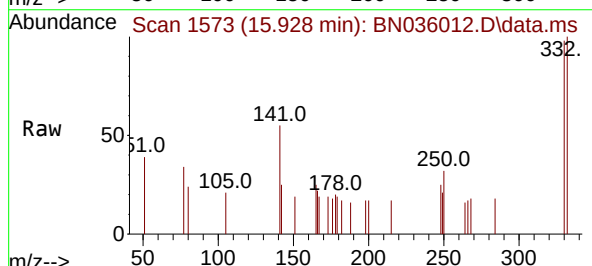
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

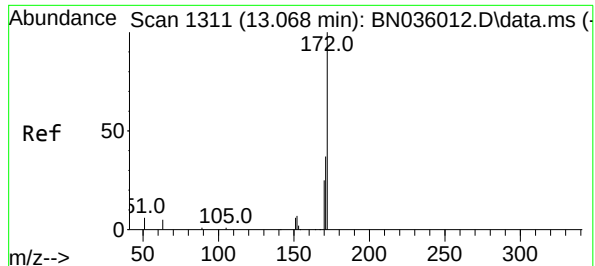
Tgt Ion:164 Resp: 1581
Ion Ratio Lower Upper
164 100
162 105.1 84.1 126.1
160 54.8 43.8 65.8



#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

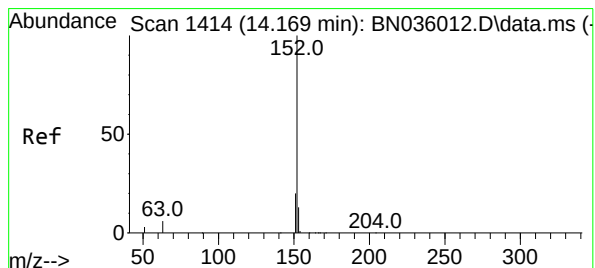
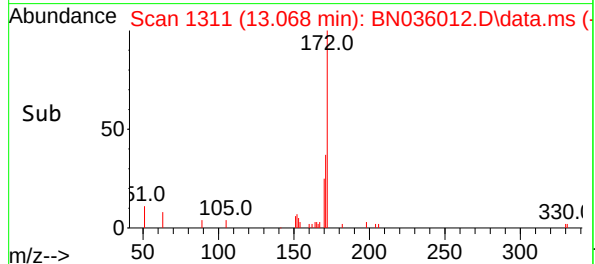
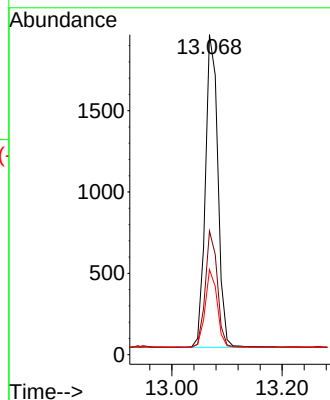
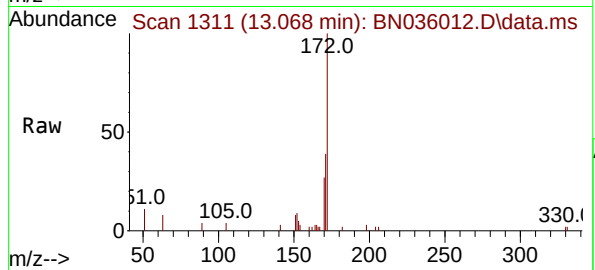




#15
2-Fluorobiphenyl
Concen: 0.433 ng
RT: 13.068 min Scan# 1311
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

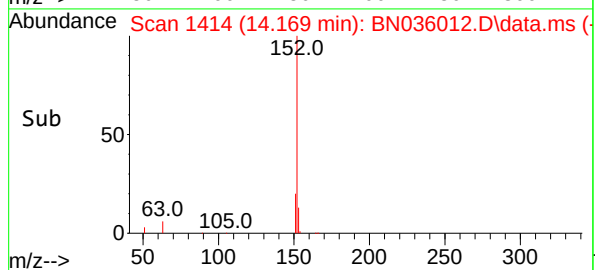
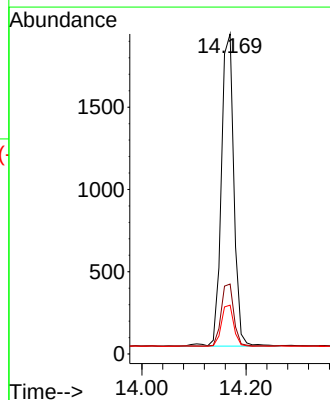
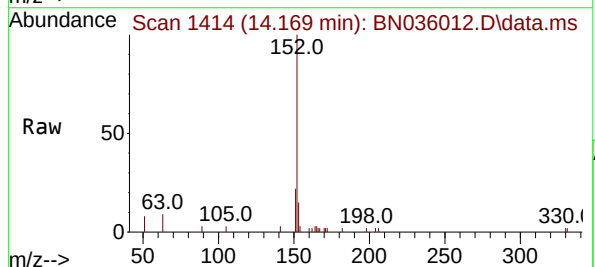
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

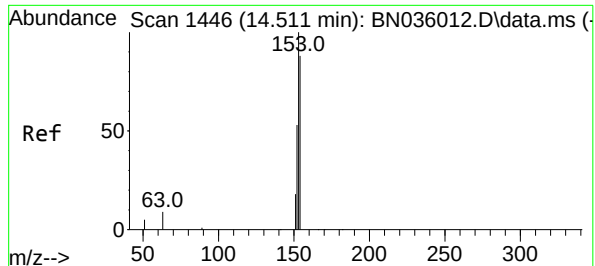
Tgt Ion:172 Resp: 3057
Ion Ratio Lower Upper
172 100
171 38.6 30.9 46.3
170 26.5 21.2 31.8



#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

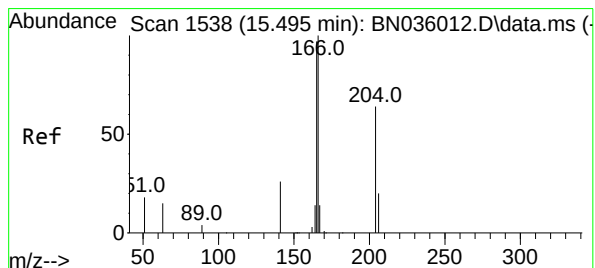
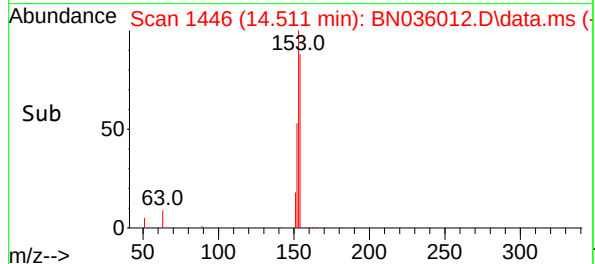
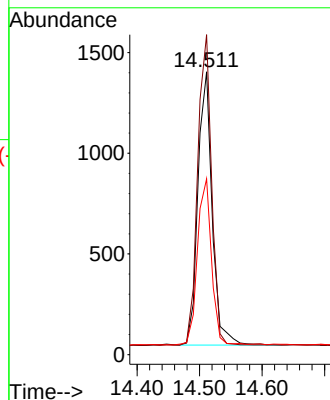
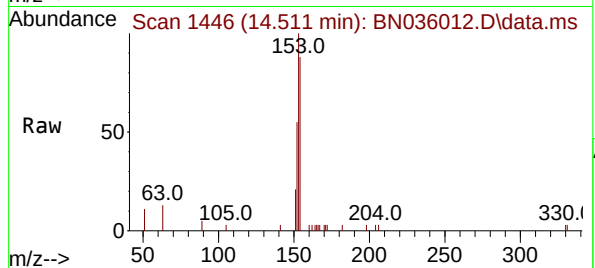




#17
Acenaphthene
Concen: 0.420 ng
RT: 14.511 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

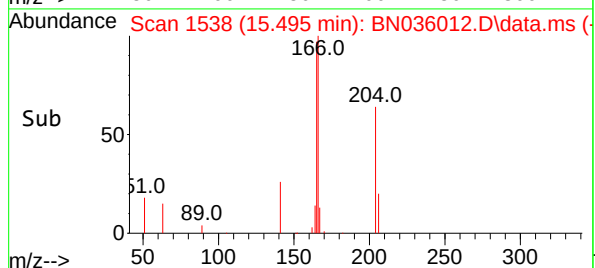
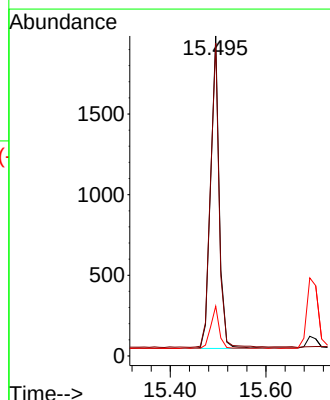
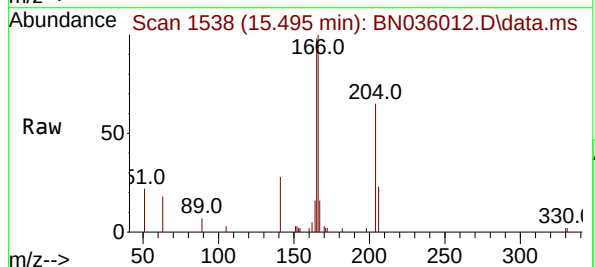
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

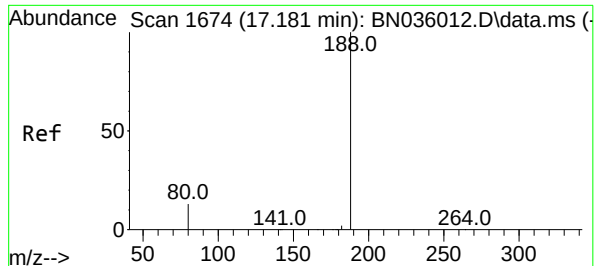
Tgt Ion	154	153	152
Resp:	2158		
Ion Ratio	100	111.1	60.1
Lower		88.9	48.1
Upper		133.3	72.1



#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	165	167
Resp:	2582		
Ion Ratio	100	98.1	13.4
Lower		78.5	10.7
Upper		117.7	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

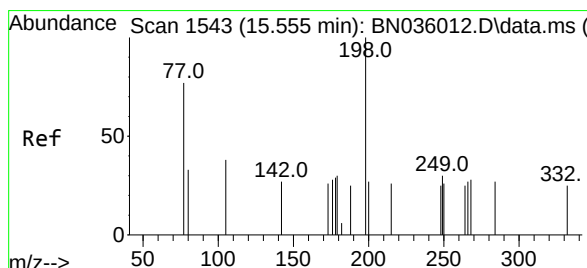
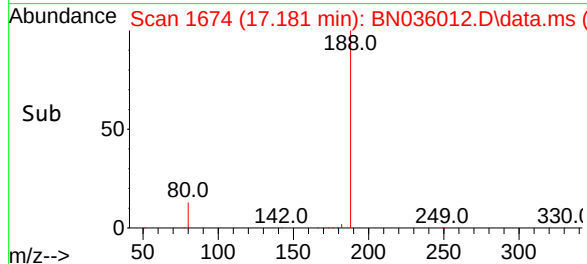
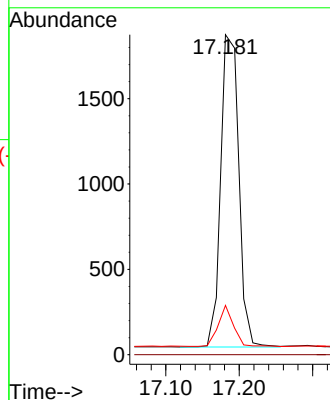
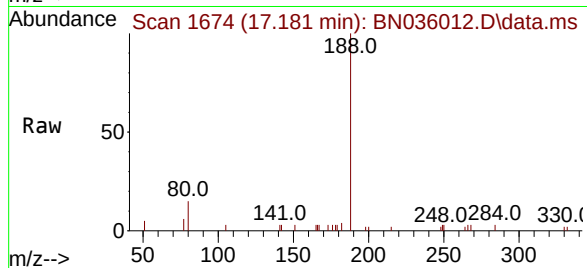
Tgt Ion:188 Resp: 3136

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

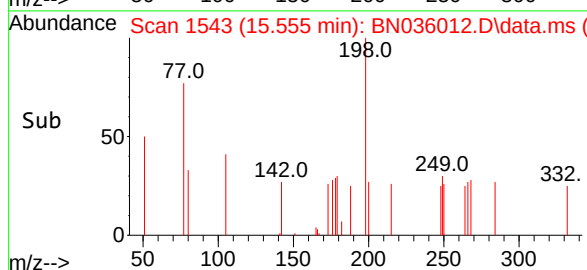
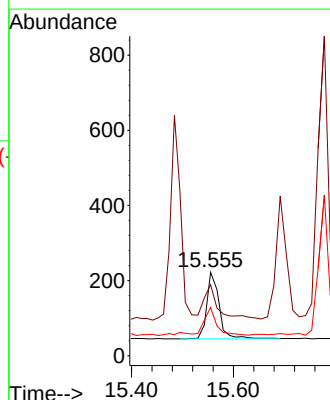
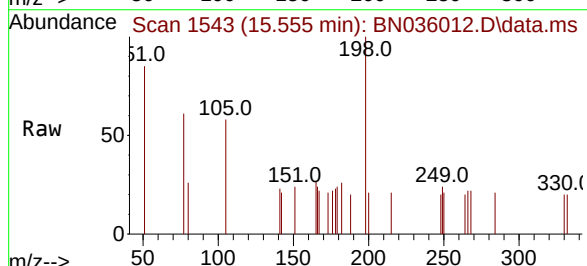
Tgt Ion:198 Resp: 298

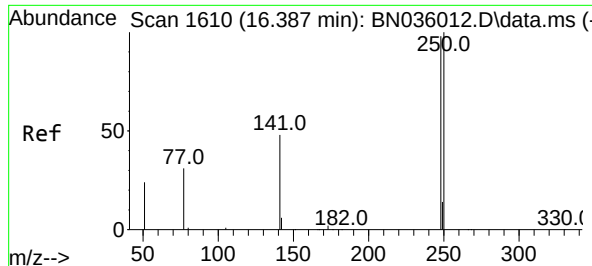
Ion Ratio Lower Upper

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

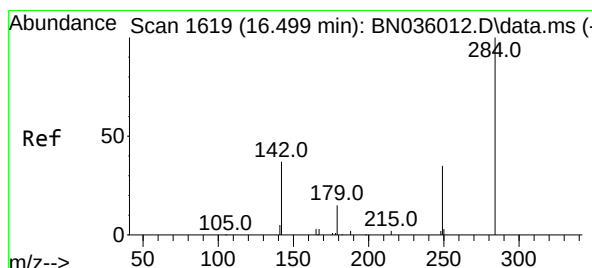
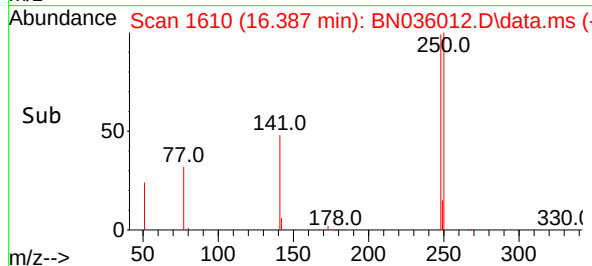
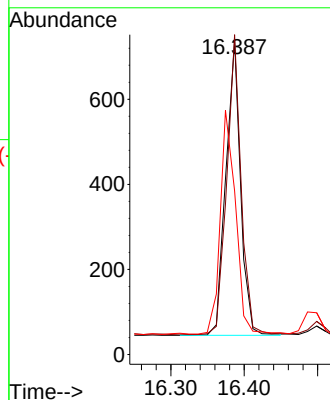
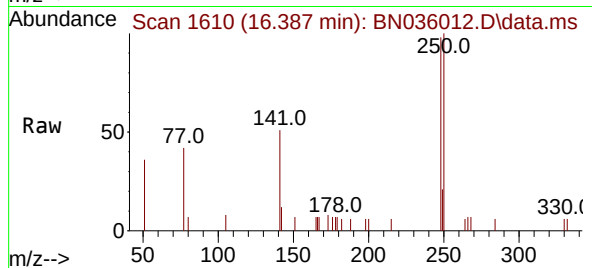
Tgt Ion:248 Resp: 962

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

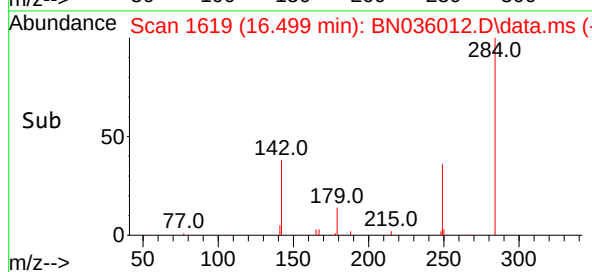
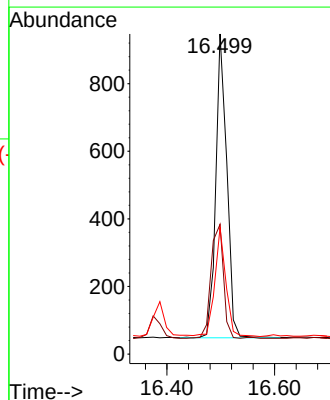
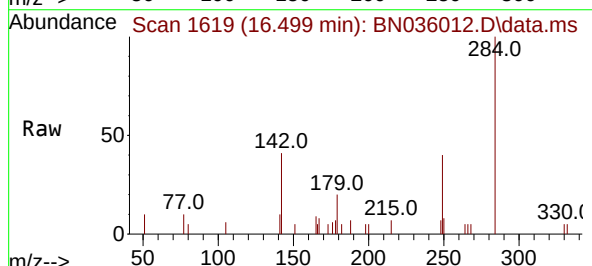
Tgt Ion:284 Resp: 1276

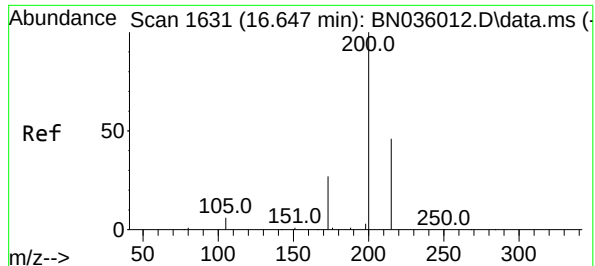
Ion Ratio Lower Upper

284 100

142 42.0 33.6 50.4

249 36.0 28.8 43.2

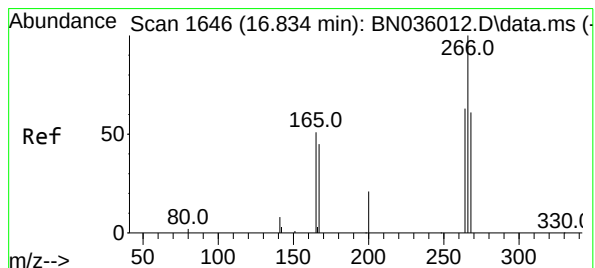
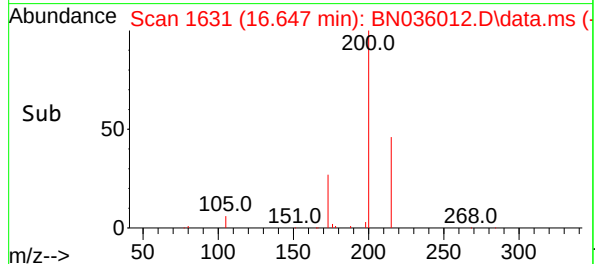
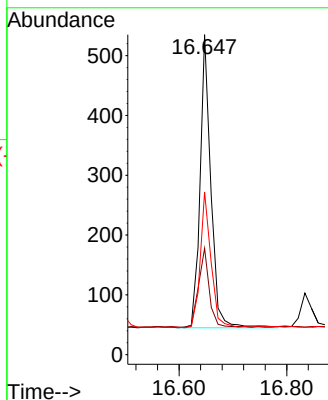
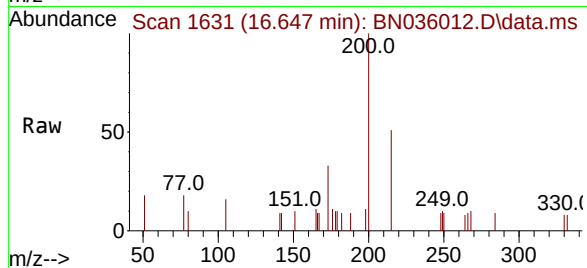




#23
Atrazine
Concen: 0.424 ng
RT: 16.647 min Scan# 1631
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

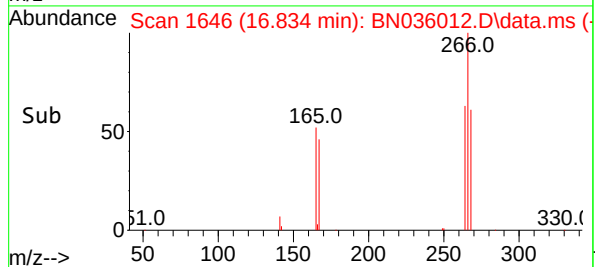
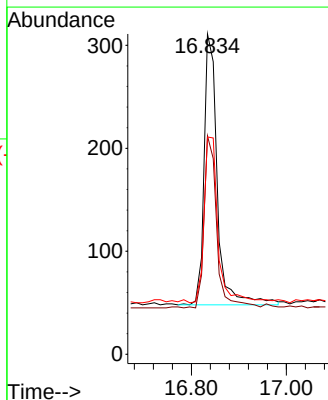
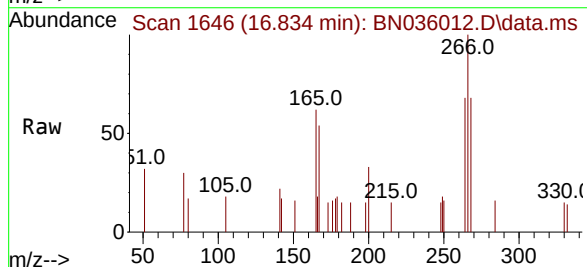
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

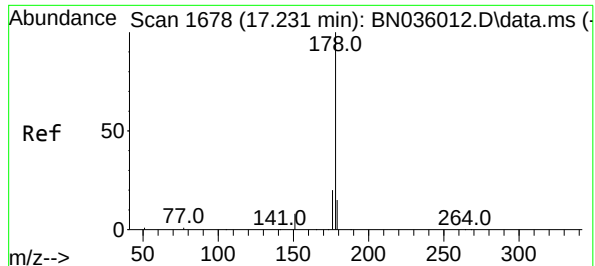
Tgt Ion	Ratio	Lower	Upper
200	100		
173	33.3	26.6	40.0
215	50.8	40.6	61.0



#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	Ratio	Lower	Upper
266	100		
264	60.2	48.2	72.2
268	64.5	51.6	77.4

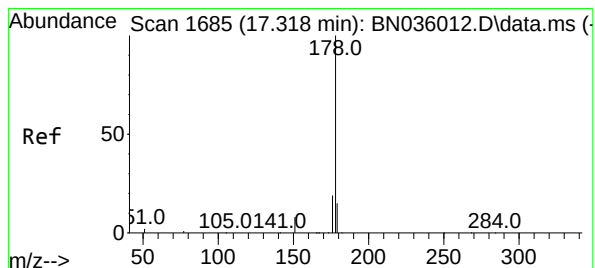
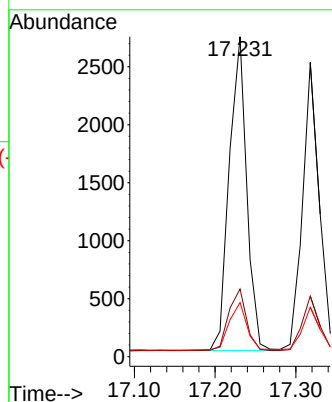
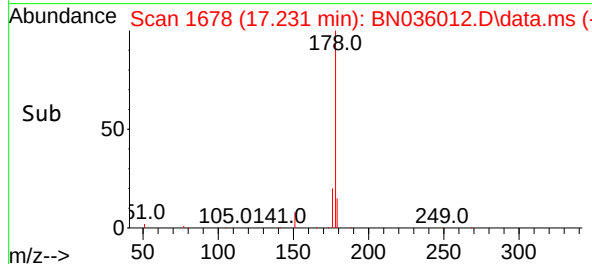
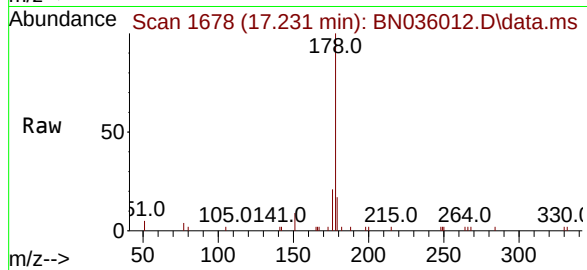




#25
Phenanthrene
Concen: 0.433 ng
RT: 17.231 min Scan# 1678
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

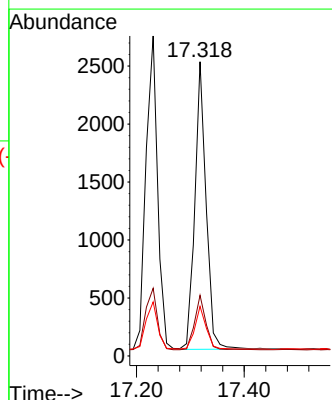
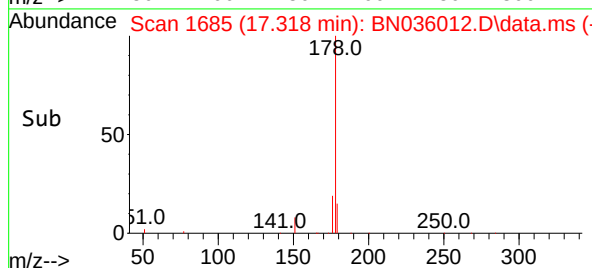
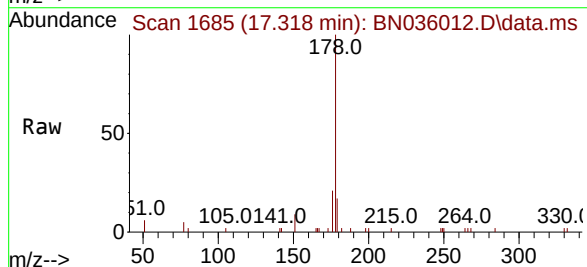
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

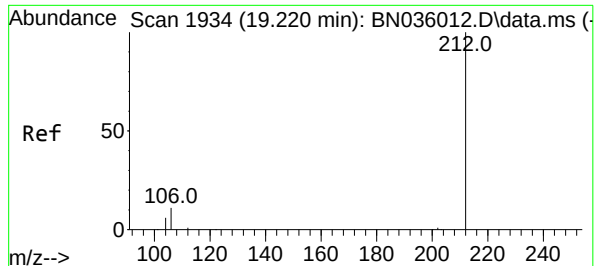
Tgt Ion:178 Resp: 4082
Ion Ratio Lower Upper
178 100
176 20.0 16.0 24.0
179 15.5 12.4 18.6



#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

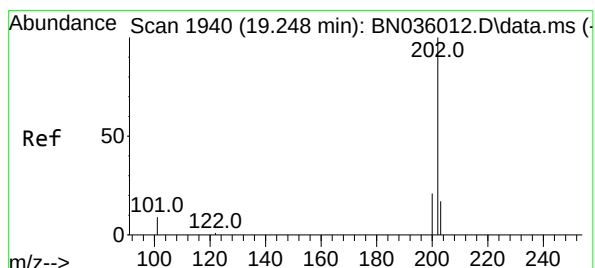
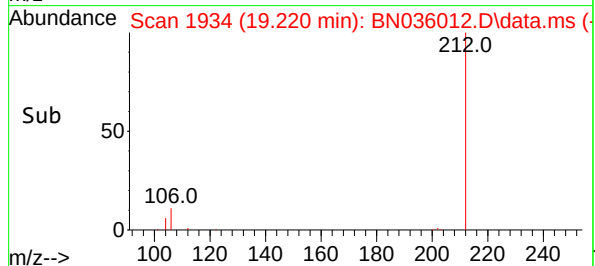
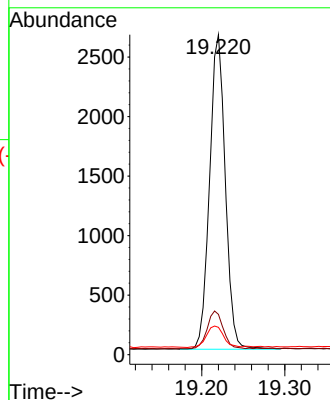
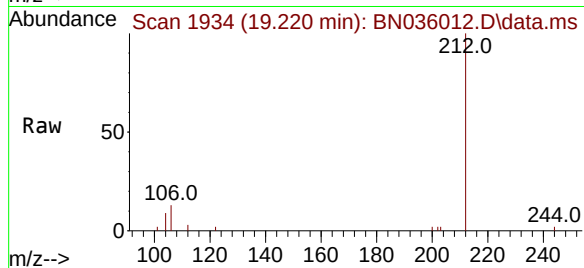
Tgt Ion:212 Resp: 3484

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

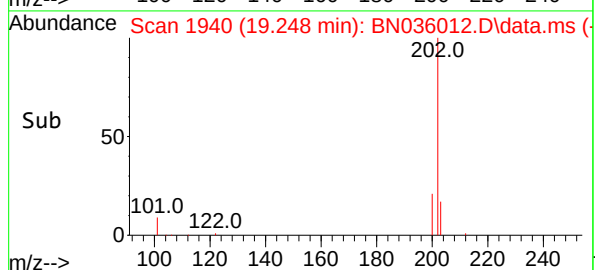
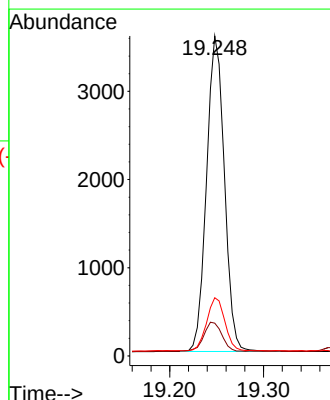
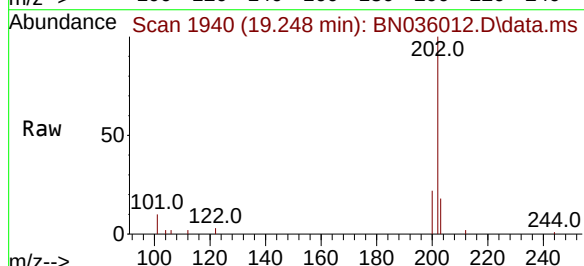
Tgt Ion:202 Resp: 4727

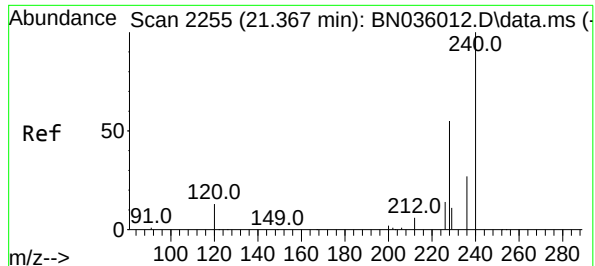
Ion Ratio Lower Upper

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

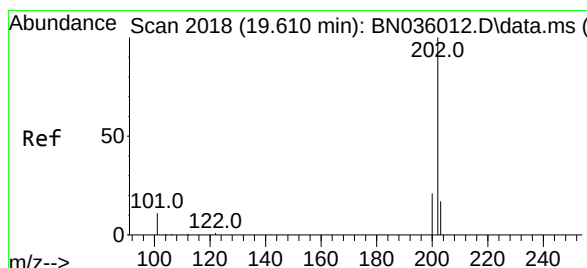
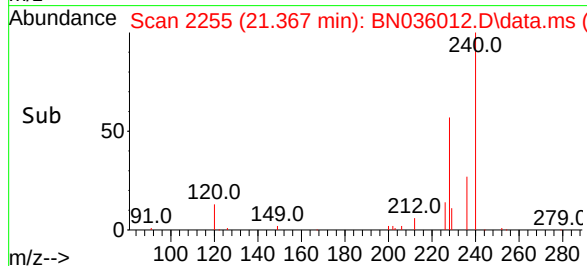
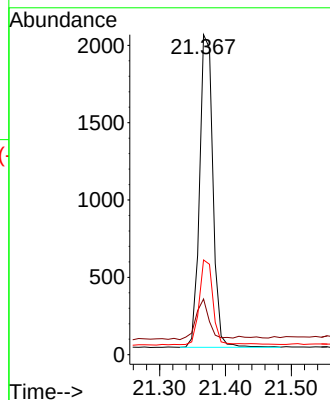
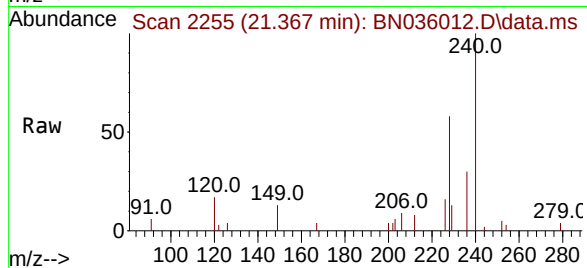
Tgt Ion:240 Resp: 2848

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

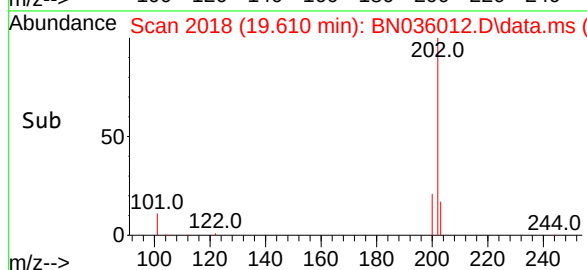
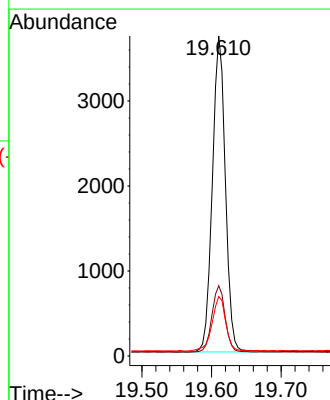
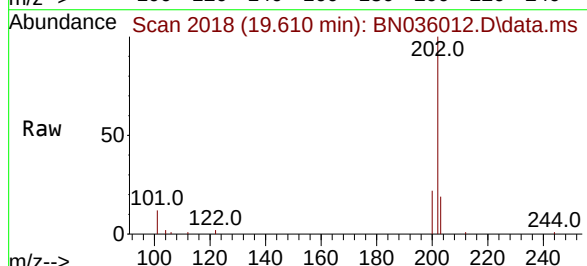
Tgt Ion:202 Resp: 4821

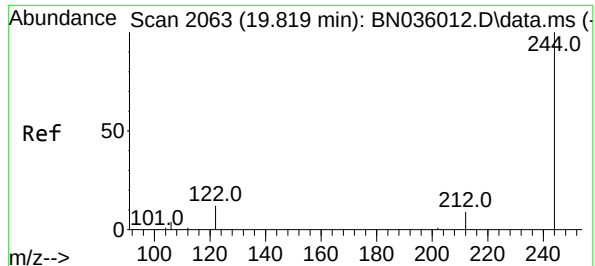
Ion Ratio Lower Upper

202 100

200 21.2 17.0 25.4

203 18.0 14.4 21.6

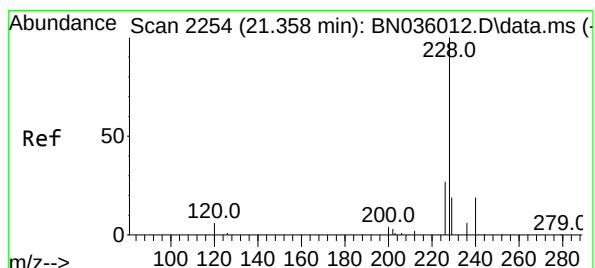
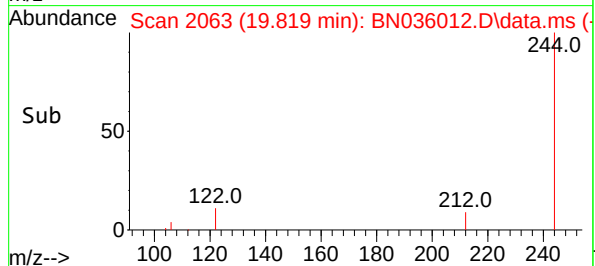
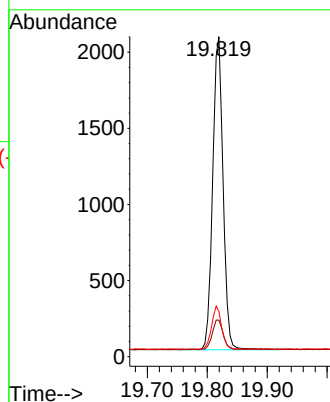
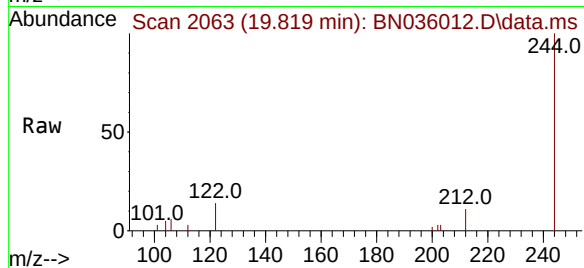




#31
Terphenyl-d14
Concen: 0.420 ng
RT: 19.819 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

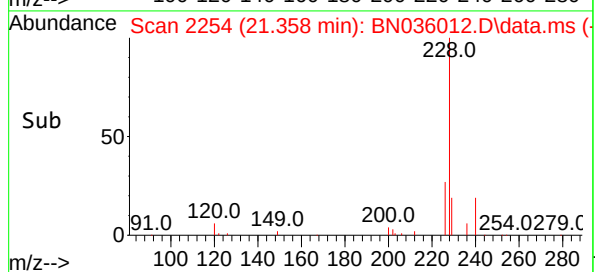
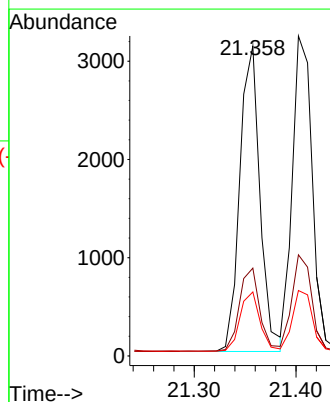
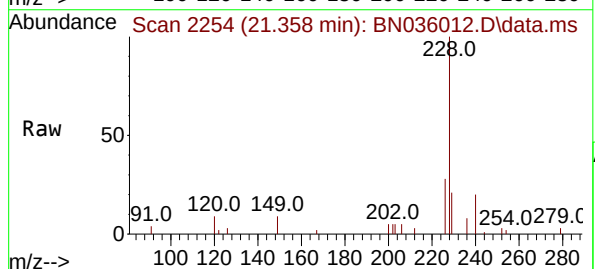
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

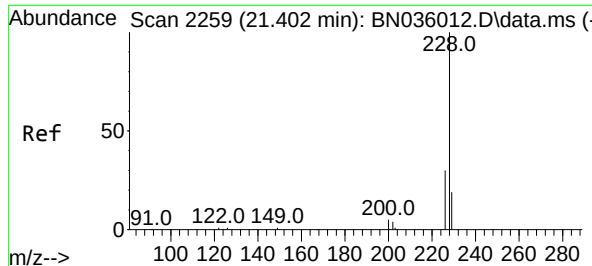
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.4	9.1	13.7
122	14.1	11.3	16.9



#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	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

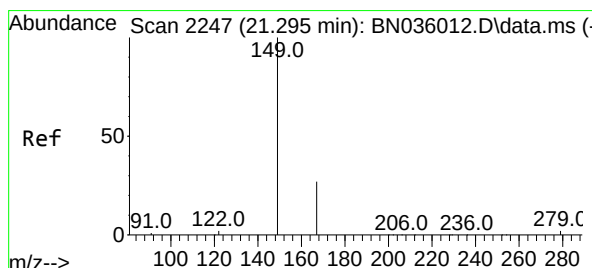
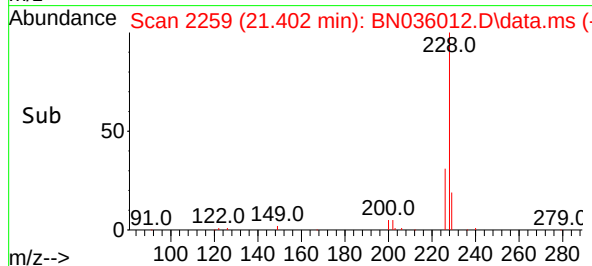
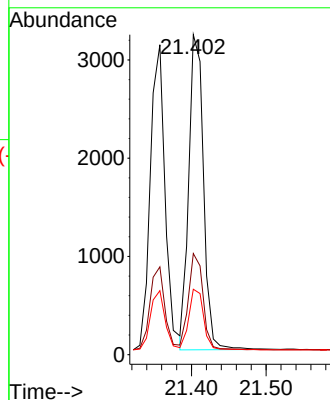
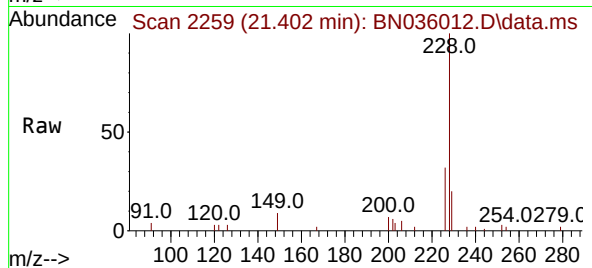
Tgt Ion:228 Resp: 4399

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

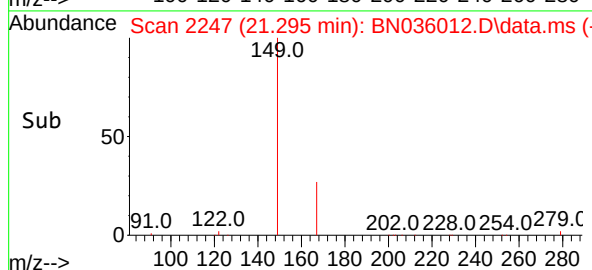
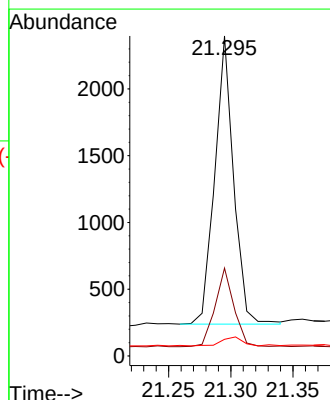
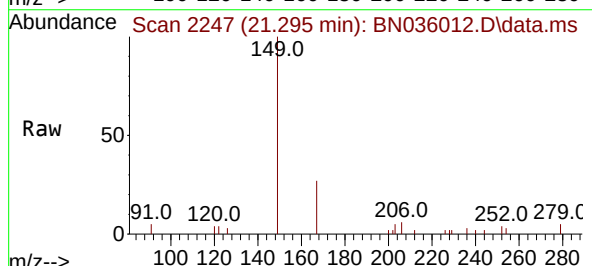
Tgt Ion:149 Resp: 2273

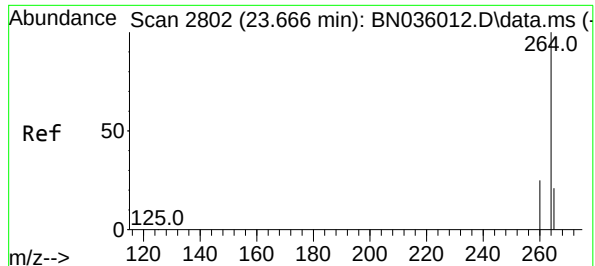
Ion Ratio Lower Upper

149 100

167 27.4 21.9 32.9

279 3.8 3.0 4.6

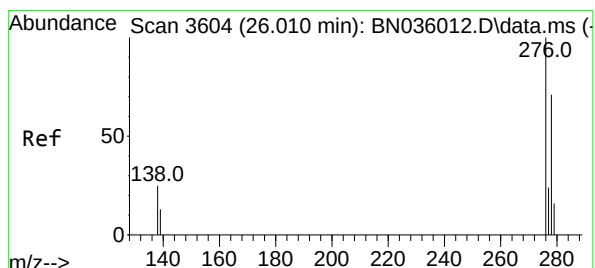
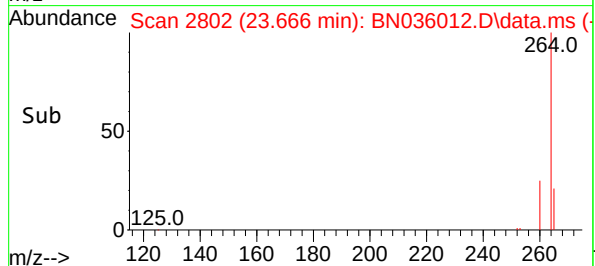
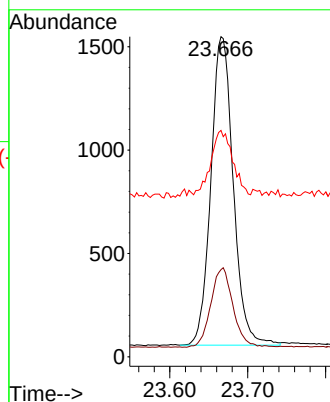
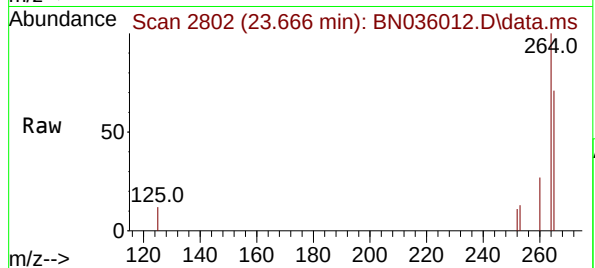




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.666 min Scan# 2802
Delta R.T. 0.000 min
Lab File: BN036012.D
Acq: 22 Jan 2025 12:13

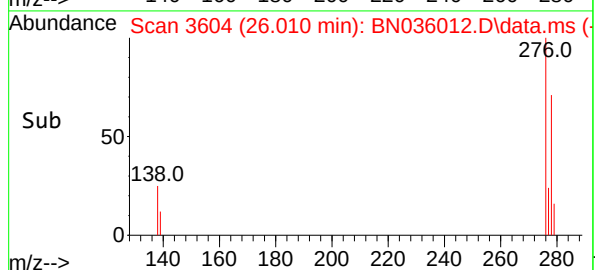
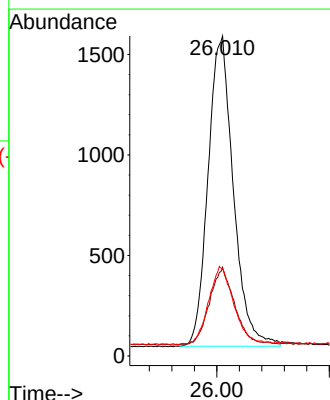
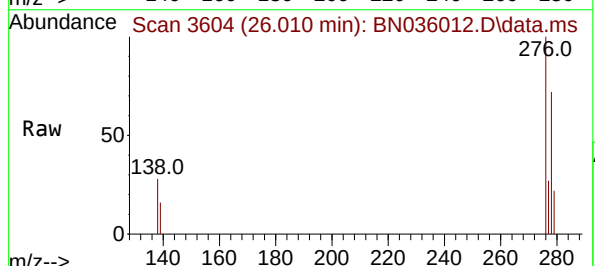
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

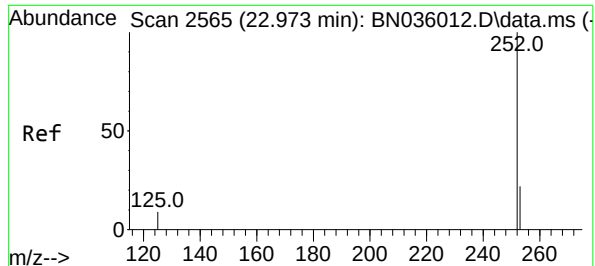
Tgt Ion:264 Resp: 2976
Ion Ratio Lower Upper
264 100
260 27.2 21.8 32.6
265 70.7 56.6 84.8



#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

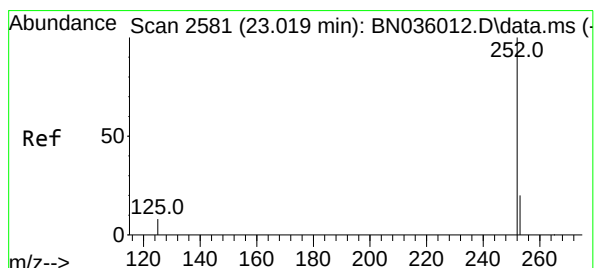
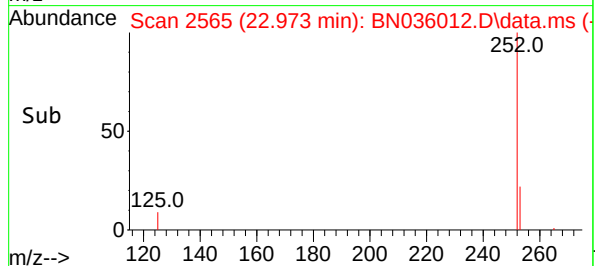
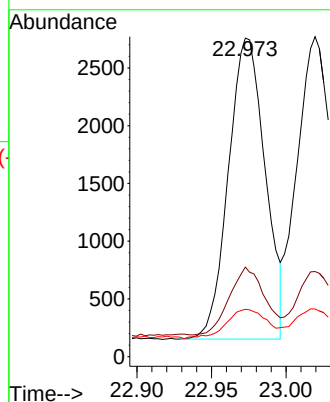
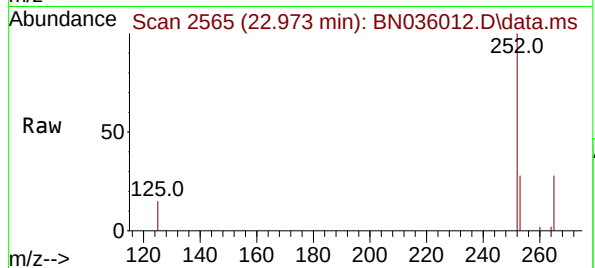
Tgt Ion:252 Resp: 4454

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

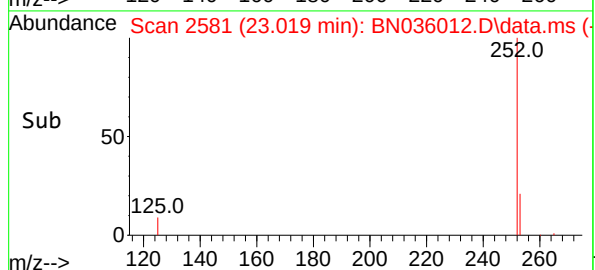
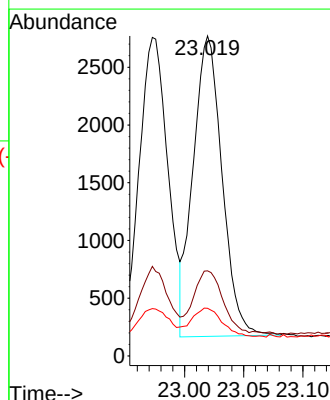
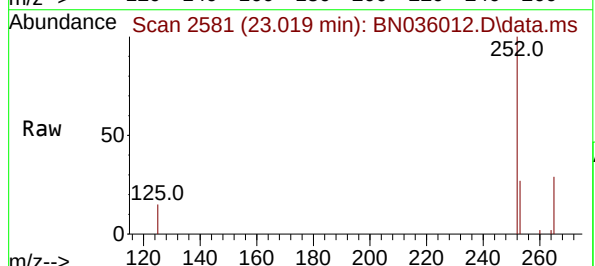
Tgt Ion:252 Resp: 4423

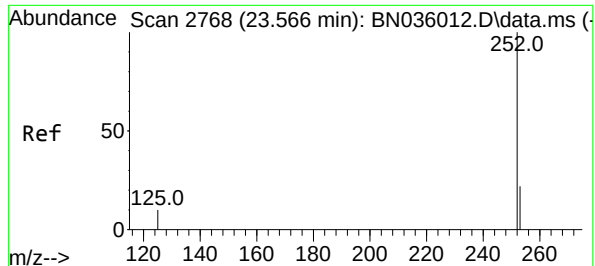
Ion Ratio Lower Upper

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

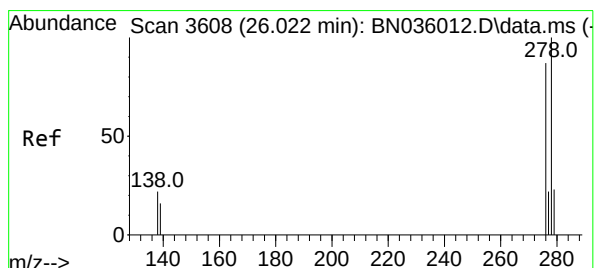
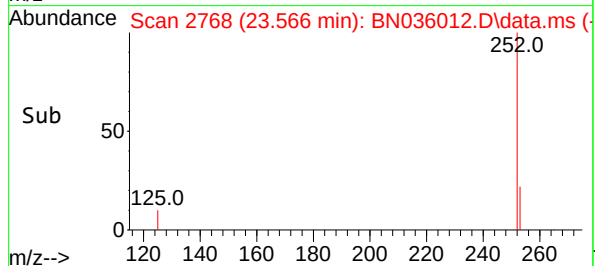
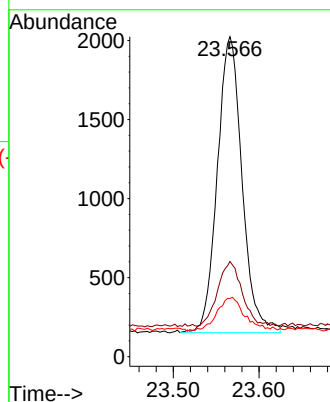
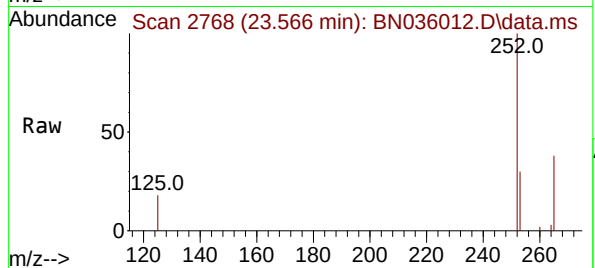
Tgt Ion:252 Resp: 3759

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

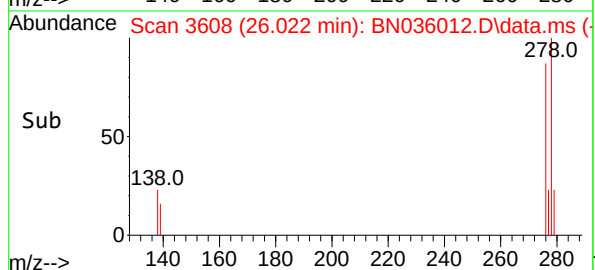
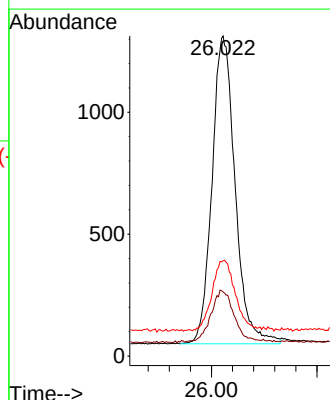
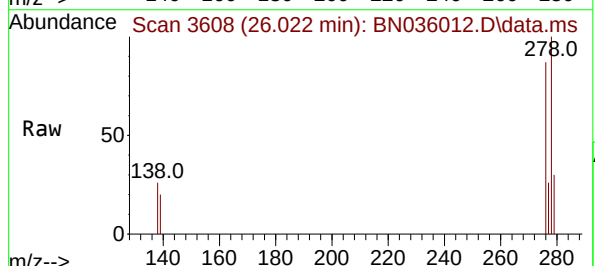
Tgt Ion:278 Resp: 3838

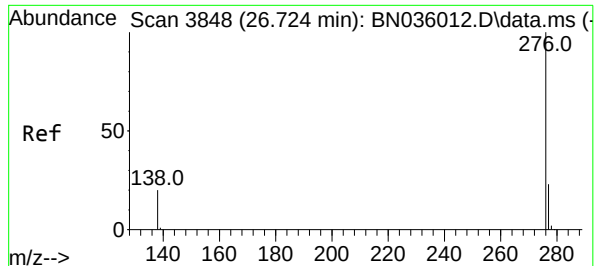
Ion Ratio Lower Upper

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

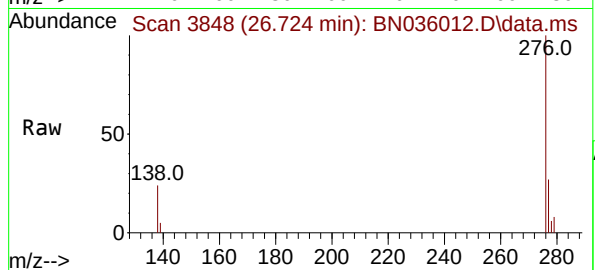
Acq: 22 Jan 2025 12:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4



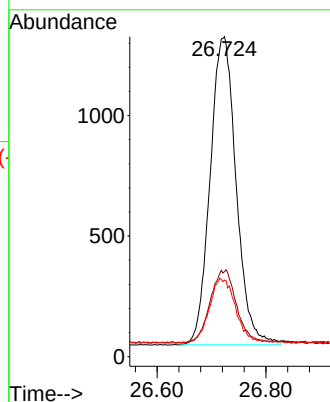
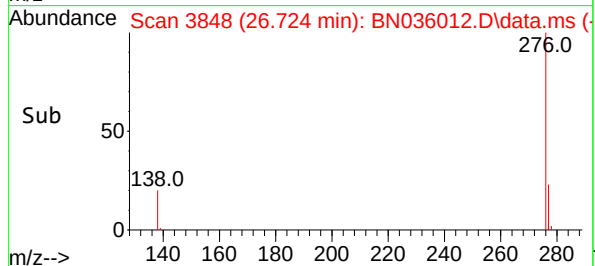
Tgt Ion:276 Resp: 4244

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)

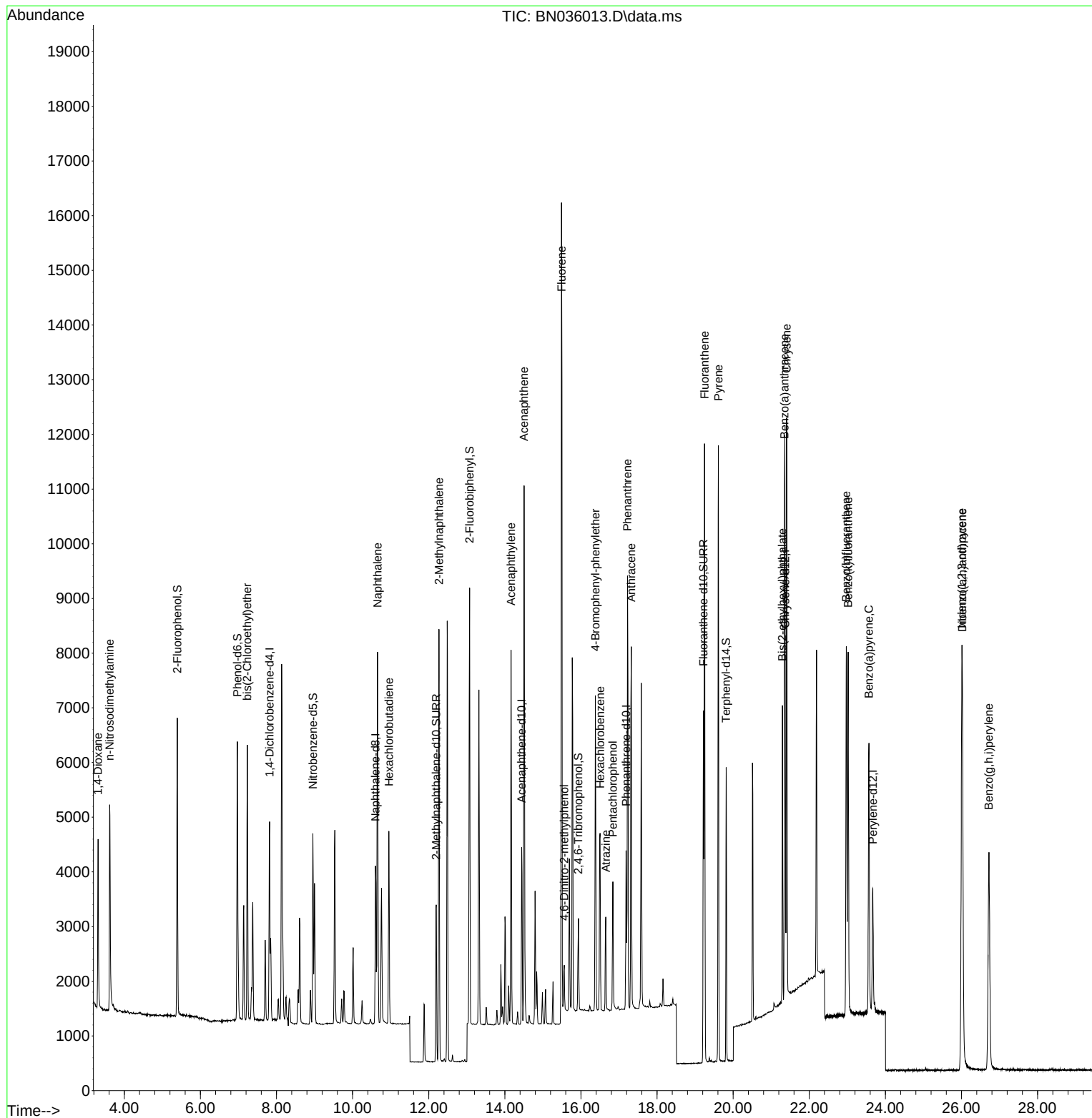
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1730	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3641	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	1841	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3559	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	2978	0.400	ng	0.00
35) Perylene-d12	23.669	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						Qvalue
2) 1,4-Dioxane	3.310	88	1651	0.854	ng	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

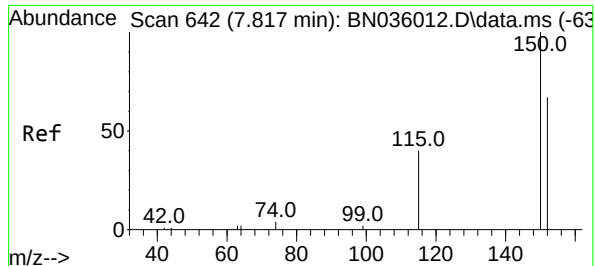
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

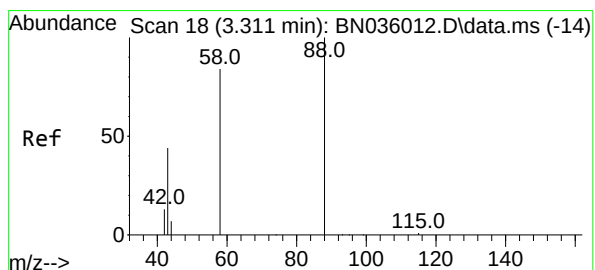
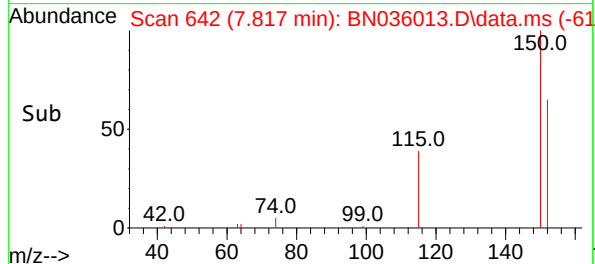
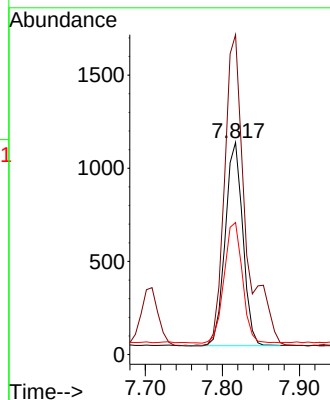
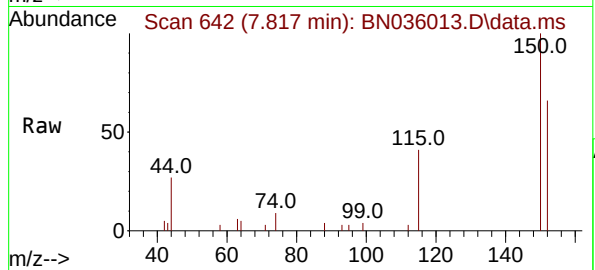




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

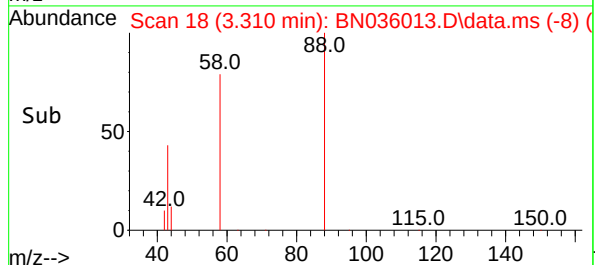
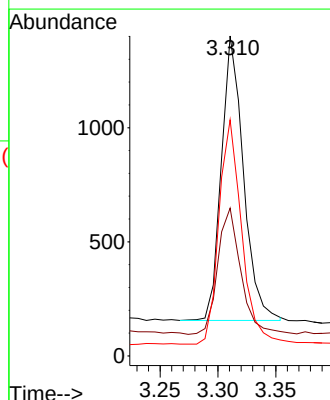
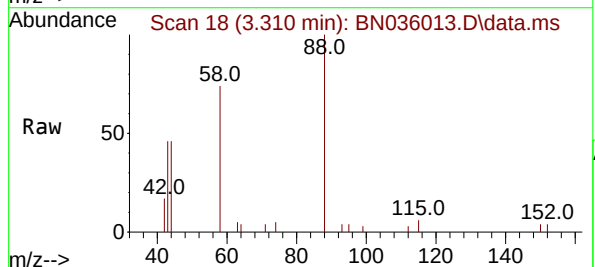
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

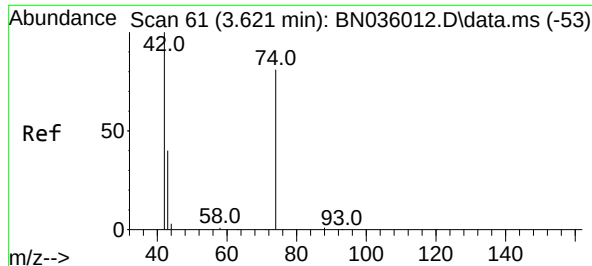
Tgt Ion:152 Resp: 1730
Ion Ratio Lower Upper
152 100
150 150.7 117.4 176.2
115 62.2 51.0 76.4



#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

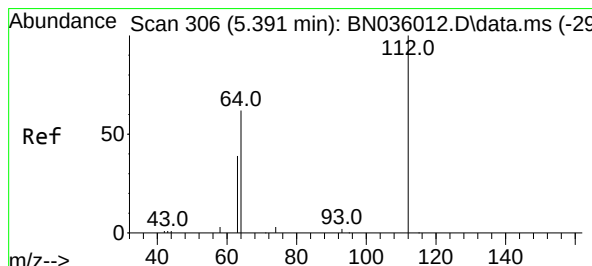
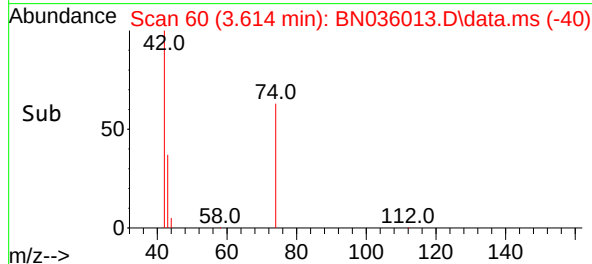
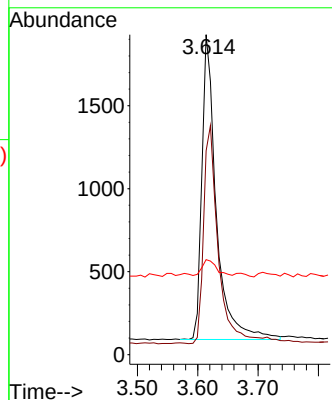
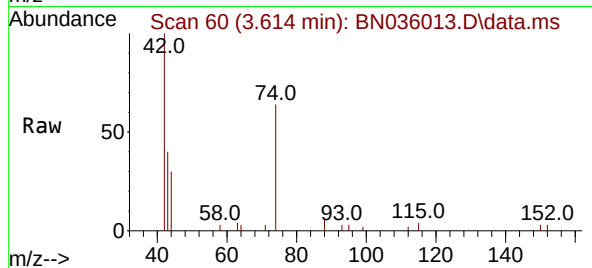




#3
n-Nitrosodimethylamine
Concen: 0.871 ng
RT: 3.614 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

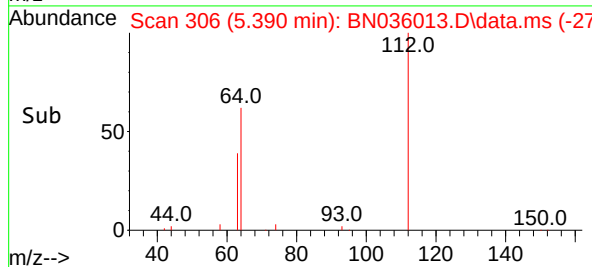
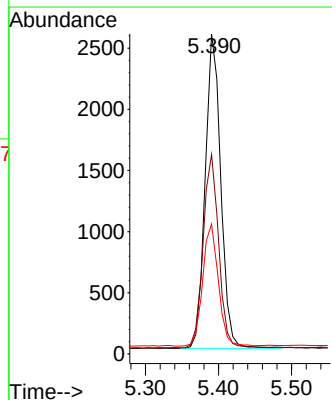
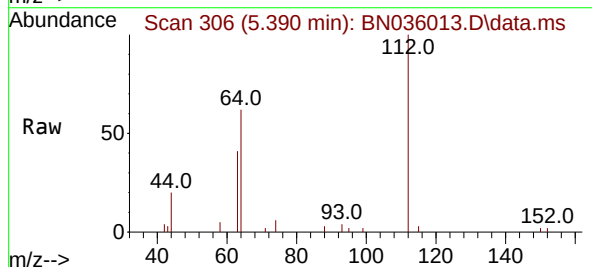
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

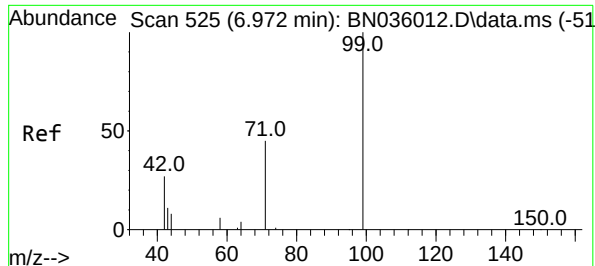
Tgt Ion: 42 Resp: 3054
Ion Ratio Lower Upper
42 100
74 73.9 58.1 87.1
44 5.5 6.2 9.4#



#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

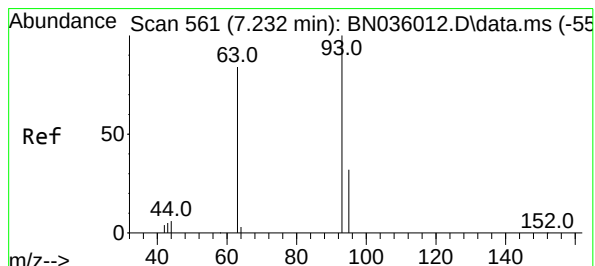
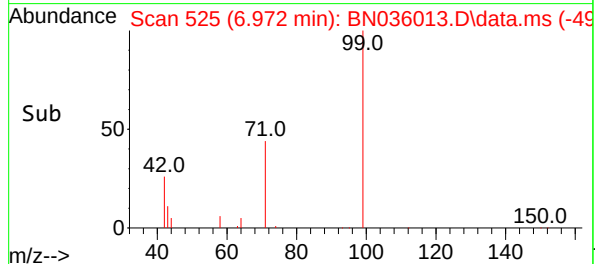
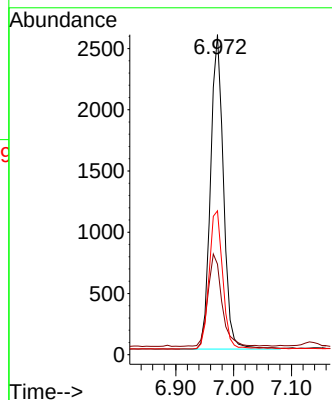
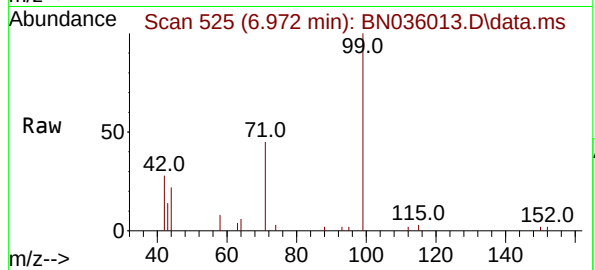




#5
Phenol-d6
Concen: 0.756 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

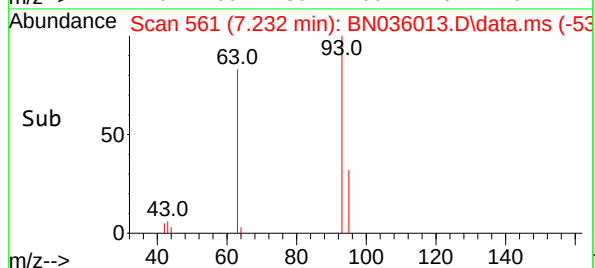
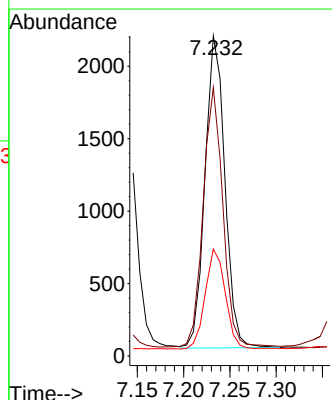
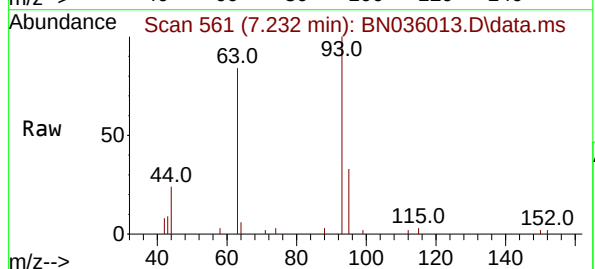
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

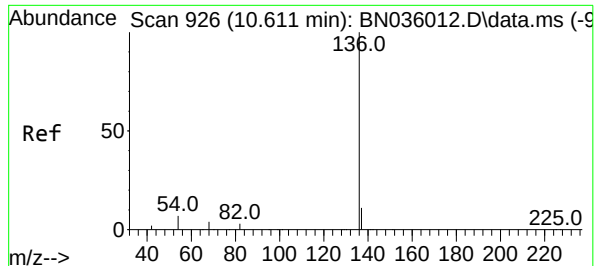
Tgt Ion: 99 Resp: 3996
Ion Ratio Lower Upper
99 100
42 31.9 26.8 40.2
71 46.0 36.6 55.0



#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

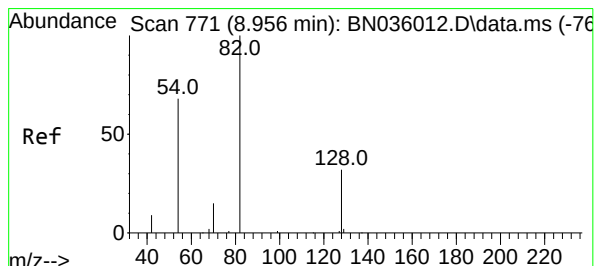
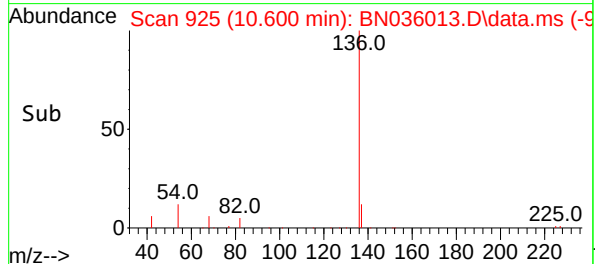
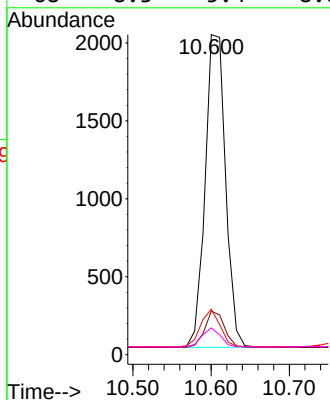
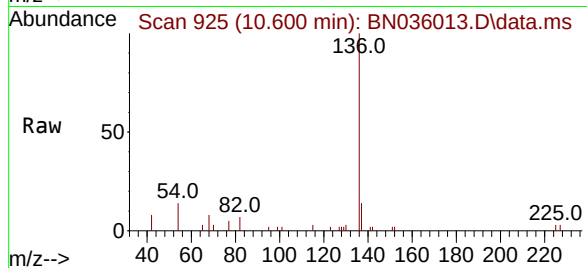




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

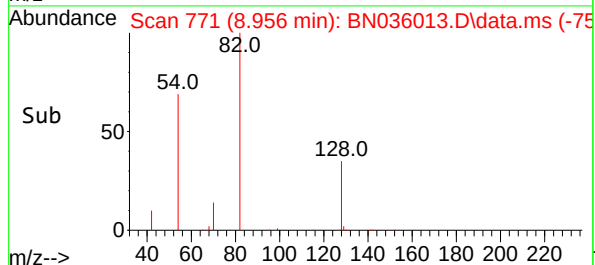
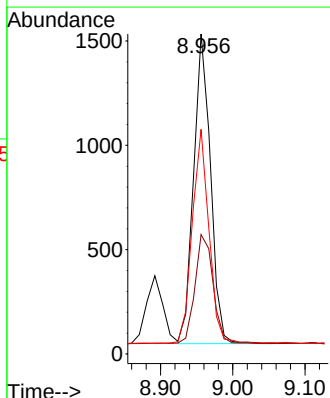
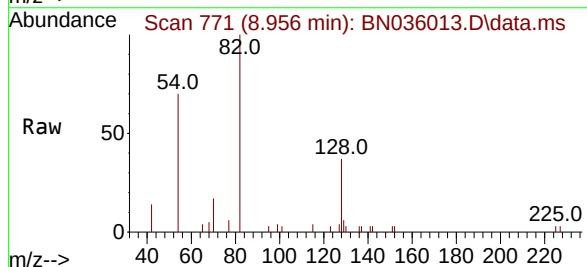
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

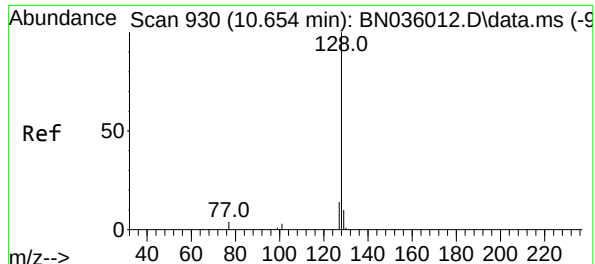
Tgt Ion:	136	Resp:	3641
Ion	Ratio	Lower	Upper
136	100		
137	13.6	10.4	15.6
54	14.2	7.7	11.5#
68	8.3	5.4	8.0#



#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

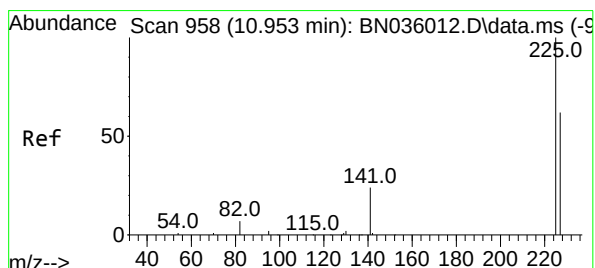
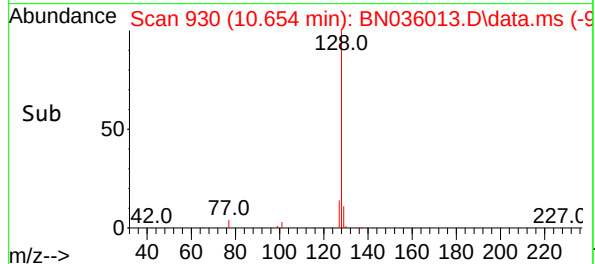
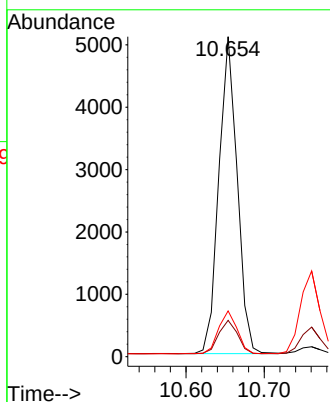
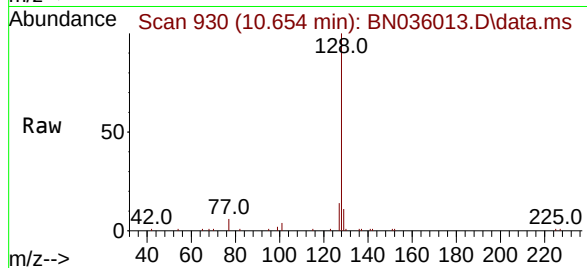




#9
Naphthalene
Concen: 0.783 ng
RT: 10.654 min Scan# 910
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

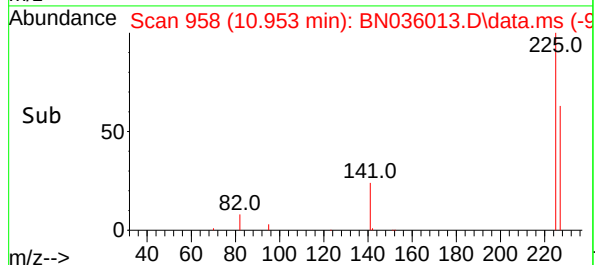
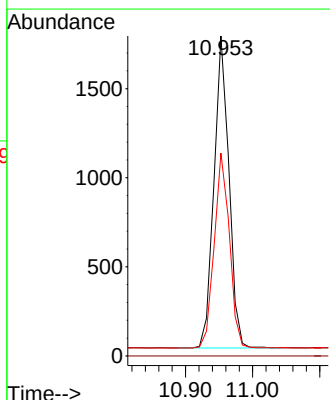
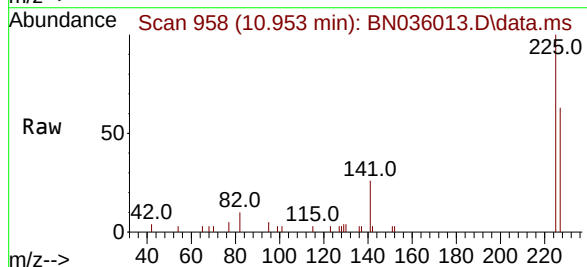
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

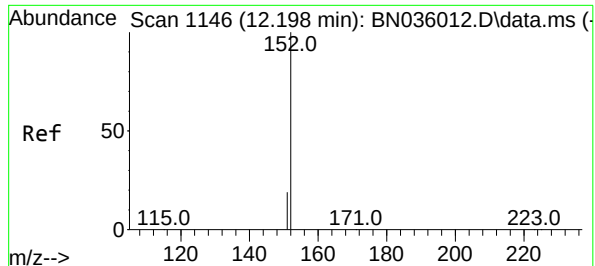
Tgt Ion	128	129	127
Resp:	8279		
Ion Ratio	100	11.4	14.3
Lower		9.4	12.6
Upper		14.2	19.0



#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

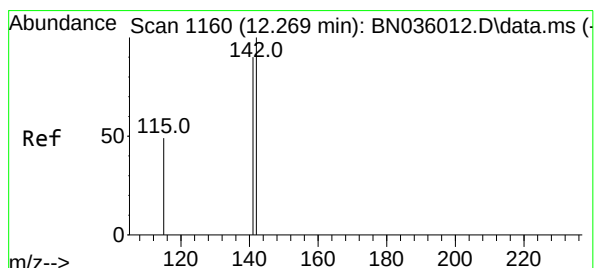
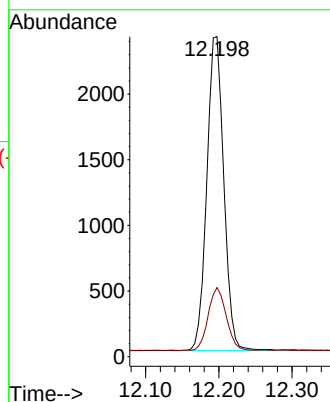
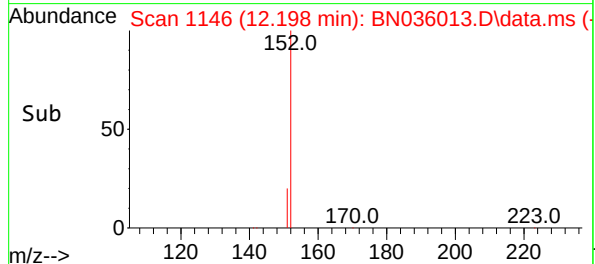
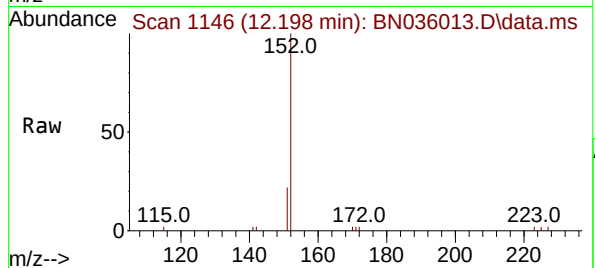




#11
2-Methylnaphthalene-d10
Concen: 0.777 ng
RT: 12.198 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

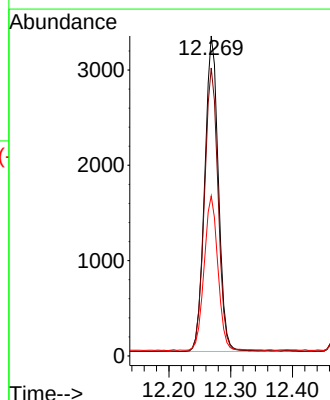
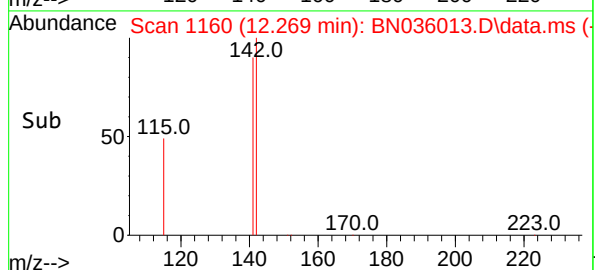
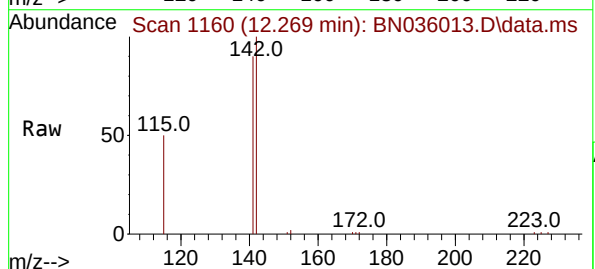
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

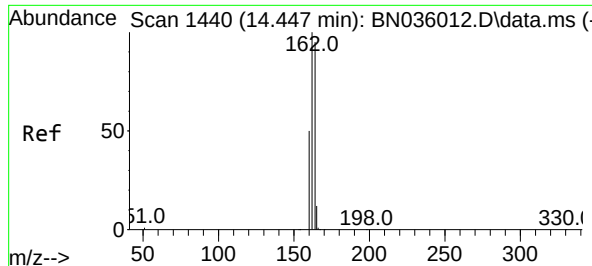
Tgt Ion:152 Resp: 3847
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#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

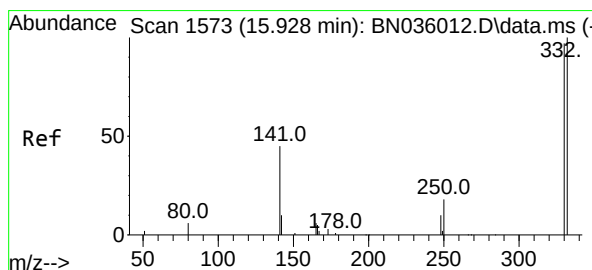
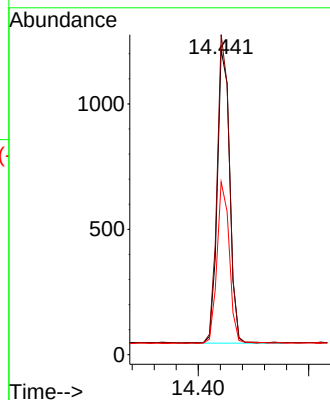
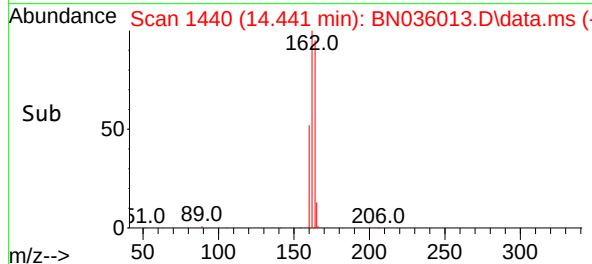
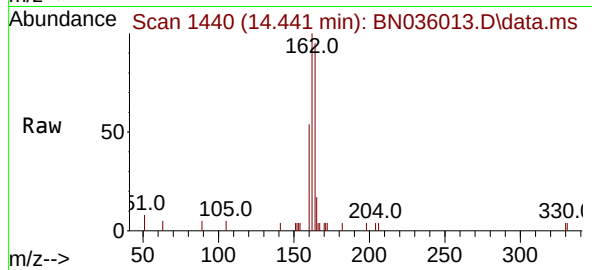




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

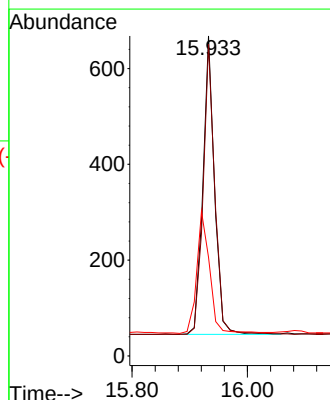
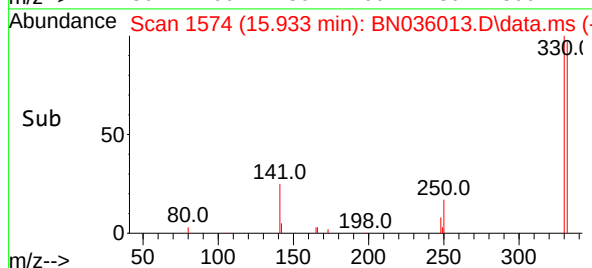
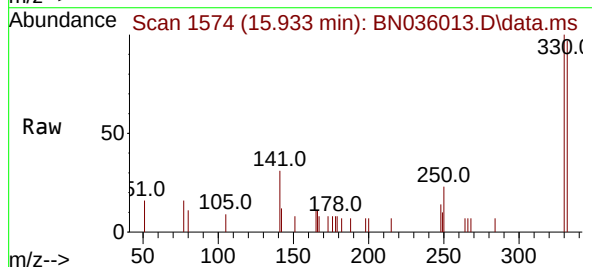
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

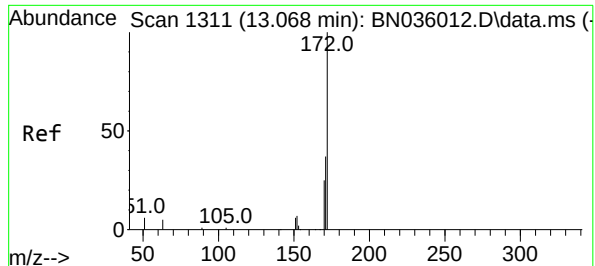
Tgt Ion	Ratio	Lower	Upper
164	100		
162	104.9	84.1	126.1
160	56.7	43.8	65.8



#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	Ratio	Lower	Upper
330	100		
332	97.5	81.0	121.4
141	44.1	36.7	55.1

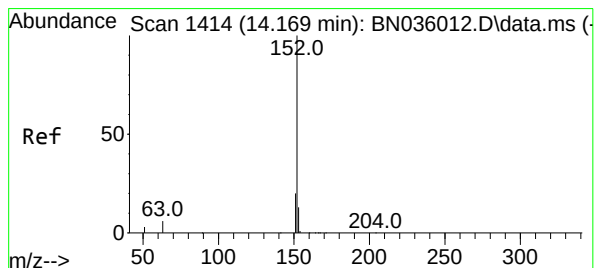
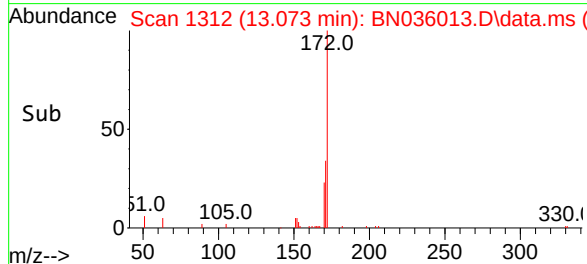
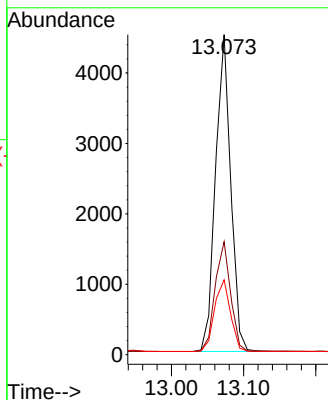
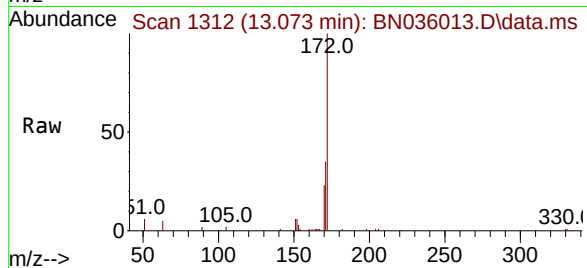




#15
2-Fluorobiphenyl
Concen: 0.801 ng
RT: 13.073 min Scan# 1311
Delta R.T. 0.005 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

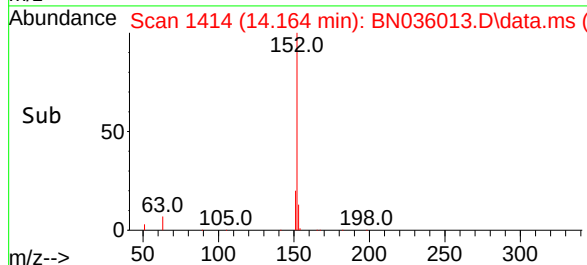
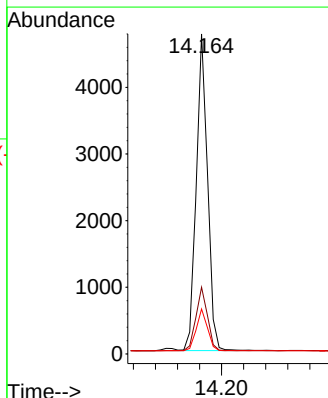
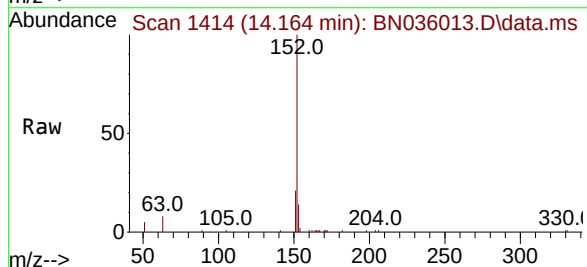
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

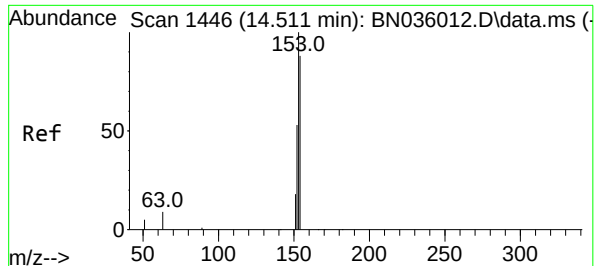
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.3	30.9	46.3
170	23.4	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	20.7	16.2	24.2
153	13.5	10.4	15.6

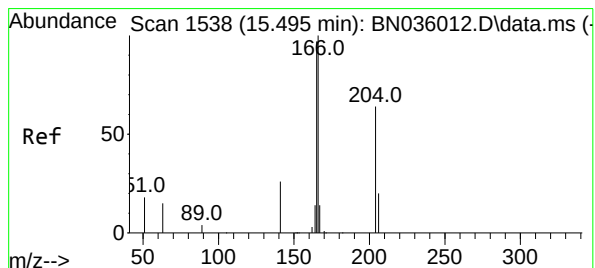
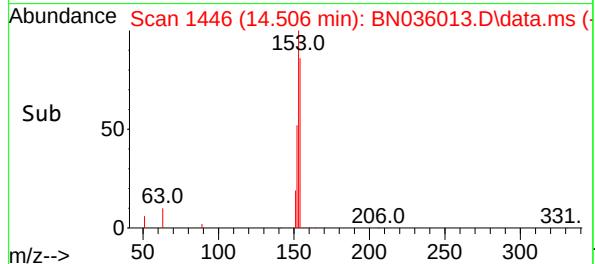
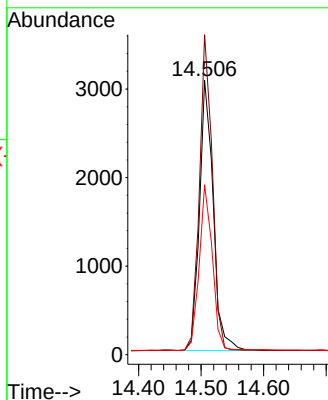
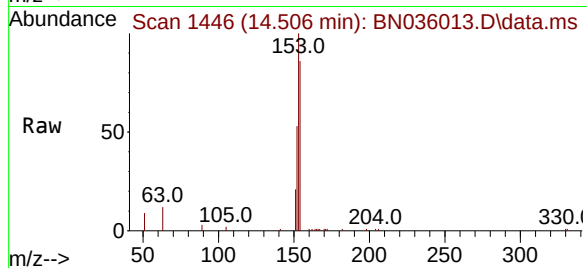




#17
Acenaphthene
Concen: 0.780 ng
RT: 14.506 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

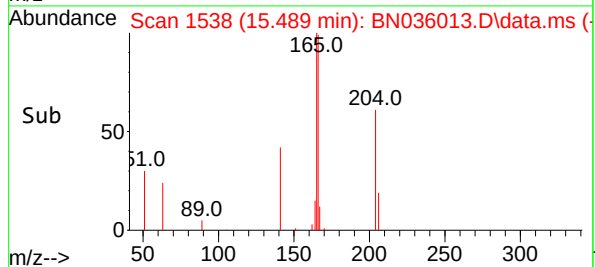
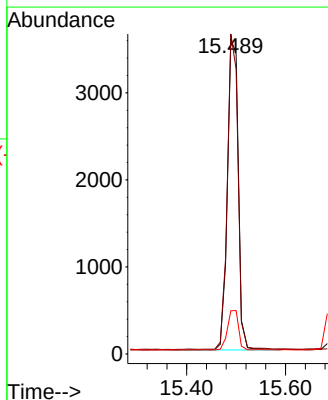
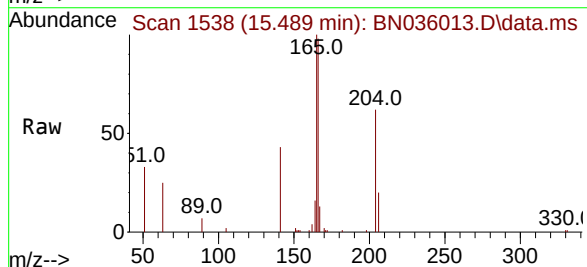
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

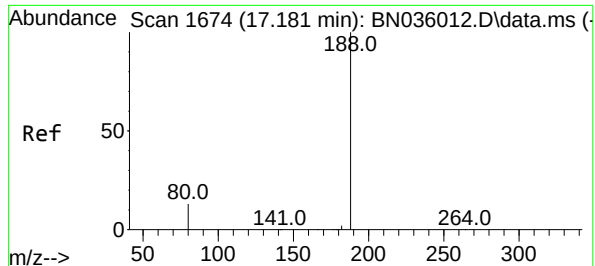
Tgt Ion:154 Resp: 4661
Ion Ratio Lower Upper
154 100
153 110.1 88.9 133.3
152 59.3 48.1 72.1



#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

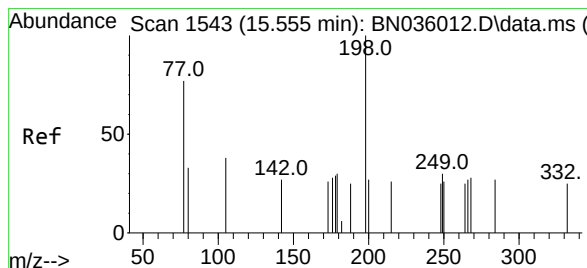
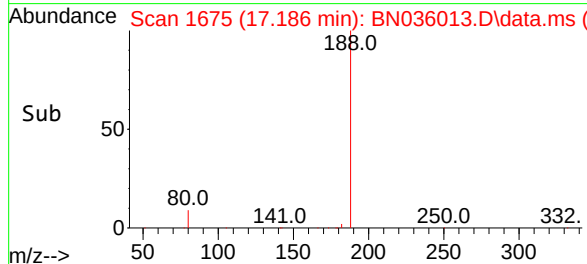
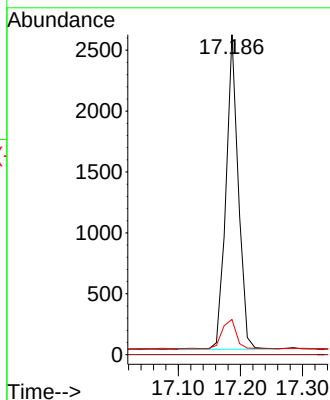
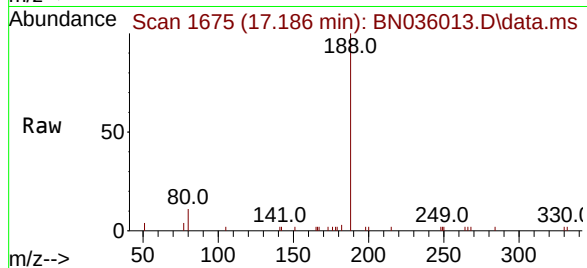
Tgt Ion:188 Resp: 3559

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

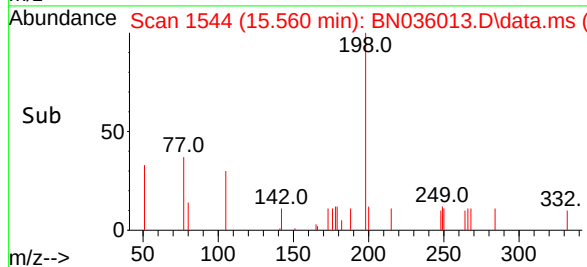
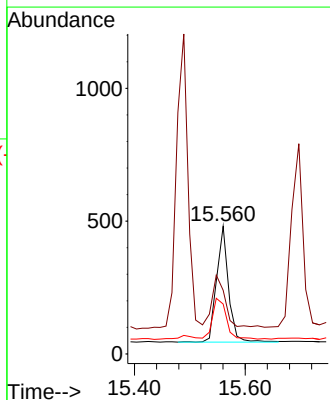
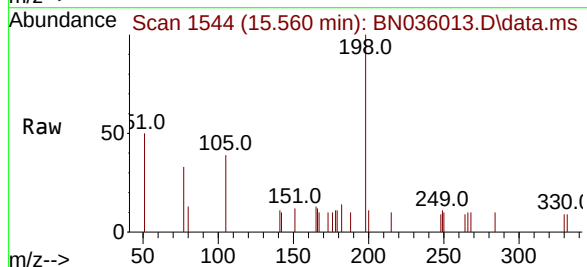
Tgt Ion:198 Resp: 632

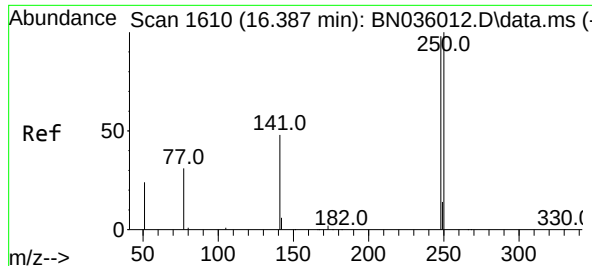
Ion Ratio Lower Upper

198 100

51 49.9 68.1 102.1#

105 39.1 46.5 69.7#

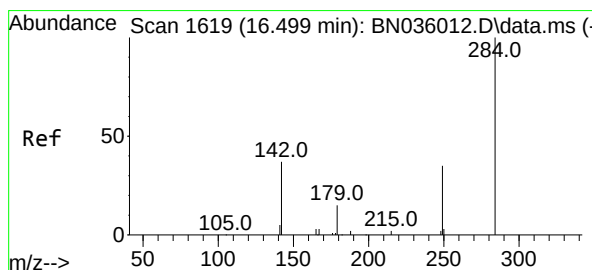
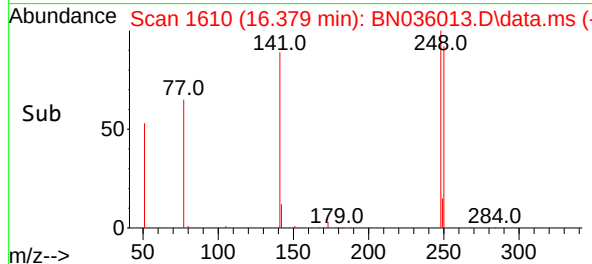
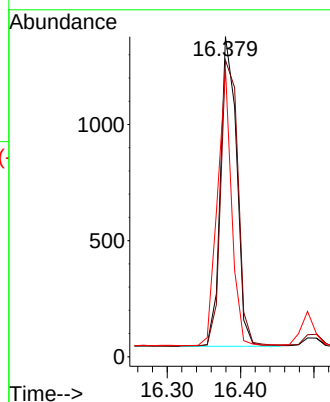
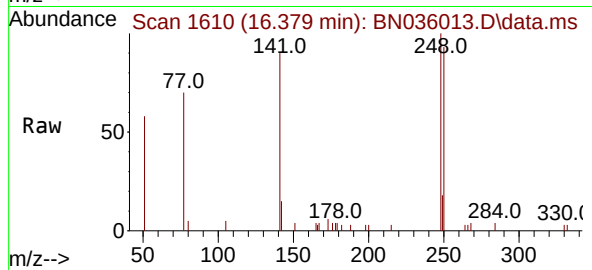




#21
4-Bromophenyl-phenylether
Concen: 0.805 ng
RT: 16.379 min Scan# 1610
Delta R.T. -0.007 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

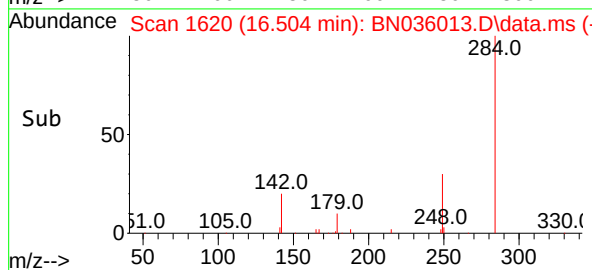
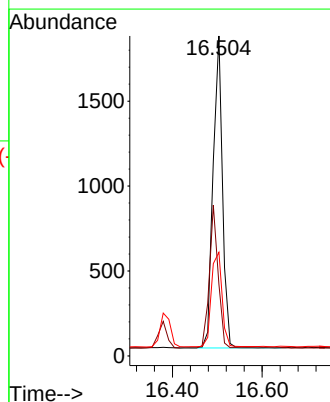
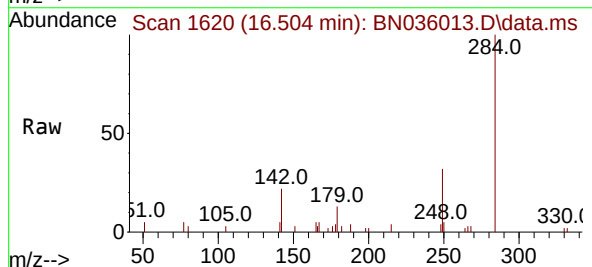
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

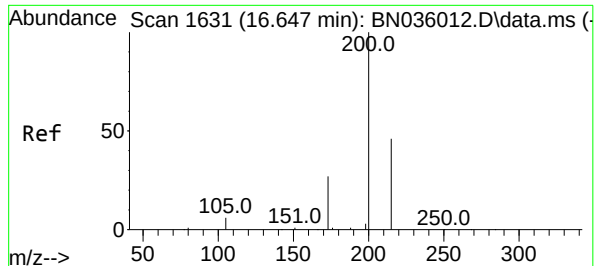
Tgt Ion	Ratio	Lower	Upper
248	100		
250	92.7	81.5	122.3
141	89.9	41.8	62.6



#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

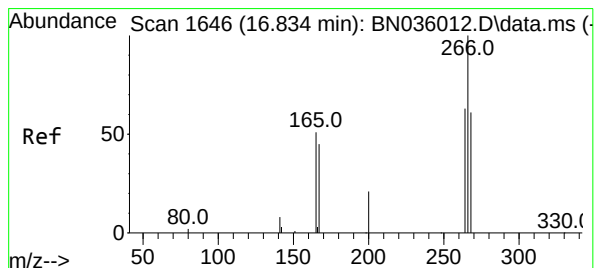
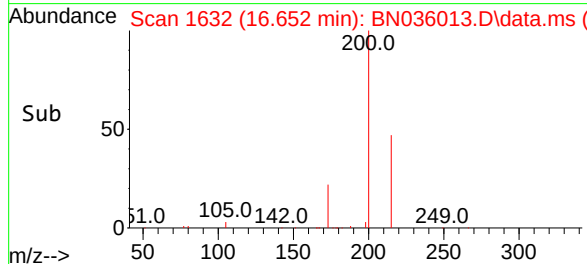
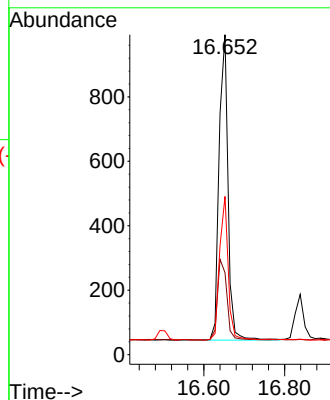
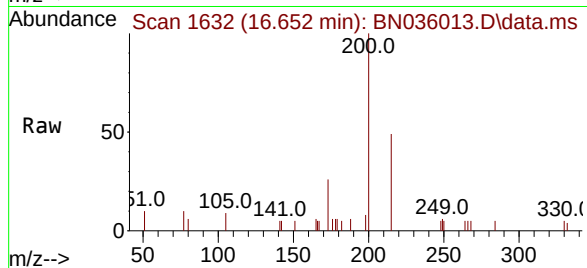




#23
Atrazine
Concen: 0.794 ng
RT: 16.652 min Scan# 1631
Delta R.T. 0.005 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

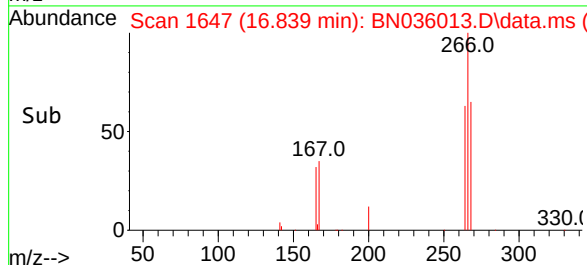
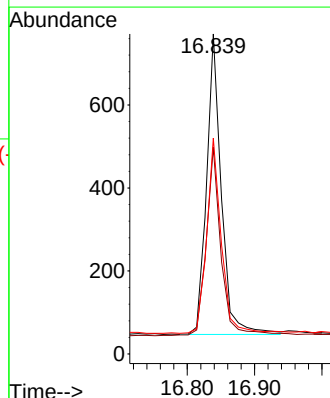
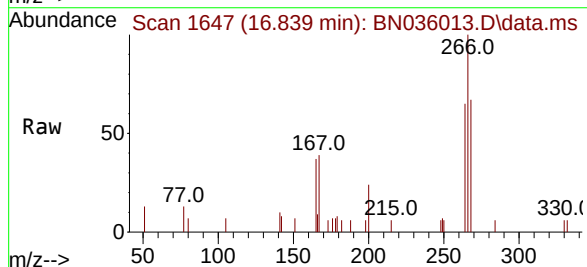
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

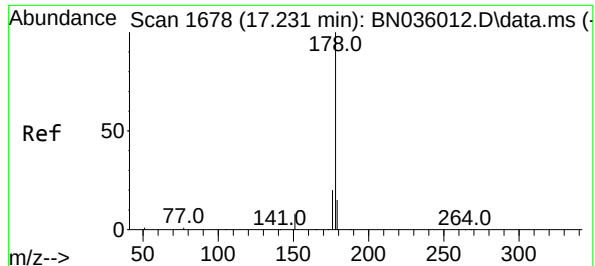
Tgt Ion	200	Resp:	1455
Ion Ratio	Lower	Upper	
200	100		
173	25.6	26.6	40.0#
215	49.4	40.6	61.0



#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

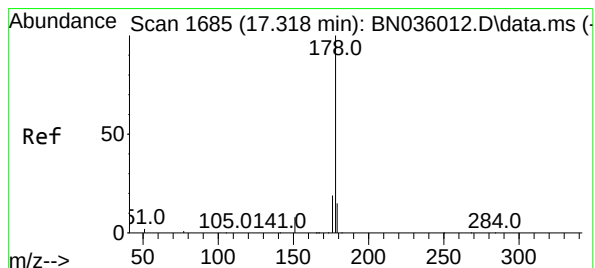
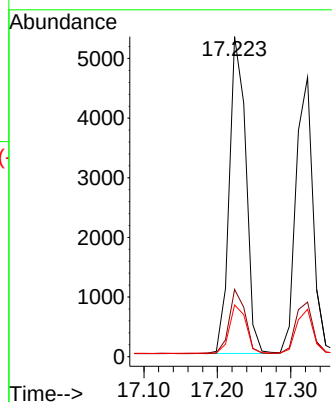
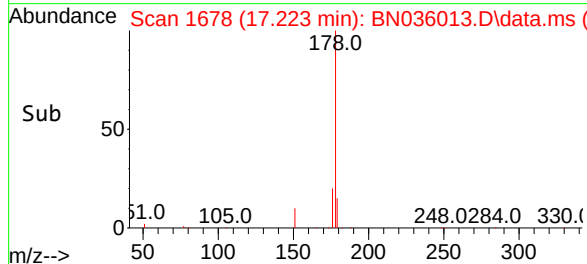
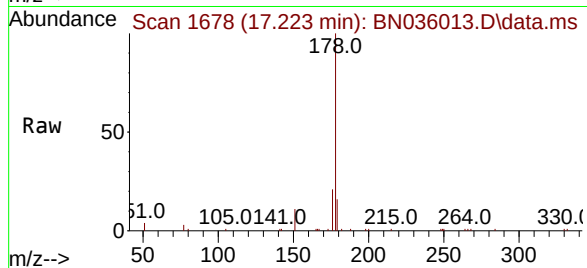




#25
Phenanthrene
Concen: 0.780 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.007 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

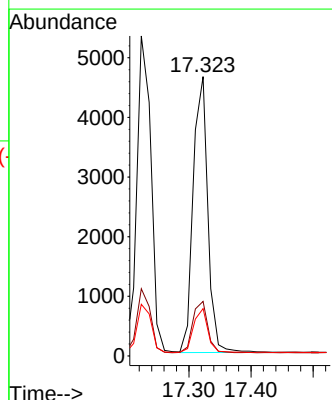
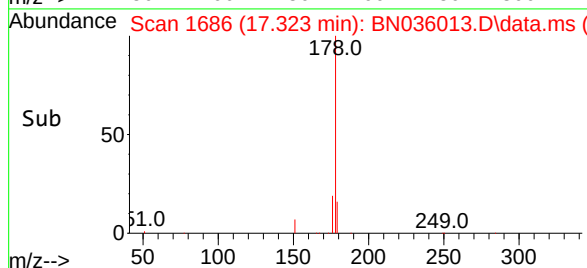
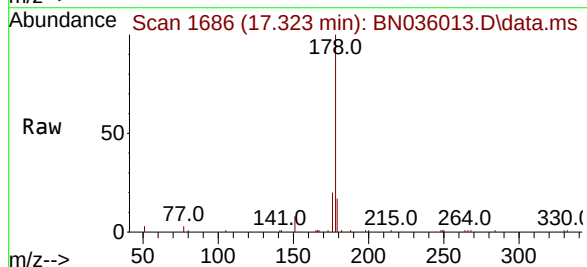
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

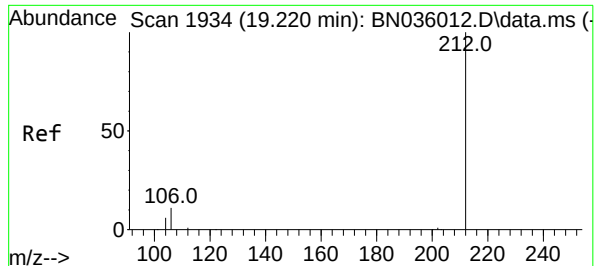
Tgt Ion:178 Resp: 8345
Ion Ratio Lower Upper
178 100
176 19.6 16.0 24.0
179 15.5 12.4 18.6



#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

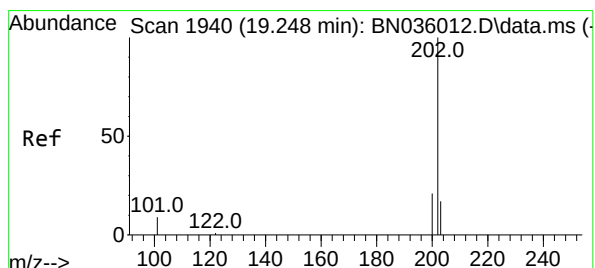
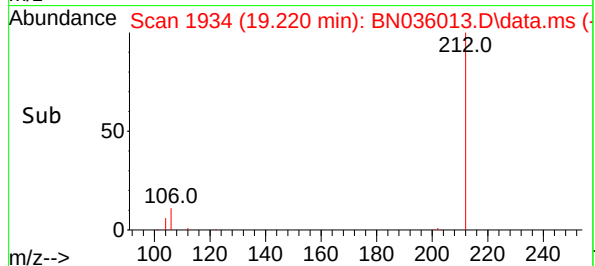
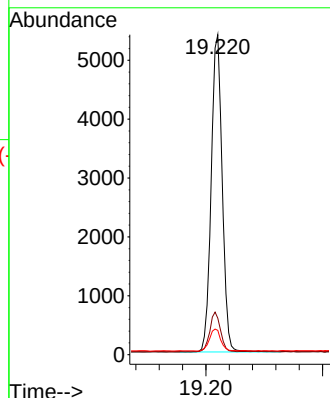
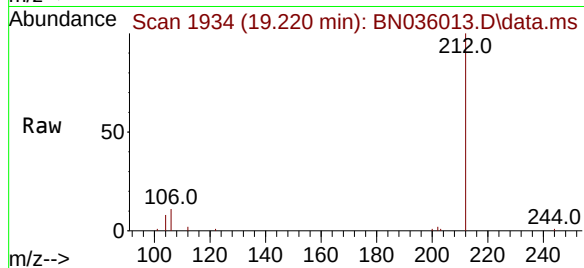
Tgt Ion:212 Resp: 7073

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

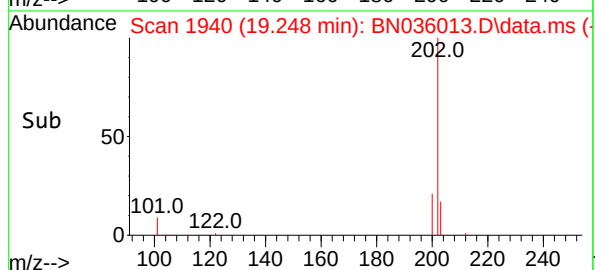
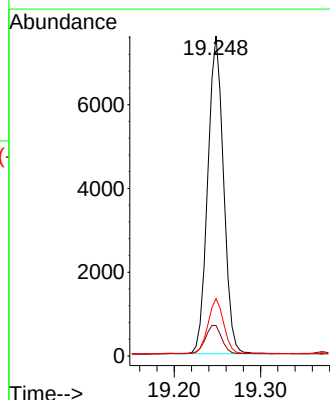
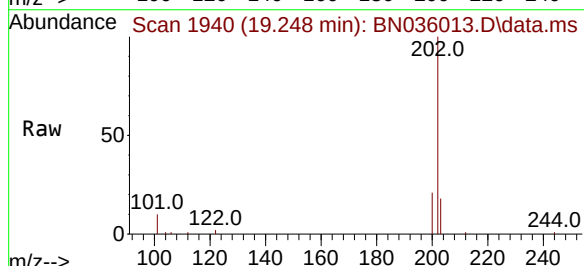
Tgt Ion:202 Resp: 9659

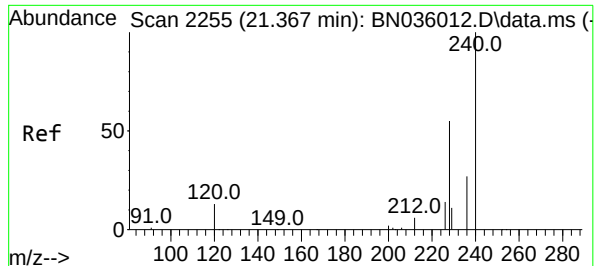
Ion Ratio Lower Upper

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

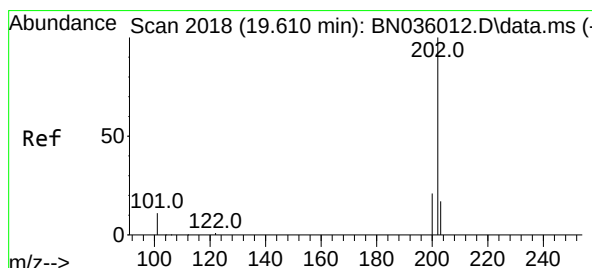
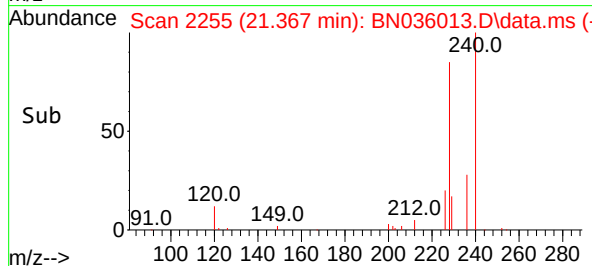
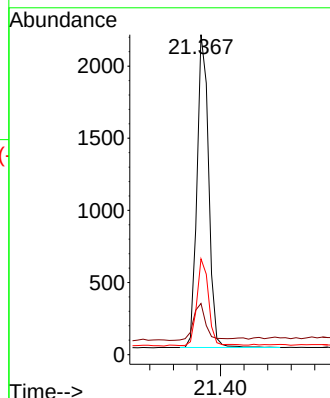
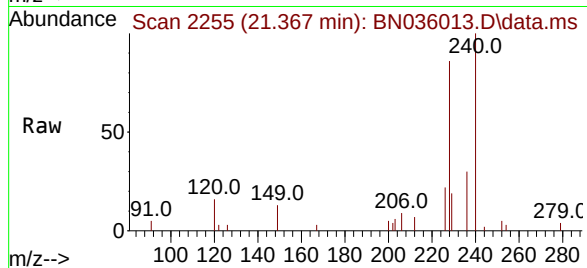
Tgt Ion:240 Resp: 2978

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

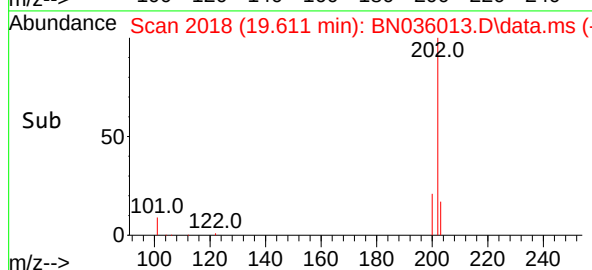
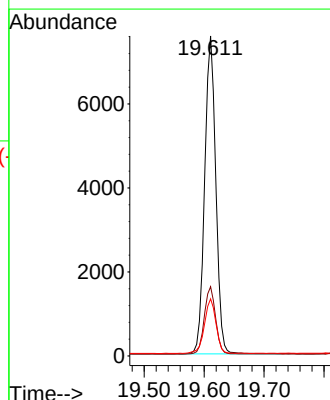
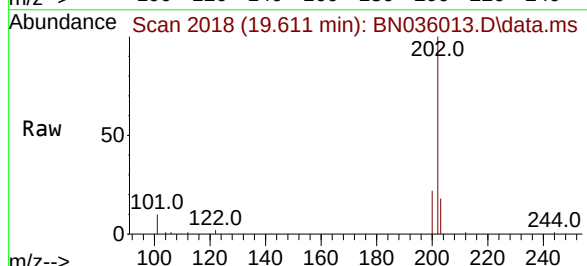
Tgt Ion:202 Resp: 9746

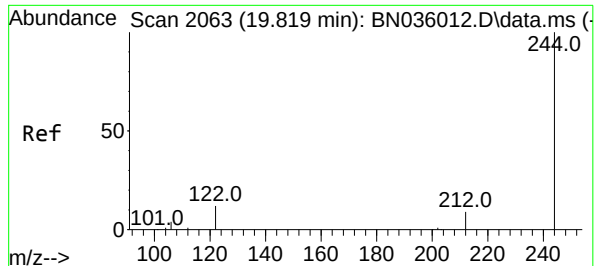
Ion Ratio Lower Upper

202 100

200 21.3 17.0 25.4

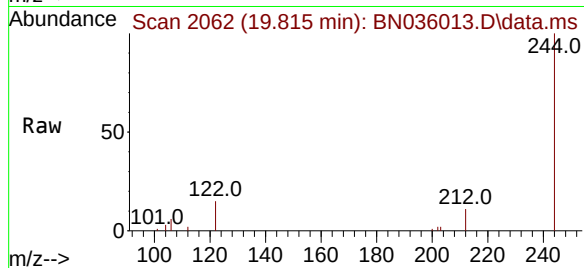
203 17.8 14.4 21.6



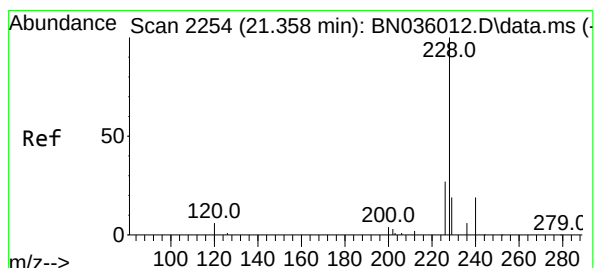
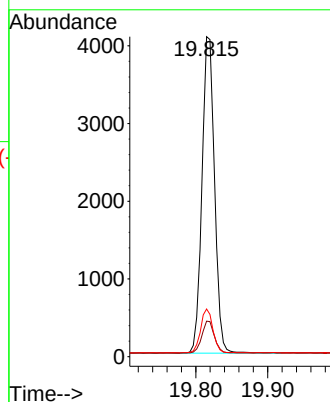
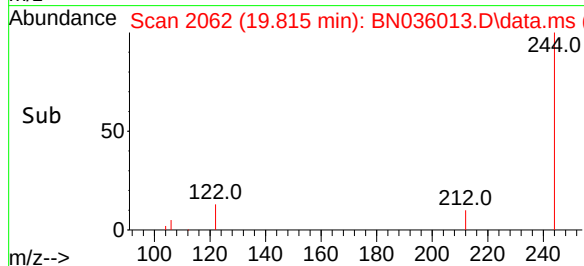


#31
Terphenyl-d14
Concen: 0.800 ng
RT: 19.815 min Scan# 2063
Delta R.T. -0.004 min
Lab File: BN036013.D
Acq: 22 Jan 2025 12:49

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

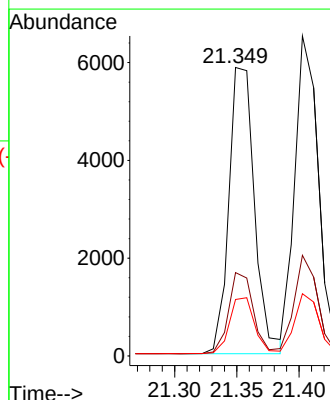
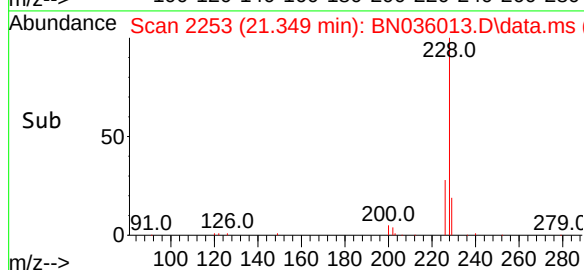
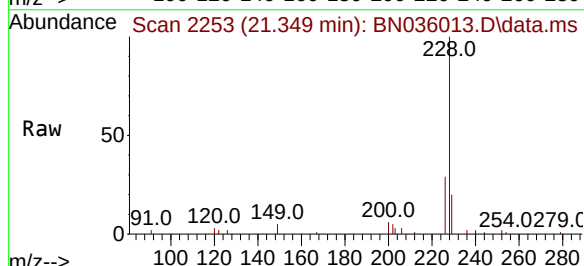


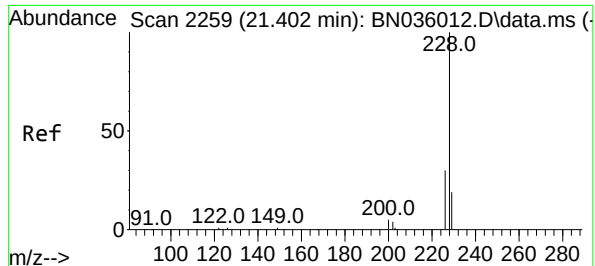
Tgt Ion:244 Resp: 4949
Ion Ratio Lower Upper
244 100
212 11.1 9.1 13.7
122 14.9 11.3 16.9



#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:228 Resp: 8402
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

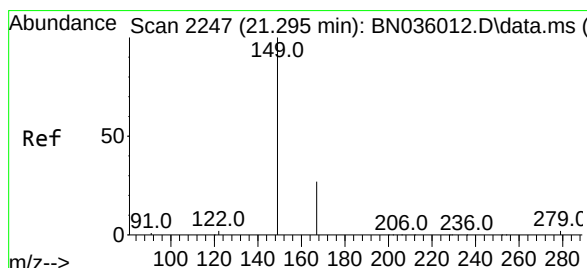
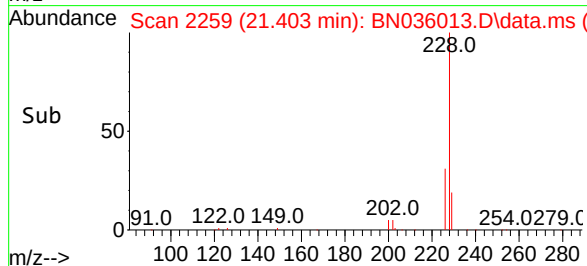
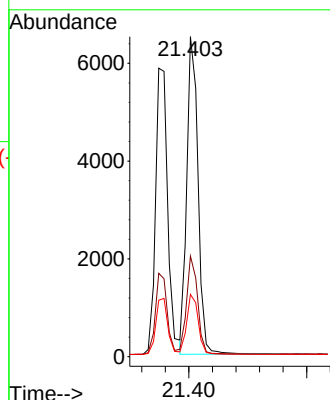
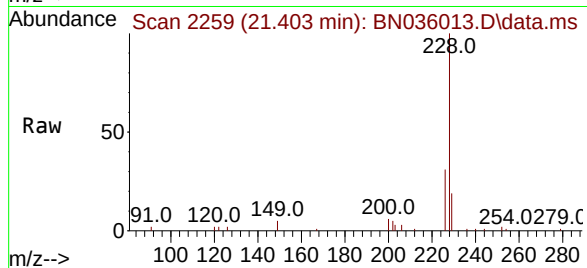
Tgt Ion:228 Resp: 8622

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

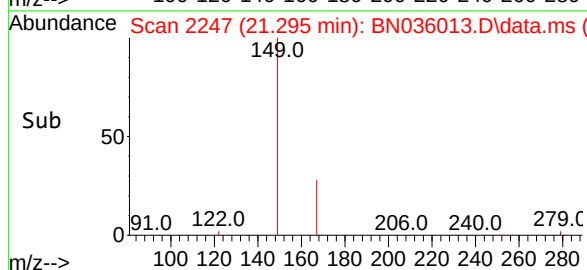
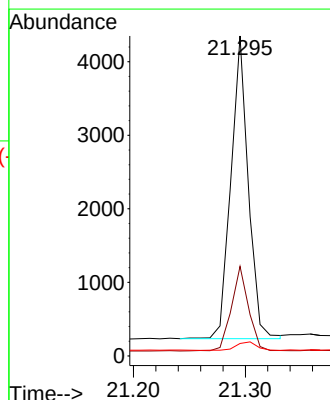
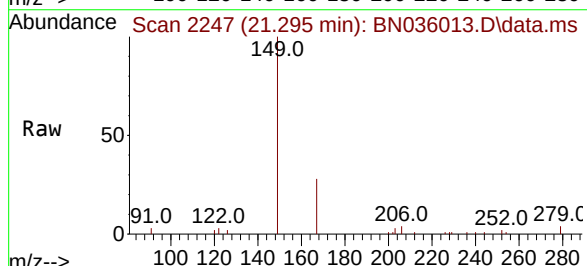
Tgt Ion:149 Resp: 4455

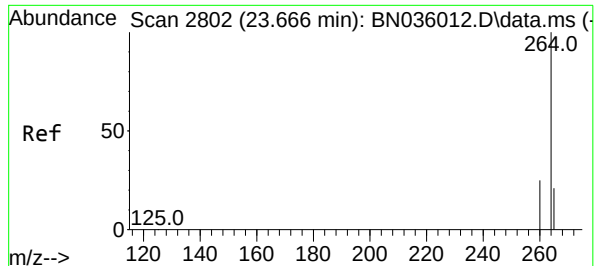
Ion Ratio Lower Upper

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

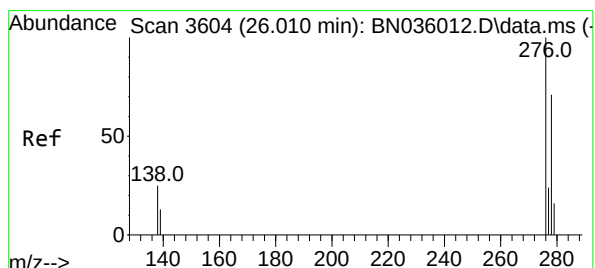
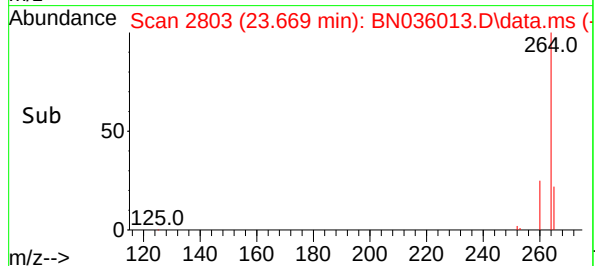
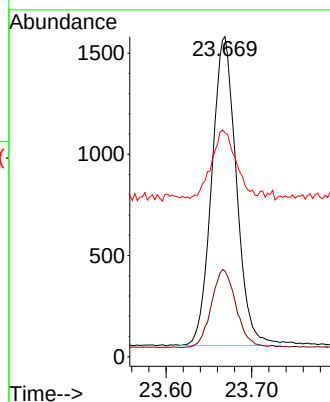
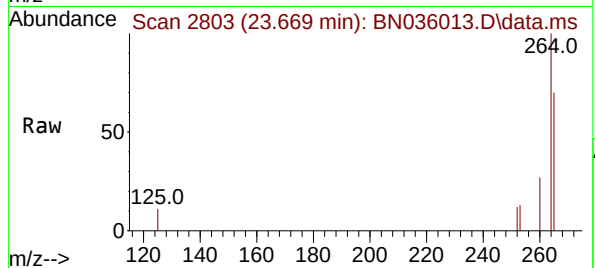
Tgt Ion:264 Resp: 3042

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

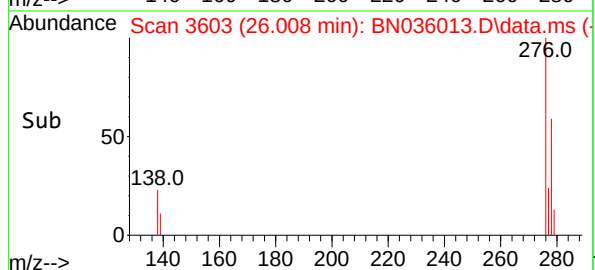
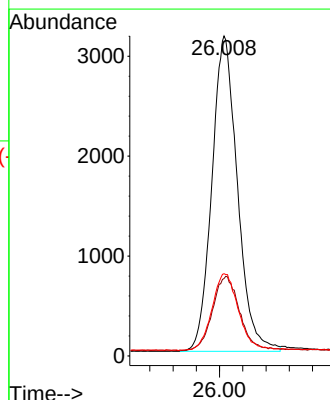
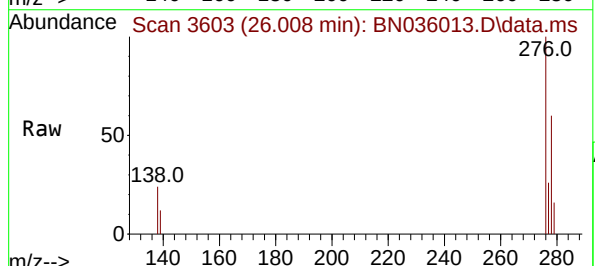
Tgt Ion:276 Resp: 9645

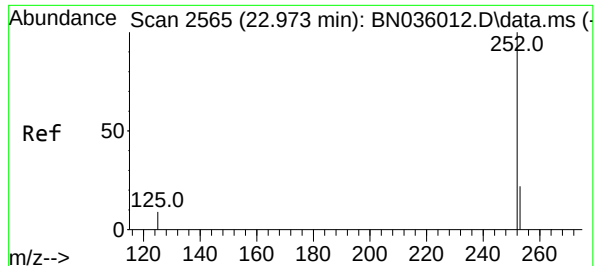
Ion Ratio Lower Upper

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

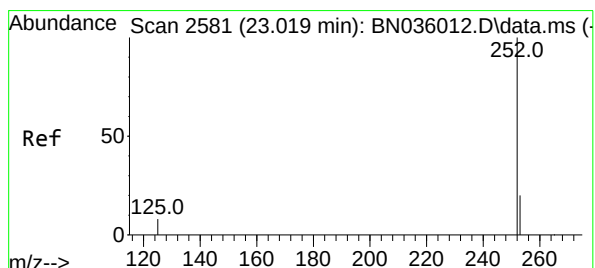
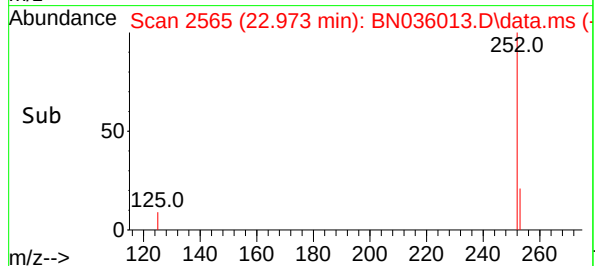
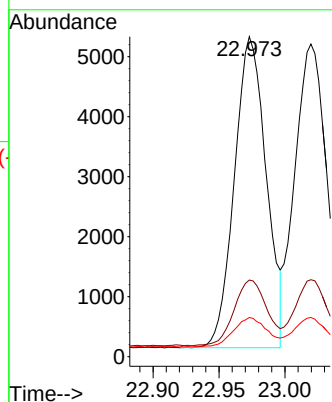
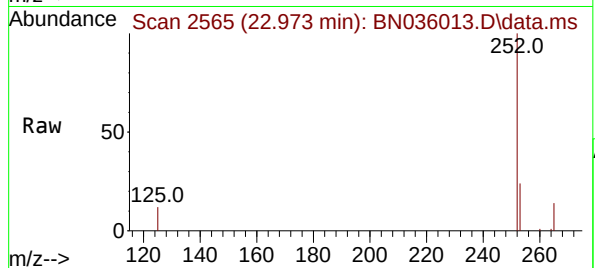
Tgt Ion:252 Resp: 8692

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

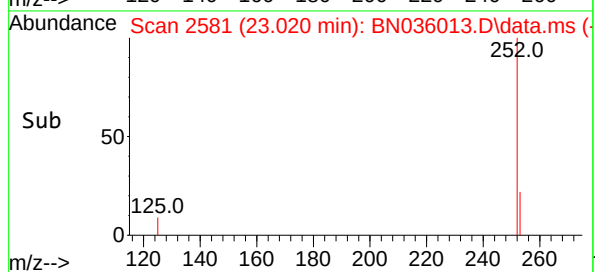
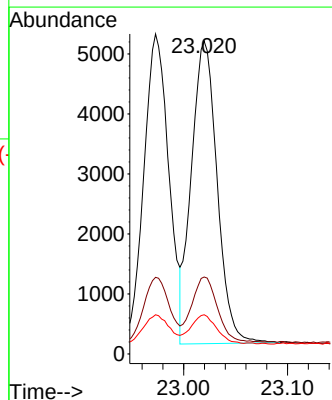
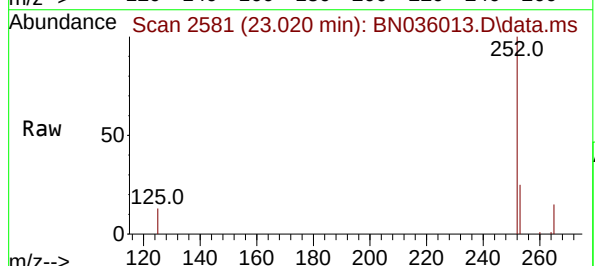
Tgt Ion:252 Resp: 8683

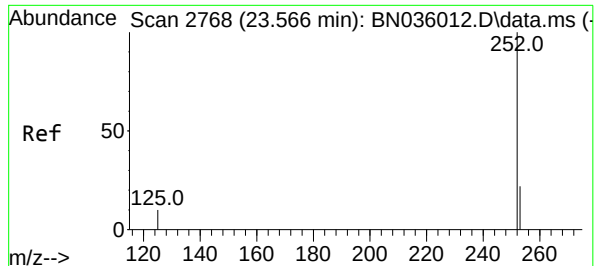
Ion Ratio Lower Upper

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

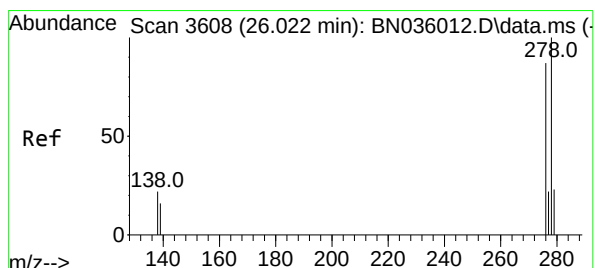
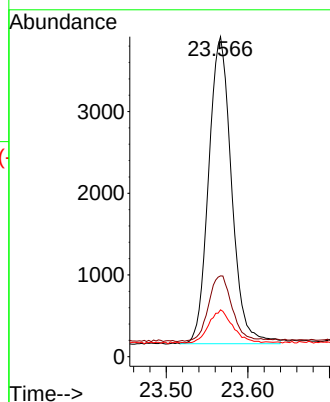
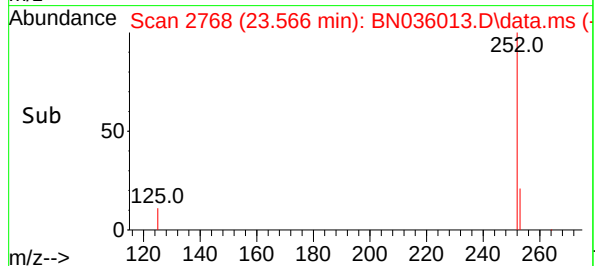
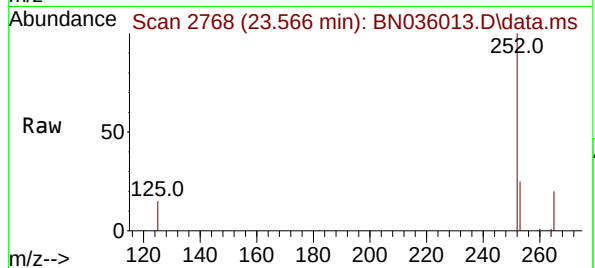
Tgt Ion:252 Resp: 7317

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

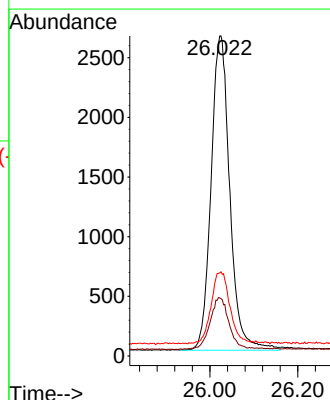
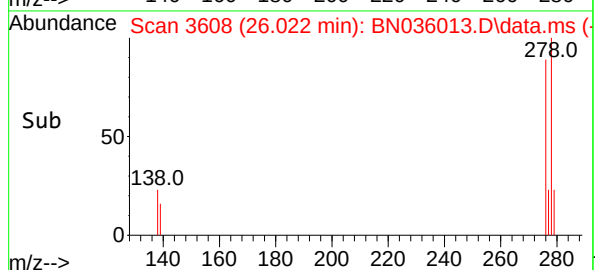
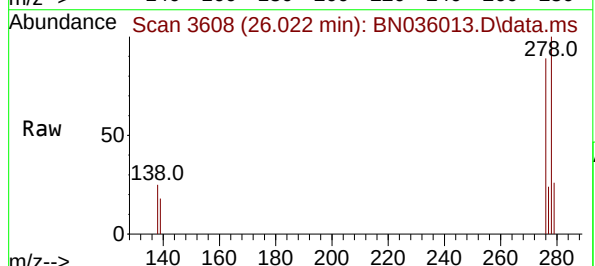
Tgt Ion:278 Resp: 7782

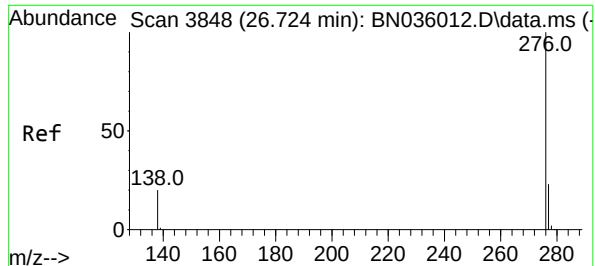
Ion Ratio Lower Upper

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

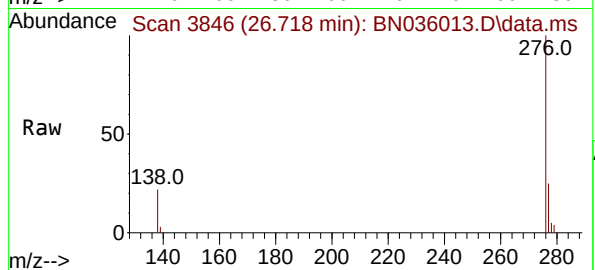
Acq: 22 Jan 2025 12:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8



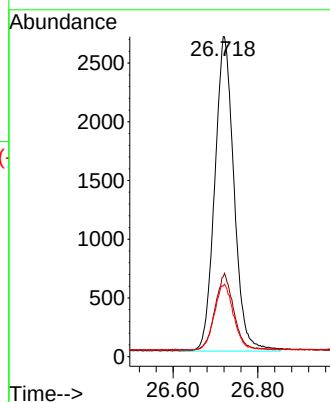
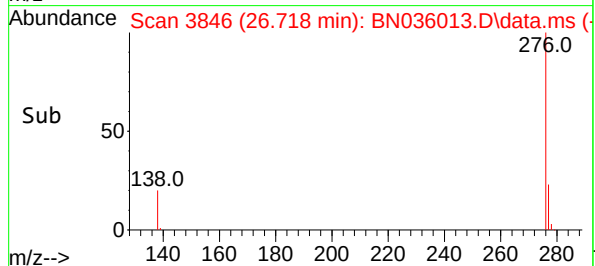
Tgt Ion:276 Resp: 8439

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)

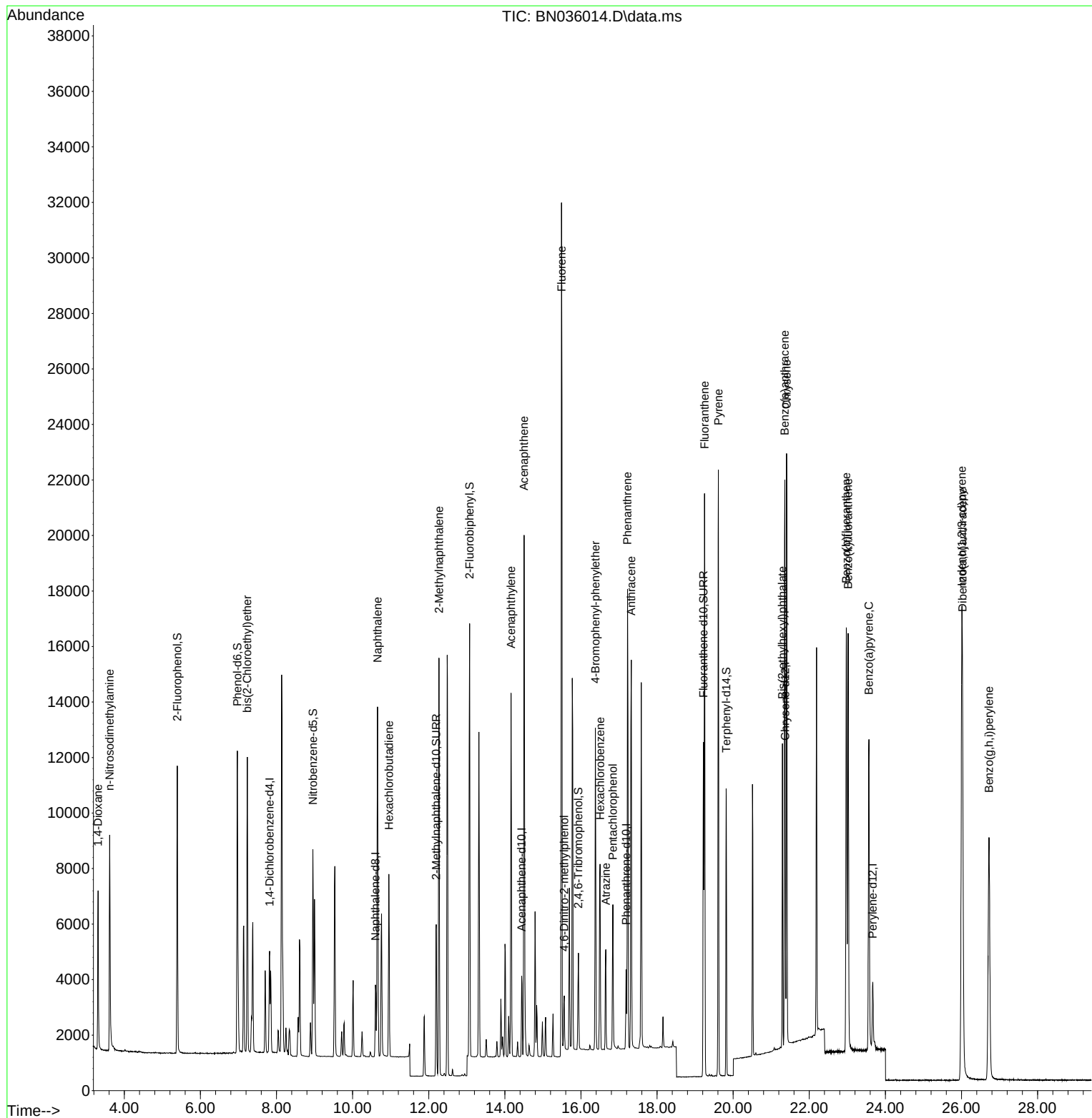
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1724	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3282	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	1710	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3501	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	2839	0.400	ng	0.00
35) Perylene-d12	23.666	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						
						Qvalue
2) 1,4-Dioxane	3.310	88	3084	1.600	ng	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

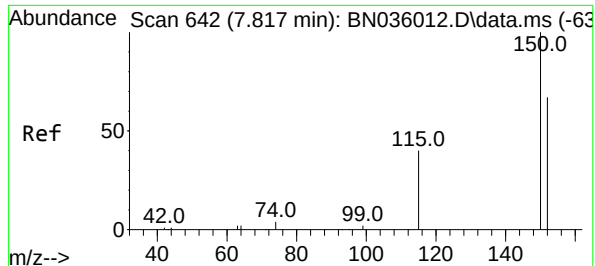
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

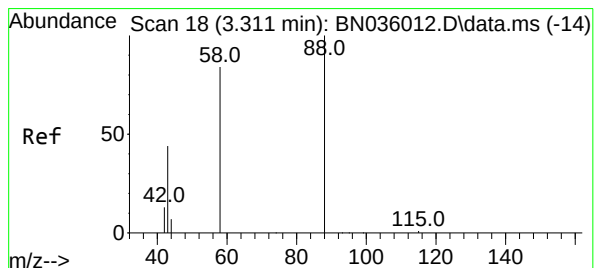
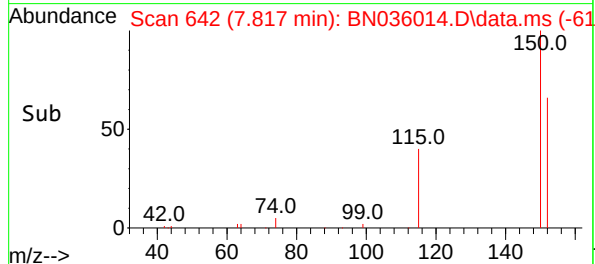
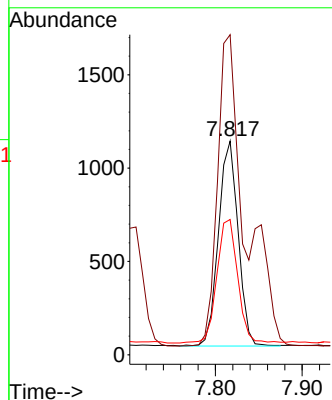
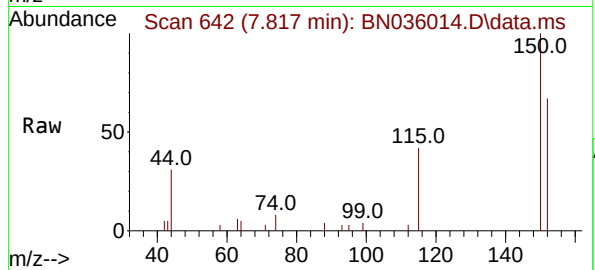




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

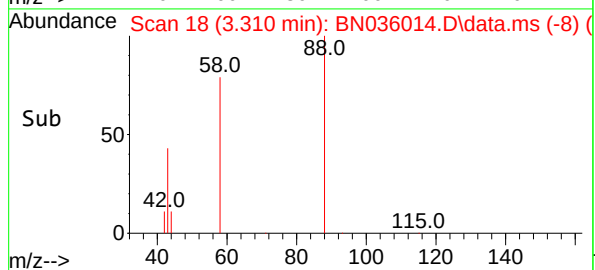
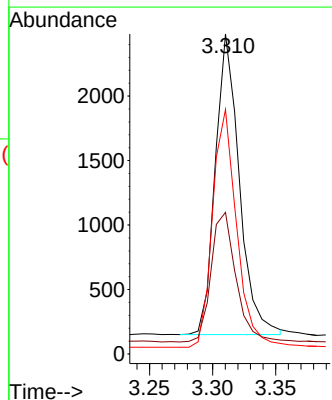
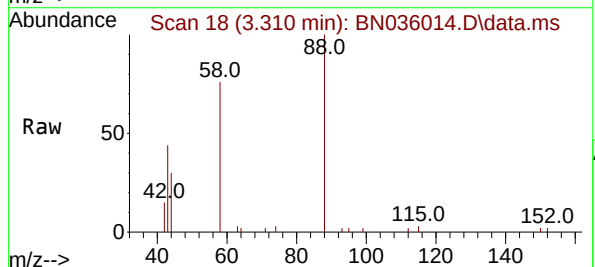
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

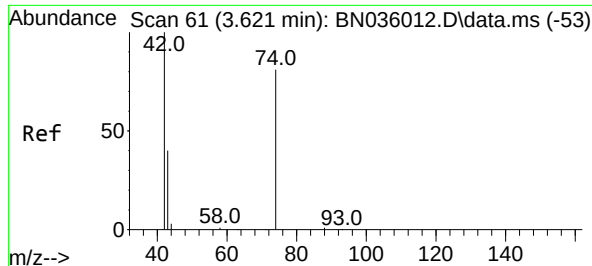
Tgt Ion:152 Resp: 1724
Ion Ratio Lower Upper
152 100
150 149.8 117.4 176.2
115 63.3 51.0 76.4



#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

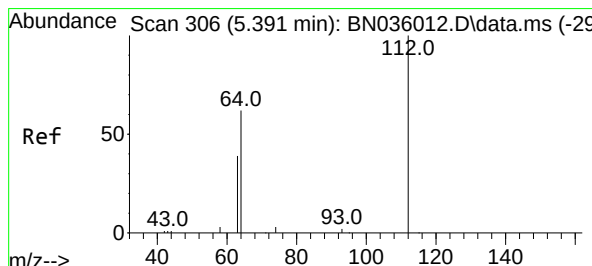
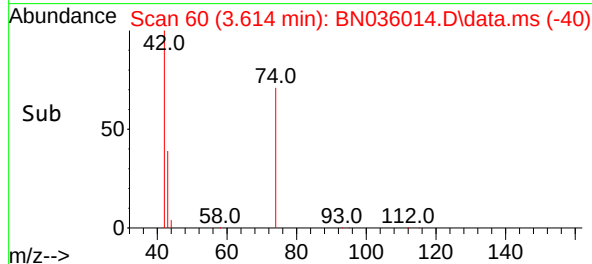
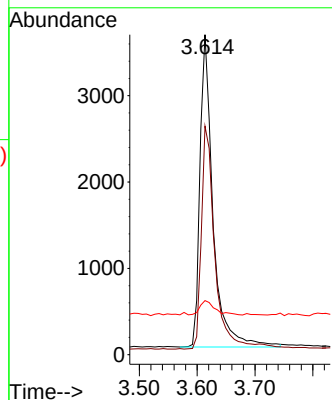
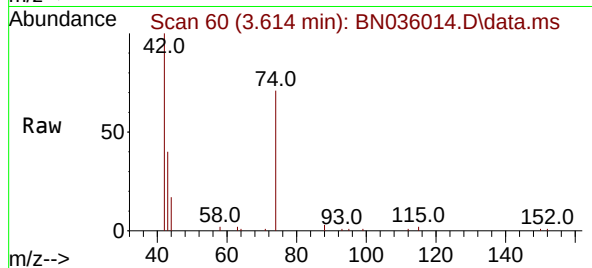




#3
n-Nitrosodimethylamine
Concen: 1.635 ng
RT: 3.614 min Scan# 60
Delta R.T. -0.008 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

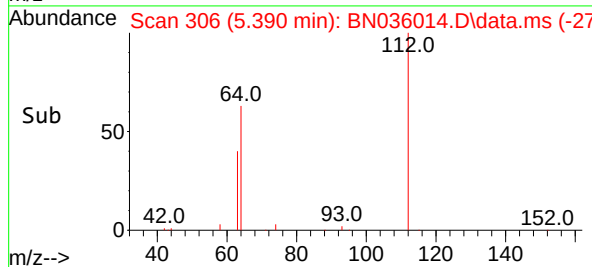
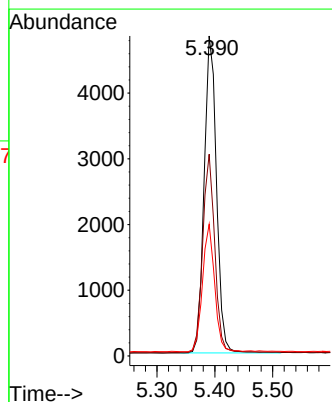
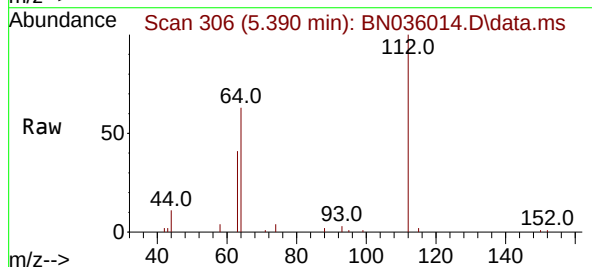
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

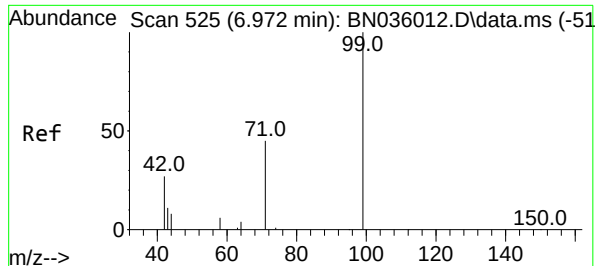
Tgt Ion: 42 Resp: 5714
Ion Ratio Lower Upper
42 100
74 73.7 58.1 87.1
44 5.4 6.2 9.4#



#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

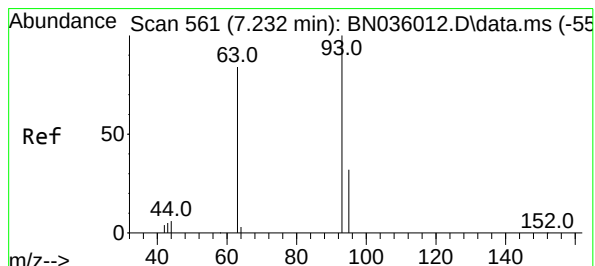
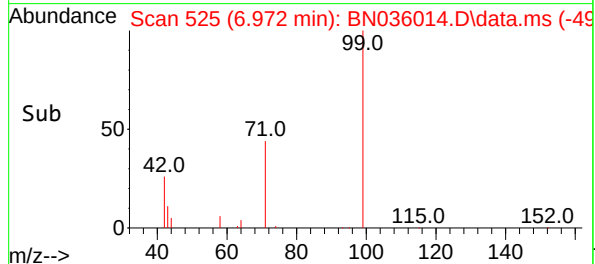
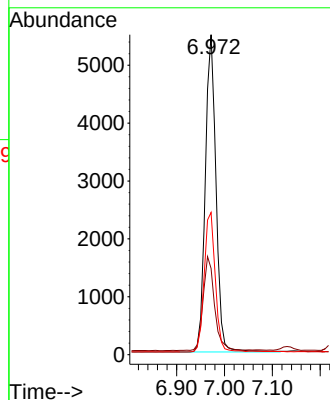
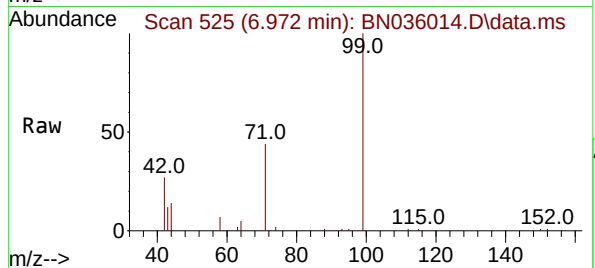




#5
Phenol-d6
Concen: 1.611 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

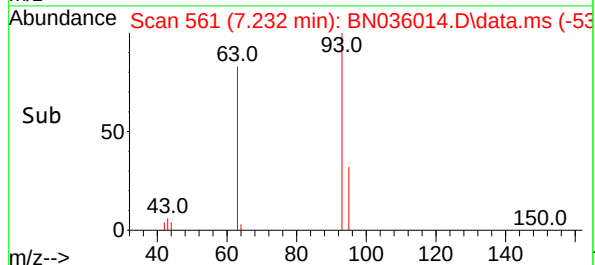
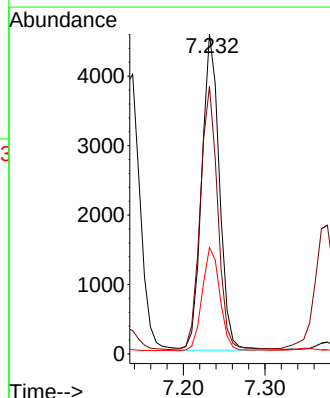
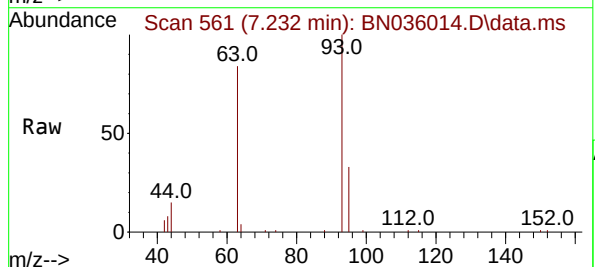
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

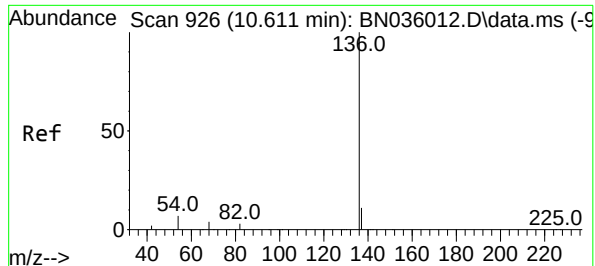
Tgt Ion: 99 Resp: 8484
Ion Ratio Lower Upper
99 100
42 32.0 26.8 40.2
71 45.6 36.6 55.0



#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

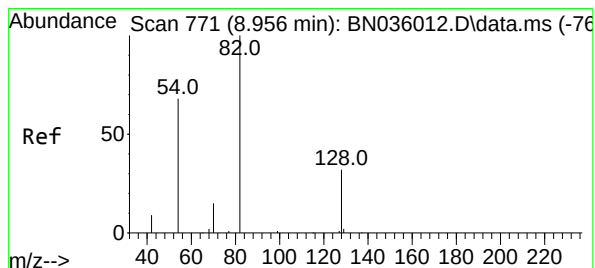
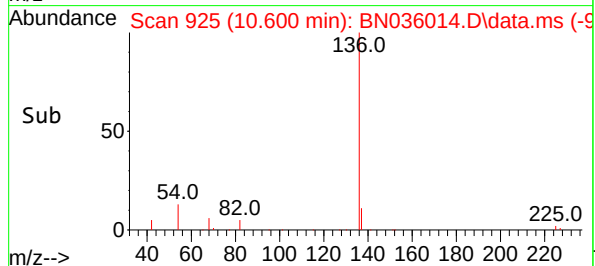
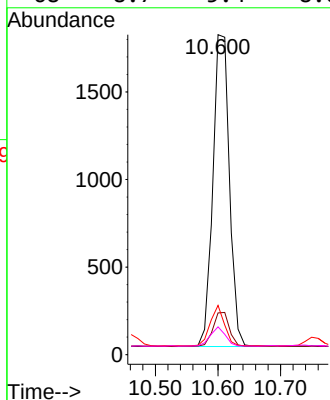
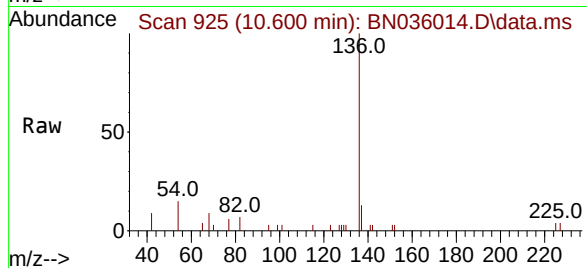




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

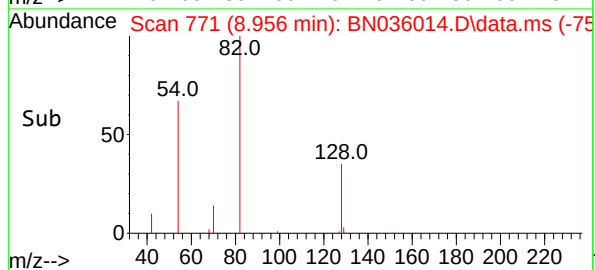
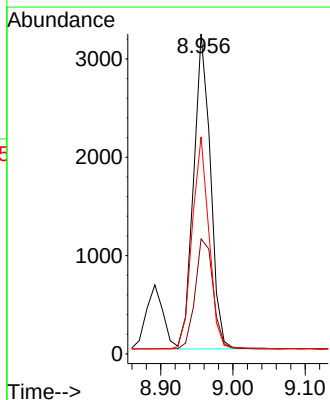
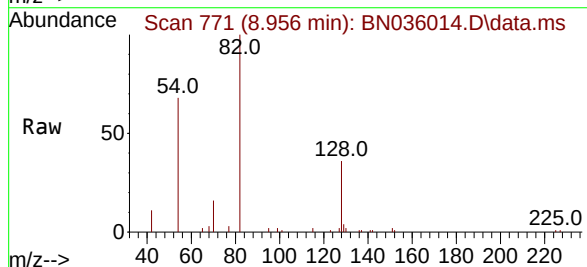
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

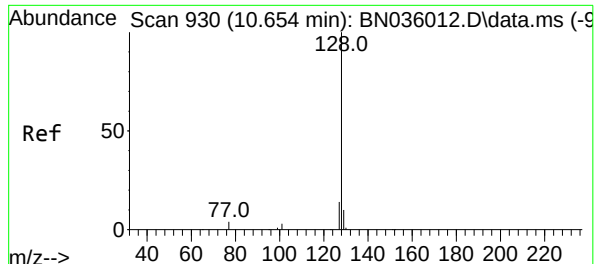
Tgt Ion:136	Resp:	3282
Ion	Ratio	Lower Upper
136	100	
137	13.0	10.4 15.6
54	15.4	7.7 11.5#
68	8.7	5.4 8.0#



#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

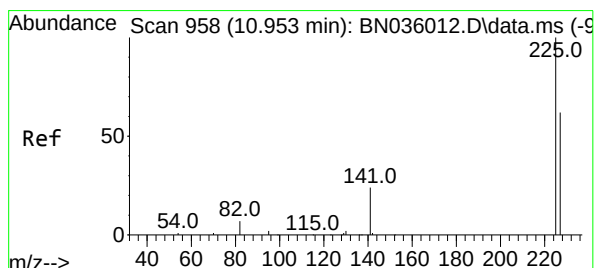
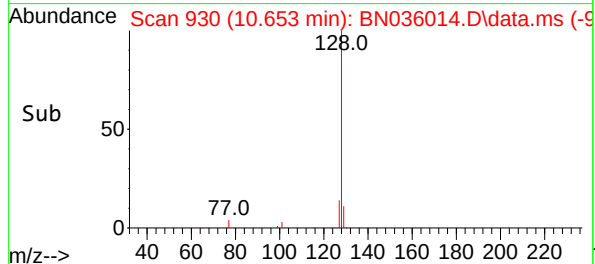
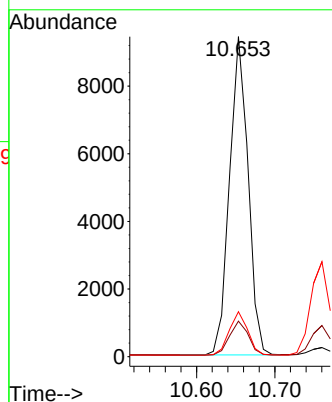
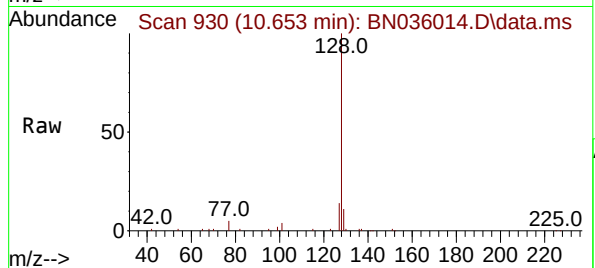




#9
Naphthalene
Concen: 1.630 ng
RT: 10.653 min Scan# 910
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

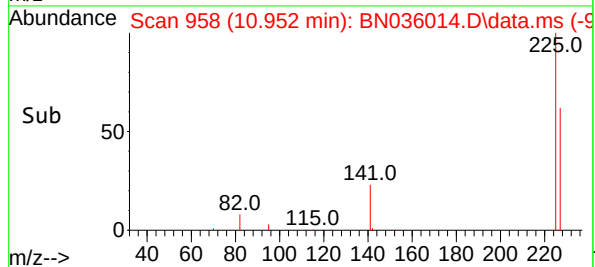
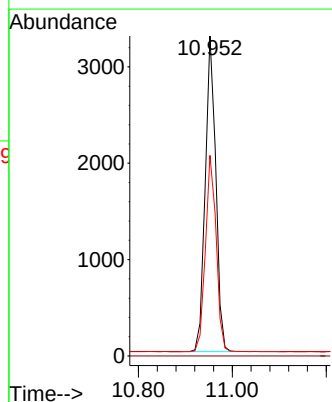
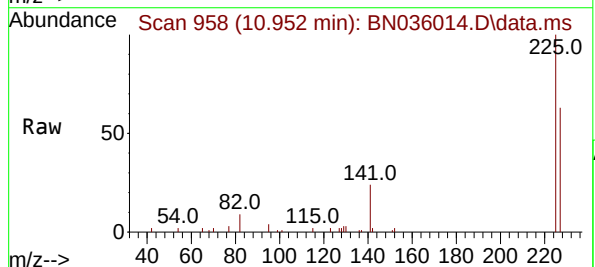
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

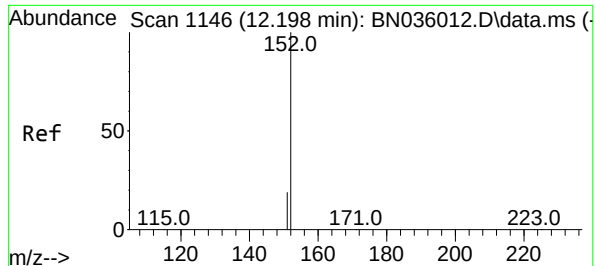
Tgt Ion:128 Resp: 15537
Ion Ratio Lower Upper
128 100
129 11.1 9.4 14.2
127 14.1 12.6 19.0



#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

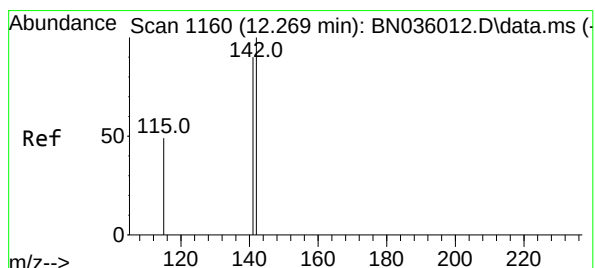
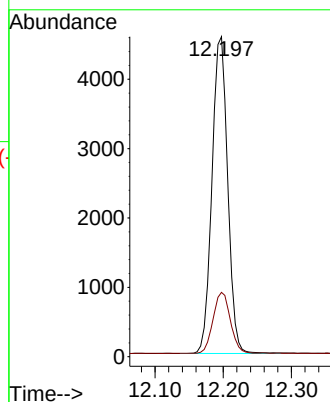
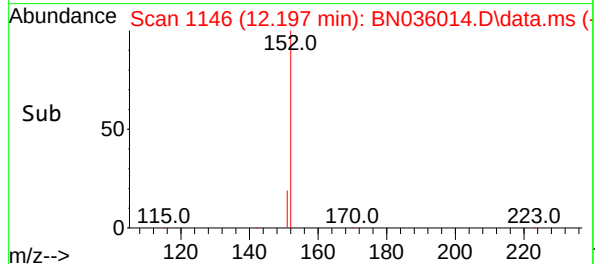
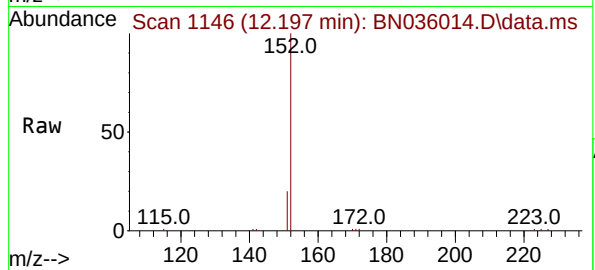




#11
2-Methylnaphthalene-d10
Concen: 1.636 ng
RT: 12.197 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

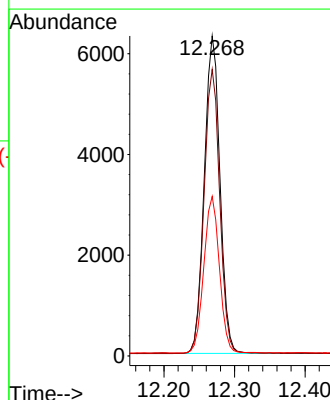
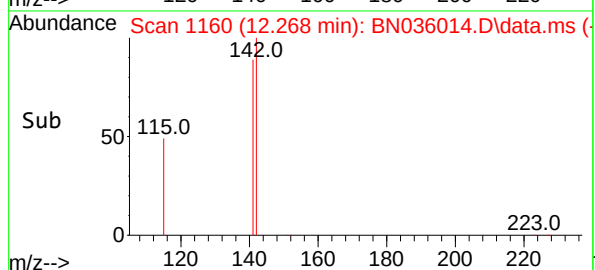
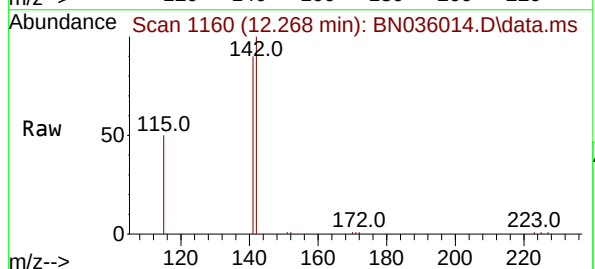
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

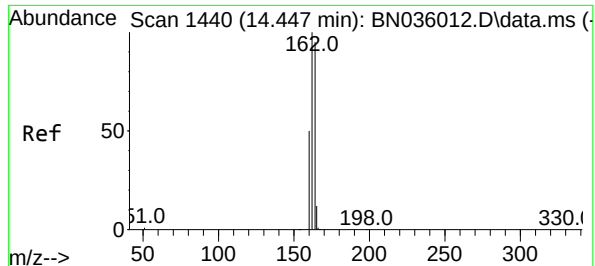
Tgt Ion:152 Resp: 7300
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#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

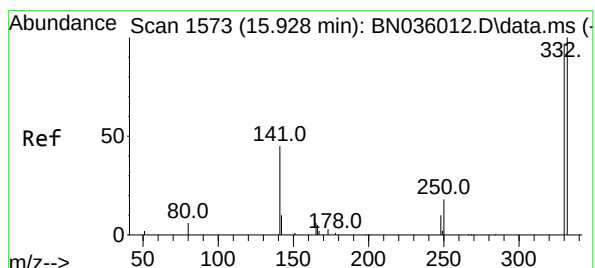
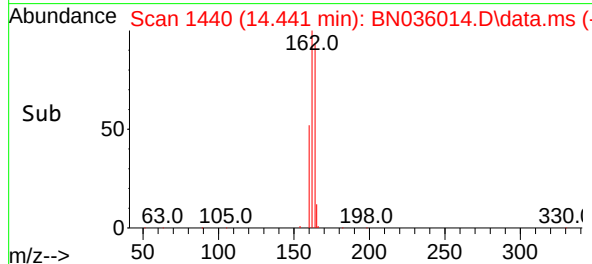
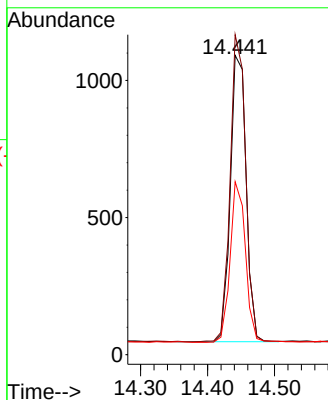
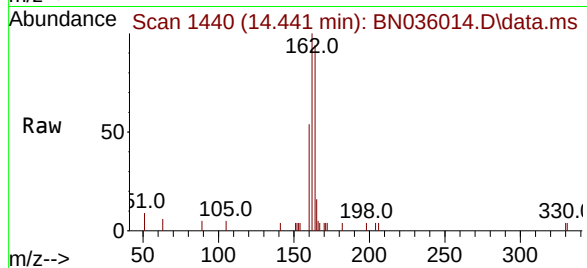




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

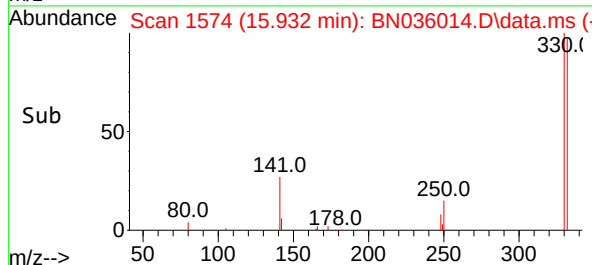
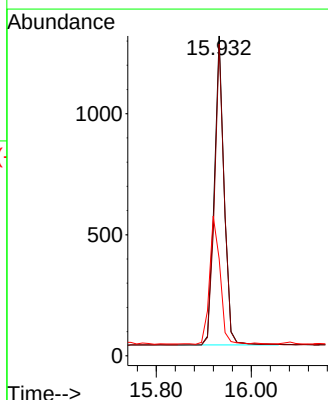
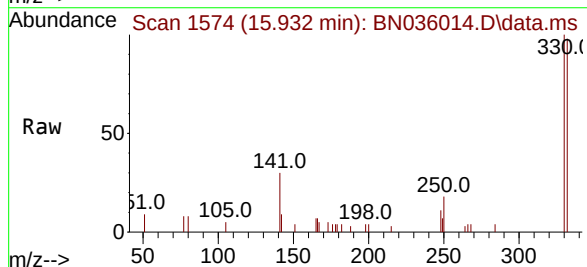
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

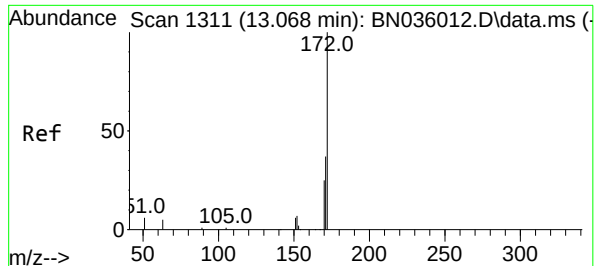
Tgt Ion:164 Resp: 1710
Ion Ratio Lower Upper
164 100
162 106.9 84.1 126.1
160 57.8 43.8 65.8



#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

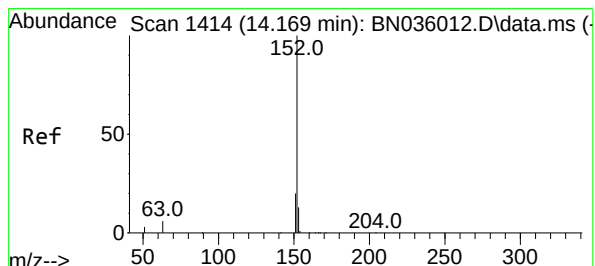
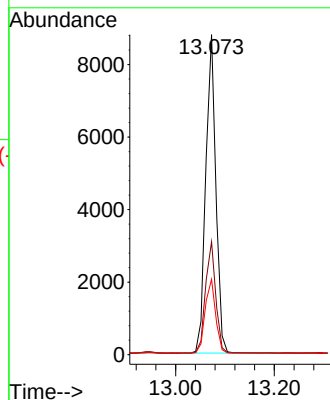
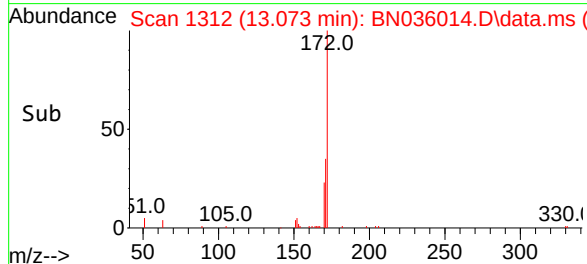
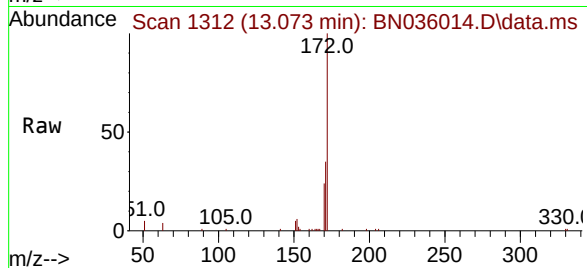




#15
2-Fluorobiphenyl
Concen: 1.630 ng
RT: 13.073 min Scan# 1311
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

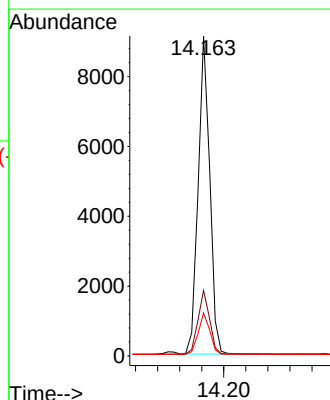
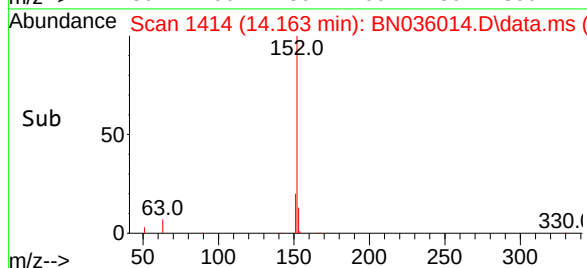
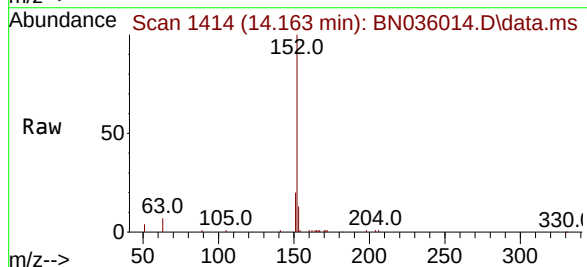
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

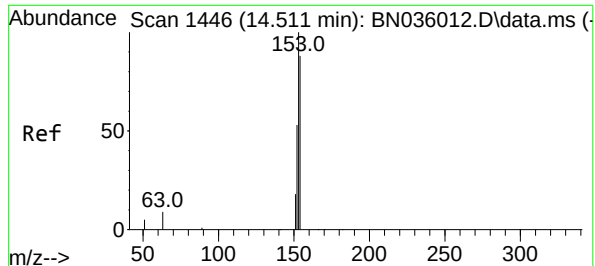
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.3	30.9	46.3
170	23.6	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	20.2	16.2	24.2
153	13.2	10.4	15.6

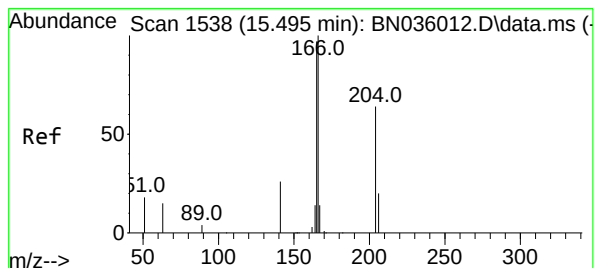
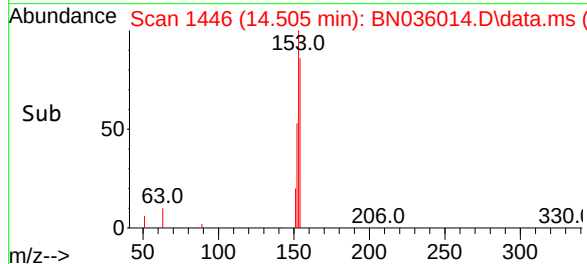
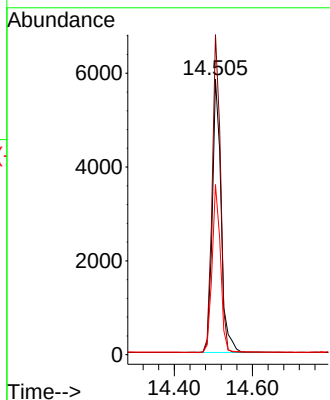
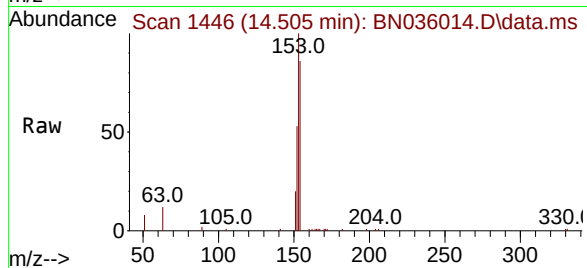




#17
Acenaphthene
Concen: 1.649 ng
RT: 14.505 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

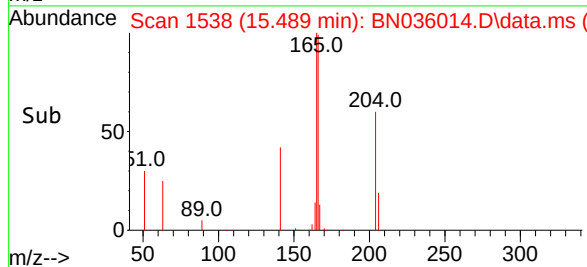
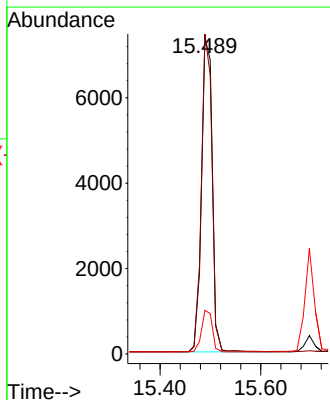
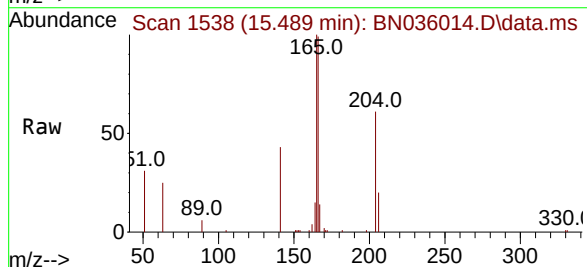
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

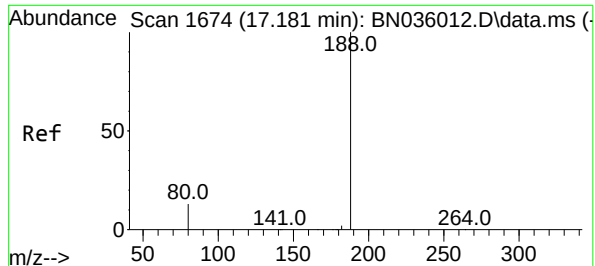
Tgt Ion	Ratio	Lower	Upper
154	100		
153	108.8	88.9	133.3
152	58.1	48.1	72.1



#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

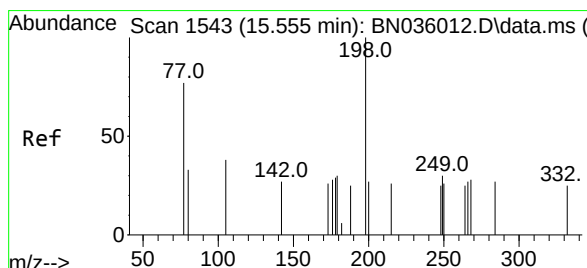
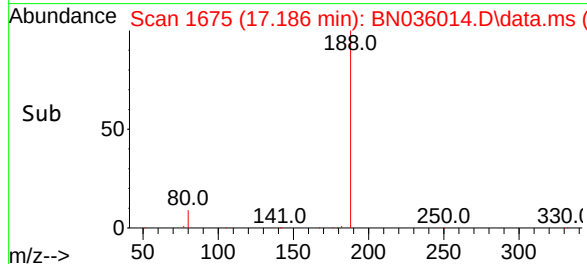
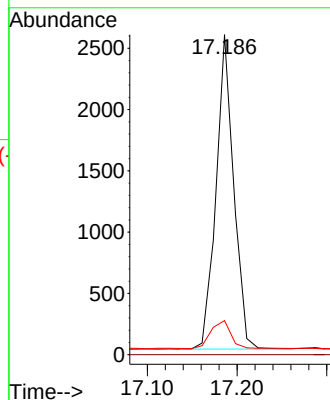
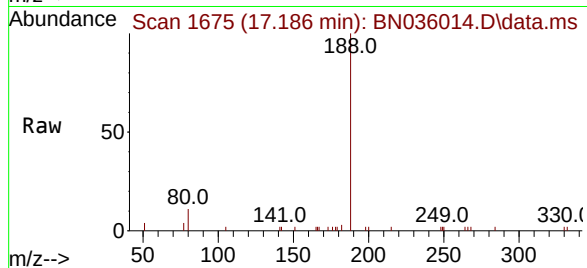
Tgt Ion:188 Resp: 3501

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

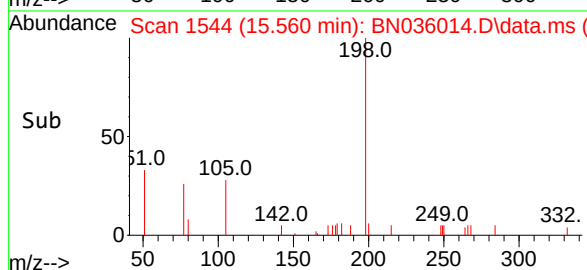
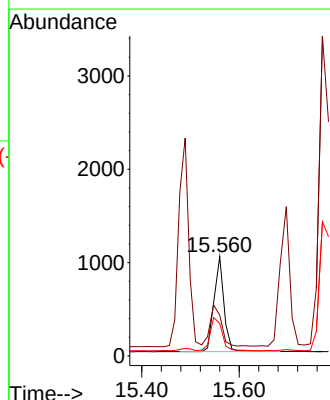
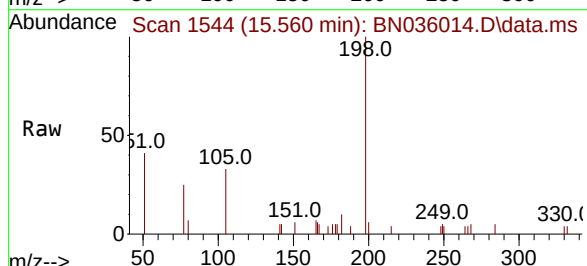
Tgt Ion:198 Resp: 1416

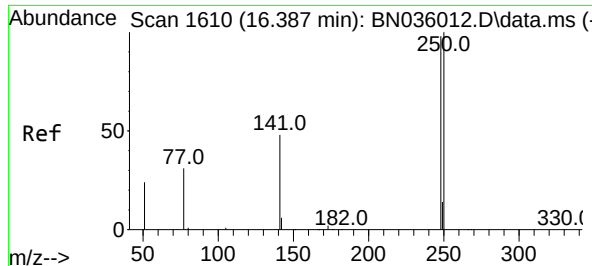
Ion Ratio Lower Upper

198 100

51 41.1 68.1 102.1#

105 32.7 46.5 69.7#

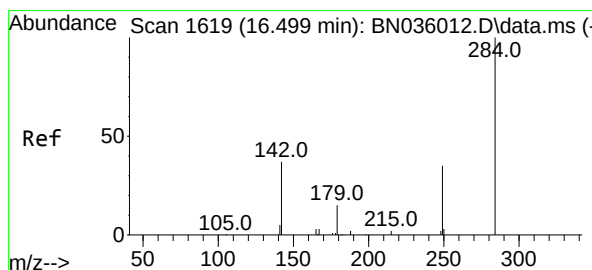
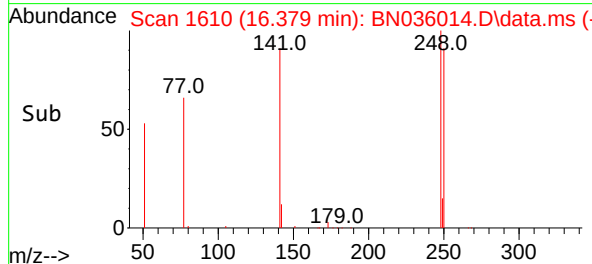
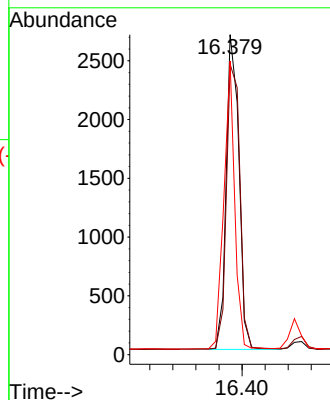
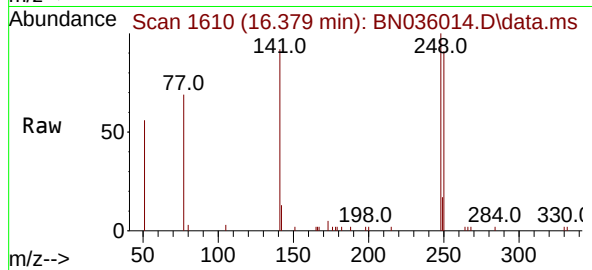




#21
4-Bromophenyl-phenylether
Concen: 1.646 ng
RT: 16.379 min Scan# 1610
Delta R.T. -0.008 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

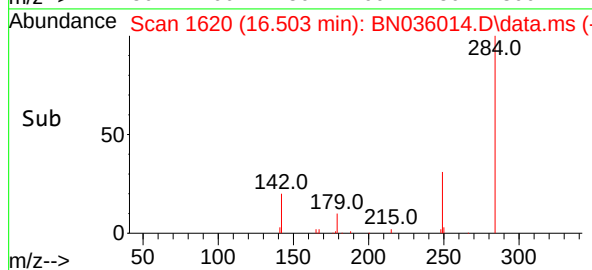
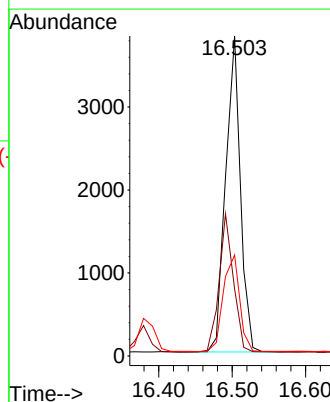
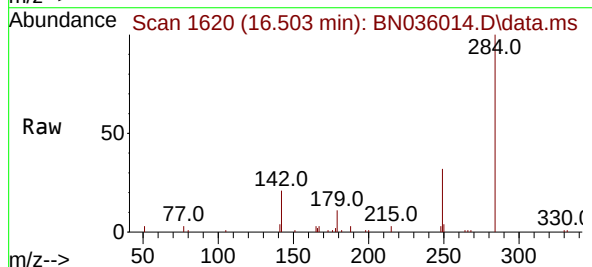
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

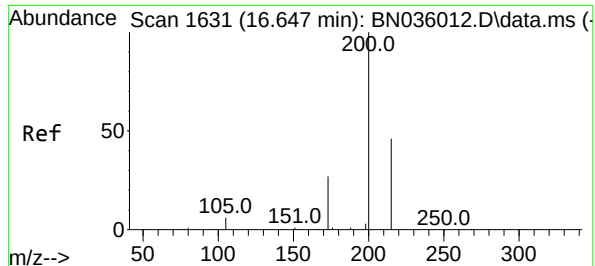
Tgt Ion	Ratio	Lower	Upper
248	100		
250	90.8	81.5	122.3
141	91.7	41.8	62.6



#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

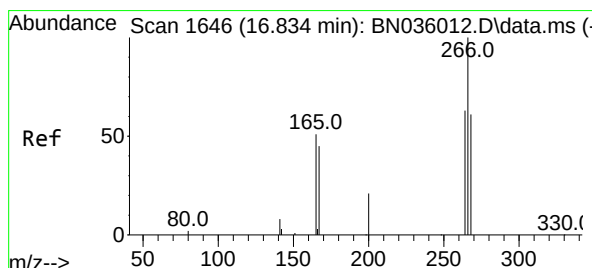
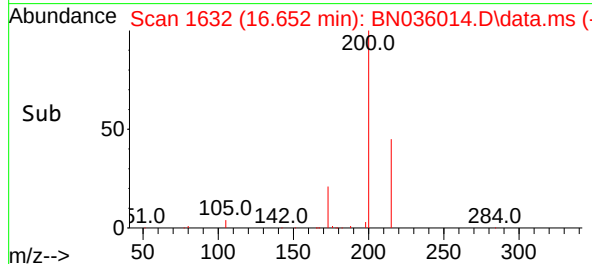
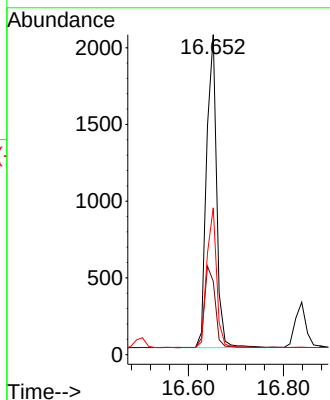
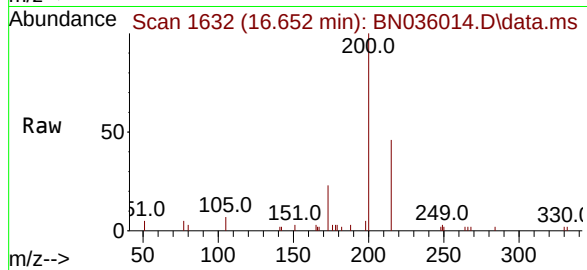




#23
Atrazine
Concen: 1.678 ng
RT: 16.652 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

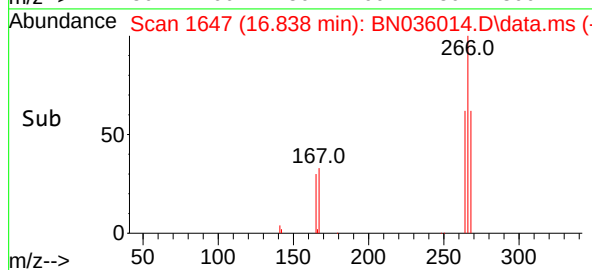
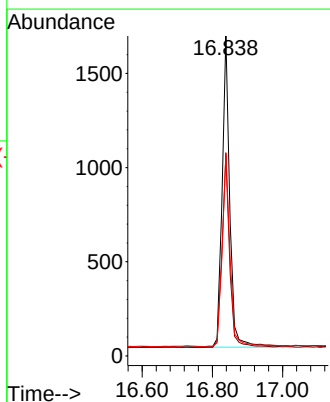
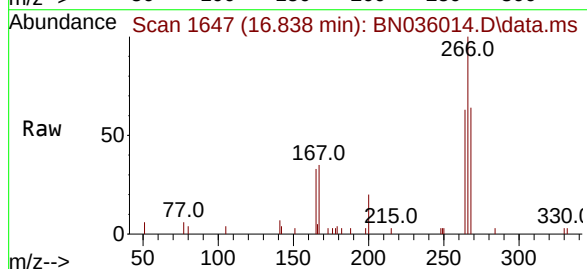
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

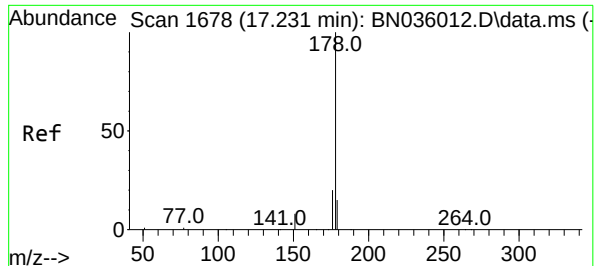
Tgt Ion	Ratio	Lower	Upper
200	100		
173	22.9	26.6	40.0#
215	45.9	40.6	61.0



#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	Ratio	Lower	Upper
266	100		
264	61.9	48.2	72.2
268	64.8	51.6	77.4

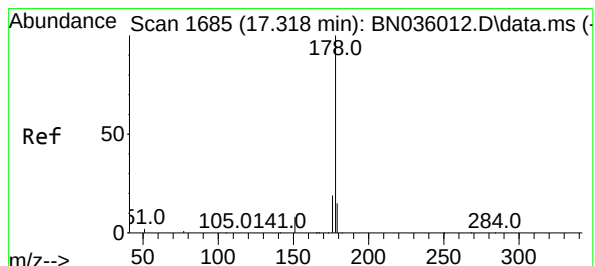
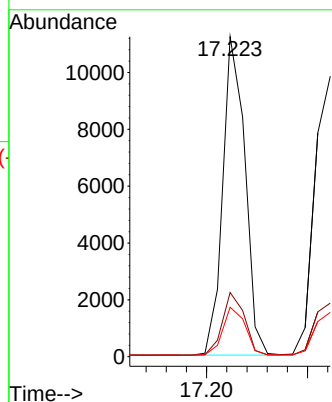
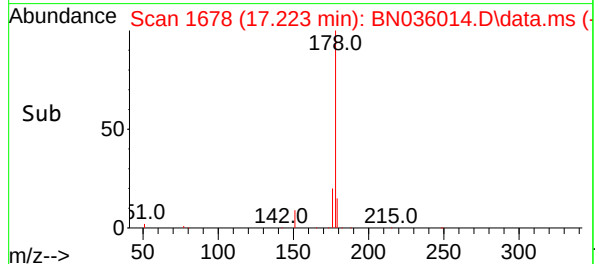
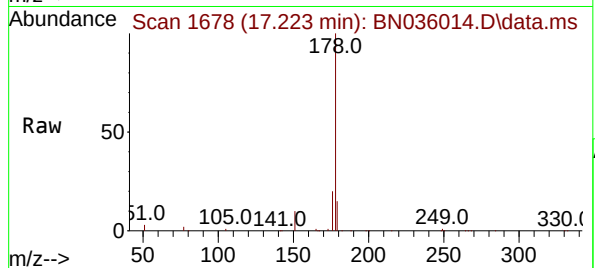




#25
Phenanthrene
Concen: 1.632 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.008 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

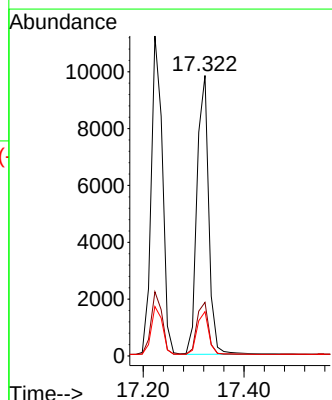
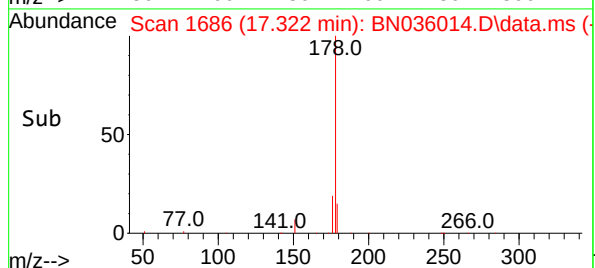
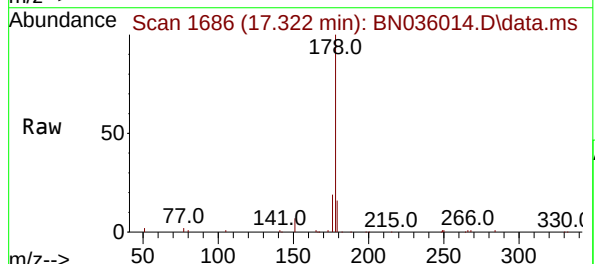
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

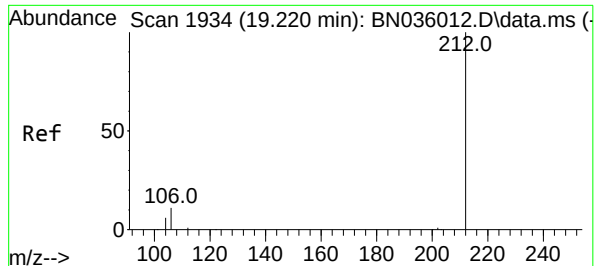
Tgt Ion:178 Resp: 17172
Ion Ratio Lower Upper
178 100
176 19.6 16.0 24.0
179 15.2 12.4 18.6



#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# 1933

Delta R.T. -0.005 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

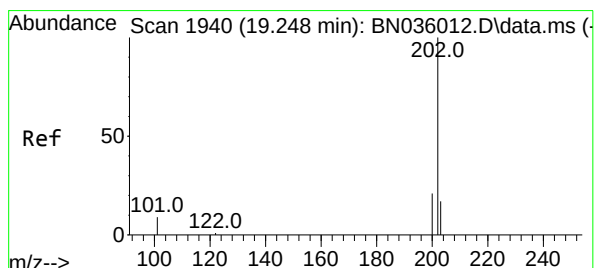
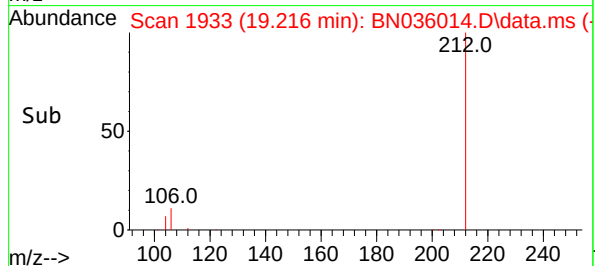
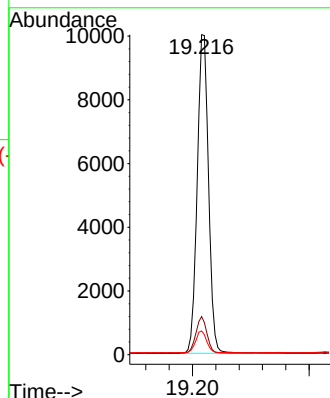
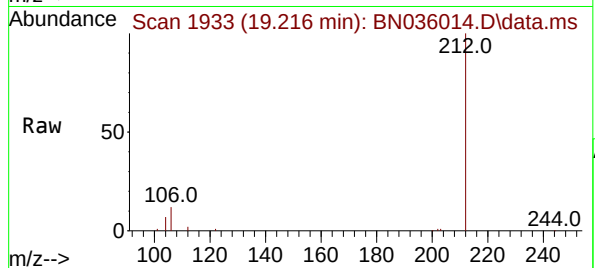
Tgt Ion:212 Resp: 13423

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

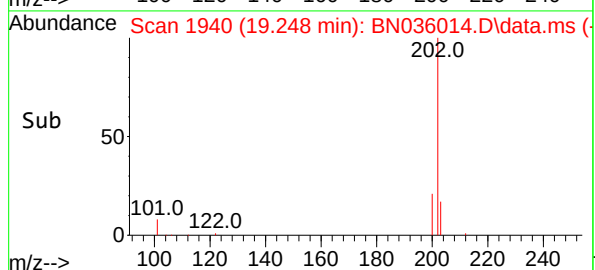
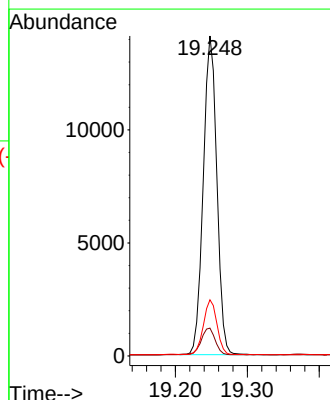
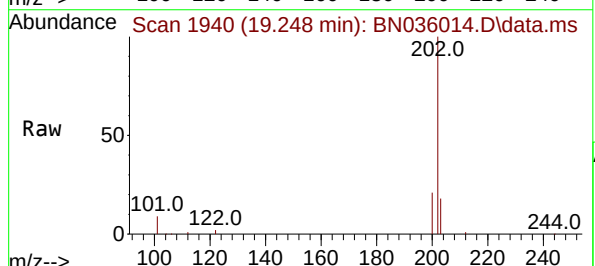
Tgt Ion:202 Resp: 18447

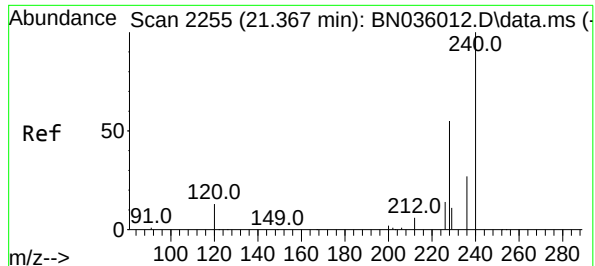
Ion Ratio Lower Upper

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

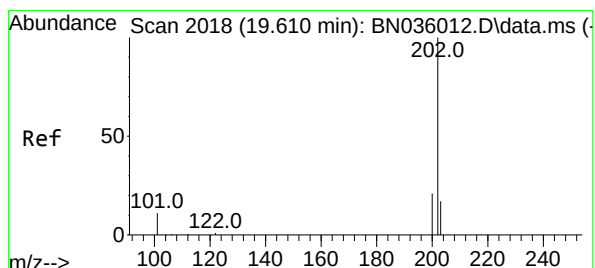
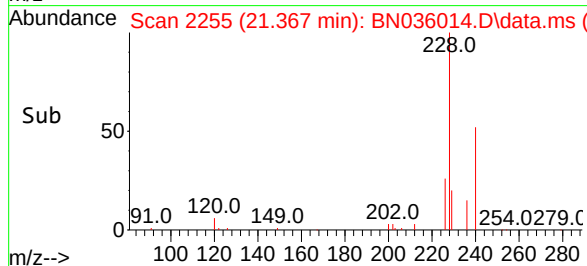
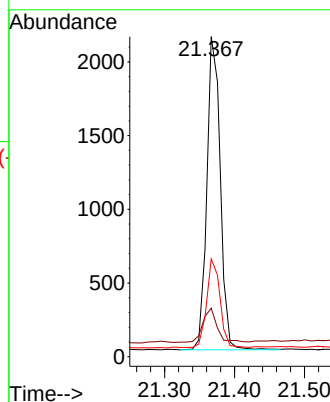
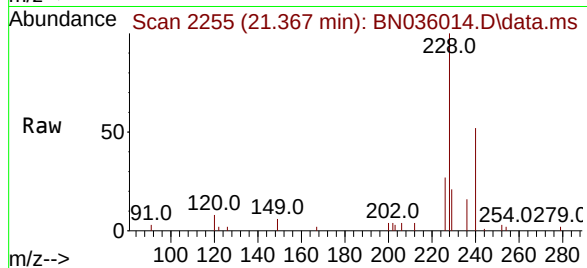
Tgt Ion:240 Resp: 2839

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

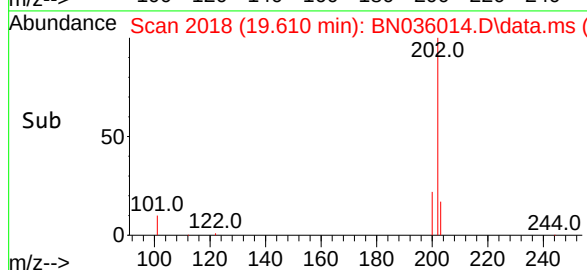
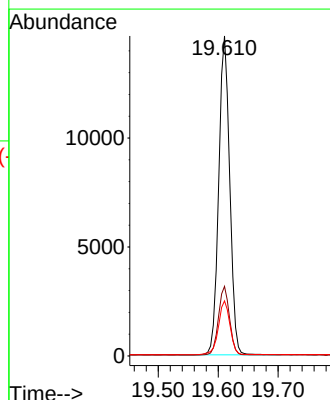
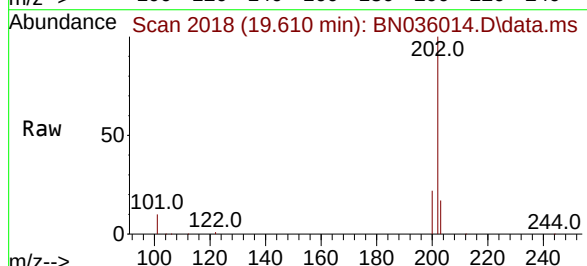
Tgt Ion:202 Resp: 18695

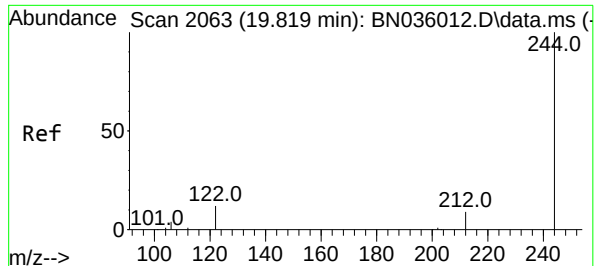
Ion Ratio Lower Upper

202 100

200 21.5 17.0 25.4

203 17.7 14.4 21.6

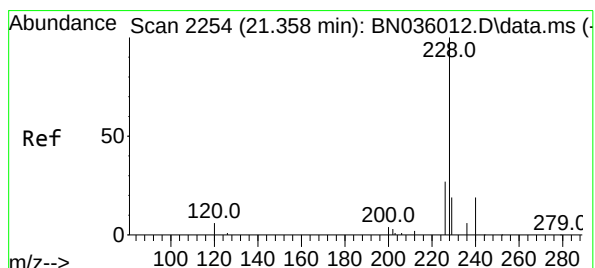
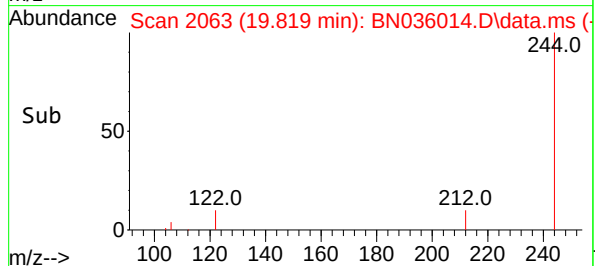
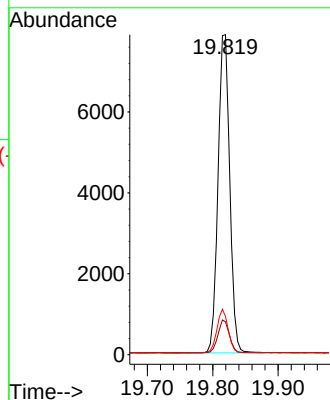
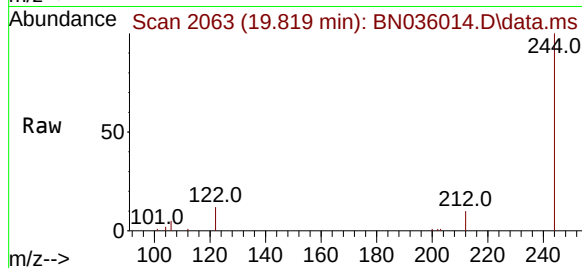




#31
Terphenyl-d14
Concen: 1.656 ng
RT: 19.819 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036014.D
Acq: 22 Jan 2025 13:25

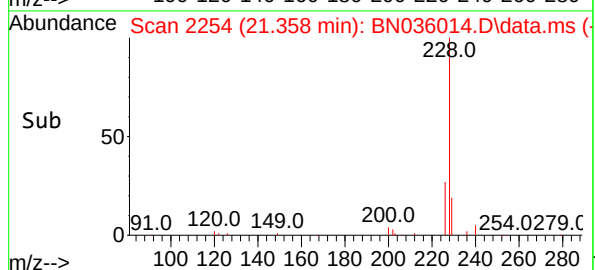
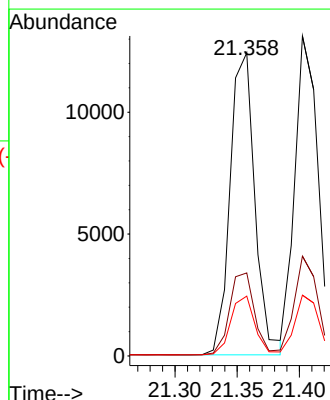
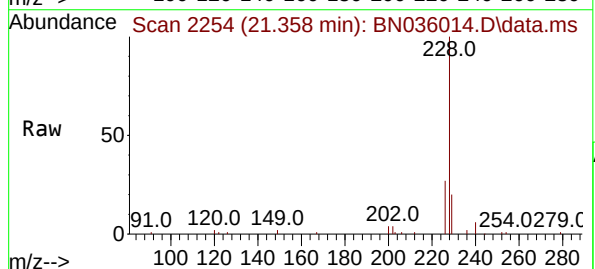
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

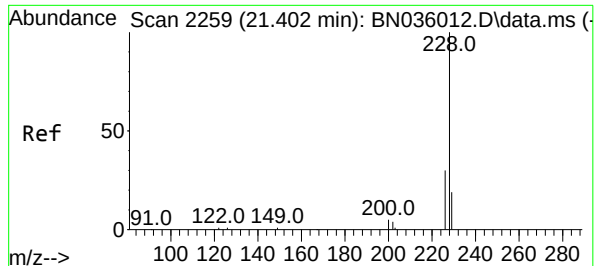
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.3	9.1	13.7
122	12.0	11.3	16.9



#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

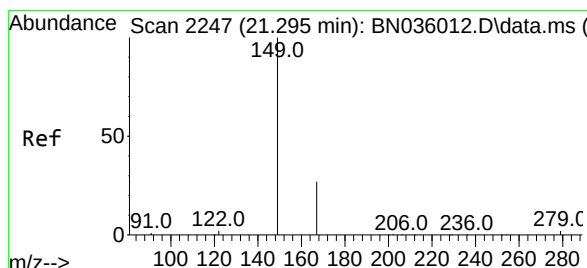
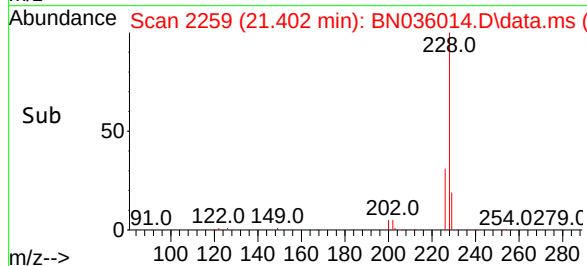
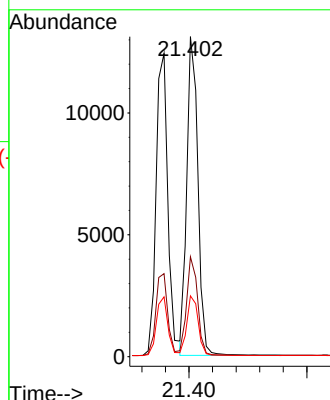
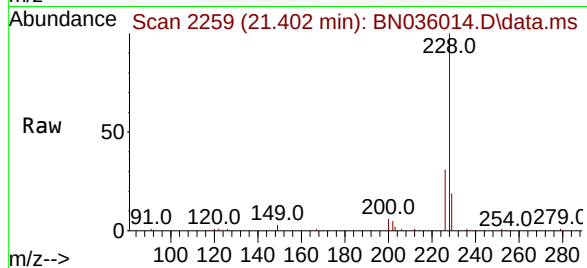
Tgt Ion:228 Resp: 17200

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

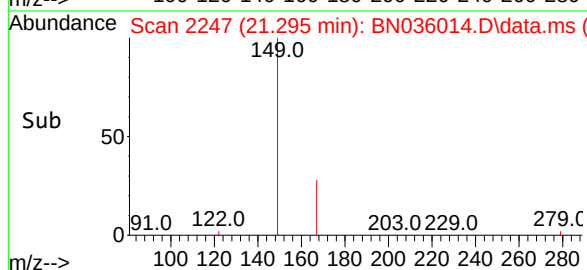
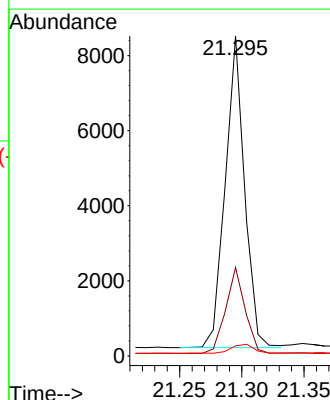
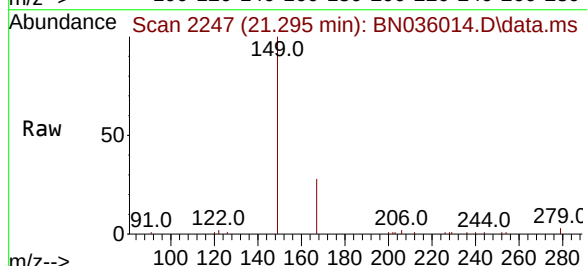
Tgt Ion:149 Resp: 8981

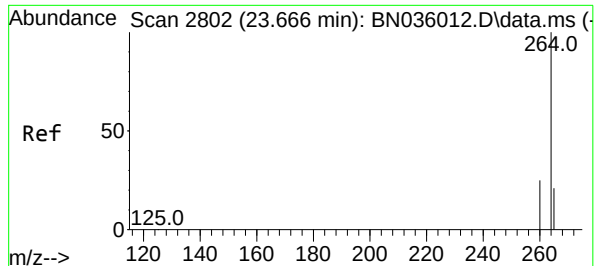
Ion Ratio Lower Upper

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

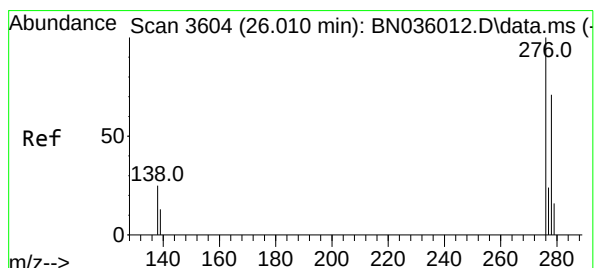
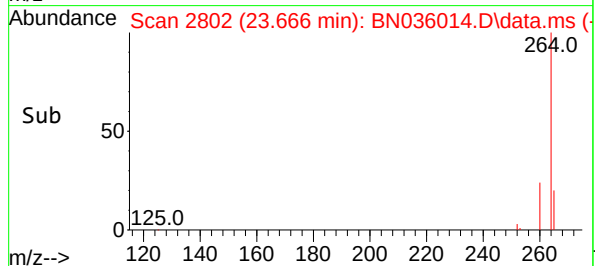
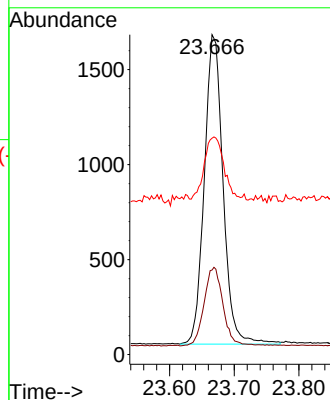
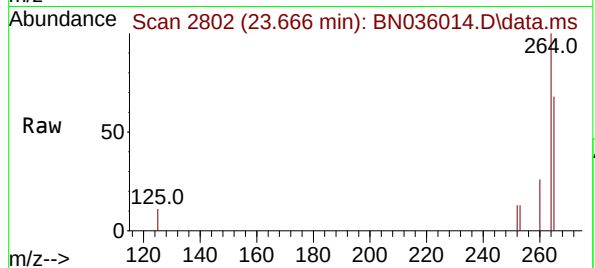
Tgt Ion:264 Resp: 3282

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

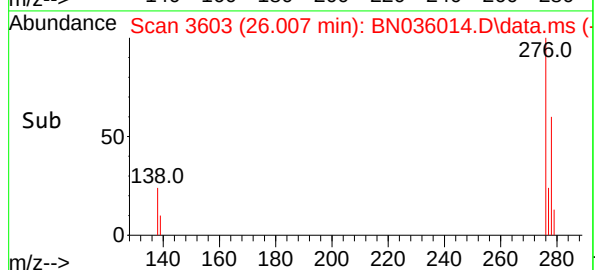
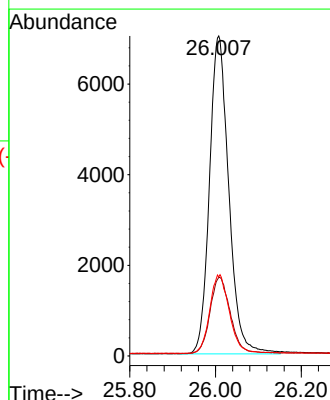
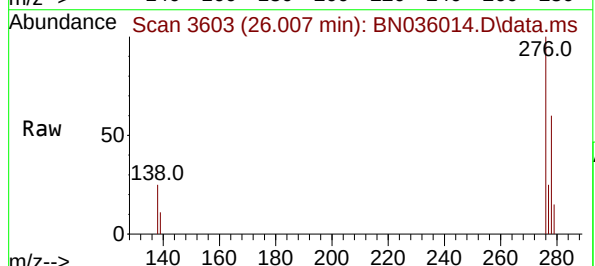
Tgt Ion:276 Resp: 21908

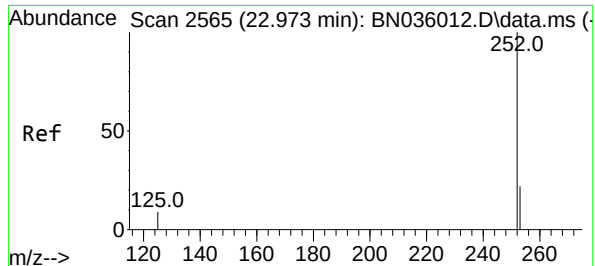
Ion Ratio Lower Upper

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

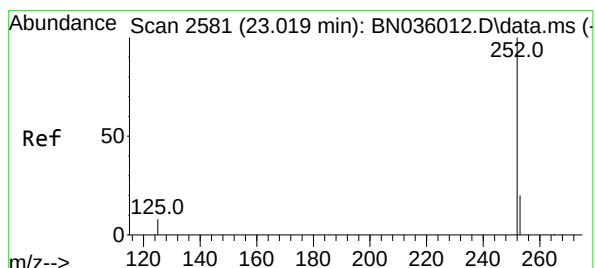
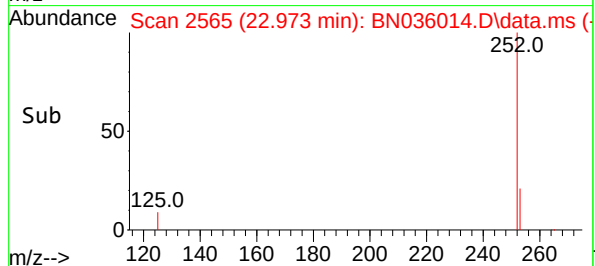
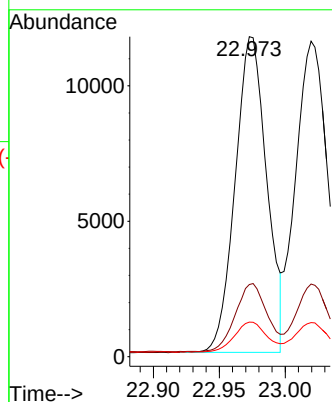
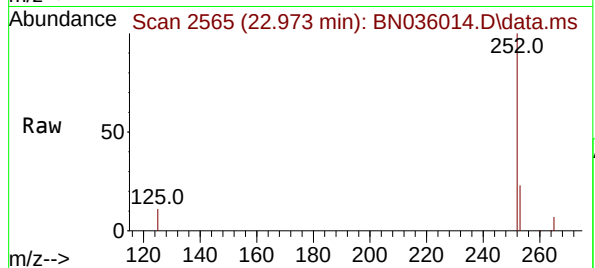
Tgt Ion:252 Resp: 19366

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

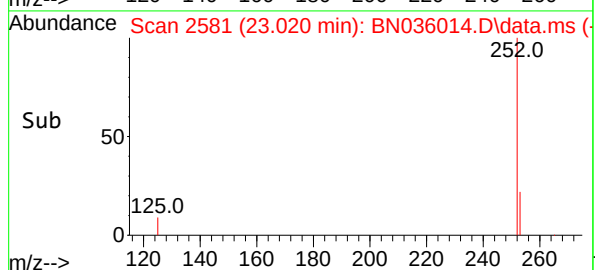
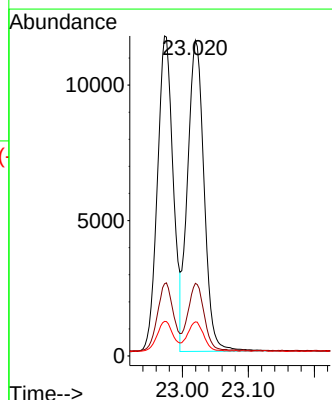
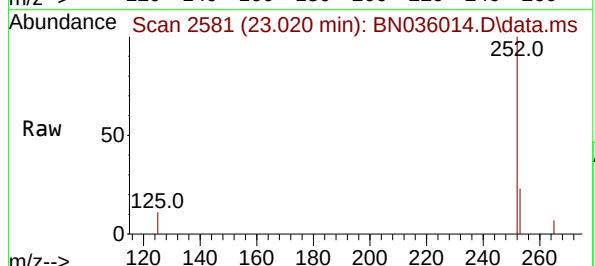
Tgt Ion:252 Resp: 19946

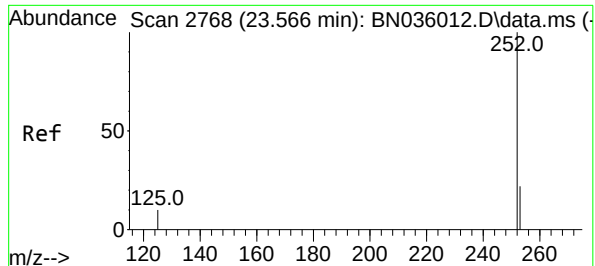
Ion Ratio Lower Upper

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

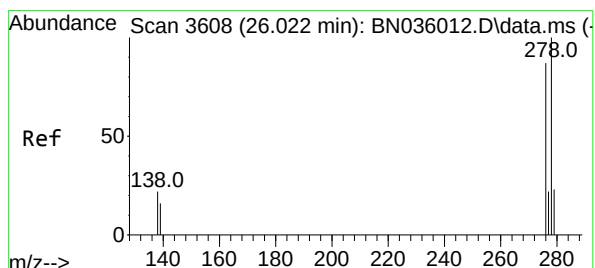
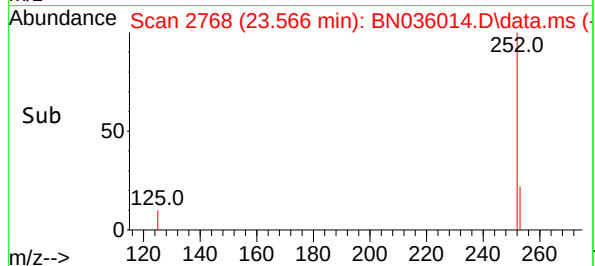
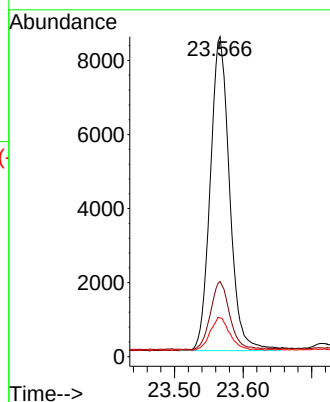
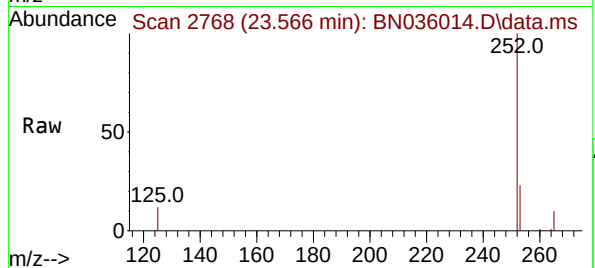
Tgt Ion:252 Resp: 16597

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

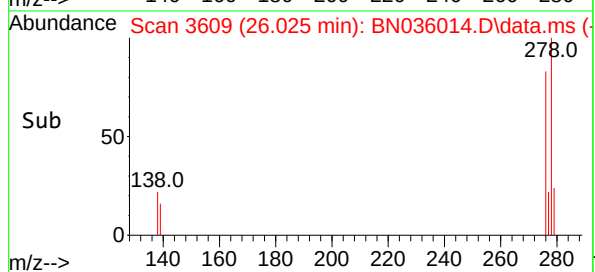
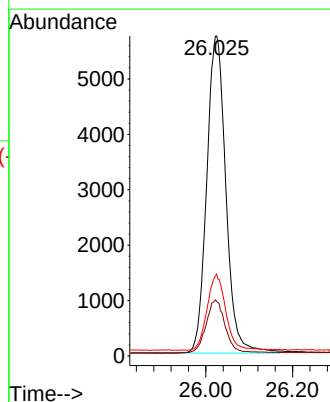
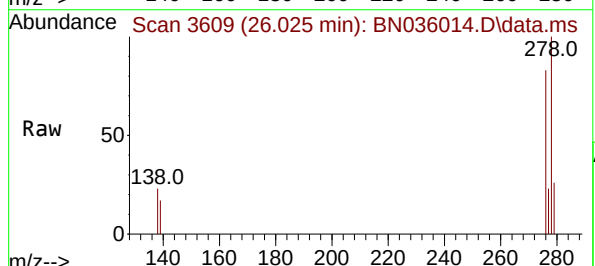
Tgt Ion:278 Resp: 17551

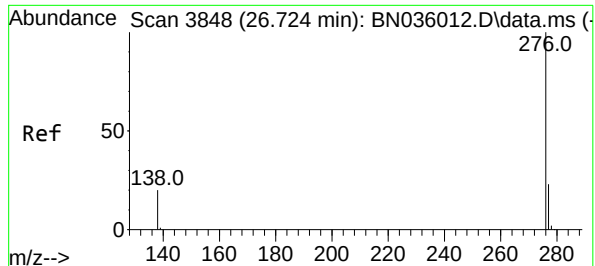
Ion Ratio Lower Upper

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

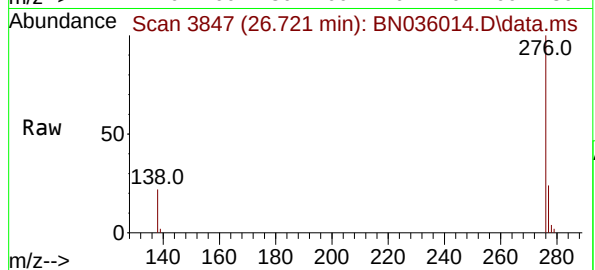
Acq: 22 Jan 2025 13:25

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6



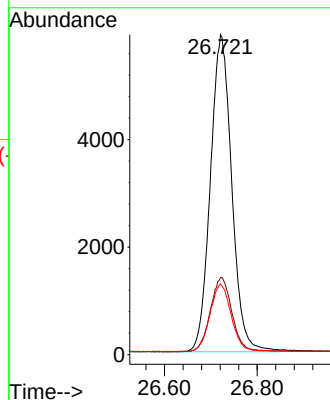
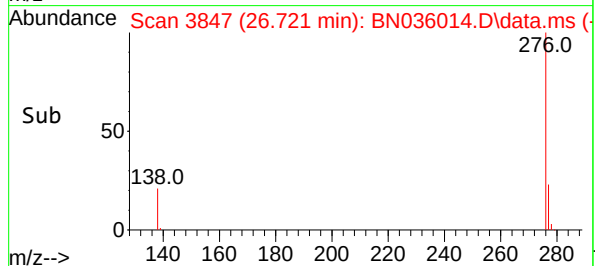
Tgt Ion:276 Resp: 18875

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)

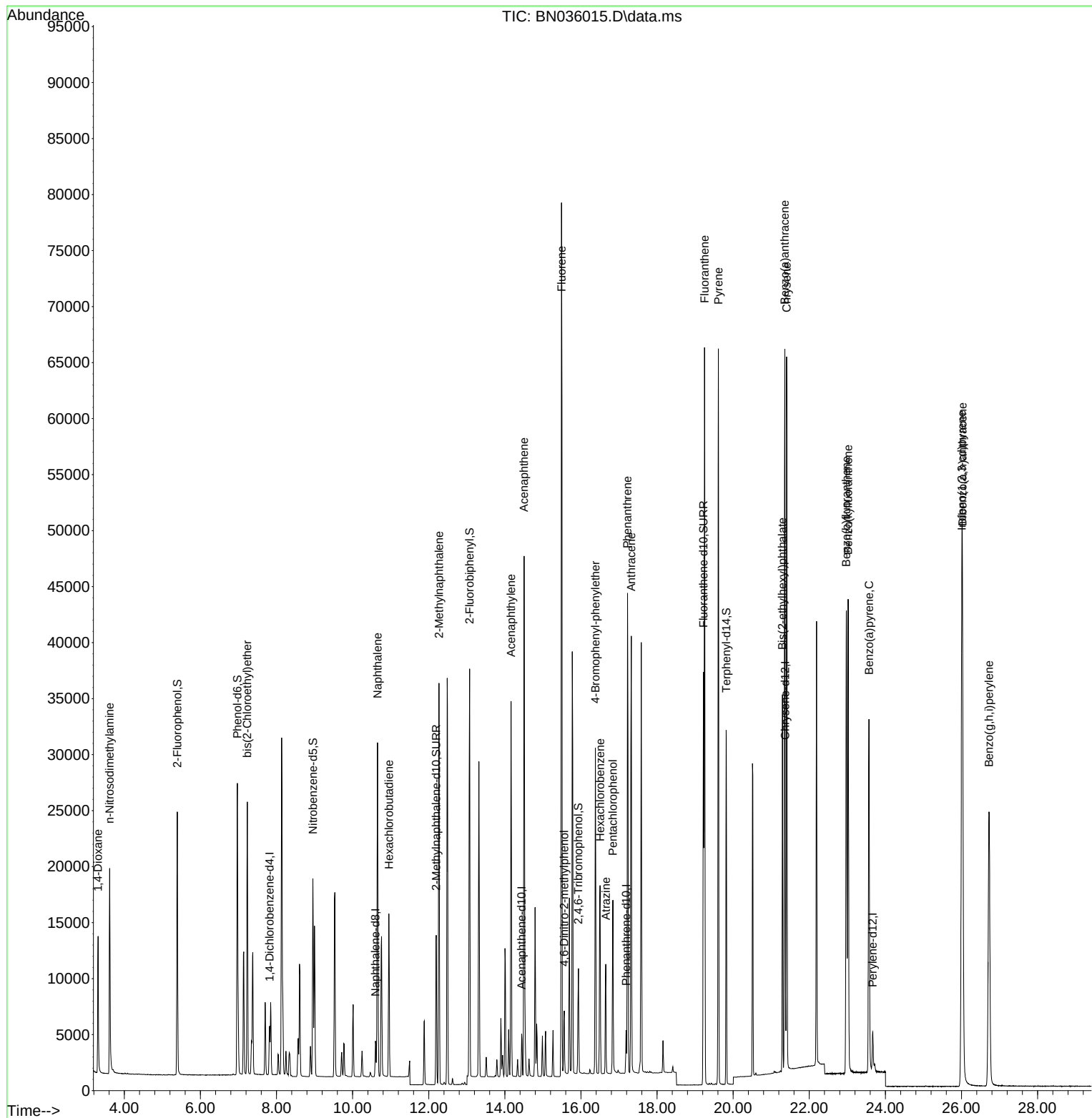
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2044	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3907	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	2182	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	4618	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	4560	0.400	ng	0.00
35) Perylene-d12	23.666	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						Qvalue
2) 1,4-Dioxane	3.310	88	6668	2.918	ng	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

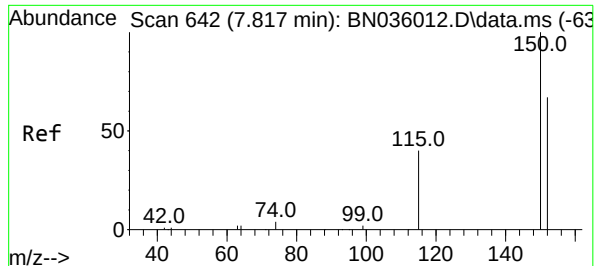
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

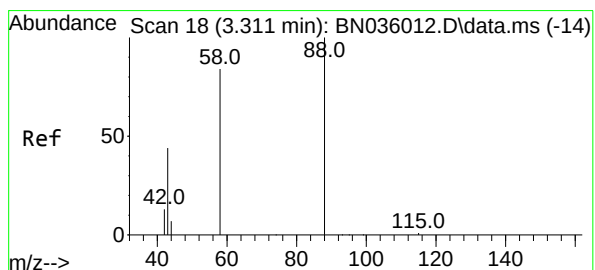
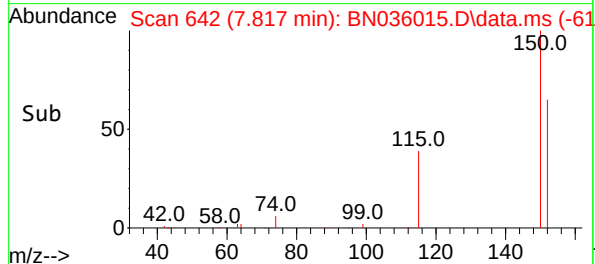
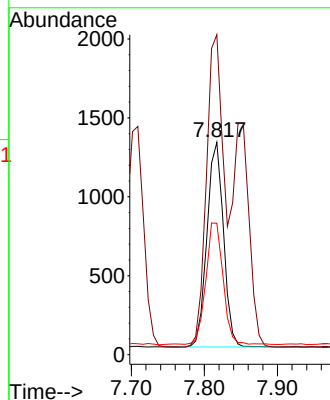
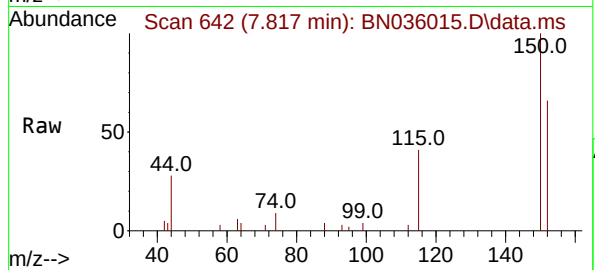




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

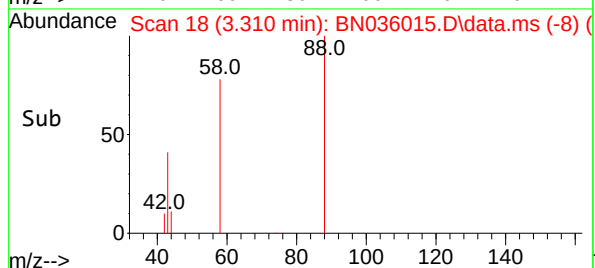
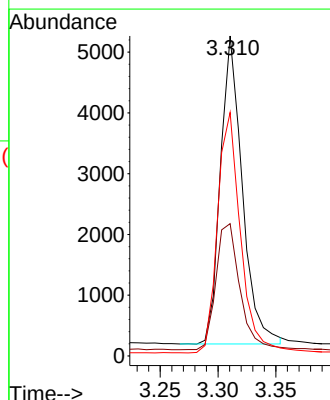
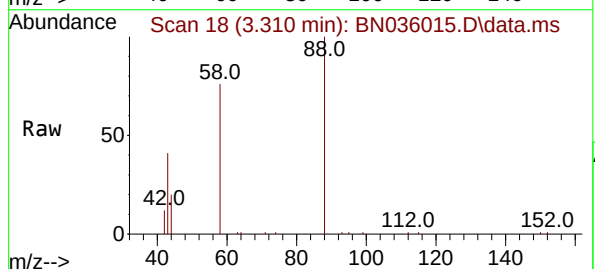
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

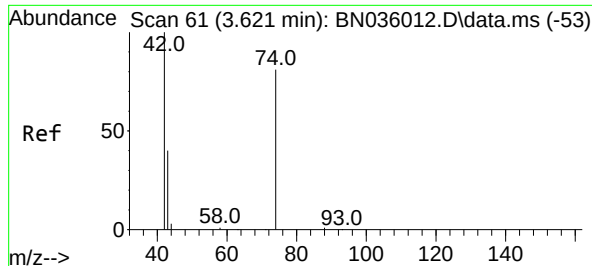
Tgt Ion:152 Resp: 2044
Ion Ratio Lower Upper
152 100
150 150.7 117.4 176.2
115 61.9 51.0 76.4



#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

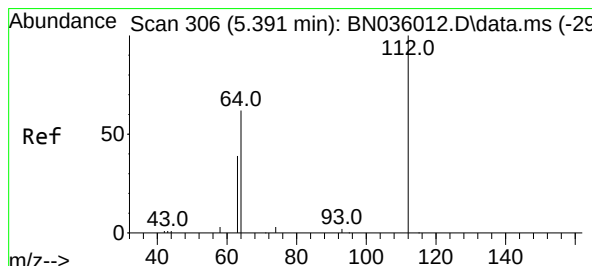
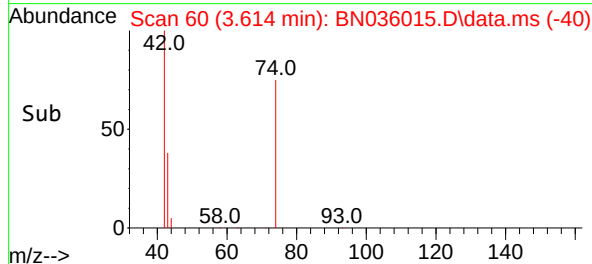
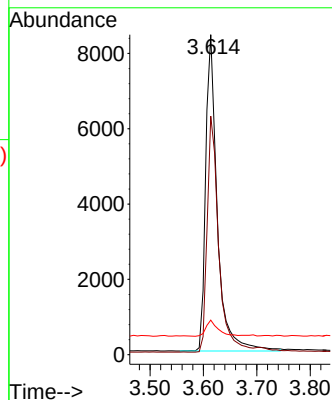
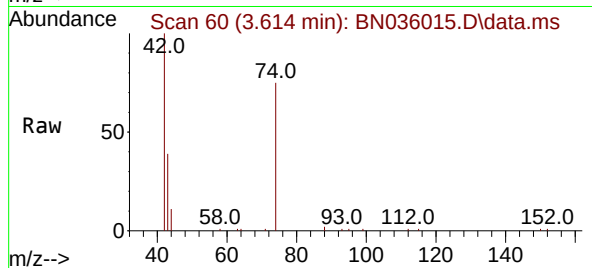




#3
n-Nitrosodimethylamine
Concen: 3.082 ng
RT: 3.614 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

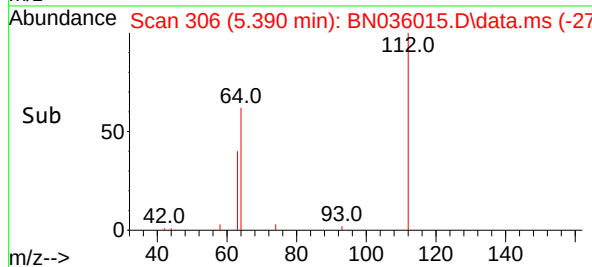
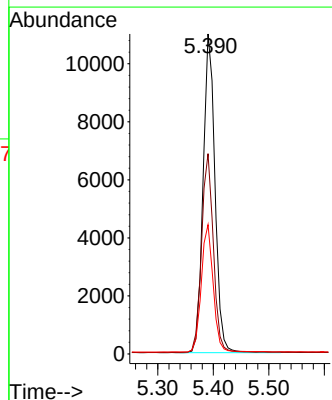
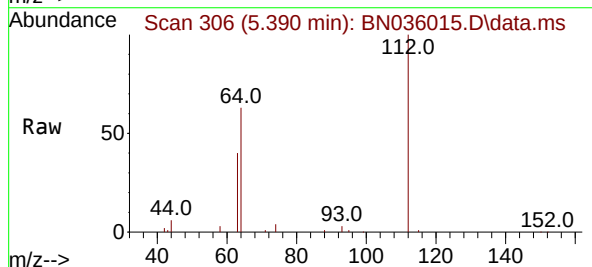
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

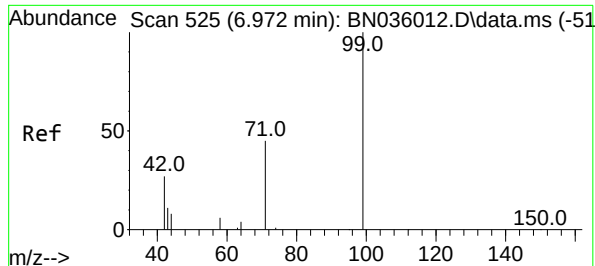
Tgt Ion: 42 Resp: 12771
Ion Ratio Lower Upper
42 100
74 73.6 58.1 87.1
44 5.3 6.2 9.4#



#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

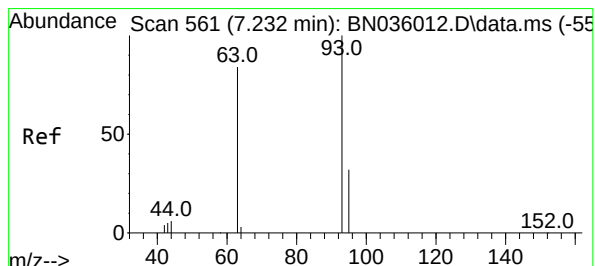
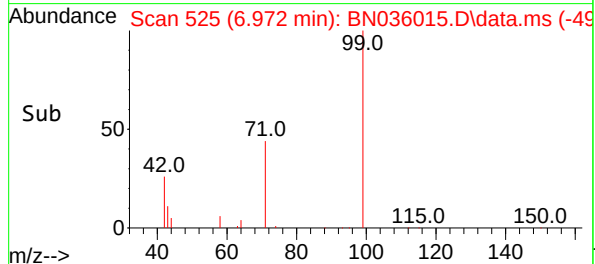
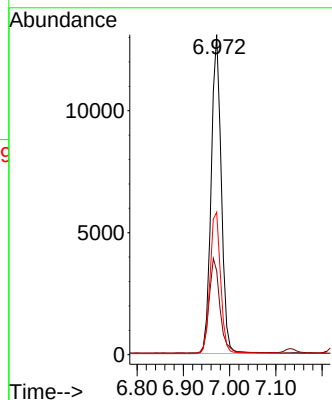
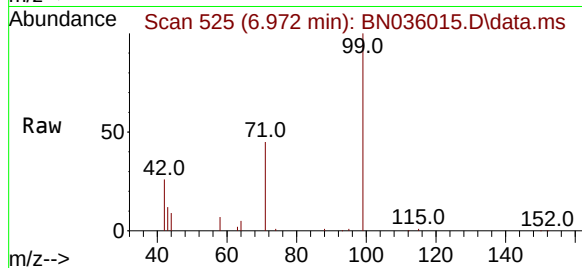




#5
Phenol-d6
Concen: 3.168 ng
RT: 6.972 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

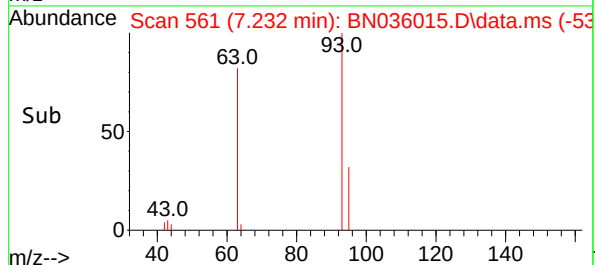
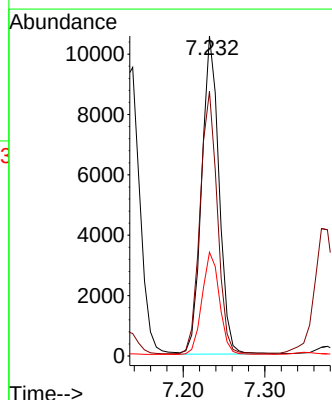
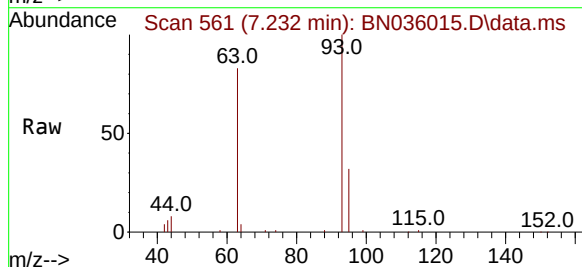
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

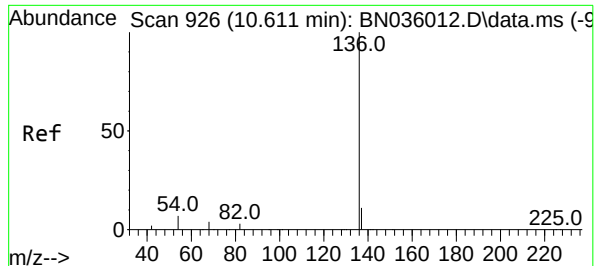
Tgt Ion: 99 Resp: 19779
Ion Ratio Lower Upper
99 100
42 31.9 26.8 40.2
71 46.2 36.6 55.0



#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

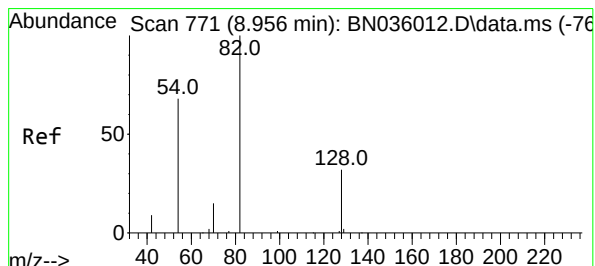
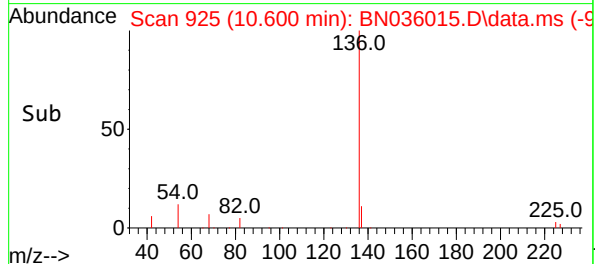
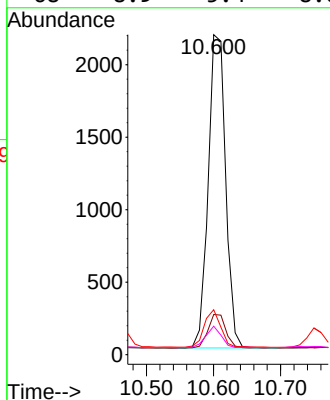
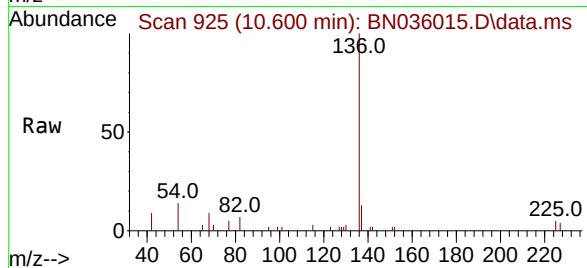




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

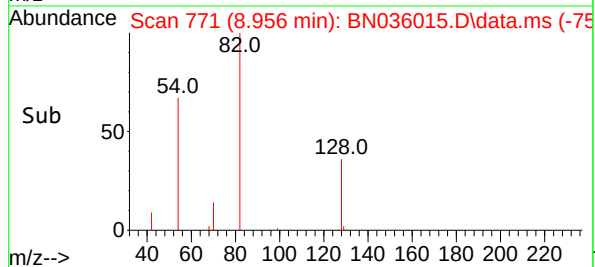
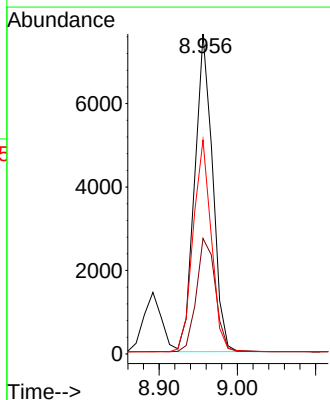
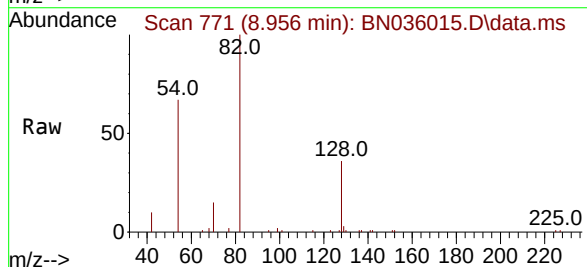
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

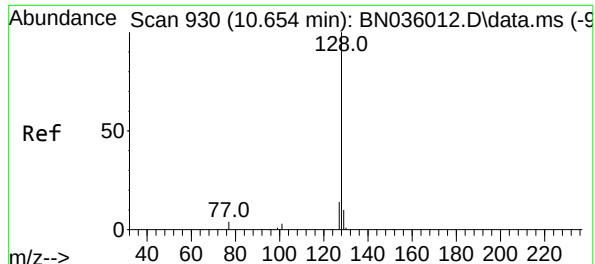
Tgt Ion:136	Resp:	3907
Ion	Ratio	Lower Upper
136	100	
137	12.6	10.4 15.6
54	14.0	7.7 11.5#
68	8.9	5.4 8.0#



#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

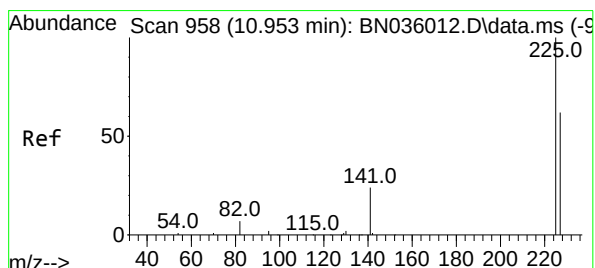
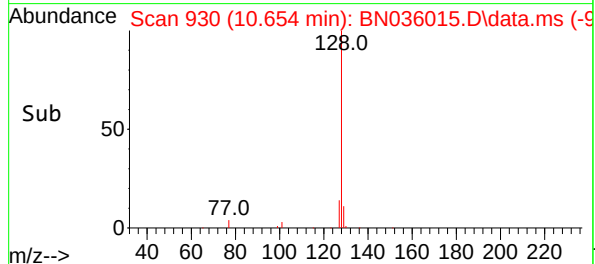
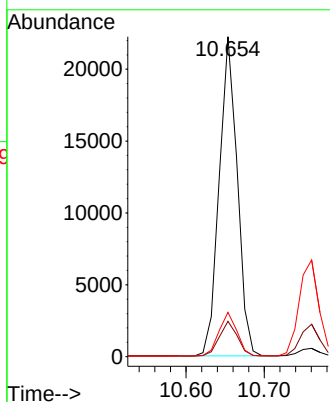
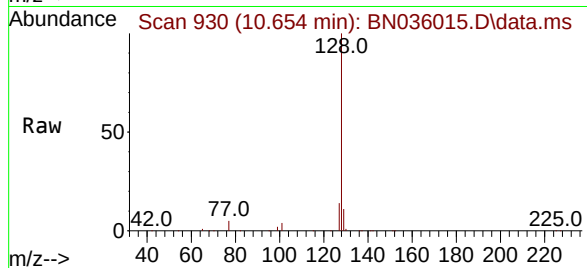




#9
Naphthalene
Concen: 3.142 ng
RT: 10.654 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

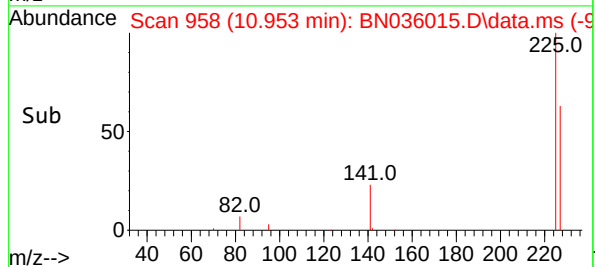
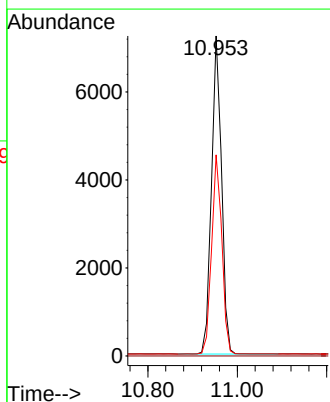
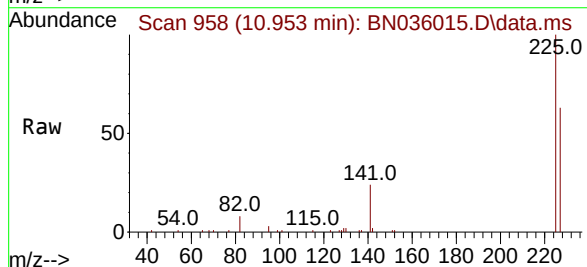
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

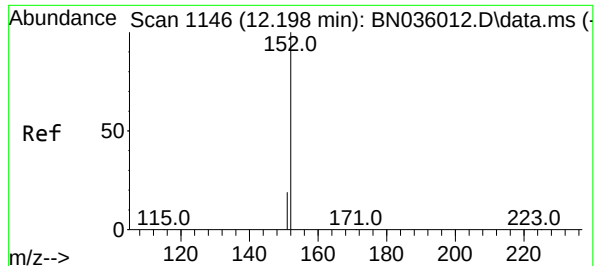
Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.0	9.4	14.2
127	13.8	12.6	19.0



#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	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	51.0	76.6

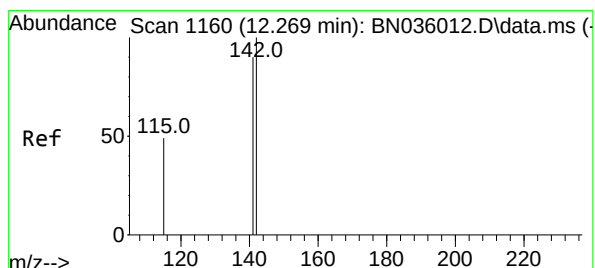
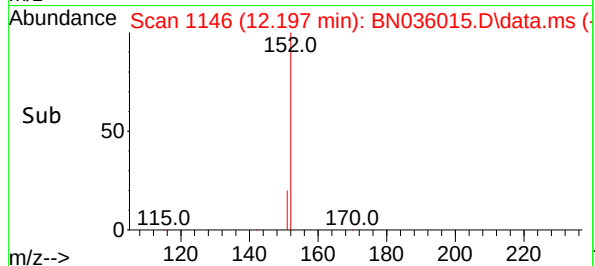
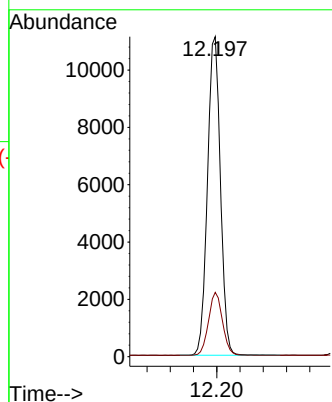
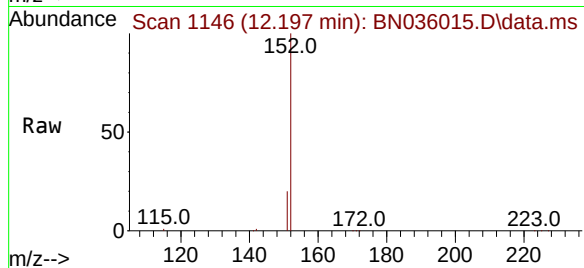




#11
2-Methylnaphthalene-d10
Concen: 3.237 ng
RT: 12.197 min Scan# 1146
Delta R.T. -0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

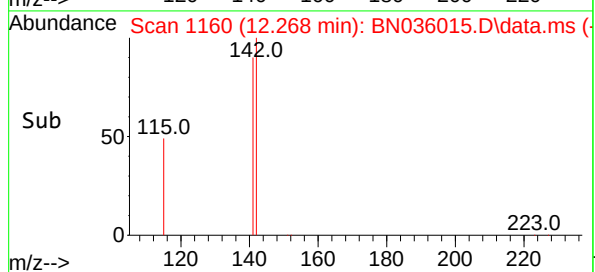
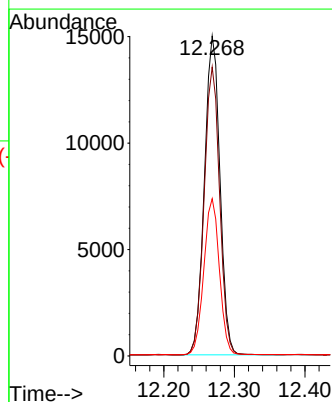
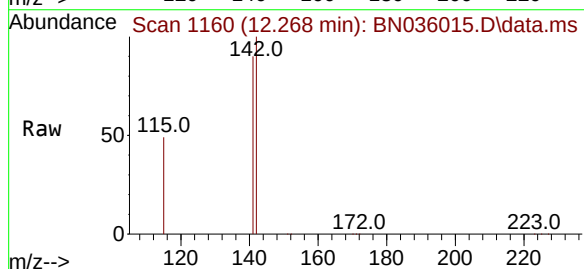
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

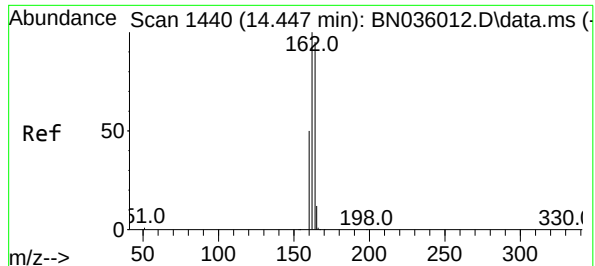
Tgt Ion:152 Resp: 17194
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#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

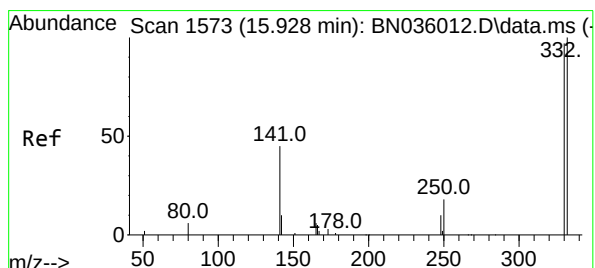
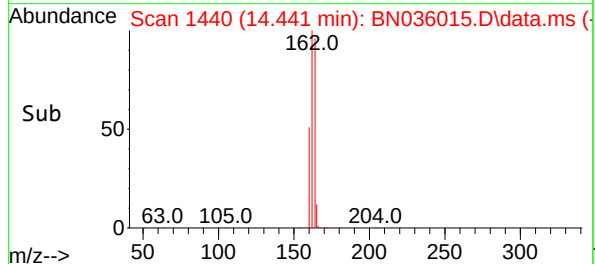
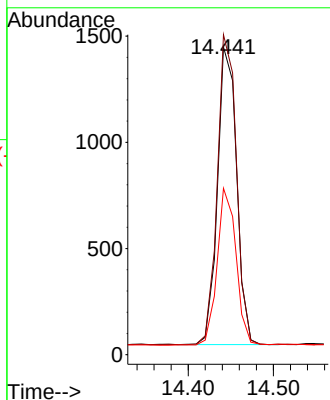
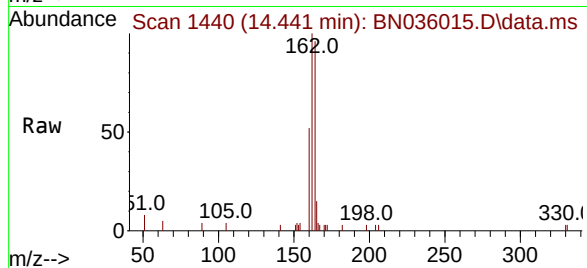




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.441 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

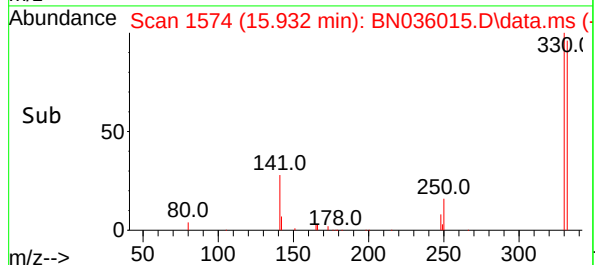
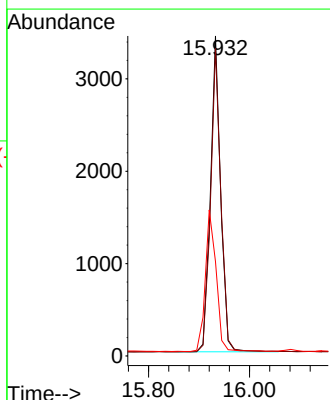
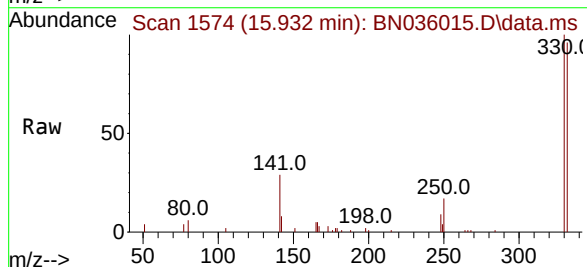
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

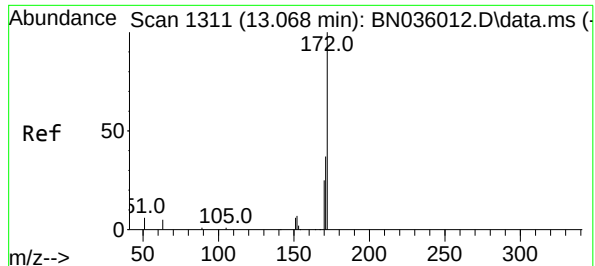
Tgt Ion:164 Resp: 2182
Ion Ratio Lower Upper
164 100
162 104.0 84.1 126.1
160 54.1 43.8 65.8



#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

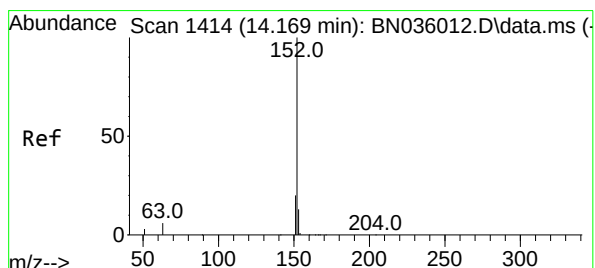
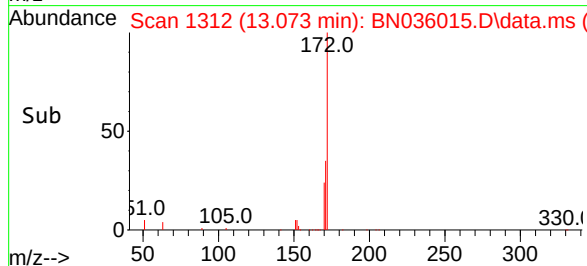
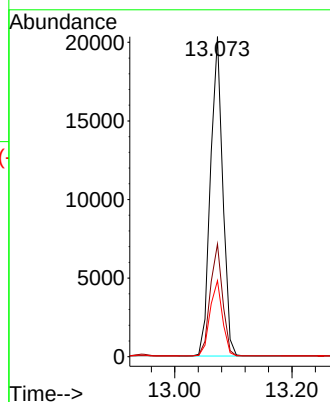
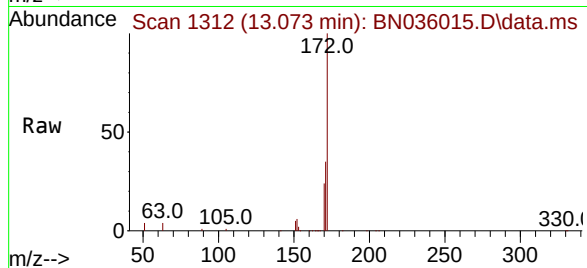




#15
2-Fluorobiphenyl
Concen: 3.035 ng
RT: 13.073 min Scan# 1311
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

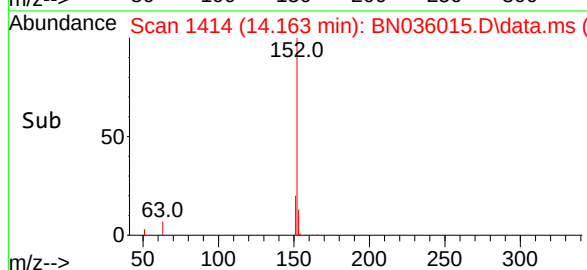
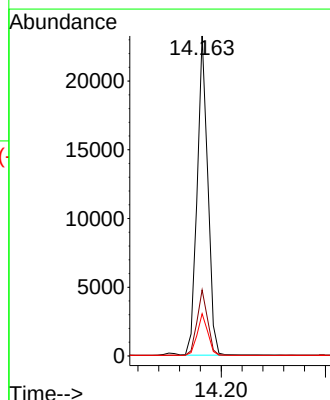
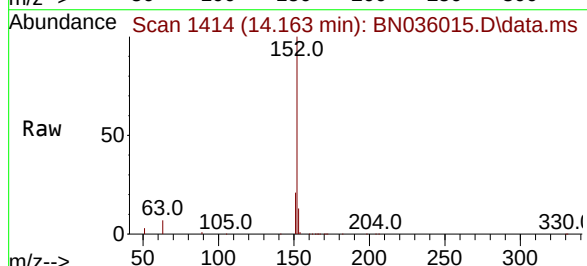
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

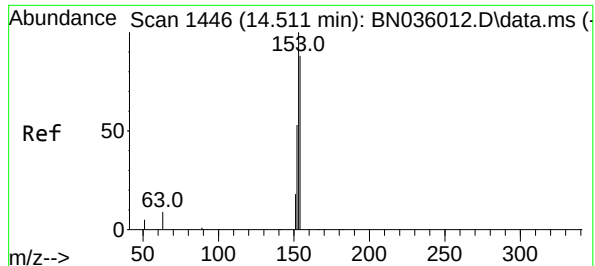
Tgt Ion:172 Resp: 29561
Ion Ratio Lower Upper
172 100
171 35.2 30.9 46.3
170 23.8 21.2 31.8



#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:152 Resp: 32971
Ion Ratio Lower Upper
152 100
151 20.4 16.2 24.2
153 12.9 10.4 15.6

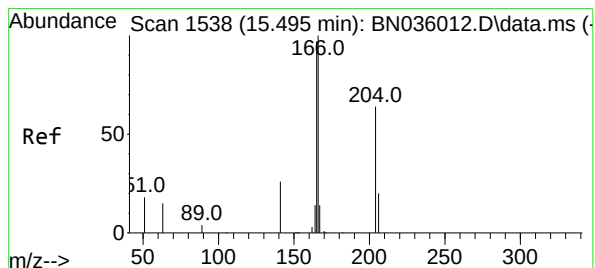
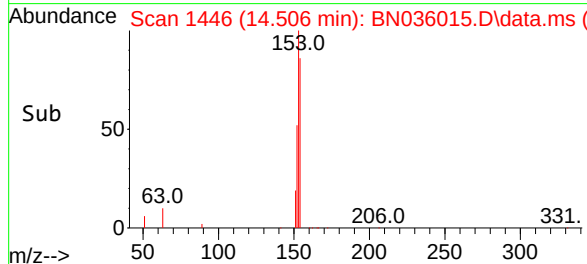
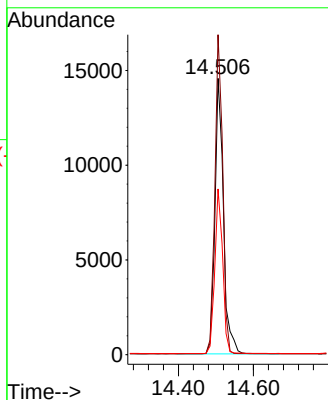
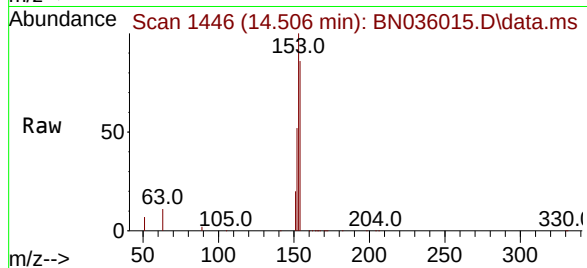




#17
Acenaphthene
Concen: 3.229 ng
RT: 14.506 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

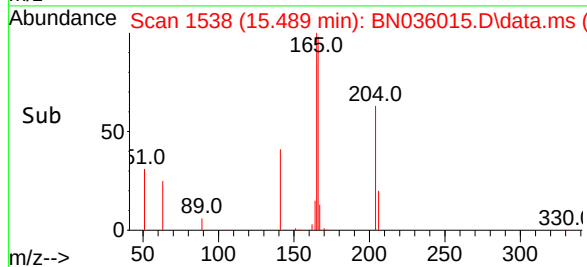
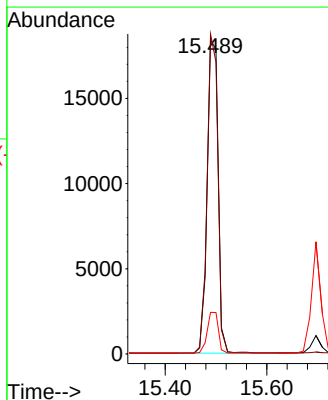
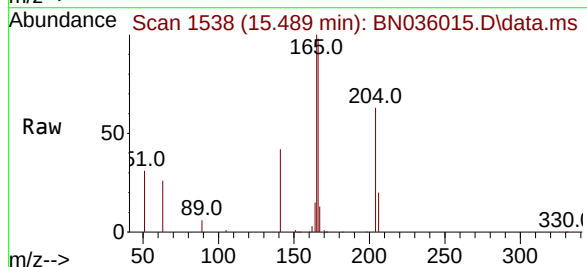
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

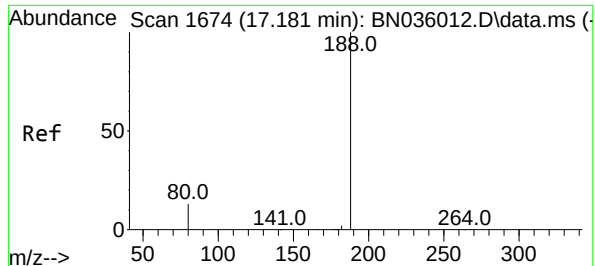
Tgt Ion:154 Resp: 22876
Ion Ratio Lower Upper
154 100
153 106.9 88.9 133.3
152 55.7 48.1 72.1



#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

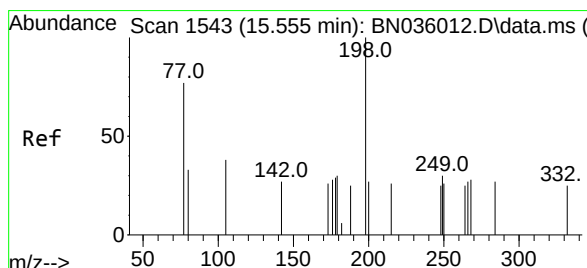
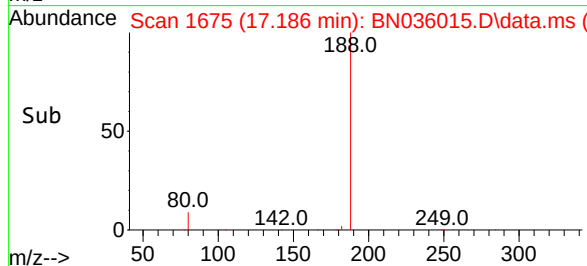
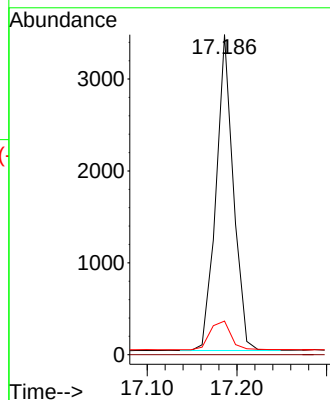
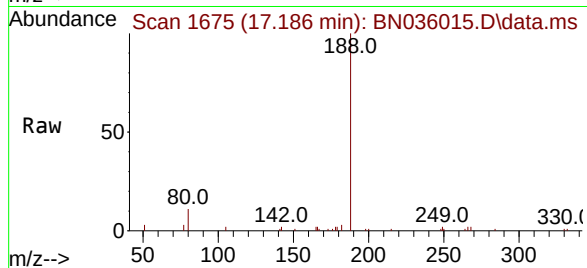
Tgt Ion:188 Resp: 4618

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

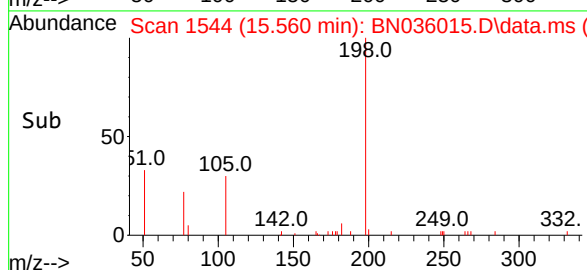
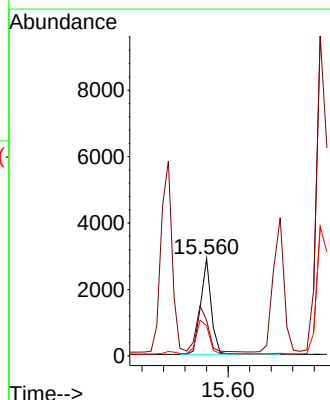
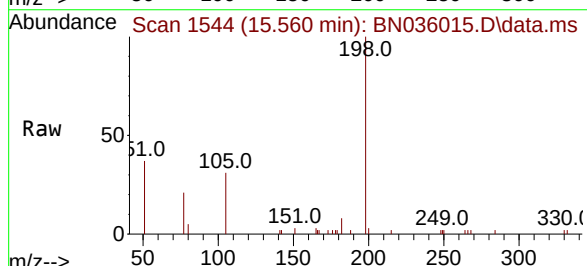
Tgt Ion:198 Resp: 3969

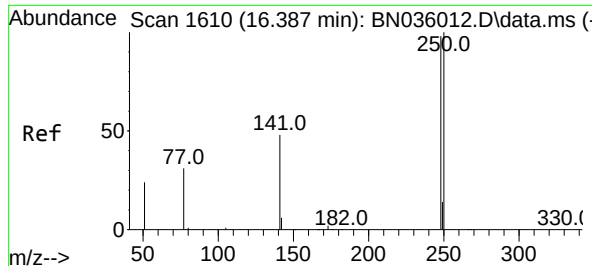
Ion Ratio Lower Upper

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

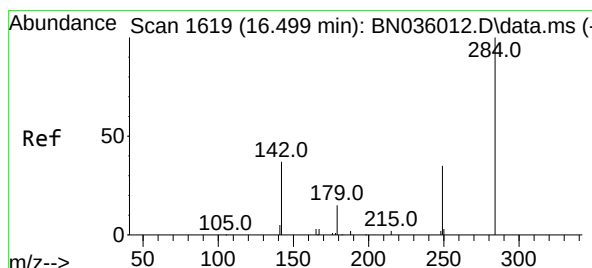
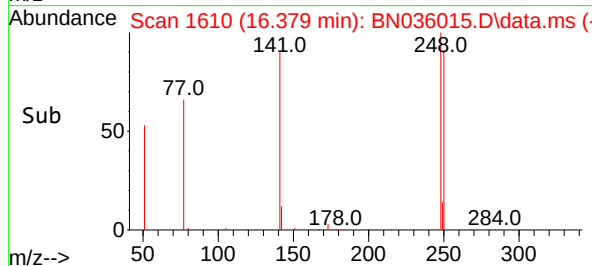
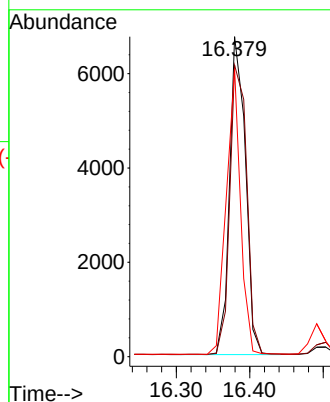
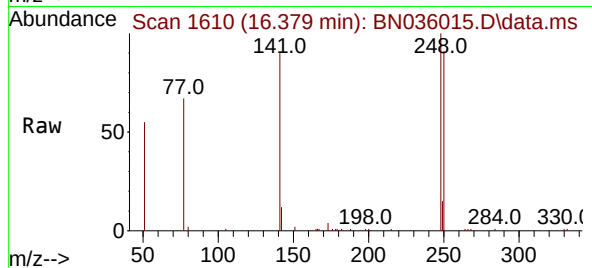
Tgt Ion:248 Resp: 10101

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

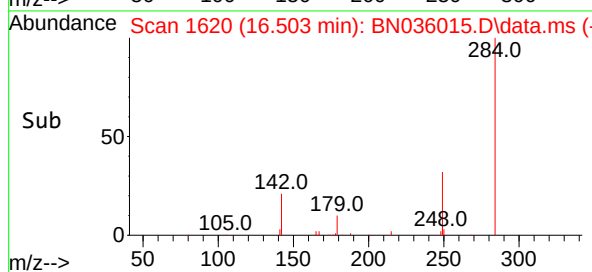
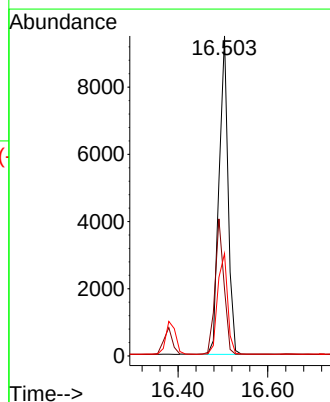
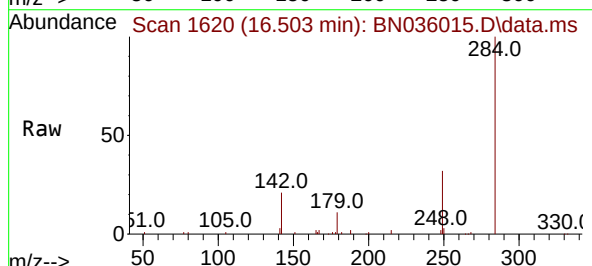
Tgt Ion:284 Resp: 13128

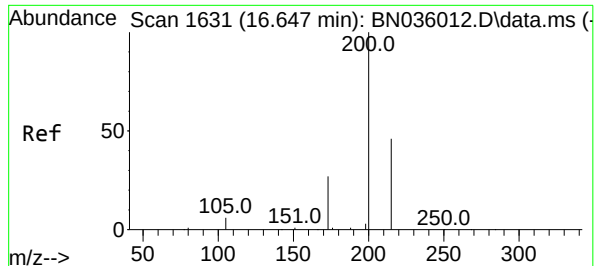
Ion Ratio Lower Upper

284 100

142 42.2 33.6 50.4

249 34.8 28.8 43.2

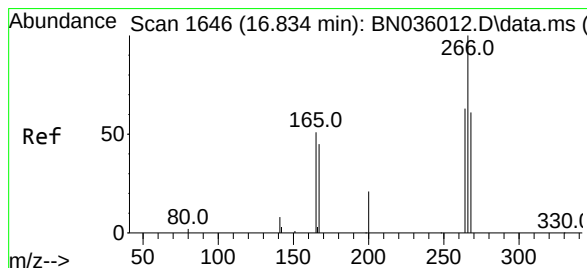
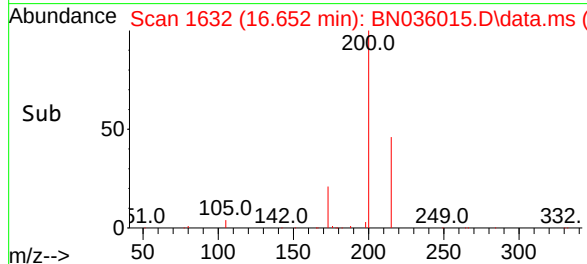
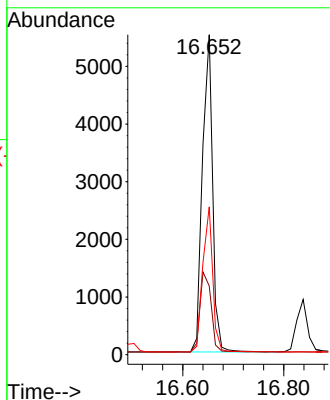
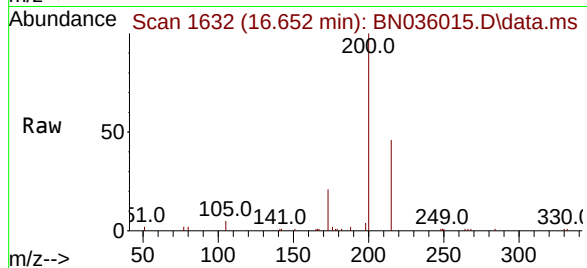




#23
Atrazine
Concen: 3.256 ng
RT: 16.652 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

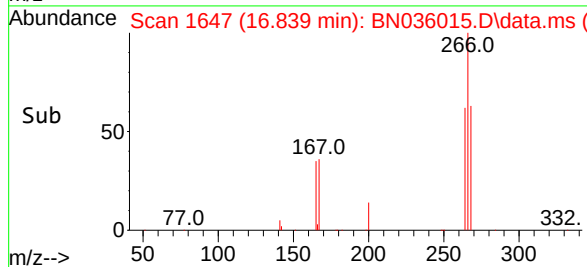
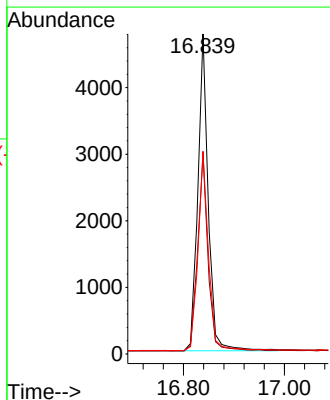
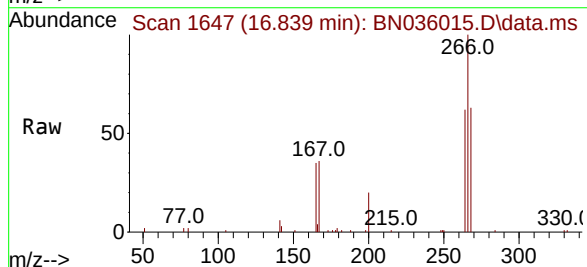
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

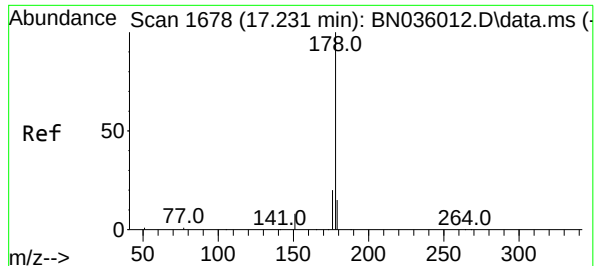
Tgt Ion:200 Resp: 7739
Ion Ratio Lower Upper
200 100
173 21.5 26.6 40.0#
215 46.2 40.6 61.0



#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

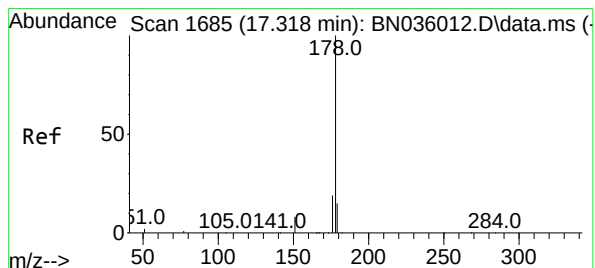
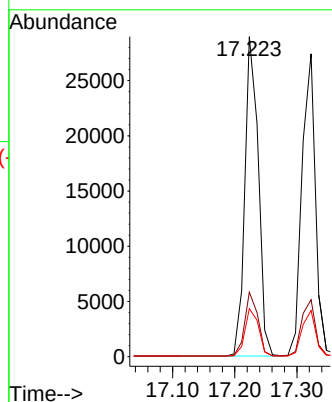
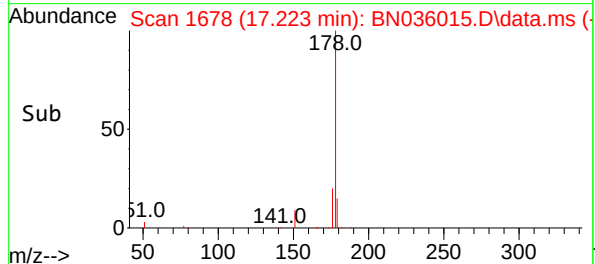
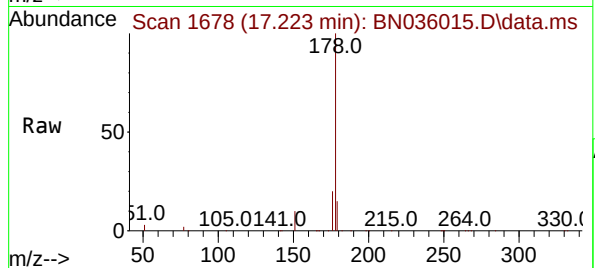




#25
Phenanthrene
Concen: 3.148 ng
RT: 17.223 min Scan# 1678
Delta R.T. -0.008 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

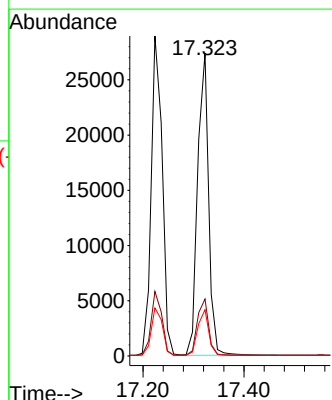
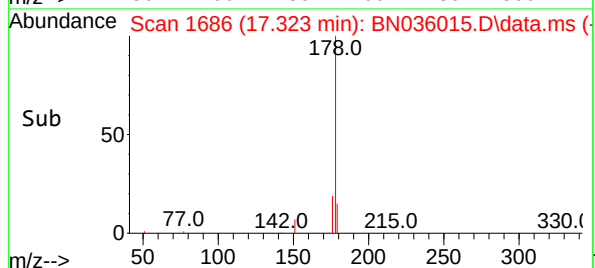
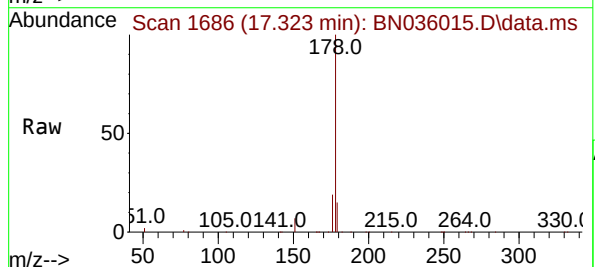
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

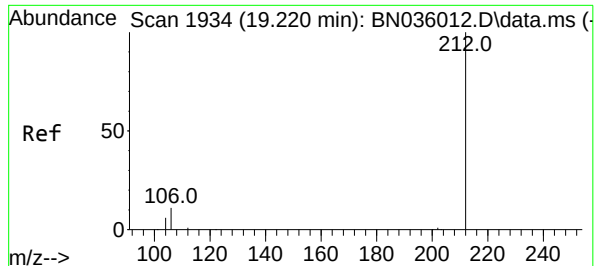
Tgt Ion:178 Resp: 43683
Ion Ratio Lower Upper
178 100
176 19.6 16.0 24.0
179 15.0 12.4 18.6



#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

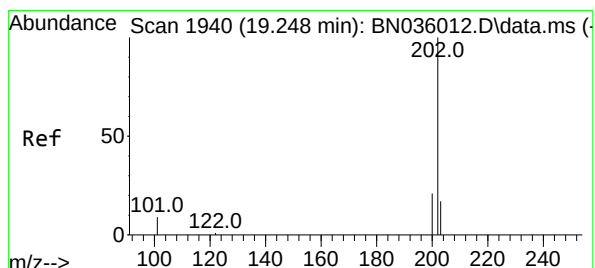
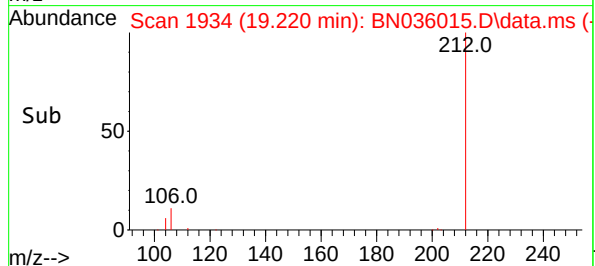
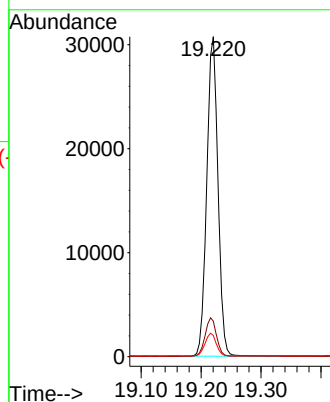
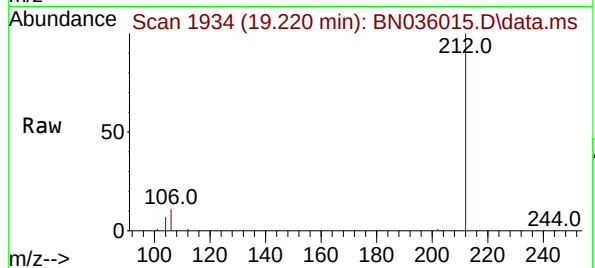
Tgt Ion:212 Resp: 39812

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

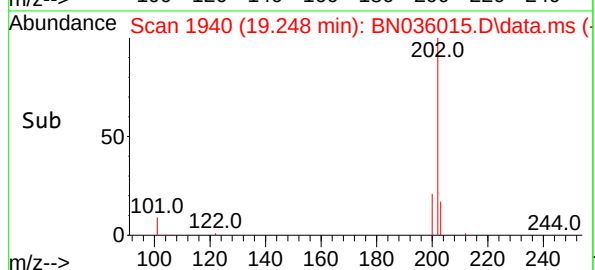
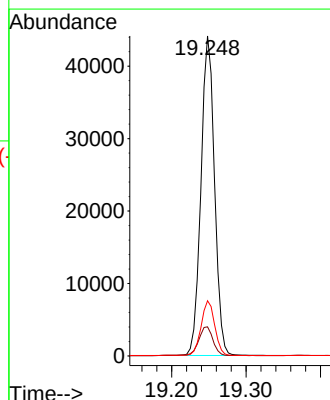
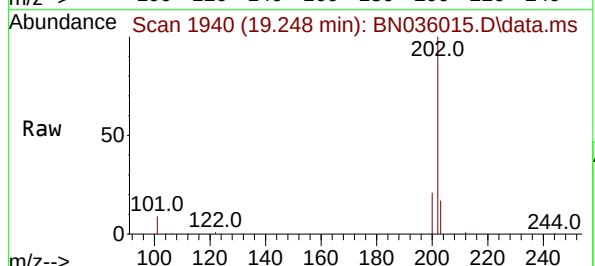
Tgt Ion:202 Resp: 55650

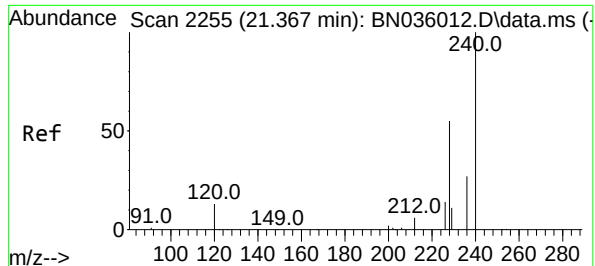
Ion Ratio Lower Upper

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

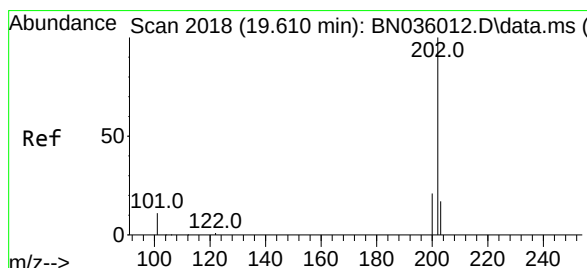
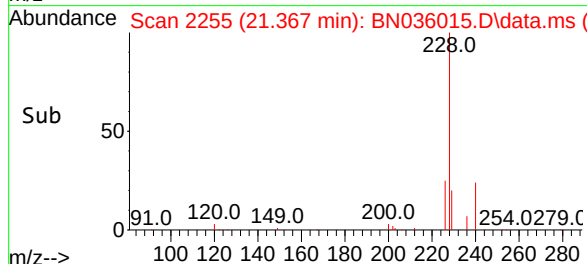
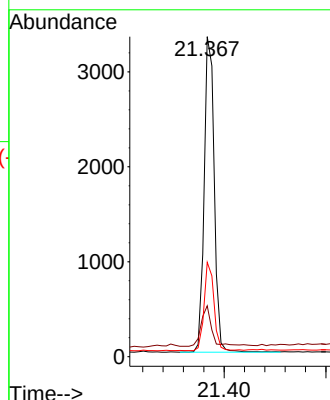
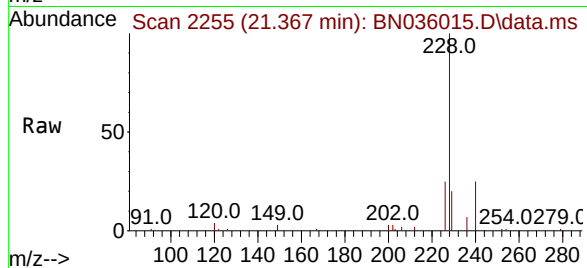
Tgt Ion:240 Resp: 4560

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

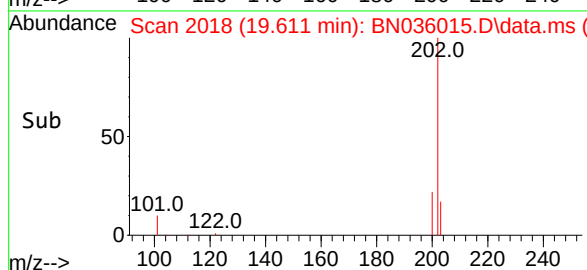
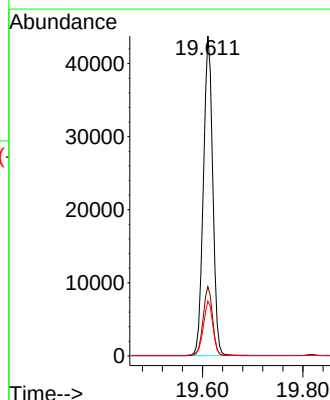
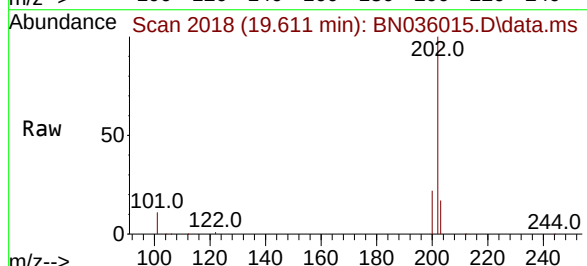
Tgt Ion:202 Resp: 56603

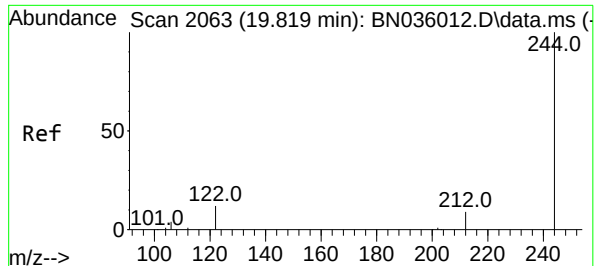
Ion Ratio Lower Upper

202 100

200 21.6 17.0 25.4

203 17.6 14.4 21.6

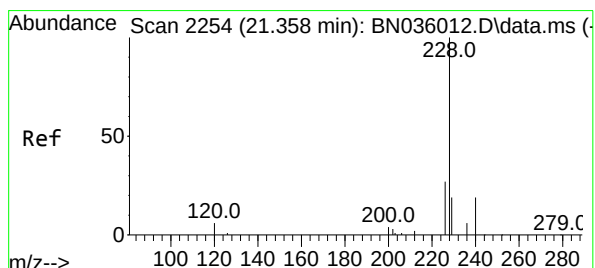
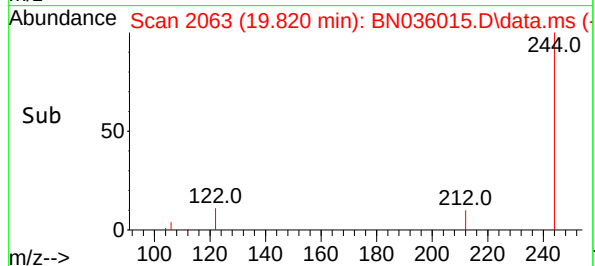
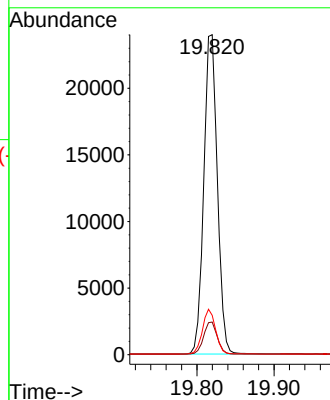
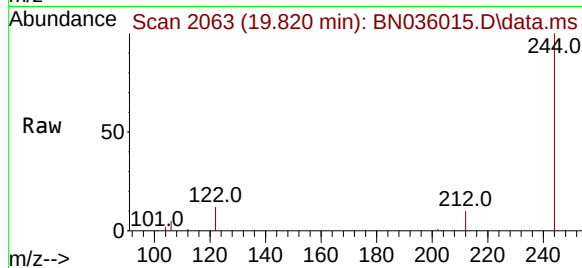




#31
Terphenyl-d14
Concen: 3.096 ng
RT: 19.820 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036015.D
Acq: 22 Jan 2025 14:01

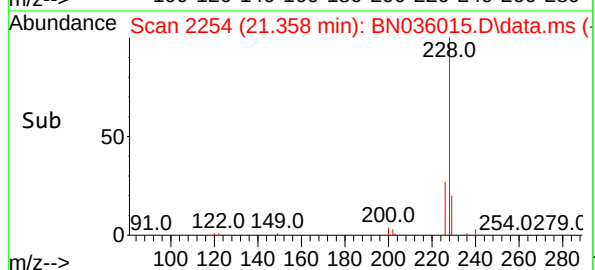
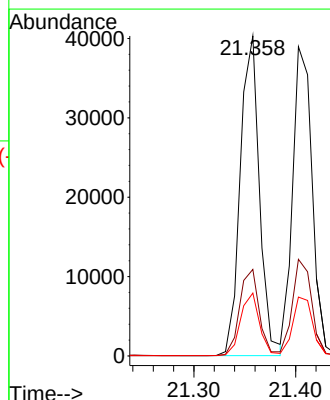
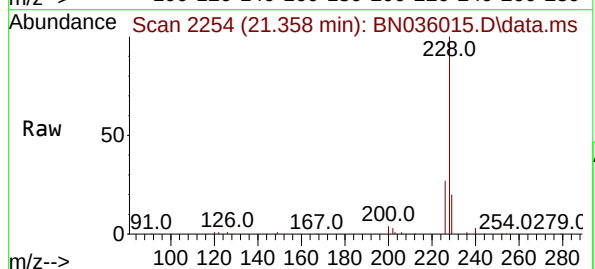
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

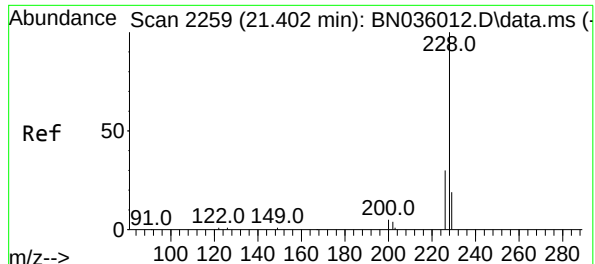
Tgt Ion:244 Resp: 29331
Ion Ratio Lower Upper
244 100
212 10.2 9.1 13.7
122 12.3 11.3 16.9



#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

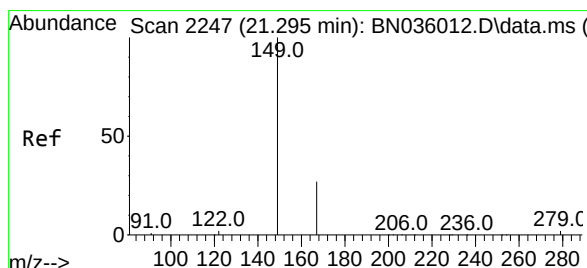
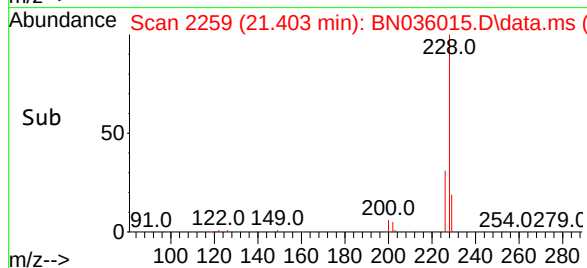
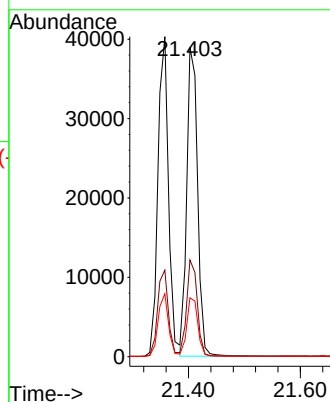
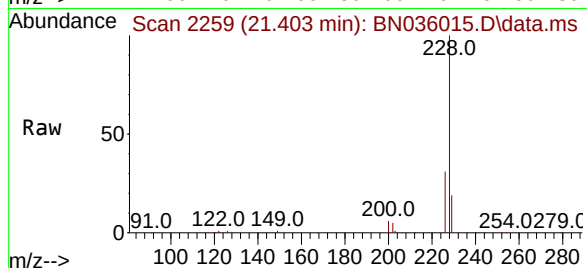
Tgt Ion:228 Resp: 52334

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

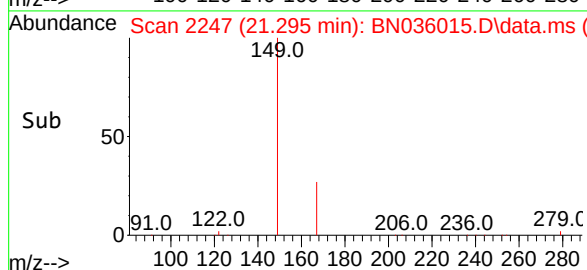
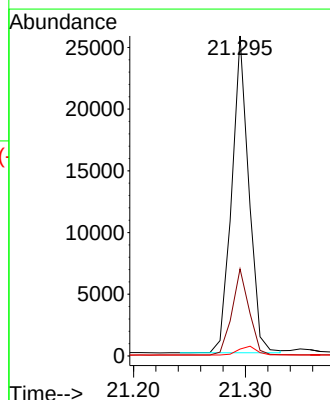
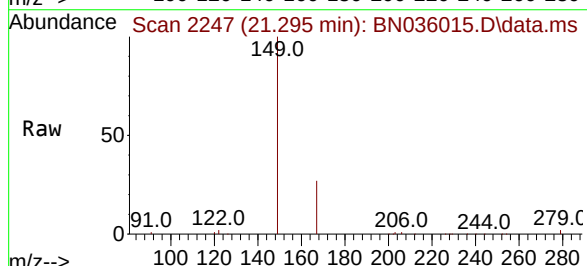
Tgt Ion:149 Resp: 27304

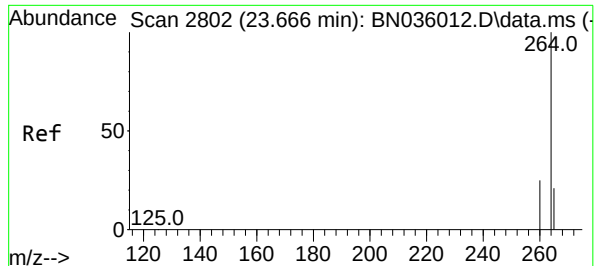
Ion Ratio Lower Upper

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

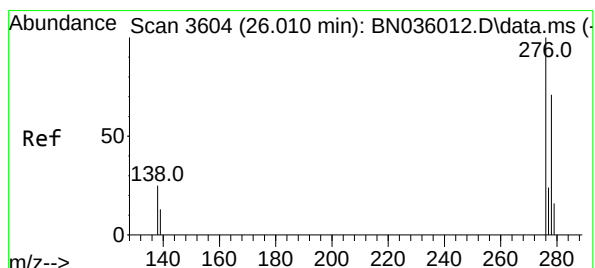
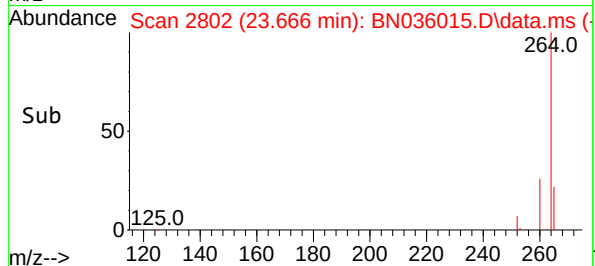
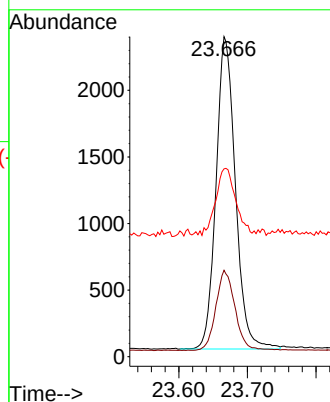
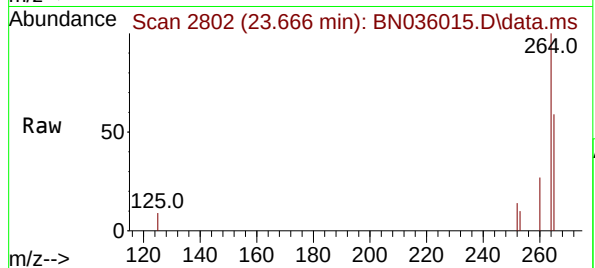
Tgt Ion:264 Resp: 4591

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

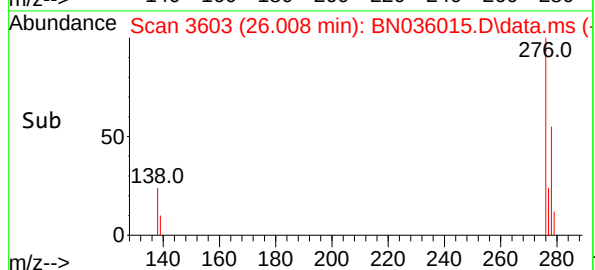
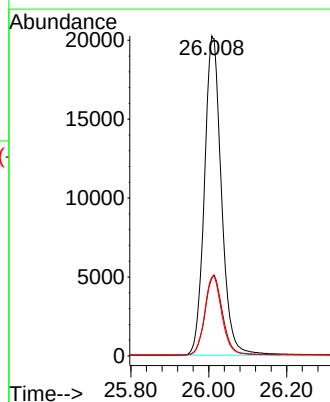
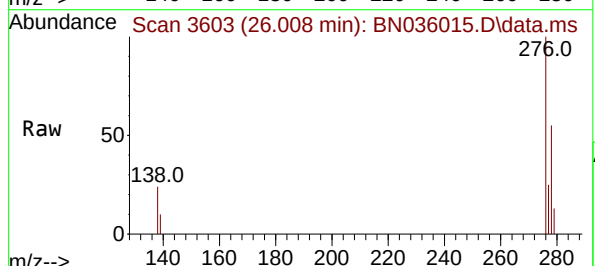
Tgt Ion:276 Resp: 61268

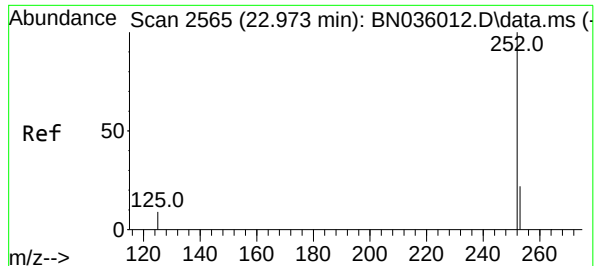
Ion Ratio Lower Upper

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

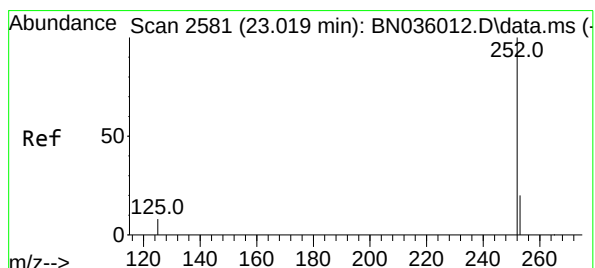
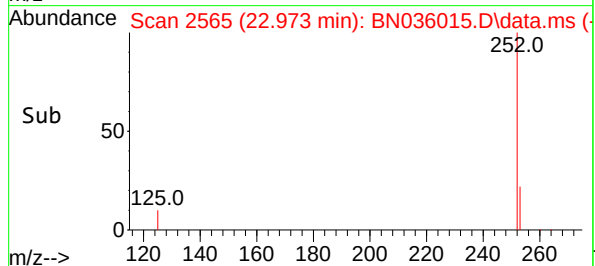
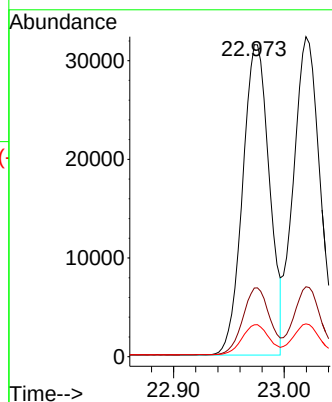
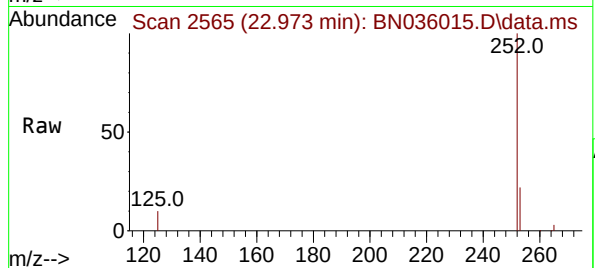
Tgt Ion:252 Resp: 53035

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

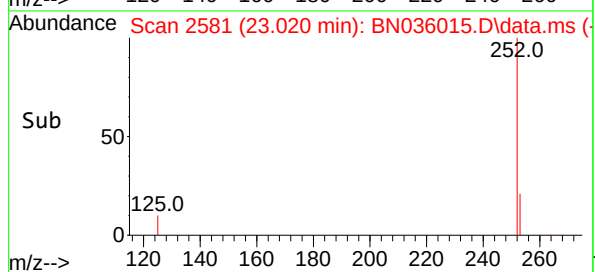
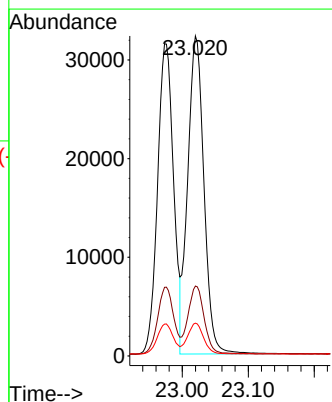
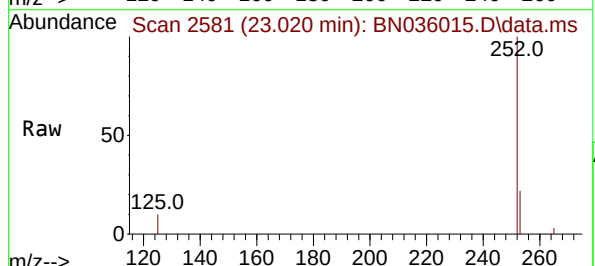
Tgt Ion:252 Resp: 54959

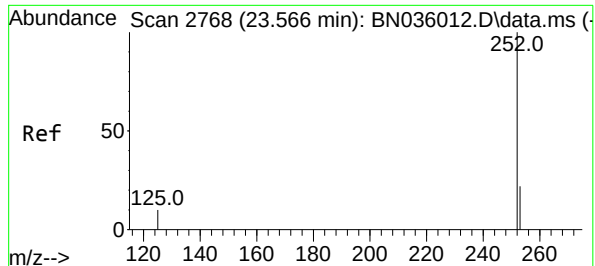
Ion Ratio Lower Upper

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

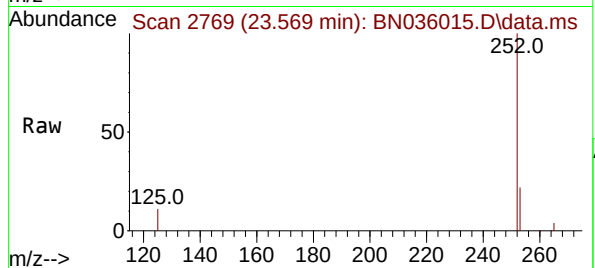
Acq: 22 Jan 2025 14:01

Instrument :

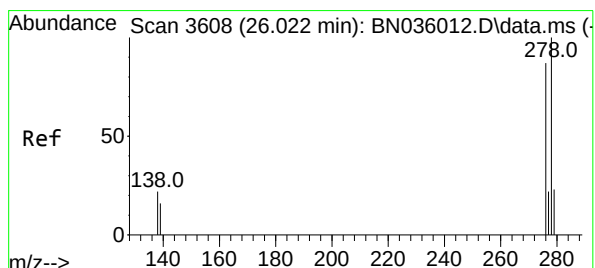
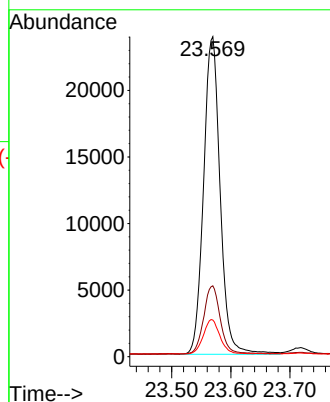
BNA_N

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

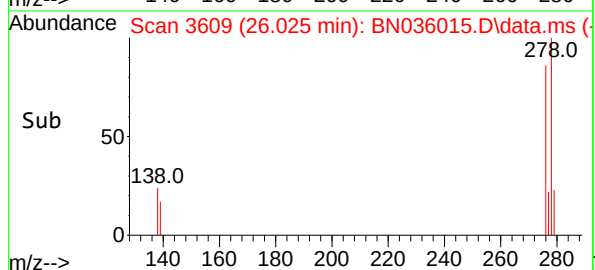
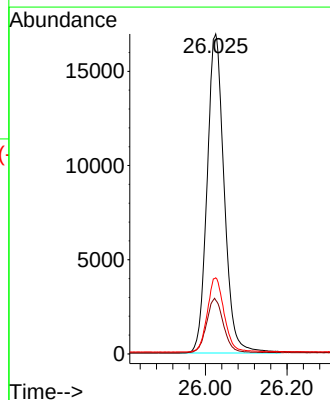
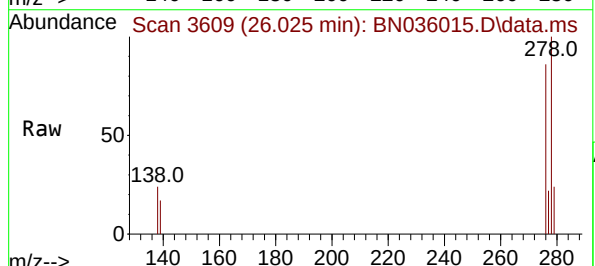
RT: 26.025 min Scan# 3609

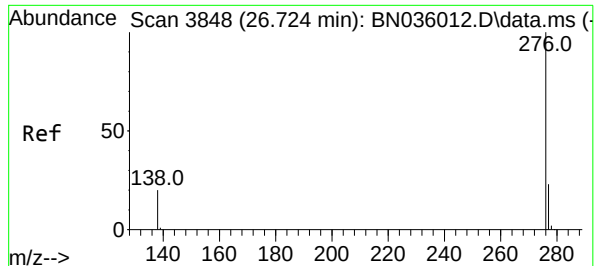
Delta R.T. 0.003 min

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

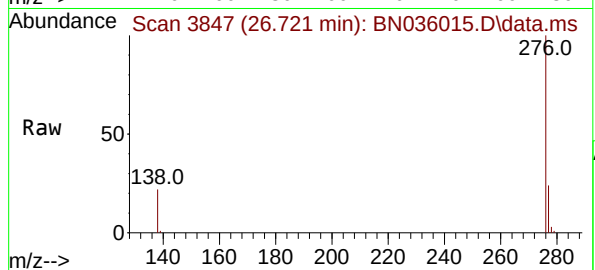
Acq: 22 Jan 2025 14:01

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2



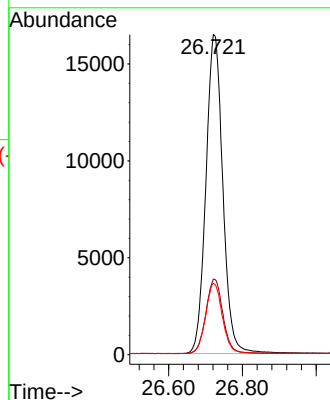
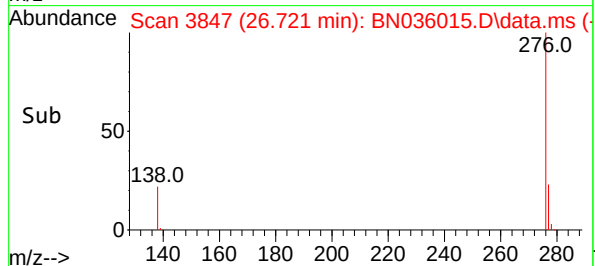
Tgt Ion:276 Resp: 52446

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)

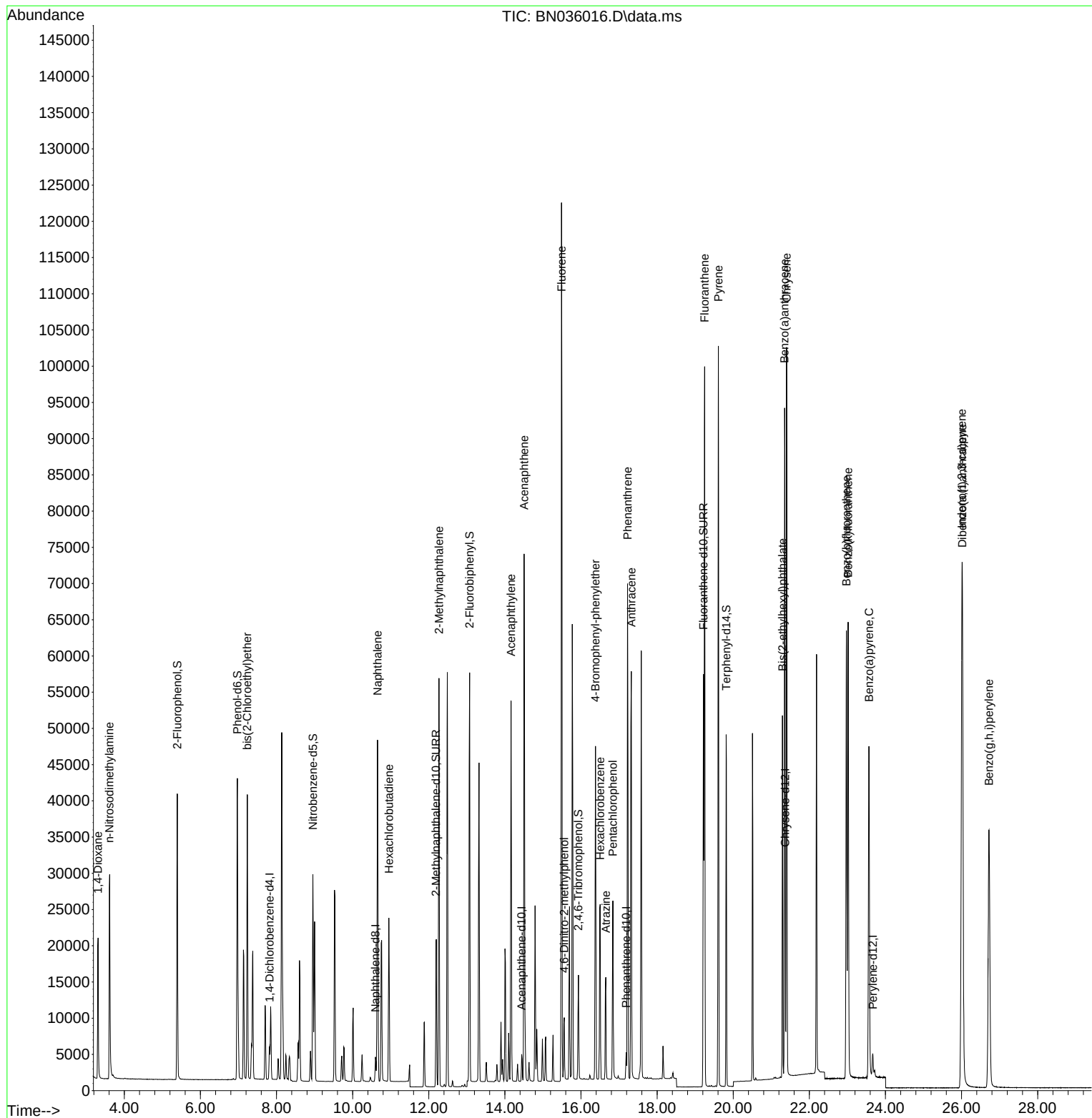
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	2110	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3989	0.400	ng	#-0.01
13) Acenaphthene-d10	14.442	164	2132	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	4417	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	4348	0.400	ng	0.00
35) Perylene-d12	23.666	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						Qvalue
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

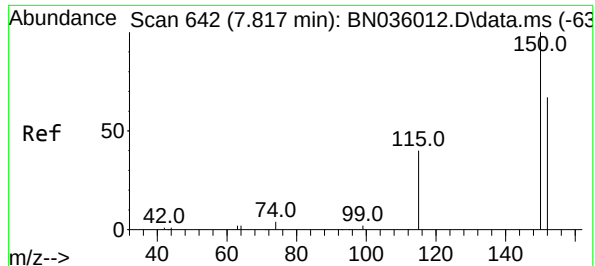
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

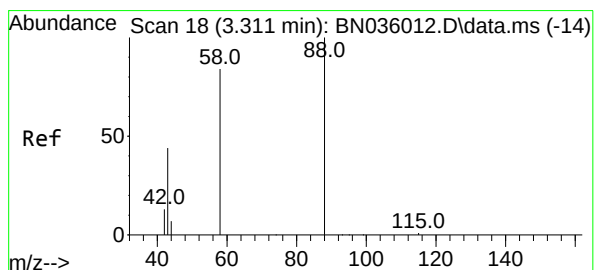
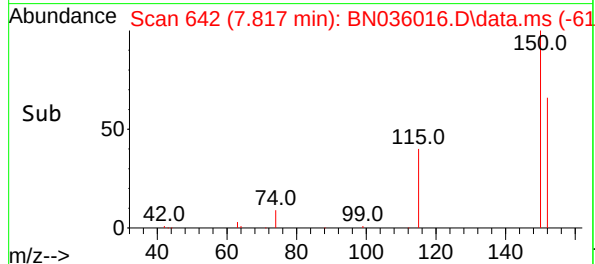
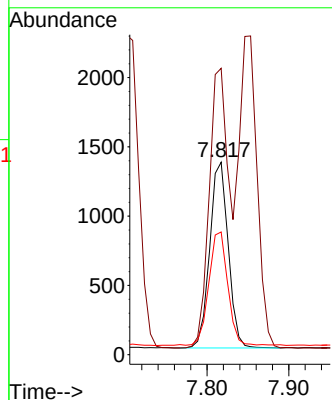
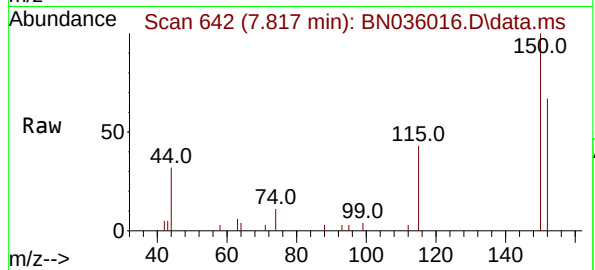




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

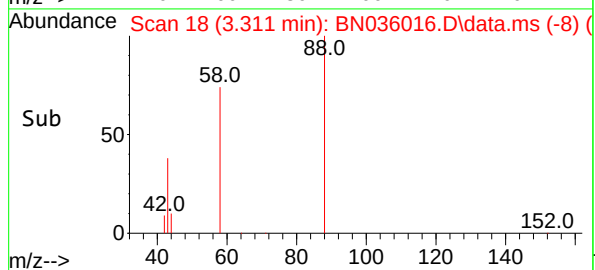
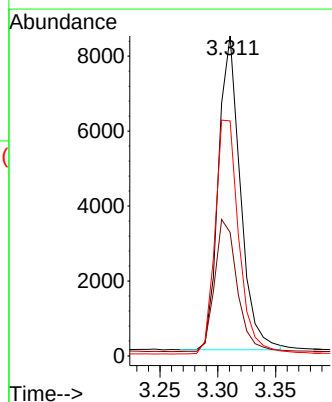
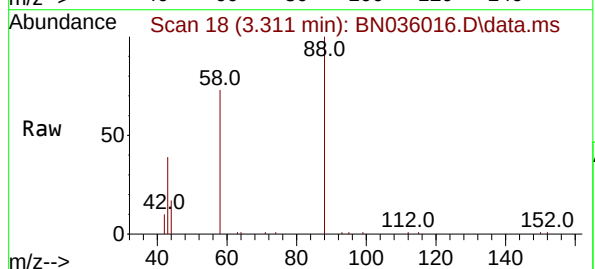
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

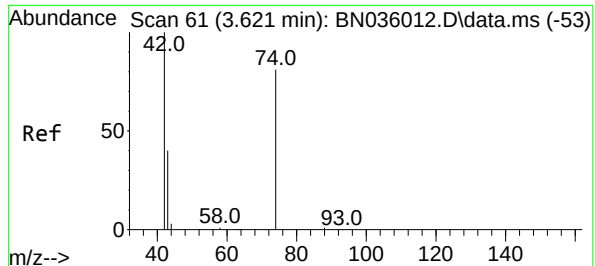
Tgt Ion:152 Resp: 2110
Ion Ratio Lower Upper
152 100
150 148.8 117.4 176.2
115 63.7 51.0 76.4



#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

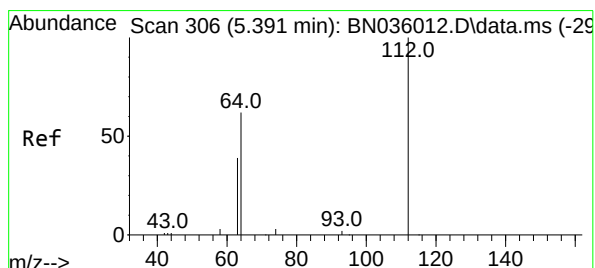
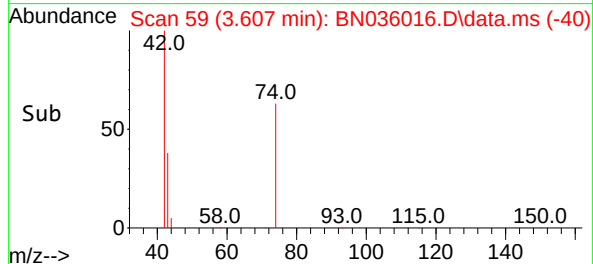
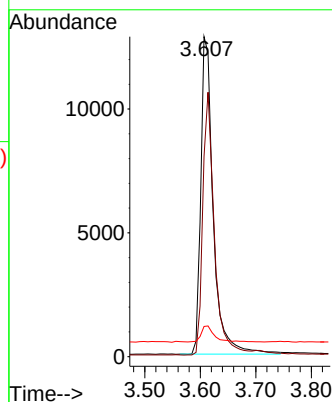
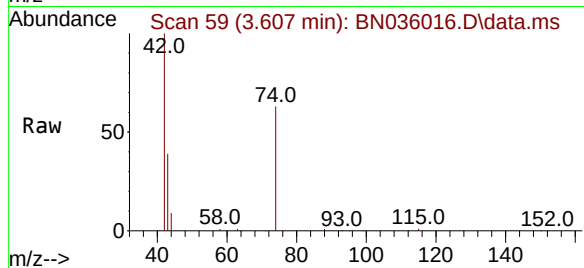




#3
n-Nitrosodimethylamine
Concen: 4.679 ng
RT: 3.607 min Scan# 59
Delta R.T. -0.014 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

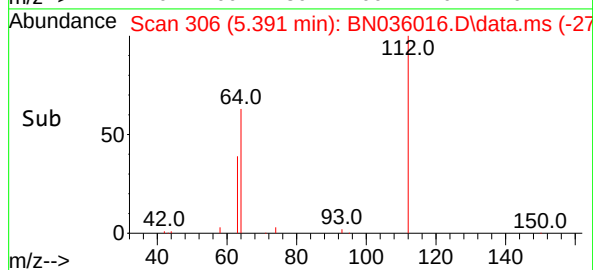
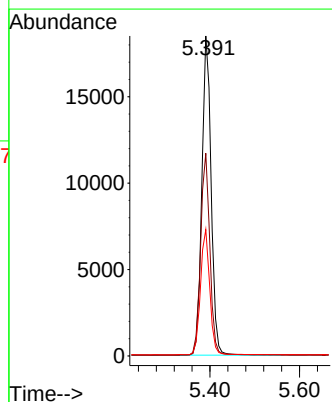
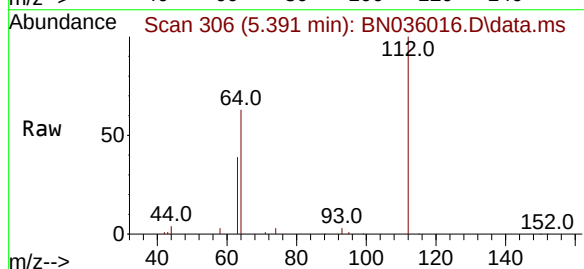
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

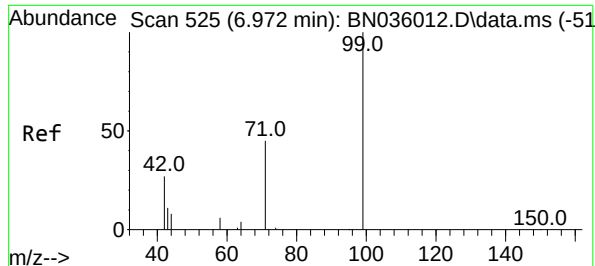
Tgt Ion: 42 Resp: 20013
Ion Ratio Lower Upper
42 100
74 77.4 58.1 87.1
44 5.5 6.2 9.4#



#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

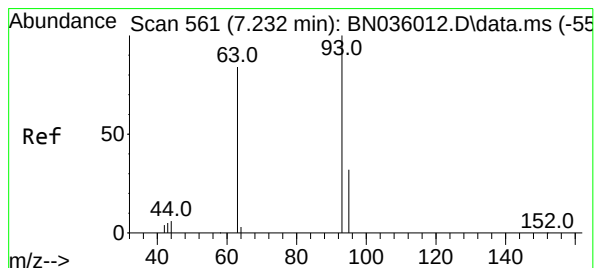
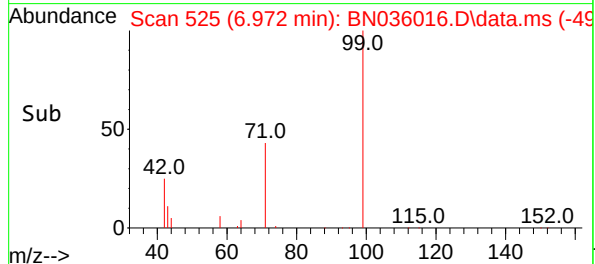
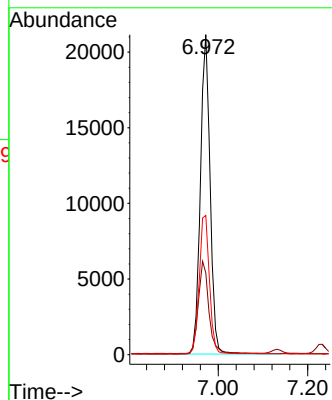
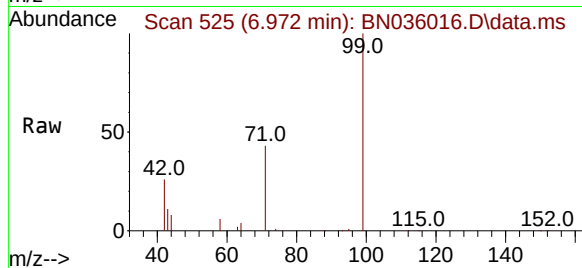




#5
Phenol-d6
Concen: 4.948 ng
RT: 6.972 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

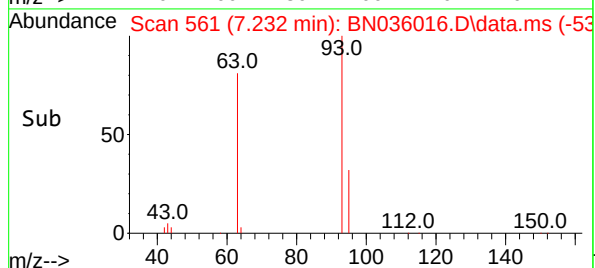
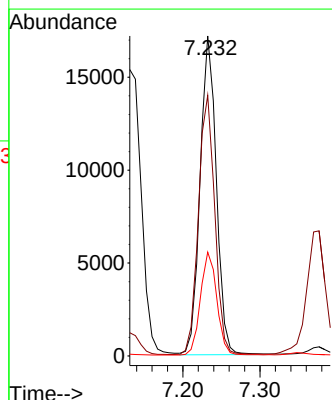
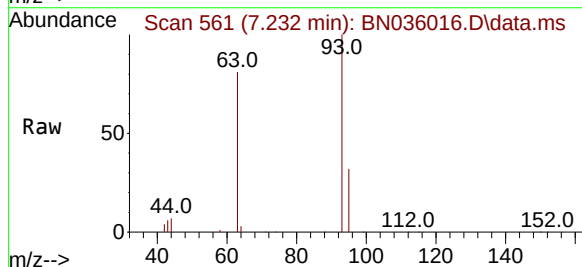
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

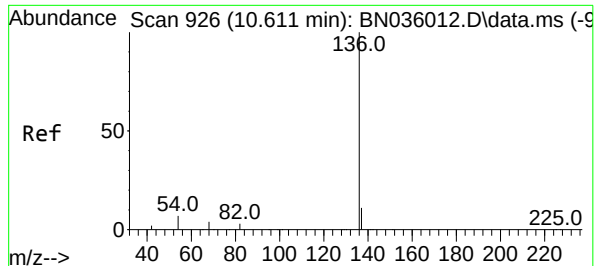
Tgt Ion: 99 Resp: 31890
Ion Ratio Lower Upper
99 100
42 31.1 26.8 40.2
71 45.9 36.6 55.0



#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

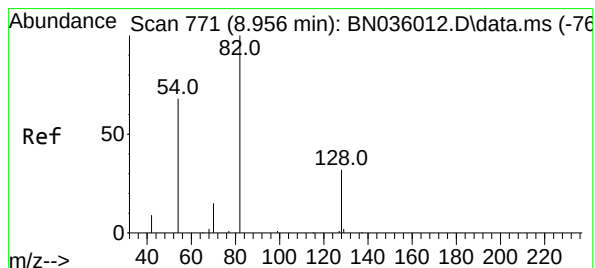
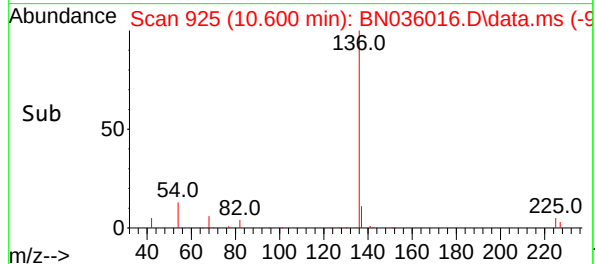
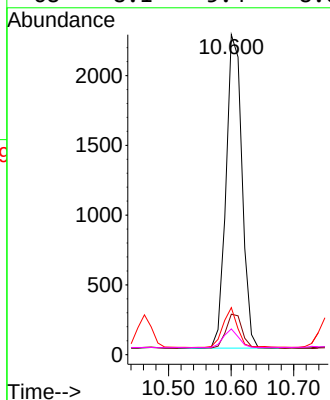
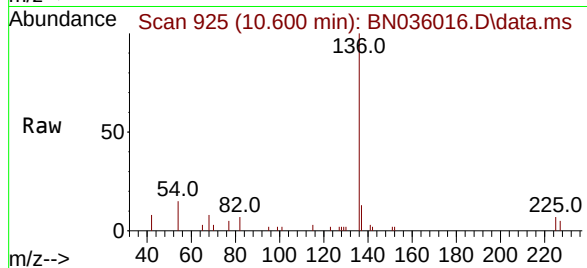




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.600 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

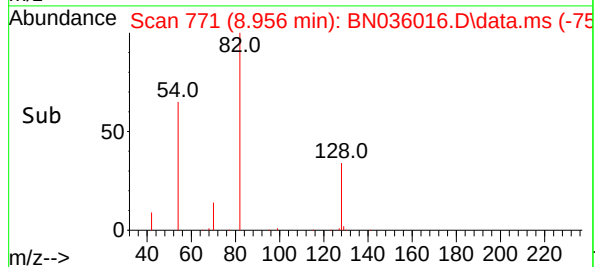
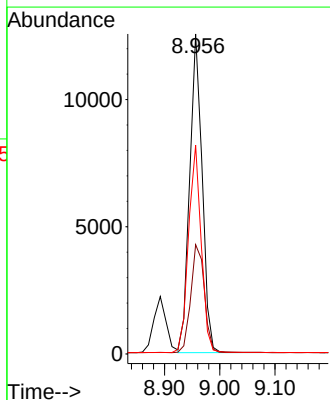
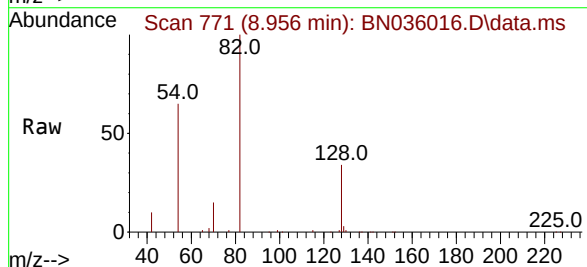
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

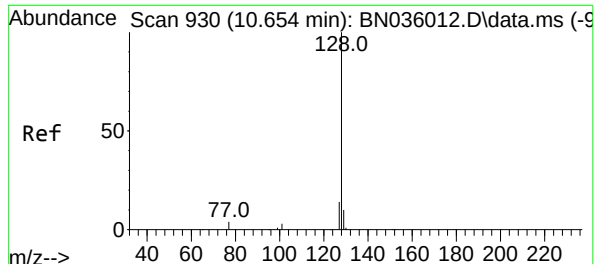
Tgt Ion:136	Resp:	3989
Ion	Ratio	Lower Upper
136	100	
137	12.6	10.4 15.6
54	14.7	7.7 11.5#
68	8.1	5.4 8.0#



#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

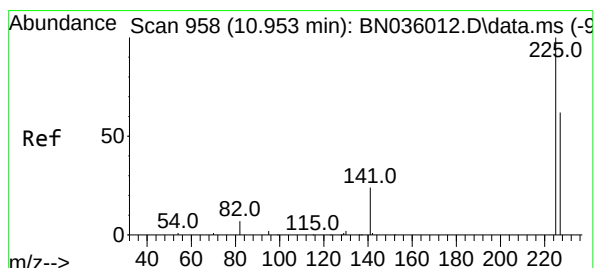
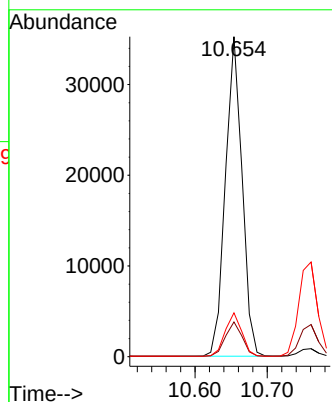
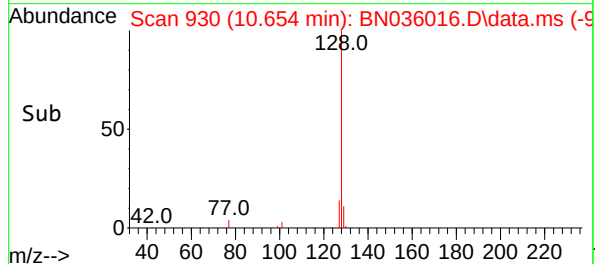
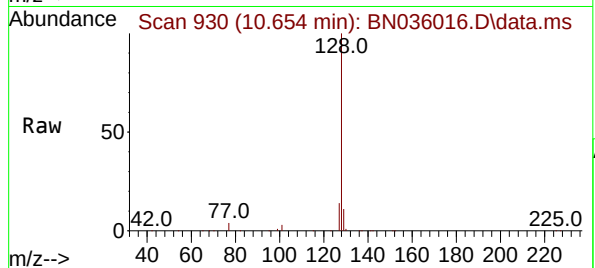




#9
Naphthalene
Concen: 4.866 ng
RT: 10.654 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

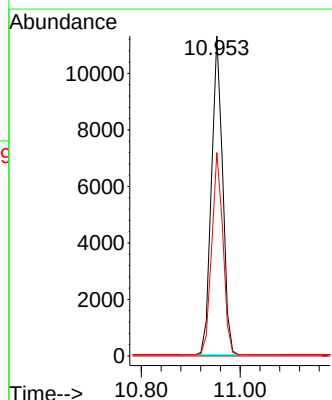
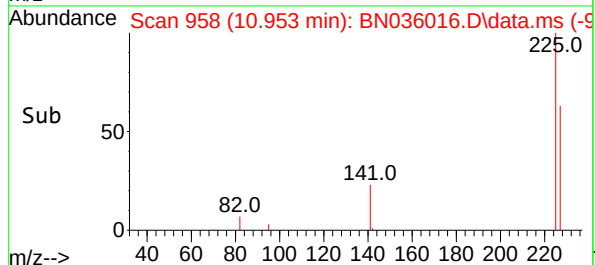
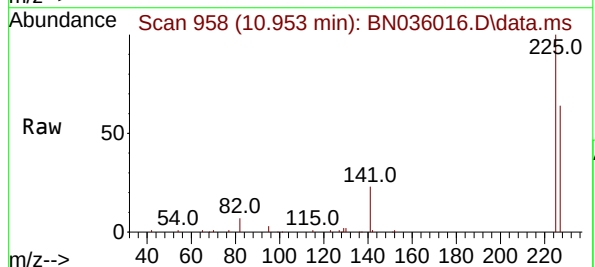
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

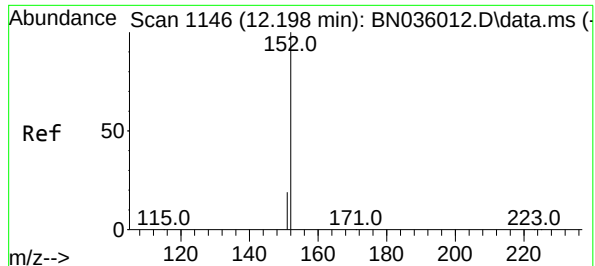
Tgt Ion:128 Resp: 56372
Ion Ratio Lower Upper
128 100
129 10.8 9.4 14.2
127 13.7 12.6 19.0



#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

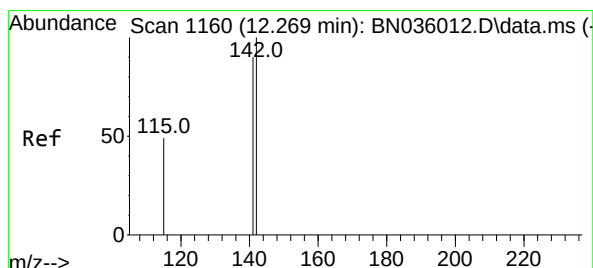
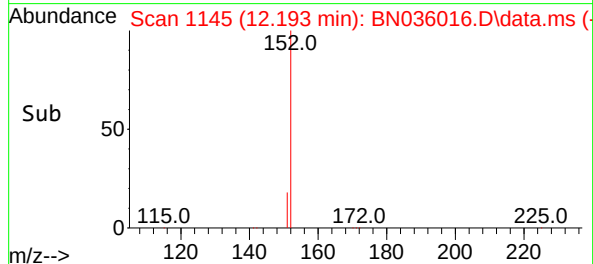
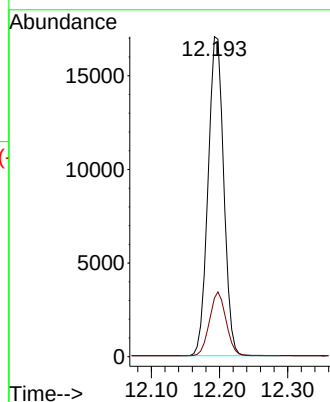
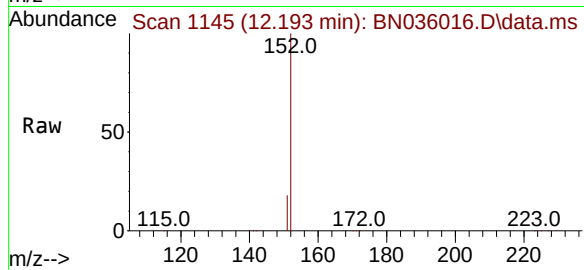




#11
2-Methylnaphthalene-d10
Concen: 5.012 ng
RT: 12.193 min Scan# 1145
Delta R.T. -0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

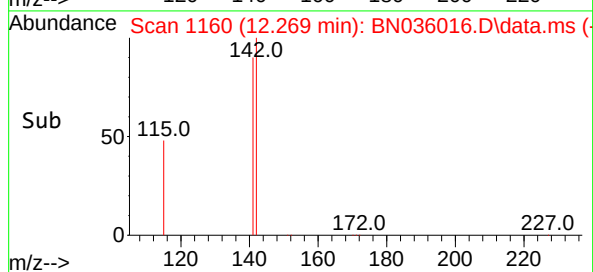
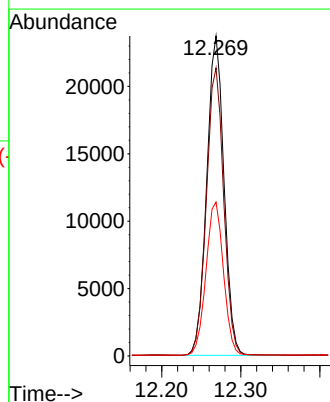
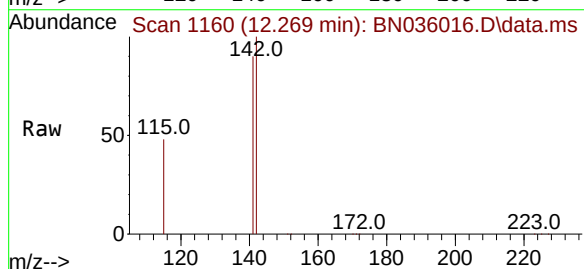
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

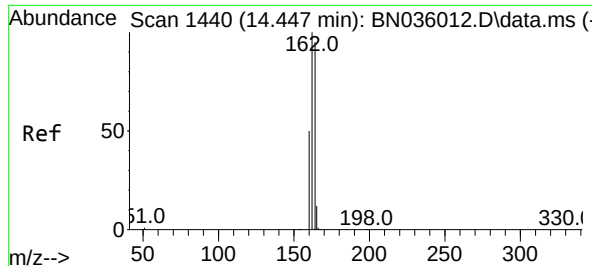
Tgt Ion:152 Resp: 27183
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#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

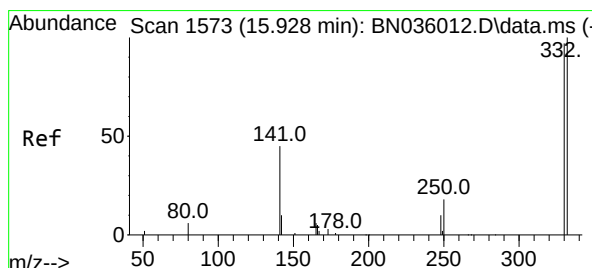
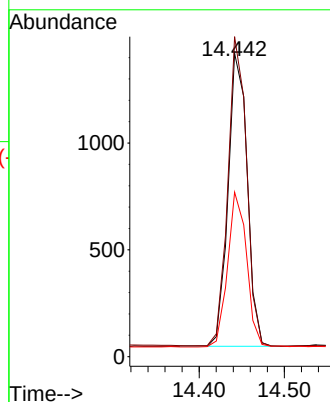
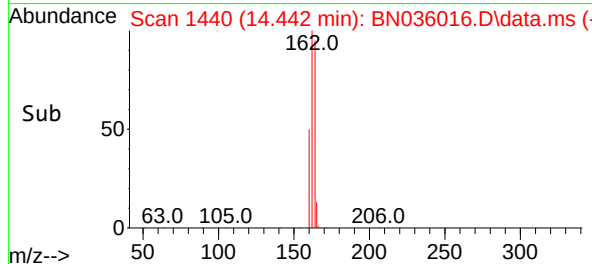
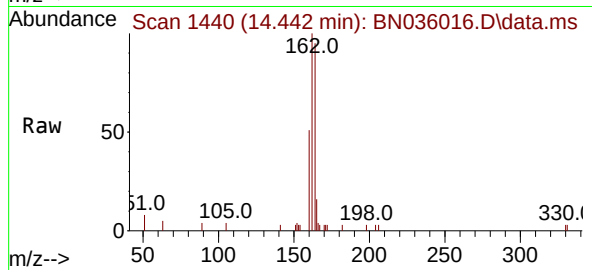




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.442 min Scan# 1440
Delta R.T. -0.006 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

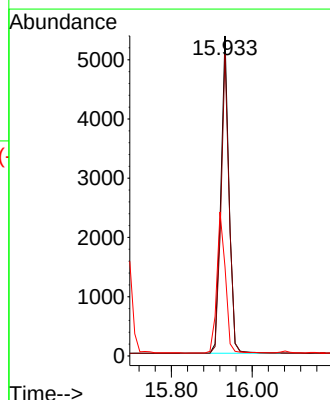
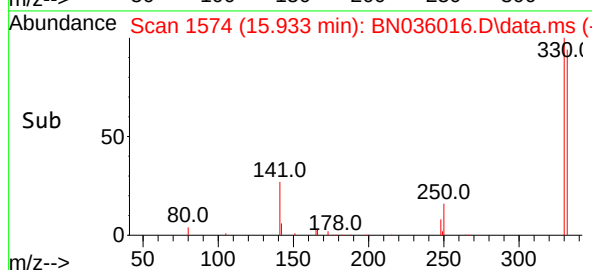
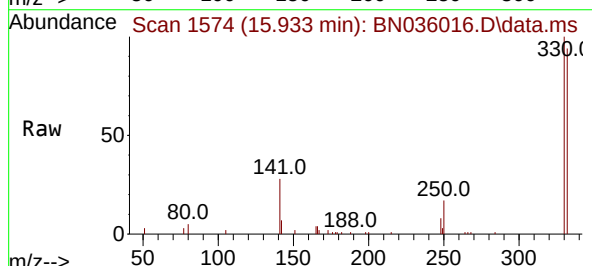
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

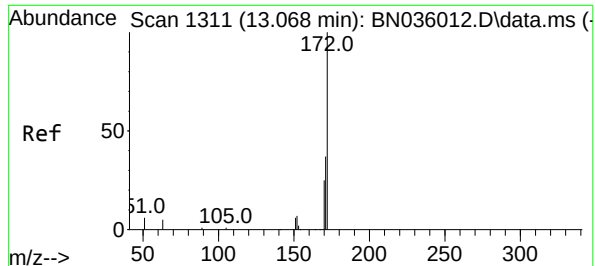
Tgt Ion:164 Resp: 2132
Ion Ratio Lower Upper
164 100
162 105.5 84.1 126.1
160 54.2 43.8 65.8



#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

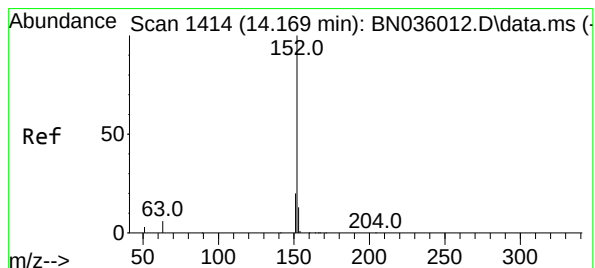
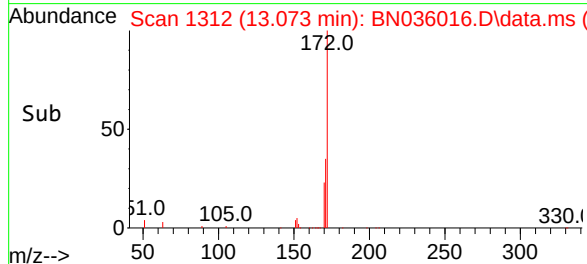
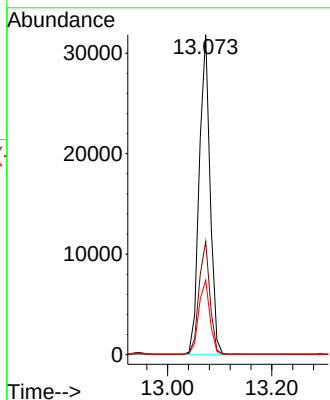
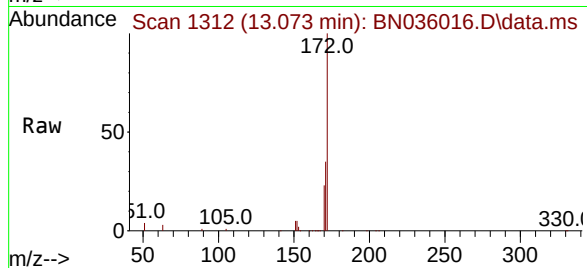




#15
2-Fluorobiphenyl
Concen: 4.827 ng
RT: 13.073 min Scan# 1311
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

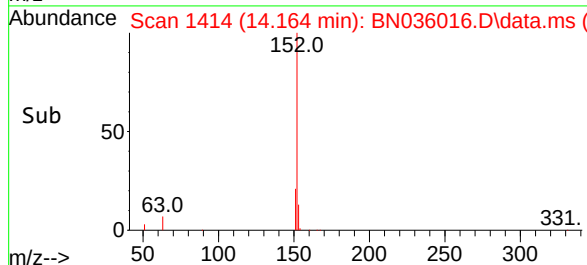
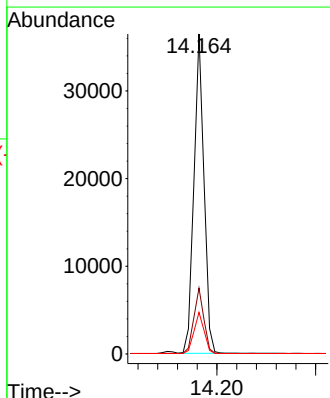
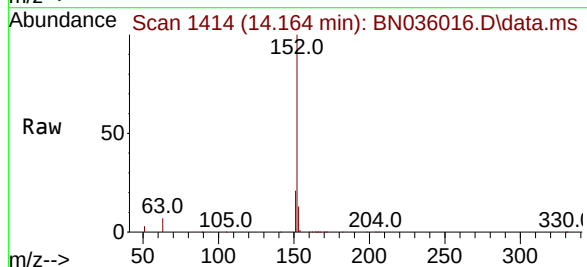
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

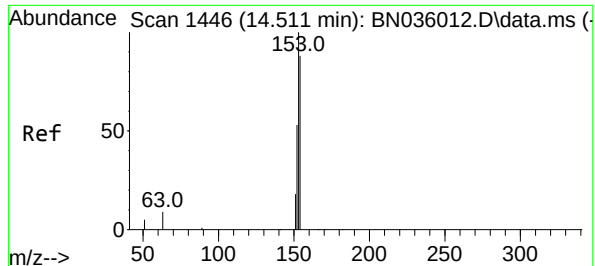
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.4	30.9	46.3
170	23.4	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	20.5	16.2	24.2
153	13.0	10.4	15.6

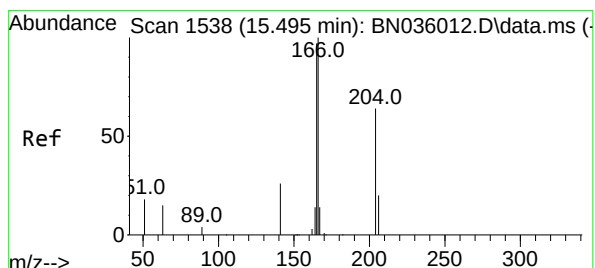
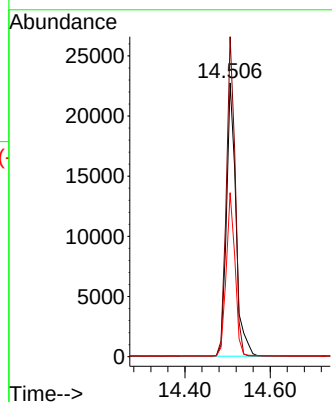
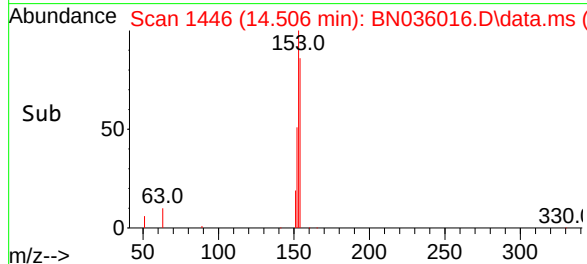
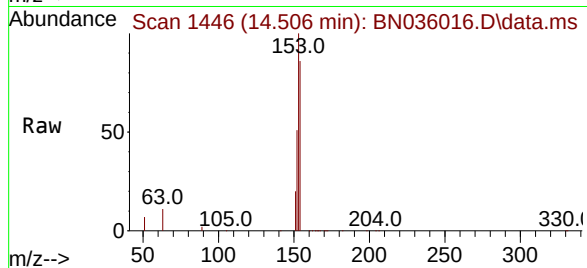




#17
Acenaphthene
Concen: 5.109 ng
RT: 14.506 min Scan# 1446
Delta R.T. -0.006 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

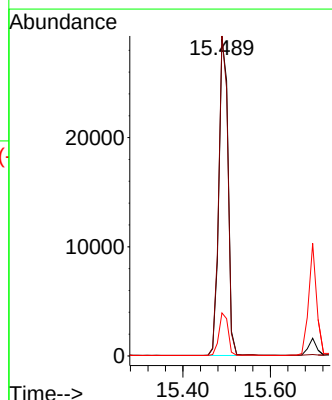
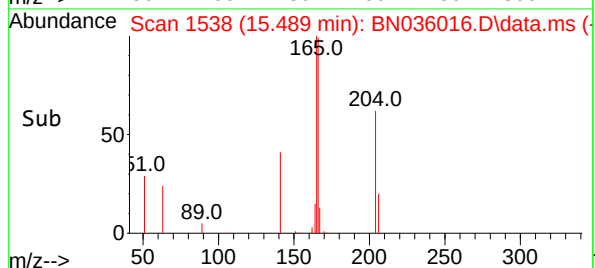
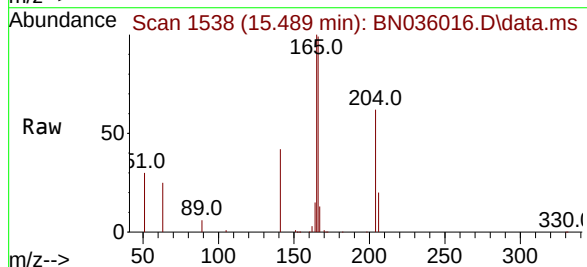
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

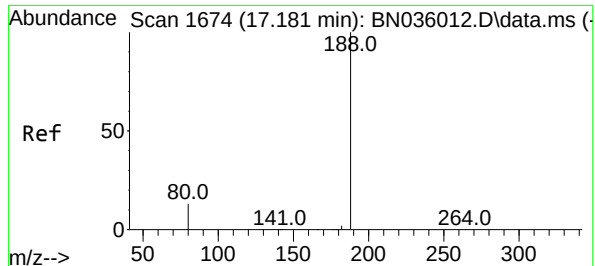
Tgt Ion:154 Resp: 35366
Ion Ratio Lower Upper
154 100
153 107.5 88.9 133.3
152 55.4 48.1 72.1



#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

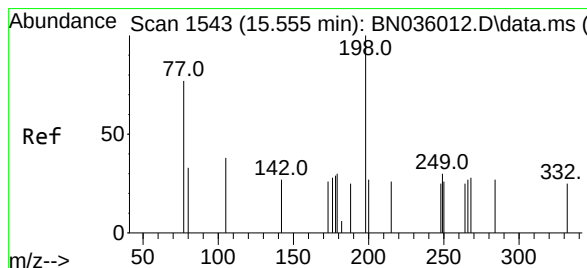
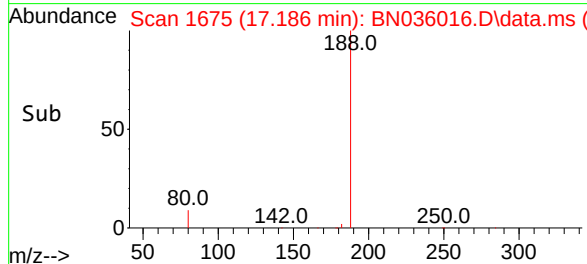
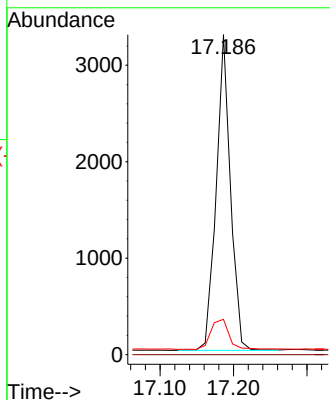
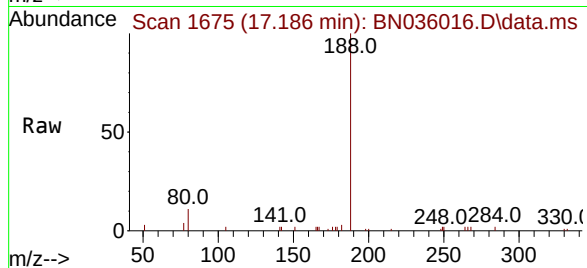
Tgt Ion:188 Resp: 4417

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

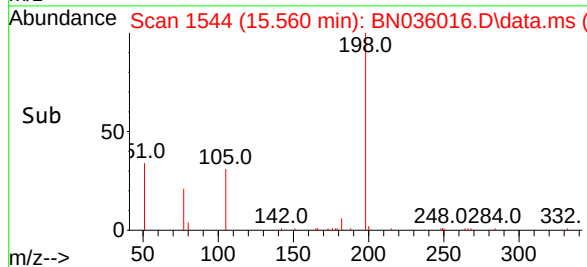
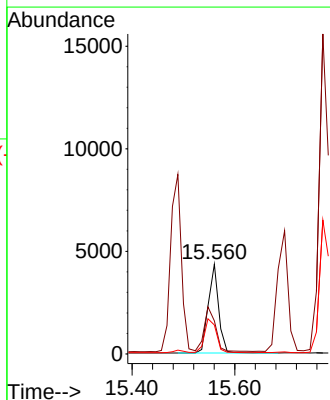
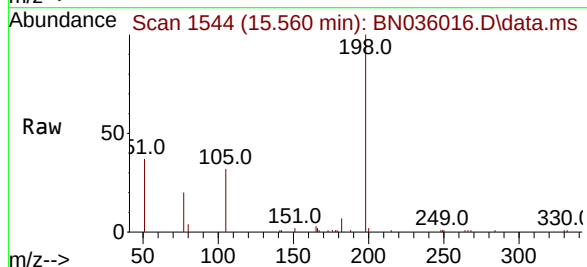
Tgt Ion:198 Resp: 5963

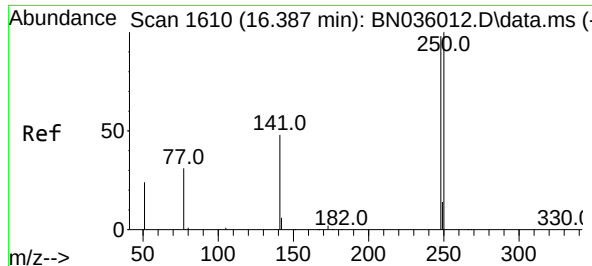
Ion Ratio Lower Upper

198 100

51 36.8 68.1 102.1#

105 32.2 46.5 69.7#

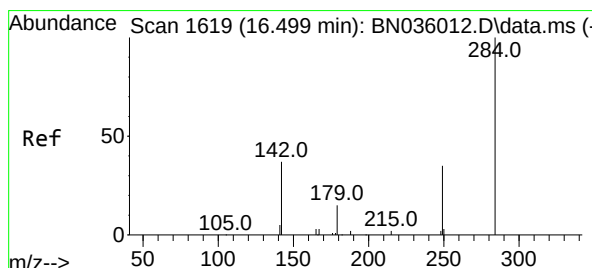
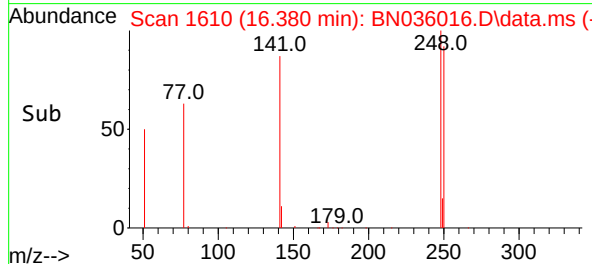
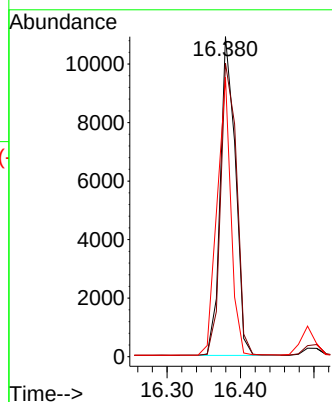
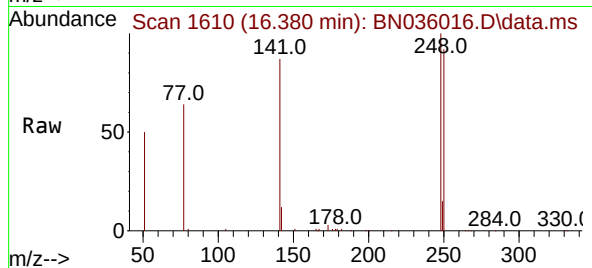




#21
4-Bromophenyl-phenylether
Concen: 4.925 ng
RT: 16.380 min Scan# 1610
Delta R.T. -0.007 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

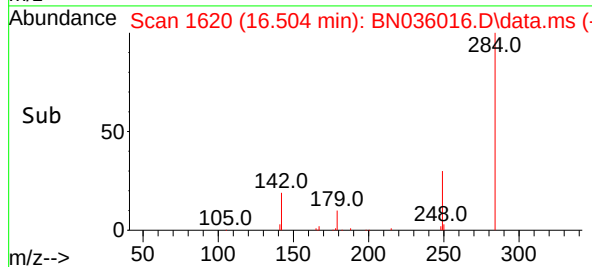
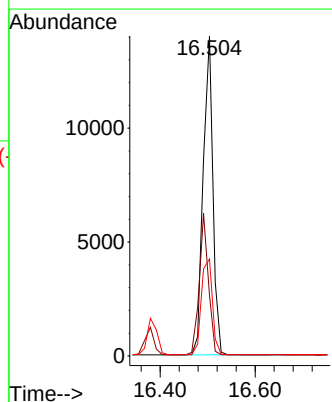
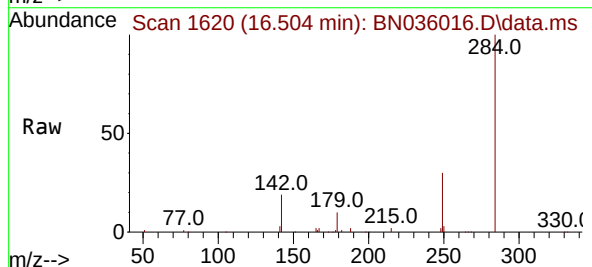
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

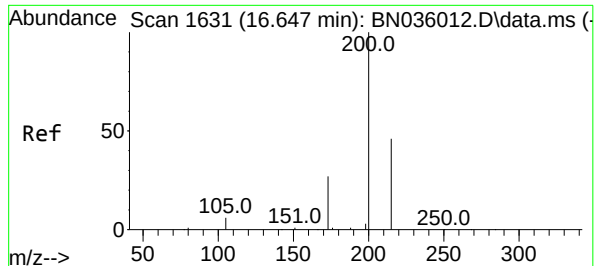
Tgt Ion	Ratio	Lower	Upper
248	100		
250	91.8	81.5	122.3
141	87.3	41.8	62.6



#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

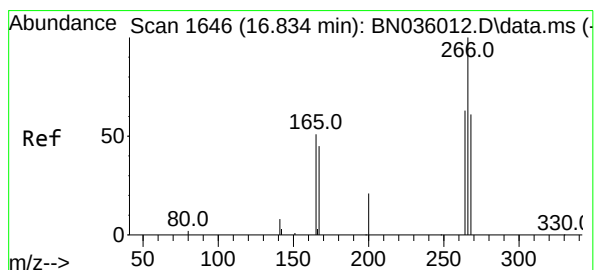
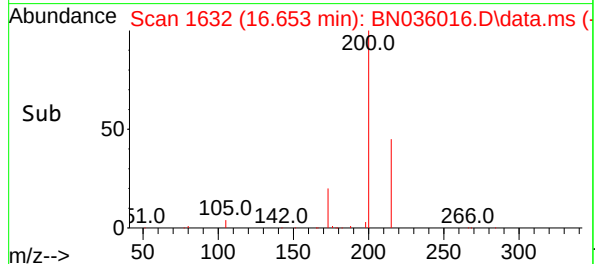
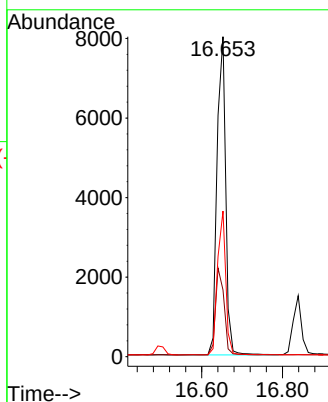
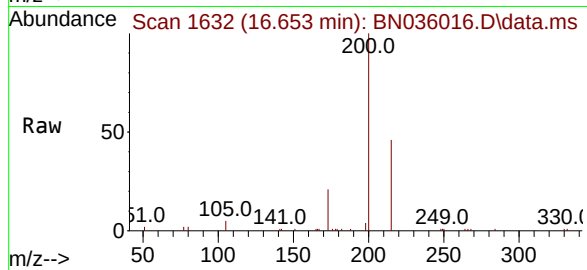




#23
Atrazine
Concen: 5.212 ng
RT: 16.653 min Scan# 1632
Delta R.T. 0.005 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

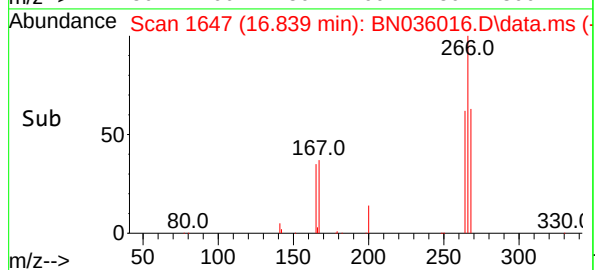
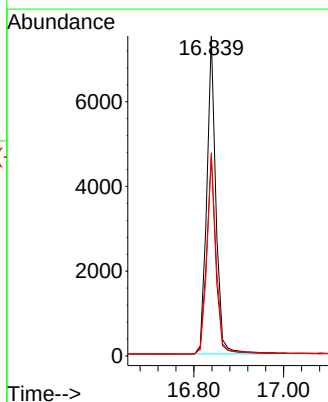
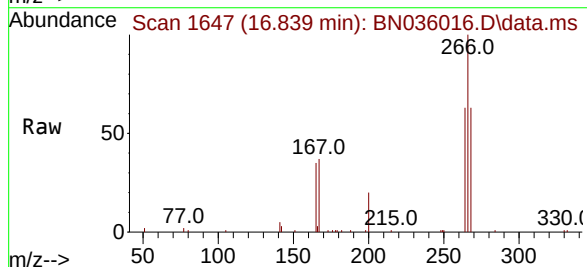
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

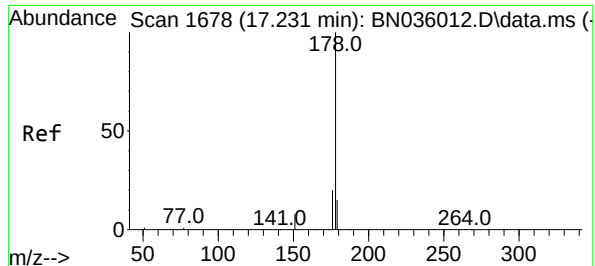
Tgt Ion:200 Resp: 11848
Ion Ratio Lower Upper
200 100
173 20.9 26.6 40.0#
215 45.5 40.6 61.0



#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

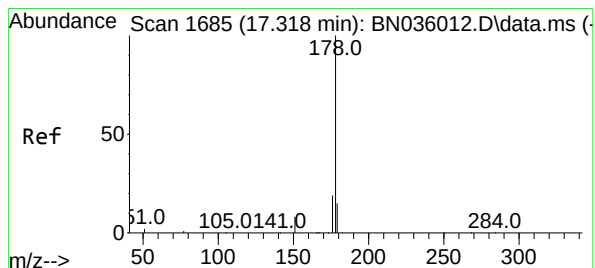
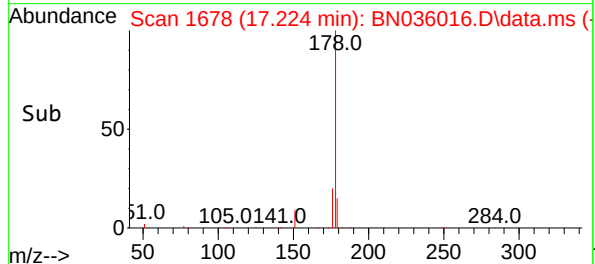
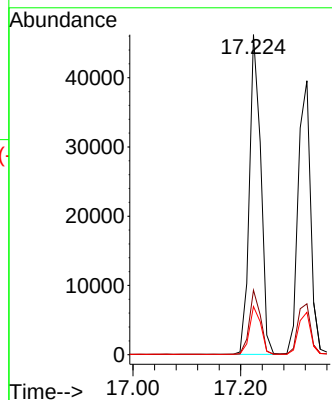
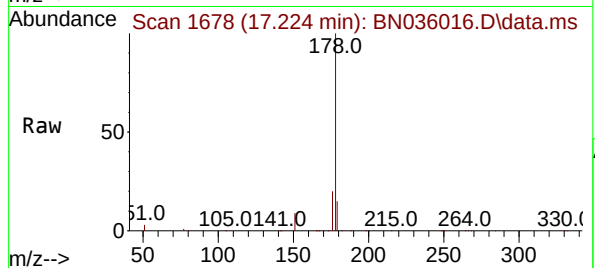




#25
Phenanthrene
Concen: 5.072 ng
RT: 17.224 min Scan# 1678
Delta R.T. -0.007 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

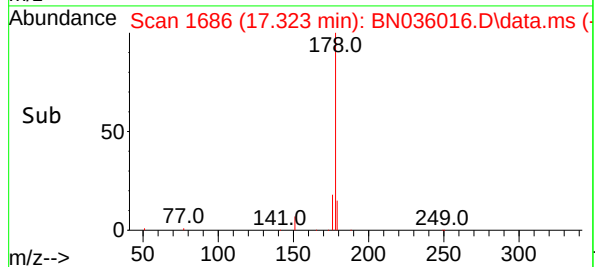
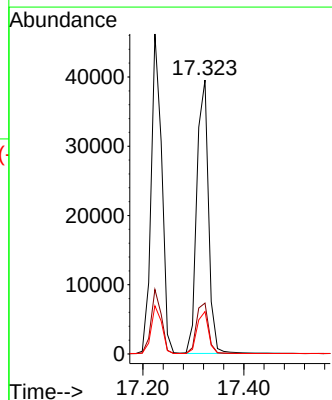
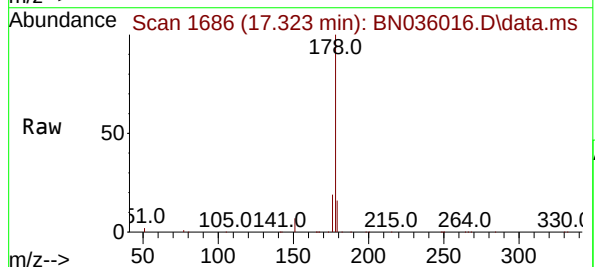
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

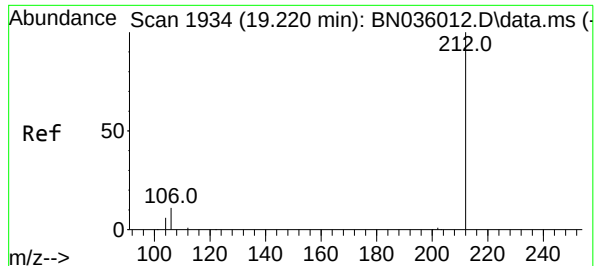
Tgt Ion:178 Resp: 67322
Ion Ratio Lower Upper
178 100
176 19.7 16.0 24.0
179 15.1 12.4 18.6



#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

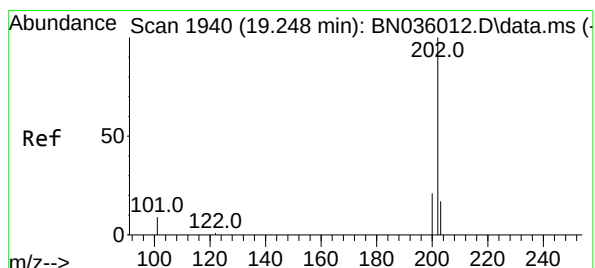
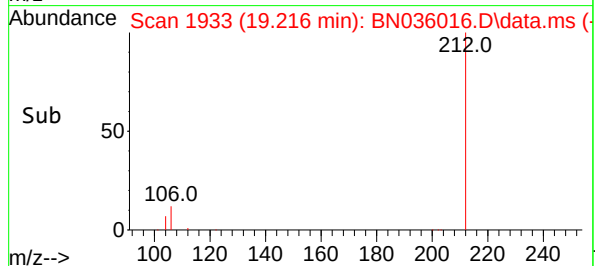
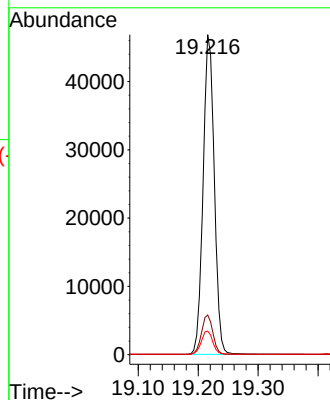
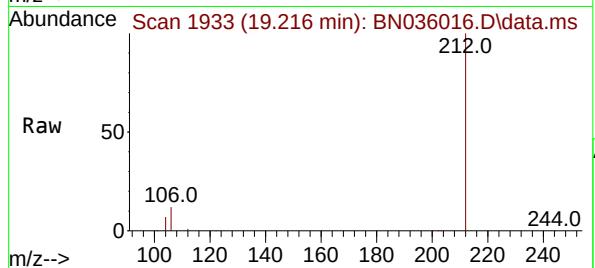
Tgt Ion:212 Resp: 60810

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

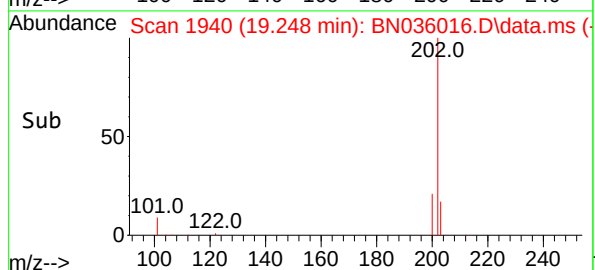
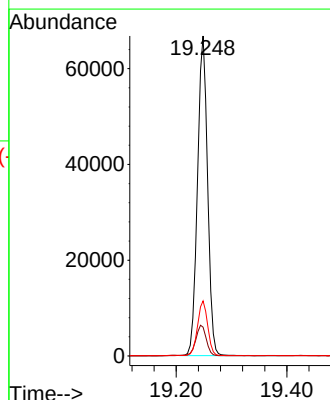
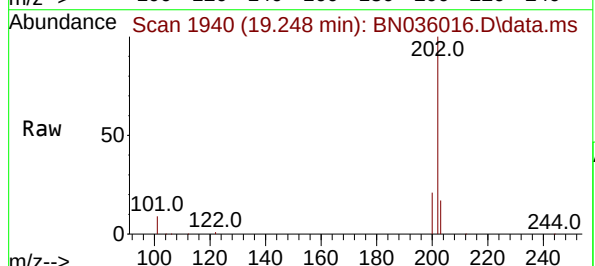
Tgt Ion:202 Resp: 84644

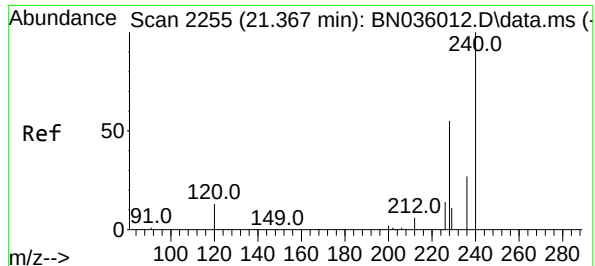
Ion Ratio Lower Upper

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

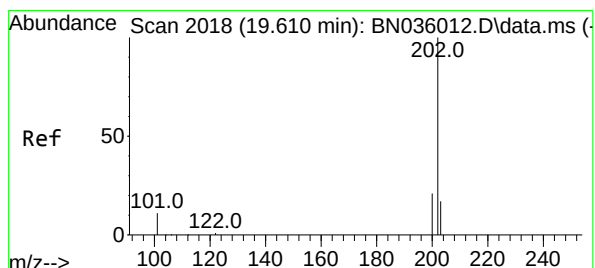
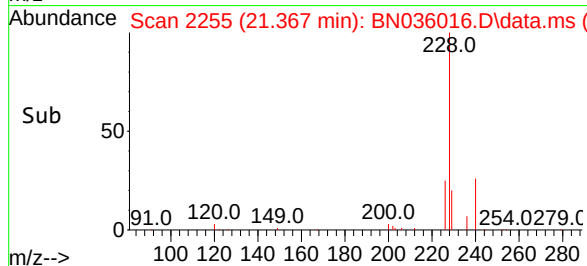
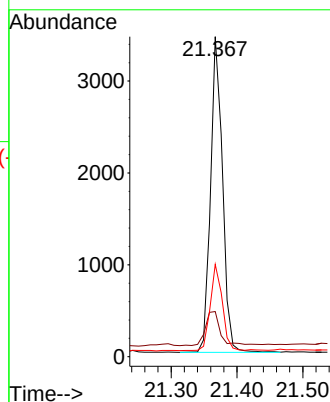
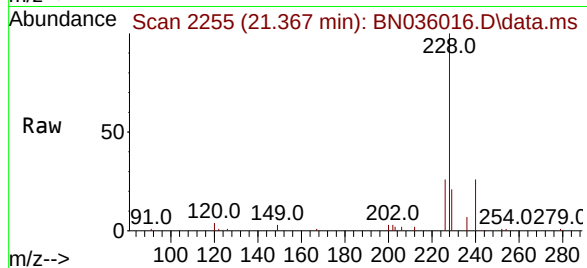
Tgt Ion:240 Resp: 4348

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

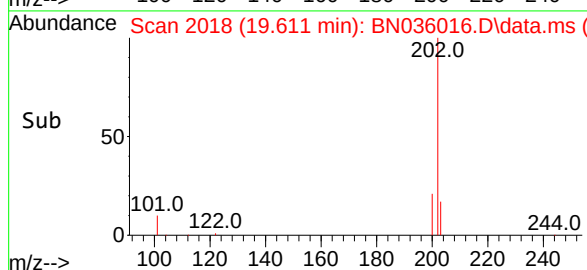
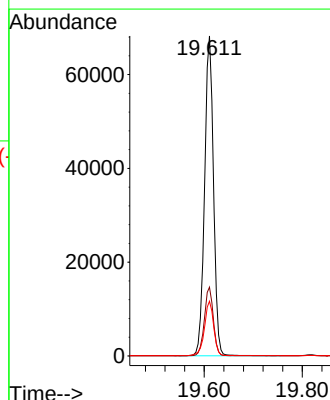
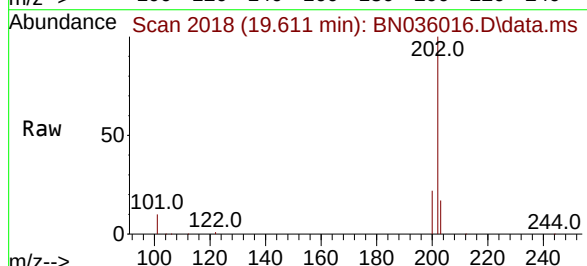
Tgt Ion:202 Resp: 85587

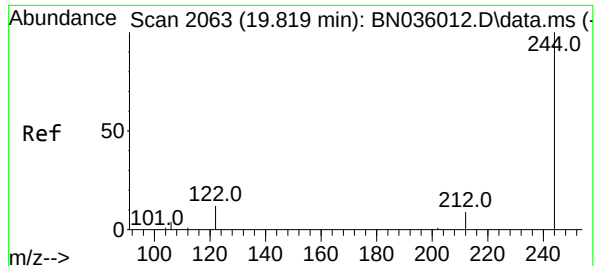
Ion Ratio Lower Upper

202 100

200 21.6 17.0 25.4

203 17.7 14.4 21.6

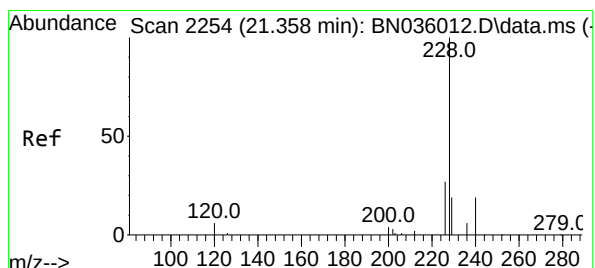
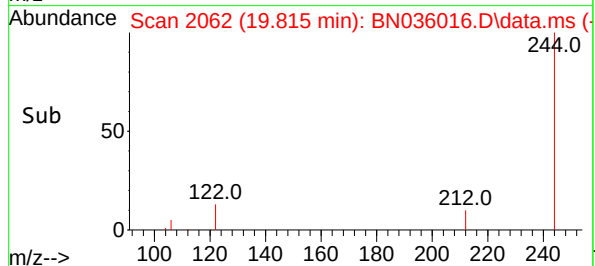
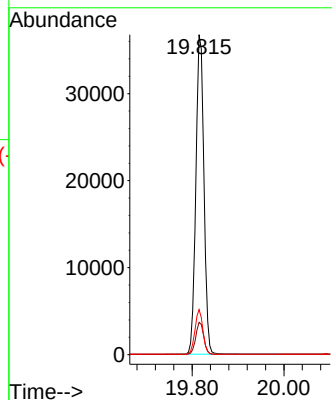
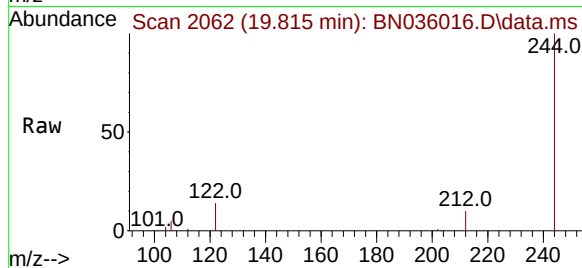




#31
Terphenyl-d14
Concen: 4.949 ng
RT: 19.815 min Scan# 2063
Delta R.T. -0.004 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

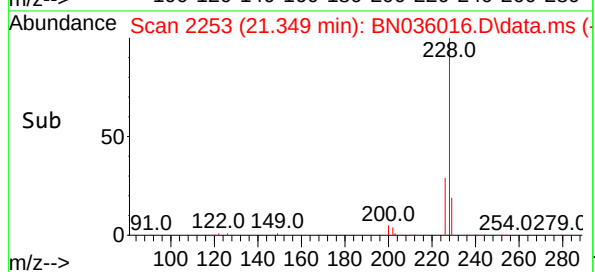
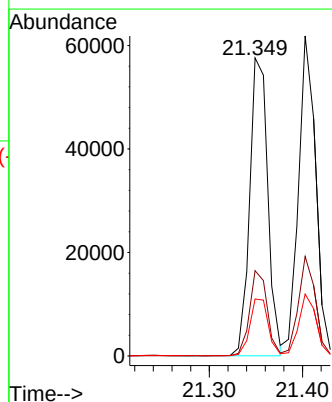
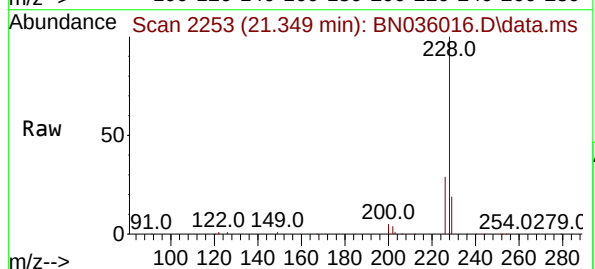
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

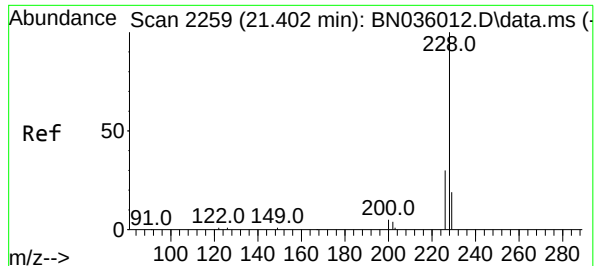
Tgt Ion:244 Resp: 44701
Ion Ratio Lower Upper
244 100
212 10.1 9.1 13.7
122 14.1 11.3 16.9



#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

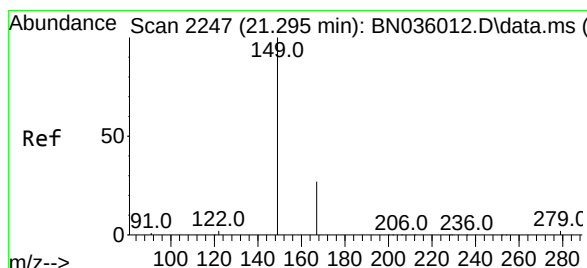
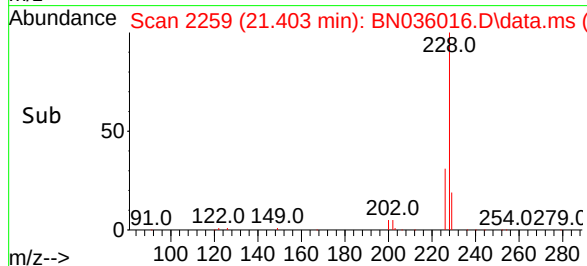
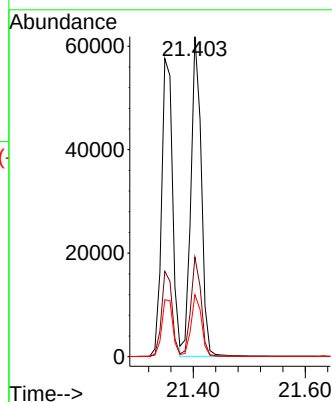
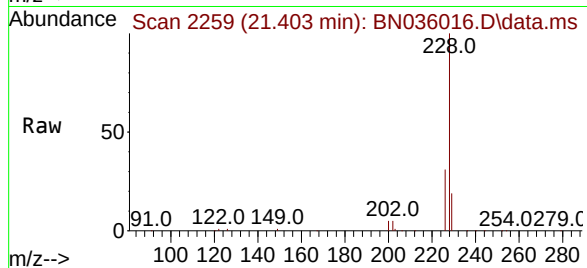
Tgt Ion:228 Resp: 79531

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

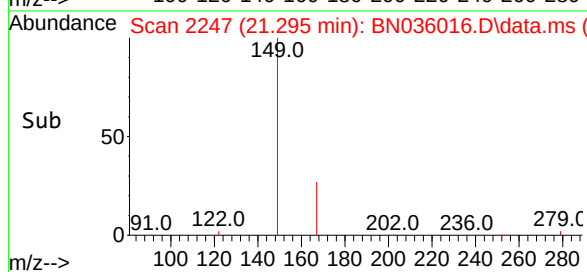
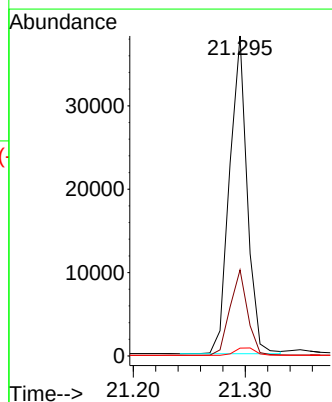
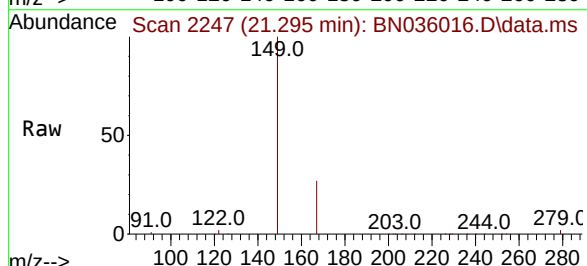
Tgt Ion:149 Resp: 41726

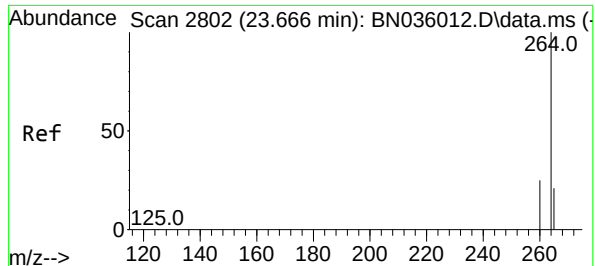
Ion Ratio Lower Upper

149 100

167 26.9 21.9 32.9

279 2.8 3.0 4.6#

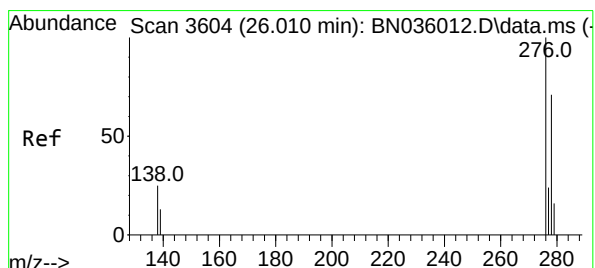
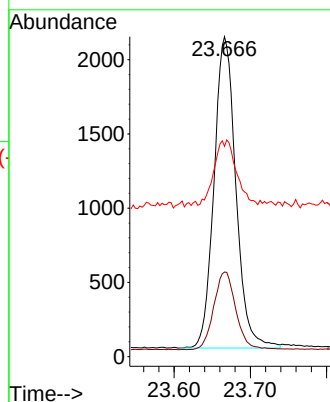
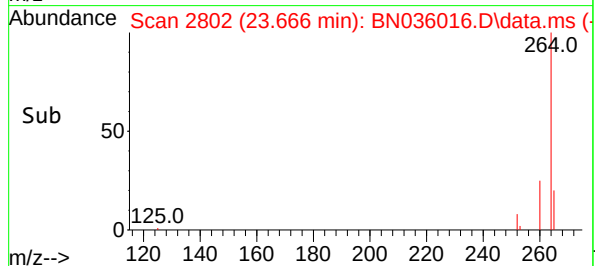
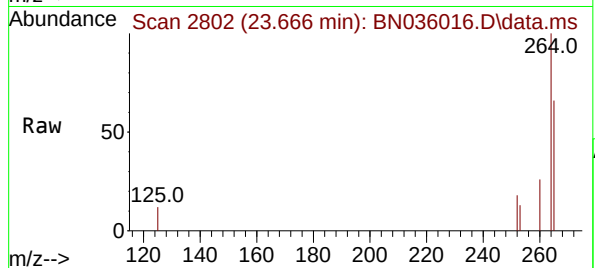




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.666 min Scan# 2802
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

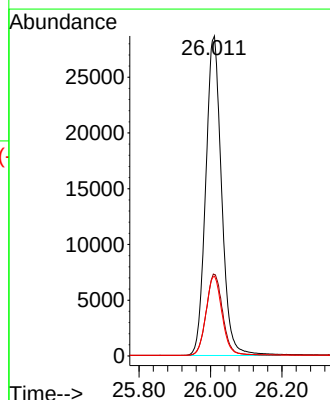
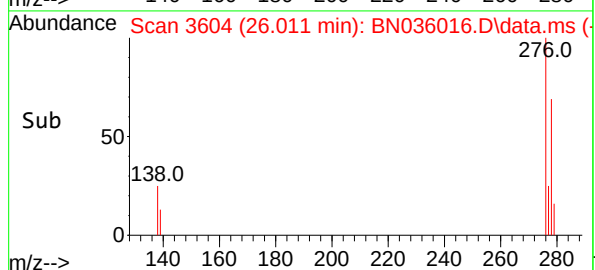
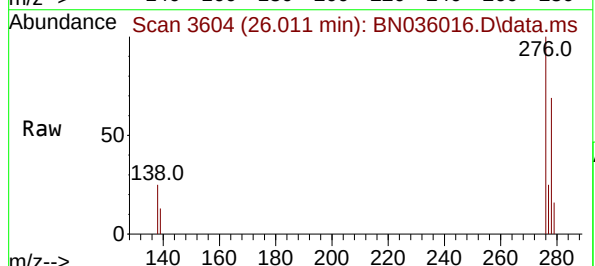
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

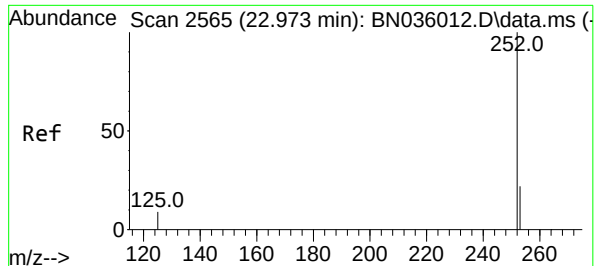
Tgt Ion:264 Resp: 4175
Ion Ratio Lower Upper
264 100
260 26.5 21.8 32.6
265 65.8 56.6 84.8



#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

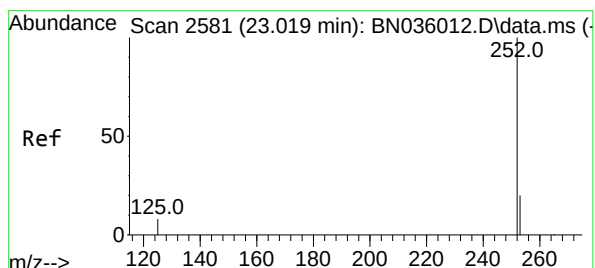
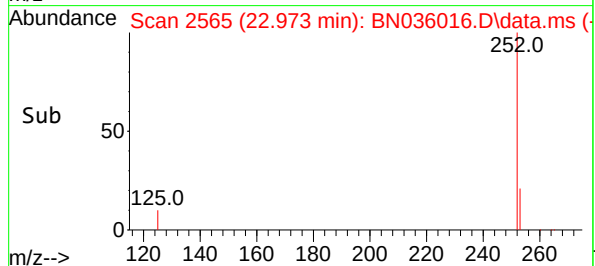
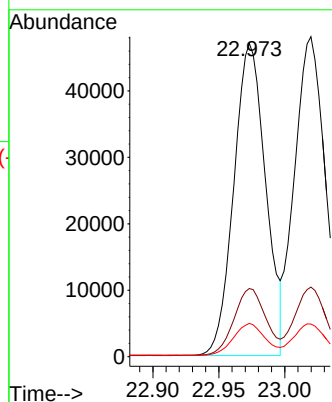
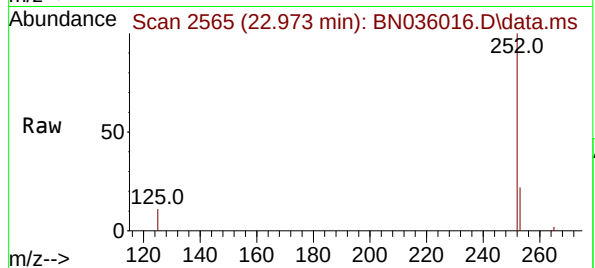




#37
Benzo(b)fluoranthene
Concen: 5.192 ng
RT: 22.973 min Scan# 2565
Delta R.T. 0.000 min
Lab File: BN036016.D
Acq: 22 Jan 2025 14:36

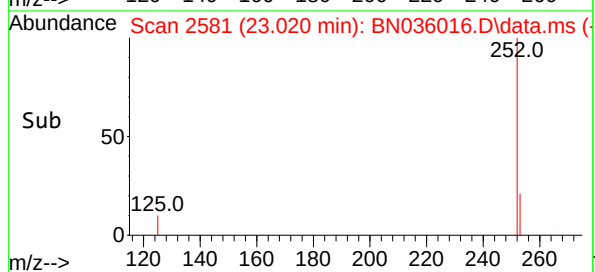
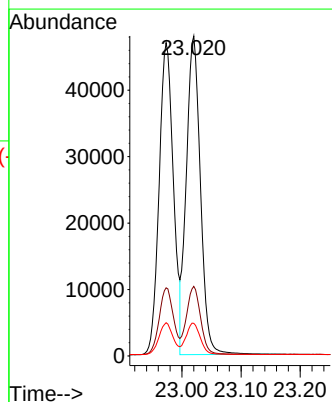
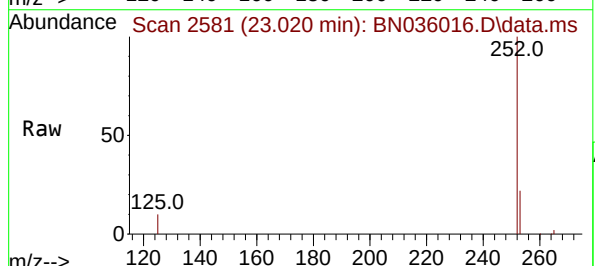
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

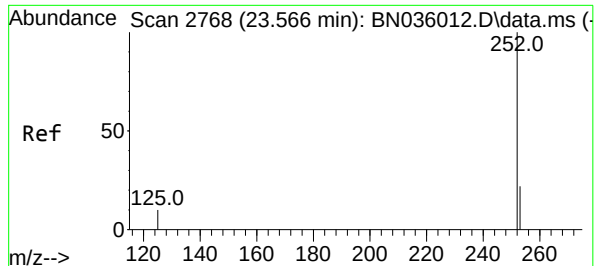
Tgt Ion:252 Resp: 78788
Ion Ratio Lower Upper
252 100
253 21.7 22.5 33.7#
125 10.6 11.9 17.9#



#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

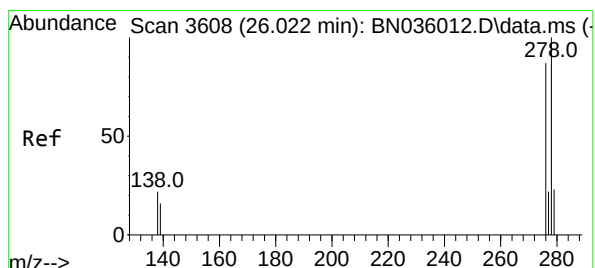
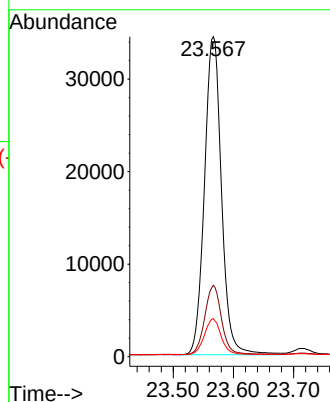
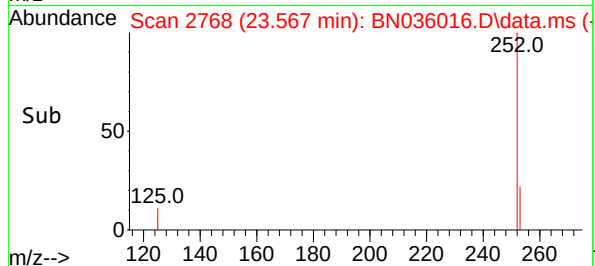
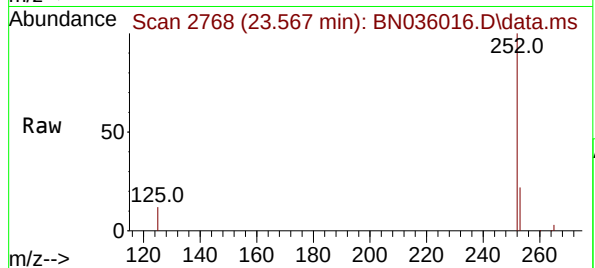
Tgt Ion:252 Resp: 67637

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

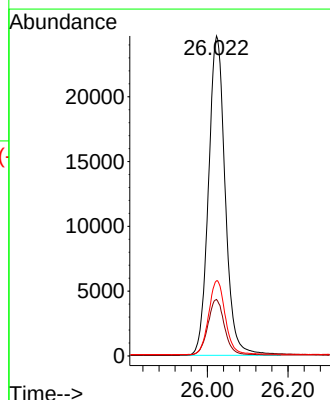
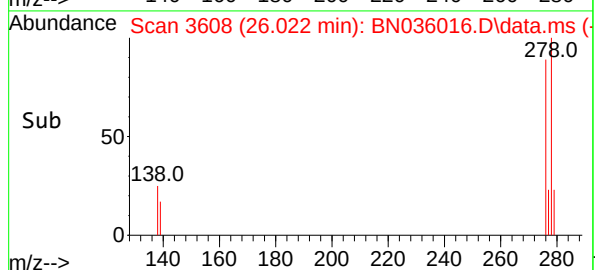
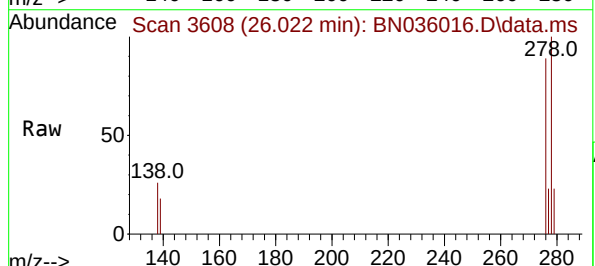
Tgt Ion:278 Resp: 70778

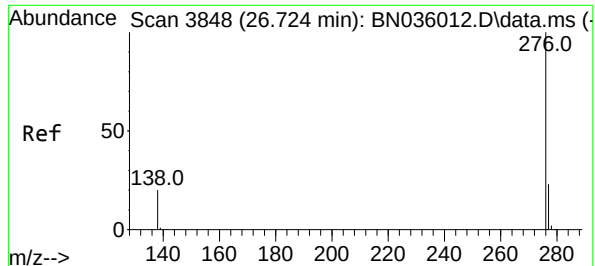
Ion Ratio Lower Upper

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

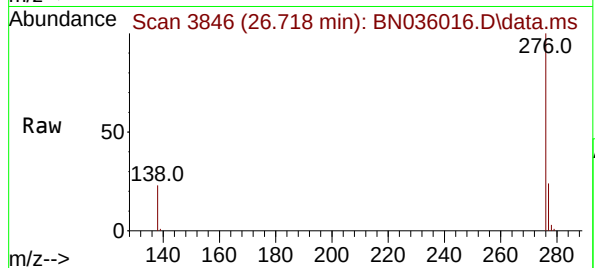
Acq: 22 Jan 2025 14:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0



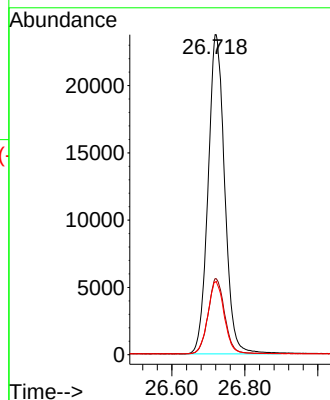
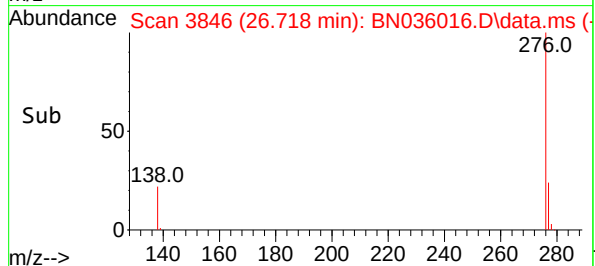
Tgt Ion:276 Resp: 74927

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)

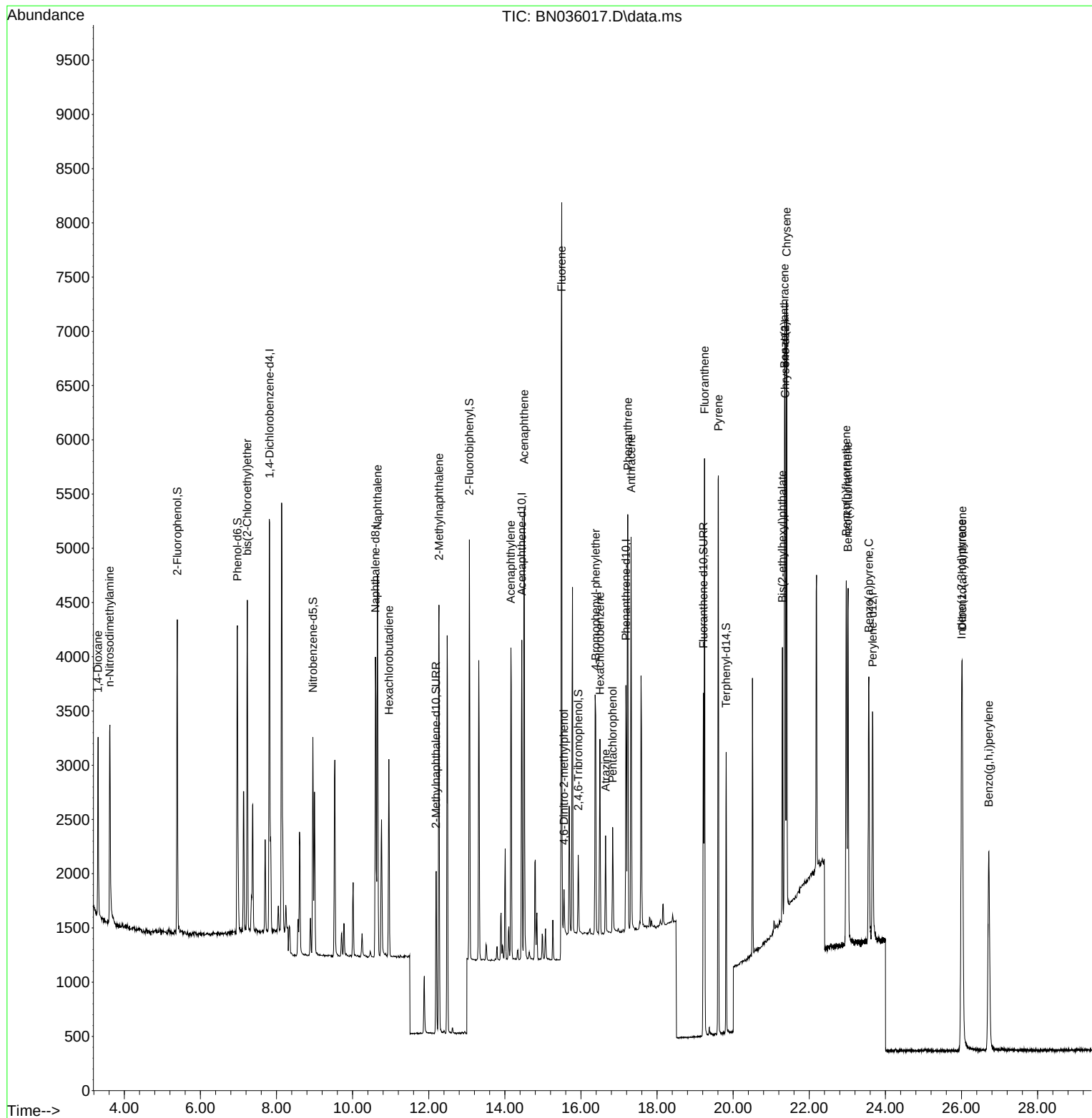
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.817	152	1865	0.400	ng	0.00
7) Naphthalene-d8	10.601	136	3525	0.400	ng	#-0.01
13) Acenaphthene-d10	14.447	164	1598	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	3132	0.400	ng	0.00
29) Chrysene-d12	21.367	240	2762	0.400	ng	0.00
35) Perylene-d12	23.663	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

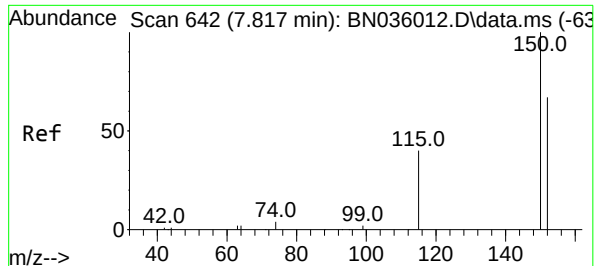
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

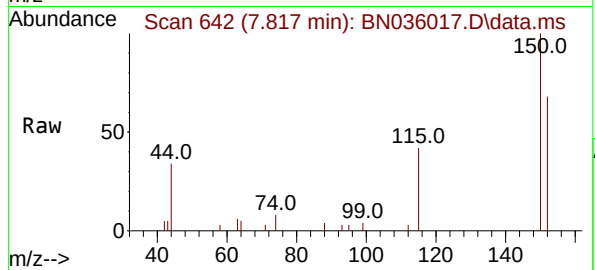
Quant Time: Jan 23 00:35:35 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jan 23 00:34:56 2025
Response via : Initial Calibration



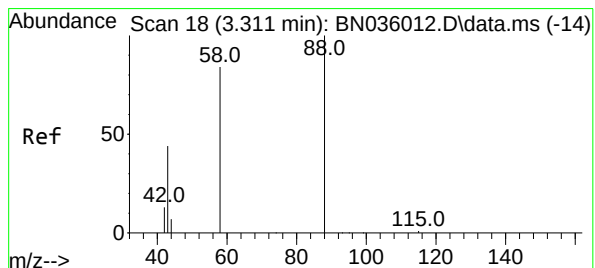
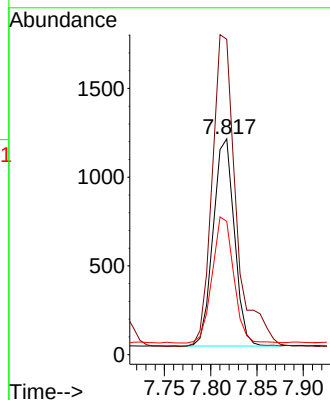


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.817 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Instrument :
BNA_N
ClientSampleId :
ICVBN012225

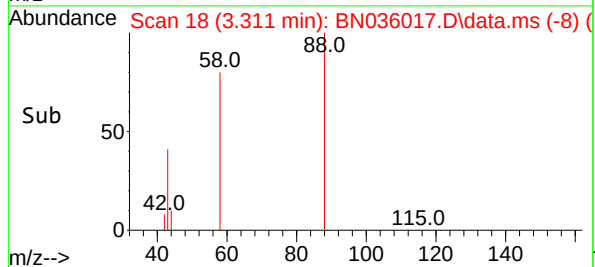
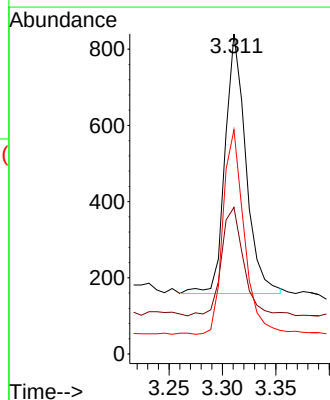
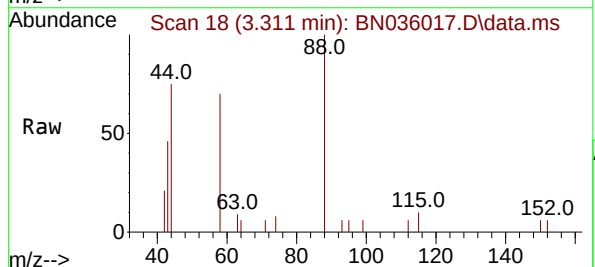


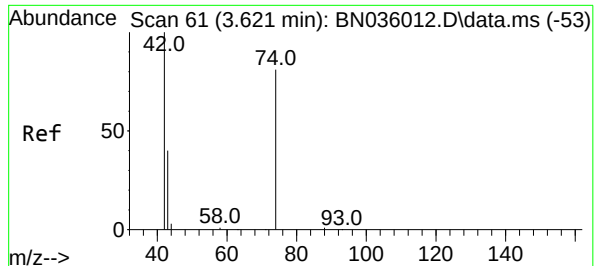
Tgt Ion: 152 Resp: 1865
Ion Ratio Lower Upper
152 100
150 146.1 117.4 176.2
115 61.8 51.0 76.4



#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

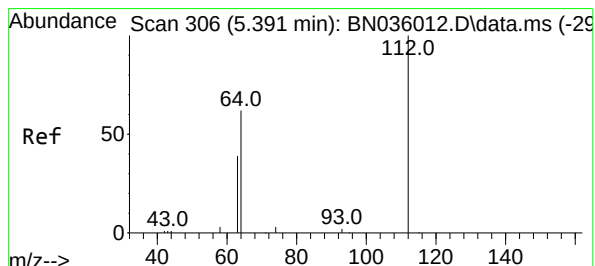
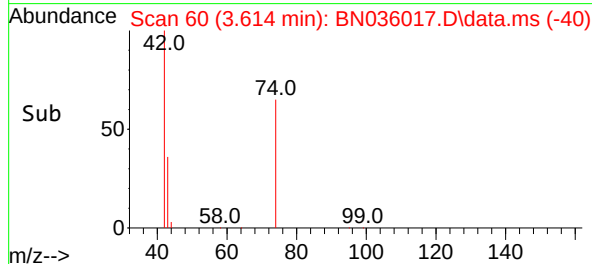
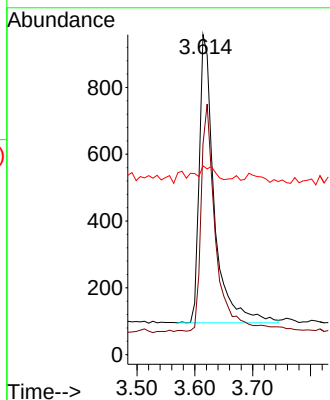
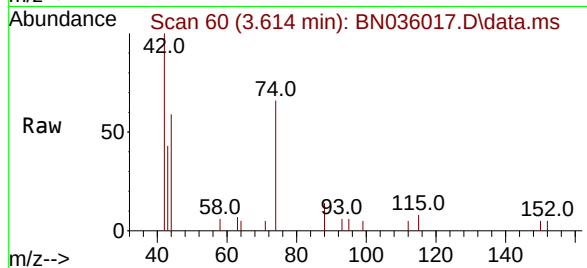




#3
 n-Nitrosodimethylamine
 Concen: 0.413 ng
 RT: 3.614 min Scan# 60
 Delta R.T. -0.007 min
 Lab File: BN036017.D
 Acq: 22 Jan 2025 15:53

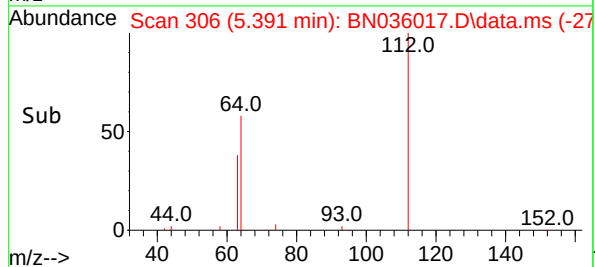
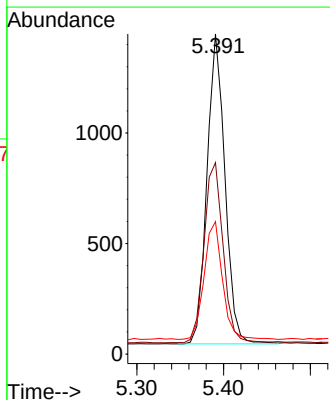
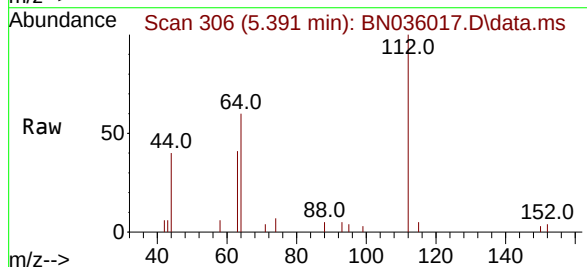
Instrument :
 BNA_N
 ClientSampleId :
 ICVBN012225

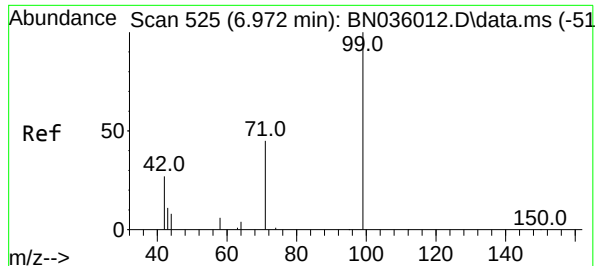
Tgt Ion: 42 Resp: 1560
 Ion Ratio Lower Upper
 42 100
 74 76.9 58.1 87.1
 44 4.4 6.2 9.4#



#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

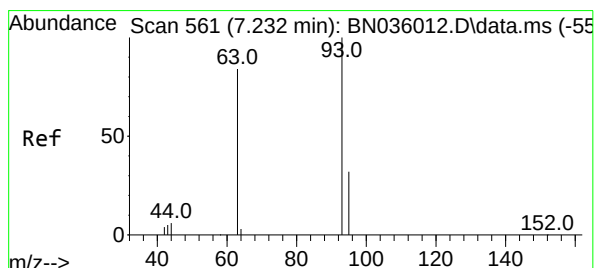
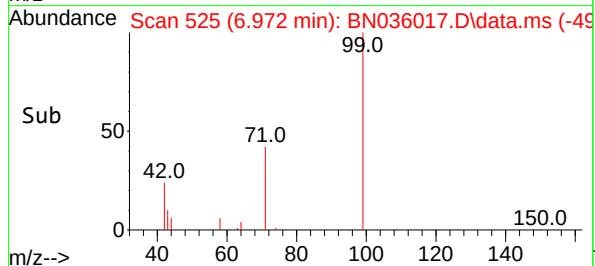
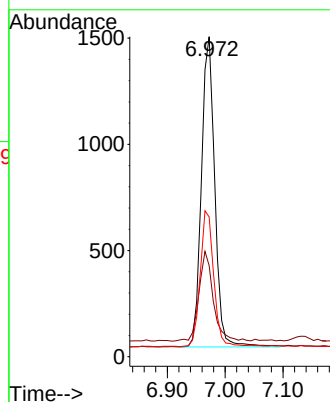
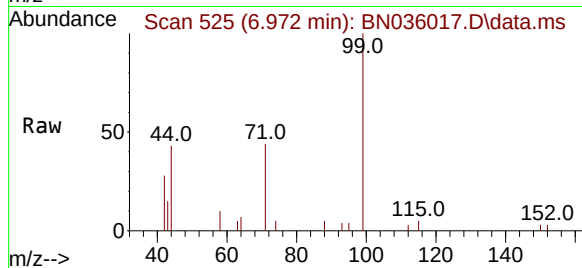
Tgt Ion: 99 Resp: 2353

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

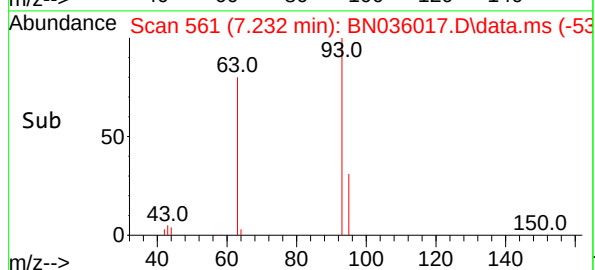
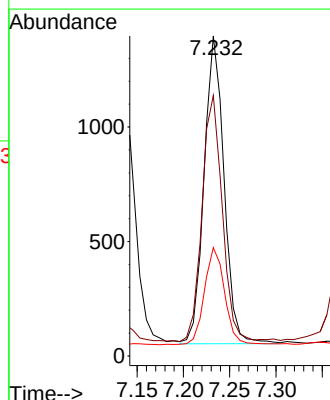
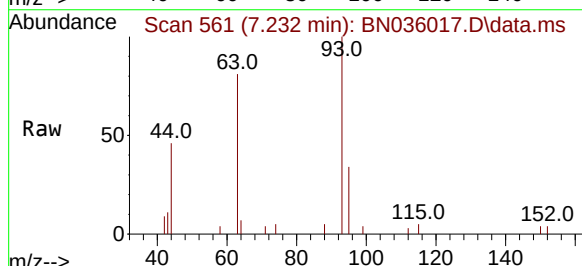
Tgt Ion: 93 Resp: 2015

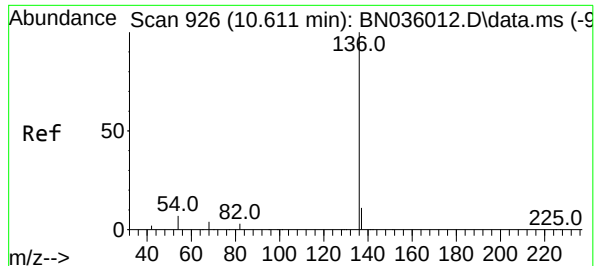
Ion	Ratio	Lower	Upper

93	100		

63	80.4	65.8	98.6

95	32.4	25.8	38.6

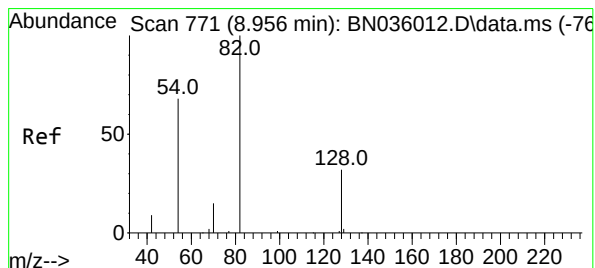
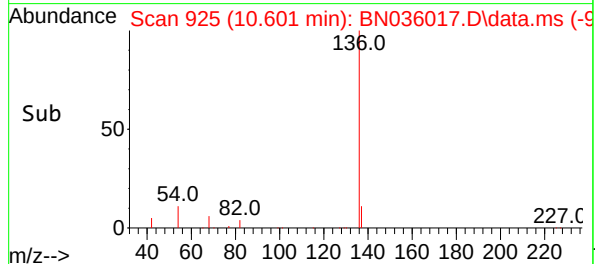
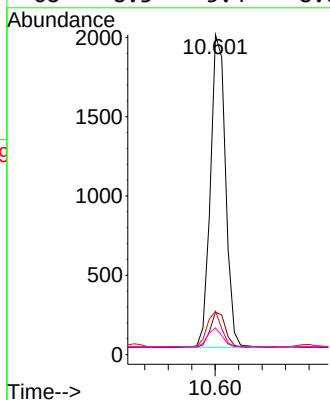
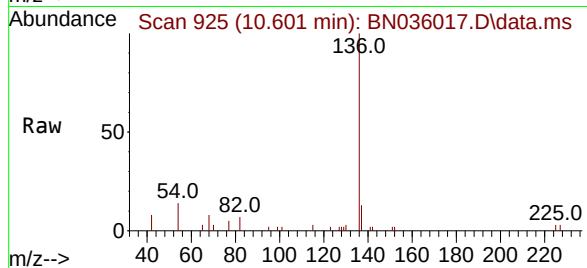




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.601 min Scan# 91
Delta R.T. -0.011 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

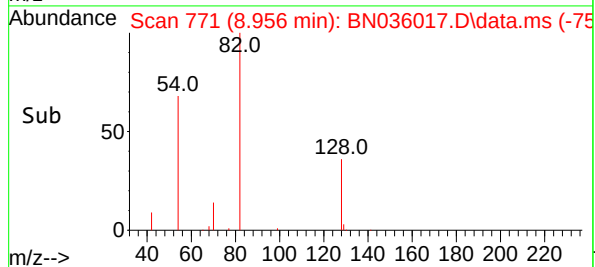
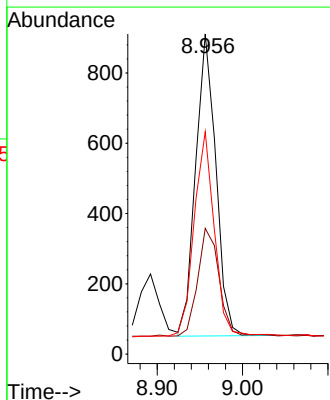
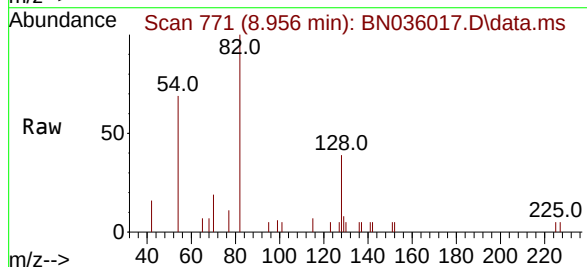
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

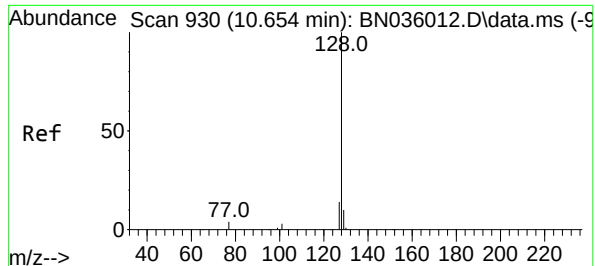
Tgt Ion:	136	Resp:	3525
Ion	Ratio	Lower	Upper
136	100		
137	13.3	10.4	15.6
54	13.6	7.7	11.5#
68	8.3	5.4	8.0#



#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

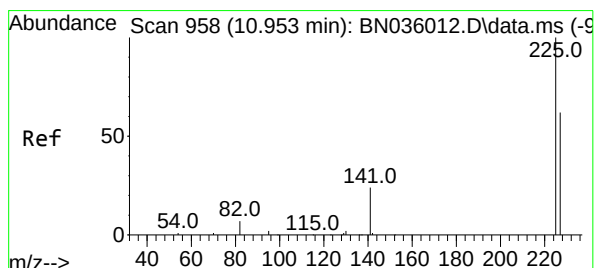
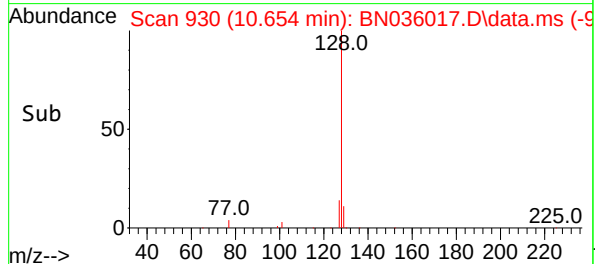
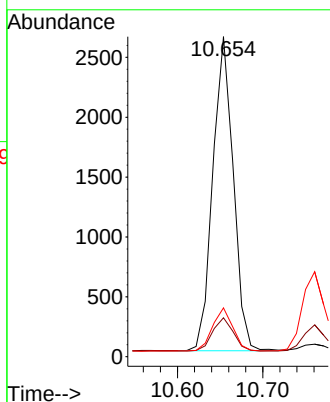
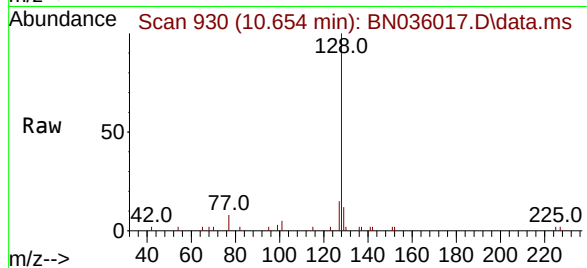




#9
Naphthalene
Concen: 0.428 ng
RT: 10.654 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

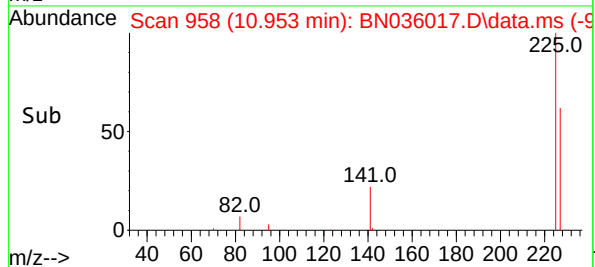
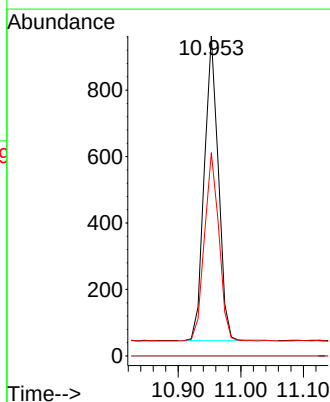
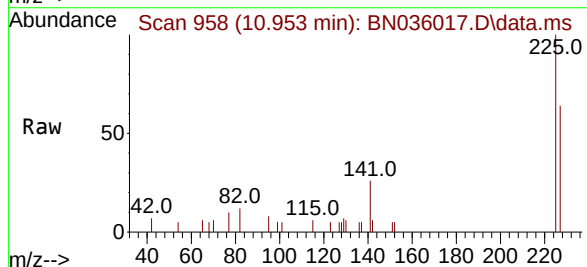
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

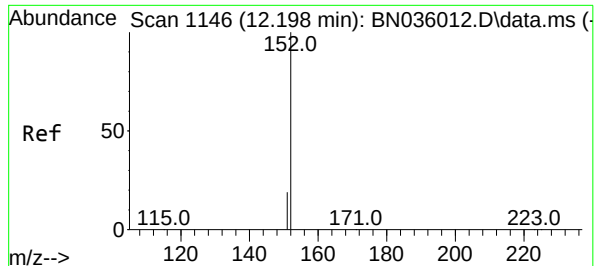
Tgt Ion	128	129	127
Resp:	4380		
Ion Ratio	100	12.2	15.3
Lower		9.4	12.6
Upper		14.2	19.0



#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	225	223	227
Resp:	1424		
Ion Ratio	100	0.0	64.1
Lower		0.0	51.0
Upper		0.0	76.6

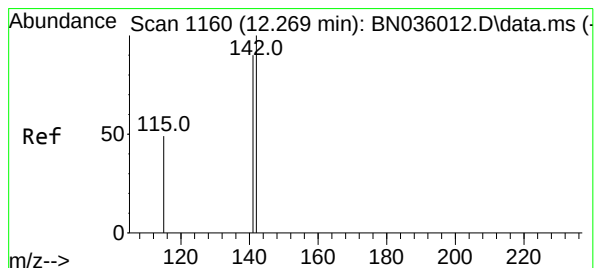
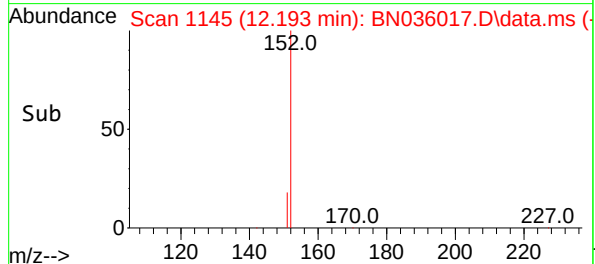
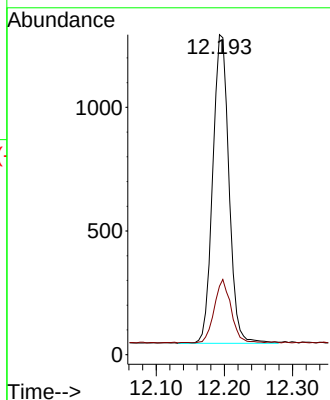
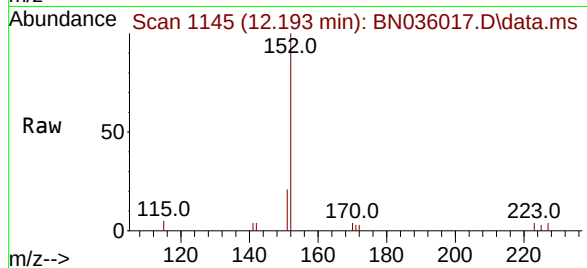




#11
2-Methylnaphthalene-d10
Concen: 0.431 ng
RT: 12.193 min Scan# 1145
Delta R.T. -0.005 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

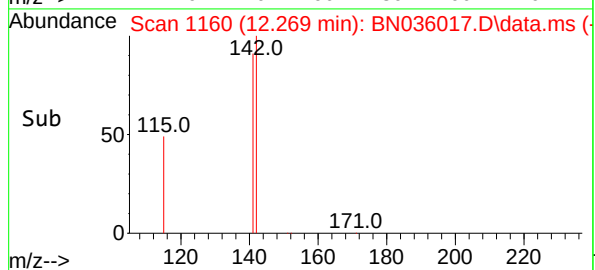
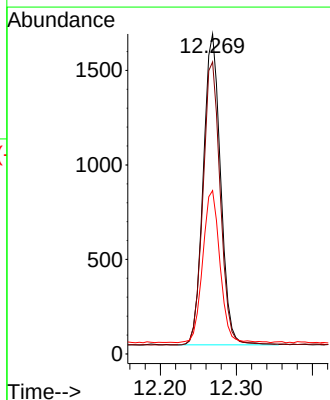
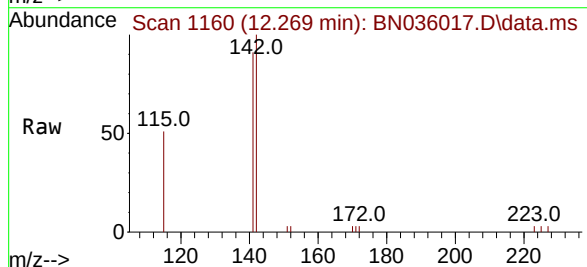
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

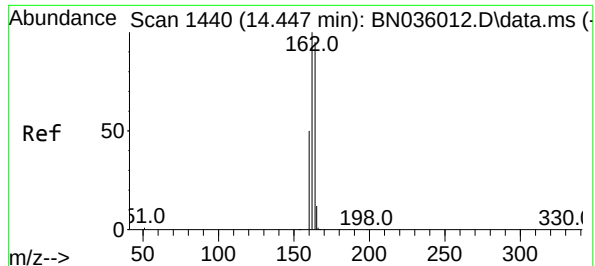
Tgt Ion:152 Resp: 2064
Ion Ratio Lower Upper
152 100
151 21.1 16.6 25.0



#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

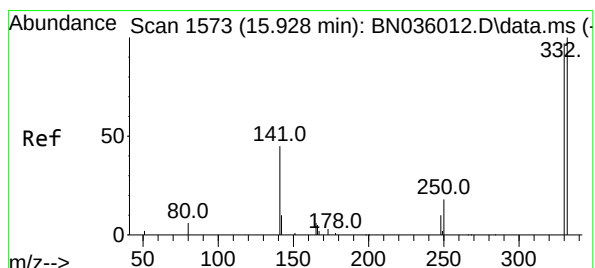
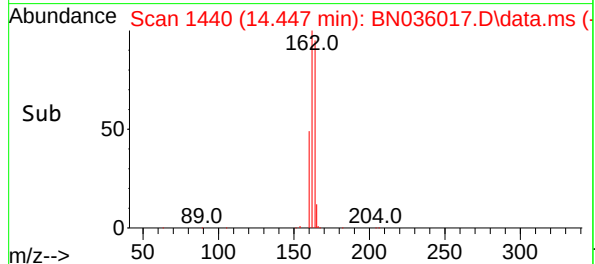
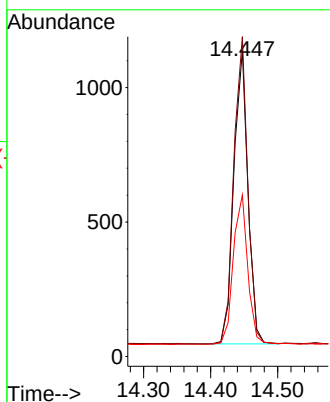
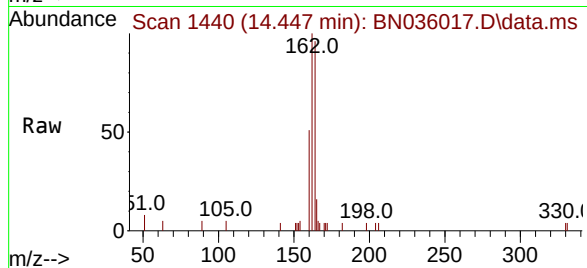




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.447 min Scan# 1440
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

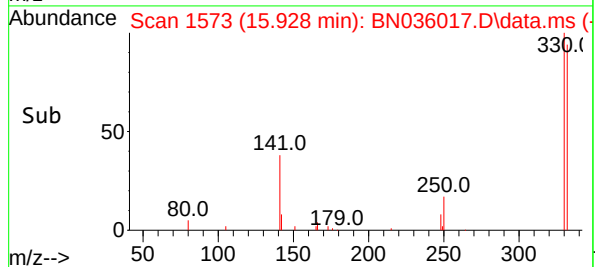
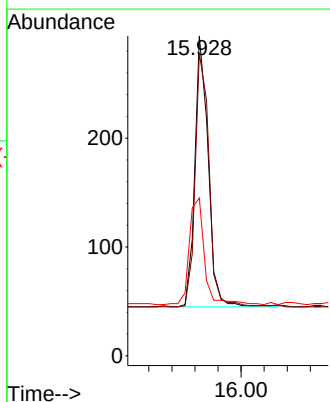
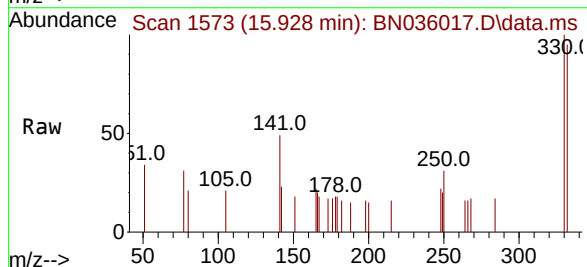
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

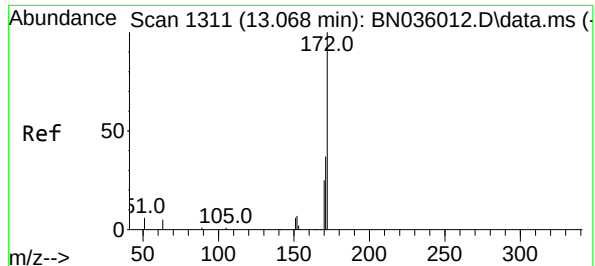
Tgt Ion:164 Resp: 1598
Ion Ratio Lower Upper
164 100
162 104.5 84.1 126.1
160 52.8 43.8 65.8



#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

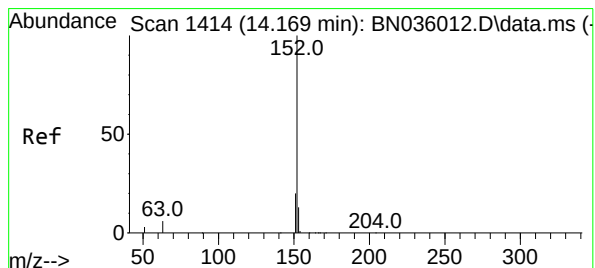
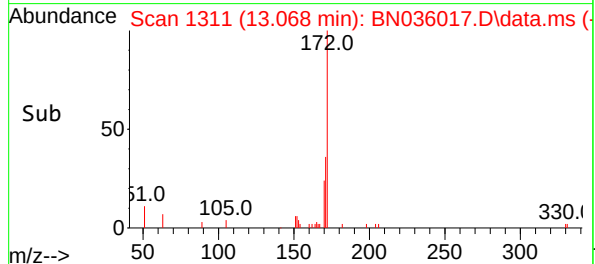
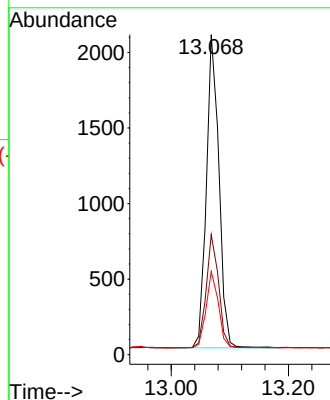
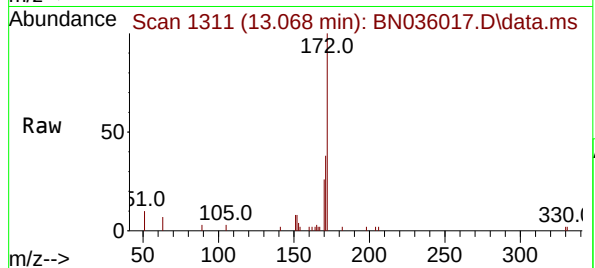




#15
2-Fluorobiphenyl
Concen: 0.433 ng
RT: 13.068 min Scan# 1311
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

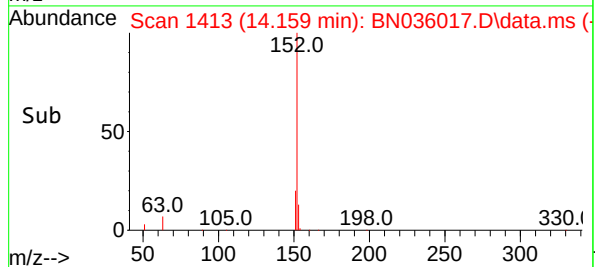
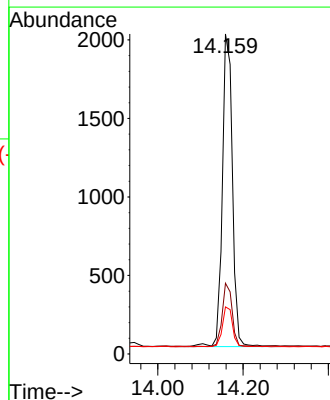
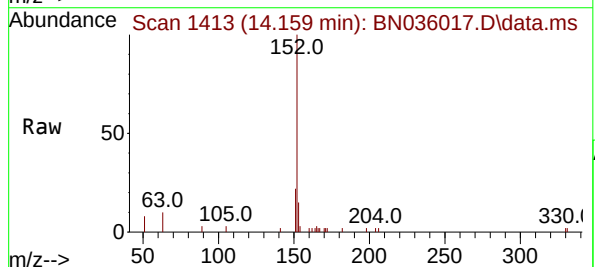
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

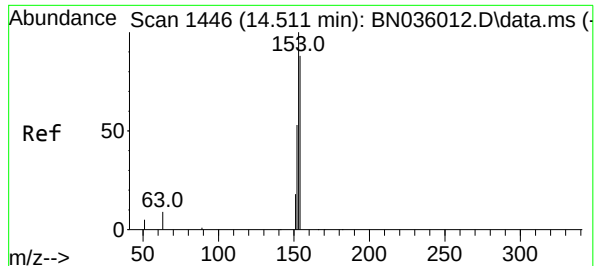
Tgt Ion	Ratio	Lower	Upper
172	100		
171	37.5	30.9	46.3
170	26.0	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	19.8	16.2	24.2
153	12.9	10.4	15.6

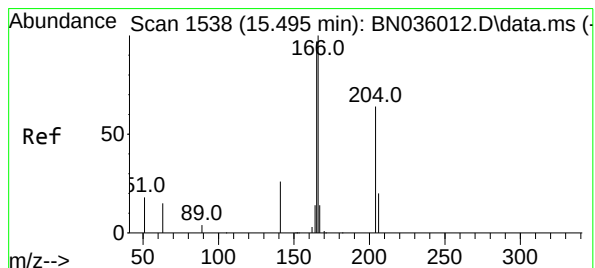
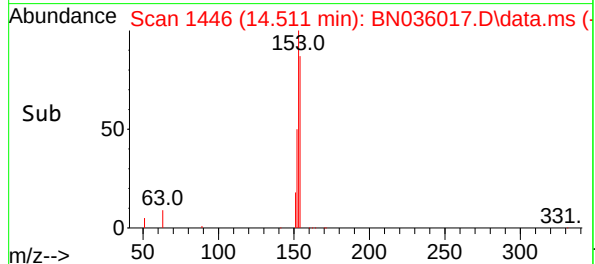
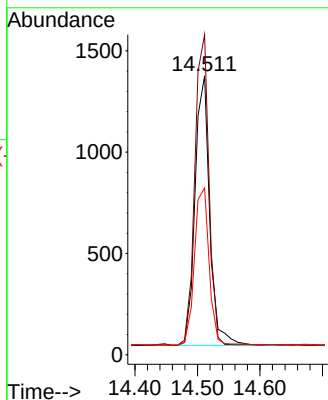
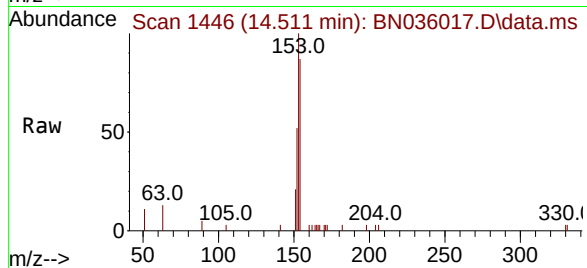




#17
Acenaphthene
Concen: 0.419 ng
RT: 14.511 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

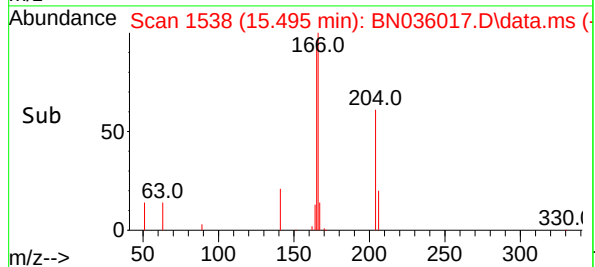
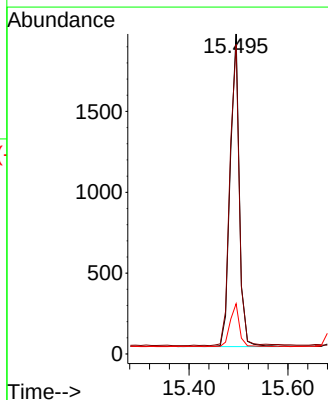
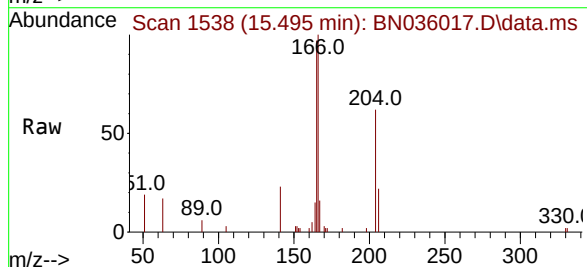
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

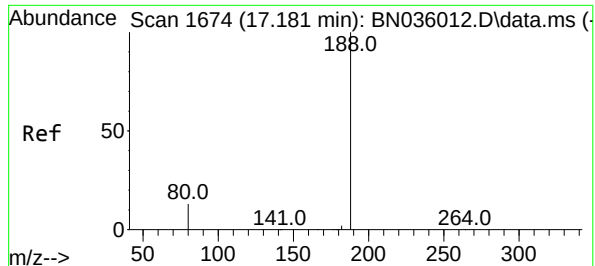
Tgt Ion	154	153	152
Resp:	2176		
Ion Ratio	100	111.3	59.1
Lower		88.9	48.1
Upper		133.3	72.1



#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	165	167
Resp:	2572		
Ion Ratio	100	104.2	14.2
Lower		78.5	10.7
Upper		117.7	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

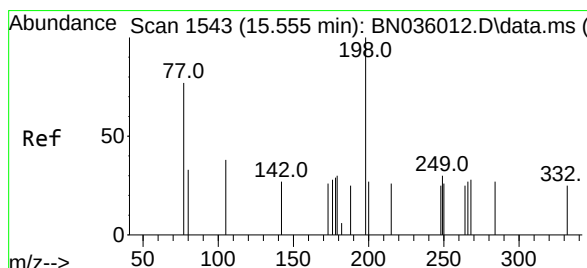
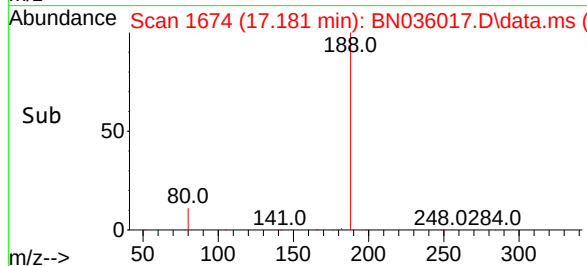
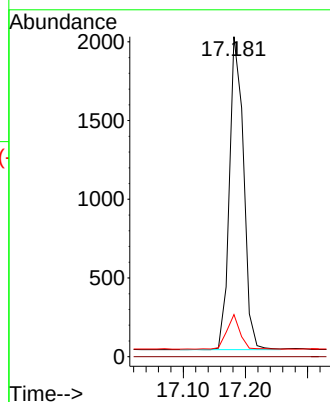
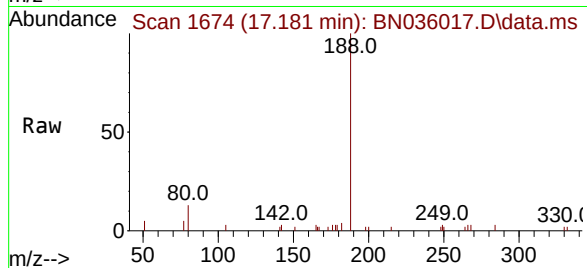
Tgt Ion:188 Resp: 3132

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

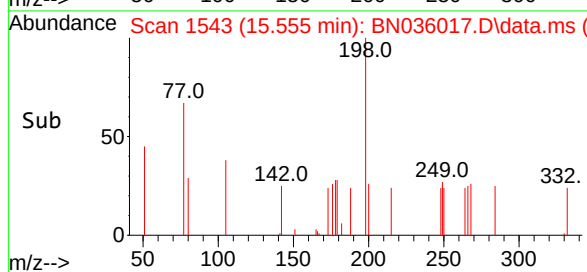
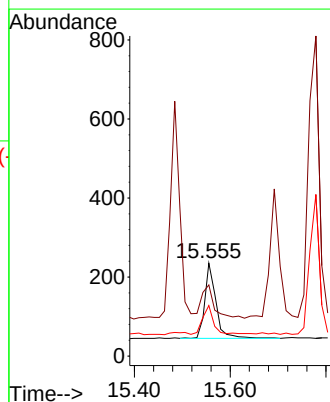
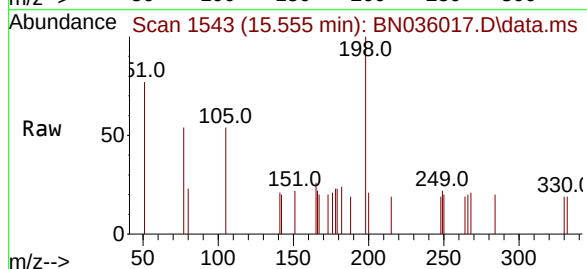
Tgt Ion:198 Resp: 302

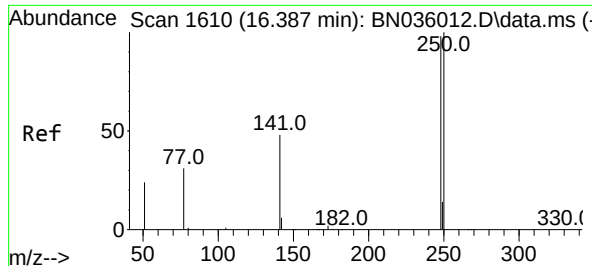
Ion Ratio Lower Upper

198 100

51 76.6 68.1 102.1

105 54.5 46.5 69.7

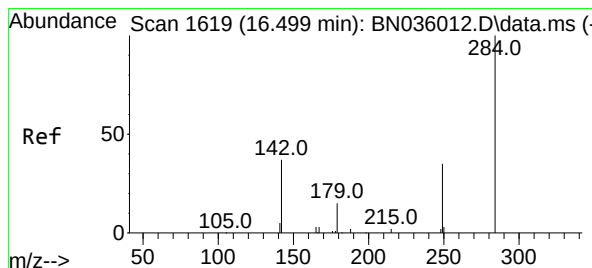
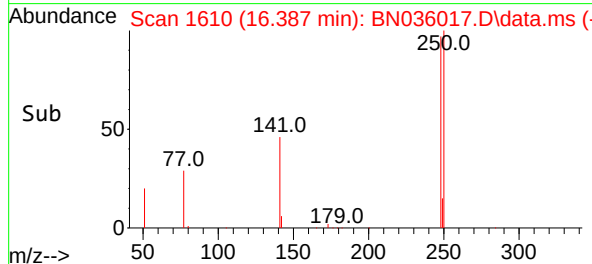
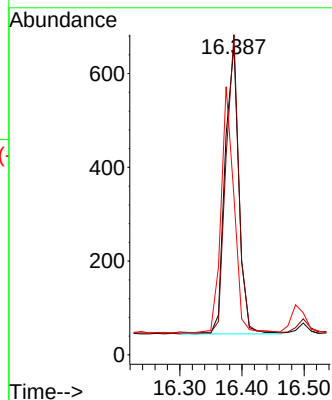
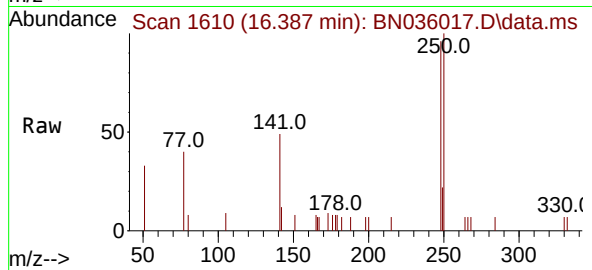




#21
4-Bromophenyl-phenylether
Concen: 0.423 ng
RT: 16.387 min Scan# 1610
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

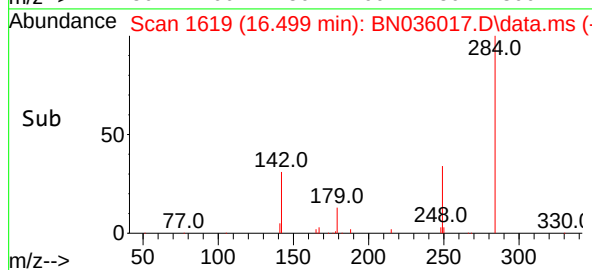
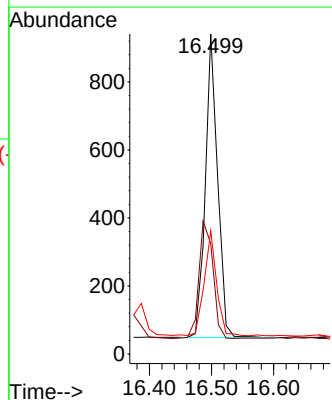
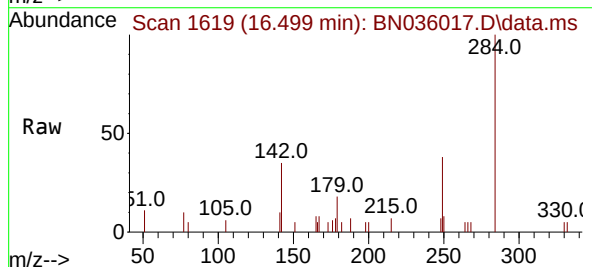
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

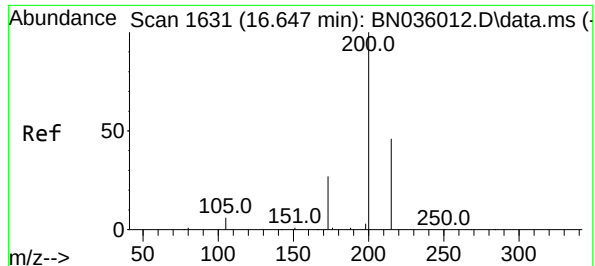
Tgt Ion	Ratio	Lower	Upper
248	100		
250	103.6	81.5	122.3
141	51.3	41.8	62.6



#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

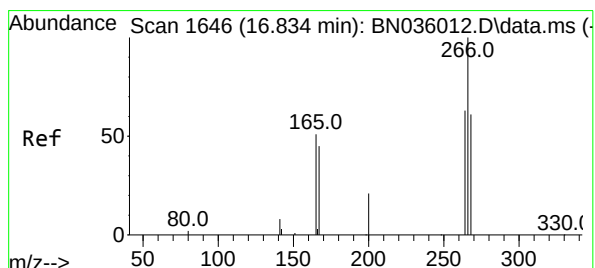
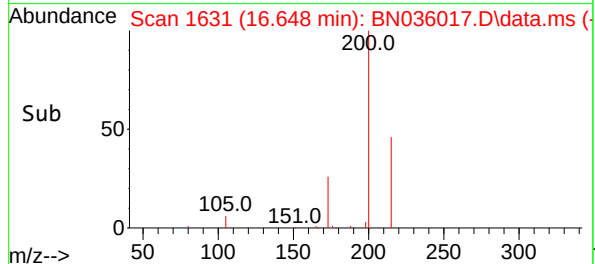
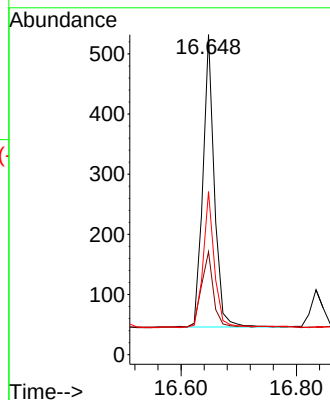
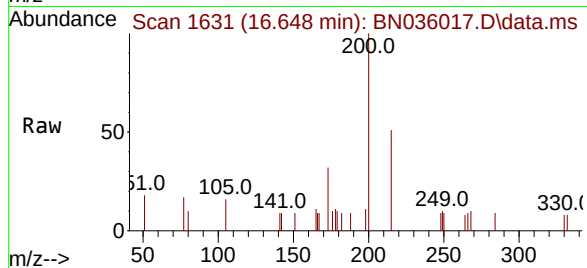
Tgt Ion:200 Resp: 667

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

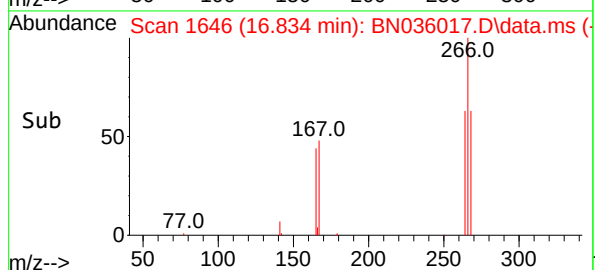
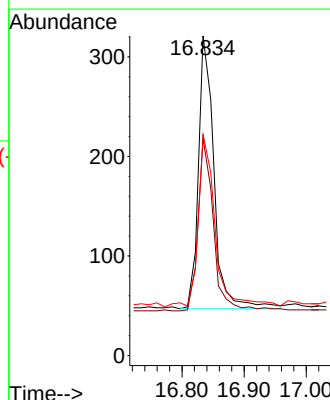
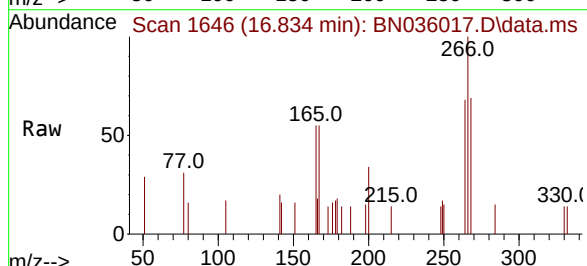
Tgt Ion:266 Resp: 479

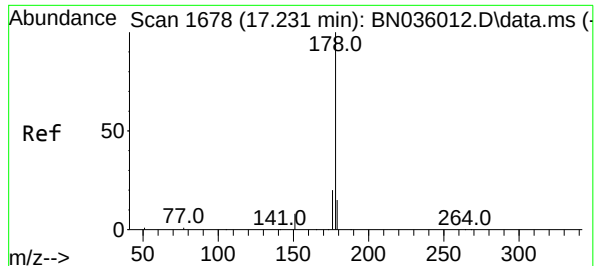
Ion Ratio Lower Upper

266 100

264 62.4 48.2 72.2

268 68.7 51.6 77.4

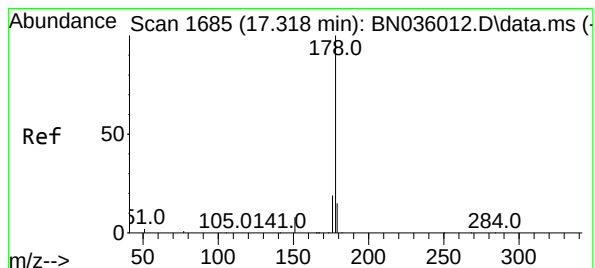
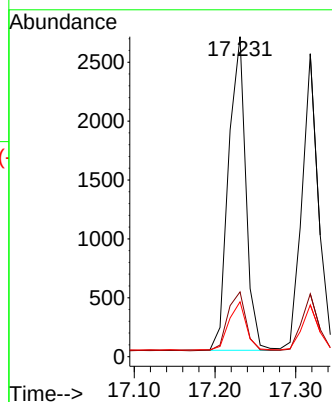
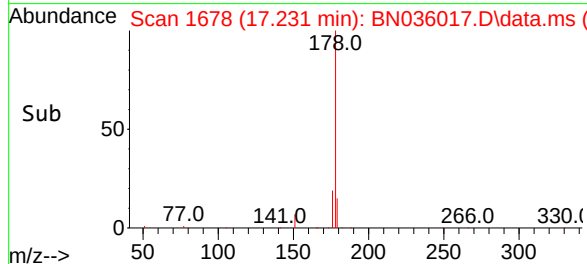
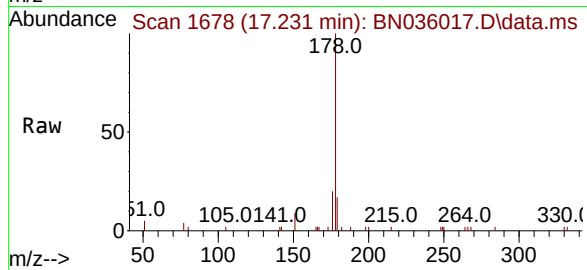




#25
Phenanthrene
Concen: 0.422 ng
RT: 17.231 min Scan# 1678
Delta R.T. 0.000 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

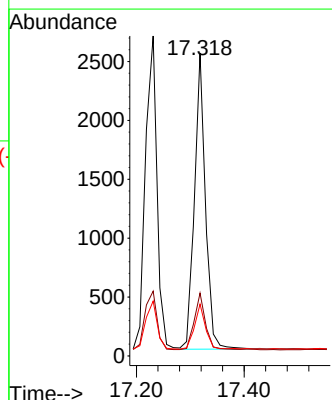
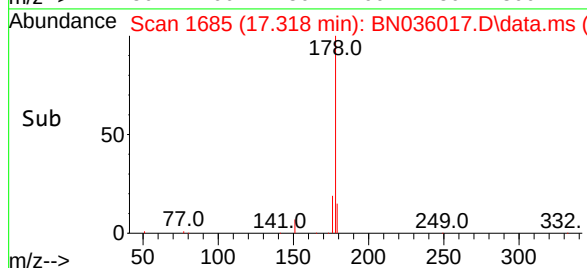
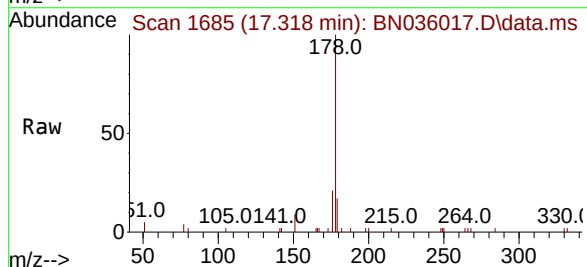
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

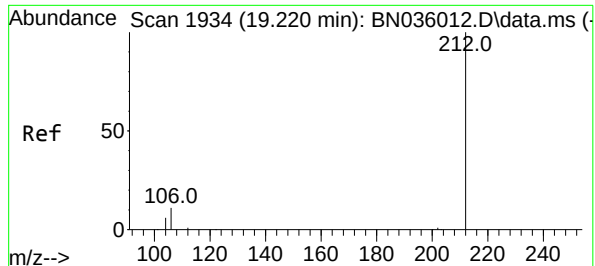
Tgt Ion:178 Resp: 3969
Ion Ratio Lower Upper
178 100
176 19.8 16.0 24.0
179 15.3 12.4 18.6



#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:178 Resp: 3591
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

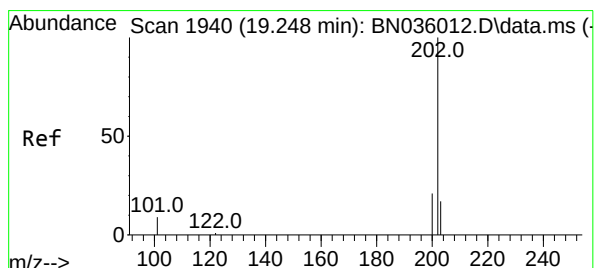
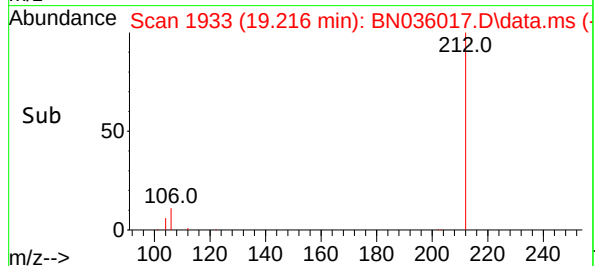
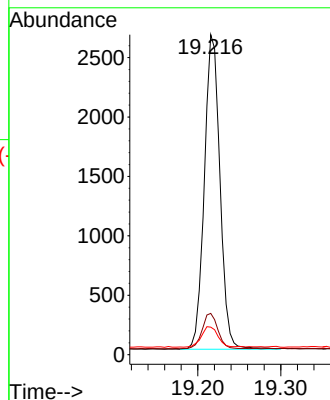
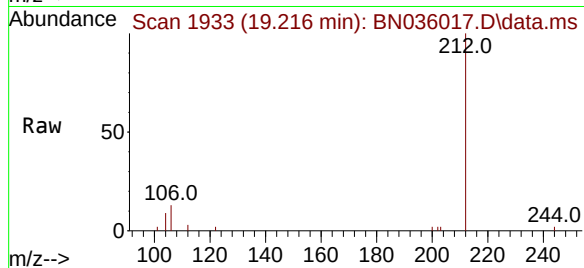
Tgt Ion:212 Resp: 3474

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

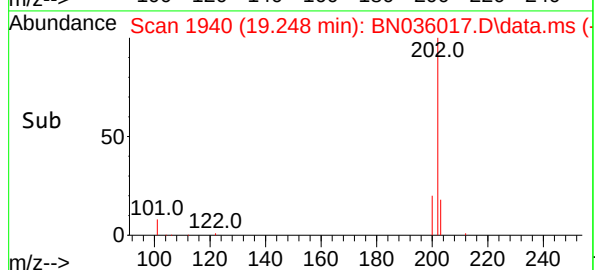
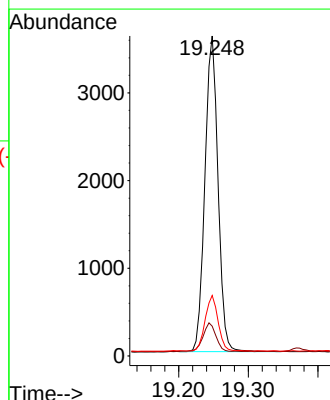
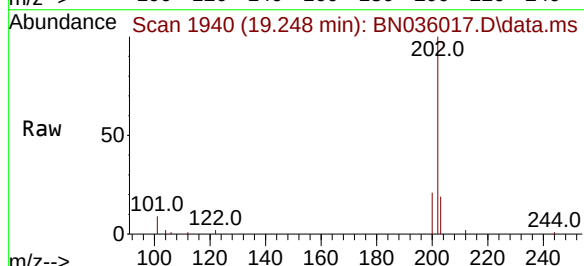
Tgt Ion:202 Resp: 4697

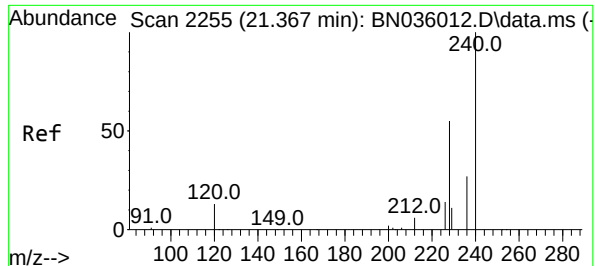
Ion Ratio Lower Upper

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

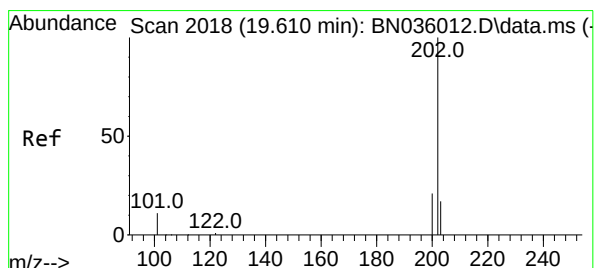
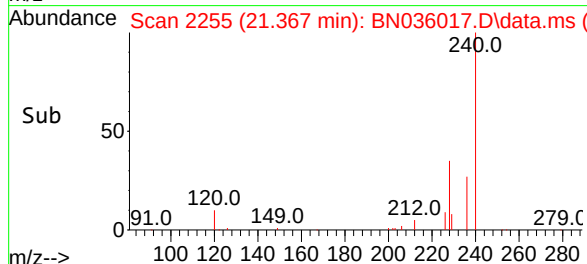
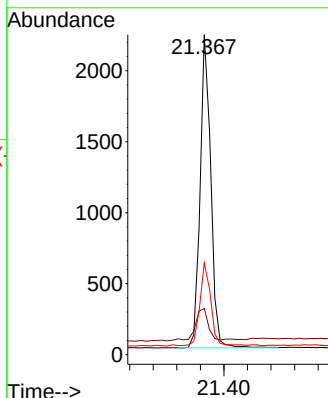
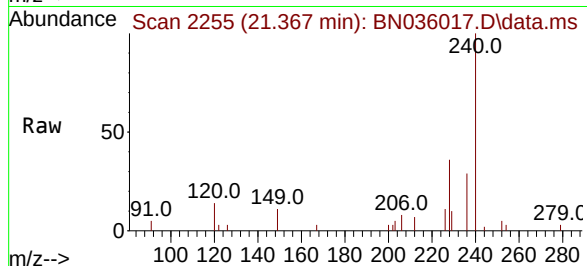
Tgt Ion:240 Resp: 2762

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

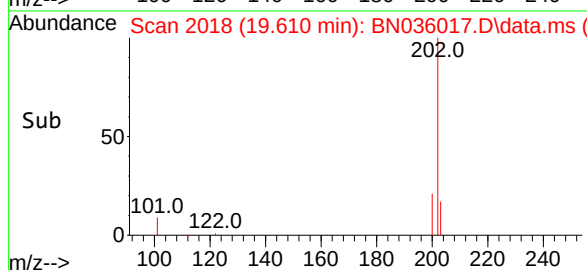
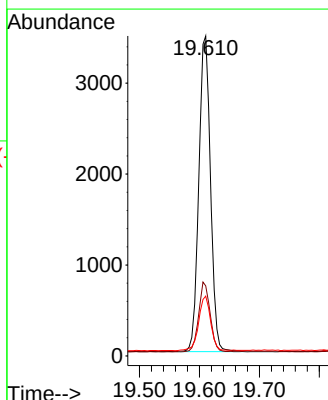
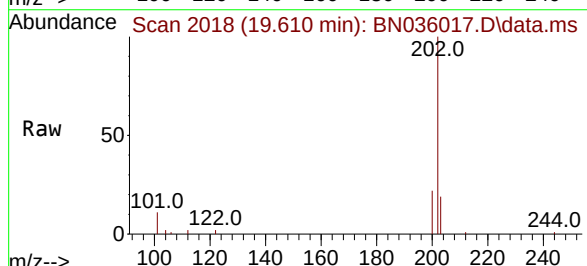
Tgt Ion:202 Resp: 4702

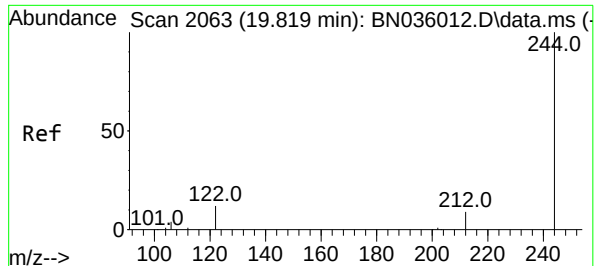
Ion Ratio Lower Upper

202 100

200 21.5 17.0 25.4

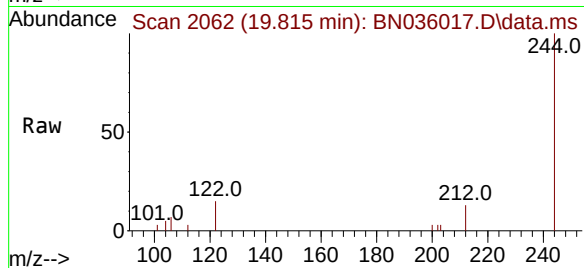
203 17.7 14.4 21.6



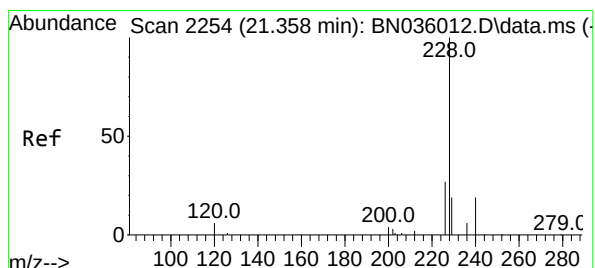
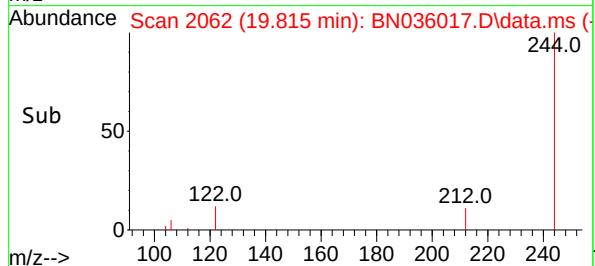
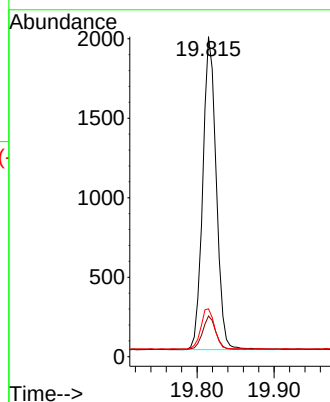


#31
Terphenyl-d14
Concen: 0.417 ng
RT: 19.815 min Scan# 2062
Delta R.T. -0.005 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

Instrument :
BNA_N
ClientSampleId :
ICVBN012225

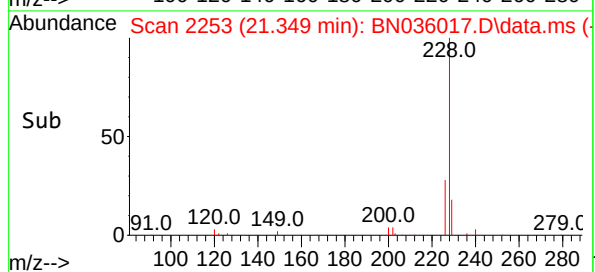
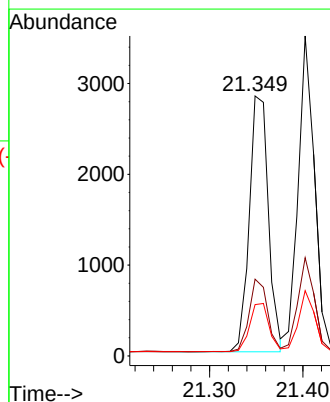
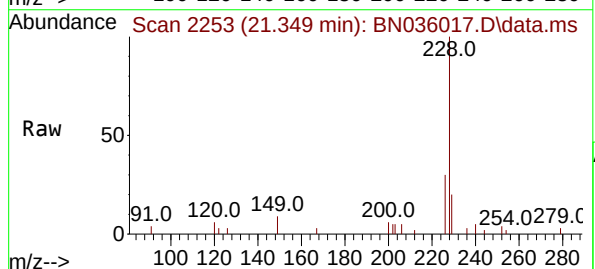


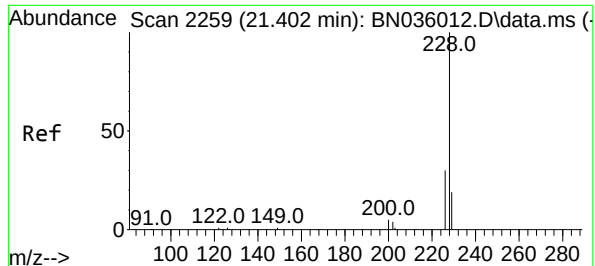
Tgt Ion:244 Resp: 2392
Ion Ratio Lower Upper
244 100
212 12.7 9.1 13.7
122 15.0 11.3 16.9



#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

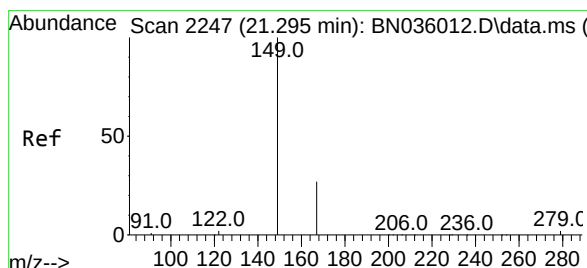
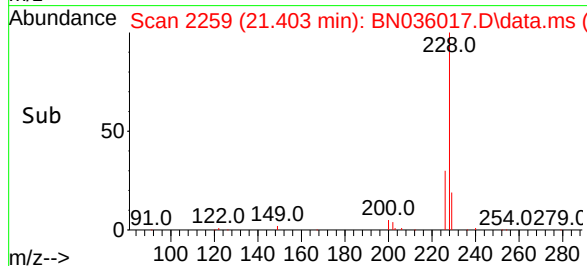
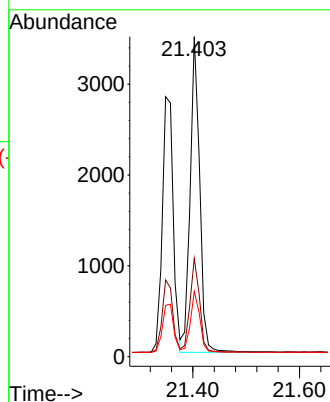
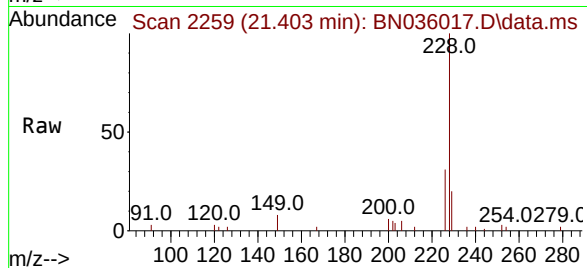
Tgt Ion:228 Resp: 4317

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

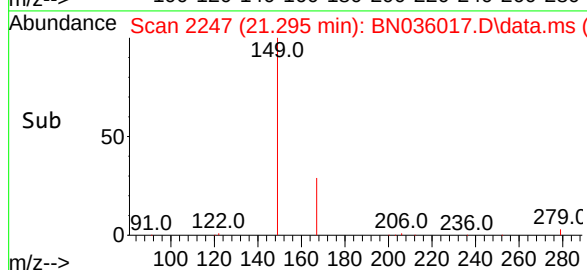
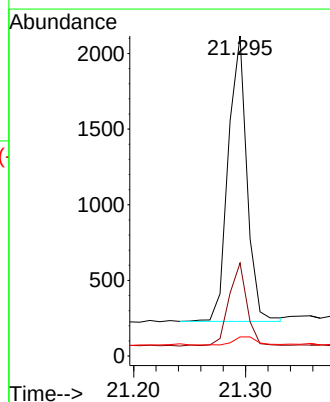
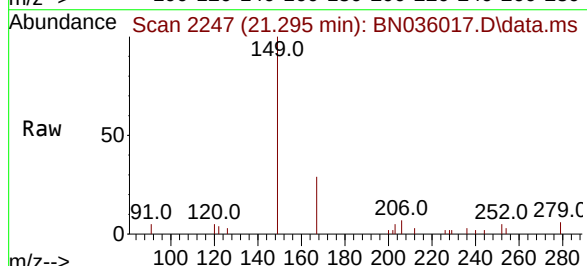
Tgt Ion:149 Resp: 2187

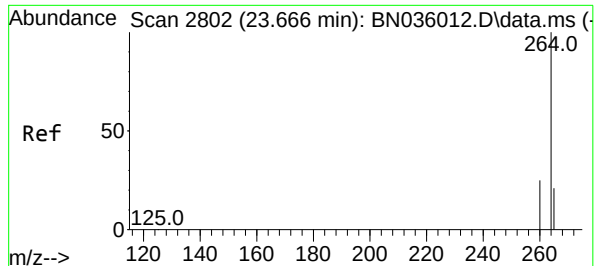
Ion Ratio Lower Upper

149 100

167 28.5 21.9 32.9

279 3.3 3.0 4.6

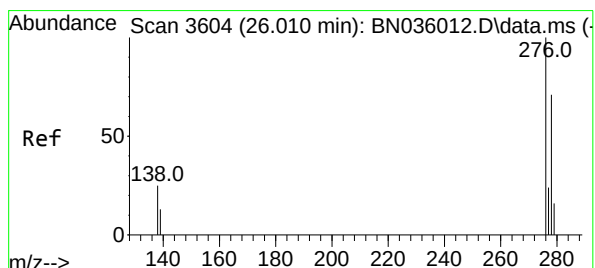
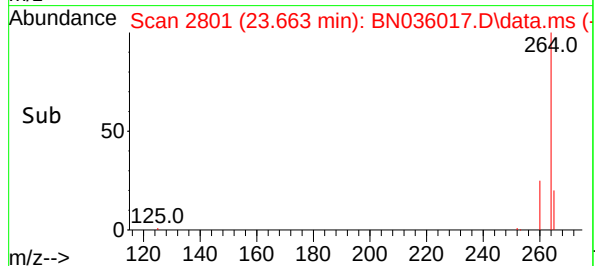
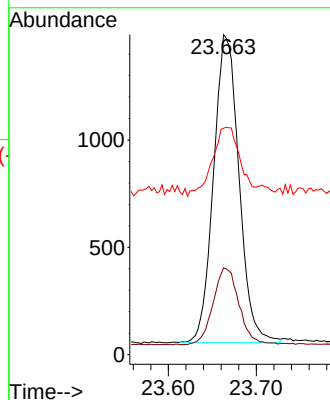
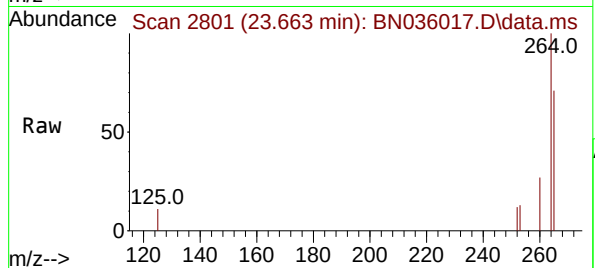




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.663 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN036017.D
Acq: 22 Jan 2025 15:53

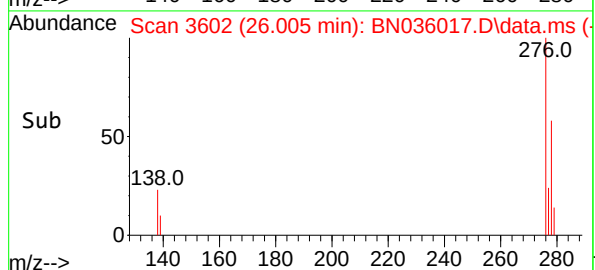
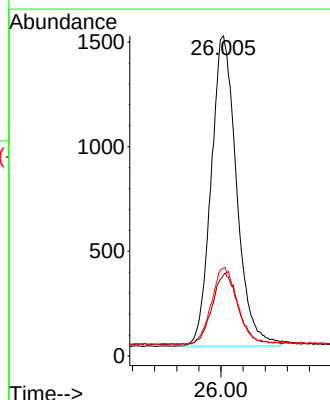
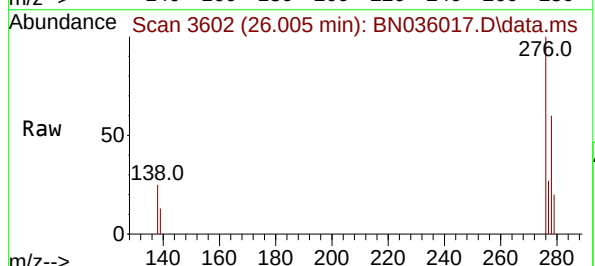
Instrument :
BNA_N
ClientSampleId :
ICVBN012225

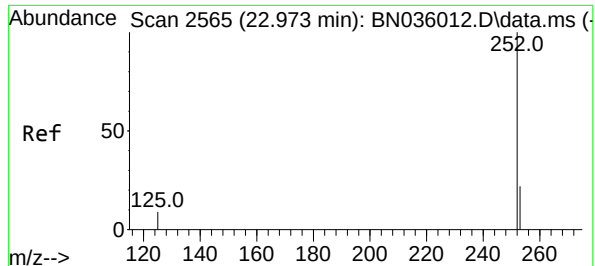
Tgt Ion:264 Resp: 2873
Ion Ratio Lower Upper
264 100
260 27.1 21.8 32.6
265 70.8 56.6 84.8



#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

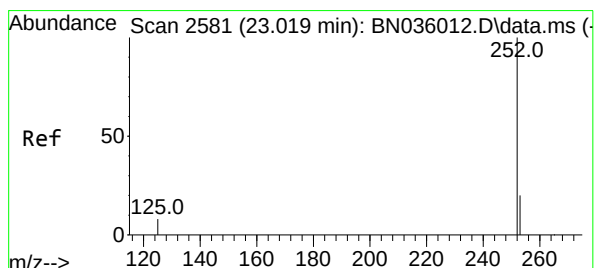
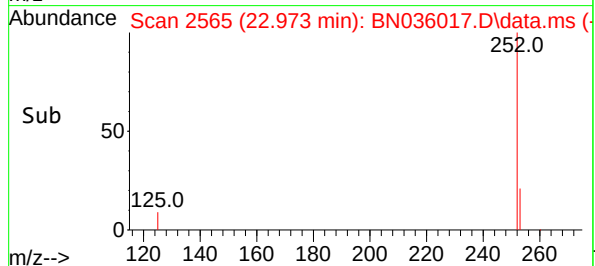
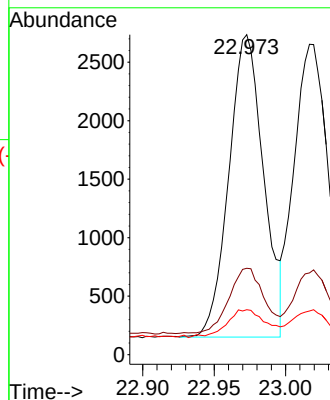
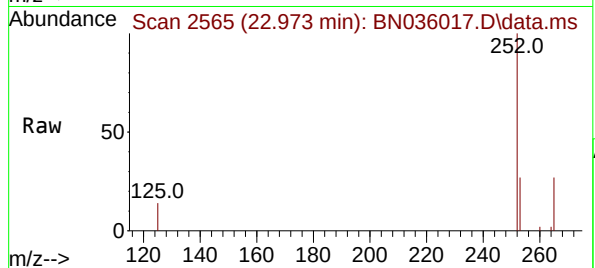
Tgt Ion:252 Resp: 4364

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

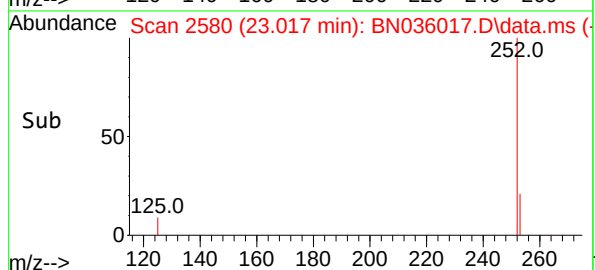
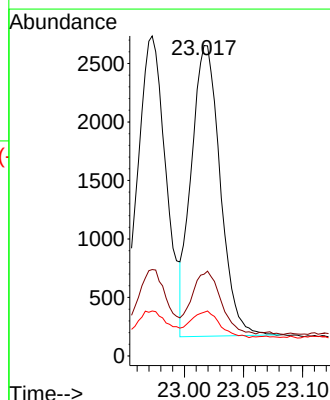
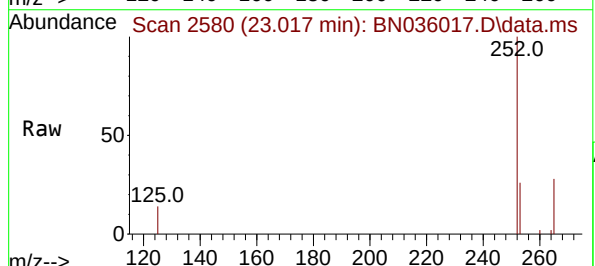
Tgt Ion:252 Resp: 4219

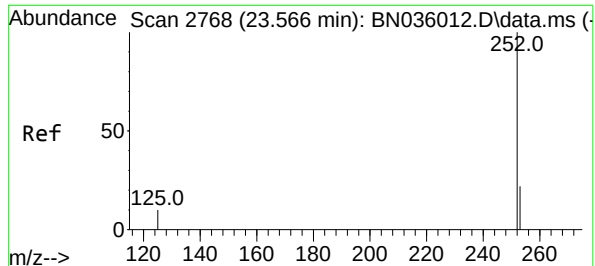
Ion Ratio Lower Upper

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

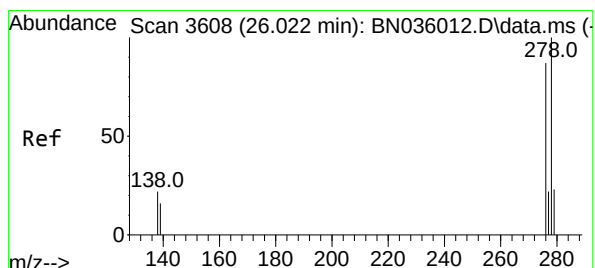
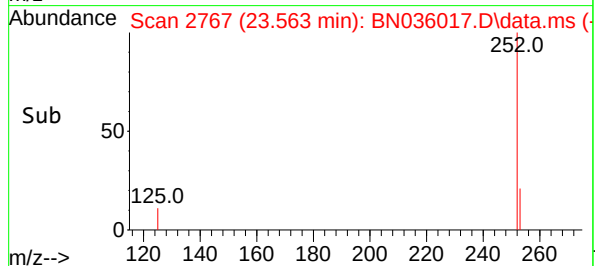
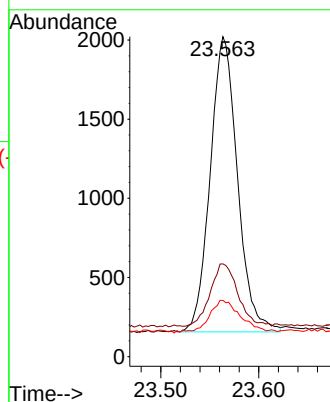
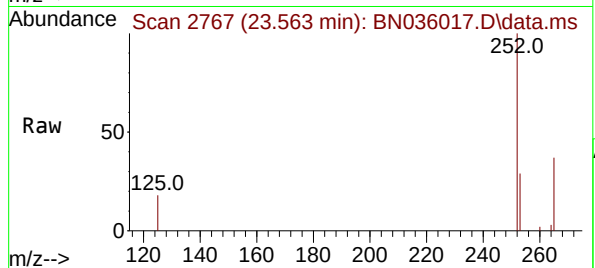
Tgt Ion:252 Resp: 3611

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

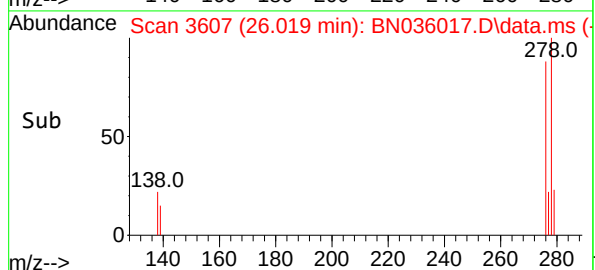
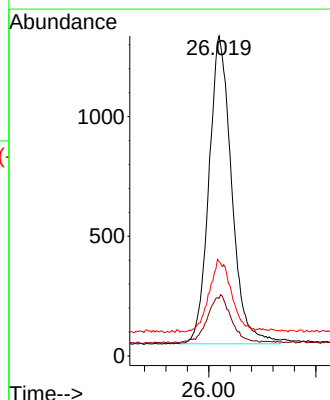
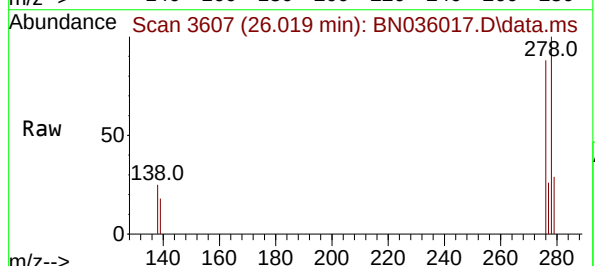
Tgt Ion:278 Resp: 3789

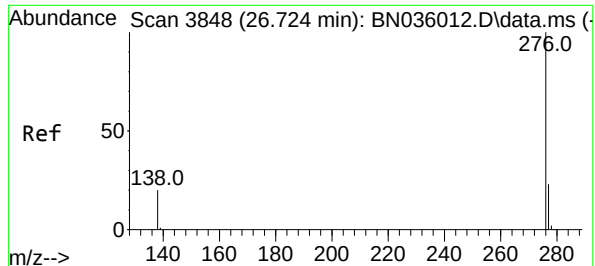
Ion Ratio Lower Upper

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

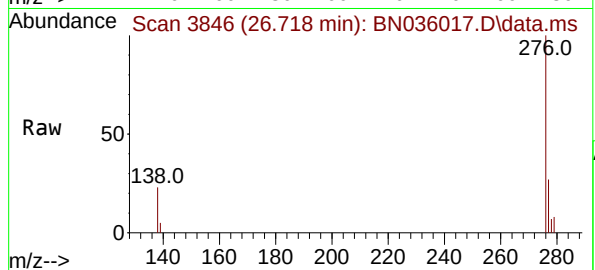
Acq: 22 Jan 2025 15:53

Instrument :

BNA_N

ClientSampleId :

ICVBN012225



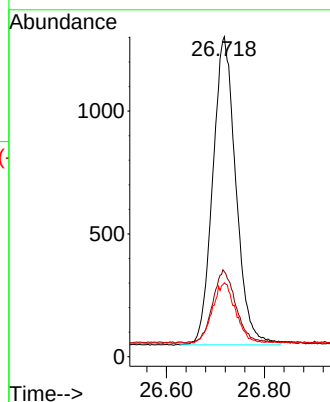
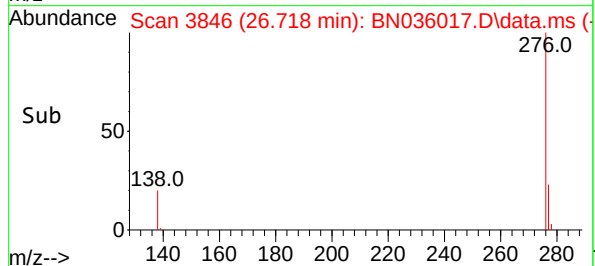
Tgt Ion:276 Resp: 4102

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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

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)

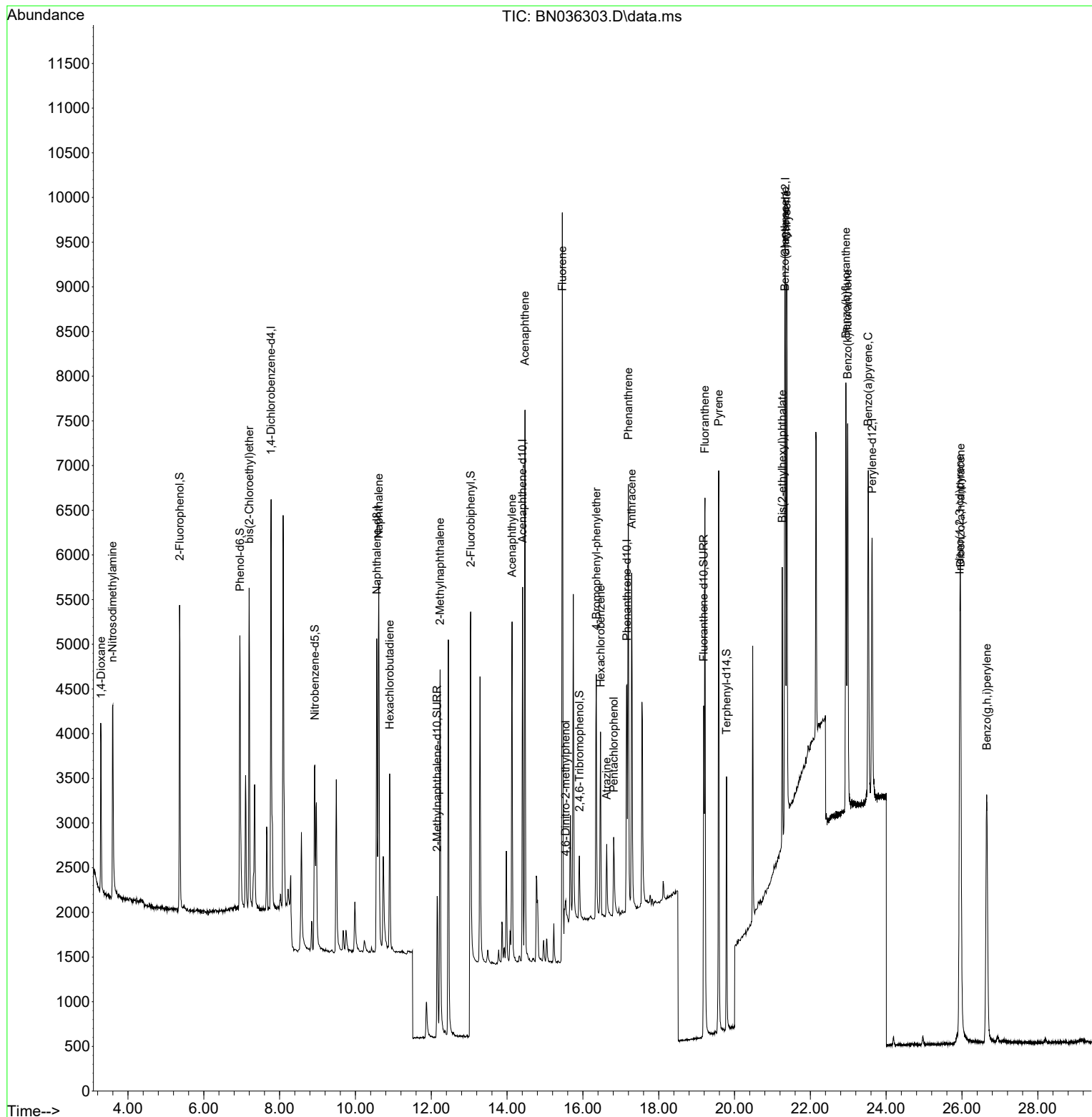
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2214	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4864	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2378	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4362	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	3774	0.400	ng	# 0.00
35) Perylene-d12	23.628	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						Qvalue
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

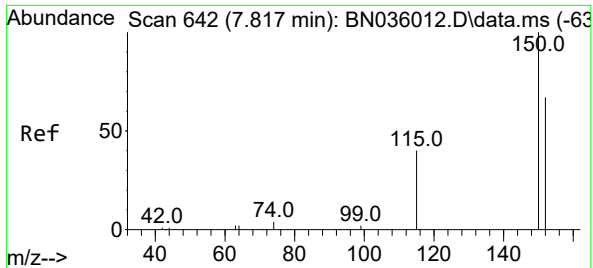
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

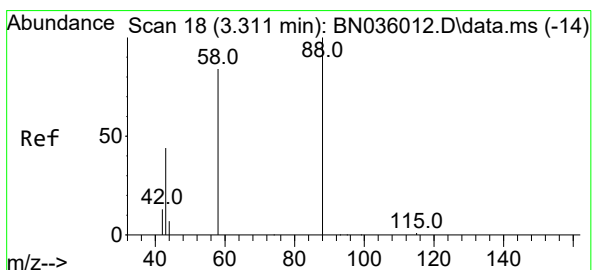
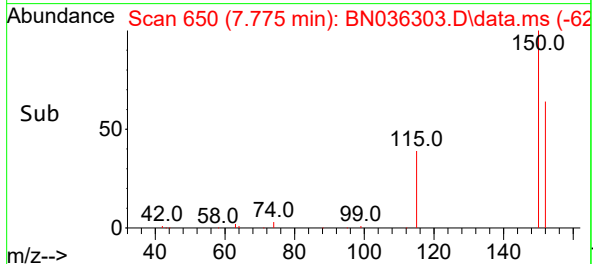
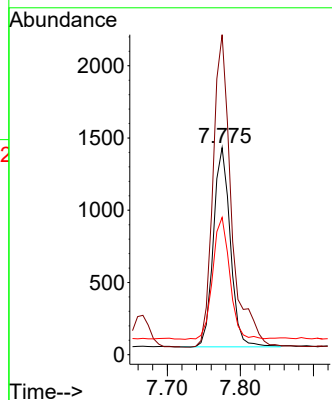
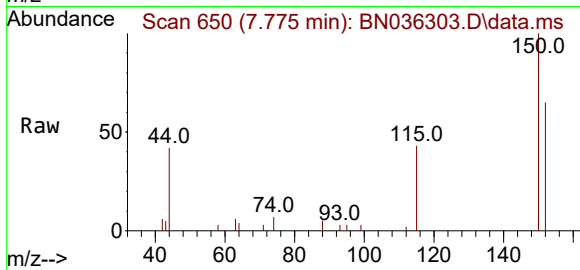




#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 7.775 min Scan# 61
 Delta R.T. 0.000 min
 Lab File: BN036303.D
 Acq: 05 Feb 2025 18:47

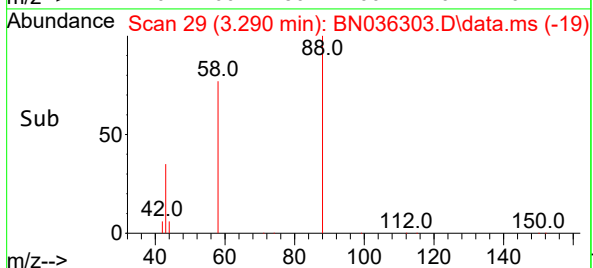
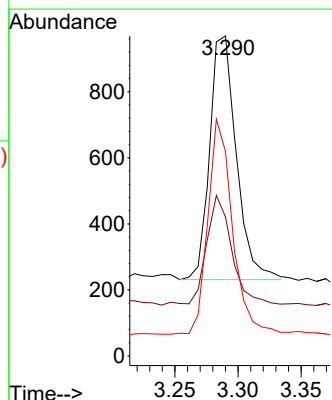
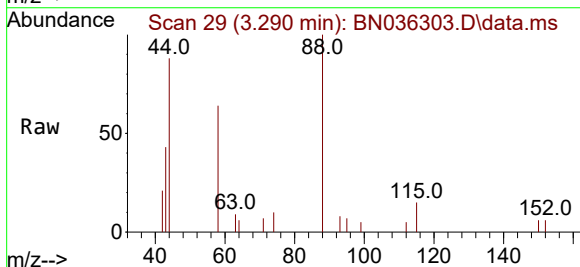
Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4

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

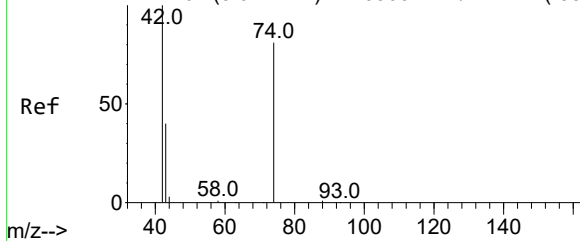


#2
 1,4-Dioxane
 Concen: 0.439 ng
 RT: 3.290 min Scan# 29
 Delta R.T. 0.000 min
 Lab File: BN036303.D
 Acq: 05 Feb 2025 18:47

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

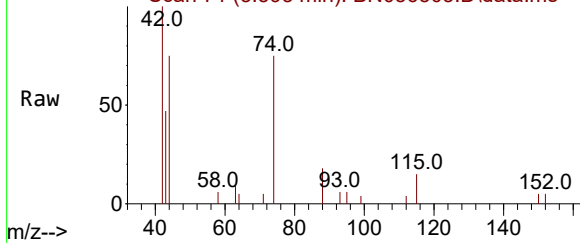
Ion Ratio Lower Upper

42 100

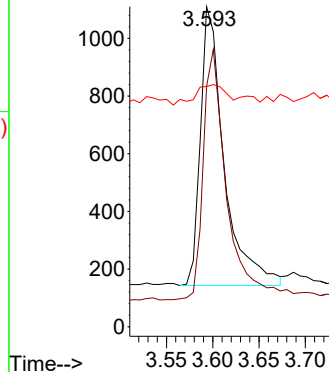
74 91.7 58.1 87.1#

44 9.2 6.2 9.4

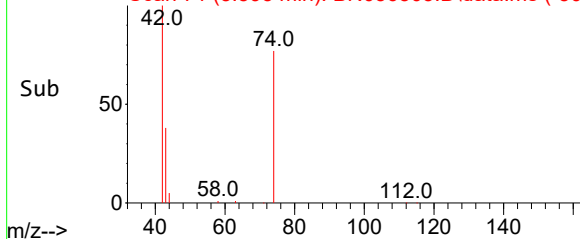
Abundance Scan 71 (3.593 min): BN036303.D\data.ms



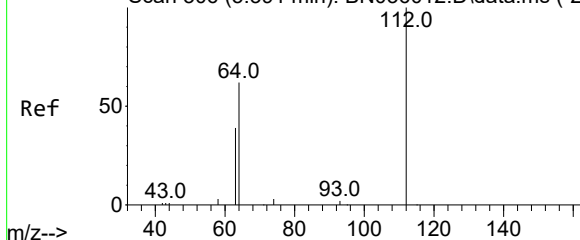
Abundance



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



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

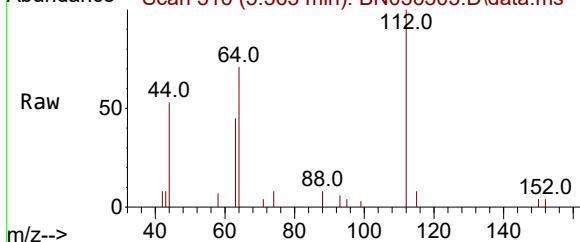
Ion Ratio Lower Upper

112 100

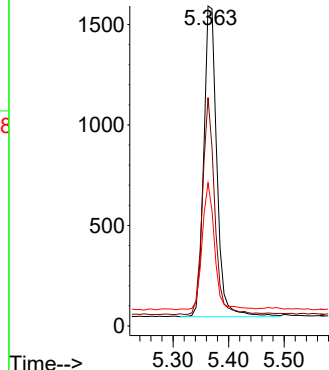
64 65.2 50.0 75.0

63 38.9 30.7 46.1

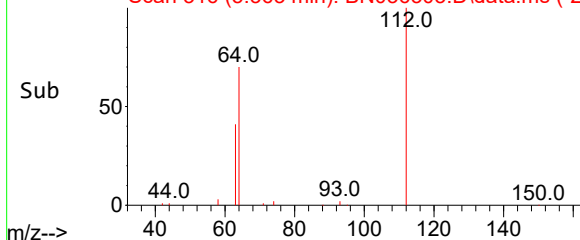
Abundance Scan 316 (5.363 min): BN036303.D\data.ms

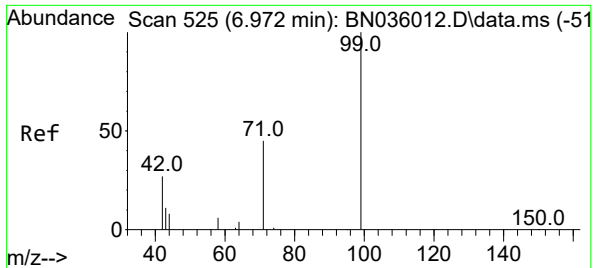


Abundance



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

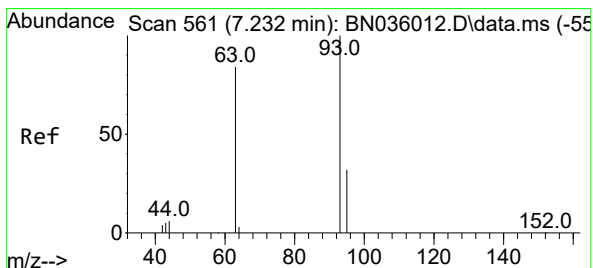
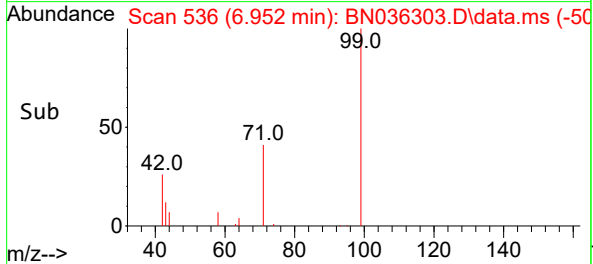
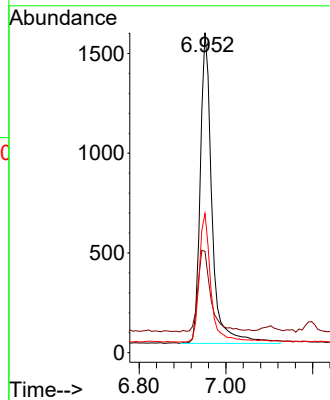
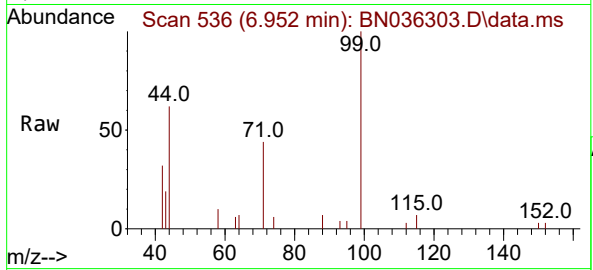




#5
Phenol-d6
Concen: 0.433 ng
RT: 6.952 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

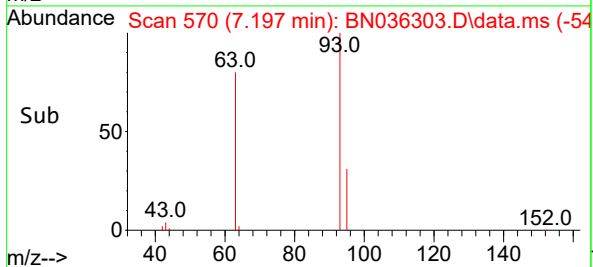
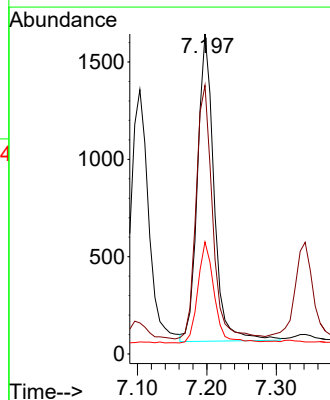
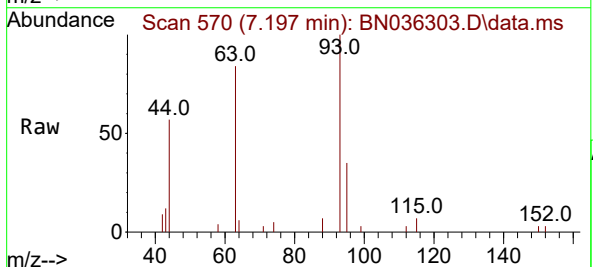
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

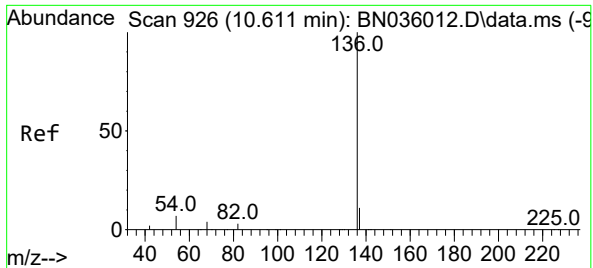
Tgt Ion: 99 Resp: 2931
Ion Ratio Lower Upper
99 100
42 29.3 26.8 40.2
71 40.7 36.6 55.0



#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

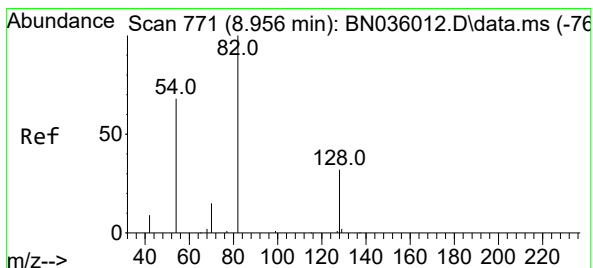
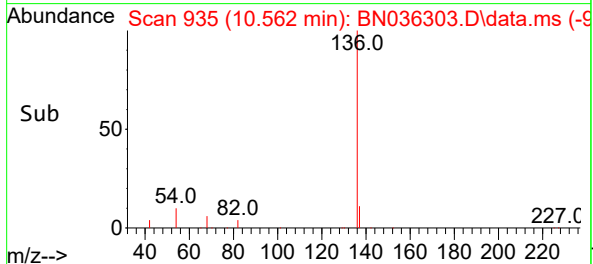
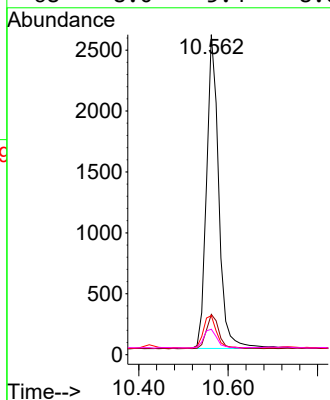
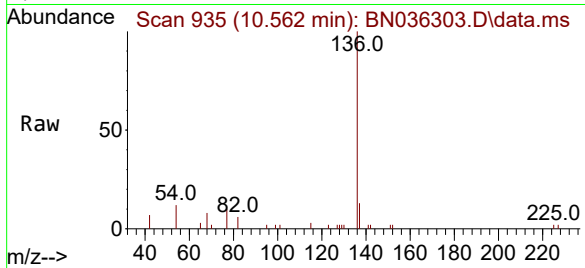




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

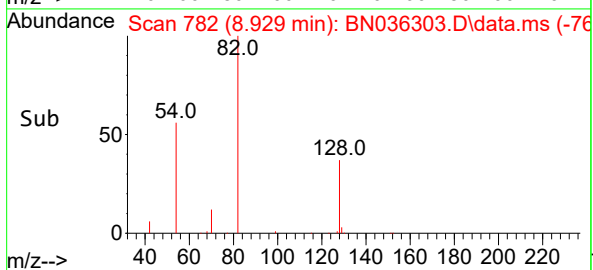
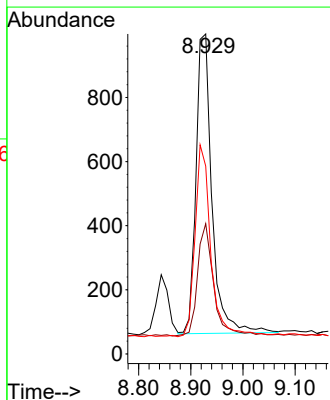
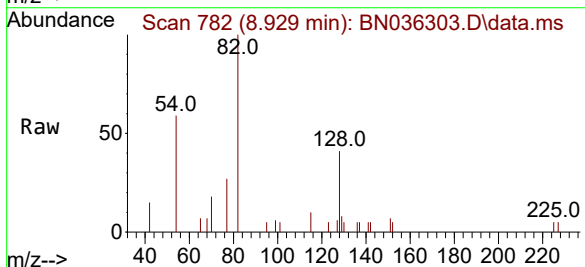
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

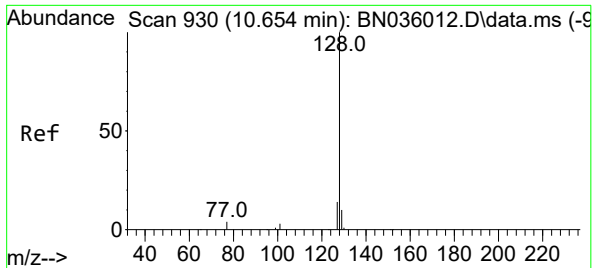
Tgt Ion:	136	Resp:	4864
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.4	15.6
54	12.2	7.7	11.5
68	8.0	5.4	8.0



#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

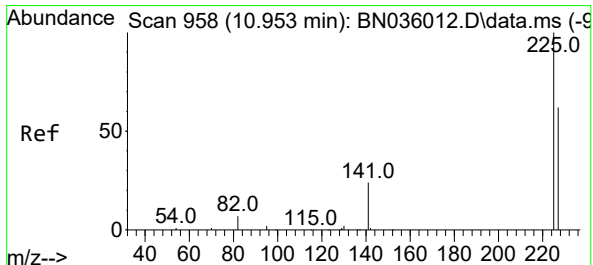
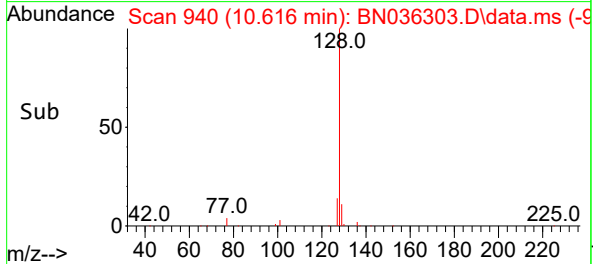
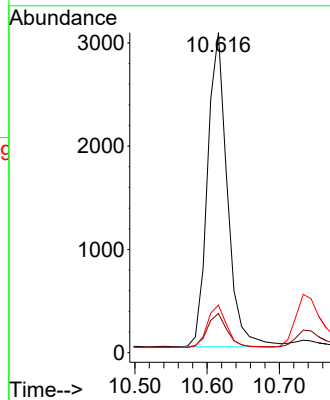
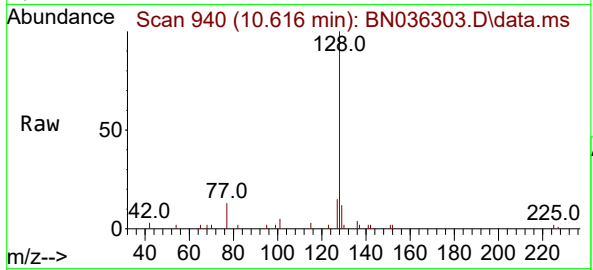




#9
Naphthalene
Concen: 0.409 ng
RT: 10.616 min Scan# 94
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

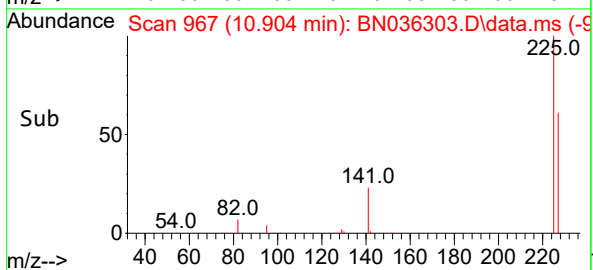
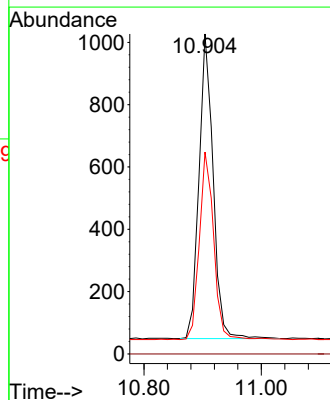
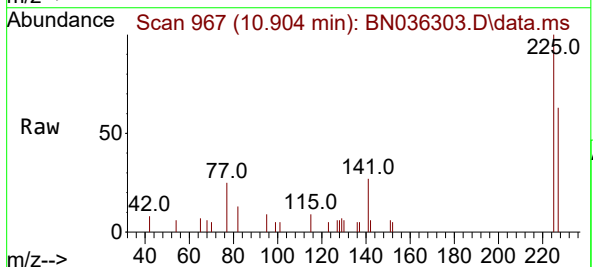
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

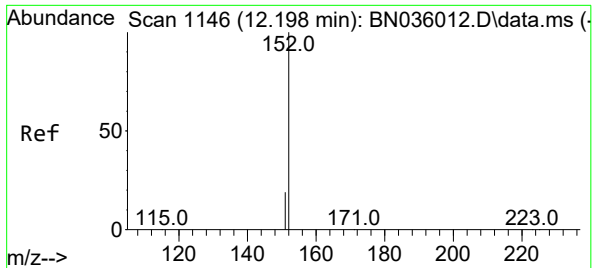
Tgt Ion:128 Resp: 5781
Ion Ratio Lower Upper
128 100
129 12.2 9.4 14.2
127 14.9 12.6 19.0



#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

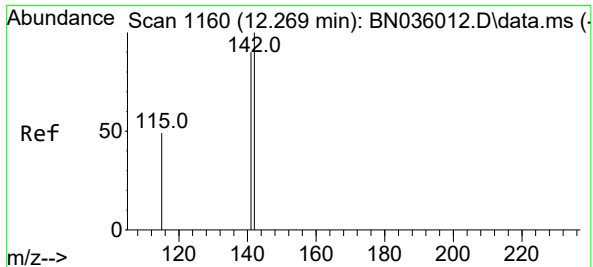
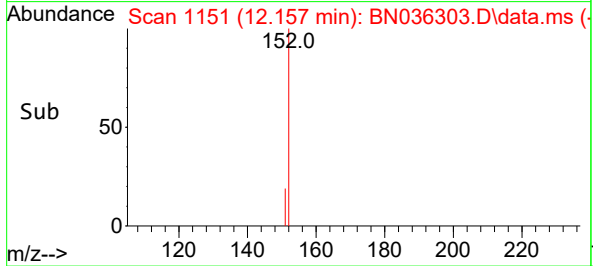
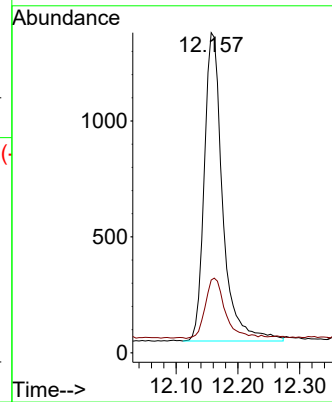
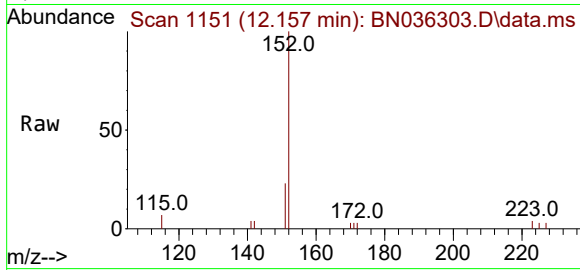




#11
2-Methylnaphthalene-d10
Concen: 0.416 ng
RT: 12.157 min Scan# 1151
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

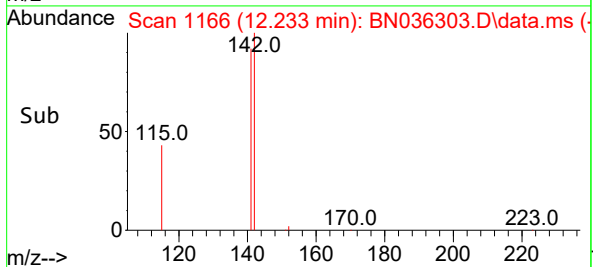
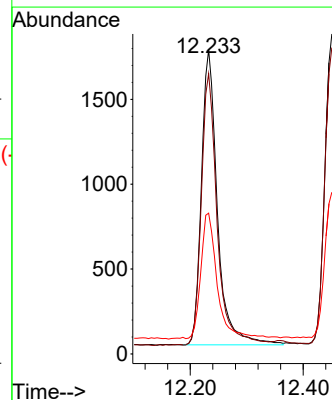
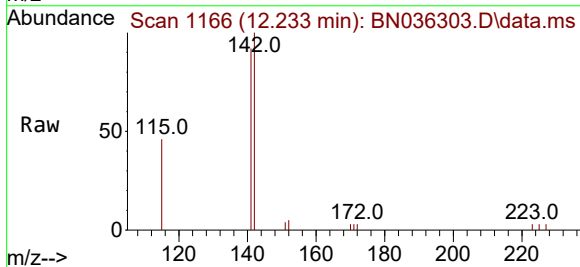
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

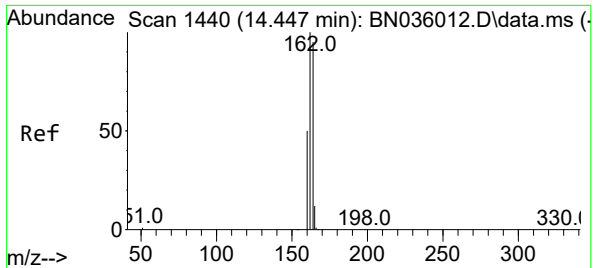
Tgt Ion:152 Resp: 2748
Ion Ratio Lower Upper
152 100
151 21.1 16.6 25.0



#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

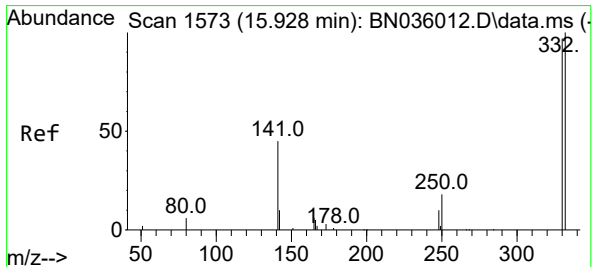
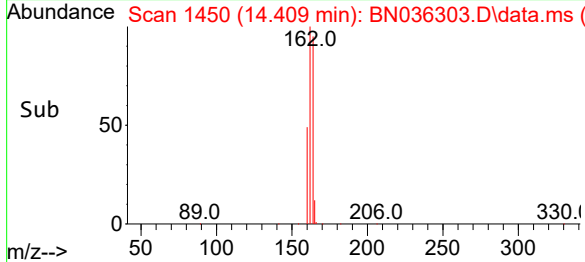
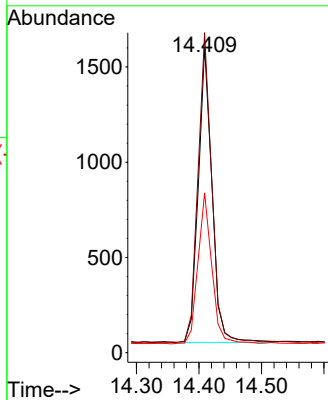
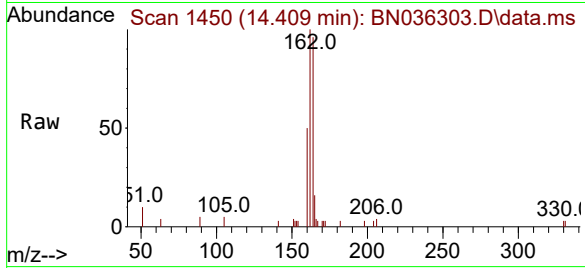




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

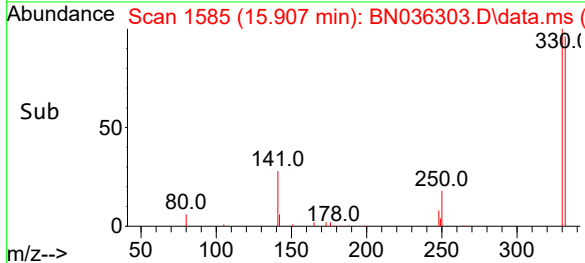
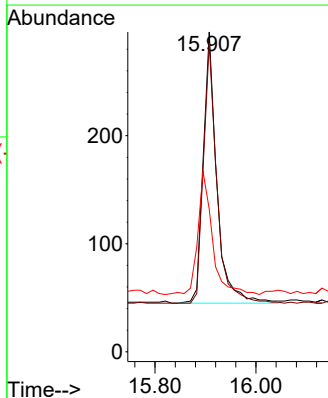
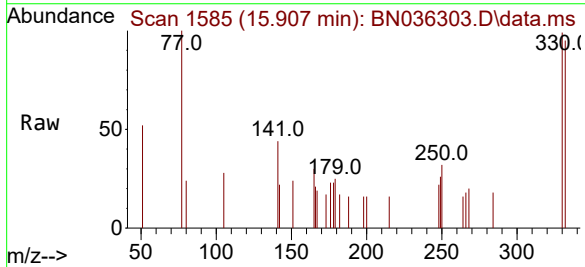
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

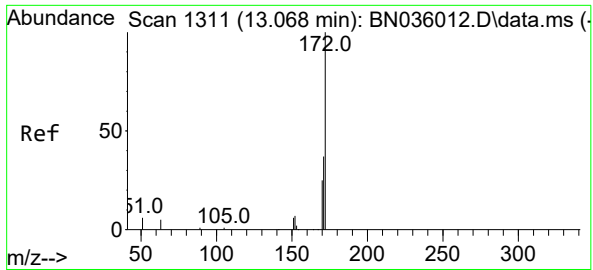
Tgt Ion:164 Resp: 2378
Ion Ratio Lower Upper
164 100
162 104.7 84.1 126.1
160 52.3 43.8 65.8



#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

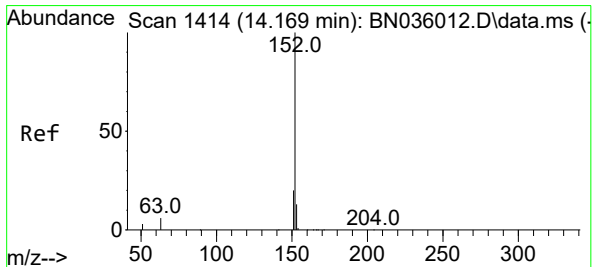
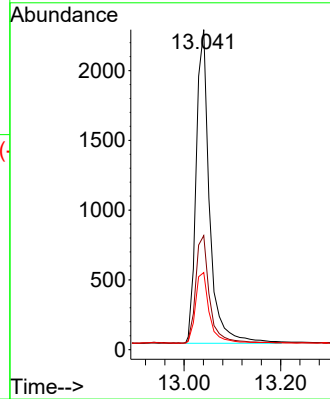
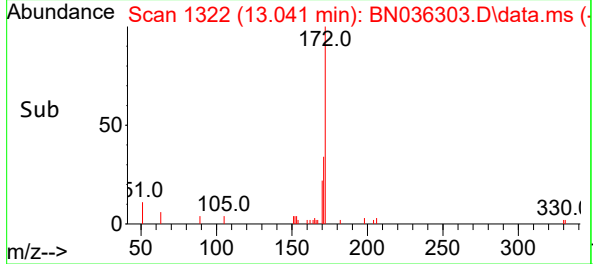
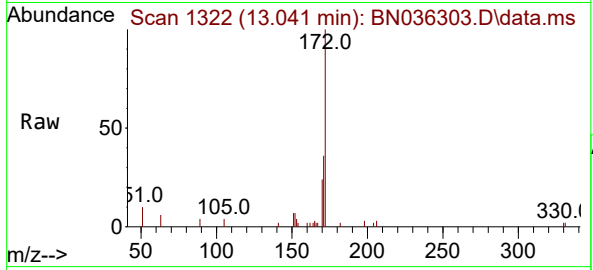




#15
2-Fluorobiphenyl
Concen: 0.379 ng
RT: 13.041 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

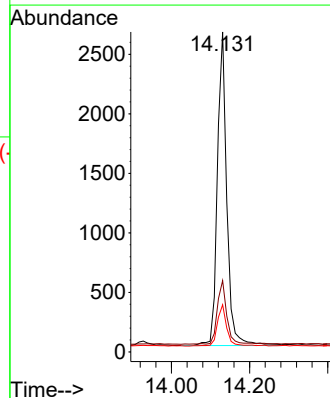
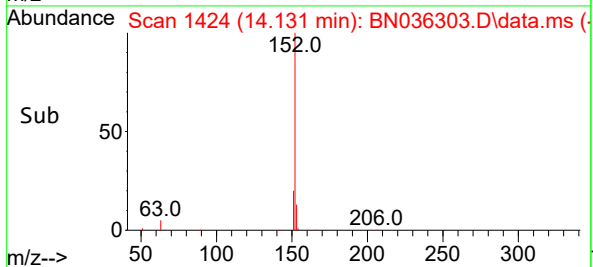
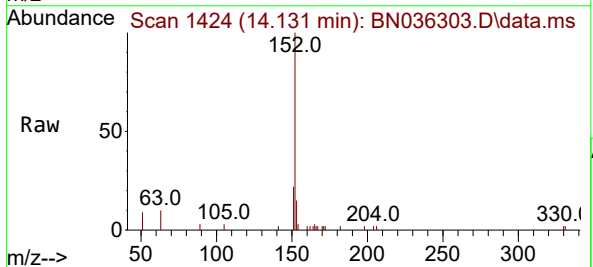
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

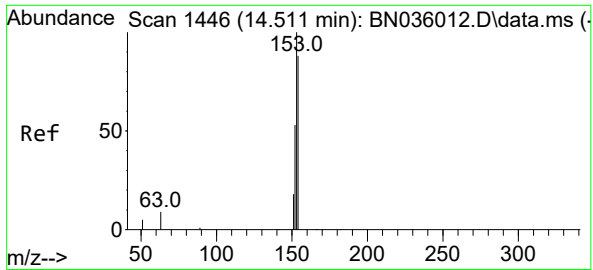
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.6	30.9	46.3
170	24.1	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	20.9	16.2	24.2
153	13.5	10.4	15.6

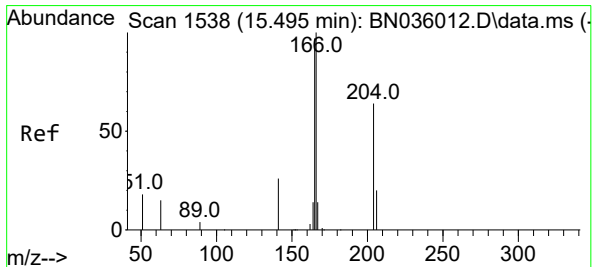
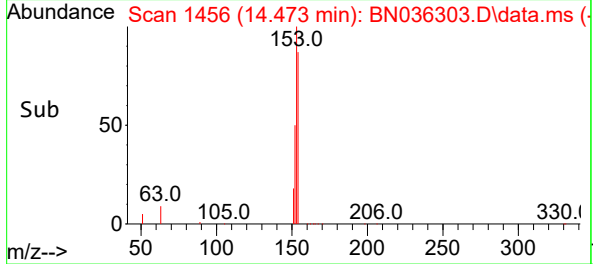
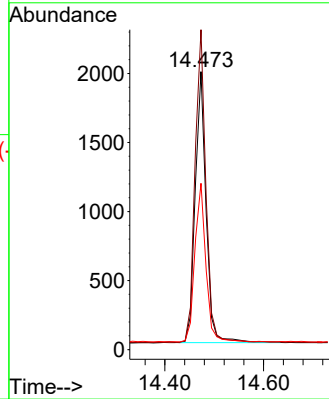
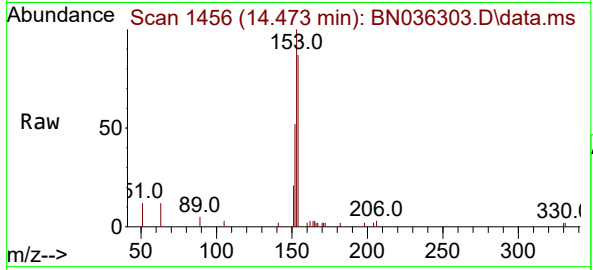




#17
Acenaphthene
Concen: 0.388 ng
RT: 14.473 min Scan# 1446
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

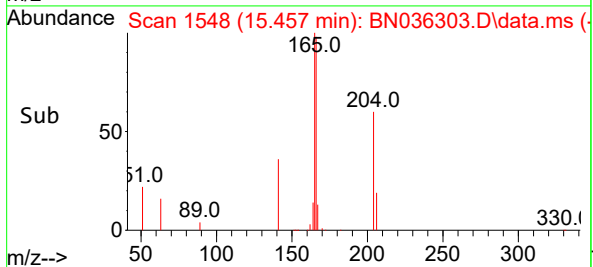
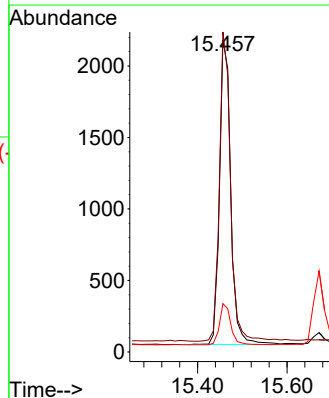
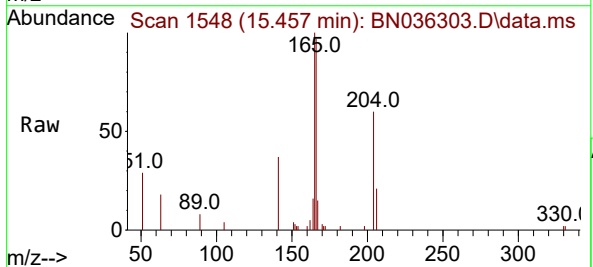
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

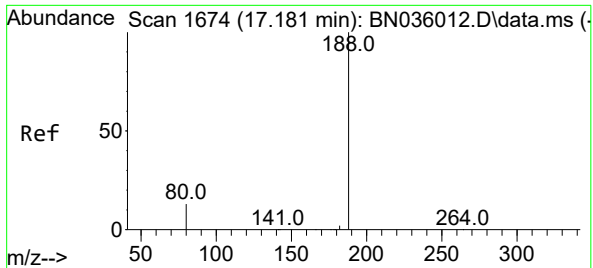
Tgt Ion:154 Resp: 2998
Ion Ratio Lower Upper
154 100
153 115.8 88.9 133.3
152 58.9 48.1 72.1



#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

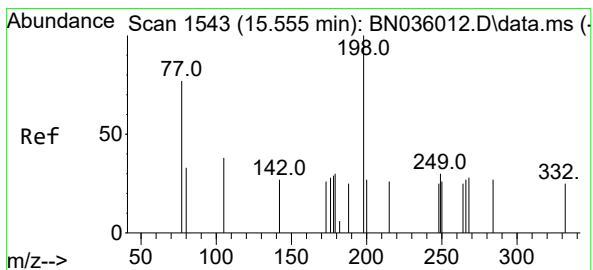
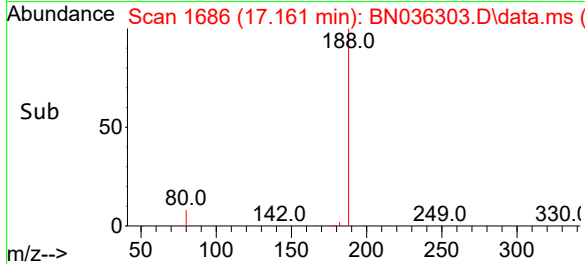
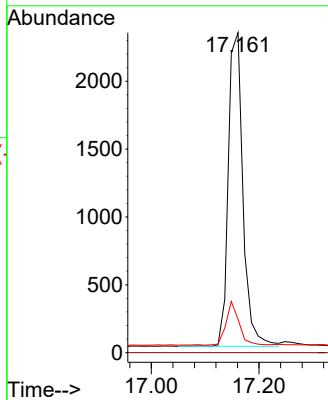
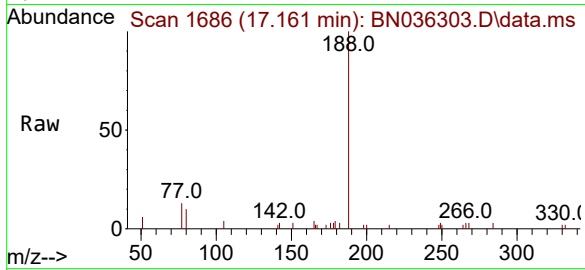




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1674
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

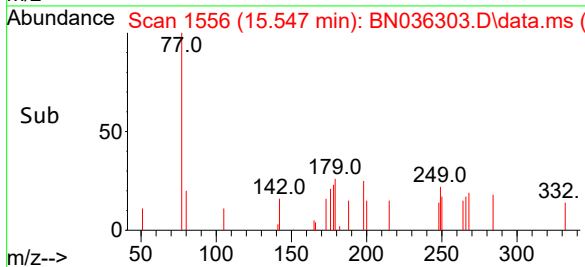
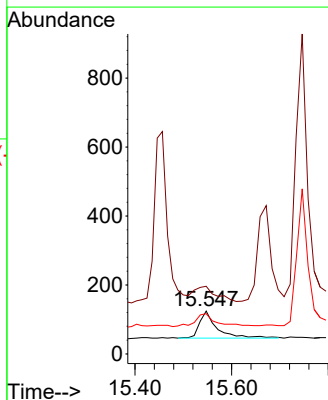
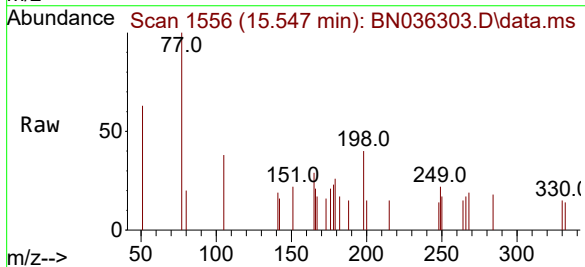
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

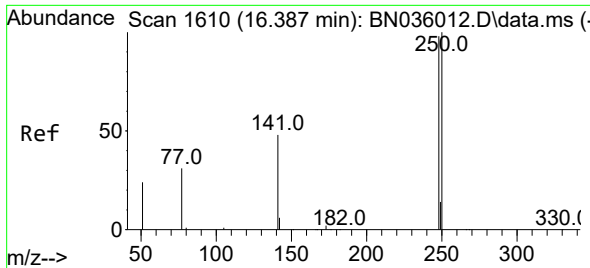
Tgt Ion:188 Resp: 4362
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.4 12.3 18.5#



#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

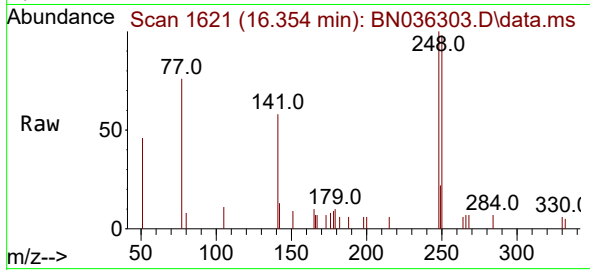
Tgt Ion:198 Resp: 193
Ion Ratio Lower Upper
198 100
51 158.1 68.1 102.1#
105 94.4 46.5 69.7#



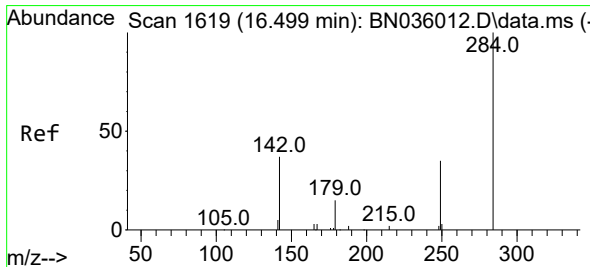
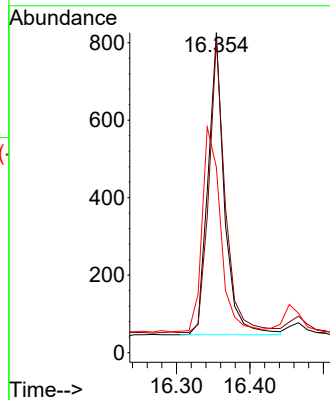
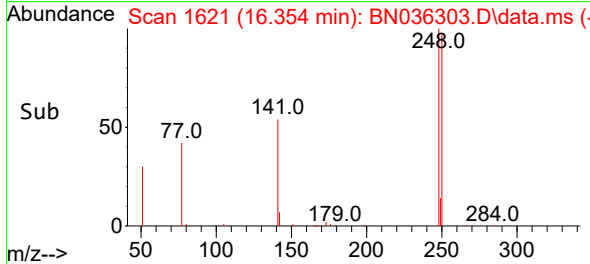


#21
4-Bromophenyl-phenylether
Concen: 0.387 ng
RT: 16.354 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

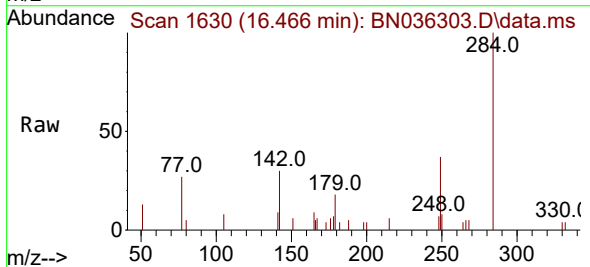
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4



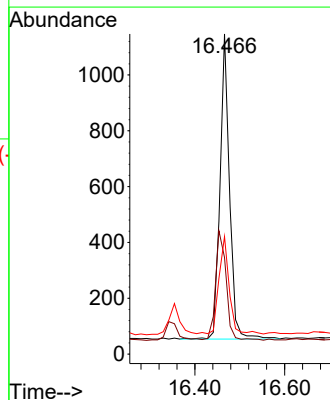
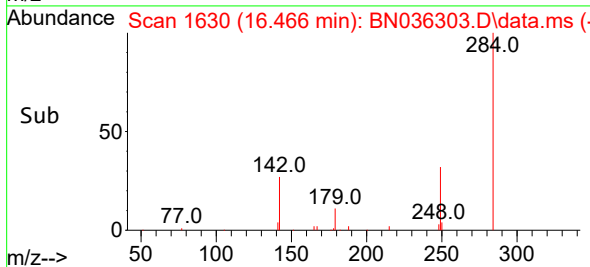
Tgt Ion	Ratio	Lower	Upper
248	100		
250	97.8	81.5	122.3
141	58.0	41.8	62.6

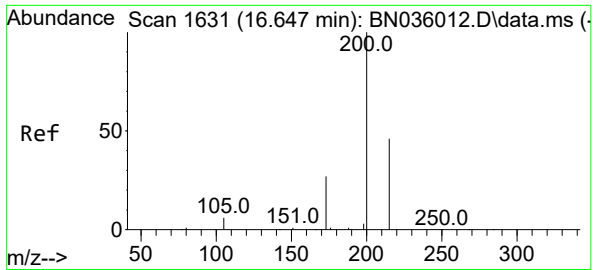


#22
Hexachlorobenzene
Concen: 0.393 ng
RT: 16.466 min Scan# 1630
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47



Tgt Ion	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# 1

Delta R.T. 0.000 min

Lab File: BN036303.D

Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

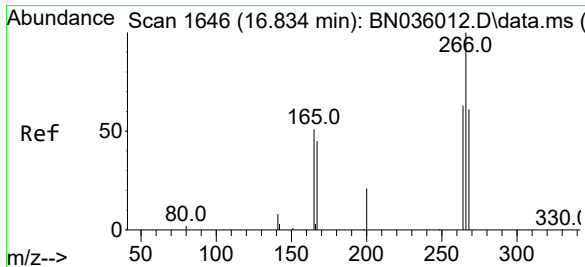
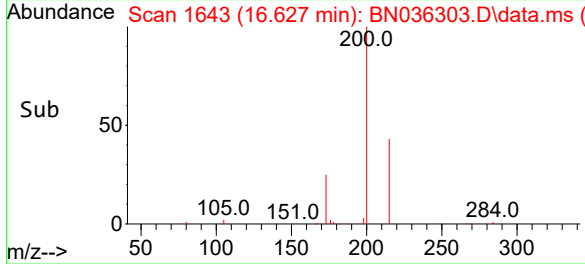
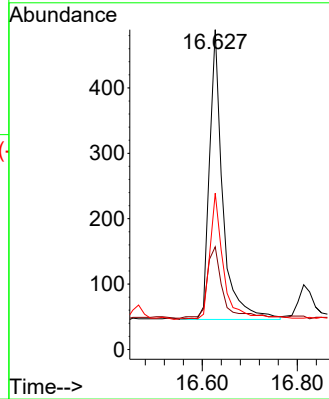
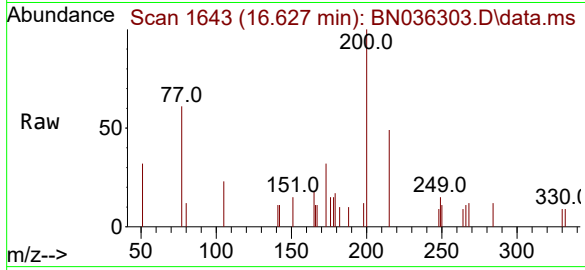
Tgt Ion:200 Resp: 859

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

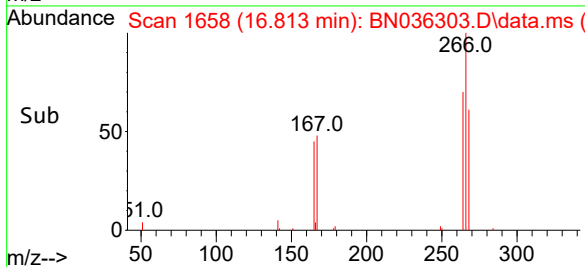
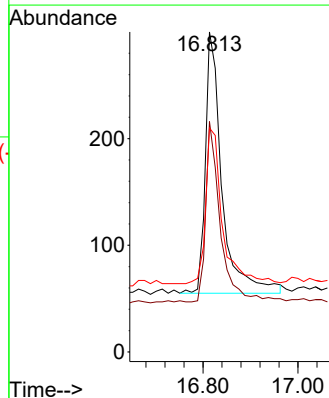
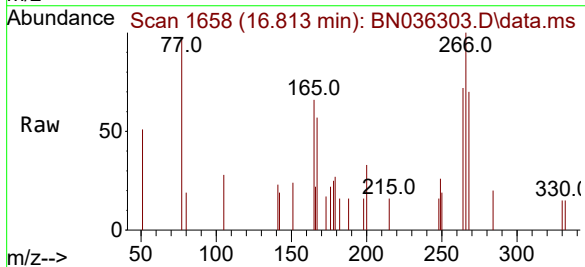
Tgt Ion:266 Resp: 597

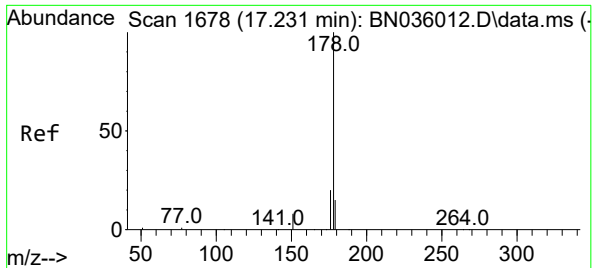
Ion Ratio Lower Upper

266 100

264 60.0 48.2 72.2

268 61.0 51.6 77.4

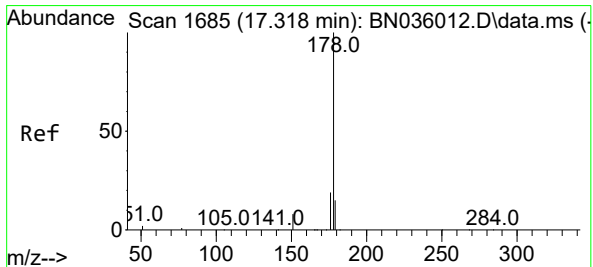
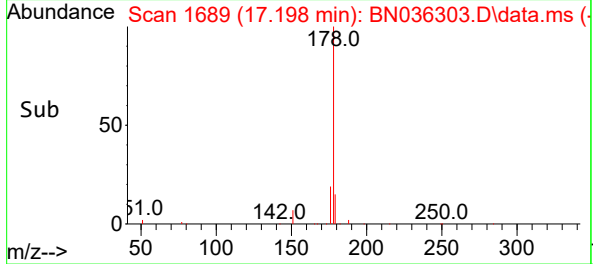
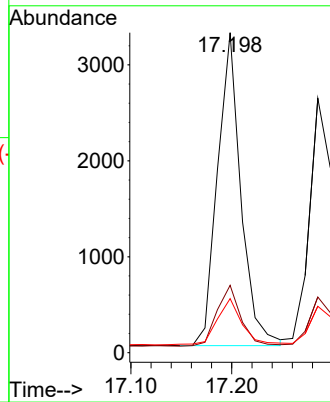
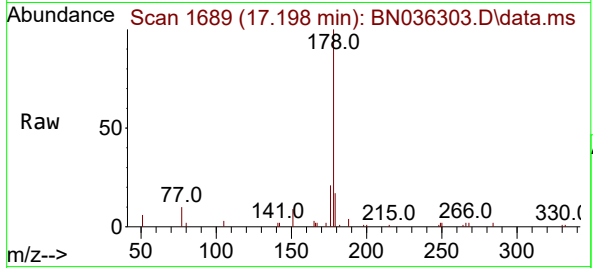




#25
Phenanthrene
Concen: 0.400 ng
RT: 17.198 min Scan# 1689
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

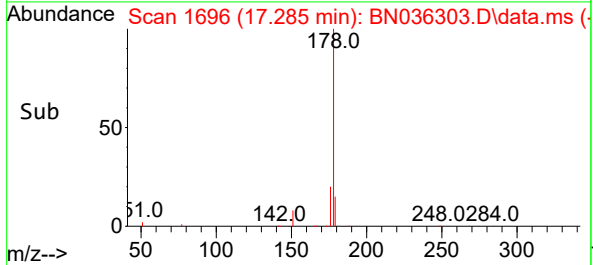
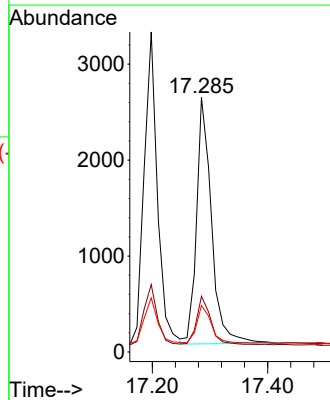
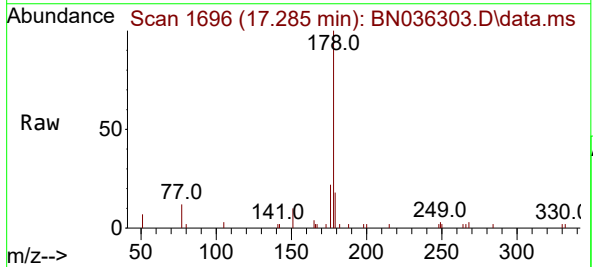
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

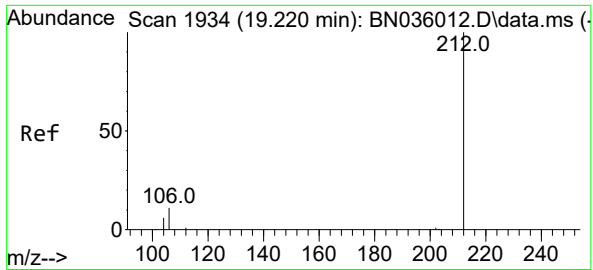
Tgt Ion:178 Resp: 5245
Ion Ratio Lower Upper
178 100
176 19.8 16.0 24.0
179 15.7 12.4 18.6



#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

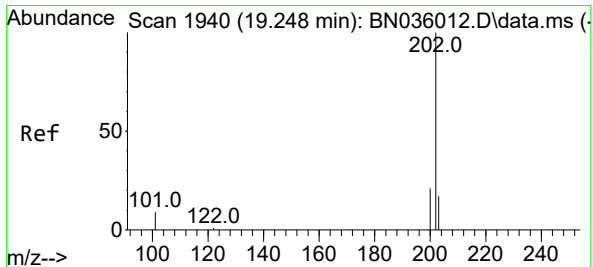
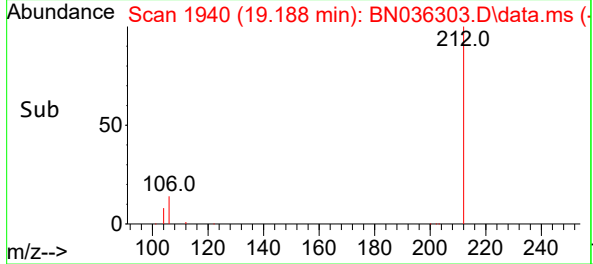
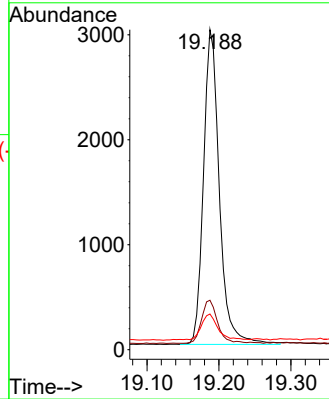
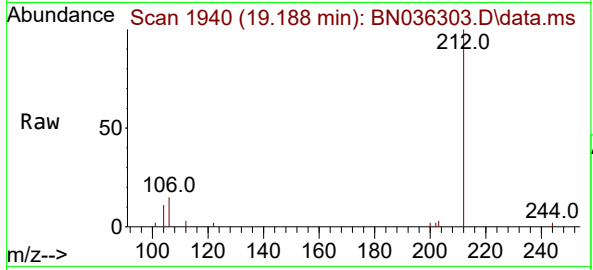




#27
Fluoranthene-d10
Concen: 0.406 ng
RT: 19.188 min Scan# 1940
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

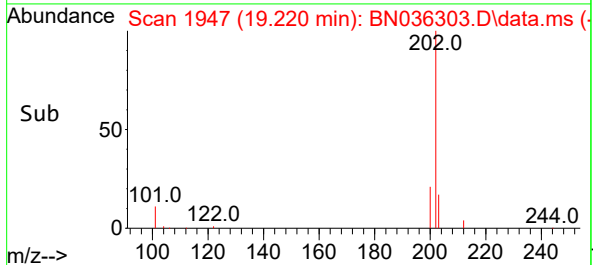
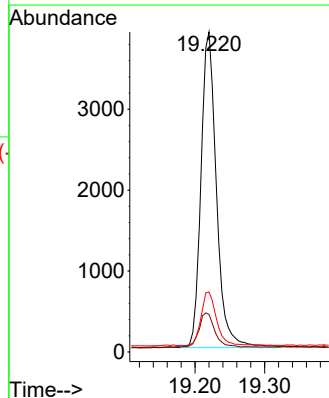
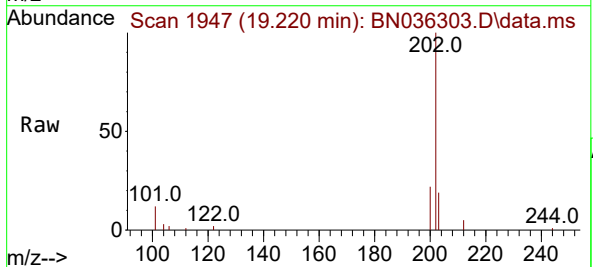
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

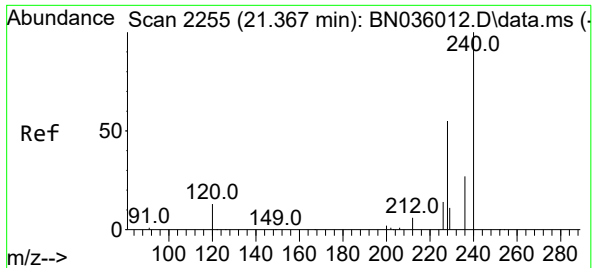
Tgt Ion:212 Resp: 4587
Ion Ratio Lower Upper
212 100
106 13.8 9.7 14.5
104 8.5 6.0 9.0



#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

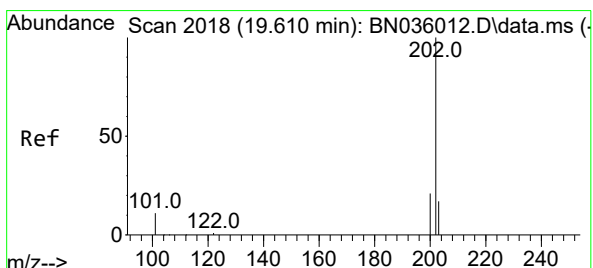
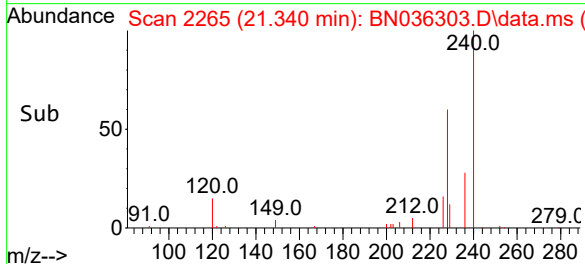
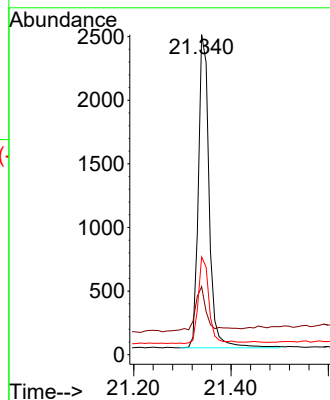
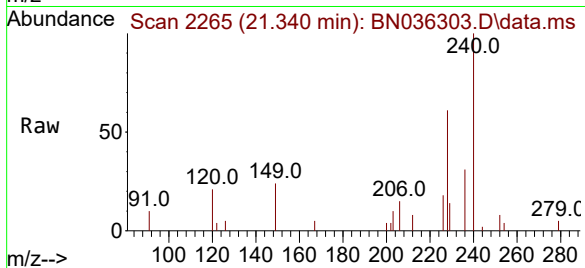
Tgt Ion:240 Resp: 3774

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

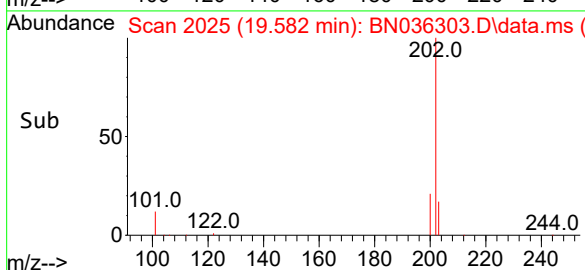
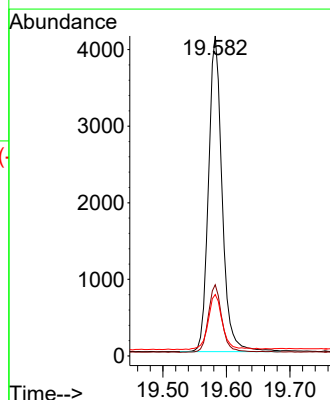
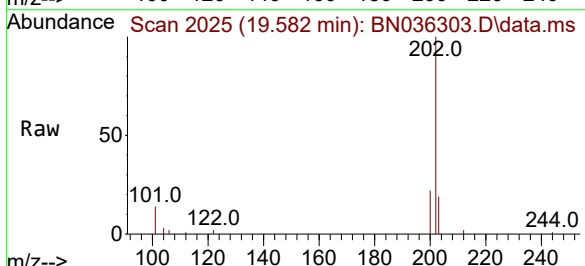
Tgt Ion:202 Resp: 6158

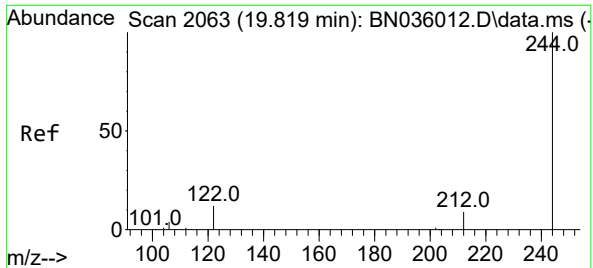
Ion Ratio Lower Upper

202 100

200 21.2 17.0 25.4

203 18.2 14.4 21.6

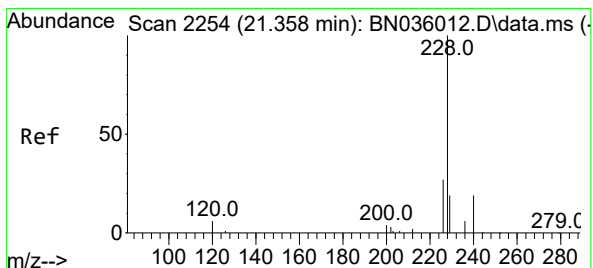
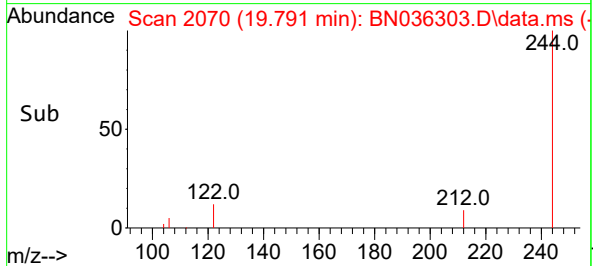
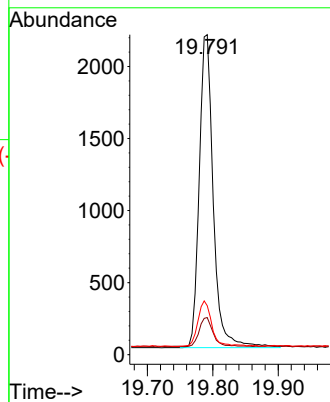
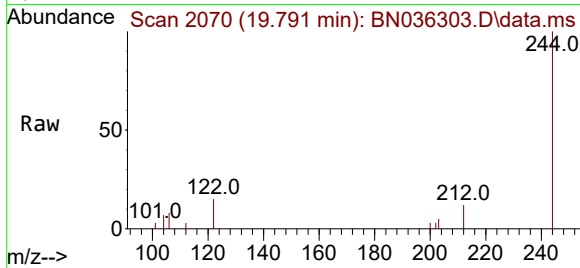




#31
Terphenyl-d14
Concen: 0.414 ng
RT: 19.791 min Scan# 2063
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

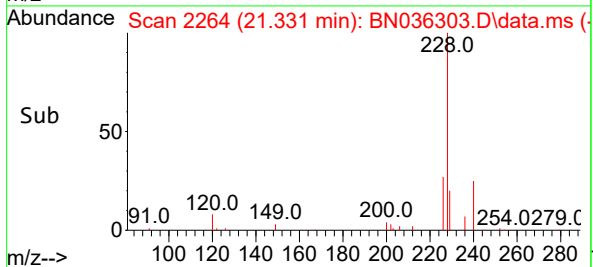
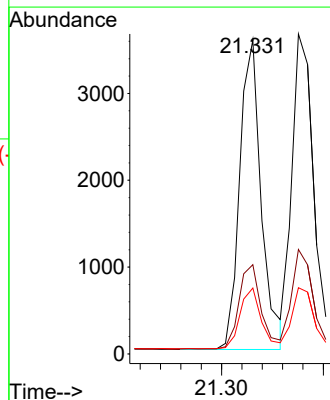
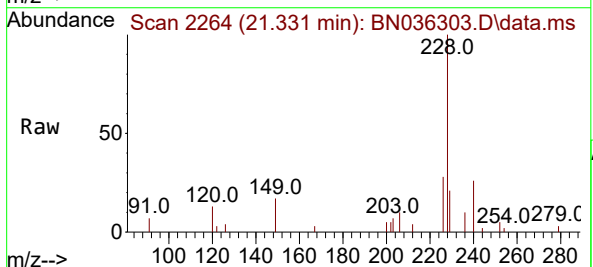
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

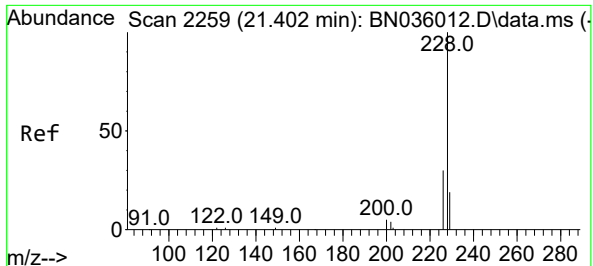
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.6	9.1	13.7
122	15.3	11.3	16.9



#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

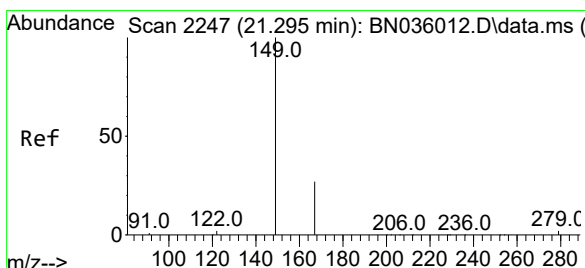
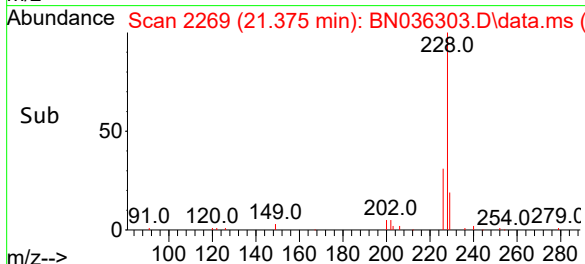
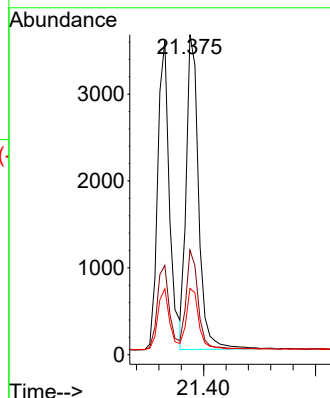
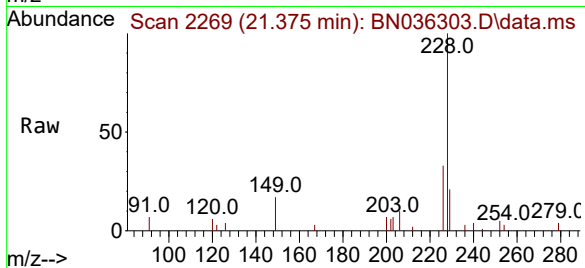
Tgt Ion:228 Resp: 5571

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

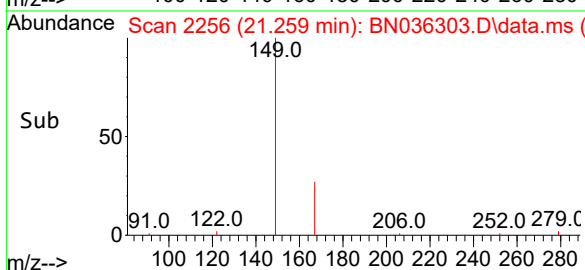
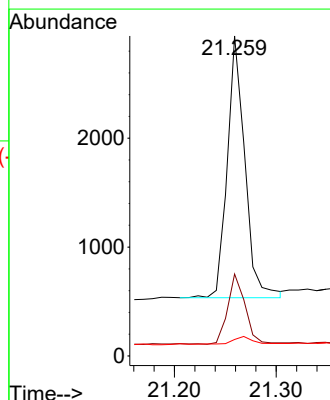
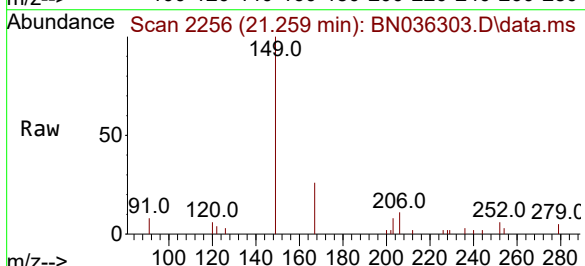
Tgt Ion:149 Resp: 2887

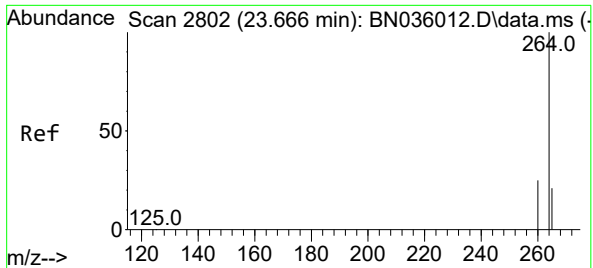
Ion Ratio Lower Upper

149 100

167 26.7 21.9 32.9

279 3.2 3.0 4.6

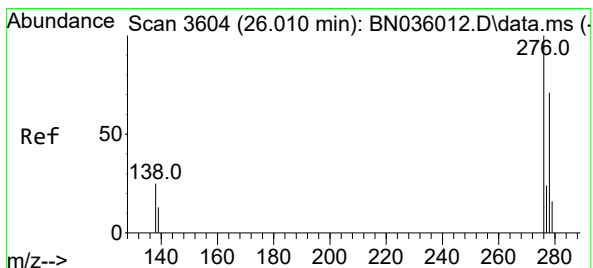
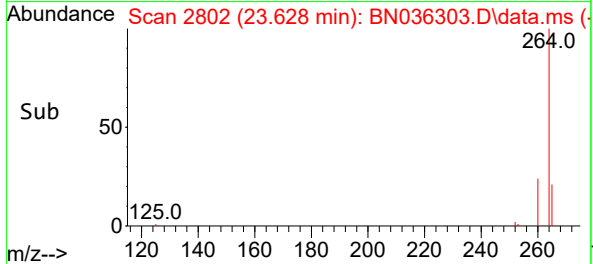
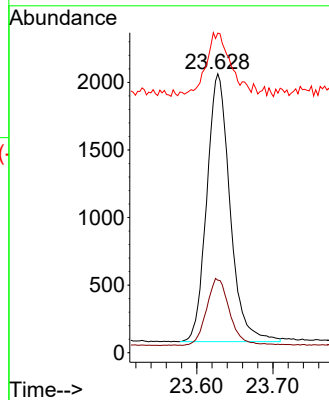
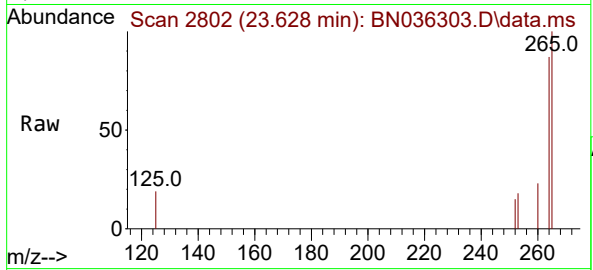




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.628 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

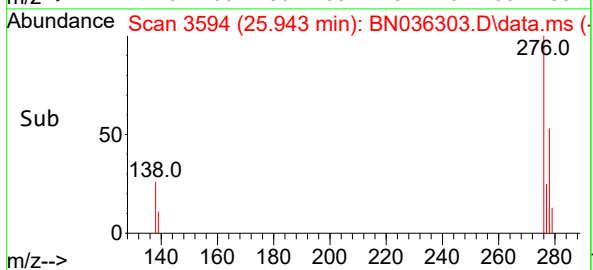
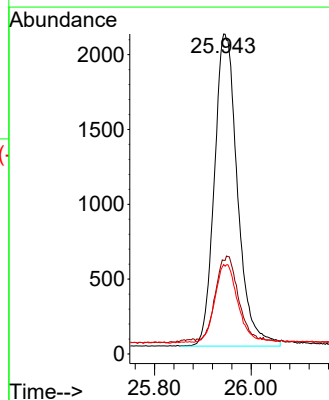
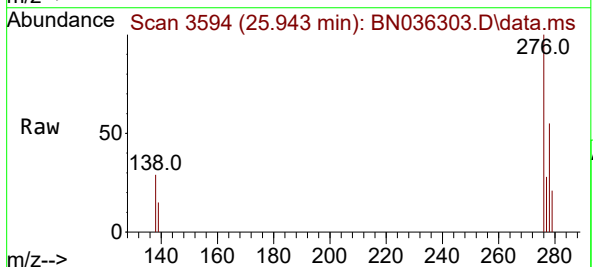
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

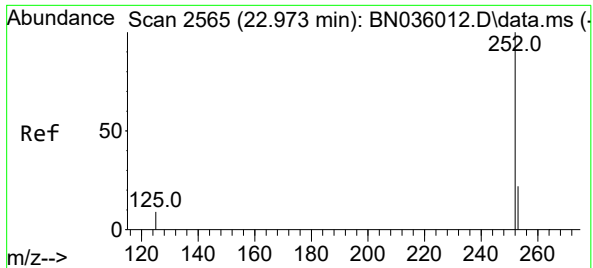
Tgt Ion:264 Resp: 4195
Ion Ratio Lower Upper
264 100
260 26.0 21.8 32.6
265 114.5 56.6 84.8#



#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

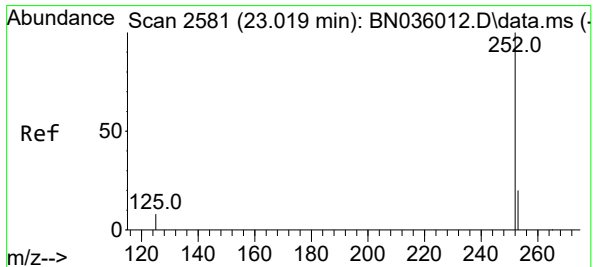
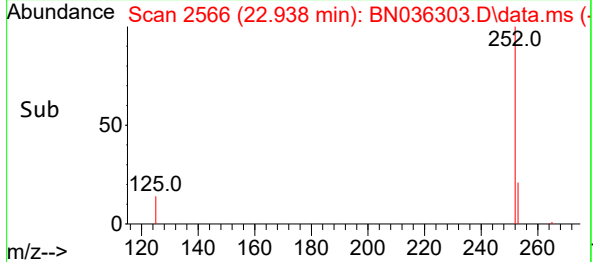
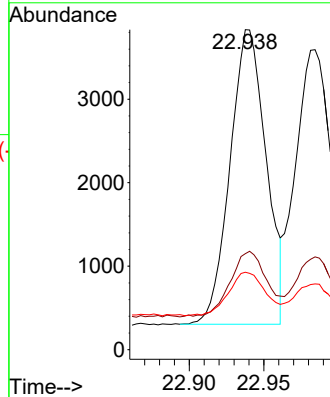
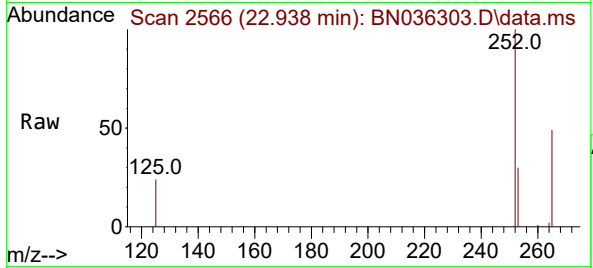




#37
Benzo(b)fluoranthene
Concen: 0.390 ng
RT: 22.938 min Scan# 2566
Delta R.T. 0.000 min
Lab File: BN036303.D
Acq: 05 Feb 2025 18:47

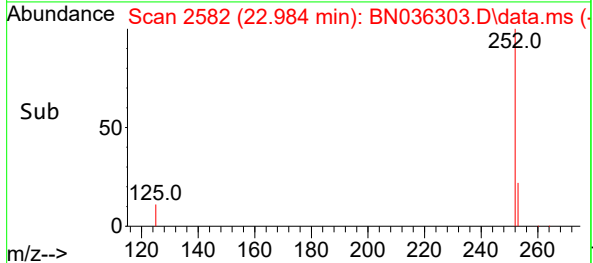
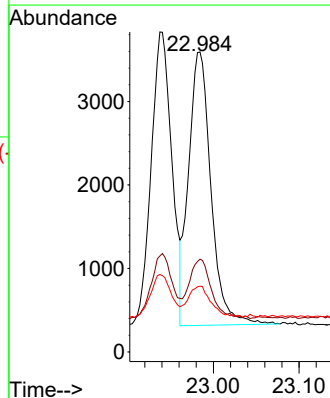
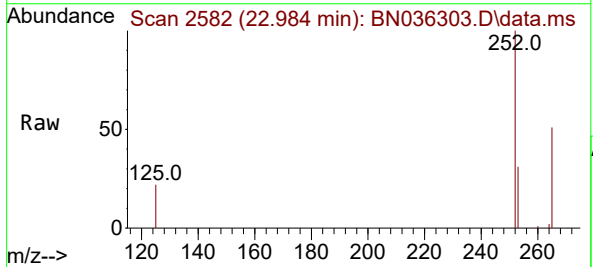
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

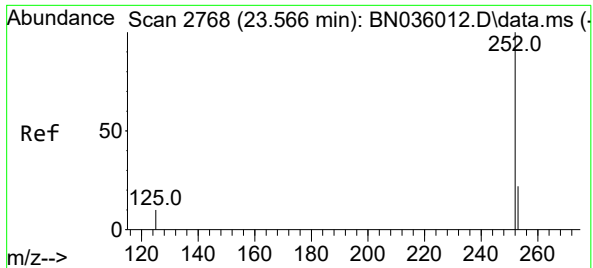
Tgt Ion:252 Resp: 5941
Ion Ratio Lower Upper
252 100
253 30.0 22.5 33.7
125 24.2 11.9 17.9#



#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

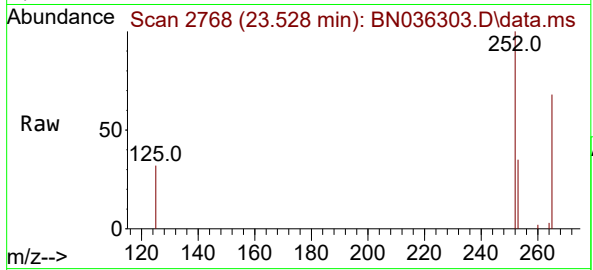
Acq: 05 Feb 2025 18:47

Instrument :

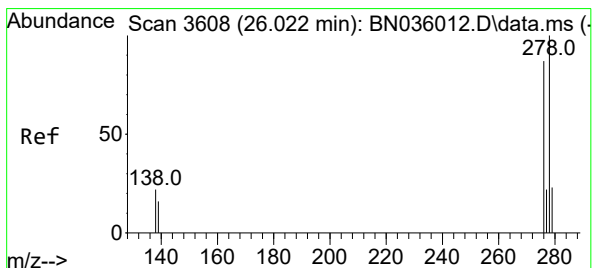
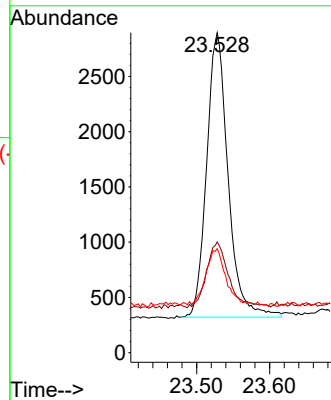
BNA_N

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

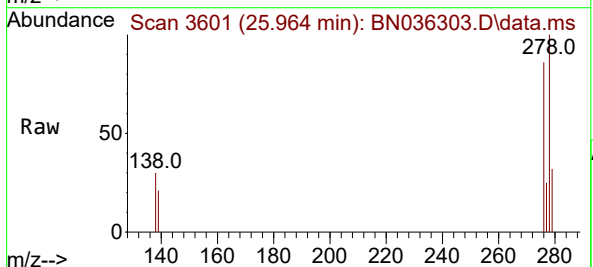
Concen: 0.408 ng

RT: 25.964 min Scan# 3601

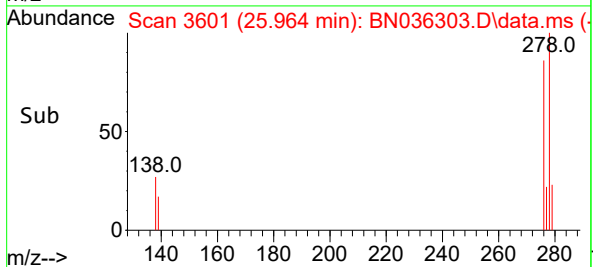
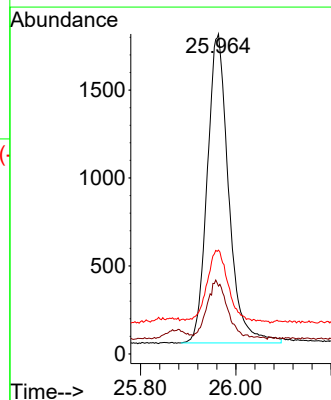
Delta R.T. 0.000 min

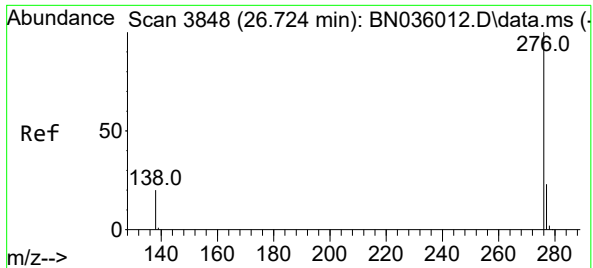
Lab File: BN036303.D

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

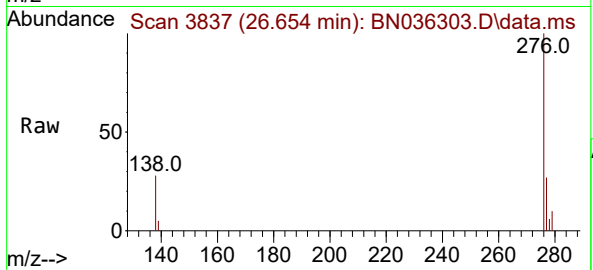
Acq: 05 Feb 2025 18:47

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4



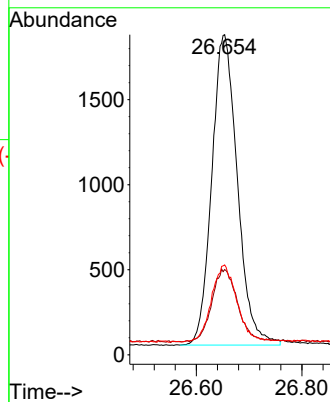
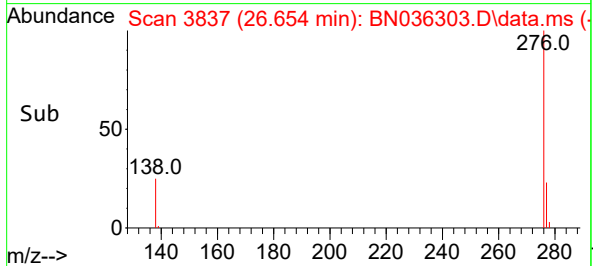
Tgt Ion:276 Resp: 6140

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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

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)

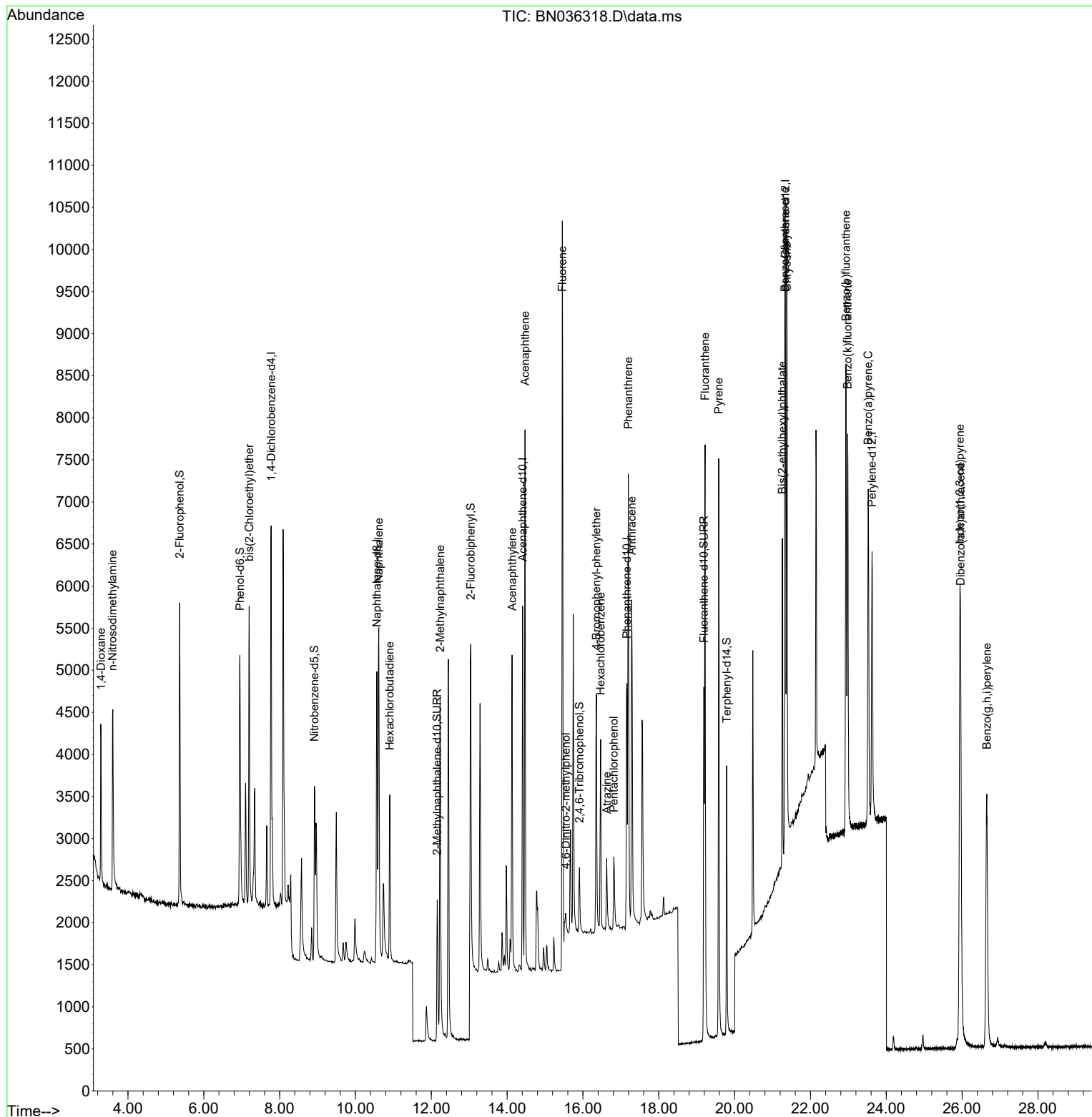
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2275	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	5023	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2525	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	5008	0.400	ng	# 0.00
29) Chrysene-d12	21.339	240	4233	0.400	ng	0.00
35) Perylene-d12	23.624	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

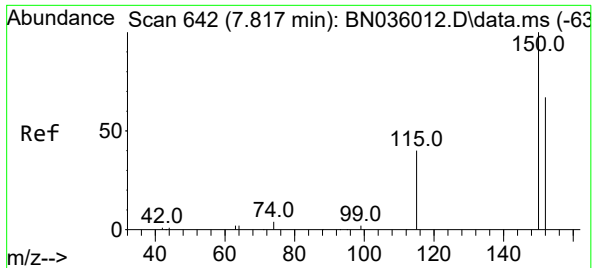
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

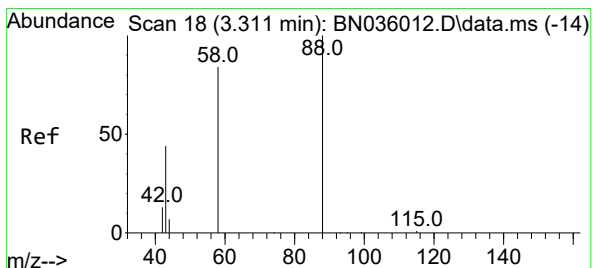
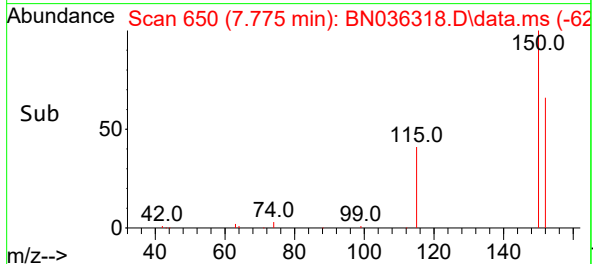
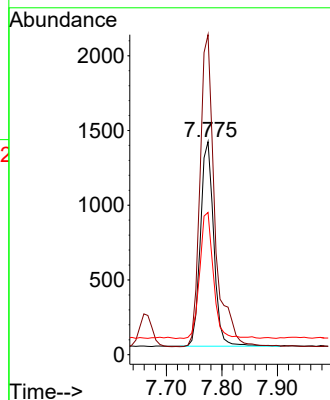
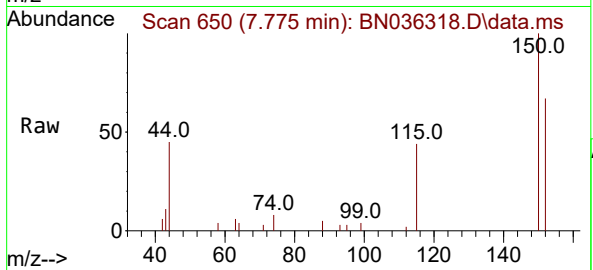




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

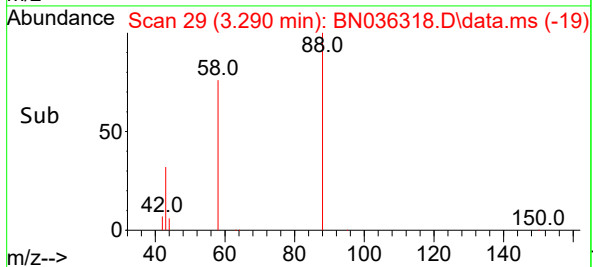
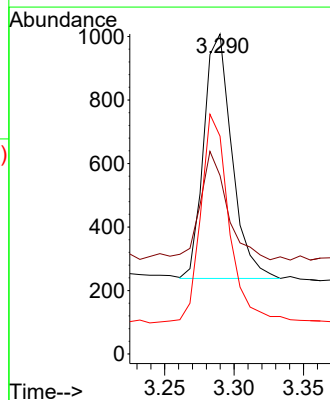
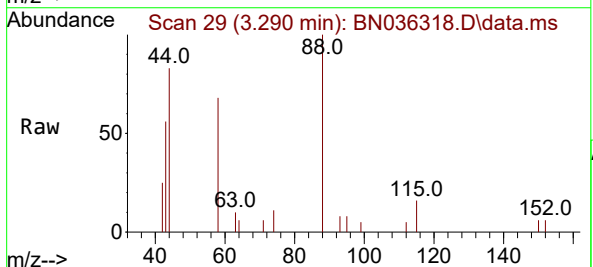
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

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

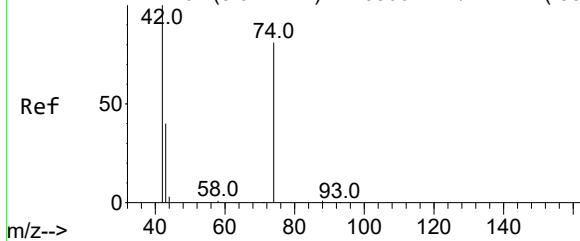


#2
1,4-Dioxane
Concen: 0.428 ng
RT: 3.290 min Scan# 29
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

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

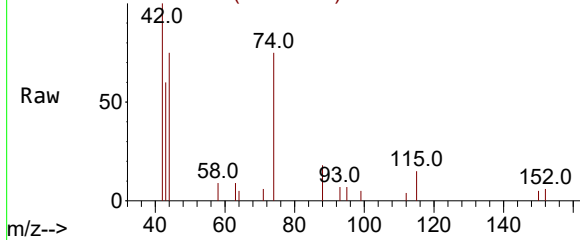
Ion Ratio Lower Upper

42 100

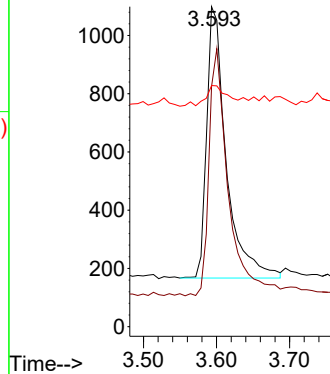
74 91.0 58.1 87.1#

44 8.4 6.2 9.4

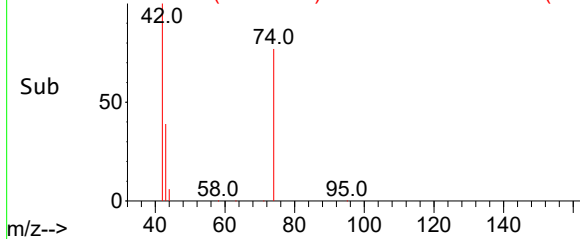
Abundance Scan 71 (3.593 min): BN036318.D\data.ms



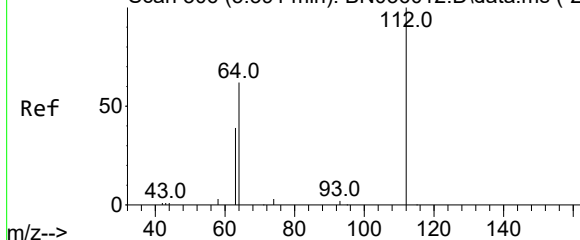
Abundance



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



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

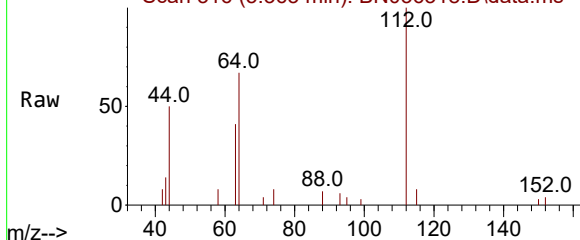
Ion Ratio Lower Upper

112 100

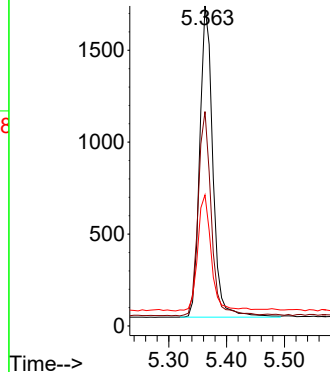
64 66.2 50.0 75.0

63 38.0 30.7 46.1

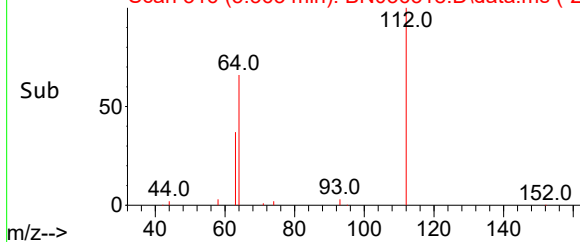
Abundance Scan 316 (5.363 min): BN036318.D\data.ms

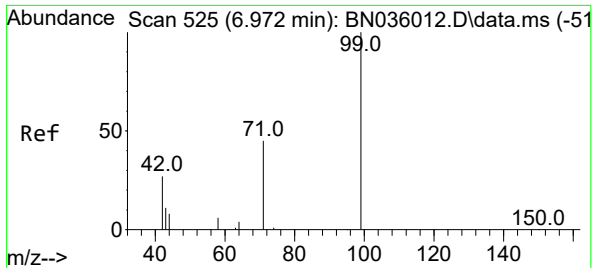


Abundance



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

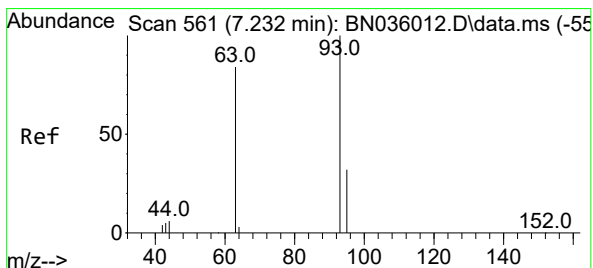
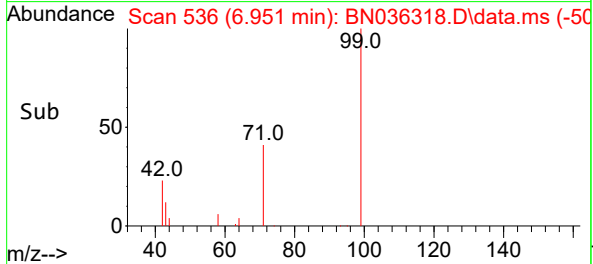
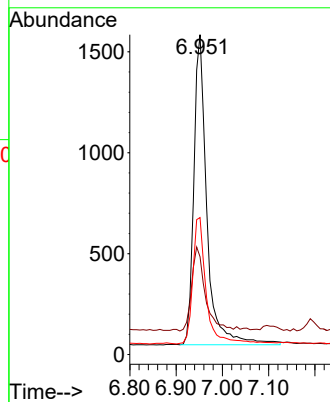
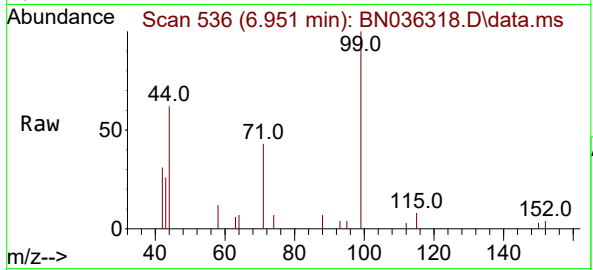




#5
Phenol-d6
Concen: 0.435 ng
RT: 6.951 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

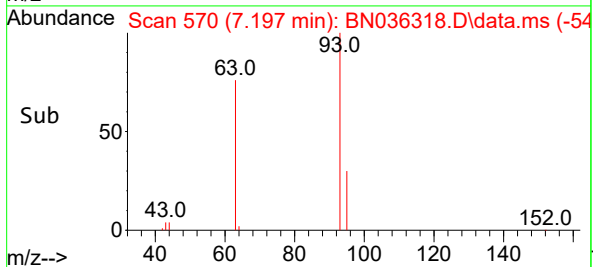
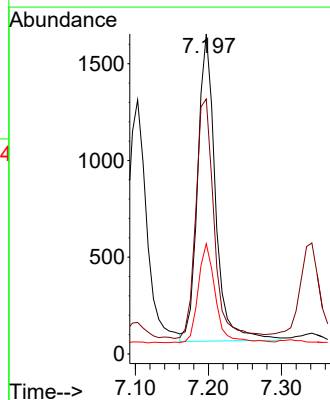
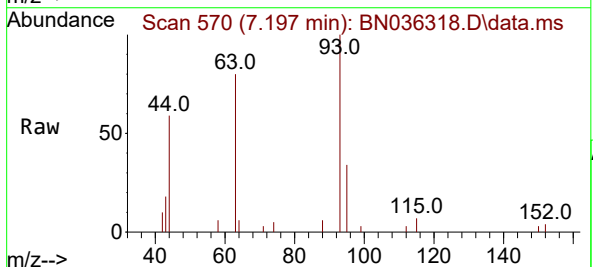
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

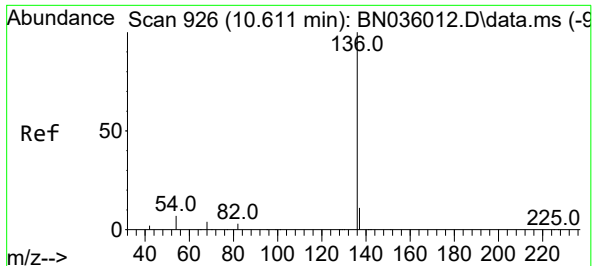
Tgt Ion: 99 Resp: 3021
Ion Ratio Lower Upper
99 100
42 28.0 26.8 40.2
71 42.1 36.6 55.0



#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

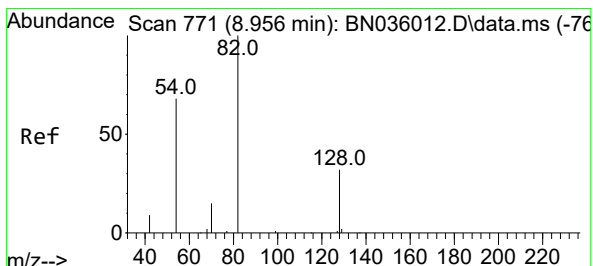
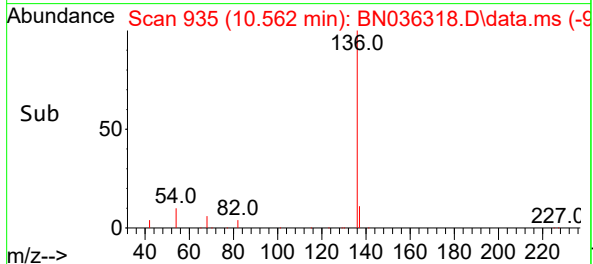
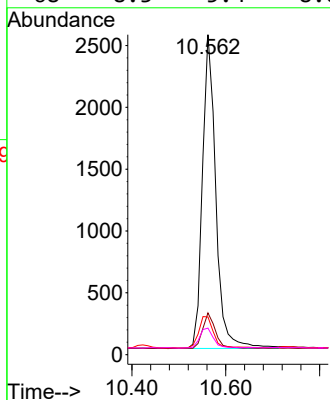
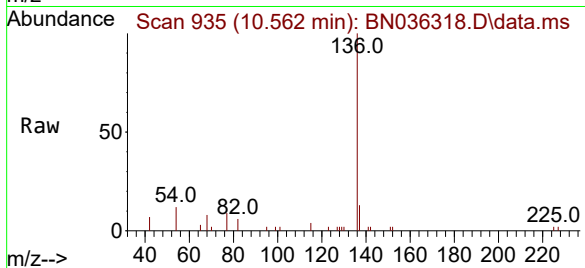




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

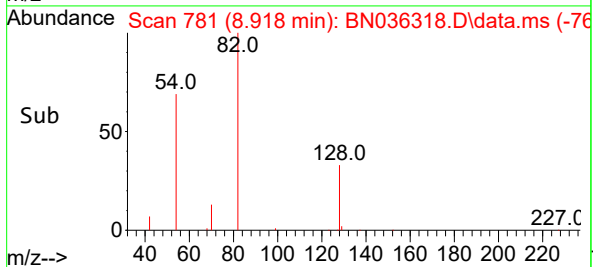
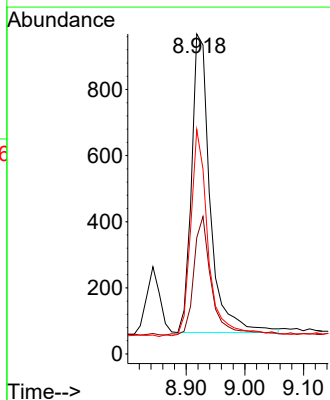
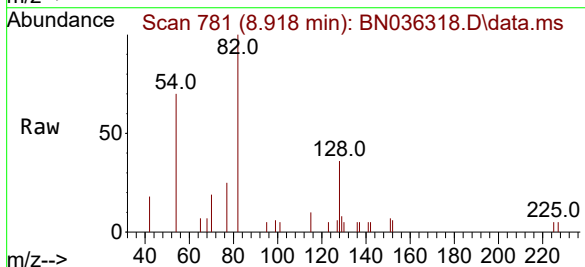
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

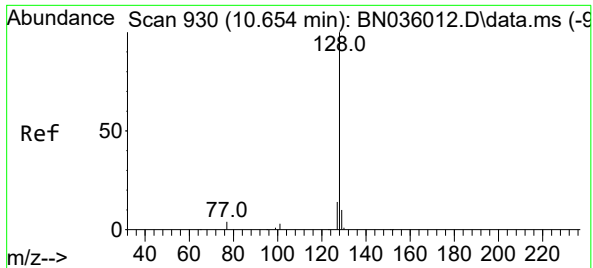
Tgt Ion:136 Resp: 5023
Ion Ratio Lower Upper
136 100
137 13.0 10.4 15.6
54 11.8 7.7 11.5#
68 8.3 5.4 8.0#



#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

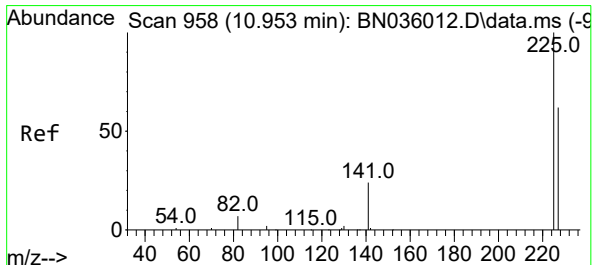
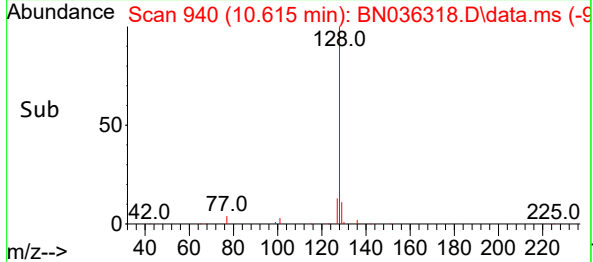
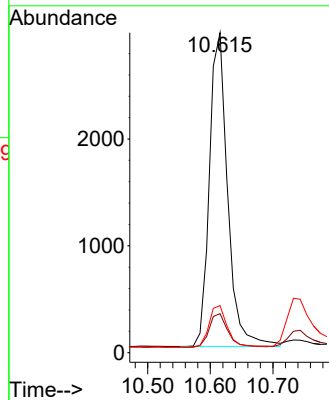
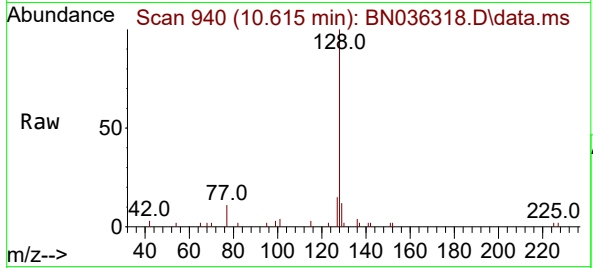




#9
Naphthalene
Concen: 0.408 ng
RT: 10.615 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

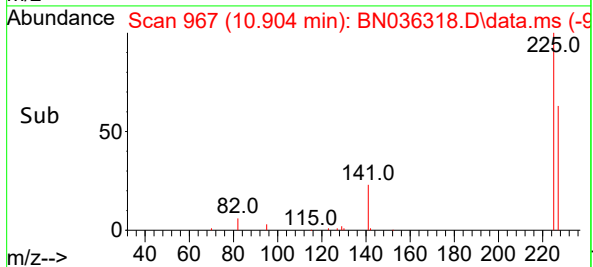
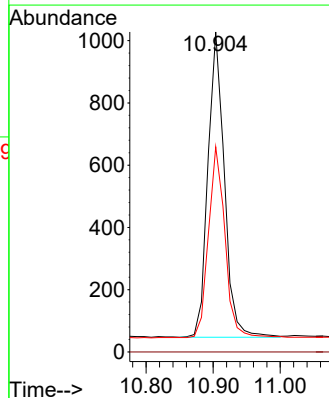
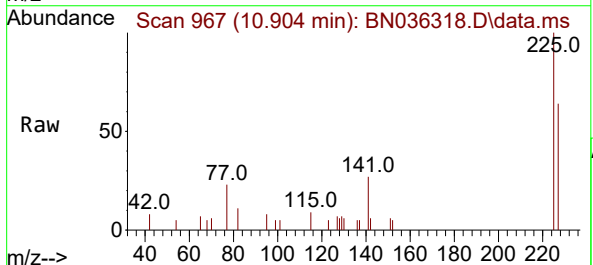
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

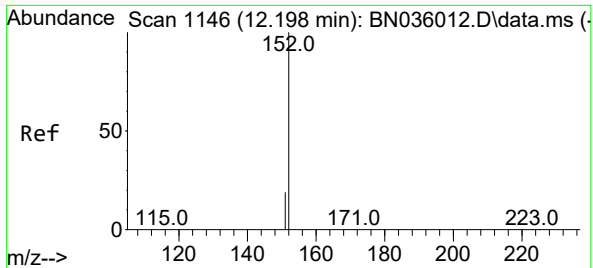
Tgt Ion:128 Resp: 5951
Ion Ratio Lower Upper
128 100
129 12.2 9.4 14.2
127 14.7 12.6 19.0



#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

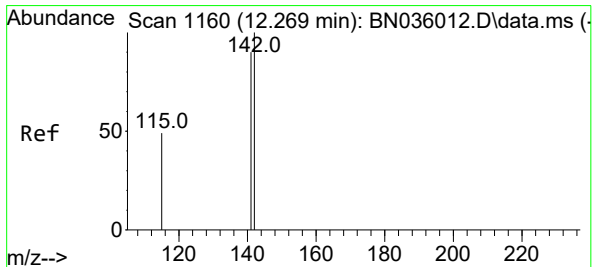
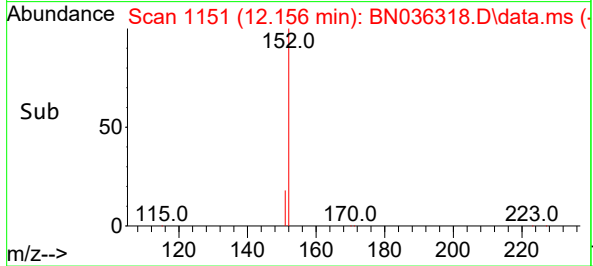
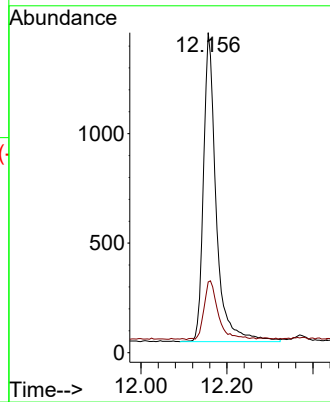
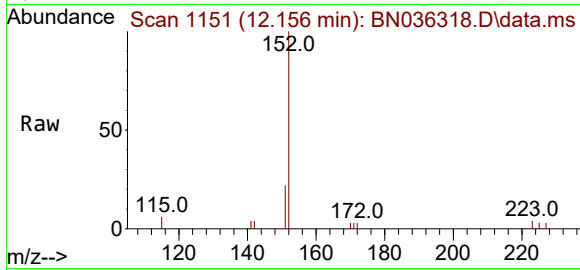




#11
2-Methylnaphthalene-d10
Concen: 0.424 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

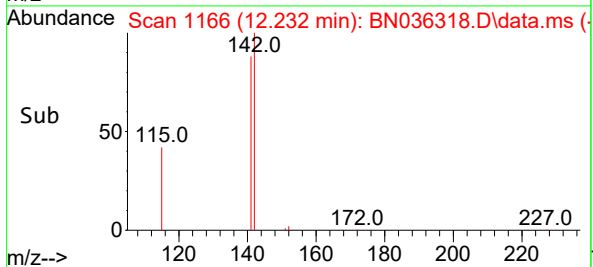
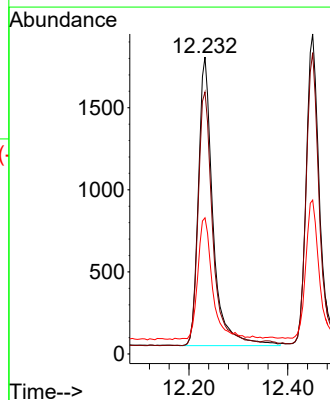
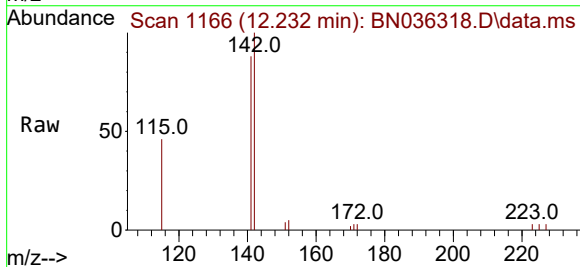
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

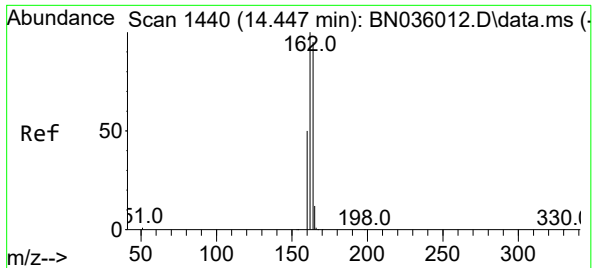
Tgt Ion:152 Resp: 2893
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#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

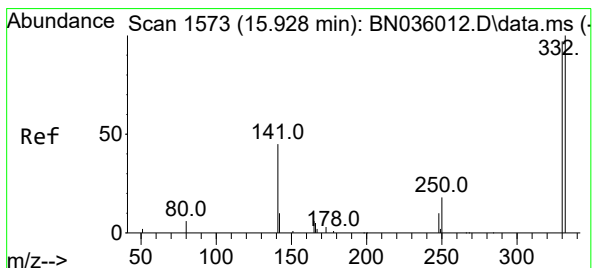
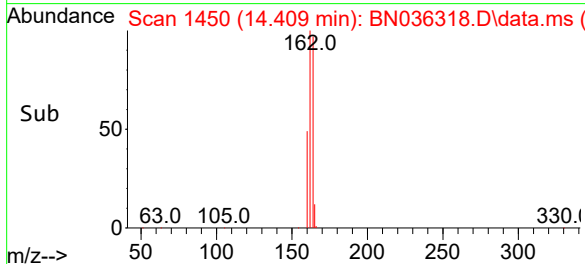
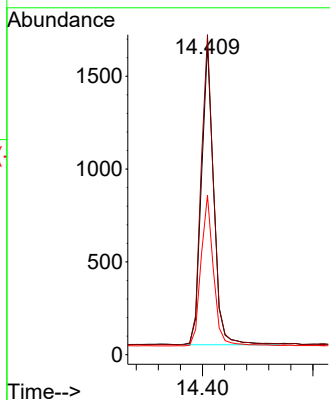
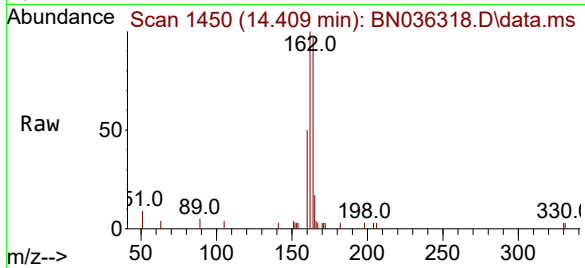




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

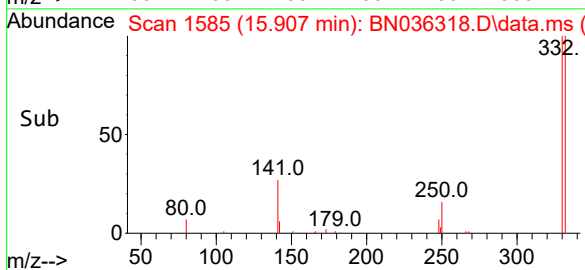
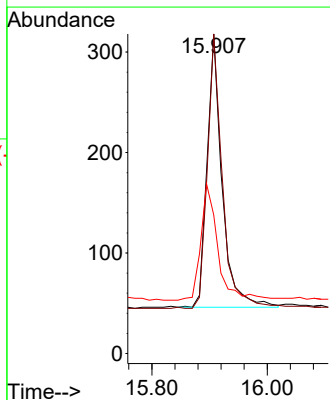
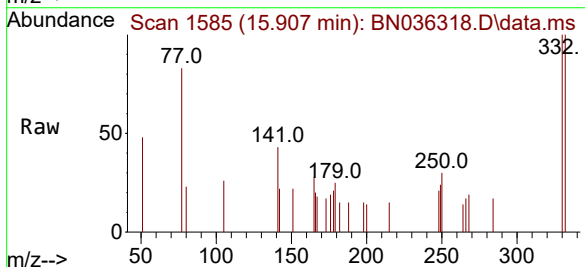
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

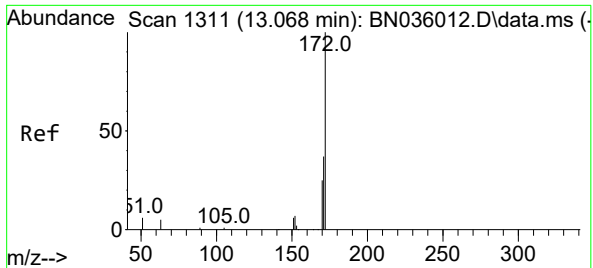
Tgt Ion:164 Resp: 2525
Ion Ratio Lower Upper
164 100
162 103.0 84.1 126.1
160 51.3 43.8 65.8



#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

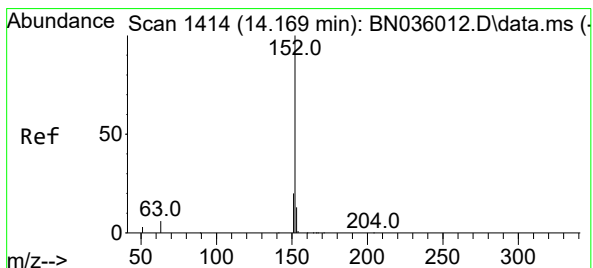
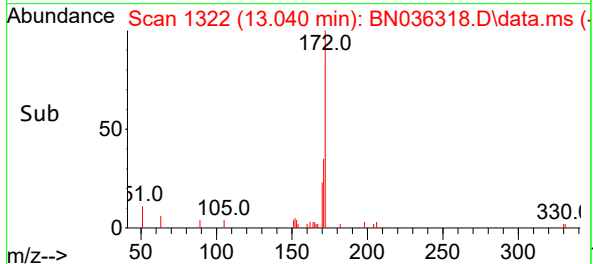
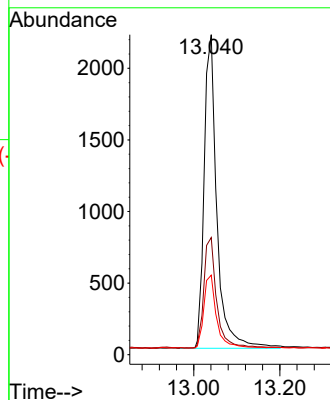
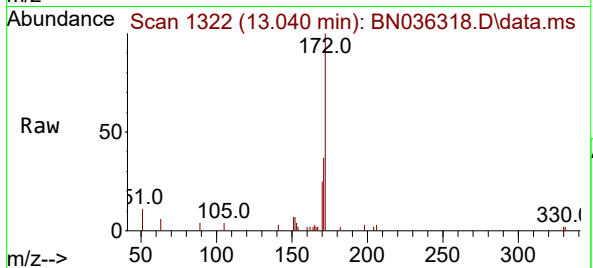




#15
2-Fluorobiphenyl
Concen: 0.337 ng
RT: 13.040 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

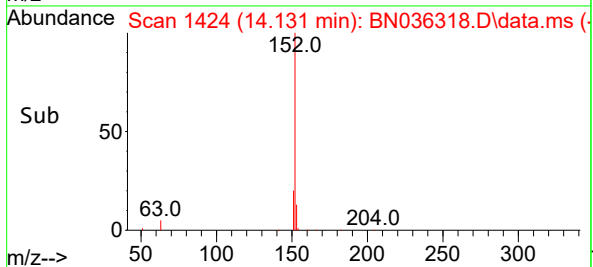
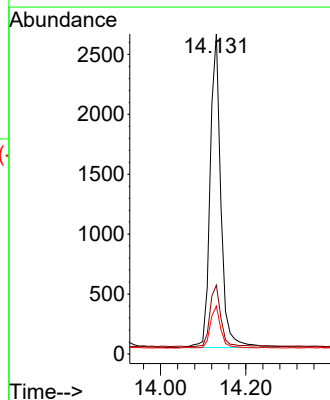
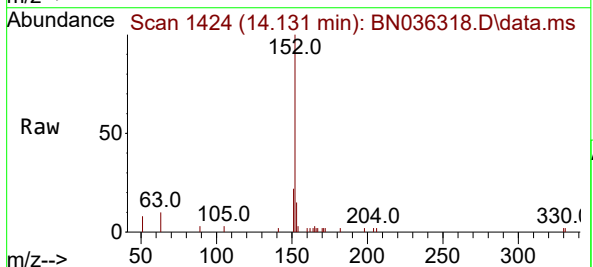
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

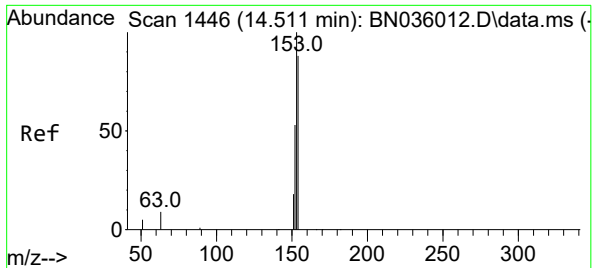
Tgt Ion	Ratio	Lower	Upper
172	100		
171	36.6	30.9	46.3
170	24.9	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	20.1	16.2	24.2
153	12.7	10.4	15.6

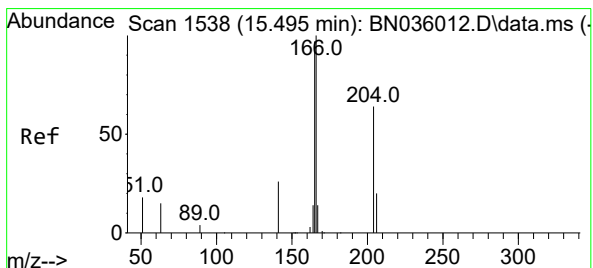
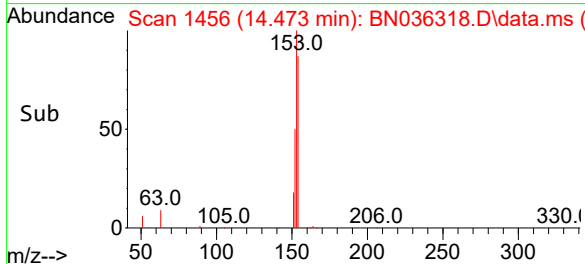
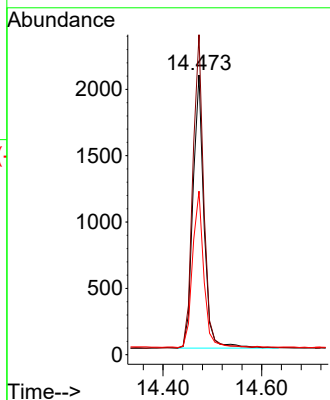
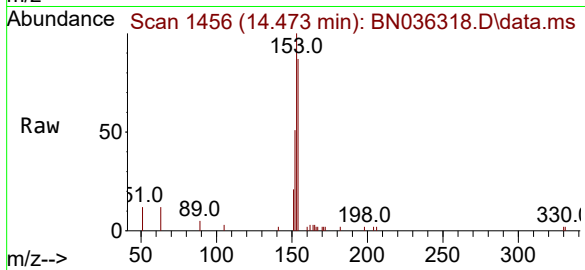




#17
Acenaphthene
Concen: 0.387 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

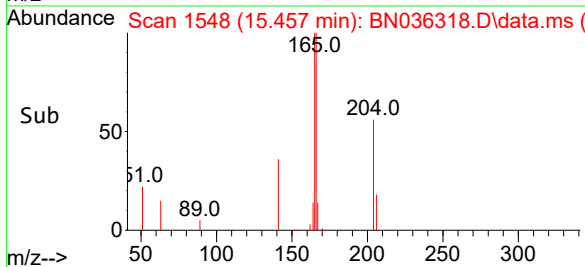
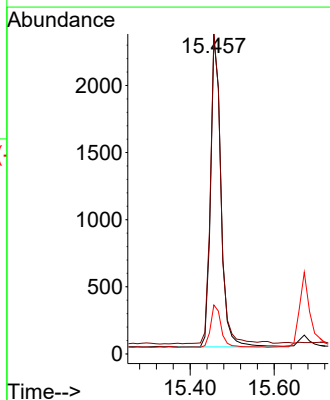
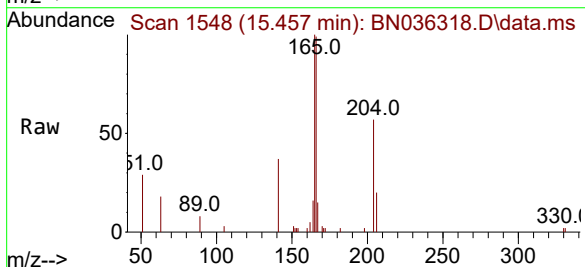
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

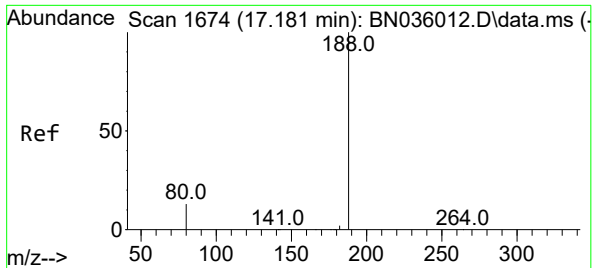
Tgt Ion:154 Resp: 3176
Ion Ratio Lower Upper
154 100
153 113.9 88.9 133.3
152 58.2 48.1 72.1



#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

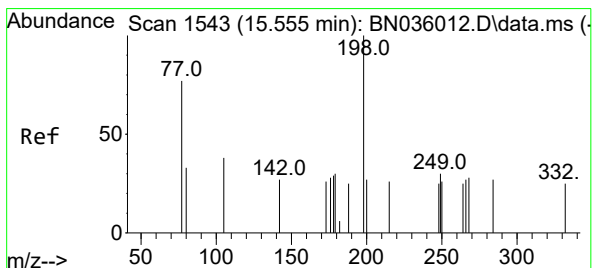
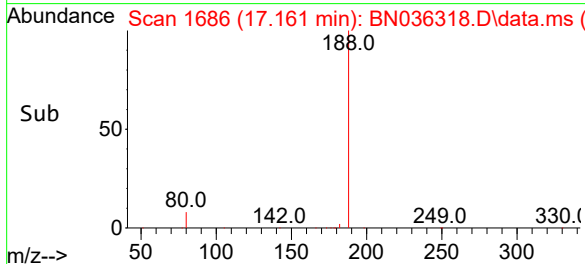
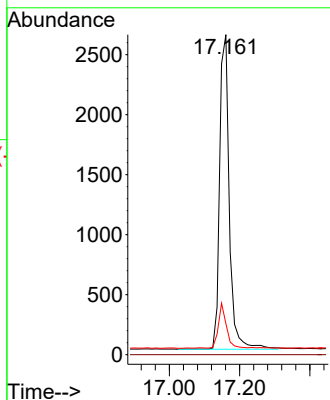
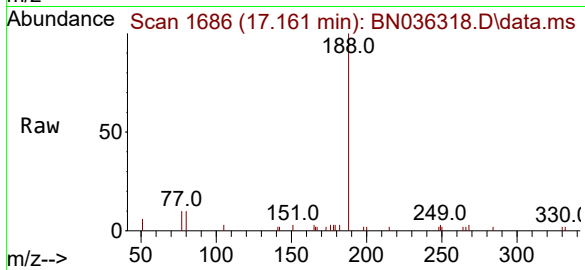




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

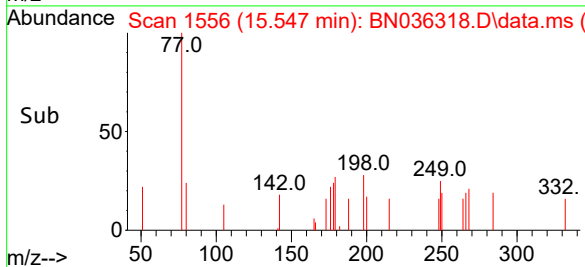
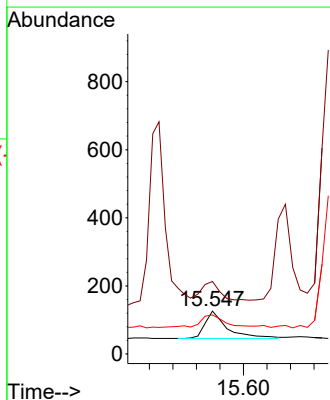
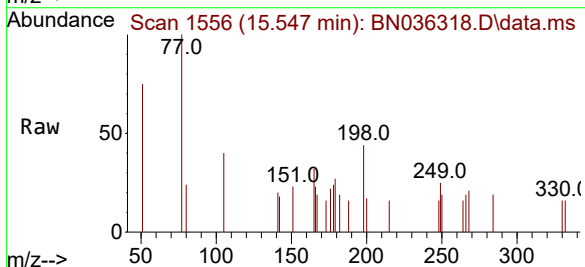
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

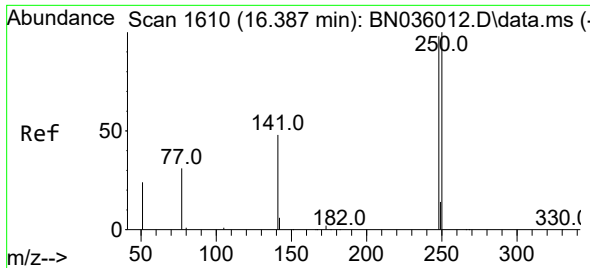
Tgt Ion:188 Resp: 5008
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 9.7 12.3 18.5#



#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#

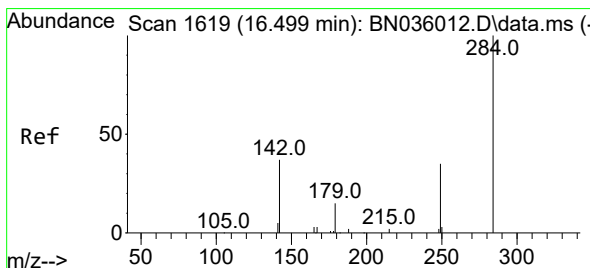
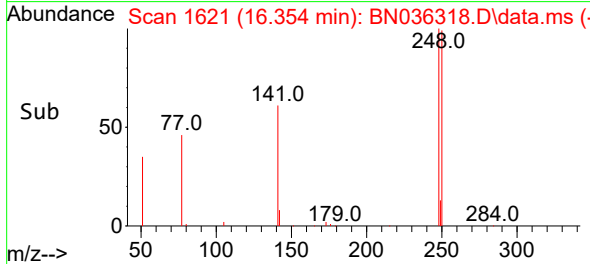
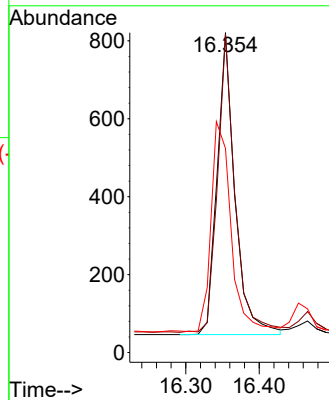
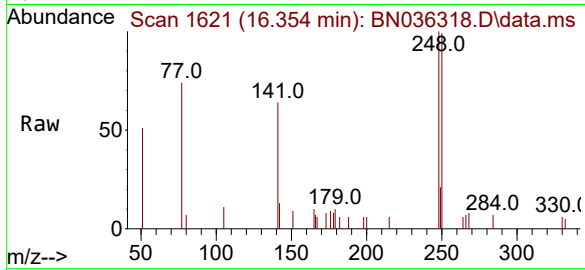




#21
4-Bromophenyl-phenylether
Concen: 0.366 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

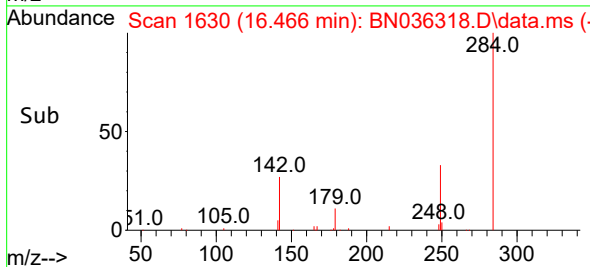
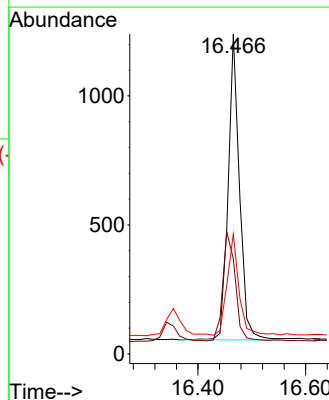
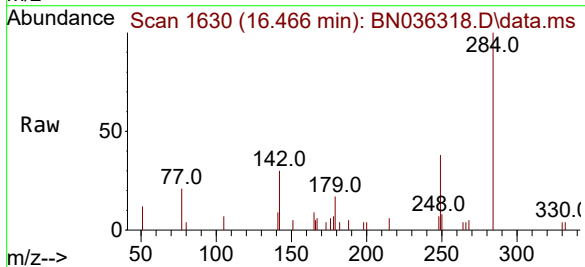
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

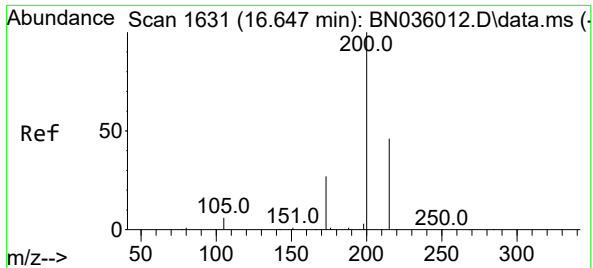
Tgt Ion:248 Resp: 1306
Ion Ratio Lower Upper
248 100
250 99.4 81.5 122.3
141 63.8 41.8 62.6#



#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:284 Resp: 1733
Ion Ratio Lower Upper
284 100
142 39.9 33.6 50.4
249 34.5 28.8 43.2

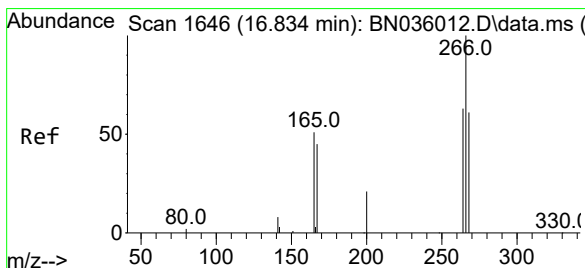
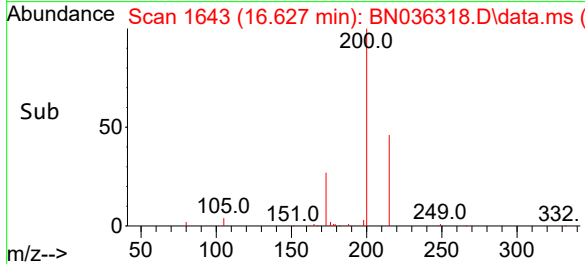
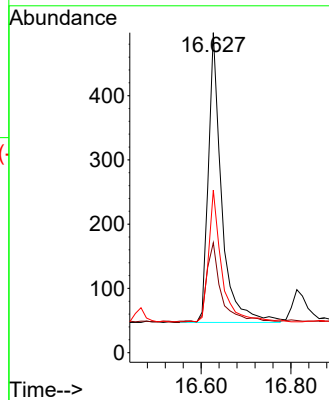
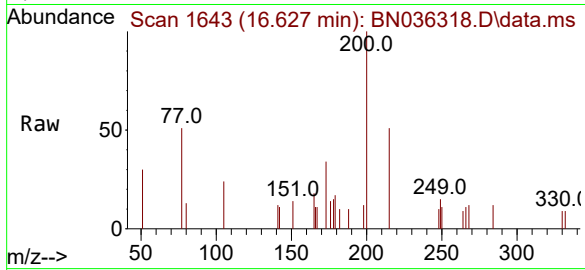




#23
Atrazine
Concen: 0.358 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

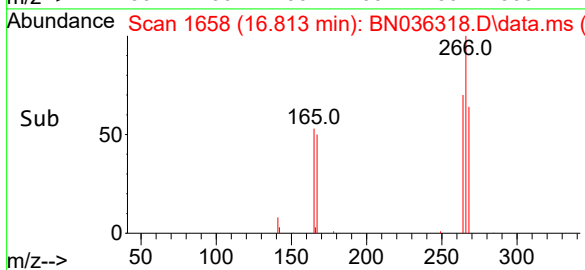
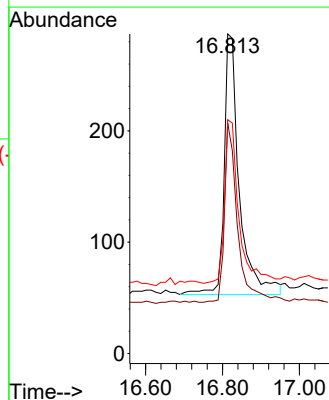
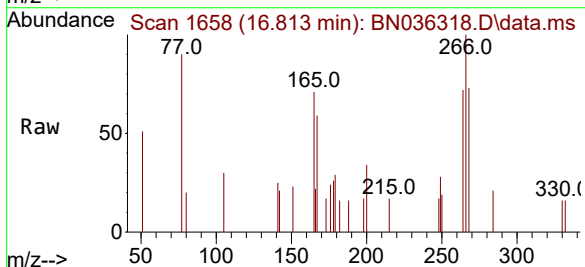
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

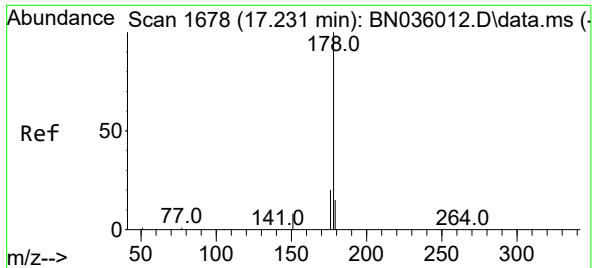
Tgt Ion:200 Resp: 924
Ion Ratio Lower Upper
200 100
173 34.3 26.6 40.0
215 50.8 40.6 61.0



#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:266 Resp: 644
Ion Ratio Lower Upper
266 100
264 59.5 48.2 72.2
268 59.3 51.6 77.4

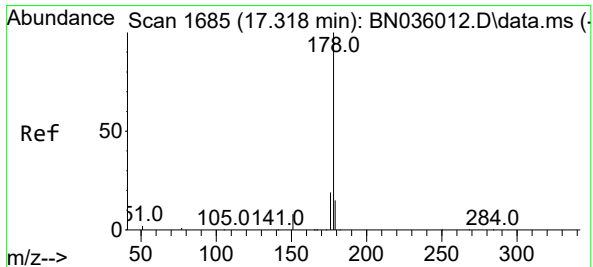
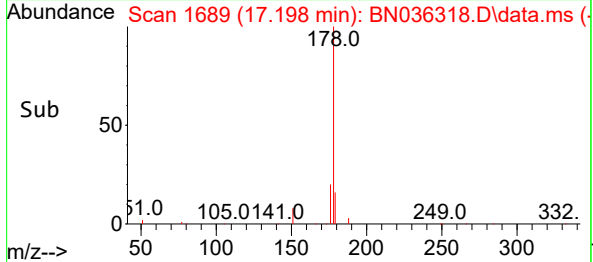
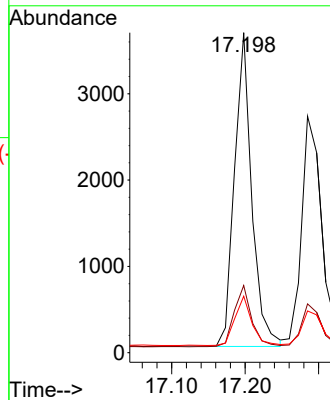
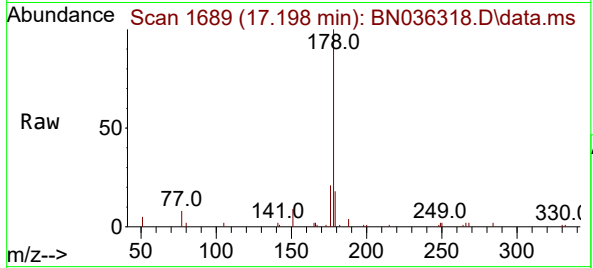




#25
Phenanthrene
Concen: 0.395 ng
RT: 17.198 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

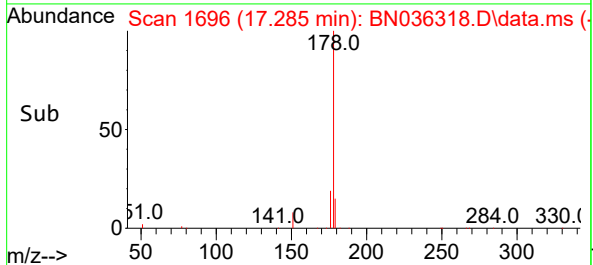
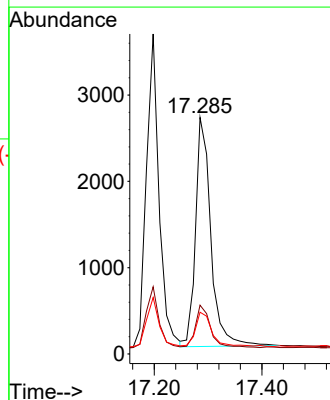
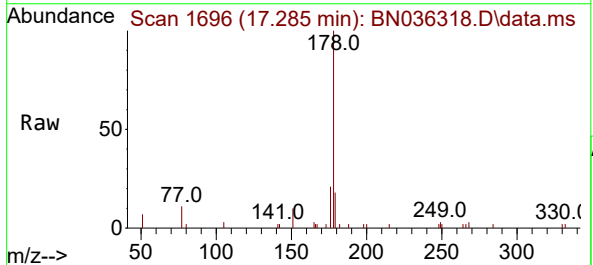
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

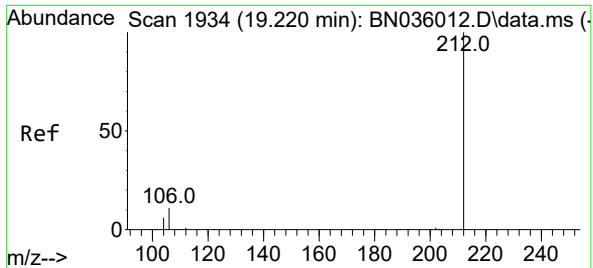
Tgt Ion:178 Resp: 5940
Ion Ratio Lower Upper
178 100
176 19.8 16.0 24.0
179 15.5 12.4 18.6



#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

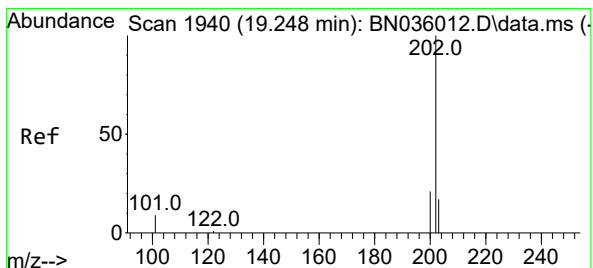
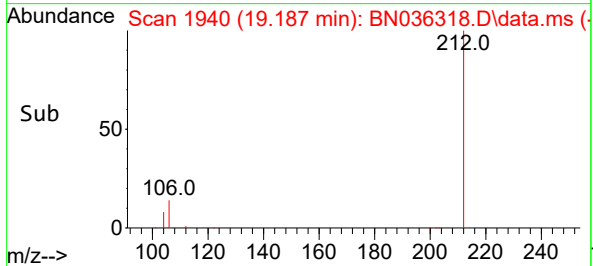
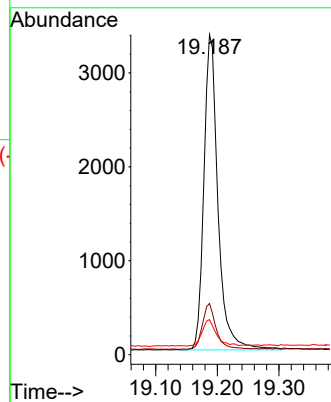
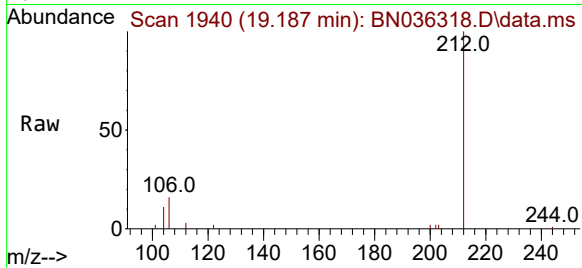
Tgt Ion:212 Resp: 5315

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

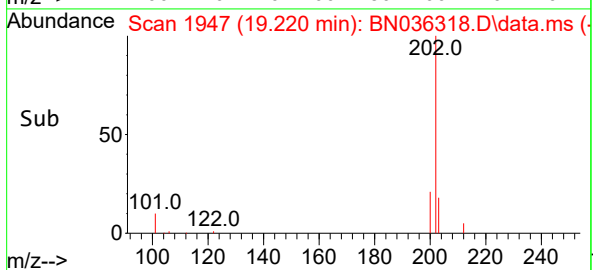
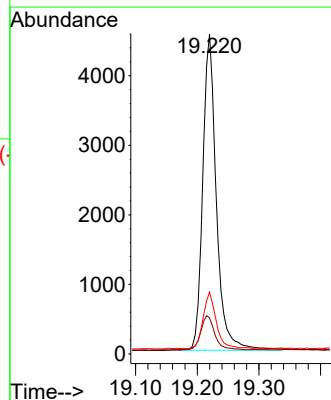
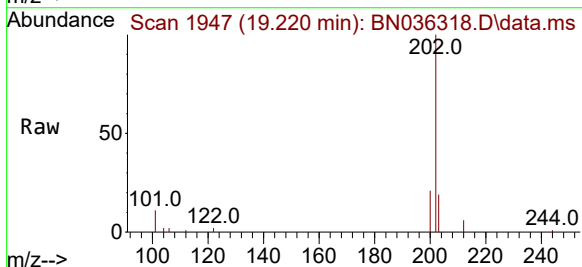
Tgt Ion:202 Resp: 6949

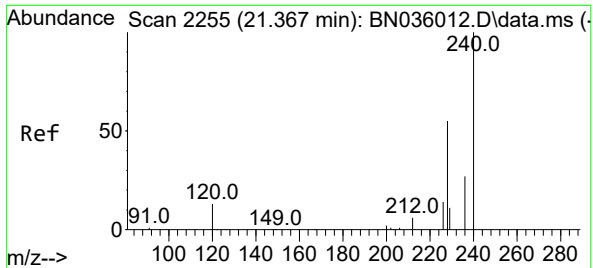
Ion Ratio Lower Upper

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

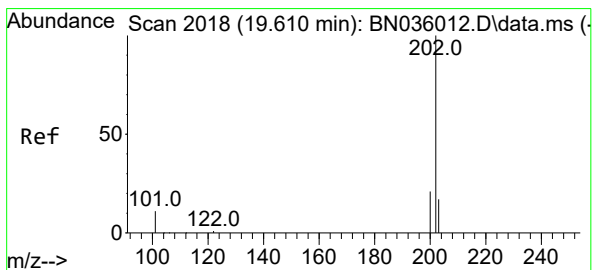
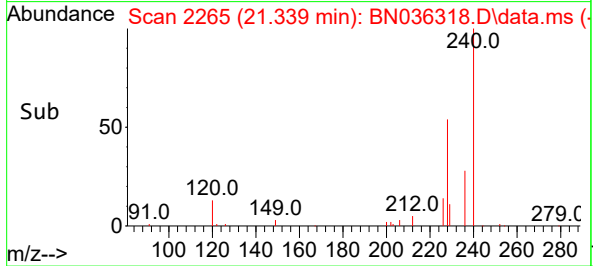
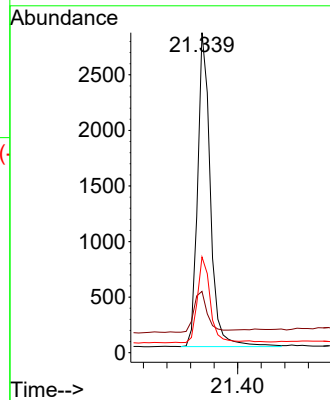
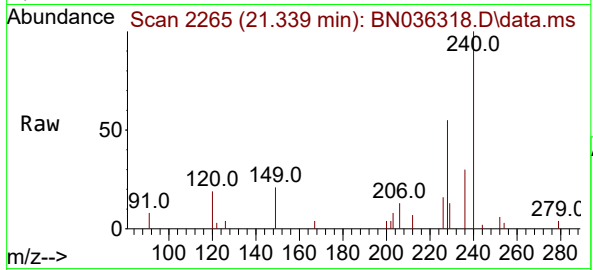
Tgt Ion:240 Resp: 4233

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

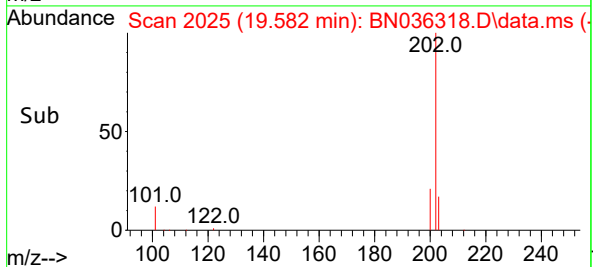
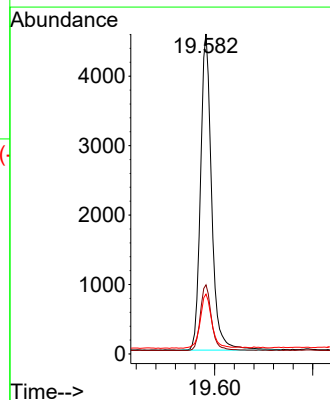
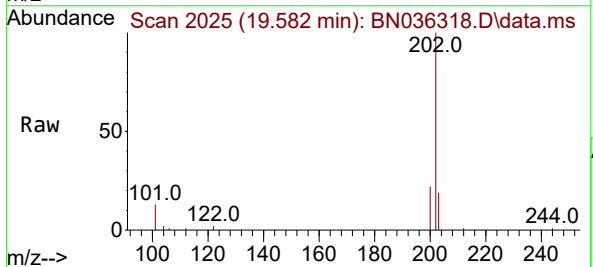
Tgt Ion:202 Resp: 7157

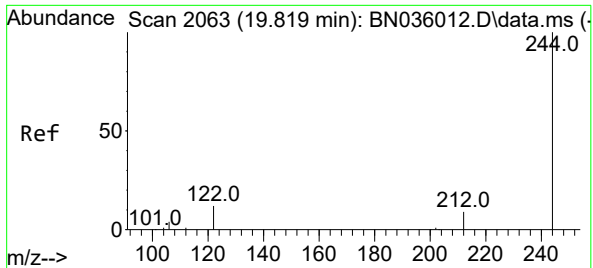
Ion Ratio Lower Upper

202 100

200 20.9 17.0 25.4

203 17.6 14.4 21.6

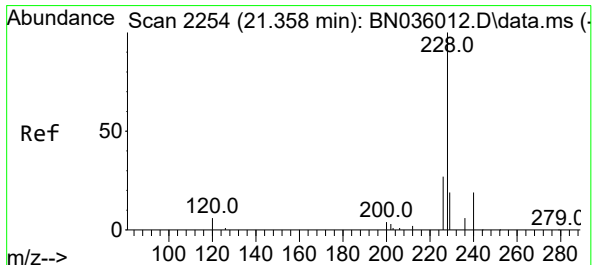
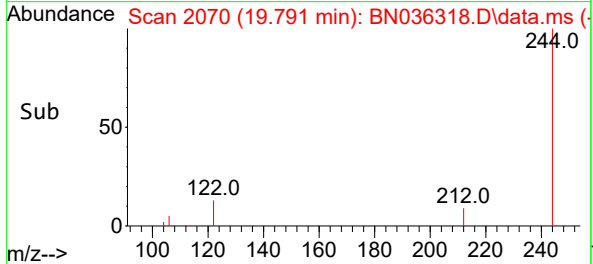
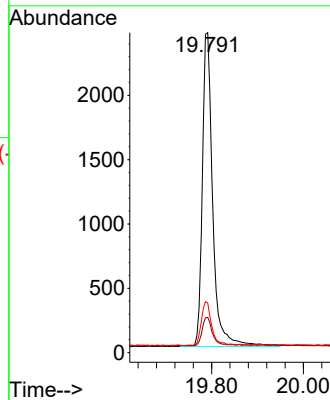
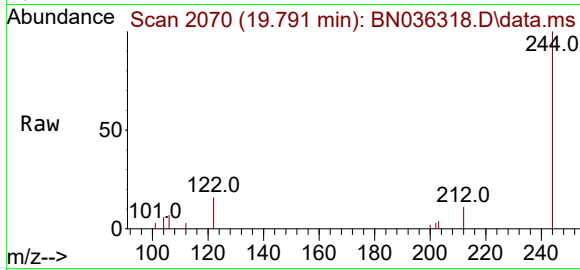




#31
Terphenyl-d14
Concen: 0.436 ng
RT: 19.791 min Scan# 2063
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

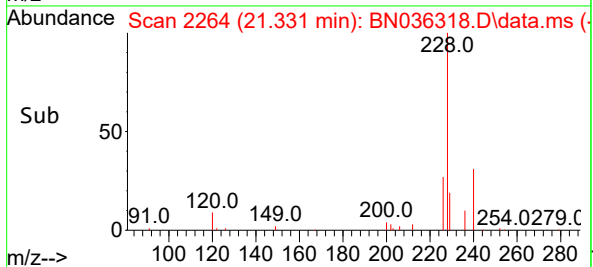
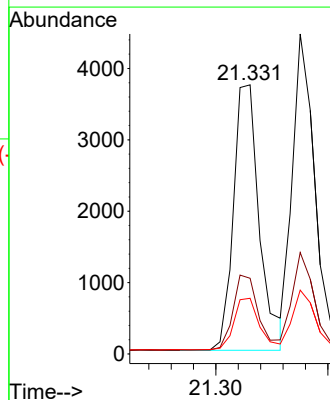
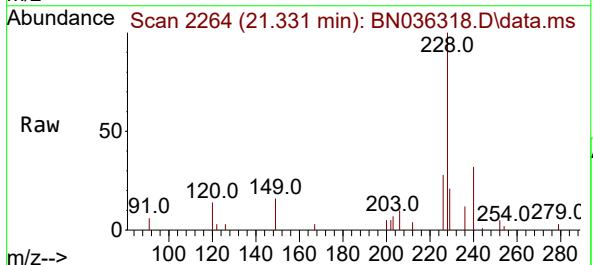
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

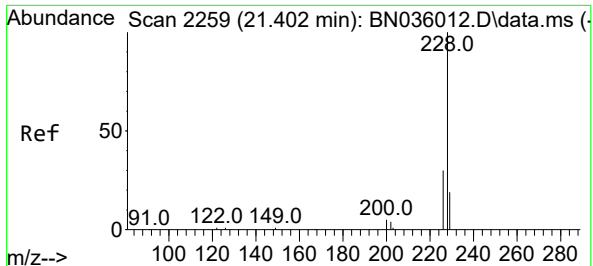
Tgt Ion:244 Resp: 3838
Ion Ratio Lower Upper
244 100
212 11.0 9.1 13.7
122 15.5 11.3 16.9



#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

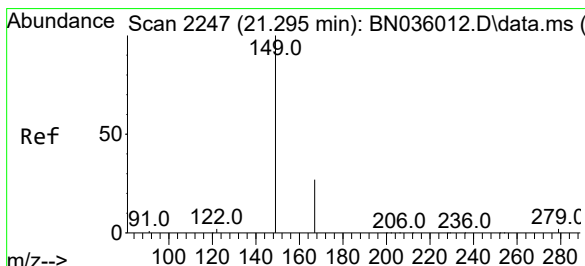
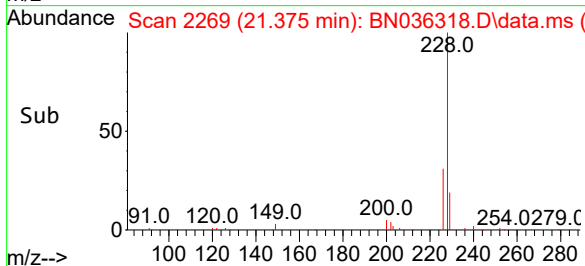
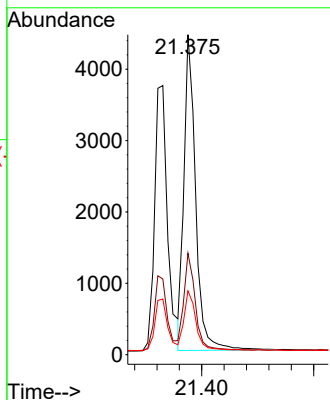
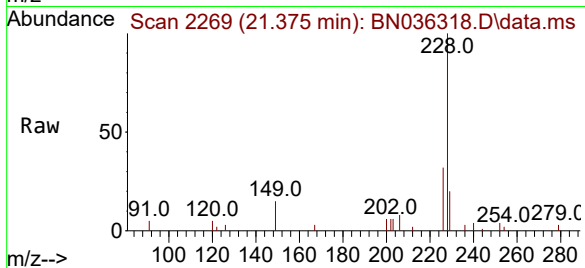




#33
Chrysene
Concen: 0.409 ng
RT: 21.375 min Scan# 2137
Delta R.T. -0.000 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

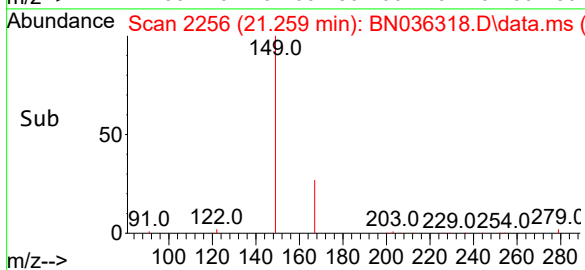
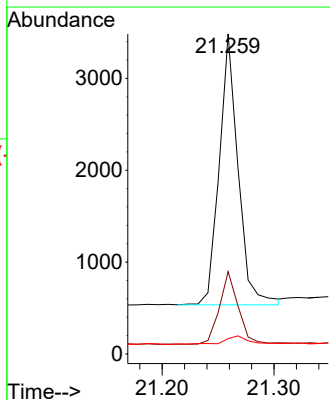
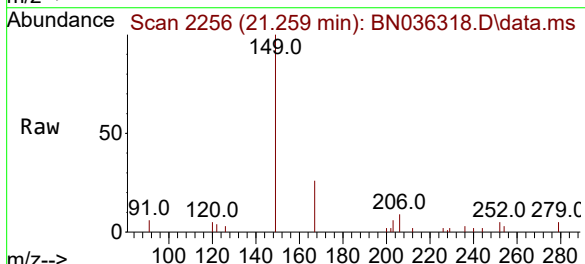
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

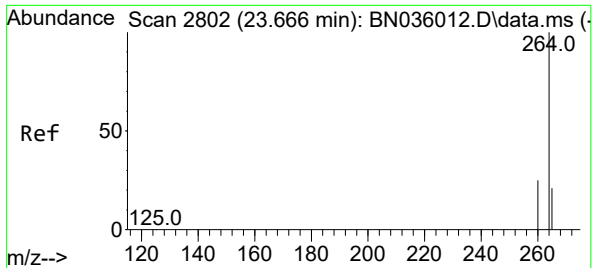
Tgt Ion:228 Resp: 6420
Ion Ratio Lower Upper
228 100
226 31.7 25.3 37.9
229 20.0 16.3 24.5



#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#

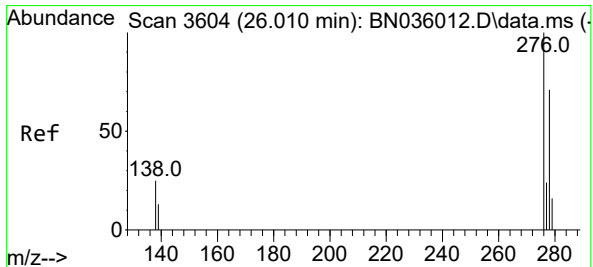
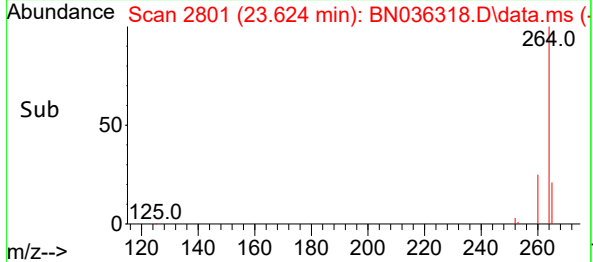
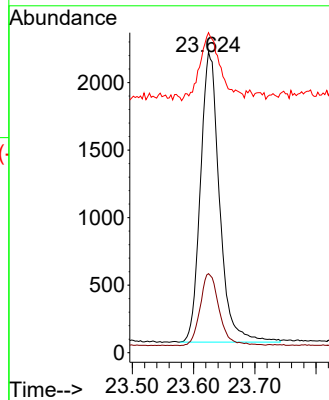
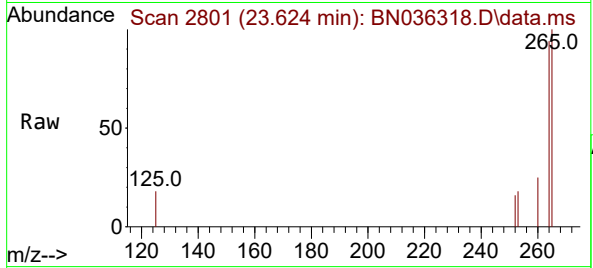




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.624 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN036318.D
Acq: 06 Feb 2025 03:45

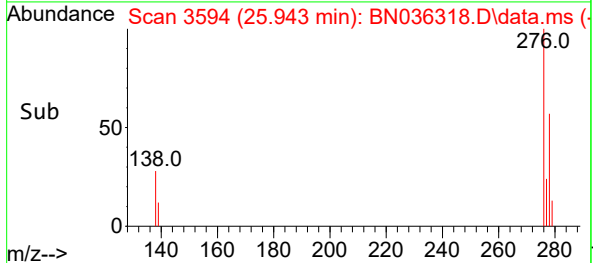
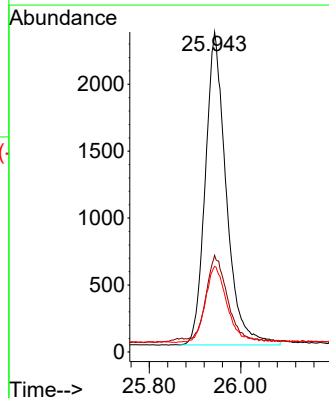
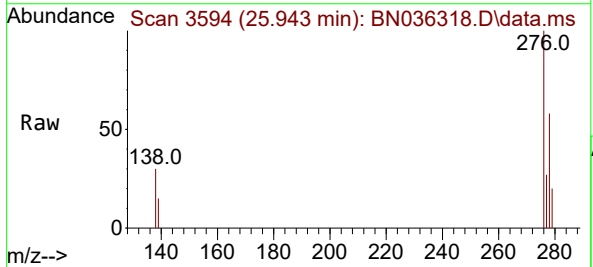
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

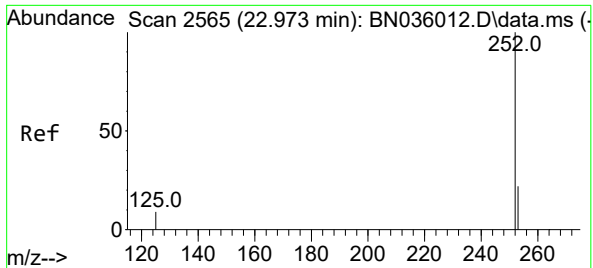
Tgt Ion:264 Resp: 4647
Ion Ratio Lower Upper
264 100
260 26.3 21.8 32.6
265 106.3 56.6 84.8#



#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

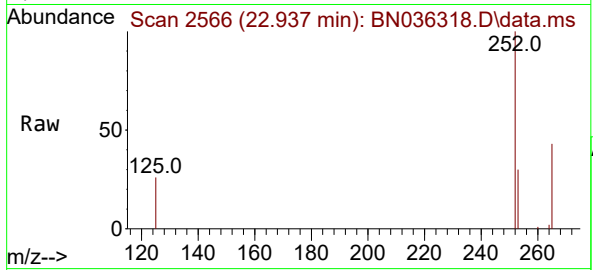
Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



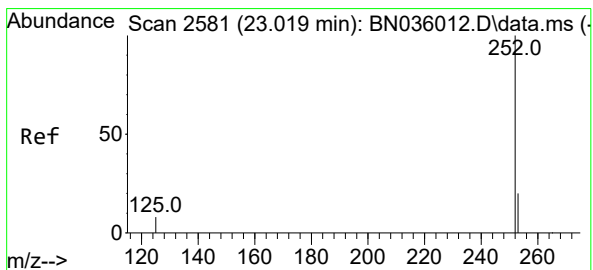
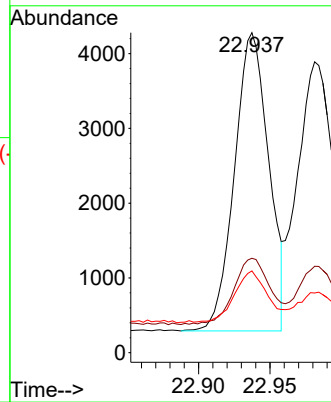
Tgt Ion:252 Resp: 6642

Ion Ratio Lower Upper

252 100

253 29.5 22.5 33.7

125 25.5 11.9 17.9#



#38

Benzo(k)fluoranthene

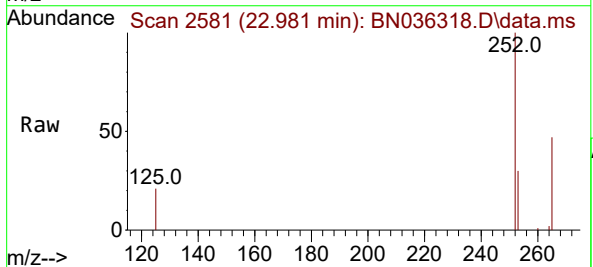
Concen: 0.376 ng

RT: 22.981 min Scan# 2581

Delta R.T. -0.003 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45



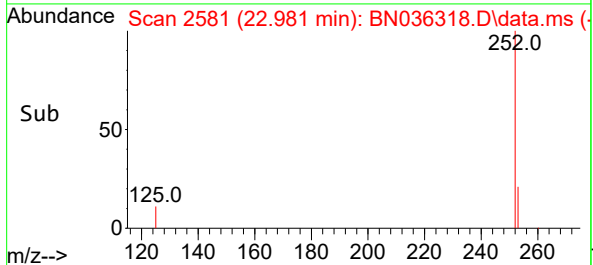
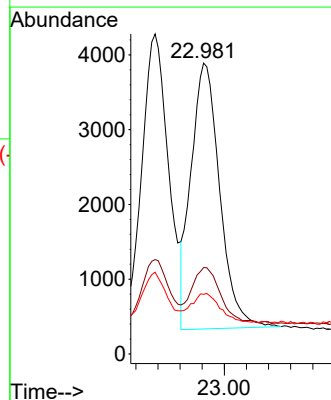
Tgt Ion:252 Resp: 6402

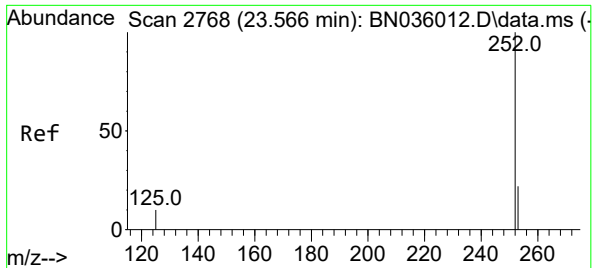
Ion Ratio Lower Upper

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

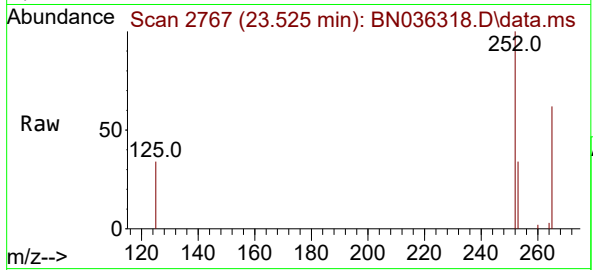
Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



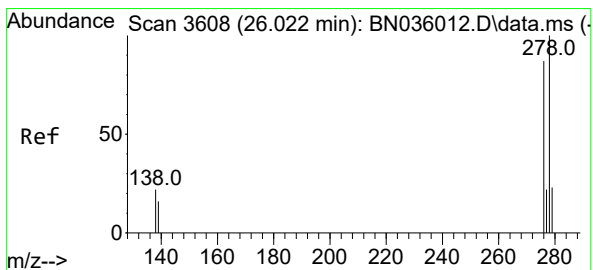
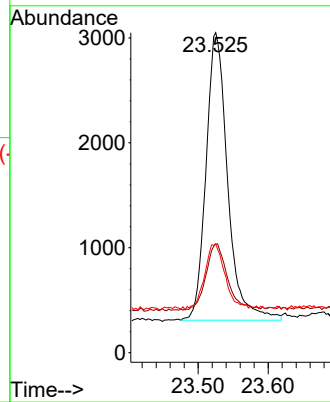
Tgt Ion:252 Resp: 5889

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

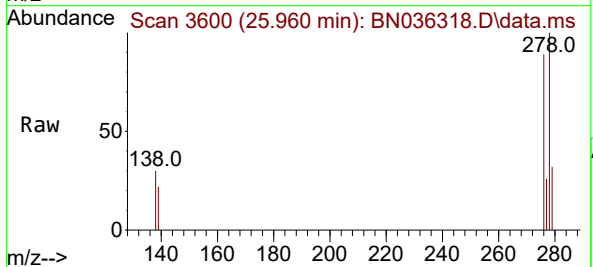
Concen: 0.388 ng

RT: 25.960 min Scan# 3600

Delta R.T. -0.003 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45



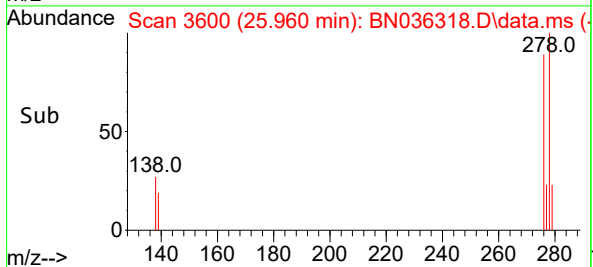
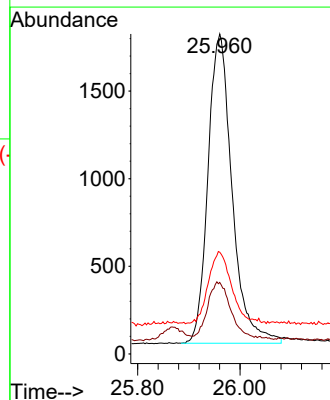
Tgt Ion:278 Resp: 5771

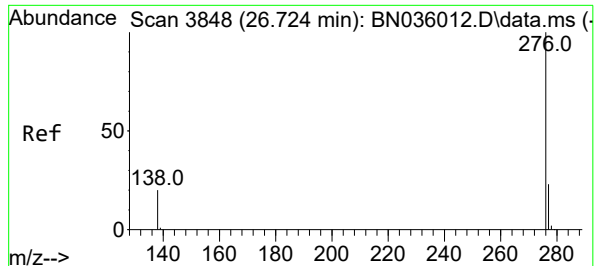
Ion Ratio Lower Upper

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# 3836

Delta R.T. -0.003 min

Lab File: BN036318.D

Acq: 06 Feb 2025 03:45

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

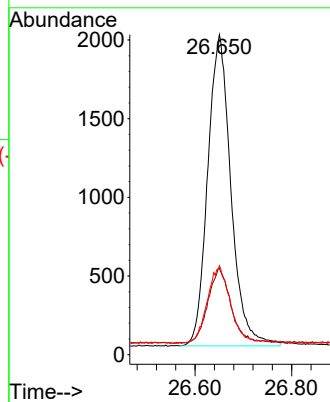
Tgt Ion:276 Resp: 6613

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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

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)

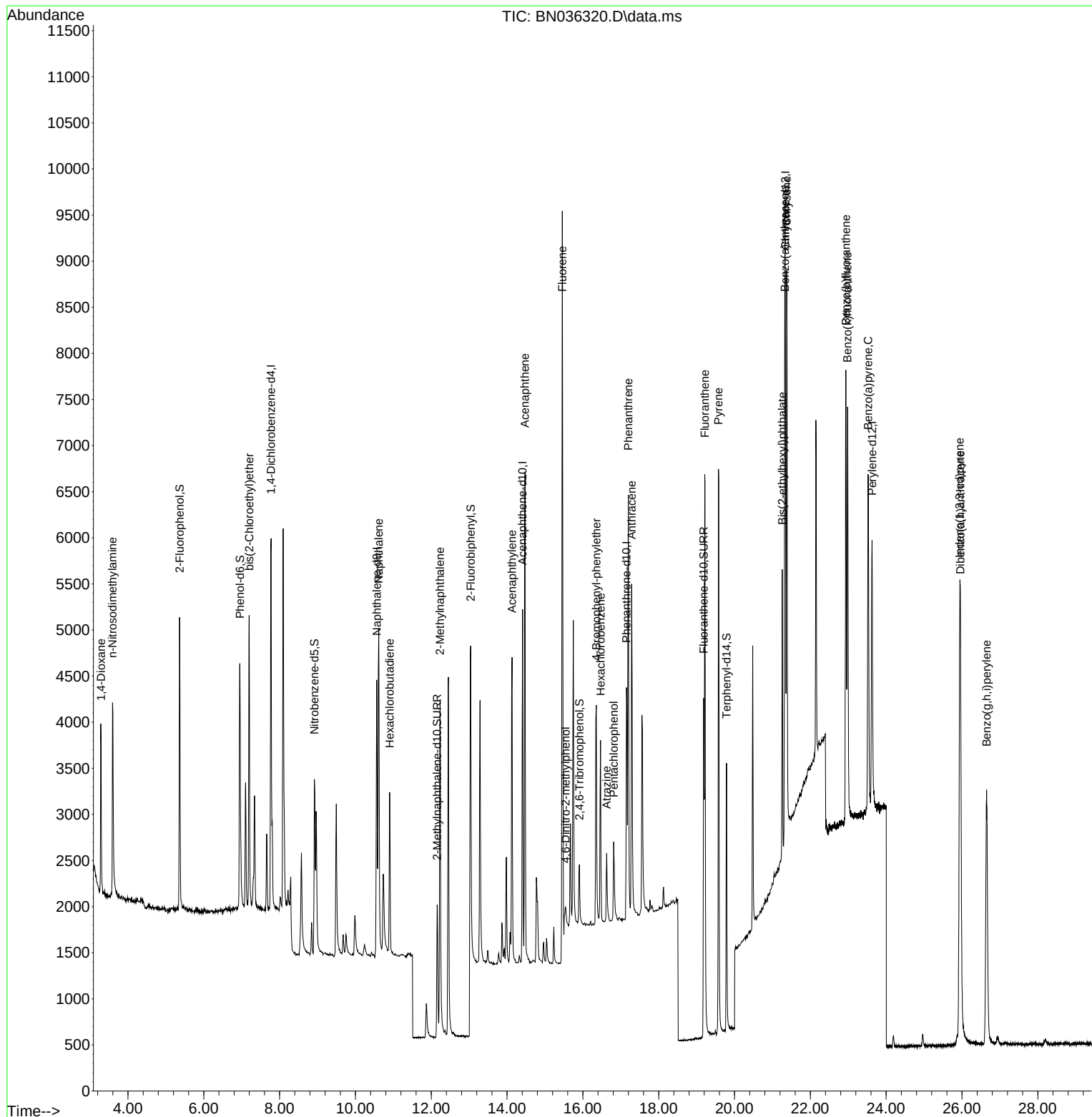
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2017	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4328	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2158	0.400	ng	0.00
19) Phenanthrene-d10	17.149	188	4298	0.400	ng	-0.01
29) Chrysene-d12	21.340	240	3803	0.400	ng	0.00
35) Perylene-d12	23.627	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						Qvalue
2) 1,4-Dioxane	3.290	88	1044	0.463	ng	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

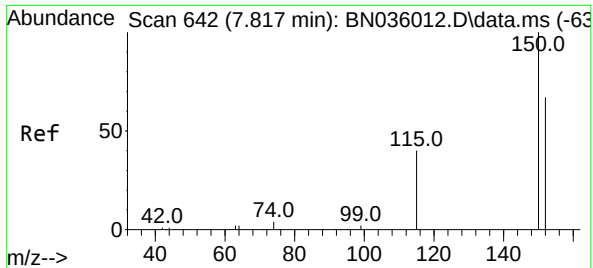
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

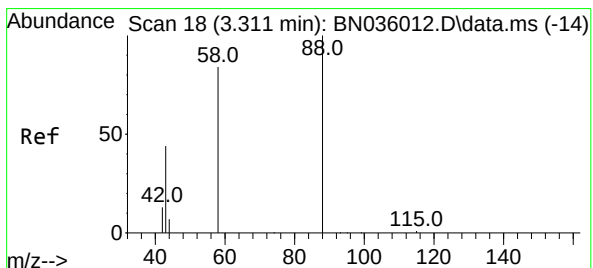
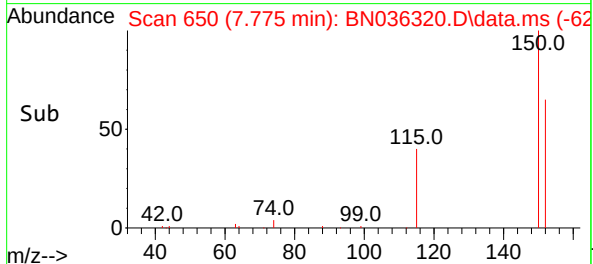
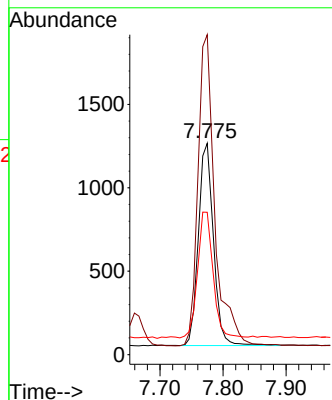
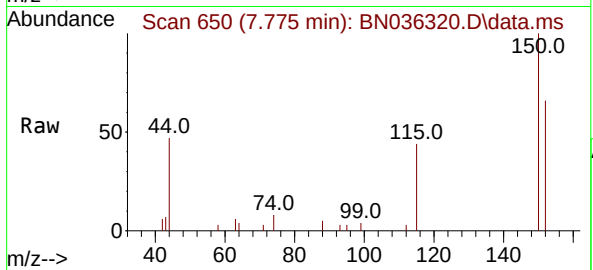




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

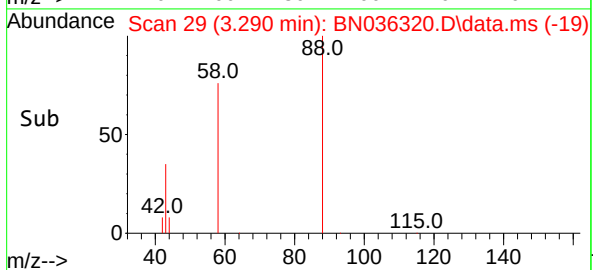
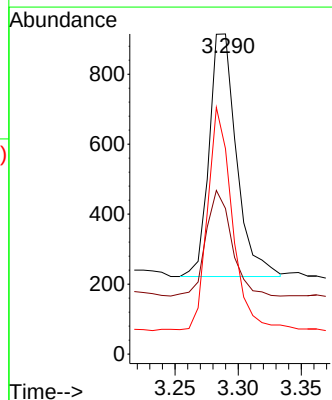
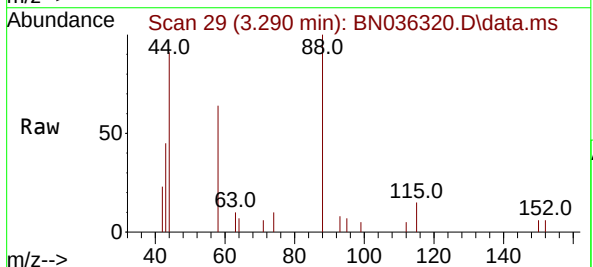
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

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

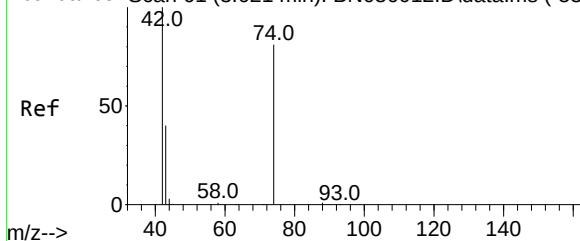


#2
1,4-Dioxane
Concen: 0.463 ng
RT: 3.290 min Scan# 29
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

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

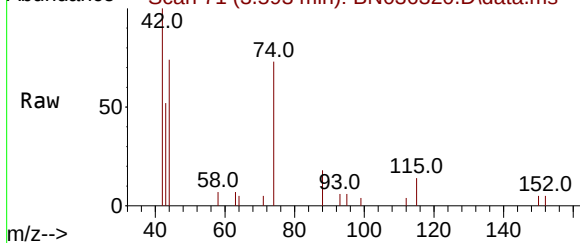
Ion Ratio Lower Upper

42 100

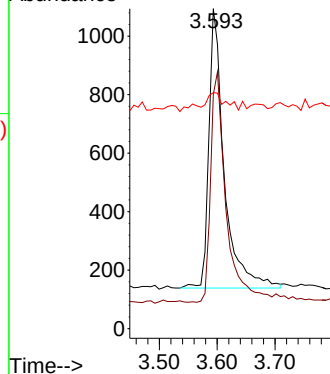
74 83.2 58.1 87.1

44 6.9 6.2 9.4

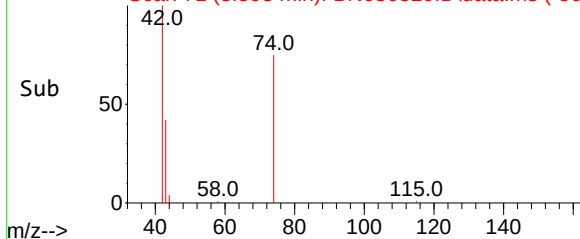
Abundance Scan 71 (3.593 min): BN036320.D\data.ms



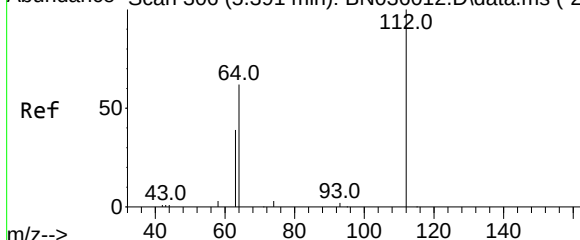
Abundance



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



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

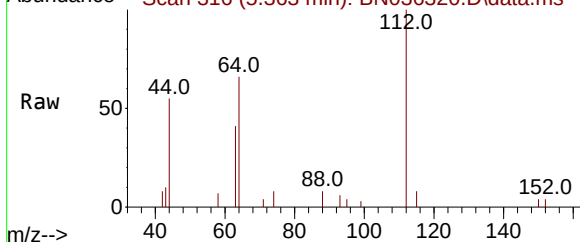
Ion Ratio Lower Upper

112 100

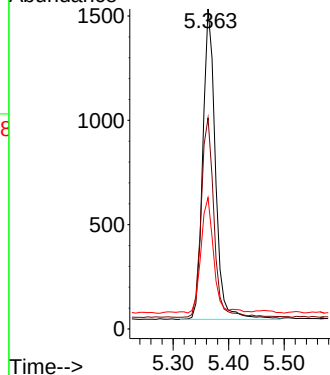
64 65.1 50.0 75.0

63 37.4 30.7 46.1

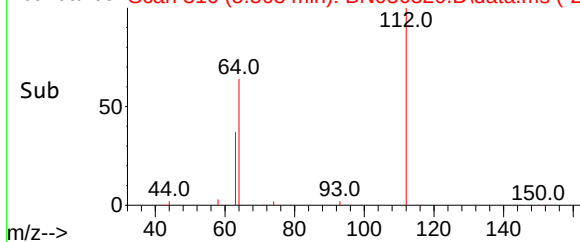
Abundance Scan 316 (5.363 min): BN036320.D\data.ms

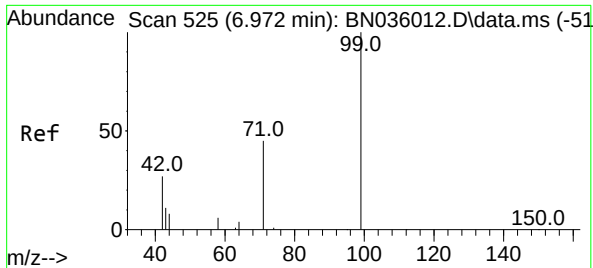


Abundance



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

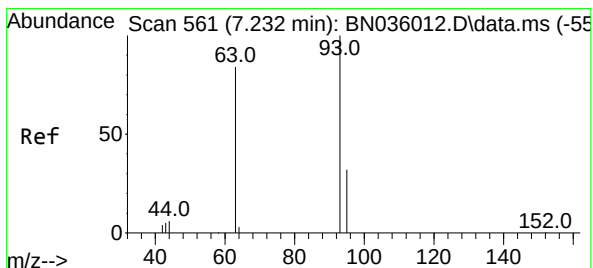
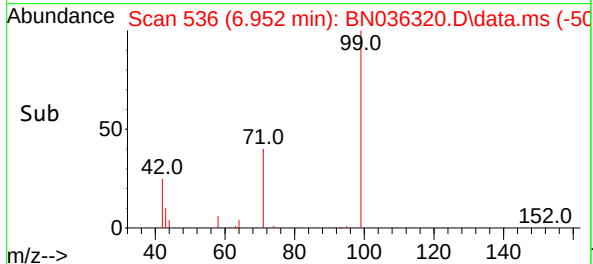
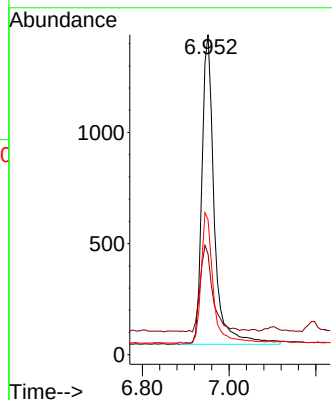
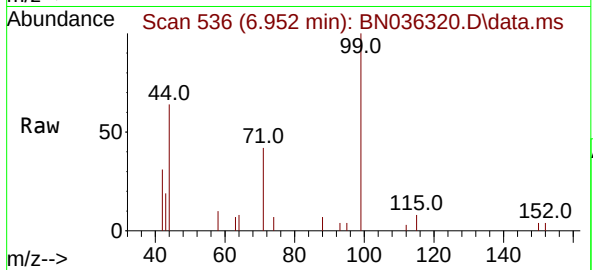




#5
Phenol-d6
Concen: 0.447 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

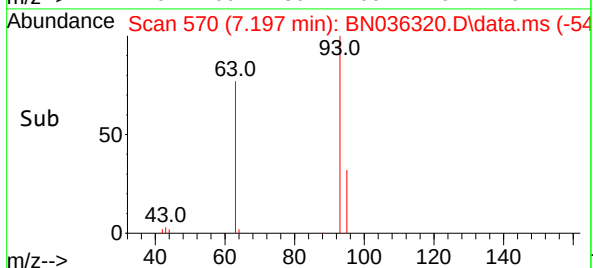
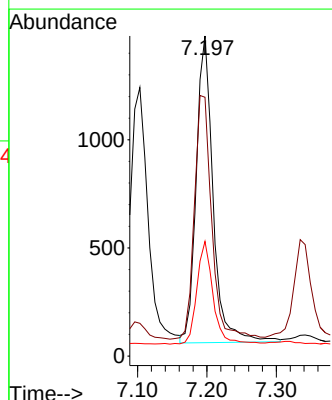
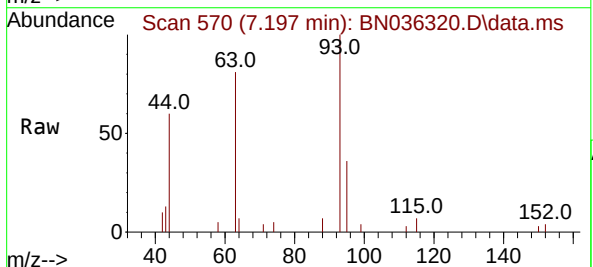
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

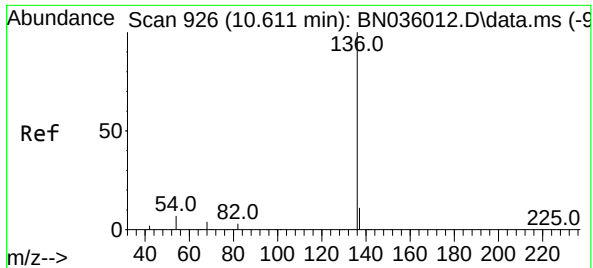
Tgt Ion: 99 Resp: 2757
Ion Ratio Lower Upper
99 100
42 28.5 26.8 40.2
71 40.6 36.6 55.0



#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

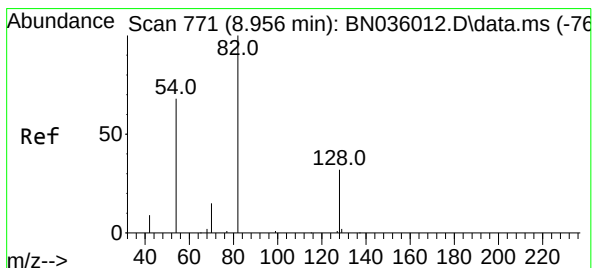
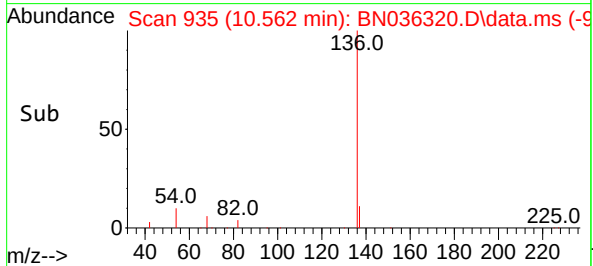
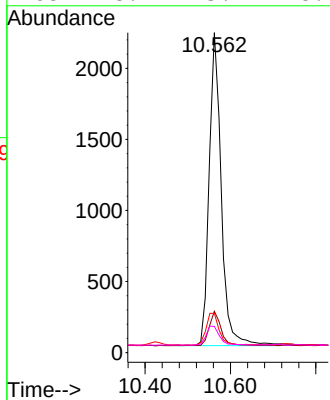
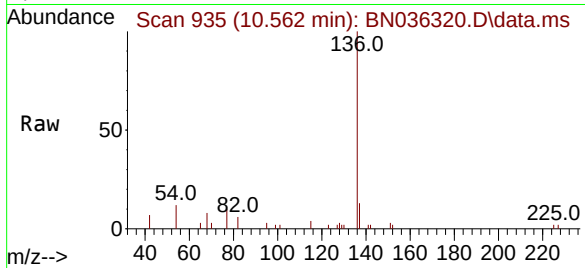




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

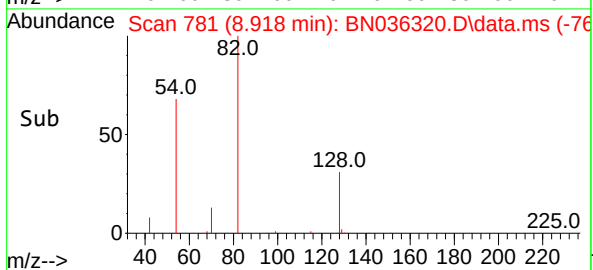
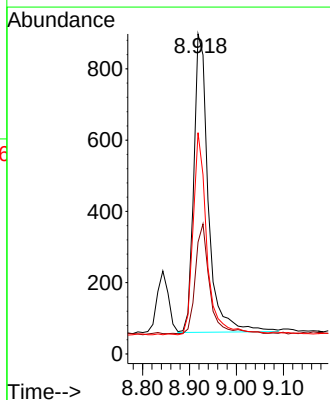
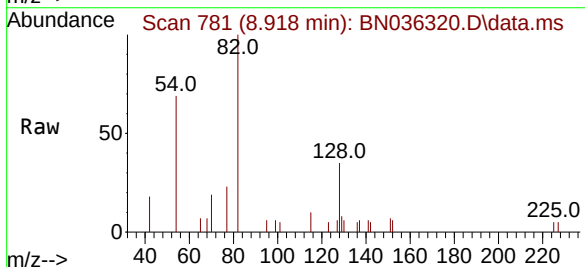
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

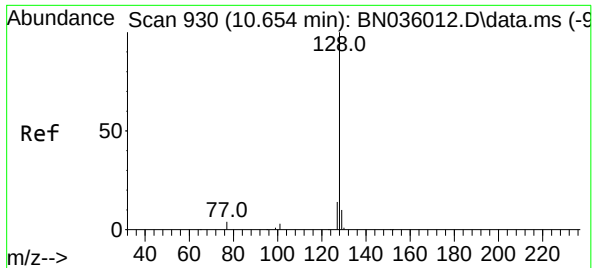
Tgt Ion:	136	Resp:	4328
Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.4	15.6
54	12.3	7.7	11.5#
68	8.2	5.4	8.0#



#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

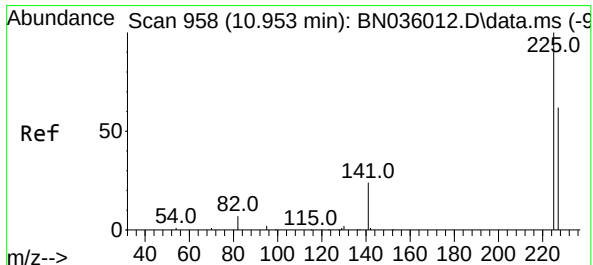
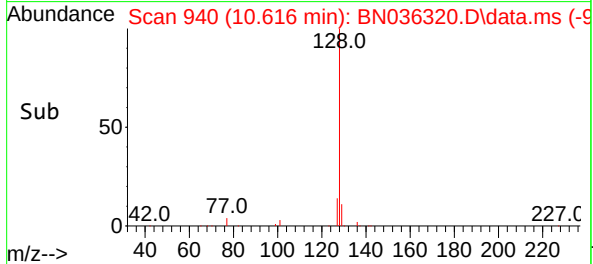
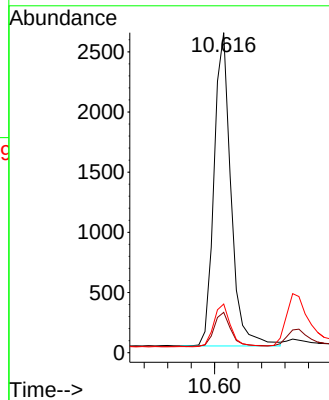
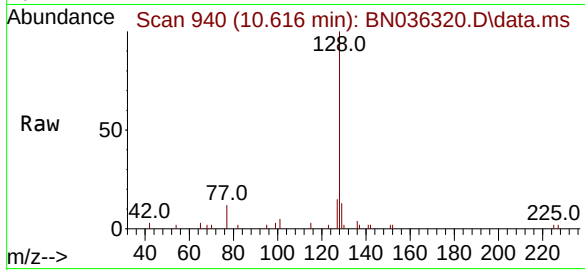




#9
Naphthalene
Concen: 0.414 ng
RT: 10.616 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

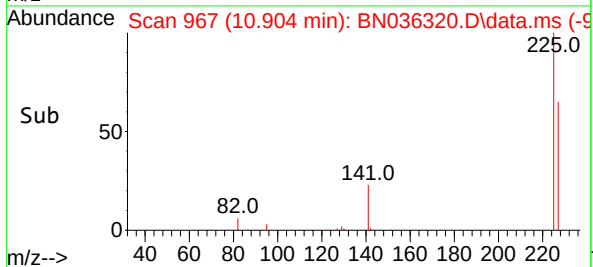
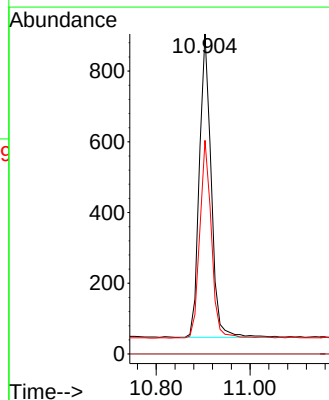
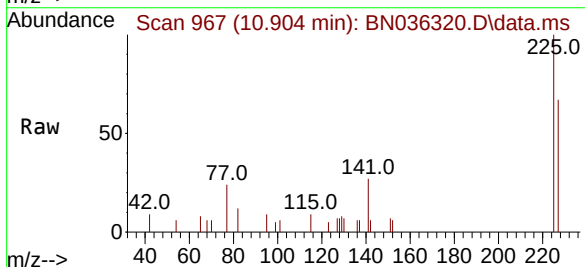
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

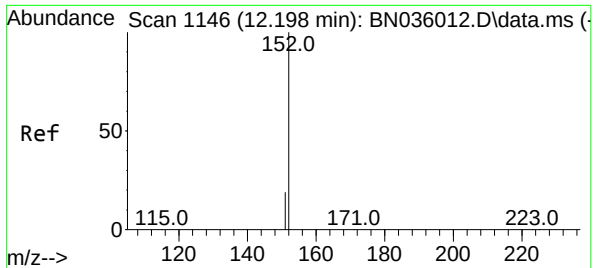
Tgt Ion:	128	Resp:	5202
Ion	Ratio	Lower	Upper
128	100		
129	12.6	9.4	14.2
127	15.2	12.6	19.0



#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

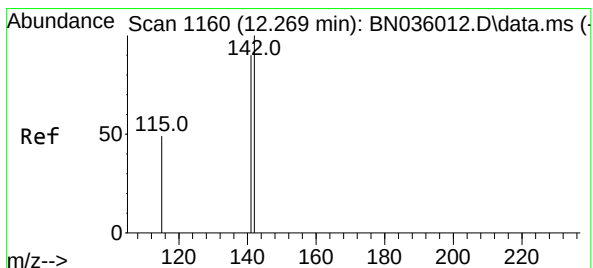
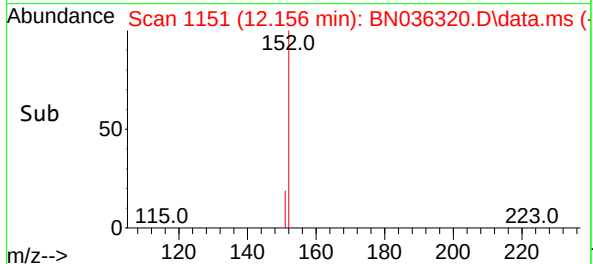
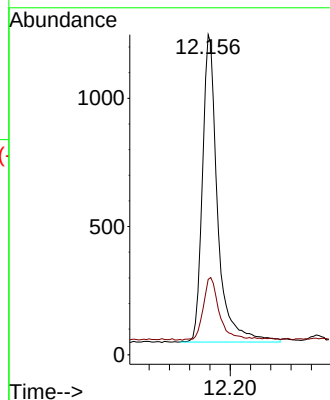
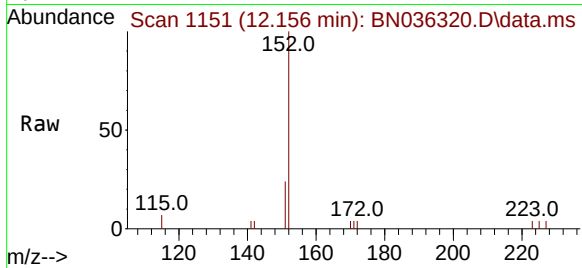




#11
2-Methylnaphthalene-d10
Concen: 0.423 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

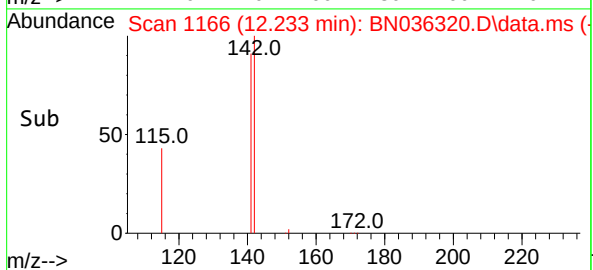
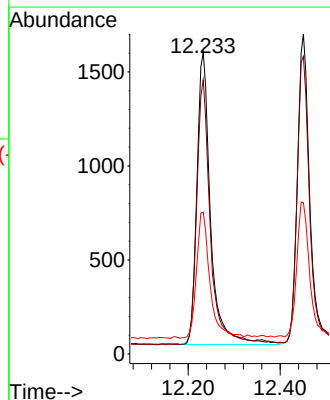
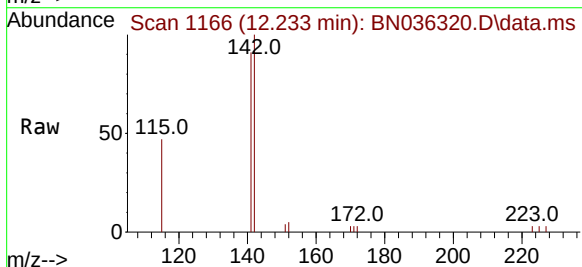
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

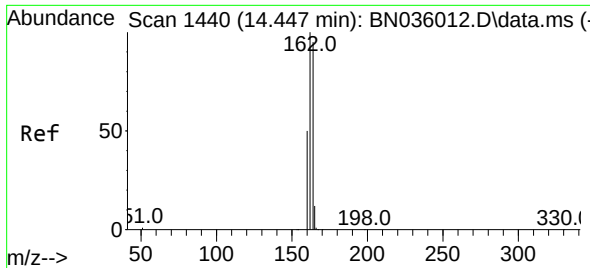
Tgt Ion:152 Resp: 2489
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0



#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

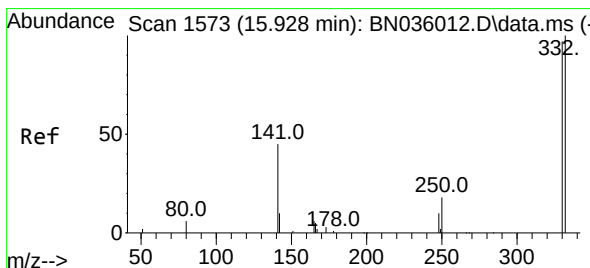
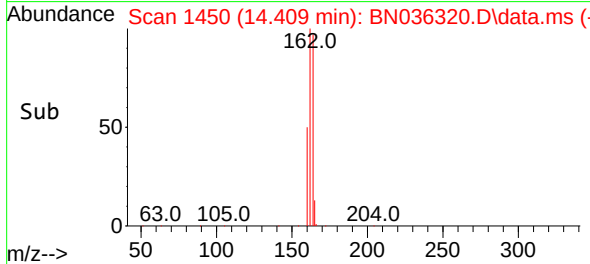
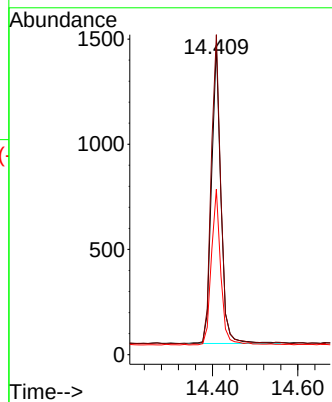
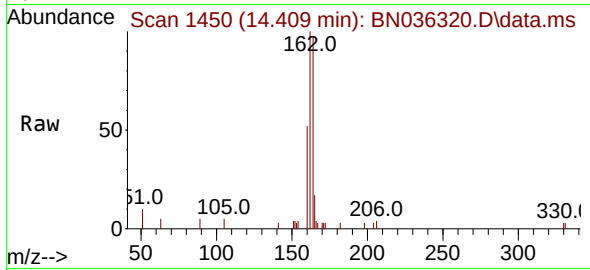




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

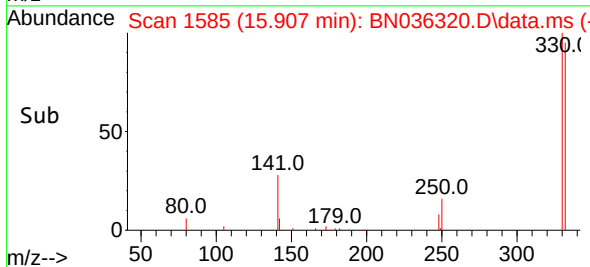
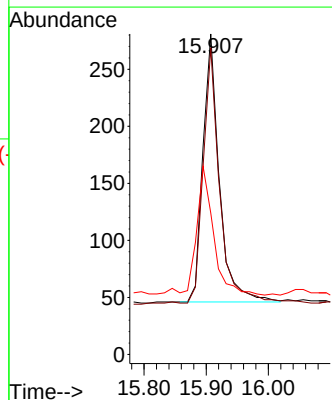
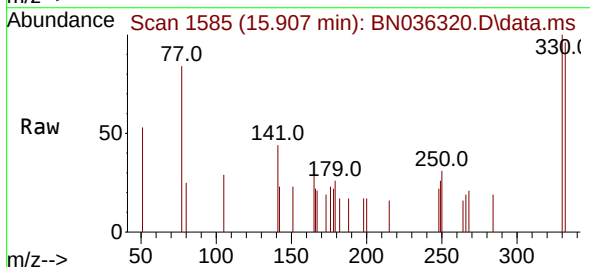
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

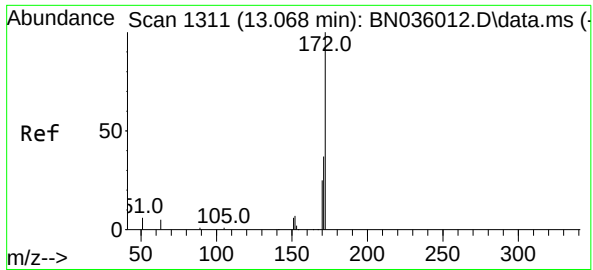
Tgt Ion:164 Resp: 2158
Ion Ratio Lower Upper
164 100
162 103.3 84.1 126.1
160 53.4 43.8 65.8



#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:330 Resp: 432
Ion Ratio Lower Upper
330 100
332 100.2 81.0 121.4
141 50.5 36.7 55.1

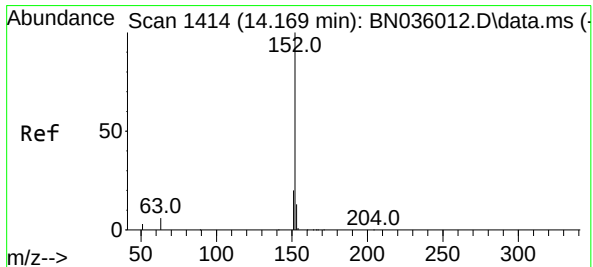
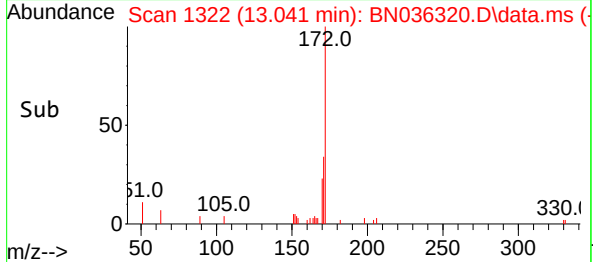
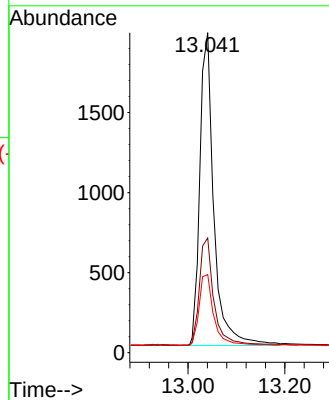
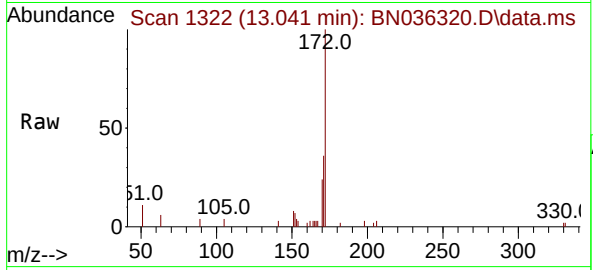




#15
2-Fluorobiphenyl
Concen: 0.361 ng
RT: 13.041 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

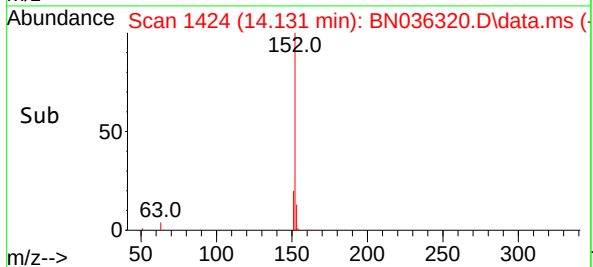
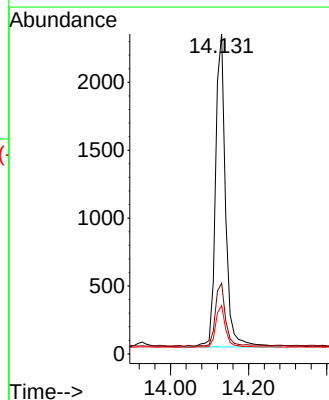
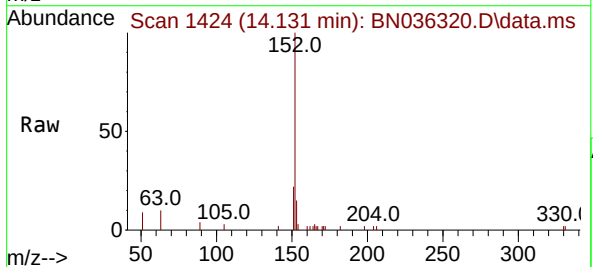
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

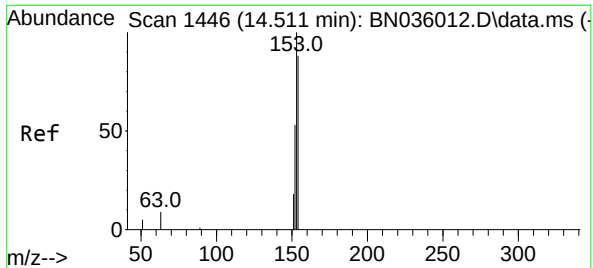
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.9	30.9	46.3
170	24.4	21.2	31.8



#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	Ratio	Lower	Upper
152	100		
151	20.6	16.2	24.2
153	13.3	10.4	15.6

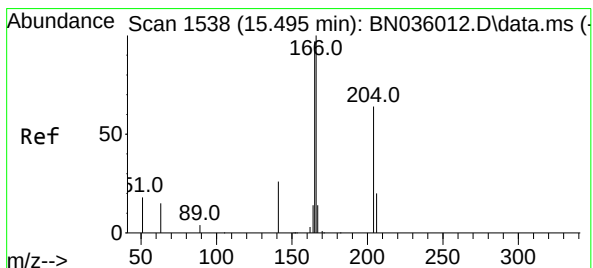
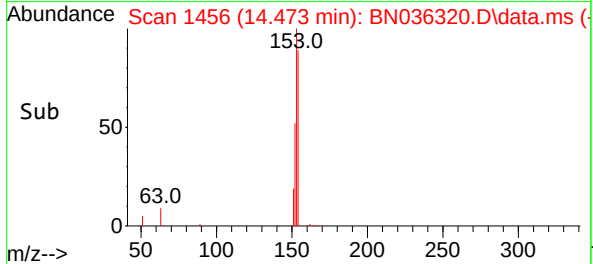
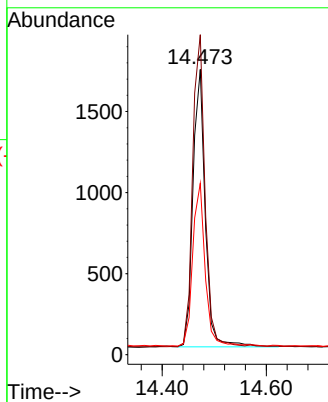
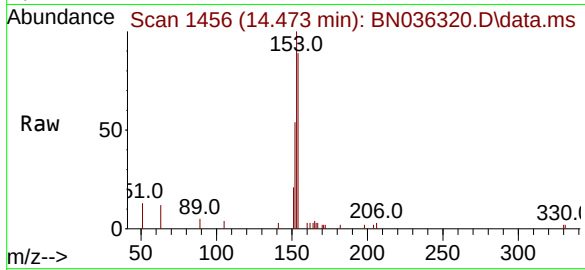




#17
Acenaphthene
Concen: 0.400 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

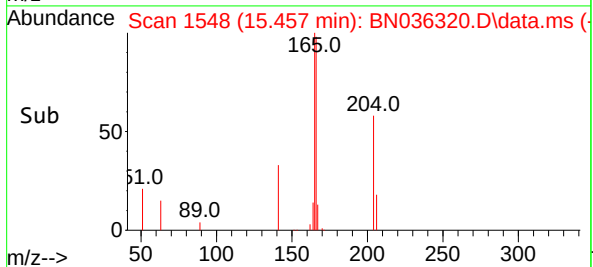
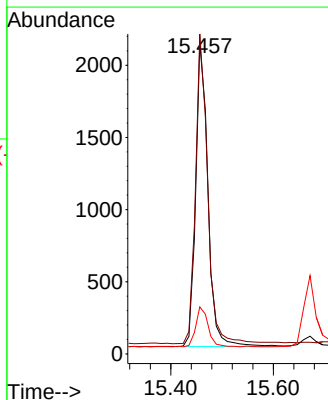
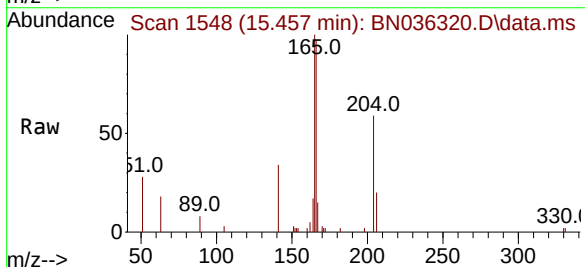
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

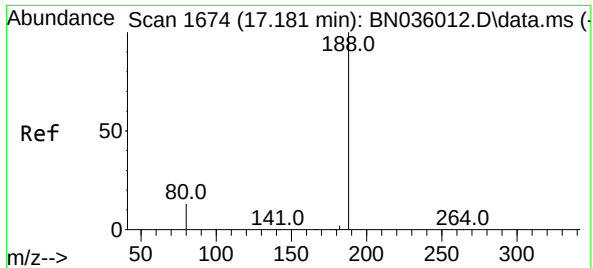
Tgt Ion	154	153	152
Resp:	2804		
Ion Ratio	100	113.1	59.1
Lower		88.9	48.1
Upper		133.3	72.1



#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	166	165	167
Resp:	3728		
Ion Ratio	100	100.7	12.6
Lower		78.5	10.7
Upper		117.7	16.1

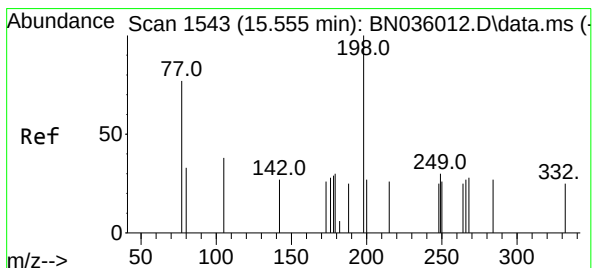
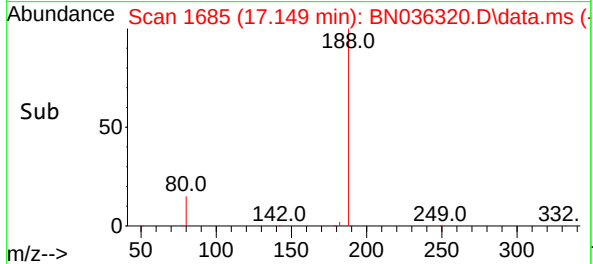
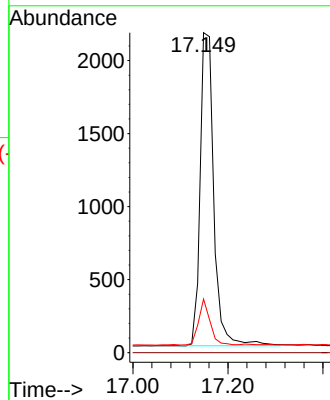
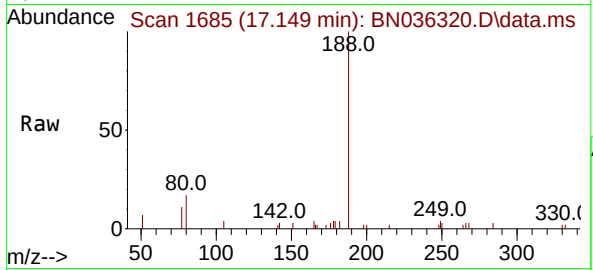




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.149 min Scan# 1685
Delta R.T. -0.013 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

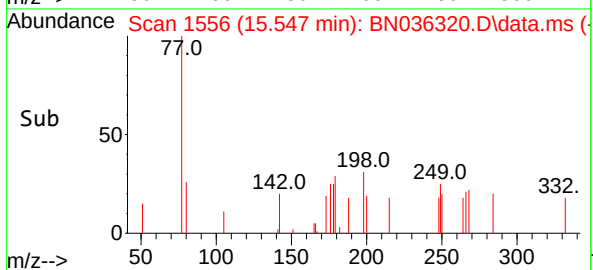
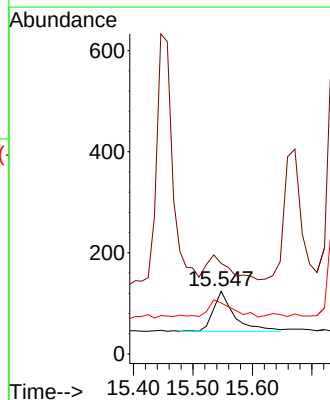
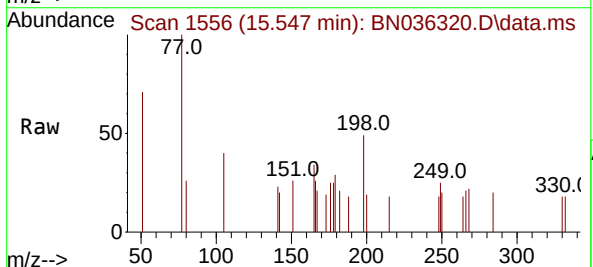
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

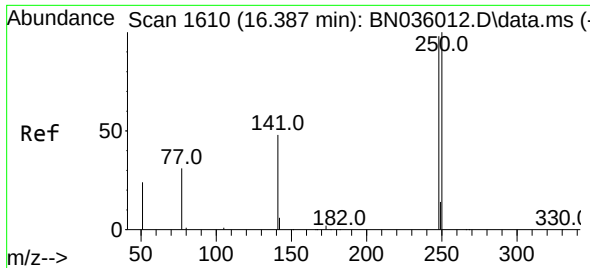
Tgt Ion:188 Resp: 4298
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 16.8 12.3 18.5



#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#

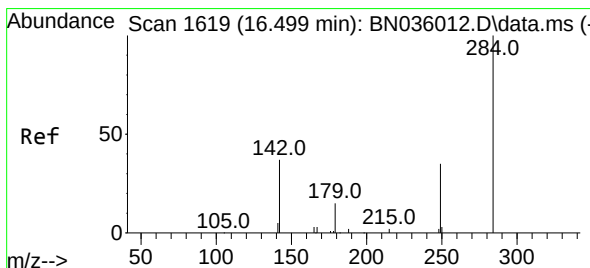
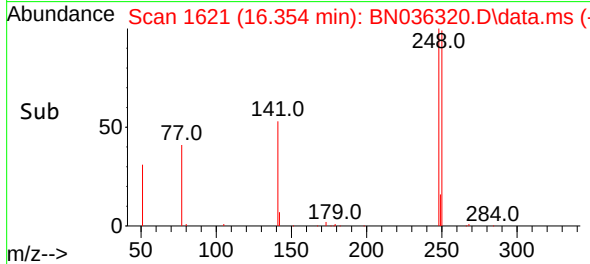
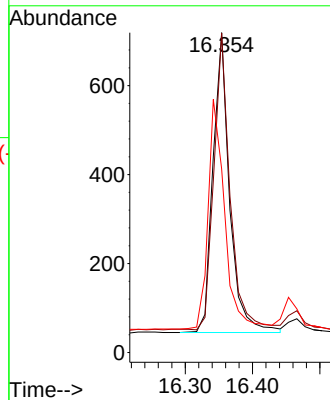
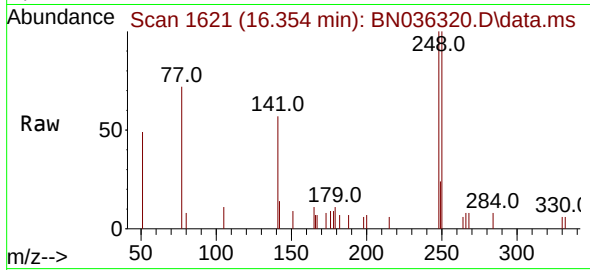




#21
4-Bromophenyl-phenylether
Concen: 0.378 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

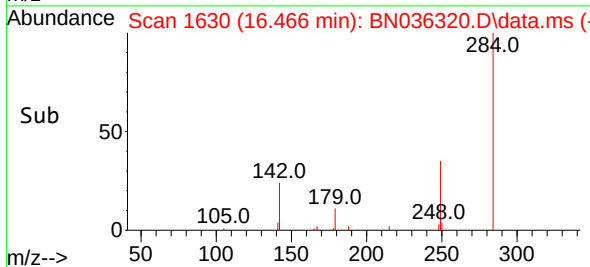
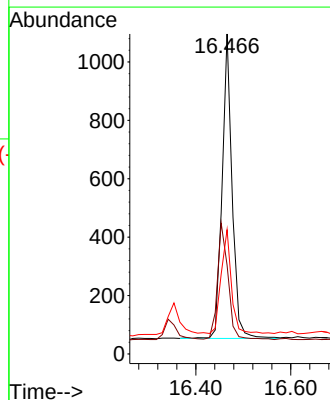
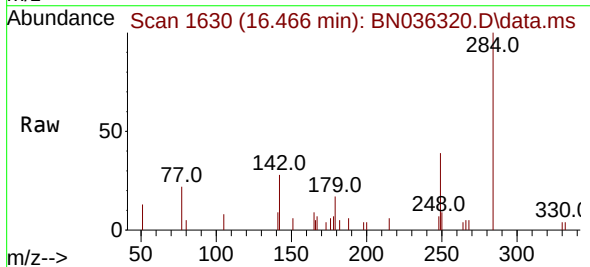
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

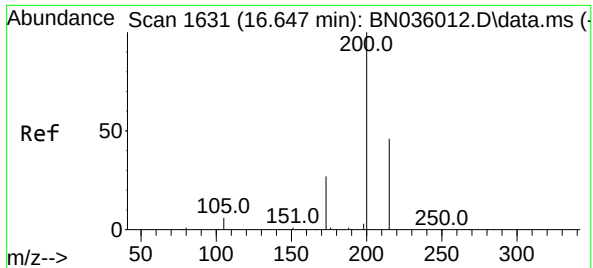
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.9	81.5	122.3
141	57.4	41.8	62.6



#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

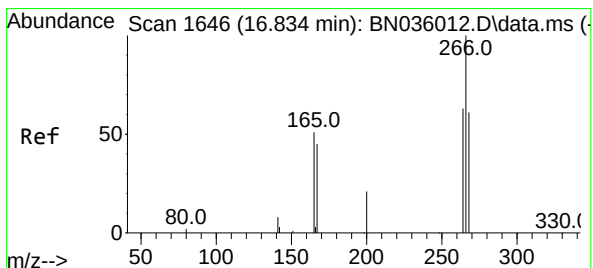
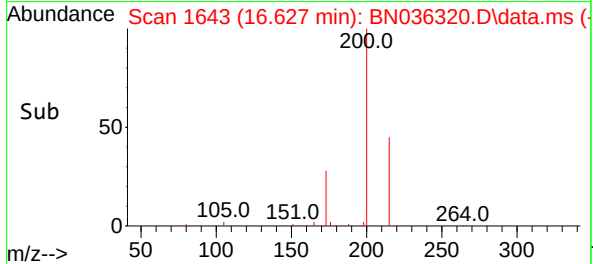
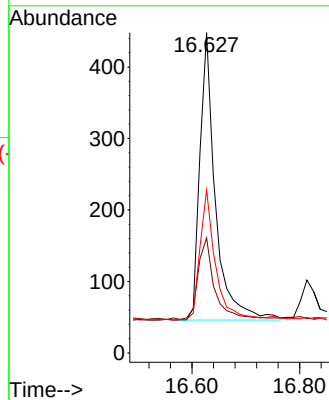
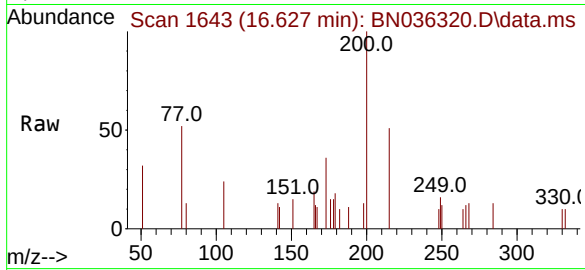




#23
Atrazine
Concen: 0.365 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

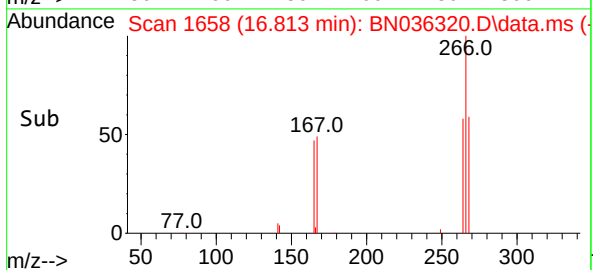
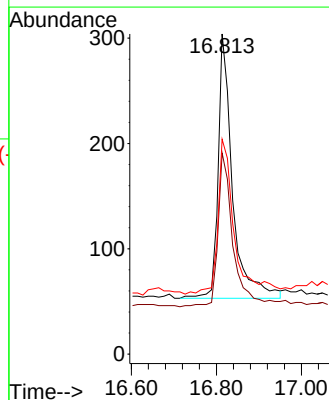
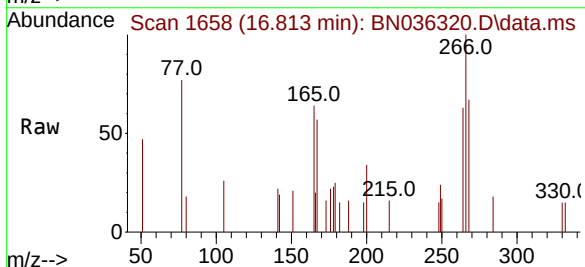
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

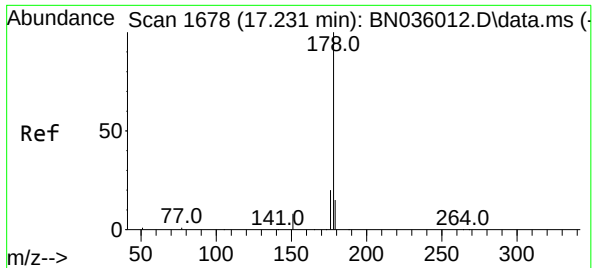
Tgt Ion:	200	Resp:	807
Ion Ratio	Lower	Upper	
200	100		
173	35.9	26.6	40.0
215	50.9	40.6	61.0



#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

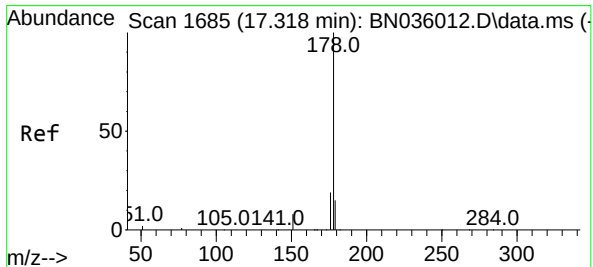
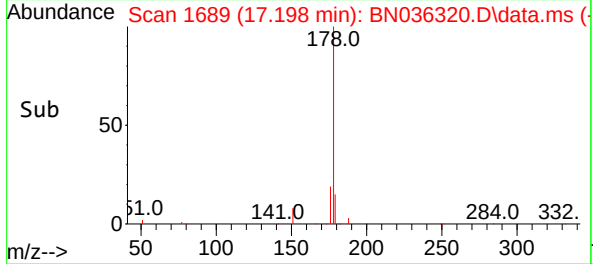
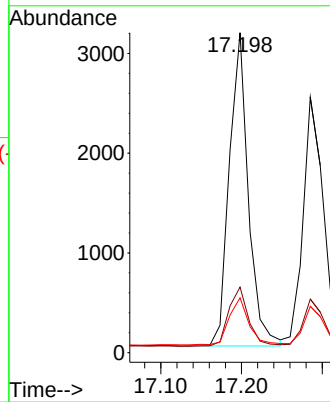
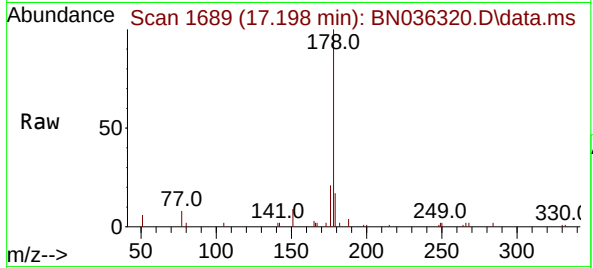




#25
Phenanthrene
Concen: 0.399 ng
RT: 17.198 min Scan# 1689
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

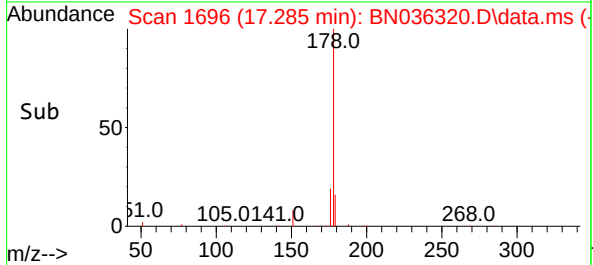
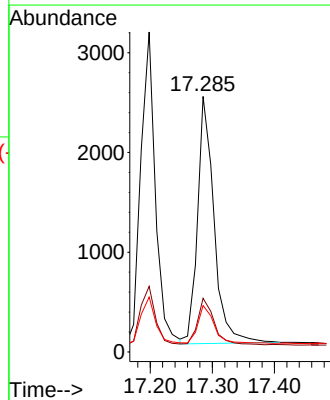
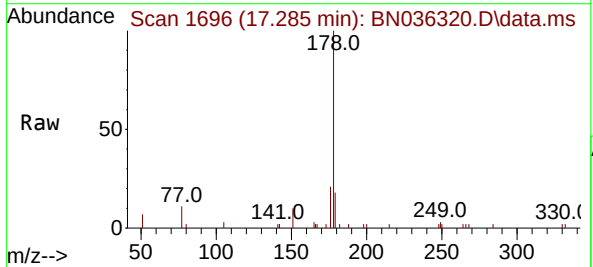
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

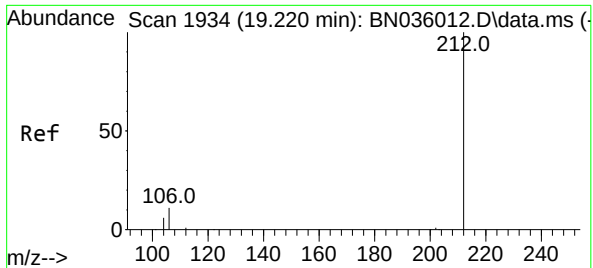
Tgt Ion:178 Resp: 5153
Ion Ratio Lower Upper
178 100
176 19.9 16.0 24.0
179 15.4 12.4 18.6



#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

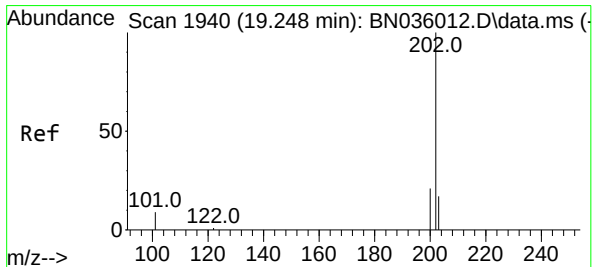
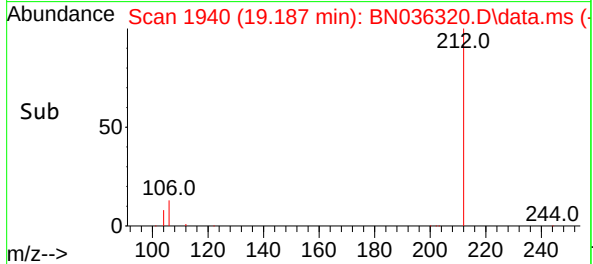
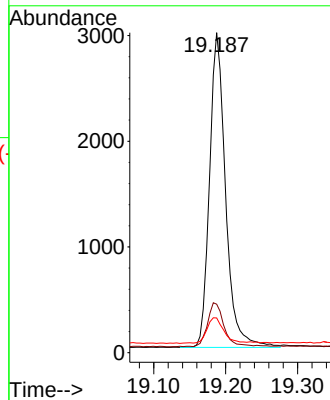
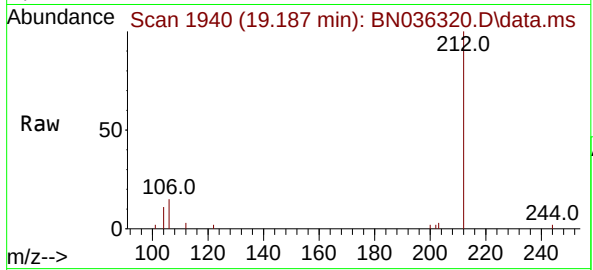




#27
Fluoranthene-d10
Concen: 0.414 ng
RT: 19.187 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

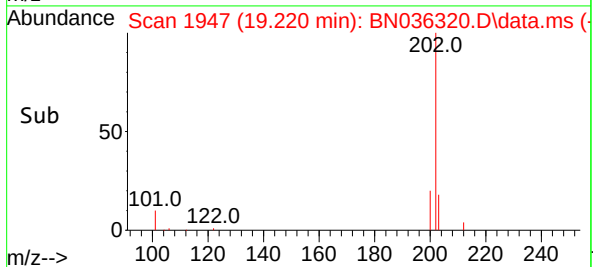
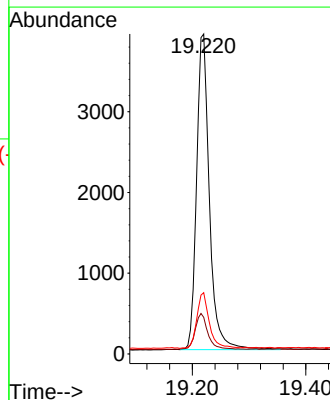
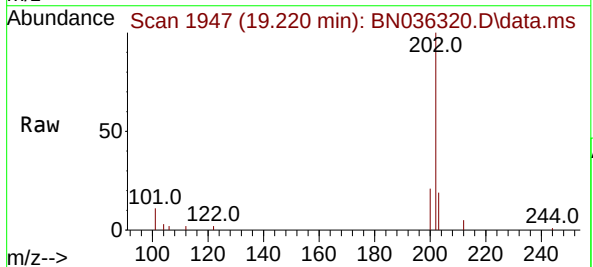
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

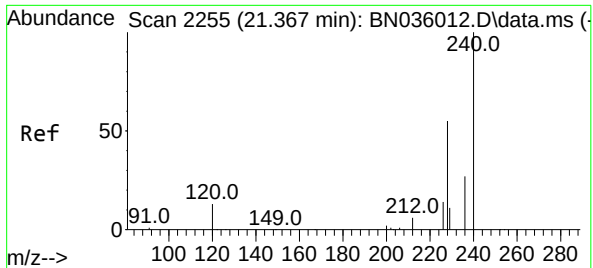
Tgt Ion	Ratio	Lower	Upper
212	100		
106	13.9	9.7	14.5
104	8.6	6.0	9.0



#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	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

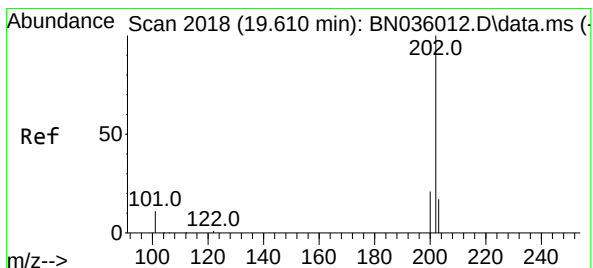
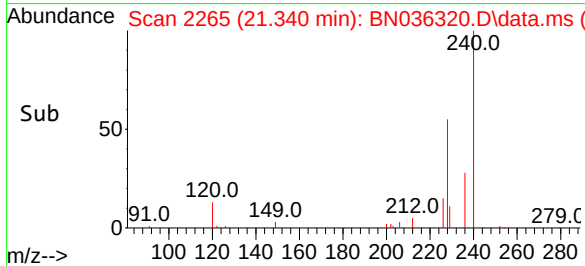
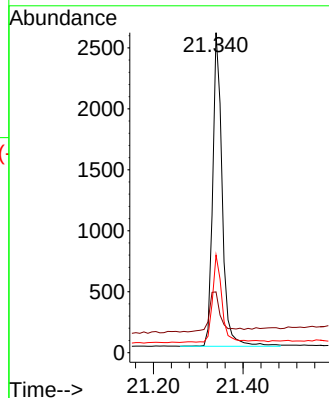
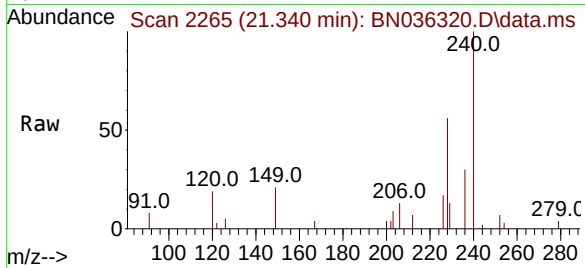
Tgt Ion:240 Resp: 3803

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

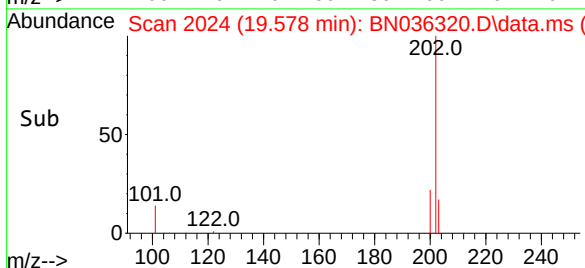
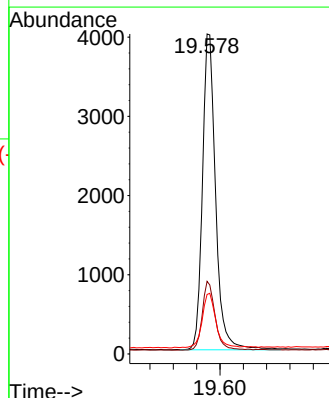
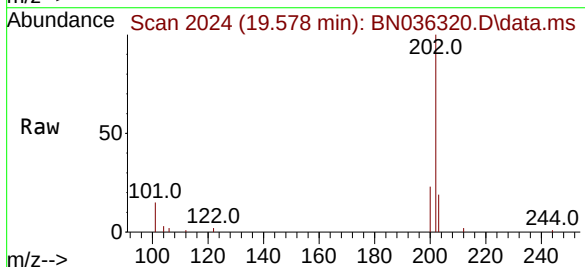
Tgt Ion:202 Resp: 6276

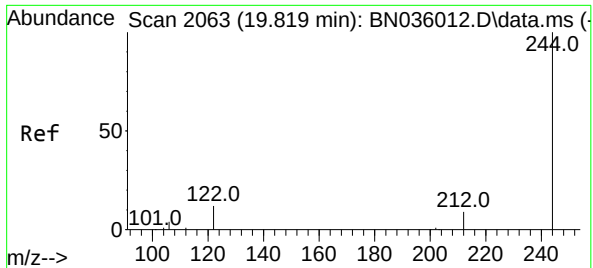
Ion Ratio Lower Upper

202 100

200 21.3 17.0 25.4

203 17.5 14.4 21.6

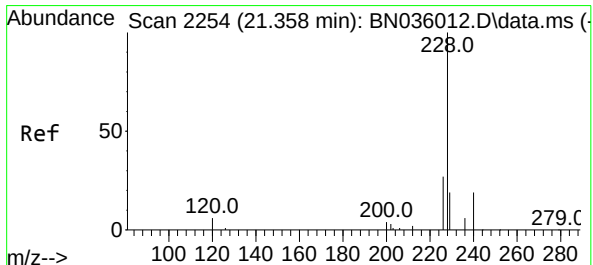
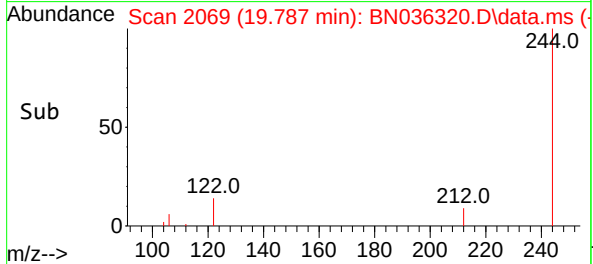
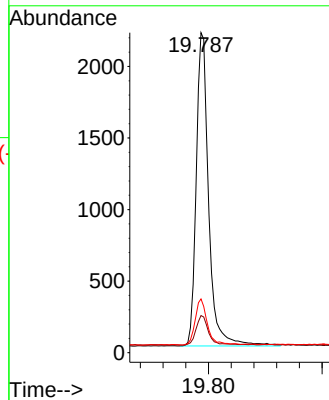
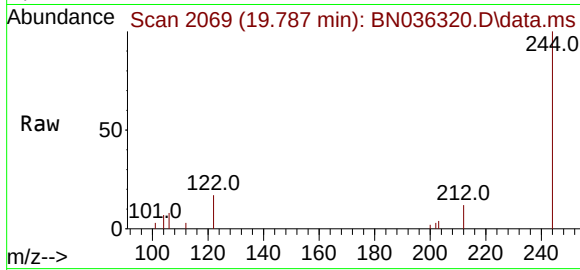




#31
Terphenyl-d14
Concen: 0.421 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

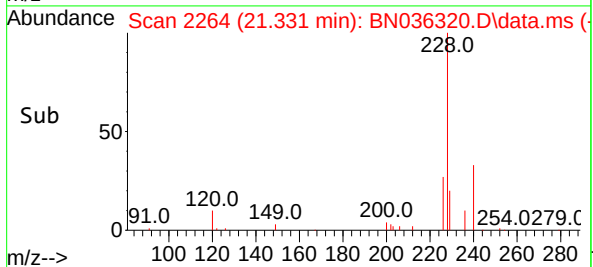
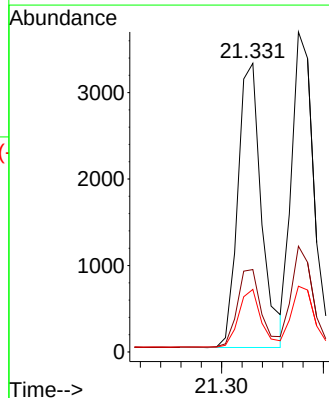
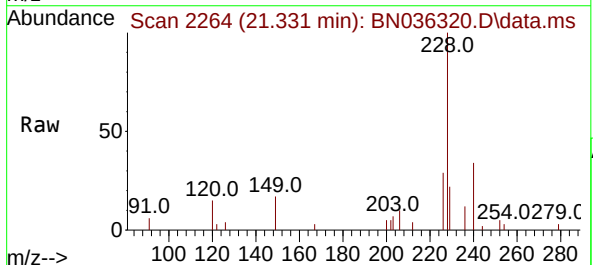
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

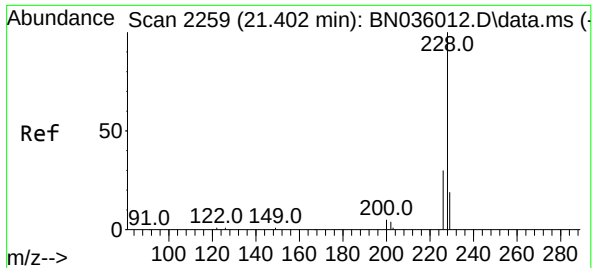
Tgt Ion:244 Resp: 3323
Ion Ratio Lower Upper
244 100
212 11.6 9.1 13.7
122 16.8 11.3 16.9



#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:228 Resp: 5315
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

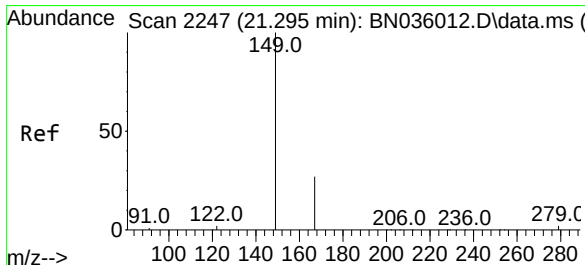
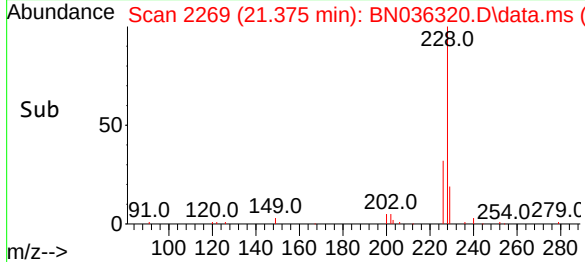
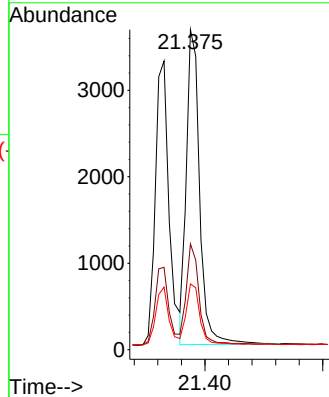
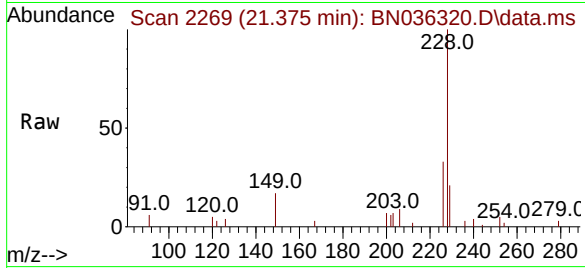
Tgt Ion:228 Resp: 5700

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

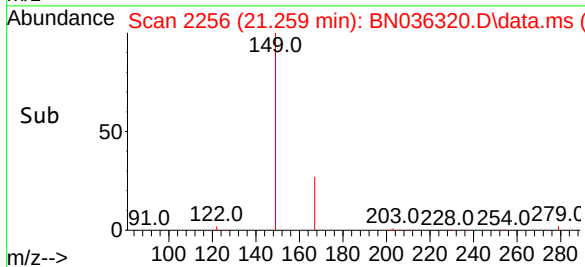
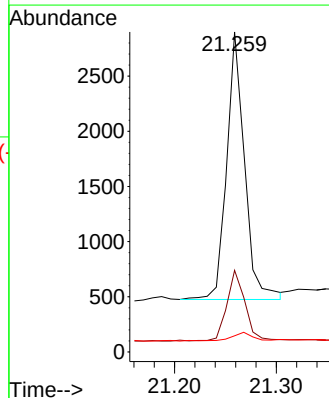
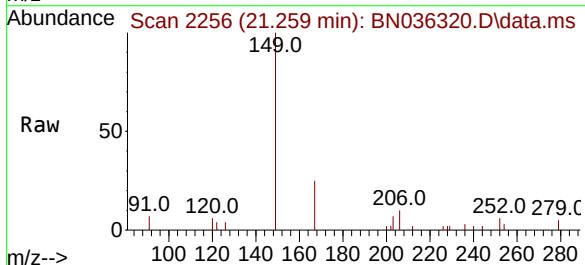
Tgt Ion:149 Resp: 2961

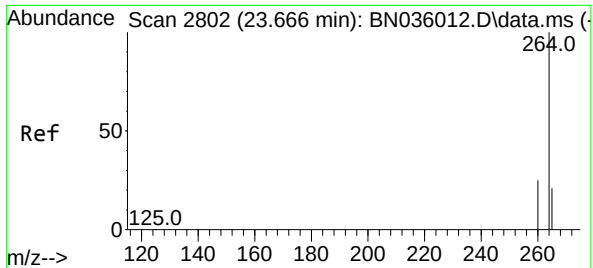
Ion Ratio Lower Upper

149 100

167 27.0 21.9 32.9

279 3.9 3.0 4.6

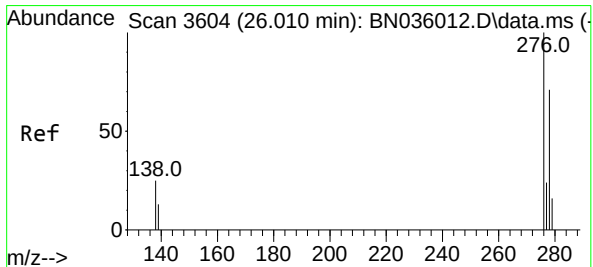
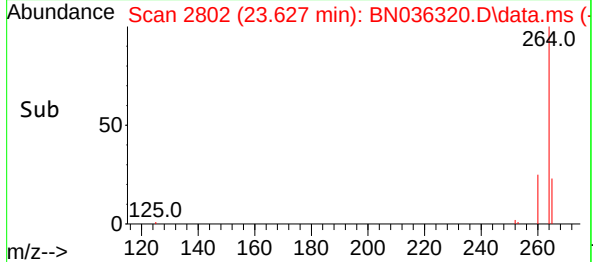
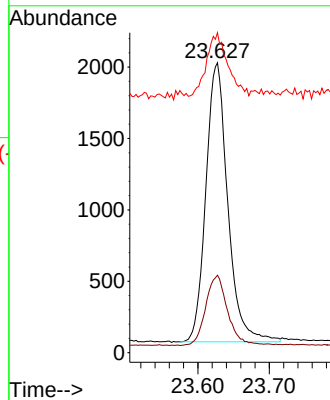
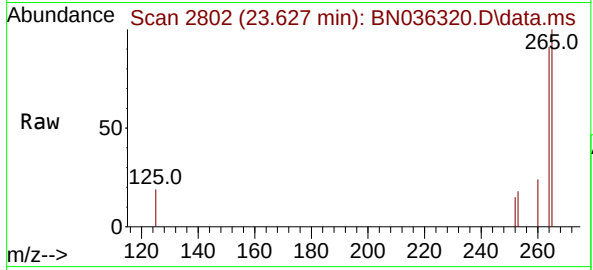




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.627 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

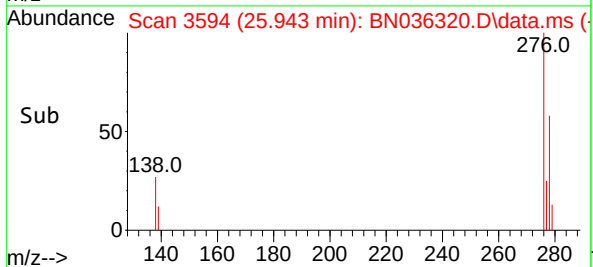
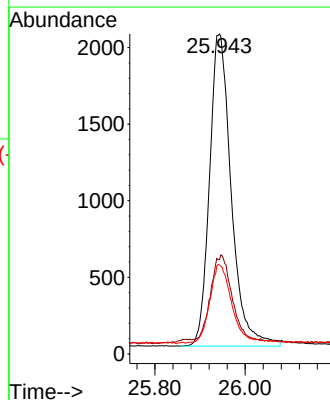
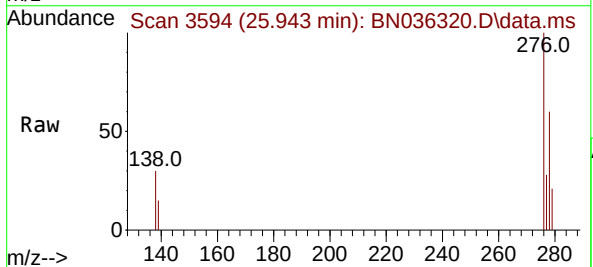
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

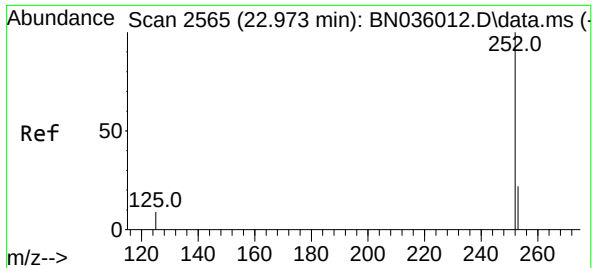
Tgt Ion:264 Resp: 4157
Ion Ratio Lower Upper
264 100
260 26.7 21.8 32.6
265 110.4 56.6 84.8#



#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

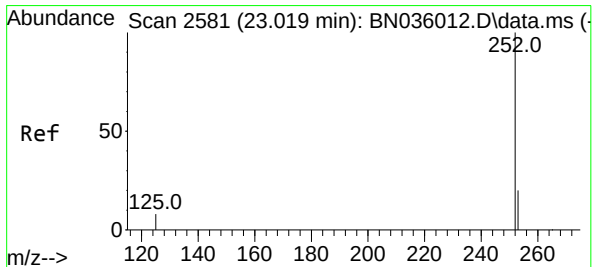
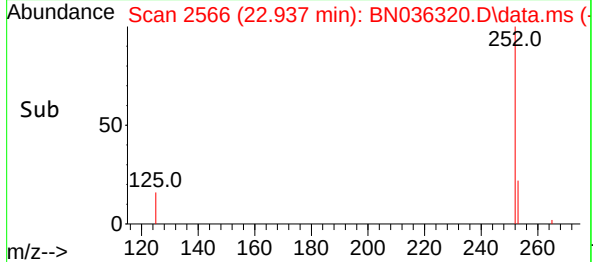
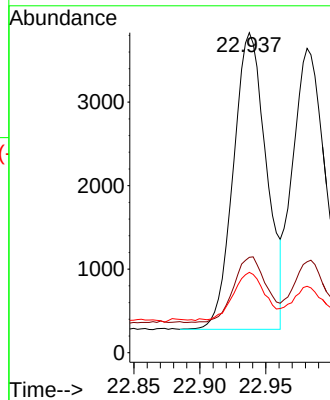
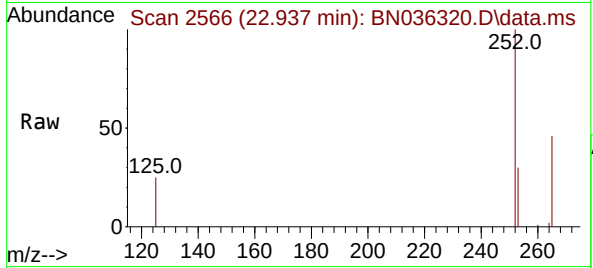




#37
Benzo(b)fluoranthene
Concen: 0.409 ng
RT: 22.937 min Scan# 2566
Delta R.T. -0.000 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

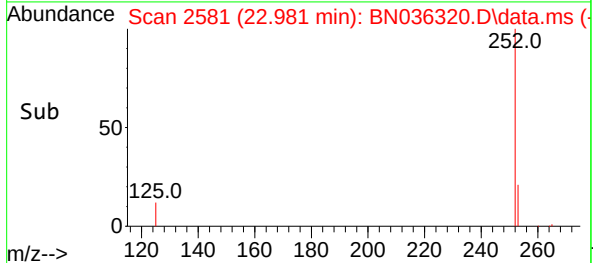
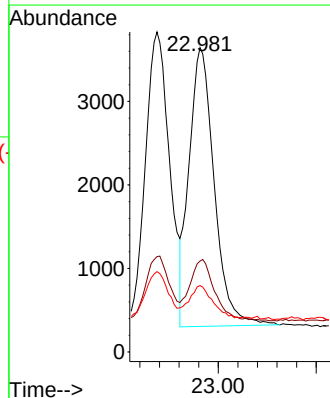
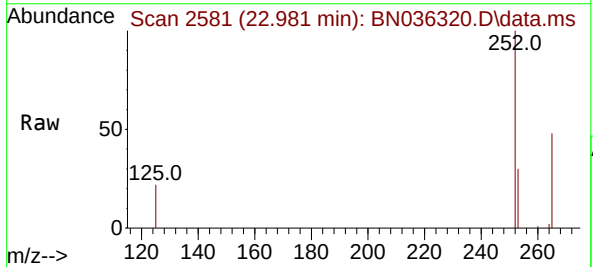
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

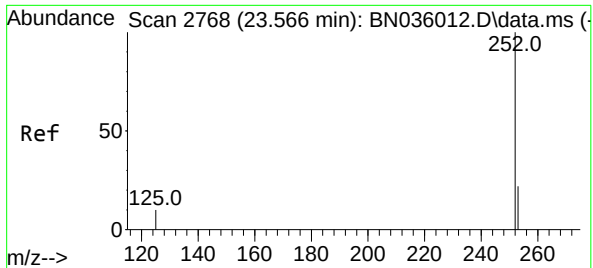
Tgt Ion:252 Resp: 6184
Ion Ratio Lower Upper
252 100
253 29.8 22.5 33.7
125 25.1 11.9 17.9#



#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

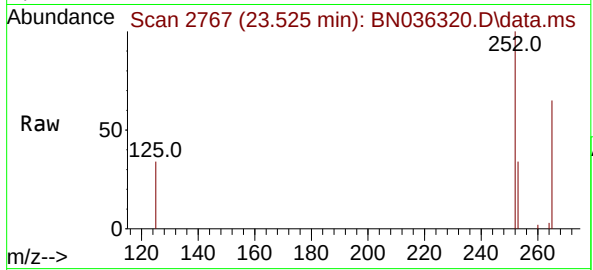
Acq: 06 Feb 2025 05:40

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4



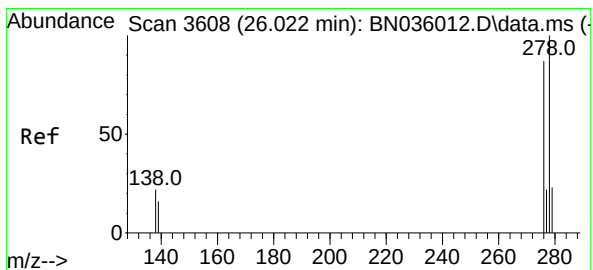
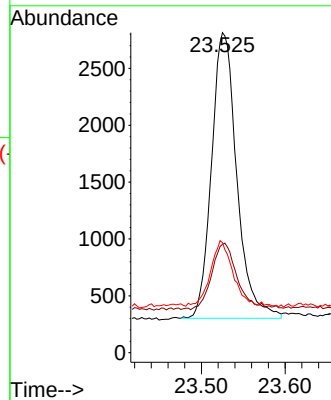
Tgt Ion:252 Resp: 5266

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

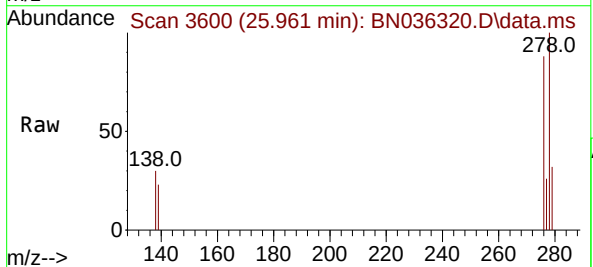
Concen: 0.395 ng

RT: 25.961 min Scan# 3600

Delta R.T. -0.003 min

Lab File: BN036320.D

Acq: 06 Feb 2025 05:40



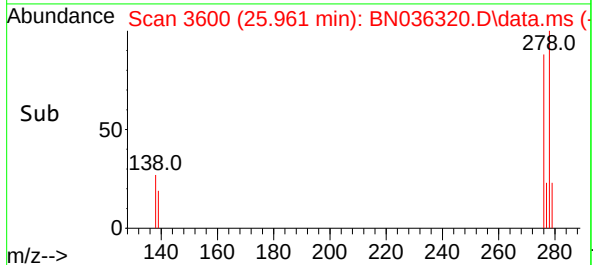
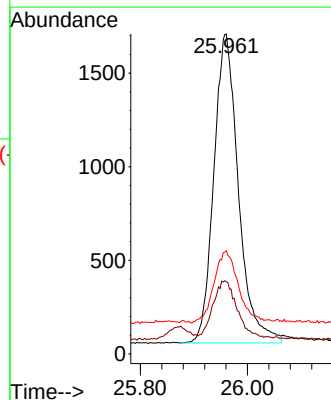
Tgt Ion:278 Resp: 5258

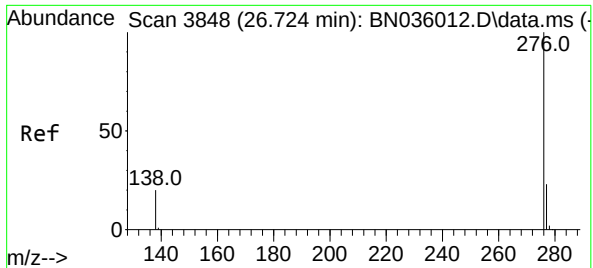
Ion Ratio Lower Upper

278 100

139 22.6 16.0 24.0

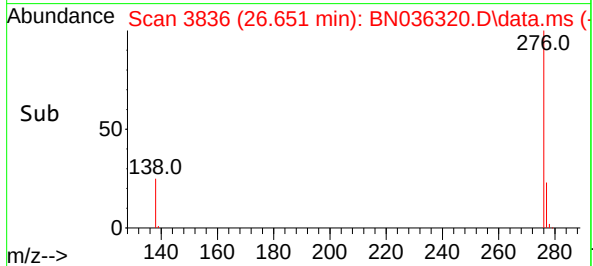
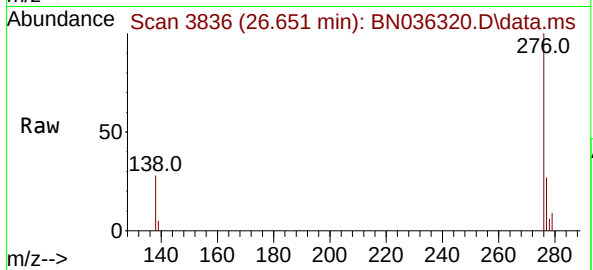
279 32.2 23.8 35.8



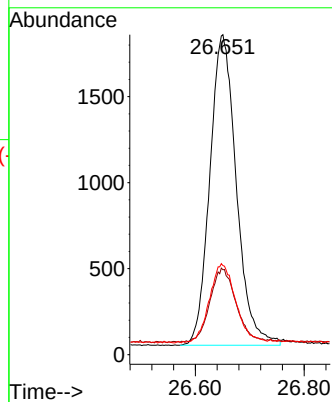


#41
Benzo(g,h,i)perylene
Concen: 0.422 ng
RT: 26.651 min Scan# 3836
Delta R.T. -0.003 min
Lab File: BN036320.D
Acq: 06 Feb 2025 05:40

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.: Q1283 SAS No.: Q1283 SDG No.: Q1283

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)

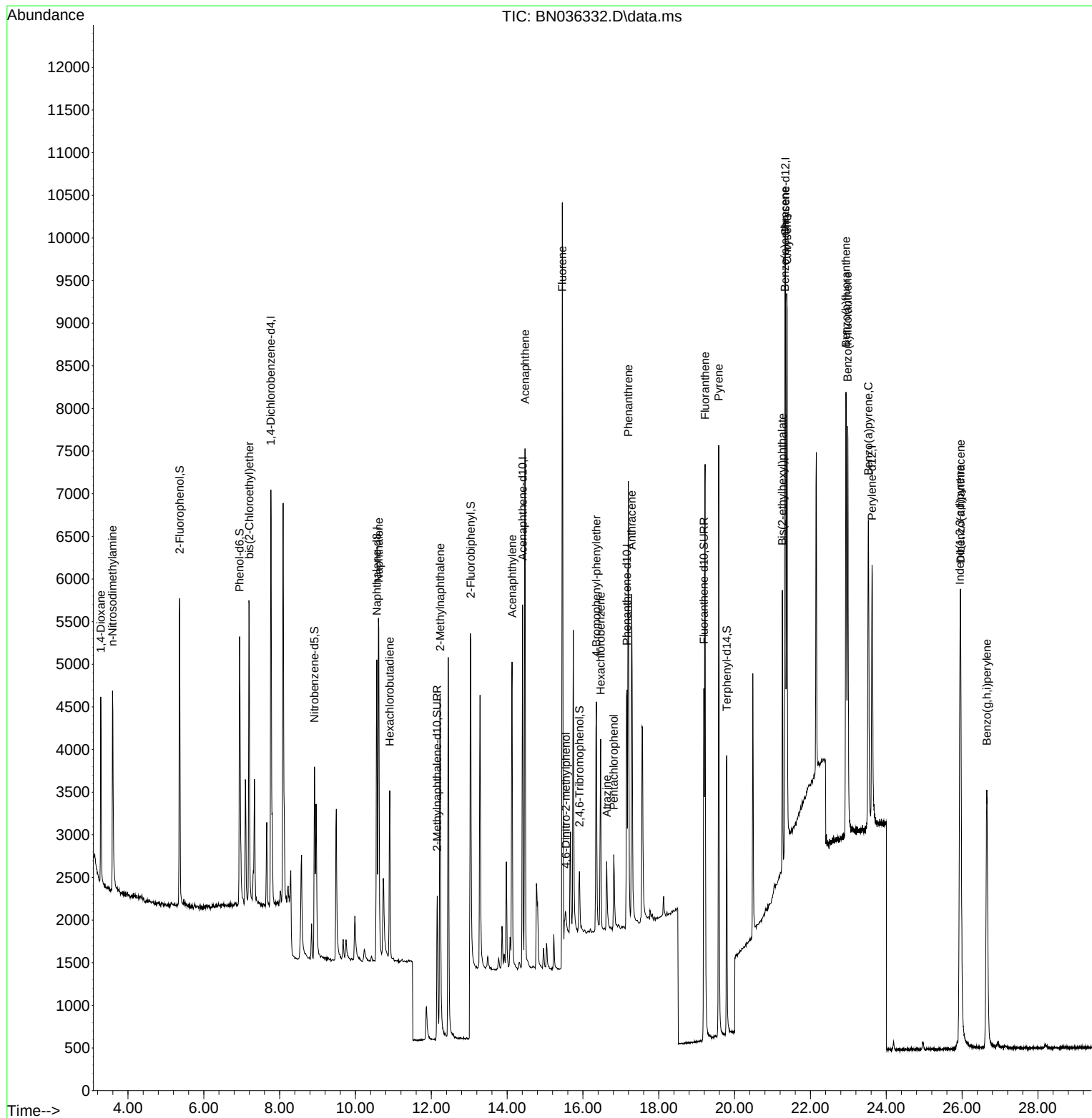
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.768	152	2400	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	5097	0.400	ng	0.00
13) Acenaphthene-d10	14.409	164	2512	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4814	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	4257	0.400	ng	# 0.00
35) Perylene-d12	23.625	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						Qvalue
2) 1,4-Dioxane	3.283	88	1166	0.435	ng	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

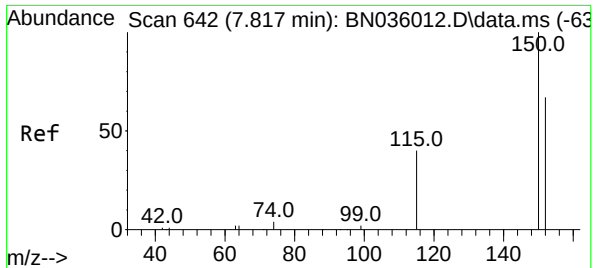
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

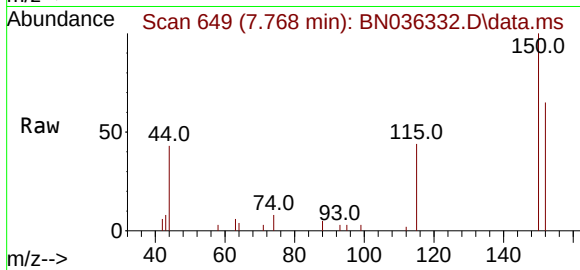
Quant Time: Feb 06 13:54:45 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration



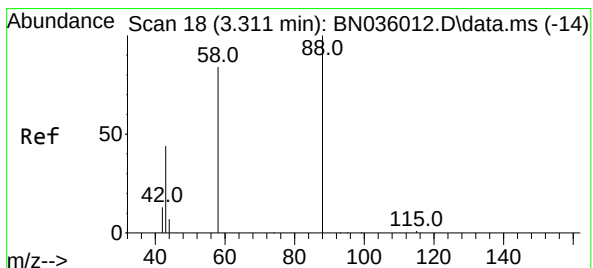
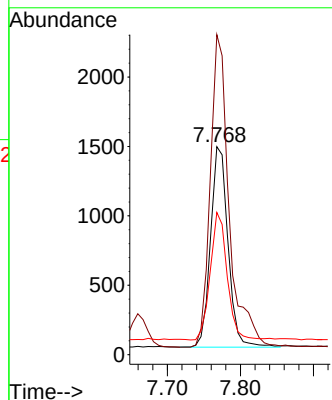
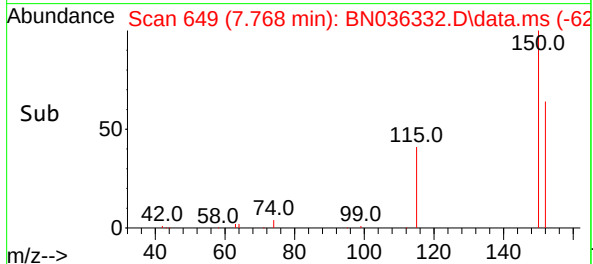


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.768 min Scan# 64
Delta R.T. -0.007 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

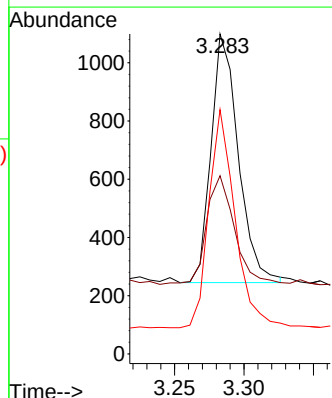
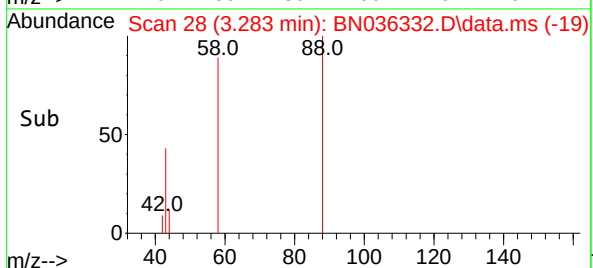
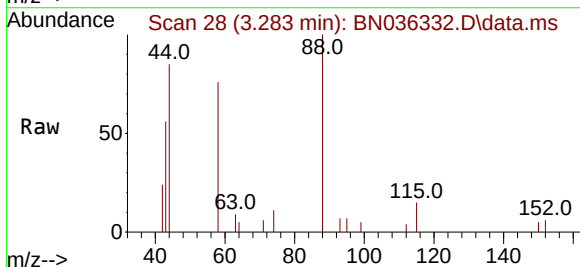


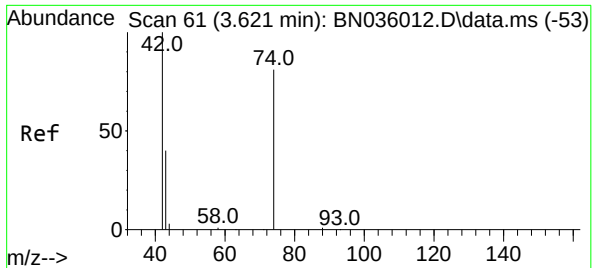
Tgt Ion:152 Resp: 2400
Ion Ratio Lower Upper
152 100
150 153.9 117.4 176.2
115 68.4 51.0 76.4



#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

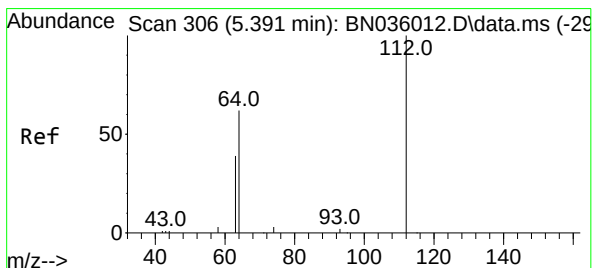
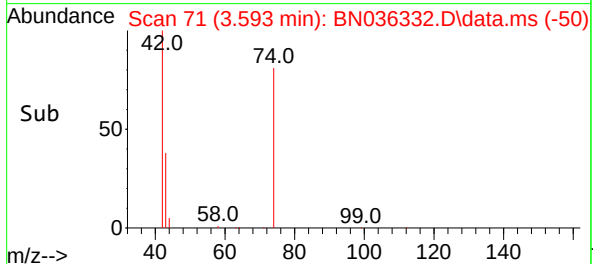
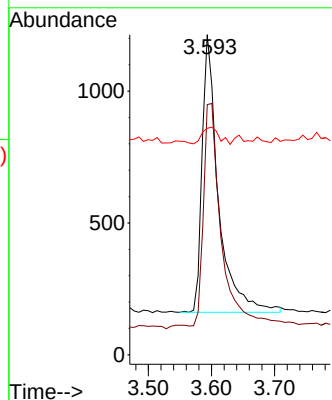
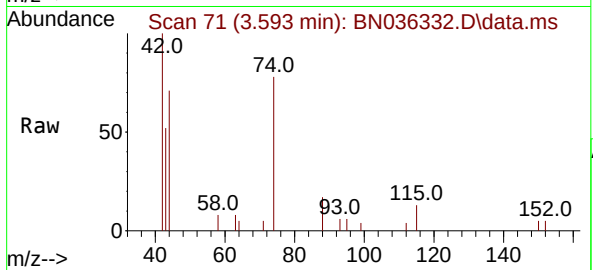




#3
n-Nitrosodimethylamine
Concen: 0.389 ng
RT: 3.593 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

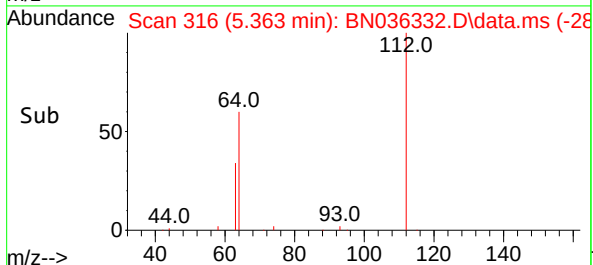
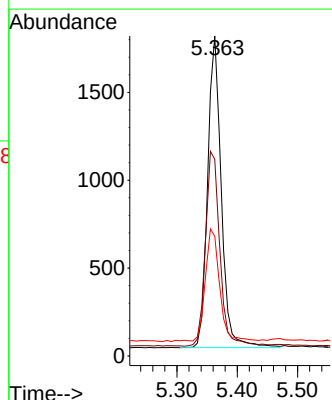
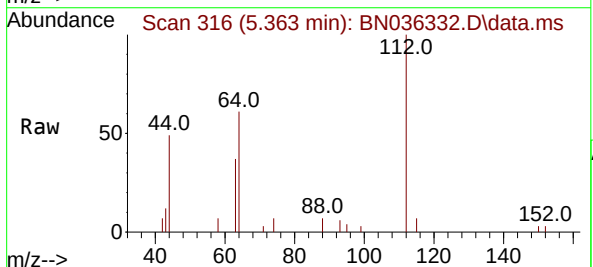
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

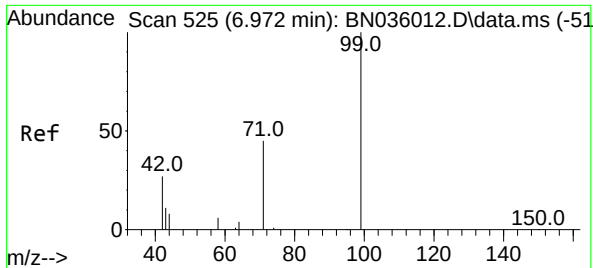
Tgt Ion: 42 Resp: 1891
Ion Ratio Lower Upper
42 100
74 87.0 58.1 87.1
44 6.3 6.2 9.4



#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

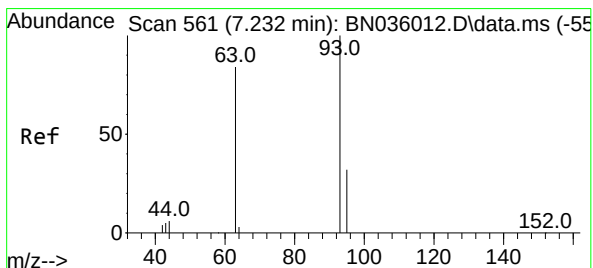
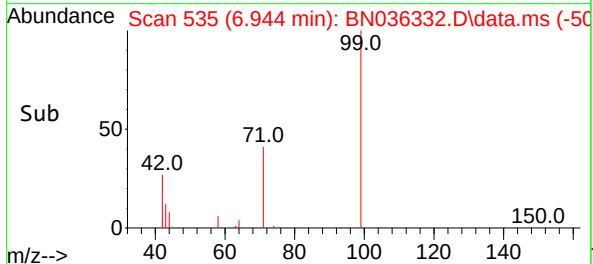
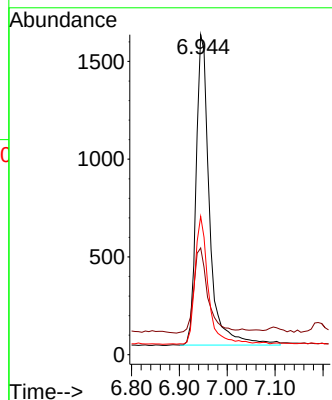
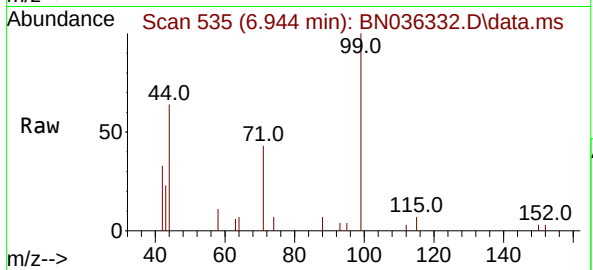




#5
Phenol-d6
Concen: 0.423 ng
RT: 6.944 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

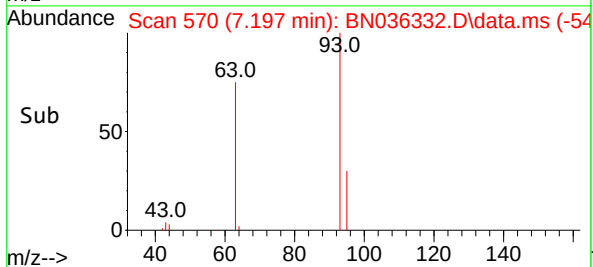
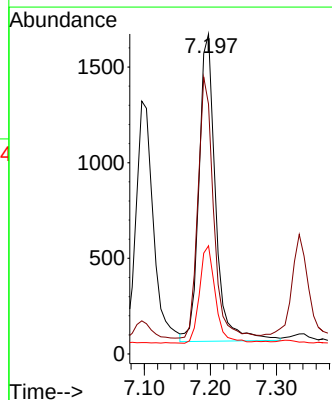
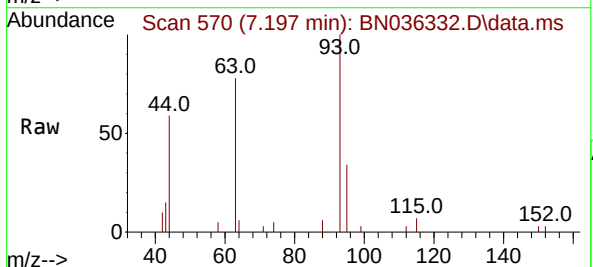
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

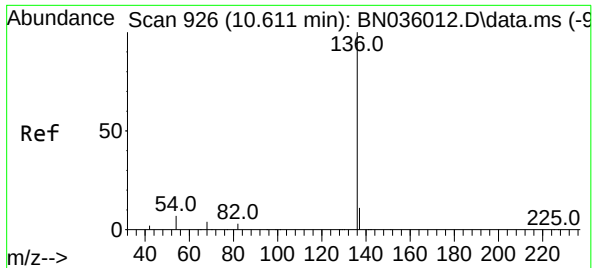
Tgt Ion: 99 Resp: 3102
Ion Ratio Lower Upper
99 100
42 28.9 26.8 40.2
71 40.3 36.6 55.0



#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

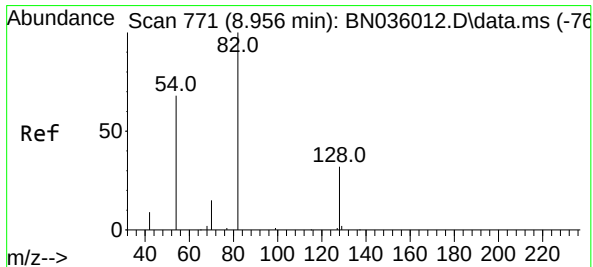
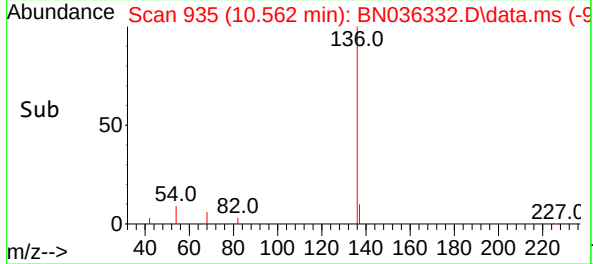
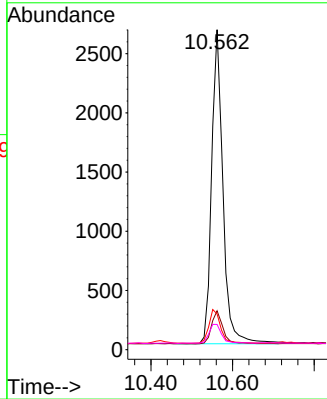
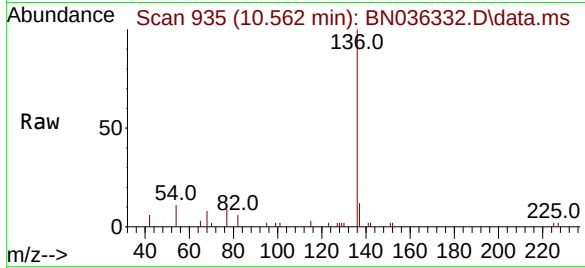




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

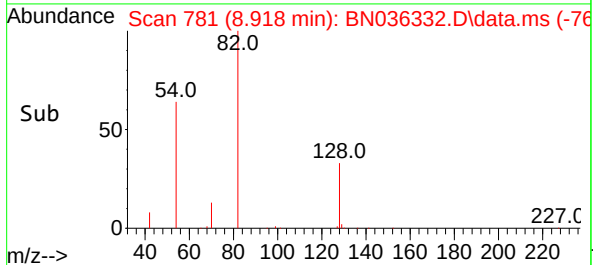
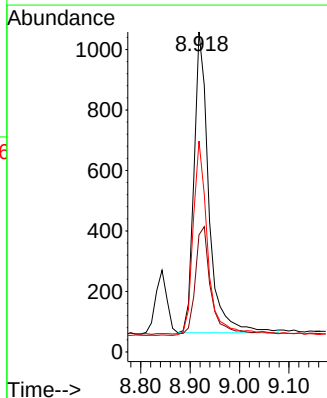
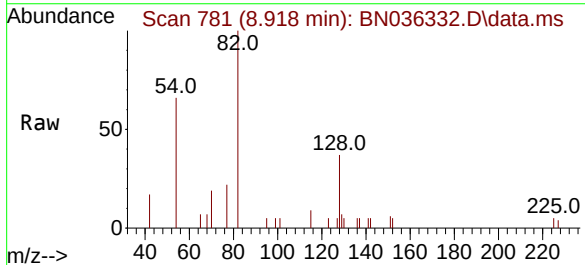
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

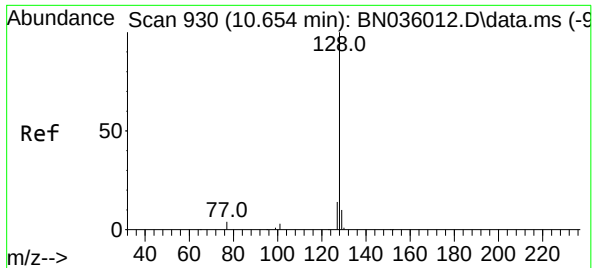
Tgt Ion:	136	Resp:	5097
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.4	15.6
54	11.2	7.7	11.5
68	7.9	5.4	8.0



#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

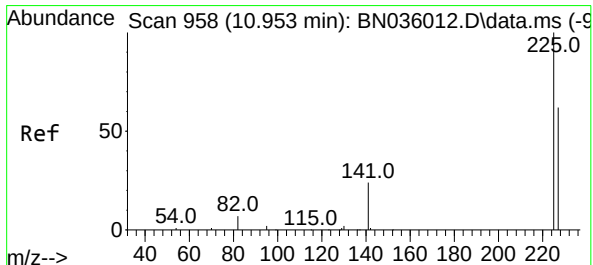
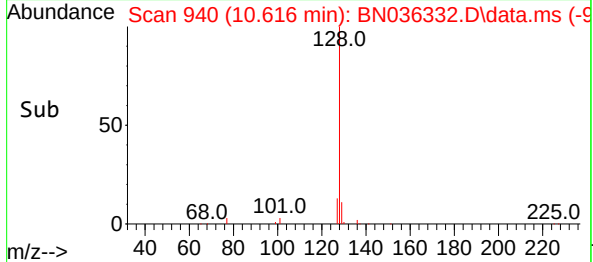
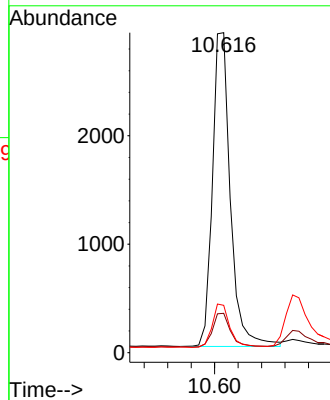
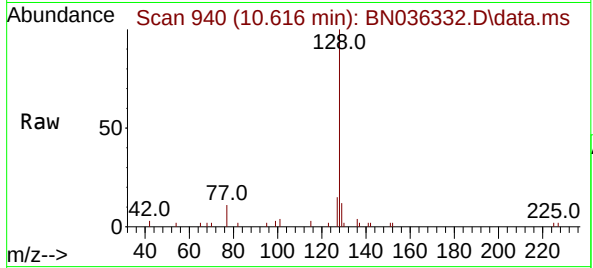




#9
Naphthalene
Concen: 0.415 ng
RT: 10.616 min Scan# 941
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

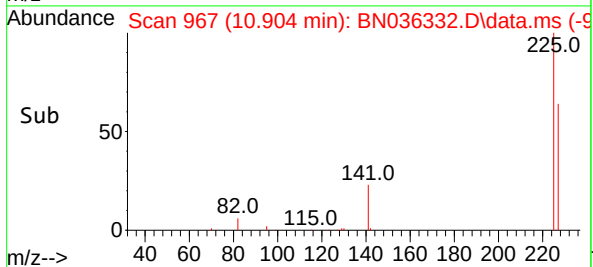
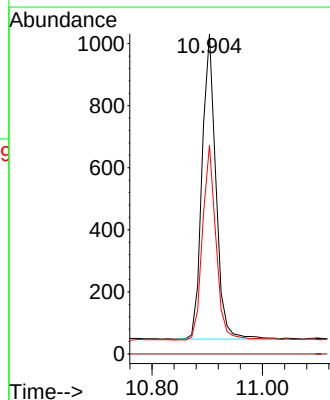
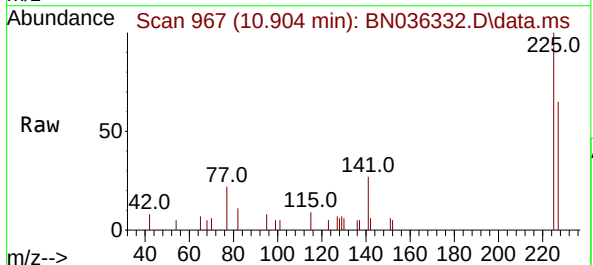
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

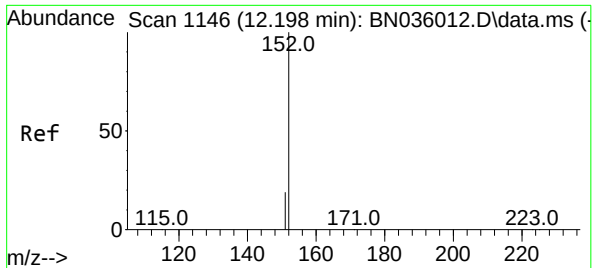
Tgt Ion:128 Resp: 6143
Ion Ratio Lower Upper
128 100
129 12.3 9.4 14.2
127 14.8 12.6 19.0



#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

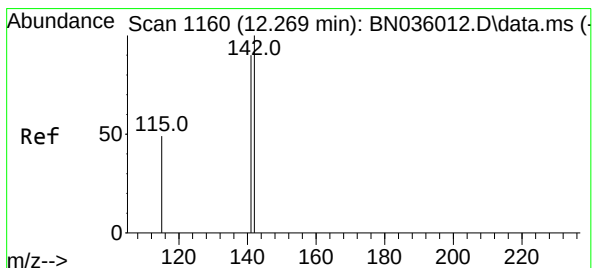
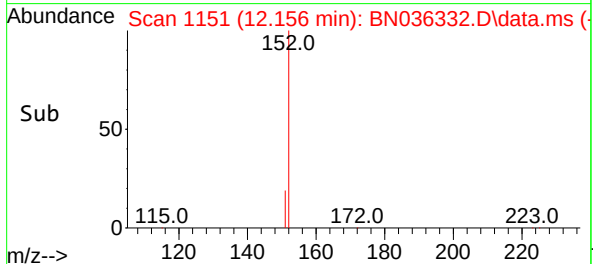
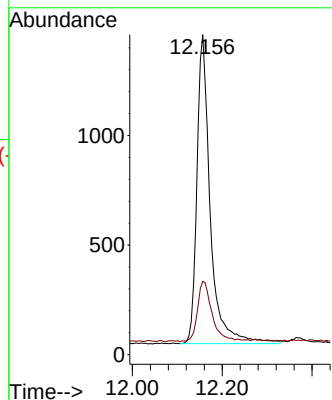
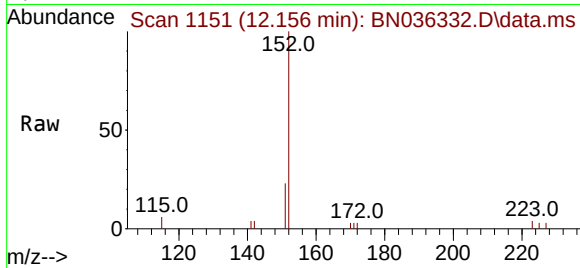




#11
2-Methylnaphthalene-d10
Concen: 0.419 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

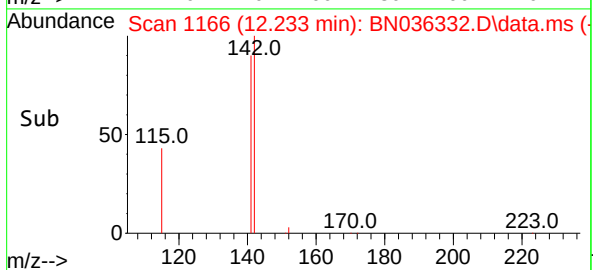
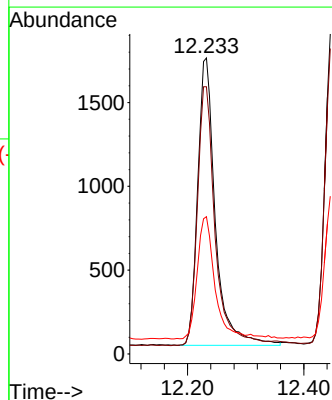
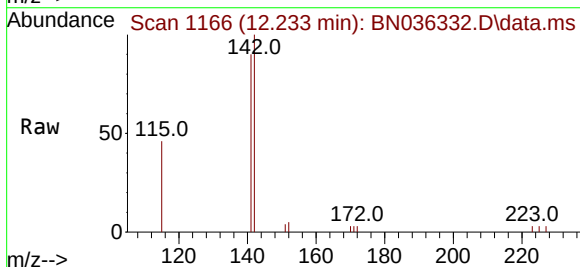
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

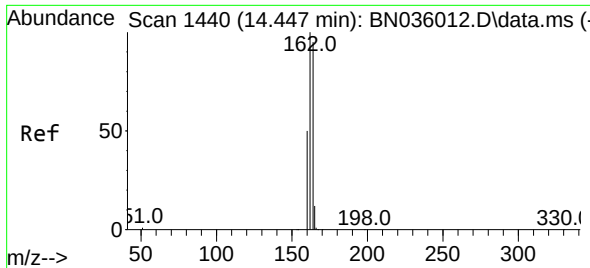
Tgt Ion:152 Resp: 2904
Ion Ratio Lower Upper
152 100
151 21.6 16.6 25.0



#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

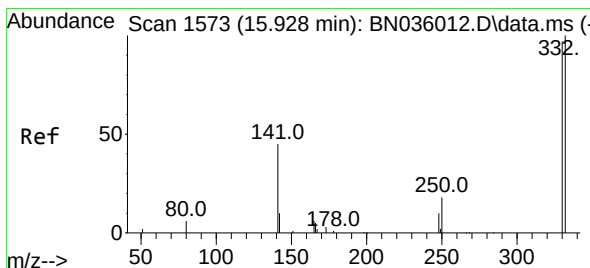
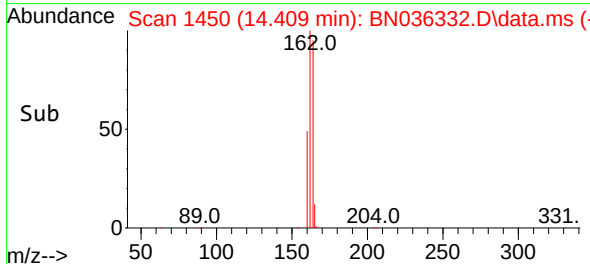
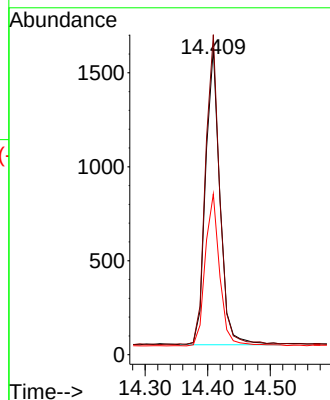
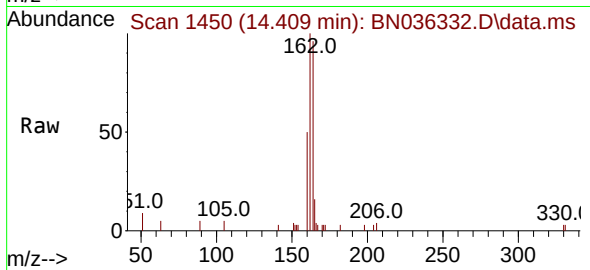




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

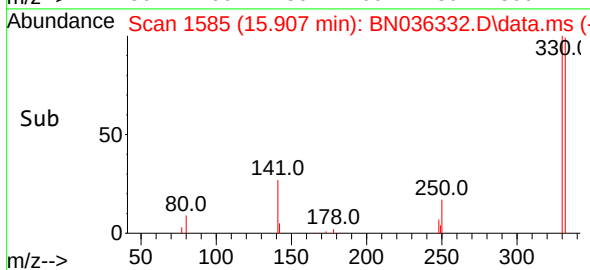
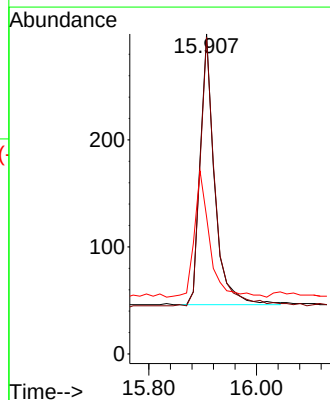
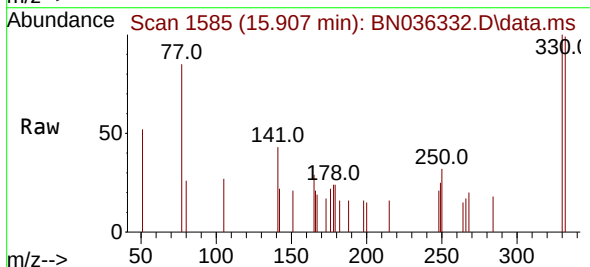
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

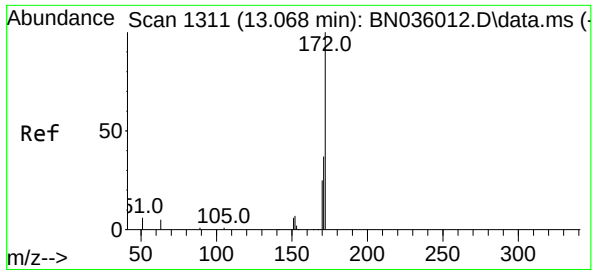
Tgt Ion:164 Resp: 2512
Ion Ratio Lower Upper
164 100
162 104.4 84.1 126.1
160 52.4 43.8 65.8



#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

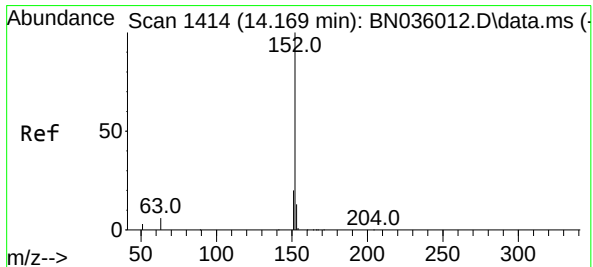
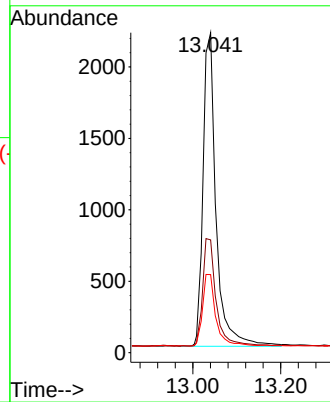
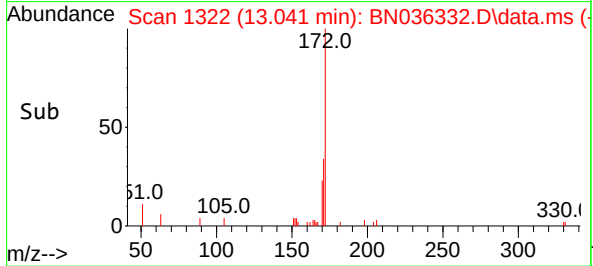
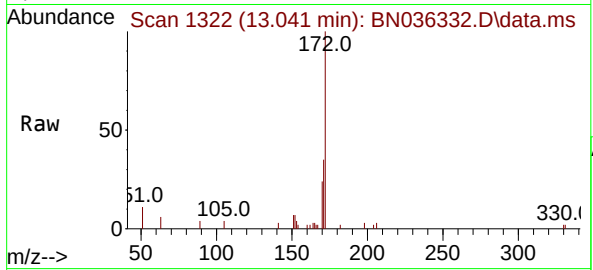




#15
2-Fluorobiphenyl
Concen: 0.347 ng
RT: 13.041 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

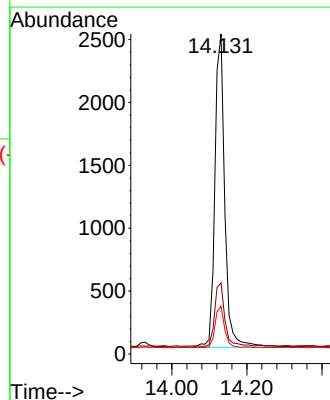
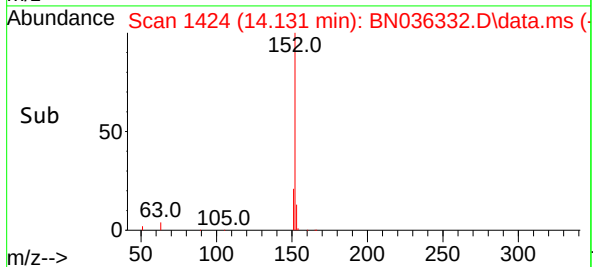
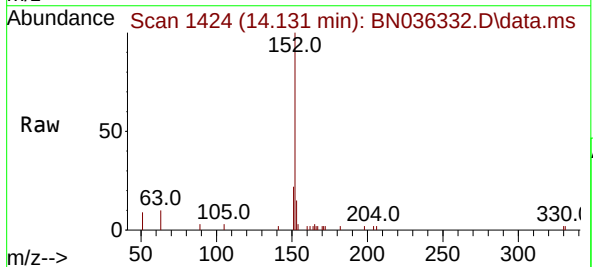
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

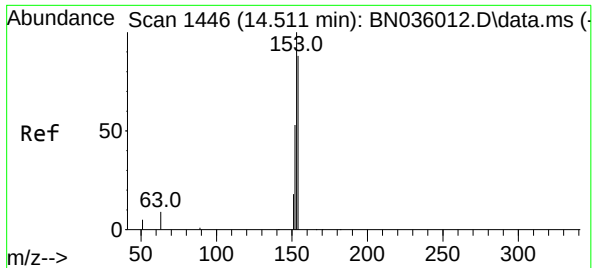
Tgt Ion:	172	Resp:	3891
Ion Ratio	Lower	Upper	
172	100		
171	35.3	30.9	46.3
170	24.4	21.2	31.8



#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

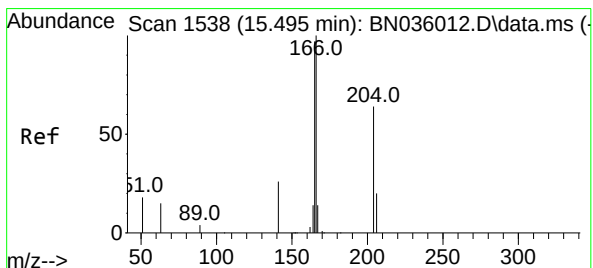
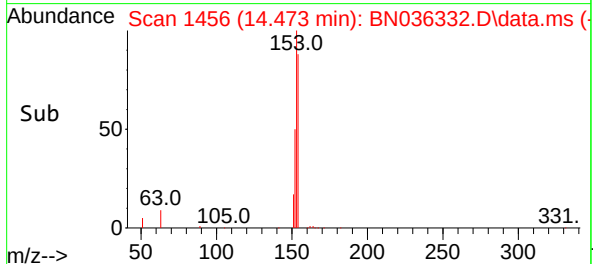
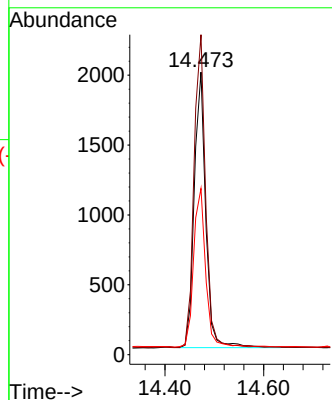
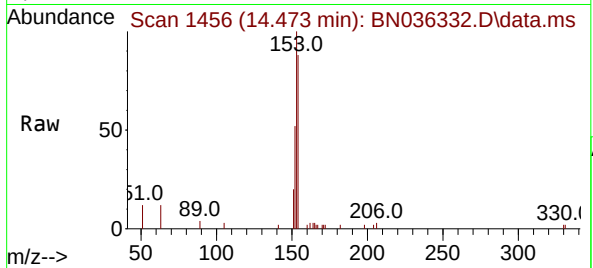




#17
Acenaphthene
Concen: 0.392 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

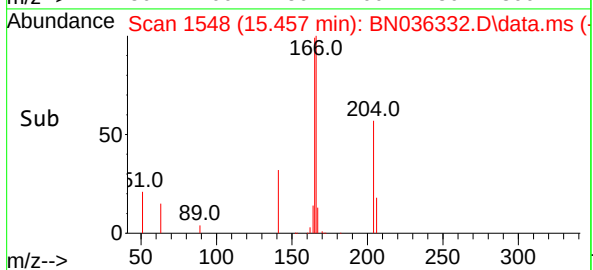
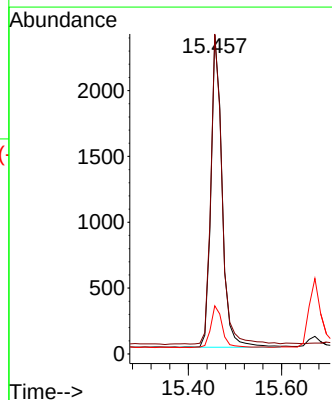
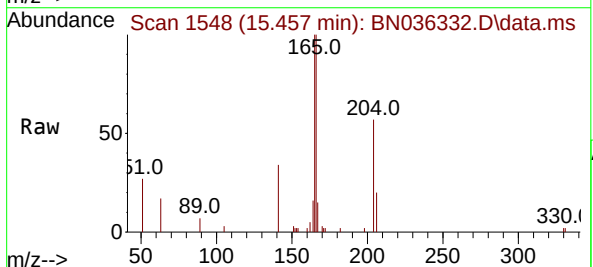
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

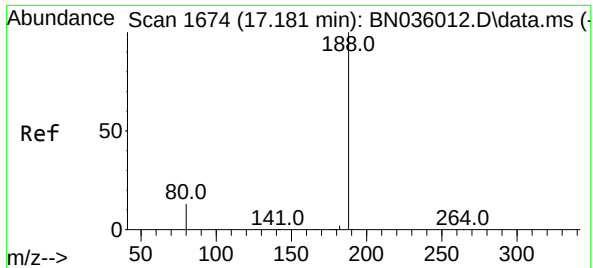
Tgt Ion:154 Resp: 3194
Ion Ratio Lower Upper
154 100
153 114.7 88.9 133.3
152 60.0 48.1 72.1



#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# 1

Delta R.T. -0.000 min

Lab File: BN036332.D

Acq: 06 Feb 2025 12:54

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

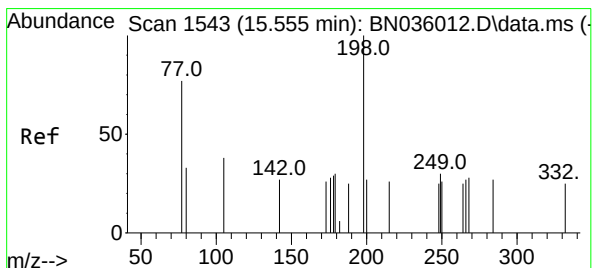
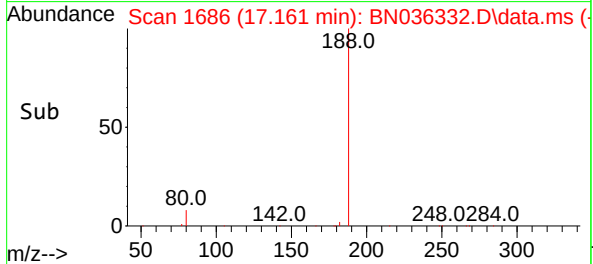
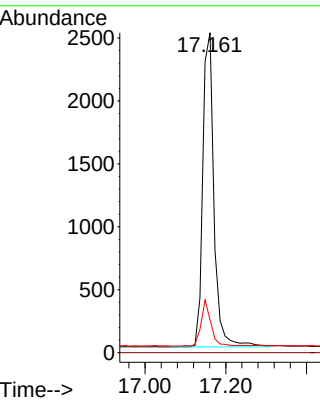
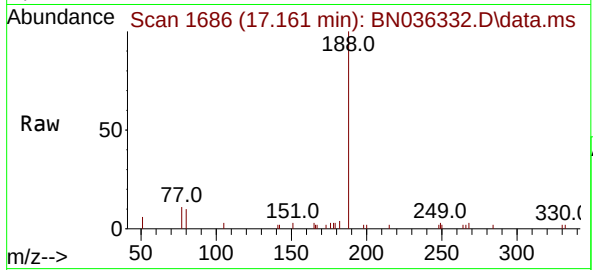
Tgt Ion:188 Resp: 4814

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

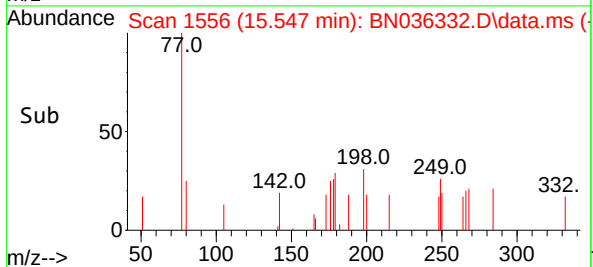
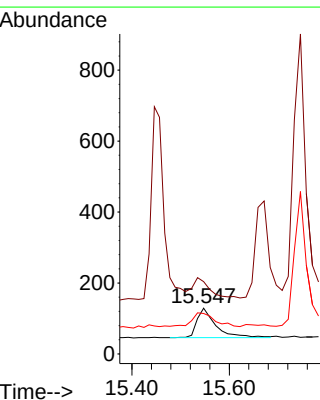
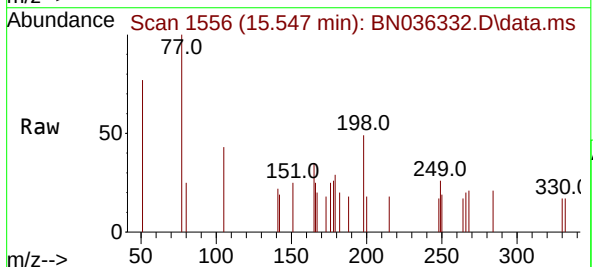
Tgt Ion:198 Resp: 220

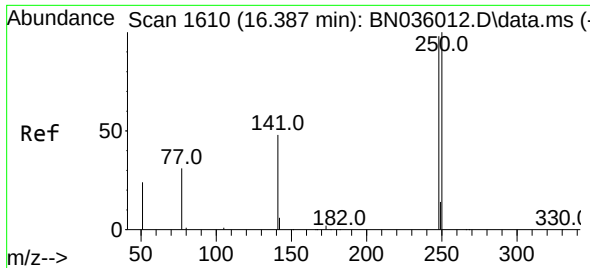
Ion Ratio Lower Upper

198 100

51 158.1 68.1 102.1#

105 88.4 46.5 69.7#

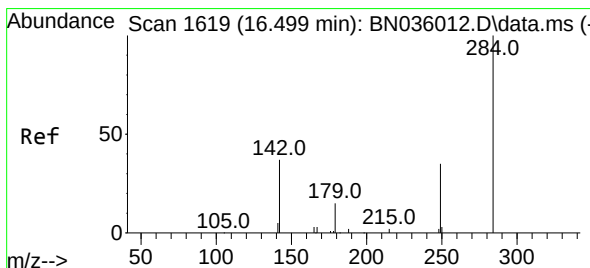
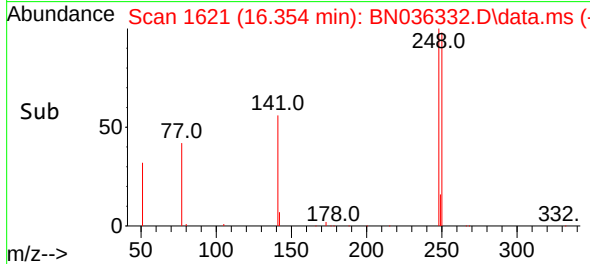
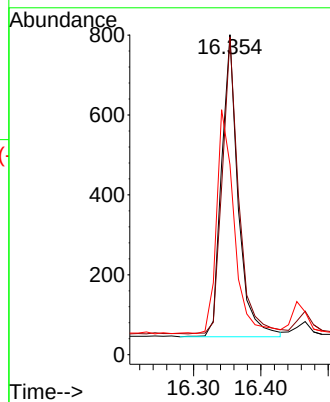
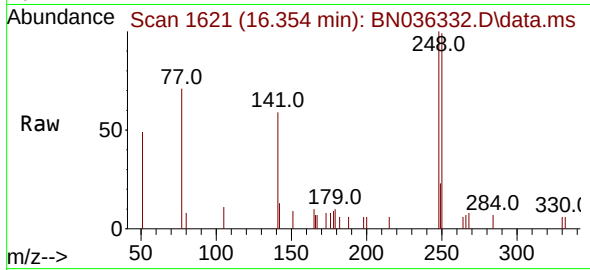




#21
4-Bromophenyl-phenylether
Concen: 0.377 ng
RT: 16.354 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

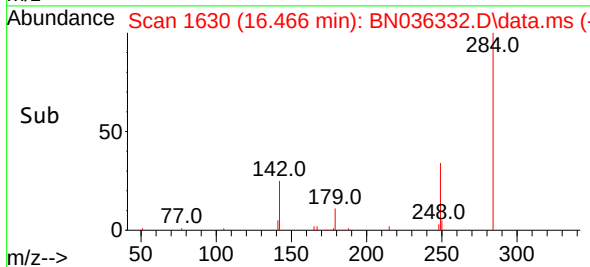
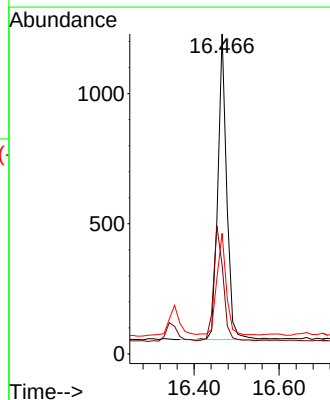
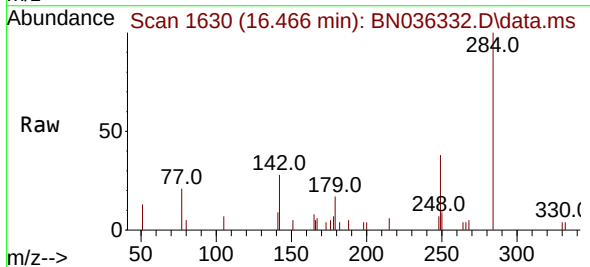
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

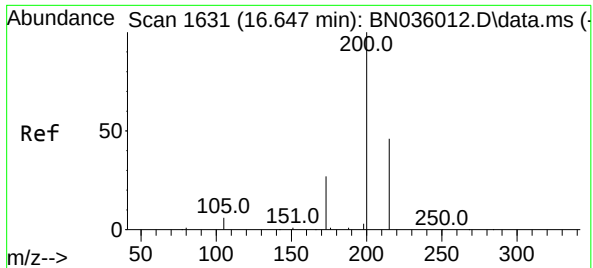
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.3	81.5	122.3
141	59.4	41.8	62.6



#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

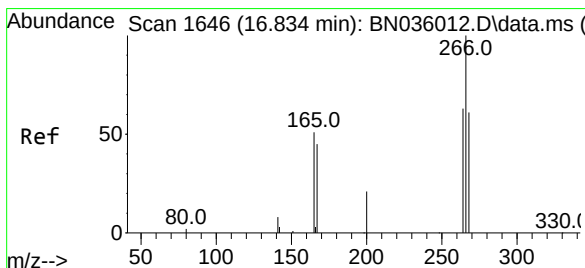
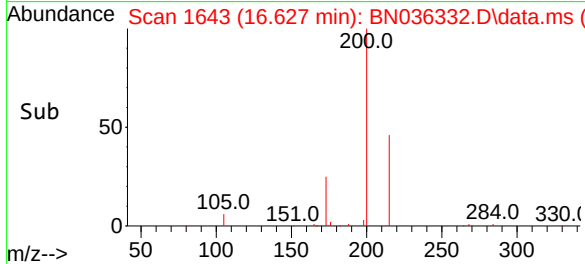
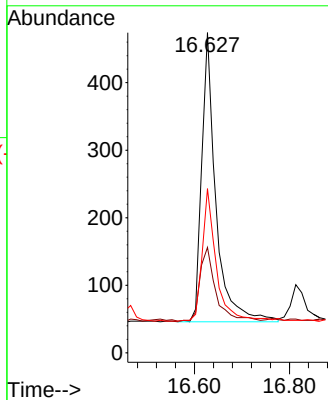
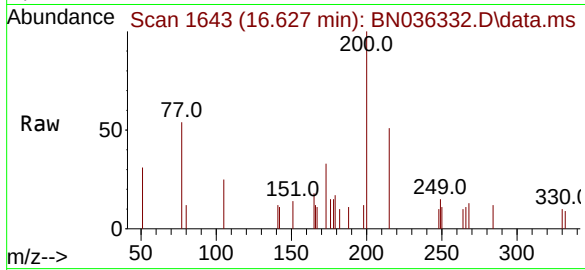




#23
Atrazine
Concen: 0.357 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

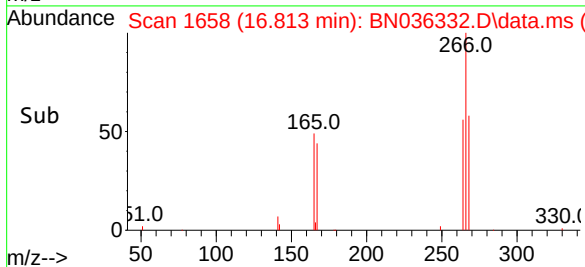
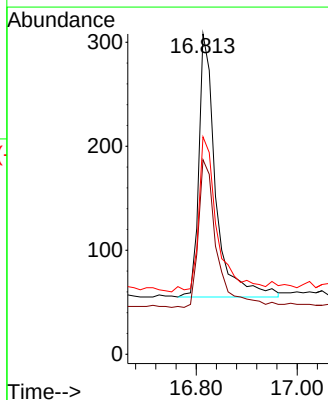
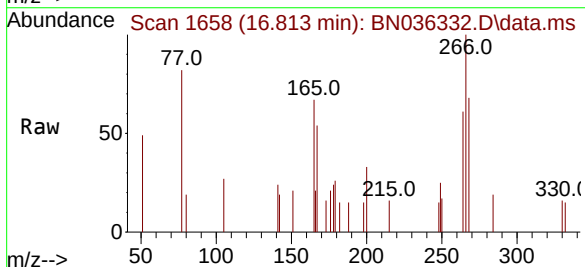
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

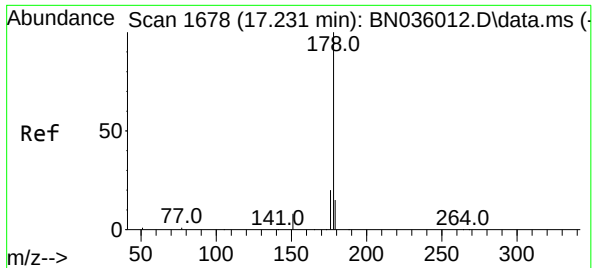
Tgt Ion	Ratio	Lower	Upper
200	100		
173	32.9	26.6	40.0
215	51.3	40.6	61.0



#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	Ratio	Lower	Upper
266	100		
264	61.6	48.2	72.2
268	65.0	51.6	77.4

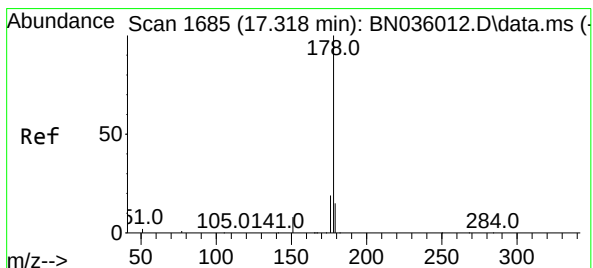
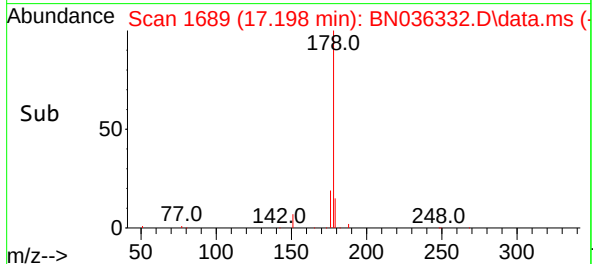
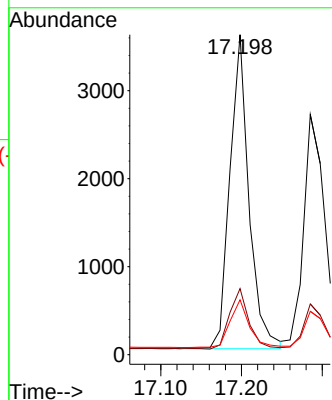
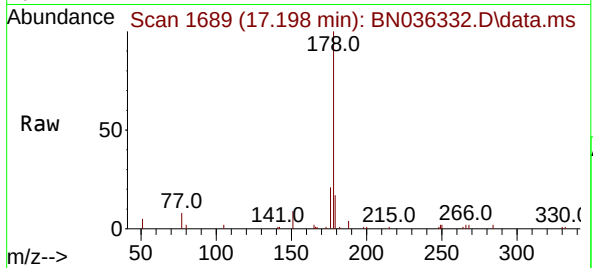




#25
Phenanthrene
Concen: 0.406 ng
RT: 17.198 min Scan# 1689
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

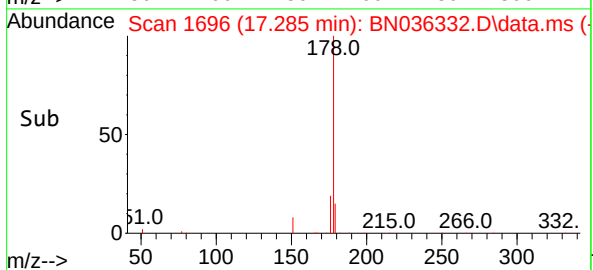
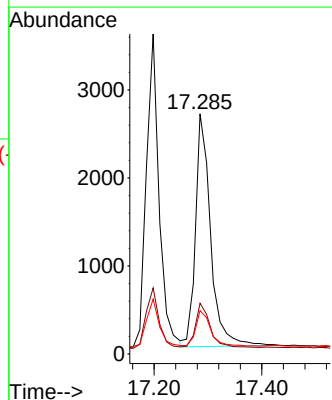
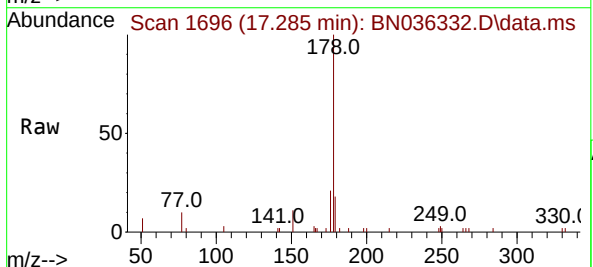
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

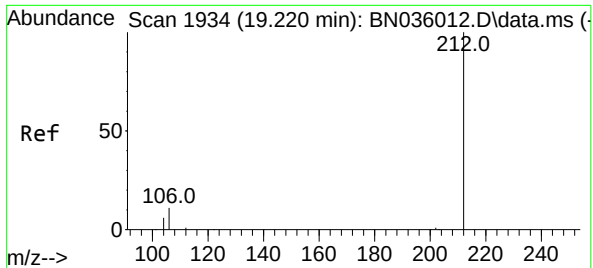
Tgt Ion:178 Resp: 5871
Ion Ratio Lower Upper
178 100
176 18.9 16.0 24.0
179 15.2 12.4 18.6



#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

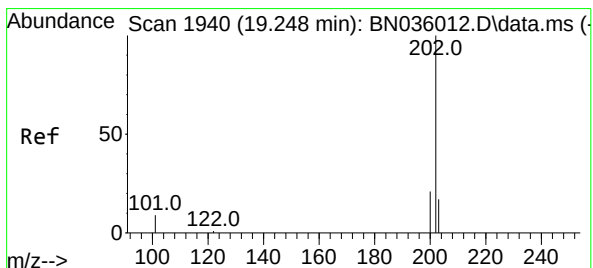
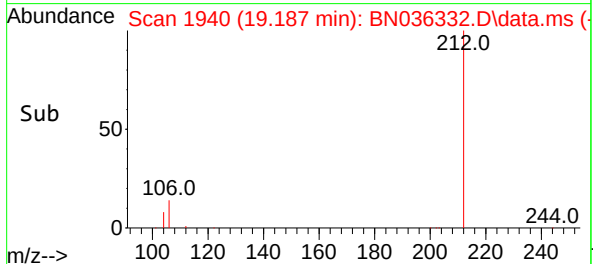
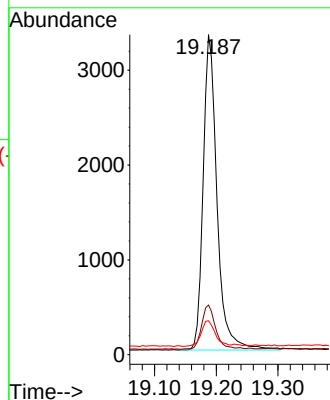
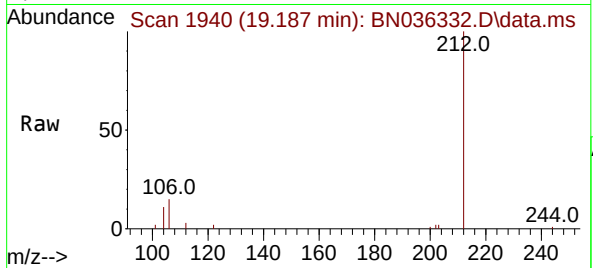
Tgt Ion:212 Resp: 5187

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

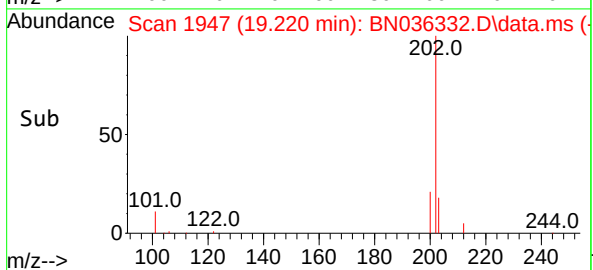
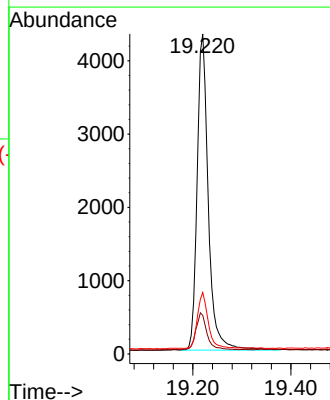
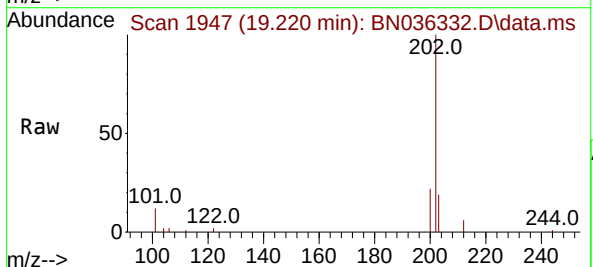
Tgt Ion:202 Resp: 6819

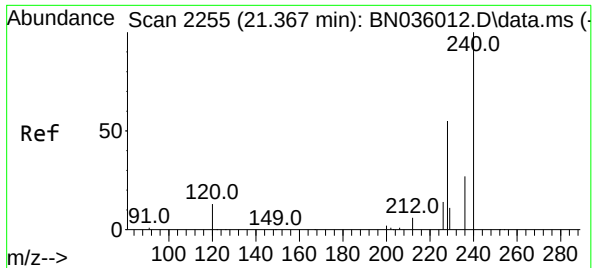
Ion Ratio Lower Upper

202 100

101 11.6 7.6 11.4#

203 16.9 13.8 20.6

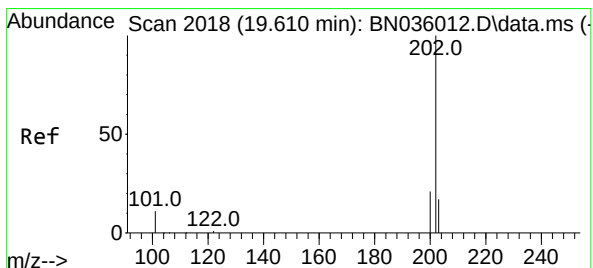
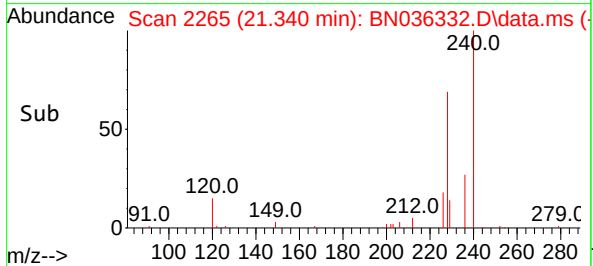
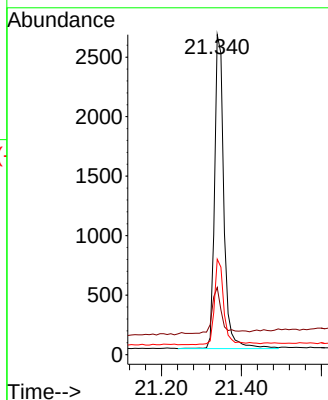
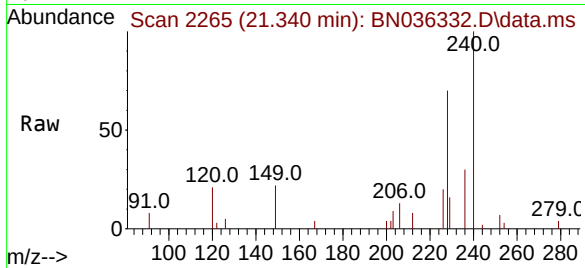




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.340 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

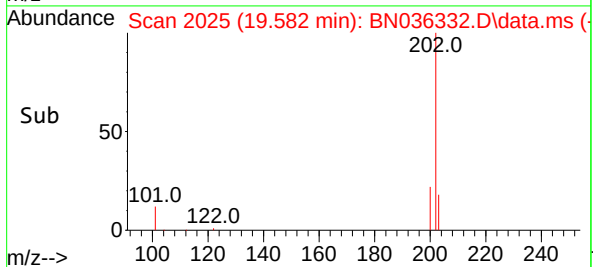
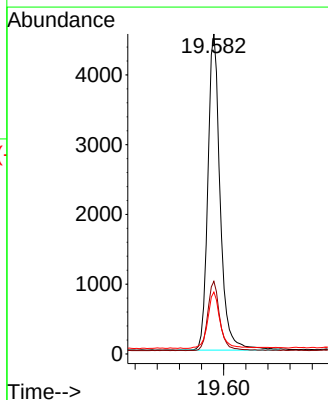
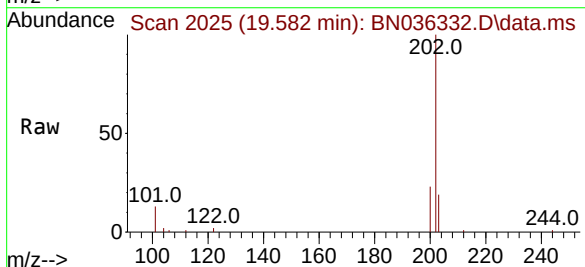
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

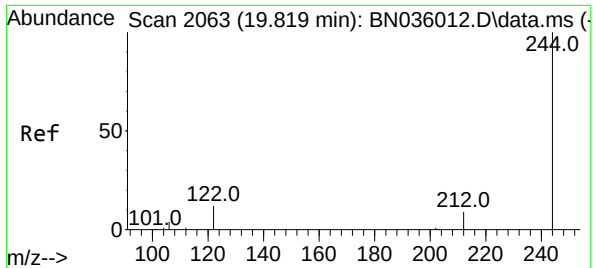
Tgt Ion	Ratio	Lower	Upper
240	100		
120	21.0	13.9	20.9
236	29.9	23.7	35.5



#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	Ratio	Lower	Upper
202	100		
200	21.5	17.0	25.4
203	18.1	14.4	21.6

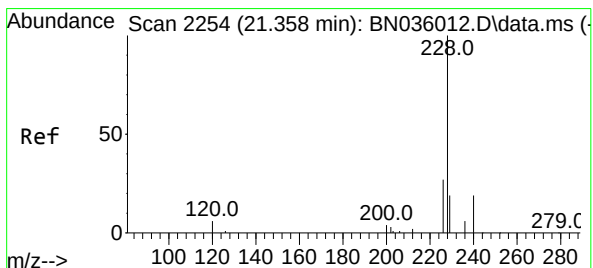
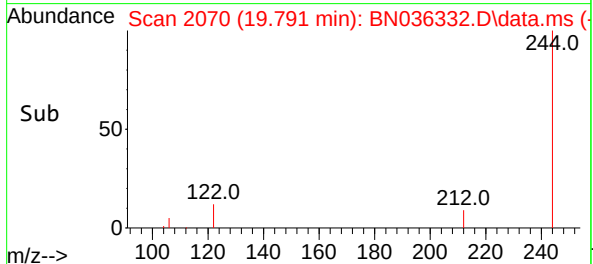
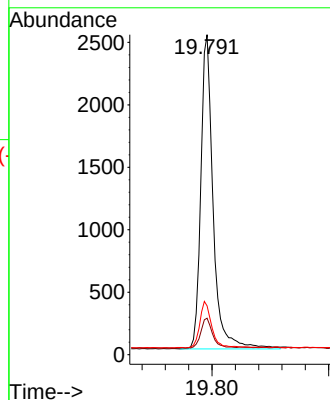
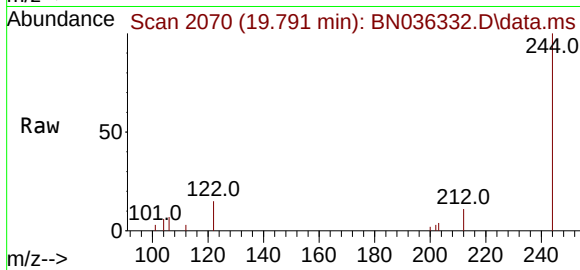




#31
Terphenyl-d14
Concen: 0.418 ng
RT: 19.791 min Scan# 2063
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

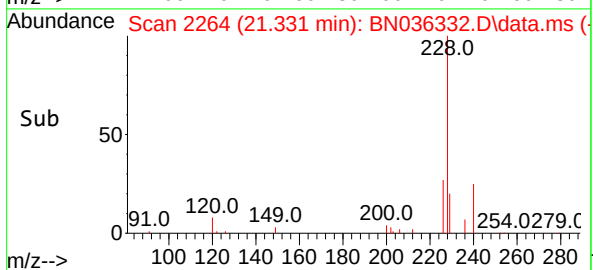
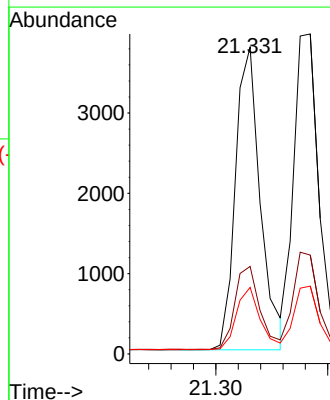
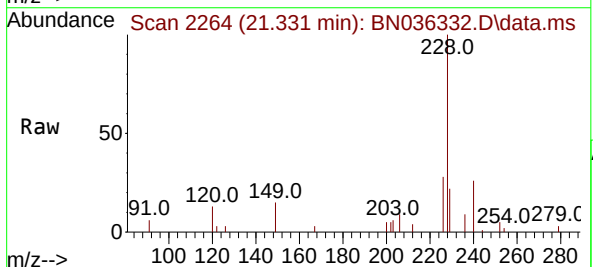
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

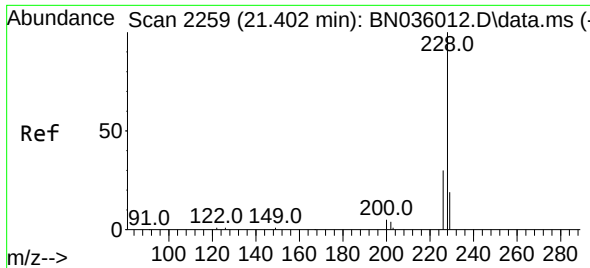
Tgt Ion:244 Resp: 3696
Ion Ratio Lower Upper
244 100
212 11.4 9.1 13.7
122 15.2 11.3 16.9



#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:228 Resp: 5830
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

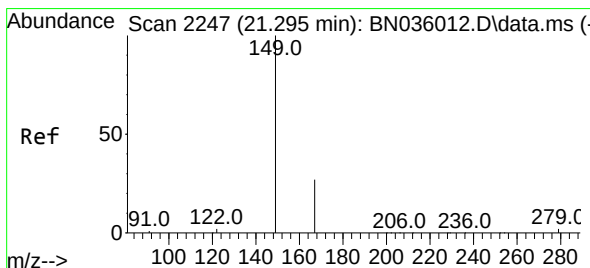
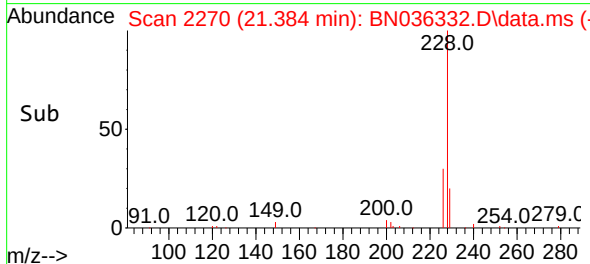
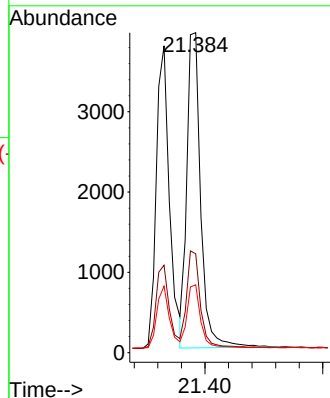
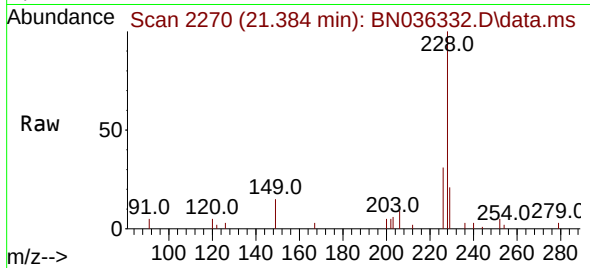
Tgt Ion:228 Resp: 6425

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

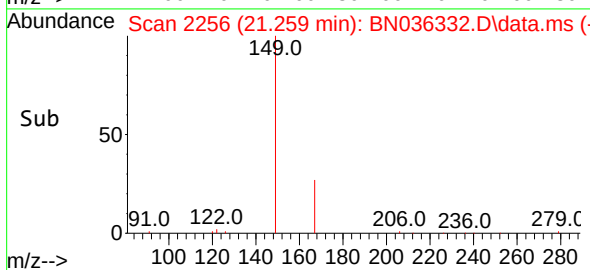
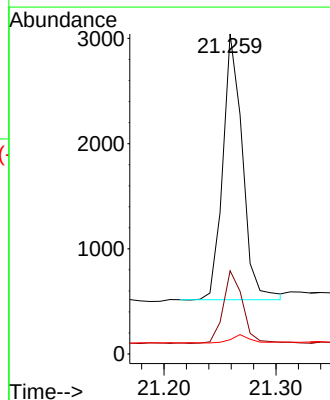
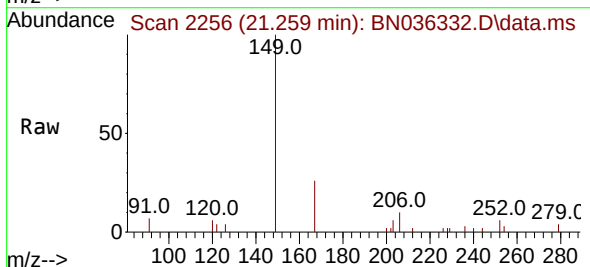
Tgt Ion:149 Resp: 3081

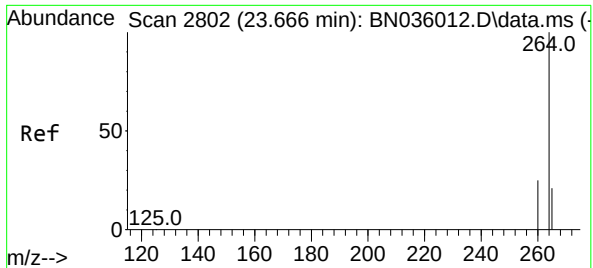
Ion Ratio Lower Upper

149 100

167 27.4 21.9 32.9

279 2.9 3.0 4.6#

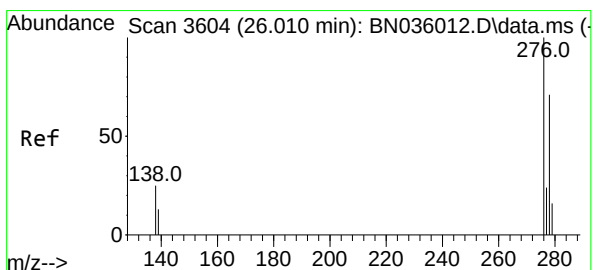
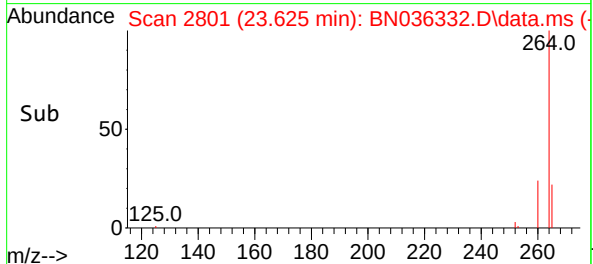
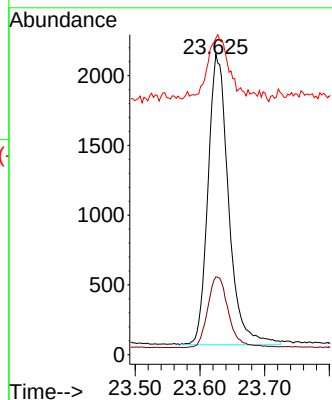
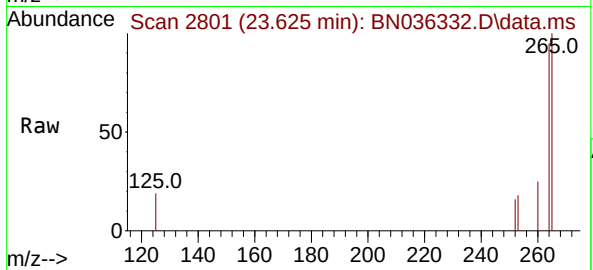




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.625 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

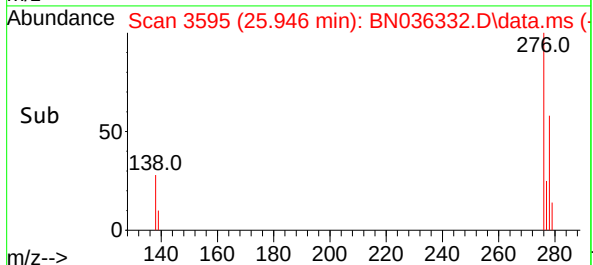
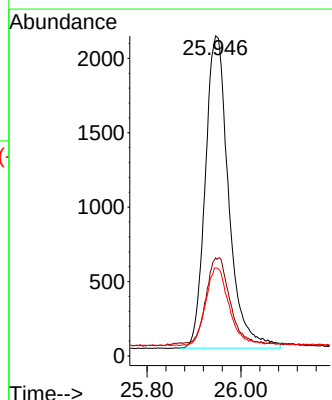
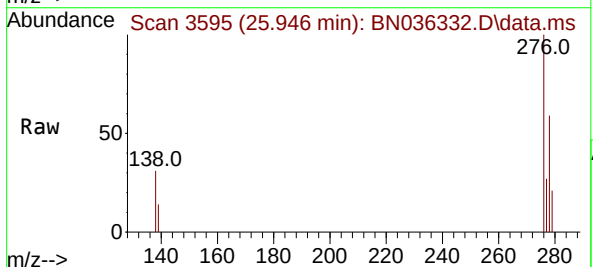
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

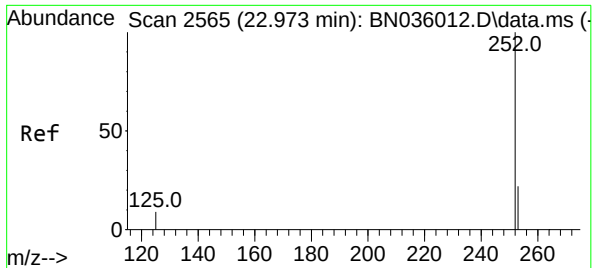
Tgt Ion:264 Resp: 4600
Ion Ratio Lower Upper
264 100
260 25.9 21.8 32.6
265 105.3 56.6 84.8#



#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

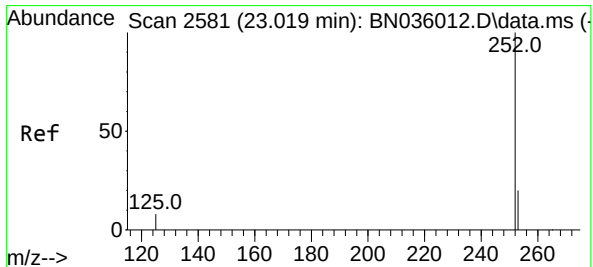
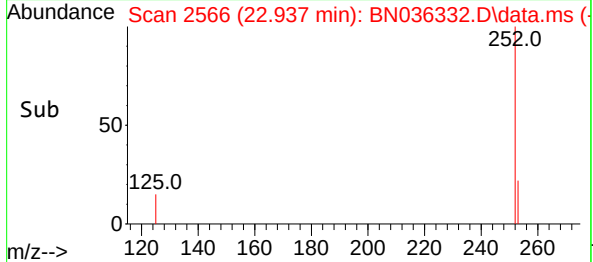
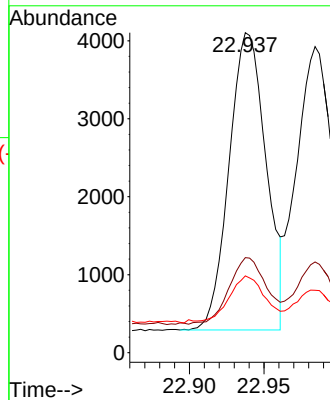
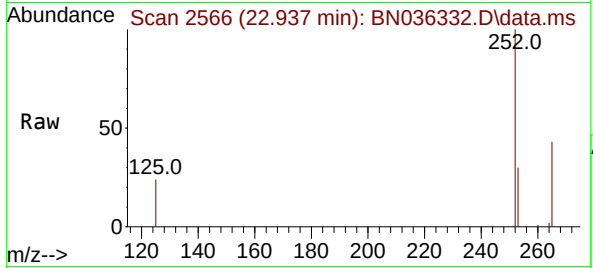




#37
Benzo(b)fluoranthene
Concen: 0.394 ng
RT: 22.937 min Scan# 2565
Delta R.T. -0.000 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

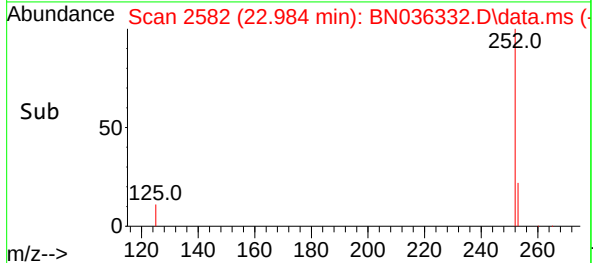
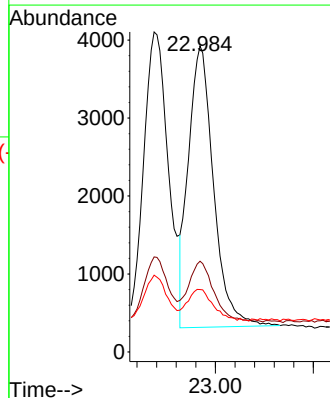
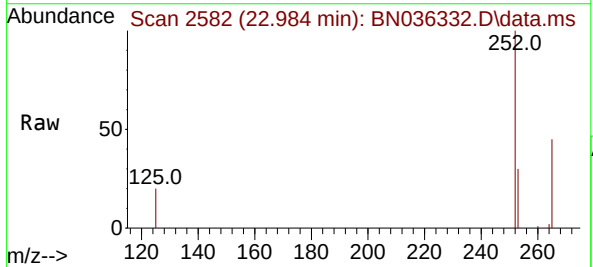
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

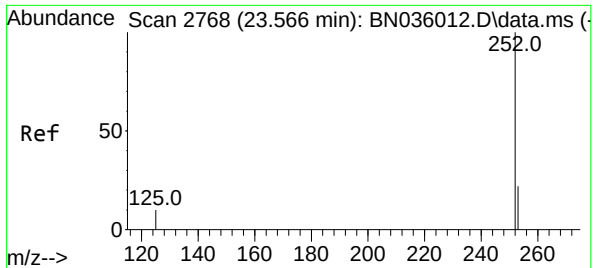
Tgt Ion:252 Resp: 6592
Ion Ratio Lower Upper
252 100
253 29.7 22.5 33.7
125 24.0 11.9 17.9#



#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

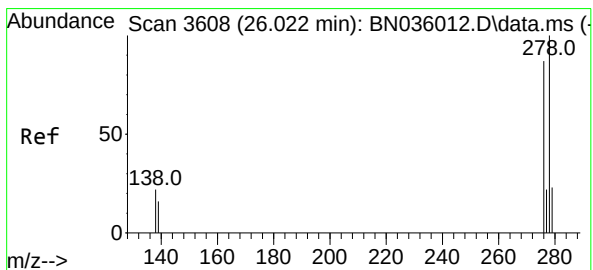
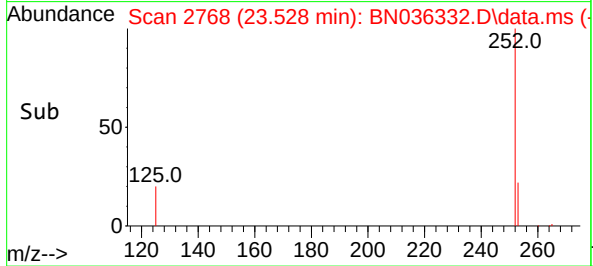
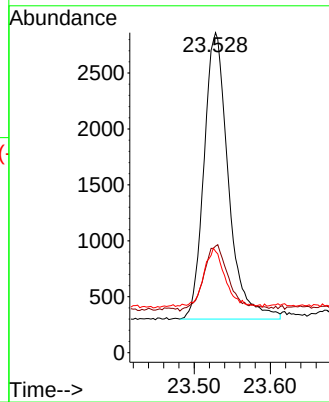
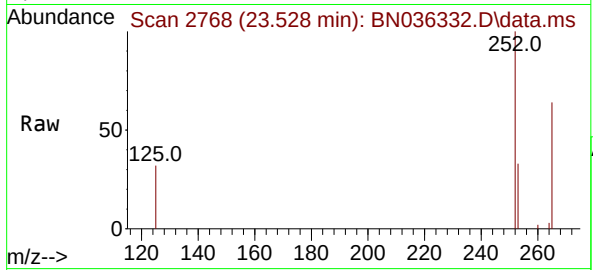
Tgt Ion:252 Resp: 5684

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

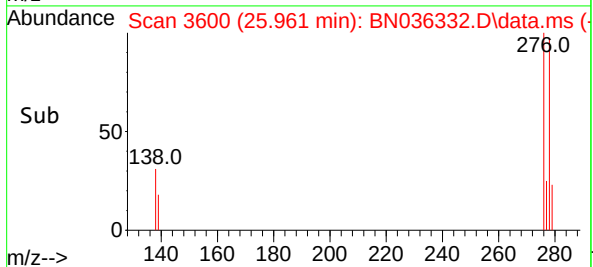
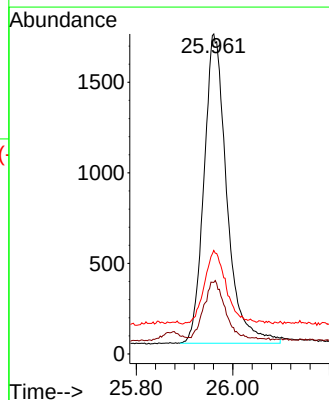
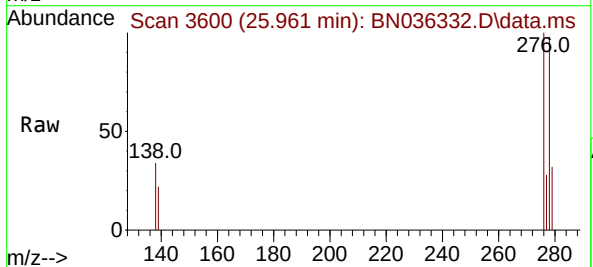
Tgt Ion:278 Resp: 5614

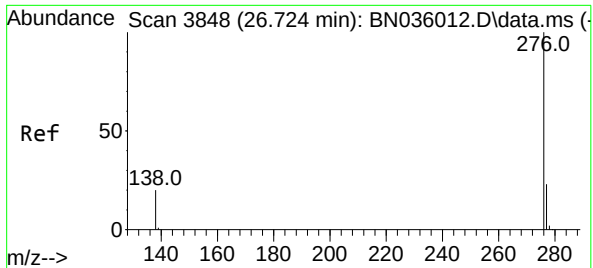
Ion Ratio Lower Upper

278 100

139 22.4 16.0 24.0

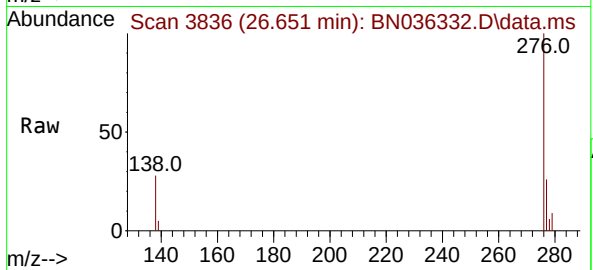
279 32.4 23.8 35.8



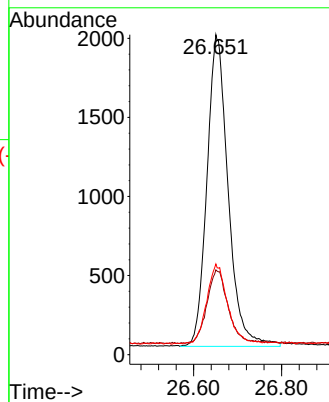
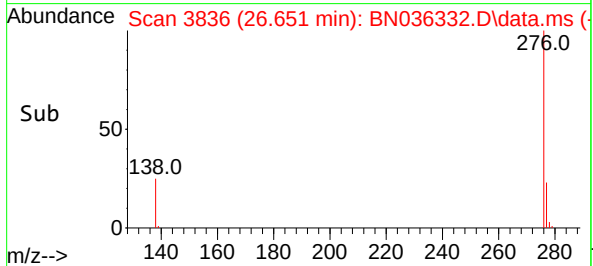


#41
Benzo(g,h,i)perylene
Concen: 0.412 ng
RT: 26.651 min Scan# 3836
Delta R.T. -0.003 min
Lab File: BN036332.D
Acq: 06 Feb 2025 12:54

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



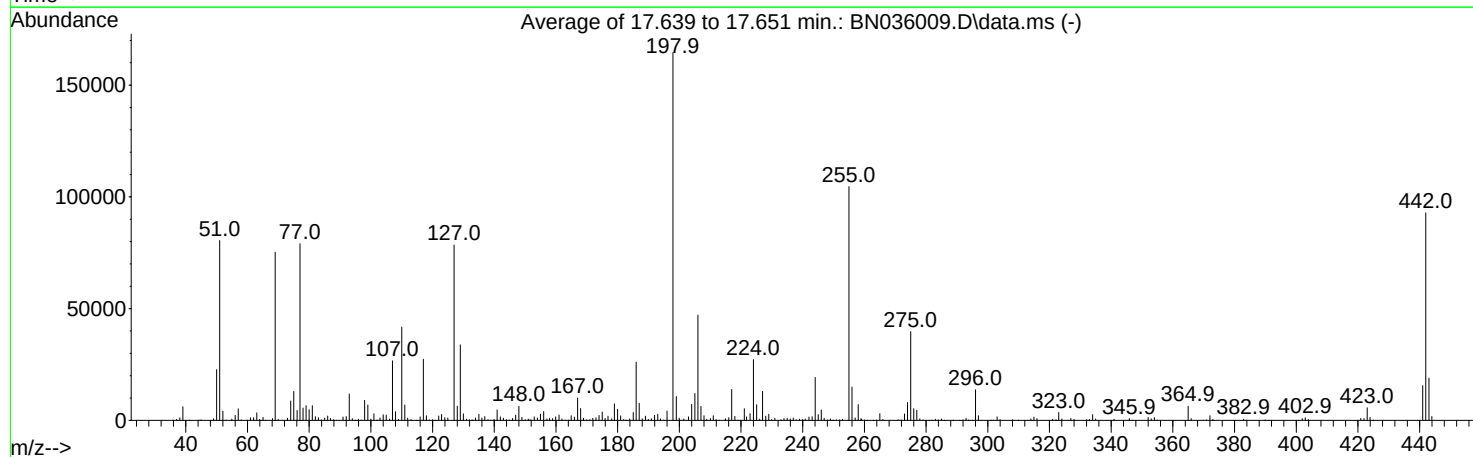
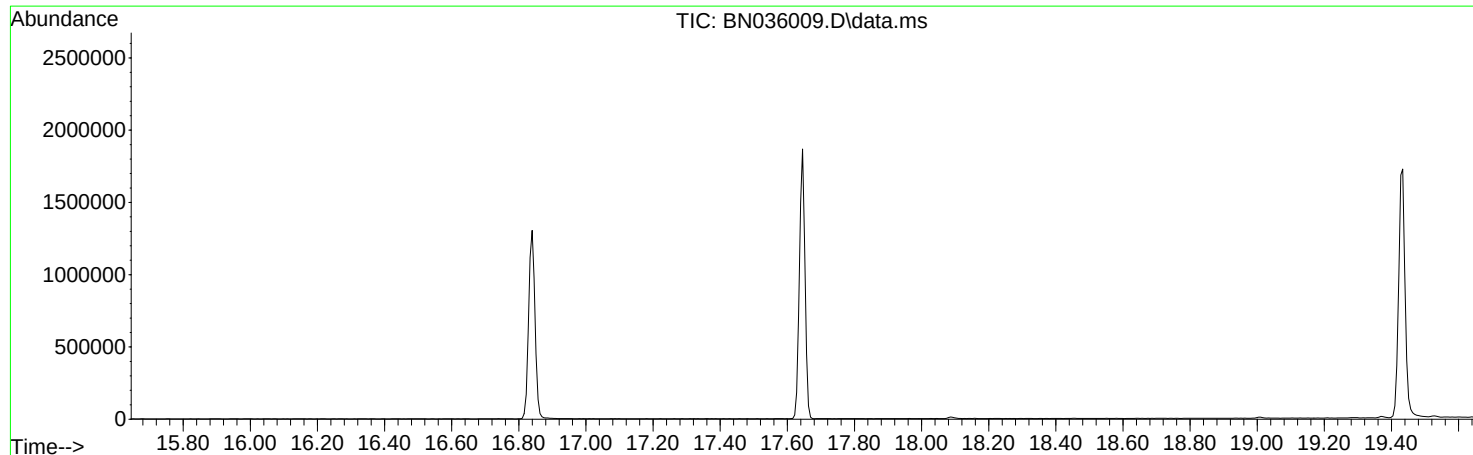
QC SAMPLE DATA

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



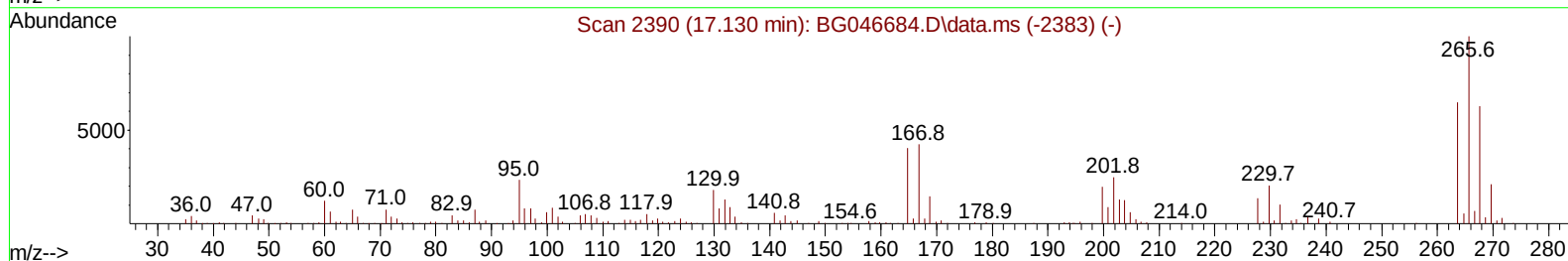
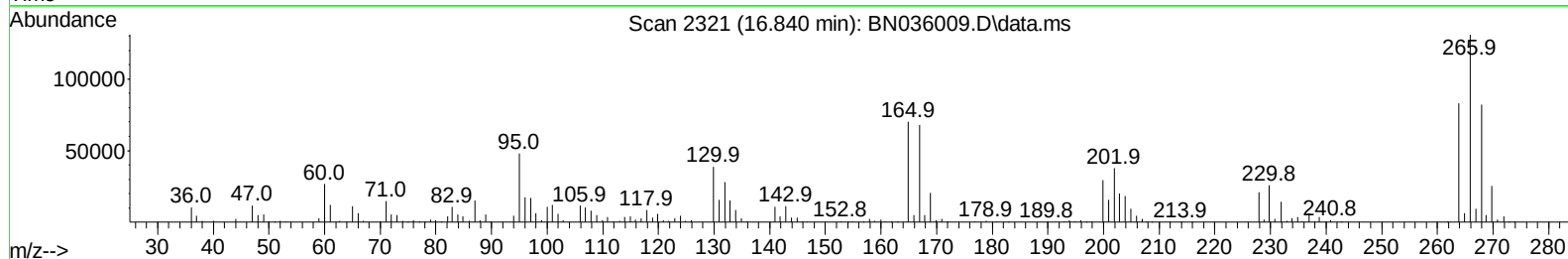
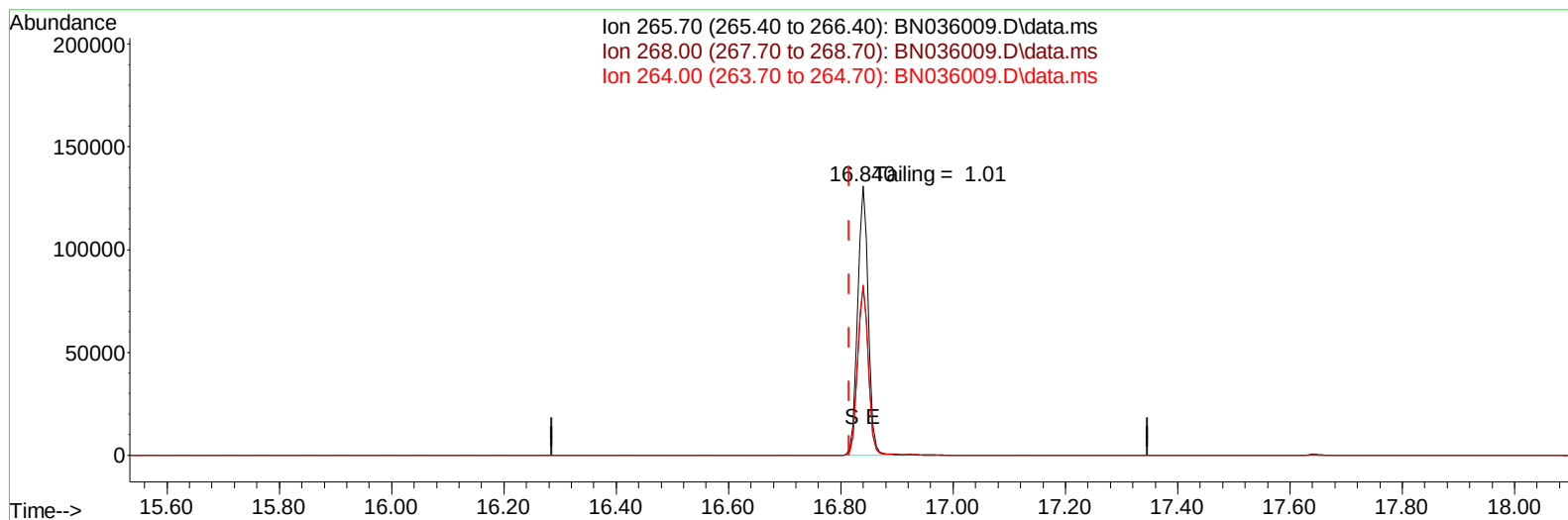
AutoFind: Scans 2457, 2458, 2459; Background Corrected with Scan 2450

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

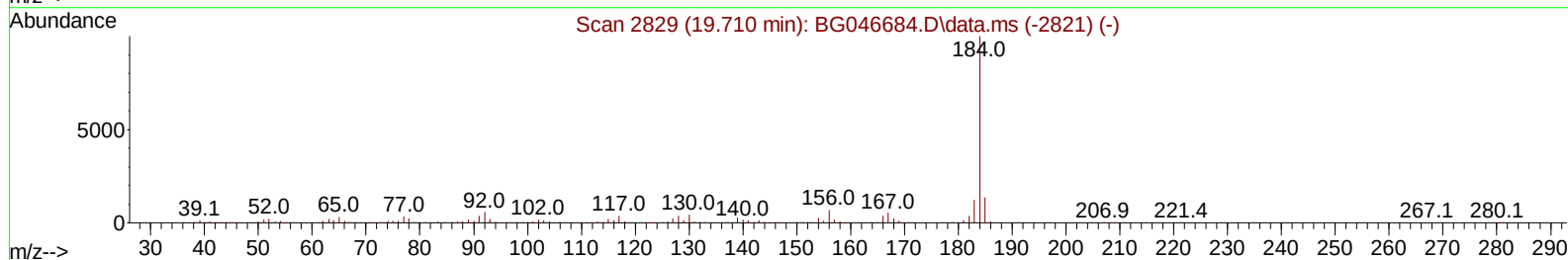
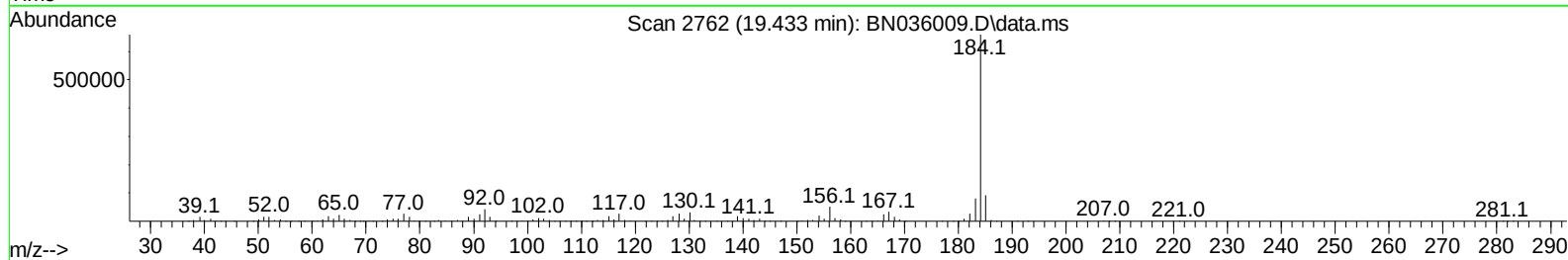
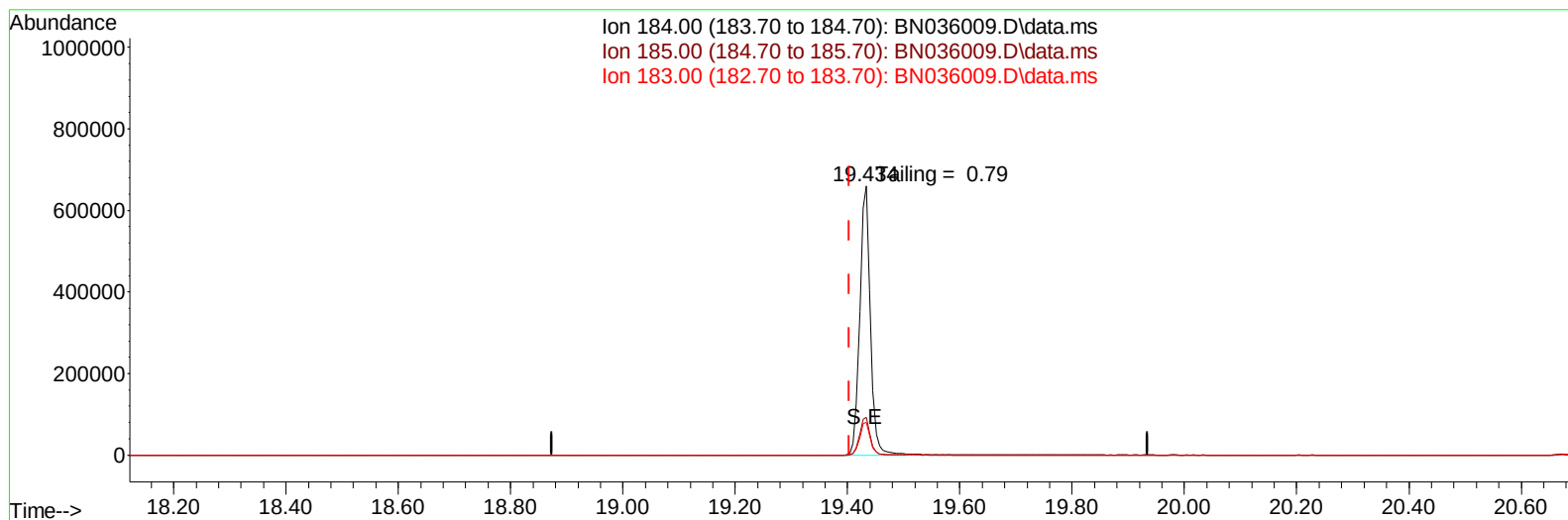
response 172285

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

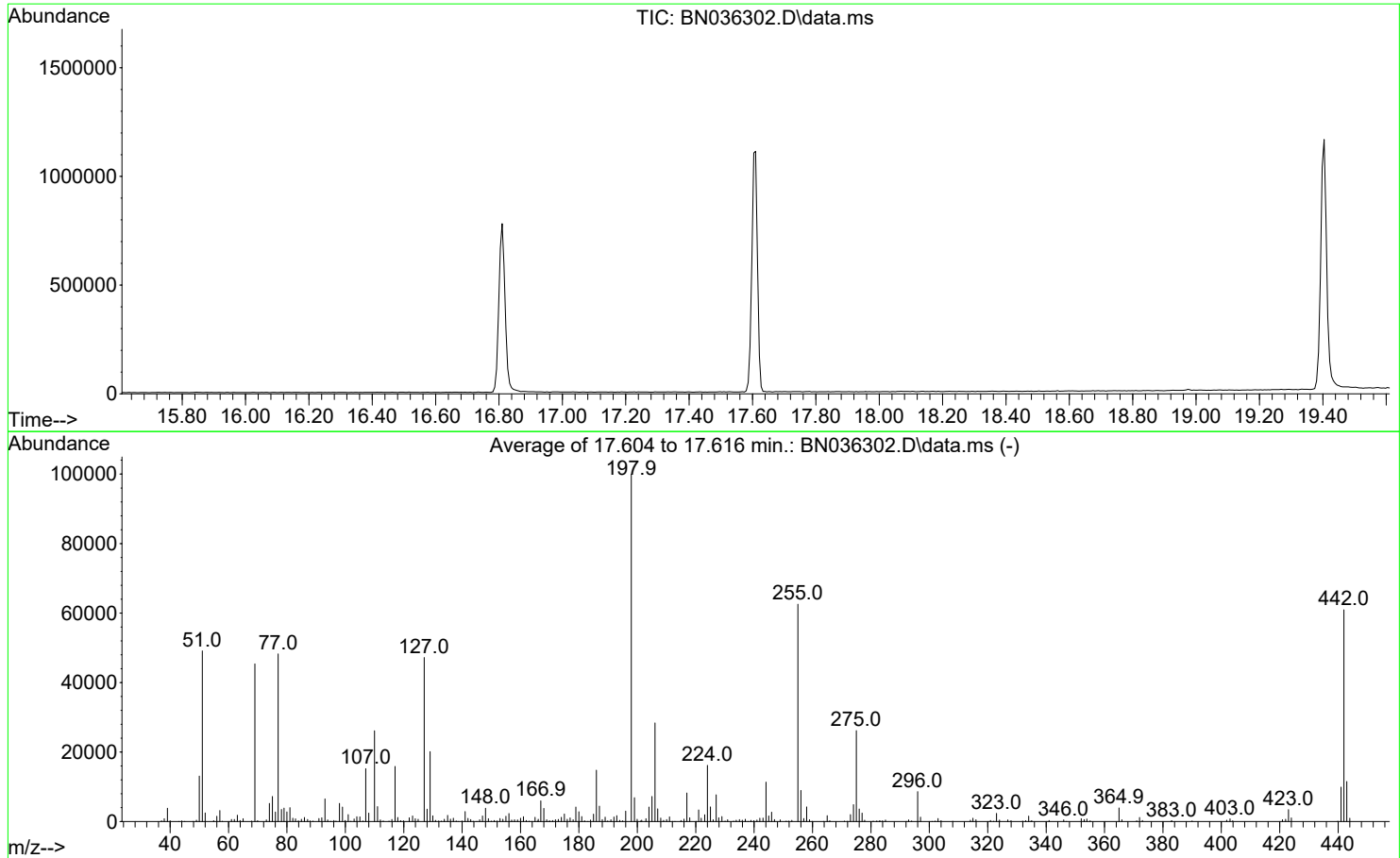
Date	Instrument Name	DFTPP Data File
1/22/2025	BNA_N	<u>BN036009.D</u>
Compound Name	Response	Retention Time
DDT	507361	20.675
DDD	11555	20.233
DDE	890	19.728
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
12445	519806	2.39

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



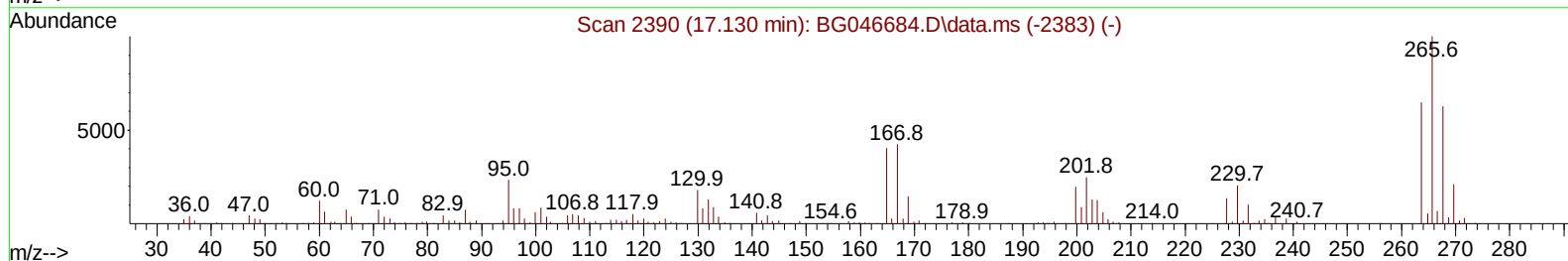
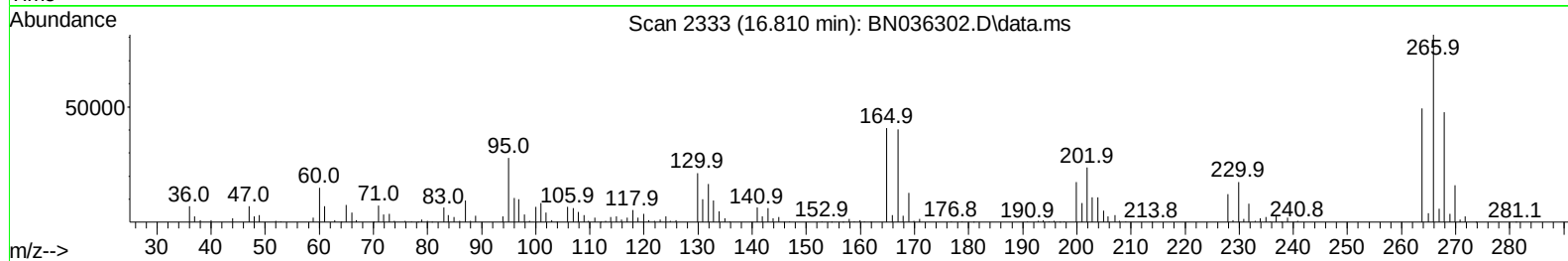
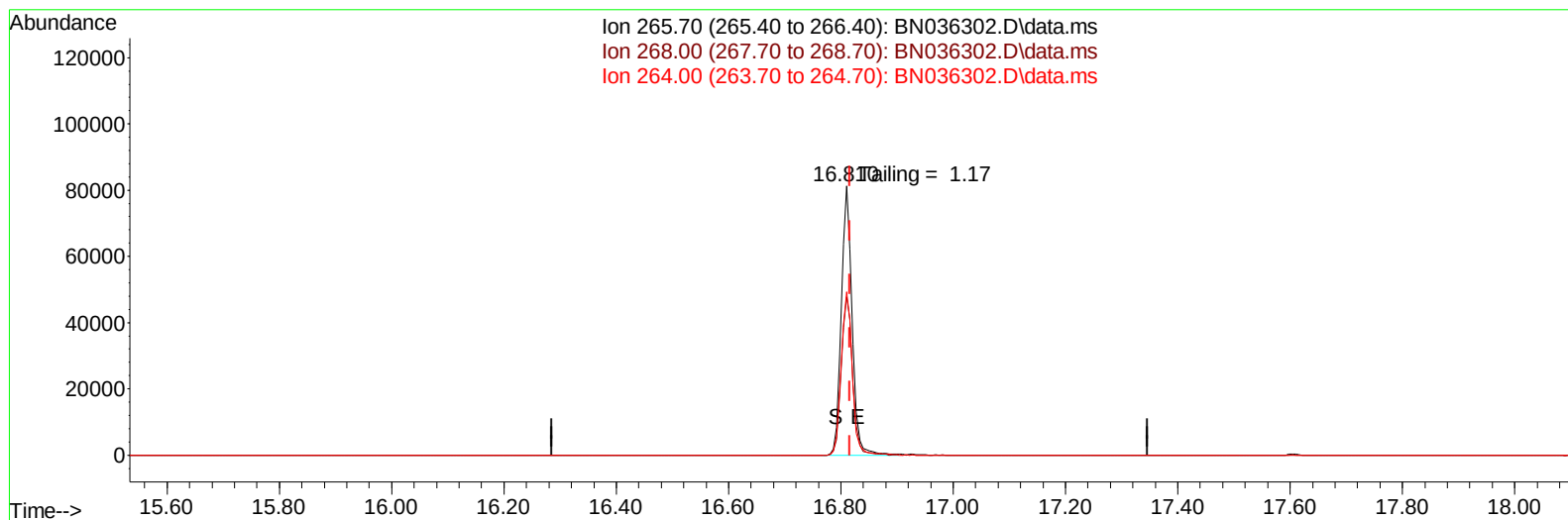
AutoFind: Scans 2468, 2469, 2470; Background Corrected with Scan 2461

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

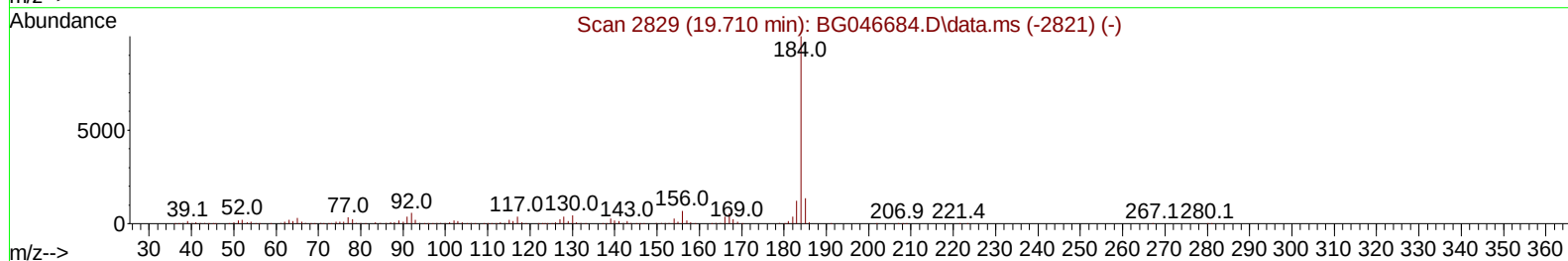
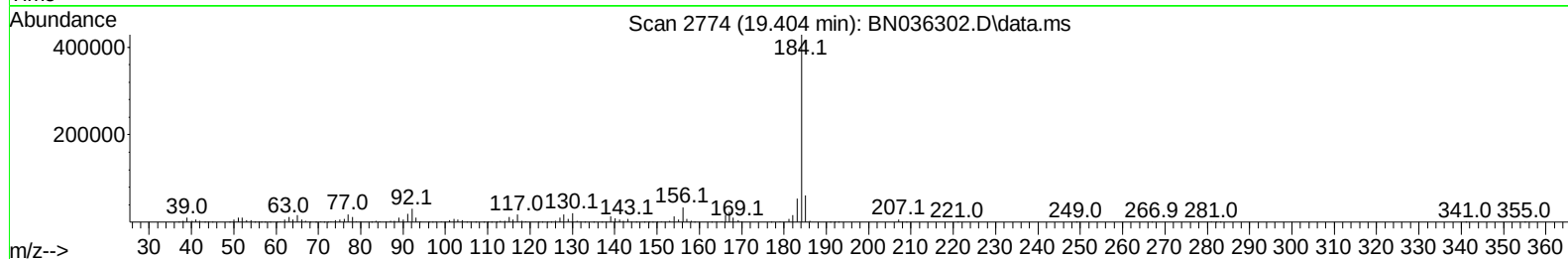
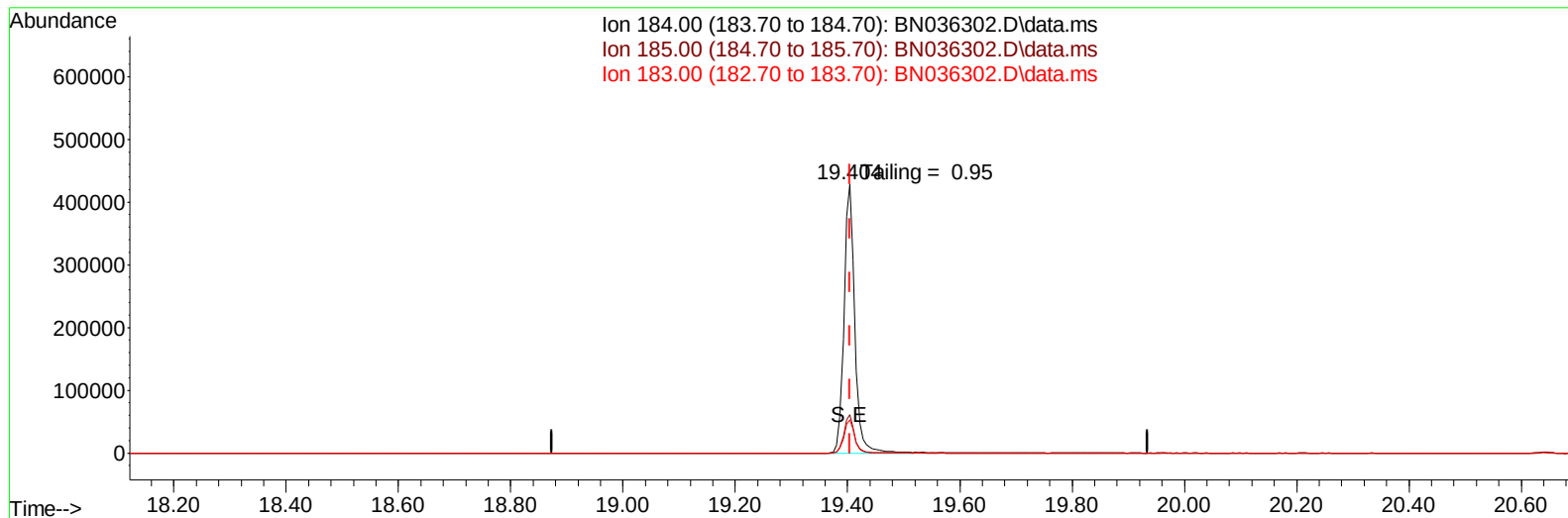
response 108491

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

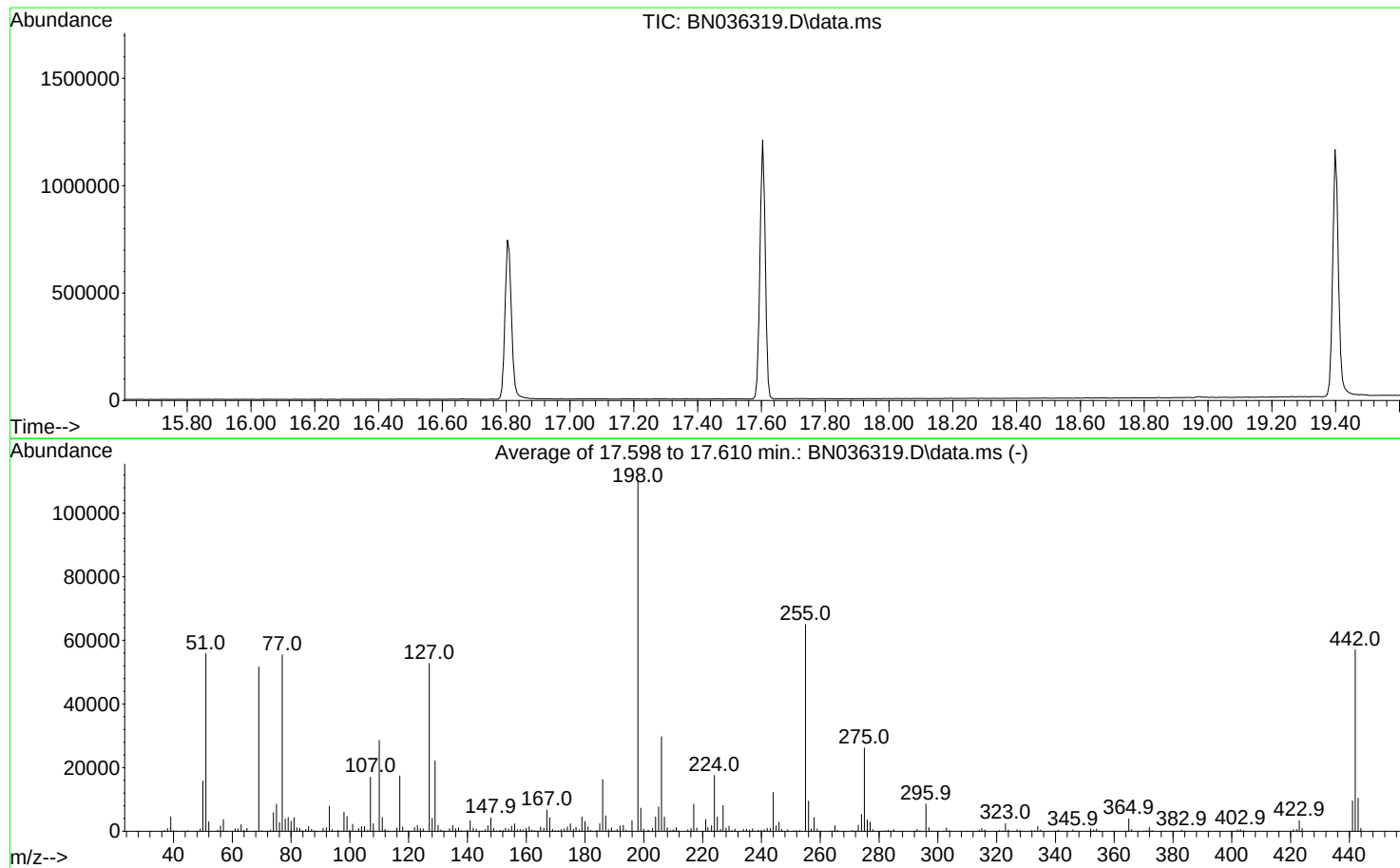
Date	Instrument Name	DFTPP Data File
2/5/2025	BNA_N	<u>BN036302.D</u>
Compound Name	Response	Retention Time
DDT	318276	20.645
DDD	25474	20.204
DDE	705	19.692
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
26179	344455	7.60

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



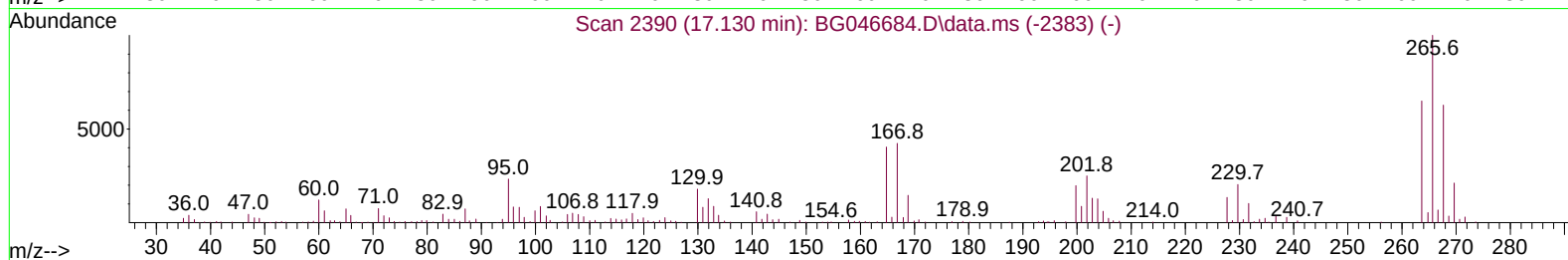
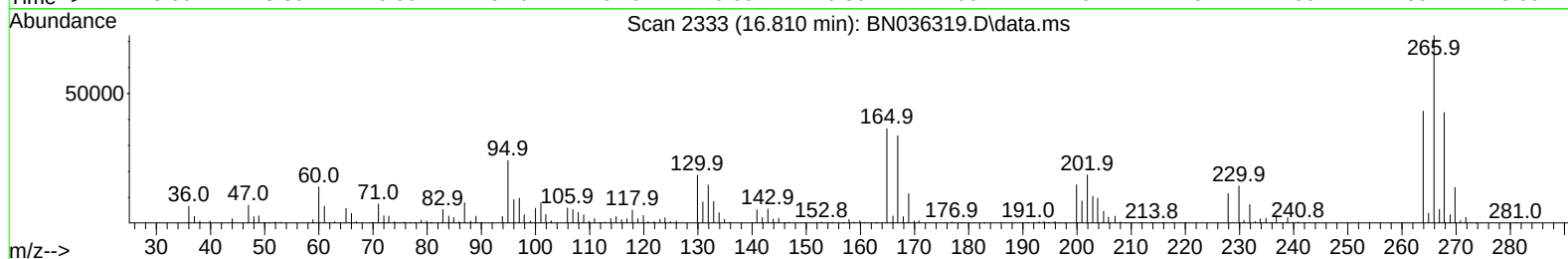
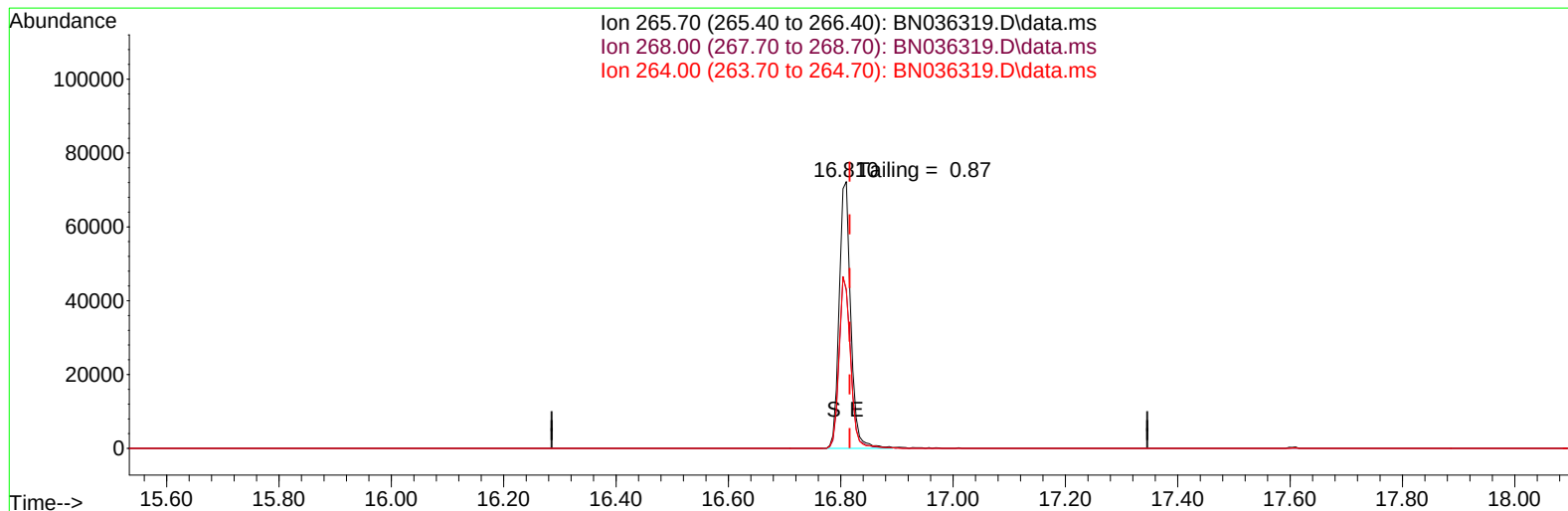
AutoFind: Scans 2467, 2468, 2469; Background Corrected with Scan 2461

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

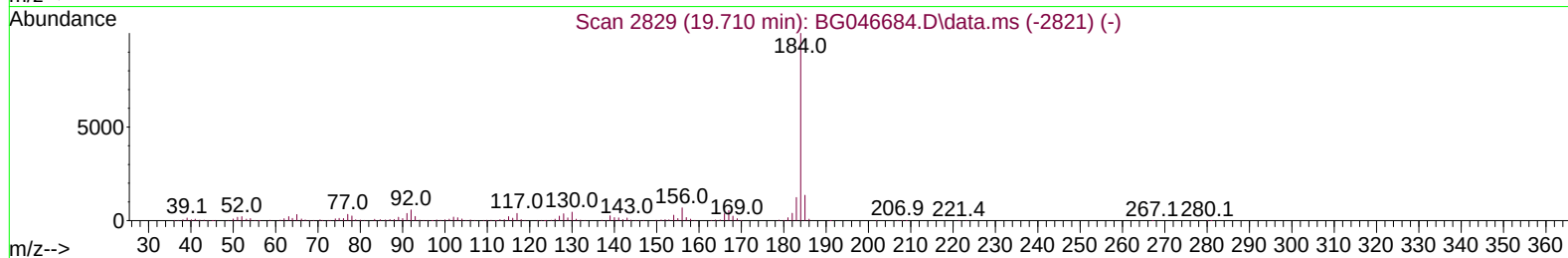
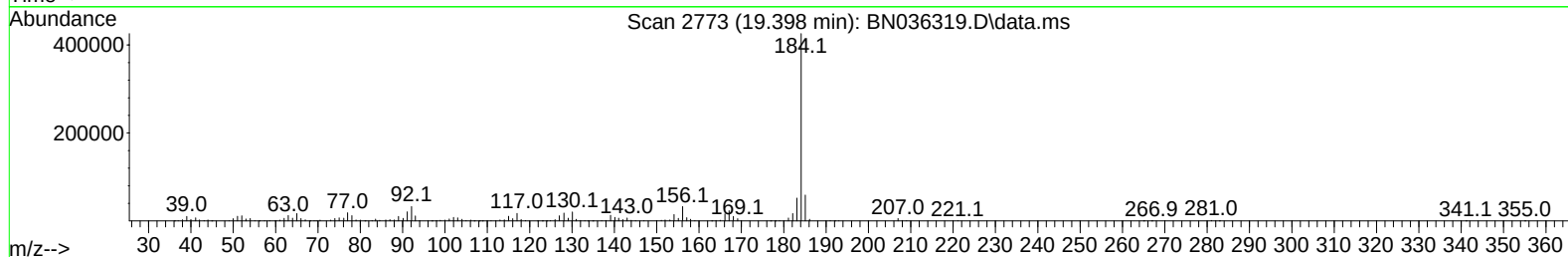
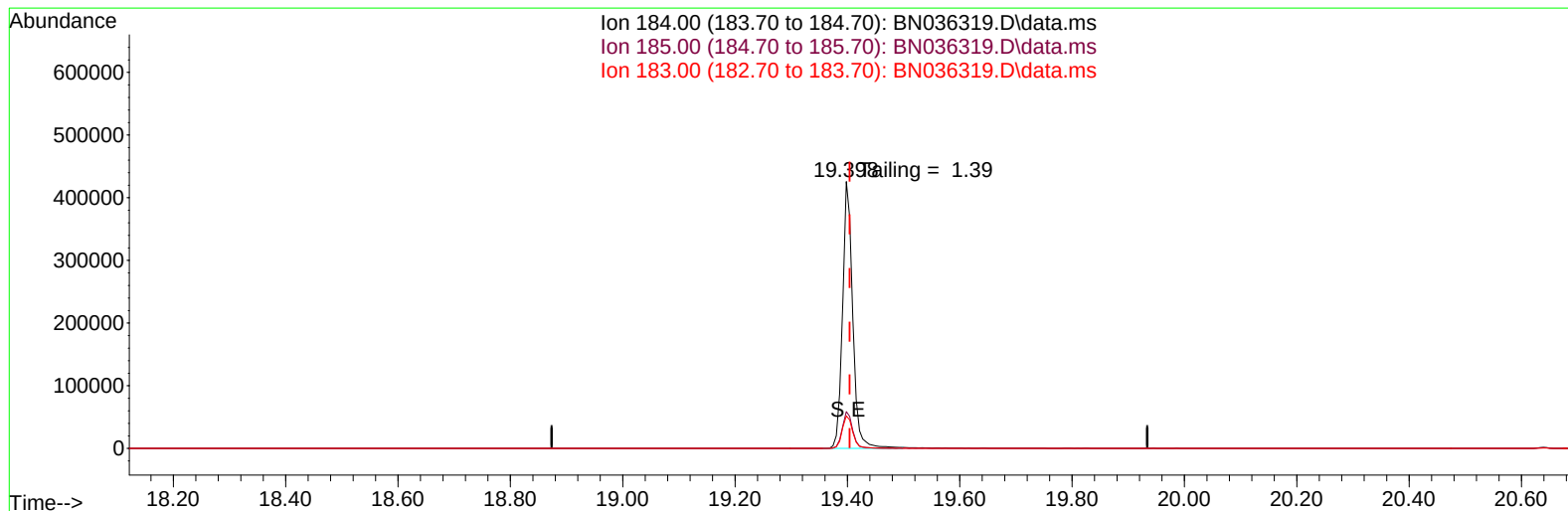
response 103084

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:	PB166533BL	SDG No.:	Q1283
Lab Sample ID:	PB166533BL	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
BN036321.D	1	02/04/25 11:00	02/06/25 06:15	PB166533

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		105%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		55 - 111		111%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		106%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2310	7.775				
1146-65-2	Naphthalene-d8	4720	10.573				
15067-26-2	Acenaphthene-d10	2290	14.42				
1517-22-2	Phenanthrene-d10	4230	17.161				
1719-03-5	Chrysene-d12	3950	21.348				
1520-96-3	Perylene-d12	4270	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 : BN036321.D
Acq On : 06 Feb 2025 06:15
Operator : RC/JU
Sample : PB166533BL
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166533BL

Quant Time: Feb 06 06:51:37 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 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	2306	0.400	ng	0.00
7) Naphthalene-d8	10.573	136	4718	0.400	ng	# 0.01
13) Acenaphthene-d10	14.420	164	2285	0.400	ng	0.01
19) Phenanthrene-d10	17.161	188	4231	0.400	ng	0.00
29) Chrysene-d12	21.348	240	3945	0.400	ng	0.00
35) Perylene-d12	23.627	264	4266	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2328	0.388	ng	0.00
5) Phenol-d6	6.952	99	2382	0.338	ng	0.00
8) Nitrobenzene-d5	8.929	82	1975	0.443	ng	0.00
11) 2-Methylnaphthalene-d10	12.172	152	2700	0.421	ng	0.02
14) 2,4,6-Tribromophenol	15.920	330	293	0.200	ng	0.01
15) 2-Fluorobiphenyl	13.051	172	3938	0.386	ng	0.01
27) Fluoranthene-d10	19.192	212	4816	0.439	ng	0.00
31) Terphenyl-d14	19.787	244	3466	0.423	ng	0.00

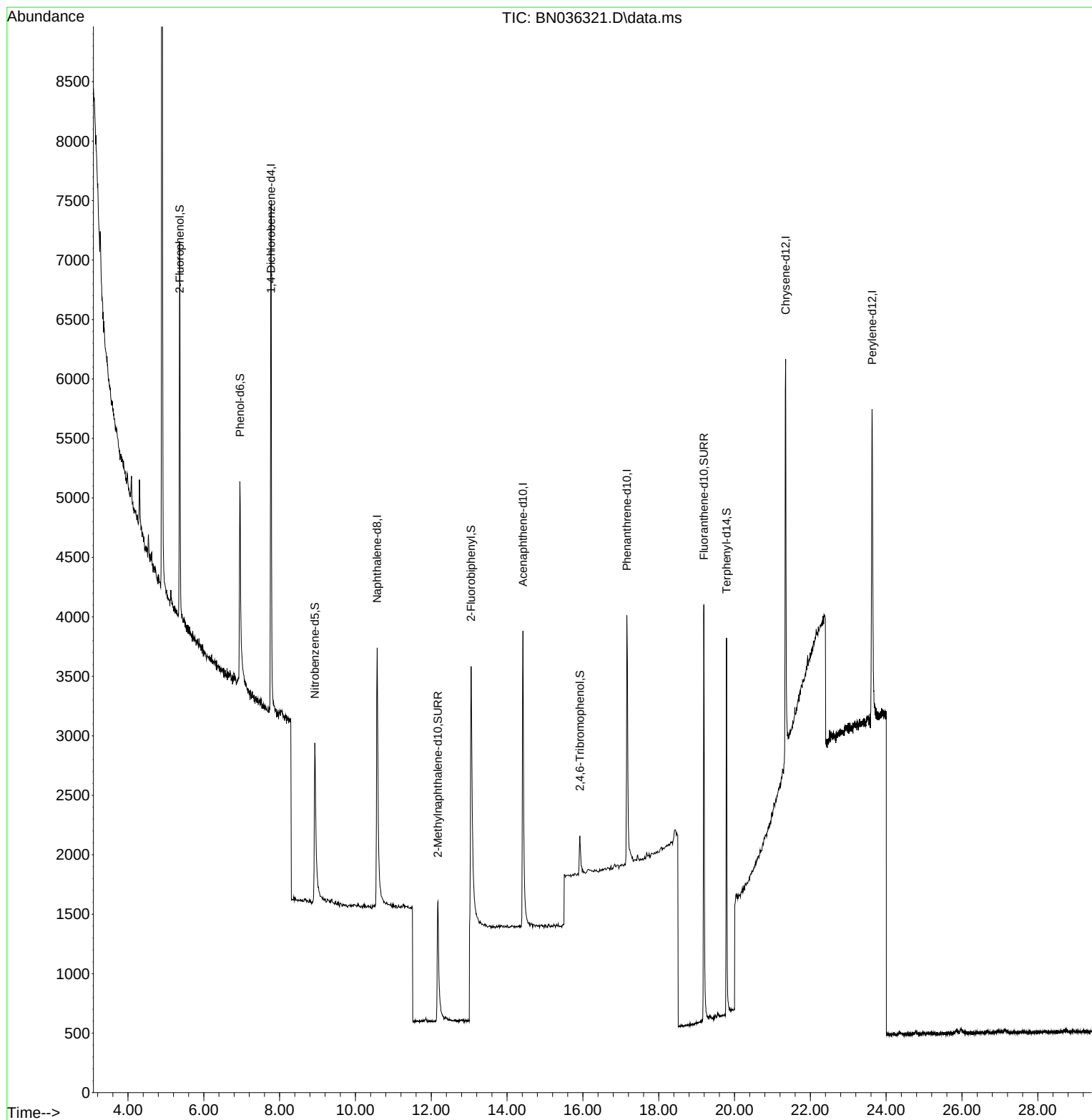
Target Compounds Qvalue

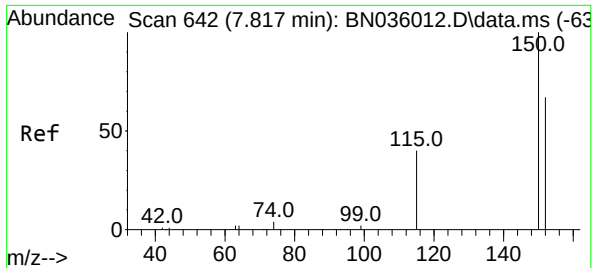
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036321.D
Acq On : 06 Feb 2025 06:15
Operator : RC/JU
Sample : PB166533BL
Misc :
ALS Vial : 20 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166533BL

Quant Time: Feb 06 06:51:37 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 Feb 06 01:04:09 2025
Response via : Initial Calibration

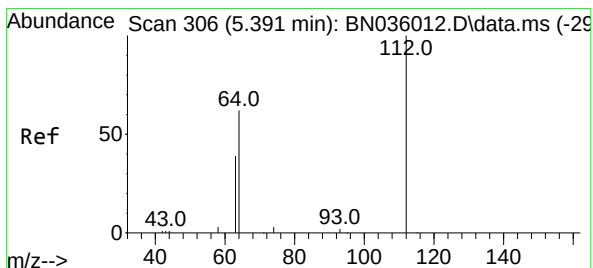
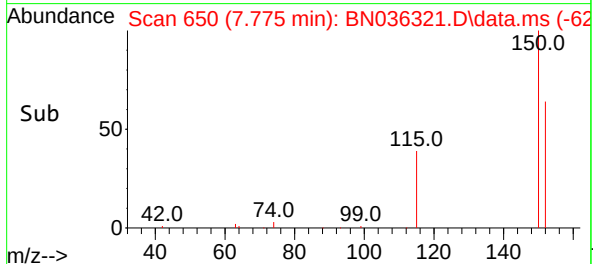
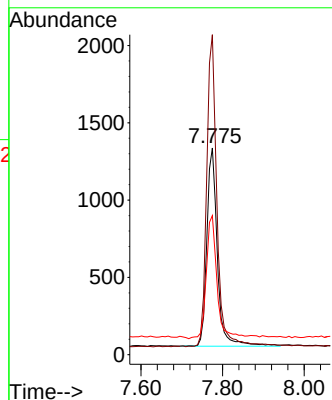
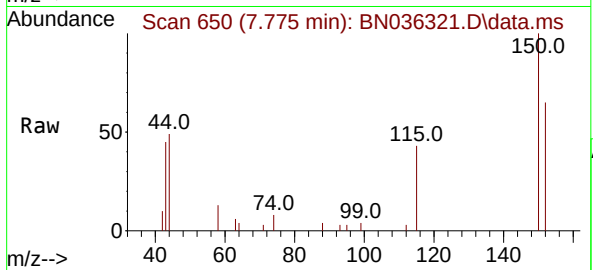




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

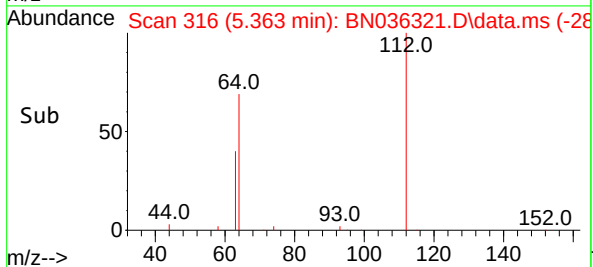
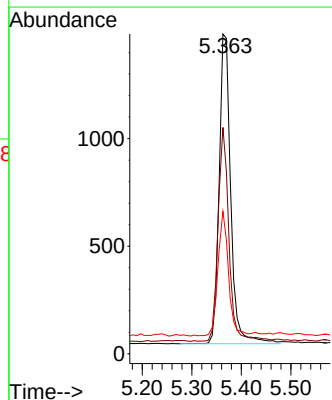
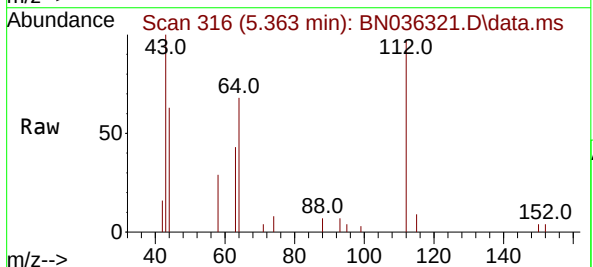
Instrument :
BNA_N
ClientSampleId :
PB166533BL

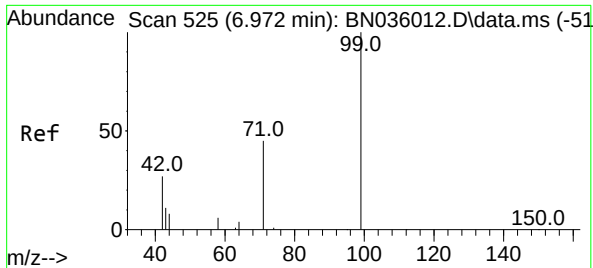
Tgt Ion:152 Resp: 2306
Ion Ratio Lower Upper
152 100
150 154.8 117.4 176.2
115 67.3 51.0 76.4



#4
2-Fluorophenol
Concen: 0.388 ng
RT: 5.363 min Scan# 316
Delta R.T. -0.000 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion:112 Resp: 2328
Ion Ratio Lower Upper
112 100
64 64.6 50.0 75.0
63 36.5 30.7 46.1

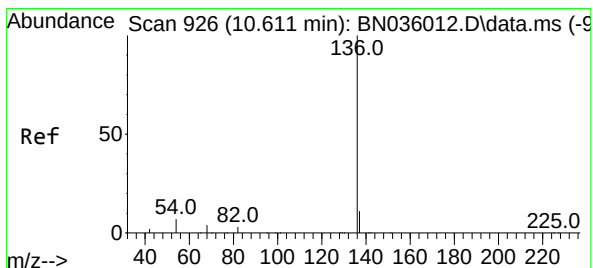
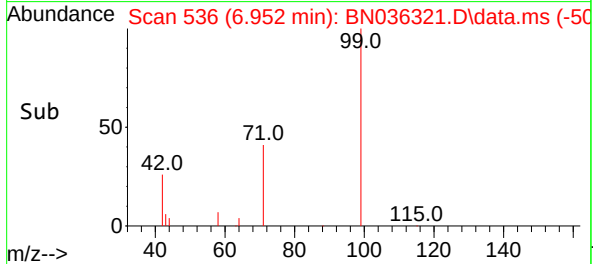
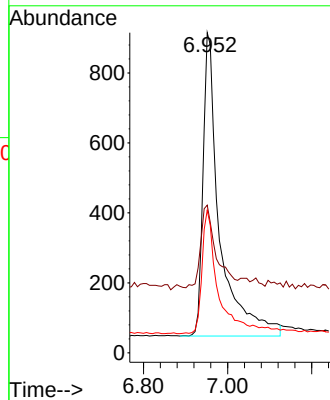
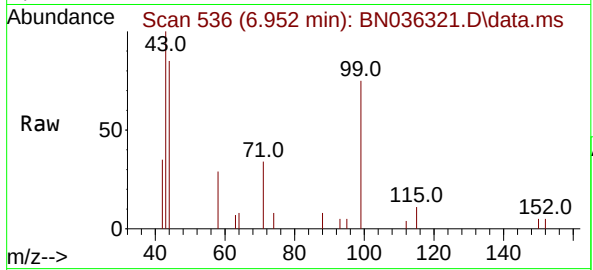




#5
Phenol-d6
Concen: 0.338 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

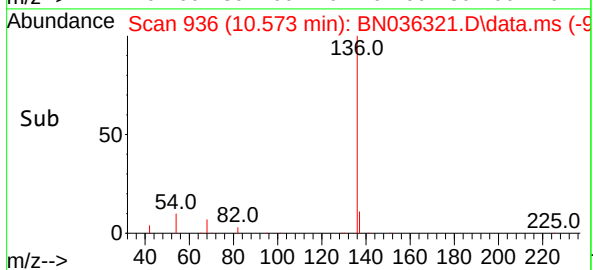
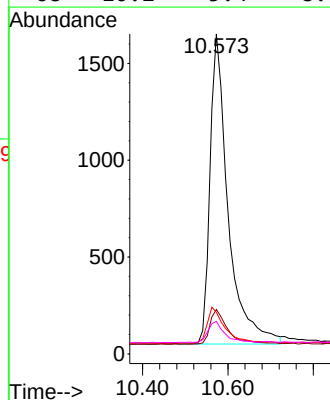
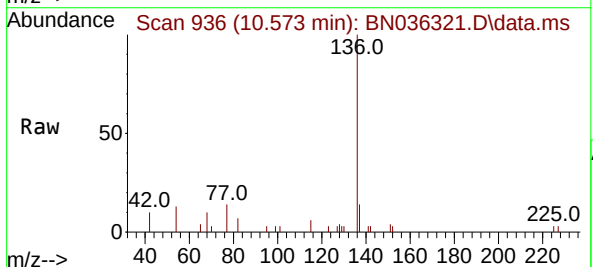
Instrument :
BNA_N
ClientSampleId :
PB166533BL

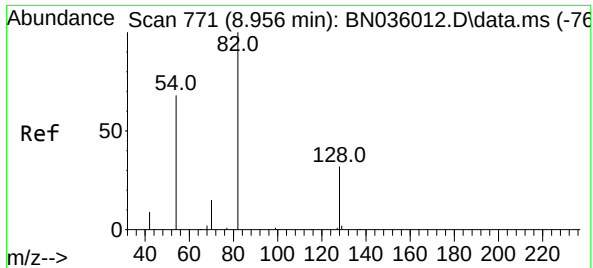
Tgt Ion: 99 Resp: 2382
Ion Ratio Lower Upper
99 100
42 25.4 26.8 40.2#
71 40.2 36.6 55.0



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.573 min Scan# 936
Delta R.T. 0.011 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion: 136 Resp: 4718
Ion Ratio Lower Upper
136 100
137 13.9 10.4 15.6
54 13.0 7.7 11.5#
68 10.2 5.4 8.0#

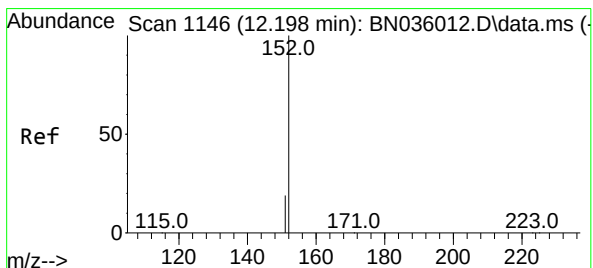
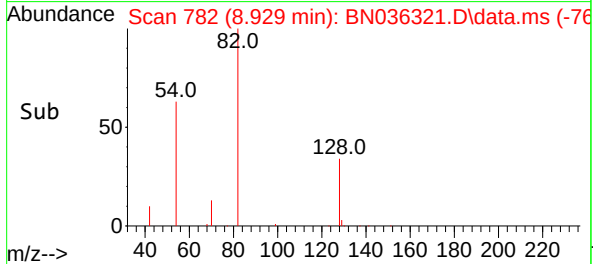
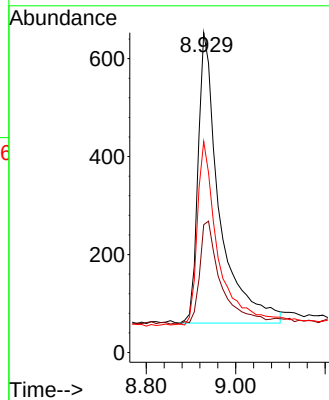
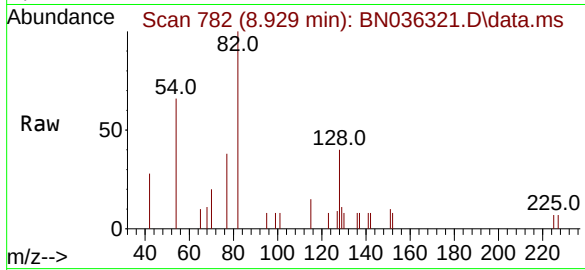




#8
Nitrobenzene-d5
Concen: 0.443 ng
RT: 8.929 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

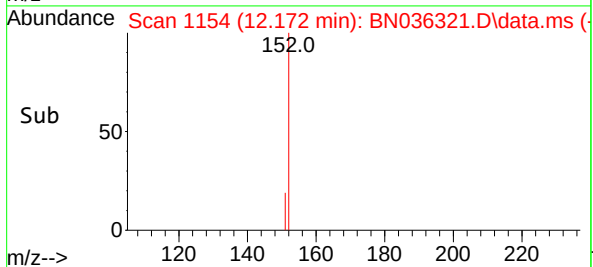
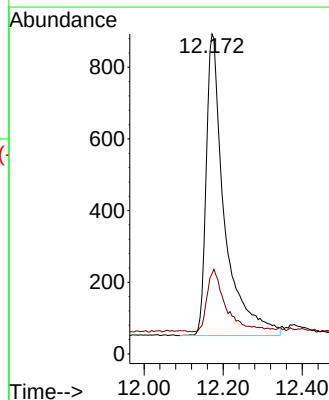
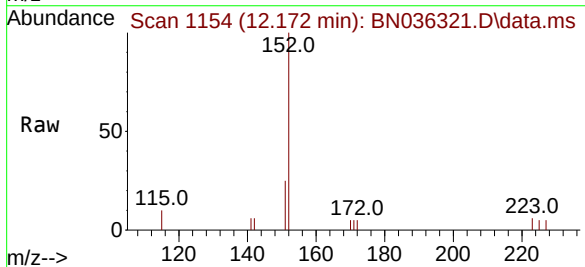
Instrument :
BNA_N
ClientSampleId :
PB166533BL

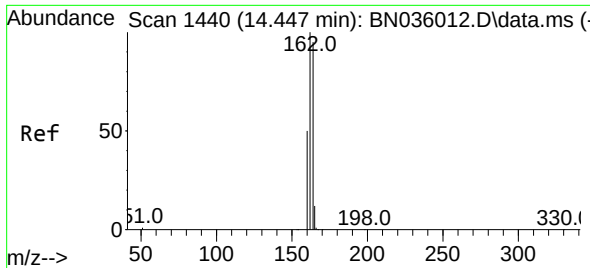
Tgt Ion: 82 Resp: 1975
Ion Ratio Lower Upper
82 100
128 40.0 28.8 43.2
54 66.0 55.8 83.8



#11
2-Methylnaphthalene-d10
Concen: 0.421 ng
RT: 12.172 min Scan# 1154
Delta R.T. 0.015 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion: 152 Resp: 2700
Ion Ratio Lower Upper
152 100
151 21.2 16.6 25.0

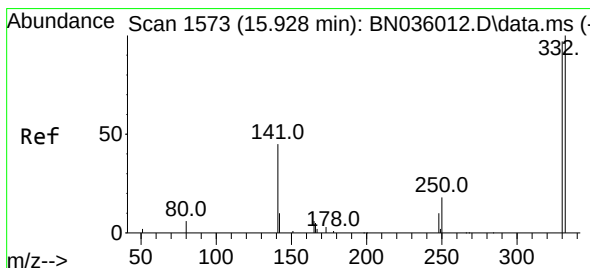
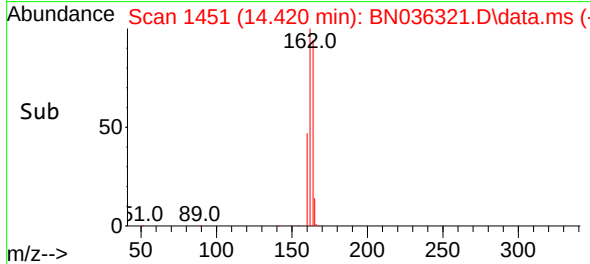
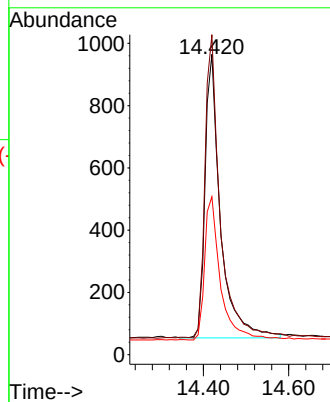
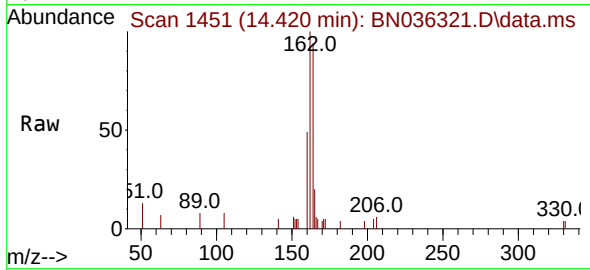




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.420 min Scan# 1440
Delta R.T. 0.011 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

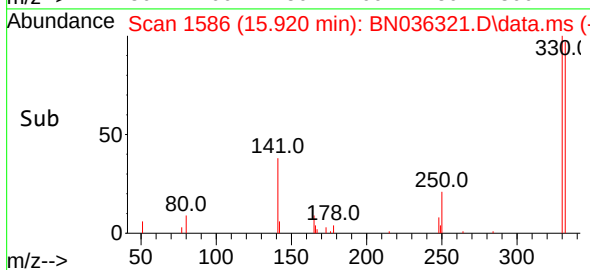
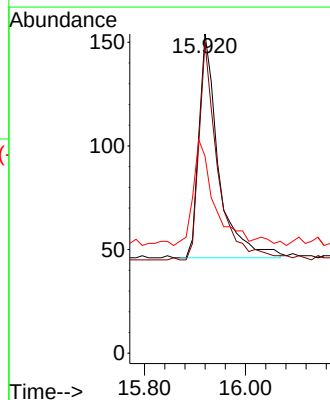
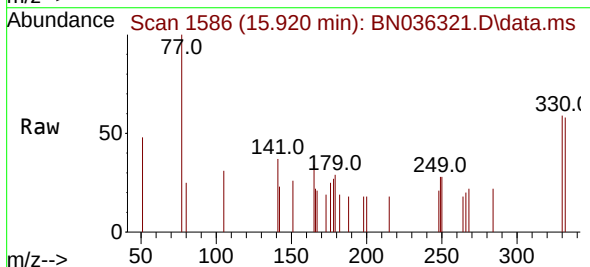
Instrument :
BNA_N
ClientSampleId :
PB166533BL

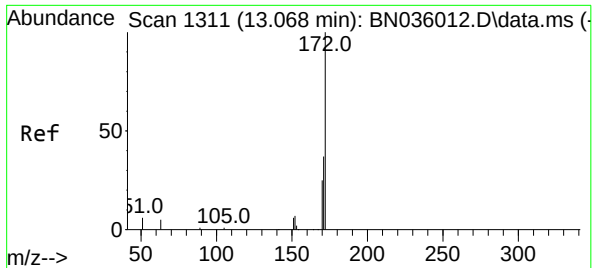
Tgt Ion	164	162	160
Resp:	2285		
Ion Ratio	100	106.5	52.5
Lower		84.1	43.8
Upper		126.1	65.8



#14
2,4,6-Tribromophenol
Concen: 0.200 ng
RT: 15.920 min Scan# 1586
Delta R.T. 0.012 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion	330	332	141
Resp:	293		
Ion Ratio	100	92.2	50.5
Lower		81.0	36.7
Upper		121.4	55.1

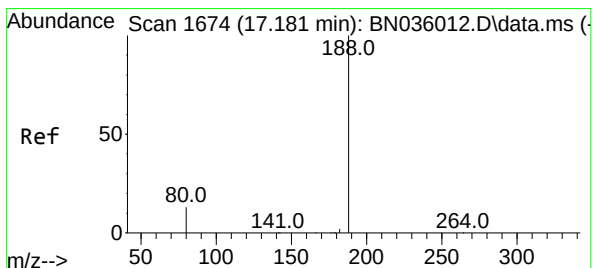
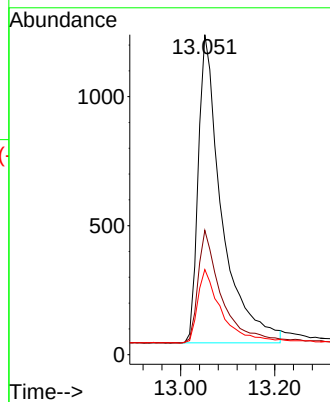
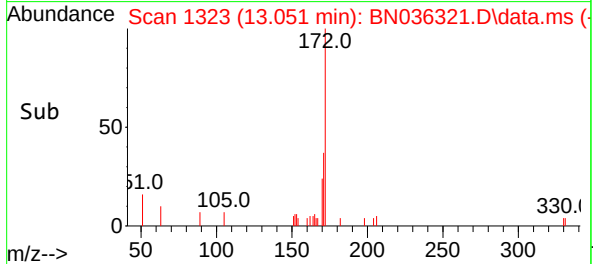
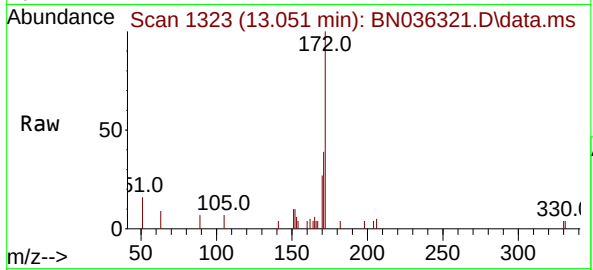




#15
2-Fluorobiphenyl
Concen: 0.386 ng
RT: 13.051 min Scan# 11
Delta R.T. 0.011 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

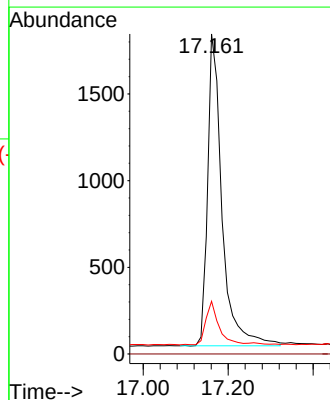
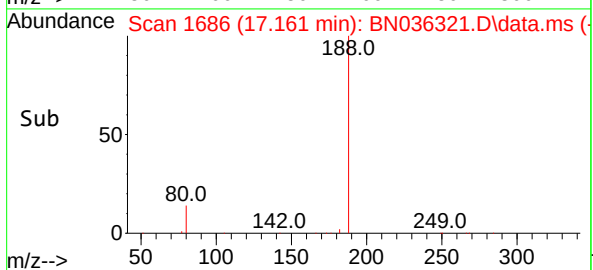
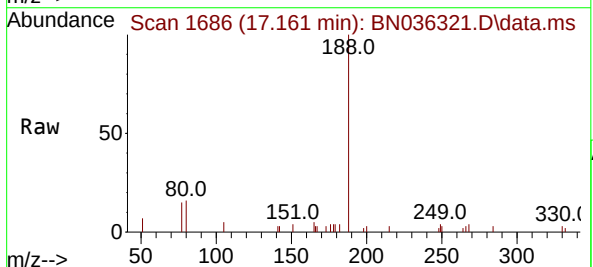
Instrument :
BNA_N
ClientSampleId :
PB166533BL

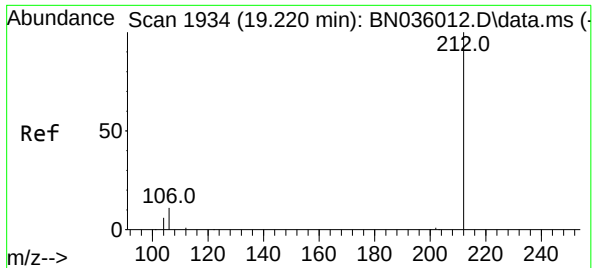
Tgt Ion	Ratio	Lower	Upper
172	100		
171	38.9	30.9	46.3
170	26.6	21.2	31.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1686
Delta R.T. -0.000 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	16.5	12.3	18.5

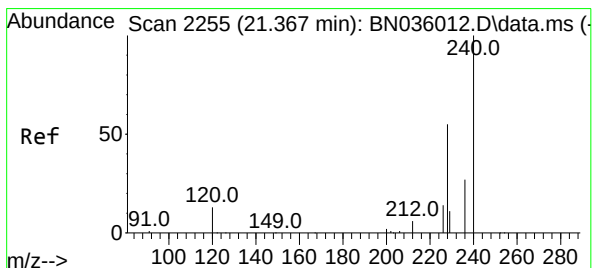
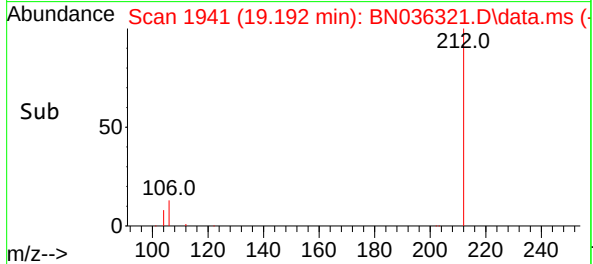
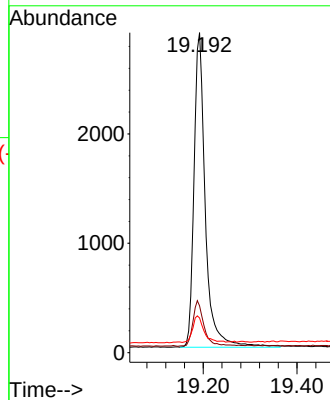
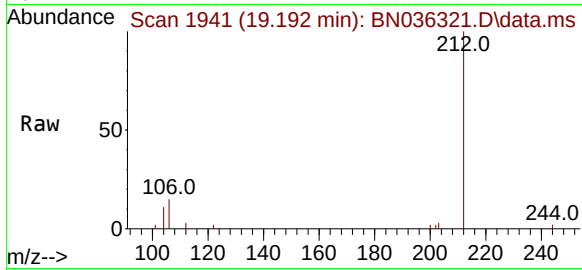




#27
Fluoranthene-d10
Concen: 0.439 ng
RT: 19.192 min Scan# 1941
Delta R.T. 0.005 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

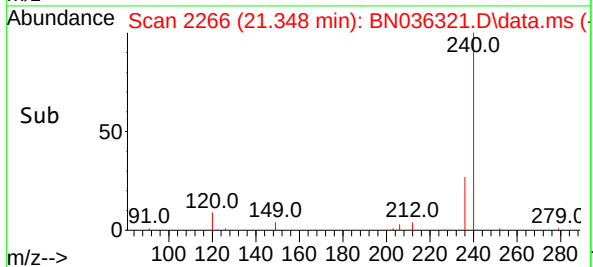
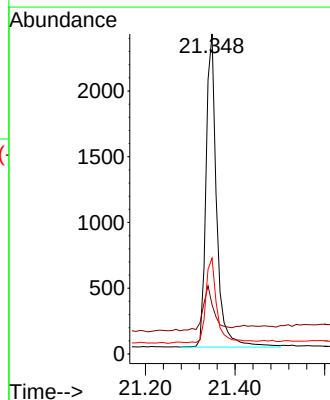
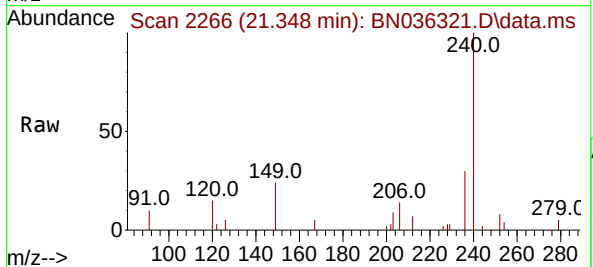
Instrument :
BNA_N
ClientSampleId :
PB166533BL

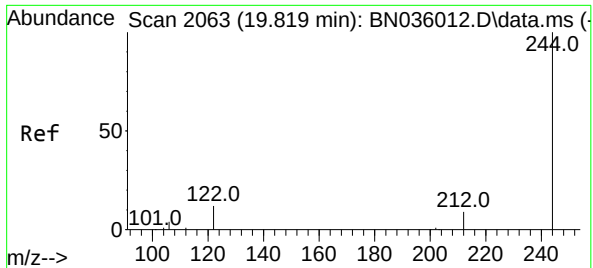
Tgt Ion:212 Resp: 4816
Ion Ratio Lower Upper
212 100
106 14.3 9.7 14.5
104 8.5 6.0 9.0



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.348 min Scan# 2266
Delta R.T. 0.009 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion:240 Resp: 3945
Ion Ratio Lower Upper
240 100
120 15.4 13.9 20.9
236 30.0 23.7 35.5

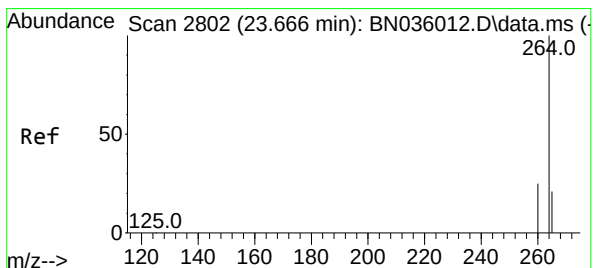
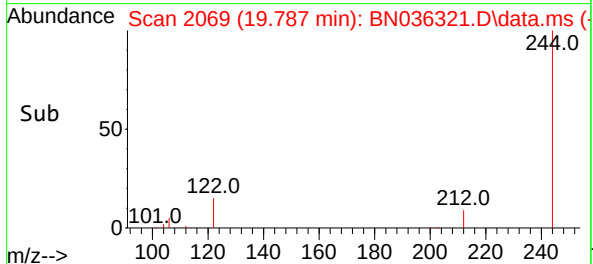
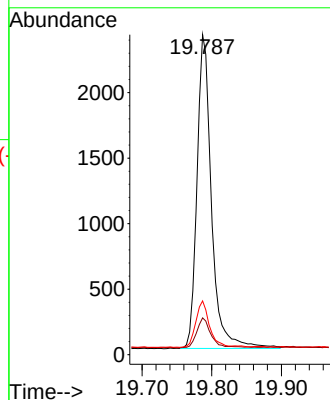
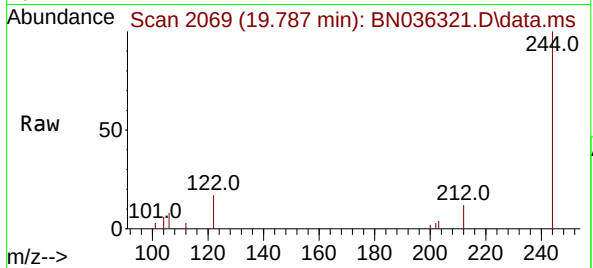




#31
Terphenyl-d14
Concen: 0.423 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

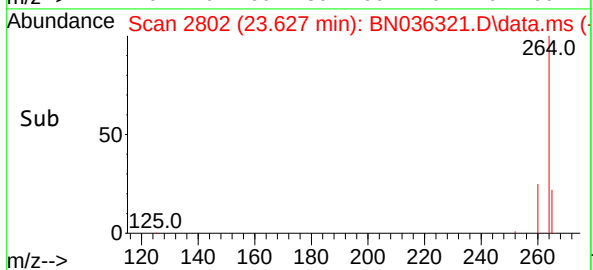
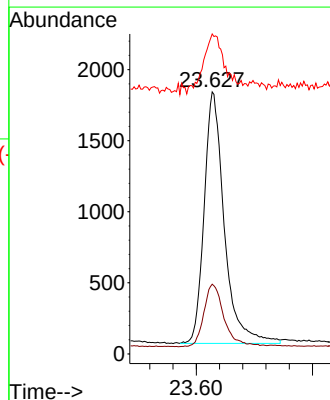
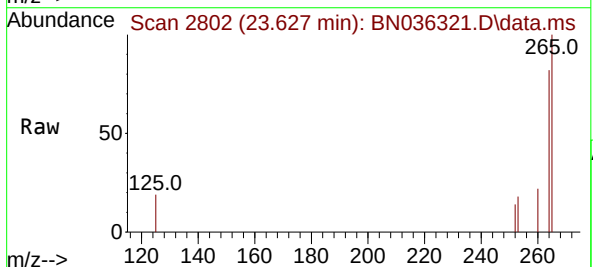
Instrument :
BNA_N
ClientSampleId :
PB166533BL

Tgt Ion:244 Resp: 3466
Ion Ratio Lower Upper
244 100
212 11.5 9.1 13.7
122 16.8 11.3 16.9



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.627 min Scan# 2802
Delta R.T. -0.000 min
Lab File: BN036321.D
Acq: 06 Feb 2025 06:15

Tgt Ion:264 Resp: 4266
Ion Ratio Lower Upper
264 100
260 26.6 21.8 32.6
265 122.1 56.6 84.8#



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB166533BS	SDG No.:	Q1283
Lab Sample ID:	PB166533BS	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
BN036326.D	1	02/04/25 11:00	02/06/25 09:15	PB166533

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	0.54		30 - 150		134%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		91%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.40		58 - 132		99%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2090	7.775				
1146-65-2	Naphthalene-d8	4540	10.562				
15067-26-2	Acenaphthene-d10	2200	14.409				
1517-22-2	Phenanthrene-d10	4110	17.161				
1719-03-5	Chrysene-d12	3850	21.34				
1520-96-3	Perylene-d12	4110	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 : BN036326.D
 Acq On : 06 Feb 2025 09:15
 Operator : RC/JU
 Sample : PB166533BS
 Misc :
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB166533BS

Quant Time: Feb 06 09:44:20 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)

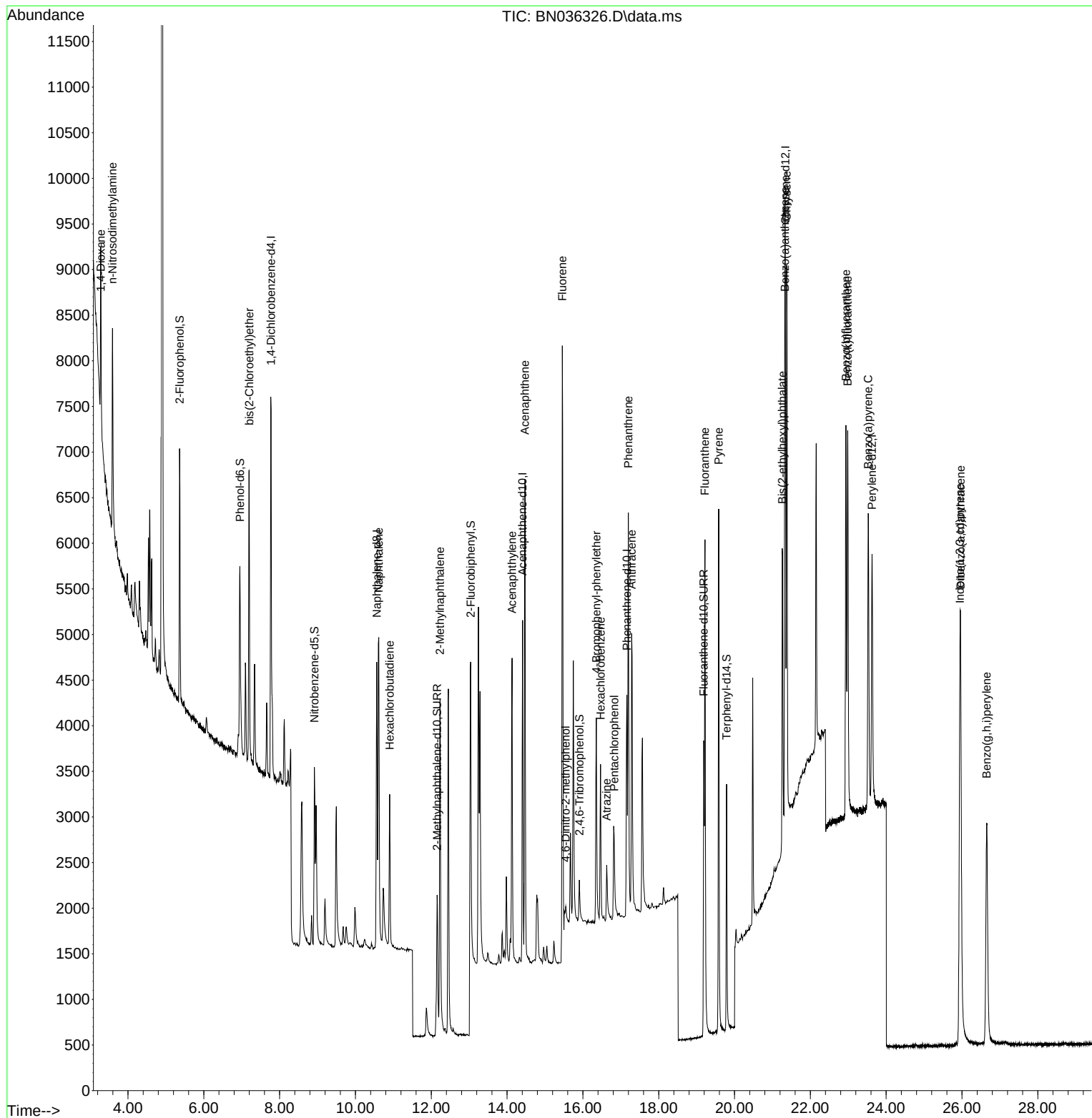
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2094	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4542	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2195	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	4114	0.400	ng	# 0.00
29) Chrysene-d12	21.340	240	3845	0.400	ng	# 0.00
35) Perylene-d12	23.627	264	4110	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2027	0.372	ng	0.00
5) Phenol-d6	6.952	99	2239	0.350	ng	0.00
8) Nitrobenzene-d5	8.918	82	1792	0.418	ng	-0.01
11) 2-Methylnaphthalene-d10	12.156	152	3318	0.537	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	314	0.223	ng	0.00
15) 2-Fluorobiphenyl	13.041	172	3563	0.364	ng	0.00
27) Fluoranthene-d10	19.187	212	4309	0.404	ng	0.00
31) Terphenyl-d14	19.791	244	3165	0.396	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.283	88	883	0.377	ng	# 62
3) n-Nitrosodimethylamine	3.593	42	1575	0.371	ng	# 82
6) bis(2-Chloroethyl)ether	7.197	93	2506	0.487	ng	98
9) Naphthalene	10.616	128	5279	0.400	ng	98
10) Hexachlorobutadiene	10.904	225	1461	0.343	ng	# 98
12) 2-Methylnaphthalene	12.233	142	3265	0.399	ng	98
16) Acenaphthylene	14.131	152	4187	0.402	ng	100
17) Acenaphthene	14.473	154	2815	0.395	ng	98
18) Fluorene	15.457	166	3530	0.395	ng	98
20) 4,6-Dinitro-2-methylph...	15.547	198	147	0.153	ng	# 15
21) 4-Bromophenyl-phenylether	16.354	248	1037	0.354	ng	# 88
22) Hexachlorobenzene	16.466	284	1358	0.352	ng	99
23) Atrazine	16.627	200	751	0.355	ng	95
24) Pentachlorophenol	16.826	266	787	0.471	ng	98
25) Phenanthrene	17.198	178	4977	0.403	ng	98
26) Anthracene	17.285	178	4467	0.397	ng	99
28) Fluoranthene	19.220	202	5654	0.389	ng	98
30) Pyrene	19.582	202	5883	0.378	ng	99
32) Benzo(a)anthracene	21.331	228	5386	0.386	ng	99
33) Chrysene	21.375	228	5823	0.408	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	2780	0.364	ng	98
36) Indeno(1,2,3-cd)pyrene	25.946	276	6801	0.412	ng	96
37) Benzo(b)fluoranthene	22.940	252	5874	0.393	ng	# 92
38) Benzo(k)fluoranthene	22.984	252	5840	0.388	ng	# 90
39) Benzo(a)pyrene	23.528	252	5255	0.412	ng	# 88
40) Dibenzo(a,h)anthracene	25.963	278	5207	0.396	ng	96
41) Benzo(g,h,i)perylene	26.650	276	5607	0.391	ng	95

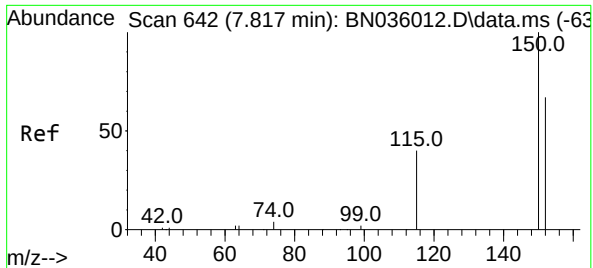
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036326.D
 Acq On : 06 Feb 2025 09:15
 Operator : RC/JU
 Sample : PB166533BS
 Misc :
 ALS Vial : 25 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB166533BS

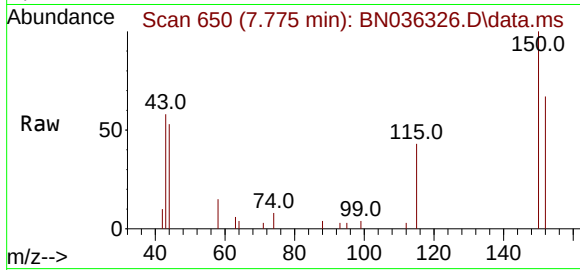
Quant Time: Feb 06 09:44:20 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Thu Feb 06 01:04:09 2025
 Response via : Initial Calibration



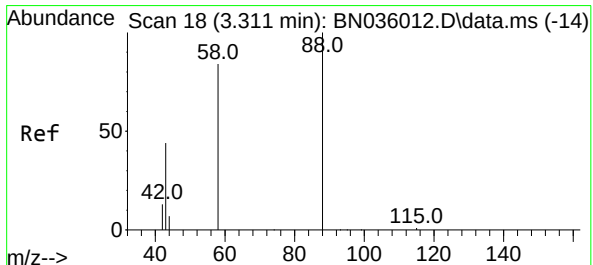
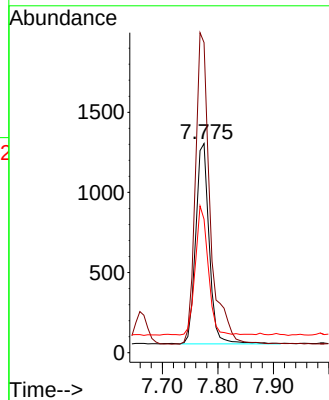
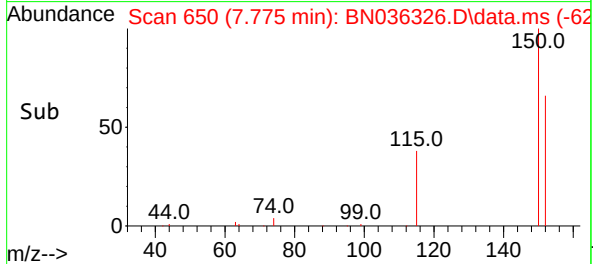


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.775 min Scan# 61
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Instrument :
BNA_N
ClientSampleId :
PB166533BS

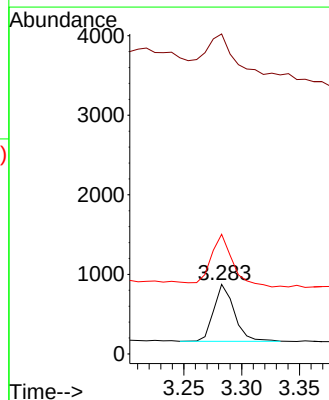
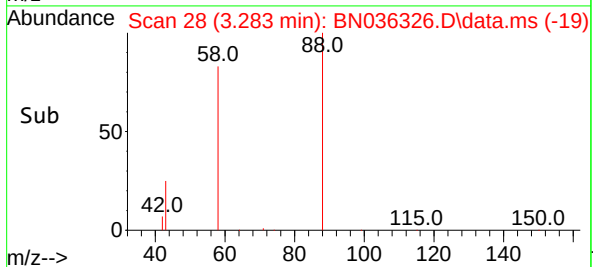
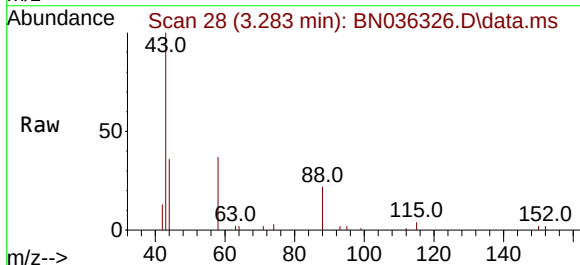


Tgt Ion:152 Resp: 2094
Ion Ratio Lower Upper
152 100
150 148.3 117.4 176.2
115 63.8 51.0 76.4

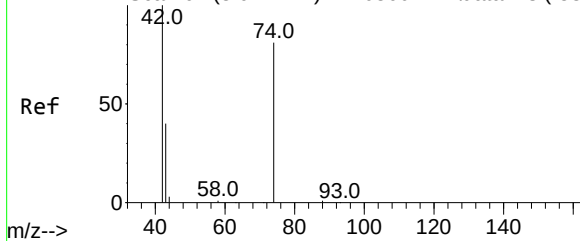


#2
1,4-Dioxane
Concen: 0.377 ng
RT: 3.283 min Scan# 28
Delta R.T. -0.007 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion: 88 Resp: 883
Ion Ratio Lower Upper
88 100
43 98.2 38.5 57.7#
58 99.2 66.6 99.8



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



#3

n-Nitrosodimethylamine

Concen: 0.371 ng

RT: 3.593 min Scan# 71

Delta R.T. -0.000 min

Lab File: BN036326.D

Acq: 06 Feb 2025 09:15

Instrument :

BNA_N

ClientSampleId :

PB166533BS

Tgt Ion: 42 Resp: 1575

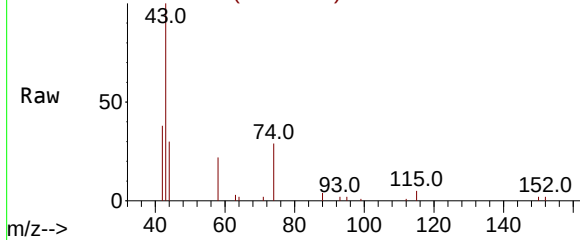
Ion Ratio Lower Upper

42 100

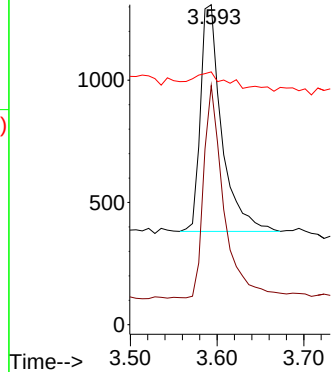
74 89.1 58.1 87.1#

44 9.6 6.2 9.4#

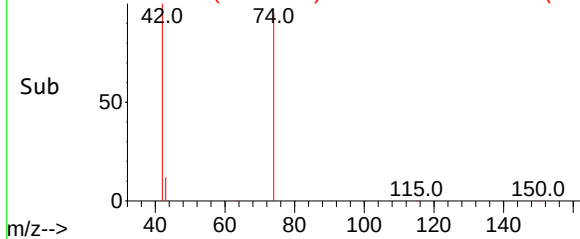
Abundance Scan 71 (3.593 min): BN036326.D\data.ms



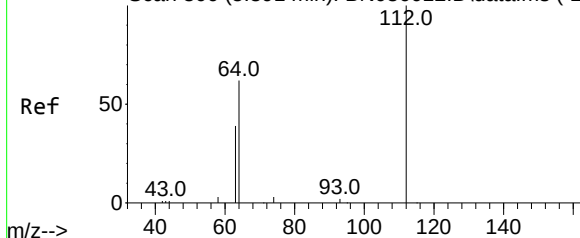
Abundance



Abundance Scan 71 (3.593 min): BN036326.D\data.ms (-50)



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



#4

2-Fluorophenol

Concen: 0.372 ng

RT: 5.363 min Scan# 316

Delta R.T. -0.000 min

Lab File: BN036326.D

Acq: 06 Feb 2025 09:15

Tgt Ion: 112 Resp: 2027

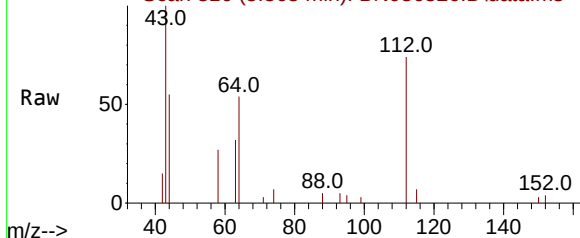
Ion Ratio Lower Upper

112 100

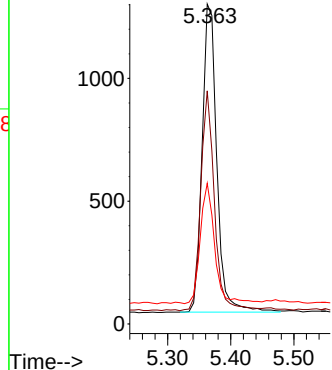
64 66.5 50.0 75.0

63 38.3 30.7 46.1

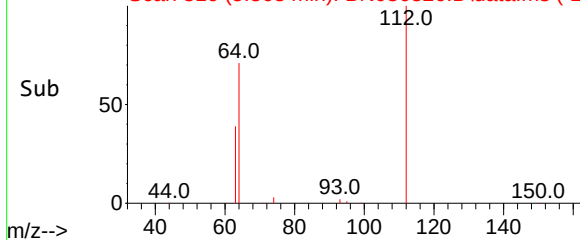
Abundance Scan 316 (5.363 min): BN036326.D\data.ms

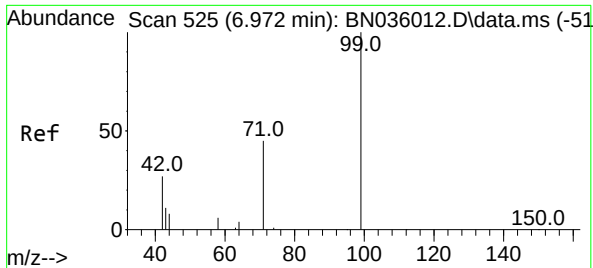


Abundance



Abundance Scan 316 (5.363 min): BN036326.D\data.ms (-28)

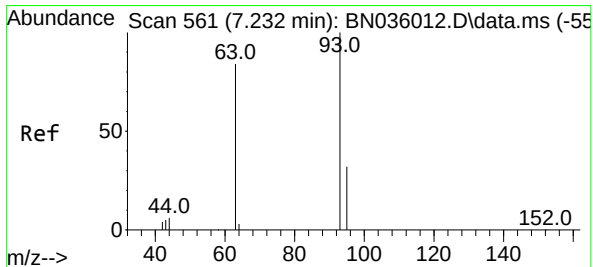
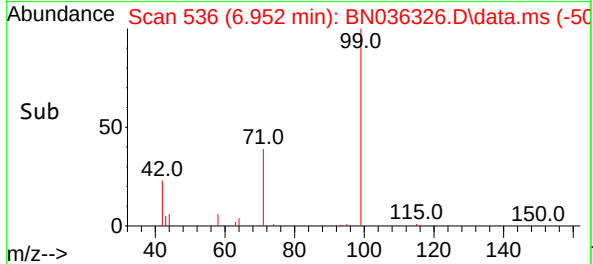
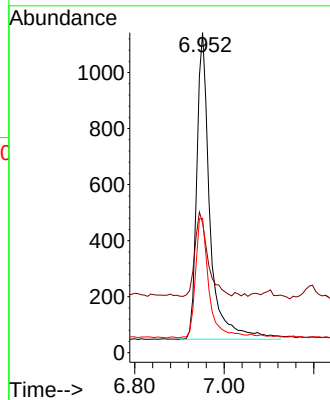
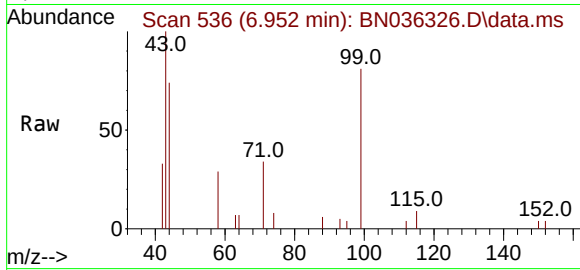




#5
Phenol-d6
Concen: 0.350 ng
RT: 6.952 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

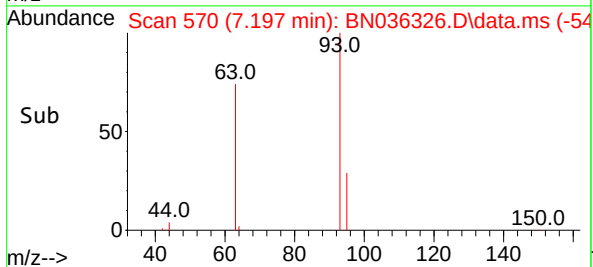
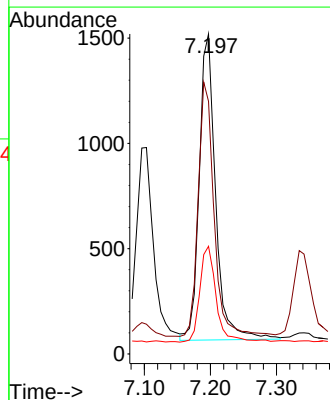
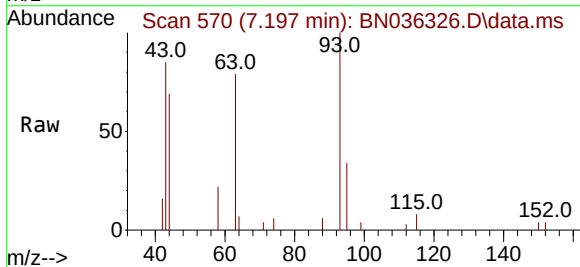
Instrument :
BNA_N
ClientSampleId :
PB166533BS

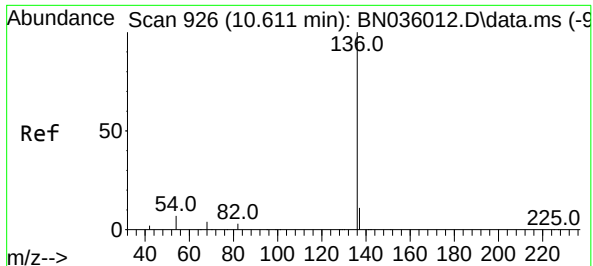
Tgt Ion: 99 Resp: 2239
Ion Ratio Lower Upper
99 100
42 26.7 26.8 40.2#
71 39.4 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.487 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion: 93 Resp: 2506
Ion Ratio Lower Upper
93 100
63 80.5 65.8 98.6
95 31.1 25.8 38.6

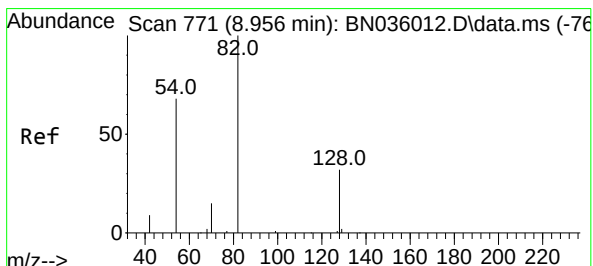
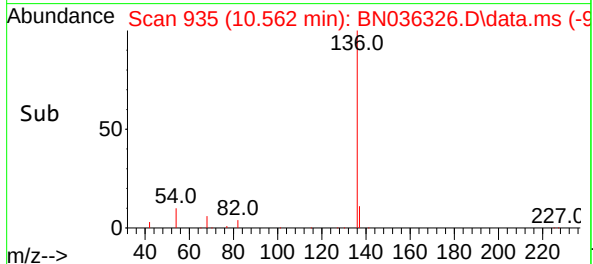
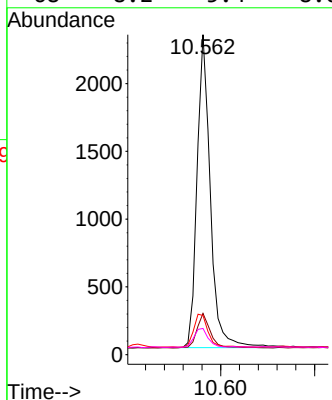
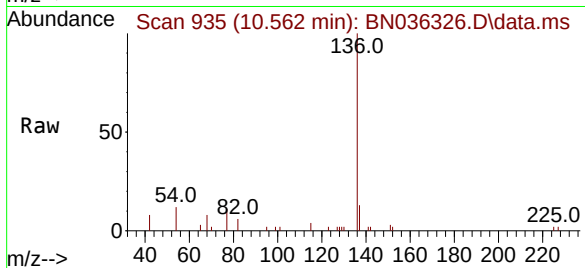




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

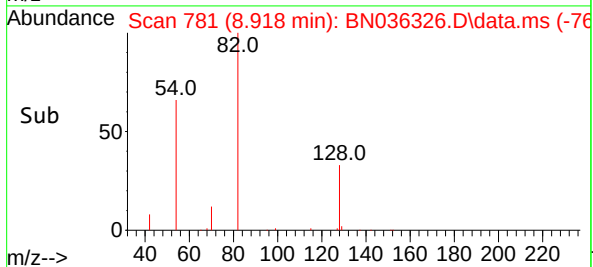
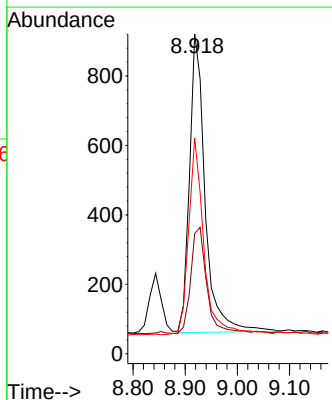
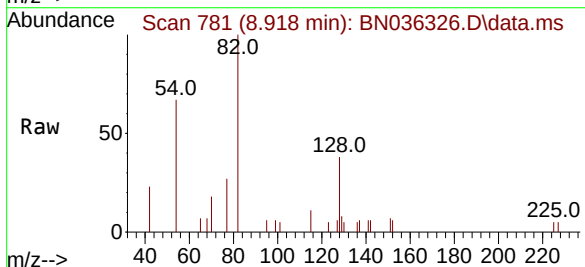
Instrument :
BNA_N
ClientSampleId :
PB166533BS

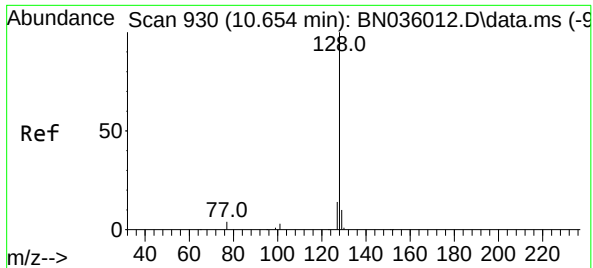
Tgt Ion:	136	Resp:	4542
Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.4	15.6
54	12.2	7.7	11.5#
68	8.2	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.418 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:	82	Resp:	1792
Ion	Ratio	Lower	Upper
82	100		
128	37.6	28.8	43.2
54	67.4	55.8	83.8

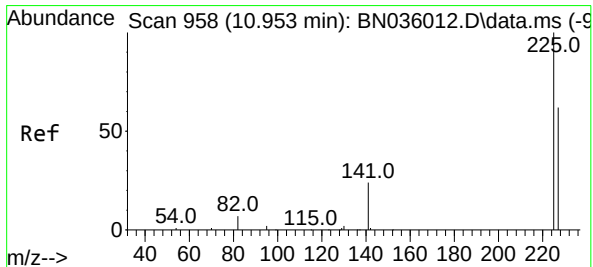
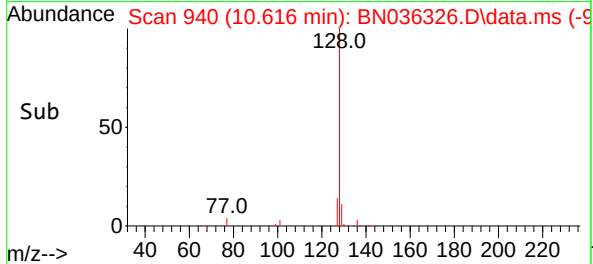
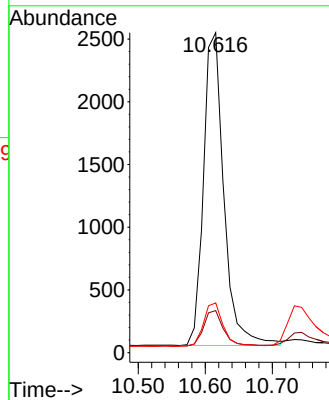
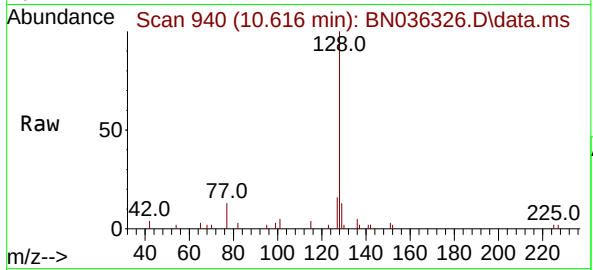




#9
Naphthalene
Concen: 0.400 ng
RT: 10.616 min Scan# 94
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

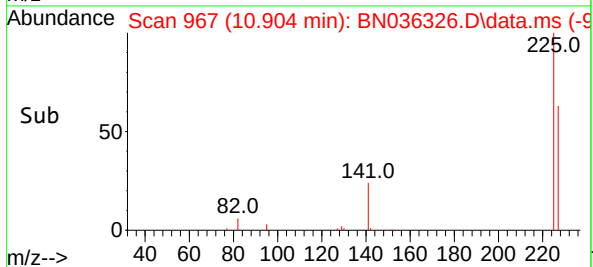
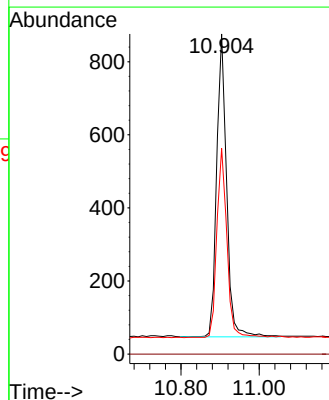
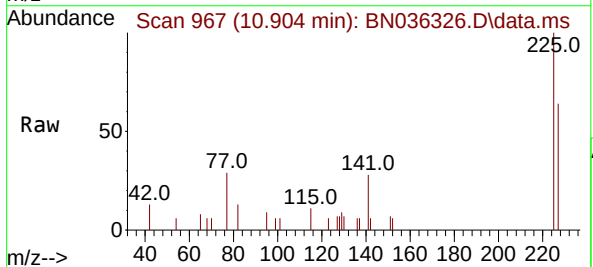
Instrument :
BNA_N
ClientSampleId :
PB166533BS

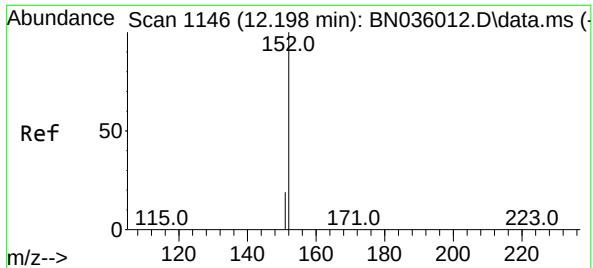
Tgt Ion:128 Resp: 5279
Ion Ratio Lower Upper
128 100
129 13.1 9.4 14.2
127 15.5 12.6 19.0



#10
Hexachlorobutadiene
Concen: 0.343 ng
RT: 10.904 min Scan# 967
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:225 Resp: 1461
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 62.5 51.0 76.6

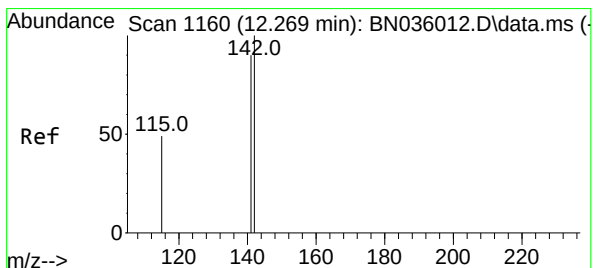
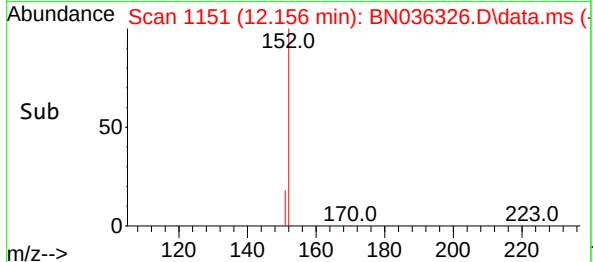
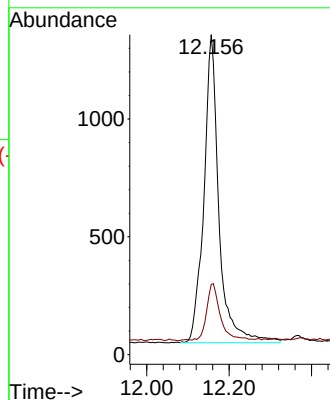
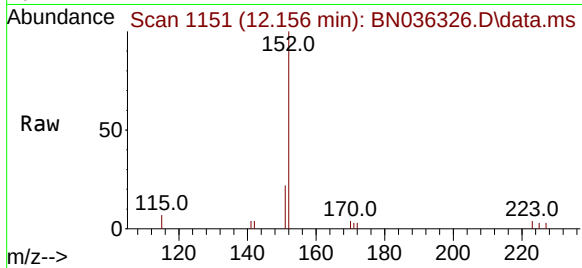




#11
2-Methylnaphthalene-d10
Concen: 0.537 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

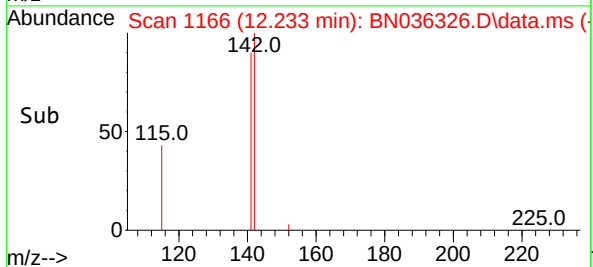
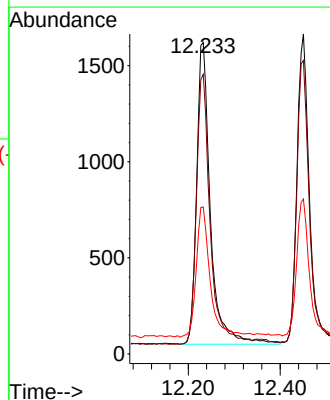
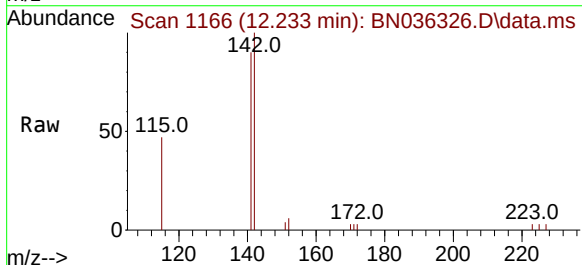
Instrument :
BNA_N
ClientSampleId :
PB166533BS

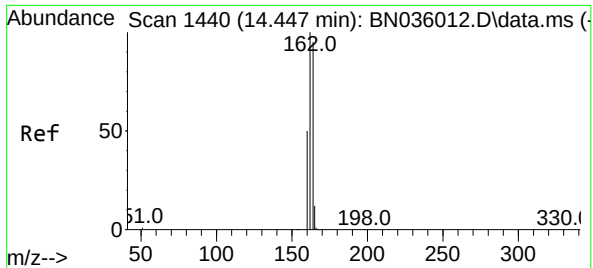
Tgt Ion:152 Resp: 3318
Ion Ratio Lower Upper
152 100
151 16.3 16.6 25.0#



#12
2-Methylnaphthalene
Concen: 0.399 ng
RT: 12.233 min Scan# 1166
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:142 Resp: 3265
Ion Ratio Lower Upper
142 100
141 89.8 72.2 108.2
115 47.2 41.2 61.8

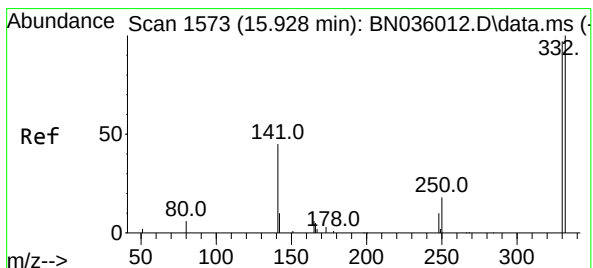
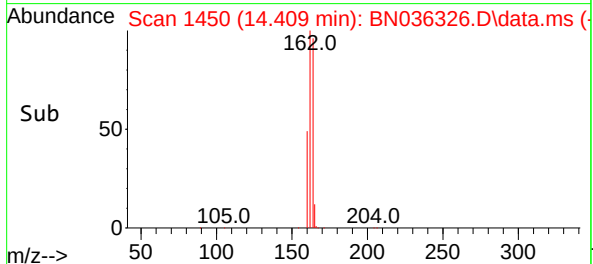
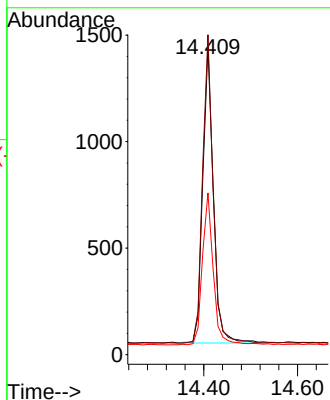
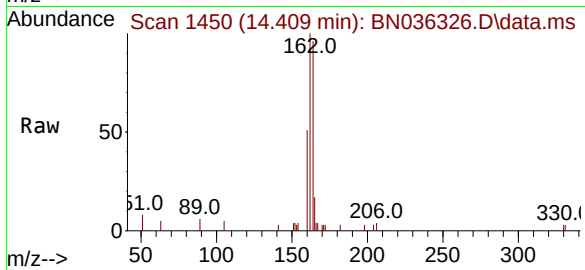




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

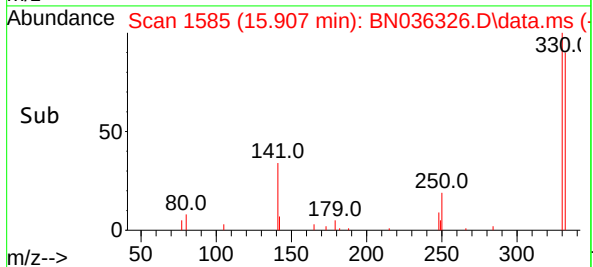
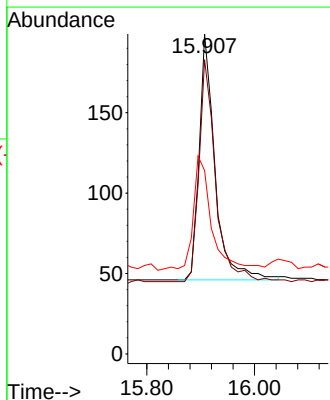
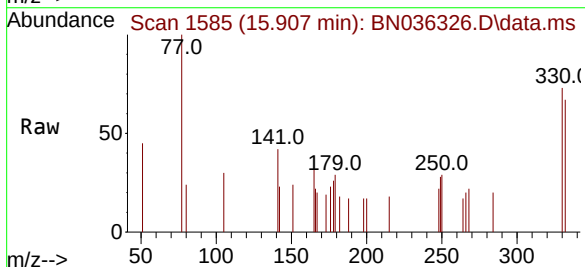
Instrument :
BNA_N
ClientSampleId :
PB166533BS

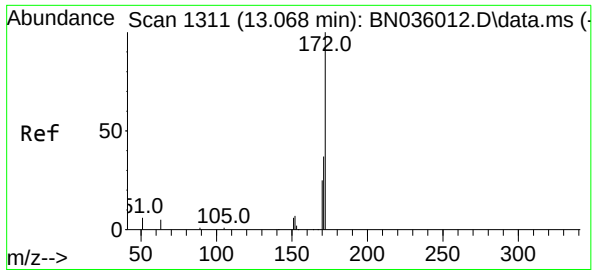
Tgt Ion:164 Resp: 2195
Ion Ratio Lower Upper
164 100
162 103.9 84.1 126.1
160 52.5 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.223 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:330 Resp: 314
Ion Ratio Lower Upper
330 100
332 93.6 81.0 121.4
141 49.7 36.7 55.1

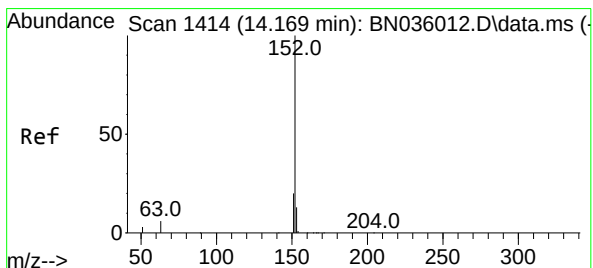
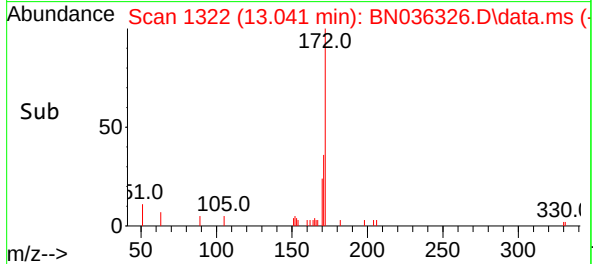
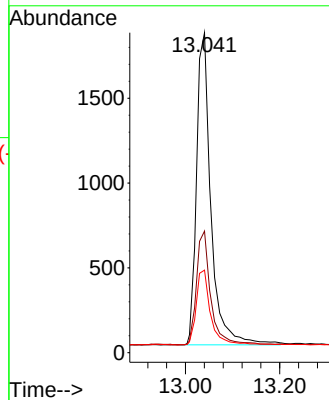
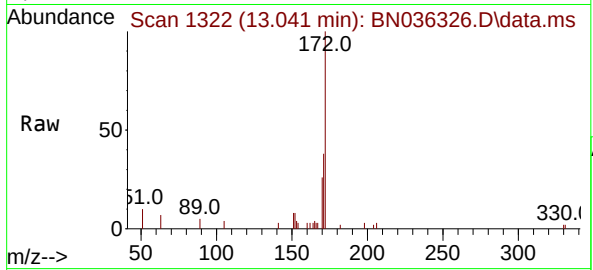




#15
2-Fluorobiphenyl
Concen: 0.364 ng
RT: 13.041 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

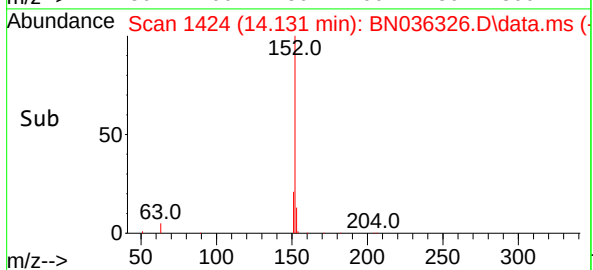
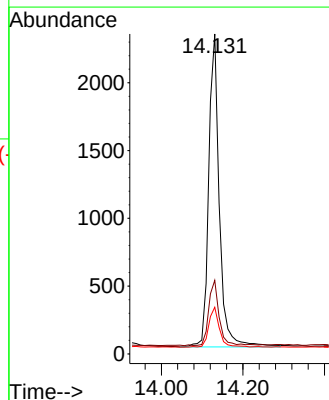
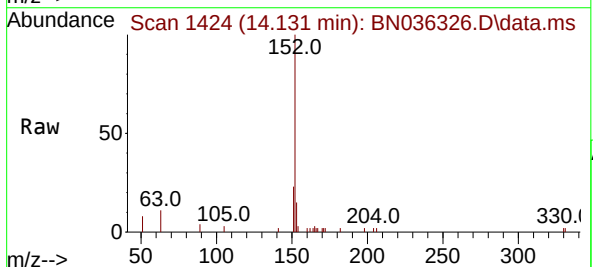
Instrument :
BNA_N
ClientSampleId :
PB166533BS

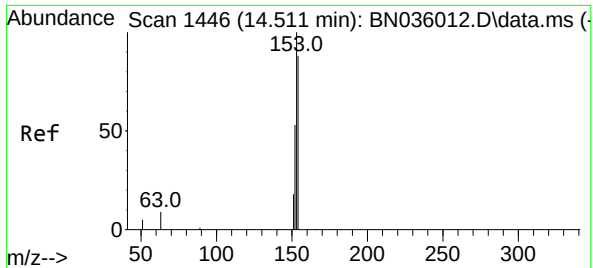
Tgt Ion:172 Resp: 3563
Ion Ratio Lower Upper
172 100
171 38.0 30.9 46.3
170 25.8 21.2 31.8



#16
Acenaphthylene
Concen: 0.402 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:152 Resp: 4187
Ion Ratio Lower Upper
152 100
151 20.4 16.2 24.2
153 12.8 10.4 15.6

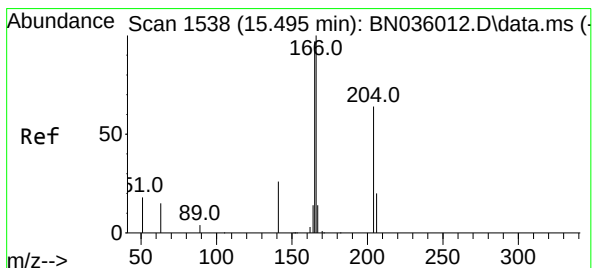
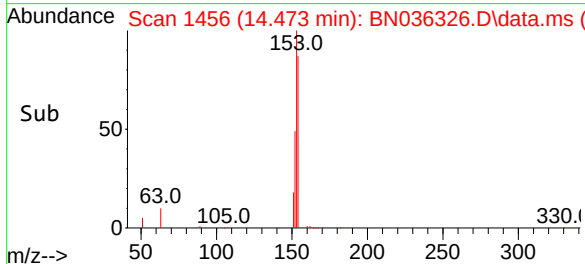
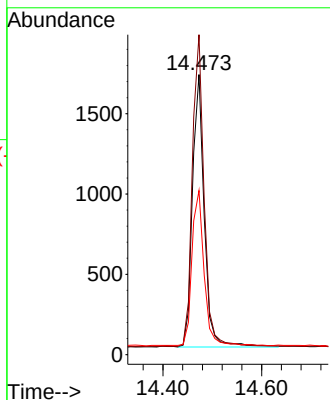
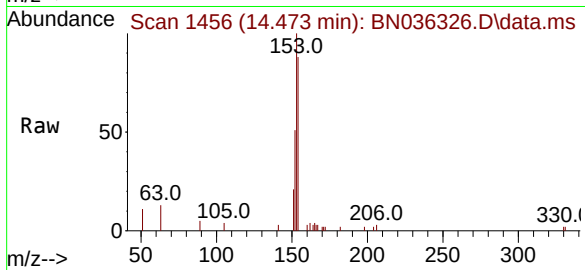




#17
Acenaphthene
Concen: 0.395 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

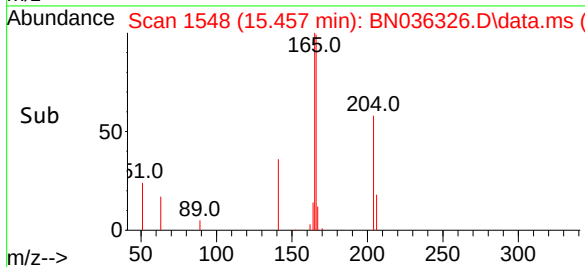
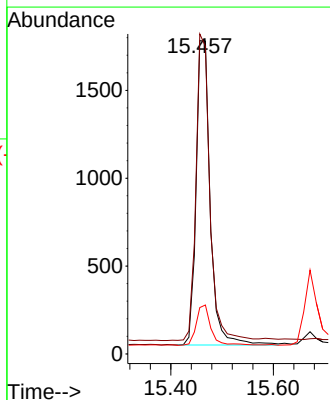
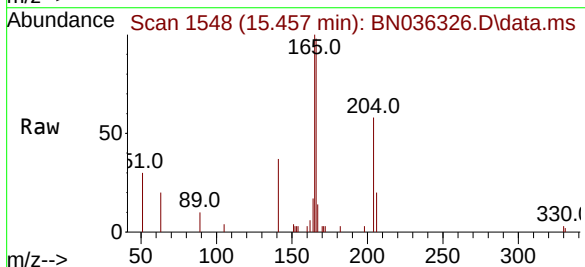
Instrument :
BNA_N
ClientSampleId :
PB166533BS

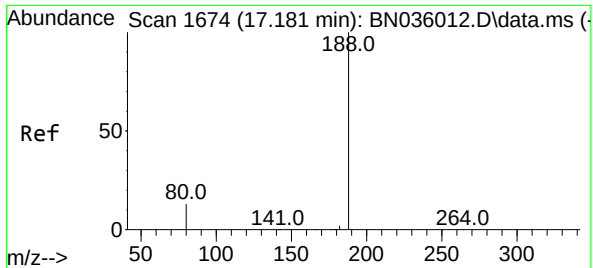
Tgt Ion	Ratio	Lower	Upper
154	100		
153	113.8	88.9	133.3
152	59.4	48.1	72.1



#18
Fluorene
Concen: 0.395 ng
RT: 15.457 min Scan# 1548
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion	Ratio	Lower	Upper
166	100		
165	96.3	78.5	117.7
167	13.9	10.7	16.1

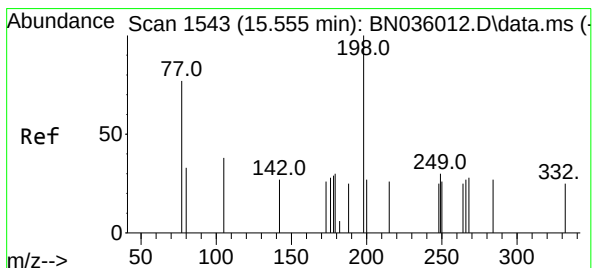
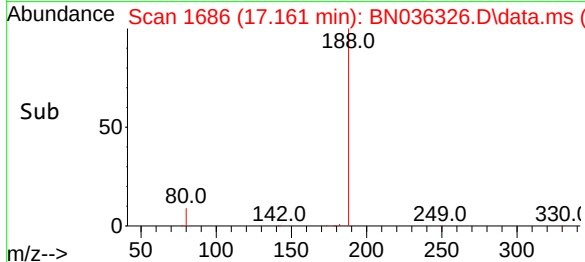
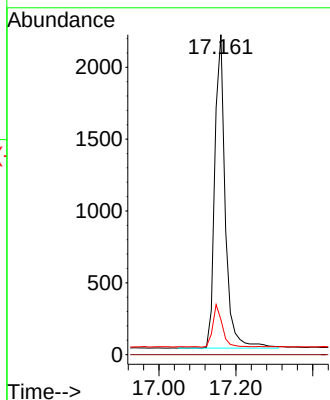
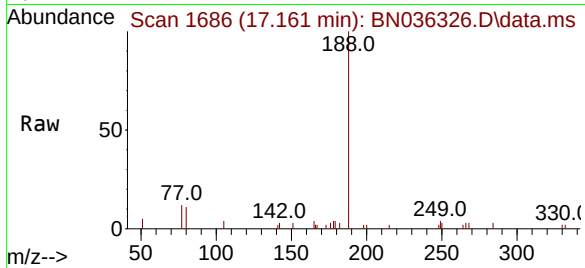




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

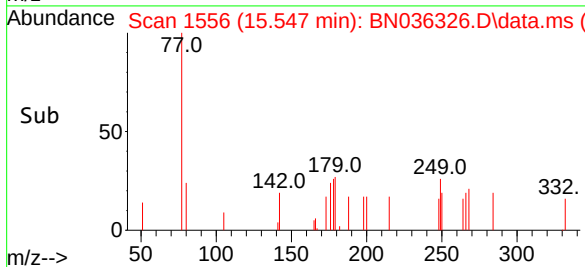
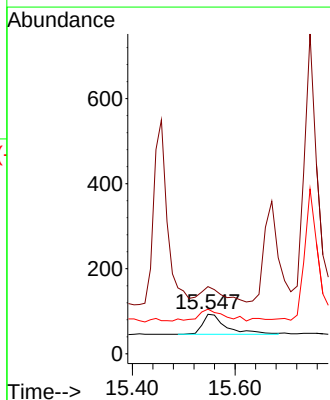
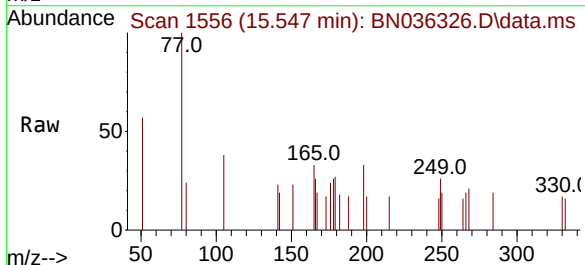
Instrument :
BNA_N
ClientSampleId :
PB166533BS

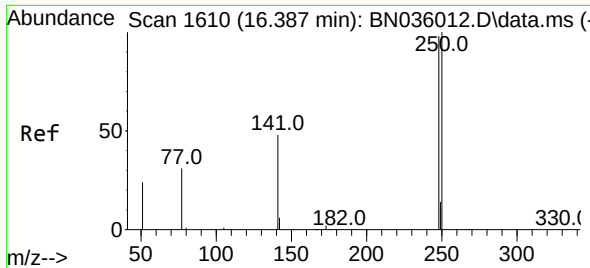
Tgt Ion:188 Resp: 4114
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 11.0 12.3 18.5#



#20
4,6-Dinitro-2-methylphenol
Concen: 0.153 ng
RT: 15.547 min Scan# 1556
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:198 Resp: 147
Ion Ratio Lower Upper
198 100
51 169.9 68.1 102.1#
105 112.9 46.5 69.7#

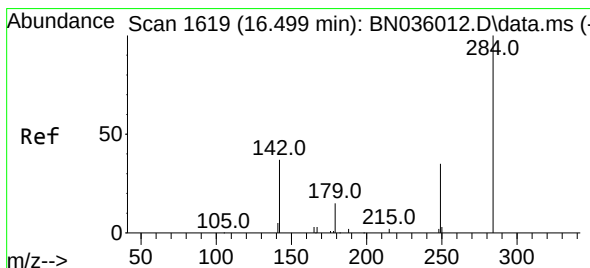
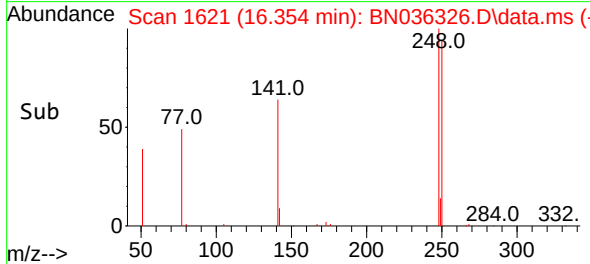
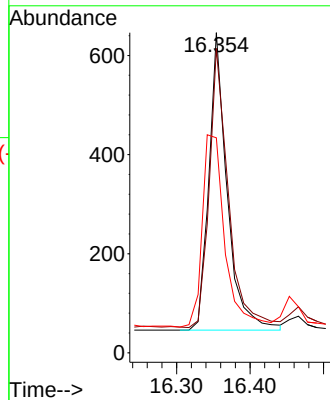
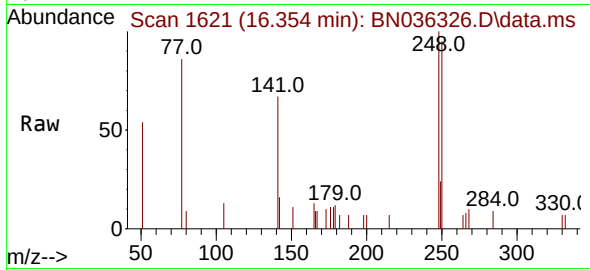




#21
4-Bromophenyl-phenylether
Concen: 0.354 ng
RT: 16.354 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

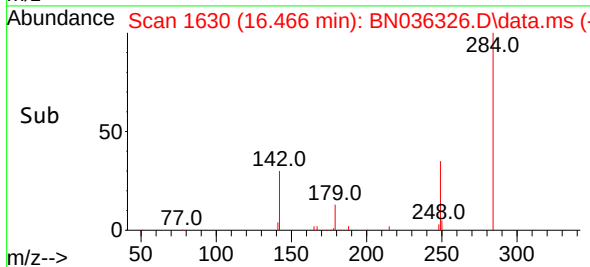
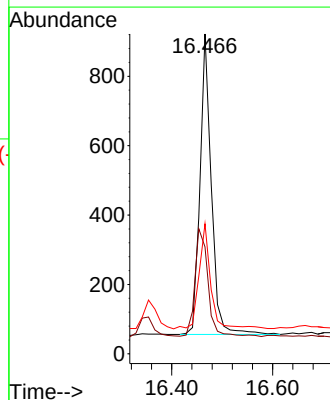
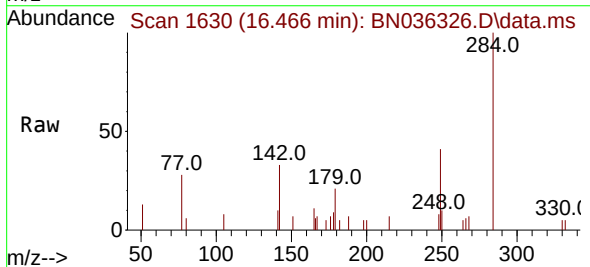
Instrument :
BNA_N
ClientSampleId :
PB166533BS

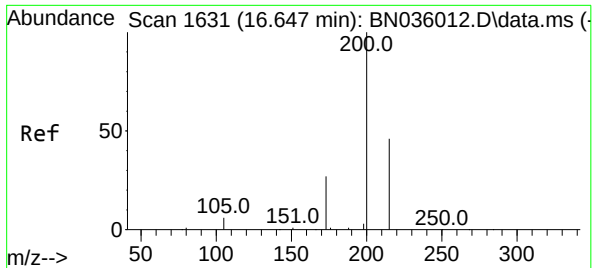
Tgt Ion:248 Resp: 1037
Ion Ratio Lower Upper
248 100
250 95.0 81.5 122.3
141 67.2 41.8 62.6#



#22
Hexachlorobenzene
Concen: 0.352 ng
RT: 16.466 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:284 Resp: 1358
Ion Ratio Lower Upper
284 100
142 41.2 33.6 50.4
249 36.3 28.8 43.2

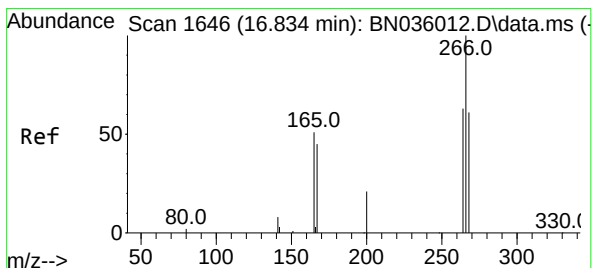
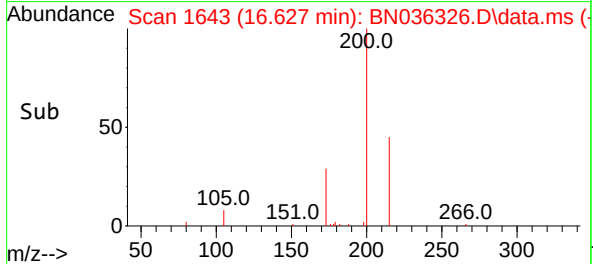
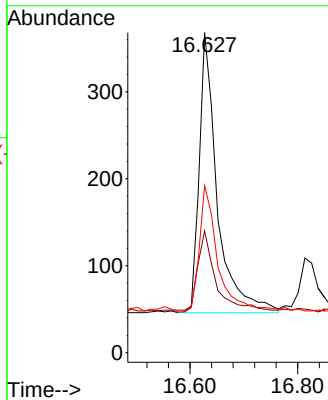
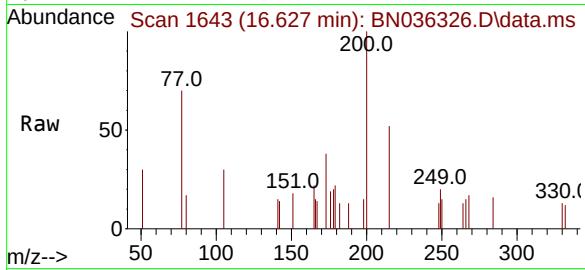




#23
Atrazine
Concen: 0.355 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

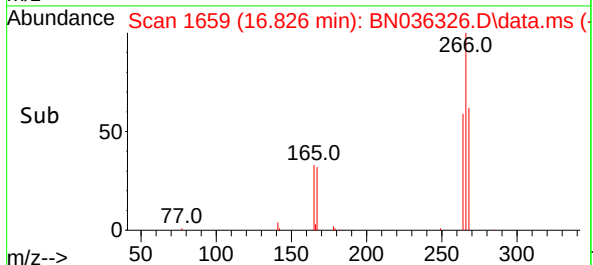
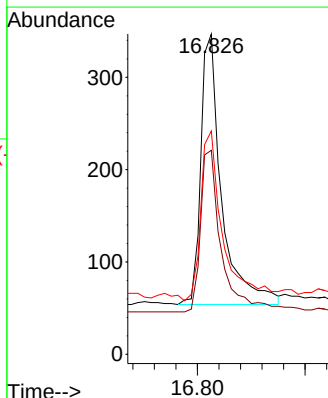
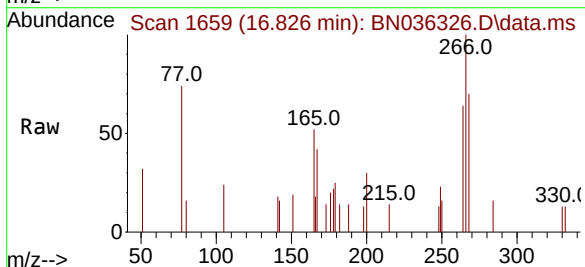
Instrument :
BNA_N
ClientSampleId :
PB166533BS

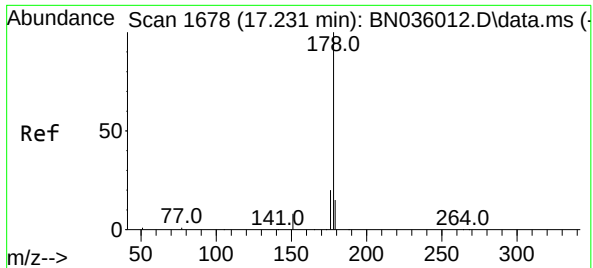
Tgt Ion	Ratio	Lower	Upper
200	100		
173	38.0	26.6	40.0
215	52.2	40.6	61.0



#24
Pentachlorophenol
Concen: 0.471 ng
RT: 16.826 min Scan# 1659
Delta R.T. 0.012 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion	Ratio	Lower	Upper
266	100		
264	60.0	48.2	72.2
268	67.3	51.6	77.4

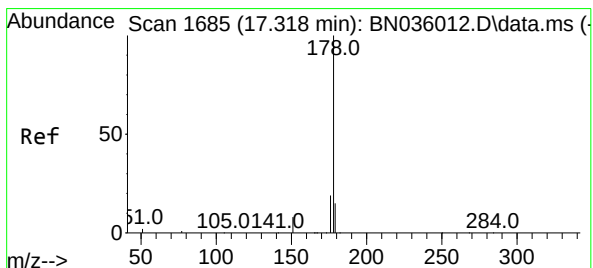
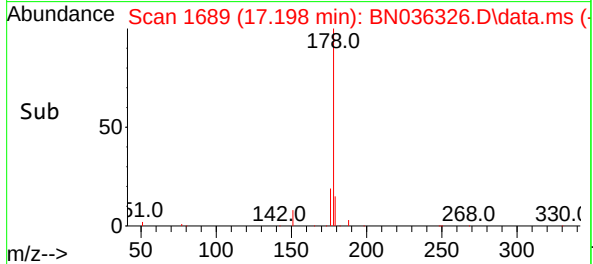
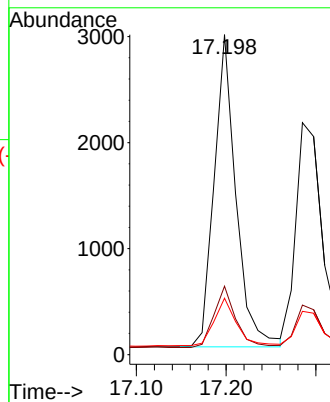
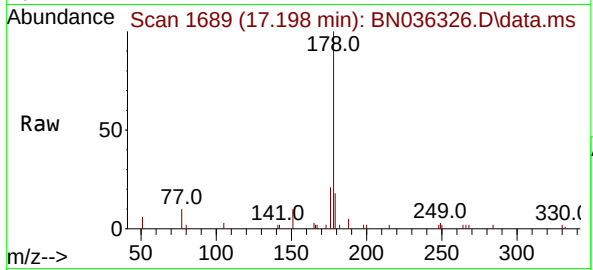




#25
Phenanthrene
Concen: 0.403 ng
RT: 17.198 min Scan# 1689
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

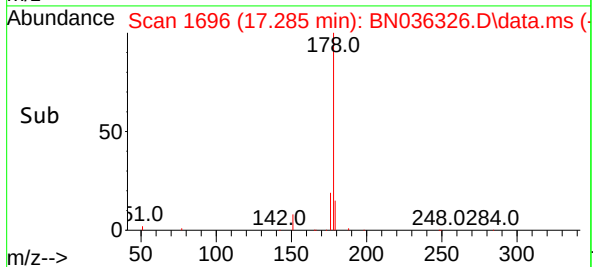
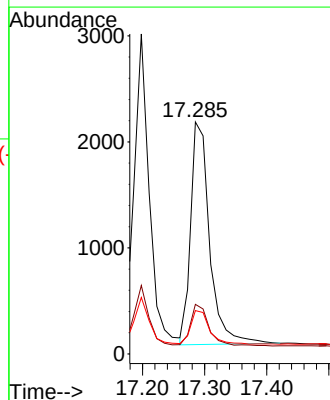
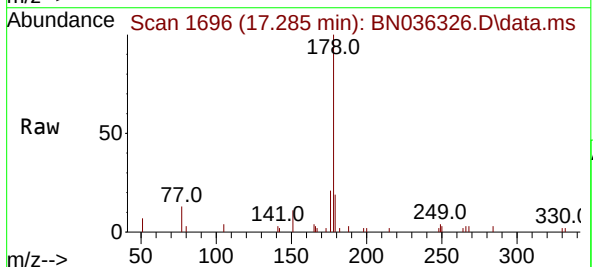
Instrument :
BNA_N
ClientSampleId :
PB166533BS

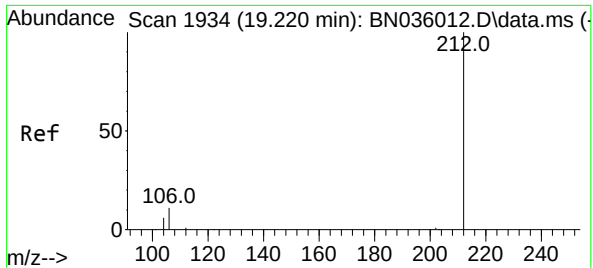
Tgt Ion:178 Resp: 4977
Ion Ratio Lower Upper
178 100
176 19.4 16.0 24.0
179 16.5 12.4 18.6



#26
Anthracene
Concen: 0.397 ng
RT: 17.285 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:178 Resp: 4467
Ion Ratio Lower Upper
178 100
176 18.7 15.4 23.2
179 15.4 12.0 18.0





#27

Fluoranthene-d10

Concen: 0.404 ng

RT: 19.187 min Scan# 1940

Delta R.T. -0.000 min

Lab File: BN036326.D

Acq: 06 Feb 2025 09:15

Instrument :

BNA_N

ClientSampleId :

PB166533BS

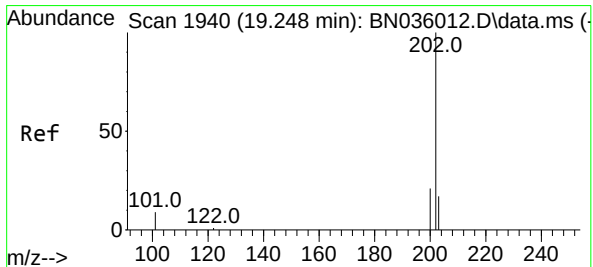
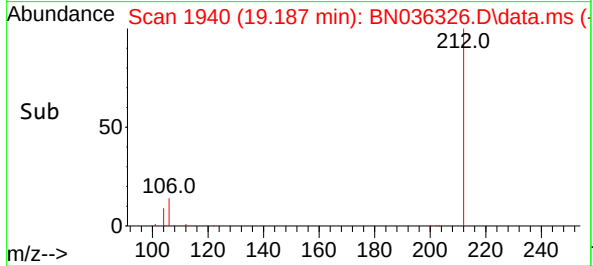
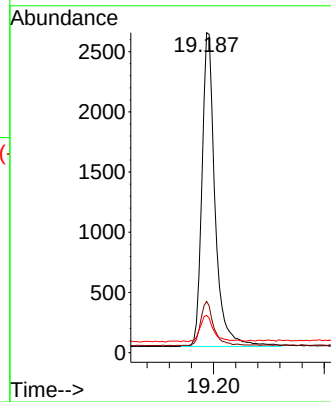
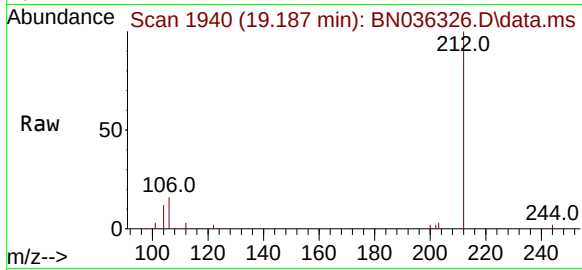
Tgt Ion:212 Resp: 4309

Ion Ratio Lower Upper

212 100

106 14.1 9.7 14.5

104 8.3 6.0 9.0



#28

Fluoranthene

Concen: 0.389 ng

RT: 19.220 min Scan# 1947

Delta R.T. -0.000 min

Lab File: BN036326.D

Acq: 06 Feb 2025 09:15

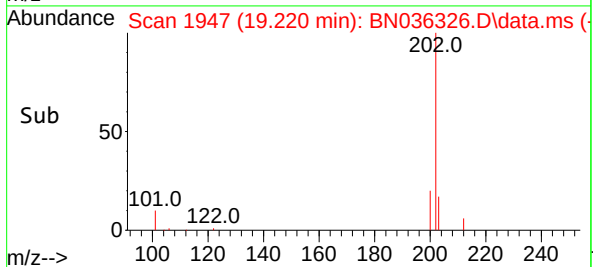
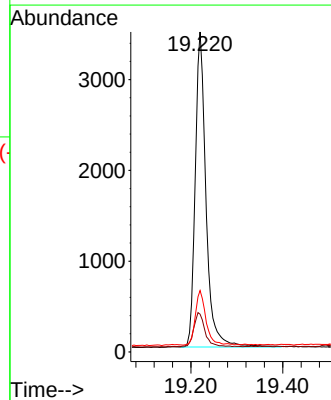
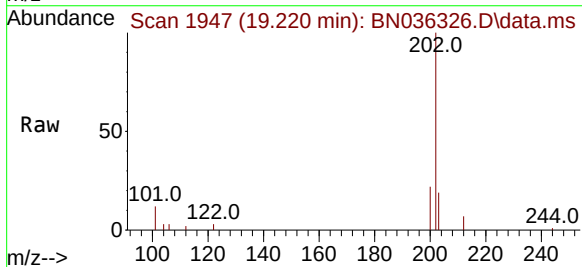
Tgt Ion:202 Resp: 5654

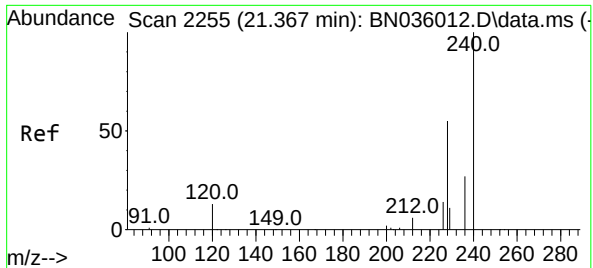
Ion Ratio Lower Upper

202 100

101 11.1 7.6 11.4

203 16.7 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: BN036326.D

Acq: 06 Feb 2025 09:15

Instrument :

BNA_N

ClientSampleId :

PB166533BS

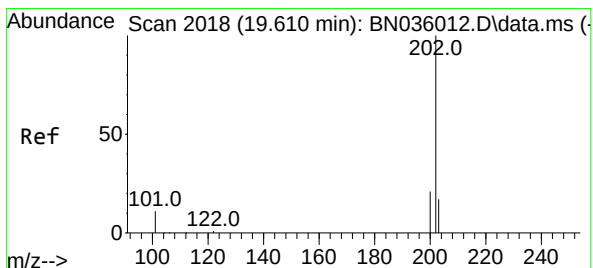
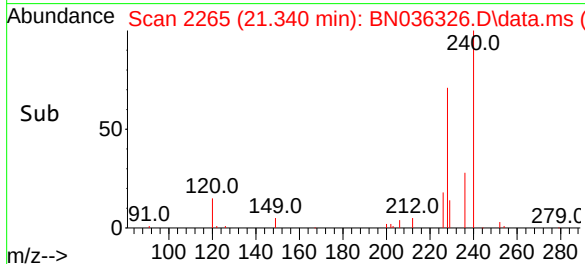
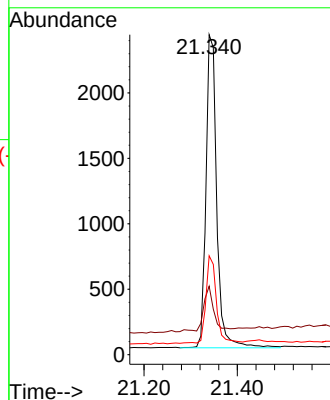
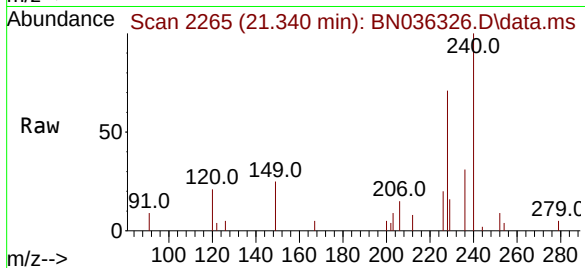
Tgt Ion:240 Resp: 3845

Ion Ratio Lower Upper

240 100

120 21.4 13.9 20.9#

236 30.9 23.7 35.5



#30

Pyrene

Concen: 0.378 ng

RT: 19.582 min Scan# 2025

Delta R.T. -0.000 min

Lab File: BN036326.D

Acq: 06 Feb 2025 09:15

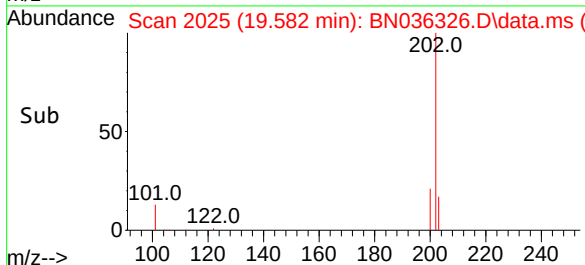
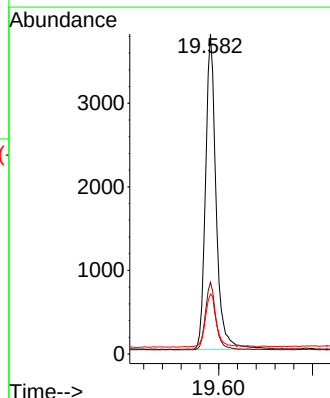
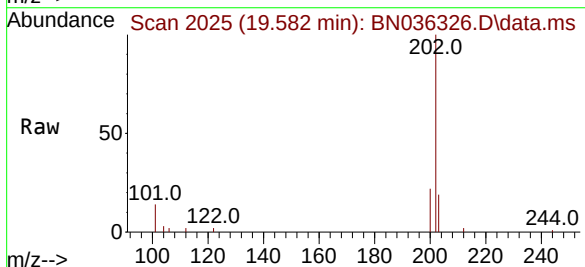
Tgt Ion:202 Resp: 5883

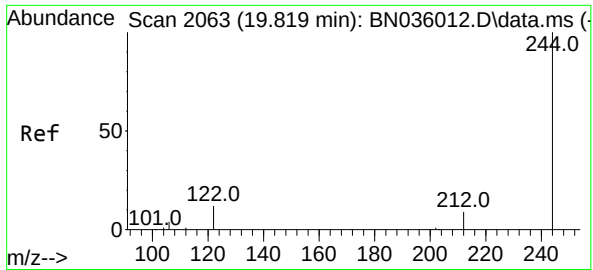
Ion Ratio Lower Upper

202 100

200 21.1 17.0 25.4

203 17.3 14.4 21.6

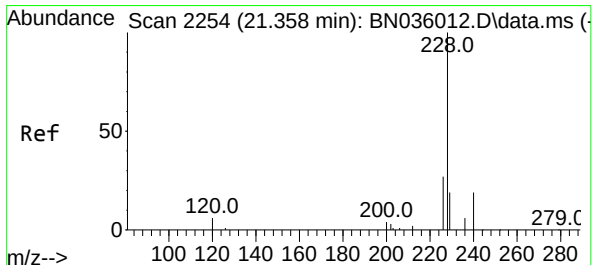
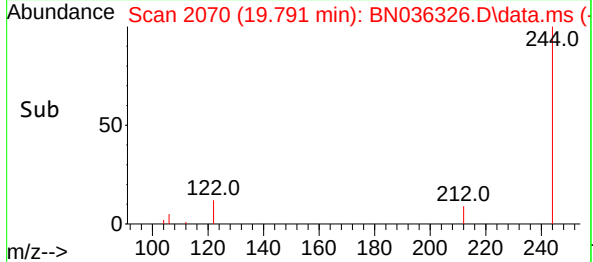
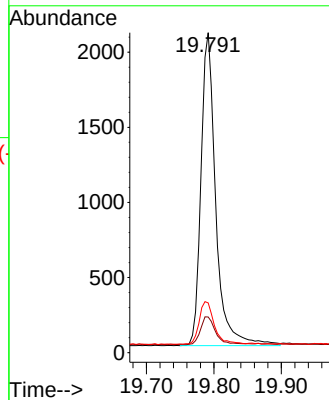
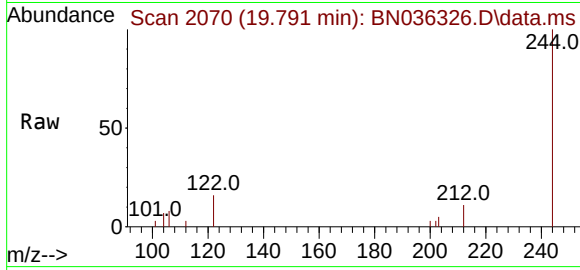




#31
Terphenyl-d14
Concen: 0.396 ng
RT: 19.791 min Scan# 2063
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

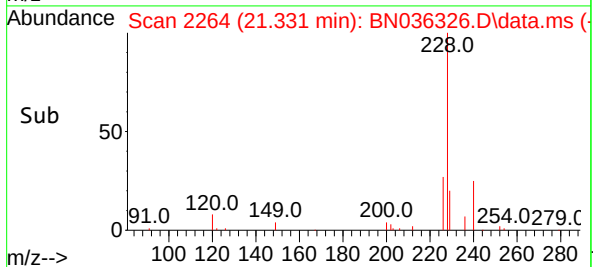
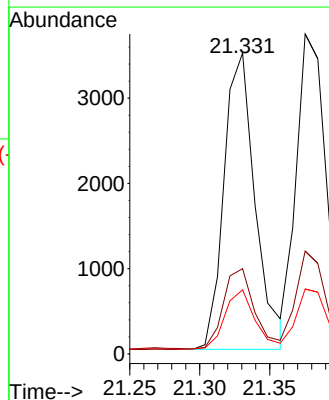
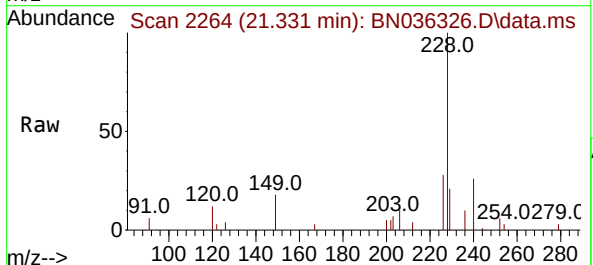
Instrument :
BNA_N
ClientSampleId :
PB166533BS

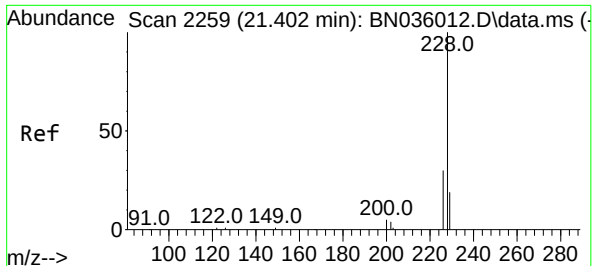
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.1	9.1	13.7
122	15.5	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.386 ng
RT: 21.331 min Scan# 2264
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.6	34.0
229	21.3	16.5	24.7





#33

Chrysene

Concen: 0.408 ng

RT: 21.375 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036326.D

Acq: 06 Feb 2025 09:15

Instrument :

BNA_N

ClientSampleId :

PB166533BS

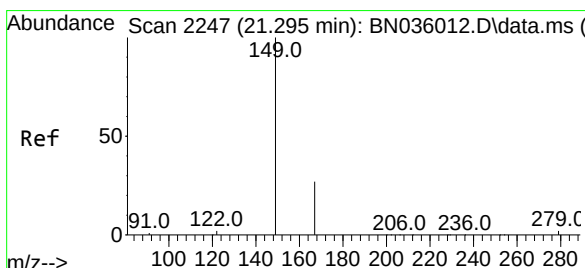
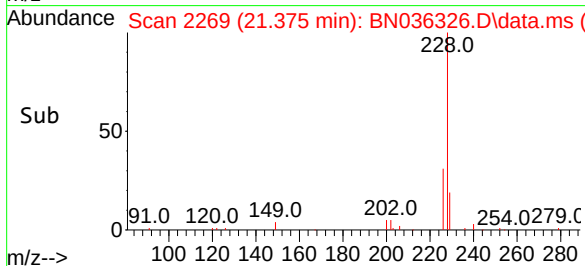
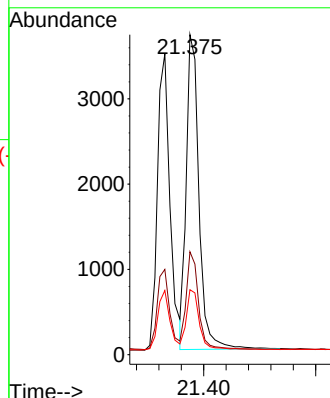
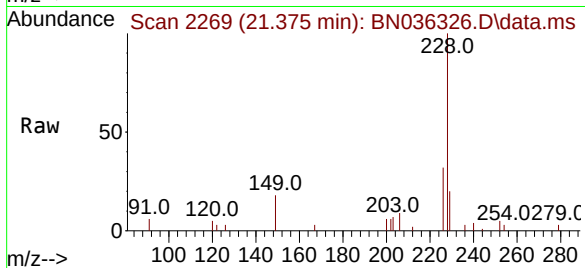
Tgt Ion:228 Resp: 5823

Ion Ratio Lower Upper

228 100

226 32.1 25.3 37.9

229 20.3 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: BN036326.D

Acq: 06 Feb 2025 09:15

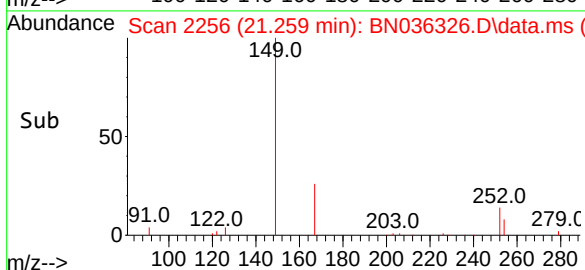
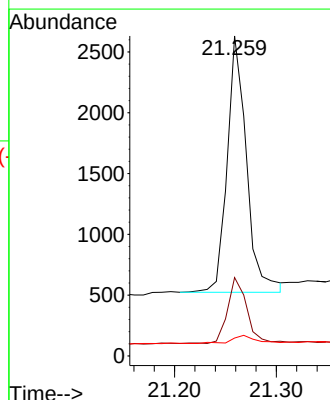
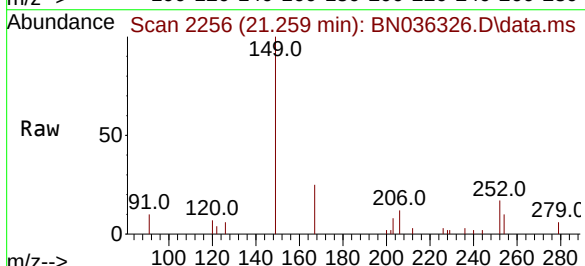
Tgt Ion:149 Resp: 2780

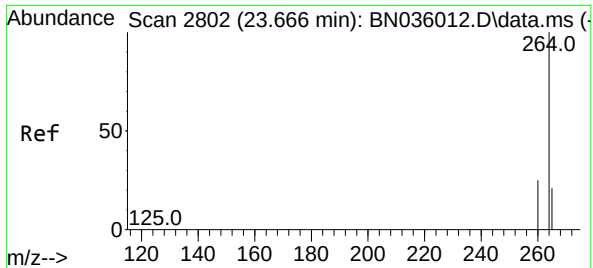
Ion Ratio Lower Upper

149 100

167 26.0 21.9 32.9

279 4.0 3.0 4.6

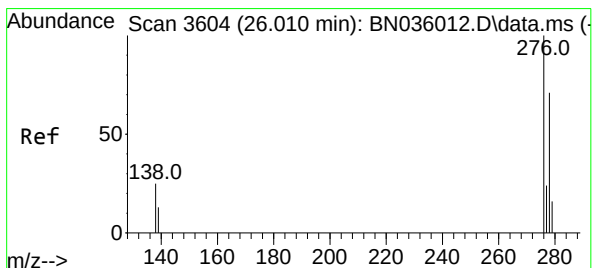
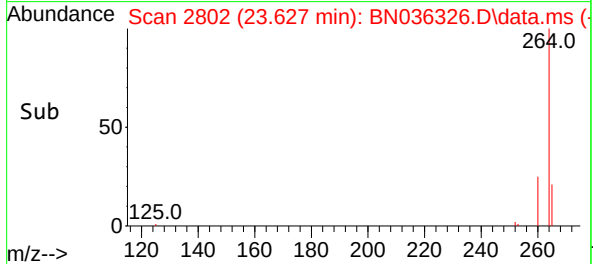
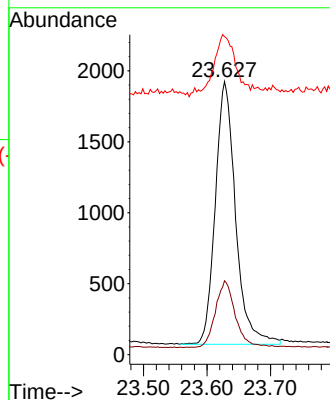
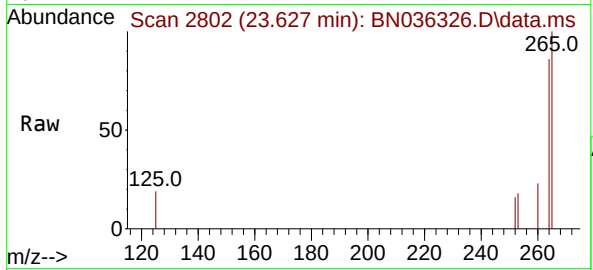




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.627 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

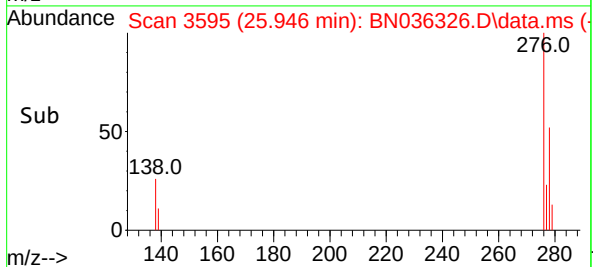
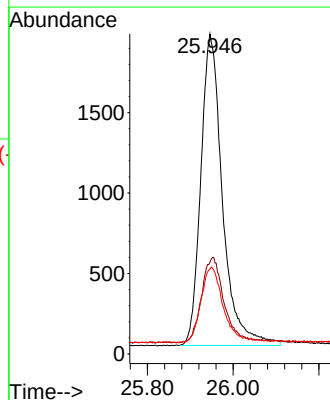
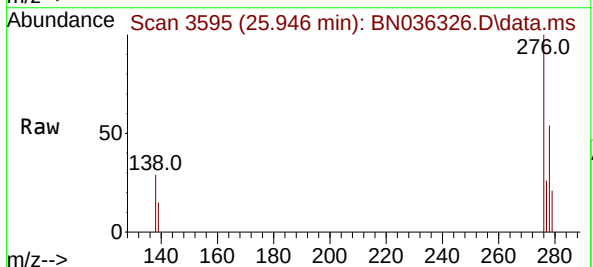
Instrument :
BNA_N
ClientSampleId :
PB166533BS

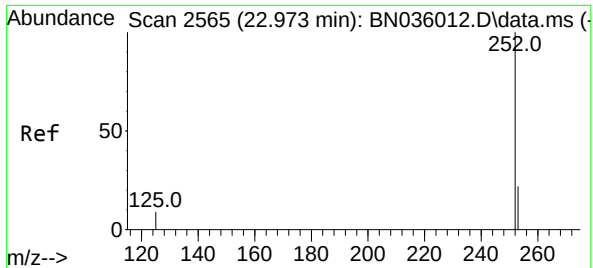
Tgt Ion:264 Resp: 4110
Ion Ratio Lower Upper
264 100
260 27.1 21.8 32.6
265 116.4 56.6 84.8#



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.412 ng
RT: 25.946 min Scan# 3595
Delta R.T. 0.003 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:276 Resp: 6801
Ion Ratio Lower Upper
276 100
138 28.3 19.9 29.9
277 24.4 19.4 29.2

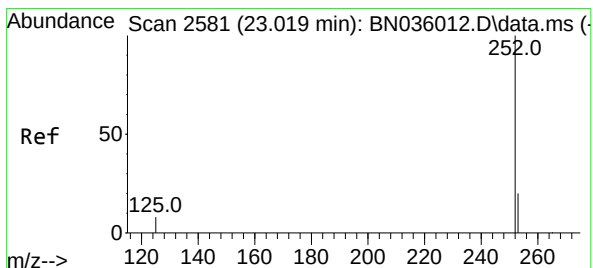
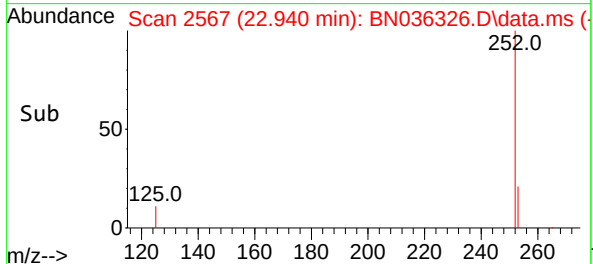
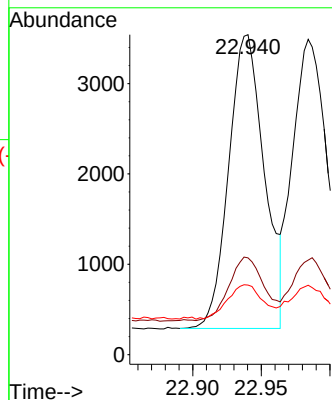
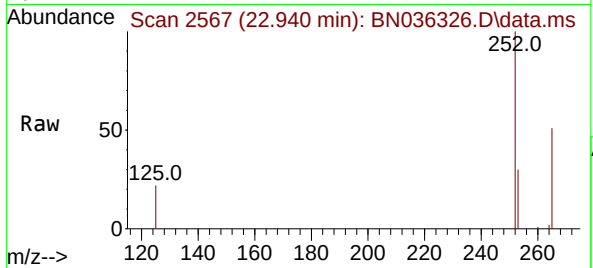




#37
Benzo(b)fluoranthene
Concen: 0.393 ng
RT: 22.940 min Scan# 2565
Delta R.T. 0.003 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

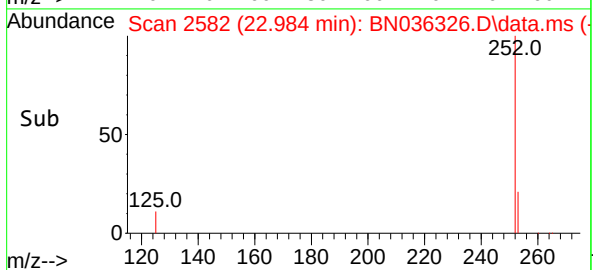
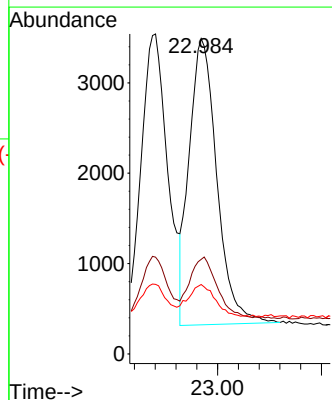
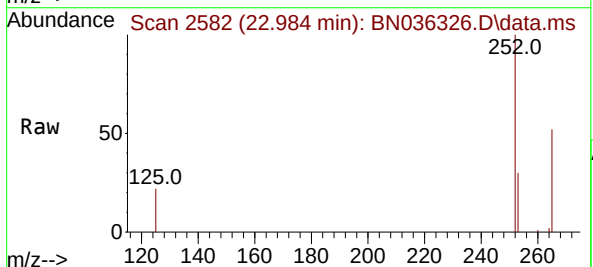
Instrument :
BNA_N
ClientSampleId :
PB166533BS

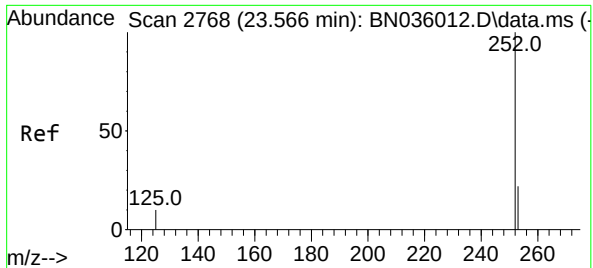
Tgt Ion:252 Resp: 5874
Ion Ratio Lower Upper
252 100
253 30.2 22.5 33.7
125 21.8 11.9 17.9#



#38
Benzo(k)fluoranthene
Concen: 0.388 ng
RT: 22.984 min Scan# 2582
Delta R.T. -0.000 min
Lab File: BN036326.D
Acq: 06 Feb 2025 09:15

Tgt Ion:252 Resp: 5840
Ion Ratio Lower Upper
252 100
253 30.0 21.3 31.9
125 22.0 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.412 ng

RT: 23.528 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036326.D

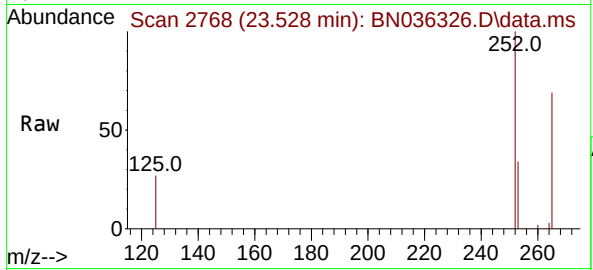
Acq: 06 Feb 2025 09:15

Instrument :

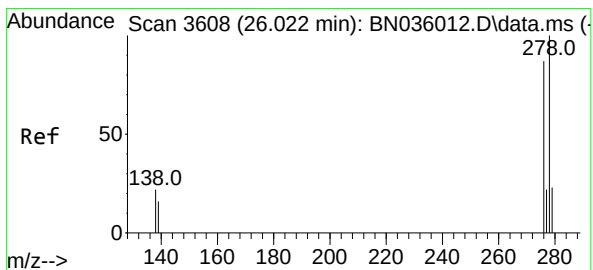
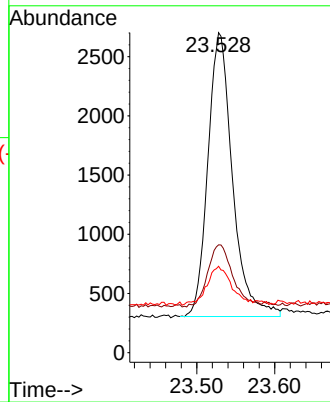
BNA_N

ClientSampleId :

PB166533BS



Tgt Ion:	252	Resp:	5255
Ion	Ratio	Lower	Upper
252	100		
253	33.7	23.8	35.6
125	27.0	14.6	21.8



#40

Dibenzo(a,h)anthracene

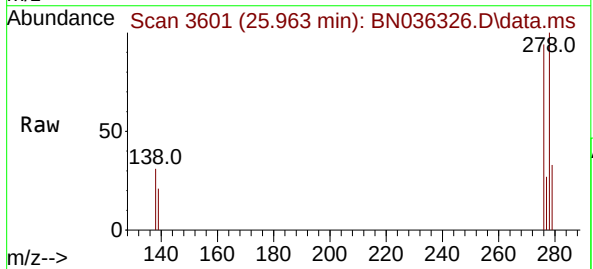
Concen: 0.396 ng

RT: 25.963 min Scan# 3601

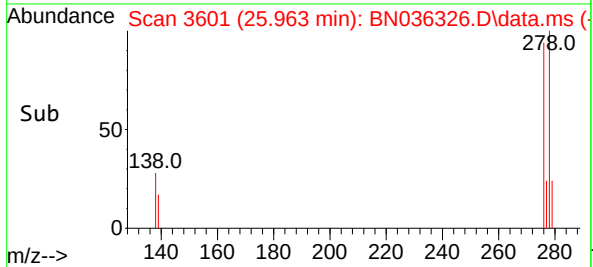
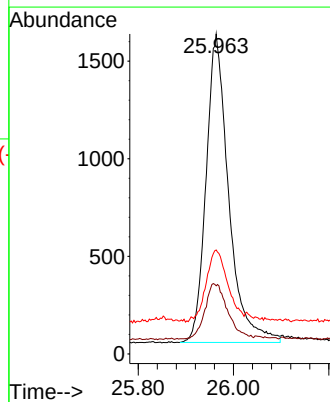
Delta R.T. -0.000 min

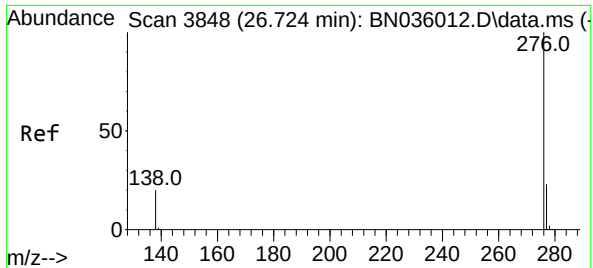
Lab File: BN036326.D

Acq: 06 Feb 2025 09:15



Tgt Ion:	278	Resp:	5207
Ion	Ratio	Lower	Upper
278	100		
139	21.3	16.0	24.0
279	32.5	23.8	35.8





#41

Benzo(g,h,i)perylene

Concen: 0.391 ng

RT: 26.650 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN036326.D

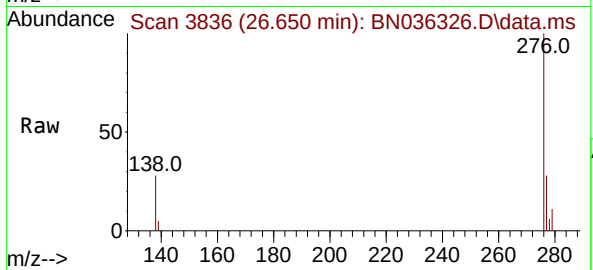
Acq: 06 Feb 2025 09:15

Instrument :

BNA_N

ClientSampleId :

PB166533BS



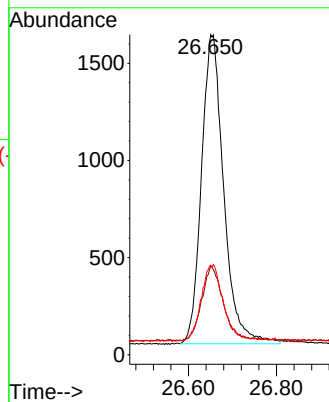
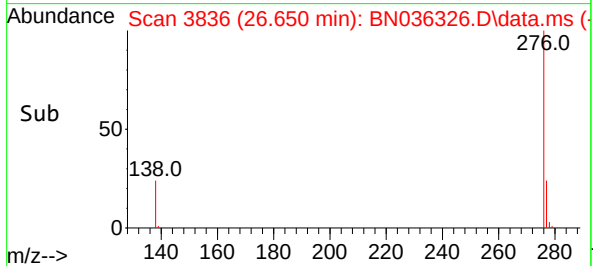
Tgt Ion:276 Resp: 5607

Ion Ratio Lower Upper

276 100

277 27.7 21.3 31.9

138 28.0 19.2 28.8



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	CTO WE13	Date Received:	
Client Sample ID:	PB166533BSD	SDG No.:	Q1283
Lab Sample ID:	PB166533BSD	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
BN036327.D	1	02/04/25 11:00	02/06/25 09:51	PB166533

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.40		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.57		30 - 150		143%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		106%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.46	*	55 - 111		114%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		105%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2080	7.775				
1146-65-2	Naphthalene-d8	4390	10.562				
15067-26-2	Acenaphthene-d10	2050	14.409				
1517-22-2	Phenanthrene-d10	3800	17.161				
1719-03-5	Chrysene-d12	3520	21.339				
1520-96-3	Perylene-d12	3850	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 : BN036327.D
 Acq On : 06 Feb 2025 09:51
 Operator : RC/JU
 Sample : PB166533BSD
 Misc :
 ALS Vial : 26 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB166533BSD

Quant Time: Feb 06 10:19:24 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)

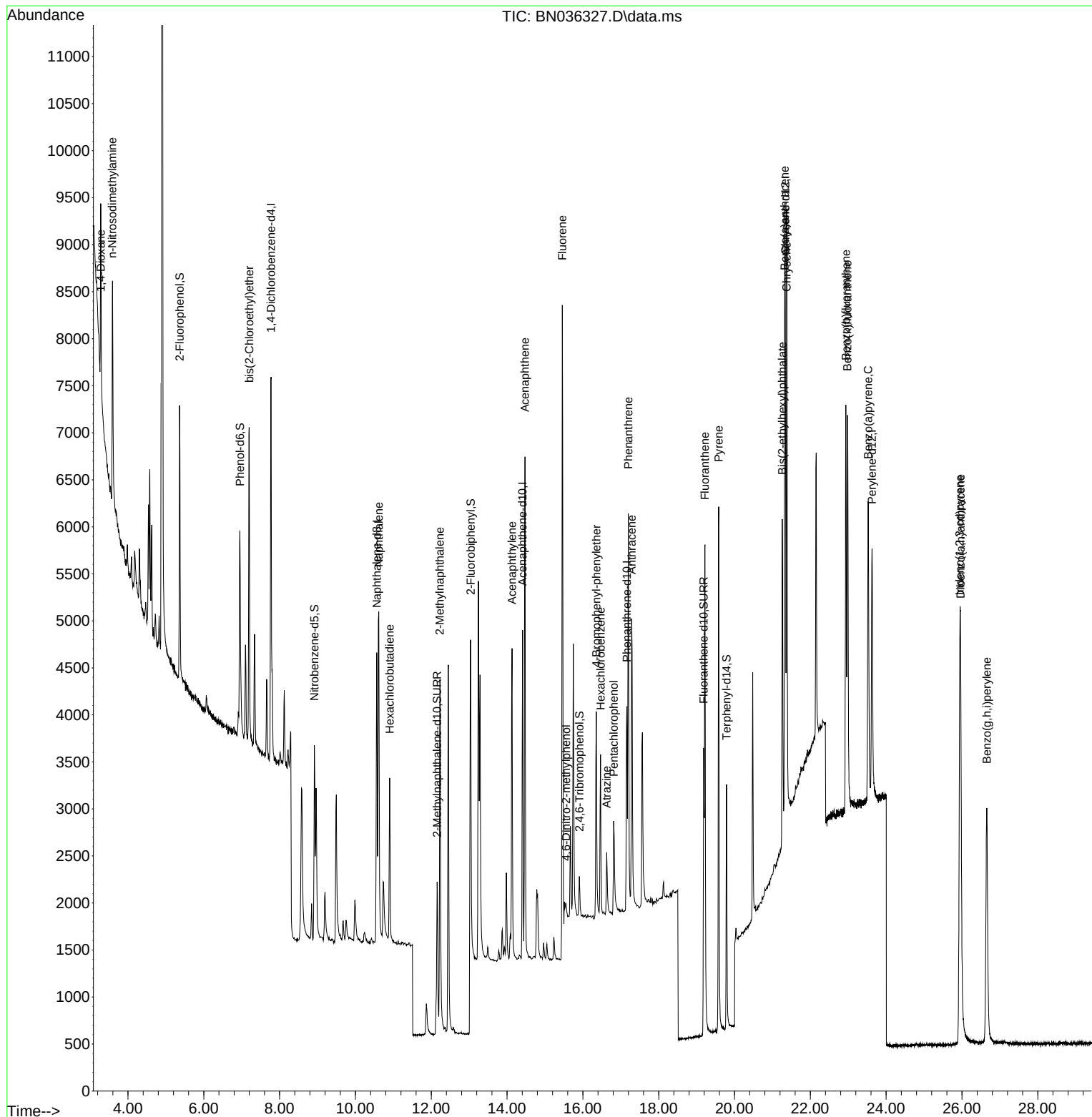
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2075	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4387	0.400	ng	# 0.00
13) Acenaphthene-d10	14.409	164	2054	0.400	ng	0.00
19) Phenanthrene-d10	17.161	188	3795	0.400	ng	# 0.00
29) Chrysene-d12	21.339	240	3518	0.400	ng	0.00
35) Perylene-d12	23.627	264	3845	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	2119	0.393	ng	0.00
5) Phenol-d6	6.951	99	2323	0.367	ng	0.00
8) Nitrobenzene-d5	8.918	82	1886	0.455	ng	-0.01
11) 2-Methylnaphthalene-d10	12.156	152	3410	0.572	ng	0.00
14) 2,4,6-Tribromophenol	15.907	330	308	0.234	ng	0.00
15) 2-Fluorobiphenyl	13.040	172	3486	0.380	ng	0.00
27) Fluoranthene-d10	19.187	212	4177	0.425	ng	0.00
31) Terphenyl-d14	19.787	244	3083	0.422	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.283	88	923	0.398	ng	# 66
3) n-Nitrosodimethylamine	3.586	42	1690	0.402	ng	# 77
6) bis(2-Chloroethyl)ether	7.197	93	2599	0.509	ng	99
9) Naphthalene	10.615	128	5491	0.431	ng	98
10) Hexachlorobutadiene	10.904	225	1495	0.363	ng	# 99
12) 2-Methylnaphthalene	12.227	142	3320	0.420	ng	97
16) Acenaphthylene	14.131	152	4202	0.431	ng	99
17) Acenaphthene	14.473	154	2852	0.428	ng	99
18) Fluorene	15.457	166	3492	0.418	ng	99
20) 4,6-Dinitro-2-methylph...	15.560	198	160	0.181	ng	# 27
21) 4-Bromophenyl-phenylether	16.354	248	990	0.366	ng	# 92
22) Hexachlorobenzene	16.466	284	1349	0.379	ng	98
23) Atrazine	16.627	200	754	0.386	ng	98
24) Pentachlorophenol	16.813	266	734	0.476	ng	99
25) Phenanthrene	17.198	178	4849	0.425	ng	99
26) Anthracene	17.285	178	4407	0.425	ng	100
28) Fluoranthene	19.220	202	5384	0.402	ng	98
30) Pyrene	19.582	202	5721	0.401	ng	100
32) Benzo(a)anthracene	21.322	228	5371	0.421	ng	98
33) Chrysene	21.375	228	5722	0.439	ng	99
34) Bis(2-ethylhexyl)phtha...	21.259	149	2667	0.381	ng	100
36) Indeno(1,2,3-cd)pyrene	25.943	276	6806	0.441	ng	97
37) Benzo(b)fluoranthene	22.937	252	5738	0.411	ng	# 92
38) Benzo(k)fluoranthene	22.981	252	5888	0.418	ng	# 89
39) Benzo(a)pyrene	23.528	252	5276	0.442	ng	# 88
40) Dibenzo(a,h)anthracene	25.963	278	5223	0.425	ng	93
41) Benzo(g,h,i)perylene	26.656	276	5582	0.416	ng	# 95

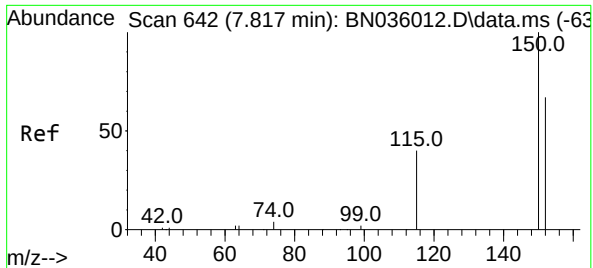
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036327.D
Acq On : 06 Feb 2025 09:51
Operator : RC/JU
Sample : PB166533BSD
Misc :
ALS Vial : 26 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB166533BSD

Quant Time: Feb 06 10:19:24 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

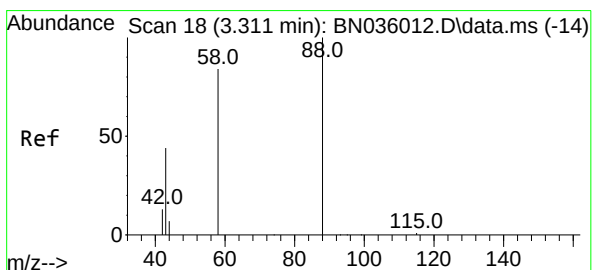
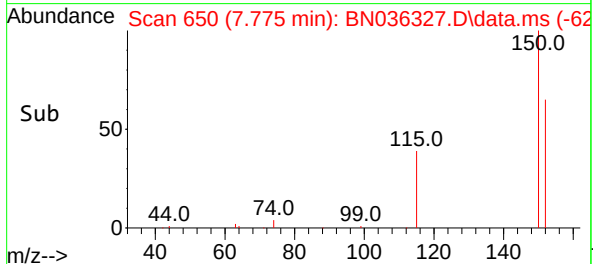
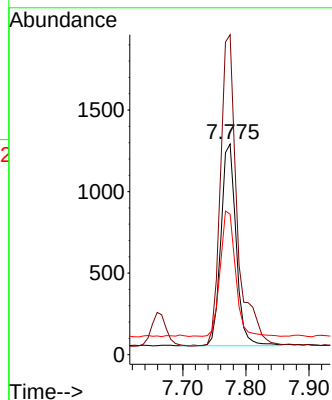
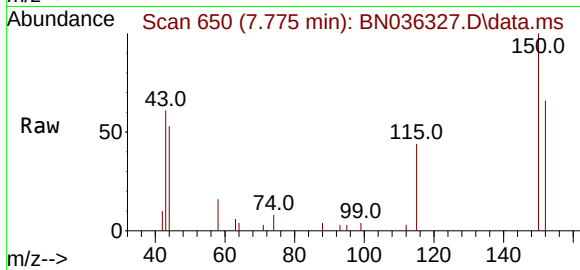




#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 7.775 min Scan# 61
 Delta R.T. -0.000 min
 Lab File: BN036327.D
 Acq: 06 Feb 2025 09:51

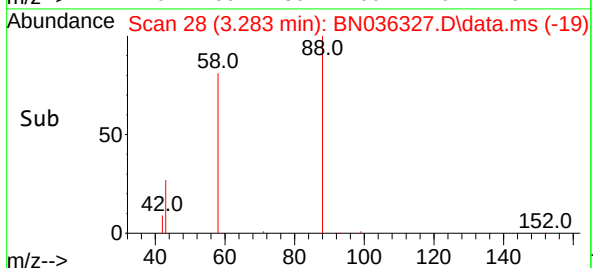
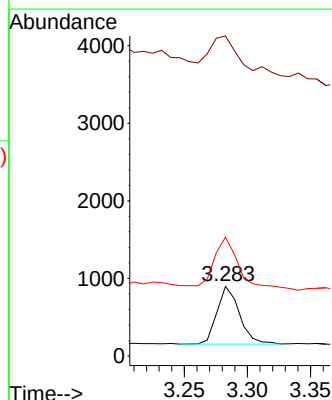
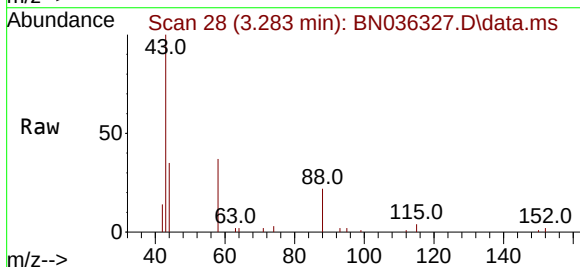
Instrument :
 BNA_N
 ClientSampleId :
 PB166533BSD

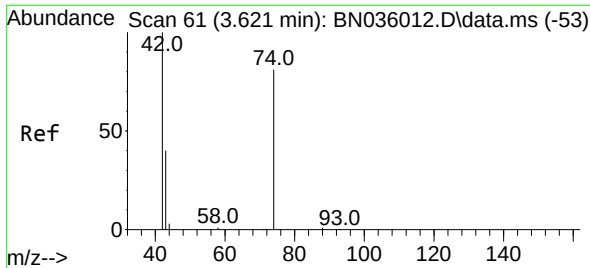
Tgt Ion: 152 Resp: 2075
 Ion Ratio Lower Upper
 152 100
 150 152.0 117.4 176.2
 115 66.7 51.0 76.4



#2
 1,4-Dioxane
 Concen: 0.398 ng
 RT: 3.283 min Scan# 28
 Delta R.T. -0.007 min
 Lab File: BN036327.D
 Acq: 06 Feb 2025 09:51

Tgt Ion: 88 Resp: 923
 Ion Ratio Lower Upper
 88 100
 43 97.3 38.5 57.7#
 58 93.9 66.6 99.8

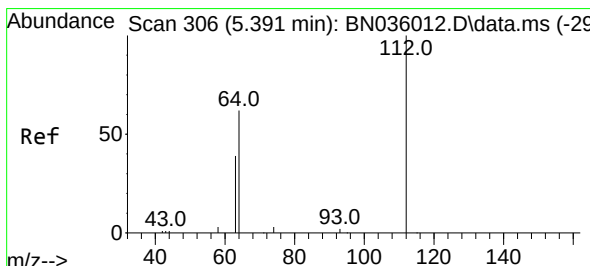
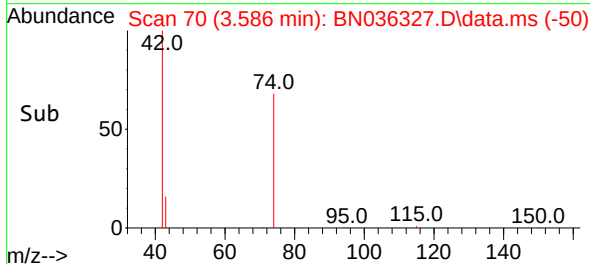
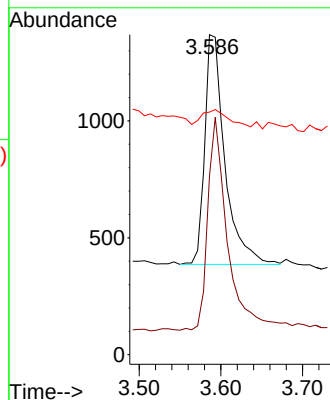
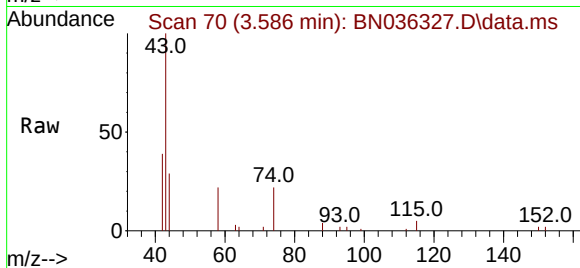




#3
n-Nitrosodimethylamine
Concen: 0.402 ng
RT: 3.586 min Scan# 70
Delta R.T. -0.007 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

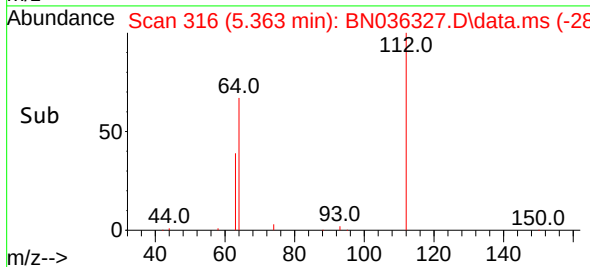
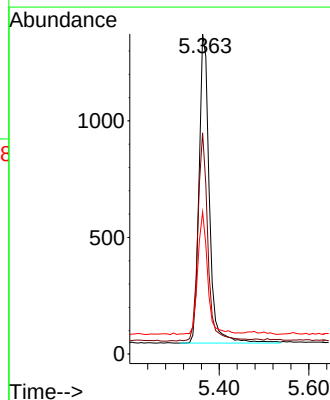
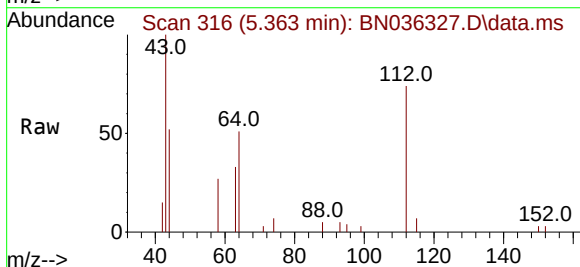
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

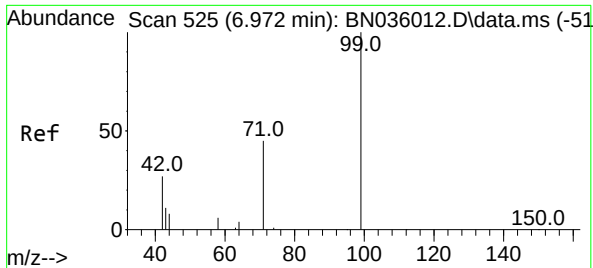
Tgt Ion: 42 Resp: 1690
Ion Ratio Lower Upper
42 100
74 93.1 58.1 87.1#
44 9.4 6.2 9.4#



#4
2-Fluorophenol
Concen: 0.393 ng
RT: 5.363 min Scan# 316
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion: 112 Resp: 2119
Ion Ratio Lower Upper
112 100
64 65.8 50.0 75.0
63 37.4 30.7 46.1

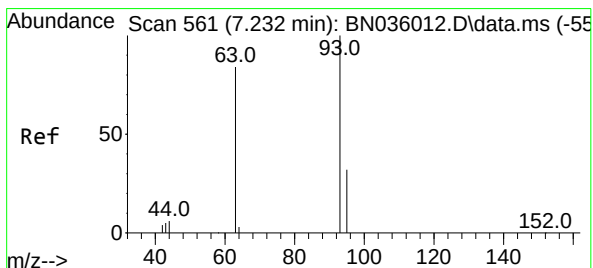
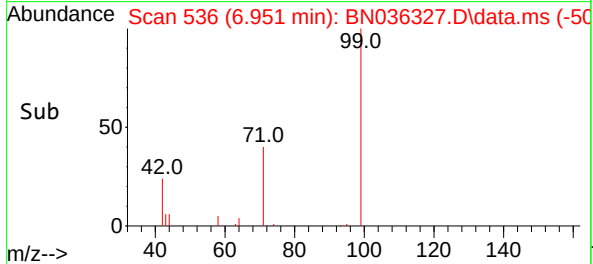
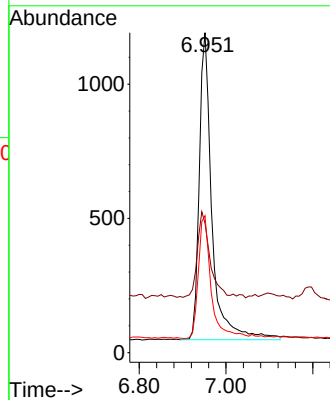
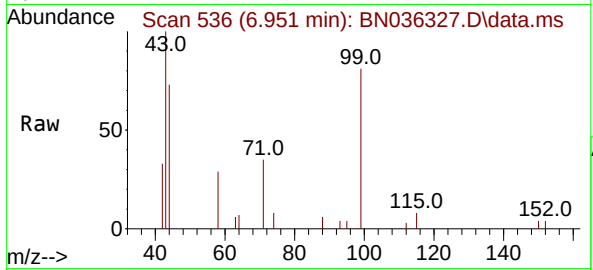




#5
Phenol-d6
Concen: 0.367 ng
RT: 6.951 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

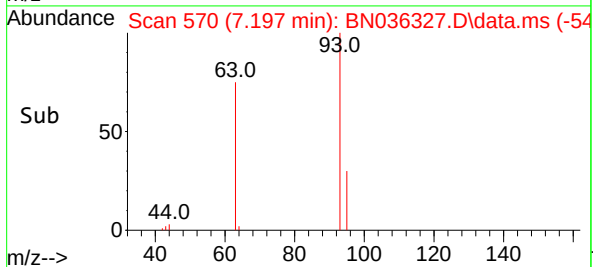
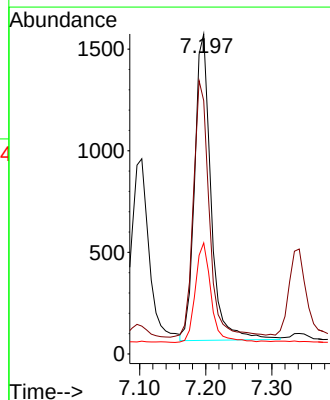
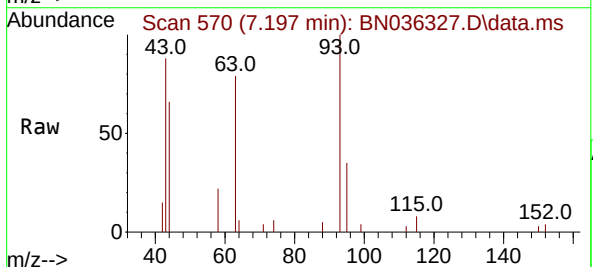
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

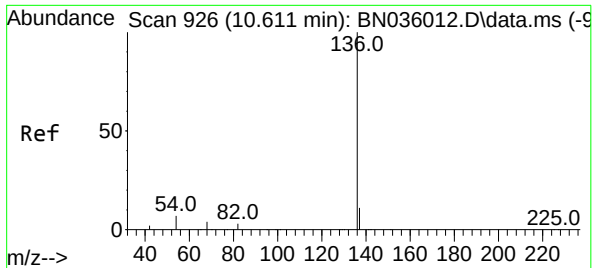
Tgt Ion: 99 Resp: 2323
Ion Ratio Lower Upper
99 100
42 27.2 26.8 40.2
71 40.2 36.6 55.0



#6
bis(2-Chloroethyl)ether
Concen: 0.509 ng
RT: 7.197 min Scan# 570
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion: 93 Resp: 2599
Ion Ratio Lower Upper
93 100
63 81.6 65.8 98.6
95 31.4 25.8 38.6

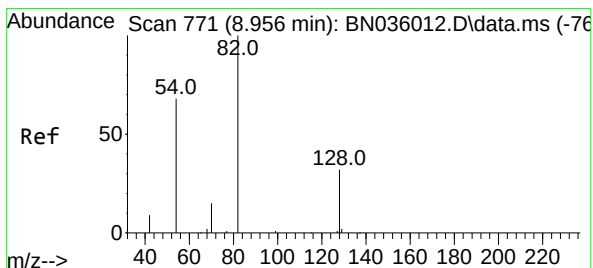
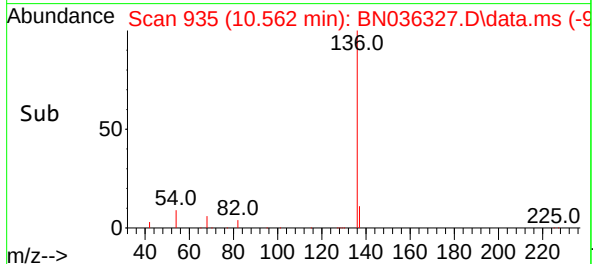
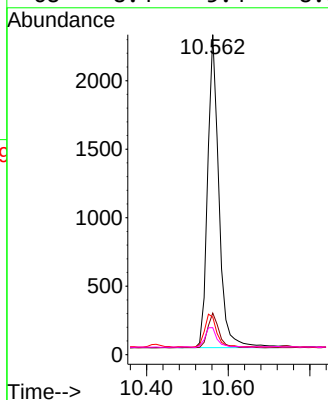
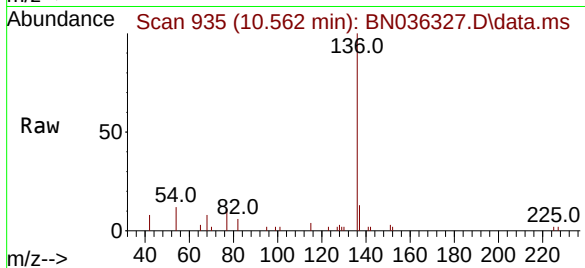




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

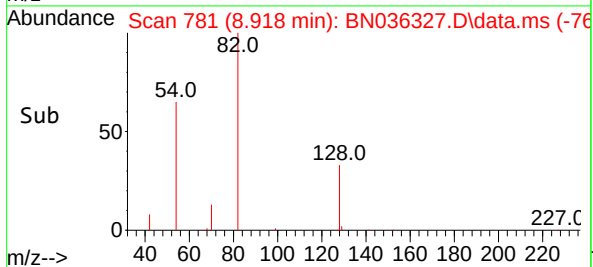
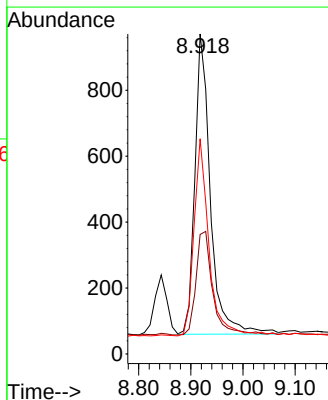
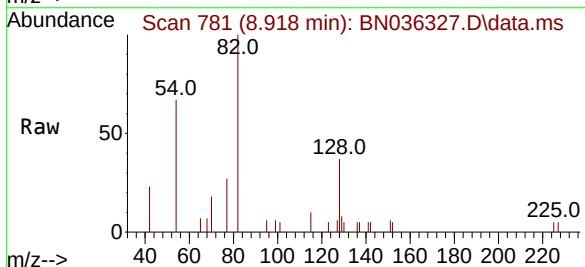
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

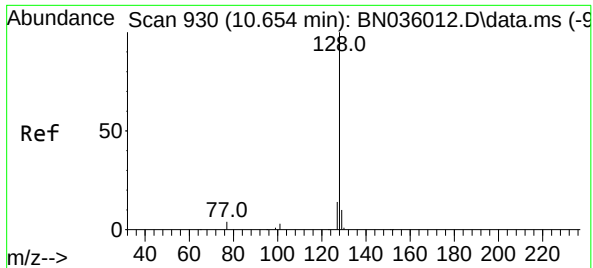
Tgt Ion:	136	Resp:	4387
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.4	15.6
54	11.8	7.7	11.5#
68	8.4	5.4	8.0#



#8
Nitrobenzene-d5
Concen: 0.455 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:	82	Resp:	1886
Ion	Ratio	Lower	Upper
82	100		
128	37.4	28.8	43.2
54	67.3	55.8	83.8

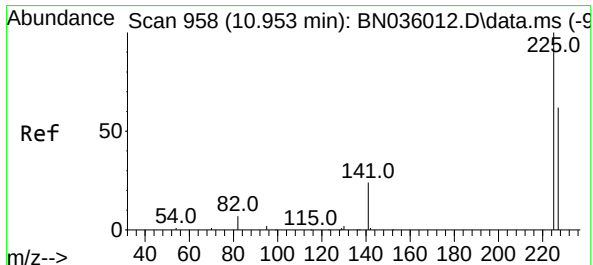
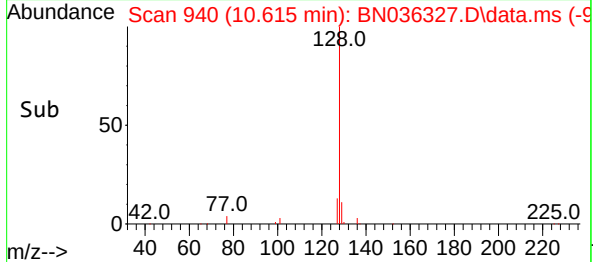
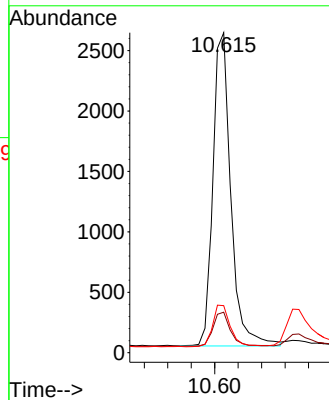
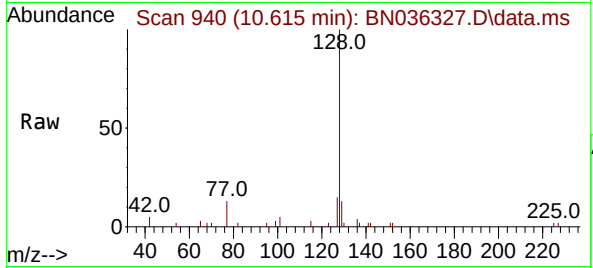




#9
Naphthalene
Concen: 0.431 ng
RT: 10.615 min Scan# 94
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

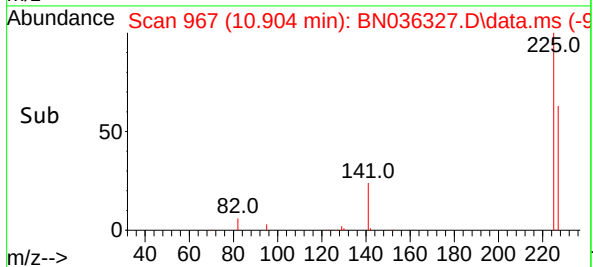
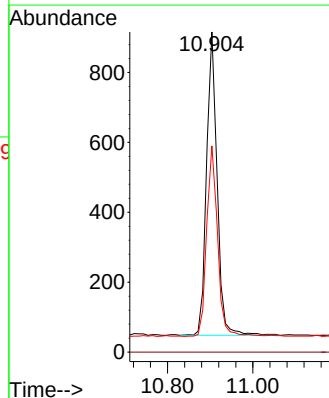
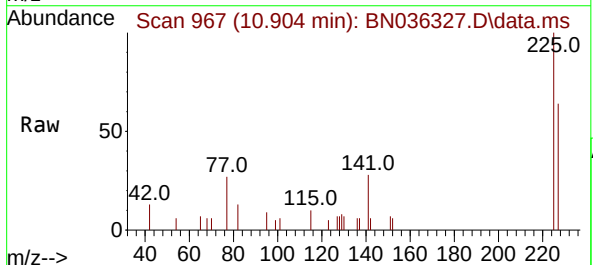
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

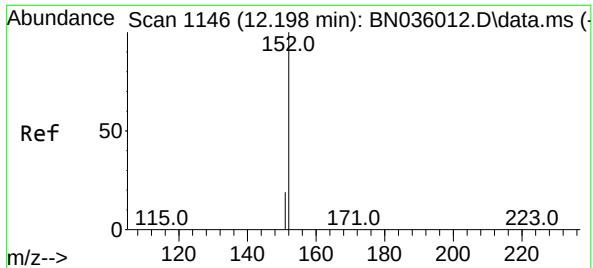
Tgt Ion	128	129	127
Resp:	5491		
Ion Ratio	100	12.7	14.7
Lower		9.4	12.6
Upper		14.2	19.0



#10
Hexachlorobutadiene
Concen: 0.363 ng
RT: 10.904 min Scan# 967
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion	225	223	227
Resp:	1495		
Ion Ratio	100	0.0	64.9
Lower		0.0	51.0
Upper		0.0	76.6

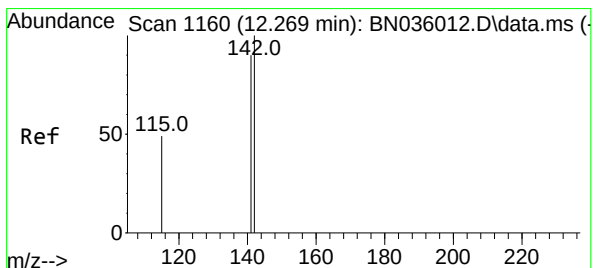
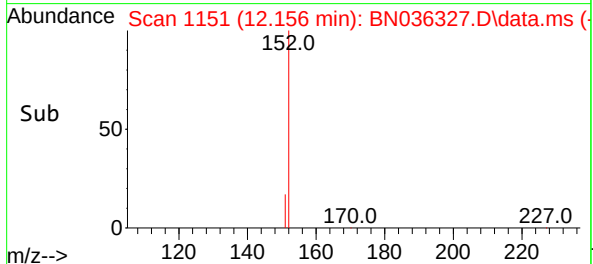
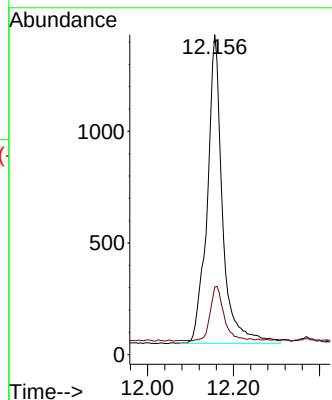
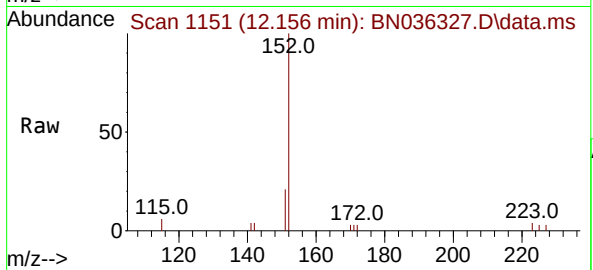




#11
2-Methylnaphthalene-d10
Concen: 0.572 ng
RT: 12.156 min Scan# 1151
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

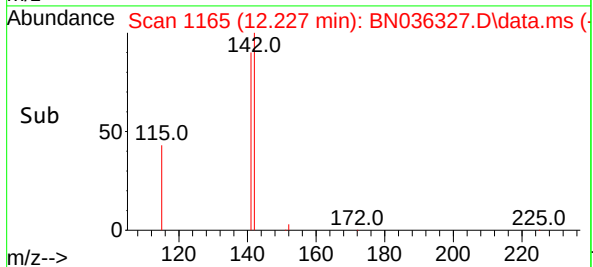
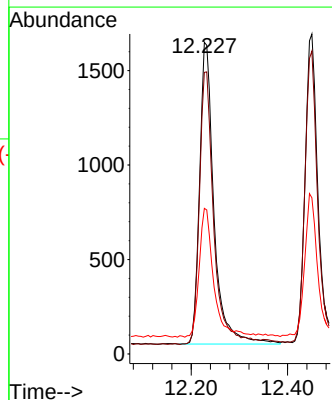
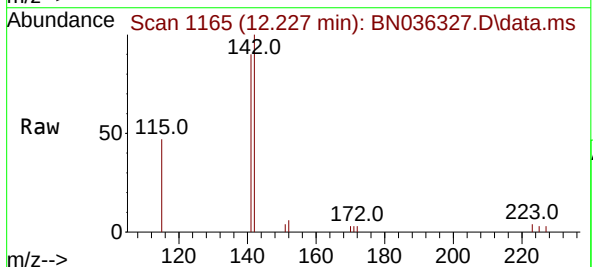
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

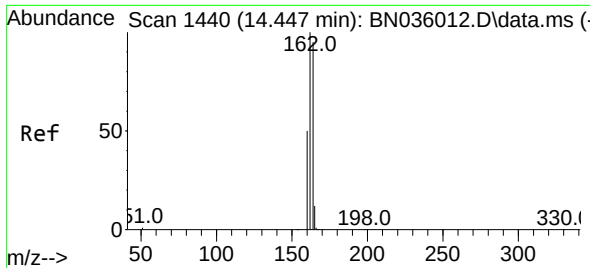
Tgt Ion:152 Resp: 3410
Ion Ratio Lower Upper
152 100
151 15.7 16.6 25.0#



#12
2-Methylnaphthalene
Concen: 0.420 ng
RT: 12.227 min Scan# 1165
Delta R.T. -0.005 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:142 Resp: 3320
Ion Ratio Lower Upper
142 100
141 90.4 72.2 108.2
115 46.7 41.2 61.8

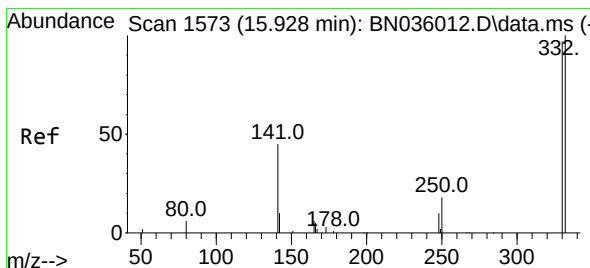
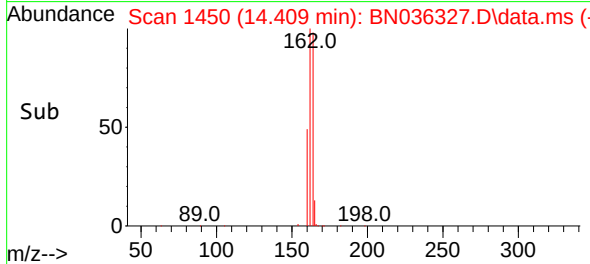
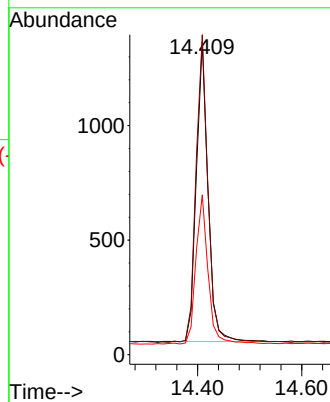
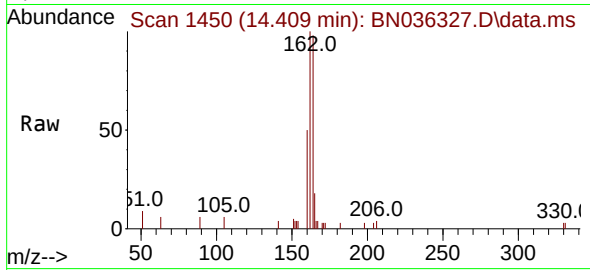




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 14
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

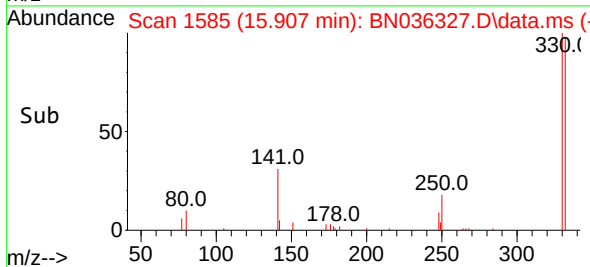
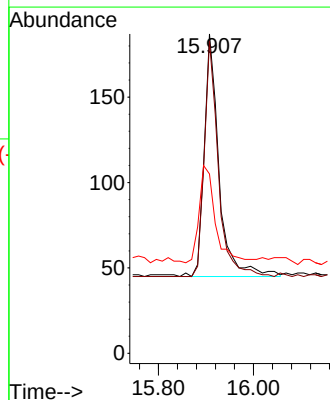
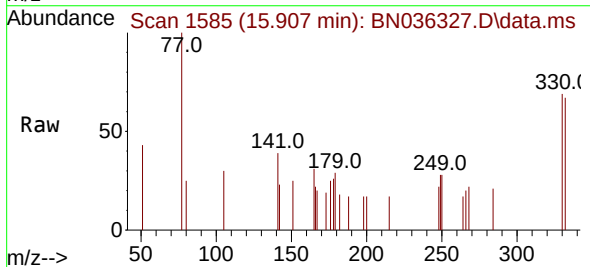
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

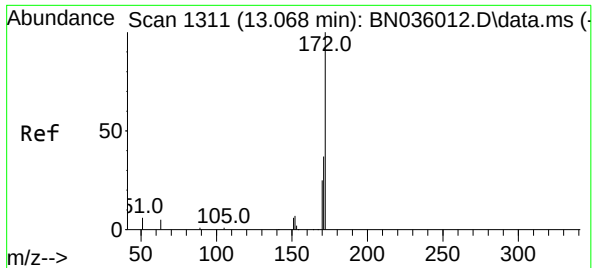
Tgt Ion:164 Resp: 2054
Ion Ratio Lower Upper
164 100
162 102.2 84.1 126.1
160 51.1 43.8 65.8



#14
2,4,6-Tribromophenol
Concen: 0.234 ng
RT: 15.907 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:330 Resp: 308
Ion Ratio Lower Upper
330 100
332 91.6 81.0 121.4
141 44.2 36.7 55.1

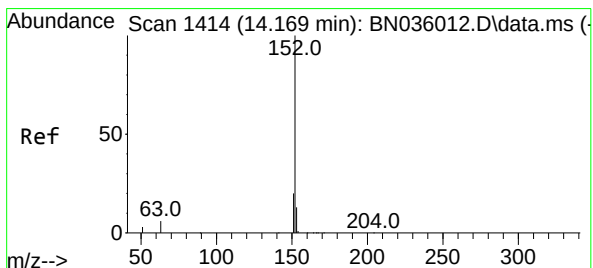
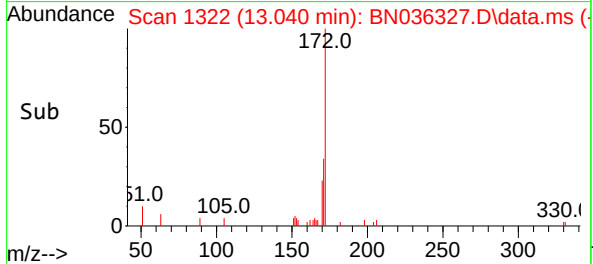
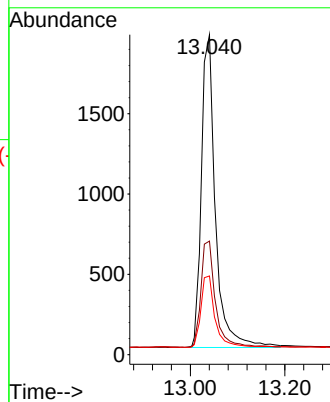
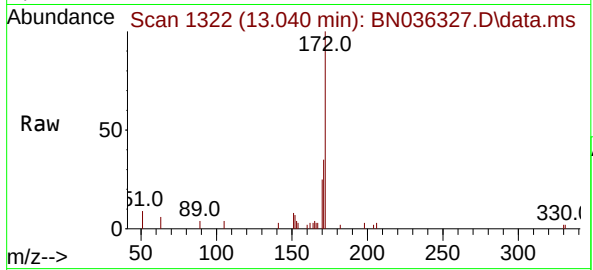




#15
2-Fluorobiphenyl
Concen: 0.380 ng
RT: 13.040 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

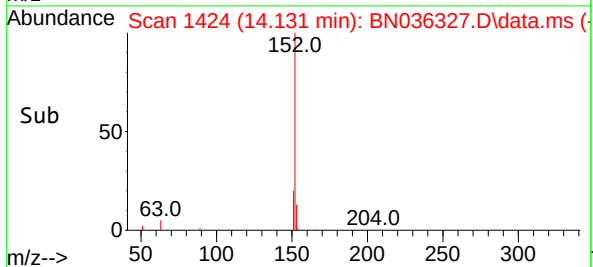
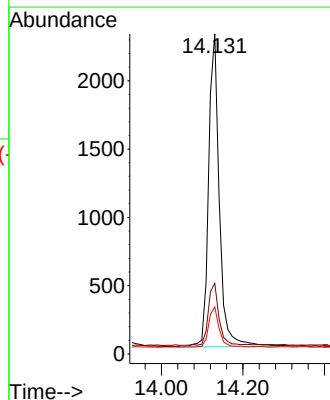
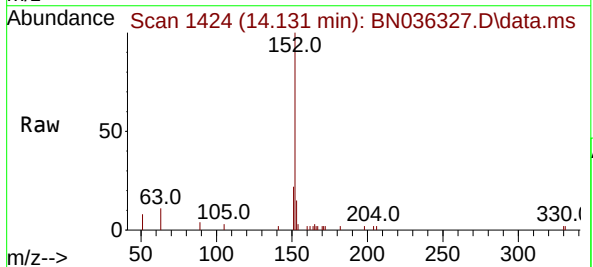
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

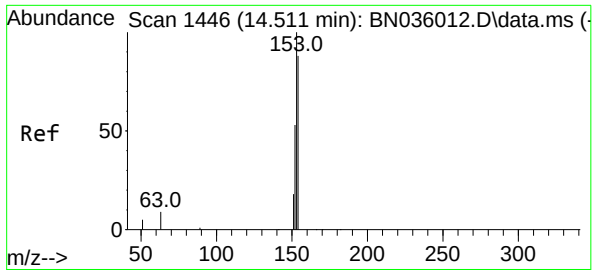
Tgt Ion	Ratio	Lower	Upper
172	100		
171	35.5	30.9	46.3
170	24.6	21.2	31.8



#16
Acenaphthylene
Concen: 0.431 ng
RT: 14.131 min Scan# 1424
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.6	16.2	24.2
153	12.4	10.4	15.6

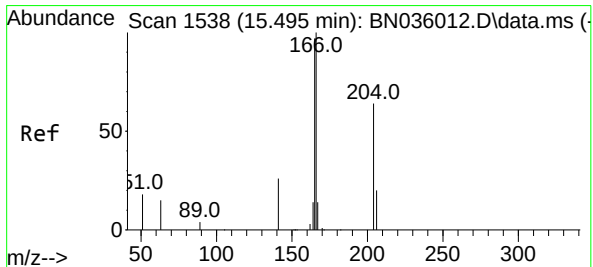
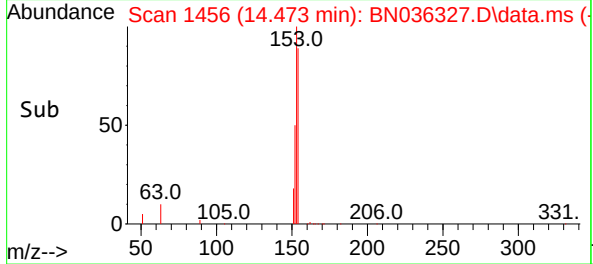
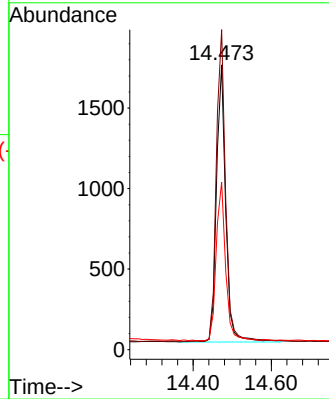
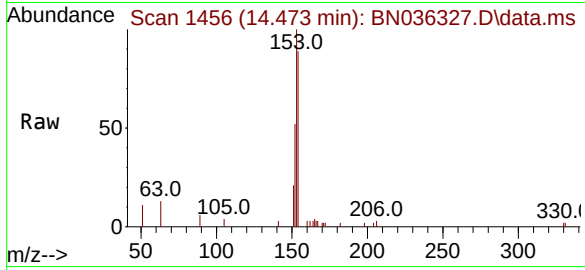




#17
Acenaphthene
Concen: 0.428 ng
RT: 14.473 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

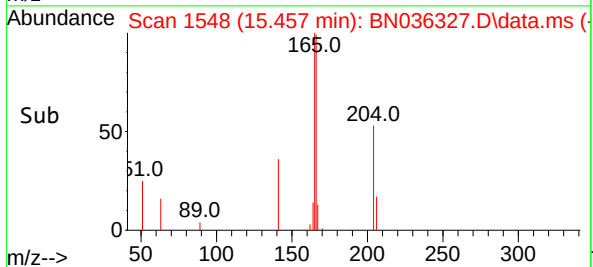
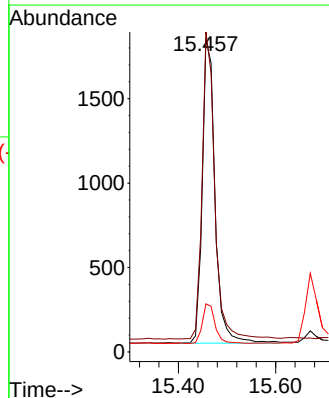
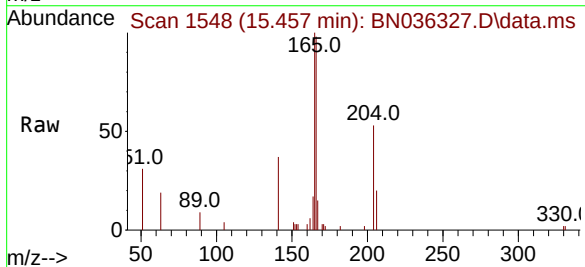
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

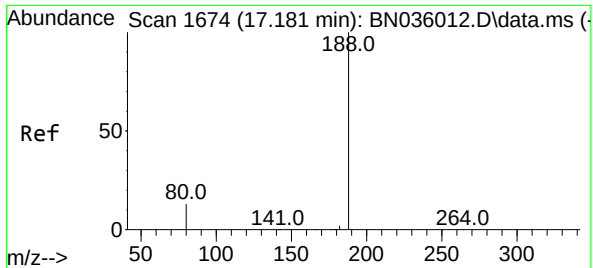
Tgt Ion:154 Resp: 2852
Ion Ratio Lower Upper
154 100
153 111.0 88.9 133.3
152 57.5 48.1 72.1



#18
Fluorene
Concen: 0.418 ng
RT: 15.457 min Scan# 1548
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:166 Resp: 3492
Ion Ratio Lower Upper
166 100
165 99.3 78.5 117.7
167 12.7 10.7 16.1

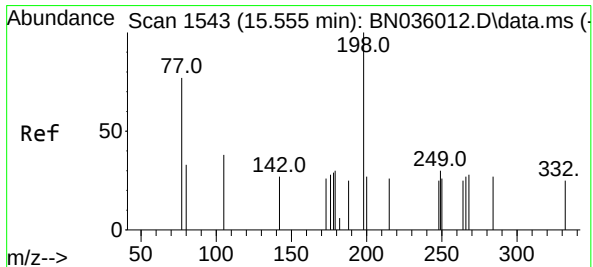
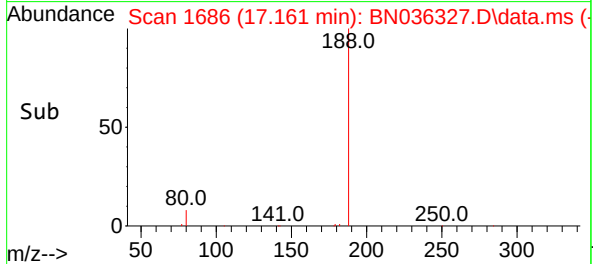
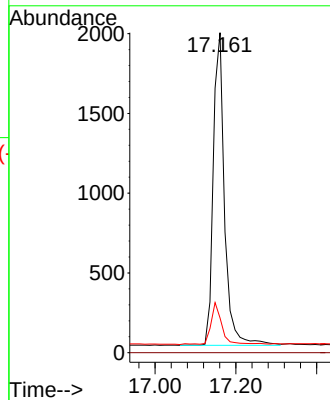
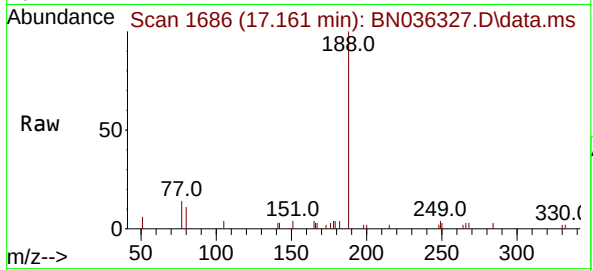




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.161 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

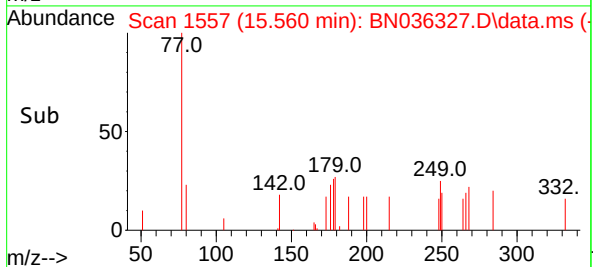
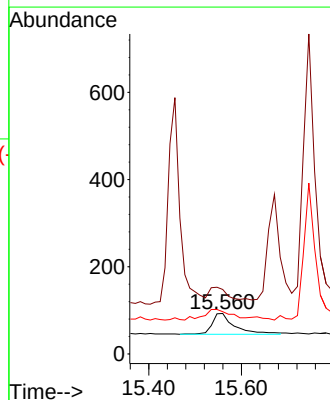
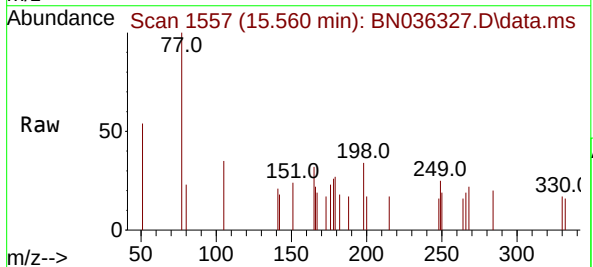
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

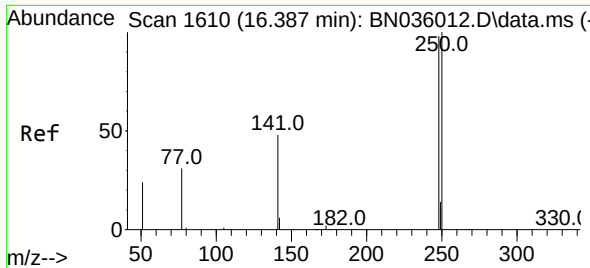
Tgt Ion:188 Resp: 3795
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.9 12.3 18.5#



#20
4,6-Dinitro-2-methylphenol
Concen: 0.181 ng
RT: 15.560 min Scan# 1557
Delta R.T. 0.012 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:198 Resp: 160
Ion Ratio Lower Upper
198 100
51 159.1 68.1 102.1#
105 104.3 46.5 69.7#

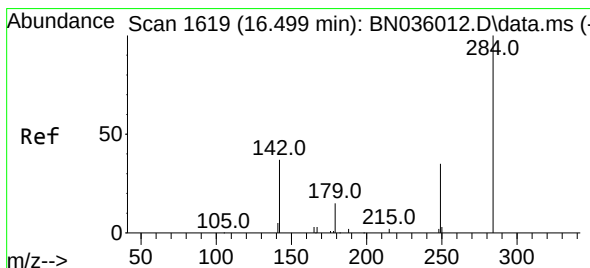
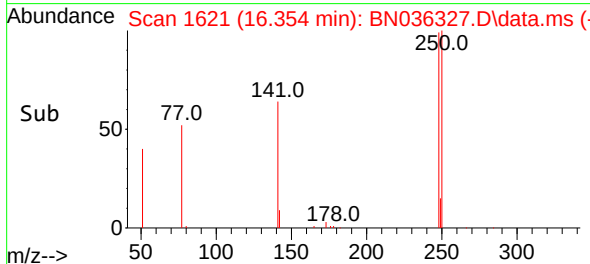
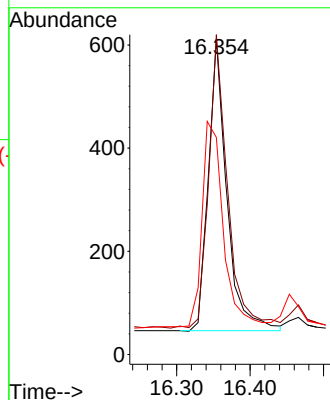
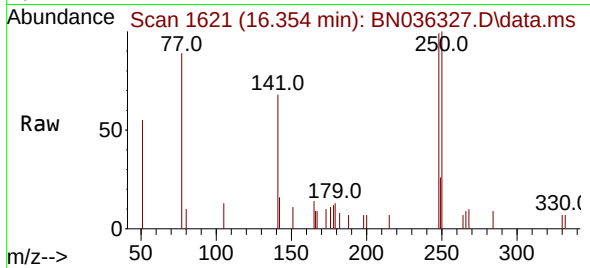




#21
4-Bromophenyl-phenylether
Concen: 0.366 ng
RT: 16.354 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

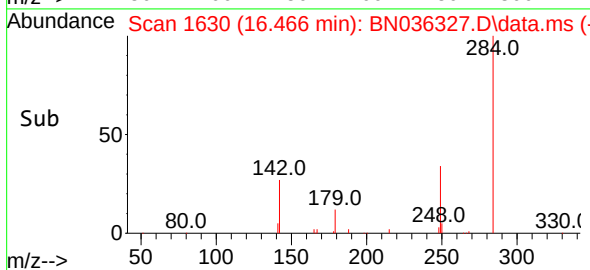
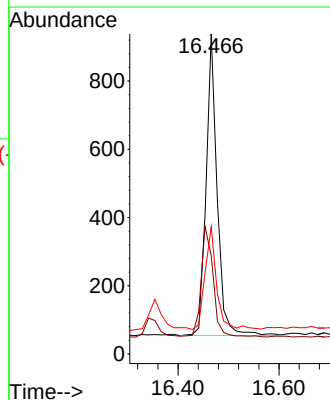
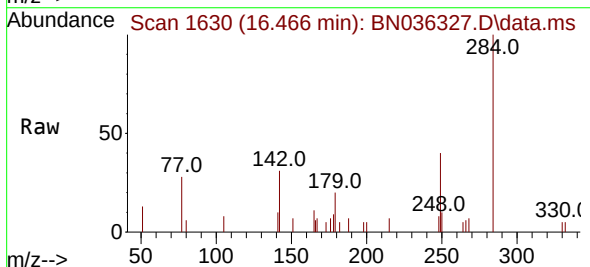
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

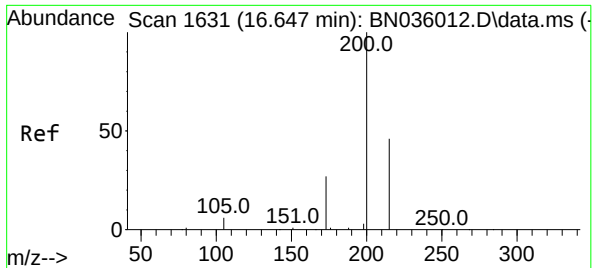
Tgt Ion	Ratio	Lower	Upper
248	100		
250	101.3	81.5	122.3
141	68.8	41.8	62.6



#22
Hexachlorobenzene
Concen: 0.379 ng
RT: 16.466 min Scan# 1630
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion	Ratio	Lower	Upper
284	100		
142	39.8	33.6	50.4
249	35.9	28.8	43.2

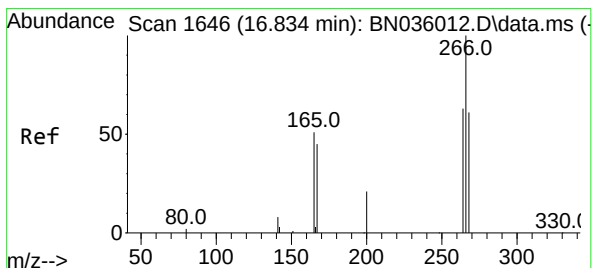
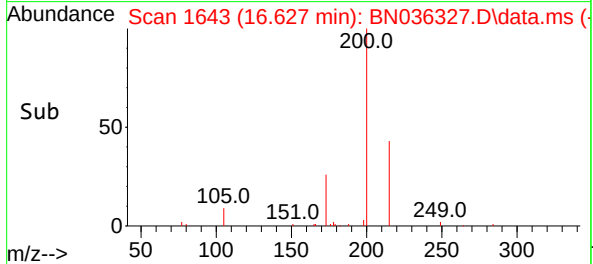
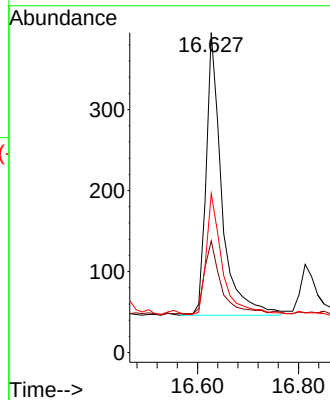
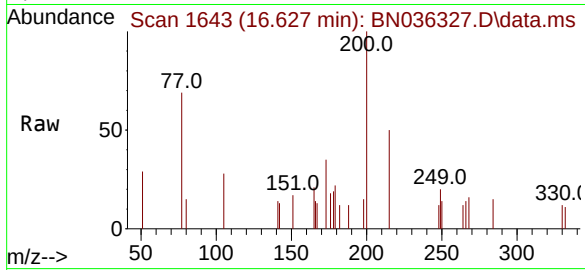




#23
Atrazine
Concen: 0.386 ng
RT: 16.627 min Scan# 1643
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

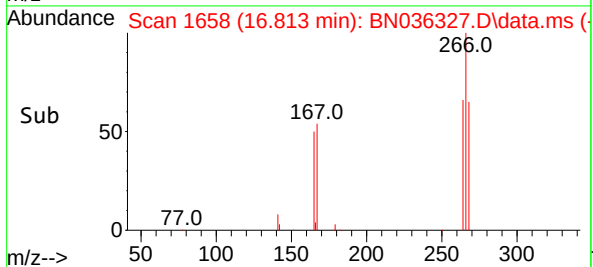
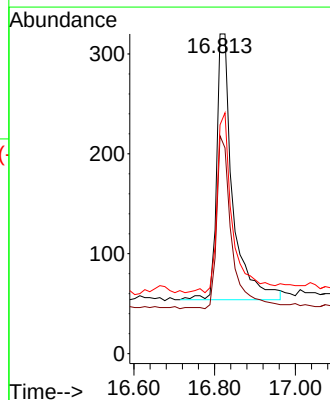
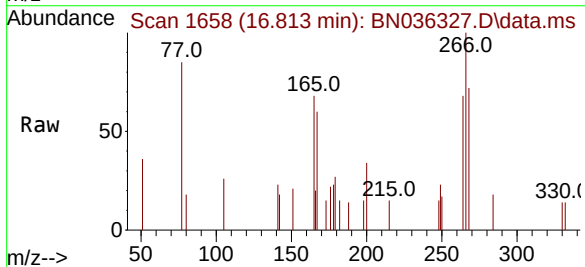
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

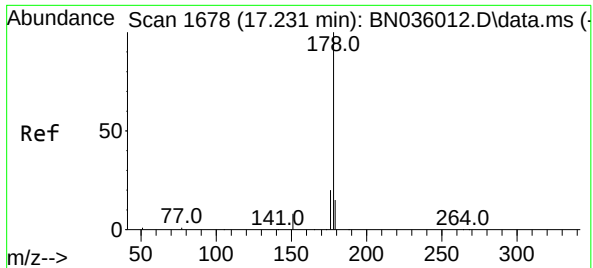
Tgt Ion:200 Resp: 754
Ion Ratio Lower Upper
200 100
173 34.9 26.6 40.0
215 49.6 40.6 61.0



#24
Pentachlorophenol
Concen: 0.476 ng
RT: 16.813 min Scan# 1658
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:266 Resp: 734
Ion Ratio Lower Upper
266 100
264 59.8 48.2 72.2
268 65.9 51.6 77.4

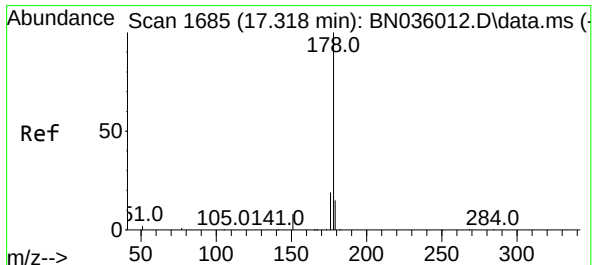
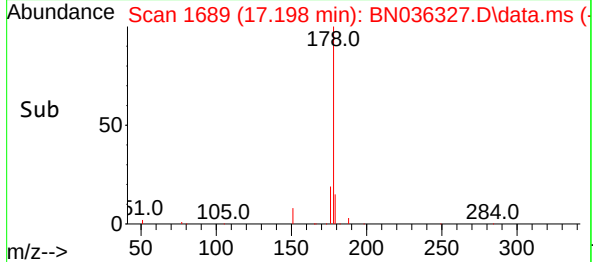
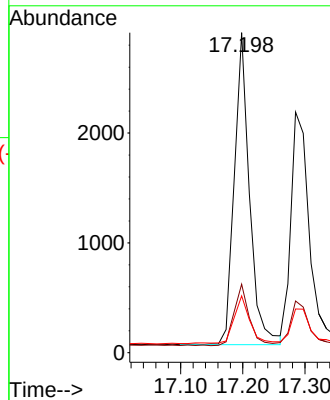
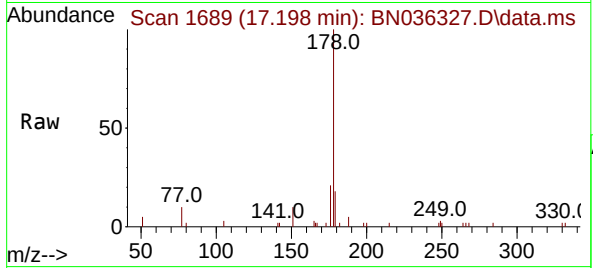




#25
Phenanthrene
Concen: 0.425 ng
RT: 17.198 min Scan# 1689
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

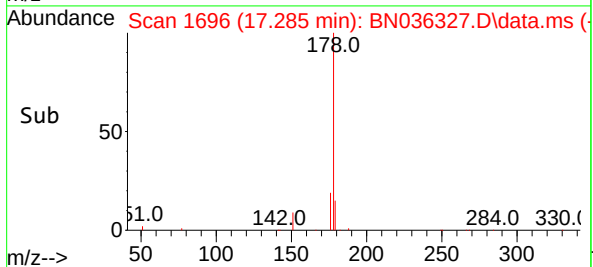
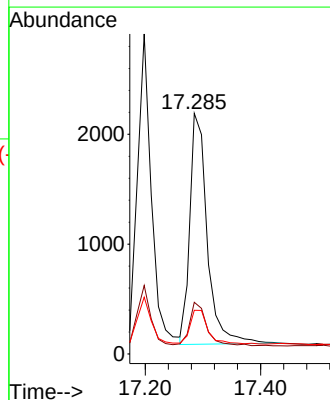
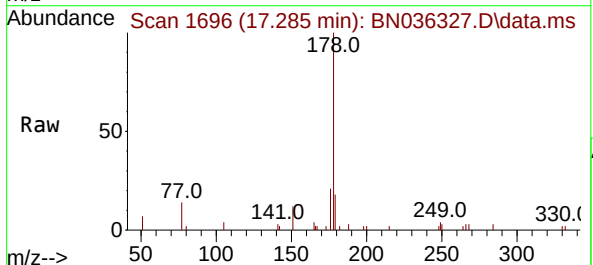
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

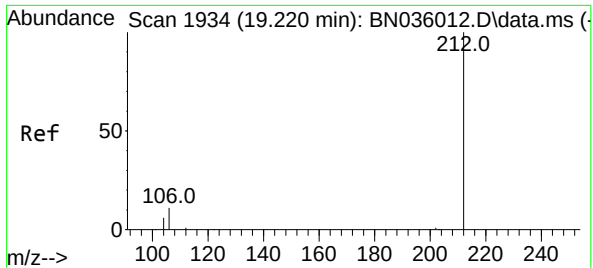
Tgt Ion:178 Resp: 4849
Ion Ratio Lower Upper
178 100
176 19.5 16.0 24.0
179 15.7 12.4 18.6



#26
Anthracene
Concen: 0.425 ng
RT: 17.285 min Scan# 1696
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:178 Resp: 4407
Ion Ratio Lower Upper
178 100
176 19.2 15.4 23.2
179 15.3 12.0 18.0

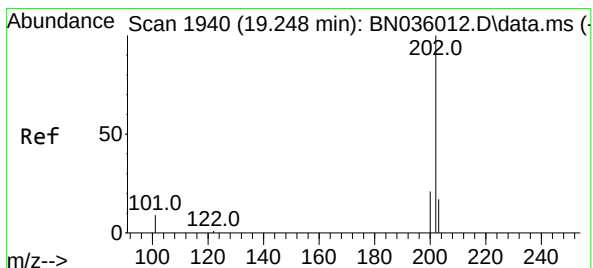
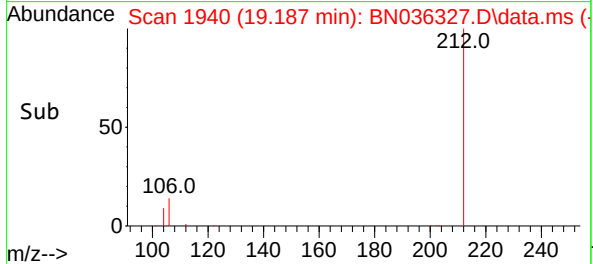
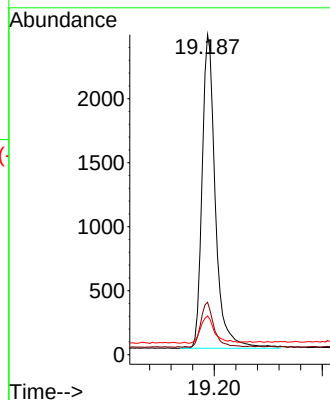
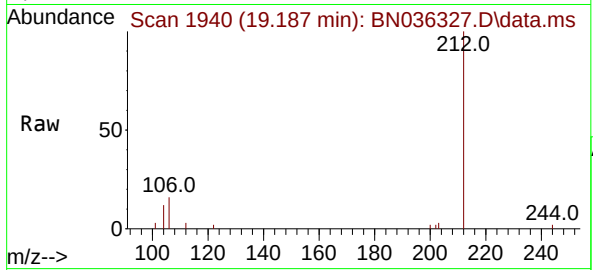




#27
Fluoranthene-d10
Concen: 0.425 ng
RT: 19.187 min Scan# 1940
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

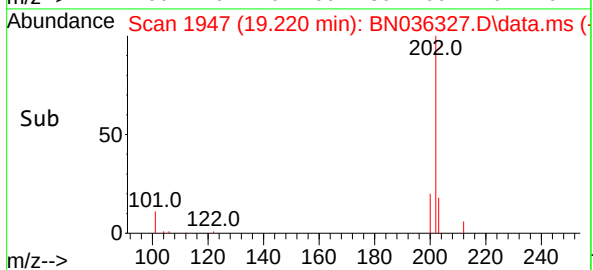
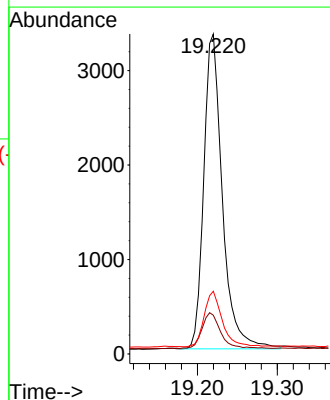
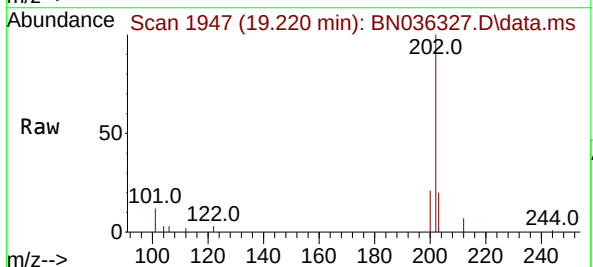
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

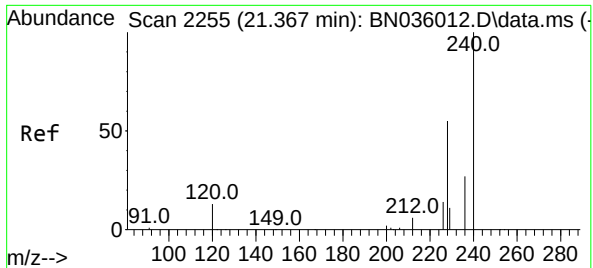
Tgt Ion:212 Resp: 4177
Ion Ratio Lower Upper
212 100
106 14.2 9.7 14.5
104 9.0 6.0 9.0#



#28
Fluoranthene
Concen: 0.402 ng
RT: 19.220 min Scan# 1947
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:202 Resp: 5384
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: BN036327.D

Acq: 06 Feb 2025 09:51

Instrument :

BNA_N

ClientSampleId :

PB166533BSD

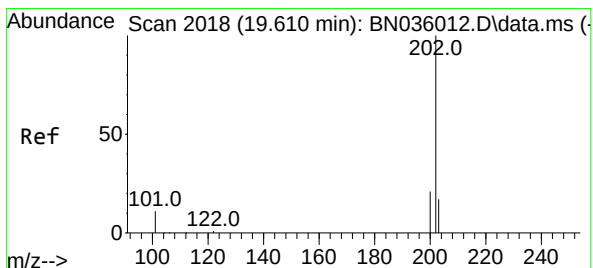
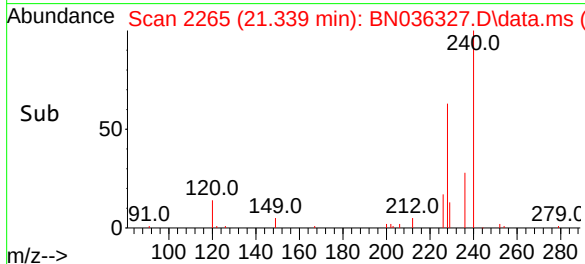
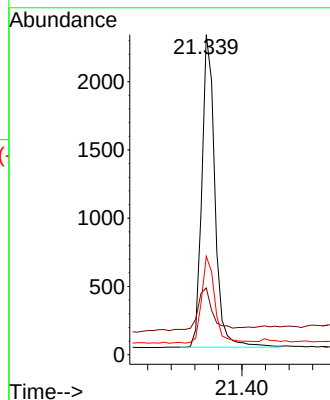
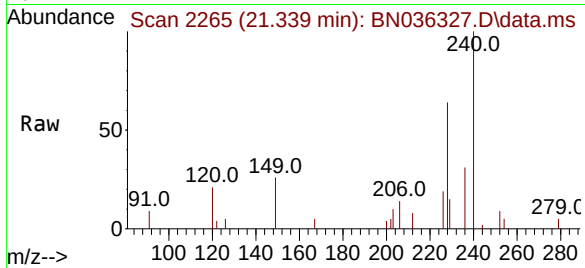
Tgt Ion:240 Resp: 3518

Ion Ratio Lower Upper

240 100

120 20.9 13.9 20.9

236 30.8 23.7 35.5



#30

Pyrene

Concen: 0.401 ng

RT: 19.582 min Scan# 2025

Delta R.T. -0.000 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

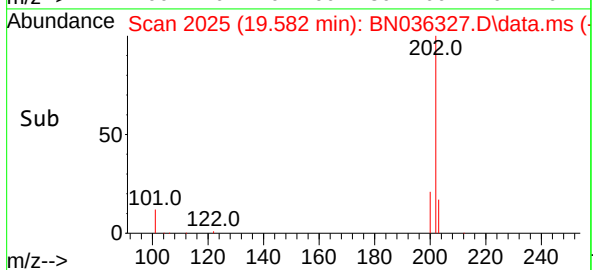
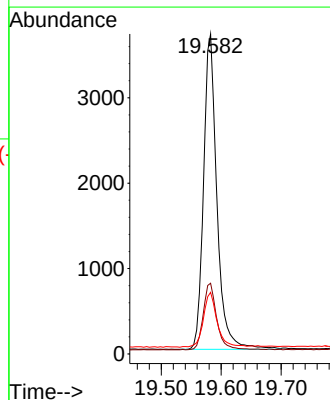
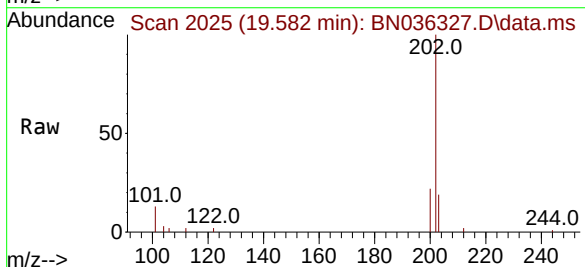
Tgt Ion:202 Resp: 5721

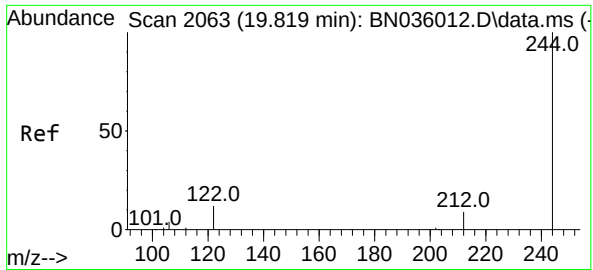
Ion Ratio Lower Upper

202 100

200 21.2 17.0 25.4

203 17.9 14.4 21.6

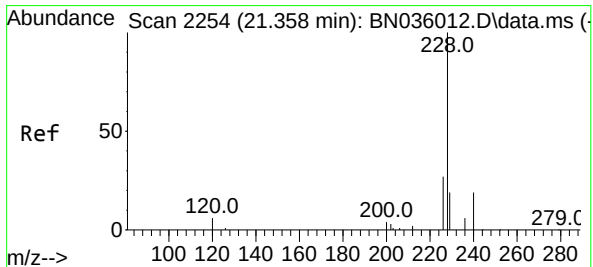
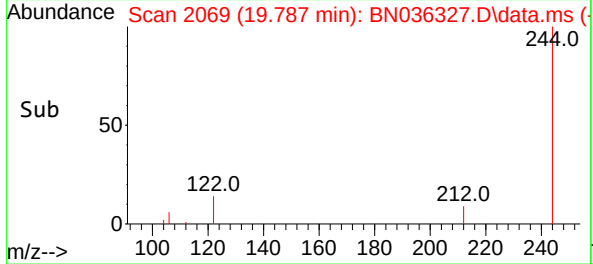
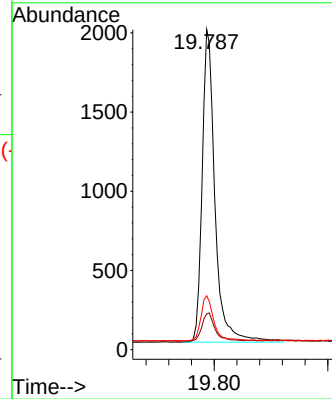
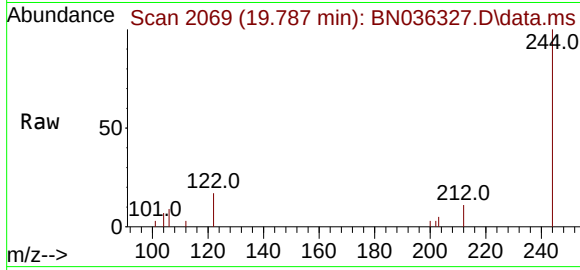




#31
Terphenyl-d14
Concen: 0.422 ng
RT: 19.787 min Scan# 2069
Delta R.T. -0.005 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

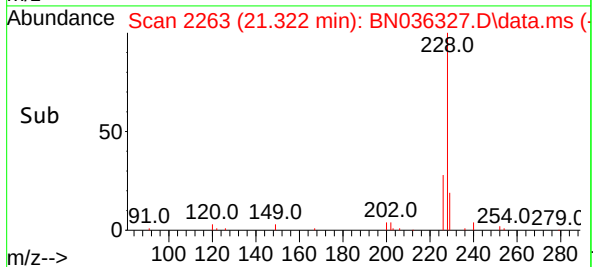
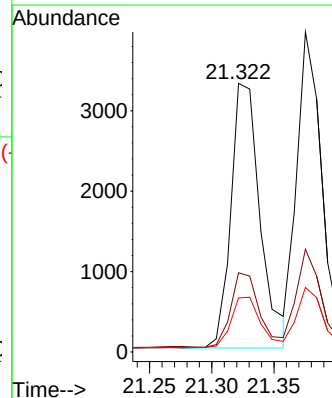
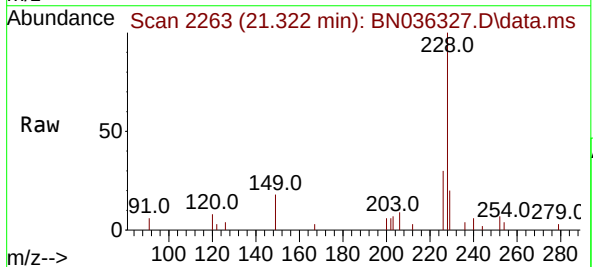
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

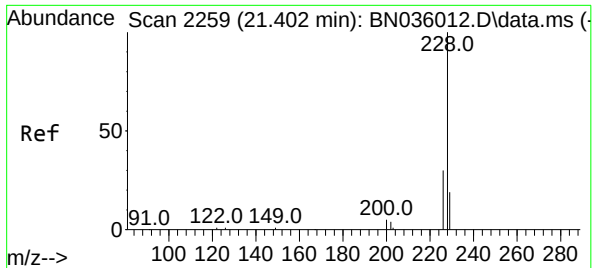
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.2	9.1	13.7
122	16.8	11.3	16.9



#32
Benzo(a)anthracene
Concen: 0.421 ng
RT: 21.322 min Scan# 2263
Delta R.T. -0.009 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion	Ratio	Lower	Upper
228	100		
226	29.5	22.6	34.0
229	20.2	16.5	24.7





#33

Chrysene

Concen: 0.439 ng

RT: 21.375 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

Instrument :

BNA_N

ClientSampleId :

PB166533BSD

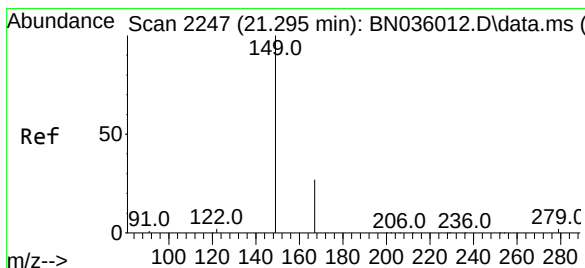
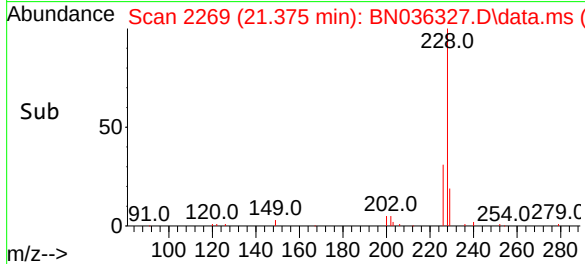
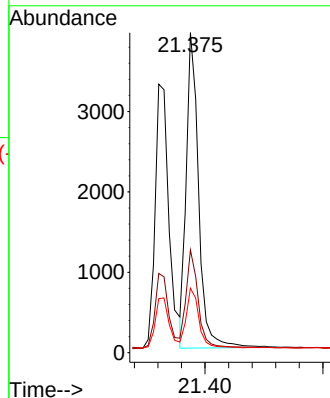
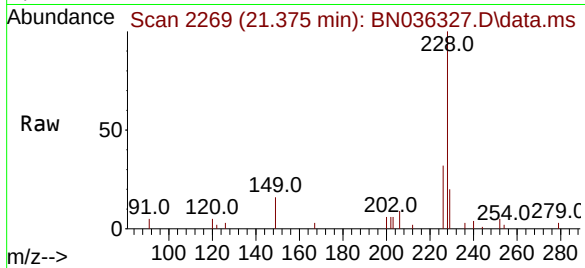
Tgt Ion:228 Resp: 5722

Ion Ratio Lower Upper

228 100

226 32.1 25.3 37.9

229 20.2 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.381 ng

RT: 21.259 min Scan# 2256

Delta R.T. -0.000 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

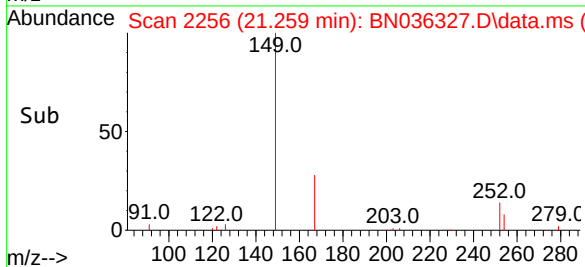
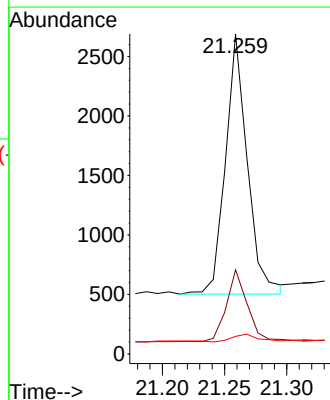
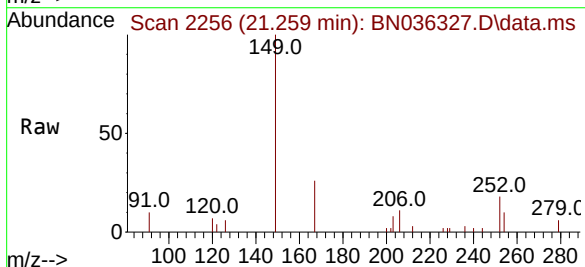
Tgt Ion:149 Resp: 2667

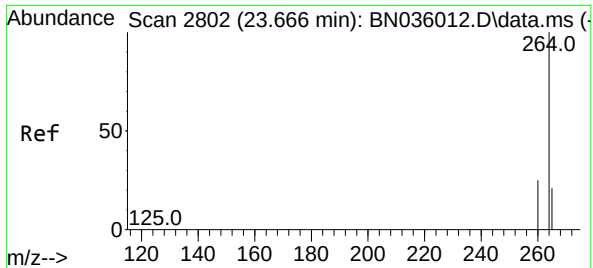
Ion Ratio Lower Upper

149 100

167 27.3 21.9 32.9

279 4.0 3.0 4.6

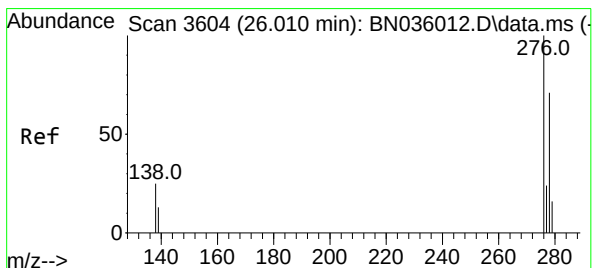
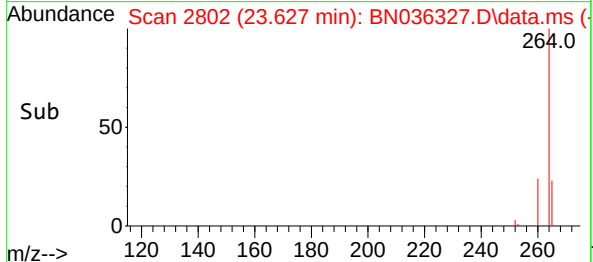
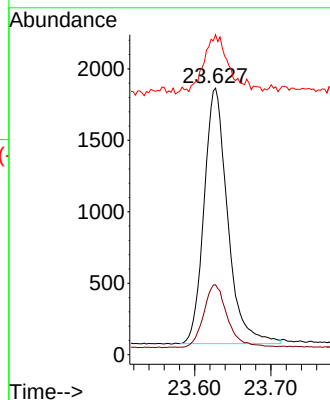
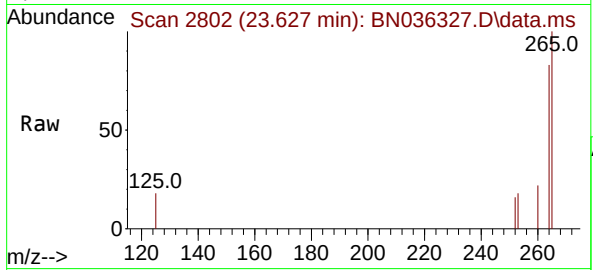




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.627 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

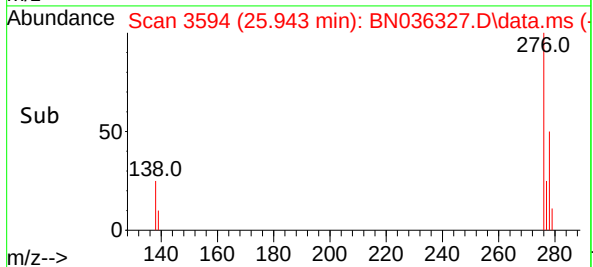
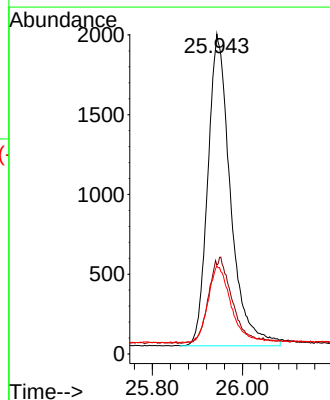
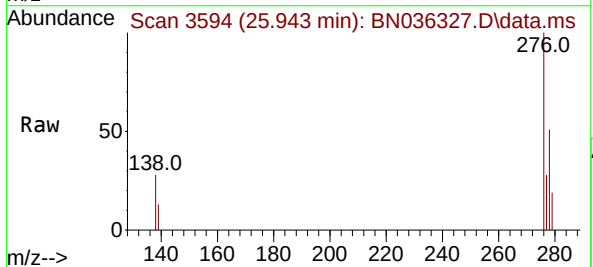
Instrument :
BNA_N
ClientSampleId :
PB166533BSD

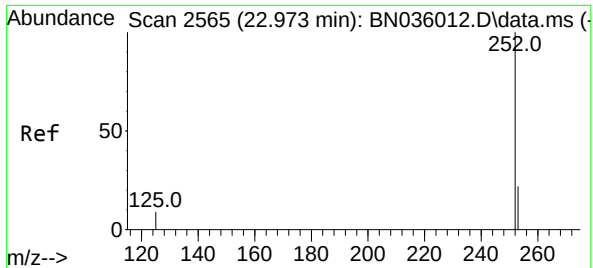
Tgt Ion:264 Resp: 3845
Ion Ratio Lower Upper
264 100
260 26.2 21.8 32.6
265 120.1 56.6 84.8#



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.441 ng
RT: 25.943 min Scan# 3594
Delta R.T. -0.000 min
Lab File: BN036327.D
Acq: 06 Feb 2025 09:51

Tgt Ion:276 Resp: 6806
Ion Ratio Lower Upper
276 100
138 27.8 19.9 29.9
277 24.4 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.411 ng

RT: 22.937 min Scan# 2566

Delta R.T. -0.000 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

Instrument :

BNA_N

ClientSampleId :

PB166533BSD

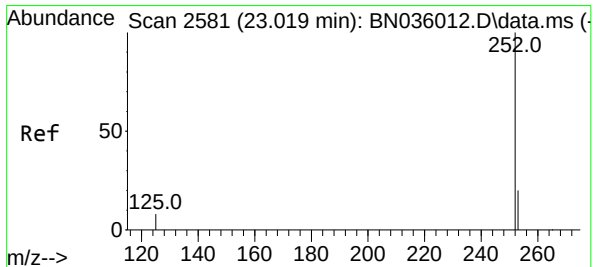
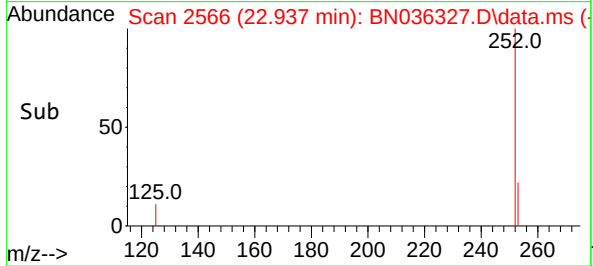
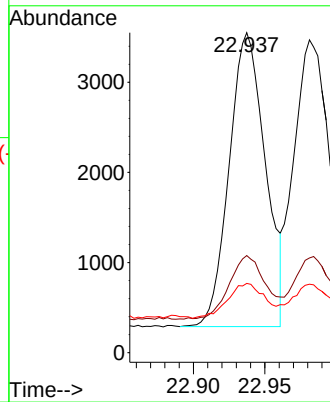
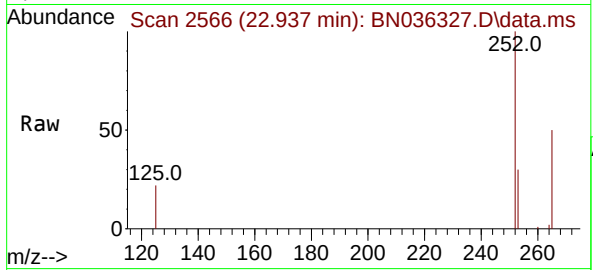
Tgt Ion:252 Resp: 5738

Ion Ratio Lower Upper

252 100

253 30.4 22.5 33.7

125 21.6 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.418 ng

RT: 22.981 min Scan# 2581

Delta R.T. -0.003 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

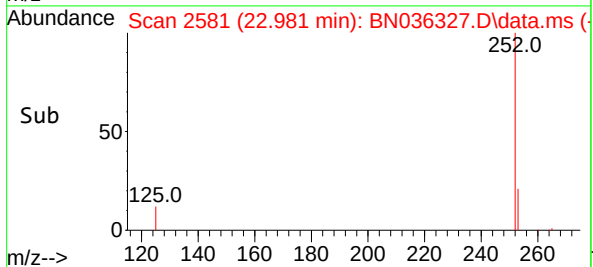
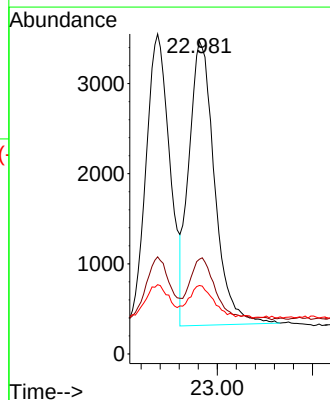
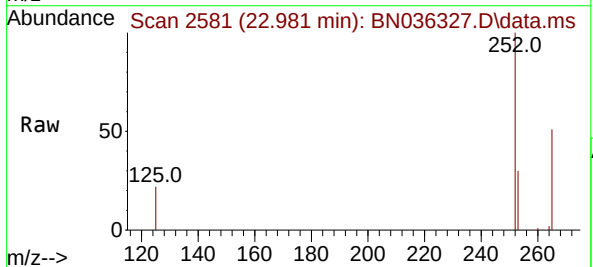
Tgt Ion:252 Resp: 5888

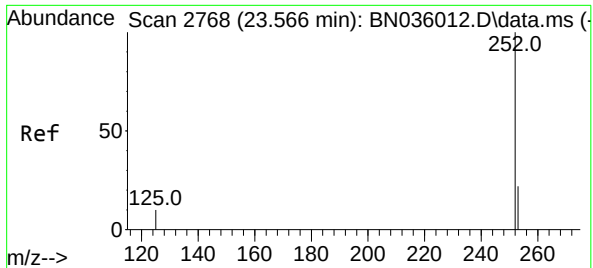
Ion Ratio Lower Upper

252 100

253 30.2 21.3 31.9

125 21.9 11.9 17.9#





#39

Benzo(a)pyrene

Concen: 0.442 ng

RT: 23.528 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

Instrument :

BNA_N

ClientSampleId :

PB166533BSD

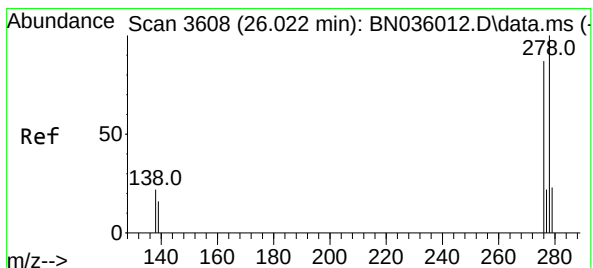
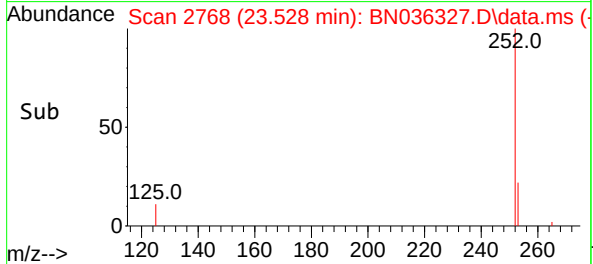
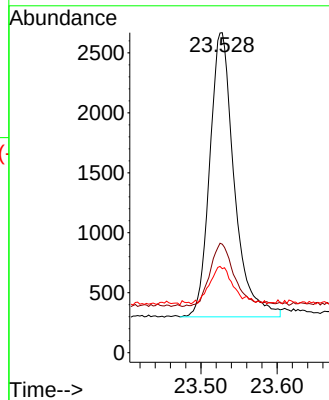
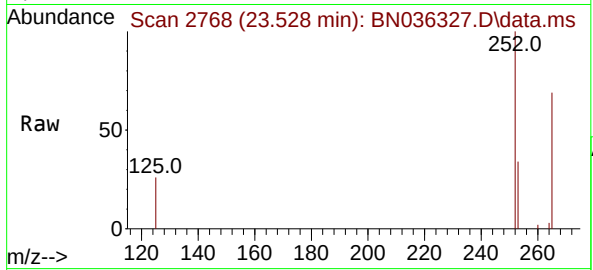
Tgt Ion:252 Resp: 5276

Ion Ratio Lower Upper

252 100

253 33.9 23.8 35.6

125 26.2 14.6 21.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.425 ng

RT: 25.963 min Scan# 3601

Delta R.T. -0.000 min

Lab File: BN036327.D

Acq: 06 Feb 2025 09:51

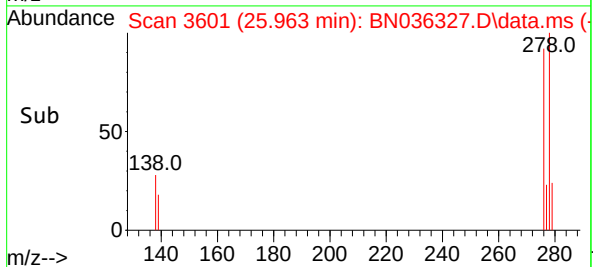
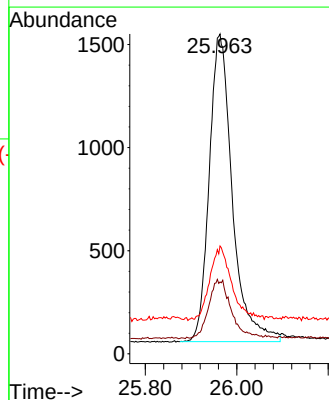
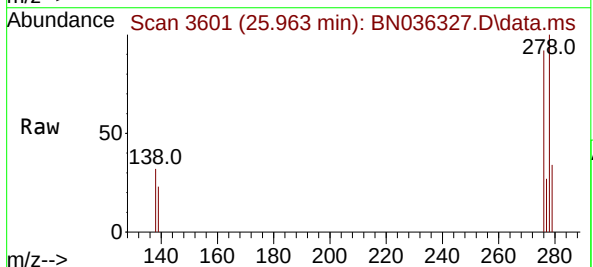
Tgt Ion:278 Resp: 5223

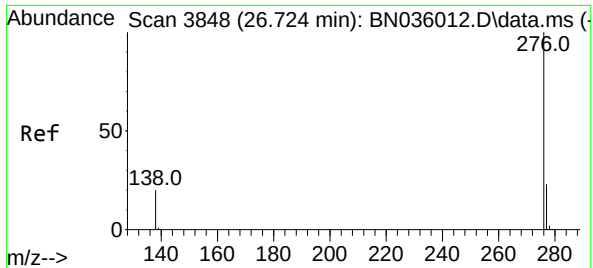
Ion Ratio Lower Upper

278 100

139 22.5 16.0 24.0

279 33.7 23.8 35.8





#41

Benzo(g,h,i)perylene

Concen: 0.416 ng

RT: 26.656 min Scan# 3838

Delta R.T. 0.003 min

Lab File: BN036327.D

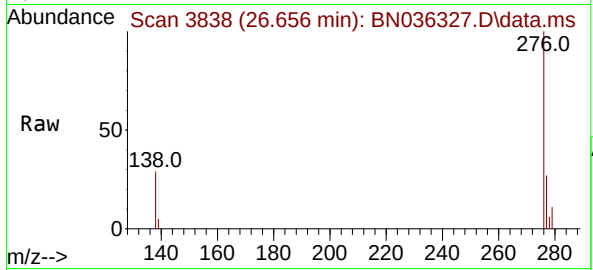
Acq: 06 Feb 2025 09:51

Instrument :

BNA_N

ClientSampleId :

PB166533BSD



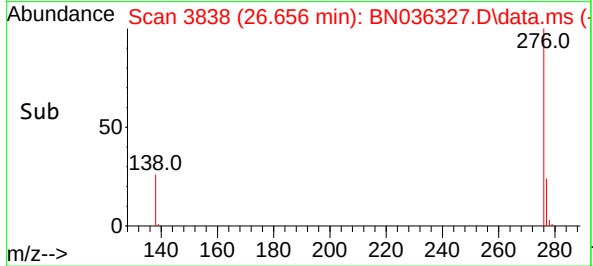
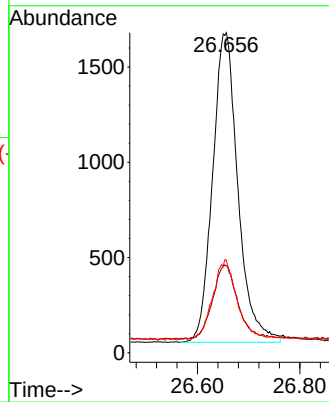
Tgt Ion:276 Resp: 5582

Ion Ratio Lower Upper

276 100

277 27.2 21.3 31.9

138 29.0 19.2 28.8#





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

Manual Integration Report

Sequence:

BN012225

Instrument

BNA_n

Sample ID

File ID

Parameter

Review By

Review On

Supervised
By

Supervised On

Reason



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

Manual Integration Report

Sequence:

BN020525

Instrument

BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
Q1283-05	BN036323.D	1,4-Dioxane	Jagrut	2/6/2025 4:07:53 PM	mohammad	2/7/2025 8:32:26 AM	Peak Integrated by Software

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_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 Initial Calibration Stds	SP6717 SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6661 SP6682,1ul/100ul sample SP6684

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	VPB192-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	VPB192-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	VPB192-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	Extraction Start Date :	02/04/2025
Matrix :	Water	Extraction Start Time :	11:00
Weigh By:	N/A	Extraction By:	RS
Balance check:	N/A	Filter By:	RS
Balance ID:	N/A	Extraction End Date :	02/04/2025
pH Strip Lot#:	E3574	Extraction End Time :	15:55
		Concentration By:	EH
		Supervisor By :	rajesh
Extraction Method:	☒ Separatory Funnel ☐ Continuous 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
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3874
Baked Na2SO4	N/A	EP2581
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	Envap ID:	NEVAP-02
KD Bath Temperature:	60 °C	Envap Temperature:	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
02/04/25	RP (Est. Lab)	AC/SVOC
16:00	Preparation Group	Analysis Group

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 02/04/2025

Sample ID	Client Sample ID	Test	g / <u>mL</u>	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166533BL	SBLK533	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			SEP-01
PB166533BS	SLCS533	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			2
PB166533BS D	SLCSD533	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			3
Q1283-01	VPB-192-HYD-20250131	SVOC-SIMGrou p1	970	6	RUPESH	ritesh	1	C		4
Q1283-03	BP-VPB-192-EB-20250131	SVOC-SIMGrou p1	970	6	RUPESH	ritesh	1	C		5
Q1283-05	BP-VPB-192-GW-500-502	SVOC-SIMGrou p1	960	6	RUPESH	ritesh	1	C		6

* Extracts relinquished on the same date as received.

8/2/25

168533
H.O.V

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1283

WorkList ID : 187453

Department : Extraction

Date : 02-04-2025 10:42:57

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1283-01	VPB-192-HYD-20250131	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	D11	01/31/2025	8270-Modified
Q1283-03	BP-VPB-192-EB-20250131	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	D11	01/31/2025	8270-Modified
Q1283-05	BP-VPB-192-GW-500-502	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	D11	01/31/2025	8270-Modified

Date/Time 02/04/25 10:45
Raw Sample Received by: R J (Exp 125)
Raw Sample Relinquished by: OR 8

Date/Time 02/04/25 11:25
Raw Sample Received by: OR 8
Raw Sample Relinquished by: R J (Exp 125)

Prep Standard - Chemical Standard Summary

Order ID : Q1283

Test : SVOC-SIMGroup1

Prepbatch ID : PB166533,

Sequence ID/Qc Batch ID: BN020525,

Standard ID :

EP2559,EP2565,EP2581,SP6616,SP6629,SP6656,SP6657,SP6658,SP6659,SP6660,SP6661,SP6662,SP6663,SP668
2,SP6683,SP6684,SP6717,SP6718,

Chemical ID :

1ul/100ul

sample,E3551,E3657,E3788,E3791,E3817,E3828,E3846,E3871,E3874,M5173,S10103,S10246,S 11011,S11074,S1109
7,S11494,S11792,S11831,S12077,S12079,S12105,S12113,S12126,S12142,S12189,S12208,S12314,S12328,S12453,
S12469,S12517,W3112,



<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
<u>FROM</u> 1000.00000ml of M5173 + 1000.00000ml of W3112 = Final Quantity: 2000.000 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>
3923	Baked Sodium Sulfate	EP2581	02/03/2025	07/01/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Rajesh Parikh 02/03/2025
<u>FROM</u> 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
<u>FROM</u>	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



<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 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								
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 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>
3895	50 ug/ml DFTPP 8270E	SP6717	01/15/2025	03/31/2025	Rahul Chavli	None	None	Yogesh Patel
								01/16/2025

FROM 1.00000ml of S10246 + 19.00000ml of E3871 = Final Quantity: 20.000 ml

<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

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	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

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL,	A0182667	03/31/2025	01/15/2025 / Rahul	03/18/2022 / Christian	S10246

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	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	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

CHEMICAL RECEIPT LOG BOOK

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

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml, methanol, 5ml/ ampul	A0206206	04/10/2025	10/10/2024 / anahy	03/15/2024 / Rahul	S12189

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml, 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

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]

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	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 #
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

Erica Castiglione

Certified By:

Erica Castiglione
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



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
Shelf S11096
to
S11099

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

<u>Compound</u>	<u>CAS No.</u>	<u>Purity (%)</u>	<u>Compound Lot No.</u>	<u>Concentration, mg/L</u>
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 Gravimetric +/- 45.7132 µg/mL Unstressed +/- 66.0037 µg/mL Stressed
2	DFTPP (Decafluorotriphenylphosphine) CAS # 5074-71-5 (Lot Q117-147) Purity 95%	1,006.6 µg/mL	+/- 5.9074 µg/mL Gravimetric +/- 45.8508 µg/mL Unstressed +/- 66.2023 µg/mL Stressed
3	Benzidine CAS # 92-87-5 (Lot 211228JLM) Purity 99%	1,008.4 µg/mL	+/- 5.9179 µg/mL Gravimetric +/- 45.9318 µg/mL Unstressed +/- 66.3193 µg/mL Stressed
4	4,4'-DDT CAS # 50-29-3 (Lot 210916JLM) Purity 99%	1,007.6 µg/mL	+/- 5.9132 µg/mL Gravimetric +/- 45.8954 µg/mL Unstressed +/- 66.2667 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:

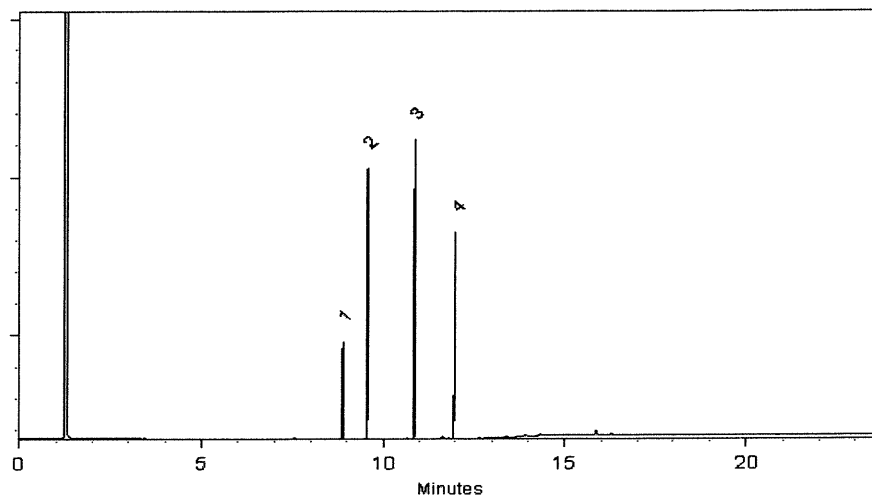
250°C

Det. Temp:

330°C

Det. Type:

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

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
Fax: (814)353-1309

www.restek.com

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:

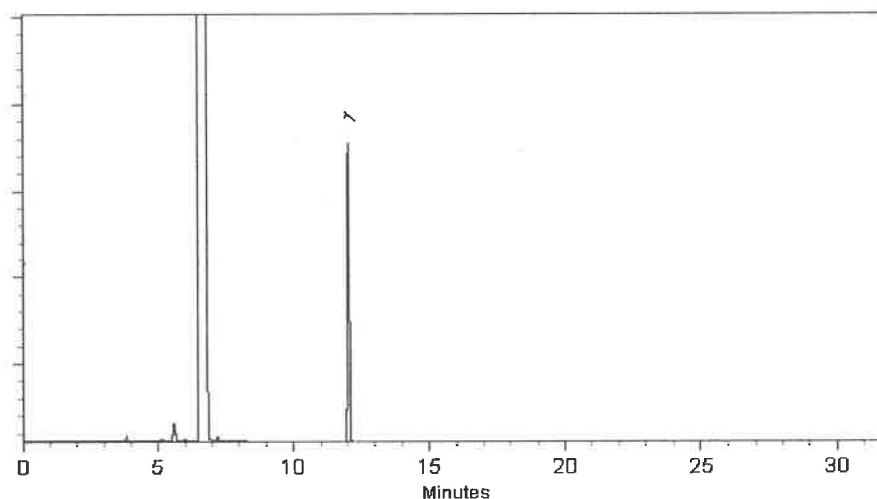
200°C

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

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.: 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.

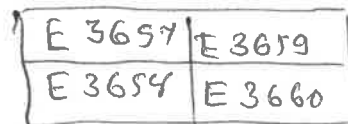
This document has been electronically produced and is valid without a signature.

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

Avantor Performance Materials LLC

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	$\leq 1.0 \text{ ppm}$	0.2 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 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

Avantor Performance Materials LLC

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

 **avantors™**



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

Avantor Performance Materials LLC

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor



Material No.: 9266-A4
Batch No.: 24K1762005
Manufactured Date: 2024-10-08
Expiration Date: 2026-01-07
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0%
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.5 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 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)



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	≤ 1.0 ppm	0.8 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 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



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-110094-02	506889	≤ -10 °C	Methylene Chloride	7/25/2028	CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2-dichlorobenzene-d ₄	2199-69-1	99.7	247.29.3P	5035 ± 28.02
2-fluorobiphenyl	321-60-8	99.69	8.286.1.1P	4999 ± 103.66
nitrobenzene-d5	4165-60-0	99.67	7.9.3P	4988 ± 27.32
p-terphenyl-d14	1718-51-0	99.3	9.120.8P	5005 ± 27.85

511494 } Y.P.
↓
511498 } 08/11/2023

*Not a certified value

Certified By: _____

Clint Tipton
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values
listed are determined 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:

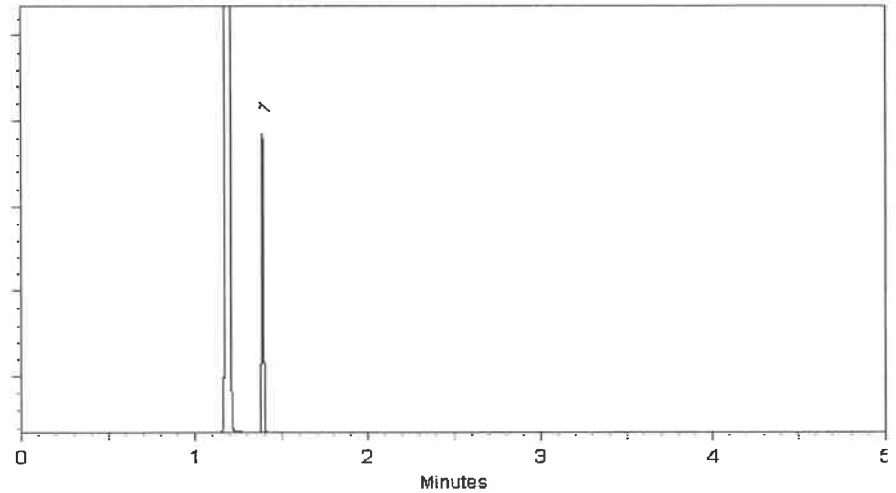
FID

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.



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. : 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:

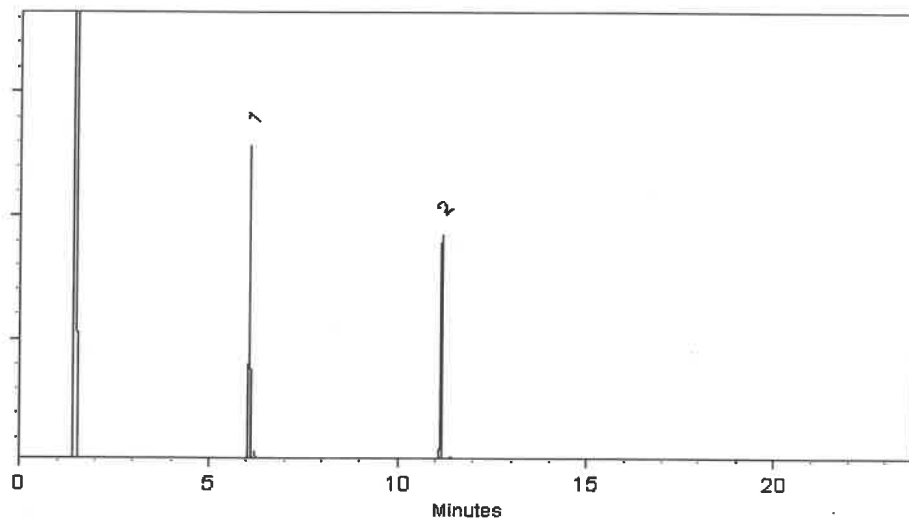
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl

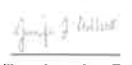


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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

912075 } RC
↓
912079 } 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
(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

912075 } RC
↓
912079 } 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/
↓
512111 } 02/22/24

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
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
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/- 36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/- 36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/- 36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/- 36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/- 36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/- 36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/- 36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/- 36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/- 36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/- 36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/- 36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/- 36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/- 36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/- 36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/- 36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/- 36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/- 36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/- 36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	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%



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
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/- 36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/- 36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/- 36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/- 36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/- 36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/- 36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/- 36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/- 36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/- 36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/- 36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/- 36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/- 36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/- 36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/- 36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/- 36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/- 36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/- 36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/- 36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/- 36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/- 36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/- 36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/- 36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/- 36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/- 36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/- 36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/- 36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/- 36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/- 36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/- 36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/- 36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/- 36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/- 36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/- 36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/- 36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/- 36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	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%



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. : 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/
↓ } 03/18/24
512206 }

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:

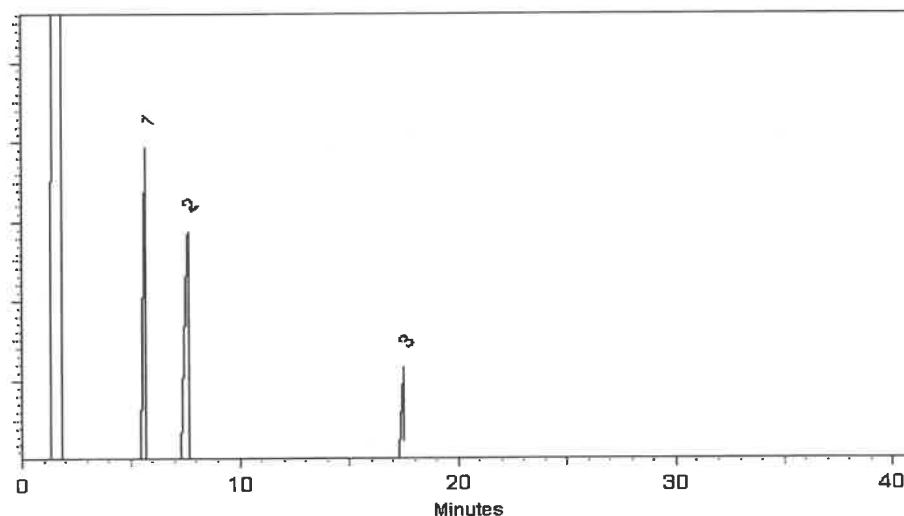
FID

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 S. 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



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. : 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:

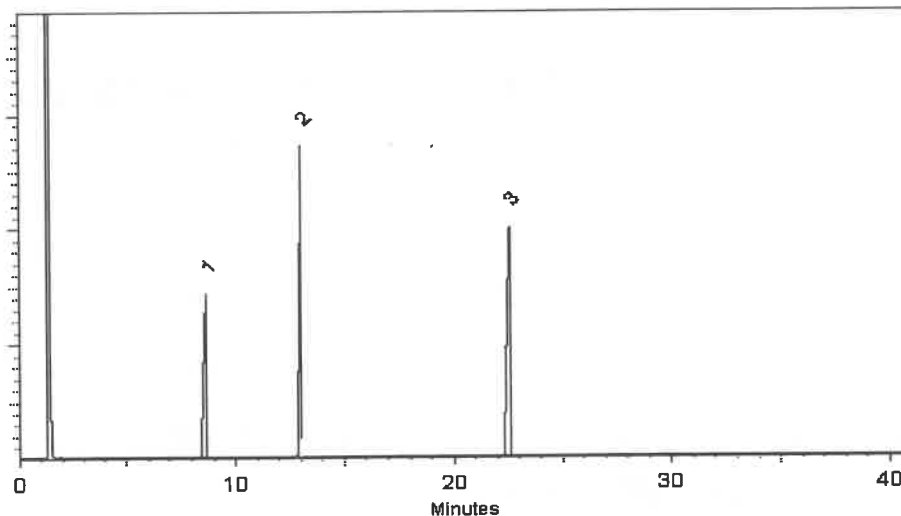
FID

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

Date Mixed: 09-Jan-2024 Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Jan-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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. : 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:

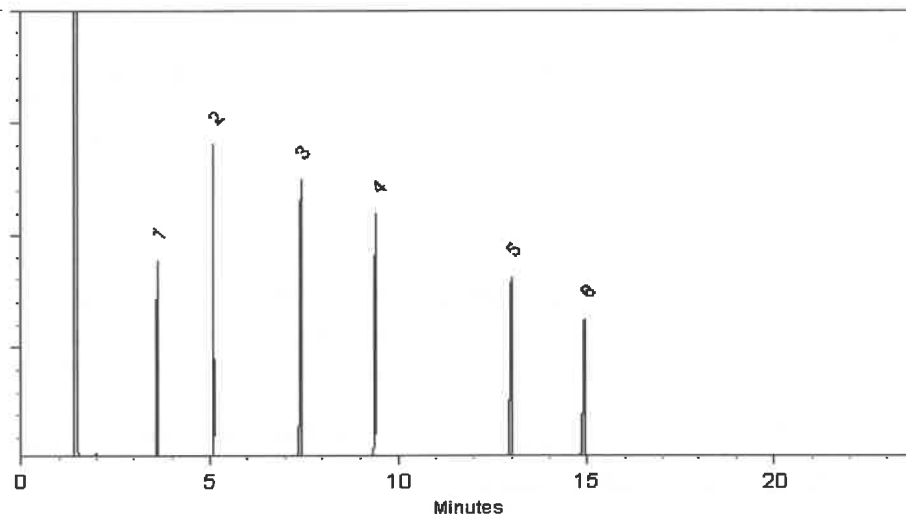
FID

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
Registered Quality System
Certificate #FM 80397



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. : 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:

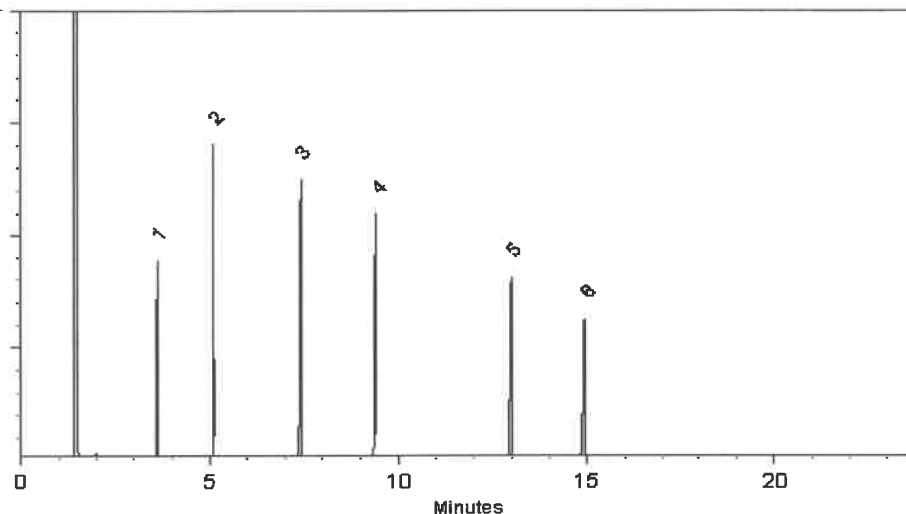
FID

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
Registered Quality System
Certificate #FM 80397



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. : 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/ μ ECD, 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. : 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.



SHIPPING DOCUMENTS

CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092

(908) 789-8900 Fax: (908) 78-8922

www.chemtech.net

Chemtech Project Number:

Q1283

COC Number:

CLIENT INFORMATION

COMPANY: Tetra Tech

ADDRESS: 4433 Corporation Lane Suite 300

CITY: Virginia Beach STATE: VA ZIP: 23462

ATTENTION: Ernie Wu

PHONE: 757-466-4901

FAX: 757-461-4148

PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage

PROJECT #: 112G08005-WE13 LOCATION: VPB-192

PROJECT MANAGER: Ernie Wu

E-MAIL: ernie.wu@tetrattech.com

PHONE: 757-466-4901

FAX: 757-461-4148

BILLING INFORMATION

BILL TO: SEE CONTRACT

PO#

ADDRESS:

CITY:

STATE: ZIP:

ATTENTION:

PHONE:

ANALYSIS

VOC(SW846-9260B)
1,4 Dioxane (8270
SIM)

1 2 3 4 5 6 7 8 9

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*

HARD COPY: 10 DAYS*

EDD 10 DAYS*

* TO BE APPROVED BY CHEMTECH

STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESULTS ONLY ☐ USEPA CLP
☐ RESULTS + QC ☐ New York State ASP "B"
☐ New Jersey REDUCED ☐ New York State ASP "A"
☐ New Jersey CLP ☐ Other _____
☐ EDD Format _____

PRESERVATIVES

COMMENTS

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		A									
1.	VPB-192-HYD-20250131	AQ		X	1/31/25	14:30	3	2	1								
2.	BP-VPB-192-TB-20250130	QA		X	1/30/25	9:00	2	2									Trip blank
3.	BP-VPB-192-EB-20250131	QA		X	1/31/25	8:30	3	2	1								Equipment blank
4.	BP-VPB-192-GW-480-482	AQ		X	1/30/25	10:48	2	2									
5.	BP-VPB-192-GW-500-502	AQ		X	1/31/25	9:45	3	2	1								
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

1. *[Signature]*

02/13/25

1. *[Signature]*

1646

2-3-25

RELINQUISHED BY

DATE/TIME

RECEIVED BY

2.

2.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.3°C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: _____
Comments: Standard TAT

RELINQUISHED BY

DATE/TIME

RECEIVED FOR LAB BY

3. *[Signature]*

2-3-25

3.

Page 1 of 1

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



284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1283 TETR06

Order Date : 2/3/2025 4:41:00 PM

Project Mgr :

Client Name : Tetra Tech NUS, Inc.

Project Name : CTO WE13

Report Type : Level 4

Client Contact : Ernie Wu

Receive DateTime : 2/3/2025 7:00:00 PM

EDD Type : ADAPT

Invoice Name : Tetra Tech NUS, Inc.

Purchase Order :

Hard Copy Date :

Invoice Contact : Ernie Wu

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
Q1283-01	VPB-192-HYD-20250131 VPB192-HYD-20250131	Water	01/31/2025	14:30					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-02	BP-VPB-192-TB-20250130	Water	01/31/2025	09:00					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-03	BP-VPB-192-EB-20250131	Water	01/31/2025	08:30					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-04	BP-VPB-192-GW-480-482	Water	01/31/2025	10:48					
					VOCMS Group1		8260-Low	10 Bus. Days	
Q1283-05	BP-VPB-192-GW-500-502	Water	01/31/2025	09:45					
					VOCMS Group1		8260-Low	10 Bus. Days	

Relinquished By :

Date / Time :


2-4-25 0900

Received By :

Date / Time :


02/04/25 09:00 Jeff 4

Storage Area : VOA Refridgerator Room

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
 Data File : BN036323.D
 Acq On : 06 Feb 2025 07:27
 Operator : RC/JU
 Sample : Q1283-05
 Misc :
 ALS Vial : 22 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 BP-VPB-192-GW-500-502

Quant Time: Feb 06 08:02:19 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 Feb 06 01:04:09 2025
 Response via : Initial Calibration

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

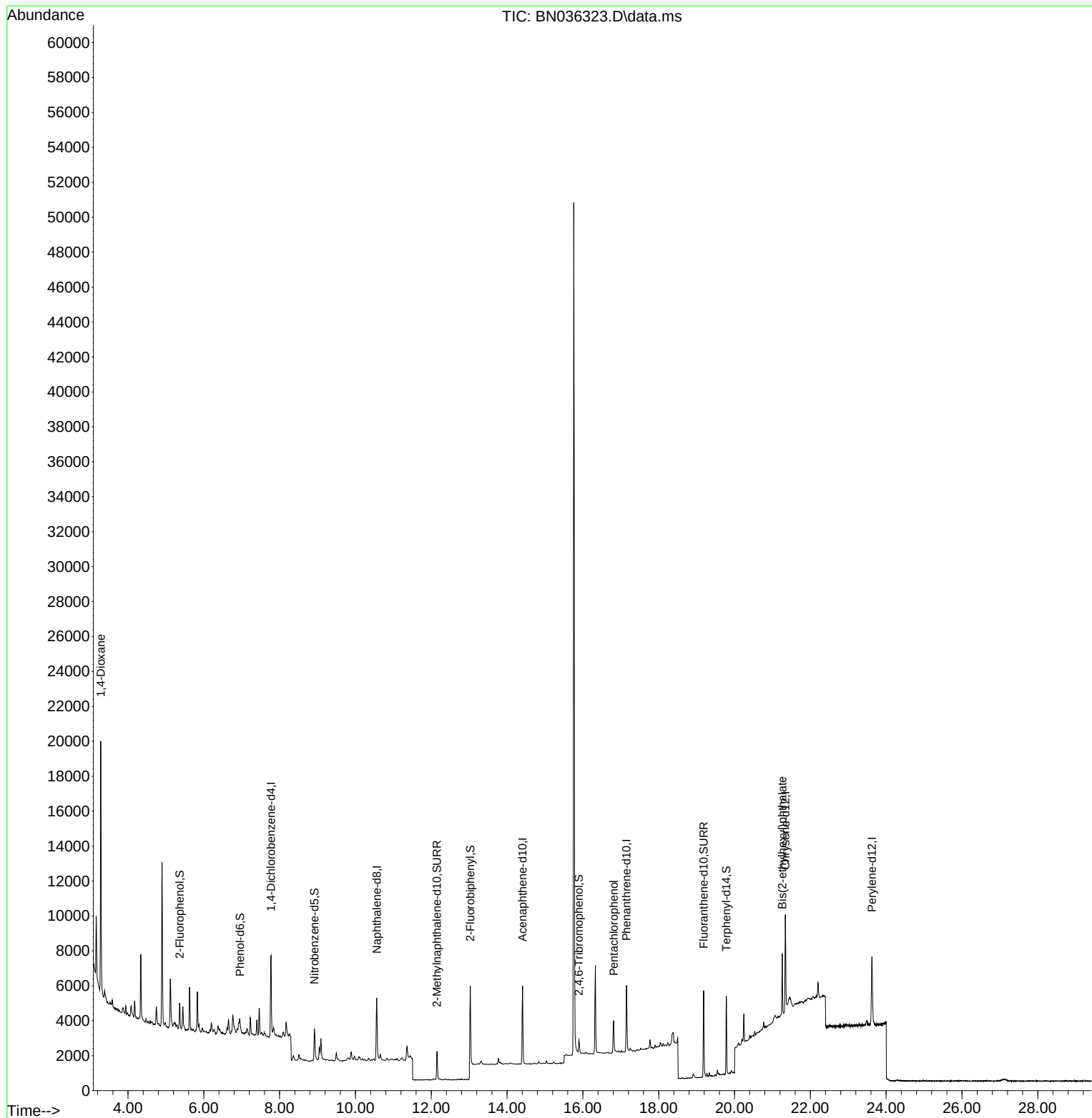
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.775	152	2177	0.400	ng	0.00
7) Naphthalene-d8	10.562	136	4873	0.400	ng	0.00
13) Acenaphthene-d10	14.409	164	2591	0.400	ng	0.00
19) Phenanthrene-d10	17.149	188	5153	0.400	ng	-0.01
29) Chrysene-d12	21.340	240	5130	0.400	ng	0.00
35) Perylene-d12	23.625	264	5436	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.363	112	927	0.164	ng	0.00
5) Phenol-d6	6.952	99	651	0.098	ng	0.00
8) Nitrobenzene-d5	8.918	82	1663	0.362	ng	-0.01
11) 2-Methylnaphthalene-d10	12.152	152	2399	0.362	ng	0.00
14) 2,4,6-Tribromophenol	15.895	330	437	0.263	ng	-0.01
15) 2-Fluorobiphenyl	13.030	172	3375	0.292	ng	-0.01
27) Fluoranthene-d10	19.188	212	5569	0.417	ng	0.00
31) Terphenyl-d14	19.782	244	4207	0.395	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.283	88	7472	3.070	ng	97
24) Pentachlorophenol	16.813	266	1017	0.486	ng	95
34) Bis(2-ethylhexyl)phtha...	21.259	149	3005	0.295	ng	99

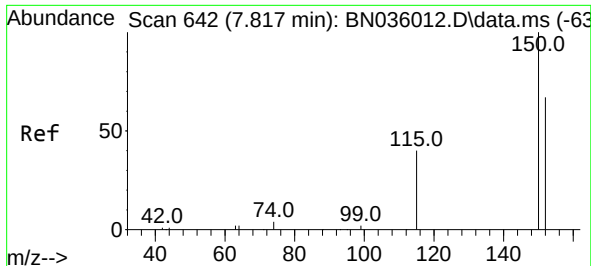
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN020525\
Data File : BN036323.D
Acq On : 06 Feb 2025 07:27
Operator : RC/JU
Sample : Q1283-05
Misc :
ALS Vial : 22 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

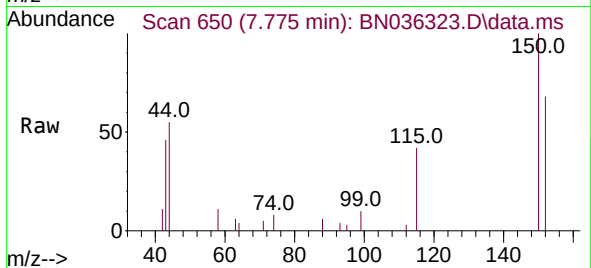
Quant Time: Feb 06 08:02:19 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN012225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Feb 06 01:04:09 2025
Response via : Initial Calibration





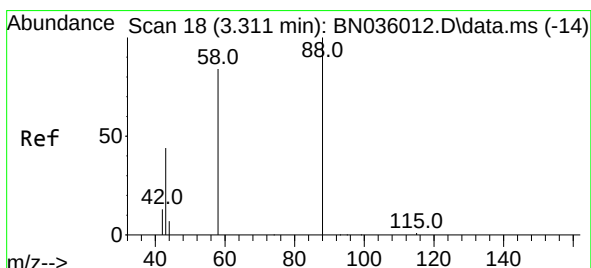
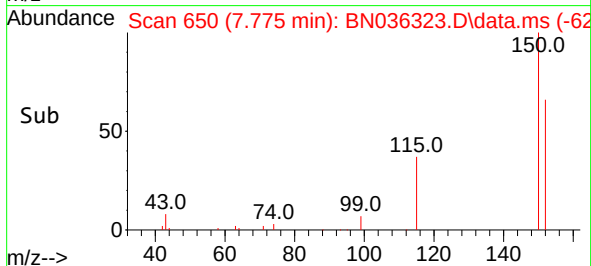
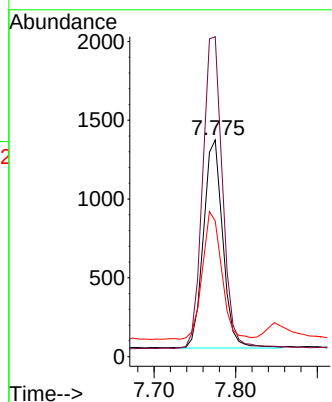
#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 7.775 min Scan# 61
 Delta R.T. 0.000 min
 Lab File: BN036323.D
 Acq: 06 Feb 2025 07:27

Instrument :
 BNA_N
 ClientSampleId :
 BP-VPB-192-GW-500-502



Tgt Ion: 152 Resp: 2177

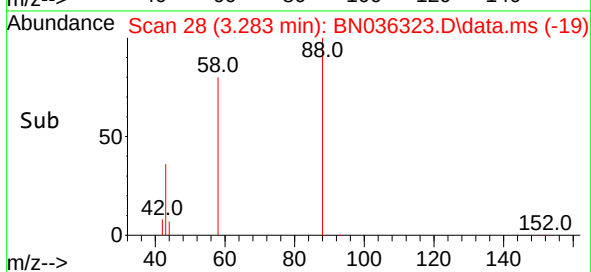
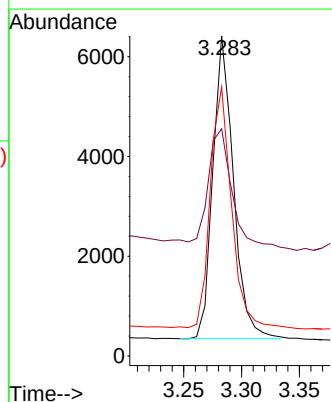
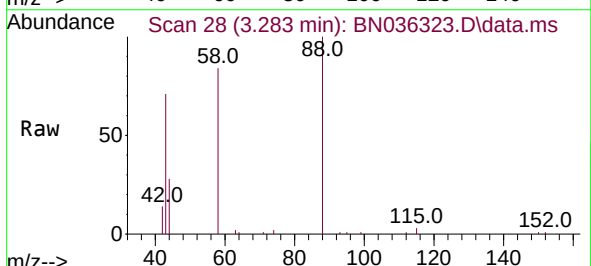
Ion	Ratio	Lower	Upper
152	100		
150	147.6	117.4	176.2
115	62.5	51.0	76.4

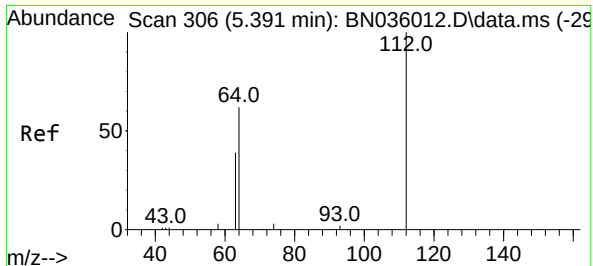


#2
 1,4-Dioxane
 Concen: 3.070 ng
 RT: 3.283 min Scan# 28
 Delta R.T. -0.007 min
 Lab File: BN036323.D
 Acq: 06 Feb 2025 07:27

Tgt Ion: 88 Resp: 7472

Ion	Ratio	Lower	Upper
88	100		
43	44.5	38.5	57.7
58	81.7	66.6	99.8

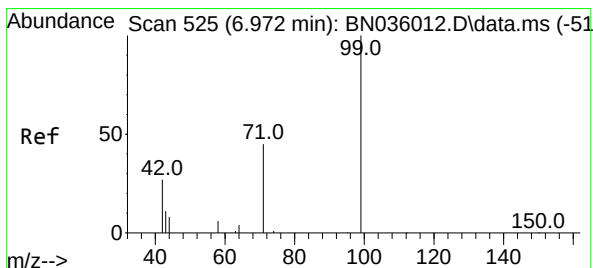
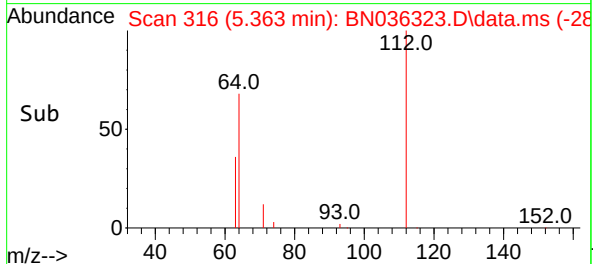
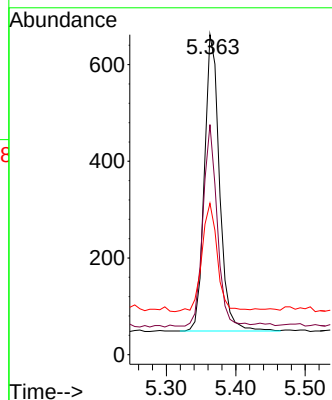
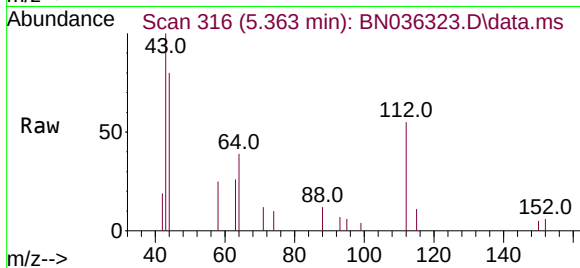




#4
2-Fluorophenol
Concen: 0.164 ng
RT: 5.363 min Scan# 316
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

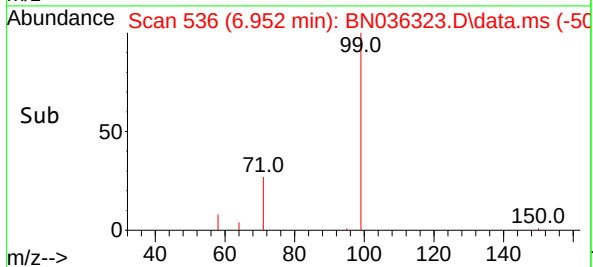
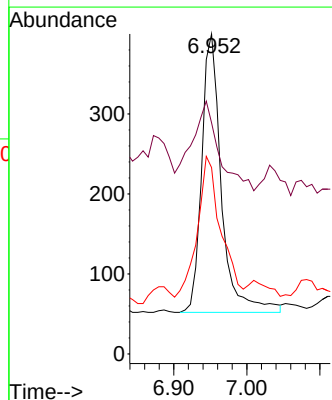
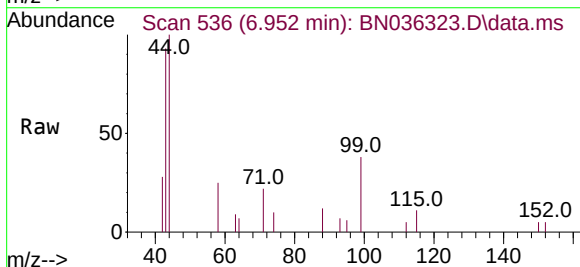
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

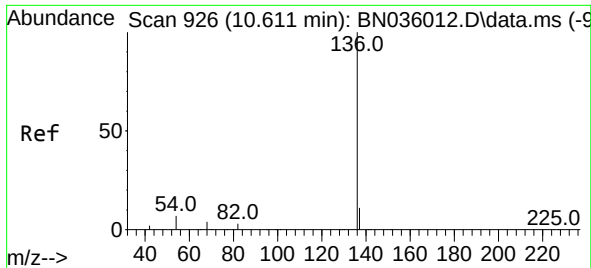
Tgt Ion:112 Resp: 927
Ion Ratio Lower Upper
112 100
64 64.1 50.0 75.0
63 37.5 30.7 46.1



#5
Phenol-d6
Concen: 0.098 ng
RT: 6.952 min Scan# 536
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion: 99 Resp: 651
Ion Ratio Lower Upper
99 100
42 44.7 26.8 40.2#
71 60.8 36.6 55.0#

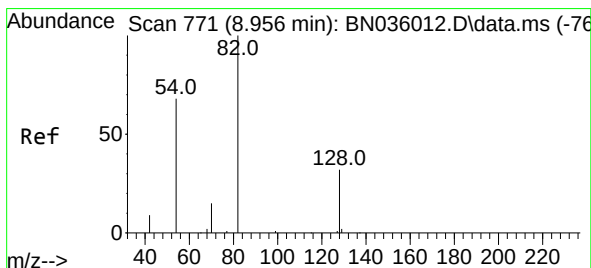
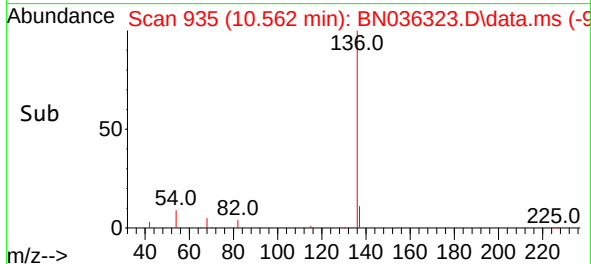
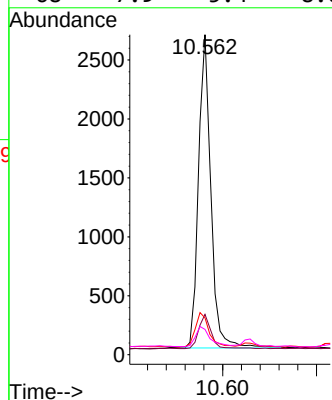
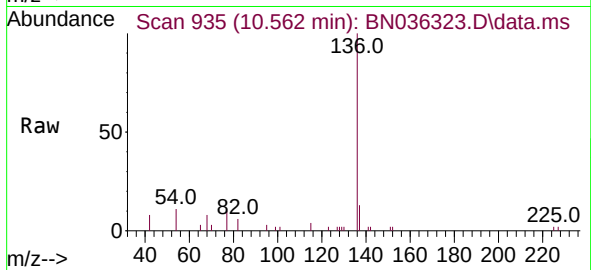




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

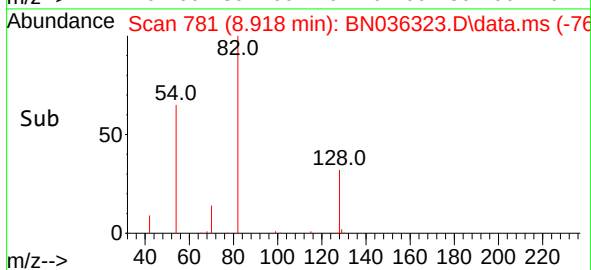
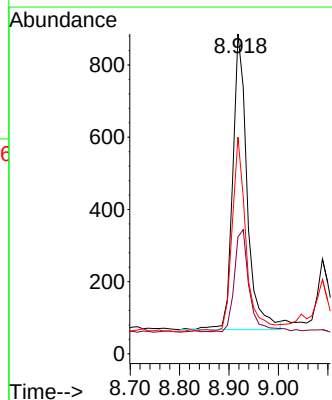
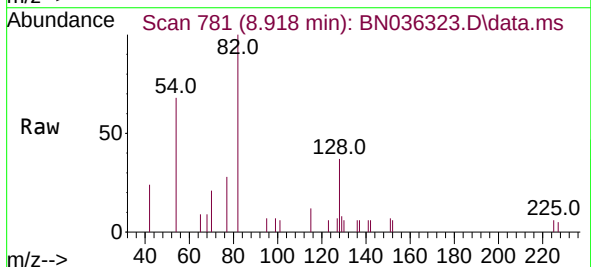
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

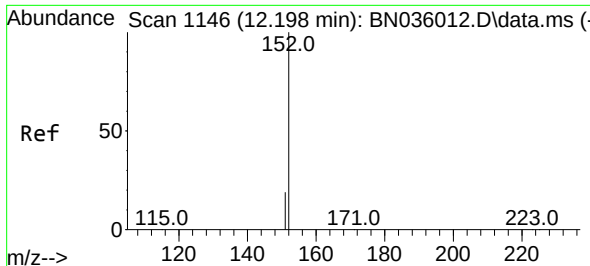
Tgt Ion:	136	Resp:	4873
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.4	15.6
54	11.5	7.7	11.5
68	7.9	5.4	8.0



#8
Nitrobenzene-d5
Concen: 0.362 ng
RT: 8.918 min Scan# 781
Delta R.T. -0.011 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion:	82	Resp:	1663
Ion	Ratio	Lower	Upper
82	100		
128	36.6	28.8	43.2
54	67.7	55.8	83.8

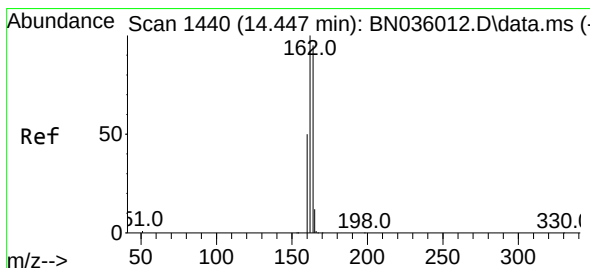
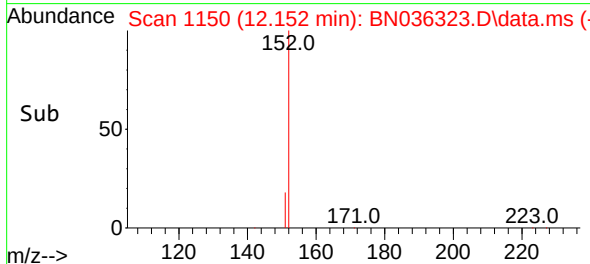
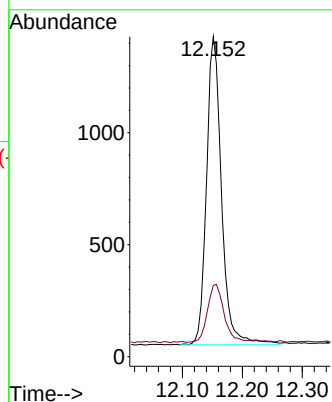
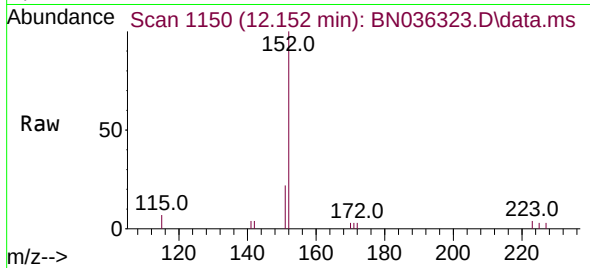




#11
2-Methylnaphthalene-d10
Concen: 0.362 ng
RT: 12.152 min Scan# 1146
Delta R.T. -0.005 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

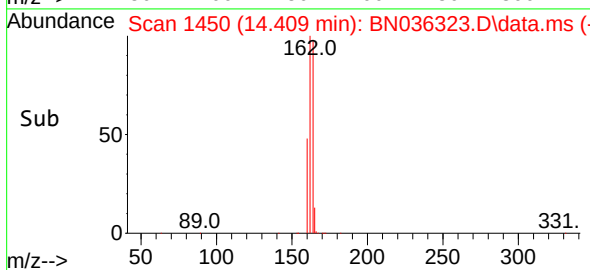
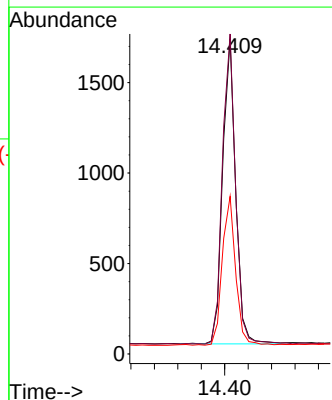
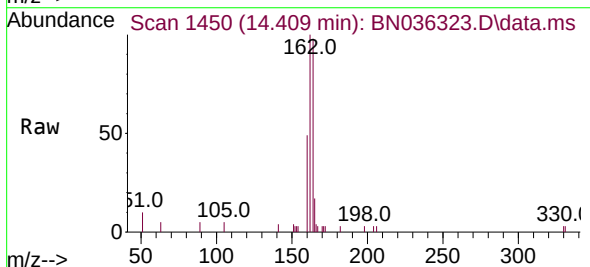
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

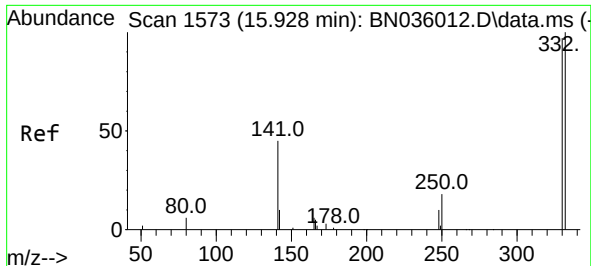
Tgt Ion:152 Resp: 2399
Ion Ratio Lower Upper
152 100
151 21.0 16.6 25.0



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.409 min Scan# 1450
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

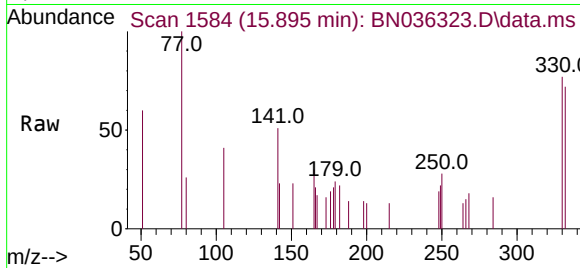
Tgt Ion:164 Resp: 2591
Ion Ratio Lower Upper
164 100
162 101.5 84.1 126.1
160 50.0 43.8 65.8



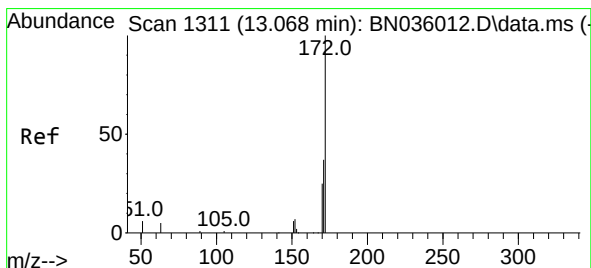
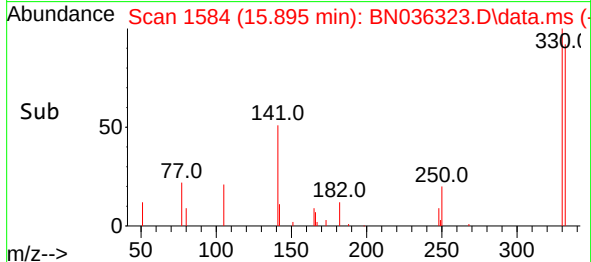
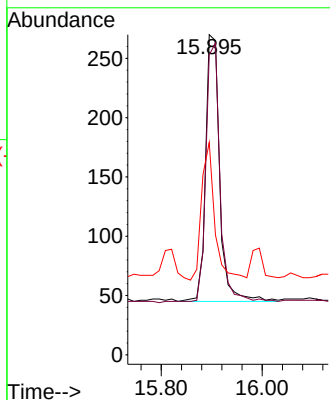


#14
2,4,6-Tribromophenol
Concen: 0.263 ng
RT: 15.895 min Scan# 1584
Delta R.T. -0.012 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

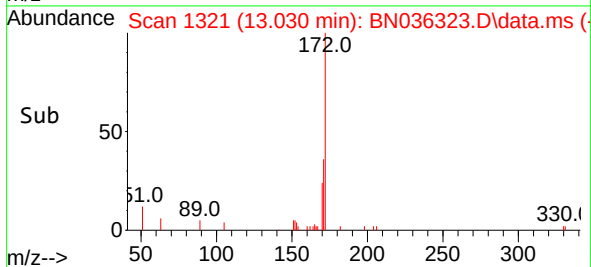
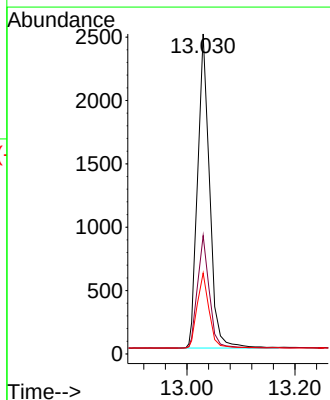
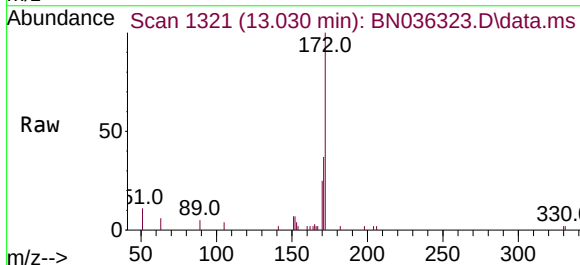


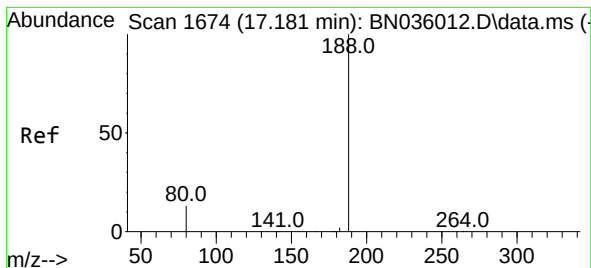
Tgt Ion:330 Resp: 437
Ion Ratio Lower Upper
330 100
332 95.7 81.0 121.4
141 47.8 36.7 55.1



#15
2-Fluorobiphenyl
Concen: 0.292 ng
RT: 13.030 min Scan# 1321
Delta R.T. -0.011 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion:172 Resp: 3375
Ion Ratio Lower Upper
172 100
171 37.0 30.9 46.3
170 25.3 21.2 31.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.149 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN036323.D

Acq: 06 Feb 2025 07:27

Instrument :

BNA_N

ClientSampleId :

BP-VPB-192-GW-500-502

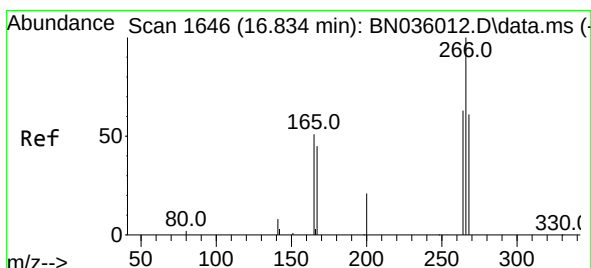
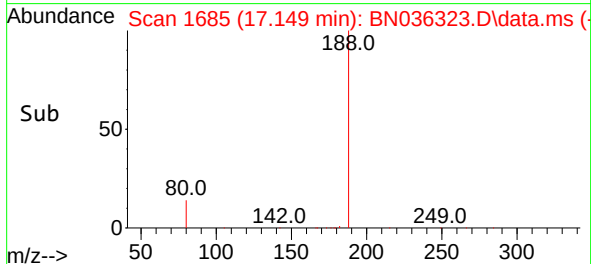
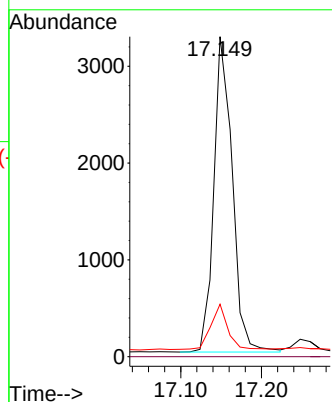
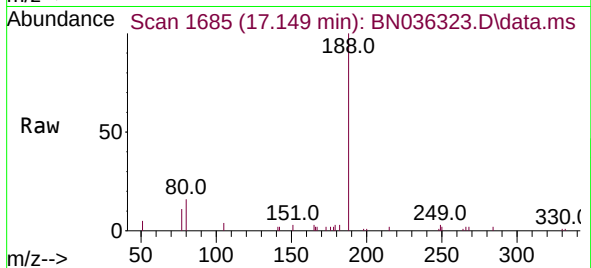
Tgt Ion:188 Resp: 5153

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 16.4 12.3 18.5



#24

Pentachlorophenol

Concen: 0.486 ng

RT: 16.813 min Scan# 1658

Delta R.T. 0.000 min

Lab File: BN036323.D

Acq: 06 Feb 2025 07:27

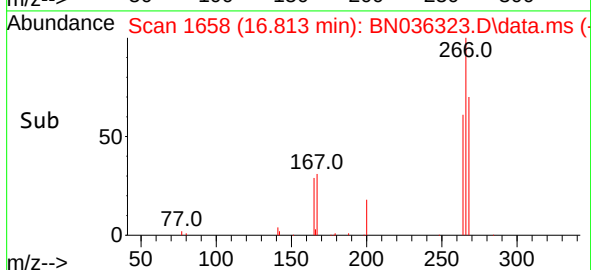
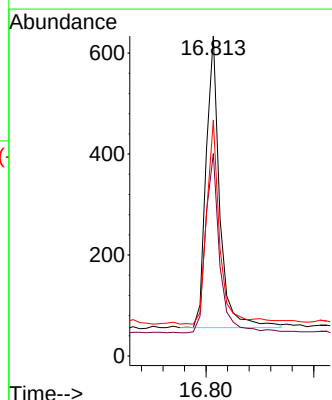
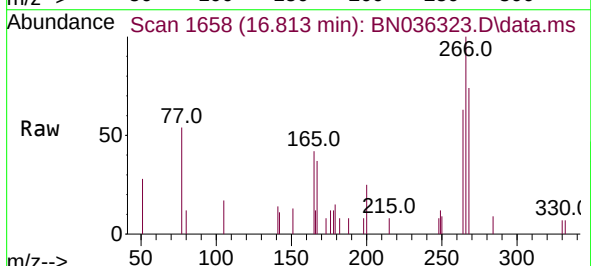
Tgt Ion:266 Resp: 1017

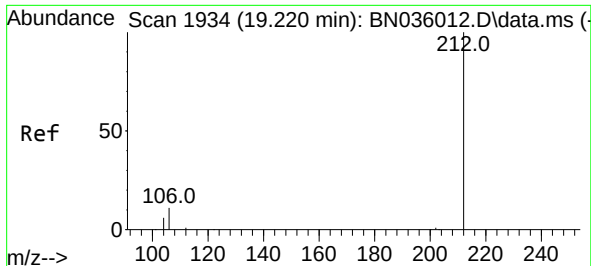
Ion Ratio Lower Upper

266 100

264 63.8 48.2 72.2

268 67.8 51.6 77.4

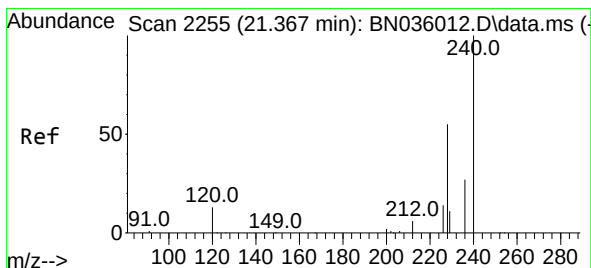
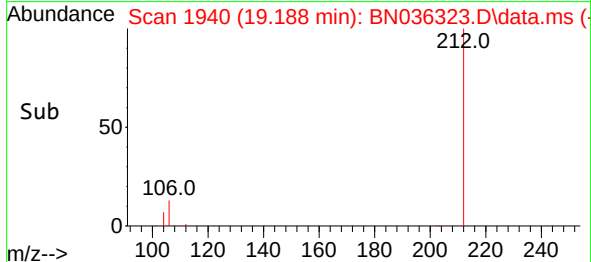
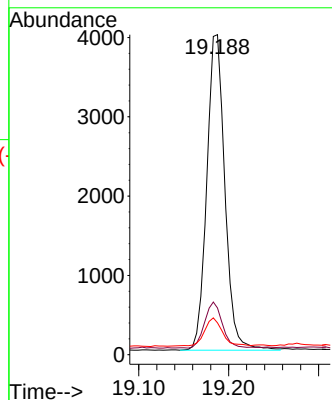
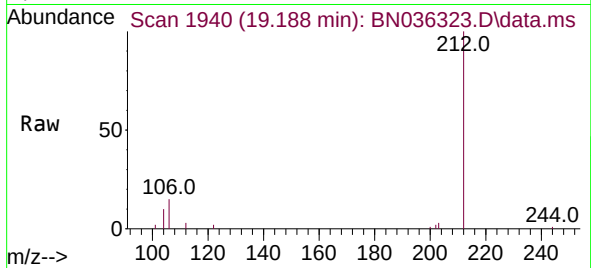




#27
Fluoranthene-d10
Concen: 0.417 ng
RT: 19.188 min Scan# 1940
Delta R.T. 0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

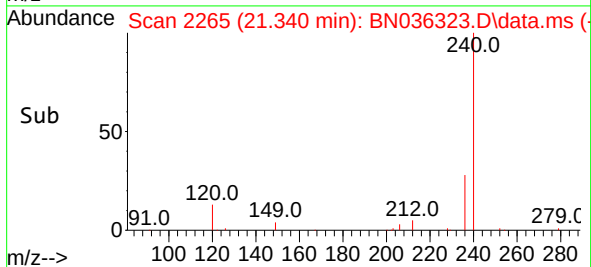
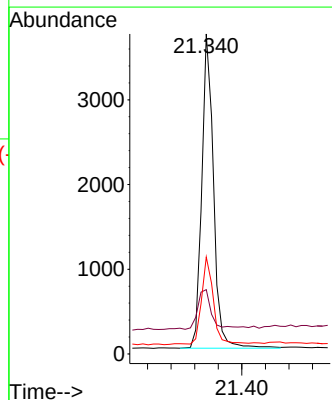
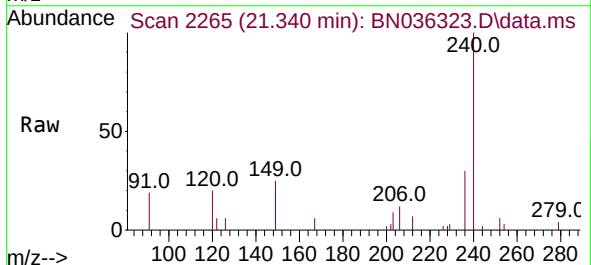
Instrument :
BNA_N
ClientSampleId :
BP-VPB-192-GW-500-502

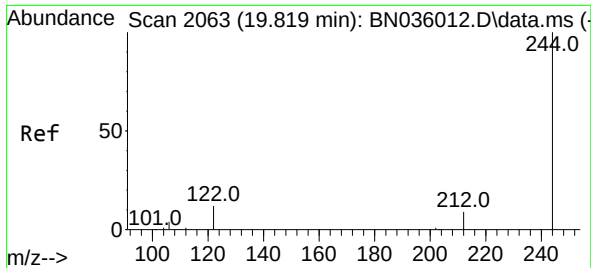
Tgt Ion:212 Resp: 5569
Ion Ratio Lower Upper
212 100
106 14.1 9.7 14.5
104 9.0 6.0 9.0



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.340 min Scan# 2265
Delta R.T. -0.000 min
Lab File: BN036323.D
Acq: 06 Feb 2025 07:27

Tgt Ion:240 Resp: 5130
Ion Ratio Lower Upper
240 100
120 20.1 13.9 20.9
236 30.3 23.7 35.5

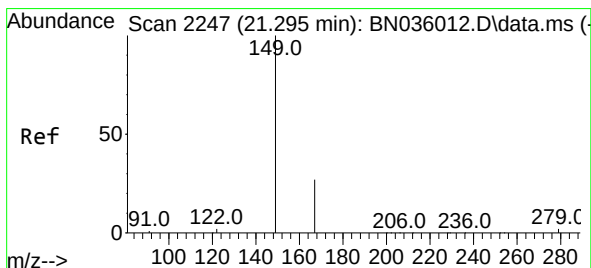
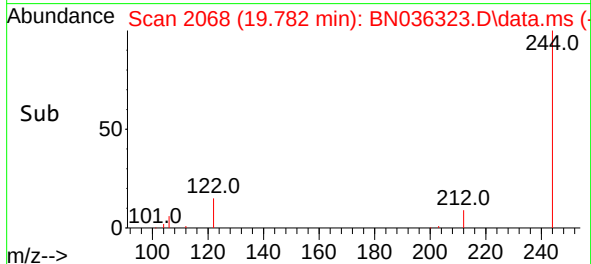
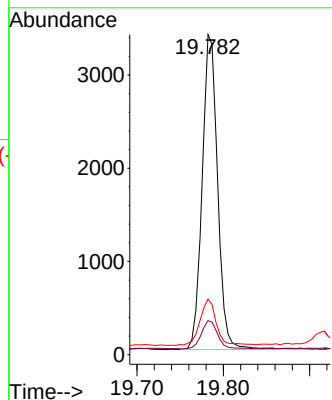
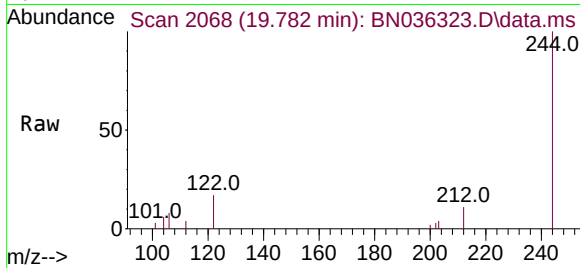




#31
 Terphenyl-d14
 Concen: 0.395 ng
 RT: 19.782 min Scan# 2063
 Delta R.T. -0.009 min
 Lab File: BN036323.D
 Acq: 06 Feb 2025 07:27

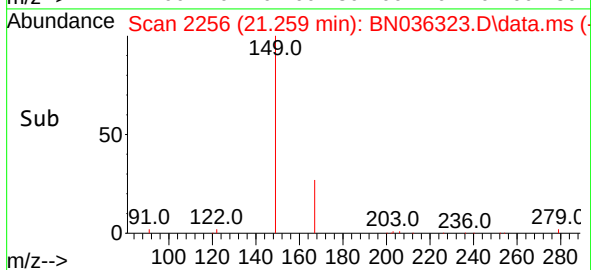
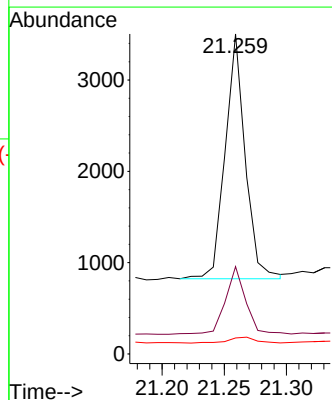
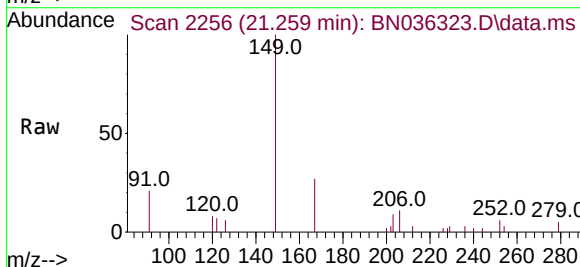
Instrument :
 BNA_N
 ClientSampleId :
 BP-VPB-192-GW-500-502

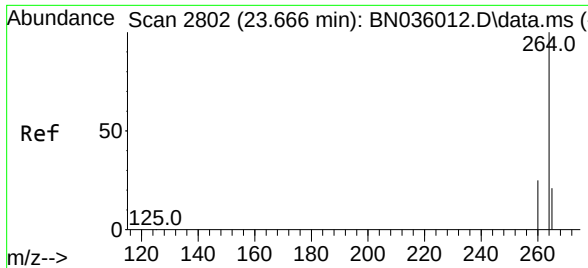
Tgt Ion:244 Resp: 4207
 Ion Ratio Lower Upper
 244 100
 212 10.7 9.1 13.7
 122 17.4 11.3 16.9#



#34
 Bis(2-ethylhexyl)phthalate
 Concen: 0.295 ng
 RT: 21.259 min Scan# 2256
 Delta R.T. 0.000 min
 Lab File: BN036323.D
 Acq: 06 Feb 2025 07:27

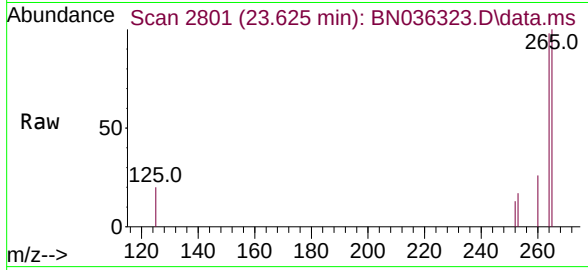
Tgt Ion:149 Resp: 3005
 Ion Ratio Lower Upper
 149 100
 167 28.1 21.9 32.9
 279 3.2 3.0 4.6





#35
 Perylene-d12
 Concen: 0.400 ng
 RT: 23.625 min Scan# 21
 Delta R.T. -0.003 min
 Lab File: BN036323.D
 Acq: 06 Feb 2025 07:27

Instrument :
 BNA_N
 ClientSampleId :
 BP-VPB-192-GW-500-502



Tgt Ion:264 Resp: 5436

Ion	Ratio	Lower	Upper
264	100		
260	26.5	21.8	32.6
265	101.6	56.6	84.8#

