

DATA PACKAGE
SEMI-VOLATILE ORGANICS

PROJECT NAME : NWIRP BETHPAGE 112G08005-WE13

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

ORDER ID : Q2488
ATTENTION : Ernie Wu



Laboratory Certification ID # 20012



1) SEMI-VOLATILE DATA	2
2) Signature Page	4
3) Case Narrative	5
4) Qualifier Page	7
5) Conformance/Non Conformance	8
6) QA Checklist	10
7) Chronicle	11
8) Hit Summary	12
9) QC Data Summary For SVOC-SIMGroup1	13
9.1) Deuterated Monitoring Compound Summary	14
9.2) LCS/LCSD Summary	15
9.3) Method Blank Summary	17
9.4) GS/MS Tune Summary	18
9.5) Internal Standard Area and RT Summary	20
10) Sample Data	24
10.1) RW8-SP100-20250701	25
10.2) RW8-SP303-20250701	39
11) Calibration Data Summary	50
11.1) Initial Calibration Data	51
11.1.1) BN071125	51
11.2) Continued Calibration Data	235
11.2.1) BN037481.D	235
11.2.2) BN037483.D	261
11.2.3) BN037496.D	287
12) QC Sample Data	313
12.1) Tune Raw Data	314
12.2) Method Blank Data	322
12.3) LCS Data	332
12.4) LCSD Data	356
13) Manual Integration	380
14) Analytical Runlogs	382
15) Extraction Logs	386
15.1) PB168720.pdf	386
15.2) PB168720IC.pdf	388
16) Standard Prep Logs	389

Table Of Contents for Q2488

17) Shipping Document	472
17.1) Chain Of Custody	473
17.2) Lab Certificate	474
18) Not Reviewed Data	475

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

Cover Page

Order ID : Q2488

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number

Q2488-01
Q2488-02

Client Sample Number

RW8-SP100-20250701
RW8-SP303-20250701

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

Signature :

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:13 am, Jul 16, 2025

Date: 7/16/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



CASE NARRATIVE

Tetra Tech NUS, Inc.

Project Name: NWIRP Bethpage 112G08005-WE13

Project Manager : Ernie Wu

Order ID # Q2488

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

2 Water samples were received on 07/02/2025.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: Metals Group4, SVOC-SIMGroup1, TDS and TSS. 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.

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 met the requirements .

The Tuning criteria met requirements.

E. Additional Comments:

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

The Sample #RW8-SP100-20250701 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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



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

The not QT review data is reported in the Miscellaneous.
Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

F. Manual Integration Comments:

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

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

APPROVED

By Nimisha Pandya, QA/QC Supervisor at 11:13 am, Jul 16, 2025

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

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

ORDER ID: Q2488

MATRIX: Water

METHOD: 8270-Modified/3510

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements. The Initial Calibration met the requirements. The Continuous Calibration met the requirements .			✓
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			✓
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:			✓

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

	NA	NO	YES
11. Analysis Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

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

The Sample #RW8-SP100-20250701 have the concentration of target compound below Method detection limits, therefore it is not reported as Hit in Form1.

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

The not QT review data is reported in the Miscellaneous.

Please use %D calculated based on Avg RF and CCRF for all compounds using Average Response Factor when the %RSD value for a compound is <20% for the Initial Calibration curve and use %D calculated based on Amount added and Calculated amount for all compounds using Linear Regression when the %RSD value for a compound is > 20% for the Initial Calibration curve for SW-846 analysis.

QA REVIEW

REVIEWED

By *Sohil Jodhani, QA/QC Director* at 11:10 am, Jul 16, 2025

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: Q2488

Completed

For thorough review, the report must have the following:

GENERAL:

Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)

✓

Check chain-of-custody for proper relinquish/return of samples

✓

Is the chain of custody signed and complete

✓

Check internal chain-of-custody for proper relinquish/return of samples /sample extracts

✓

Collect information for each project id from server. Were all requirements followed

✓

COVER PAGE:

Do numbers of samples correspond to the number of samples in the Chain of Custody on login page

✓

Do lab numbers and client Ids on cover page agree with the Chain of Custody

✓

CHAIN OF CUSTODY:

Do requested analyses on Chain of Custody agree with form I results

✓

Do requested analyses on Chain of Custody agree with the log-in page

✓

Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody

✓

Were the samples received within hold time

✓

Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

QA Review Signature: SOHIL JODHANI

Date: 07/16/2025

LAB CHRONICLE

OrderID:	Q2488	OrderDate:	7/2/2025 11:43:00 AM
Client:	Tetra Tech NUS, Inc.	Project:	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	Location:	A42

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2488-01	RW8-SP100-20250701	Water			07/01/25			07/02/25
			SVOC-SIMGroup1	8270-Modified		07/03/25	07/14/25	
Q2488-02	RW8-SP303-20250701	Water			07/01/25			07/02/25
			SVOC-SIMGroup1	8270-Modified		07/03/25	07/14/25	



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

Hit Summary Sheet SW-846

SDG No.: Q2488

Client: Tetra Tech NUS, Inc.

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



QC SUMMARY

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Surrogate Summary

SW-846

SDG No.: Q2488

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168720BL	PB168720BL	2-Methylnaphthalene-d10	0.4	0.35	86		30	150
		Fluoranthene-d10	0.4	0.34	84		30	150
		Nitrobenzene-d5	0.4	0.37	92		55	111
		2-Fluorobiphenyl	0.4	0.41	102		53	106
		Terphenyl-d14	0.4	0.40	99		58	132
PB168720BS	PB168720BS	2-Methylnaphthalene-d10	0.4	0.35	86		30	150
		Fluoranthene-d10	0.4	0.31	77		30	150
		Nitrobenzene-d5	0.4	0.35	87		55	111
		2-Fluorobiphenyl	0.4	0.36	90		53	106
		Terphenyl-d14	0.4	0.36	90		58	132
PB168720BSD	PB168720BSD	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.32	80		30	150
		Nitrobenzene-d5	0.4	0.37	91		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
Q2488-01	RW8-SP100-20250701	2-Methylnaphthalene-d10	0.4	0.32	80		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.53	132		58	132
Q2488-02	RW8-SP303-20250701	2-Methylnaphthalene-d10	0.4	0.30	75		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.35	86		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.49	123		58	132

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2488

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037487.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		
								Qual	Low	High	RPD
PB168720BS	1,4-Dioxane	0.4	0.33	ug/L	83				70	130	

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.:	<u>Q2488</u>	Analytical Method:	<u>8270-Modified</u>
Client:	<u>Tetra Tech NUS, Inc.</u>	DataFile:	<u>BN037488.D</u>

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB168720BSD	1,4-Dioxane	0.4	0.30	ug/L	75	10			70	130		20

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB168720BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2488

Lab File ID: BN037475.D

Lab Sample ID: PB168720BL

Instrument ID: BNA_N

Date Extracted: 07/03/2025

Matrix: (soil/water) Water

Date Analyzed: 07/11/2025

Level: (low/med) LOW

Time Analyzed: 16:02

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168720BS	PB168720BS	BN037487.D	07/14/2025
RW8-SP100-20250701	Q2488-01	BN037485.D	07/14/2025
RW8-SP303-20250701	Q2488-02	BN037486.D	07/14/2025
PB168720BSD	PB168720BSD	BN037488.D	07/14/2025

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: Alliance
Lab Code: ACE
Lab File ID: BN037465.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2488
DFTPP Injection Date: 07/11/2025
DFTPP Injection Time: 08:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.2 (0.6) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.1 (0.3) 1
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	78.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	15 (19.4) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN037467.D	07/11/2025	11:10
SSTDICC0.2	SSTDICC0.2	BN037468.D	07/11/2025	11:46
SSTDICCC0.4	SSTDICCC0.4	BN037469.D	07/11/2025	12:22
SSTDICC0.8	SSTDICC0.8	BN037470.D	07/11/2025	12:59
SSTDICC1.6	SSTDICC1.6	BN037471.D	07/11/2025	13:36
SSTDICC3.2	SSTDICC3.2	BN037472.D	07/11/2025	14:12
SSTDICC5.0	SSTDICC5.0	BN037473.D	07/11/2025	14:49
PB168720BL	PB168720BL	BN037475.D	07/11/2025	16:02
SSTDCCC0.4EC	SSTDCCC0.4	BN037481.D	07/11/2025	19:43



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: Alliance
Lab Code: ACE
Lab File ID: BN037482.D
Instrument ID: BNA_N

Contract: TETR06
SDG NO.: Q2488
DFTPP Injection Date: 07/14/2025
DFTPP Injection Time: 08:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.3 (0.7) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7
365	Greater than 1% of mass 198	4
441	Present, but less than mass 443	64.7
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	14.9 (20) 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	BN037483.D	07/14/2025	09:10
RW8-SP100-20250701	Q2488-01	BN037485.D	07/14/2025	10:26
RW8-SP303-20250701	Q2488-02	BN037486.D	07/14/2025	11:02
PB168720BS	PB168720BS	BN037487.D	07/14/2025	11:39
PB168720BSD	PB168720BSD	BN037488.D	07/14/2025	12:15
SSTDCCC0.4EC	SSTDCCC0.4	BN037496.D	07/14/2025	18:00

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2488

Client ID : SSTDICCC0.4

Date Analyzed: 07/11/2025

Lab File ID: BN037469.D

Time Analyzed: 12:22

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	1754	7.732	4116	10.51	1977	14.37
UPPER LIMIT	3508	8.232	8232	11.009	3954	14.866
LOWER LIMIT	877	7.232	2058	10.009	988.5	13.866
EPA SAMPLE NO.						
01 PB168720BL	1870	7.73	4442	10.51	1998	14.37

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2488

Client ID: SSTDICCC0.4

Date Analyzed: 07/11/2025

Lab File ID: BN037469.D

Time Analyzed: 12:22

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	3577	17.099	2684	21.286	2478	23.528
UPPER LIMIT	7154	17.599	5368	21.786	4956	24.028
LOWER LIMIT	1788.5	16.599	1342	20.786	1239	23.028
EPA SAMPLE NO.						
01 PB168720BL	3362	17.10	2365	21.29	2144	23.53

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: Alliance

Lab Code: ACE

SDG NO.: Q2488

Client ID : SSTDCCC0.4

Date Analyzed: 07/14/2025

Lab File ID: BN037483.D

Time Analyzed: 09:10

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	1935	7.732	4597	10.51	2166	14.36
UPPER LIMIT	3870	8.232	9194	11.009	4332	14.855
LOWER LIMIT	967.5	7.232	2298.5	10.009	1083	13.855
EPA SAMPLE NO.						
01 PB168720BS	1966	7.73	4534	10.51	2005	14.36
02 PB168720BSD	1906	7.73	4315	10.51	1930	14.36
03 RW8-SP100-20250701	2365	7.73	5646	10.51	2637	14.36
04 RW8-SP303-20250701	1815	7.73	4225	10.51	1935	14.36

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: Alliance

Lab Code: ACE

SDG NO.: Q2488

Client ID: SSTDCCC0.4

Date Analyzed: 07/14/2025

Lab File ID: BN037483.D

Time Analyzed: 09:10

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	3930	17.099	2837	21.286	2676	23.522
UPPER LIMIT	7860	17.599	5674	21.786	5352	24.022
LOWER LIMIT	1965	16.599	1418.5	20.786	1338	23.022
EPA SAMPLE NO.						
01 PB168720BS	3383	17.10	2498	21.29	2162	23.53
02 PB168720BSD	3183	17.10	2258	21.29	1944	23.53
03 RW8-SP100-20250701	4838	17.10	3617	21.29	3162	23.52
04 RW8-SP303-20250701	3578	17.10	2748	21.29	2331	23.53

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.



SAMPLE DATA

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/01/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/02/25
Client Sample ID:	RW8-SP100-20250701	SDG No.:	Q2488
Lab Sample ID:	Q2488-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037485.D	1	07/03/25 08:58	07/14/25 10:26	PB168720

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	0.32		30 - 150		80%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.53		58 - 132		132%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2370	7.732				
1146-65-2	Naphthalene-d8	5650	10.509				
15067-26-2	Acenaphthene-d10	2640	14.355				
1517-22-2	Phenanthrene-d10	4840	17.099				
1719-03-5	Chrysene-d12	3620	21.286				
1520-96-3	Perylene-d12	3160	23.522				

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\BN071425\
Data File : BN037485.D
Acq On : 14 Jul 2025 10:26
Operator : RC/JU
Sample : Q2488-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

Quant Time: Jul 14 10:56:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

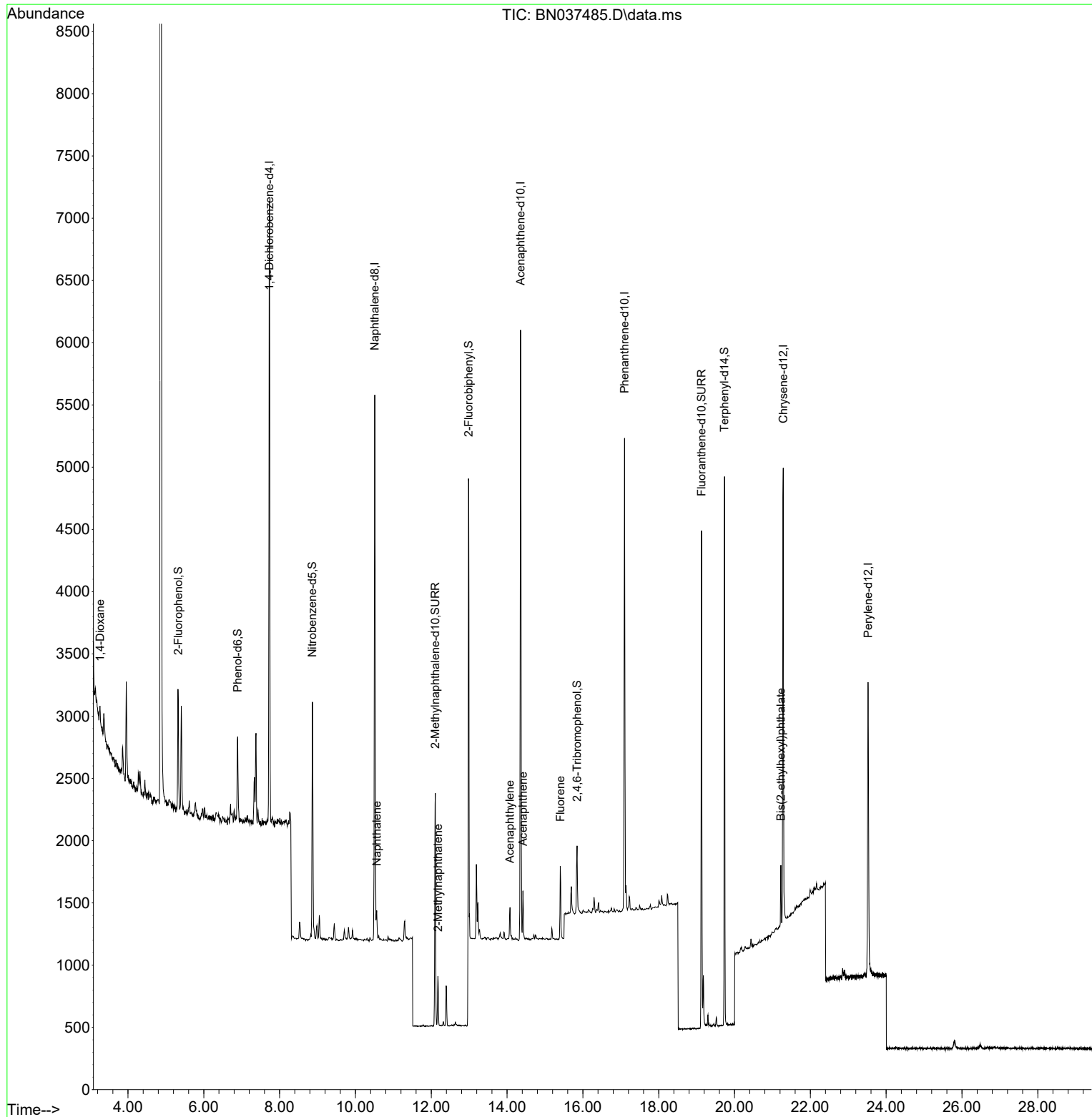
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	2365	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5646	0.400	ng	# 0.00
13) Acenaphthene-d10	14.355	164	2637	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	4838	0.400	ng	# 0.00
29) Chrysene-d12	21.286	240	3617	0.400	ng	# 0.00
35) Perylene-d12	23.522	264	3162	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.327	112	798	0.145	ng	0.00
5) Phenol-d6	6.894	99	600	0.087	ng	0.00
8) Nitrobenzene-d5	8.864	82	1410	0.344	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2457	0.320	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	310	0.347	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	5122	0.340	ng	0.00
27) Fluoranthene-d10	19.132	212	4551	0.373	ng	0.00
31) Terphenyl-d14	19.736	244	3986	0.528	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.261	88	82	0.037	ng	# 1
9) Naphthalene	10.562	128	308	0.020	ng	# 61
12) 2-Methylnaphthalene	12.177	142	276	0.029	ng	# 90
16) Acenaphthylene	14.077	152	262	0.022	ng	95
17) Acenaphthene	14.420	154	173	0.021	ng	95
18) Fluorene	15.403	166	264	0.026	ng	98
34) Bis(2-ethylhexyl)phtha...	21.223	149	440	0.106	ng	98

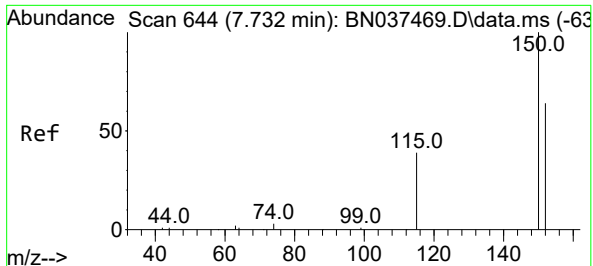
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037485.D
Acq On : 14 Jul 2025 10:26
Operator : RC/JU
Sample : Q2488-01
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

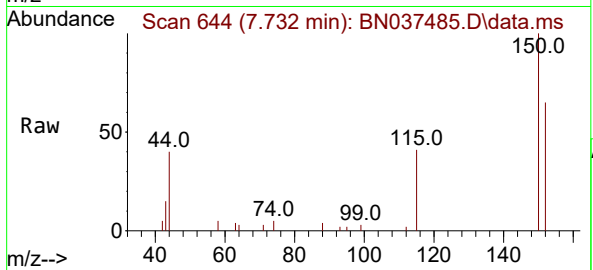
Quant Time: Jul 14 10:56:41 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration



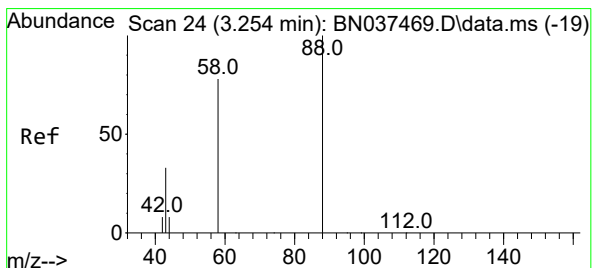
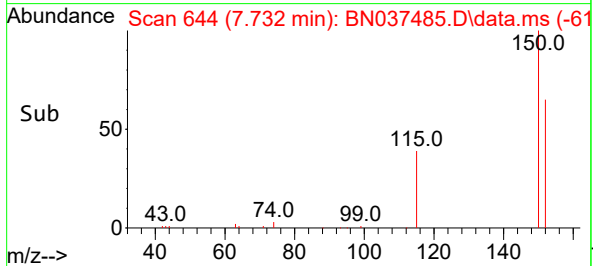
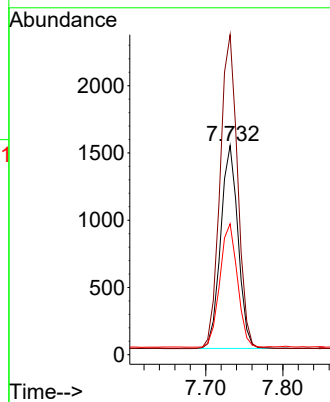


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

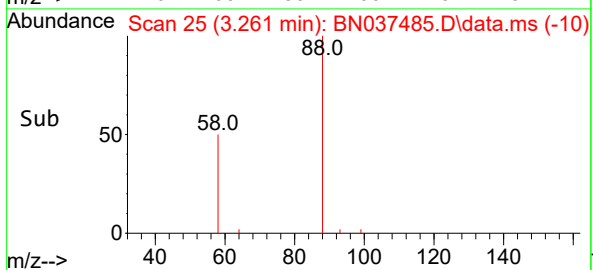
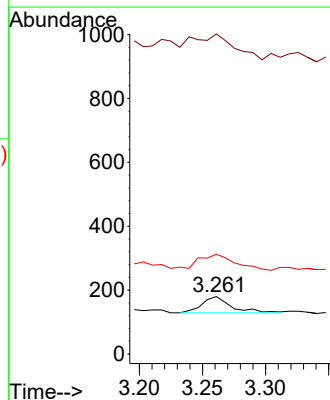
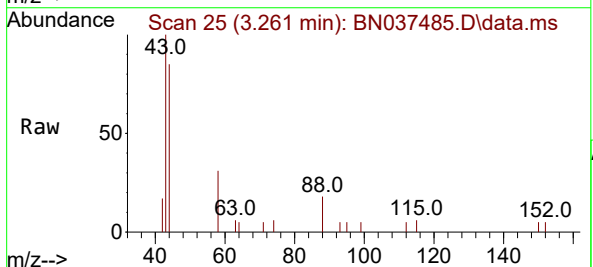


Tgt Ion:152 Resp: 2365
Ion Ratio Lower Upper
152 100
150 153.0 122.5 183.7
115 62.6 49.9 74.9

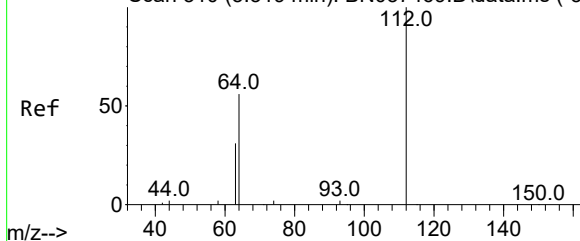


#2
1,4-Dioxane
Concen: 0.037 ng
RT: 3.261 min Scan# 25
Delta R.T. 0.007 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion: 88 Resp: 82
Ion Ratio Lower Upper
88 100
43 223.2 30.7 46.1#
58 125.6 65.0 97.4#



Abundance Scan 310 (5.319 min): BN037469.D\data.ms (-30



#4

2-Fluorophenol

Concen: 0.145 ng

RT: 5.327 min Scan# 310

Delta R.T. 0.007 min

Lab File: BN037485.D

Acq: 14 Jul 2025 10:26

Instrument :

BNA_N

ClientSampleId :

RW8-SP100-20250701

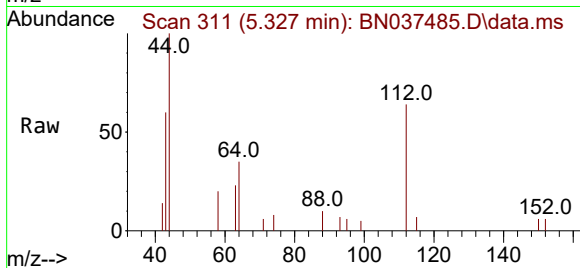
Tgt Ion:112 Resp: 798

Ion Ratio Lower Upper

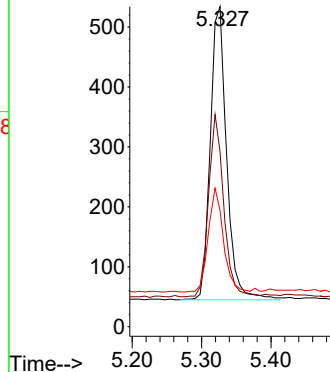
112 100

64 57.8 45.4 68.0

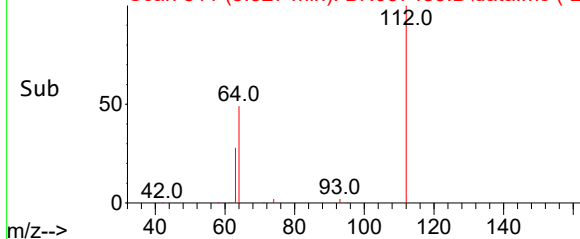
63 32.7 24.7 37.1



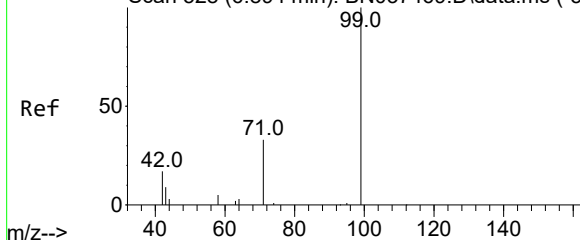
Abundance



Abundance Scan 311 (5.327 min): BN037485.D\data.ms (-28



Abundance Scan 528 (6.894 min): BN037469.D\data.ms (-52



#5

Phenol-d6

Concen: 0.087 ng

RT: 6.894 min Scan# 528

Delta R.T. -0.000 min

Lab File: BN037485.D

Acq: 14 Jul 2025 10:26

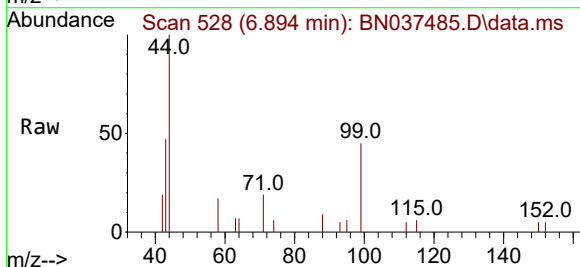
Tgt Ion: 99 Resp: 600

Ion Ratio Lower Upper

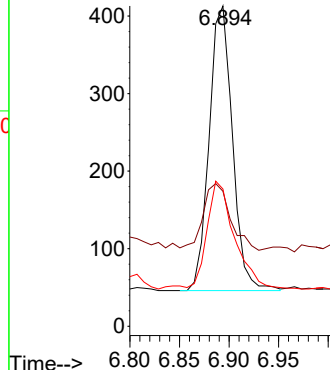
99 100

42 27.2 19.5 29.3

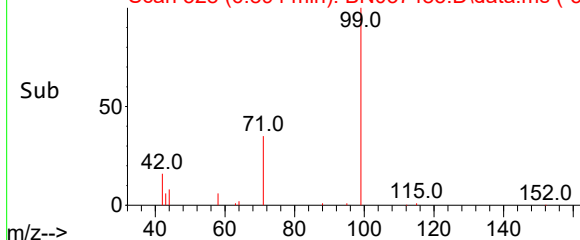
71 45.7 29.4 44.2#

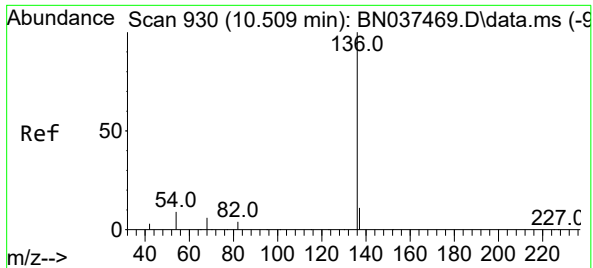


Abundance



Abundance Scan 528 (6.894 min): BN037485.D\data.ms (-50

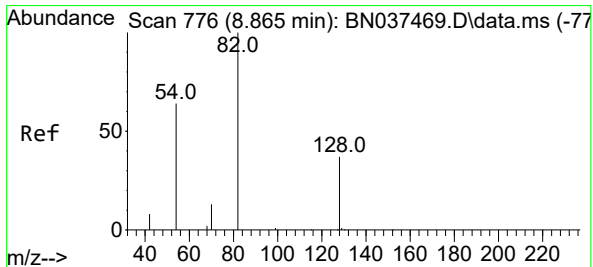
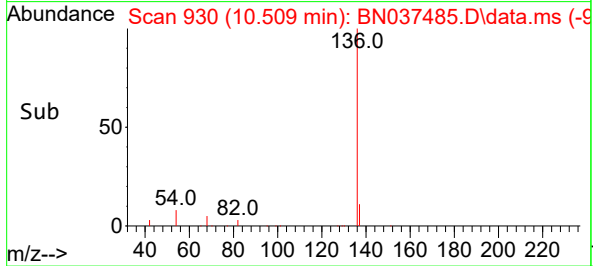
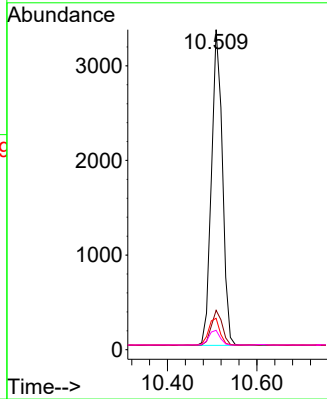
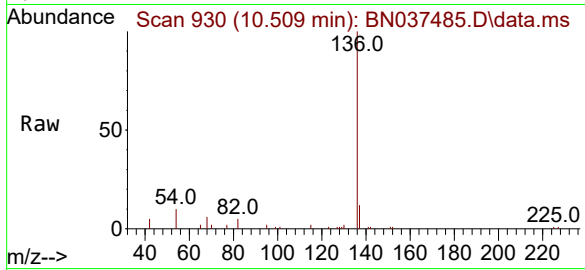




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

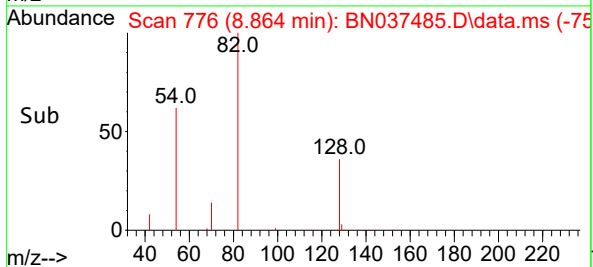
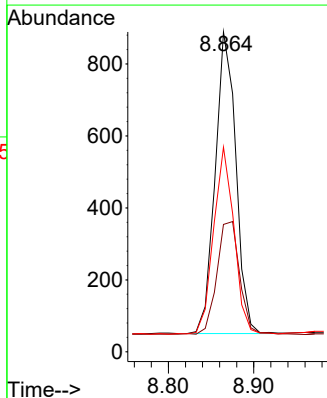
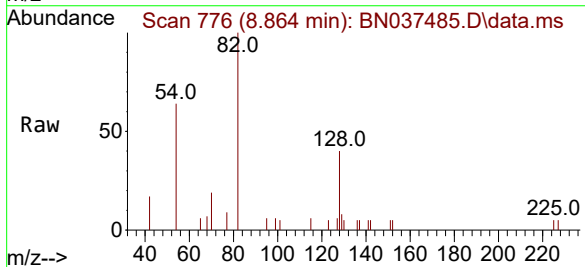
Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

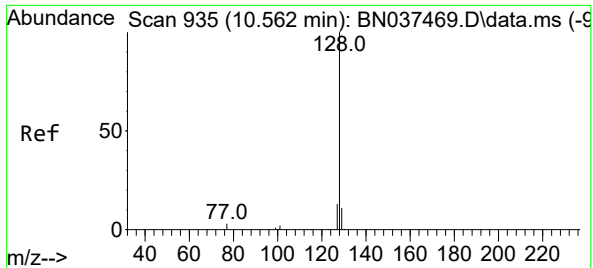
Tgt Ion:	136	Resp:	5646
Ion	Ratio	Lower	Upper
136	100		
137	12.3	10.0	15.0
54	9.8	9.0	13.6
68	6.1	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.344 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion:	82	Resp:	1410
Ion	Ratio	Lower	Upper
82	100		
128	39.8	33.1	49.7
54	64.0	53.0	79.4

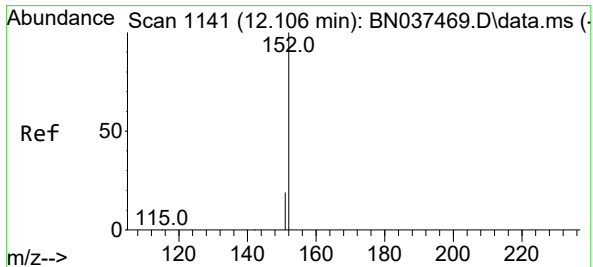
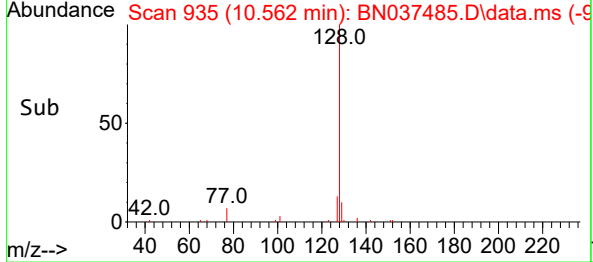
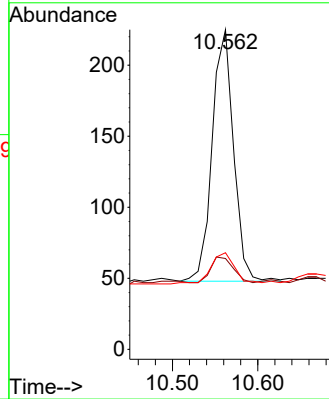
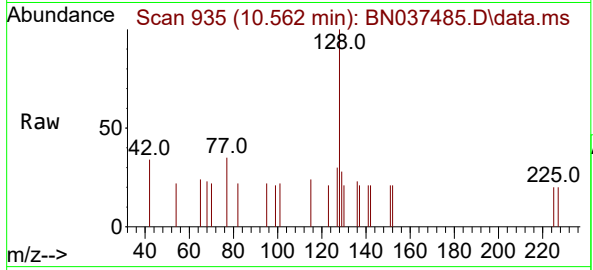




#9
Naphthalene
Concen: 0.020 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

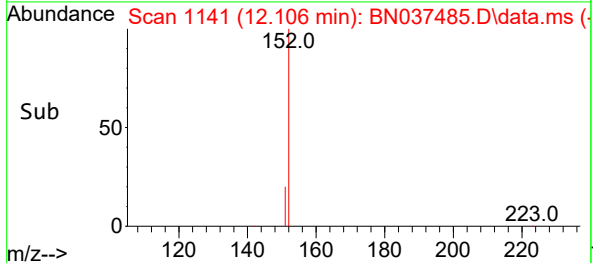
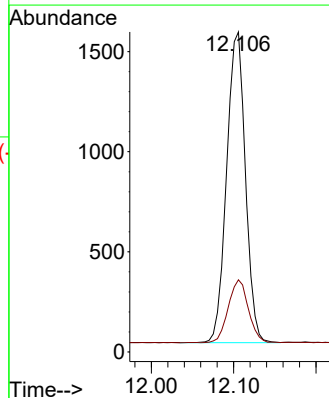
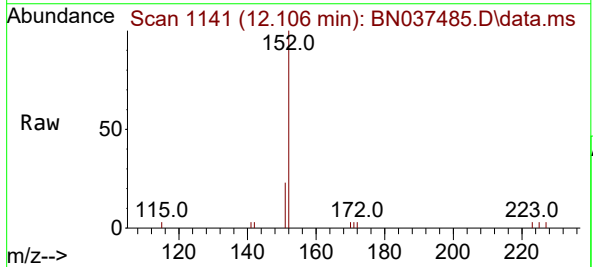
Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

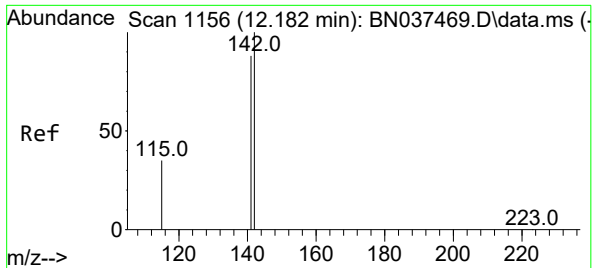
Tgt Ion	Ratio	Lower	Upper
128	100		
129	28.4	10.2	15.2#
127	30.2	11.8	17.6#



#11
2-Methylnaphthalene-d10
Concen: 0.320 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion	Ratio	Lower	Upper
152	100		
151	21.7	17.0	25.6





#12

2-Methylnaphthalene

Concen: 0.029 ng

RT: 12.177 min Scan# 1155

Delta R.T. -0.005 min

Lab File: BN037485.D

Acq: 14 Jul 2025 10:26

Instrument :

BNA_N

ClientSampleId :

RW8-SP100-20250701

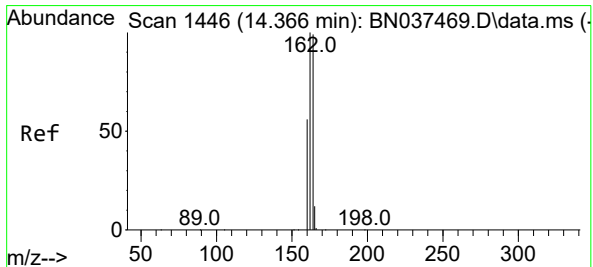
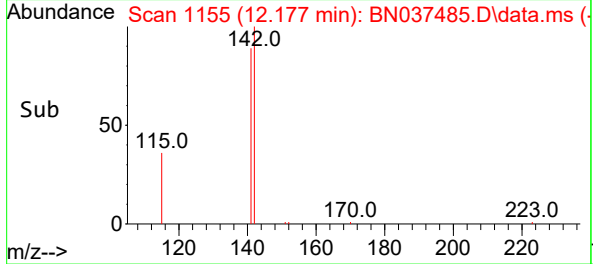
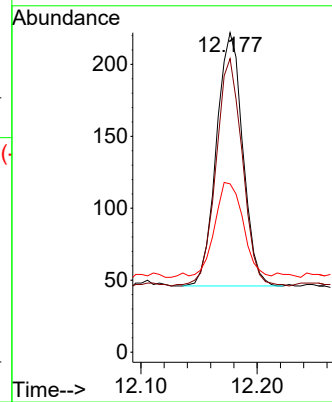
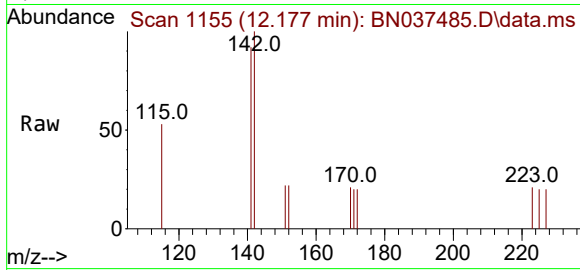
Tgt Ion:142 Resp: 276

Ion Ratio Lower Upper

142 100

141 91.9 70.6 105.8

115 52.7 30.0 45.0#



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.011 min

Lab File: BN037485.D

Acq: 14 Jul 2025 10:26

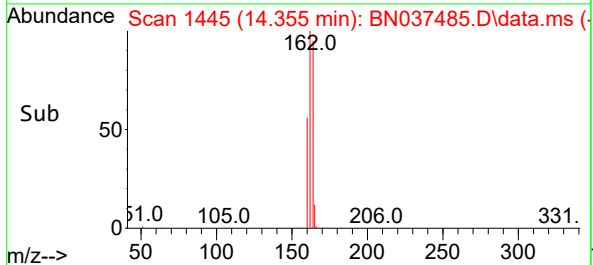
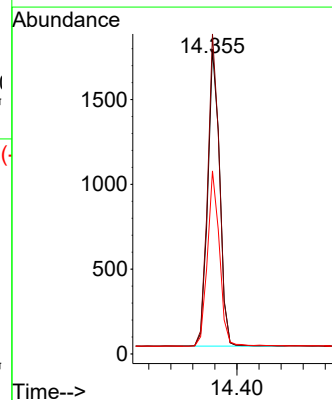
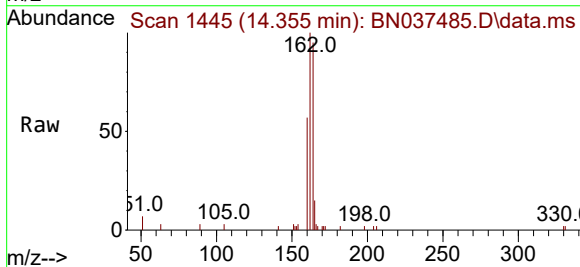
Tgt Ion:164 Resp: 2637

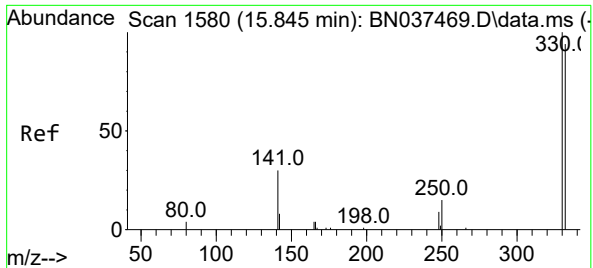
Ion Ratio Lower Upper

164 100

162 105.1 81.1 121.7

160 60.1 46.5 69.7

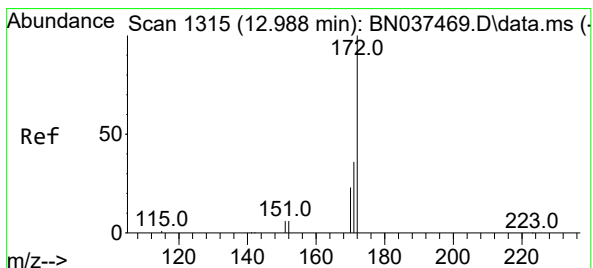
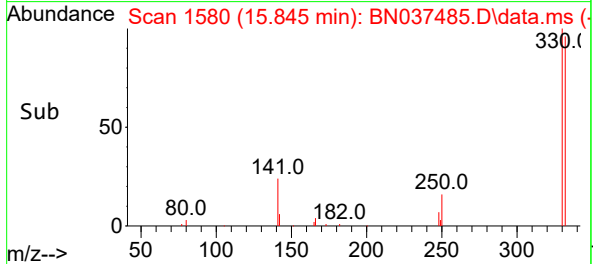
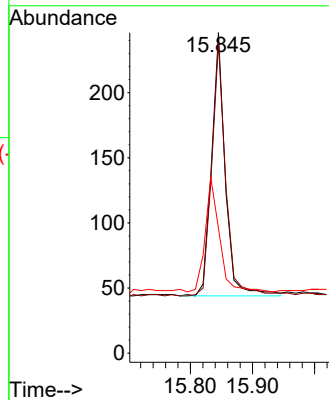
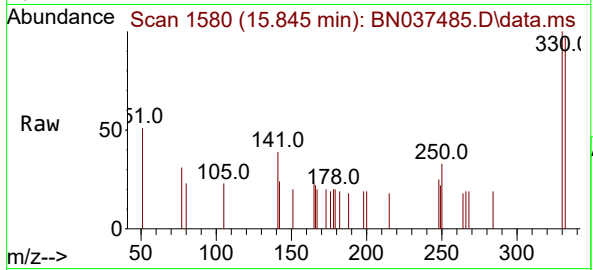




#14
2,4,6-Tribromophenol
Concen: 0.347 ng
RT: 15.845 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

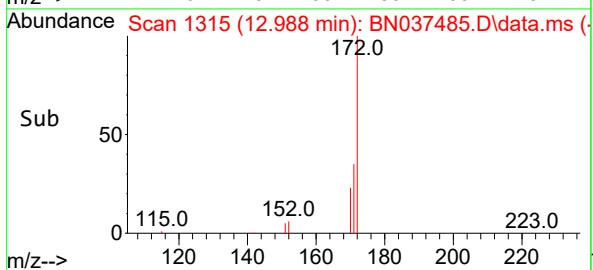
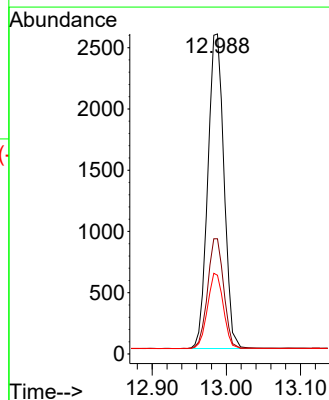
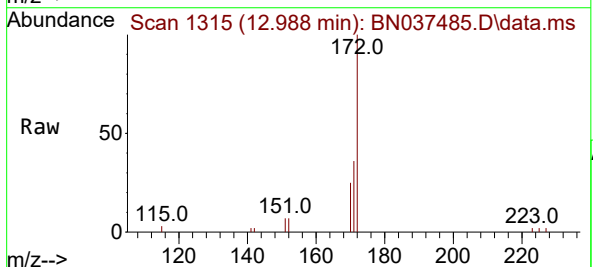
Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

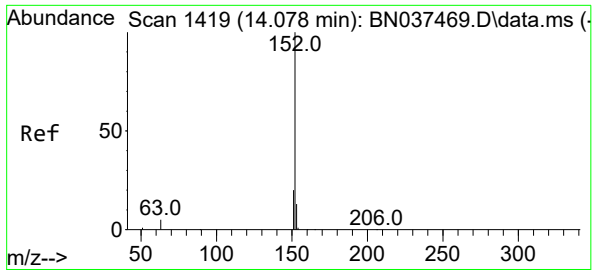
Tgt Ion:	330	Resp:	310
Ion	Ratio	Lower	Upper
330	100		
332	98.4	82.0	123.0
141	45.5	36.2	54.2



#15
2-Fluorobiphenyl
Concen: 0.340 ng
RT: 12.988 min Scan# 1315
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion:	172	Resp:	5122
Ion	Ratio	Lower	Upper
172	100		
171	36.0	29.8	44.8
170	24.6	20.0	30.0

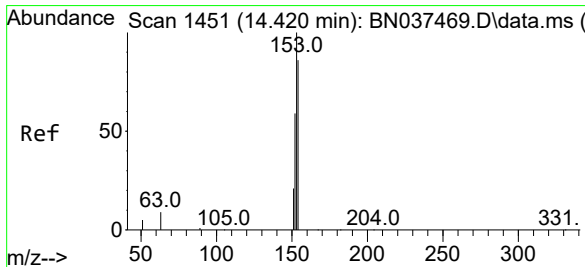
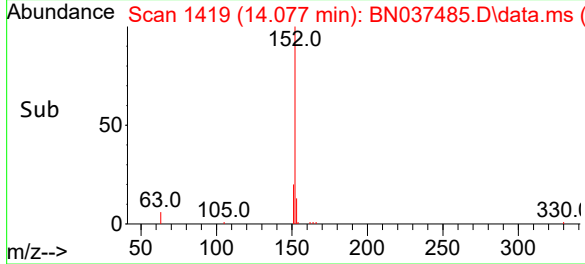
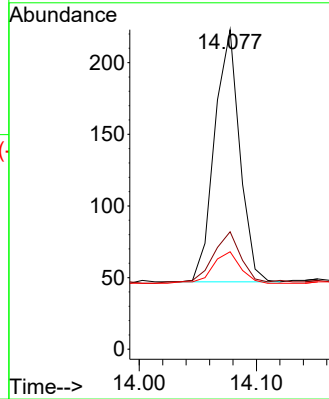
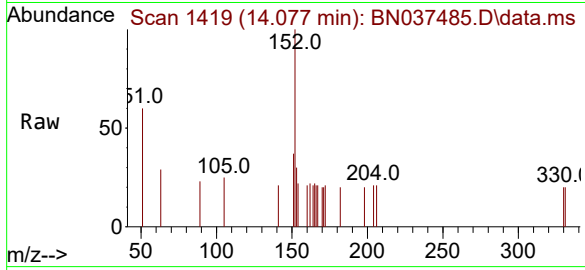




#16
Acenaphthylene
Concen: 0.022 ng
RT: 14.077 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

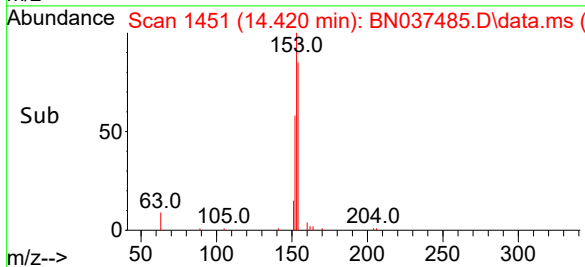
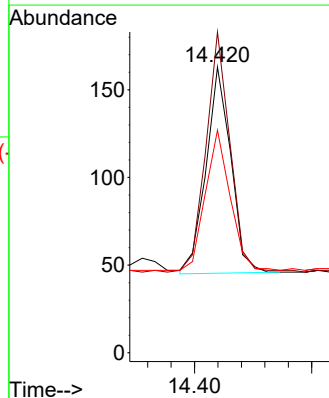
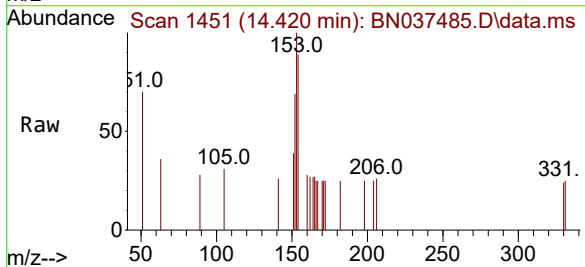
Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

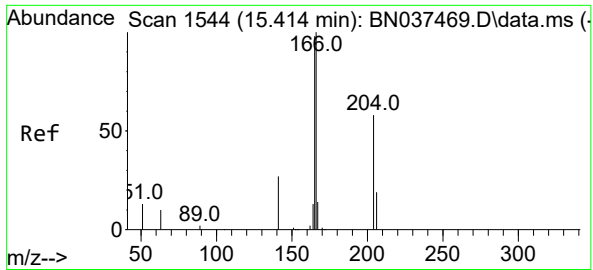
Tgt Ion:	152	Resp:	262
Ion	Ratio	Lower	Upper
152	100		
151	24.0	16.4	24.6
153	13.7	10.6	15.8



#17
Acenaphthene
Concen: 0.021 ng
RT: 14.420 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion:	154	Resp:	173
Ion	Ratio	Lower	Upper
154	100		
153	115.0	89.4	134.0
152	73.4	53.2	79.8

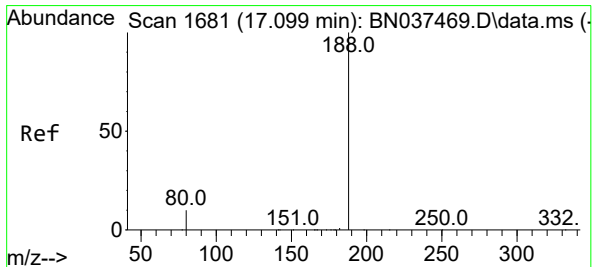
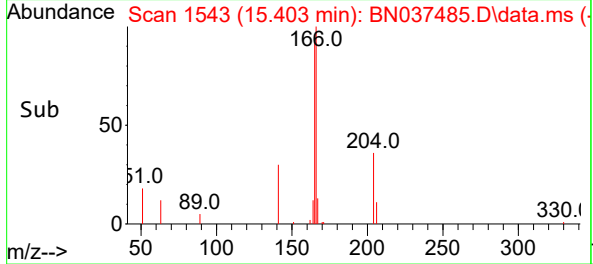
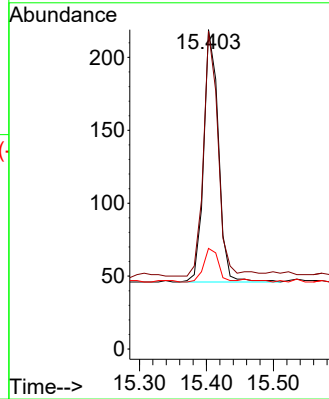
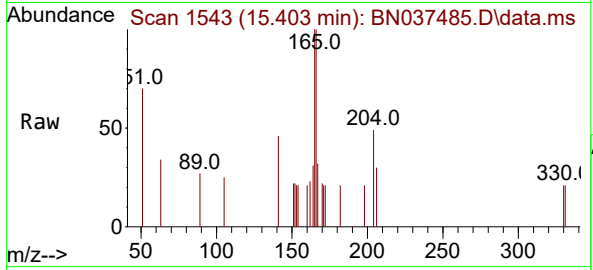




#18
Fluorene
Concen: 0.026 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

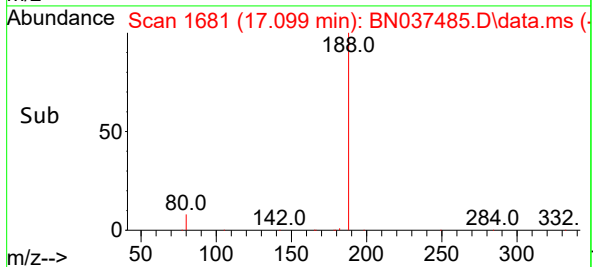
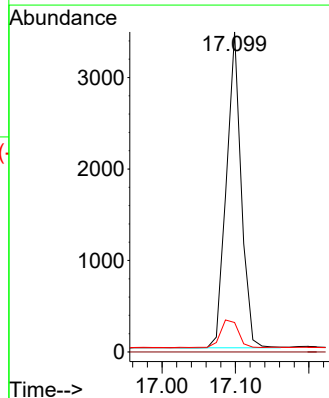
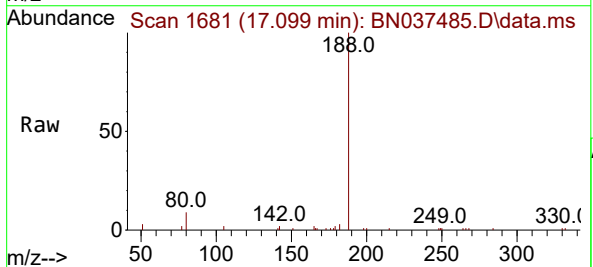
Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

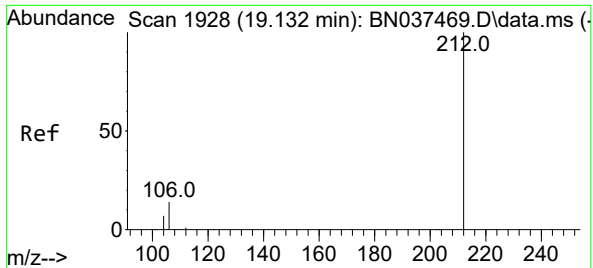
Tgt Ion:166 Resp: 264
Ion Ratio Lower Upper
166 100
165 97.0 79.4 119.2
167 13.6 10.6 15.8



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1681
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion:188 Resp: 4838
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 9.2 9.3 13.9#





#27

Fluoranthene-d10

Concen: 0.373 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037485.D

Acq: 14 Jul 2025 10:26

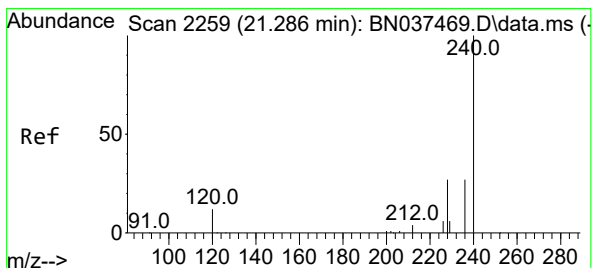
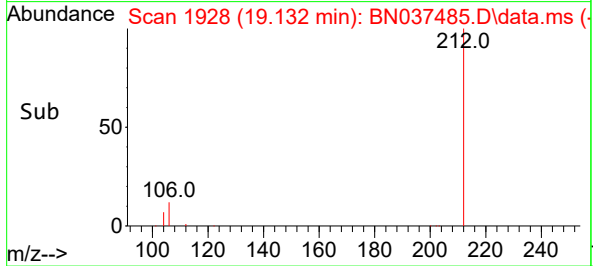
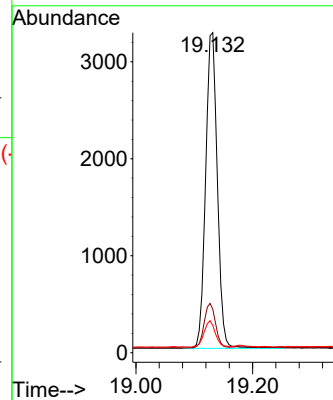
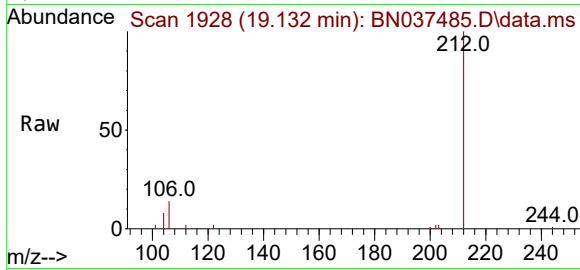
Instrument :

BNA_N

ClientSampleId :

RW8-SP100-20250701

Tgt Ion:	212	Resp:	4551
Ion	Ratio	Lower	Upper
212	100		
106	13.8	11.7	17.5
104	8.0	6.6	10.0



#29

Chrysene-d12

Concen: 0.400 ng

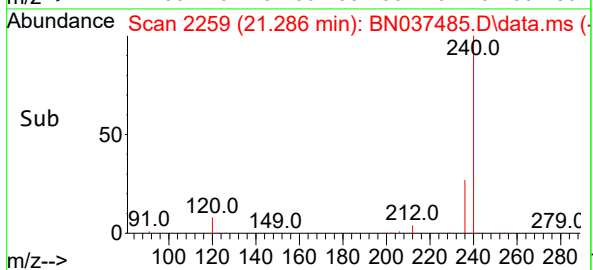
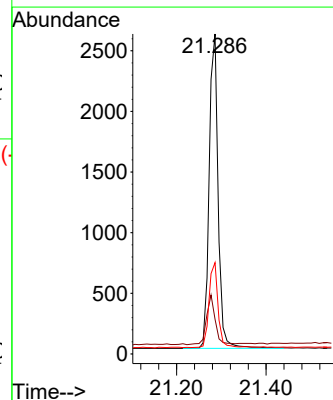
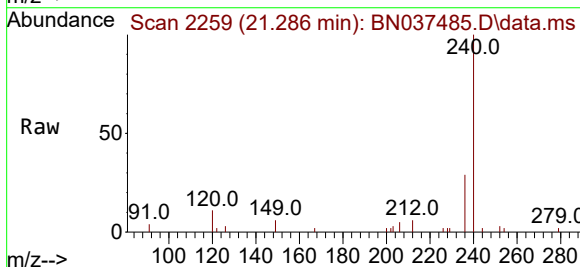
RT: 21.286 min Scan# 2259

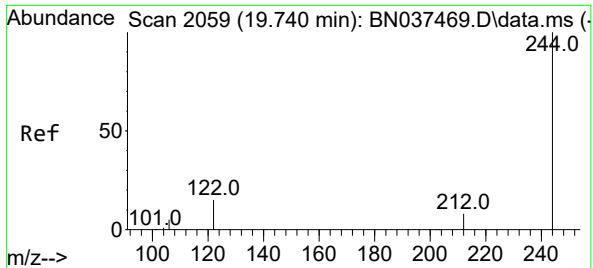
Delta R.T. -0.000 min

Lab File: BN037485.D

Acq: 14 Jul 2025 10:26

Tgt Ion:	240	Resp:	3617
Ion	Ratio	Lower	Upper
240	100		
120	10.9	12.4	18.6#
236	28.6	22.9	34.3

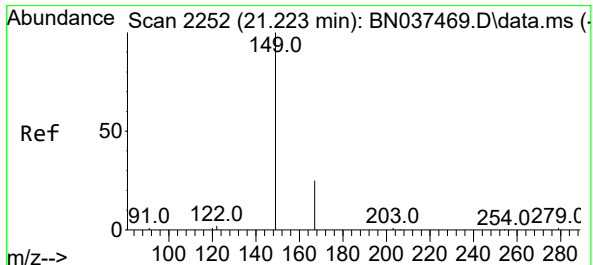
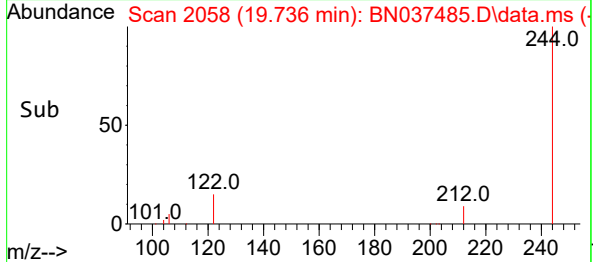
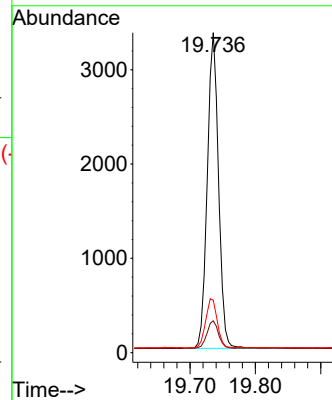
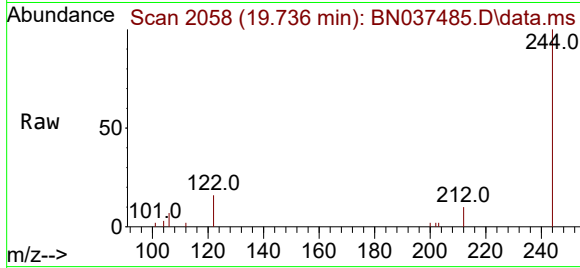




#31
Terphenyl-d14
Concen: 0.528 ng
RT: 19.736 min Scan# 2058
Delta R.T. -0.005 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

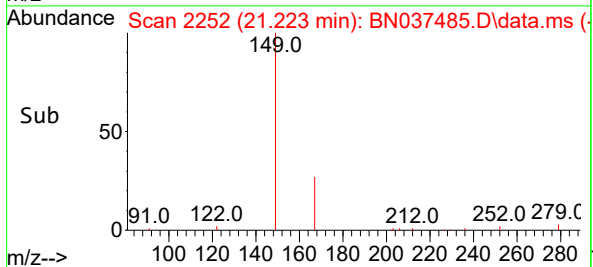
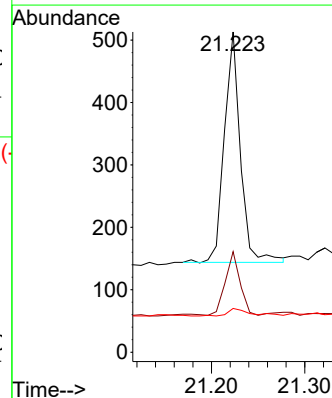
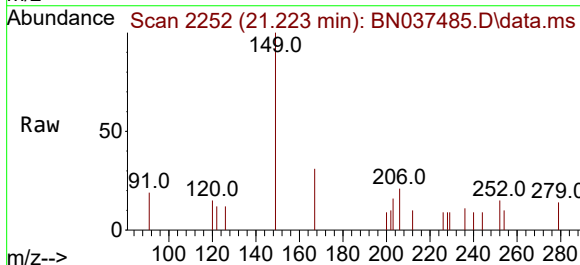
Instrument :
BNA_N
ClientSampleId :
RW8-SP100-20250701

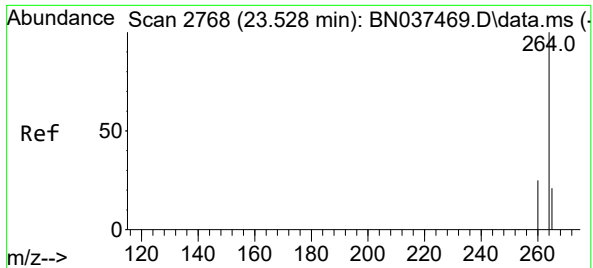
Tgt Ion	Ratio	Lower	Upper
244	100		
212	9.9	8.7	13.1
122	16.4	14.1	21.1



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.106 ng
RT: 21.223 min Scan# 2252
Delta R.T. -0.000 min
Lab File: BN037485.D
Acq: 14 Jul 2025 10:26

Tgt Ion	Ratio	Lower	Upper
149	100		
167	25.2	19.4	29.2
279	3.6	2.5	3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.522 min Scan# 21

Delta R.T. -0.006 min

Lab File: BN037485.D

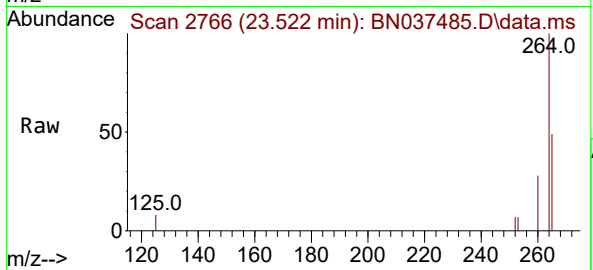
Acq: 14 Jul 2025 10:26

Instrument :

BNA_N

ClientSampleId :

RW8-SP100-20250701



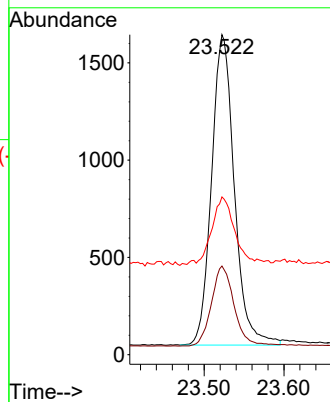
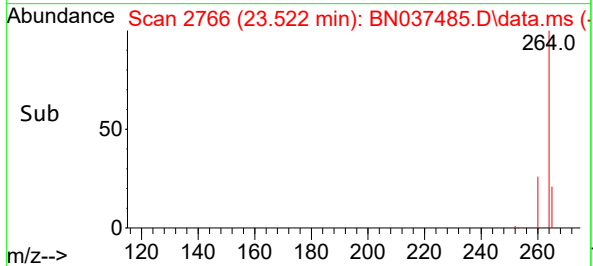
Tgt Ion:264 Resp: 3162

Ion Ratio Lower Upper

264 100

260 27.7 21.7 32.5

265 49.3 41.6 62.4



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/01/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/02/25
Client Sample ID:	RW8-SP303-20250701	SDG No.:	Q2488
Lab Sample ID:	Q2488-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037486.D	1	07/03/25 08:58	07/14/25 11:02	PB168720

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	0.30		30 - 150		75%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		58 - 132		123%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1820	7.731				
1146-65-2	Naphthalene-d8	4230	10.509				
15067-26-2	Acenaphthene-d10	1940	14.355				
1517-22-2	Phenanthrene-d10	3580	17.099				
1719-03-5	Chrysene-d12	2750	21.286				
1520-96-3	Perylene-d12	2330	23.525				

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\BN071425\
Data File : BN037486.D
Acq On : 14 Jul 2025 11:02
Operator : RC/JU
Sample : Q2488-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

Quant Time: Jul 14 12:49:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

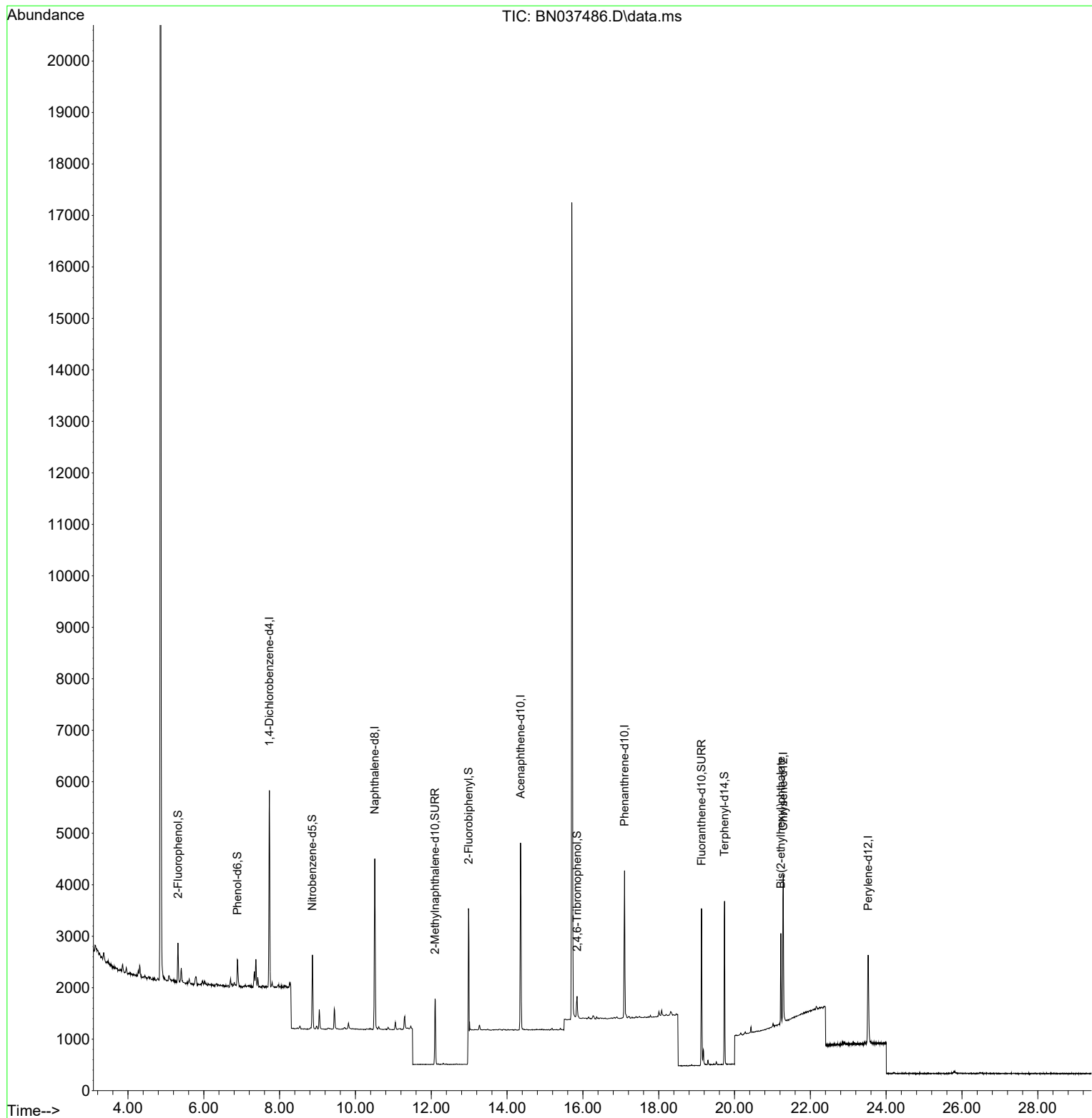
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.731	152	1815	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4225	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	1935	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3578	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2748	0.400	ng	# 0.00
35) Perylene-d12	23.525	264	2331	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	596	0.141	ng	0.00
5) Phenol-d6	6.886	99	468	0.088	ng	0.00
8) Nitrobenzene-d5	8.864	82	1058	0.345	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	1712	0.298	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	247	0.376	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	3939	0.357	ng	0.00
27) Fluoranthene-d10	19.132	212	3390	0.376	ng	0.00
31) Terphenyl-d14	19.736	244	2828	0.493	ng	0.00
Target Compounds						
34) Bis(2-ethylhexyl)phtha...	21.223	149	1516	0.479	ng	Qvalue 97

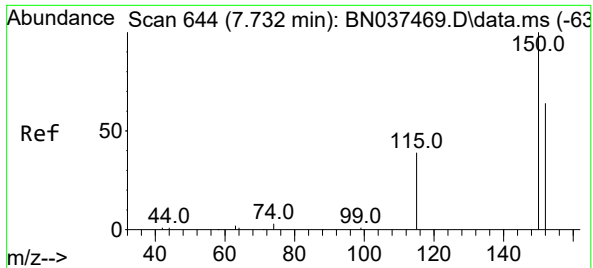
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037486.D
Acq On : 14 Jul 2025 11:02
Operator : RC/JU
Sample : Q2488-02
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

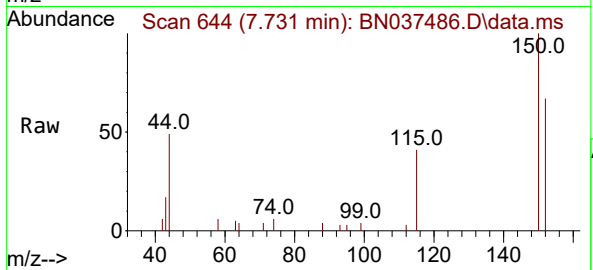
Quant Time: Jul 14 12:49:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration



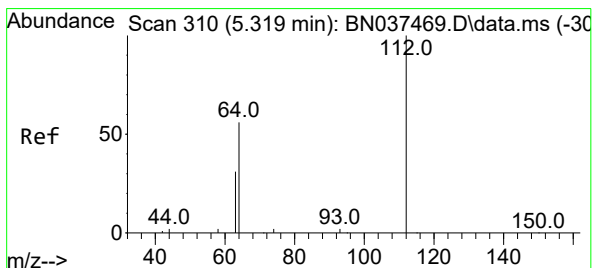
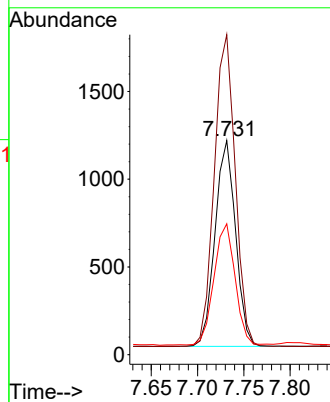
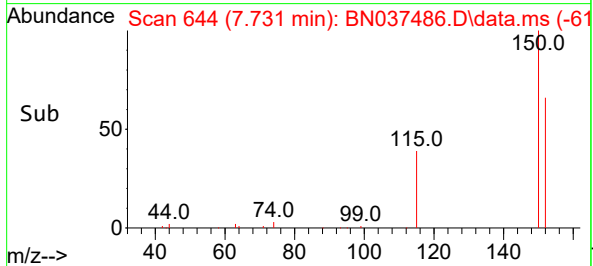


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.731 min Scan# 644
Delta R.T. -0.001 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

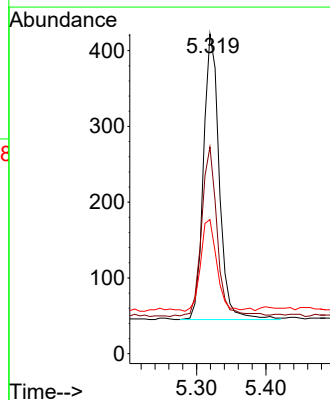
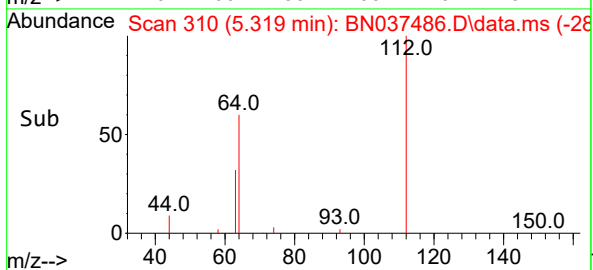
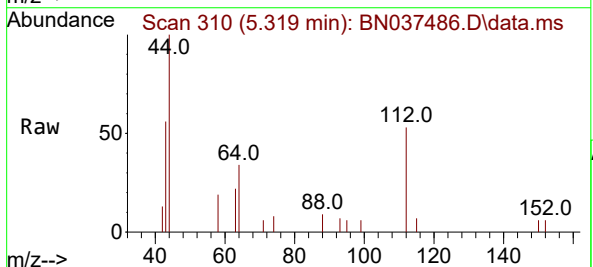


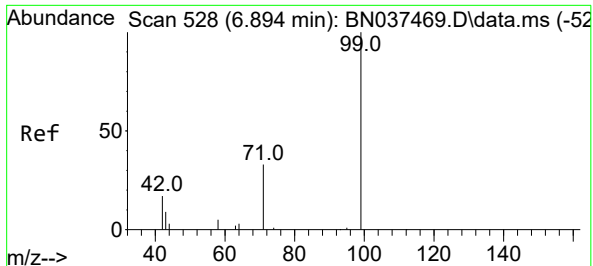
Tgt Ion:152 Resp: 1815
Ion Ratio Lower Upper
152 100
150 149.5 122.5 183.7
115 61.1 49.9 74.9



#4
2-Fluorophenol
Concen: 0.141 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

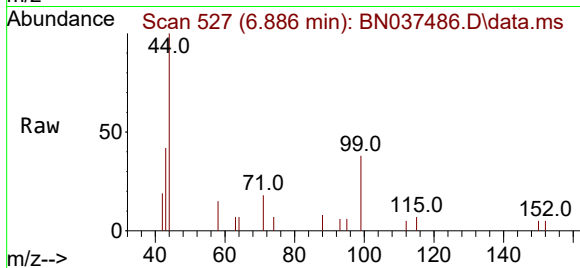
Tgt Ion:112 Resp: 596
Ion Ratio Lower Upper
112 100
64 59.2 45.4 68.0
63 32.7 24.7 37.1



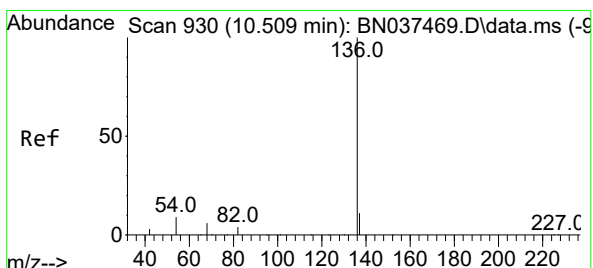
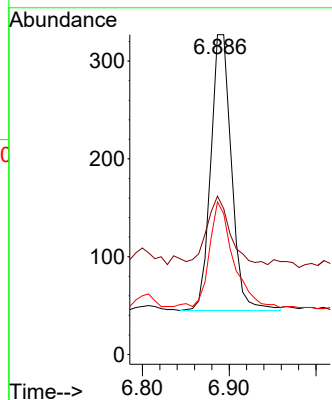
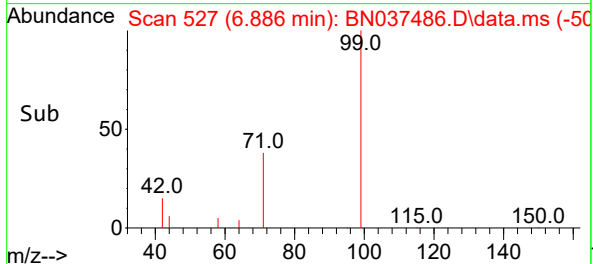


#5
Phenol-d6
Concen: 0.088 ng
RT: 6.886 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

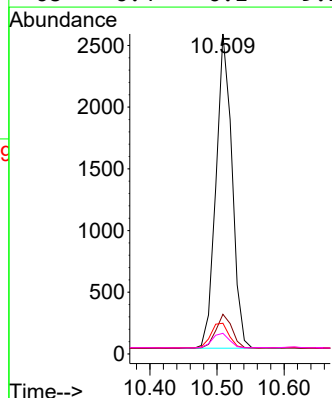
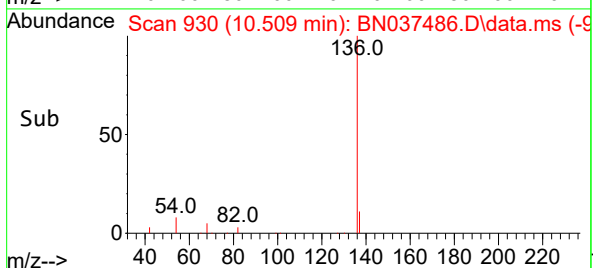
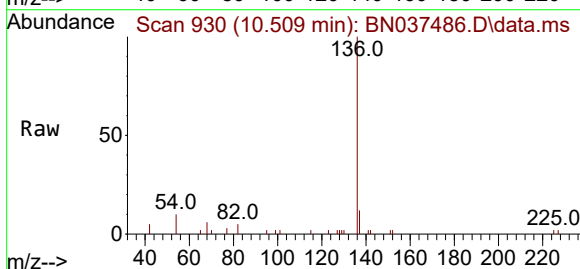


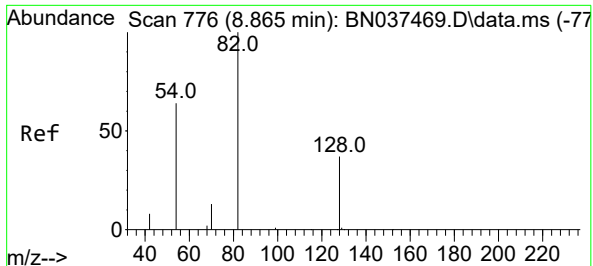
Tgt Ion: 99 Resp: 468
Ion Ratio Lower Upper
99 100
42 27.4 19.5 29.3
71 46.6 29.4 44.2#



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. -0.000 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Tgt Ion: 136 Resp: 4225
Ion Ratio Lower Upper
136 100
137 12.4 10.0 15.0
54 9.6 9.0 13.6
68 6.4 6.1 9.1

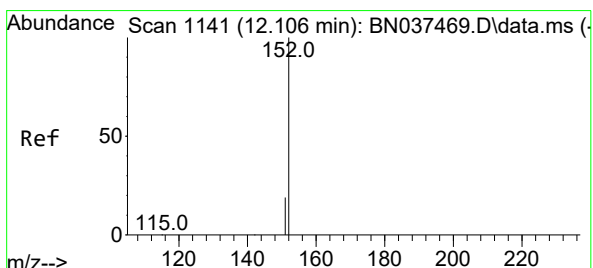
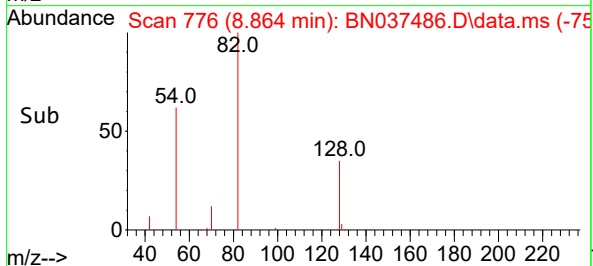
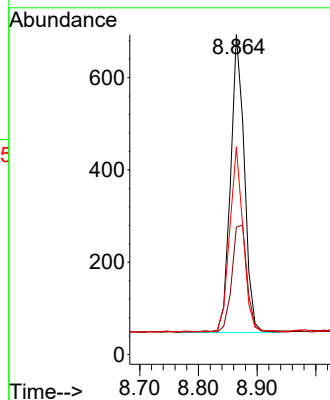
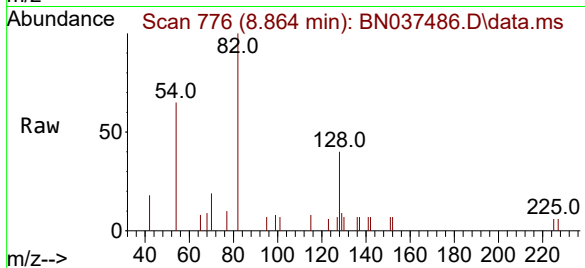




#8
Nitrobenzene-d5
Concen: 0.345 ng
RT: 8.864 min Scan# 71
Delta R.T. -0.000 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

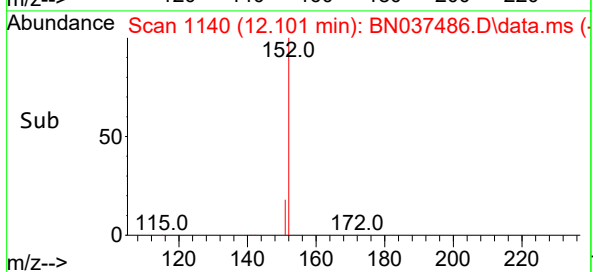
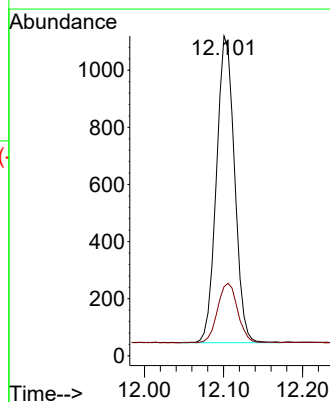
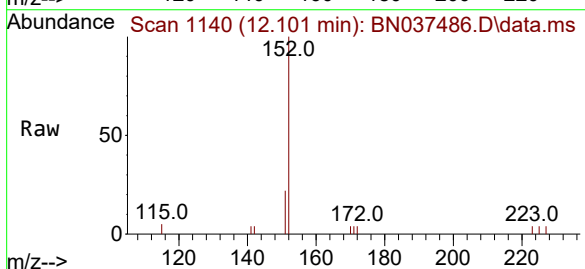
Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

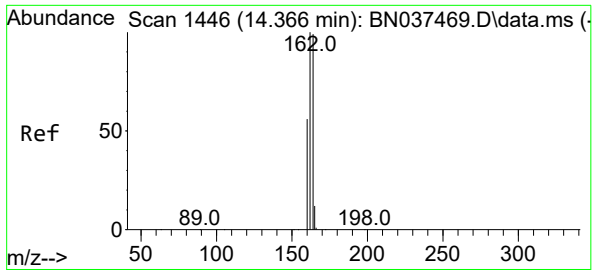
Tgt Ion	Ratio	Lower	Upper
82	100		
128	39.8	33.1	49.7
54	64.9	53.0	79.4



#11
2-Methylnaphthalene-d10
Concen: 0.298 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.005 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Tgt Ion	Ratio	Lower	Upper
152	100		
151	21.5	17.0	25.6

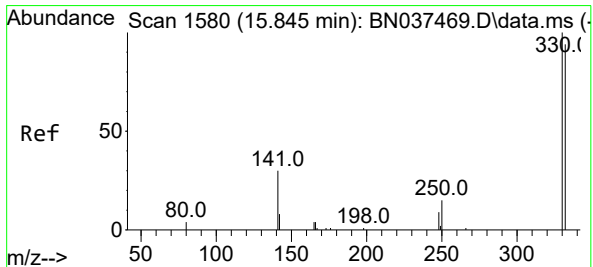
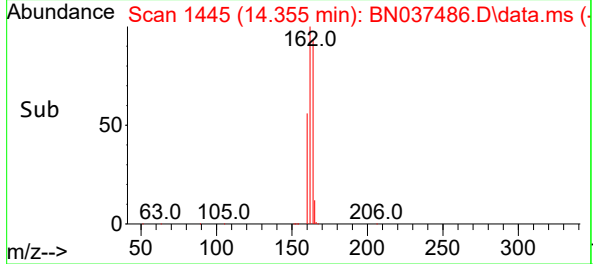
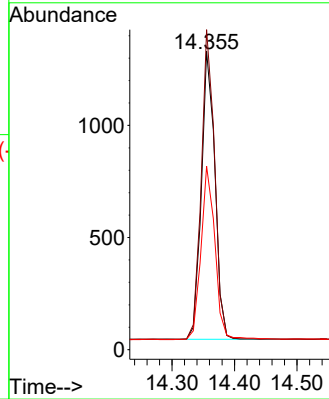
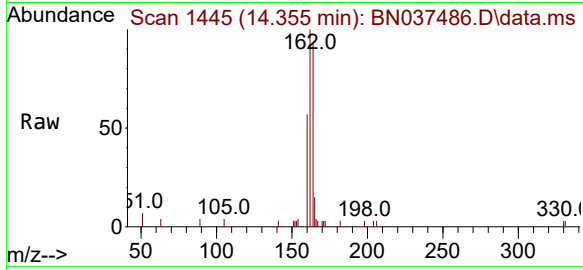




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1445
Delta R.T. -0.011 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

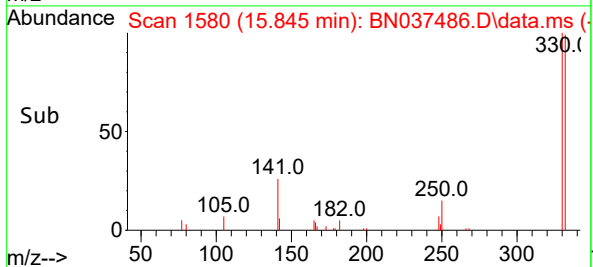
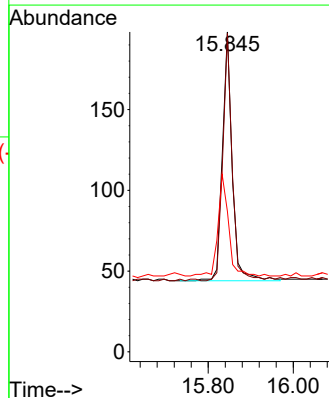
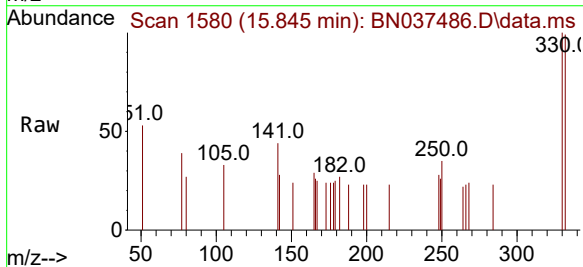
Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

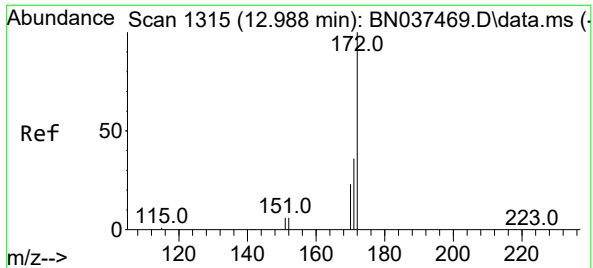
Tgt Ion:164 Resp: 1935
Ion Ratio Lower Upper
164 100
162 107.2 81.1 121.7
160 61.5 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 0.376 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Tgt Ion:330 Resp: 247
Ion Ratio Lower Upper
330 100
332 93.9 82.0 123.0
141 44.1 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 0.357 ng

RT: 12.983 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN037486.D

Acq: 14 Jul 2025 11:02

Instrument :

BNA_N

ClientSampleId :

RW8-SP303-20250701

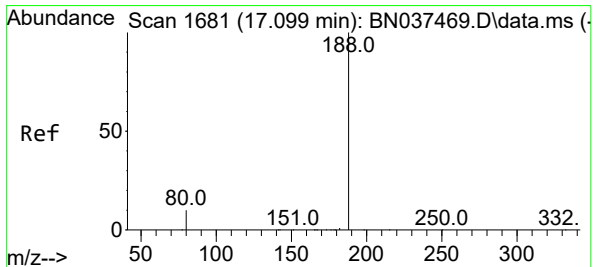
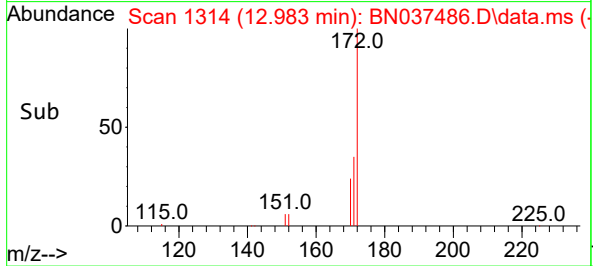
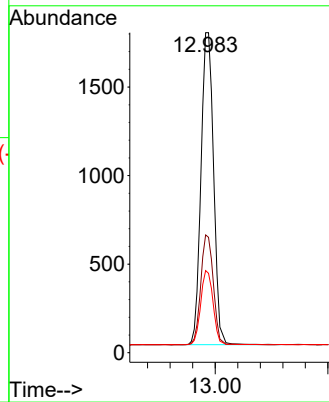
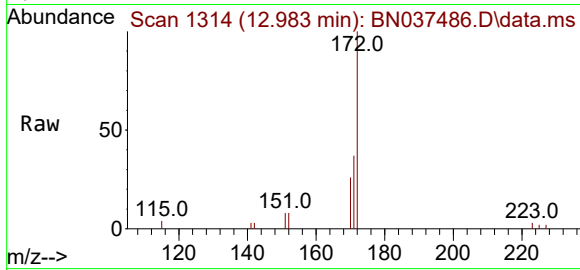
Tgt Ion:172 Resp: 3939

Ion Ratio Lower Upper

172 100

171 36.8 29.8 44.8

170 25.7 20.0 30.0



#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1681

Delta R.T. -0.000 min

Lab File: BN037486.D

Acq: 14 Jul 2025 11:02

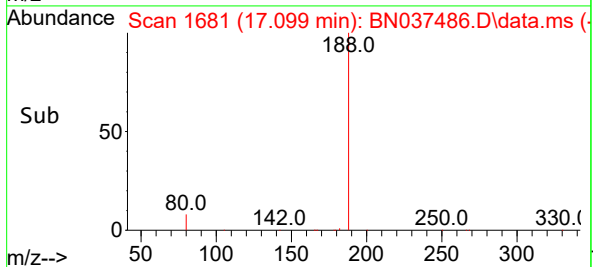
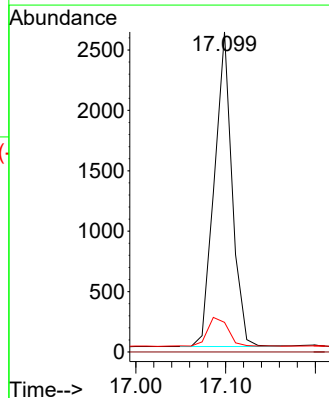
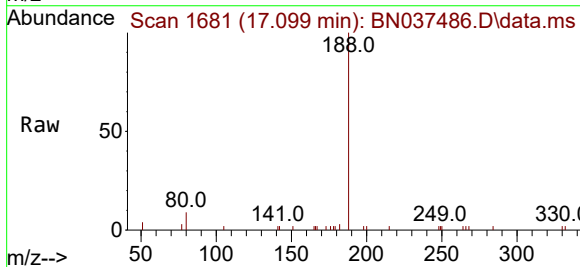
Tgt Ion:188 Resp: 3578

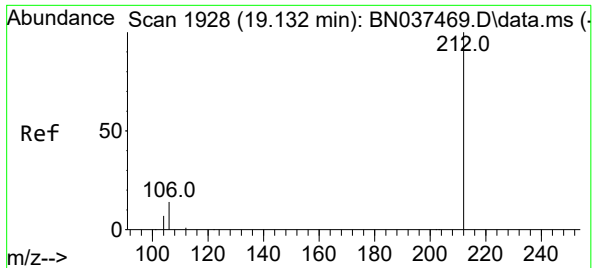
Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.3 9.3 13.9





#27

Fluoranthene-d10

Concen: 0.376 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037486.D

Acq: 14 Jul 2025 11:02

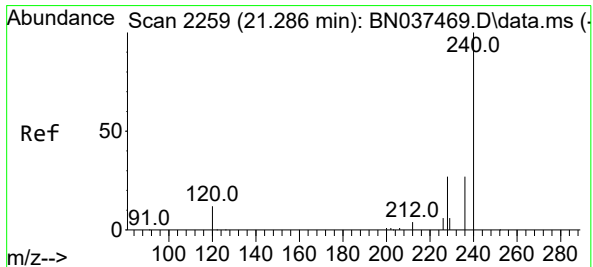
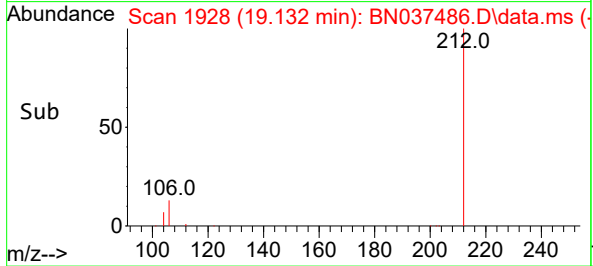
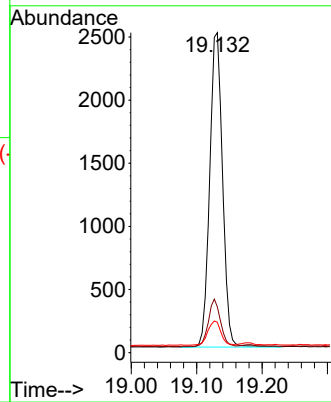
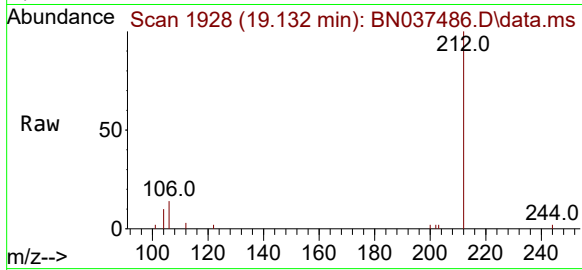
Instrument :

BNA_N

ClientSampleId :

RW8-SP303-20250701

Tgt Ion:212	Resp:	3390
Ion	Ratio	Lower Upper
212	100	
106	14.2	11.7 17.5
104	7.9	6.6 10.0



#29

Chrysene-d12

Concen: 0.400 ng

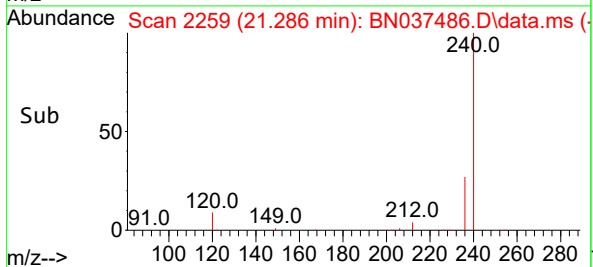
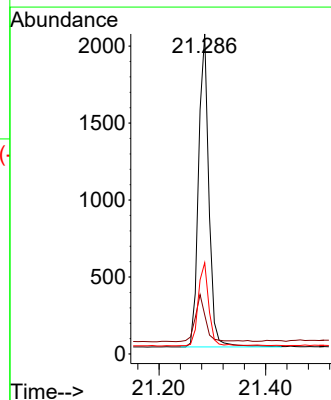
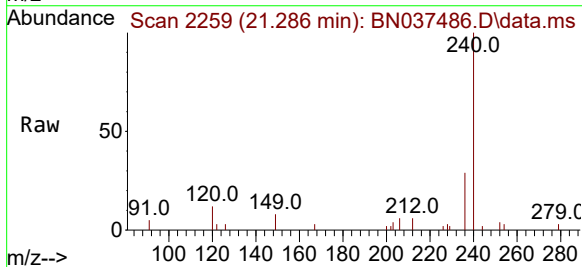
RT: 21.286 min Scan# 2259

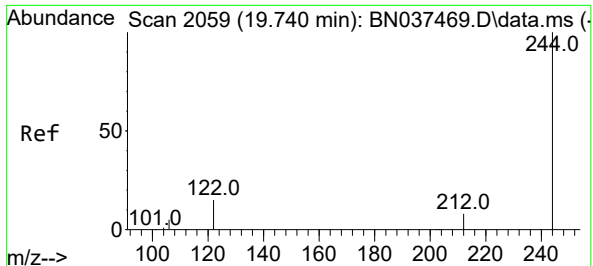
Delta R.T. -0.000 min

Lab File: BN037486.D

Acq: 14 Jul 2025 11:02

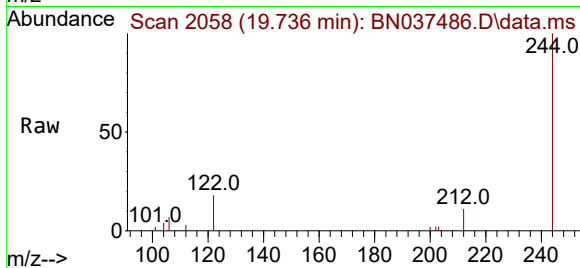
Tgt Ion:240	Resp:	2748
Ion	Ratio	Lower Upper
240	100	
120	12.2	12.4 18.6#
236	28.5	22.9 34.3



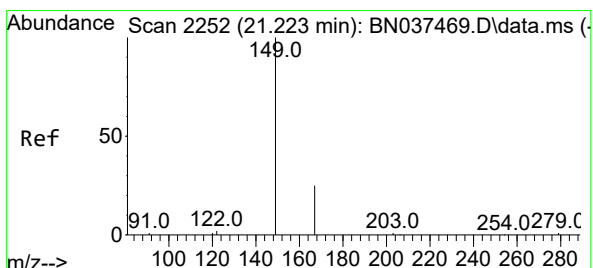
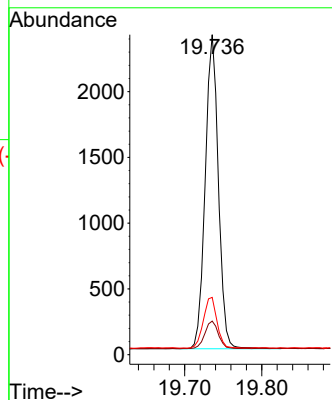


#31
Terphenyl-d14
Concen: 0.493 ng
RT: 19.736 min Scan# 2058
Delta R.T. -0.005 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Instrument :
BNA_N
ClientSampleId :
RW8-SP303-20250701

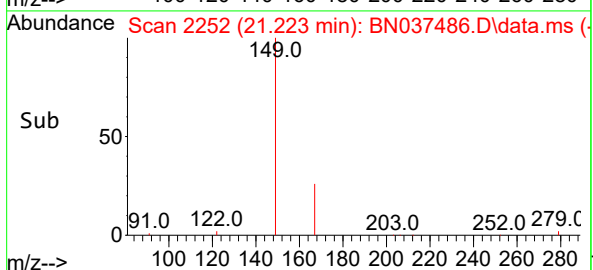
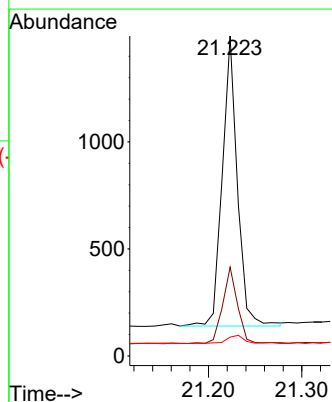
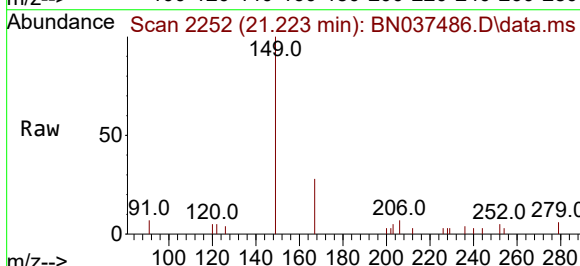


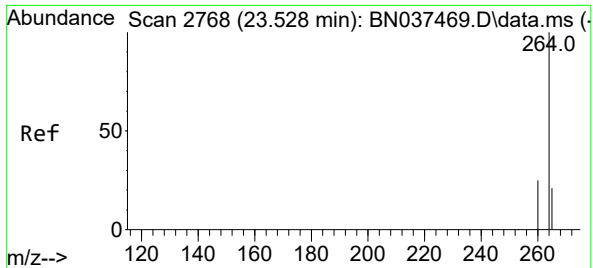
Tgt Ion:244 Resp: 2828
Ion Ratio Lower Upper
244 100
212 10.5 8.7 13.1
122 17.9 14.1 21.1



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.479 ng
RT: 21.223 min Scan# 2252
Delta R.T. -0.000 min
Lab File: BN037486.D
Acq: 14 Jul 2025 11:02

Tgt Ion:149 Resp: 1516
Ion Ratio Lower Upper
149 100
167 26.1 19.4 29.2
279 3.6 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.525 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037486.D

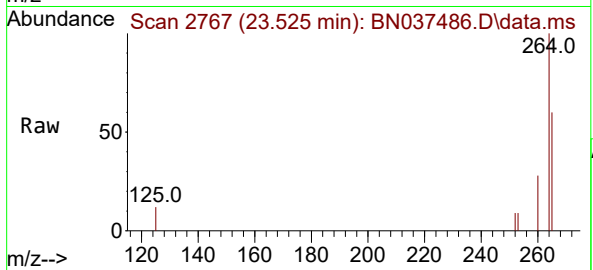
Acq: 14 Jul 2025 11:02

Instrument :

BNA_N

ClientSampleId :

RW8-SP303-20250701



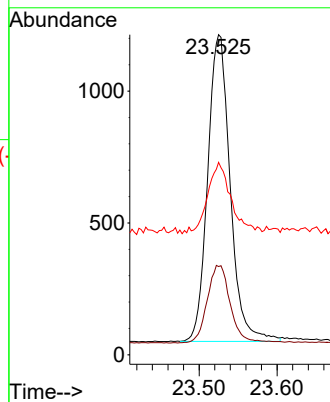
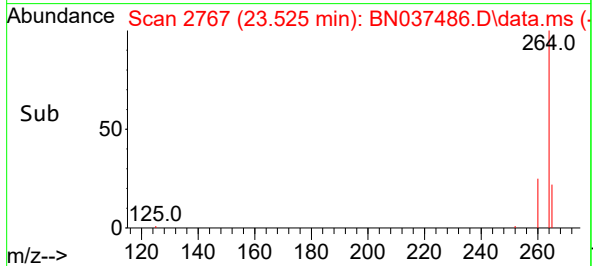
Tgt Ion:264 Resp: 2331

Ion Ratio Lower Upper

264 100

260 27.6 21.7 32.5

265 60.1 41.6 62.4





CALIBRATION SUMMARY

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN071125.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Jul 11 15:38:34 2025
Response Via : Initial Calibration

Calibration Files

0.1 =BN037467.D 0.2 =BN037468.D 0.4 =BN037469.D 0.8 =BN037470.D 1.6 =BN037471.D 3.2 =BN037472.D 5 =BN037473.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.370	0.385	0.376	0.396	0.383	0.344	0.376	4.69	
3)	n-Nitrosodimet...	0.478	0.499	0.474	0.526	0.520	0.517	0.502	4.49	
4) S	2-Fluorophenol	0.941	0.935	0.931	0.854	0.927	0.942	0.987	0.931	4.22
5) S	Phenol-d6	1.222	1.196	1.173	1.063	1.158	1.171	1.214	1.171	4.52
6)	bis(2-Chloroet...	1.010	0.981	0.970	0.935	1.004	0.985	0.976	0.980	2.51
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.279	0.277	0.276	0.266	0.296	0.306	0.333	0.290	7.95
9)	Naphthalene	1.063	1.050	1.052	1.015	1.096	1.109	1.140	1.075	3.93
10)	Hexachlorobuta...	0.263	0.251	0.257	0.247	0.266	0.261	0.262	0.258	2.67
11) SURR2	Methylnaphth...	0.513	0.509	0.511	0.490	0.531	0.563	0.689	0.544	12.51
12)	2-Methylnaphth...	0.645	0.640	0.646	0.625	0.691	0.718	0.746	0.673	6.79
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.119	0.115	0.122	0.121	0.138	0.153	0.182	0.136	18.05
15) S	2-Fluorobiphenyl	2.213	2.152	2.305	2.139	2.318	2.357	2.499	2.283	5.55
16)	Acenaphthylene	1.778	1.768	1.761	1.706	1.881	1.886	1.988	1.824	5.34
17)	Acenaphthene	1.207	1.167	1.184	1.138	1.260	1.270	1.340	1.224	5.72
18)	Fluorene	1.478	1.432	1.482	1.423	1.606	1.620	1.723	1.538	7.35
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.036	0.039	0.043	0.050	0.057		0.045	19.20	
21)	4-Bromophenyl-...	0.246	0.238	0.236	0.234	0.253	0.260	0.279	0.250	6.54
22)	Hexachlorobenzene	0.339	0.340	0.340	0.329	0.353	0.351	0.358	0.344	2.97
23)	Atrazine	0.118	0.111	0.115	0.114	0.133	0.153		0.124	13.13
24)	Pentachlorophenol		0.105	0.101	0.100	0.119	0.131	0.156	0.119	18.40
25)	Phenanthrene	1.213	1.165	1.157	1.147	1.242	1.256	1.346	1.218	5.79
26)	Anthracene	1.019	1.035	1.014	1.024	1.131	1.185	1.286	1.099	9.61
27) SURR	Fluoranthene-d10	0.956	0.936	0.909	0.895	0.981	1.049	1.336	1.009	15.16
28)	Fluoranthene	1.252	1.235	1.220	1.232	1.389	1.455	1.572	1.337	10.32
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.674	1.630	1.594	1.511	1.605	1.595	1.648	1.608	3.23
31) S	Terphenyl-d14	0.849	0.822	0.821	0.778	0.836	0.834	0.903	0.835	4.49
32)	Benzo(a)anthra...	1.329	1.310	1.292	1.240	1.394	1.428	1.490	1.355	6.40
33)	Chrysene	1.522	1.487	1.464	1.413	1.473	1.464	1.542	1.481	2.85
34)	Bis(2-ethylhex...	0.451	0.451	0.419	0.439	0.467	0.537	0.461		8.81
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN071125.M

36)	Indeno(1,2,3-c...	1.339	1.316	1.392	1.434	1.655	1.758	1.973	1.553	16.01
37)	Benzo(b)fluora...	1.382	1.423	1.411	1.459	1.668	1.674	1.871	1.556	11.86
38)	Benzo(k)fluora...	1.416	1.374	1.433	1.505	1.674	1.745	1.892	1.577	12.41
39) C	Benzo(a)pyrene	1.069	1.109	1.152	1.162	1.325	1.398	1.549	1.252	14.09
40)	Dibenzo(a,h)an...	1.069	1.039	1.105	1.152	1.342	1.442	1.617	1.252	17.51
41)	Benzo(g,h,i)pe...	1.187	1.236	1.266	1.281	1.442	1.507	1.683	1.372	13.03

(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037467.D
 Acq On : 11 Jul 2025 11:10
 Operator : RC/JU
 Sample : SSTDICC0.1
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.1

Quant Time: Jul 11 15:25:24 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

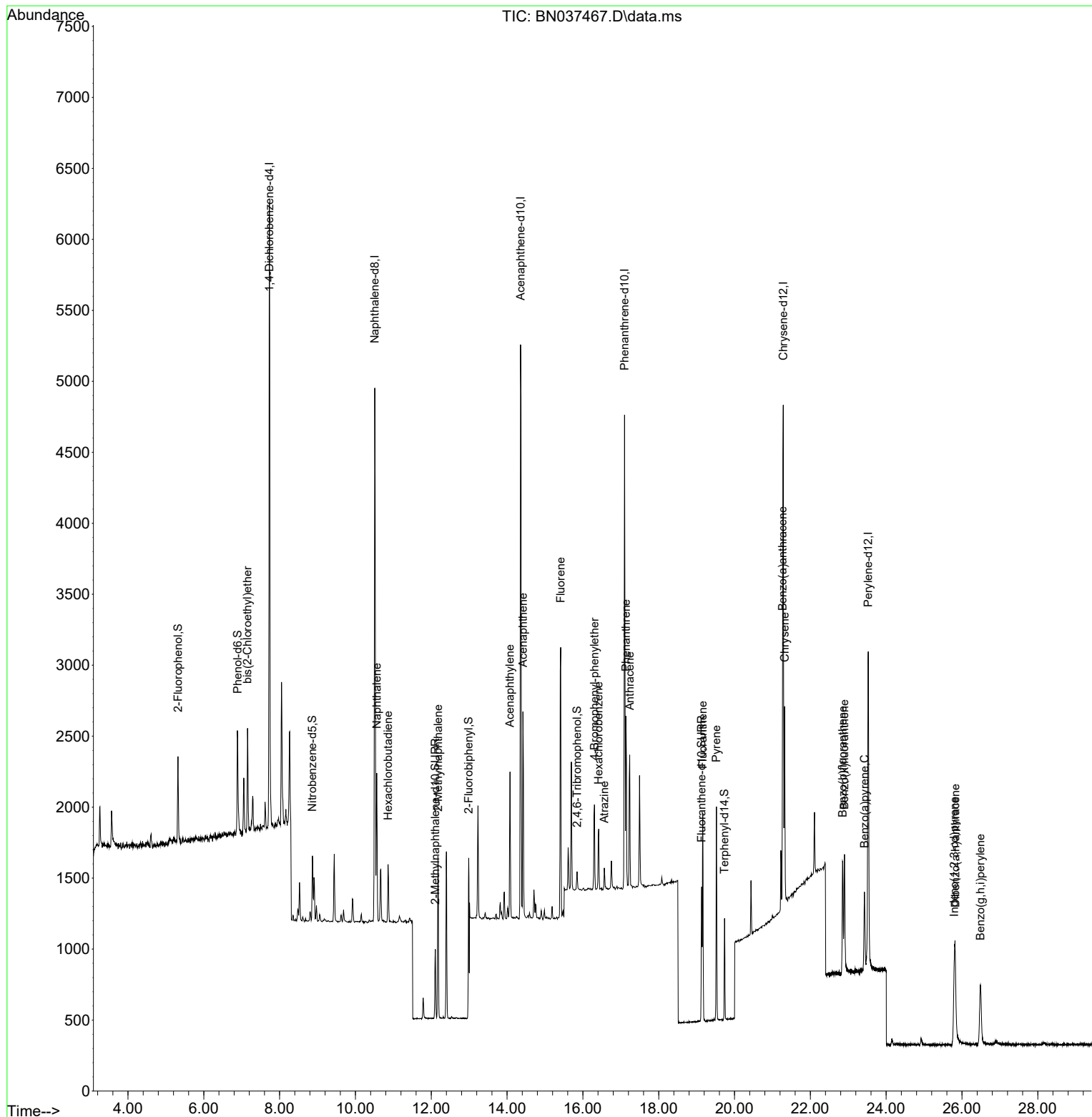
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.731	152	2088	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4970	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2362	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	4197	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3080	0.400	ng	0.00
35) Perylene-d12	23.528	264	3076	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	491	0.101	ng	0.00
5) Phenol-d6	6.894	99	638	0.104	ng	0.00
8) Nitrobenzene-d5	8.864	82	347	0.096	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	638	0.094	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	70	0.087	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	1307	0.097	ng	0.00
27) Fluoranthene-d10	19.132	212	1003	0.095	ng	0.00
31) Terphenyl-d14	19.736	244	654	0.102	ng	0.00
Target Compounds						
6) bis(2-Chloroethyl)ether	7.154	93	527	0.103	ng	99
9) Naphthalene	10.562	128	1321	0.099	ng	# 92
10) Hexachlorobutadiene	10.861	225	327	0.102	ng	# 97
12) 2-Methylnaphthalene	12.177	142	802	0.096	ng	96
16) Acenaphthylene	14.077	152	1050	0.097	ng	98
17) Acenaphthene	14.420	154	713	0.099	ng	98
18) Fluorene	15.414	166	873	0.096	ng	98
21) 4-Bromophenyl-phenylether	16.304	248	258	0.099	ng	99
22) Hexachlorobenzene	16.416	284	356	0.099	ng	98
23) Atrazine	16.565	200	124	0.095	ng	# 84
25) Phenanthrene	17.136	178	1273	0.100	ng	99
26) Anthracene	17.235	178	1069	0.093	ng	99
28) Fluoranthene	19.159	202	1314	0.094	ng	99
30) Pyrene	19.522	202	1289	0.104	ng	100
32) Benzo(a)anthracene	21.268	228	1023	0.098	ng	93
33) Chrysene	21.322	228	1172	0.103	ng	93
36) Indeno(1,2,3-cd)pyrene	25.794	276	1030	0.086	ng	97
37) Benzo(b)fluoranthene	22.853	252	1063	0.089	ng	# 83
38) Benzo(k)fluoranthene	22.899	252	1089	0.090	ng	# 74
39) Benzo(a)pyrene	23.429	252	822	0.085	ng	# 75
40) Dibenzo(a,h)anthracene	25.823	278	822	0.085	ng	# 74
41) Benzo(g,h,i)perylene	26.487	276	913	0.087	ng	# 86

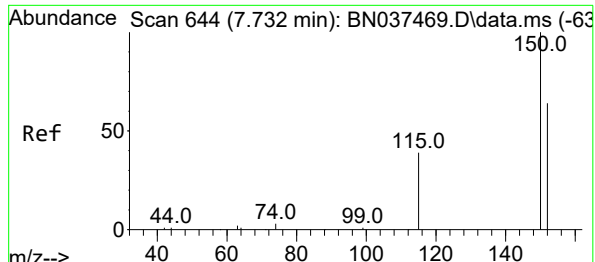
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037467.D
Acq On : 11 Jul 2025 11:10
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

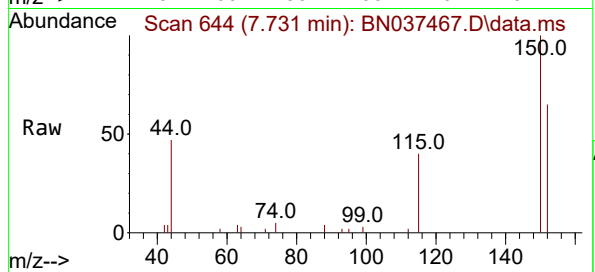
Quant Time: Jul 11 15:25:24 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration



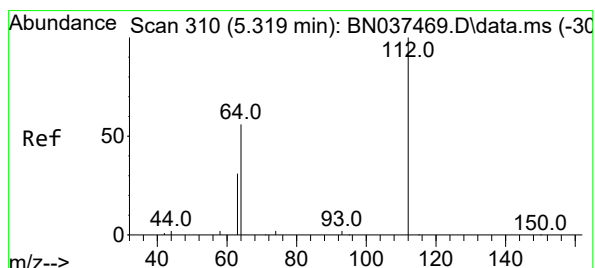
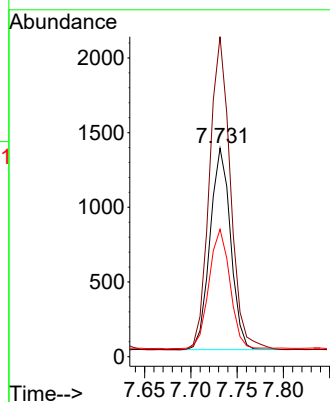
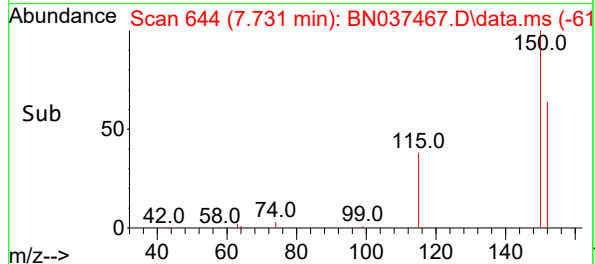


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.731 min Scan# 64
Delta R.T. -0.001 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

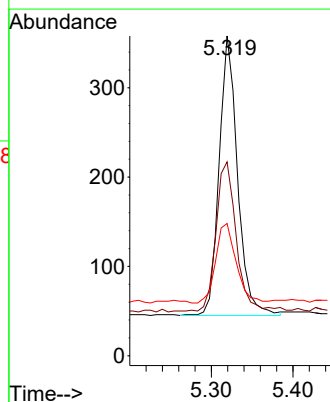
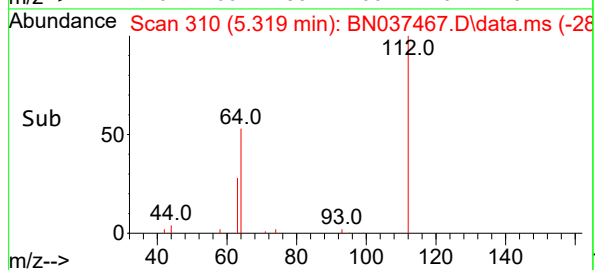
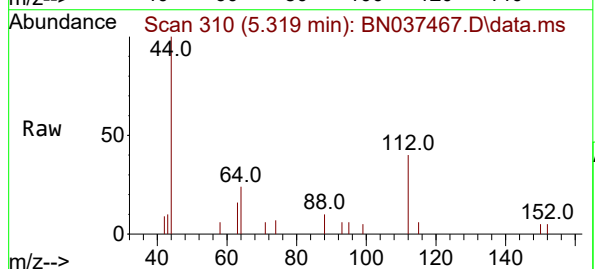


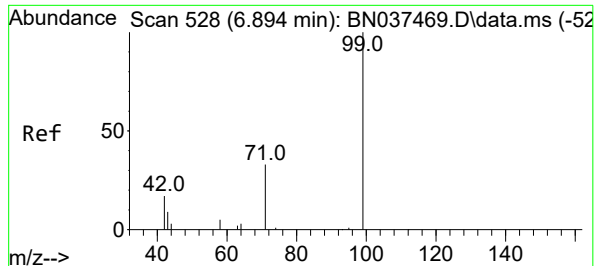
Tgt Ion:152 Resp: 2088
Ion Ratio Lower Upper
152 100
150 153.4 122.5 183.7
115 61.1 49.9 74.9



#4
2-Fluorophenol
Concen: 0.101 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

Tgt Ion:112 Resp: 491
Ion Ratio Lower Upper
112 100
64 58.2 45.4 68.0
63 32.2 24.7 37.1

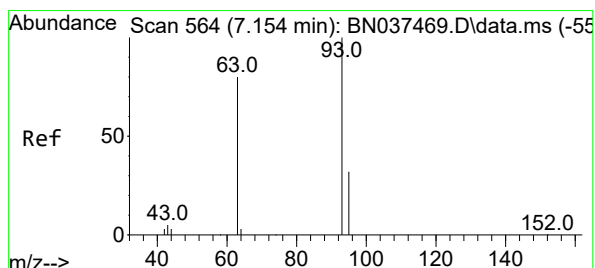
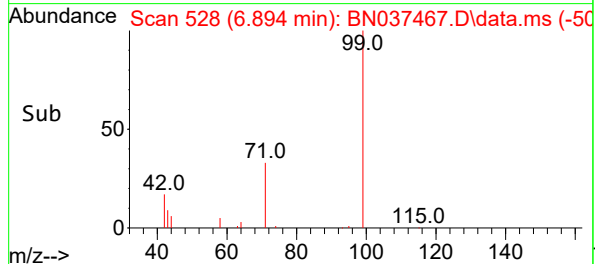
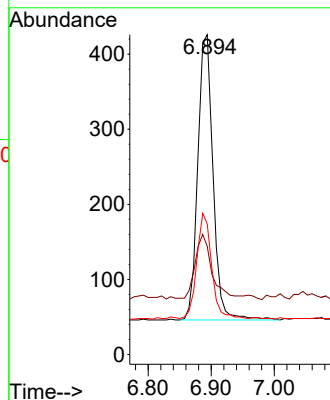
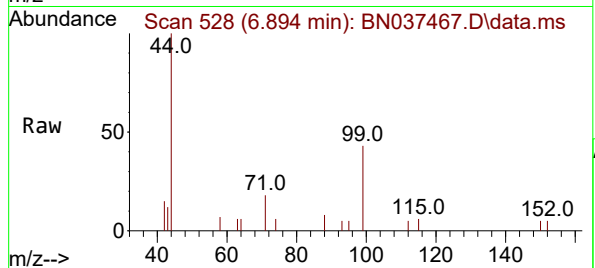




#5
Phenol-d6
Concen: 0.104 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

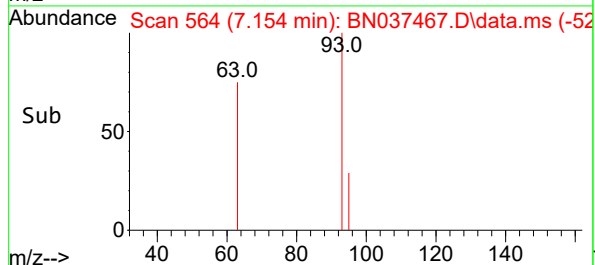
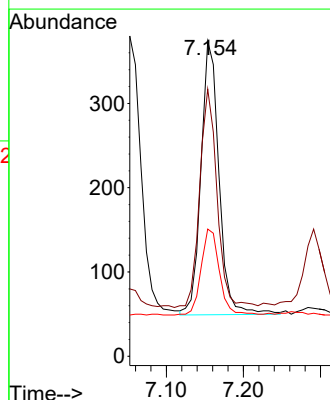
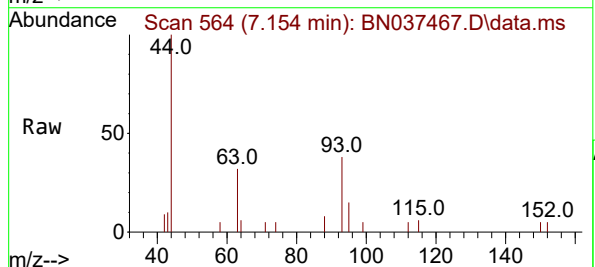
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

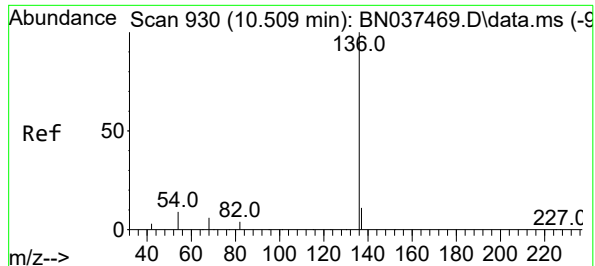
Tgt Ion	Ratio	Lower	Upper
99	100		
42	23.8	19.5	29.3
71	36.1	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.103 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

Tgt Ion	Ratio	Lower	Upper
93	100		
63	76.7	60.8	91.2
95	31.9	25.6	38.4

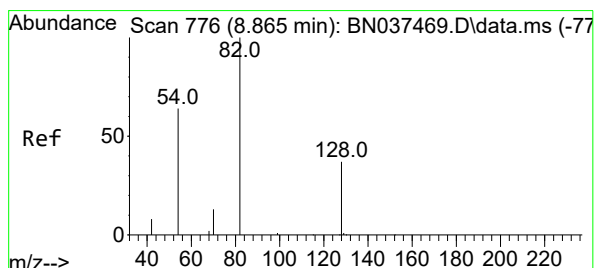
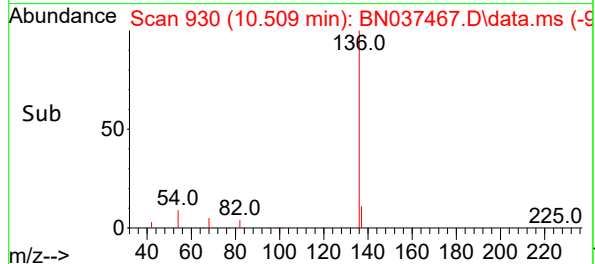
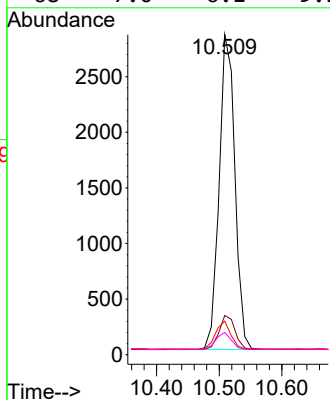
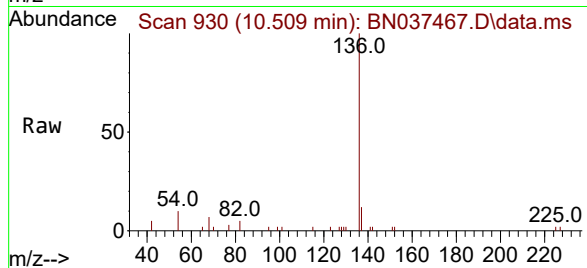




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

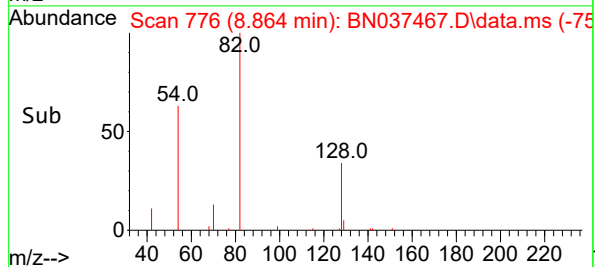
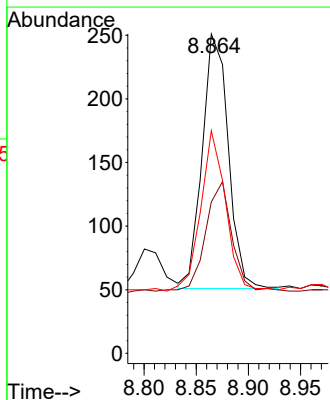
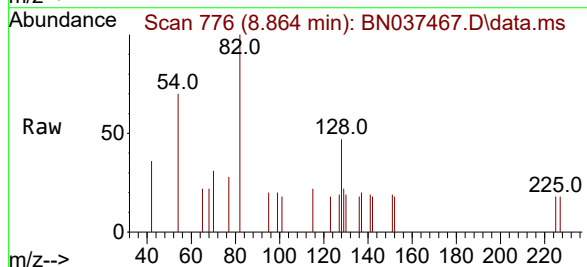
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

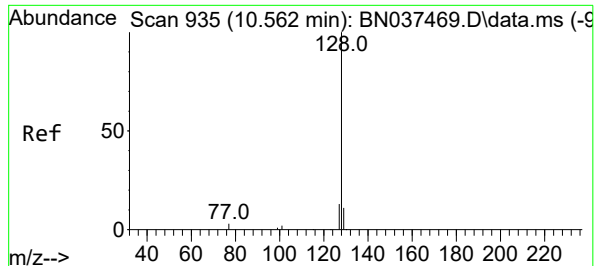
Tgt Ion:	136	Resp:	4970
Ion	Ratio	Lower	Upper
136	100		
137	12.3	10.0	15.0
54	10.5	9.0	13.6
68	7.0	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.096 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

Tgt Ion:	82	Resp:	347
Ion	Ratio	Lower	Upper
82	100		
128	47.4	33.1	49.7
54	69.7	53.0	79.4

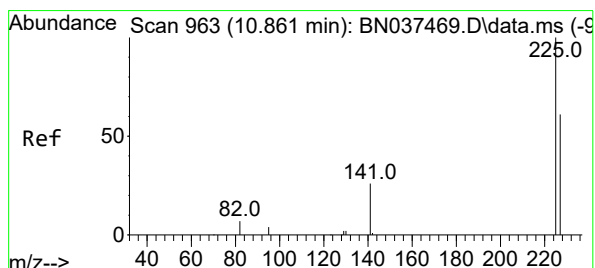
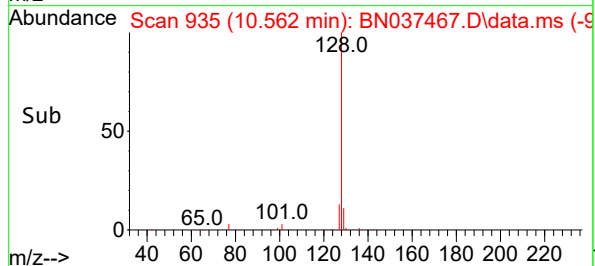
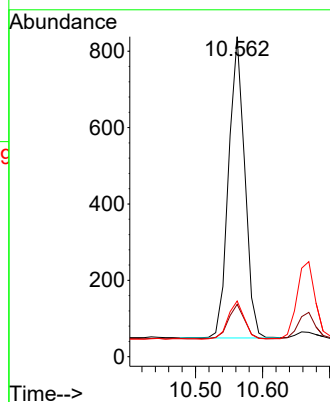
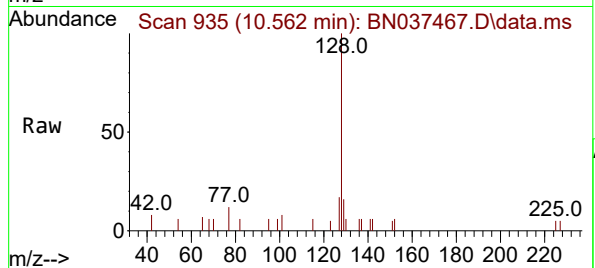




#9
Naphthalene
Concen: 0.099 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

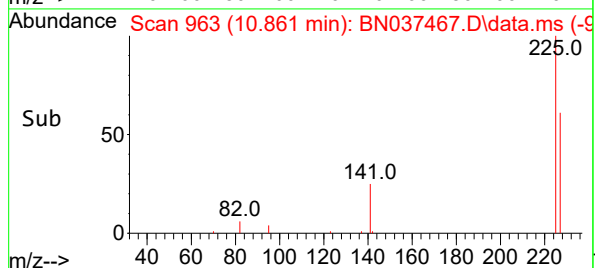
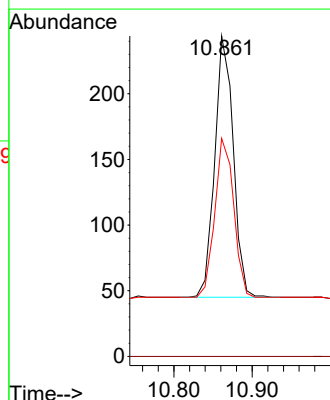
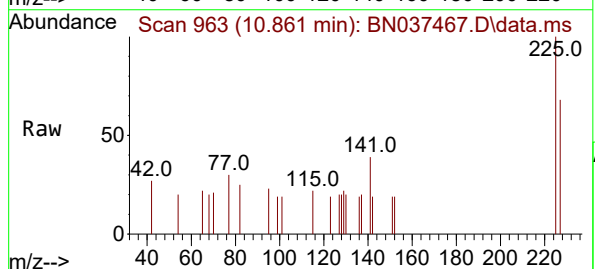
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

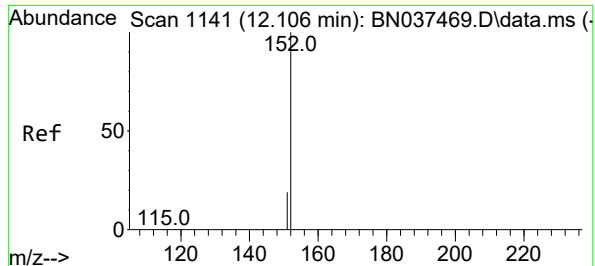
Tgt Ion:128 Resp: 1321
Ion Ratio Lower Upper
128 100
129 16.3 10.2 15.2#
127 17.4 11.8 17.6



#10
Hexachlorobutadiene
Concen: 0.102 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

Tgt Ion:225 Resp: 327
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 62.1 51.4 77.2

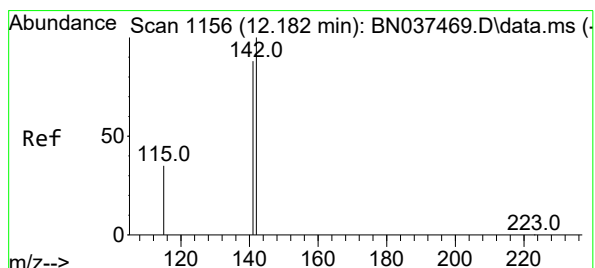
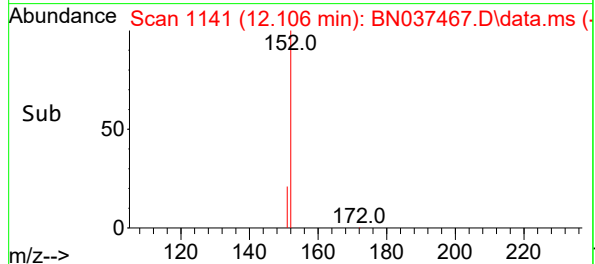
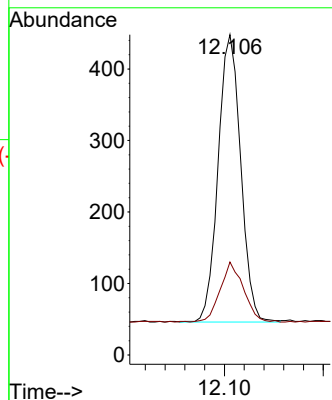
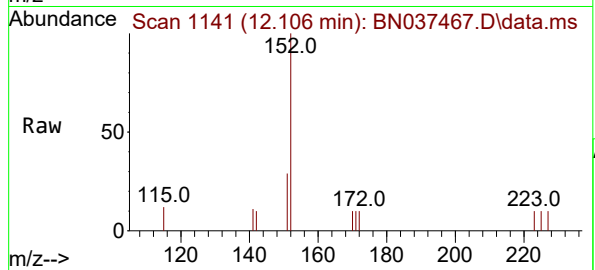




#11
2-Methylnaphthalene-d10
Concen: 0.094 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

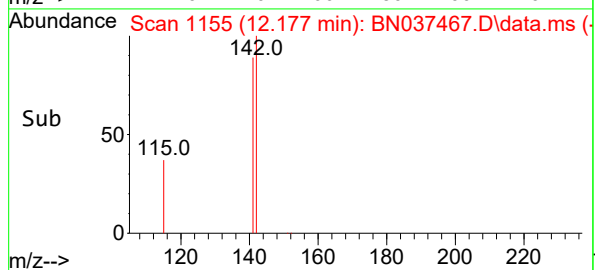
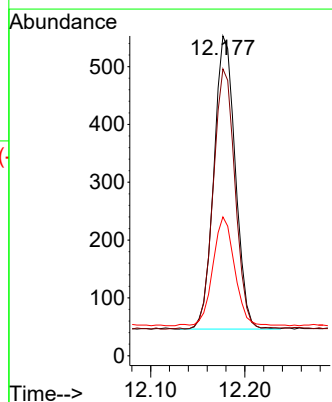
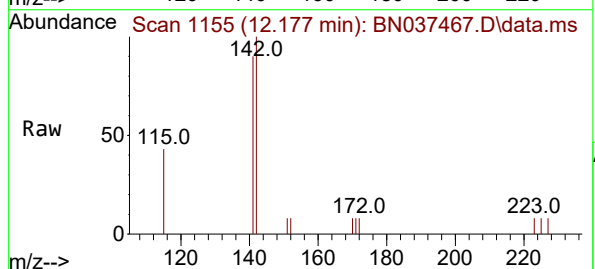
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

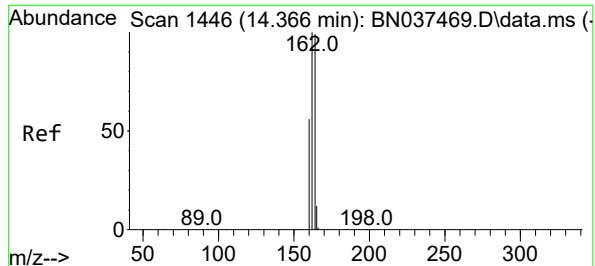
Tgt Ion:152 Resp: 638
Ion Ratio Lower Upper
152 100
151 21.6 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.096 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037467.D
Acq: 11 Jul 2025 11:10

Tgt Ion:142 Resp: 802
Ion Ratio Lower Upper
142 100
141 89.7 70.6 105.8
115 43.4 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 14

Delta R.T. -0.011 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

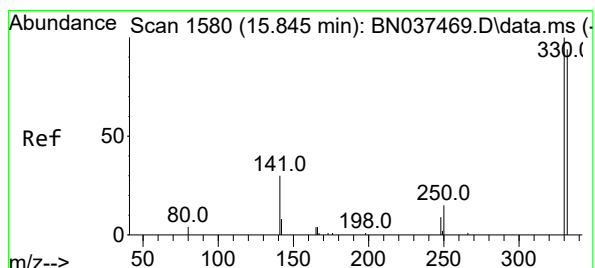
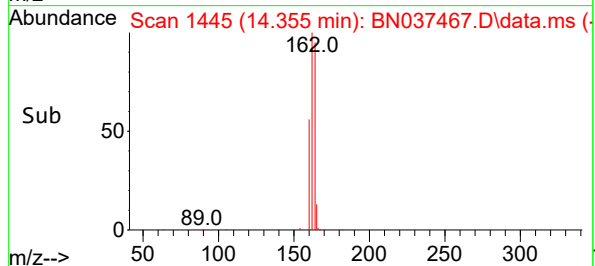
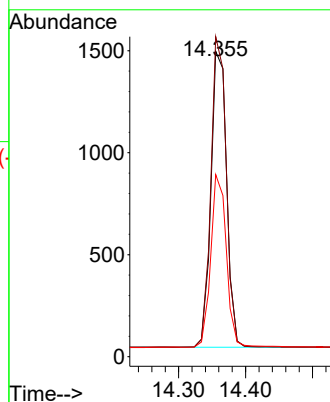
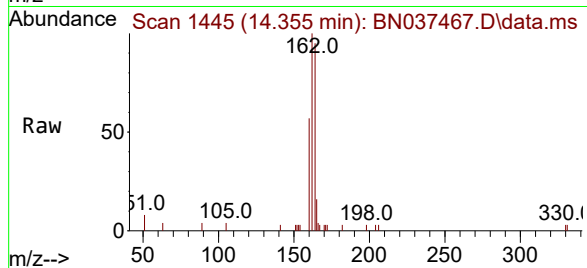
Tgt Ion:164 Resp: 2362

Ion Ratio Lower Upper

164 100

162 104.7 81.1 121.7

160 59.6 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 0.087 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

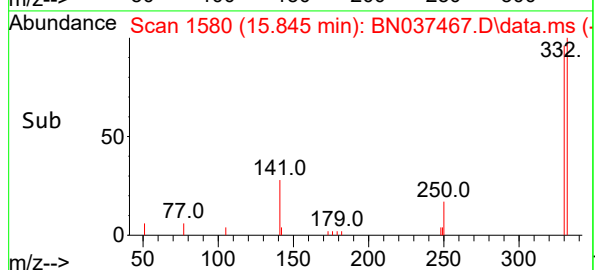
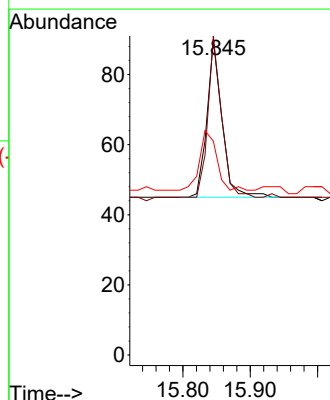
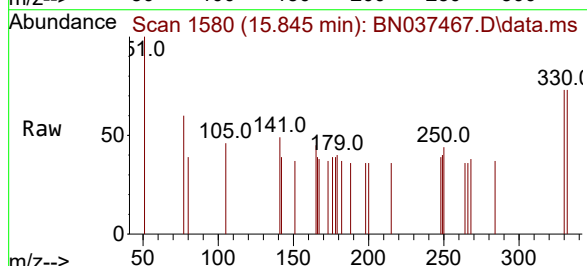
Tgt Ion:330 Resp: 70

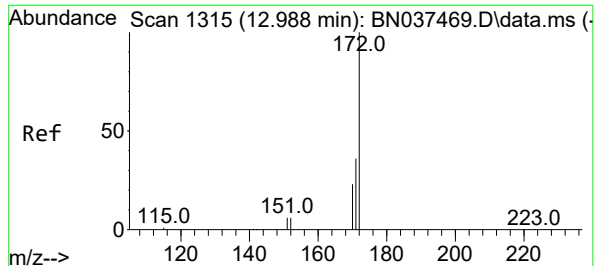
Ion Ratio Lower Upper

330 100

332 92.9 82.0 123.0

141 47.1 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 0.097 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

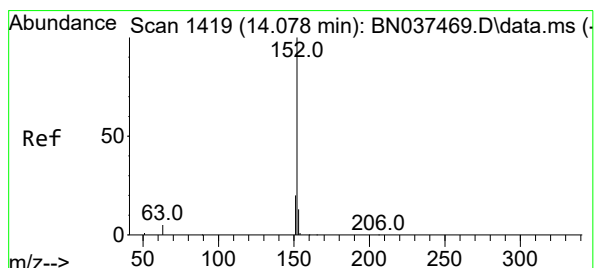
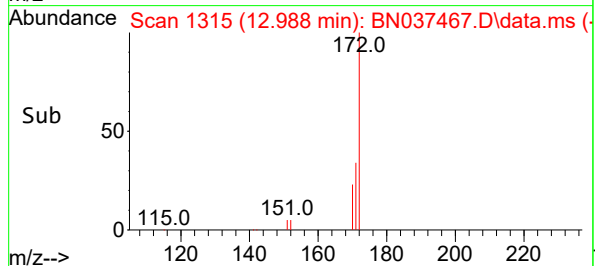
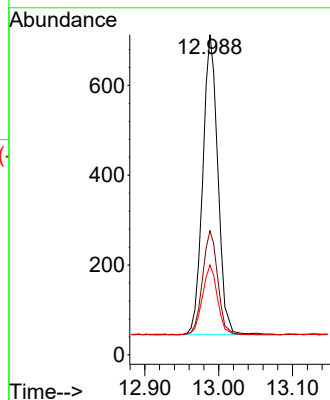
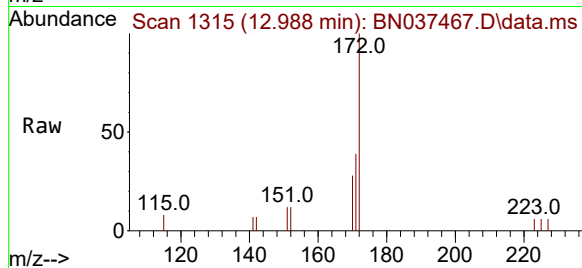
Tgt Ion:172 Resp: 1307

Ion Ratio Lower Upper

172 100

171 38.7 29.8 44.8

170 28.1 20.0 30.0



#16

Acenaphthylene

Concen: 0.097 ng

RT: 14.077 min Scan# 1419

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

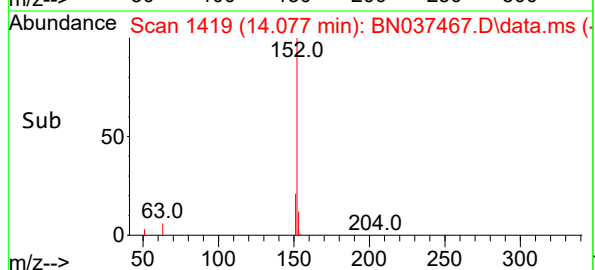
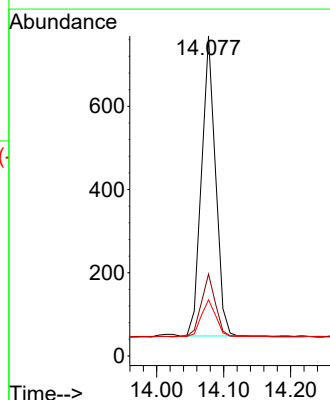
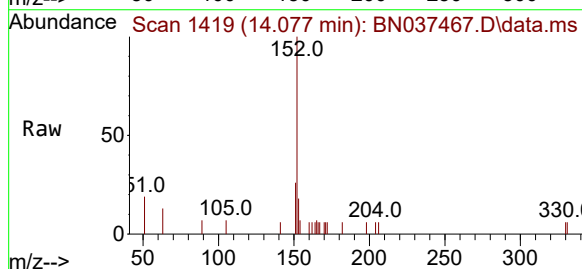
Tgt Ion:152 Resp: 1050

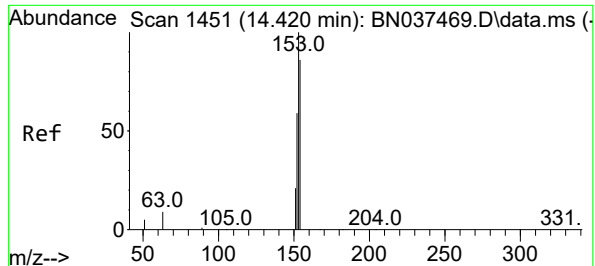
Ion Ratio Lower Upper

152 100

151 21.9 16.4 24.6

153 13.1 10.6 15.8





#17

Acenaphthene

Concen: 0.099 ng

RT: 14.420 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

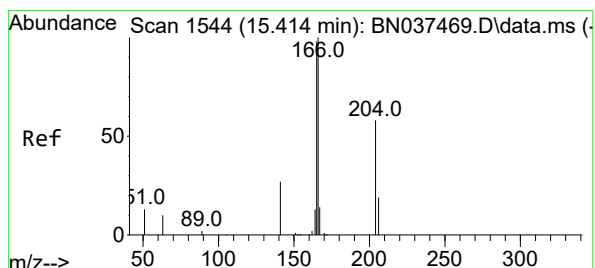
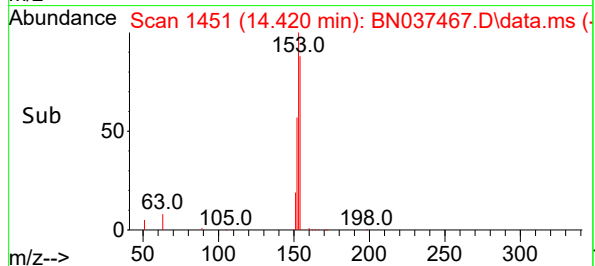
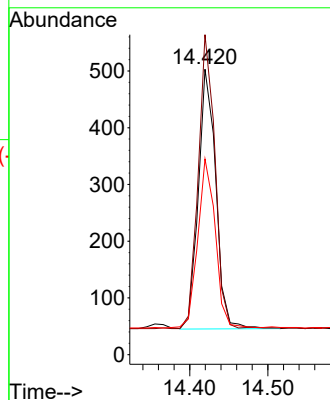
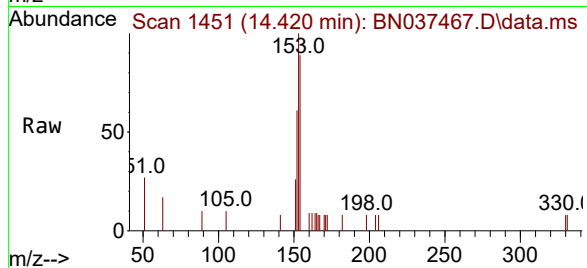
Tgt Ion:154 Resp: 713

Ion Ratio Lower Upper

154 100

153 108.7 89.4 134.0

152 65.4 53.2 79.8



#18

Fluorene

Concen: 0.096 ng

RT: 15.414 min Scan# 1544

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

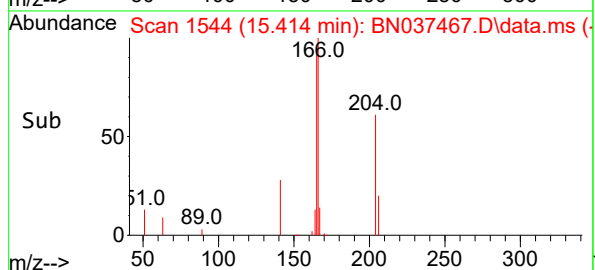
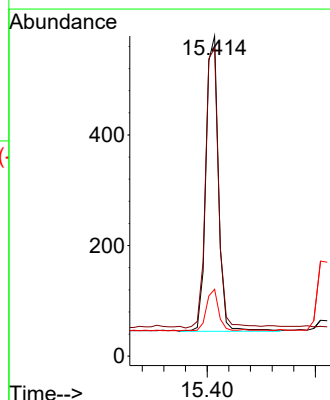
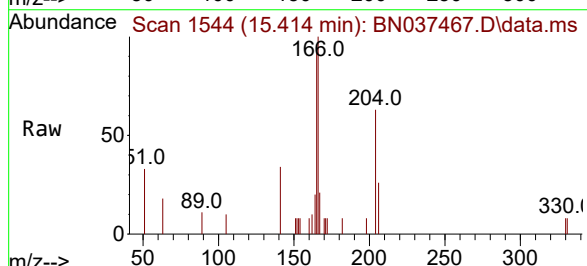
Tgt Ion:166 Resp: 873

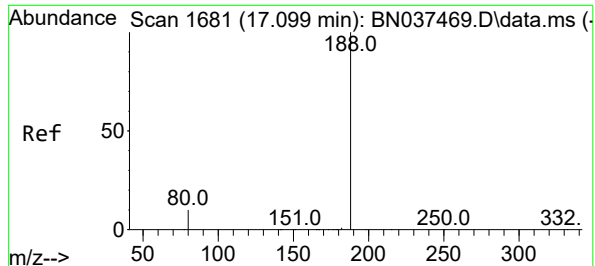
Ion Ratio Lower Upper

166 100

165 97.0 79.4 119.2

167 13.3 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

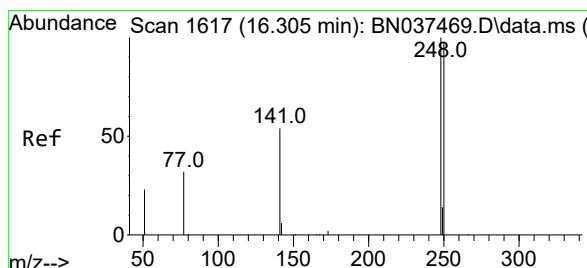
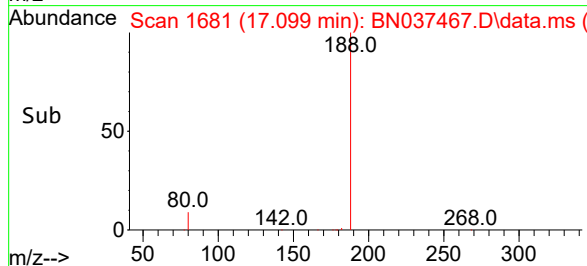
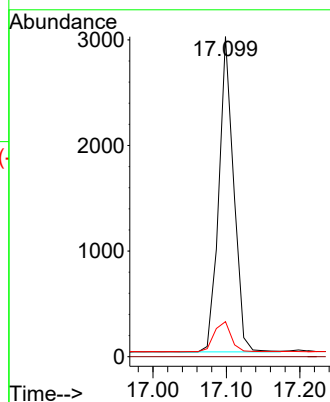
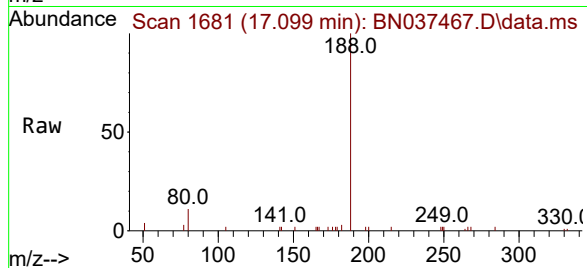
Tgt Ion:188 Resp: 4197

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.9 9.3 13.9



#21

4-Bromophenyl-phenylether

Concen: 0.099 ng

RT: 16.304 min Scan# 1617

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

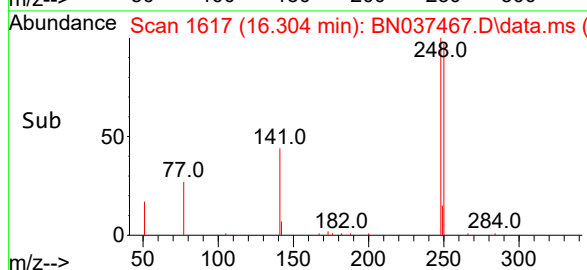
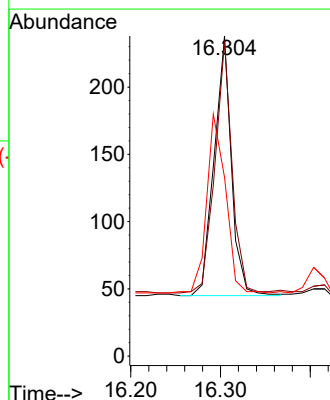
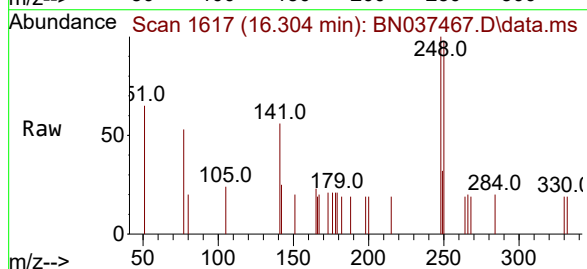
Tgt Ion:248 Resp: 258

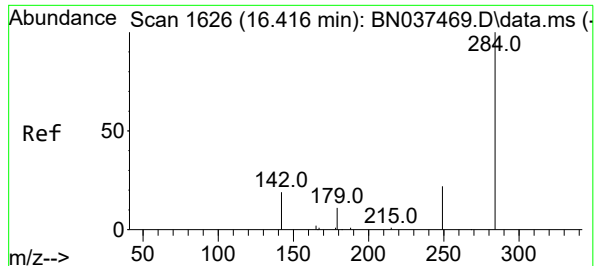
Ion Ratio Lower Upper

248 100

250 98.3 77.8 116.6

141 55.9 45.9 68.9





#22

Hexachlorobenzene

Concen: 0.099 ng

RT: 16.416 min Scan# 1626

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

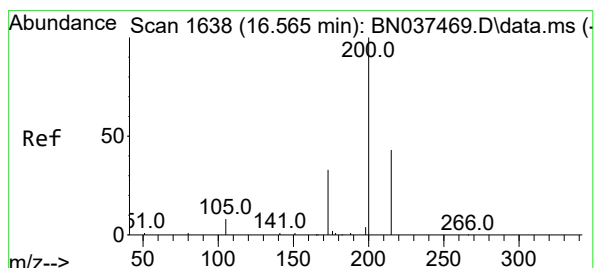
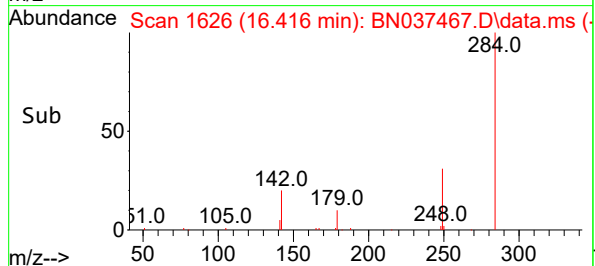
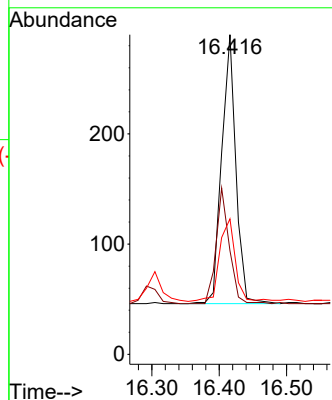
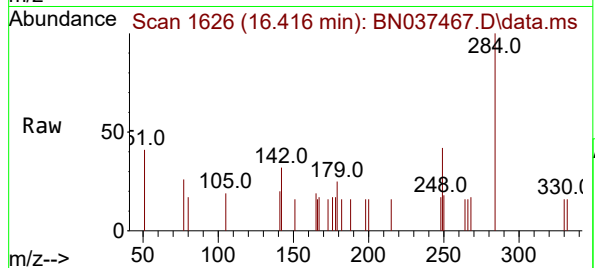
Tgt Ion:284 Resp: 356

Ion Ratio Lower Upper

284 100

142 40.2 31.3 46.9

249 34.6 26.6 40.0



#23

Atrazine

Concen: 0.095 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

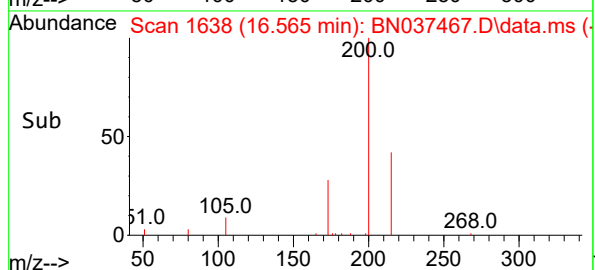
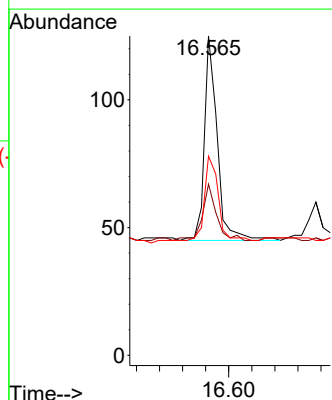
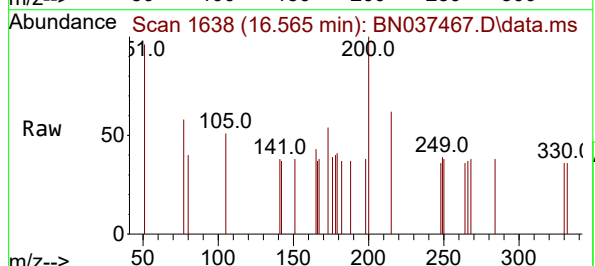
Tgt Ion:200 Resp: 124

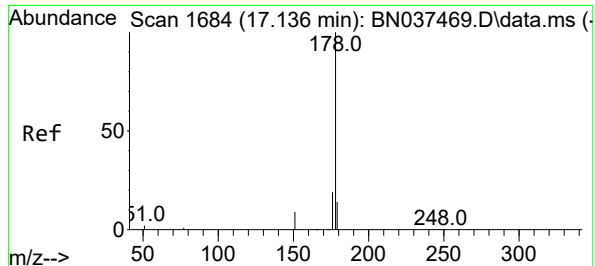
Ion Ratio Lower Upper

200 100

173 53.6 34.3 51.5#

215 62.4 41.6 62.4





#25

Phenanthrene

Concen: 0.100 ng

RT: 17.136 min Scan# 1684

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

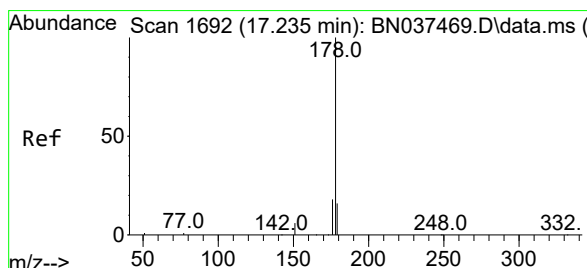
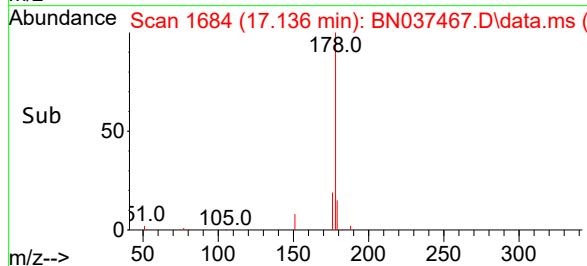
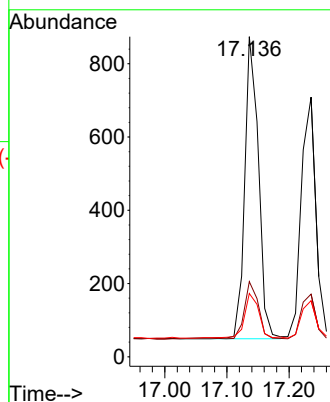
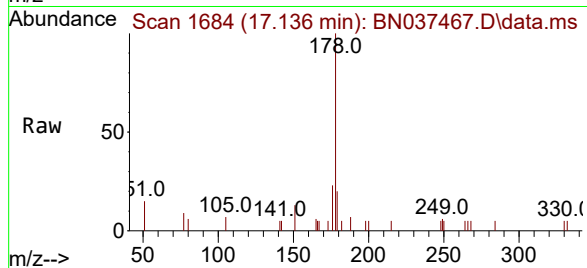
Tgt Ion:178 Resp: 1273

Ion Ratio Lower Upper

178 100

176 19.0 15.1 22.7

179 15.7 12.2 18.2



#26

Anthracene

Concen: 0.093 ng

RT: 17.235 min Scan# 1692

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

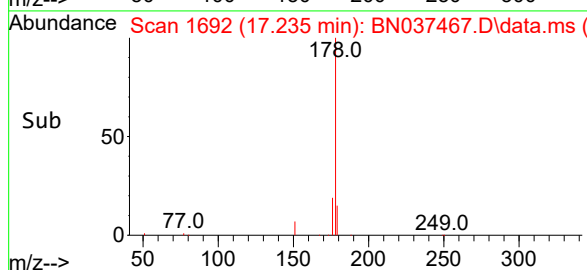
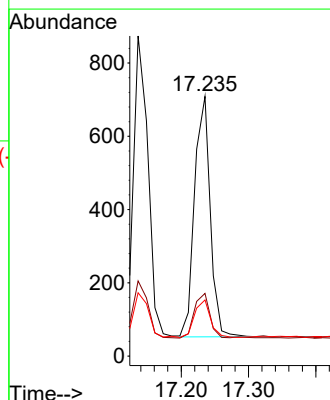
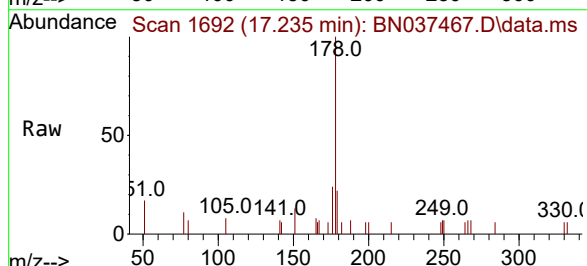
Tgt Ion:178 Resp: 1069

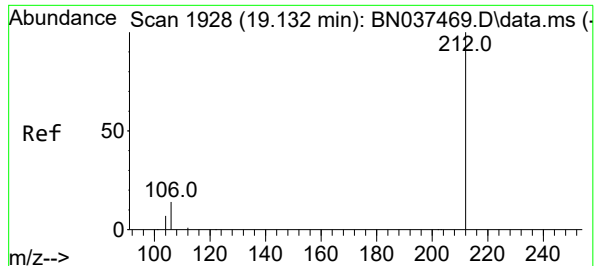
Ion Ratio Lower Upper

178 100

176 18.3 14.9 22.3

179 15.6 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.095 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

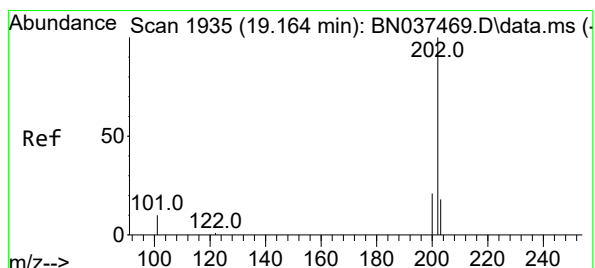
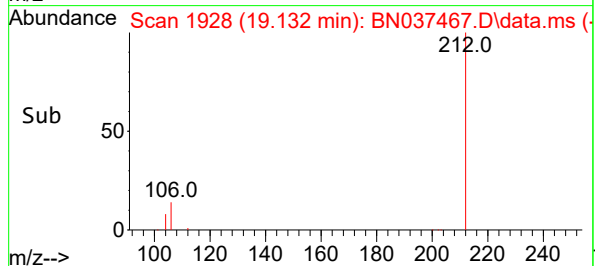
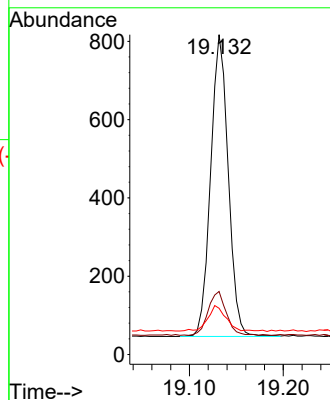
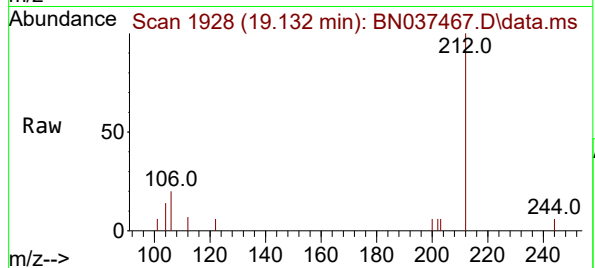
Tgt Ion:212 Resp: 1003

Ion Ratio Lower Upper

212 100

106 14.9 11.7 17.5

104 9.2 6.6 10.0



#28

Fluoranthene

Concen: 0.094 ng

RT: 19.159 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

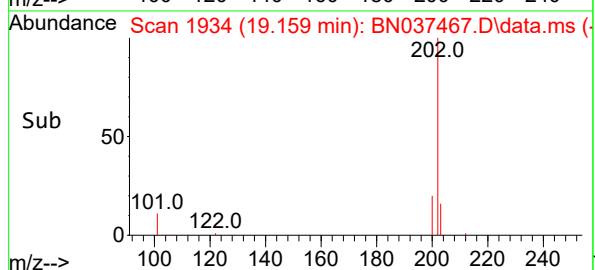
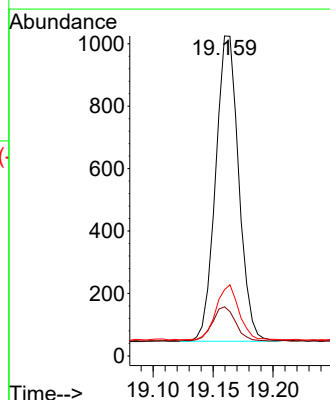
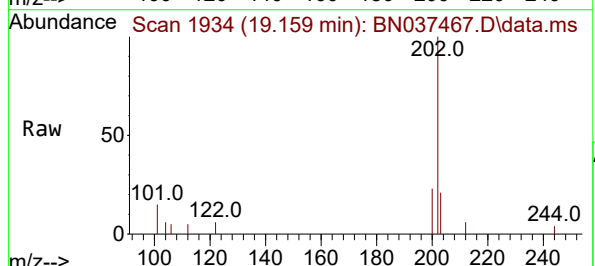
Tgt Ion:202 Resp: 1314

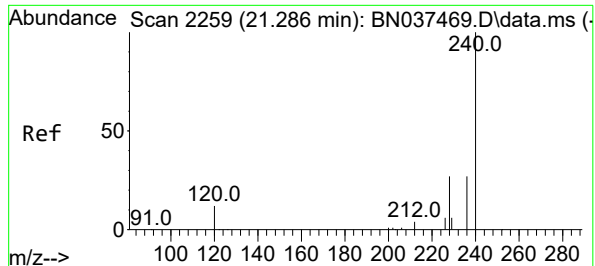
Ion Ratio Lower Upper

202 100

101 11.1 9.2 13.8

203 17.8 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

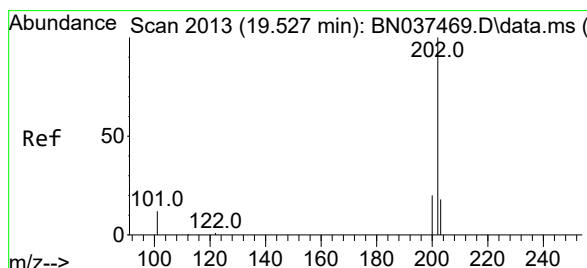
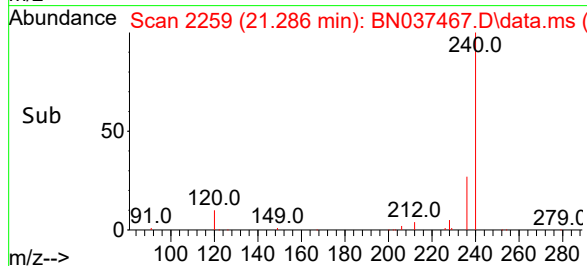
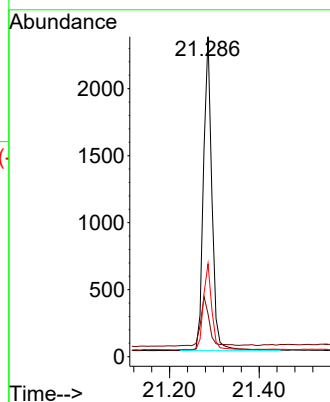
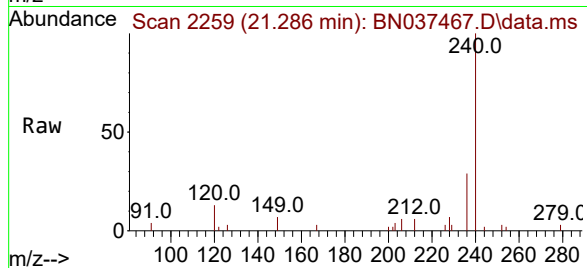
Tgt Ion:240 Resp: 3080

Ion Ratio Lower Upper

240 100

120 13.3 12.4 18.6

236 29.1 22.9 34.3



#30

Pyrene

Concen: 0.104 ng

RT: 19.522 min Scan# 2012

Delta R.T. -0.005 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

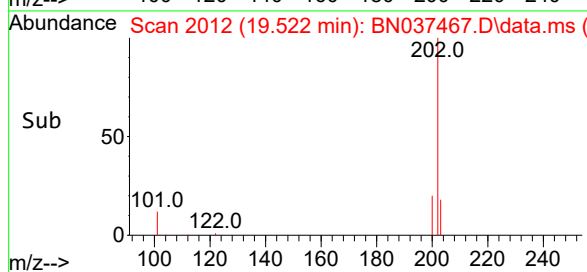
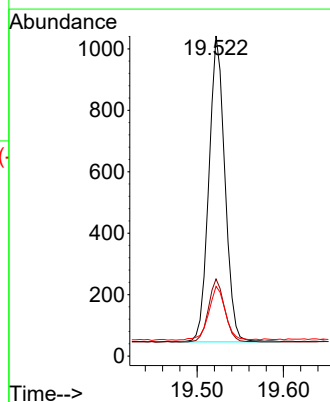
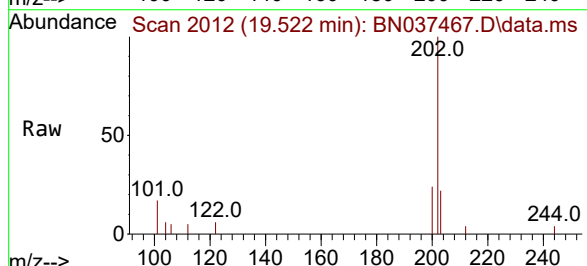
Tgt Ion:202 Resp: 1289

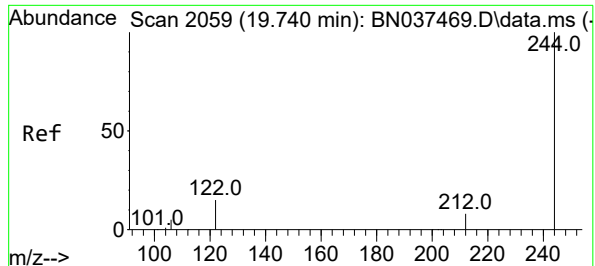
Ion Ratio Lower Upper

202 100

200 20.6 16.4 24.6

203 18.2 14.3 21.5





#31

Terphenyl-d14

Concen: 0.102 ng

RT: 19.736 min Scan# 2058

Delta R.T. -0.005 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

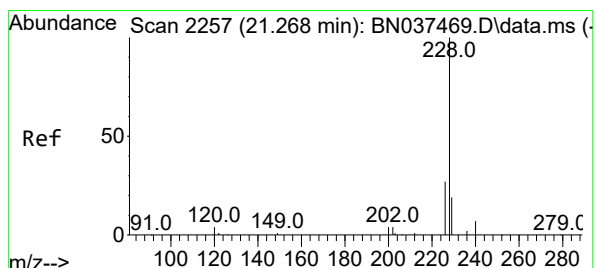
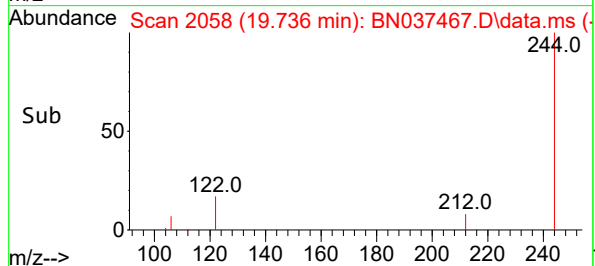
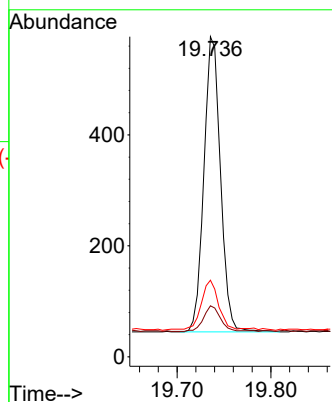
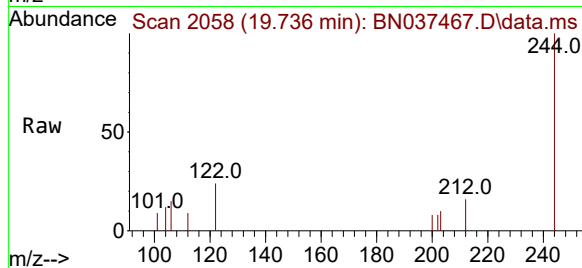
Tgt Ion:244 Resp: 654

Ion Ratio Lower Upper

244 100

212 15.9 8.7 13.1#

122 23.9 14.1 21.1#



#32

Benzo(a)anthracene

Concen: 0.098 ng

RT: 21.268 min Scan# 2257

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

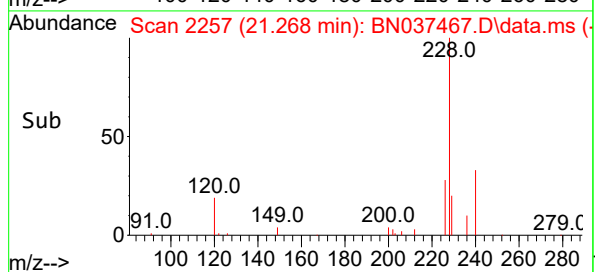
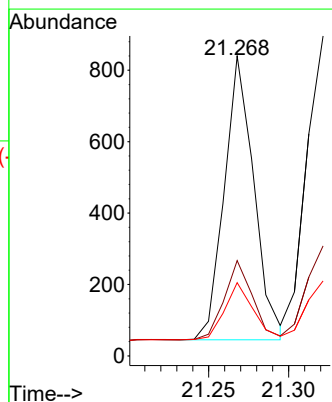
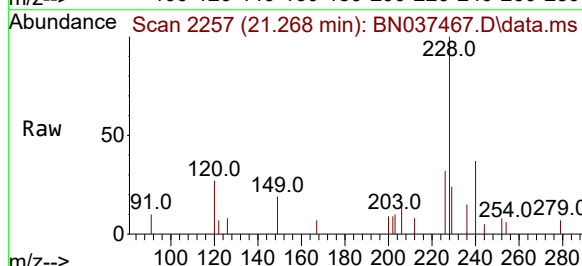
Tgt Ion:228 Resp: 1023

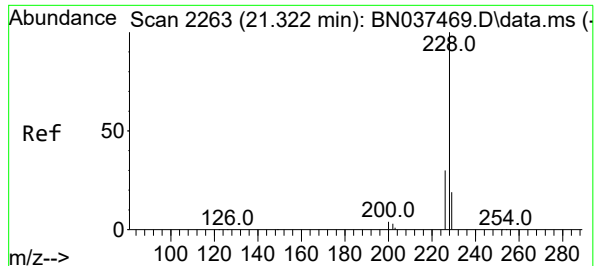
Ion Ratio Lower Upper

228 100

226 31.8 22.7 34.1

229 24.4 16.6 24.8





#33

Chrysene

Concen: 0.103 ng

RT: 21.322 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

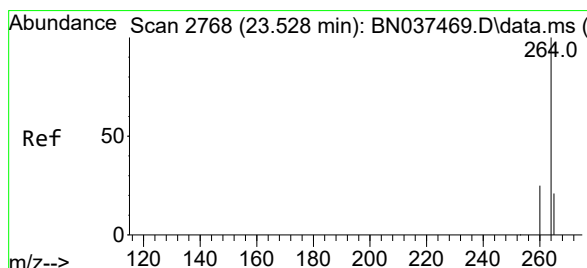
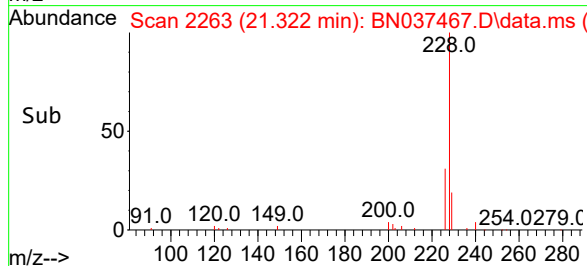
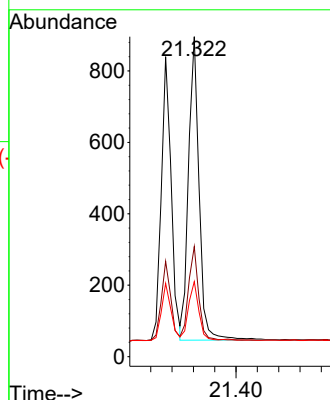
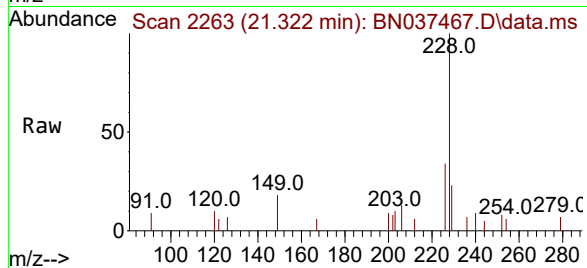
Tgt Ion:228 Resp: 1172

Ion Ratio Lower Upper

228 100

226 34.4 24.6 36.8

229 23.4 16.4 24.6



#35

Perylene-d12

Concen: 0.400 ng

RT: 23.528 min Scan# 2768

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

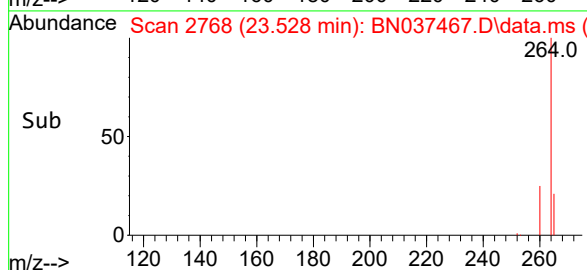
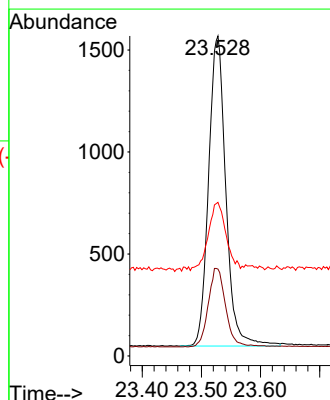
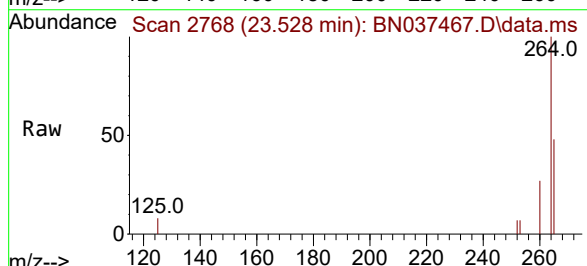
Tgt Ion:264 Resp: 3076

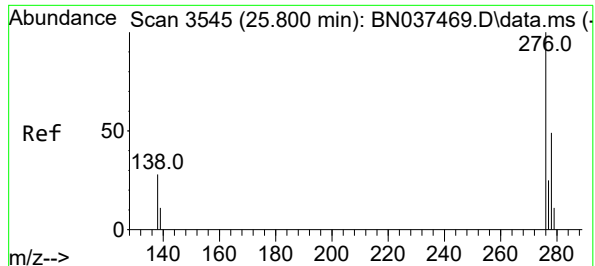
Ion Ratio Lower Upper

264 100

260 27.2 21.7 32.5

265 48.0 41.6 62.4





#36

Indeno(1,2,3-cd)pyrene

Concen: 0.086 ng

RT: 25.794 min Scan# 3543

Delta R.T. -0.006 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

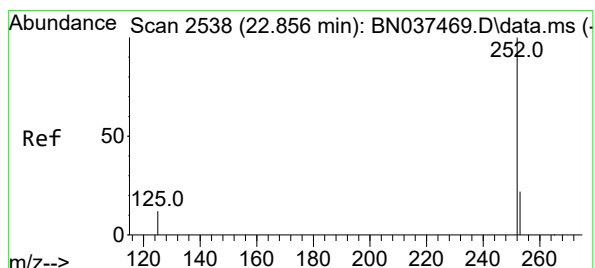
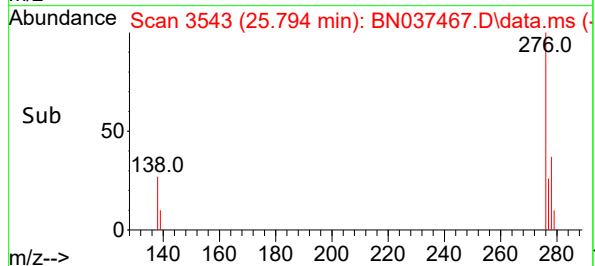
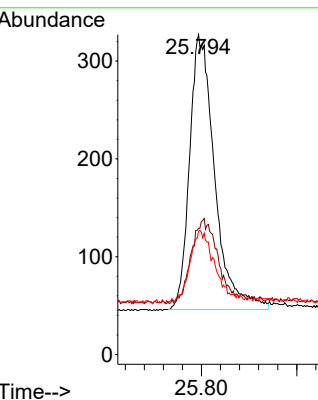
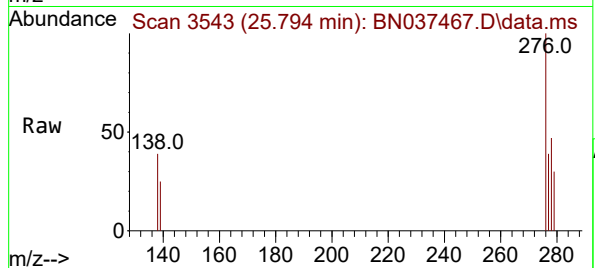
Tgt Ion:276 Resp: 1030

Ion Ratio Lower Upper

276 100

138 31.7 23.4 35.2

277 25.0 19.8 29.8



#37

Benzo(b)fluoranthene

Concen: 0.089 ng

RT: 22.853 min Scan# 2537

Delta R.T. -0.003 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

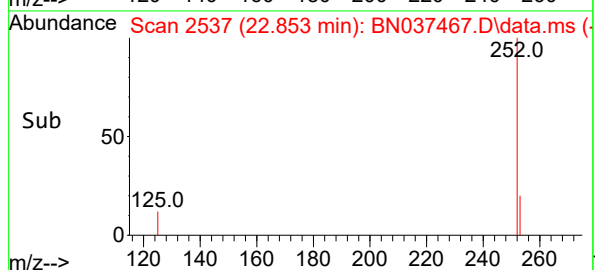
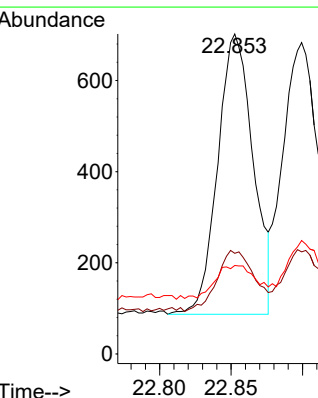
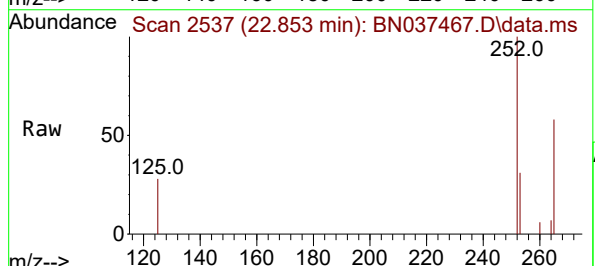
Tgt Ion:252 Resp: 1063

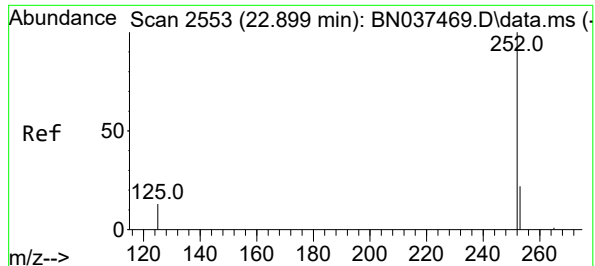
Ion Ratio Lower Upper

252 100

253 31.5 20.1 30.1#

125 27.6 13.7 20.5#





#38

Benzo(k)fluoranthene

Concen: 0.090 ng

RT: 22.899 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

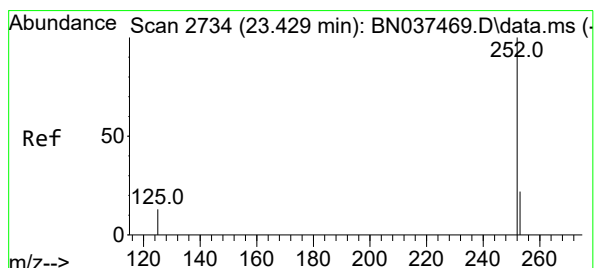
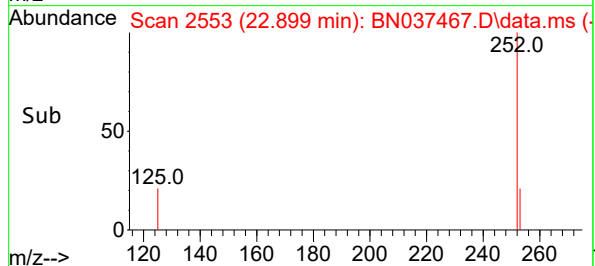
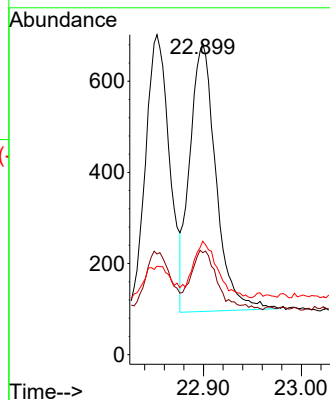
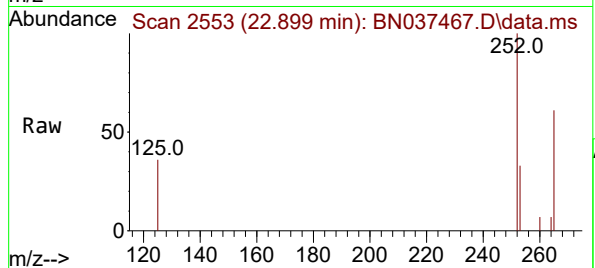
Tgt Ion:252 Resp: 1089

Ion Ratio Lower Upper

252 100

253 32.8 20.4 30.6#

125 36.5 14.6 21.8#



#39

Benzo(a)pyrene

Concen: 0.085 ng

RT: 23.429 min Scan# 2734

Delta R.T. -0.000 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

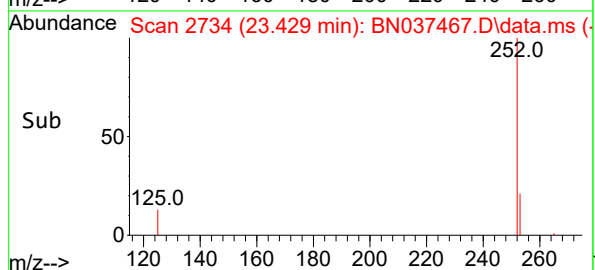
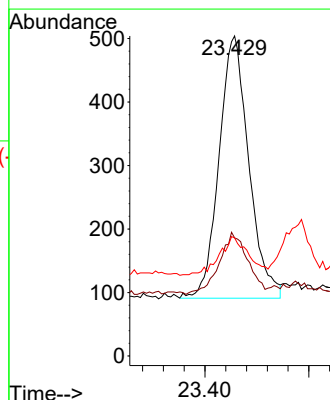
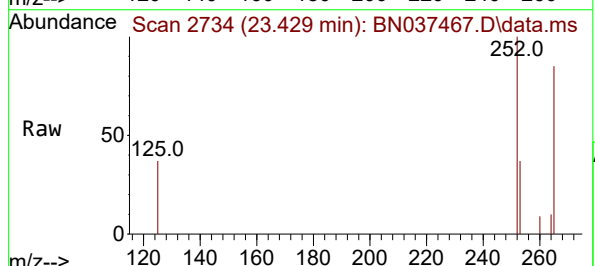
Tgt Ion:252 Resp: 822

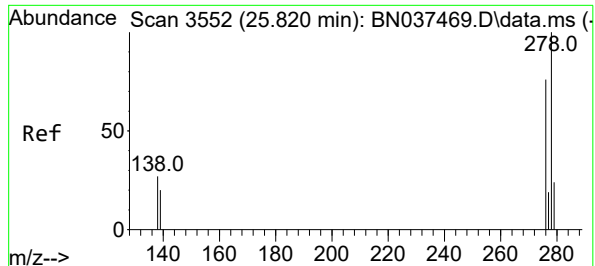
Ion Ratio Lower Upper

252 100

253 36.9 21.8 32.6#

125 36.9 16.7 25.1#





#40

Dibenzo(a,h)anthracene

Concen: 0.085 ng

RT: 25.823 min Scan# 3

Delta R.T. 0.003 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

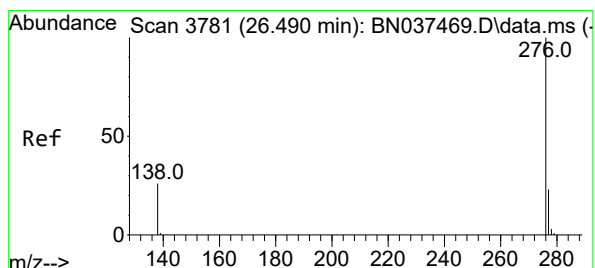
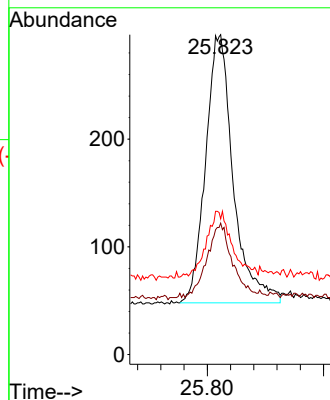
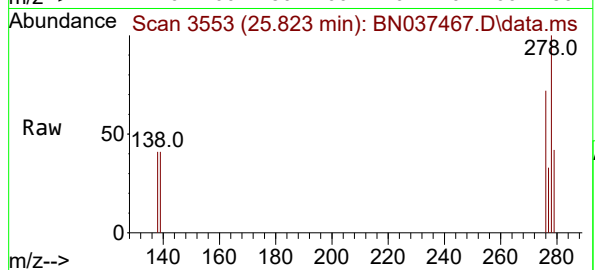
Tgt Ion:278 Resp: 822

Ion Ratio Lower Upper

278 100

139 41.1 19.9 29.9#

279 42.4 24.8 37.2#



#41

Benzo(g,h,i)perylene

Concen: 0.087 ng

RT: 26.487 min Scan# 3780

Delta R.T. -0.003 min

Lab File: BN037467.D

Acq: 11 Jul 2025 11:10

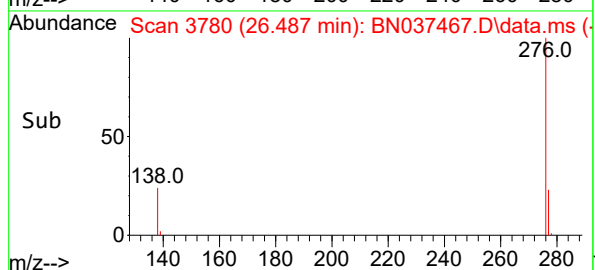
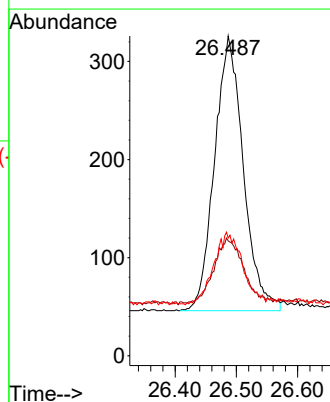
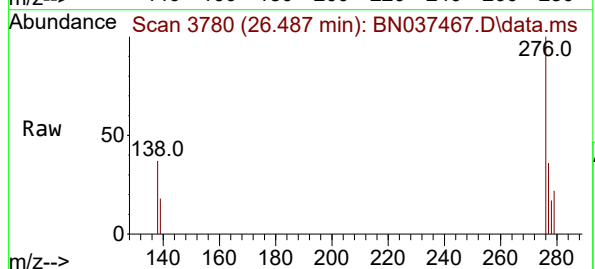
Tgt Ion:276 Resp: 913

Ion Ratio Lower Upper

276 100

277 35.9 21.7 32.5#

138 36.8 24.3 36.5#



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037468.D
 Acq On : 11 Jul 2025 11:46
 Operator : RC/JU
 Sample : SSTDICC0.2
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.2

Quant Time: Jul 11 15:25:49 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

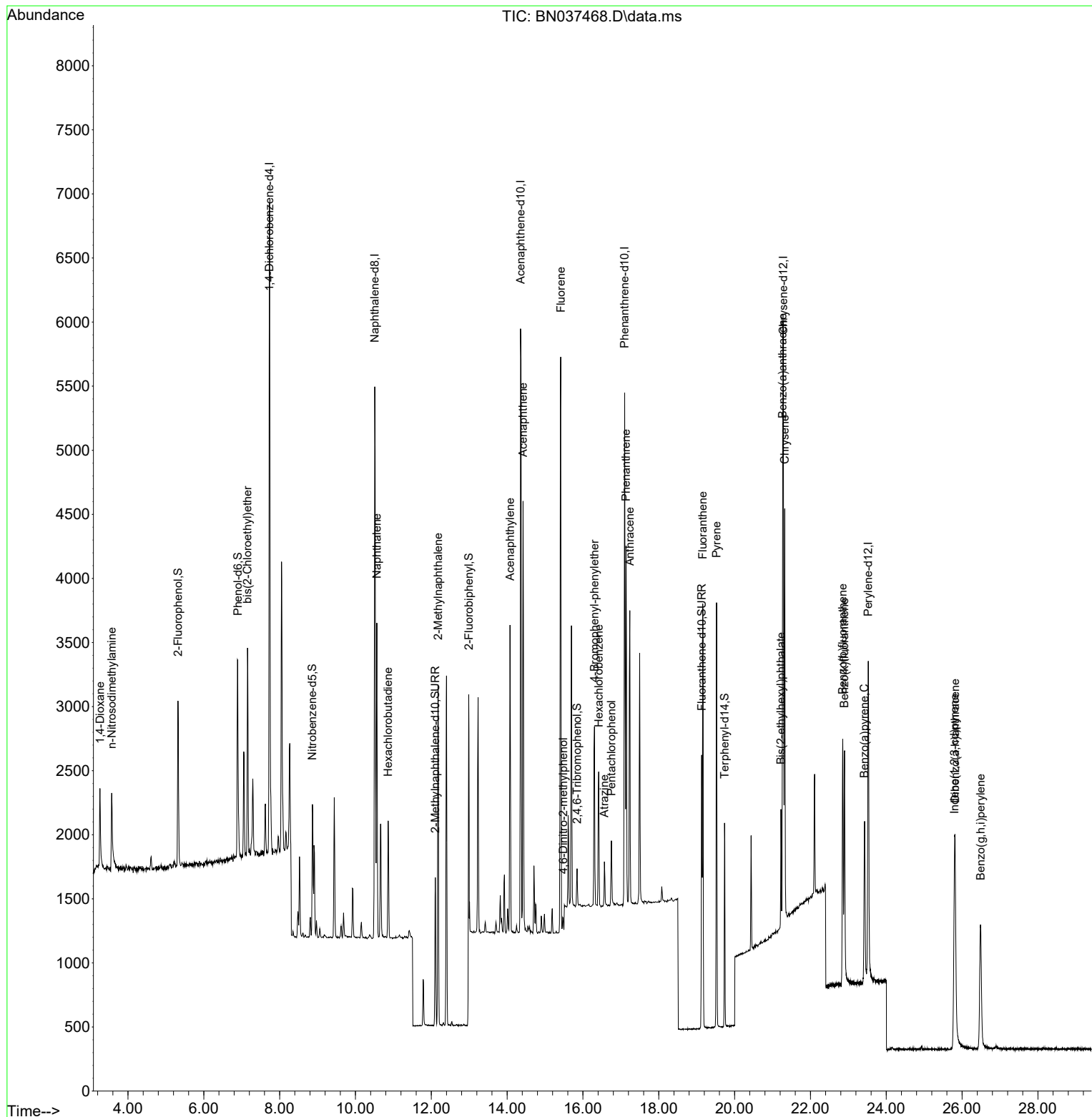
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	2429	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5847	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2772	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	4915	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3653	0.400	ng	# 0.00
35) Perylene-d12	23.525	264	3449	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1135	0.201	ng	0.00
5) Phenol-d6	6.894	99	1452	0.204	ng	0.00
8) Nitrobenzene-d5	8.865	82	810	0.191	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	1487	0.187	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	159	0.169	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	2982	0.188	ng	0.00
27) Fluoranthene-d10	19.132	212	2301	0.186	ng	0.00
31) Terphenyl-d14	19.736	244	1501	0.197	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.261	88	449	0.197	ng	97
3) n-Nitrosodimethylamine	3.572	42	580	0.190	ng	# 98
6) bis(2-Chloroethyl)ether	7.154	93	1192	0.200	ng	99
9) Naphthalene	10.562	128	3069	0.195	ng	99
10) Hexachlorobutadiene	10.861	225	733	0.194	ng	# 100
12) 2-Methylnaphthalene	12.177	142	1870	0.190	ng	97
16) Acenaphthylene	14.078	152	2451	0.194	ng	99
17) Acenaphthene	14.420	154	1617	0.191	ng	99
18) Fluorene	15.414	166	1985	0.186	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	88	0.159	ng	# 71
21) 4-Bromophenyl-phenylether	16.304	248	585	0.191	ng	96
22) Hexachlorobenzene	16.416	284	836	0.198	ng	98
23) Atrazine	16.565	200	273	0.179	ng	92
24) Pentachlorophenol	16.751	266	258	0.177	ng	98
25) Phenanthrene	17.136	178	2862	0.191	ng	99
26) Anthracene	17.235	178	2543	0.188	ng	100
28) Fluoranthene	19.160	202	3035	0.185	ng	100
30) Pyrene	19.522	202	2977	0.203	ng	100
32) Benzo(a)anthracene	21.268	228	2392	0.193	ng	98
33) Chrysene	21.322	228	2716	0.201	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	823	0.196	ng	98
36) Indeno(1,2,3-cd)pyrene	25.797	276	2270	0.170	ng	99
37) Benzo(b)fluoranthene	22.853	252	2454	0.183	ng	96
38) Benzo(k)fluoranthene	22.897	252	2369	0.174	ng	95
39) Benzo(a)pyrene	23.426	252	1913	0.177	ng	94
40) Dibenzo(a,h)anthracene	25.817	278	1791	0.166	ng	95
41) Benzo(g,h,i)perylene	26.487	276	2131	0.180	ng	95

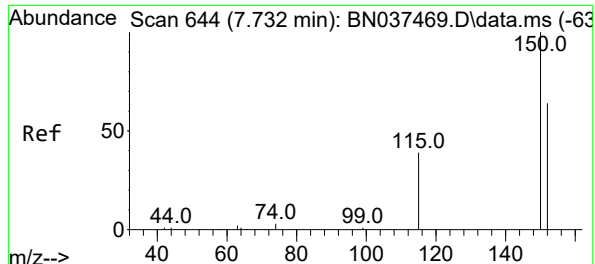
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037468.D
Acq On : 11 Jul 2025 11:46
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

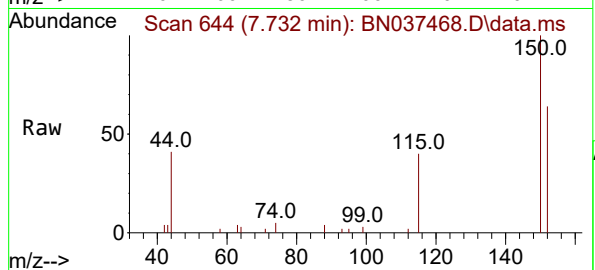
Quant Time: Jul 11 15:25:49 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration



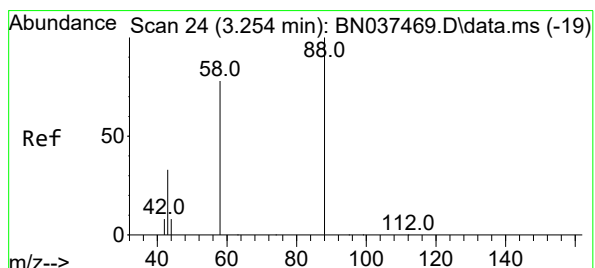
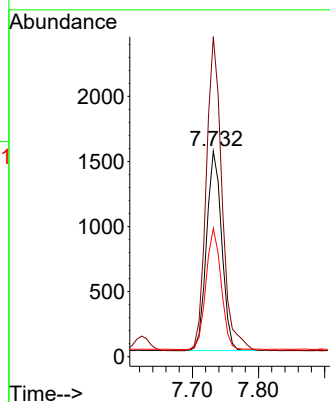
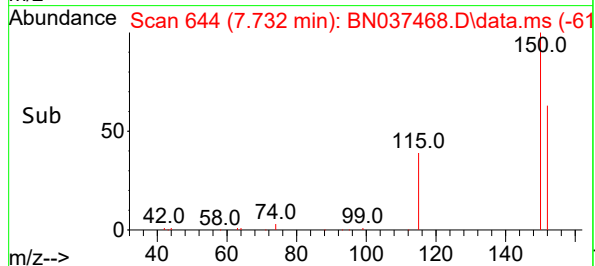


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

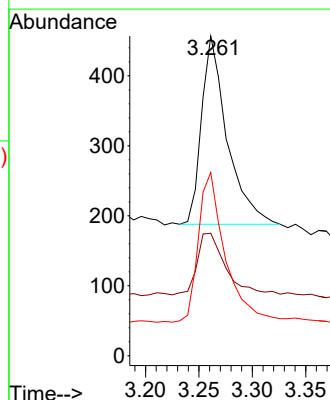
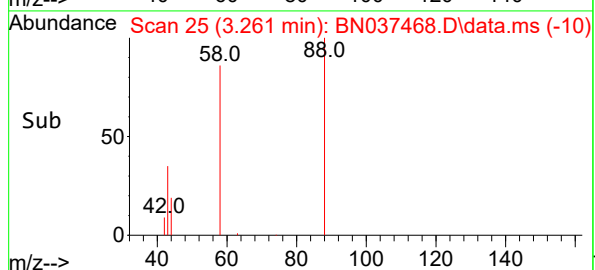
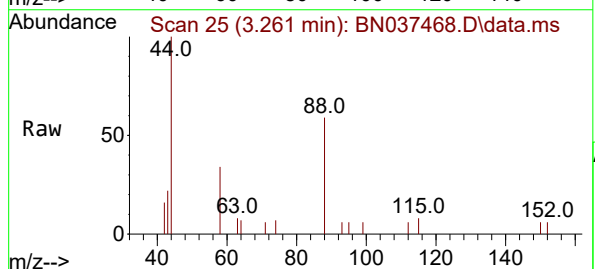


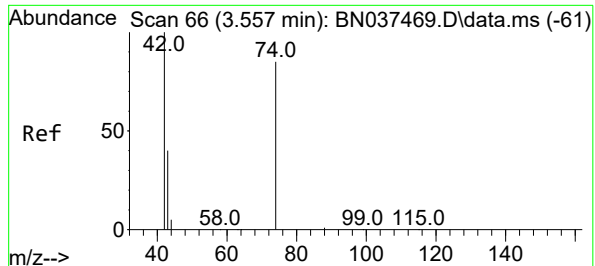
Tgt Ion:152 Resp: 2429
Ion Ratio Lower Upper
152 100
150 155.7 122.5 183.7
115 62.4 49.9 74.9



#2
1,4-Dioxane
Concen: 0.197 ng
RT: 3.261 min Scan# 25
Delta R.T. 0.007 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion: 88 Resp: 449
Ion Ratio Lower Upper
88 100
43 37.0 30.7 46.1
58 83.5 65.0 97.4

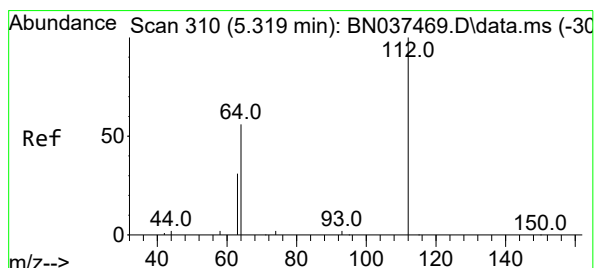
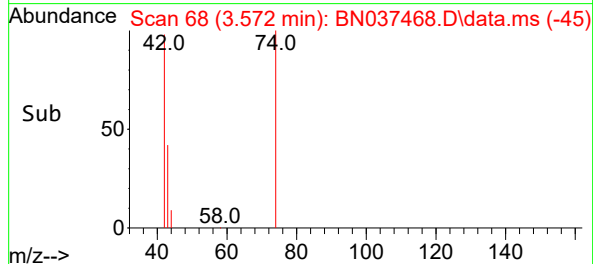
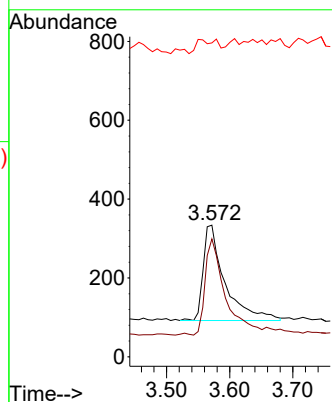
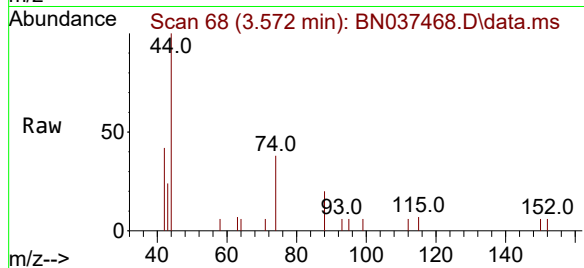




#3
n-Nitrosodimethylamine
Concen: 0.190 ng
RT: 3.572 min Scan# 61
Delta R.T. 0.014 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

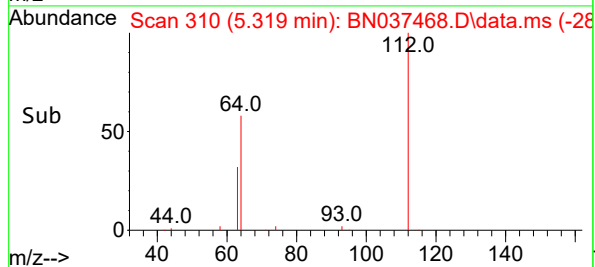
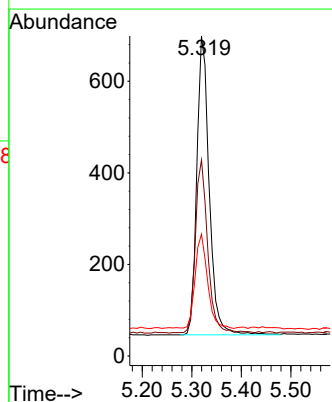
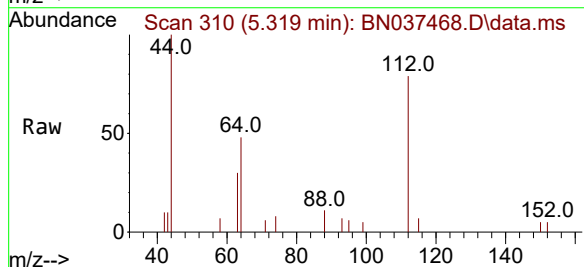
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

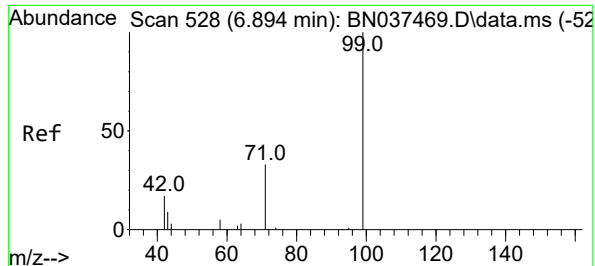
Tgt Ion: 42 Resp: 580
Ion Ratio Lower Upper
42 100
74 93.1 74.9 112.3
44 13.6 7.2 10.8#



#4
2-Fluorophenol
Concen: 0.201 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion: 112 Resp: 1135
Ion Ratio Lower Upper
112 100
64 57.7 45.4 68.0
63 31.4 24.7 37.1

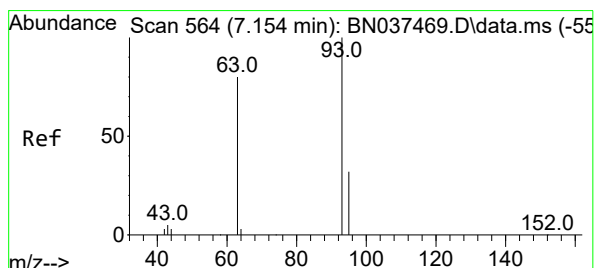
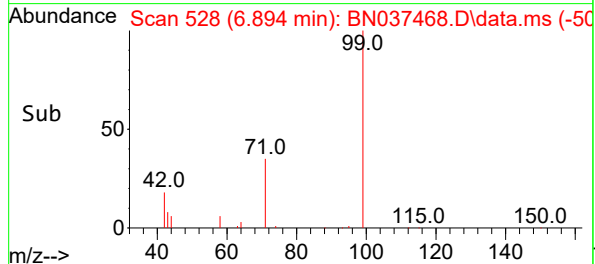
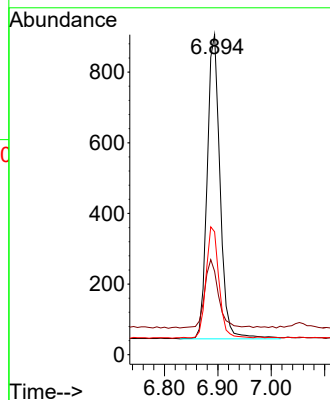
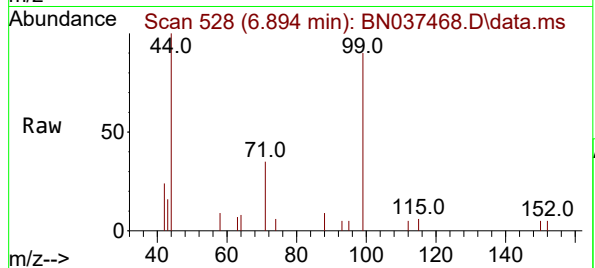




#5
Phenol-d6
Concen: 0.204 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

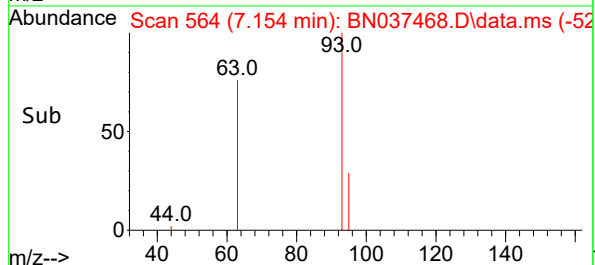
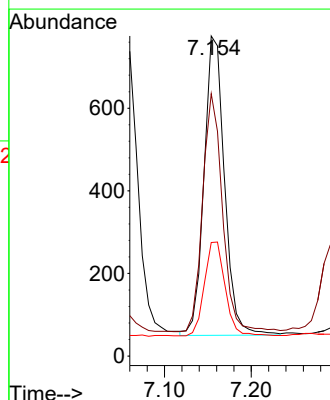
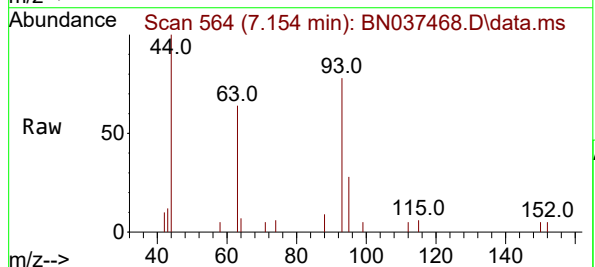
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

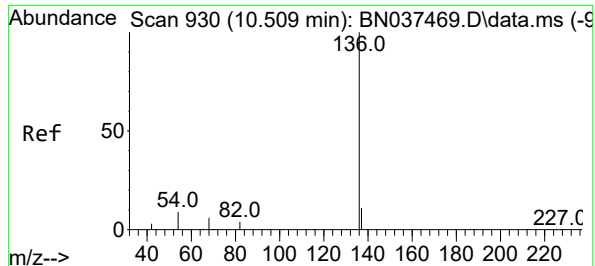
Tgt Ion	Ratio	Lower	Upper
99	100		
42	23.8	19.5	29.3
71	36.2	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.200 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion	Ratio	Lower	Upper
93	100		
63	76.8	60.8	91.2
95	31.9	25.6	38.4

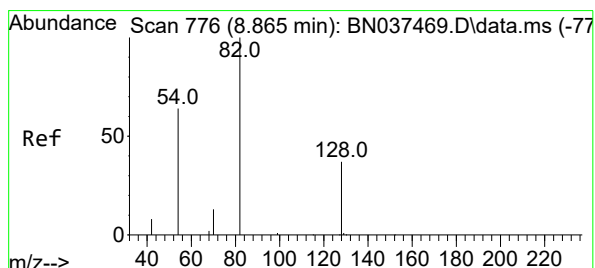
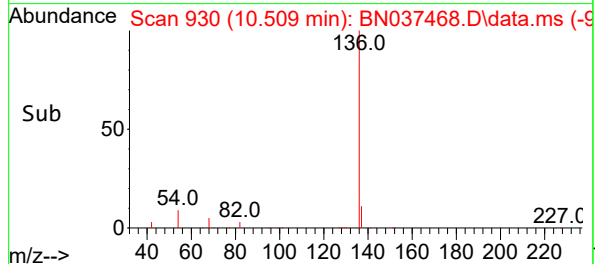
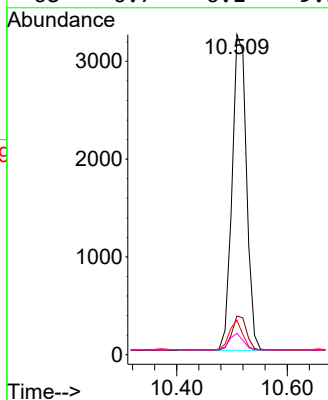
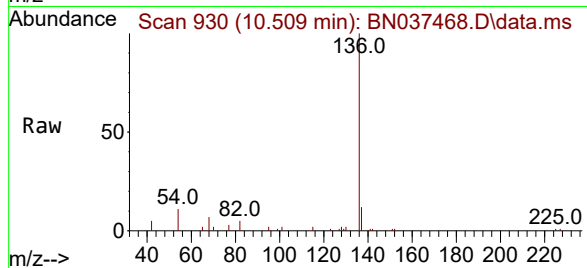




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

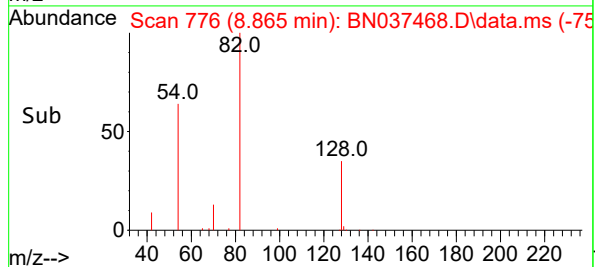
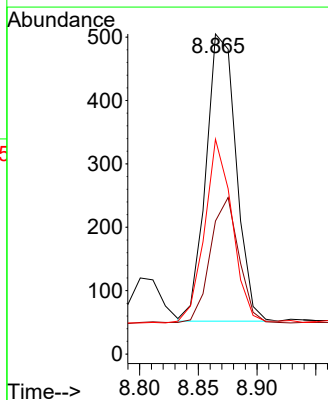
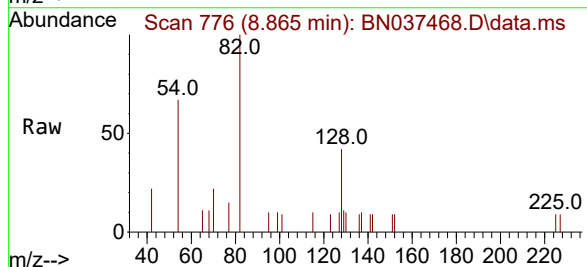
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

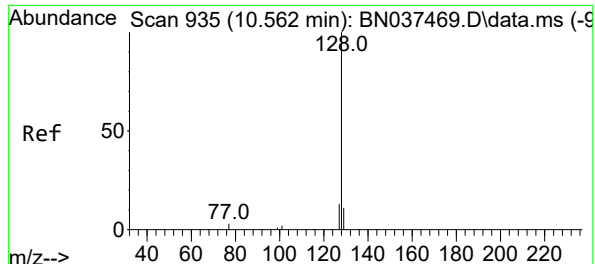
Tgt Ion:	136	Resp:	5847
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.0	15.0
54	10.8	9.0	13.6
68	6.7	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.191 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion:	82	Resp:	810
Ion	Ratio	Lower	Upper
82	100		
128	41.6	33.1	49.7
54	67.1	53.0	79.4





#9

Naphthalene

Concen: 0.195 ng

RT: 10.562 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

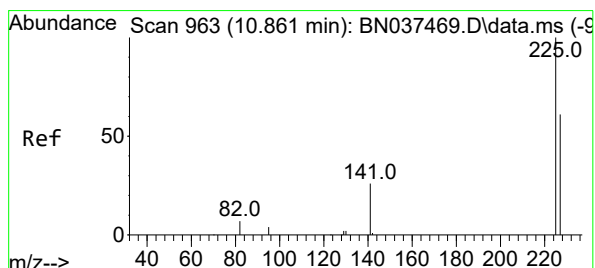
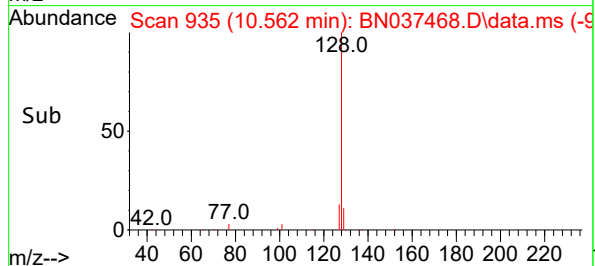
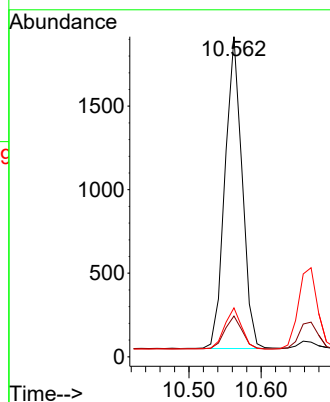
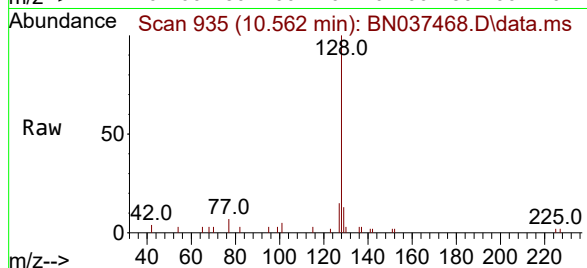
Tgt Ion:128 Resp: 3069

Ion Ratio Lower Upper

128 100

129 12.7 10.2 15.2

127 15.3 11.8 17.6



#10

Hexachlorobutadiene

Concen: 0.194 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

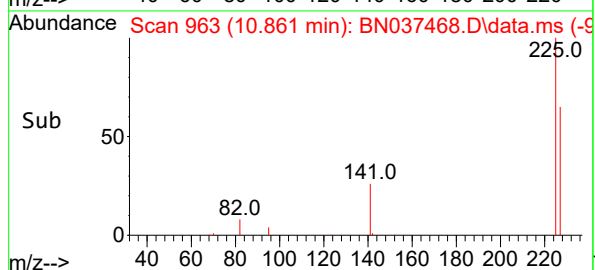
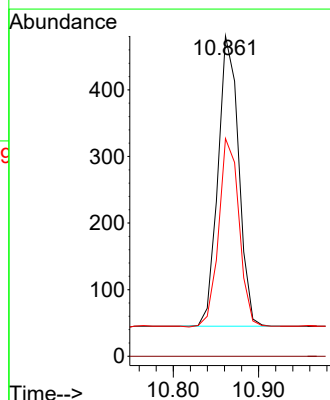
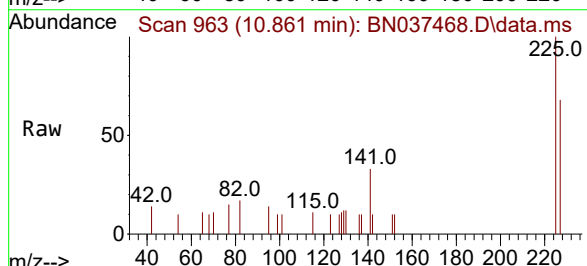
Tgt Ion:225 Resp: 733

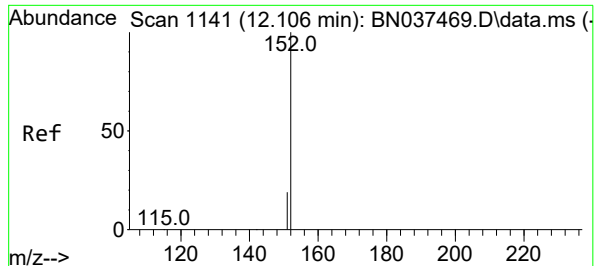
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 64.3 51.4 77.2

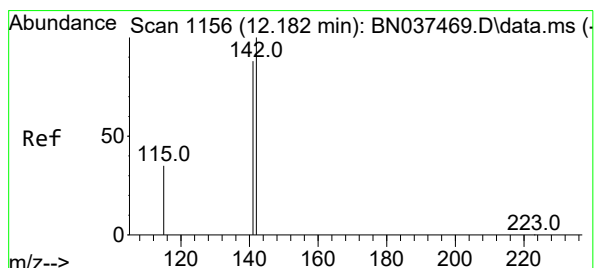
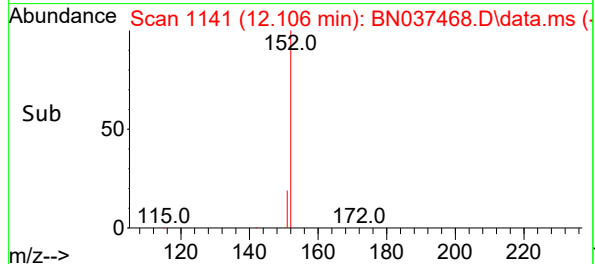
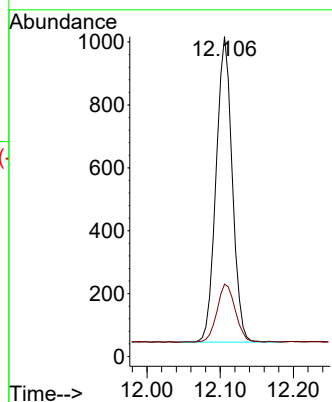
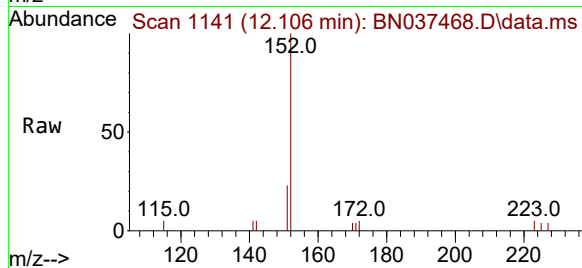




#11
2-Methylnaphthalene-d10
Concen: 0.187 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

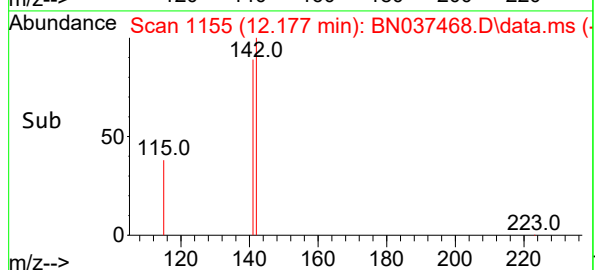
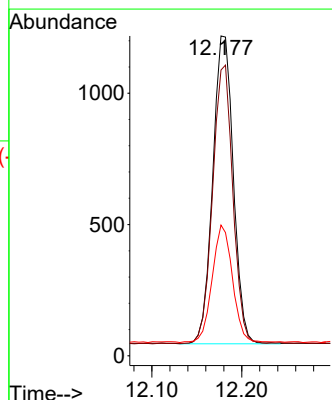
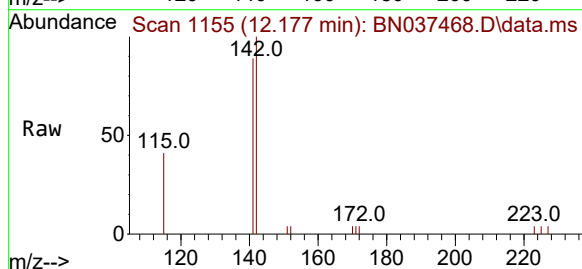
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

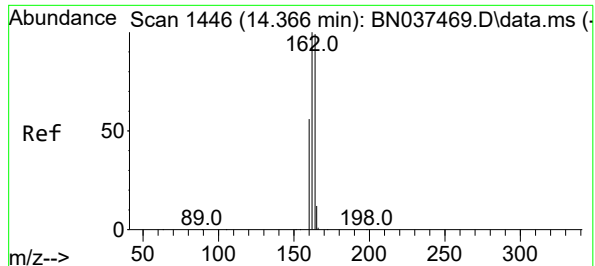
Tgt Ion:152 Resp: 1487
Ion Ratio Lower Upper
152 100
151 21.5 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.190 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion:142 Resp: 1870
Ion Ratio Lower Upper
142 100
141 89.3 70.6 105.8
115 40.9 30.0 45.0

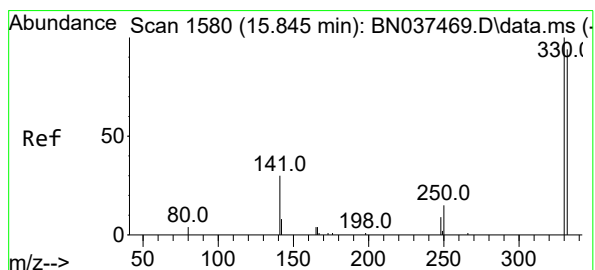
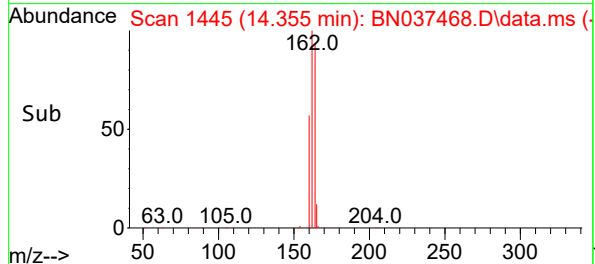
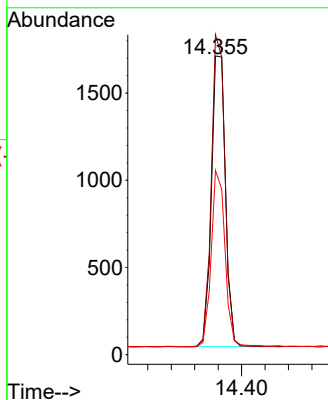
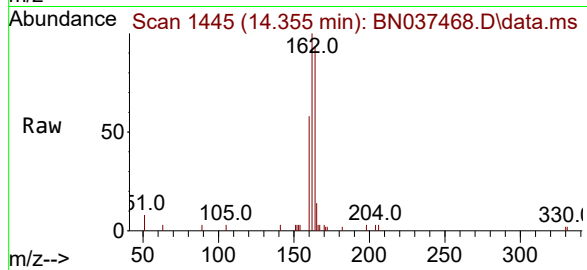




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1446
Delta R.T. -0.011 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

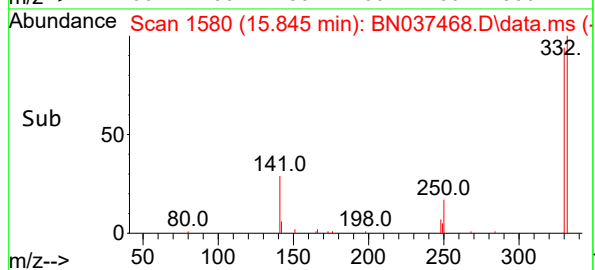
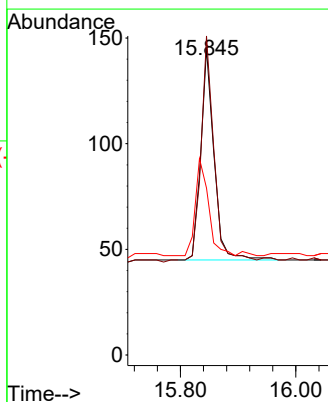
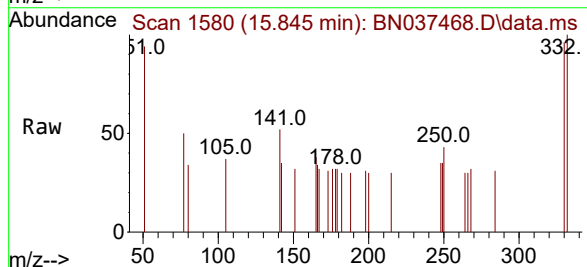
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

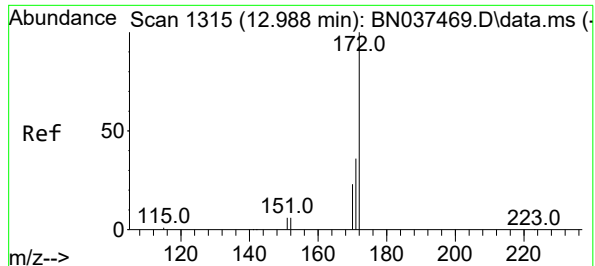
Tgt Ion:164 Resp: 2772
Ion Ratio Lower Upper
164 100
162 107.1 81.1 121.7
160 61.6 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 0.169 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion:330 Resp: 159
Ion Ratio Lower Upper
330 100
332 106.9 82.0 123.0
141 45.9 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 0.188 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

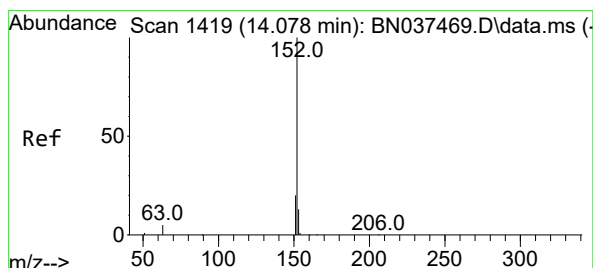
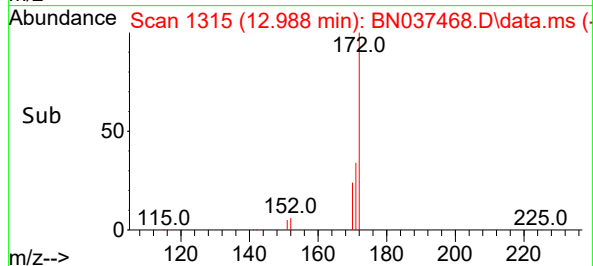
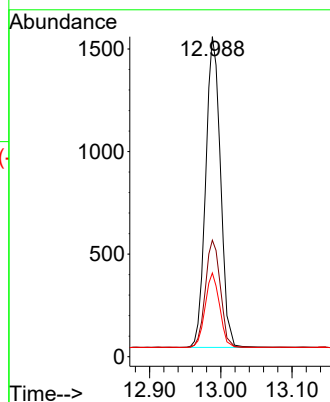
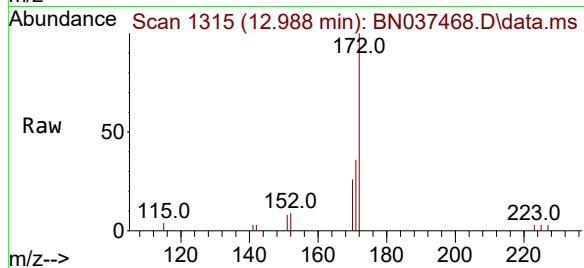
Tgt Ion:172 Resp: 2982

Ion Ratio Lower Upper

172 100

171 36.4 29.8 44.8

170 26.2 20.0 30.0



#16

Acenaphthylene

Concen: 0.194 ng

RT: 14.078 min Scan# 1419

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

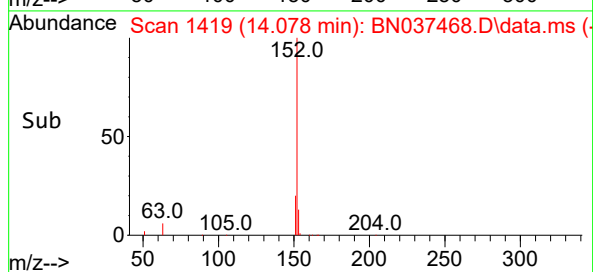
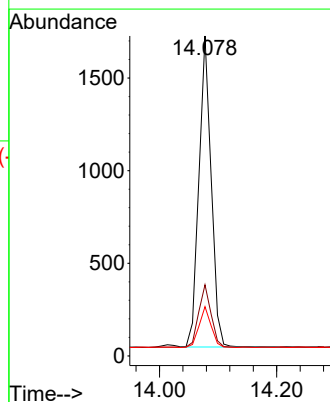
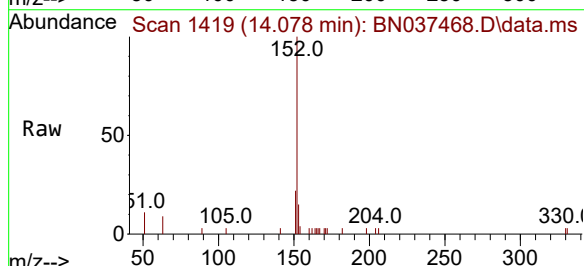
Tgt Ion:152 Resp: 2451

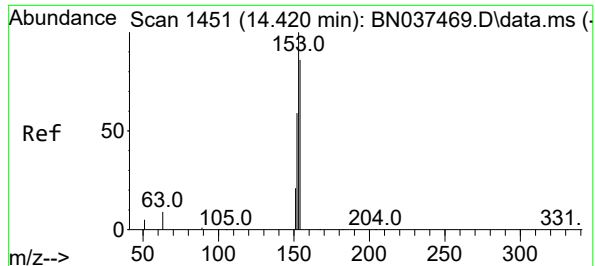
Ion Ratio Lower Upper

152 100

151 20.7 16.4 24.6

153 12.8 10.6 15.8





#17

Acenaphthene

Concen: 0.191 ng

RT: 14.420 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

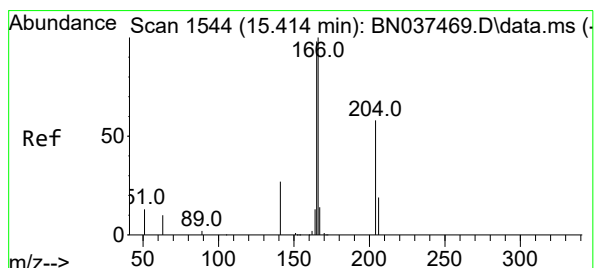
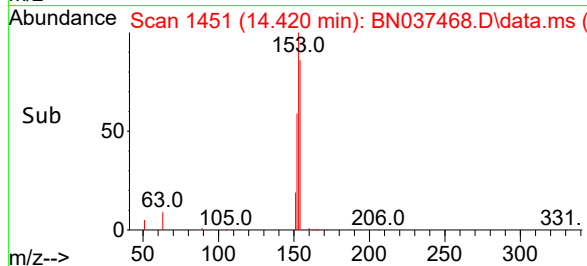
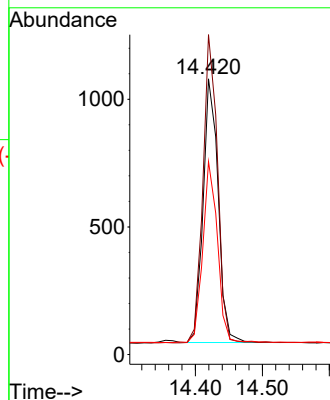
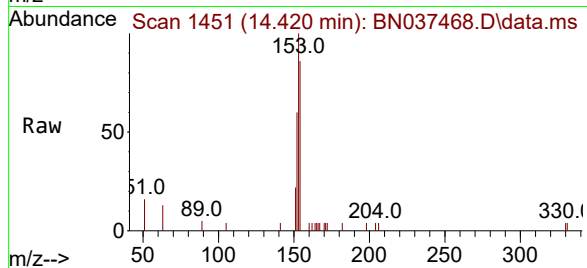
Tgt Ion:154 Resp: 1617

Ion Ratio Lower Upper

154 100

153 112.9 89.4 134.0

152 67.0 53.2 79.8



#18

Fluorene

Concen: 0.186 ng

RT: 15.414 min Scan# 1544

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

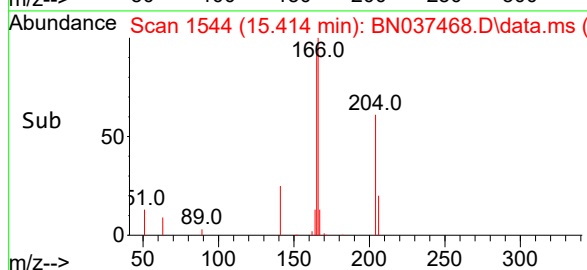
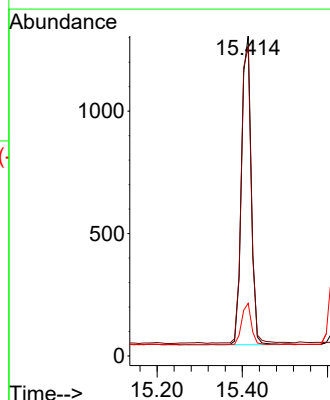
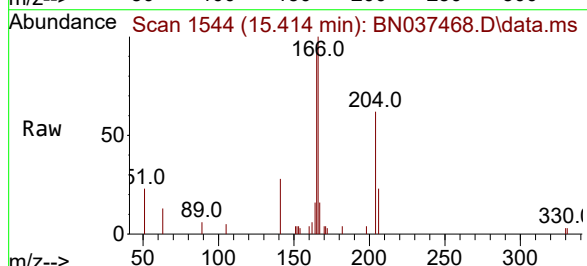
Tgt Ion:166 Resp: 1985

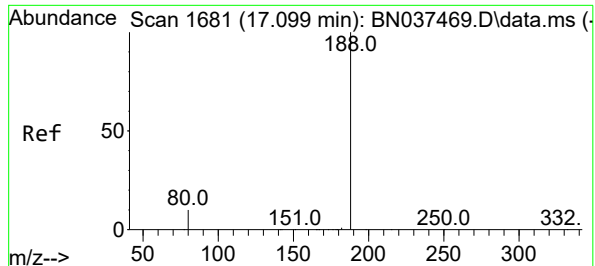
Ion Ratio Lower Upper

166 100

165 99.9 79.4 119.2

167 13.4 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

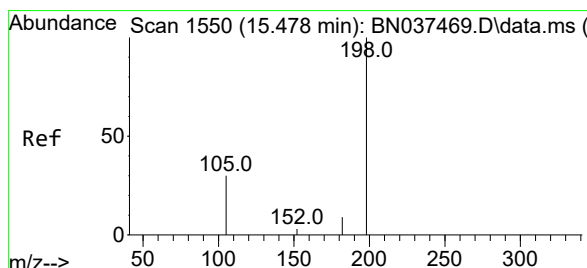
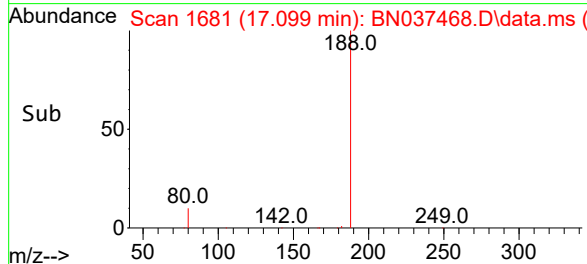
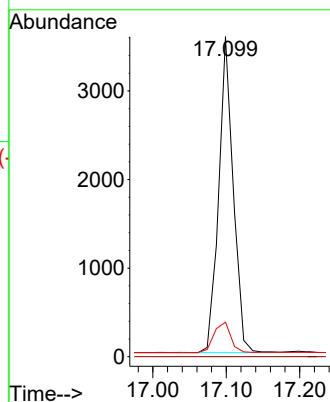
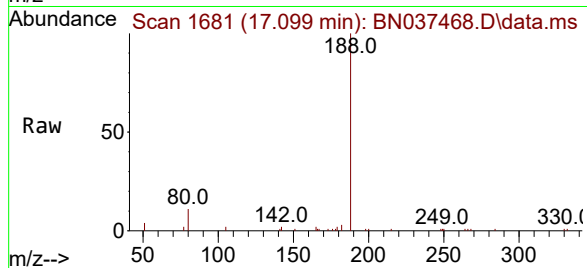
Tgt Ion:188 Resp: 4915

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.8 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.159 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

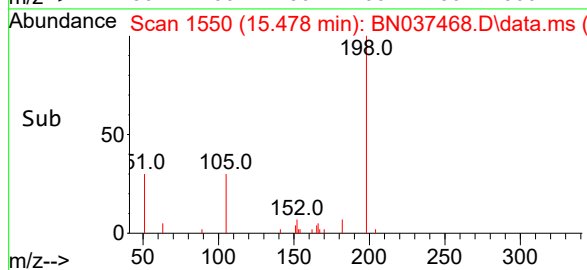
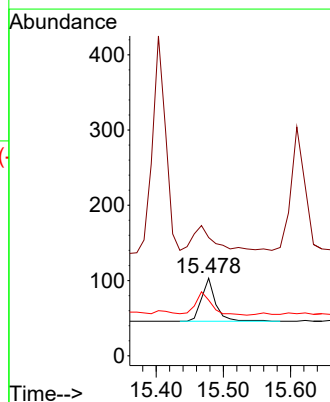
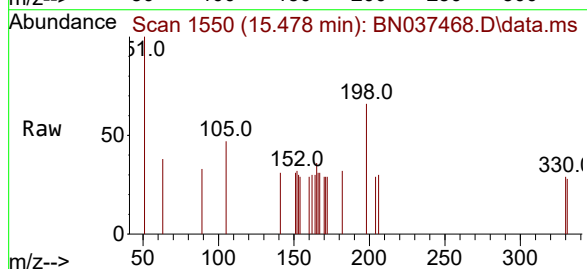
Tgt Ion:198 Resp: 88

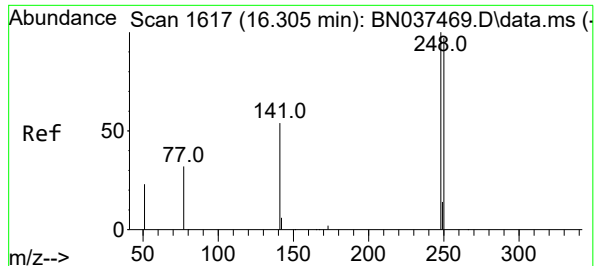
Ion Ratio Lower Upper

198 100

51 152.4 86.0 129.0#

105 71.8 53.0 79.4

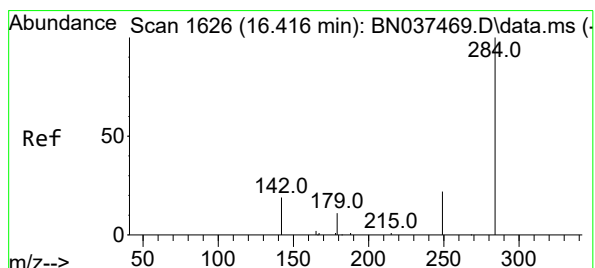
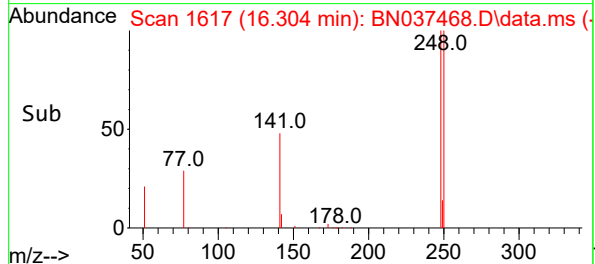
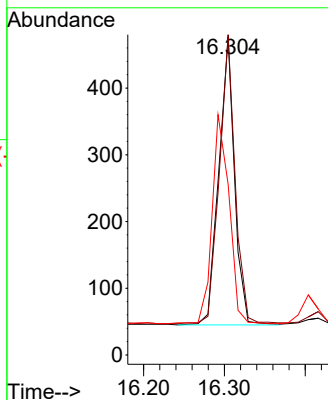
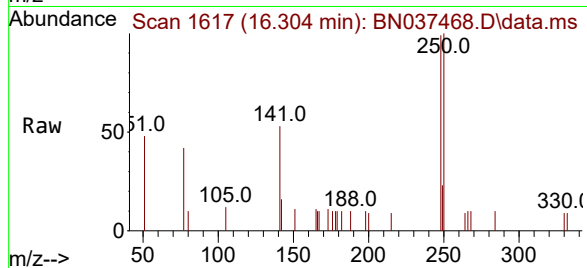




#21
4-Bromophenyl-phenylether
Concen: 0.191 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

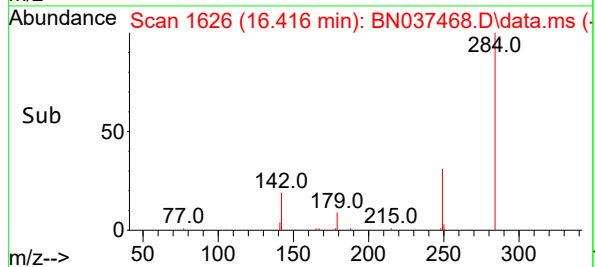
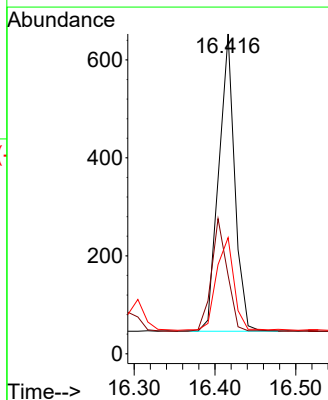
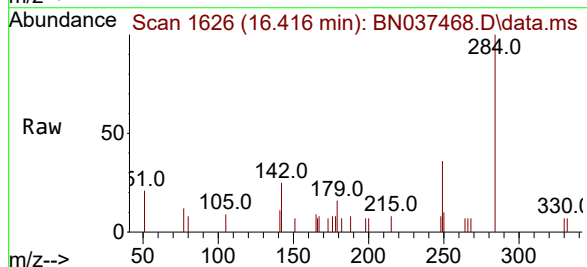
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

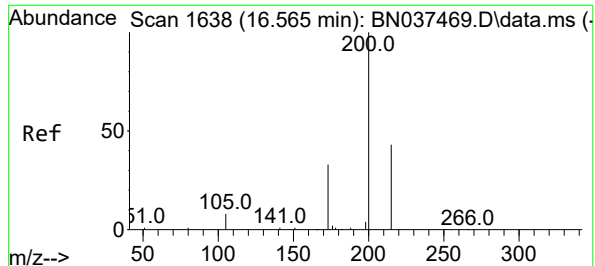
Tgt Ion	Ratio	Lower	Upper
248	100		
250	100.6	77.8	116.6
141	53.7	45.9	68.9



#22
Hexachlorobenzene
Concen: 0.198 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion	Ratio	Lower	Upper
284	100		
142	37.7	31.3	46.9
249	34.4	26.6	40.0





#23

Atrazine

Concen: 0.179 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

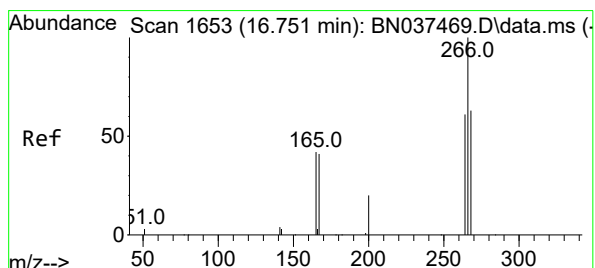
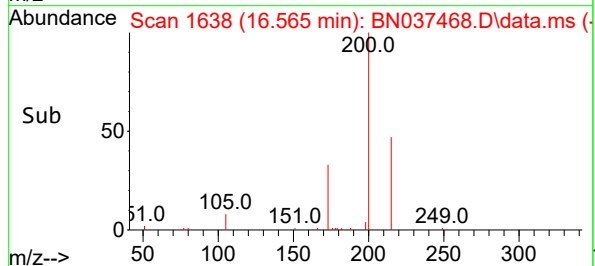
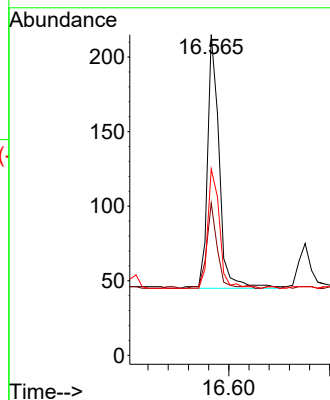
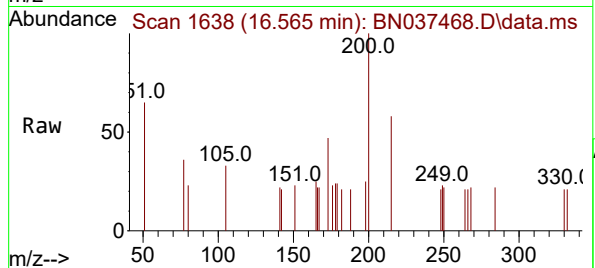
Tgt Ion:200 Resp: 273

Ion Ratio Lower Upper

200 100

173 47.4 34.3 51.5

215 58.1 41.6 62.4



#24

Pentachlorophenol

Concen: 0.177 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

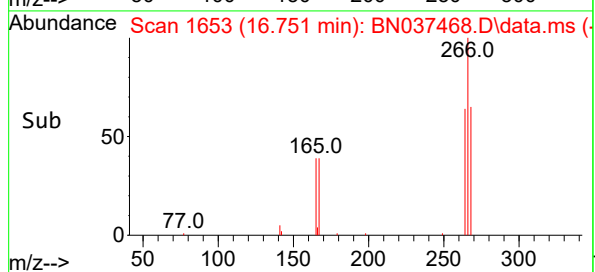
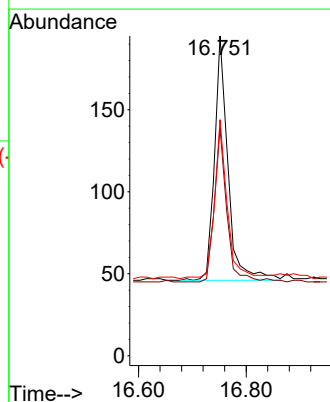
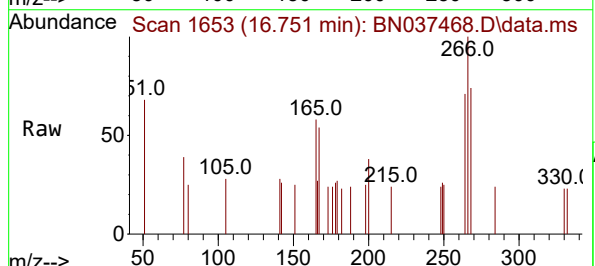
Tgt Ion:266 Resp: 258

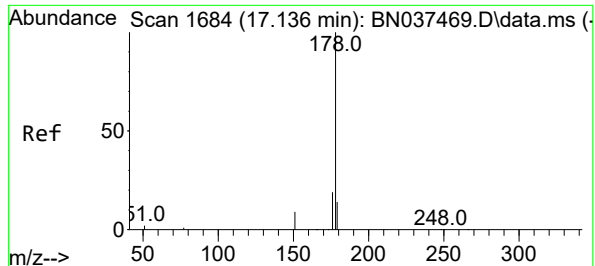
Ion Ratio Lower Upper

266 100

264 58.1 47.5 71.3

268 61.2 50.6 76.0

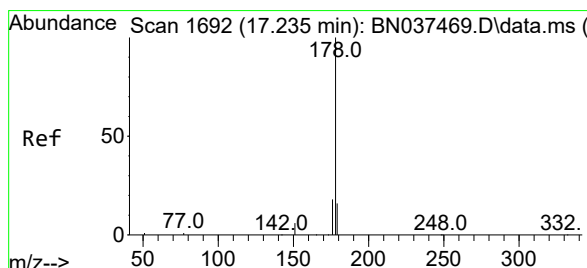
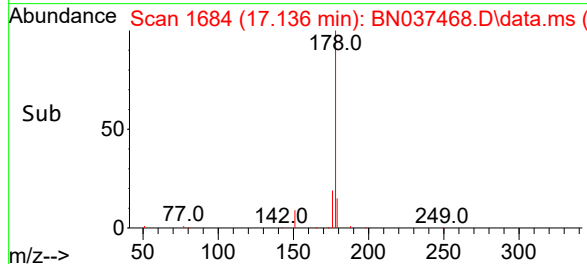
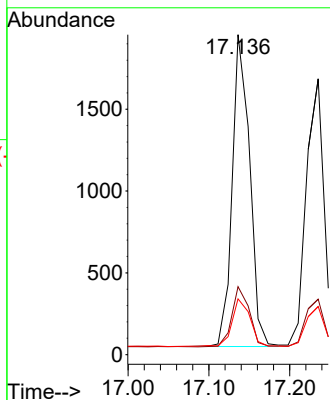
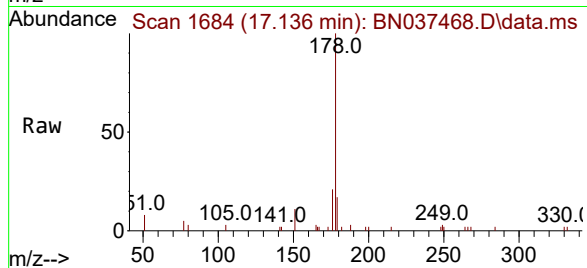




#25
Phenanthrene
Concen: 0.191 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

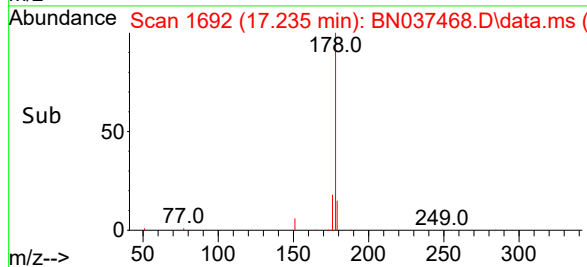
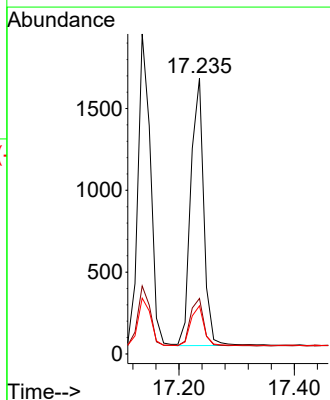
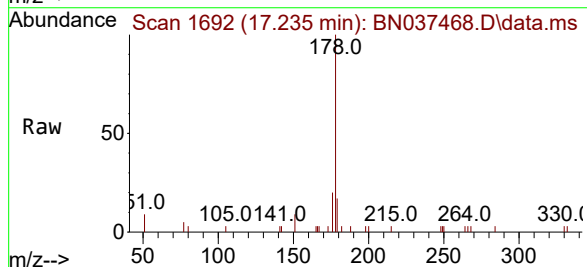
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

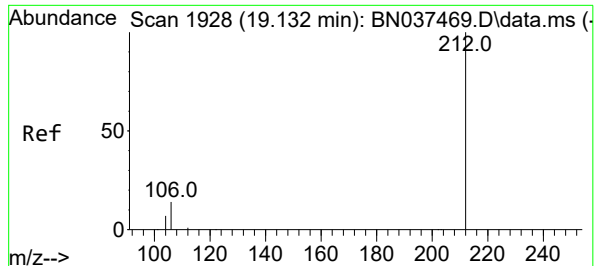
Tgt Ion:178 Resp: 2862
Ion Ratio Lower Upper
178 100
176 19.5 15.1 22.7
179 15.7 12.2 18.2



#26
Anthracene
Concen: 0.188 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.000 min
Lab File: BN037468.D
Acq: 11 Jul 2025 11:46

Tgt Ion:178 Resp: 2543
Ion Ratio Lower Upper
178 100
176 18.6 14.9 22.3
179 15.1 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.186 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

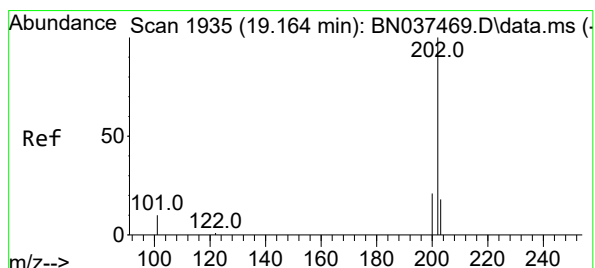
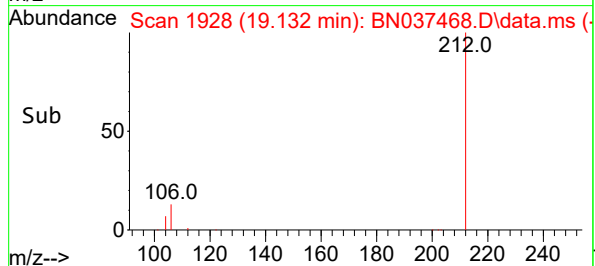
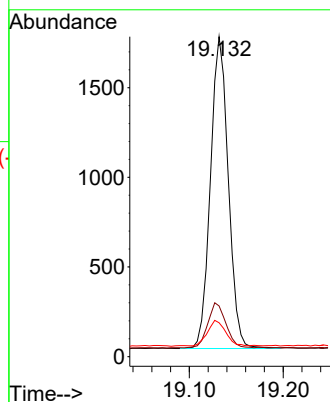
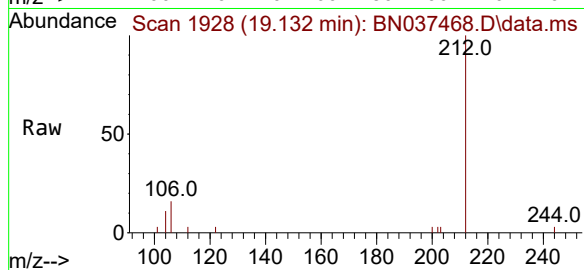
Tgt Ion:212 Resp: 2301

Ion Ratio Lower Upper

212 100

106 14.5 11.7 17.5

104 8.2 6.6 10.0



#28

Fluoranthene

Concen: 0.185 ng

RT: 19.160 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

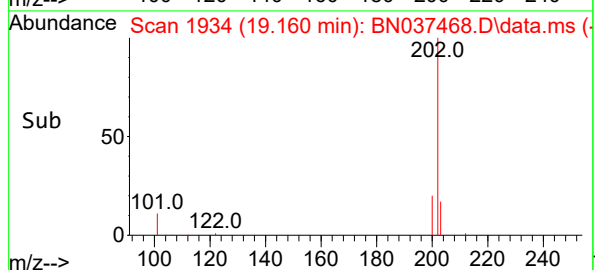
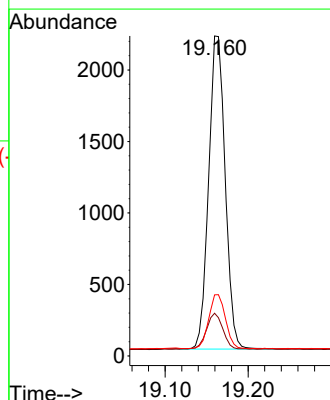
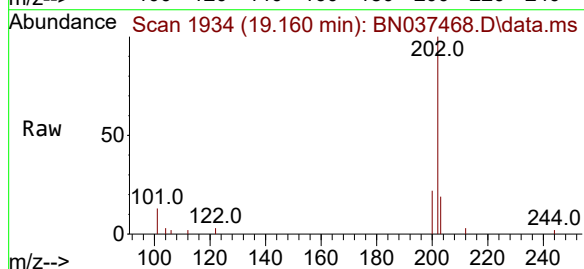
Tgt Ion:202 Resp: 3035

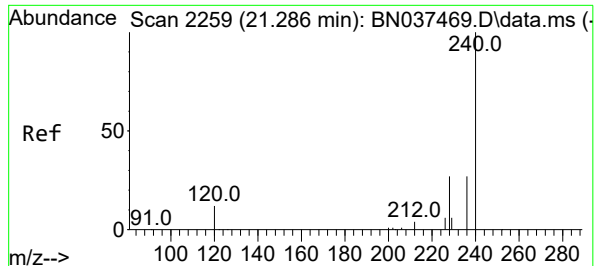
Ion Ratio Lower Upper

202 100

101 11.5 9.2 13.8

203 17.5 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

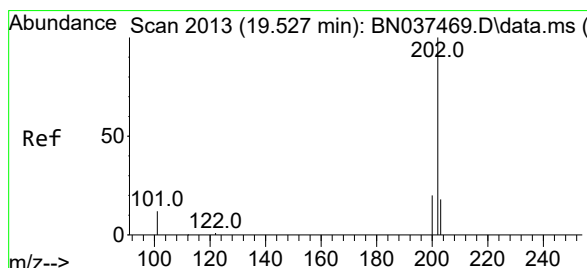
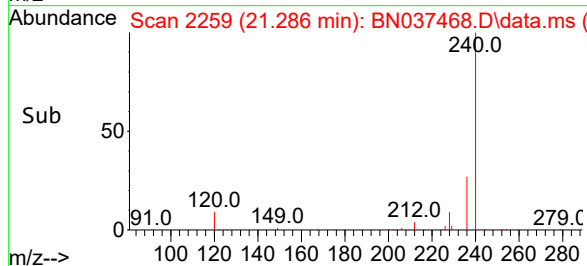
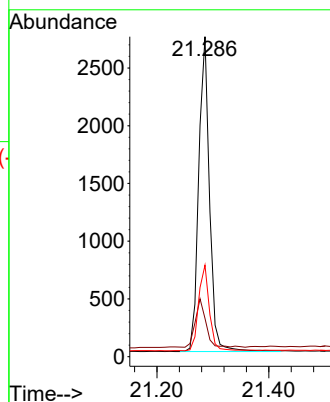
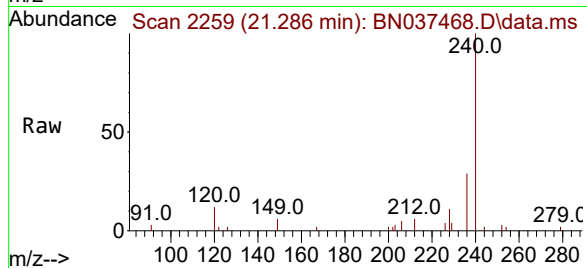
Tgt Ion:240 Resp: 3653

Ion Ratio Lower Upper

240 100

120 11.9 12.4 18.6#

236 28.6 22.9 34.3



#30

Pyrene

Concen: 0.203 ng

RT: 19.522 min Scan# 2012

Delta R.T. -0.005 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

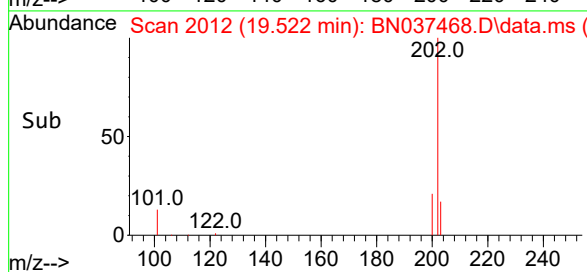
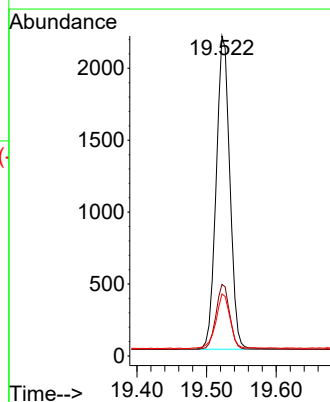
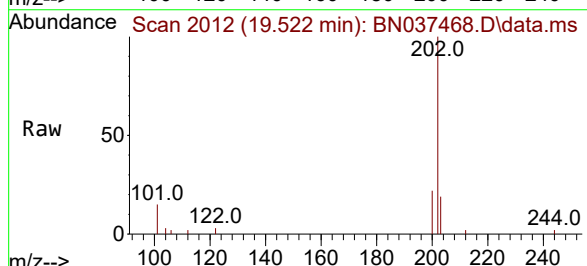
Tgt Ion:202 Resp: 2977

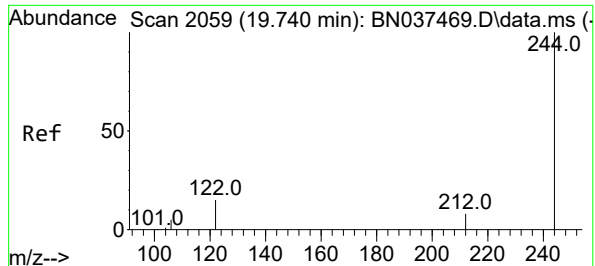
Ion Ratio Lower Upper

202 100

200 20.8 16.4 24.6

203 18.0 14.3 21.5





#31

Terphenyl-d14

Concen: 0.197 ng

RT: 19.736 min Scan# 2058

Delta R.T. -0.005 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

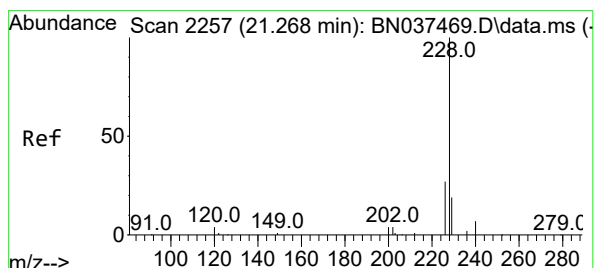
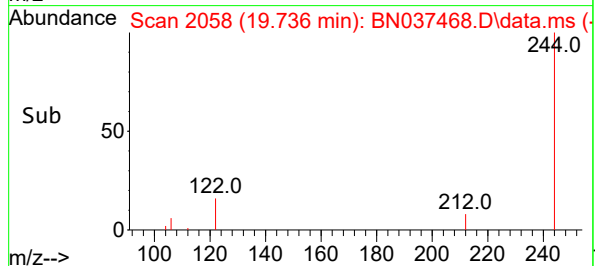
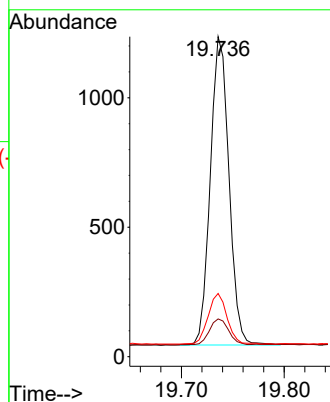
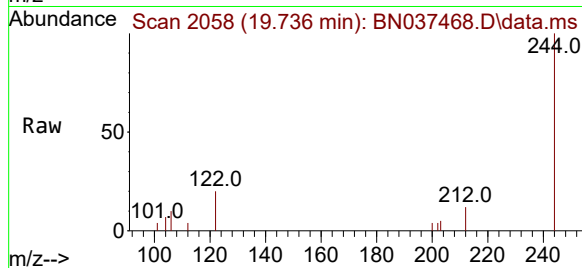
Tgt Ion:244 Resp: 1501

Ion Ratio Lower Upper

244 100

212 11.8 8.7 13.1

122 19.7 14.1 21.1



#32

Benzo(a)anthracene

Concen: 0.193 ng

RT: 21.268 min Scan# 2257

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

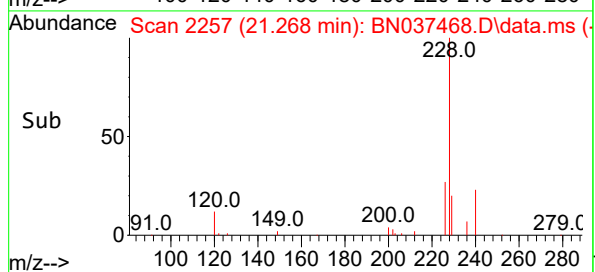
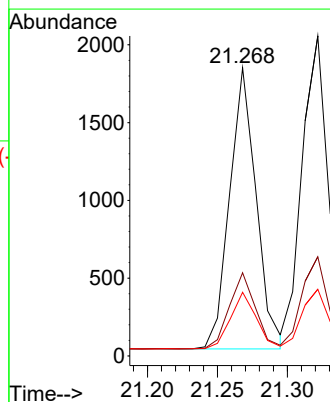
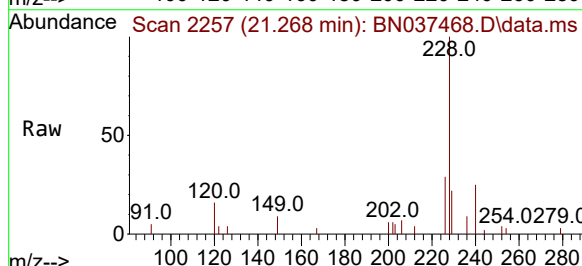
Tgt Ion:228 Resp: 2392

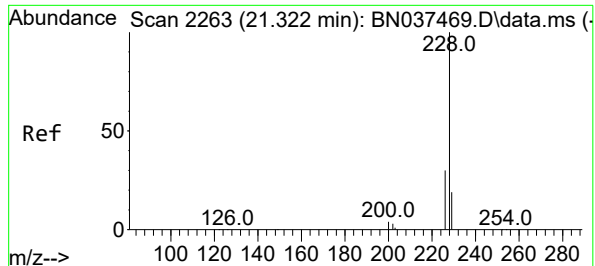
Ion Ratio Lower Upper

228 100

226 28.9 22.7 34.1

229 22.1 16.6 24.8





#33

Chrysene

Concen: 0.201 ng

RT: 21.322 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

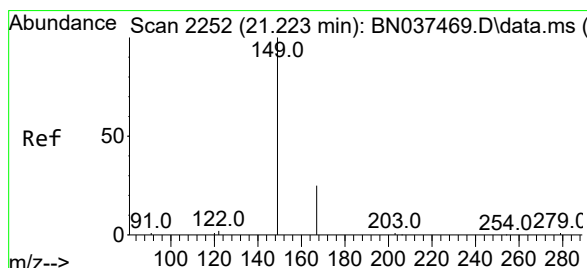
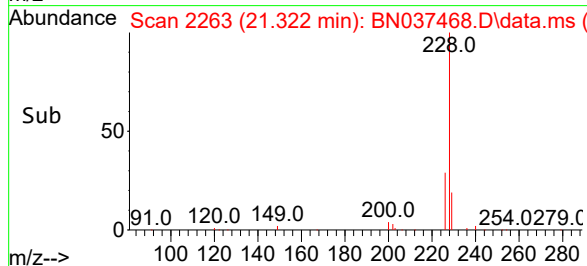
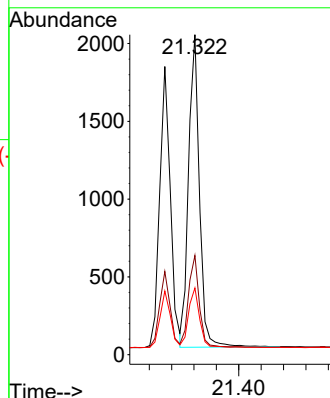
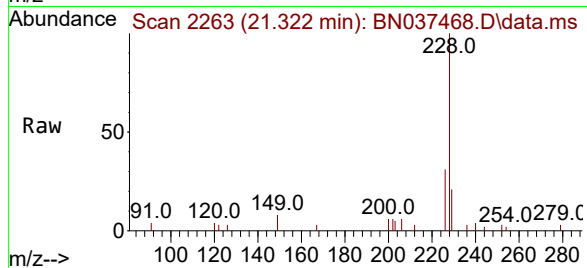
Tgt Ion:228 Resp: 2716

Ion Ratio Lower Upper

228 100

226 31.0 24.6 36.8

229 20.9 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.196 ng

RT: 21.223 min Scan# 2252

Delta R.T. -0.000 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

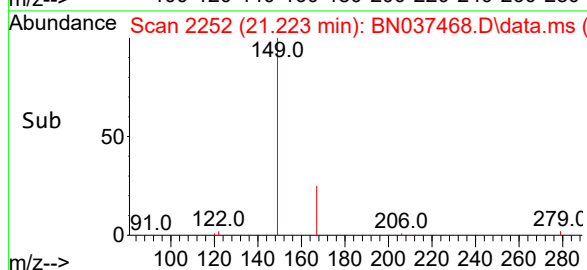
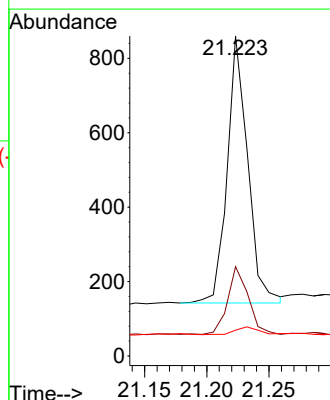
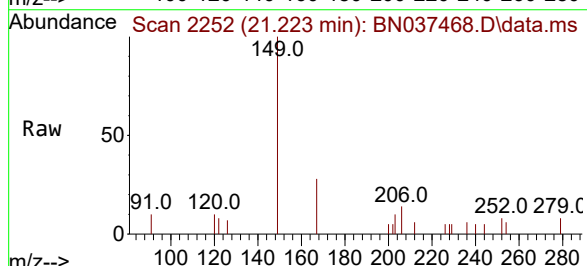
Tgt Ion:149 Resp: 823

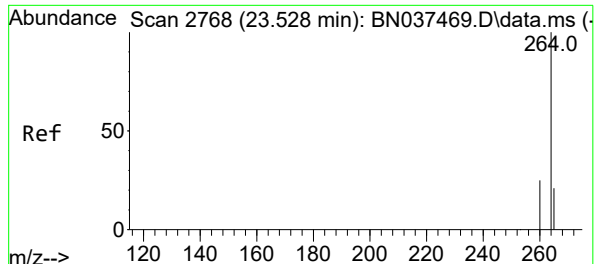
Ion Ratio Lower Upper

149 100

167 25.4 19.4 29.2

279 3.4 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.525 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037468.D

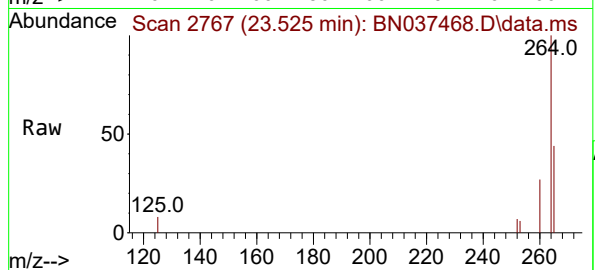
Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2



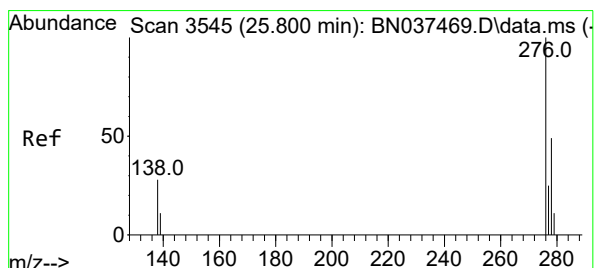
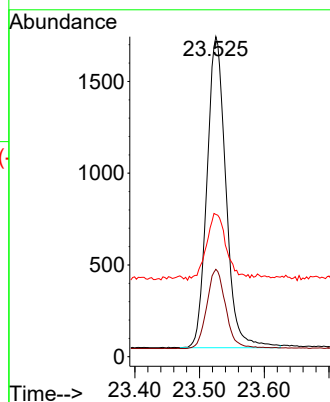
Tgt Ion:264 Resp: 3449

Ion	Ratio	Lower	Upper

264	100		

260	27.3	21.7	32.5

265	44.4	41.6	62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.170 ng

RT: 25.797 min Scan# 3544

Delta R.T. -0.003 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

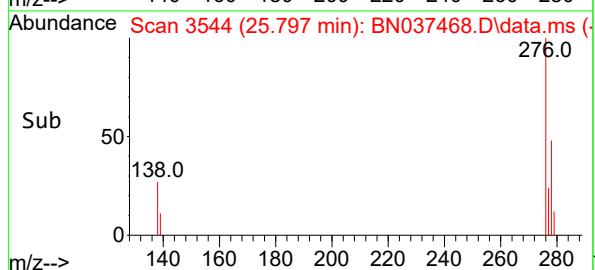
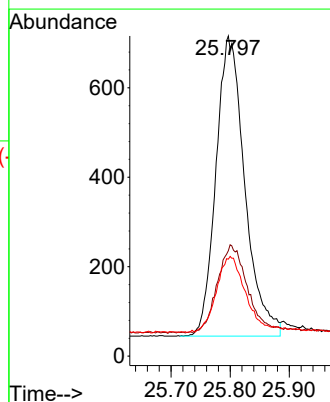
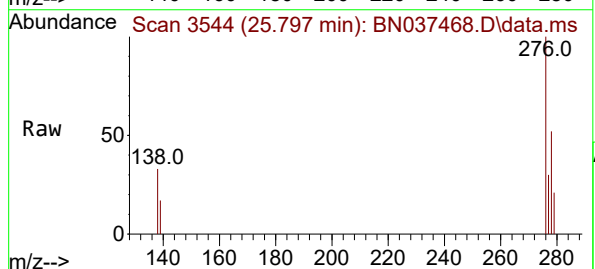
Tgt Ion:276 Resp: 2270

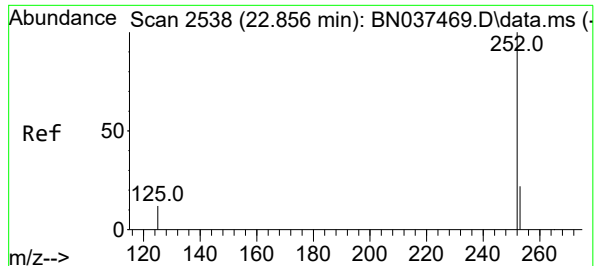
Ion	Ratio	Lower	Upper

276	100		

138	30.2	23.4	35.2

277	25.5	19.8	29.8





#37

Benzo(b)fluoranthene

Concen: 0.183 ng

RT: 22.853 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

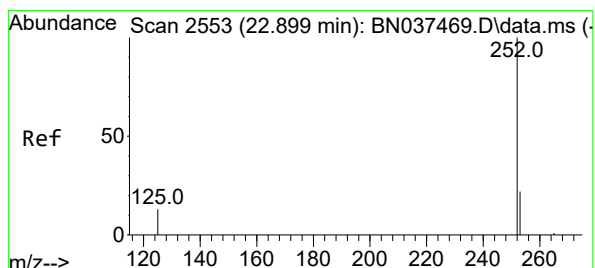
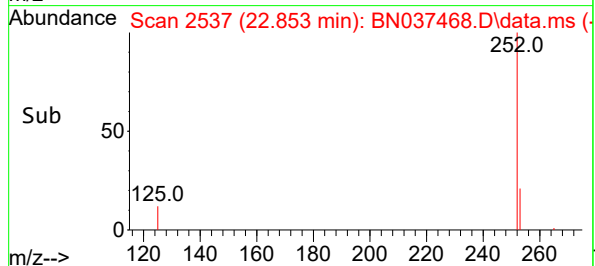
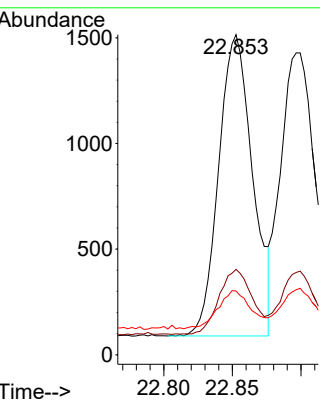
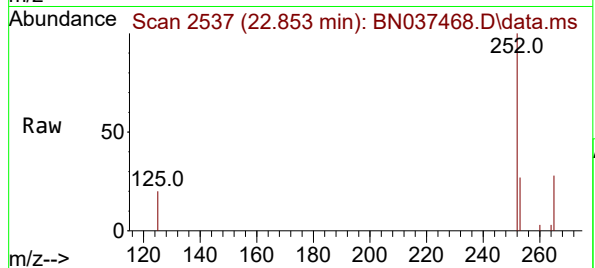
Tgt Ion:252 Resp: 2454

Ion Ratio Lower Upper

252 100

253 26.7 20.1 30.1

125 19.9 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.174 ng

RT: 22.897 min Scan# 2552

Delta R.T. -0.003 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

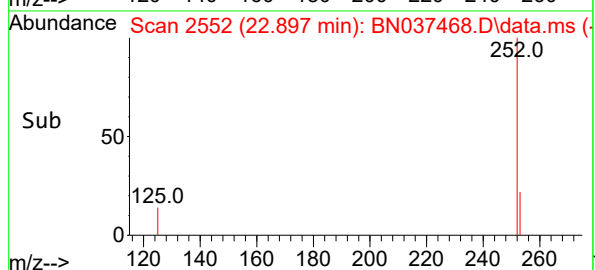
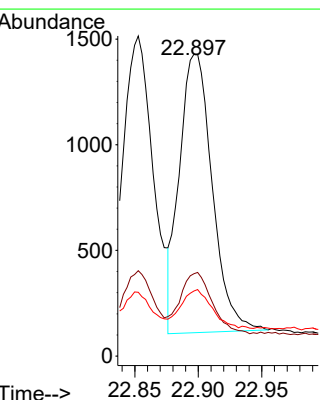
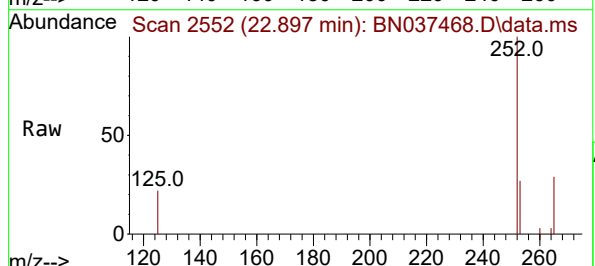
Tgt Ion:252 Resp: 2369

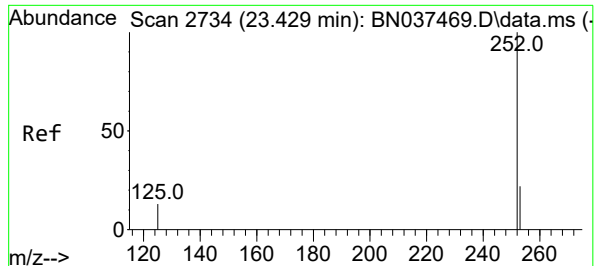
Ion Ratio Lower Upper

252 100

253 27.3 20.4 30.6

125 21.6 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.177 ng

RT: 23.426 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

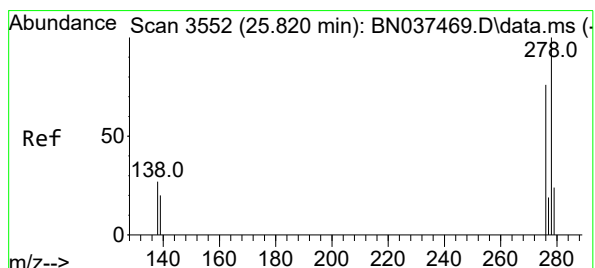
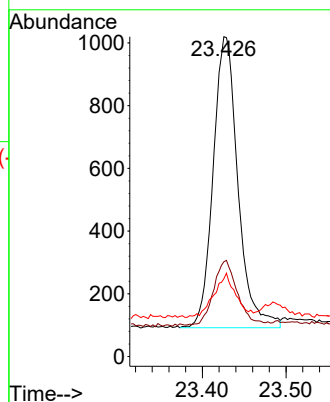
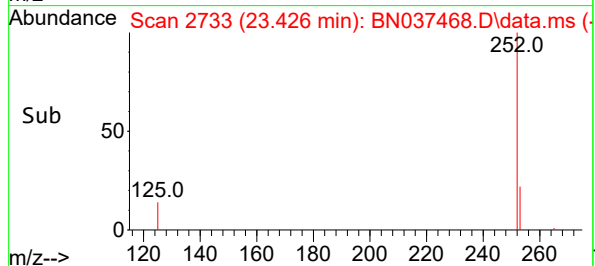
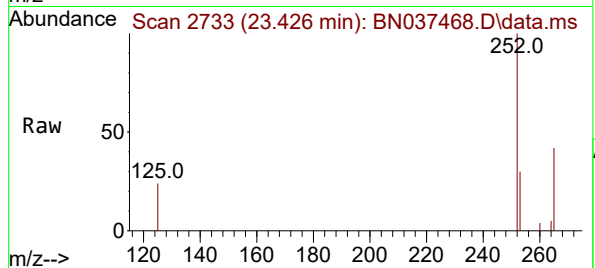
Tgt Ion:252 Resp: 1913

Ion Ratio Lower Upper

252 100

253 29.6 21.8 32.6

125 24.3 16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.166 ng

RT: 25.817 min Scan# 3551

Delta R.T. -0.003 min

Lab File: BN037468.D

Acq: 11 Jul 2025 11:46

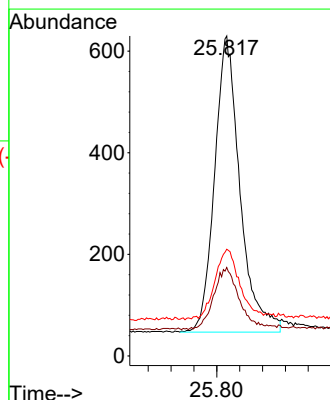
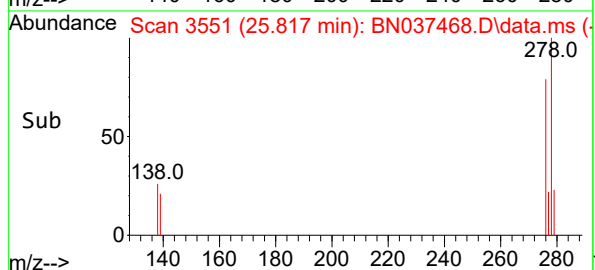
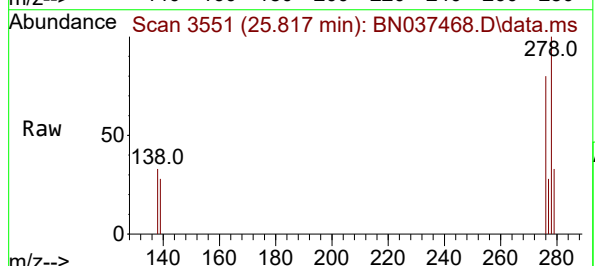
Tgt Ion:278 Resp: 1791

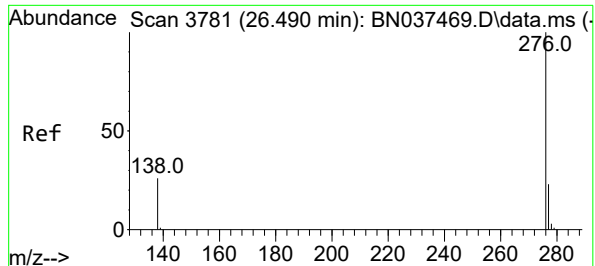
Ion Ratio Lower Upper

278 100

139 27.6 19.9 29.9

279 33.3 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.180 ng

RT: 26.487 min Scan# 31

Delta R.T. -0.003 min

Lab File: BN037468.D

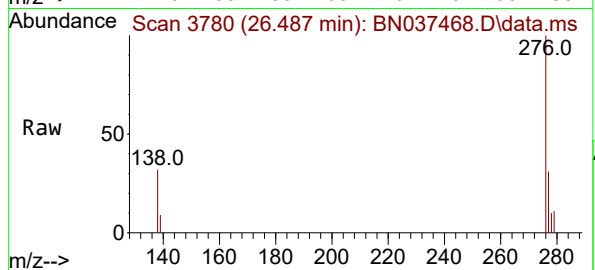
Acq: 11 Jul 2025 11:46

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2



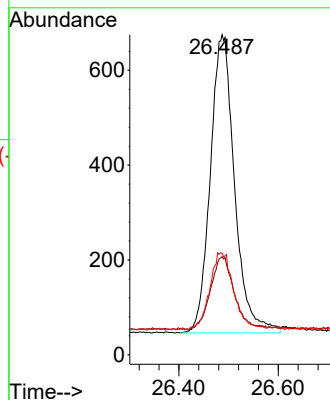
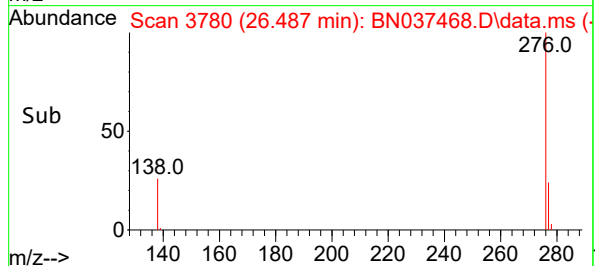
Tgt Ion:276 Resp: 2131

Ion Ratio Lower Upper

276 100

277 30.7 21.7 32.5

138 31.7 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037469.D
 Acq On : 11 Jul 2025 12:22
 Operator : RC/JU
 Sample : SSTDICCC0.4
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICCC0.4

Quant Time: Jul 11 15:26:14 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

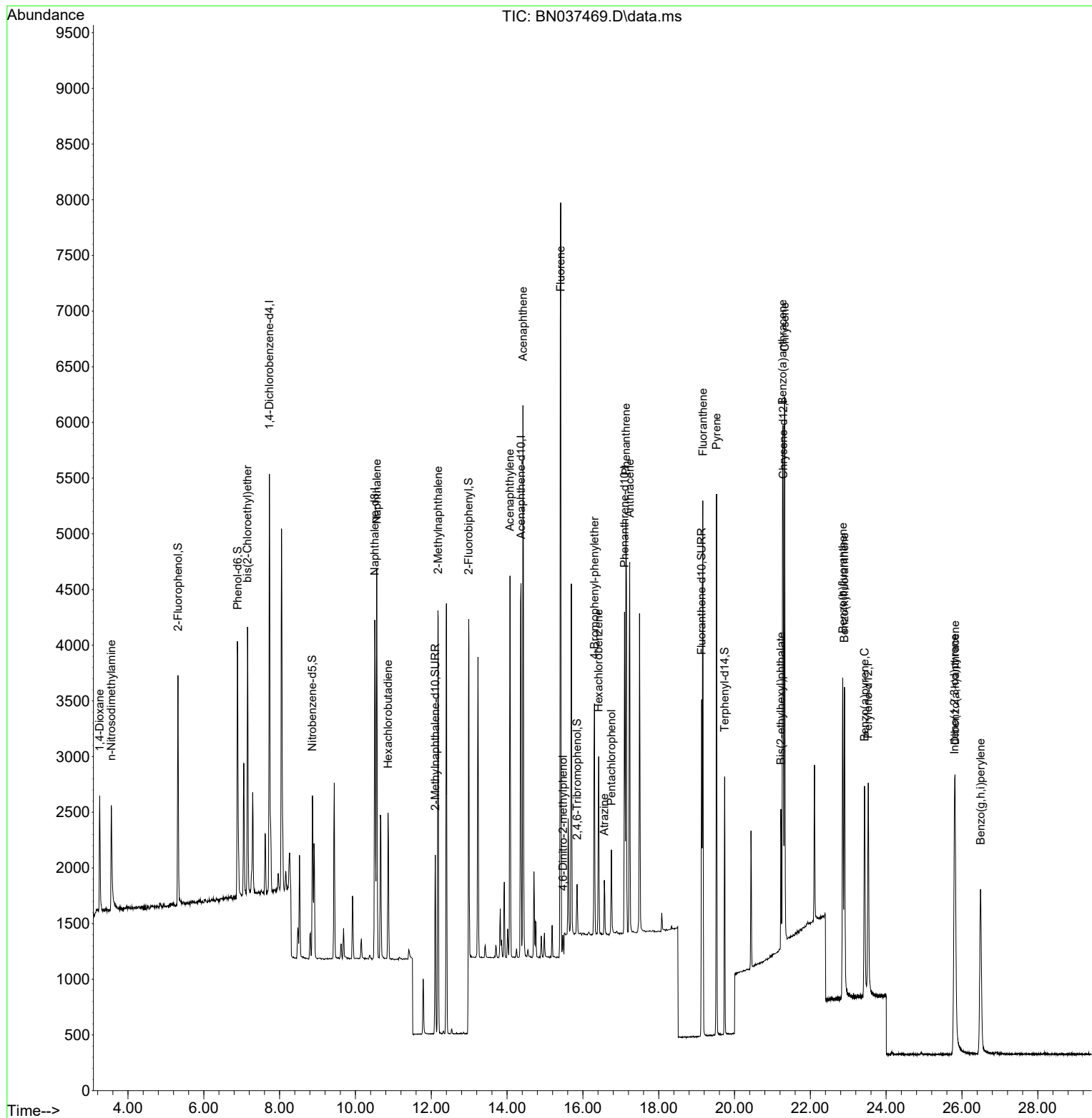
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1754	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4116	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	1977	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	3577	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2684	0.400	ng	0.00
35) Perylene-d12	23.528	264	2478	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1633	0.400	ng	0.00
5) Phenol-d6	6.894	99	2058	0.401	ng	0.00
8) Nitrobenzene-d5	8.865	82	1134	0.380	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2104	0.376	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	241	0.359	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	4556	0.404	ng	0.00
27) Fluoranthene-d10	19.132	212	3252	0.360	ng	0.00
31) Terphenyl-d14	19.740	244	2203	0.393	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	675	0.410	ng	Qvalue 100
3) n-Nitrosodimethylamine	3.557	42	876	0.398	ng	100
6) bis(2-Chloroethyl)ether	7.154	93	1702	0.396	ng	100
9) Naphthalene	10.562	128	4329	0.391	ng	100
10) Hexachlorobutadiene	10.861	225	1057	0.398	ng	# 100
12) 2-Methylnaphthalene	12.182	142	2659	0.384	ng	100
16) Acenaphthylene	14.078	152	3482	0.386	ng	100
17) Acenaphthene	14.420	154	2341	0.387	ng	100
18) Fluorene	15.414	166	2929	0.385	ng	100
20) 4,6-Dinitro-2-methylph...	15.478	198	139	0.346	ng	100
21) 4-Bromophenyl-phenylether	16.305	248	844	0.378	ng	100
22) Hexachlorobenzene	16.416	284	1215	0.395	ng	100
23) Atrazine	16.565	200	411	0.370	ng	100
24) Pentachlorophenol	16.751	266	360	0.340	ng	100
25) Phenanthrene	17.136	178	4140	0.380	ng	100
26) Anthracene	17.235	178	3627	0.369	ng	100
28) Fluoranthene	19.164	202	4365	0.365	ng	100
30) Pyrene	19.527	202	4278	0.396	ng	100
32) Benzo(a)anthracene	21.268	228	3467	0.381	ng	100
33) Chrysene	21.322	228	3930	0.396	ng	100
34) Bis(2-ethylhexyl)phtha...	21.223	149	1211	0.392	ng	100
36) Indeno(1,2,3-cd)pyrene	25.800	276	3450	0.359	ng	100
37) Benzo(b)fluoranthene	22.856	252	3496	0.363	ng	100
38) Benzo(k)fluoranthene	22.899	252	3550	0.363	ng	100
39) Benzo(a)pyrene	23.429	252	2854	0.368	ng	100
40) Dibenzo(a,h)anthracene	25.820	278	2738	0.353	ng	100
41) Benzo(g,h,i)perylene	26.490	276	3138	0.369	ng	100

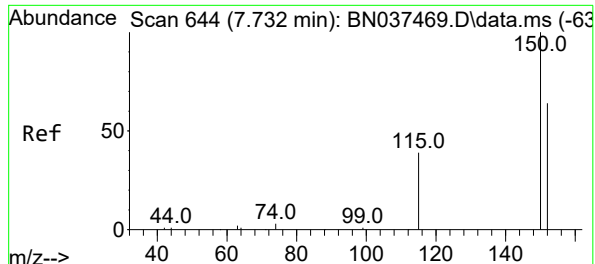
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037469.D
Acq On : 11 Jul 2025 12:22
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Jul 11 15:26:14 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration

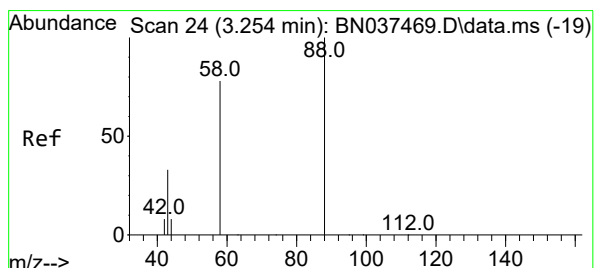
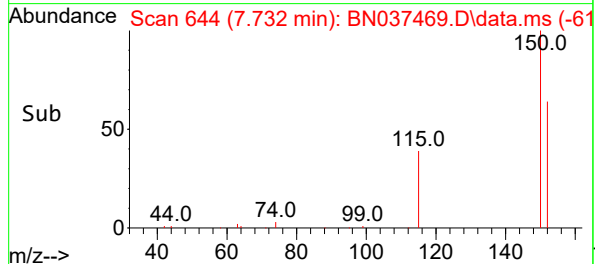
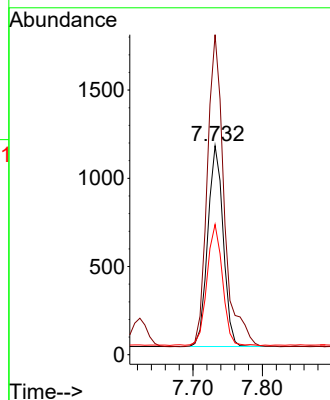
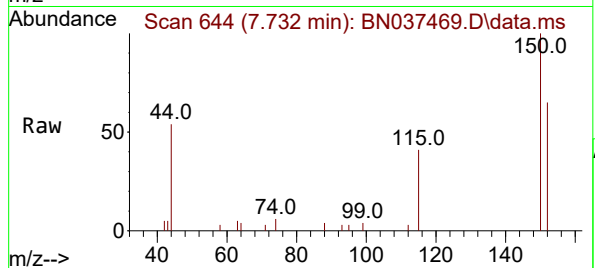




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

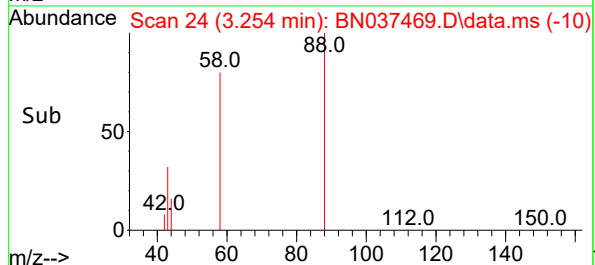
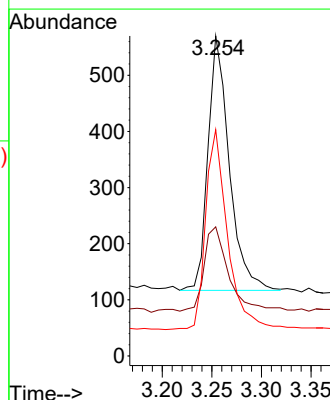
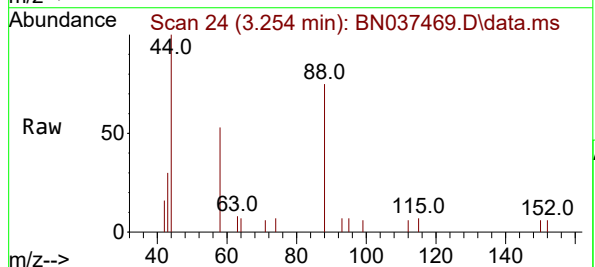
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

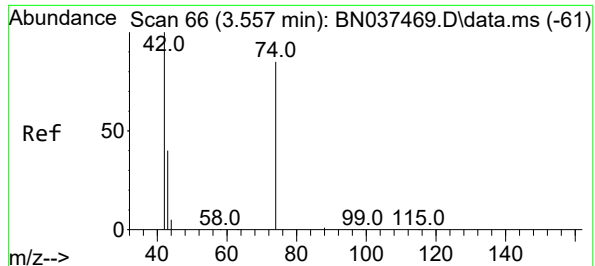
Tgt Ion:152 Resp: 1754
Ion Ratio Lower Upper
152 100
150 153.1 122.5 183.7
115 62.4 49.9 74.9



#2
1,4-Dioxane
Concen: 0.410 ng
RT: 3.254 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

Tgt Ion: 88 Resp: 675
Ion Ratio Lower Upper
88 100
43 38.4 30.7 46.1
58 81.2 65.0 97.4

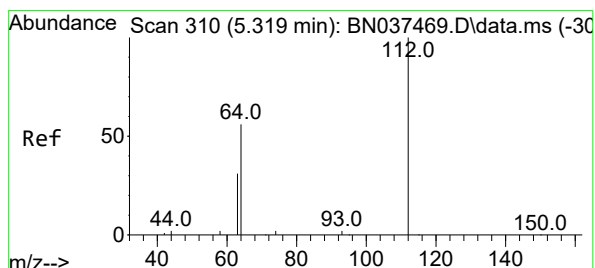
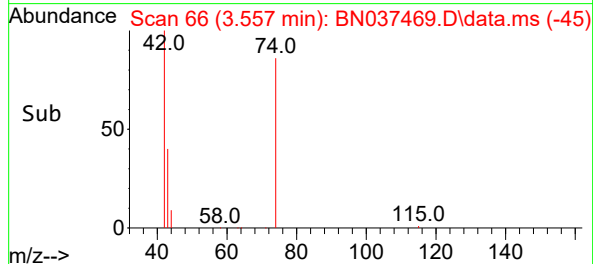
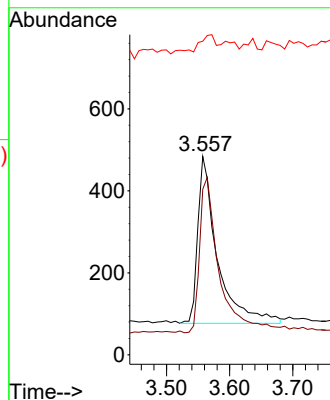
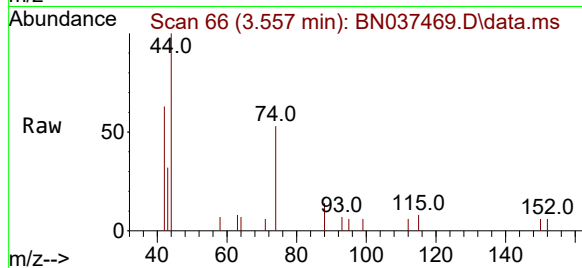




#3
n-Nitrosodimethylamine
Concen: 0.398 ng
RT: 3.557 min Scan# 60
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

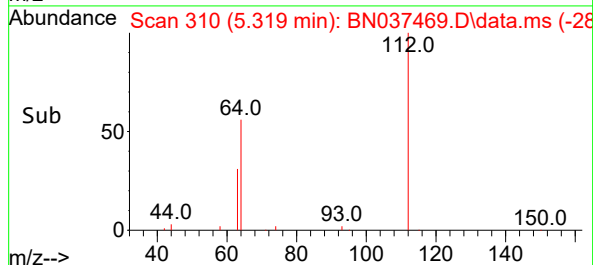
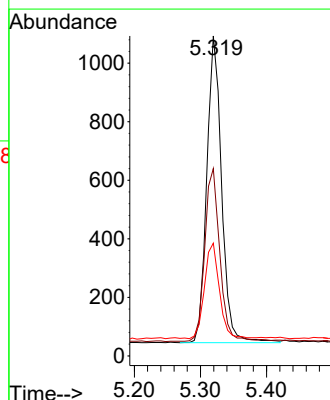
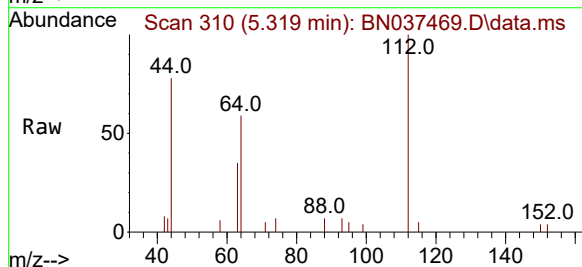
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

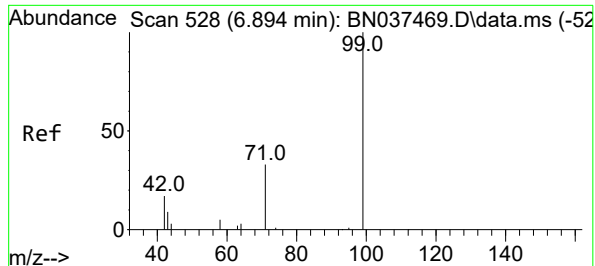
Tgt Ion: 42 Resp: 876
Ion Ratio Lower Upper
42 100
74 93.6 74.9 112.3
44 9.0 7.2 10.8



#4
2-Fluorophenol
Concen: 0.400 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

Tgt Ion: 112 Resp: 1633
Ion Ratio Lower Upper
112 100
64 56.7 45.4 68.0
63 30.9 24.7 37.1





#5

Phenol-d6

Concen: 0.401 ng

RT: 6.894 min Scan# 51

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

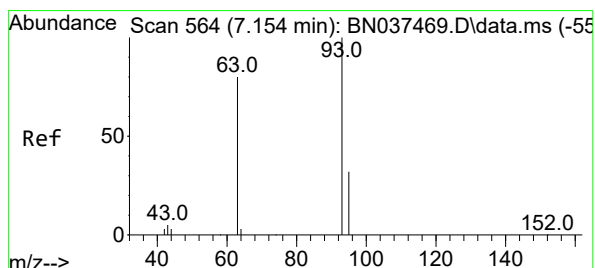
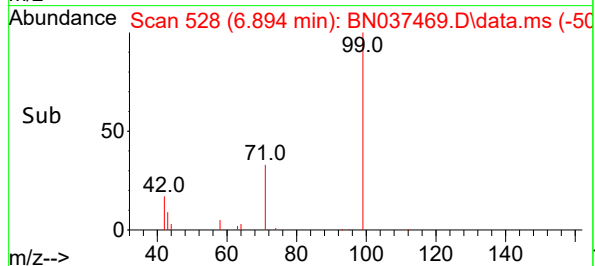
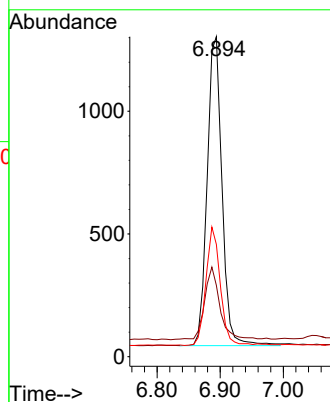
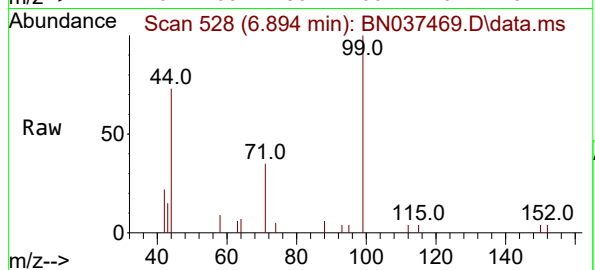
Tgt Ion: 99 Resp: 2058

Ion Ratio Lower Upper

99 100

42 24.4 19.5 29.3

71 36.8 29.4 44.2



#6

bis(2-Chloroethyl)ether

Concen: 0.396 ng

RT: 7.154 min Scan# 564

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

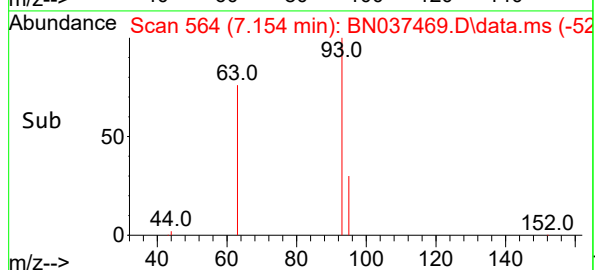
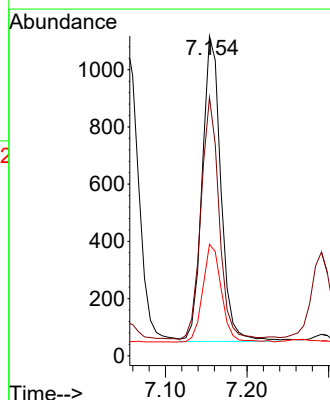
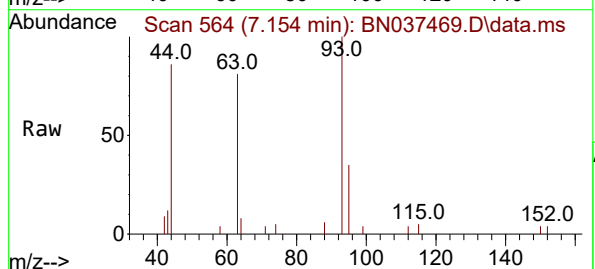
Tgt Ion: 93 Resp: 1702

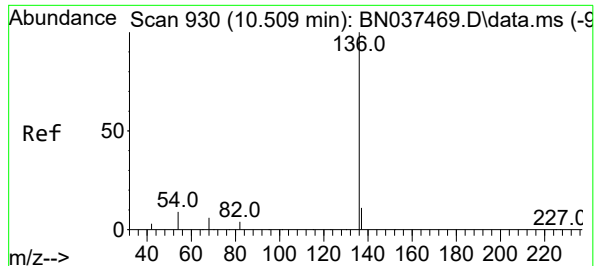
Ion Ratio Lower Upper

93 100

63 76.0 60.8 91.2

95 32.0 25.6 38.4

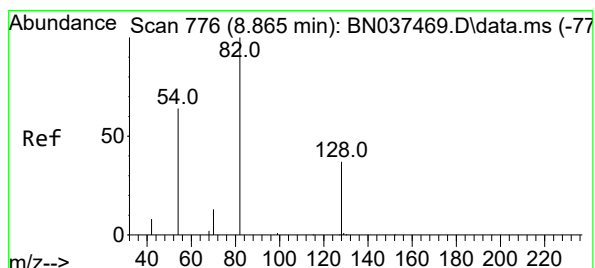
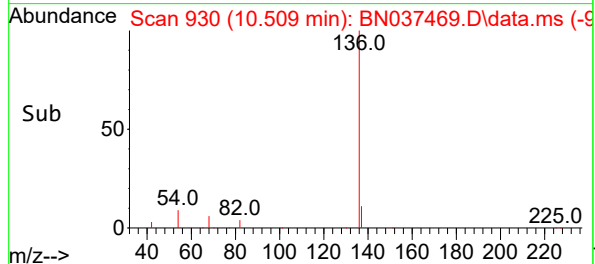
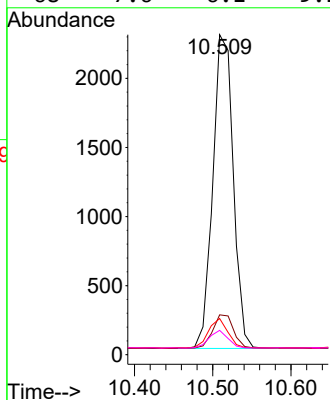
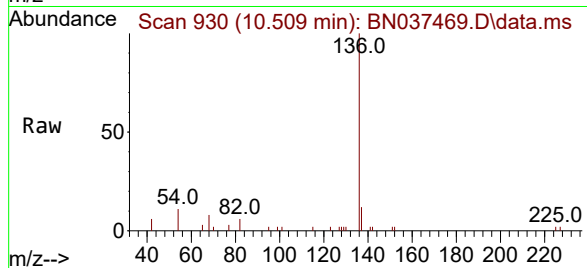




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

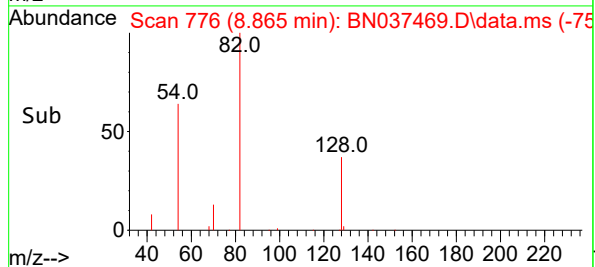
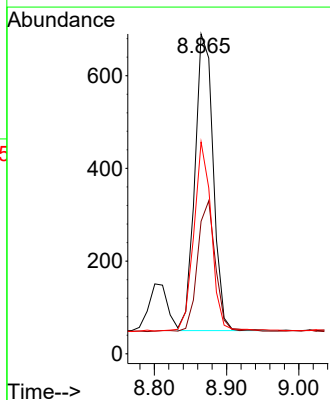
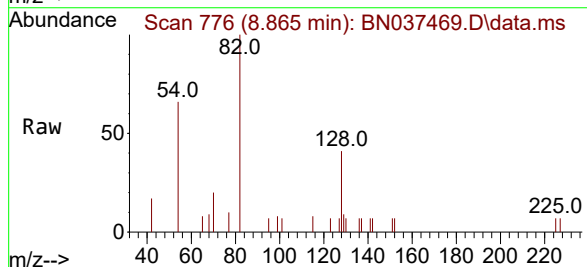
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

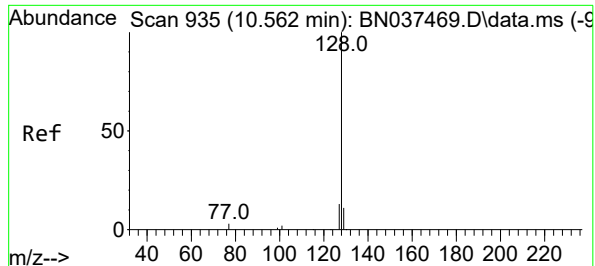
Tgt Ion:	136	Resp:	4116
Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.0	15.0
54	11.3	9.0	13.6
68	7.6	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.380 ng
RT: 8.865 min Scan# 776
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

Tgt Ion:	82	Resp:	1134
Ion	Ratio	Lower	Upper
82	100		
128	41.4	33.1	49.7
54	66.2	53.0	79.4

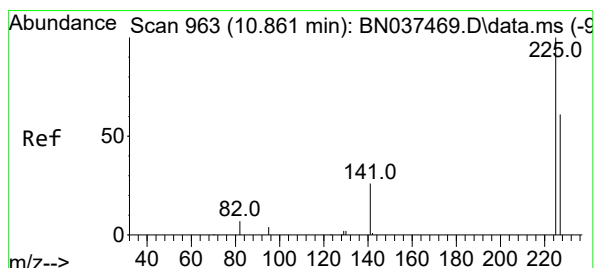
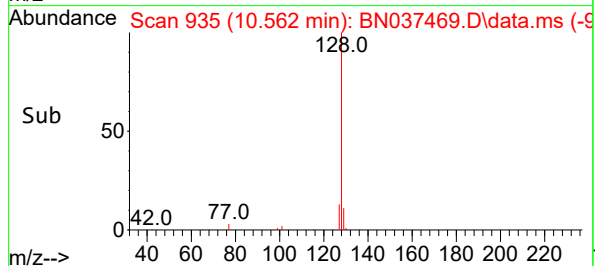
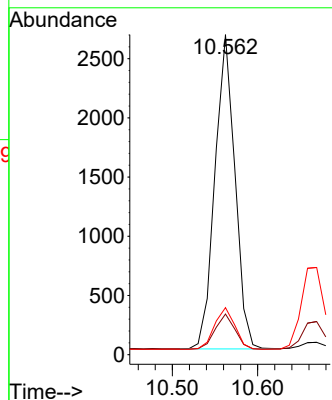
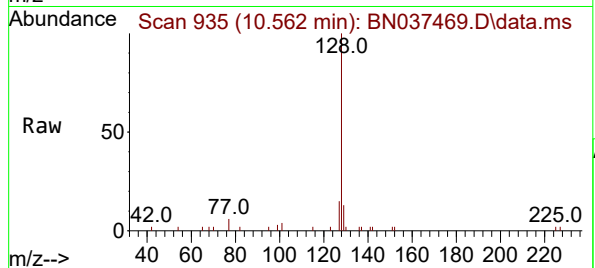




#9
Naphthalene
Concen: 0.391 ng
RT: 10.562 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

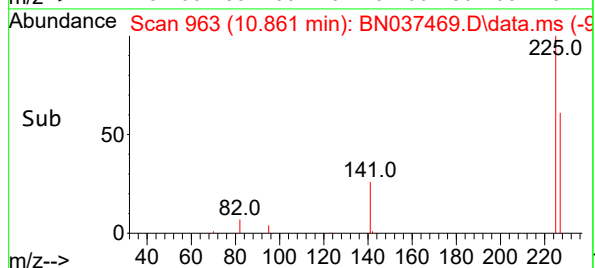
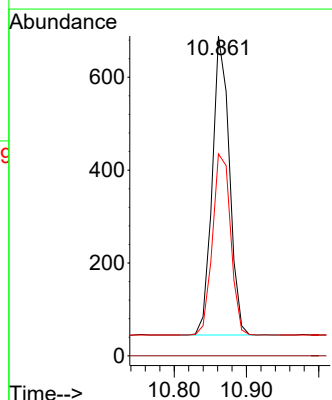
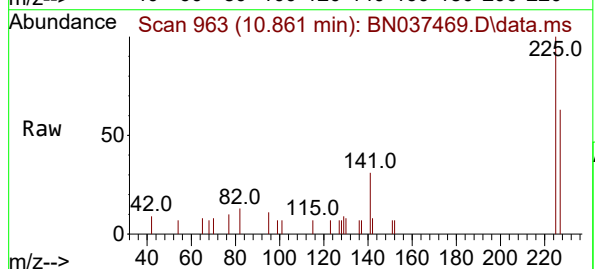
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

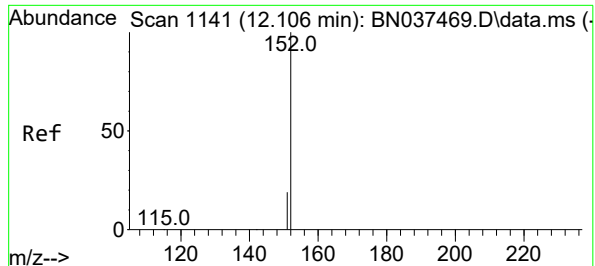
Tgt Ion:128 Resp: 4329
Ion Ratio Lower Upper
128 100
129 12.7 10.2 15.2
127 14.7 11.8 17.6



#10
Hexachlorobutadiene
Concen: 0.398 ng
RT: 10.861 min Scan# 963
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

Tgt Ion:225 Resp: 1057
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 64.3 51.4 77.2

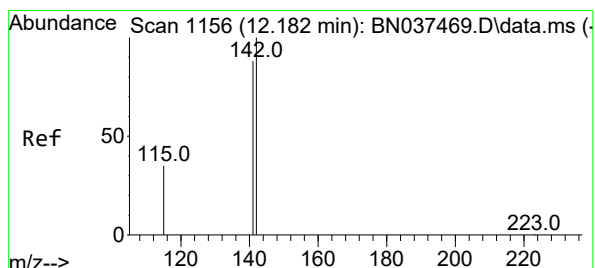
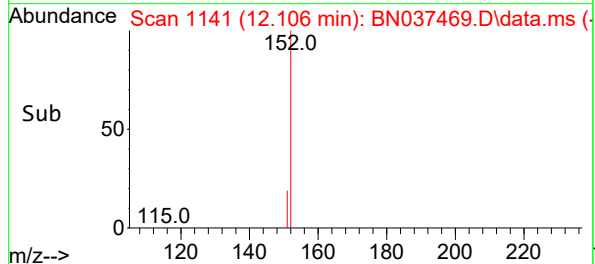
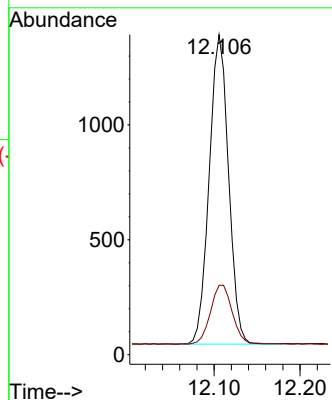
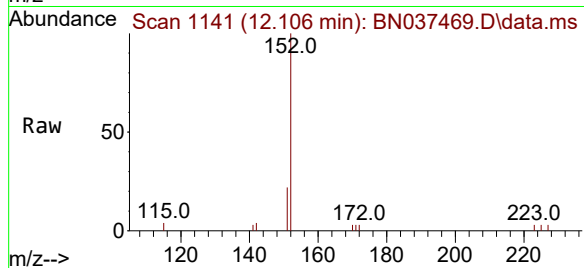




#11
2-Methylnaphthalene-d10
Concen: 0.376 ng
RT: 12.106 min Scan# 1141
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

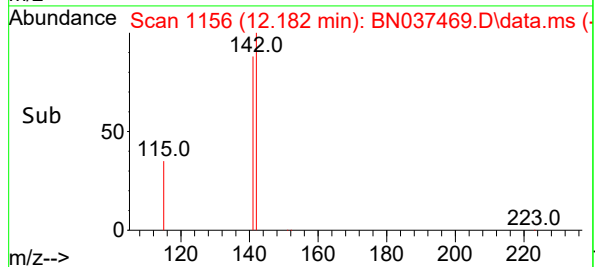
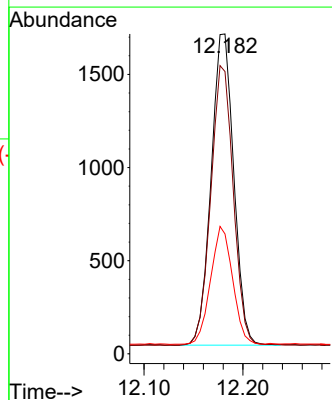
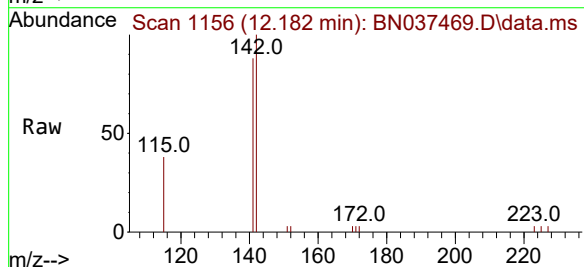
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

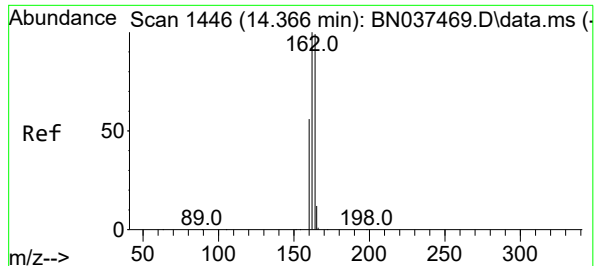
Tgt Ion:152 Resp: 2104
Ion Ratio Lower Upper
152 100
151 21.3 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.384 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

Tgt Ion:142 Resp: 2659
Ion Ratio Lower Upper
142 100
141 88.2 70.6 105.8
115 37.5 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

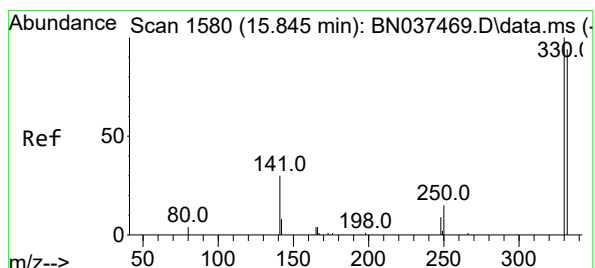
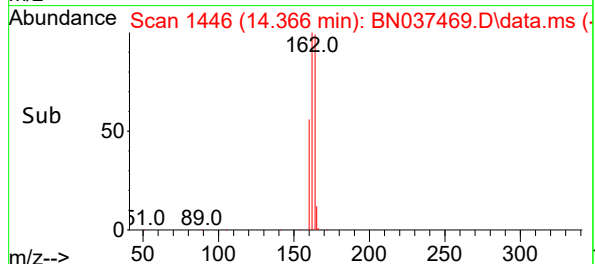
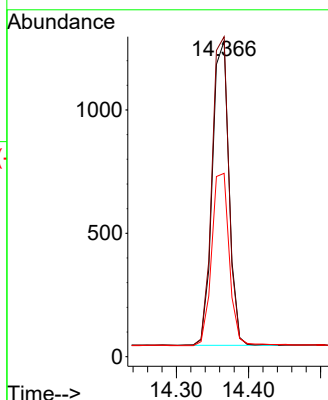
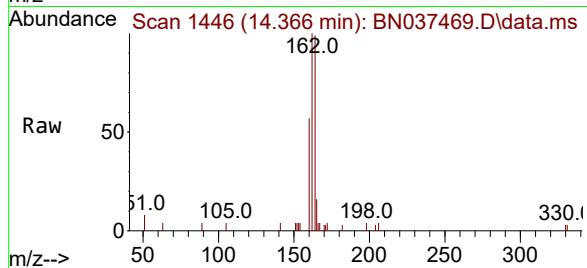
Tgt Ion:164 Resp: 1977

Ion Ratio Lower Upper

164 100

162 101.4 81.1 121.7

160 58.1 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 0.359 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

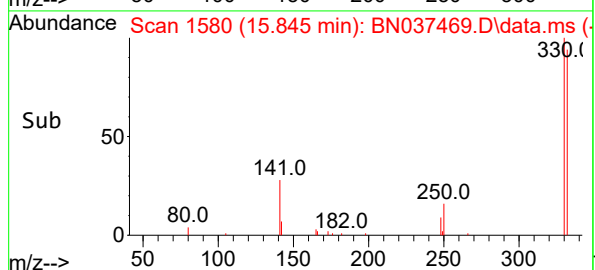
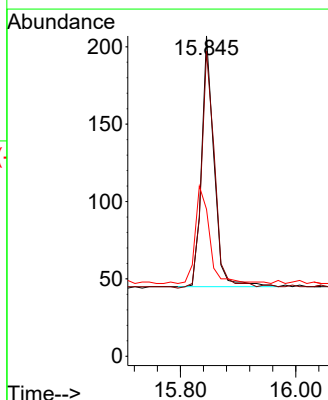
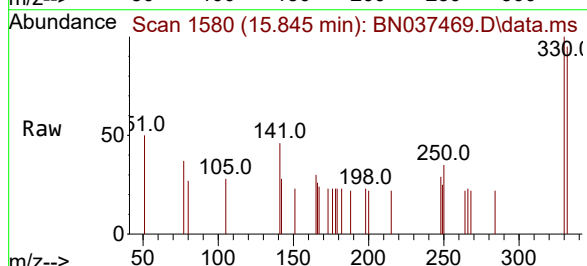
Tgt Ion:330 Resp: 241

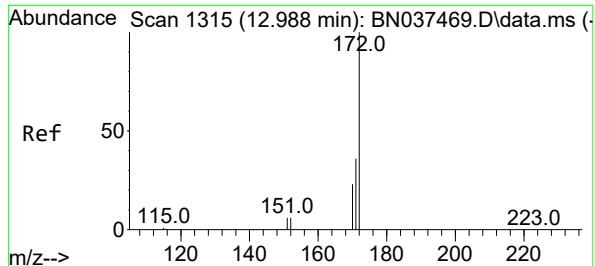
Ion Ratio Lower Upper

330 100

332 102.5 82.0 123.0

141 45.2 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 0.404 ng

RT: 12.988 min Scan# 1315

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

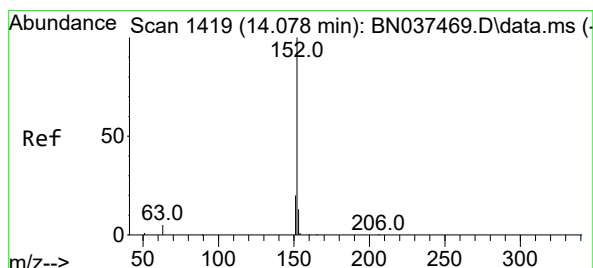
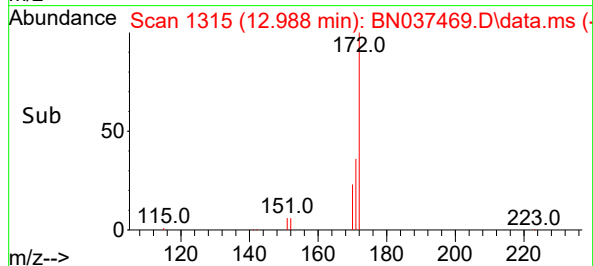
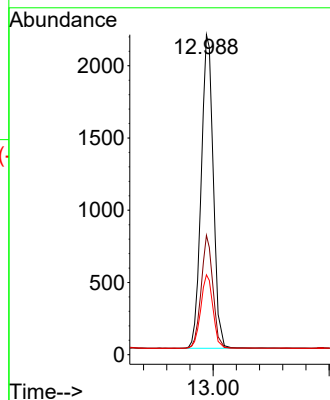
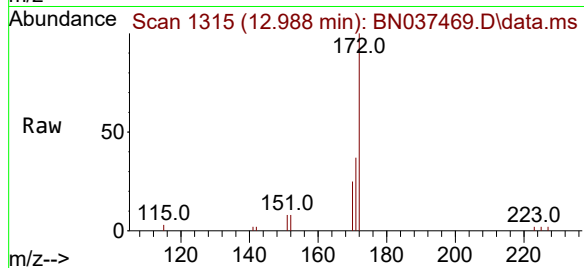
Tgt Ion:172 Resp: 4556

Ion Ratio Lower Upper

172 100

171 37.3 29.8 44.8

170 25.0 20.0 30.0



#16

Acenaphthylene

Concen: 0.386 ng

RT: 14.078 min Scan# 1419

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

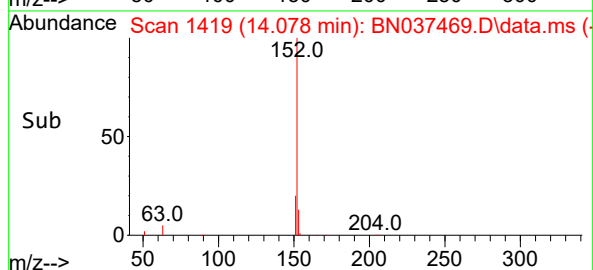
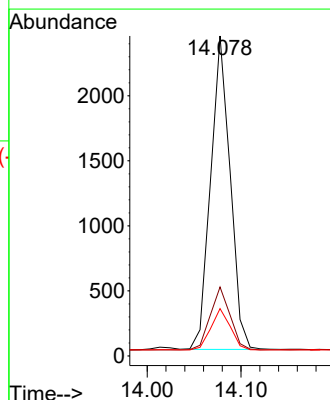
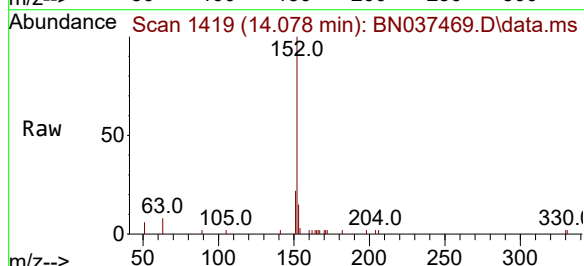
Tgt Ion:152 Resp: 3482

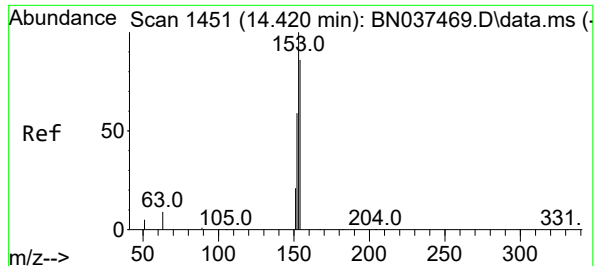
Ion Ratio Lower Upper

152 100

151 20.5 16.4 24.6

153 13.2 10.6 15.8





#17

Acenaphthene

Concen: 0.387 ng

RT: 14.420 min Scan# 1451

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

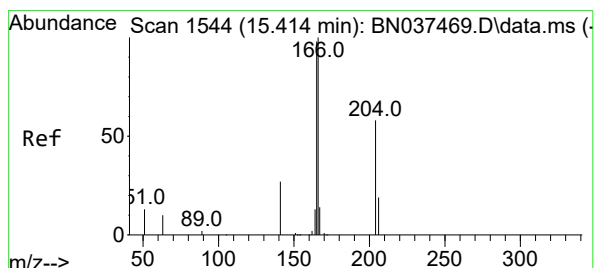
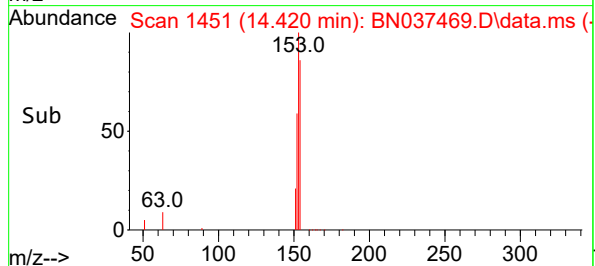
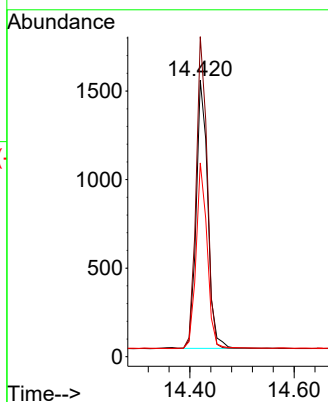
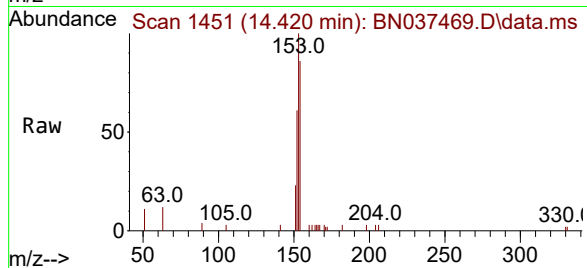
Tgt Ion:154 Resp: 2341

Ion Ratio Lower Upper

154 100

153 111.7 89.4 134.0

152 66.5 53.2 79.8



#18

Fluorene

Concen: 0.385 ng

RT: 15.414 min Scan# 1544

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

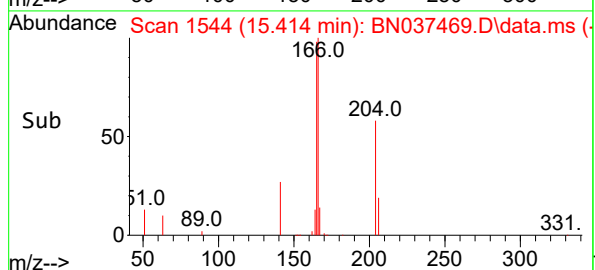
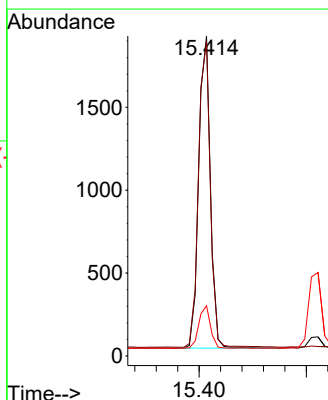
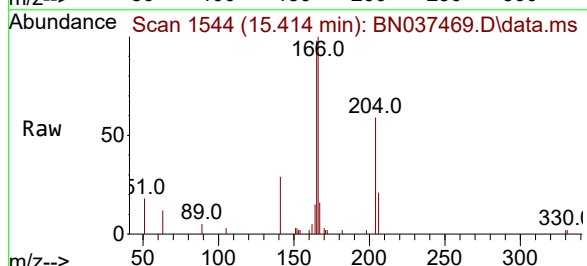
Tgt Ion:166 Resp: 2929

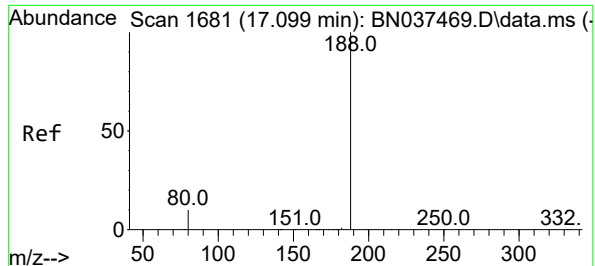
Ion Ratio Lower Upper

166 100

165 99.3 79.4 119.2

167 13.2 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

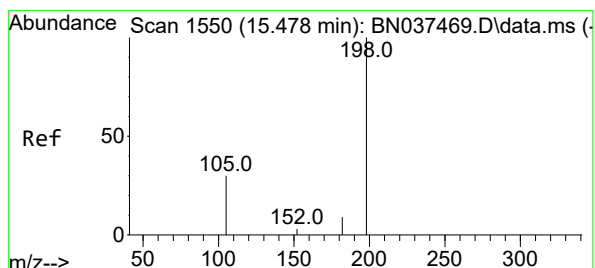
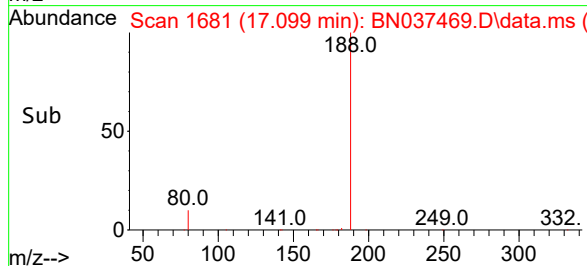
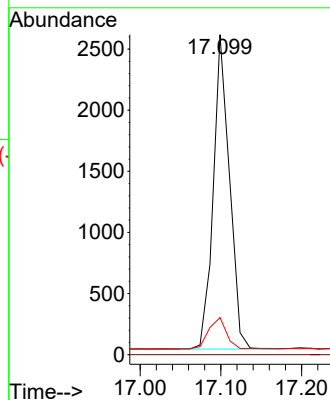
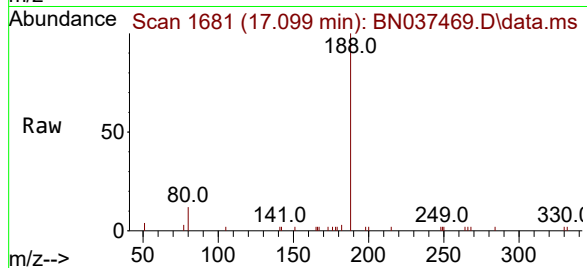
Tgt Ion:188 Resp: 3577

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.6 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.346 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

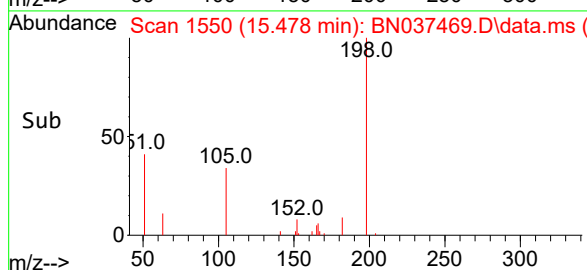
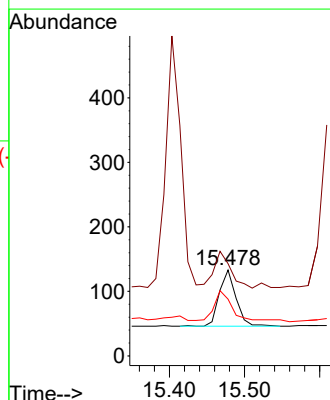
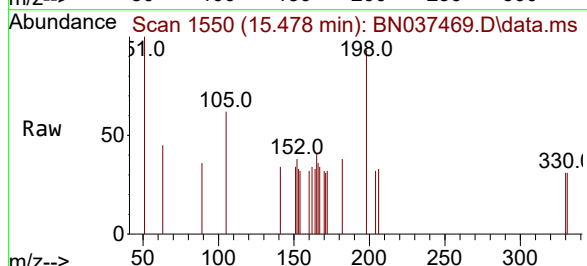
Tgt Ion:198 Resp: 139

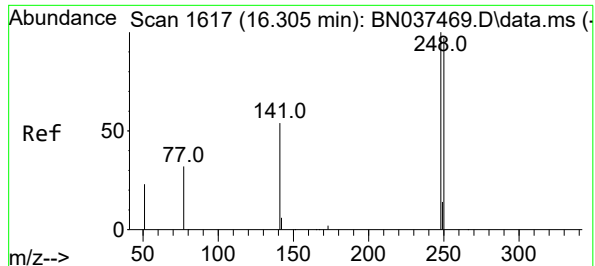
Ion Ratio Lower Upper

198 100

51 107.5 86.0 129.0

105 66.2 53.0 79.4





#21

4-Bromophenyl-phenylether

Concen: 0.378 ng

RT: 16.305 min Scan# 1617

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

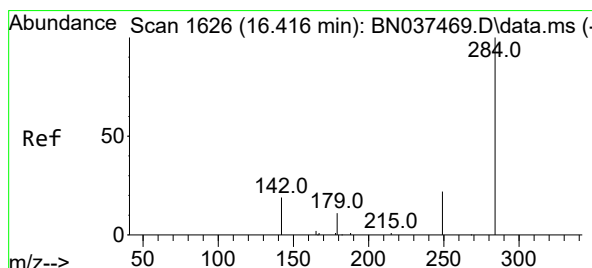
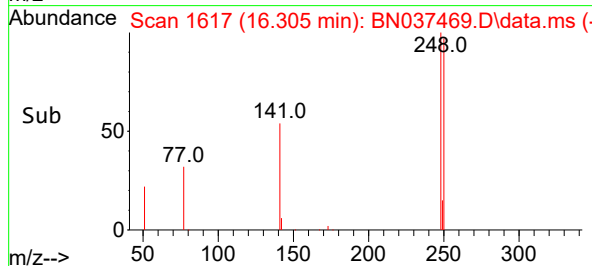
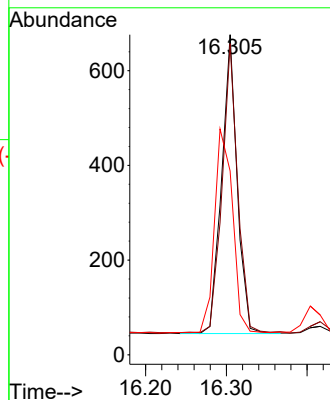
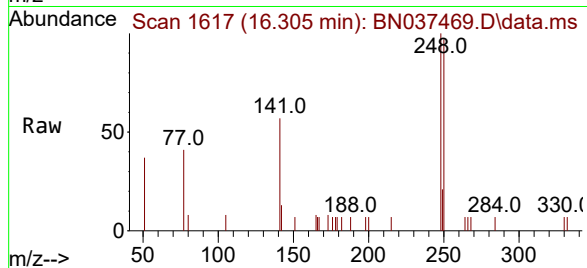
Tgt Ion:248 Resp: 844

Ion Ratio Lower Upper

248 100

250 97.2 77.8 116.6

141 57.4 45.9 68.9



#22

Hexachlorobenzene

Concen: 0.395 ng

RT: 16.416 min Scan# 1626

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

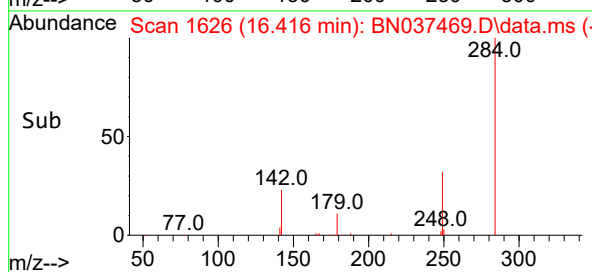
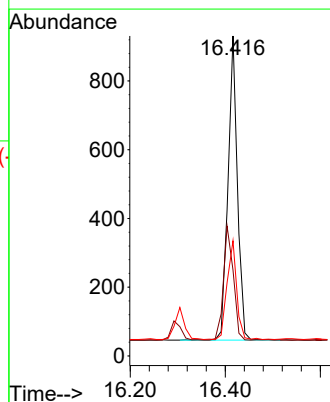
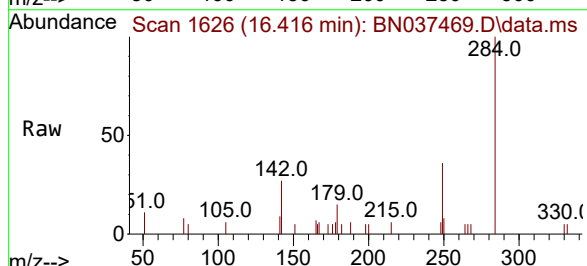
Tgt Ion:284 Resp: 1215

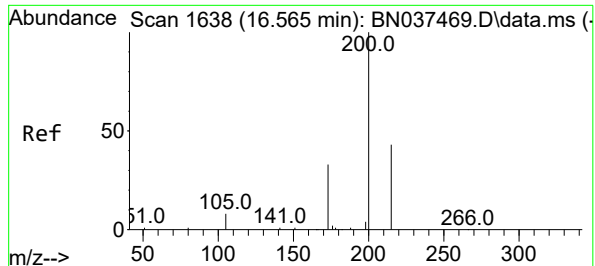
Ion Ratio Lower Upper

284 100

142 39.1 31.3 46.9

249 33.3 26.6 40.0





#23

Atrazine

Concen: 0.370 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

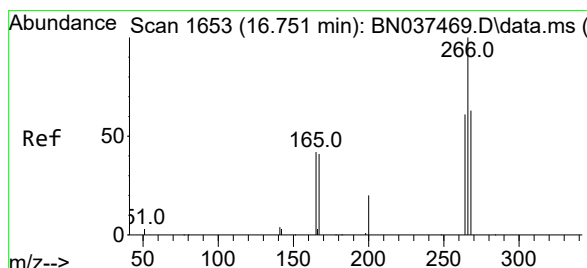
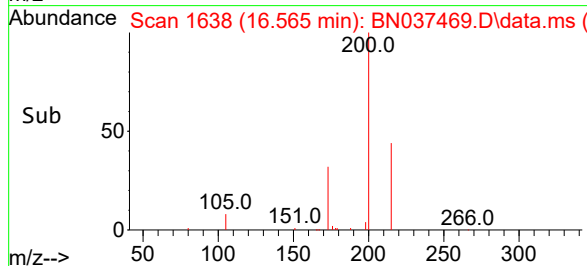
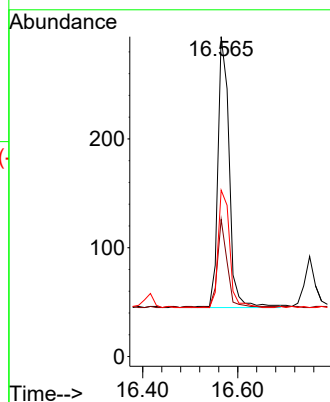
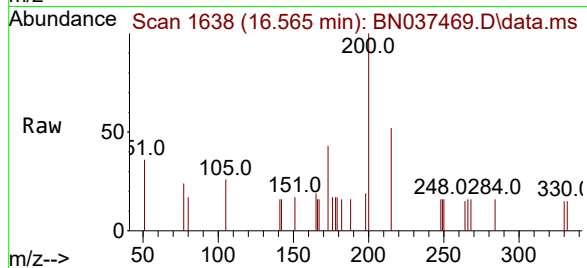
Tgt Ion:200 Resp: 411

Ion Ratio Lower Upper

200 100

173 42.9 34.3 51.5

215 52.0 41.6 62.4



#24

Pentachlorophenol

Concen: 0.340 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

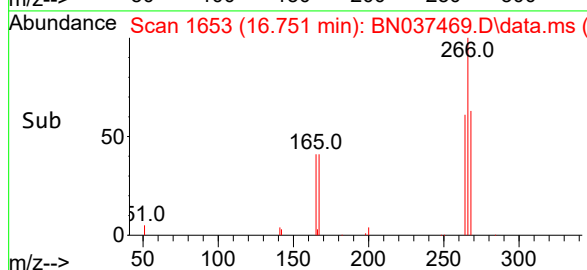
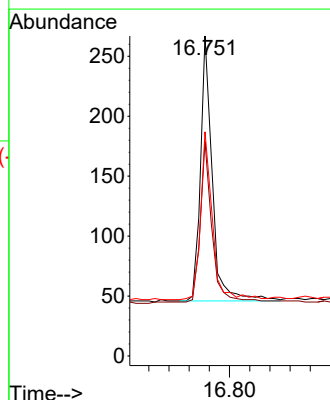
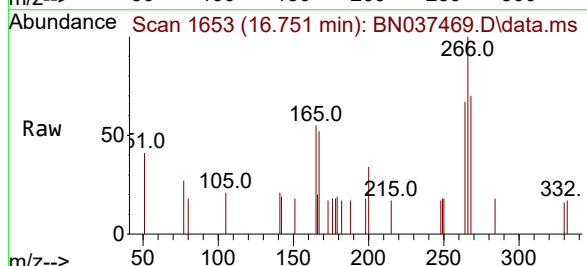
Tgt Ion:266 Resp: 360

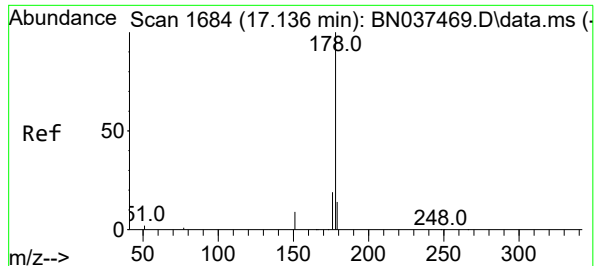
Ion Ratio Lower Upper

266 100

264 59.4 47.5 71.3

268 63.3 50.6 76.0





#25

Phenanthrene

Concen: 0.380 ng

RT: 17.136 min Scan# 1684

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

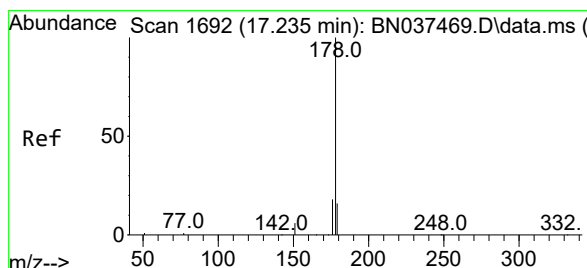
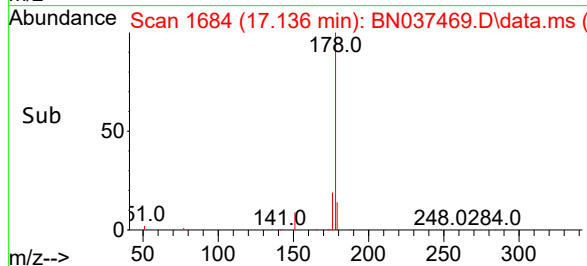
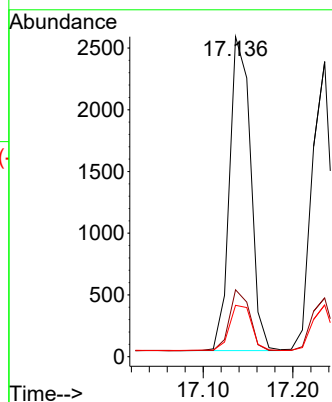
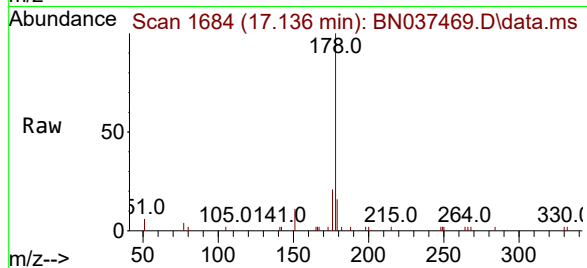
Tgt Ion:178 Resp: 4140

Ion Ratio Lower Upper

178 100

176 18.9 15.1 22.7

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.369 ng

RT: 17.235 min Scan# 1692

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

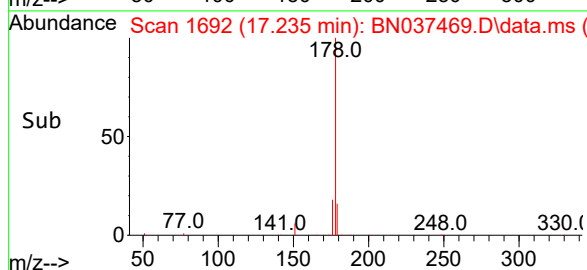
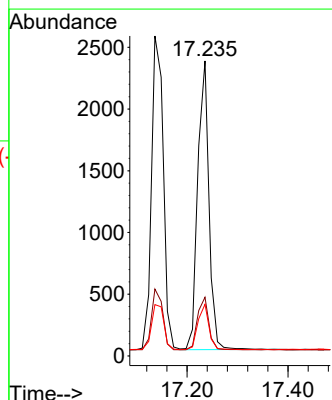
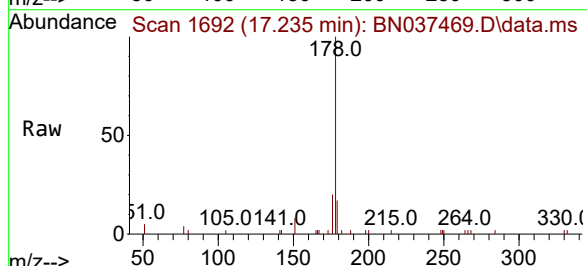
Tgt Ion:178 Resp: 3627

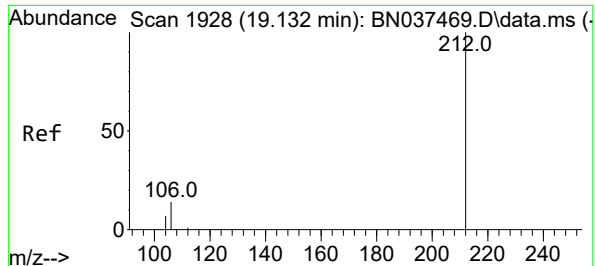
Ion Ratio Lower Upper

178 100

176 18.6 14.9 22.3

179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.360 ng

RT: 19.132 min Scan# 1928

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

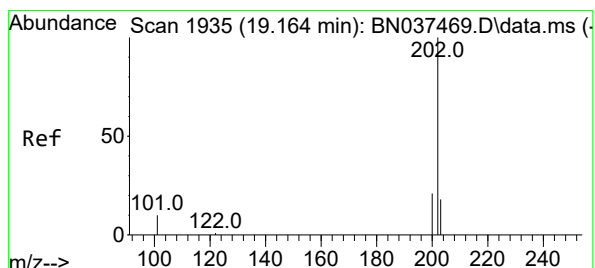
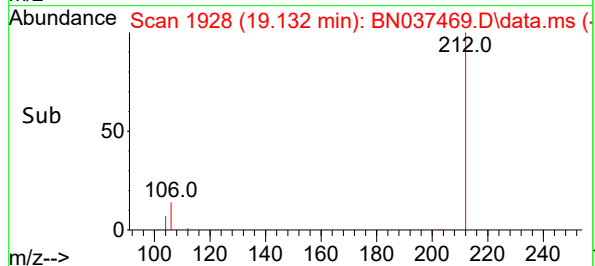
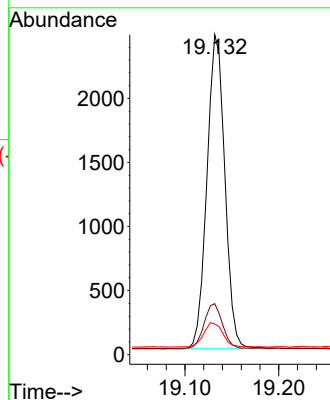
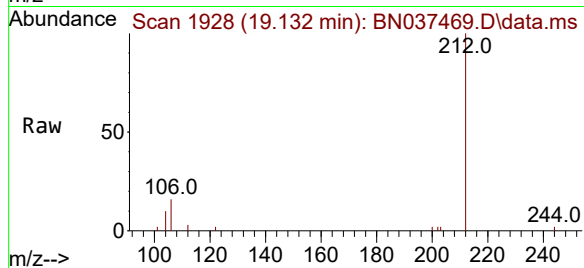
Tgt Ion:212 Resp: 3252

Ion Ratio Lower Upper

212 100

106 14.6 11.7 17.5

104 8.3 6.6 10.0



#28

Fluoranthene

Concen: 0.365 ng

RT: 19.164 min Scan# 1935

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

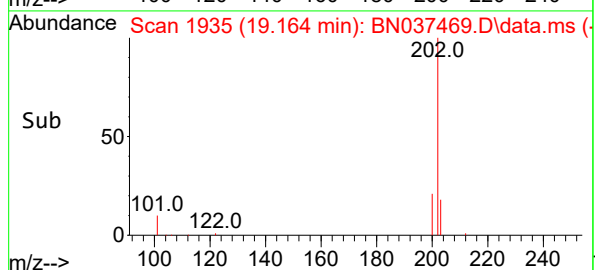
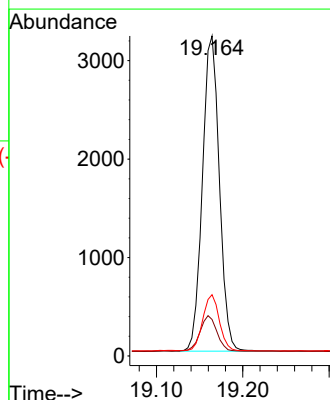
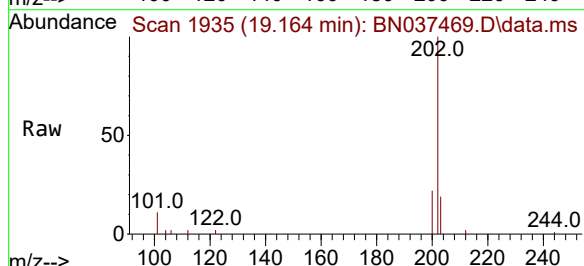
Tgt Ion:202 Resp: 4365

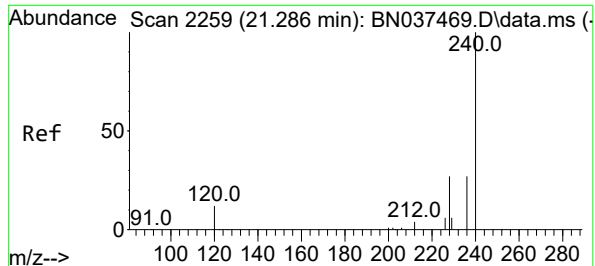
Ion Ratio Lower Upper

202 100

101 11.5 9.2 13.8

203 17.5 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

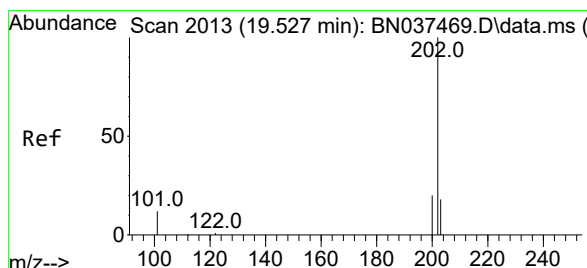
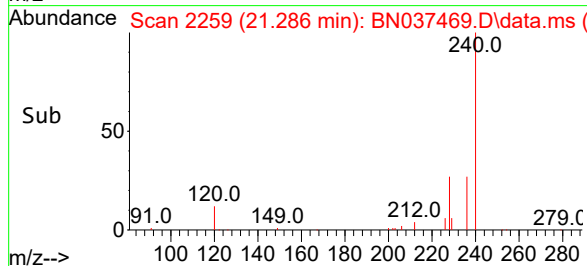
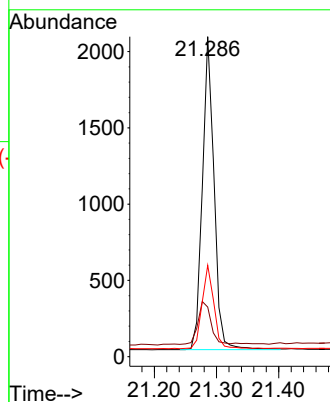
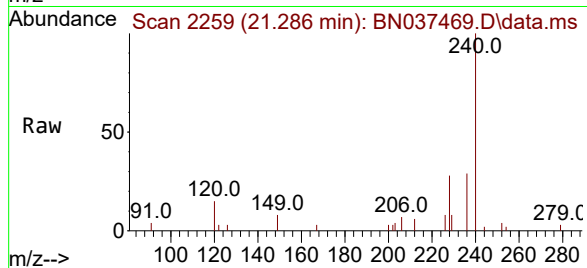
Tgt Ion:240 Resp: 2684

Ion Ratio Lower Upper

240 100

120 15.5 12.4 18.6

236 28.6 22.9 34.3



#30

Pyrene

Concen: 0.396 ng

RT: 19.527 min Scan# 2013

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

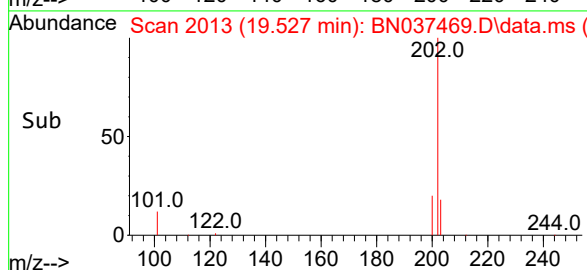
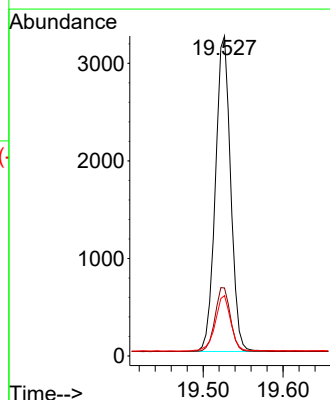
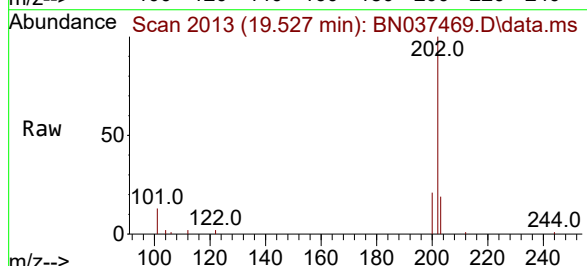
Tgt Ion:202 Resp: 4278

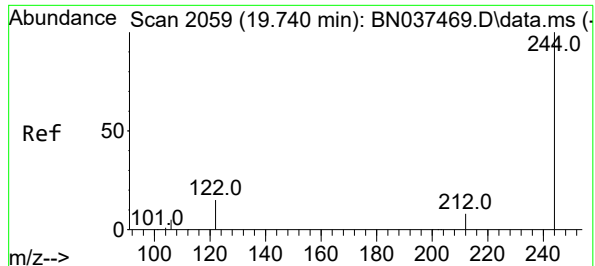
Ion Ratio Lower Upper

202 100

200 20.5 16.4 24.6

203 17.9 14.3 21.5

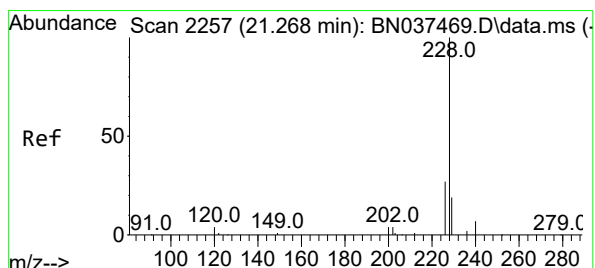
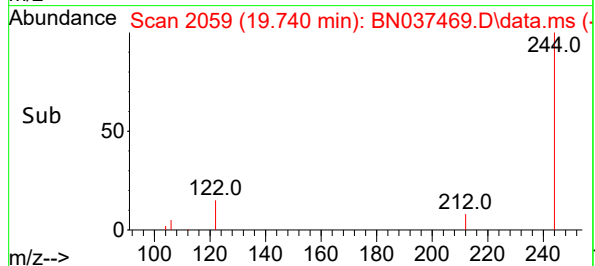
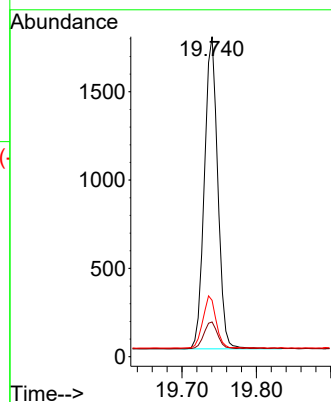
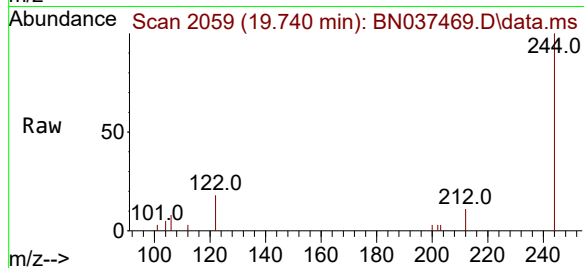




#31
Terphenyl-d14
Concen: 0.393 ng
RT: 19.740 min Scan# 2059
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

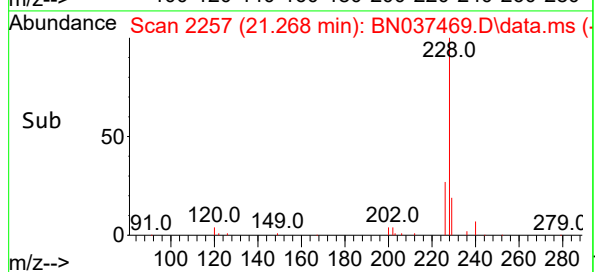
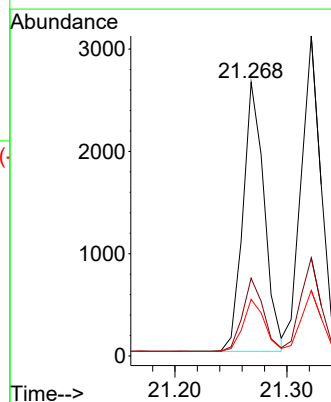
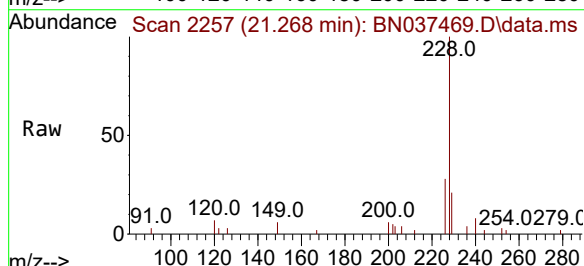
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

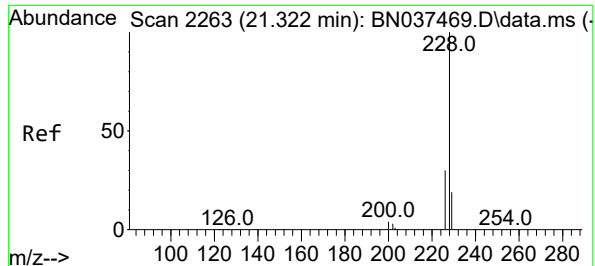
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.9	8.7	13.1
122	17.6	14.1	21.1



#32
Benzo(a)anthracene
Concen: 0.381 ng
RT: 21.268 min Scan# 2257
Delta R.T. 0.000 min
Lab File: BN037469.D
Acq: 11 Jul 2025 12:22

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.4	22.7	34.1
229	20.7	16.6	24.8





#33

Chrysene

Concen: 0.396 ng

RT: 21.322 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

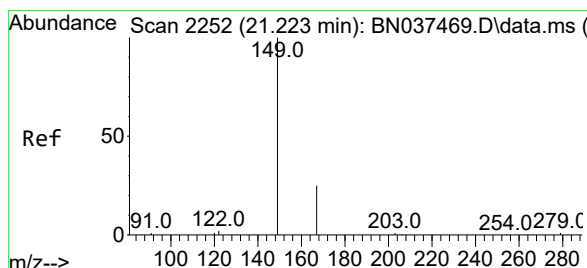
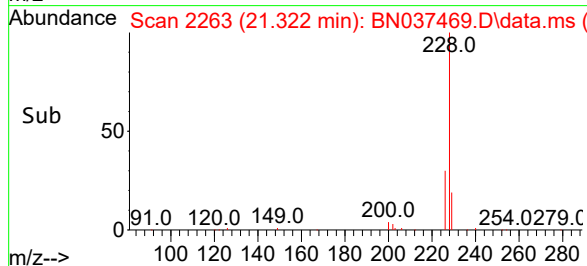
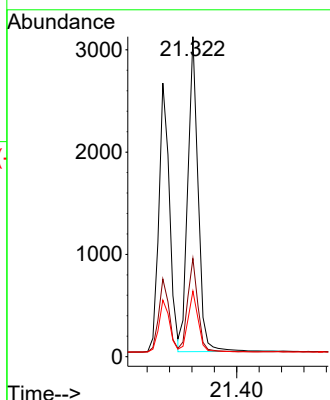
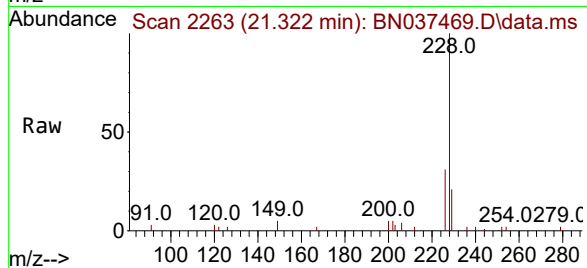
Tgt Ion:228 Resp: 3930

Ion Ratio Lower Upper

228 100

226 30.7 24.6 36.8

229 20.5 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.392 ng

RT: 21.223 min Scan# 2252

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

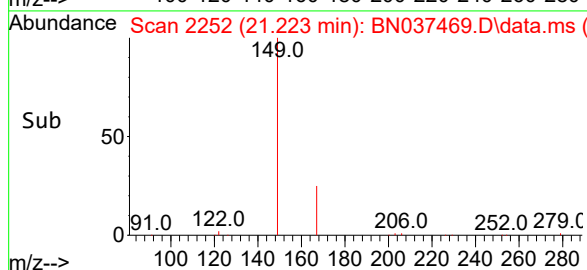
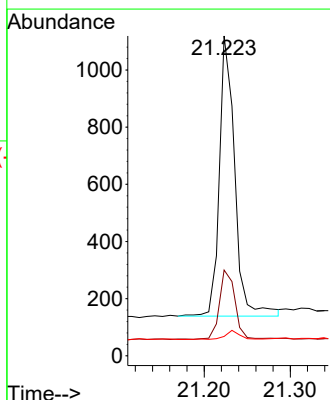
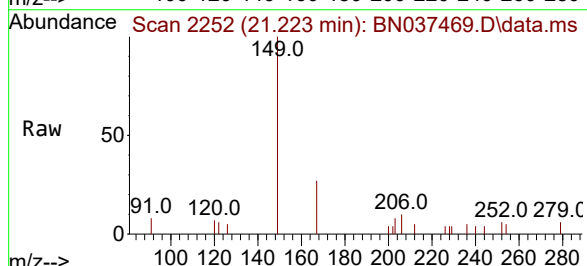
Tgt Ion:149 Resp: 1211

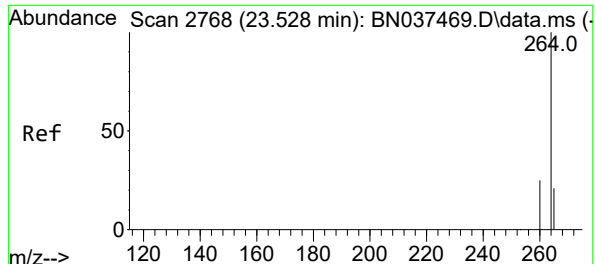
Ion Ratio Lower Upper

149 100

167 24.3 19.4 29.2

279 3.1 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.528 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

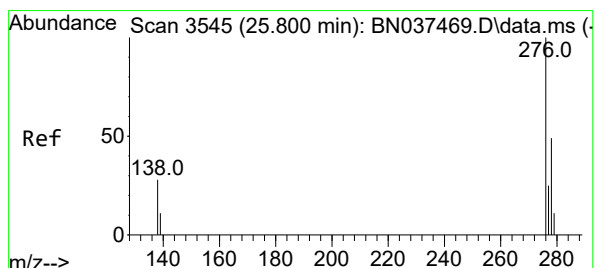
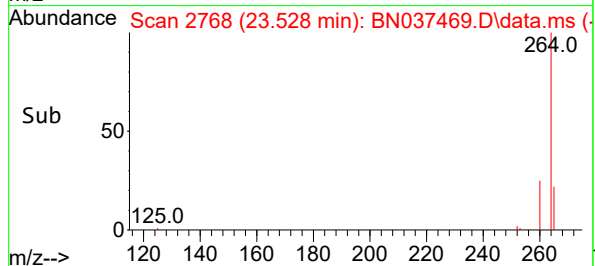
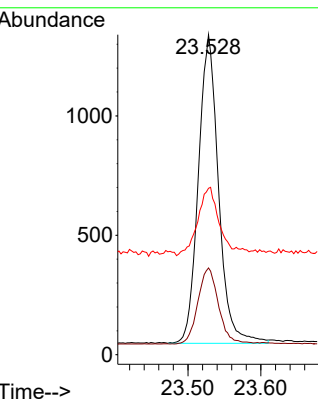
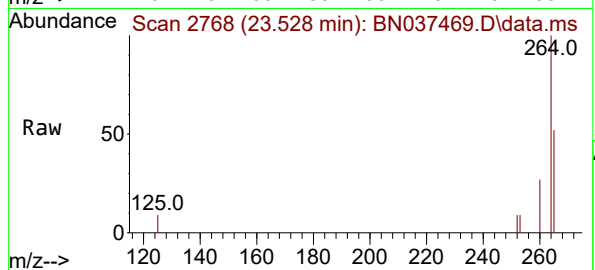
Tgt Ion:264 Resp: 2478

Ion Ratio Lower Upper

264 100

260 27.1 21.7 32.5

265 52.0 41.6 62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.359 ng

RT: 25.800 min Scan# 3545

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

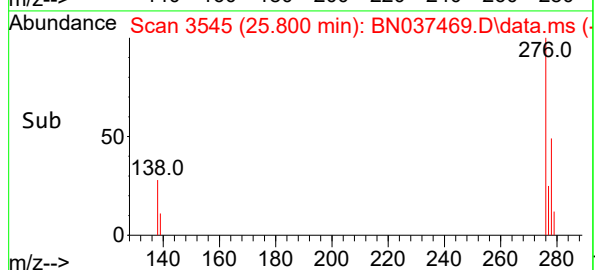
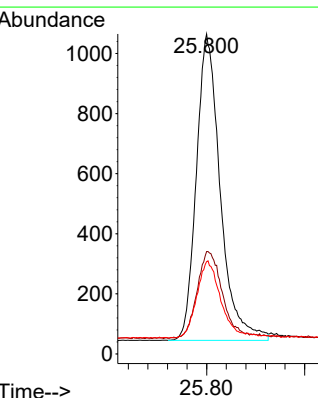
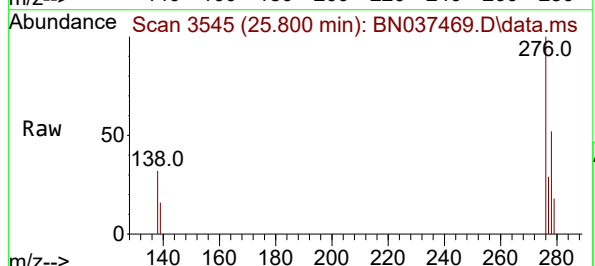
Tgt Ion:276 Resp: 3450

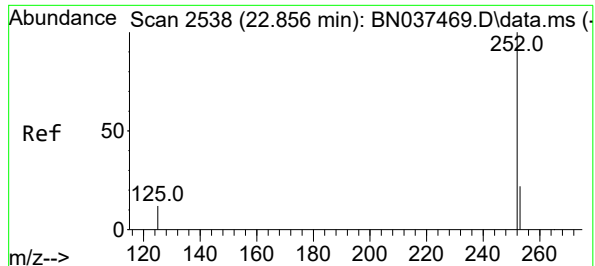
Ion Ratio Lower Upper

276 100

138 29.3 23.4 35.2

277 24.8 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.363 ng

RT: 22.856 min Scan# 2538

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

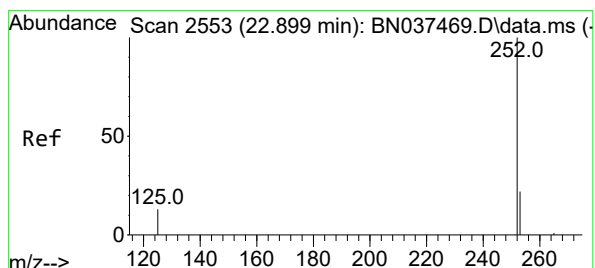
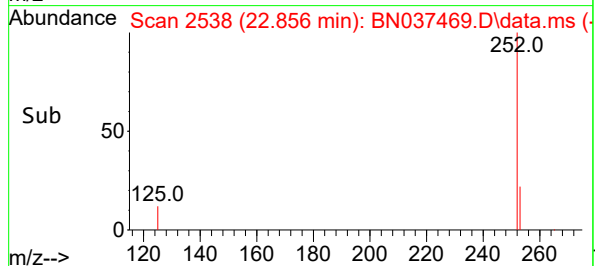
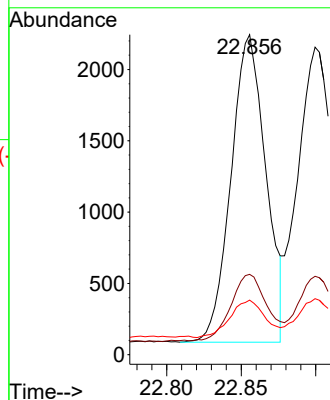
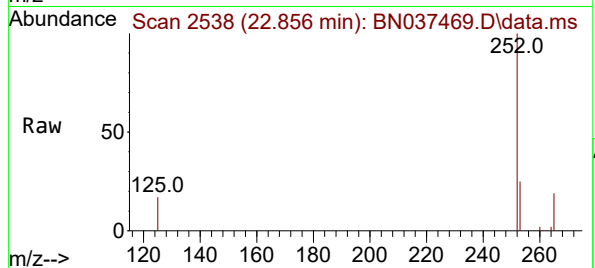
Tgt Ion:252 Resp: 3496

Ion Ratio Lower Upper

252 100

253 25.1 20.1 30.1

125 17.1 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.363 ng

RT: 22.899 min Scan# 2553

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

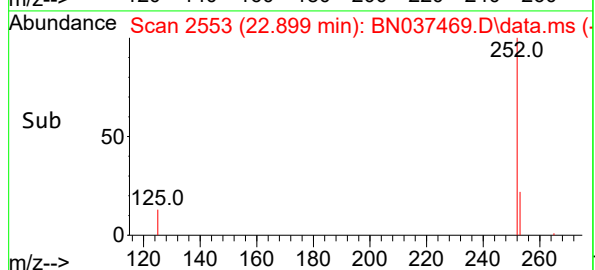
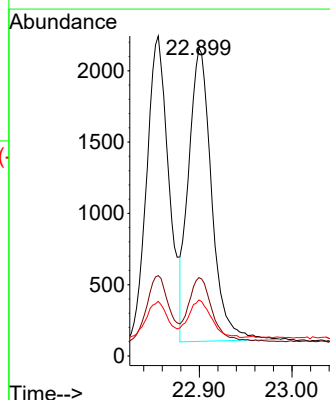
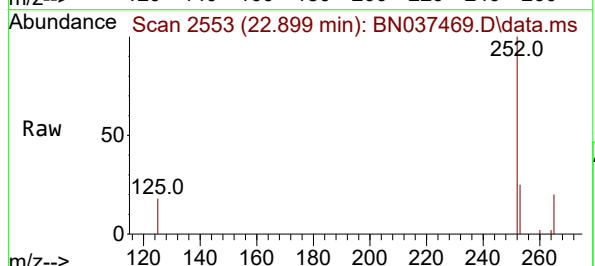
Tgt Ion:252 Resp: 3550

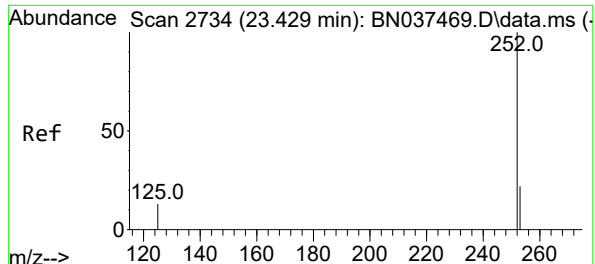
Ion Ratio Lower Upper

252 100

253 25.5 20.4 30.6

125 18.2 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.368 ng

RT: 23.429 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

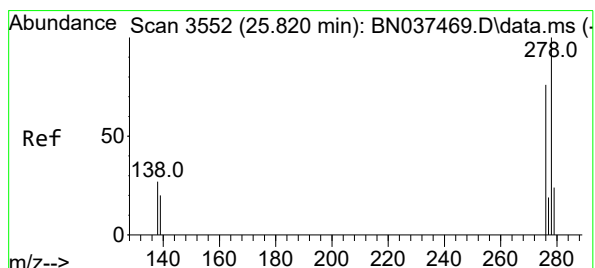
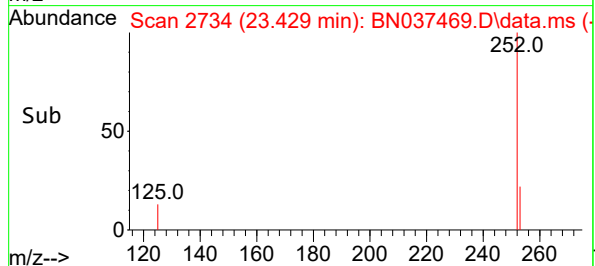
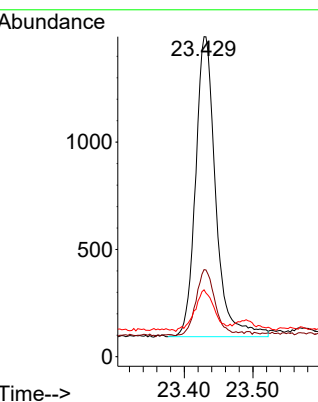
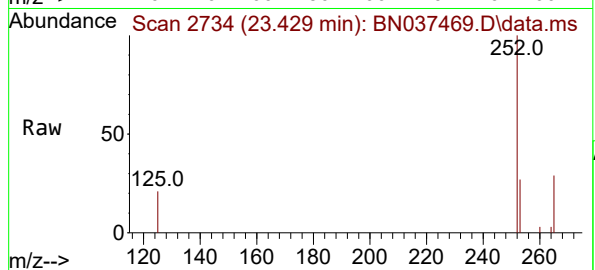
Tgt Ion:252 Resp: 2854

Ion Ratio Lower Upper

252 100

253 27.2 21.8 32.6

125 20.9 16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.353 ng

RT: 25.820 min Scan# 3552

Delta R.T. 0.000 min

Lab File: BN037469.D

Acq: 11 Jul 2025 12:22

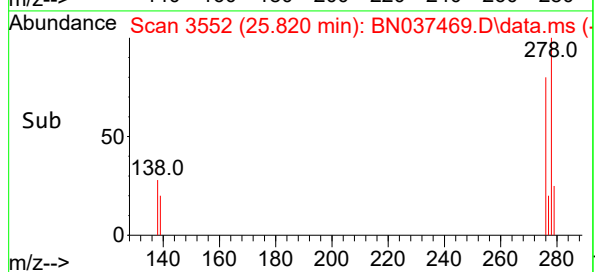
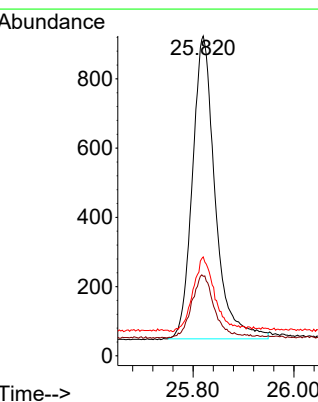
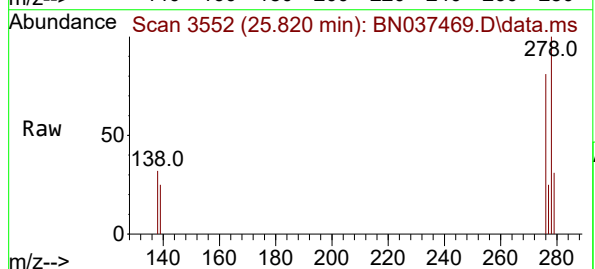
Tgt Ion:278 Resp: 2738

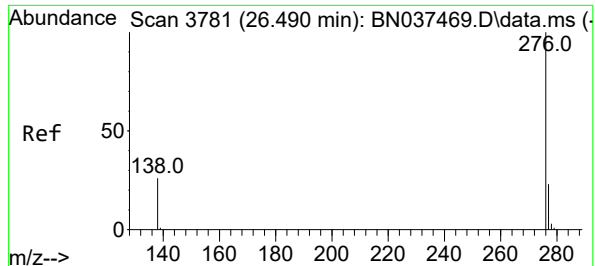
Ion Ratio Lower Upper

278 100

139 24.9 19.9 29.9

279 31.0 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.369 ng

RT: 26.490 min Scan# 31

Delta R.T. 0.000 min

Lab File: BN037469.D

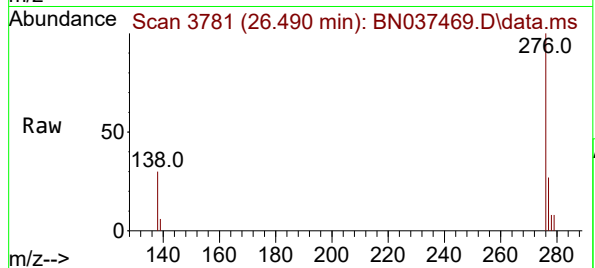
Acq: 11 Jul 2025 12:22

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4



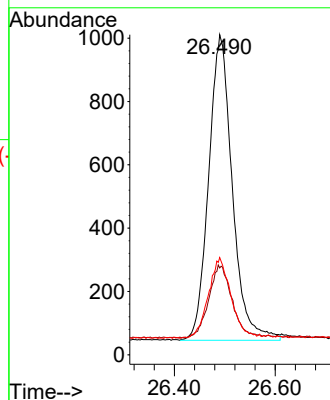
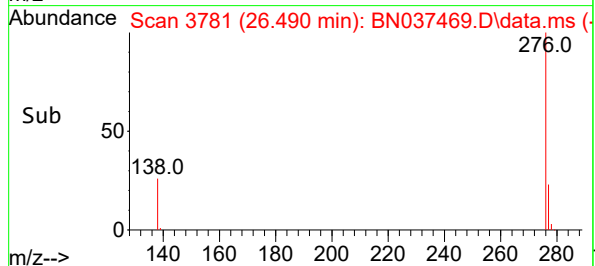
Tgt Ion:276 Resp: 3138

Ion Ratio Lower Upper

276 100

277 27.1 21.7 32.5

138 30.4 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037470.D
 Acq On : 11 Jul 2025 12:59
 Operator : RC/JU
 Sample : SSTDICC0.8
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.8

Quant Time: Jul 11 15:26:39 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

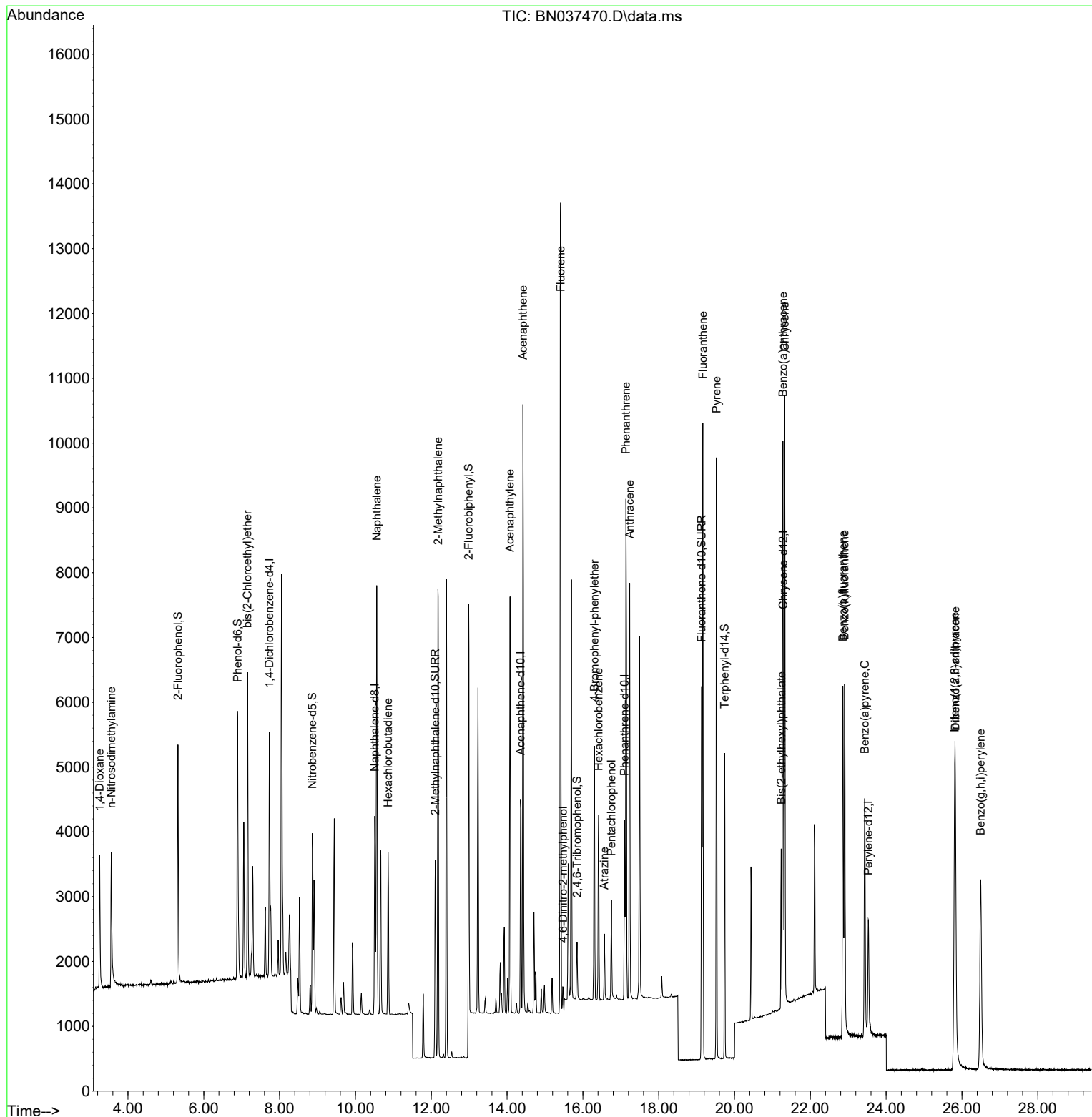
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1736	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4076	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	1951	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3482	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2759	0.400	ng	0.00
35) Perylene-d12	23.531	264	2383	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	2966	0.734	ng	0.00
5) Phenol-d6	6.894	99	3692	0.726	ng	0.00
8) Nitrobenzene-d5	8.865	82	2168	0.733	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	3996	0.721	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	474	0.716	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	8347	0.750	ng	0.00
27) Fluoranthene-d10	19.132	212	6236	0.710	ng	0.00
31) Terphenyl-d14	19.740	244	4293	0.746	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	1305	0.800	ng	97
3) n-Nitrosodimethylamine	3.557	42	1644	0.754	ng	97
6) bis(2-Chloroethyl)ether	7.154	93	3245	0.763	ng	99
9) Naphthalene	10.562	128	8271	0.755	ng	98
10) Hexachlorobutadiene	10.861	225	2016	0.766	ng	# 99
12) 2-Methylnaphthalene	12.177	142	5099	0.743	ng	98
16) Acenaphthylene	14.078	152	6655	0.748	ng	100
17) Acenaphthene	14.420	154	4442	0.744	ng	99
18) Fluorene	15.414	166	5554	0.741	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	298	0.762	ng	# 72
21) 4-Bromophenyl-phenylether	16.304	248	1628	0.749	ng	95
22) Hexachlorobenzene	16.416	284	2289	0.764	ng	100
23) Atrazine	16.565	200	795	0.736	ng	93
24) Pentachlorophenol	16.751	266	696	0.674	ng	95
25) Phenanthrene	17.136	178	7991	0.754	ng	100
26) Anthracene	17.235	178	7130	0.745	ng	100
28) Fluoranthene	19.164	202	8578	0.737	ng	99
30) Pyrene	19.527	202	8340	0.752	ng	100
32) Benzo(a)anthracene	21.277	228	6842	0.732	ng	99
33) Chrysene	21.322	228	7796	0.763	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	2313	0.728	ng	98
36) Indeno(1,2,3-cd)pyrene	25.806	276	6834	0.739	ng	99
37) Benzo(b)fluoranthene	22.858	252	6954	0.750	ng	96
38) Benzo(k)fluoranthene	22.902	252	7171	0.763	ng	95
39) Benzo(a)pyrene	23.434	252	5538	0.743	ng	# 93
40) Dibenzo(a,h)anthracene	25.826	278	5490	0.736	ng	93
41) Benzo(g,h,i)perylene	26.493	276	6107	0.747	ng	96

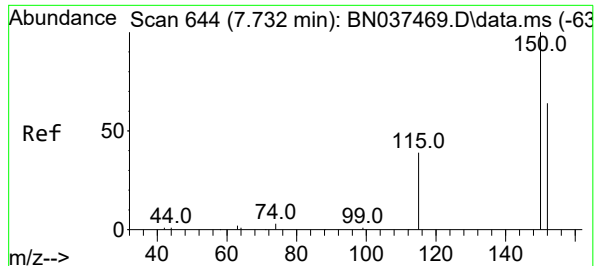
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037470.D
Acq On : 11 Jul 2025 12:59
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Jul 11 15:26:39 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration

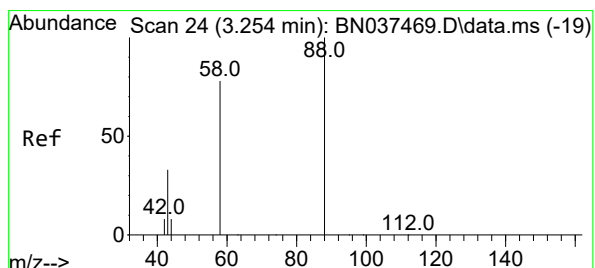
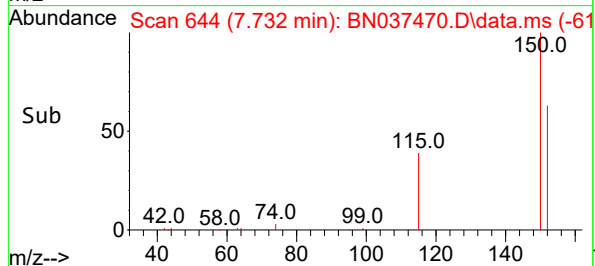
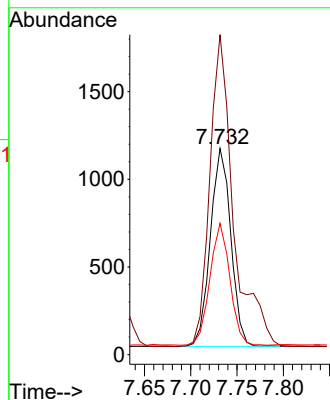
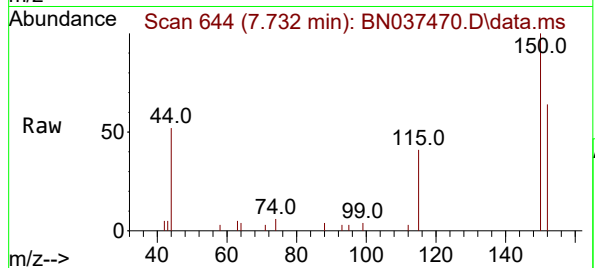




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

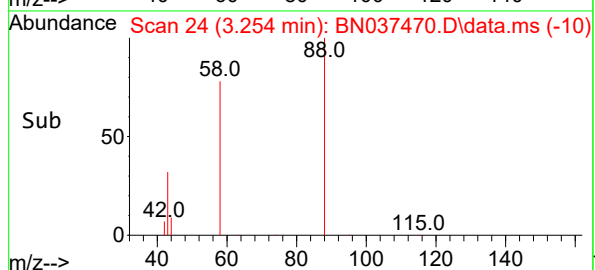
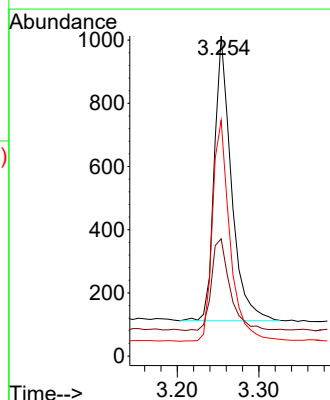
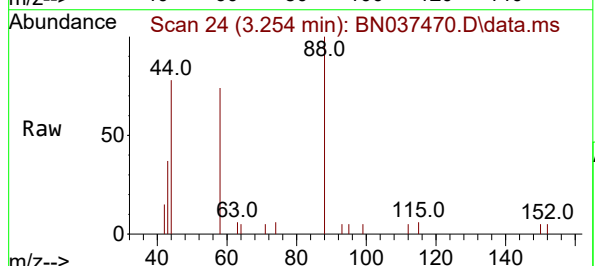
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

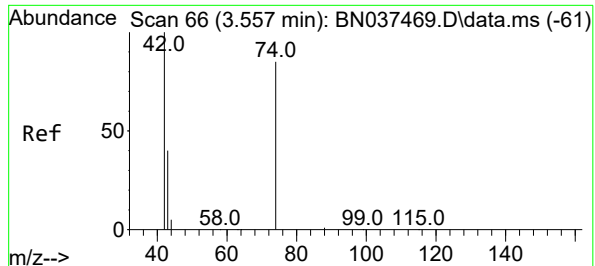
Tgt Ion:152 Resp: 1736
Ion Ratio Lower Upper
152 100
150 155.2 122.5 183.7
115 63.7 49.9 74.9



#2
1,4-Dioxane
Concen: 0.800 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion: 88 Resp: 1305
Ion Ratio Lower Upper
88 100
43 35.2 30.7 46.1
58 79.8 65.0 97.4

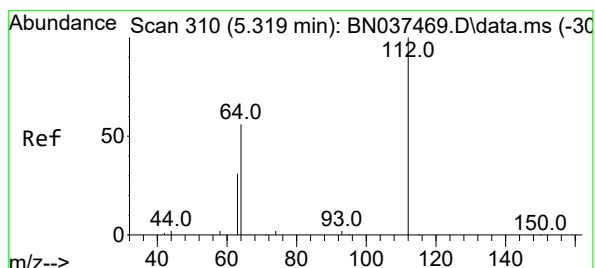
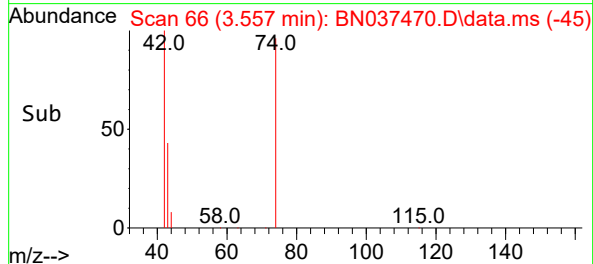
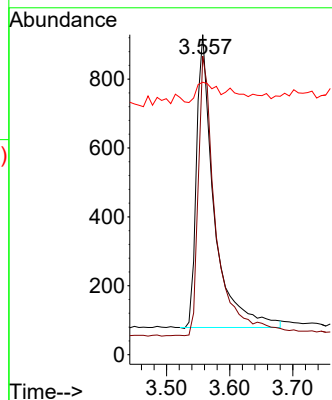
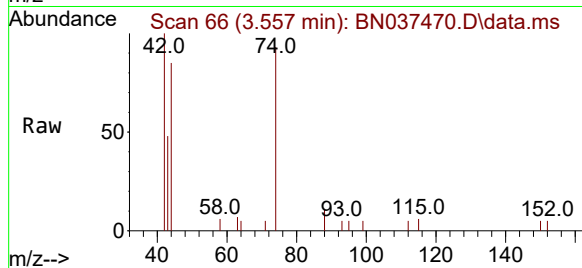




#3
n-Nitrosodimethylamine
Concen: 0.754 ng
RT: 3.557 min Scan# 60
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

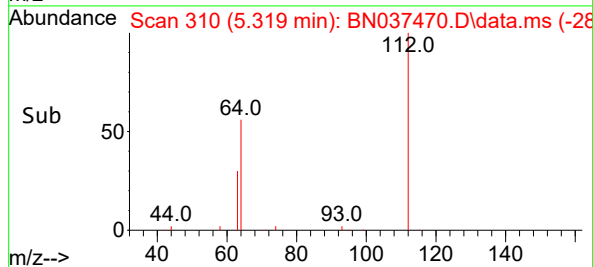
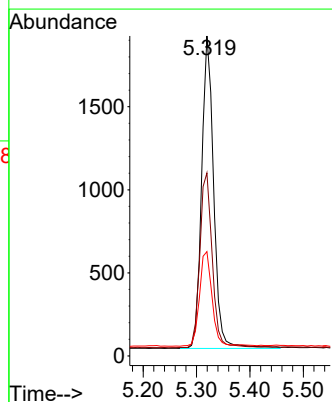
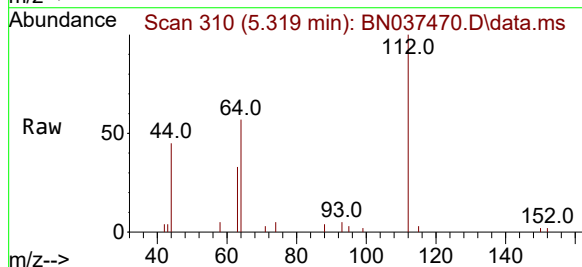
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

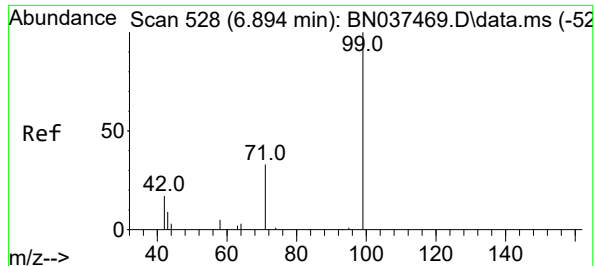
Tgt Ion: 42 Resp: 1644
Ion Ratio Lower Upper
42 100
74 96.5 74.9 112.3
44 7.6 7.2 10.8



#4
2-Fluorophenol
Concen: 0.734 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion: 112 Resp: 2966
Ion Ratio Lower Upper
112 100
64 57.7 45.4 68.0
63 31.5 24.7 37.1

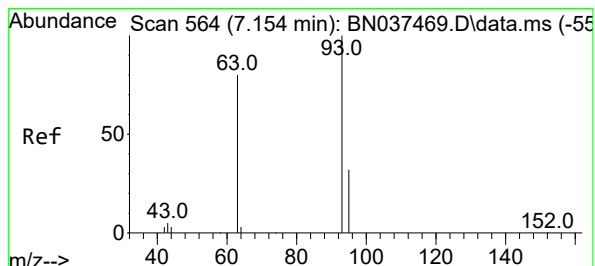
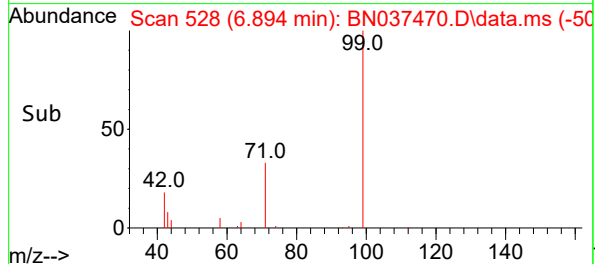
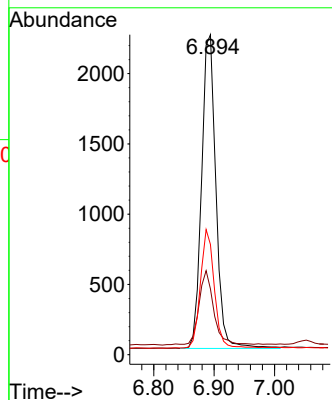
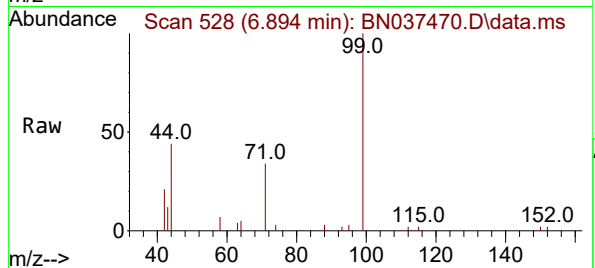




#5
Phenol-d6
Concen: 0.726 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

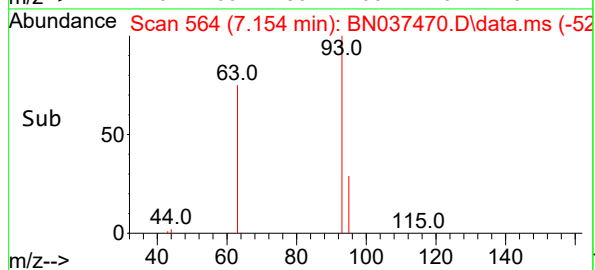
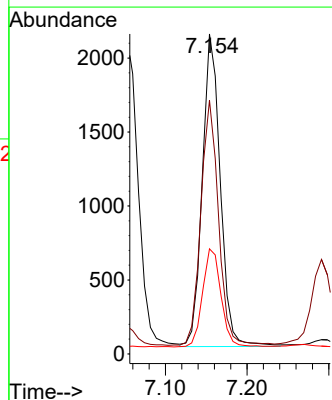
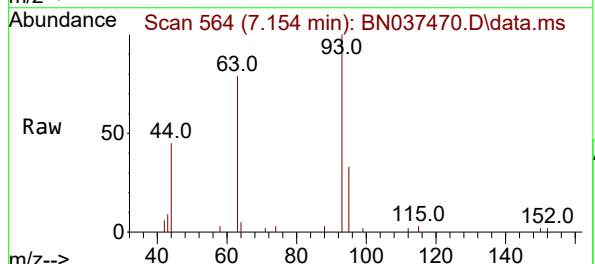
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

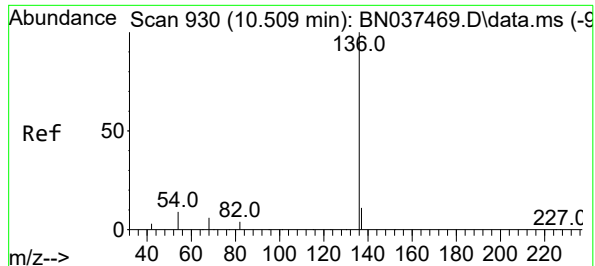
Tgt Ion:	99	Resp:	3692
Ion	Ratio	Lower	Upper
99	100		
42	24.5	19.5	29.3
71	36.9	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.763 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion:	93	Resp:	3245
Ion	Ratio	Lower	Upper
93	100		
63	77.0	60.8	91.2
95	32.2	25.6	38.4

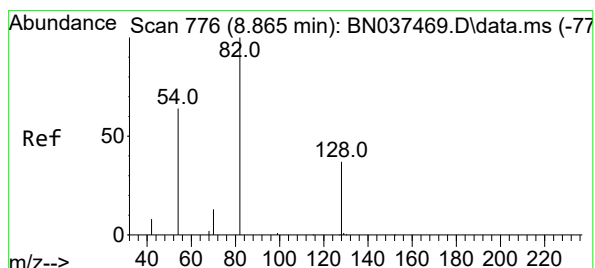
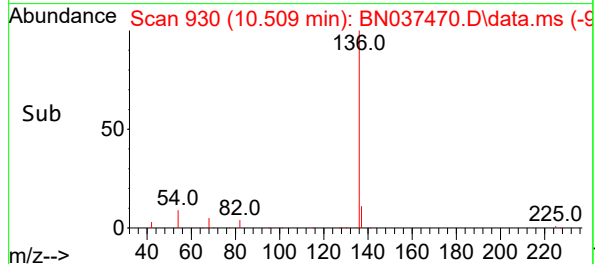
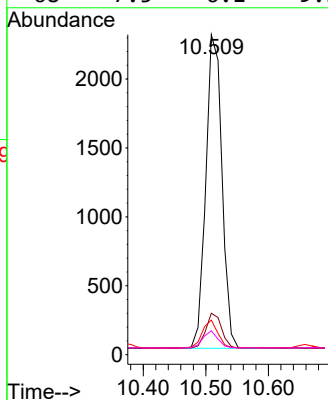
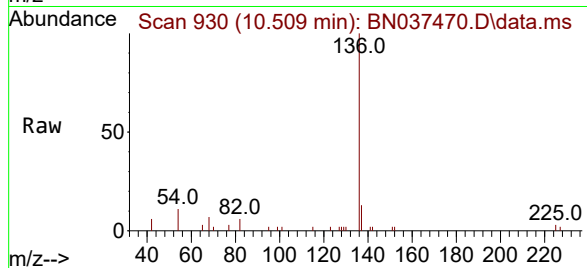




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

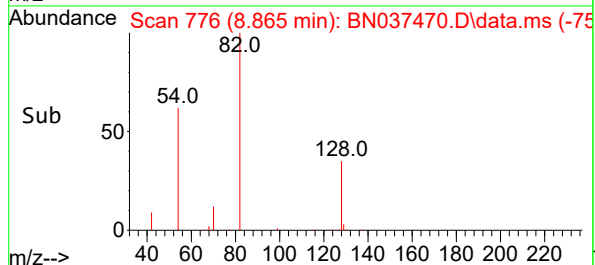
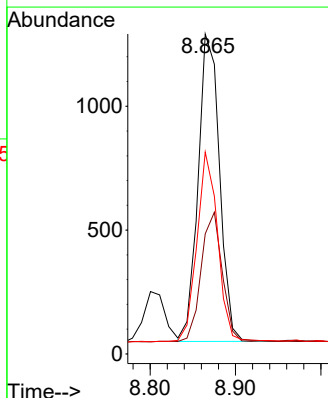
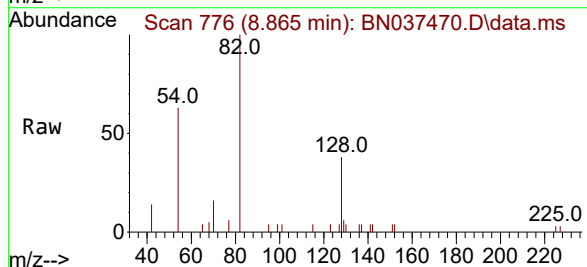
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

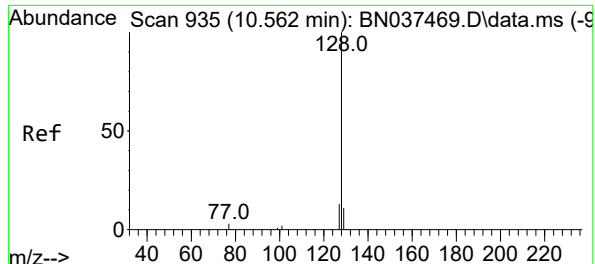
Tgt Ion:	136	Resp:	4076
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.0	15.0
54	10.8	9.0	13.6
68	7.5	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.733 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion:	82	Resp:	2168
Ion	Ratio	Lower	Upper
82	100		
128	37.5	33.1	49.7
54	63.1	53.0	79.4





#9

Naphthalene

Concen: 0.755 ng

RT: 10.562 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

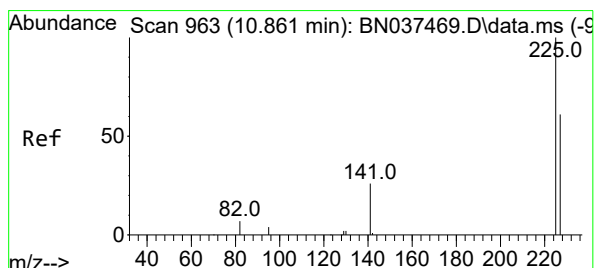
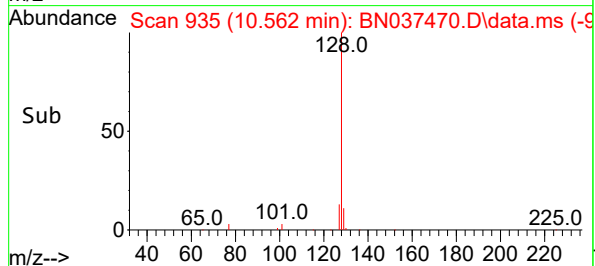
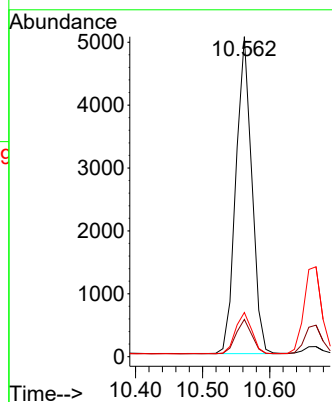
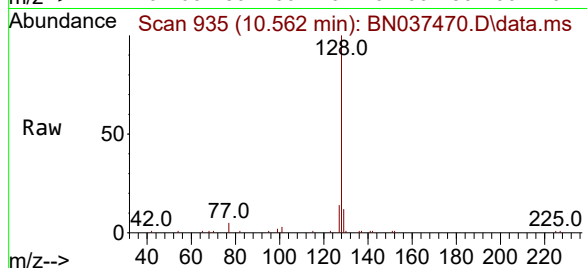
Tgt Ion:128 Resp: 8271

Ion Ratio Lower Upper

128 100

129 11.7 10.2 15.2

127 13.8 11.8 17.6



#10

Hexachlorobutadiene

Concen: 0.766 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

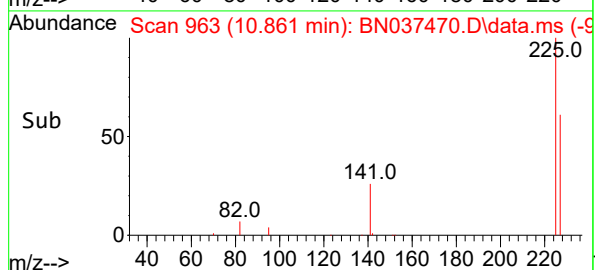
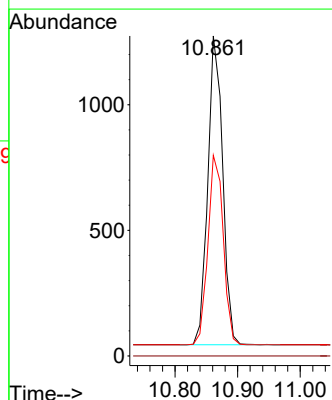
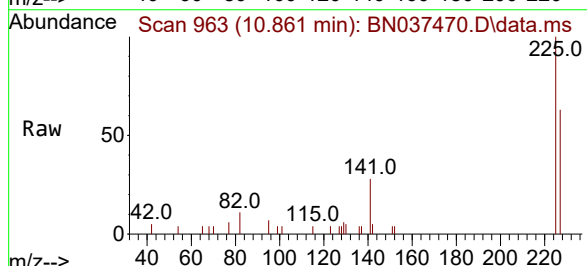
Tgt Ion:225 Resp: 2016

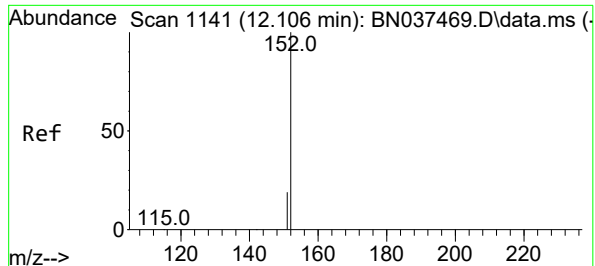
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.2 51.4 77.2

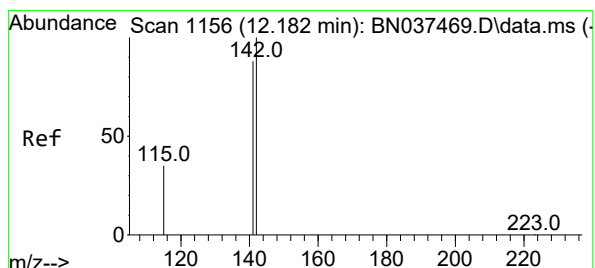
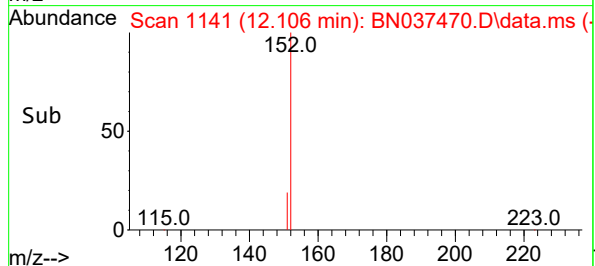
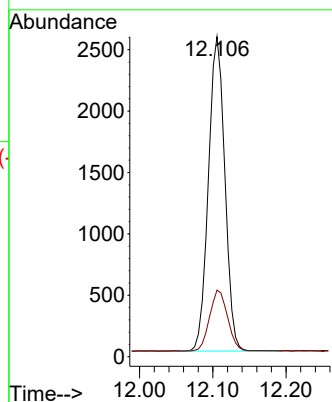
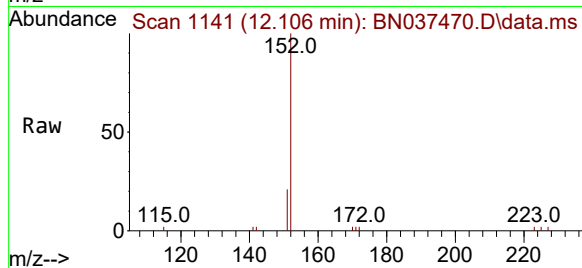




#11
2-Methylnaphthalene-d10
Concen: 0.721 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

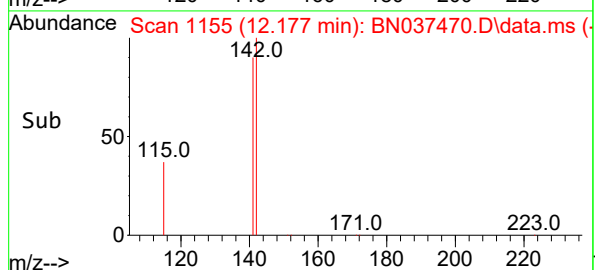
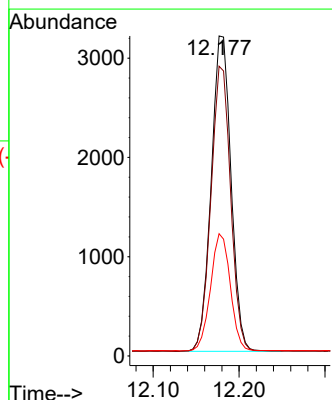
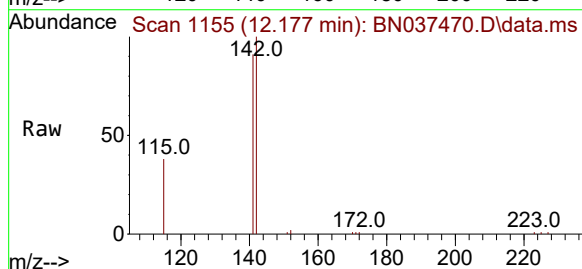
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

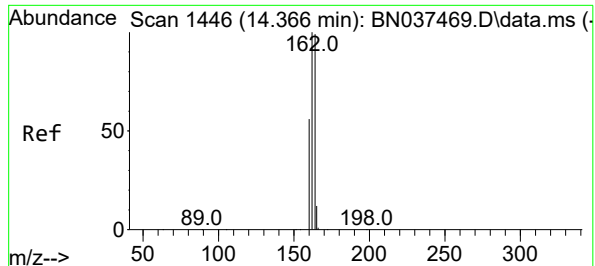
Tgt Ion:152 Resp: 3996
Ion Ratio Lower Upper
152 100
151 21.2 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.743 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion:142 Resp: 5099
Ion Ratio Lower Upper
142 100
141 90.5 70.6 105.8
115 38.2 30.0 45.0

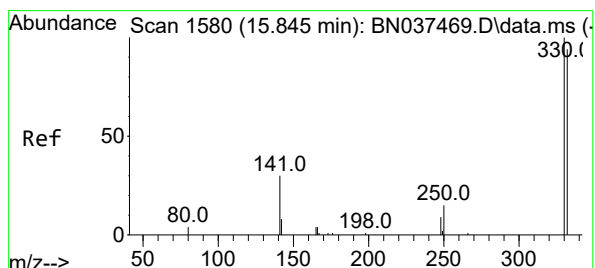
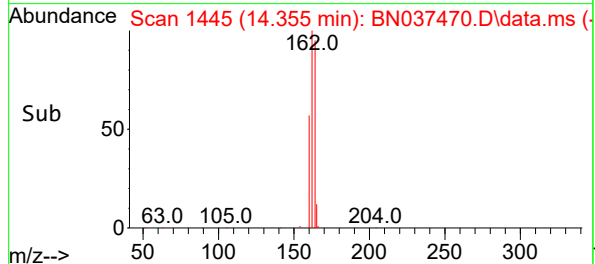
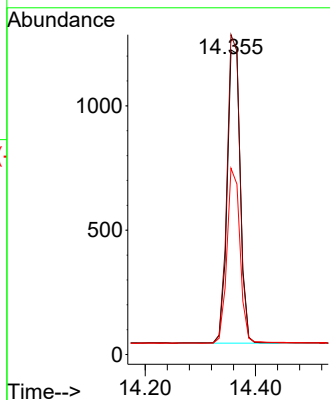
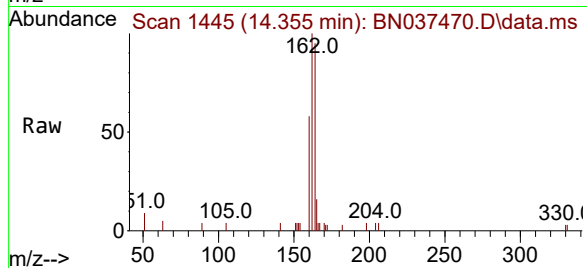




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1445
Delta R.T. -0.011 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

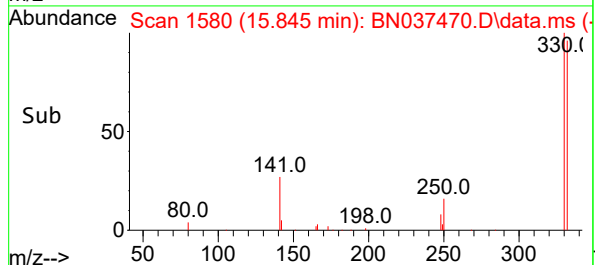
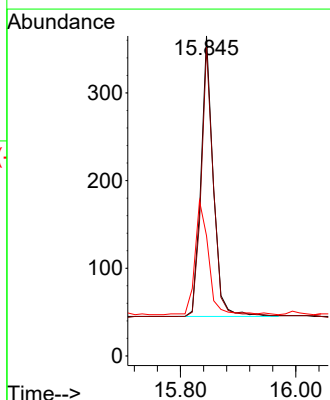
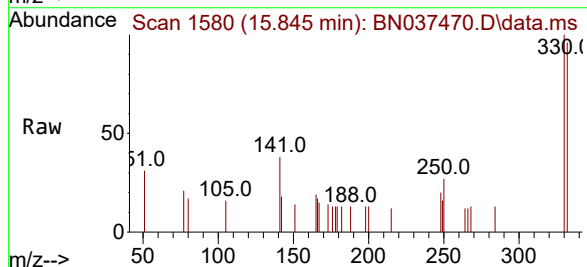
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

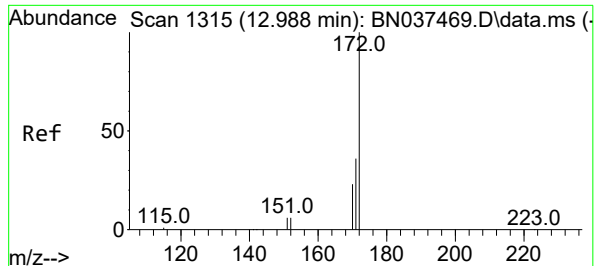
Tgt Ion:164 Resp: 1951
Ion Ratio Lower Upper
164 100
162 105.0 81.1 121.7
160 61.1 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 0.716 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion:330 Resp: 474
Ion Ratio Lower Upper
330 100
332 95.8 82.0 123.0
141 45.1 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 0.750 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

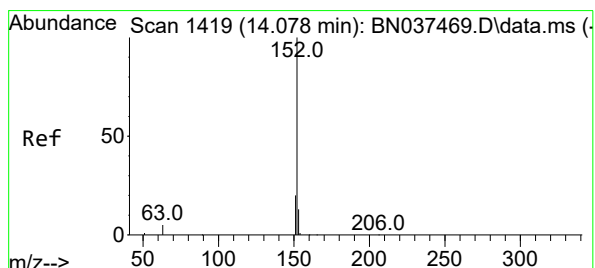
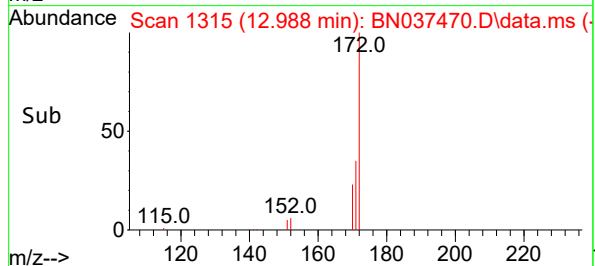
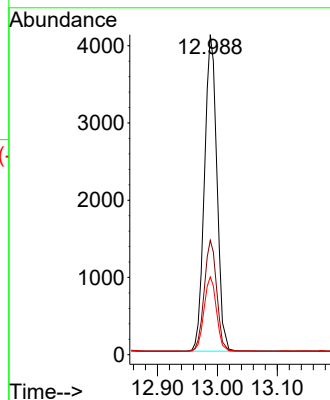
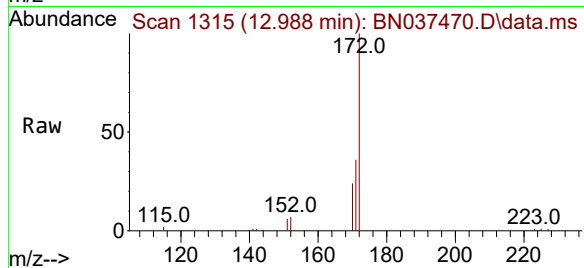
Tgt Ion:172 Resp: 8347

Ion Ratio Lower Upper

172 100

171 35.7 29.8 44.8

170 24.3 20.0 30.0



#16

Acenaphthylene

Concen: 0.748 ng

RT: 14.078 min Scan# 1419

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

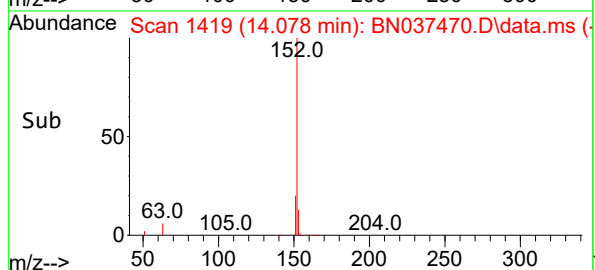
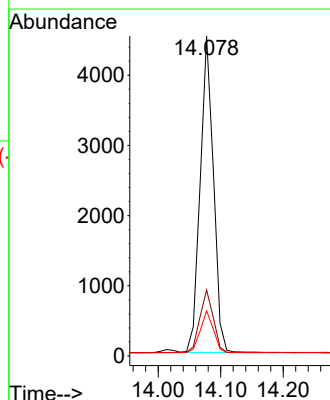
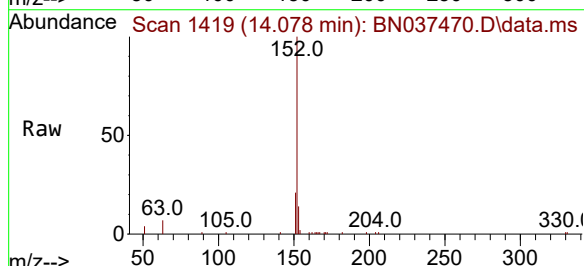
Tgt Ion:152 Resp: 6655

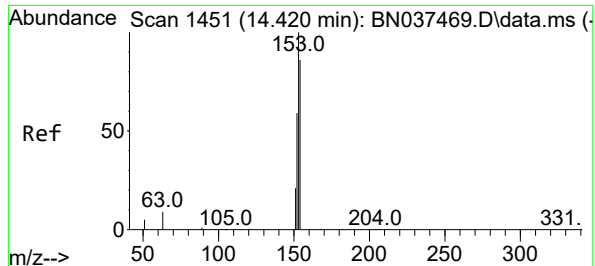
Ion Ratio Lower Upper

152 100

151 20.2 16.4 24.6

153 13.1 10.6 15.8





#17

Acenaphthene

Concen: 0.744 ng

RT: 14.420 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

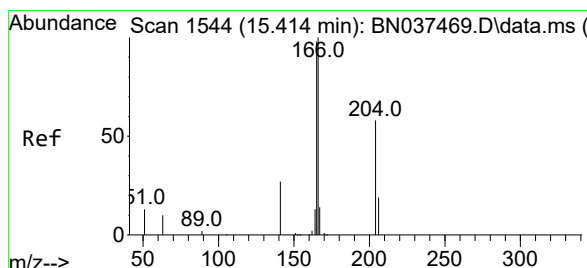
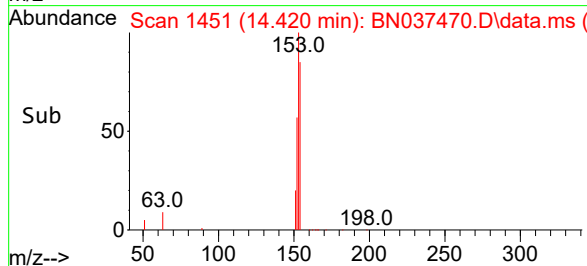
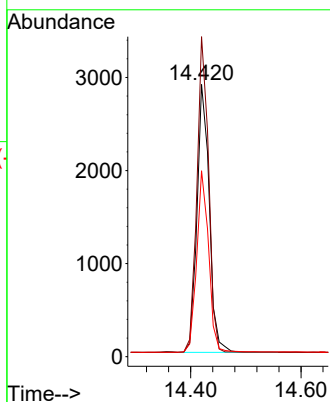
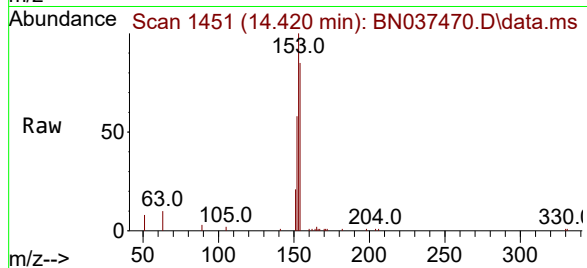
Tgt Ion:154 Resp: 4442

Ion Ratio Lower Upper

154 100

153 112.6 89.4 134.0

152 66.0 53.2 79.8



#18

Fluorene

Concen: 0.741 ng

RT: 15.414 min Scan# 1544

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

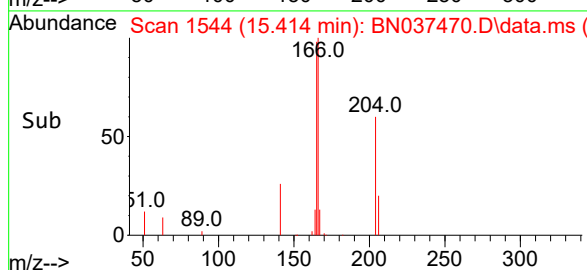
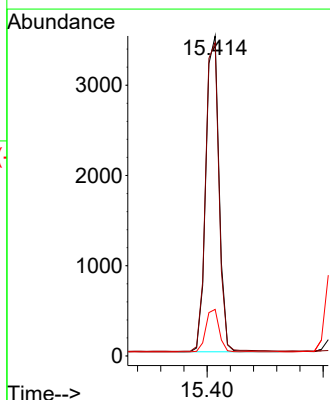
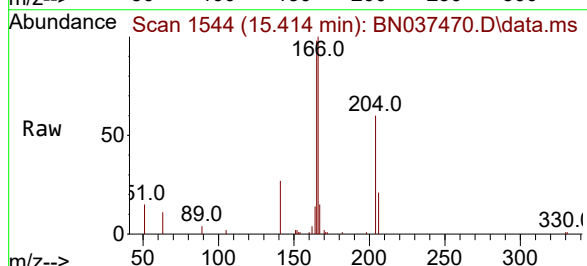
Tgt Ion:166 Resp: 5554

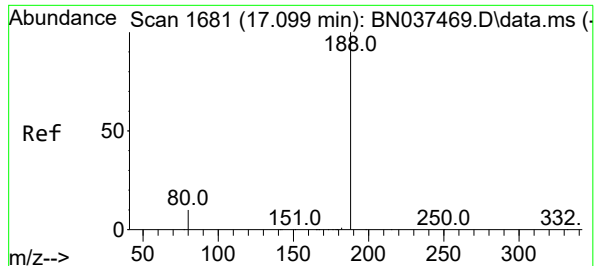
Ion Ratio Lower Upper

166 100

165 100.4 79.4 119.2

167 13.4 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

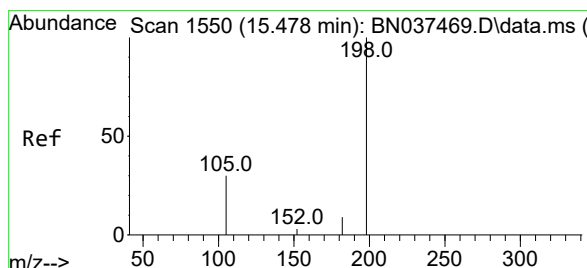
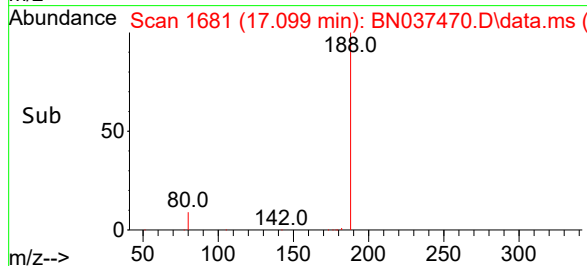
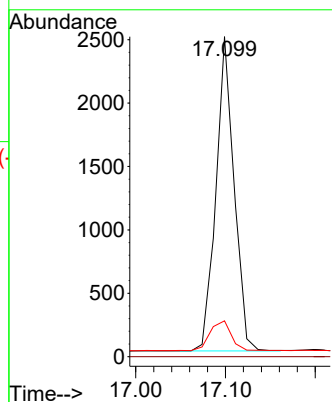
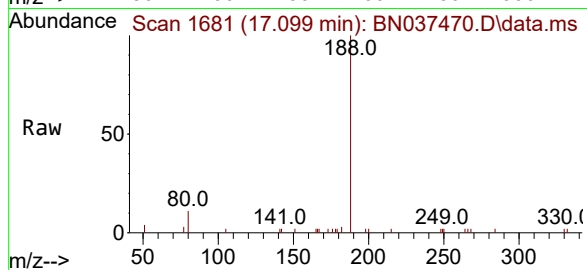
Tgt Ion:188 Resp: 3482

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.2 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.762 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

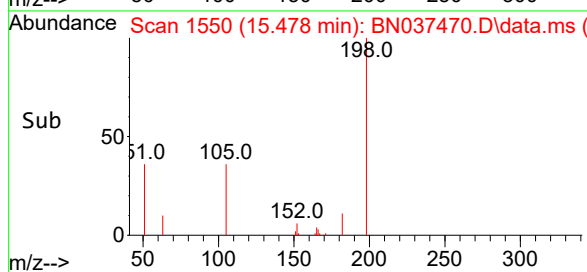
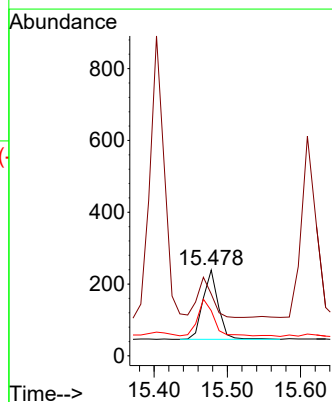
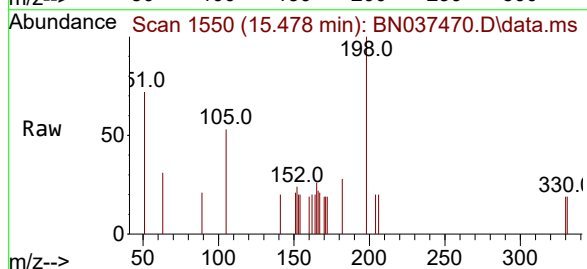
Tgt Ion:198 Resp: 298

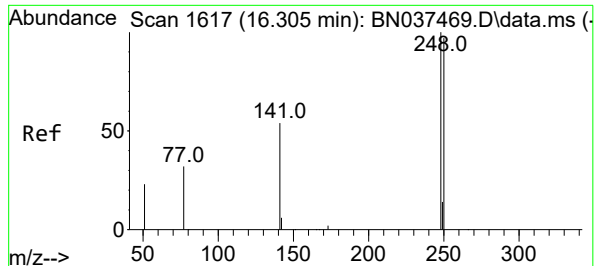
Ion Ratio Lower Upper

198 100

51 72.0 86.0 129.0#

105 52.7 53.0 79.4#

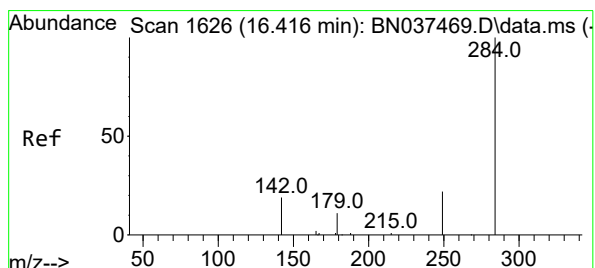
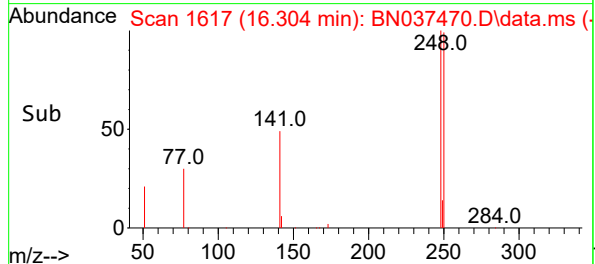
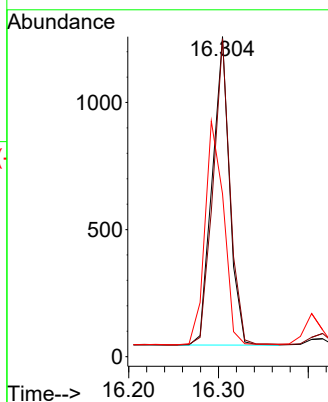
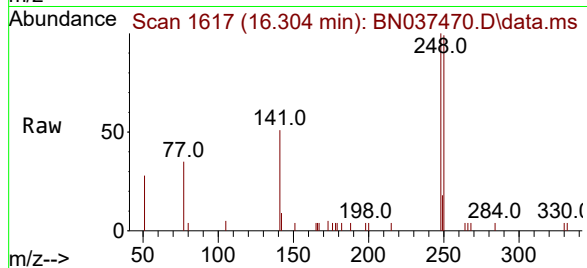




#21
4-Bromophenyl-phenylether
Concen: 0.749 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

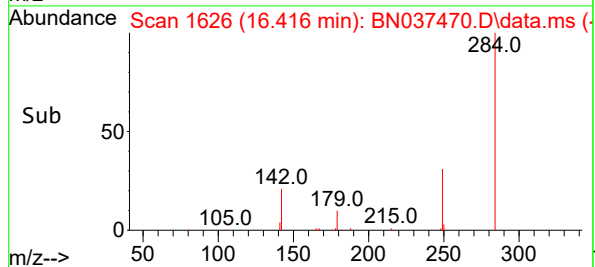
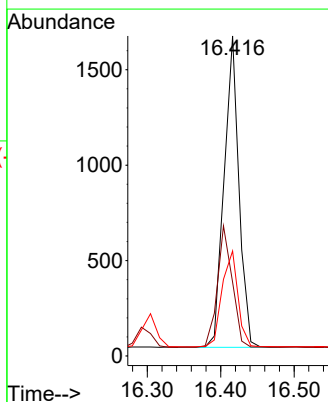
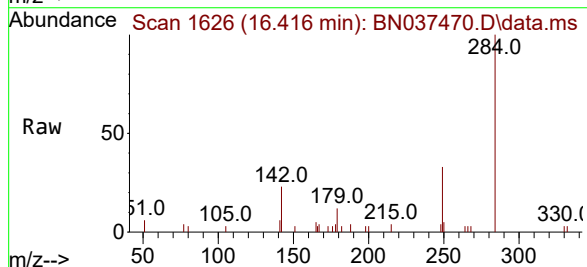
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

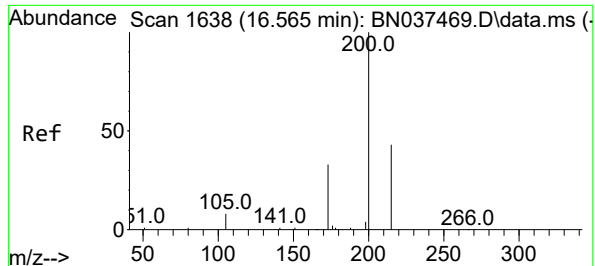
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.4	77.8	116.6
141	50.9	45.9	68.9



#22
Hexachlorobenzene
Concen: 0.764 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion	Ratio	Lower	Upper
284	100		
142	38.9	31.3	46.9
249	33.2	26.6	40.0





#23

Atrazine

Concen: 0.736 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

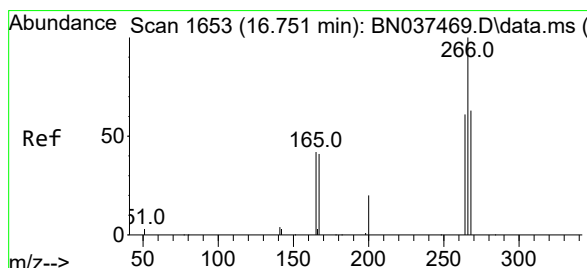
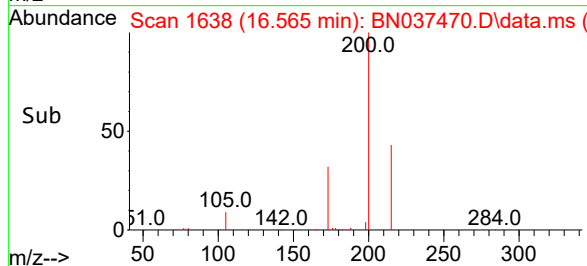
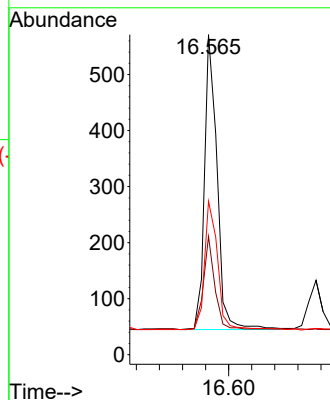
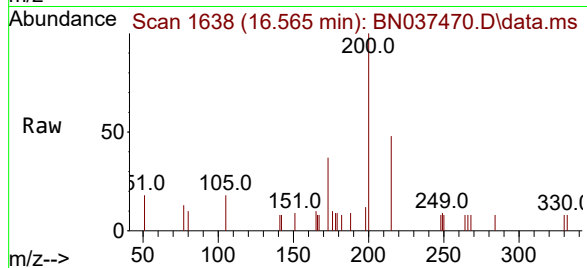
Tgt Ion:200 Resp: 795

Ion Ratio Lower Upper

200 100

173 37.0 34.3 51.5

215 48.0 41.6 62.4



#24

Pentachlorophenol

Concen: 0.674 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

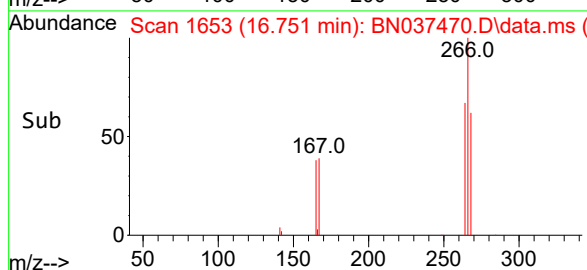
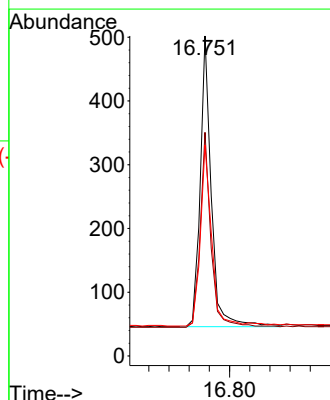
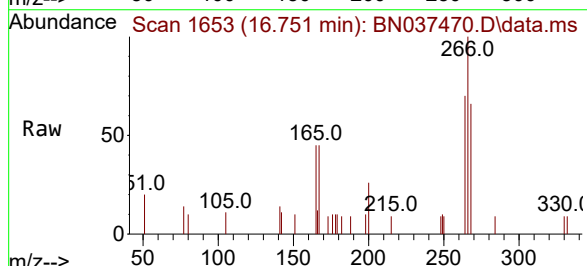
Tgt Ion:266 Resp: 696

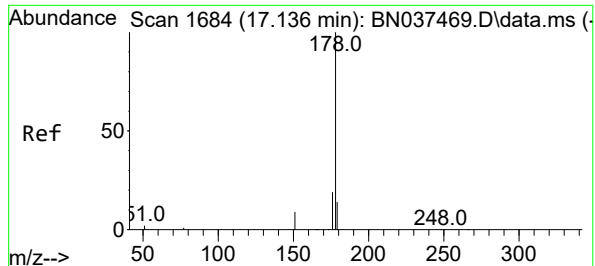
Ion Ratio Lower Upper

266 100

264 65.5 47.5 71.3

268 62.4 50.6 76.0

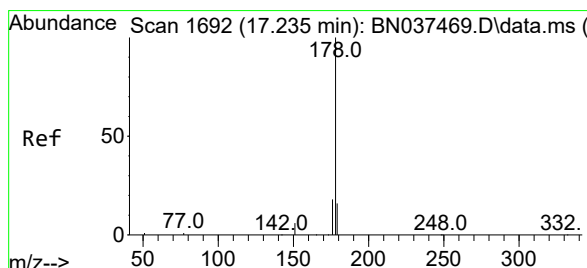
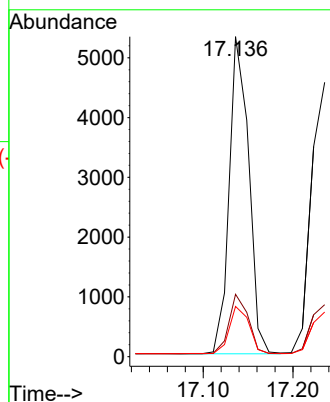
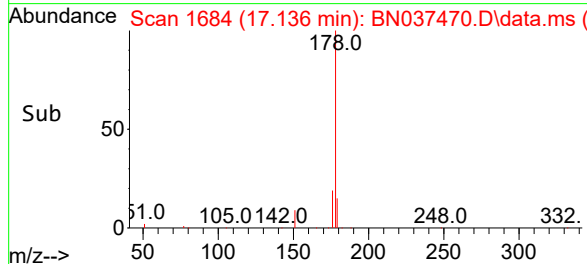
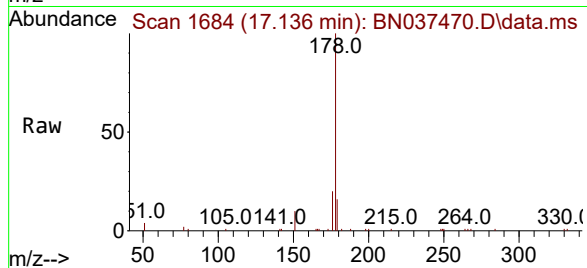




#25
Phenanthrene
Concen: 0.754 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

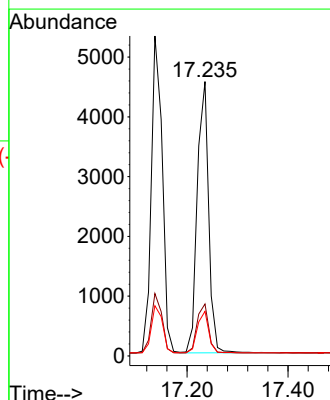
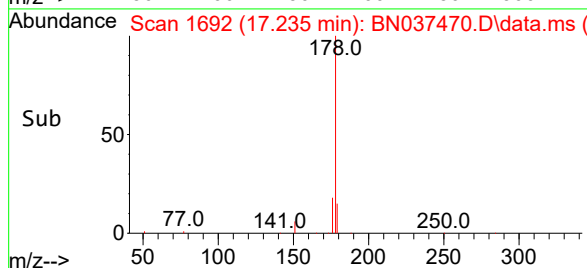
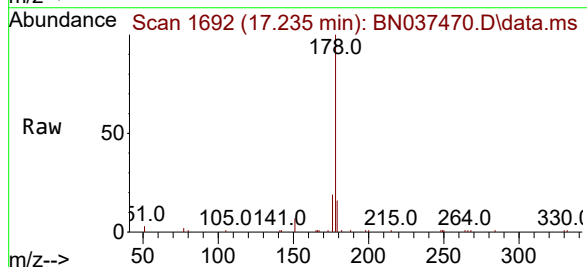
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

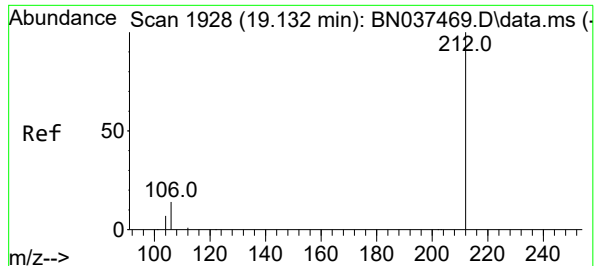
Tgt Ion:178 Resp: 7991
Ion Ratio Lower Upper
178 100
176 18.6 15.1 22.7
179 15.3 12.2 18.2



#26
Anthracene
Concen: 0.745 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion:178 Resp: 7130
Ion Ratio Lower Upper
178 100
176 18.3 14.9 22.3
179 15.3 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.710 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

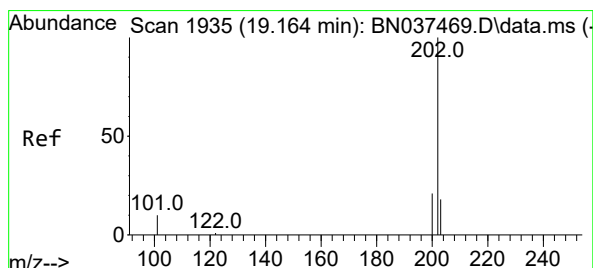
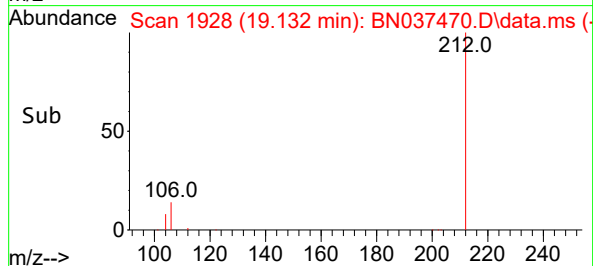
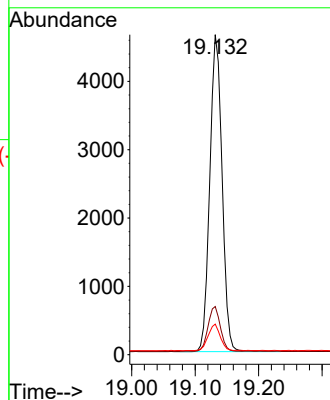
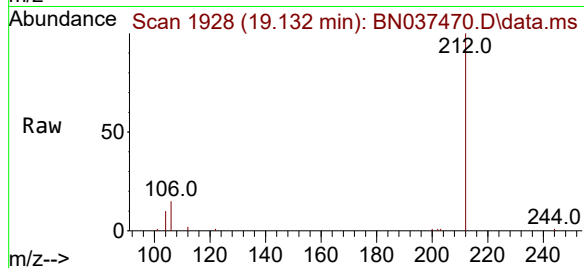
Tgt Ion:212 Resp: 6236

Ion Ratio Lower Upper

212 100

106 14.1 11.7 17.5

104 8.2 6.6 10.0



#28

Fluoranthene

Concen: 0.737 ng

RT: 19.164 min Scan# 1935

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

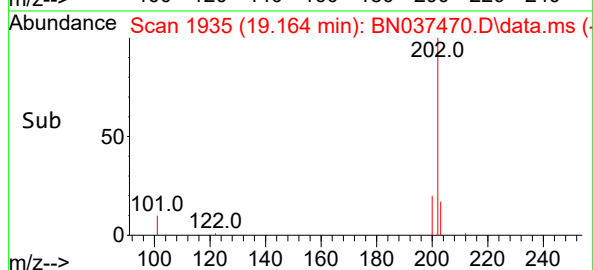
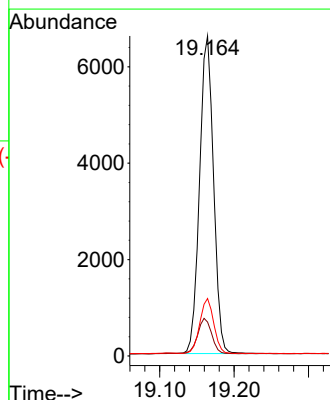
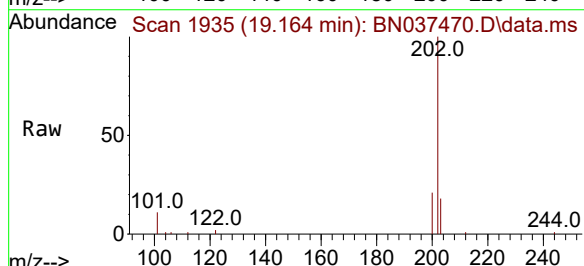
Tgt Ion:202 Resp: 8578

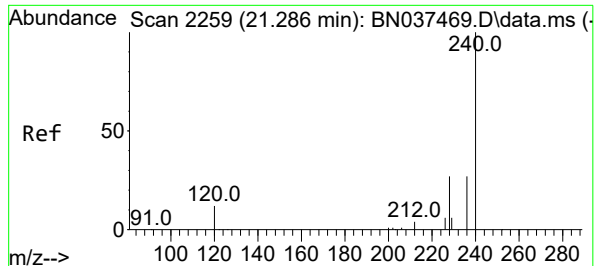
Ion Ratio Lower Upper

202 100

101 11.2 9.2 13.8

203 17.2 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

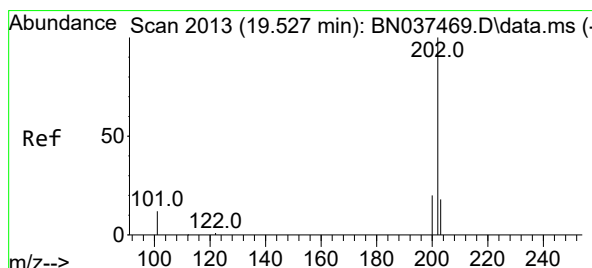
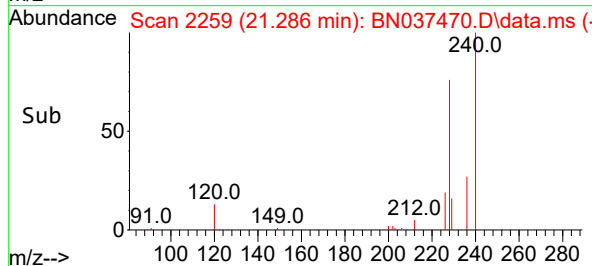
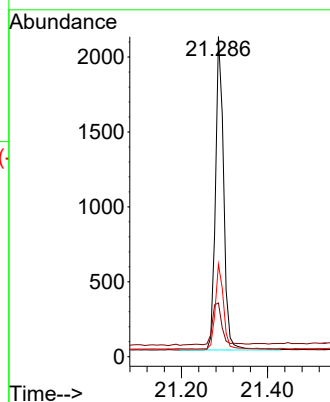
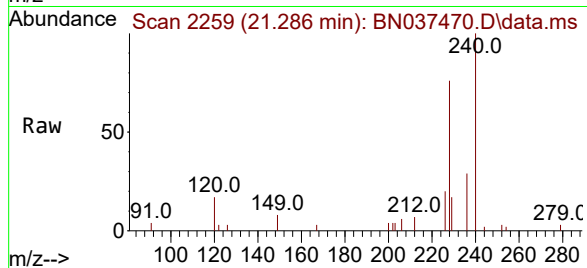
Tgt Ion:240 Resp: 2759

Ion Ratio Lower Upper

240 100

120 16.8 12.4 18.6

236 28.9 22.9 34.3



#30

Pyrene

Concen: 0.752 ng

RT: 19.527 min Scan# 2013

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

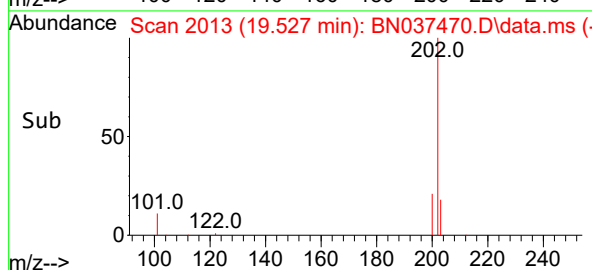
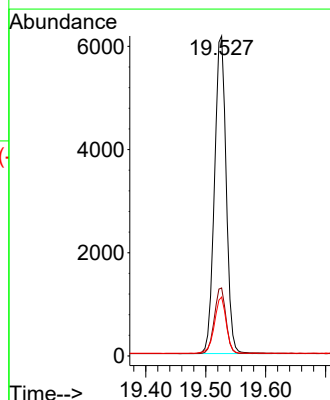
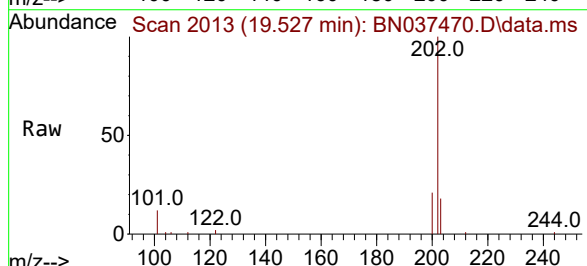
Tgt Ion:202 Resp: 8340

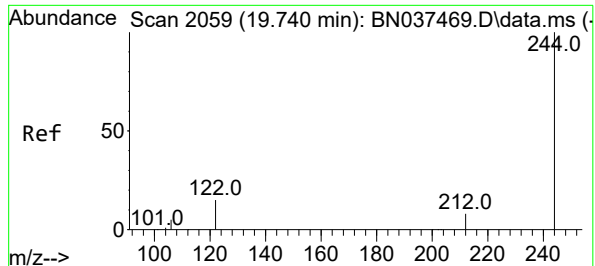
Ion Ratio Lower Upper

202 100

200 20.6 16.4 24.6

203 17.8 14.3 21.5

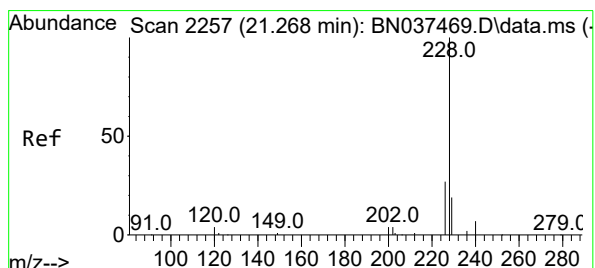
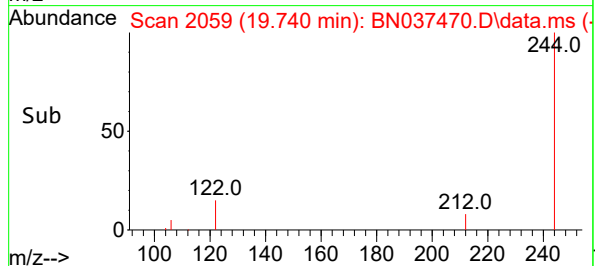
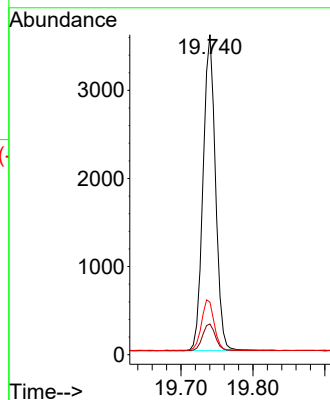
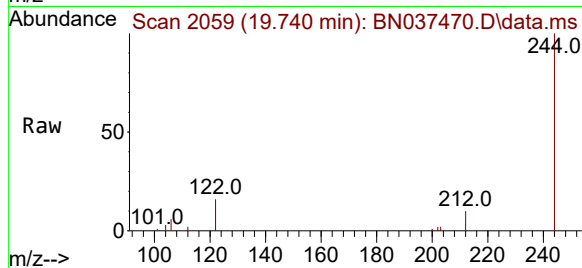




#31
Terphenyl-d14
Concen: 0.746 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.000 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

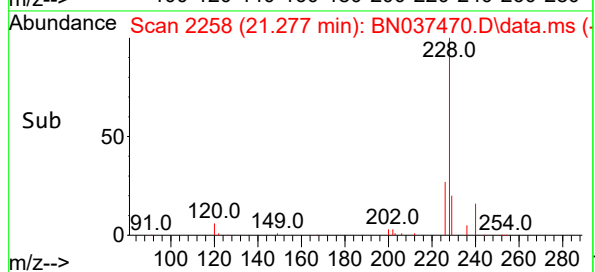
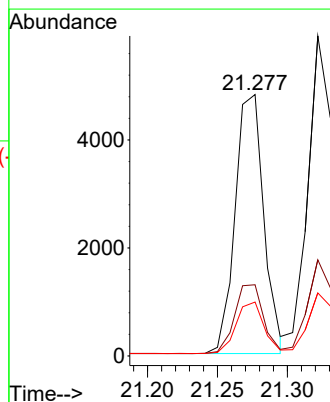
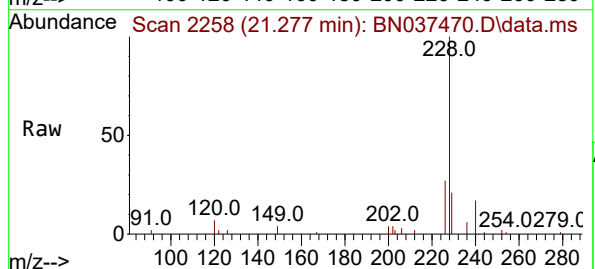
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

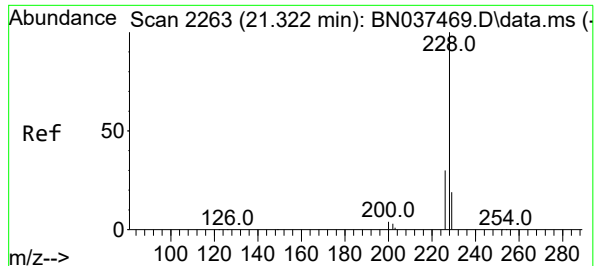
Tgt Ion	Ratio	Lower	Upper
244	100		
212	9.6	8.7	13.1
122	16.4	14.1	21.1



#32
Benzo(a)anthracene
Concen: 0.732 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.009 min
Lab File: BN037470.D
Acq: 11 Jul 2025 12:59

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.2	22.7	34.1
229	20.6	16.6	24.8





#33

Chrysene

Concen: 0.763 ng

RT: 21.322 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

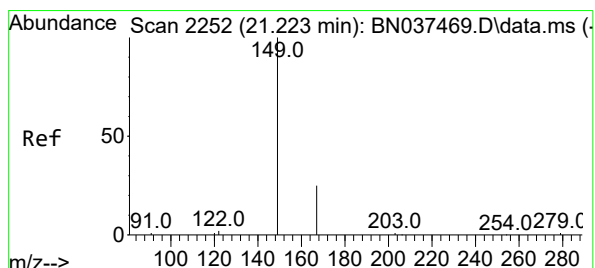
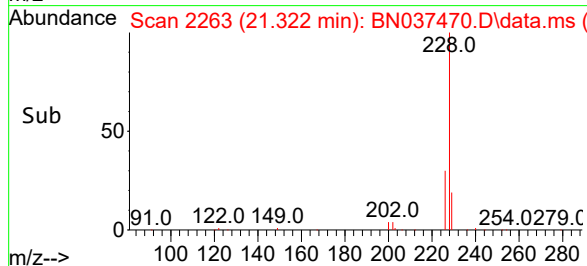
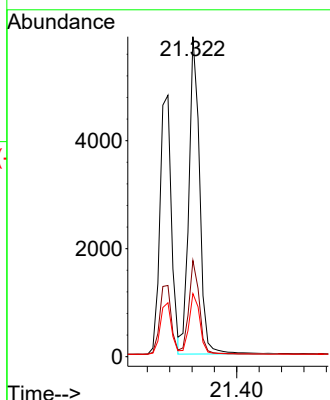
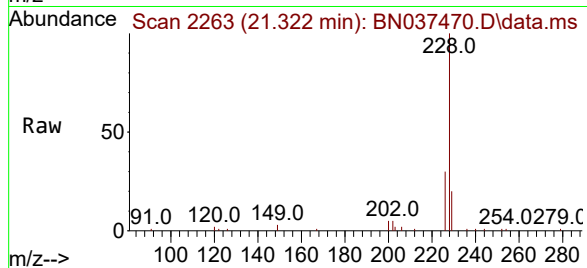
Tgt Ion:228 Resp: 7796

Ion Ratio Lower Upper

228 100

226 30.1 24.6 36.8

229 19.7 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.728 ng

RT: 21.232 min Scan# 2253

Delta R.T. 0.009 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

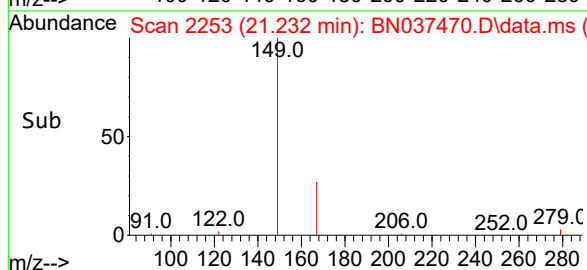
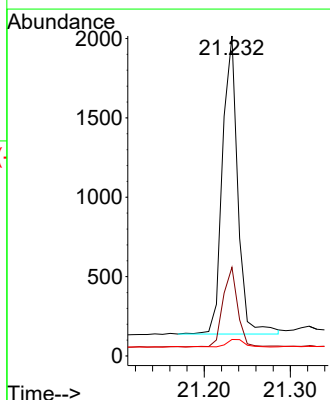
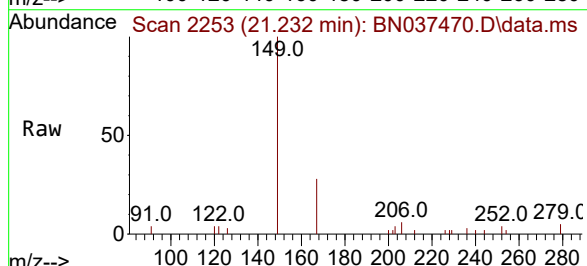
Tgt Ion:149 Resp: 2313

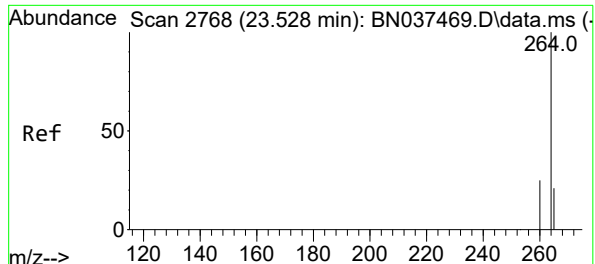
Ion Ratio Lower Upper

149 100

167 25.4 19.4 29.2

279 3.0 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.531 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037470.D

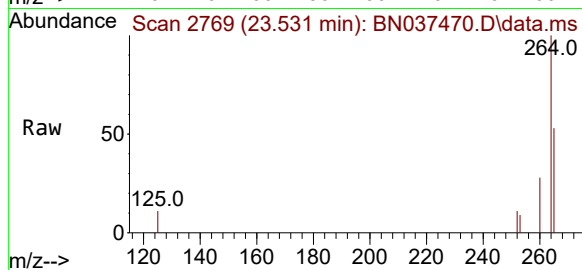
Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8



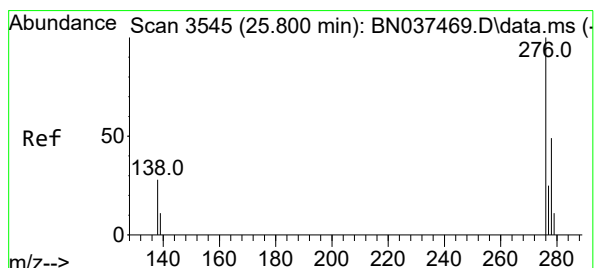
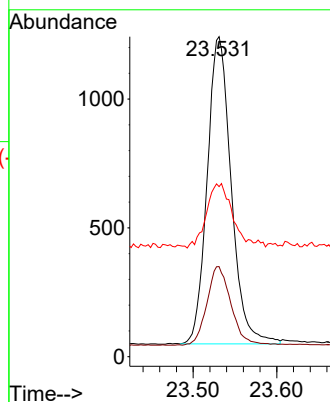
Tgt Ion:264 Resp: 2383

Ion Ratio Lower Upper

264 100

260 28.2 21.7 32.5

265 53.1 41.6 62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.739 ng

RT: 25.806 min Scan# 3547

Delta R.T. 0.006 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

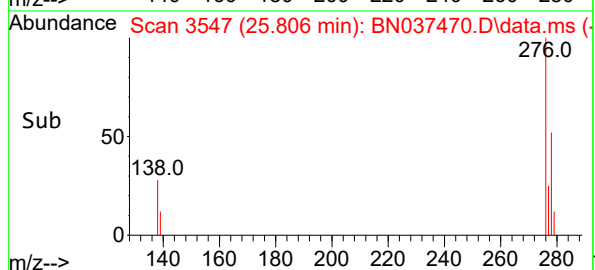
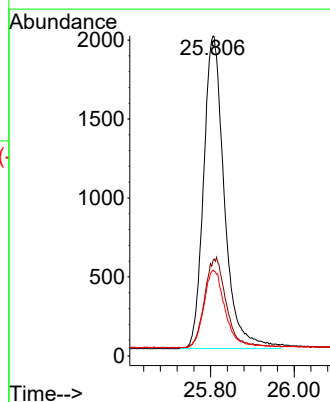
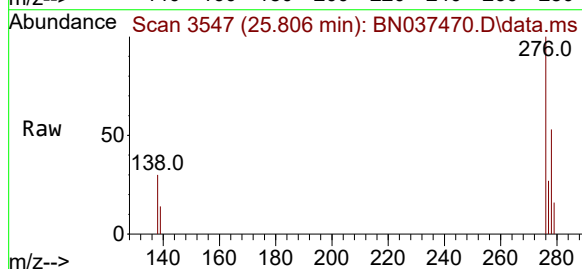
Tgt Ion:276 Resp: 6834

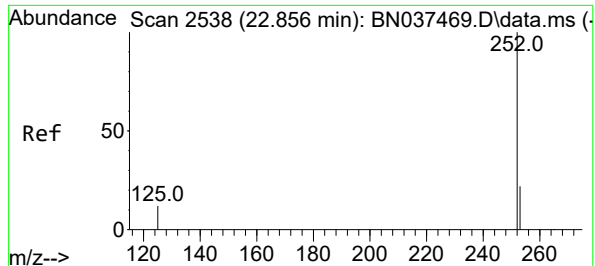
Ion Ratio Lower Upper

276 100

138 30.1 23.4 35.2

277 24.9 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.750 ng

RT: 22.858 min Scan# 2538

Delta R.T. 0.003 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

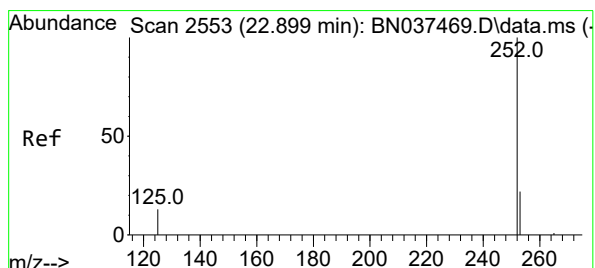
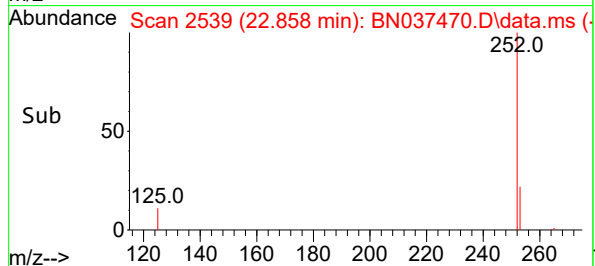
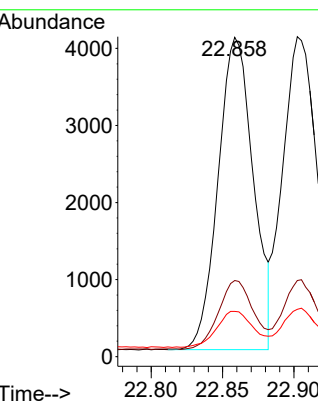
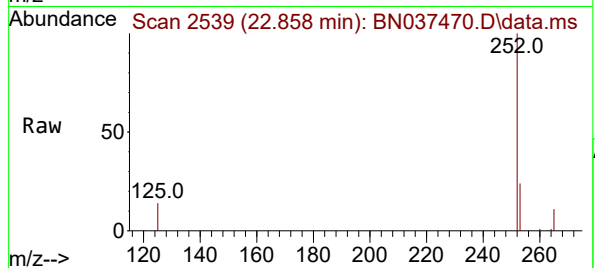
Tgt Ion:252 Resp: 6954

Ion Ratio Lower Upper

252 100

253 23.8 20.1 30.1

125 14.2 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.763 ng

RT: 22.902 min Scan# 2554

Delta R.T. 0.003 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

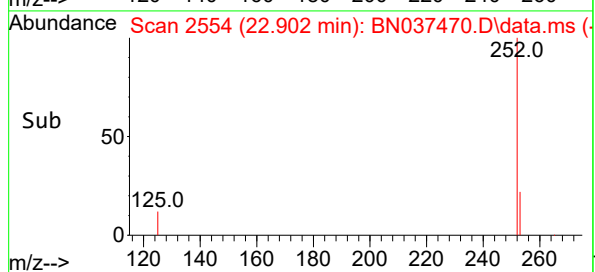
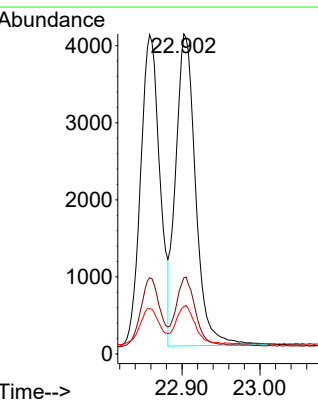
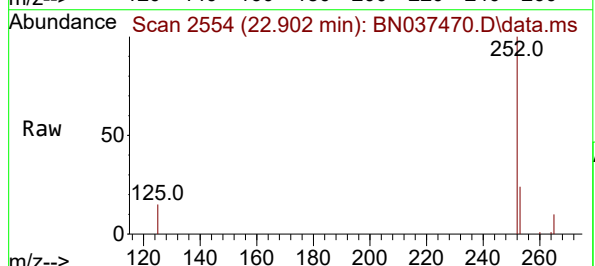
Tgt Ion:252 Resp: 7171

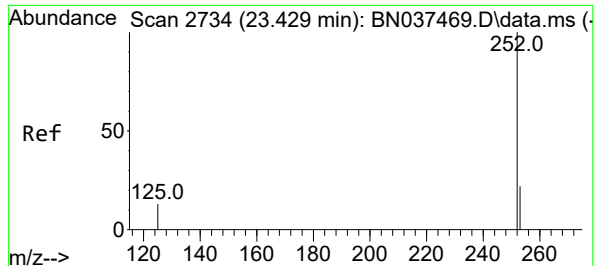
Ion Ratio Lower Upper

252 100

253 23.8 20.4 30.6

125 14.8 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.743 ng

RT: 23.434 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

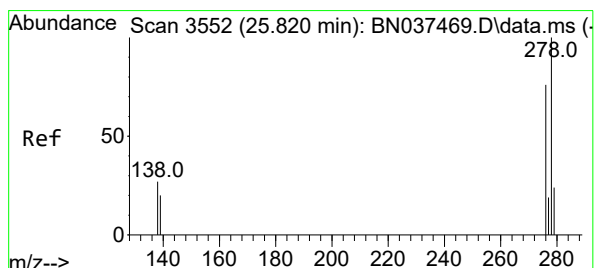
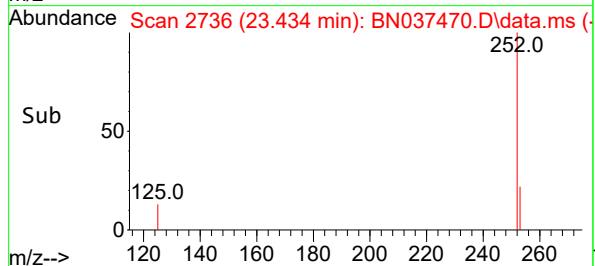
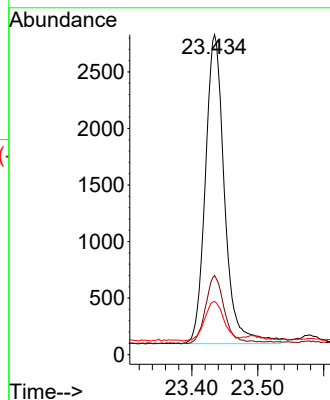
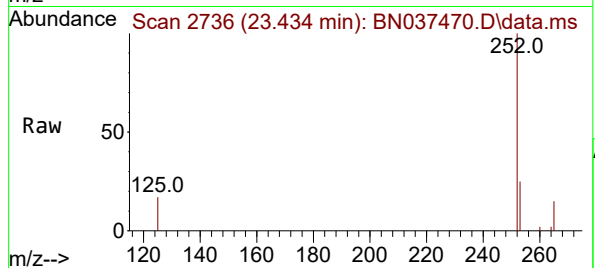
Tgt Ion:252 Resp: 5538

Ion Ratio Lower Upper

252 100

253 24.7 21.8 32.6

125 16.6 16.7 25.1#



#40

Dibenzo(a,h)anthracene

Concen: 0.736 ng

RT: 25.826 min Scan# 3554

Delta R.T. 0.006 min

Lab File: BN037470.D

Acq: 11 Jul 2025 12:59

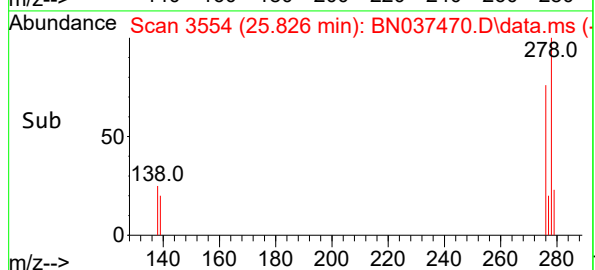
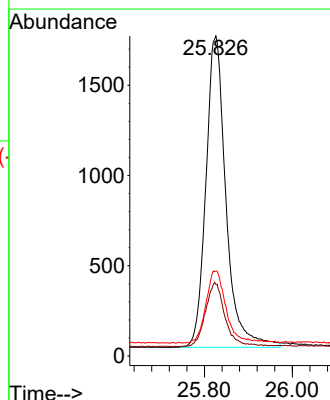
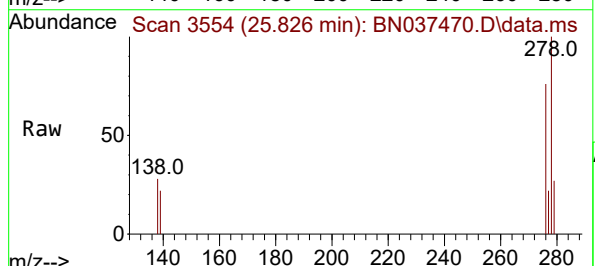
Tgt Ion:278 Resp: 5490

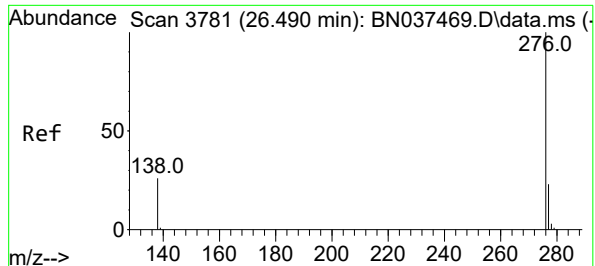
Ion Ratio Lower Upper

278 100

139 22.3 19.9 29.9

279 26.6 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.747 ng

RT: 26.493 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN037470.D

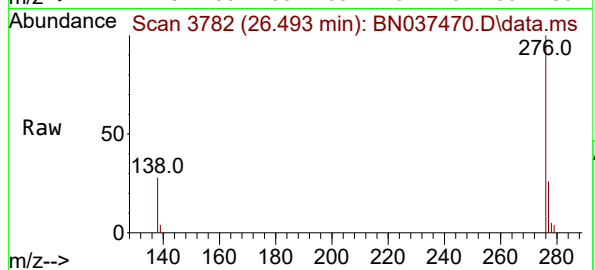
Acq: 11 Jul 2025 12:59

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8



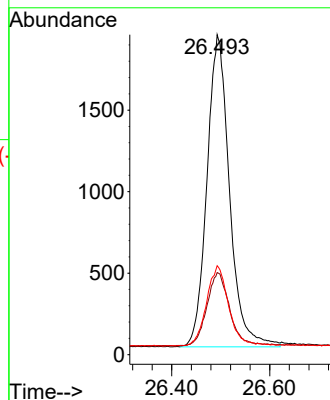
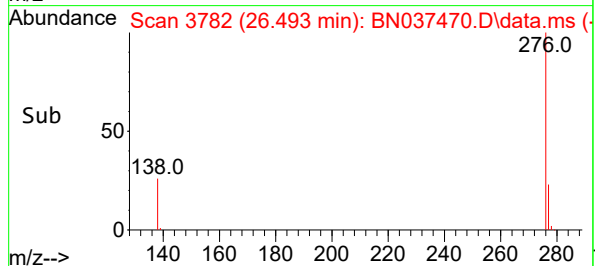
Tgt Ion:276 Resp: 6107

Ion Ratio Lower Upper

276 100

277 25.6 21.7 32.5

138 27.8 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037471.D
 Acq On : 11 Jul 2025 13:36
 Operator : RC/JU
 Sample : SSTDICC1.6
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC1.6

Quant Time: Jul 11 15:27:05 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

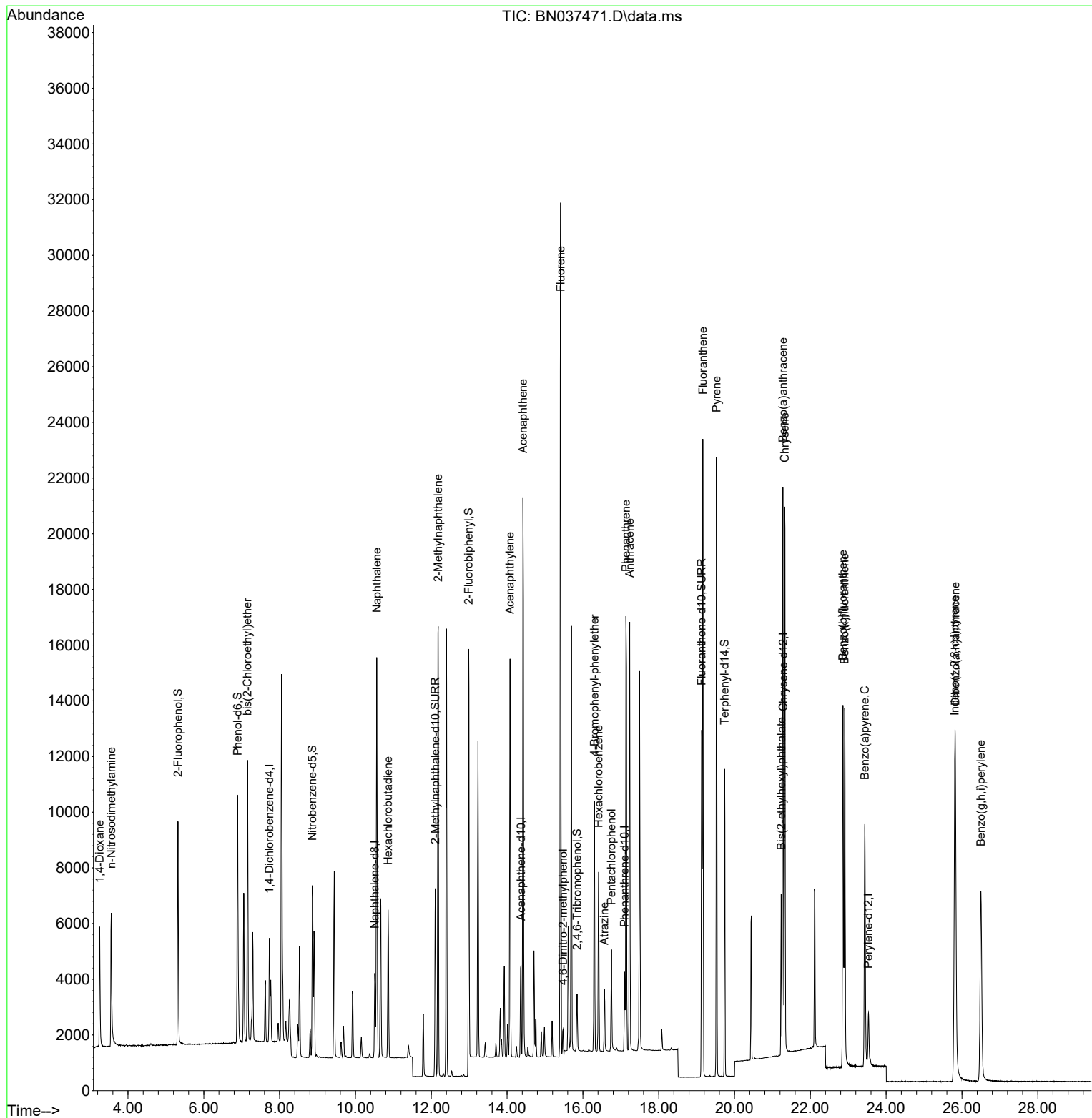
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.731	152	1742	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4072	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	1984	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	3525	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2965	0.400	ng	# 0.00
35) Perylene-d12	23.534	264	2463	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	6460	1.593	ng	0.00
5) Phenol-d6	6.894	99	8071	1.582	ng	0.00
8) Nitrobenzene-d5	8.864	82	4816	1.629	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	8642	1.561	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	1094	1.626	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	18395	1.624	ng	0.00
27) Fluoranthene-d10	19.132	212	13833	1.556	ng	0.00
31) Terphenyl-d14	19.740	244	9911	1.602	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	2757	1.685	ng	Qvalue 97
3) n-Nitrosodimethylamine	3.557	42	3665	1.676	ng	98
6) bis(2-Chloroethyl)ether	7.154	93	6993	1.638	ng	100
9) Naphthalene	10.562	128	17848	1.631	ng	97
10) Hexachlorobutadiene	10.861	225	4329	1.647	ng	# 99
12) 2-Methylnaphthalene	12.182	142	11263	1.644	ng	99
16) Acenaphthylene	14.077	152	14926	1.650	ng	99
17) Acenaphthene	14.419	154	10002	1.648	ng	99
18) Fluorene	15.414	166	12742	1.671	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	710	1.792	ng	# 58
21) 4-Bromophenyl-phenylether	16.304	248	3572	1.624	ng	95
22) Hexachlorobenzene	16.416	284	4981	1.642	ng	99
23) Atrazine	16.565	200	1876	1.715	ng	91
24) Pentachlorophenol	16.751	266	1682	1.610	ng	98
25) Phenanthrene	17.136	178	17507	1.631	ng	100
26) Anthracene	17.235	178	15953	1.647	ng	100
28) Fluoranthene	19.164	202	19585	1.663	ng	99
30) Pyrene	19.526	202	19037	1.597	ng	100
32) Benzo(a)anthracene	21.277	228	16533	1.647	ng	97
33) Chrysene	21.321	228	17469	1.592	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	5207	1.525	ng	98
36) Indeno(1,2,3-cd)pyrene	25.808	276	16302	1.705	ng	99
37) Benzo(b)fluoranthene	22.861	252	16437	1.716	ng	# 92
38) Benzo(k)fluoranthene	22.905	252	16488	1.698	ng	# 92
39) Benzo(a)pyrene	23.437	252	13051	1.693	ng	# 89
40) Dibenzo(a,h)anthracene	25.826	278	13217	1.714	ng	90
41) Benzo(g,h,i)perylene	26.498	276	14207	1.682	ng	93

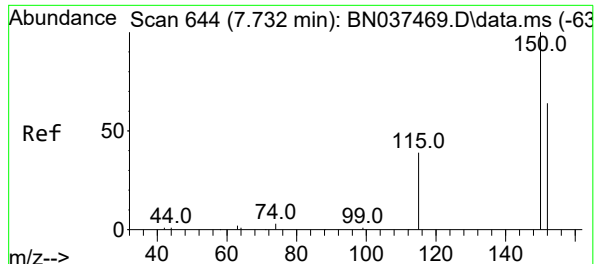
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037471.D
Acq On : 11 Jul 2025 13:36
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Jul 11 15:27:05 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration

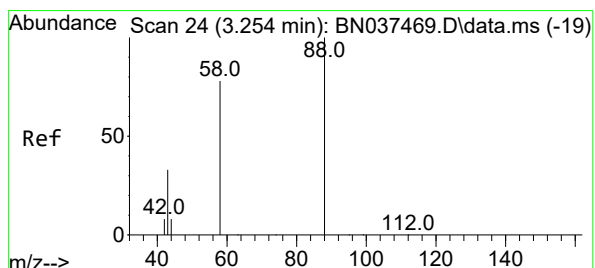
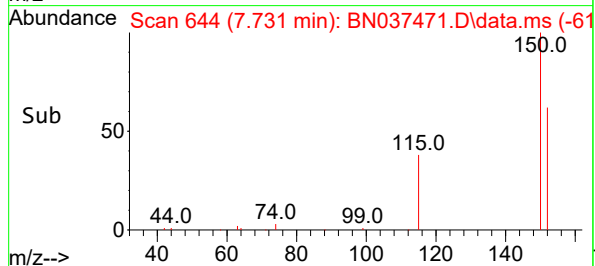
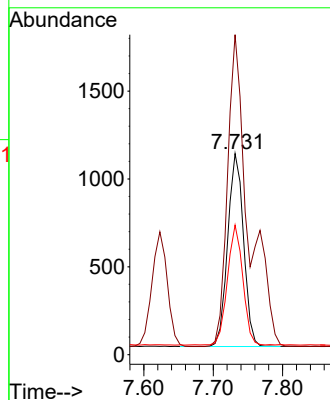
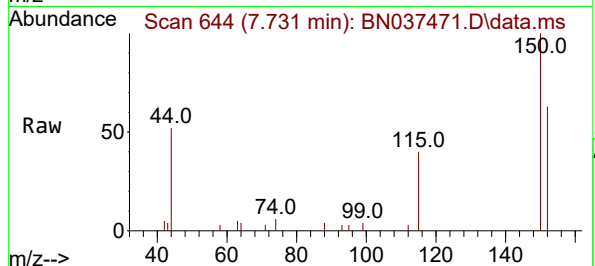




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.731 min Scan# 64
Delta R.T. -0.001 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

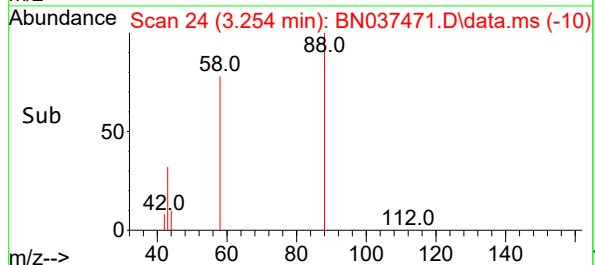
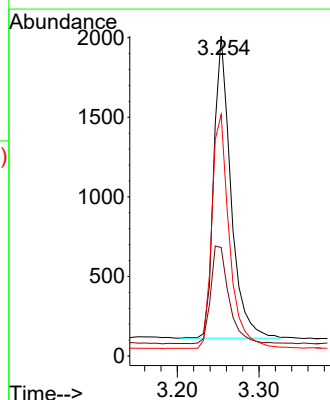
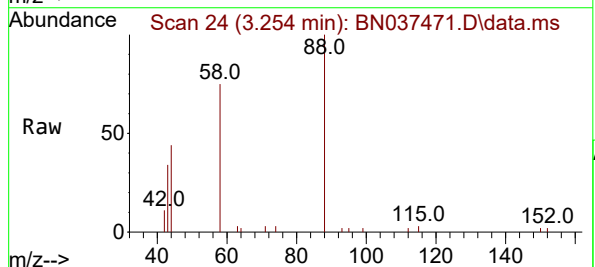
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

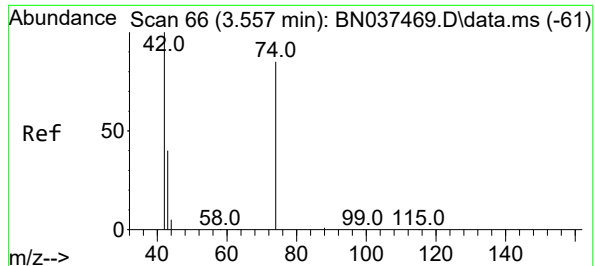
Tgt Ion:152 Resp: 1742
Ion Ratio Lower Upper
152 100
150 159.2 122.5 183.7
115 64.4 49.9 74.9



#2
1,4-Dioxane
Concen: 1.685 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion: 88 Resp: 2757
Ion Ratio Lower Upper
88 100
43 34.6 30.7 46.1
58 79.3 65.0 97.4

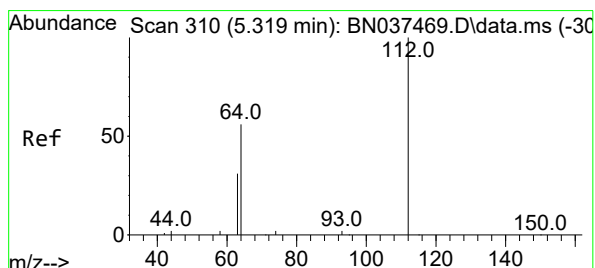
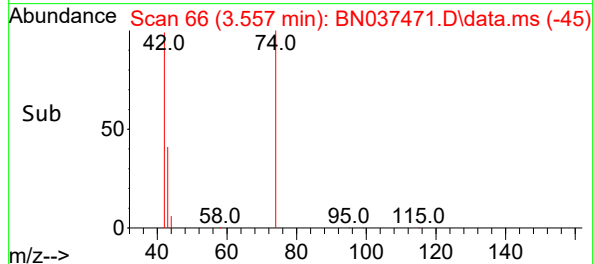
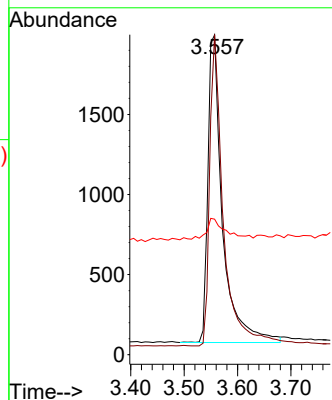
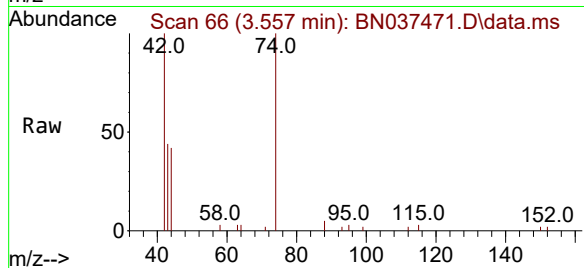




#3
n-Nitrosodimethylamine
Concen: 1.676 ng
RT: 3.557 min Scan# 60
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

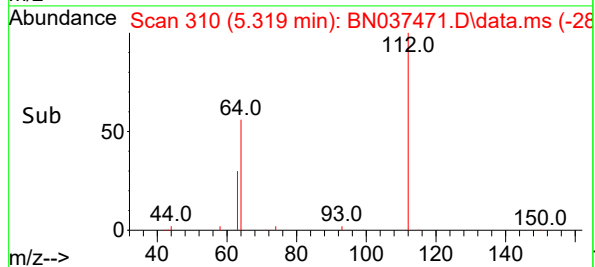
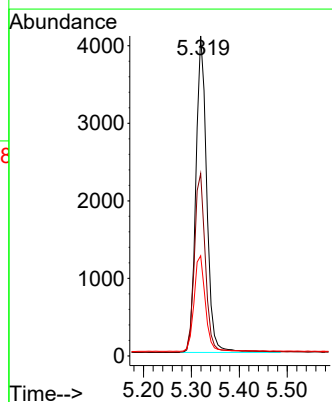
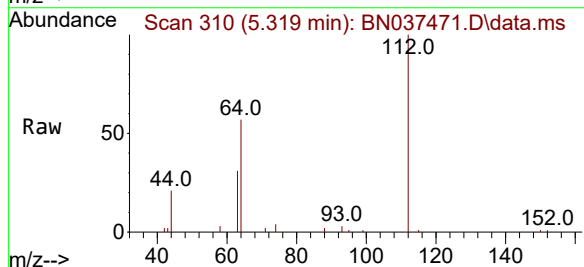
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

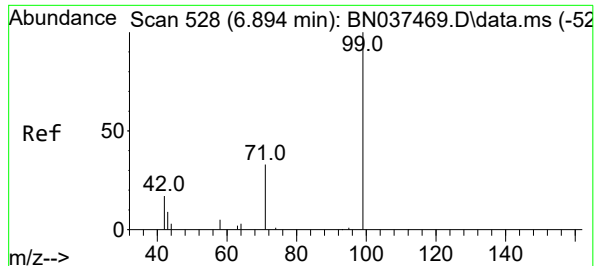
Tgt Ion: 42 Resp: 3665
Ion Ratio Lower Upper
42 100
74 95.2 74.9 112.3
44 9.7 7.2 10.8



#4
2-Fluorophenol
Concen: 1.593 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion: 112 Resp: 6460
Ion Ratio Lower Upper
112 100
64 57.3 45.4 68.0
63 31.4 24.7 37.1

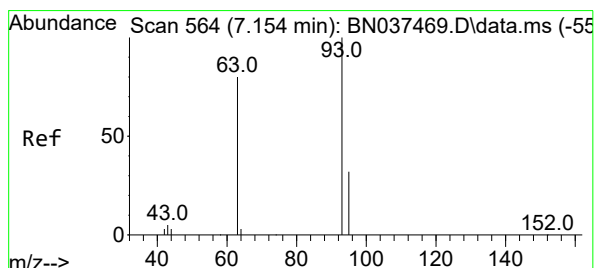
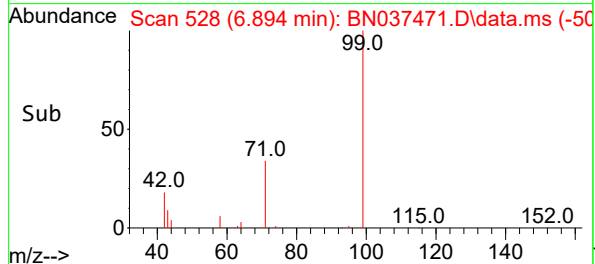
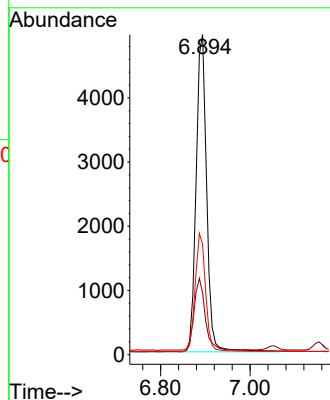
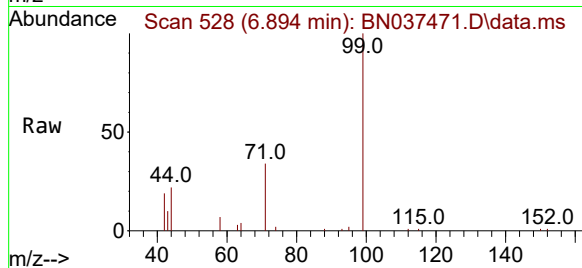




#5
Phenol-d6
Concen: 1.582 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

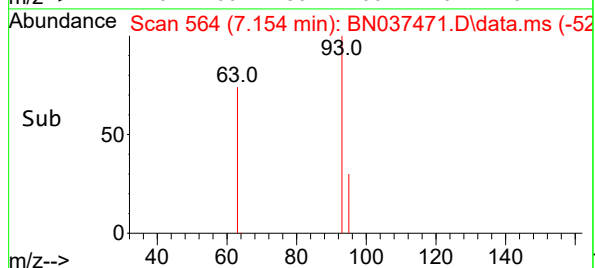
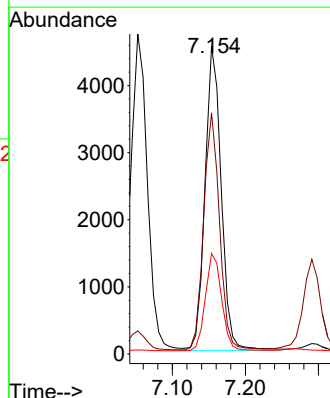
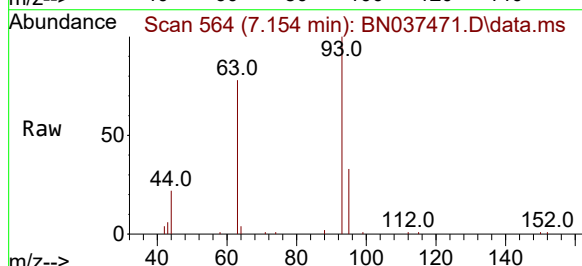
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

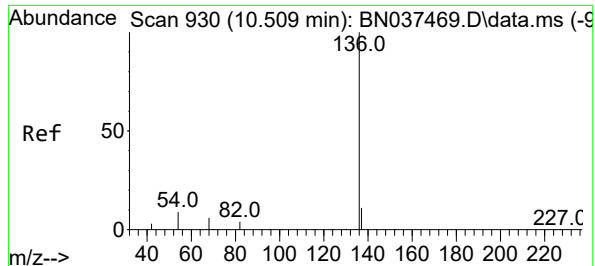
Tgt Ion	Ratio	Lower	Upper
99	100		
42	23.9	19.5	29.3
71	37.2	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 1.638 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion	Ratio	Lower	Upper
93	100		
63	75.9	60.8	91.2
95	32.0	25.6	38.4

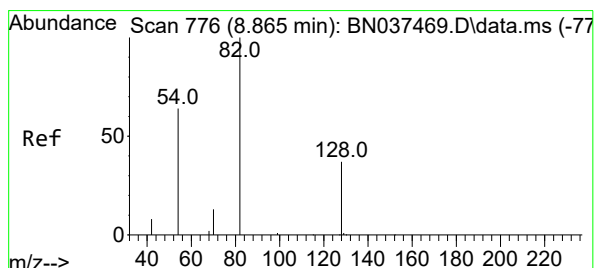
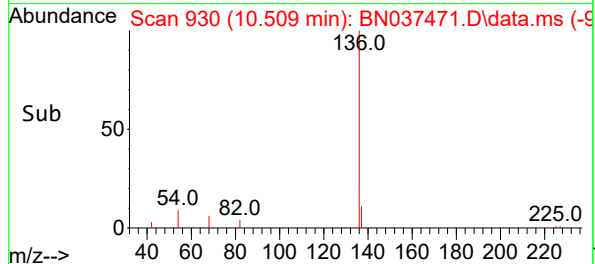
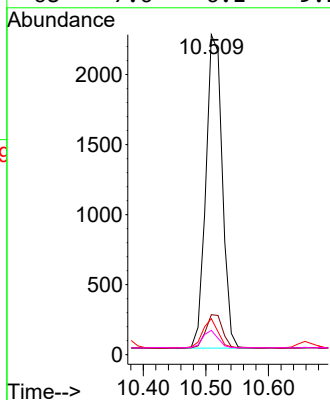
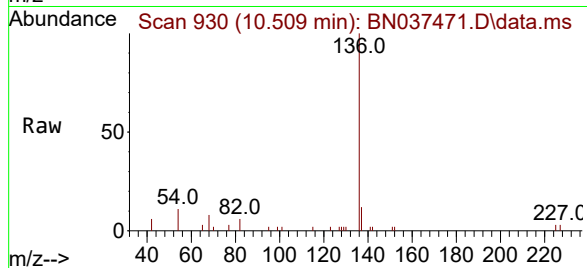




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

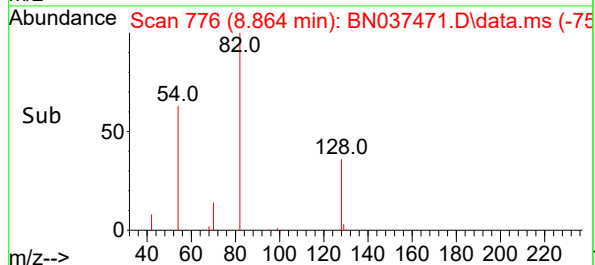
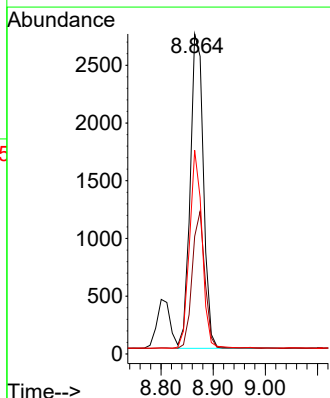
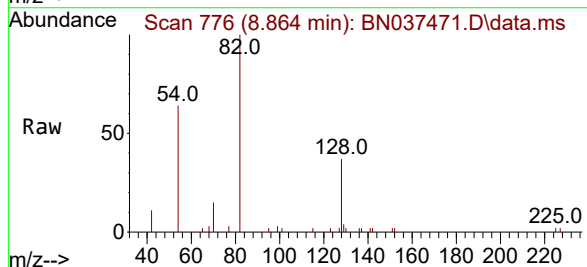
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

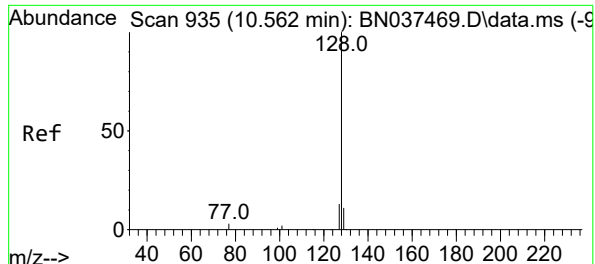
Tgt Ion:	136	Resp:	4072
Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.0	15.0
54	11.2	9.0	13.6
68	7.6	6.1	9.1



#8
Nitrobenzene-d5
Concen: 1.629 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:	82	Resp:	4816
Ion	Ratio	Lower	Upper
82	100		
128	36.8	33.1	49.7
54	63.7	53.0	79.4





#9

Naphthalene

Concen: 1.631 ng

RT: 10.562 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

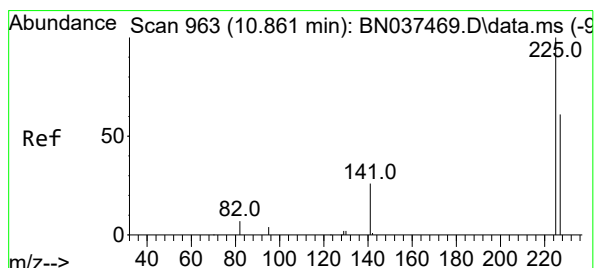
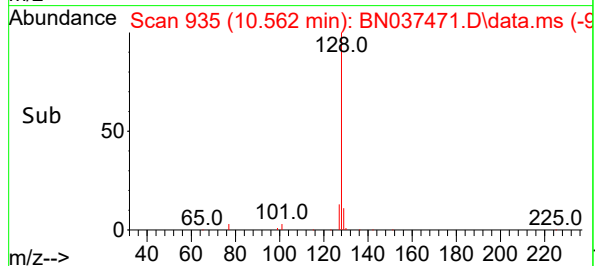
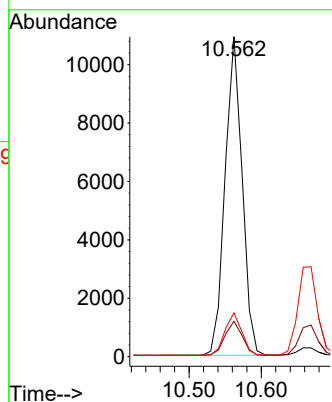
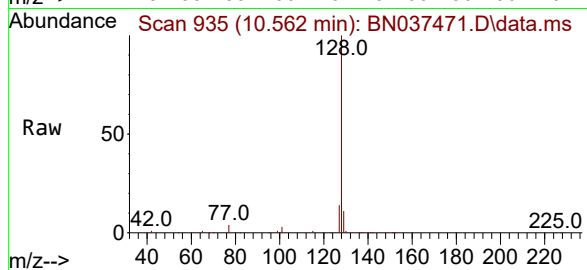
Tgt Ion:128 Resp: 17848

Ion Ratio Lower Upper

128 100

129 11.1 10.2 15.2

127 13.7 11.8 17.6



#10

Hexachlorobutadiene

Concen: 1.647 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

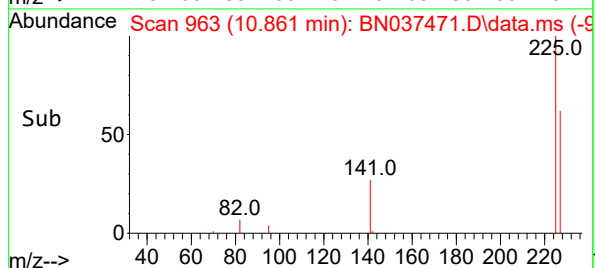
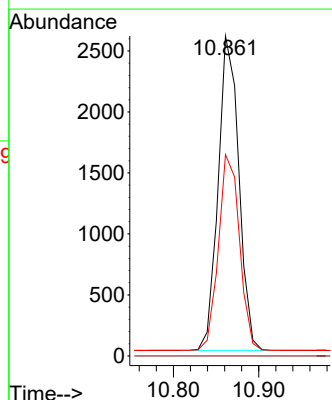
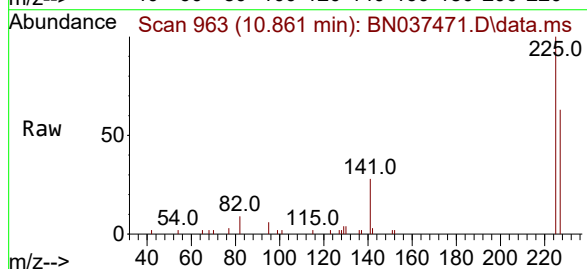
Tgt Ion:225 Resp: 4329

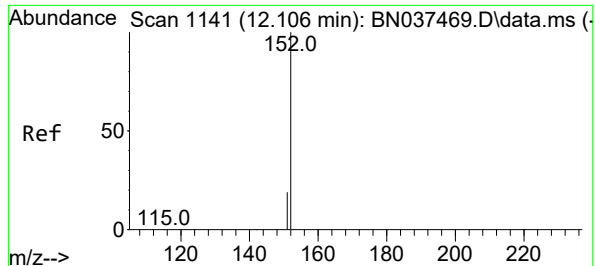
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.5 51.4 77.2

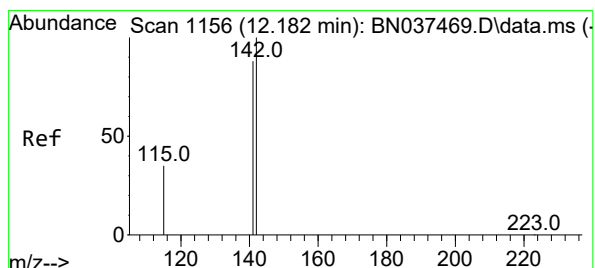
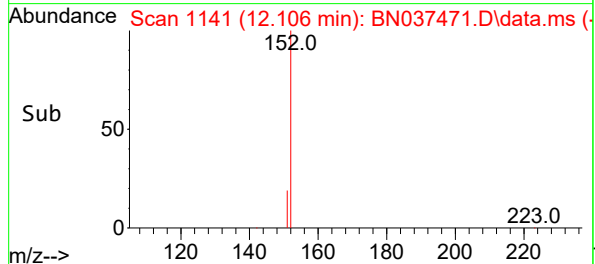
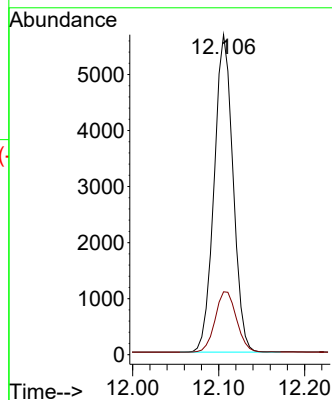
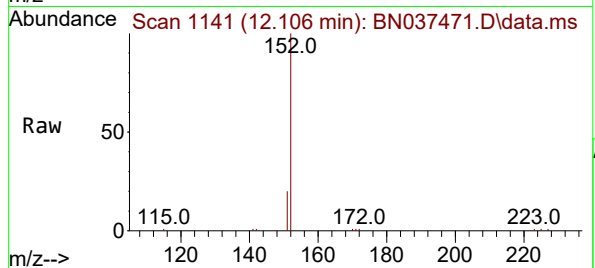




#11
2-Methylnaphthalene-d10
Concen: 1.561 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

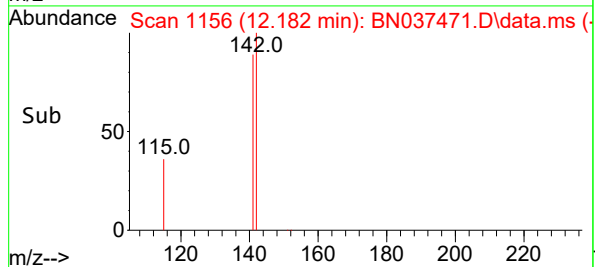
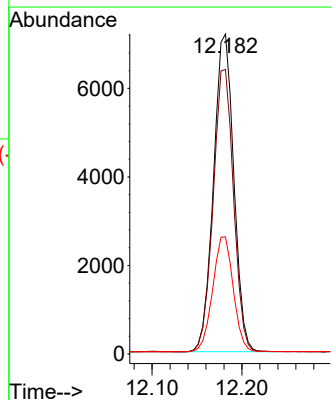
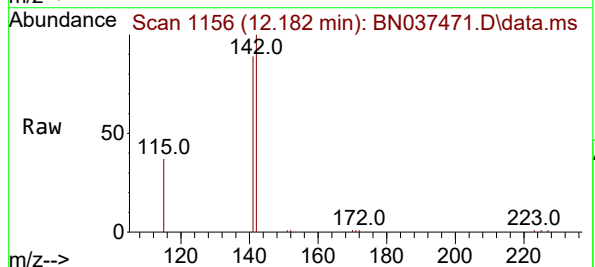
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

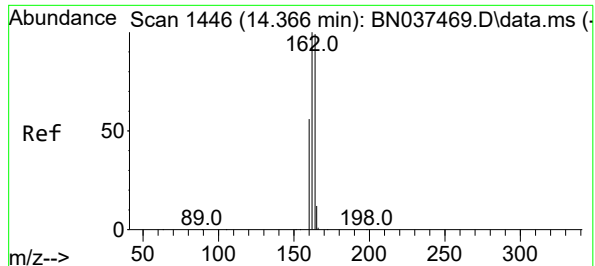
Tgt Ion:152 Resp: 8642
Ion Ratio Lower Upper
152 100
151 21.5 17.0 25.6



#12
2-Methylnaphthalene
Concen: 1.644 ng
RT: 12.182 min Scan# 1156
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion:142 Resp: 11263
Ion Ratio Lower Upper
142 100
141 88.9 70.6 105.8
115 36.6 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1446

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

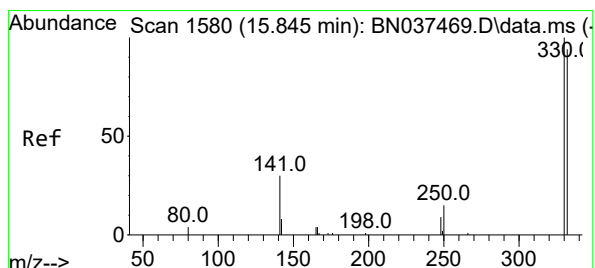
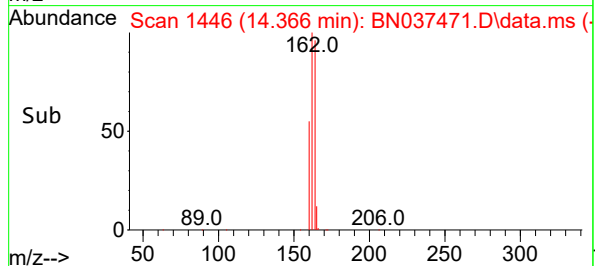
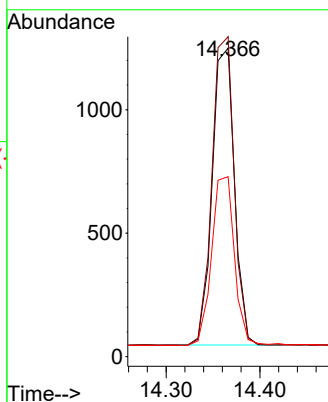
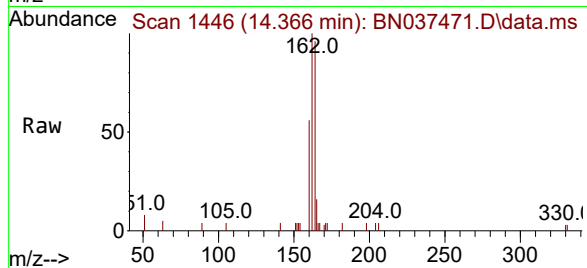
Tgt Ion:164 Resp: 1984

Ion Ratio Lower Upper

164 100

162 103.7 81.1 121.7

160 58.3 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 1.626 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

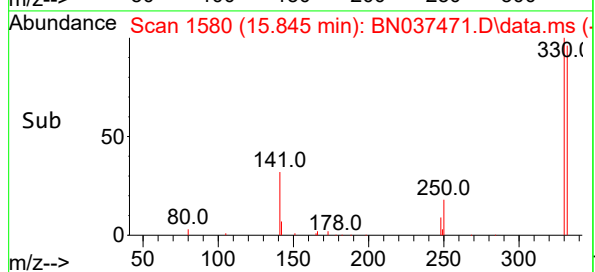
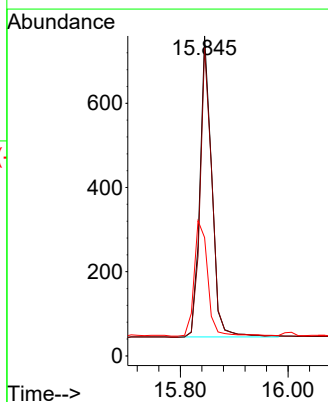
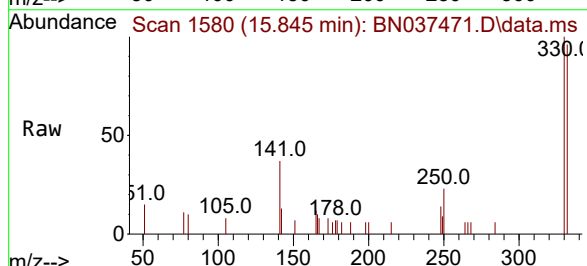
Tgt Ion:330 Resp: 1094

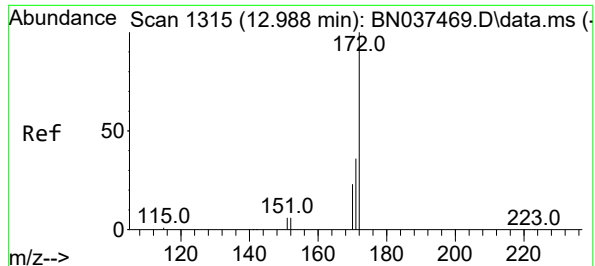
Ion Ratio Lower Upper

330 100

332 97.7 82.0 123.0

141 43.9 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 1.624 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

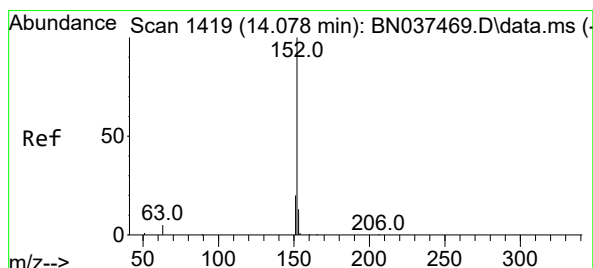
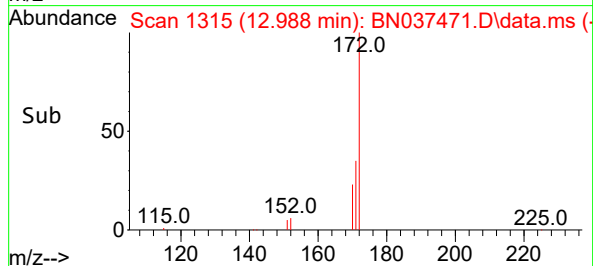
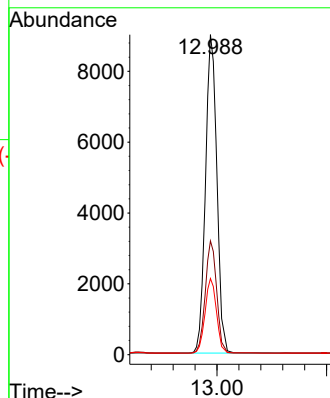
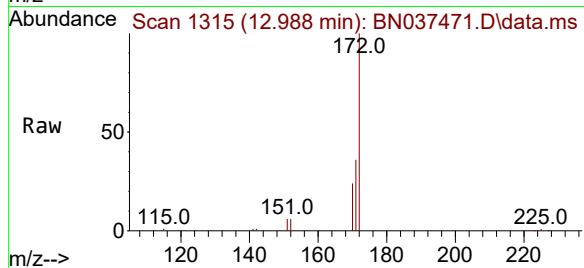
Tgt Ion:172 Resp: 18395

Ion Ratio Lower Upper

172 100

171 35.5 29.8 44.8

170 23.8 20.0 30.0



#16

Acenaphthylene

Concen: 1.650 ng

RT: 14.077 min Scan# 1419

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

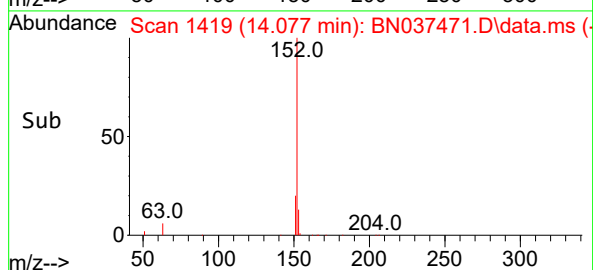
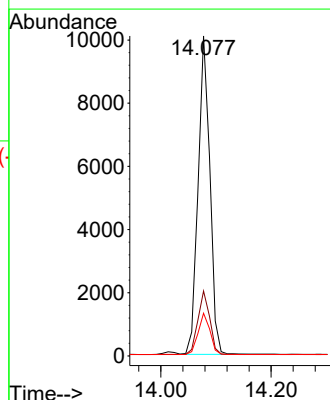
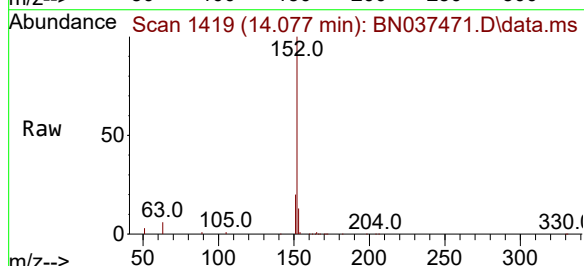
Tgt Ion:152 Resp: 14926

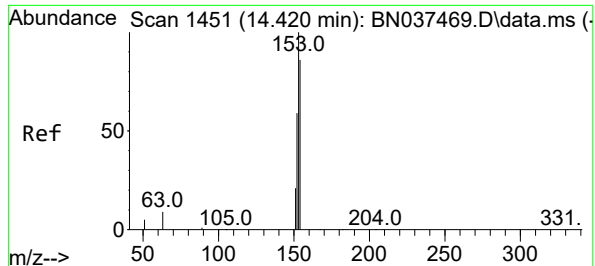
Ion Ratio Lower Upper

152 100

151 20.0 16.4 24.6

153 12.9 10.6 15.8





#17

Acenaphthene

Concen: 1.648 ng

RT: 14.419 min Scan# 14

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

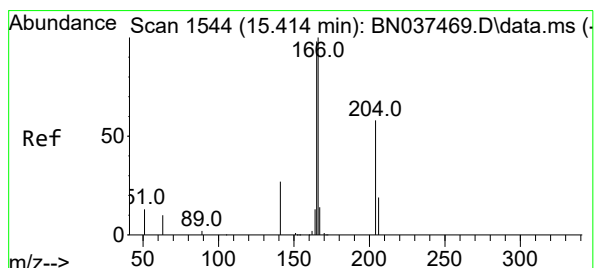
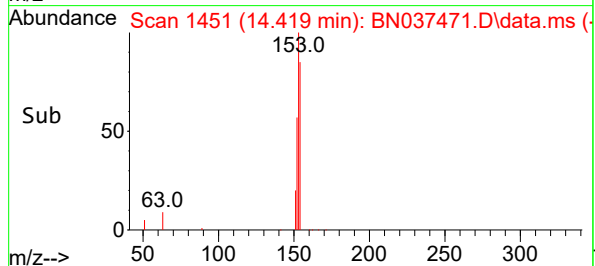
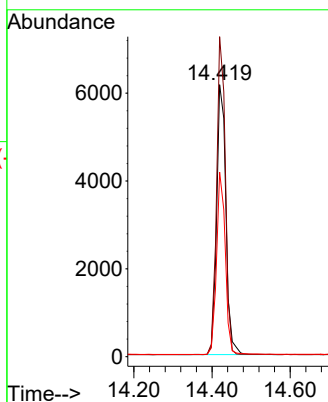
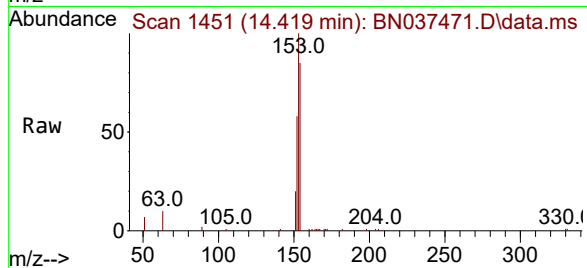
Tgt Ion:154 Resp: 10002

Ion Ratio Lower Upper

154 100

153 111.6 89.4 134.0

152 64.5 53.2 79.8



#18

Fluorene

Concen: 1.671 ng

RT: 15.414 min Scan# 1544

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

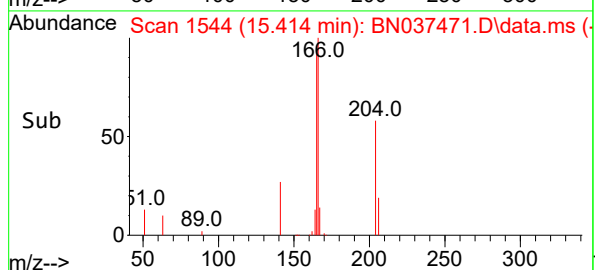
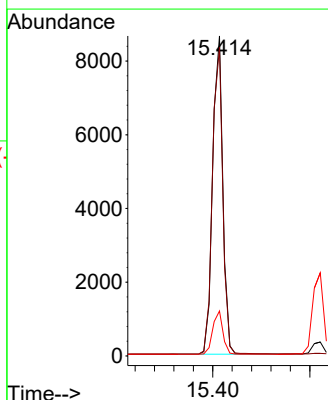
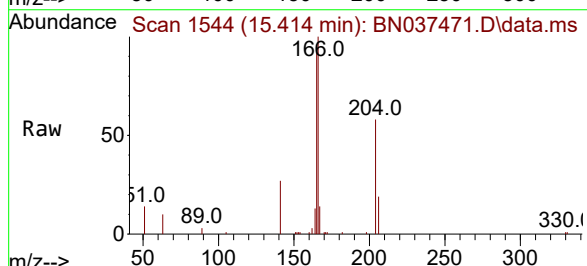
Tgt Ion:166 Resp: 12742

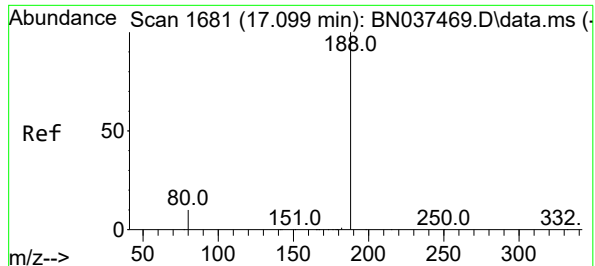
Ion Ratio Lower Upper

166 100

165 98.4 79.4 119.2

167 13.2 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

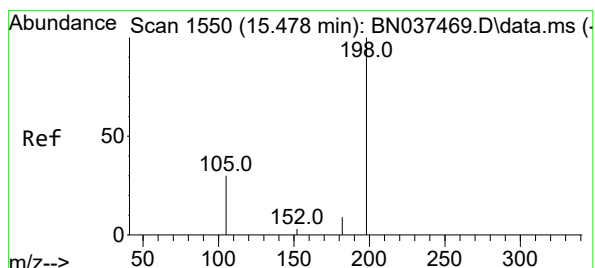
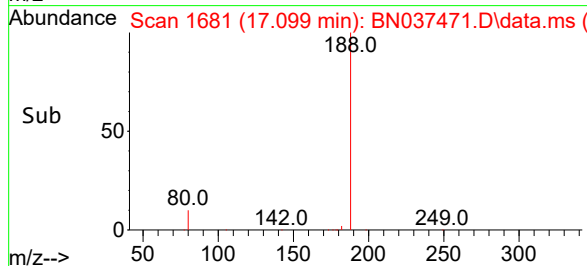
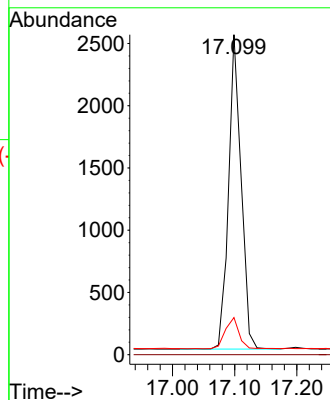
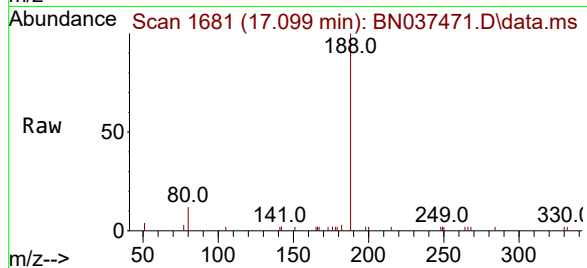
Tgt Ion:188 Resp: 3525

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.6 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 1.792 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

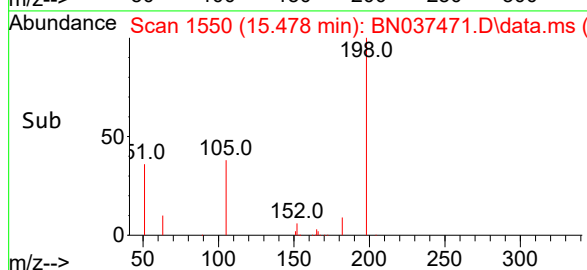
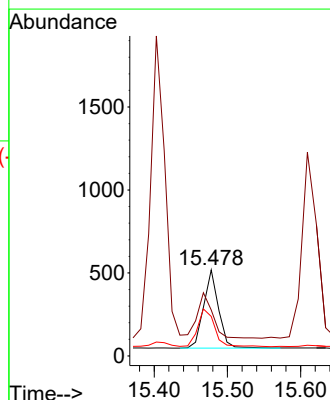
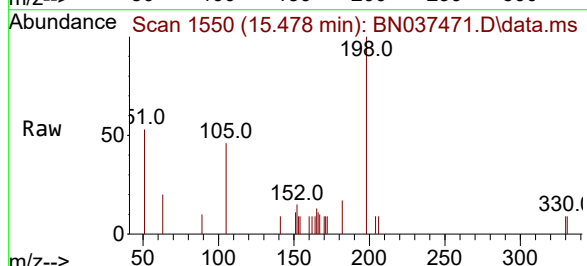
Tgt Ion:198 Resp: 710

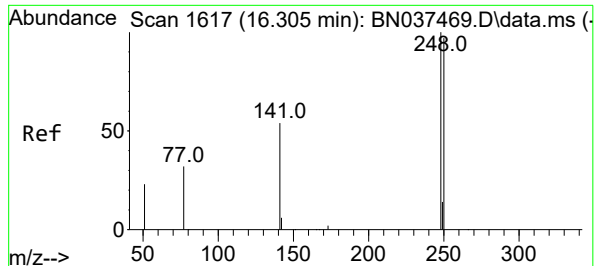
Ion Ratio Lower Upper

198 100

51 53.4 86.0 129.0#

105 45.9 53.0 79.4#





#21

4-Bromophenyl-phenylether

Concen: 1.624 ng

RT: 16.304 min Scan# 1617

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

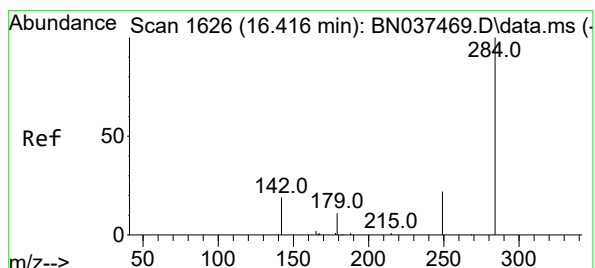
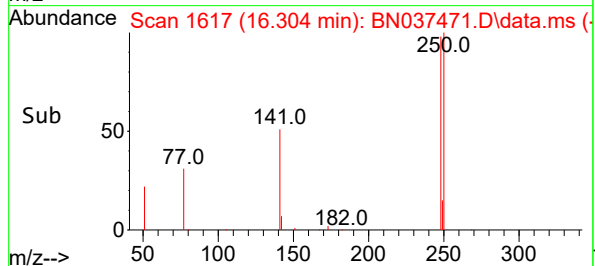
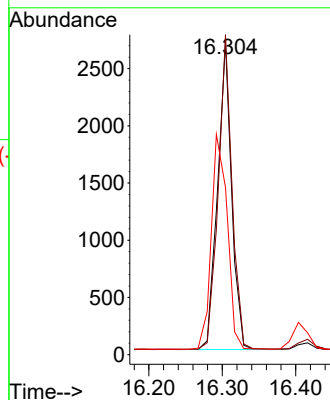
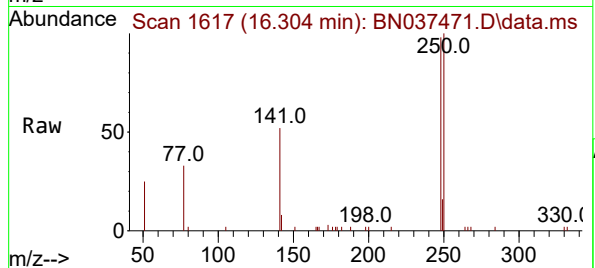
Tgt Ion:248 Resp: 3572

Ion Ratio Lower Upper

248 100

250 102.4 77.8 116.6

141 53.5 45.9 68.9



#22

Hexachlorobenzene

Concen: 1.642 ng

RT: 16.416 min Scan# 1626

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

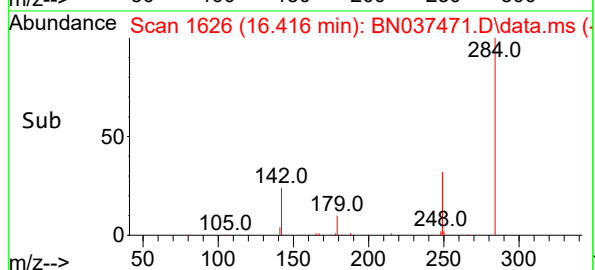
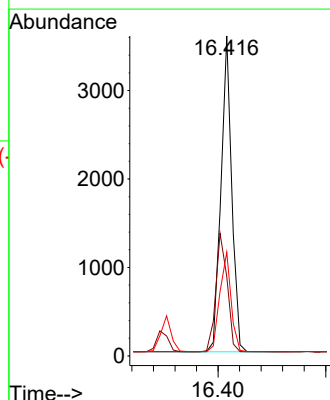
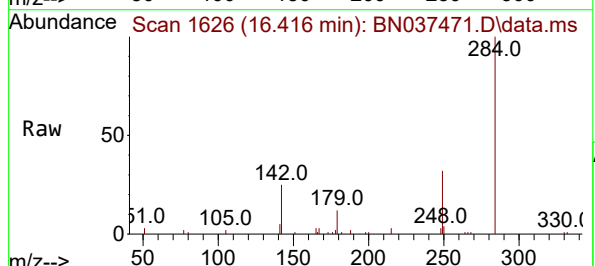
Tgt Ion:284 Resp: 4981

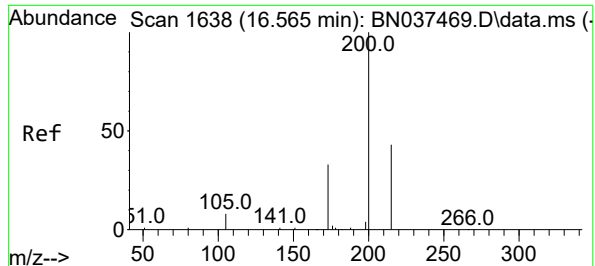
Ion Ratio Lower Upper

284 100

142 39.6 31.3 46.9

249 33.1 26.6 40.0





#23

Atrazine

Concen: 1.715 ng

RT: 16.565 min Scan# 1638

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

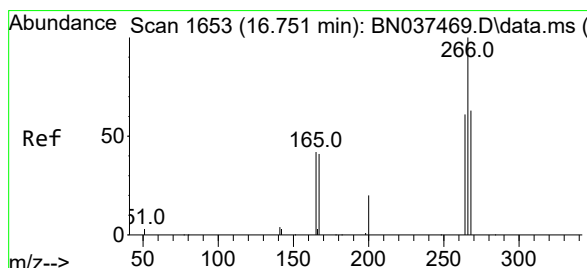
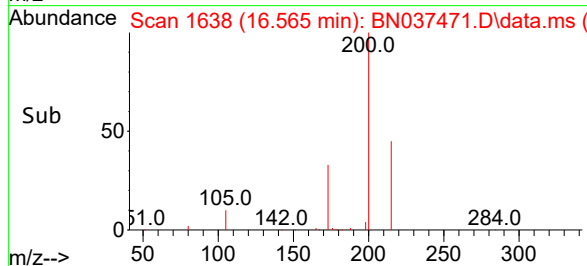
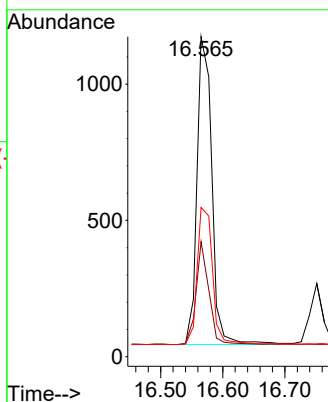
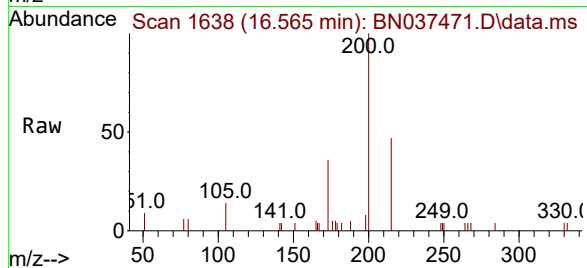
Tgt Ion:200 Resp: 1876

Ion Ratio Lower Upper

200 100

173 35.9 34.3 51.5

215 46.7 41.6 62.4



#24

Pentachlorophenol

Concen: 1.610 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

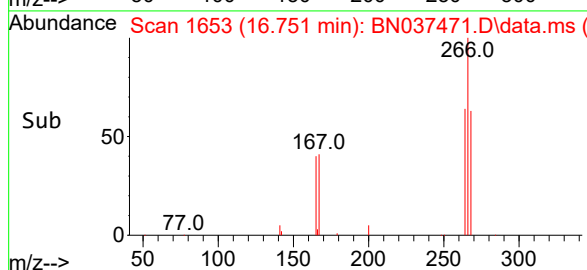
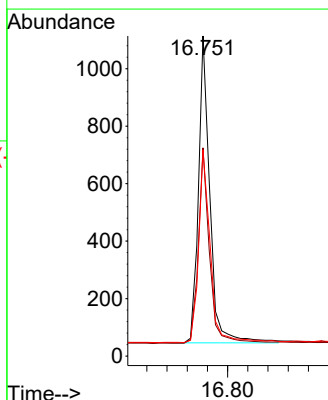
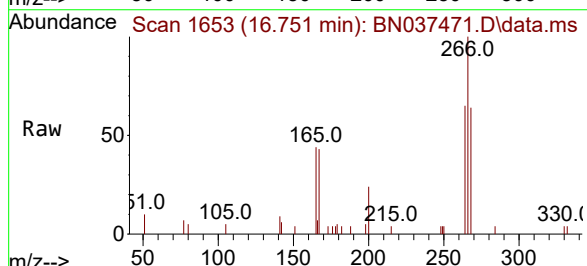
Tgt Ion:266 Resp: 1682

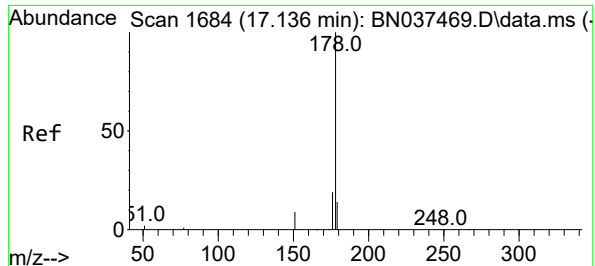
Ion Ratio Lower Upper

266 100

264 61.8 47.5 71.3

268 64.0 50.6 76.0





#25

Phenanthrene

Concen: 1.631 ng

RT: 17.136 min Scan# 1684

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

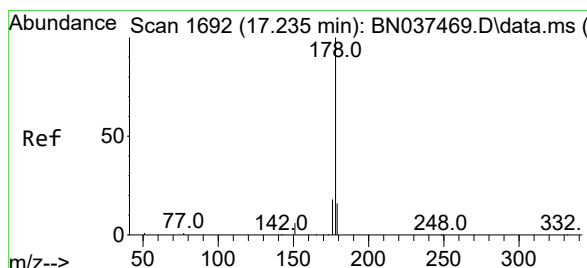
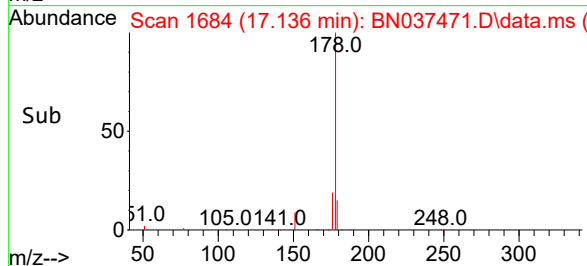
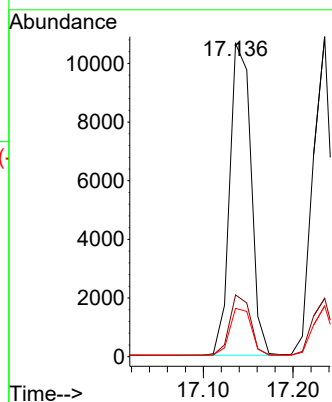
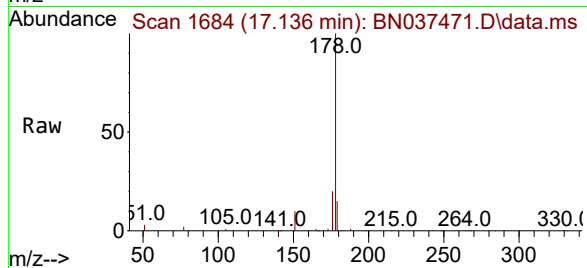
Tgt Ion:178 Resp: 17507

Ion Ratio Lower Upper

178 100

176 19.0 15.1 22.7

179 15.2 12.2 18.2



#26

Anthracene

Concen: 1.647 ng

RT: 17.235 min Scan# 1692

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

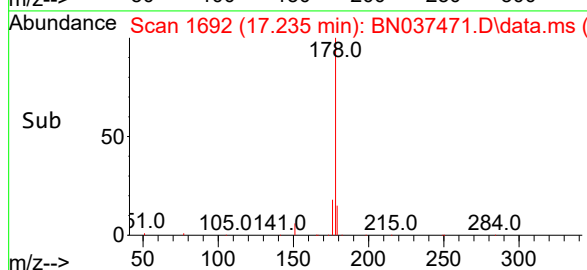
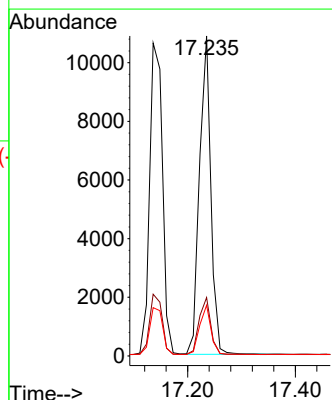
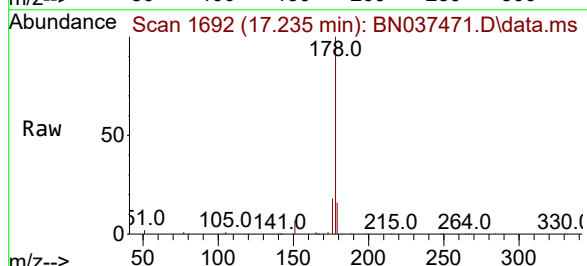
Tgt Ion:178 Resp: 15953

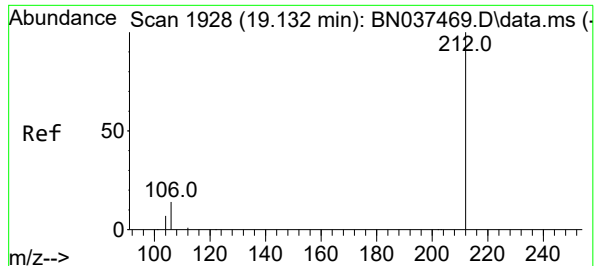
Ion Ratio Lower Upper

178 100

176 18.3 14.9 22.3

179 15.4 12.3 18.5





#27

Fluoranthene-d10

Concen: 1.556 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

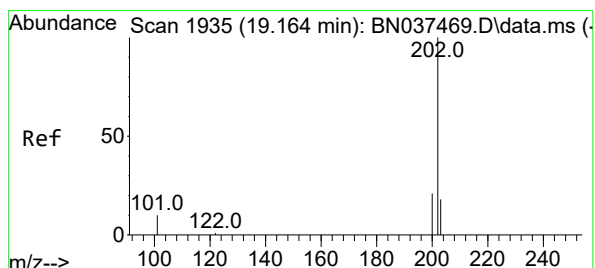
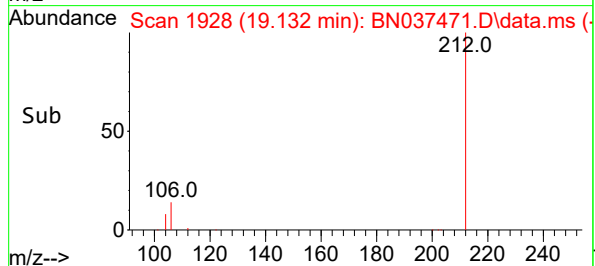
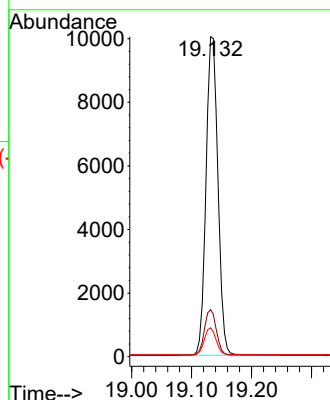
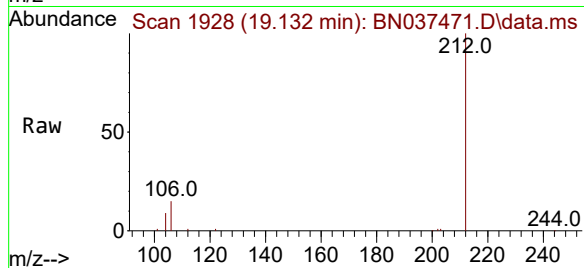
Tgt Ion:212 Resp: 13833

Ion Ratio Lower Upper

212 100

106 14.3 11.7 17.5

104 8.3 6.6 10.0



#28

Fluoranthene

Concen: 1.663 ng

RT: 19.164 min Scan# 1935

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

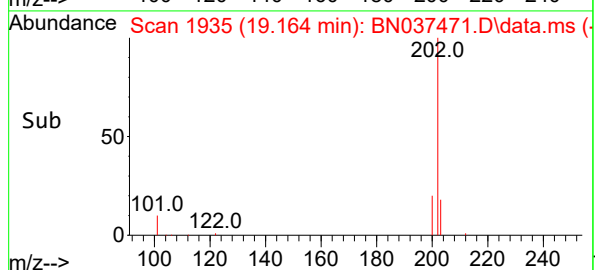
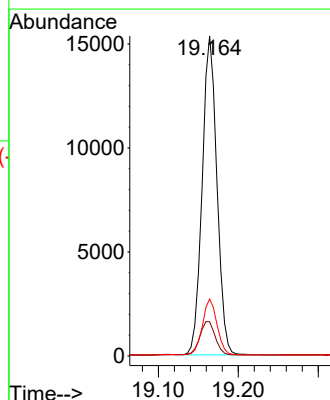
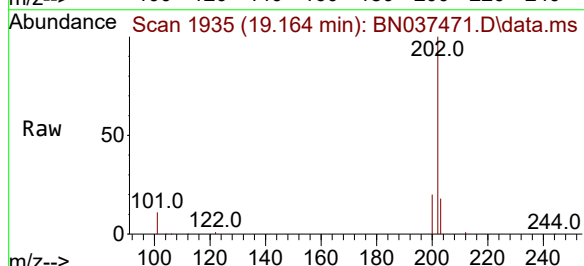
Tgt Ion:202 Resp: 19585

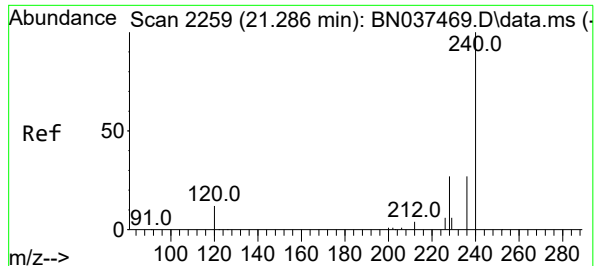
Ion Ratio Lower Upper

202 100

101 11.2 9.2 13.8

203 17.3 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

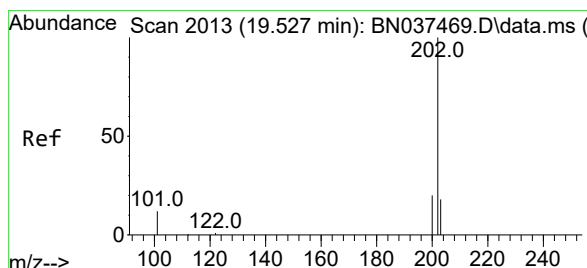
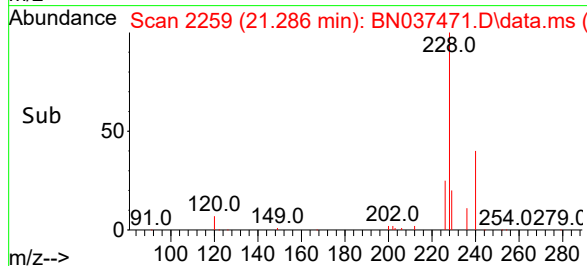
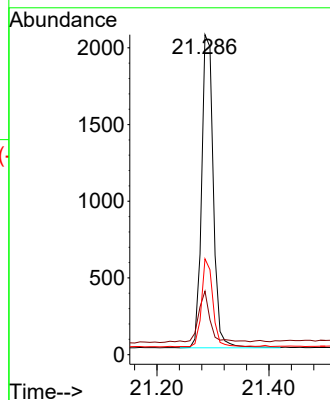
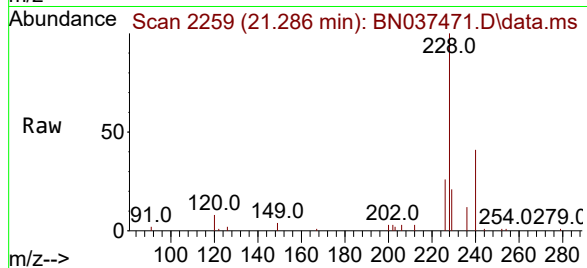
Tgt Ion:240 Resp: 2965

Ion Ratio Lower Upper

240 100

120 19.8 12.4 18.6#

236 30.0 22.9 34.3



#30

Pyrene

Concen: 1.597 ng

RT: 19.526 min Scan# 2013

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

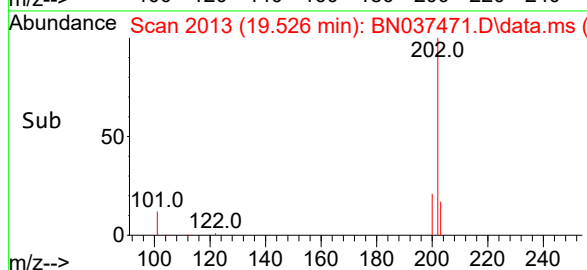
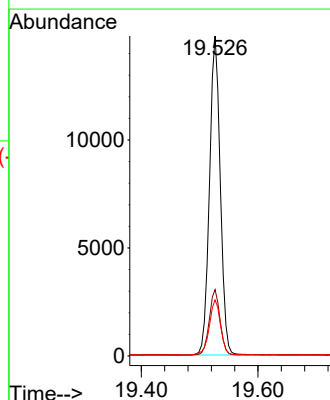
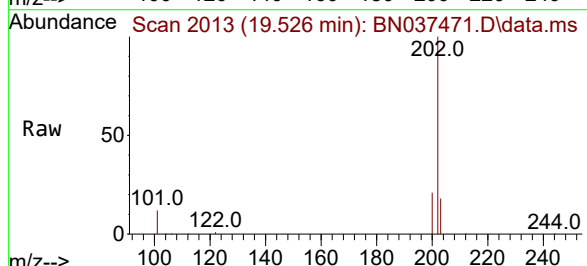
Tgt Ion:202 Resp: 19037

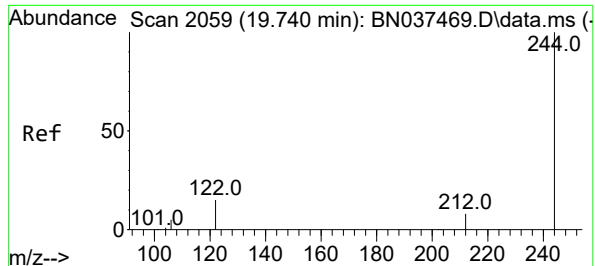
Ion Ratio Lower Upper

202 100

200 20.4 16.4 24.6

203 17.9 14.3 21.5

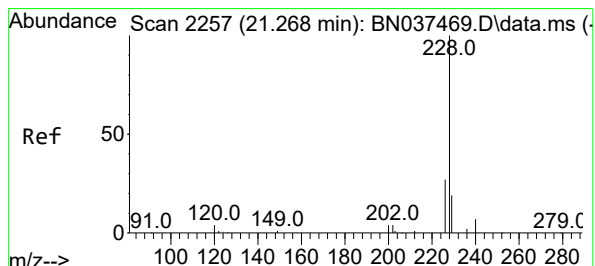
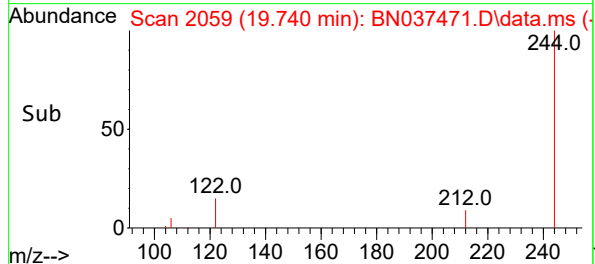
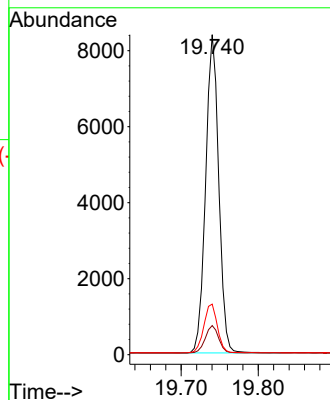
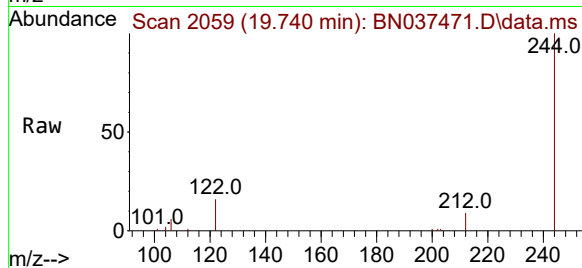




#31
Terphenyl-d14
Concen: 1.602 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.000 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

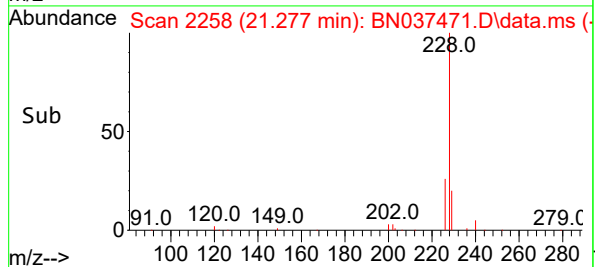
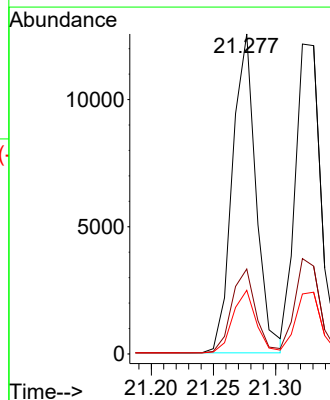
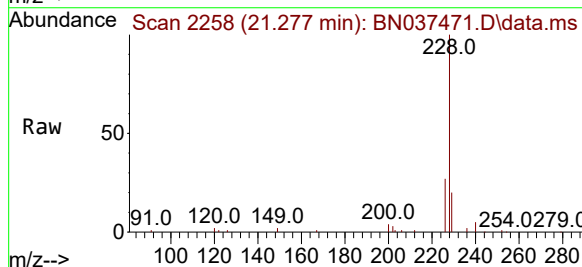
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

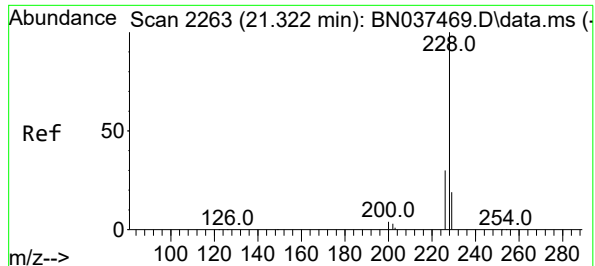
Tgt Ion	Ratio	Lower	Upper
244	100		
212	9.1	8.7	13.1
122	15.8	14.1	21.1



#32
Benzo(a)anthracene
Concen: 1.647 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.009 min
Lab File: BN037471.D
Acq: 11 Jul 2025 13:36

Tgt Ion	Ratio	Lower	Upper
228	100		
226	26.6	22.7	34.1
229	19.9	16.6	24.8





#33

Chrysene

Concen: 1.592 ng

RT: 21.321 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

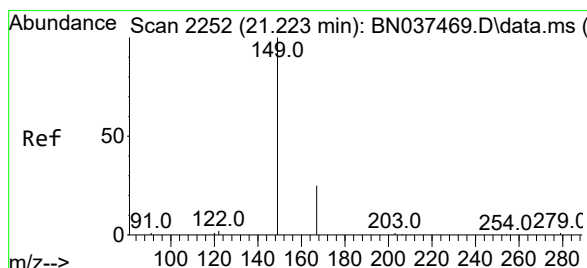
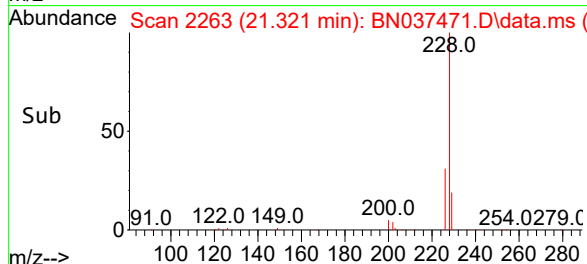
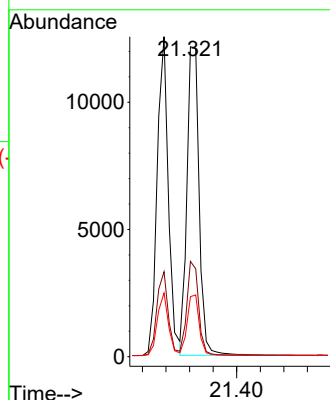
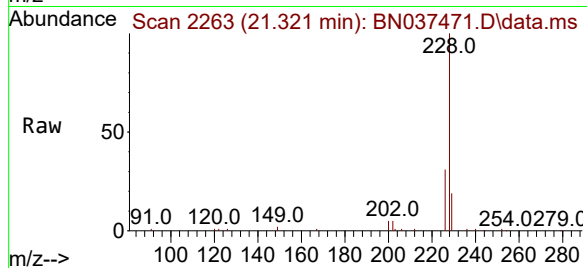
Tgt Ion:228 Resp: 17469

Ion Ratio Lower Upper

228 100

226 30.8 24.6 36.8

229 19.4 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.525 ng

RT: 21.232 min Scan# 2253

Delta R.T. 0.009 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

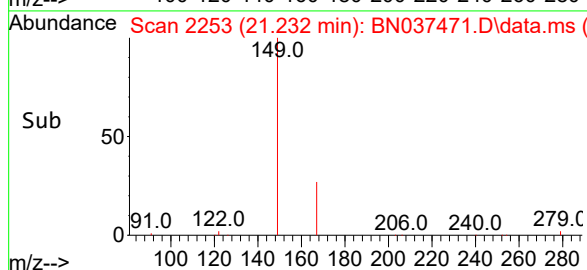
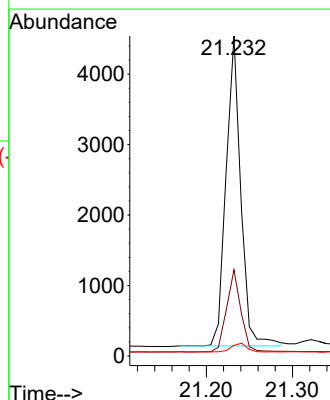
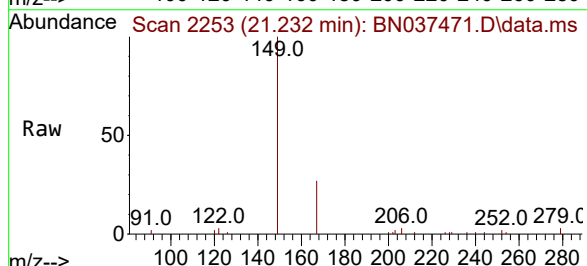
Tgt Ion:149 Resp: 5207

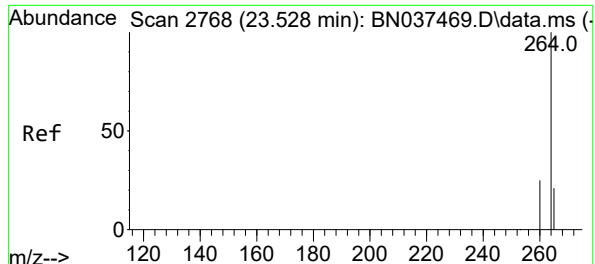
Ion Ratio Lower Upper

149 100

167 25.6 19.4 29.2

279 2.9 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.534 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN037471.D

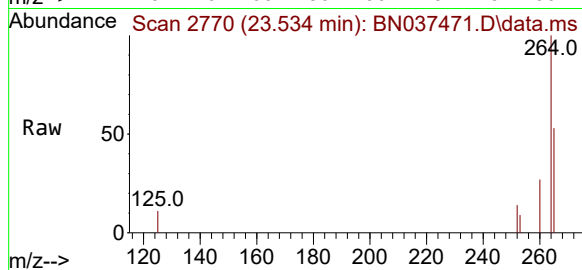
Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6



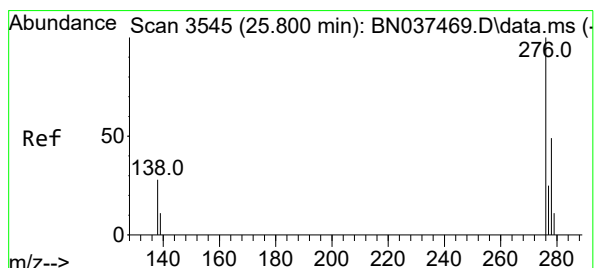
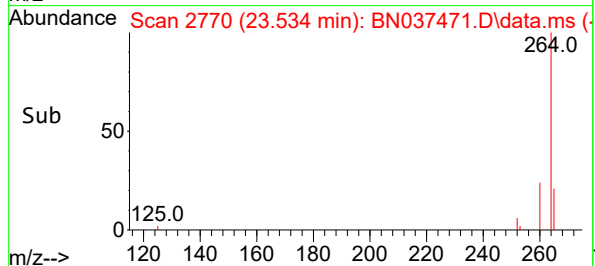
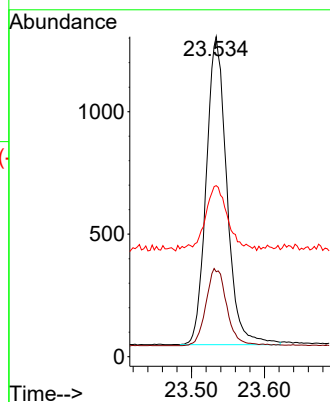
Tgt Ion:264 Resp: 2463

Ion Ratio Lower Upper

264 100

260 26.6 21.7 32.5

265 53.4 41.6 62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 1.705 ng

RT: 25.808 min Scan# 3548

Delta R.T. 0.009 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

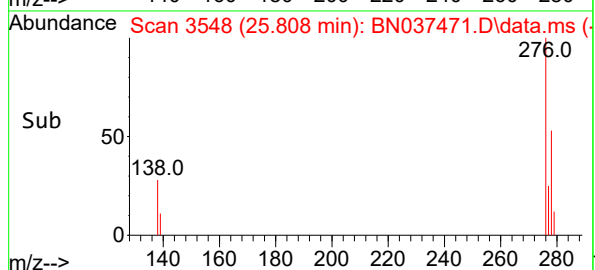
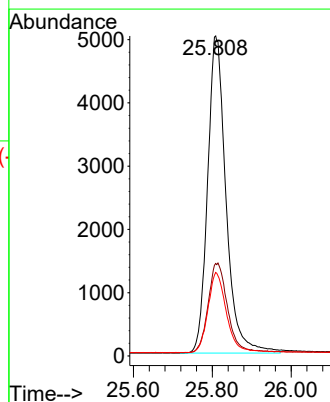
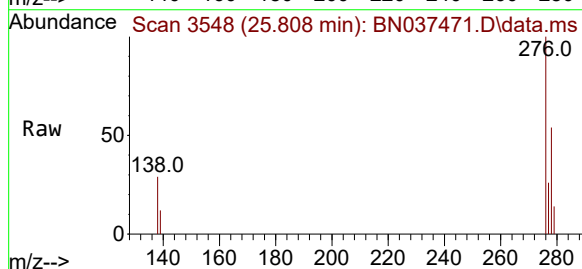
Tgt Ion:276 Resp: 16302

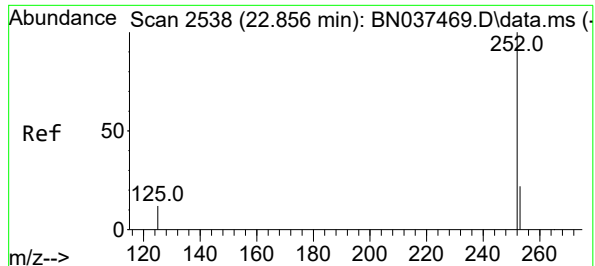
Ion Ratio Lower Upper

276 100

138 29.5 23.4 35.2

277 25.2 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 1.716 ng

RT: 22.861 min Scan# 2540

Delta R.T. 0.006 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

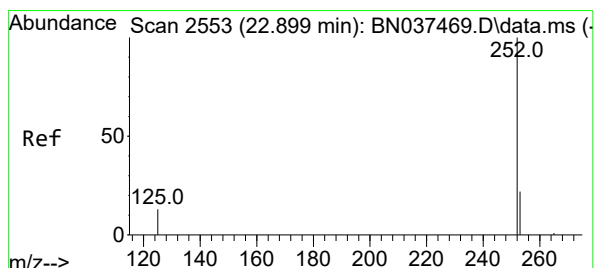
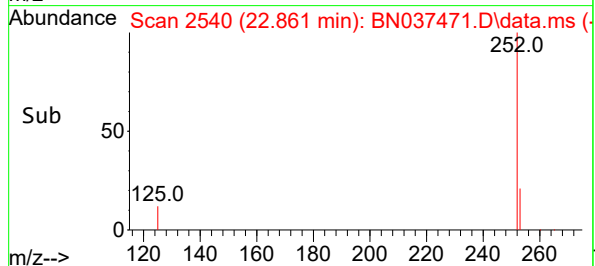
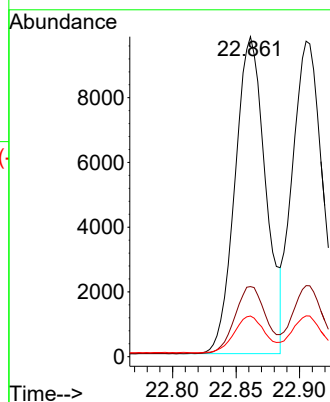
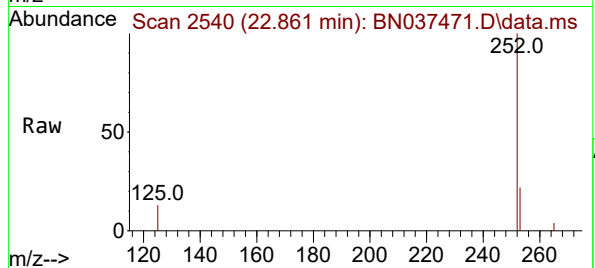
Tgt Ion:252 Resp: 16437

Ion Ratio Lower Upper

252 100

253 21.9 20.1 30.1

125 12.7 13.7 20.5#



#38

Benzo(k)fluoranthene

Concen: 1.698 ng

RT: 22.905 min Scan# 2555

Delta R.T. 0.006 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

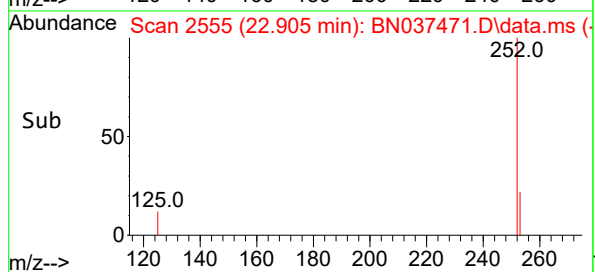
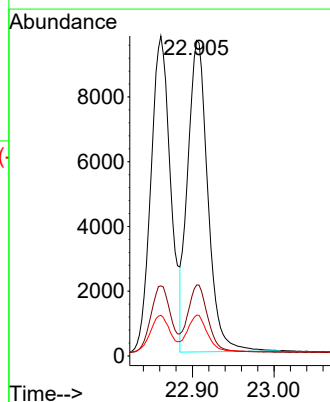
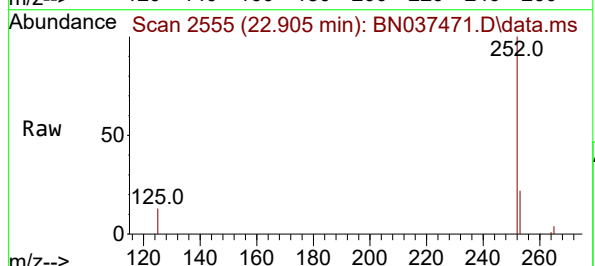
Tgt Ion:252 Resp: 16488

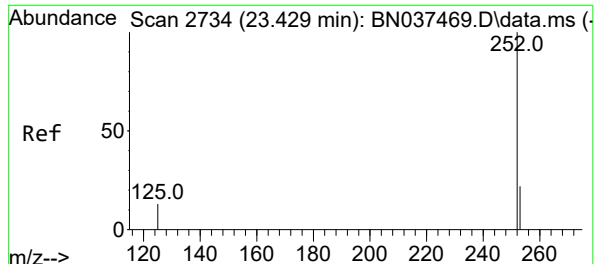
Ion Ratio Lower Upper

252 100

253 22.5 20.4 30.6

125 12.9 14.6 21.8#





#39

Benzo(a)pyrene

Concen: 1.693 ng

RT: 23.437 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

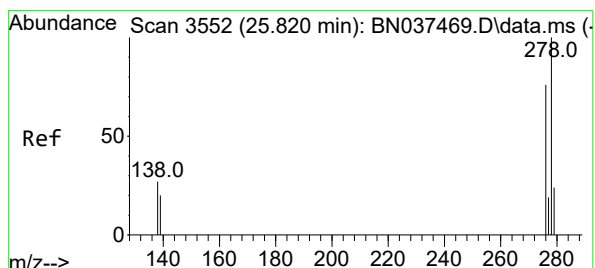
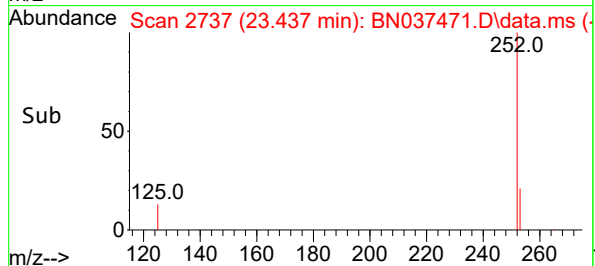
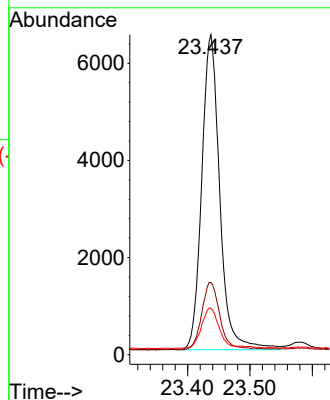
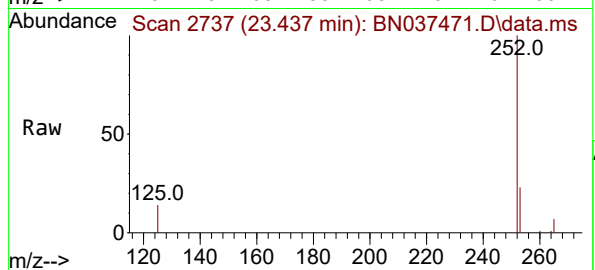
Tgt Ion:252 Resp: 13051

Ion Ratio Lower Upper

252 100

253 22.6 21.8 32.6

125 14.4 16.7 25.1#



#40

Dibenzo(a,h)anthracene

Concen: 1.714 ng

RT: 25.826 min Scan# 3554

Delta R.T. 0.006 min

Lab File: BN037471.D

Acq: 11 Jul 2025 13:36

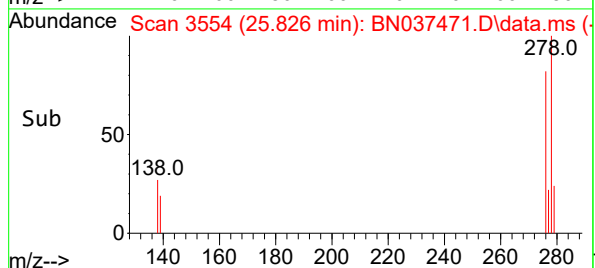
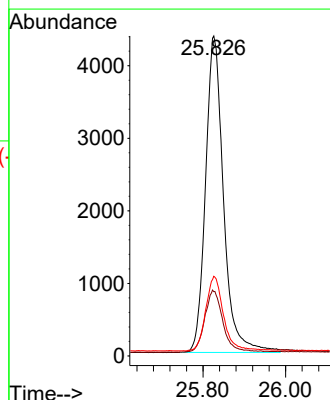
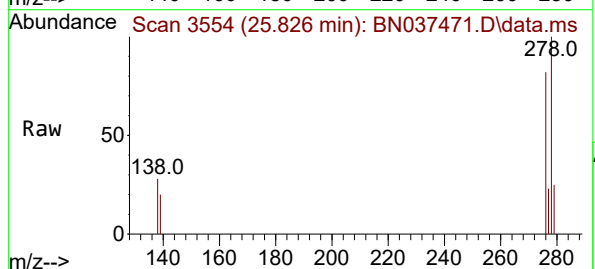
Tgt Ion:278 Resp: 13217

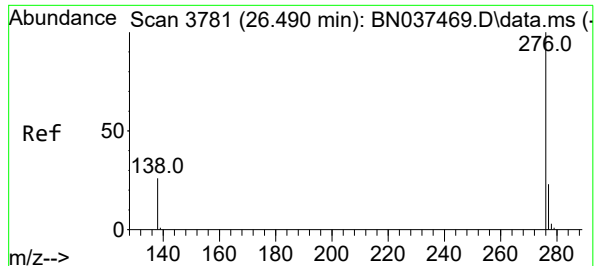
Ion Ratio Lower Upper

278 100

139 20.1 19.9 29.9

279 24.9 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 1.682 ng

RT: 26.498 min Scan# 31

Delta R.T. 0.009 min

Lab File: BN037471.D

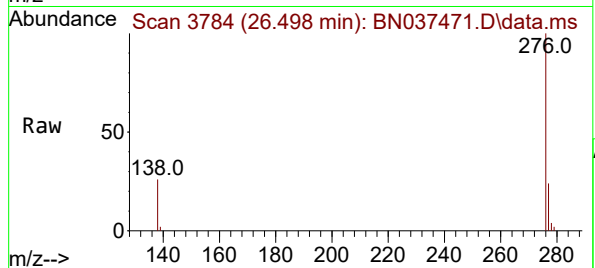
Acq: 11 Jul 2025 13:36

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6



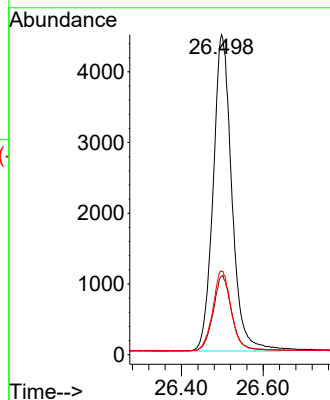
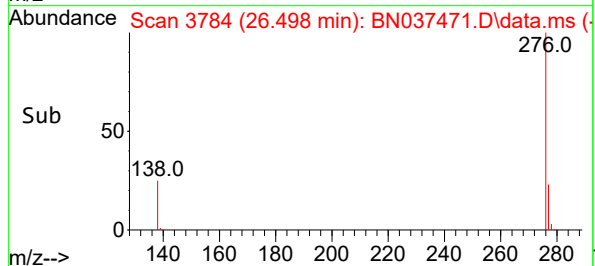
Tgt Ion:276 Resp: 14207

Ion Ratio Lower Upper

276 100

277 24.4 21.7 32.5

138 26.0 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037472.D
 Acq On : 11 Jul 2025 14:12
 Operator : RC/JU
 Sample : SSTDICC3.2
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC3.2

Quant Time: Jul 11 15:27:30 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

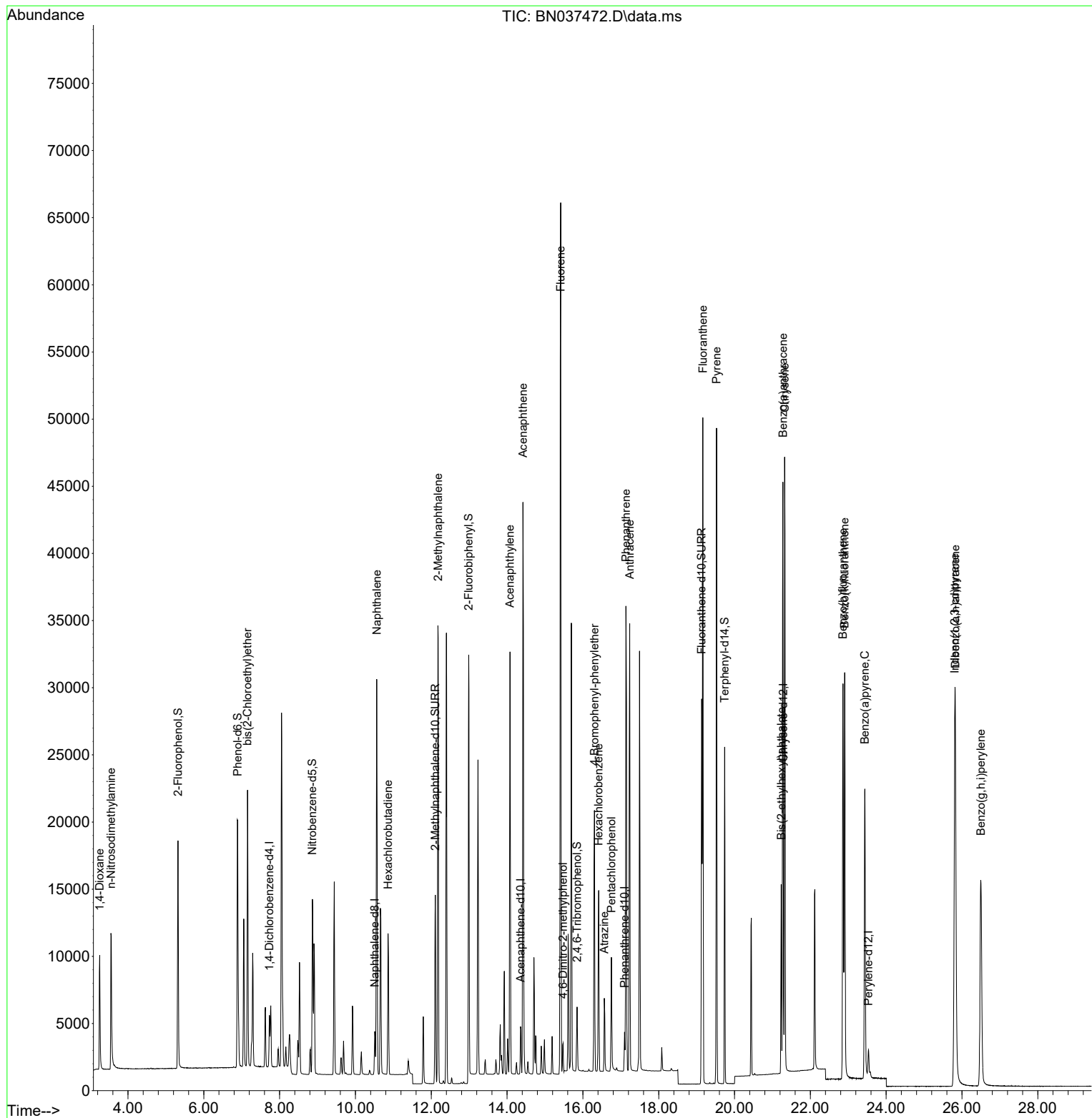
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.731	152	1783	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4111	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2097	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3689	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3278	0.400	ng	# 0.00
35) Perylene-d12	23.534	264	2672	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	13443	3.239	ng	0.00
5) Phenol-d6	6.894	99	16707	3.200	ng	0.00
8) Nitrobenzene-d5	8.864	82	10071	3.375	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	18523	3.314	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	2561	3.601	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	39540	3.303	ng	0.00
27) Fluoranthene-d10	19.132	212	30970	3.328	ng	0.00
31) Terphenyl-d14	19.740	244	21864	3.197	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	5469	3.266	ng	Qvalue 96
3) n-Nitrosodimethylamine	3.550	42	7419	3.314	ng	97
6) bis(2-Chloroethyl)ether	7.154	93	14049	3.216	ng	100
9) Naphthalene	10.562	128	36457	3.301	ng	96
10) Hexachlorobutadiene	10.861	225	8593	3.238	ng	# 99
12) 2-Methylnaphthalene	12.177	142	23612	3.413	ng	99
16) Acenaphthylene	14.077	152	31638	3.309	ng	99
17) Acenaphthene	14.419	154	21303	3.320	ng	97
18) Fluorene	15.414	166	27172	3.371	ng	98
20) 4,6-Dinitro-2-methylph...	15.478	198	1680	4.053	ng	# 48
21) 4-Bromophenyl-phenylether	16.304	248	7684	3.339	ng	95
22) Hexachlorobenzene	16.416	284	10345	3.258	ng	99
23) Atrazine	16.565	200	4528	3.955	ng	90
24) Pentachlorophenol	16.751	266	3862	3.532	ng	97
25) Phenanthrene	17.136	178	37061	3.299	ng	100
26) Anthracene	17.235	178	34968	3.450	ng	99
28) Fluoranthene	19.164	202	42951	3.485	ng	99
30) Pyrene	19.526	202	41820	3.173	ng	100
32) Benzo(a)anthracene	21.277	228	37454	3.374	ng	97
33) Chrysene	21.321	228	38393	3.164	ng	99
34) Bis(2-ethylhexyl)phtha...	21.232	149	12243	3.243	ng	96
36) Indeno(1,2,3-cd)pyrene	25.808	276	37588	3.624	ng	99
37) Benzo(b)fluoranthene	22.861	252	35793	3.445	ng	# 92
38) Benzo(k)fluoranthene	22.905	252	37293	3.541	ng	# 91
39) Benzo(a)pyrene	23.437	252	29875	3.573	ng	# 87
40) Dibenzo(a,h)anthracene	25.826	278	30827	3.685	ng	# 89
41) Benzo(g,h,i)perylene	26.495	276	32205	3.515	ng	93

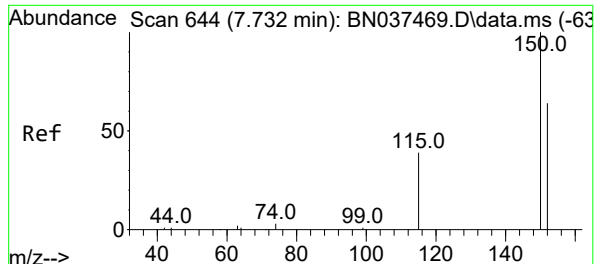
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037472.D
Acq On : 11 Jul 2025 14:12
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

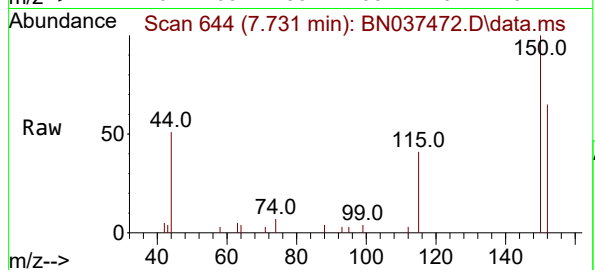
Quant Time: Jul 11 15:27:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration



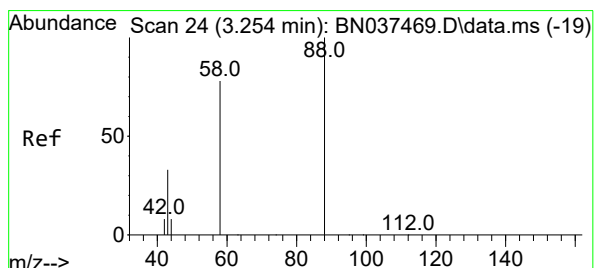
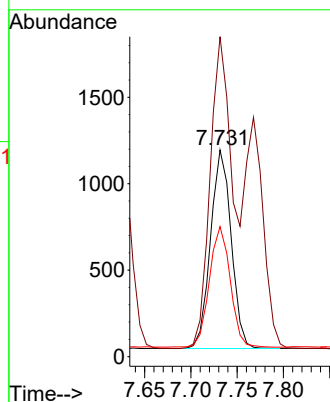
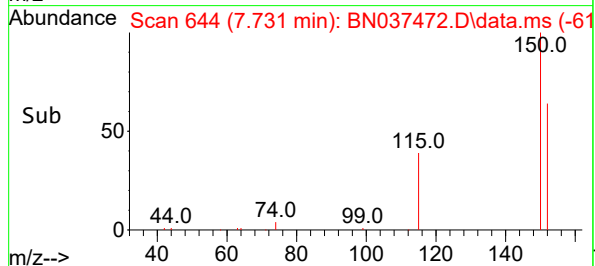


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.731 min Scan# 64
Delta R.T. -0.001 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

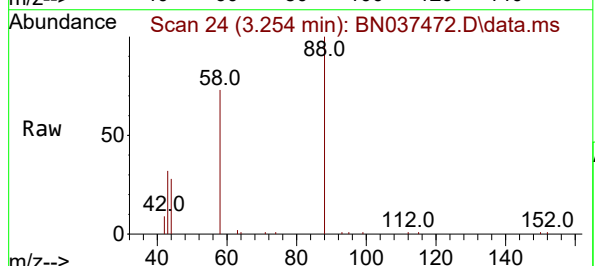
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2



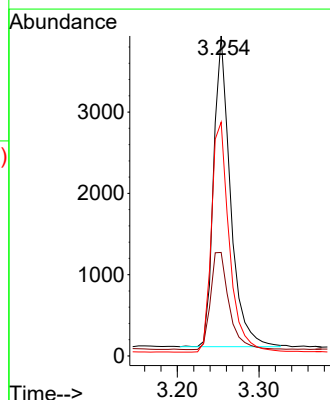
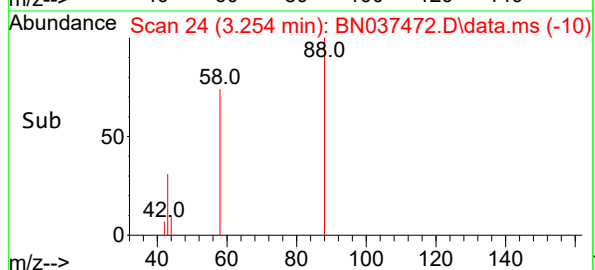
Tgt Ion:152 Resp: 1783
Ion Ratio Lower Upper
152 100
150 154.8 122.5 183.7
115 62.9 49.9 74.9

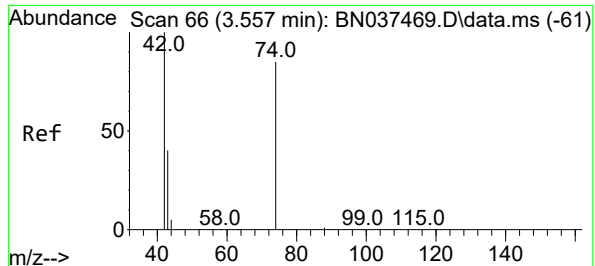


#2
1,4-Dioxane
Concen: 3.266 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12



Tgt Ion: 88 Resp: 5469
Ion Ratio Lower Upper
88 100
43 34.5 30.7 46.1
58 78.7 65.0 97.4

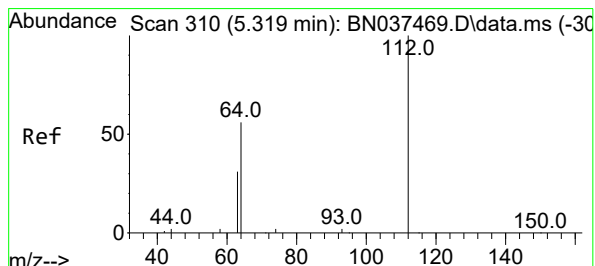
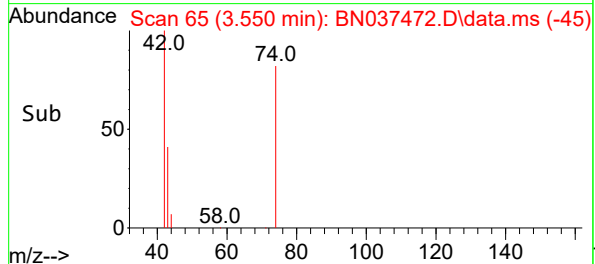
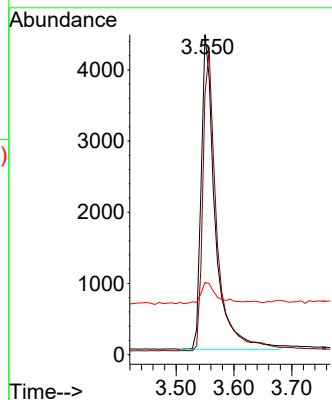
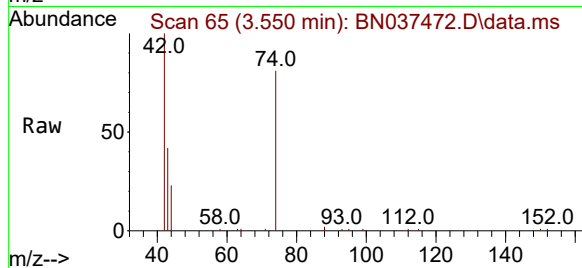




#3
n-Nitrosodimethylamine
Concen: 3.314 ng
RT: 3.550 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

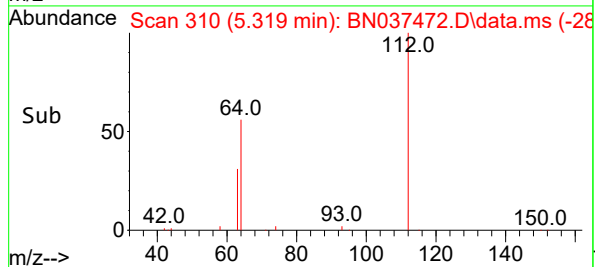
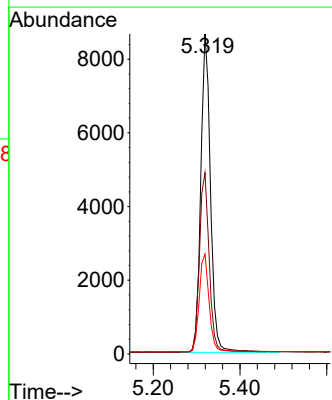
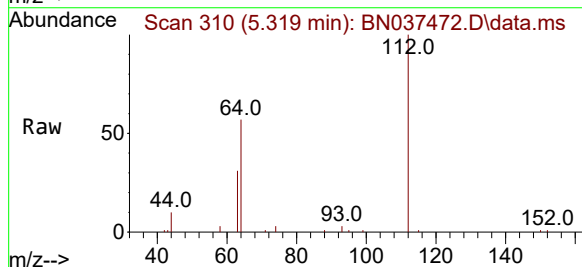
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

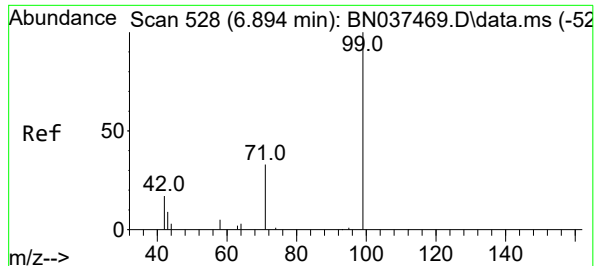
Tgt Ion: 42 Resp: 7419
Ion Ratio Lower Upper
42 100
74 96.5 74.9 112.3
44 7.6 7.2 10.8



#4
2-Fluorophenol
Concen: 3.239 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

Tgt Ion: 112 Resp: 13443
Ion Ratio Lower Upper
112 100
64 57.0 45.4 68.0
63 31.1 24.7 37.1

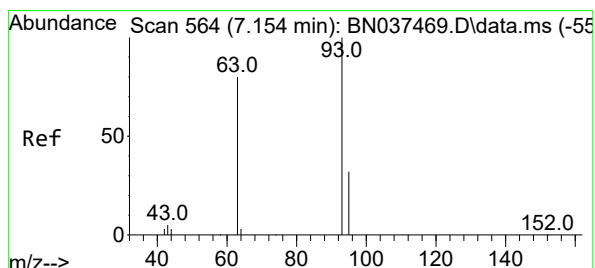
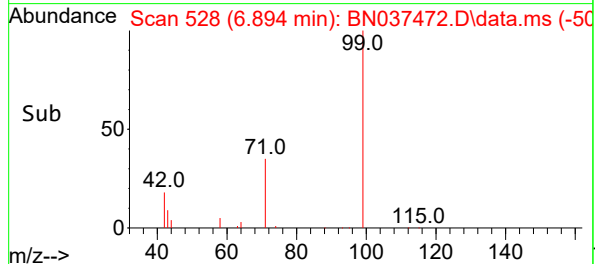
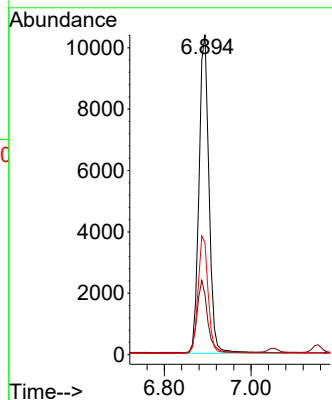
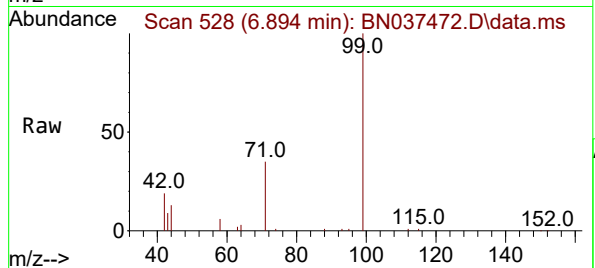




#5
Phenol-d6
Concen: 3.200 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

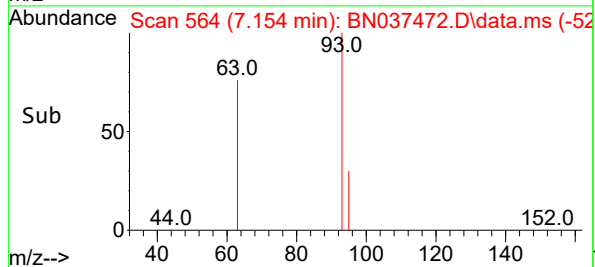
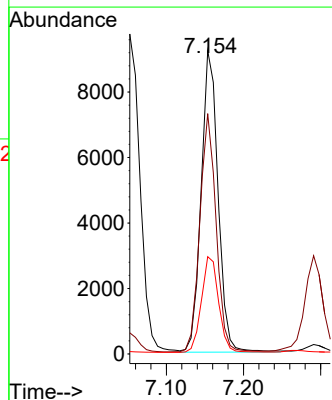
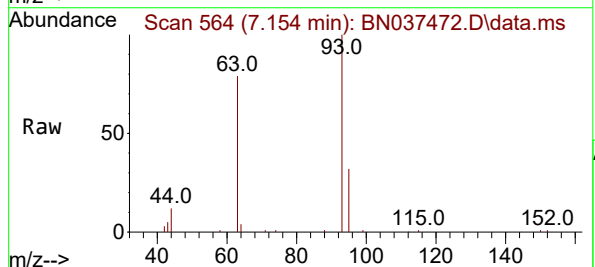
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

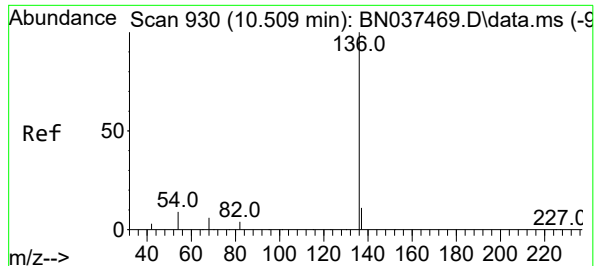
Tgt Ion: 99 Resp: 16707
Ion Ratio Lower Upper
99 100
42 23.6 19.5 29.3
71 37.1 29.4 44.2



#6
bis(2-Chloroethyl)ether
Concen: 3.216 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

Tgt Ion: 93 Resp: 14049
Ion Ratio Lower Upper
93 100
63 75.9 60.8 91.2
95 32.2 25.6 38.4

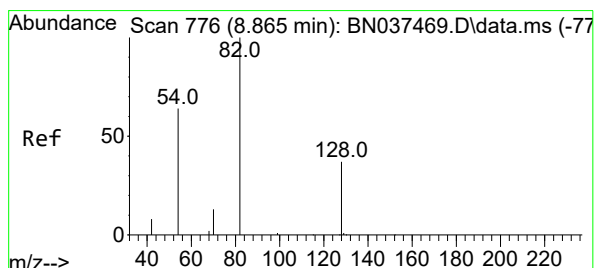
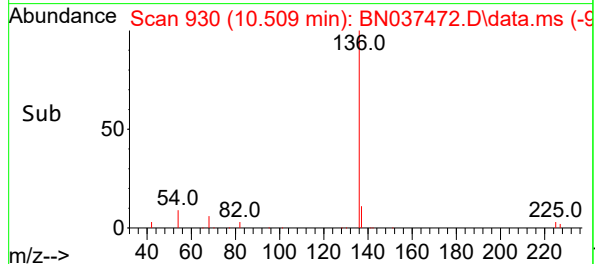
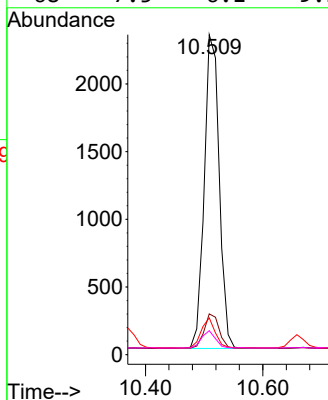
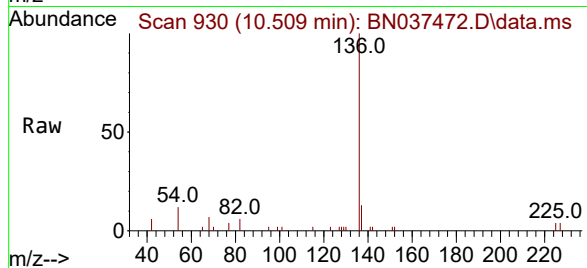




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

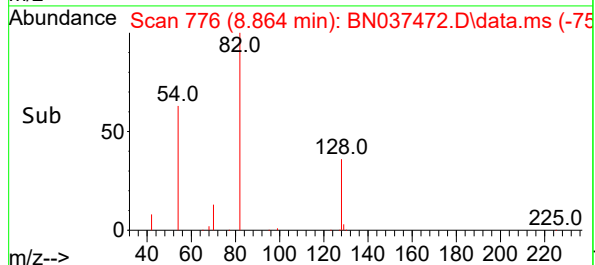
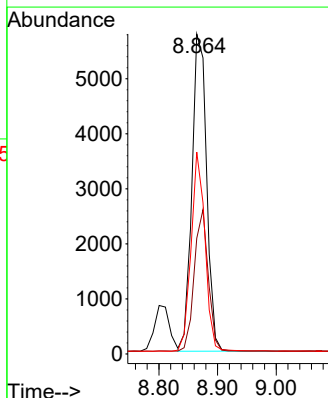
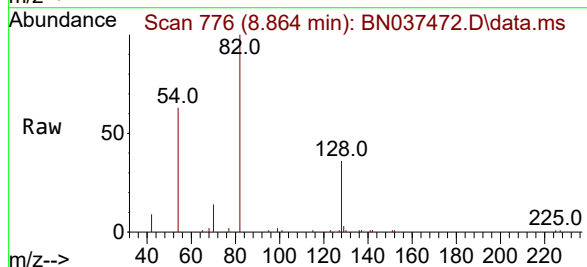
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

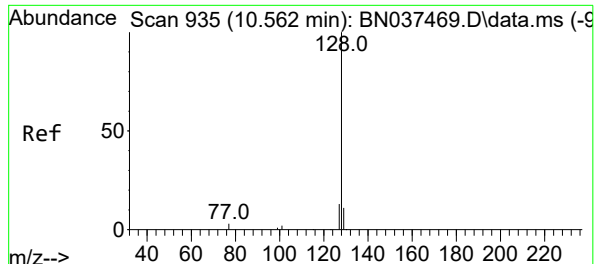
Tgt Ion	136	137	54	68
Resp:	4111			
Ratio	100	12.7	11.5	7.5
Lower		10.0	9.0	6.1
Upper		15.0	13.6	9.1



#8
Nitrobenzene-d5
Concen: 3.375 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

Tgt Ion	82	128	54
Resp:	10071		
Ratio	100	36.2	63.1
Lower		33.1	53.0
Upper		49.7	79.4





#9

Naphthalene

Concen: 3.301 ng

RT: 10.562 min Scan# 91

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

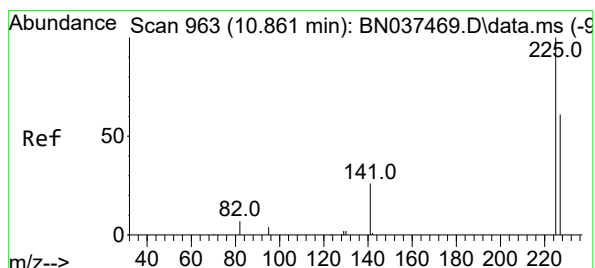
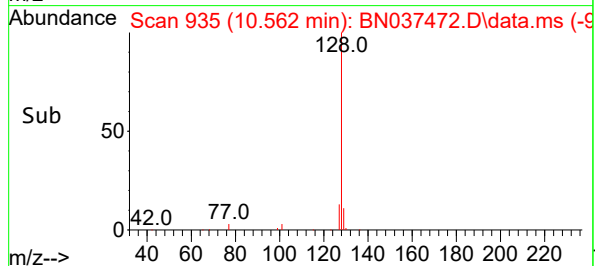
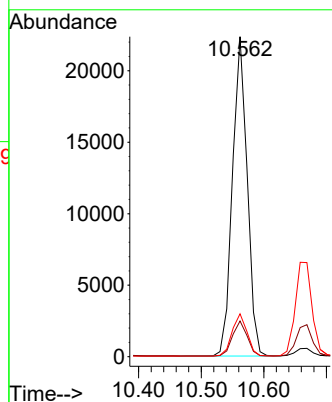
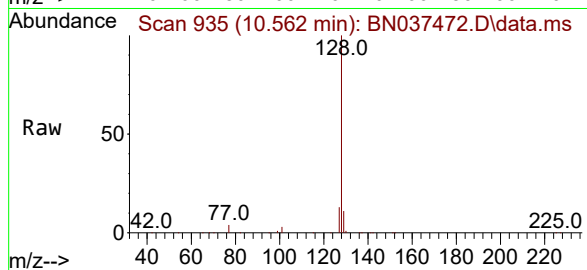
Tgt Ion:128 Resp: 36457

Ion Ratio Lower Upper

128 100

129 11.1 10.2 15.2

127 13.4 11.8 17.6



#10

Hexachlorobutadiene

Concen: 3.238 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

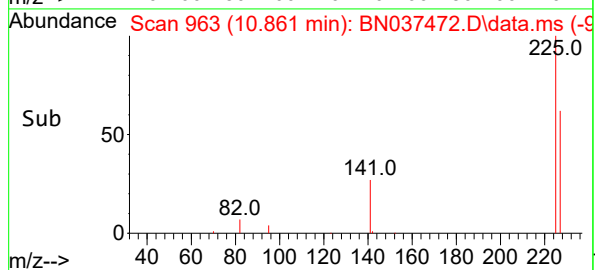
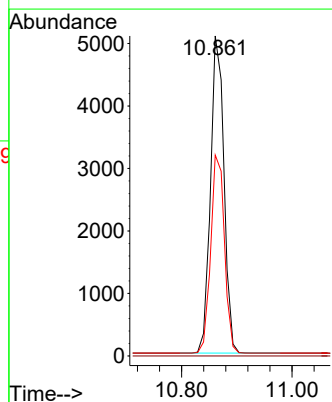
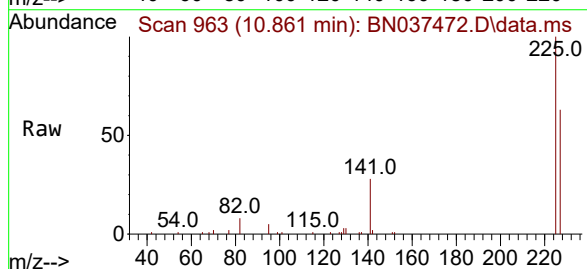
Tgt Ion:225 Resp: 8593

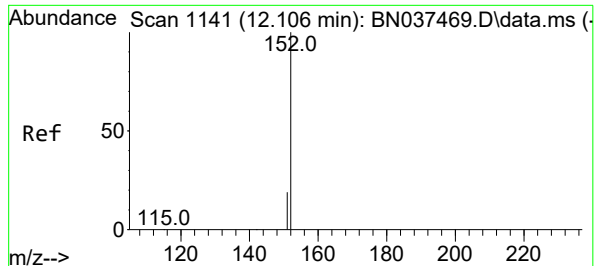
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.8 51.4 77.2





#11

2-Methylnaphthalene-d10

Concen: 3.314 ng

RT: 12.106 min Scan# 1141

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

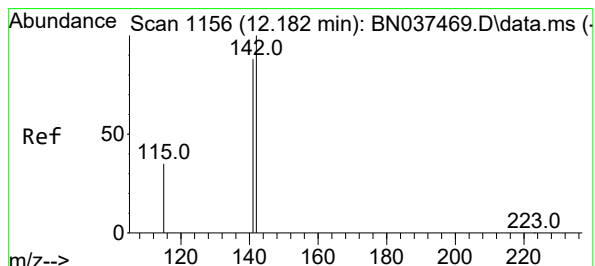
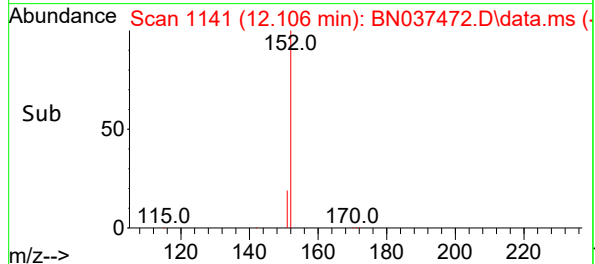
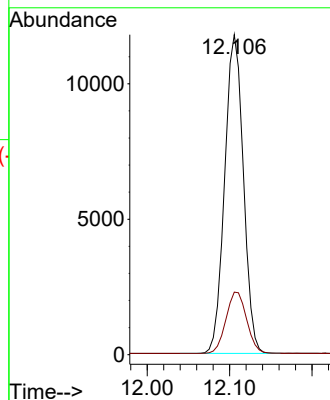
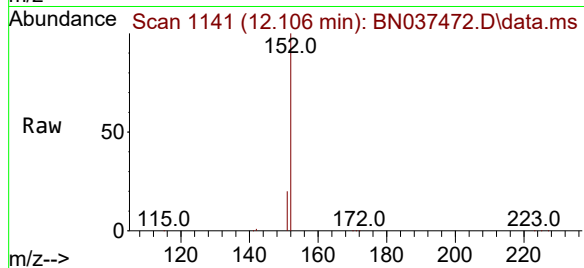
SSTDICC3.2

Tgt Ion:152 Resp: 18523

Ion Ratio Lower Upper

152 100

151 21.3 17.0 25.6



#12

2-Methylnaphthalene

Concen: 3.413 ng

RT: 12.177 min Scan# 1155

Delta R.T. -0.005 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

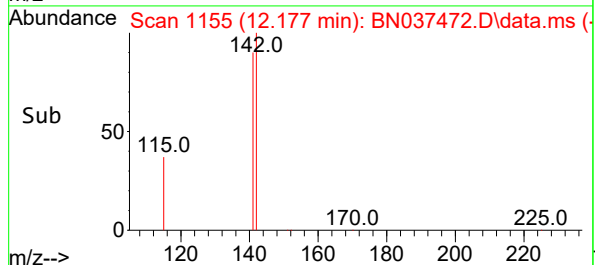
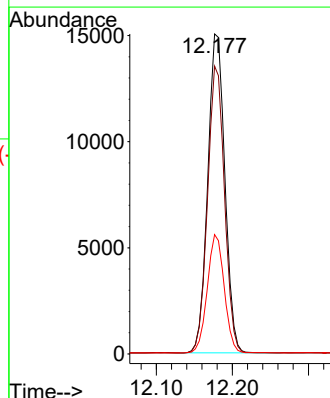
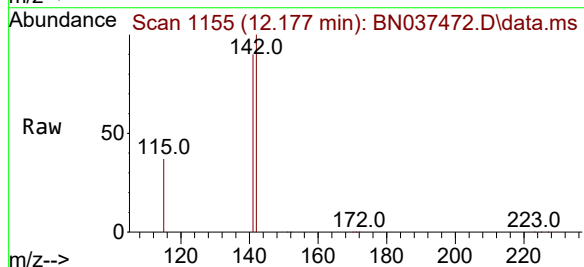
Tgt Ion:142 Resp: 23612

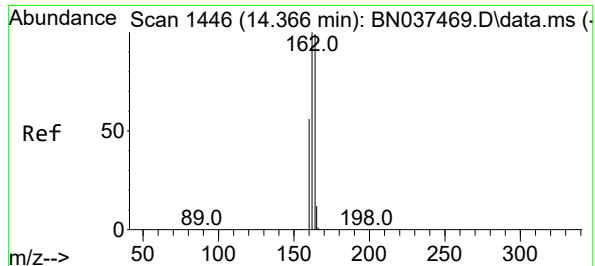
Ion Ratio Lower Upper

142 100

141 89.9 70.6 105.8

115 37.3 30.0 45.0

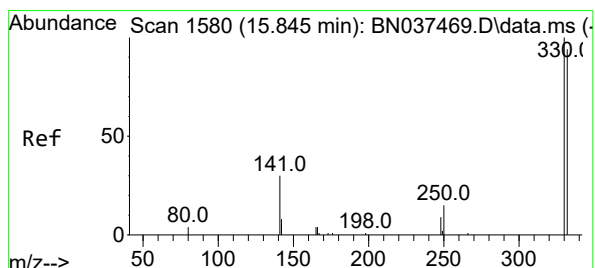
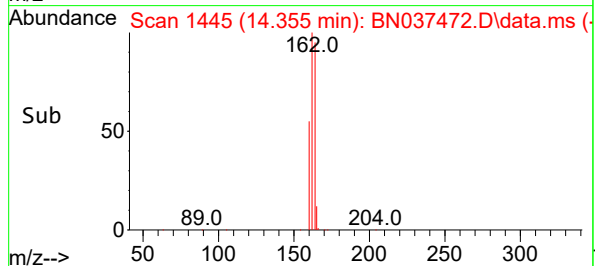
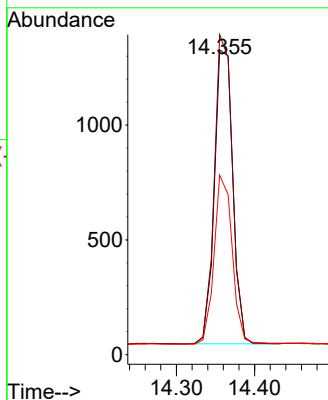
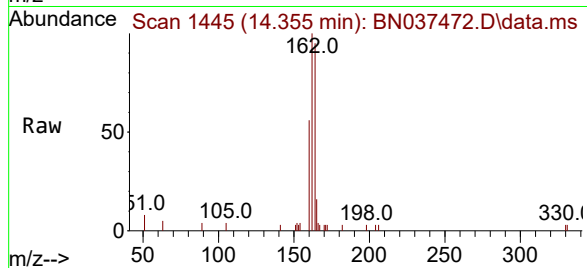




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1446
Delta R.T. -0.011 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

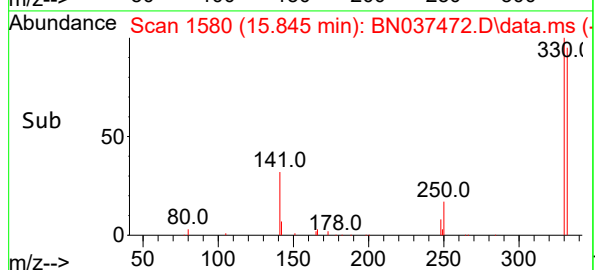
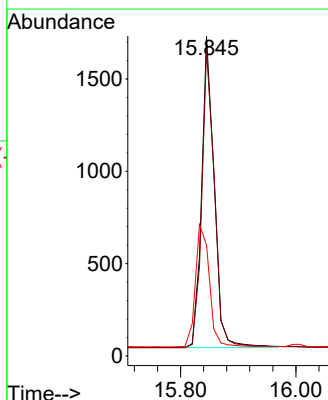
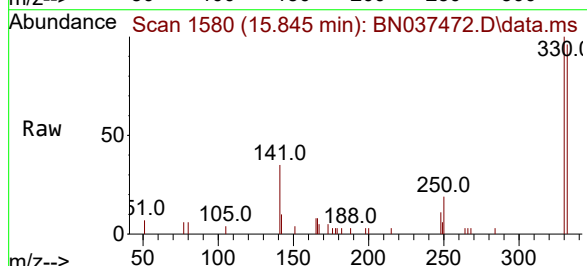
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

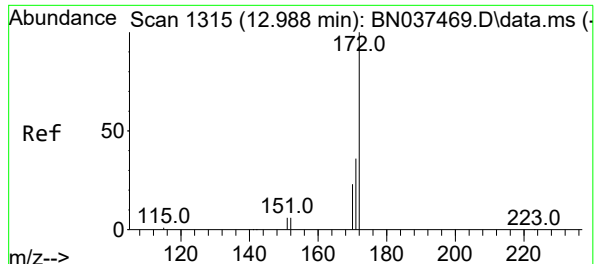
Tgt Ion:164 Resp: 2097
Ion Ratio Lower Upper
164 100
162 105.0 81.1 121.7
160 58.9 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 3.601 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

Tgt Ion:330 Resp: 2561
Ion Ratio Lower Upper
330 100
332 96.6 82.0 123.0
141 43.5 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 3.303 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

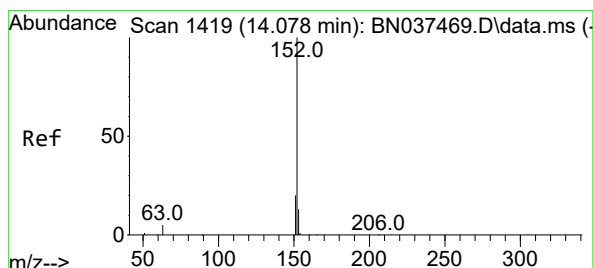
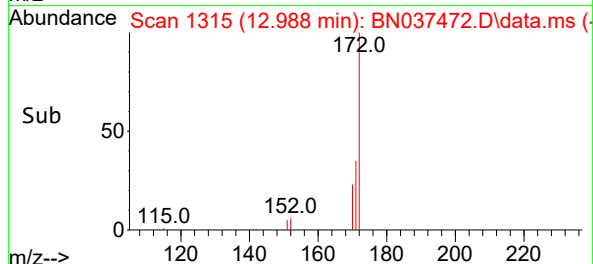
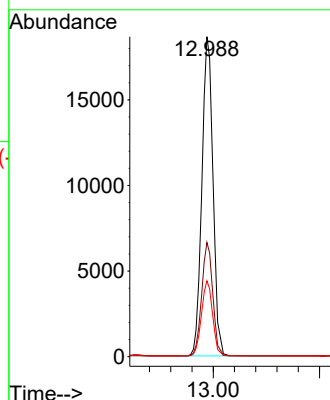
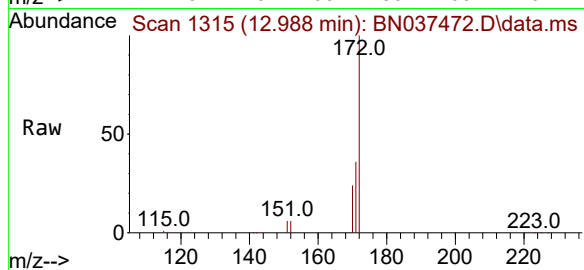
Tgt Ion:172 Resp: 39540

Ion Ratio Lower Upper

172 100

171 35.7 29.8 44.8

170 23.7 20.0 30.0



#16

Acenaphthylene

Concen: 3.309 ng

RT: 14.077 min Scan# 1419

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

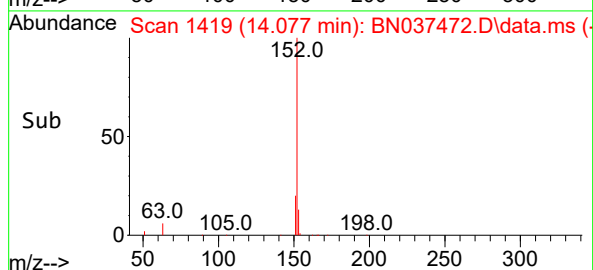
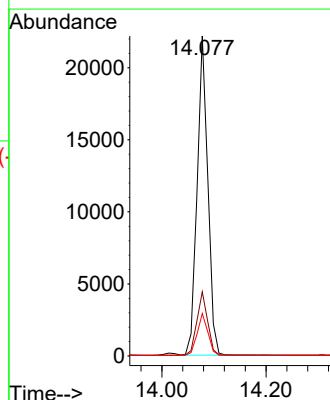
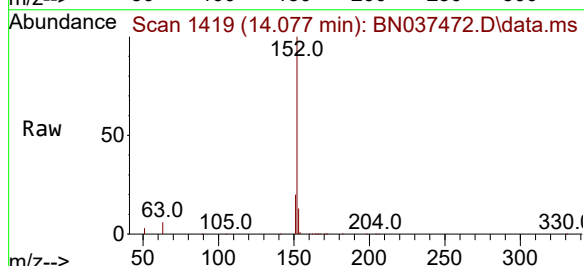
Tgt Ion:152 Resp: 31638

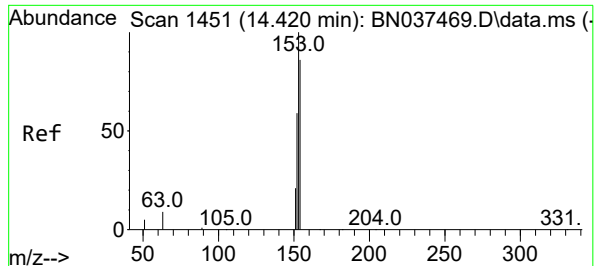
Ion Ratio Lower Upper

152 100

151 19.9 16.4 24.6

153 13.1 10.6 15.8





#17

Acenaphthene

Concen: 3.320 ng

RT: 14.419 min Scan# 1451

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

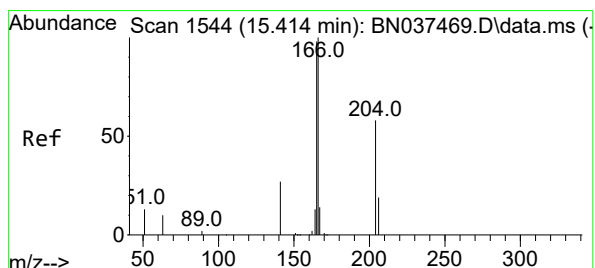
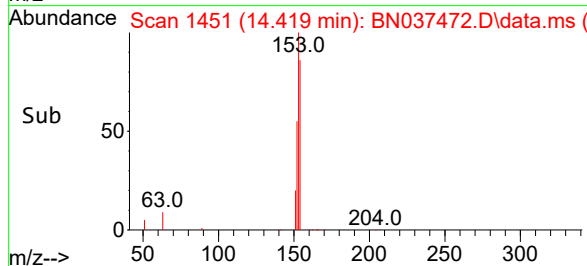
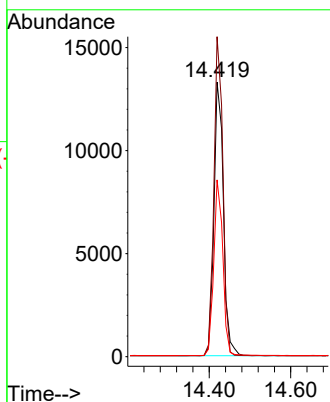
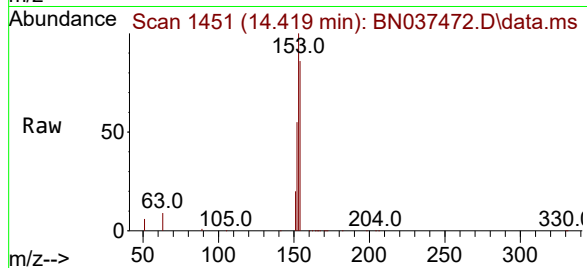
Tgt Ion:154 Resp: 21303

Ion Ratio Lower Upper

154 100

153 110.6 89.4 134.0

152 61.6 53.2 79.8



#18

Fluorene

Concen: 3.371 ng

RT: 15.414 min Scan# 1544

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

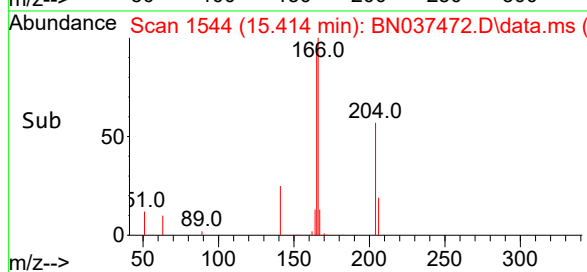
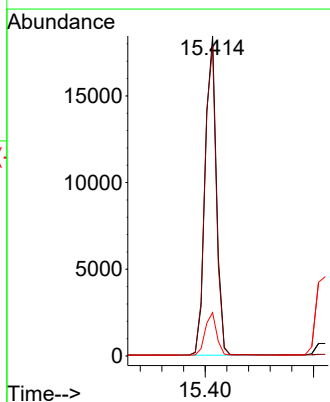
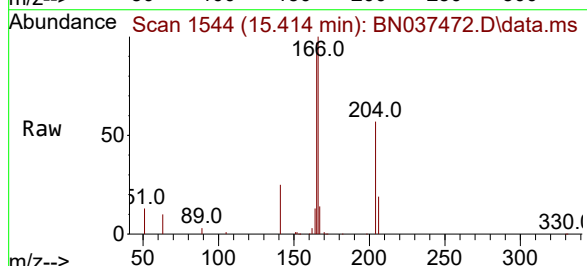
Tgt Ion:166 Resp: 27172

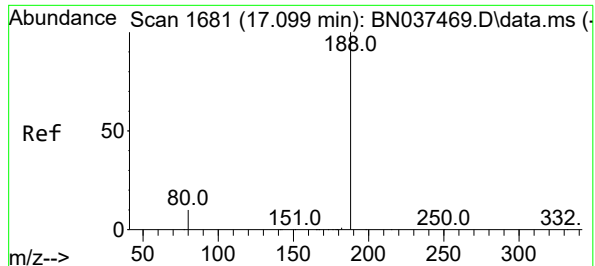
Ion Ratio Lower Upper

166 100

165 97.4 79.4 119.2

167 13.1 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

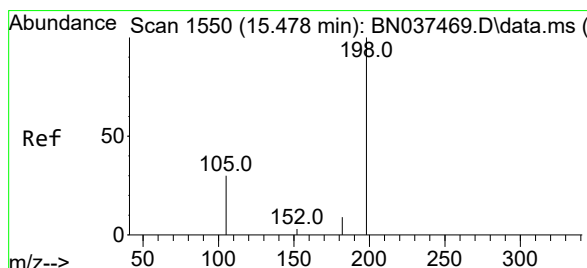
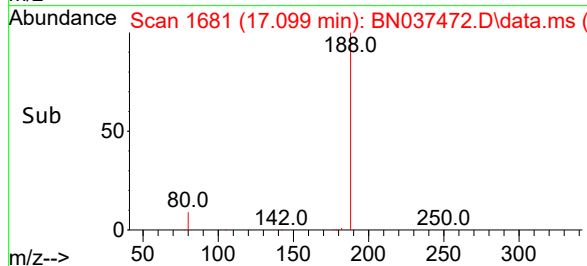
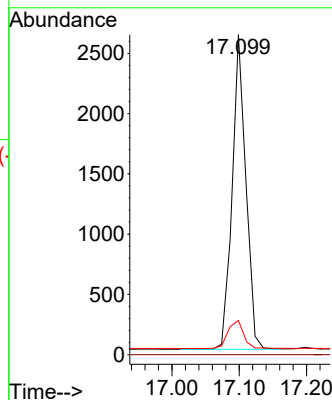
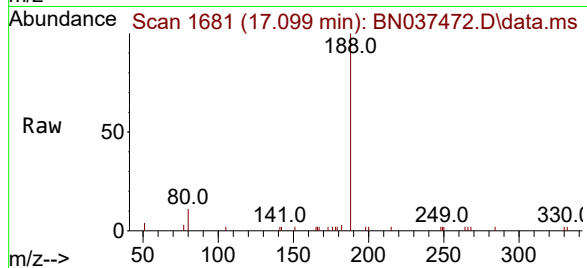
Tgt Ion:188 Resp: 3689

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.7 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 4.053 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

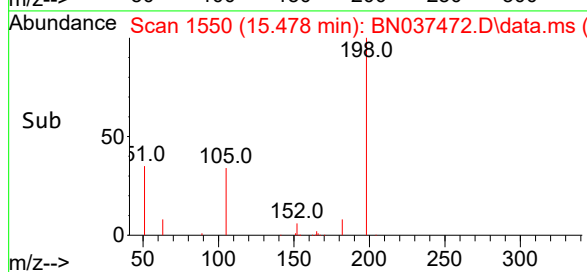
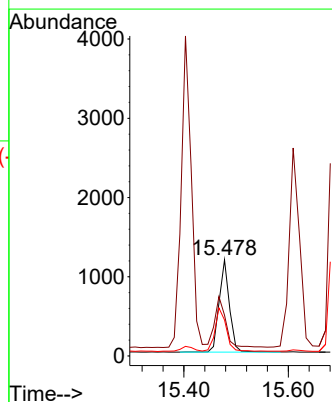
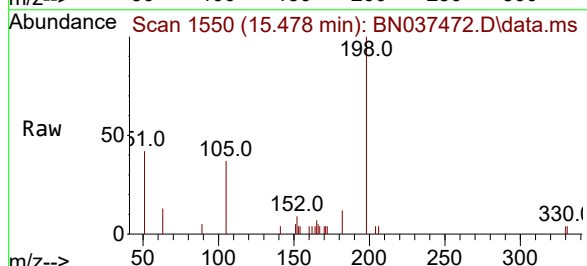
Tgt Ion:198 Resp: 1680

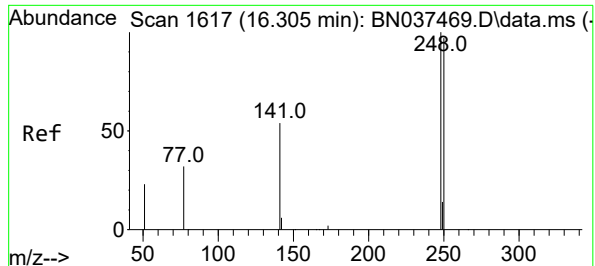
Ion Ratio Lower Upper

198 100

51 42.4 86.0 129.0#

105 37.5 53.0 79.4#

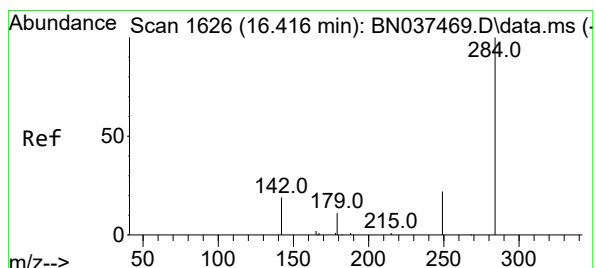
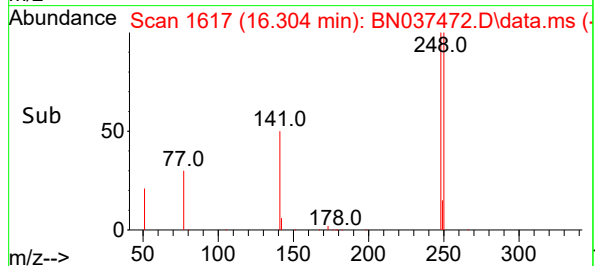
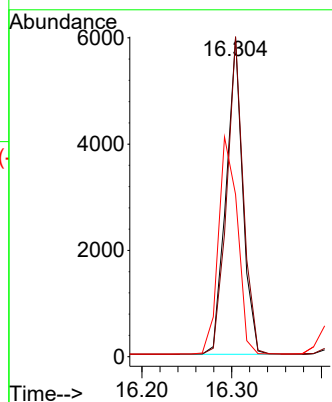
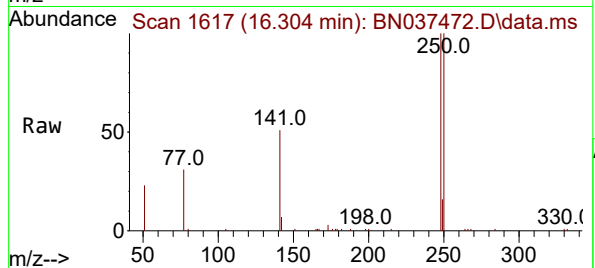




#21
4-Bromophenyl-phenylether
Concen: 3.339 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

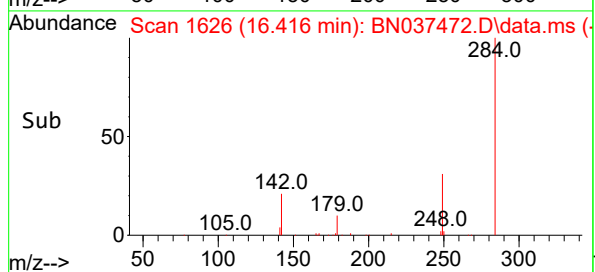
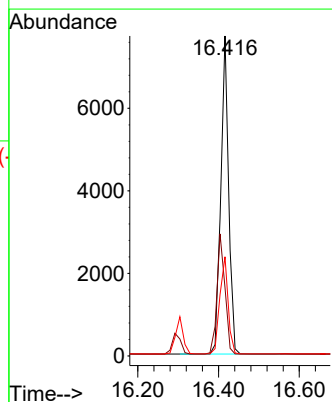
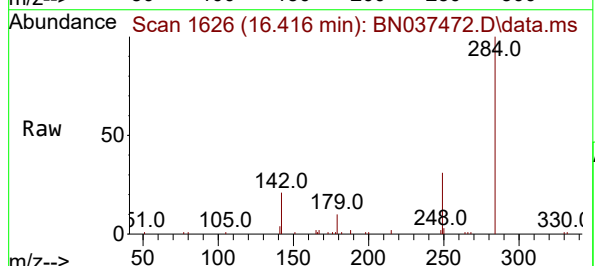
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

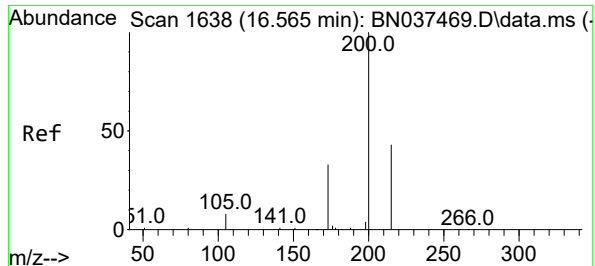
Tgt Ion:248 Resp: 7684
Ion Ratio Lower Upper
248 100
250 100.3 77.8 116.6
141 50.8 45.9 68.9



#22
Hexachlorobenzene
Concen: 3.258 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

Tgt Ion:284 Resp: 10345
Ion Ratio Lower Upper
284 100
142 38.7 31.3 46.9
249 32.5 26.6 40.0





#23

Atrazine

Concen: 3.955 ng

RT: 16.565 min Scan# 1638

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

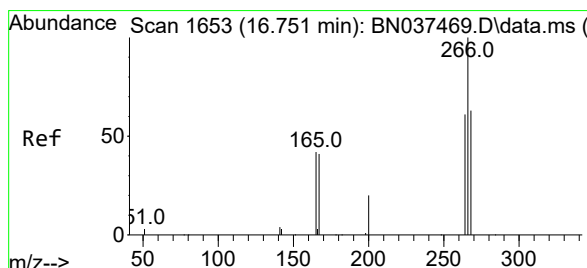
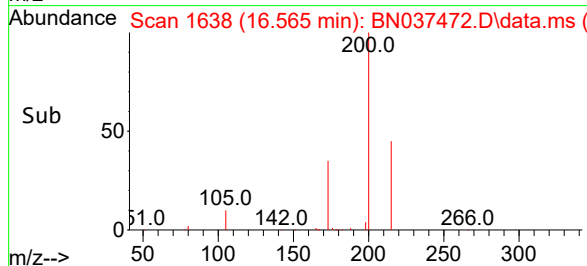
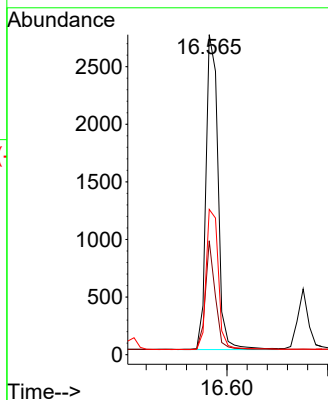
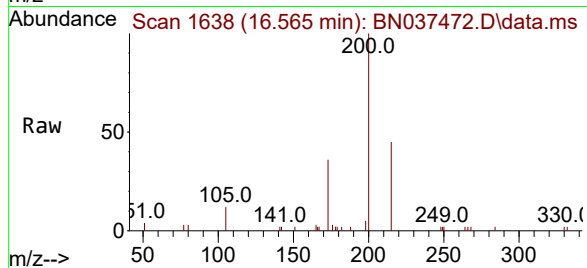
Tgt Ion:200 Resp: 4528

Ion Ratio Lower Upper

200 100

173 35.6 34.3 51.5

215 45.4 41.6 62.4



#24

Pentachlorophenol

Concen: 3.532 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

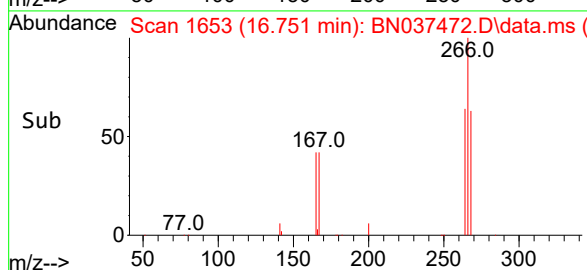
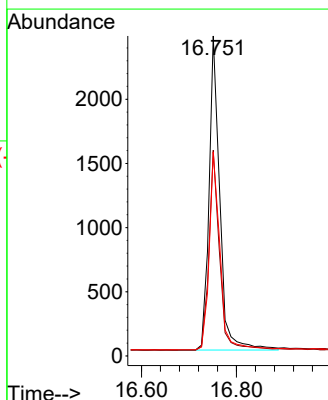
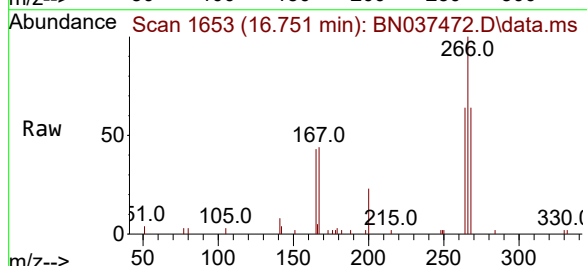
Tgt Ion:266 Resp: 3862

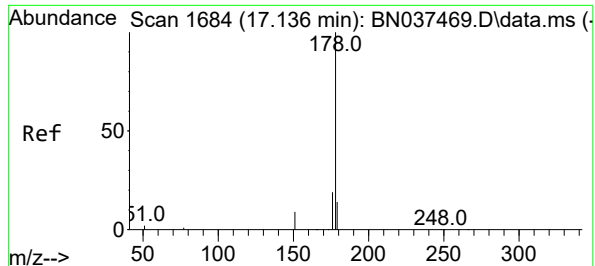
Ion Ratio Lower Upper

266 100

264 63.1 47.5 71.3

268 63.5 50.6 76.0

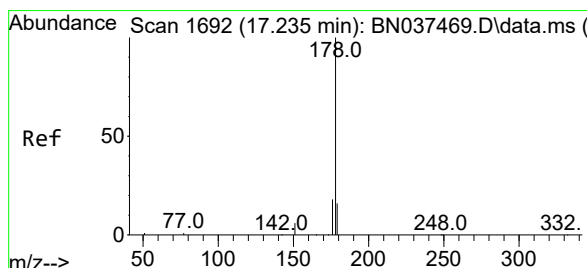
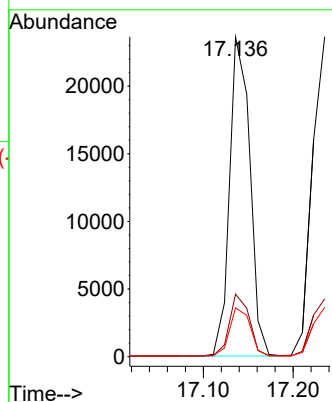
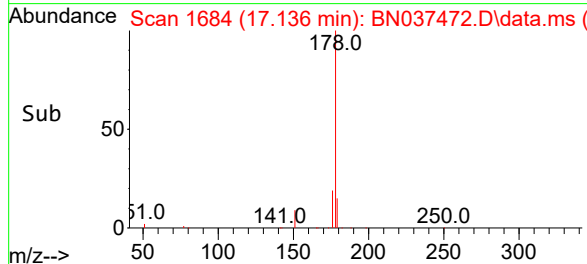
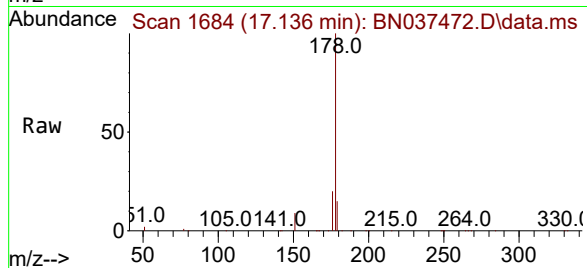




#25
Phenanthrene
Concen: 3.299 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

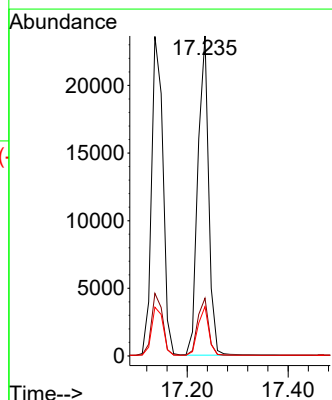
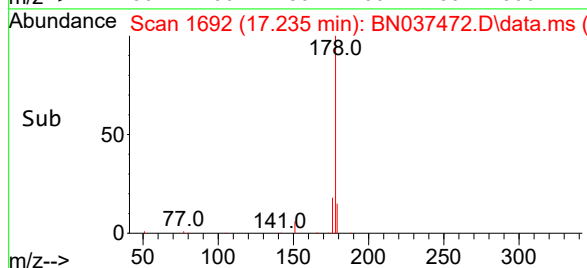
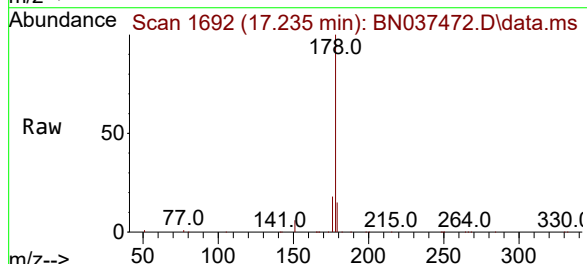
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

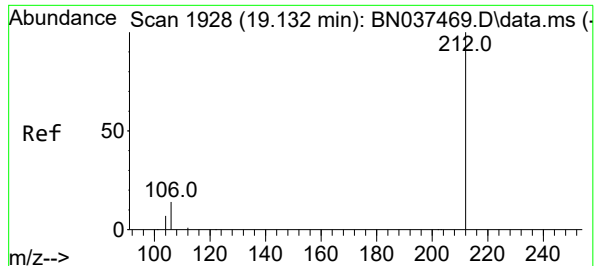
Tgt Ion:178 Resp: 37061
Ion Ratio Lower Upper
178 100
176 19.0 15.1 22.7
179 15.3 12.2 18.2



#26
Anthracene
Concen: 3.450 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.000 min
Lab File: BN037472.D
Acq: 11 Jul 2025 14:12

Tgt Ion:178 Resp: 34968
Ion Ratio Lower Upper
178 100
176 18.2 14.9 22.3
179 15.2 12.3 18.5





#27

Fluoranthene-d10

Concen: 3.328 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

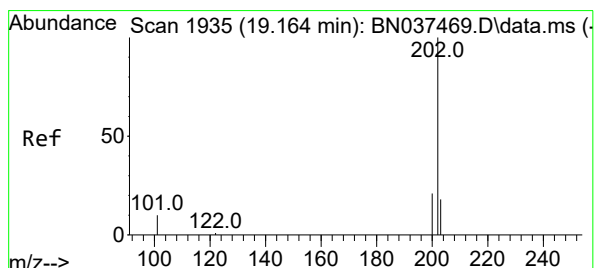
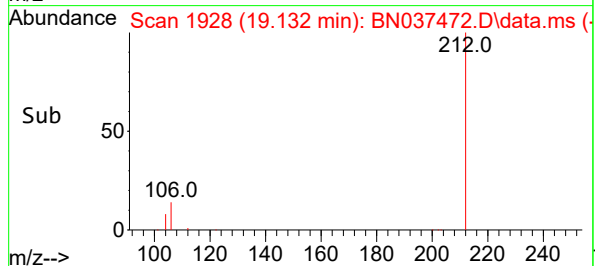
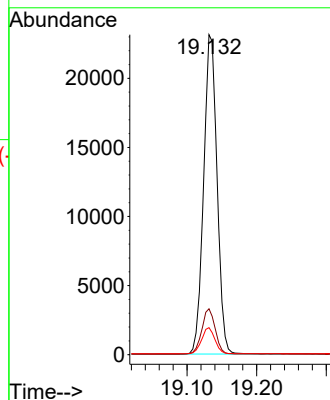
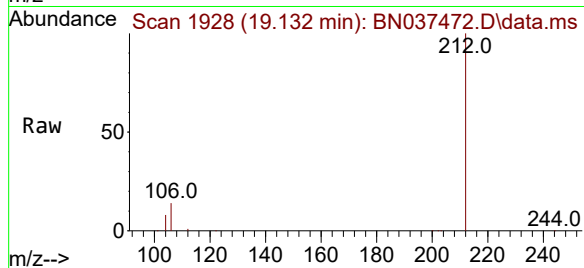
Tgt Ion:212 Resp: 30970

Ion Ratio Lower Upper

212 100

106 14.1 11.7 17.5

104 8.1 6.6 10.0



#28

Fluoranthene

Concen: 3.485 ng

RT: 19.164 min Scan# 1935

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

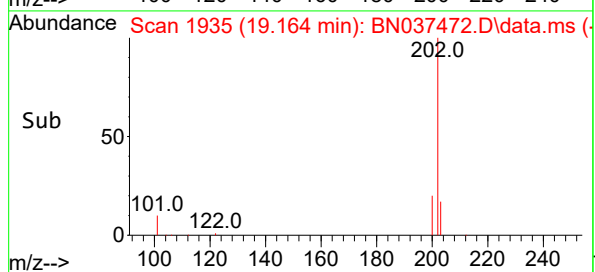
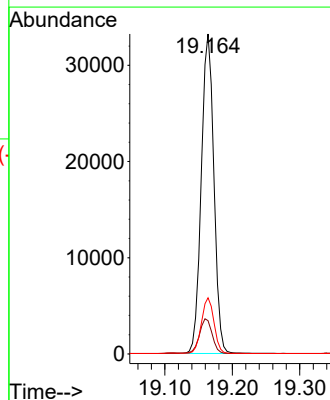
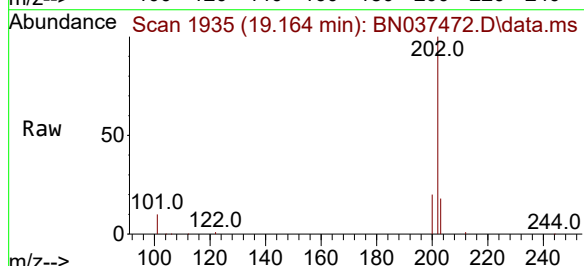
Tgt Ion:202 Resp: 42951

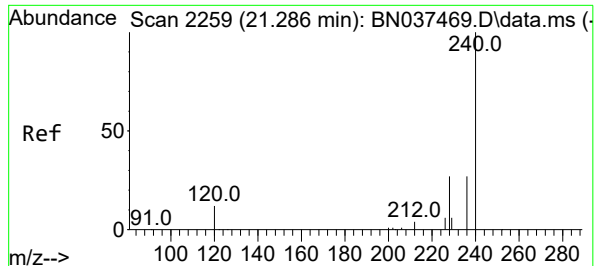
Ion Ratio Lower Upper

202 100

101 11.2 9.2 13.8

203 17.3 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

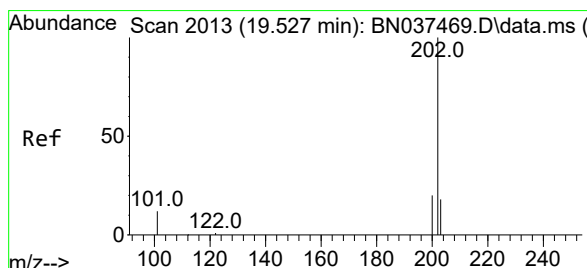
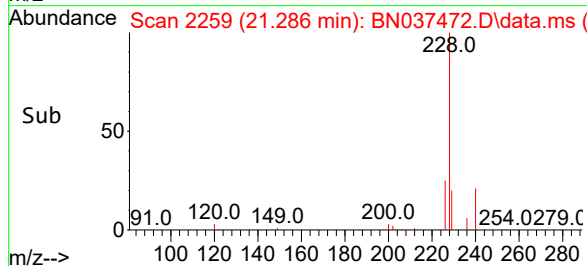
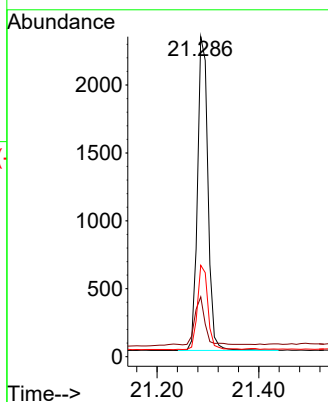
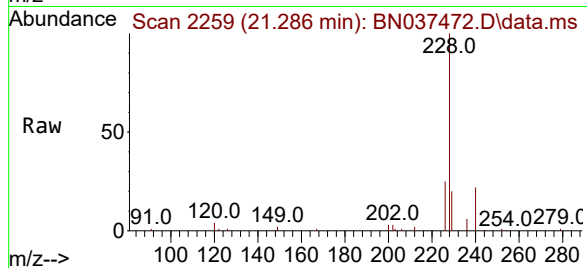
Tgt Ion:240 Resp: 3278

Ion Ratio Lower Upper

240 100

120 18.7 12.4 18.6#

236 28.6 22.9 34.3



#30

Pyrene

Concen: 3.173 ng

RT: 19.526 min Scan# 2013

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

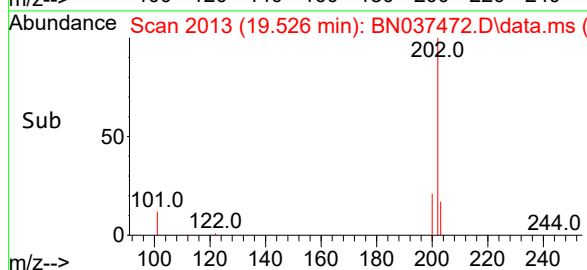
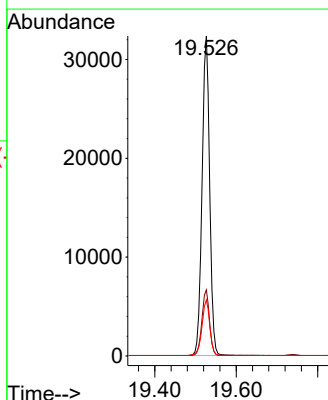
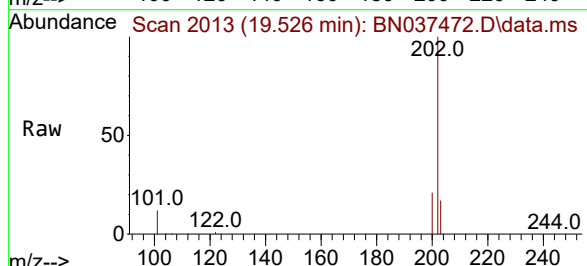
Tgt Ion:202 Resp: 41820

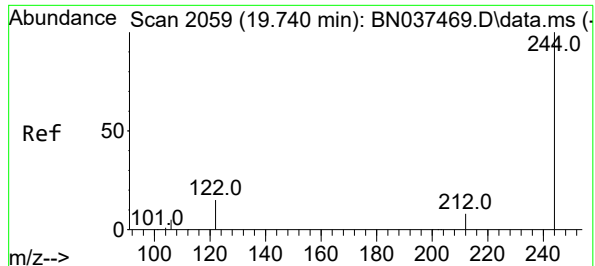
Ion Ratio Lower Upper

202 100

200 20.5 16.4 24.6

203 17.8 14.3 21.5





#31

Terphenyl-d14

Concen: 3.197 ng

RT: 19.740 min Scan# 2059

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

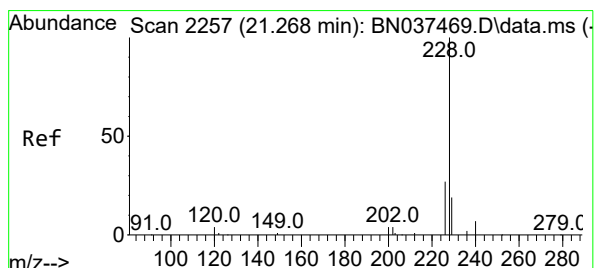
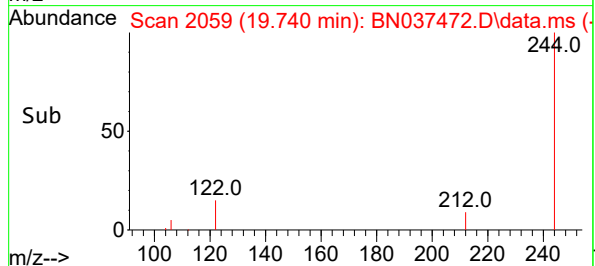
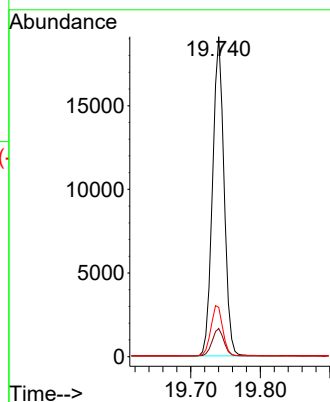
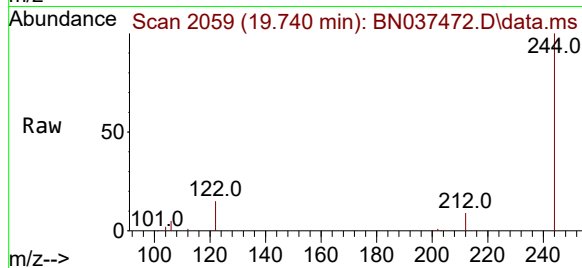
Tgt Ion:244 Resp: 21864

Ion Ratio Lower Upper

244 100

212 8.8 8.7 13.1

122 15.4 14.1 21.1



#32

Benzo(a)anthracene

Concen: 3.374 ng

RT: 21.277 min Scan# 2258

Delta R.T. 0.009 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

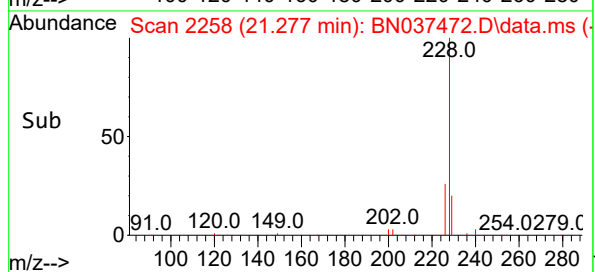
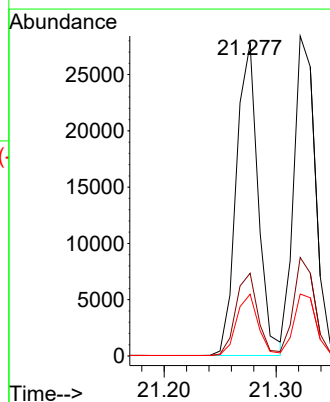
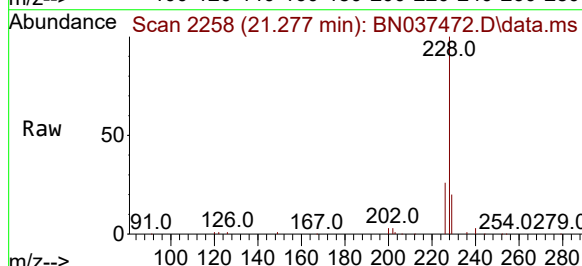
Tgt Ion:228 Resp: 37454

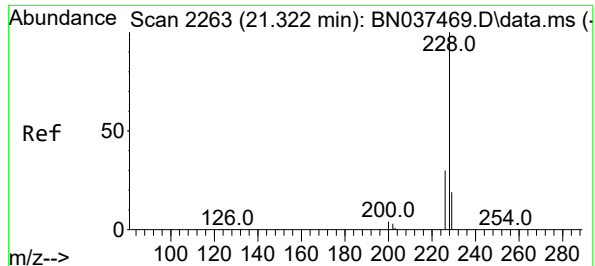
Ion Ratio Lower Upper

228 100

226 26.5 22.7 34.1

229 19.8 16.6 24.8





#33

Chrysene

Concen: 3.164 ng

RT: 21.321 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

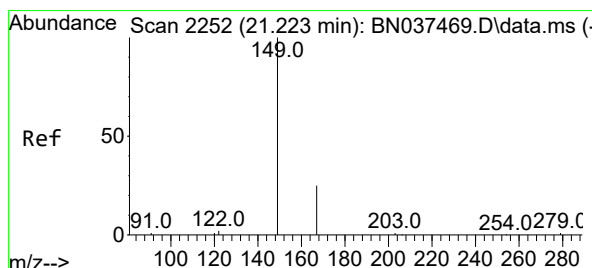
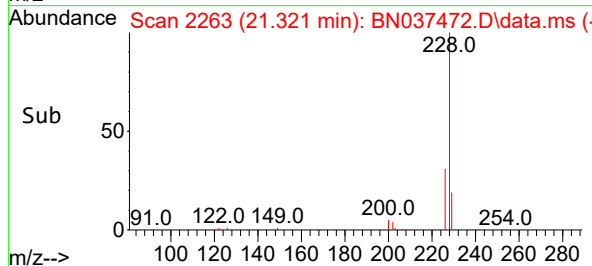
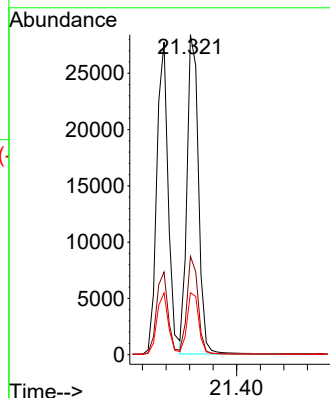
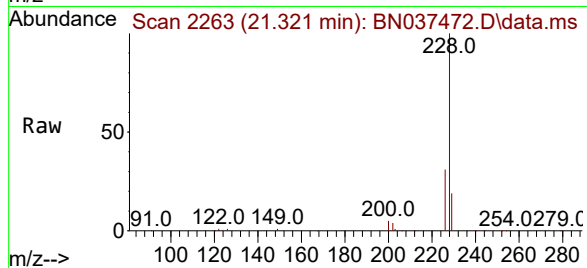
Tgt Ion:228 Resp: 38393

Ion Ratio Lower Upper

228 100

226 30.7 24.6 36.8

229 19.4 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 3.243 ng

RT: 21.232 min Scan# 2253

Delta R.T. 0.009 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

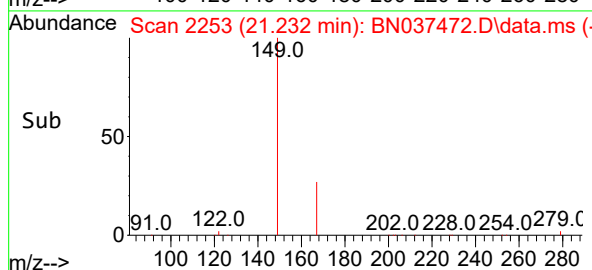
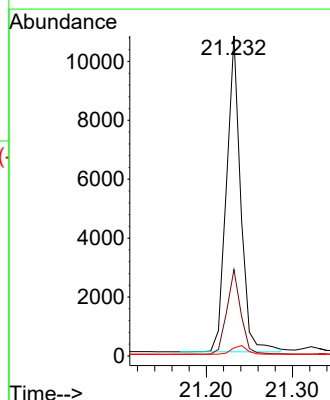
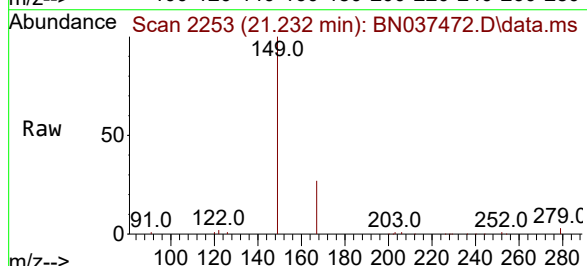
Tgt Ion:149 Resp: 12243

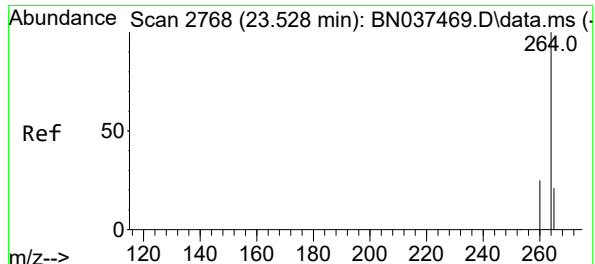
Ion Ratio Lower Upper

149 100

167 26.3 19.4 29.2

279 3.0 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.534 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN037472.D

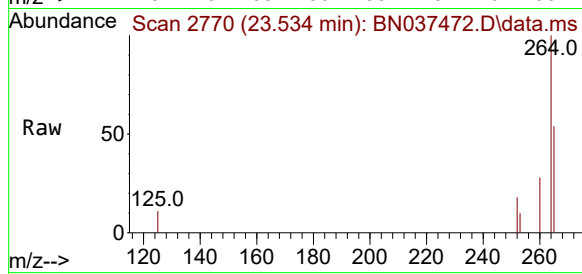
Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2



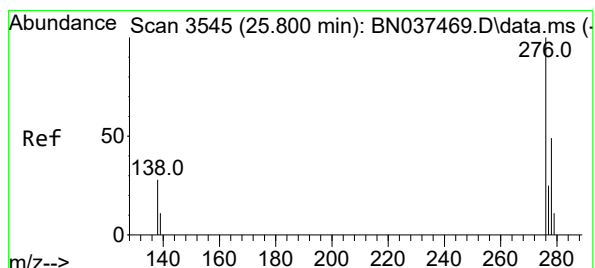
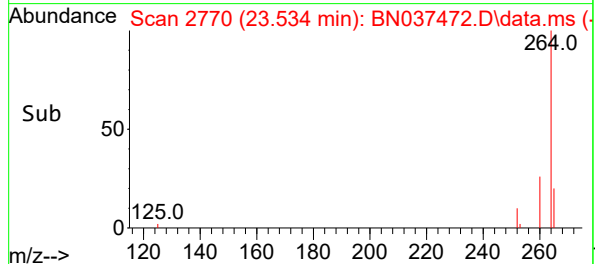
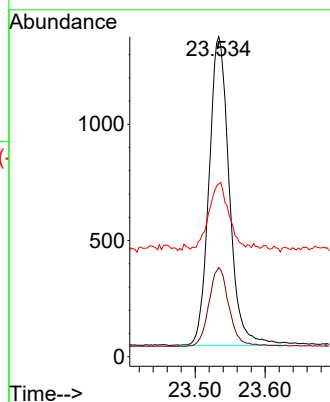
Tgt Ion:264 Resp: 2672

Ion Ratio Lower Upper

264 100

260 27.9 21.7 32.5

265 54.0 41.6 62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 3.624 ng

RT: 25.808 min Scan# 3548

Delta R.T. 0.009 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

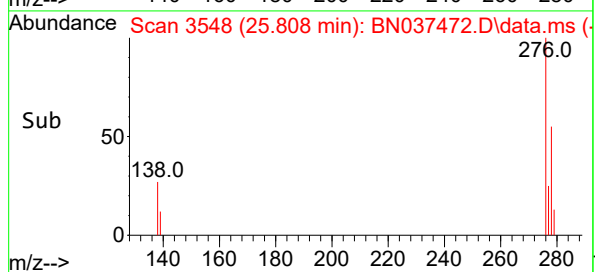
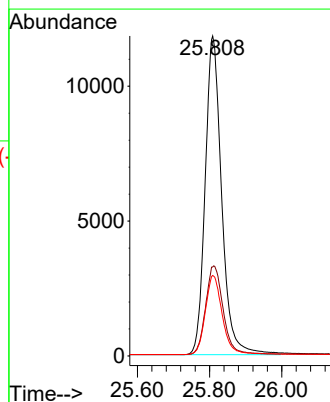
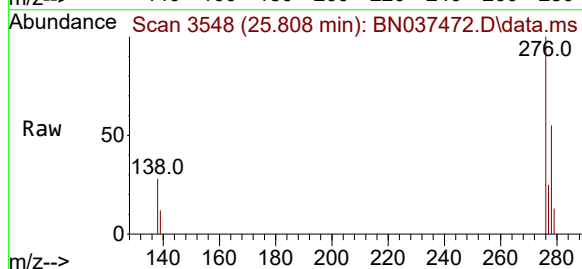
Tgt Ion:276 Resp: 37588

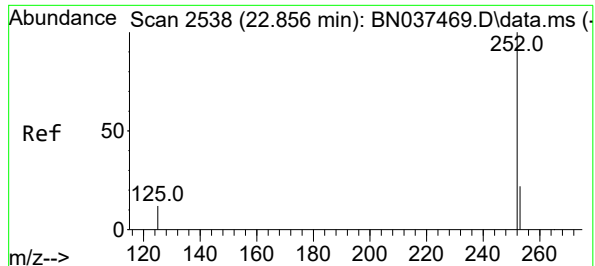
Ion Ratio Lower Upper

276 100

138 29.5 23.4 35.2

277 25.2 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 3.445 ng

RT: 22.861 min Scan# 2538

Delta R.T. 0.006 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

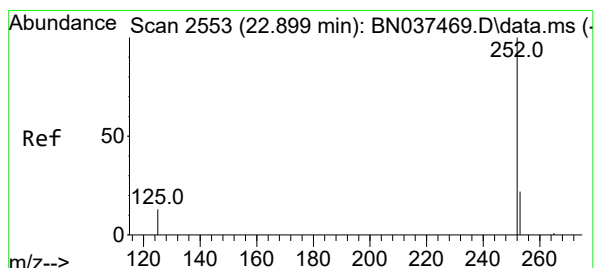
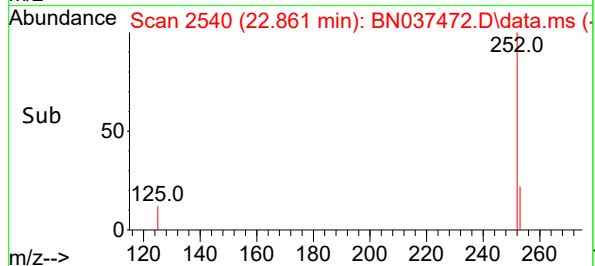
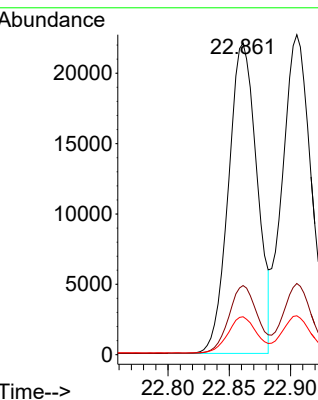
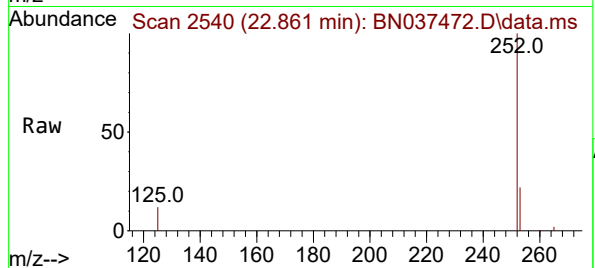
Tgt Ion:252 Resp: 35793

Ion Ratio Lower Upper

252 100

253 22.2 20.1 30.1

125 12.2 13.7 20.5#



#38

Benzo(k)fluoranthene

Concen: 3.541 ng

RT: 22.905 min Scan# 2555

Delta R.T. 0.006 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

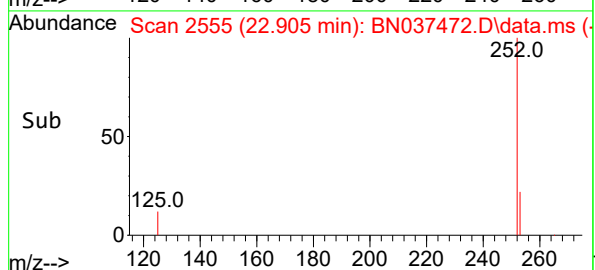
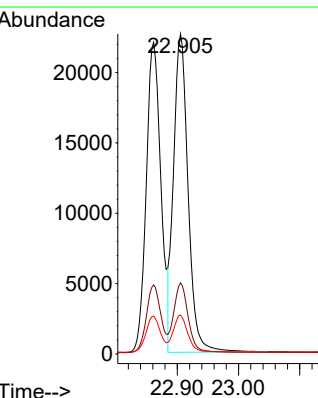
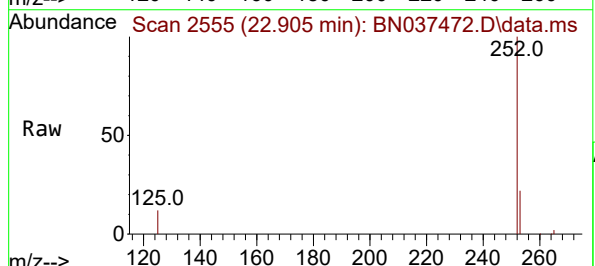
Tgt Ion:252 Resp: 37293

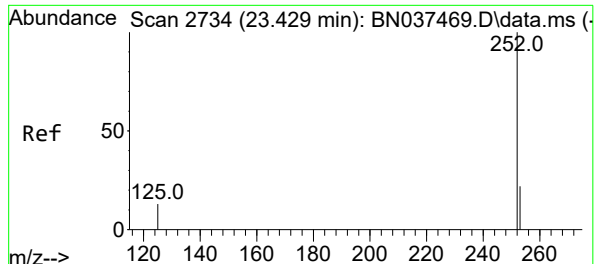
Ion Ratio Lower Upper

252 100

253 22.2 20.4 30.6

125 12.2 14.6 21.8#





#39

Benzo(a)pyrene

Concen: 3.573 ng

RT: 23.437 min Scan# 21

Delta R.T. 0.009 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

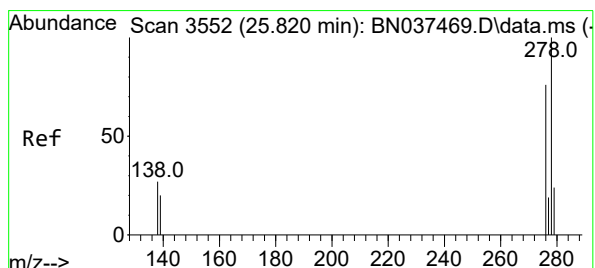
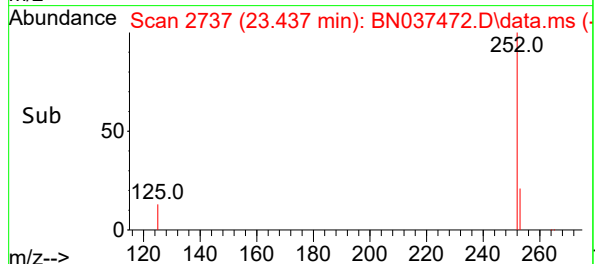
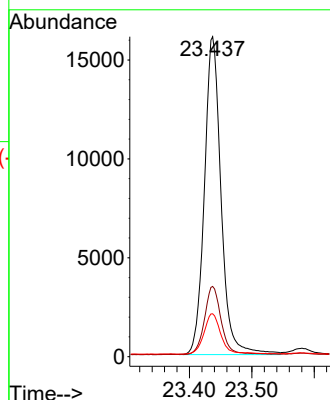
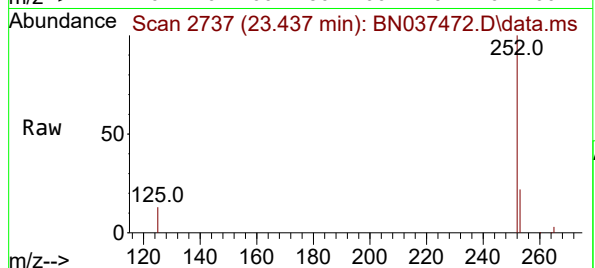
Tgt Ion:252 Resp: 29875

Ion Ratio Lower Upper

252 100

253 21.9 21.8 32.6

125 13.4 16.7 25.1#



#40

Dibenzo(a,h)anthracene

Concen: 3.685 ng

RT: 25.826 min Scan# 3554

Delta R.T. 0.006 min

Lab File: BN037472.D

Acq: 11 Jul 2025 14:12

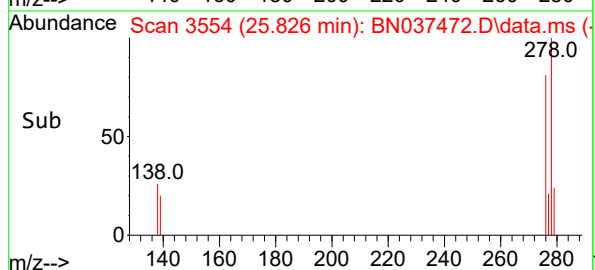
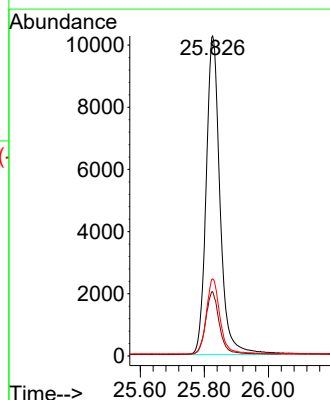
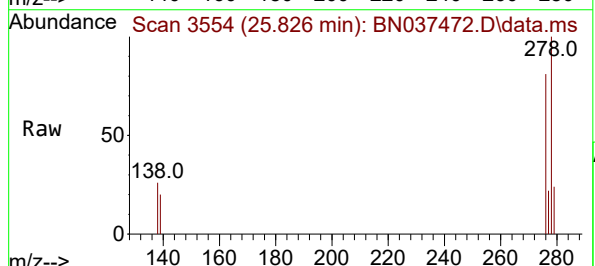
Tgt Ion:278 Resp: 30827

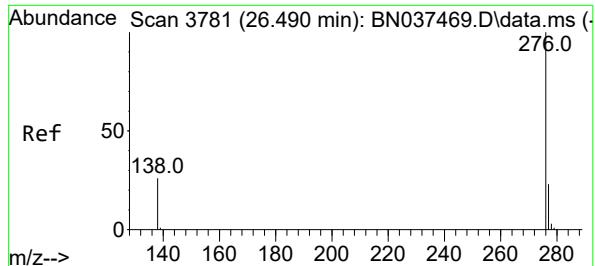
Ion Ratio Lower Upper

278 100

139 20.1 19.9 29.9

279 24.1 24.8 37.2#





#41

Benzo(g,h,i)perylene

Concen: 3.515 ng

RT: 26.495 min Scan# 31

Delta R.T. 0.006 min

Lab File: BN037472.D

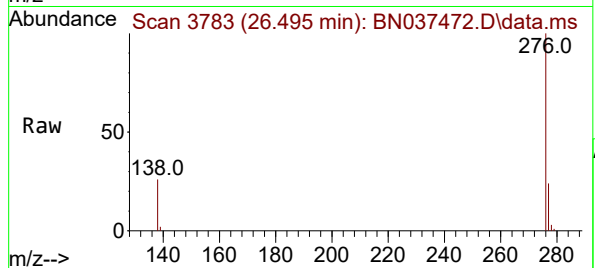
Acq: 11 Jul 2025 14:12

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2



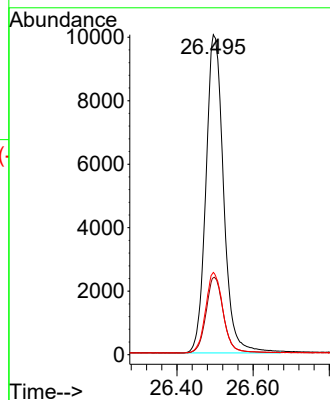
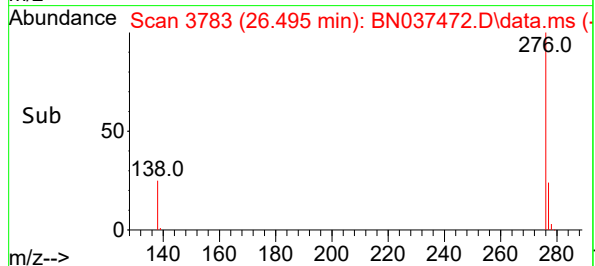
Tgt Ion:276 Resp: 32205

Ion Ratio Lower Upper

276 100

277 24.0 21.7 32.5

138 25.7 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037473.D
 Acq On : 11 Jul 2025 14:49
 Operator : RC/JU
 Sample : SSTDICC5.0
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC5.0

Quant Time: Jul 11 15:27:55 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:17:19 2025
 Response via : Initial Calibration

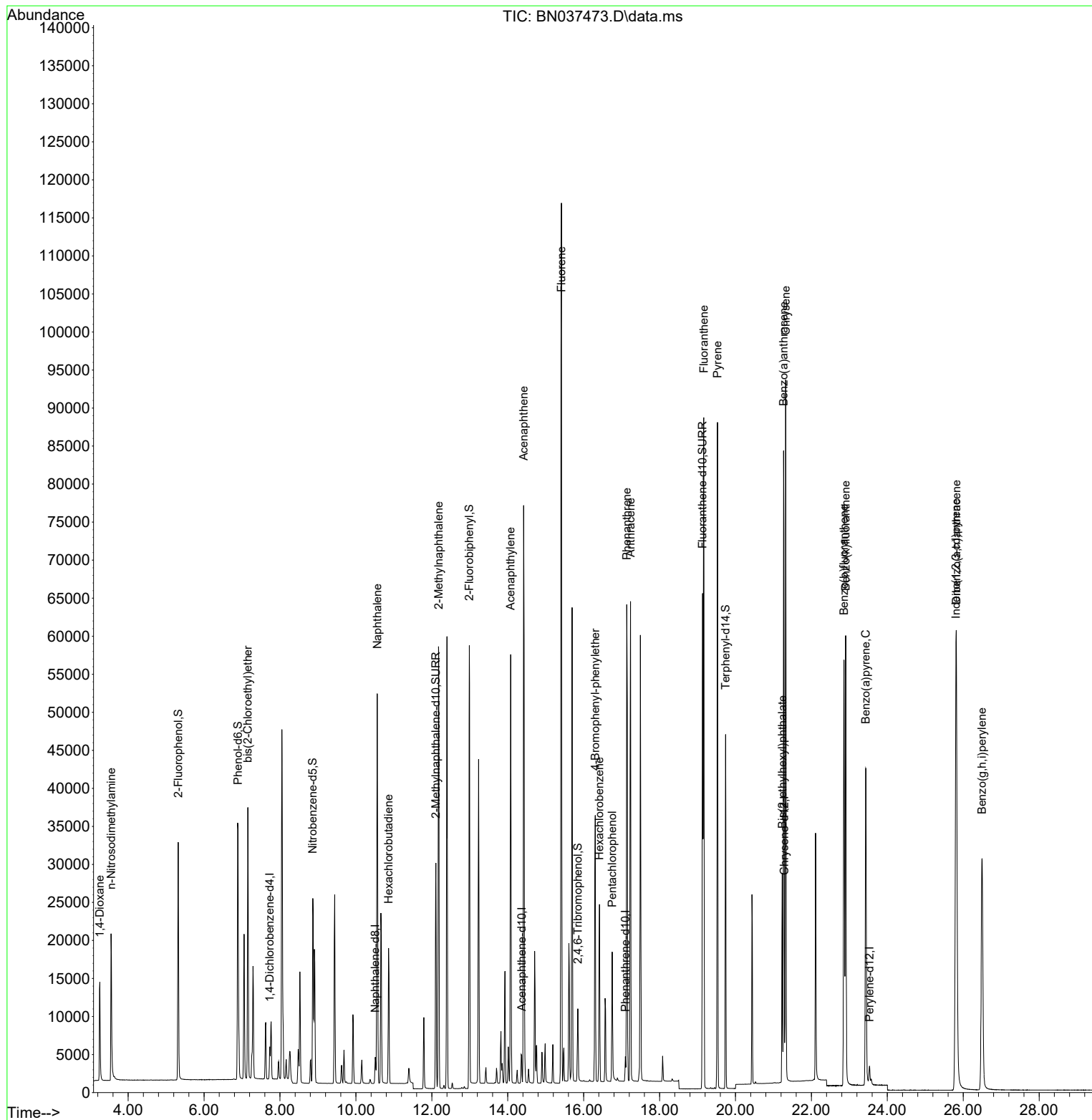
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1975	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4428	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	2274	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	3996	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3738	0.400	ng	0.00
35) Perylene-d12	23.531	264	2986	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	24359	5.299	ng	0.00
5) Phenol-d6	6.894	99	29973	5.183	ng	0.00
8) Nitrobenzene-d5	8.865	82	18423	5.732	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	38139	6.336	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	5183	6.721	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	71026	5.472	ng	0.00
27) Fluoranthene-d10	19.132	212	66747	6.621	ng	0.00
31) Terphenyl-d14	19.740	244	42184	5.409	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	8504	4.585	ng	96
3) n-Nitrosodimethylamine	3.550	42	12758	5.145	ng	95
6) bis(2-Chloroethyl)ether	7.154	93	24098	4.980	ng	100
9) Naphthalene	10.562	128	63085	5.302	ng	96
10) Hexachlorobutadiene	10.861	225	14520	5.080	ng	# 99
12) 2-Methylnaphthalene	12.182	142	41281	5.540	ng	99
16) Acenaphthylene	14.078	152	56500	5.449	ng	99
17) Acenaphthene	14.420	154	38089	5.475	ng	96
18) Fluorene	15.414	166	48979	5.603	ng	98
21) 4-Bromophenyl-phenylether	16.305	248	13953	5.597	ng	95
22) Hexachlorobenzene	16.416	284	17904	5.205	ng	99
24) Pentachlorophenol	16.751	266	7775	6.564	ng	98
25) Phenanthrene	17.136	178	67213	5.524	ng	100
26) Anthracene	17.235	178	64260	5.852	ng	99
28) Fluoranthene	19.164	202	78520	5.881	ng	100
30) Pyrene	19.527	202	77002	5.124	ng	100
32) Benzo(a)anthracene	21.268	228	69627	5.500	ng	98
33) Chrysene	21.322	228	72035	5.206	ng	98
34) Bis(2-ethylhexyl)phtha...	21.232	149	25087	5.828	ng	97
36) Indeno(1,2,3-cd)pyrene	25.806	276	73642	6.354	ng	99
37) Benzo(b)fluoranthene	22.859	252	69826	6.013	ng	# 91
38) Benzo(k)fluoranthene	22.902	252	70616	5.999	ng	# 90
39) Benzo(a)pyrene	23.432	252	57809	6.186	ng	# 87
40) Dibenzo(a,h)anthracene	25.820	278	60364	6.458	ng	# 88
41) Benzo(g,h,i)perylene	26.493	276	62808	6.134	ng	92

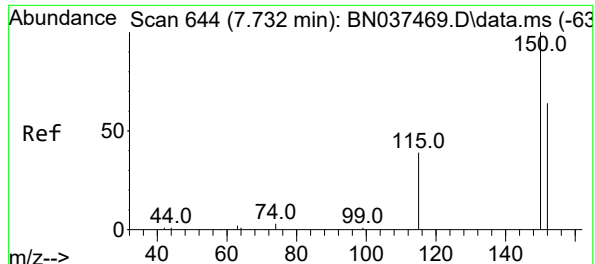
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037473.D
Acq On : 11 Jul 2025 14:49
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Jul 11 15:27:55 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:17:19 2025
Response via : Initial Calibration

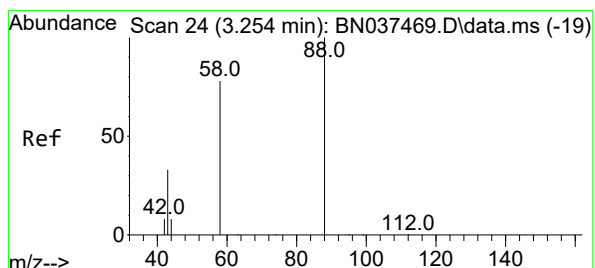
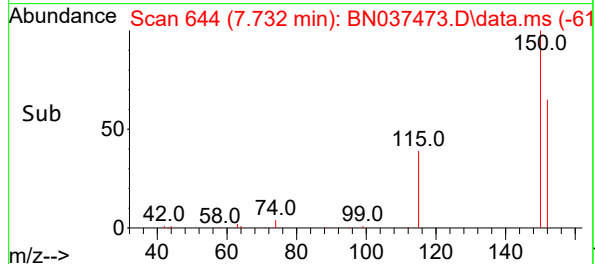
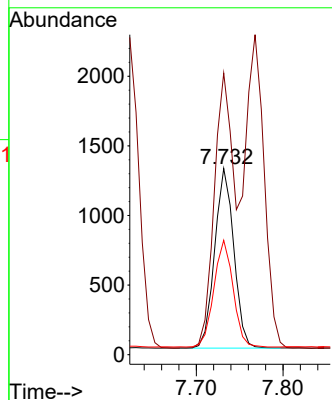
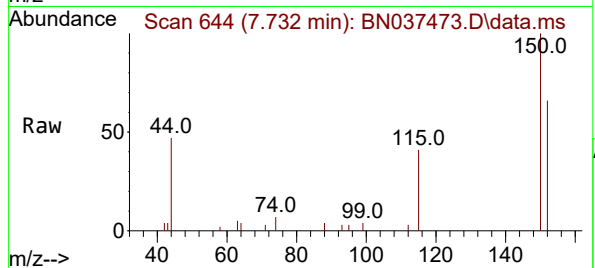




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

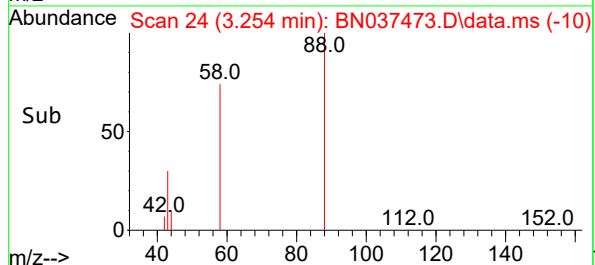
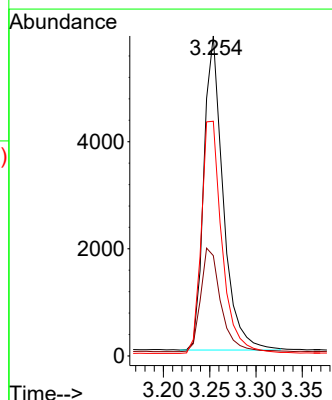
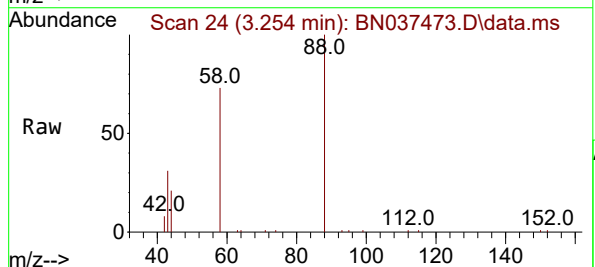
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

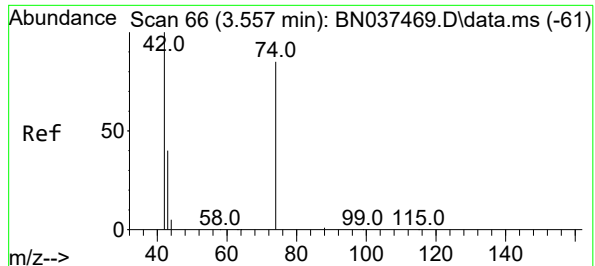
Tgt Ion:152 Resp: 1975
Ion Ratio Lower Upper
152 100
150 151.2 122.5 183.7
115 61.4 49.9 74.9



#2
1,4-Dioxane
Concen: 4.585 ng
RT: 3.254 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion: 88 Resp: 8504
Ion Ratio Lower Upper
88 100
43 34.4 30.7 46.1
58 79.0 65.0 97.4

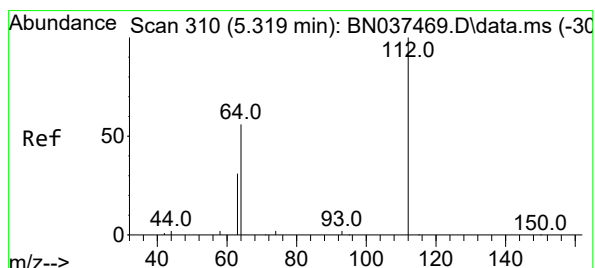
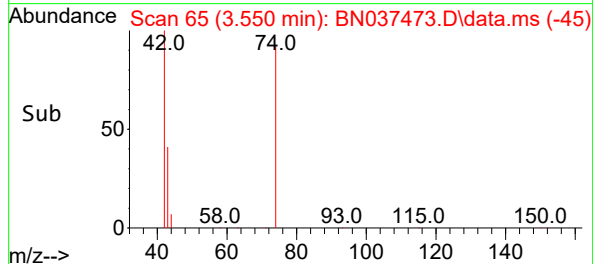
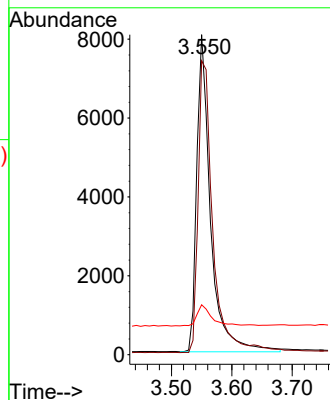
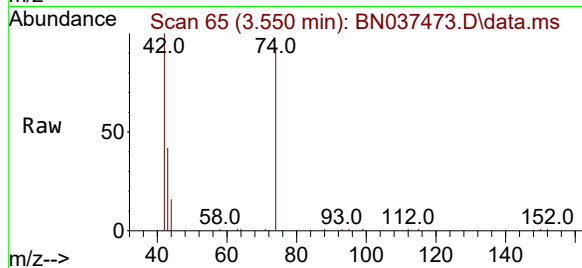




#3
n-Nitrosodimethylamine
Concen: 5.145 ng
RT: 3.550 min Scan# 61
Delta R.T. -0.007 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

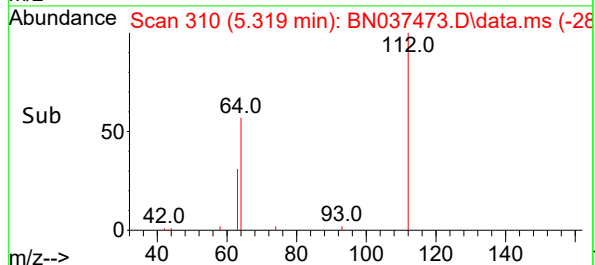
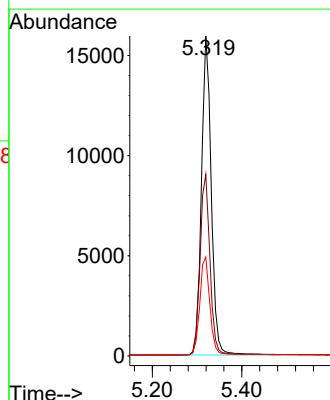
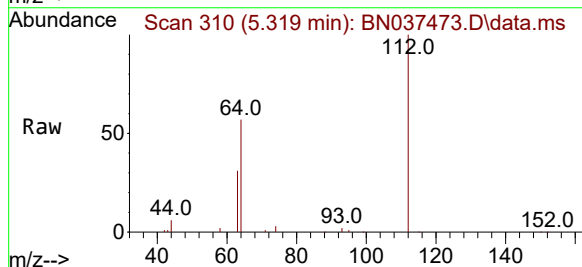
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

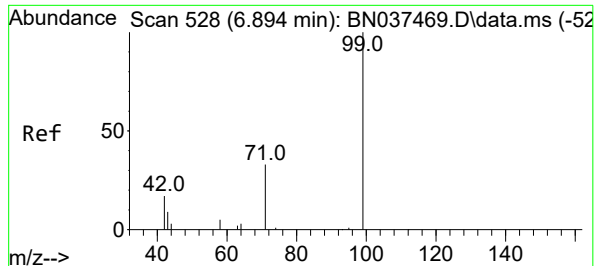
Tgt Ion: 42 Resp: 12758
Ion Ratio Lower Upper
42 100
74 98.2 74.9 112.3
44 7.3 7.2 10.8



#4
2-Fluorophenol
Concen: 5.299 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion: 112 Resp: 24359
Ion Ratio Lower Upper
112 100
64 57.5 45.4 68.0
63 31.5 24.7 37.1

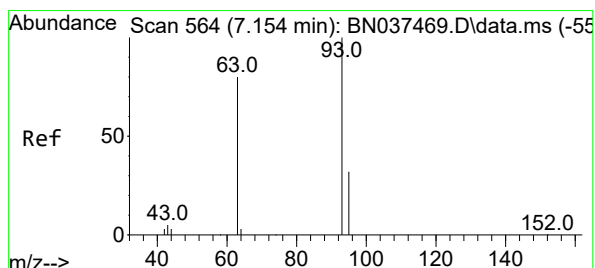
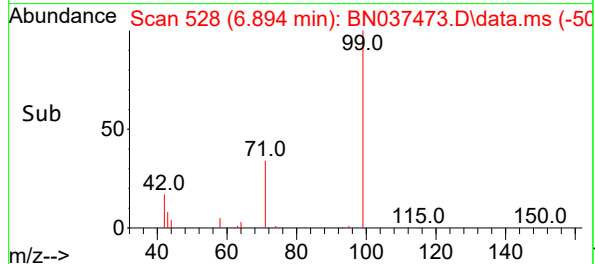
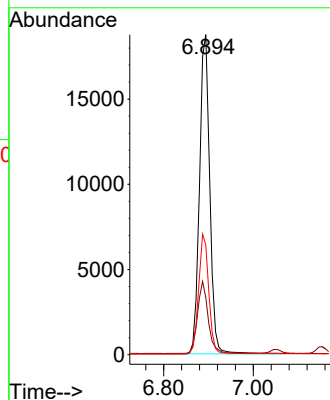
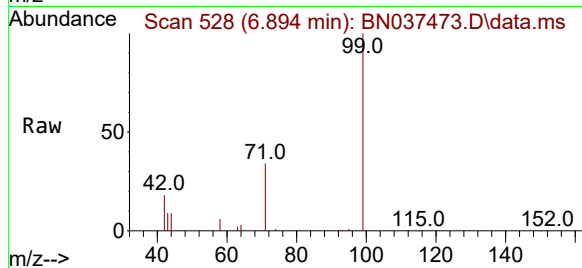




#5
Phenol-d6
Concen: 5.183 ng
RT: 6.894 min Scan# 51
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

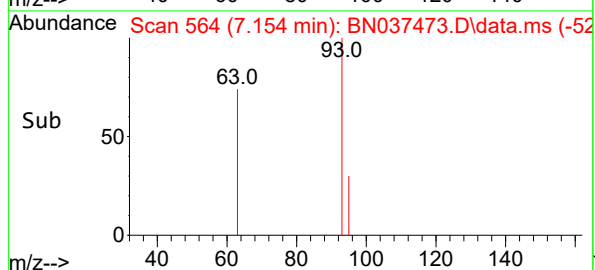
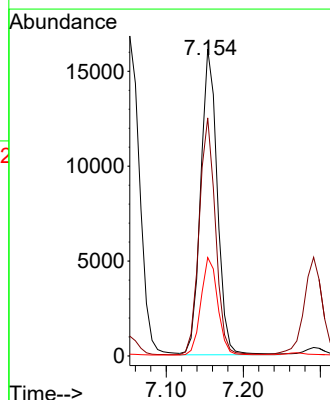
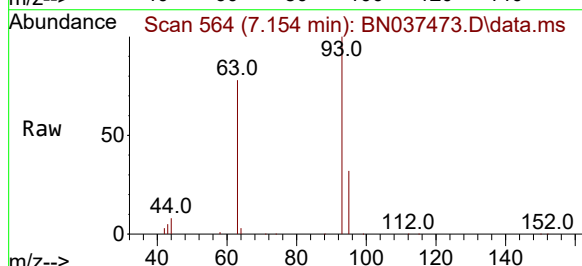
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

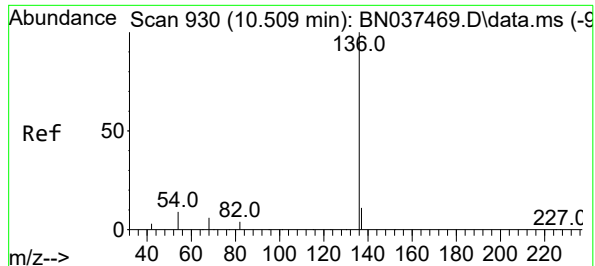
Tgt Ion	Ratio	Lower	Upper
99	100		
42	23.2	19.5	29.3
71	37.1	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 4.980 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion	Ratio	Lower	Upper
93	100		
63	75.8	60.8	91.2
95	32.1	25.6	38.4

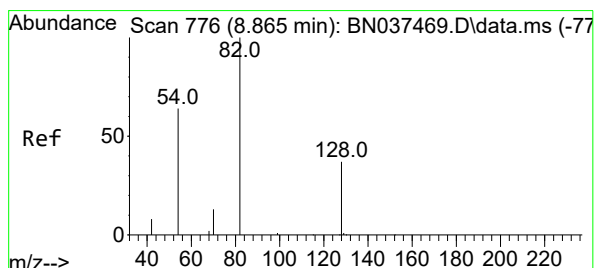
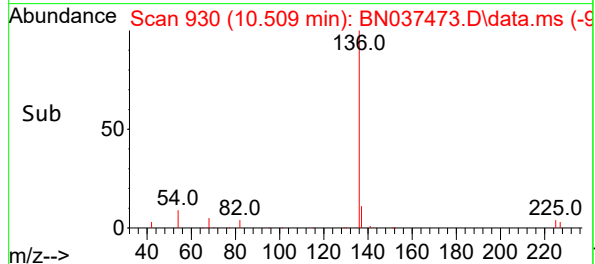
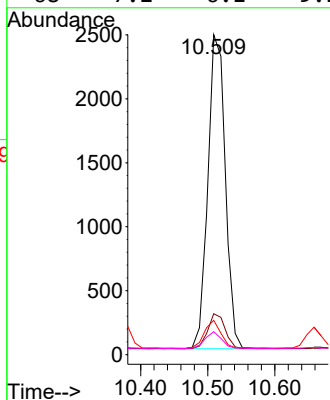
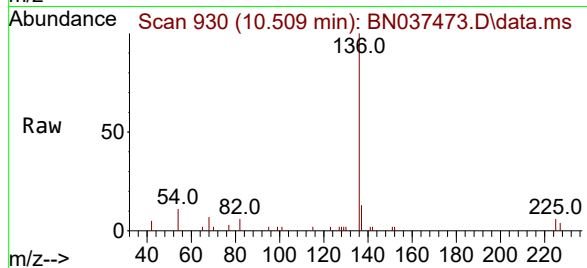




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

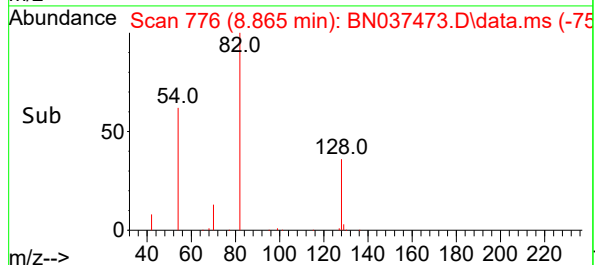
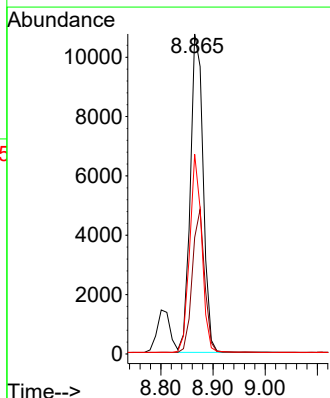
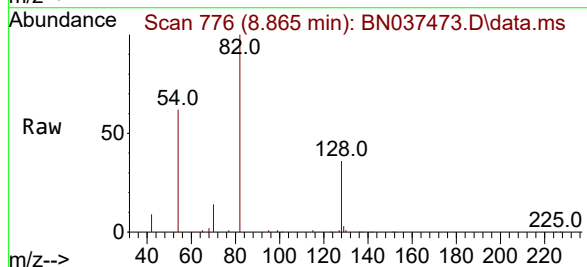
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

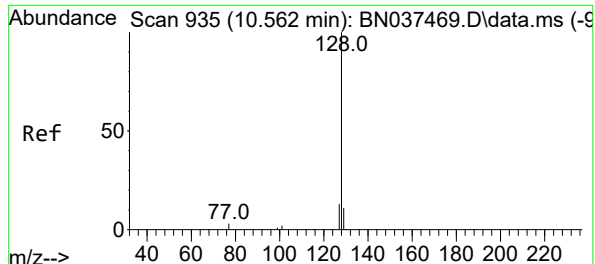
Tgt Ion:	136	Resp:	4428
Ion	Ratio	Lower	Upper
136	100		
137	12.8	10.0	15.0
54	10.8	9.0	13.6
68	7.2	6.1	9.1



#8
Nitrobenzene-d5
Concen: 5.732 ng
RT: 8.865 min Scan# 776
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion:	82	Resp:	18423
Ion	Ratio	Lower	Upper
82	100		
128	36.4	33.1	49.7
54	62.4	53.0	79.4

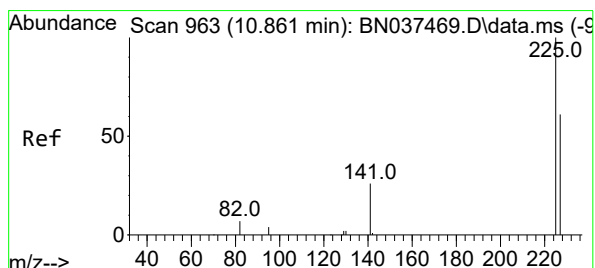
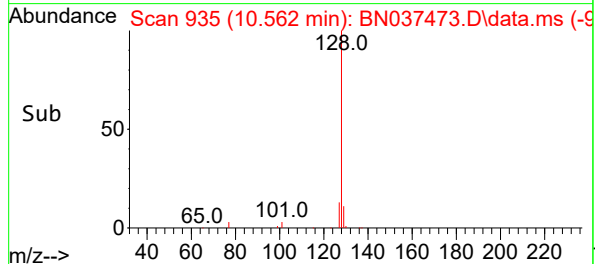
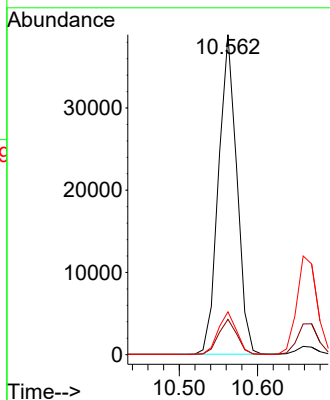
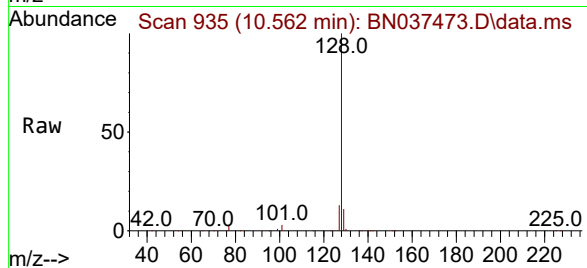




#9
Naphthalene
Concen: 5.302 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

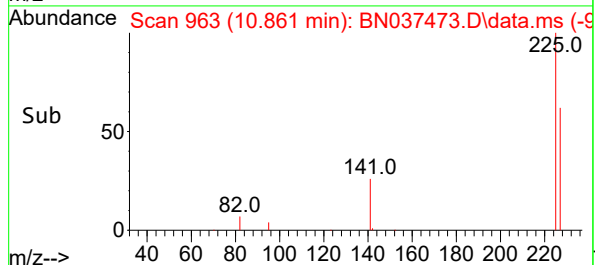
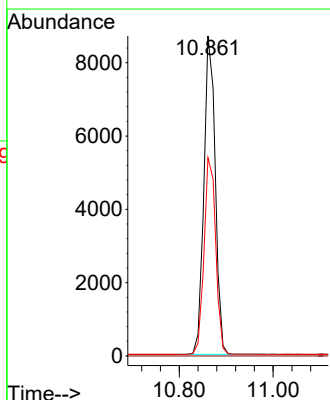
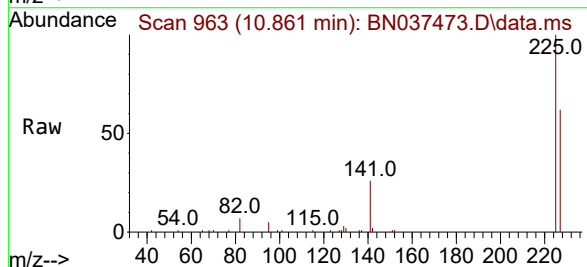
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

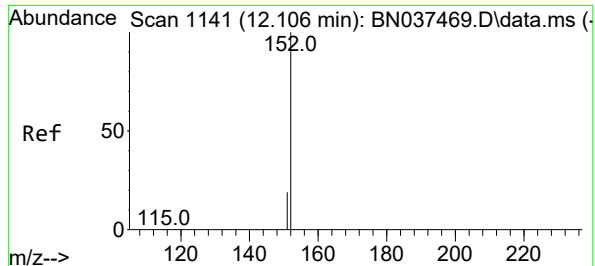
Tgt Ion:128 Resp: 63085
Ion Ratio Lower Upper
128 100
129 11.0 10.2 15.2
127 13.4 11.8 17.6



#10
Hexachlorobutadiene
Concen: 5.080 ng
RT: 10.861 min Scan# 963
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion:225 Resp: 14520
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.5 51.4 77.2

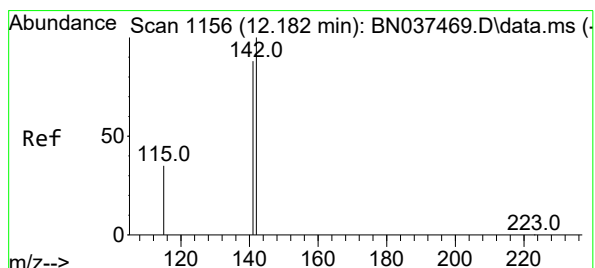
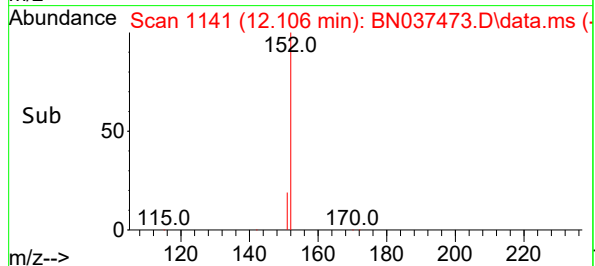
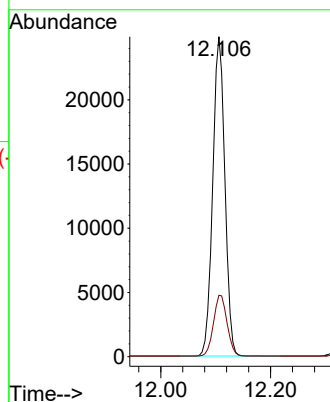
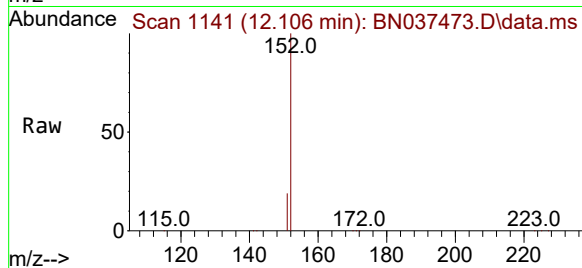




#11
2-Methylnaphthalene-d10
Concen: 6.336 ng
RT: 12.106 min Scan# 1141
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

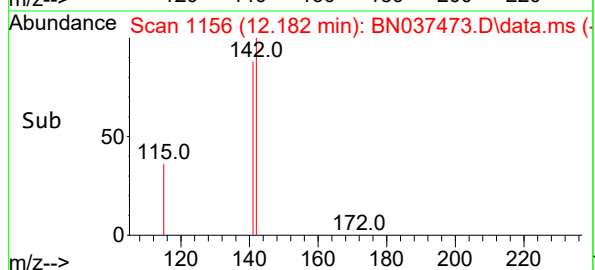
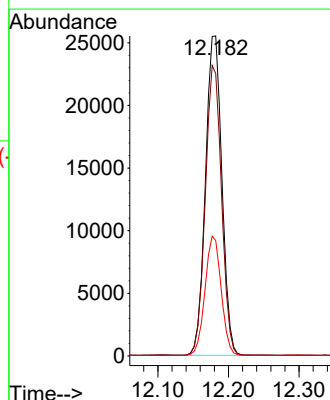
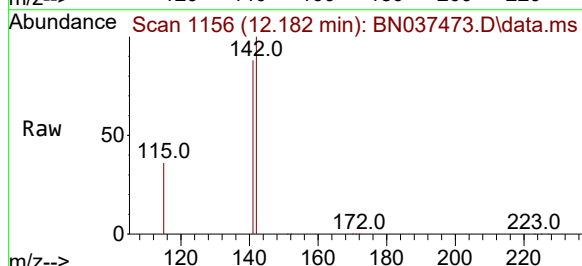
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

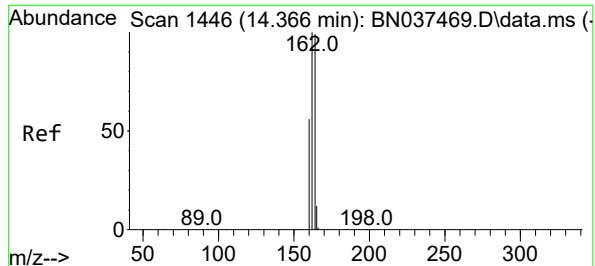
Tgt Ion:152 Resp: 38139
Ion Ratio Lower Upper
152 100
151 21.3 17.0 25.6



#12
2-Methylnaphthalene
Concen: 5.540 ng
RT: 12.182 min Scan# 1156
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion:142 Resp: 41281
Ion Ratio Lower Upper
142 100
141 88.3 70.6 105.8
115 36.1 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

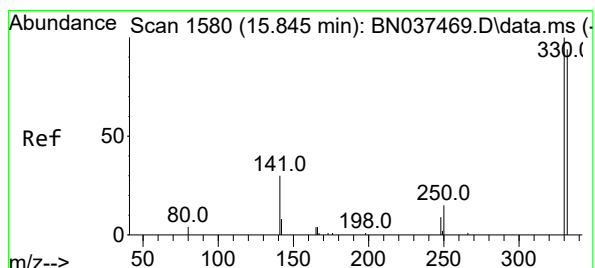
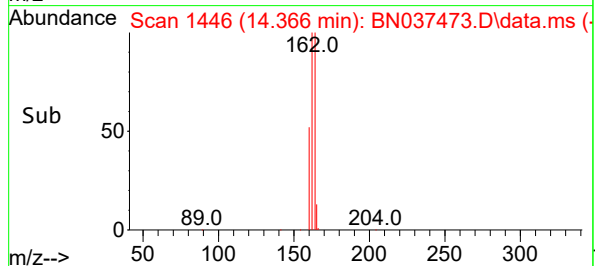
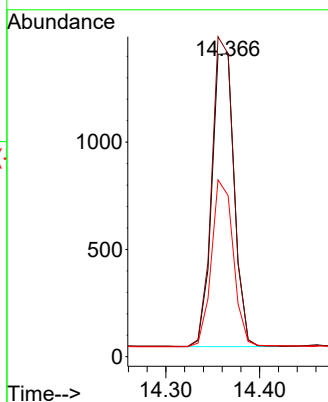
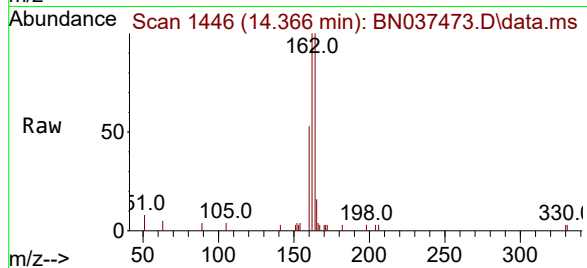
Tgt Ion:164 Resp: 2274

Ion Ratio Lower Upper

164 100

162 100.0 81.1 121.7

160 53.2 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 6.721 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

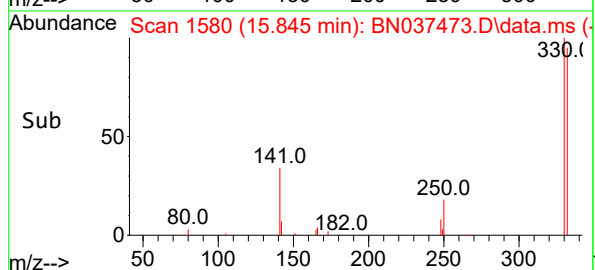
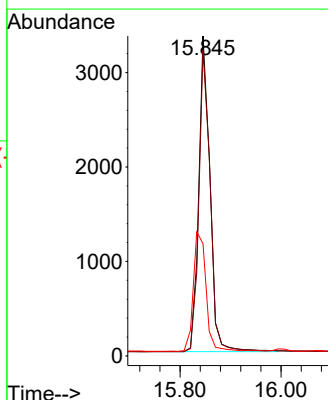
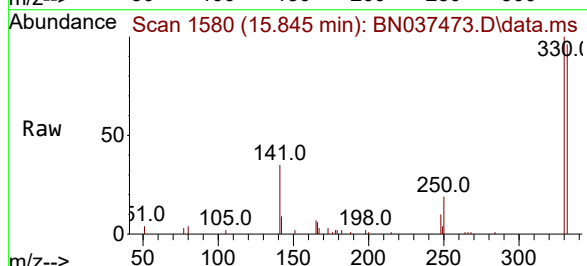
Tgt Ion:330 Resp: 5183

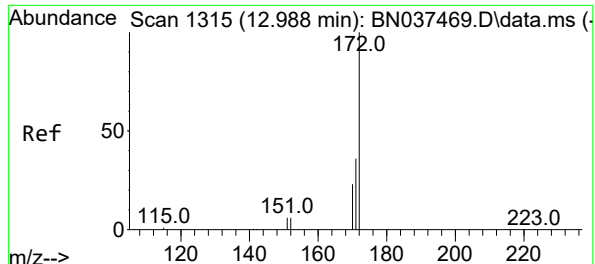
Ion Ratio Lower Upper

330 100

332 96.5 82.0 123.0

141 42.9 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 5.472 ng

RT: 12.988 min Scan# 1315

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

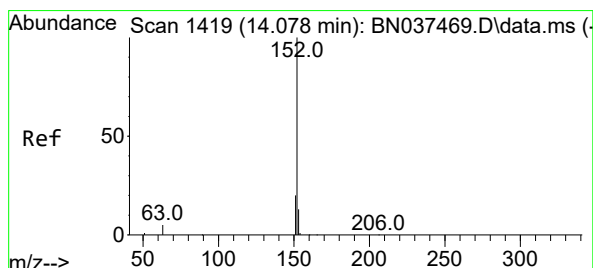
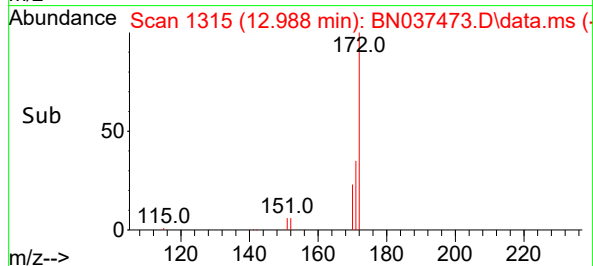
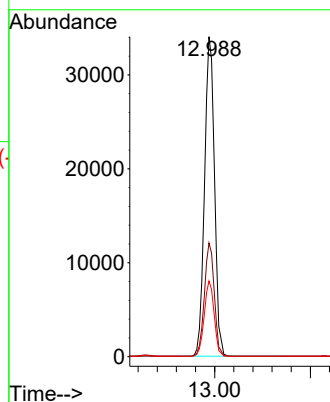
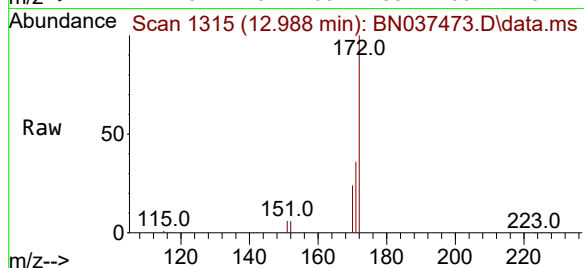
Tgt Ion:172 Resp: 71026

Ion Ratio Lower Upper

172 100

171 35.5 29.8 44.8

170 23.6 20.0 30.0



#16

Acenaphthylene

Concen: 5.449 ng

RT: 14.078 min Scan# 1419

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

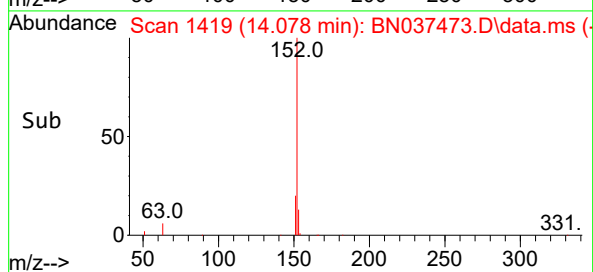
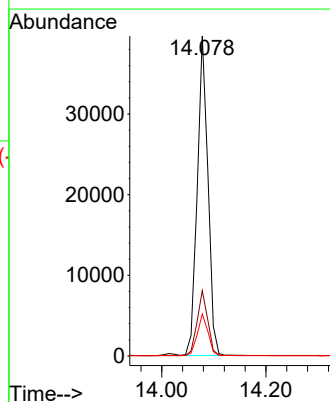
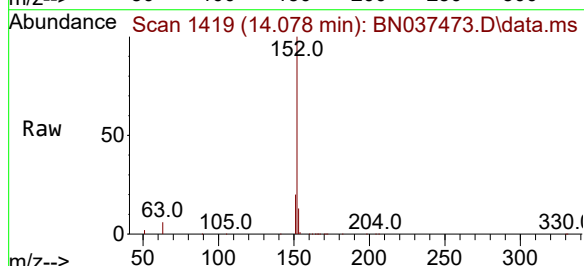
Tgt Ion:152 Resp: 56500

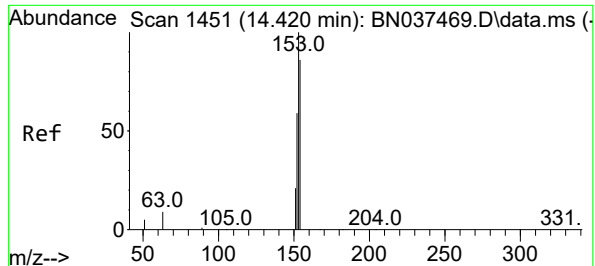
Ion Ratio Lower Upper

152 100

151 20.2 16.4 24.6

153 13.0 10.6 15.8





#17

Acenaphthene

Concen: 5.475 ng

RT: 14.420 min Scan# 1451

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

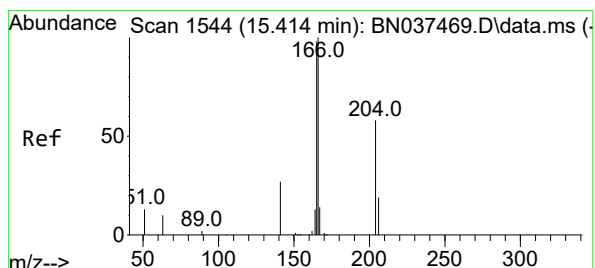
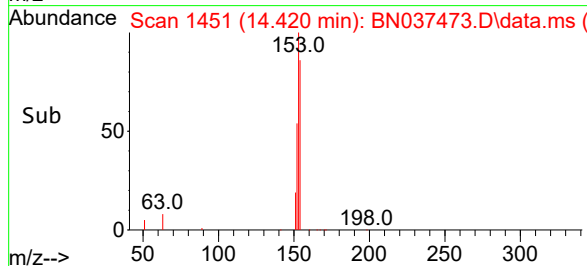
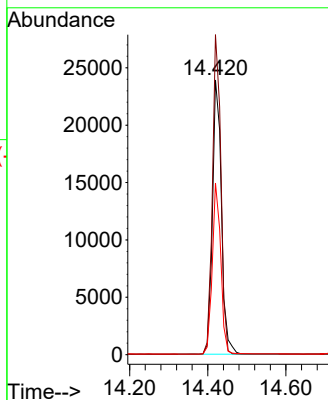
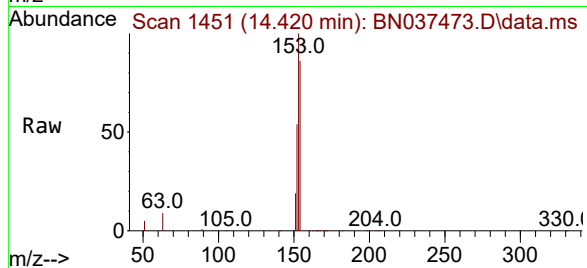
Tgt Ion:154 Resp: 38089

Ion Ratio Lower Upper

154 100

153 110.1 89.4 134.0

152 59.1 53.2 79.8



#18

Fluorene

Concen: 5.603 ng

RT: 15.414 min Scan# 1544

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

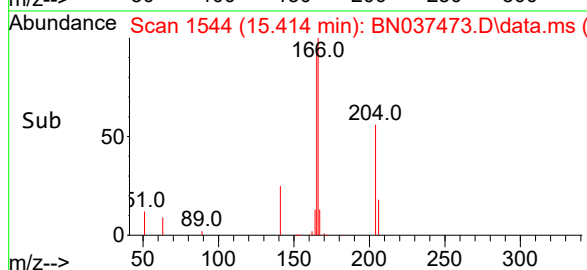
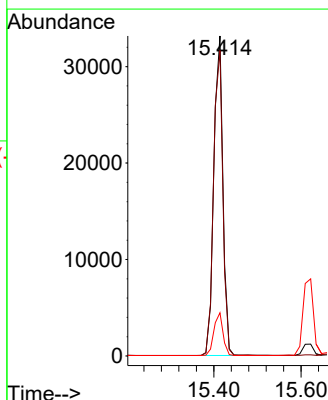
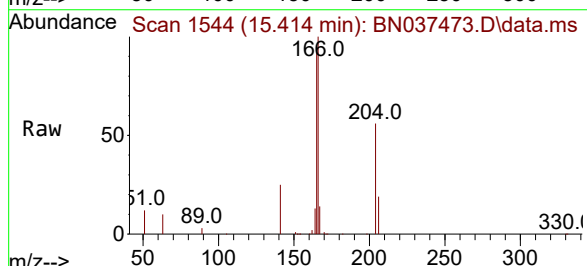
Tgt Ion:166 Resp: 48979

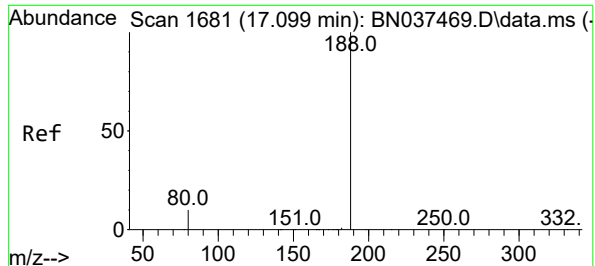
Ion Ratio Lower Upper

166 100

165 97.0 79.4 119.2

167 13.1 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

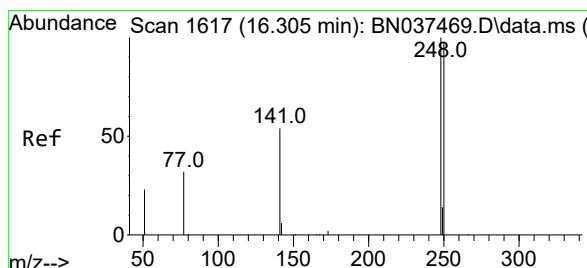
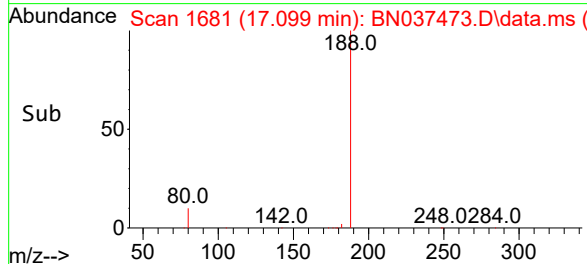
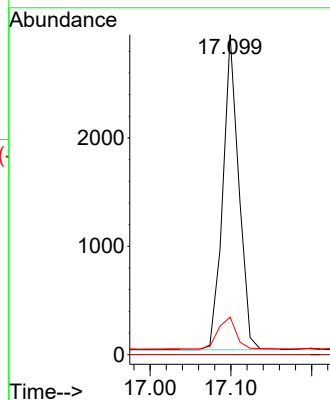
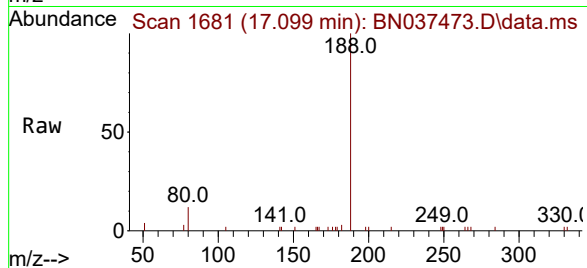
Tgt Ion:188 Resp: 3996

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.7 9.3 13.9



#21

4-Bromophenyl-phenylether

Concen: 5.597 ng

RT: 16.305 min Scan# 1617

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

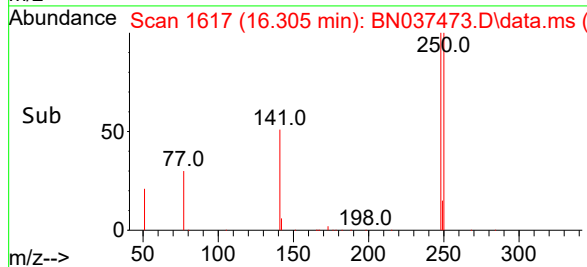
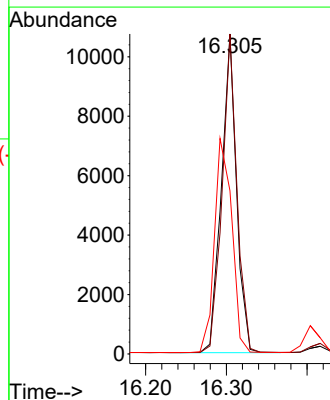
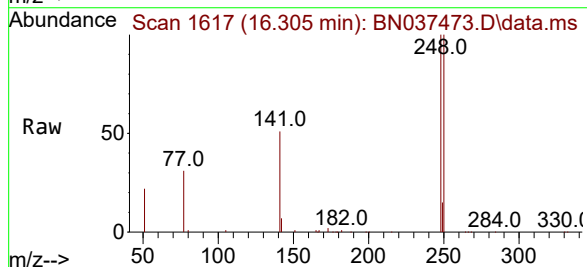
Tgt Ion:248 Resp: 13953

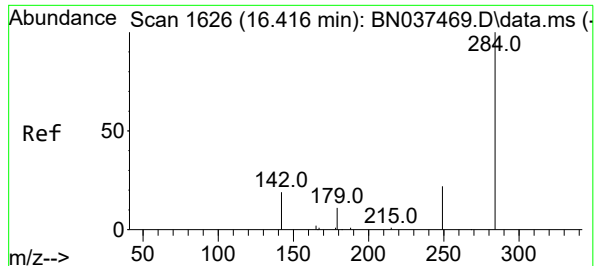
Ion Ratio Lower Upper

248 100

250 100.0 77.8 116.6

141 51.0 45.9 68.9





#22

Hexachlorobenzene

Concen: 5.205 ng

RT: 16.416 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

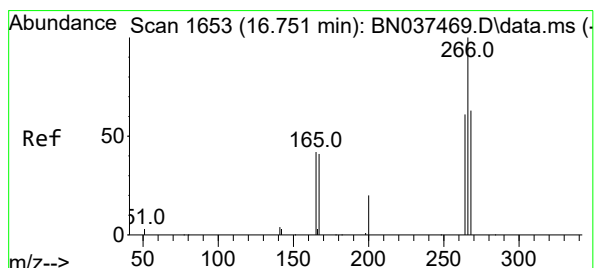
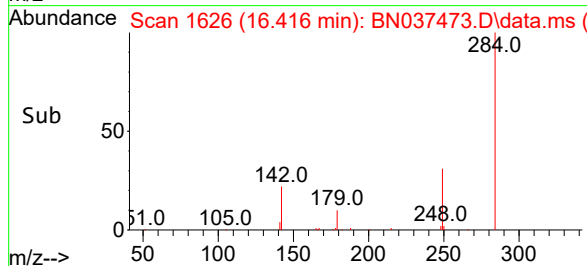
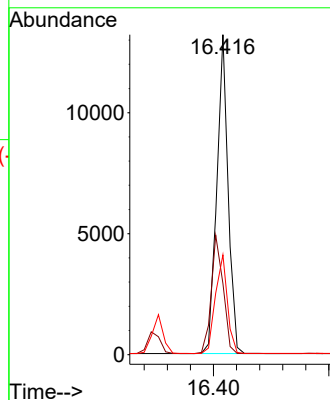
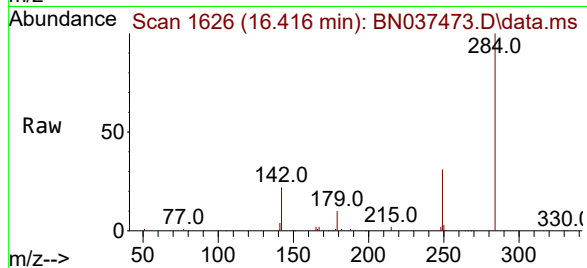
Tgt Ion:284 Resp: 17904

Ion Ratio Lower Upper

284 100

142 38.7 31.3 46.9

249 32.9 26.6 40.0



#24

Pentachlorophenol

Concen: 6.564 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

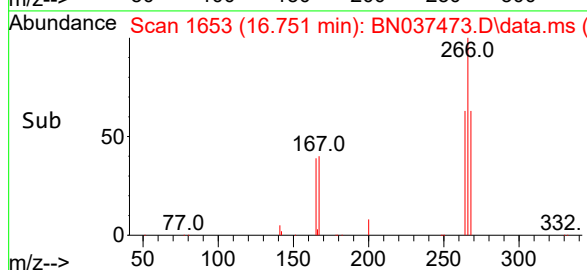
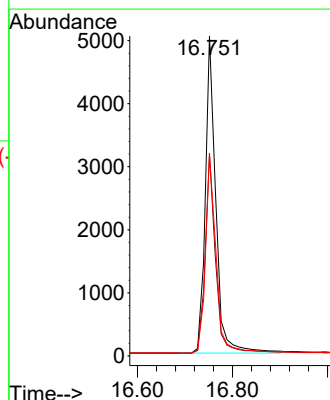
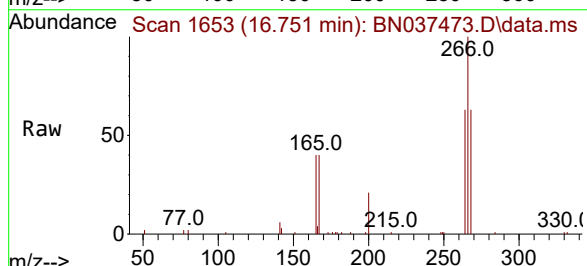
Tgt Ion:266 Resp: 7775

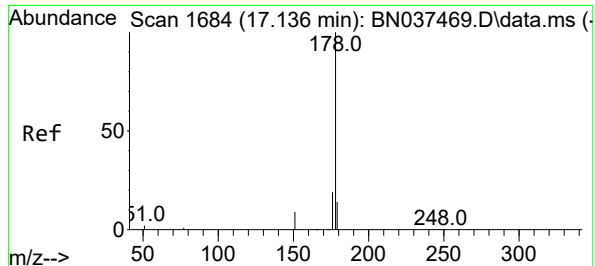
Ion Ratio Lower Upper

266 100

264 62.4 47.5 71.3

268 63.7 50.6 76.0





#25

Phenanthrene

Concen: 5.524 ng

RT: 17.136 min Scan# 1684

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

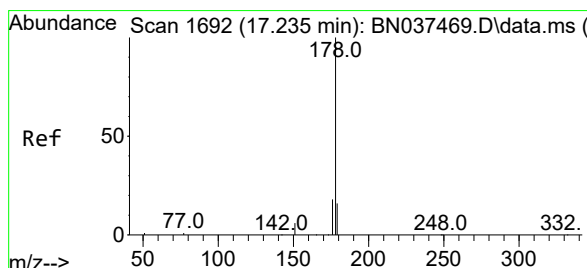
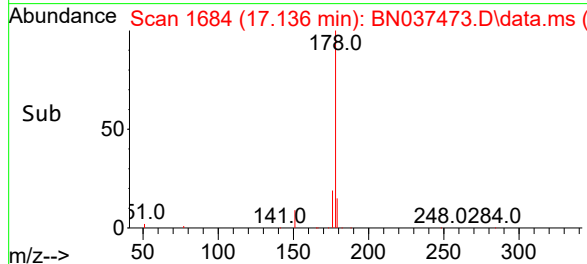
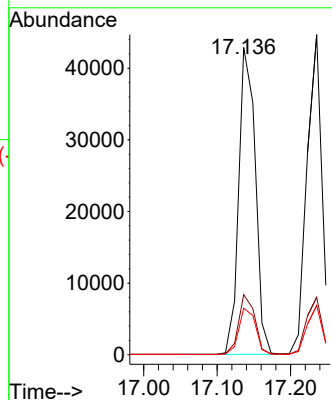
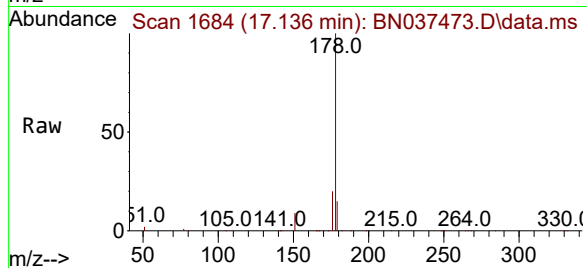
Tgt Ion:178 Resp: 67213

Ion Ratio Lower Upper

178 100

176 18.9 15.1 22.7

179 15.2 12.2 18.2



#26

Anthracene

Concen: 5.852 ng

RT: 17.235 min Scan# 1692

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

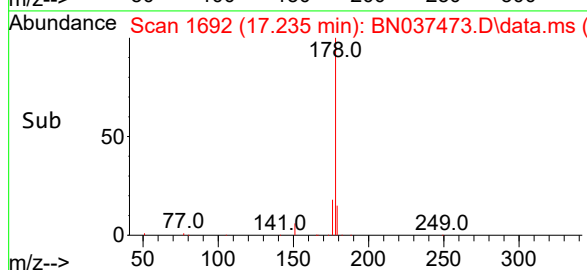
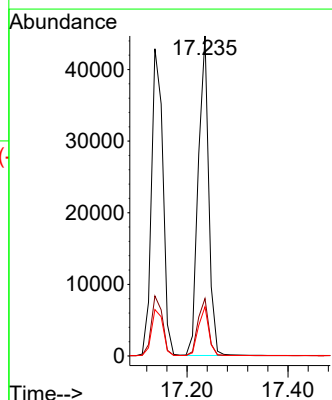
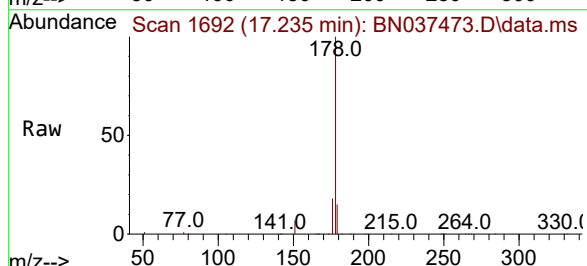
Tgt Ion:178 Resp: 64260

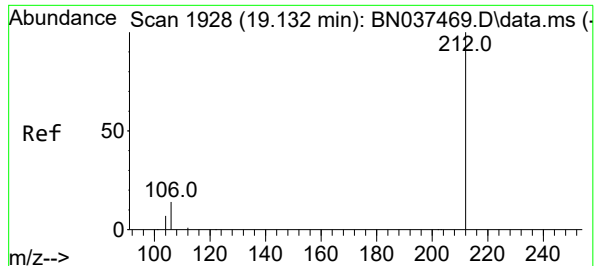
Ion Ratio Lower Upper

178 100

176 18.2 14.9 22.3

179 15.2 12.3 18.5





#27

Fluoranthene-d10

Concen: 6.621 ng

RT: 19.132 min Scan# 1928

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

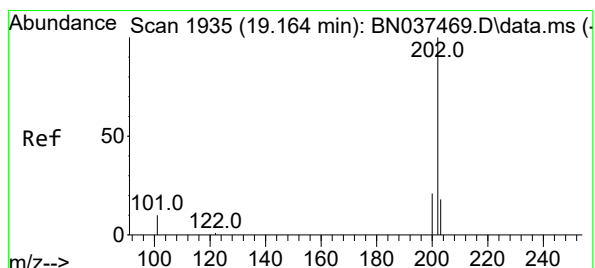
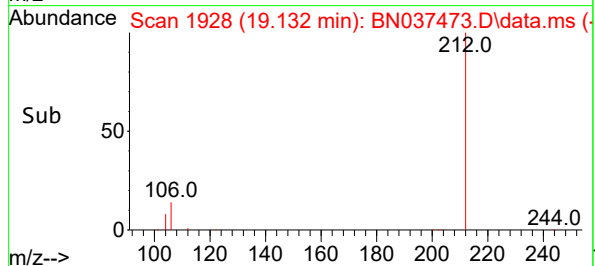
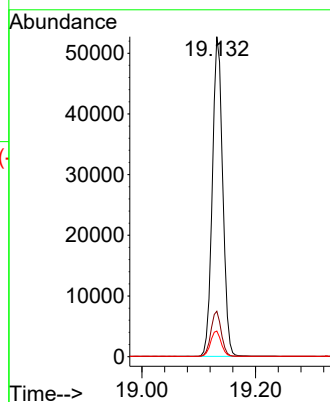
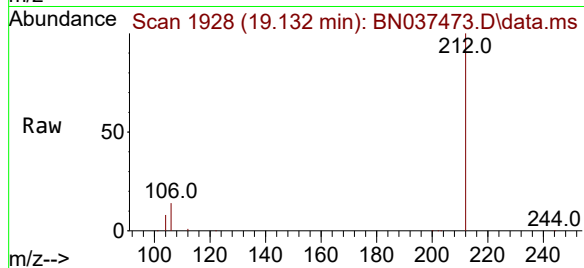
Tgt Ion:212 Resp: 66747

Ion Ratio Lower Upper

212 100

106 14.1 11.7 17.5

104 8.1 6.6 10.0



#28

Fluoranthene

Concen: 5.881 ng

RT: 19.164 min Scan# 1935

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

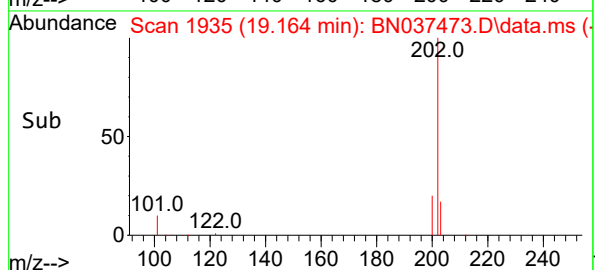
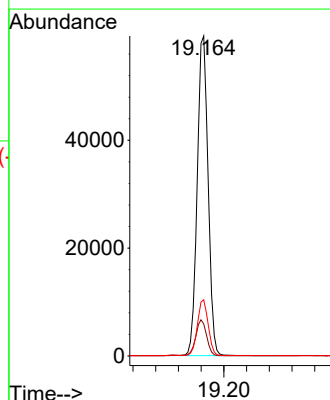
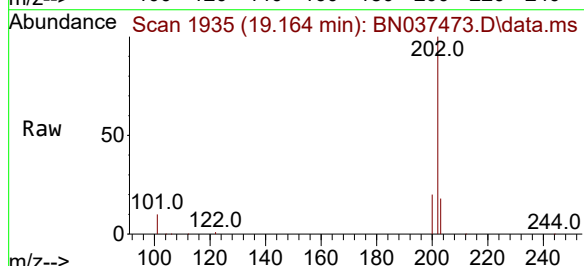
Tgt Ion:202 Resp: 78520

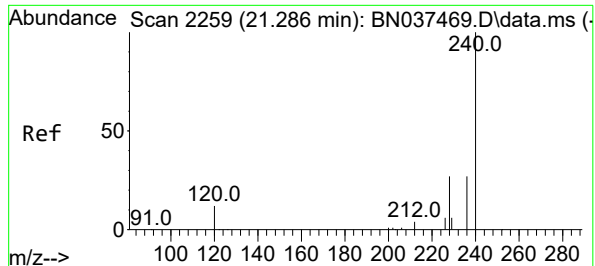
Ion Ratio Lower Upper

202 100

101 11.3 9.2 13.8

203 17.4 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

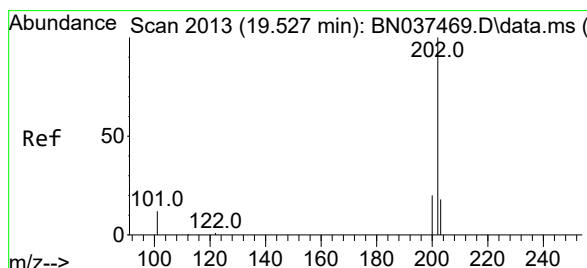
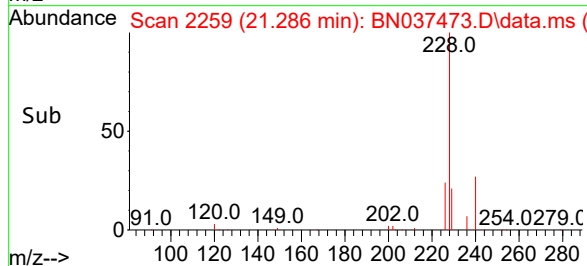
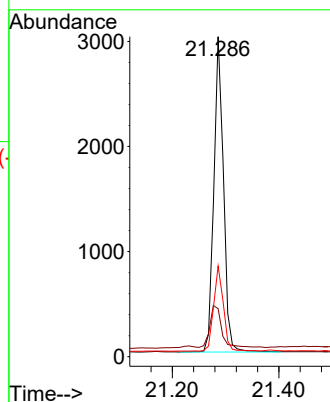
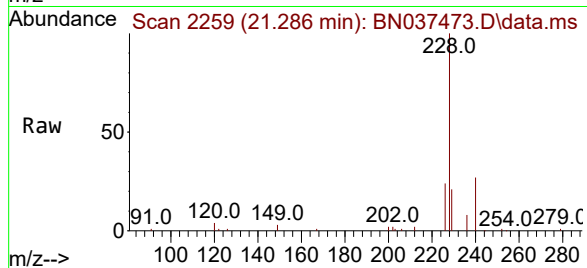
Tgt Ion:240 Resp: 3738

Ion Ratio Lower Upper

240 100

120 15.0 12.4 18.6

236 28.4 22.9 34.3



#30

Pyrene

Concen: 5.124 ng

RT: 19.527 min Scan# 2013

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

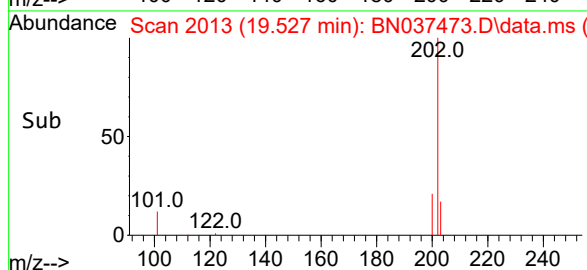
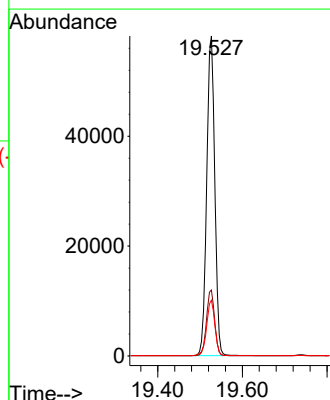
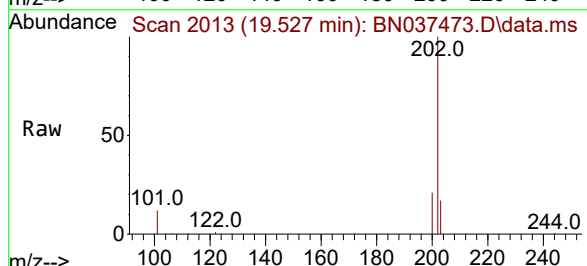
Tgt Ion:202 Resp: 77002

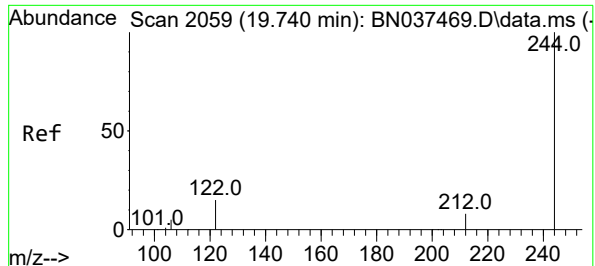
Ion Ratio Lower Upper

202 100

200 20.7 16.4 24.6

203 17.8 14.3 21.5

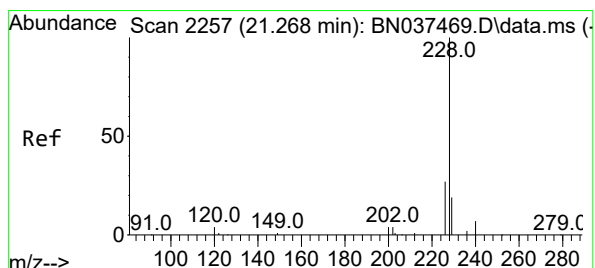
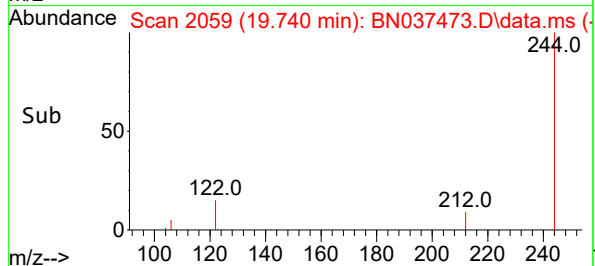
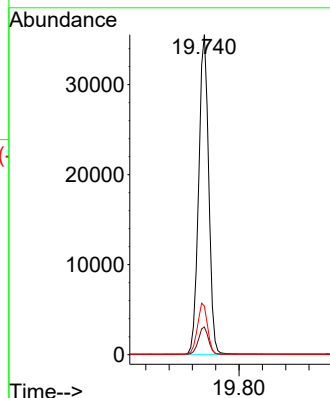
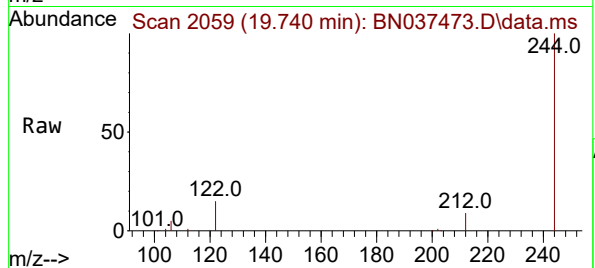




#31
Terphenyl-d14
Concen: 5.409 ng
RT: 19.740 min Scan# 2059
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

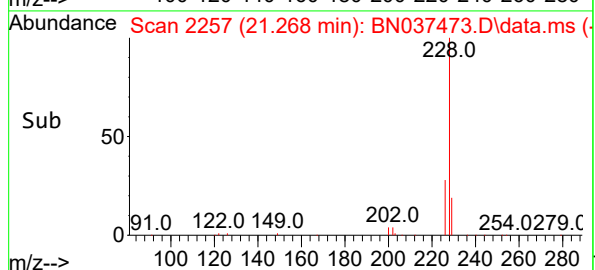
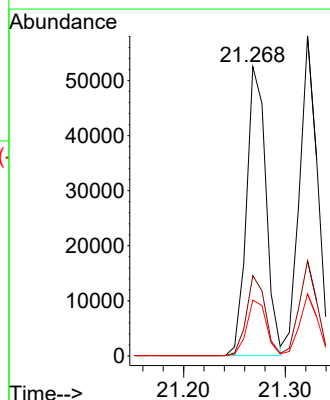
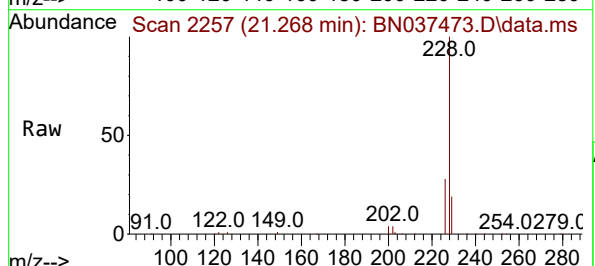
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

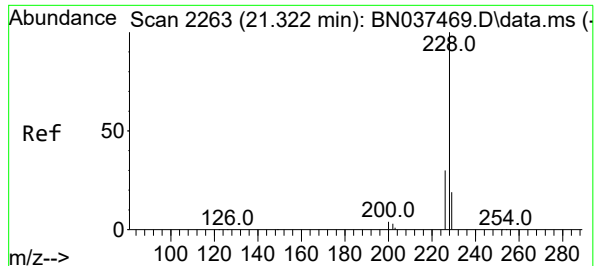
Tgt Ion:244 Resp: 42184
Ion Ratio Lower Upper
244 100
212 8.7 8.7 13.1#
122 15.2 14.1 21.1



#32
Benzo(a)anthracene
Concen: 5.500 ng
RT: 21.268 min Scan# 2257
Delta R.T. 0.000 min
Lab File: BN037473.D
Acq: 11 Jul 2025 14:49

Tgt Ion:228 Resp: 69627
Ion Ratio Lower Upper
228 100
226 27.7 22.7 34.1
229 19.3 16.6 24.8





#33

Chrysene

Concen: 5.206 ng

RT: 21.322 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

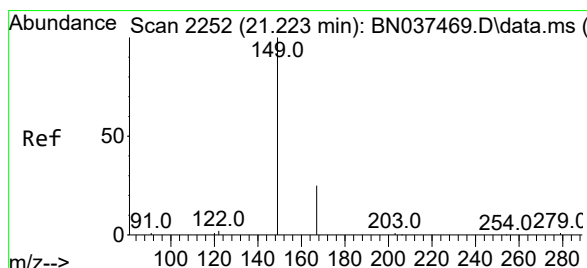
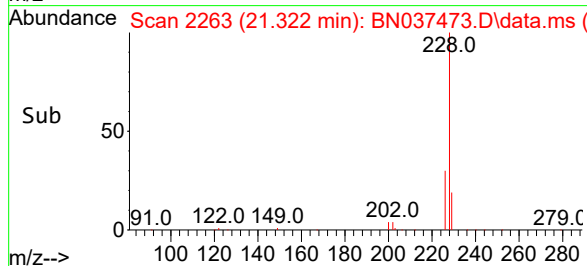
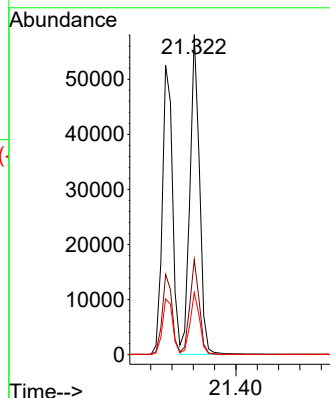
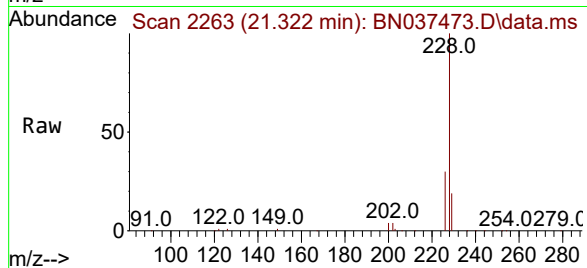
Tgt Ion:228 Resp: 72035

Ion Ratio Lower Upper

228 100

226 29.7 24.6 36.8

229 19.4 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 5.828 ng

RT: 21.232 min Scan# 2253

Delta R.T. 0.009 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

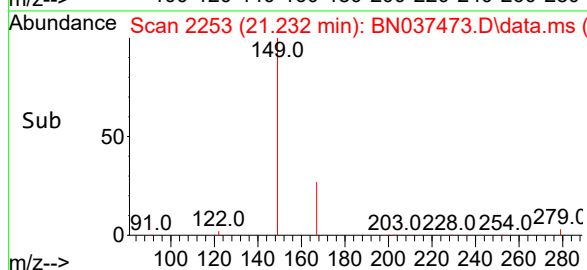
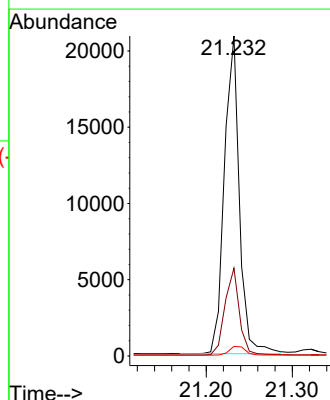
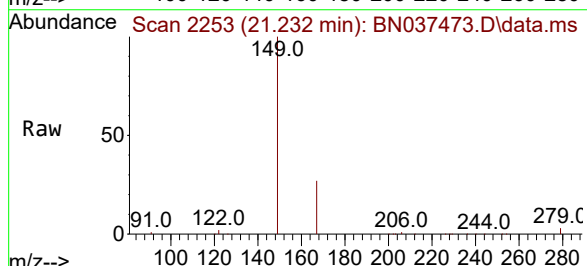
Tgt Ion:149 Resp: 25087

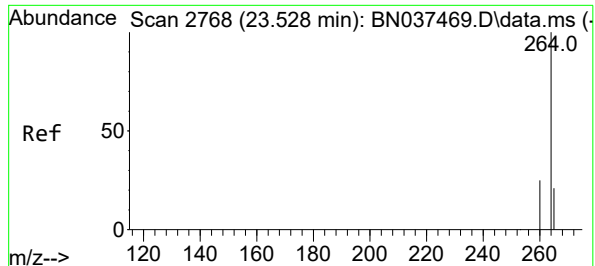
Ion Ratio Lower Upper

149 100

167 26.2 19.4 29.2

279 3.0 2.5 3.7





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.531 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

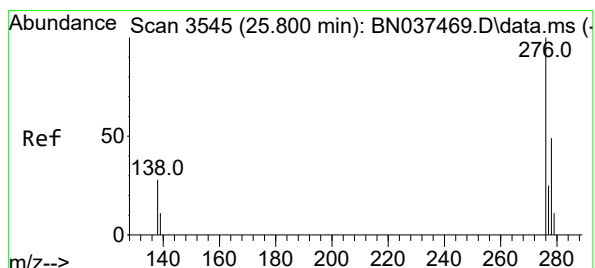
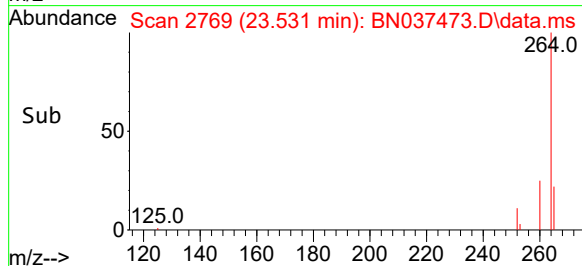
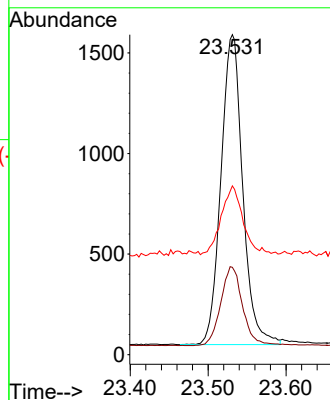
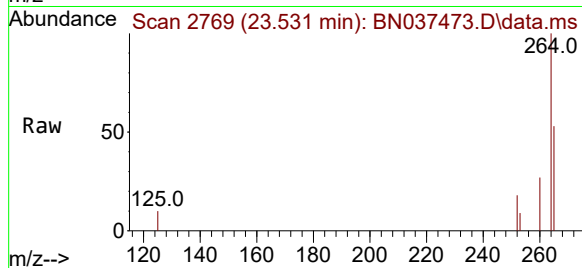
Tgt Ion:264 Resp: 2986

Ion Ratio Lower Upper

264 100

260 27.3 21.7 32.5

265 52.7 41.6 62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 6.354 ng

RT: 25.806 min Scan# 3547

Delta R.T. 0.006 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

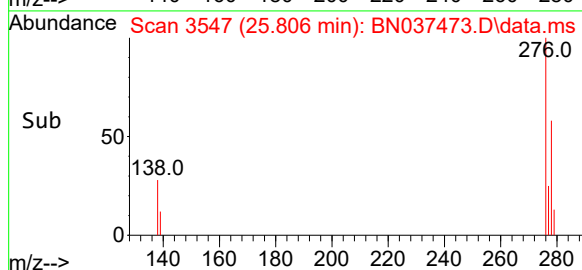
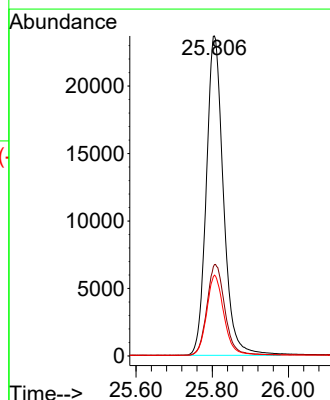
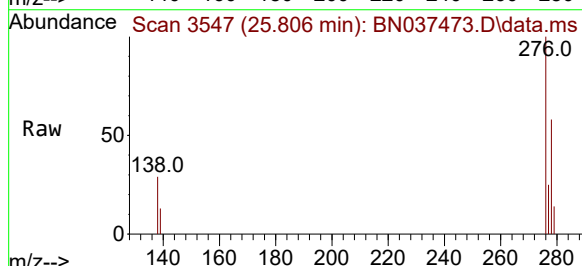
Tgt Ion:276 Resp: 73642

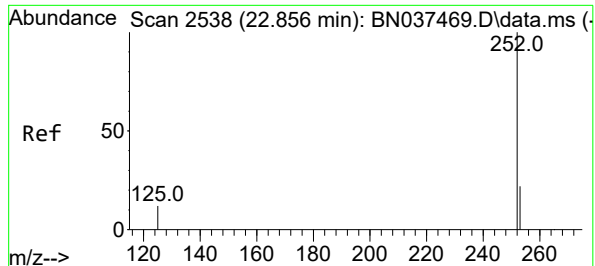
Ion Ratio Lower Upper

276 100

138 29.9 23.4 35.2

277 25.3 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 6.013 ng

RT: 22.859 min Scan# 2538

Delta R.T. 0.003 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

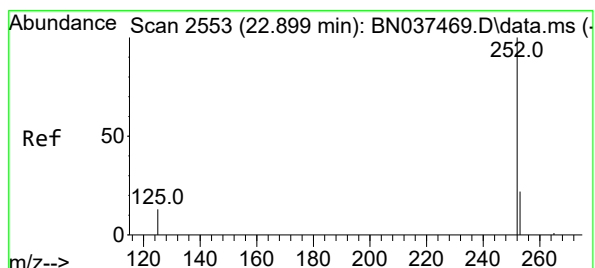
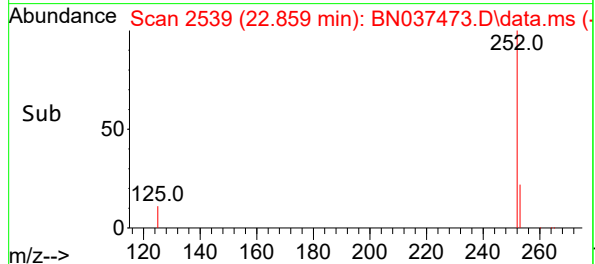
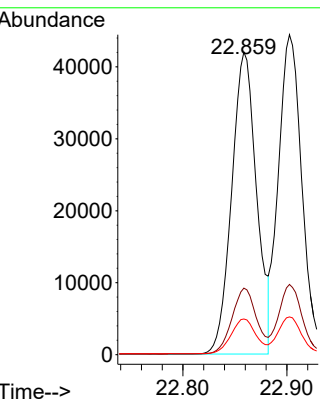
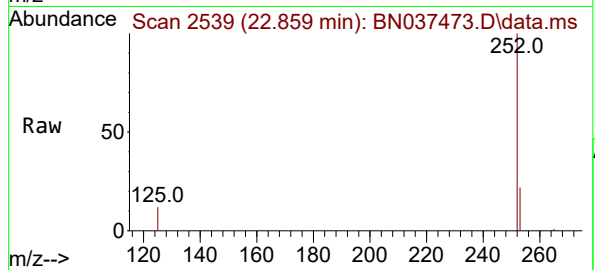
Tgt Ion:252 Resp: 69826

Ion Ratio Lower Upper

252 100

253 22.0 20.1 30.1

125 11.8 13.7 20.5#



#38

Benzo(k)fluoranthene

Concen: 5.999 ng

RT: 22.902 min Scan# 2554

Delta R.T. 0.003 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

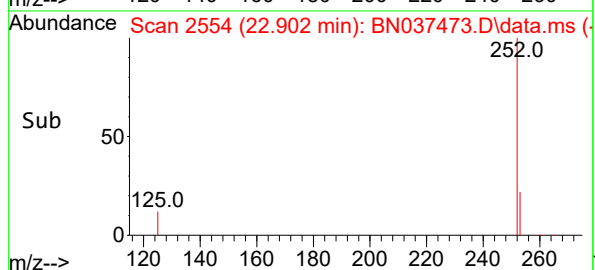
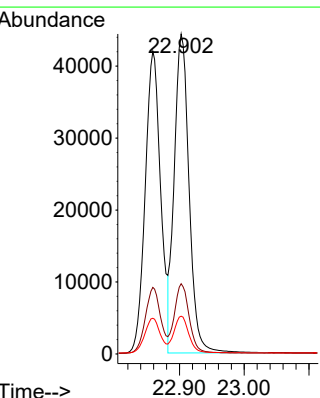
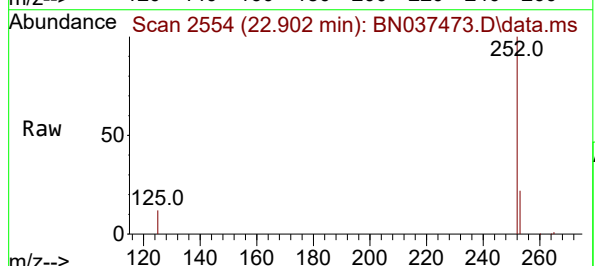
Tgt Ion:252 Resp: 70616

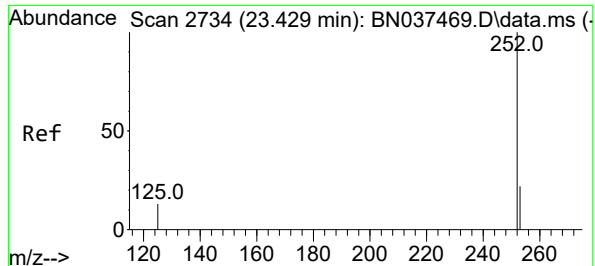
Ion Ratio Lower Upper

252 100

253 21.9 20.4 30.6

125 11.8 14.6 21.8#





#39

Benzo(a)pyrene

Concen: 6.186 ng

RT: 23.432 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037473.D

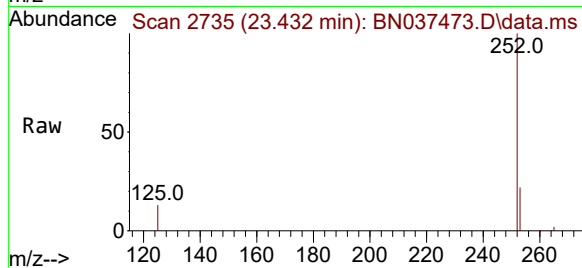
Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0



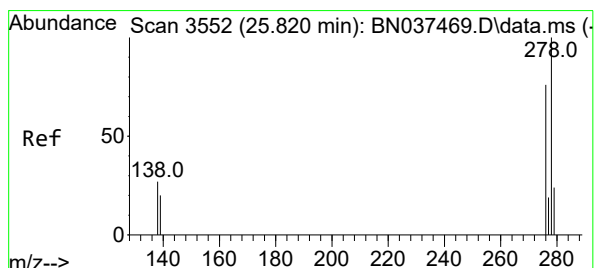
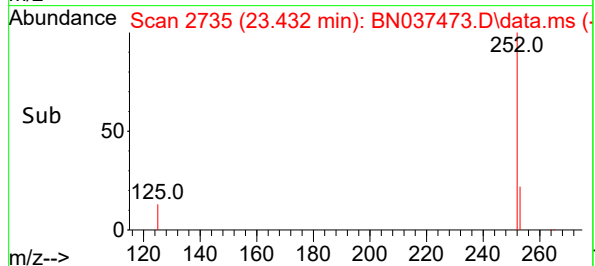
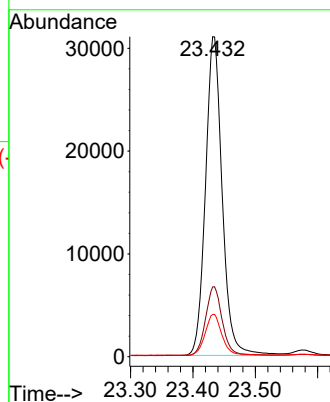
Tgt Ion:252 Resp: 57809

Ion Ratio Lower Upper

252 100

253 21.8 21.8 32.6

125 13.2 16.7 25.1#



#40

Dibenzo(a,h)anthracene

Concen: 6.458 ng

RT: 25.820 min Scan# 3552

Delta R.T. 0.000 min

Lab File: BN037473.D

Acq: 11 Jul 2025 14:49

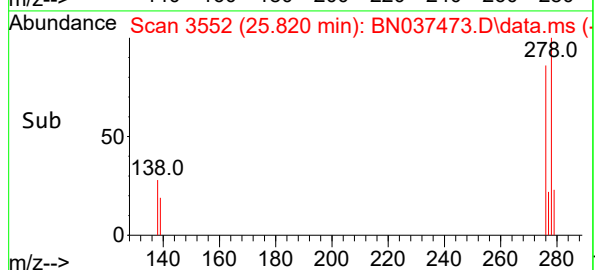
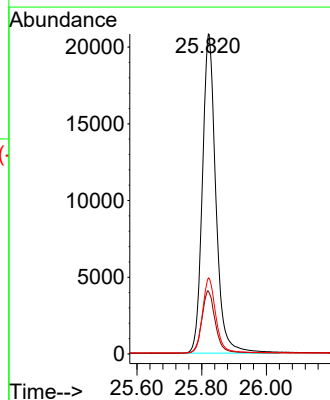
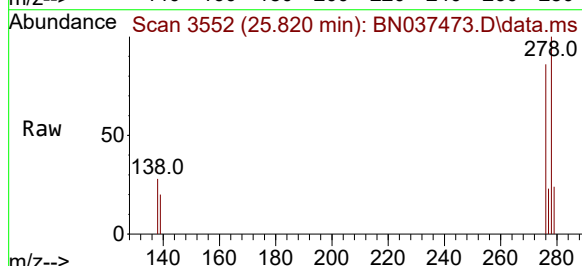
Tgt Ion:278 Resp: 60364

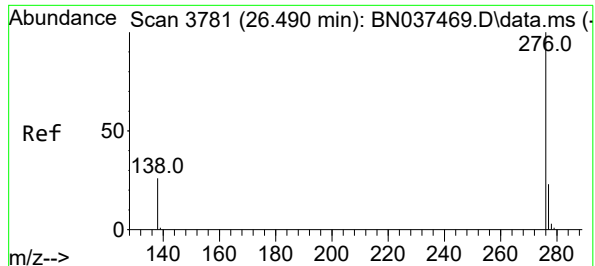
Ion Ratio Lower Upper

278 100

139 19.7 19.9 29.9#

279 23.8 24.8 37.2#





#41

Benzo(g,h,i)perylene

Concen: 6.134 ng

RT: 26.493 min Scan# 31

Delta R.T. 0.003 min

Lab File: BN037473.D

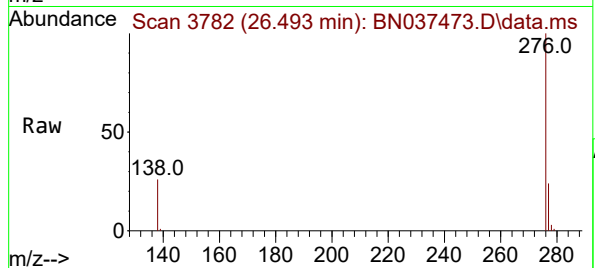
Acq: 11 Jul 2025 14:49

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0



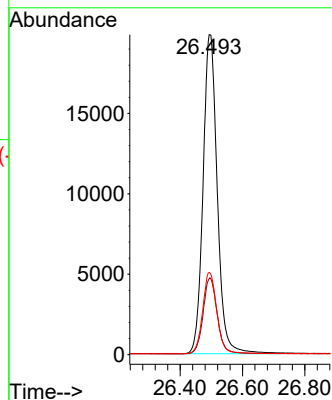
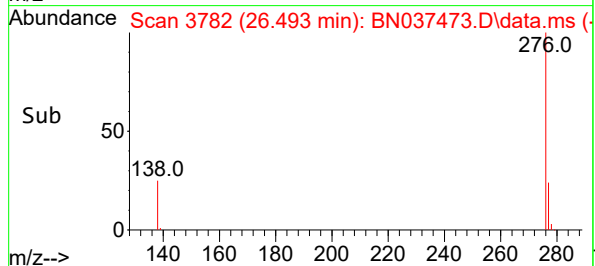
Tgt Ion:276 Resp: 62808

Ion Ratio Lower Upper

276 100

277 23.8 21.7 32.5

138 25.7 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037474.D
 Acq On : 11 Jul 2025 15:25
 Operator : RC/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN071125

Quant Time: Jul 11 16:29:03 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

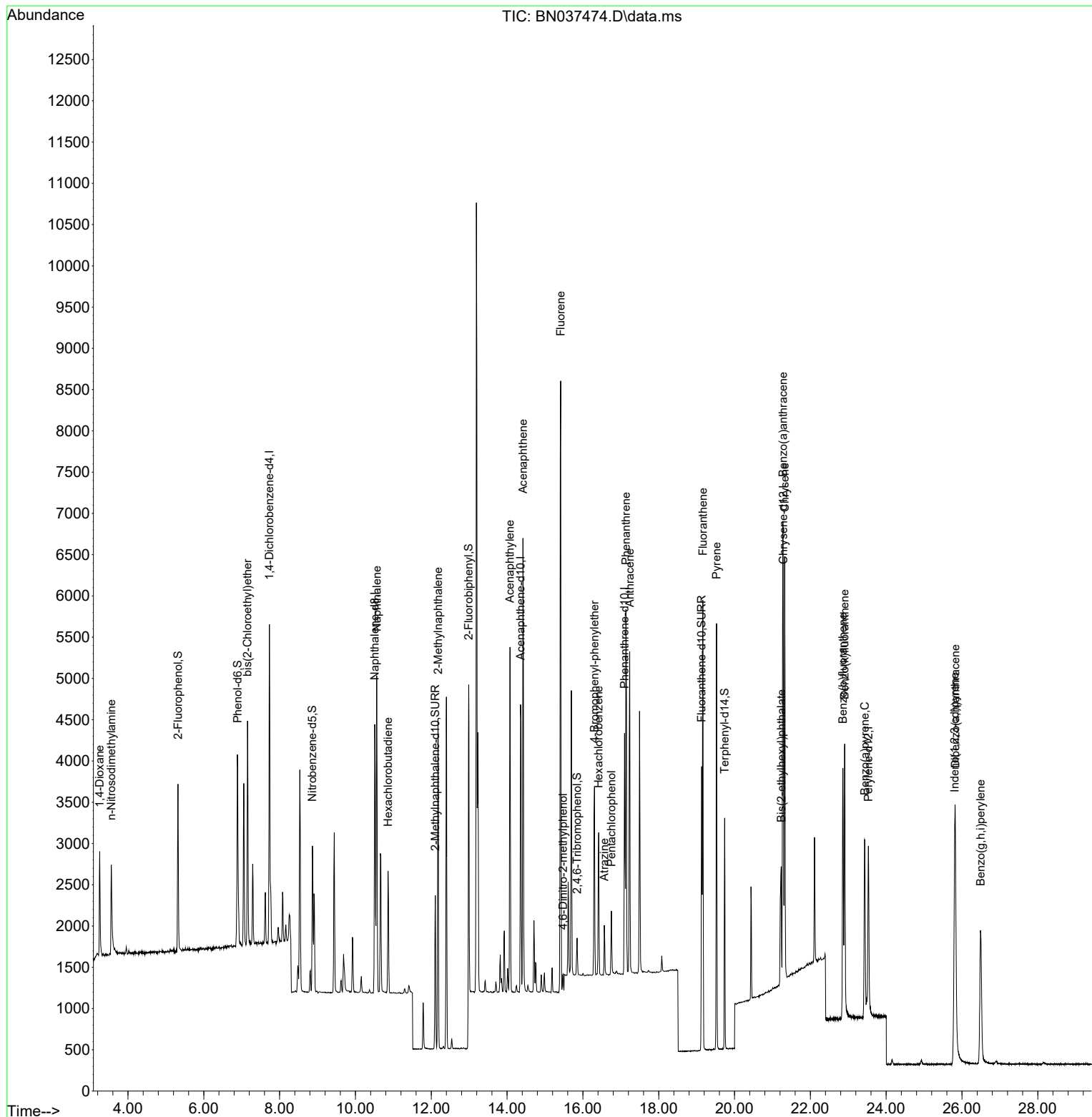
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1795	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4293	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2055	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3647	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2808	0.400	ng	0.00
35) Perylene-d12	23.531	264	2686	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1616	0.387	ng	0.00
5) Phenol-d6	6.894	99	2005	0.381	ng	0.00
8) Nitrobenzene-d5	8.865	82	1382	0.443	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2460	0.422	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	249	0.357	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	5463	0.466	ng	0.00
27) Fluoranthene-d10	19.132	212	3712	0.403	ng	0.00
31) Terphenyl-d14	19.740	244	2601	0.444	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	827	0.491	ng	95
3) n-Nitrosodimethylamine	3.557	42	955	0.424	ng	95
6) bis(2-Chloroethyl)ether	7.154	93	1983	0.451	ng	99
9) Naphthalene	10.562	128	4841	0.420	ng	99
10) Hexachlorobutadiene	10.861	225	1182	0.427	ng	# 100
12) 2-Methylnaphthalene	12.177	142	2750	0.381	ng	98
16) Acenaphthylene	14.077	152	4297	0.459	ng	100
17) Acenaphthene	14.420	154	2598	0.413	ng	99
18) Fluorene	15.414	166	3179	0.402	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	167	0.408	ng	84
21) 4-Bromophenyl-phenylether	16.304	248	959	0.422	ng	96
22) Hexachlorobenzene	16.416	284	1358	0.433	ng	100
23) Atrazine	16.565	200	469	0.414	ng	98
24) Pentachlorophenol	16.751	266	364	0.337	ng	97
25) Phenanthrene	17.136	178	4686	0.422	ng	100
26) Anthracene	17.235	178	4164	0.415	ng	100
28) Fluoranthene	19.164	202	4784	0.393	ng	99
30) Pyrene	19.527	202	4634	0.410	ng	100
32) Benzo(a)anthracene	21.277	228	3978	0.418	ng	98
33) Chrysene	21.322	228	4341	0.418	ng	100
34) Bis(2-ethylhexyl)phtha...	21.232	149	1323	0.409	ng	# 98
36) Indeno(1,2,3-cd)pyrene	25.806	276	4274	0.410	ng	99
37) Benzo(b)fluoranthene	22.858	252	3894	0.373	ng	99
38) Benzo(k)fluoranthene	22.905	252	4346	0.410	ng	99
39) Benzo(a)pyrene	23.434	252	3457	0.411	ng	98
40) Dibenzo(a,h)anthracene	25.823	278	3486	0.415	ng	97
41) Benzo(g,h,i)perylene	26.490	276	3518	0.382	ng	98

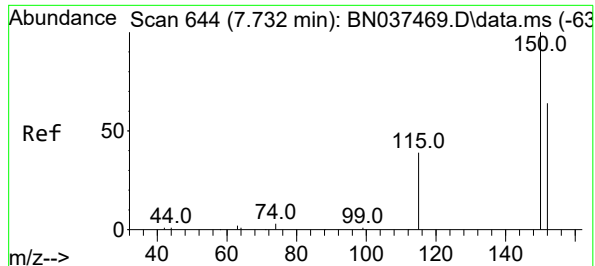
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037474.D
Acq On : 11 Jul 2025 15:25
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN071125

Quant Time: Jul 11 16:29:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

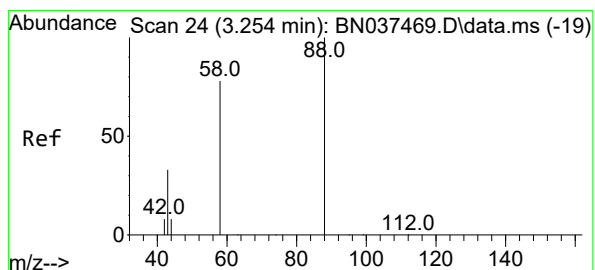
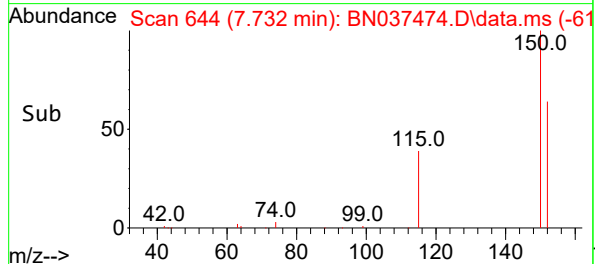
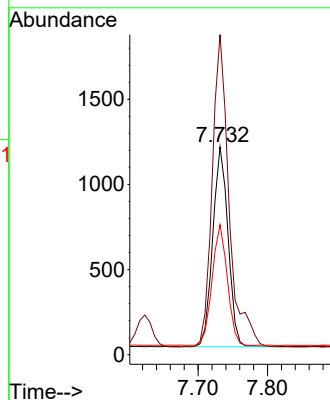
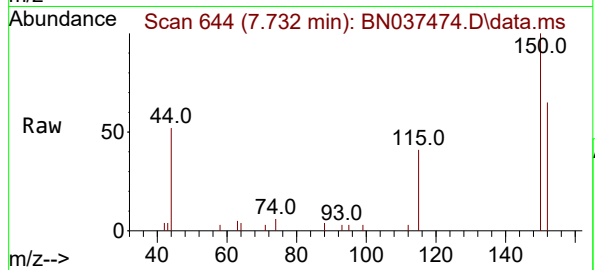




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

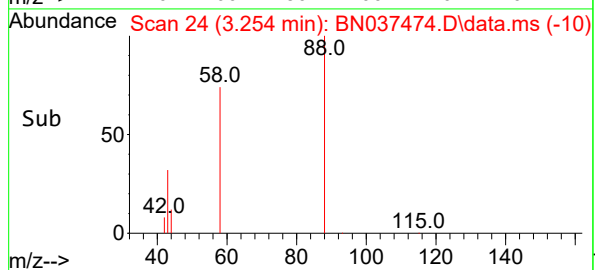
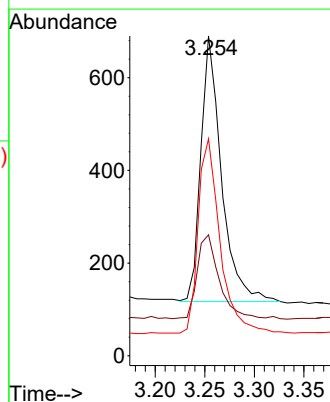
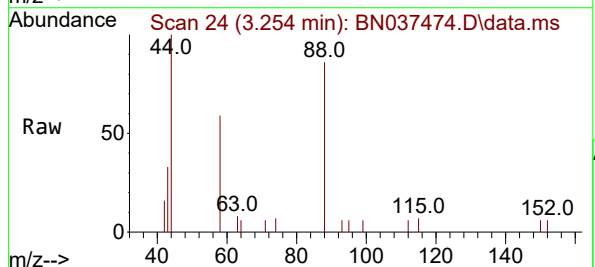
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

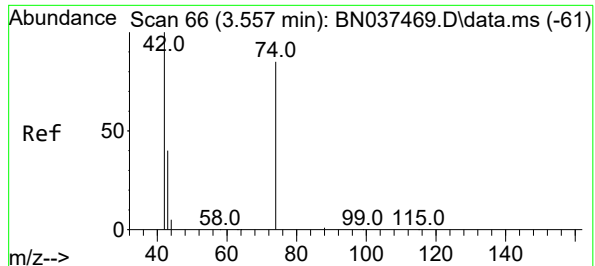
Tgt Ion:152 Resp: 1795
Ion Ratio Lower Upper
152 100
150 153.9 122.5 183.7
115 62.5 49.9 74.9



#2
1,4-Dioxane
Concen: 0.491 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion: 88 Resp: 827
Ion Ratio Lower Upper
88 100
43 33.9 30.7 46.1
58 77.4 65.0 97.4

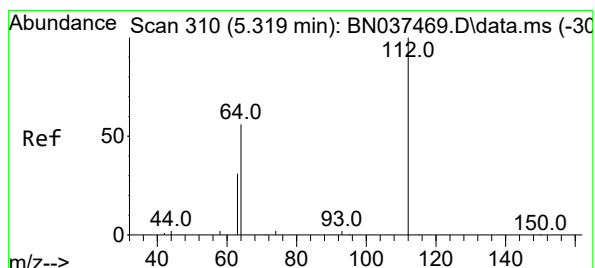
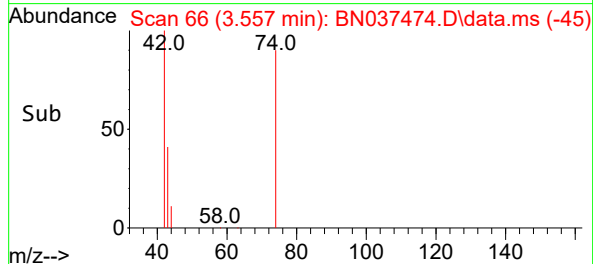
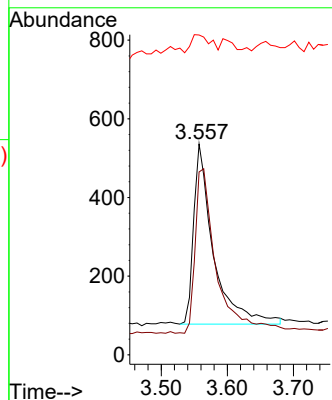
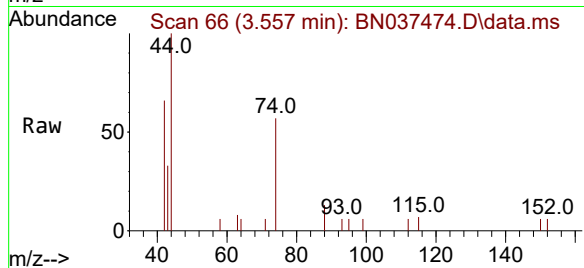




#3
n-Nitrosodimethylamine
Concen: 0.424 ng
RT: 3.557 min Scan# 60
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

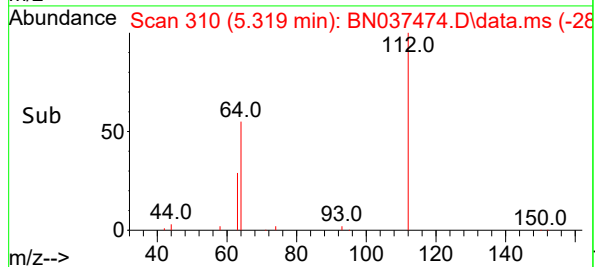
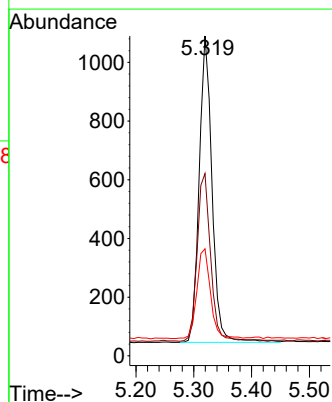
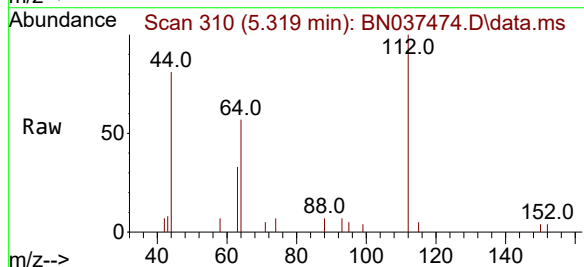
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

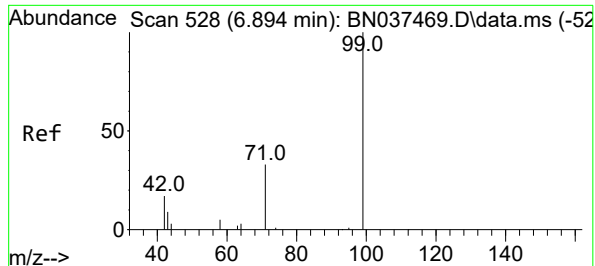
Tgt Ion: 42 Resp: 955
Ion Ratio Lower Upper
42 100
74 98.5 74.9 112.3
44 10.8 7.2 10.8



#4
2-Fluorophenol
Concen: 0.387 ng
RT: 5.319 min Scan# 310
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion: 112 Resp: 1616
Ion Ratio Lower Upper
112 100
64 56.9 45.4 68.0
63 30.9 24.7 37.1

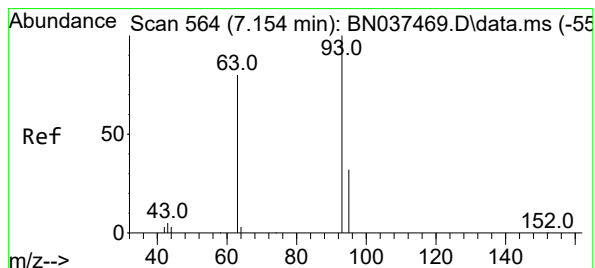
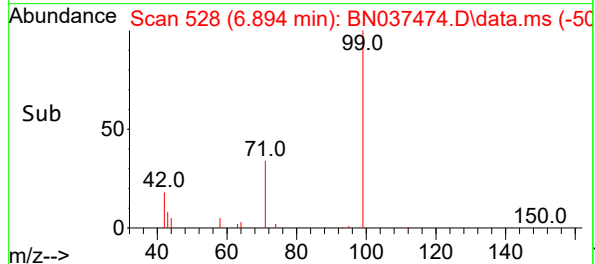
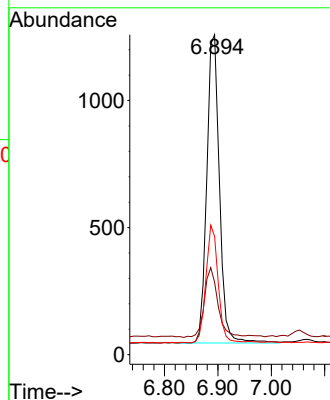
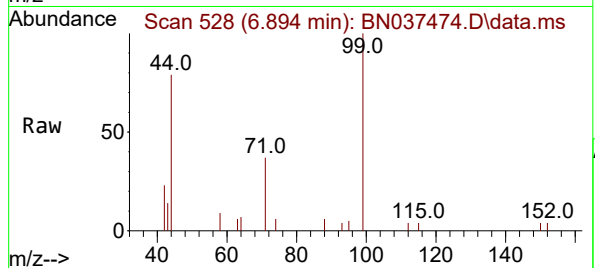




#5
Phenol-d6
Concen: 0.381 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

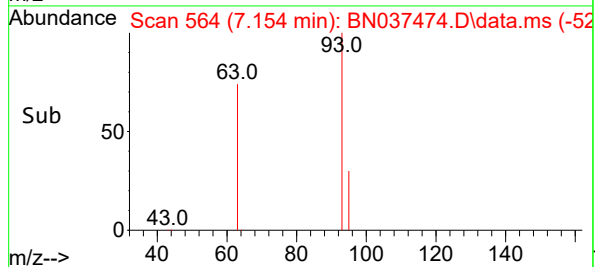
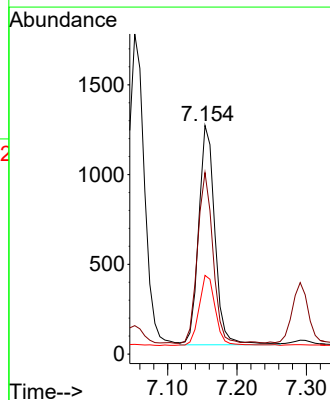
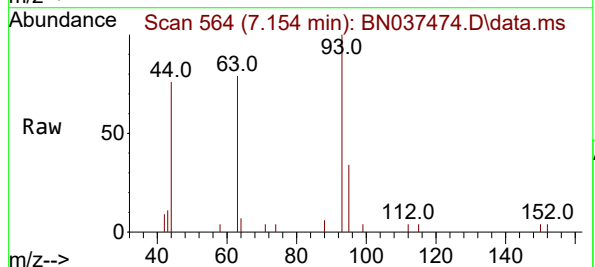
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

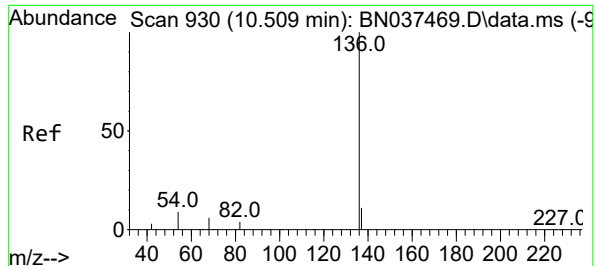
Tgt Ion	Ratio	Lower	Upper
99	100		
42	24.2	19.5	29.3
71	36.5	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.451 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion	Ratio	Lower	Upper
93	100		
63	74.5	60.8	91.2
95	32.1	25.6	38.4

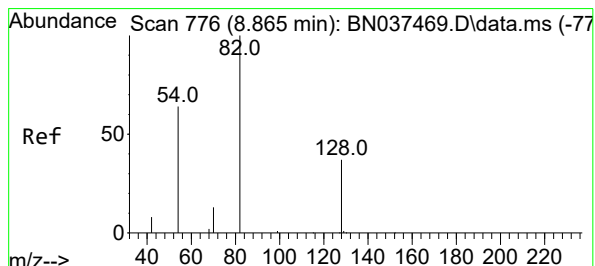
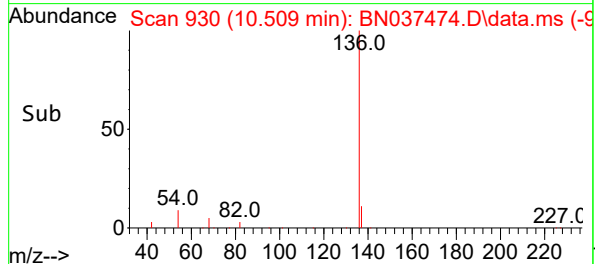
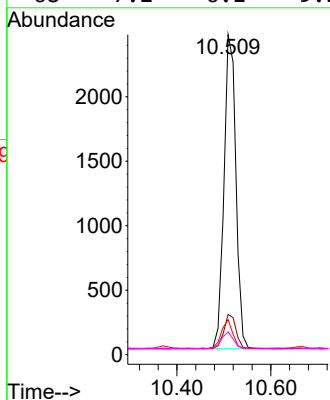
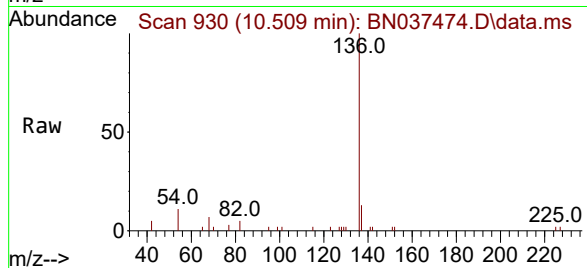




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

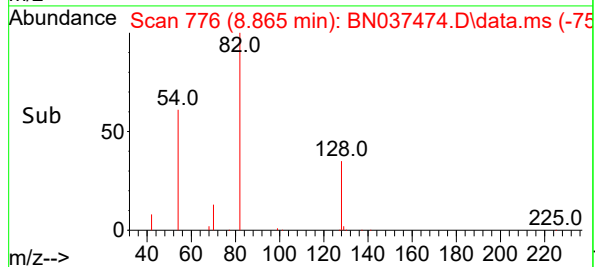
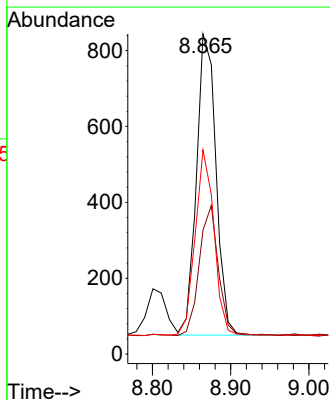
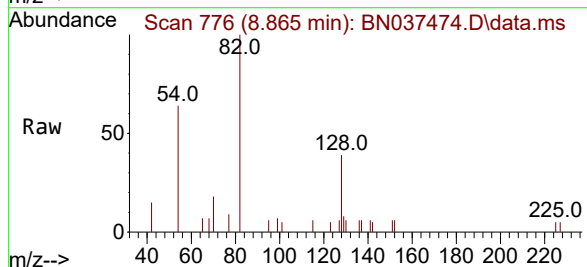
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

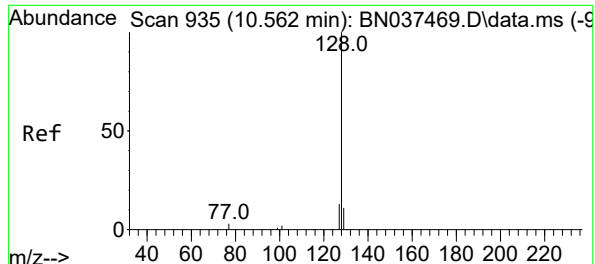
Tgt Ion:	136	Resp:	4293
Ion	Ratio	Lower	Upper
136	100		
137	12.6	10.0	15.0
54	11.0	9.0	13.6
68	7.2	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.443 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion:	82	Resp:	1382
Ion	Ratio	Lower	Upper
82	100		
128	38.7	33.1	49.7
54	63.7	53.0	79.4

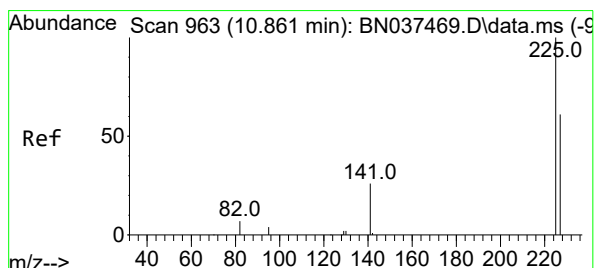
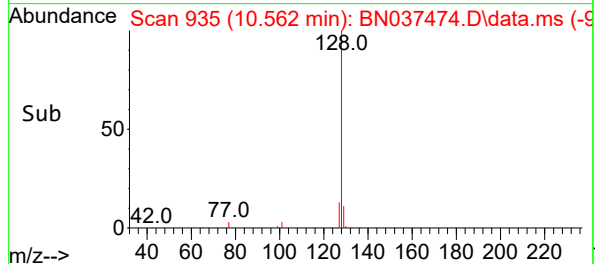
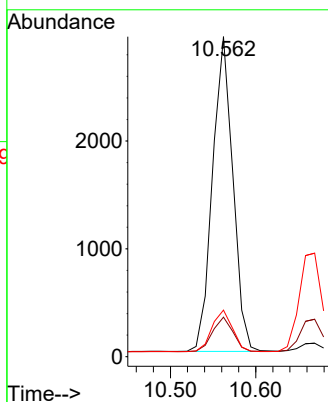
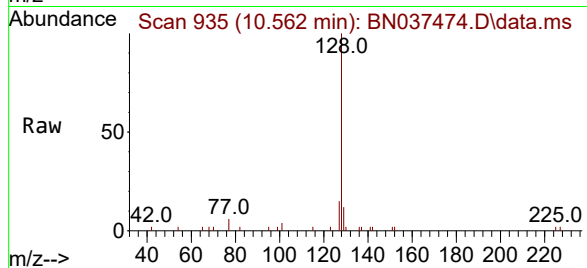




#9
Naphthalene
Concen: 0.420 ng
RT: 10.562 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

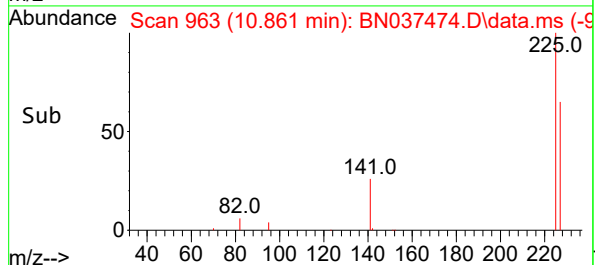
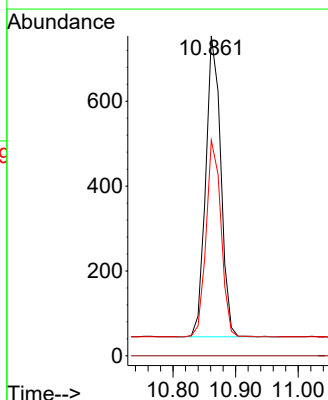
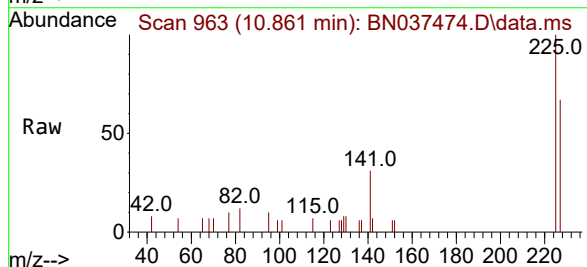
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

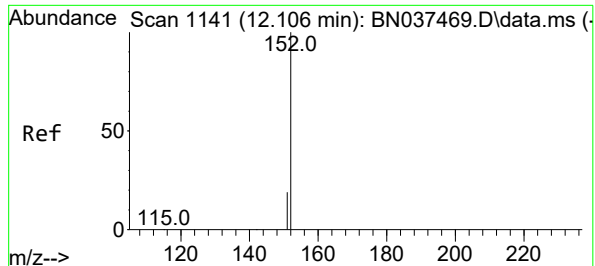
Tgt Ion	128	129	127
Resp:	4841		
Ion Ratio	100	12.3	14.6
Lower		10.2	11.8
Upper		15.2	17.6



#10
Hexachlorobutadiene
Concen: 0.427 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion	225	223	227
Resp:	1182		
Ion Ratio	100	0.0	64.4
Lower		0.0	51.4
Upper		0.0	77.2

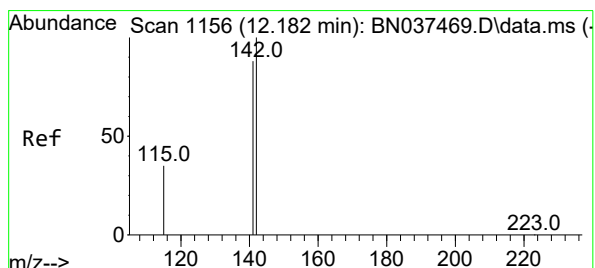
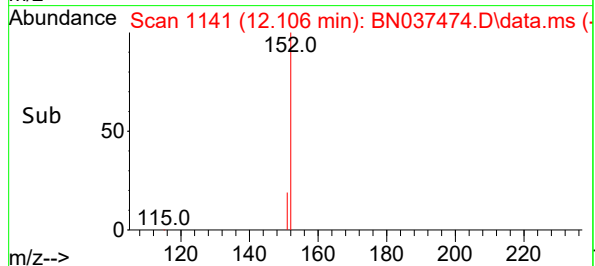
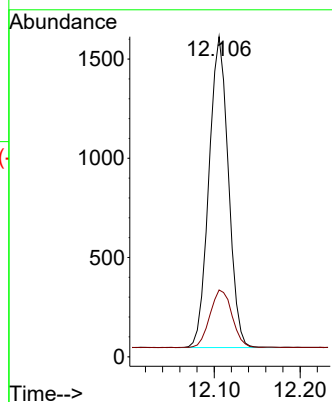
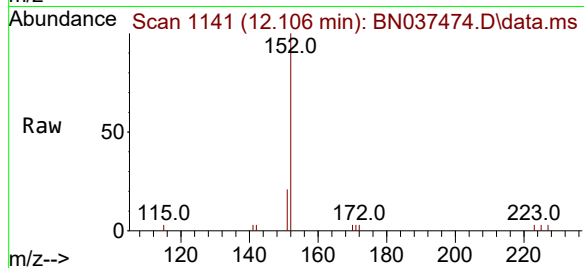




#11
2-Methylnaphthalene-d10
Concen: 0.422 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

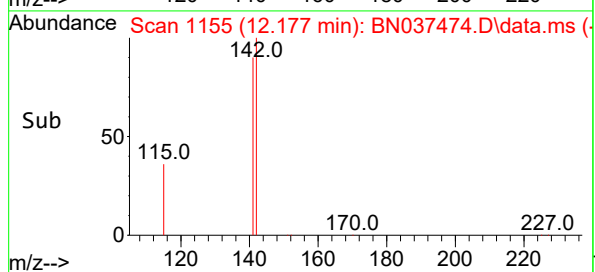
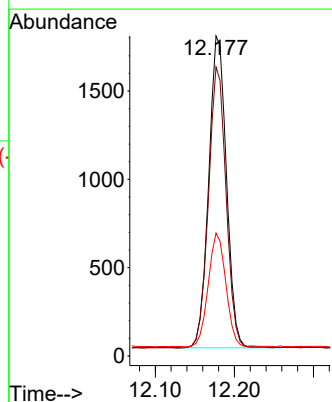
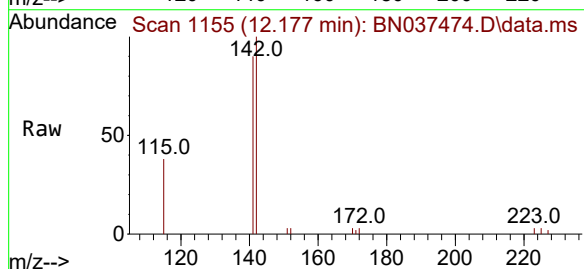
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

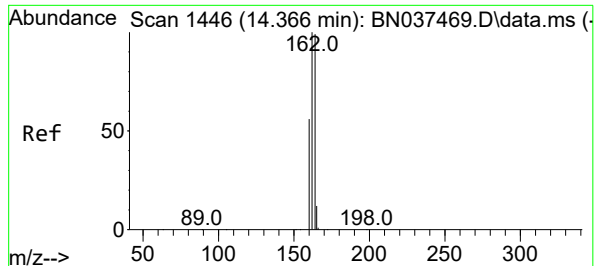
Tgt Ion:152 Resp: 2460
Ion Ratio Lower Upper
152 100
151 21.1 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.381 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion:142 Resp: 2750
Ion Ratio Lower Upper
142 100
141 90.3 70.6 105.8
115 38.4 30.0 45.0

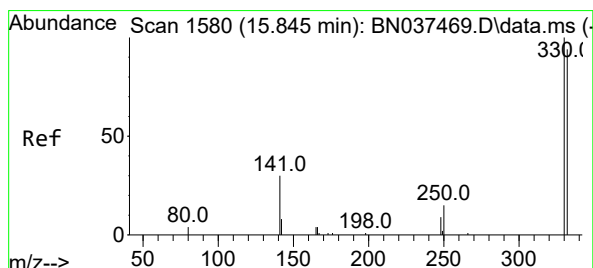
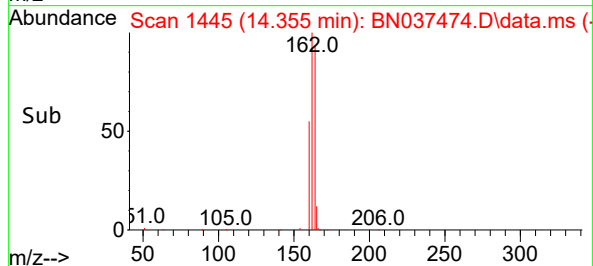
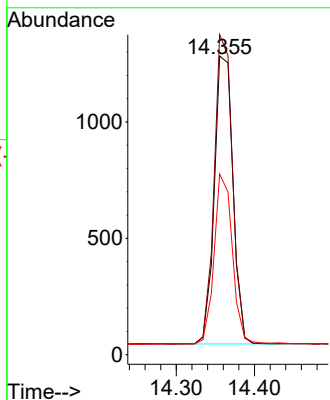
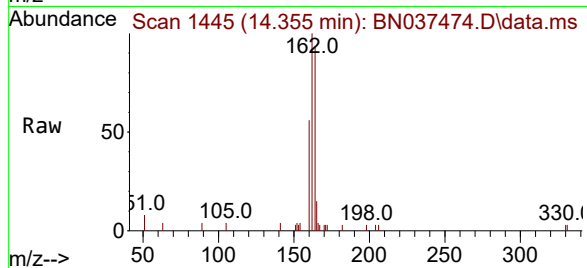




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1446
Delta R.T. -0.011 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

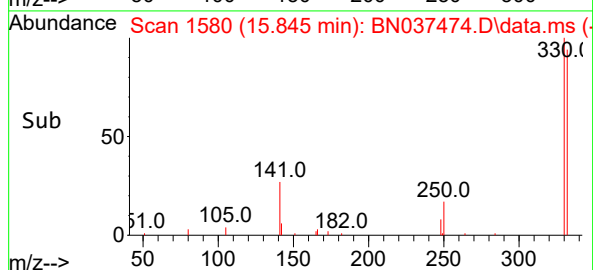
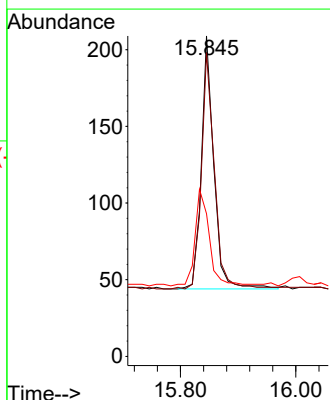
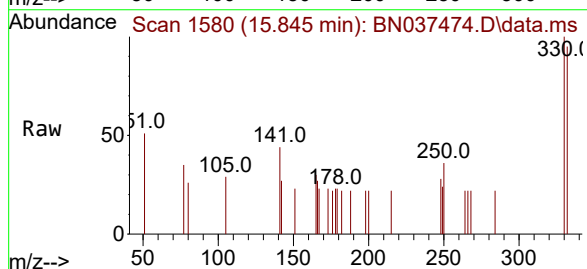
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

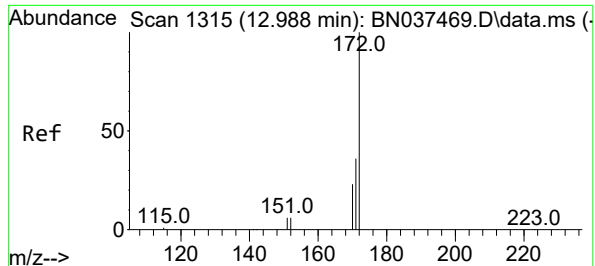
Tgt Ion:164 Resp: 2055
Ion Ratio Lower Upper
164 100
162 107.2 81.1 121.7
160 60.5 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 0.357 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion:330 Resp: 249
Ion Ratio Lower Upper
330 100
332 96.8 82.0 123.0
141 43.4 36.2 54.2





#15

2-Fluorobiphenyl

Concen: 0.466 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

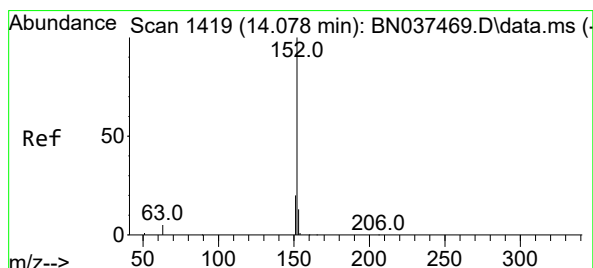
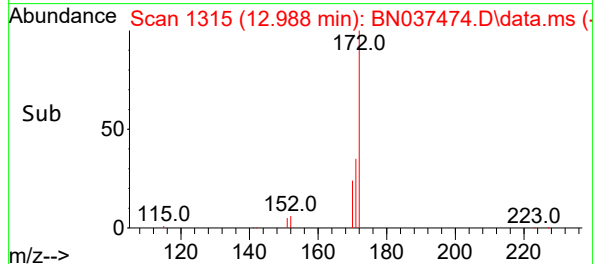
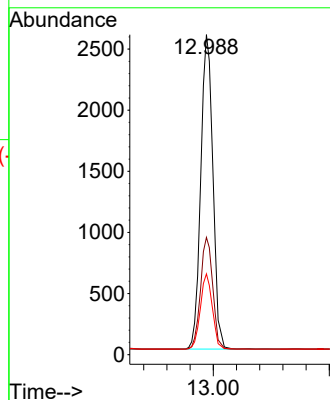
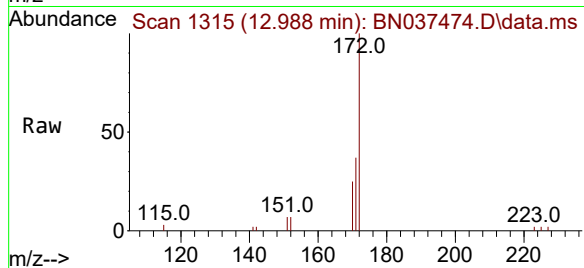
Tgt Ion:172 Resp: 5463

Ion Ratio Lower Upper

172 100

171 36.6 29.8 44.8

170 25.2 20.0 30.0



#16

Acenaphthylene

Concen: 0.459 ng

RT: 14.077 min Scan# 1419

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

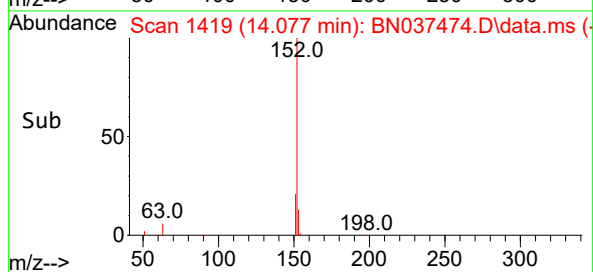
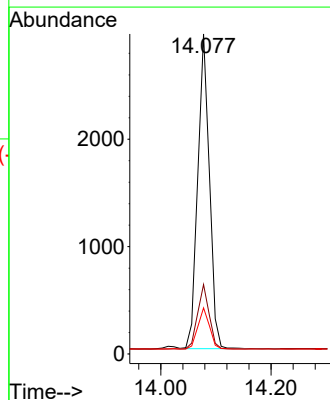
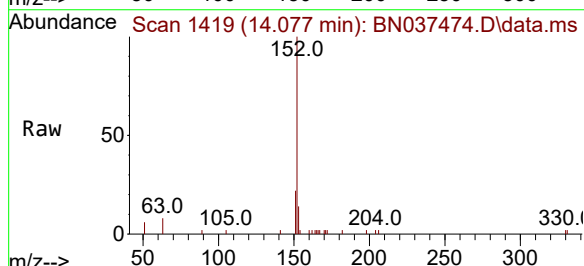
Tgt Ion:152 Resp: 4297

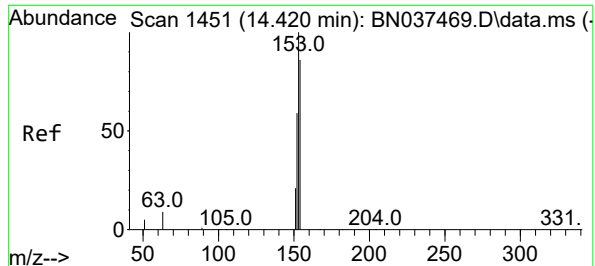
Ion Ratio Lower Upper

152 100

151 20.5 16.4 24.6

153 13.2 10.6 15.8

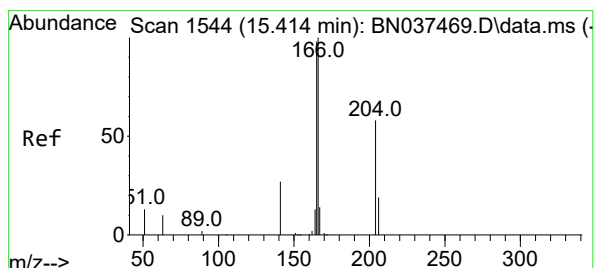
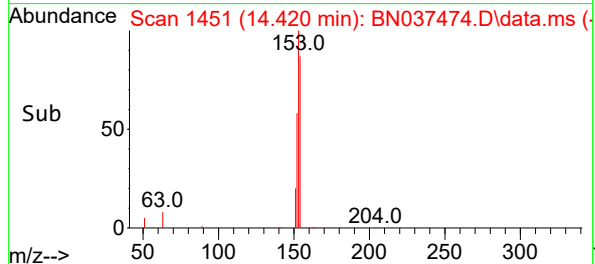
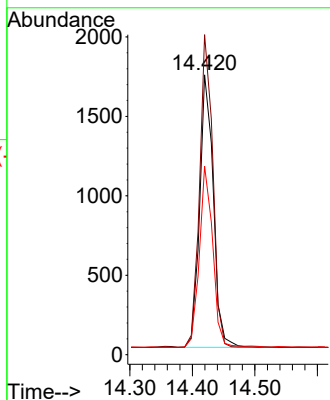
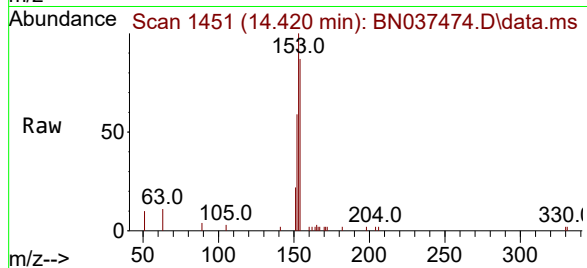




#17
Acenaphthene
Concen: 0.413 ng
RT: 14.420 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

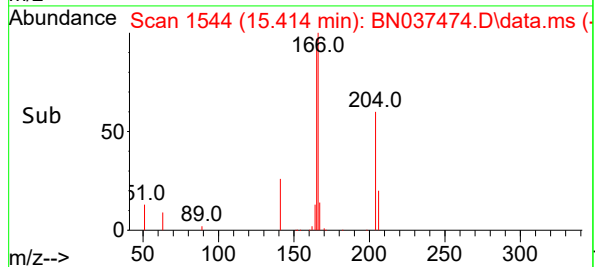
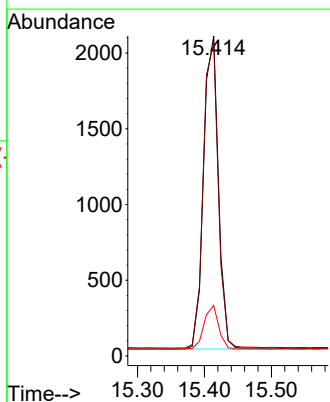
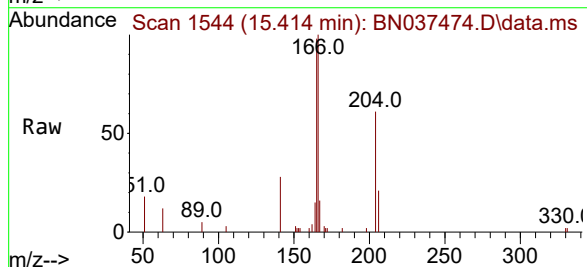
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

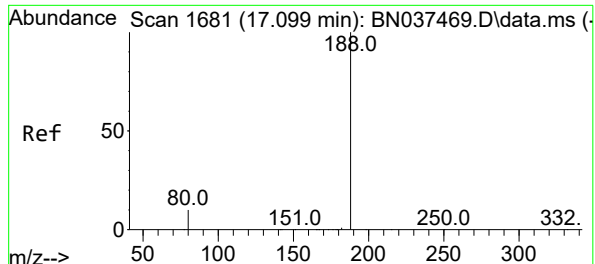
Tgt Ion:154 Resp: 2598
Ion Ratio Lower Upper
154 100
153 111.7 89.4 134.0
152 65.3 53.2 79.8



#18
Fluorene
Concen: 0.402 ng
RT: 15.414 min Scan# 1544
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion:166 Resp: 3179
Ion Ratio Lower Upper
166 100
165 98.5 79.4 119.2
167 13.7 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

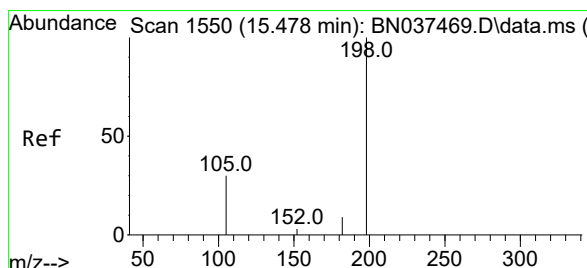
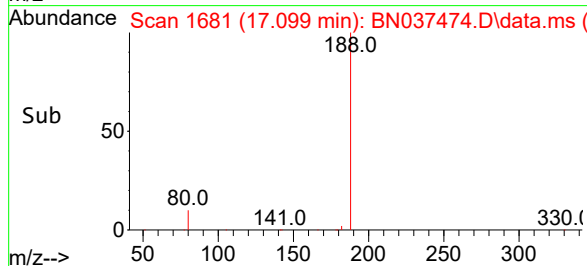
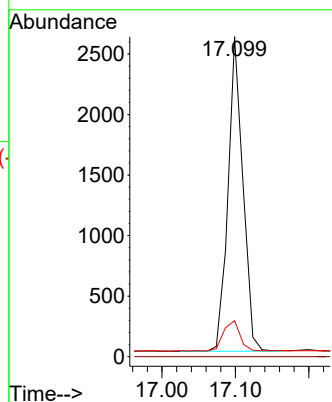
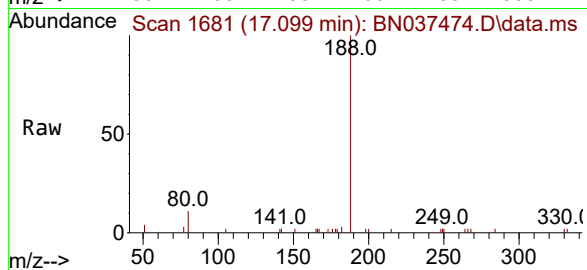
Tgt Ion:188 Resp: 3647

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.2 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.408 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

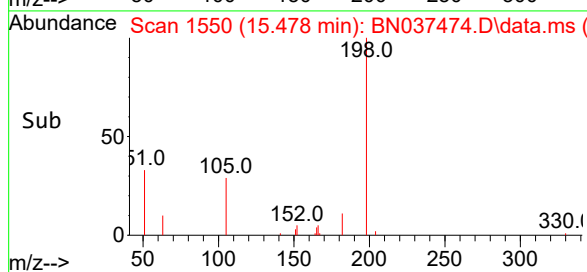
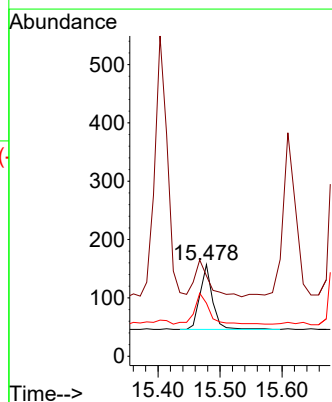
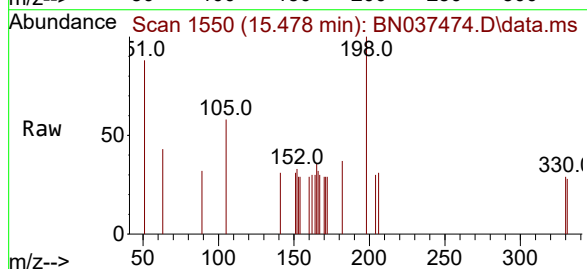
Tgt Ion:198 Resp: 167

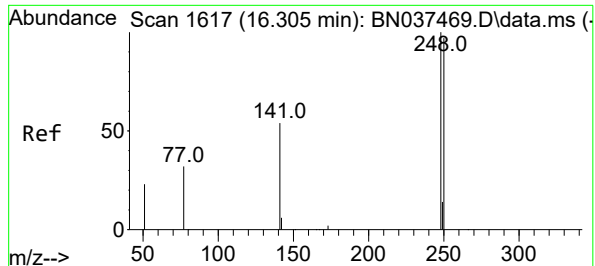
Ion Ratio Lower Upper

198 100

51 87.9 86.0 129.0

105 58.0 53.0 79.4

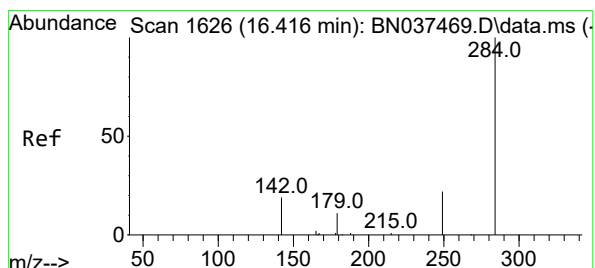
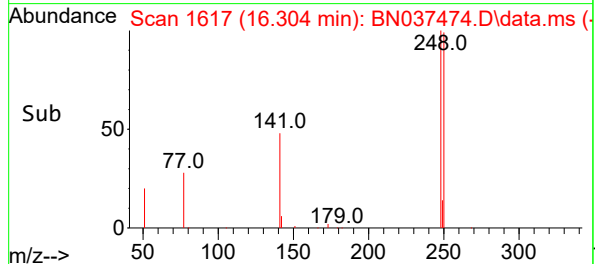
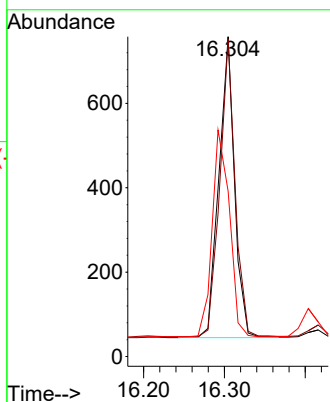
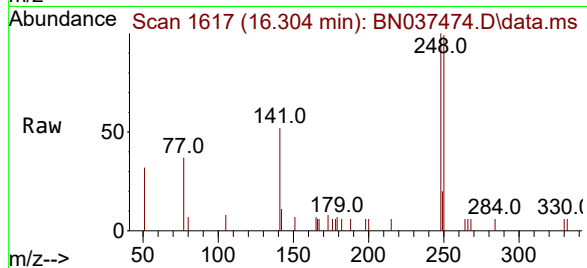




#21
4-Bromophenyl-phenylether
Concen: 0.422 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

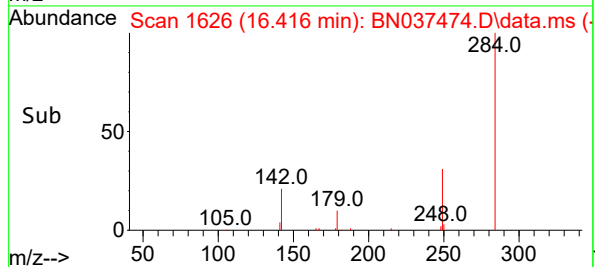
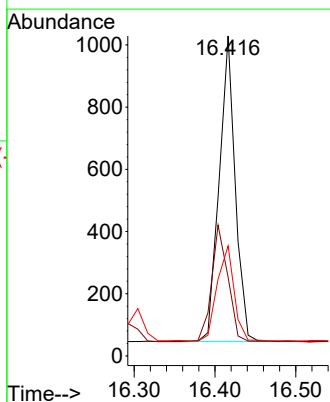
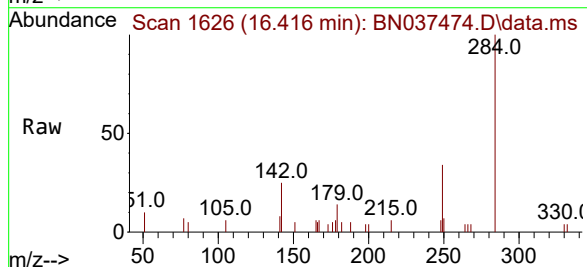
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

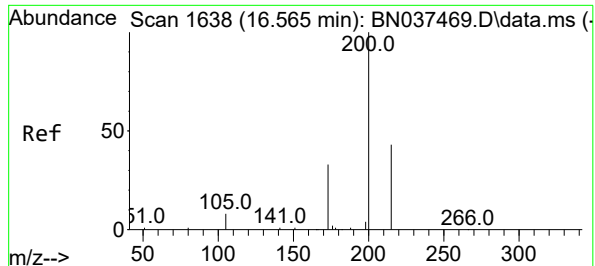
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.3	77.8	116.6
141	51.7	45.9	68.9



#22
Hexachlorobenzene
Concen: 0.433 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion	Ratio	Lower	Upper
284	100		
142	39.2	31.3	46.9
249	33.0	26.6	40.0

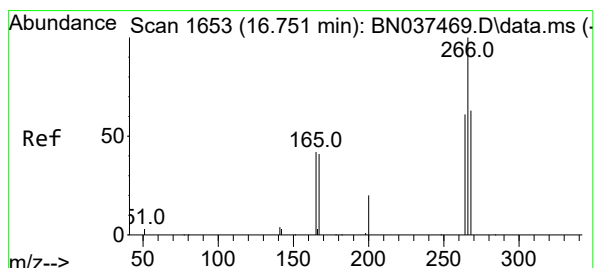
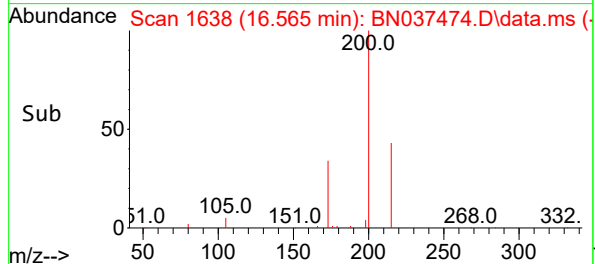
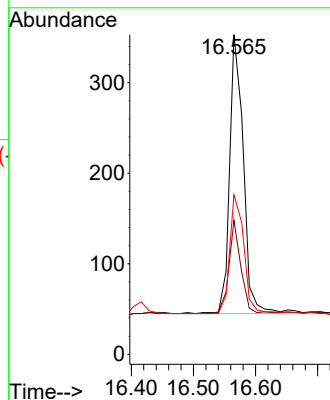
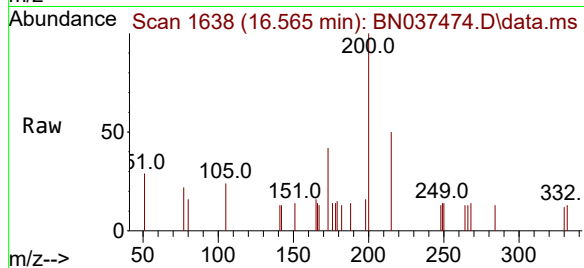




#23
Atrazine
Concen: 0.414 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

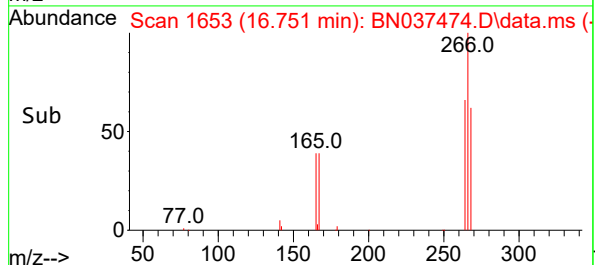
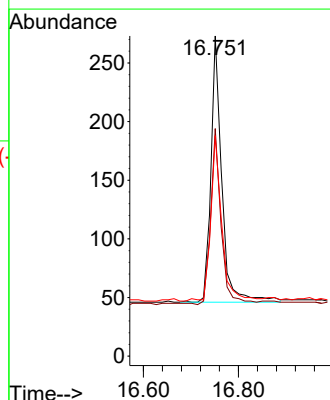
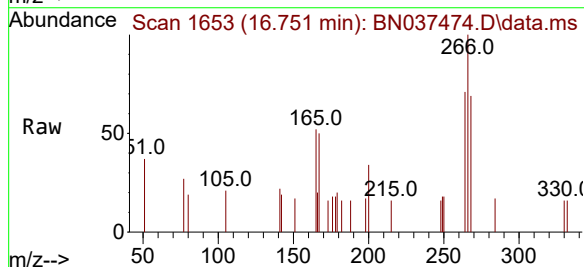
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

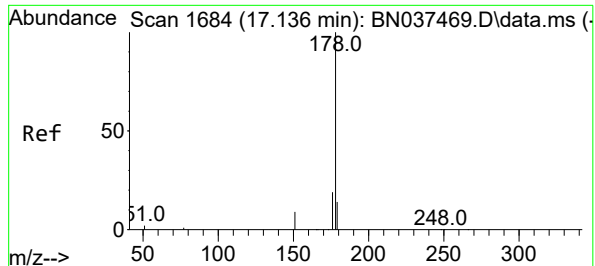
Tgt Ion:200 Resp: 469
Ion Ratio Lower Upper
200 100
173 41.9 34.3 51.5
215 49.9 41.6 62.4



#24
Pentachlorophenol
Concen: 0.337 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion:266 Resp: 364
Ion Ratio Lower Upper
266 100
264 63.2 47.5 71.3
268 62.4 50.6 76.0

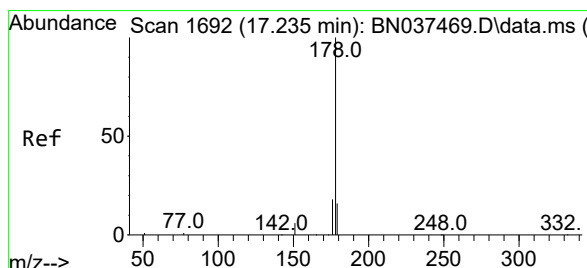
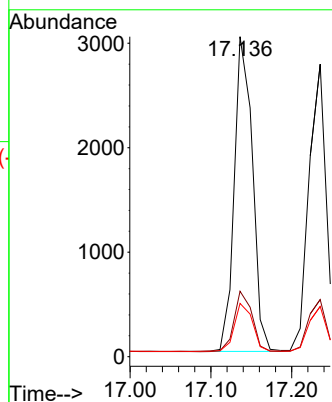
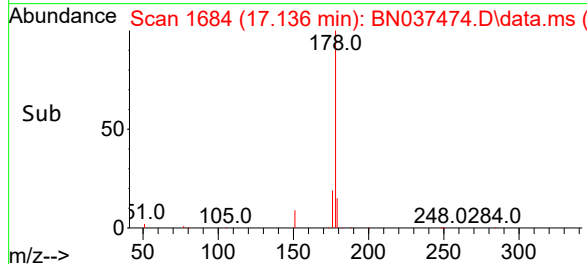
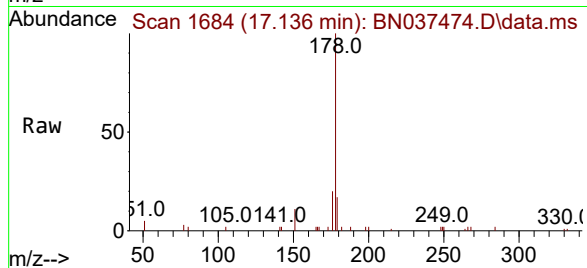




#25
Phenanthrene
Concen: 0.422 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

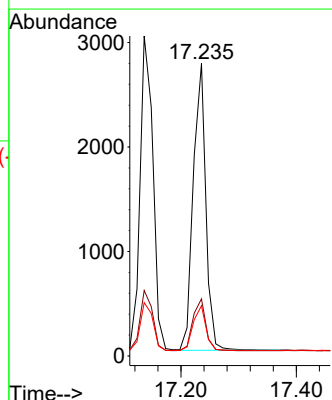
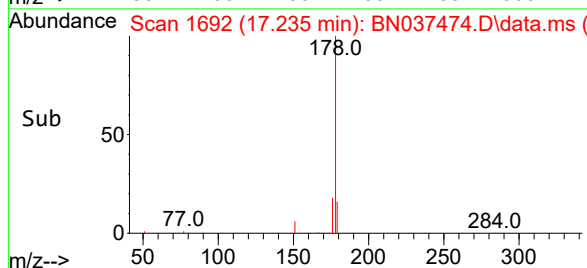
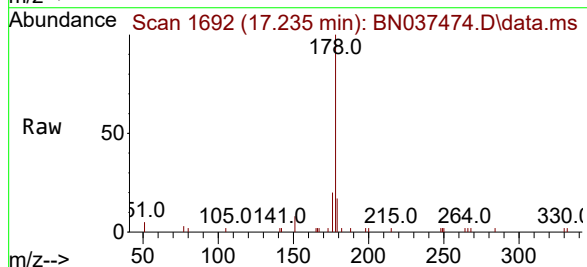
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

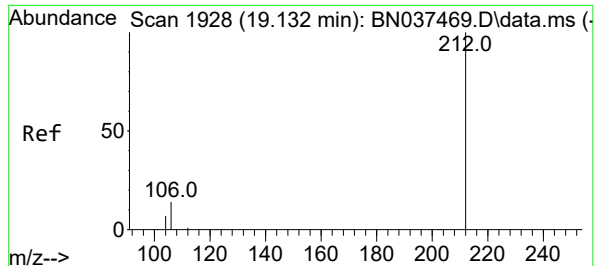
Tgt Ion:178 Resp: 4686
Ion Ratio Lower Upper
178 100
176 19.0 15.1 22.7
179 15.3 12.2 18.2



#26
Anthracene
Concen: 0.415 ng
RT: 17.235 min Scan# 1692
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion:178 Resp: 4164
Ion Ratio Lower Upper
178 100
176 18.6 14.9 22.3
179 15.7 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.403 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

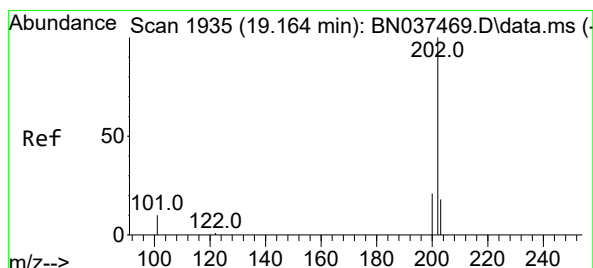
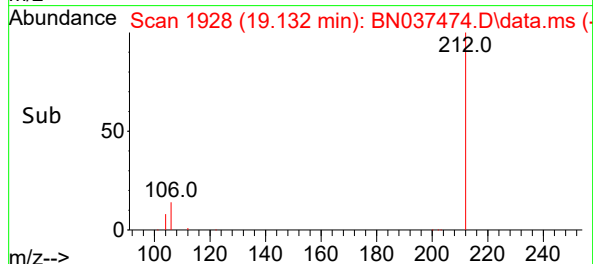
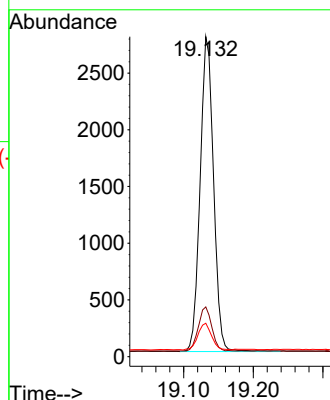
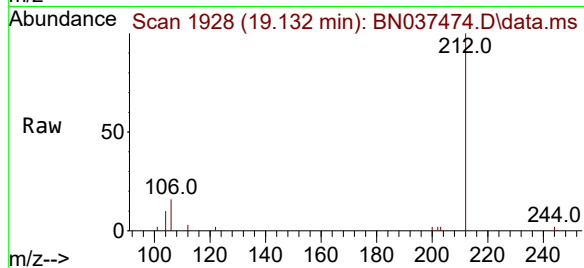
Tgt Ion:212 Resp: 3712

Ion Ratio Lower Upper

212 100

106 13.9 11.7 17.5

104 8.6 6.6 10.0



#28

Fluoranthene

Concen: 0.393 ng

RT: 19.164 min Scan# 1935

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

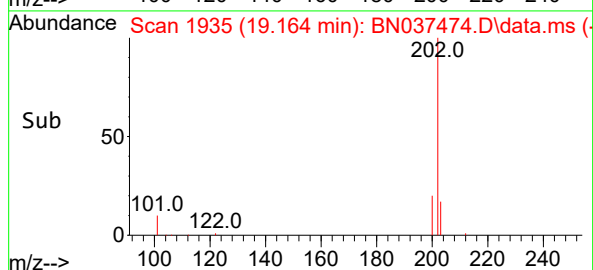
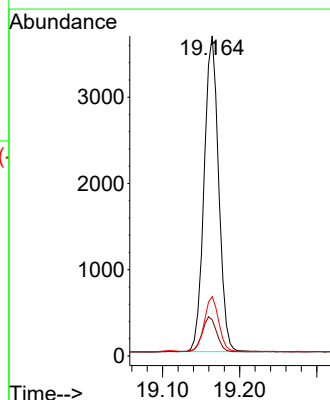
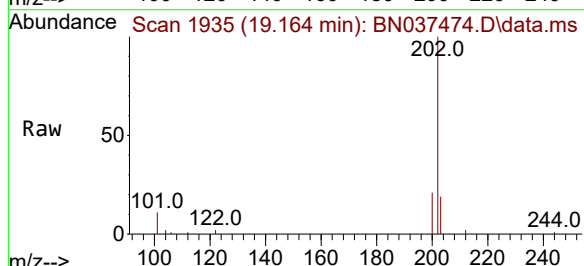
Tgt Ion:202 Resp: 4784

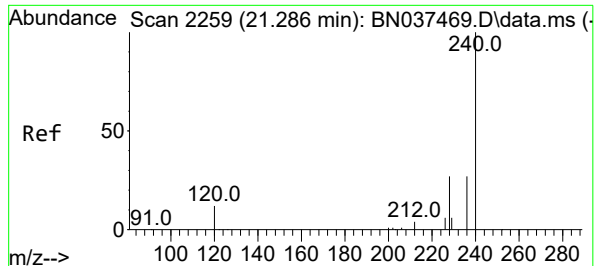
Ion Ratio Lower Upper

202 100

101 11.2 9.2 13.8

203 17.2 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

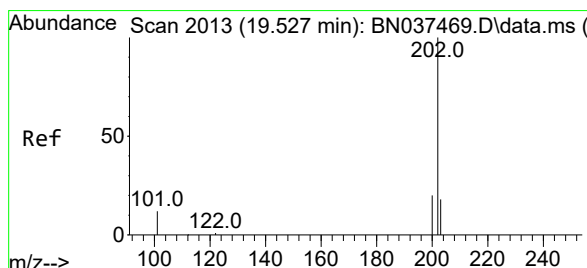
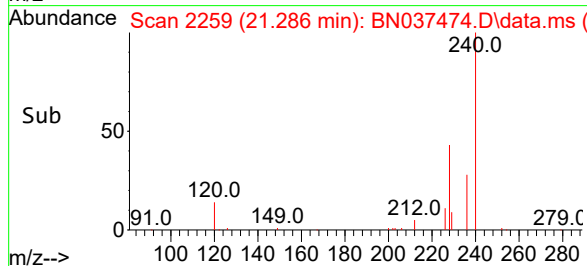
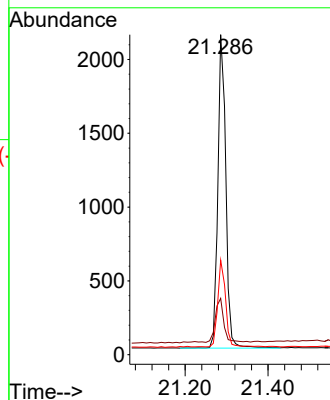
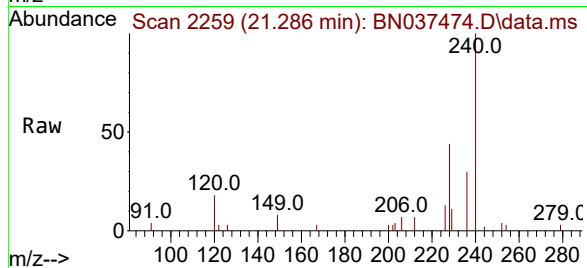
Tgt Ion:240 Resp: 2808

Ion Ratio Lower Upper

240 100

120 17.6 12.4 18.6

236 29.6 22.9 34.3



#30

Pyrene

Concen: 0.410 ng

RT: 19.527 min Scan# 2013

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

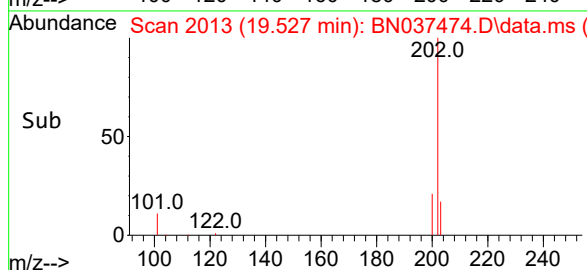
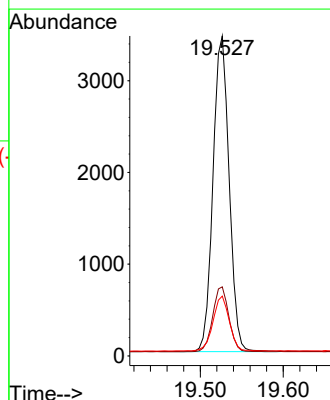
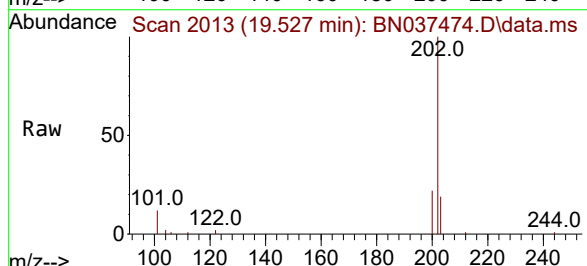
Tgt Ion:202 Resp: 4634

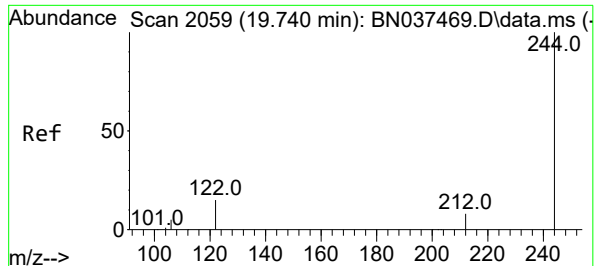
Ion Ratio Lower Upper

202 100

200 20.5 16.4 24.6

203 18.0 14.3 21.5

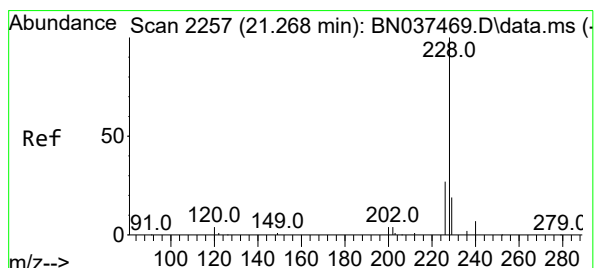
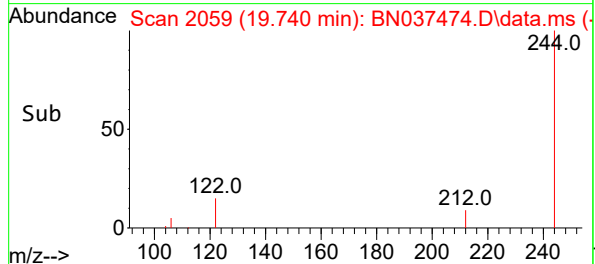
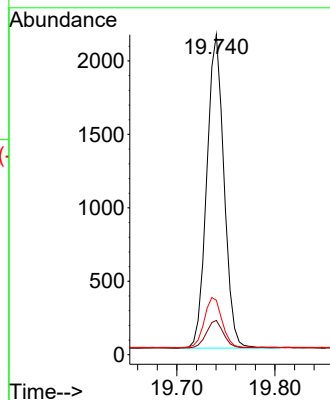
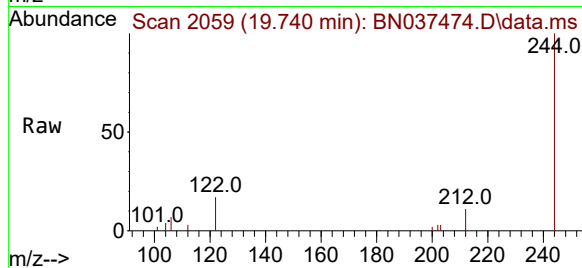




#31
Terphenyl-d14
Concen: 0.444 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.000 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

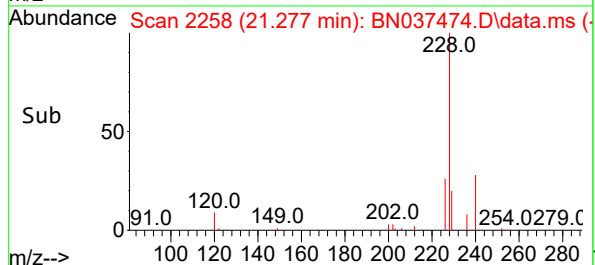
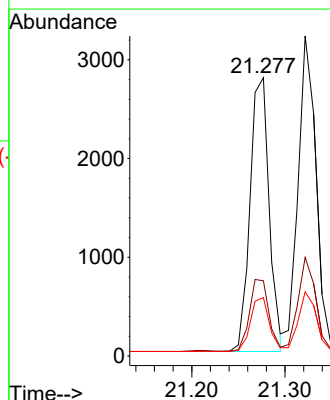
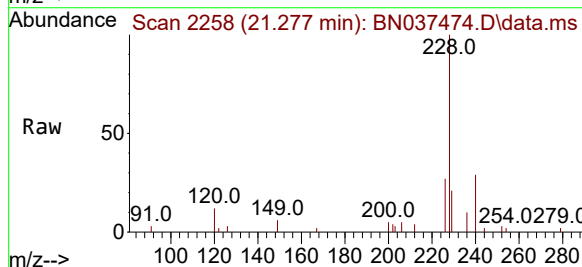
Instrument :
BNA_N
ClientSampleId :
ICVBN071125

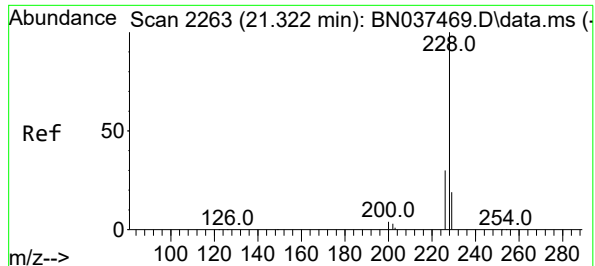
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.7	13.1
122	17.0	14.1	21.1



#32
Benzo(a)anthracene
Concen: 0.418 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.009 min
Lab File: BN037474.D
Acq: 11 Jul 2025 15:25

Tgt Ion	Ratio	Lower	Upper
228	100		
226	27.0	22.7	34.1
229	21.0	16.6	24.8





#33

Chrysene

Concen: 0.418 ng

RT: 21.322 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

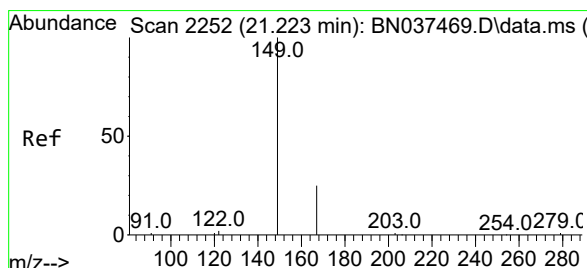
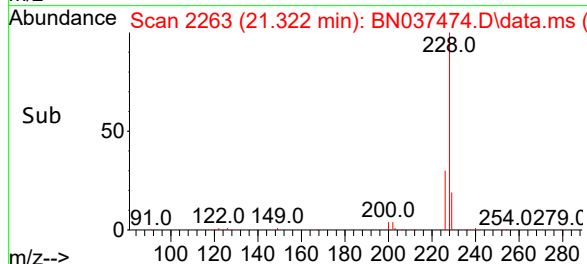
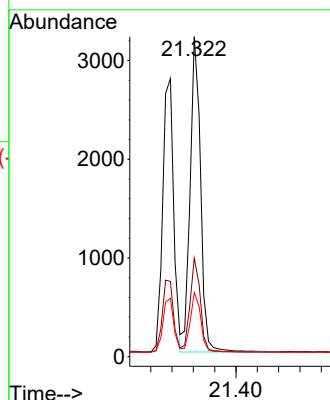
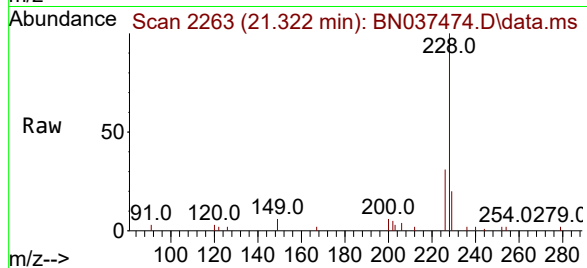
Tgt Ion:228 Resp: 4341

Ion Ratio Lower Upper

228 100

226 30.8 24.6 36.8

229 20.0 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.409 ng

RT: 21.232 min Scan# 2253

Delta R.T. 0.009 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

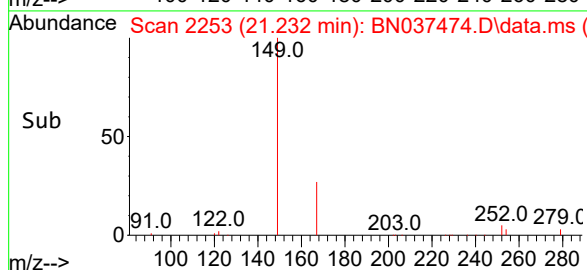
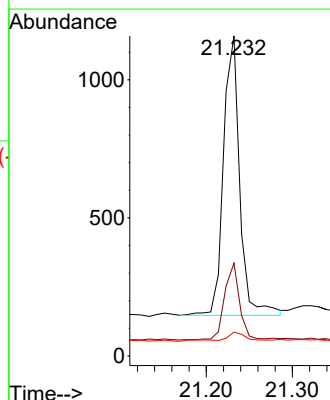
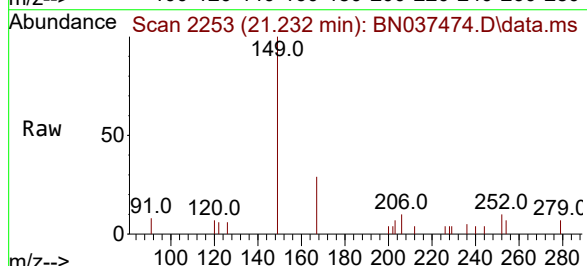
Tgt Ion:149 Resp: 1323

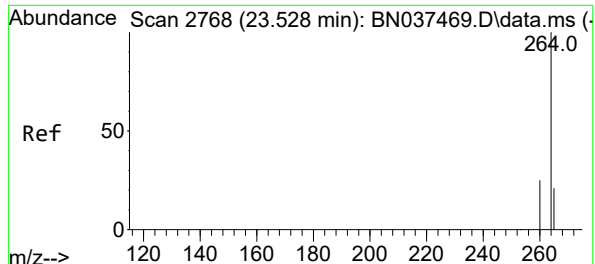
Ion Ratio Lower Upper

149 100

167 25.2 19.4 29.2

279 4.5 2.5 3.7#





#35

Perylene-d12

Concen: 0.400 ng

RT: 23.531 min Scan# 21

Delta R.T. 0.003 min

Lab File: BN037474.D

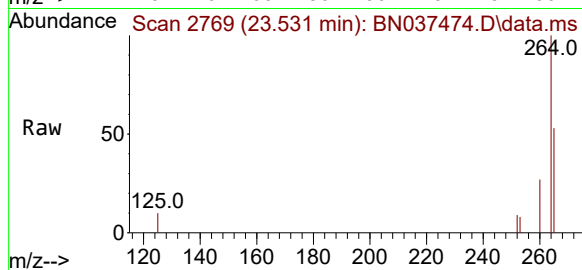
Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125



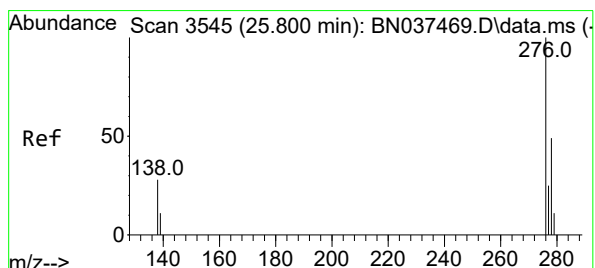
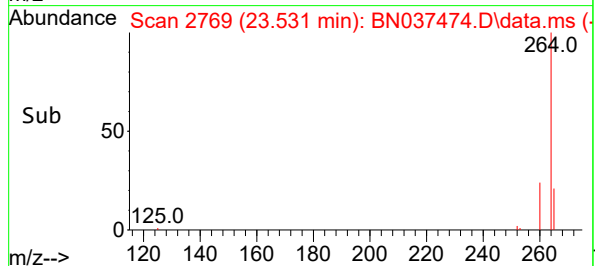
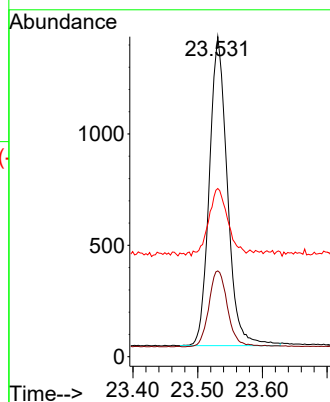
Tgt Ion:264 Resp: 2686

Ion Ratio Lower Upper

264 100

260 26.8 21.7 32.5

265 52.5 41.6 62.4



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.410 ng

RT: 25.806 min Scan# 3547

Delta R.T. 0.006 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

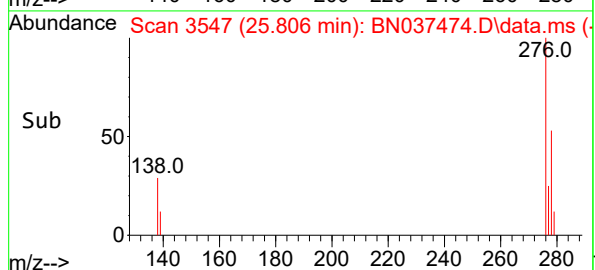
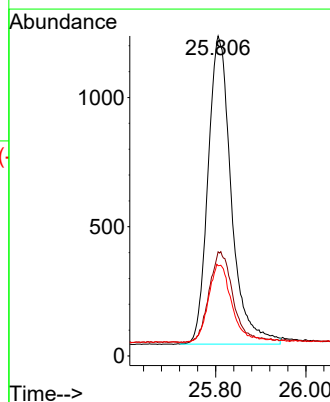
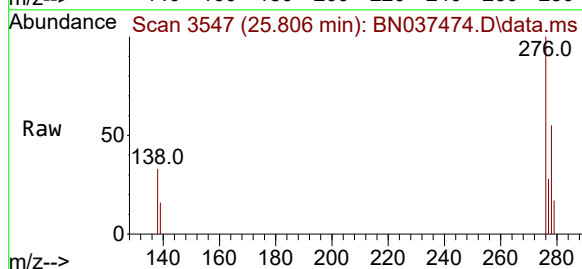
Tgt Ion:276 Resp: 4274

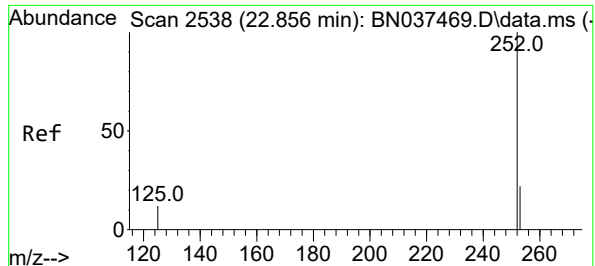
Ion Ratio Lower Upper

276 100

138 30.4 23.4 35.2

277 25.1 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.373 ng

RT: 22.858 min Scan# 2538

Delta R.T. 0.003 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

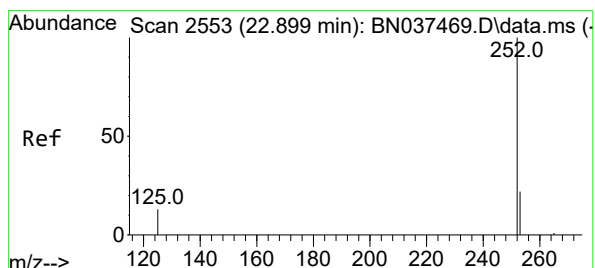
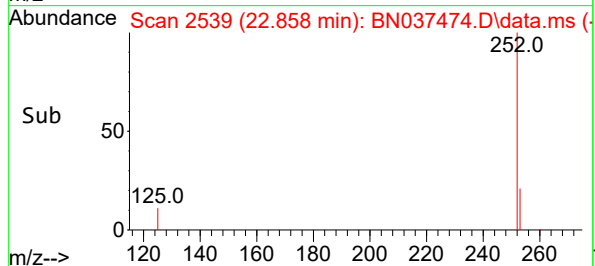
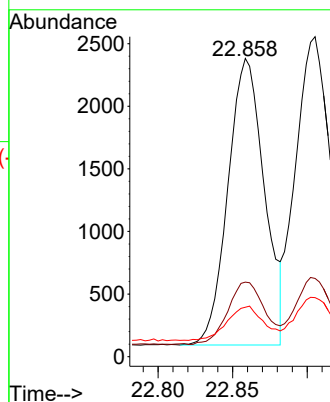
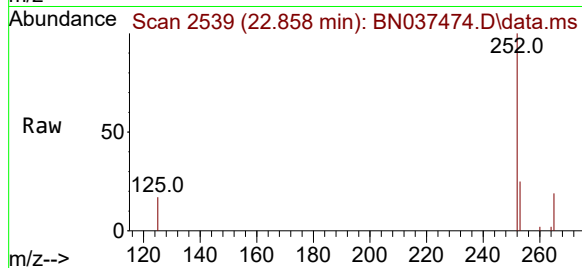
Tgt Ion:252 Resp: 3894

Ion Ratio Lower Upper

252 100

253 25.0 20.1 30.1

125 16.6 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.410 ng

RT: 22.905 min Scan# 2555

Delta R.T. 0.006 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

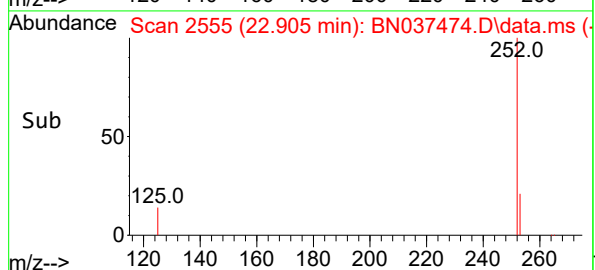
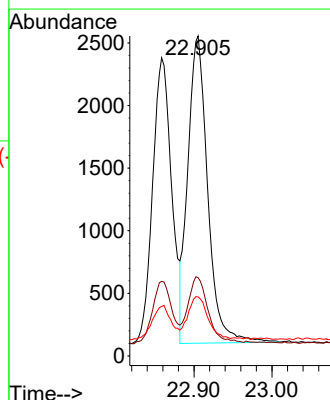
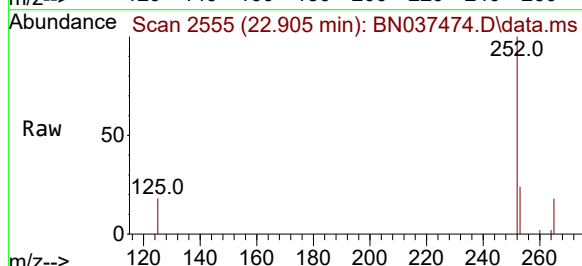
Tgt Ion:252 Resp: 4346

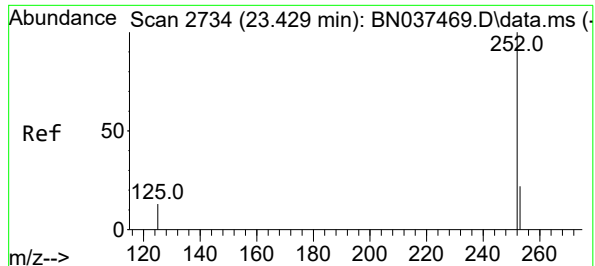
Ion Ratio Lower Upper

252 100

253 24.5 20.4 30.6

125 18.5 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.411 ng

RT: 23.434 min Scan# 21

Delta R.T. 0.006 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125

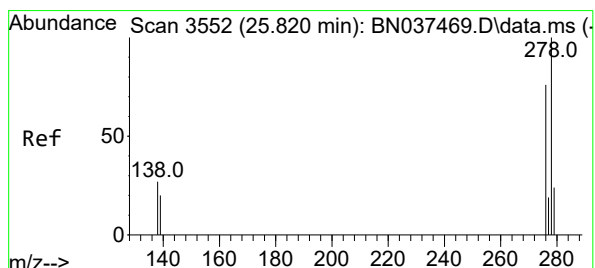
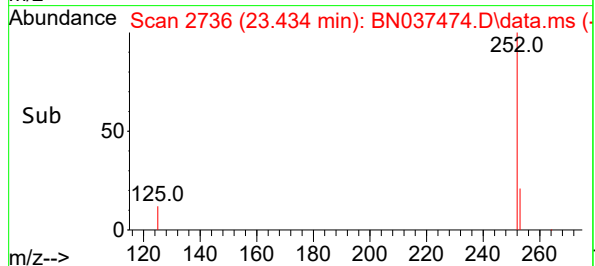
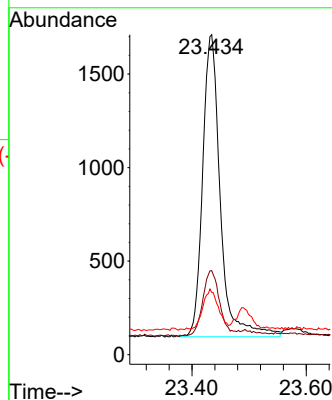
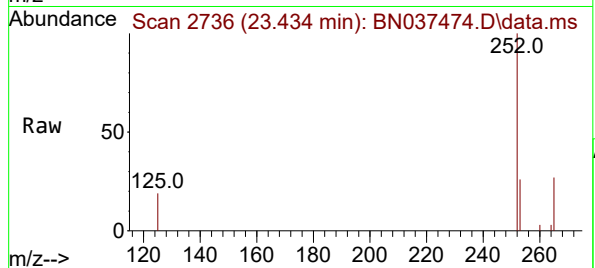
Tgt Ion:252 Resp: 3457

Ion Ratio Lower Upper

252 100

253 26.3 21.8 32.6

125 19.5 16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.415 ng

RT: 25.823 min Scan# 3553

Delta R.T. 0.003 min

Lab File: BN037474.D

Acq: 11 Jul 2025 15:25

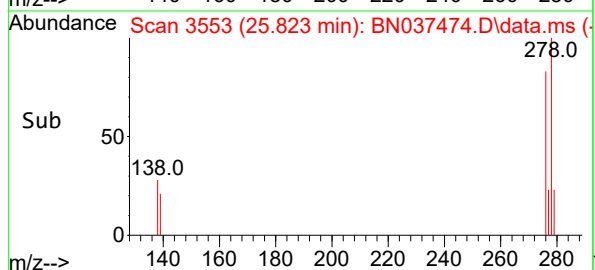
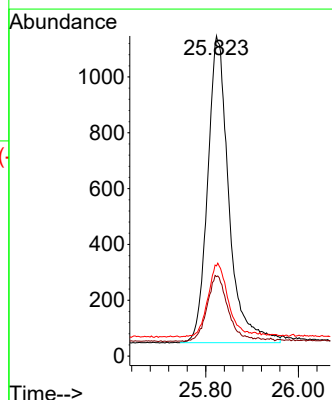
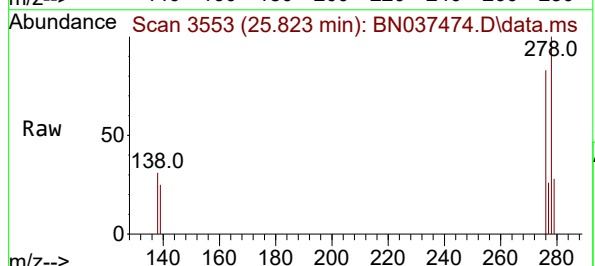
Tgt Ion:278 Resp: 3486

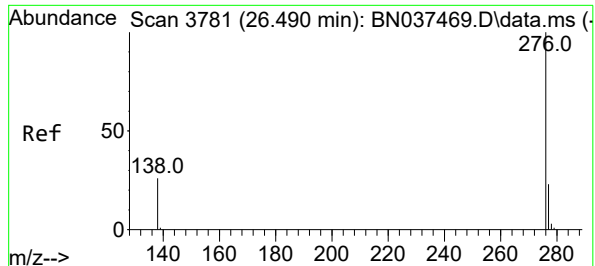
Ion Ratio Lower Upper

278 100

139 24.8 19.9 29.9

279 28.2 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.382 ng

RT: 26.490 min Scan# 31

Delta R.T. -0.000 min

Lab File: BN037474.D

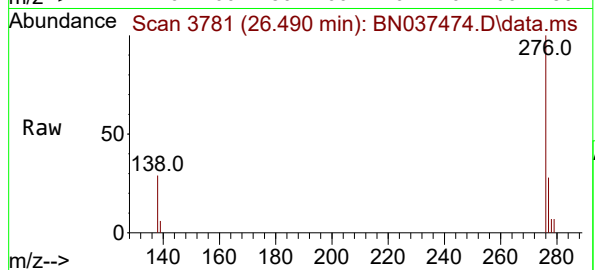
Acq: 11 Jul 2025 15:25

Instrument :

BNA_N

ClientSampleId :

ICVBN071125



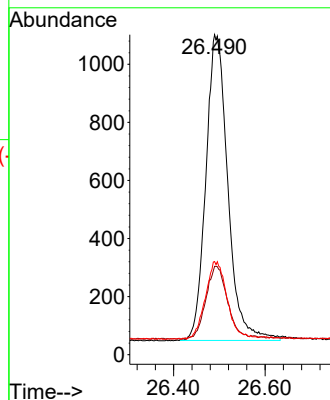
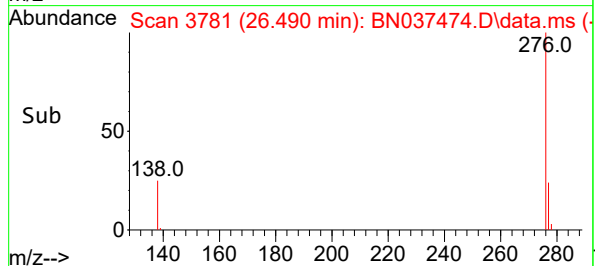
Tgt Ion:276 Resp: 3518

Ion Ratio Lower Upper

276 100

277 27.6 21.7 32.5

138 29.1 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037474.D
Acq On : 11 Jul 2025 15:25
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN071125

Quant Time: Jul 11 16:29:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 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	102	0.00
2	1,4-Dioxane	0.376	0.461	-22.6	123	0.00
3	n-Nitrosodimethylamine	0.502	0.532	-6.0	109	0.00
4 S	2-Fluorophenol	0.931	0.900	3.3	99	0.00
5 S	Phenol-d6	1.171	1.117	4.6	97	0.00
6	bis(2-Chloroethyl)ether	0.980	1.105	-12.8	117	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	104	0.00
8 S	Nitrobenzene-d5	0.290	0.322	-11.0	122	0.00
9	Naphthalene	1.075	1.128	-4.9	112	0.00
10	Hexachlorobutadiene	0.258	0.275	-6.6	112	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.573	-5.3	117	0.00
12	2-Methylnaphthalene	0.673	0.641	4.8	103	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	104	-0.01
14 S	2,4,6-Tribromophenol	0.136	0.121	11.0	103	0.00
15 S	2-Fluorobiphenyl	2.283	2.658	-16.4	120	0.00
16	Acenaphthylene	1.824	2.091	-14.6	123	0.00
17	Acenaphthene	1.224	1.264	-3.3	111	0.00
18	Fluorene	1.538	1.547	-0.6	109	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	102	0.00
20	4,6-Dinitro-2-methylphenol	0.045	0.046	-2.2	120	0.00
21	4-Bromophenyl-phenylether	0.250	0.263	-5.2	114	0.00
22	Hexachlorobenzene	0.344	0.372	-8.1	112	0.00
23	Atrazine	0.124	0.129	-4.0	114	0.00
24	Pentachlorophenol	0.119	0.100	16.0	101	0.00
25	Phenanthrene	1.218	1.285	-5.5	113	0.00
26	Anthracene	1.099	1.142	-3.9	115	0.00
27 SURR	Fluoranthene-d10	1.009	1.018	-0.9	114	0.00
28	Fluoranthene	1.337	1.312	1.9	110	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	105	0.00
30	Pyrene	1.608	1.650	-2.6	108	0.00
31 S	Terphenyl-d14	0.835	0.926	-10.9	118	0.00
32	Benzo(a)anthracene	1.355	1.417	-4.6	115	0.00
33	Chrysene	1.481	1.546	-4.4	110	0.00
34	Bis(2-ethylhexyl)phthalate	0.461	0.471	-2.2	109	0.00
35 I	Perylene-d12	1.000	1.000	0.0	108	0.00
36	Indeno(1,2,3-cd)pyrene	1.553	1.591	-2.4	124	0.00
37	Benzo(b)fluoranthene	1.556	1.450	6.8	111	0.00
38	Benzo(k)fluoranthene	1.577	1.618	-2.6	122	0.00
39 C	Benzo(a)pyrene	1.252	1.287	-2.8	121	0.00
40	Dibenzo(a,h)anthracene	1.252	1.298	-3.7	127	0.00
41	Benzo(g,h,i)perylene	1.372	1.310	4.5	112	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037474.D
Acq On : 11 Jul 2025 15:25
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN071125

Quant Time: Jul 11 16:29:03 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 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	102	0.00
2	1,4-Dioxane	0.400	0.491	-22.7	123	0.00
3	n-Nitrosodimethylamine	0.400	0.424	-6.0	109	0.00
4 S	2-Fluorophenol	0.400	0.387	3.3	99	0.00
5 S	Phenol-d6	0.400	0.381	4.8	97	0.00
6	bis(2-Chloroethyl)ether	0.400	0.451	-12.7	117	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	104	0.00
8 S	Nitrobenzene-d5	0.400	0.443	-10.7	122	0.00
9	Naphthalene	0.400	0.420	-5.0	112	0.00
10	Hexachlorobutadiene	0.400	0.427	-6.7	112	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.422	-5.5	117	0.00
12	2-Methylnaphthalene	0.400	0.381	4.8	103	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	104	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.357	10.8	103	0.00
15 S	2-Fluorobiphenyl	0.400	0.466	-16.5	120	0.00
16	Acenaphthylene	0.400	0.459	-14.8	123	0.00
17	Acenaphthene	0.400	0.413	-3.2	111	0.00
18	Fluorene	0.400	0.402	-0.5	109	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	102	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.408	-2.0	120	0.00
21	4-Bromophenyl-phenylether	0.400	0.422	-5.5	114	0.00
22	Hexachlorobenzene	0.400	0.433	-8.2	112	0.00
23	Atrazine	0.400	0.414	-3.5	114	0.00
24	Pentachlorophenol	0.400	0.337	15.8	101	0.00
25	Phenanthrene	0.400	0.422	-5.5	113	0.00
26	Anthracene	0.400	0.415	-3.7	115	0.00
27 SURR	Fluoranthene-d10	0.400	0.403	-0.8	114	0.00
28	Fluoranthene	0.400	0.393	1.8	110	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	105	0.00
30	Pyrene	0.400	0.410	-2.5	108	0.00
31 S	Terphenyl-d14	0.400	0.444	-11.0	118	0.00
32	Benzo(a)anthracene	0.400	0.418	-4.5	115	0.00
33	Chrysene	0.400	0.418	-4.5	110	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.409	-2.2	109	0.00
35 I	Perylene-d12	0.400	0.400	0.0	108	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.410	-2.5	124	0.00
37	Benzo(b)fluoranthene	0.400	0.373	6.8	111	0.00
38	Benzo(k)fluoranthene	0.400	0.410	-2.5	122	0.00
39 C	Benzo(a)pyrene	0.400	0.411	-2.7	121	0.00
40	Dibenzo(a,h)anthracene	0.400	0.415	-3.7	127	0.00
41	Benzo(g,h,i)perylene	0.400	0.382	4.5	112	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: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q2488
 Instrument ID: BNA_N Calibration Date/Time: 07/11/2025 19:43
 Lab File ID: BN037481.D Init. Calib. Date(s): 07/11/2025 07/11/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:10 14:49
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.419		-23.0	50.0
Fluoranthene-d10	1.009	0.757		-25.0	50.0
2-Fluorophenol	0.931	0.915		-1.7	50.0
Phenol-d6	1.171	1.144		-2.3	50.0
Nitrobenzene-d5	0.290	0.238		-17.9	50.0
2-Fluorobiphenyl	2.283	1.999		-12.4	50.0
2,4,6-Tribromophenol	0.136	0.133		-2.2	50.0
Terphenyl-d14	0.835	0.664		-20.5	50.0
1,4-Dioxane	0.376	0.317		-15.7	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037481.D
 Acq On : 11 Jul 2025 19:43
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

Quant Time: Jul 11 23:29:23 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

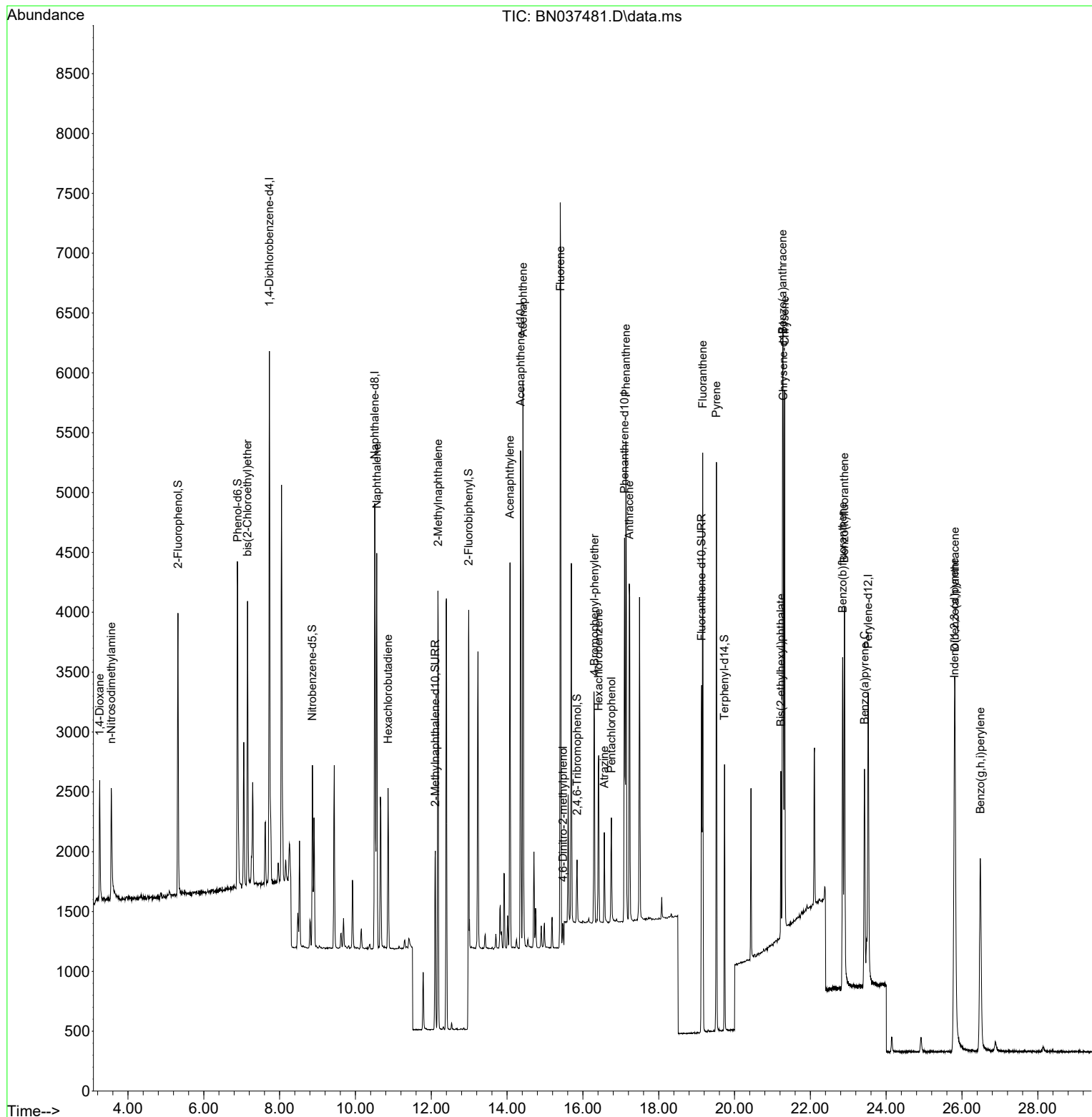
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	2080	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4810	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2230	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	4045	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3148	0.400	ng	# 0.00
35) Perylene-d12	23.528	264	3275	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1903	0.393	ng	0.00
5) Phenol-d6	6.894	99	2379	0.391	ng	0.00
8) Nitrobenzene-d5	8.865	82	1147	0.329	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2015	0.308	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	296	0.391	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	4458	0.350	ng	0.00
27) Fluoranthene-d10	19.132	212	3064	0.300	ng	0.00
31) Terphenyl-d14	19.736	244	2090	0.318	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	659	0.337	ng	Qvalue 98
3) n-Nitrosodimethylamine	3.557	42	859	0.329	ng	100
6) bis(2-Chloroethyl)ether	7.154	93	1661	0.326	ng	100
9) Naphthalene	10.562	128	4185	0.324	ng	99
10) Hexachlorobutadiene	10.861	225	1067	0.344	ng	# 99
12) 2-Methylnaphthalene	12.177	142	2536	0.313	ng	98
16) Acenaphthylene	14.078	152	3291	0.324	ng	99
17) Acenaphthene	14.420	154	2223	0.326	ng	99
18) Fluorene	15.403	166	2753	0.321	ng	98
20) 4,6-Dinitro-2-methylph...	15.478	198	141	0.310	ng	96
21) 4-Bromophenyl-phenylether	16.304	248	797	0.316	ng	92
22) Hexachlorobenzene	16.416	284	1153	0.331	ng	97
23) Atrazine	16.565	200	562	0.448	ng	93
24) Pentachlorophenol	16.751	266	422	0.352	ng	95
25) Phenanthrene	17.136	178	3968	0.322	ng	99
26) Anthracene	17.223	178	3404	0.306	ng	100
28) Fluoranthene	19.160	202	4165	0.308	ng	99
30) Pyrene	19.522	202	4077	0.322	ng	99
32) Benzo(a)anthracene	21.268	228	3329	0.312	ng	99
33) Chrysene	21.322	228	3716	0.319	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	1217	0.336	ng	95
36) Indeno(1,2,3-cd)pyrene	25.800	276	3929	0.309	ng	98
37) Benzo(b)fluoranthene	22.853	252	3502	0.275	ng	100
38) Benzo(k)fluoranthene	22.899	252	3951m	0.306	ng	
39) Benzo(a)pyrene	23.429	252	2804	0.274	ng	99
40) Dibenzo(a,h)anthracene	25.814	278	3294	0.321	ng	97
41) Benzo(g,h,i)perylene	26.484	276	3300	0.294	ng	99

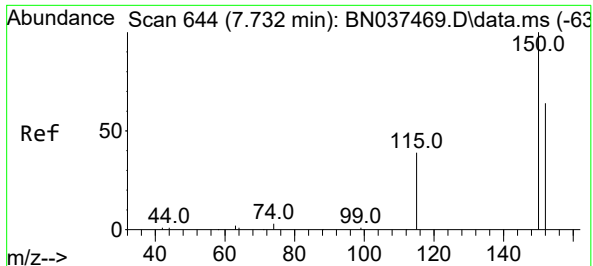
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037481.D
Acq On : 11 Jul 2025 19:43
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Jul 11 23:29:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

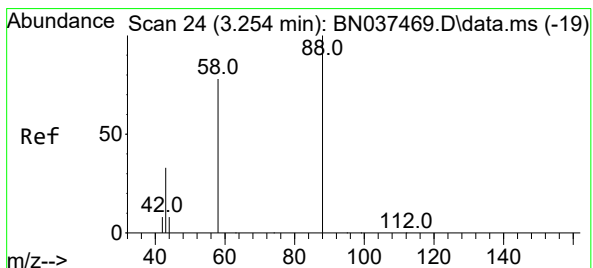
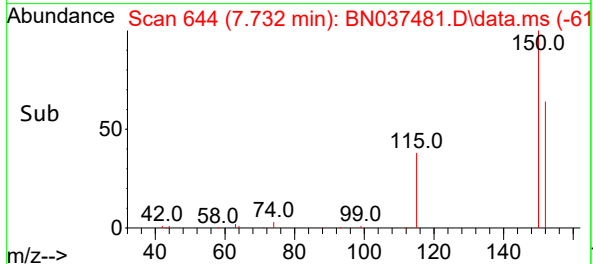
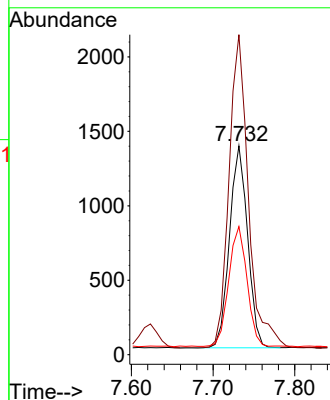
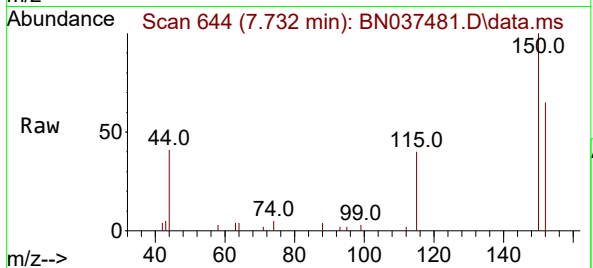




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

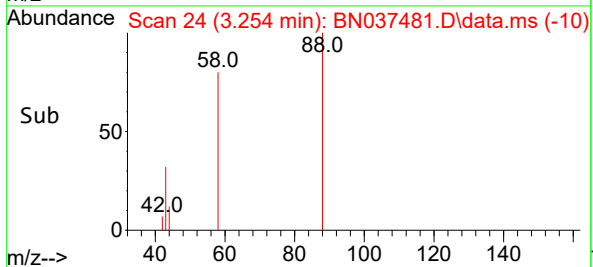
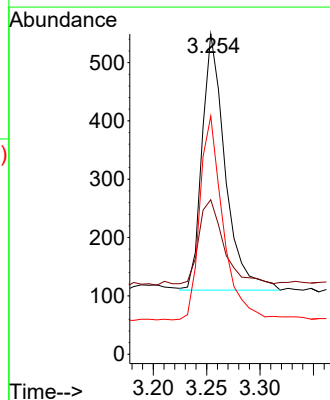
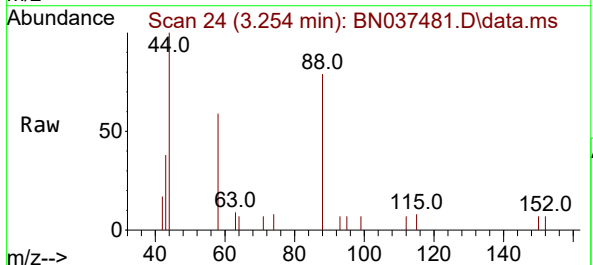
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2080
Ion Ratio Lower Upper
152 100
150 153.3 122.5 183.7
115 61.4 49.9 74.9

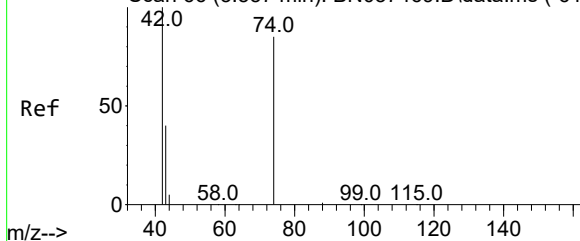


#2
1,4-Dioxane
Concen: 0.337 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion: 88 Resp: 659
Ion Ratio Lower Upper
88 100
43 35.5 30.7 46.1
58 80.3 65.0 97.4



Abundance Scan 66 (3.557 min): BN037469.D\data.ms (-61)



#3

n-Nitrosodimethylamine

Concen: 0.329 ng

RT: 3.557 min Scan# 60

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion: 42 Resp: 859

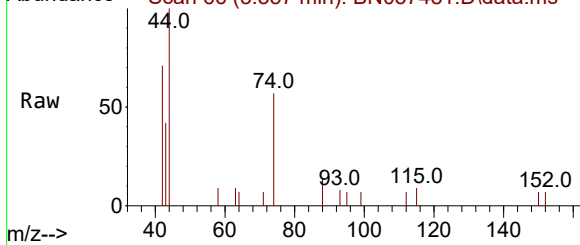
Ion Ratio Lower Upper

42 100

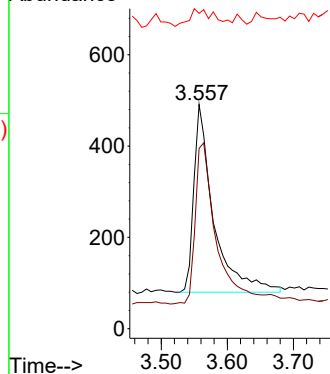
74 93.6 74.9 112.3

44 10.6 7.2 10.8

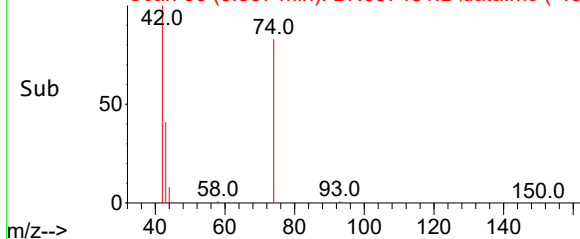
Abundance Scan 66 (3.557 min): BN037481.D\data.ms



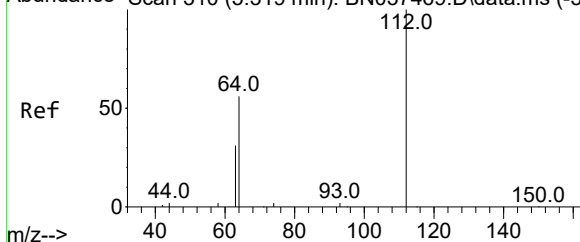
Abundance



Abundance Scan 66 (3.557 min): BN037481.D\data.ms (-45)



Abundance Scan 310 (5.319 min): BN037469.D\data.ms (-30)



#4

2-Fluorophenol

Concen: 0.393 ng

RT: 5.319 min Scan# 310

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Tgt Ion: 112 Resp: 1903

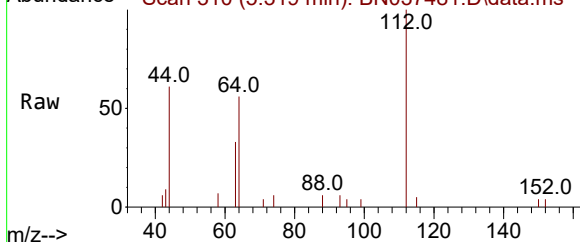
Ion Ratio Lower Upper

112 100

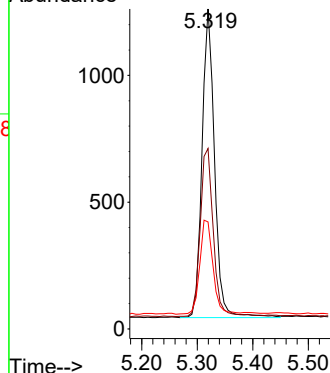
64 57.2 45.4 68.0

63 31.8 24.7 37.1

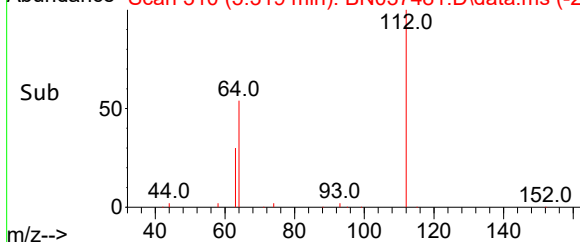
Abundance Scan 310 (5.319 min): BN037481.D\data.ms

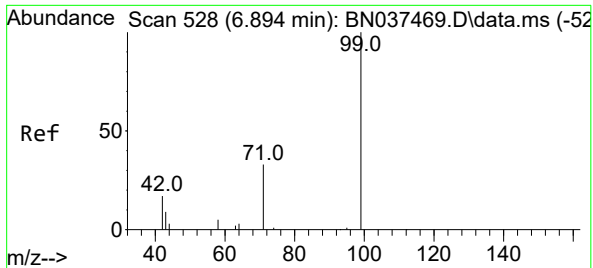


Abundance



Abundance Scan 310 (5.319 min): BN037481.D\data.ms (-28)

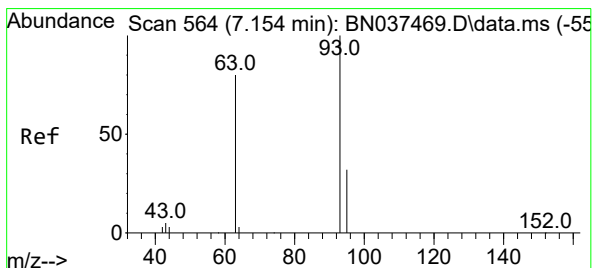
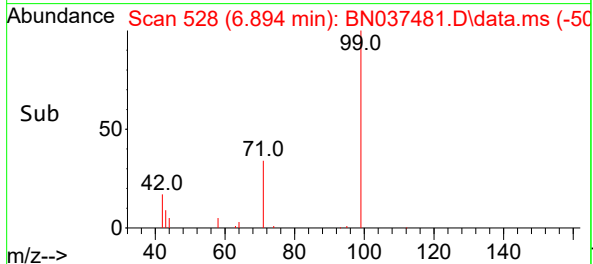
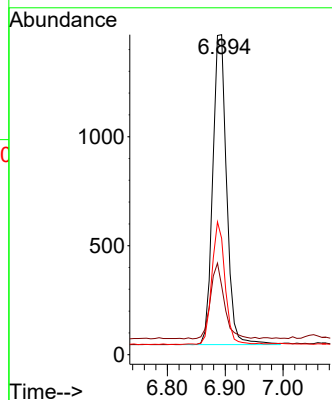
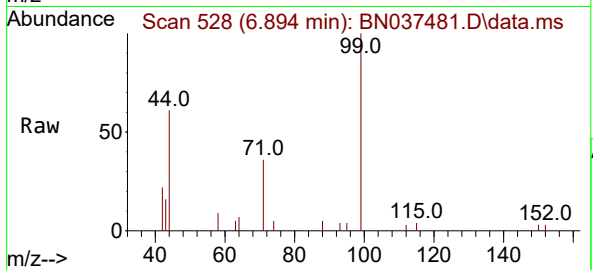




#5
Phenol-d6
Concen: 0.391 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

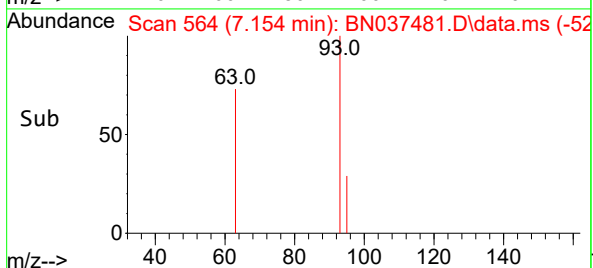
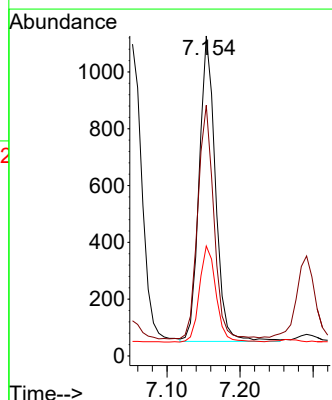
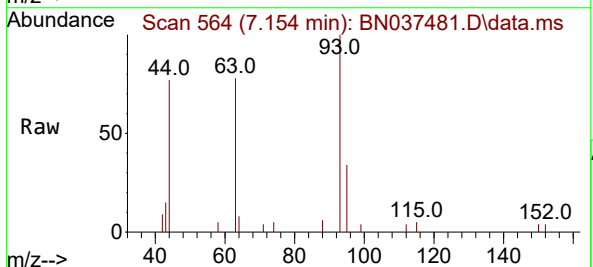
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

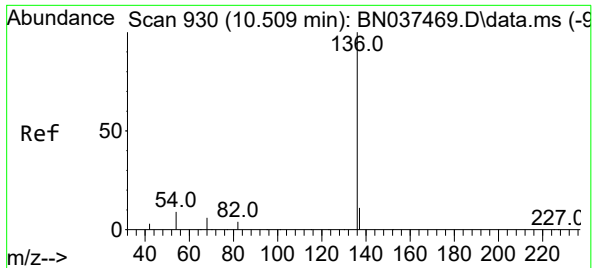
Tgt Ion: 99 Resp: 2379
Ion Ratio Lower Upper
99 100
42 24.2 19.5 29.3
71 37.5 29.4 44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.326 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion: 93 Resp: 1661
Ion Ratio Lower Upper
93 100
63 75.4 60.8 91.2
95 32.0 25.6 38.4

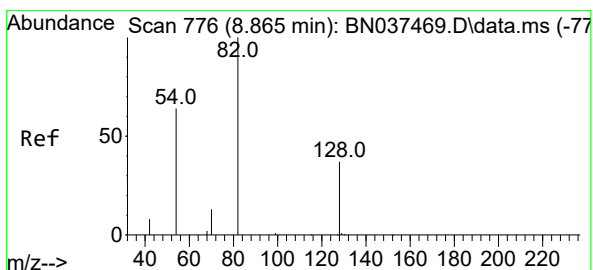
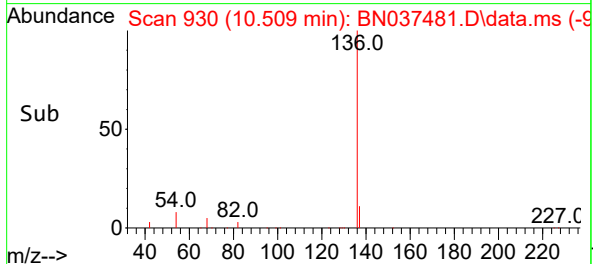
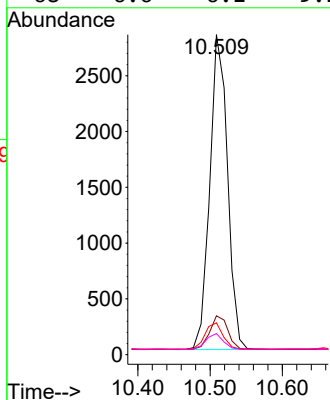
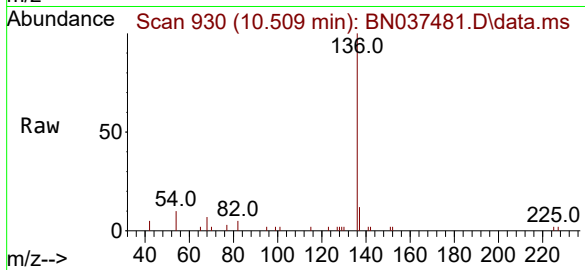




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

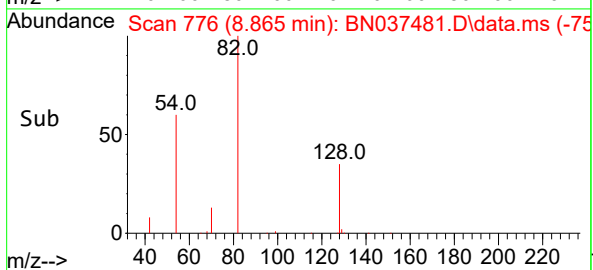
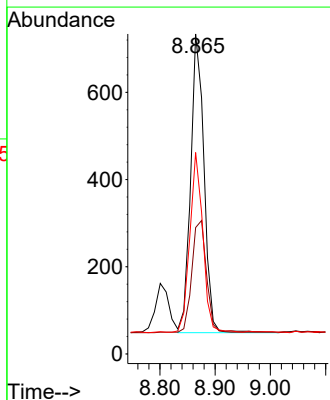
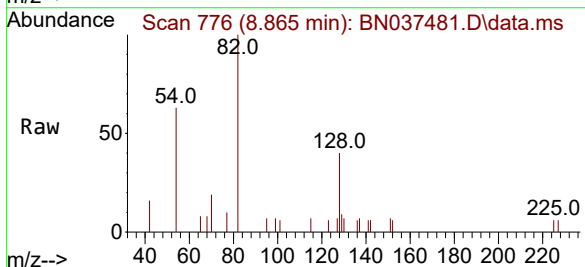
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

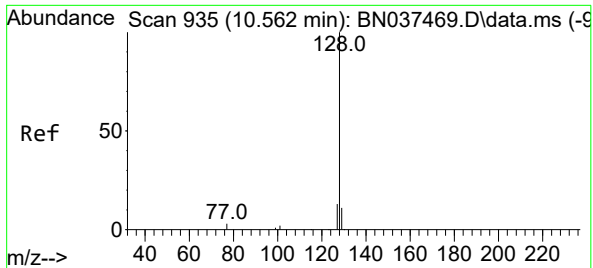
Tgt Ion:	136	Resp:	4810
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.0	15.0
54	10.0	9.0	13.6
68	6.6	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.329 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:	82	Resp:	1147
Ion	Ratio	Lower	Upper
82	100		
128	39.5	33.1	49.7
54	62.9	53.0	79.4

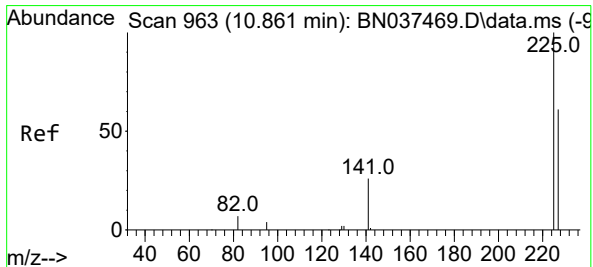
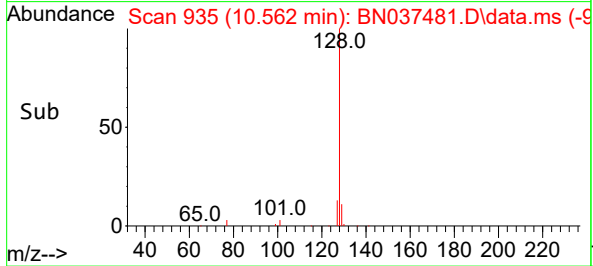
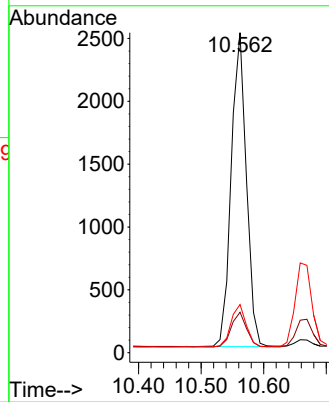
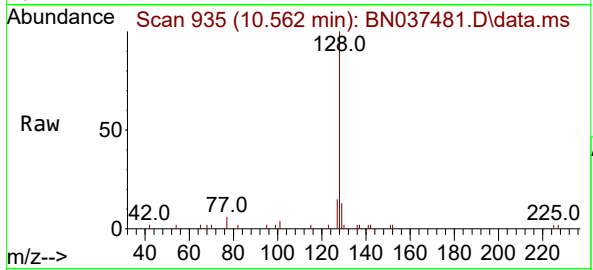




#9
Naphthalene
Concen: 0.324 ng
RT: 10.562 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

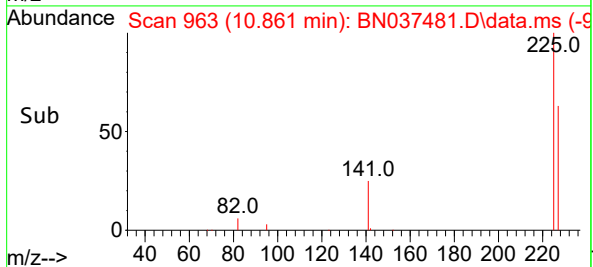
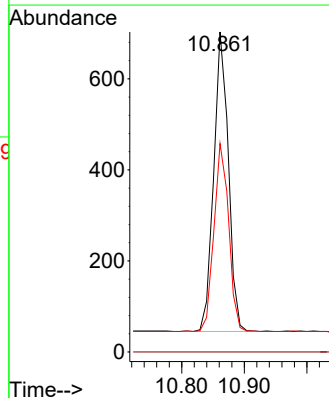
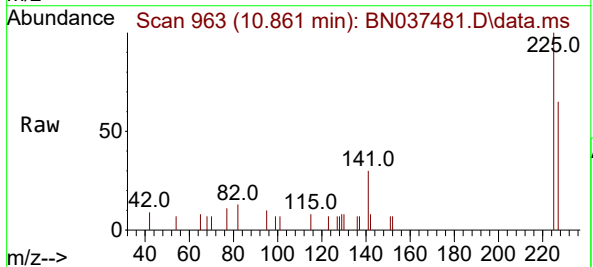
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

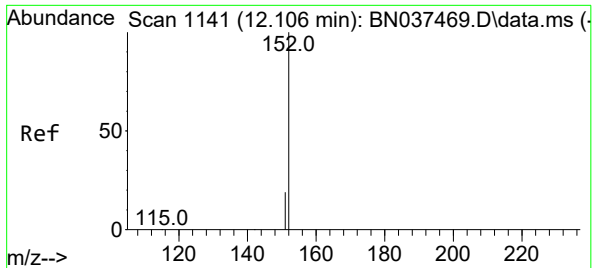
Tgt Ion:	128	Resp:	4185
Ion	Ratio	Lower	Upper
128	100		
129	12.6	10.2	15.2
127	15.0	11.8	17.6



#10
Hexachlorobutadiene
Concen: 0.344 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:	225	Resp:	1067
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	51.4	77.2

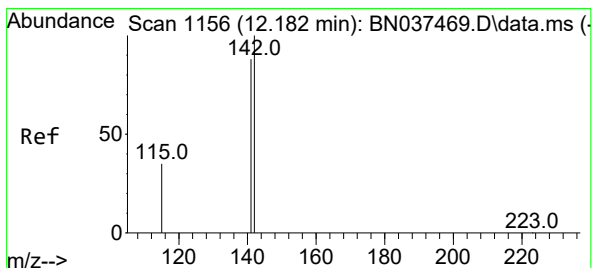
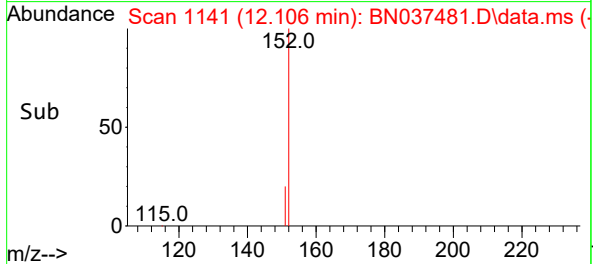
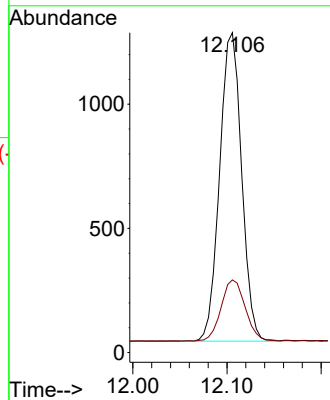
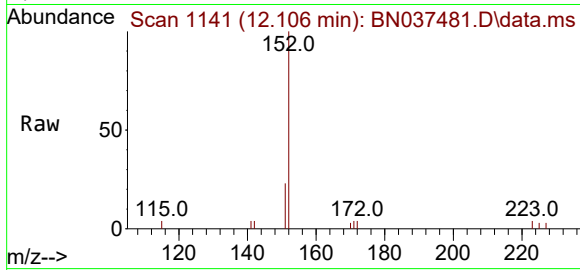




#11
2-Methylnaphthalene-d10
Concen: 0.308 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

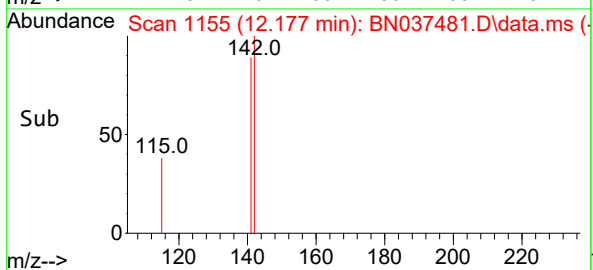
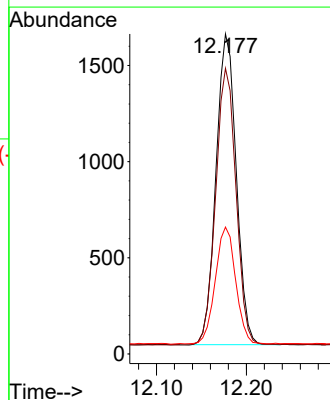
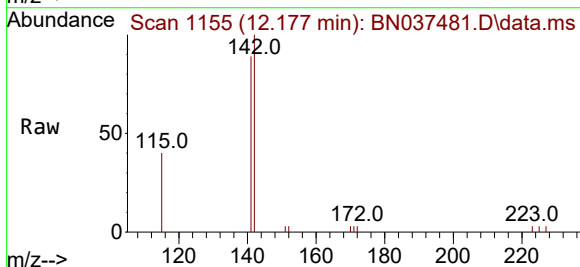
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

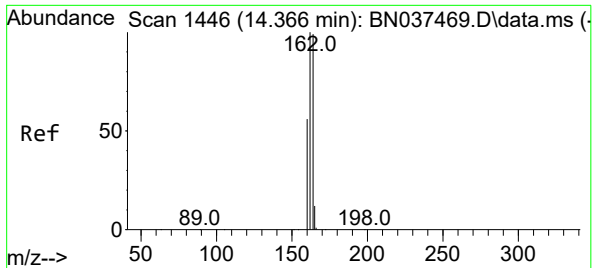
Tgt Ion:152 Resp: 2015
Ion Ratio Lower Upper
152 100
151 21.5 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.313 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:142 Resp: 2536
Ion Ratio Lower Upper
142 100
141 89.2 70.6 105.8
115 39.7 30.0 45.0

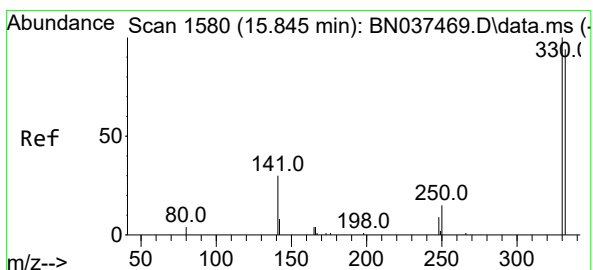
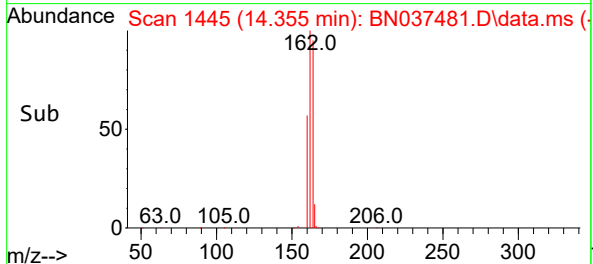
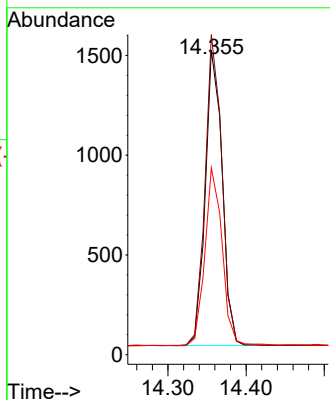
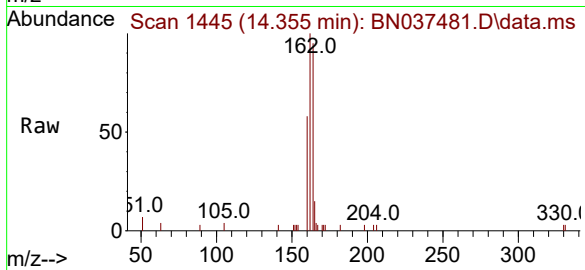




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1446
Delta R.T. -0.011 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

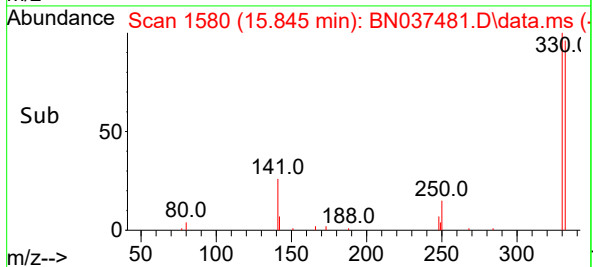
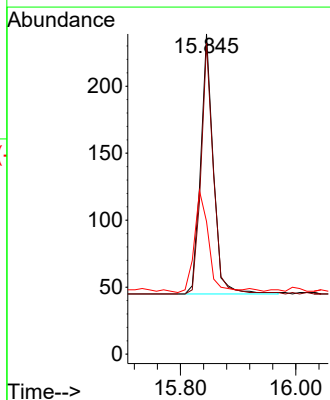
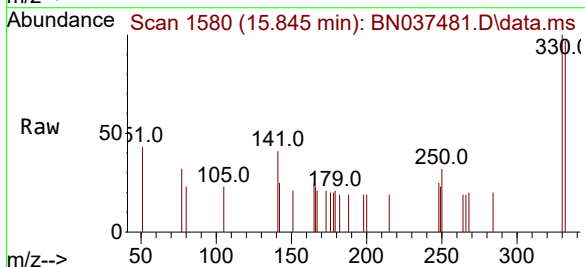
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

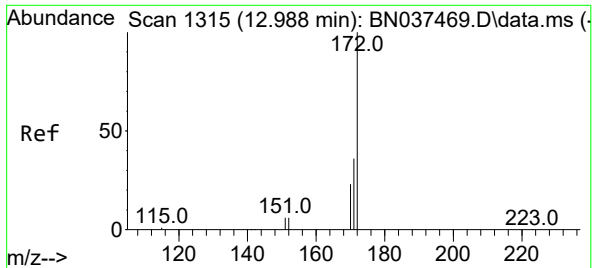
Tgt Ion:164 Resp: 2230
Ion Ratio Lower Upper
164 100
162 105.0 81.1 121.7
160 61.4 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 0.391 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:330 Resp: 296
Ion Ratio Lower Upper
330 100
332 94.3 82.0 123.0
141 44.3 36.2 54.2

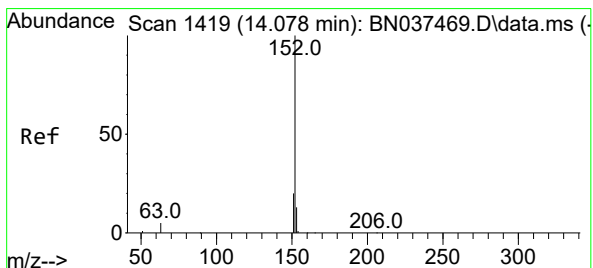
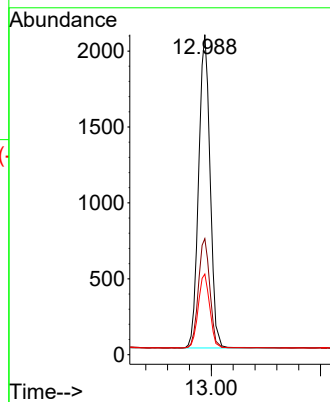
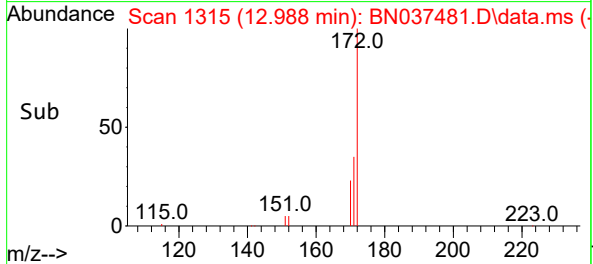
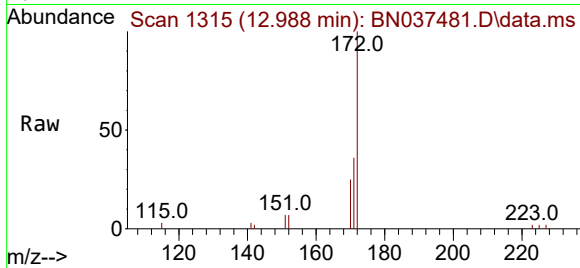




#15
2-Fluorobiphenyl
Concen: 0.350 ng
RT: 12.988 min Scan# 1315
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

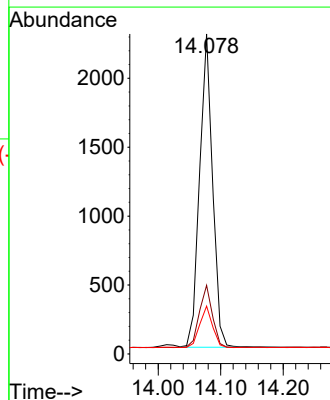
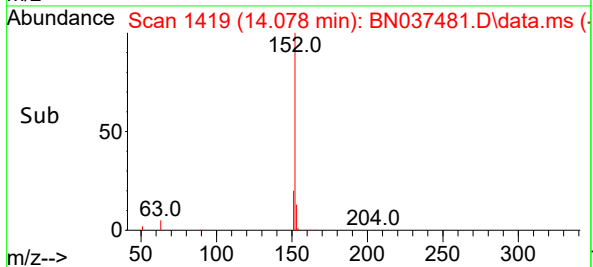
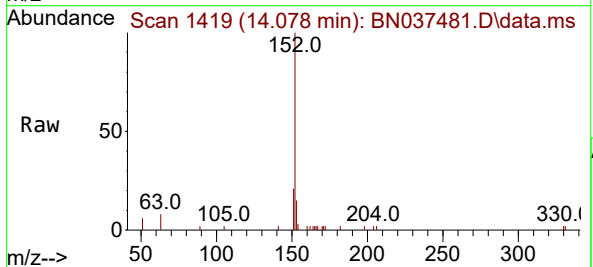
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

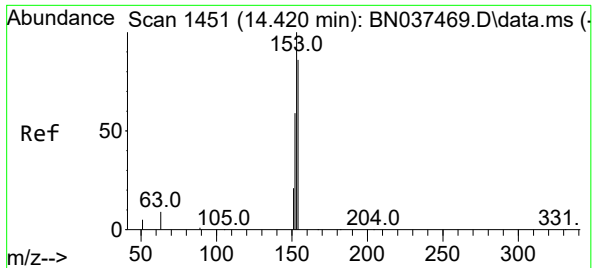
Tgt Ion	Ratio	Lower	Upper
172	100		
171	36.2	29.8	44.8
170	25.2	20.0	30.0



#16
Acenaphthylene
Concen: 0.324 ng
RT: 14.078 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.4	24.6
153	13.0	10.6	15.8

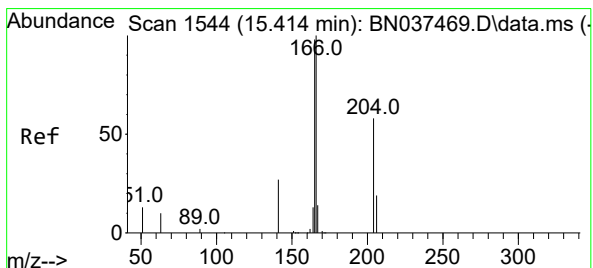
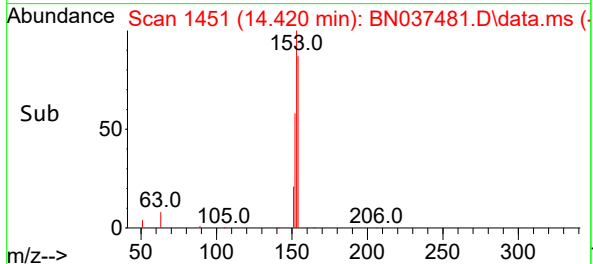
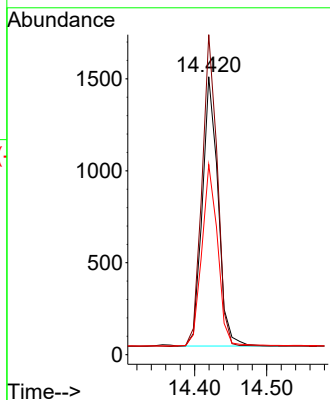
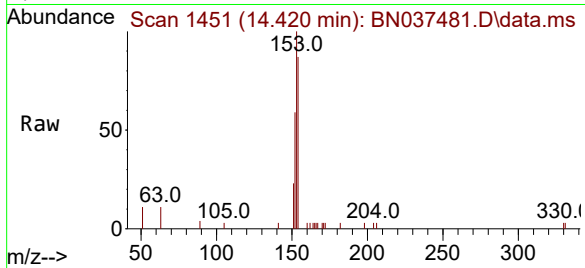




#17
Acenaphthene
Concen: 0.326 ng
RT: 14.420 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

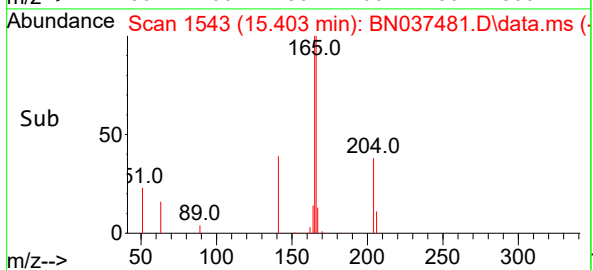
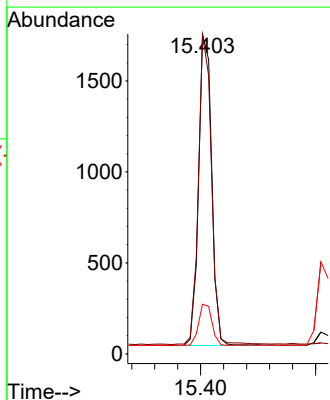
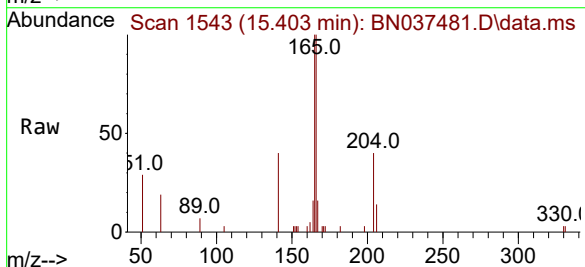
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

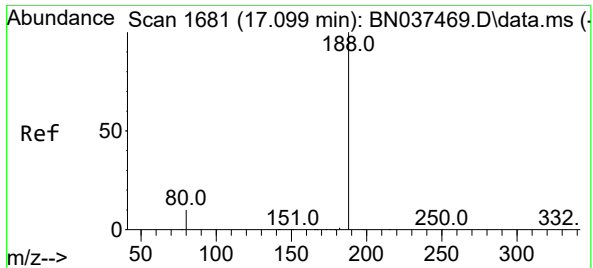
Tgt Ion:154 Resp: 2223
Ion Ratio Lower Upper
154 100
153 112.4 89.4 134.0
152 68.1 53.2 79.8



#18
Fluorene
Concen: 0.321 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:166 Resp: 2753
Ion Ratio Lower Upper
166 100
165 97.5 79.4 119.2
167 13.4 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

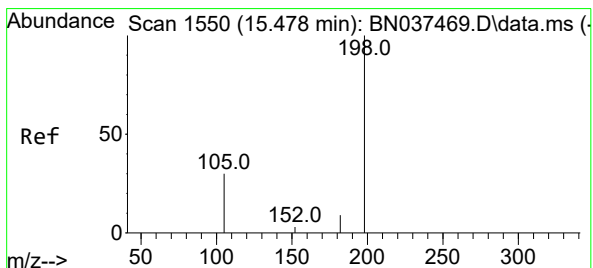
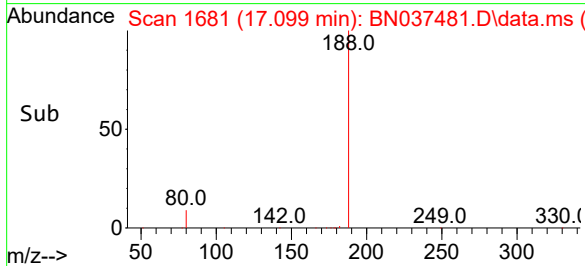
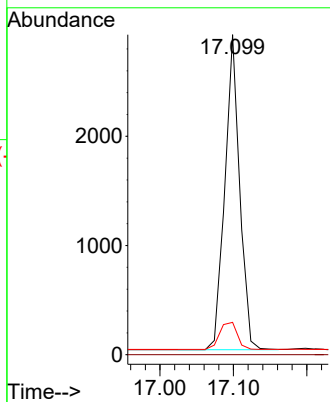
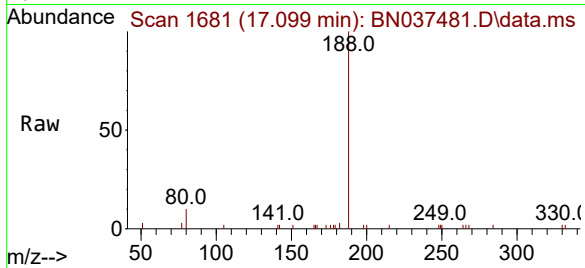
Tgt Ion:188 Resp: 4045

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.1 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.310 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

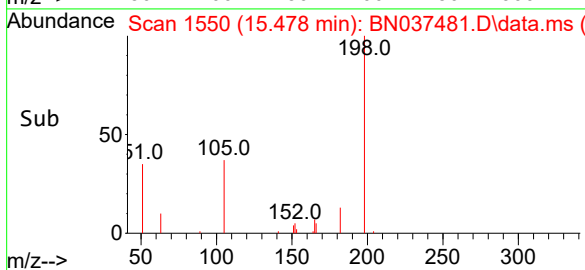
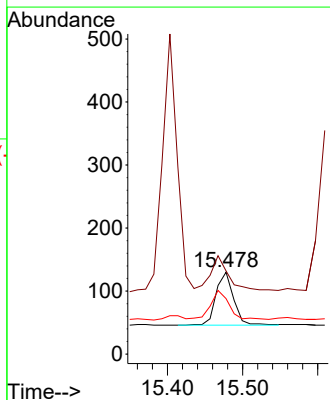
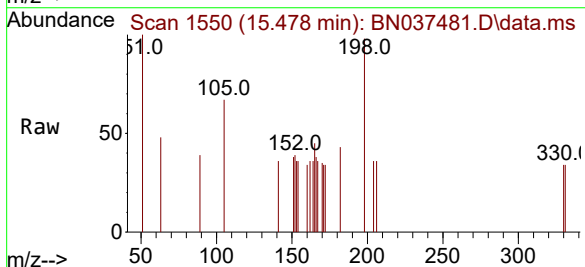
Tgt Ion:198 Resp: 141

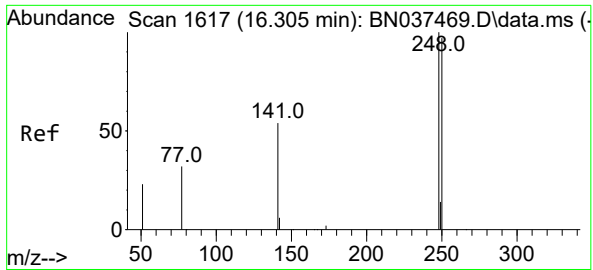
Ion Ratio Lower Upper

198 100

51 101.5 86.0 129.0

105 67.7 53.0 79.4

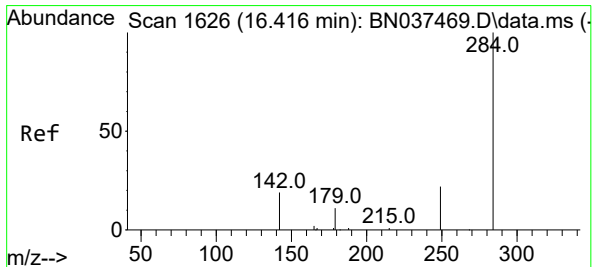
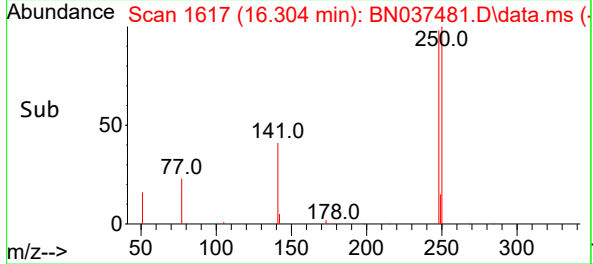
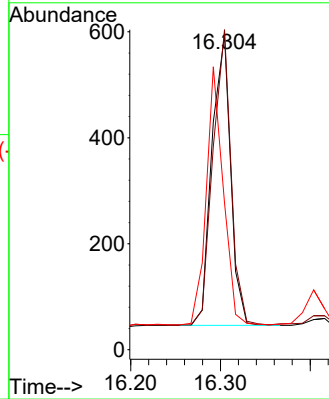
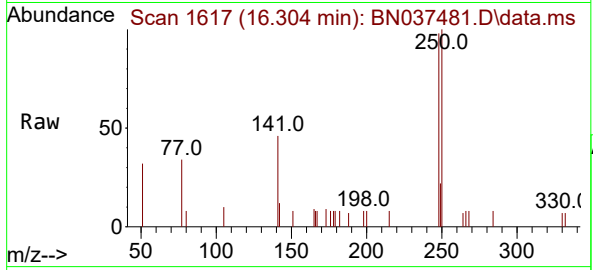




#21
4-Bromophenyl-phenylether
Concen: 0.316 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

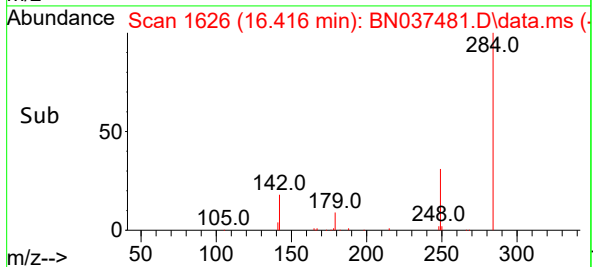
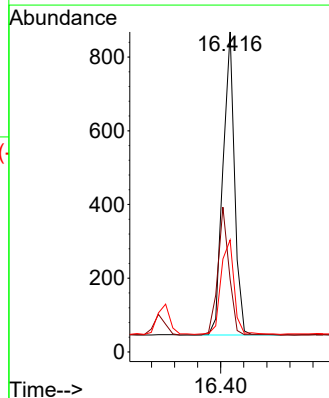
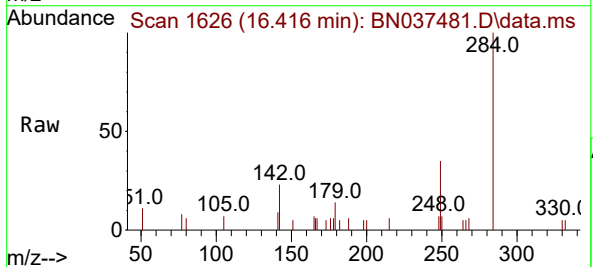
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

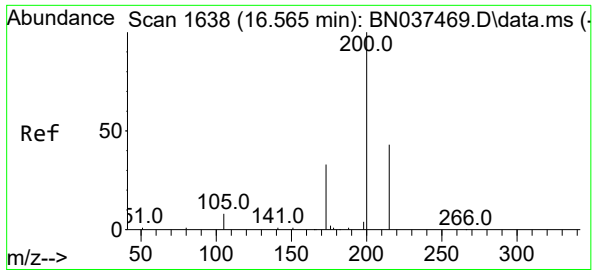
Tgt Ion:	248	Resp:	797
Ion	Ratio	Lower	Upper
248	100		
250	101.7	77.8	116.6
141	46.6	45.9	68.9



#22
Hexachlorobenzene
Concen: 0.331 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:	284	Resp:	1153
Ion	Ratio	Lower	Upper
284	100		
142	40.5	31.3	46.9
249	35.0	26.6	40.0

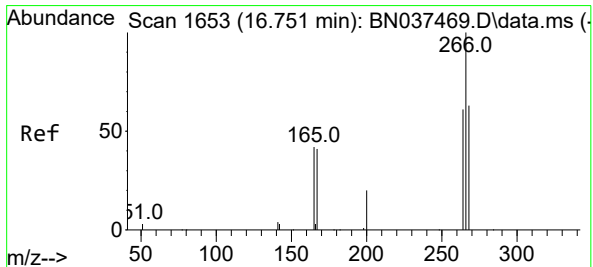
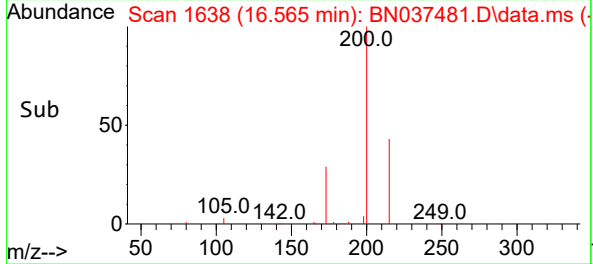
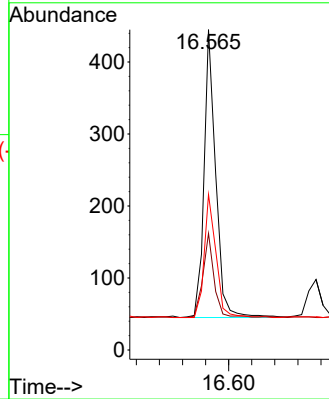
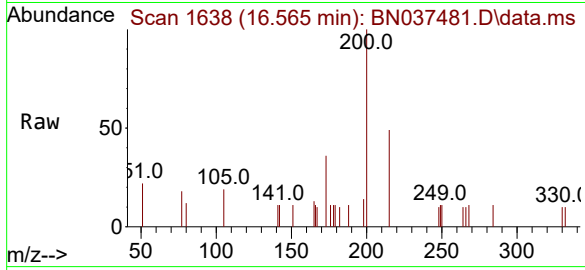




#23
Atrazine
Concen: 0.448 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

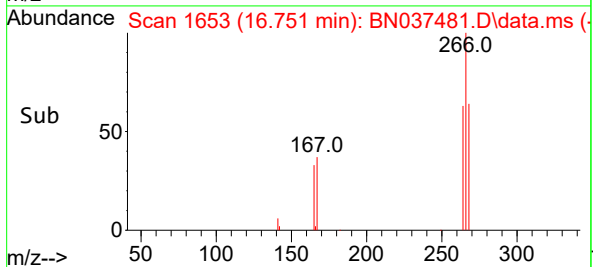
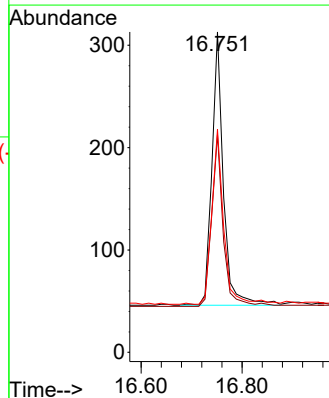
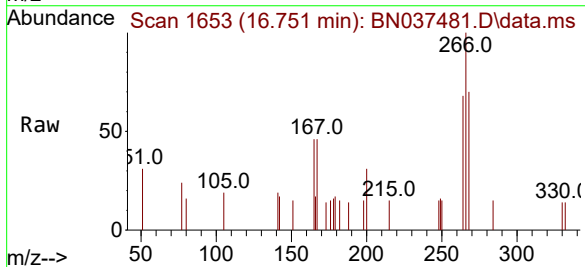
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

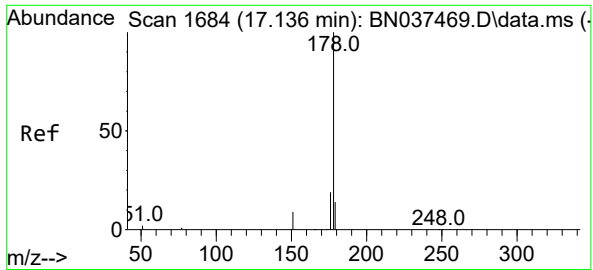
Tgt Ion	Ratio	Lower	Upper
200	100		
173	36.4	34.3	51.5
215	48.5	41.6	62.4



#24
Pentachlorophenol
Concen: 0.352 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion	Ratio	Lower	Upper
266	100		
264	63.3	47.5	71.3
268	66.8	50.6	76.0

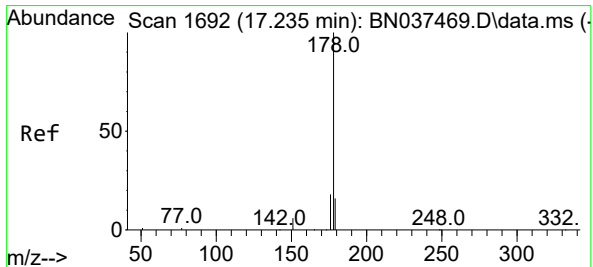
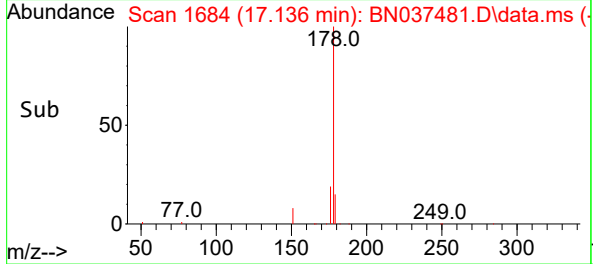
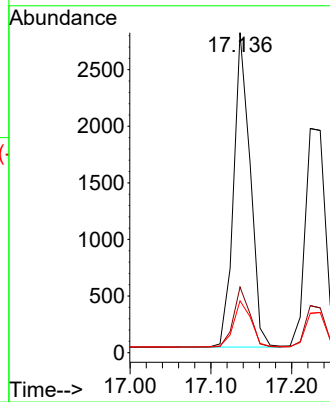
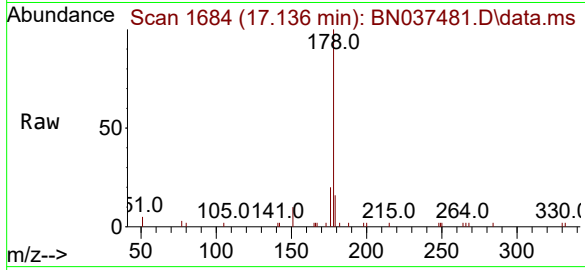




#25
Phenanthrene
Concen: 0.322 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

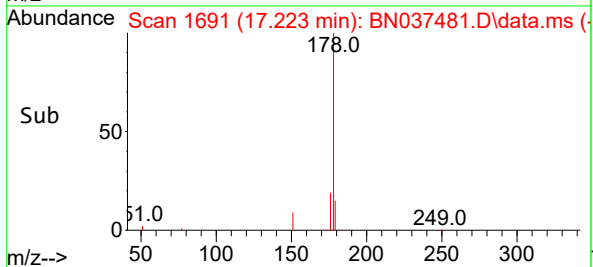
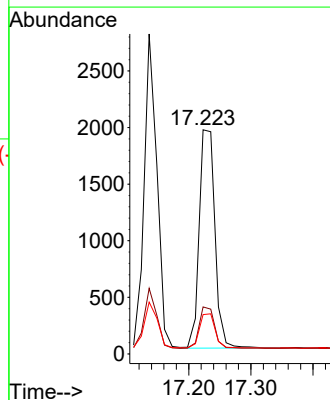
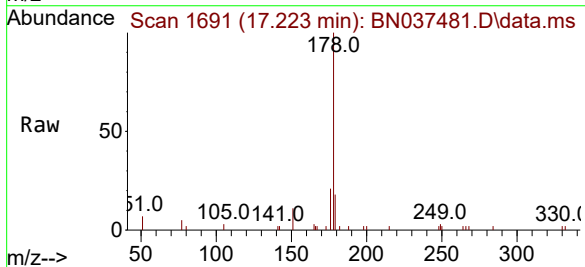
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

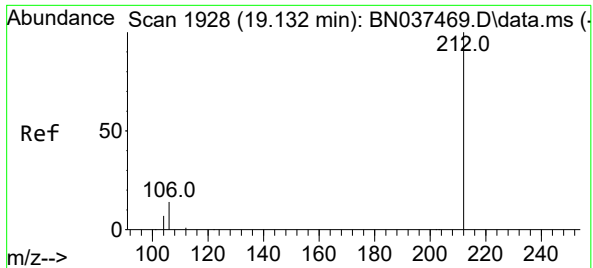
Tgt Ion:178 Resp: 3968
Ion Ratio Lower Upper
178 100
176 18.8 15.1 22.7
179 15.8 12.2 18.2



#26
Anthracene
Concen: 0.306 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.012 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:178 Resp: 3404
Ion Ratio Lower Upper
178 100
176 18.6 14.9 22.3
179 15.5 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.300 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

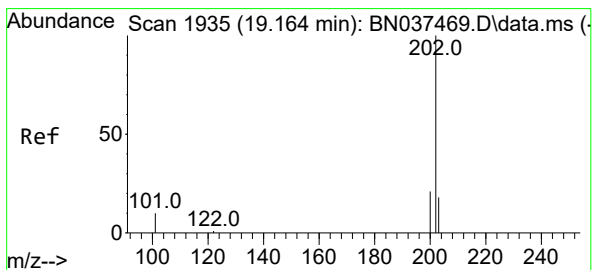
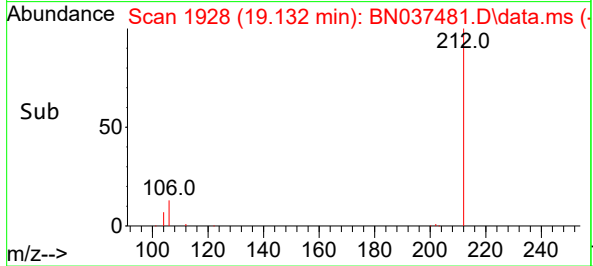
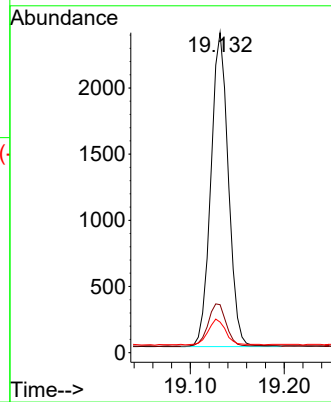
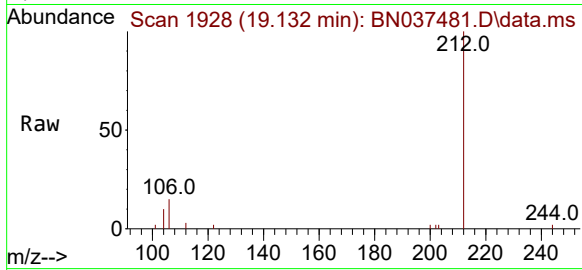
Tgt Ion:212 Resp: 3064

Ion Ratio Lower Upper

212 100

106 14.0 11.7 17.5

104 8.2 6.6 10.0



#28

Fluoranthene

Concen: 0.308 ng

RT: 19.160 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

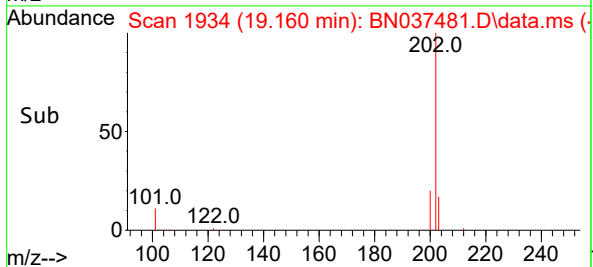
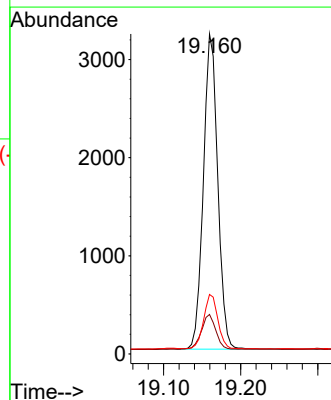
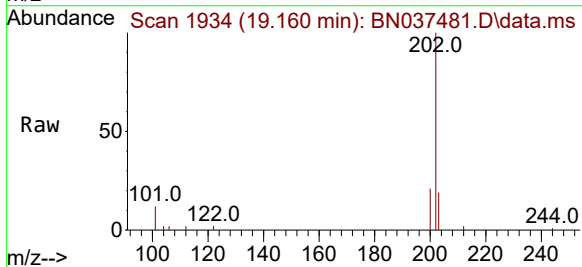
Tgt Ion:202 Resp: 4165

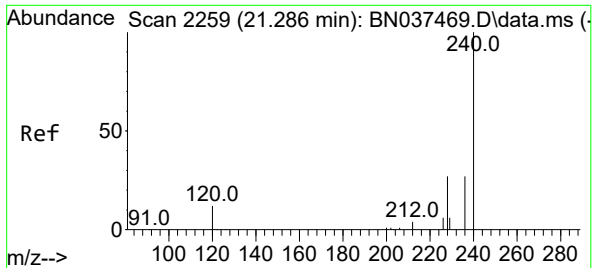
Ion Ratio Lower Upper

202 100

101 11.1 9.2 13.8

203 17.0 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

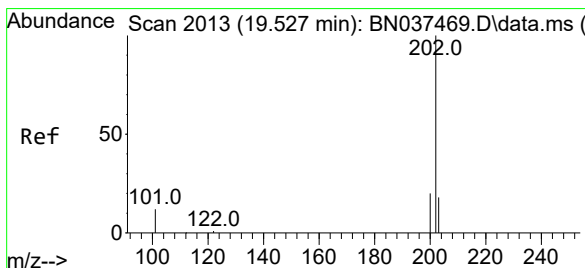
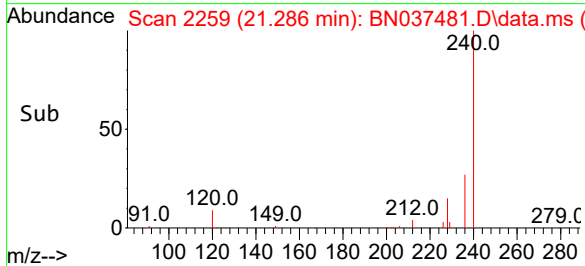
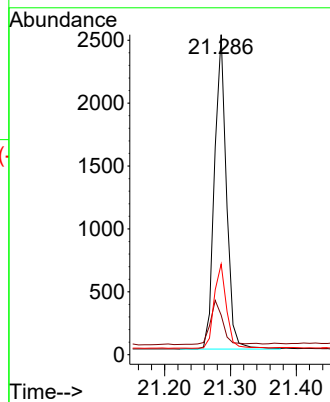
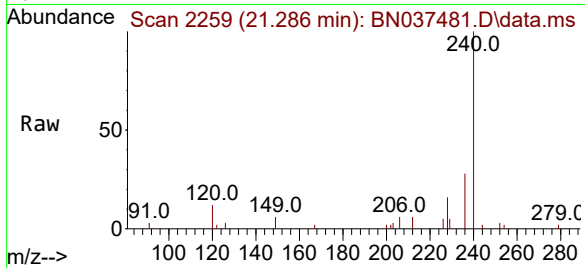
Tgt Ion:240 Resp: 3148

Ion Ratio Lower Upper

240 100

120 12.3 12.4 18.6#

236 28.3 22.9 34.3



#30

Pyrene

Concen: 0.322 ng

RT: 19.522 min Scan# 2012

Delta R.T. -0.005 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

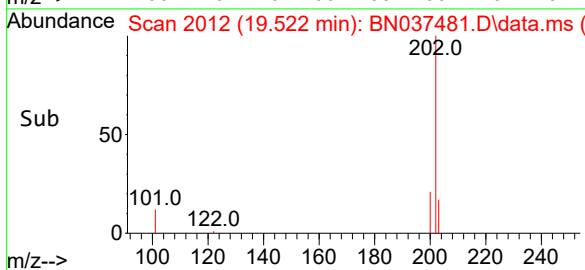
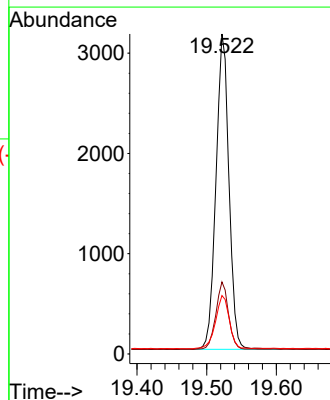
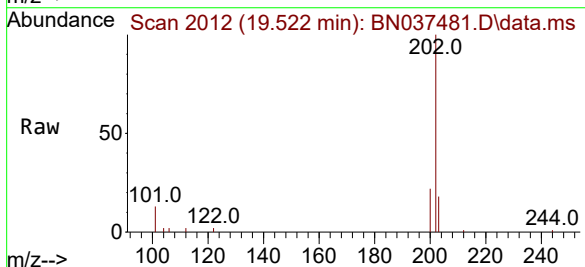
Tgt Ion:202 Resp: 4077

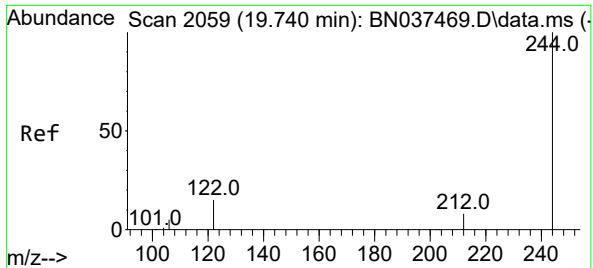
Ion Ratio Lower Upper

202 100

200 21.0 16.4 24.6

203 17.9 14.3 21.5

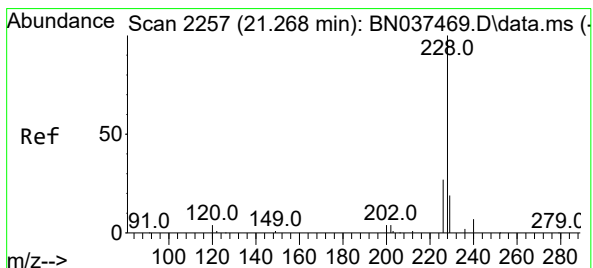
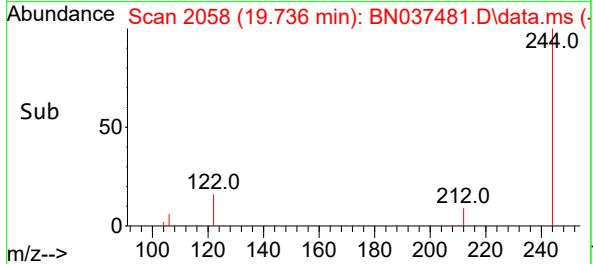
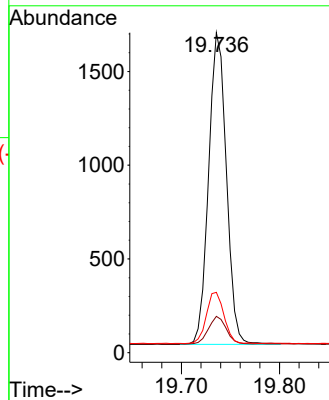
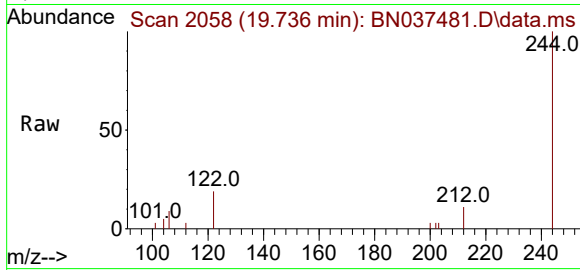




#31
Terphenyl-d14
Concen: 0.318 ng
RT: 19.736 min Scan# 2058
Delta R.T. -0.005 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

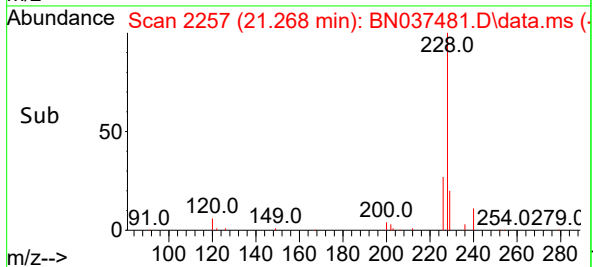
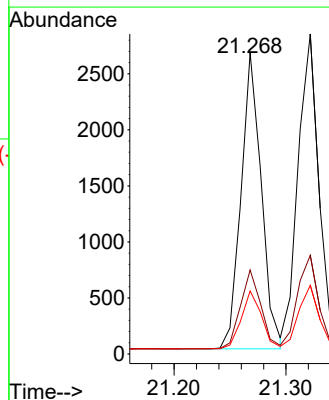
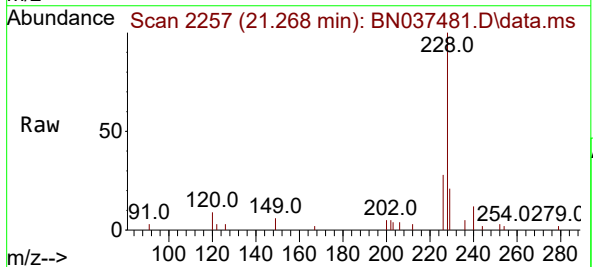
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

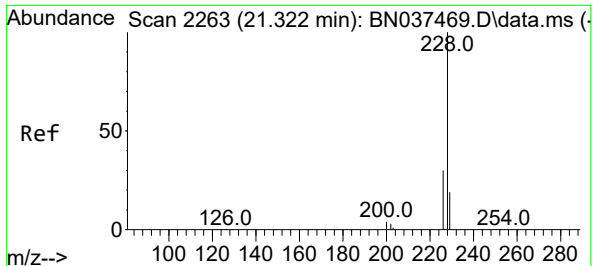
Tgt Ion:244	Resp:	2090
Ion Ratio	Lower	Upper
244	100	
212	11.4	8.7 13.1
122	18.9	14.1 21.1



#32
Benzo(a)anthracene
Concen: 0.312 ng
RT: 21.268 min Scan# 2257
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:228	Resp:	3329
Ion Ratio	Lower	Upper
228	100	
226	27.9	22.7 34.1
229	20.9	16.6 24.8

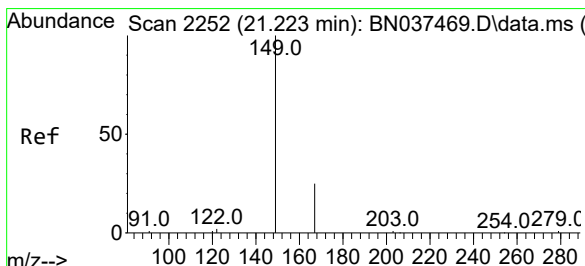
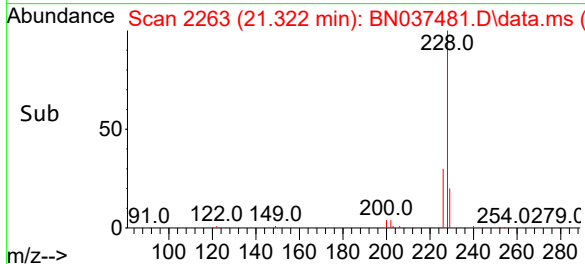
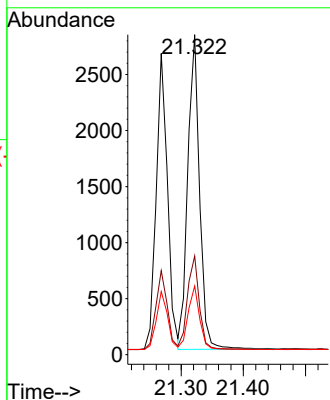
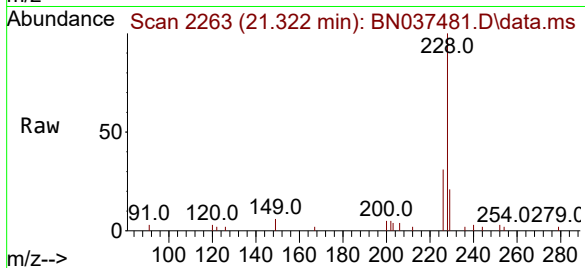




#33
Chrysene
Concen: 0.319 ng
RT: 21.322 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

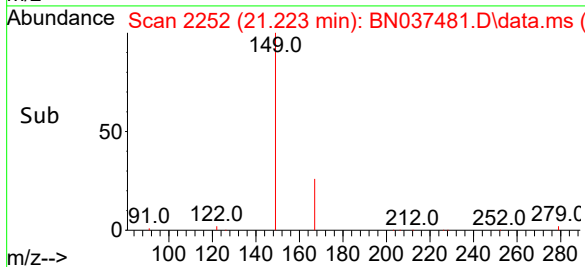
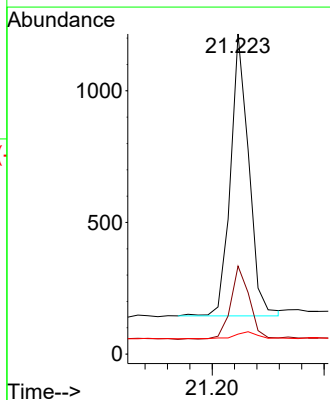
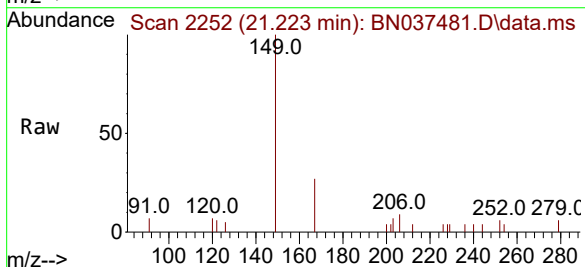
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

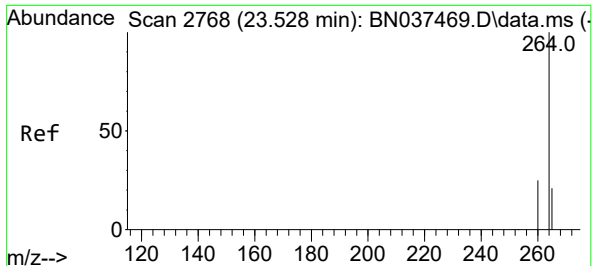
Tgt Ion:228 Resp: 3716
Ion Ratio Lower Upper
228 100
226 30.8 24.6 36.8
229 21.5 16.4 24.6



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.336 ng
RT: 21.223 min Scan# 2252
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:149 Resp: 1217
Ion Ratio Lower Upper
149 100
167 26.9 19.4 29.2
279 3.3 2.5 3.7

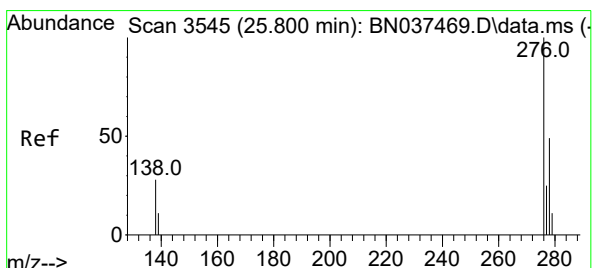
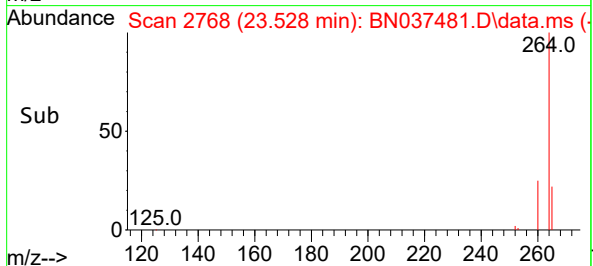
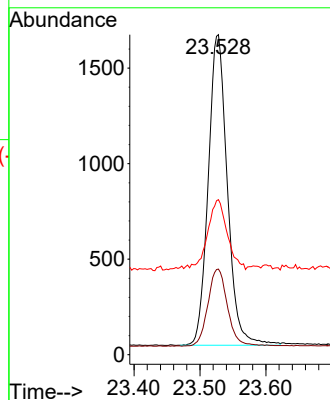
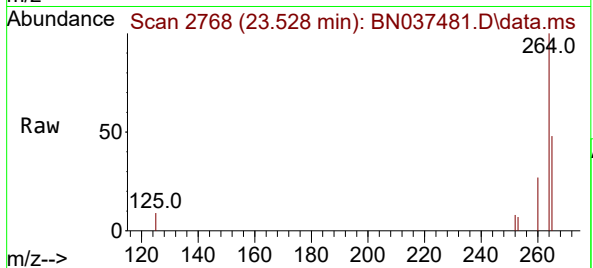




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.528 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

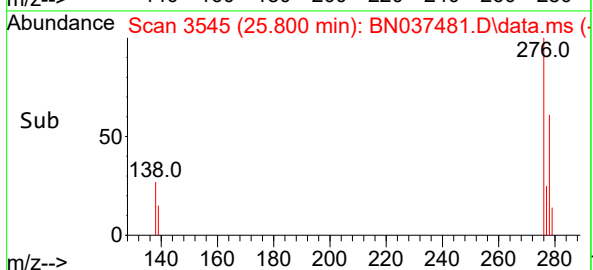
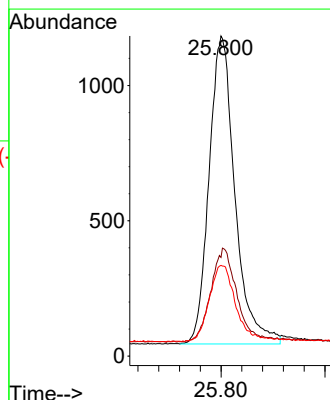
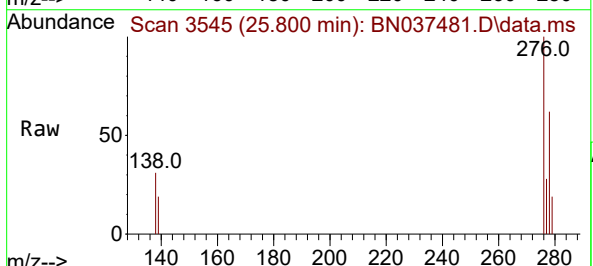
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

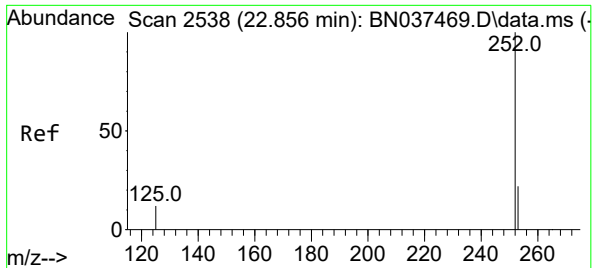
Tgt Ion:264 Resp: 3275
Ion Ratio Lower Upper
264 100
260 26.7 21.7 32.5
265 48.5 41.6 62.4



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.309 ng
RT: 25.800 min Scan# 3545
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:276 Resp: 3929
Ion Ratio Lower Upper
276 100
138 30.4 23.4 35.2
277 25.3 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.275 ng

RT: 22.853 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

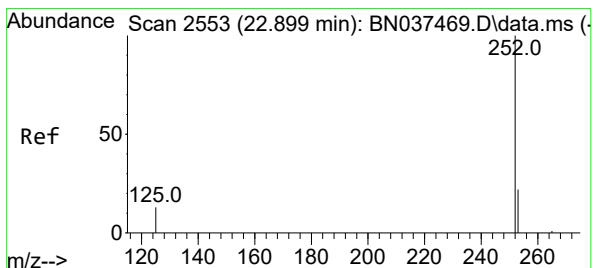
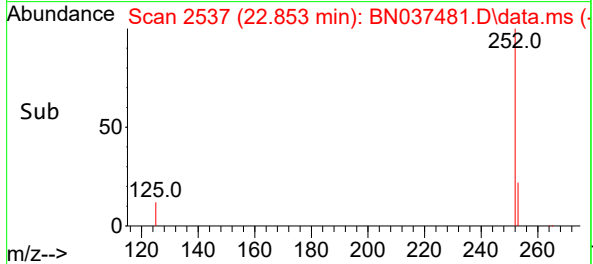
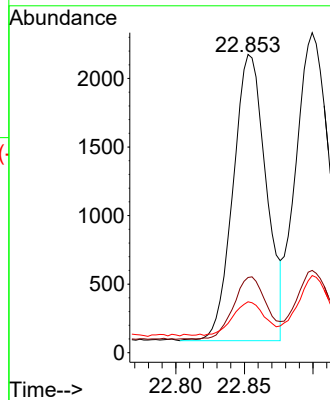
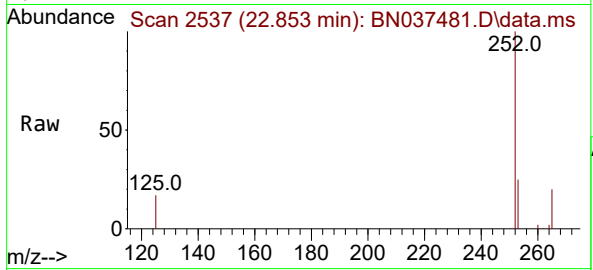
Tgt Ion:252 Resp: 3502

Ion Ratio Lower Upper

252 100

253 25.2 20.1 30.1

125 17.1 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.306 ng m

RT: 22.899 min Scan# 2553

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

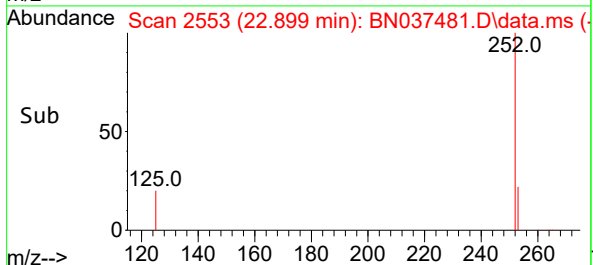
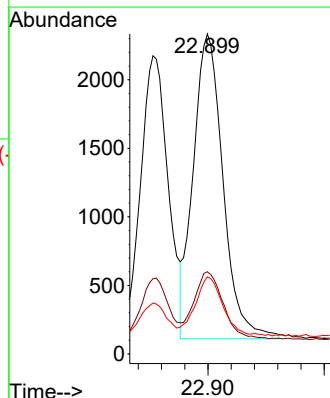
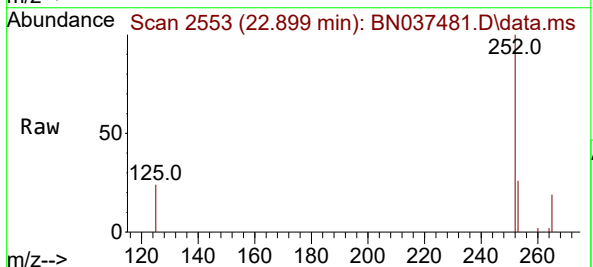
Tgt Ion:252 Resp: 3951

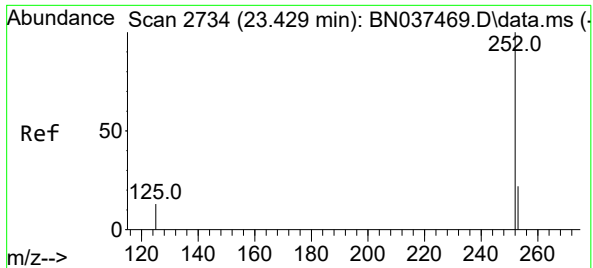
Ion Ratio Lower Upper

252 100

253 25.7 20.4 30.6

125 24.1 14.6 21.8#





#39

Benzo(a)pyrene

Concen: 0.274 ng

RT: 23.429 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037481.D

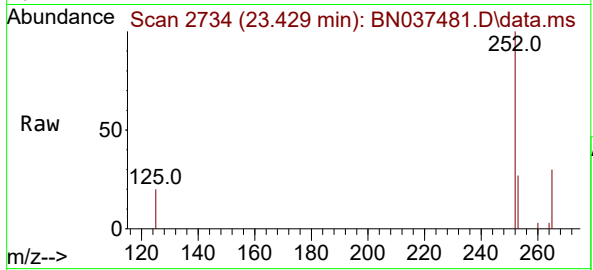
Acq: 11 Jul 2025 19:43

Instrument :

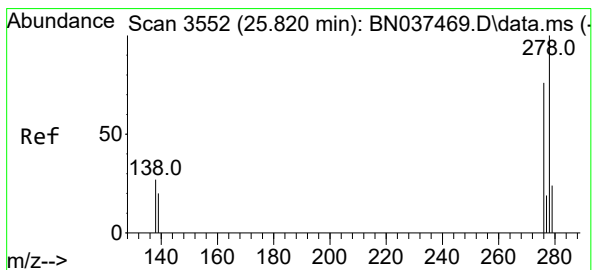
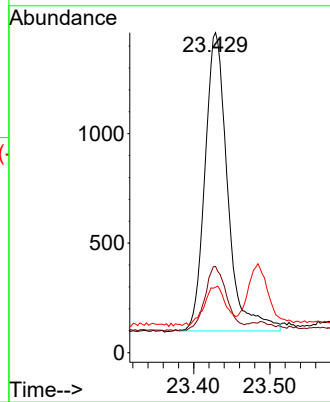
BNA_N

ClientSampleId :

SSTDCCC0.4EC



Tgt Ion:	252	Resp:	2804
Ion Ratio	Lower	Upper	
252	100		
253	27.0	21.8	32.6
125	20.5	16.7	25.1



#40

Dibenzo(a,h)anthracene

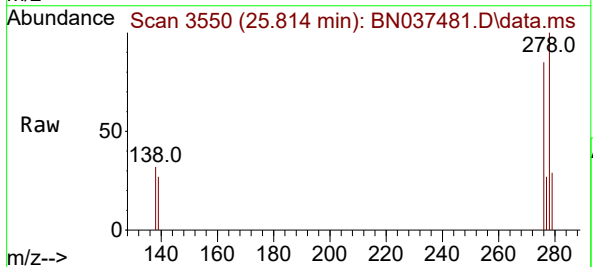
Concen: 0.321 ng

RT: 25.814 min Scan# 3550

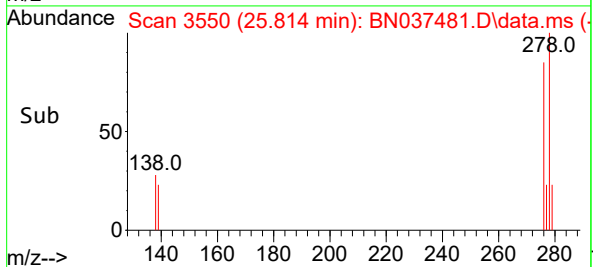
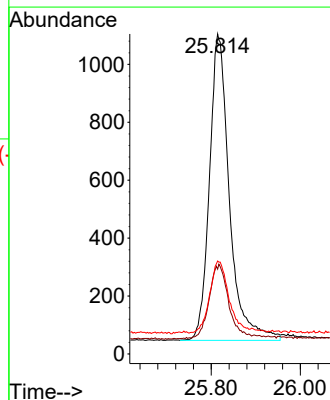
Delta R.T. -0.006 min

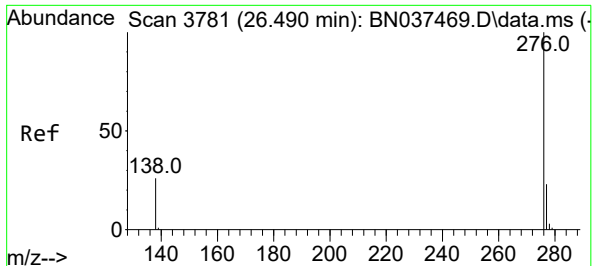
Lab File: BN037481.D

Acq: 11 Jul 2025 19:43



Tgt Ion:	278	Resp:	3294
Ion Ratio	Lower	Upper	
278	100		
139	26.5	19.9	29.9
279	29.0	24.8	37.2





#41

Benzo(g,h,i)perylene

Concen: 0.294 ng

RT: 26.484 min Scan# 31

Delta R.T. -0.006 min

Lab File: BN037481.D

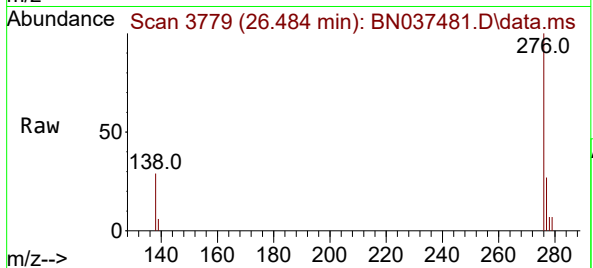
Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



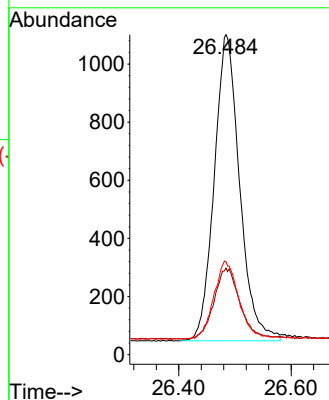
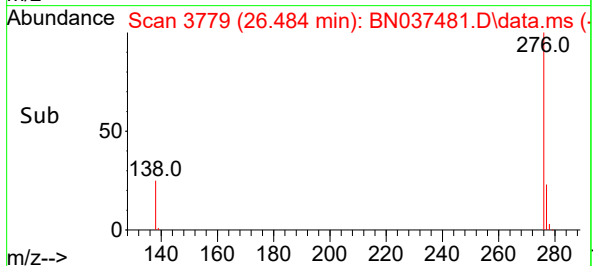
Tgt Ion:276 Resp: 3300

Ion Ratio Lower Upper

276 100

277 27.1 21.7 32.5

138 29.1 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037481.D
Acq On : 11 Jul 2025 19:43
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Jul 11 23:29:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 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	119	0.00
2	1,4-Dioxane	0.376	0.317	15.7	98	0.00
3	n-Nitrosodimethylamine	0.502	0.413	17.7	98	0.00
4 S	2-Fluorophenol	0.931	0.915	1.7	117	0.00
5 S	Phenol-d6	1.171	1.144	2.3	116	0.00
6	bis(2-Chloroethyl)ether	0.980	0.799	18.5	98	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	117	0.00
8 S	Nitrobenzene-d5	0.290	0.238	17.9	101	0.00
9	Naphthalene	1.075	0.870	19.1	97	0.00
10	Hexachlorobutadiene	0.258	0.222	14.0	101	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.419	23.0	96	0.00
12	2-Methylnaphthalene	0.673	0.527	21.7	95	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	113	-0.01
14 S	2,4,6-Tribromophenol	0.136	0.133	2.2	123	0.00
15 S	2-Fluorobiphenyl	2.283	1.999	12.4	98	0.00
16	Acenaphthylene	1.824	1.476	19.1	95	0.00
17	Acenaphthene	1.224	0.997	18.5	95	0.00
18	Fluorene	1.538	1.235	19.7	94	-0.01
19 I	Phenanthrene-d10	1.000	1.000	0.0	113	0.00
20	4,6-Dinitro-2-methylphenol	0.045	0.035	22.2	101	0.00
21	4-Bromophenyl-phenylether	0.250	0.197	21.2	94	0.00
22	Hexachlorobenzene	0.344	0.285	17.2	95	0.00
23	Atrazine	0.124	0.139	-12.1	137	0.00
24	Pentachlorophenol	0.119	0.104	12.6	117	0.00
25	Phenanthrene	1.218	0.981	19.5	96	0.00
26	Anthracene	1.099	0.842	23.4	94	-0.01
27 SURR	Fluoranthene-d10	1.009	0.757	25.0	94	0.00
28	Fluoranthene	1.337	1.030	23.0	95	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	117	0.00
30	Pyrene	1.608	1.295	19.5	95	0.00
31 S	Terphenyl-d14	0.835	0.664	20.5	95	0.00
32	Benzo(a)anthracene	1.355	1.057	22.0	96	0.00
33	Chrysene	1.481	1.180	20.3	95	0.00
34	Bis(2-ethylhexyl)phthalate	0.461	0.387	16.1	100	0.00
35 I	Perylene-d12	1.000	1.000	0.0	132	0.00
36	Indeno(1,2,3-cd)pyrene	1.553	1.200	22.7	114	0.00
37	Benzo(b)fluoranthene	1.556	1.069	31.3#	100	0.00
38	Benzo(k)fluoranthene	1.577	1.206	23.5	111	0.00
39 C	Benzo(a)pyrene	1.252	0.856	31.6#	98	0.00
40	Dibenzo(a,h)anthracene	1.252	1.006	19.6	120	0.00
41	Benzo(g,h,i)perylene	1.372	1.008	26.5#	105	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 1

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037481.D
Acq On : 11 Jul 2025 19:43
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Jul 11 23:29:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 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	119	0.00
2	1,4-Dioxane	0.400	0.337	15.8	98	0.00
3	n-Nitrosodimethylamine	0.400	0.329	17.8	98	0.00
4 S	2-Fluorophenol	0.400	0.393	1.8	117	0.00
5 S	Phenol-d6	0.400	0.391	2.3	116	0.00
6	bis(2-Chloroethyl)ether	0.400	0.326	18.5	98	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	117	0.00
8 S	Nitrobenzene-d5	0.400	0.329	17.8	101	0.00
9	Naphthalene	0.400	0.324	19.0	97	0.00
10	Hexachlorobutadiene	0.400	0.344	14.0	101	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.308	23.0	96	0.00
12	2-Methylnaphthalene	0.400	0.313	21.8	95	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	113	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.391	2.3	123	0.00
15 S	2-Fluorobiphenyl	0.400	0.350	12.5	98	0.00
16	Acenaphthylene	0.400	0.324	19.0	95	0.00
17	Acenaphthene	0.400	0.326	18.5	95	0.00
18	Fluorene	0.400	0.321	19.8	94	-0.01
19 I	Phenanthrene-d10	0.400	0.400	0.0	113	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.310	22.5	101	0.00
21	4-Bromophenyl-phenylether	0.400	0.316	21.0	94	0.00
22	Hexachlorobenzene	0.400	0.331	17.3	95	0.00
23	Atrazine	0.400	0.448	-12.0	137	0.00
24	Pentachlorophenol	0.400	0.352	12.0	117	0.00
25	Phenanthrene	0.400	0.322	19.5	96	0.00
26	Anthracene	0.400	0.306	23.5	94	-0.01
27 SURR	Fluoranthene-d10	0.400	0.300	25.0#	94	0.00
28	Fluoranthene	0.400	0.308	23.0	95	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	117	0.00
30	Pyrene	0.400	0.322	19.5	95	0.00
31 S	Terphenyl-d14	0.400	0.318	20.5	95	0.00
32	Benzo(a)anthracene	0.400	0.312	22.0	96	0.00
33	Chrysene	0.400	0.319	20.3	95	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.336	16.0	100	0.00
35 I	Perylene-d12	0.400	0.400	0.0	132	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.309	22.8	114	0.00
37	Benzo(b)fluoranthene	0.400	0.275	31.3#	100	0.00
38	Benzo(k)fluoranthene	0.400	0.306	23.5	111	0.00
39 C	Benzo(a)pyrene	0.400	0.274	31.5#	98	0.00
40	Dibenzo(a,h)anthracene	0.400	0.321	19.8	120	0.00
41	Benzo(g,h,i)perylene	0.400	0.294	26.5#	105	0.00

(#) = Out of Range

SPCC's out = 0 CCC's out = 1



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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q2488
 Instrument ID: BNA_N Calibration Date/Time: 07/14/2025 09:10
 Lab File ID: BN037483.D Init. Calib. Date(s): 07/11/2025 07/11/2025
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 11:10 14:49
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.511		-6.1	20.0
Fluoranthene-d10	1.009	0.900		-10.8	20.0
2-Fluorophenol	0.931	0.920		-1.2	20.0
Phenol-d6	1.171	1.170		-0.1	20.0
Nitrobenzene-d5	0.290	0.263		-9.3	20.0
2-Fluorobiphenyl	2.283	2.364		3.5	20.0
2,4,6-Tribromophenol	0.136	0.112		-17.6	20.0
Terphenyl-d14	0.835	0.853		2.2	20.0
1,4-Dioxane	0.376	0.399		6.1	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
 Data File : BN037483.D
 Acq On : 14 Jul 2025 09:10
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4

Quant Time: Jul 14 10:55:57 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

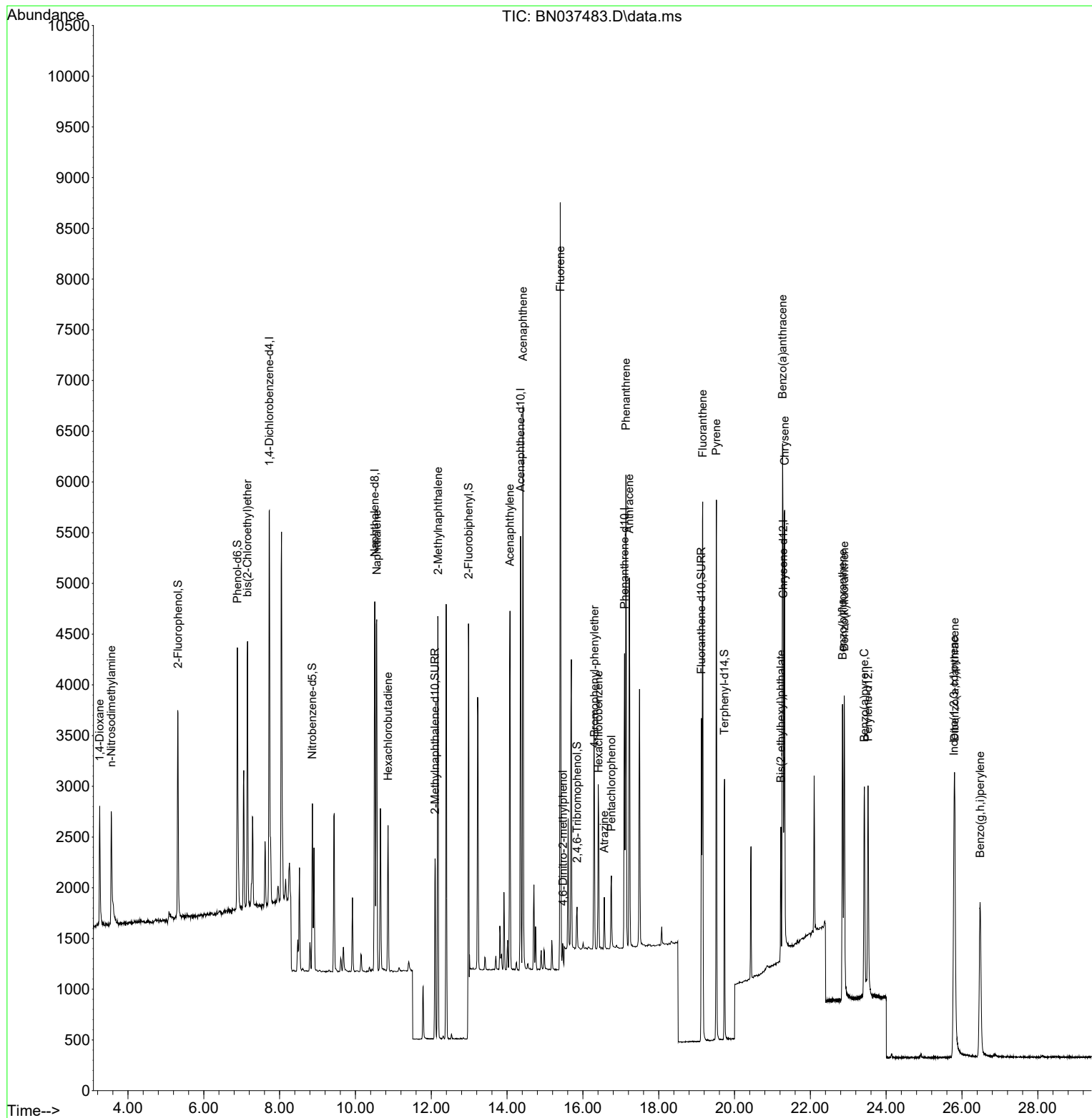
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1935	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4597	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2166	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3930	0.400	ng	# 0.00
29) Chrysene-d12	21.286	240	2837	0.400	ng	# 0.00
35) Perylene-d12	23.522	264	2676	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1781	0.395	ng	0.00
5) Phenol-d6	6.887	99	2263	0.399	ng	0.00
8) Nitrobenzene-d5	8.865	82	1208	0.362	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	2348	0.376	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	243	0.331	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	5120	0.414	ng	0.00
27) Fluoranthene-d10	19.127	212	3538	0.357	ng	0.00
31) Terphenyl-d14	19.736	244	2420	0.409	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	772	0.425	ng	Qvalue 97
3) n-Nitrosodimethylamine	3.557	42	995	0.410	ng	99
6) bis(2-Chloroethyl)ether	7.154	93	1904	0.402	ng	100
9) Naphthalene	10.562	128	4843	0.392	ng	99
10) Hexachlorobutadiene	10.861	225	1140	0.384	ng	# 99
12) 2-Methylnaphthalene	12.177	142	2934	0.379	ng	98
16) Acenaphthylene	14.078	152	3817	0.386	ng	100
17) Acenaphthene	14.420	154	2553	0.385	ng	99
18) Fluorene	15.403	166	3037	0.365	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	145	0.328	ng	95
21) 4-Bromophenyl-phenylether	16.304	248	880	0.359	ng	# 88
22) Hexachlorobenzene	16.416	284	1304	0.385	ng	99
23) Atrazine	16.565	200	387	0.317	ng	96
24) Pentachlorophenol	16.751	266	376	0.323	ng	97
25) Phenanthrene	17.136	178	4610	0.385	ng	100
26) Anthracene	17.223	178	4028	0.373	ng	100
28) Fluoranthene	19.160	202	4814	0.367	ng	100
30) Pyrene	19.522	202	4688	0.411	ng	99
32) Benzo(a)anthracene	21.268	228	3631	0.378	ng	99
33) Chrysene	21.322	228	4194	0.399	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	1290	0.395	ng	97
36) Indeno(1,2,3-cd)pyrene	25.791	276	3733	0.359	ng	100
37) Benzo(b)fluoranthene	22.850	252	3639	0.350	ng	99
38) Benzo(k)fluoranthene	22.894	252	3882	0.368	ng	98
39) Benzo(a)pyrene	23.426	252	3154	0.377	ng	100
40) Dibenzo(a,h)anthracene	25.808	278	2896	0.346	ng	97
41) Benzo(g,h,i)perylene	26.478	276	3310	0.361	ng	98

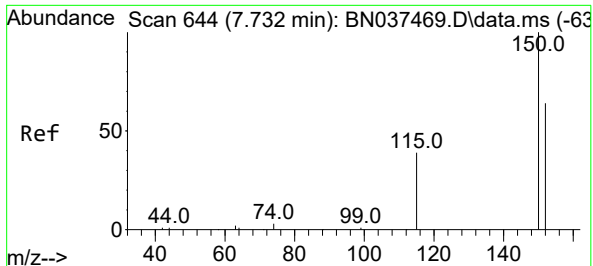
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037483.D
Acq On : 14 Jul 2025 09:10
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Jul 14 10:55:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

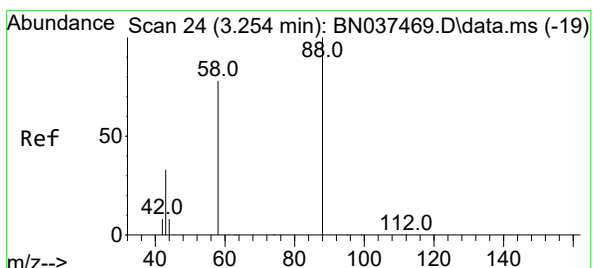
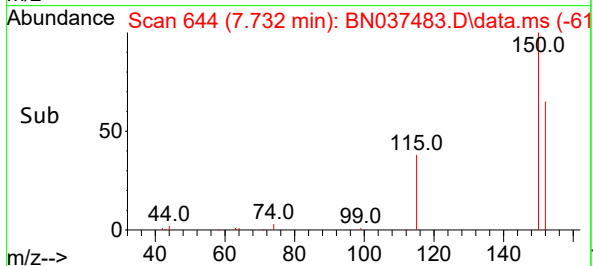
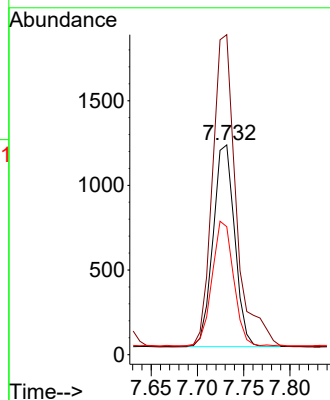
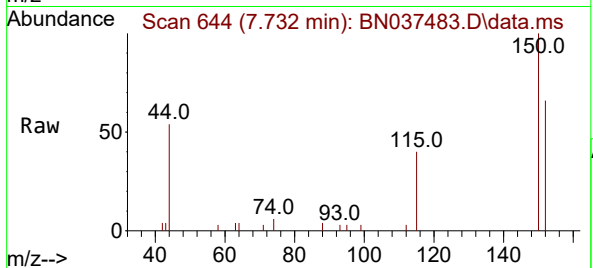




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

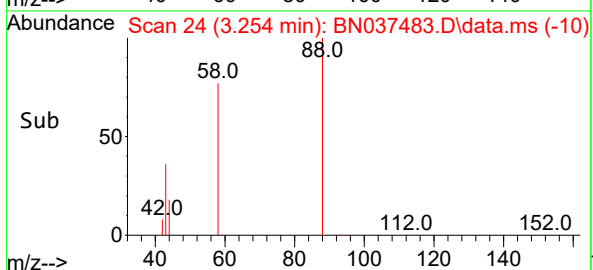
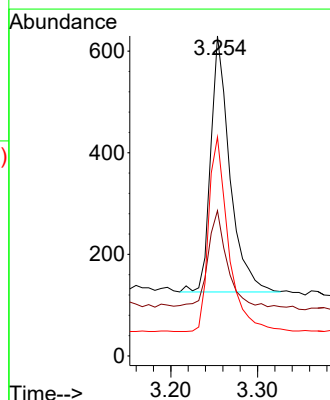
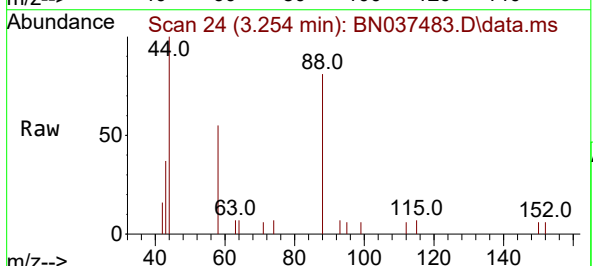
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 1935
Ion Ratio Lower Upper
152 100
150 152.5 122.5 183.7
115 61.0 49.9 74.9

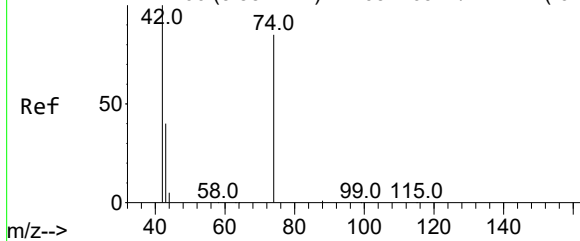


#2
1,4-Dioxane
Concen: 0.425 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion: 88 Resp: 772
Ion Ratio Lower Upper
88 100
43 37.0 30.7 46.1
58 78.8 65.0 97.4



Abundance Scan 66 (3.557 min): BN037469.D\data.ms (-61)



#3

n-Nitrosodimethylamine

Concen: 0.410 ng

RT: 3.557 min Scan# 60

Delta R.T. -0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion: 42 Resp: 995

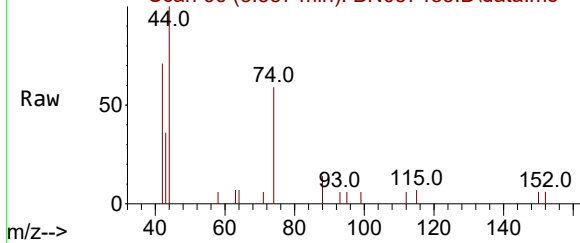
Ion Ratio Lower Upper

42 100

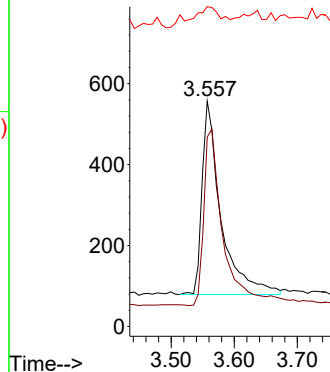
74 94.0 74.9 112.3

44 9.6 7.2 10.8

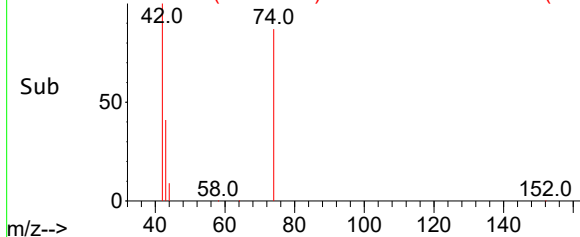
Abundance Scan 66 (3.557 min): BN037483.D\data.ms



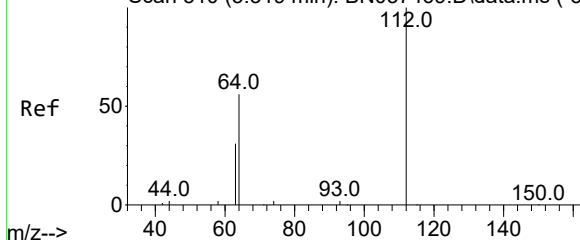
Abundance



Abundance Scan 66 (3.557 min): BN037483.D\data.ms (-45)



Abundance Scan 310 (5.319 min): BN037469.D\data.ms (-30)



#4

2-Fluorophenol

Concen: 0.395 ng

RT: 5.319 min Scan# 310

Delta R.T. -0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Tgt Ion: 112 Resp: 1781

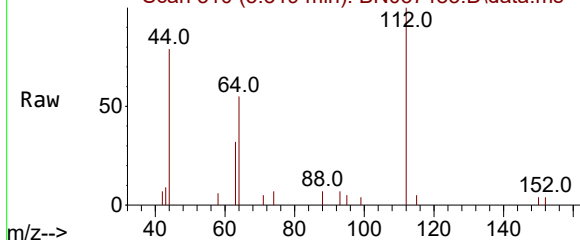
Ion Ratio Lower Upper

112 100

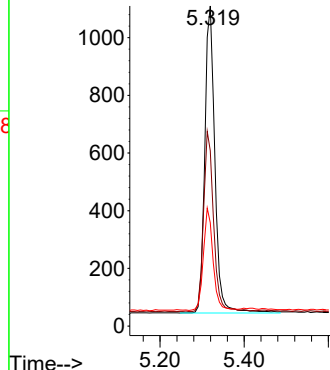
64 57.7 45.4 68.0

63 31.8 24.7 37.1

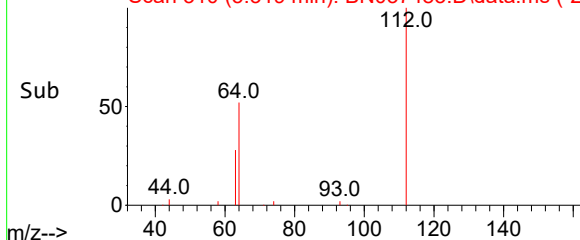
Abundance Scan 310 (5.319 min): BN037483.D\data.ms

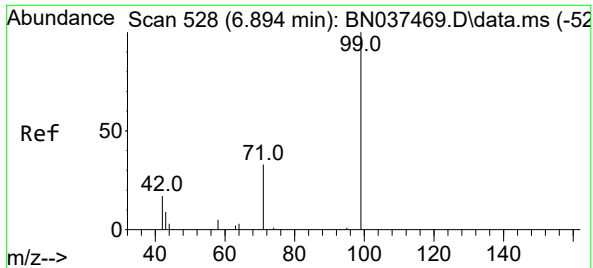


Abundance



Abundance Scan 310 (5.319 min): BN037483.D\data.ms (-28)

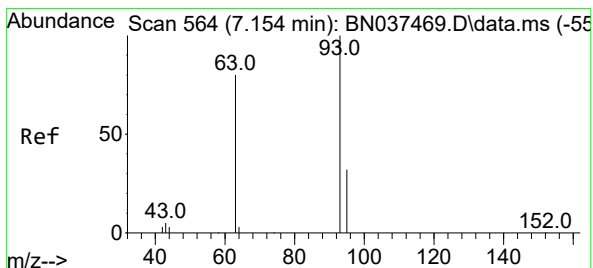
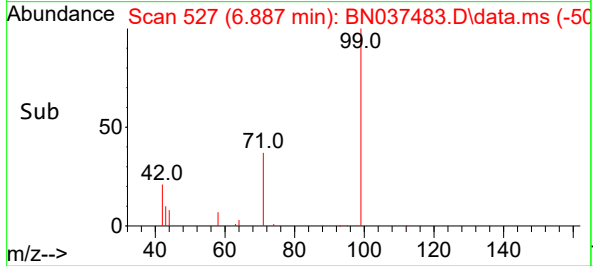
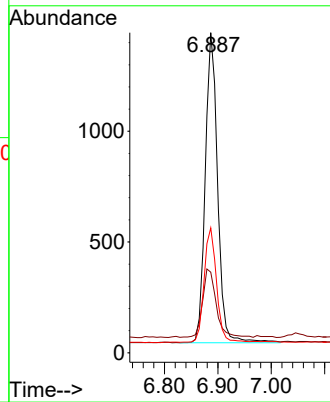
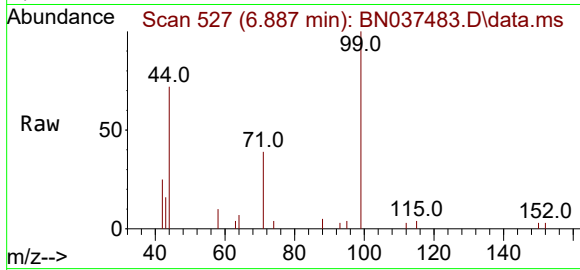




#5
Phenol-d6
Concen: 0.399 ng
RT: 6.887 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

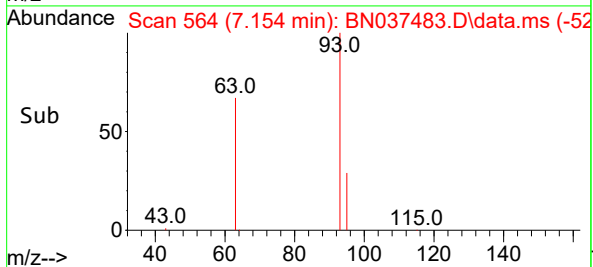
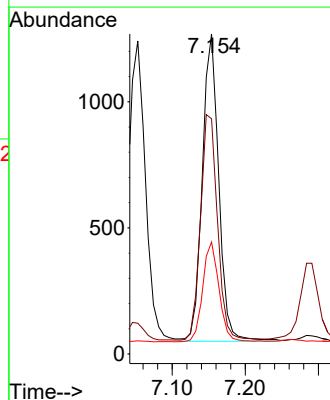
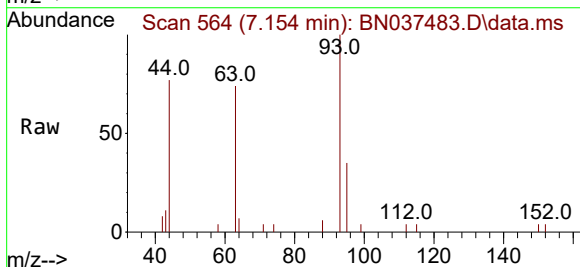
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

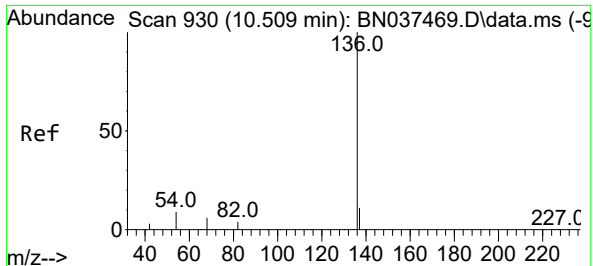
Tgt Ion	Ratio	Lower	Upper
99	100		
42	23.9	19.5	29.3
71	36.9	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.402 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion	Ratio	Lower	Upper
93	100		
63	75.7	60.8	91.2
95	32.4	25.6	38.4

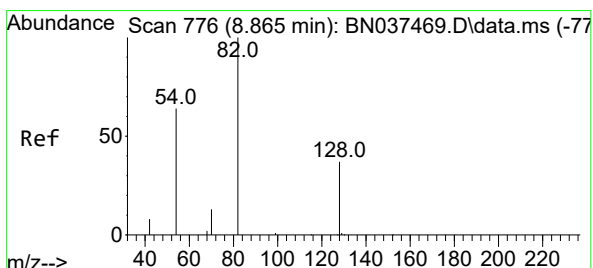
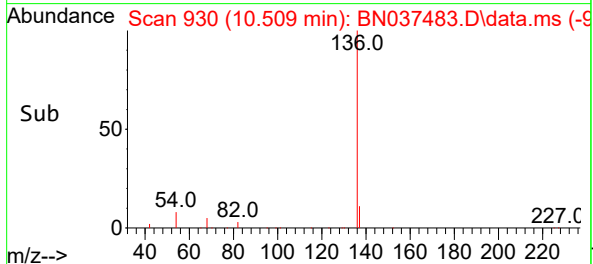
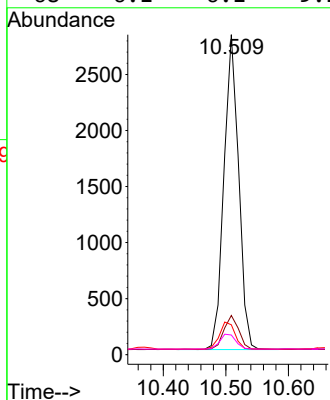
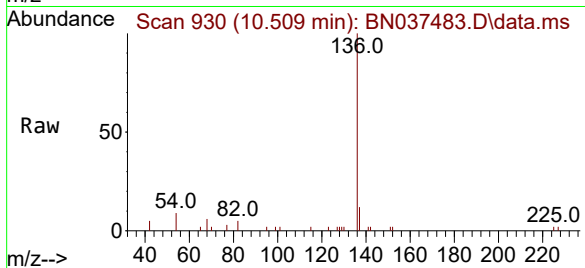




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

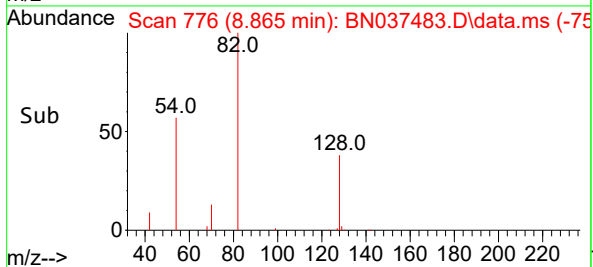
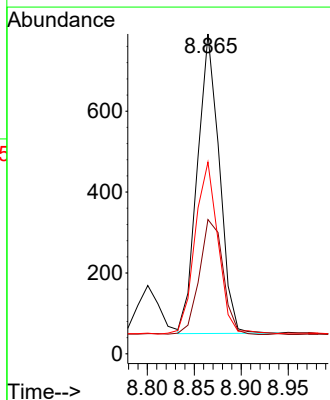
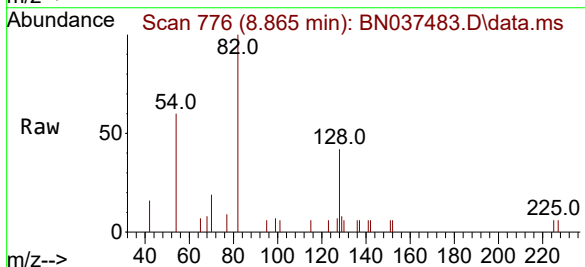
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

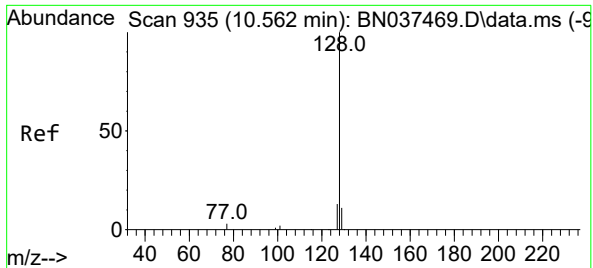
Tgt Ion:	136	Resp:	4597
Ion	Ratio	Lower	Upper
136	100		
137	12.3	10.0	15.0
54	9.4	9.0	13.6
68	6.1	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.362 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:	82	Resp:	1208
Ion	Ratio	Lower	Upper
82	100		
128	42.0	33.1	49.7
54	59.9	53.0	79.4

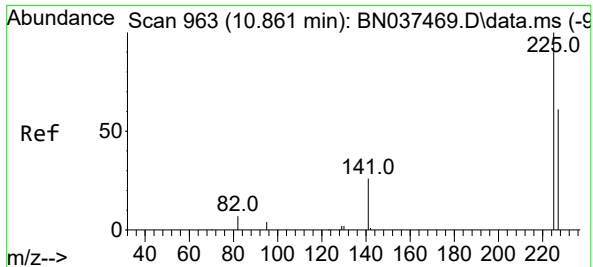
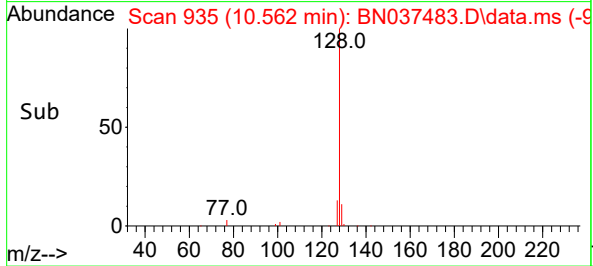
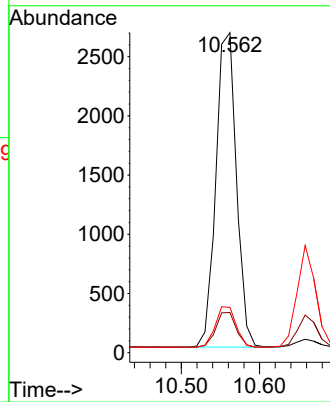
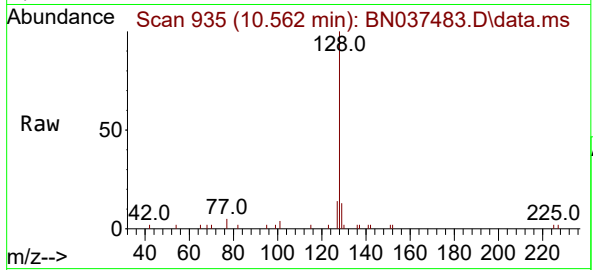




#9
Naphthalene
Concen: 0.392 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

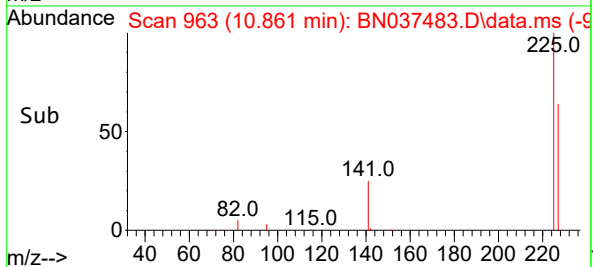
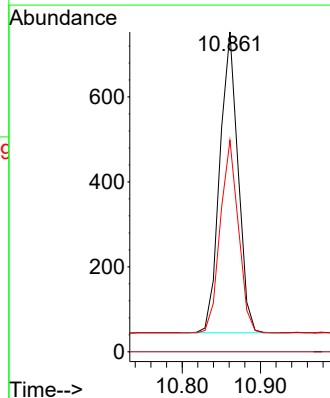
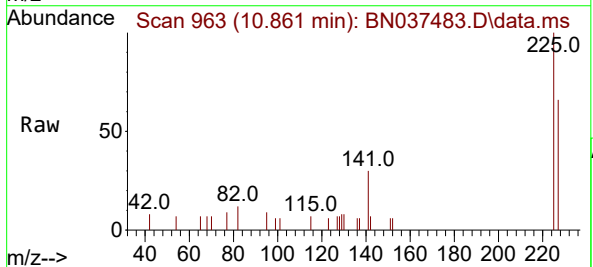
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

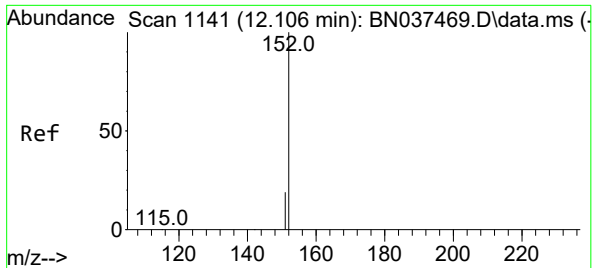
Tgt Ion:	128	Resp:	4843
Ion	Ratio	Lower	Upper
128	100		
129	12.5	10.2	15.2
127	14.1	11.8	17.6



#10
Hexachlorobutadiene
Concen: 0.384 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:	225	Resp:	1140
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	51.4	77.2

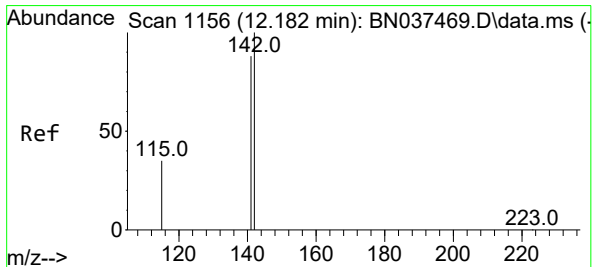
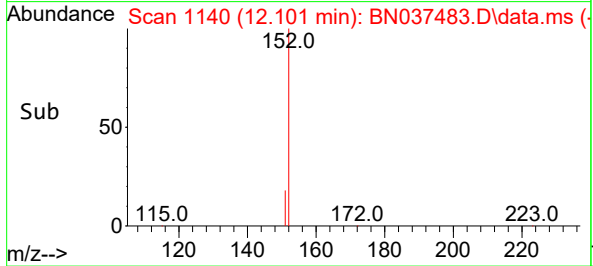
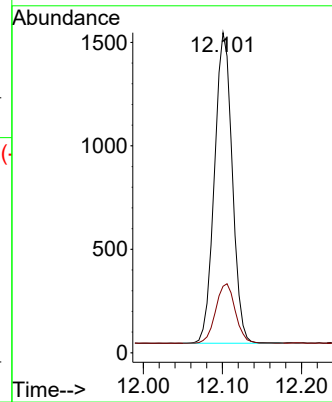
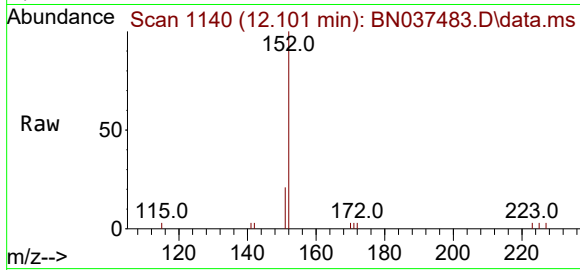




#11
2-Methylnaphthalene-d10
Concen: 0.376 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

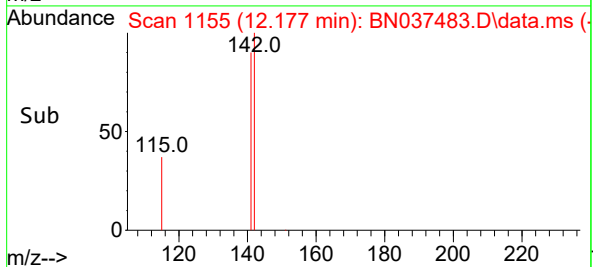
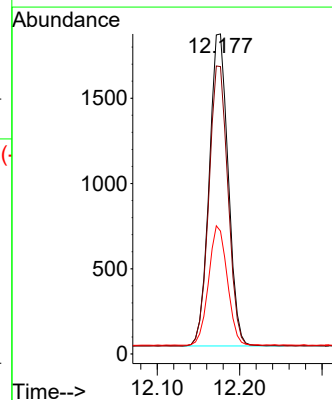
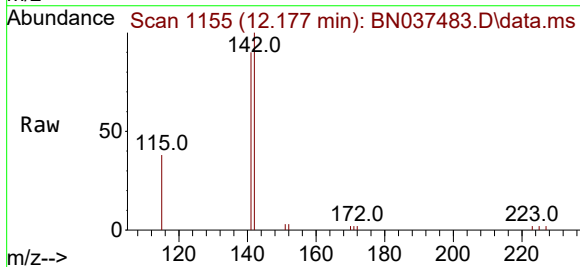
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

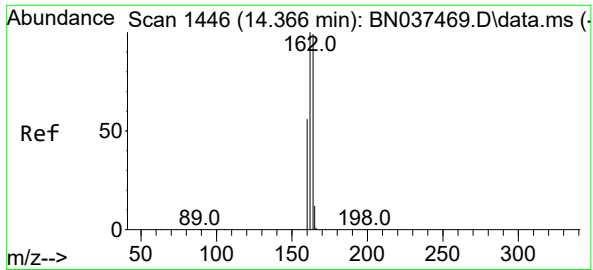
Tgt Ion:152 Resp: 2348
Ion Ratio Lower Upper
152 100
151 21.2 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.379 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:142 Resp: 2934
Ion Ratio Lower Upper
142 100
141 89.8 70.6 105.8
115 38.4 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.011 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

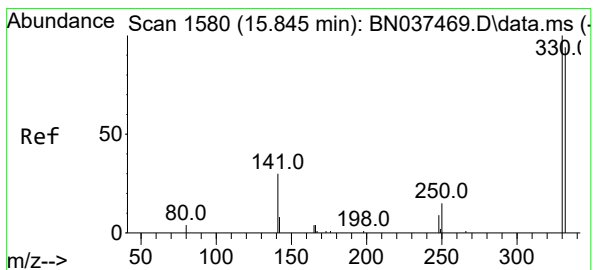
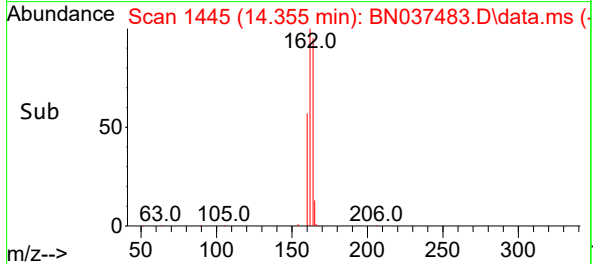
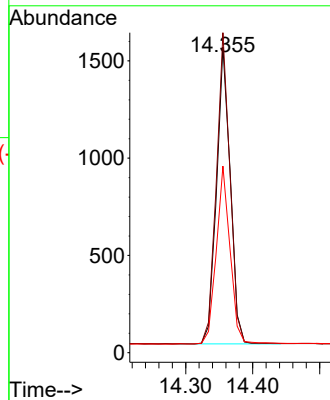
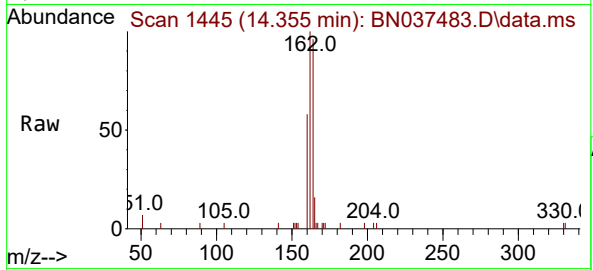
Tgt Ion:164 Resp: 2166

Ion Ratio Lower Upper

164 100

162 104.7 81.1 121.7

160 61.0 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 0.331 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

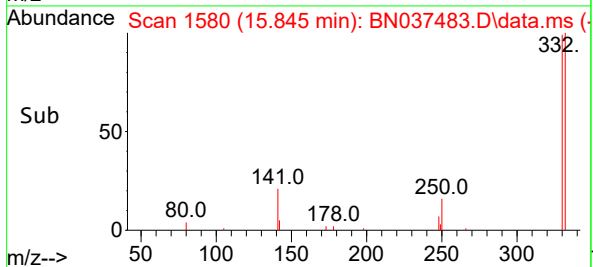
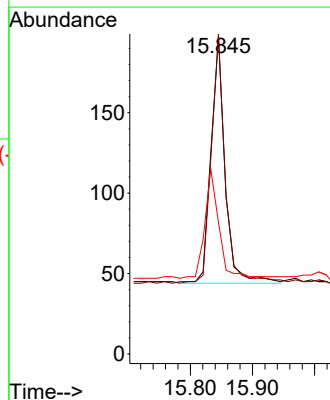
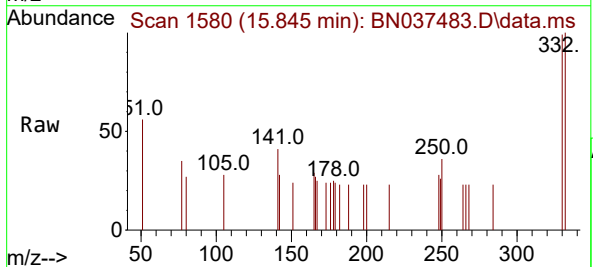
Tgt Ion:330 Resp: 243

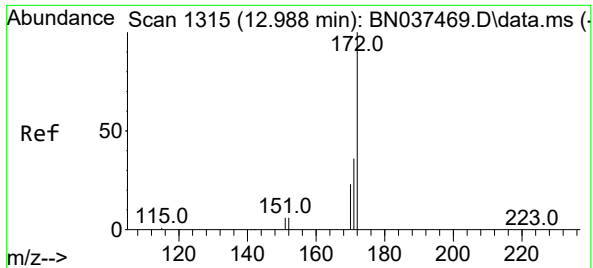
Ion Ratio Lower Upper

330 100

332 100.4 82.0 123.0

141 43.6 36.2 54.2

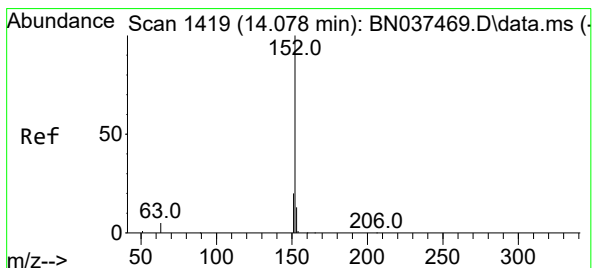
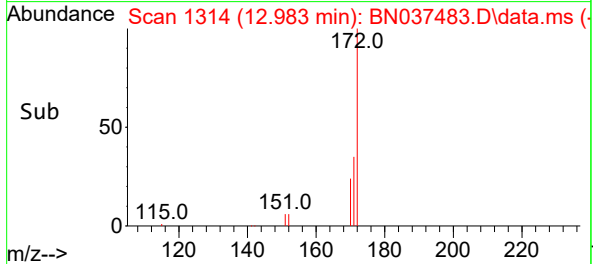
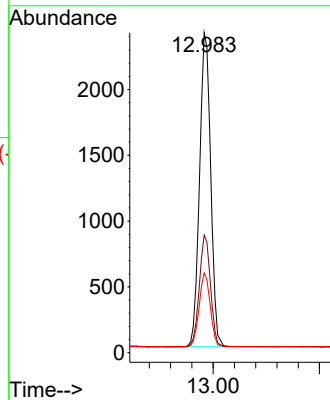
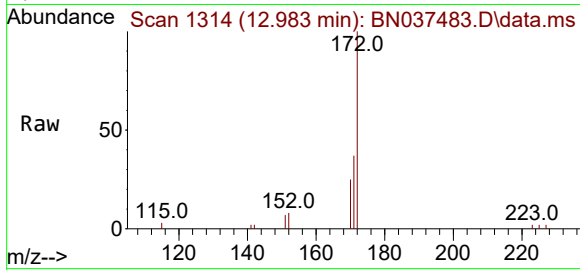




#15
2-Fluorobiphenyl
Concen: 0.414 ng
RT: 12.983 min Scan# 1314
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

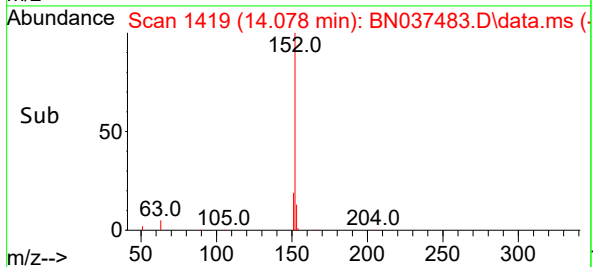
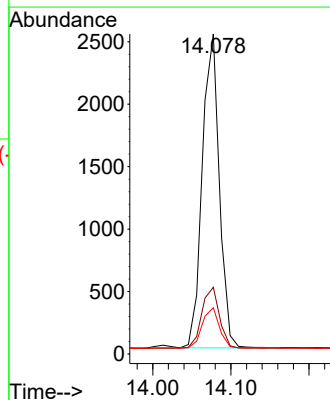
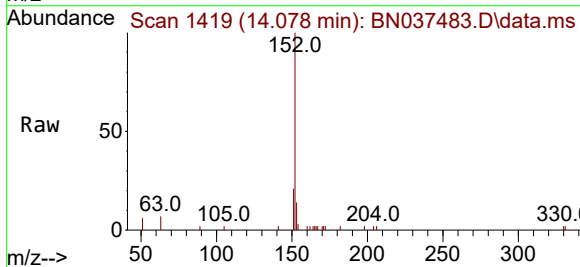
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

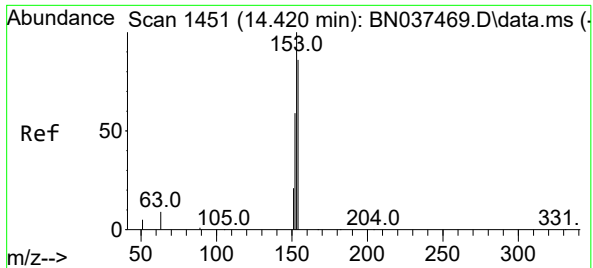
Tgt Ion:172 Resp: 5120
Ion Ratio Lower Upper
172 100
171 36.8 29.8 44.8
170 25.0 20.0 30.0



#16
Acenaphthylene
Concen: 0.386 ng
RT: 14.078 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:152 Resp: 3817
Ion Ratio Lower Upper
152 100
151 20.3 16.4 24.6
153 13.0 10.6 15.8

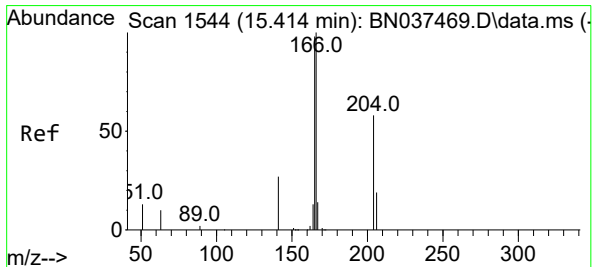
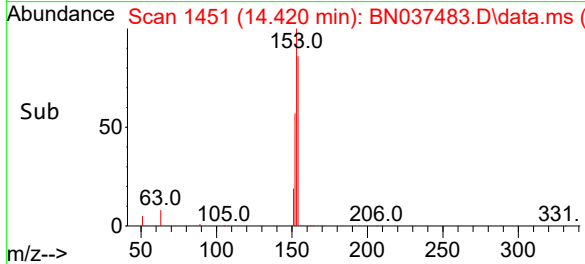
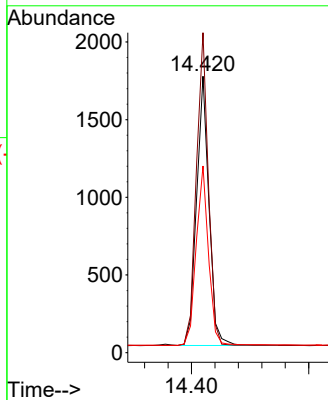
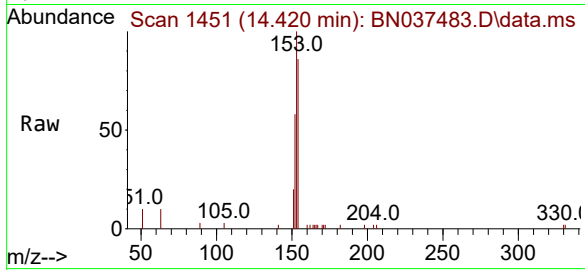




#17
Acenaphthene
Concen: 0.385 ng
RT: 14.420 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

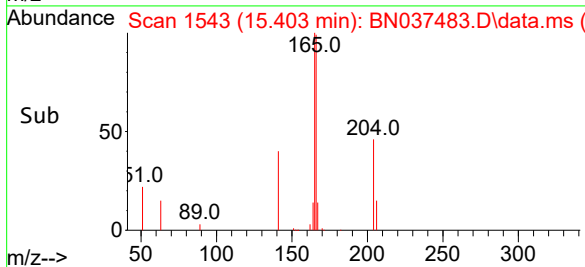
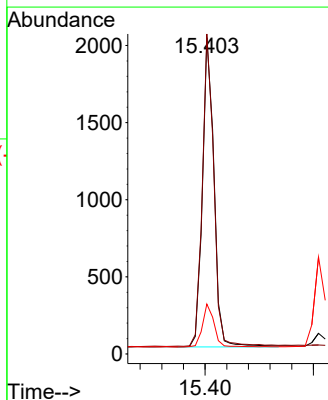
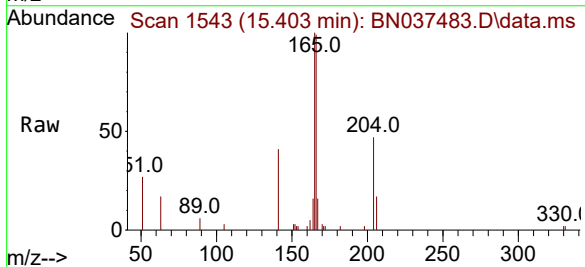
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

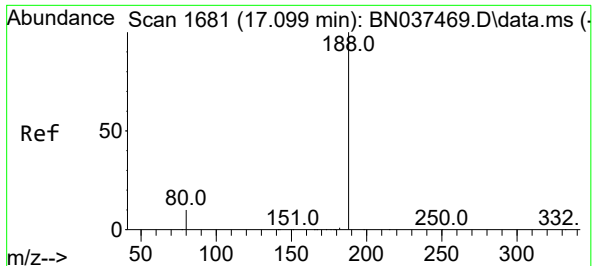
Tgt Ion:154 Resp: 2553
Ion Ratio Lower Upper
154 100
153 112.2 89.4 134.0
152 66.0 53.2 79.8



#18
Fluorene
Concen: 0.365 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:166 Resp: 3037
Ion Ratio Lower Upper
166 100
165 100.1 79.4 119.2
167 13.9 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

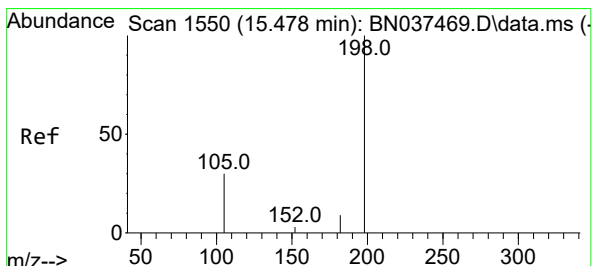
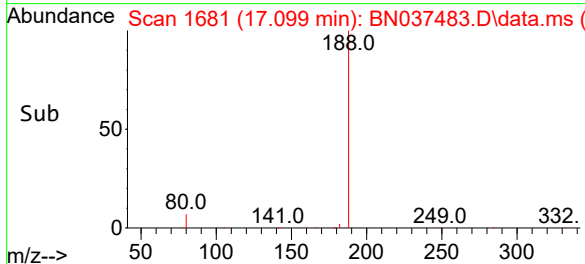
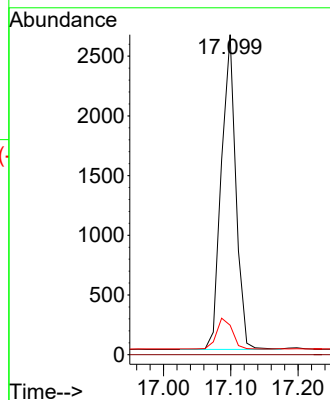
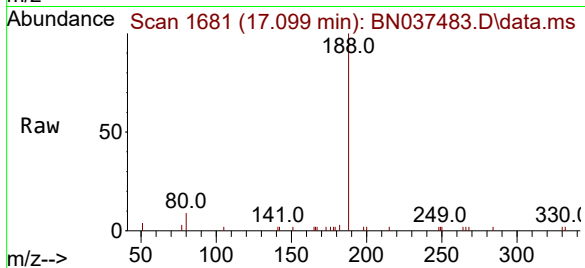
Tgt Ion:188 Resp: 3930

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.2 9.3 13.9#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.328 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

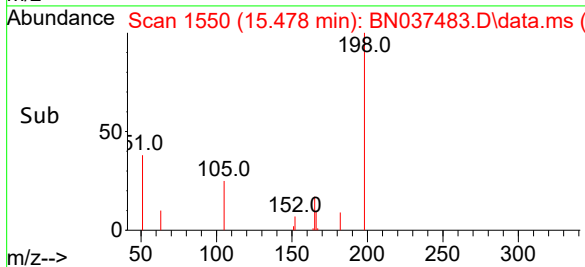
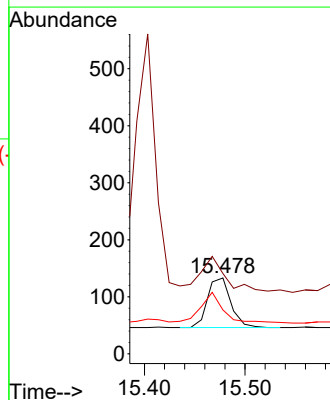
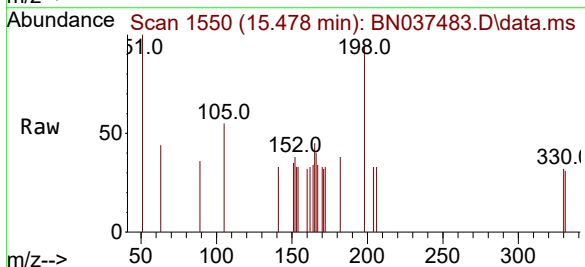
Tgt Ion:198 Resp: 145

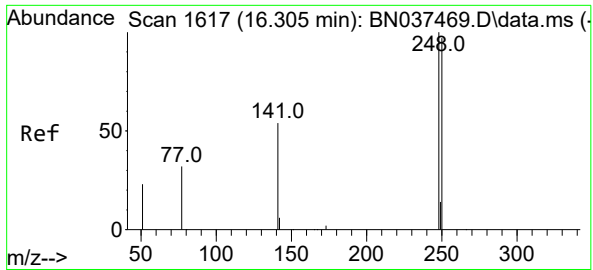
Ion Ratio Lower Upper

198 100

51 106.0 86.0 129.0

105 57.9 53.0 79.4

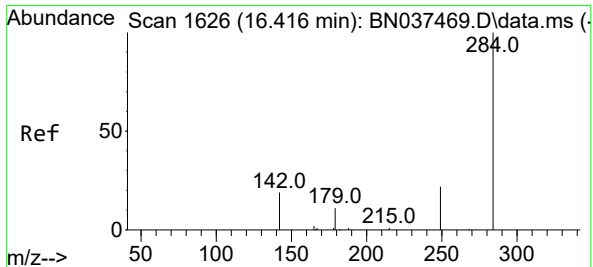
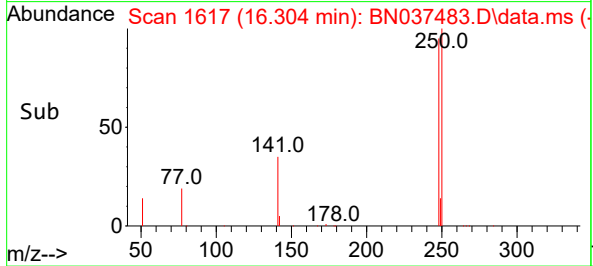
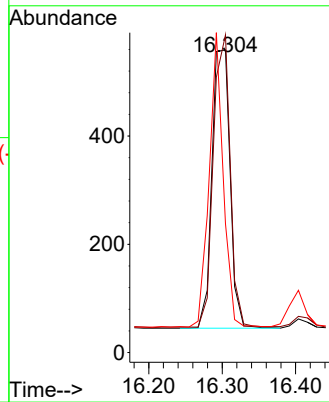
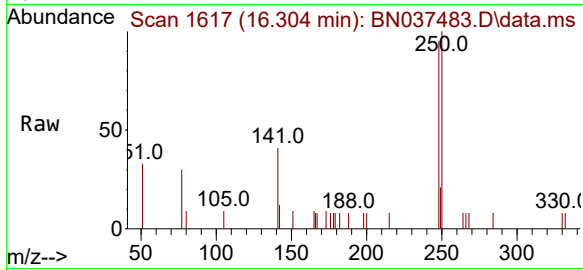




#21
4-Bromophenyl-phenylether
Concen: 0.359 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

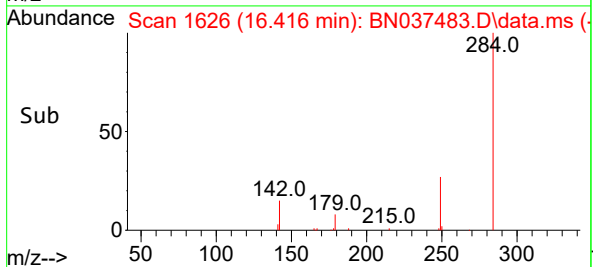
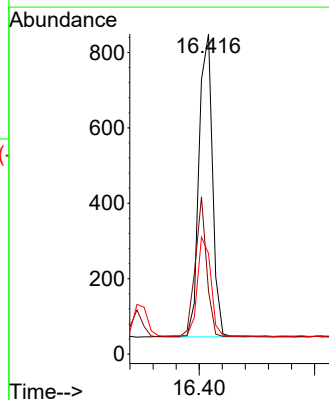
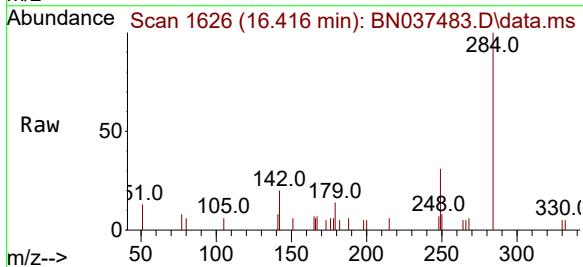
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

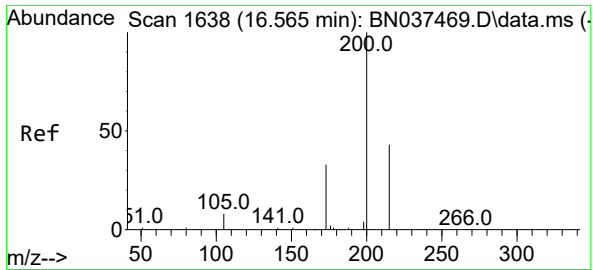
Tgt Ion	Ratio	Lower	Upper
248	100		
250	105.0	77.8	116.6
141	42.6	45.9	68.9#



#22
Hexachlorobenzene
Concen: 0.385 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion	Ratio	Lower	Upper
284	100		
142	39.2	31.3	46.9
249	32.6	26.6	40.0

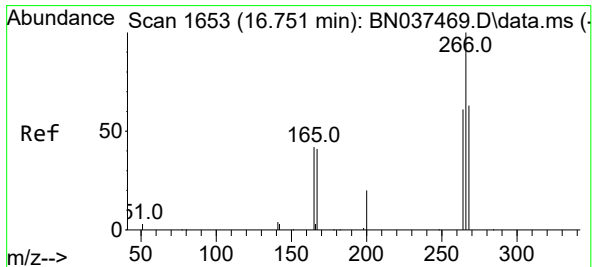
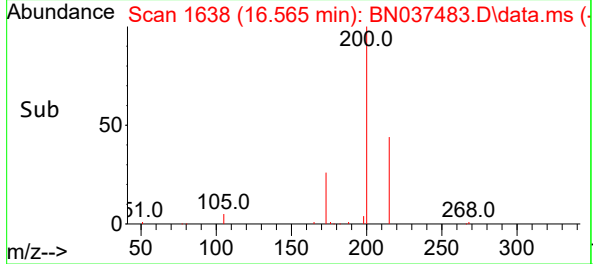
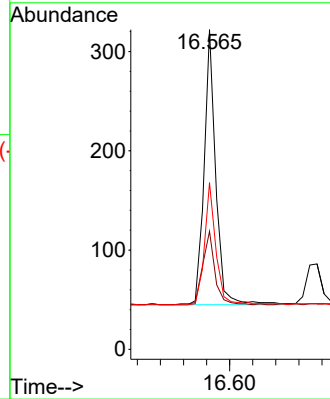
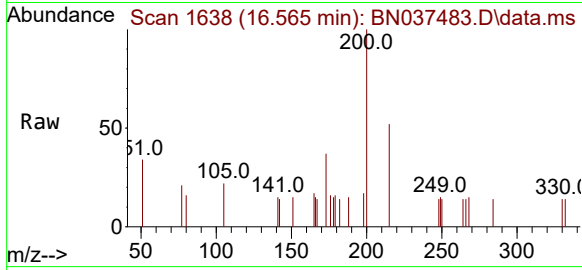




#23
Atrazine
Concen: 0.317 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

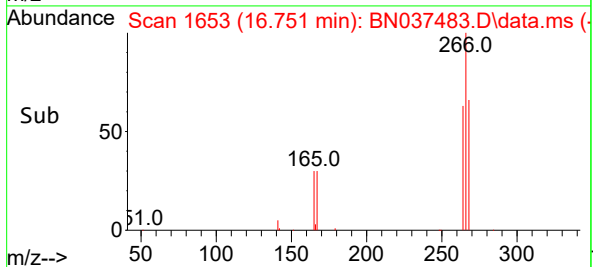
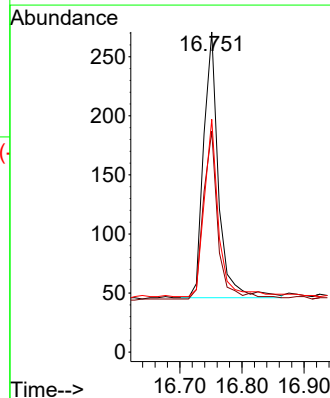
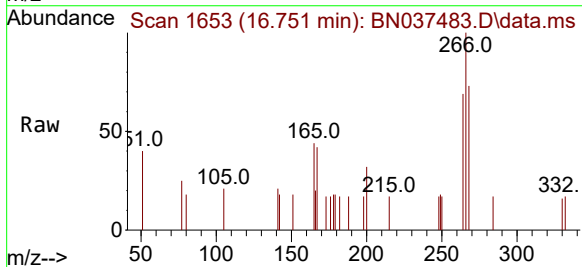
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

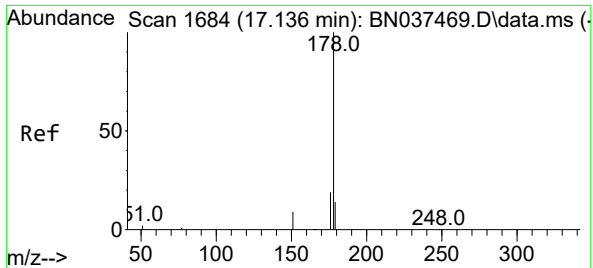
Tgt Ion	Ratio	Lower	Upper
200	100		
173	37.0	34.3	51.5
215	52.2	41.6	62.4



#24
Pentachlorophenol
Concen: 0.323 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion	Ratio	Lower	Upper
266	100		
264	61.7	47.5	71.3
268	64.9	50.6	76.0

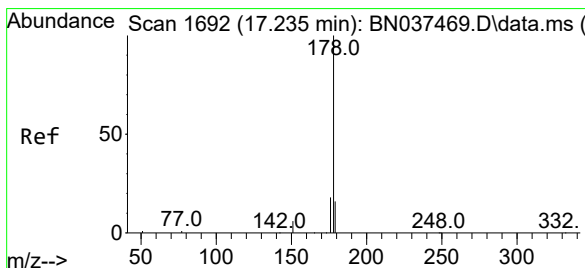
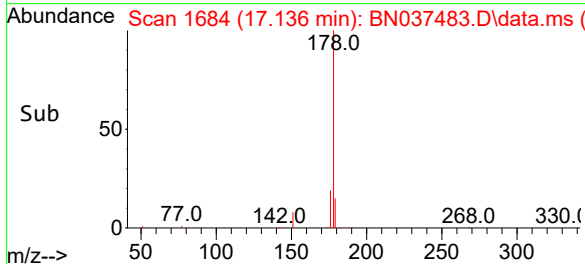
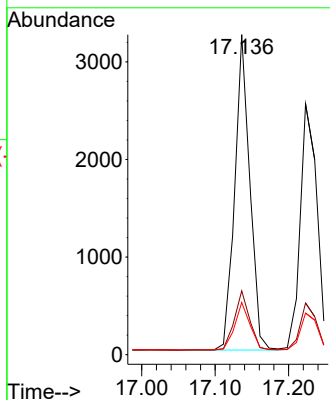
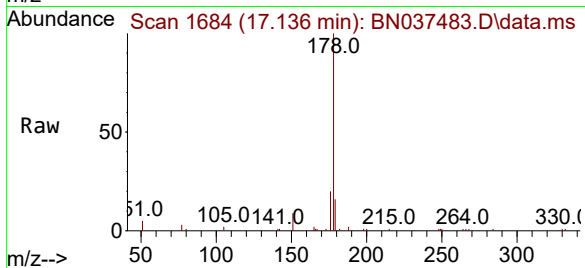




#25
Phenanthrene
Concen: 0.385 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

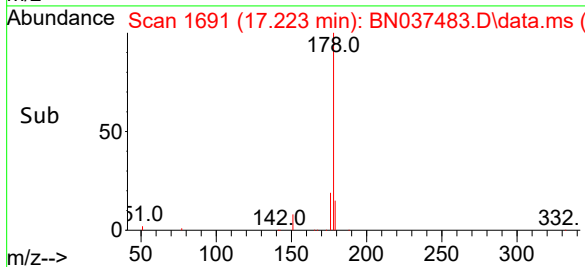
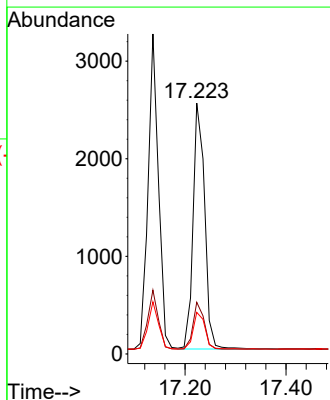
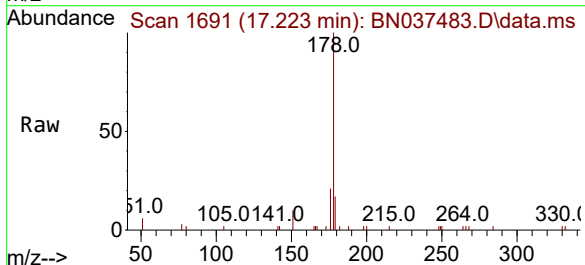
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

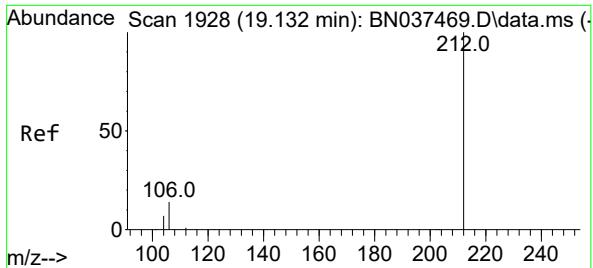
Tgt Ion:178 Resp: 4610
Ion Ratio Lower Upper
178 100
176 19.2 15.1 22.7
179 15.3 12.2 18.2



#26
Anthracene
Concen: 0.373 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.012 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:178 Resp: 4028
Ion Ratio Lower Upper
178 100
176 18.4 14.9 22.3
179 15.2 12.3 18.5

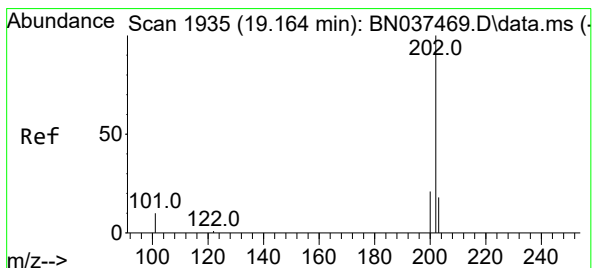
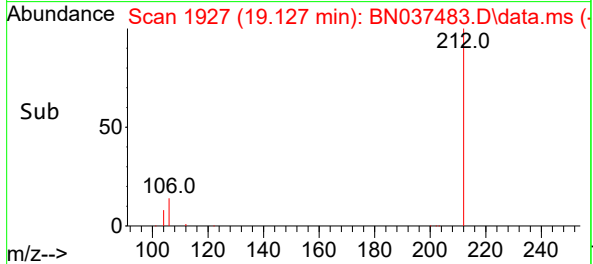
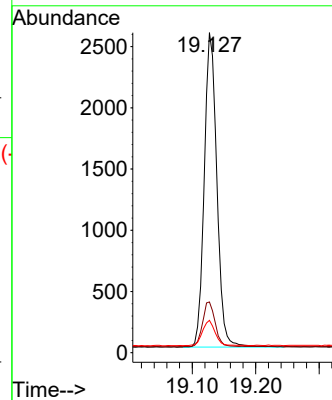
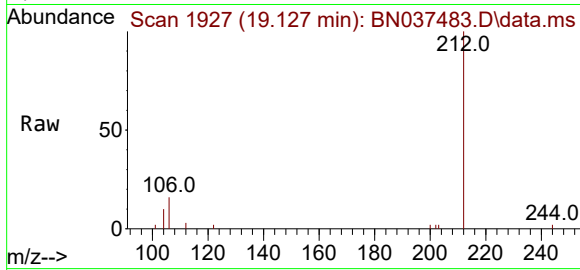




#27
Fluoranthene-d10
Concen: 0.357 ng
RT: 19.127 min Scan# 1927
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

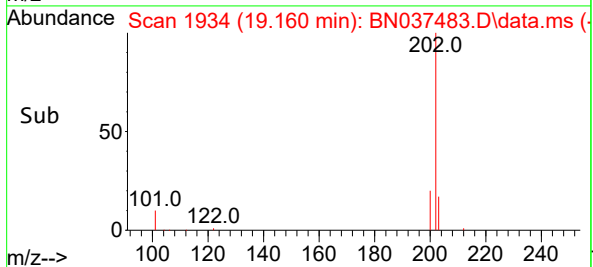
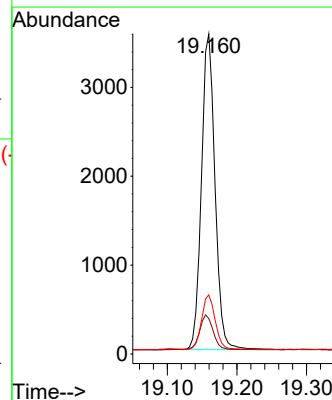
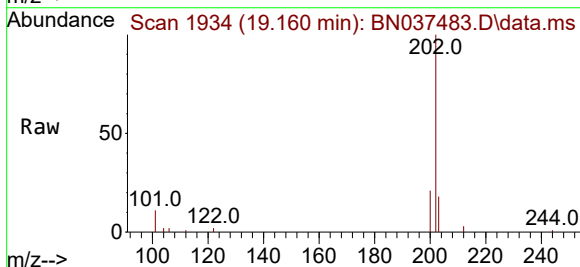
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

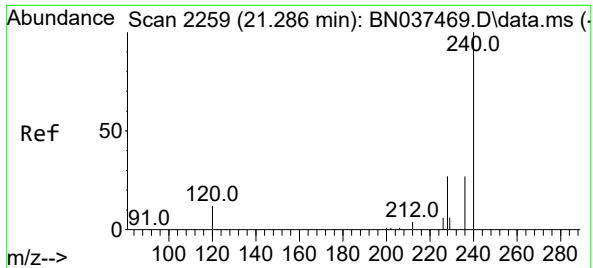
Tgt Ion	Ratio	Lower	Upper
212	100		
106	14.2	11.7	17.5
104	8.1	6.6	10.0



#28
Fluoranthene
Concen: 0.367 ng
RT: 19.160 min Scan# 1934
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion	Ratio	Lower	Upper
202	100		
101	11.3	9.2	13.8
203	17.4	14.0	21.0

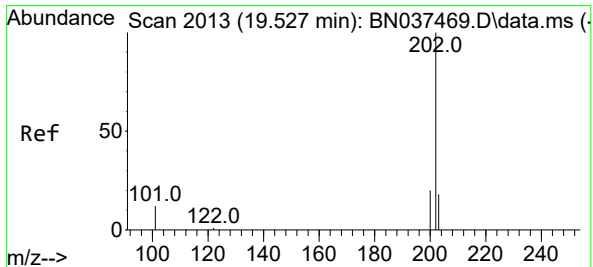
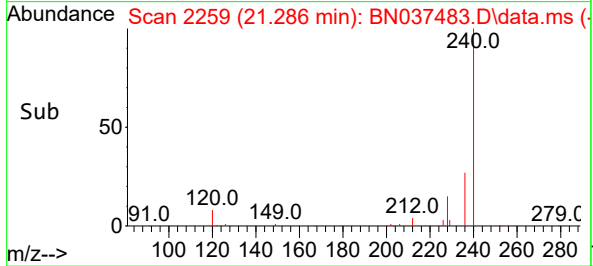
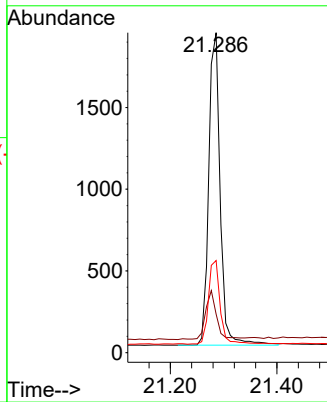
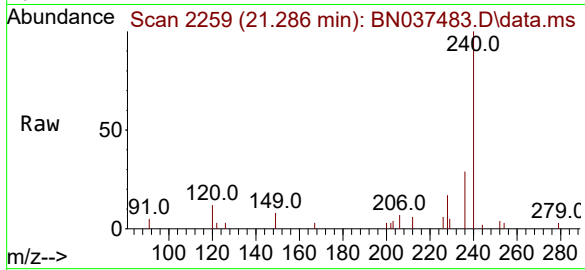




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.286 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

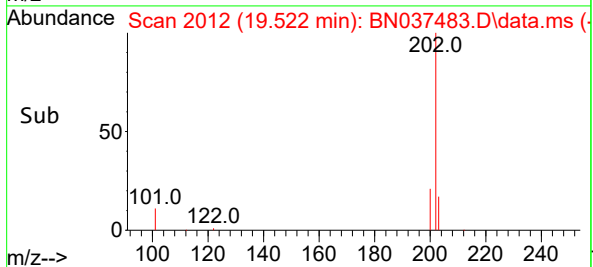
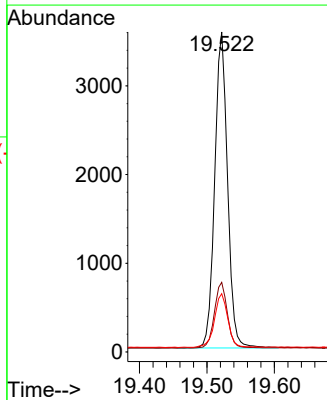
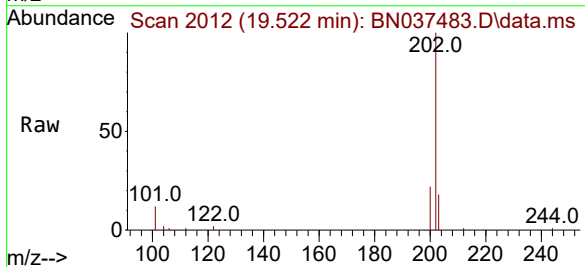
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

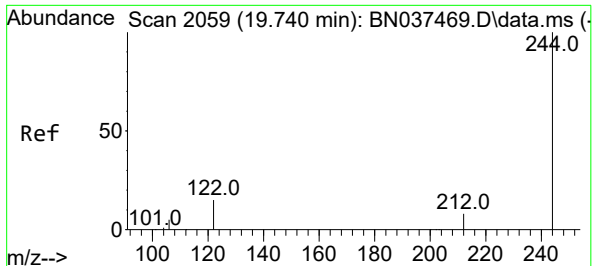
Tgt Ion	Ratio	Lower	Upper
240	100		
120	12.1	12.4	18.6#
236	28.8	22.9	34.3



#30
Pyrene
Concen: 0.411 ng
RT: 19.522 min Scan# 2012
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.4	24.6
203	17.8	14.3	21.5

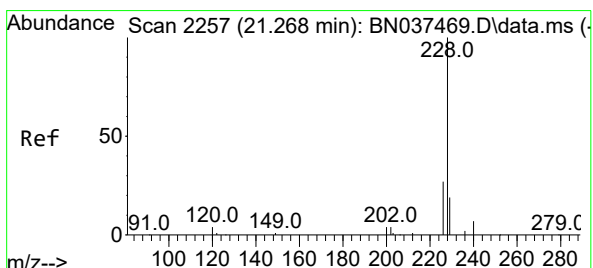
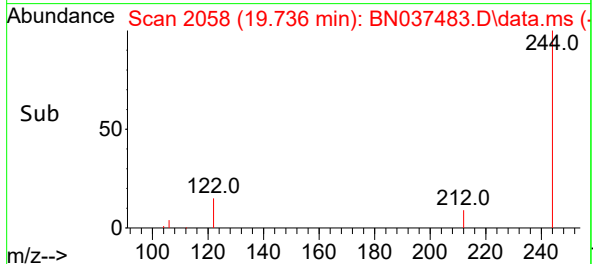
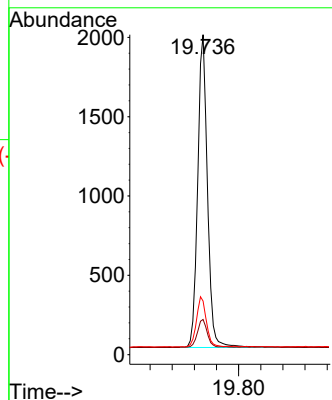
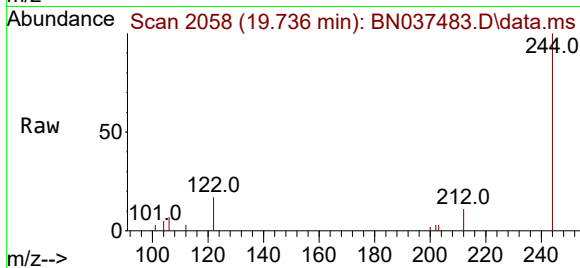




#31
Terphenyl-d14
Concen: 0.409 ng
RT: 19.736 min Scan# 2058
Delta R.T. -0.005 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

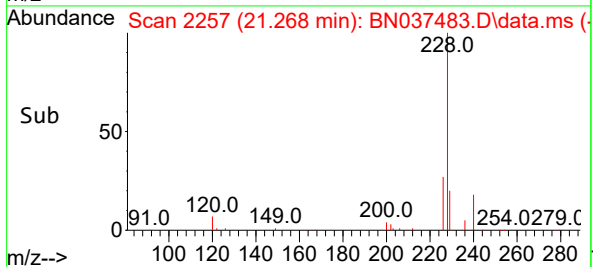
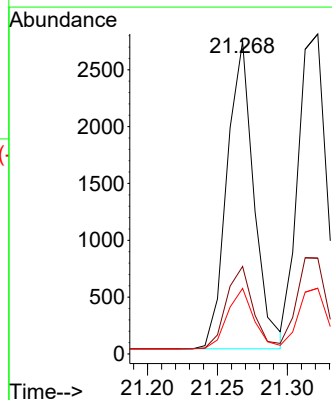
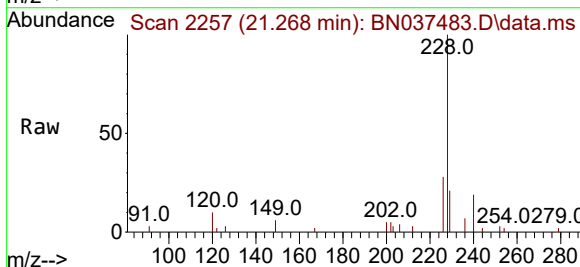
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

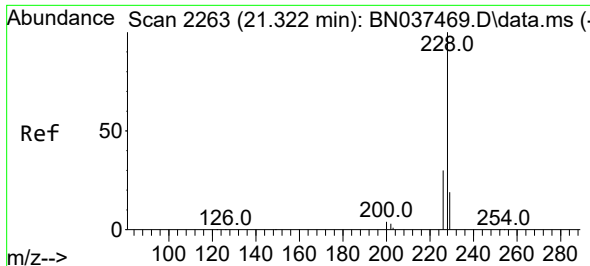
Tgt Ion:244 Resp: 2420
Ion Ratio Lower Upper
244 100
212 11.0 8.7 13.1
122 16.7 14.1 21.1



#32
Benzo(a)anthracene
Concen: 0.378 ng
RT: 21.268 min Scan# 2257
Delta R.T. -0.000 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

Tgt Ion:228 Resp: 3631
Ion Ratio Lower Upper
228 100
226 28.0 22.7 34.1
229 21.0 16.6 24.8





#33

Chrysene

Concen: 0.399 ng

RT: 21.322 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

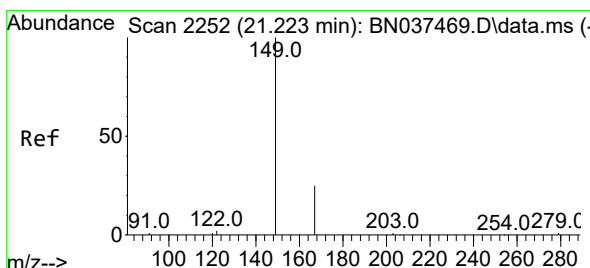
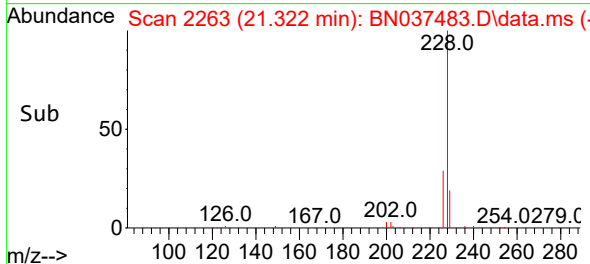
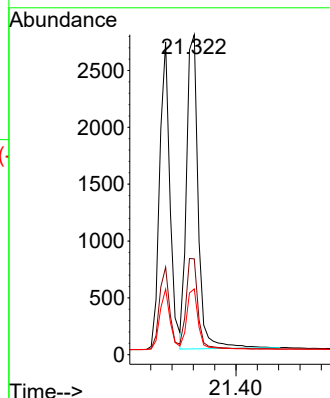
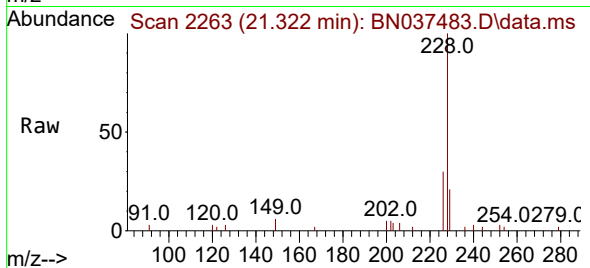
Tgt Ion:228 Resp: 4194

Ion Ratio Lower Upper

228 100

226 30.0 24.6 36.8

229 20.6 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.395 ng

RT: 21.223 min Scan# 2252

Delta R.T. -0.000 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

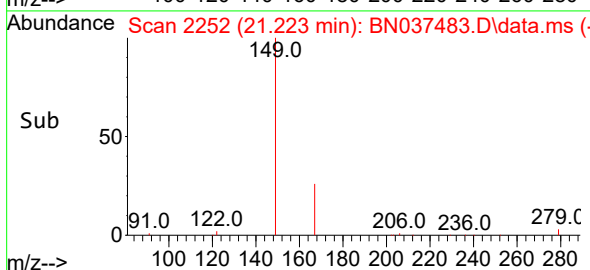
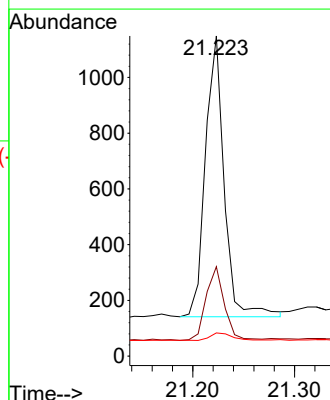
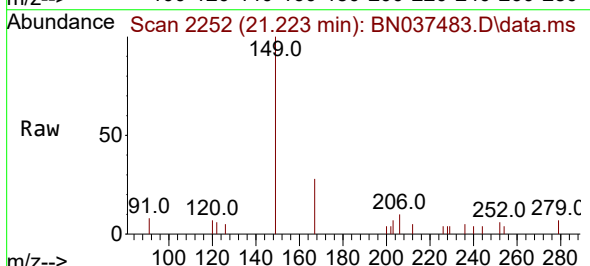
Tgt Ion:149 Resp: 1290

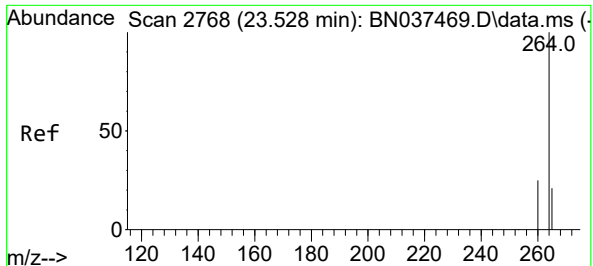
Ion Ratio Lower Upper

149 100

167 25.8 19.4 29.2

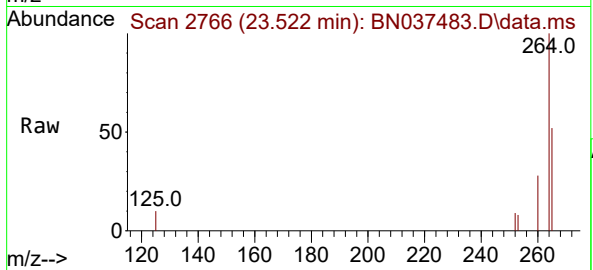
279 2.9 2.5 3.7



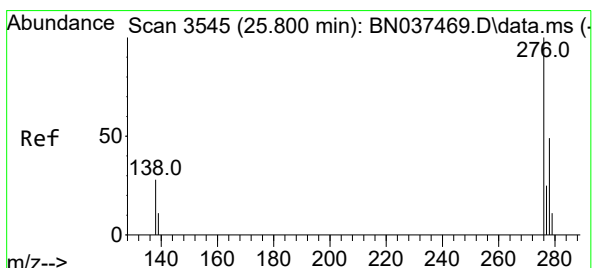
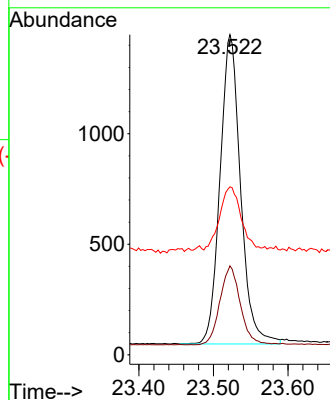
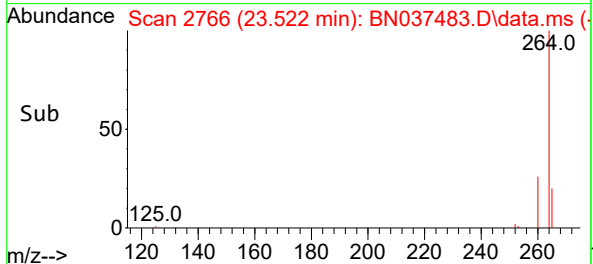


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.522 min Scan# 21
Delta R.T. -0.006 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10

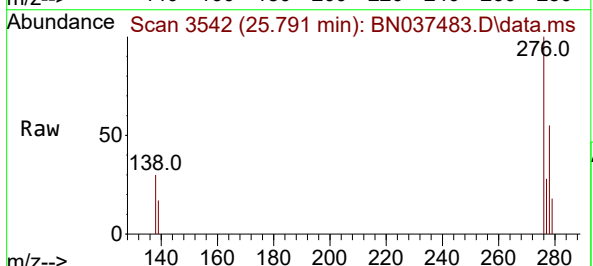
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4



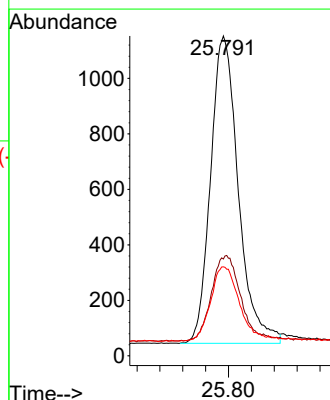
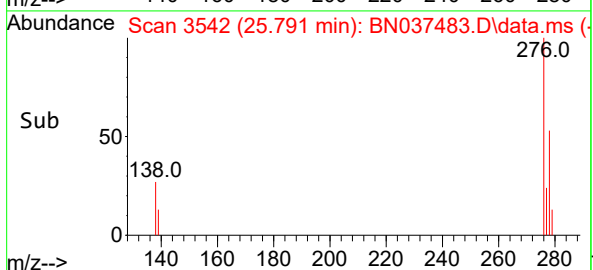
Tgt Ion:264 Resp: 2676
Ion Ratio Lower Upper
264 100
260 27.8 21.7 32.5
265 52.5 41.6 62.4

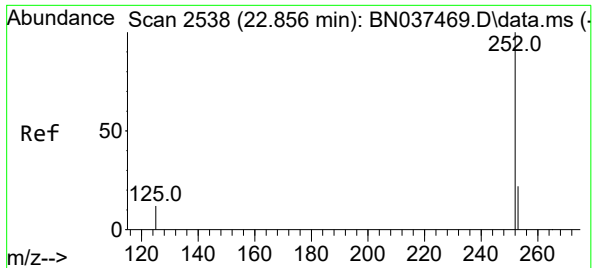


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.359 ng
RT: 25.791 min Scan# 3542
Delta R.T. -0.009 min
Lab File: BN037483.D
Acq: 14 Jul 2025 09:10



Tgt Ion:276 Resp: 3733
Ion Ratio Lower Upper
276 100
138 29.1 23.4 35.2
277 24.9 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.350 ng

RT: 22.850 min Scan# 2536

Delta R.T. -0.006 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

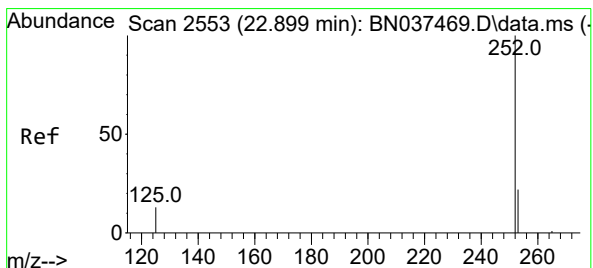
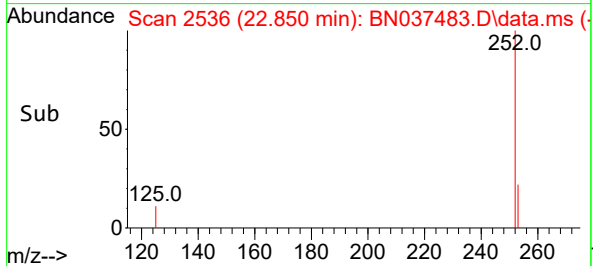
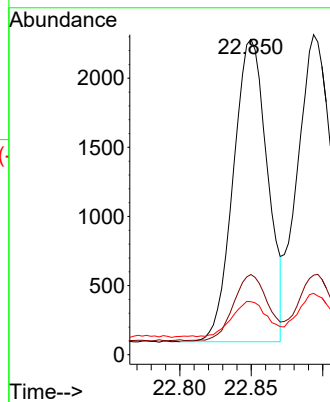
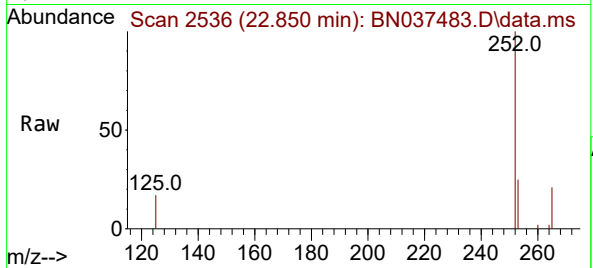
Tgt Ion:252 Resp: 3639

Ion Ratio Lower Upper

252 100

253 25.4 20.1 30.1

125 16.8 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.368 ng

RT: 22.894 min Scan# 2551

Delta R.T. -0.006 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

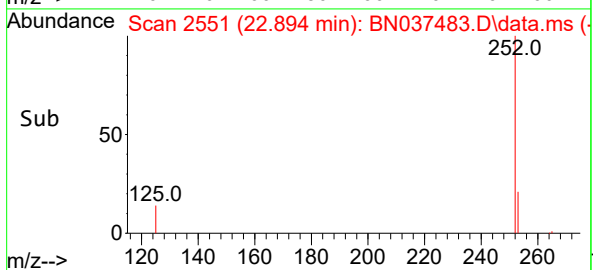
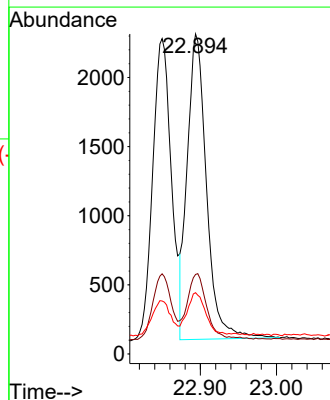
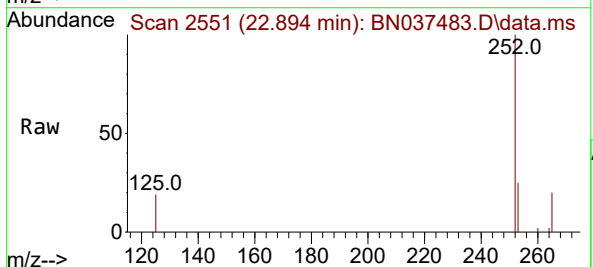
Tgt Ion:252 Resp: 3882

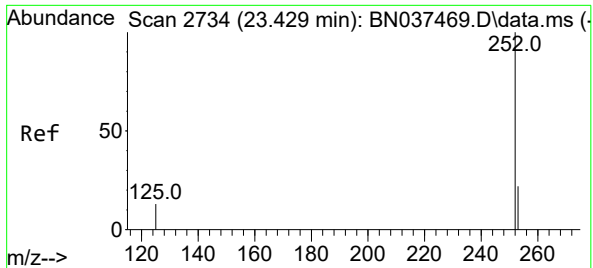
Ion Ratio Lower Upper

252 100

253 24.9 20.4 30.6

125 19.2 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.377 ng

RT: 23.426 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

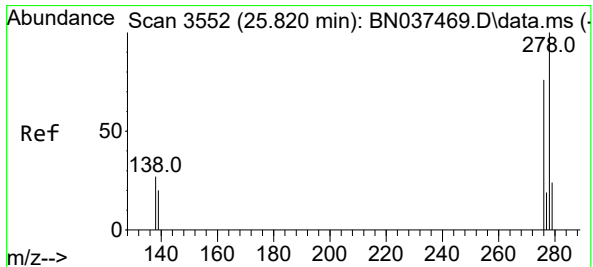
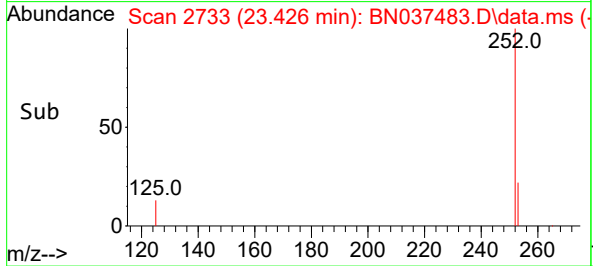
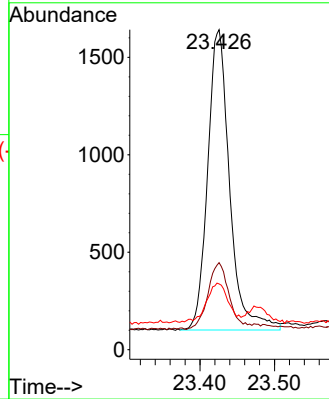
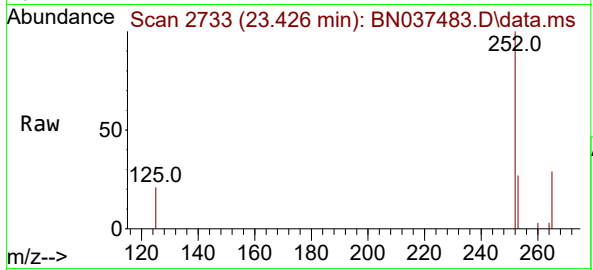
Tgt Ion:252 Resp: 3154

Ion Ratio Lower Upper

252 100

253 27.2 21.8 32.6

125 20.6 16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.346 ng

RT: 25.808 min Scan# 3548

Delta R.T. -0.012 min

Lab File: BN037483.D

Acq: 14 Jul 2025 09:10

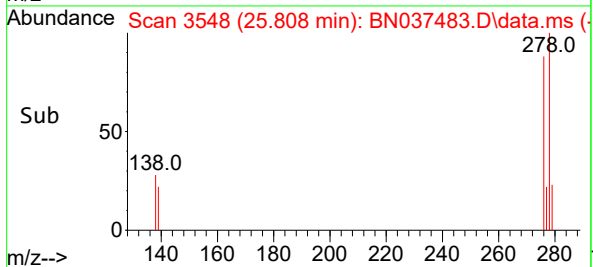
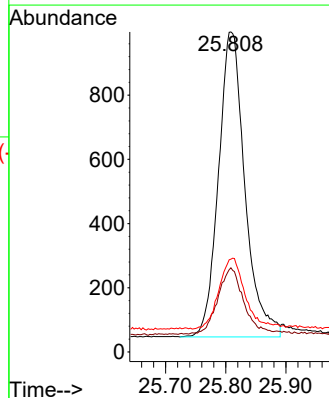
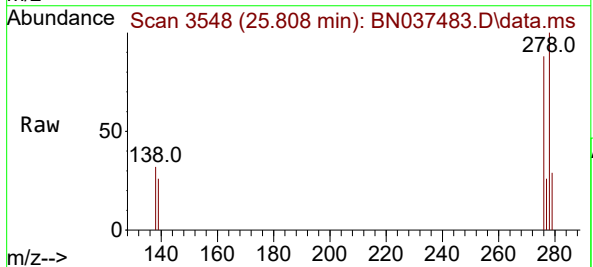
Tgt Ion:278 Resp: 2896

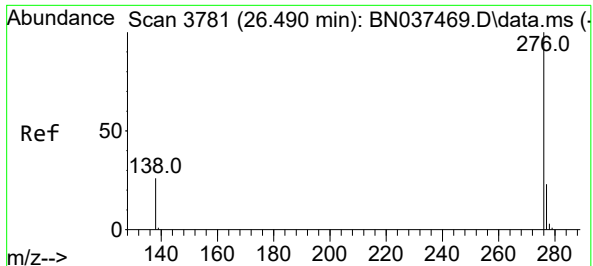
Ion Ratio Lower Upper

278 100

139 26.3 19.9 29.9

279 29.0 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.361 ng

RT: 26.478 min Scan# 31

Delta R.T. -0.012 min

Lab File: BN037483.D

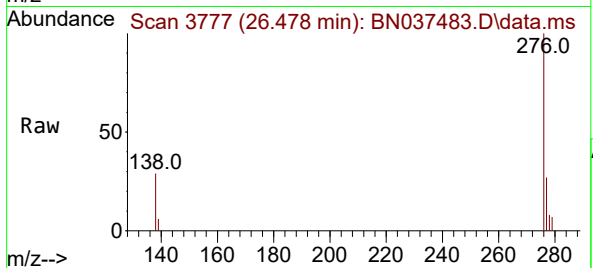
Acq: 14 Jul 2025 09:10

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4



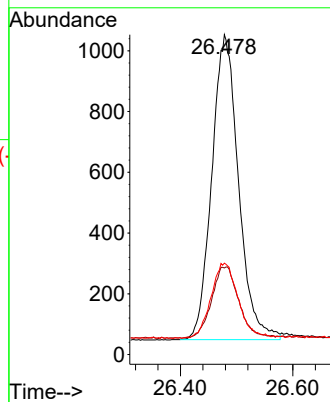
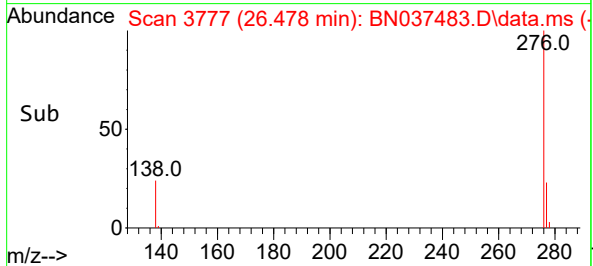
Tgt Ion:276 Resp: 3310

Ion Ratio Lower Upper

276 100

277 27.1 21.7 32.5

138 28.6 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037483.D
Acq On : 14 Jul 2025 09:10
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Jul 14 10:55:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 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	110	0.00
2	1,4-Dioxane	0.376	0.399	-6.1	114	0.00
3	n-Nitrosodimethylamine	0.502	0.514	-2.4	114	0.00
4 S	2-Fluorophenol	0.931	0.920	1.2	109	0.00
5 S	Phenol-d6	1.171	1.170	0.1	110	0.00
6	bis(2-Chloroethyl)ether	0.980	0.984	-0.4	112	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	112	0.00
8 S	Nitrobenzene-d5	0.290	0.263	9.3	107	0.00
9	Naphthalene	1.075	1.054	2.0	112	0.00
10	Hexachlorobutadiene	0.258	0.248	3.9	108	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.511	6.1	112	0.00
12	2-Methylnaphthalene	0.673	0.638	5.2	110	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	110	-0.01
14 S	2,4,6-Tribromophenol	0.136	0.112	17.6	101	0.00
15 S	2-Fluorobiphenyl	2.283	2.364	-3.5	112	0.00
16	Acenaphthylene	1.824	1.762	3.4	110	0.00
17	Acenaphthene	1.224	1.179	3.7	109	0.00
18	Fluorene	1.538	1.402	8.8	104	-0.01
19 I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00
20	4,6-Dinitro-2-methylphenol	0.045	0.037	17.8	104	0.00
21	4-Bromophenyl-phenylether	0.250	0.224	10.4	104	0.00
22	Hexachlorobenzene	0.344	0.332	3.5	107	0.00
23	Atrazine	0.124	0.098	21.0	94	0.00
24	Pentachlorophenol	0.119	0.096	19.3	104	0.00
25	Phenanthrene	1.218	1.173	3.7	111	0.00
26	Anthracene	1.099	1.025	6.7	111	-0.01
27 SURR	Fluoranthene-d10	1.009	0.900	10.8	109	0.00
28	Fluoranthene	1.337	1.225	8.4	110	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	106	0.00
30	Pyrene	1.608	1.652	-2.7	110	0.00
31 S	Terphenyl-d14	0.835	0.853	-2.2	110	0.00
32	Benzo(a)anthracene	1.355	1.280	5.5	105	0.00
33	Chrysene	1.481	1.478	0.2	107	0.00
34	Bis(2-ethylhexyl)phthalate	0.461	0.455	1.3	107	0.00
35 I	Perylene-d12	1.000	1.000	0.0	108	0.00
36	Indeno(1,2,3-cd)pyrene	1.553	1.395	10.2	108	0.00
37	Benzo(b)fluoranthene	1.556	1.360	12.6	104	0.00
38	Benzo(k)fluoranthene	1.577	1.451	8.0	109	0.00
39 C	Benzo(a)pyrene	1.252	1.179	5.8	111	0.00
40	Dibenzo(a,h)anthracene	1.252	1.082	13.6	106	-0.01
41	Benzo(g,h,i)perylene	1.372	1.237	9.8	105	-0.01

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037483.D
Acq On : 14 Jul 2025 09:10
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Jul 14 10:55:57 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 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	110	0.00
2	1,4-Dioxane	0.400	0.425	-6.2	114	0.00
3	n-Nitrosodimethylamine	0.400	0.410	-2.5	114	0.00
4 S	2-Fluorophenol	0.400	0.395	1.3	109	0.00
5 S	Phenol-d6	0.400	0.399	0.3	110	0.00
6	bis(2-Chloroethyl)ether	0.400	0.402	-0.5	112	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	112	0.00
8 S	Nitrobenzene-d5	0.400	0.362	9.5	107	0.00
9	Naphthalene	0.400	0.392	2.0	112	0.00
10	Hexachlorobutadiene	0.400	0.384	4.0	108	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.376	6.0	112	0.00
12	2-Methylnaphthalene	0.400	0.379	5.3	110	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	110	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.331	17.3	101	0.00
15 S	2-Fluorobiphenyl	0.400	0.414	-3.5	112	0.00
16	Acenaphthylene	0.400	0.386	3.5	110	0.00
17	Acenaphthene	0.400	0.385	3.8	109	0.00
18	Fluorene	0.400	0.365	8.8	104	-0.01
19 I	Phenanthrene-d10	0.400	0.400	0.0	110	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.328	18.0	104	0.00
21	4-Bromophenyl-phenylether	0.400	0.359	10.3	104	0.00
22	Hexachlorobenzene	0.400	0.385	3.8	107	0.00
23	Atrazine	0.400	0.317	20.8	94	0.00
24	Pentachlorophenol	0.400	0.323	19.3	104	0.00
25	Phenanthrene	0.400	0.385	3.8	111	0.00
26	Anthracene	0.400	0.373	6.8	111	-0.01
27 SURR	Fluoranthene-d10	0.400	0.357	10.8	109	0.00
28	Fluoranthene	0.400	0.367	8.3	110	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	106	0.00
30	Pyrene	0.400	0.411	-2.7	110	0.00
31 S	Terphenyl-d14	0.400	0.409	-2.2	110	0.00
32	Benzo(a)anthracene	0.400	0.378	5.5	105	0.00
33	Chrysene	0.400	0.399	0.3	107	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.395	1.3	107	0.00
35 I	Perylene-d12	0.400	0.400	0.0	108	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.359	10.3	108	0.00
37	Benzo(b)fluoranthene	0.400	0.350	12.5	104	0.00
38	Benzo(k)fluoranthene	0.400	0.368	8.0	109	0.00
39 C	Benzo(a)pyrene	0.400	0.377	5.8	111	0.00
40	Dibenzo(a,h)anthracene	0.400	0.346	13.5	106	-0.01
41	Benzo(g,h,i)perylene	0.400	0.361	9.8	105	-0.01

(#) = 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: Alliance Contract: TETR06
 Lab Code: ACE SDG No.: Q2488
 Instrument ID: BNA_N Calibration Date/Time: 07/14/2025 18:00
 Lab File ID: BN037496.D Init. Calib. Date(s): 07/11/2025 07/11/2025
 EPA Sample No.: SSTDCCC0.4EC Init. Calib. Time(s): 11:10 14:49
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.510		-6.3	50.0
Fluoranthene-d10	1.009	0.908		-10.0	50.0
2-Fluorophenol	0.931	0.998		7.2	50.0
Phenol-d6	1.171	1.250		6.7	50.0
Nitrobenzene-d5	0.290	0.288		-0.7	50.0
2-Fluorobiphenyl	2.283	2.093		-8.3	50.0
2,4,6-Tribromophenol	0.136	0.153		12.5	50.0
Terphenyl-d14	0.835	0.740		-11.4	50.0
1,4-Dioxane	0.376	0.407		8.2	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
 Data File : BN037496.D
 Acq On : 14 Jul 2025 18:00
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

Quant Time: Jul 14 18:25:23 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

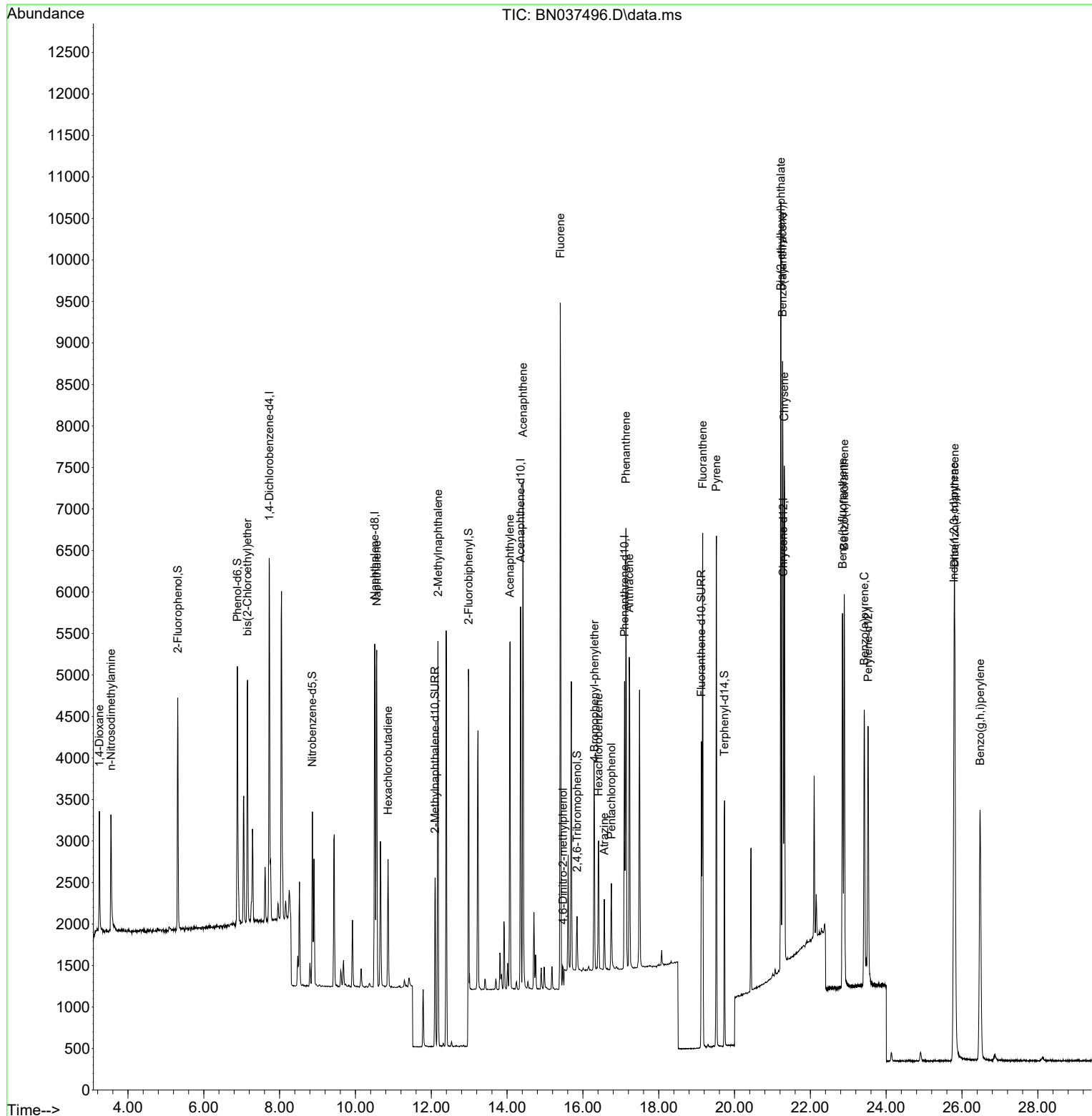
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	2152	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5297	0.400	ng	# 0.00
13) Acenaphthene-d10	14.356	164	2508	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	4381	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3666	0.400	ng	# 0.00
35) Perylene-d12	23.522	264	4119	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	2147	0.429	ng	0.00
5) Phenol-d6	6.887	99	2691	0.427	ng	0.00
8) Nitrobenzene-d5	8.865	82	1528	0.397	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	2701	0.375	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	384	0.452	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	5250	0.367	ng	0.00
27) Fluoranthene-d10	19.127	212	3978	0.360	ng	0.00
31) Terphenyl-d14	19.736	244	2713	0.355	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.247	88	876	0.433	ng	93
3) n-Nitrosodimethylamine	3.550	42	984	0.364	ng	# 77
6) bis(2-Chloroethyl)ether	7.154	93	2168	0.411	ng	99
9) Naphthalene	10.562	128	5491	0.386	ng	99
10) Hexachlorobutadiene	10.861	225	1221	0.357	ng	# 99
12) 2-Methylnaphthalene	12.177	142	3403	0.382	ng	99
16) Acenaphthylene	14.078	152	4467	0.391	ng	100
17) Acenaphthene	14.420	154	2949	0.384	ng	97
18) Fluorene	15.403	166	3588	0.372	ng	98
20) 4,6-Dinitro-2-methylph...	15.478	198	219	0.445	ng	84
21) 4-Bromophenyl-phenylether	16.305	248	1046	0.383	ng	# 86
22) Hexachlorobenzene	16.416	284	1408	0.373	ng	99
23) Atrazine	16.565	200	629	0.463	ng	94
24) Pentachlorophenol	16.751	266	545	0.420	ng	98
25) Phenanthrene	17.136	178	5108	0.383	ng	99
26) Anthracene	17.223	178	4488	0.373	ng	99
28) Fluoranthene	19.160	202	5371	0.367	ng	99
30) Pyrene	19.522	202	5366	0.364	ng	99
32) Benzo(a)anthracene	21.268	228	5027	0.405	ng	100
33) Chrysene	21.313	228	5273	0.389	ng	98
34) Bis(2-ethylhexyl)phtha...	21.223	149	8141	1.928	ng	96
36) Indeno(1,2,3-cd)pyrene	25.791	276	7069	0.442	ng	98
37) Benzo(b)fluoranthene	22.850	252	5533	0.345	ng	100
38) Benzo(k)fluoranthene	22.894	252	5718	0.352	ng	97
39) Benzo(a)pyrene	23.423	252	4802	0.373	ng	97
40) Dibenzo(a,h)anthracene	25.809	278	5724	0.444	ng	95
41) Benzo(g,h,i)perylene	26.478	276	6020	0.426	ng	97

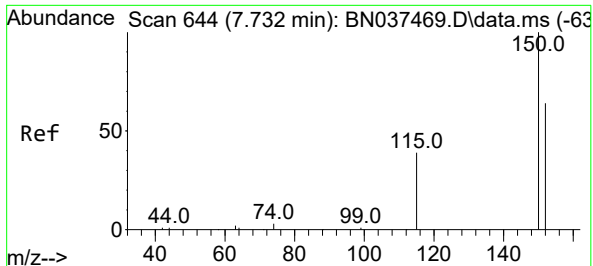
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037496.D
Acq On : 14 Jul 2025 18:00
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Jul 14 18:25:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

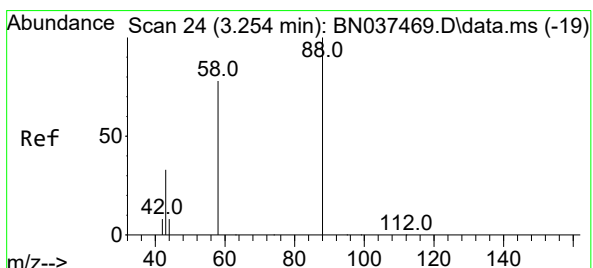
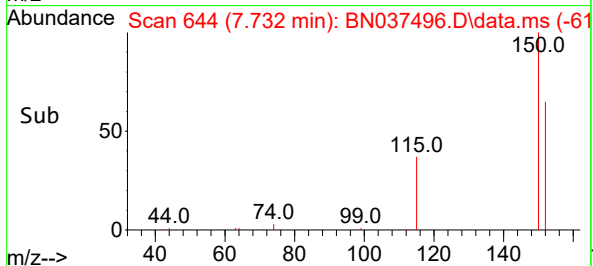
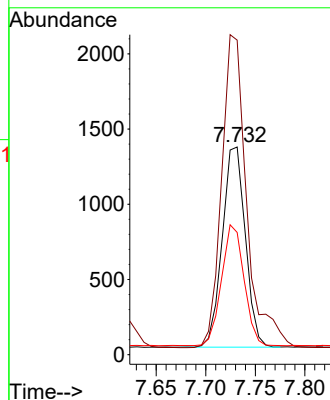
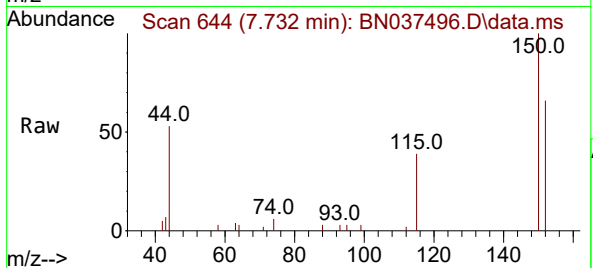




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

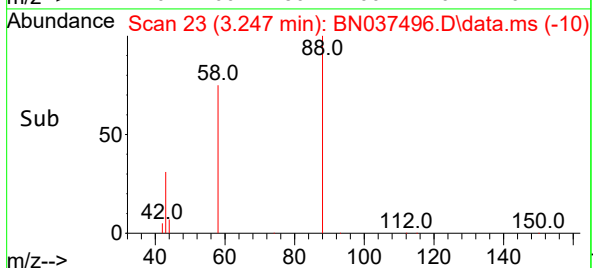
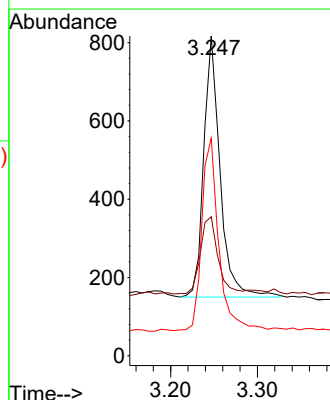
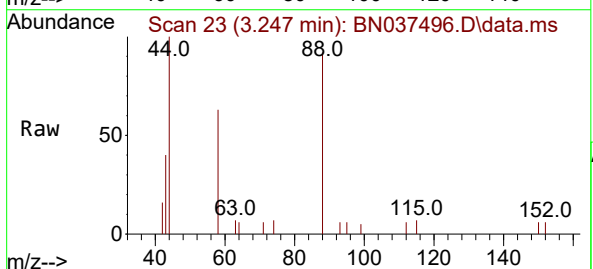
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2152
Ion Ratio Lower Upper
152 100
150 151.5 122.5 183.7
115 58.9 49.9 74.9

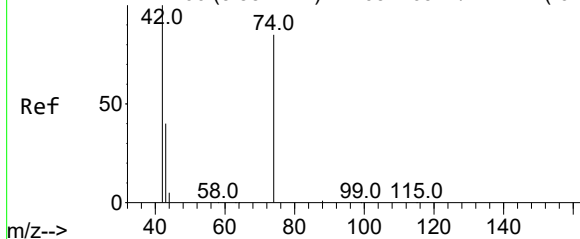


#2
1,4-Dioxane
Concen: 0.433 ng
RT: 3.247 min Scan# 23
Delta R.T. -0.007 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion: 88 Resp: 876
Ion Ratio Lower Upper
88 100
43 31.7 30.7 46.1
58 77.1 65.0 97.4



Abundance Scan 66 (3.557 min): BN037469.D\data.ms (-61)



#3

n-Nitrosodimethylamine

Concen: 0.364 ng

RT: 3.550 min Scan# 61

Delta R.T. -0.007 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

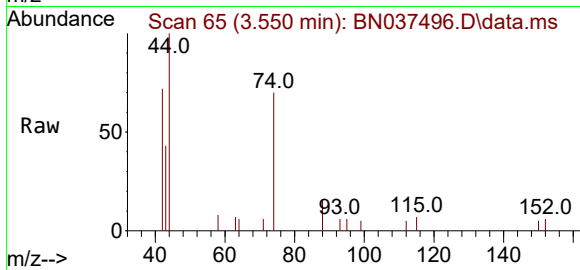
Tgt Ion: 42 Resp: 984

Ion Ratio Lower Upper

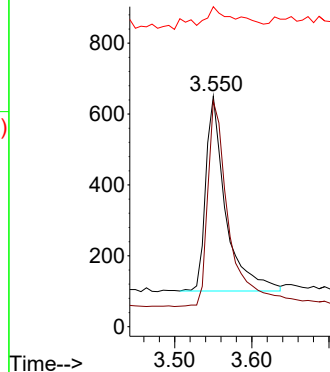
42 100

74 116.9 74.9 112.3#

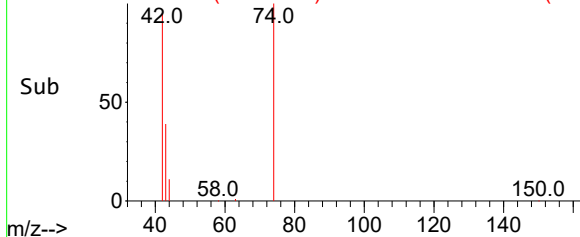
44 12.1 7.2 10.8#



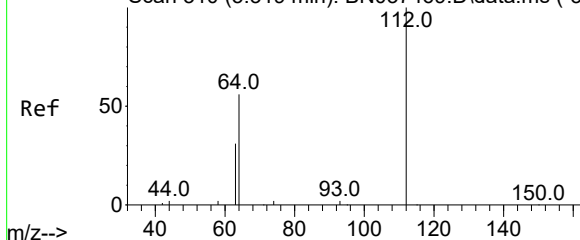
Abundance



Abundance Scan 65 (3.550 min): BN037496.D\data.ms (-45)



Abundance Scan 310 (5.319 min): BN037469.D\data.ms (-30)



#4

2-Fluorophenol

Concen: 0.429 ng

RT: 5.312 min Scan# 309

Delta R.T. -0.007 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

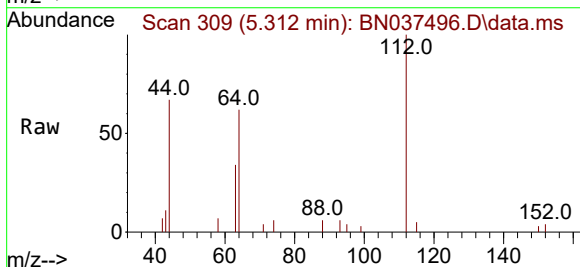
Tgt Ion: 112 Resp: 2147

Ion Ratio Lower Upper

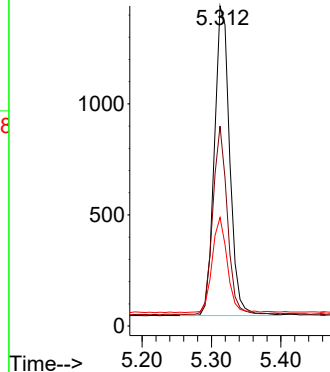
112 100

64 57.4 45.4 68.0

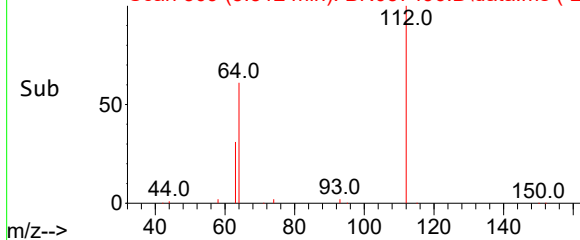
63 29.9 24.7 37.1

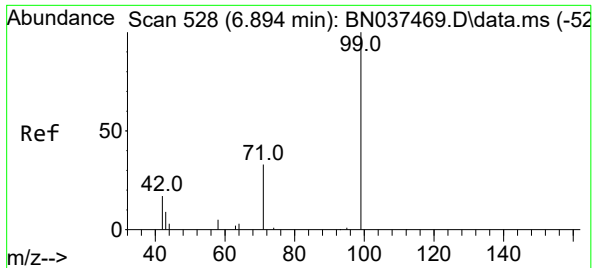


Abundance



Abundance Scan 309 (5.312 min): BN037496.D\data.ms (-28)

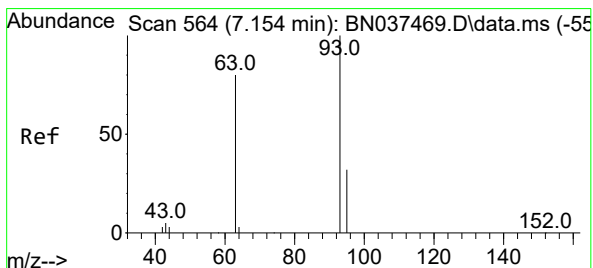
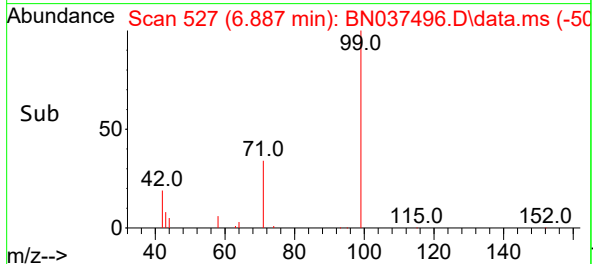
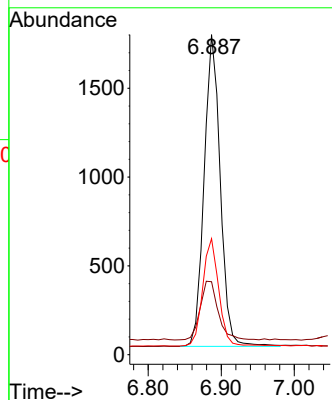
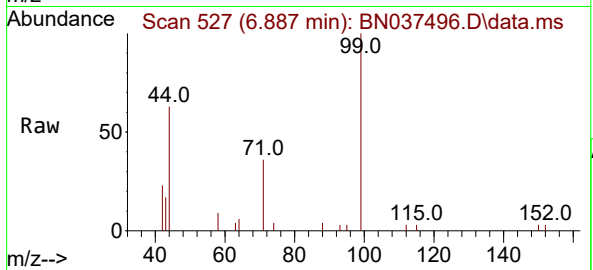




#5
Phenol-d6
Concen: 0.427 ng
RT: 6.887 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

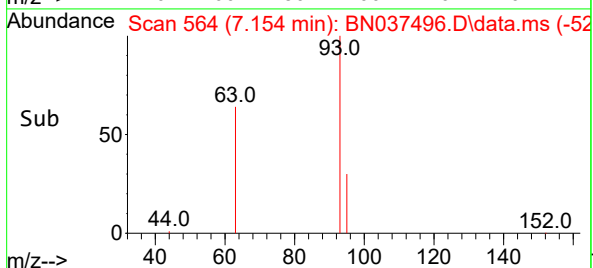
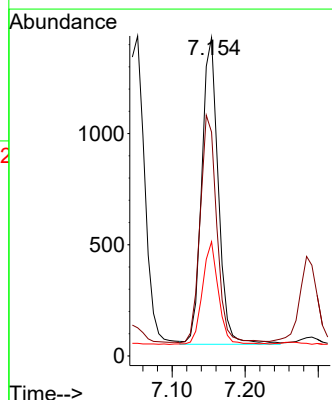
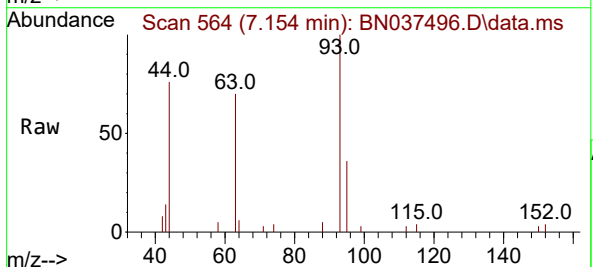
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

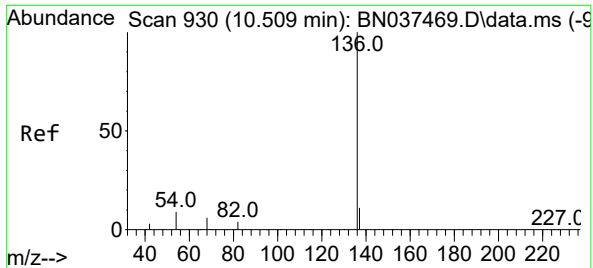
Tgt Ion:	99	Resp:	2691
Ion	Ratio	Lower	Upper
99	100		
42	21.0	19.5	29.3
71	34.3	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.411 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:	93	Resp:	2168
Ion	Ratio	Lower	Upper
93	100		
63	74.5	60.8	91.2
95	32.4	25.6	38.4

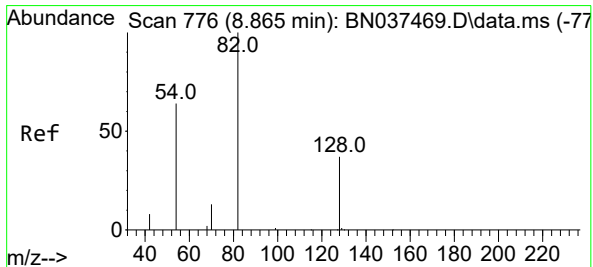
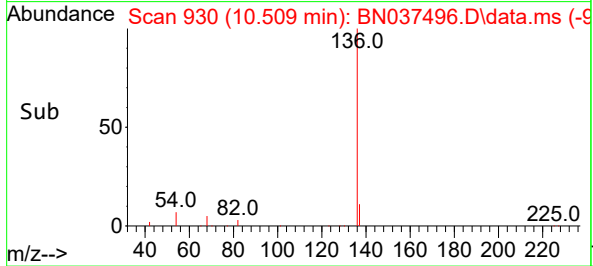
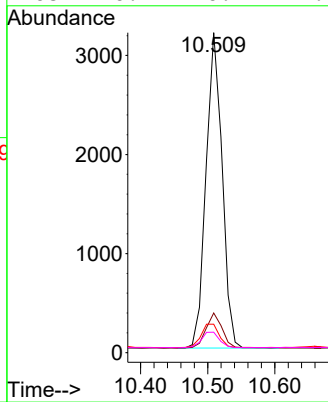
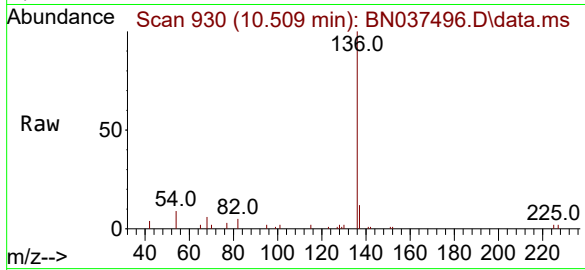




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

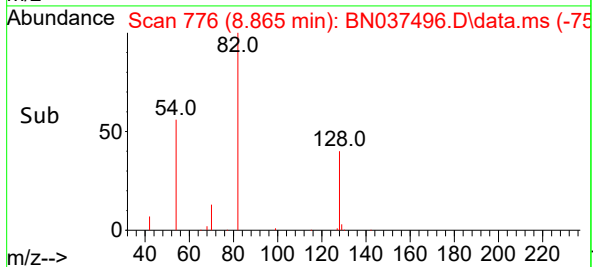
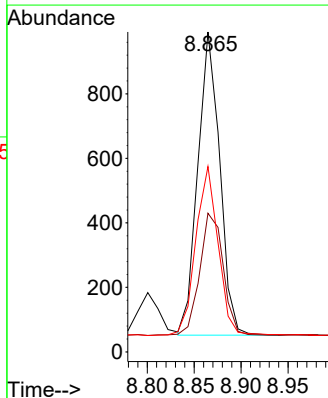
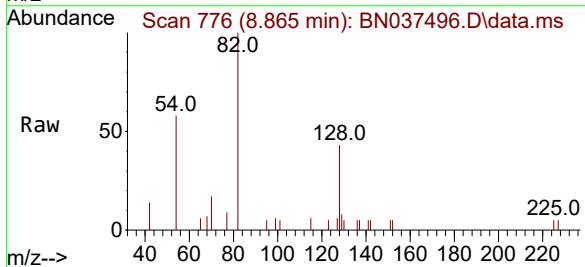
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

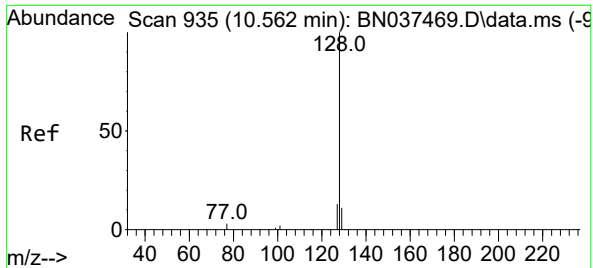
Tgt Ion:	136	Resp:	5297
Ion	Ratio	Lower	Upper
136	100		
137	12.4	10.0	15.0
54	8.9	9.0	13.6#
68	6.4	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.397 ng
RT: 8.865 min Scan# 776
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:	82	Resp:	1528
Ion	Ratio	Lower	Upper
82	100		
128	43.3	33.1	49.7
54	58.0	53.0	79.4

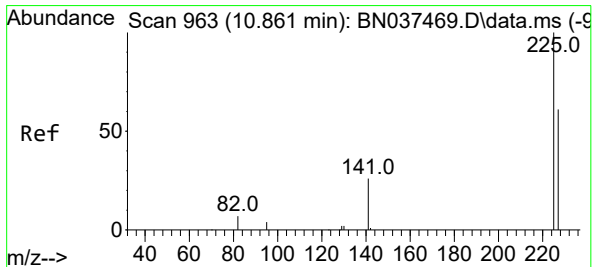
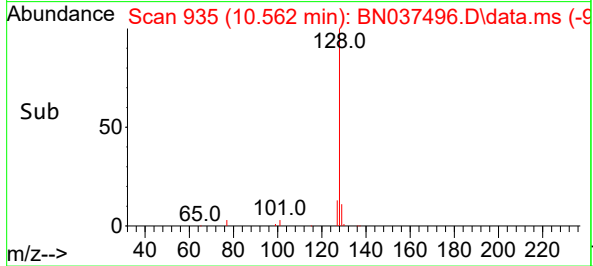
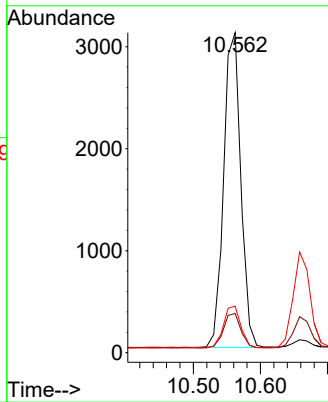
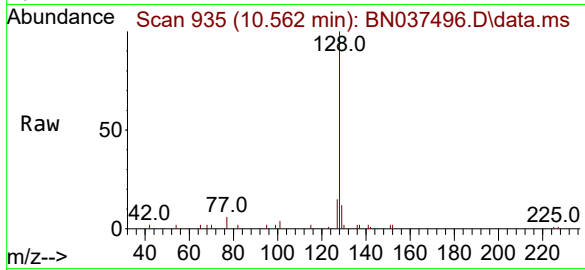




#9
Naphthalene
Concen: 0.386 ng
RT: 10.562 min Scan# 911
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

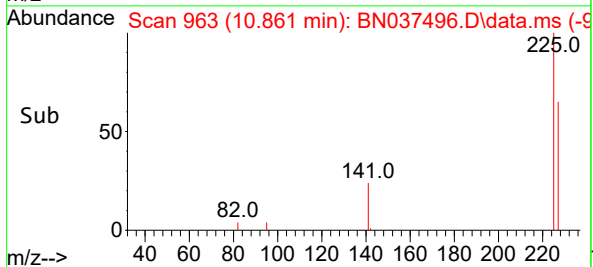
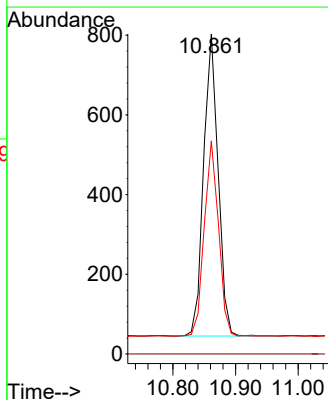
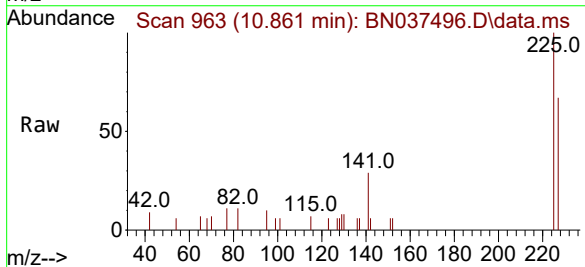
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

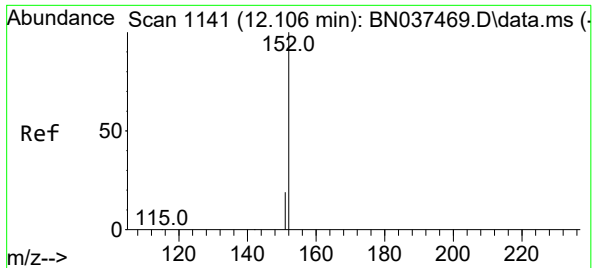
Tgt Ion:	128	Resp:	5491
Ion	Ratio	Lower	Upper
128	100		
129	12.3	10.2	15.2
127	14.6	11.8	17.6



#10
Hexachlorobutadiene
Concen: 0.357 ng
RT: 10.861 min Scan# 963
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:	225	Resp:	1221
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.4	51.4	77.2

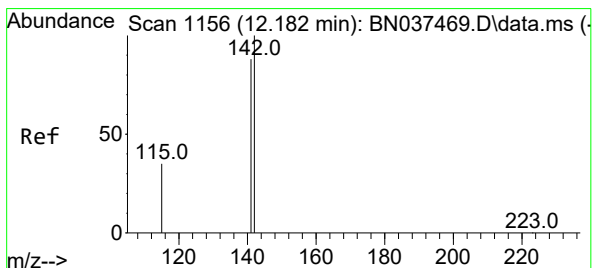
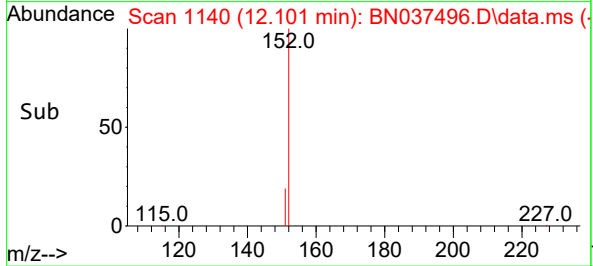
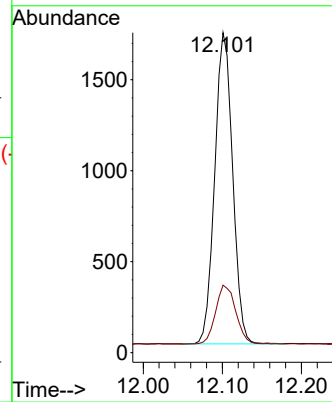
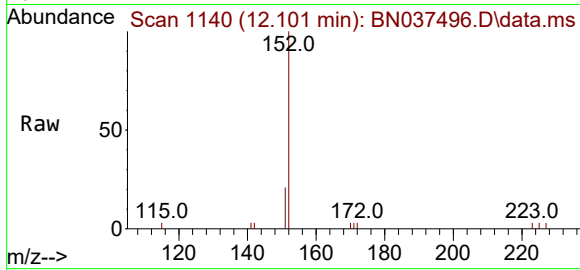




#11
2-Methylnaphthalene-d10
Concen: 0.375 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.005 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

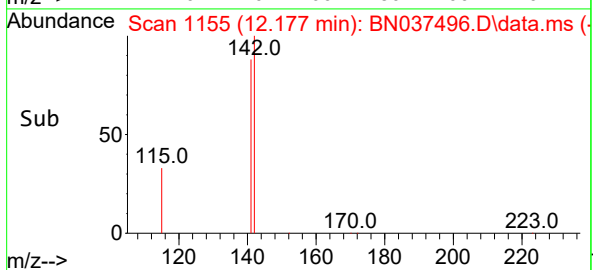
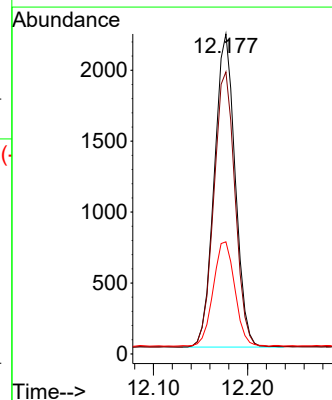
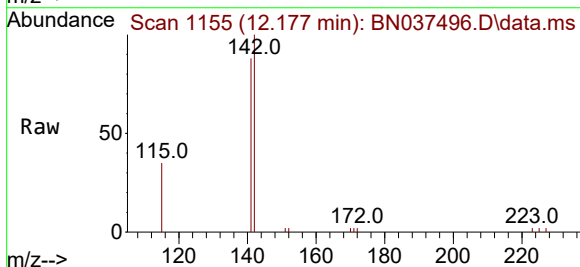
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

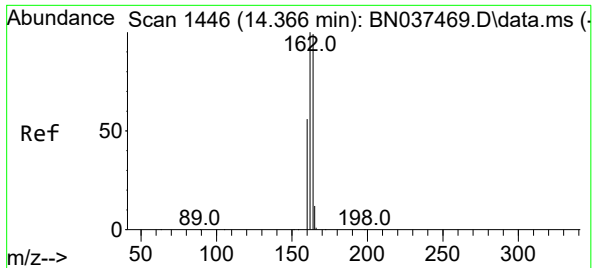
Tgt Ion:152 Resp: 2701
Ion Ratio Lower Upper
152 100
151 21.3 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.382 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:142 Resp: 3403
Ion Ratio Lower Upper
142 100
141 88.2 70.6 105.8
115 35.0 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 1445

Delta R.T. -0.011 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

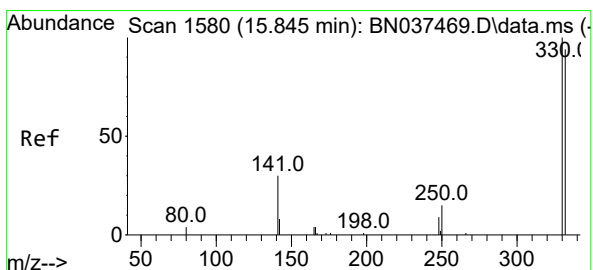
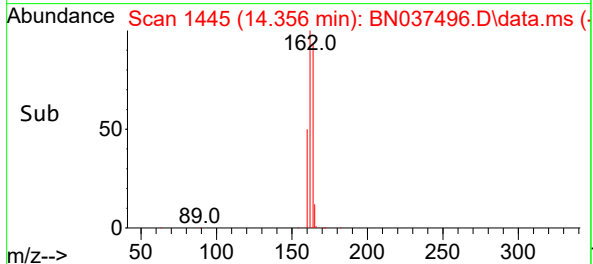
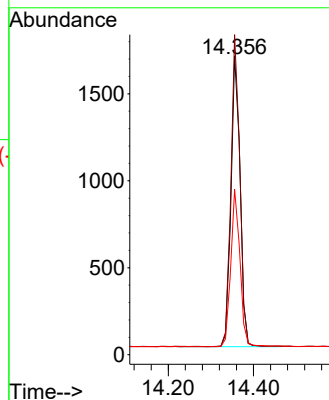
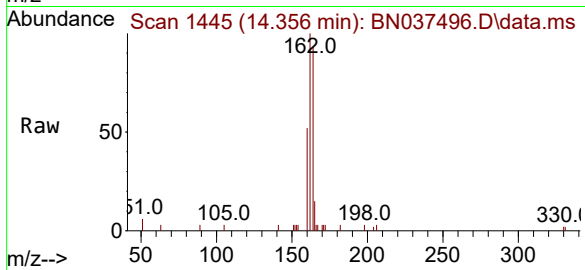
Tgt Ion:164 Resp: 2508

Ion Ratio Lower Upper

164 100

162 107.0 81.1 121.7

160 55.3 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 0.452 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

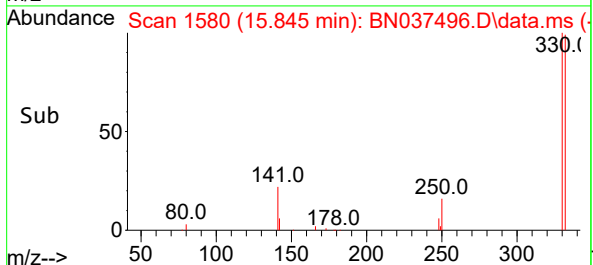
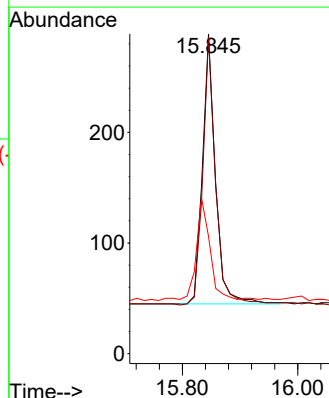
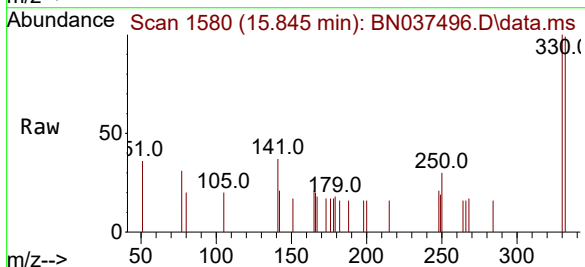
Tgt Ion:330 Resp: 384

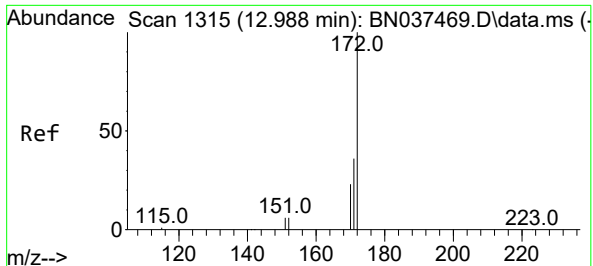
Ion Ratio Lower Upper

330 100

332 97.9 82.0 123.0

141 40.6 36.2 54.2

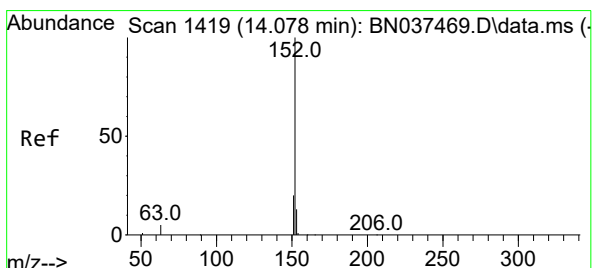
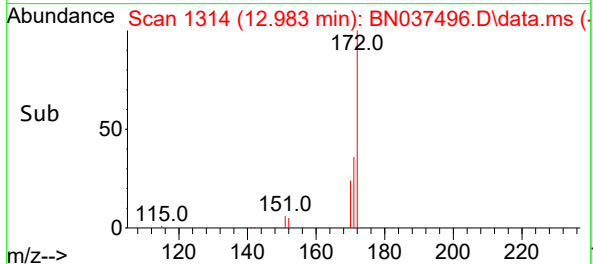
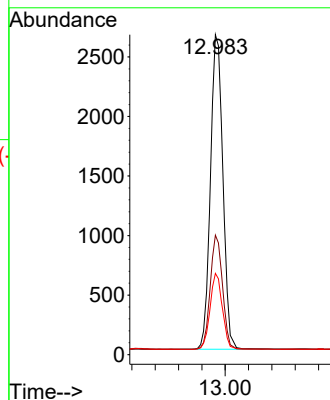
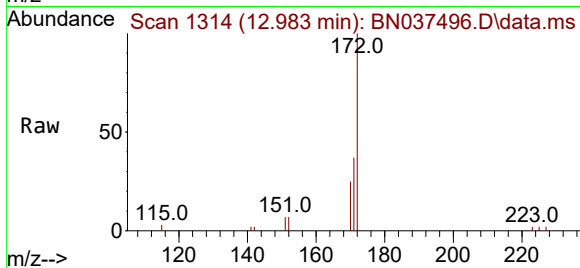




#15
2-Fluorobiphenyl
Concen: 0.367 ng
RT: 12.983 min Scan# 11
Delta R.T. -0.005 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

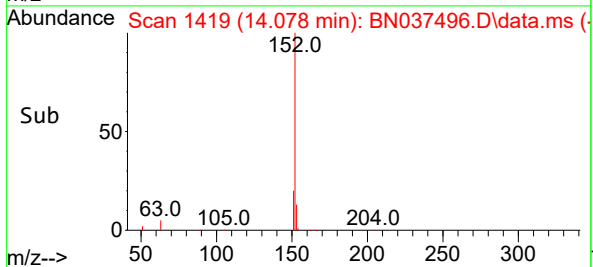
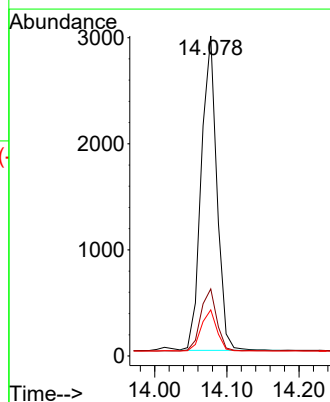
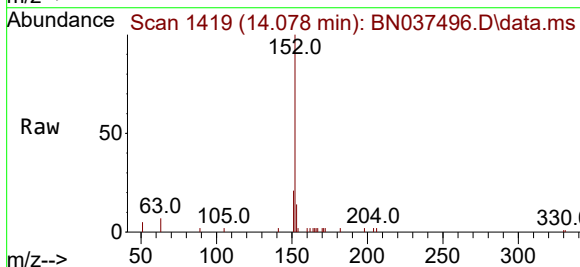
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

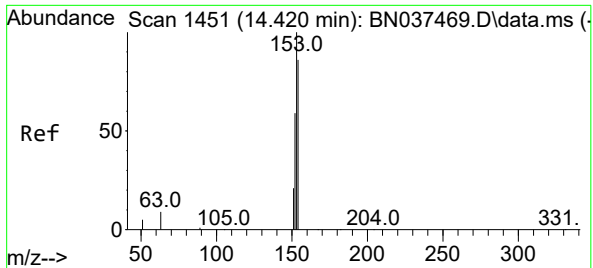
Tgt Ion	Ratio	Lower	Upper
172	100		
171	37.3	29.8	44.8
170	25.4	20.0	30.0



#16
Acenaphthylene
Concen: 0.391 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion	Ratio	Lower	Upper
152	100		
151	20.7	16.4	24.6
153	13.0	10.6	15.8

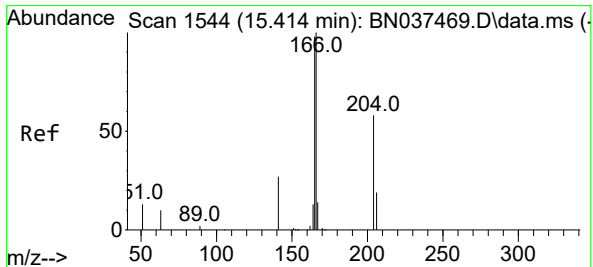
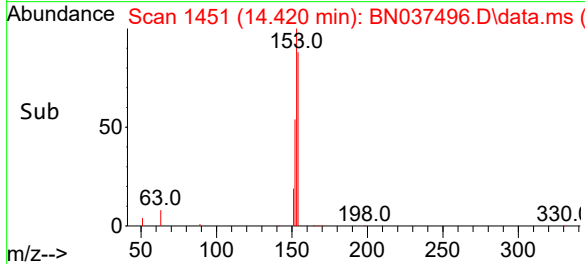
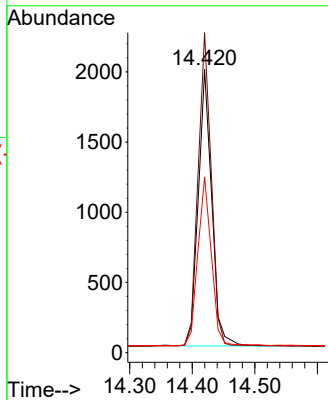
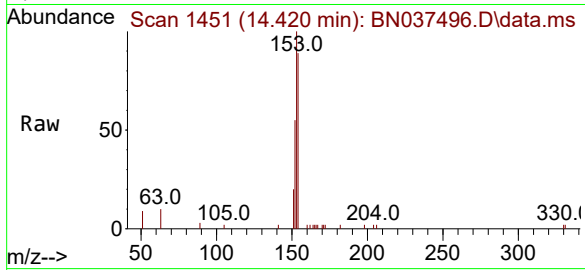




#17
Acenaphthene
Concen: 0.384 ng
RT: 14.420 min Scan# 1451
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

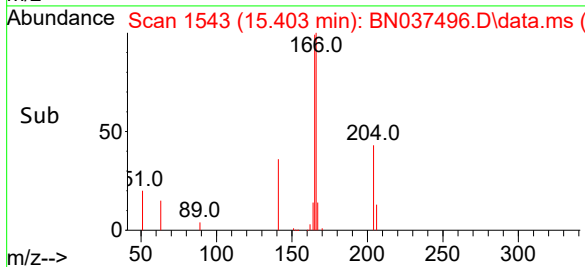
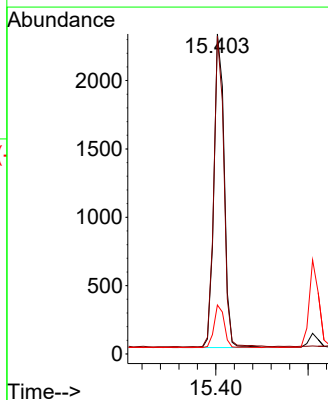
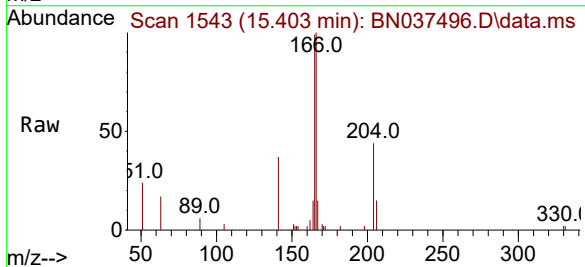
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

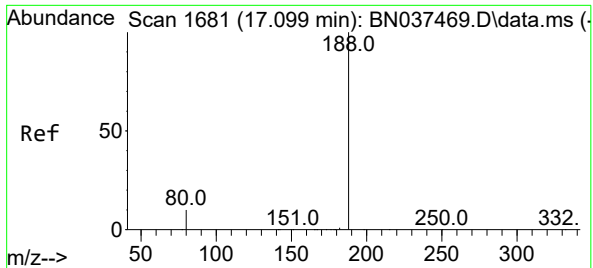
Tgt Ion:154 Resp: 2949
Ion Ratio Lower Upper
154 100
153 111.3 89.4 134.0
152 61.4 53.2 79.8



#18
Fluorene
Concen: 0.372 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:166 Resp: 3588
Ion Ratio Lower Upper
166 100
165 96.8 79.4 119.2
167 13.3 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

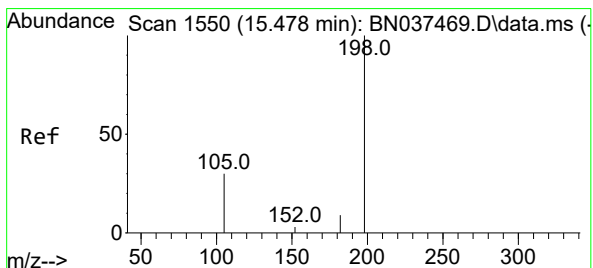
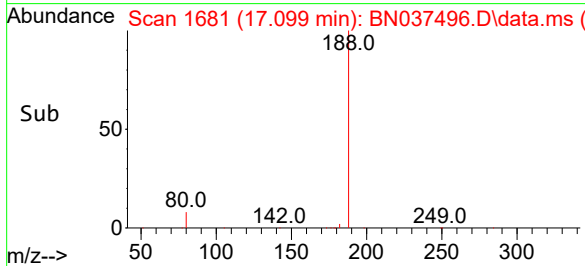
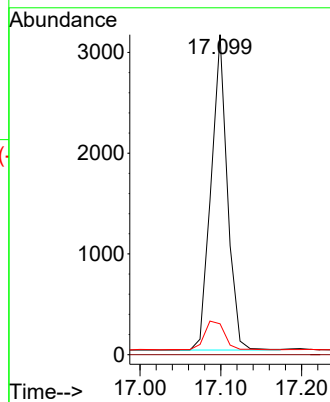
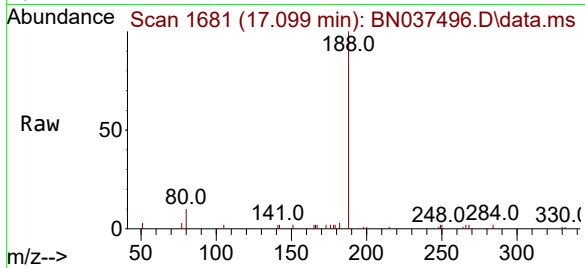
Tgt Ion:188 Resp: 4381

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.7 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.445 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

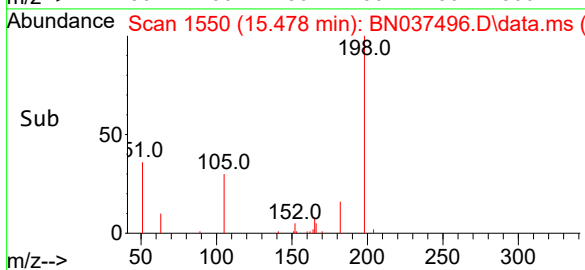
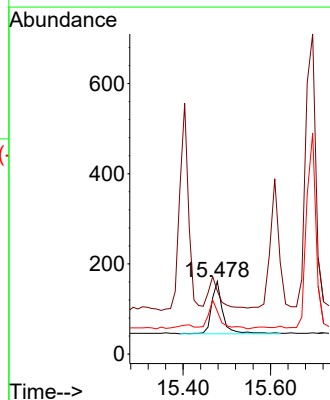
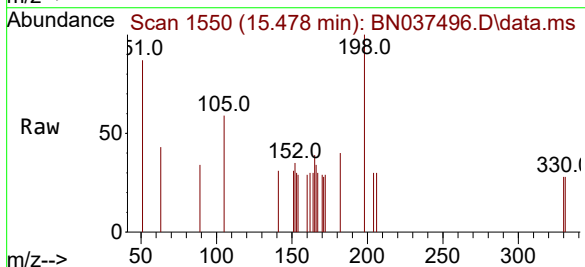
Tgt Ion:198 Resp: 219

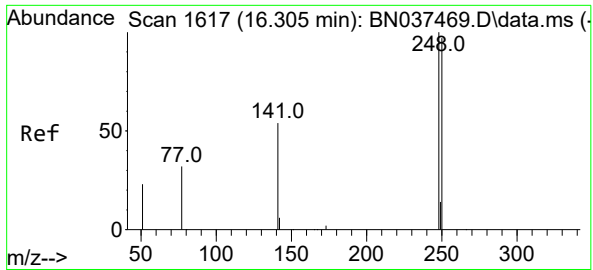
Ion Ratio Lower Upper

198 100

51 87.0 86.0 129.0

105 59.0 53.0 79.4

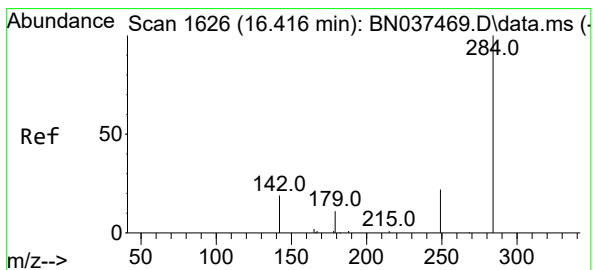
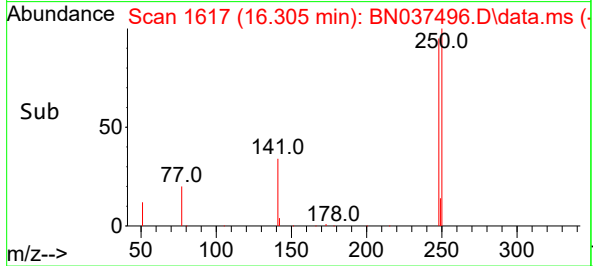
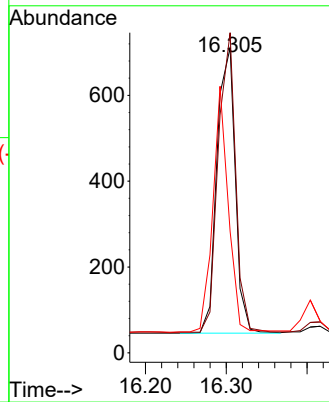
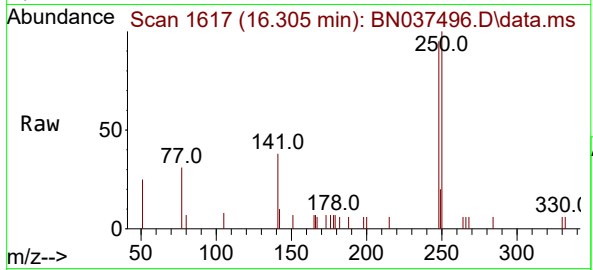




#21
4-Bromophenyl-phenylether
Concen: 0.383 ng
RT: 16.305 min Scan# 1617
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

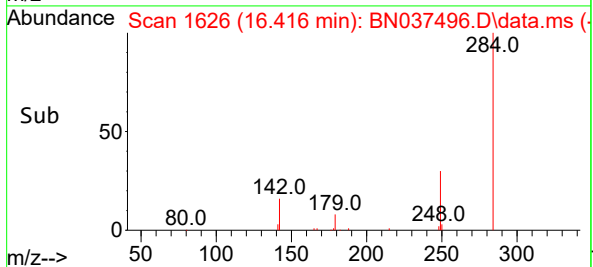
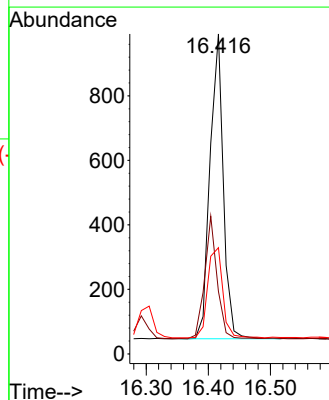
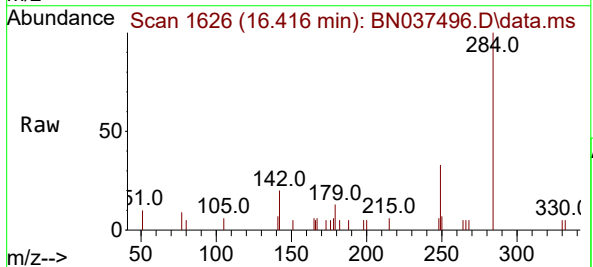
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

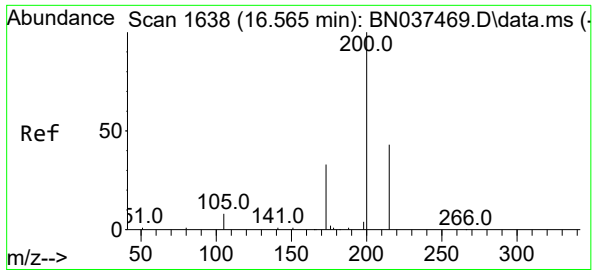
Tgt Ion	Ratio	Lower	Upper
248	100		
250	104.9	77.8	116.6
141	39.8	45.9	68.9



#22
Hexachlorobenzene
Concen: 0.373 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion	Ratio	Lower	Upper
284	100		
142	37.6	31.3	46.9
249	33.4	26.6	40.0

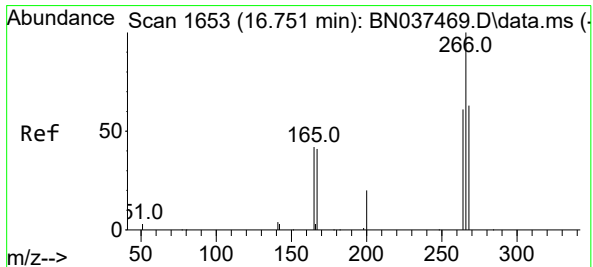
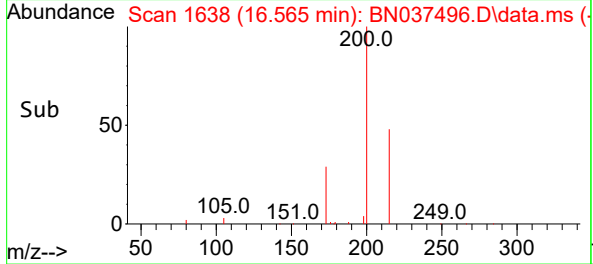
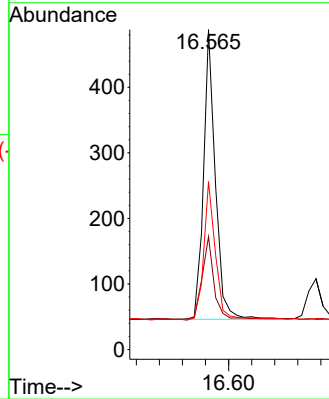
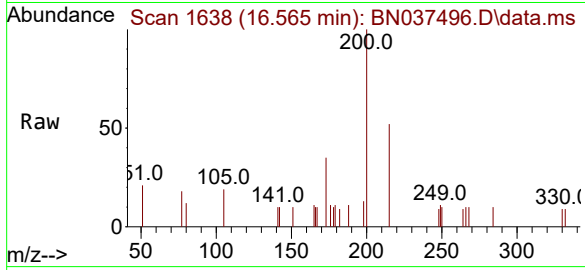




#23
Atrazine
Concen: 0.463 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

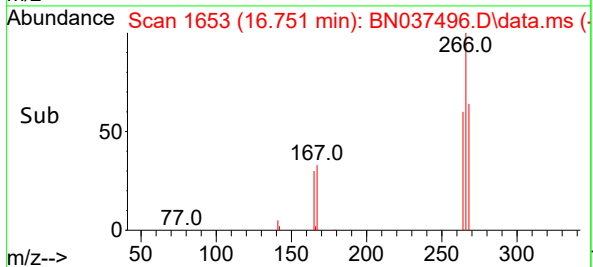
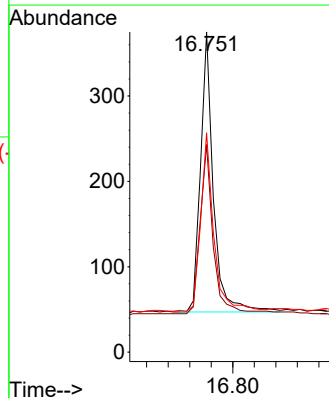
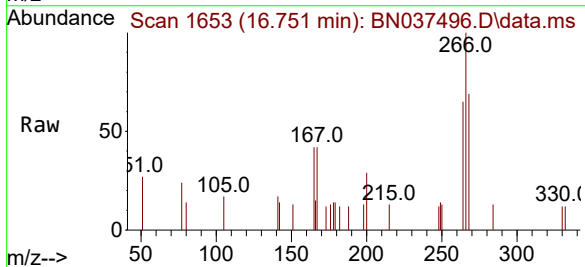
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

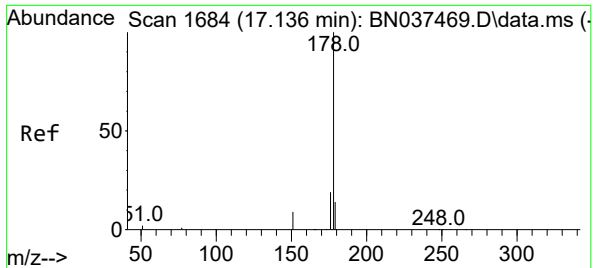
Tgt Ion:	200	Resp:	629
Ion Ratio	Lower	Upper	
200	100		
173	35.2	34.3	51.5
215	52.5	41.6	62.4



#24
Pentachlorophenol
Concen: 0.420 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:	266	Resp:	545
Ion Ratio	Lower	Upper	
266	100		
264	61.5	47.5	71.3
268	64.0	50.6	76.0

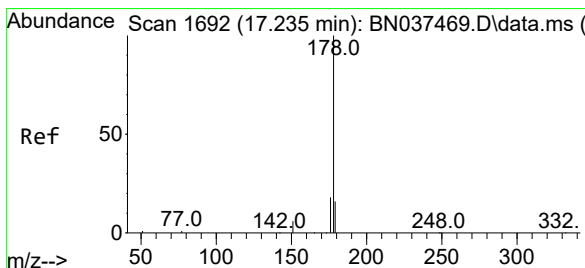
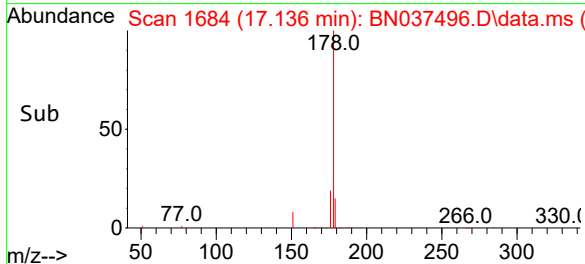
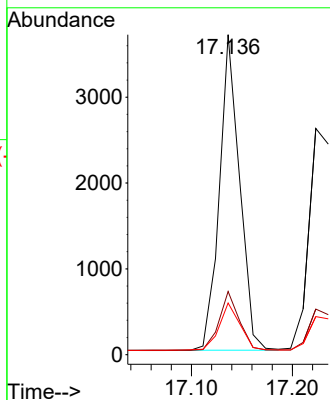
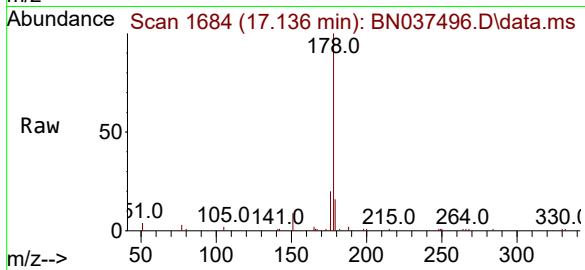




#25
Phenanthrene
Concen: 0.383 ng
RT: 17.136 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

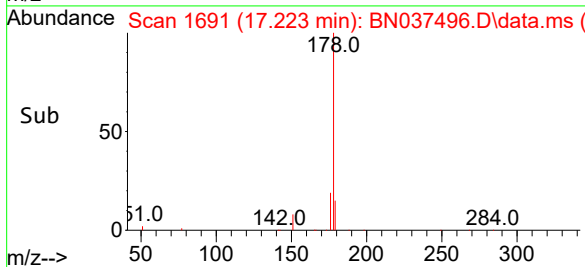
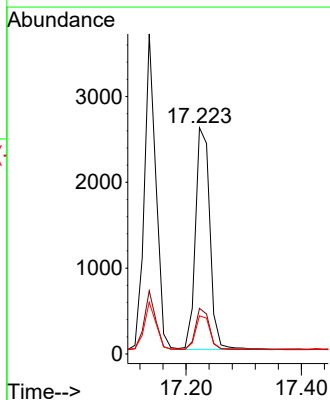
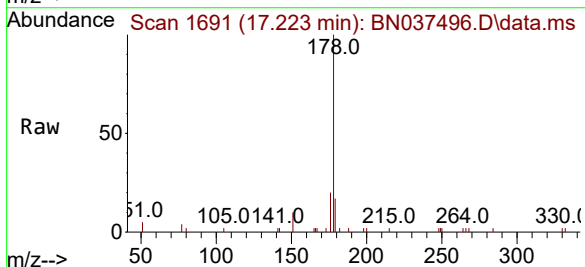
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

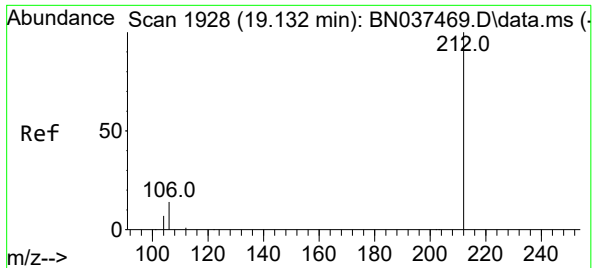
Tgt Ion:178 Resp: 5108
Ion Ratio Lower Upper
178 100
176 18.6 15.1 22.7
179 15.7 12.2 18.2



#26
Anthracene
Concen: 0.373 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.012 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:178 Resp: 4488
Ion Ratio Lower Upper
178 100
176 18.1 14.9 22.3
179 15.5 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.360 ng

RT: 19.127 min Scan# 1927

Delta R.T. -0.005 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

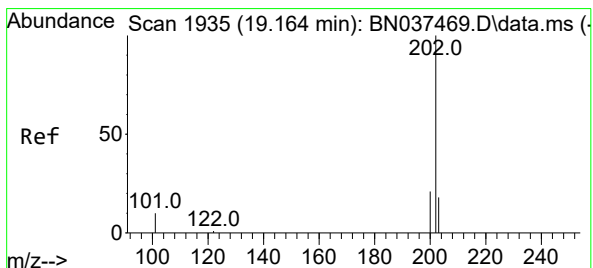
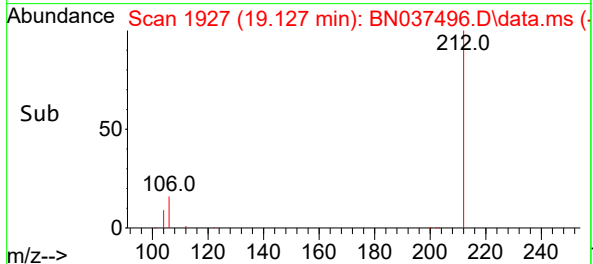
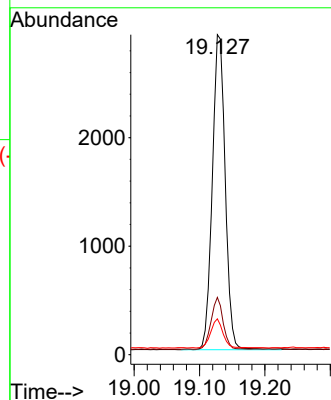
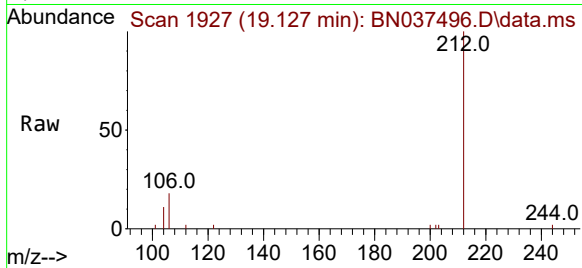
Tgt Ion:212 Resp: 3978

Ion Ratio Lower Upper

212 100

106 15.4 11.7 17.5

104 8.8 6.6 10.0



#28

Fluoranthene

Concen: 0.367 ng

RT: 19.160 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

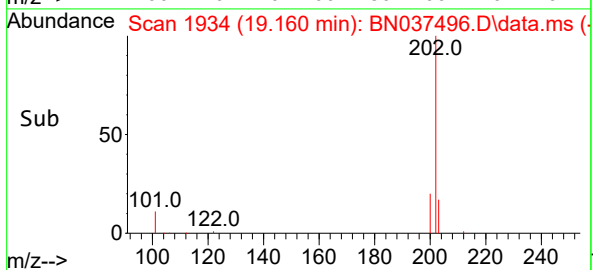
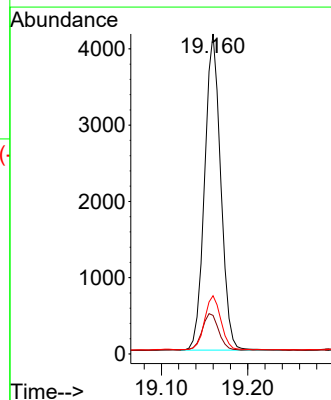
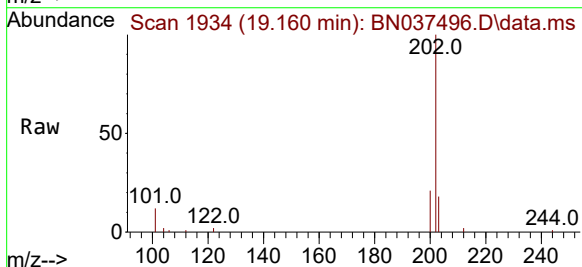
Tgt Ion:202 Resp: 5371

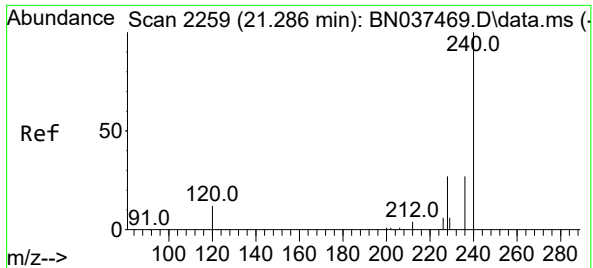
Ion Ratio Lower Upper

202 100

101 12.1 9.2 13.8

203 17.3 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

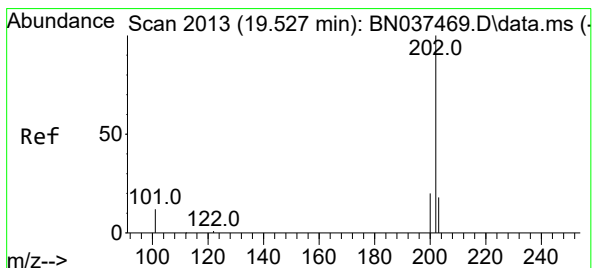
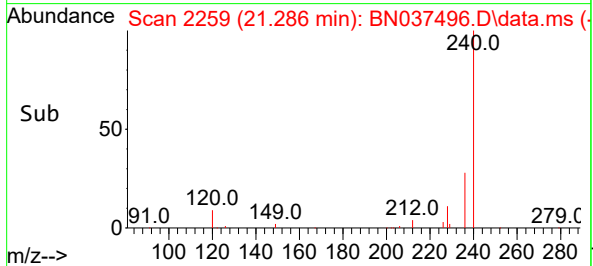
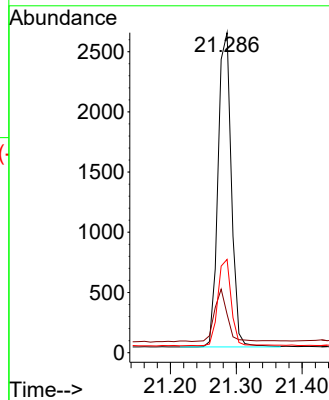
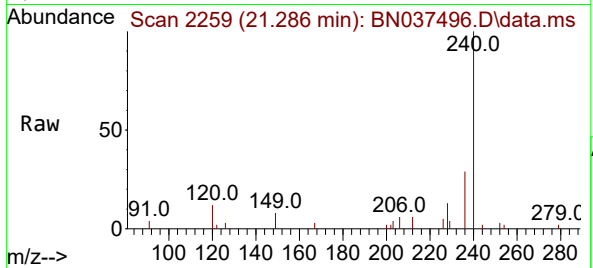
Tgt Ion:240 Resp: 3666

Ion Ratio Lower Upper

240 100

120 12.0 12.4 18.6#

236 29.2 22.9 34.3



#30

Pyrene

Concen: 0.364 ng

RT: 19.522 min Scan# 2012

Delta R.T. -0.005 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

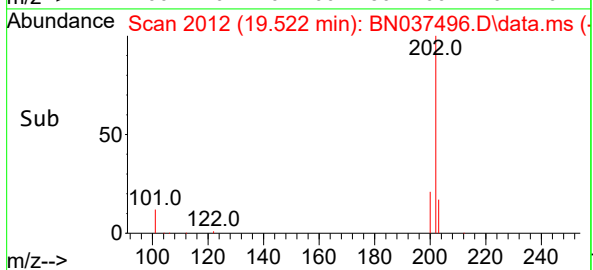
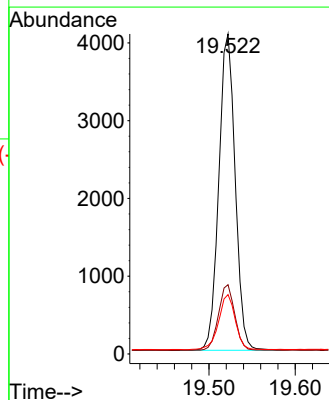
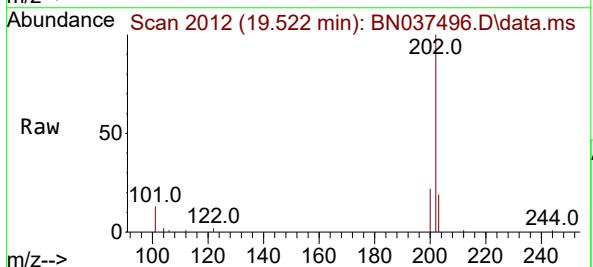
Tgt Ion:202 Resp: 5366

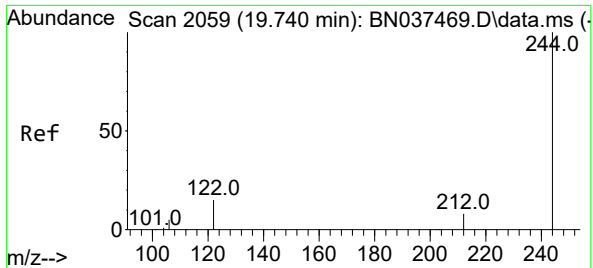
Ion Ratio Lower Upper

202 100

200 20.7 16.4 24.6

203 17.6 14.3 21.5

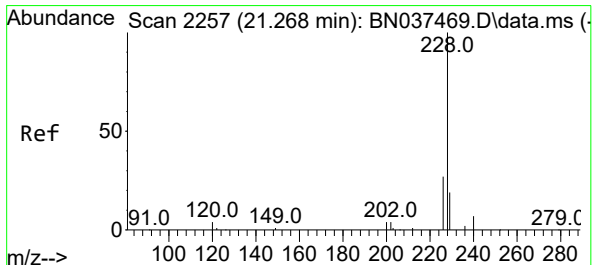
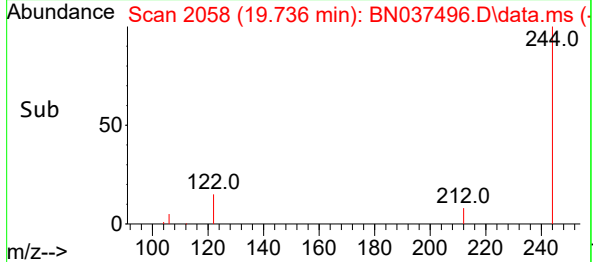
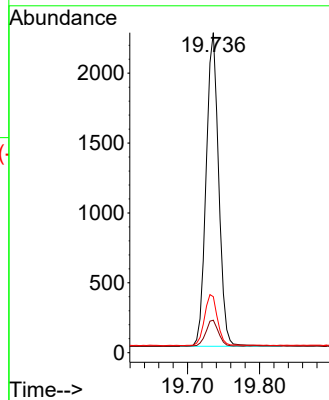
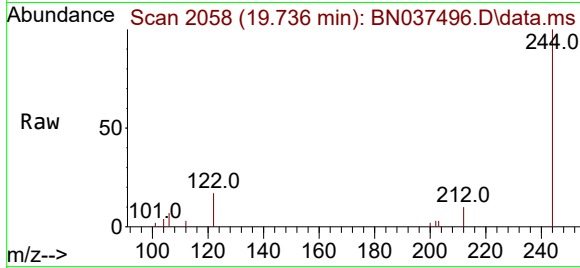




#31
Terphenyl-d14
Concen: 0.355 ng
RT: 19.736 min Scan# 2058
Delta R.T. -0.005 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

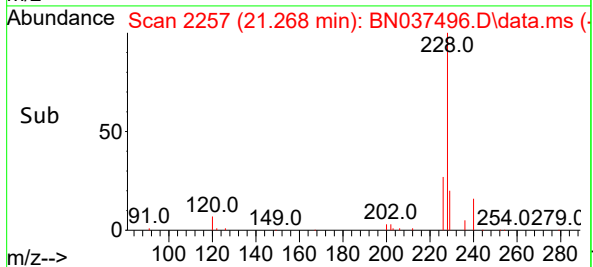
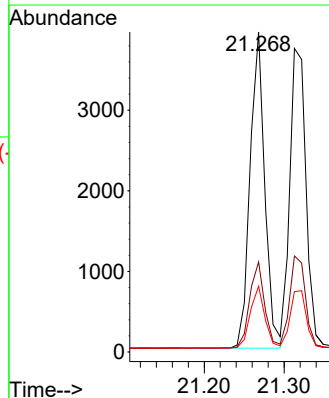
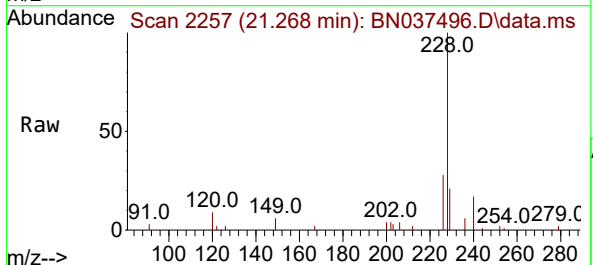
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

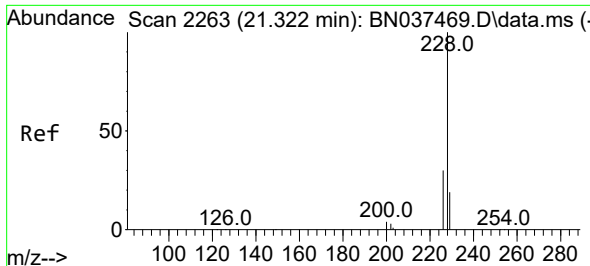
Tgt Ion	Ratio	Lower	Upper
244	100		
212	10.1	8.7	13.1
122	17.5	14.1	21.1



#32
Benzo(a)anthracene
Concen: 0.405 ng
RT: 21.268 min Scan# 2257
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.1	22.7	34.1
229	20.6	16.6	24.8

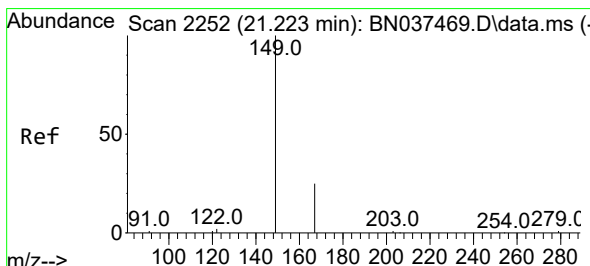
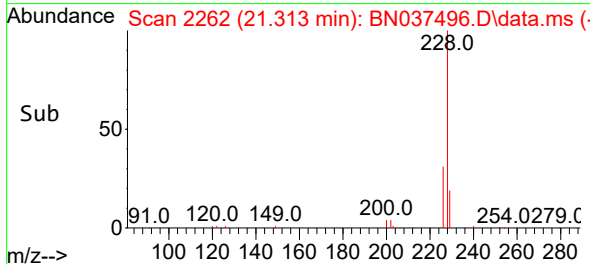
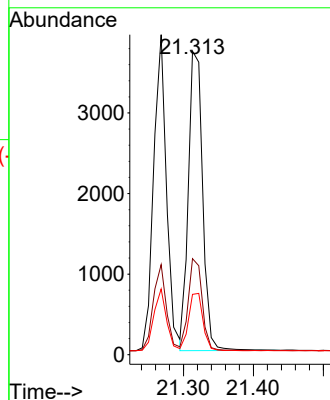
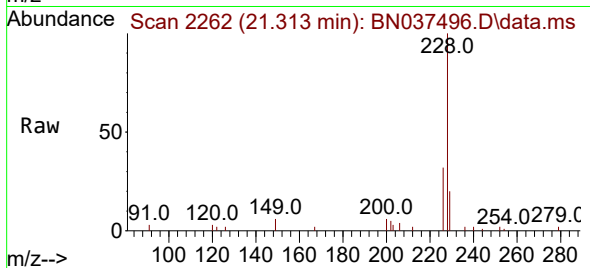




#33
Chrysene
Concen: 0.389 ng
RT: 21.313 min Scan# 211
Delta R.T. -0.009 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

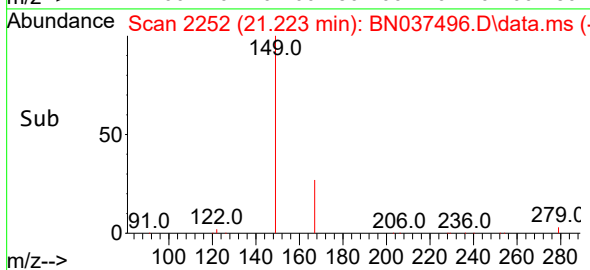
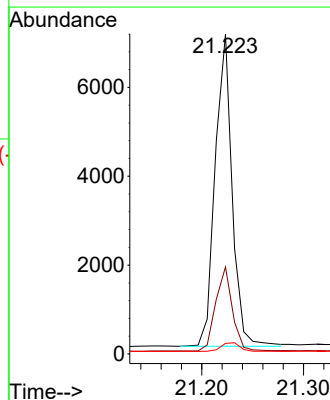
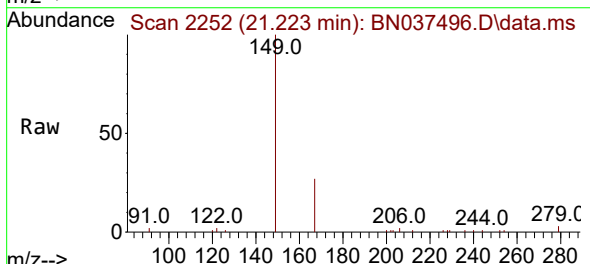
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

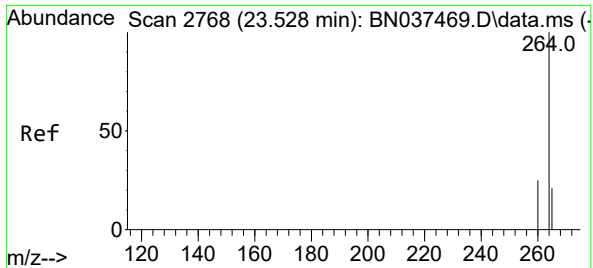
Tgt Ion	Ratio	Lower	Upper
228	100		
226	31.6	24.6	36.8
229	19.9	16.4	24.6



#34
Bis(2-ethylhexyl)phthalate
Concen: 1.928 ng
RT: 21.223 min Scan# 2252
Delta R.T. 0.000 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion	Ratio	Lower	Upper
149	100		
167	26.3	19.4	29.2
279	3.2	2.5	3.7

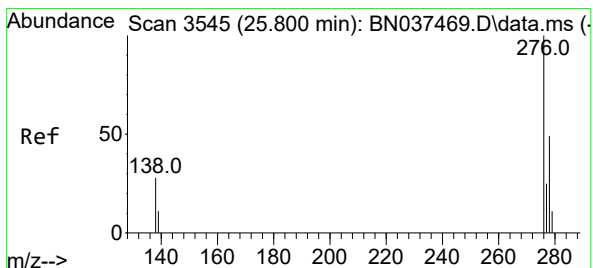
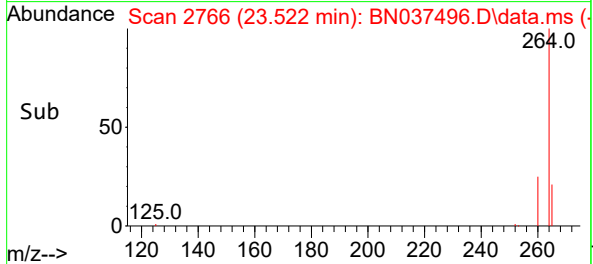
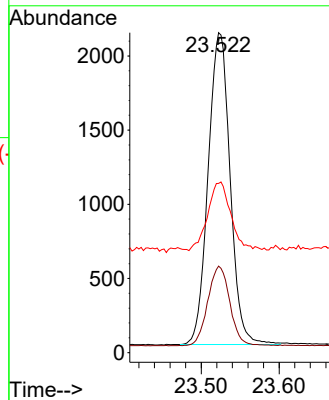
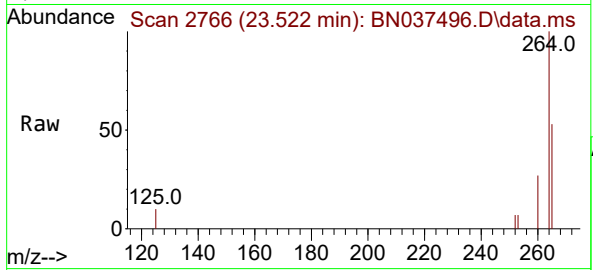




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.522 min Scan# 21
Delta R.T. -0.006 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

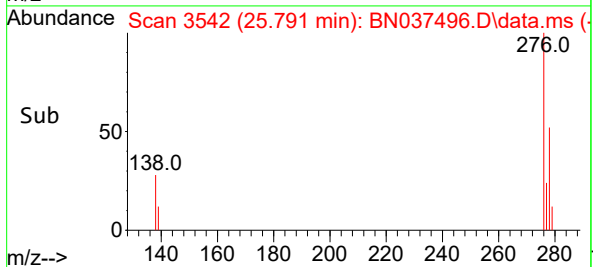
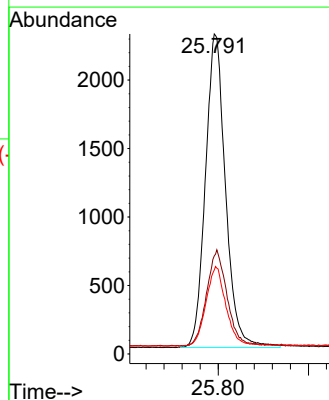
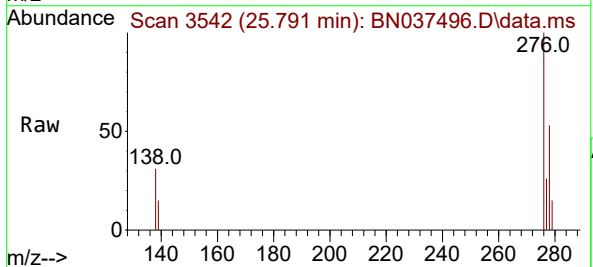
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

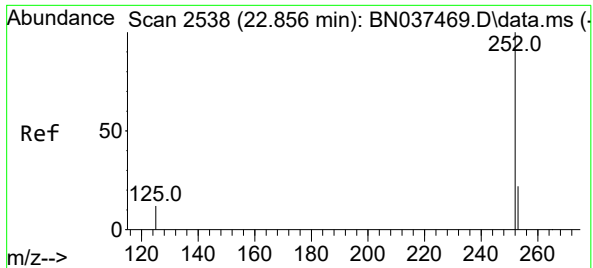
Tgt Ion:	264	Resp:	4119
Ion Ratio	Lower	Upper	
264	100		
260	27.0	21.7	32.5
265	52.9	41.6	62.4



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.442 ng
RT: 25.791 min Scan# 3542
Delta R.T. -0.009 min
Lab File: BN037496.D
Acq: 14 Jul 2025 18:00

Tgt Ion:	276	Resp:	7069
Ion Ratio	Lower	Upper	
276	100		
138	31.1	23.4	35.2
277	25.1	19.8	29.8





#37

Benzo(b)fluoranthene

Concen: 0.345 ng

RT: 22.850 min Scan# 2538

Delta R.T. -0.006 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

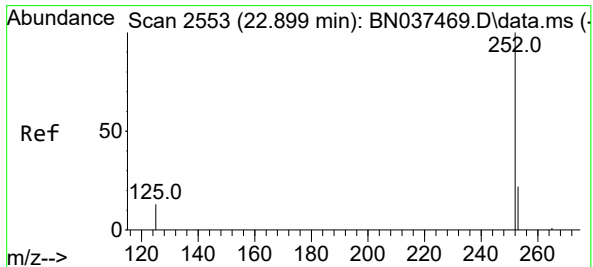
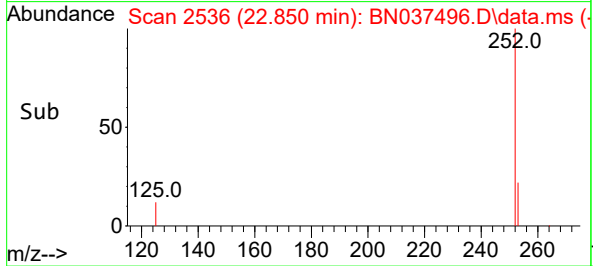
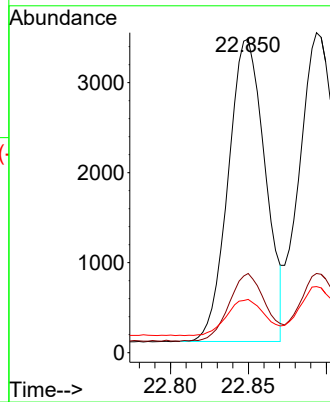
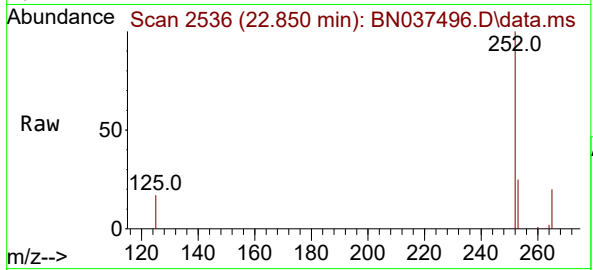
Tgt Ion:252 Resp: 5533

Ion Ratio Lower Upper

252 100

253 25.2 20.1 30.1

125 17.0 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.352 ng

RT: 22.894 min Scan# 2551

Delta R.T. -0.006 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

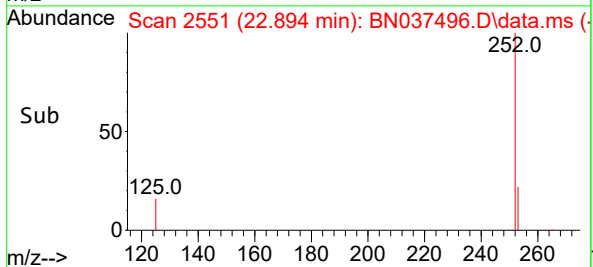
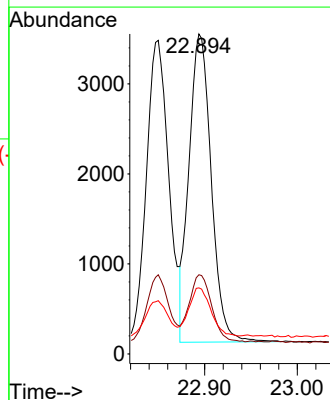
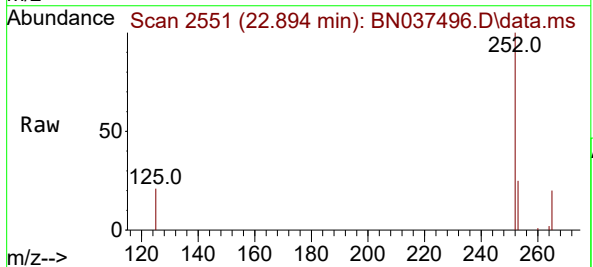
Tgt Ion:252 Resp: 5718

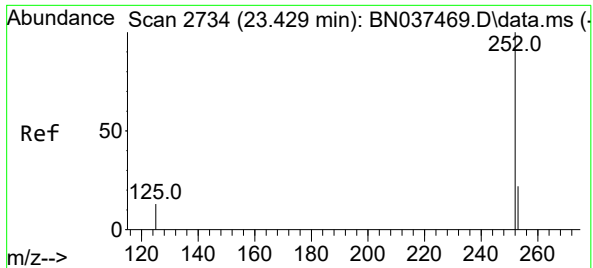
Ion Ratio Lower Upper

252 100

253 24.8 20.4 30.6

125 20.6 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.373 ng

RT: 23.423 min Scan# 21

Delta R.T. -0.006 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

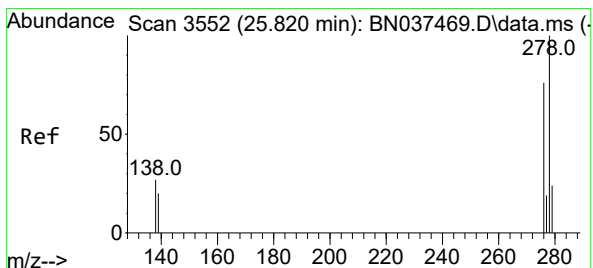
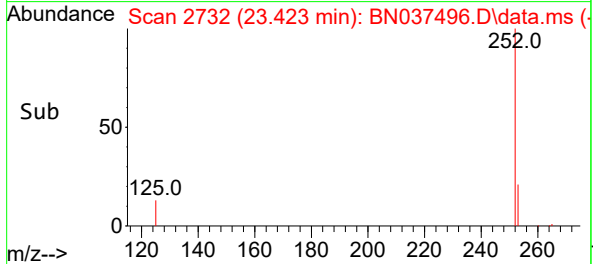
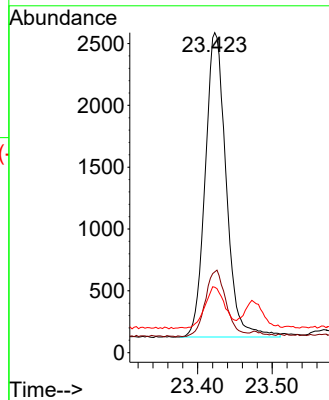
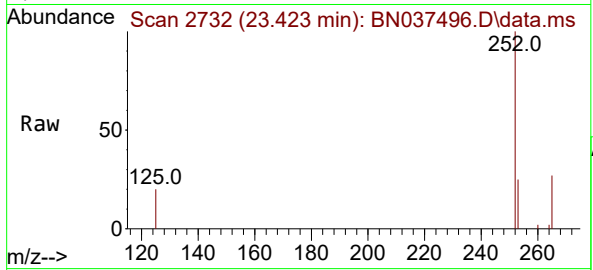
Tgt Ion:252 Resp: 4802

Ion Ratio Lower Upper

252 100

253 25.2 21.8 32.6

125 20.4 16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.444 ng

RT: 25.809 min Scan# 3548

Delta R.T. -0.012 min

Lab File: BN037496.D

Acq: 14 Jul 2025 18:00

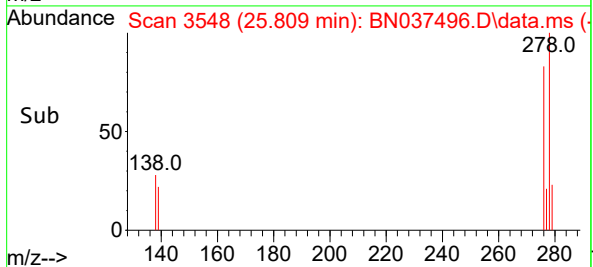
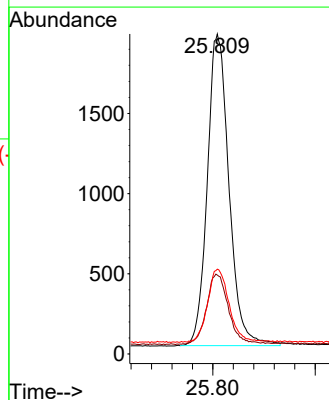
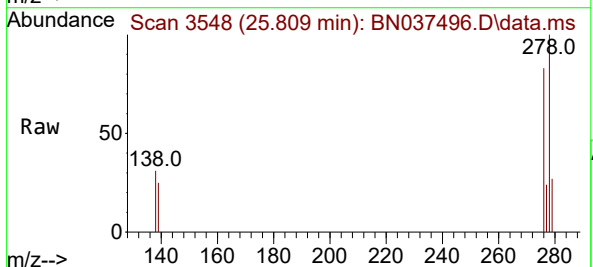
Tgt Ion:278 Resp: 5724

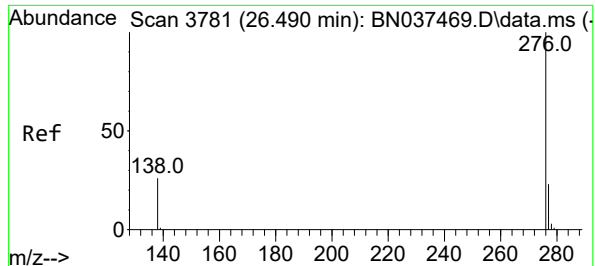
Ion Ratio Lower Upper

278 100

139 24.6 19.9 29.9

279 26.5 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.426 ng

RT: 26.478 min Scan# 31

Delta R.T. -0.012 min

Lab File: BN037496.D

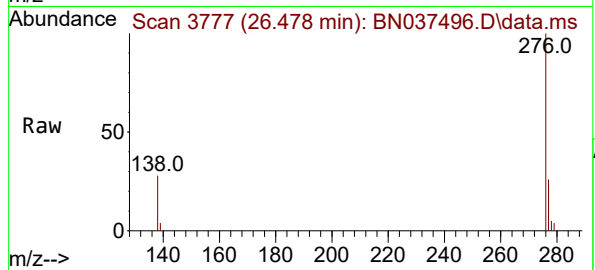
Acq: 14 Jul 2025 18:00

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



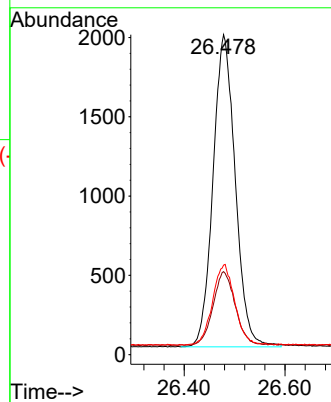
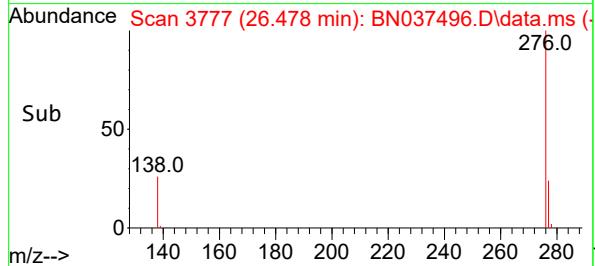
Tgt Ion:276 Resp: 6020

Ion Ratio Lower Upper

276 100

277 25.9 21.7 32.5

138 28.0 24.3 36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
 Data File : BN037496.D
 Acq On : 14 Jul 2025 18:00
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 15 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Jul 14 18:25:23 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	123	0.00
2	1,4-Dioxane	0.376	0.407	-8.2	130	0.00
3	n-Nitrosodimethylamine	0.502	0.457	9.0	112	0.00
4 S	2-Fluorophenol	0.931	0.998	-7.2	131	0.00
5 S	Phenol-d6	1.171	1.250	-6.7	131	0.00
6	bis(2-Chloroethyl)ether	0.980	1.007	-2.8	127	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	129	0.00
8 S	Nitrobenzene-d5	0.290	0.288	0.7	135	0.00
9	Naphthalene	1.075	1.037	3.5	127	0.00
10	Hexachlorobutadiene	0.258	0.231	10.5	116	0.00
11 SURR	2-Methylnaphthalene-d10	0.544	0.510	6.3	128	0.00
12	2-Methylnaphthalene	0.673	0.642	4.6	128	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	127	-0.01
14 S	2,4,6-Tribromophenol	0.136	0.153	-12.5	159#	0.00
15 S	2-Fluorobiphenyl	2.283	2.093	8.3	115	0.00
16	Acenaphthylene	1.824	1.781	2.4	128	0.00
17	Acenaphthene	1.224	1.176	3.9	126	0.00
18	Fluorene	1.538	1.431	7.0	122	-0.01
19 I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00
20	4,6-Dinitro-2-methylphenol	0.045	0.050	-11.1	158#	0.00
21	4-Bromophenyl-phenylether	0.250	0.239	4.4	124	0.00
22	Hexachlorobenzene	0.344	0.321	6.7	116	0.00
23	Atrazine	0.124	0.144	-16.1	153#	0.00
24	Pentachlorophenol	0.119	0.124	-4.2	151#	0.00
25	Phenanthrene	1.218	1.166	4.3	123	0.00
26	Anthracene	1.099	1.024	6.8	124	-0.01
27 SURR	Fluoranthene-d10	1.009	0.908	10.0	122	0.00
28	Fluoranthene	1.337	1.226	8.3	123	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	137	0.00
30	Pyrene	1.608	1.464	9.0	125	0.00
31 S	Terphenyl-d14	0.835	0.740	11.4	123	0.00
32	Benzo(a)anthracene	1.355	1.371	-1.2	145	0.00
33	Chrysene	1.481	1.438	2.9	134	0.00
34	Bis(2-ethylhexyl)phthalate	0.461	2.221	-381.8#	672#	0.00
35 I	Perylene-d12	1.000	1.000	0.0	166#	0.00
36	Indeno(1,2,3-cd)pyrene	1.553	1.716	-10.5	205#	0.00
37	Benzo(b)fluoranthene	1.556	1.343	13.7	158#	0.00
38	Benzo(k)fluoranthene	1.577	1.388	12.0	161#	0.00
39 C	Benzo(a)pyrene	1.252	1.166	6.9	168#	0.00
40	Dibenzo(a,h)anthracene	1.252	1.390	-11.0	209#	-0.01
41	Benzo(g,h,i)perylene	1.372	1.462	-6.6	192#	-0.01

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037496.D
Acq On : 14 Jul 2025 18:00
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 15 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Jul 14 18:25:23 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	123	0.00
2	1,4-Dioxane	0.400	0.433	-8.2	130	0.00
3	n-Nitrosodimethylamine	0.400	0.364	9.0	112	0.00
4 S	2-Fluorophenol	0.400	0.429	-7.2	131	0.00
5 S	Phenol-d6	0.400	0.427	-6.7	131	0.00
6	bis(2-Chloroethyl)ether	0.400	0.411	-2.7	127	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	129	0.00
8 S	Nitrobenzene-d5	0.400	0.397	0.8	135	0.00
9	Naphthalene	0.400	0.386	3.5	127	0.00
10	Hexachlorobutadiene	0.400	0.357	10.8	116	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.375	6.3	128	0.00
12	2-Methylnaphthalene	0.400	0.382	4.5	128	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	127	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.452	-13.0	159	0.00
15 S	2-Fluorobiphenyl	0.400	0.367	8.3	115	0.00
16	Acenaphthylene	0.400	0.391	2.3	128	0.00
17	Acenaphthene	0.400	0.384	4.0	126	0.00
18	Fluorene	0.400	0.372	7.0	122	-0.01
19 I	Phenanthrene-d10	0.400	0.400	0.0	122	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.445	-11.2	158	0.00
21	4-Bromophenyl-phenylether	0.400	0.383	4.3	124	0.00
22	Hexachlorobenzene	0.400	0.373	6.8	116	0.00
23	Atrazine	0.400	0.463	-15.8	153	0.00
24	Pentachlorophenol	0.400	0.420	-5.0	151	0.00
25	Phenanthrene	0.400	0.383	4.3	123	0.00
26	Anthracene	0.400	0.373	6.8	124	-0.01
27 SURR	Fluoranthene-d10	0.400	0.360	10.0	122	0.00
28	Fluoranthene	0.400	0.367	8.3	123	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	137	0.00
30	Pyrene	0.400	0.364	9.0	125	0.00
31 S	Terphenyl-d14	0.400	0.355	11.3	123	0.00
32	Benzo(a)anthracene	0.400	0.405	-1.3	145	0.00
33	Chrysene	0.400	0.389	2.8	134	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	1.928	-382.0#	672	0.00
35 I	Perylene-d12	0.400	0.400	0.0	166	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.442	-10.5	205	0.00
37	Benzo(b)fluoranthene	0.400	0.345	13.8	158	0.00
38	Benzo(k)fluoranthene	0.400	0.352	12.0	161	0.00
39 C	Benzo(a)pyrene	0.400	0.373	6.8	168	0.00
40	Dibenzo(a,h)anthracene	0.400	0.444	-11.0	209	-0.01
41	Benzo(g,h,i)perylene	0.400	0.426	-6.5	192	-0.01

(#) = Out of Range

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



QC SAMPLE DATA

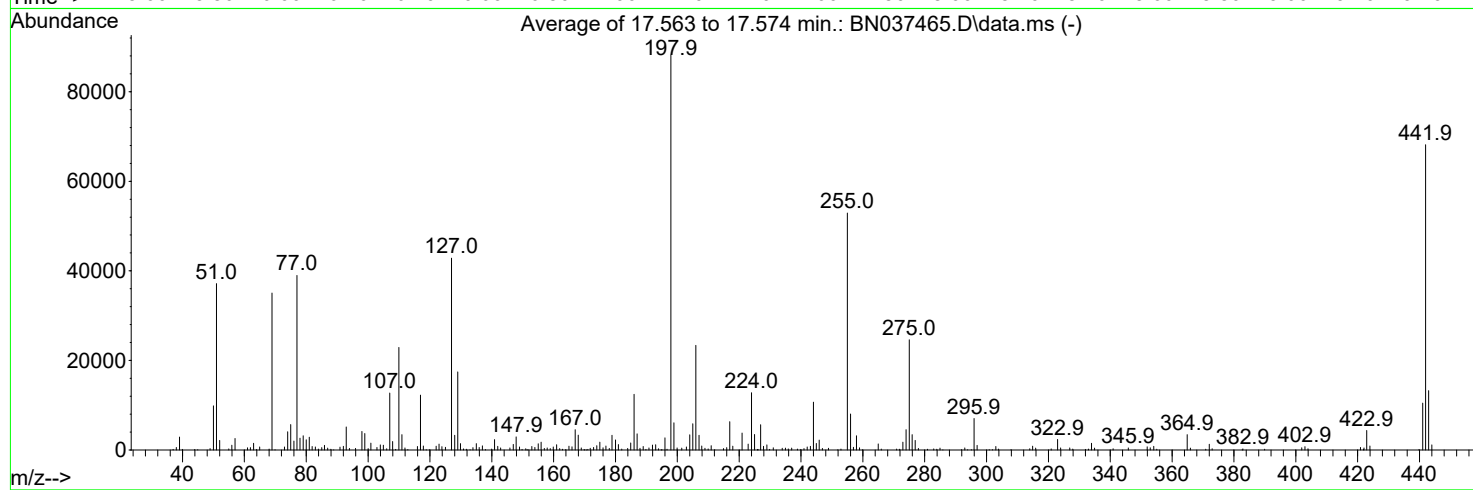
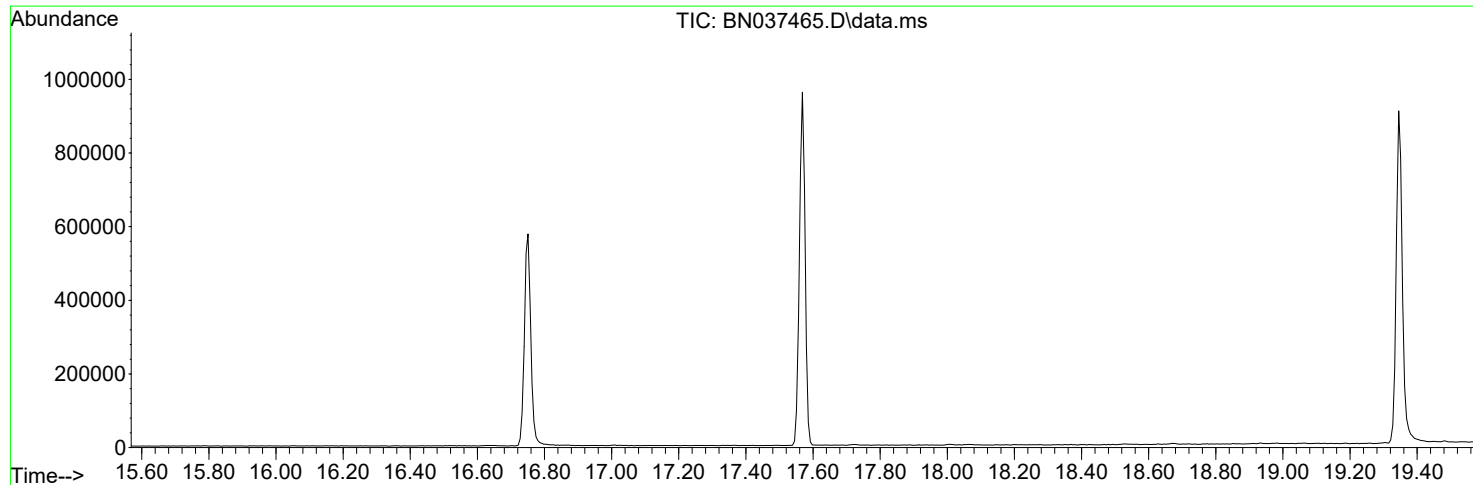
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037465.D
Acq On : 11 Jul 2025 08:36
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-BN071125.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Jul 11 15:38:34 2025



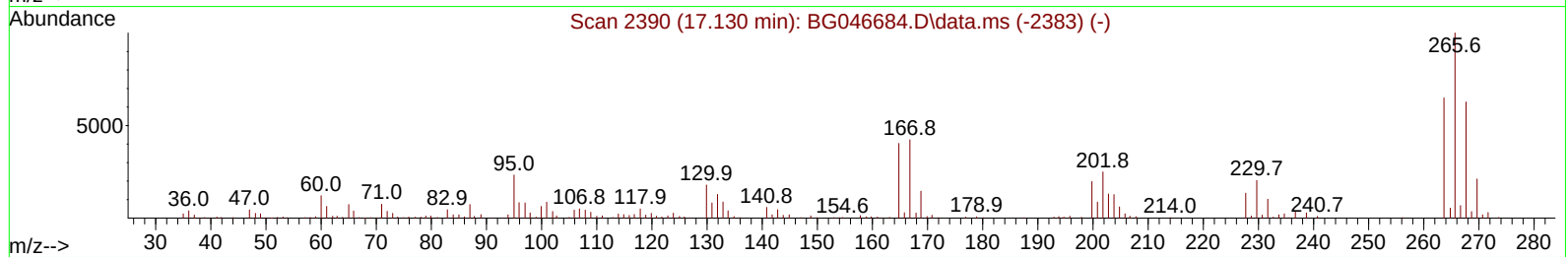
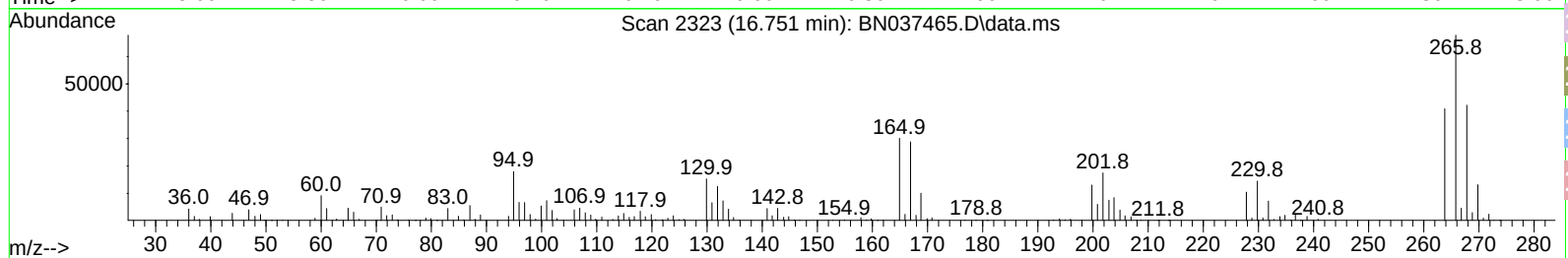
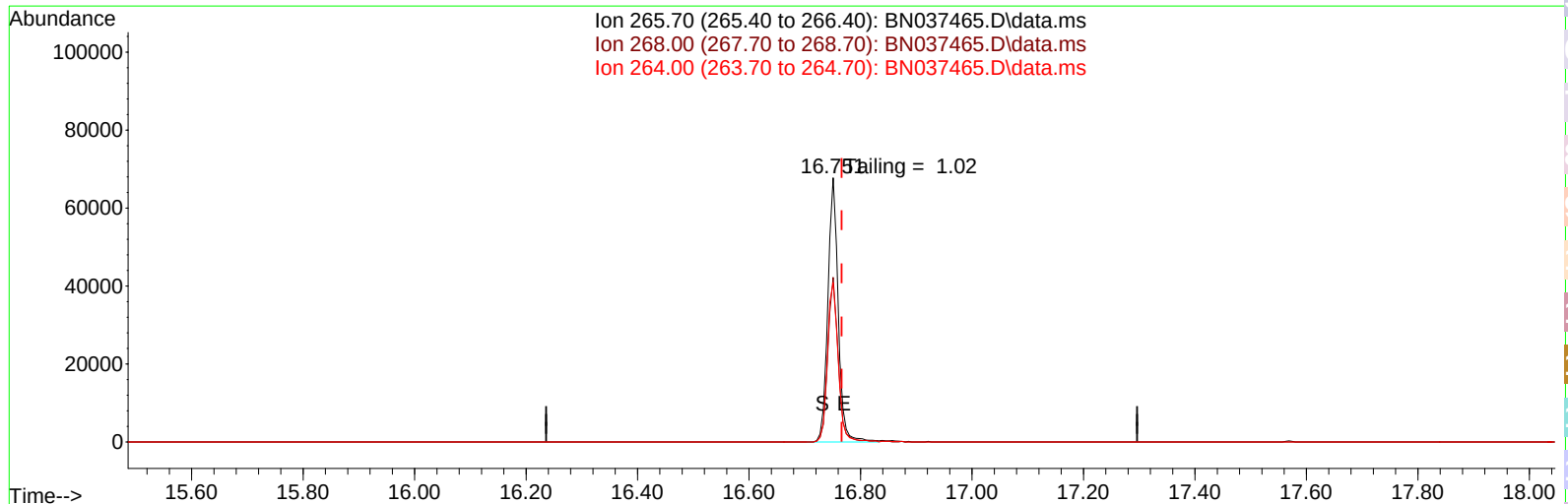
AutoFind: Scans 2461, 2462, 2463; Background Corrected with Scan 2454

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
68	69	0.00	2	0.6	212	PASS
69	69	100	100	100.0	35043	PASS
70	69	0.00	2	0.3	88	PASS
197	198	0.00	2	0.2	180	PASS
198	198	100	100	100.0	88163	PASS
199	198	5	9	6.9	6064	PASS
365	198	1	100	3.9	3416	PASS
441	443	0.01	150	78.9	10453	PASS
442	442	100	100	100.0	68157	PASS
443	442	15	24	19.4	13251	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037465.D
Acq On : 11 Jul 2025 08:36
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Jul 11 16:46:09 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jul 10 02:20:59 2025
Response via : Initial Calibration



TIC: BN037465.D\data.ms

(70) Pentachlorophenol (C)

16.751min (-0.015) 19733.94 ng

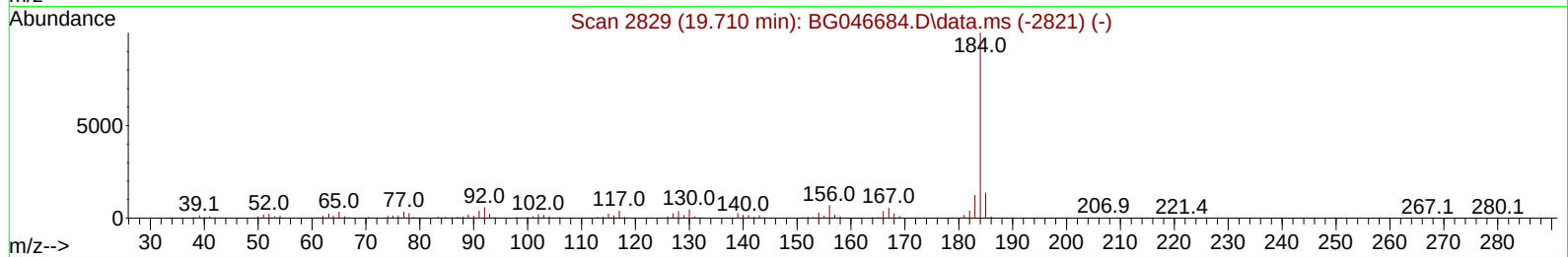
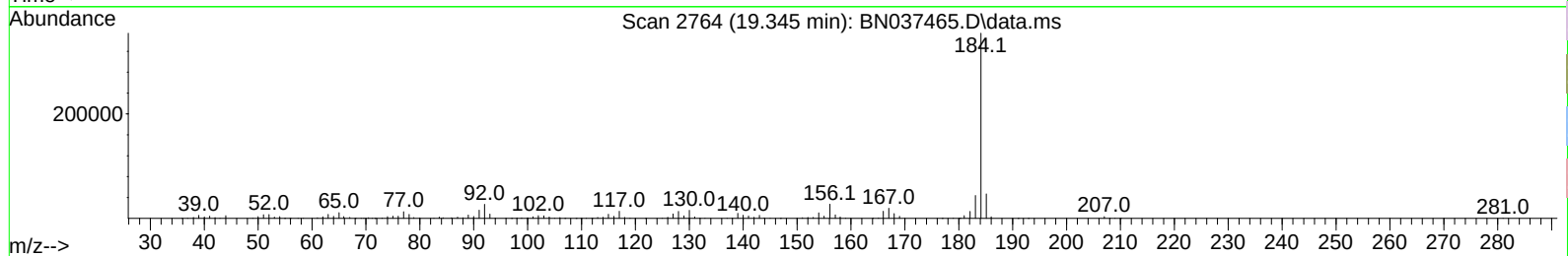
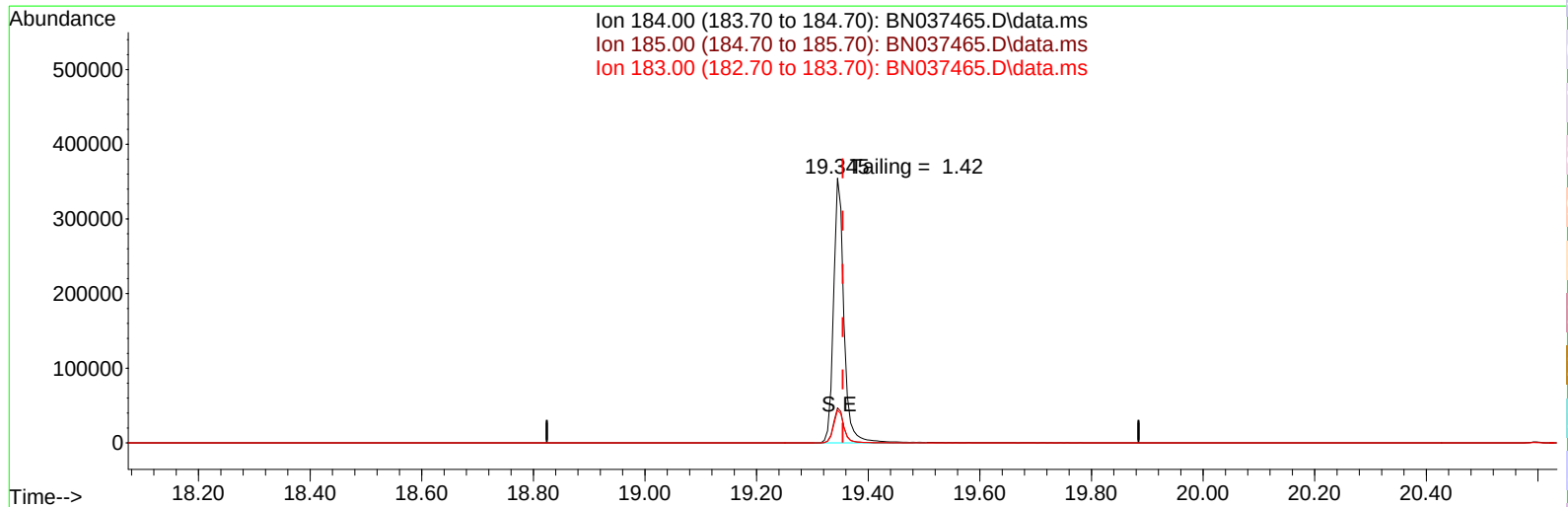
response 87345

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	62.30
264.00	61.60	60.32
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037465.D
Acq On : 11 Jul 2025 08:36
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Jul 11 16:46:09 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jul 10 02:20:59 2025
Response via : Initial Calibration



TIC: BN037465.D\data.ms

(77) Benzidine

19.345min (-0.009) 0.00 ng

response 460569

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.26
183.00	13.20	12.35
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

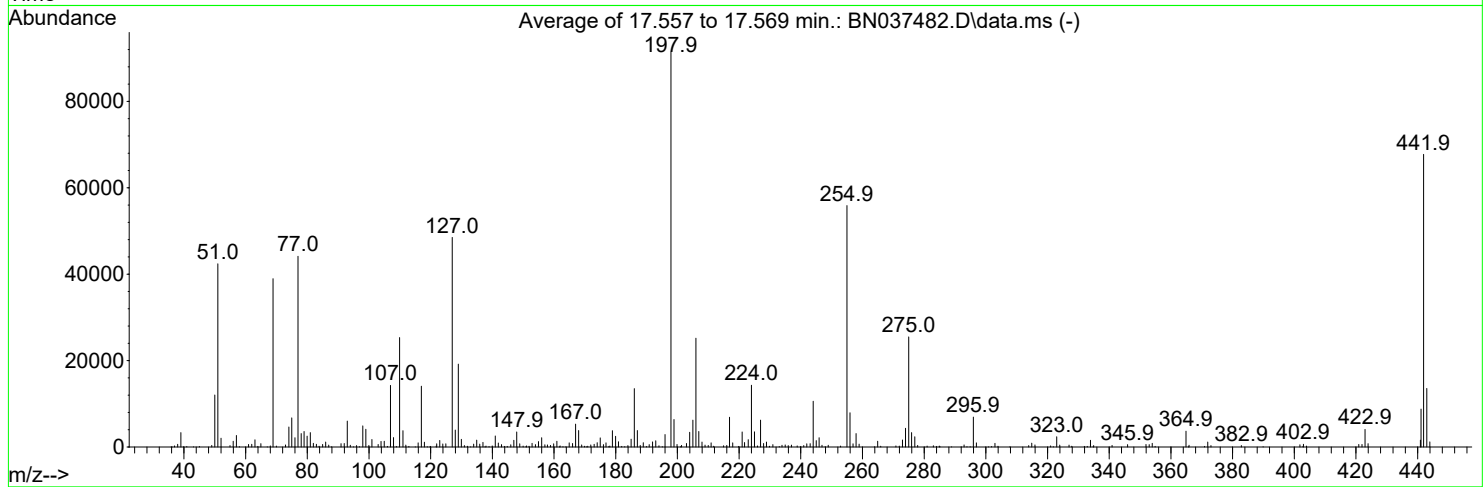
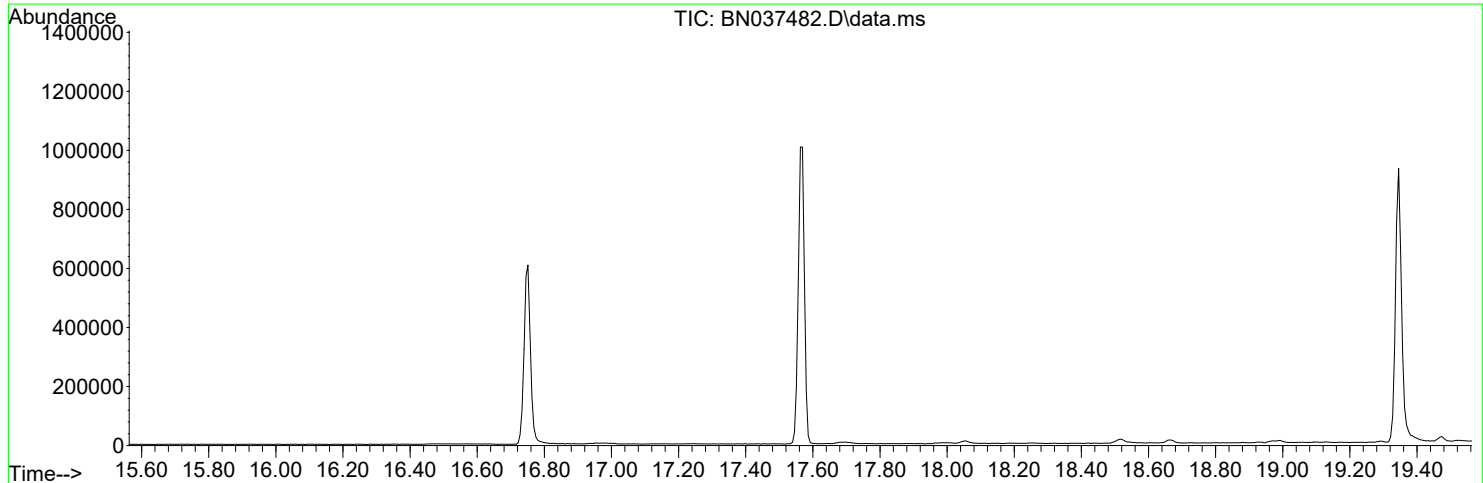
Date	Instrument Name	DFTPP Data File
7/11/2025	BNA_N	<u>BN037465.D</u>
Compound Name	Response	Retention Time
DDT	193083	20.598
DDD	2276	20.21
DDE	169	19.645
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
2445	195528	1.25

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037482.D
Acq On : 14 Jul 2025 08:31
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-BN071125.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Jul 11 15:38:34 2025



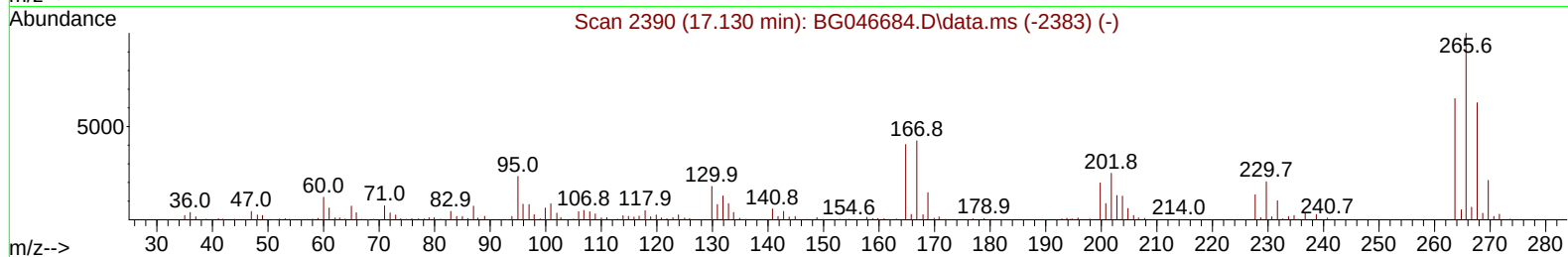
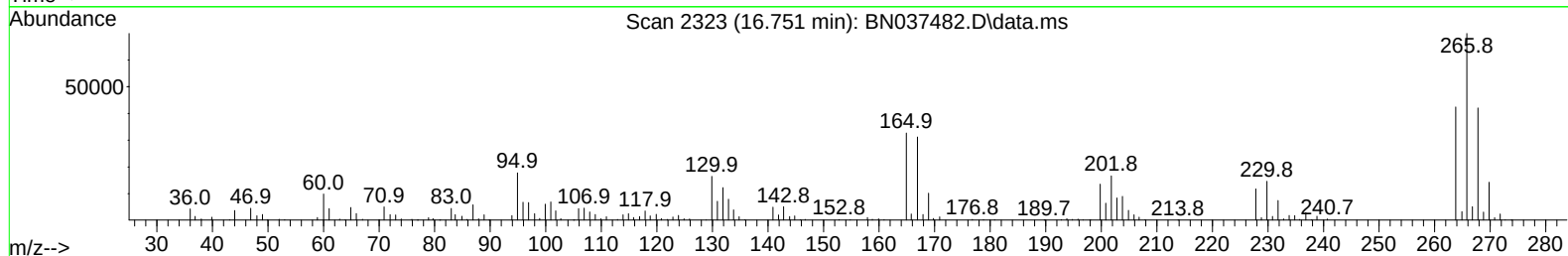
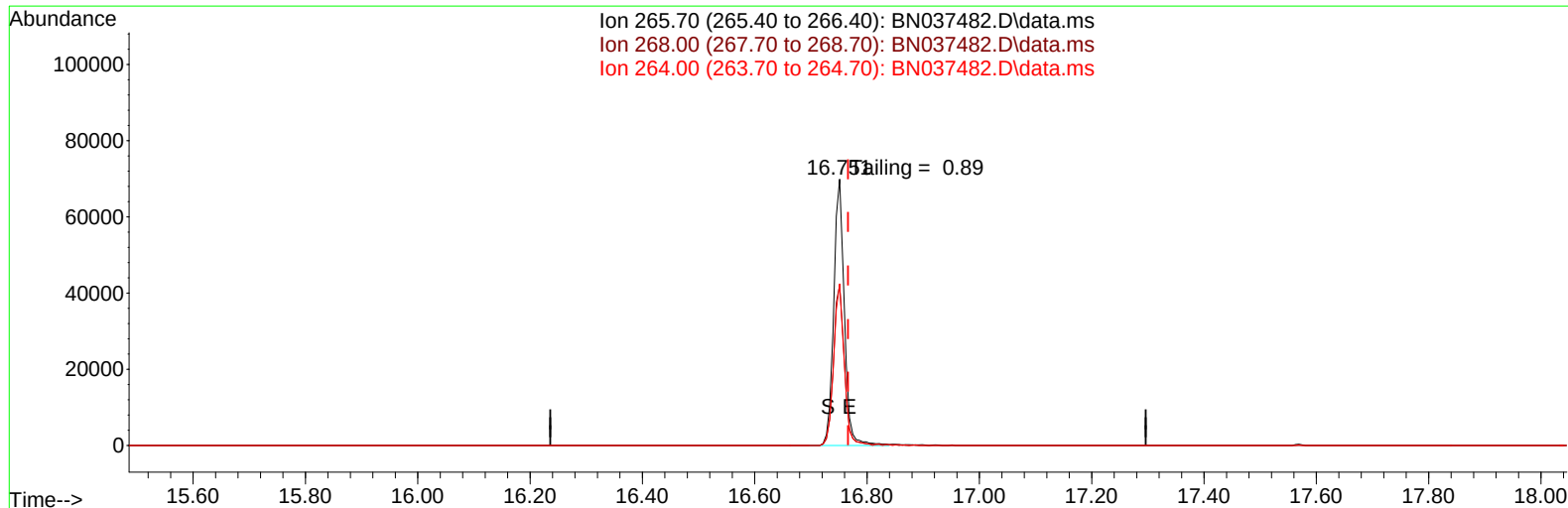
AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2454

Target	Rel. to	Lower	Upper	Rel.	Raw	Result
Mass	Mass	Limit%	Limit%	Abn%	Abn	Pass/Fail
68	69	0.00	2	0.7	271	PASS
69	69	100	100	100.0	38979	PASS
70	69	0.00	2	0.6	223	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	91384	PASS
199	198	5	9	7.0	6375	PASS
365	198	1	100	4.0	3663	PASS
441	443	0.01	150	64.7	8781	PASS
442	442	100	100	100.0	67717	PASS
443	442	15	24	20.0	13573	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037482.D
Acq On : 14 Jul 2025 08:31
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Jul 14 15:18:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jul 10 02:20:59 2025
Response via : Initial Calibration



TIC: BN037482.D\data.ms

(70) Pentachlorophenol (C)

16.751min (-0.015) 23296.92 ng

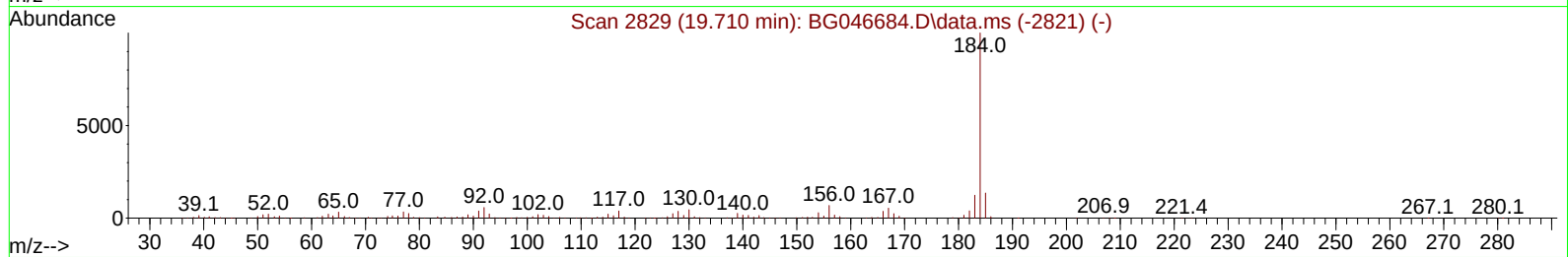
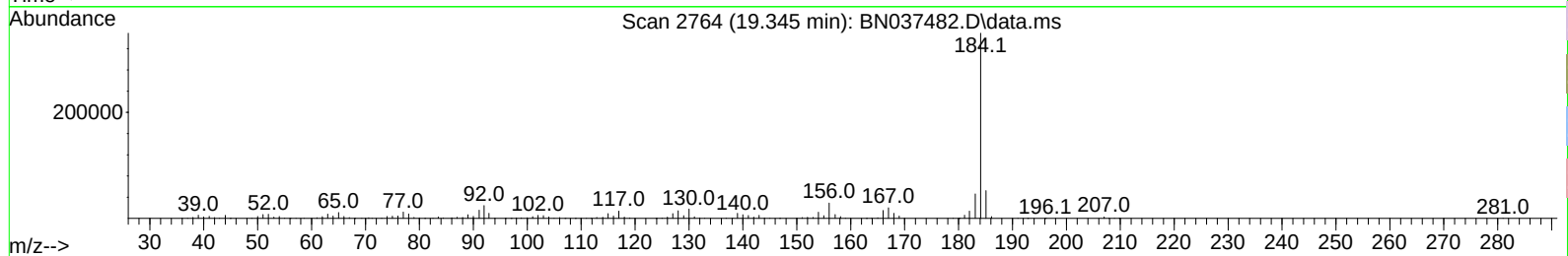
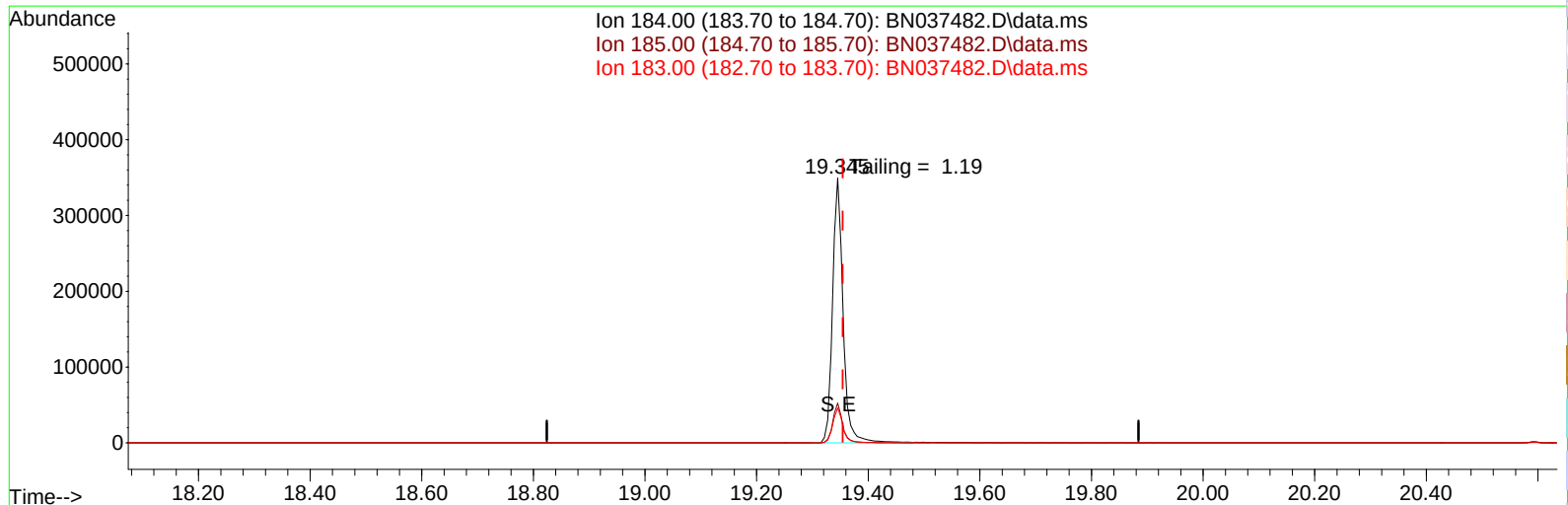
response 91597

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	60.19
264.00	61.60	60.71
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037482.D
Acq On : 14 Jul 2025 08:31
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Jul 14 15:18:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Thu Jul 10 02:20:59 2025
Response via : Initial Calibration



TIC: BN037482.D\data.ms

(77) Benzidine

19.345min (-0.009) 0.00 ng

response 459420

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	15.04
183.00	13.20	13.23
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
7/14/2025	BNA_N	<u>BN037482.D</u>
Compound Name	Response	Retention Time
DDT	217524	20.592
DDD	2566	20.204
DDE	509	19.645
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
3075	220599	1.39

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB168720BL	SDG No.:	Q2488
Lab Sample ID:	PB168720BL	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
BN037475.D	1	07/03/25 08:58	07/11/25 16:02	PB168720

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		86%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.34		30 - 150		84%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		92%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		53 - 106		102%	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	1870	7.731				
1146-65-2	Naphthalene-d8	4440	10.509				
15067-26-2	Acenaphthene-d10	2000	14.366				
1517-22-2	Phenanthrene-d10	3360	17.099				
1719-03-5	Chrysene-d12	2370	21.286				
1520-96-3	Perylene-d12	2140	23.534				

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\BN071125\
Data File : BN037475.D
Acq On : 11 Jul 2025 16:02
Operator : RC/JU
Sample : PB168720BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB168720BL

Quant Time: Jul 11 16:29:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.731	152	1870	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4442	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	1998	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	3362	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2365	0.400	ng	# 0.00
35) Perylene-d12	23.534	264	2144	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.326	112	1518	0.349	ng	0.00
5) Phenol-d6	6.894	99	1838	0.336	ng	0.00
8) Nitrobenzene-d5	8.864	82	1184	0.367	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2090	0.346	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	130	0.192	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	4649	0.408	ng	0.00
27) Fluoranthene-d10	19.132	212	2860	0.337	ng	0.00
31) Terphenyl-d14	19.740	244	1960	0.397	ng	0.00

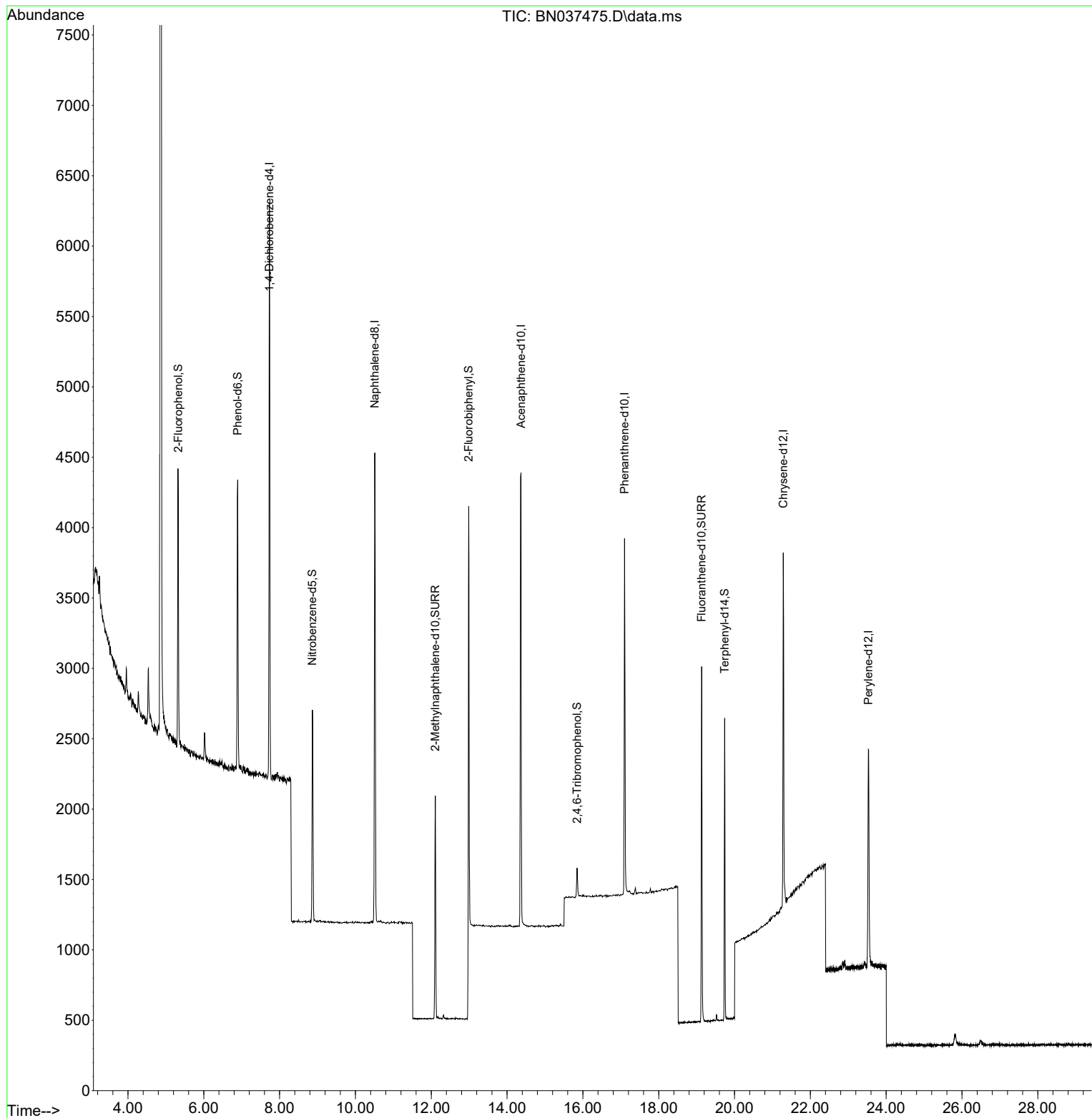
Target Compounds	Qvalue

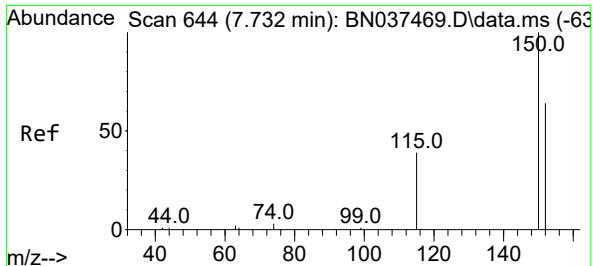
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037475.D
Acq On : 11 Jul 2025 16:02
Operator : RC/JU
Sample : PB168720BL
Misc :
ALS Vial : 12 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB168720BL

Quant Time: Jul 11 16:29:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

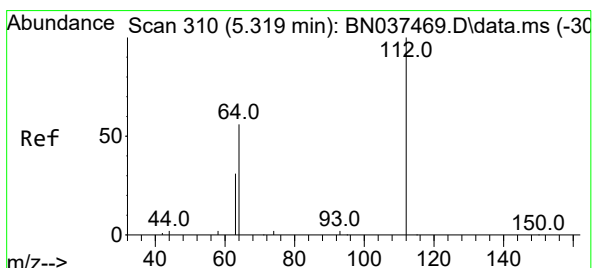
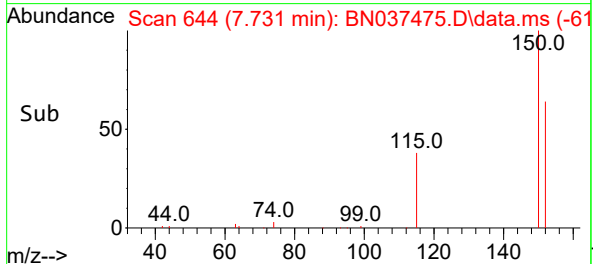
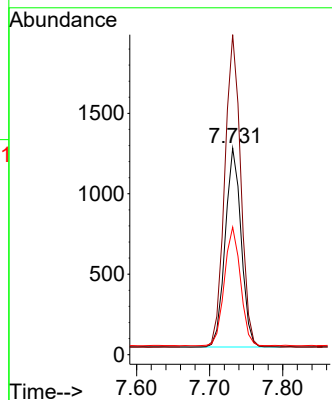
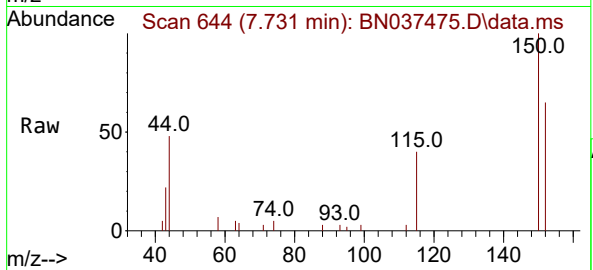




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.731 min Scan# 64
Delta R.T. -0.001 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

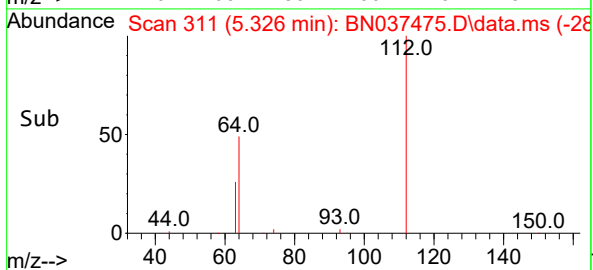
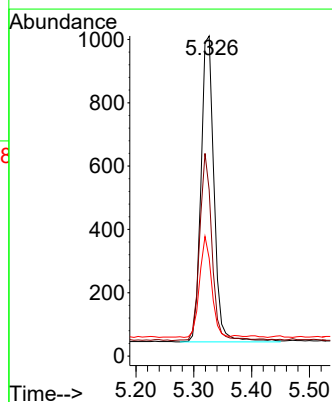
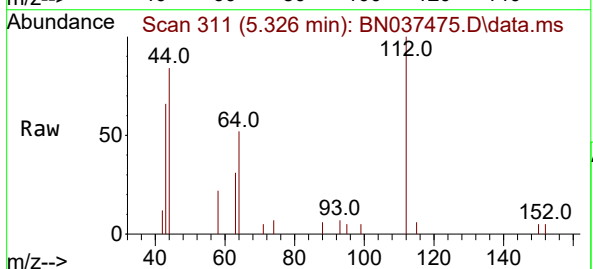
Instrument :
BNA_N
ClientSampleId :
PB168720BL

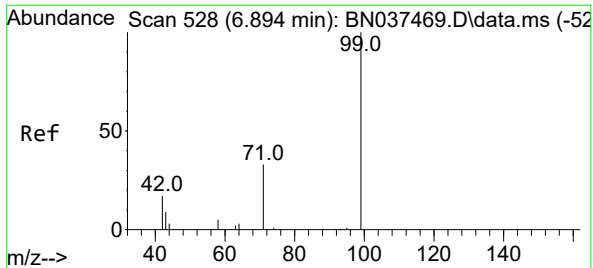
Tgt Ion:152 Resp: 1870
Ion Ratio Lower Upper
152 100
150 154.9 122.5 183.7
115 61.7 49.9 74.9



#4
2-Fluorophenol
Concen: 0.349 ng
RT: 5.326 min Scan# 311
Delta R.T. 0.007 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

Tgt Ion:112 Resp: 1518
Ion Ratio Lower Upper
112 100
64 57.4 45.4 68.0
63 30.0 24.7 37.1

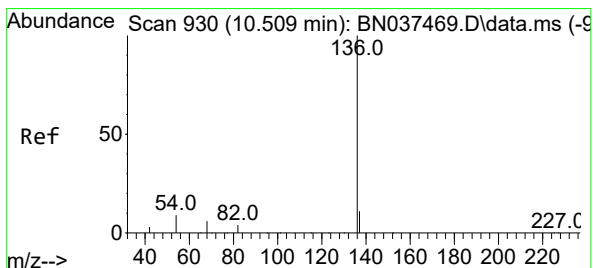
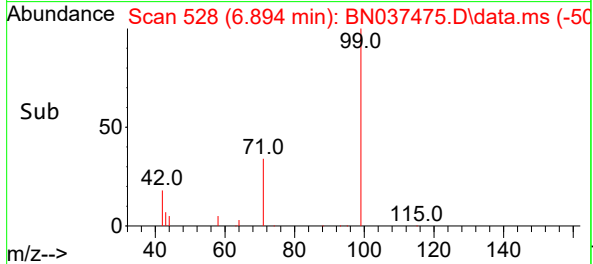
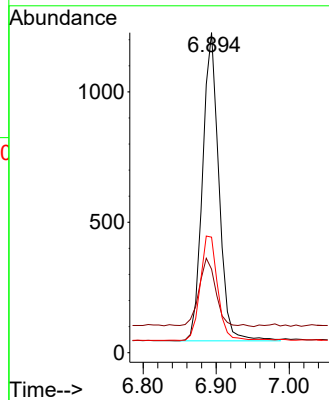
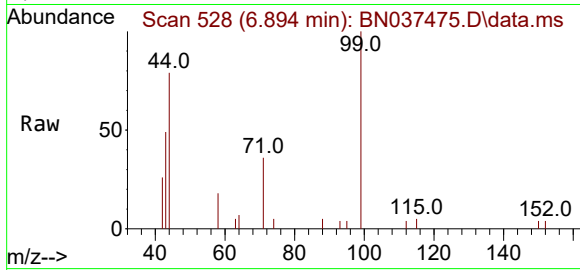




#5
Phenol-d6
Concen: 0.336 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

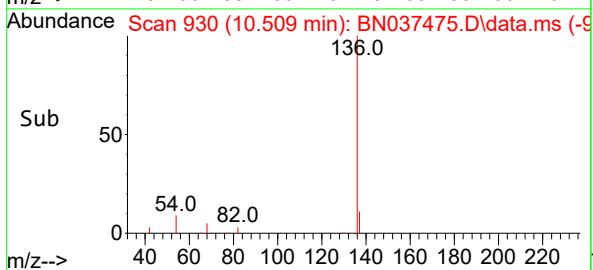
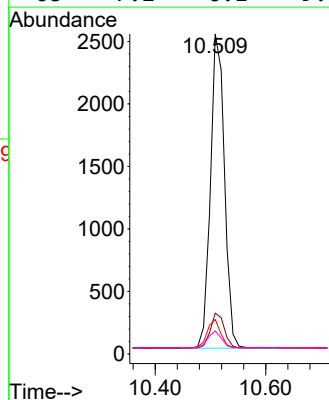
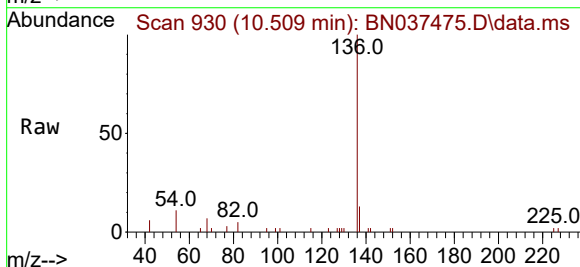
Instrument :
BNA_N
ClientSampleId :
PB168720BL

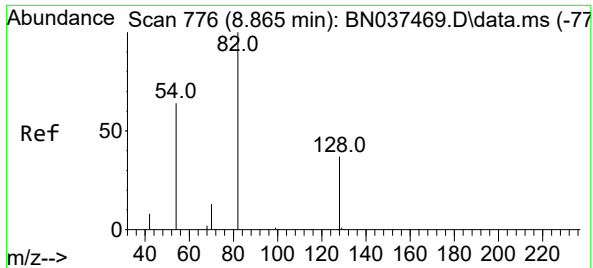
Tgt Ion:	99	Resp:	1838
Ion	Ratio	Lower	Upper
99	100		
42	23.0	19.5	29.3
71	35.8	29.4	44.2



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 930
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

Tgt Ion:	136	Resp:	4442
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.0	15.0
54	10.7	9.0	13.6
68	7.2	6.1	9.1

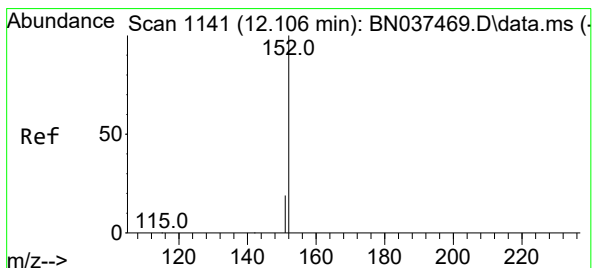
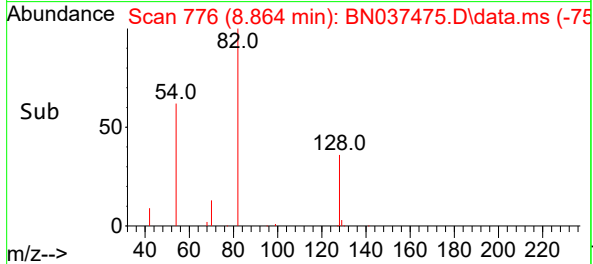
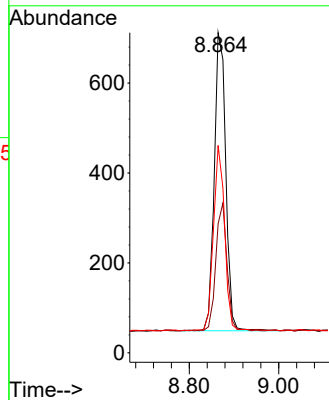
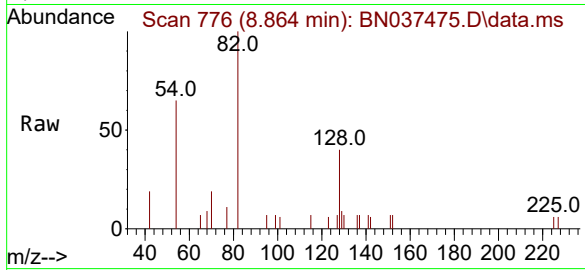




#8
Nitrobenzene-d5
Concen: 0.367 ng
RT: 8.864 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

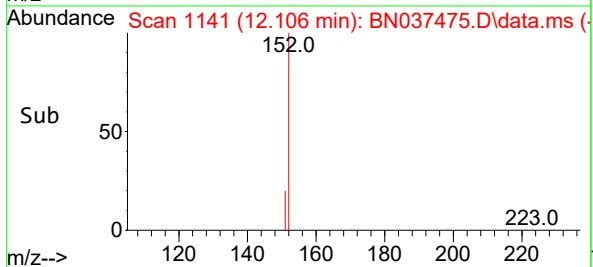
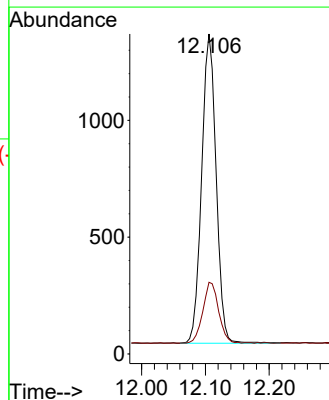
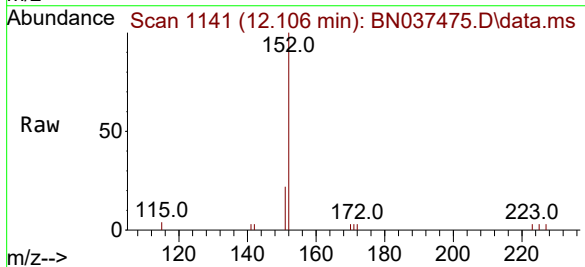
Instrument :
BNA_N
ClientSampleId :
PB168720BL

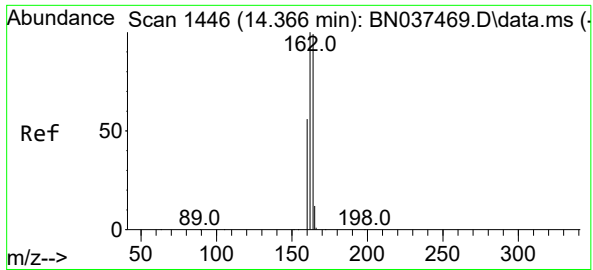
Tgt Ion:	82	Resp:	1184
Ion	Ratio	Lower	Upper
82	100		
128	40.3	33.1	49.7
54	64.7	53.0	79.4



#11
2-Methylnaphthalene-d10
Concen: 0.346 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

Tgt Ion:	152	Resp:	2090
Ion	Ratio	Lower	Upper
152	100		
151	21.6	17.0	25.6

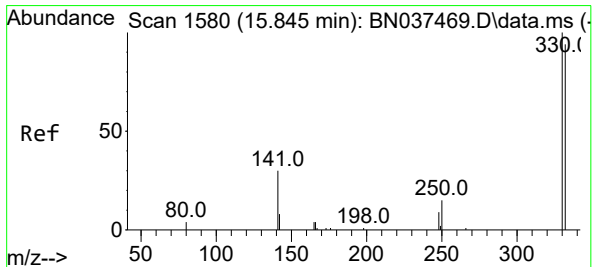
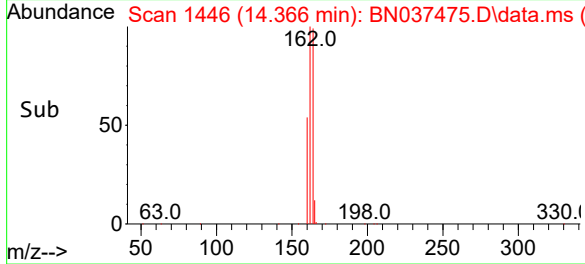
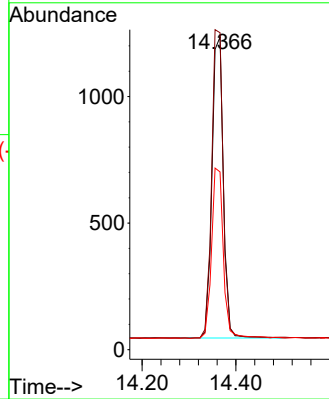
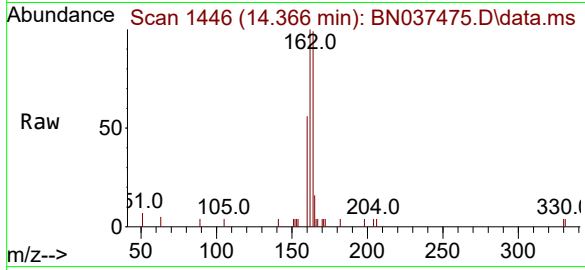




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.366 min Scan# 1446
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

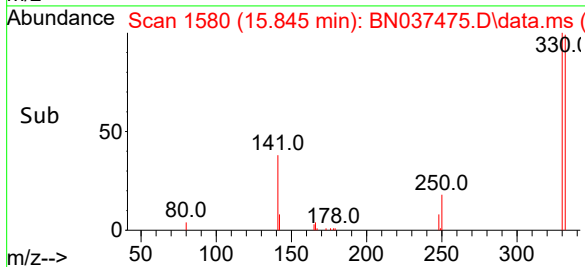
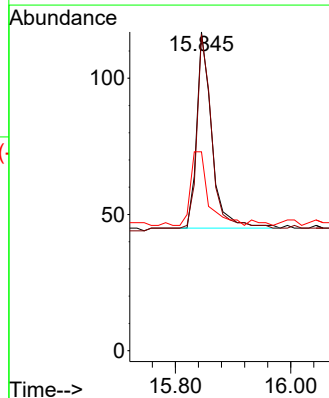
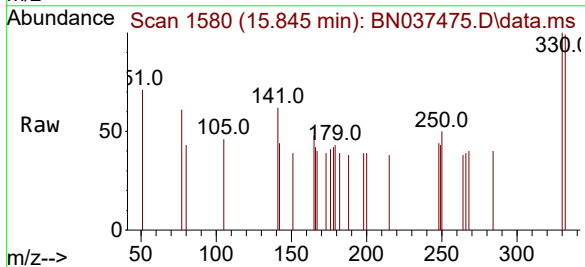
Instrument :
BNA_N
ClientSampleId :
PB168720BL

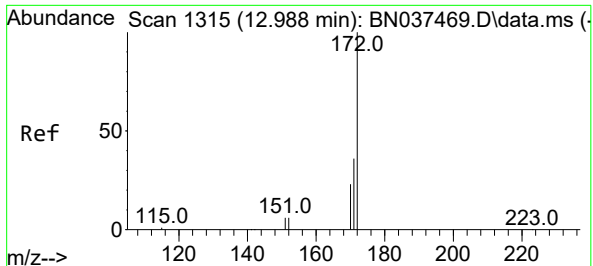
Tgt Ion	Ratio	Lower	Upper
164	100		
162	101.4	81.1	121.7
160	56.8	46.5	69.7



#14
2,4,6-Tribromophenol
Concen: 0.192 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

Tgt Ion	Ratio	Lower	Upper
330	100		
332	96.9	82.0	123.0
141	44.6	36.2	54.2





#15

2-Fluorobiphenyl

Concen: 0.408 ng

RT: 12.988 min Scan# 1315

Delta R.T. -0.000 min

Lab File: BN037475.D

Acq: 11 Jul 2025 16:02

Instrument :

BNA_N

ClientSampleId :

PB168720BL

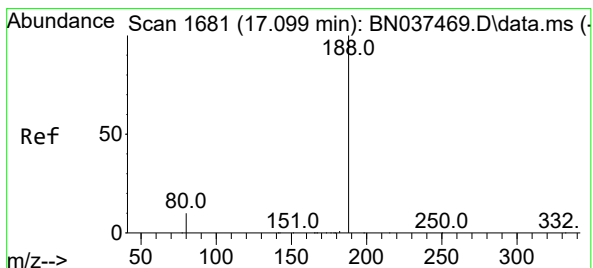
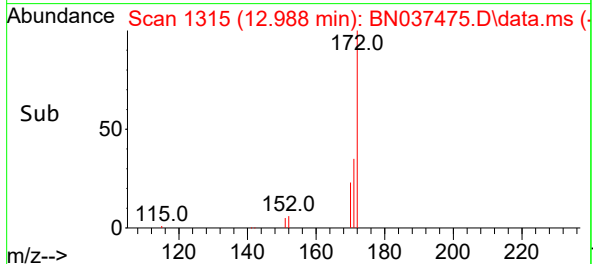
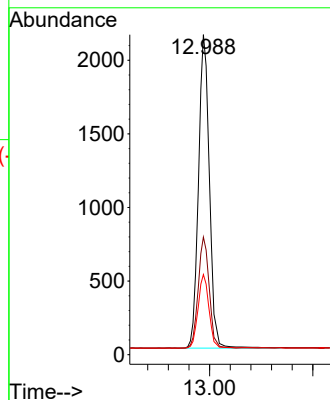
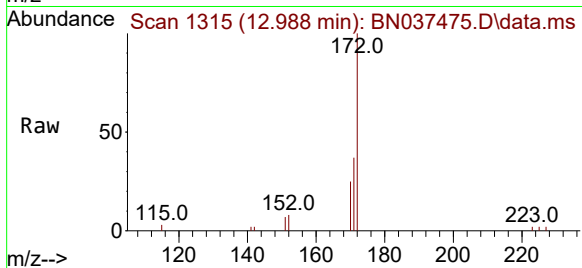
Tgt Ion:172 Resp: 4649

Ion Ratio Lower Upper

172 100

171 36.8 29.8 44.8

170 25.1 20.0 30.0



#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1681

Delta R.T. -0.000 min

Lab File: BN037475.D

Acq: 11 Jul 2025 16:02

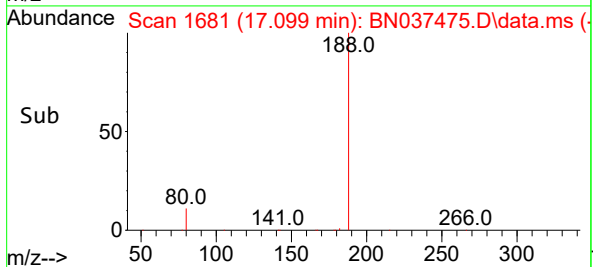
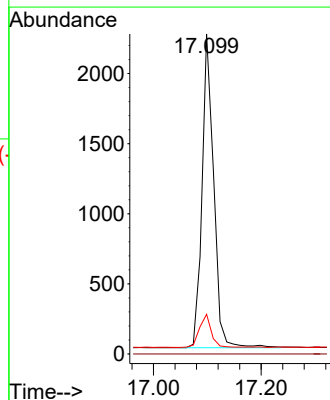
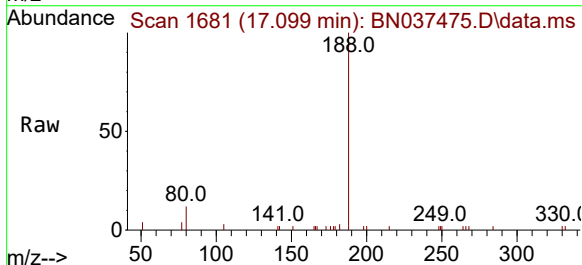
Tgt Ion:188 Resp: 3362

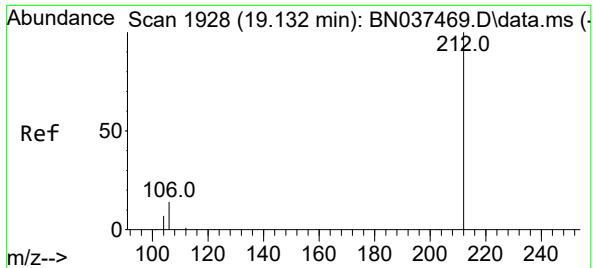
Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.4 9.3 13.9

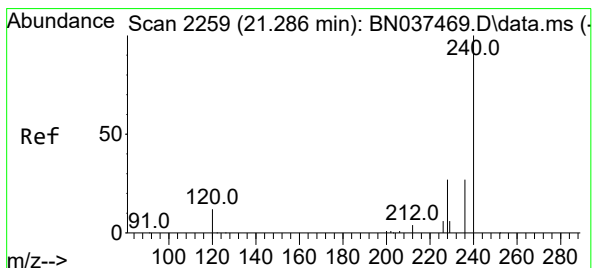
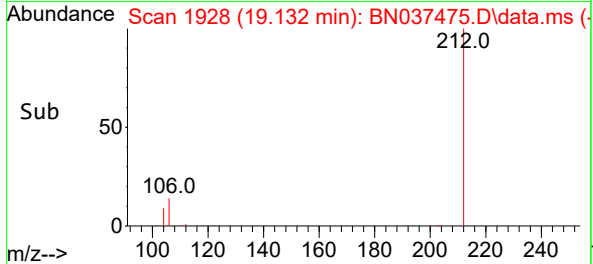
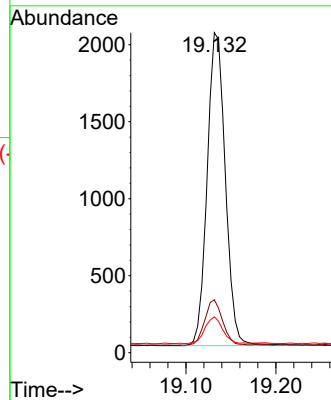
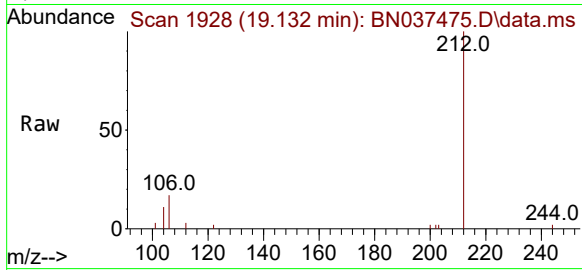




#27
Fluoranthene-d10
Concen: 0.337 ng
RT: 19.132 min Scan# 1928
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

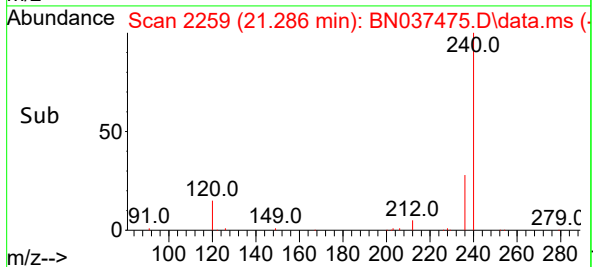
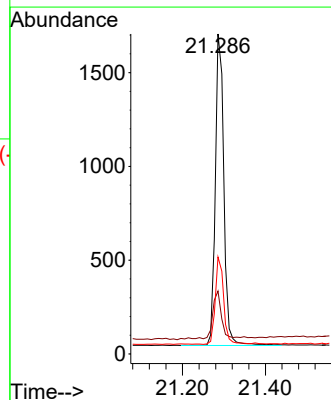
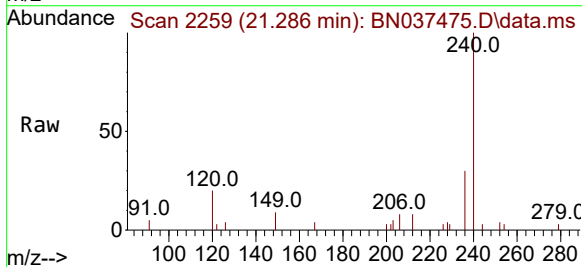
Instrument :
BNA_N
ClientSampleId :
PB168720BL

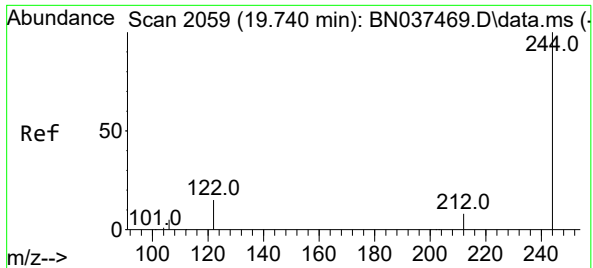
Tgt Ion:	212	Resp:	2860
Ion Ratio	Lower	Upper	
212	100		
106	14.2	11.7	17.5
104	8.3	6.6	10.0



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.286 min Scan# 2259
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

Tgt Ion:	240	Resp:	2365
Ion Ratio	Lower	Upper	
240	100		
120	19.6	12.4	18.6#
236	30.3	22.9	34.3

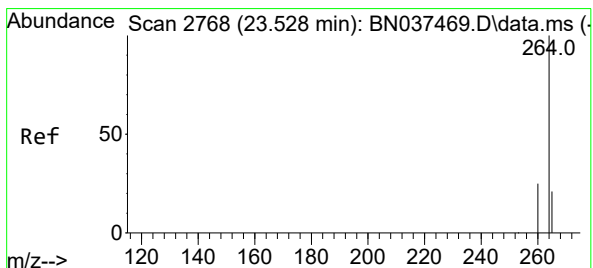
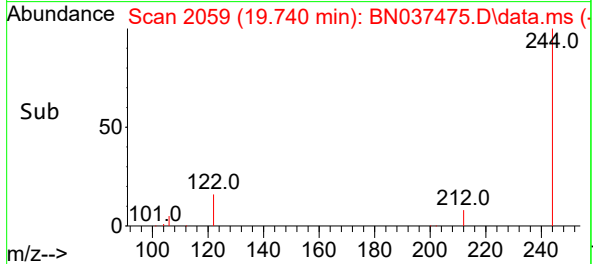
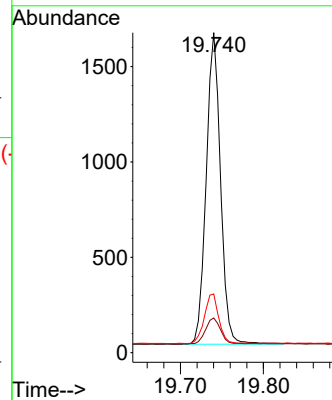
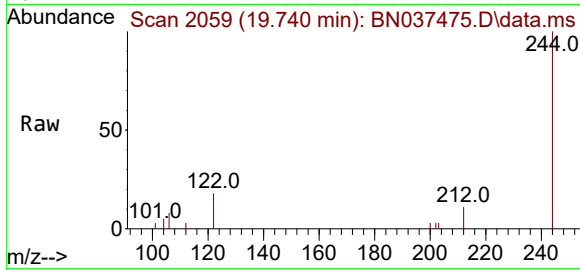




#31
Terphenyl-d14
Concen: 0.397 ng
RT: 19.740 min Scan# 2059
Delta R.T. -0.000 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

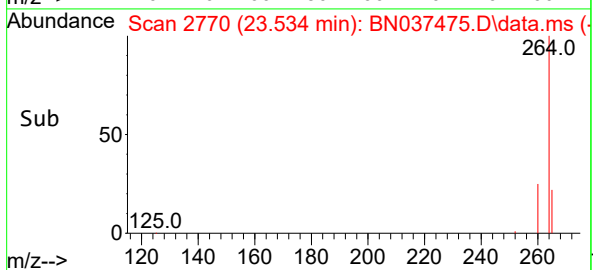
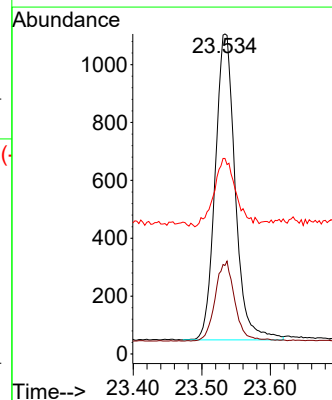
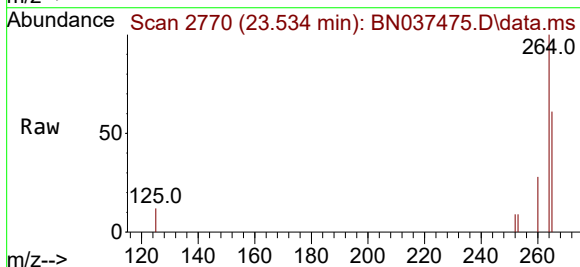
Instrument :
BNA_N
ClientSampleId :
PB168720BL

Tgt Ion:244	Resp:	1960
Ion	Ratio	Lower Upper
244	100	
212	10.8	8.7 13.1
122	18.4	14.1 21.1



#35
Perylene-d12
Concen: 0.400 ng
RT: 23.534 min Scan# 2770
Delta R.T. 0.006 min
Lab File: BN037475.D
Acq: 11 Jul 2025 16:02

Tgt Ion:264	Resp:	2144
Ion	Ratio	Lower Upper
264	100	
260	27.7	21.7 32.5
265	61.1	41.6 62.4



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB168720BS	SDG No.:	Q2488
Lab Sample ID:	PB168720BS	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
BN037487.D	1	07/03/25 08:58	07/14/25 11:39	PB168720

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.33		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		86%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		77%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		90%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1970	7.732				
1146-65-2	Naphthalene-d8	4530	10.509				
15067-26-2	Acenaphthene-d10	2010	14.355				
1517-22-2	Phenanthrene-d10	3380	17.099				
1719-03-5	Chrysene-d12	2500	21.286				
1520-96-3	Perylene-d12	2160	23.525				

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\BN071425\
 Data File : BN037487.D
 Acq On : 14 Jul 2025 11:39
 Operator : RC/JU
 Sample : PB168720BS
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB168720BS

Quant Time: Jul 14 12:50:02 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

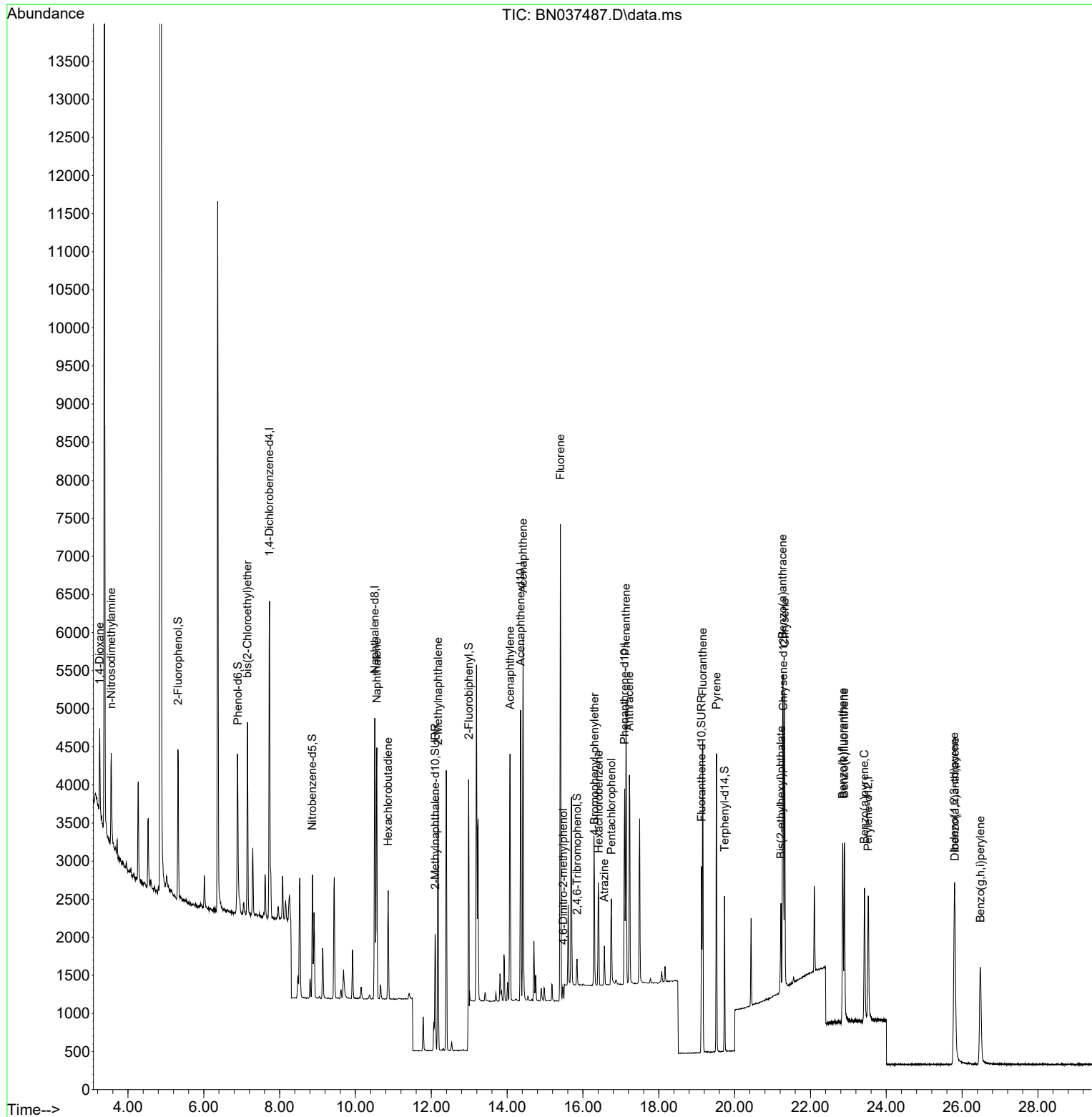
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1966	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4534	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2005	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3383	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2498	0.400	ng	0.00
35) Perylene-d12	23.525	264	2162	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1473	0.322	ng	0.00
5) Phenol-d6	6.894	99	1791	0.311	ng	0.00
8) Nitrobenzene-d5	8.865	82	1150	0.349	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	2130	0.346	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	195	0.287	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	4148	0.362	ng	0.00
27) Fluoranthene-d10	19.127	212	2645	0.310	ng	0.00
31) Terphenyl-d14	19.736	244	1871	0.359	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	606	0.328	ng	Qvalue 91
3) n-Nitrosodimethylamine	3.557	42	891	0.361	ng	# 96
6) bis(2-Chloroethyl)ether	7.154	93	1739	0.361	ng	98
9) Naphthalene	10.562	128	4246	0.349	ng	100
10) Hexachlorobutadiene	10.861	225	1101	0.376	ng	# 100
12) 2-Methylnaphthalene	12.177	142	2332	0.306	ng	98
16) Acenaphthylene	14.078	152	3543	0.388	ng	100
17) Acenaphthene	14.420	154	2144	0.350	ng	100
18) Fluorene	15.403	166	2528	0.328	ng	98
20) 4,6-Dinitro-2-methylph...	15.478	198	136	0.358	ng	# 80
21) 4-Bromophenyl-phenylether	16.304	248	751	0.356	ng	# 90
22) Hexachlorobenzene	16.416	284	1101	0.378	ng	98
23) Atrazine	16.565	200	382	0.364	ng	95
24) Pentachlorophenol	16.751	266	582	0.580	ng	98
25) Phenanthrene	17.136	178	3618	0.351	ng	99
26) Anthracene	17.223	178	3215	0.346	ng	100
28) Fluoranthene	19.160	202	3519	0.311	ng	99
30) Pyrene	19.522	202	3456	0.344	ng	100
32) Benzo(a)anthracene	21.268	228	2920	0.345	ng	99
33) Chrysene	21.322	228	3244	0.351	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	1036	0.360	ng	99
36) Indeno(1,2,3-cd)pyrene	25.794	276	3126	0.373	ng	99
37) Benzo(b)fluoranthene	22.853	252	3012	0.358	ng	98
38) Benzo(k)fluoranthene	22.897	252	2969	0.348	ng	99
39) Benzo(a)pyrene	23.426	252	2561	0.378	ng	99
40) Dibenzo(a,h)anthracene	25.811	278	2399	0.354	ng	100
41) Benzo(g,h,i)perylene	26.481	276	2774	0.374	ng	97

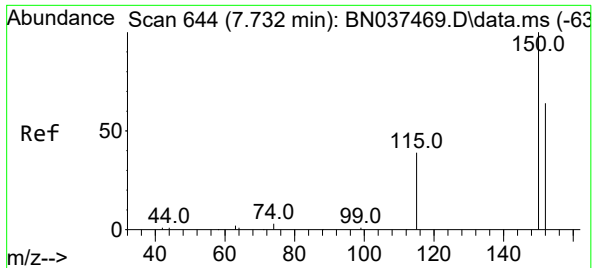
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037487.D
Acq On : 14 Jul 2025 11:39
Operator : RC/JU
Sample : PB168720BS
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB168720BS

Quant Time: Jul 14 12:50:02 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

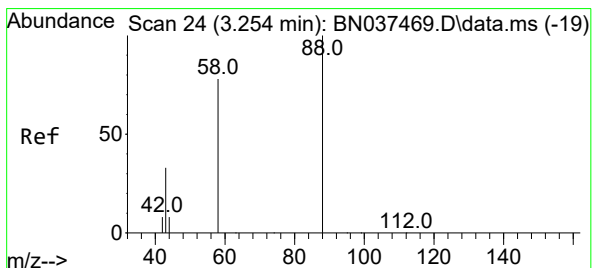
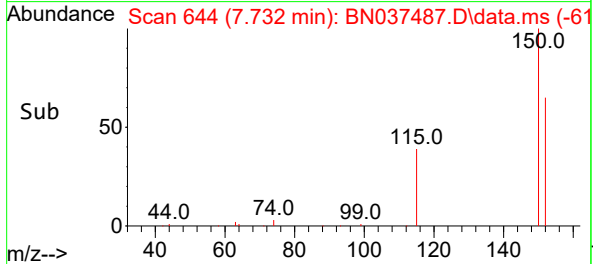
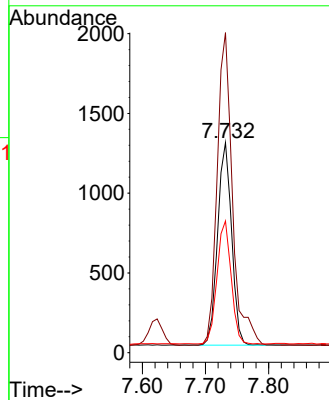
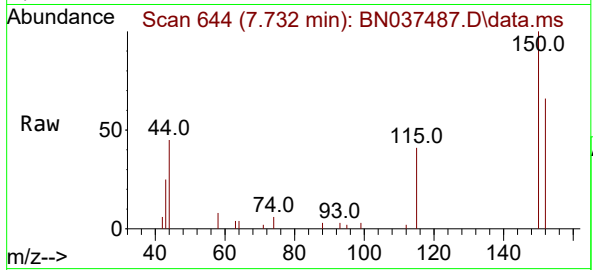




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

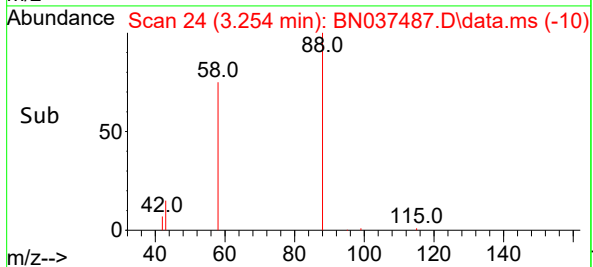
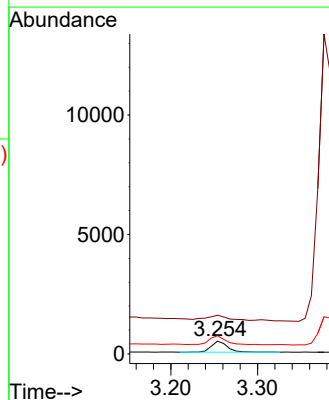
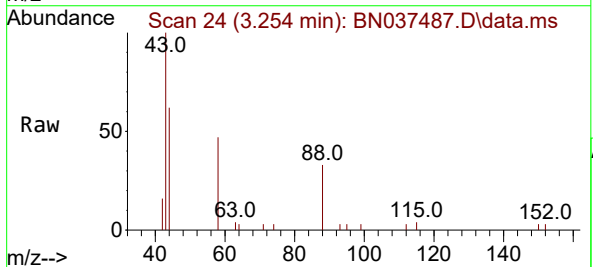
Instrument :
BNA_N
ClientSampleId :
PB168720BS

Tgt Ion:152 Resp: 1966
Ion Ratio Lower Upper
152 100
150 152.3 122.5 183.7
115 62.7 49.9 74.9

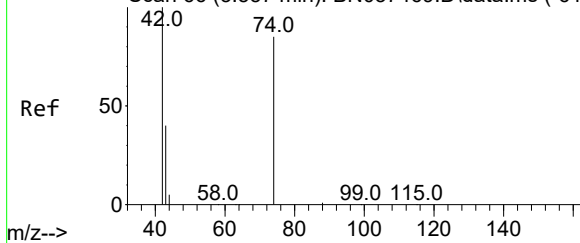


#2
1,4-Dioxane
Concen: 0.328 ng
RT: 3.254 min Scan# 24
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion: 88 Resp: 606
Ion Ratio Lower Upper
88 100
43 53.6 30.7 46.1#
58 82.2 65.0 97.4



Abundance Scan 66 (3.557 min): BN037469.D\data.ms (-61)



#3

n-Nitrosodimethylamine

Concen: 0.361 ng

RT: 3.557 min Scan# 60

Delta R.T. -0.000 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Instrument :

BNA_N

ClientSampleId :

PB168720BS

Tgt Ion: 42 Resp: 891

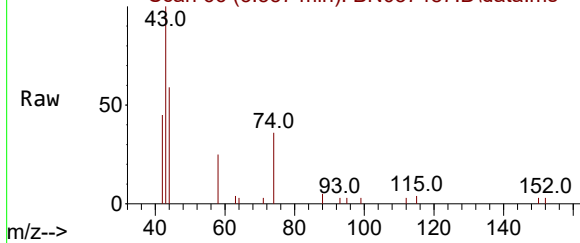
Ion Ratio Lower Upper

42 100

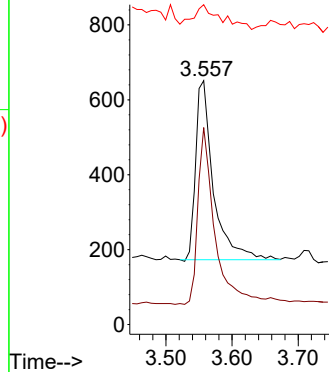
74 94.2 74.9 112.3

44 21.5 7.2 10.8#

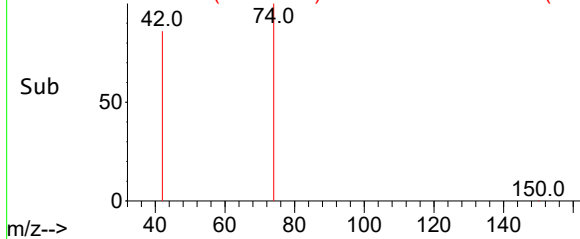
Abundance Scan 66 (3.557 min): BN037487.D\data.ms



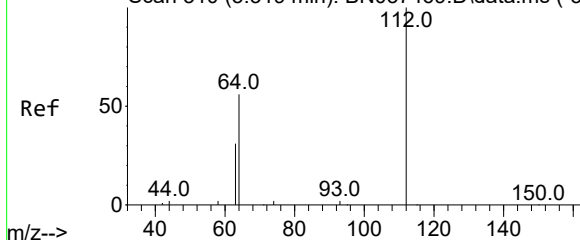
Abundance



Abundance Scan 66 (3.557 min): BN037487.D\data.ms (-45)



Abundance Scan 310 (5.319 min): BN037469.D\data.ms (-30)



#4

2-Fluorophenol

Concen: 0.322 ng

RT: 5.319 min Scan# 310

Delta R.T. -0.000 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Tgt Ion: 112 Resp: 1473

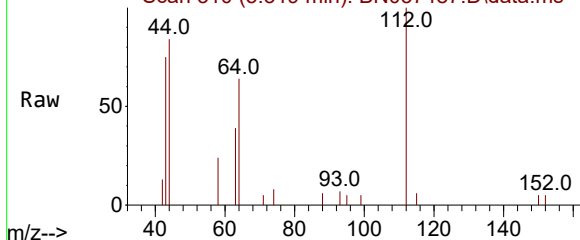
Ion Ratio Lower Upper

112 100

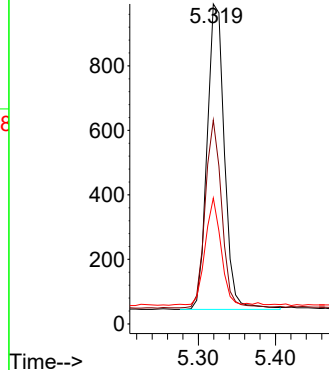
64 58.5 45.4 68.0

63 32.2 24.7 37.1

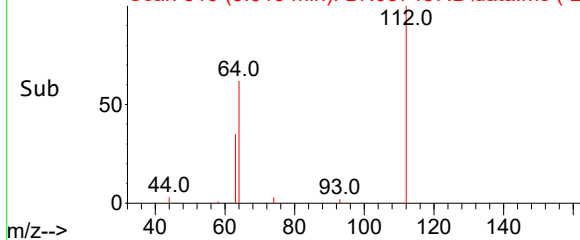
Abundance Scan 310 (5.319 min): BN037487.D\data.ms

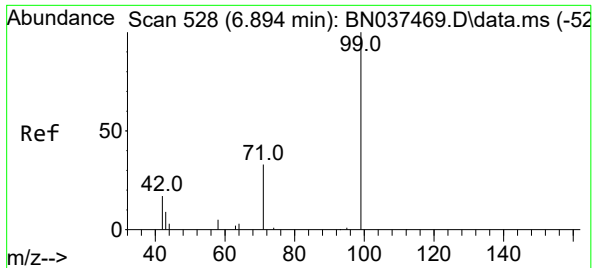


Abundance



Abundance Scan 310 (5.319 min): BN037487.D\data.ms (-28)

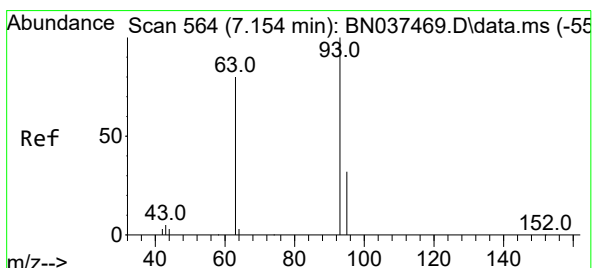
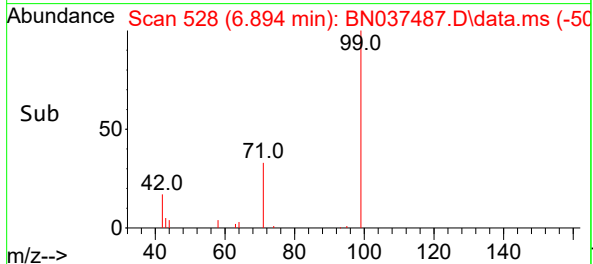
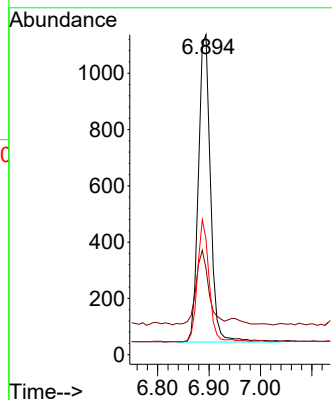
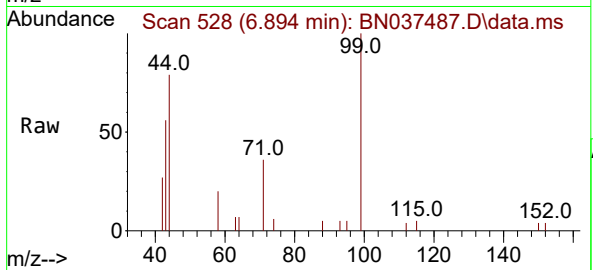




#5
Phenol-d6
Concen: 0.311 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

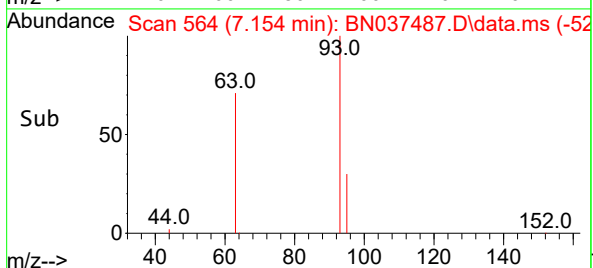
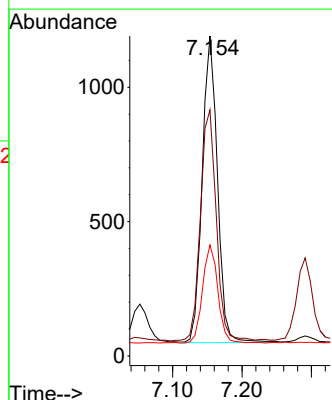
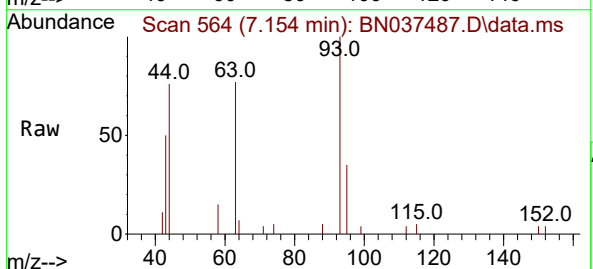
Instrument :
BNA_N
ClientSampleId :
PB168720BS

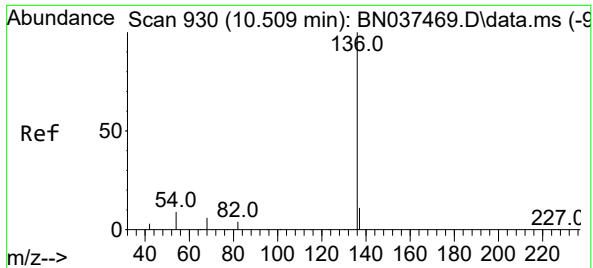
Tgt Ion	Ratio	Lower	Upper
99	100		
42	25.5	19.5	29.3
71	38.0	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.361 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion	Ratio	Lower	Upper
93	100		
63	78.2	60.8	91.2
95	32.0	25.6	38.4

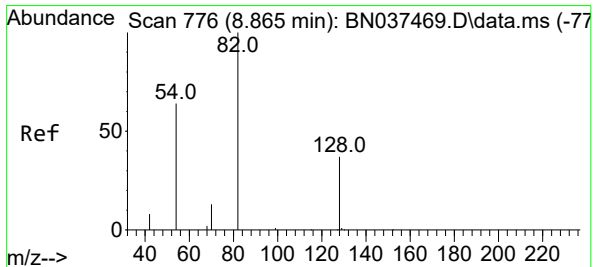
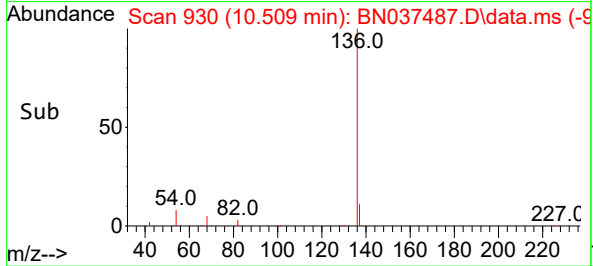
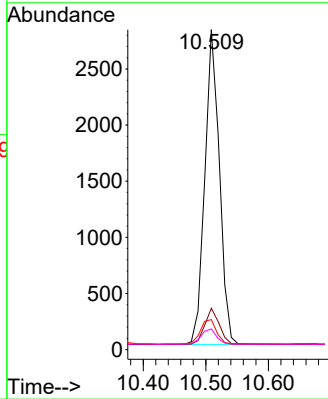
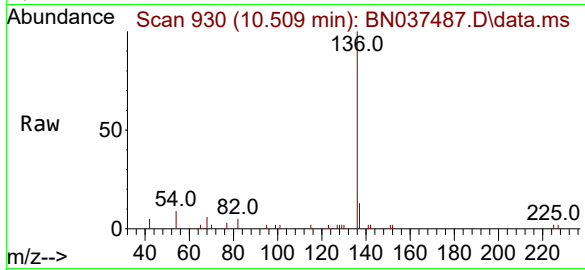




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

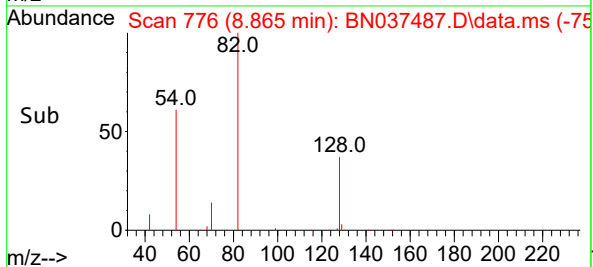
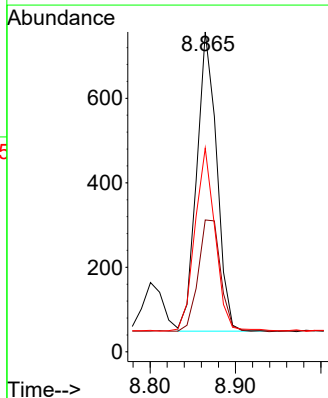
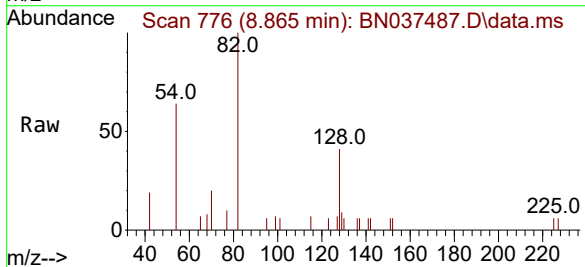
Instrument :
BNA_N
ClientSampleId :
PB168720BS

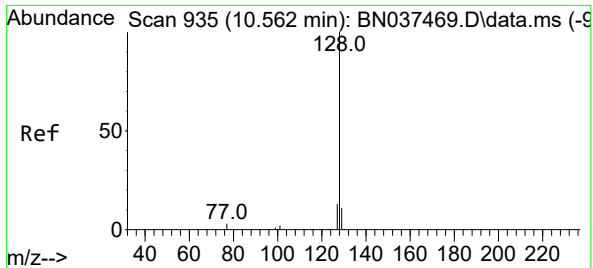
Tgt Ion:	136	Resp:	4534
Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.0	15.0
54	9.4	9.0	13.6
68	6.5	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.349 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:	82	Resp:	1150
Ion	Ratio	Lower	Upper
82	100		
128	41.2	33.1	49.7
54	63.7	53.0	79.4

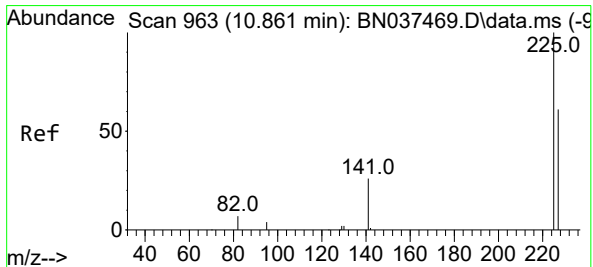
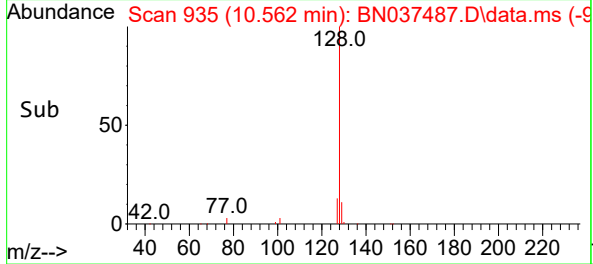
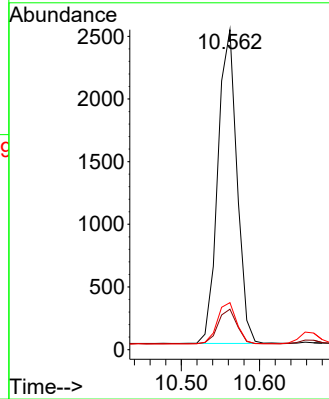
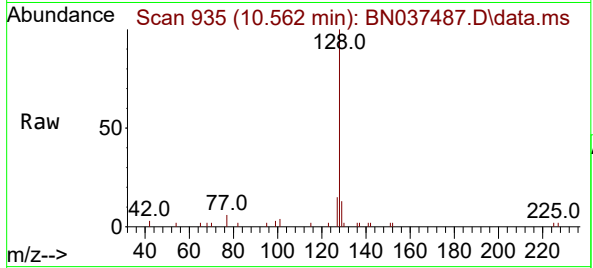




#9
Naphthalene
Concen: 0.349 ng
RT: 10.562 min Scan# 911
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

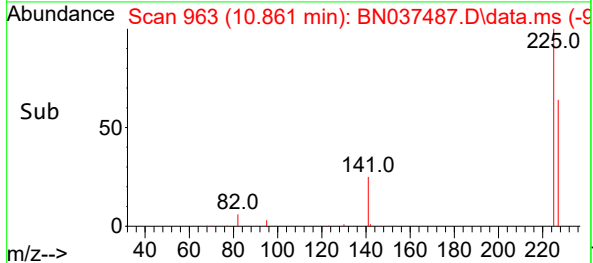
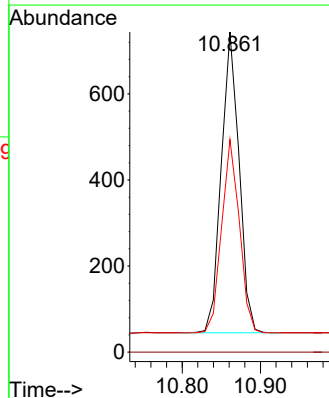
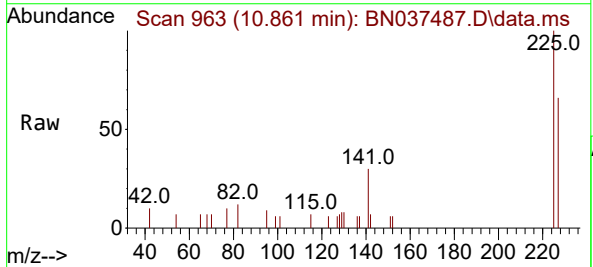
Instrument :
BNA_N
ClientSampleId :
PB168720BS

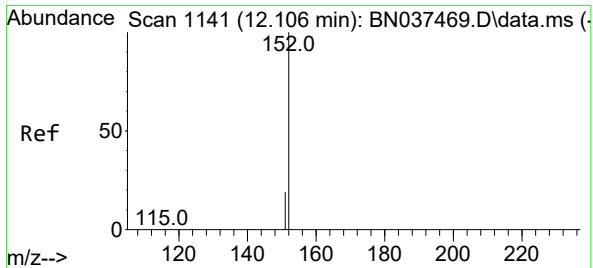
Tgt Ion:	128	Resp:	4246
Ion	Ratio	Lower	Upper
128	100		
129	12.7	10.2	15.2
127	14.7	11.8	17.6



#10
Hexachlorobutadiene
Concen: 0.376 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:	225	Resp:	1101
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	51.4	77.2

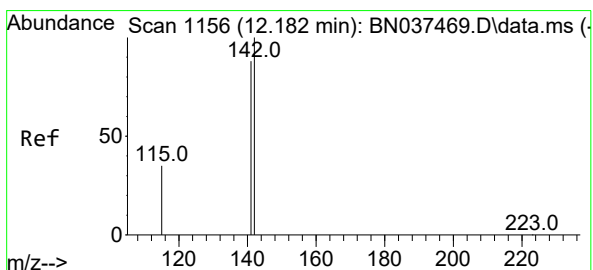
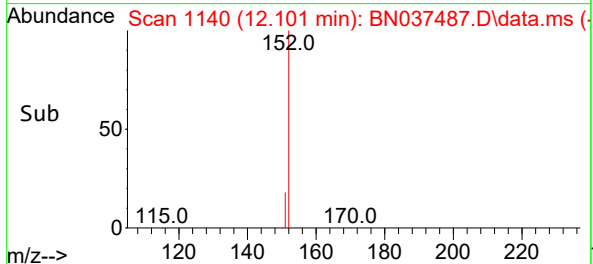
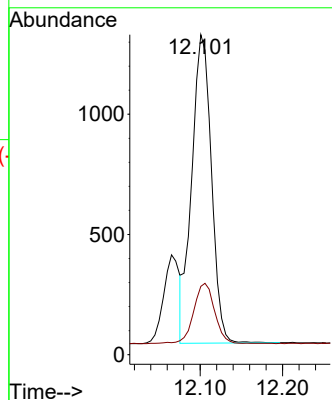
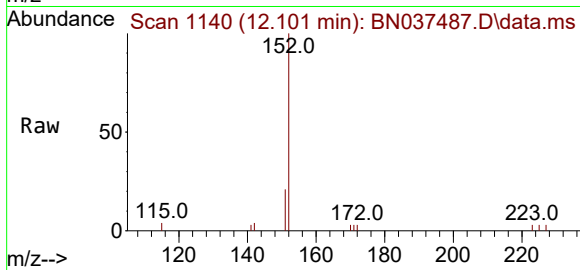




#11
2-Methylnaphthalene-d10
Concen: 0.346 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.005 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

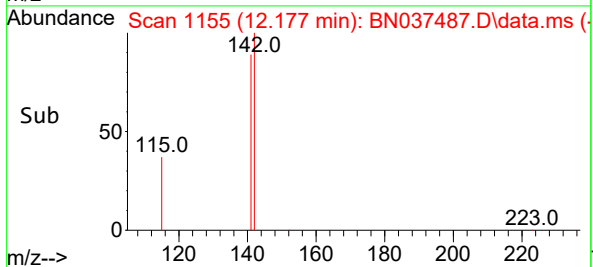
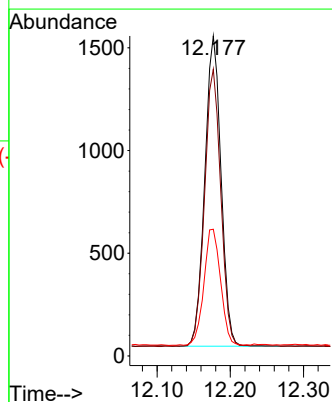
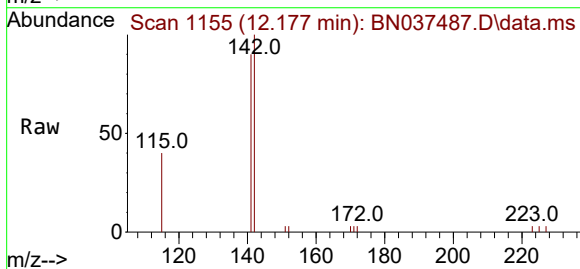
Instrument :
BNA_N
ClientSampleId :
PB168720BS

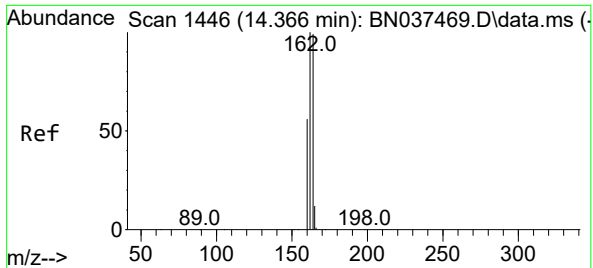
Tgt Ion:152 Resp: 2130
Ion Ratio Lower Upper
152 100
151 20.9 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.306 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:142 Resp: 2332
Ion Ratio Lower Upper
142 100
141 89.6 70.6 105.8
115 39.6 30.0 45.0

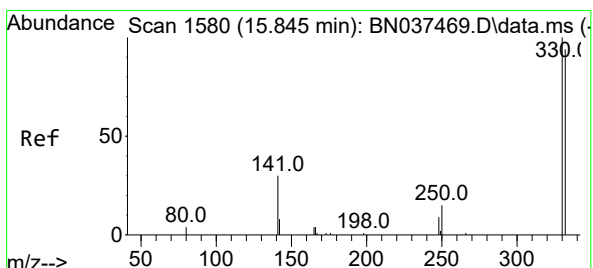
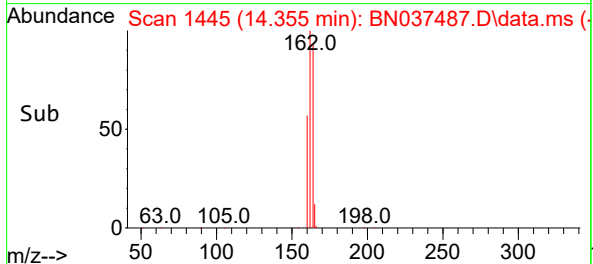
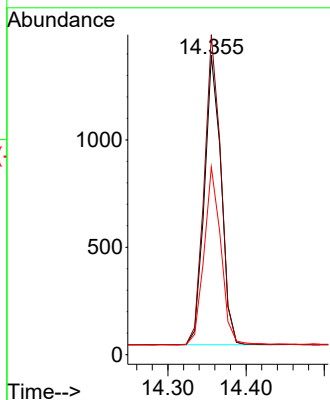
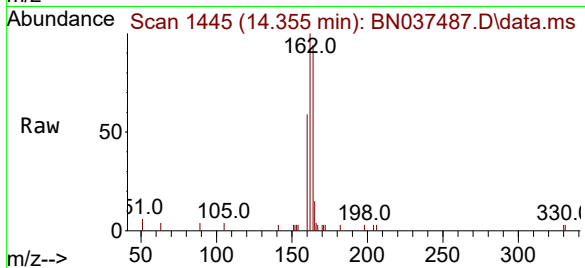




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.355 min Scan# 1445
Delta R.T. -0.011 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

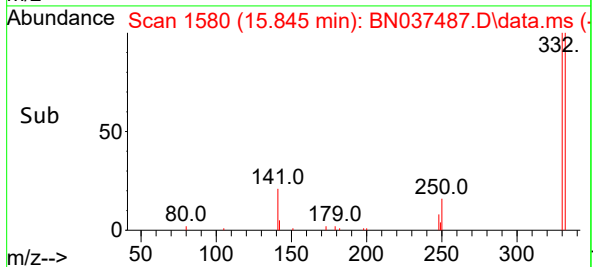
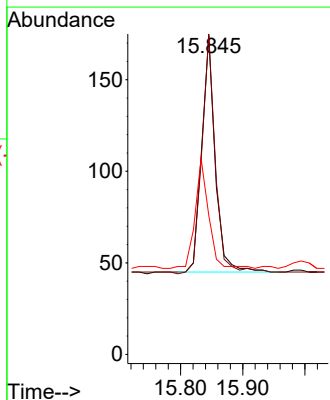
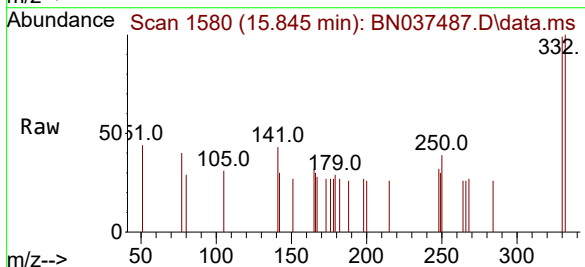
Instrument :
BNA_N
ClientSampleId :
PB168720BS

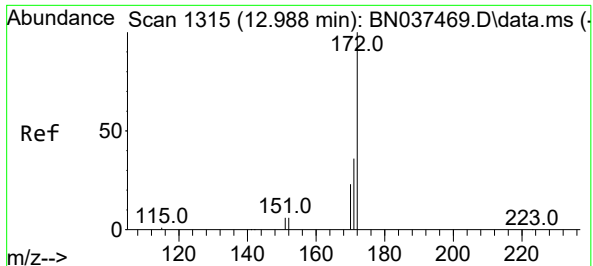
Tgt Ion	Ratio	Lower	Upper
164	100		
162	106.9	81.1	121.7
160	62.7	46.5	69.7



#14
2,4,6-Tribromophenol
Concen: 0.287 ng
RT: 15.845 min Scan# 1580
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion	Ratio	Lower	Upper
330	100		
332	104.1	82.0	123.0
141	46.2	36.2	54.2

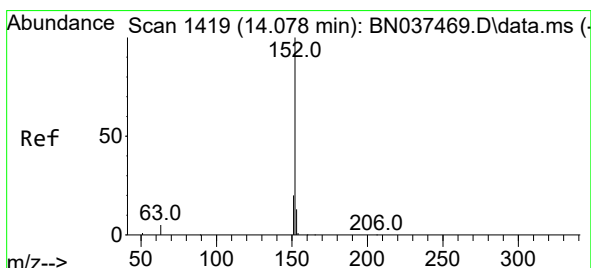
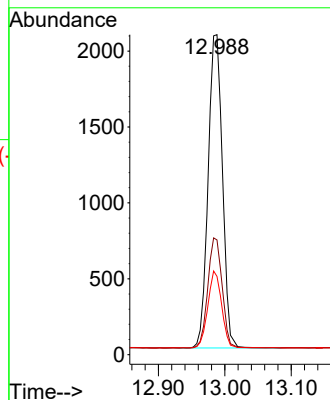
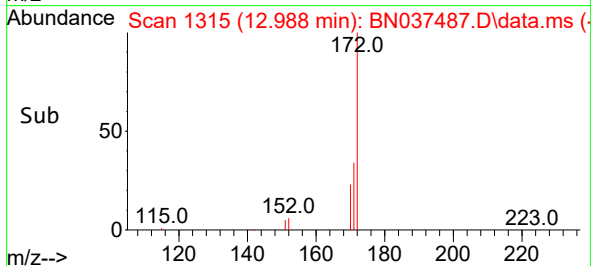
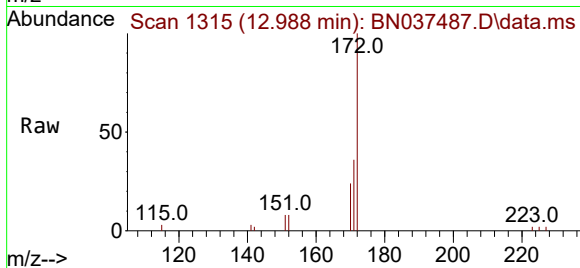




#15
2-Fluorobiphenyl
Concen: 0.362 ng
RT: 12.988 min Scan# 1315
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

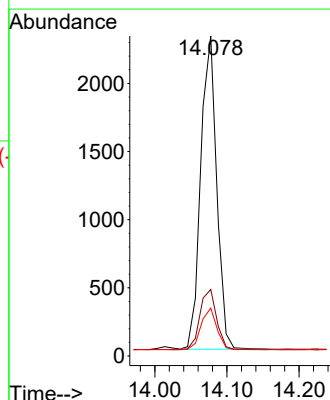
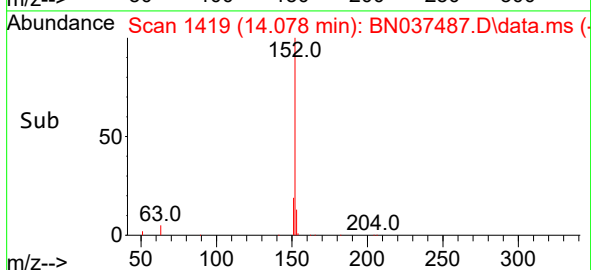
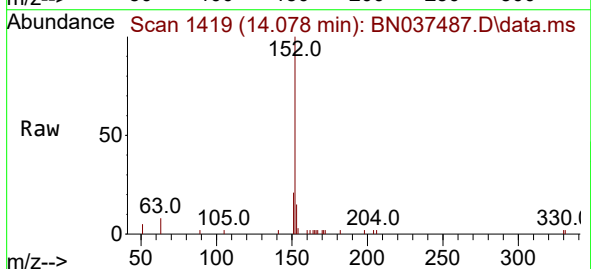
Instrument :
BNA_N
ClientSampleId :
PB168720BS

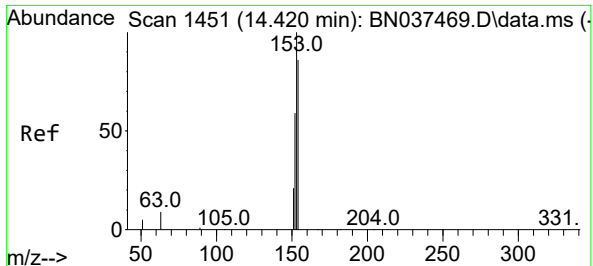
Tgt Ion:	172	Resp:	4148
Ion Ratio	Lower	Upper	
172	100		
171	35.9	29.8	44.8
170	24.5	20.0	30.0



#16
Acenaphthylene
Concen: 0.388 ng
RT: 14.078 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:	152	Resp:	3543
Ion Ratio	Lower	Upper	
152	100		
151	20.3	16.4	24.6
153	13.3	10.6	15.8

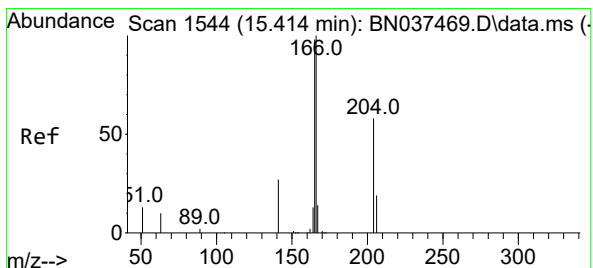
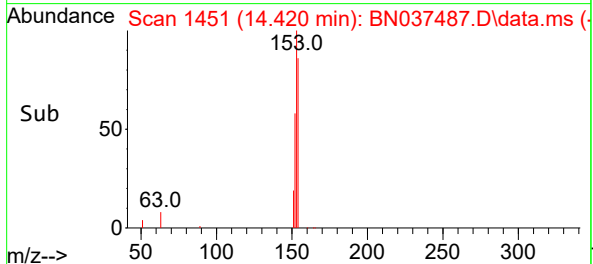
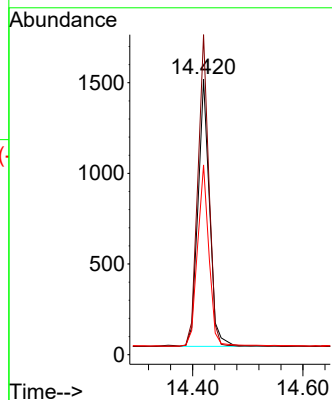
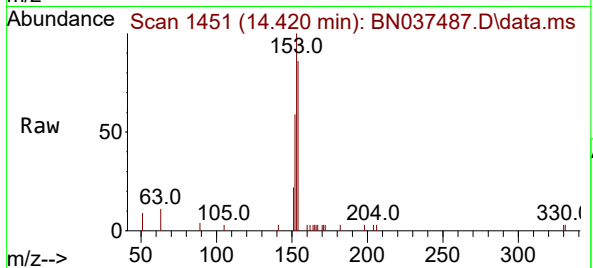




#17
Acenaphthene
Concen: 0.350 ng
RT: 14.420 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

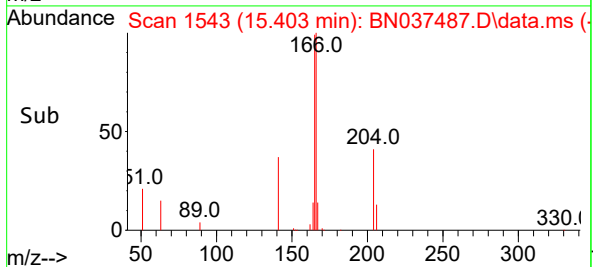
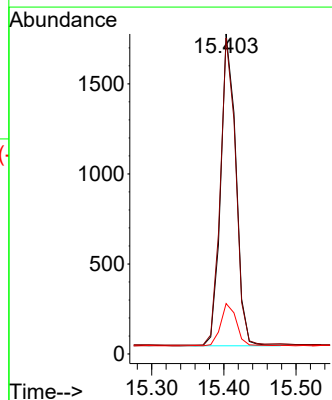
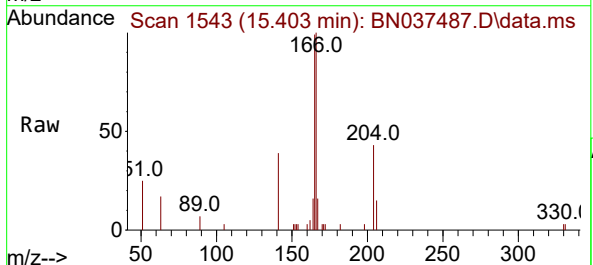
Instrument :
BNA_N
ClientSampleId :
PB168720BS

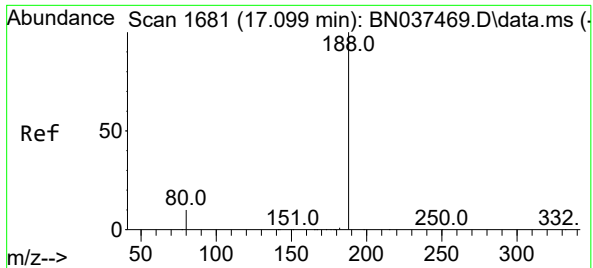
Tgt Ion:154 Resp: 2144
Ion Ratio Lower Upper
154 100
153 111.8 89.4 134.0
152 67.0 53.2 79.8



#18
Fluorene
Concen: 0.328 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:166 Resp: 2528
Ion Ratio Lower Upper
166 100
165 101.7 79.4 119.2
167 14.0 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Instrument :

BNA_N

ClientSampleId :

PB168720BS

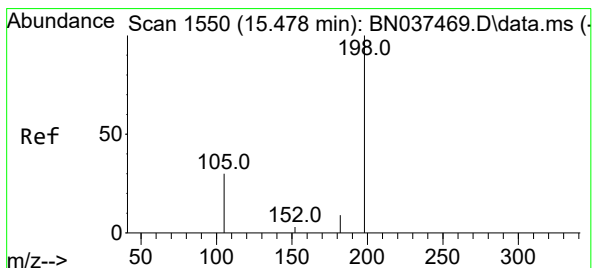
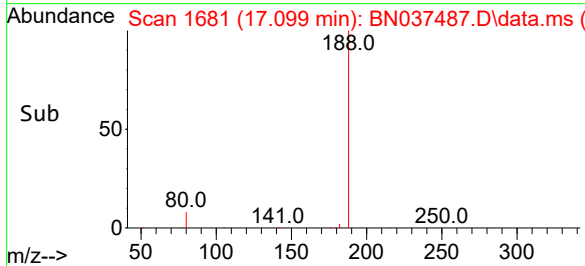
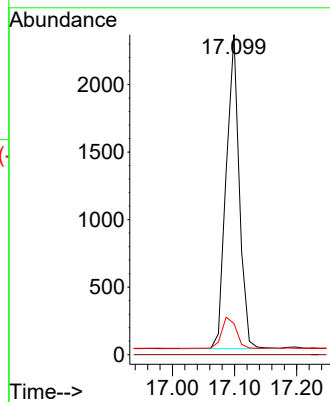
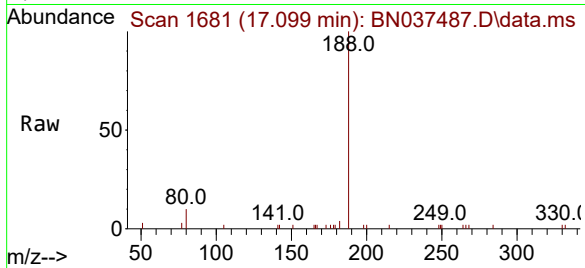
Tgt Ion:188 Resp: 3383

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.8 9.3 13.9



#20

4,6-Dinitro-2-methylphenol

Concen: 0.358 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

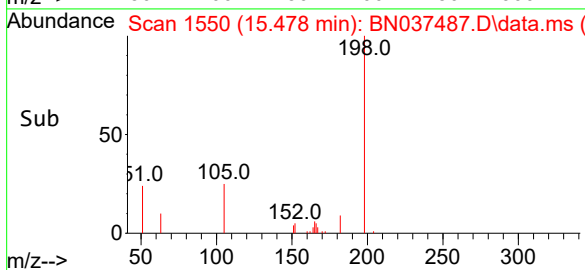
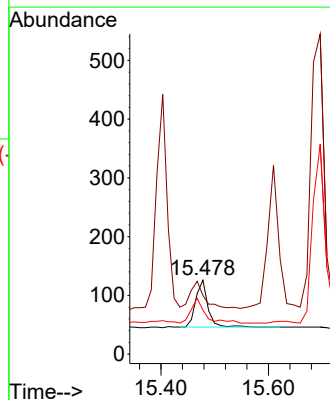
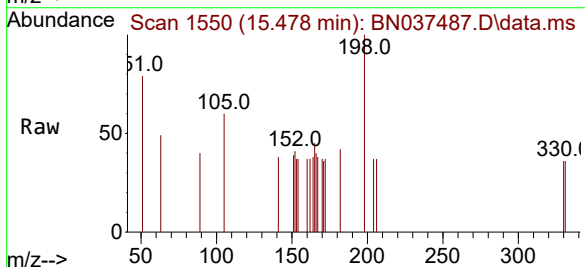
Tgt Ion:198 Resp: 136

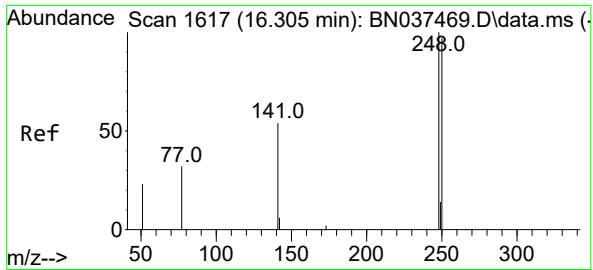
Ion Ratio Lower Upper

198 100

51 79.4 86.0 129.0#

105 59.5 53.0 79.4

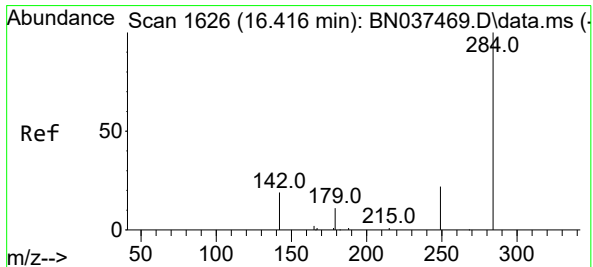
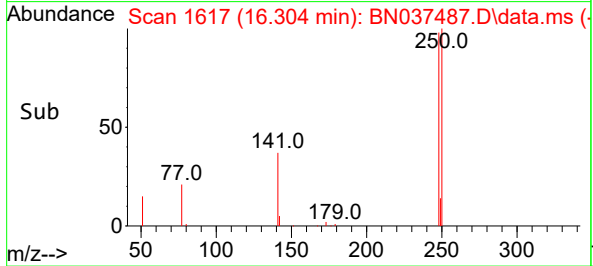
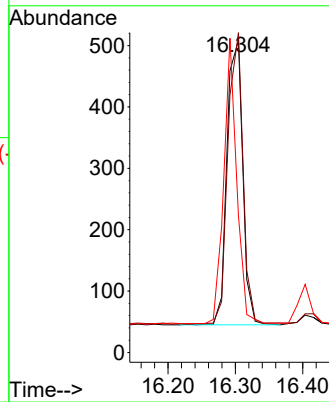
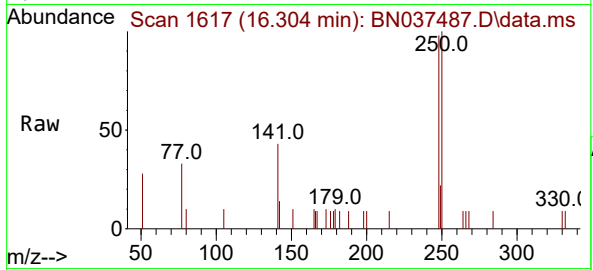




#21
4-Bromophenyl-phenylether
Concen: 0.356 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

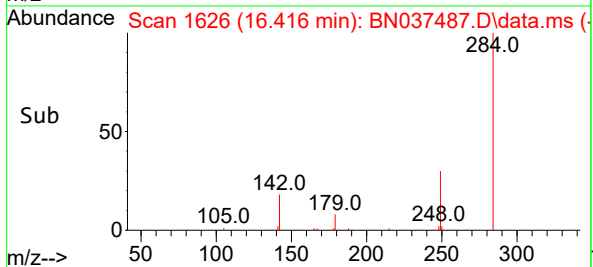
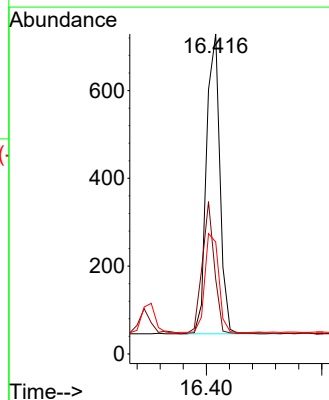
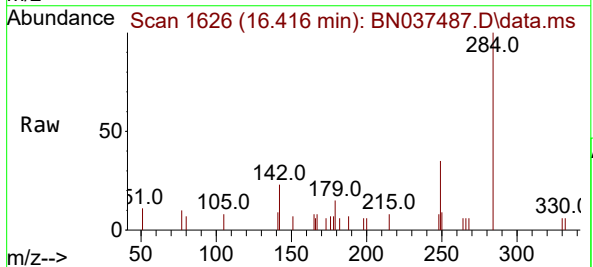
Instrument :
BNA_N
ClientSampleId :
PB168720BS

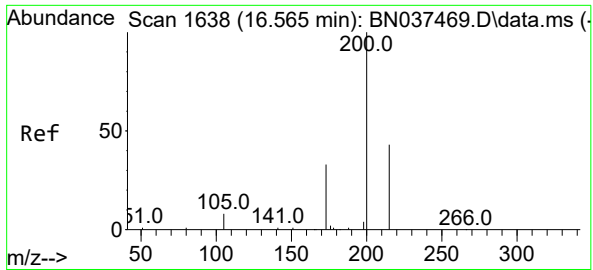
Tgt Ion:248 Resp: 751
Ion Ratio Lower Upper
248 100
250 102.6 77.8 116.6
141 43.9 45.9 68.9#



#22
Hexachlorobenzene
Concen: 0.378 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:284 Resp: 1101
Ion Ratio Lower Upper
284 100
142 40.1 31.3 46.9
249 34.4 26.6 40.0

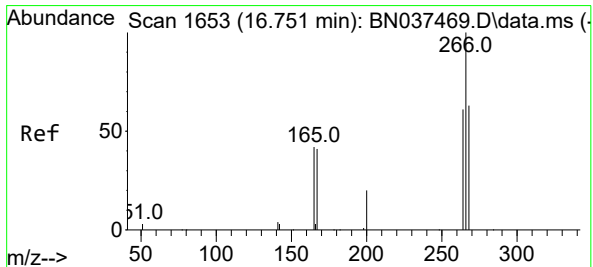
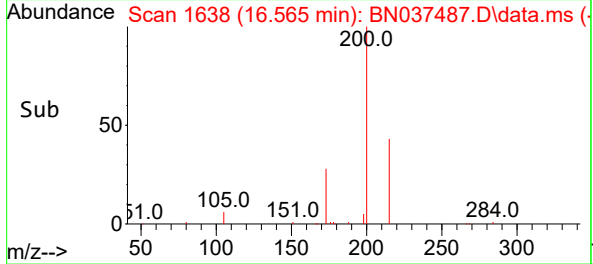
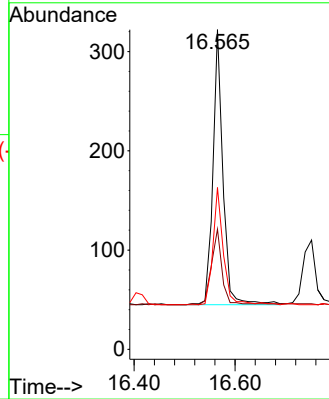
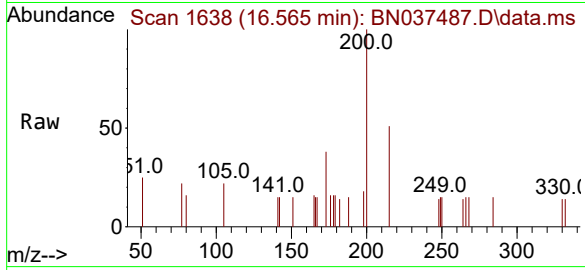




#23
Atrazine
Concen: 0.364 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

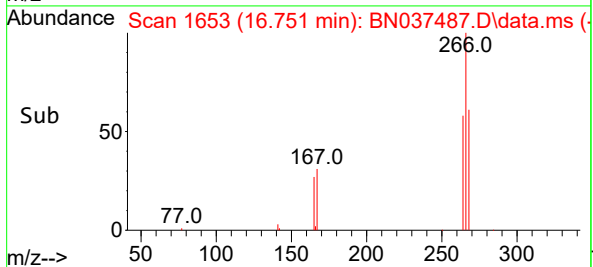
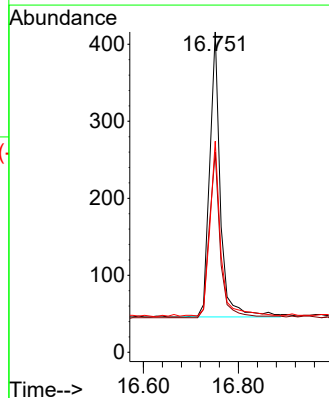
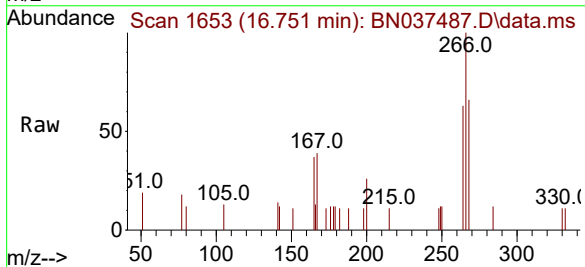
Instrument :
BNA_N
ClientSampleId :
PB168720BS

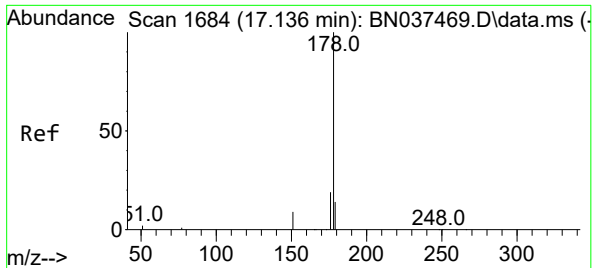
Tgt Ion	Ratio	Lower	Upper
200	100		
173	37.6	34.3	51.5
215	50.6	41.6	62.4



#24
Pentachlorophenol
Concen: 0.580 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion	Ratio	Lower	Upper
266	100		
264	58.9	47.5	71.3
268	60.7	50.6	76.0

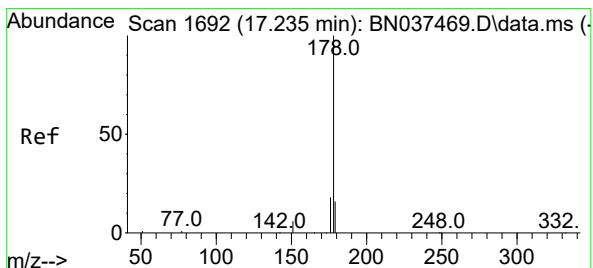
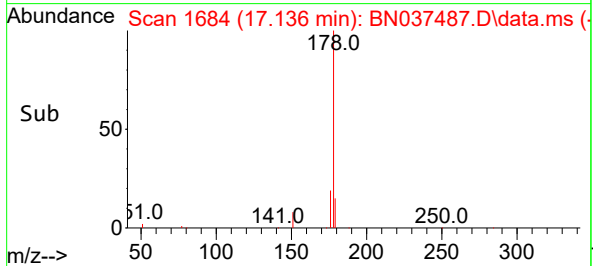
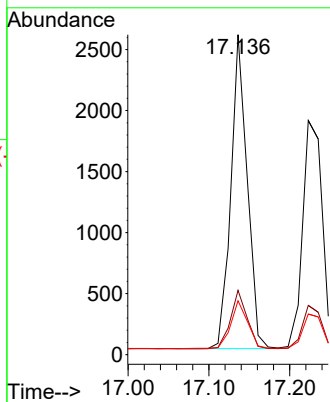
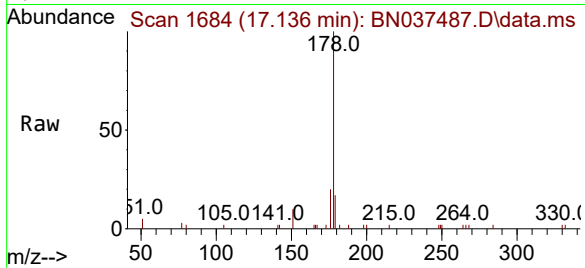




#25
Phenanthrene
Concen: 0.351 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

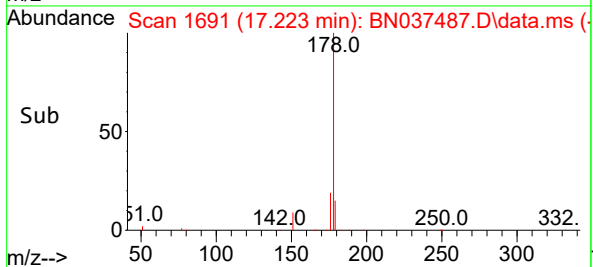
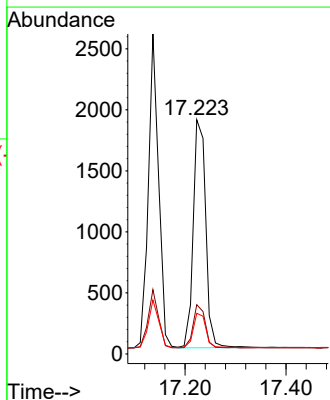
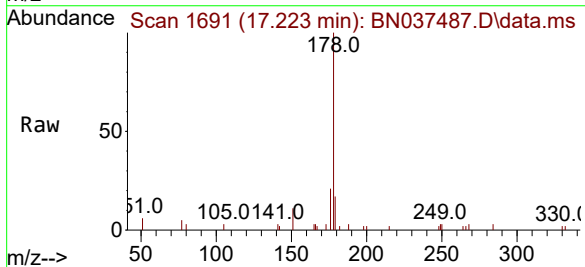
Instrument :
BNA_N
ClientSampleId :
PB168720BS

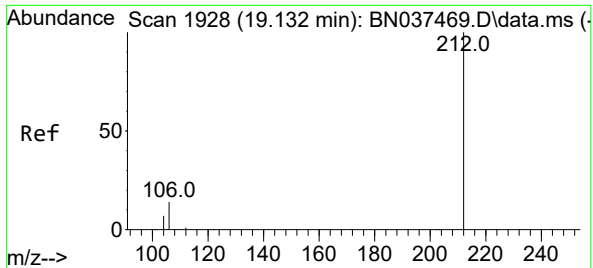
Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.1	22.7
179	15.9	12.2	18.2



#26
Anthracene
Concen: 0.346 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.012 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.4	14.9	22.3
179	15.5	12.3	18.5





#27

Fluoranthene-d10

Concen: 0.310 ng

RT: 19.127 min Scan# 1927

Delta R.T. -0.005 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Instrument :

BNA_N

ClientSampleId :

PB168720BS

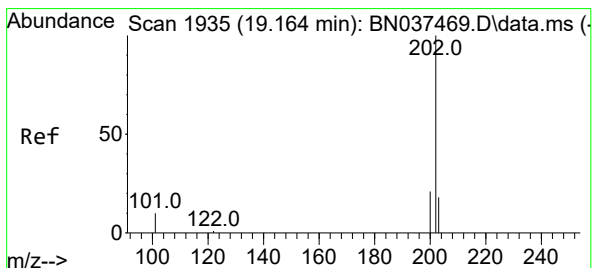
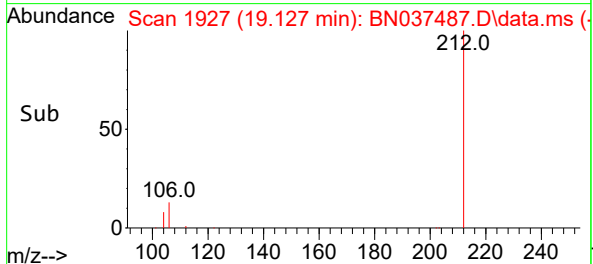
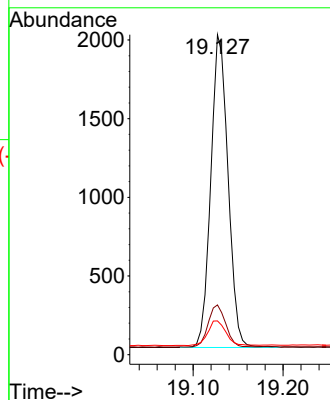
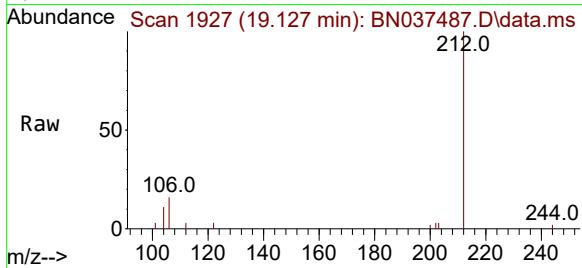
Tgt Ion:212 Resp: 2645

Ion Ratio Lower Upper

212 100

106 13.5 11.7 17.5

104 8.4 6.6 10.0



#28

Fluoranthene

Concen: 0.311 ng

RT: 19.160 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

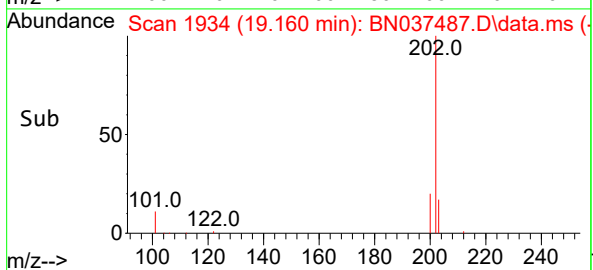
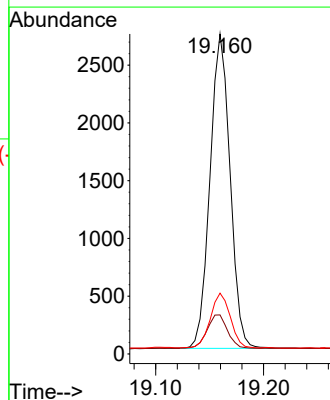
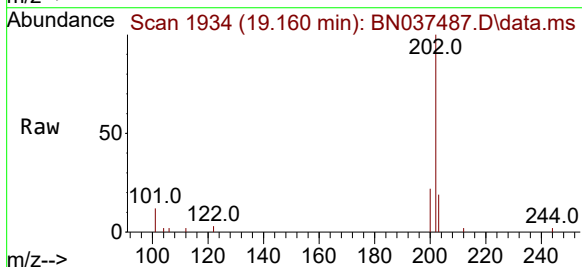
Tgt Ion:202 Resp: 3519

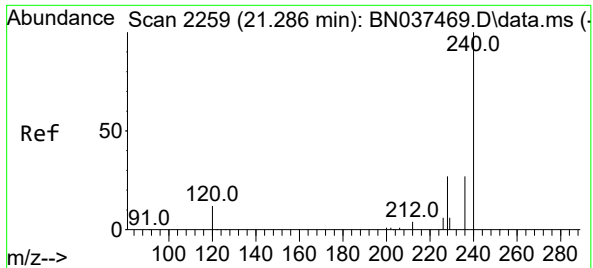
Ion Ratio Lower Upper

202 100

101 11.3 9.2 13.8

203 17.2 14.0 21.0

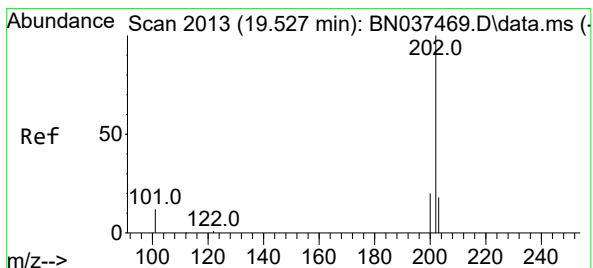
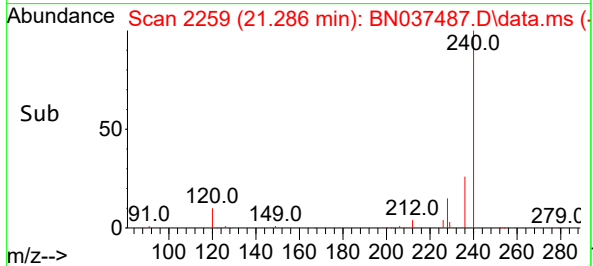
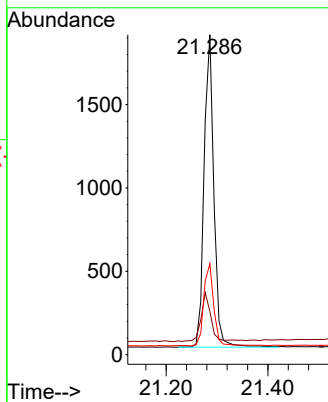
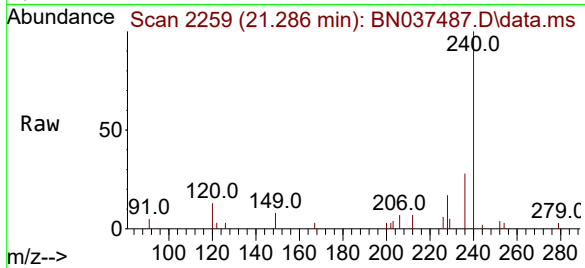




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.286 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

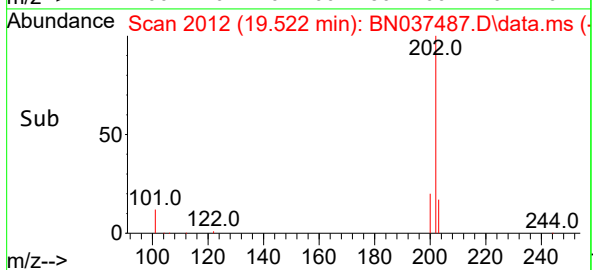
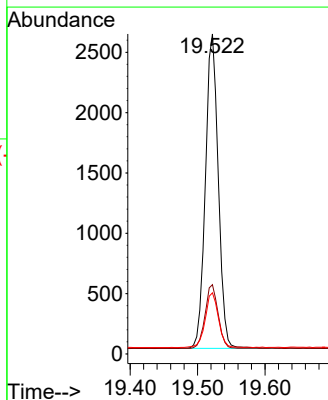
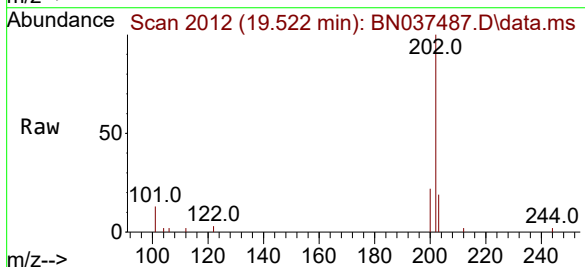
Instrument :
BNA_N
ClientSampleId :
PB168720BS

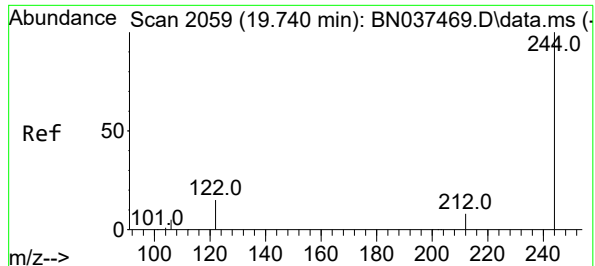
Tgt Ion	Ratio	Lower	Upper
240	100		
120	13.5	12.4	18.6
236	28.5	22.9	34.3



#30
Pyrene
Concen: 0.344 ng
RT: 19.522 min Scan# 2012
Delta R.T. -0.005 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

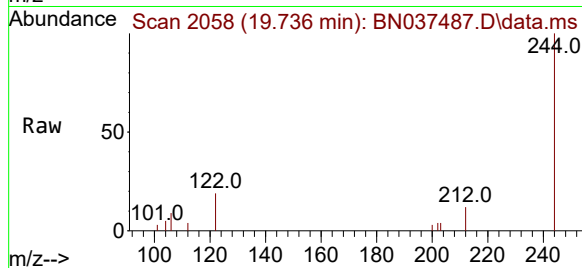
Tgt Ion	Ratio	Lower	Upper
202	100		
200	20.5	16.4	24.6
203	18.0	14.3	21.5



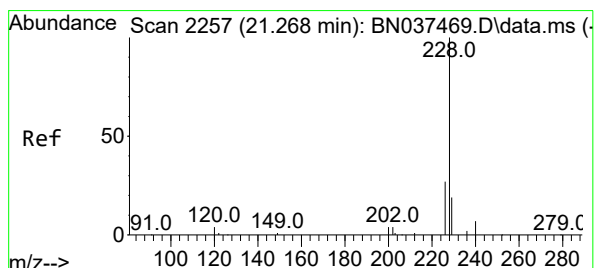
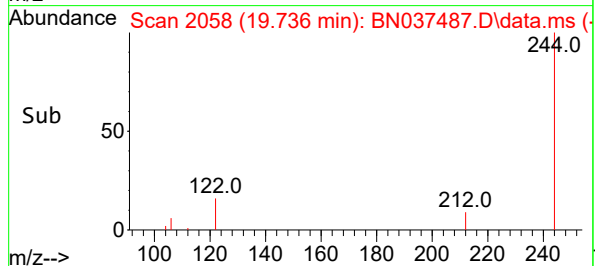
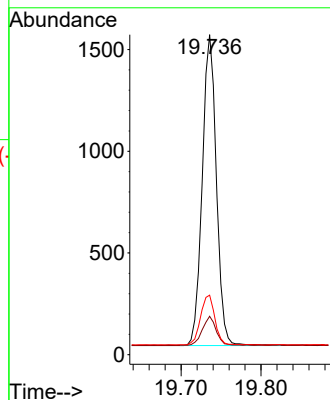


#31
 Terphenyl-d14
 Concen: 0.359 ng
 RT: 19.736 min Scan# 2058
 Delta R.T. -0.005 min
 Lab File: BN037487.D
 Acq: 14 Jul 2025 11:39

Instrument :
 BNA_N
 ClientSampleId :
 PB168720BS

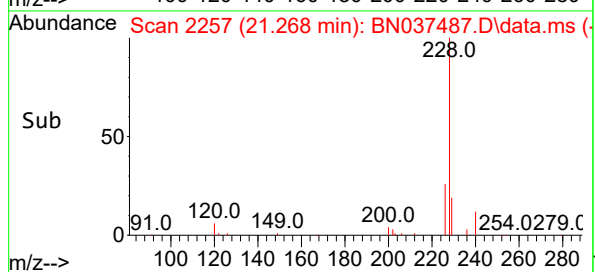
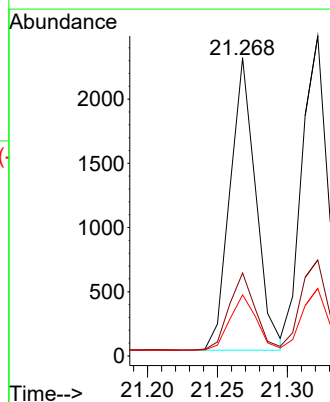
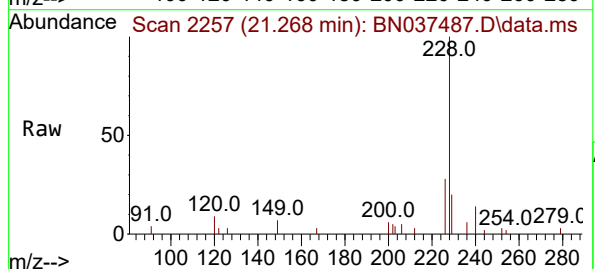


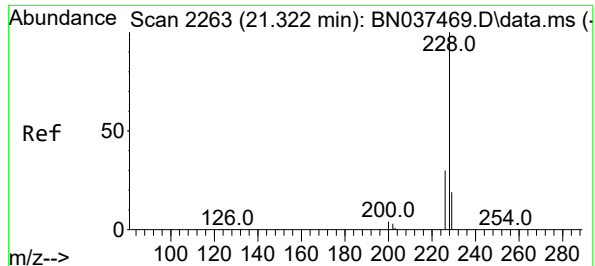
Tgt Ion:244 Resp: 1871
 Ion Ratio Lower Upper
 244 100
 212 12.0 8.7 13.1
 122 18.6 14.1 21.1



#32
 Benzo(a)anthracene
 Concen: 0.345 ng
 RT: 21.268 min Scan# 2257
 Delta R.T. -0.000 min
 Lab File: BN037487.D
 Acq: 14 Jul 2025 11:39

Tgt Ion:228 Resp: 2920
 Ion Ratio Lower Upper
 228 100
 226 27.9 22.7 34.1
 229 20.5 16.6 24.8





#33

Chrysene

Concen: 0.351 ng

RT: 21.322 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Instrument :

BNA_N

ClientSampleId :

PB168720BS

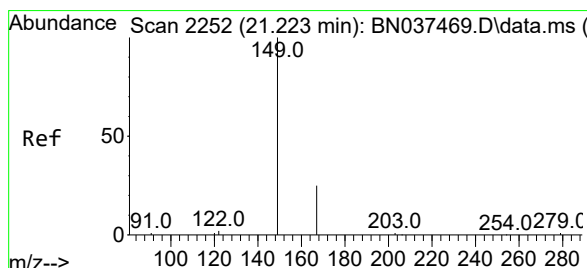
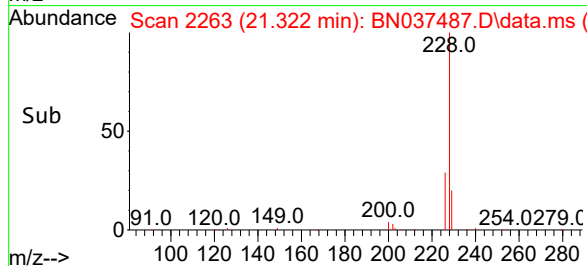
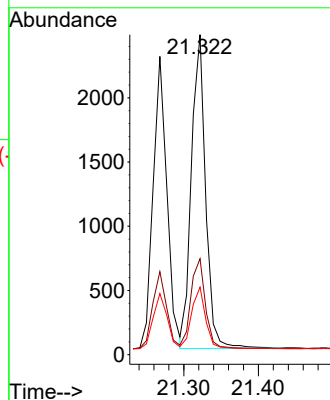
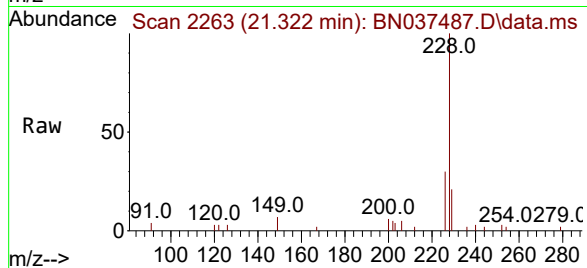
Tgt Ion:228 Resp: 3244

Ion Ratio Lower Upper

228 100

226 30.0 24.6 36.8

229 21.1 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.360 ng

RT: 21.223 min Scan# 2252

Delta R.T. -0.000 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

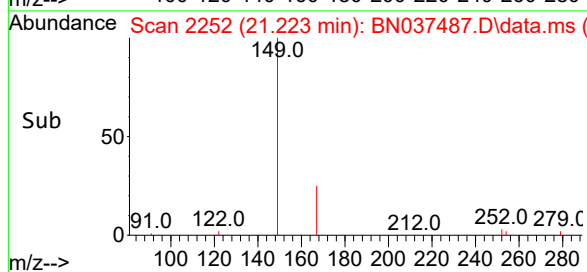
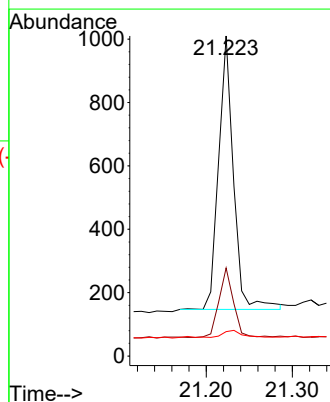
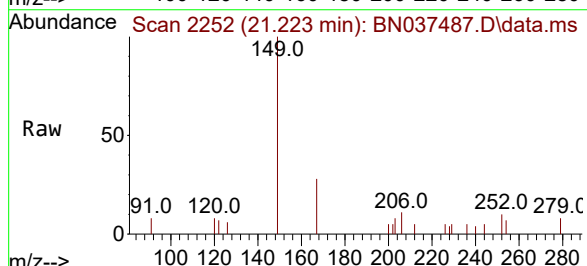
Tgt Ion:149 Resp: 1036

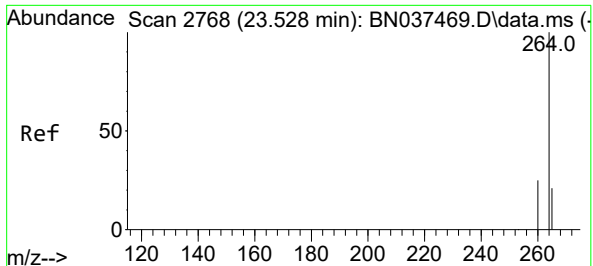
Ion Ratio Lower Upper

149 100

167 24.6 19.4 29.2

279 3.2 2.5 3.7

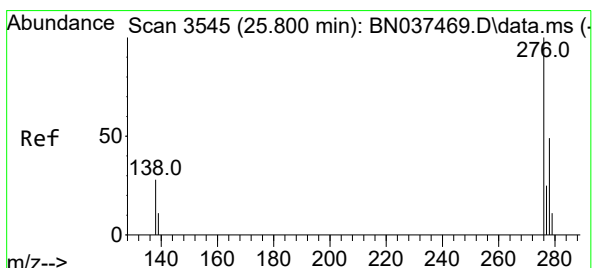
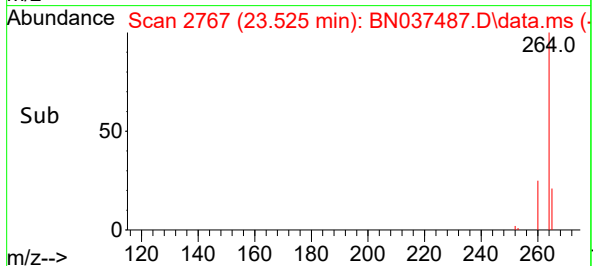
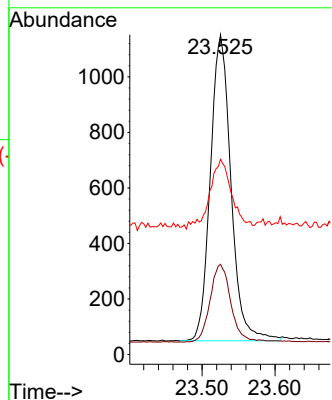
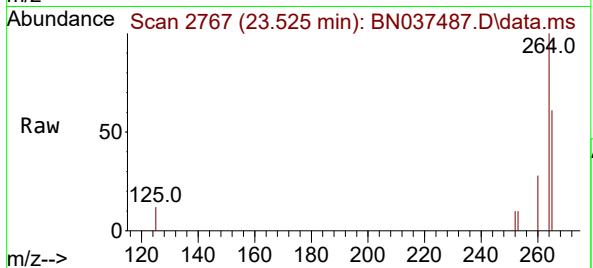




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

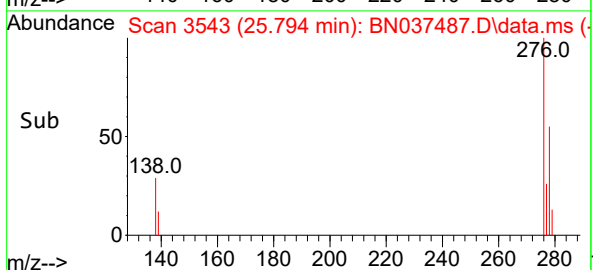
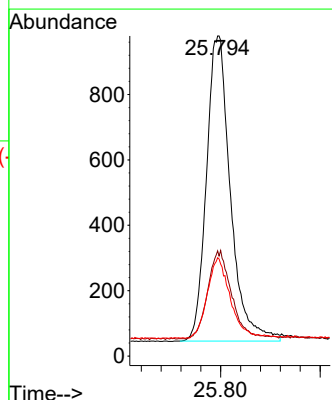
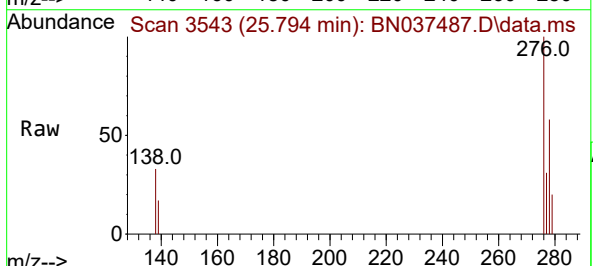
Instrument :
BNA_N
ClientSampleId :
PB168720BS

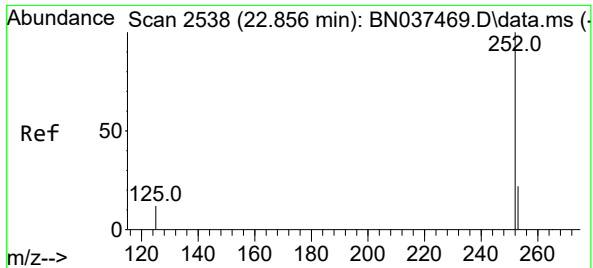
Tgt Ion:264 Resp: 2162
Ion Ratio Lower Upper
264 100
260 28.2 21.7 32.5
265 61.0 41.6 62.4



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.373 ng
RT: 25.794 min Scan# 3543
Delta R.T. -0.006 min
Lab File: BN037487.D
Acq: 14 Jul 2025 11:39

Tgt Ion:276 Resp: 3126
Ion Ratio Lower Upper
276 100
138 28.7 23.4 35.2
277 25.3 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.358 ng

RT: 22.853 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Instrument :

BNA_N

ClientSampleId :

PB168720BS

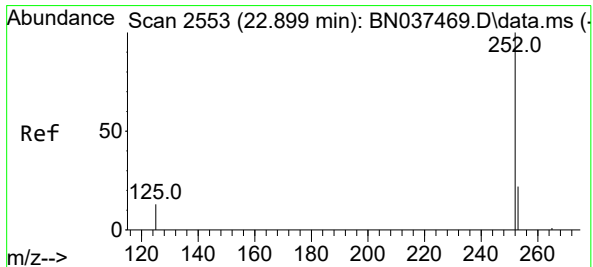
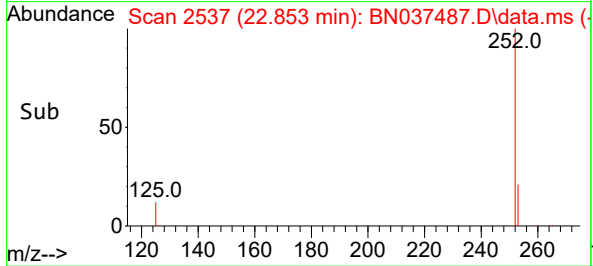
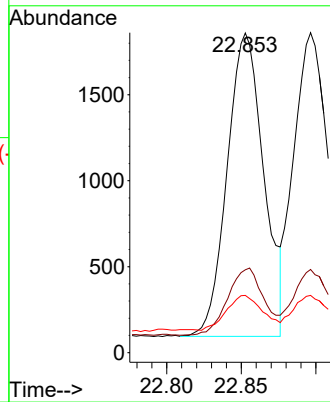
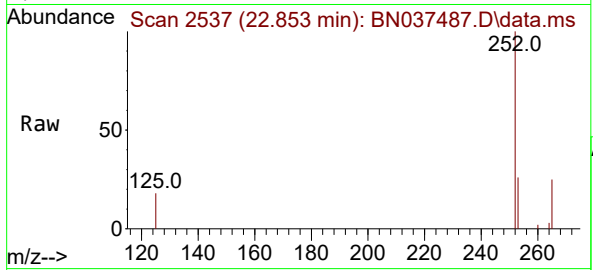
Tgt Ion:252 Resp: 3012

Ion Ratio Lower Upper

252 100

253 25.9 20.1 30.1

125 17.9 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.348 ng

RT: 22.897 min Scan# 2552

Delta R.T. -0.003 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

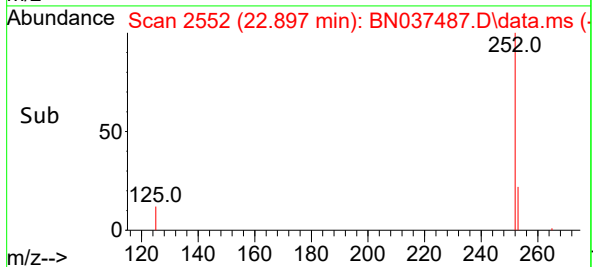
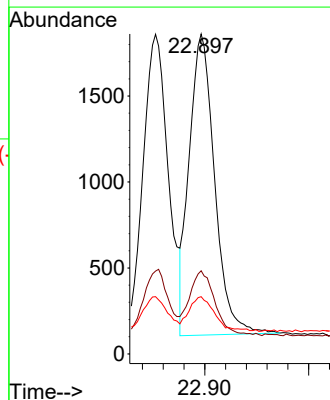
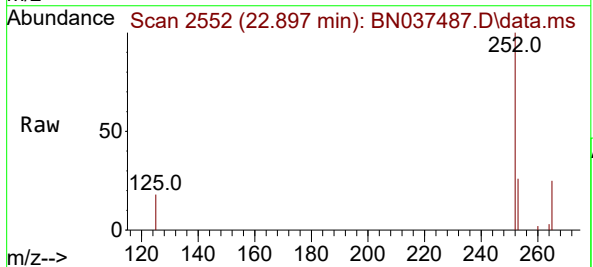
Tgt Ion:252 Resp: 2969

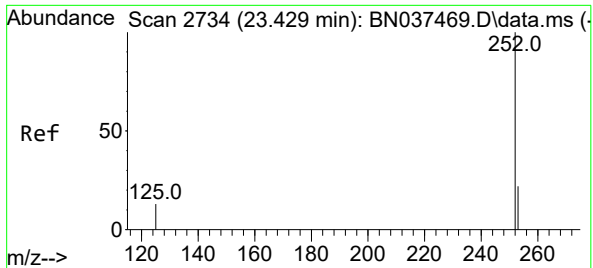
Ion Ratio Lower Upper

252 100

253 26.0 20.4 30.6

125 17.9 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.378 ng

RT: 23.426 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

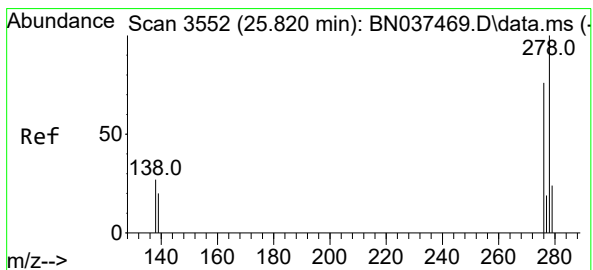
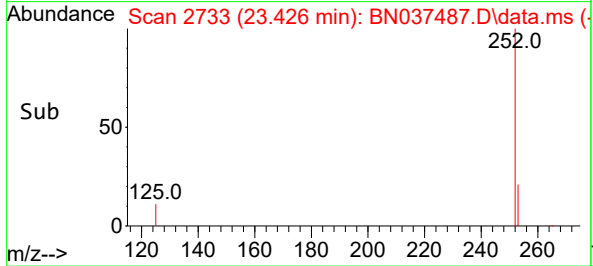
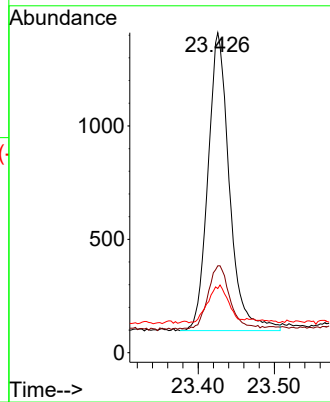
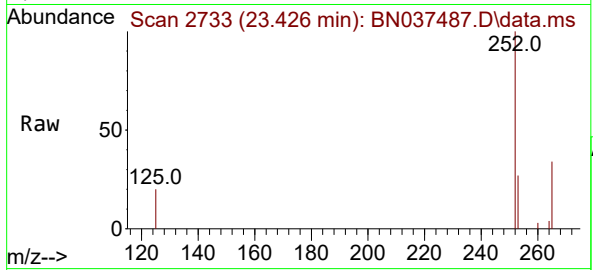
Instrument :

BNA_N

ClientSampleId :

PB168720BS

Tgt Ion:252	Resp:	2561
Ion Ratio	Lower	Upper
252	100	
253	27.1	21.8 32.6
125	20.1	16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.354 ng

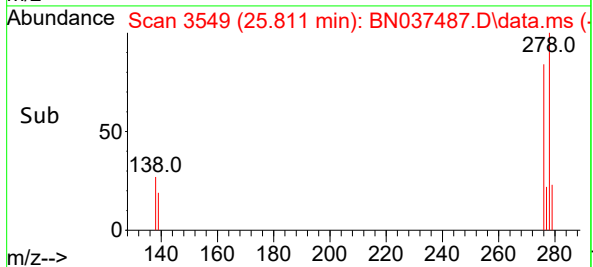
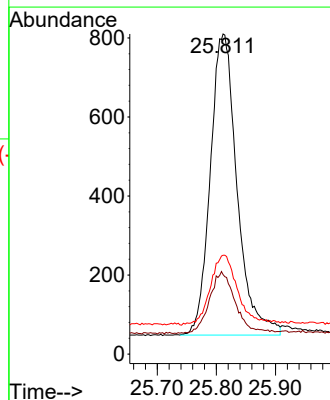
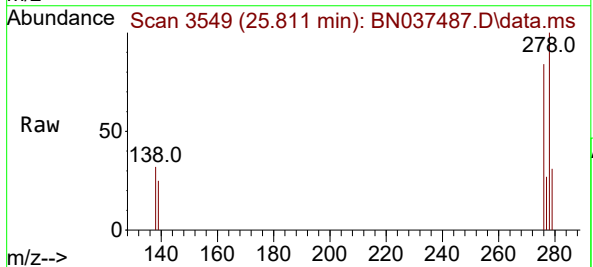
RT: 25.811 min Scan# 3549

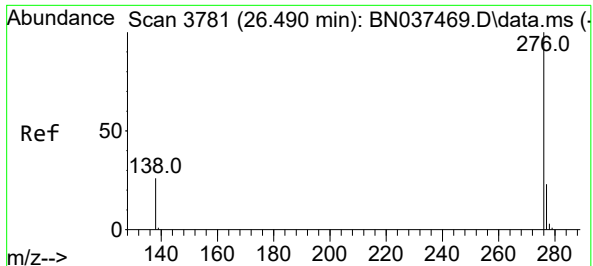
Delta R.T. -0.009 min

Lab File: BN037487.D

Acq: 14 Jul 2025 11:39

Tgt Ion:278	Resp:	2399
Ion Ratio	Lower	Upper
278	100	
139	24.8	19.9 29.9
279	30.9	24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.374 ng

RT: 26.481 min Scan# 31

Delta R.T. -0.009 min

Lab File: BN037487.D

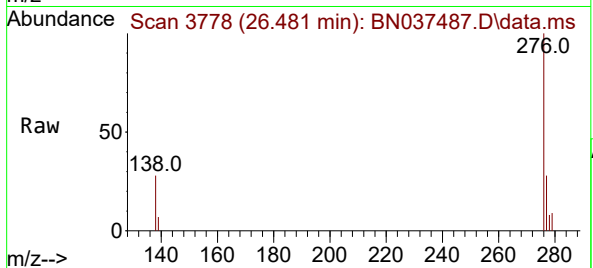
Acq: 14 Jul 2025 11:39

Instrument :

BNA_N

ClientSampleId :

PB168720BS



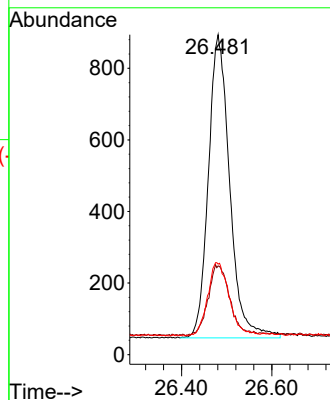
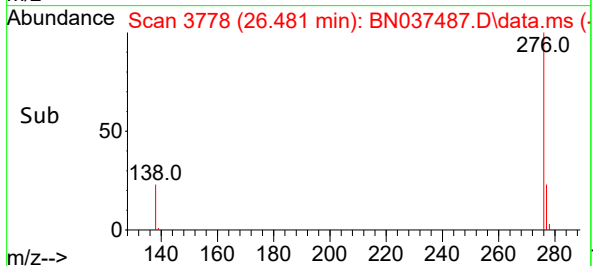
Tgt Ion:276 Resp: 2774

Ion Ratio Lower Upper

276 100

277 27.7 21.7 32.5

138 28.3 24.3 36.5



Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB168720BSD	SDG No.:	Q2488
Lab Sample ID:	PB168720BSD	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
BN037488.D	1	07/03/25 08:58	07/14/25 12:15	PB168720

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		91%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1910	7.732				
1146-65-2	Naphthalene-d8	4320	10.509				
15067-26-2	Acenaphthene-d10	1930	14.356				
1517-22-2	Phenanthrene-d10	3180	17.099				
1719-03-5	Chrysene-d12	2260	21.286				
1520-96-3	Perylene-d12	1940	23.525				

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\BN071425\
 Data File : BN037488.D
 Acq On : 14 Jul 2025 12:15
 Operator : RC/JU
 Sample : PB168720BSD
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD

Quant Time: Jul 14 12:50:28 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

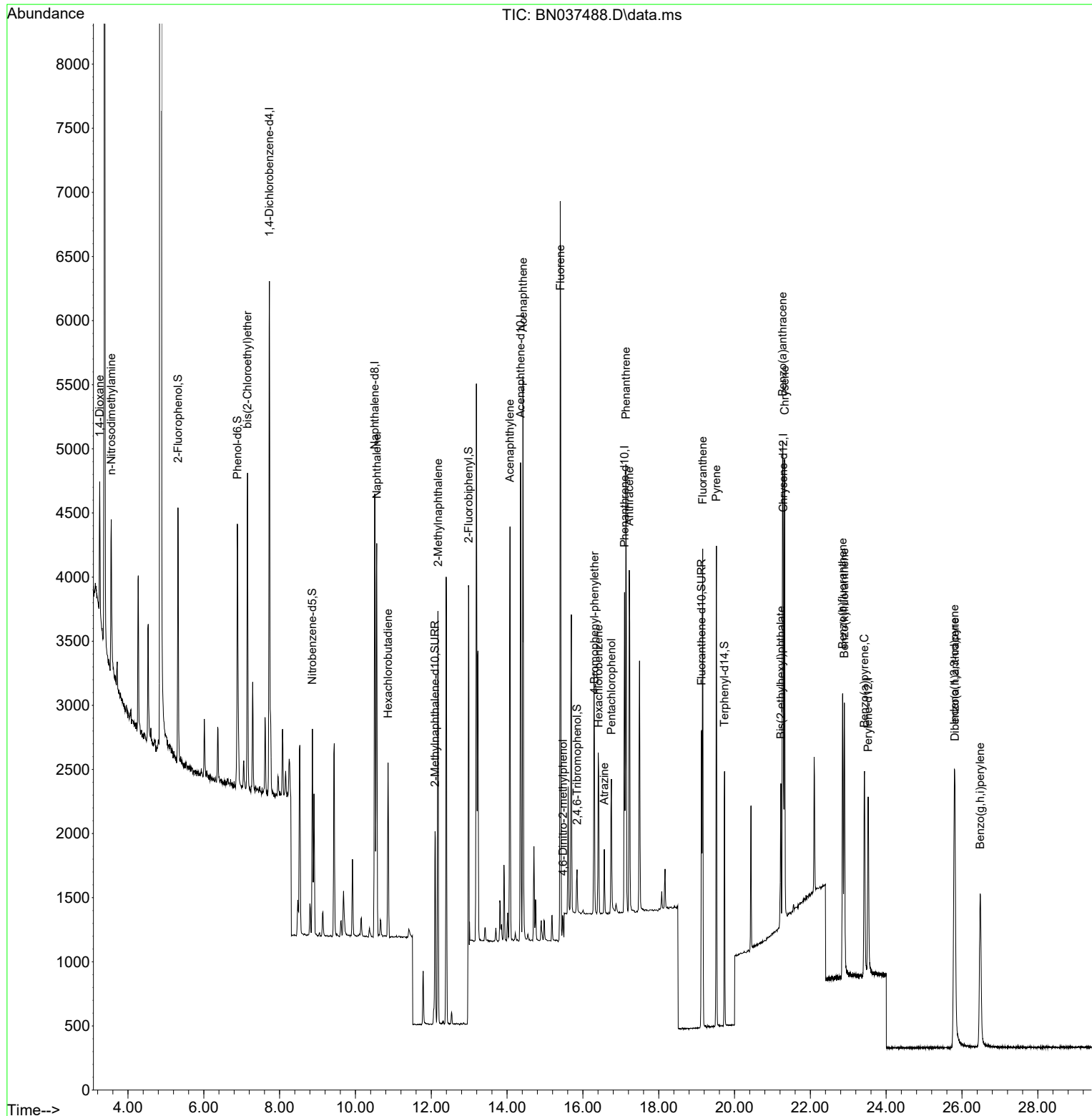
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1906	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4315	0.400	ng	0.00
13) Acenaphthene-d10	14.356	164	1930	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3183	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2258	0.400	ng	0.00
35) Perylene-d12	23.525	264	1944	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1467	0.331	ng	0.00
5) Phenol-d6	6.887	99	1734	0.311	ng	0.00
8) Nitrobenzene-d5	8.865	82	1147	0.366	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	2001m	0.341	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	194	0.296	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	3931	0.357	ng	0.00
27) Fluoranthene-d10	19.132	212	2563	0.319	ng	0.00
31) Terphenyl-d14	19.736	244	1802	0.382	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	542	0.303	ng	# 71
3) n-Nitrosodimethylamine	3.557	42	951	0.397	ng	# 89
6) bis(2-Chloroethyl)ether	7.154	93	1665	0.357	ng	98
9) Naphthalene	10.562	128	4070	0.351	ng	100
10) Hexachlorobutadiene	10.861	225	1073	0.385	ng	# 100
12) 2-Methylnaphthalene	12.177	142	2196	0.302	ng	99
16) Acenaphthylene	14.078	152	3342	0.380	ng	100
17) Acenaphthene	14.420	154	1994	0.338	ng	98
18) Fluorene	15.403	166	2406	0.324	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	143	0.400	ng	# 85
21) 4-Bromophenyl-phenylether	16.305	248	707	0.356	ng	# 87
22) Hexachlorobenzene	16.416	284	1046	0.382	ng	99
23) Atrazine	16.565	200	366	0.371	ng	96
24) Pentachlorophenol	16.751	266	544	0.577	ng	97
25) Phenanthrene	17.136	178	3406	0.351	ng	99
26) Anthracene	17.223	178	3043	0.348	ng	99
28) Fluoranthene	19.160	202	3286	0.309	ng	99
30) Pyrene	19.522	202	3218	0.354	ng	100
32) Benzo(a)anthracene	21.268	228	2755	0.360	ng	99
33) Chrysene	21.322	228	3058	0.366	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	948	0.365	ng	99
36) Indeno(1,2,3-cd)pyrene	25.800	276	2947	0.391	ng	98
37) Benzo(b)fluoranthene	22.853	252	2832	0.375	ng	97
38) Benzo(k)fluoranthene	22.897	252	2765	0.361	ng	99
39) Benzo(a)pyrene	23.426	252	2429	0.399	ng	99
40) Dibenzo(a,h)anthracene	25.814	278	2257	0.371	ng	99
41) Benzo(g,h,i)perylene	26.481	276	2561	0.384	ng	99

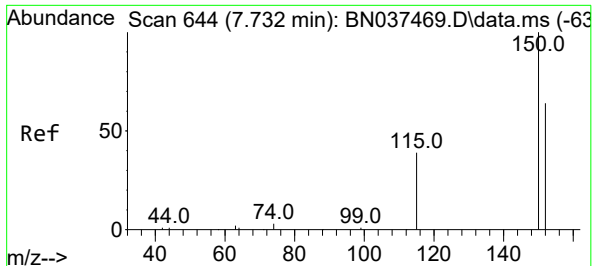
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037488.D
Acq On : 14 Jul 2025 12:15
Operator : RC/JU
Sample : PB168720BSD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB168720BSD

Quant Time: Jul 14 12:50:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration

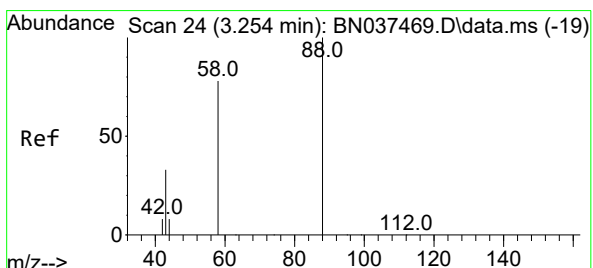
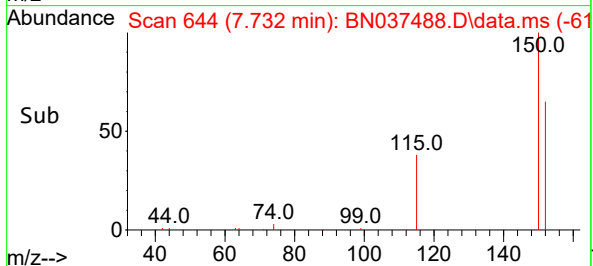
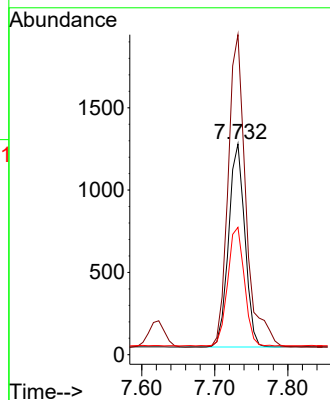
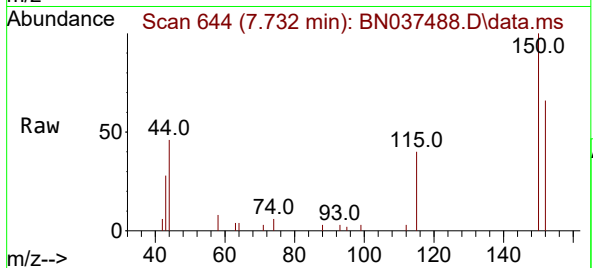




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.732 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

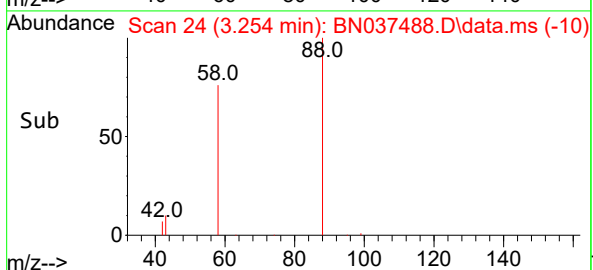
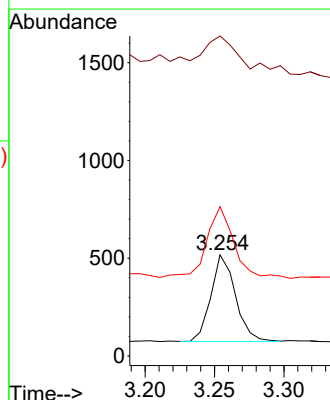
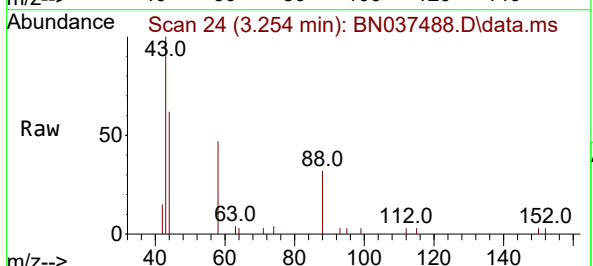
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

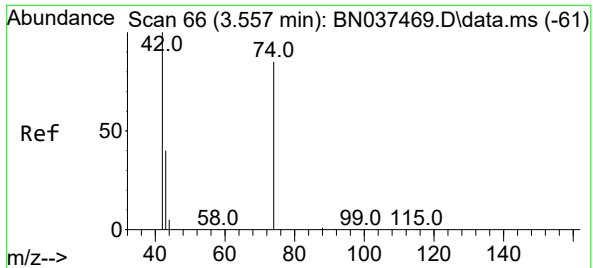
Tgt Ion:152 Resp: 1906
Ion Ratio Lower Upper
152 100
150 151.9 122.5 183.7
115 60.5 49.9 74.9



#2
1,4-Dioxane
Concen: 0.303 ng
RT: 3.254 min Scan# 24
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion: 88 Resp: 542
Ion Ratio Lower Upper
88 100
43 74.7 30.7 46.1#
58 93.5 65.0 97.4

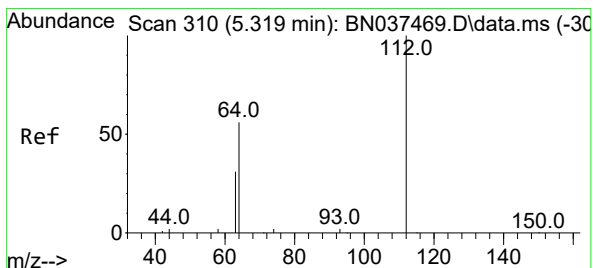
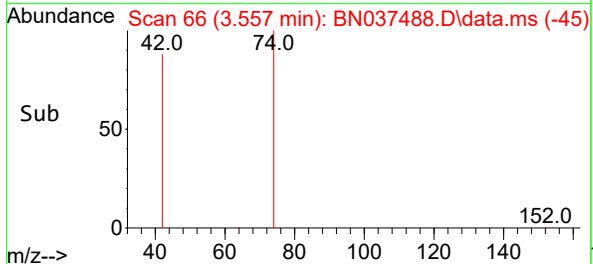
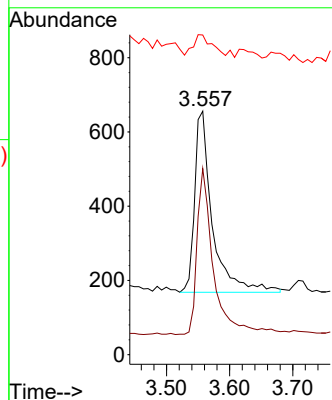
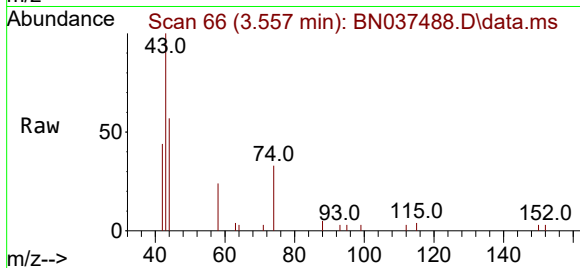




#3
n-Nitrosodimethylamine
Concen: 0.397 ng
RT: 3.557 min Scan# 60
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

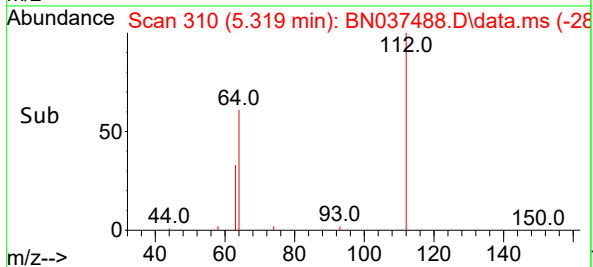
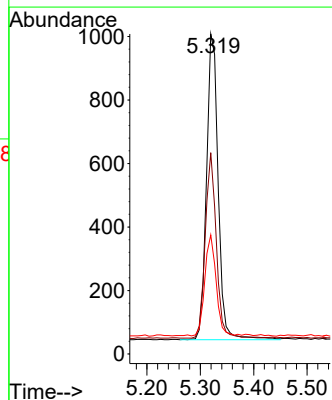
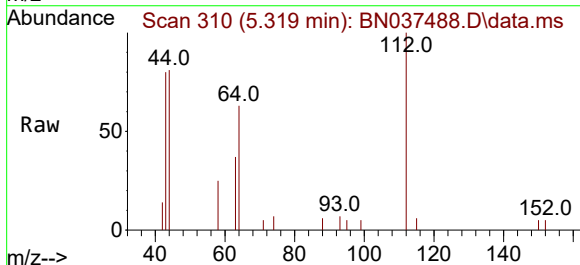
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

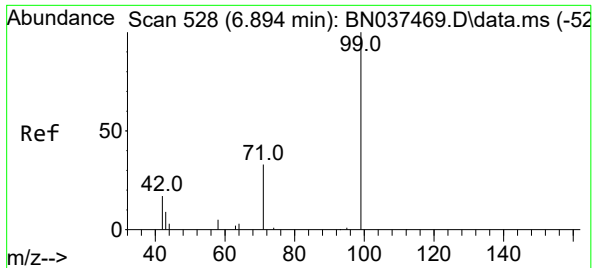
Tgt Ion: 42 Resp: 951
Ion Ratio Lower Upper
42 100
74 82.6 74.9 112.3
44 11.3 7.2 10.8#



#4
2-Fluorophenol
Concen: 0.331 ng
RT: 5.319 min Scan# 310
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion: 112 Resp: 1467
Ion Ratio Lower Upper
112 100
64 57.6 45.4 68.0
63 32.4 24.7 37.1

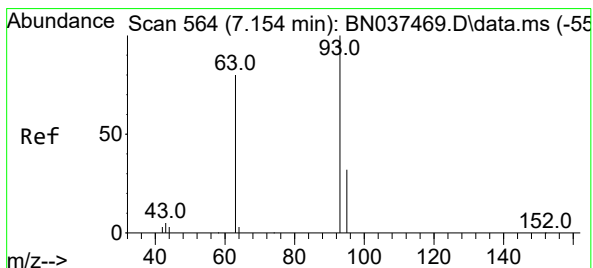
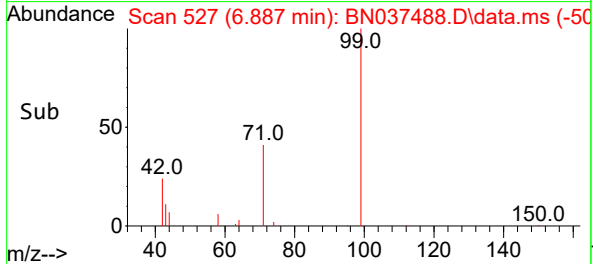
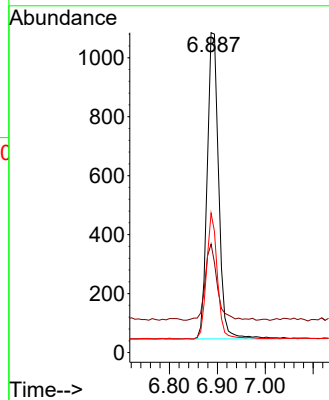
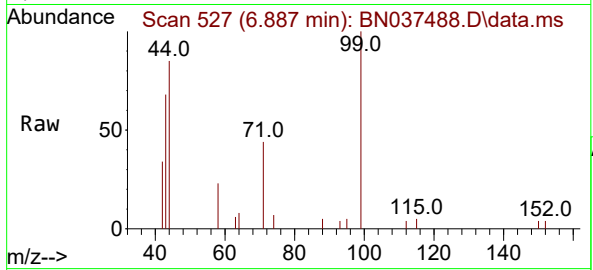




#5
Phenol-d6
Concen: 0.311 ng
RT: 6.887 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

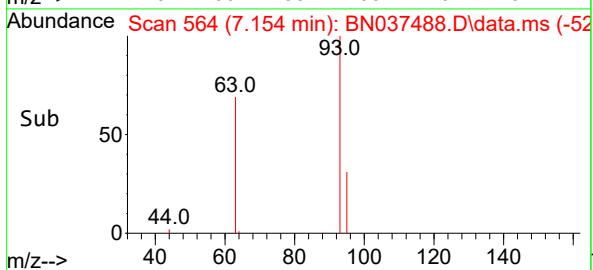
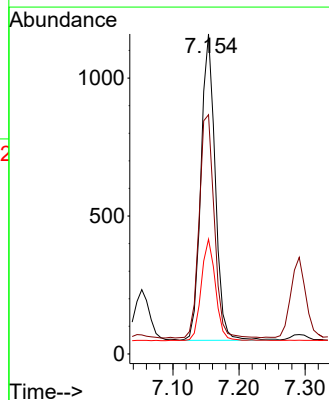
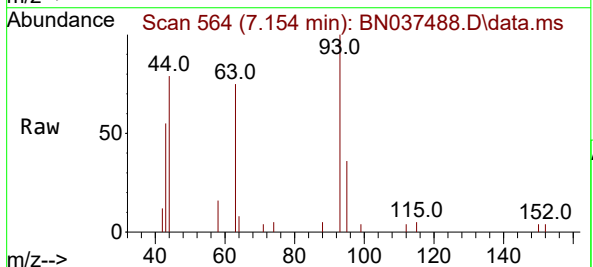
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

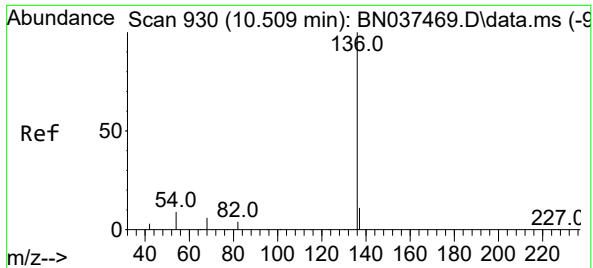
Tgt Ion: 99 Resp: 1734
Ion Ratio Lower Upper
99 100
42 25.7 19.5 29.3
71 38.5 29.4 44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.357 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion: 93 Resp: 1665
Ion Ratio Lower Upper
93 100
63 77.4 60.8 91.2
95 33.0 25.6 38.4

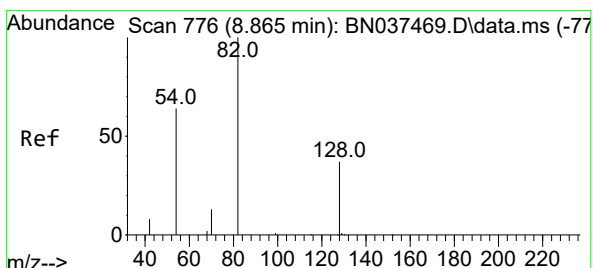
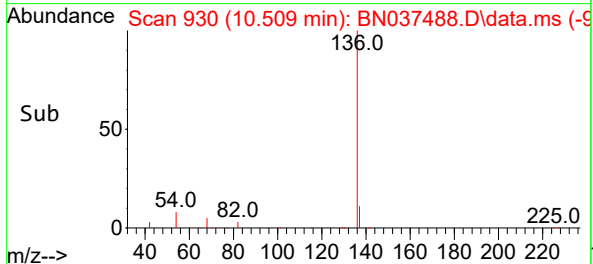
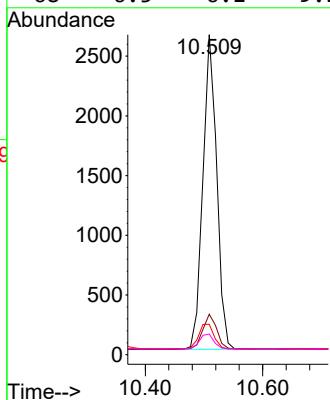
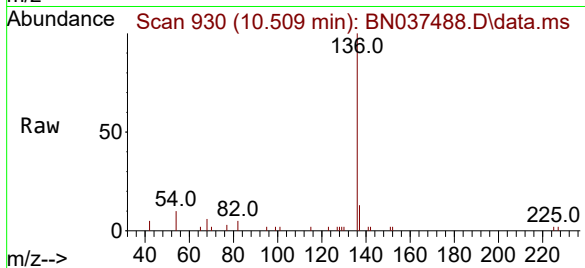




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

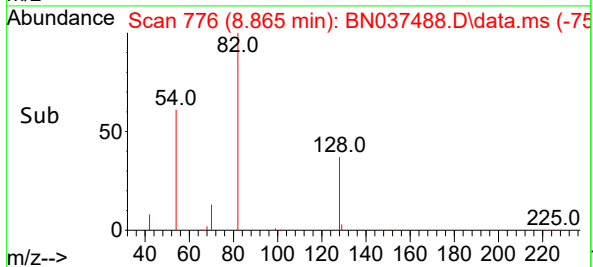
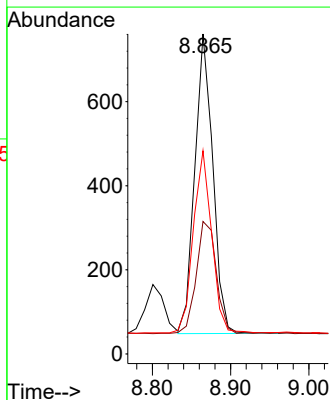
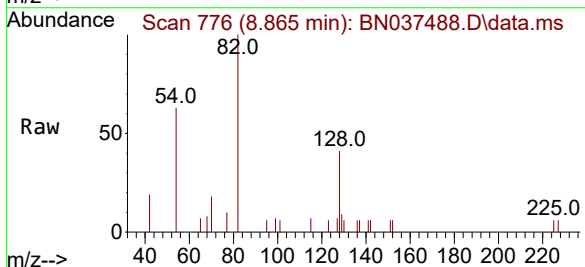
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

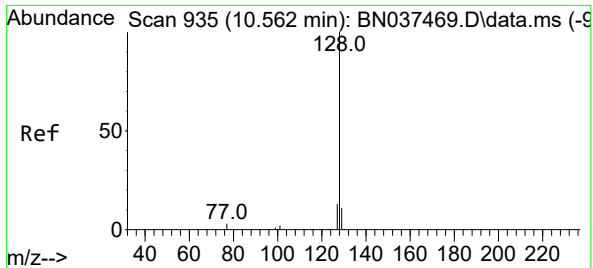
Tgt Ion:	136	Resp:	4315
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.0	15.0
54	9.5	9.0	13.6
68	6.5	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.366 ng
RT: 8.865 min Scan# 776
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:	82	Resp:	1147
Ion	Ratio	Lower	Upper
82	100		
128	41.4	33.1	49.7
54	63.5	53.0	79.4

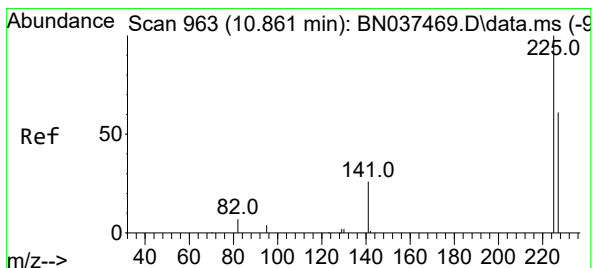
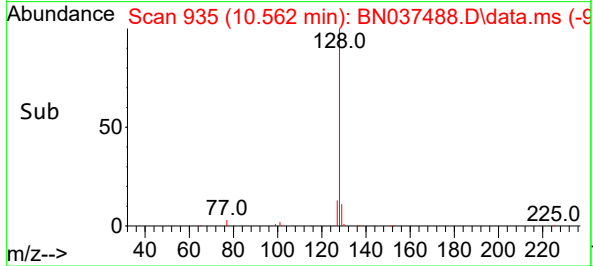
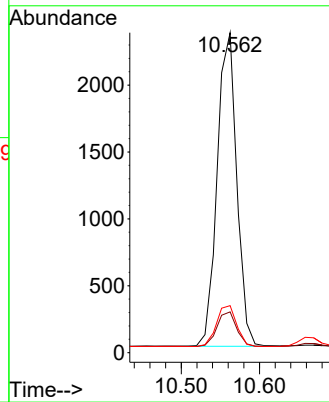
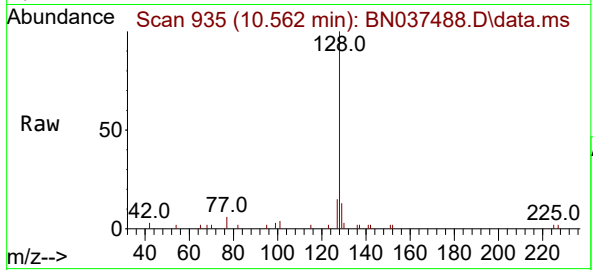




#9
Naphthalene
Concen: 0.351 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

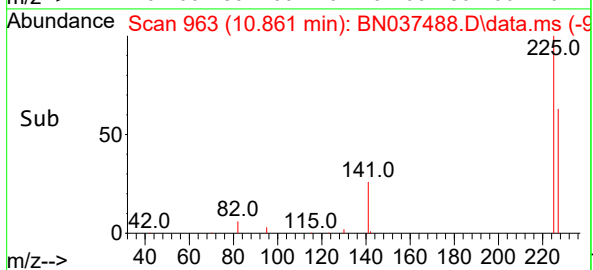
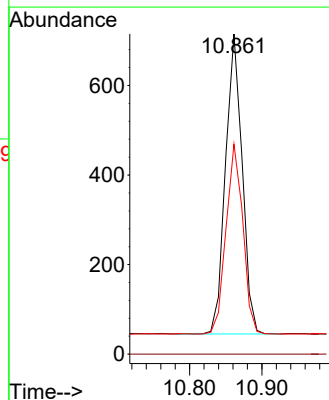
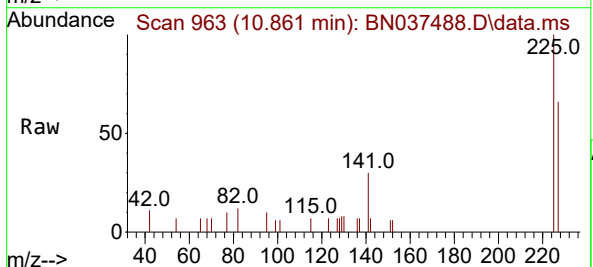
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

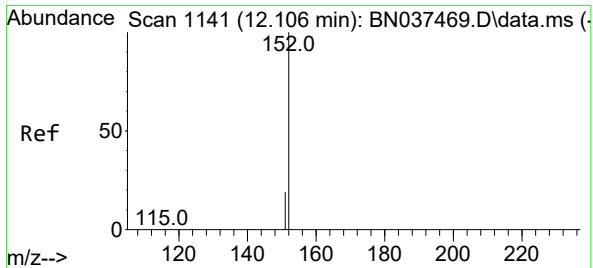
Tgt Ion:	128	Resp:	4070
Ion	Ratio	Lower	Upper
128	100		
129	12.8	10.2	15.2
127	14.7	11.8	17.6



#10
Hexachlorobutadiene
Concen: 0.385 ng
RT: 10.861 min Scan# 963
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:	225	Resp:	1073
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.9	51.4	77.2

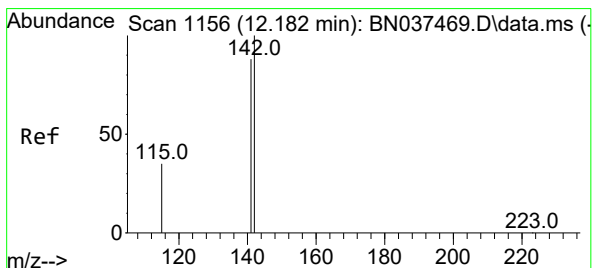
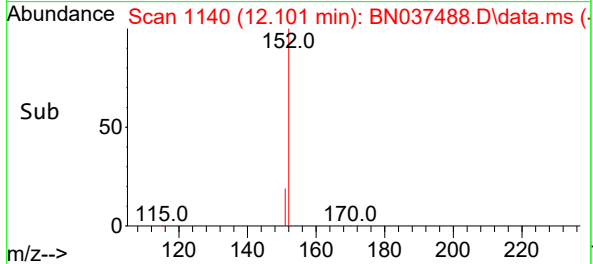
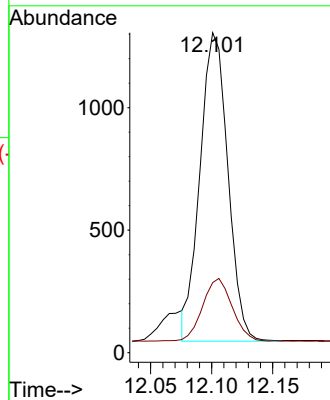
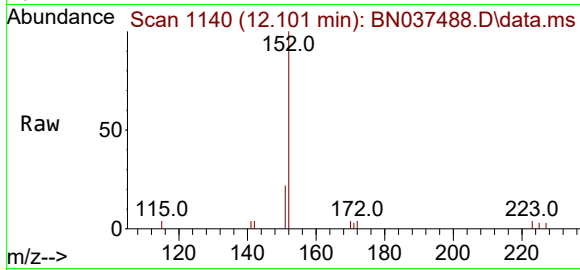




#11
2-Methylnaphthalene-d10
Concen: 0.341 ng m
RT: 12.101 min Scan# 1140
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

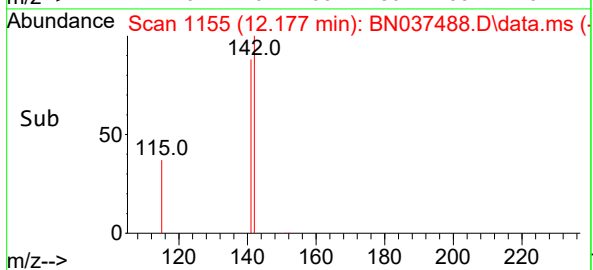
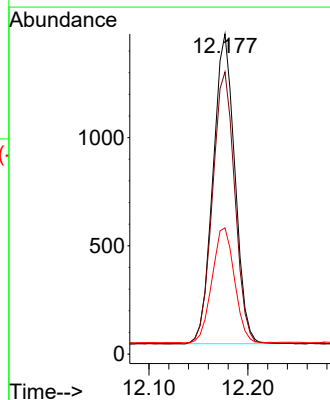
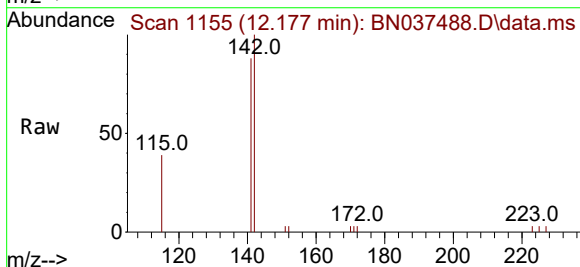
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

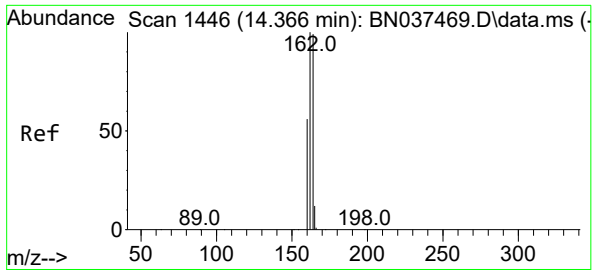
Tgt Ion:152 Resp: 2001
Ion Ratio Lower Upper
152 100
151 22.2 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.302 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:142 Resp: 2196
Ion Ratio Lower Upper
142 100
141 88.2 70.6 105.8
115 39.4 30.0 45.0

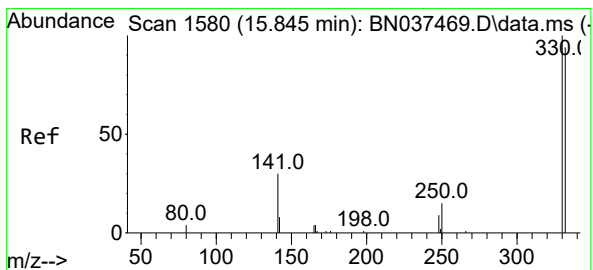
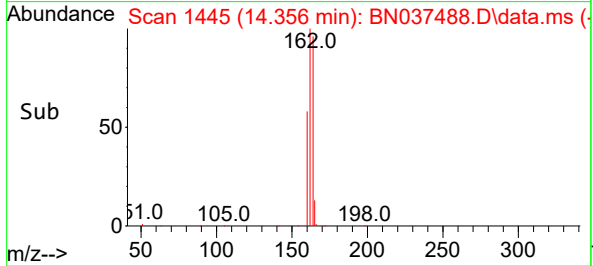
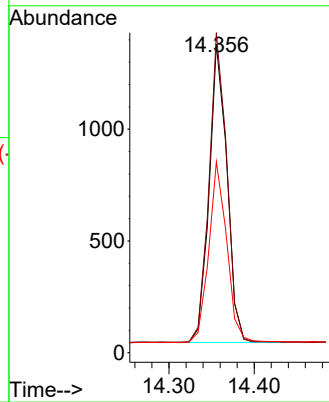
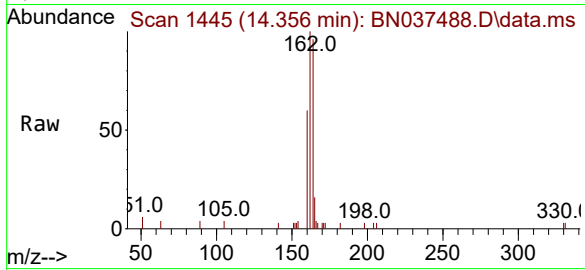




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.356 min Scan# 1445
Delta R.T. -0.011 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

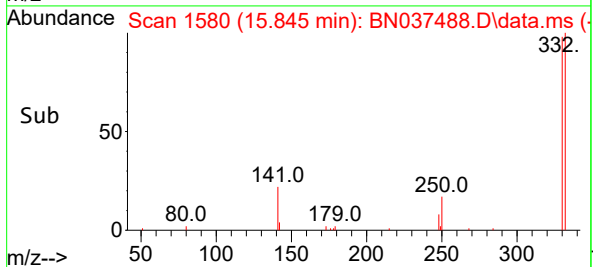
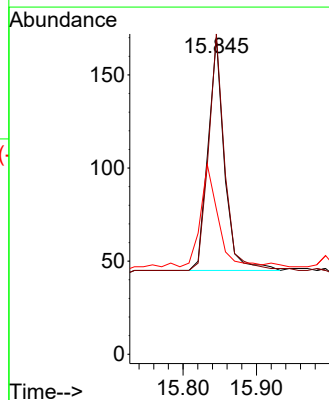
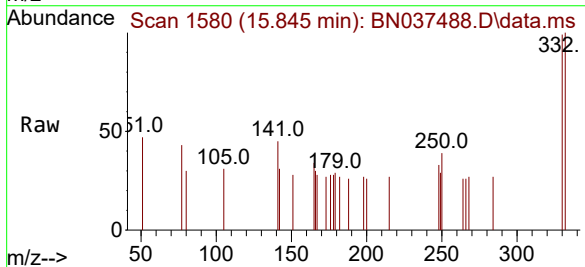
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

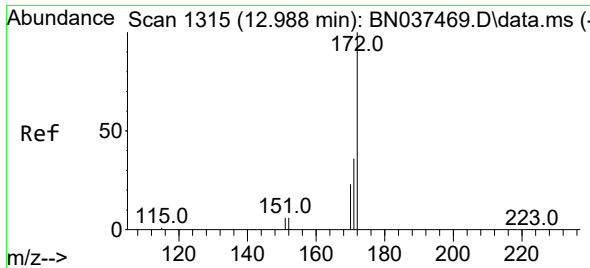
Tgt Ion:164 Resp: 1930
Ion Ratio Lower Upper
164 100
162 103.7 81.1 121.7
160 61.8 46.5 69.7



#14
2,4,6-Tribromophenol
Concen: 0.296 ng
RT: 15.845 min Scan# 1580
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:330 Resp: 194
Ion Ratio Lower Upper
330 100
332 100.0 82.0 123.0
141 49.0 36.2 54.2

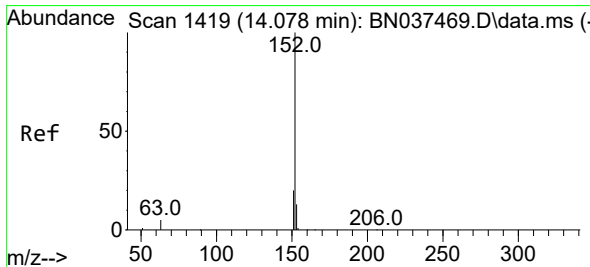
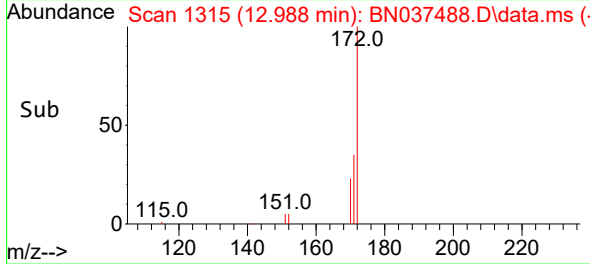
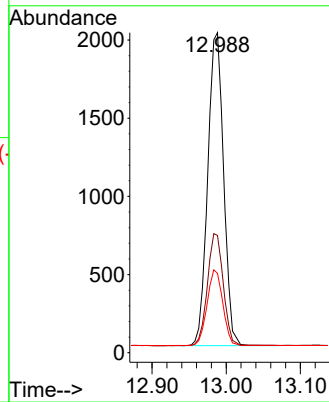
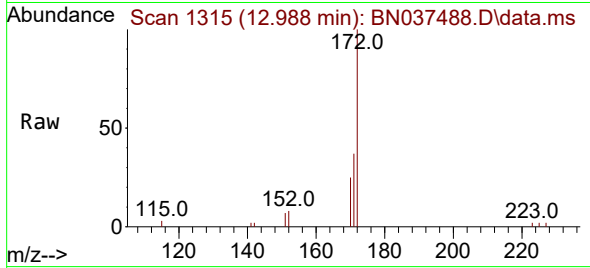




#15
2-Fluorobiphenyl
Concen: 0.357 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

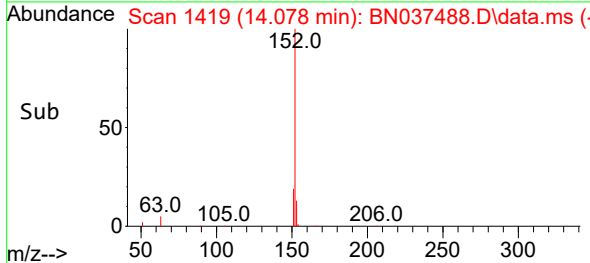
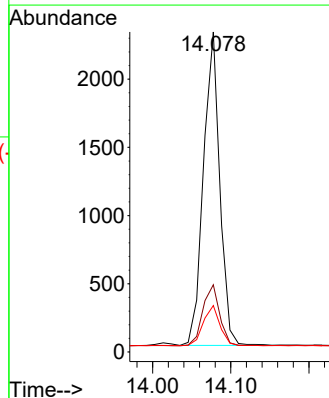
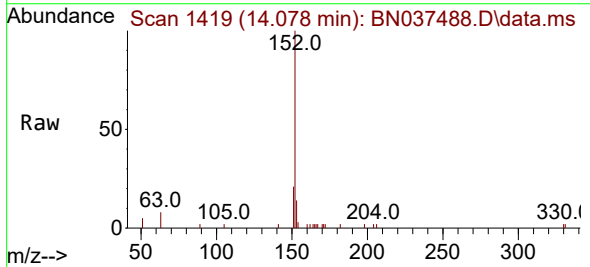
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

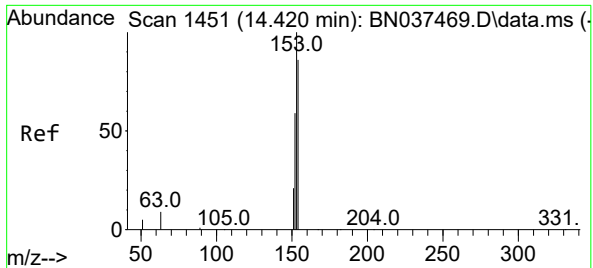
Tgt Ion:	172	Resp:	3931
Ion Ratio	Lower	Upper	
172	100		
171	36.6	29.8	44.8
170	24.8	20.0	30.0



#16
Acenaphthylene
Concen: 0.380 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:	152	Resp:	3342
Ion Ratio	Lower	Upper	
152	100		
151	20.2	16.4	24.6
153	13.3	10.6	15.8

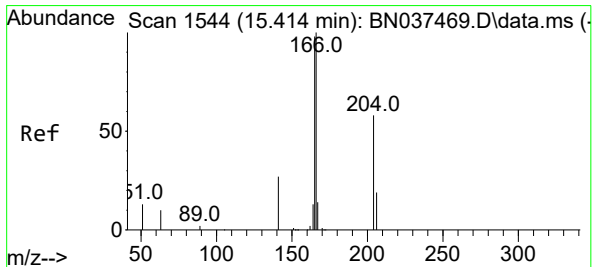
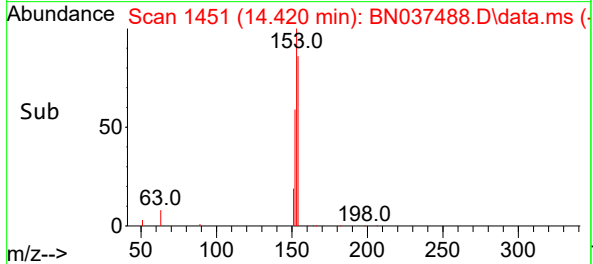
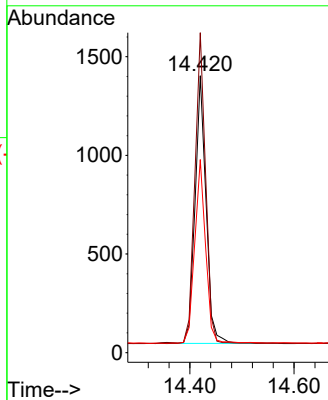
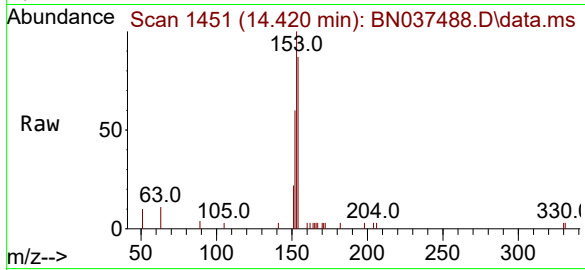




#17
Acenaphthene
Concen: 0.338 ng
RT: 14.420 min Scan# 1451
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

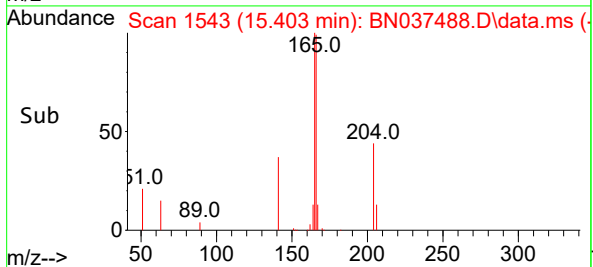
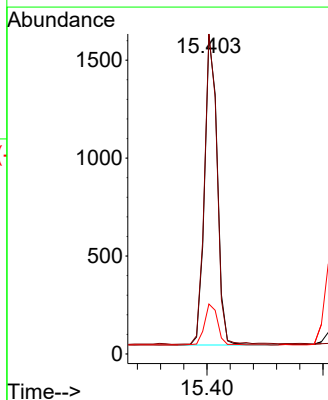
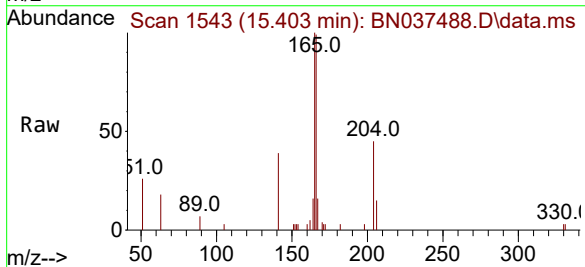
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

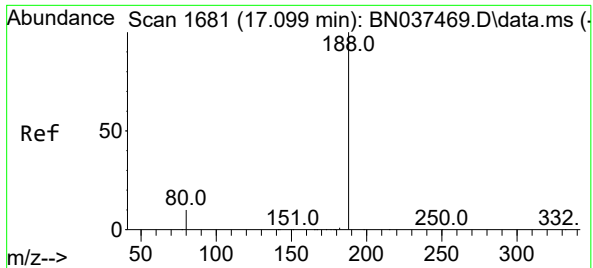
Tgt Ion	Ratio	Lower	Upper
154	100		
153	113.6	89.4	134.0
152	68.7	53.2	79.8



#18
Fluorene
Concen: 0.324 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion	Ratio	Lower	Upper
166	100		
165	100.2	79.4	119.2
167	13.6	10.6	15.8

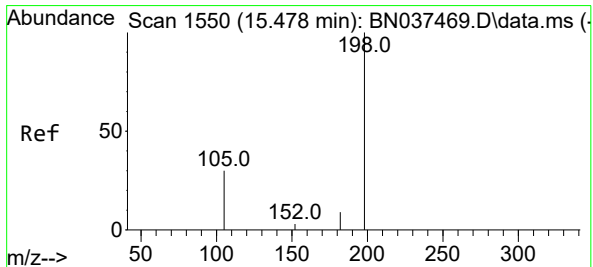
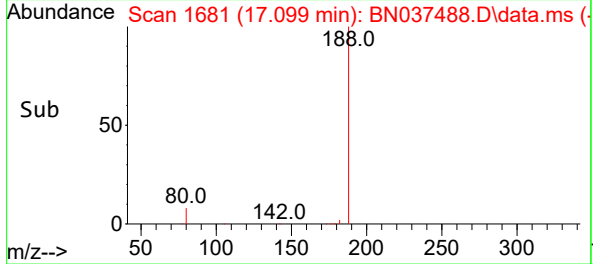
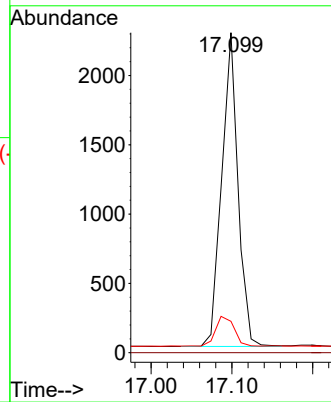
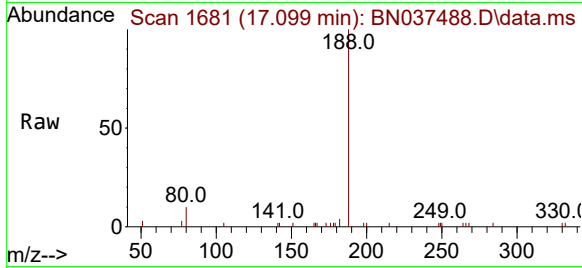




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1681
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

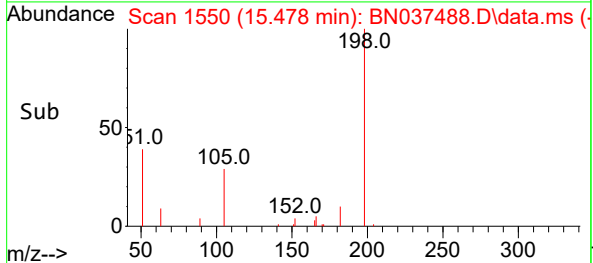
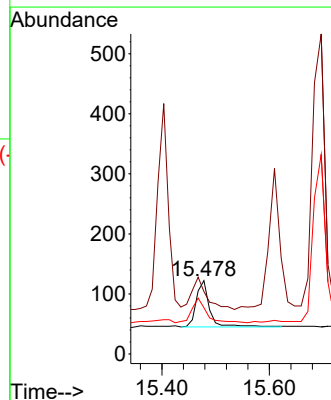
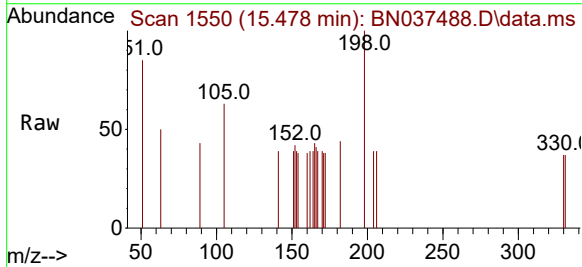
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

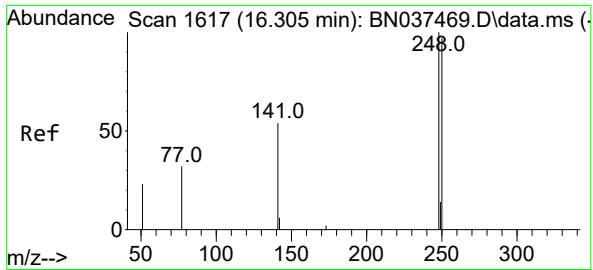
Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	9.8	9.3	13.9



#20
4,6-Dinitro-2-methylphenol
Concen: 0.400 ng
RT: 15.478 min Scan# 1550
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion	Ratio	Lower	Upper
198	100		
51	85.2	86.0	129.0#
105	63.1	53.0	79.4

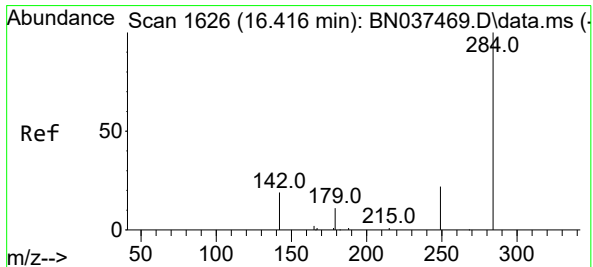
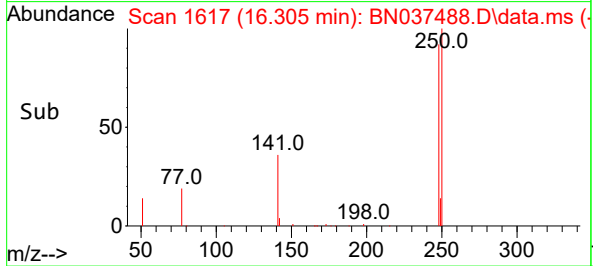
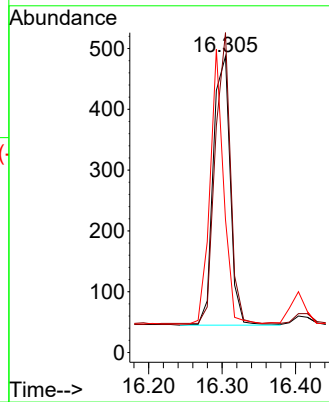
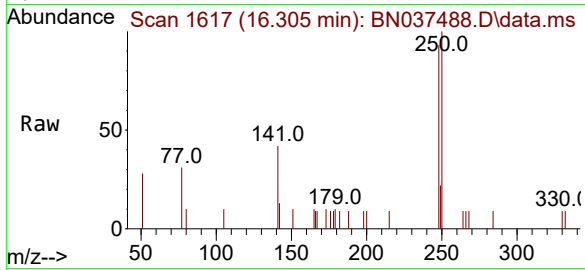




#21
4-Bromophenyl-phenylether
Concen: 0.356 ng
RT: 16.305 min Scan# 1617
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

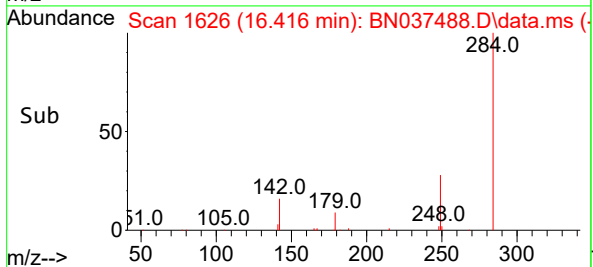
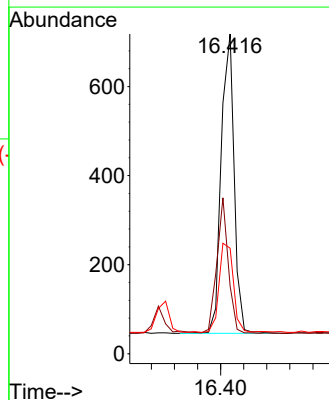
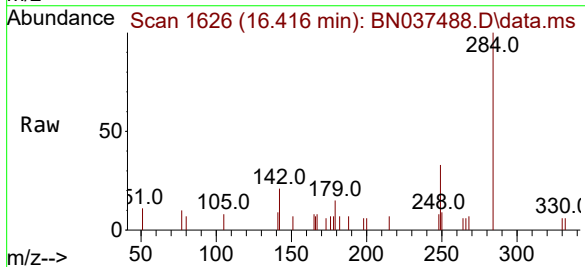
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

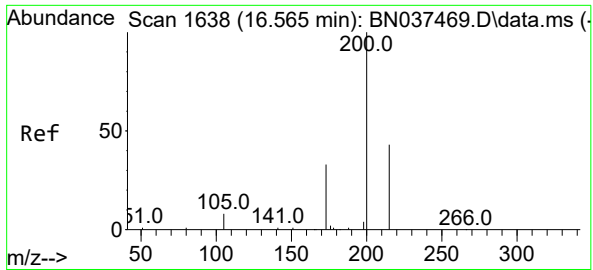
Tgt Ion:248 Resp: 707
Ion Ratio Lower Upper
248 100
250 108.0 77.8 116.6
141 45.0 45.9 68.9#



#22
Hexachlorobenzene
Concen: 0.382 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:284 Resp: 1046
Ion Ratio Lower Upper
284 100
142 40.2 31.3 46.9
249 33.1 26.6 40.0

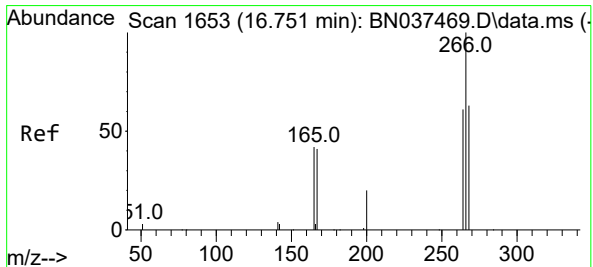
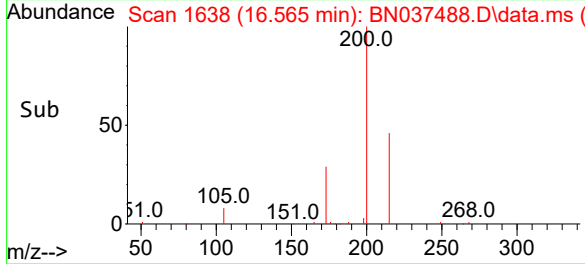
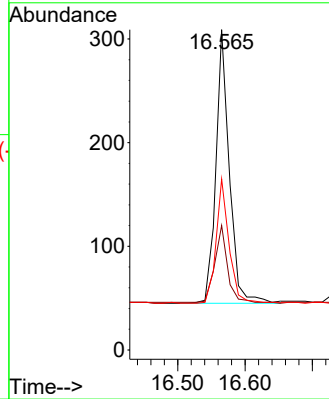
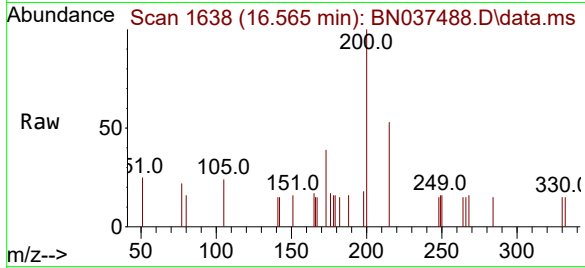




#23
Atrazine
Concen: 0.371 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

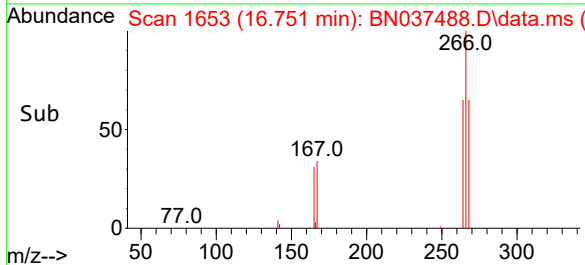
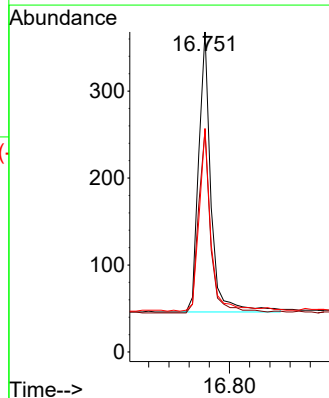
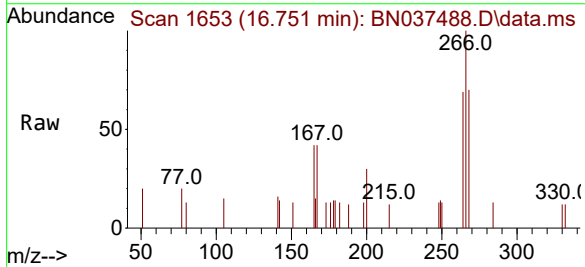
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

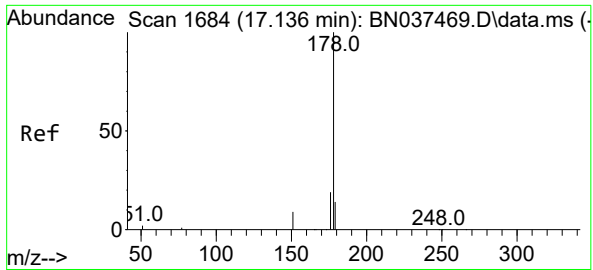
Tgt Ion	Ratio	Lower	Upper
200	100		
173	38.8	34.3	51.5
215	53.4	41.6	62.4



#24
Pentachlorophenol
Concen: 0.577 ng
RT: 16.751 min Scan# 1653
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion	Ratio	Lower	Upper
266	100		
264	64.0	47.5	71.3
268	63.1	50.6	76.0

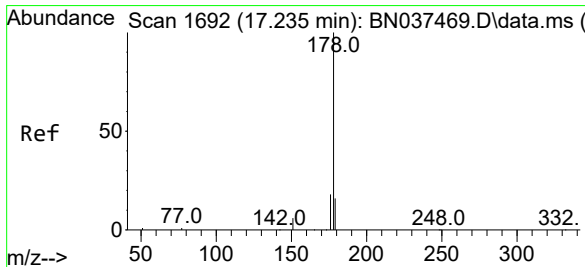
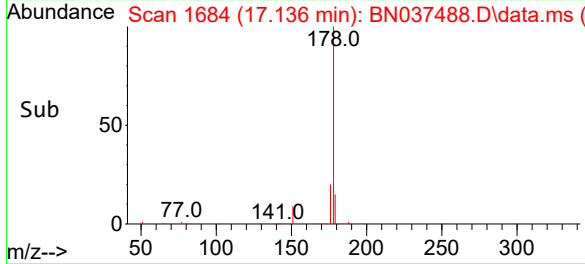
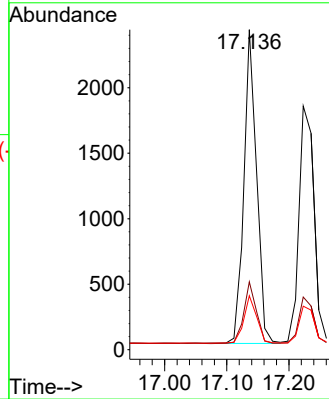
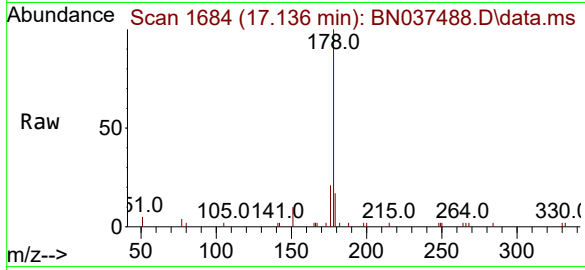




#25
Phenanthrene
Concen: 0.351 ng
RT: 17.136 min Scan# 1684
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

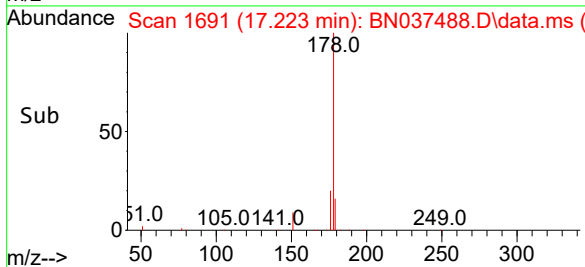
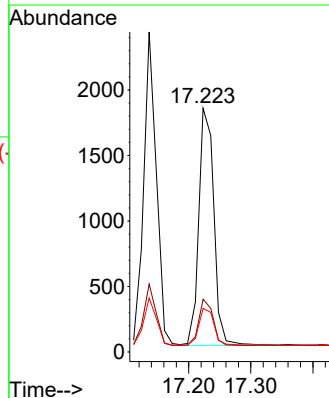
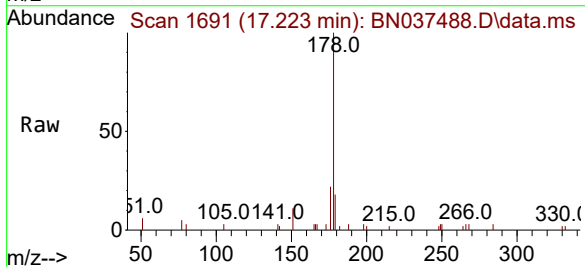
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

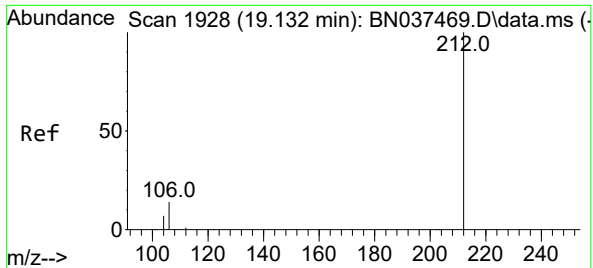
Tgt Ion:178 Resp: 3406
Ion Ratio Lower Upper
178 100
176 19.5 15.1 22.7
179 15.2 12.2 18.2



#26
Anthracene
Concen: 0.348 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.012 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:178 Resp: 3043
Ion Ratio Lower Upper
178 100
176 18.6 14.9 22.3
179 15.9 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.319 ng

RT: 19.132 min Scan# 1928

Delta R.T. 0.000 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD

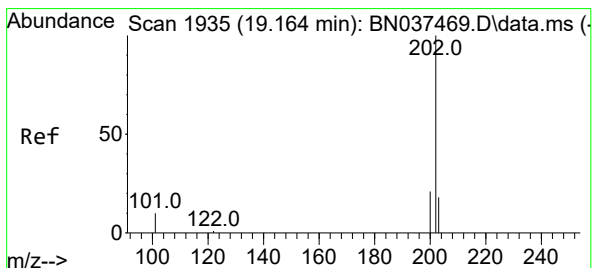
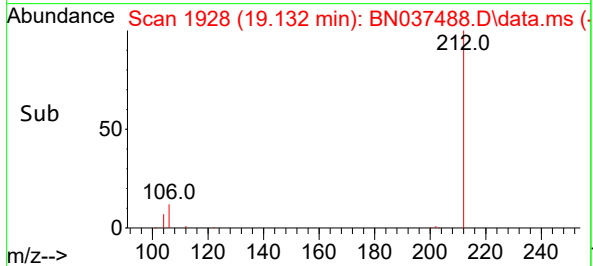
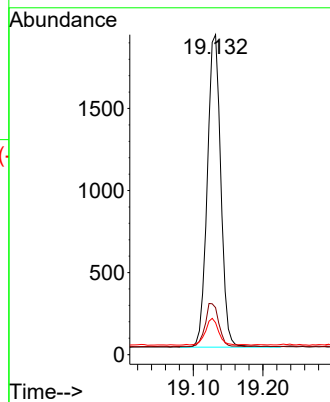
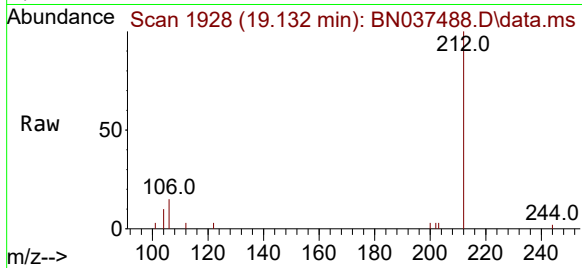
Tgt Ion:212 Resp: 2563

Ion Ratio Lower Upper

212 100

106 14.2 11.7 17.5

104 8.3 6.6 10.0



#28

Fluoranthene

Concen: 0.309 ng

RT: 19.160 min Scan# 1934

Delta R.T. -0.005 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

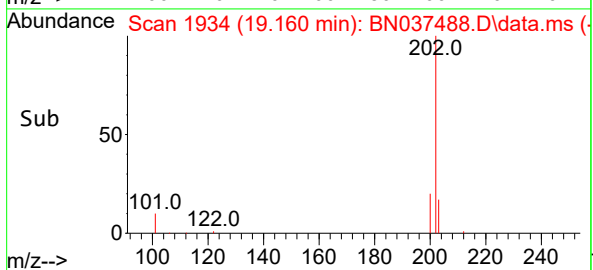
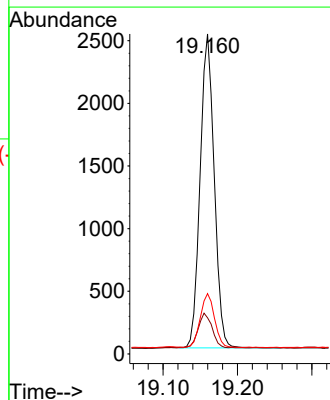
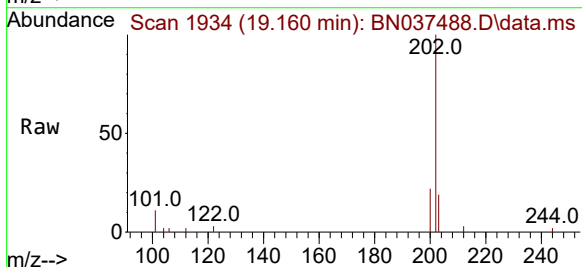
Tgt Ion:202 Resp: 3286

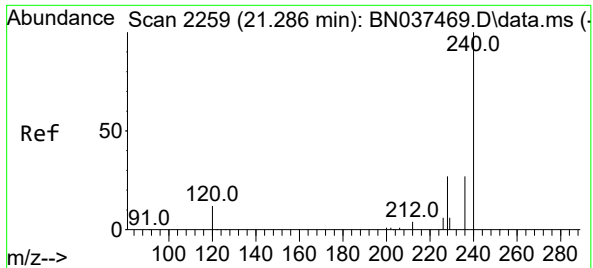
Ion Ratio Lower Upper

202 100

101 11.1 9.2 13.8

203 17.2 14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD

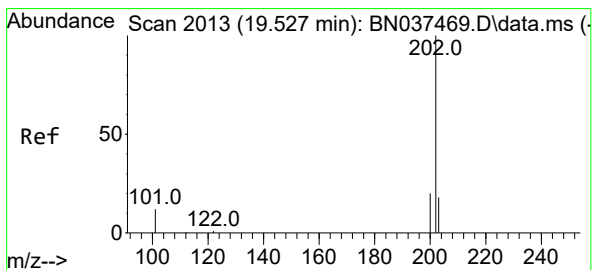
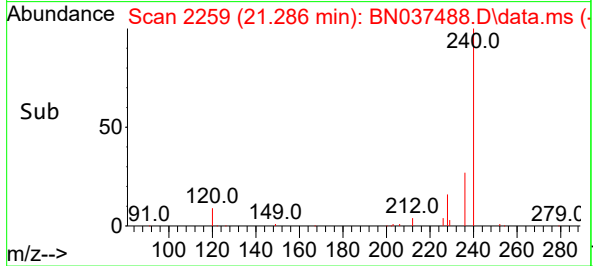
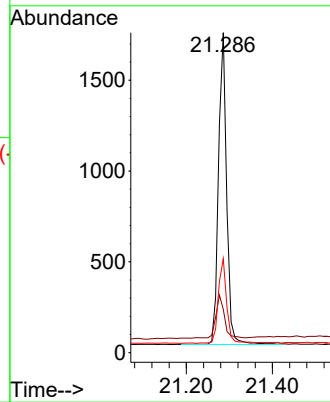
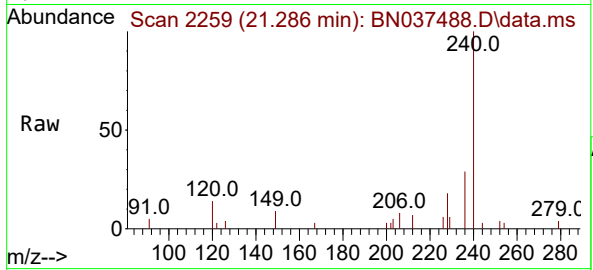
Tgt Ion:240 Resp: 2258

Ion Ratio Lower Upper

240 100

120 13.6 12.4 18.6

236 29.3 22.9 34.3



#30

Pyrene

Concen: 0.354 ng

RT: 19.522 min Scan# 2012

Delta R.T. -0.005 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

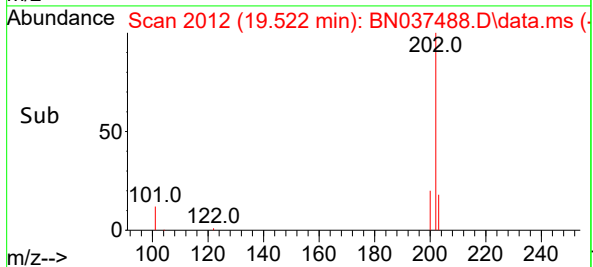
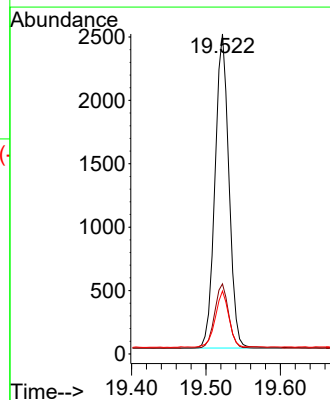
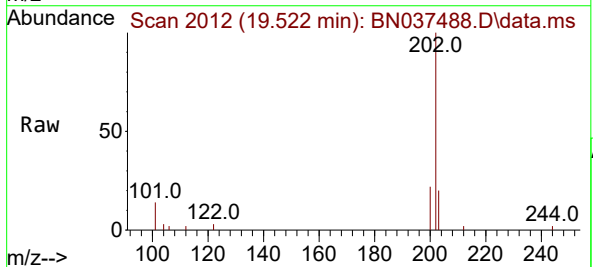
Tgt Ion:202 Resp: 3218

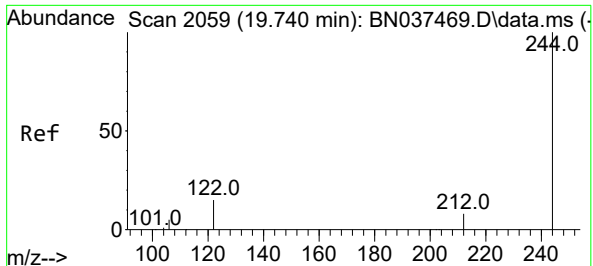
Ion Ratio Lower Upper

202 100

200 20.4 16.4 24.6

203 17.5 14.3 21.5

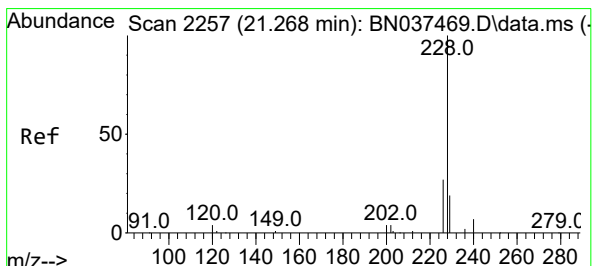
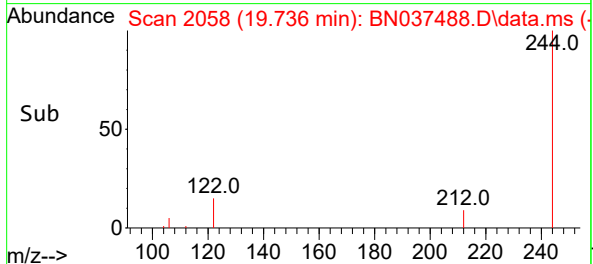
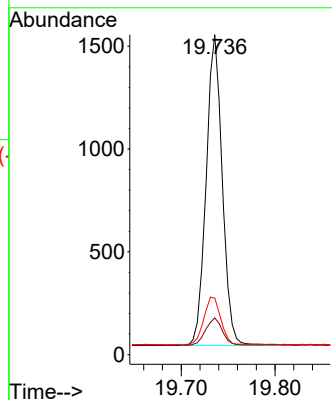
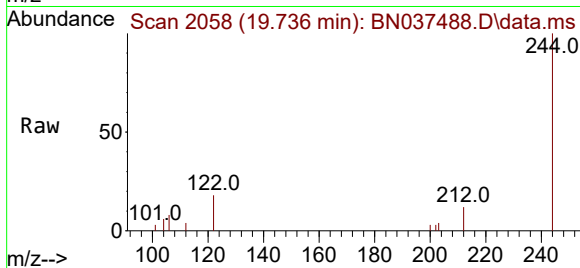




#31
Terphenyl-d14
Concen: 0.382 ng
RT: 19.736 min Scan# 2058
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

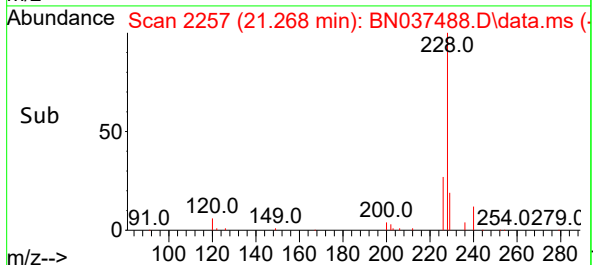
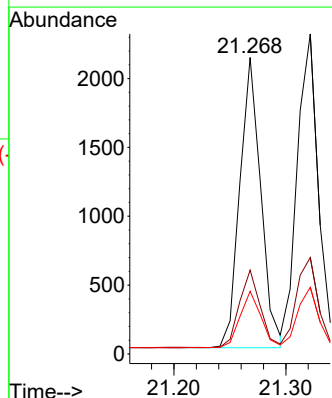
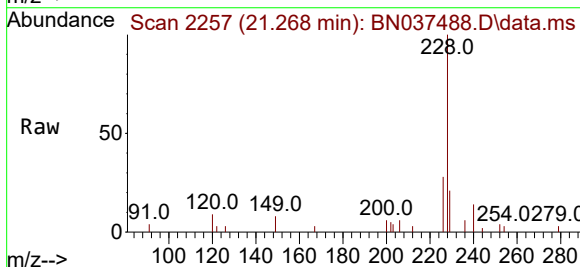
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

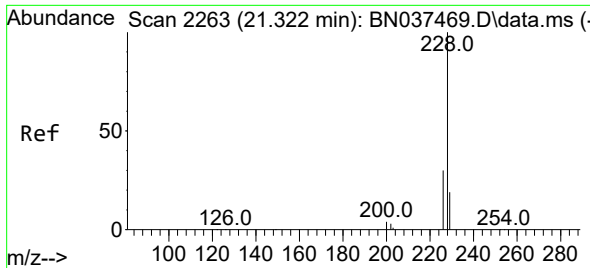
Tgt Ion	Ratio	Lower	Upper
244	100		
212	11.5	8.7	13.1
122	17.7	14.1	21.1



#32
Benzo(a)anthracene
Concen: 0.360 ng
RT: 21.268 min Scan# 2257
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.7	34.1
229	21.1	16.6	24.8





#33

Chrysene

Concen: 0.366 ng

RT: 21.322 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD

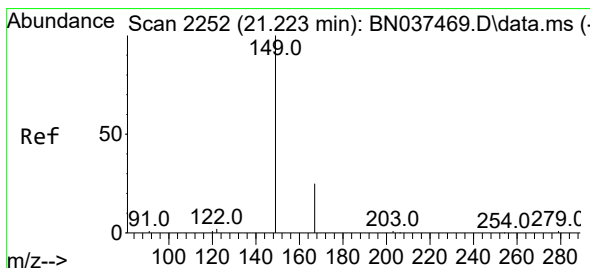
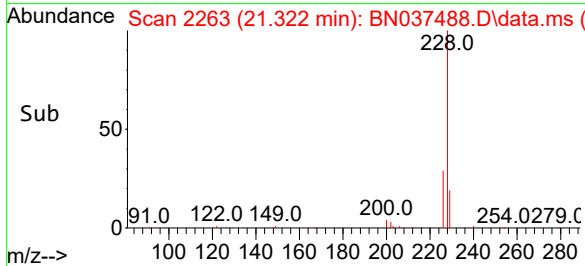
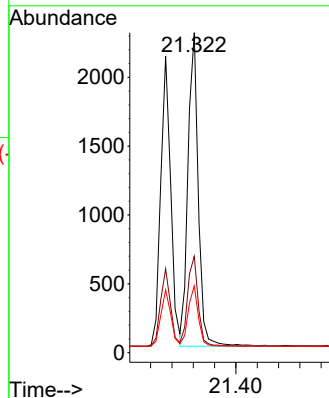
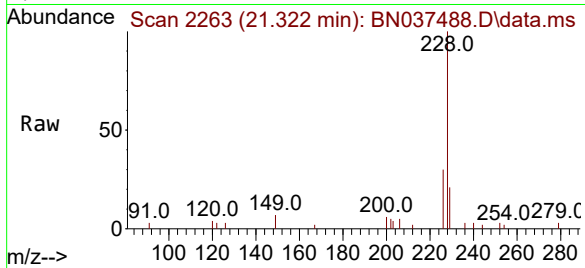
Tgt Ion:228 Resp: 3058

Ion Ratio Lower Upper

228 100

226 30.2 24.6 36.8

229 20.8 16.4 24.6



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.365 ng

RT: 21.223 min Scan# 2252

Delta R.T. 0.000 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

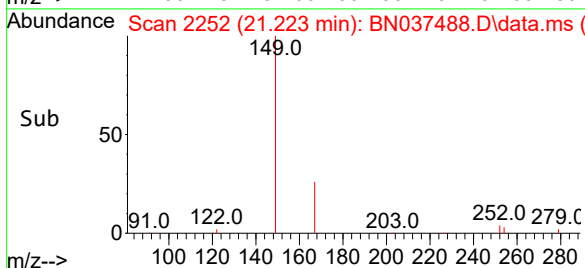
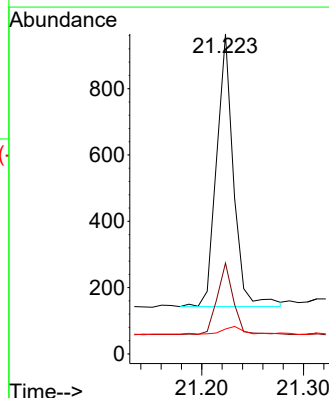
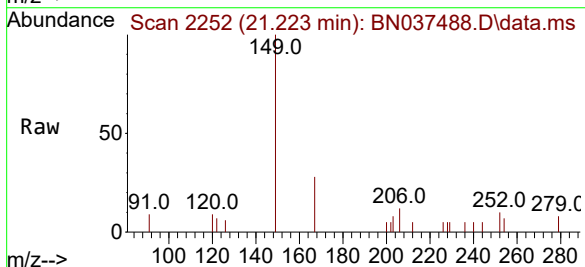
Tgt Ion:149 Resp: 948

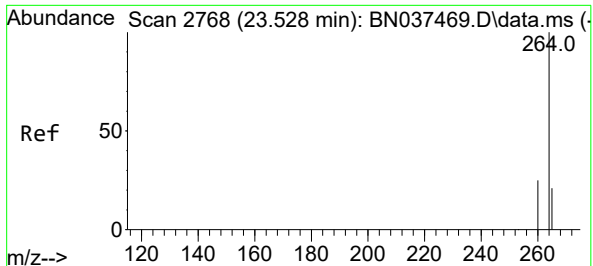
Ion Ratio Lower Upper

149 100

167 24.8 19.4 29.2

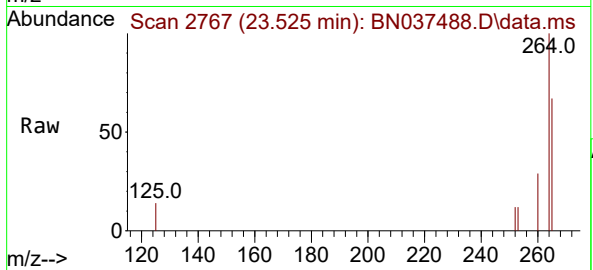
279 3.2 2.5 3.7



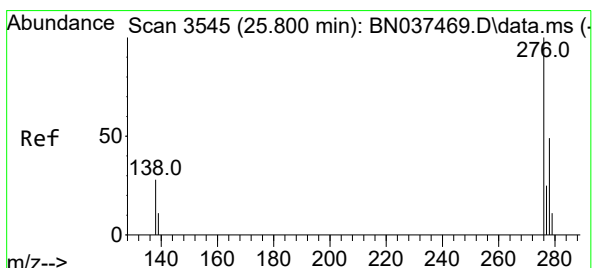
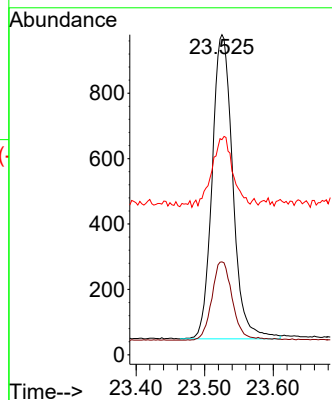
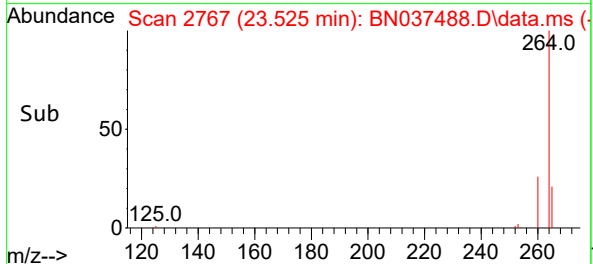


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.525 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

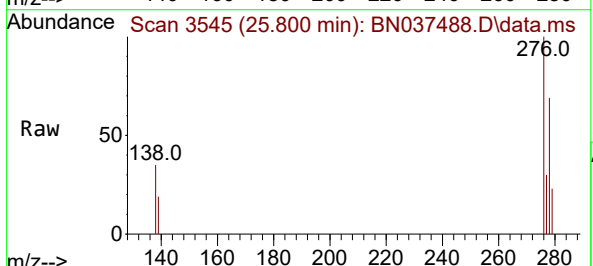
Instrument :
BNA_N
ClientSampleId :
PB168720BSD



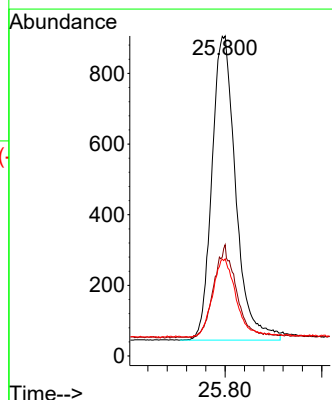
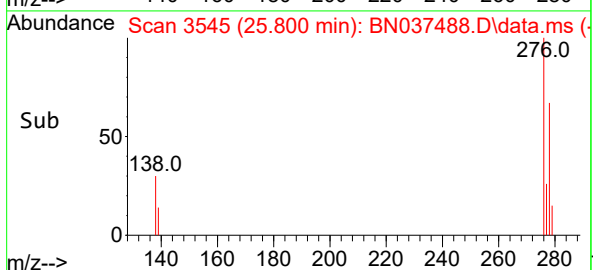
Tgt Ion:264 Resp: 1944
Ion Ratio Lower Upper
264 100
260 29.0 21.7 32.5
265 67.2 41.6 62.4#

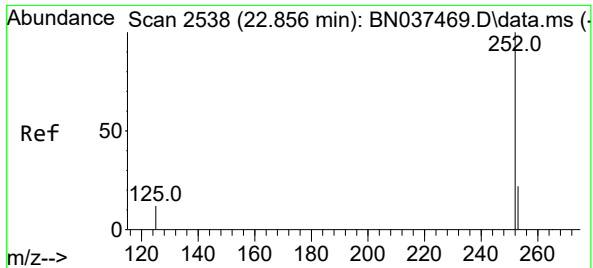


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.391 ng
RT: 25.800 min Scan# 3545
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15



Tgt Ion:276 Resp: 2947
Ion Ratio Lower Upper
276 100
138 28.4 23.4 35.2
277 25.6 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.375 ng

RT: 22.853 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD

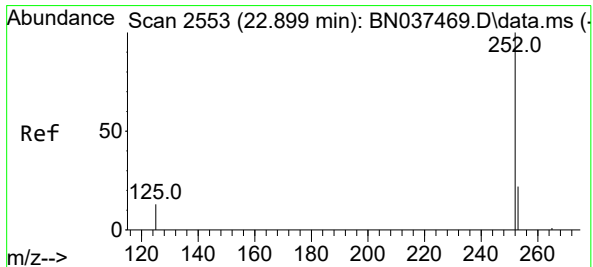
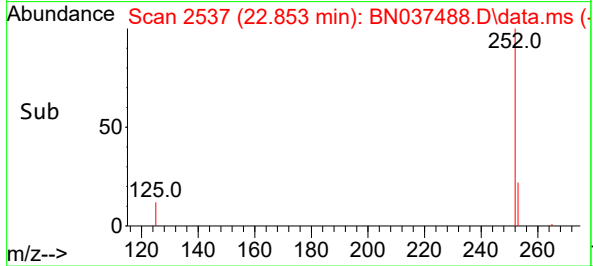
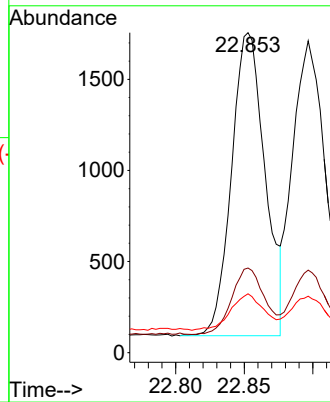
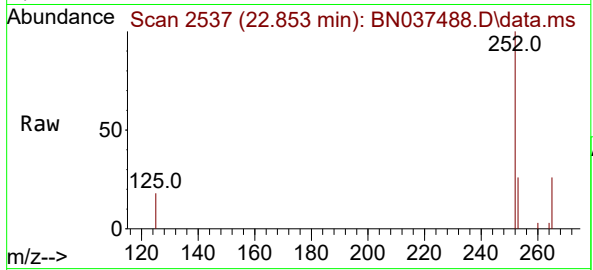
Tgt Ion:252 Resp: 2832

Ion Ratio Lower Upper

252 100

253 26.4 20.1 30.1

125 18.4 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.361 ng

RT: 22.897 min Scan# 2552

Delta R.T. -0.003 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

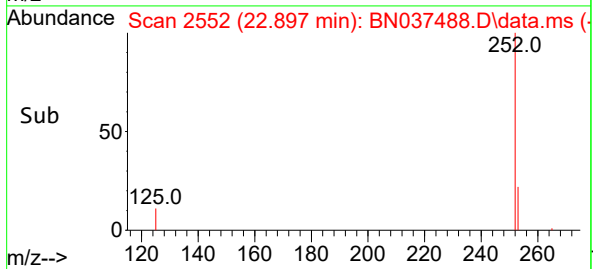
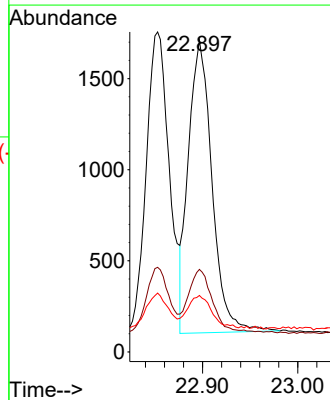
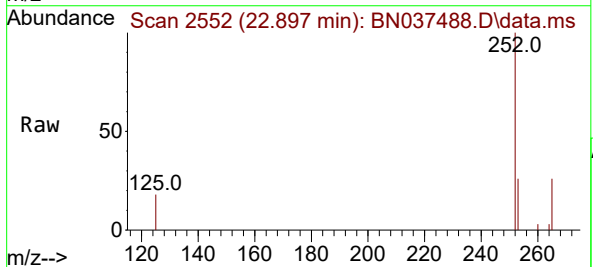
Tgt Ion:252 Resp: 2765

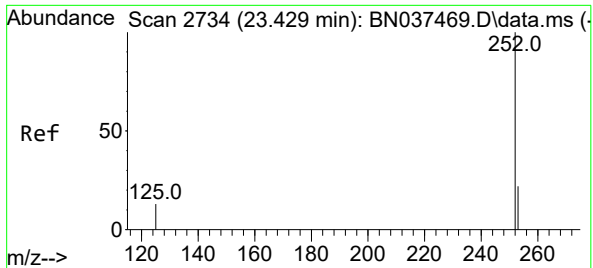
Ion Ratio Lower Upper

252 100

253 26.5 20.4 30.6

125 18.1 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.399 ng

RT: 23.426 min Scan# 21

Delta R.T. -0.003 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD

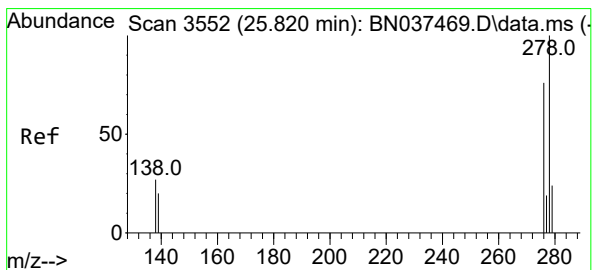
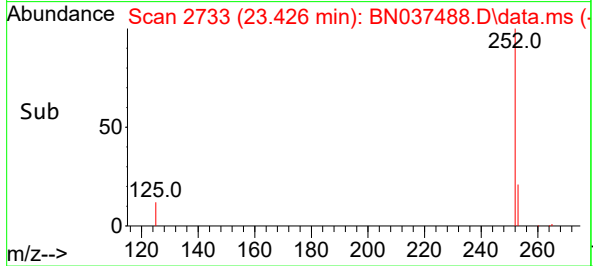
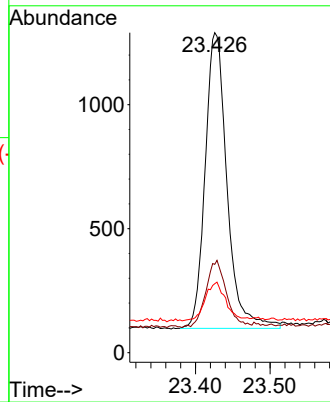
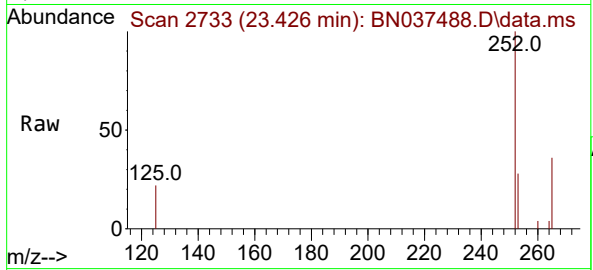
Tgt Ion:252 Resp: 2429

Ion Ratio Lower Upper

252 100

253 27.6 21.8 32.6

125 21.6 16.7 25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.371 ng

RT: 25.814 min Scan# 3550

Delta R.T. -0.006 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

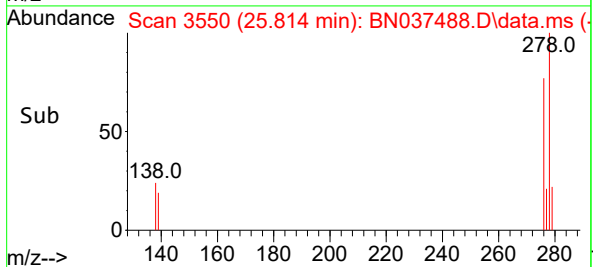
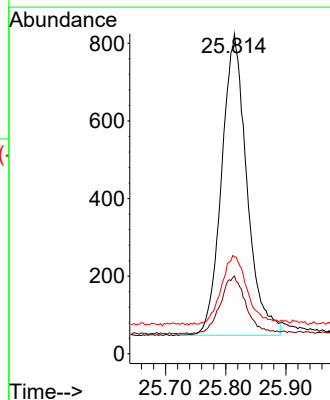
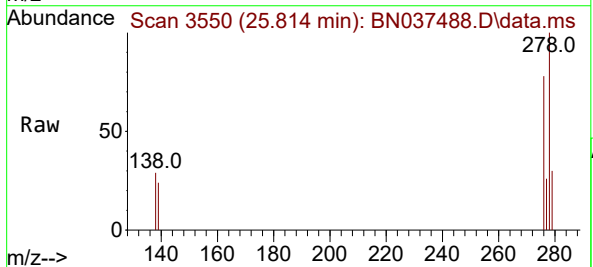
Tgt Ion:278 Resp: 2257

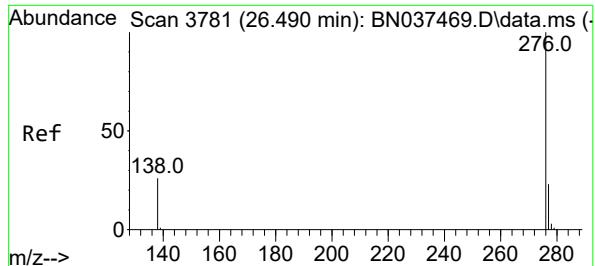
Ion Ratio Lower Upper

278 100

139 24.4 19.9 29.9

279 30.3 24.8 37.2





#41

Benzo(g,h,i)perylene

Concen: 0.384 ng

RT: 26.481 min Scan# 31

Delta R.T. -0.009 min

Lab File: BN037488.D

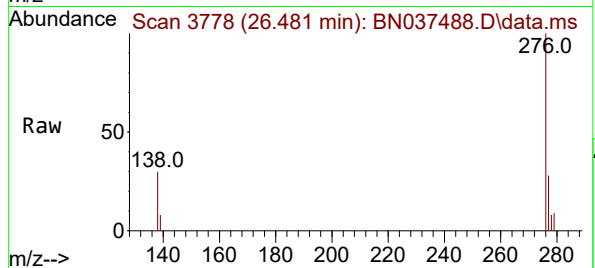
Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD



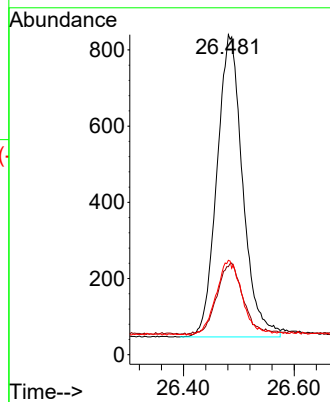
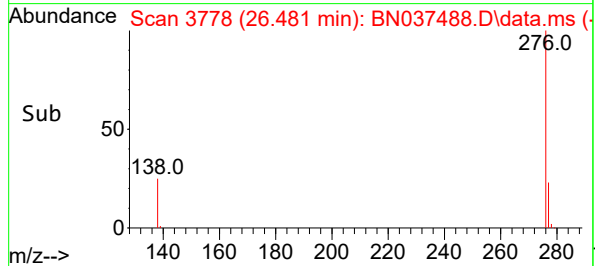
Tgt Ion:276 Resp: 2561

Ion Ratio Lower Upper

276 100

277 27.5 21.7 32.5

138 29.5 24.3 36.5



Manual Integration Report

Sequence:	BN071125	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC0.4	BN037481.D	Benzo(k)fluoranthene	Rahul	7/14/2025 11:10:47 AM	Jagrut	7/14/2025 2:28:47 PM	Peak Integrated by Software

Manual Integration Report

Sequence:	BN071425	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB168720BSD	BN037488.D	2-Methylnaphthalene-d1 0	Rahul	7/15/2025 1:04:23 PM	Jagrut	7/15/2025 2:38:12 PM	Peak Integrated by Software

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN071125

Review By	Rahul	Review On	7/14/2025 11:11:52 AM
Supervise By	Jagrut	Supervise On	7/14/2025 2:29:11 PM
SubDirectory	BN071125	HP Acquire Method	BNA_N, 8270_SiM HP Processing Method bn071125
STD. NAME	STD REF.#		
Tune/Reschk	SP6757		
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848		
CCC	SP6846		
Internal Standard/PEM	SP6740,1ul/100ul sample		
ICV/I.BLK	SP6854		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN037465.D	11 Jul 2025 08:36	RC/JU	Ok
2	SSTDCCC0.4	BN037466.D	11 Jul 2025 09:51	RC/JU	Not Ok
3	SSTDICC0.1	BN037467.D	11 Jul 2025 11:10	RC/JU	Ok
4	SSTDICC0.2	BN037468.D	11 Jul 2025 11:46	RC/JU	Ok
5	SSTDICCC0.4	BN037469.D	11 Jul 2025 12:22	RC/JU	Ok
6	SSTDICC0.8	BN037470.D	11 Jul 2025 12:59	RC/JU	Ok
7	SSTDICC1.6	BN037471.D	11 Jul 2025 13:36	RC/JU	Ok
8	SSTDICC3.2	BN037472.D	11 Jul 2025 14:12	RC/JU	Ok
9	SSTDICC5.0	BN037473.D	11 Jul 2025 14:49	RC/JU	Ok
10	SSTDICV0.4	BN037474.D	11 Jul 2025 15:25	RC/JU	Ok
11	PB168720BL	BN037475.D	11 Jul 2025 16:02	RC/JU	Ok
12	Q2126-09	BN037476.D	11 Jul 2025 16:39	RC/JU	Ok,M
13	Q2126-09	BN037477.D	11 Jul 2025 17:16	RC/JU	Ok
14	Q2126-03	BN037478.D	11 Jul 2025 17:52	RC/JU	Ok
15	Q2126-03	BN037479.D	11 Jul 2025 18:29	RC/JU	Ok
16	PB168721BL	BN037480.D	11 Jul 2025 19:06	RC/JU	Ok
17	SSTDCCC0.4	BN037481.D	11 Jul 2025 19:43	RC/JU	Ok,M

M : Manual Integration

Instrument ID: **BNA_N**

Daily Analysis Runlog For Sequence/QC Batch ID # BN071425

Review By	Rahul	Review On	7/15/2025 1:04:59 PM
Supervise By	Jagrut	Supervise On	7/15/2025 2:43:18 PM
SubDirectory	BN071425	HP Acquire Method	BNA_N, 8270_SiM HP Processing Method bn071125
STD. NAME	STD REF.#		
Tune/Reschk	SP6757		
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848		
CCC	SP6846		
Internal Standard/PEM	SP6740,1ul/100ul sample		
ICV/I.BLK	SP6854		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN037482.D	14 Jul 2025 08:31	RC/JU	Ok
2	SSTDCCC0.4	BN037483.D	14 Jul 2025 09:10	RC/JU	Ok
3	PB168696BL	BN037484.D	14 Jul 2025 09:49	RC/JU	Ok
4	Q2488-01	BN037485.D	14 Jul 2025 10:26	RC/JU	Ok
5	Q2488-02	BN037486.D	14 Jul 2025 11:02	RC/JU	Ok
6	PB168720BS	BN037487.D	14 Jul 2025 11:39	RC/JU	Ok
7	PB168720BSD	BN037488.D	14 Jul 2025 12:15	RC/JU	Ok,M
8	Q2580-02	BN037489.D	14 Jul 2025 13:27	RC/JU	Not Ok
9	Q2580-02	BN037490.D	14 Jul 2025 14:21	RC/JU	Dilution
10	Q2580-02MS	BN037491.D	14 Jul 2025 14:57	RC/JU	Ok,M
11	Q2580-02MSD	BN037492.D	14 Jul 2025 15:34	RC/JU	Ok,M
12	Q2580-02DL	BN037493.D	14 Jul 2025 16:11	RC/JU	Ok,M
13	PB168831BS	BN037494.D	14 Jul 2025 16:47	RC/JU	Ok,M
14	PB168831BL	BN037495.D	14 Jul 2025 17:24	RC/JU	Ok
15	SSTDCCC0.4	BN037496.D	14 Jul 2025 18:00	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN071125

Review By	Rahul	Review On	7/14/2025 11:11:52 AM
Supervise By	Jagrut	Supervise On	7/14/2025 2:29:11 PM
SubDirectory	BN071125	HP Acquire Method	BNA_N, 8270_HP Processing Method bn071125

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848
CCC	SP6846
Internal Standard/PEM	SP6740,1ul/100ul sample
ICV/I.BLK	SP6854
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN037465.D	11 Jul 2025 08:36		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN037466.D	11 Jul 2025 09:51	A Fresh Calibration is required.	RC/JU	Not Ok
3	SSTDICC0.1	SSTDICC0.1	BN037467.D	11 Jul 2025 11:10		RC/JU	Ok
4	SSTDICC0.2	SSTDICC0.2	BN037468.D	11 Jul 2025 11:46		RC/JU	Ok
5	SSTDICCC0.4	SSTDICCC0.4	BN037469.D	11 Jul 2025 12:22		RC/JU	Ok
6	SSTDICC0.8	SSTDICC0.8	BN037470.D	11 Jul 2025 12:59		RC/JU	Ok
7	SSTDICC1.6	SSTDICC1.6	BN037471.D	11 Jul 2025 13:36		RC/JU	Ok
8	SSTDICC3.2	SSTDICC3.2	BN037472.D	11 Jul 2025 14:12		RC/JU	Ok
9	SSTDICC5.0	SSTDICC5.0	BN037473.D	11 Jul 2025 14:49	Compound#20,23 removed from 5 ppm	RC/JU	Ok
10	SSTDICV0.4	ICVBN071125	BN037474.D	11 Jul 2025 15:25		RC/JU	Ok
11	PB168720BL	PB168720BL	BN037475.D	11 Jul 2025 16:02		RC/JU	Ok
12	Q2126-09	MDL-WATER-03-QT2-2	BN037476.D	11 Jul 2025 16:39	MDL-WATER -0.1 ppm	RC/JU	Ok,M
13	Q2126-09	MDL-WATER-03-QT2-2	BN037477.D	11 Jul 2025 17:16	MDL-WATER -0.2 ppm	RC/JU	Ok
14	Q2126-03	MDL-SOIL-03-QT2-202	BN037478.D	11 Jul 2025 17:52	MDL-SOIL -0.1 ppm	RC/JU	Ok
15	Q2126-03	MDL-SOIL-03-QT2-202	BN037479.D	11 Jul 2025 18:29	MDL-SOIL-0.2 PPM	RC/JU	Ok
16	PB168721BL	PB168721BL	BN037480.D	11 Jul 2025 19:06		RC/JU	Ok
17	SSTDCCC0.4	SSTDCCC0.4EC	BN037481.D	11 Jul 2025 19:43		RC/JU	Ok,M

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN071425

Review By	Rahul	Review On	7/15/2025 1:04:59 PM
Supervise By	Jagrut	Supervise On	7/15/2025 2:43:18 PM
SubDirectory	BN071425	HP Acquire Method	BNA_N, 8270_HP Processing Method bn071125

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6842, SP6843, SP6844, SP6845, SP6846, SP6847, SP6848
CCC	SP6846
Internal Standard/PEM	SP6740, 1ul/100ul sample
ICV/I.BLK	SP6854
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleID	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN037482.D	14 Jul 2025 08:31		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN037483.D	14 Jul 2025 09:10		RC/JU	Ok
3	PB168696BL	PB168696BL	BN037484.D	14 Jul 2025 09:49		RC/JU	Ok
4	Q2488-01	RW8-SP100-20250701	BN037485.D	14 Jul 2025 10:26		RC/JU	Ok
5	Q2488-02	RW8-SP303-20250701	BN037486.D	14 Jul 2025 11:02		RC/JU	Ok
6	PB168720BS	PB168720BS	BN037487.D	14 Jul 2025 11:39		RC/JU	Ok
7	PB168720BSD	PB168720BSD	BN037488.D	14 Jul 2025 12:15		RC/JU	Ok,M
8	Q2580-02	WC-URBAN-FILL-B2	BN037489.D	14 Jul 2025 13:27	Concentrated Matrix, Analyze with 10X dilution as a first run.	RC/JU	Not Ok
9	Q2580-02	WC-URBAN-FILL-B2	BN037490.D	14 Jul 2025 14:21	Need further 10X dilution	RC/JU	Dilution
10	Q2580-02MS	WC-URBAN-FILL-B2M	BN037491.D	14 Jul 2025 14:57	Internal Standard Failed	RC/JU	Ok,M
11	Q2580-02MSD	WC-URBAN-FILL-B2M	BN037492.D	14 Jul 2025 15:34	Internal Standard Failed	RC/JU	Ok,M
12	Q2580-02DL	WC-URBAN-FILL-B2DL	BN037493.D	14 Jul 2025 16:11		RC/JU	Ok,M
13	PB168831BS	PB168831BS	BN037494.D	14 Jul 2025 16:47		RC/JU	Ok,M
14	PB168831BL	PB168831BL	BN037495.D	14 Jul 2025 17:24		RC/JU	Ok
15	SSTDCCC0.4	SSTDCCC0.4EC	BN037496.D	14 Jul 2025 18:00		RC/JU	Ok

M : Manual Integration

SOP ID: M3510C,3580A-Extraction SVOC-21

Clean Up SOP #: N/A

Matrix : Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3880

Extraction By: RS

Filter By: RJ

pH Meter ID: N/A

Hood ID: 4,6,7

Extraction Start Date : 07/03/2025

Extraction Start Time : 08:58

Extraction End Date : 07/03/2025

Extraction End Time : 14:00

Concentration By: EH

Supervisor By : RUPESH

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	SP6756
Surrogate	1.0ML	0.4 PPM	SP6831
MDL	1.0ML	N/A	SP6821
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	E3943
Baked Na2SO4	N/A	EP2624
10N NaoH	N/A	EP2609
H2SO4 1:1	N/A	EP2610
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# 2210443. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID: WATER BATH-1,2

Envap ID: NEVAP-02

KD Bath Temperature: 60 °C

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
7/3/25	RS (Ext Lab)	RCLSVOC
14:05	Preparation Group	Analysis Group

Analytical Method: M3510C,3580A-Extraction SVOC-21

Concentration Date: 07/03/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168720BL	SBLK720	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			SEP-1
PB168720BS	SLCS720	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			2
PB168720BS D	SLCSD720	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			3
Q2126-09	MDL-WATER-03-QT2-202 5 0.1 PPM	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			4
Q2488-01	RW8-SP100-20250701	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	B		5
Q2488-02	RW8-SP303-20250701	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1	D		6
Q2126-09	MDL-WATER-03 0.2 PPM	1	1000	6	1	1	1			7

Rs
713

* Extracts relinquished on the same date as received.

168720
8:58 w

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2488

WorkList ID : 190544

Department : Extraction

Date : 07-03-2025 08:53:09

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2126-03	MDL-SOIL-03-QT2-2025	Solid	SVOC-SIMGroup1	Cool 4 deg C	ALLI03	QA Of	05/23/2025	8270-Modified
Q2126-09	MDL-WATER-03-QT2-2025	Water	SVOC-SIMGroup1	Cool 4 deg C	ALLI03	QA Of	05/23/2025	8270-Modified
Q2488-01	RW8-SP100-20250701	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	A42	07/01/2025	8270-Modified
Q2488-02	RW8-SP303-20250701	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	A42	07/01/2025	8270-Modified

Date/Time

7/3/25 8:53

Raw Sample Received by:

RS (Ext Lab)

Raw Sample Relinquished by:

ASU

Date/Time

7/3/25 9:30

Raw Sample Received by:

ASU

Raw Sample Relinquished by:

RS (Ext Lab)

Prep Standard - Chemical Standard Summary

Order ID : Q2488
Test : SVOC-SIMGroup1
Prepbatch ID : PB168720,
Sequence ID/Qc Batch ID: BN071125,BN071425,

Standard ID :
 EP2609,EP2610,EP2624,SP6740,SP6756,SP6757,SP6815,SP6820,SP6821,SP6830,SP6831,SP6841,SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848,SP6853,SP6854,

Chemical ID :
 1ul/100ul
 sample,E3551,E3657,E3874,E3902,E3904,E3939,E3940,E3942,E3943,M6157,S10105,S11073,S11496,S11650,S11788,S11806,S11828,S12115,S12195,S12197,S12216,S12220,S12273,S12486,S12498,S12499,S12533,S12545,S12552,S12577,S12651,S12670,S12974,S12983,S12986,S13058,W3112,

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1874	10 N SODIUM HYDROXIDE SOLN	EP2609	05/07/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2	None	Riteshkumar Patel

(EX-SC-2)

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	EP2610	05/07/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SC ALE_2	None	Riteshkumar Patel

(EX-SC-2)

FROM 1000.00000ml of M6157 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	EP2624	06/26/2025	12/04/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 06/26/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	SP6740	02/13/2025	07/30/2025	Rahul Chavli	None	None	Yogesh Patel 02/28/2025

FROM 0.10000ml of S12651 + 4.90000ml of E3874 = Final Quantity: 5.000 ml

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>
3492	8270-SIM-Spike 0.4 PPM	SP6756	03/24/2025	07/29/2025	Rahul Chavli	None	None	mohammad ahmed
04/07/2025								

FROM 0.00160ml of S11650 + 0.02000ml of S11788 + 0.04000ml of S12486 + 0.04000ml of S12533 + 0.04000ml of S12974 + 99.85840ml of E3902 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3895	50 ug/ml DFTPP 8270E	SP6757	03/31/2025	09/30/2025	Rahul Chavli	None	None	Jagrut Upadhyay
04/01/2025								

FROM 1.00000ml of S12577 + 19.00000ml of E3904 = Final Quantity: 20.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1366	LOQ & LOD 20 PPM	SP6815	06/12/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								07/08/2025

FROM 0.20000ml of S11806 + 0.40000ml of S12498 + 0.40000ml of S12545 + 0.40000ml of S12983 + 18.60000ml of E3939 = Final
Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1374	LOQ & LOD 1 PPM	SP6820	06/12/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								07/08/2025

FROM 23.75000ml of E3939 + 1.25000ml of SP6815 = Final Quantity: 25.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2151	LOQ & LOD 0.1 PPM	SP6821	06/12/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								07/08/2025

FROM 9.00000ml of E3939 + 1.00000ml of SP6820 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	SP6830	06/17/2025	12/13/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/19/2025

FROM 0.10000ml of S12670 + 4.90000ml of E3942 = Final Quantity: 5.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3491	8270-SIM-Surrogate 0.4 PPM	SP6831	06/18/2025	09/18/2025	Rahul Chavli	None	None	Jagrut Upadhyay
06/18/2025								

FROM 0.00800ml of S12195 + 0.01600ml of S12216 + 0.04000ml of S11828 + 199.93600ml of E3940 = Final Quantity: 200.000 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)	SP6841	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
06/25/2025								

FROM 0.03350ml of S10105 + 0.05000ml of S11496 + 0.12500ml of S11828 + 0.12500ml of S12115 + 0.25000ml of S12273 + 0.25000ml of S13058 + 24.16650ml of E3943 = 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	SP6842	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6841 = 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	SP6843	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.68000ml of E3943 + 0.01000ml of SP6830 + 0.32000ml of SP6841 = 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	SP6844	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.84000ml of E3943 + 0.01000ml of SP6830 + 0.16000ml of SP6841 = 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	SP6845	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.92000ml of E3943 + 0.01000ml of SP6830 + 0.08000ml of SP6841 = 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	SP6846	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.96000ml of E3943 + 0.01000ml of SP6830 + 0.04000ml of SP6841 = 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	SP6847	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6846 = 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	SP6848	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								06/25/2025

FROM 0.75000ml of E3943 + 0.01000ml of SP6830 + 0.25000ml of SP6846 = 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>
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND	SP6853	07/02/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli
								07/08/2025

FROM SOURCE
0.00630ml of S12197 + 0.01280ml of S12220 + 0.03200ml of S11073 + 0.03200ml of S11828 + 0.06400ml of S12499 +
0.06400ml of S12552 + 0.06400ml of S12986 + 19.72490ml of E3943 = Final Quantity: 20.000 ml

SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3356	8270-SIM MDL-0.4PPM CALIBRATION SOL ICV-2ND	SP6854	07/02/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli
SOURCE FROM 0.87500ml of E3943 + 0.01000ml of SP6830 + 0.12500ml of SP6853 = Final Quantity: 1.010 ml								

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

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	12/04/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	09/18/2025	03/18/2025 / RUPESH	02/12/2025 / RUPESH	E3902

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	01/07/2026	03/13/2025 /	12/27/2024 / RUPESH	E3904

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)	25A2862010	11/22/2025	05/22/2025 / RUPESH	02/28/2025 / RUPESH	E3939

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)	24H1462005	12/11/2025	06/11/2025 / Rajesh	06/04/2025 / Rajesh	E3940

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)	25A2862010	12/13/2025	06/13/2025 / Rajesh	02/28/2025 / Rajesh	E3942

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)	25A2862010	12/13/2025	06/13/2025 / Rajesh	02/28/2025 / Rajesh	E3943

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)	24i1262013	11/07/2025	05/07/2025 / RUPESH	02/18/2025 / Mohan	M6157

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	12/19/2025	06/19/2025 / Jagrut	12/09/2021 / Christian	S10105

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	11/16/2025	05/16/2025 / Jagrut	02/06/2023 / Christian	S11073

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	10/28/2025	04/28/2025 / Jagrut	08/11/2023 / Yogesh	S11496

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0201728	07/29/2025	01/29/2025 / anahy	11/09/2023 / Yogesh	S11650

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	09/10/2025	03/10/2025 / anahy	11/21/2023 / Rahul	S11788

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	A0200655	12/04/2025	06/04/2025 / Jagrut	11/21/2023 / rahul	S11806

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	12/09/2025	06/09/2025 / Jagrut	11/21/2023 / rahul	S11828

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	10/28/2025	04/28/2025 / Jagrut	03/08/2024 / Rahul	S12115

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	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12195

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	01/02/2026	07/02/2025 / Jagrut	03/15/2024 / Rahul	S12197

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	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12216

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	01/02/2026	07/02/2025 / Jagrut	03/15/2024 / Rahul	S12220

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	520963	12/25/2025	06/25/2025 / Jagrut	05/24/2024 / Rahul	S12273

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	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12486

[CS 4978-1]

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0214021	12/04/2025	06/04/2025 / Jagrut	07/23/2024 / RAHUL	S12498

[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	01/01/2026	07/01/2025 / Rahul	07/23/2024 / RAHUL	S12499

[CS 4978-1]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0214017	09/10/2025	03/10/2025 / anahy	07/23/2024 / RAHUL	S12533

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0214017	12/04/2025	06/04/2025 / Jagrut	07/23/2024 / RAHUL	S12545

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0214017	01/01/2026	07/01/2025 / Rahul	07/23/2024 / RAHUL	S12552

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH ₂ Cl ₂ , 1mL,	A0212955	06/30/2027	03/31/2025 / Rahul	08/01/2024 / Rahul	S12577

CHEMICAL RECEIPT LOG BOOK

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	A0212266	08/07/2025	02/07/2025 / anahy	09/20/2024 / anahy	S12651

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH ₂ Cl ₂ , 1mL	A0212266	12/16/2025	06/16/2025 / anahy	09/20/2024 / anahy	S12670

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]	A0219438	09/10/2025	03/10/2025 / anahy	12/11/2024 / anahy	S12974

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]	A0219438	09/30/2025	04/30/2025 / Rahul	12/11/2024 / anahy	S12983

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]	A0219438	09/30/2025	06/04/2025 / Jagrut	12/11/2024 / anahy	S12986

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)	531243	12/25/2025	06/25/2025 / Jagrut	01/16/2025 / anahy	S13058

CHEMICAL RECEIPT LOG BOOK

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

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18



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	≤ -10 °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 ± 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 ± 17.26
phenol-d ₆	13127-88-3	99.9	949.120.8P	7481 ± 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 ± 17.17

Received on

02/25/21

by
CG

S9236
to

S9240

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certified By: _____

Erica Castiglione
Chemist



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:

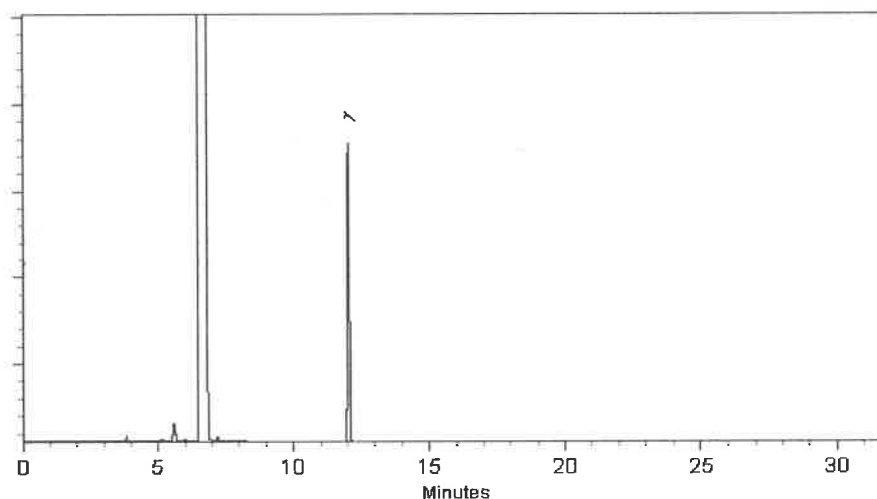
200°C

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



**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.

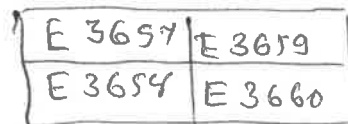
This document has been electronically produced and is valid without a signature.

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.



Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

Avantor

Material No.: 9266-A4
Batch No.: 25A0262002
Manufactured Date: 2024-11-21
Expiration Date: 2026-02-20
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	4
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	99.9%
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 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

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

avantor

Material No.: 9254-03

Batch No.: 24H2762008

Manufactured Date: 2024-04-18

Expiration Date: 2027-04-18

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (µeq/g)	<= 0.3	0.2
Titration Base (µeq/g)	<= 0.6	<0.1
Water (H ₂ O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E3902

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.: 25A2862010
Manufactured Date: 2024-12-18
Expiration Date: 2026-03-19
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid (μ 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

E3939

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Acetone

BAKER RESI-ANALYZED® Reagent

For Organic Residue Analysis

Avantor™



Material No.: 9254-03

Batch No.: 24H1462005

Manufactured Date: 2024-05-24

Expiration Date: 2027-05-24

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 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 %	0.2 %
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 6/11/25

E3940

J. Croak

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)



Material No.: 9266-A4
Batch No.: 25A2862010
Manufactured Date: 2024-12-18
Expiration Date: 2026-03-19
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH ₂ Cl ₂) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Titration Acid (μ 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

E3942

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4

Batch No.: 25A2862010

Manufactured Date: 2024-12-18

Expiration Date: 2026-03-19

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	<1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	99.9%
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

E3942

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

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™



MG157
MS

Material No.: 9673-33

Batch No.: 24I1262013

Manufactured Date: 2024-08-07

Retest Date: 2029-08-06

Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS – Assay (H ₂ SO ₄)	95.0 – 98.0 %	96.2 %
Appearance	Passes Test	Passes Test
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	<1 ppm
ACS – Substances Reducing Permanganate(as SO ₂)	<= 2 ppm	<2 ppm
Ammonium (NH ₄)	<= 1 ppm	<1 ppm
Chloride (Cl)	<= 0.1 ppm	<0.1 ppm
Nitrate (NO ₃)	<= 0.2 ppm	0.1 ppm
Phosphate (PO ₄)	<= 0.5 ppm	<0.1 ppm
Trace Impurities – Aluminum (Al)	<= 30.0 ppb	<5.0 ppb
Arsenic & Antimony (as As)	<= 4.0 ppb	<2.0 ppb
Trace Impurities – Boron (B)	<= 10.0 ppb	<5.0 ppb
Trace Impurities – Cadmium (Cd)	<= 2.0 ppb	<1.0 ppb
Trace Impurities – Chromium (Cr)	<= 6.0 ppb	<1.0 ppb
Trace Impurities – Cobalt (Co)	<= 0.5 ppb	<0.3 ppb
Trace Impurities – Copper (Cu)	<= 1.0 ppb	<1.0 ppb
Trace Impurities – Gold (Au)	<= 10.0 ppb	<5.0 ppb
Heavy Metals (as Pb)	<= 500.0 ppb	<100.0 ppb
Trace Impurities – Iron (Fe)	<= 50.0 ppb	<1.0 ppb
Trace Impurities – Lead (Pb)	<= 0.5 ppb	<0.5 ppb
Trace Impurities – Magnesium (Mg)	<= 7.0 ppb	<1.0 ppb
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	<1.0 ppb
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	<0.1 ppb
Trace Impurities – Nickel (Ni)	<= 2.0 ppb	<0.3 ppb
Trace Impurities – Potassium (K)	<= 500.0 ppb	<10.0 ppb
Trace Impurities – Selenium (Se)	<= 50.0 ppb	7.2 ppb
Trace Impurities – Silicon (Si)	<= 100.0 ppb	12.8 ppb
Trace Impurities – Silver (Ag)	<= 1.0 ppb	<1.0 ppb

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

 **avantor**™



Material No.: 9673-33
Batch No.: 24I1262013

Test	Specification	Result
Trace Impurities – Sodium (Na)	<= 500.0 ppb	<5.0 ppb
Trace Impurities – Strontium (Sr)	<= 5.0 ppb	<1.0 ppb
Trace Impurities – Tin (Sn)	<= 5.0 ppb	1.1 ppb
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	<1.0 ppb

For Laboratory, Research, or Manufacturing Use

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Croak
Director Quality Operations, Bioscience Production



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: Shane C. Tipton
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

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.:** A0201728

Description : Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

511649
↓
511658
Y.P.
11/13/23

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP230530RSR	99%	25,000.0 µg/mL	+/- 777.0837

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Josh McCloskey - Operations Technician I

Date Mixed: 05-Sep-2023

Balance: B251644995

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k \sqrt{u_{gravimetric}^2 + u_{homogeneity}^2 + u_{storage\ stability}^2 + u_{shipping\ stability}^2}$$

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. : 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:

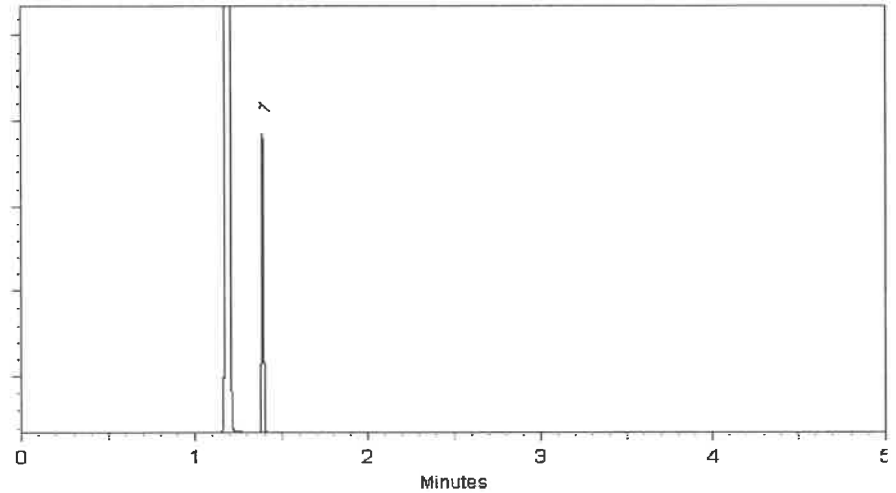
FID

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. : 31853 **Lot No.:** A0200655
Description : 1,4-dioxane
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : August 31, 2028 **Storage:** 0°C or colder
Ship: Ambient

S11795
↓
S11808 } 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	SHBQ1693	99%	2,007.0 µg/mL	+/- 24.9775

* 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:

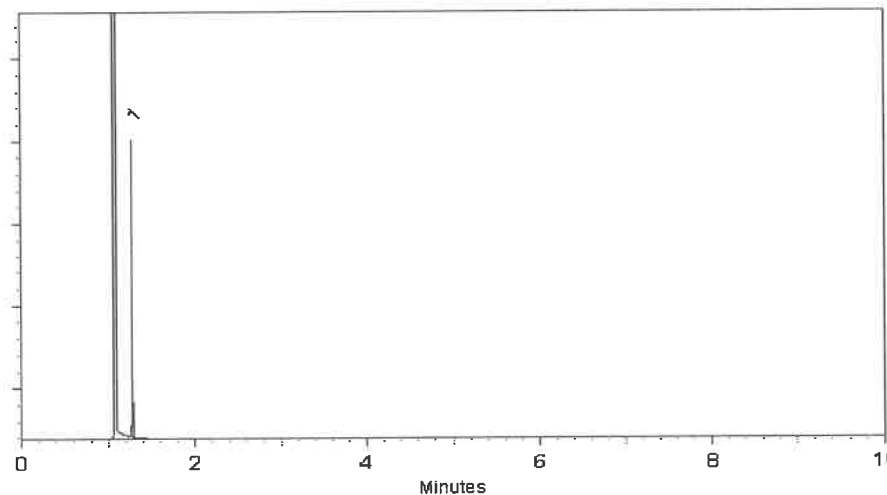
FID

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.

Penelope Riglin - Operations Tech I

Date Mixed: 06-Aug-2023 Balance Serial # 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-Aug-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:

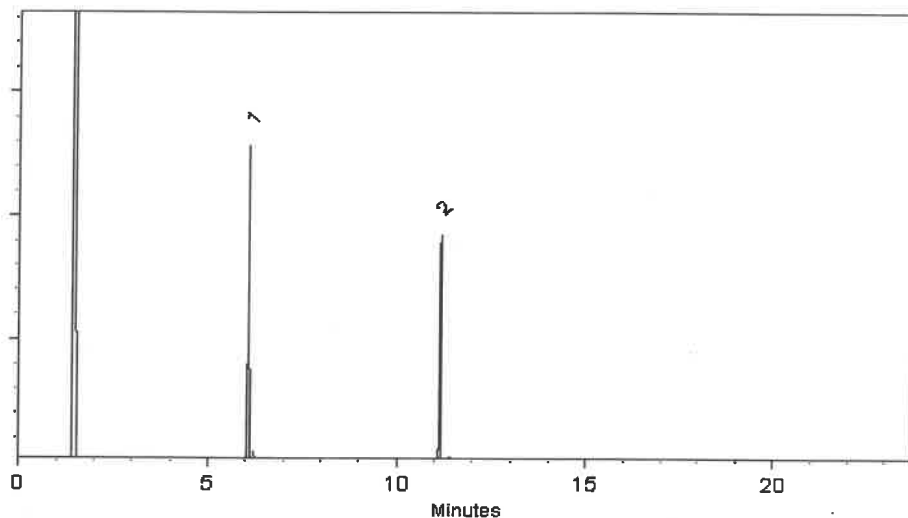
FID

Split Vent:

10 ml/min.

Inj. Vol

1µl

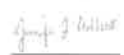


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


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-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026	1,4-Dioxane Solution, 2000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane	123-91-1	100	223.1.3P	1997 ± 57.08

512112 } RC/
↓
912116 } 03/08/24

*Not a certified value

Certified By: _____

Melissa Workoff
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values
listed are determined gravimetrically.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus



FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31087 **Lot No.:** A0206206
Description : Acid Surrogate Mix (4/89 SOW)
Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul
Container Size : 5 mL **Pkg Amt:** > 5 mL
Expiration Date : January 31, 2032 **Storage:** 10°C or colder
Ship: Ambient

512187 } RC/
↓
512206 } 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorophenol	367-12-4	STBK1705	99%	10,005.3 µg/mL	+/- 302.5390
2	Phenol-d6	13127-88-3	PR-33287A	99%	10,005.5 µg/mL	+/- 302.5475
3	2,4,6-Tribromophenol	118-79-6	RP230831RSR	99%	10,006.6 µg/mL	+/- 302.5783

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

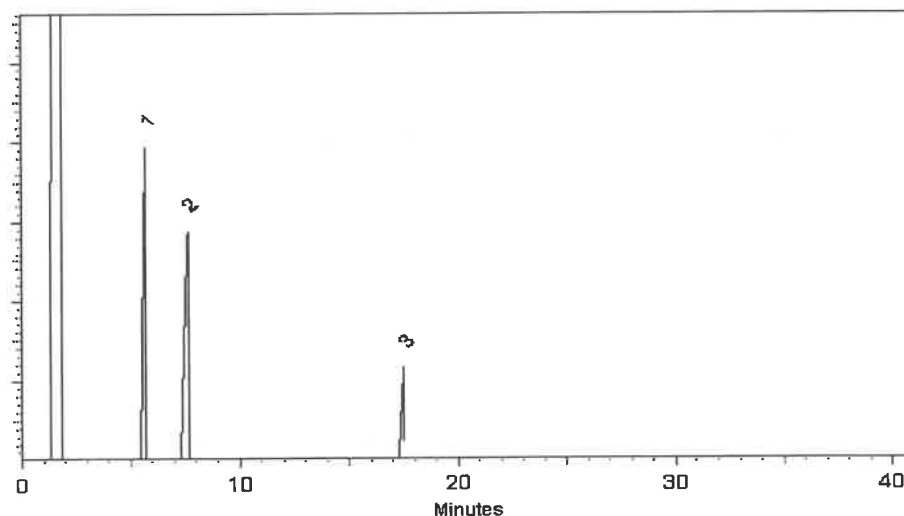
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope A. Riglin

Penelope Riglin - Operations Tech I

Date Mixed: 04-Jan-2024

Balance Serial # 1128360905

Christie Mills

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Jan-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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/
↓
512206 } 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorophenol	367-12-4	STBK1705	99%	10,005.3 µg/mL	+/- 302.5390
2	Phenol-d6	13127-88-3	PR-33287A	99%	10,005.5 µg/mL	+/- 302.5475
3	2,4,6-Tribromophenol	118-79-6	RP230831RSR	99%	10,006.6 µg/mL	+/- 302.5783

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

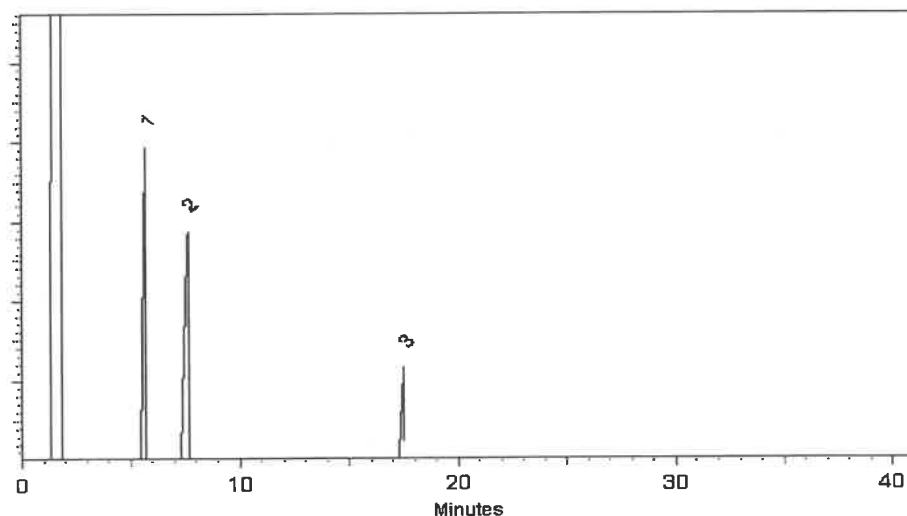
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope A. Riglin

Penelope Riglin - Operations Tech I

Christie Mills

Christie Mills - Operations Lead Tech - ARM QC

Date Mixed: 04-Jan-2024

Balance Serial # 1128360905

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:

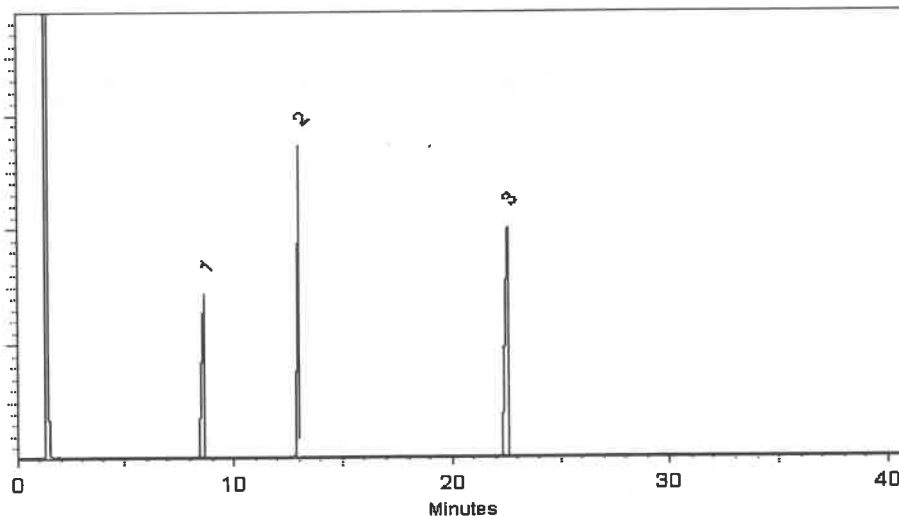
FID

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. : 31086 **Lot No.:** A0206381
Description : B/N Surrogate Mix (4/89 SOW)
Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul
Container Size : 5 mL **Pkg Amt:** > 5 mL
Expiration Date : December 31, 2029 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

S12207 } RC/
↓
S12221 } 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitrobenzene-d5	4165-60-0	I-25158	99%	5,029.3 µg/mL	+/- 226.5204
2	2-Fluorobiphenyl	321-60-8	00021384	99%	5,030.9 µg/mL	+/- 226.5936
3	p-Terphenyl-d14	1718-51-0	PR-32599	99%	5,026.4 µg/mL	+/- 226.3909

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Quality Confirmation Test

Column:

30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

Carrier Gas:

hydrogen-constant pressure 10 psi.

Temp. Program:

40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:

250°C

Det. Temp:

330°C

Det. Type:

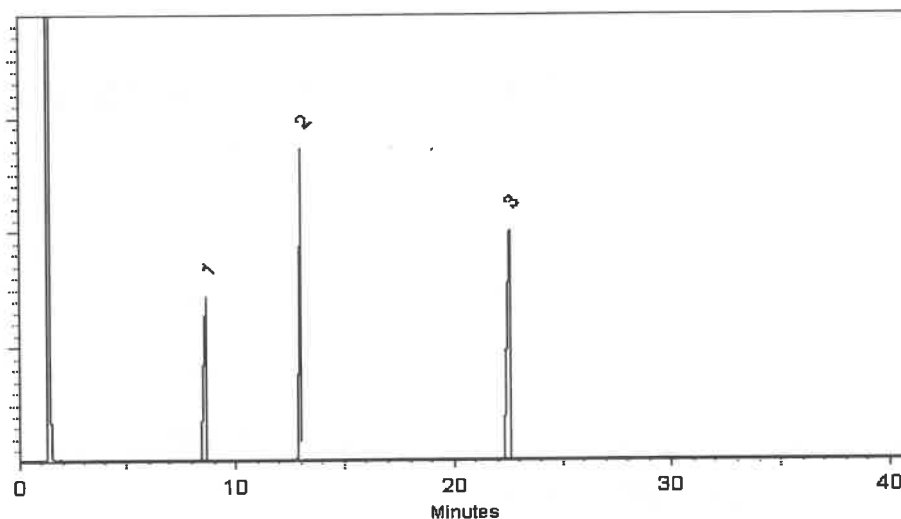
FID

Split Vent:

2 ml/min.

Inj. Vol

1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jess Hoy - Operations Tech I

Jennifer Pollino - Operations Tech III - ARM QC

Date Mixed: 09-Jan-2024

Balance Serial # 1128360905

Date Passed: 11-Jan-2024

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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 4

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110381-01	520963	≤ -10 °C	Methylene Chloride	10/10/2028	Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1010 ± 9.89
acenaphthylene	208-96-8	97.6	14.290.1P	1014 ± 9.93
aniline	62-53-3	99.97	64.1.4P	1001 ± 9.8
anthracene	120-12-7	99.5	15.7.1P	999.6 ± 9.79
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 9.8
benzo[a]anthracene	56-55-3	100	16.7.3P	1007 ± 9.86
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1011 ± 14.11
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 10.96
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 13.95
benzo[a]pyrene	50-32-8	97	20.286.2P	999.9 ± 22.24
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 9.82
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	1000 ± 14.69
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1003 ± 13.89
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.15P	999.4 ± 14.68
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 9.8
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 17.03
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	1000 ± 13.85
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 16.79
carbazole	86-74-8	99.4	239.7.2P	1000 ± 9.8

*Not a certified value

512270 } RC/
↓
512274 } 05/24/24

Kerry Kane

Certified By: _____

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values
listed are determined gravimetrically.

Certificate of Analysis

Page 2 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	100	66.7.1P	1000 ± 9.79
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	1001 ± 17.07
4-chloro-3-methylphenol	59-50-7	99	102.1.2P	1006 ± 17.16
2-chloronaphthalene	91-58-7	99.9	42.7.6P	1000 ± 9.79
2-chlorophenol	95-57-8	99.8	103.7.1P	1007 ± 13.96
chrysene	218-01-9	96	21.286.2P	998.4 ± 12.85
dibenz[a,h]anthracene	53-70-3	99.44	22.286.3P	1000 ± 9.74
dibenzofuran	132-64-9	100	67.7.2.1P	1002 ± 9.77
di-n-butyl phthalate	84-74-2	99.84	40.286.1P	1007 ± 24.48
1,2-dichlorobenzene	95-50-1	99.8	43.7.1P	1000 ± 9.79
1,3-dichlorobenzene	541-73-1	99.5	44.1.3P	999.4 ± 9.79
1,4-dichlorobenzene	106-46-7	99.9	45.29.2P	1000 ± 9.79
2,4-dichlorophenol	120-83-2	99.6	104.7.1.1P	1005 ± 13.93
diethyl phthalate	84-66-2	99.8	38.7.1P	1011 ± 14
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	1009 ± 13.98
dimethyl phthalate	131-11-3	99.9	39.9.2P	996.5 ± 13.8
1,2-dinitrobenzene	528-29-0	99.86	86.7.3.1P	999.5 ± 9.75
1,3-dinitrobenzene	99-65-0	100	313.7.2P	998 ± 9.79
1,4-dinitrobenzene	100-25-4	100	907.7.1P	999.5 ± 9.8
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1002 ± 13.89
2,4-dinitrotoluene	121-14-2	100	87.7.3P	999.8 ± 13.85
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	999.6 ± 13.85
di-n-octyl phthalate	117-84-0	99.1	41.7.5P	991.6 ± 13.74
diphenylamine	122-39-4	100	78.1.6P	998 ± 13.79
2,3,5,6-tetrachlorophenol	935-95-5	97	1112.286.1P	1004 ± 14.02
fluoranthene	206-44-0	98.6	23.7.4P	999.6 ± 9.79
fluorene	86-73-7	98.4	24.7.1P	999.7 ± 9.79

*Not a certified value

Kerry Kane

Certified By:

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certificate of Analysis

Page 3 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	999.9 ± 13.96
hexachlorobutadiene	87-68-3	97.4	47.1.4P	1000 ± 9.79
hexachlorocyclopentadiene	77-47-4	99.2	48.2.2P	1001 ± 9.8
hexachloroethane	67-72-1	99.9	49.1.4P	1003 ± 9.82
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.4P	999.4 ± 22.23
isophorone	78-59-1	98.9	90.1.4P	999.9 ± 13.85
2-methyl-4,6-dinitrophenol	534-52-1	99.6	107.421.2DP	991 ± 24.09
1-methylnaphthalene	90-12-0	97.1	249.7.5P	999.2 ± 13.95
2-methylnaphthalene	91-57-6	97.4	68.7.2P	1006 ± 22.38
2-methylphenol	95-48-7	99.6	114.7.3P	1001 ± 13.87
3-methylphenol	108-39-4	99.1	115.7.4P	499.7 ± 6.92
4-methylphenol	106-44-5	99.5	116.7.1P	501.2 ± 6.94
naphthalene	91-20-3	99.8	26.9.1P	1018 ± 9.97
2-nitroaniline	88-74-4	99.7	69.29.1P	999.6 ± 9.79
3-nitroaniline	99-09-2	100	70.7.3P	1000 ± 9.74
4-nitroaniline	100-01-6	99.7	71.29.1P	1001 ± 9.8
nitrobenzene	98-95-3	100	94.7.1P	1000 ± 13.85
2-nitrophenol	88-75-5	99.1	108.29.1P	996.5 ± 13.81
4-nitrophenol	100-02-7	100	109.7.1P	1000 ± 13.82
N-nitrosodimethylamine	62-75-9	99.5	57.3.19P	998.5 ± 14.67
N-nitrosodi-n-propylamine	621-64-7	99.8	59.286.1P	996.8 ± 17
pentachlorophenol	87-86-5	99	110.1.7P	1004 ± 13.92
phenanthrene	85-01-8	99.7	27.1.5P	999 ± 12.87
phenol	108-95-2	100	112.7.1P	998.5 ± 13.8
pyrene	129-00-0	99.2	28.9.2P	998.9 ± 9.78
pyridine	110-86-1	100	101.24.1P	999 ± 9.73
2,3,4,6-Tetrachlorophenol	58-90-2	91.8	120.421.1P	996.5 ± 13.92

*Not a certified value

Kerry Kane

Certified By:

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values
listed are determined gravimetrically.

Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	999.6 ± 9.79
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	999.5 ± 13.85
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	996 ± 13.8

*Not a certified value

Kerry E Kane

Certified By:

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined 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. : 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/
↓ 7/24/24
S12508 }

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. : 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.



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.



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.



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. : 31615 **Lot No.:** A0212955
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 : June 30, 2027 **Storage:** 10°C or colder
Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,004.5 µg/mL	+/- 44.8902
2	DFTPP (Decafluorotriphenylphosphine)	5074-71-5	Q117-147	99%	1,004.5 µg/mL	+/- 44.8902
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 µg/mL	+/- 44.9572
4	4,4'-DDT	50-29-3	S240530RSR	97%	1,000.1 µg/mL	+/- 44.6922

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12577 } RC
↓
S12579 } 8/2/24

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.)

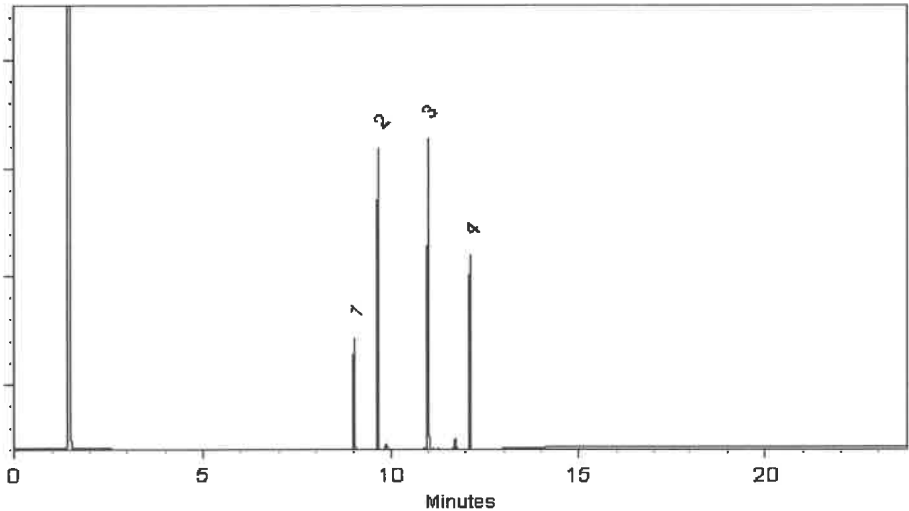
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

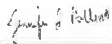
Inj. Vol
1µl



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.


Ethan Winiarski - Operations Tech I

Date Mixed: 19-Jun-2024 Balance Serial # 1128353505


Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Jun-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.:** A0212266

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,000.6 µg/mL	+/- 90.1075
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,000.3 µg/mL	+/- 90.0925
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,000.4 µg/mL	+/- 90.1000
4	Phenanthrene-d10	1517-22-2	PR-34099	99%	2,000.5 µg/mL	+/- 90.1037
5	Chrysene-d12	1719-03-5	PR-33506	99%	2,000.7 µg/mL	+/- 90.1112
6	Perylene-d12	1520-96-3	PR-33205	99%	2,000.6 µg/mL	+/- 90.1075

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12645
↓
S12674
AC
10/1/24



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.:** A0212266

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,000.6 µg/mL	+/- 90.1075
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,000.3 µg/mL	+/- 90.0925
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,000.4 µg/mL	+/- 90.1000
4	Phenanthrene-d10	1517-22-2	PR-34099	99%	2,000.5 µg/mL	+/- 90.1037
5	Chrysene-d12	1719-03-5	PR-33506	99%	2,000.7 µg/mL	+/- 90.1112
6	Perylene-d12	1520-96-3	PR-33205	99%	2,000.6 µg/mL	+/- 90.1075

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12645
↓
S12674
AC
10/1/24



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.:** A0219438

Description : 8270 MegaMix®
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12963
↓
S12992 } AC
12/17/20

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/- 36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/- 36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/- 36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/- 36.6257
22	2,4-Dichlorophenol	120-83-2	BCKK6969	99%	1,001.5	µg/mL	+/- 36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/- 36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/- 36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/- 36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/- 36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/- 36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/- 36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/- 36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/- 36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/- 36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/- 36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/- 36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/- 36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/- 36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/- 36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/- 36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/- 36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/- 36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/- 36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/- 36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/- 36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/- 36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/- 36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/- 36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/- 36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/- 36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/- 36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/- 36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/- 36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/- 36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/- 36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/- 36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/- 36.4938
55	Azobenzene	103-33-3	BCKK0887	99%	1,002.4	µg/mL	+/- 36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/- 36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/- 36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/- 36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/- 36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/- 36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/- 36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/- 36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/- 36.5120
64	Pyrene	129-00-0	BCKK2592	99%	1,002.0	µg/mL	+/- 36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/- 36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/- 36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/- 36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/- 36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/- 36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/- 36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/- 36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/- 36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/- 36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/- 36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/- 36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/- 36.5217

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.



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.:** A0219438

Description : 8270 MegaMix®
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12963
↓
S12992 } AC
12/17/20

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/- 36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/- 36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/- 36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/- 36.6257
22	2,4-Dichlorophenol	120-83-2	BCKK6969	99%	1,001.5	µg/mL	+/- 36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/- 36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/- 36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/- 36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/- 36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/- 36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/- 36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/- 36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/- 36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/- 36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/- 36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/- 36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/- 36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/- 36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/- 36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/- 36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/- 36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/- 36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/- 36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/- 36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/- 36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/- 36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/- 36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/- 36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/- 36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/- 36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/- 36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/- 36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/- 36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/- 36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/- 36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/- 36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/- 36.4938
55	Azobenzene	103-33-3	BCKK0887	99%	1,002.4	µg/mL	+/- 36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/- 36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/- 36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/- 36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/- 36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/- 36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/- 36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/- 36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/- 36.5120
64	Pyrene	129-00-0	BCKK2592	99%	1,002.0	µg/mL	+/- 36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/- 36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/- 36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/- 36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/- 36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/- 36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/- 36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/- 36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/- 36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/- 36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/- 36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/- 36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/- 36.5217

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.



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.:** A0219438

Description : 8270 MegaMix®
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12963
↓
S12992 } AC
12/17/20

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/- 36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/- 36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/- 36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/- 36.6257
22	2,4-Dichlorophenol	120-83-2	BCKK6969	99%	1,001.5	µg/mL	+/- 36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/- 36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/- 36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/- 36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/- 36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/- 36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/- 36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/- 36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/- 36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/- 36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/- 36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/- 36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/- 36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/- 36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/- 36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/- 36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/- 36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/- 36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/- 36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/- 36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/- 36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/- 36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/- 36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/- 36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/- 36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/- 36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/- 36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/- 36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/- 36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/- 36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/- 36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/- 36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/- 36.4938
55	Azobenzene	103-33-3	BCKK0887	99%	1,002.4	µg/mL	+/- 36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/- 36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/- 36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/- 36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/- 36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/- 36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/- 36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/- 36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/- 36.5120
64	Pyrene	129-00-0	BCKK2592	99%	1,002.0	µg/mL	+/- 36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/- 36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/- 36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/- 36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/- 36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/- 36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/- 36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/- 36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/- 36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/- 36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/- 36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/- 36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/- 36.5217

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.



5580 Skyline Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110816-01	531243	≤ -10 °C	Methylene Chloride	1/2/2030	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	337.7.4P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	993.8 ± 5.78
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

513057 } AC
↓
513061 } 1/16/25

*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: _____

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.



SHIPPING DOCUMENTS

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18

CHEMTECH CHAIN OF CUSTODY RECORD		284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 Fax: (908) 78-8922 www.chemtech.net		Chemtech Project Number: Q 2488											
				COC Number:											
CLIENT INFORMATION		PROJECT INFORMATION		BILLING INFORMATION											
COMPANY: Tetra Tech		PROJECT NAME: NWIRP Bethpage		BILL TO: PO#											
ADDRESS: 4433 Corporation Ln, Suite 300		PROJECT #: 112G08005-WE13 LOCATION: RW8		ADDRESS:											
CITY: Virginia Beach STATE: VA ZIP: 23462		PROJECT MANAGER: Ernie Wu		CITY: STATE: ZIP:											
ATTENTION: Ernie Wu		E-MAIL: ernie.wu@tetratech.com		ATTENTION: PHONE:											
PHONE: 757-466-4901 FAX: 757-461-4148		PHONE: 757-466-4901 FAX: 757-461-4148													
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION		ANALYSIS											
FAX: _____ 10 _____ DAYS* HARD COPY: _____ 10 _____ DAYS* EDD _____ 10 _____ DAYS* * TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		☐ RESEULTS ONLY ☐ USEPA CLP ☐ RESULTS + QC ☐ New York State ASP "B" ☐ New Jersey REDUCED ☐ New York State ASP "A" ☐ New Jersey CLP ☐ Other _____ ☐ EDD Format _____		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">1,4-Dioxane SW846 8270</td> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td> </tr> </table>		1,4-Dioxane SW846 8270	1	2	3	4	5	6	7	8	9
1,4-Dioxane SW846 8270	1	2	3	4	5	6	7	8	9						
				PRESERVATIVES											
				COMMENTS											
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP GRAB	SAMPLE COLLECTION DATE TIME	# of Bottles										
1.	RW8-SP100-20250701	GW		7/1/25 13:05	2										
2.	RW8-SP303-20250701	GW		7/1/25 13:13	4										
3.															
4.															
5.															
6.															
7.															
8.															
9.															
10.															

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSESSION INCLUDING COURIER DELIVERY									
RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY	Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp <u>2.1°C</u> MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: <u>yes</u> Comments: TR-6m #1						
RELINQUISHED BY	DATE/TIME	RECEIVED BY							
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY							
SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight CHEMTECH: ☐ Picked Up ☐ Overnight			Shipment Complete ☐ YES ☐ NO						

Page _____ of _____
WHITE - CHEMTECH COPY FOR RETURN TO CLIENT YELLOW - CHEMTECH COPY PINK - SAMPLER COPY

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
 Data File : BN037481.D
 Acq On : 11 Jul 2025 19:43
 Operator : RC/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 18 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

Quant Time: Jul 11 22:42:51 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

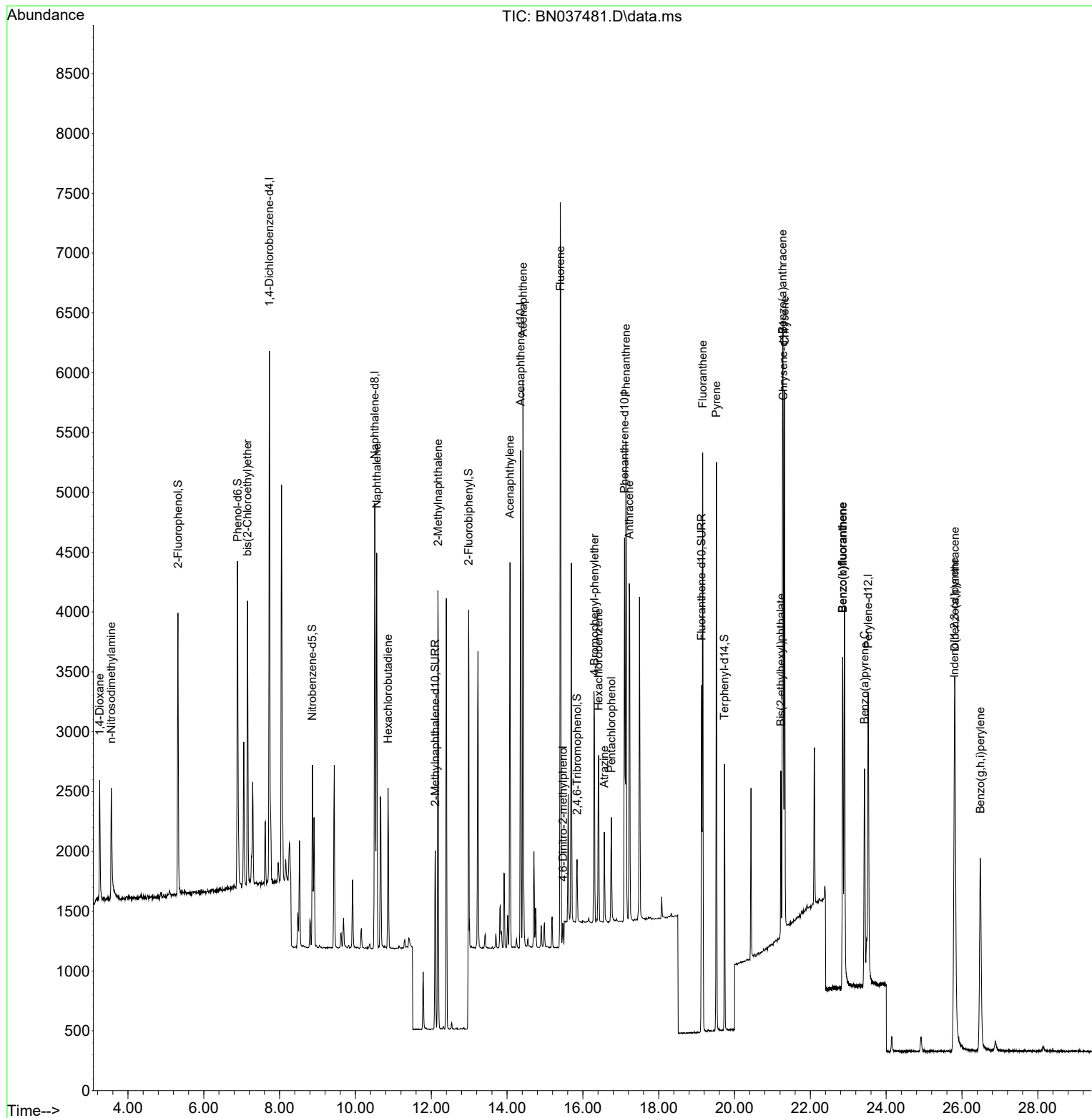
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	2080	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4810	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2230	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	4045	0.400	ng	0.00
29) Chrysene-d12	21.286	240	3148	0.400	ng	# 0.00
35) Perylene-d12	23.528	264	3275	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1903	0.393	ng	0.00
5) Phenol-d6	6.894	99	2379	0.391	ng	0.00
8) Nitrobenzene-d5	8.865	82	1147	0.329	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	2015	0.308	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	296	0.391	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	4458	0.350	ng	0.00
27) Fluoranthene-d10	19.132	212	3064	0.300	ng	0.00
31) Terphenyl-d14	19.736	244	2090	0.318	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.254	88	659	0.337	ng	98
3) n-Nitrosodimethylamine	3.557	42	859	0.329	ng	100
6) bis(2-Chloroethyl)ether	7.154	93	1661	0.326	ng	100
9) Naphthalene	10.562	128	4185	0.324	ng	99
10) Hexachlorobutadiene	10.861	225	1067	0.344	ng	# 99
12) 2-Methylnaphthalene	12.177	142	2536	0.313	ng	98
16) Acenaphthylene	14.078	152	3291	0.324	ng	99
17) Acenaphthene	14.420	154	2223	0.326	ng	99
18) Fluorene	15.403	166	2753	0.321	ng	98
20) 4,6-Dinitro-2-methylph...	15.478	198	141	0.310	ng	96
21) 4-Bromophenyl-phenylether	16.304	248	797	0.316	ng	92
22) Hexachlorobenzene	16.416	284	1153	0.331	ng	97
23) Atrazine	16.565	200	562	0.448	ng	93
24) Pentachlorophenol	16.751	266	422	0.352	ng	95
25) Phenanthrene	17.136	178	3968	0.322	ng	99
26) Anthracene	17.223	178	3404	0.306	ng	100
28) Fluoranthene	19.160	202	4165	0.308	ng	99
30) Pyrene	19.522	202	4077	0.322	ng	99
32) Benzo(a)anthracene	21.268	228	3329	0.312	ng	99
33) Chrysene	21.322	228	3716	0.319	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	1217	0.336	ng	95
36) Indeno(1,2,3-cd)pyrene	25.800	276	3929	0.309	ng	98
37) Benzo(b)fluoranthene	22.853	252	3502	0.275	ng	100
38) Benzo(k)fluoranthene	22.853	252	3502	0.271	ng	99
39) Benzo(a)pyrene	23.429	252	2804	0.274	ng	99
40) Dibenzo(a,h)anthracene	25.814	278	3294	0.321	ng	97
41) Benzo(g,h,i)perylene	26.484	276	3300	0.294	ng	99

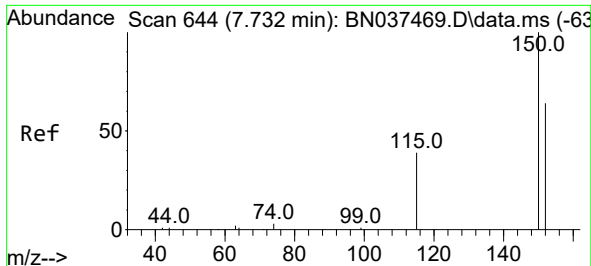
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071125\
Data File : BN037481.D
Acq On : 11 Jul 2025 19:43
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 18 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

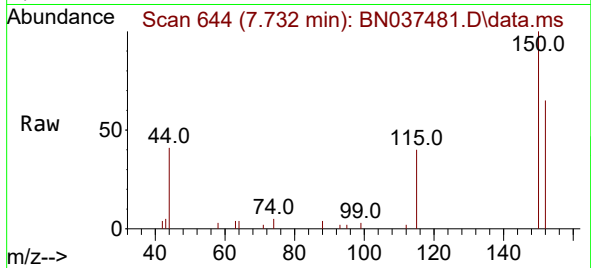
Quant Time: Jul 11 22:42:51 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration



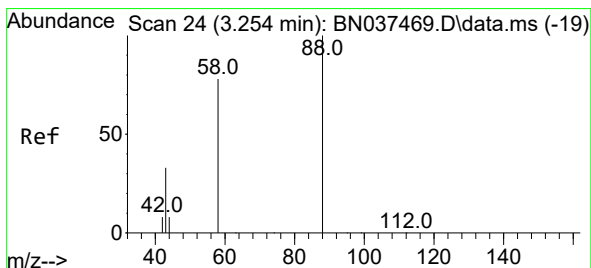
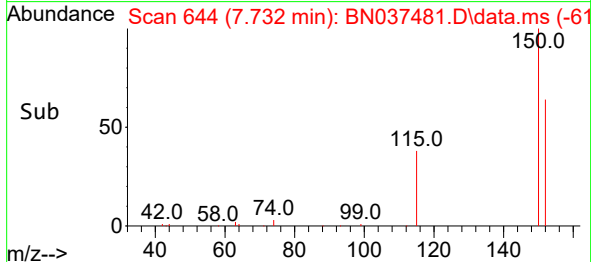
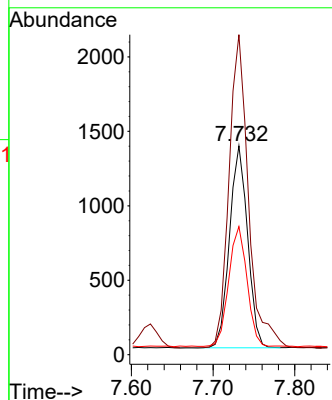


#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 7.732 min Scan# 64
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

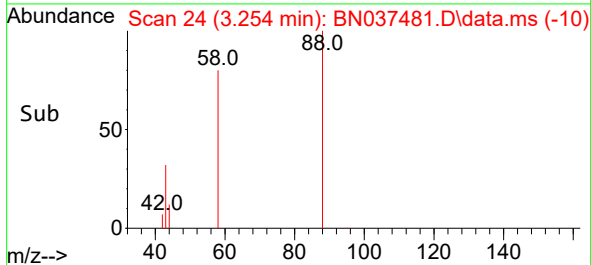
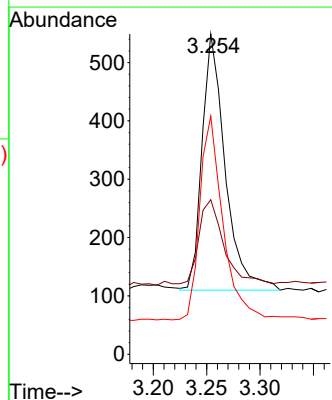
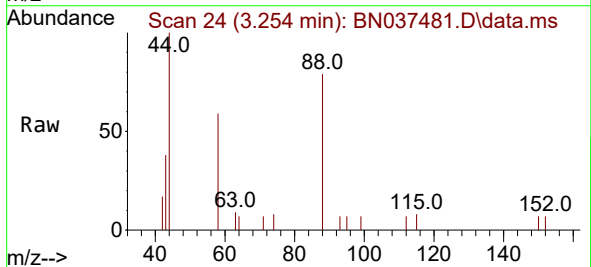


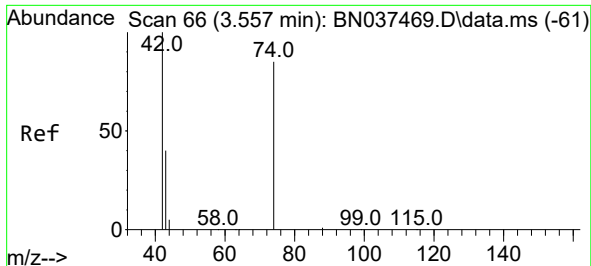
Tgt Ion:152 Resp: 2080
 Ion Ratio Lower Upper
 152 100
 150 153.3 122.5 183.7
 115 61.4 49.9 74.9



#2
 1,4-Dioxane
 Concen: 0.337 ng
 RT: 3.254 min Scan# 24
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Tgt Ion: 88 Resp: 659
 Ion Ratio Lower Upper
 88 100
 43 35.5 30.7 46.1
 58 80.3 65.0 97.4

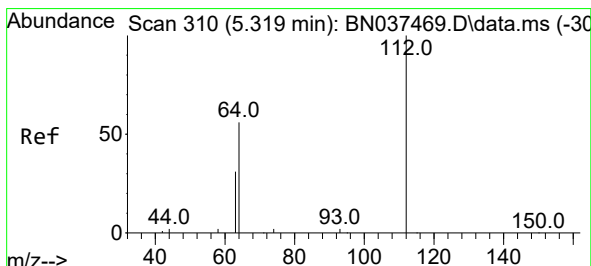
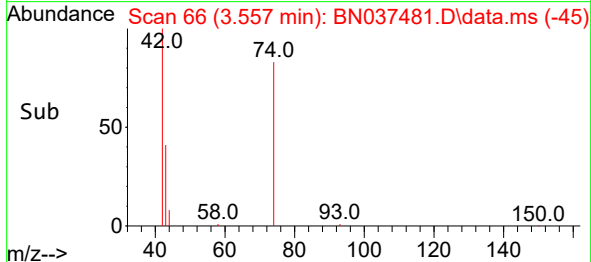
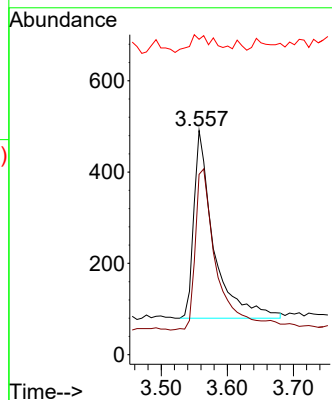
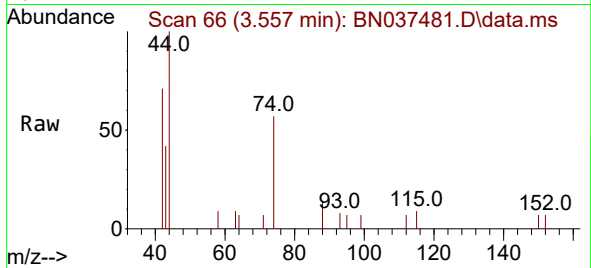




#3
 n-Nitrosodimethylamine
 Concen: 0.329 ng
 RT: 3.557 min Scan# 61
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

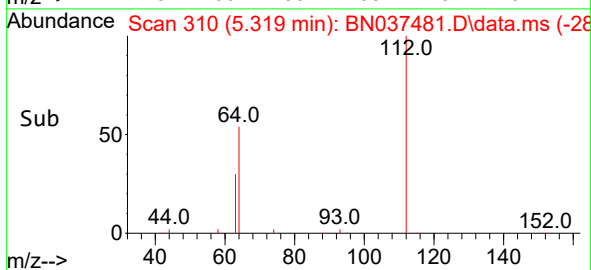
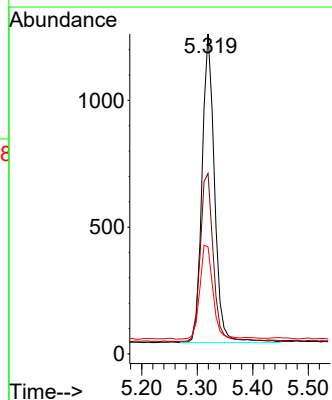
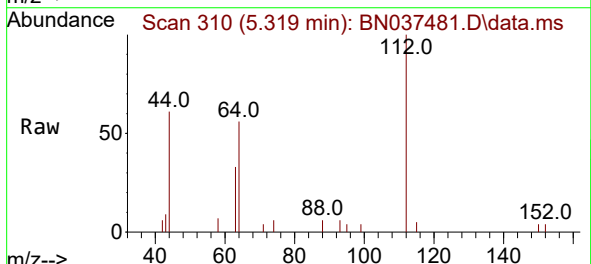
Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

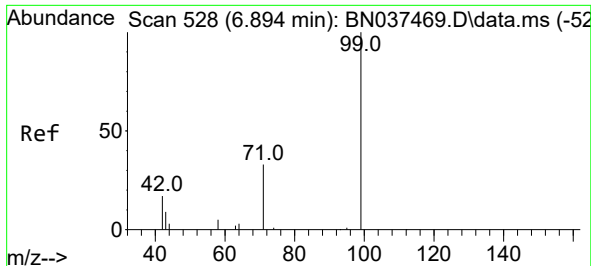
Tgt Ion: 42 Resp: 859
 Ion Ratio Lower Upper
 42 100
 74 93.6 74.9 112.3
 44 10.6 7.2 10.8



#4
 2-Fluorophenol
 Concen: 0.393 ng
 RT: 5.319 min Scan# 310
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Tgt Ion: 112 Resp: 1903
 Ion Ratio Lower Upper
 112 100
 64 57.2 45.4 68.0
 63 31.8 24.7 37.1

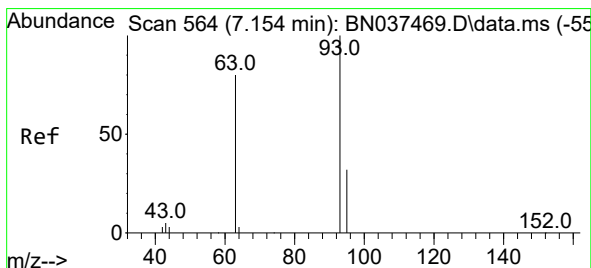
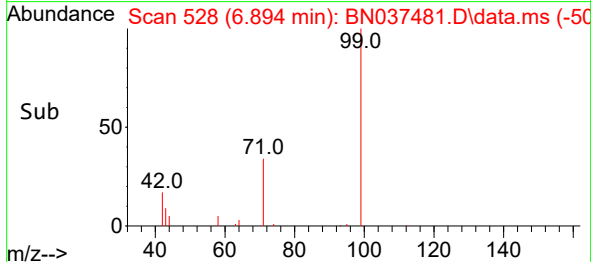
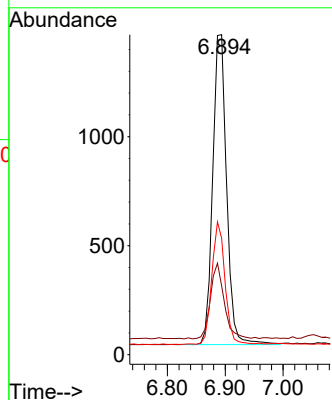
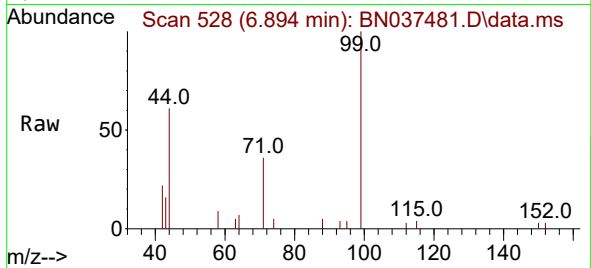




#5
Phenol-d6
Concen: 0.391 ng
RT: 6.894 min Scan# 51
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

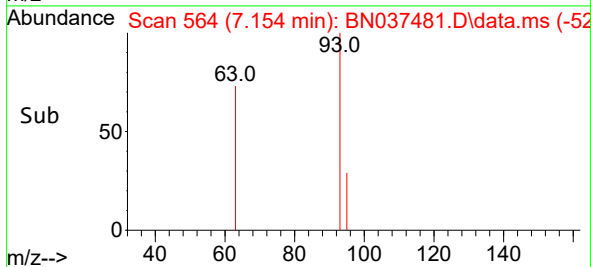
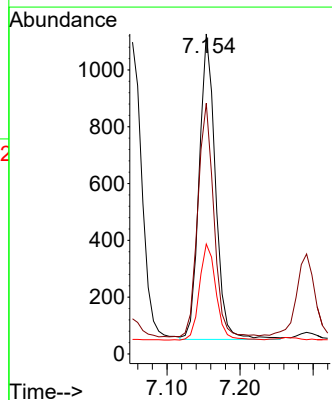
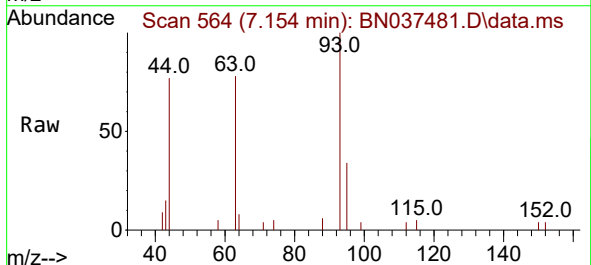
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

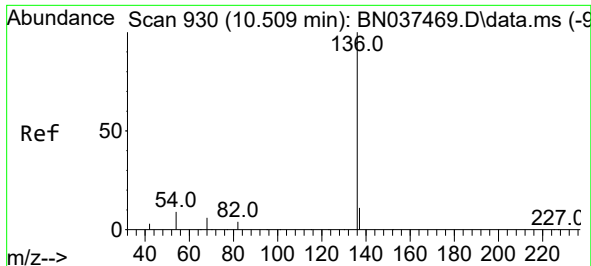
Tgt Ion:	99	Resp:	2379
Ion	Ratio	Lower	Upper
99	100		
42	24.2	19.5	29.3
71	37.5	29.4	44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.326 ng
RT: 7.154 min Scan# 564
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:	93	Resp:	1661
Ion	Ratio	Lower	Upper
93	100		
63	75.4	60.8	91.2
95	32.0	25.6	38.4

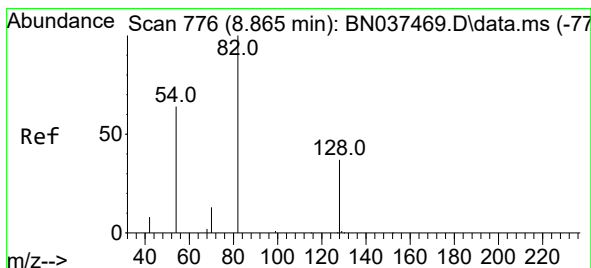
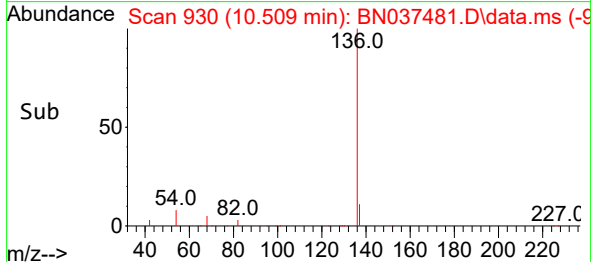
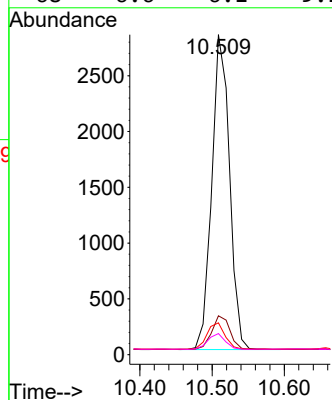
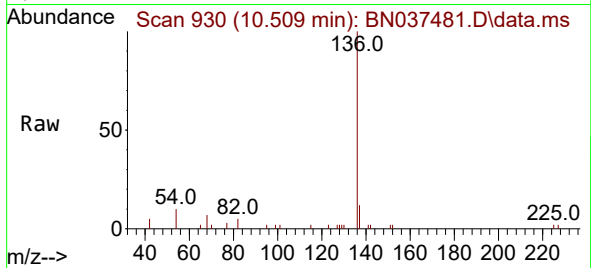




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

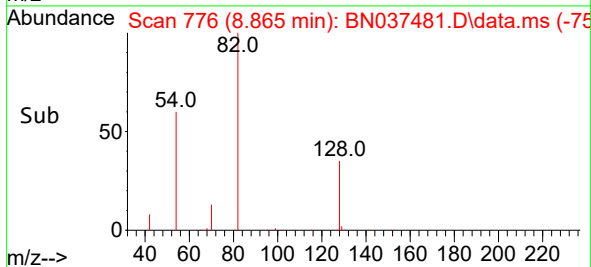
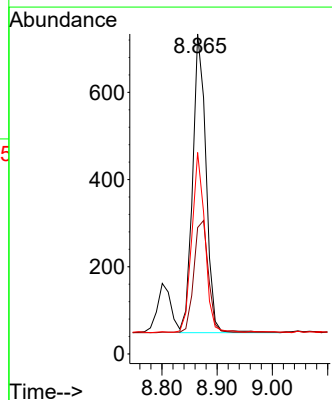
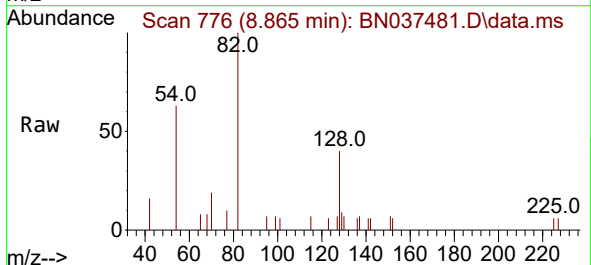
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

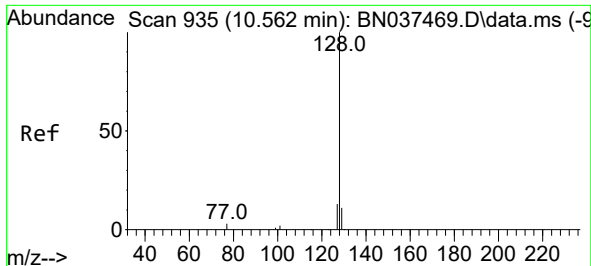
Tgt Ion:	136	Resp:	4810
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.0	15.0
54	10.0	9.0	13.6
68	6.6	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.329 ng
RT: 8.865 min Scan# 776
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:	82	Resp:	1147
Ion	Ratio	Lower	Upper
82	100		
128	39.5	33.1	49.7
54	62.9	53.0	79.4

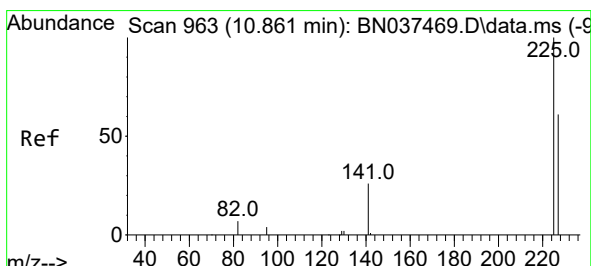
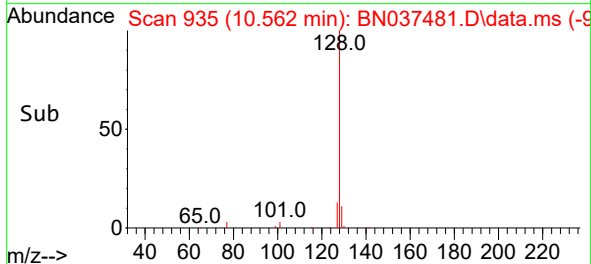
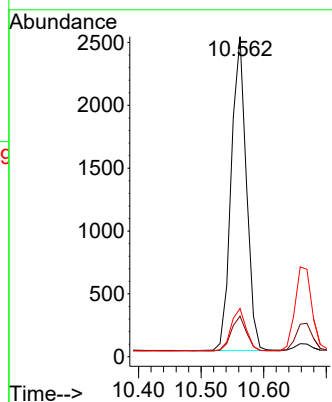
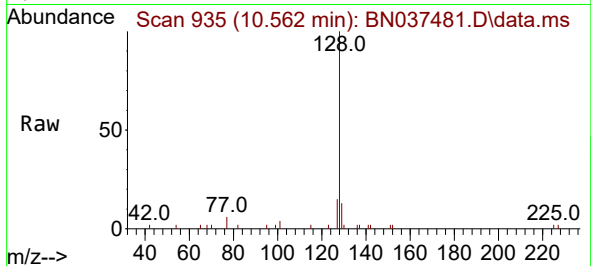




#9
Naphthalene
Concen: 0.324 ng
RT: 10.562 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

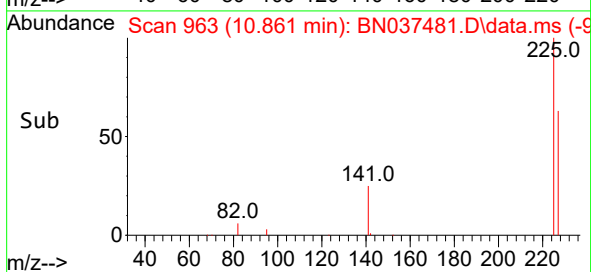
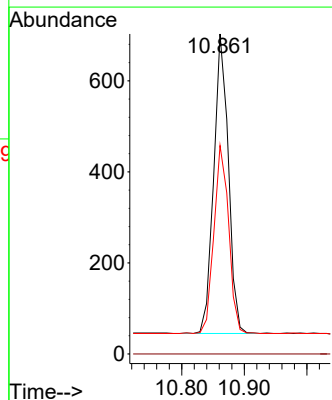
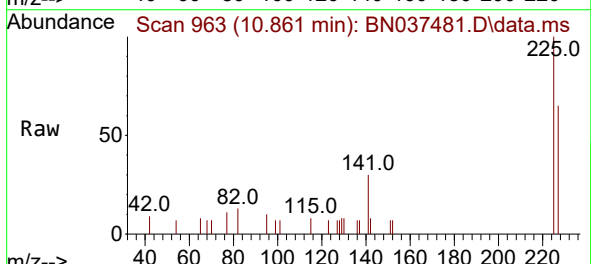
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

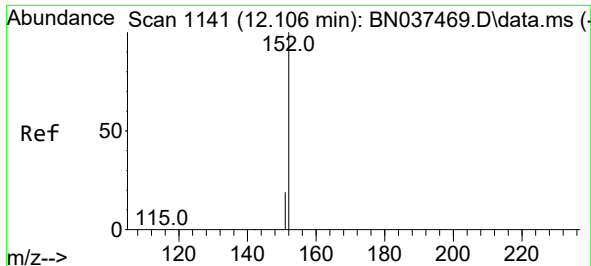
Tgt Ion:	128	Resp:	4185
Ion	Ratio	Lower	Upper
128	100		
129	12.6	10.2	15.2
127	15.0	11.8	17.6



#10
Hexachlorobutadiene
Concen: 0.344 ng
RT: 10.861 min Scan# 963
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:	225	Resp:	1067
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.3	51.4	77.2

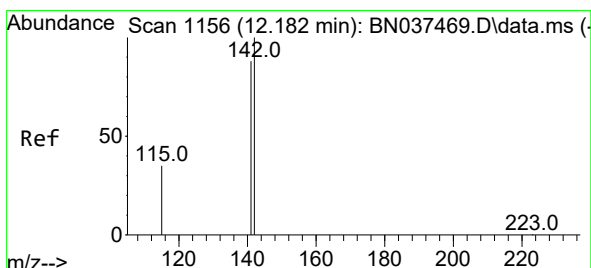
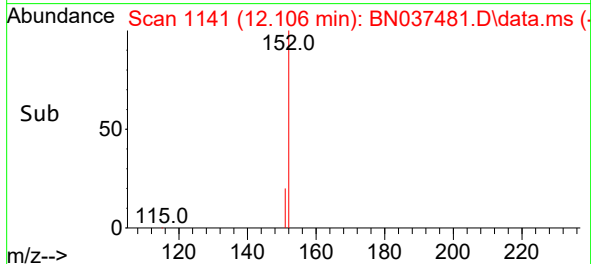
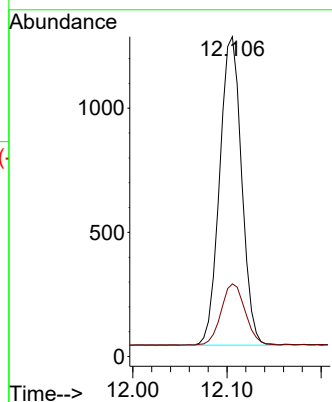
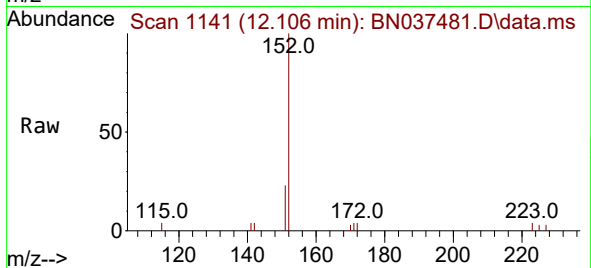




#11
2-Methylnaphthalene-d10
Concen: 0.308 ng
RT: 12.106 min Scan# 1141
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

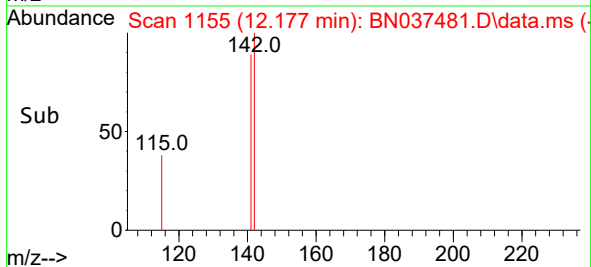
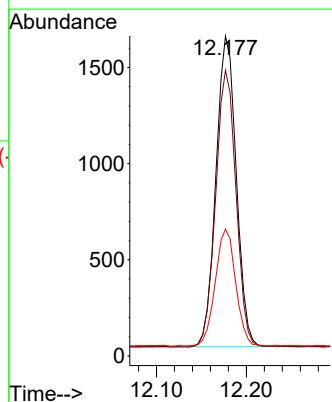
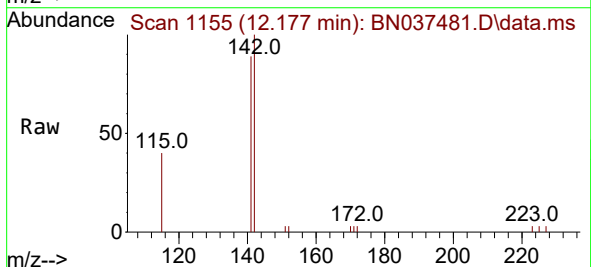
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

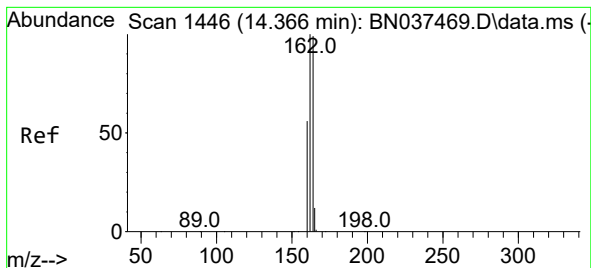
Tgt Ion:152 Resp: 2015
Ion Ratio Lower Upper
152 100
151 21.5 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.313 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:142 Resp: 2536
Ion Ratio Lower Upper
142 100
141 89.2 70.6 105.8
115 39.7 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.011 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

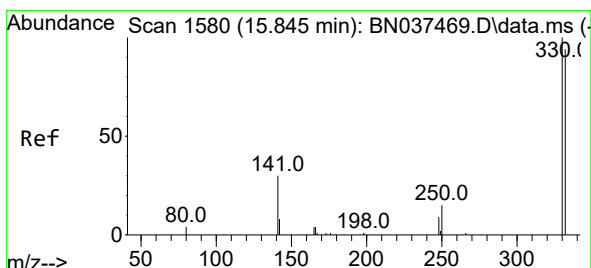
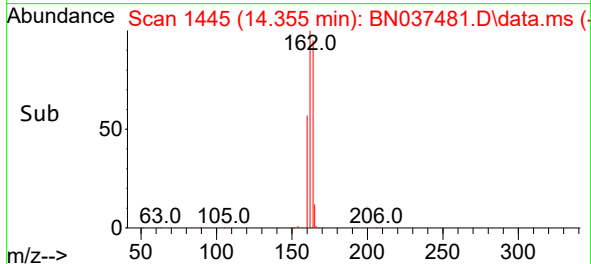
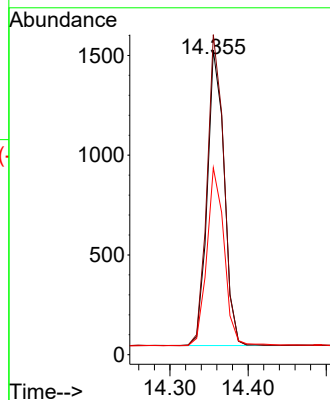
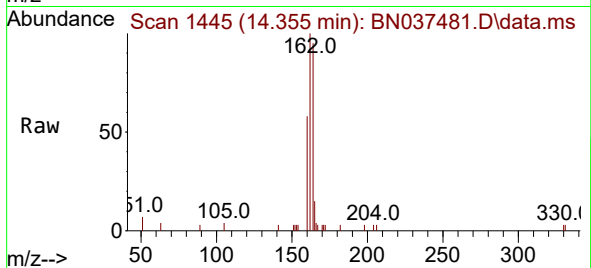
Tgt Ion:164 Resp: 2230

Ion Ratio Lower Upper

164 100

162 105.0 81.1 121.7

160 61.4 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 0.391 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

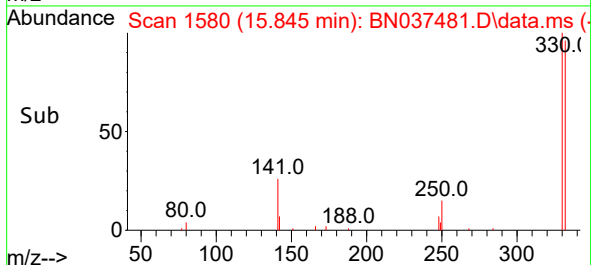
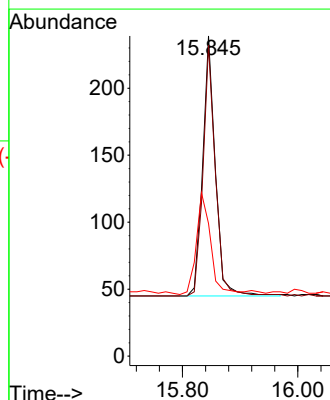
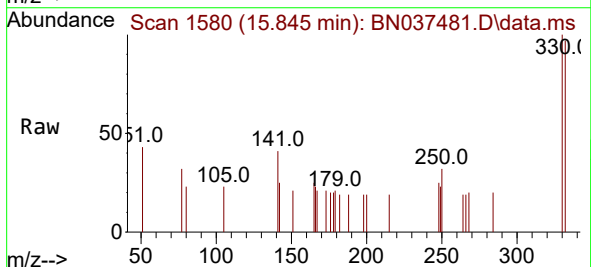
Tgt Ion:330 Resp: 296

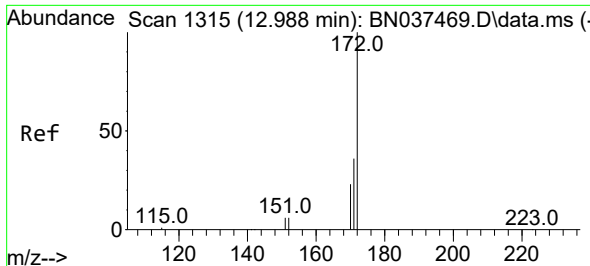
Ion Ratio Lower Upper

330 100

332 94.3 82.0 123.0

141 44.3 36.2 54.2

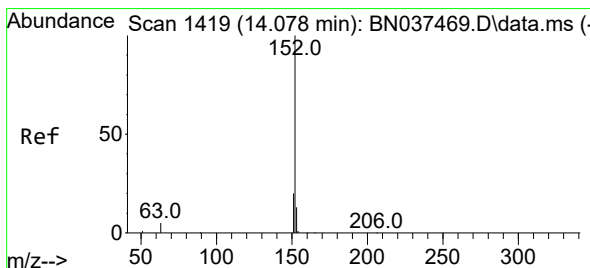
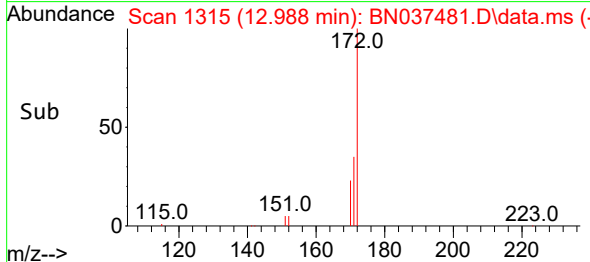
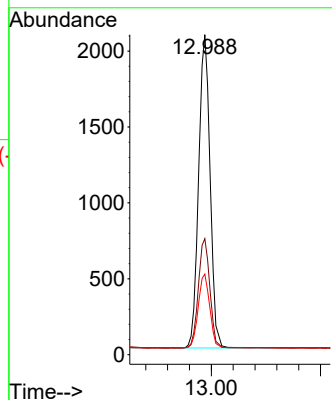
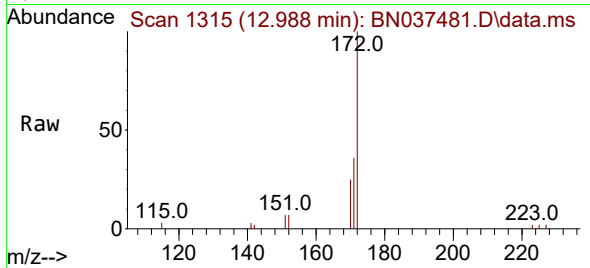




#15
2-Fluorobiphenyl
Concen: 0.350 ng
RT: 12.988 min Scan# 1315
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

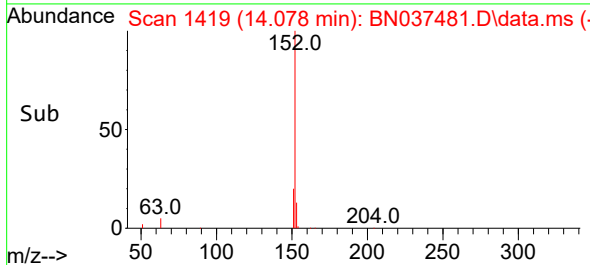
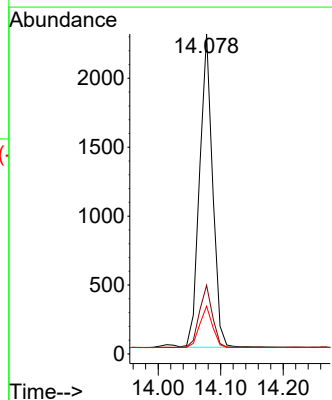
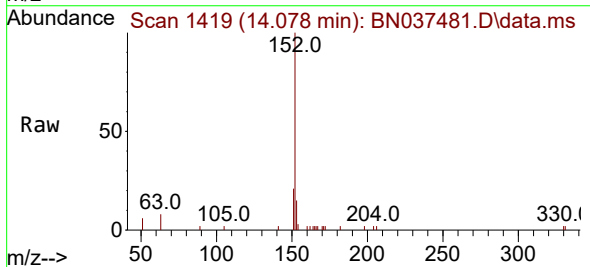
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

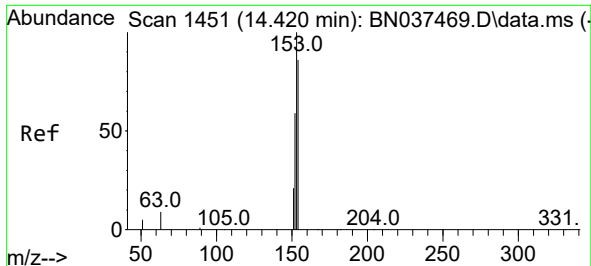
Tgt Ion:172	Resp:	4458
Ion Ratio	Lower	Upper
172	100	
171	36.2	29.8 44.8
170	25.2	20.0 30.0



#16
Acenaphthylene
Concen: 0.324 ng
RT: 14.078 min Scan# 1419
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:152	Resp:	3291
Ion Ratio	Lower	Upper
152	100	
151	20.1	16.4 24.6
153	13.0	10.6 15.8

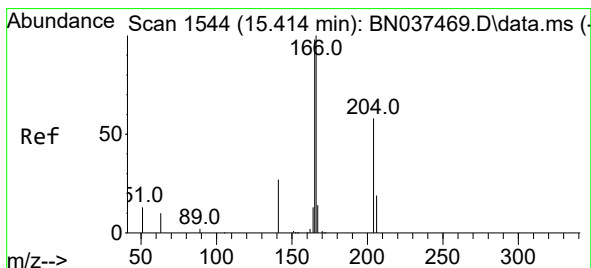
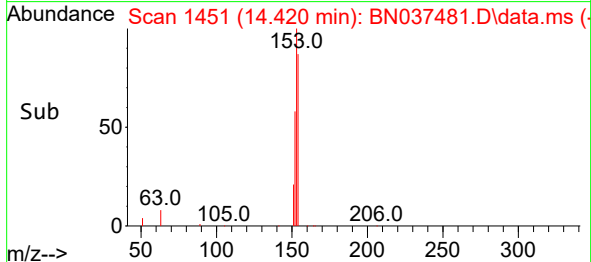
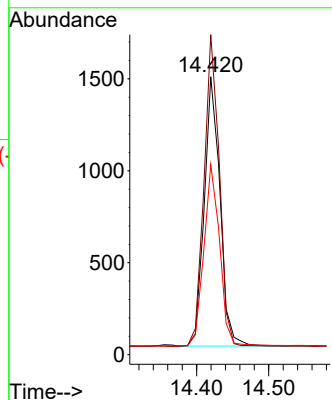
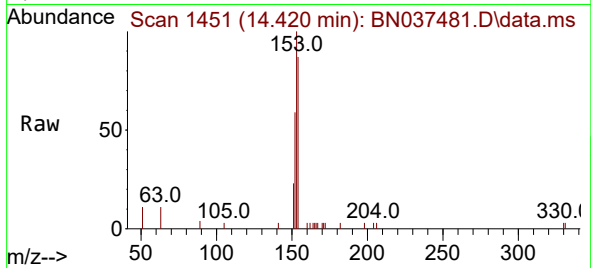




#17
Acenaphthene
Concen: 0.326 ng
RT: 14.420 min Scan# 1451
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

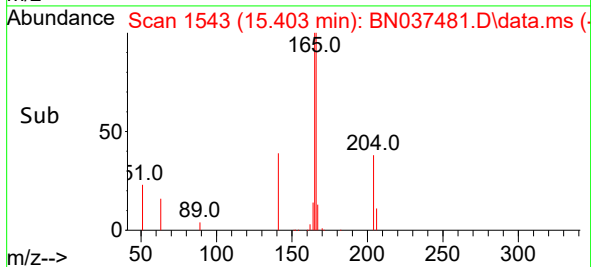
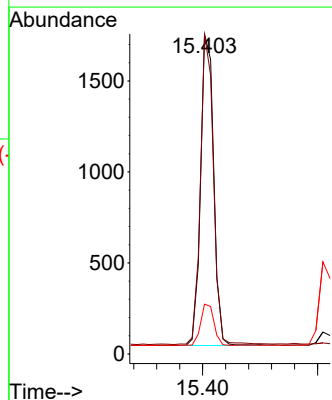
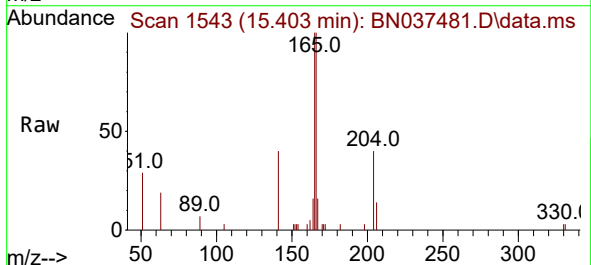
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

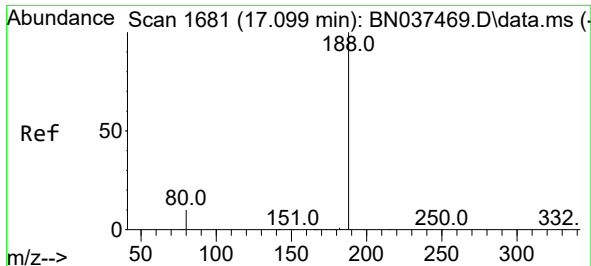
Tgt Ion:154 Resp: 2223
Ion Ratio Lower Upper
154 100
153 112.4 89.4 134.0
152 68.1 53.2 79.8



#18
Fluorene
Concen: 0.321 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:166 Resp: 2753
Ion Ratio Lower Upper
166 100
165 97.5 79.4 119.2
167 13.4 10.6 15.8

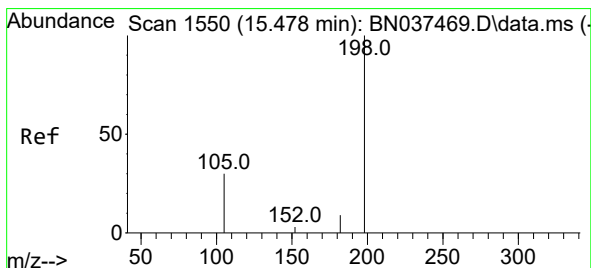
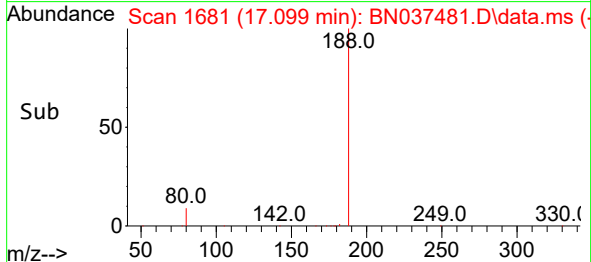
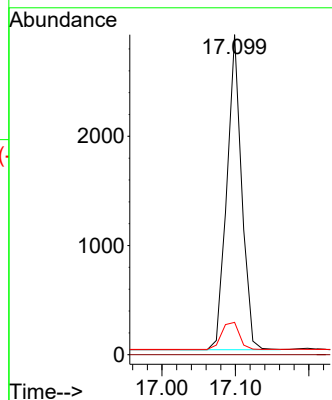
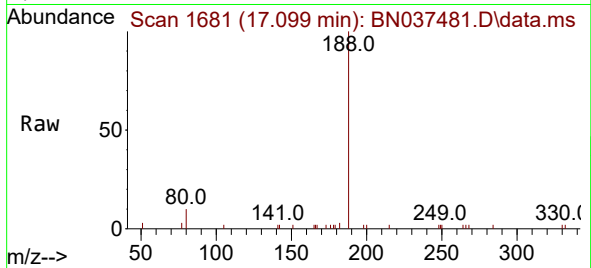




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

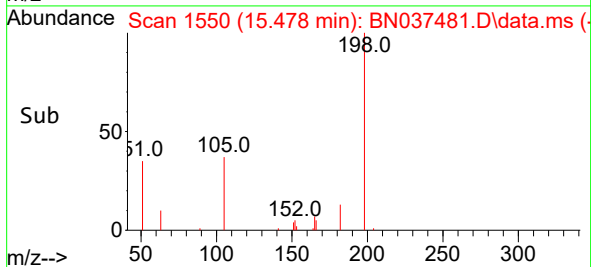
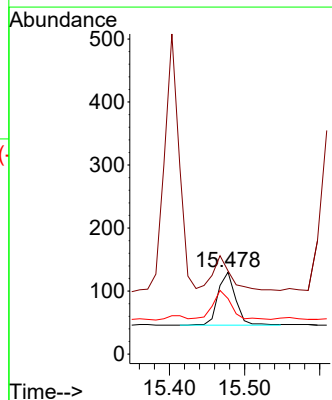
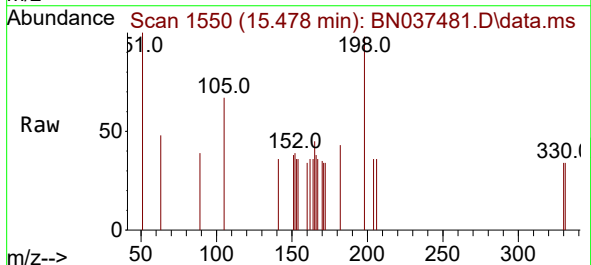
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

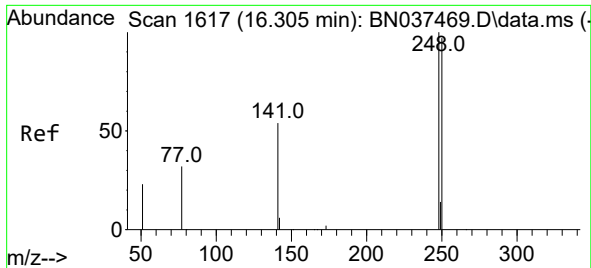
Tgt Ion:188 Resp: 4045
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.1 9.3 13.9



#20
4,6-Dinitro-2-methylphenol
Concen: 0.310 ng
RT: 15.478 min Scan# 1550
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:198 Resp: 141
Ion Ratio Lower Upper
198 100
51 101.5 86.0 129.0
105 67.7 53.0 79.4

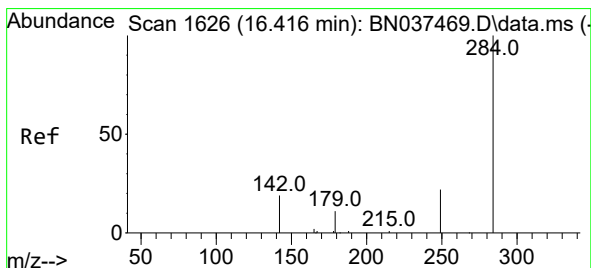
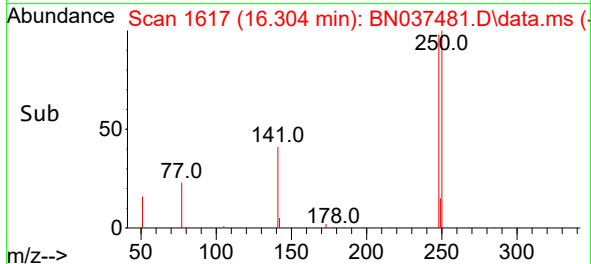
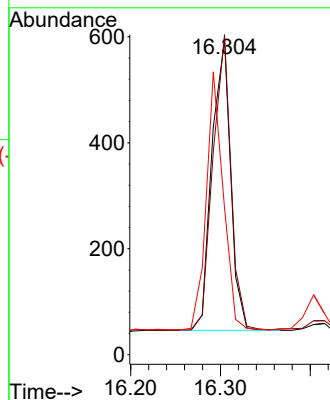
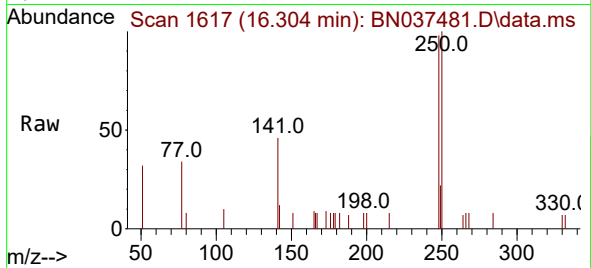




#21
4-Bromophenyl-phenylether
Concen: 0.316 ng
RT: 16.304 min Scan# 1617
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

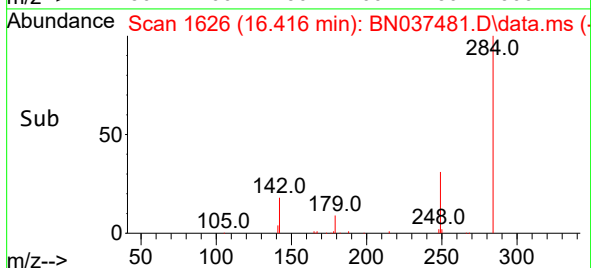
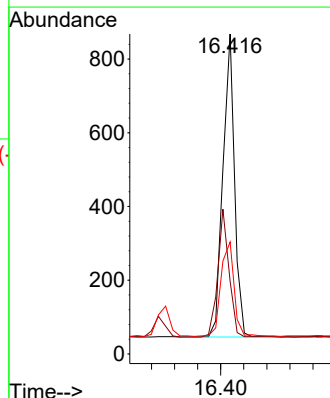
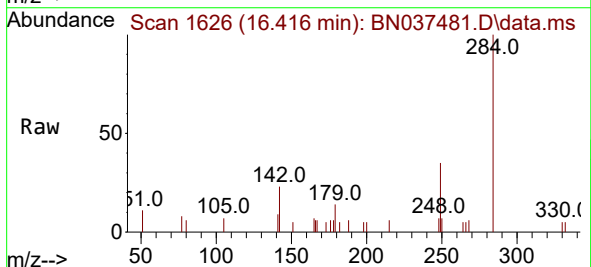
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

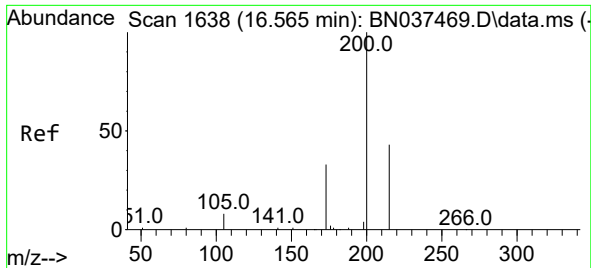
Tgt Ion:248 Resp: 797
Ion Ratio Lower Upper
248 100
250 101.7 77.8 116.6
141 46.6 45.9 68.9



#22
Hexachlorobenzene
Concen: 0.331 ng
RT: 16.416 min Scan# 1626
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:284 Resp: 1153
Ion Ratio Lower Upper
284 100
142 40.5 31.3 46.9
249 35.0 26.6 40.0

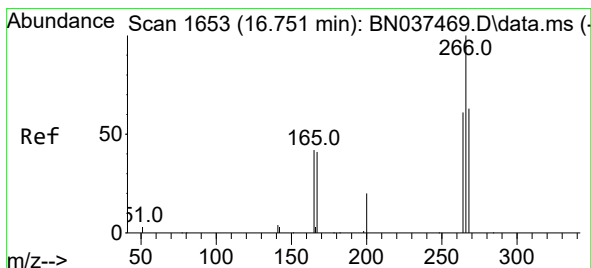
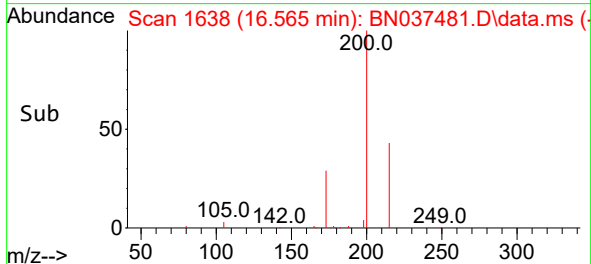
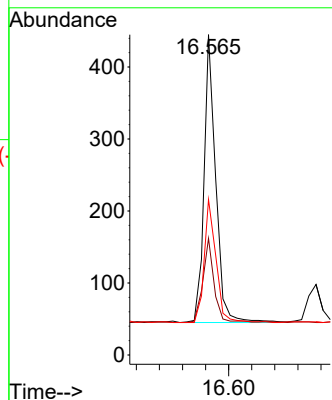
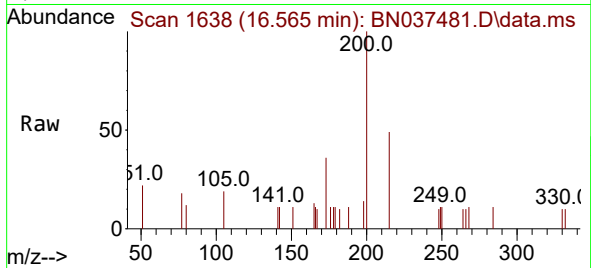




#23
 Atrazine
 Concen: 0.448 ng
 RT: 16.565 min Scan# 1638
 Delta R.T. 0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

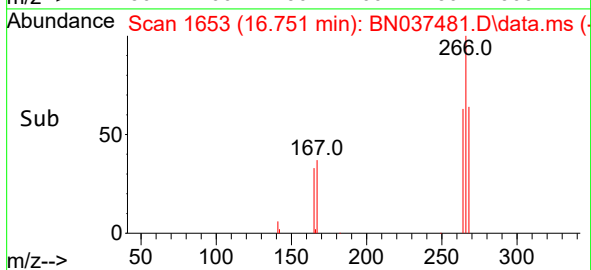
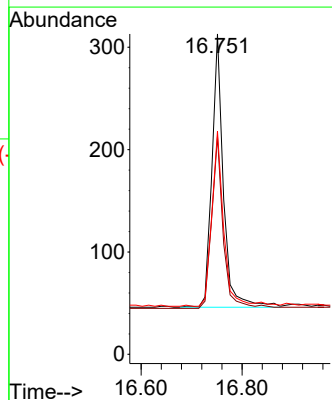
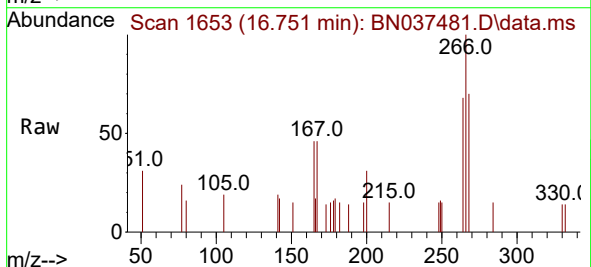
Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

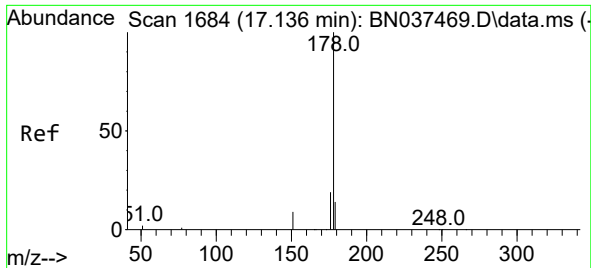
Tgt Ion:200 Resp: 562
 Ion Ratio Lower Upper
 200 100
 173 36.4 34.3 51.5
 215 48.5 41.6 62.4



#24
 Pentachlorophenol
 Concen: 0.352 ng
 RT: 16.751 min Scan# 1653
 Delta R.T. 0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Tgt Ion:266 Resp: 422
 Ion Ratio Lower Upper
 266 100
 264 63.3 47.5 71.3
 268 66.8 50.6 76.0

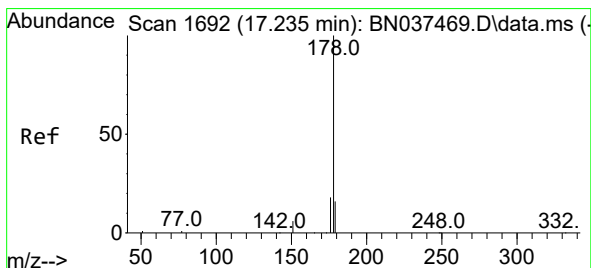
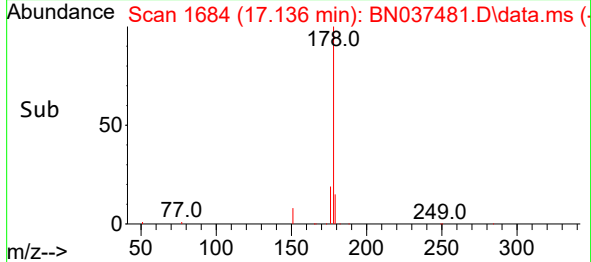
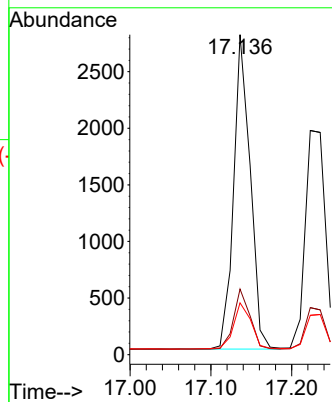
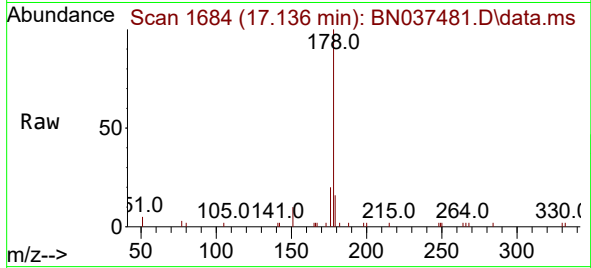




#25
Phenanthrene
Concen: 0.322 ng
RT: 17.136 min Scan# 1684
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

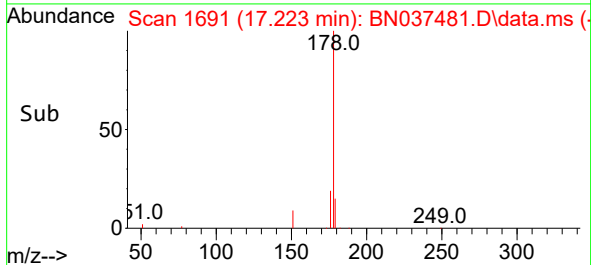
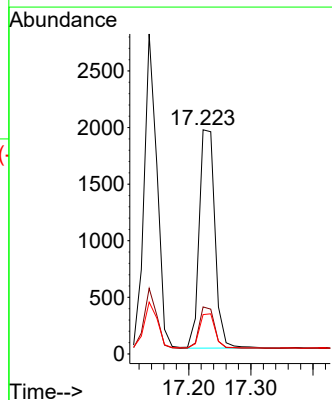
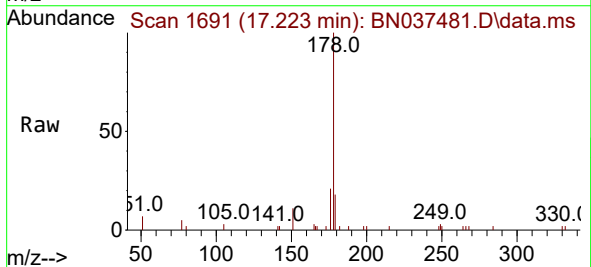
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

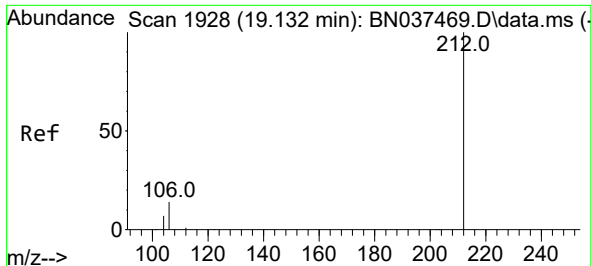
Tgt Ion:178 Resp: 3968
Ion Ratio Lower Upper
178 100
176 18.8 15.1 22.7
179 15.8 12.2 18.2



#26
Anthracene
Concen: 0.306 ng
RT: 17.223 min Scan# 1691
Delta R.T. -0.012 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

Tgt Ion:178 Resp: 3404
Ion Ratio Lower Upper
178 100
176 18.6 14.9 22.3
179 15.5 12.3 18.5





#27

Fluoranthene-d10

Concen: 0.300 ng

RT: 19.132 min Scan# 1928

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

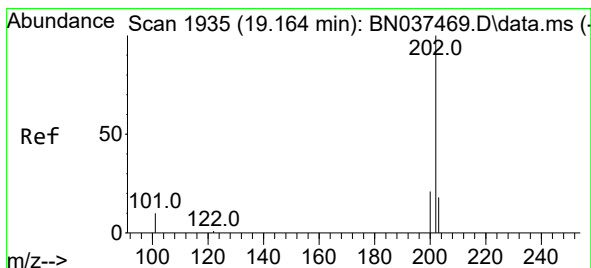
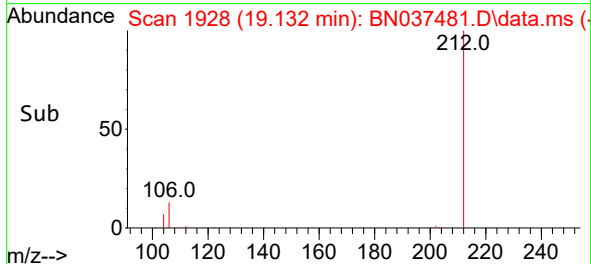
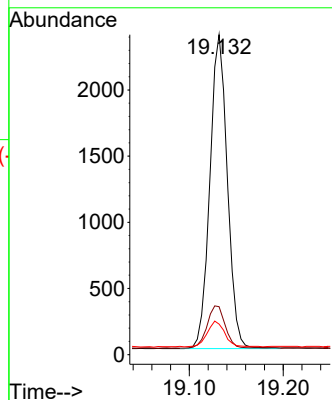
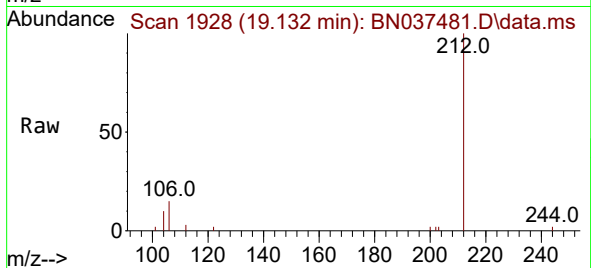
Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion:212	Resp:	3064
Ion Ratio	Lower	Upper
212	100	
106	14.0	11.7 17.5
104	8.2	6.6 10.0



#28

Fluoranthene

Concen: 0.308 ng

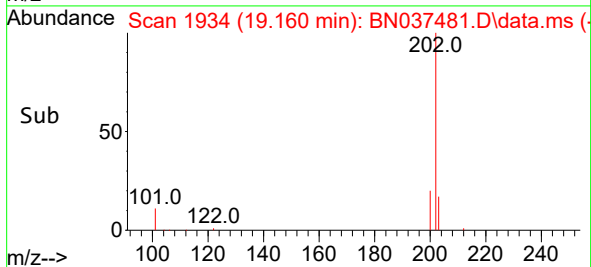
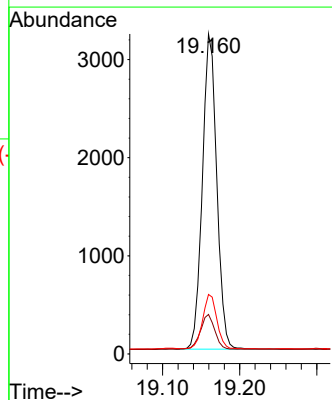
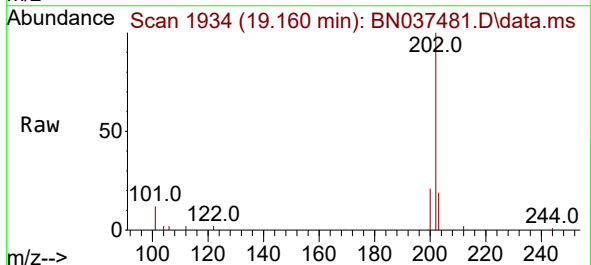
RT: 19.160 min Scan# 1934

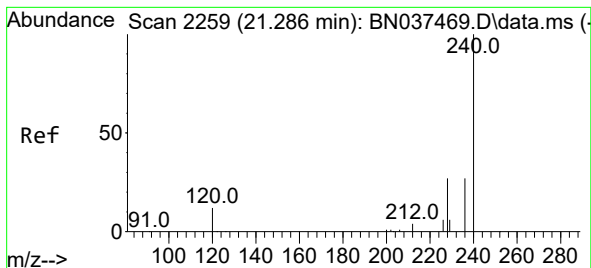
Delta R.T. -0.005 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Tgt Ion:202	Resp:	4165
Ion Ratio	Lower	Upper
202	100	
101	11.1	9.2 13.8
203	17.0	14.0 21.0





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.286 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC

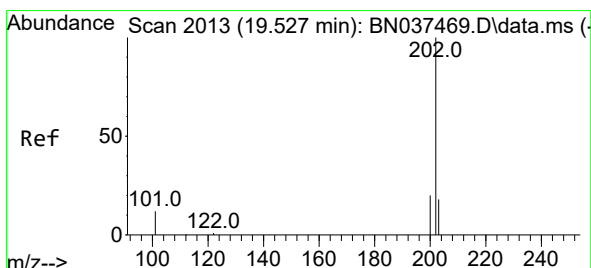
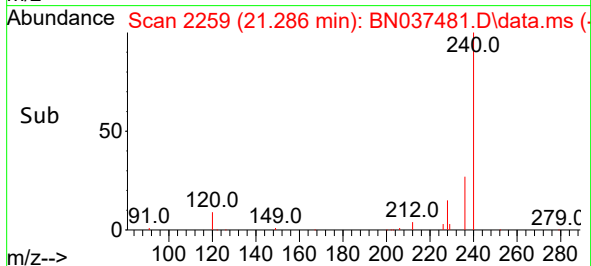
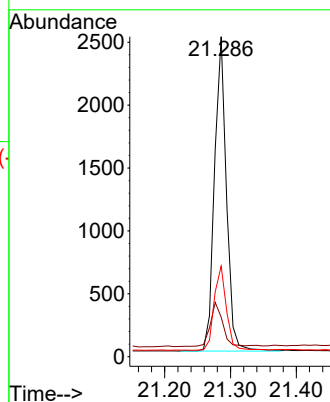
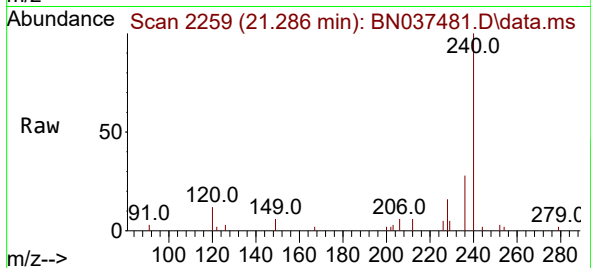
Tgt Ion:240 Resp: 3148

Ion Ratio Lower Upper

240 100

120 12.3 12.4 18.6#

236 28.3 22.9 34.3



#30

Pyrene

Concen: 0.322 ng

RT: 19.522 min Scan# 2012

Delta R.T. -0.005 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

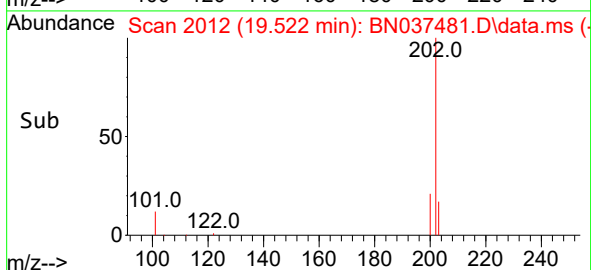
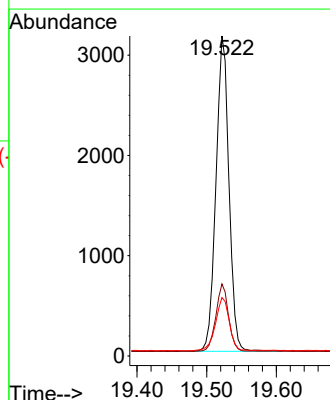
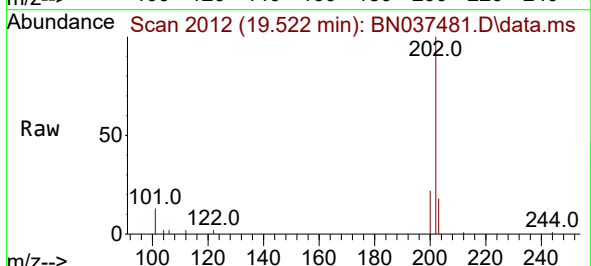
Tgt Ion:202 Resp: 4077

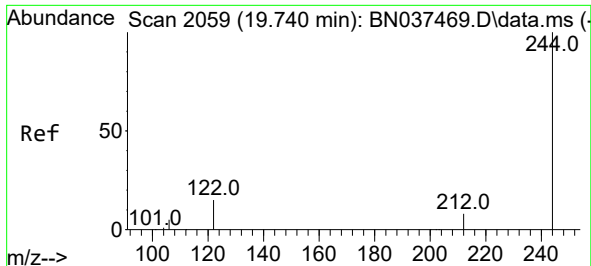
Ion Ratio Lower Upper

202 100

200 21.0 16.4 24.6

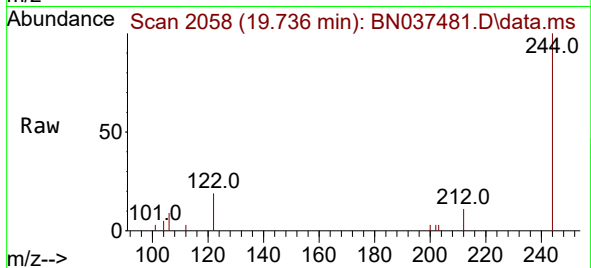
203 17.9 14.3 21.5



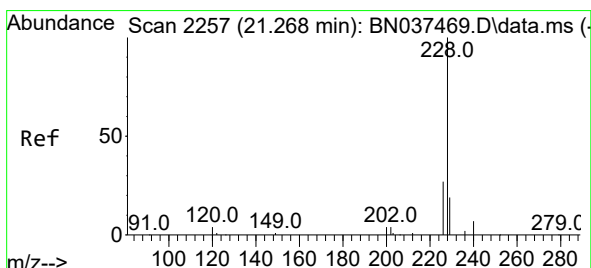
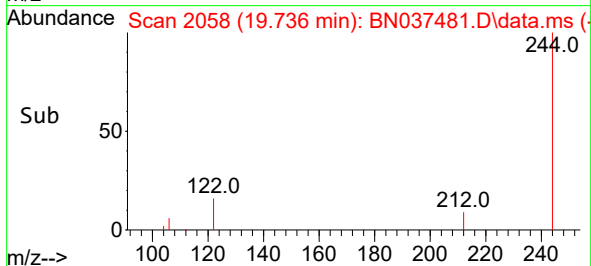
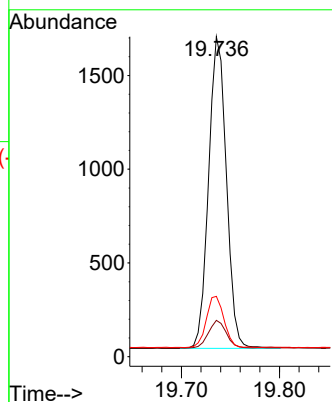


#31
 Terphenyl-d14
 Concen: 0.318 ng
 RT: 19.736 min Scan# 2058
 Delta R.T. -0.005 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

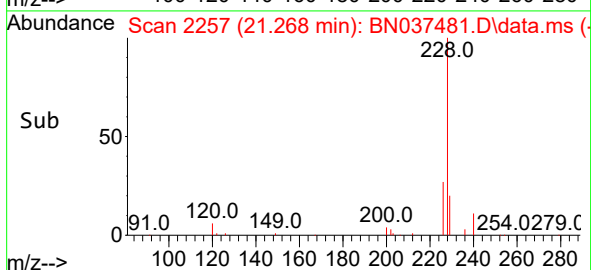
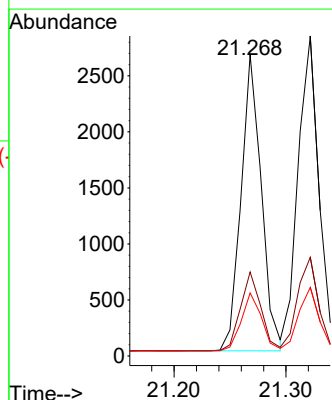
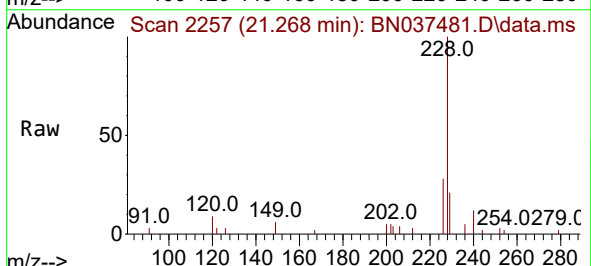


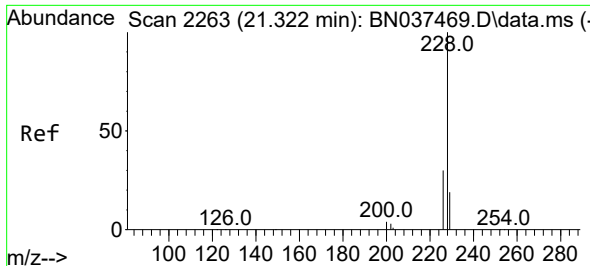
Tgt Ion:244 Resp: 2090
 Ion Ratio Lower Upper
 244 100
 212 11.4 8.7 13.1
 122 18.9 14.1 21.1



#32
 Benzo(a)anthracene
 Concen: 0.312 ng
 RT: 21.268 min Scan# 2257
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Tgt Ion:228 Resp: 3329
 Ion Ratio Lower Upper
 228 100
 226 27.9 22.7 34.1
 229 20.9 16.6 24.8

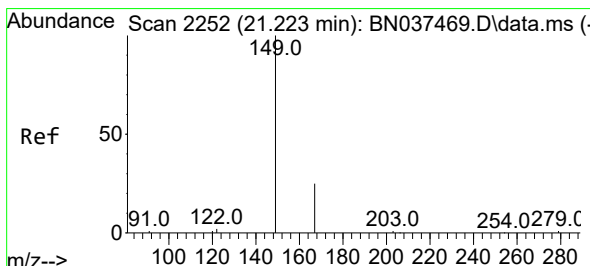
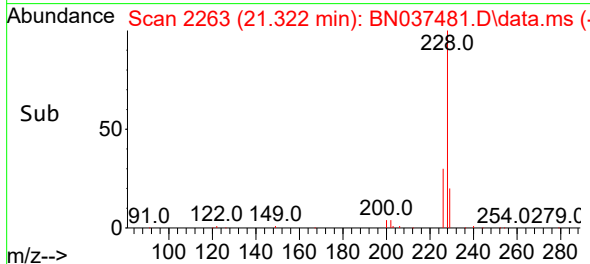
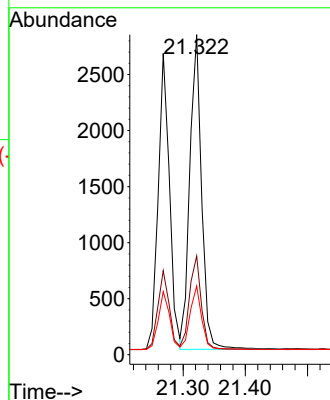
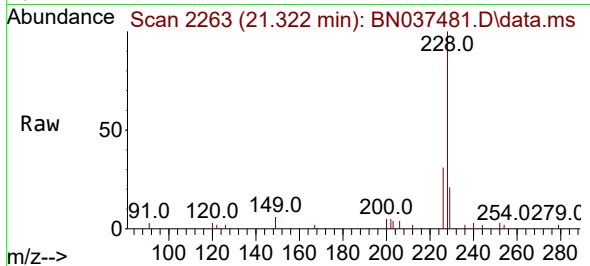




#33
Chrysene
Concen: 0.319 ng
RT: 21.322 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

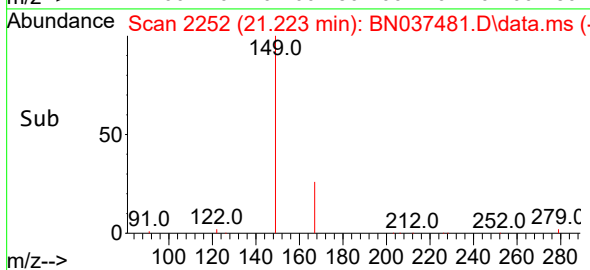
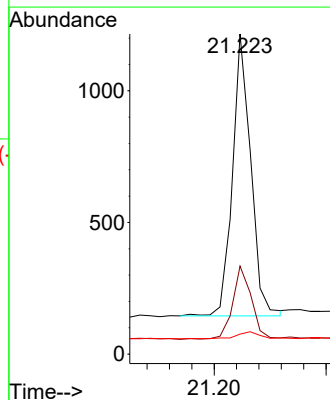
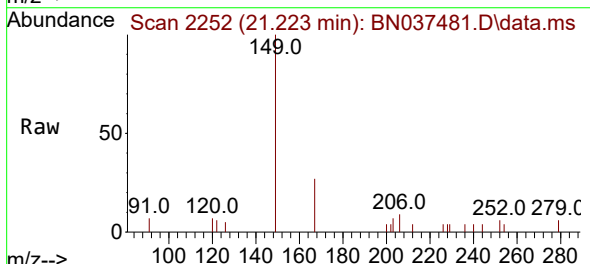
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

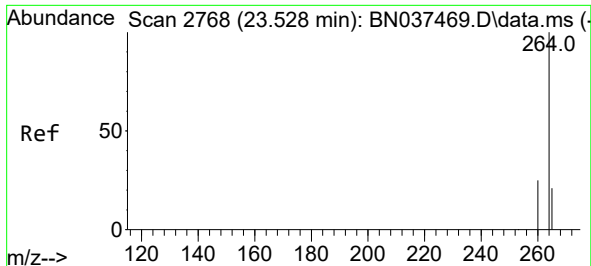
Tgt Ion:228 Resp: 3716
Ion Ratio Lower Upper
228 100
226 30.8 24.6 36.8
229 21.5 16.4 24.6



#34
Bis(2-ethylhexyl)phthalate
Concen: 0.336 ng
RT: 21.223 min Scan# 2252
Delta R.T. -0.000 min
Lab File: BN037481.D
Acq: 11 Jul 2025 19:43

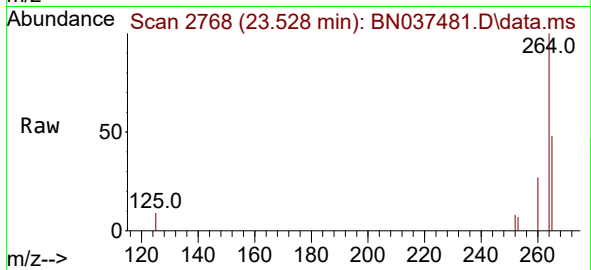
Tgt Ion:149 Resp: 1217
Ion Ratio Lower Upper
149 100
167 26.9 19.4 29.2
279 3.3 2.5 3.7





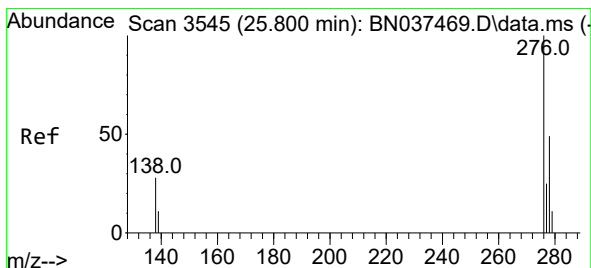
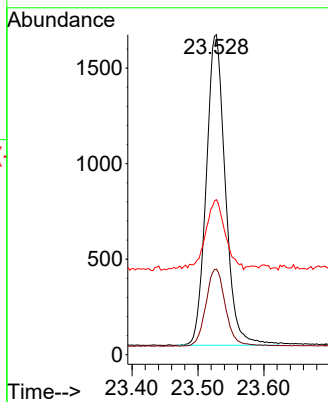
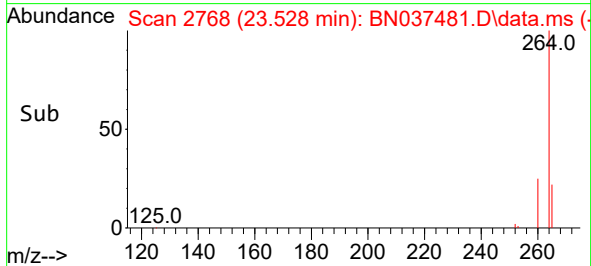
#35
 Perylene-d12
 Concen: 0.400 ng
 RT: 23.528 min Scan# 21
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC

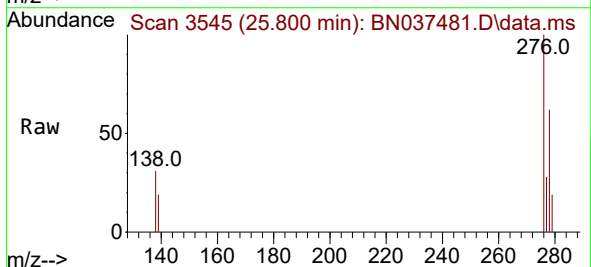


Tgt Ion:264 Resp: 3275

Ion	Ratio	Lower	Upper
264	100		
260	26.7	21.7	32.5
265	48.5	41.6	62.4

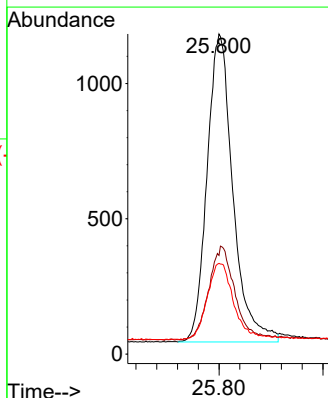
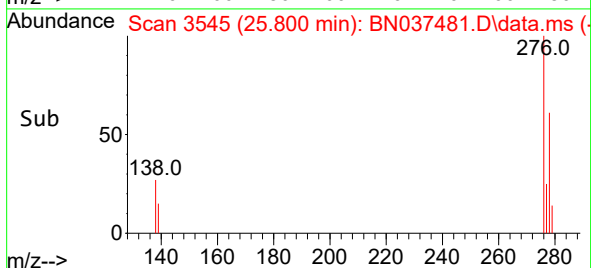


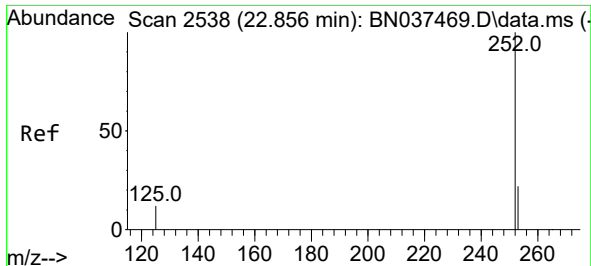
#36
 Indeno(1,2,3-cd)pyrene
 Concen: 0.309 ng
 RT: 25.800 min Scan# 3545
 Delta R.T. -0.000 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43



Tgt Ion:276 Resp: 3929

Ion	Ratio	Lower	Upper
276	100		
138	30.4	23.4	35.2
277	25.3	19.8	29.8





#37

Benzo(b)fluoranthene

Concen: 0.275 ng

RT: 22.853 min Scan# 2537

Delta R.T. -0.003 min

Lab File: BN037481.D

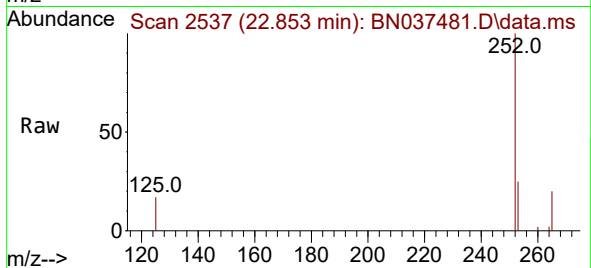
Acq: 11 Jul 2025 19:43

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4EC



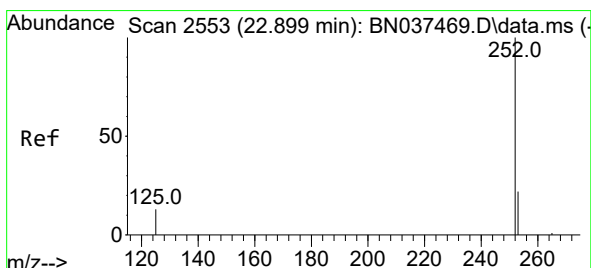
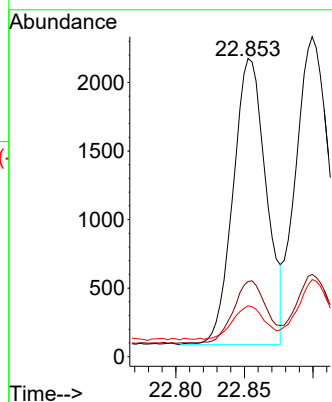
Tgt Ion:252 Resp: 3502

Ion Ratio Lower Upper

252 100

253 25.2 20.1 30.1

125 17.1 13.7 20.5



#38

Benzo(k)fluoranthene

Concen: 0.271 ng

RT: 22.853 min Scan# 2537

Delta R.T. -0.047 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

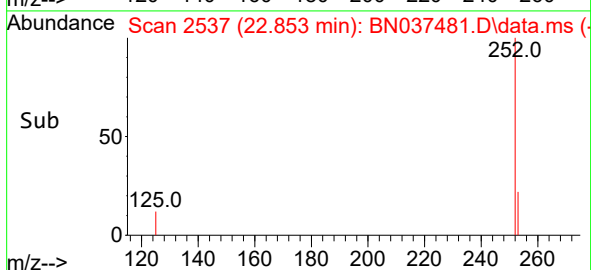
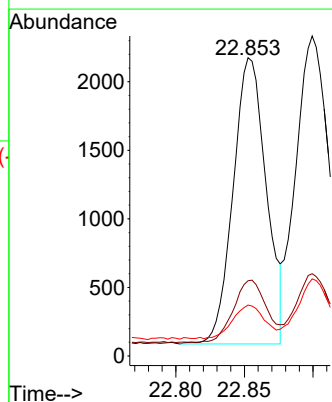
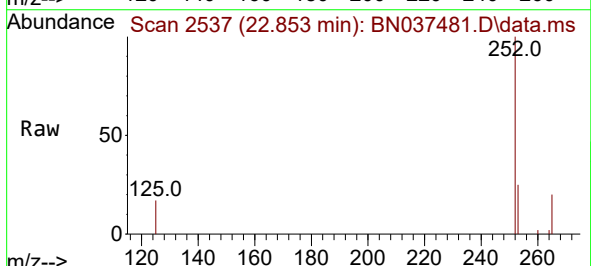
Tgt Ion:252 Resp: 3502

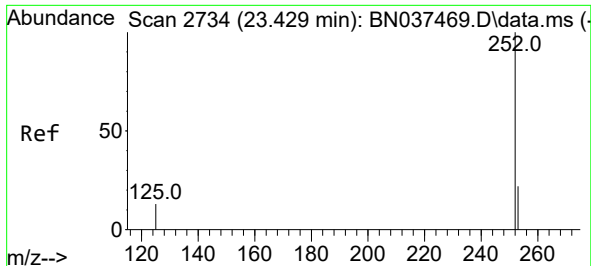
Ion Ratio Lower Upper

252 100

253 25.2 20.4 30.6

125 17.1 14.6 21.8





#39

Benzo(a)pyrene

Concen: 0.274 ng

RT: 23.429 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN037481.D

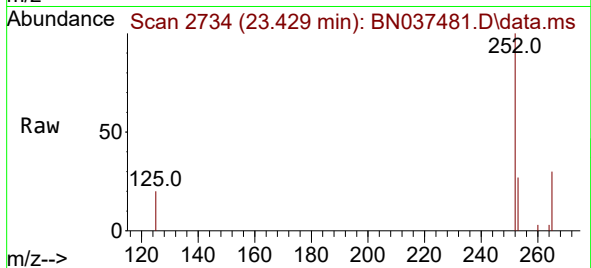
Acq: 11 Jul 2025 19:43

Instrument :

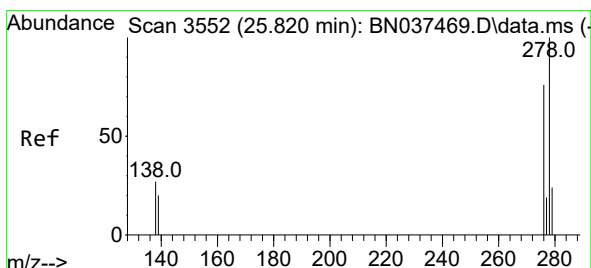
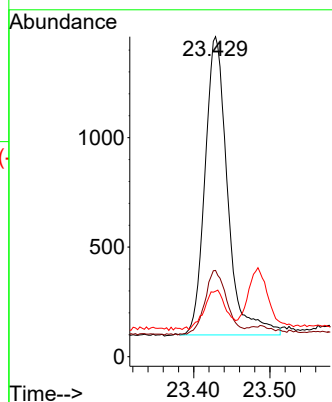
BNA_N

ClientSampleId :

SSTDCCC0.4EC



Tgt Ion:	252	Resp:	2804
Ion Ratio	Lower	Upper	
252	100		
253	27.0	21.8	32.6
125	20.5	16.7	25.1



#40

Dibenzo(a,h)anthracene

Concen: 0.321 ng

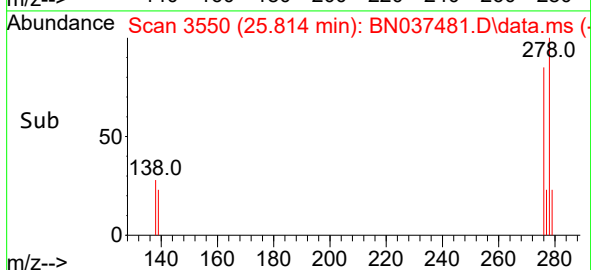
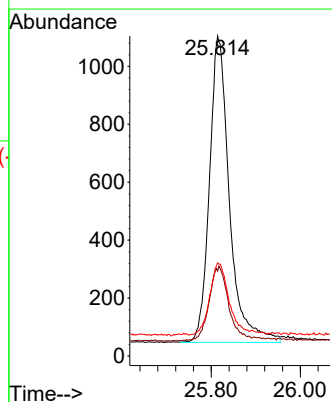
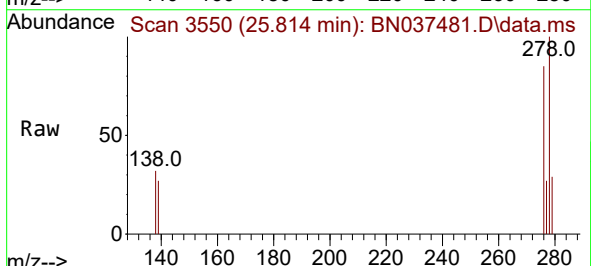
RT: 25.814 min Scan# 3550

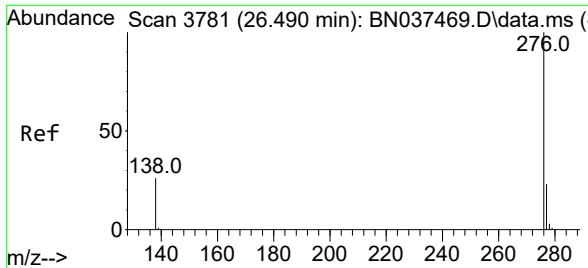
Delta R.T. -0.006 min

Lab File: BN037481.D

Acq: 11 Jul 2025 19:43

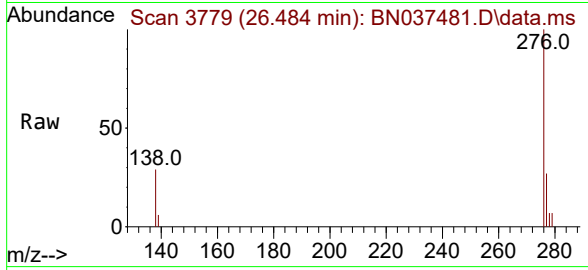
Tgt Ion:	278	Resp:	3294
Ion Ratio	Lower	Upper	
278	100		
139	26.5	19.9	29.9
279	29.0	24.8	37.2



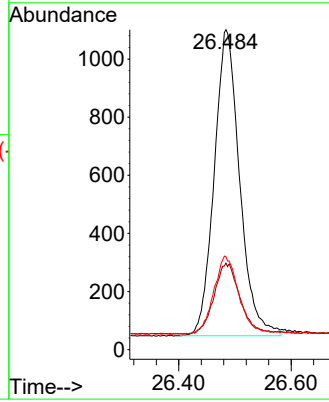
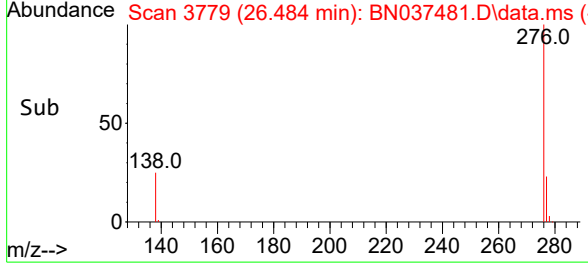


#41
 Benzo(g,h,i)perylene
 Concen: 0.294 ng
 RT: 26.484 min Scan# 31
 Delta R.T. -0.006 min
 Lab File: BN037481.D
 Acq: 11 Jul 2025 19:43

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4EC



Tgt Ion:	276	Resp:	3300
Ion Ratio	Lower	Upper	
276	100		
277	27.1	21.7	32.5
138	29.1	24.3	36.5



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
 Data File : BN037488.D
 Acq On : 14 Jul 2025 12:15
 Operator : RC/JU
 Sample : PB168720BSD
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD

Quant Time: Jul 14 12:50:28 2025
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Jul 11 15:38:34 2025
 Response via : Initial Calibration

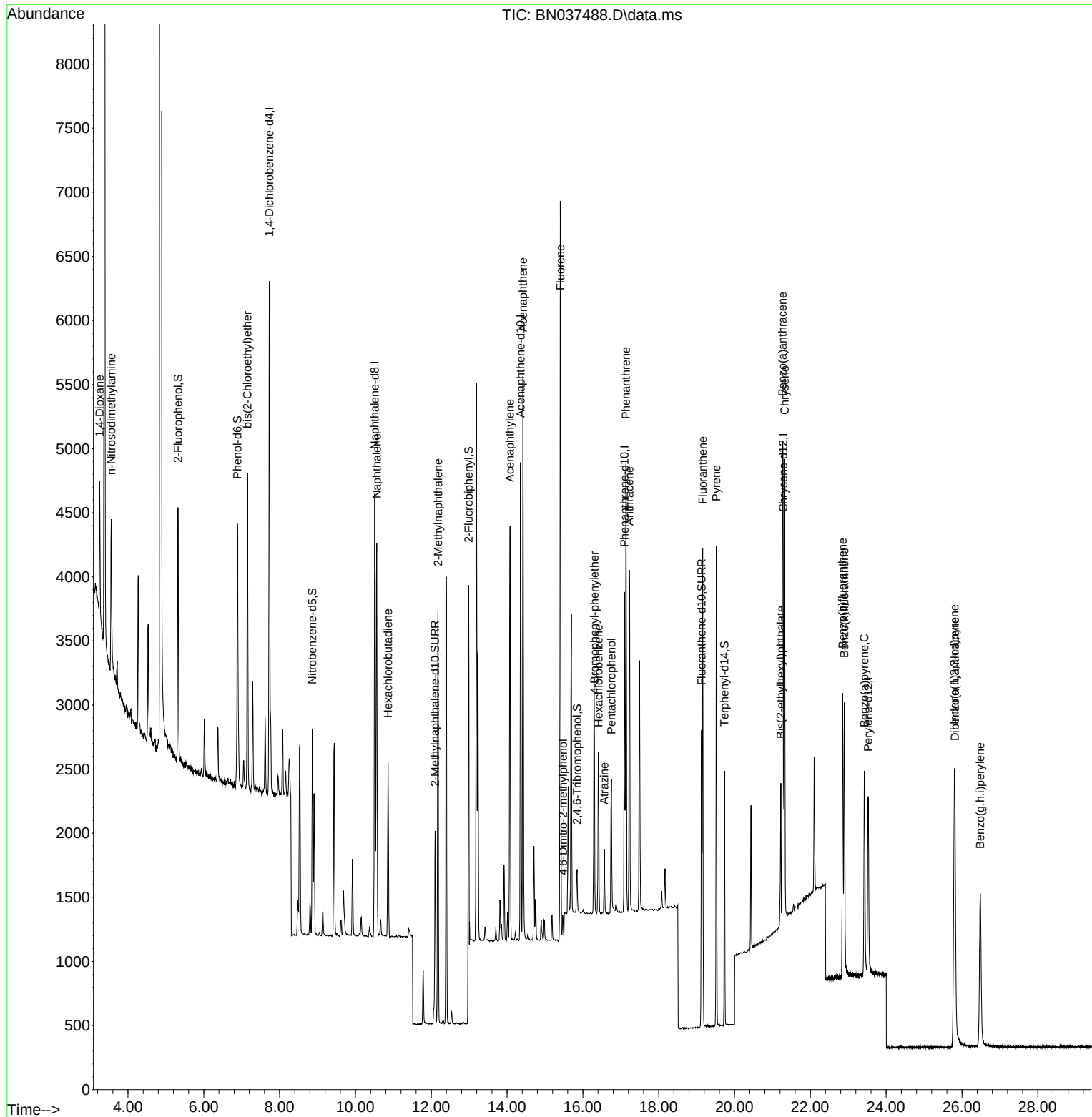
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.732	152	1906	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4315	0.400	ng	0.00
13) Acenaphthene-d10	14.356	164	1930	0.400	ng	-0.01
19) Phenanthrene-d10	17.099	188	3183	0.400	ng	0.00
29) Chrysene-d12	21.286	240	2258	0.400	ng	0.00
35) Perylene-d12	23.525	264	1944	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.319	112	1467	0.331	ng	0.00
5) Phenol-d6	6.887	99	1734	0.311	ng	0.00
8) Nitrobenzene-d5	8.865	82	1147	0.366	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	2171	0.370	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	194	0.296	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	3931	0.357	ng	0.00
27) Fluoranthene-d10	19.132	212	2563	0.319	ng	0.00
31) Terphenyl-d14	19.736	244	1802	0.382	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.254	88	542	0.303	ng	# 71
3) n-Nitrosodimethylamine	3.557	42	951	0.397	ng	# 89
6) bis(2-Chloroethyl)ether	7.154	93	1665	0.357	ng	98
9) Naphthalene	10.562	128	4070	0.351	ng	100
10) Hexachlorobutadiene	10.861	225	1073	0.385	ng	# 100
12) 2-Methylnaphthalene	12.177	142	2196	0.302	ng	99
16) Acenaphthylene	14.078	152	3342	0.380	ng	100
17) Acenaphthene	14.420	154	1994	0.338	ng	98
18) Fluorene	15.403	166	2406	0.324	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	143	0.400	ng	# 85
21) 4-Bromophenyl-phenylether	16.305	248	707	0.356	ng	# 87
22) Hexachlorobenzene	16.416	284	1046	0.382	ng	99
23) Atrazine	16.565	200	366	0.371	ng	96
24) Pentachlorophenol	16.751	266	544	0.577	ng	97
25) Phenanthrene	17.136	178	3406	0.351	ng	99
26) Anthracene	17.223	178	3043	0.348	ng	99
28) Fluoranthene	19.160	202	3286	0.309	ng	99
30) Pyrene	19.522	202	3218	0.354	ng	100
32) Benzo(a)anthracene	21.268	228	2755	0.360	ng	99
33) Chrysene	21.322	228	3058	0.366	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	948	0.365	ng	99
36) Indeno(1,2,3-cd)pyrene	25.800	276	2947	0.391	ng	98
37) Benzo(b)fluoranthene	22.853	252	2832	0.375	ng	97
38) Benzo(k)fluoranthene	22.897	252	2765	0.361	ng	99
39) Benzo(a)pyrene	23.426	252	2429	0.399	ng	99
40) Dibenzo(a,h)anthracene	25.814	278	2257	0.371	ng	99
41) Benzo(g,h,i)perylene	26.481	276	2561	0.384	ng	99

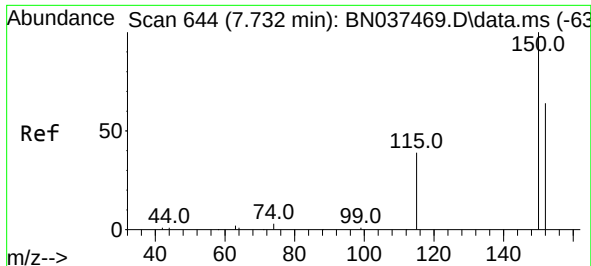
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN071425\
Data File : BN037488.D
Acq On : 14 Jul 2025 12:15
Operator : RC/JU
Sample : PB168720BSD
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB168720BSD

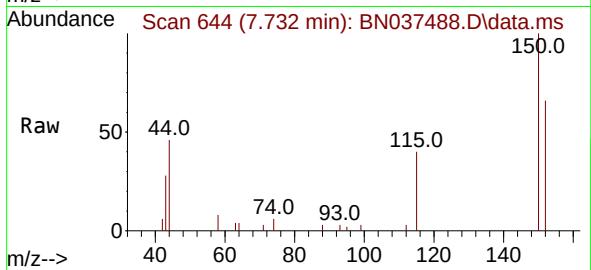
Quant Time: Jul 14 12:50:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN071125.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Jul 11 15:38:34 2025
Response via : Initial Calibration



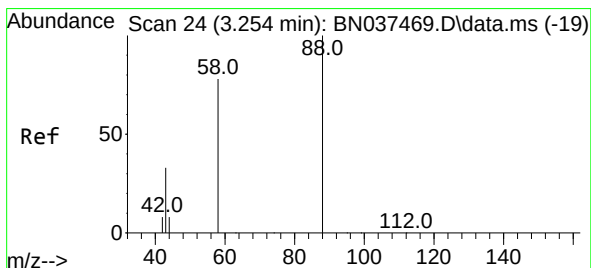
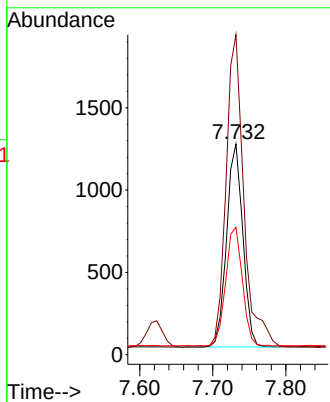
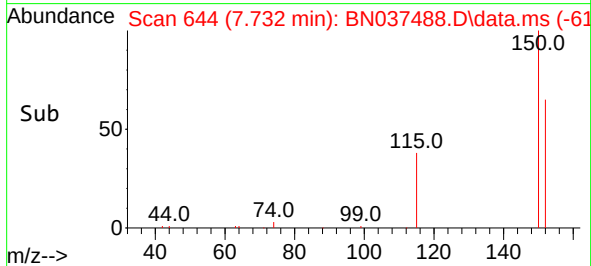


#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 7.732 min Scan# 64
 Delta R.T. -0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

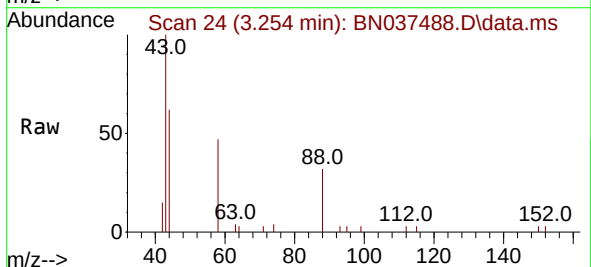
Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD



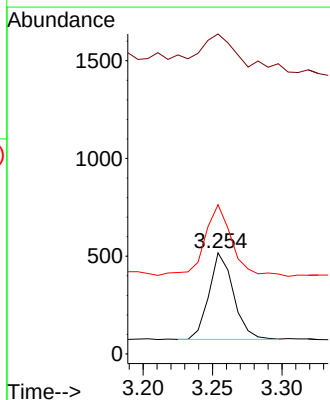
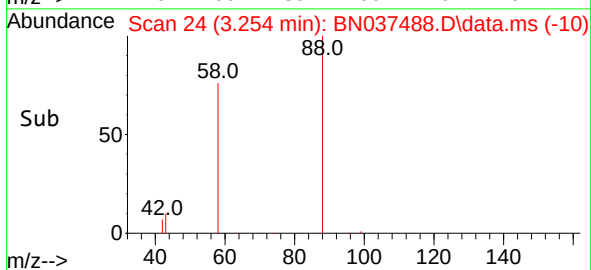
Tgt Ion:152 Resp: 1906
 Ion Ratio Lower Upper
 152 100
 150 151.9 122.5 183.7
 115 60.5 49.9 74.9

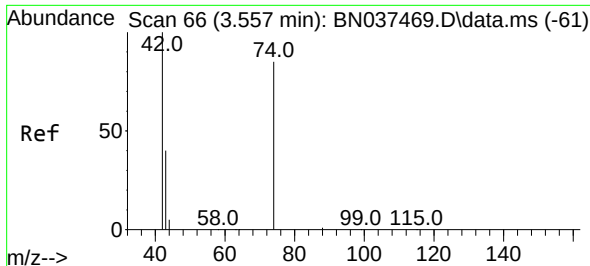


#2
 1,4-Dioxane
 Concen: 0.303 ng
 RT: 3.254 min Scan# 24
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15



Tgt Ion: 88 Resp: 542
 Ion Ratio Lower Upper
 88 100
 43 74.7 30.7 46.1#
 58 93.5 65.0 97.4

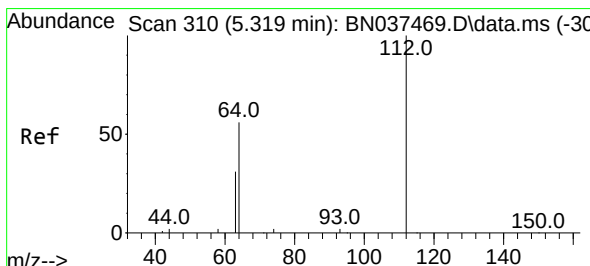
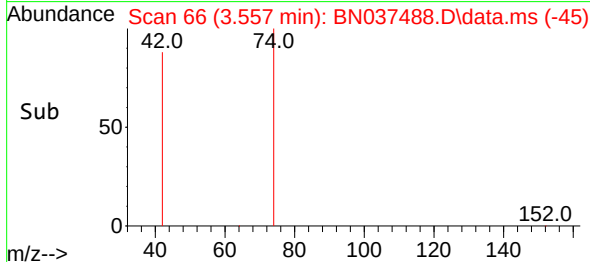
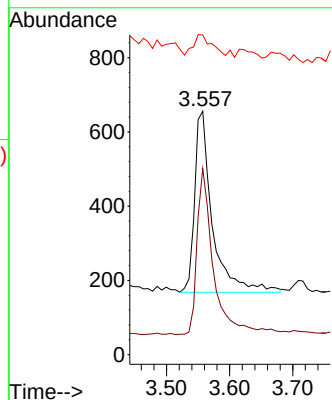
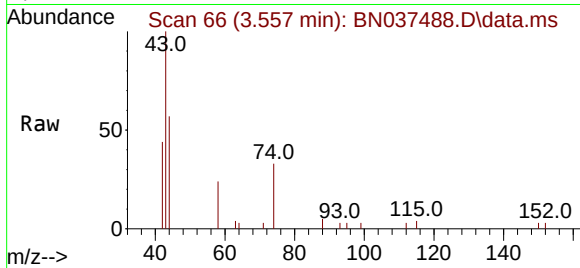




#3
 n-Nitrosodimethylamine
 Concen: 0.397 ng
 RT: 3.557 min Scan# 60
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

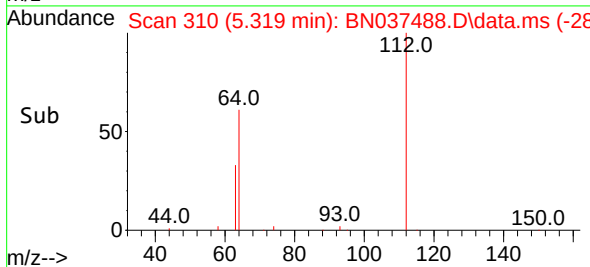
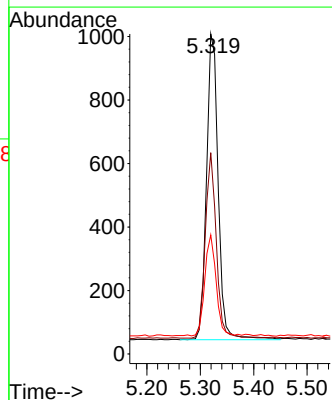
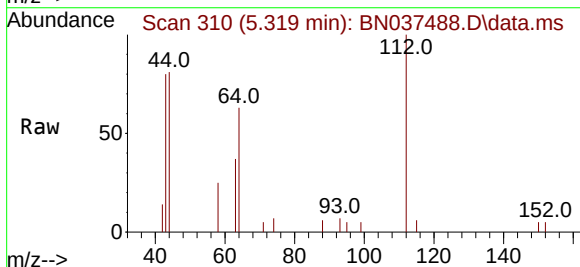
Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD

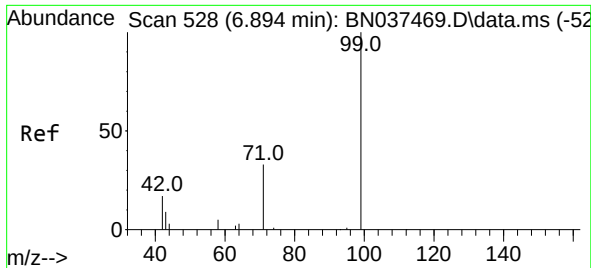
Tgt Ion: 42 Resp: 951
 Ion Ratio Lower Upper
 42 100
 74 82.6 74.9 112.3
 44 11.3 7.2 10.8#



#4
 2-Fluorophenol
 Concen: 0.331 ng
 RT: 5.319 min Scan# 310
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

Tgt Ion: 112 Resp: 1467
 Ion Ratio Lower Upper
 112 100
 64 57.6 45.4 68.0
 63 32.4 24.7 37.1

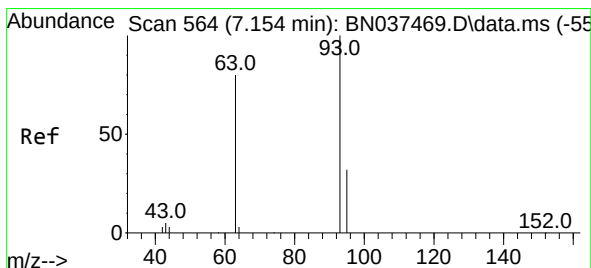
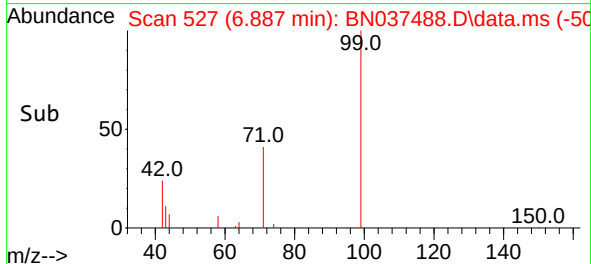
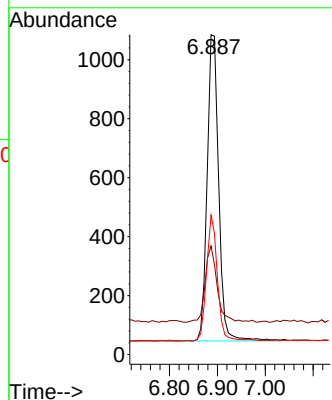
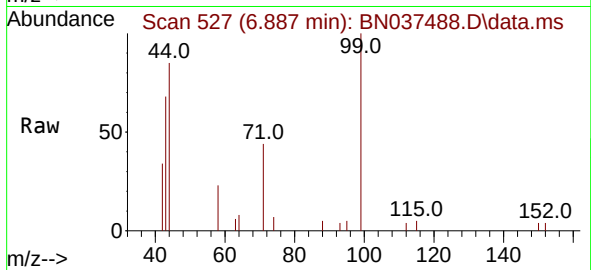




#5
Phenol-d6
Concen: 0.311 ng
RT: 6.887 min Scan# 51
Delta R.T. -0.007 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

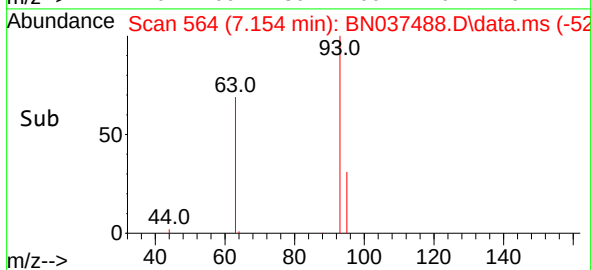
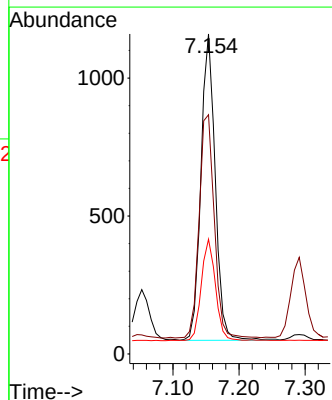
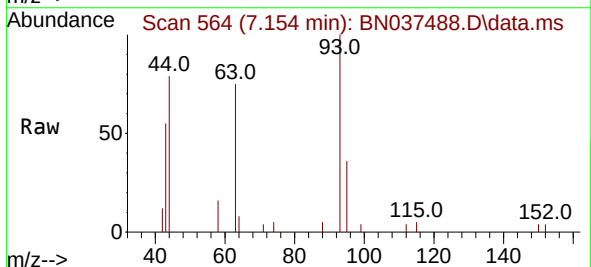
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

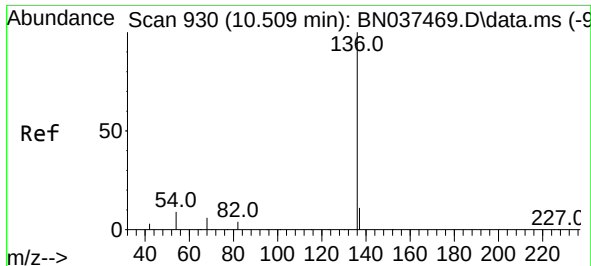
Tgt Ion: 99 Resp: 1734
Ion Ratio Lower Upper
99 100
42 25.7 19.5 29.3
71 38.5 29.4 44.2



#6
bis(2-Chloroethyl)ether
Concen: 0.357 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion: 93 Resp: 1665
Ion Ratio Lower Upper
93 100
63 77.4 60.8 91.2
95 33.0 25.6 38.4

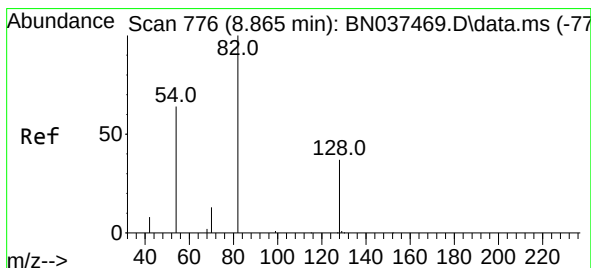
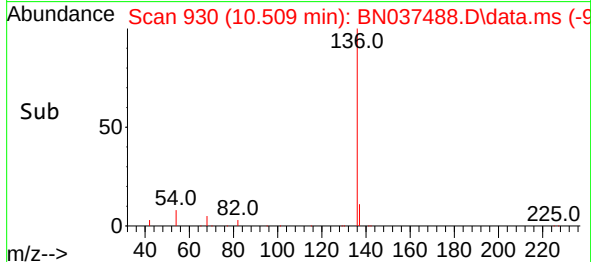
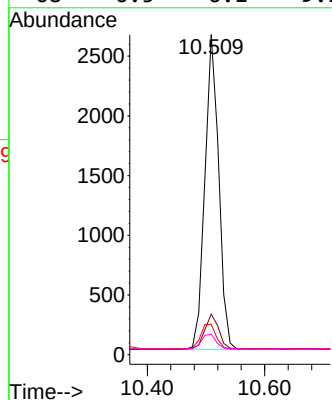
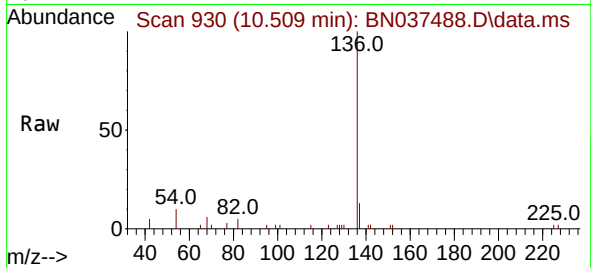




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.509 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

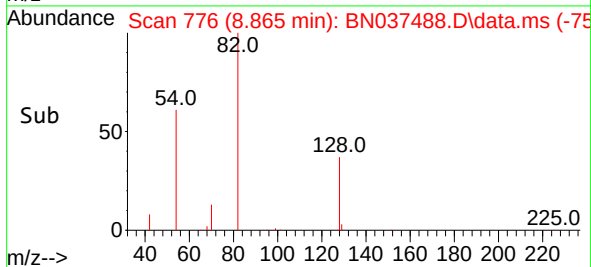
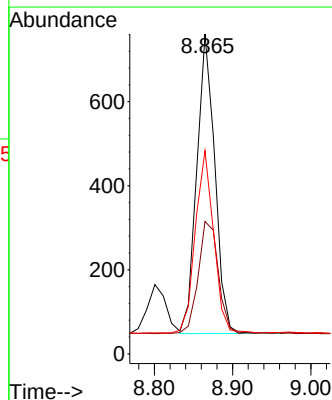
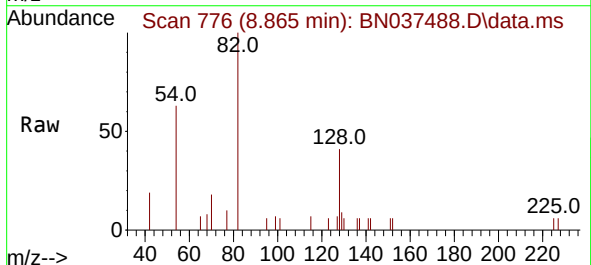
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

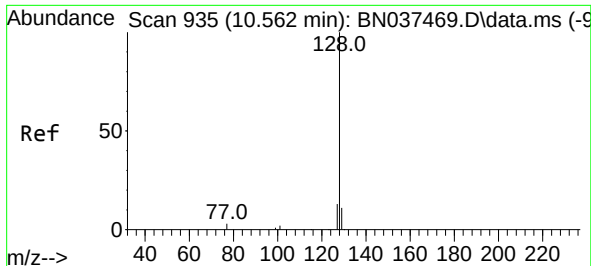
Tgt Ion:	136	Resp:	4315
Ion	Ratio	Lower	Upper
136	100		
137	12.7	10.0	15.0
54	9.5	9.0	13.6
68	6.5	6.1	9.1



#8
Nitrobenzene-d5
Concen: 0.366 ng
RT: 8.865 min Scan# 776
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:	82	Resp:	1147
Ion	Ratio	Lower	Upper
82	100		
128	41.4	33.1	49.7
54	63.5	53.0	79.4

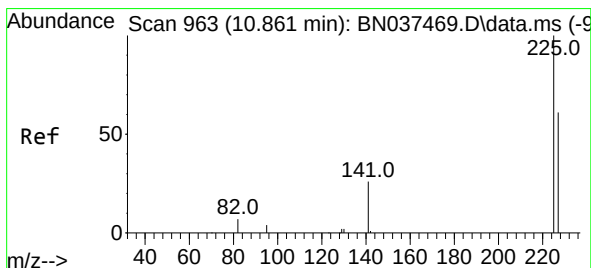
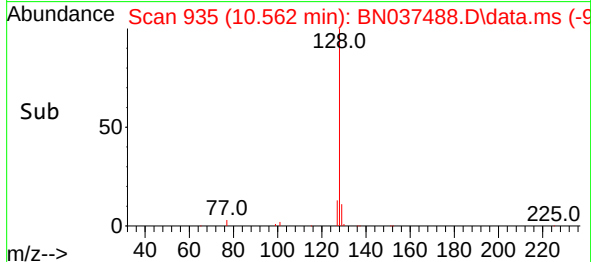
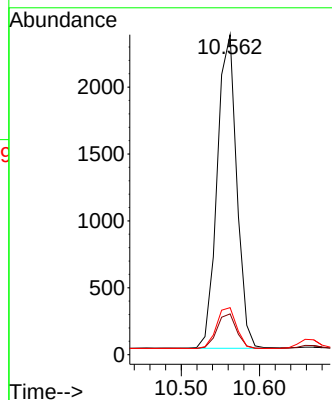
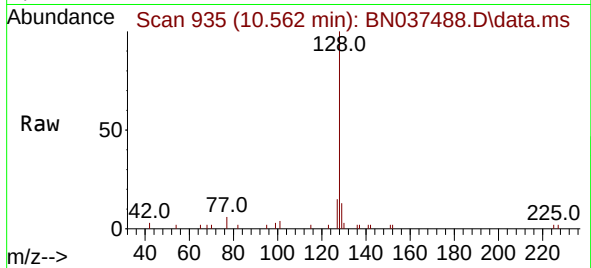




#9
Naphthalene
Concen: 0.351 ng
RT: 10.562 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

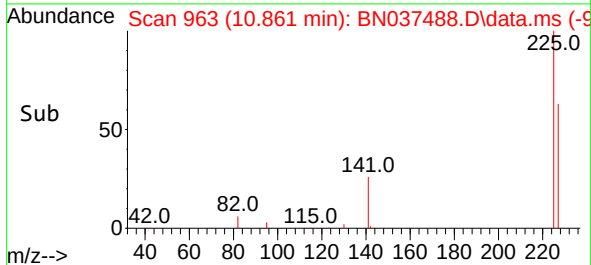
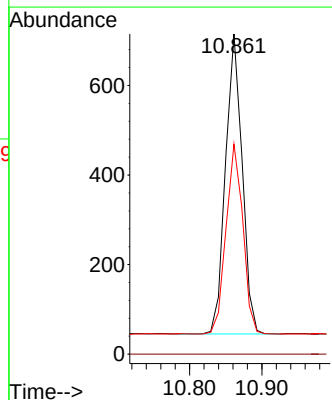
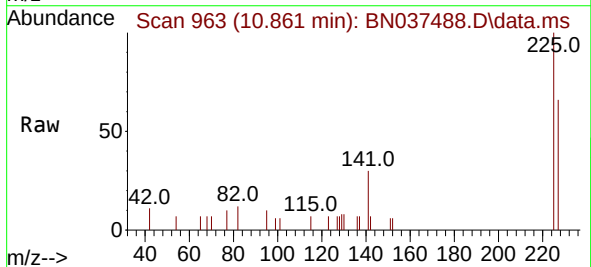
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

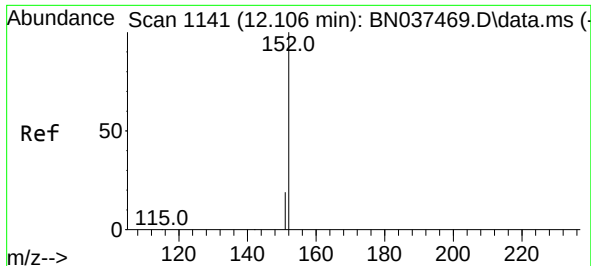
Tgt Ion:128 Resp: 4070
Ion Ratio Lower Upper
128 100
129 12.8 10.2 15.2
127 14.7 11.8 17.6



#10
Hexachlorobutadiene
Concen: 0.385 ng
RT: 10.861 min Scan# 963
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:225 Resp: 1073
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.9 51.4 77.2

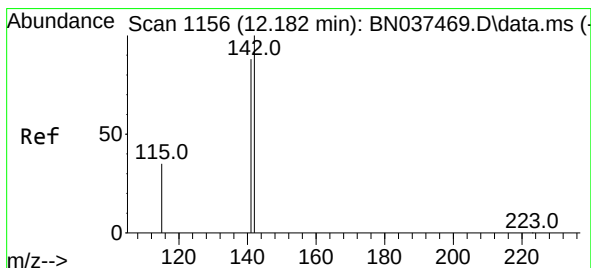
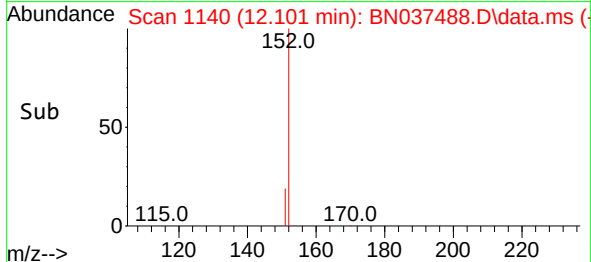
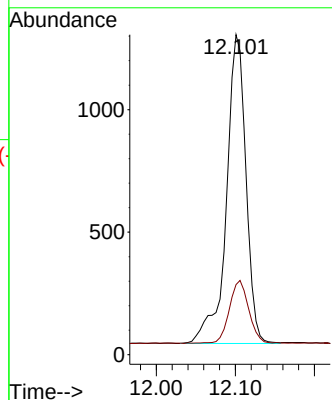
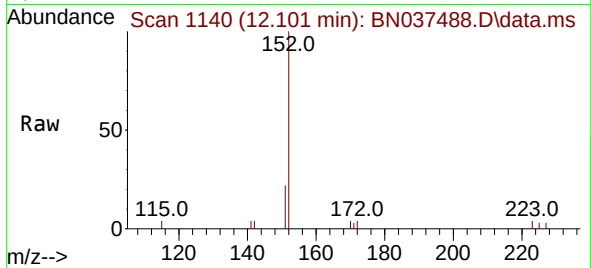




#11
2-Methylnaphthalene-d10
Concen: 0.370 ng
RT: 12.101 min Scan# 1140
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

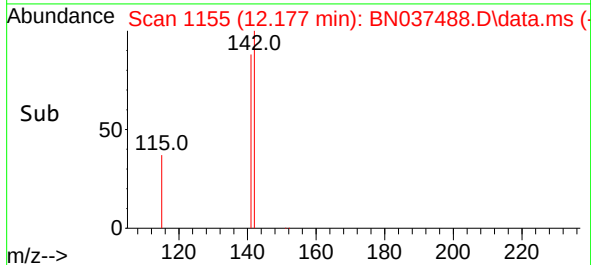
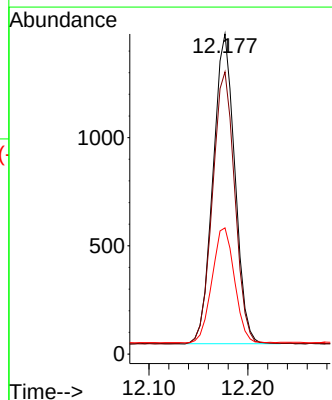
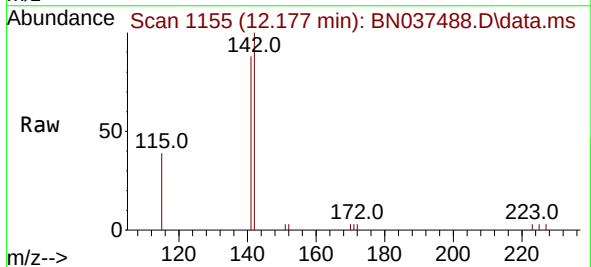
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

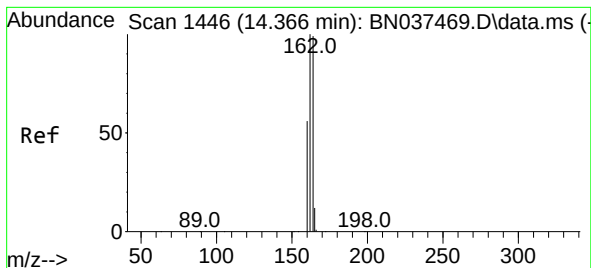
Tgt Ion:152 Resp: 2171
Ion Ratio Lower Upper
152 100
151 20.5 17.0 25.6



#12
2-Methylnaphthalene
Concen: 0.302 ng
RT: 12.177 min Scan# 1155
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:142 Resp: 2196
Ion Ratio Lower Upper
142 100
141 88.2 70.6 105.8
115 39.4 30.0 45.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 1445

Delta R.T. -0.011 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

Instrument :

BNA_N

ClientSampleId :

PB168720BSD

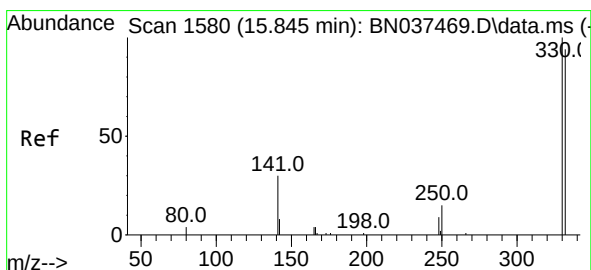
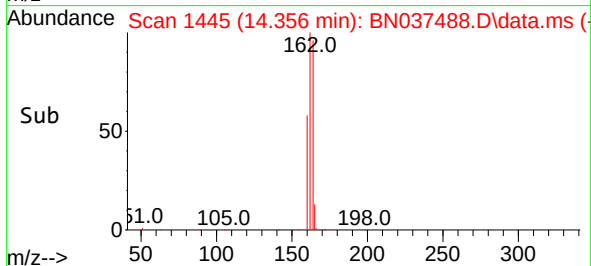
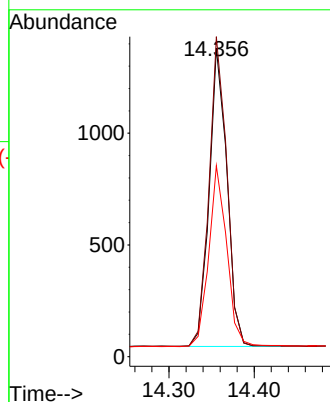
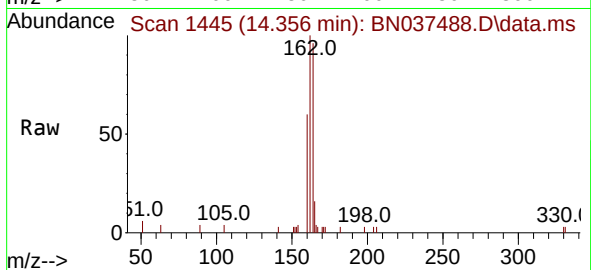
Tgt Ion:164 Resp: 1930

Ion Ratio Lower Upper

164 100

162 103.7 81.1 121.7

160 61.8 46.5 69.7



#14

2,4,6-Tribromophenol

Concen: 0.296 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037488.D

Acq: 14 Jul 2025 12:15

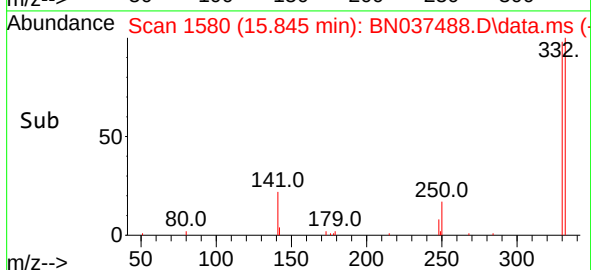
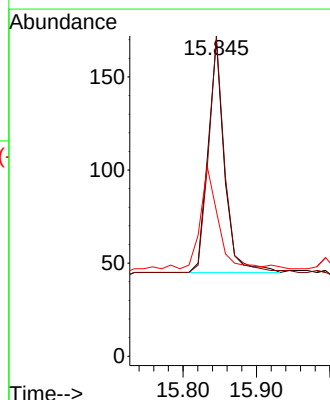
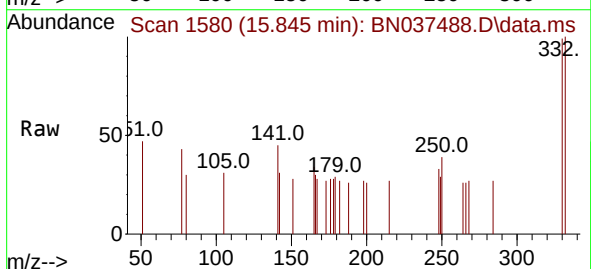
Tgt Ion:330 Resp: 194

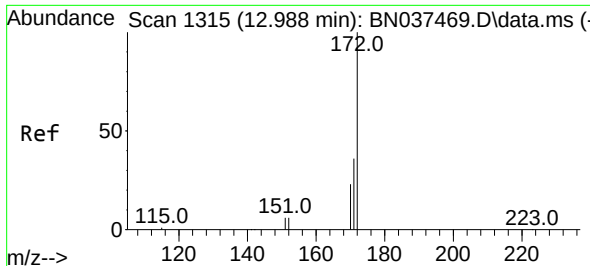
Ion Ratio Lower Upper

330 100

332 100.0 82.0 123.0

141 49.0 36.2 54.2

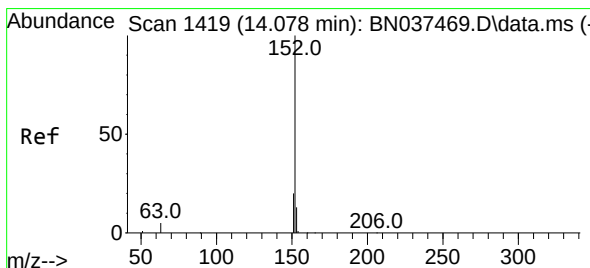
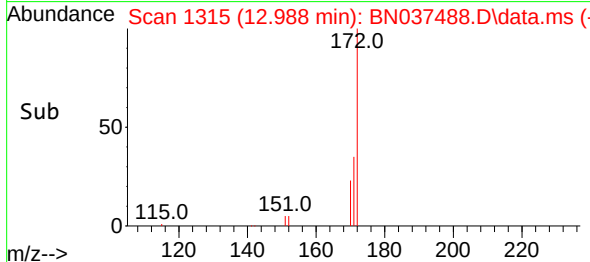
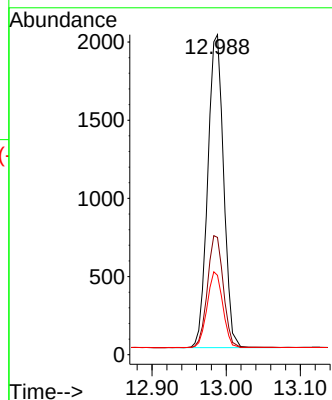
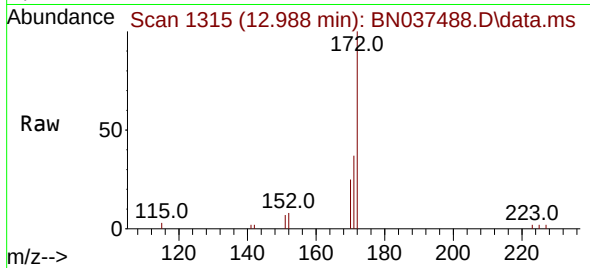




#15
2-Fluorobiphenyl
Concen: 0.357 ng
RT: 12.988 min Scan# 1315
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

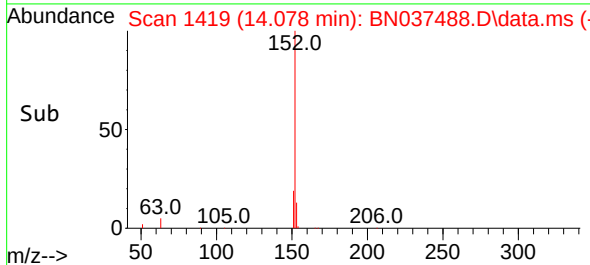
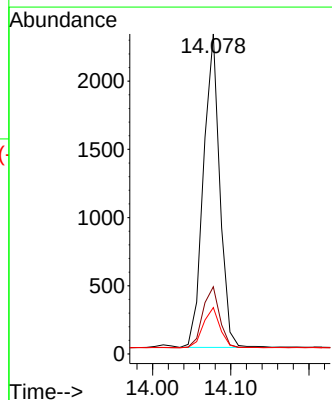
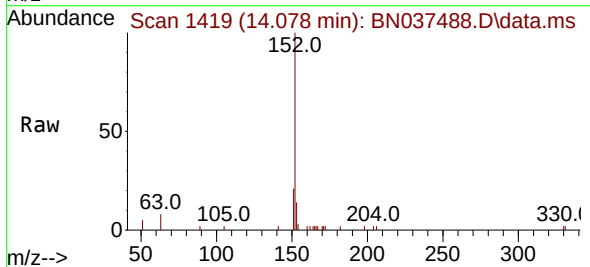
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

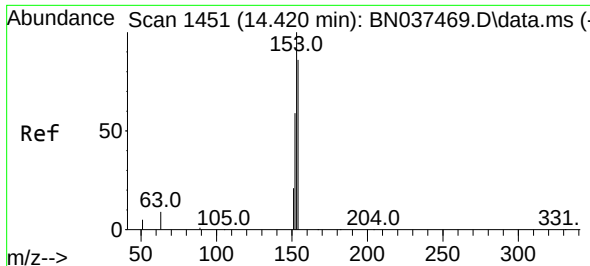
Tgt Ion:172	Resp:	3931
Ion Ratio	Lower	Upper
172	100	
171	36.6	29.8 44.8
170	24.8	20.0 30.0



#16
Acenaphthylene
Concen: 0.380 ng
RT: 14.078 min Scan# 1419
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:152	Resp:	3342
Ion Ratio	Lower	Upper
152	100	
151	20.2	16.4 24.6
153	13.3	10.6 15.8

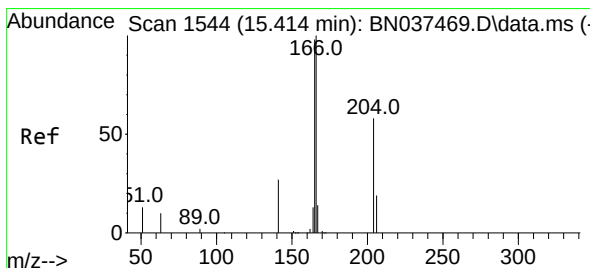
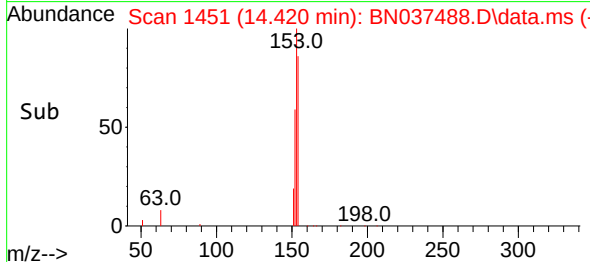
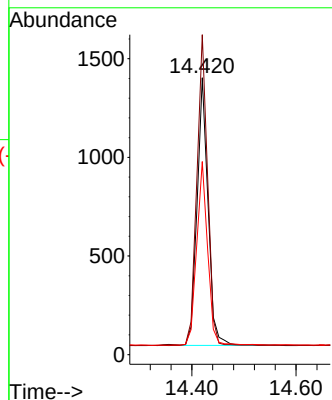
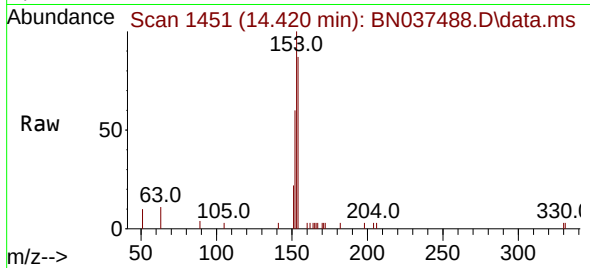




#17
Acenaphthene
Concen: 0.338 ng
RT: 14.420 min Scan# 1451
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

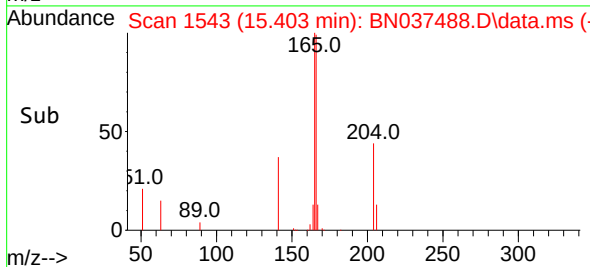
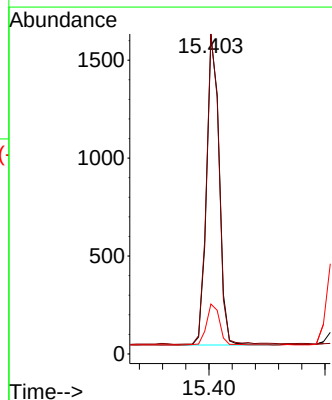
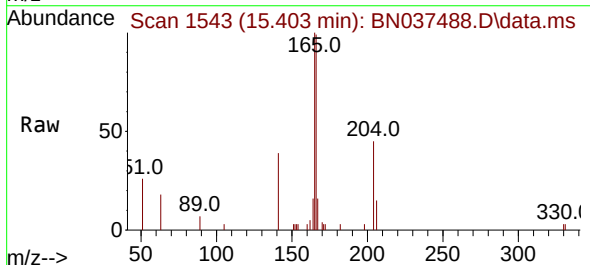
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

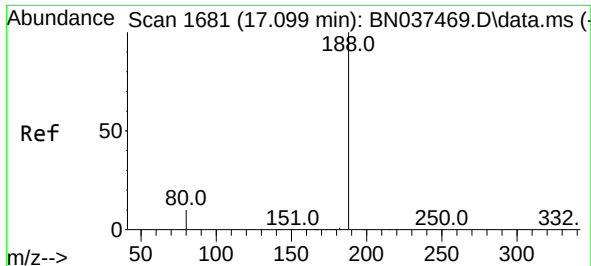
Tgt Ion:154 Resp: 1994
Ion Ratio Lower Upper
154 100
153 113.6 89.4 134.0
152 68.7 53.2 79.8



#18
Fluorene
Concen: 0.324 ng
RT: 15.403 min Scan# 1543
Delta R.T. -0.011 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:166 Resp: 2406
Ion Ratio Lower Upper
166 100
165 100.2 79.4 119.2
167 13.6 10.6 15.8

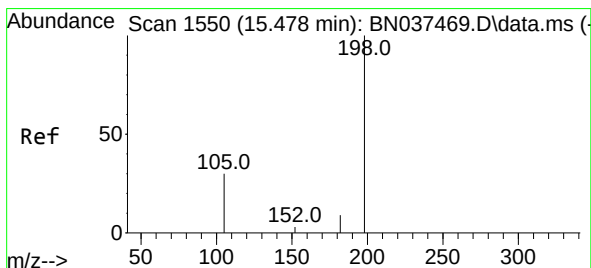
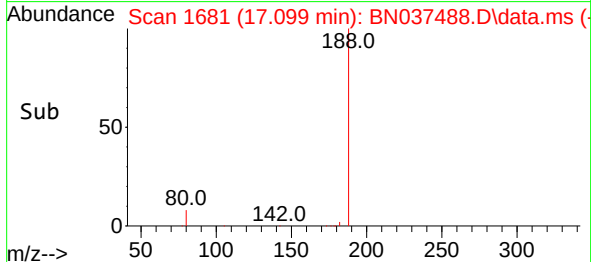
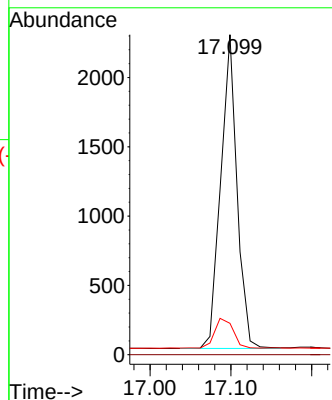
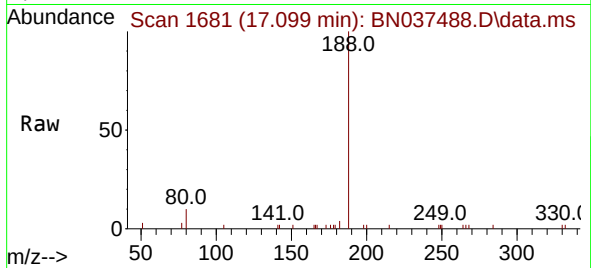




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1681
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

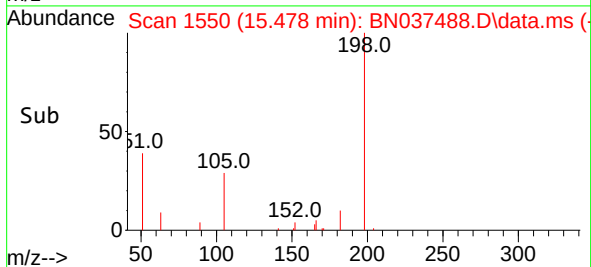
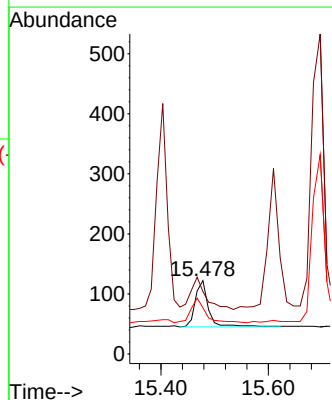
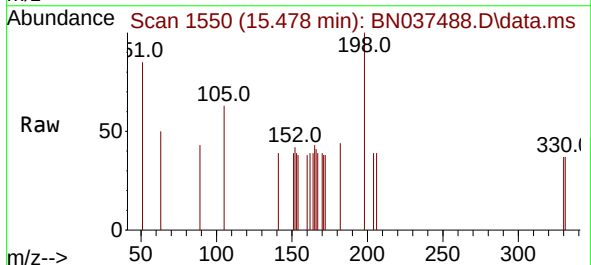
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

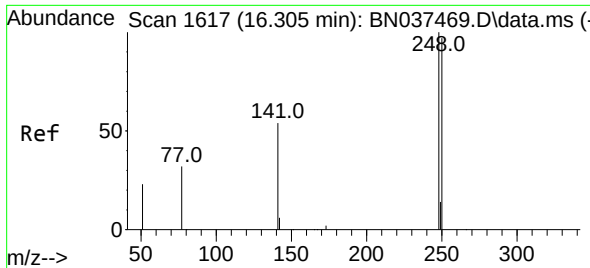
Tgt Ion:188 Resp: 3183
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 9.8 9.3 13.9



#20
4,6-Dinitro-2-methylphenol
Concen: 0.400 ng
RT: 15.478 min Scan# 1550
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:198 Resp: 143
Ion Ratio Lower Upper
198 100
51 85.2 86.0 129.0#
105 63.1 53.0 79.4

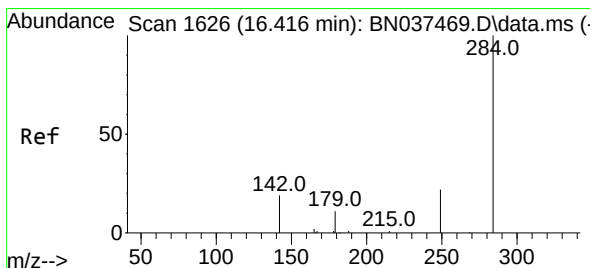
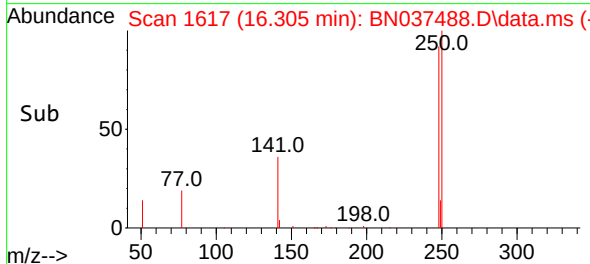
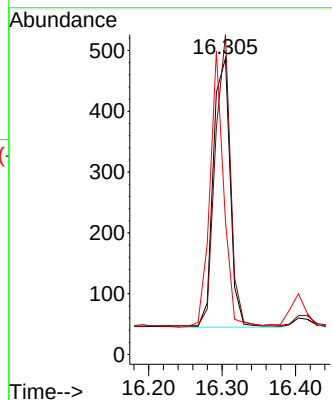
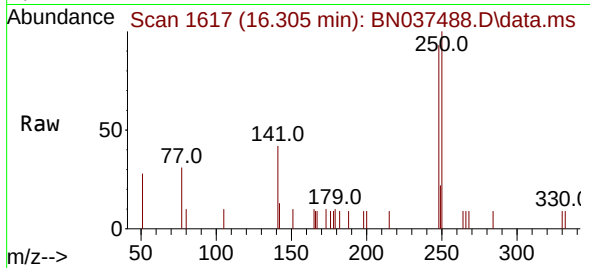




#21
4-Bromophenyl-phenylether
Concen: 0.356 ng
RT: 16.305 min Scan# 1617
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

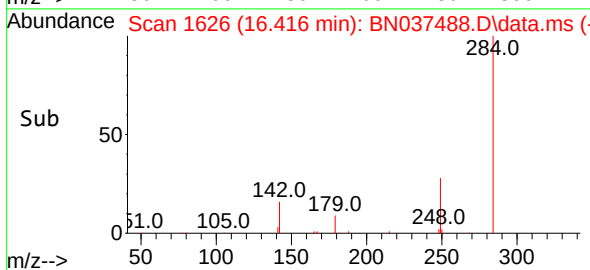
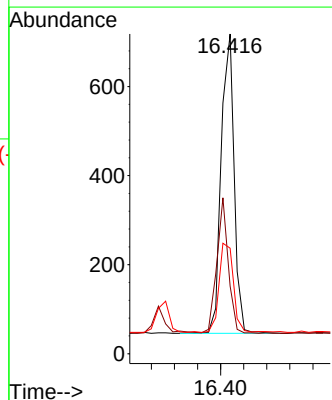
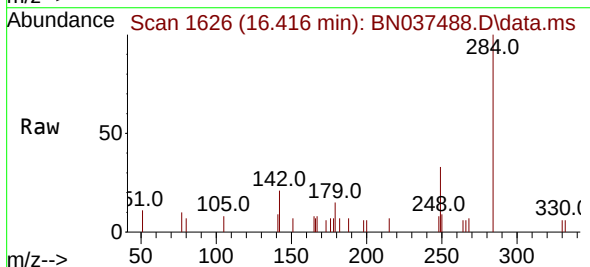
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

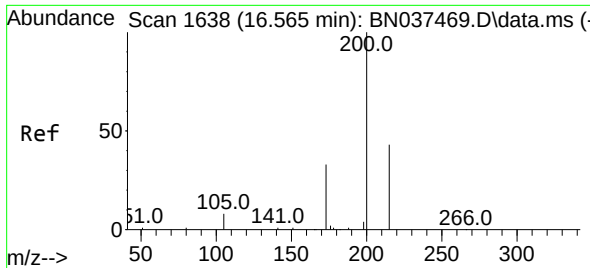
Tgt Ion:248 Resp: 707
Ion Ratio Lower Upper
248 100
250 108.0 77.8 116.6
141 45.0 45.9 68.9#



#22
Hexachlorobenzene
Concen: 0.382 ng
RT: 16.416 min Scan# 1626
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:284 Resp: 1046
Ion Ratio Lower Upper
284 100
142 40.2 31.3 46.9
249 33.1 26.6 40.0

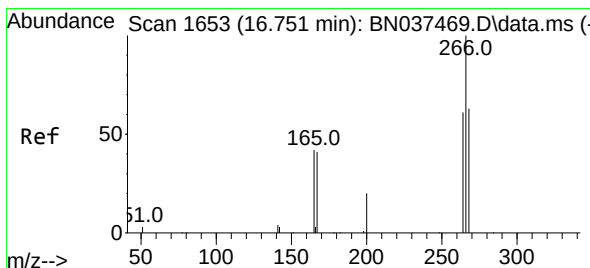
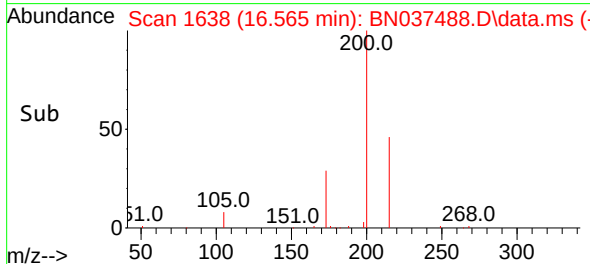
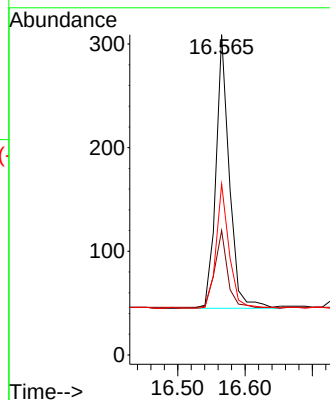
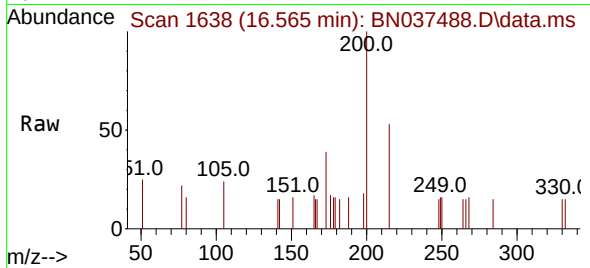




#23
 Atrazine
 Concen: 0.371 ng
 RT: 16.565 min Scan# 1638
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

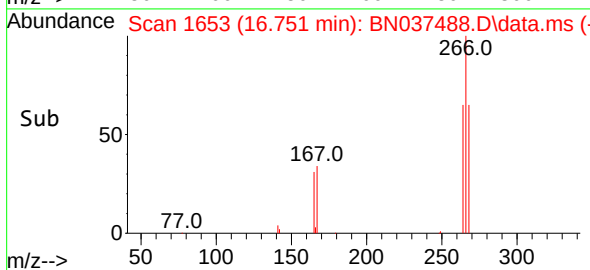
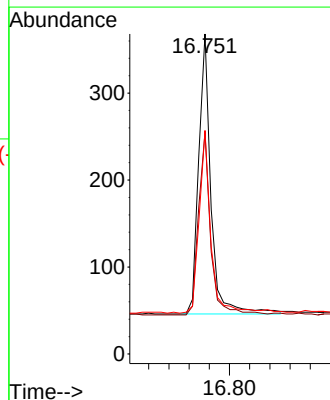
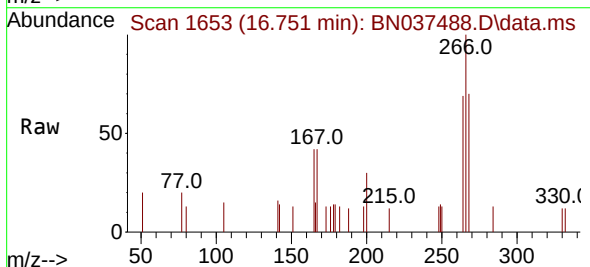
Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD

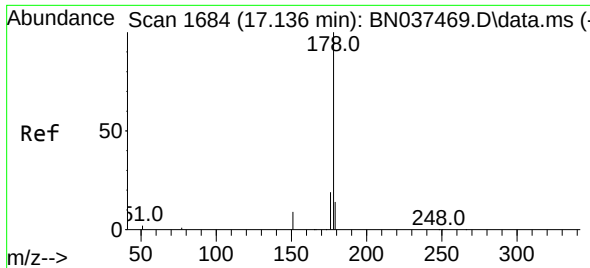
Tgt Ion:	200	Resp:	366
Ion Ratio	Lower	Upper	
200	100		
173	38.8	34.3	51.5
215	53.4	41.6	62.4



#24
 Pentachlorophenol
 Concen: 0.577 ng
 RT: 16.751 min Scan# 1653
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

Tgt Ion:	266	Resp:	544
Ion Ratio	Lower	Upper	
266	100		
264	64.0	47.5	71.3
268	63.1	50.6	76.0

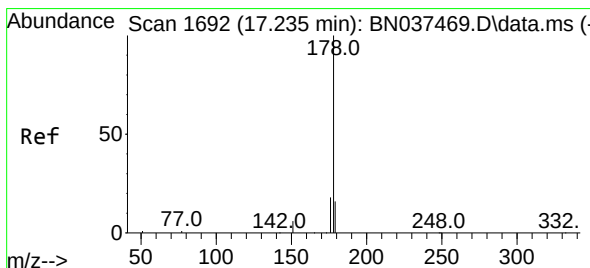
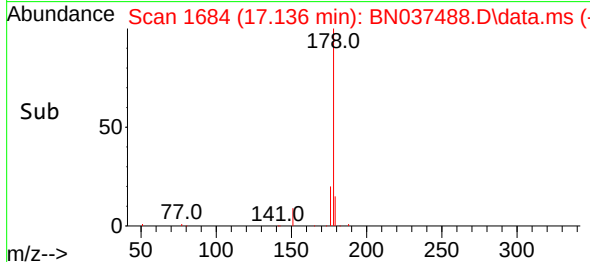
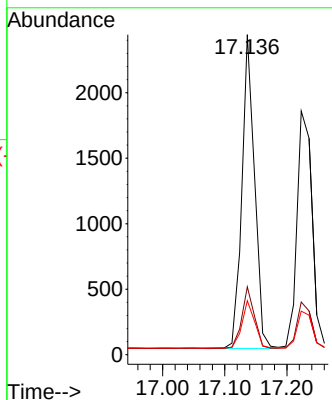
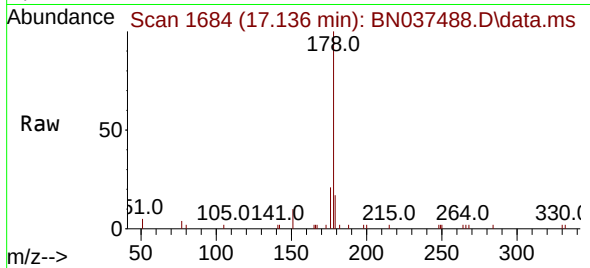




#25
 Phenanthrene
 Concen: 0.351 ng
 RT: 17.136 min Scan# 1684
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

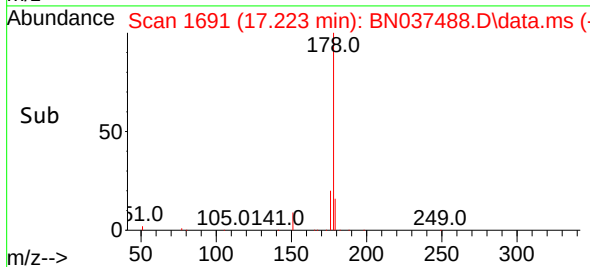
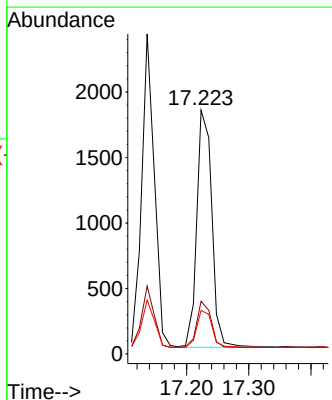
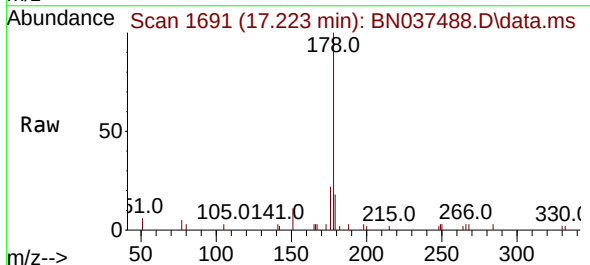
Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD

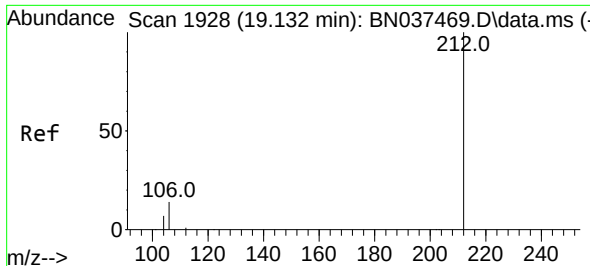
Tgt Ion:	178	Resp:	3406
Ion Ratio	Lower	Upper	
178	100		
176	19.5	15.1	22.7
179	15.2	12.2	18.2



#26
 Anthracene
 Concen: 0.348 ng
 RT: 17.223 min Scan# 1691
 Delta R.T. -0.012 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

Tgt Ion:	178	Resp:	3043
Ion Ratio	Lower	Upper	
178	100		
176	18.6	14.9	22.3
179	15.9	12.3	18.5

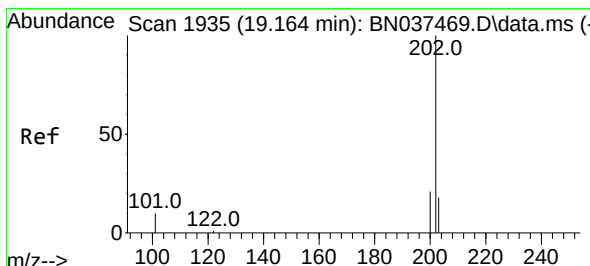
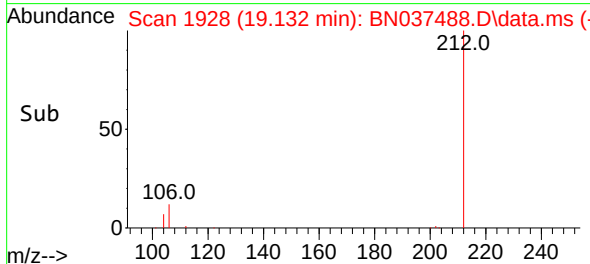
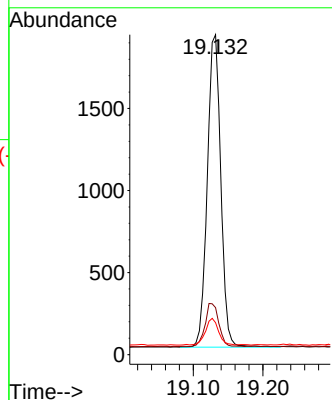
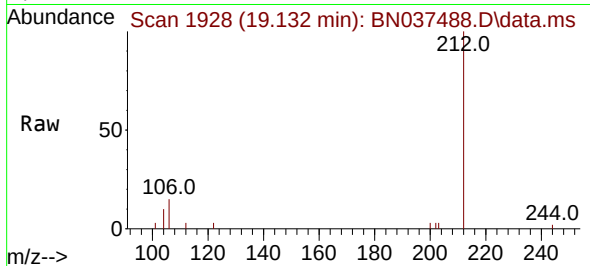




#27
Fluoranthene-d10
Concen: 0.319 ng
RT: 19.132 min Scan# 1928
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

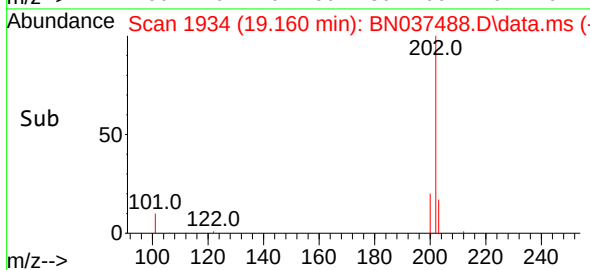
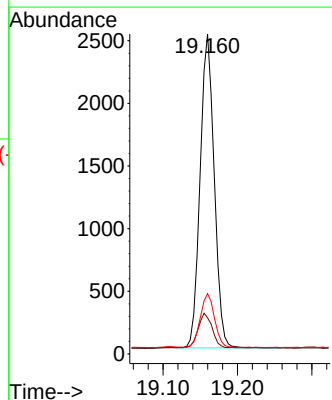
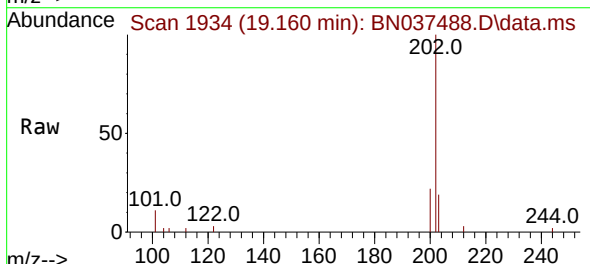
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

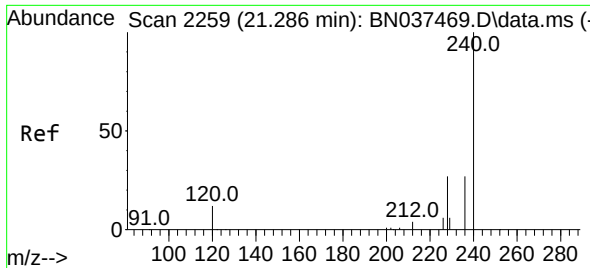
Tgt Ion:	212	Resp:	2563
Ion	Ratio	Lower	Upper
212	100		
106	14.2	11.7	17.5
104	8.3	6.6	10.0



#28
Fluoranthene
Concen: 0.309 ng
RT: 19.160 min Scan# 1934
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:	202	Resp:	3286
Ion	Ratio	Lower	Upper
202	100		
101	11.1	9.2	13.8
203	17.2	14.0	21.0

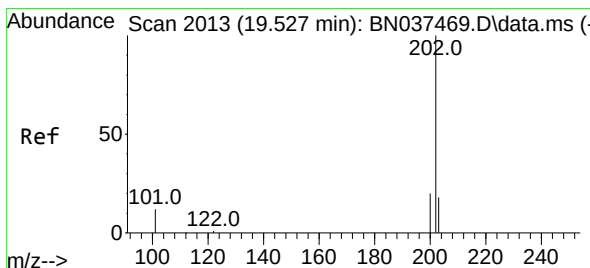
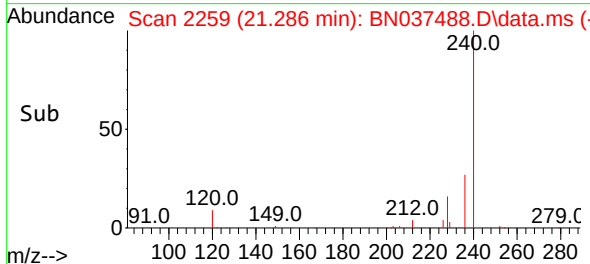
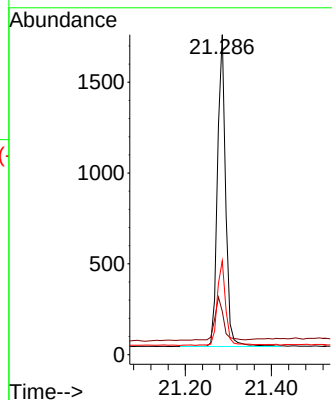
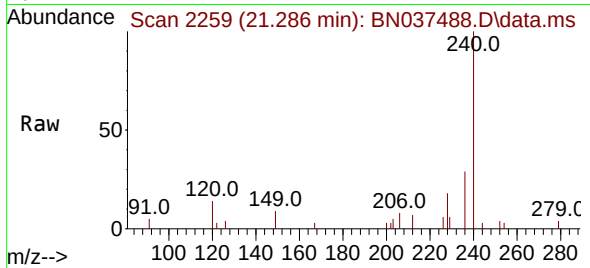




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.286 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

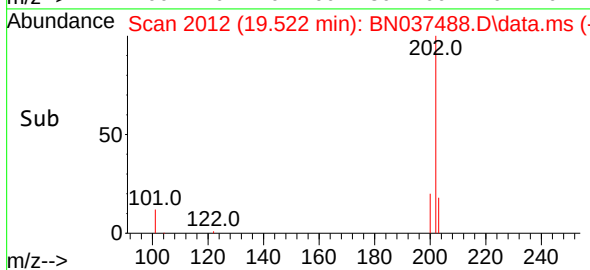
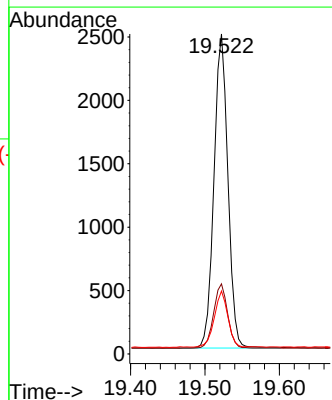
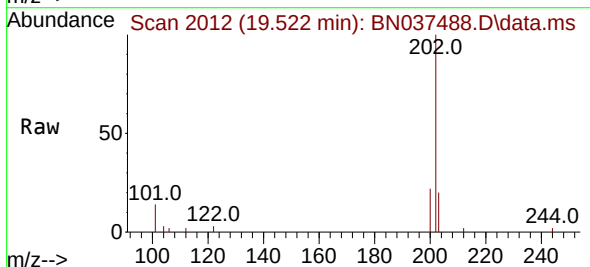
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

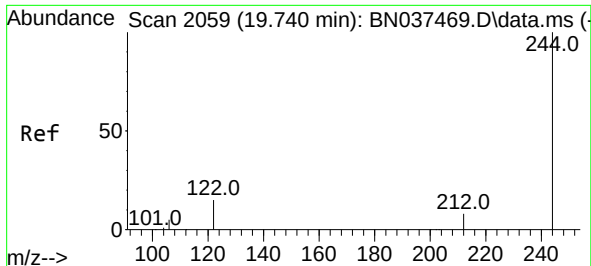
Tgt Ion:240	Resp:	2258
Ion Ratio	Lower	Upper
240	100	
120	13.6	12.4 18.6
236	29.3	22.9 34.3



#30
Pyrene
Concen: 0.354 ng
RT: 19.522 min Scan# 2012
Delta R.T. -0.005 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Tgt Ion:202	Resp:	3218
Ion Ratio	Lower	Upper
202	100	
200	20.4	16.4 24.6
203	17.5	14.3 21.5

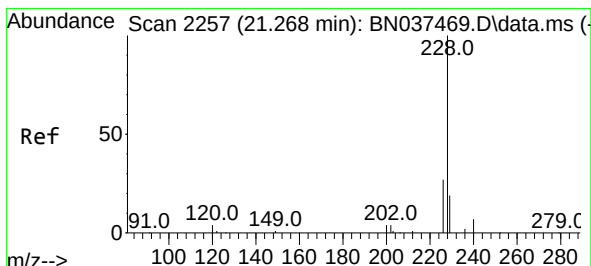
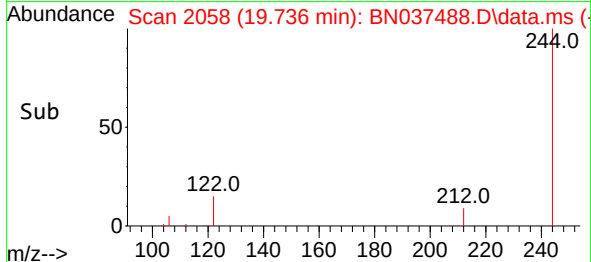
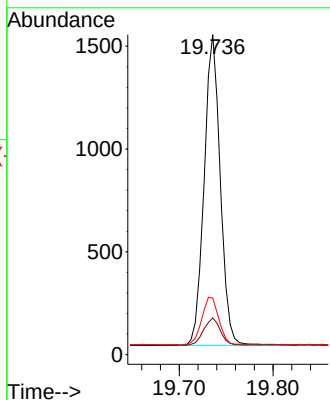
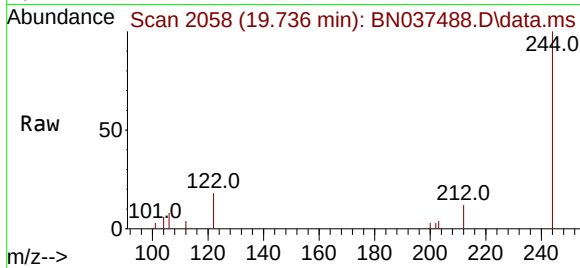




#31
 Terphenyl-d14
 Concen: 0.382 ng
 RT: 19.736 min Scan# 2058
 Delta R.T. -0.005 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

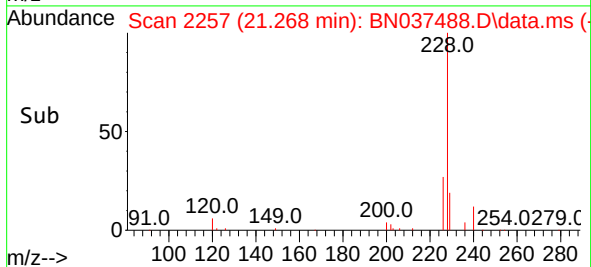
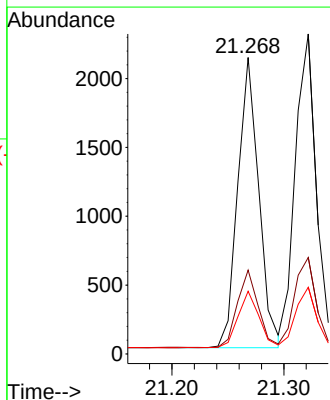
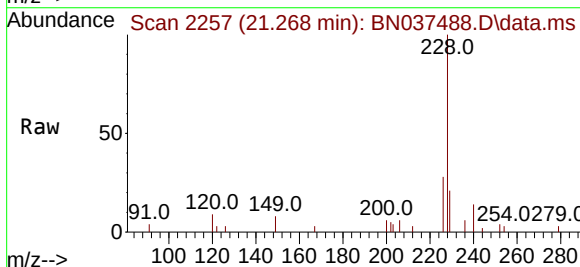
Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD

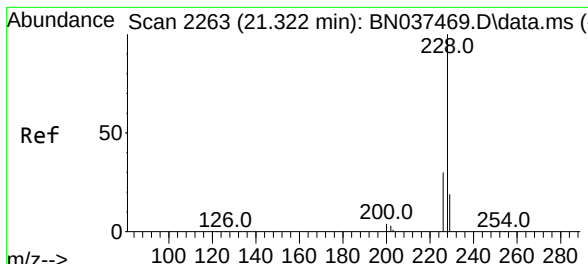
Tgt Ion:244	Resp:	1802	
Ion	Ratio	Lower	Upper
244	100		
212	11.5	8.7	13.1
122	17.7	14.1	21.1



#32
 Benzo(a)anthracene
 Concen: 0.360 ng
 RT: 21.268 min Scan# 2257
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

Tgt Ion:228	Resp:	2755	
Ion	Ratio	Lower	Upper
228	100		
226	28.3	22.7	34.1
229	21.1	16.6	24.8

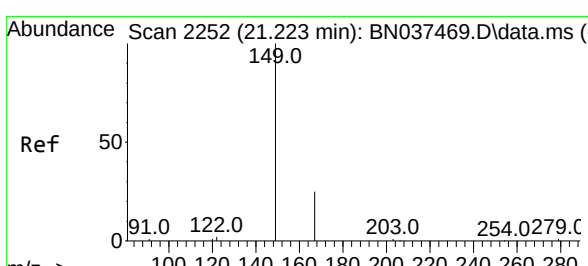
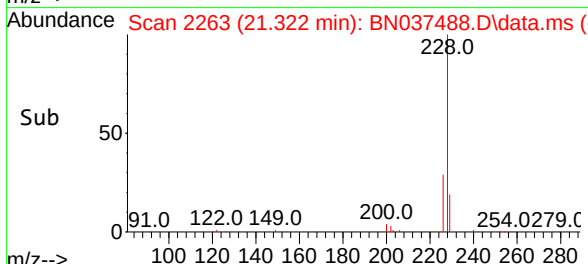
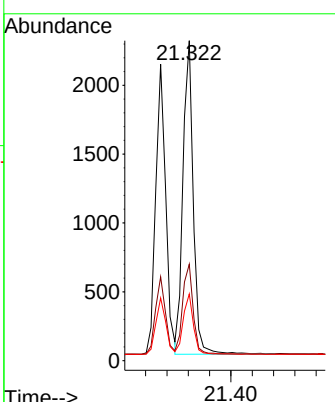
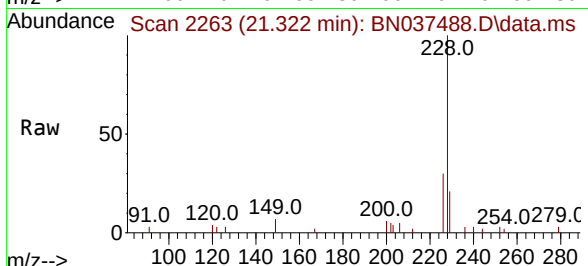




#33
 Chrysene
 Concen: 0.366 ng
 RT: 21.322 min Scan# 21
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

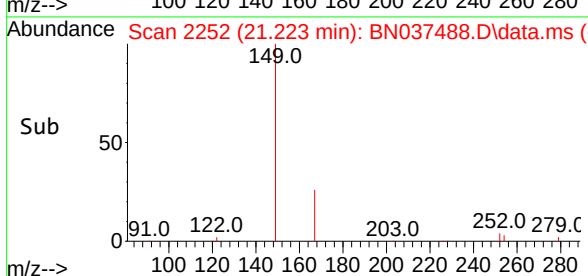
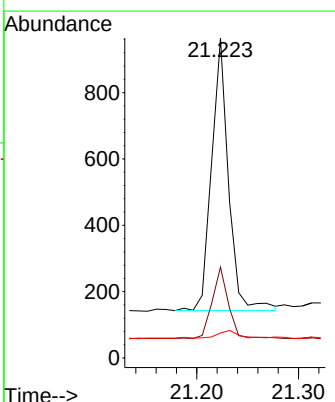
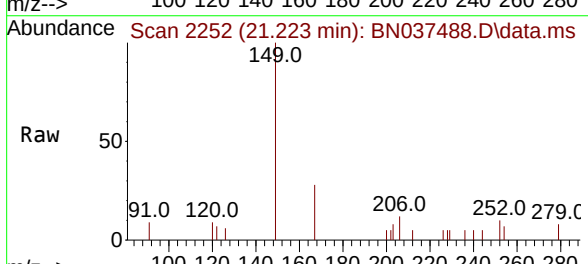
Instrument : BNA_N
 ClientSampleId : PB168720BSD

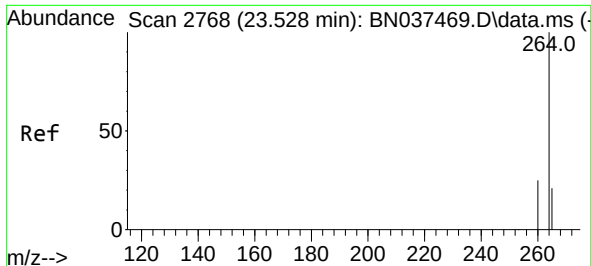
Tgt Ion:	228	Resp:	3058
Ion Ratio	Lower	Upper	
228	100		
226	30.2	24.6	36.8
229	20.8	16.4	24.6



#34
 Bis(2-ethylhexyl)phthalate
 Concen: 0.365 ng
 RT: 21.223 min Scan# 2252
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

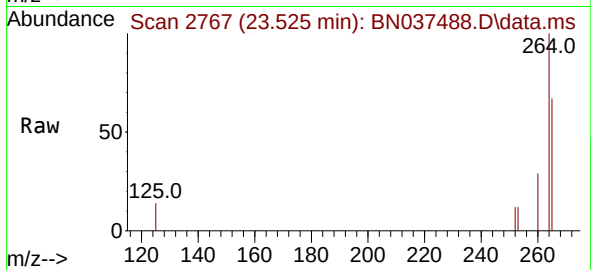
Tgt Ion:	149	Resp:	948
Ion Ratio	Lower	Upper	
149	100		
167	24.8	19.4	29.2
279	3.2	2.5	3.7



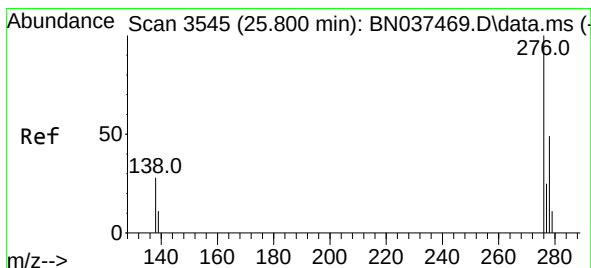
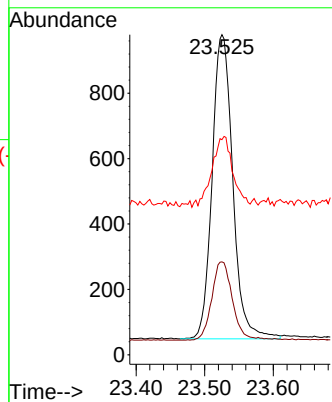
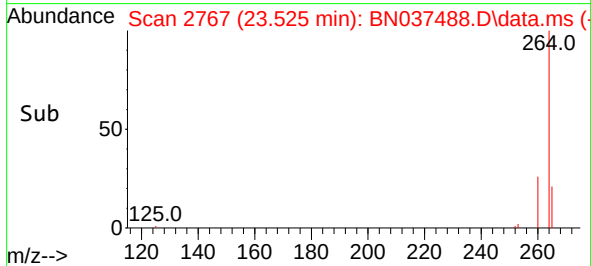


#35
 Perylene-d12
 Concen: 0.400 ng
 RT: 23.525 min Scan# 21
 Delta R.T. -0.003 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

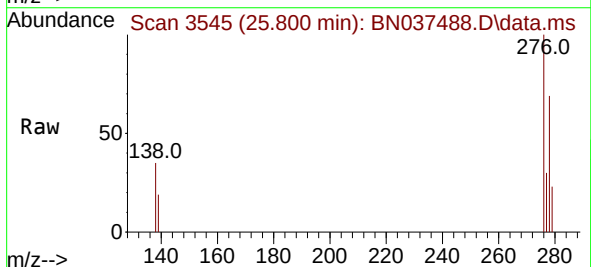
Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD



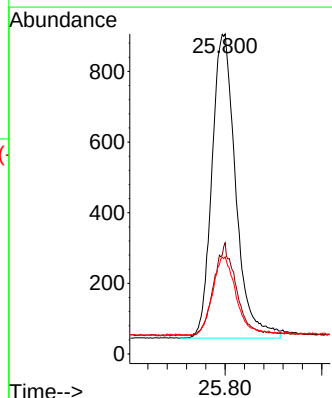
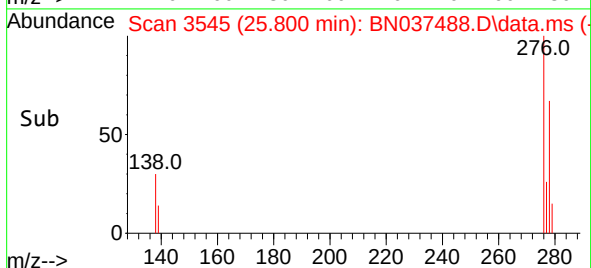
Tgt Ion:264 Resp: 1944
 Ion Ratio Lower Upper
 264 100
 260 29.0 21.7 32.5
 265 67.2 41.6 62.4#

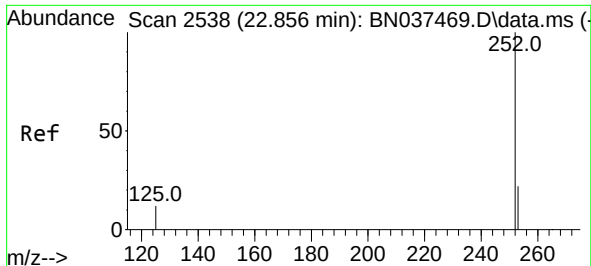


#36
 Indeno(1,2,3-cd)pyrene
 Concen: 0.391 ng
 RT: 25.800 min Scan# 3545
 Delta R.T. 0.000 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15



Tgt Ion:276 Resp: 2947
 Ion Ratio Lower Upper
 276 100
 138 28.4 23.4 35.2
 277 25.6 19.8 29.8

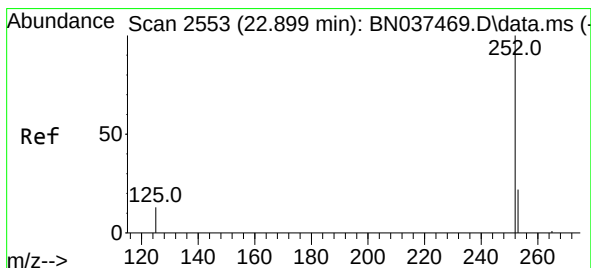
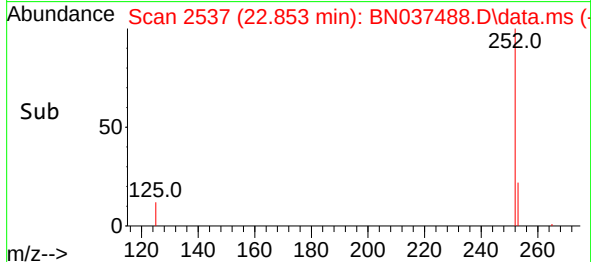
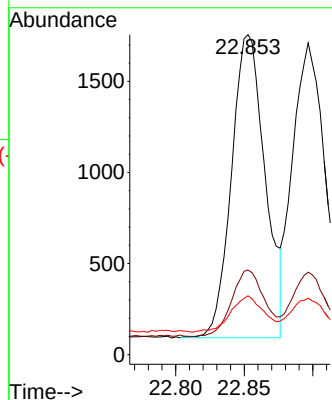
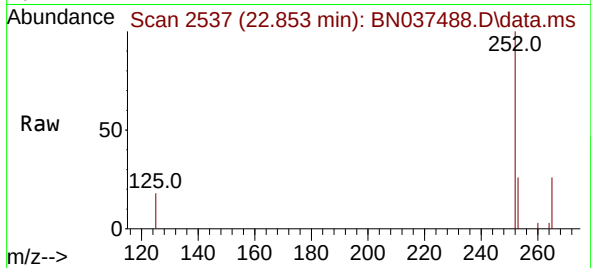




#37
Benzo(b)fluoranthene
Concen: 0.375 ng
RT: 22.853 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

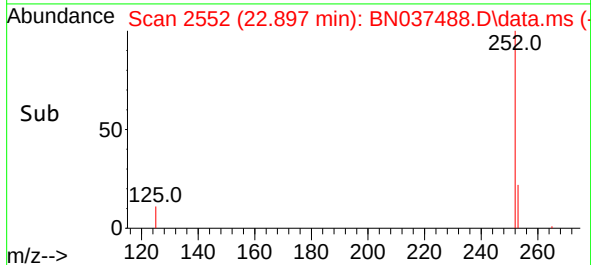
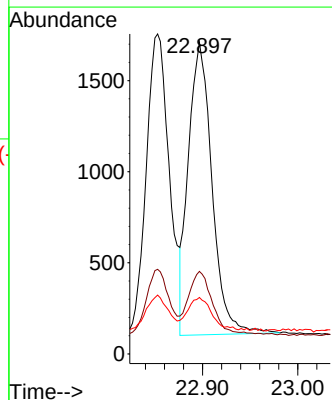
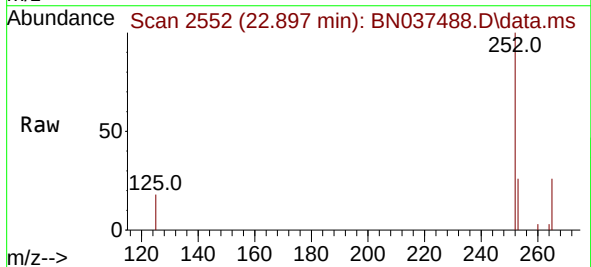
Instrument :
BNA_N
ClientSampleId :
PB168720BSD

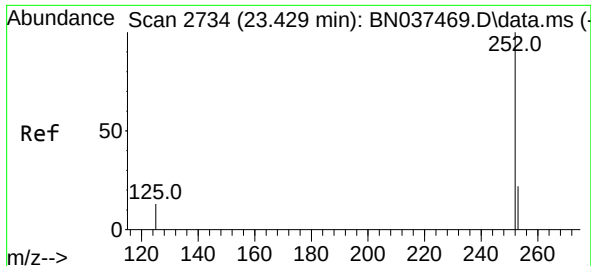
Tgt Ion:252 Resp: 2832
Ion Ratio Lower Upper
252 100
253 26.4 20.1 30.1
125 18.4 13.7 20.5



#38
Benzo(k)fluoranthene
Concen: 0.361 ng
RT: 22.897 min Scan# 2552
Delta R.T. -0.003 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

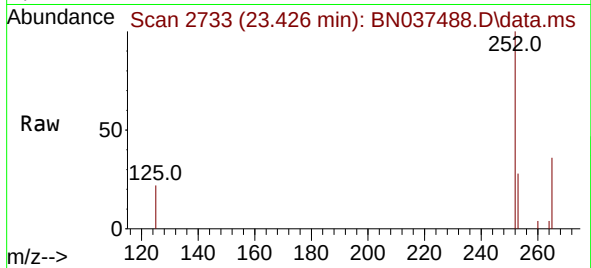
Tgt Ion:252 Resp: 2765
Ion Ratio Lower Upper
252 100
253 26.5 20.4 30.6
125 18.1 14.6 21.8



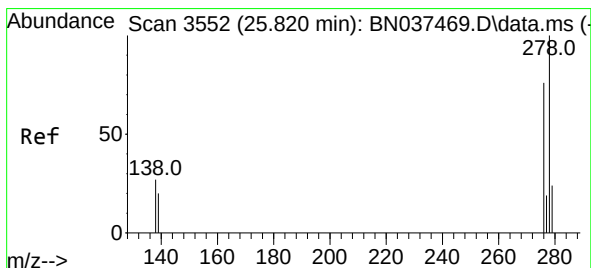
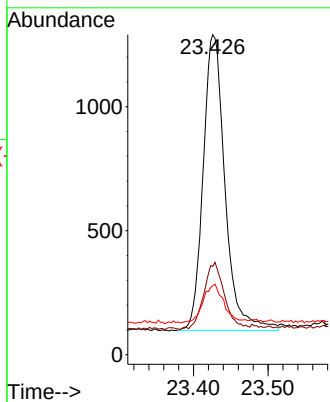
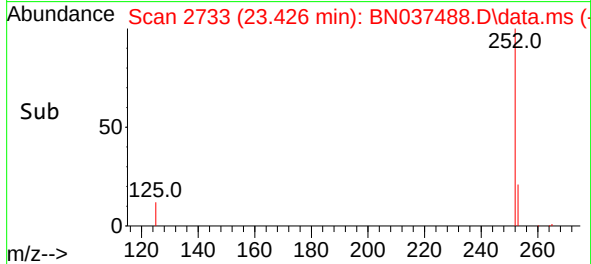


#39
Benzo(a)pyrene
Concen: 0.399 ng
RT: 23.426 min Scan# 21
Delta R.T. -0.003 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

Instrument :
BNA_N
ClientSampleId :
PB168720BSD

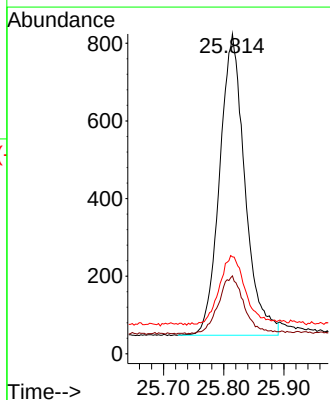
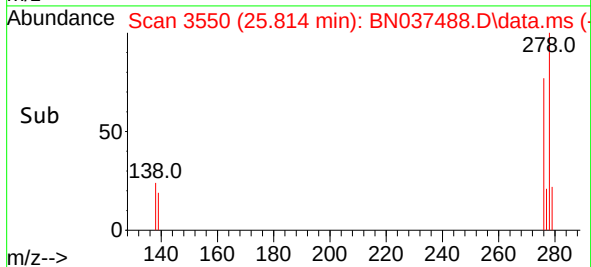
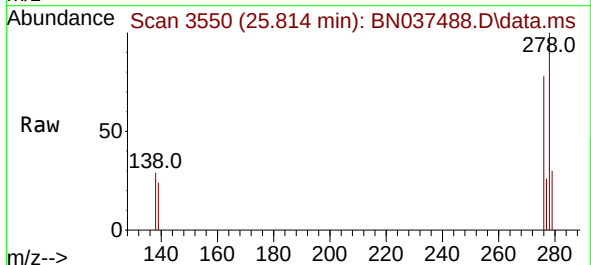


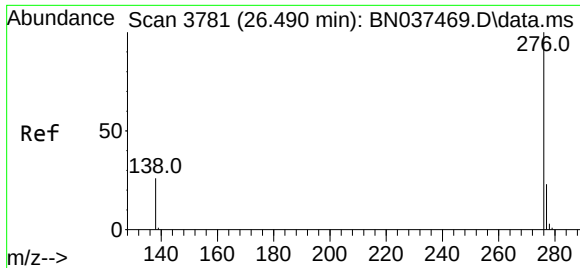
Tgt Ion:252 Resp: 2429
Ion Ratio Lower Upper
252 100
253 27.6 21.8 32.6
125 21.6 16.7 25.1



#40
Dibenzo(a,h)anthracene
Concen: 0.371 ng
RT: 25.814 min Scan# 3550
Delta R.T. -0.006 min
Lab File: BN037488.D
Acq: 14 Jul 2025 12:15

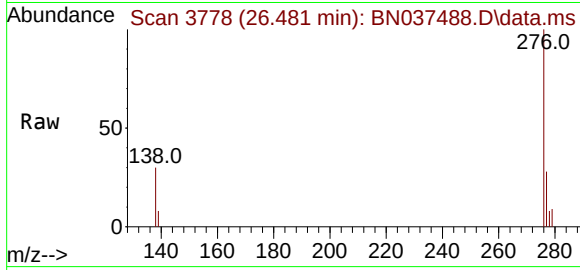
Tgt Ion:278 Resp: 2257
Ion Ratio Lower Upper
278 100
139 24.4 19.9 29.9
279 30.3 24.8 37.2





#41
 Benzo(g,h,i)perylene
 Concen: 0.384 ng
 RT: 26.481 min Scan# 31
 Delta R.T. -0.009 min
 Lab File: BN037488.D
 Acq: 14 Jul 2025 12:15

Instrument :
 BNA_N
 ClientSampleId :
 PB168720BSD



Tgt Ion:	276	Resp:	2561
Ion	Ratio	Lower	Upper
276	100		
277	27.5	21.7	32.5
138	29.5	24.3	36.5

