

**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 : Q2644  
ATTENTION : Ernie Wu**



**Laboratory Certification ID # 20012**

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## Cover Page

**Order ID :** Q2644

**Project ID :** NWIRP Bethpage 112G08005-WE13

**Client :** Tetra Tech NUS, Inc.

**Lab Sample Number**

Q2644-01  
Q2644-02

**Client Sample Number**

RW8-SP100-20250717  
RW8-SP303-20250717

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

Signature : \_\_\_\_\_

Date: 7/28/2025

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 #** Q2644

**Test Name:** SVOC-SIMGroup1

**A. Number of Samples and Date of Receipt:**

2 Water samples were received on 07/18/2025.

**B. Parameters**

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

**C. Analytical Techniques:**

The samples were analyzed on instrument BNA\_N using GC Column ZB-SemiVolatile Guardian which is 30 meters, 0.25 mm ID, 0.5 um df, Catalog # 7HG-G027-17-GGA. The 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 were met for all analysis except for, PB168952BS [2-Fluorobiphenyl - 107%]. Failed surrogate is not associated with DOD, therefor no further corrective action was taken.

The Internal Standards Areas were met for all analysis except for PB168952BS and PB168952BSD. Failed internal standard is not associated with DOD, therefor no further corrective action was taken.

The Retention Times were met for all analysis.

The RPD were met for all analysis.

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

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

The Initial Calibration met the requirements.

The Continuous Calibration File ID BN037532.D met the requirements except for 2,4,6-Tribromophenol. it is not associated with reporting list , Therefor no further corrective action was taken.

The Tuning criteria met requirements.



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Phone: 908 789 8900 Fax: 908 789 8922

**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-SP100-20250717 has 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.

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.

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

Signature\_\_\_\_\_

**DATA REPORTING QUALIFIERS- ORGANIC**

For reporting results, the following "Results Qualifiers" are used:

- Value** If the result is a value greater than or equal to the detection limit, report the value
- U** Indicates the compound was analyzed for but was not detected. Report the minimum detection limit for the sample with the U, i.e. "10 U". This is not necessarily the instrument detection limit attainable for this particular sample based on any concentration or dilution that may have been required.
- ND** Indicates the analyte was analyzed for, but not detected
- J** Indicates an estimated value. This flag is used:  
(1) When estimating a concentration for a tentatively identified compound (library search hits, where a 1:1 response is assumed.)  
(2) When the mass spectral data indicated the identification, however the result was less than the specified detection limit greater than zero. If the detection limit was 10ug/L and a concentration of 3 ug/L was calculated report as 3 J. This flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
- B** Indicates the analyte was found in the blank as well as the sample report as "12 B".
- E** Indicates the analyte's concentration exceeds the calibrated range of the instrument for that specific analysis.
- D** This flag identifies all compounds identified in an analysis at a secondary dilution factor.
- P** This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
- N** This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
- A** This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
- Q** Indicates the LCS did not meet the control limits requirements

# **ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092**

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

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

ORDER ID: Q2644

MATRIX: Water

METHOD: 8270-Modified/3510

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements.			✓

The Initial Calibration met the requirements.

The Continuous Calibration File ID BN037532.D met the requirements except for 2,4,6-Tribromophenol. it is not associated with reporting list , Therefor no further corrective action was taken.

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

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

The Surrogate recoveries were met for all analysis except for PB168952BS [2-Fluorobiphenyl - 107%]. Failed surrogate is not associated with DOD, therefor no further corrective action was taken.

# **ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092**

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

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

### **(CONTINUED)**

NA      NO      YES

8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria ✓

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

The Blank Spike met requirements for all compounds.

The Blank Spike Duplicate met requirements for all compounds.

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

Comments: The Internal Standards Areas were met for all analysis except for PB168952BS and PB168952BSD. Failed internal standard is not associated with DOD, therefor no further corrective action was taken.

10. Extraction Holding Time Met ✓

If not met, list number of days exceeded for each sample:

11. Analysis Holding Time Met ✓

If not met, list number of days exceeded for each sample:

#### **ADDITIONAL COMMENTS:**

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

The Sample RW8-SP100-20250717 has 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.

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.

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QA REVIEW

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## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q2644

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: 07/28/2025

## LAB CHRONICLE

<b>OrderID:</b>	Q2644	<b>OrderDate:</b>	7/18/2025 11:21:00 AM					
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	NWIRP Bethpage 112G08005-WE13					
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	O33					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2644-01	RW8-SP100-2025071 7	Water			<b>07/17/25</b>			<b>07/18/25</b>
			SVOC-SIMGroup1	8270-Modified		07/21/25	07/22/25	
Q2644-02	RW8-SP303-2025071 7	Water			<b>07/17/25</b>			<b>07/18/25</b>
			SVOC-SIMGroup1	8270-Modified		07/21/25	07/22/25	

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# QC SUMMARY

### Surrogate Summary

SW-846

SDG No.: Q2644

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB168952BL	PB168952BL	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.31	76		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB168952BS	PB168952BS	2-Methylnaphthalene-d10	0.4	0.36	90		30	150
		Fluoranthene-d10	0.4	0.30	76	*	30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.43	107	*	53	106
		Terphenyl-d14	0.4	0.39	98		58	132
PB168952BSD	PB168952BSD	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.31	76		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.40	100		53	106
		Terphenyl-d14	0.4	0.36	89		58	132
Q2644-01	RW8-SP100-20250717	2-Methylnaphthalene-d10	0.4	0.25	62		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.27	68		55	111
		2-Fluorobiphenyl	0.4	0.30	75		53	106
		Terphenyl-d14	0.4	0.41	103		58	132
Q2644-02	RW8-SP303-20250717	2-Methylnaphthalene-d10	0.4	0.30	75		30	150
		Fluoranthene-d10	0.4	0.39	98		30	150
		Nitrobenzene-d5	0.4	0.32	80		55	111
		2-Fluorobiphenyl	0.4	0.37	92		53	106
		Terphenyl-d14	0.4	0.43	108		58	132

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2644

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037544.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		RPD
									Low	High	
PB168952BS	1,4-Dioxane	0.4	0.30	ug/L	75				70	130	

### Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2644

Analytical Method: 8270-Modified

Client: Tetra Tech NUS, Inc.

DataFile: BN037545.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
									Qual	Low	High
PB168952BSD	1,4-Dioxane	0.4	0.30	ug/L	75	0			70	130	20



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4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID

PB168952BL

Lab Name: Alliance

Contract: TETR06

Lab Code: ACE

SDG NO.: Q2644

Lab File ID: BN037533.D

Lab Sample ID: PB168952BL

Instrument ID: BNA\_N

Date Extracted: 07/21/2025

Matrix: (soil/water) Water

Date Analyzed: 07/22/2025

Level: (low/med) LOW

Time Analyzed: 11:28

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB168952BS	PB168952BS	BN037544.D	07/22/2025
RW8-SP100-20250717	Q2644-01	BN037541.D	07/22/2025
RW8-SP303-20250717	Q2644-02	BN037542.D	07/22/2025
PB168952BSD	PB168952BSD	BN037545.D	07/22/2025

COMMENTS:



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance  
Lab Code: ACE  
Lab File ID: BN037497.D  
Instrument ID: BNA\_N

Contract: TETR06  
SDG NO.: Q2644  
DFTPP Injection Date: 07/15/2025  
DFTPP Injection Time: 10:57

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 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	6.7
365	Greater than 1% of mass 198	3.5
441	Present, but less than mass 443	83.6
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	17.4 (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	BN037499.D	07/15/2025	12:36
SSTDICC0.2	SSTDICC0.2	BN037500.D	07/15/2025	13:12
SSTDICCC0.4	SSTDICCC0.4	BN037501.D	07/15/2025	13:49
SSTDICC0.8	SSTDICC0.8	BN037502.D	07/15/2025	14:25
SSTDICC1.6	SSTDICC1.6	BN037503.D	07/15/2025	15:01
SSTDICC3.2	SSTDICC3.2	BN037504.D	07/15/2025	15:38
SSTDICC5.0	SSTDICC5.0	BN037505.D	07/15/2025	16:14



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance  
 Lab Code: ACE  
 Lab File ID: BN037531.D  
 Instrument ID: BNA\_N

Contract: TETR06  
 SDG NO.: Q2644  
 DFTPP Injection Date: 07/22/2025  
 DFTPP Injection Time: 10:07

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 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	3.3
441	Present, but less than mass 443	80.9
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.8 (21.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN037532.D	07/22/2025	10:51
PB168952BL	PB168952BL	BN037533.D	07/22/2025	11:28
RW8-SP100-20250717	Q2644-01	BN037541.D	07/22/2025	16:16
RW8-SP303-20250717	Q2644-02	BN037542.D	07/22/2025	16:53
PB168952BS	PB168952BS	BN037544.D	07/22/2025	18:05
PB168952BSD	PB168952BSD	BN037545.D	07/22/2025	18:41
SSTDCCC0.4EC	SSTDCCC0.4	BN037546.D	07/22/2025	19:17



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8B

SEMOVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE

SDG NO.: Q2644

Client ID : SSTDCCC0.4

Date Analyzed: 07/22/2025

Lab File ID: BN037532.D

Time Analyzed: 10:51

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	2751	7.717	7206	10.50	3790	14.36
UPPER LIMIT	5502	8.217	14412	10.998	7580	14.855
LOWER LIMIT	1375.5	7.217	3603	9.998	1895	13.855
EPA SAMPLE NO.						
01 PB168952BL	3218	7.72	8001	10.51	4007	14.36
02 PB168952BS	2046	7.72	5016	10.50	2405	14.36
03 PB168952BSD	1815	7.72	4389	10.50	2110	14.36
04 RW8-SP100-20250717	1735	7.72	4230	10.51	2216	14.36
05 RW8-SP303-20250717	1486	7.72	3623	10.51	1895	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 LOWER 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	SDG NO.:	Q2644		
Lab Code:	ACE	Date Analyzed:	07/22/2025		
Client ID:	SSTDCCC0.4	Time Analyzed:	10:51		
Lab File ID:	BN037532.D	GC Column:	ZB-GR	ID:	0.25 (mm)
Instrument ID:	BNA_N				

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	7043	17.086	6014	21.277	5778	23.513
	14086	17.586	12028	21.777	11556	24.013
	3521.5	16.586	3007	20.777	2889	23.013
EPA SAMPLE NO.						
01 PB168952BL	6964	17.10	4782	21.28	4734	23.51
02 PB168952BS	4507	17.09	3057	21.27	2587 *	23.51
03 PB168952BSD	4034	17.09	3054	21.27	2644 *	23.51
04 RW8-SP100-20250717	4398	17.09	3793	21.28	3358	23.51
05 RW8-SP303-20250717	4067	17.09	3787	21.28	3407	23.51

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 LOWER 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



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Fax : 908 789 8922

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/17/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/18/25
Client Sample ID:	RW8-SP100-20250717	SDG No.:	Q2644
Lab Sample ID:	Q2644-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	990	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
BN037541.D	1	07/21/25 09:10	07/22/25 16:16	PB168952

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.25		30 - 150		62%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.27		55 - 111		68%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.30		53 - 106		75%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.41		58 - 132		103%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	1740		7.724			
1146-65-2	Naphthalene-d8	4230		10.509			
15067-26-2	Acenaphthene-d10	2220		14.355			
1517-22-2	Phenanthrene-d10	4400		17.086			
1719-03-5	Chrysene-d12	3790		21.277			
1520-96-3	Perylene-d12	3360		23.51			

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\BN072225\  
 Data File : BN037541.D  
 Acq On : 22 Jul 2025 16:16  
 Operator : RC/JU  
 Sample : Q2644-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RW8-SP100-20250717**

Quant Time: Jul 22 17:01:49 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

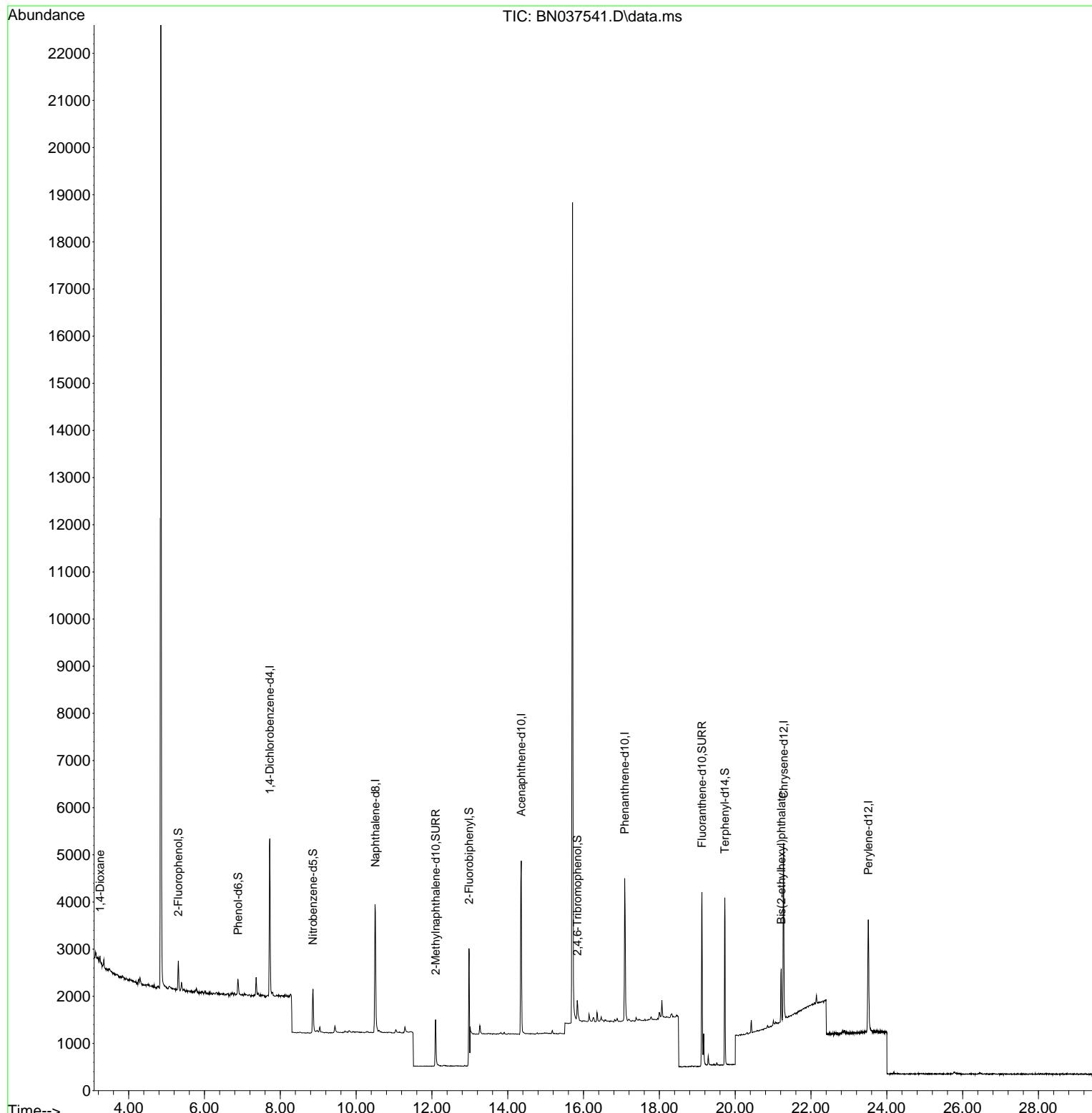
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	1735	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	4230	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	2216	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4398	0.400	ng	#-0.01
29) Chrysene-d12	21.277	240	3793	0.400	ng	0.00
35) Perylene-d12	23.510	264	3358	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	490	0.114	ng	0.00
5) Phenol-d6	6.886	99	327	0.061	ng	0.00
8) Nitrobenzene-d5	8.864	82	853	0.270	ng	0.00
11) 2-Methylnaphthalene-d10	12.095	152	1497	0.247	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	267	0.245	ng	-0.01
15) 2-Fluorobiphenyl	12.978	172	3445	0.299	ng	0.00
27) Fluoranthene-d10	19.122	212	4274	0.367	ng	0.00
31) Terphenyl-d14	19.726	244	3349	0.411	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.246	88	75	0.045	ng	# 27
34) Bis(2-ethylhexyl)phtha...	21.214	149	1159	0.194	ng	99

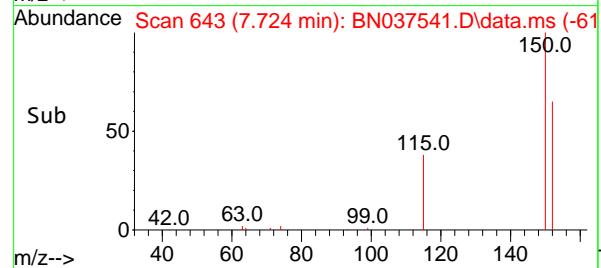
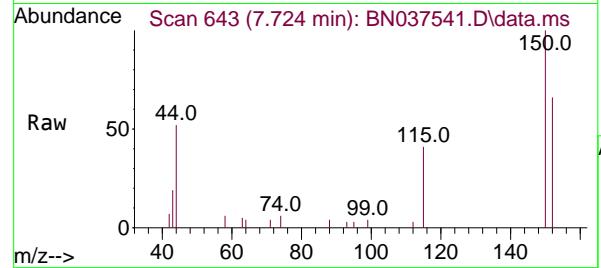
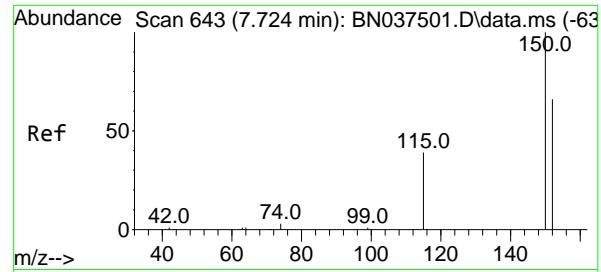
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037541.D  
 Acq On : 22 Jul 2025 16:16  
 Operator : RC/JU  
 Sample : Q2644-01  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP100-20250717

Quant Time: Jul 22 17:01:49 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

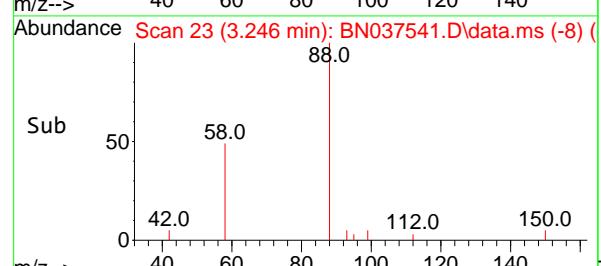
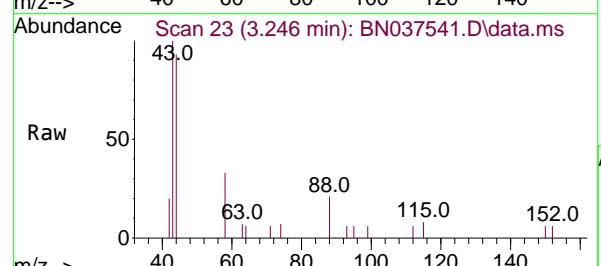
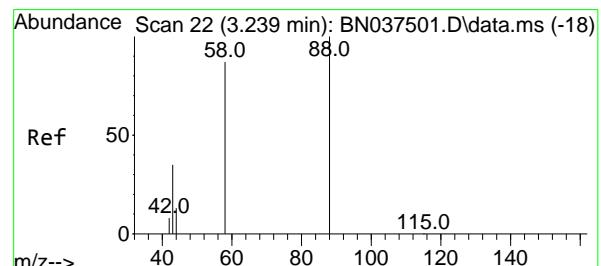
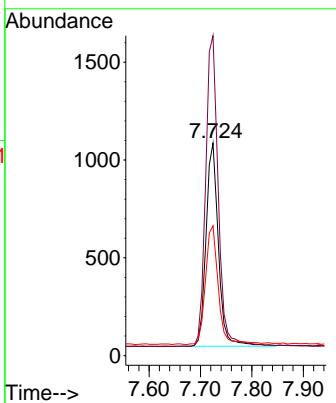




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

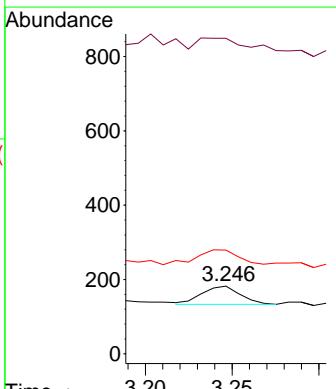
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ClientSampleId : RW8-SP100-20250717

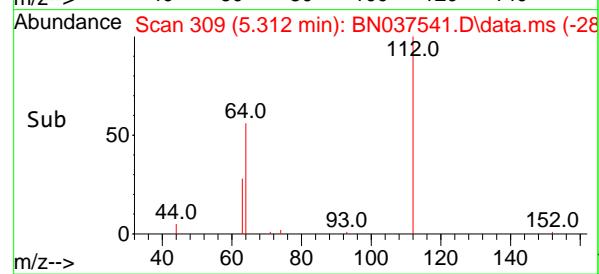
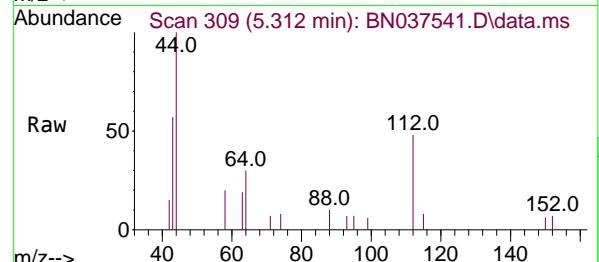
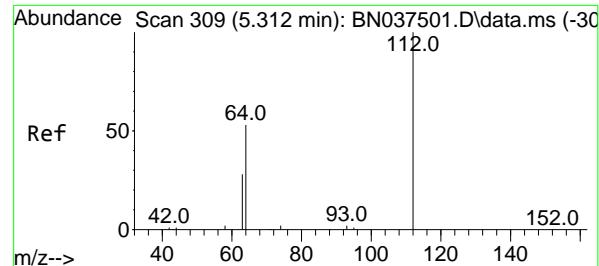
Tgt Ion:152 Resp: 1735  
Ion Ratio Lower Upper  
152 100  
150 150.6 119.8 179.8  
115 61.1 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.045 ng  
RT: 3.246 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

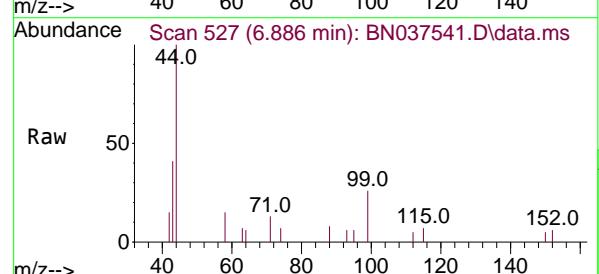
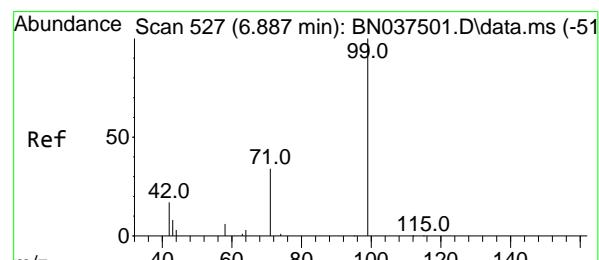
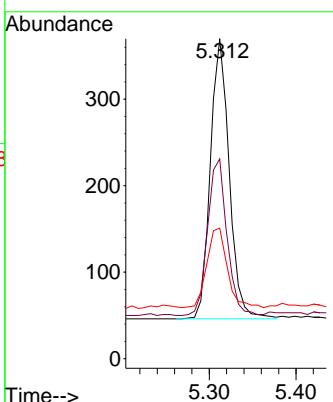
Tgt Ion: 88 Resp: 75  
Ion Ratio Lower Upper  
88 100  
43 160.0 27.5 41.3#  
58 86.7 62.7 94.1





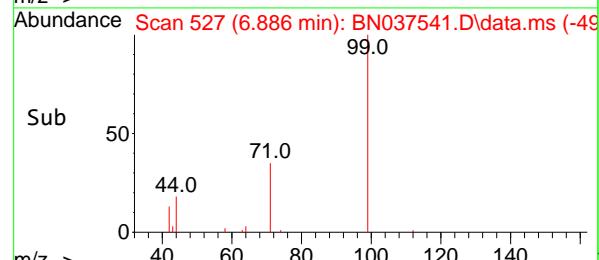
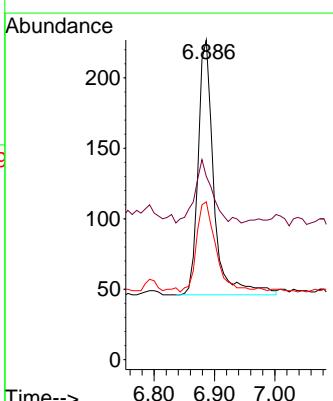
#4  
2-Fluorophenol  
Concen: 0.114 ng  
RT: 5.312 min Scan# 3  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16  
ClientSampleId : RW8-SP100-20250717

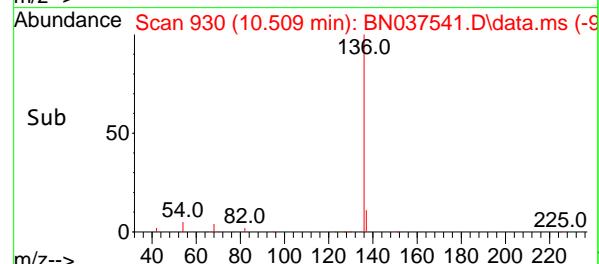
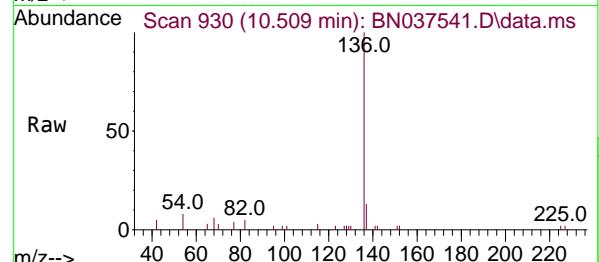
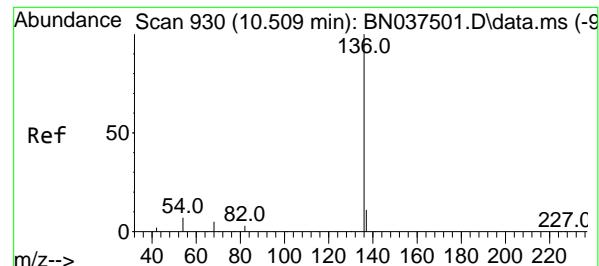
Tgt Ion:112 Resp: 490  
Ion Ratio Lower Upper  
112 100  
64 56.9 45.1 67.7  
63 30.6 23.8 35.8



#5  
Phenol-d6  
Concen: 0.061 ng  
RT: 6.886 min Scan# 527  
Delta R.T. -0.000 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

Tgt Ion: 99 Resp: 327  
Ion Ratio Lower Upper  
99 100  
42 27.2 17.1 25.7#  
71 43.7 27.8 41.8#



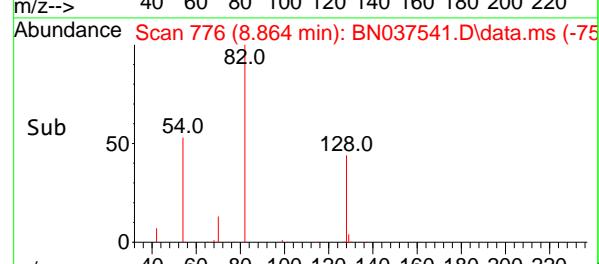
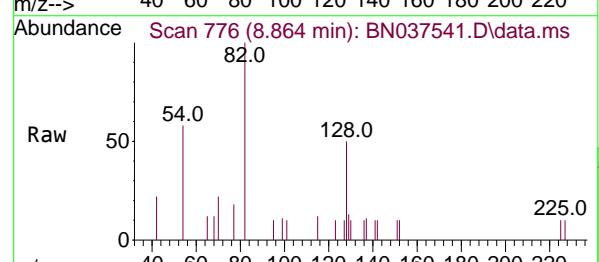
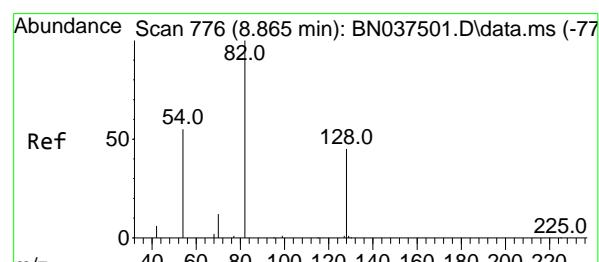
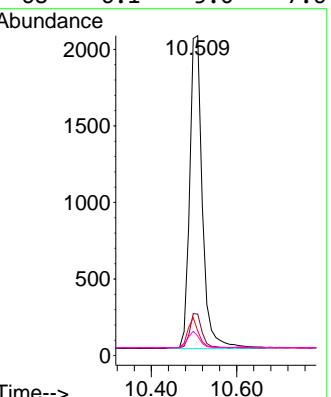


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037541.D  
 Acq: 22 Jul 2025 16:16

Instrument : BNA\_N  
 ClientSampleId : RW8-SP100-20250717

Tgt Ion:136 Resp: 4230

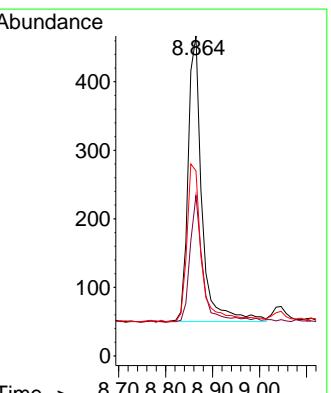
Ion	Ratio	Lower	Upper
136	100		
137	13.0	9.8	14.8
54	7.7	6.6	9.8
68	6.1	5.0	7.6

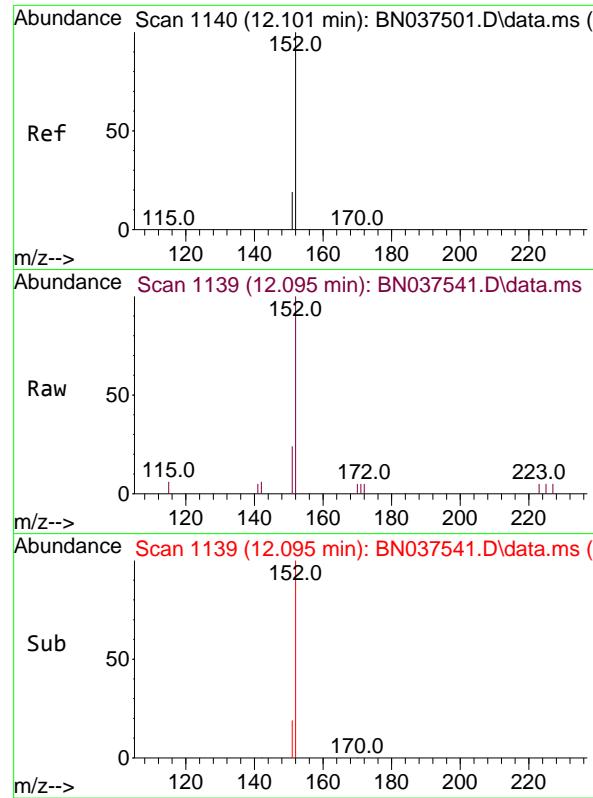


#8  
 Nitrobenzene-d5  
 Concen: 0.270 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037541.D  
 Acq: 22 Jul 2025 16:16

Tgt Ion: 82 Resp: 853

Ion	Ratio	Lower	Upper
82	100		
128	50.1	37.5	56.3
54	57.8	45.3	67.9

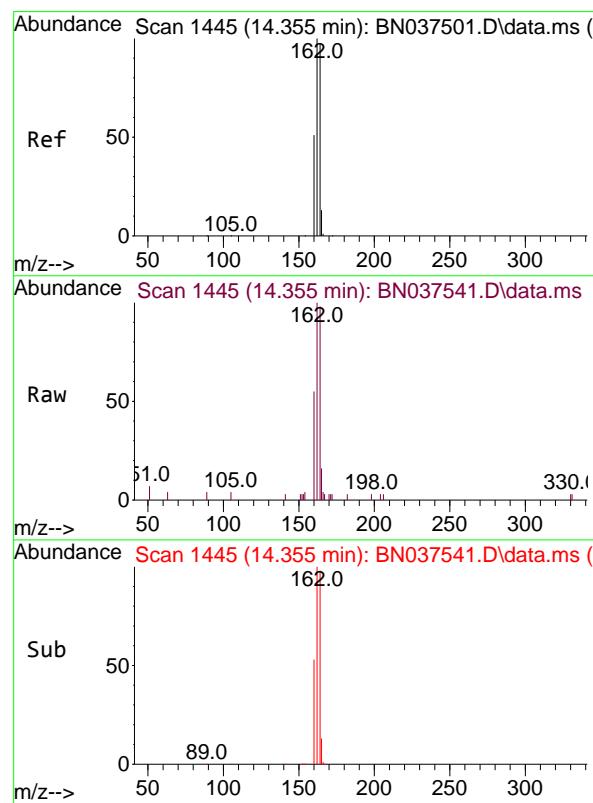
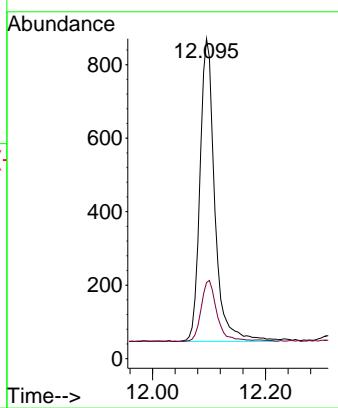




#11  
2-Methylnaphthalene-d10  
Concen: 0.247 ng  
RT: 12.095 min Scan# 1140  
Delta R.T. -0.005 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

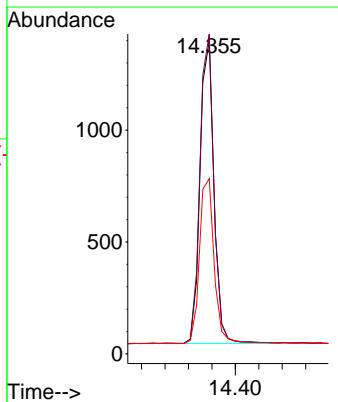
Instrument : BNA\_N  
ClientSampleId : RW8-SP100-20250717

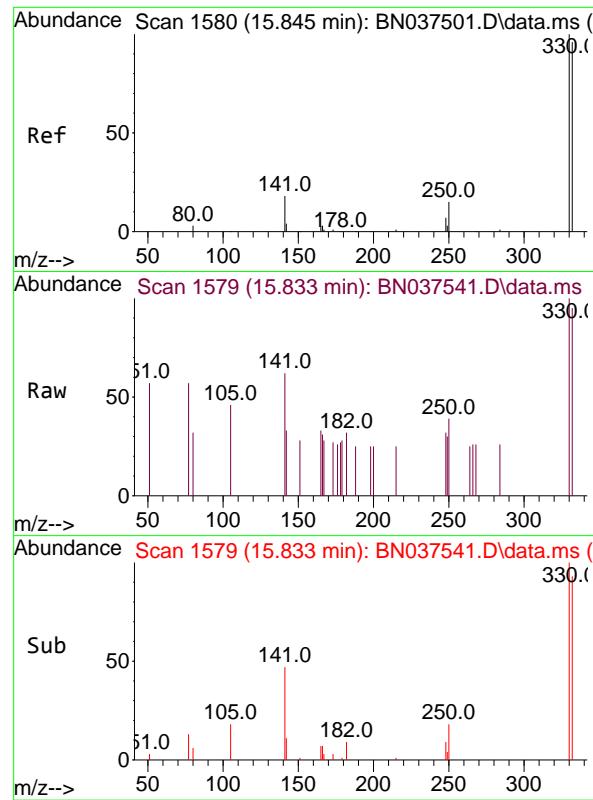
Tgt Ion:152 Resp: 1497  
Ion Ratio Lower Upper  
152 100  
151 21.4 16.8 25.2



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.355 min Scan# 1445  
Delta R.T. -0.000 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

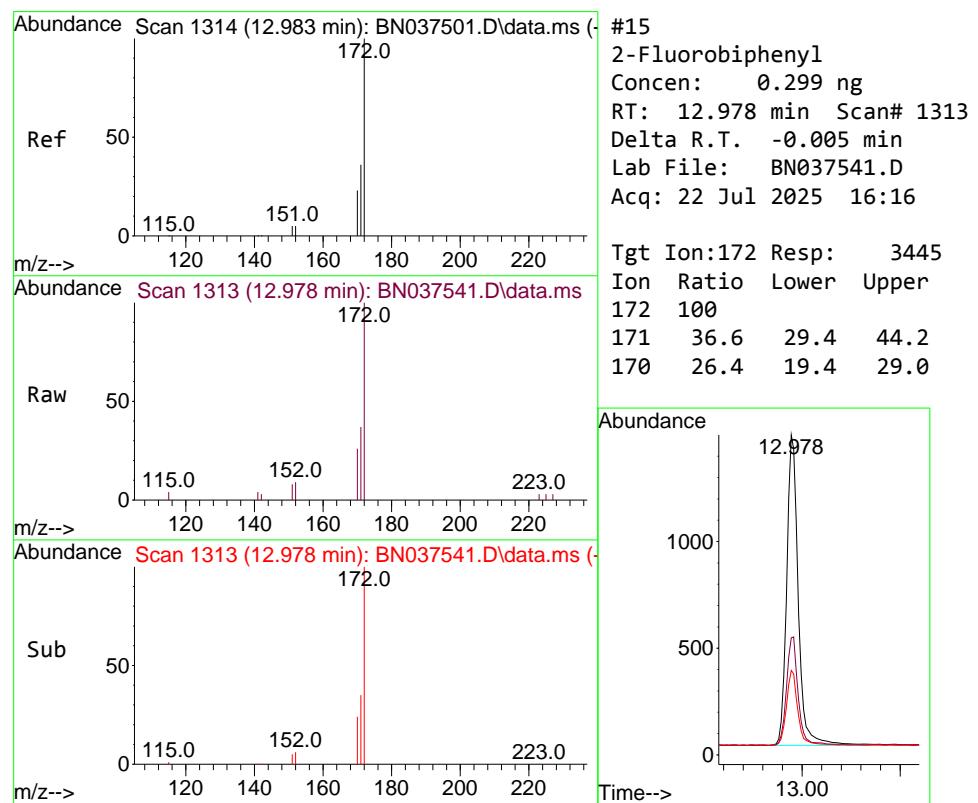
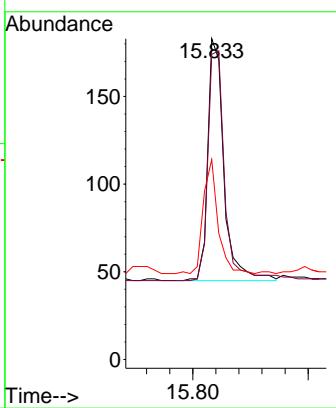
Tgt Ion:164 Resp: 2216  
Ion Ratio Lower Upper  
164 100  
162 102.3 82.0 123.0  
160 56.0 42.4 63.6





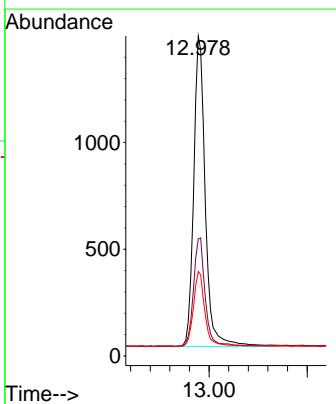
#14  
2,4,6-Tribromophenol  
Concen: 0.245 ng  
RT: 15.833 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.013 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16  
ClientSampleId : RW8-SP100-20250717

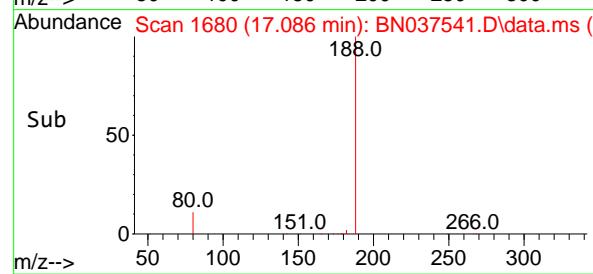
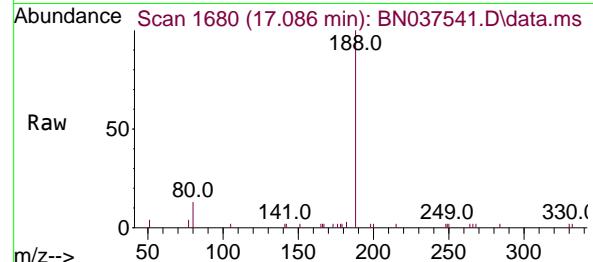
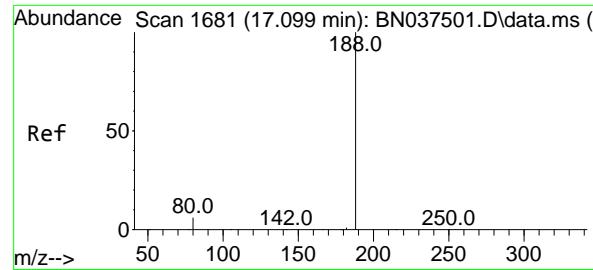
Tgt Ion:330 Resp: 267  
Ion Ratio Lower Upper  
330 100  
332 100.0 76.1 114.1  
141 43.1 33.4 50.0



#15  
2-Fluorobiphenyl  
Concen: 0.299 ng  
RT: 12.978 min Scan# 1313  
Delta R.T. -0.005 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

Tgt Ion:172 Resp: 3445  
Ion Ratio Lower Upper  
172 100  
171 36.6 29.4 44.2  
170 26.4 19.4 29.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.013 min

Lab File: BN037541.D

Acq: 22 Jul 2025 16:16

Instrument :

BNA\_N

ClientSampleId :

RW8-SP100-20250717

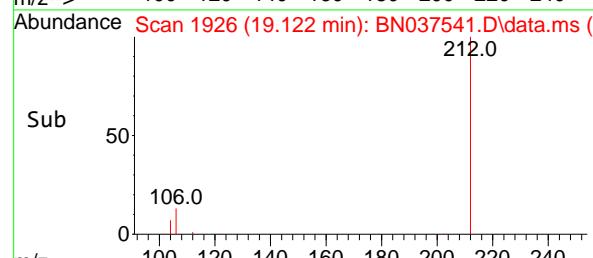
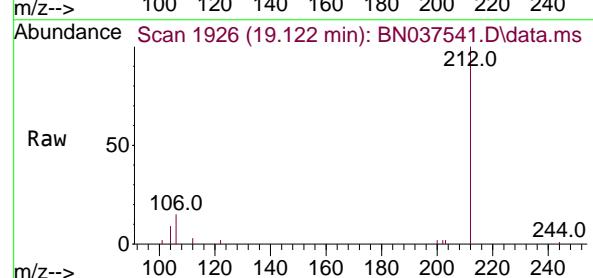
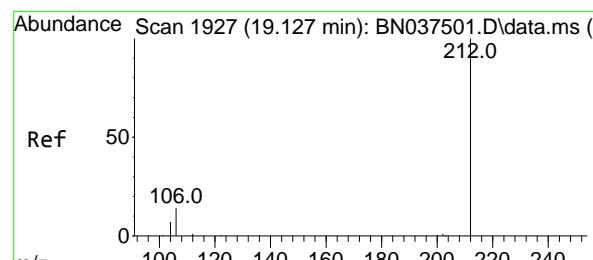
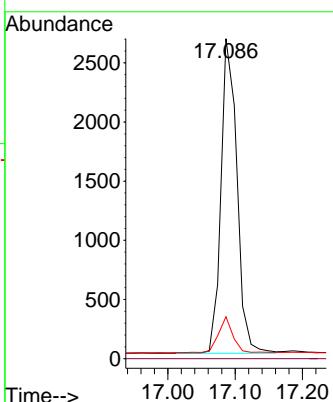
Tgt Ion:188 Resp: 4398

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.1 6.0 9.0#



#27

Fluoranthene-d10

Concen: 0.367 ng

RT: 19.122 min Scan# 1926

Delta R.T. -0.005 min

Lab File: BN037541.D

Acq: 22 Jul 2025 16:16

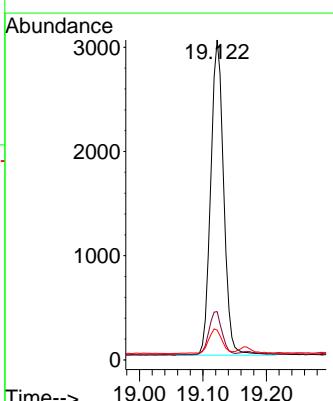
Tgt Ion:212 Resp: 4274

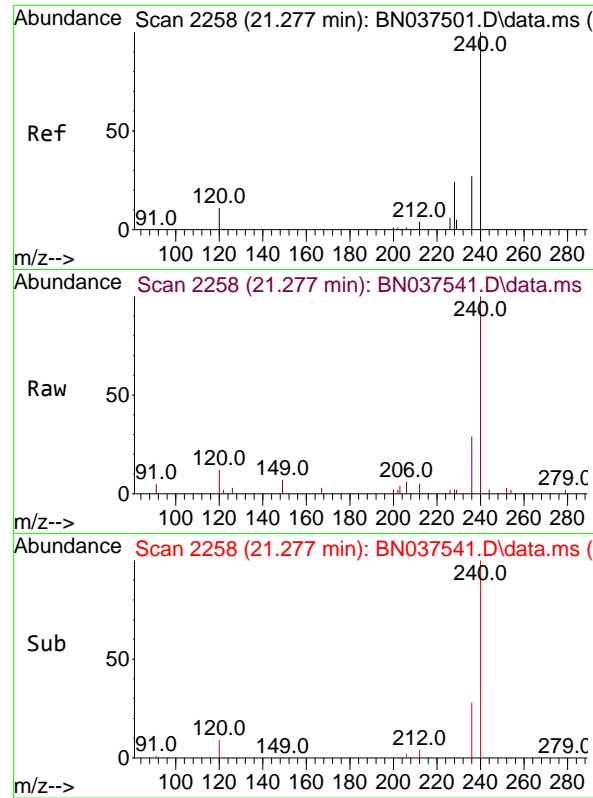
Ion Ratio Lower Upper

212 100

106 13.7 12.2 18.4

104 7.8 6.7 10.1

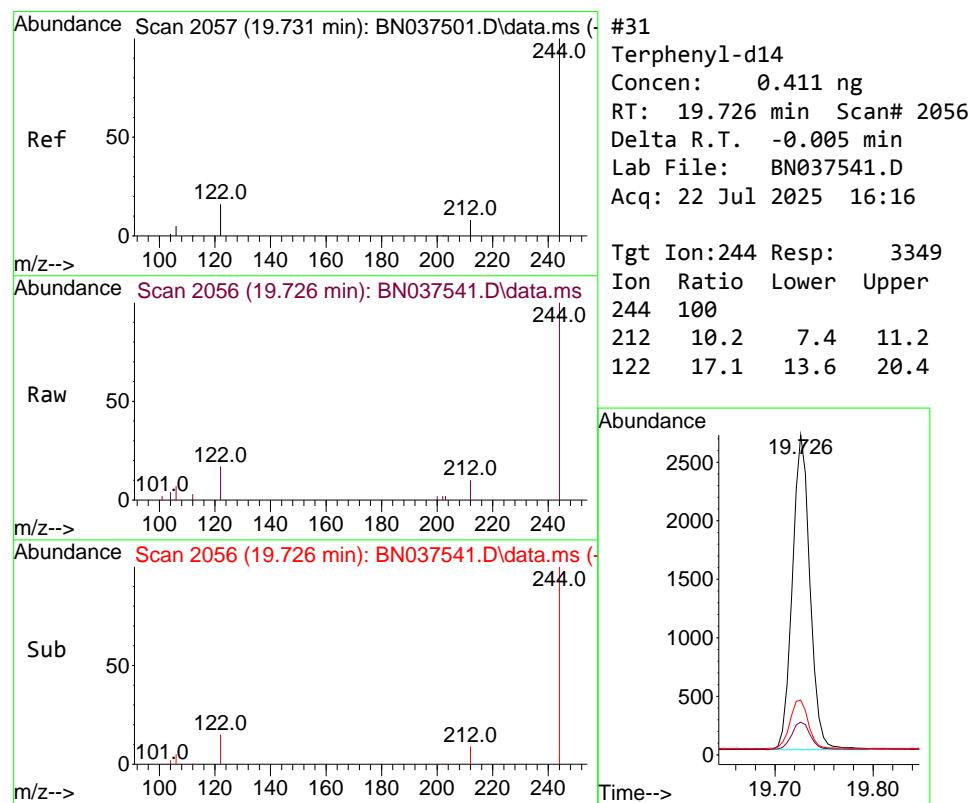
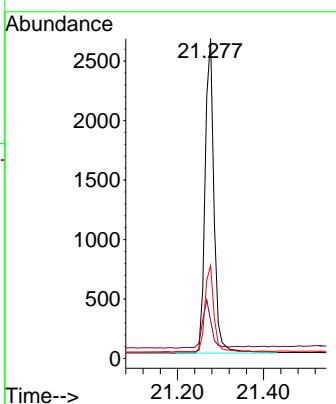




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

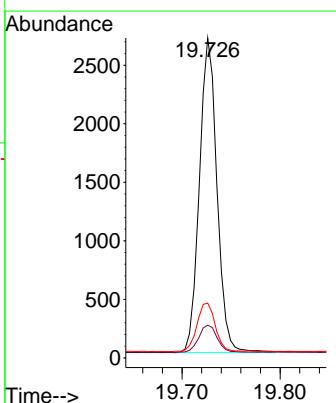
Instrument : BNA\_N  
ClientSampleId : RW8-SP100-20250717

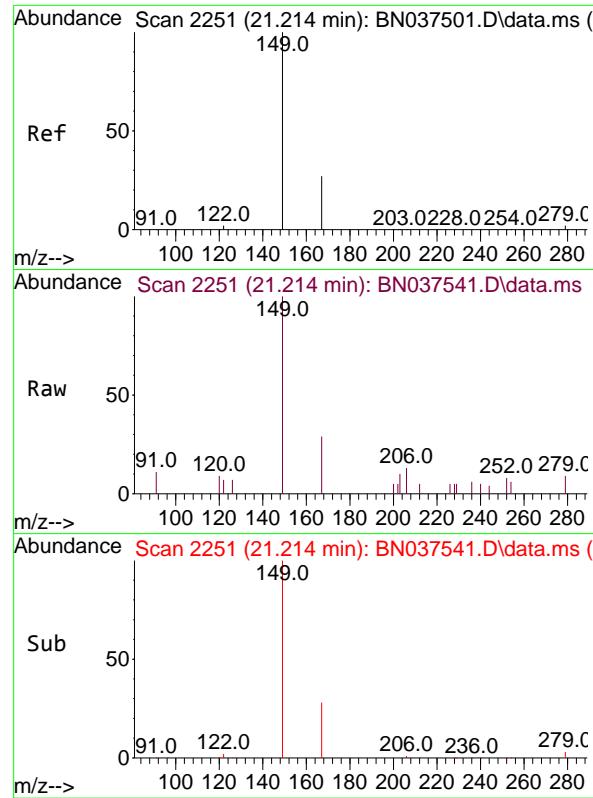
Tgt Ion:240 Resp: 3793  
Ion Ratio Lower Upper  
240 100  
120 11.9 10.7 16.1  
236 29.1 22.6 33.8



#31  
Terphenyl-d14  
Concen: 0.411 ng  
RT: 19.726 min Scan# 2056  
Delta R.T. -0.005 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

Tgt Ion:244 Resp: 3349  
Ion Ratio Lower Upper  
244 100  
212 10.2 7.4 11.2  
122 17.1 13.6 20.4

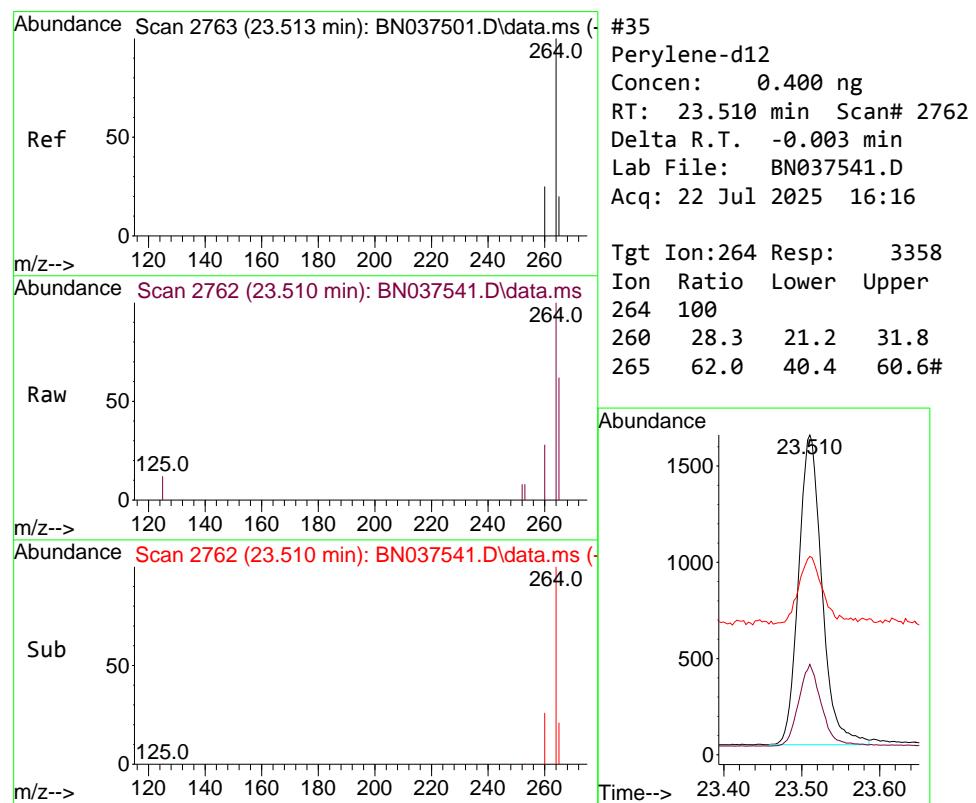
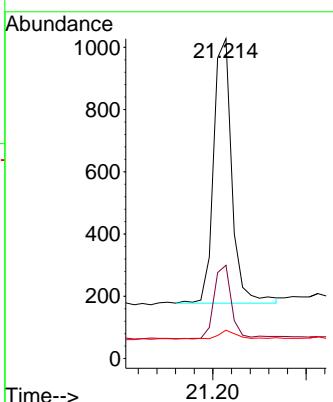




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.194 ng  
RT: 21.214 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

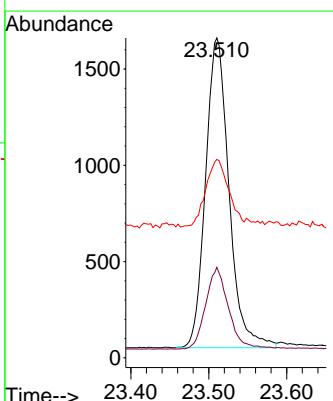
Instrument : BNA\_N  
ClientSampleId : RW8-SP100-20250717

Tgt Ion:149 Resp: 1159  
Ion Ratio Lower Upper  
149 100  
167 26.7 21.8 32.8  
279 3.4 3.0 4.4



#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.510 min Scan# 2762  
Delta R.T. -0.003 min  
Lab File: BN037541.D  
Acq: 22 Jul 2025 16:16

Tgt Ion:264 Resp: 3358  
Ion Ratio Lower Upper  
264 100  
260 28.3 21.2 31.8  
265 62.0 40.4 60.6#





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	07/17/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	07/18/25
Client Sample ID:	RW8-SP303-20250717	SDG No.:	Q2644
Lab Sample ID:	Q2644-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	990	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
BN037542.D	1	07/21/25 09:10	07/22/25 16:53	PB168952

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.30		30 - 150		75%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		98%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		55 - 111		80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		108%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	1490		7.724			
1146-65-2	Naphthalene-d8	3620		10.509			
15067-26-2	Acenaphthene-d10	1900		14.355			
1517-22-2	Phenanthrene-d10	4070		17.086			
1719-03-5	Chrysene-d12	3790		21.277			
1520-96-3	Perylene-d12	3410		23.513			

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\BN072225\  
 Data File : BN037542.D  
 Acq On : 22 Jul 2025 16:53  
 Operator : RC/JU  
 Sample : Q2644-02  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP303-20250717

Quant Time: Jul 22 17:26:08 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

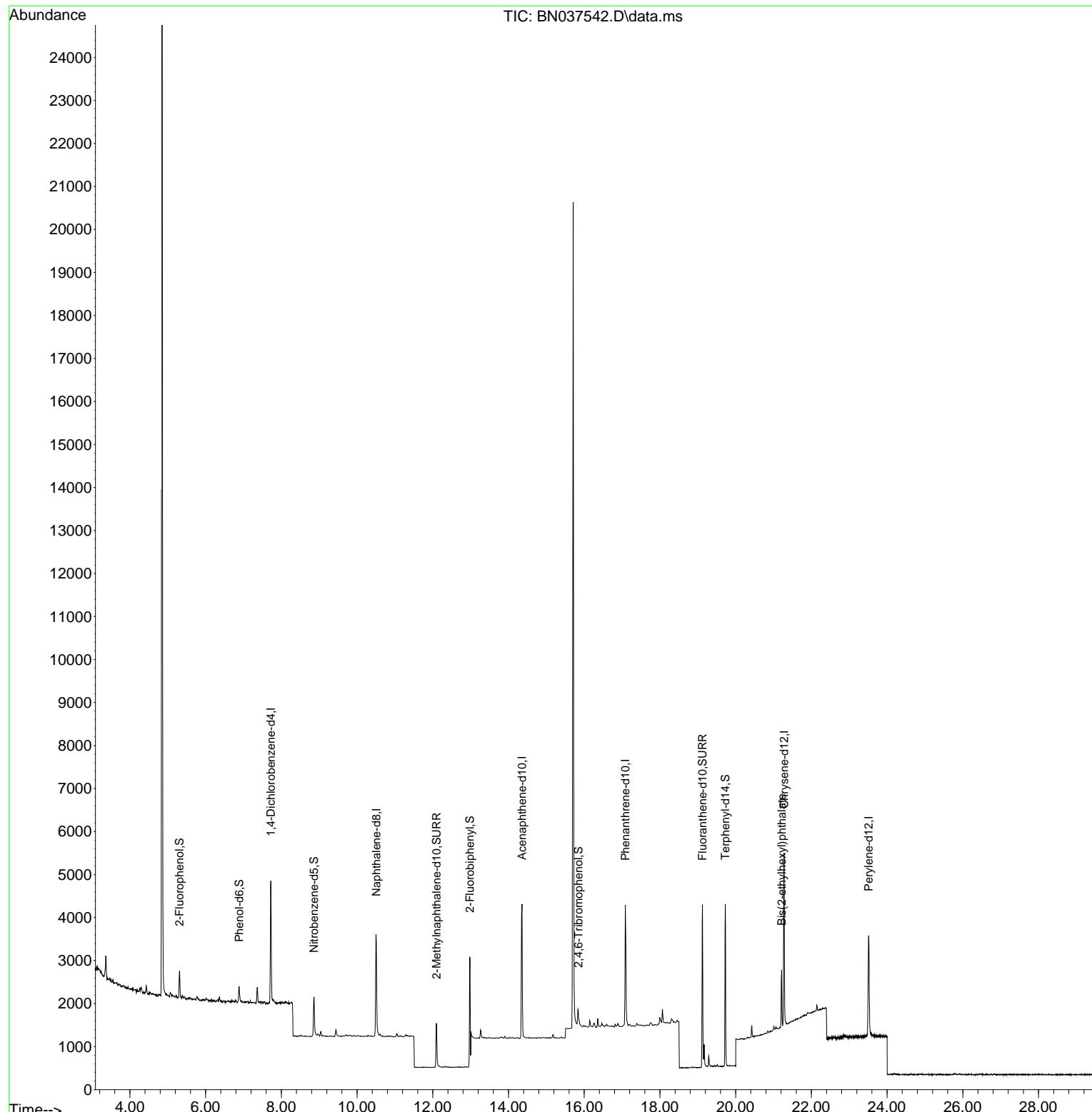
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	1486	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	3623	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	1895	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4067	0.400	ng	#-0.01
29) Chrysene-d12	21.277	240	3787	0.400	ng	0.00
35) Perylene-d12	23.513	264	3407	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	483	0.131	ng	0.00
5) Phenol-d6	6.886	99	372	0.081	ng	0.00
8) Nitrobenzene-d5	8.864	82	870	0.321	ng	0.00
11) 2-Methylnaphthalene-d10	12.096	152	1554	0.299	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	247	0.265	ng	0.00
15) 2-Fluorobiphenyl	12.978	172	3633	0.369	ng	0.00
27) Fluoranthene-d10	19.122	212	4249	0.394	ng	0.00
31) Terphenyl-d14	19.726	244	3527	0.433	ng	0.00
<b>Target Compounds</b>						
34) Bis(2-ethylhexyl)phtha...	21.214	149	1318	0.221	ng	97

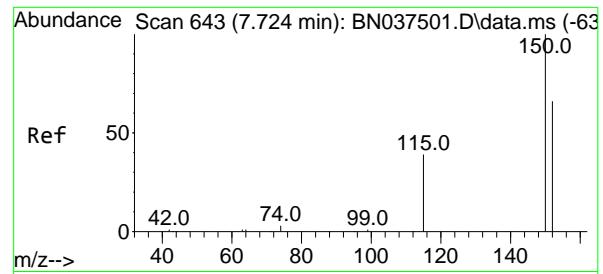
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037542.D  
 Acq On : 22 Jul 2025 16:53  
 Operator : RC/JU  
 Sample : Q2644-02  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RW8-SP303-20250717

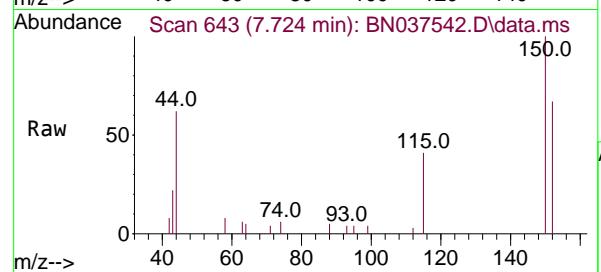
Quant Time: Jul 22 17:26:08 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration



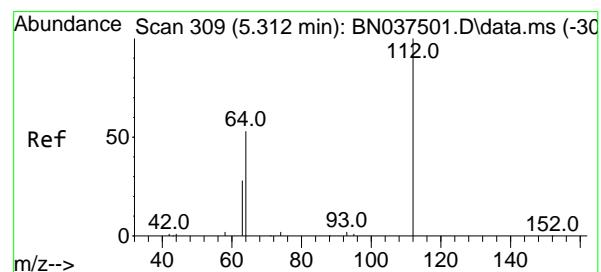
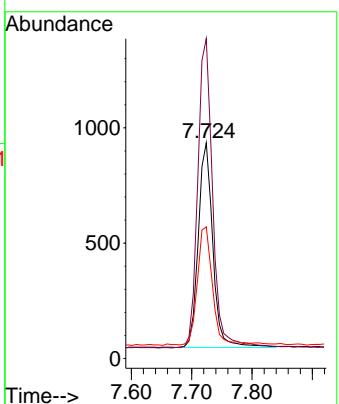
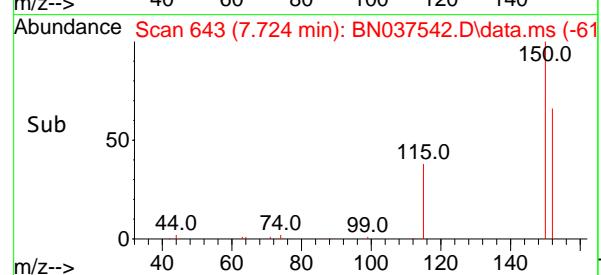


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53

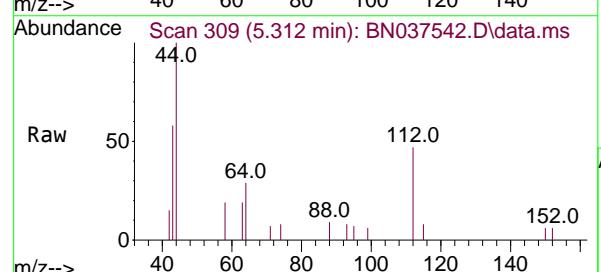
Instrument : BNA\_N  
ClientSampleId : RW8-SP303-20250717



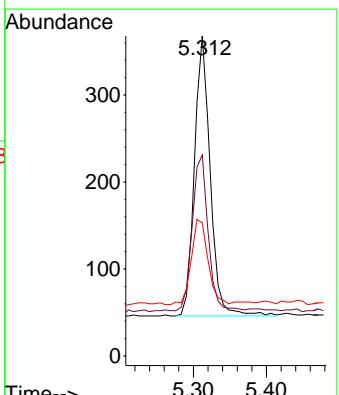
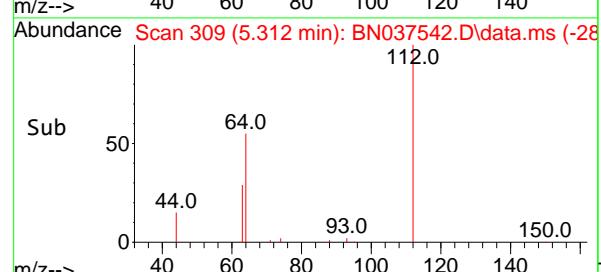
Tgt Ion:152 Resp: 1486  
Ion Ratio Lower Upper  
152 100  
150 148.3 119.8 179.8  
115 61.1 49.1 73.7

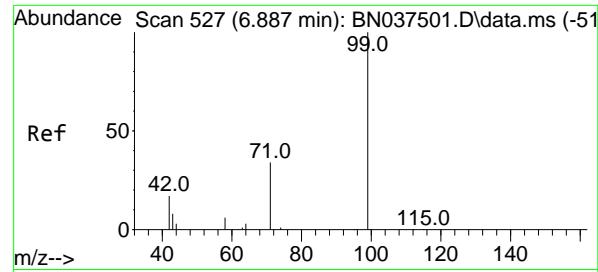


#4  
2-Fluorophenol  
Concen: 0.131 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53

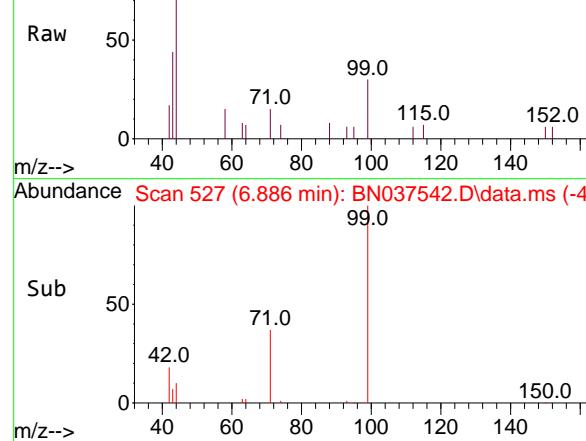


Tgt Ion:112 Resp: 483  
Ion Ratio Lower Upper  
112 100  
64 57.3 45.1 67.7  
63 32.3 23.8 35.8





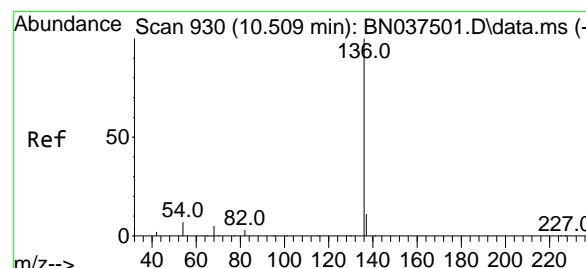
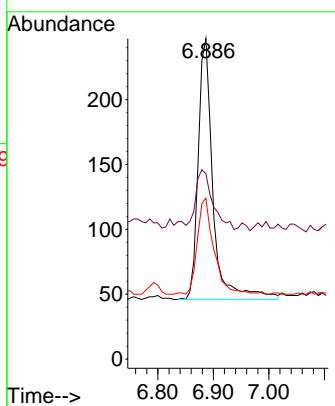
Abundance Scan 527 (6.886 min): BN037542.D\data.ms



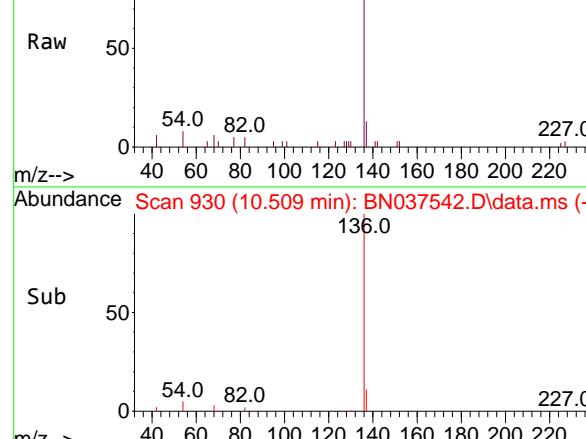
#5  
 Phenol-d6  
 Concen: 0.081 ng  
 RT: 6.886 min Scan# 51  
 Delta R.T. -0.000 min  
 Lab File: BN037542.D  
 Acq: 22 Jul 2025 16:53

Instrument : BNA\_N  
 ClientSampleId : RW8-SP303-20250717

Tgt Ion: 99 Resp: 372  
 Ion Ratio Lower Upper  
 99 100  
 42 26.1 17.1 25.7#  
 71 41.1 27.8 41.8

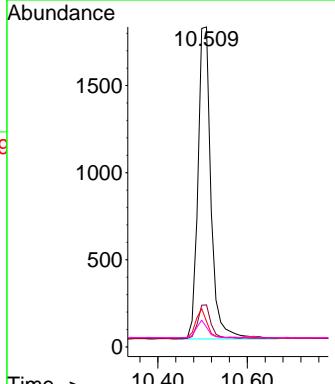


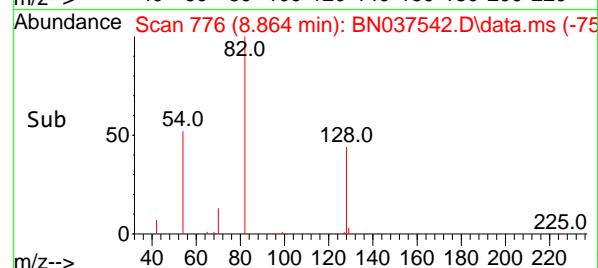
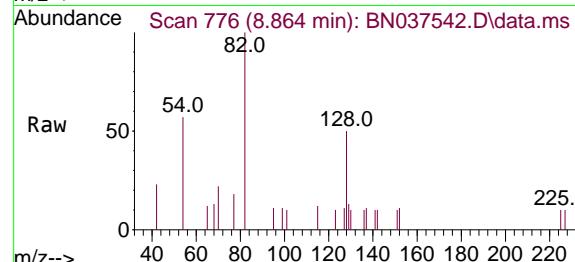
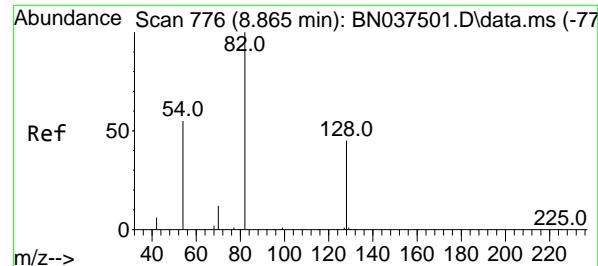
Abundance Scan 930 (10.509 min): BN037542.D\data.ms



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 930  
 Delta R.T. -0.000 min  
 Lab File: BN037542.D  
 Acq: 22 Jul 2025 16:53

Tgt Ion:136 Resp: 3623  
 Ion Ratio Lower Upper  
 136 100  
 137 13.1 9.8 14.8  
 54 8.0 6.6 9.8  
 68 6.2 5.0 7.6





#8

Nitrobenzene-d5

Concen: 0.321 ng

RT: 8.864 min Scan# 7

Instrument:

BNA\_N

Delta R.T. -0.000 min

Lab File: BN037542.D

Acq: 22 Jul 2025 16:53

ClientSampleId :

RW8-SP303-20250717

Tgt Ion: 82 Resp: 870

Ion Ratio Lower Upper

82 100

128 50.1 37.5 56.3

54 57.0 45.3 67.9

Abundance

8.864

400

300

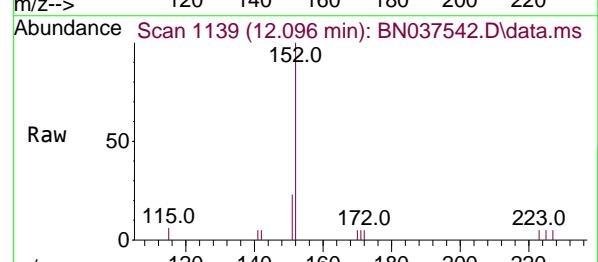
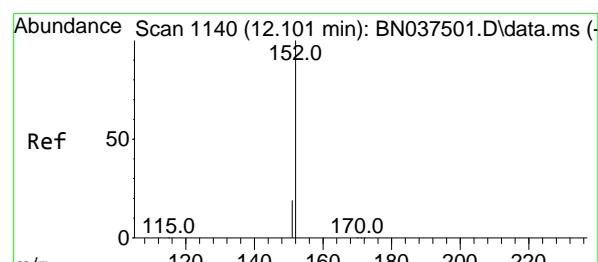
200

100

0

Time--&gt;

8.70 8.80 8.90 9.00



#11

2-Methylnaphthalene-d10

Concen: 0.299 ng

RT: 12.096 min Scan# 1139

Delta R.T. -0.005 min

Lab File: BN037542.D

Acq: 22 Jul 2025 16:53

Tgt Ion: 152 Resp: 1554

Ion Ratio Lower Upper

152 100

151 20.8 16.8 25.2

Abundance

12.096

800

600

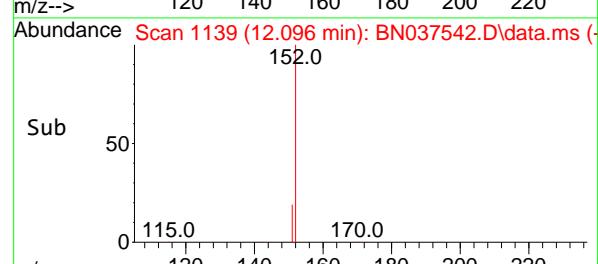
400

200

0

Time--&gt;

12.00 12.10 12.20



Sub

50

0

115.0

120

130

140

150

160

170

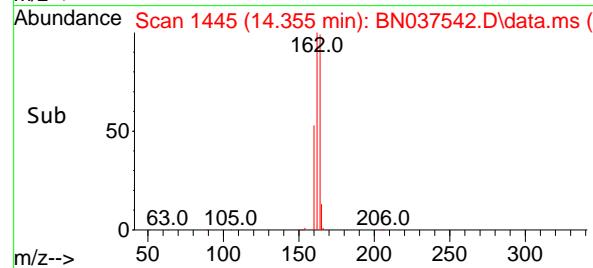
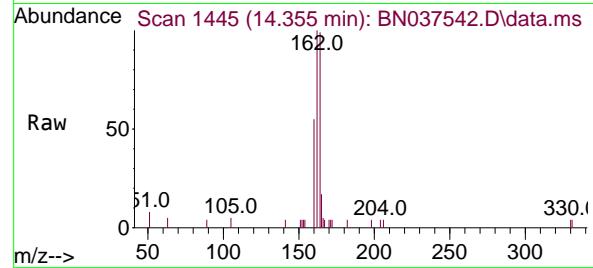
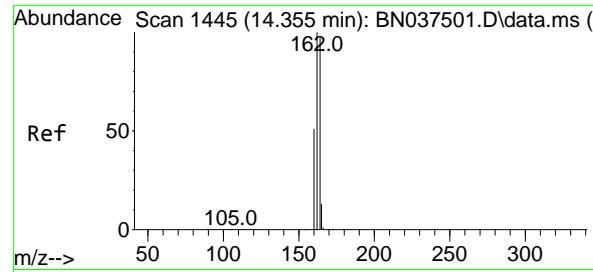
180

190

200

210

220



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 14

Delta R.T. -0.000 min

Lab File: BN037542.D

Acq: 22 Jul 2025 16:53

Instrument :

BNA\_N

ClientSampleId :

RW8-SP303-20250717

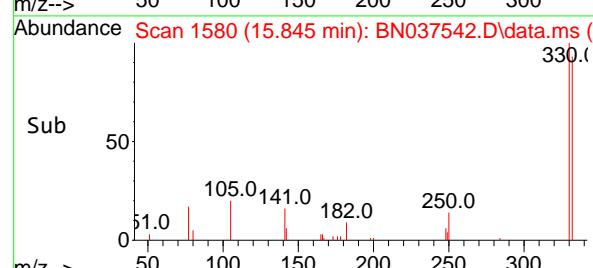
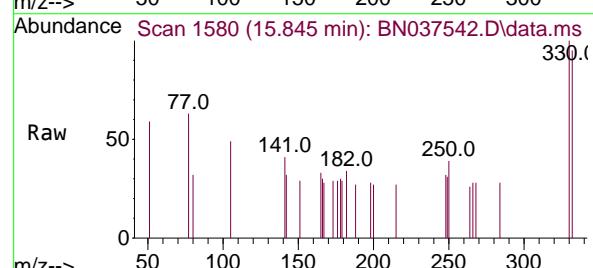
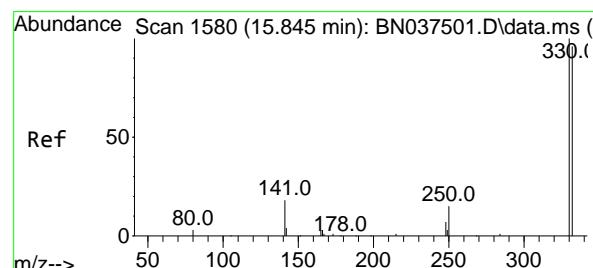
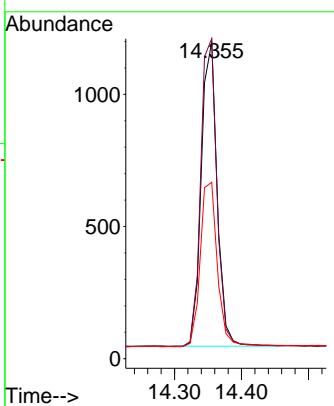
Tgt Ion:164 Resp: 1895

Ion Ratio Lower Upper

164 100

162 101.1 82.0 123.0

160 55.8 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.265 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037542.D

Acq: 22 Jul 2025 16:53

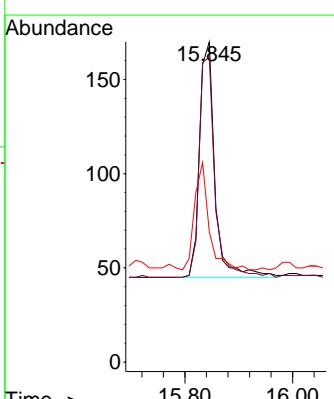
Tgt Ion:330 Resp: 247

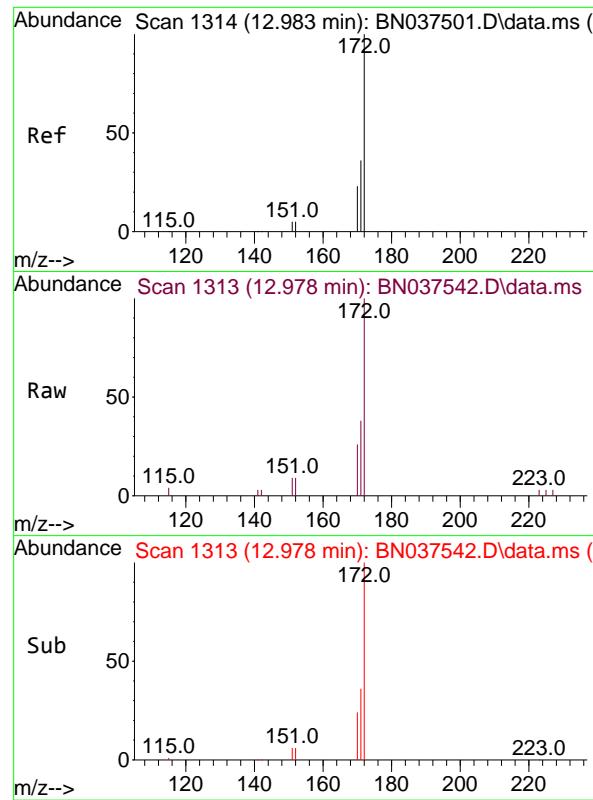
Ion Ratio Lower Upper

330 100

332 95.5 76.1 114.1

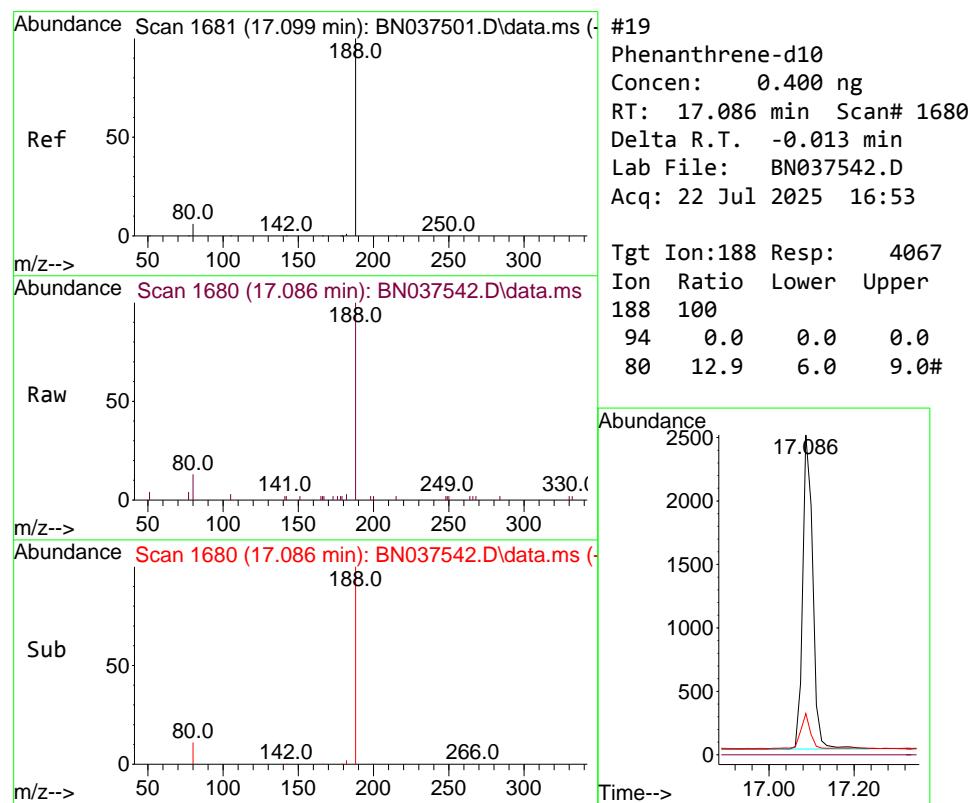
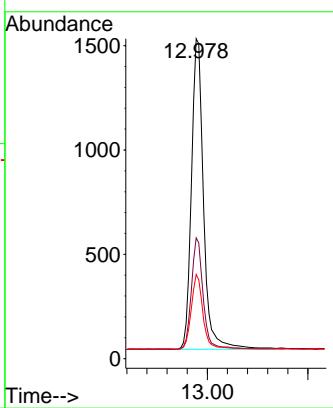
141 42.9 33.4 50.0





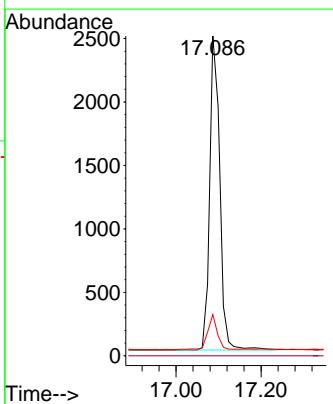
#15  
2-Fluorobiphenyl  
Concen: 0.369 ng  
RT: 12.978 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53  
ClientSampleId : RW8-SP303-20250717

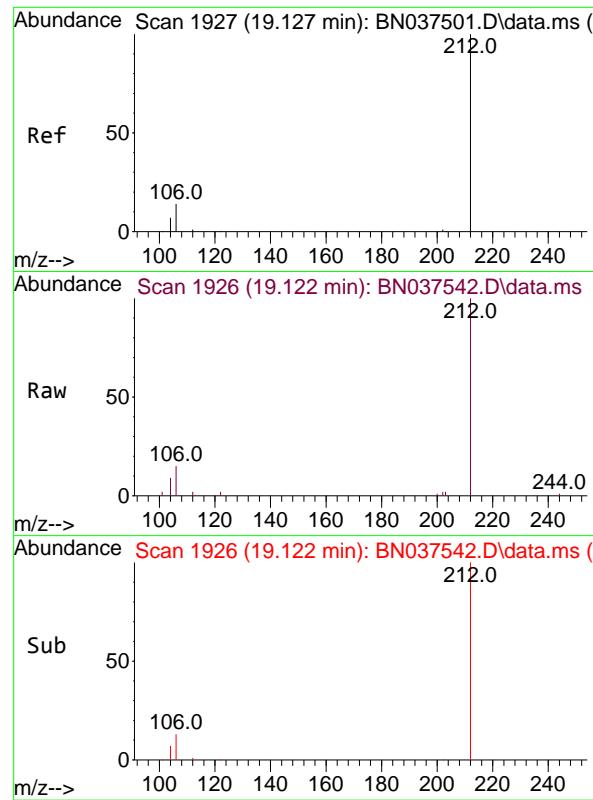
Tgt Ion:172 Resp: 3633  
Ion Ratio Lower Upper  
172 100  
171 37.7 29.4 44.2  
170 26.3 19.4 29.0



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.086 min Scan# 1680  
Delta R.T. -0.013 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53

Tgt Ion:188 Resp: 4067  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 12.9 6.0 9.0#

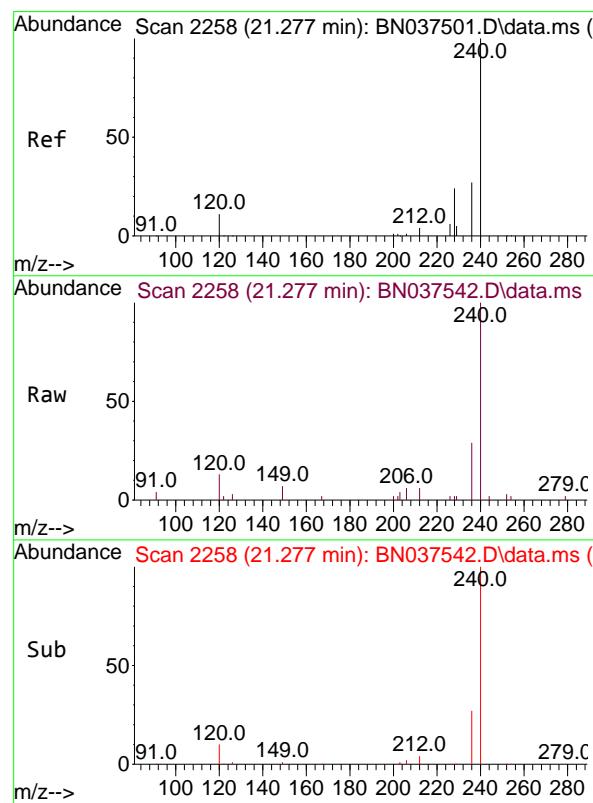
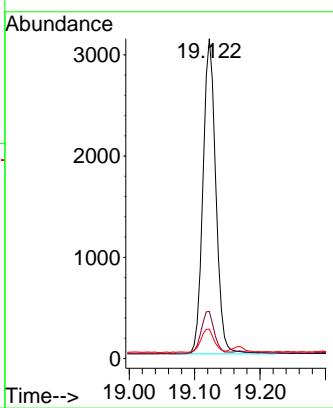




#27  
 Fluoranthene-d10  
 Concen: 0.394 ng  
 RT: 19.122 min Scan# 1926  
 Delta R.T. -0.005 min  
 Lab File: BN037542.D  
 Acq: 22 Jul 2025 16:53

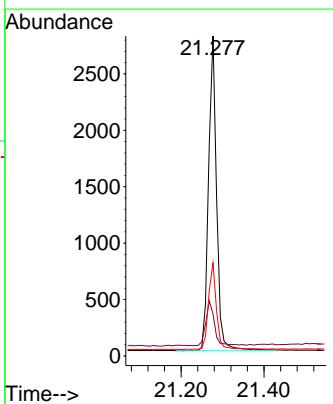
Instrument : BNA\_N  
 ClientSampleId : RW8-SP303-20250717

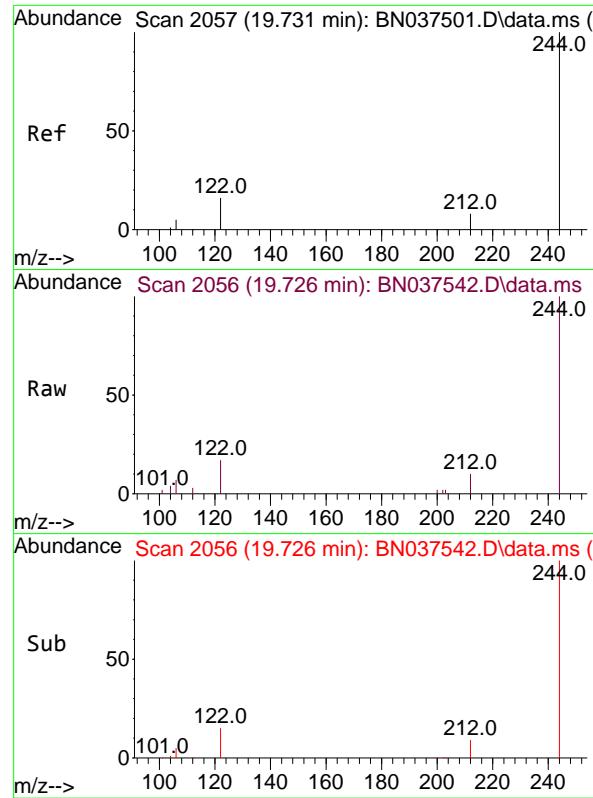
Tgt Ion:212 Resp: 4249  
 Ion Ratio Lower Upper  
 212 100  
 106 13.4 12.2 18.4  
 104 7.5 6.7 10.1



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2258  
 Delta R.T. -0.000 min  
 Lab File: BN037542.D  
 Acq: 22 Jul 2025 16:53

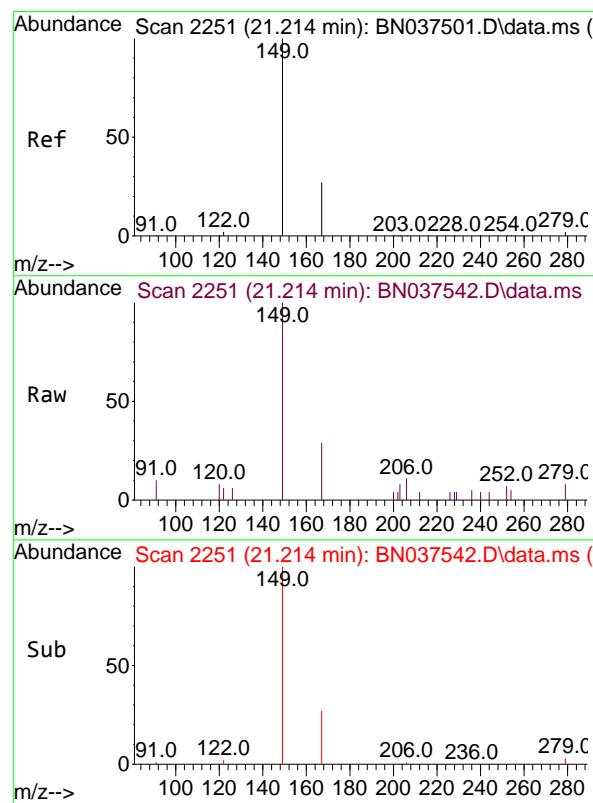
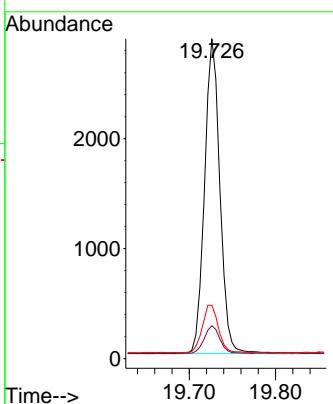
Tgt Ion:240 Resp: 3787  
 Ion Ratio Lower Upper  
 240 100  
 120 13.1 10.7 16.1  
 236 29.0 22.6 33.8





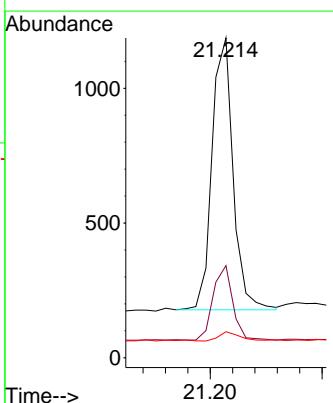
#31  
Terphenyl-d14  
Concen: 0.433 ng  
RT: 19.726 min Scan# 21  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53  
ClientSampleId : RW8-SP303-20250717

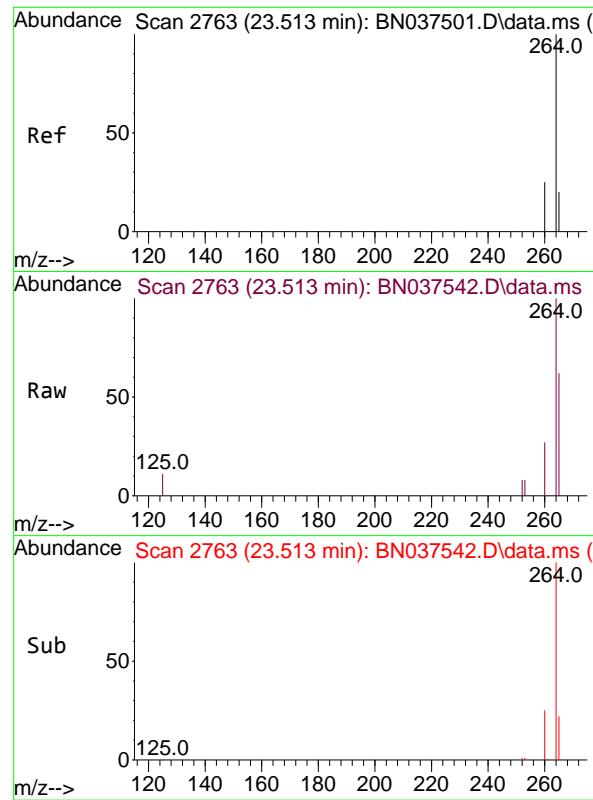
Tgt Ion:244 Resp: 3527  
Ion Ratio Lower Upper  
244 100  
212 10.3 7.4 11.2  
122 16.7 13.6 20.4



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.221 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53

Tgt Ion:149 Resp: 1318  
Ion Ratio Lower Upper  
149 100  
167 25.6 21.8 32.8  
279 3.5 3.0 4.4

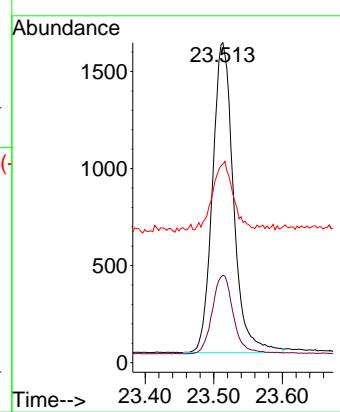




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037542.D  
Acq: 22 Jul 2025 16:53

Instrument : BNA\_N  
ClientSampleId : RW8-SP303-20250717

Tgt Ion:264 Resp: 3407  
Ion Ratio Lower Upper  
264 100  
260 27.3 21.2 31.8  
265 62.0 40.4 60.6#





# CALIBRATION

# SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN071525.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Wed Jul 16 02:38:11 2025  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN037499.D 0.2 =BN037500.D 0.4 =BN037501.D 0.8 =BN037502.D 1.6 =BN037503.D 3.2 =BN037504.D 5 =BN037505.D

Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD
----------	-----	-----	-----	-----	-----	-----	---	-----	------

1) I	1,4-Dichlorobenzene	-----	ISTD-----						
2)	1,4-Dioxane	0.409	0.395	0.371	0.398	0.380	0.354	0.385	5.29
3)	n-Nitrosodimethylamine	0.466	0.464	0.465	0.508	0.499	0.501	0.484	4.31
4) S	2-Fluorophenol	1.038	1.011	0.985	0.908	0.982	0.971	1.030	0.989
5) S	Phenol-d6	1.448	1.238	1.190	1.105	1.201	1.229	1.275	1.241
6)	bis(2-Chloroethyl)ether	1.082	1.052	1.024	0.983	1.037	1.033	1.016	1.033
7) I	Naphthalene-d8	-----	ISTD-----						
8) S	Nitrobenzene-d5	0.311	0.288	0.283	0.270	0.300	0.305	0.336	0.299
9)	Naphthalene	1.069	1.054	1.046	1.009	1.091	1.073	1.126	1.067
10)	Hexachlorobutane	0.229	0.237	0.235	0.223	0.245	0.236	0.246	0.236
11)	SURR2-Methylnaphthalene	0.556	0.534	0.541	0.522	0.562	0.590	0.711	0.574
12)	2-Methylnaphthalene	0.704	0.655	0.678	0.665	0.716	0.736	0.756	0.701
13) I	Acenaphthene-d10	-----	ISTD-----						
14) S	2,4,6-Tribromoethane	0.197	0.173	0.173	0.176	0.194	0.215	0.248	0.197
15) S	2-Fluorobiphenyl	1.818	1.794	2.045	2.024	2.277	2.205	2.397	2.080
16)	Acenaphthylene	1.723	1.708	1.719	1.684	1.830	1.895	1.981	1.792
17)	Acenaphthene	1.239	1.160	1.172	1.150	1.238	1.251	1.320	1.218
18)	Fluorene	1.592	1.488	1.485	1.486	1.605	1.606	1.717	1.569
19) I	Phenanthrene-d10	-----	ISTD-----						
20)	4,6-Dinitro-2-phenol	0.044	0.041	0.047	0.057	0.070	0.080	0.057	27.89
21)	4-Bromophenylmethanol	0.248	0.247	0.243	0.242	0.268	0.272	0.274	0.256
22)	Hexachlorobenzene	0.315	0.330	0.328	0.321	0.345	0.340	0.338	0.331
23)	Atrazine	0.173	0.161	0.159	0.158	0.181	0.200	0.220	0.179
24)	Pentachlorophenol	0.131	0.125	0.126	0.151	0.170	0.189	0.149	17.64
25)	Phenanthrene	1.167	1.163	1.160	1.129	1.248	1.248	1.273	1.198
26)	Anthracene	1.025	1.025	1.013	1.023	1.160	1.176	1.232	1.093
27)	SURRFluoranthene-d10	1.023	0.998	0.962	0.928	1.041	1.078	1.385	1.060
28)	Fluoranthene	1.358	1.310	1.290	1.270	1.429	1.431	1.585	1.382
29) I	Chrysene-d12	-----	ISTD-----						
30)	Pyrene	1.754	1.559	1.607	1.549	1.607	1.665	1.539	1.612
31) S	Terphenyl-d14	0.926	0.815	0.844	0.811	0.854	0.902	0.865	0.859
32)	Benzo(a)anthracene	1.414	1.357	1.341	1.285	1.429	1.464	1.517	1.401
33)	Chrysene	1.452	1.461	1.434	1.358	1.488	1.490	1.528	1.459
34)	Bis(2-ethylhexyl)phthalate	0.603	0.564	0.538	0.603	0.693	0.779	0.630	14.26
35) I	Perylene-d12	-----	ISTD-----						

6  
7  
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14  
15  
16  
17

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN071525.M

36)	Indeno(1,2,3-c...)	1.493	1.528	1.514	1.559	1.771	1.805	1.991	1.666	11.48
37)	Benzo(b)fluora...	1.464	1.378	1.454	1.436	1.589	1.617	1.692	1.518	7.53
38)	Benzo(k)fluora...	1.516	1.420	1.486	1.470	1.661	1.689	1.724	1.567	7.75
39) C	Benzo(a)pyrene	1.189	1.152	1.192	1.176	1.320	1.369	1.469	1.267	9.51
40)	Dibenzo(a,h)an...	1.201	1.218	1.216	1.256	1.444	1.483	1.627	1.349	12.46
41)	Benzo(g,h,i)pe...	1.247	1.283	1.309	1.297	1.482	1.497	1.663	1.397	10.98

(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037499.D  
 Acq On : 15 Jul 2025 12:36  
 Operator : RC/JU  
 Sample : SSTDICCO.1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICCO.1

Quant Time: Jul 15 17:25:41 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

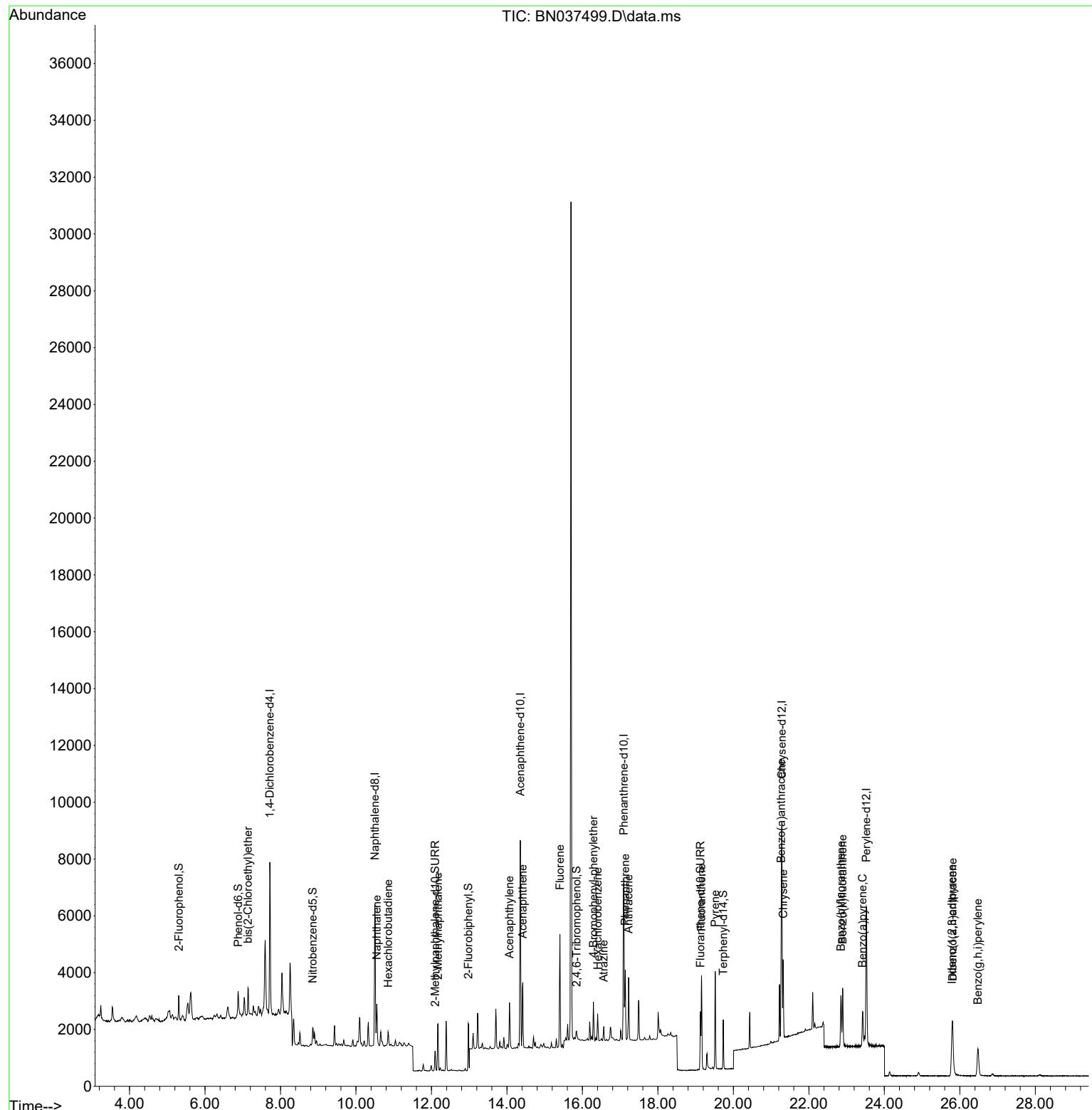
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.717	152	2613	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	6917	0.400	ng	#-0.01
13) Acenaphthene-d10	14.355	164	4050	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	8501	0.400	ng	0.00
29) Chrysene-d12	21.286	240	6753	0.400	ng	0.00
35) Perylene-d12	23.522	264	6399	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.305	112	678	0.105	ng	0.00
5) Phenol-d6	6.879	99	946	0.117	ng	0.00
8) Nitrobenzene-d5	8.854	82	538	0.104	ng	-0.01
11) 2-Methylnaphthalene-d10	12.096	152	962	0.097	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	199	0.100	ng	0.00
15) 2-Fluorobiphenyl	12.978	172	1841	0.087	ng	0.00
27) Fluoranthene-d10	19.127	212	2175	0.097	ng	0.00
31) Terphenyl-d14	19.731	244	1563	0.108	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
6) bis(2-Chloroethyl)ether	7.139	93	707	0.105	ng	97
9) Naphthalene	10.551	128	1848	0.100	ng	# 93
10) Hexachlorobutadiene	10.850	225	396	0.097	ng	# 100
12) 2-Methylnaphthalene	12.172	142	1218	0.100	ng	98
16) Acenaphthylene	14.067	152	1745	0.096	ng	97
17) Acenaphthene	14.420	154	1254	0.102	ng	98
18) Fluorene	15.403	166	1612	0.101	ng	97
21) 4-Bromophenyl-phenylether	16.292	248	527	0.097	ng	98
22) Hexachlorobenzene	16.404	284	670	0.095	ng	100
23) Atrazine	16.565	200	368	0.097	ng	# 81
25) Phenanthrene	17.136	178	2480	0.097	ng	99
26) Anthracene	17.223	178	2179	0.094	ng	100
28) Fluoranthene	19.155	202	2886	0.098	ng	98
30) Pyrene	19.517	202	2961	0.109	ng	100
32) Benzo(a)anthracene	21.268	228	2388	0.101	ng	97
33) Chrysene	21.322	228	2451	0.100	ng	98
36) Indeno(1,2,3-cd)pyrene	25.791	276	2389	0.090	ng	96
37) Benzo(b)fluoranthene	22.850	252	2342	0.096	ng	# 85
38) Benzo(k)fluoranthene	22.896	252	2426	0.097	ng	# 73
39) Benzo(a)pyrene	23.426	252	1902	0.094	ng	# 77
40) Dibenzo(a,h)anthracene	25.811	278	1921	0.089	ng	# 78
41) Benzo(g,h,i)perylene	26.478	276	1995	0.089	ng	90

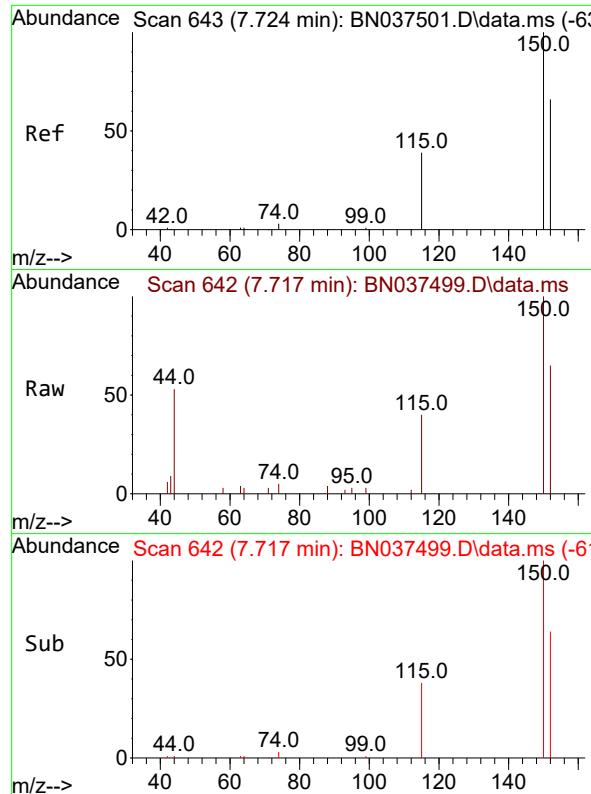
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037499.D  
 Acq On : 15 Jul 2025 12:36  
 Operator : RC/JU  
 Sample : SSTDICCO.1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.1

Quant Time: Jul 15 17:25:41 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

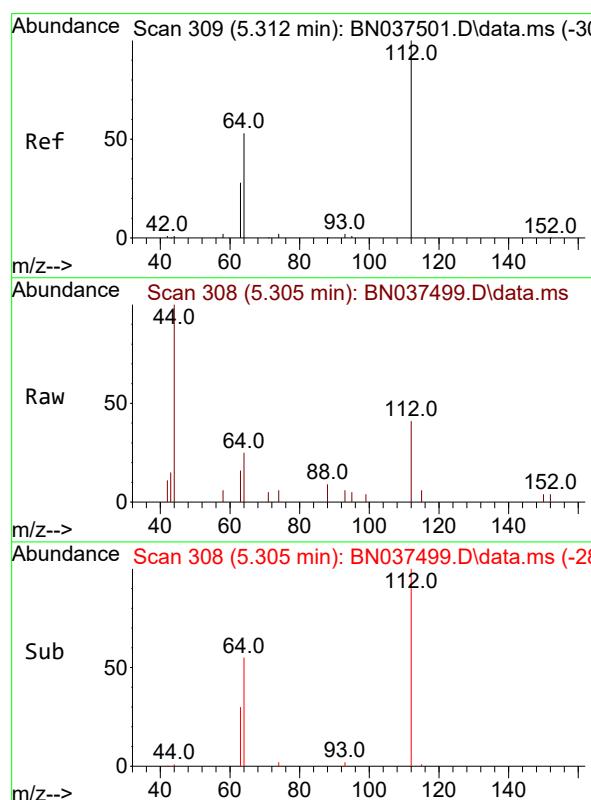
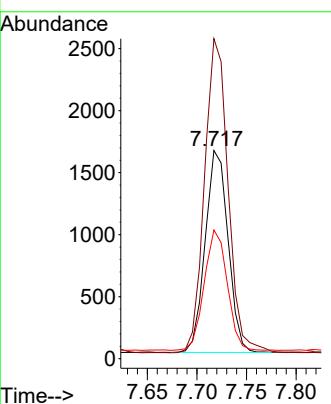




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

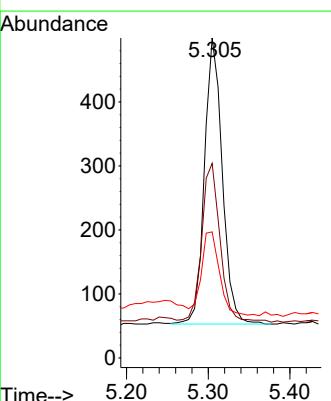
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

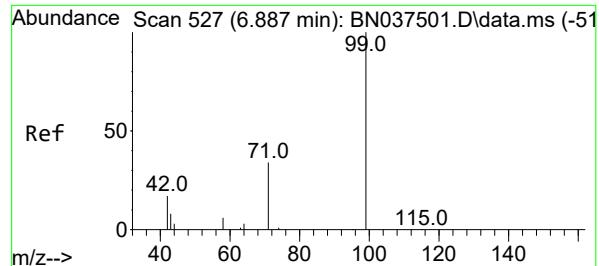
Tgt Ion:152 Resp: 2613  
Ion Ratio Lower Upper  
152 100  
150 153.7 119.8 179.8  
115 61.8 49.1 73.7



#4  
2-Fluorophenol  
Concen: 0.105 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

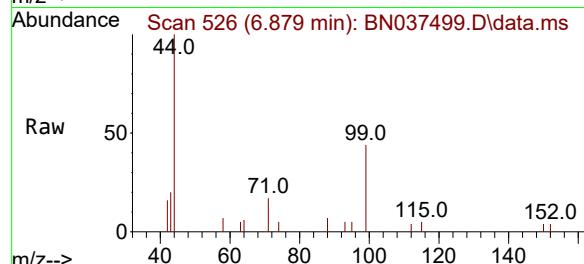
Tgt Ion:112 Resp: 678  
Ion Ratio Lower Upper  
112 100  
64 57.5 45.1 67.7  
63 29.1 23.8 35.8



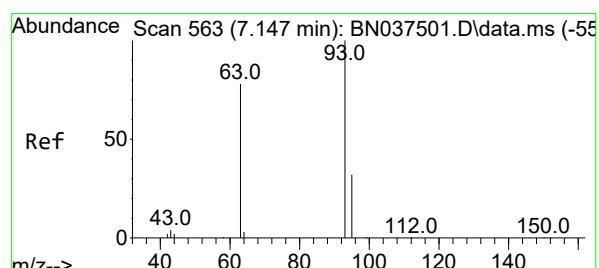
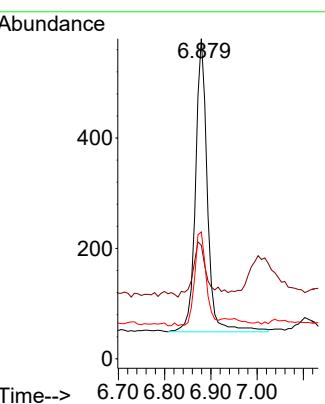
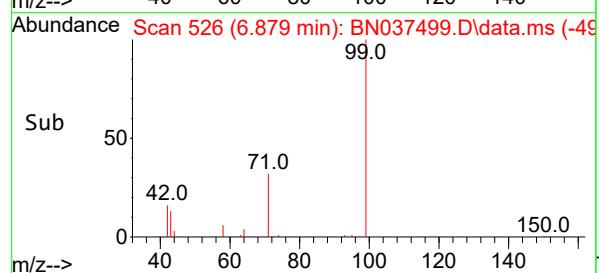


#5  
 Phenol-d6  
 Concen: 0.117 ng  
 RT: 6.879 min Scan# 51  
 Delta R.T. -0.007 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

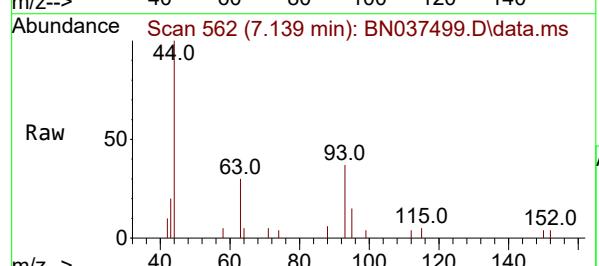
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1



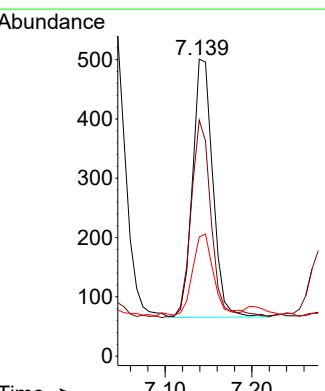
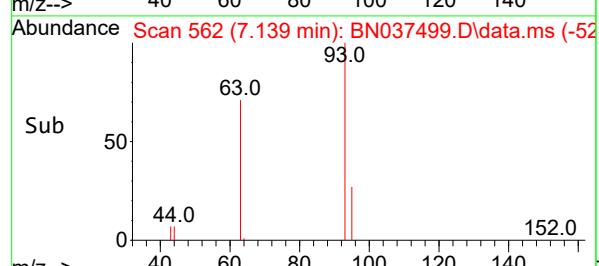
Tgt Ion: 99 Resp: 946  
 Ion Ratio Lower Upper  
 99 100  
 42 22.3 17.1 25.7  
 71 31.1 27.8 41.8

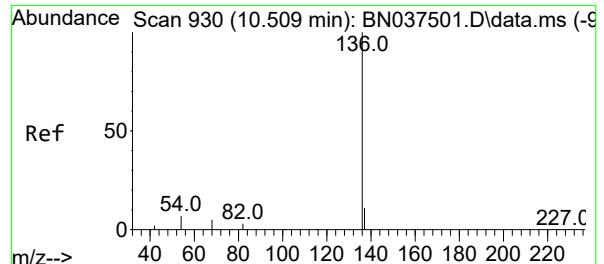


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.105 ng  
 RT: 7.139 min Scan# 562  
 Delta R.T. -0.007 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36



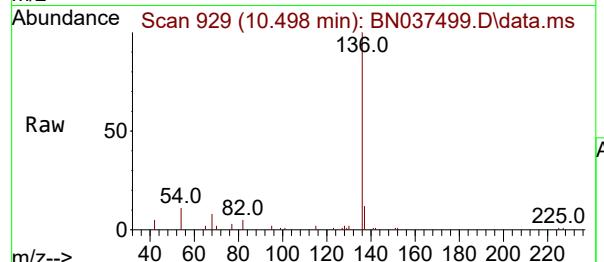
Tgt Ion: 93 Resp: 707  
 Ion Ratio Lower Upper  
 93 100  
 63 75.8 58.2 87.4  
 95 33.2 25.3 37.9



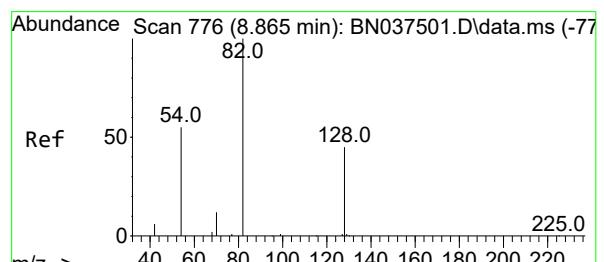
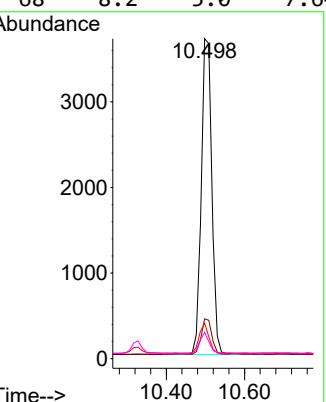
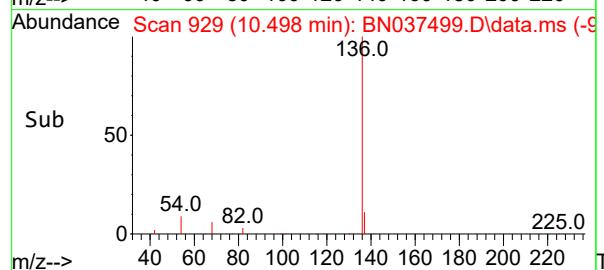


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

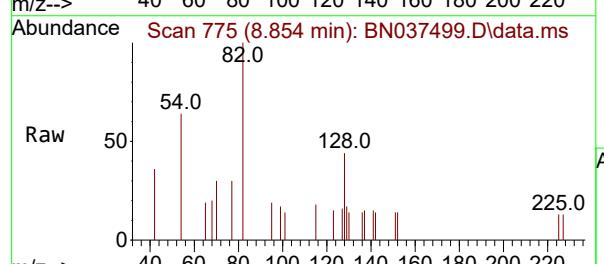
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1



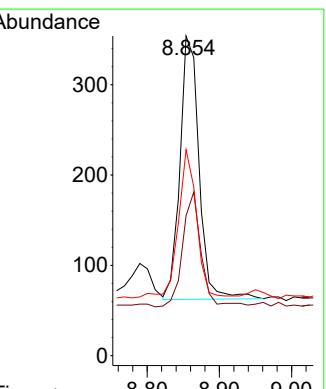
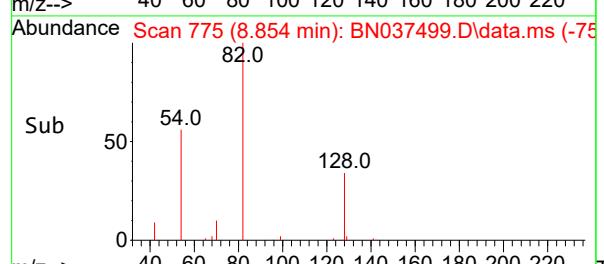
Tgt Ion:136 Resp: 6917  
 Ion Ratio Lower Upper  
 136 100  
 137 12.5 9.8 14.8  
 54 11.1 6.6 9.8#  
 68 8.2 5.0 7.6#

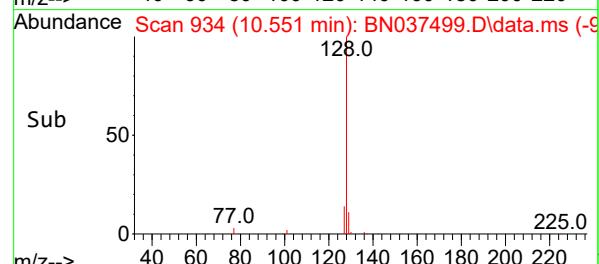
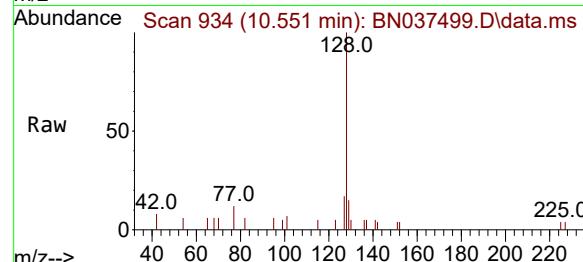
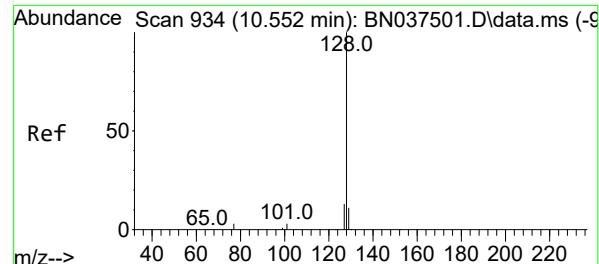


#8  
 Nitrobenzene-d5  
 Concen: 0.104 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36



Tgt Ion: 82 Resp: 538  
 Ion Ratio Lower Upper  
 82 100  
 128 43.8 37.5 56.3  
 54 64.4 45.3 67.9





#9

Naphthalene

Concen: 0.100 ng

RT: 10.551 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

Tgt Ion:128 Resp: 1848

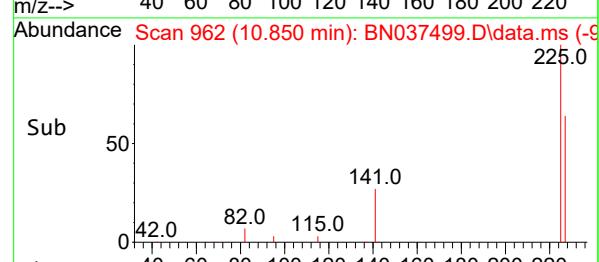
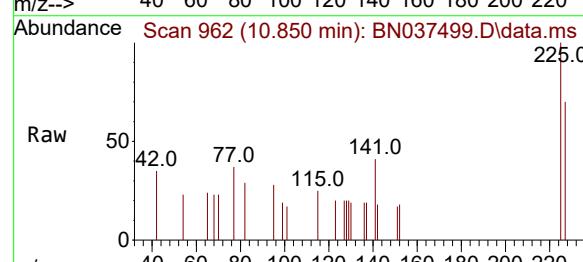
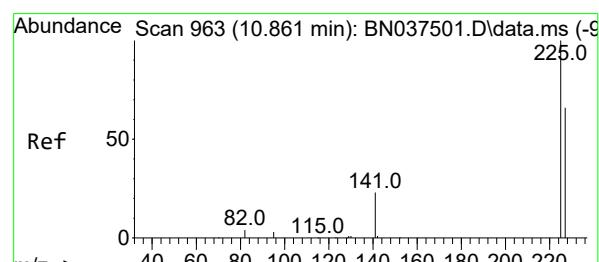
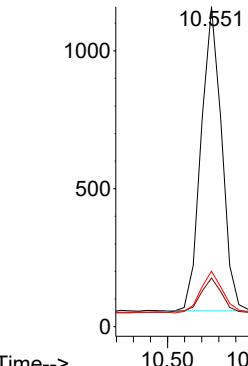
Ion Ratio Lower Upper

128 100

129 15.2 9.7 14.5#

127 17.3 11.5 17.3#

Abundance



#10

Hexachlorobutadiene

Concen: 0.097 ng

RT: 10.850 min Scan# 962

Delta R.T. -0.011 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Tgt Ion:225 Resp: 396

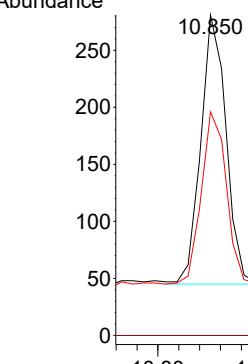
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.4 51.0 76.4

Abundance



#11

2-Methylnaphthalene-d10

Concen: 0.097 ng

RT: 12.096 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN037499.D

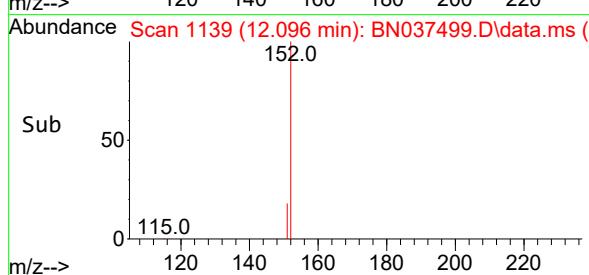
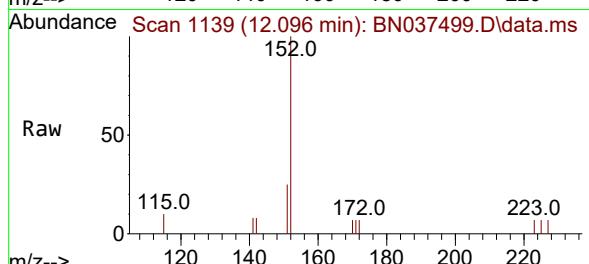
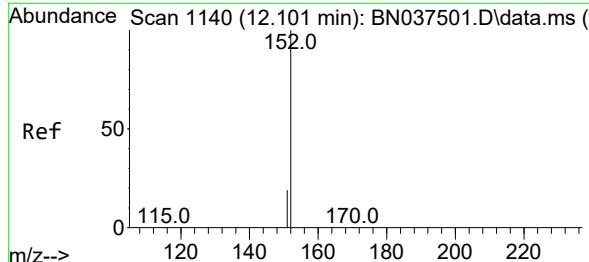
Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

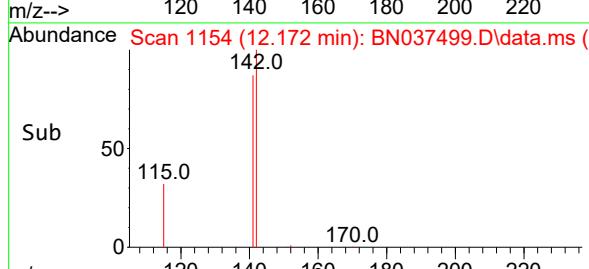
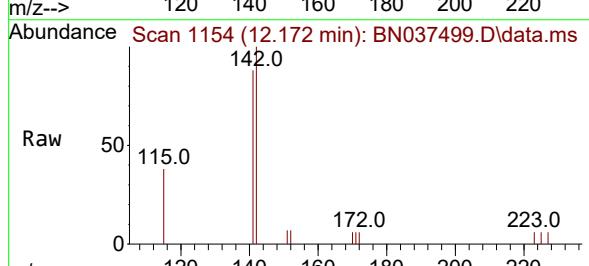
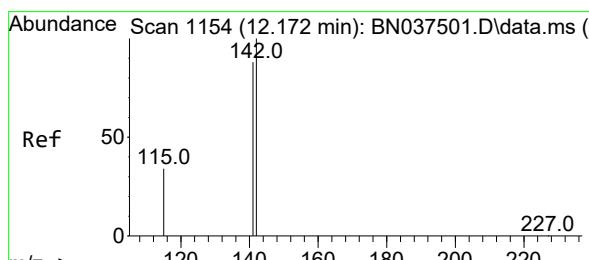
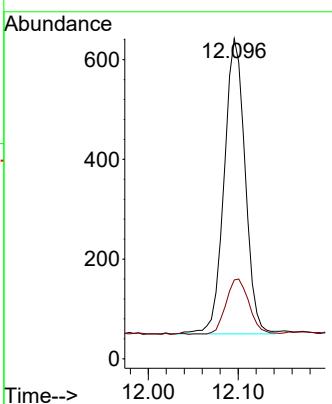


Tgt Ion:152 Resp: 962

Ion Ratio Lower Upper

152 100

151 20.3 16.8 25.2



#12

2-Methylnaphthalene

Concen: 0.100 ng

RT: 12.172 min Scan# 1154

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

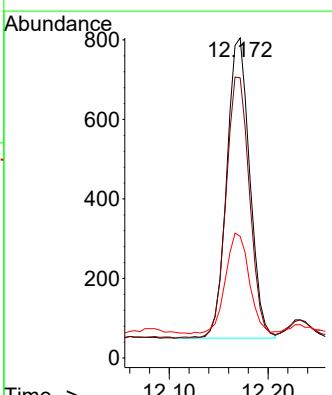
Tgt Ion:142 Resp: 1218

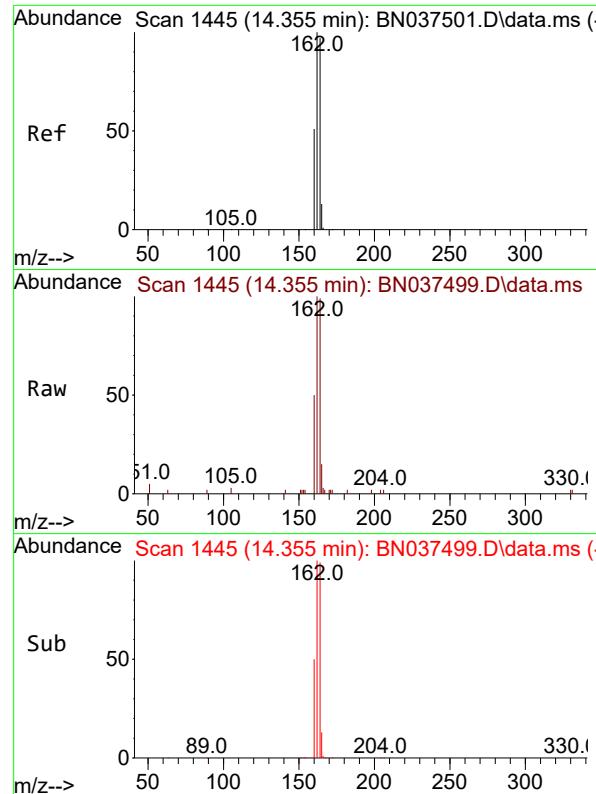
Ion Ratio Lower Upper

142 100

141 87.6 71.0 106.4

115 38.0 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

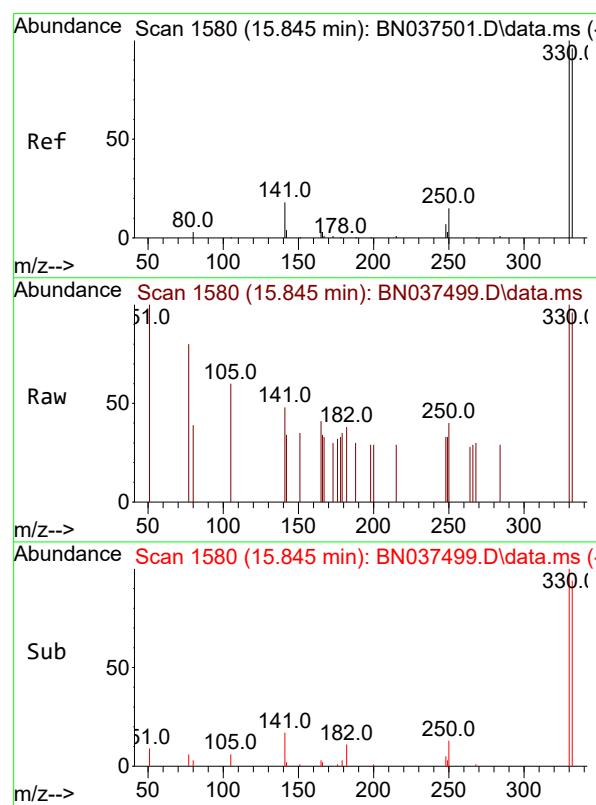
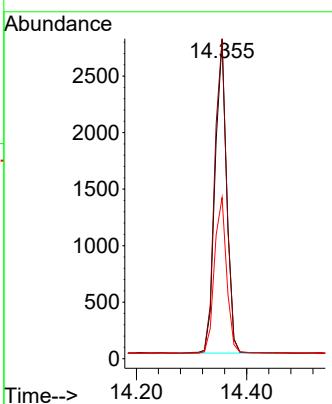
Tgt Ion:164 Resp: 4050

Ion Ratio Lower Upper

164 100

162 100.5 82.0 123.0

160 50.6 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.100 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

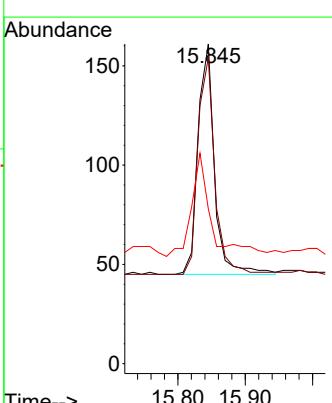
Tgt Ion:330 Resp: 199

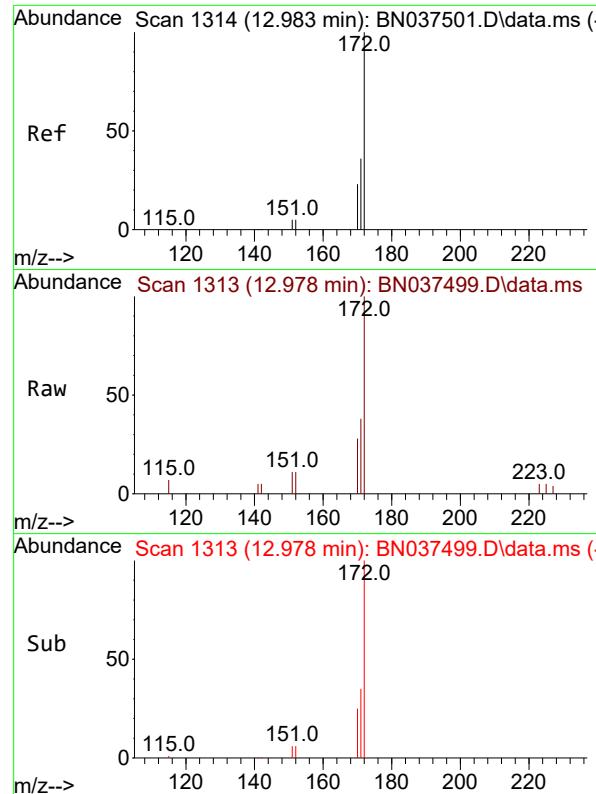
Ion Ratio Lower Upper

330 100

332 96.0 76.1 114.1

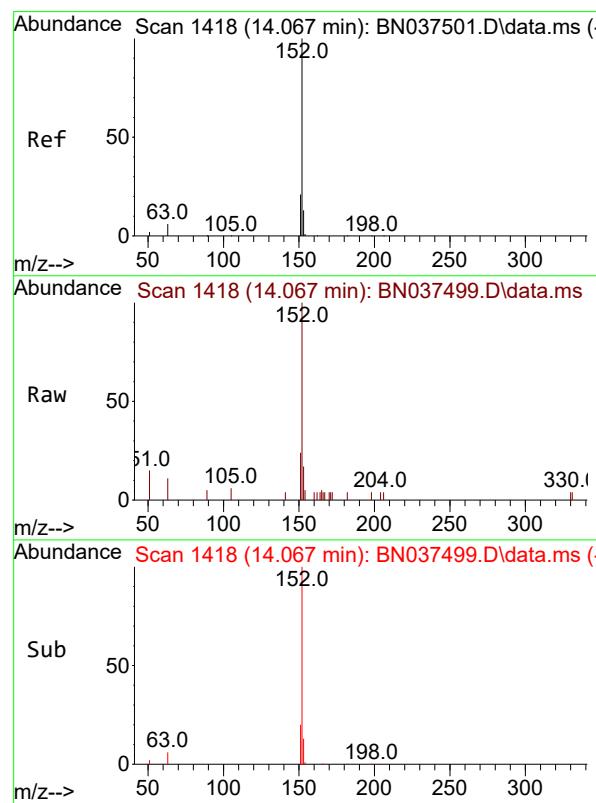
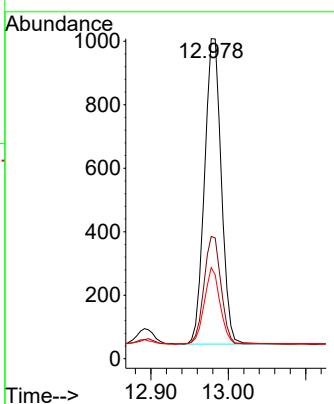
141 44.7 33.4 50.0





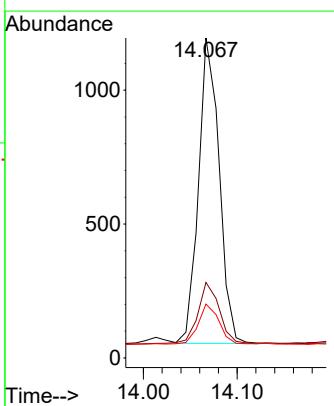
#15  
2-Fluorobiphenyl  
Concen: 0.087 ng  
RT: 12.978 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36  
ClientSampleId : SSTDICCO.1

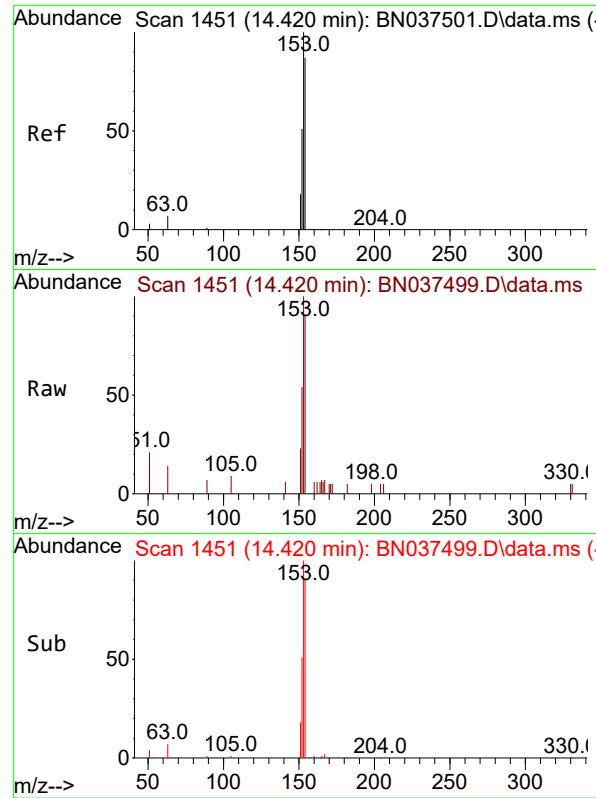
Tgt Ion:172 Resp: 1841  
Ion Ratio Lower Upper  
172 100  
171 38.2 29.4 44.2  
170 28.5 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.096 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:152 Resp: 1745  
Ion Ratio Lower Upper  
152 100  
151 21.7 15.9 23.9  
153 14.3 10.7 16.1





#17

Acenaphthene

Concen: 0.102 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

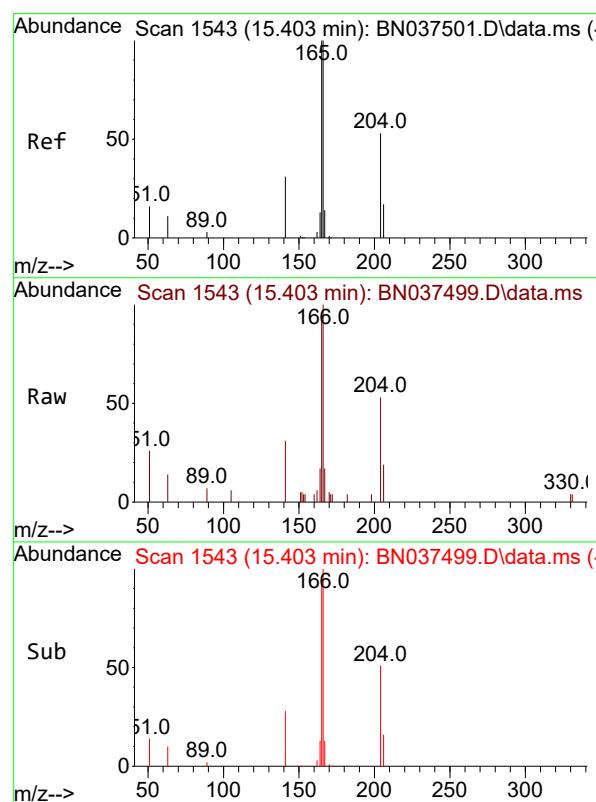
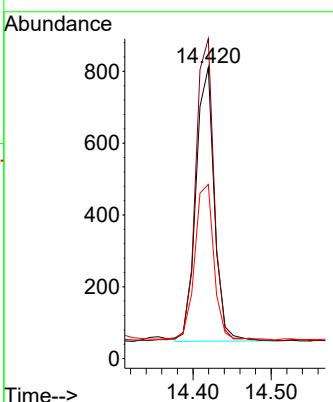
Tgt Ion:154 Resp: 1254

Ion Ratio Lower Upper

154 100

153 108.9 89.2 133.8

152 59.4 48.0 72.0



#18

Fluorene

Concen: 0.101 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

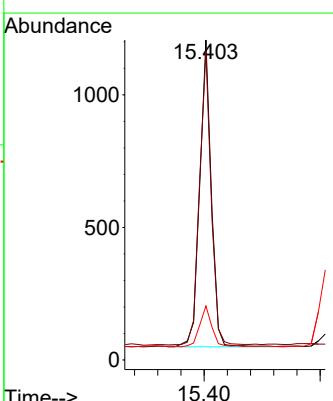
Tgt Ion:166 Resp: 1612

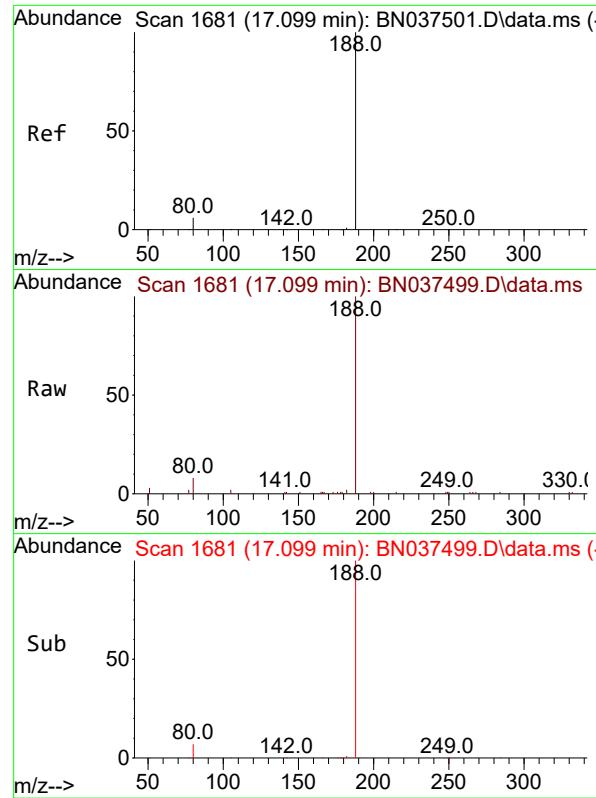
Ion Ratio Lower Upper

166 100

165 94.6 78.1 117.1

167 14.0 11.0 16.6

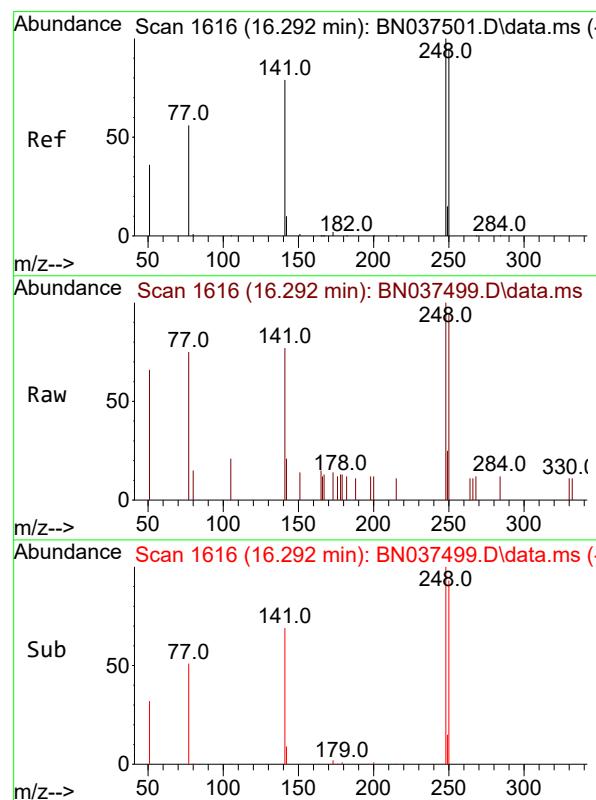
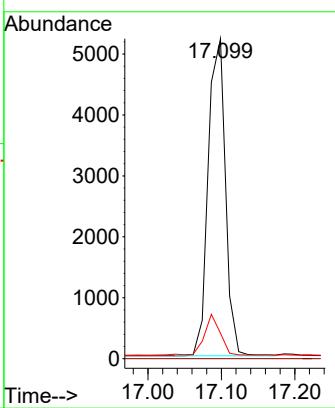




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

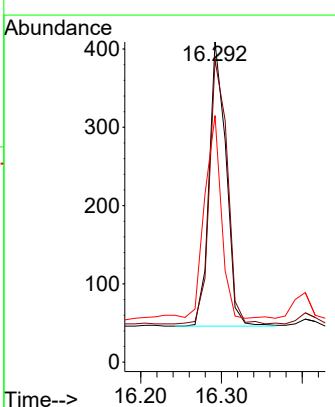
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

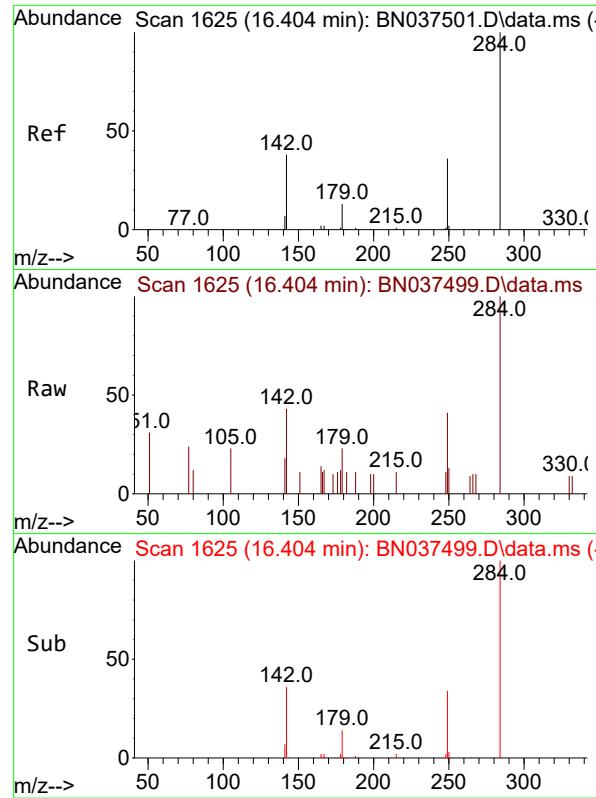
Tgt Ion:188 Resp: 8501  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 7.9 6.0 9.0



#21  
 4-Bromophenyl-phenylether  
 Concen: 0.097 ng  
 RT: 16.292 min Scan# 1616  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

Tgt Ion:248 Resp: 527  
 Ion Ratio Lower Upper  
 248 100  
 250 94.4 76.2 114.2  
 141 77.0 63.9 95.9

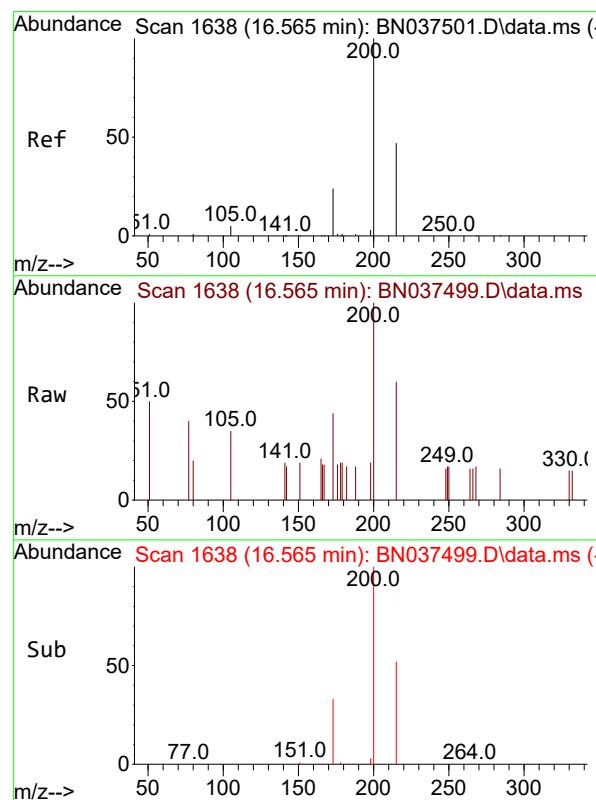
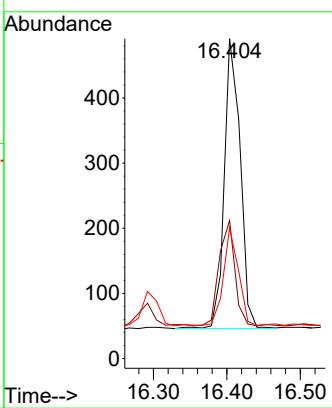




#22  
Hexachlorobenzene  
Concen: 0.095 ng  
RT: 16.404 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

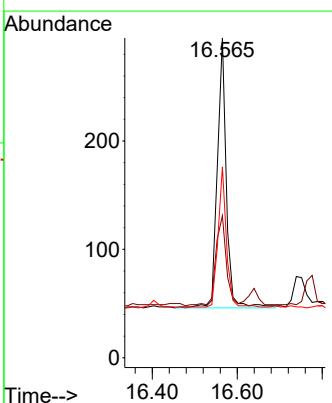
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

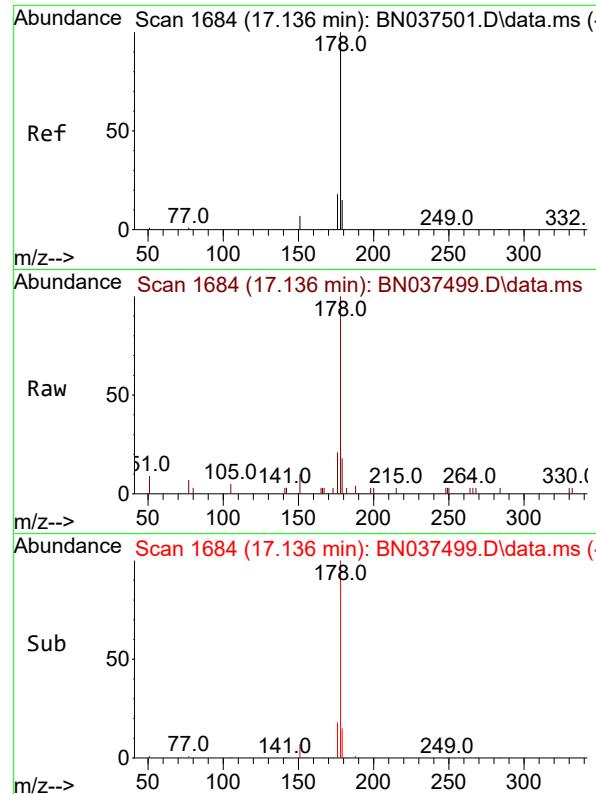
Tgt Ion:284 Resp: 670  
Ion Ratio Lower Upper  
284 100  
142 36.1 28.9 43.3  
249 32.4 25.8 38.6



#23  
Atrazine  
Concen: 0.097 ng  
RT: 16.565 min Scan# 1638  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:200 Resp: 368  
Ion Ratio Lower Upper  
200 100  
173 44.4 23.2 34.8#  
215 59.7 40.2 60.4





#25

Phenanthrene

Concen: 0.097 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument:

BNA\_N

ClientSampleId:

SSTDICCO.1

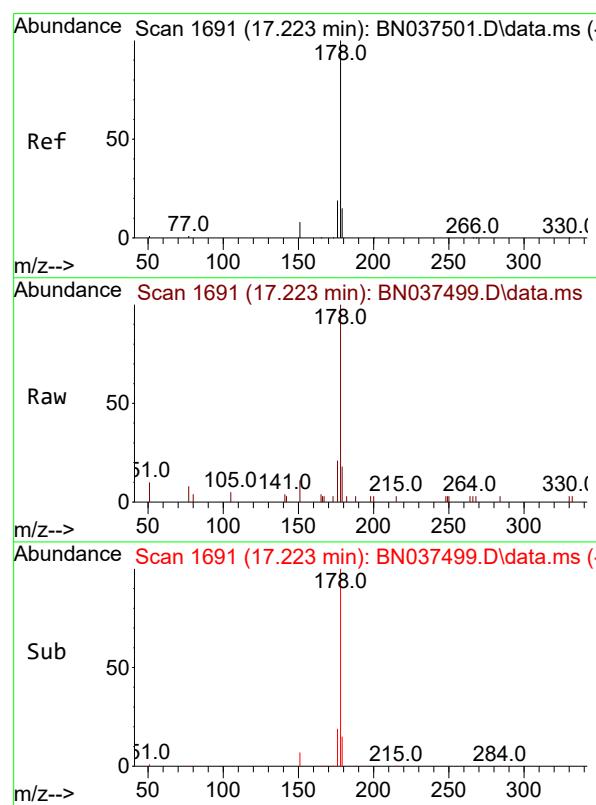
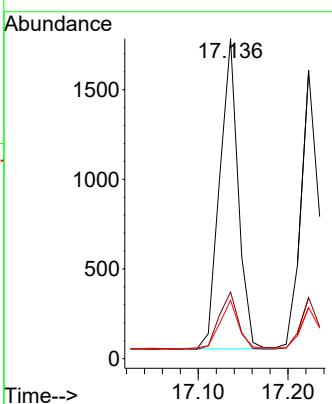
Tgt Ion:178 Resp: 2480

Ion Ratio Lower Upper

178 100

176 19.2 15.0 22.6

179 15.8 12.2 18.2



#26

Anthracene

Concen: 0.094 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

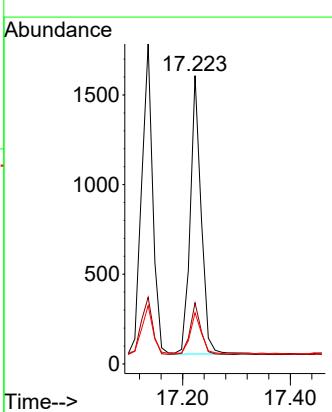
Tgt Ion:178 Resp: 2179

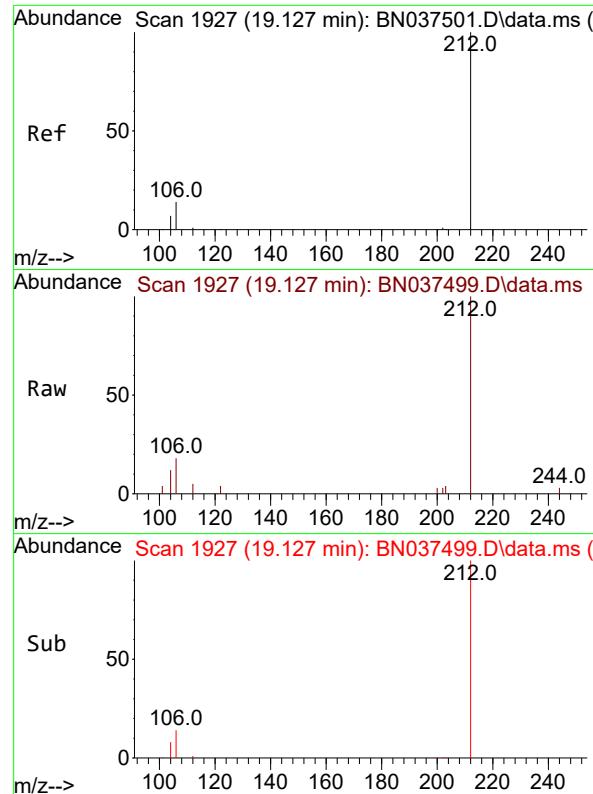
Ion Ratio Lower Upper

178 100

176 18.3 14.7 22.1

179 15.3 12.3 18.5

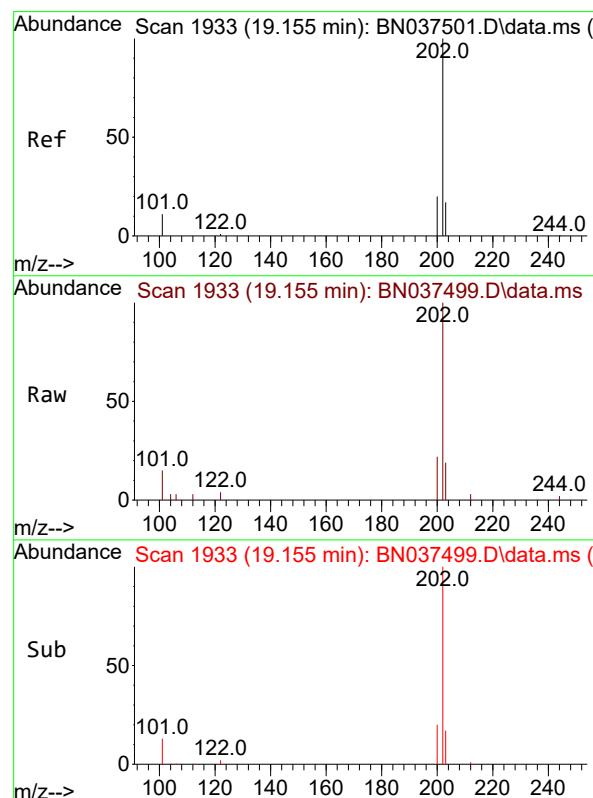
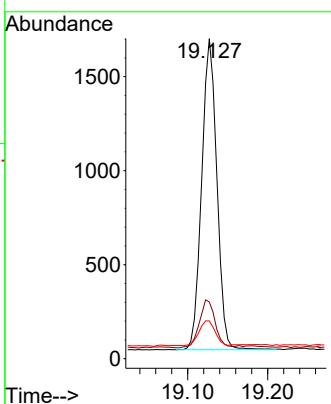




#27  
 Fluoranthene-d10  
 Concen: 0.097 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

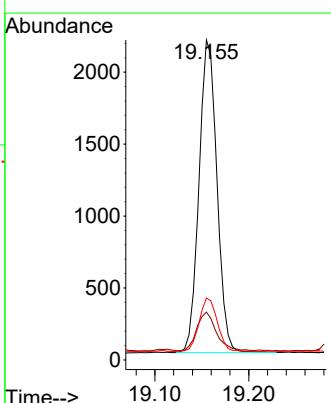
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

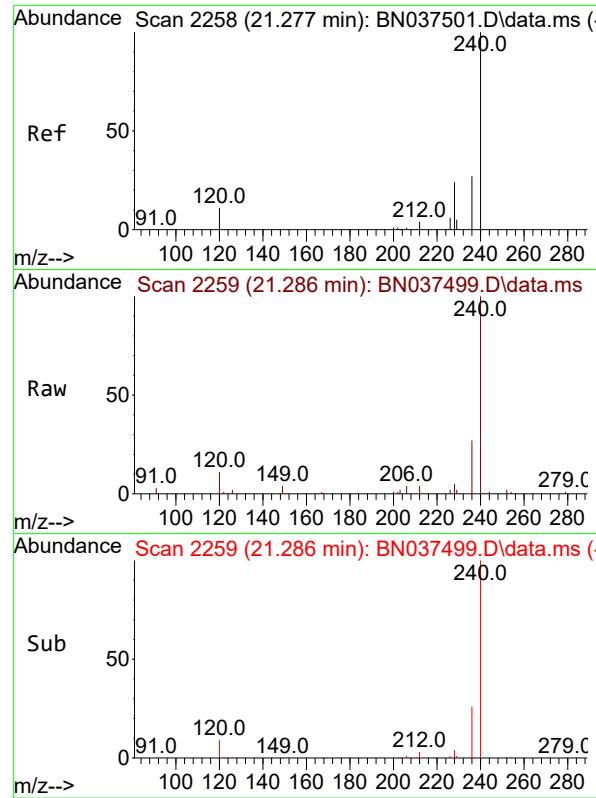
Tgt Ion:212 Resp: 2175  
 Ion Ratio Lower Upper  
 212 100  
 106 15.9 12.2 18.4  
 104 8.7 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.098 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037499.D  
 Acq: 15 Jul 2025 12:36

Tgt Ion:202 Resp: 2886  
 Ion Ratio Lower Upper  
 202 100  
 101 13.5 9.8 14.6  
 203 17.3 13.6 20.4

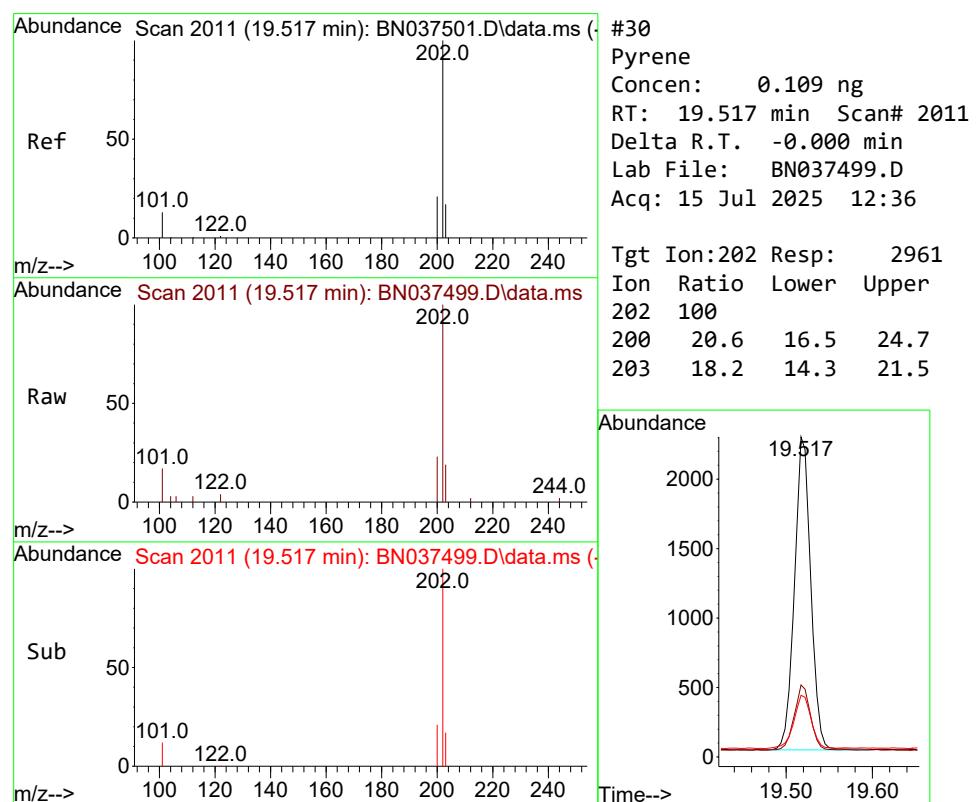
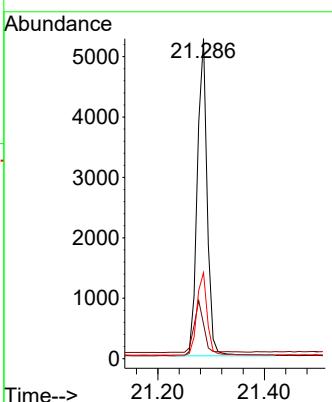




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.286 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

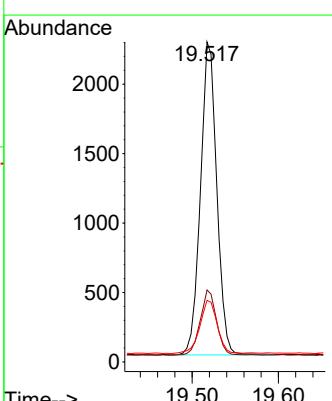
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

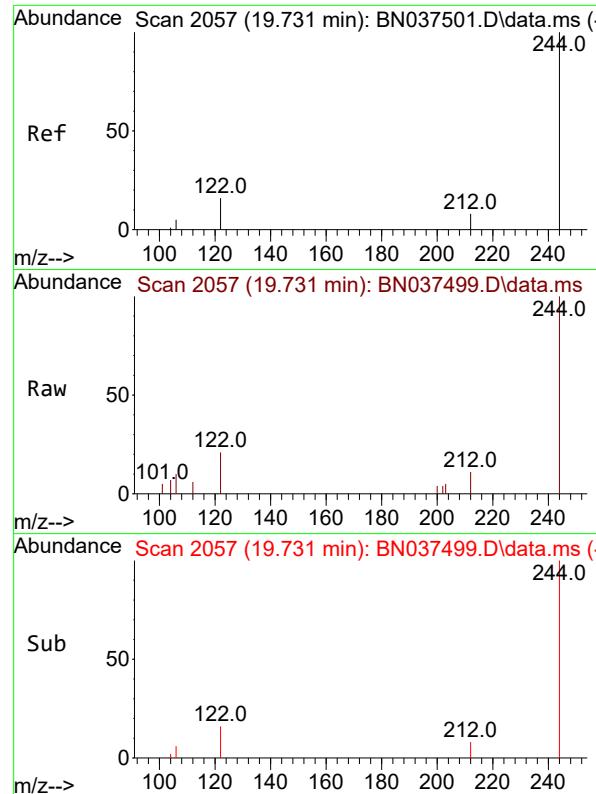
Tgt Ion:240 Resp: 6753  
Ion Ratio Lower Upper  
240 100  
120 10.8 10.7 16.1  
236 26.9 22.6 33.8



#30  
Pyrene  
Concen: 0.109 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

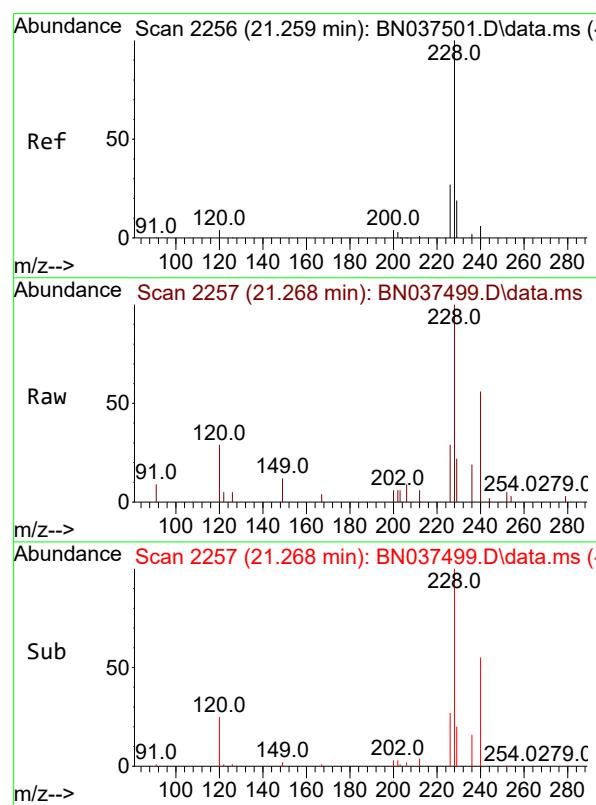
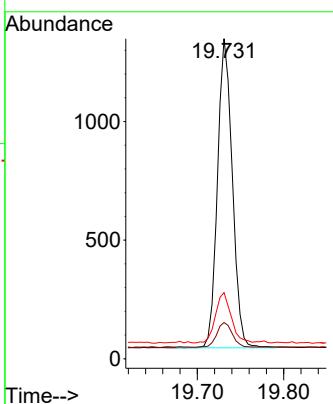
Tgt Ion:202 Resp: 2961  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 18.2 14.3 21.5





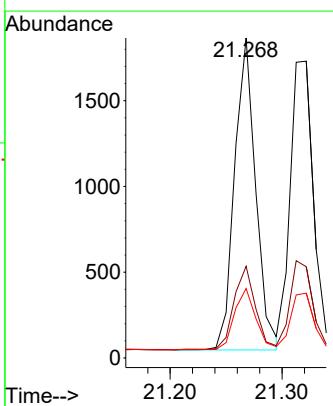
#31  
Terphenyl-d14  
Concen: 0.108 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36  
ClientSampleId : SSTDICCO.1

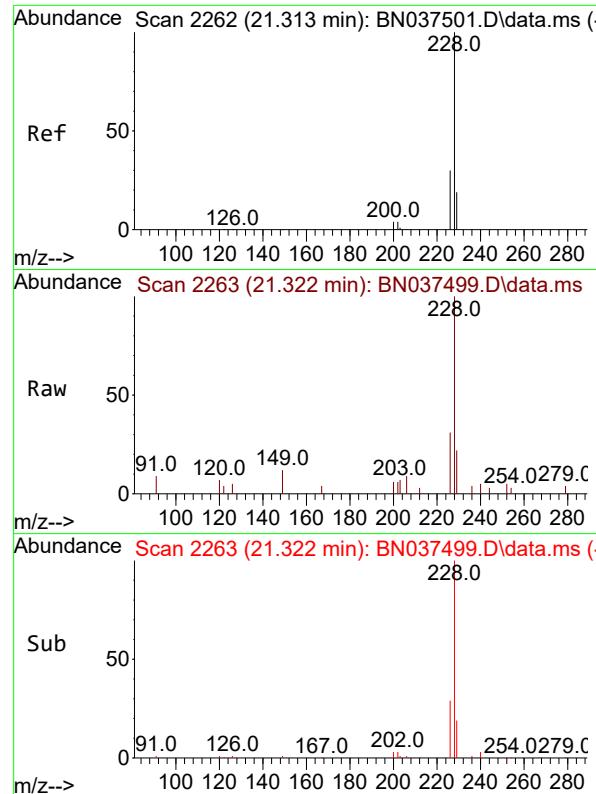
Tgt Ion:244 Resp: 1563  
Ion Ratio Lower Upper  
244 100  
212 11.3 7.4 11.2#  
122 20.7 13.6 20.4#



#32  
Benzo(a)anthracene  
Concen: 0.101 ng  
RT: 21.268 min Scan# 2257  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:228 Resp: 2388  
Ion Ratio Lower Upper  
228 100  
226 28.7 21.9 32.9  
229 21.7 15.8 23.8

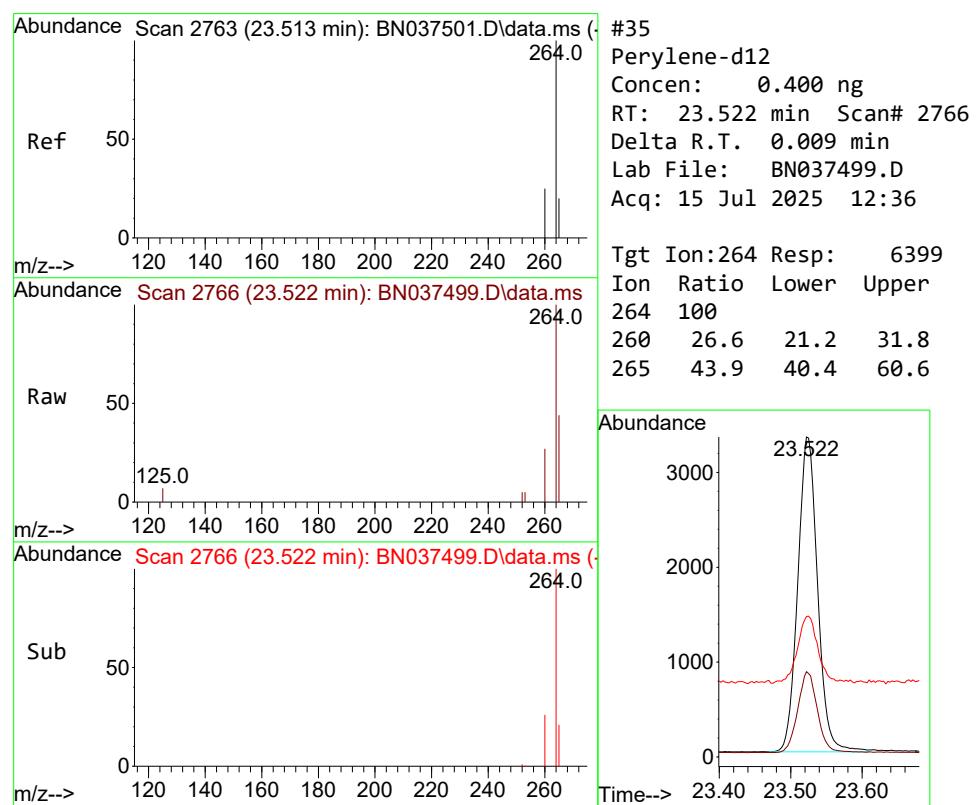
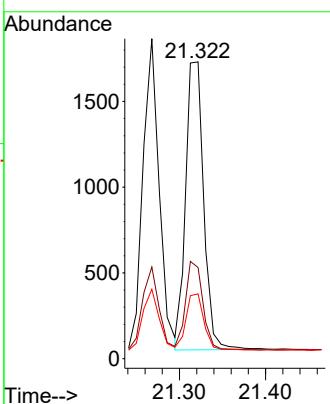




#33  
Chrysene  
Concen: 0.100 ng  
RT: 21.322 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

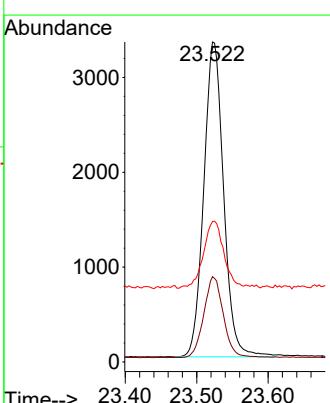
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

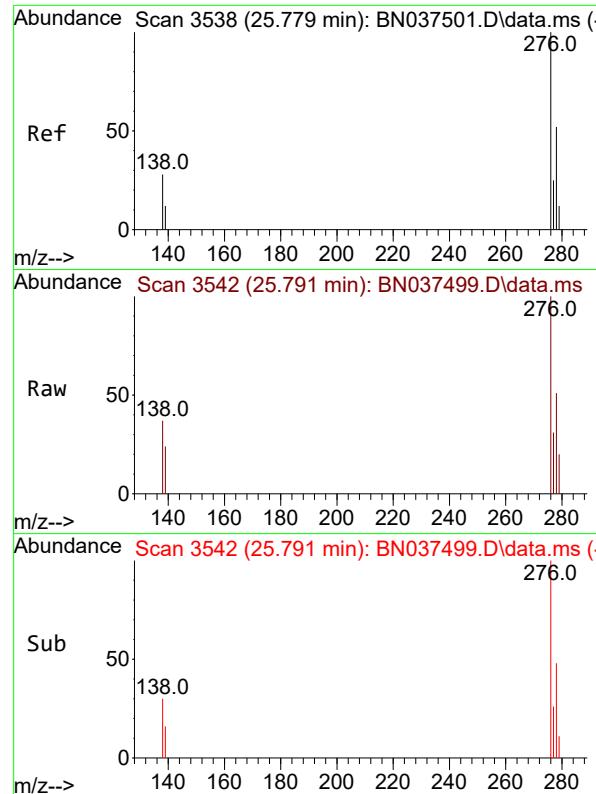
Tgt Ion:228 Resp: 2451  
Ion Ratio Lower Upper  
228 100  
226 30.7 24.2 36.4  
229 21.8 16.1 24.1



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.522 min Scan# 2766  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:264 Resp: 6399  
Ion Ratio Lower Upper  
264 100  
260 26.6 21.2 31.8  
265 43.9 40.4 60.6

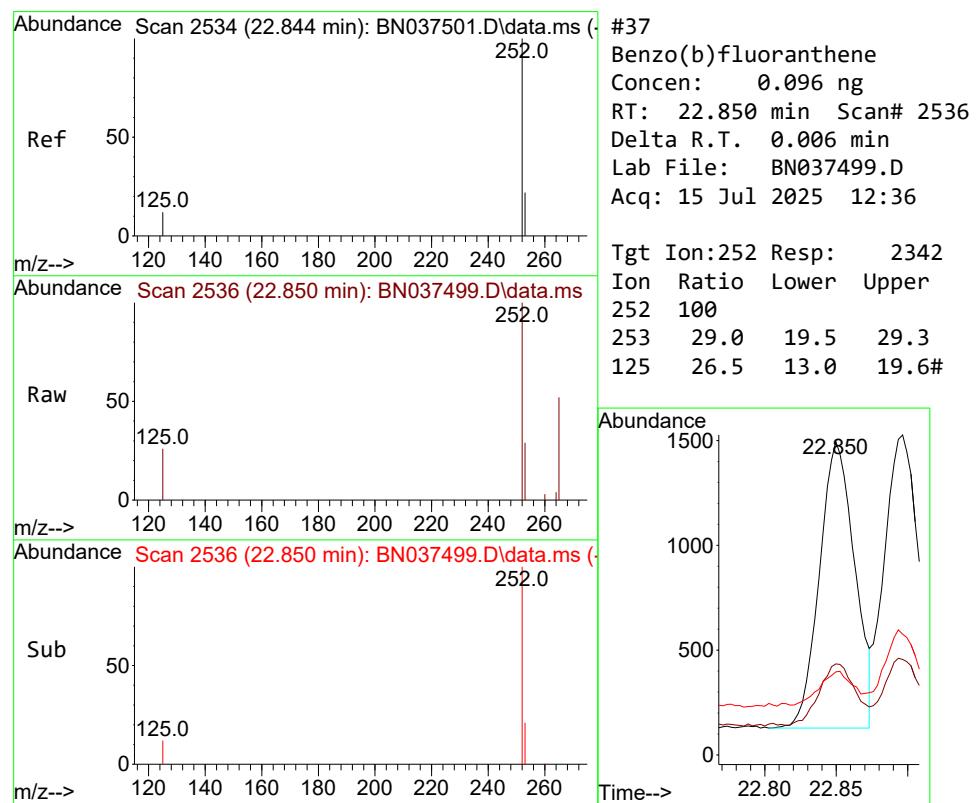
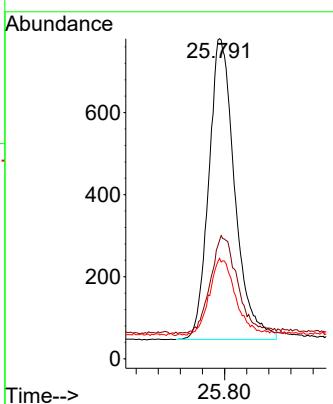




#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.090 ng  
RT: 25.791 min Scan# 3  
Delta R.T. 0.012 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

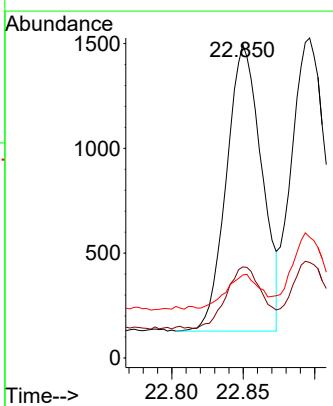
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

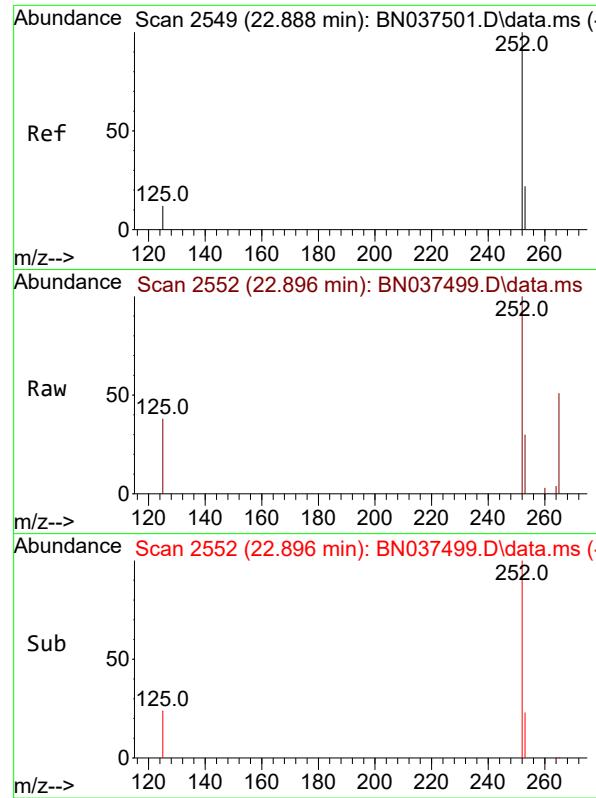
Tgt Ion:276 Resp: 2389  
Ion Ratio Lower Upper  
276 100  
138 33.7 24.0 36.0  
277 25.3 20.5 30.7



#37  
Benzo(b)fluoranthene  
Concen: 0.096 ng  
RT: 22.850 min Scan# 2536  
Delta R.T. 0.006 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:252 Resp: 2342  
Ion Ratio Lower Upper  
252 100  
253 29.0 19.5 29.3  
125 26.5 13.0 19.6#





#38

Benzo(k)fluoranthene

Concen: 0.097 ng

RT: 22.896 min Scan# 2

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

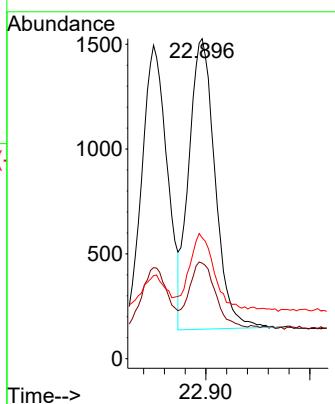
Tgt Ion:252 Resp: 2426

Ion Ratio Lower Upper

252 100

253 29.9 19.5 29.3#

125 37.7 13.1 19.7#



#39

Benzo(a)pyrene

Concen: 0.094 ng

RT: 23.426 min Scan# 2733

Delta R.T. 0.009 min

Lab File: BN037499.D

Acq: 15 Jul 2025 12:36

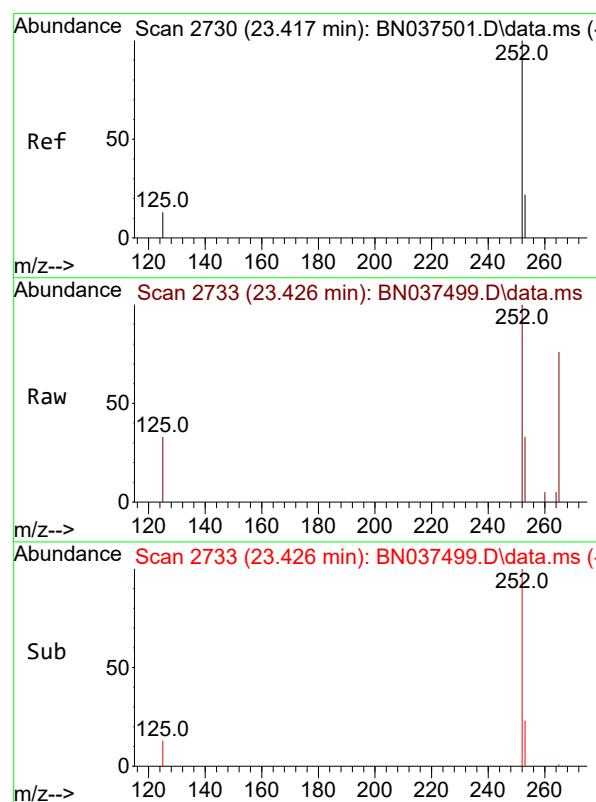
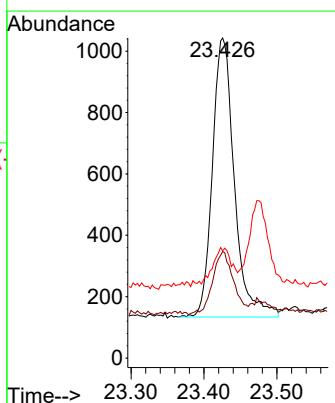
Tgt Ion:252 Resp: 1902

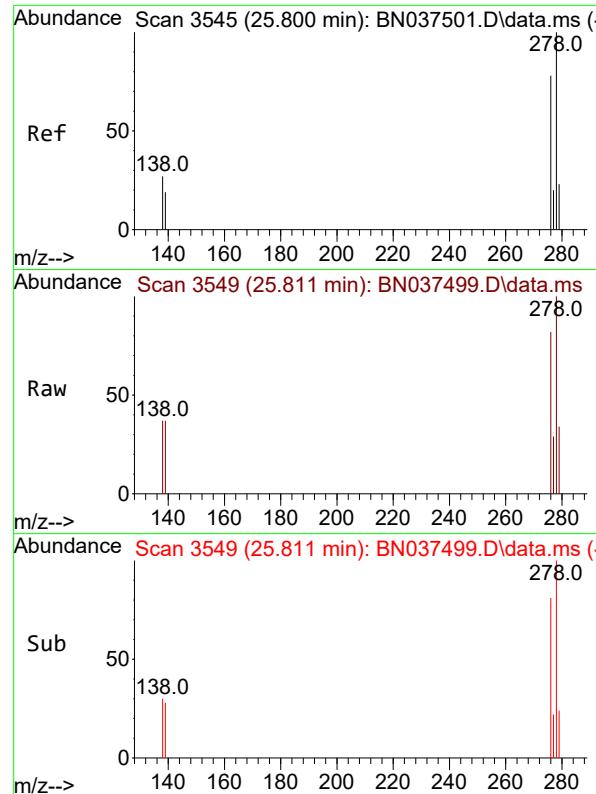
Ion Ratio Lower Upper

252 100

253 33.3 19.9 29.9#

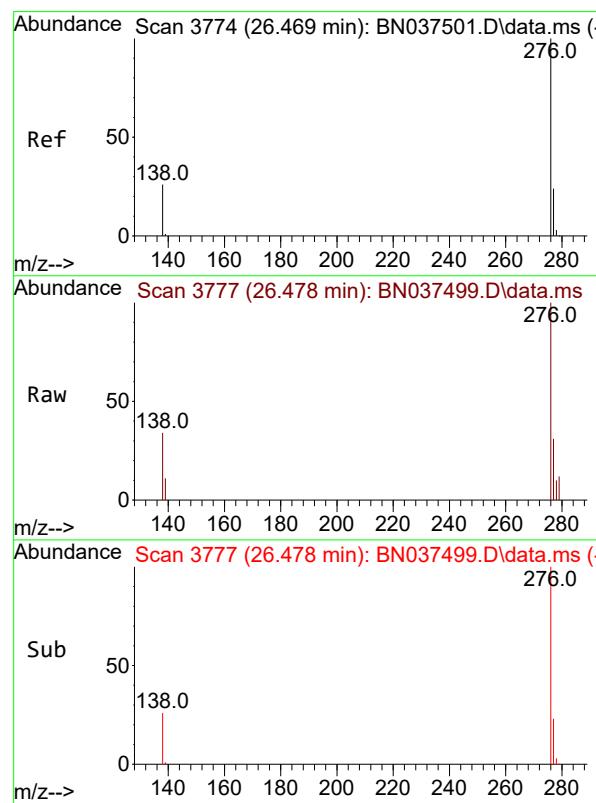
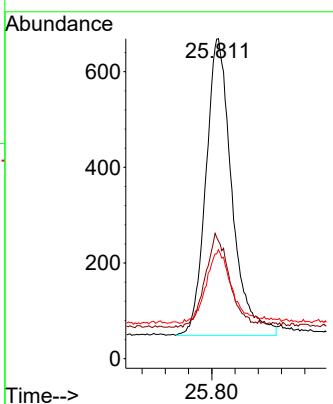
125 33.5 15.2 22.8#





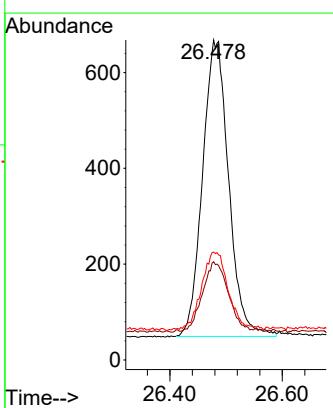
#40  
Dibenzo(a,h)anthracene  
Concen: 0.089 ng  
RT: 25.811 min Scan# 3  
Instrument : BNA\_N  
Delta R.T. 0.012 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36  
ClientSampleId : SSTDICCO.1

Tgt Ion:278 Resp: 1921  
Ion Ratio Lower Upper  
278 100  
139 36.8 17.5 26.3#  
279 34.1 21.3 31.9#



#41  
Benzo(g,h,i)perylene  
Concen: 0.089 ng  
RT: 26.478 min Scan# 3777  
Delta R.T. 0.009 min  
Lab File: BN037499.D  
Acq: 15 Jul 2025 12:36

Tgt Ion:276 Resp: 1995  
Ion Ratio Lower Upper  
276 100  
277 30.7 20.9 31.3  
138 33.7 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037500.D  
 Acq On : 15 Jul 2025 13:12  
 Operator : RC/JU  
 Sample : SSTDICCO.2  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

Quant Time: Jul 15 17:26:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

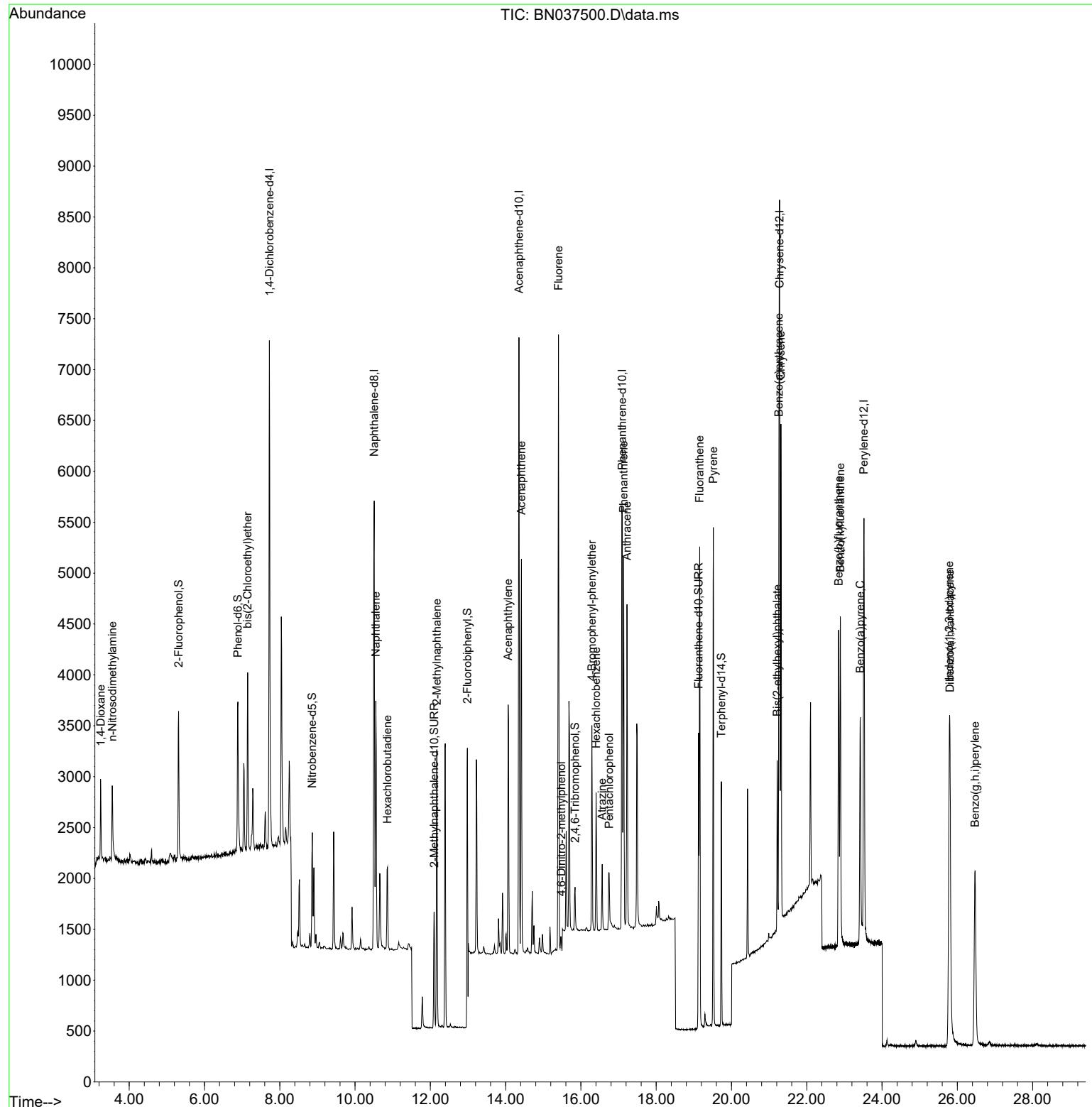
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2351	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	6017	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3325	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	6414	0.400	ng	0.00
29) Chrysene-d12	21.277	240	5490	0.400	ng	# 0.00
35) Perylene-d12	23.519	264	5600	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	1188	0.204	ng	0.00
5) Phenol-d6	6.887	99	1455	0.200	ng	0.00
8) Nitrobenzene-d5	8.864	82	867	0.193	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	1606	0.186	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	288	0.176	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	2983	0.173	ng	0.00
27) Fluoranthene-d10	19.127	212	3202	0.188	ng	0.00
31) Terphenyl-d14	19.731	244	2238	0.190	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.247	88	481	0.213	ng	99
3) n-Nitrosodimethylamine	3.550	42	548	0.193	ng	# 94
6) bis(2-Chloroethyl)ether	7.147	93	1237	0.204	ng	99
9) Naphthalene	10.551	128	3170	0.198	ng	97
10) Hexachlorobutadiene	10.861	225	712	0.201	ng	# 99
12) 2-Methylnaphthalene	12.172	142	1971	0.187	ng	99
16) Acenaphthylene	14.067	152	2840	0.191	ng	98
17) Acenaphthene	14.420	154	1928	0.190	ng	99
18) Fluorene	15.403	166	2474	0.190	ng	100
20) 4,6-Dinitro-2-methylph...	15.478	198	140	0.255	ng	# 78
21) 4-Bromophenyl-phenylether	16.292	248	793	0.193	ng	97
22) Hexachlorobenzene	16.404	284	1057	0.199	ng	100
23) Atrazine	16.565	200	515	0.180	ng	# 94
24) Pentachlorophenol	16.751	266	419	0.176	ng	99
25) Phenanthrene	17.136	178	3730	0.194	ng	99
26) Anthracene	17.223	178	3288	0.188	ng	100
28) Fluoranthene	19.155	202	4200	0.190	ng	100
30) Pyrene	19.517	202	4280	0.194	ng	100
32) Benzo(a)anthracene	21.259	228	3724	0.194	ng	98
33) Chrysene	21.313	228	4010	0.200	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	1656	0.191	ng	97
36) Indeno(1,2,3-cd)pyrene	25.788	276	4278	0.183	ng	98
37) Benzo(b)fluoranthene	22.847	252	3857	0.181	ng	# 93
38) Benzo(k)fluoranthene	22.891	252	3977	0.181	ng	# 93
39) Benzo(a)pyrene	23.420	252	3225	0.182	ng	# 91
40) Dibenzo(a,h)anthracene	25.803	278	3411	0.181	ng	# 94
41) Benzo(g,h,i)perylene	26.472	276	3591	0.184	ng	96

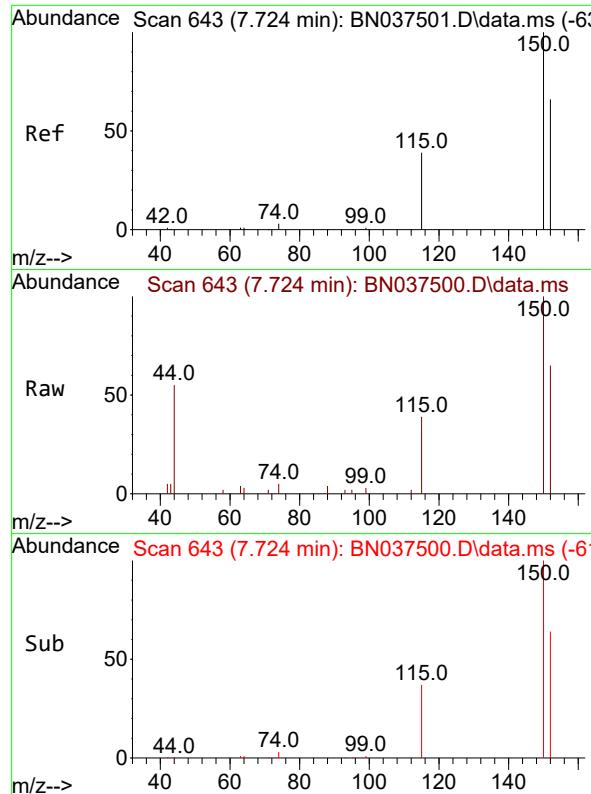
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037500.D  
 Acq On : 15 Jul 2025 13:12  
 Operator : RC/JU  
 Sample : SSTDICC0.2  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.2

Quant Time: Jul 15 17:26:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

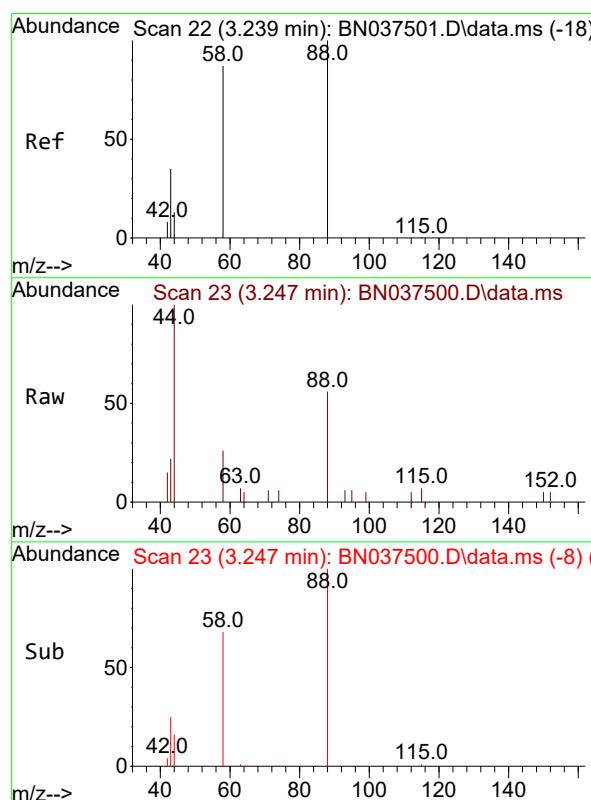
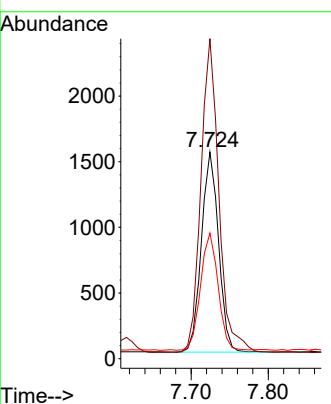




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

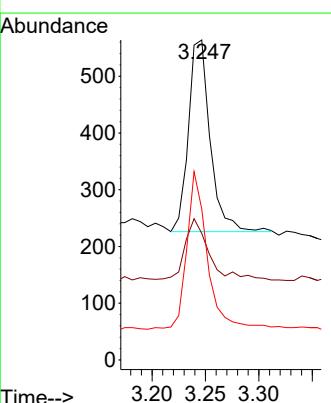
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

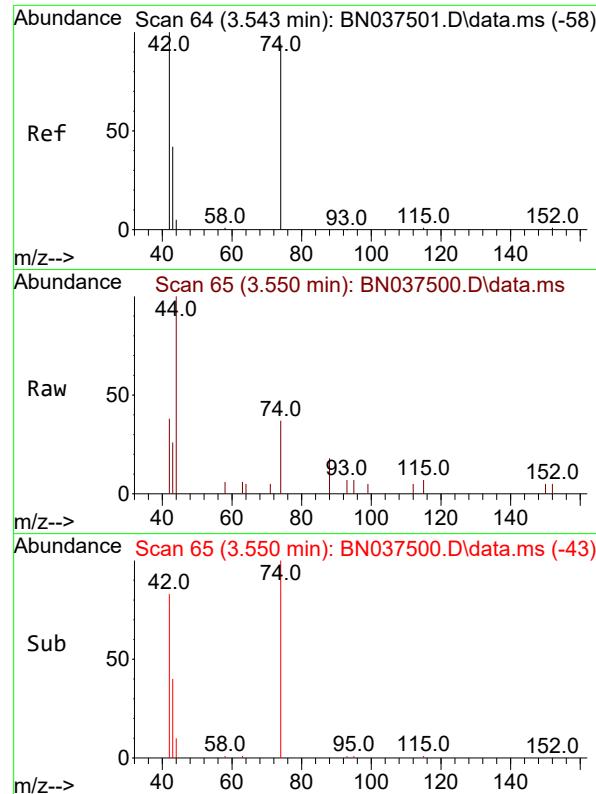
Tgt Ion:152 Resp: 2351  
Ion Ratio Lower Upper  
152 100  
150 154.9 119.8 179.8  
115 60.8 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.213 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

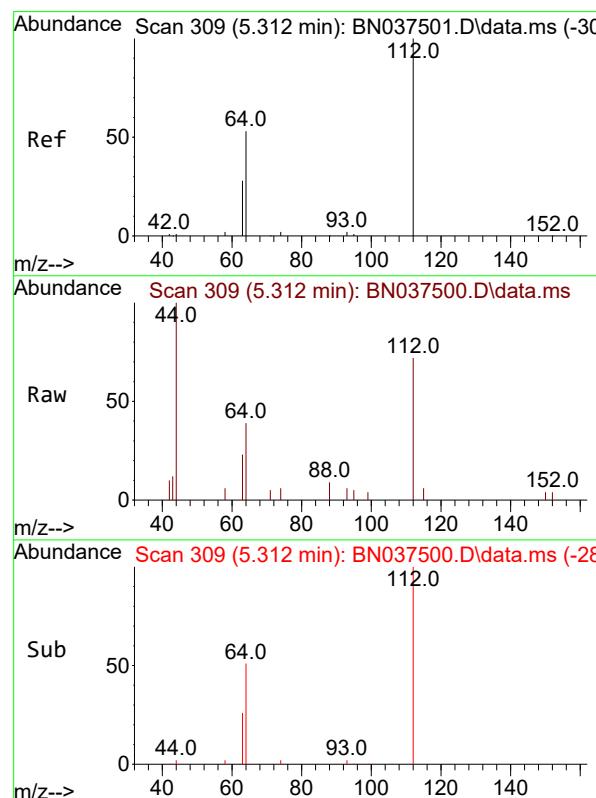
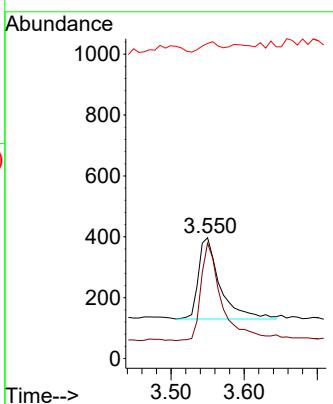
Tgt Ion: 88 Resp: 481  
Ion Ratio Lower Upper  
88 100  
43 34.9 27.5 41.3  
58 77.8 62.7 94.1





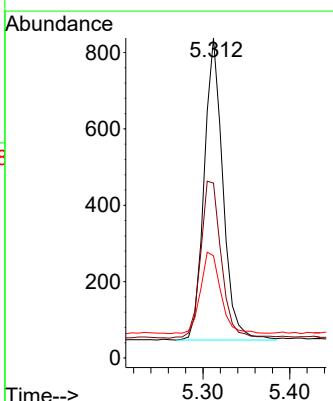
#3  
n-Nitrosodimethylamine  
Concen: 0.193 ng  
RT: 3.550 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. 0.007 min  
Lab File: BN037500.D  
ClientSampleId : SSTDICCO.2  
Acq: 15 Jul 2025 13:12

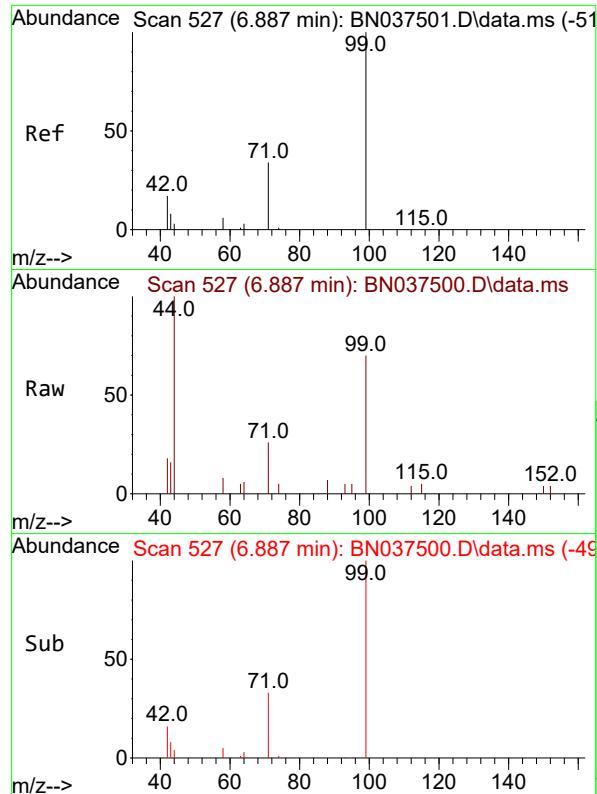
Tgt Ion: 42 Resp: 548  
Ion Ratio Lower Upper  
42 100  
74 119.2 91.8 137.6  
44 9.9 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.204 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion: 112 Resp: 1188  
Ion Ratio Lower Upper  
112 100  
64 57.9 45.1 67.7  
63 29.0 23.8 35.8

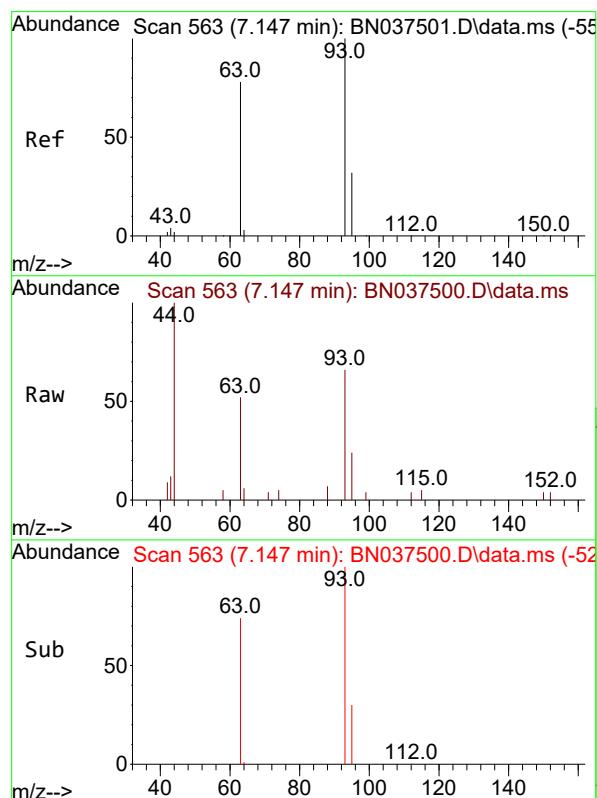
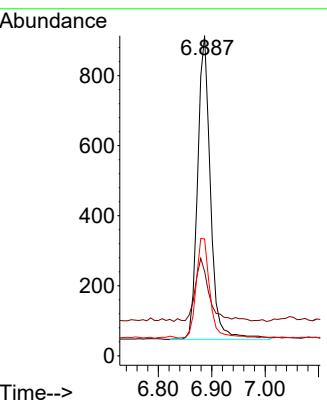




#5  
Phenol-d6  
Concen: 0.200 ng  
RT: 6.887 min Scan# 5  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

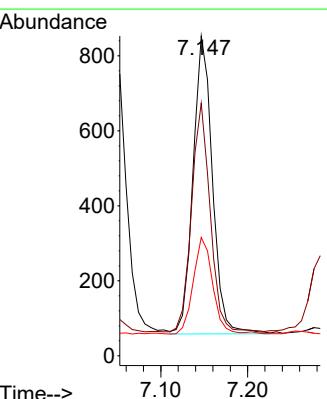
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

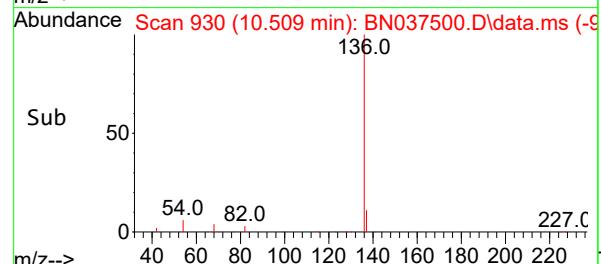
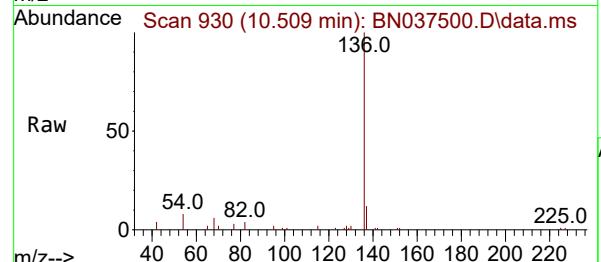
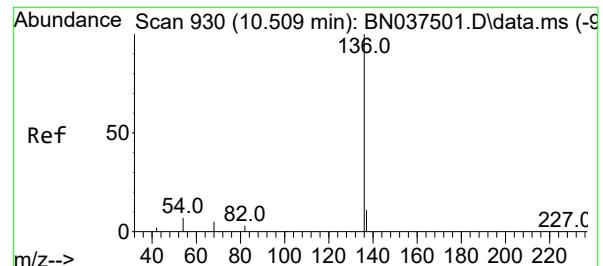
Tgt Ion: 99 Resp: 1455  
Ion Ratio Lower Upper  
99 100  
42 22.1 17.1 25.7  
71 34.8 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.204 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion: 93 Resp: 1237  
Ion Ratio Lower Upper  
93 100  
63 73.6 58.2 87.4  
95 32.7 25.3 37.9



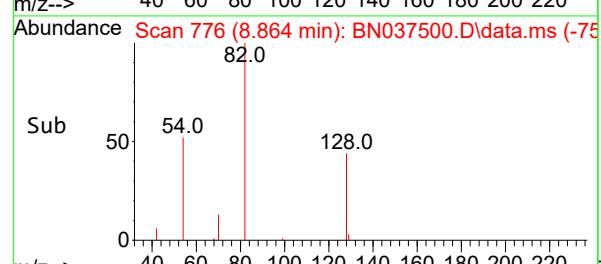
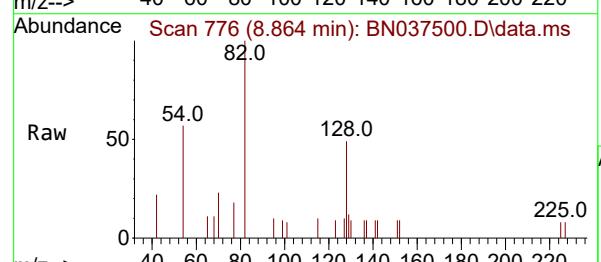
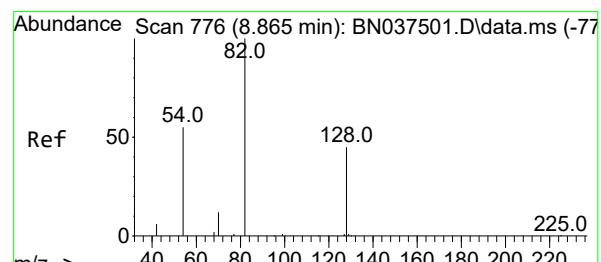
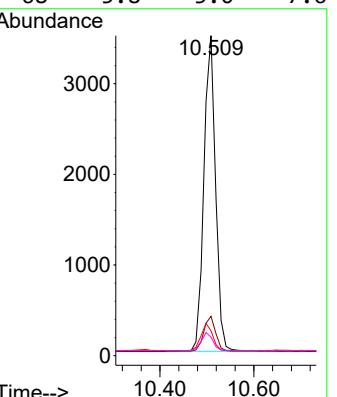


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

Tgt Ion:136 Resp: 6017

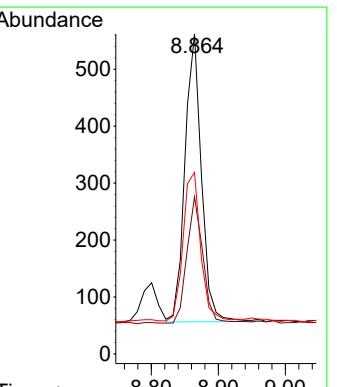
Ion	Ratio	Lower	Upper
136	100		
137	12.3	9.8	14.8
54	7.7	6.6	9.8
68	5.8	5.0	7.6

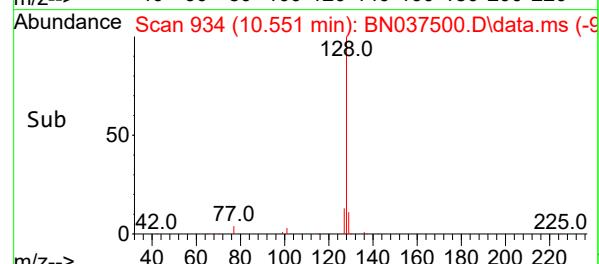
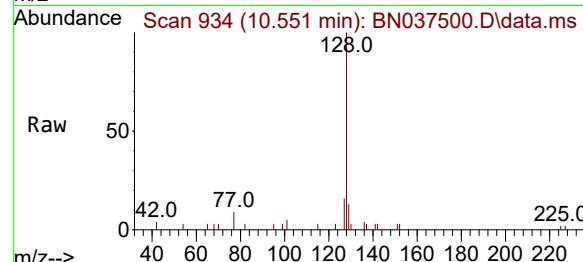
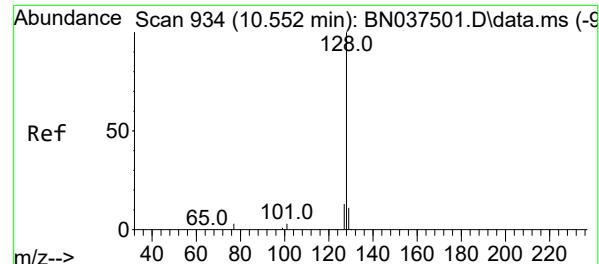


#8  
 Nitrobenzene-d5  
 Concen: 0.193 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion: 82 Resp: 867

Ion	Ratio	Lower	Upper
82	100		
128	49.1	37.5	56.3
54	56.8	45.3	67.9





#9

Naphthalene

Concen: 0.198 ng

RT: 10.551 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

Tgt Ion:128 Resp: 3170

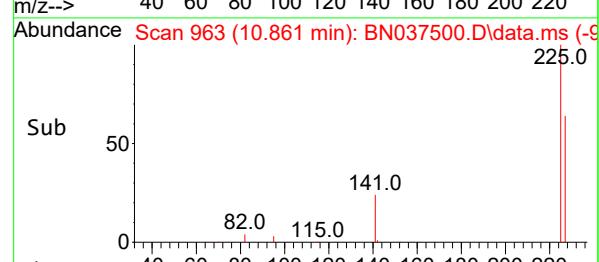
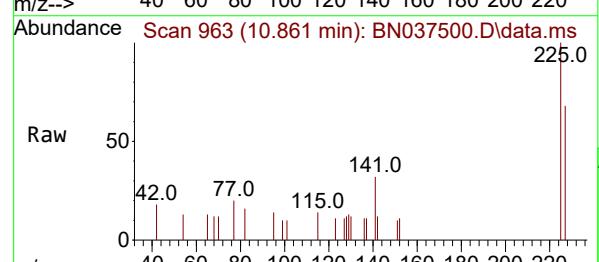
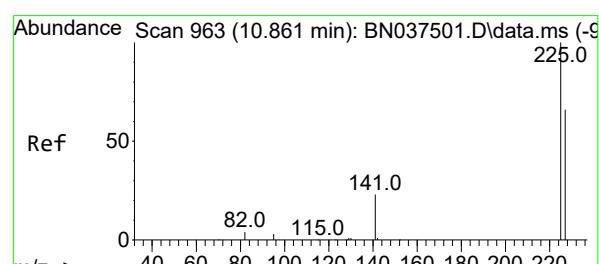
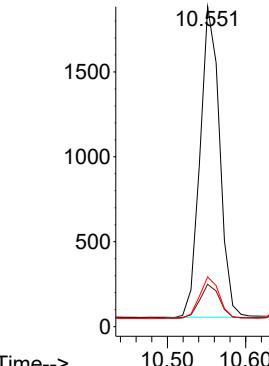
Ion Ratio Lower Upper

128 100

129 13.2 9.7 14.5

127 15.6 11.5 17.3

Abundance



#10

Hexachlorobutadiene

Concen: 0.201 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Tgt Ion:225 Resp: 712

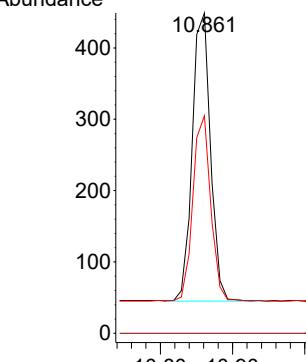
Ion Ratio Lower Upper

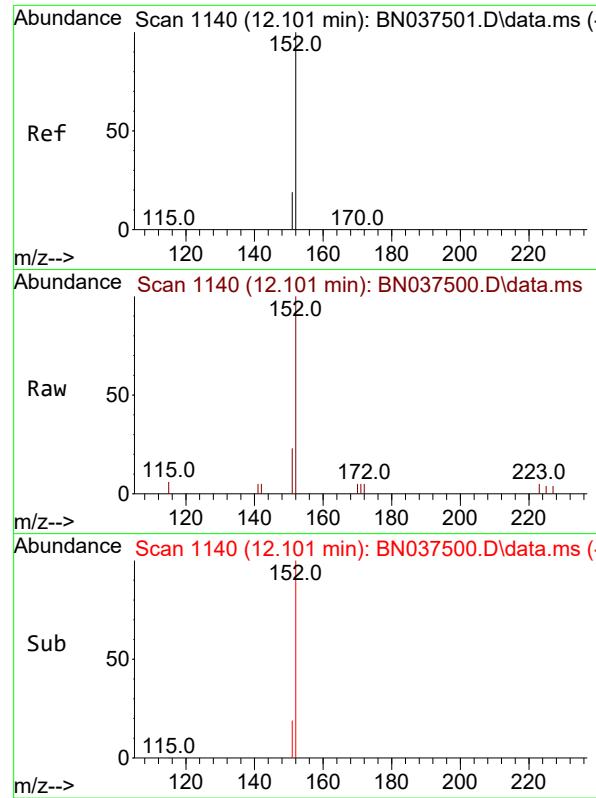
225 100

223 0.0 0.0 0.0

227 62.9 51.0 76.4

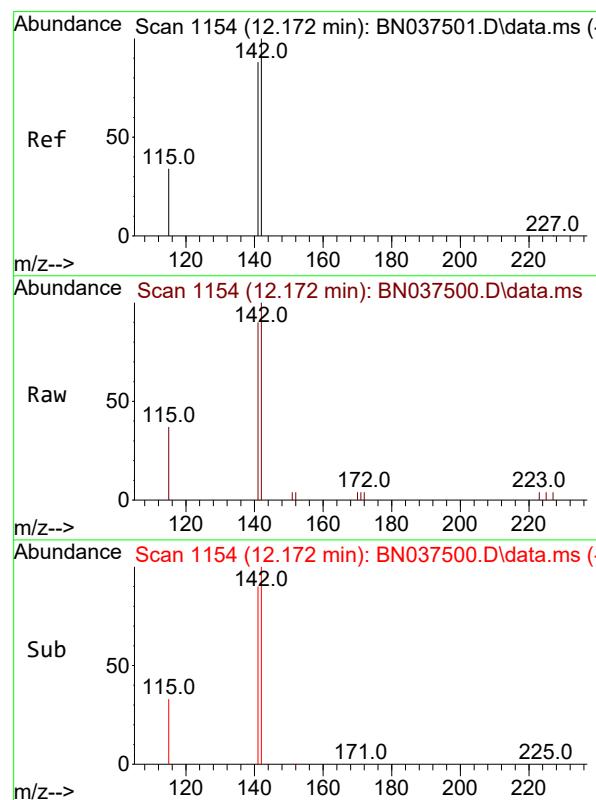
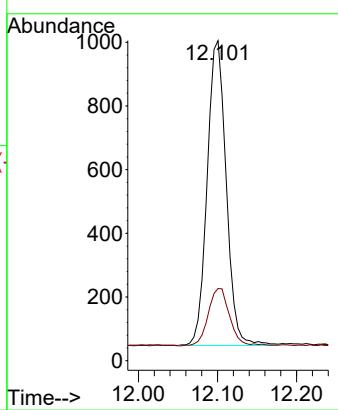
Abundance





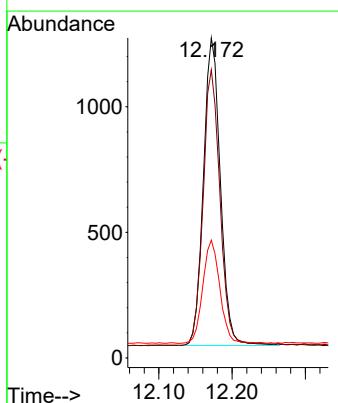
#11  
2-Methylnaphthalene-d10  
Concen: 0.186 ng  
RT: 12.101 min Scan# 1:Instrument :  
Delta R.T. -0.000 min BNA\_N  
Lab File: BN037500.D ClientSampleId :  
Acq: 15 Jul 2025 13:12 SSTDICCO.2

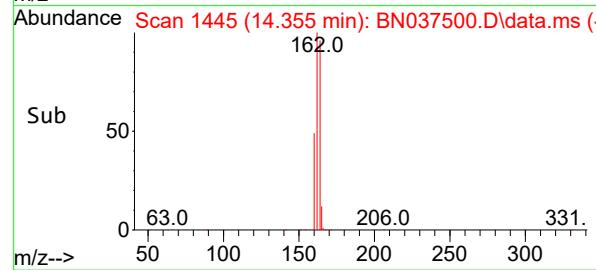
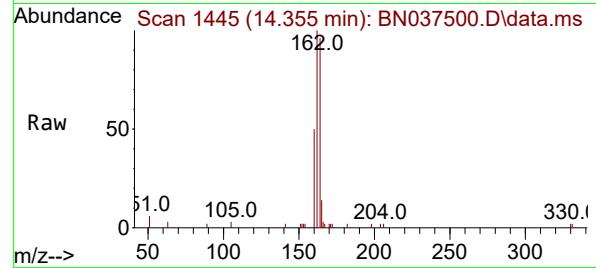
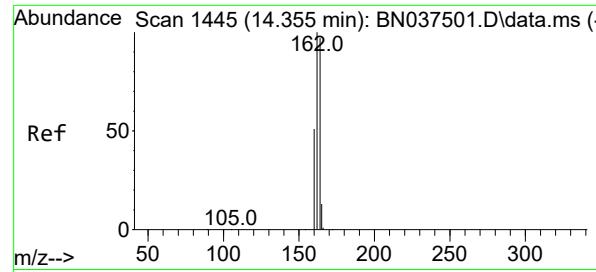
Tgt Ion:152 Resp: 1606  
Ion Ratio Lower Upper  
152 100  
151 21.2 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.187 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:142 Resp: 1971  
Ion Ratio Lower Upper  
142 100  
141 90.0 71.0 106.4  
115 36.8 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

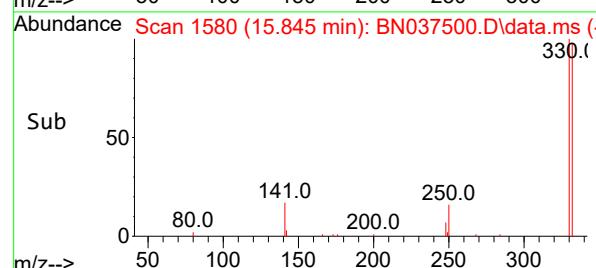
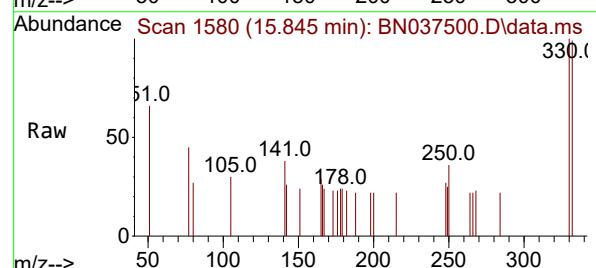
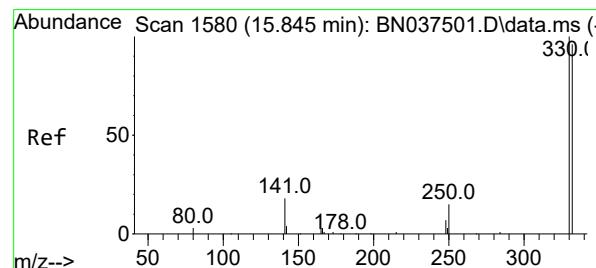
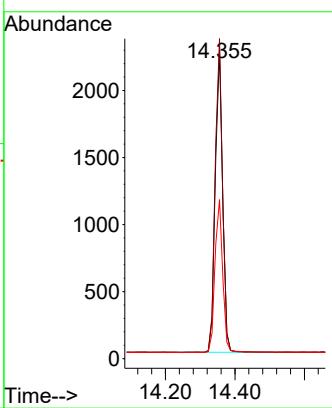
Tgt Ion:164 Resp: 3325

Ion Ratio Lower Upper

164 100

162 103.8 82.0 123.0

160 51.6 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.176 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

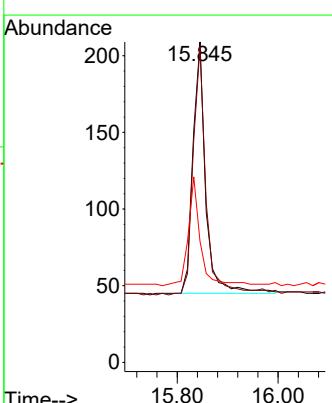
Tgt Ion:330 Resp: 288

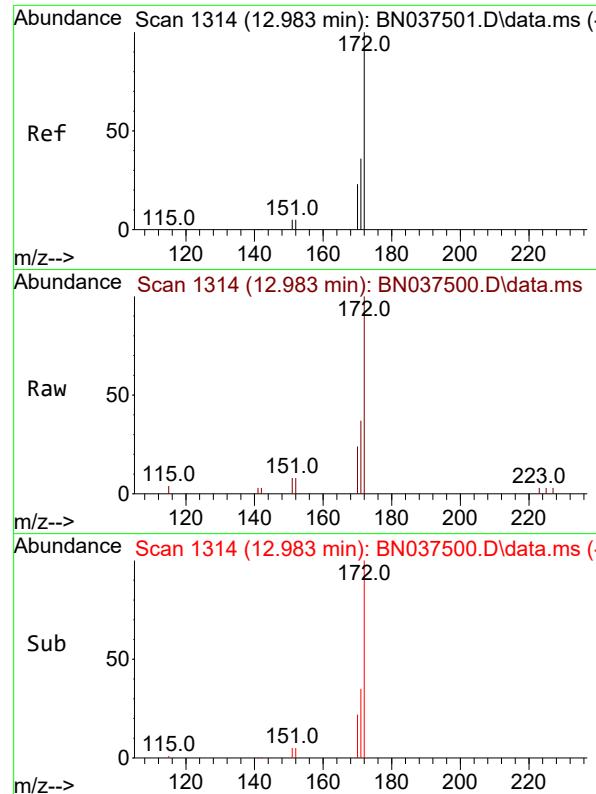
Ion Ratio Lower Upper

330 100

332 99.7 76.1 114.1

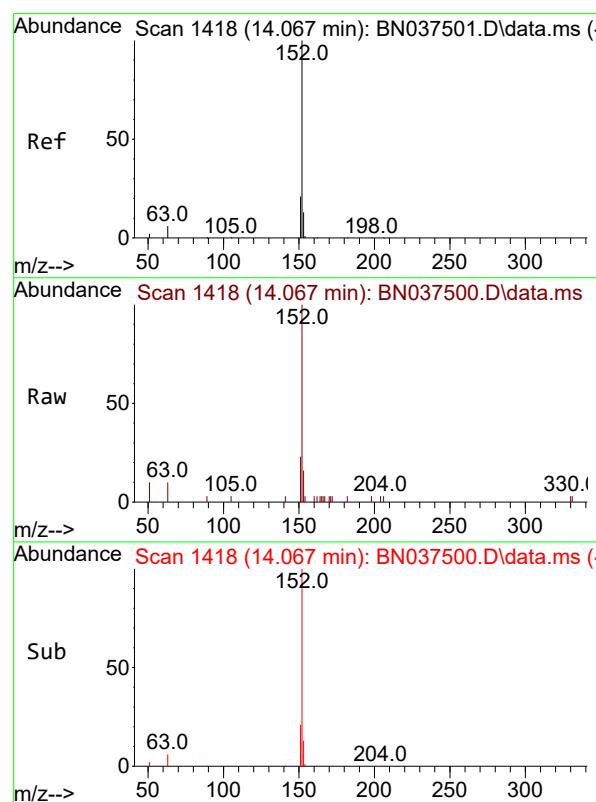
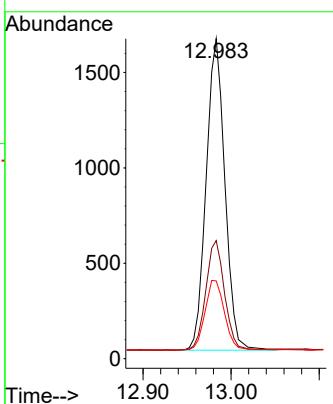
141 41.3 33.4 50.0





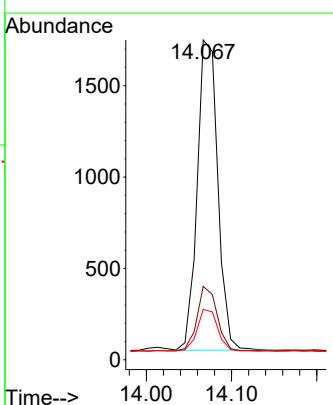
#15  
2-Fluorobiphenyl  
Concen: 0.173 ng  
RT: 12.983 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12  
ClientSampleId : SSTDICCO.2

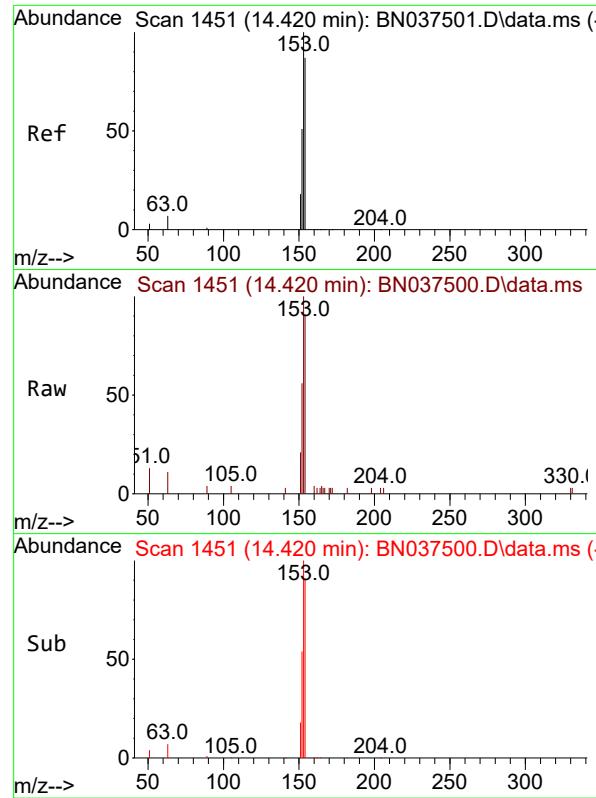
Tgt Ion:172 Resp: 2983  
Ion Ratio Lower Upper  
172 100  
171 36.9 29.4 44.2  
170 24.3 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.191 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:152 Resp: 2840  
Ion Ratio Lower Upper  
152 100  
151 21.3 15.9 23.9  
153 13.2 10.7 16.1

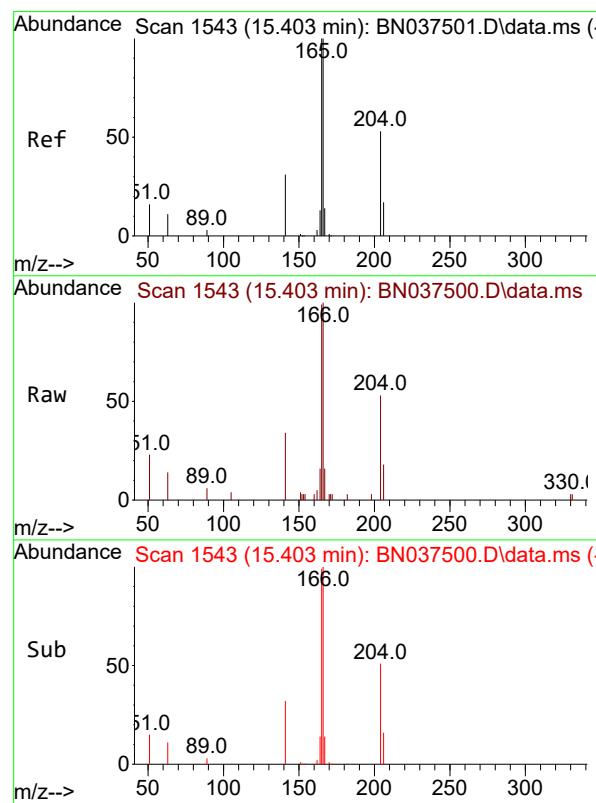
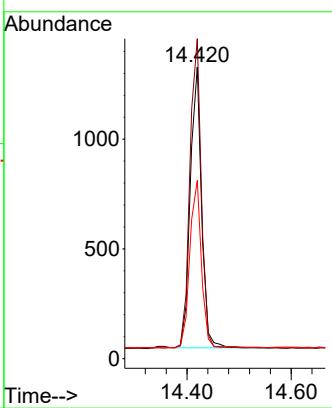




#17  
Acenaphthene  
Concen: 0.190 ng  
RT: 14.420 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

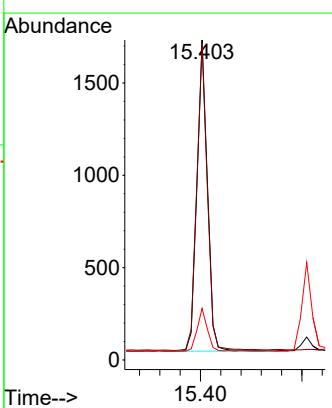
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

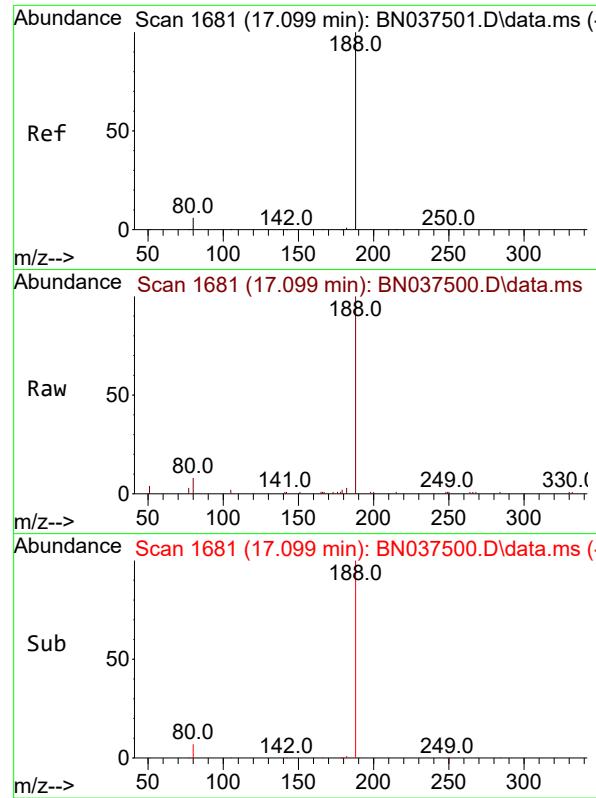
Tgt Ion:154 Resp: 1928  
Ion Ratio Lower Upper  
154 100  
153 111.4 89.2 133.8  
152 61.5 48.0 72.0



#18  
Fluorene  
Concen: 0.190 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:166 Resp: 2474  
Ion Ratio Lower Upper  
166 100  
165 97.8 78.1 117.1  
167 13.0 11.0 16.6

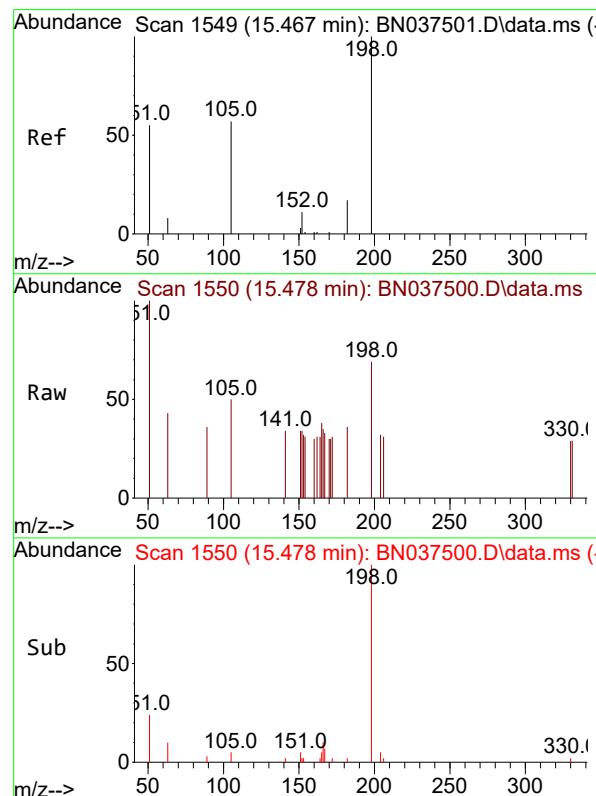
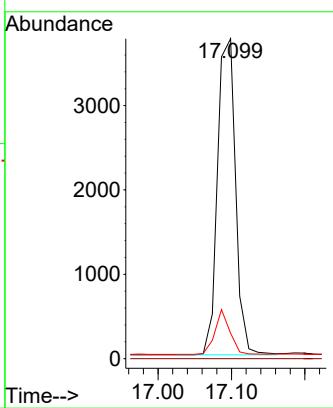




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

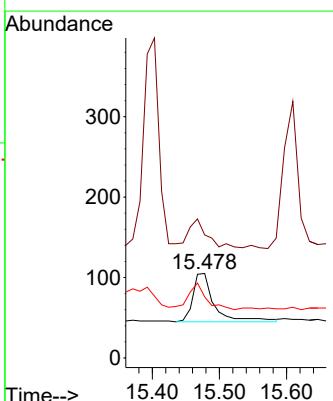
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

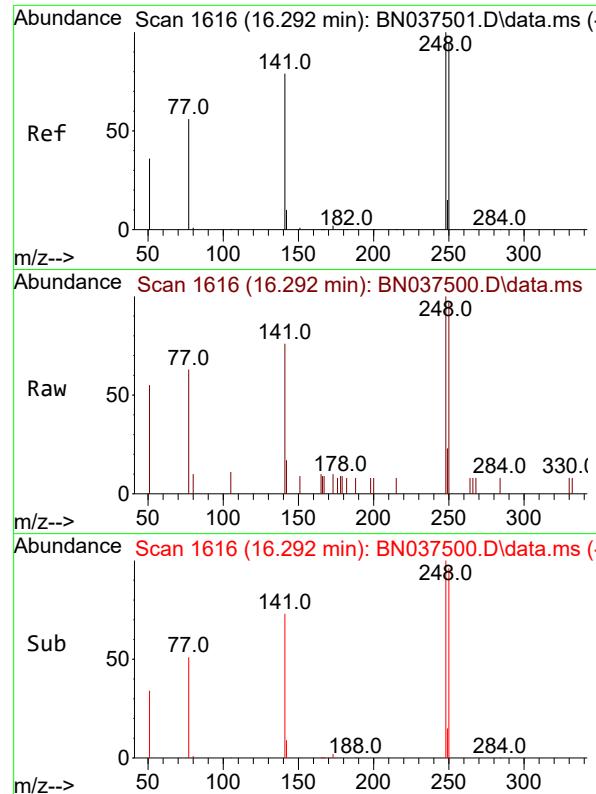
Tgt Ion:188 Resp: 6414  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 8.0 6.0 9.0



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.255 ng  
 RT: 15.478 min Scan# 1550  
 Delta R.T. 0.011 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion:198 Resp: 140  
 Ion Ratio Lower Upper  
 198 100  
 51 145.7 88.5 132.7#  
 105 72.4 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 0.193 ng

RT: 16.292 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Instrument:

BNA\_N

ClientSampleId :

SSTDICCO.2

Tgt Ion:248 Resp: 793

Ion Ratio Lower Upper

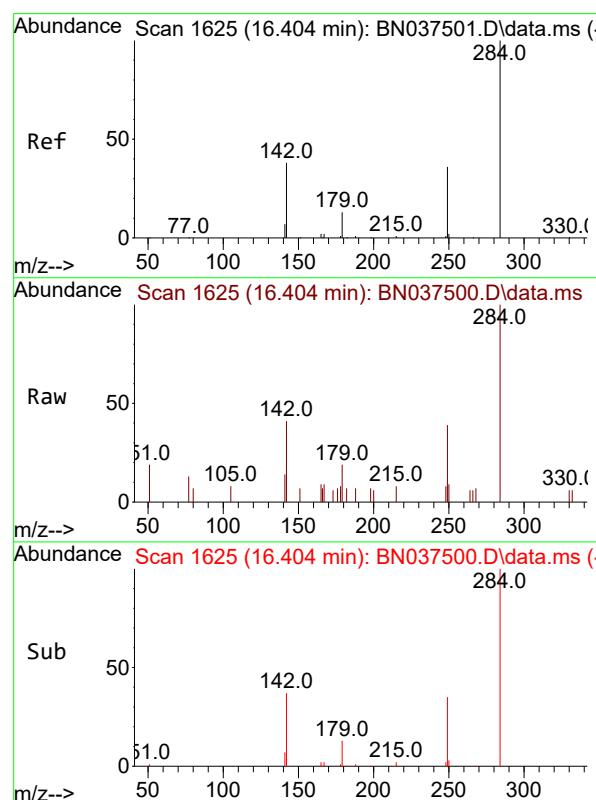
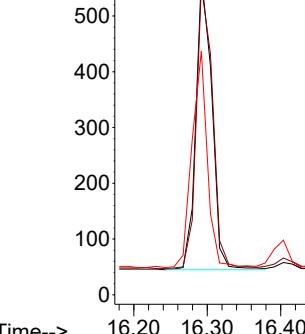
248 100

250 96.5 76.2 114.2

141 76.1 63.9 95.9

Abundance

16.292



#22

Hexachlorobenzene

Concen: 0.199 ng

RT: 16.404 min Scan# 1625

Delta R.T. -0.000 min

Lab File: BN037500.D

Acq: 15 Jul 2025 13:12

Tgt Ion:284 Resp: 1057

Ion Ratio Lower Upper

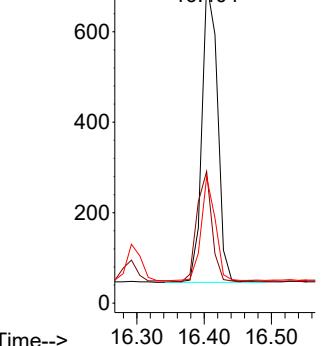
284 100

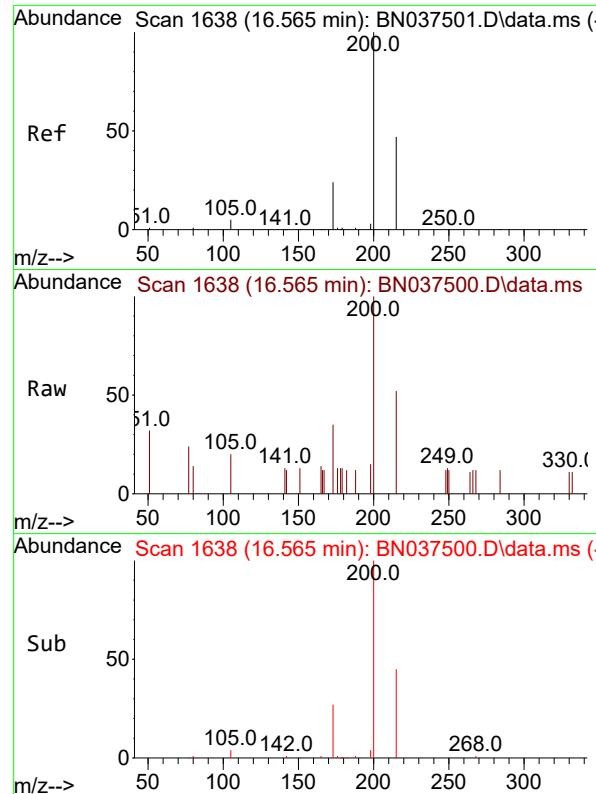
142 35.8 28.9 43.3

249 32.2 25.8 38.6

Abundance

16.404

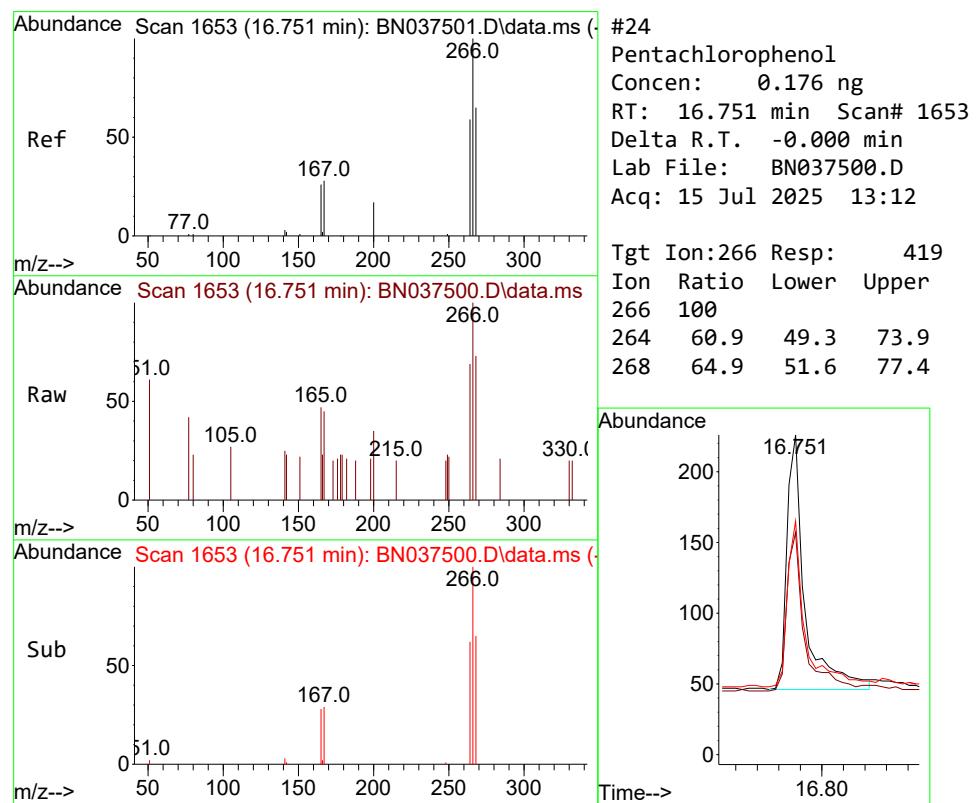
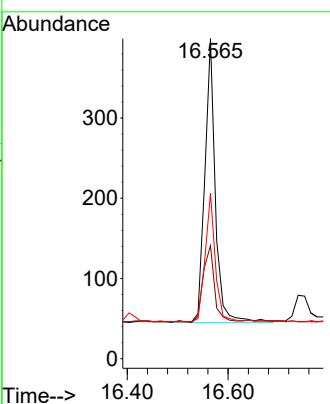




#23  
Atrazine  
Concen: 0.180 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

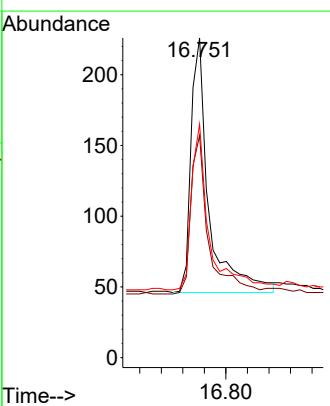
Instrument: BNA\_N  
ClientSampleId: SSTDICCO.2

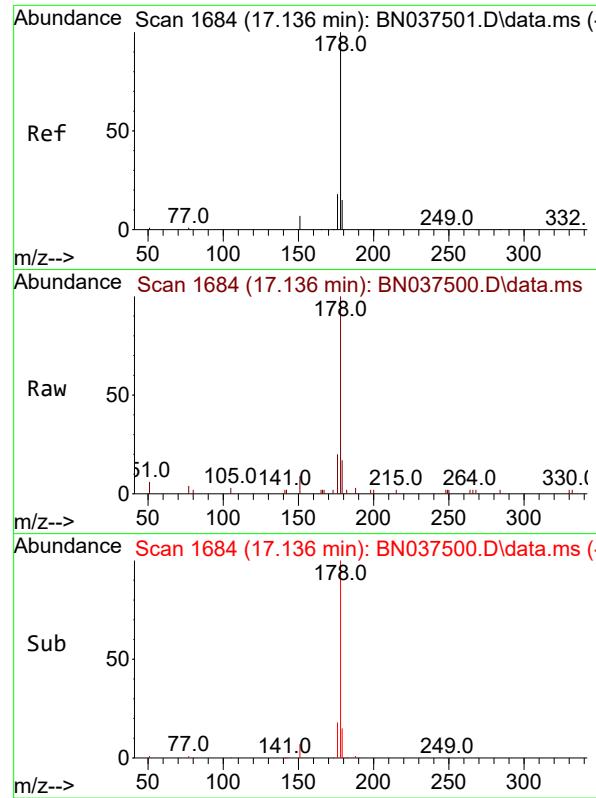
Tgt Ion:200 Resp: 515  
Ion Ratio Lower Upper  
200 100  
173 35.3 23.2 34.8#  
215 51.6 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.176 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:266 Resp: 419  
Ion Ratio Lower Upper  
266 100  
264 60.9 49.3 73.9  
268 64.9 51.6 77.4

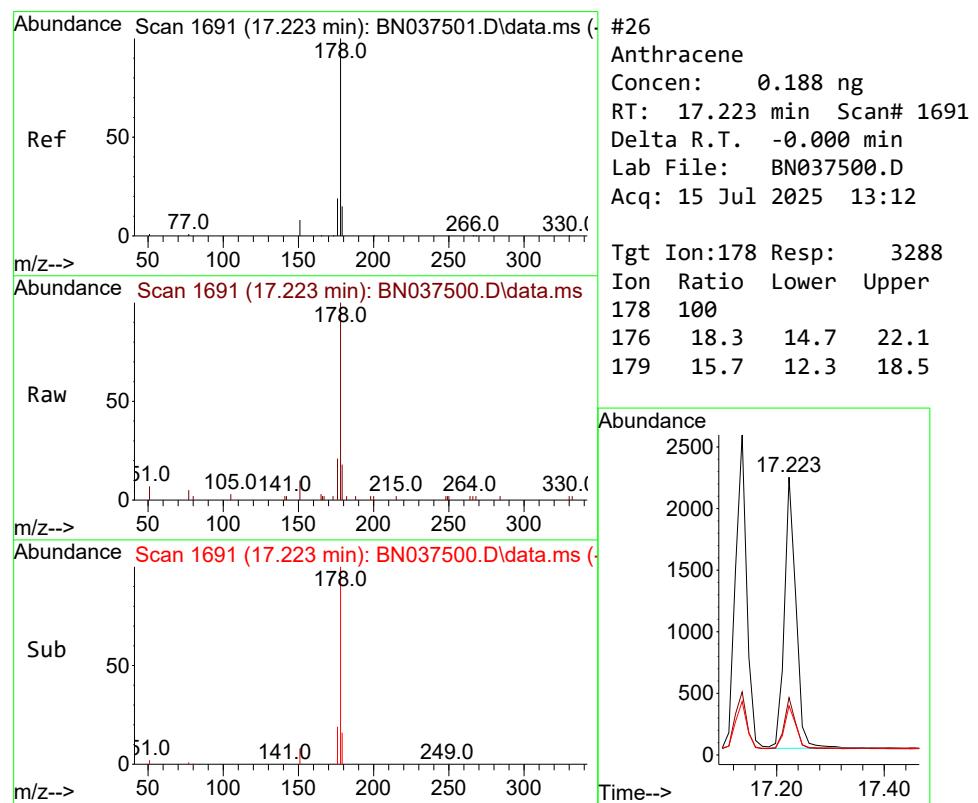
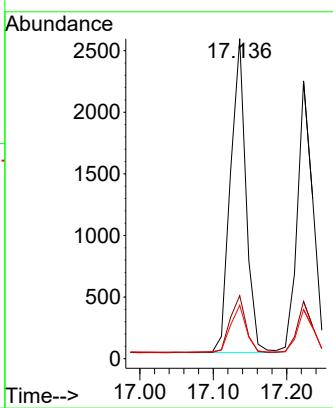




#25  
Phenanthrene  
Concen: 0.194 ng  
RT: 17.136 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

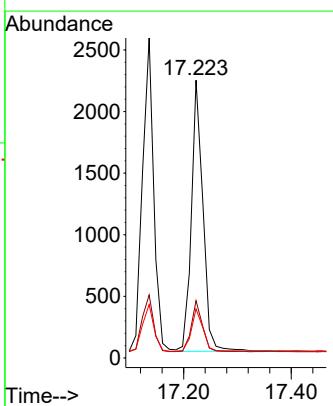
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

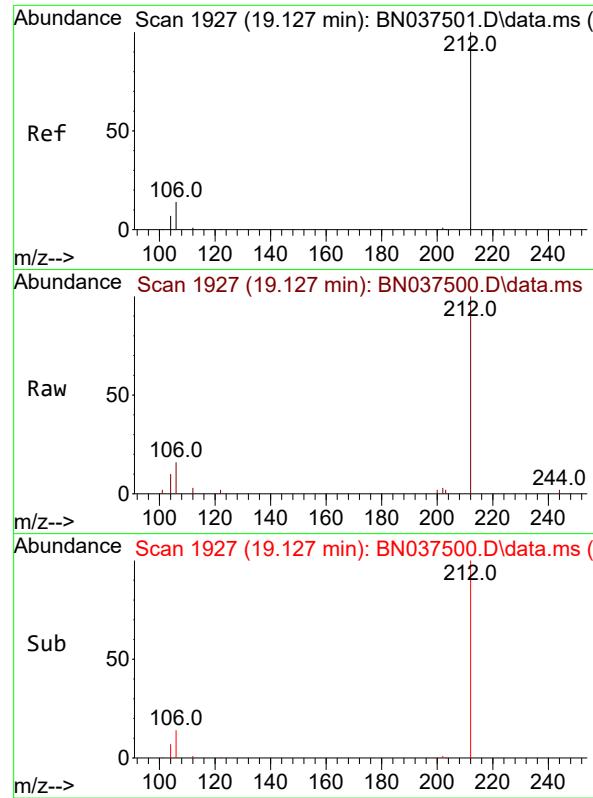
Tgt Ion:178 Resp: 3730  
Ion Ratio Lower Upper  
178 100  
176 18.4 15.0 22.6  
179 15.4 12.2 18.2



#26  
Anthracene  
Concen: 0.188 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:178 Resp: 3288  
Ion Ratio Lower Upper  
178 100  
176 18.3 14.7 22.1  
179 15.7 12.3 18.5

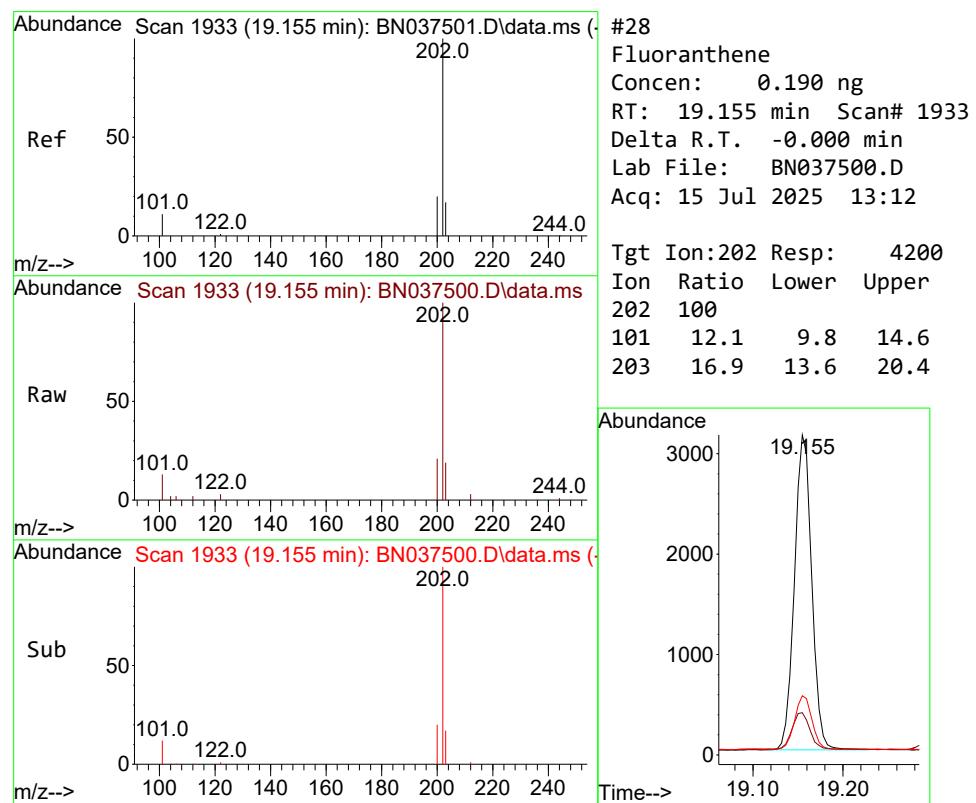
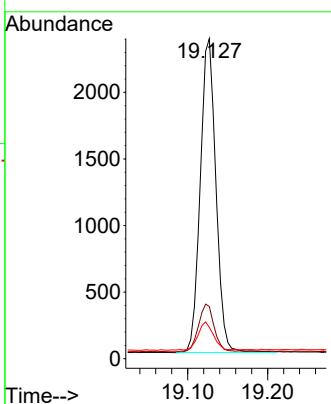




#27  
 Fluoranthene-d10  
 Concen: 0.188 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

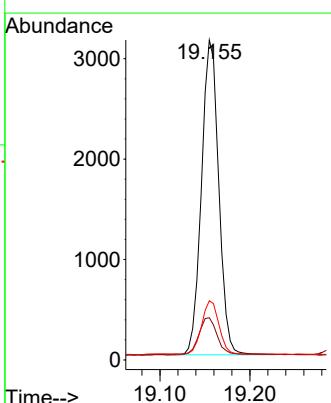
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

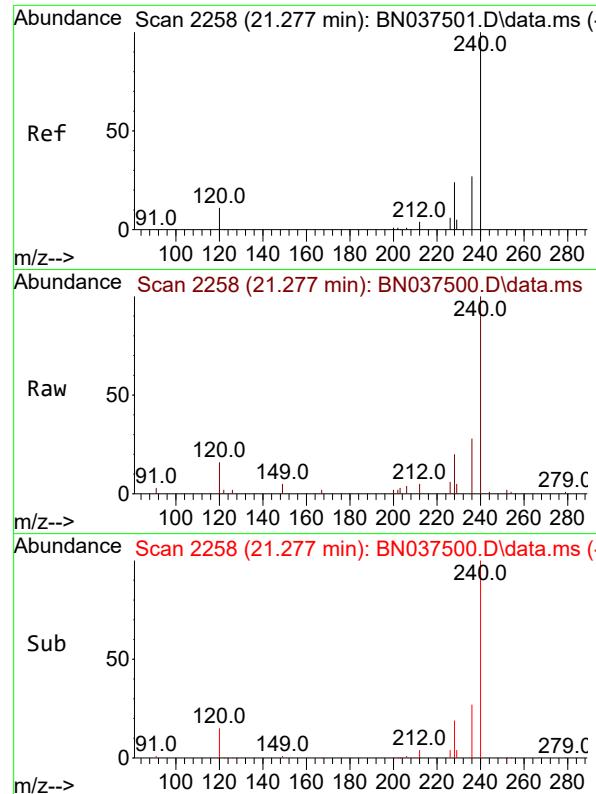
Tgt Ion:212 Resp: 3202  
 Ion Ratio Lower Upper  
 212 100  
 106 15.3 12.2 18.4  
 104 8.8 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.190 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Tgt Ion:202 Resp: 4200  
 Ion Ratio Lower Upper  
 202 100  
 101 12.1 9.8 14.6  
 203 16.9 13.6 20.4

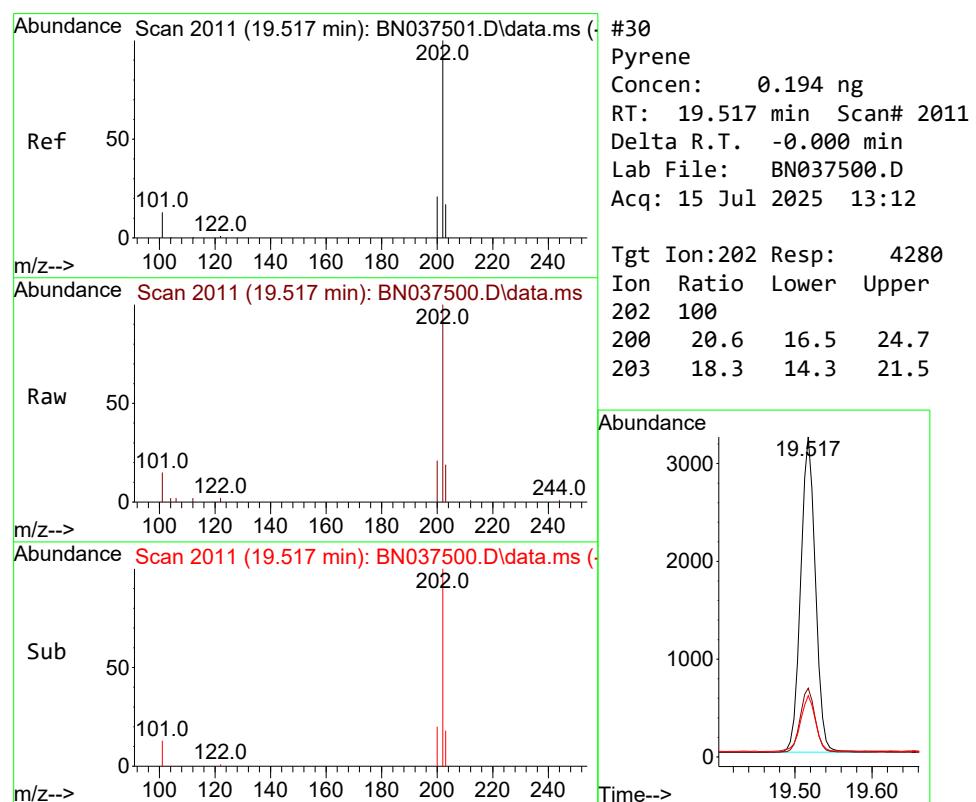
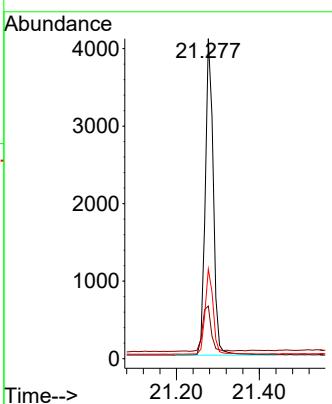




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

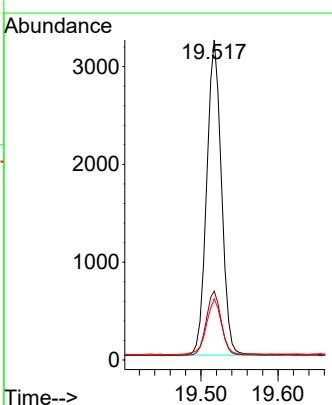
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

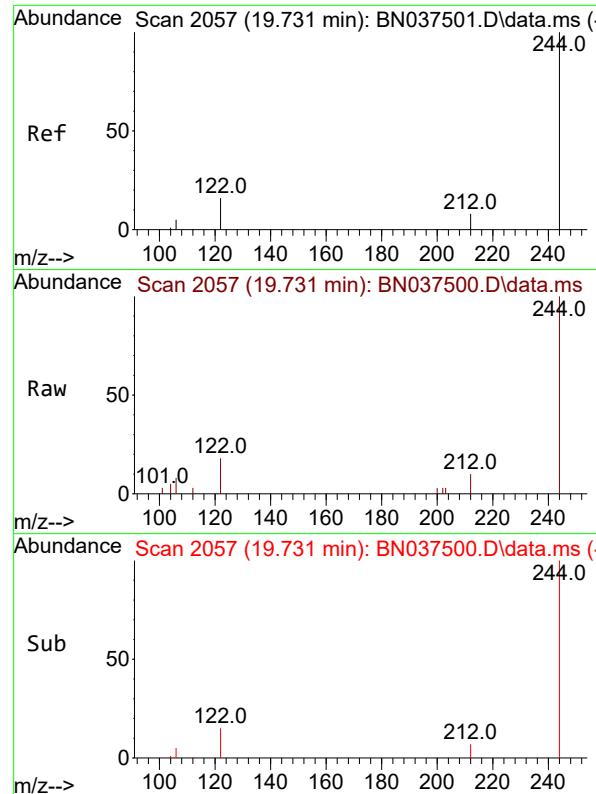
Tgt Ion:240 Resp: 5490  
Ion Ratio Lower Upper  
240 100  
120 16.5 10.7 16.1#  
236 28.0 22.6 33.8



#30  
Pyrene  
Concen: 0.194 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

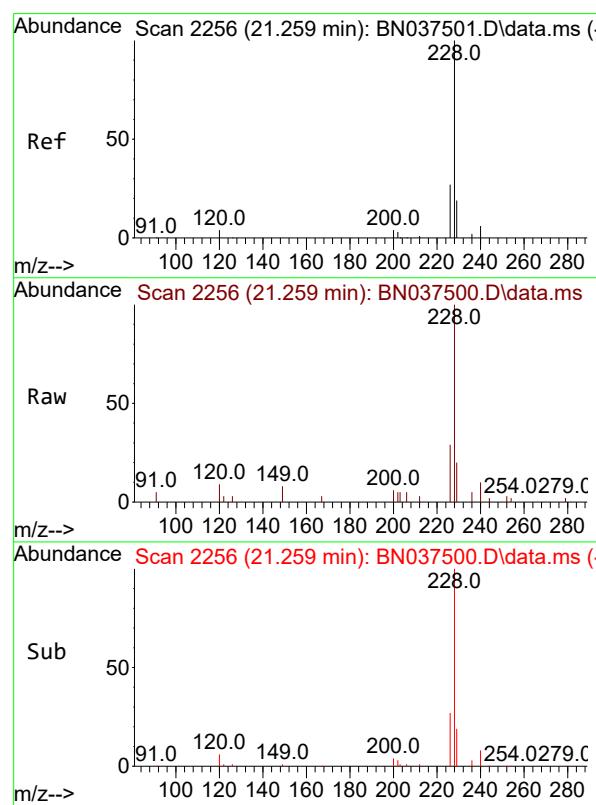
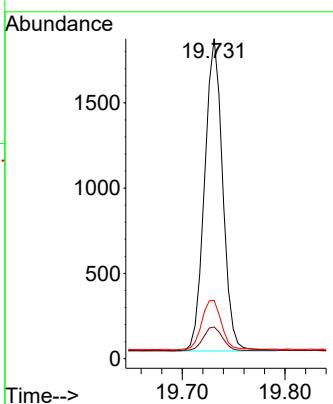
Tgt Ion:202 Resp: 4280  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 18.3 14.3 21.5





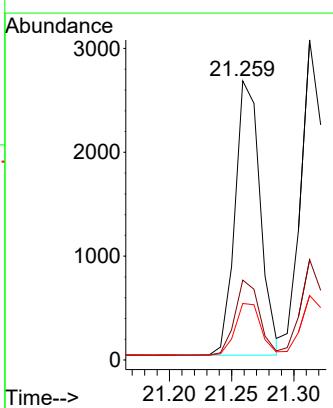
#31  
Terphenyl-d14  
Concen: 0.190 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12  
ClientSampleId : SSTDICCO.2

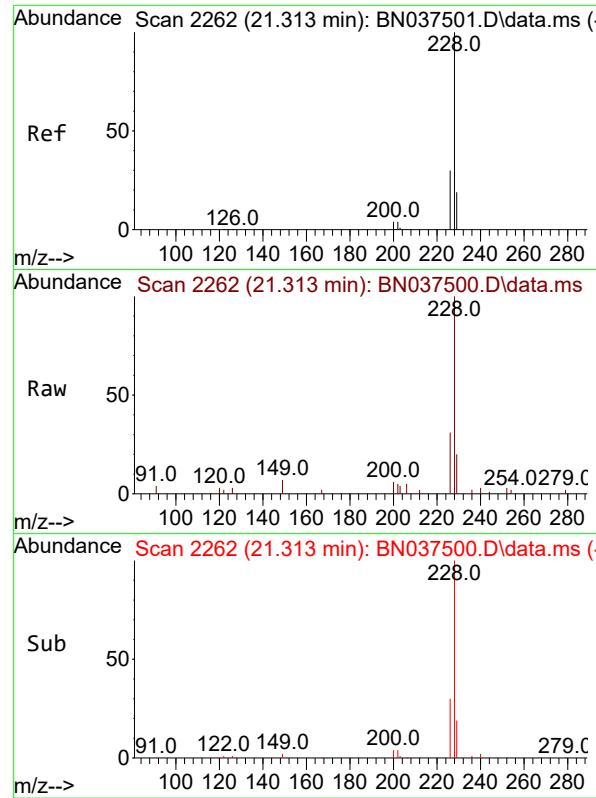
Tgt Ion:244 Resp: 2238  
Ion Ratio Lower Upper  
244 100  
212 9.9 7.4 11.2  
122 18.3 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.194 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

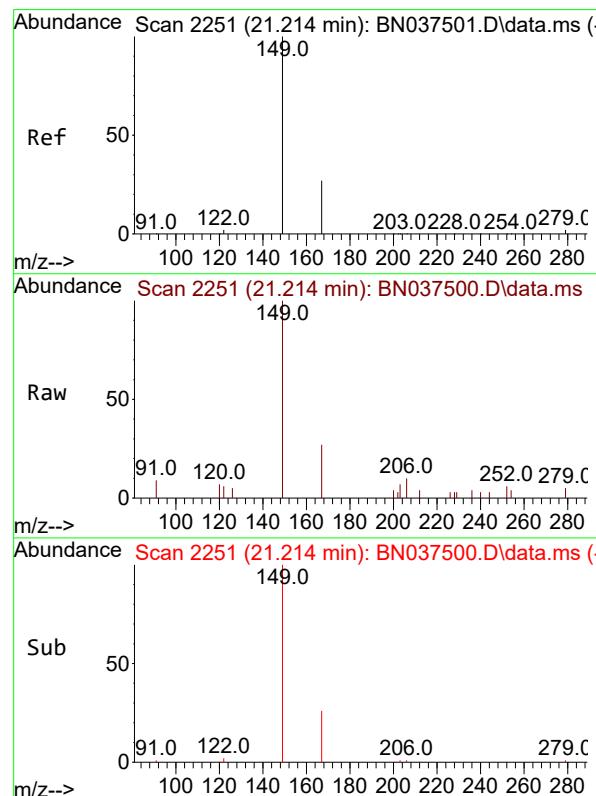
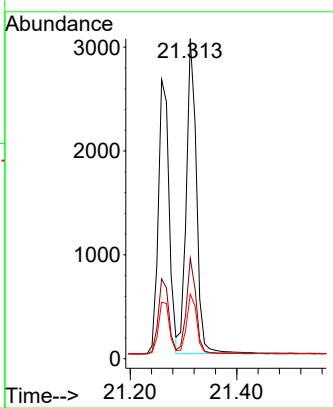
Tgt Ion:228 Resp: 3724  
Ion Ratio Lower Upper  
228 100  
226 28.6 21.9 32.9  
229 20.3 15.8 23.8





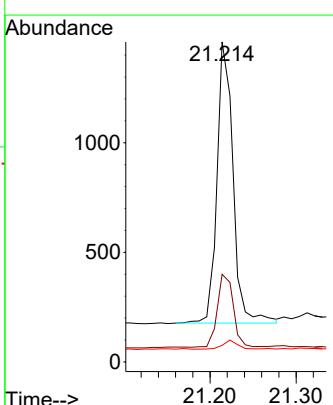
#33  
Chrysene  
Concen: 0.200 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12  
ClientSampleId : SSTDICCO.2

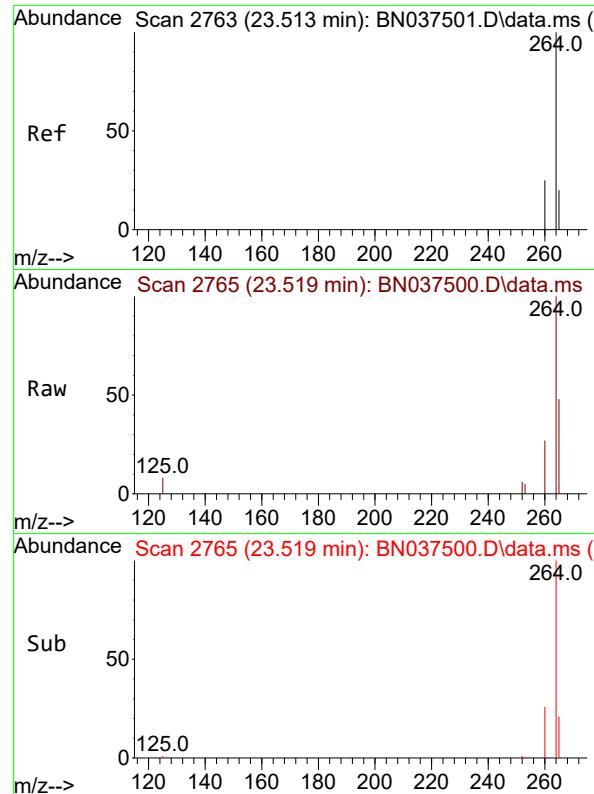
Tgt Ion:228 Resp: 4010  
Ion Ratio Lower Upper  
228 100  
226 31.3 24.2 36.4  
229 20.1 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.191 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

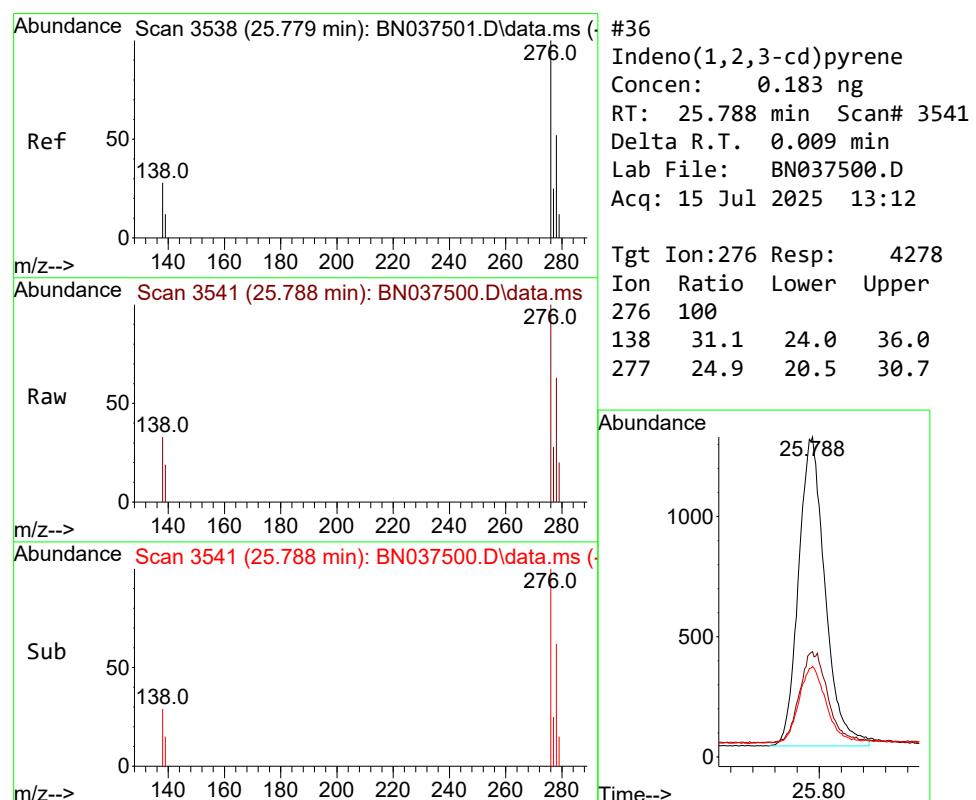
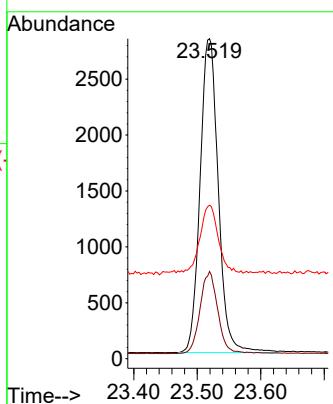
Tgt Ion:149 Resp: 1656  
Ion Ratio Lower Upper  
149 100  
167 25.8 21.8 32.8  
279 3.0 3.0 4.4





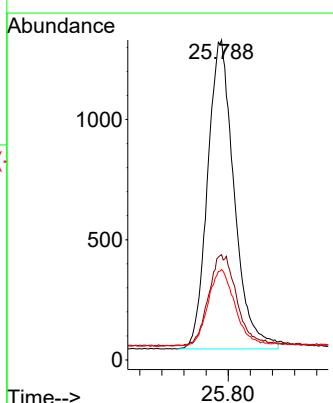
#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.519 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.006 min  
Lab File: BN037500.D  
ClientSampleId : SSTDICCO.2  
Acq: 15 Jul 2025 13:12

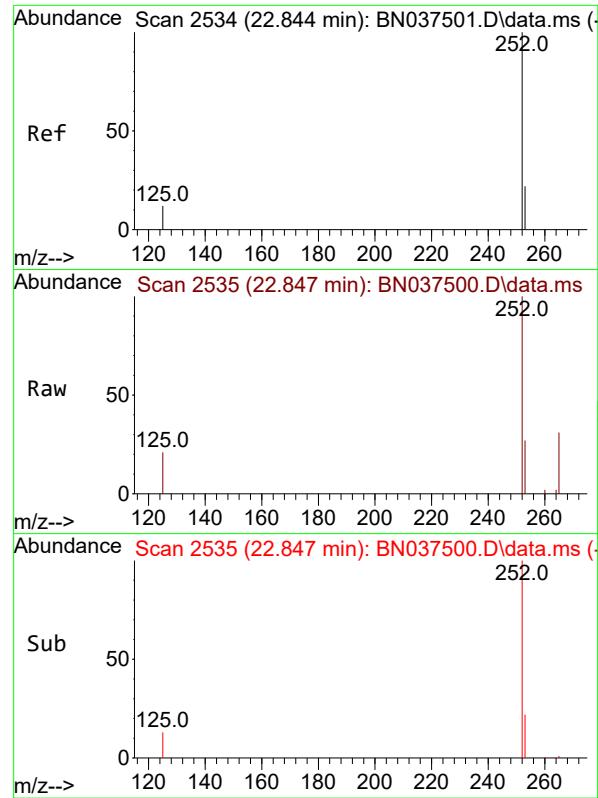
Tgt Ion:264 Resp: 5600  
Ion Ratio Lower Upper  
264 100  
260 27.3 21.2 31.8  
265 47.9 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.183 ng  
RT: 25.788 min Scan# 3541  
Delta R.T. 0.009 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:276 Resp: 4278  
Ion Ratio Lower Upper  
276 100  
138 31.1 24.0 36.0  
277 24.9 20.5 30.7

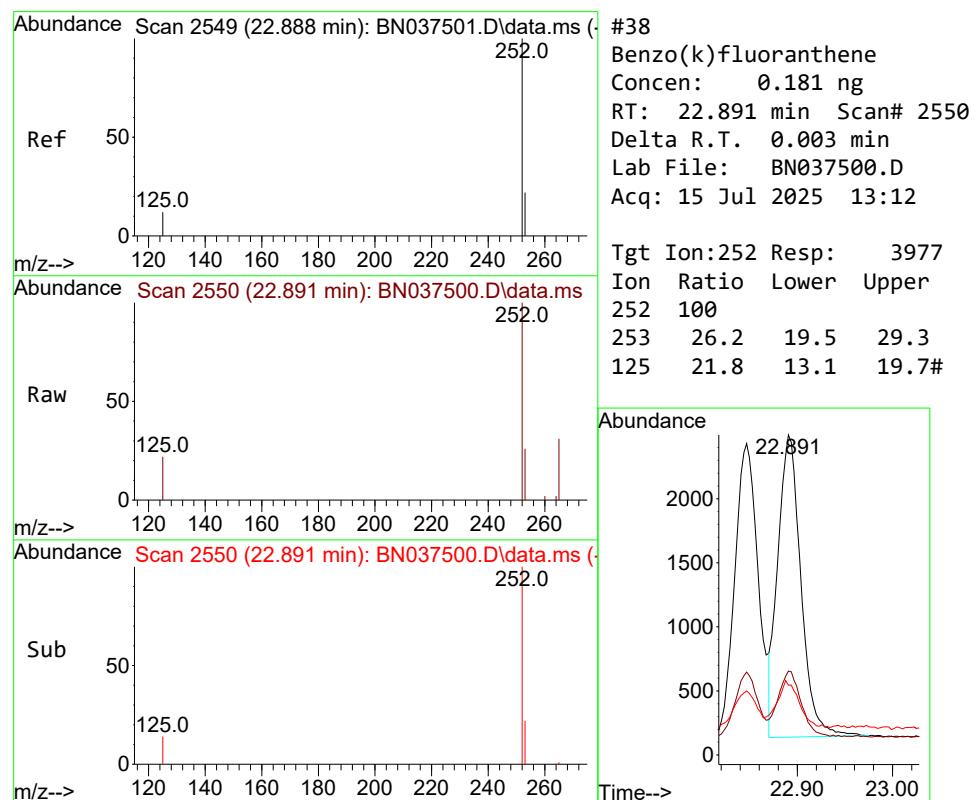
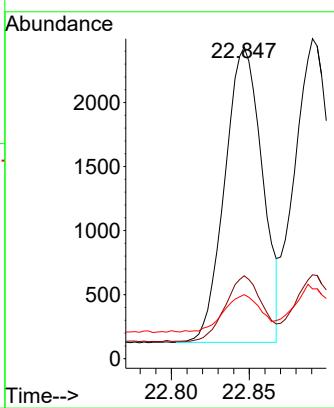




#37  
 Benzo(b)fluoranthene  
 Concen: 0.181 ng  
 RT: 22.847 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

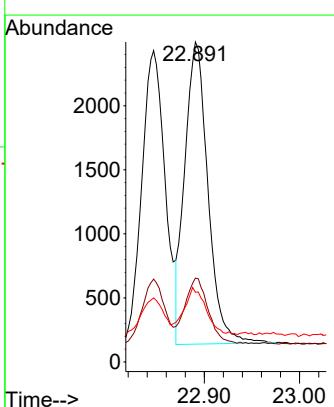
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

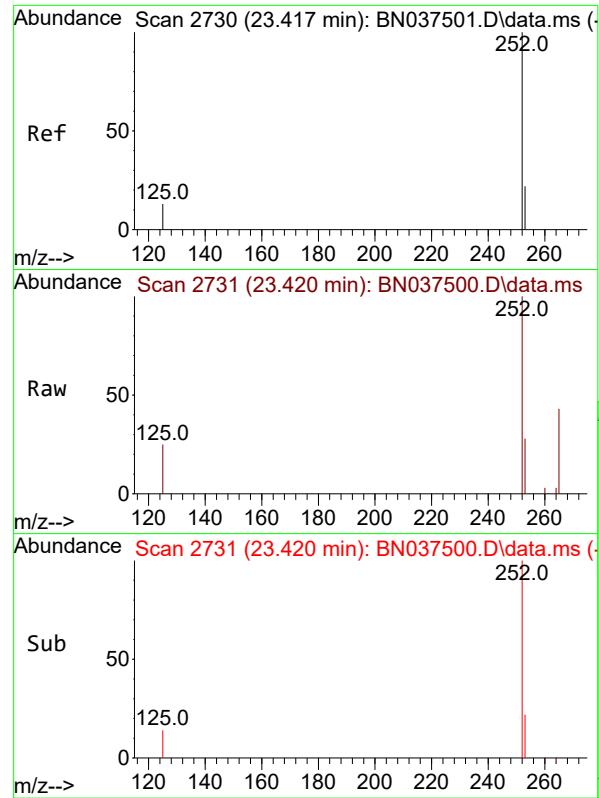
Tgt Ion:252 Resp: 3857  
 Ion Ratio Lower Upper  
 252 100  
 253 26.6 19.5 29.3  
 125 20.6 13.0 19.6#



#38  
 Benzo(k)fluoranthene  
 Concen: 0.181 ng  
 RT: 22.891 min Scan# 2550  
 Delta R.T. 0.003 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

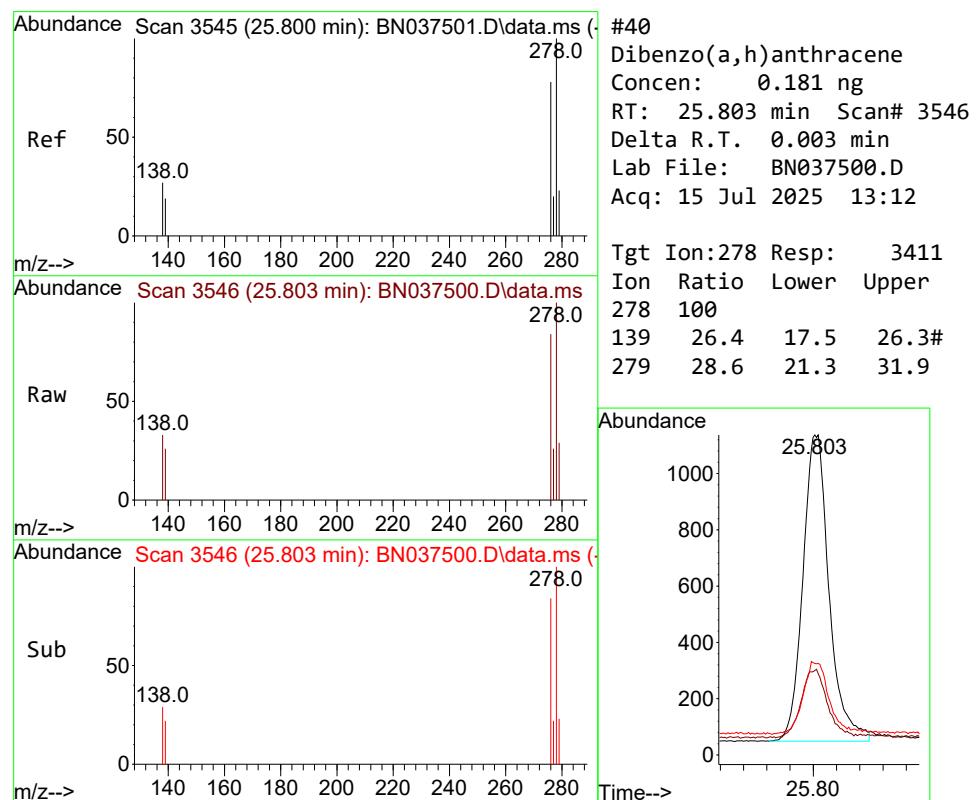
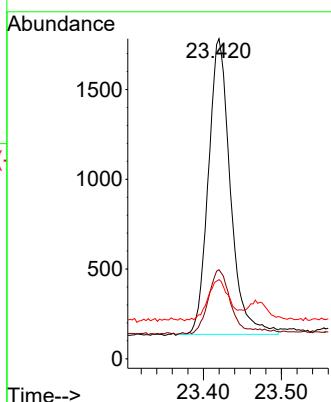
Tgt Ion:252 Resp: 3977  
 Ion Ratio Lower Upper  
 252 100  
 253 26.2 19.5 29.3  
 125 21.8 13.1 19.7#





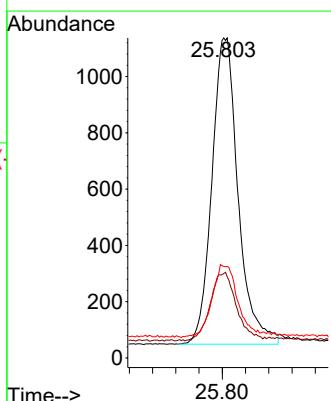
#39  
Benzo(a)pyrene  
Concen: 0.182 ng  
RT: 23.420 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.003 min  
Lab File: BN037500.D ClientSampleId : SSTDICCO.2  
Acq: 15 Jul 2025 13:12

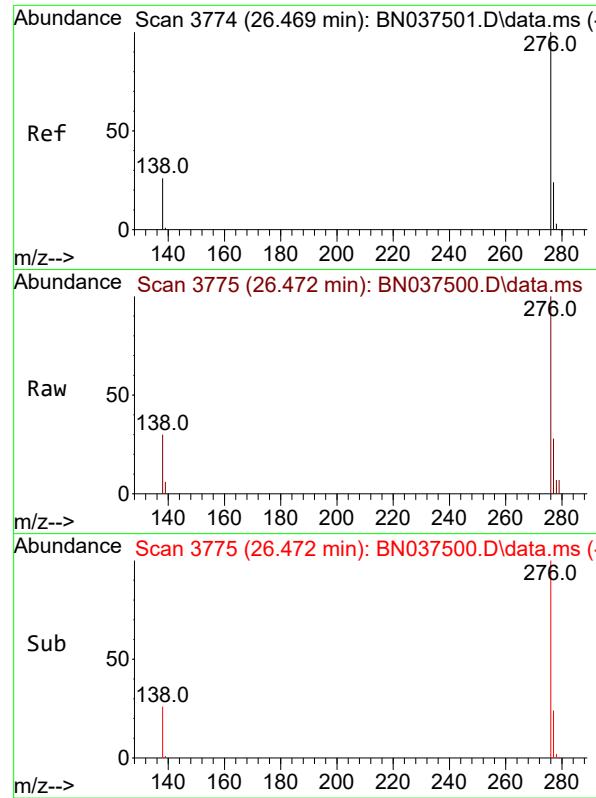
Tgt Ion:252 Resp: 3225  
Ion Ratio Lower Upper  
252 100  
253 27.8 19.9 29.9  
125 24.7 15.2 22.8#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.181 ng  
RT: 25.803 min Scan# 3546  
Delta R.T. 0.003 min  
Lab File: BN037500.D  
Acq: 15 Jul 2025 13:12

Tgt Ion:278 Resp: 3411  
Ion Ratio Lower Upper  
278 100  
139 26.4 17.5 26.3#  
279 28.6 21.3 31.9

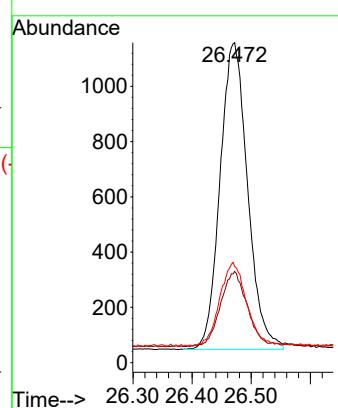




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.184 ng  
 RT: 26.472 min Scan# 3  
 Delta R.T. 0.003 min  
 Lab File: BN037500.D  
 Acq: 15 Jul 2025 13:12

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

Tgt Ion:276 Resp: 3591  
 Ion Ratio Lower Upper  
 276 100  
 277 28.5 20.9 31.3  
 138 30.1 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037501.D  
 Acq On : 15 Jul 2025 13:49  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDICCC0.4**

Quant Time: Jul 15 17:26:37 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

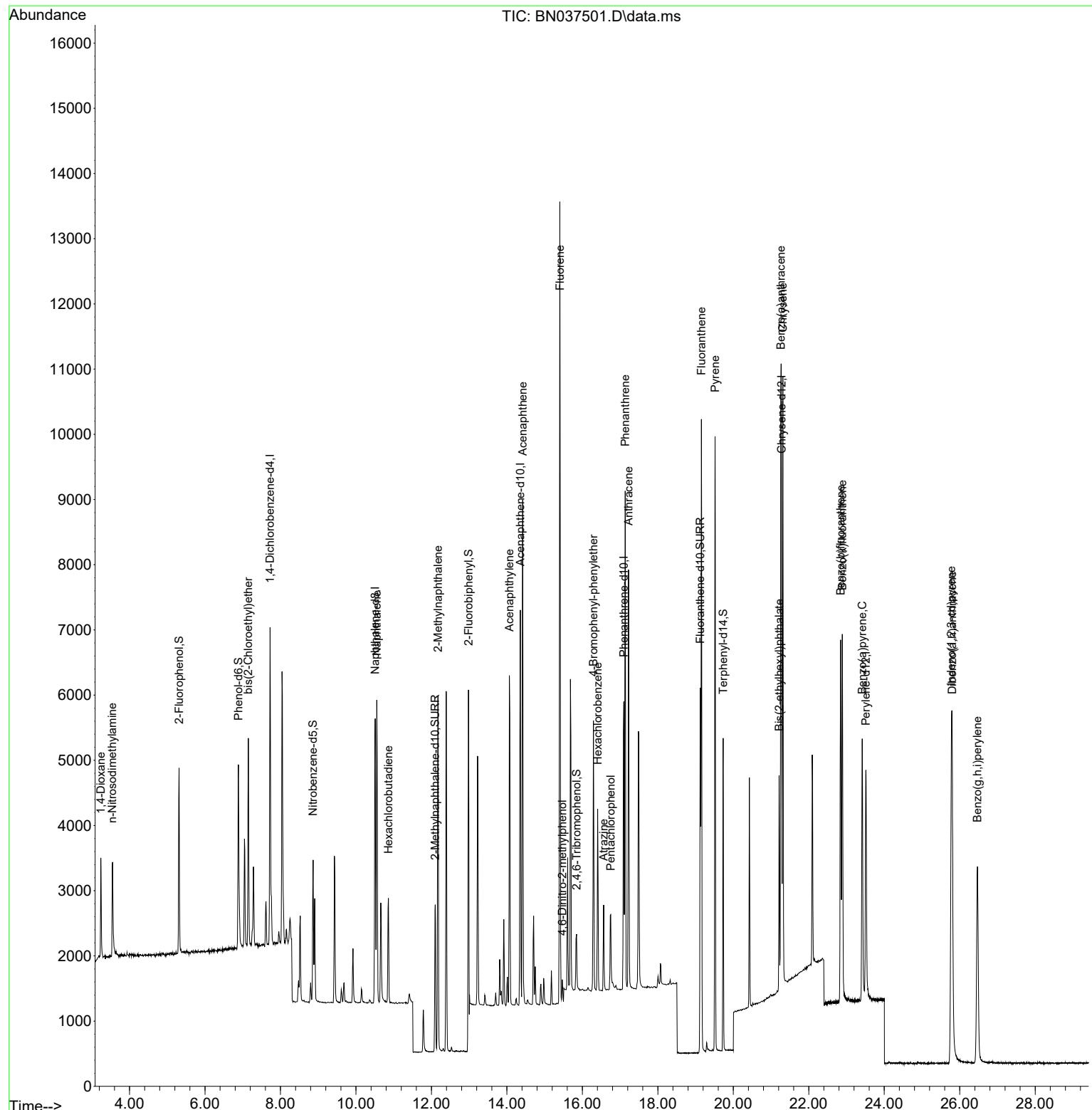
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2287	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5836	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3328	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	6474	0.400	ng	0.00
29) Chrysene-d12	21.277	240	5210	0.400	ng	0.00
35) Perylene-d12	23.513	264	4807	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	2253	0.398	ng	0.00
5) Phenol-d6	6.887	99	2721	0.384	ng	0.00
8) Nitrobenzene-d5	8.865	82	1650	0.378	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	3156	0.377	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	576	0.352	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	6806	0.393	ng	0.00
27) Fluoranthene-d10	19.127	212	6230	0.363	ng	0.00
31) Terphenyl-d14	19.731	244	4396	0.393	ng	0.00
<b>Target Compounds</b>						
					<b>Qvalue</b>	
2) 1,4-Dioxane	3.239	88	904	0.411	ng	100
3) n-Nitrosodimethylamine	3.543	42	1061	0.384	ng	99
6) bis(2-Chloroethyl)ether	7.147	93	2342	0.397	ng	100
9) Naphthalene	10.552	128	6104	0.392	ng	100
10) Hexachlorobutadiene	10.861	225	1371	0.399	ng	# 100
12) 2-Methylnaphthalene	12.172	142	3956	0.387	ng	100
16) Acenaphthylene	14.067	152	5722	0.384	ng	100
17) Acenaphthene	14.420	154	3900	0.385	ng	100
18) Fluorene	15.403	166	4943	0.379	ng	100
20) 4,6-Dinitro-2-methylph...	15.467	198	268	0.396	ng	100
21) 4-Bromophenyl-phenylether	16.292	248	1574	0.379	ng	100
22) Hexachlorobenzene	16.404	284	2126	0.397	ng	100
23) Atrazine	16.565	200	1027	0.355	ng	100
24) Pentachlorophenol	16.751	266	812	0.338	ng	100
25) Phenanthrene	17.136	178	7511	0.387	ng	100
26) Anthracene	17.223	178	6557	0.370	ng	100
28) Fluoranthene	19.155	202	8352	0.373	ng	100
30) Pyrene	19.517	202	8375	0.399	ng	100
32) Benzo(a)anthracene	21.259	228	6989	0.383	ng	100
33) Chrysene	21.313	228	7472	0.393	ng	100
34) Bis(2-ethylhexyl)phtha...	21.214	149	2941	0.358	ng	100
36) Indeno(1,2,3-cd)pyrene	25.779	276	7280	0.364	ng	100
37) Benzo(b)fluoranthene	22.844	252	6988	0.383	ng	100
38) Benzo(k)fluoranthene	22.888	252	7143	0.379	ng	100
39) Benzo(a)pyrene	23.417	252	5731	0.376	ng	100
40) Dibenzo(a,h)anthracene	25.800	278	5845	0.360	ng	100
41) Benzo(g,h,i)perylene	26.469	276	6293	0.375	ng	100

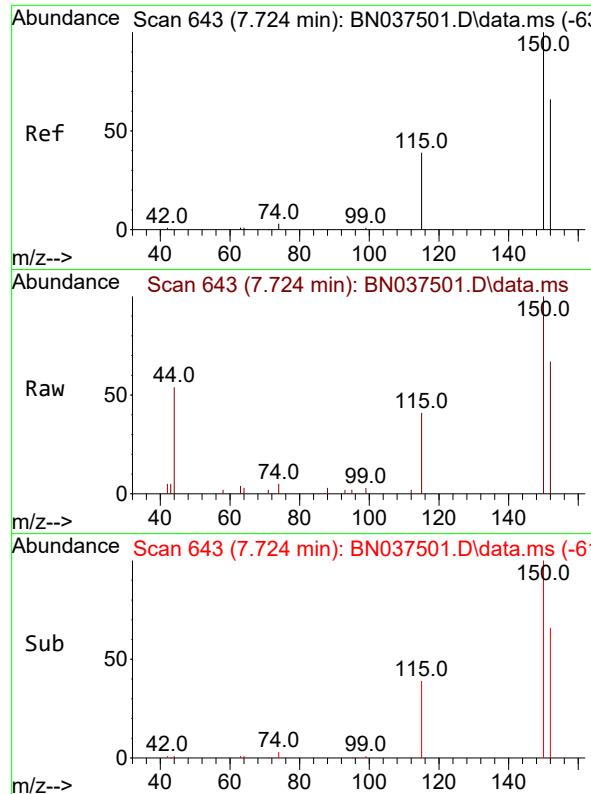
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037501.D  
 Acq On : 15 Jul 2025 13:49  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

Quant Time: Jul 15 17:26:37 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

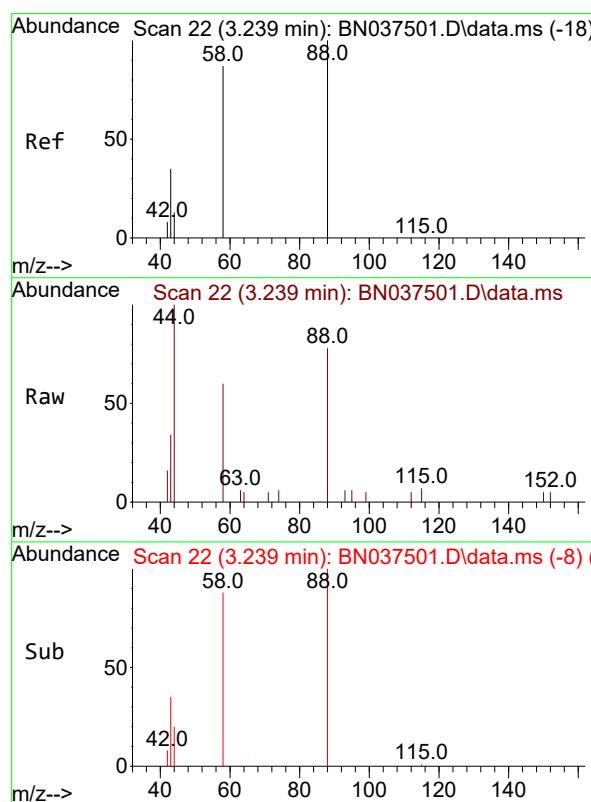
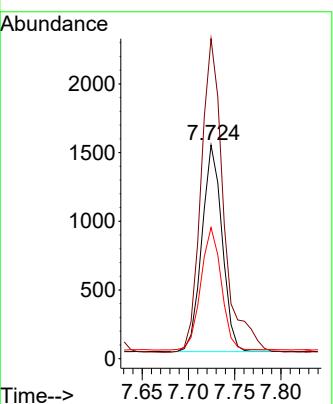




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

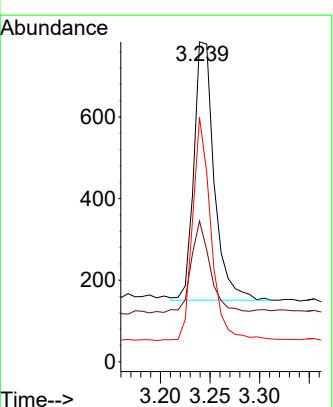
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

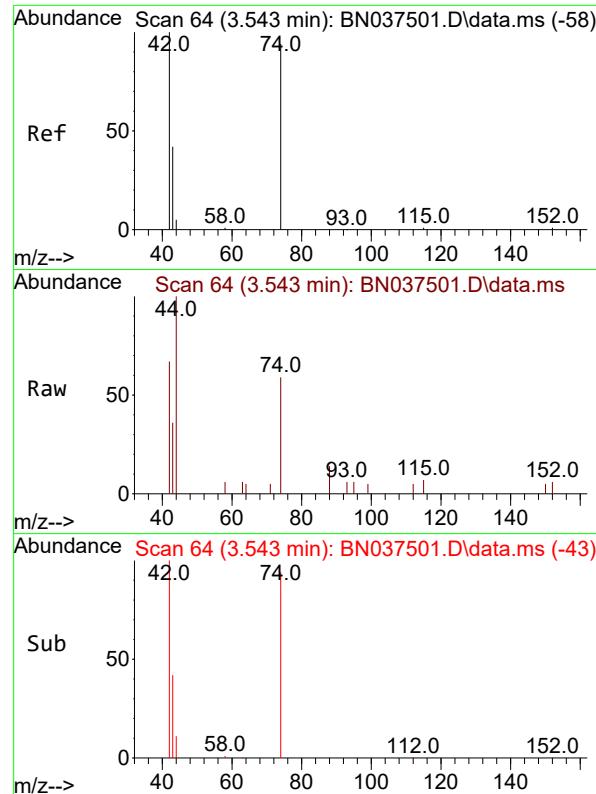
Tgt Ion:152 Resp: 2287  
Ion Ratio Lower Upper  
152 100  
150 149.8 119.8 179.8  
115 61.4 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.411 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion: 88 Resp: 904  
Ion Ratio Lower Upper  
88 100  
43 34.4 27.5 41.3  
58 78.3 62.7 94.1

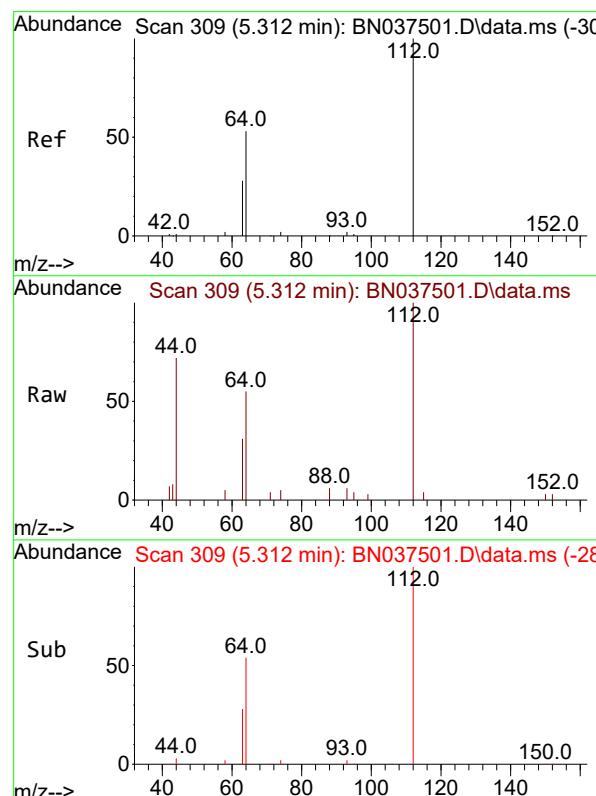
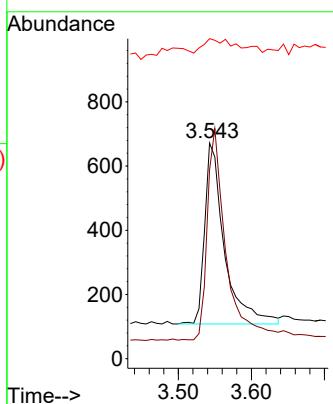




#3  
n-Nitrosodimethylamine  
Concen: 0.384 ng  
RT: 3.543 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

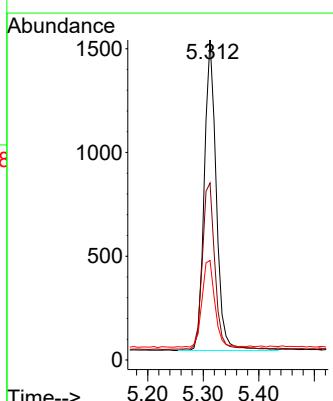
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

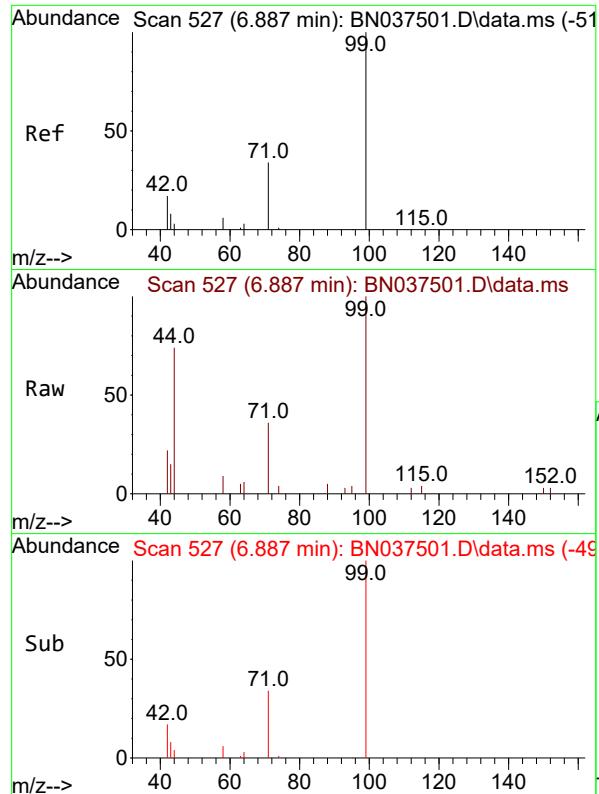
Tgt Ion: 42 Resp: 1061  
Ion Ratio Lower Upper  
42 100  
74 113.4 91.8 137.6  
44 18.8 15.0 22.6



#4  
2-Fluorophenol  
Concen: 0.398 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion: 112 Resp: 2253  
Ion Ratio Lower Upper  
112 100  
64 56.4 45.1 67.7  
63 29.8 23.8 35.8

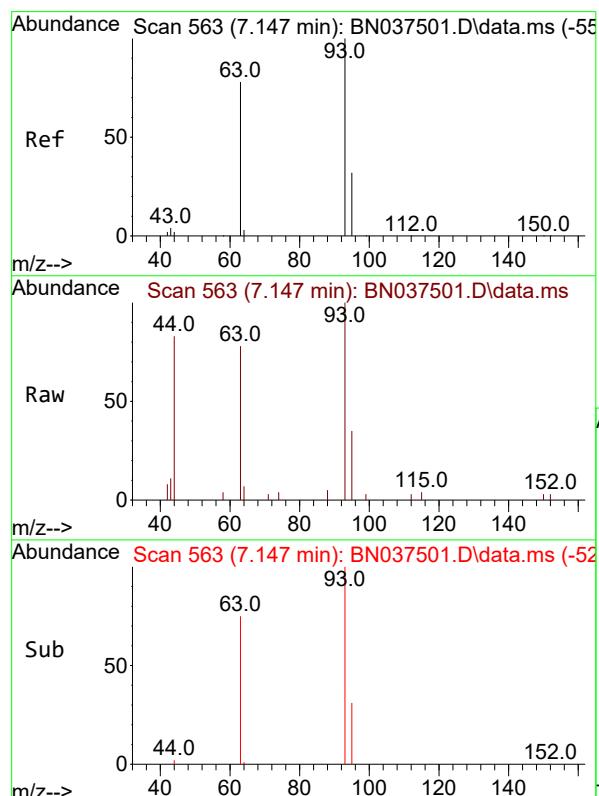
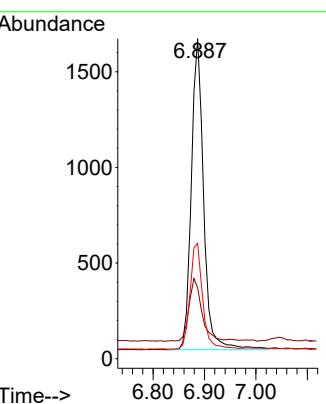




#5  
 Phenol-d6  
 Concen: 0.384 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

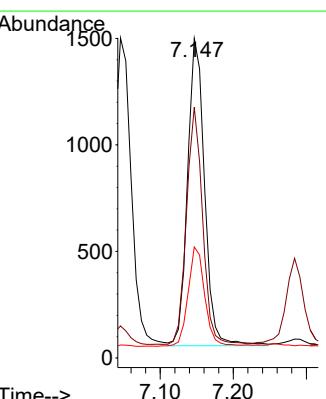
Instrument : BNA\_N  
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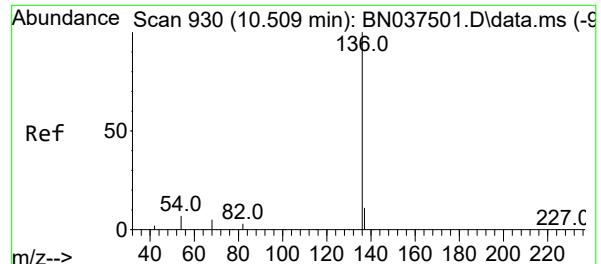
Tgt Ion: 99 Resp: 2721  
 Ion Ratio Lower Upper  
 99 100  
 42 21.4 17.1 25.7  
 71 34.8 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.397 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

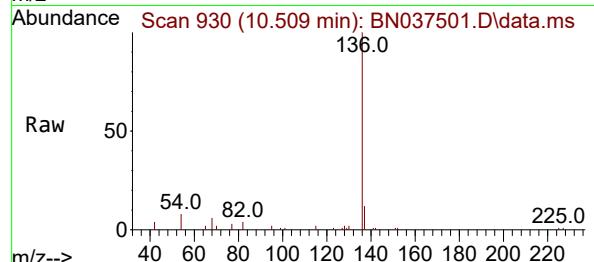
Tgt Ion: 93 Resp: 2342  
 Ion Ratio Lower Upper  
 93 100  
 63 72.8 58.2 87.4  
 95 31.6 25.3 37.9



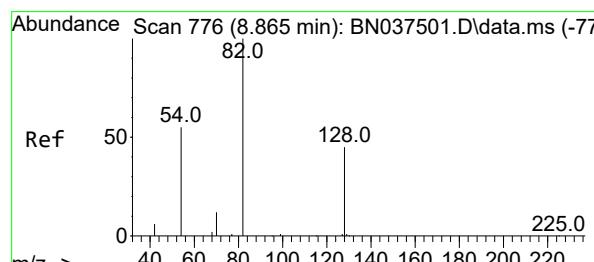
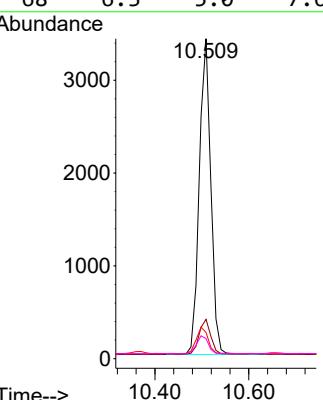
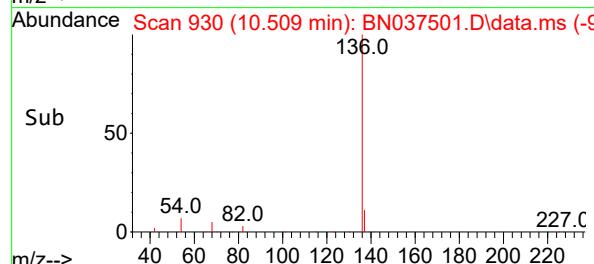


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

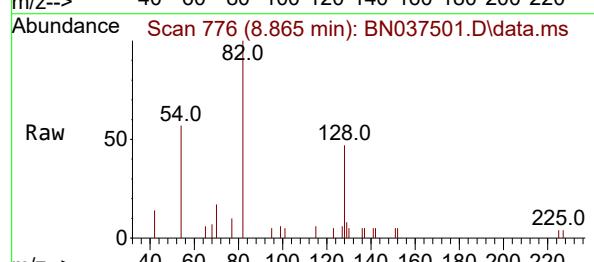
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4



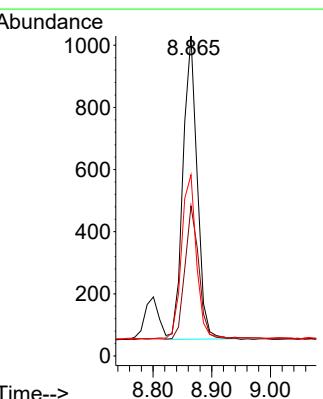
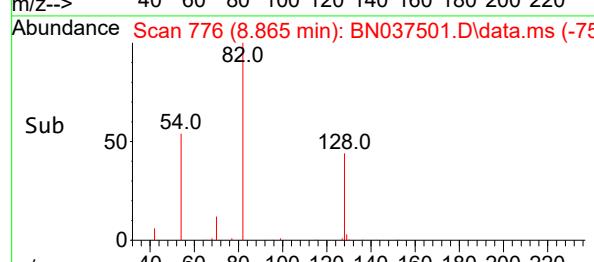
Tgt Ion:136 Resp: 5836  
 Ion Ratio Lower Upper  
 136 100  
 137 12.3 9.8 14.8  
 54 8.2 6.6 9.8  
 68 6.3 5.0 7.6

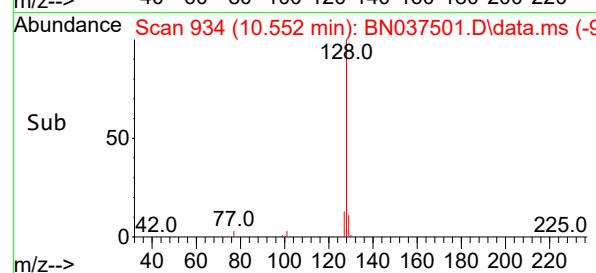
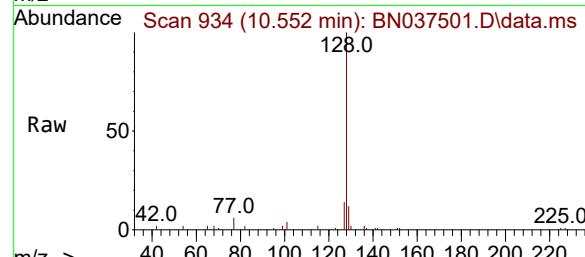
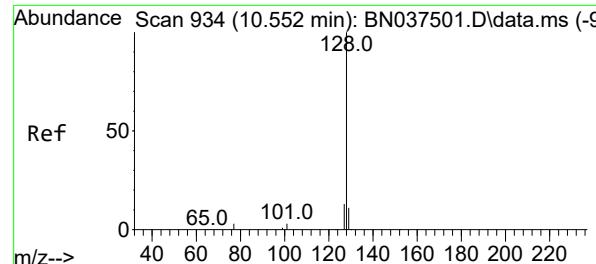


#8  
 Nitrobenzene-d5  
 Concen: 0.378 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49



Tgt Ion: 82 Resp: 1650  
 Ion Ratio Lower Upper  
 82 100  
 128 46.9 37.5 56.3  
 54 56.6 45.3 67.9





#9

Naphthalene

Concen: 0.392 ng

RT: 10.552 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion:128 Resp: 6104

Ion Ratio Lower Upper

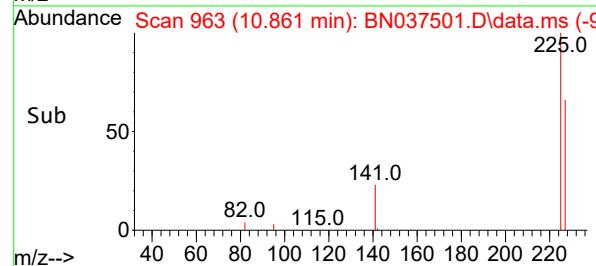
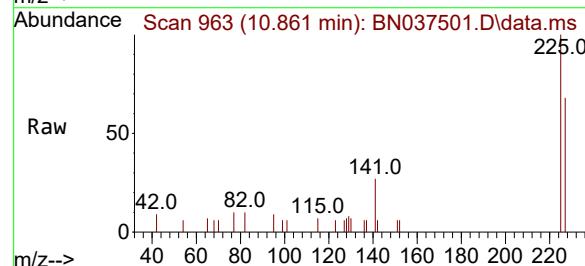
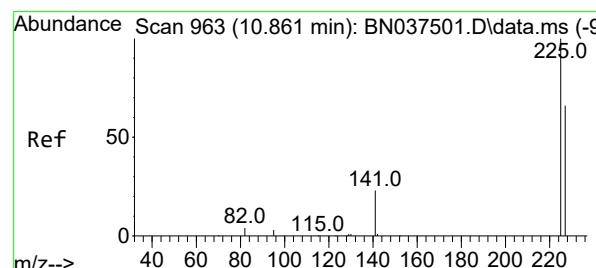
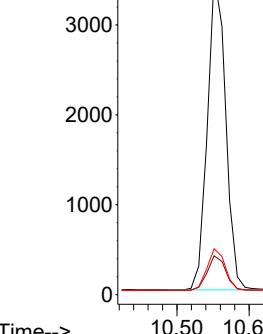
128 100

129 12.1 9.7 14.5

127 14.4 11.5 17.3

Abundance

10.552



#10

Hexachlorobutadiene

Concen: 0.399 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Tgt Ion:225 Resp: 1371

Ion Ratio Lower Upper

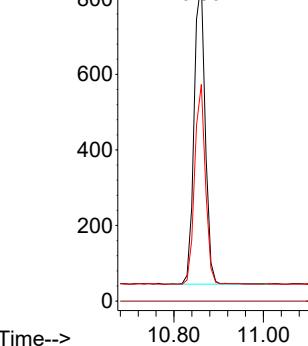
225 100

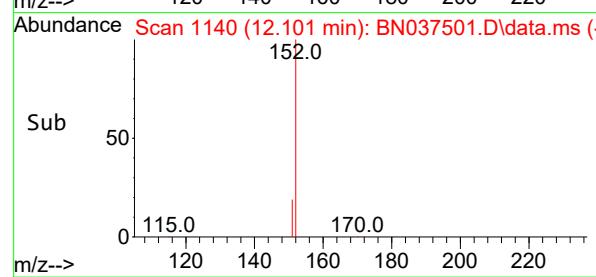
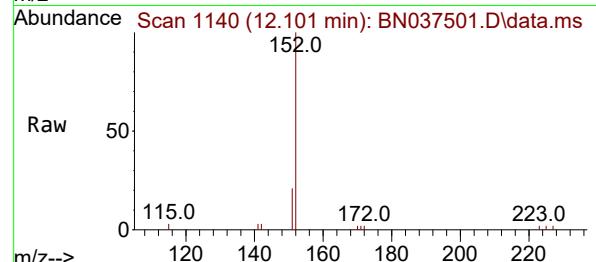
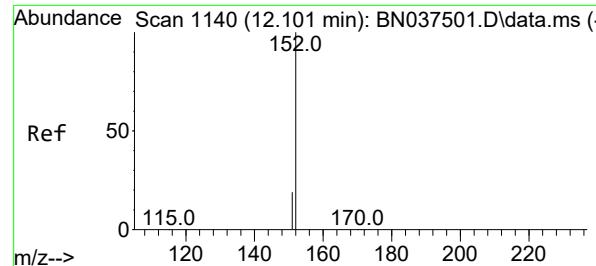
223 0.0 0.0 0.0

227 63.7 51.0 76.4

Abundance

10.861





#11

2-Methylnaphthalene-d10

Concen: 0.377 ng

RT: 12.101 min Scan# 1140

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

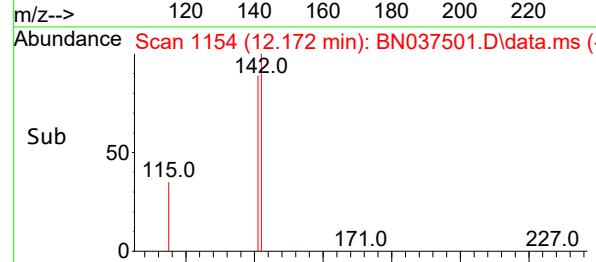
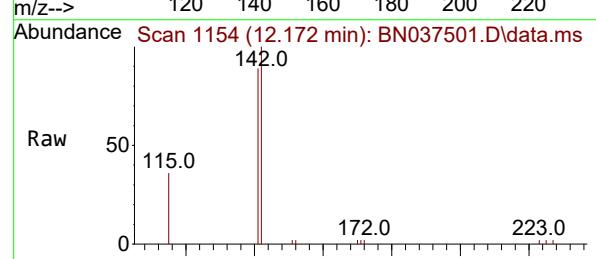
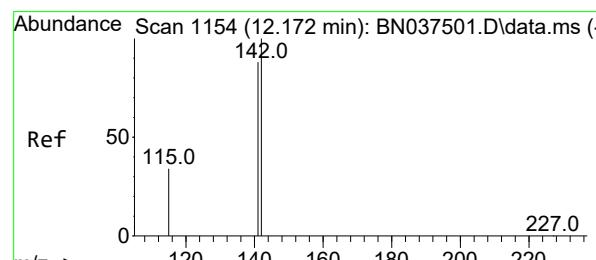
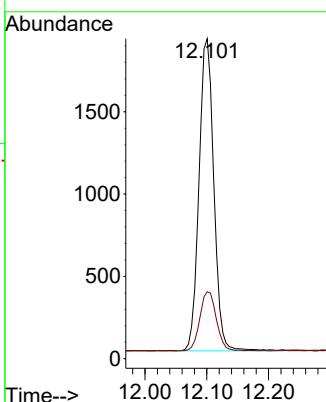
SSTDICCC0.4

Tgt Ion:152 Resp: 3156

Ion Ratio Lower Upper

152 100

151 21.0 16.8 25.2



#12

2-Methylnaphthalene

Concen: 0.387 ng

RT: 12.172 min Scan# 1154

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

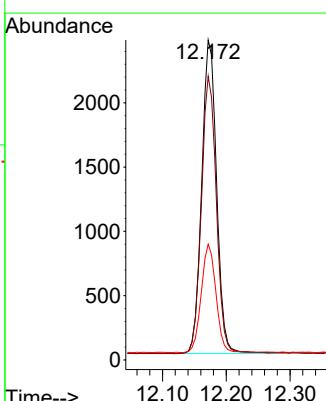
Tgt Ion:142 Resp: 3956

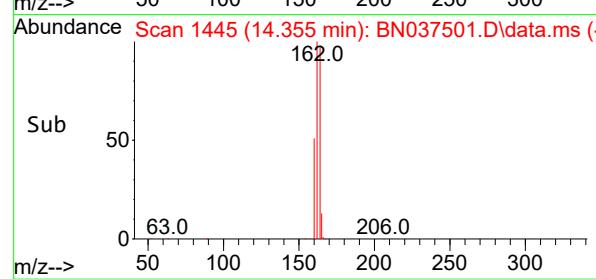
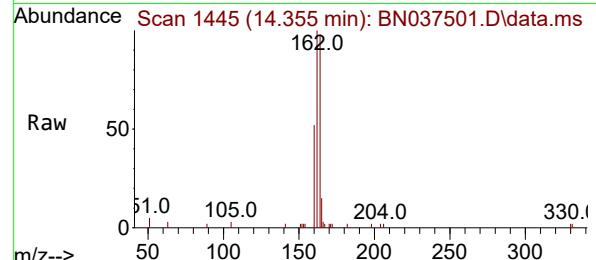
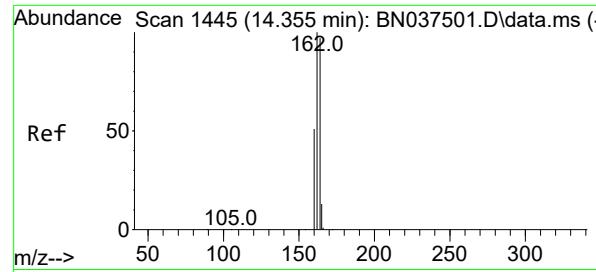
Ion Ratio Lower Upper

142 100

141 88.7 71.0 106.4

115 36.2 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion:164 Resp: 3328

Ion Ratio Lower Upper

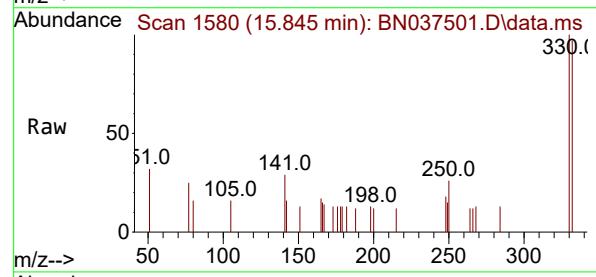
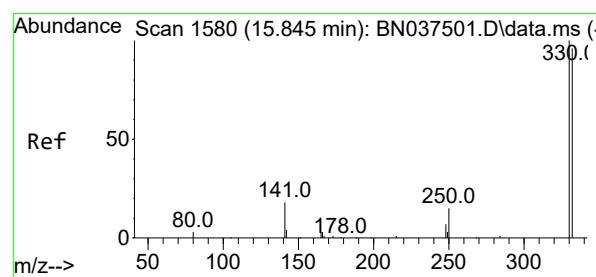
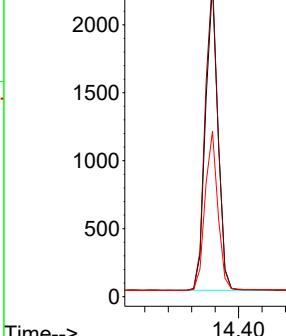
164 100

162 102.5 82.0 123.0

160 53.0 42.4 63.6

Abundance

14.355



#14

2,4,6-Tribromophenol

Concen: 0.352 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Tgt Ion:330 Resp: 576

Ion Ratio Lower Upper

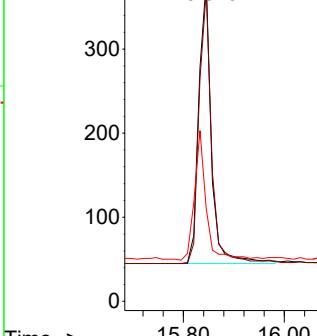
330 100

332 95.1 76.1 114.1

141 41.7 33.4 50.0

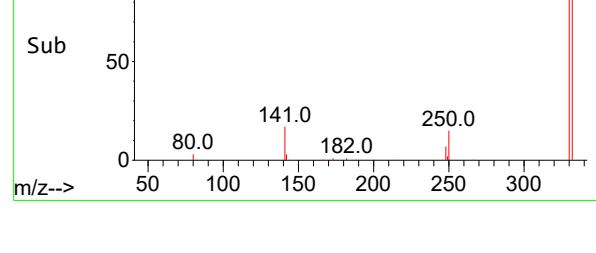
Abundance

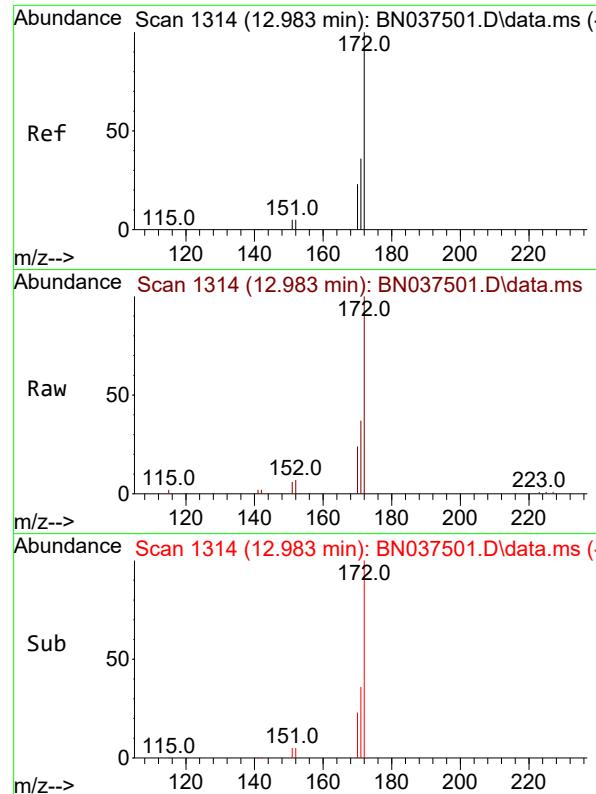
15.845



Abundance Scan 1580 (15.845 min): BN037501.D\data.ms (-)

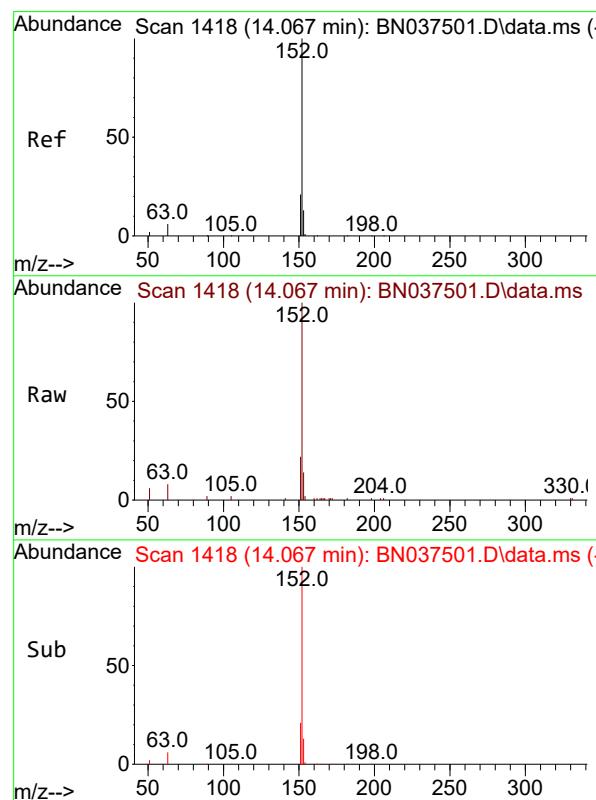
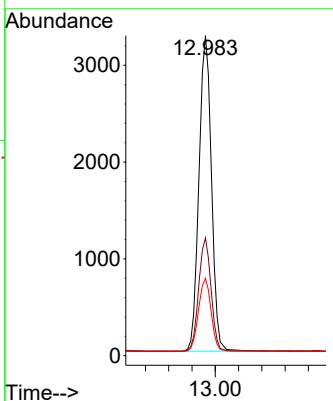
330.0





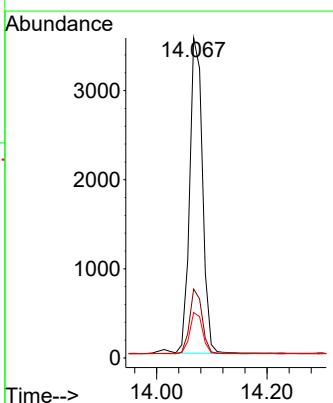
#15  
2-Fluorobiphenyl  
Concen: 0.393 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037501.D ClientSampleId : SSTDICCC0.4  
Acq: 15 Jul 2025 13:49

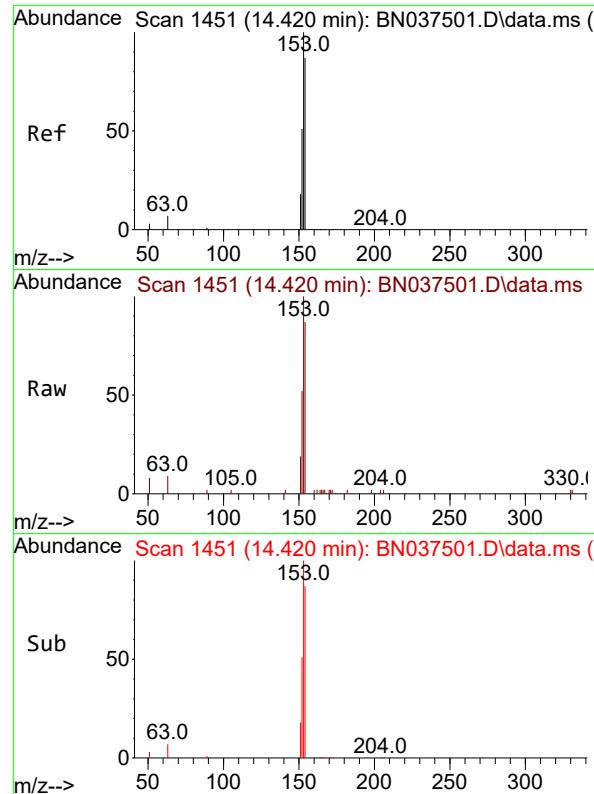
Tgt Ion:172 Resp: 6806  
Ion Ratio Lower Upper  
172 100  
171 36.8 29.4 44.2  
170 24.2 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.384 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:152 Resp: 5722  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 13.4 10.7 16.1





#17

Acenaphthene

Concen: 0.385 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion:154 Resp: 3900

Ion Ratio Lower Upper

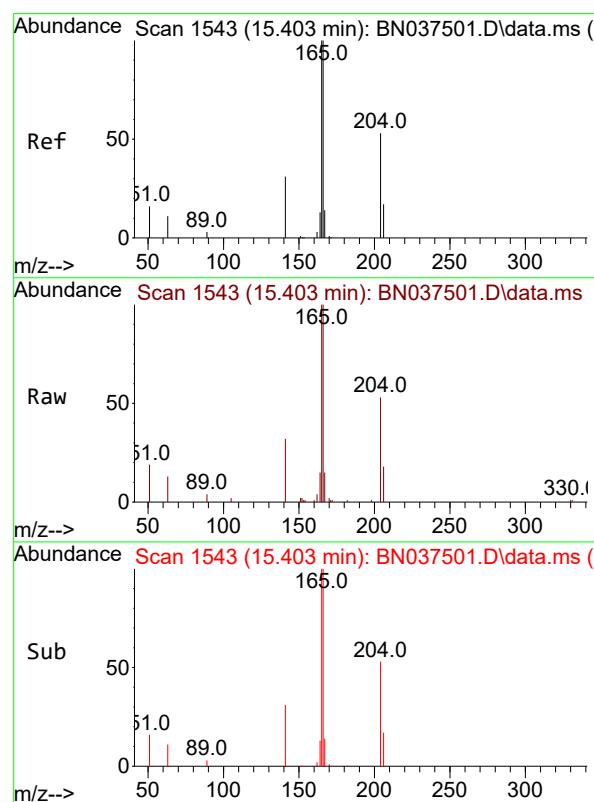
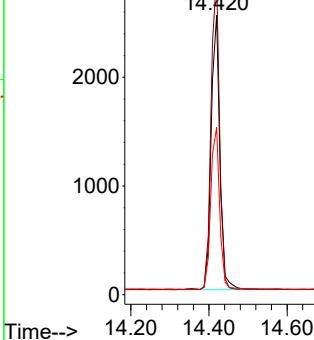
154 100

153 111.5 89.2 133.8

152 60.0 48.0 72.0

Abundance

14.420



#18

Fluorene

Concen: 0.379 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Tgt Ion:166 Resp: 4943

Ion Ratio Lower Upper

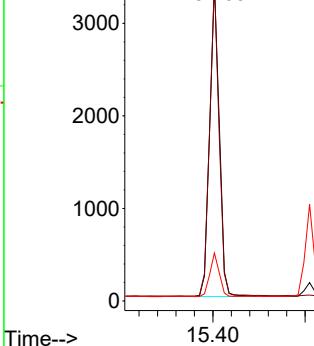
166 100

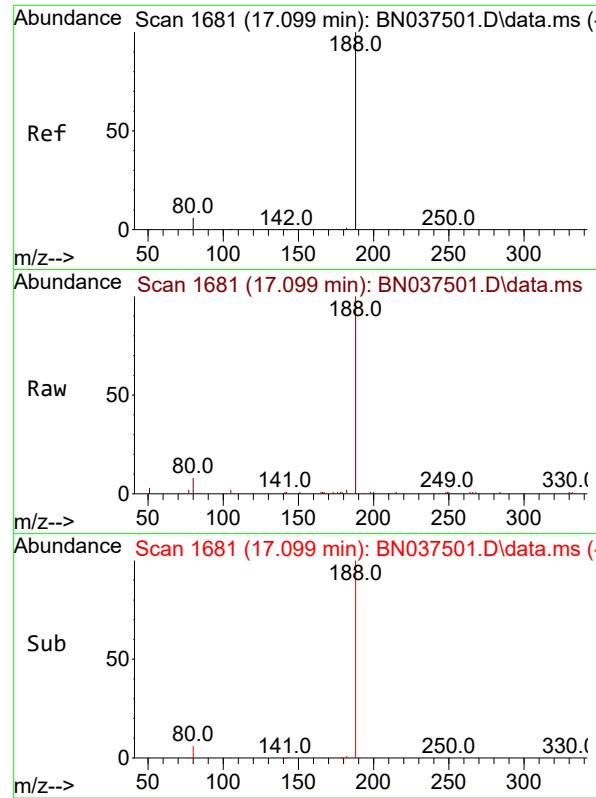
165 97.6 78.1 117.1

167 13.8 11.0 16.6

Abundance

15.403

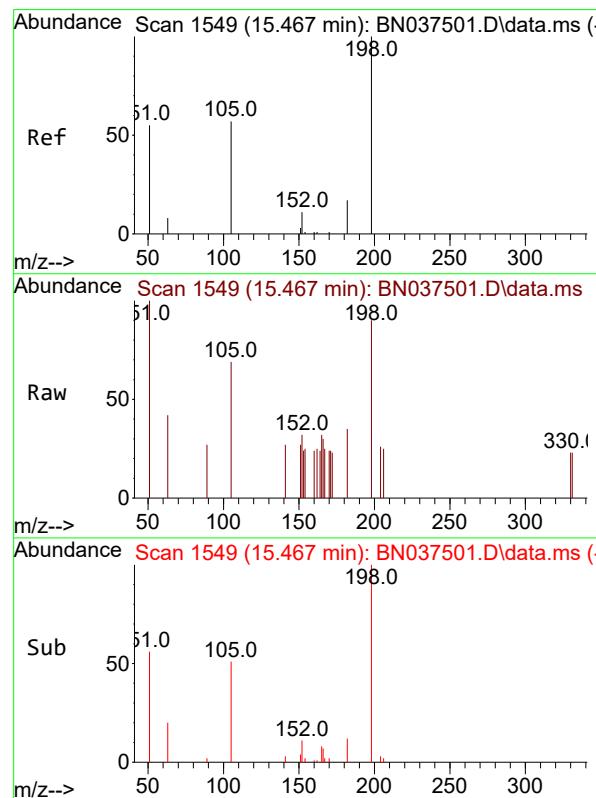
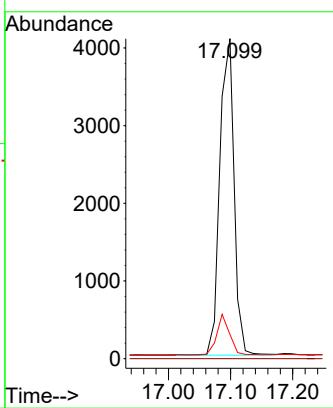




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.099 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

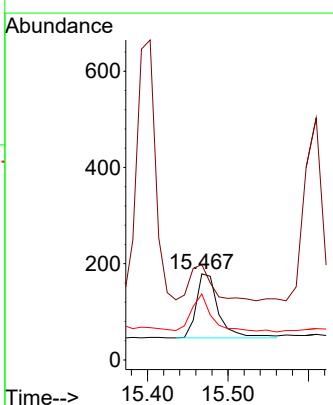
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

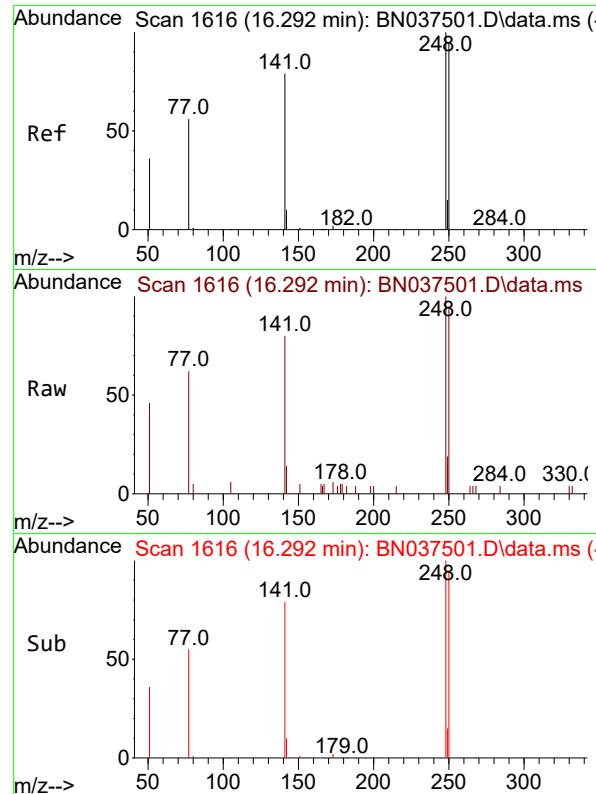
Tgt Ion:188 Resp: 6474  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 7.5 6.0 9.0



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.396 ng  
 RT: 15.467 min Scan# 1549  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion:198 Resp: 268  
 Ion Ratio Lower Upper  
 198 100  
 51 110.6 88.5 132.7  
 105 76.5 61.2 91.8

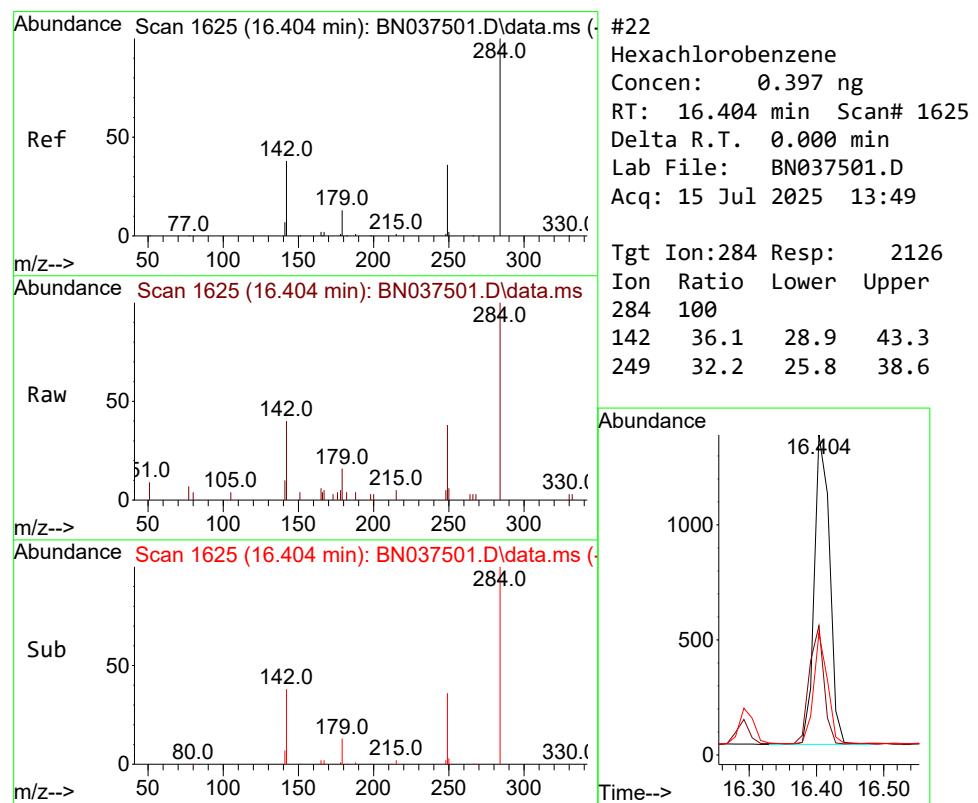
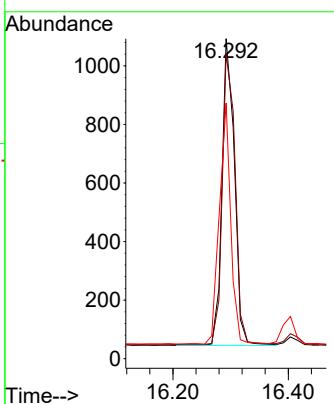




#21  
4-Bromophenyl-phenylether  
Concen: 0.379 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

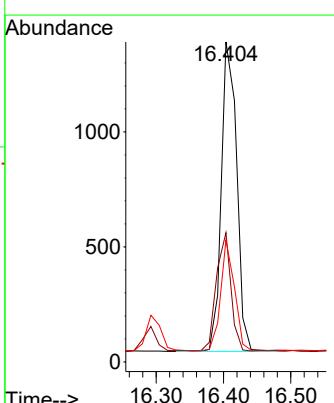
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

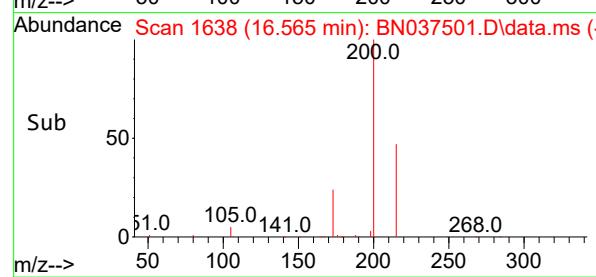
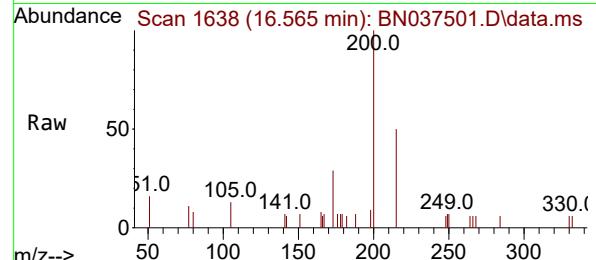
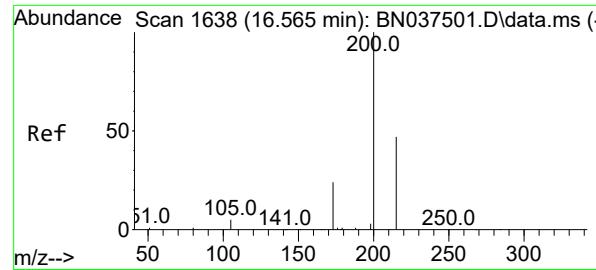
Tgt Ion:248 Resp: 1574  
Ion Ratio Lower Upper  
248 100  
250 95.2 76.2 114.2  
141 79.9 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 0.397 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:284 Resp: 2126  
Ion Ratio Lower Upper  
284 100  
142 36.1 28.9 43.3  
249 32.2 25.8 38.6





#23

Atrazine

Concen: 0.355 ng

RT: 16.565 min Scan# 1638

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

Instrument : BNA\_N

ClientSampleId : SSTDICCC0.4

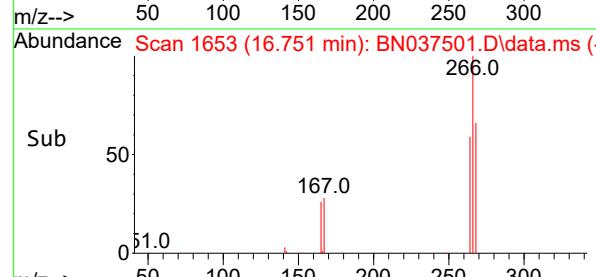
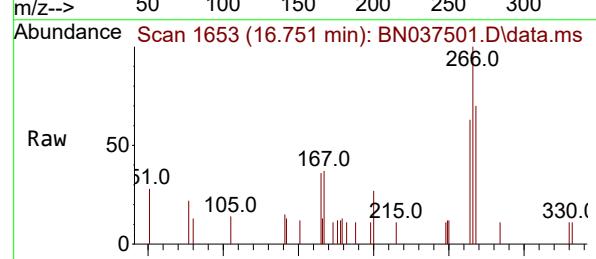
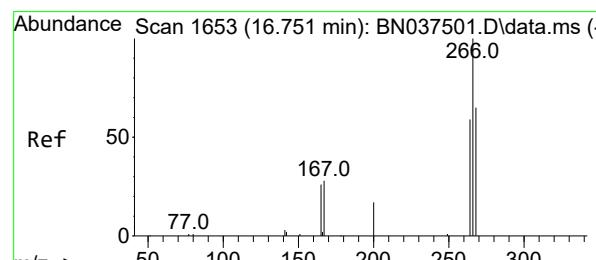
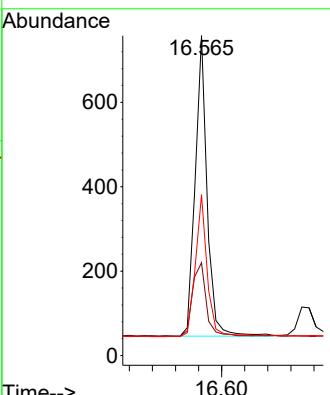
Tgt Ion:200 Resp: 1027

Ion Ratio Lower Upper

200 100

173 29.0 23.2 34.8

215 50.3 40.2 60.4



#24

Pentachlorophenol

Concen: 0.338 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037501.D

Acq: 15 Jul 2025 13:49

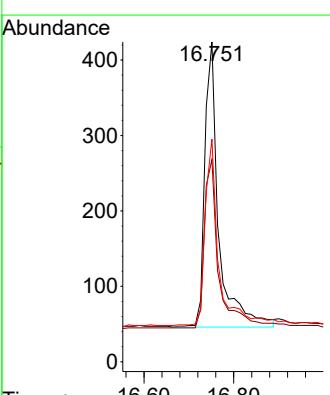
Tgt Ion:266 Resp: 812

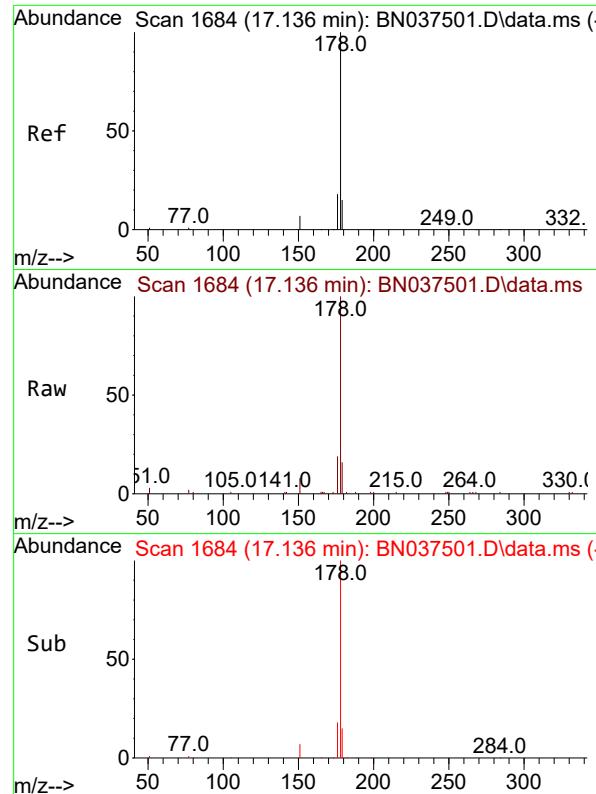
Ion Ratio Lower Upper

266 100

264 61.6 49.3 73.9

268 64.5 51.6 77.4

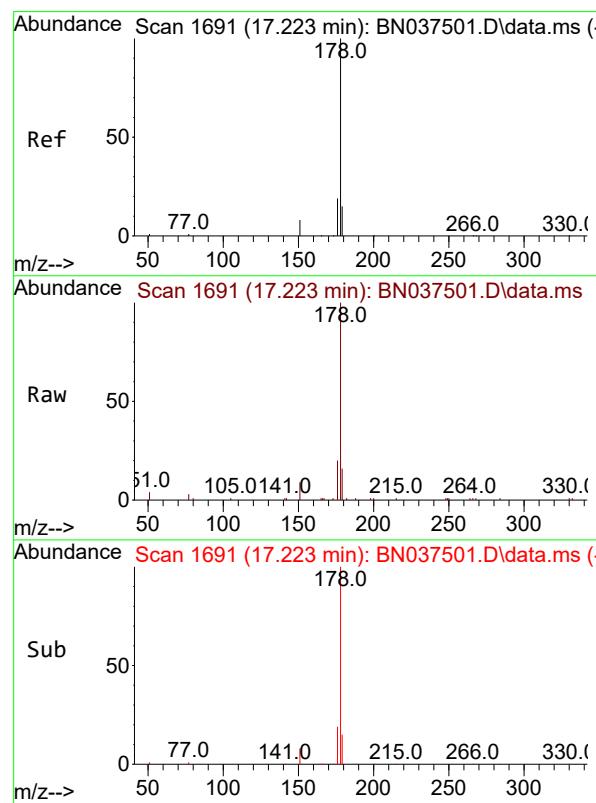
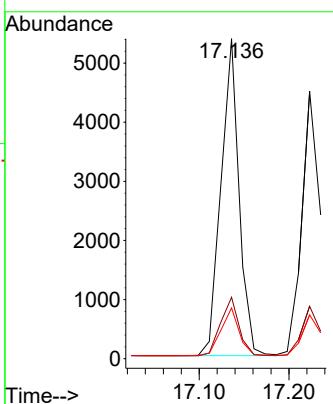




#25  
Phenanthrene  
Concen: 0.387 ng  
RT: 17.136 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

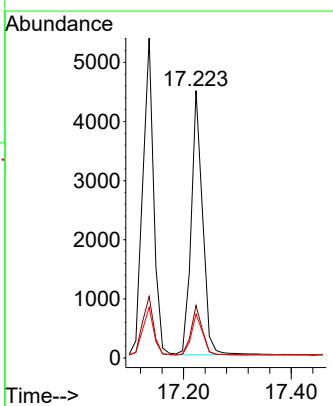
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

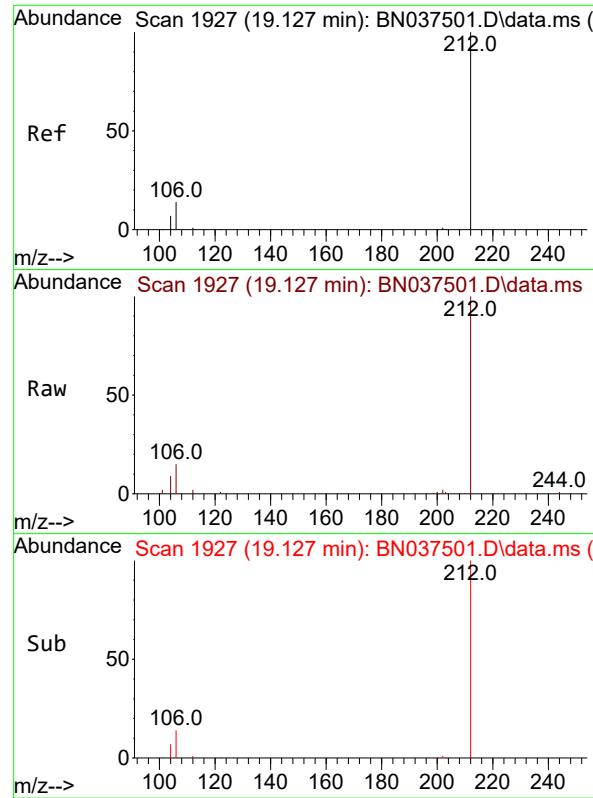
Tgt Ion:178 Resp: 7511  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.0 22.6  
179 15.2 12.2 18.2



#26  
Anthracene  
Concen: 0.370 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:178 Resp: 6557  
Ion Ratio Lower Upper  
178 100  
176 18.4 14.7 22.1  
179 15.4 12.3 18.5

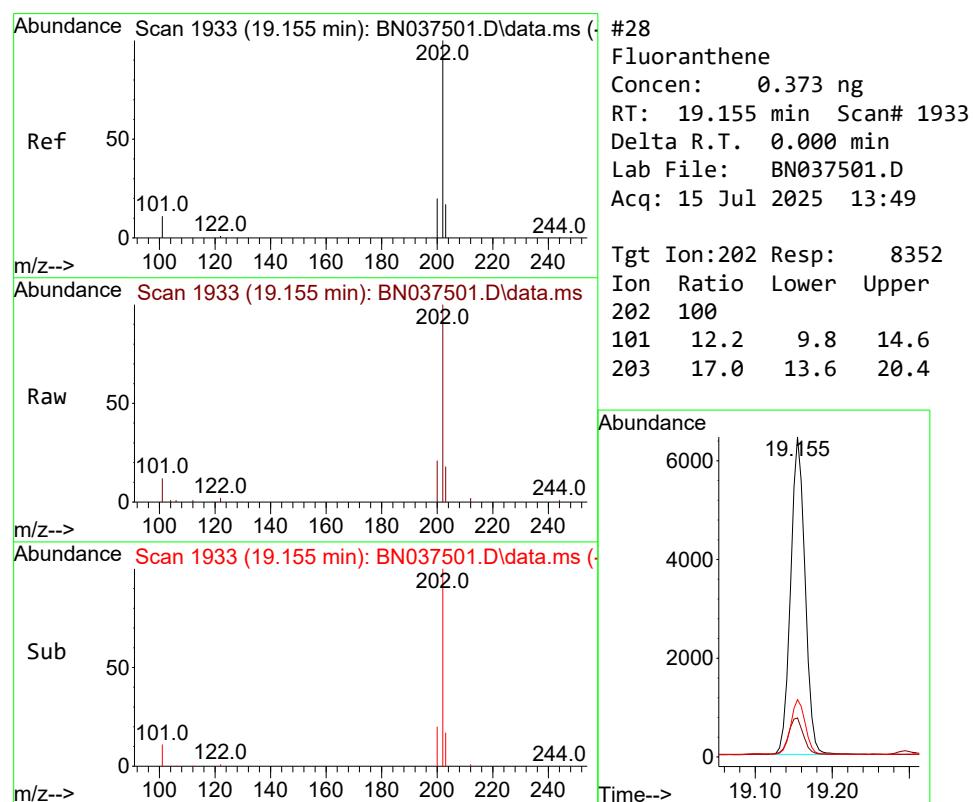
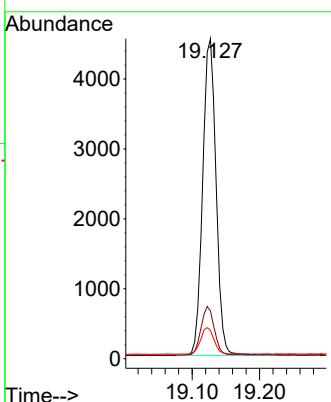




#27  
 Fluoranthene-d10  
 Concen: 0.363 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

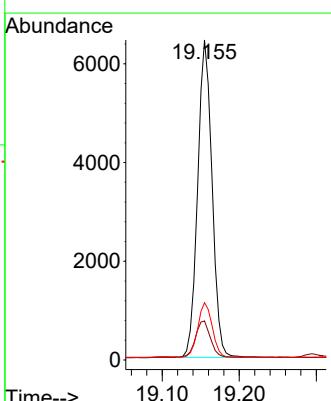
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

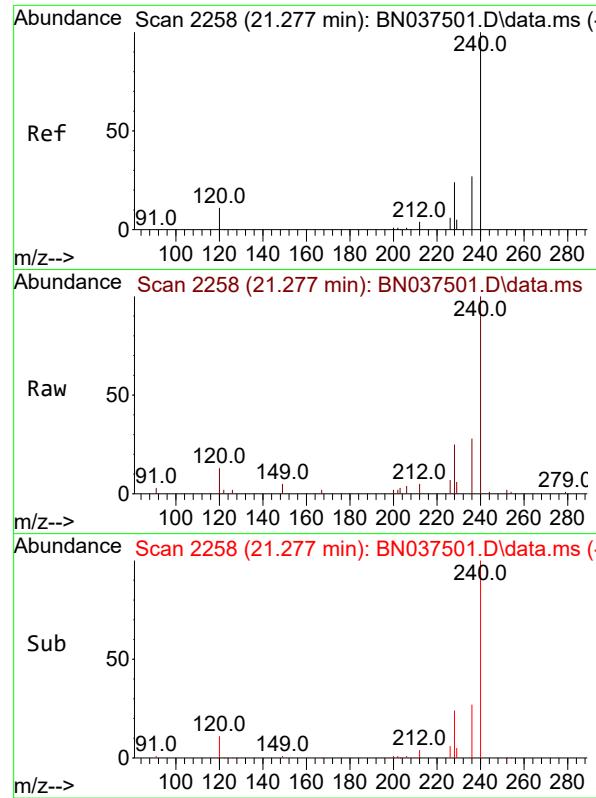
Tgt Ion:212 Resp: 6230  
 Ion Ratio Lower Upper  
 212 100  
 106 15.3 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.373 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037501.D  
 Acq: 15 Jul 2025 13:49

Tgt Ion:202 Resp: 8352  
 Ion Ratio Lower Upper  
 202 100  
 101 12.2 9.8 14.6  
 203 17.0 13.6 20.4

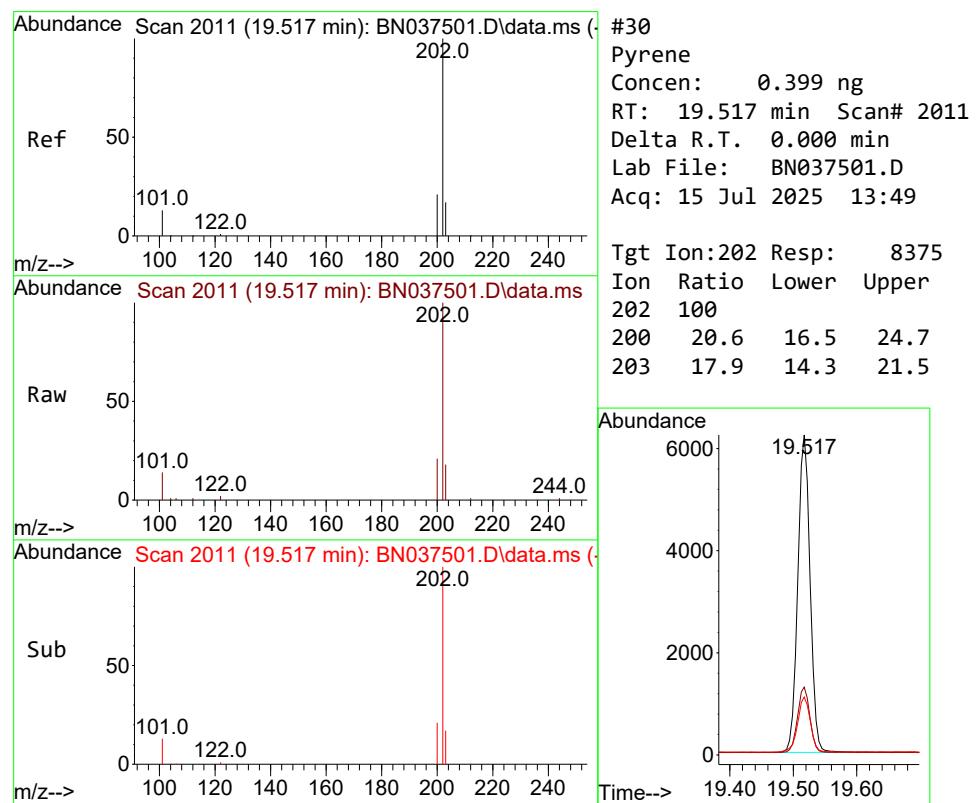
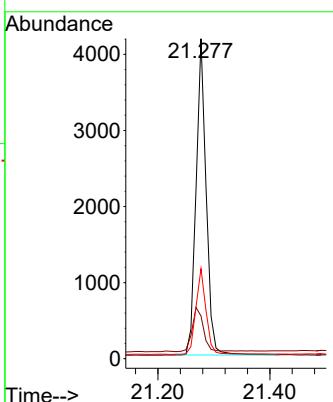




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

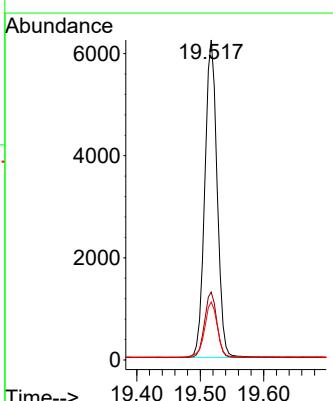
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

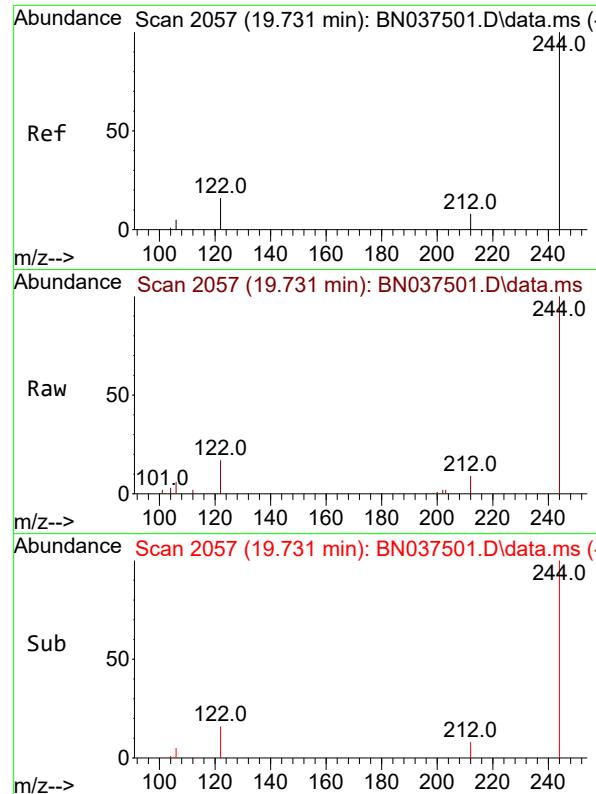
Tgt Ion:240 Resp: 5210  
Ion Ratio Lower Upper  
240 100  
120 13.4 10.7 16.1  
236 28.2 22.6 33.8



#30  
Pyrene  
Concen: 0.399 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

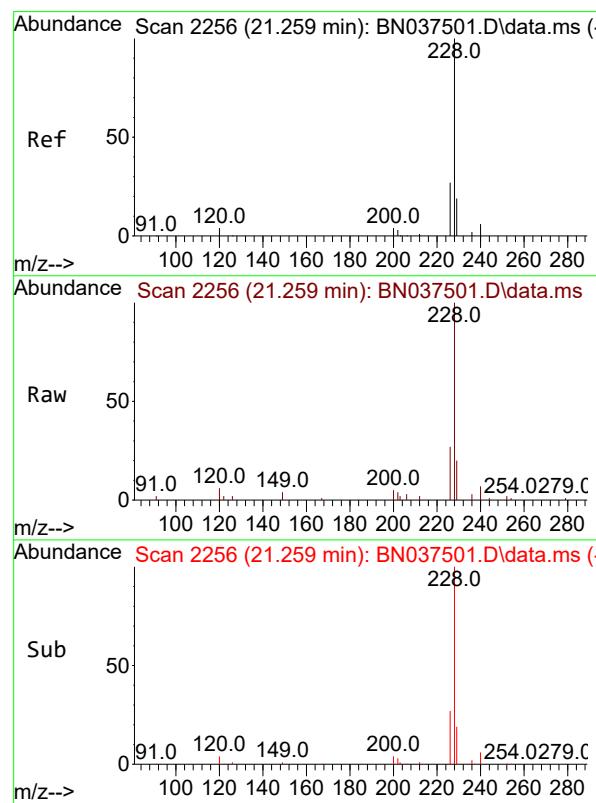
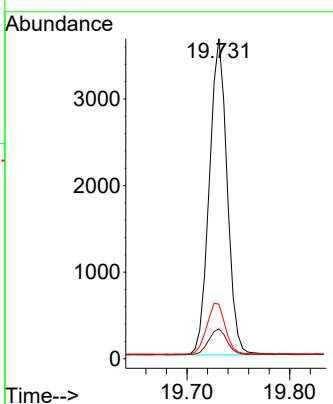
Tgt Ion:202 Resp: 8375  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 17.9 14.3 21.5





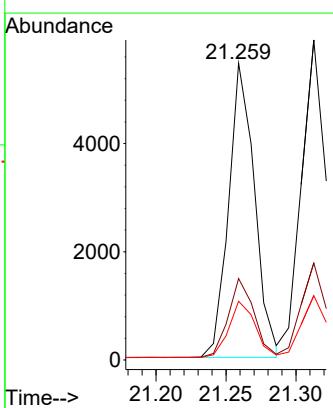
#31  
Terphenyl-d14  
Concen: 0.393 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49  
ClientSampleId : SSTDICCC0.4

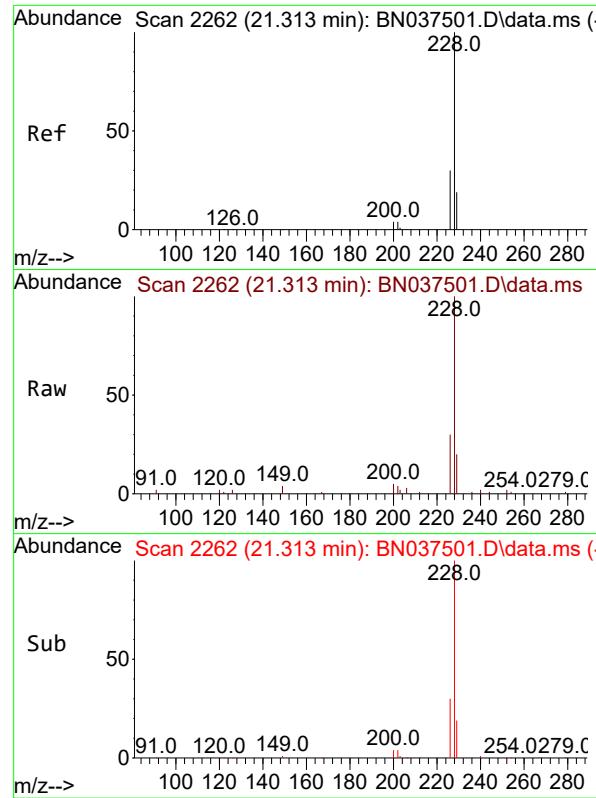
Tgt Ion:244 Resp: 4396  
Ion Ratio Lower Upper  
244 100  
212 9.3 7.4 11.2  
122 17.0 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.383 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:228 Resp: 6989  
Ion Ratio Lower Upper  
228 100  
226 27.4 21.9 32.9  
229 19.8 15.8 23.8

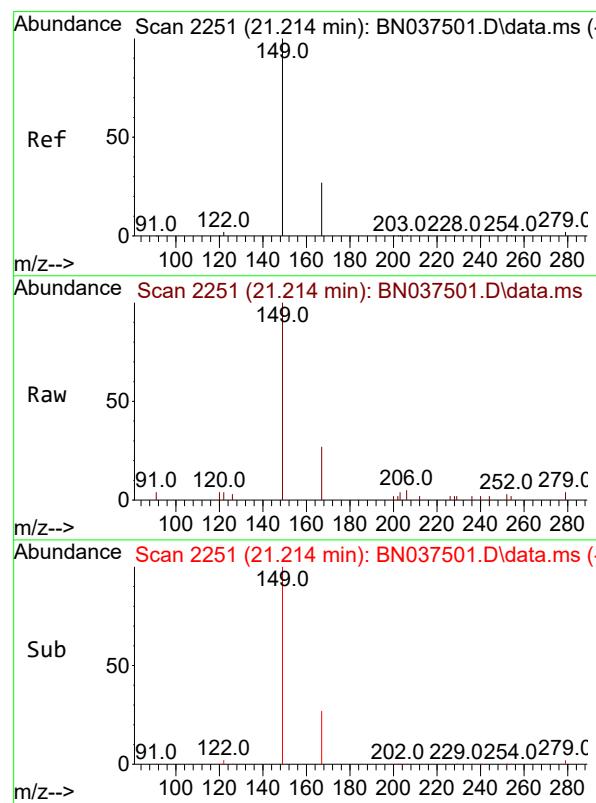
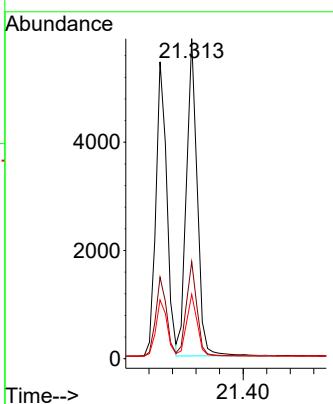




#33  
Chrysene  
Concen: 0.393 ng  
RT: 21.313 min Scan# 21  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

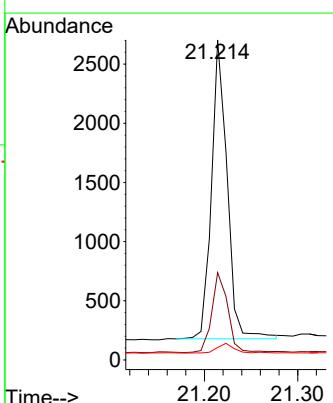
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

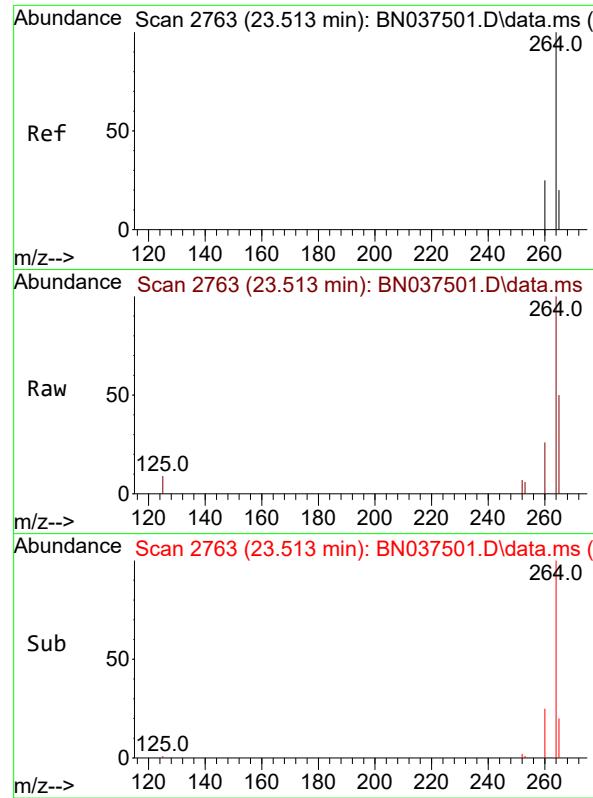
Tgt Ion:228 Resp: 7472  
Ion Ratio Lower Upper  
228 100  
226 30.3 24.2 36.4  
229 20.1 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.358 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:149 Resp: 2941  
Ion Ratio Lower Upper  
149 100  
167 27.3 21.8 32.8  
279 3.7 3.0 4.4

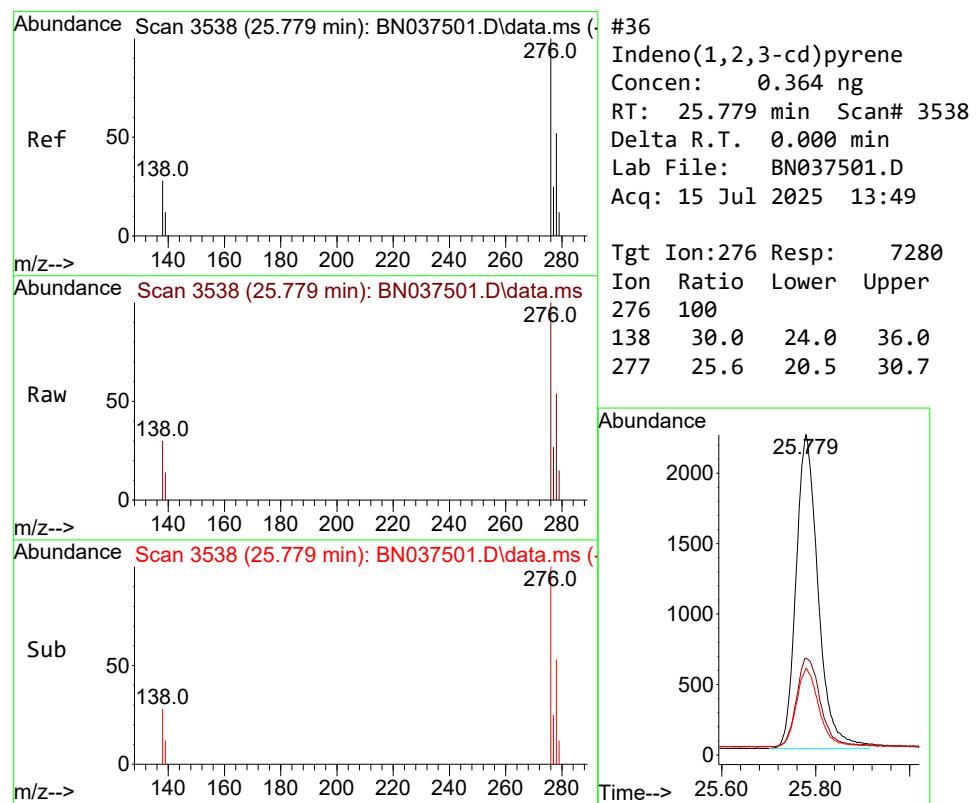
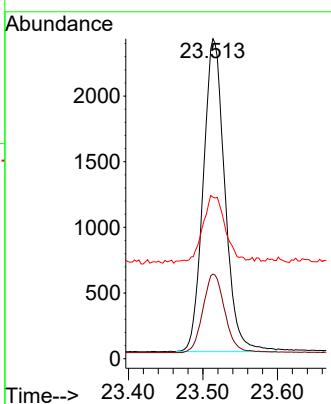




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

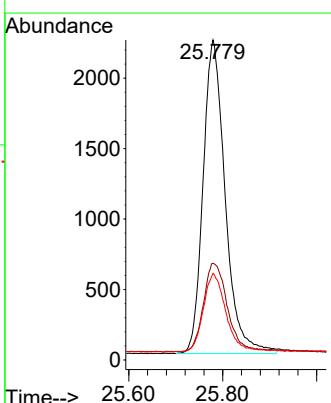
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

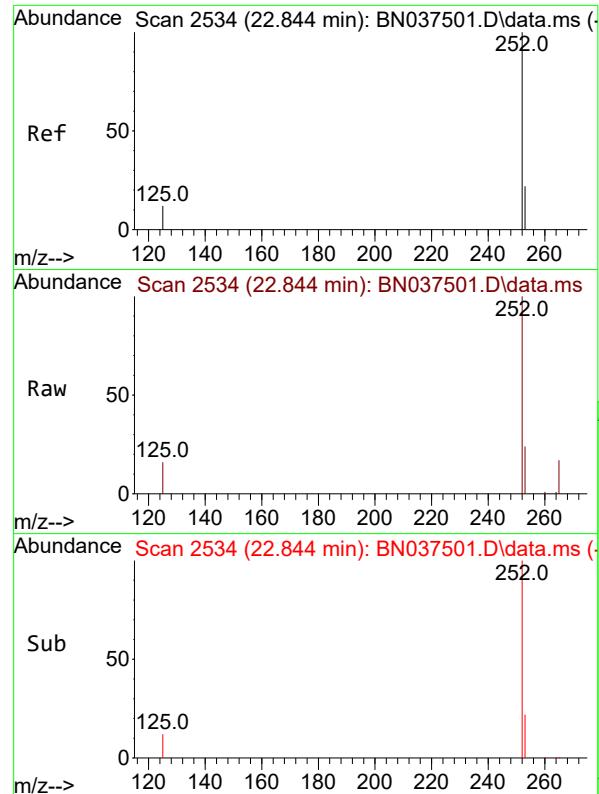
Tgt Ion:264 Resp: 4807  
Ion Ratio Lower Upper  
264 100  
260 26.5 21.2 31.8  
265 50.5 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.364 ng  
RT: 25.779 min Scan# 3538  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

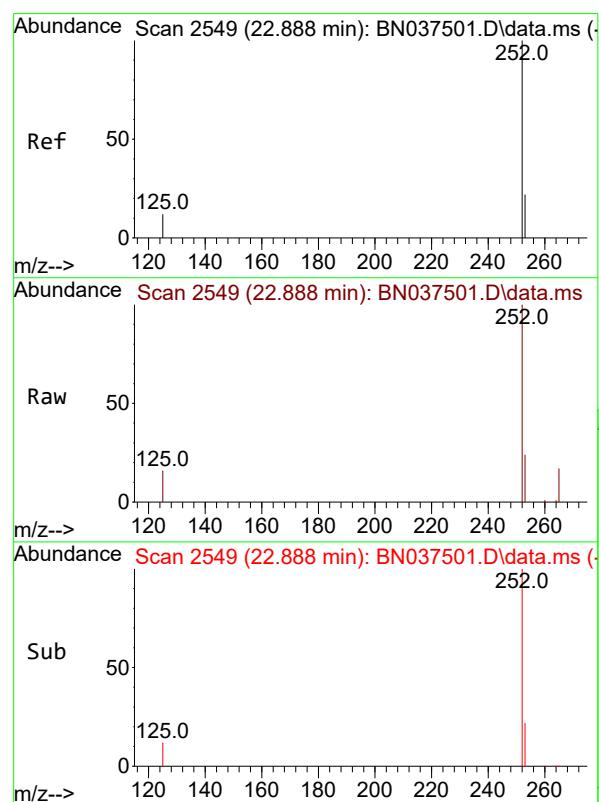
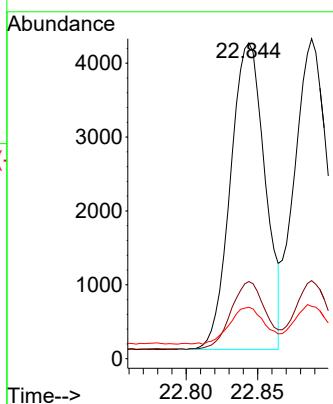
Tgt Ion:276 Resp: 7280  
Ion Ratio Lower Upper  
276 100  
138 30.0 24.0 36.0  
277 25.6 20.5 30.7





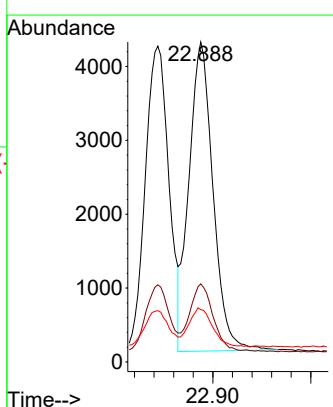
#37  
Benzo(b)fluoranthene  
Concen: 0.383 ng  
RT: 22.844 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49  
ClientSampleId : SSTDICCC0.4

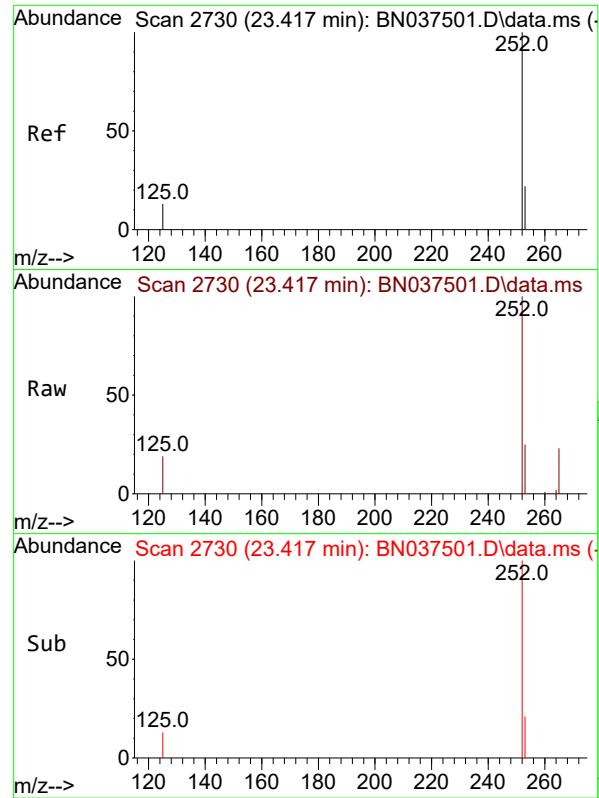
Tgt Ion:252 Resp: 6988  
Ion Ratio Lower Upper  
252 100  
253 24.4 19.5 29.3  
125 16.3 13.0 19.6



#38  
Benzo(k)fluoranthene  
Concen: 0.379 ng  
RT: 22.888 min Scan# 2549  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

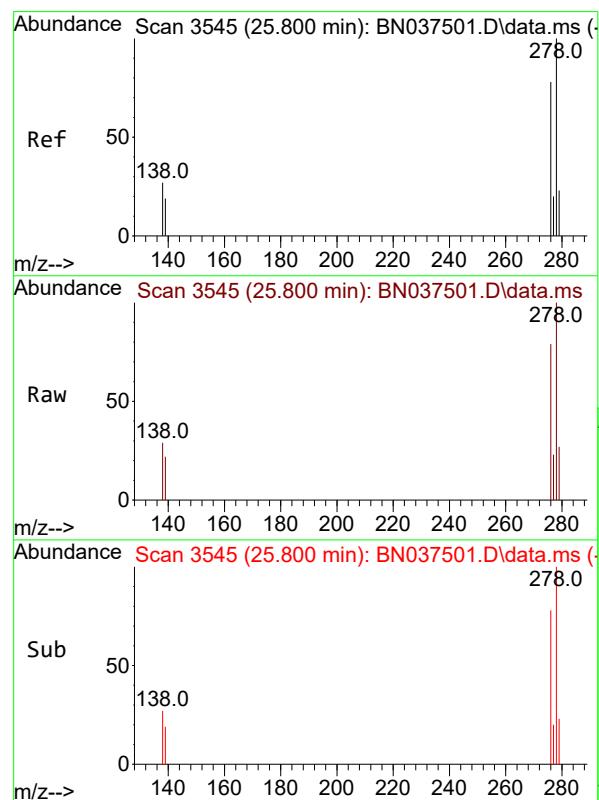
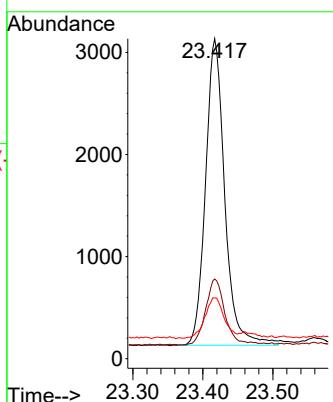
Tgt Ion:252 Resp: 7143  
Ion Ratio Lower Upper  
252 100  
253 24.4 19.5 29.3  
125 16.4 13.1 19.7





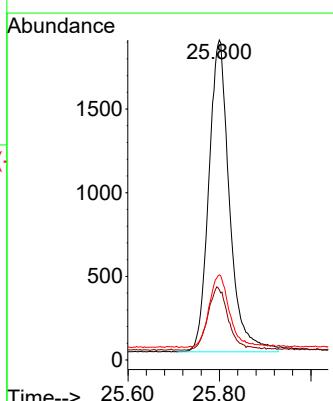
#39  
Benzo(a)pyrene  
Concen: 0.376 ng  
RT: 23.417 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49  
ClientSampleId : SSTDICCC0.4

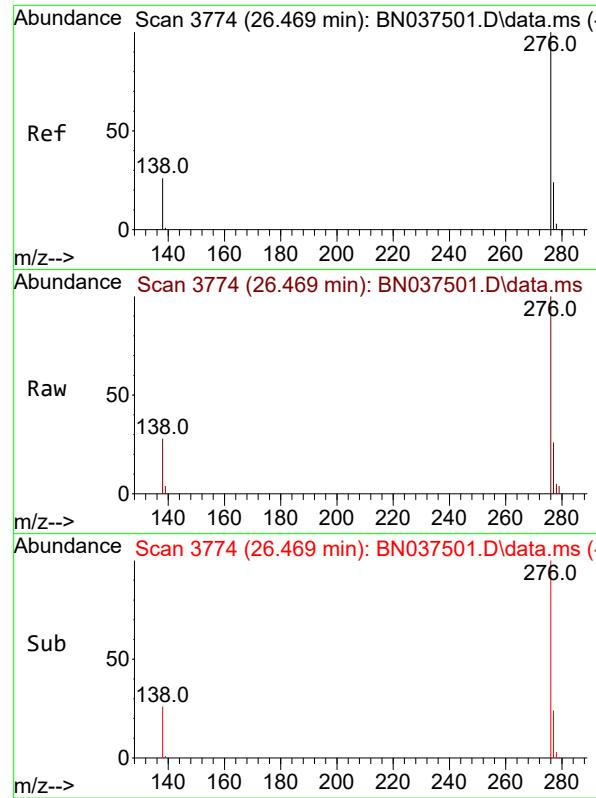
Tgt Ion:252 Resp: 5731  
Ion Ratio Lower Upper  
252 100  
253 24.9 19.9 29.9  
125 19.0 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.360 ng  
RT: 25.800 min Scan# 3545  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Tgt Ion:278 Resp: 5845  
Ion Ratio Lower Upper  
278 100  
139 21.9 17.5 26.3  
279 26.6 21.3 31.9

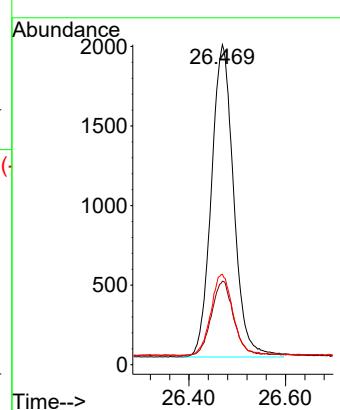




#41  
Benzo(g,h,i)perylene  
Concen: 0.375 ng  
RT: 26.469 min Scan# 3  
Delta R.T. 0.000 min  
Lab File: BN037501.D  
Acq: 15 Jul 2025 13:49

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCC0.4

Tgt Ion:276 Resp: 6293  
Ion Ratio Lower Upper  
276 100  
277 26.1 20.9 31.3  
138 28.2 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037502.D  
 Acq On : 15 Jul 2025 14:25  
 Operator : RC/JU  
 Sample : SSTDICCO.8  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.8

Quant Time: Jul 15 17:27:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

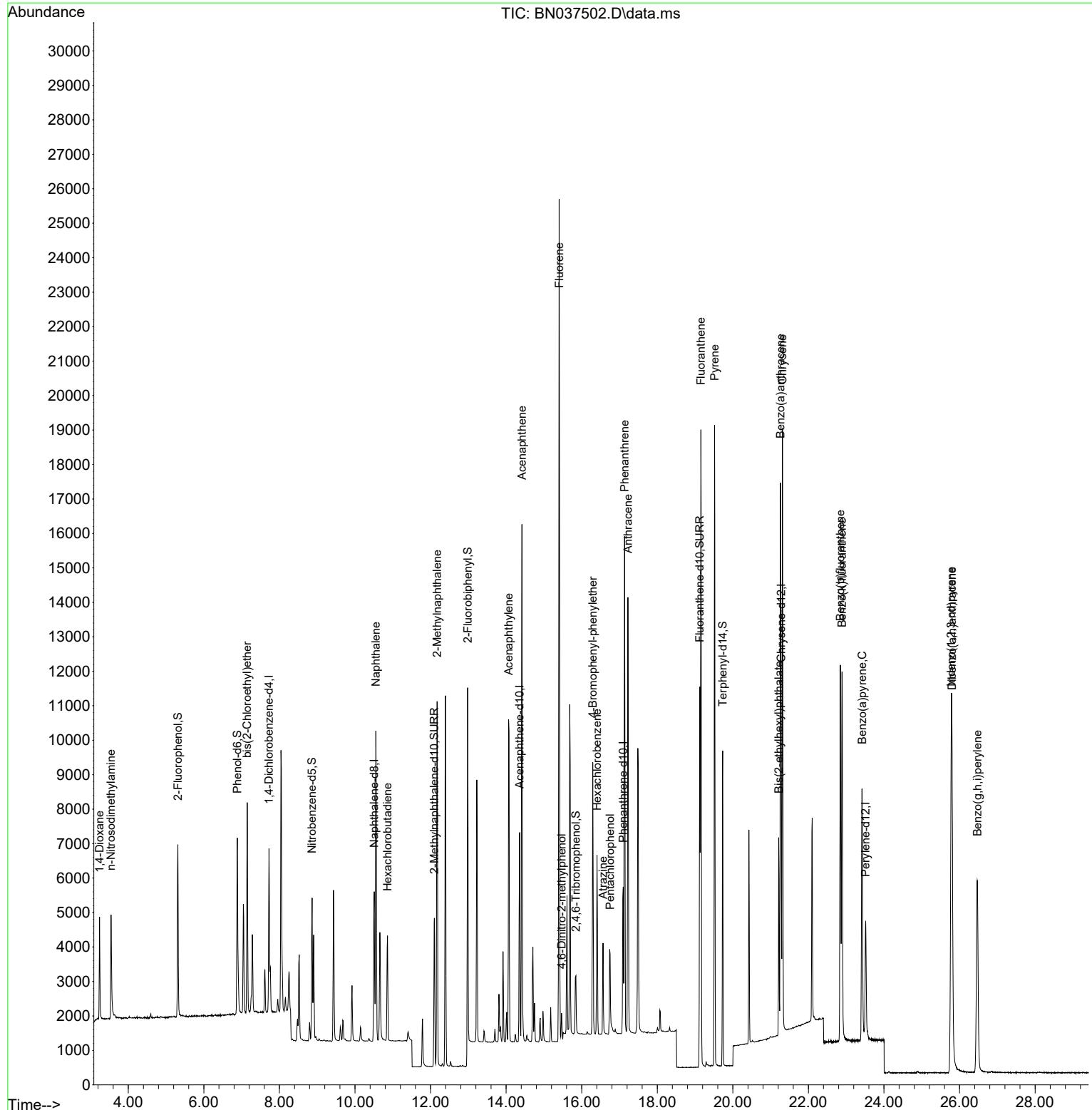
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2213	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5743	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3273	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	6314	0.400	ng	0.00
29) Chrysene-d12	21.277	240	5167	0.400	ng	0.00
35) Perylene-d12	23.516	264	4636	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	4020	0.735	ng	0.00
5) Phenol-d6	6.887	99	4891	0.713	ng	0.00
8) Nitrobenzene-d5	8.865	82	3103	0.723	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	5995	0.728	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	1155	0.718	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	13250	0.778	ng	0.00
27) Fluoranthene-d10	19.127	212	11723	0.701	ng	0.00
31) Terphenyl-d14	19.731	244	8376	0.754	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	1641	0.771	ng	98
3) n-Nitrosodimethylamine	3.543	42	2056	0.768	ng	# 94
6) bis(2-Chloroethyl)ether	7.147	93	4350	0.761	ng	99
9) Naphthalene	10.552	128	11585	0.756	ng	99
10) Hexachlorobutadiene	10.861	225	2561	0.757	ng	# 100
12) 2-Methylnaphthalene	12.172	142	7636	0.758	ng	99
16) Acenaphthylene	14.067	152	11025	0.752	ng	99
17) Acenaphthene	14.420	154	7528	0.755	ng	100
18) Fluorene	15.403	166	9729	0.758	ng	99
20) 4,6-Dinitro-2-methylph...	15.467	198	589	0.750	ng	# 78
21) 4-Bromophenyl-phenylether	16.292	248	3053	0.755	ng	96
22) Hexachlorobenzene	16.404	284	4049	0.775	ng	100
23) Atrazine	16.565	200	1994	0.706	ng	97
24) Pentachlorophenol	16.751	266	1588	0.677	ng	98
25) Phenanthrene	17.136	178	14261	0.754	ng	100
26) Anthracene	17.223	178	12919	0.748	ng	99
28) Fluoranthene	19.155	202	16043	0.735	ng	99
30) Pyrene	19.517	202	16008	0.769	ng	100
32) Benzo(a)anthracene	21.259	228	13280	0.734	ng	99
33) Chrysene	21.313	228	14034	0.745	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	5562	0.683	ng	98
36) Indeno(1,2,3-cd)pyrene	25.779	276	14458	0.749	ng	99
37) Benzo(b)fluoranthene	22.844	252	13315	0.757	ng	96
38) Benzo(k)fluoranthene	22.888	252	13634	0.751	ng	97
39) Benzo(a)pyrene	23.420	252	10903	0.743	ng	96
40) Dibenzo(a,h)anthracene	25.800	278	11648	0.745	ng	97
41) Benzo(g,h,i)perylene	26.472	276	12022	0.743	ng	97

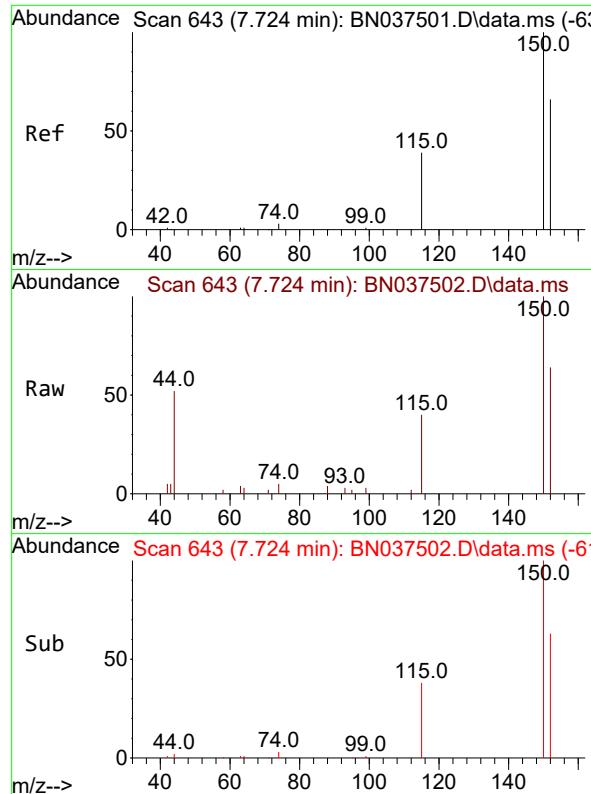
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037502.D  
 Acq On : 15 Jul 2025 14:25  
 Operator : RC/JU  
 Sample : SSTDICC0.8  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.8

Quant Time: Jul 15 17:27:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

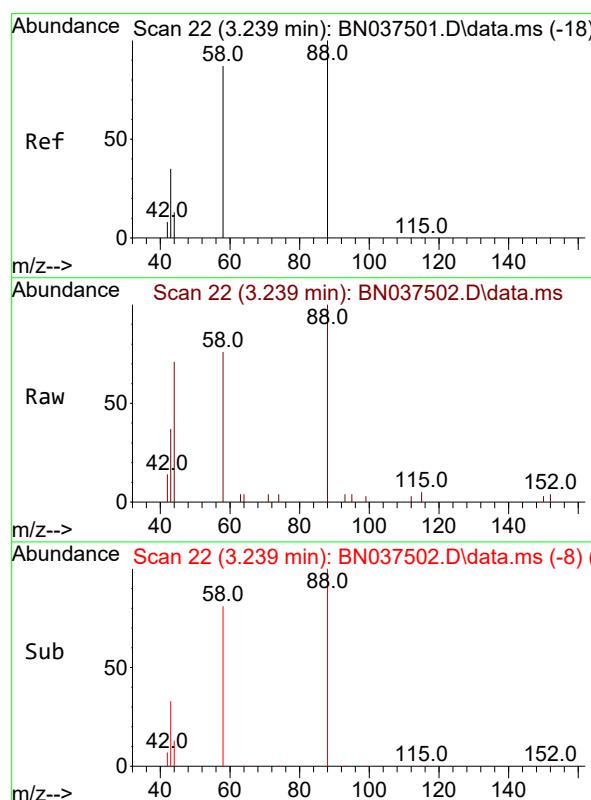
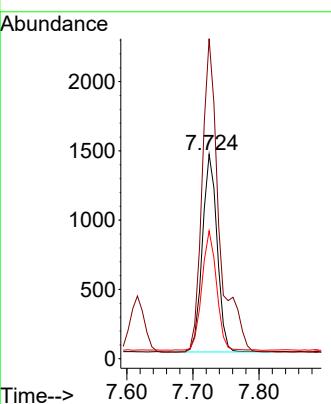




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

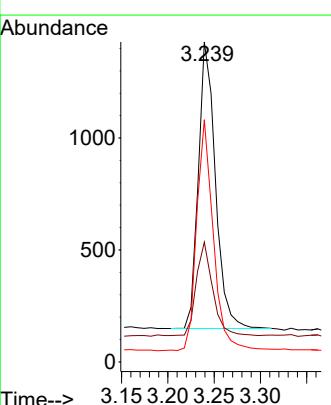
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

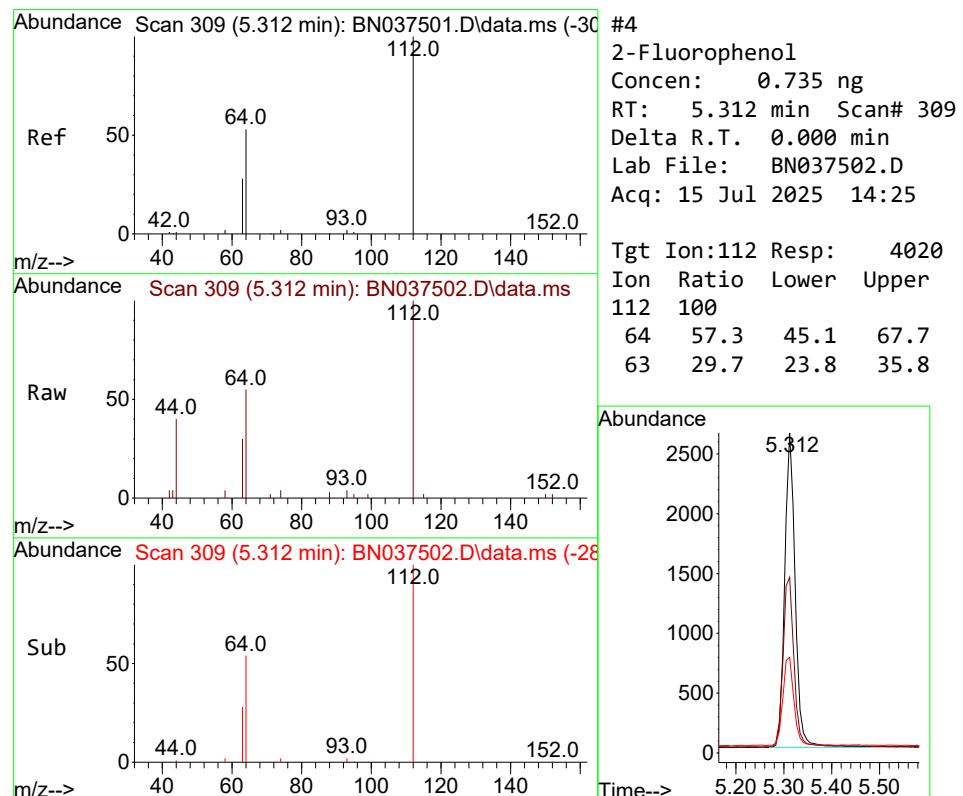
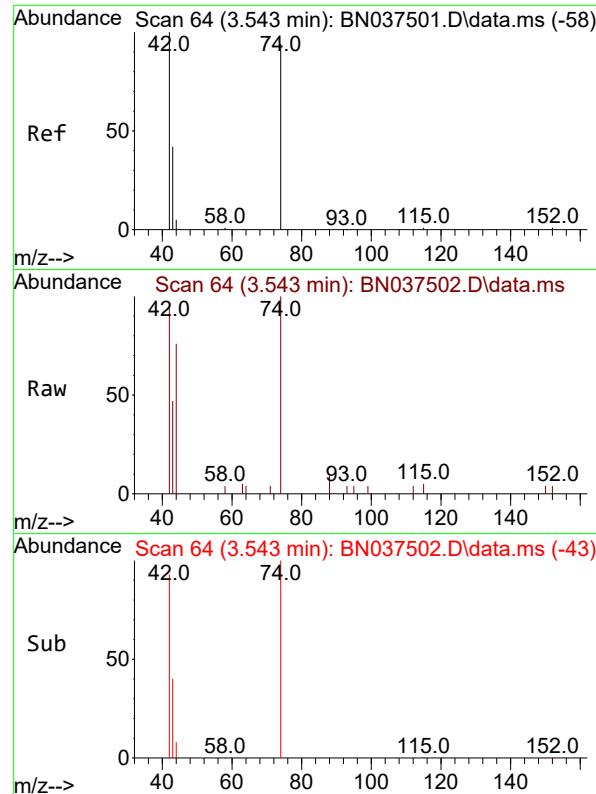
Tgt Ion:152 Resp: 2213  
Ion Ratio Lower Upper  
152 100  
150 156.6 119.8 179.8  
115 62.6 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.771 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion: 88 Resp: 1641  
Ion Ratio Lower Upper  
88 100  
43 31.3 27.5 41.3  
58 79.0 62.7 94.1





#4

2-Fluorophenol

Concen: 0.735 ng

RT: 5.312 min Scan# 309

Delta R.T. 0.000 min

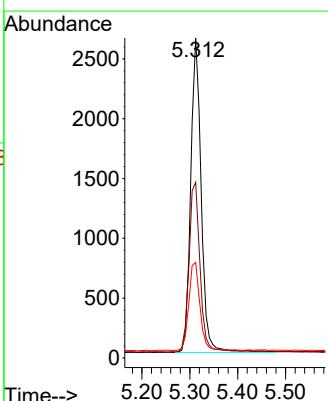
Lab File: BN037502.D

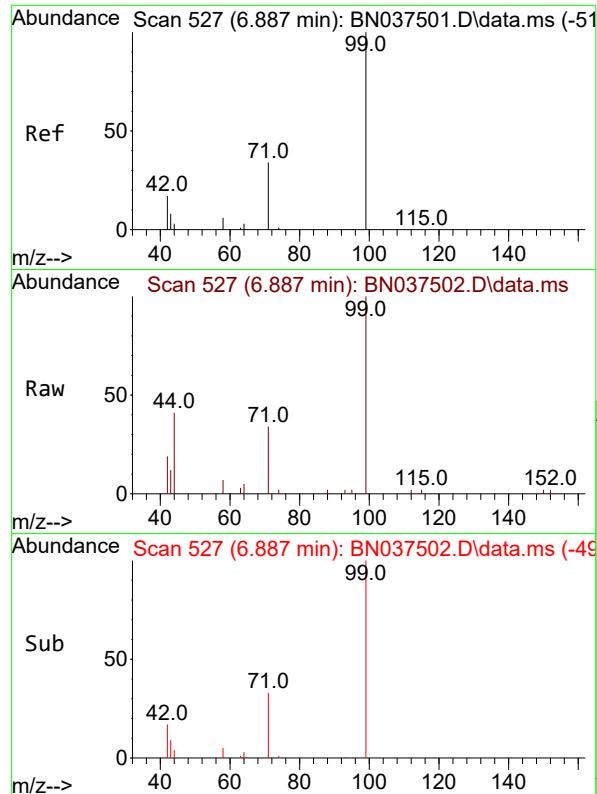
Acq: 15 Jul 2025 14:25

Tgt Ion: 112 Resp: 4020

Ion Ratio Lower Upper

112	100		
64	57.3	45.1	67.7
63	29.7	23.8	35.8

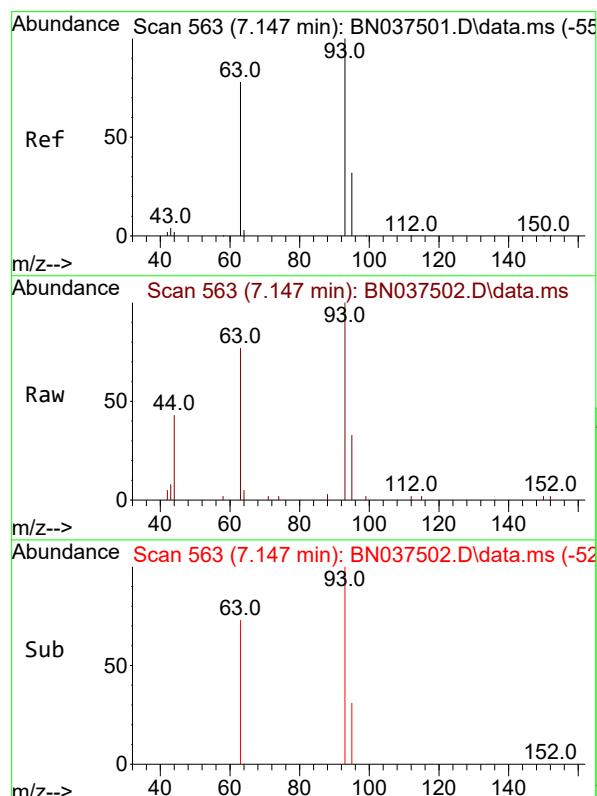
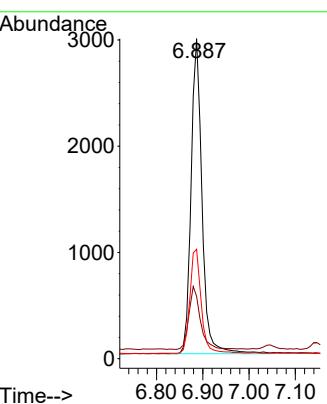




#5  
 Phenol-d6  
 Concen: 0.713 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

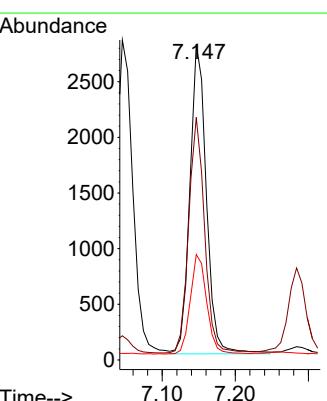
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

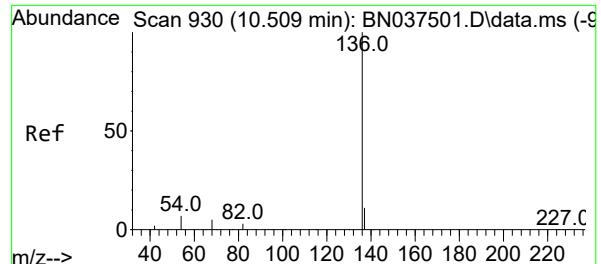
Tgt Ion: 99 Resp: 4891  
 Ion Ratio Lower Upper  
 99 100  
 42 20.9 17.1 25.7  
 71 34.1 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.761 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

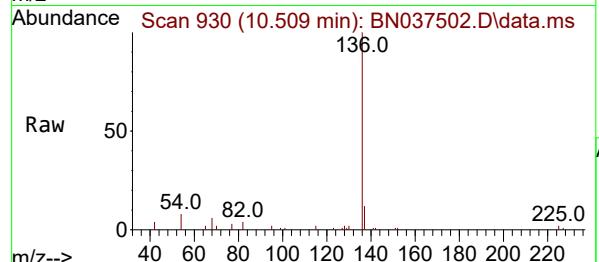
Tgt Ion: 93 Resp: 4350  
 Ion Ratio Lower Upper  
 93 100  
 63 73.6 58.2 87.4  
 95 32.3 25.3 37.9



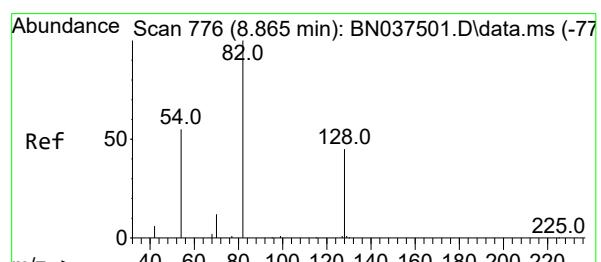
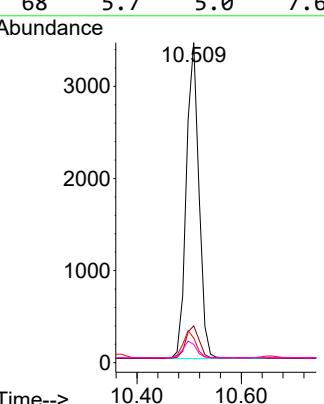
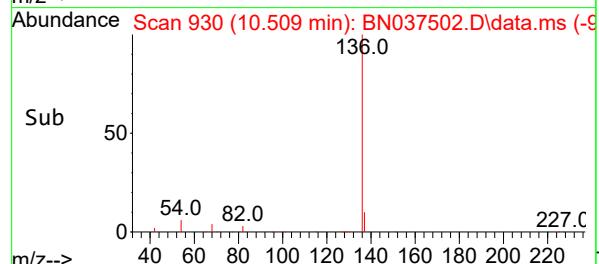


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

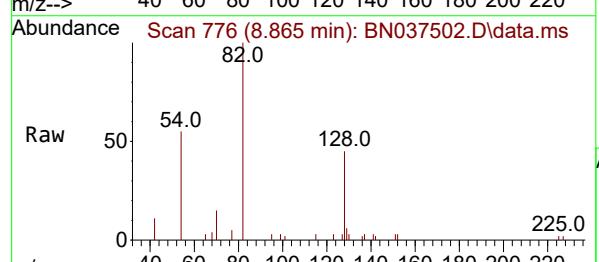
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8



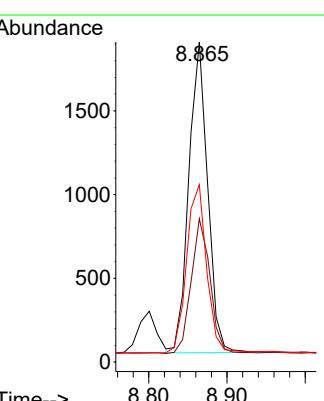
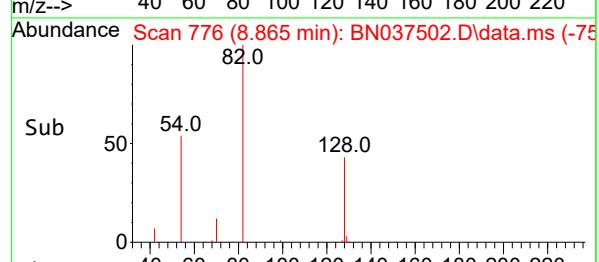
Tgt Ion:136 Resp: 5743  
 Ion Ratio Lower Upper  
 136 100  
 137 11.5 9.8 14.8  
 54 7.7 6.6 9.8  
 68 5.7 5.0 7.6

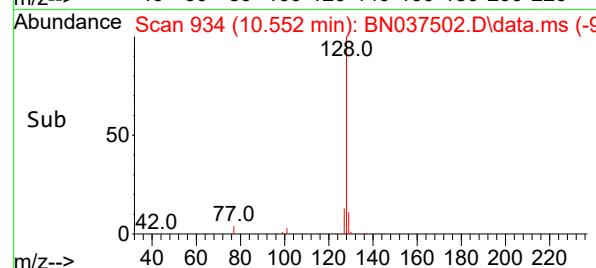
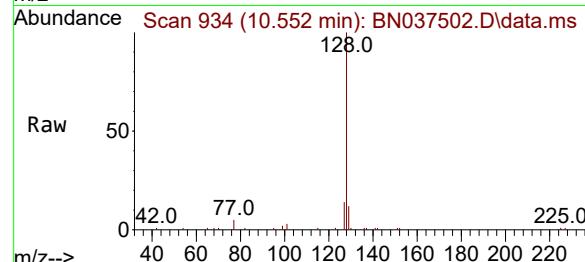
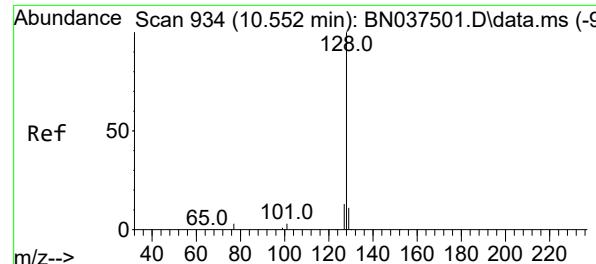


#8  
 Nitrobenzene-d5  
 Concen: 0.723 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25



Tgt Ion: 82 Resp: 3103  
 Ion Ratio Lower Upper  
 82 100  
 128 44.8 37.5 56.3  
 54 55.4 45.3 67.9





#9

Naphthalene

Concen: 0.756 ng

RT: 10.552 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.8

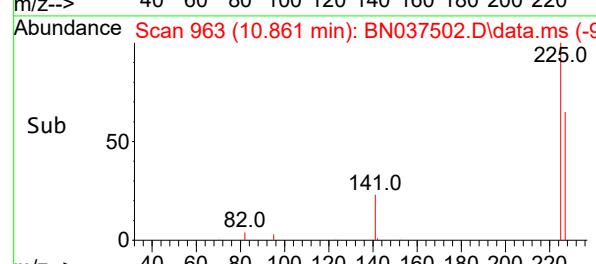
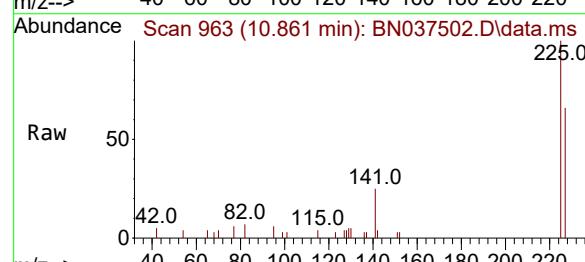
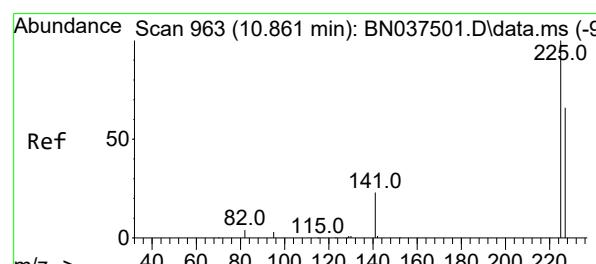
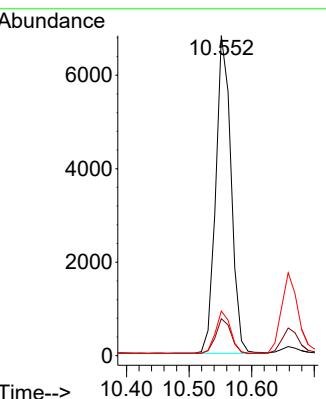
Tgt Ion:128 Resp: 11585

Ion Ratio Lower Upper

128 100

129 11.6 9.7 14.5

127 13.9 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.757 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

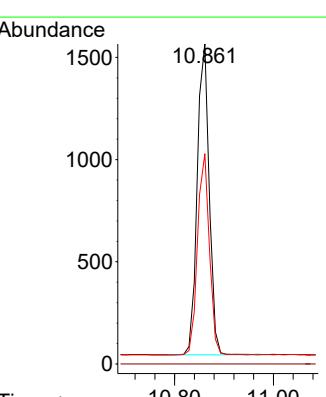
Tgt Ion:225 Resp: 2561

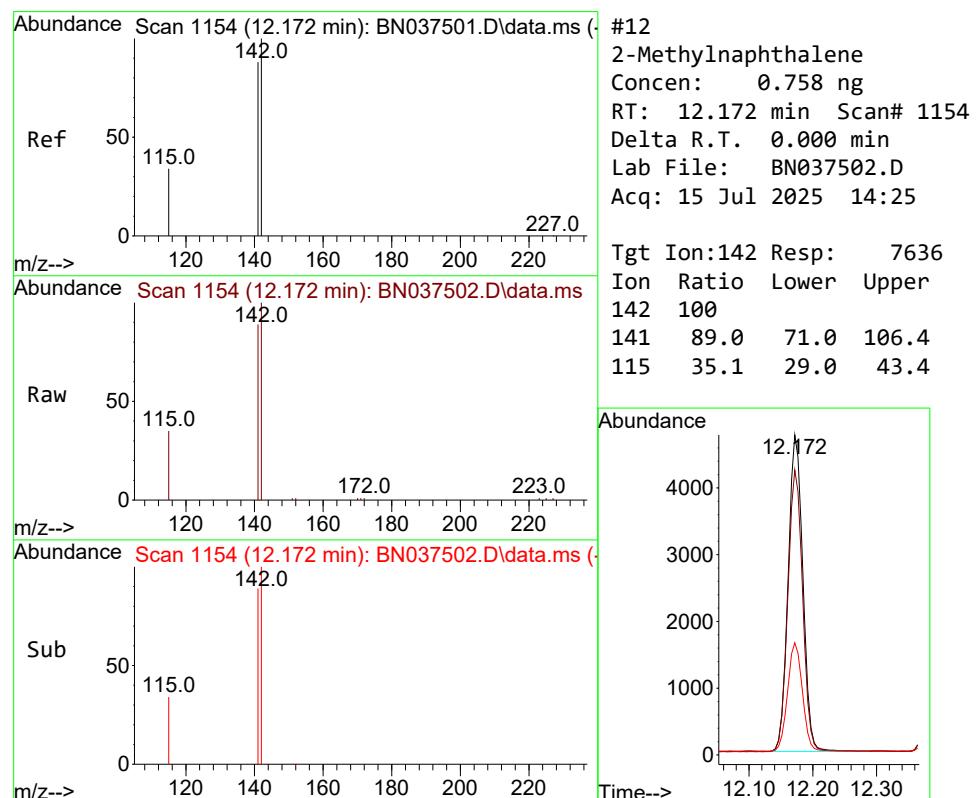
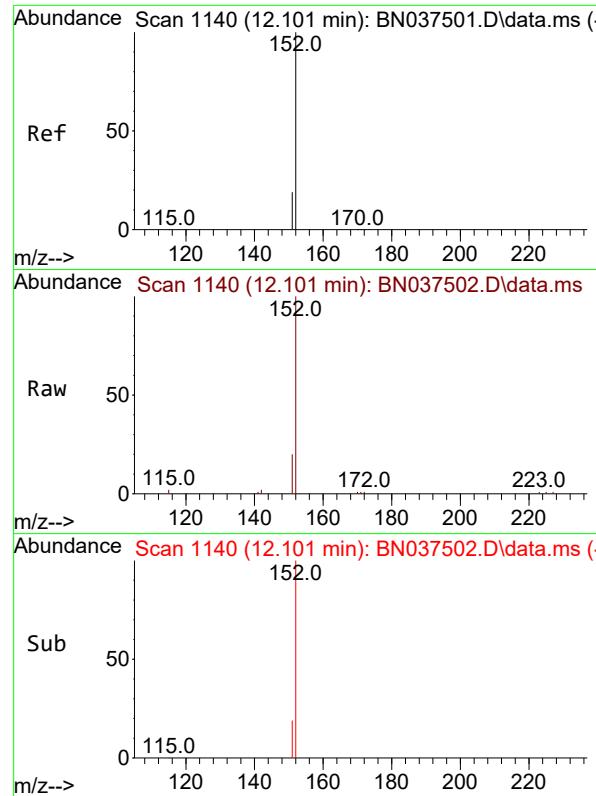
Ion Ratio Lower Upper

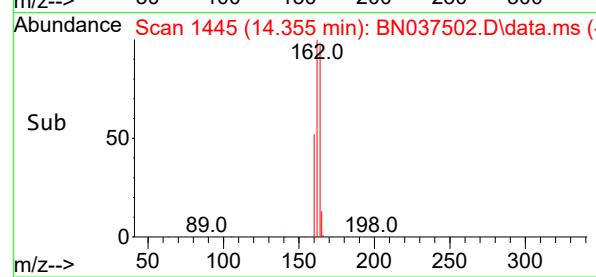
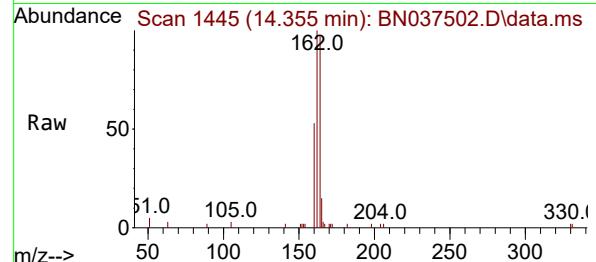
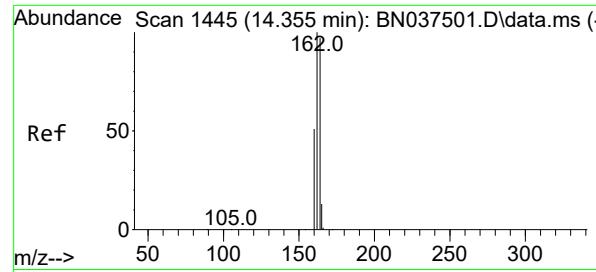
225 100

223 0.0 0.0 0.0

227 63.7 51.0 76.4







#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1445

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

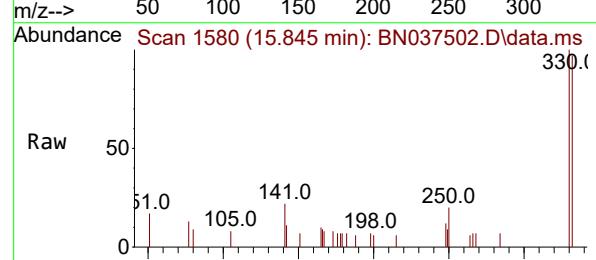
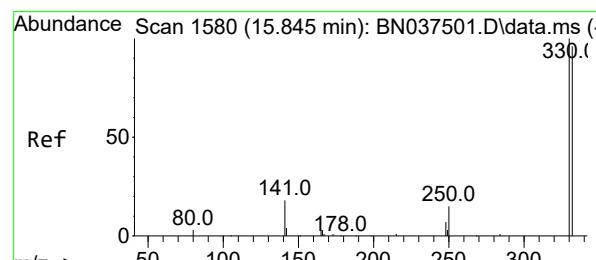
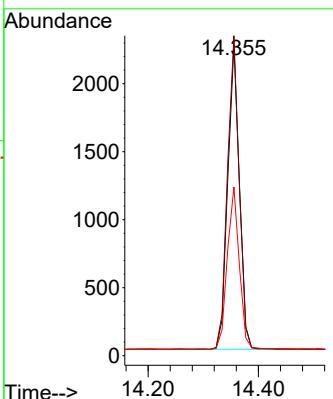
Tgt Ion:164 Resp: 3273

Ion Ratio Lower Upper

164 100

162 102.8 82.0 123.0

160 54.2 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.718 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

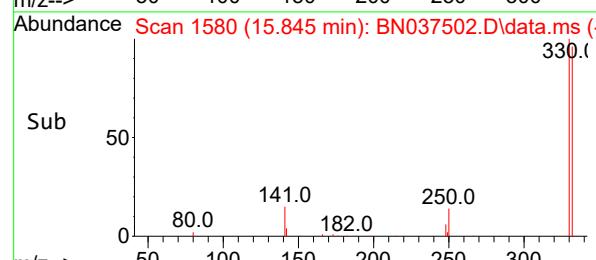
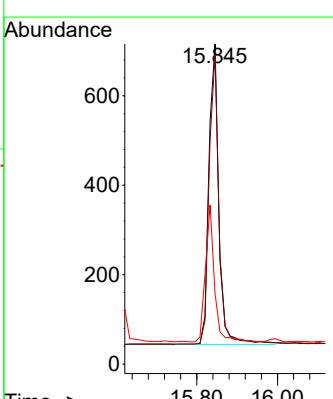
Tgt Ion:330 Resp: 1155

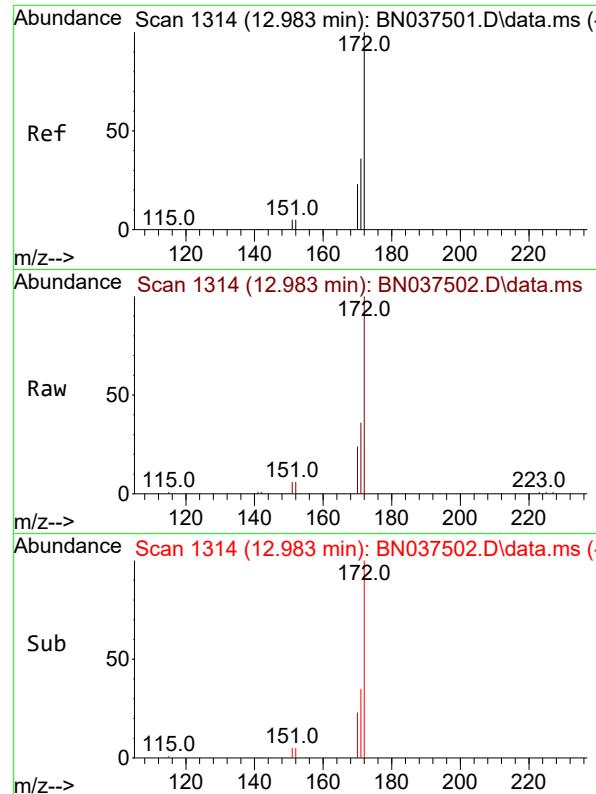
Ion Ratio Lower Upper

330 100

332 94.4 76.1 114.1

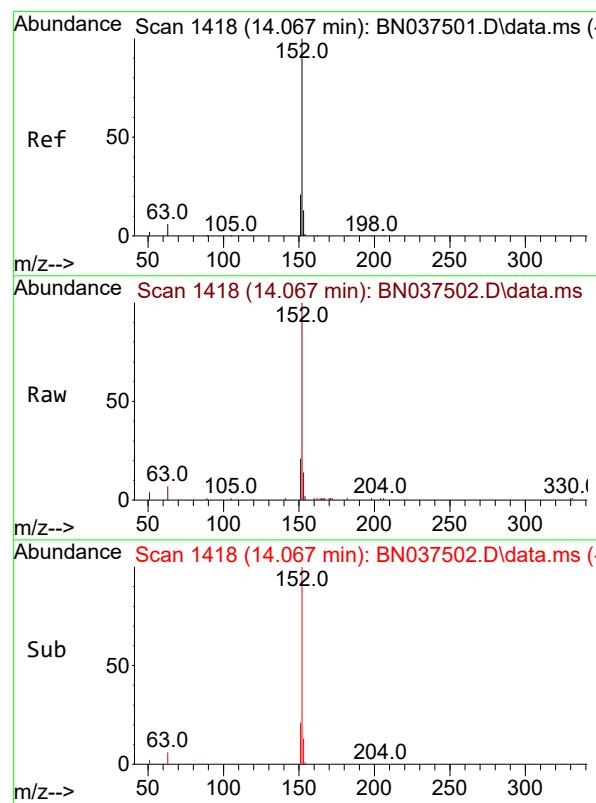
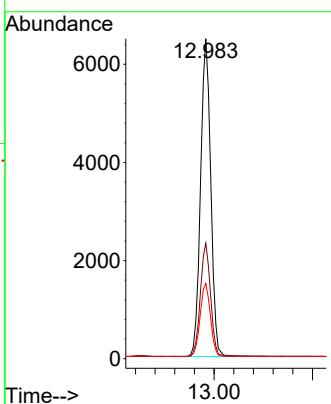
141 40.8 33.4 50.0





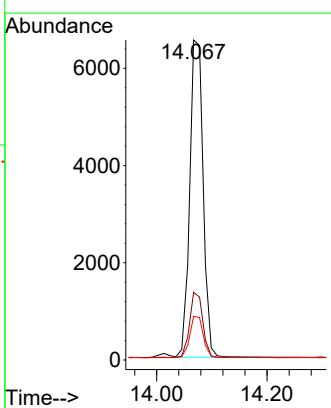
#15  
2-Fluorobiphenyl  
Concen: 0.778 ng  
RT: 12.983 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
ClientSampleId : SSTDICCO.8  
Acq: 15 Jul 2025 14:25

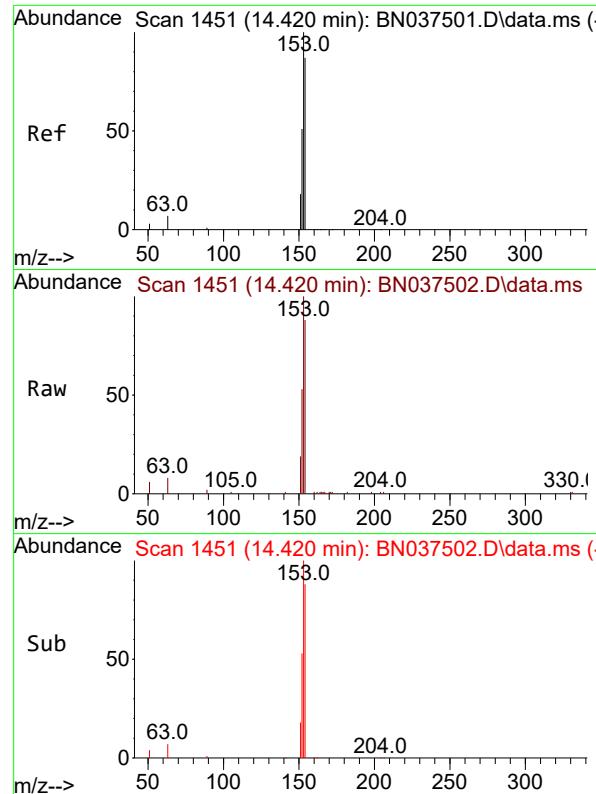
Tgt Ion:172 Resp: 13250  
Ion Ratio Lower Upper  
172 100  
171 36.1 29.4 44.2  
170 23.5 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.752 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:152 Resp: 11025  
Ion Ratio Lower Upper  
152 100  
151 20.3 15.9 23.9  
153 12.9 10.7 16.1





#17

Acenaphthene

Concen: 0.755 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

Tgt Ion:154 Resp: 7528

Ion Ratio Lower Upper

154 100

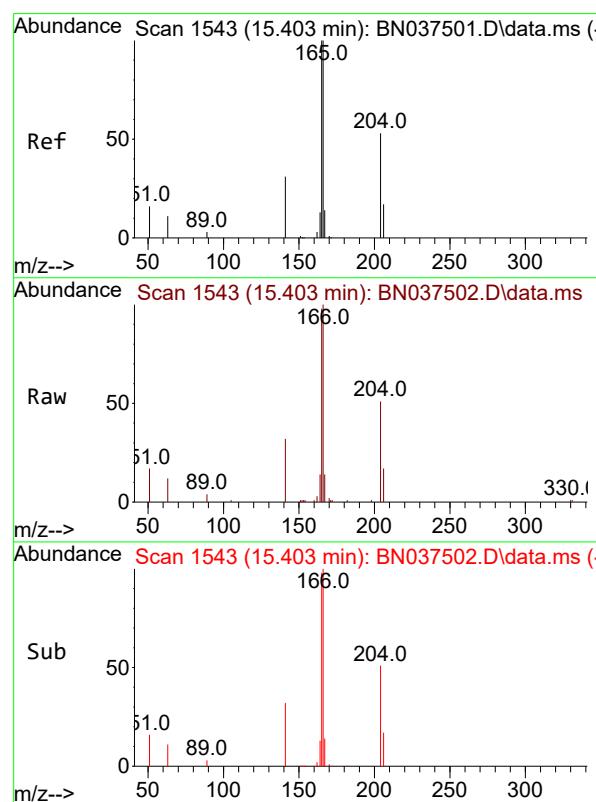
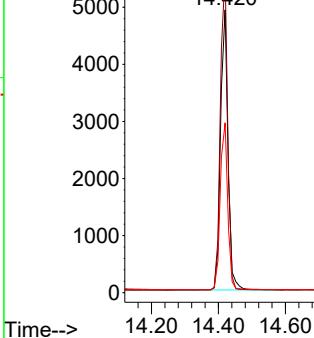
153 111.1 89.2 133.8

152 60.2 48.0 72.0

Abundance

5000  
4000  
3000  
2000  
1000  
0

14.420



#18

Fluorene

Concen: 0.758 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Tgt Ion:166 Resp: 9729

Ion Ratio Lower Upper

166 100

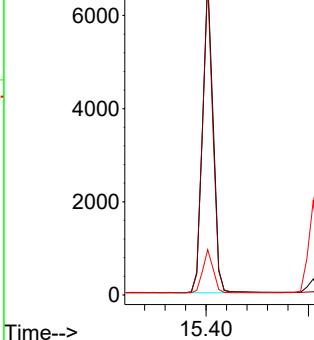
165 98.6 78.1 117.1

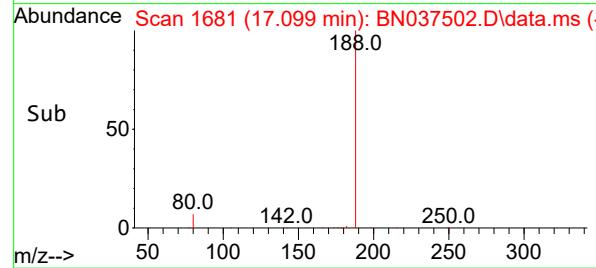
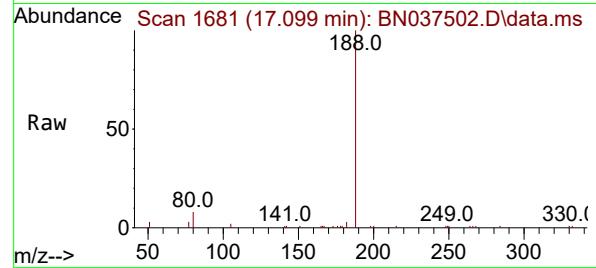
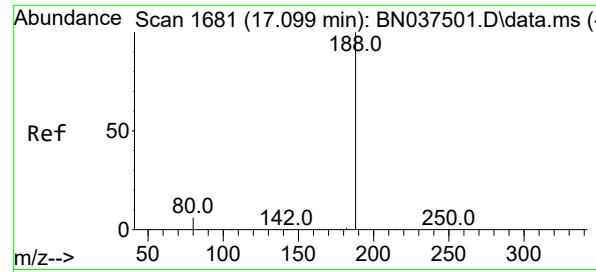
167 13.3 11.0 16.6

Abundance

6000  
4000  
2000  
0

15.403





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

Tgt Ion:188 Resp: 6314

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.0 6.0 9.0

Abundance

17.099

3000

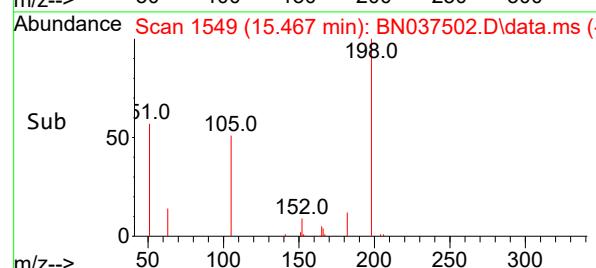
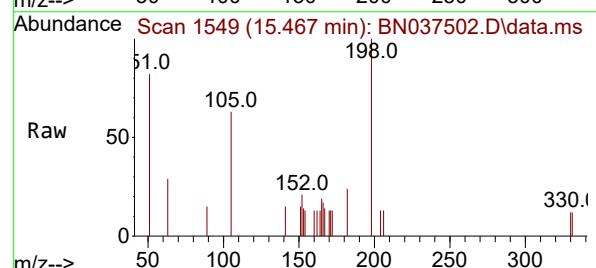
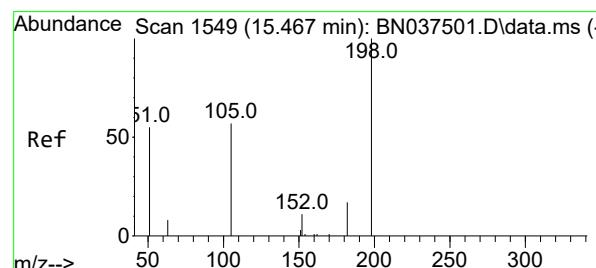
2000

1000

0

Time--&gt;

17.00 17.10



#20

4,6-Dinitro-2-methylphenol

Concen: 0.750 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Tgt Ion:198 Resp: 589

Ion Ratio Lower Upper

198 100

51 82.4 88.5 132.7#

105 63.1 61.2 91.8

Abundance

15.467

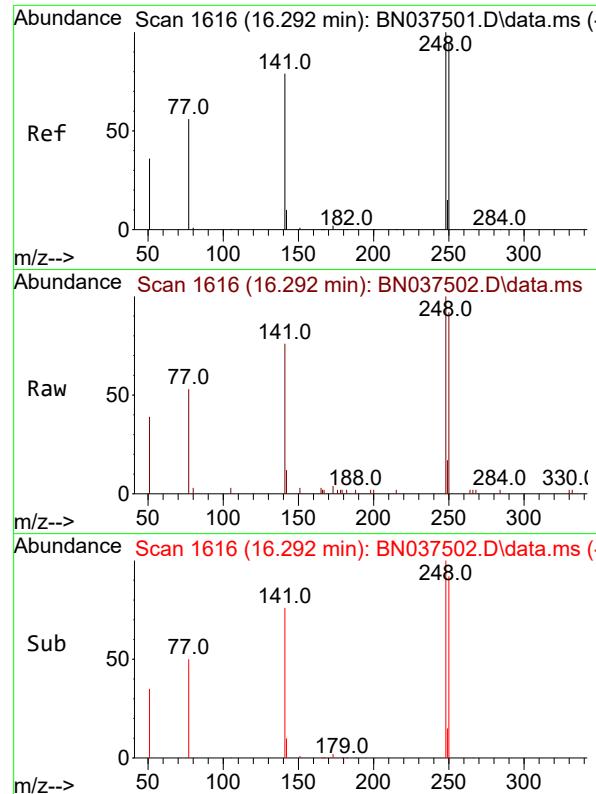
1000

500

0

Time--&gt;

15.40 15.50 15.60



#21

4-Bromophenyl-phenylether

Concen: 0.755 ng

RT: 16.292 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.8

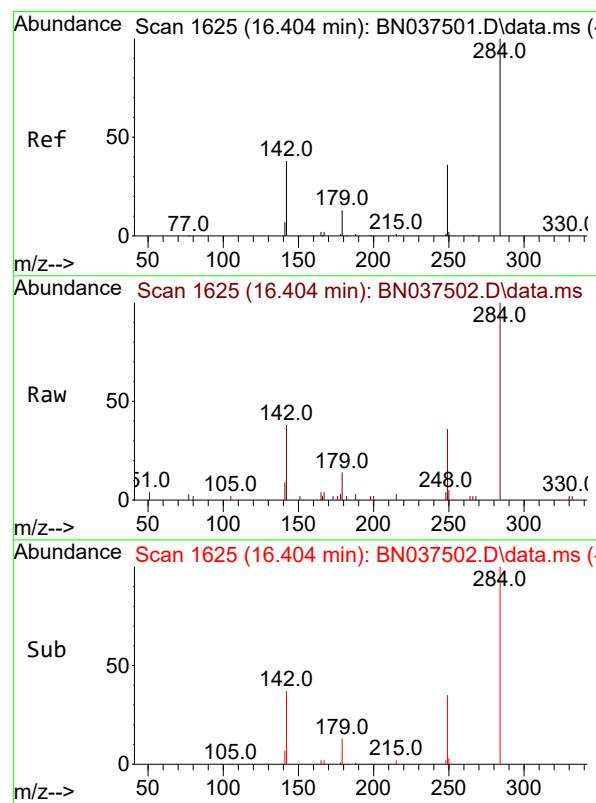
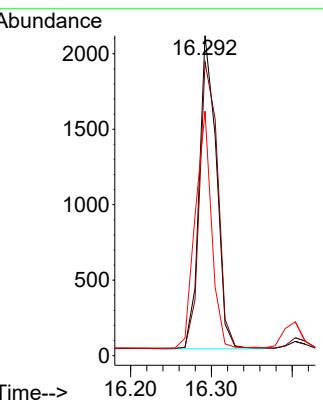
Tgt Ion:248 Resp: 3053

Ion Ratio Lower Upper

248 100

250 91.8 76.2 114.2

141 76.4 63.9 95.9



#22

Hexachlorobenzene

Concen: 0.775 ng

RT: 16.404 min Scan# 1625

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

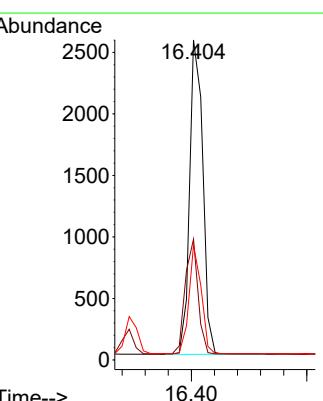
Tgt Ion:284 Resp: 4049

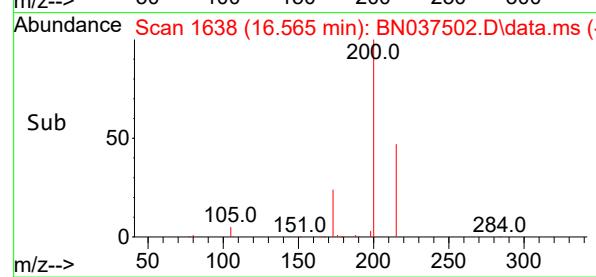
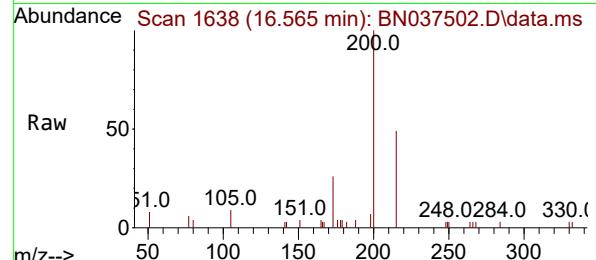
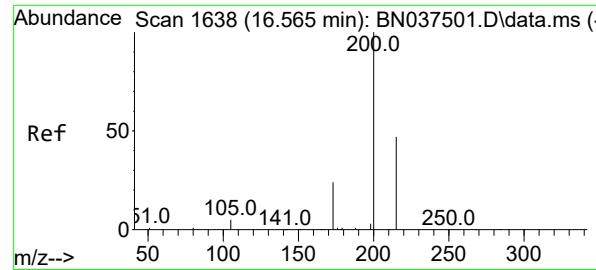
Ion Ratio Lower Upper

284 100

142 35.7 28.9 43.3

249 32.1 25.8 38.6





#23

Atrazine

Concen: 0.706 ng

RT: 16.565 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument : BNA\_N

ClientSampleId : SSTDICCO.8

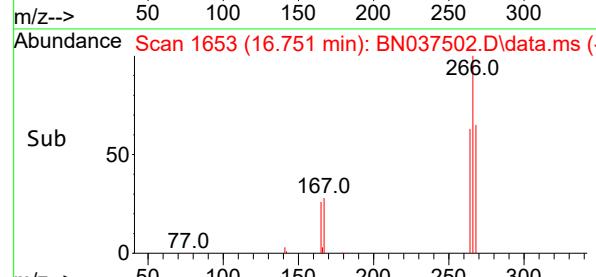
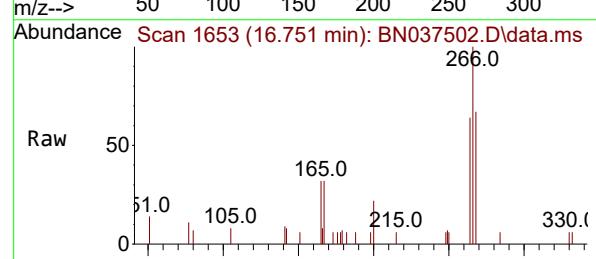
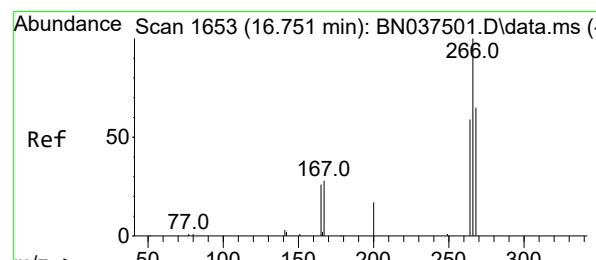
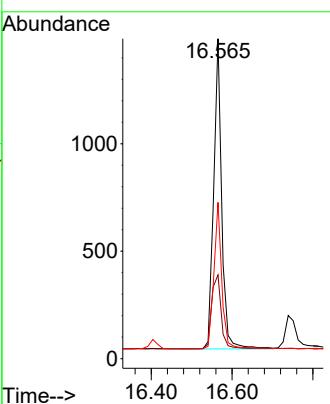
Tgt Ion:200 Resp: 1994

Ion Ratio Lower Upper

200 100

173 26.2 23.2 34.8

215 48.8 40.2 60.4



#24

Pentachlorophenol

Concen: 0.677 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

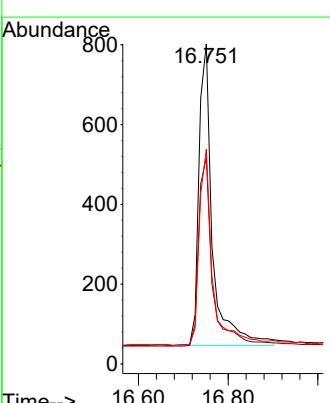
Tgt Ion:266 Resp: 1588

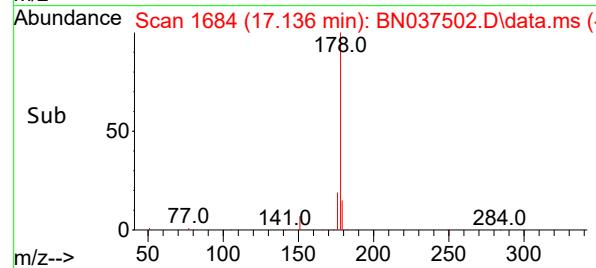
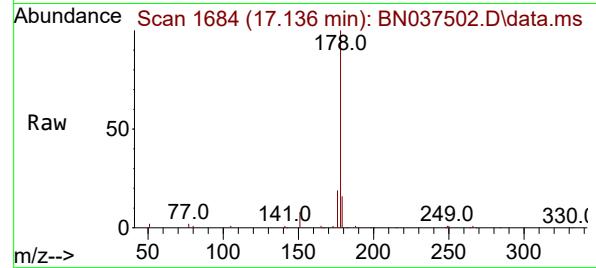
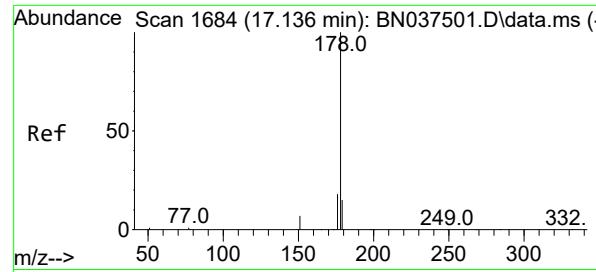
Ion Ratio Lower Upper

266 100

264 63.7 49.3 73.9

268 64.0 51.6 77.4





#25

Phenanthrene

Concen: 0.754 ng

RT: 17.136 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.8

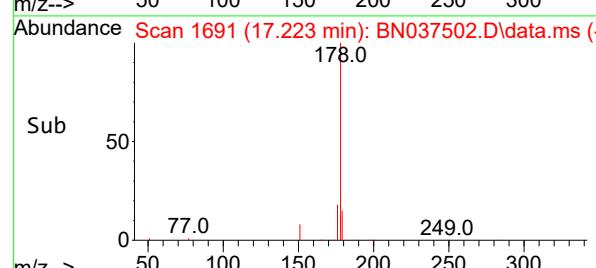
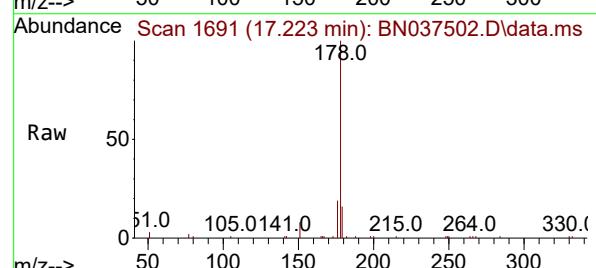
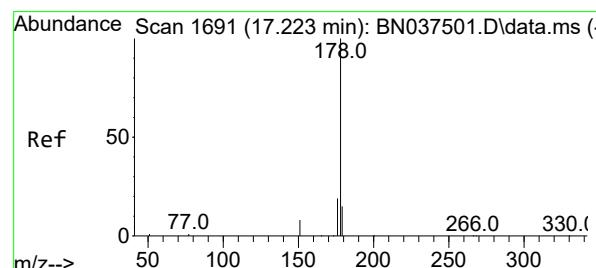
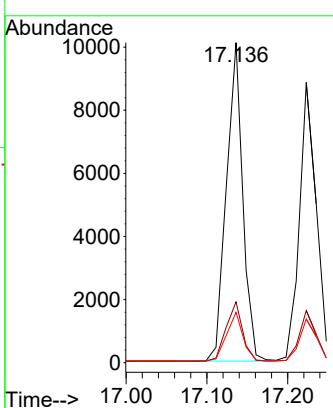
Tgt Ion:178 Resp: 14261

Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.748 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037502.D

Acq: 15 Jul 2025 14:25

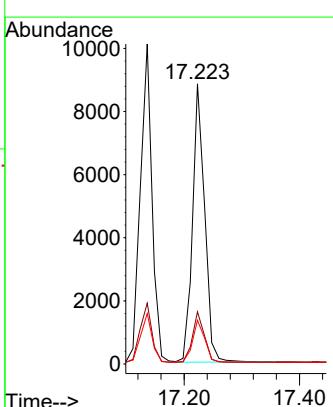
Tgt Ion:178 Resp: 12919

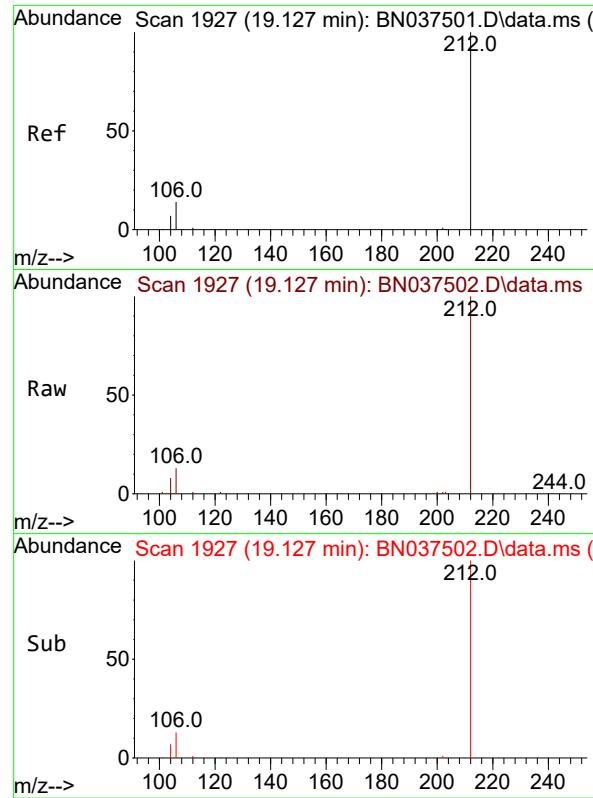
Ion Ratio Lower Upper

178 100

176 18.0 14.7 22.1

179 15.1 12.3 18.5

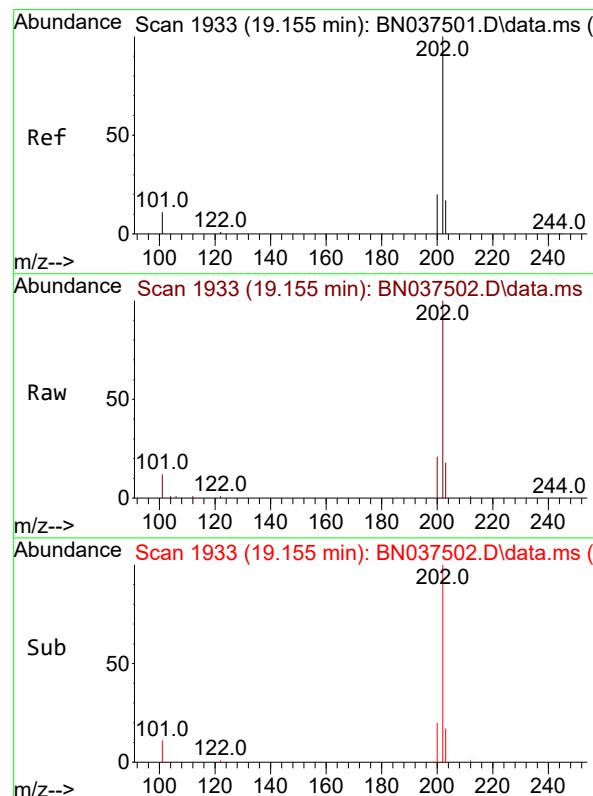
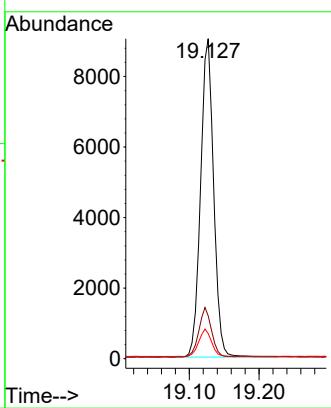




#27  
 Fluoranthene-d10  
 Concen: 0.701 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

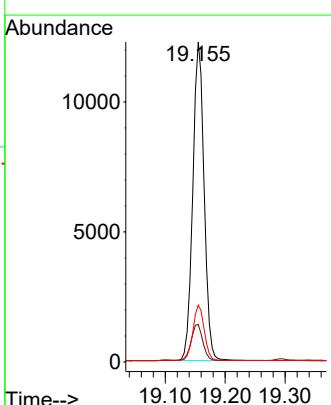
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

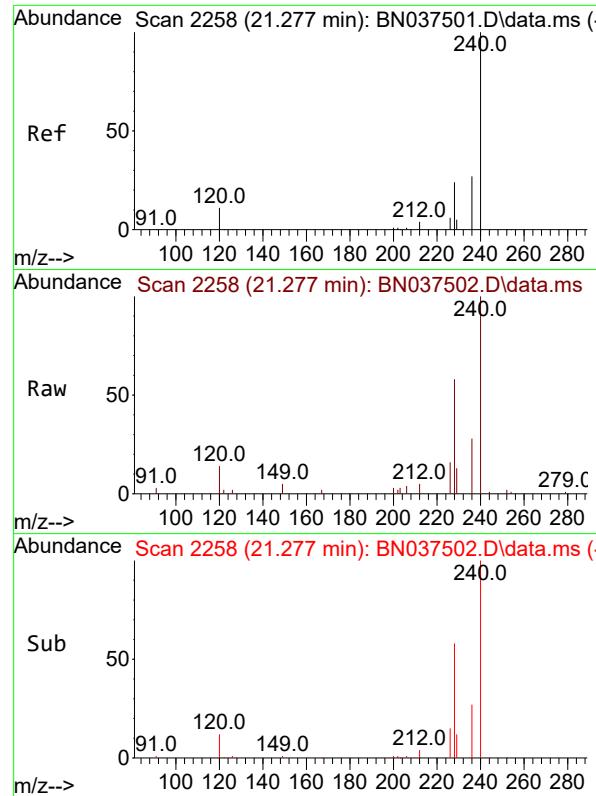
Tgt Ion:212 Resp: 11723  
 Ion Ratio Lower Upper  
 212 100  
 106 15.0 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.735 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:202 Resp: 16043  
 Ion Ratio Lower Upper  
 202 100  
 101 11.9 9.8 14.6  
 203 17.3 13.6 20.4

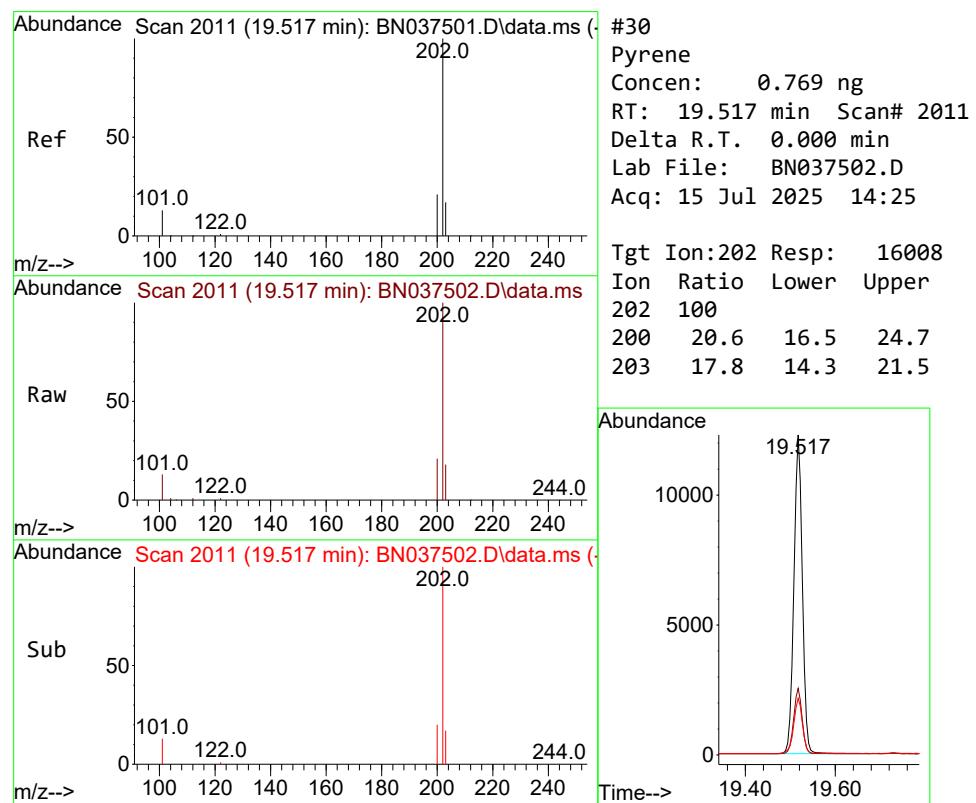
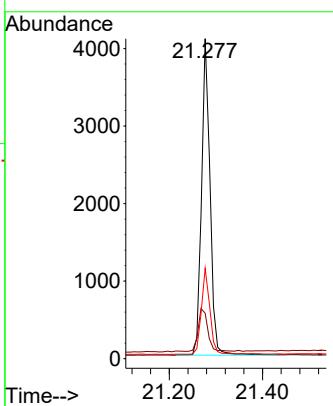




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

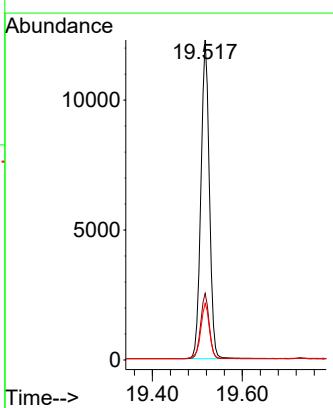
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

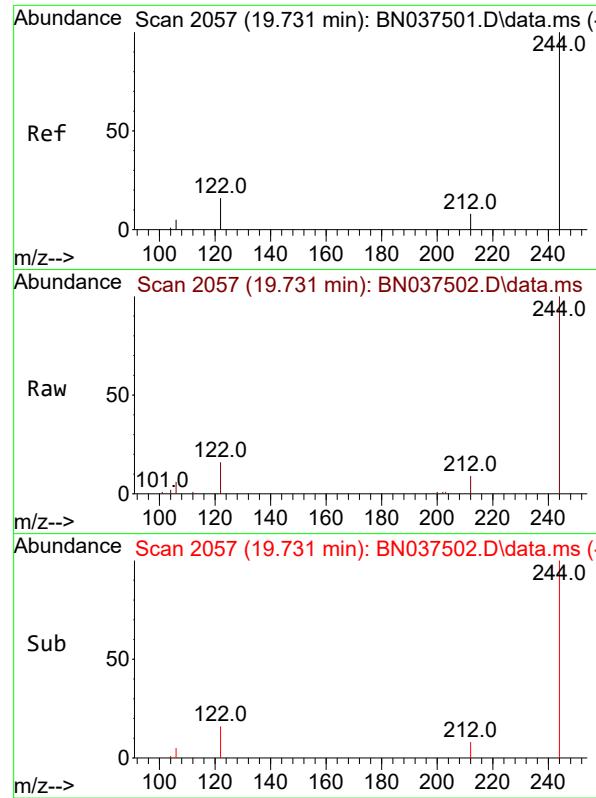
Tgt Ion:240 Resp: 5167  
Ion Ratio Lower Upper  
240 100  
120 14.2 10.7 16.1  
236 28.3 22.6 33.8



#30  
Pyrene  
Concen: 0.769 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

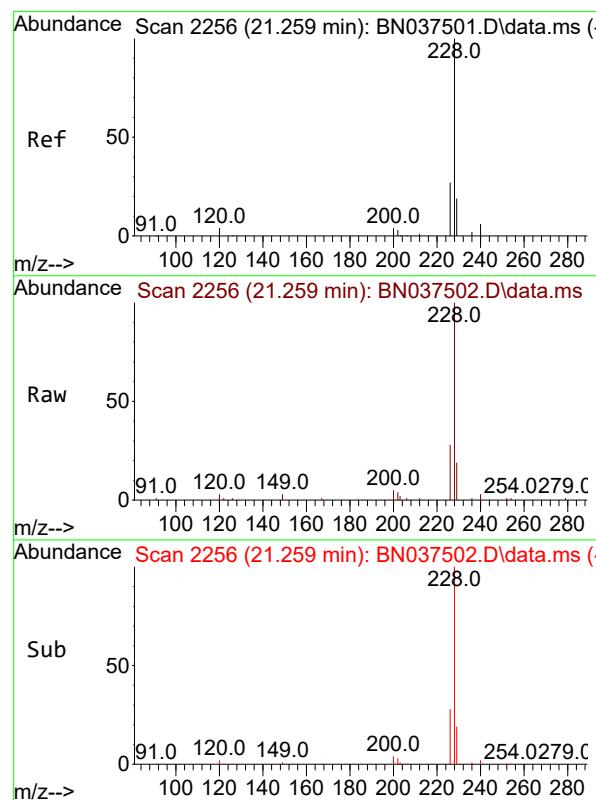
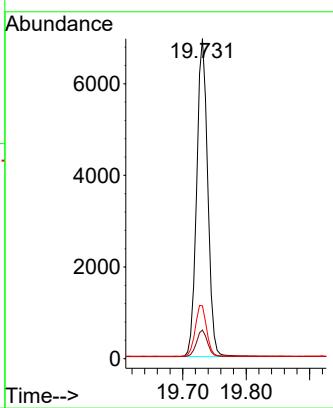
Tgt Ion:202 Resp: 16008  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 17.8 14.3 21.5





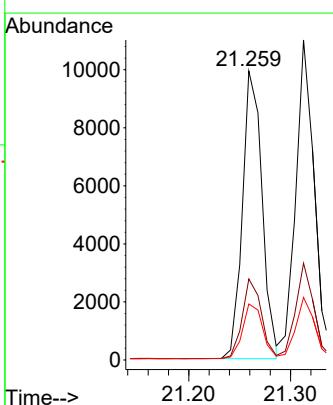
#31  
Terphenyl-d14  
Concen: 0.754 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25  
ClientSampleId : SSTDICCO.8

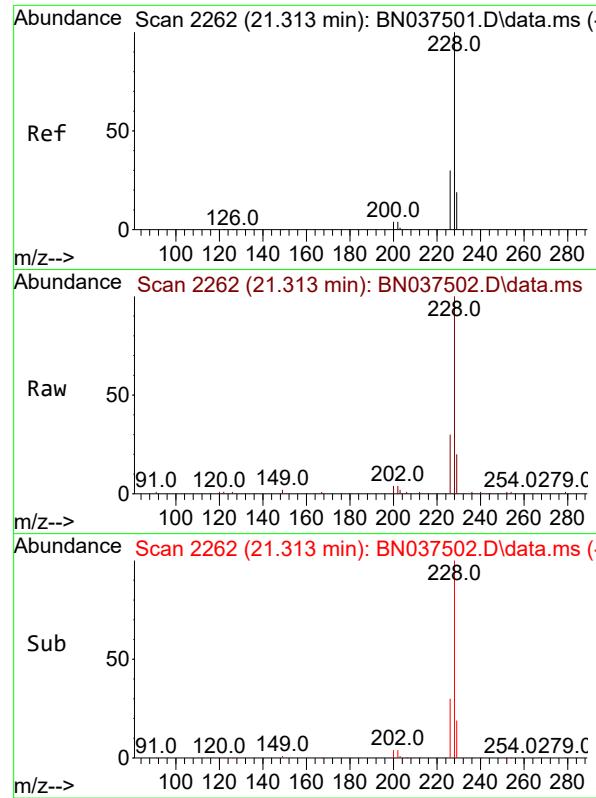
Tgt Ion:244 Resp: 8376  
Ion Ratio Lower Upper  
244 100  
212 8.9 7.4 11.2  
122 16.5 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.734 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:228 Resp: 13280  
Ion Ratio Lower Upper  
228 100  
226 28.0 21.9 32.9  
229 19.4 15.8 23.8

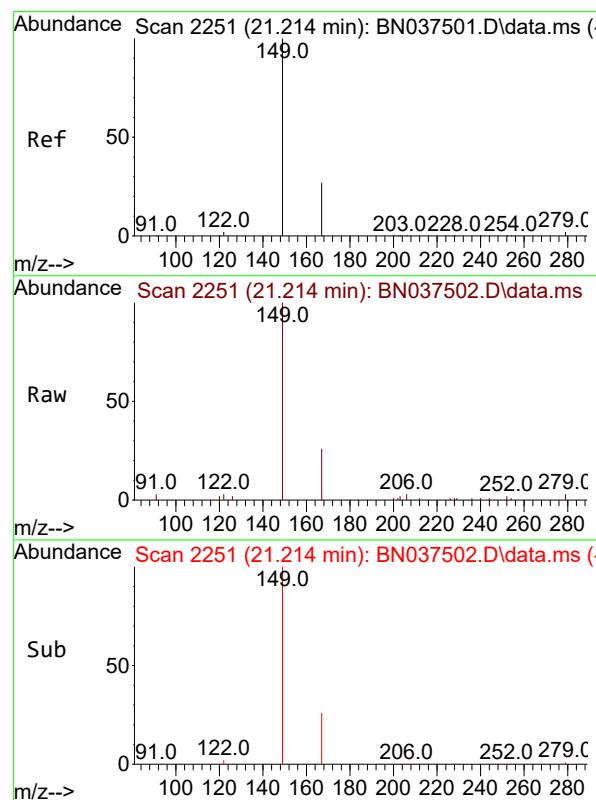
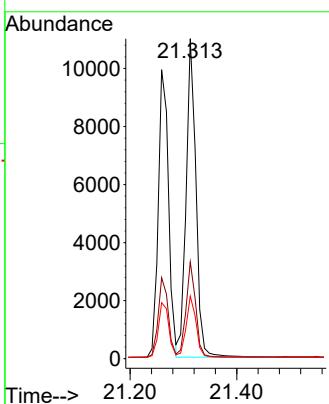




#33  
Chrysene  
Concen: 0.745 ng  
RT: 21.313 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

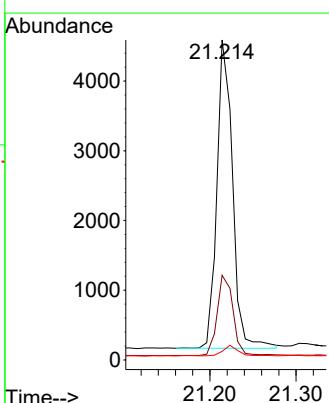
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

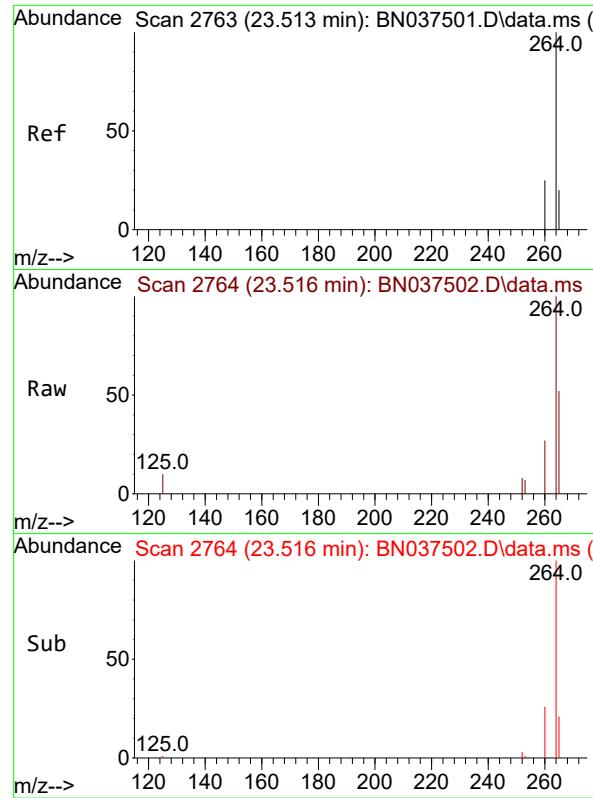
Tgt Ion:228 Resp: 14034  
Ion Ratio Lower Upper  
228 100  
226 30.3 24.2 36.4  
229 19.5 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.683 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:149 Resp: 5562  
Ion Ratio Lower Upper  
149 100  
167 26.4 21.8 32.8  
279 3.4 3.0 4.4

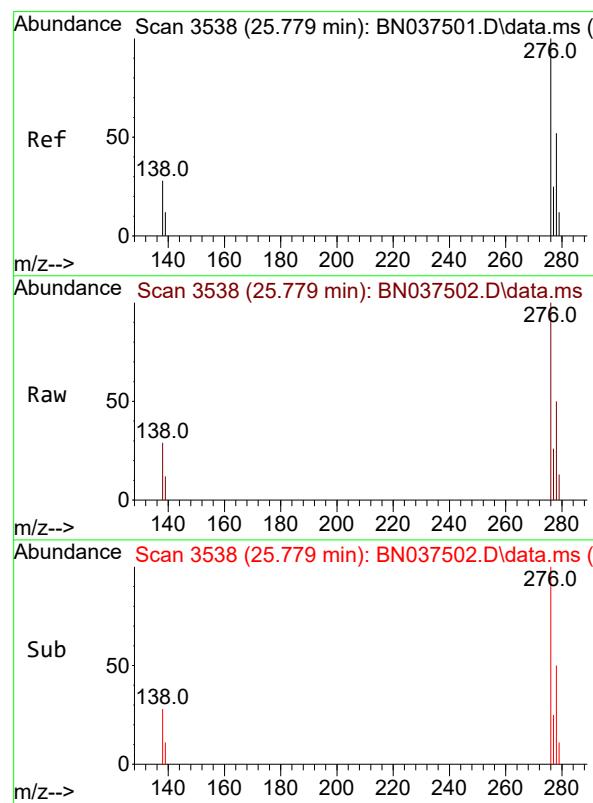
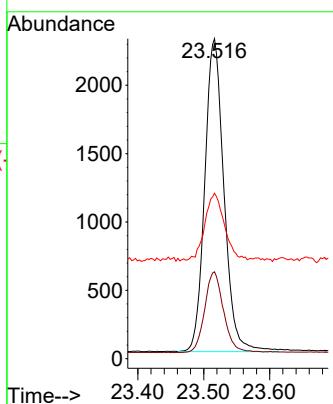




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

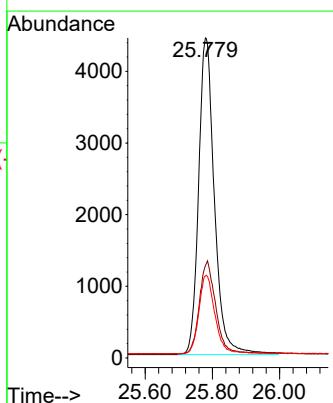
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

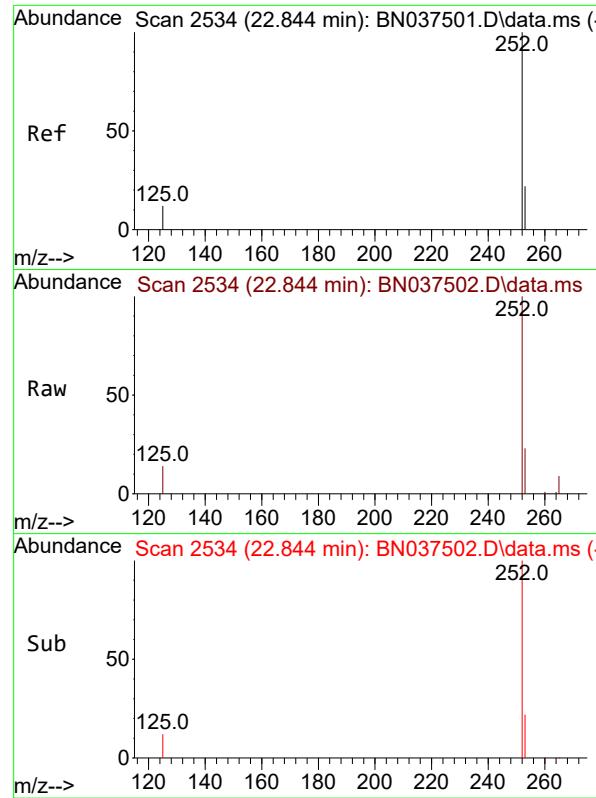
Tgt Ion:264 Resp: 4636  
Ion Ratio Lower Upper  
264 100  
260 27.2 21.2 31.8  
265 51.7 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.749 ng  
RT: 25.779 min Scan# 3538  
Delta R.T. 0.000 min  
Lab File: BN037502.D  
Acq: 15 Jul 2025 14:25

Tgt Ion:276 Resp: 14458  
Ion Ratio Lower Upper  
276 100  
138 30.0 24.0 36.0  
277 25.0 20.5 30.7

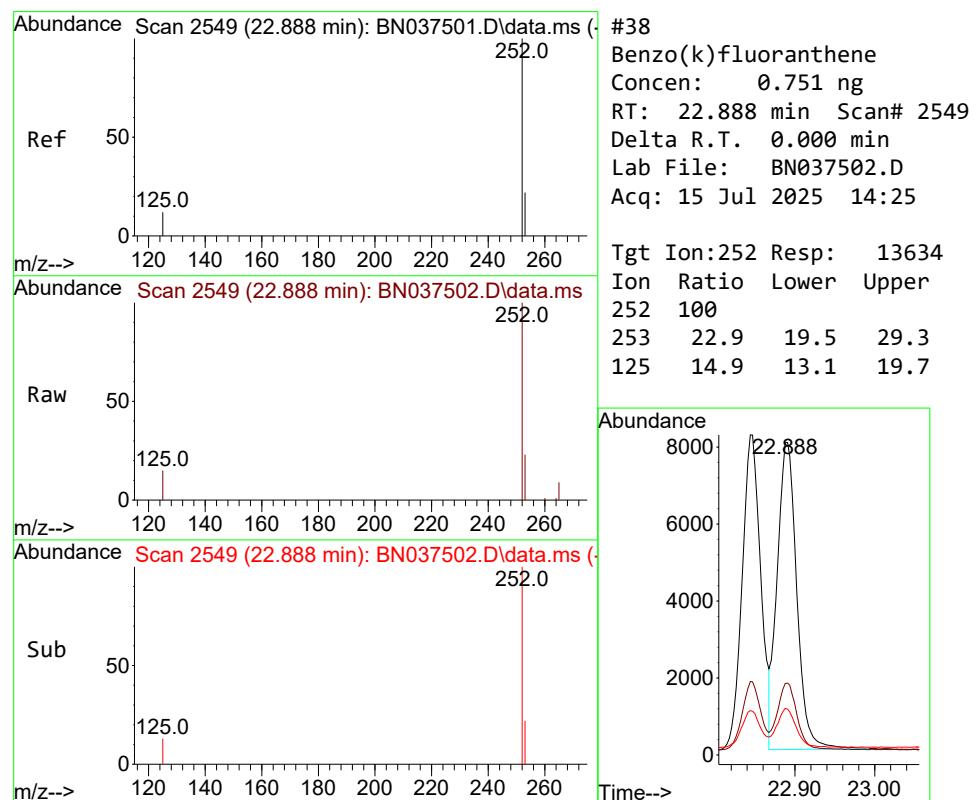
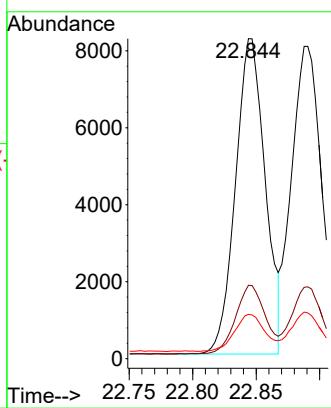




#37  
 Benzo(b)fluoranthene  
 Concen: 0.757 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

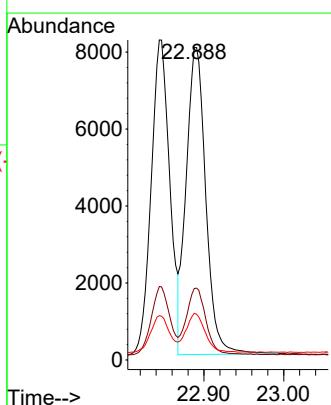
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

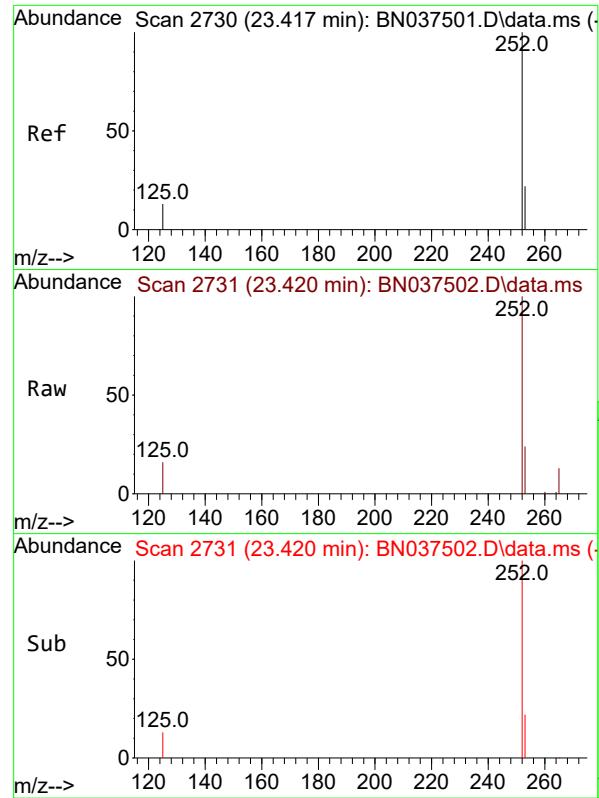
Tgt Ion:252 Resp: 13315  
 Ion Ratio Lower Upper  
 252 100  
 253 23.0 19.5 29.3  
 125 13.9 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.751 ng  
 RT: 22.888 min Scan# 2549  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:252 Resp: 13634  
 Ion Ratio Lower Upper  
 252 100  
 253 22.9 19.5 29.3  
 125 14.9 13.1 19.7

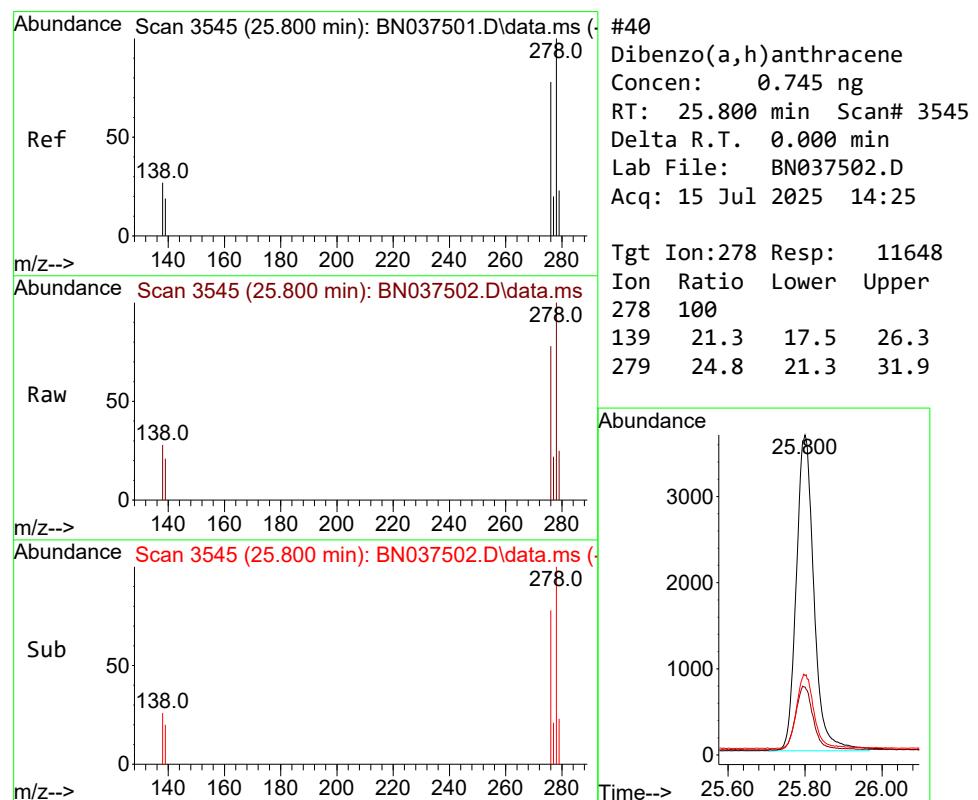
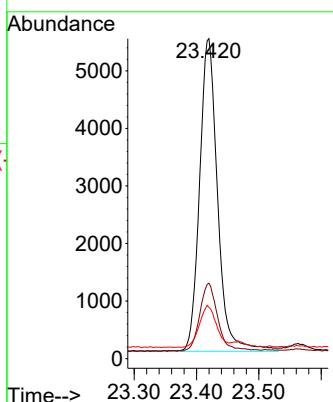




#39  
 Benzo(a)pyrene  
 Concen: 0.743 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

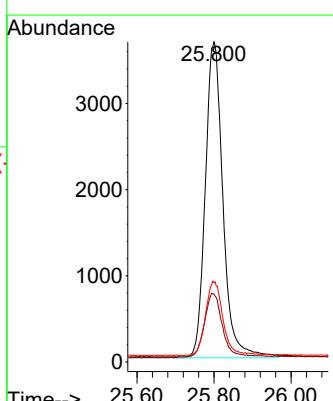
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

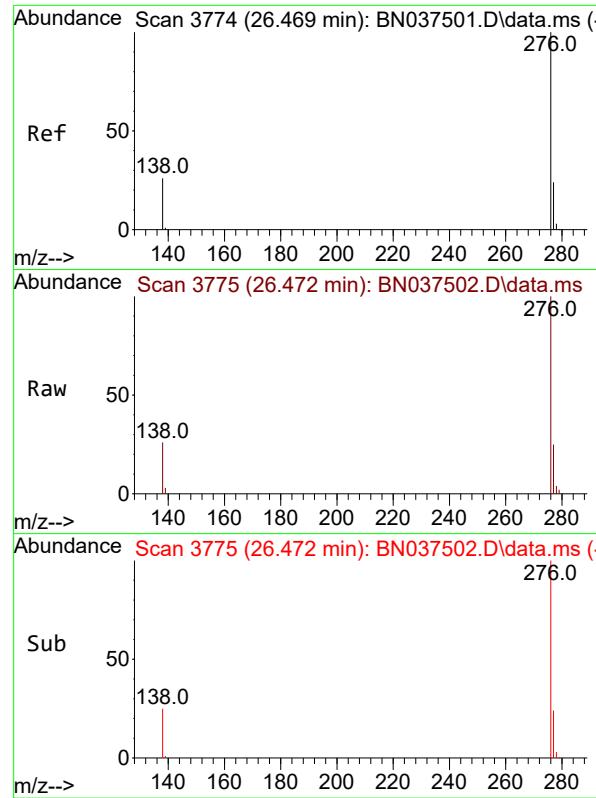
Tgt Ion:252 Resp: 10903  
 Ion Ratio Lower Upper  
 252 100  
 253 23.6 19.9 29.9  
 125 16.0 15.2 22.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.745 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. 0.000 min  
 Lab File: BN037502.D  
 Acq: 15 Jul 2025 14:25

Tgt Ion:278 Resp: 11648  
 Ion Ratio Lower Upper  
 278 100  
 139 21.3 17.5 26.3  
 279 24.8 21.3 31.9





#41

Benzo(g,h,i)perylene

Concen: 0.743 ng

RT: 26.472 min Scan# 3

Instrument :

BNA\_N

Delta R.T. 0.003 min

Lab File: BN037502.D

ClientSampleId :

Acq: 15 Jul 2025 14:25

SSTDICC0.8

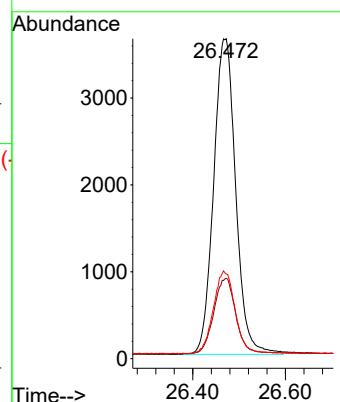
Tgt Ion:276 Resp: 12022

Ion Ratio Lower Upper

276 100

277 25.1 20.9 31.3

138 26.5 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037503.D  
 Acq On : 15 Jul 2025 15:01  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Jul 15 17:27:34 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

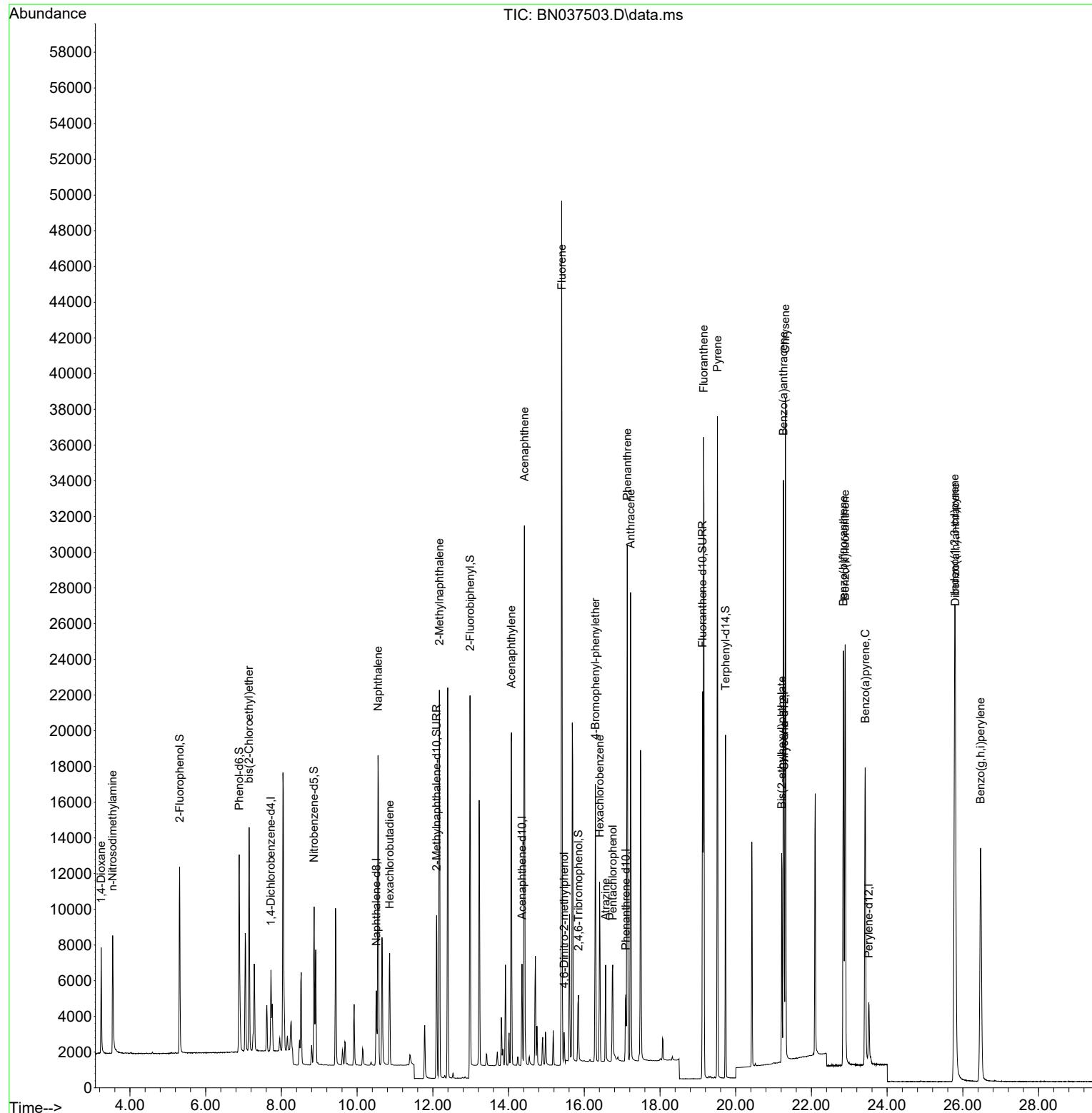
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2129	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5384	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3005	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	5542	0.400	ng	0.00
29) Chrysene-d12	21.277	240	4955	0.400	ng	0.00
35) Perylene-d12	23.516	264	4551	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	8362	1.588	ng	0.00
5) Phenol-d6	6.886	99	10225	1.548	ng	0.00
8) Nitrobenzene-d5	8.864	82	6457	1.604	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	12096	1.566	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	2331	1.578	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	27369	1.751	ng	0.00
27) Fluoranthene-d10	19.127	212	23071	1.572	ng	0.00
31) Terphenyl-d14	19.731	244	16936	1.591	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	3392	1.657	ng	98
3) n-Nitrosodimethylamine	3.543	42	4327	1.681	ng	# 90
6) bis(2-Chloroethyl)ether	7.146	93	8832	1.607	ng	99
9) Naphthalene	10.551	128	23495	1.636	ng	98
10) Hexachlorobutadiene	10.861	225	5277	1.663	ng	# 98
12) 2-Methylnaphthalene	12.172	142	15410	1.632	ng	99
16) Acenaphthylene	14.077	152	22002	1.635	ng	100
17) Acenaphthene	14.419	154	14877	1.625	ng	99
18) Fluorene	15.403	166	19298	1.638	ng	98
20) 4,6-Dinitro-2-methylph...	15.467	198	1268	1.576	ng	# 75
21) 4-Bromophenyl-phenylether	16.292	248	5943	1.674	ng	98
22) Hexachlorobenzene	16.404	284	7650	1.668	ng	100
23) Atrazine	16.565	200	4016	1.621	ng	95
24) Pentachlorophenol	16.751	266	3347	1.627	ng	99
25) Phenanthrene	17.136	178	27669	1.666	ng	100
26) Anthracene	17.223	178	25717	1.697	ng	100
28) Fluoranthene	19.155	202	31674	1.654	ng	99
30) Pyrene	19.517	202	31858	1.596	ng	100
32) Benzo(a)anthracene	21.259	228	28317	1.632	ng	99
33) Chrysene	21.313	228	29489	1.632	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	11959	1.532	ng	99
36) Indeno(1,2,3-cd)pyrene	25.782	276	32244	1.701	ng	99
37) Benzo(b)fluoranthene	22.844	252	28933	1.675	ng	# 94
38) Benzo(k)fluoranthene	22.890	252	30228	1.696	ng	# 94
39) Benzo(a)pyrene	23.420	252	24034	1.668	ng	# 93
40) Dibenzo(a,h)anthracene	25.800	278	26285	1.712	ng	95
41) Benzo(g,h,i)perylene	26.466	276	26971	1.697	ng	96

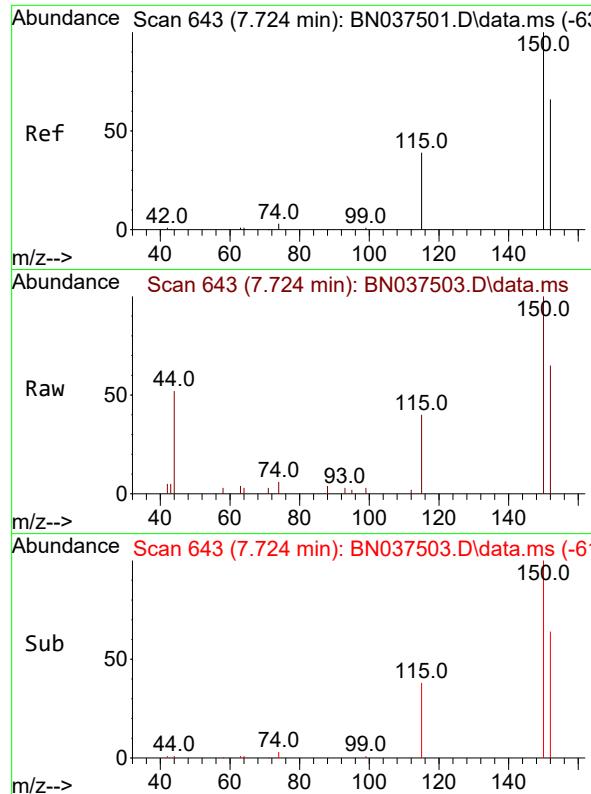
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037503.D  
 Acq On : 15 Jul 2025 15:01  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Jul 15 17:27:34 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

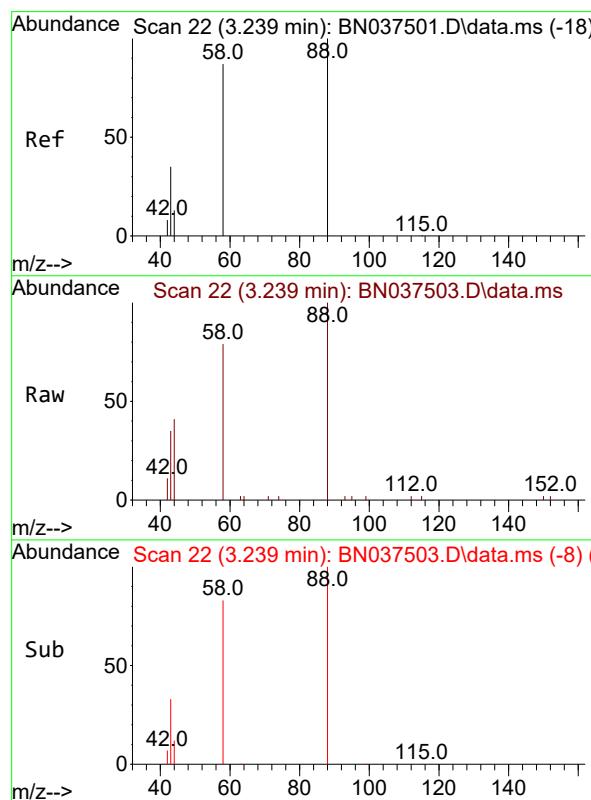
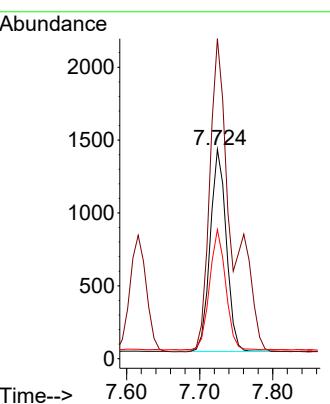




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

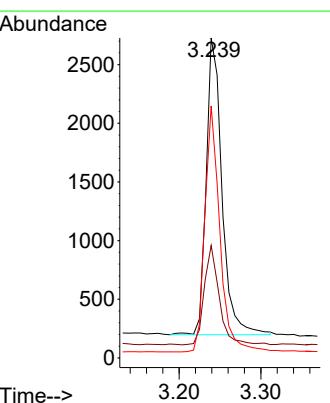
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

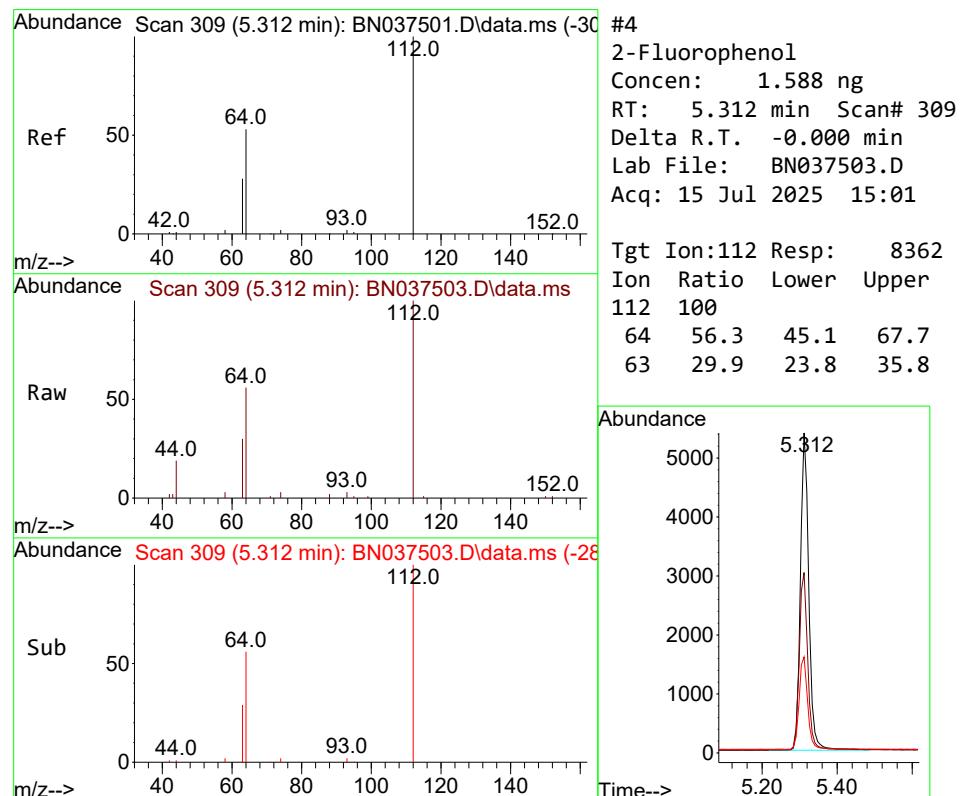
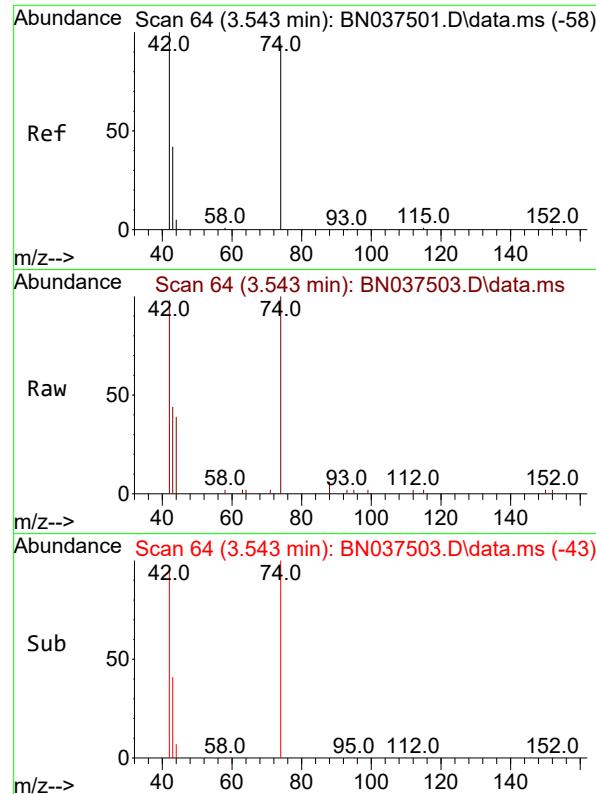
Tgt Ion:152 Resp: 2129  
Ion Ratio Lower Upper  
152 100  
150 152.9 119.8 179.8  
115 61.7 49.1 73.7



#2  
1,4-Dioxane  
Concen: 1.657 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion: 88 Resp: 3392  
Ion Ratio Lower Upper  
88 100  
43 31.9 27.5 41.3  
58 78.8 62.7 94.1

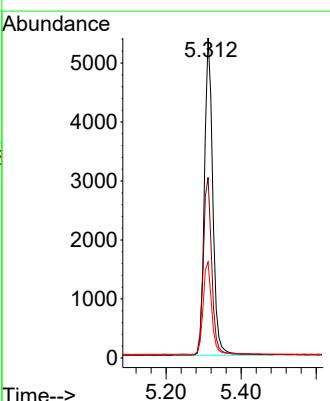


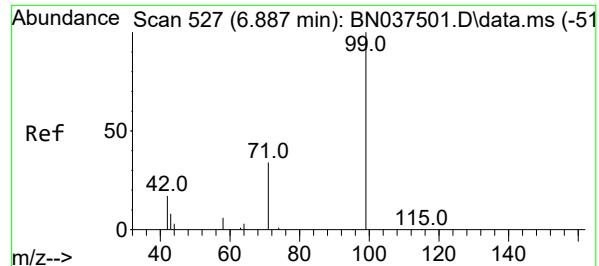


#4

2-Fluorophenol  
Concen: 1.588 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

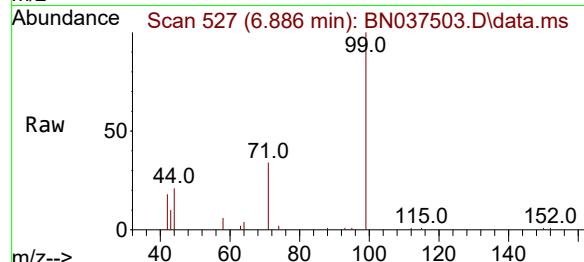
Tgt Ion: 112 Resp: 8362  
Ion Ratio Lower Upper  
112 100  
64 56.3 45.1 67.7  
63 29.9 23.8 35.8



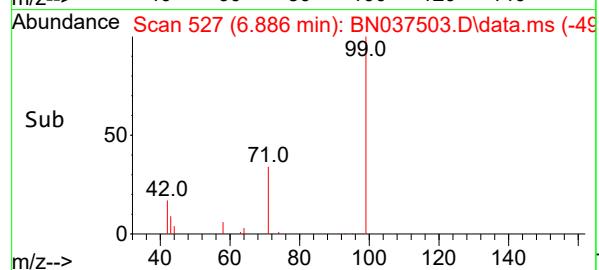
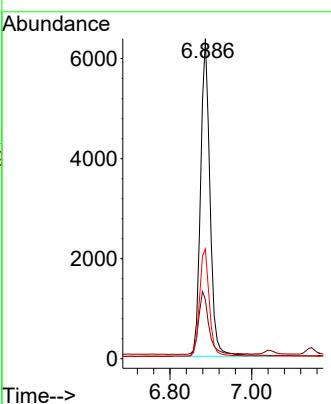


#5  
 Phenol-d6  
 Concen: 1.548 ng  
 RT: 6.886 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

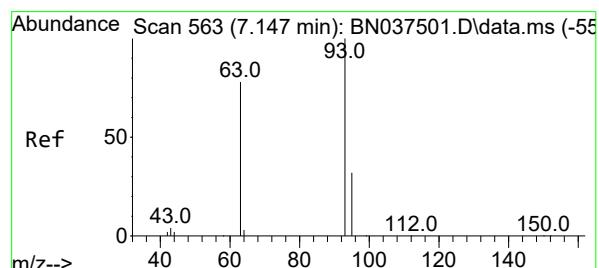
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6



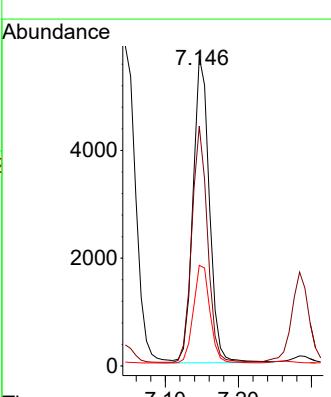
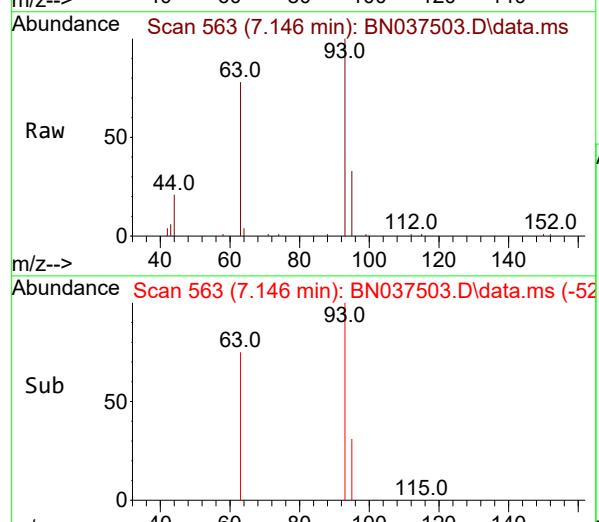
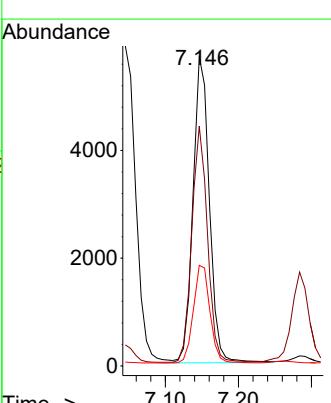
Tgt Ion: 99 Resp: 10225  
 Ion Ratio Lower Upper  
 99 100  
 42 21.6 17.1 25.7  
 71 34.7 27.8 41.8

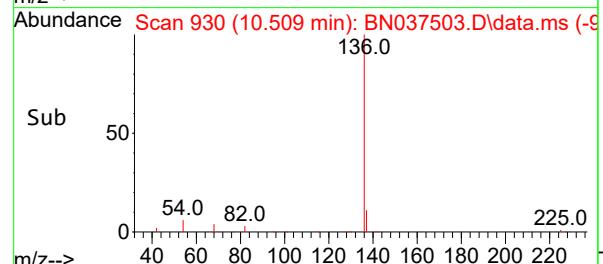
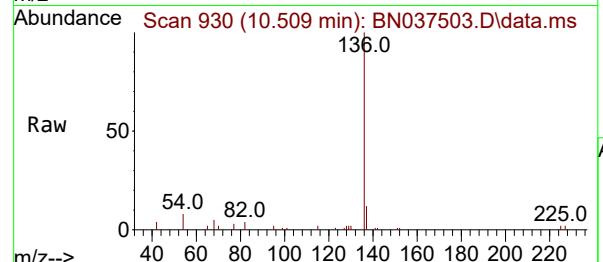
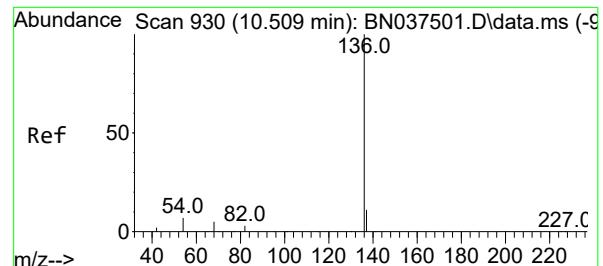


#6  
 bis(2-Chloroethyl)ether  
 Concen: 1.607 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01



Tgt Ion: 93 Resp: 8832  
 Ion Ratio Lower Upper  
 93 100  
 63 73.9 58.2 87.4  
 95 32.4 25.3 37.9



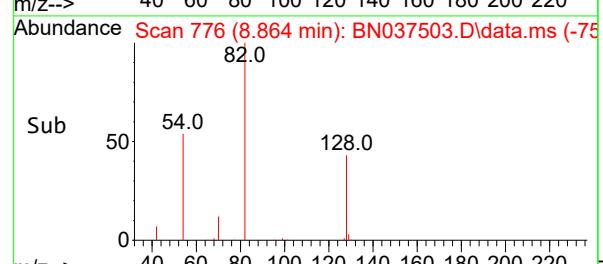
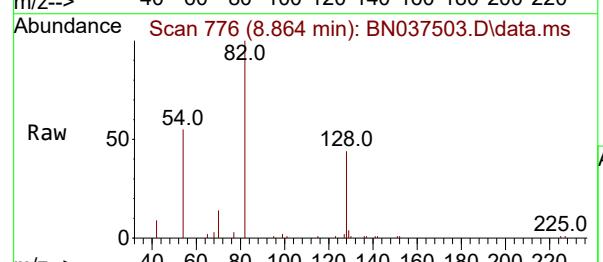
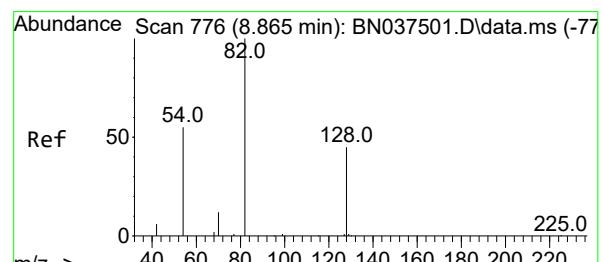
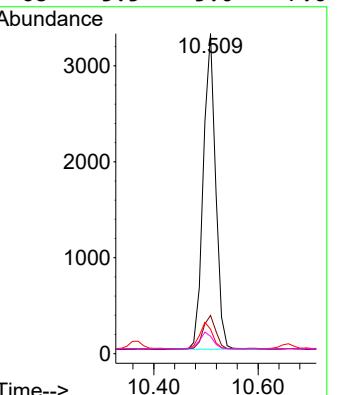


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

Tgt Ion:136 Resp: 5384

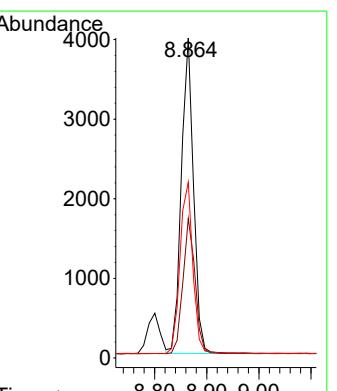
	Ion Ratio	Lower	Upper
136	100		
137	11.9	9.8	14.8
54	7.7	6.6	9.8
68	5.5	5.0	7.6

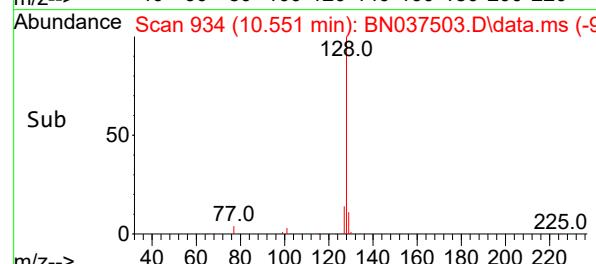
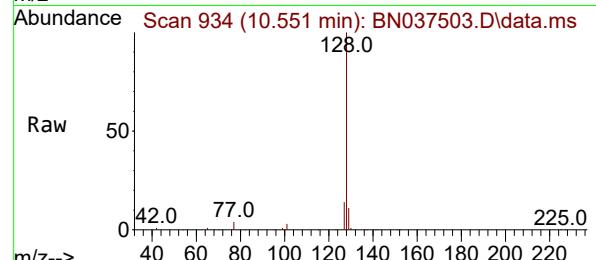
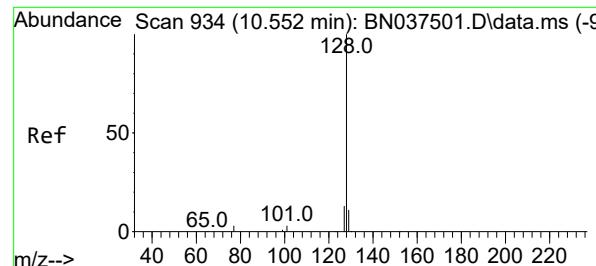


#8  
 Nitrobenzene-d5  
 Concen: 1.604 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion: 82 Resp: 6457

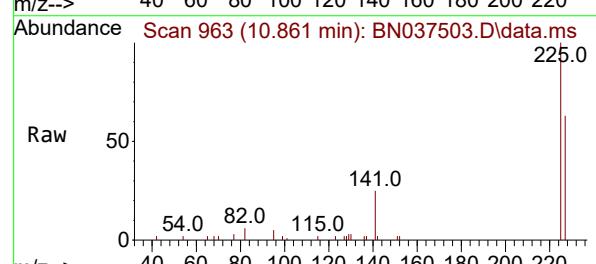
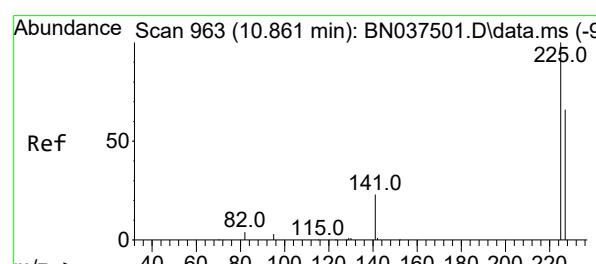
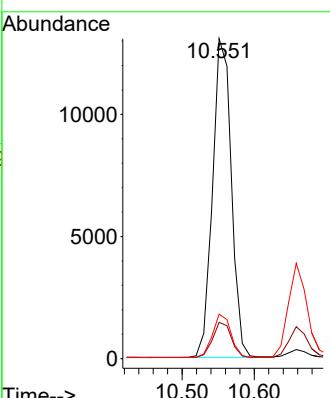
	Ion Ratio	Lower	Upper
82	100		
128	43.6	37.5	56.3
54	54.9	45.3	67.9





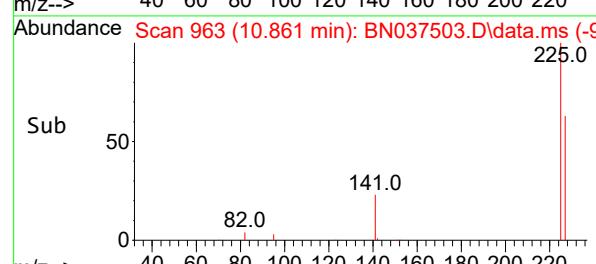
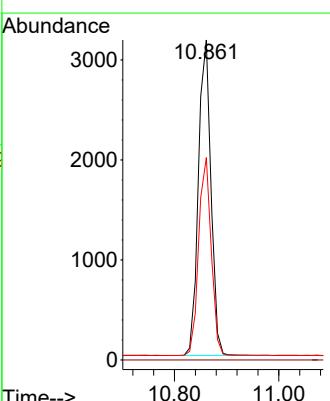
#9  
Naphthalene  
Concen: 1.636 ng  
RT: 10.551 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01  
ClientSampleId : SSTDICC1.6

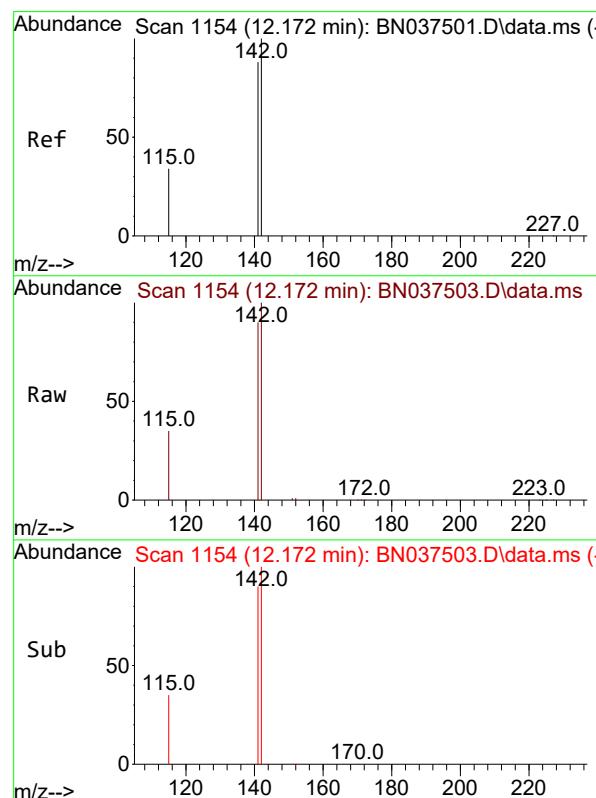
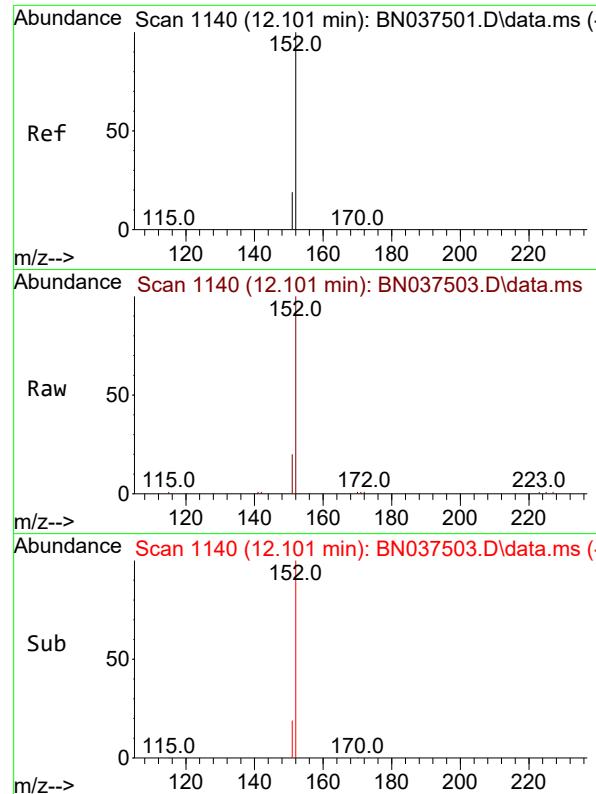
Tgt Ion:128 Resp: 23495  
Ion Ratio Lower Upper  
128 100  
129 11.3 9.7 14.5  
127 13.9 11.5 17.3



#10  
Hexachlorobutadiene  
Concen: 1.663 ng  
RT: 10.861 min Scan# 963  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

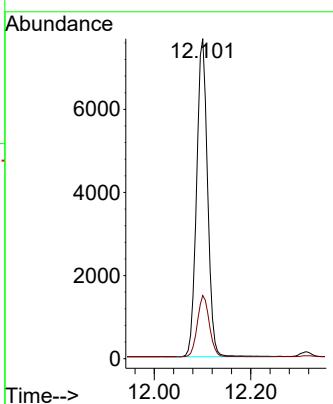
Tgt Ion:225 Resp: 5277  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.4 51.0 76.4





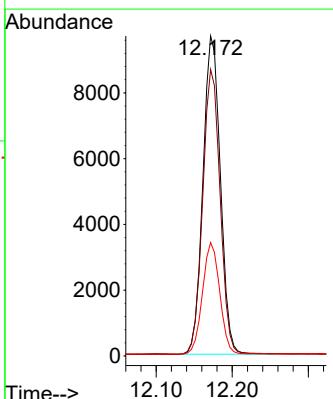
#11  
2-Methylnaphthalene-d10  
Concen: 1.566 ng  
RT: 12.101 min Scan# 1:Instrument :  
Delta R.T. -0.000 min BNA\_N  
Lab File: BN037503.D ClientSampleId :  
Acq: 15 Jul 2025 15:01 SSTDICC1.6

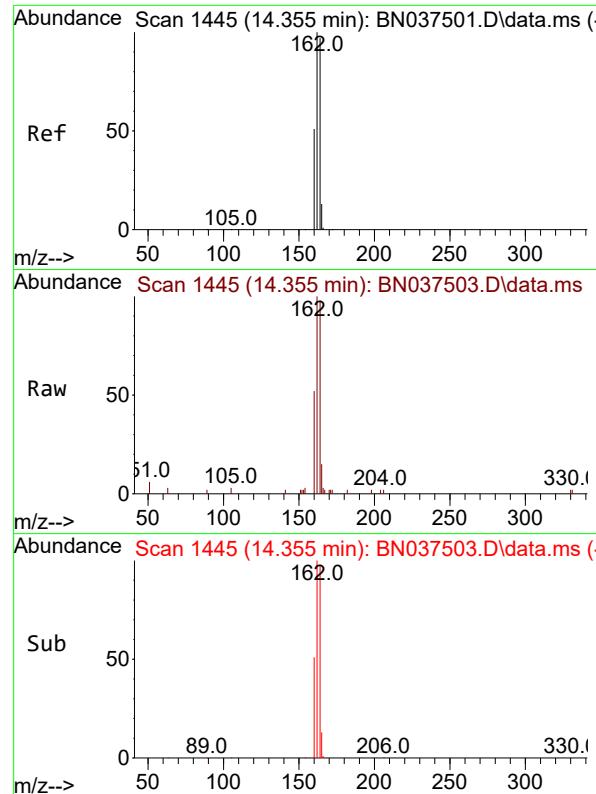
Tgt Ion:152 Resp: 12096  
Ion Ratio Lower Upper  
152 100  
151 20.9 16.8 25.2



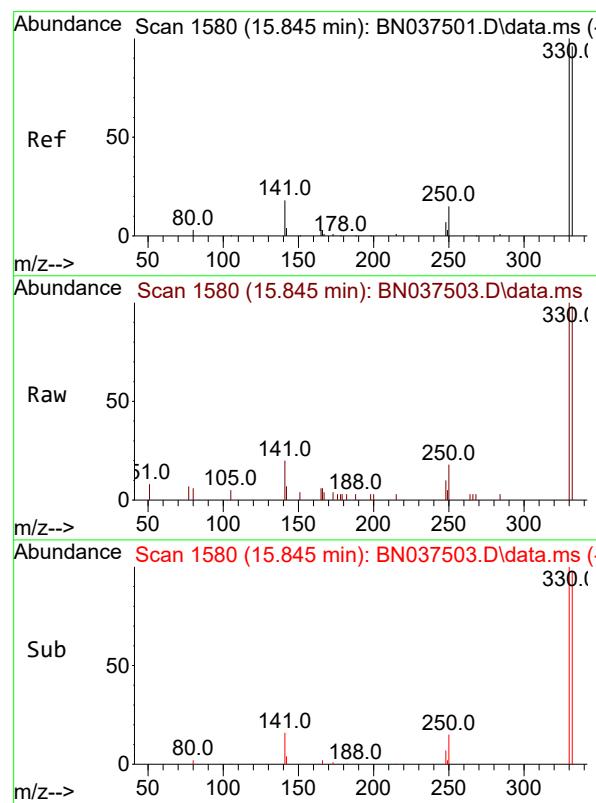
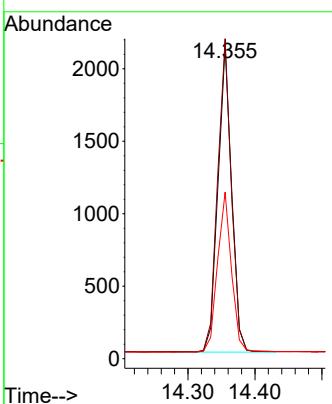
#12  
2-Methylnaphthalene  
Concen: 1.632 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:142 Resp: 15410  
Ion Ratio Lower Upper  
142 100  
141 89.5 71.0 106.4  
115 35.4 29.0 43.4

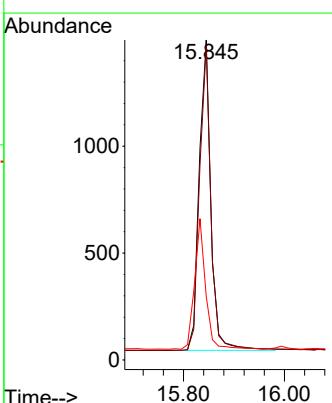


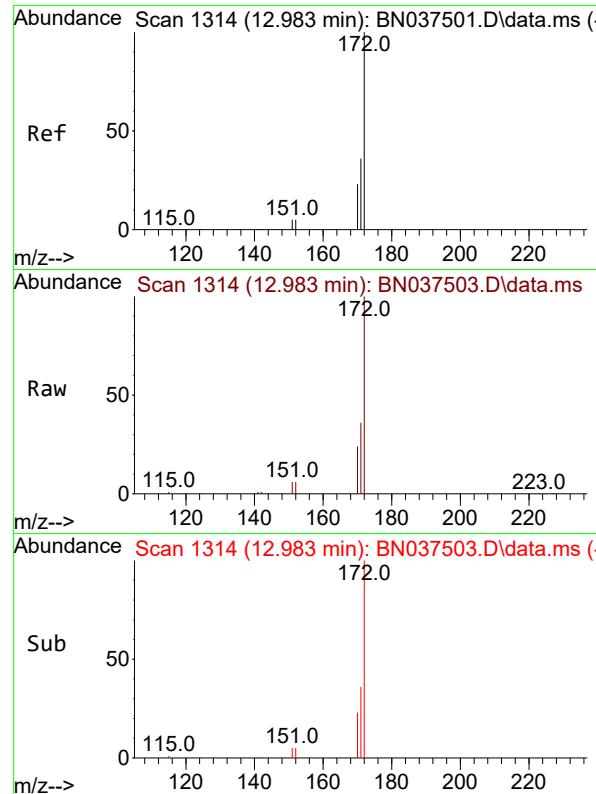


#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.355 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6Tgt Ion:164 Resp: 3005  
Ion Ratio Lower Upper  
164 100  
162 102.0 82.0 123.0  
160 53.1 42.4 63.6

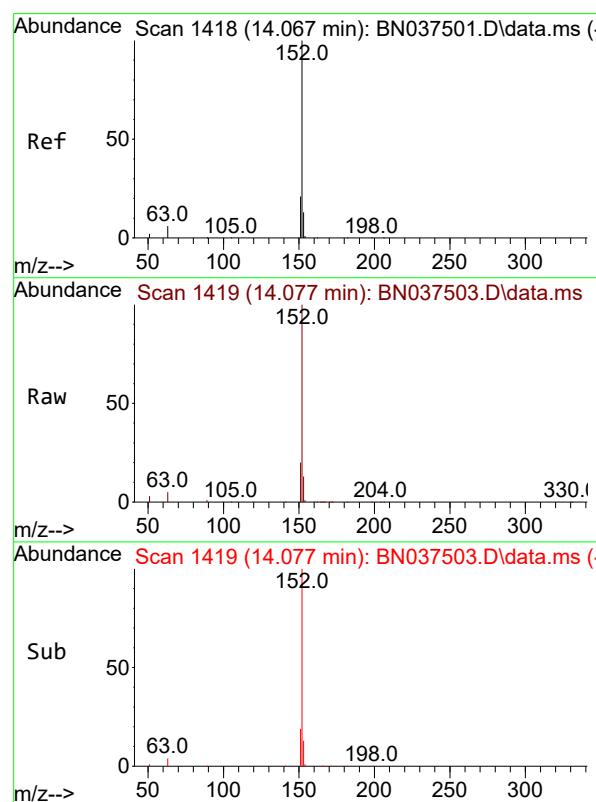
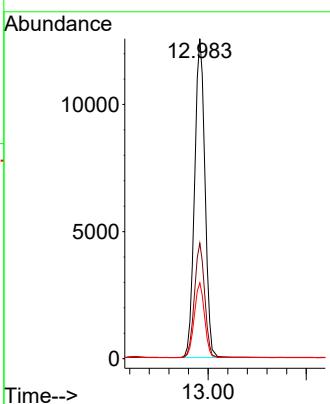
#14

2,4,6-Tribromophenol  
Concen: 1.578 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01Tgt Ion:330 Resp: 2331  
Ion Ratio Lower Upper  
330 100  
332 96.1 76.1 114.1  
141 40.0 33.4 50.0



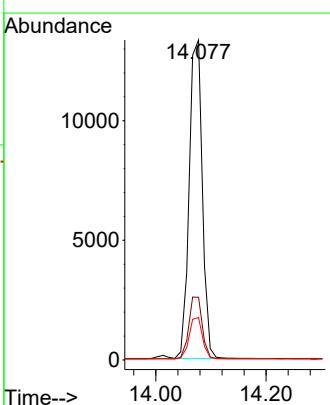
#15  
2-Fluorobiphenyl  
Concen: 1.751 ng  
RT: 12.983 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01  
ClientSampleId : SSTDICC1.6

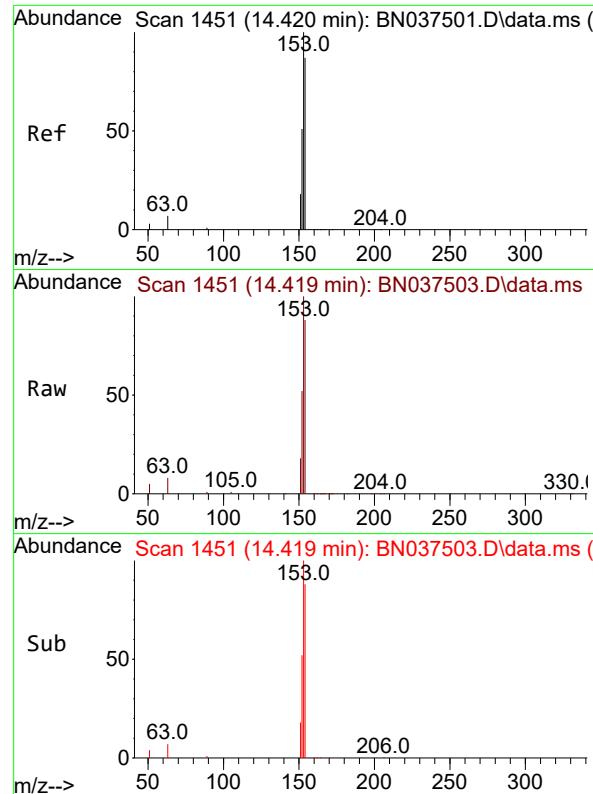
Tgt Ion:172 Resp: 27369  
Ion Ratio Lower Upper  
172 100  
171 36.1 29.4 44.2  
170 23.7 19.4 29.0



#16  
Acenaphthylene  
Concen: 1.635 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.011 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:152 Resp: 22002  
Ion Ratio Lower Upper  
152 100  
151 19.9 15.9 23.9  
153 13.2 10.7 16.1

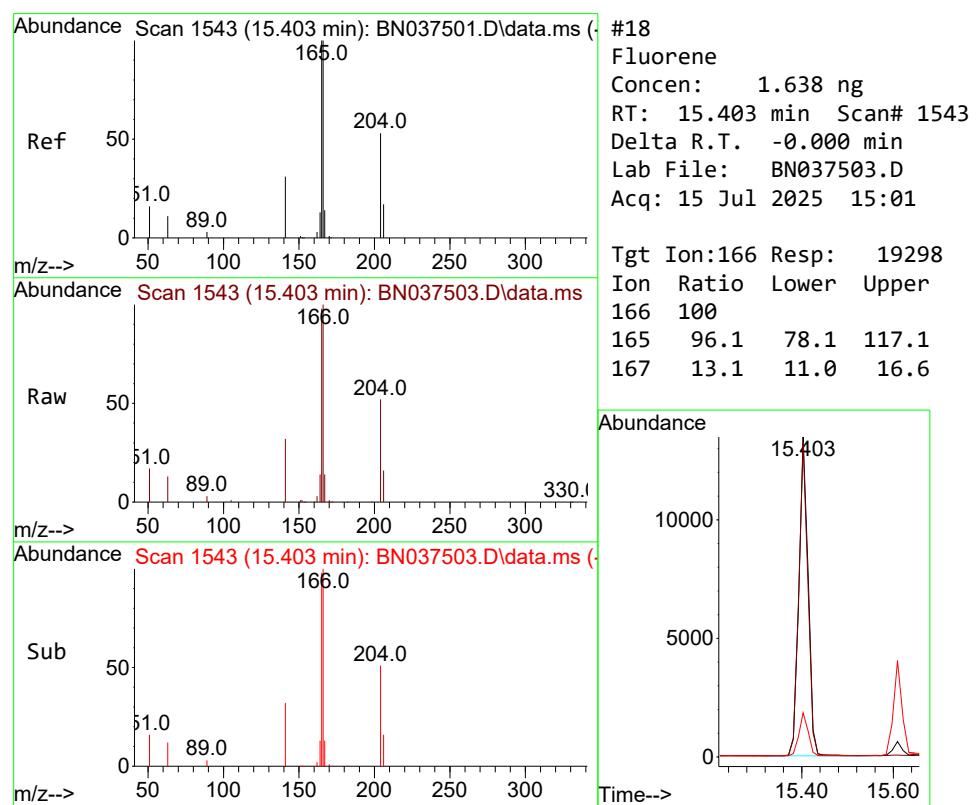
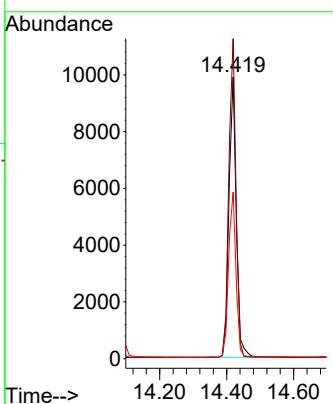




#17  
Acenaphthene  
Concen: 1.625 ng  
RT: 14.419 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

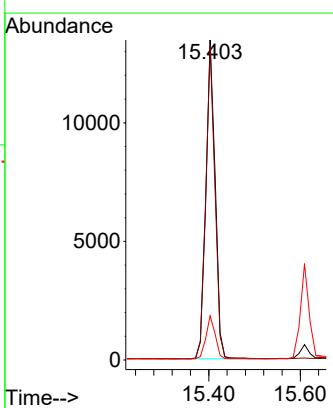
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

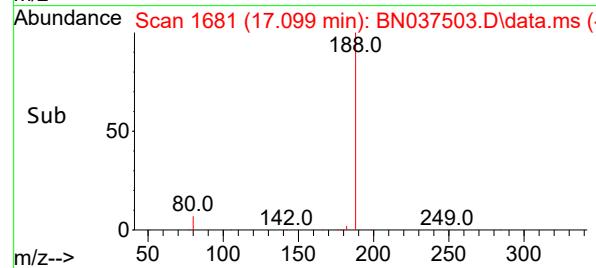
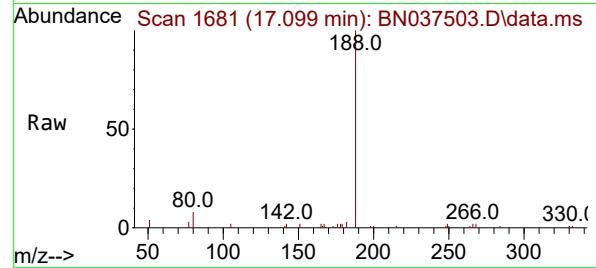
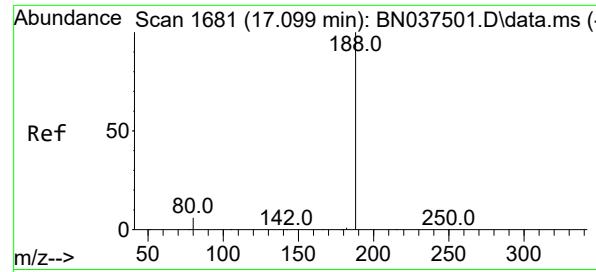
Tgt Ion:154 Resp: 14877  
Ion Ratio Lower Upper  
154 100  
153 110.6 89.2 133.8  
152 59.5 48.0 72.0



#18  
Fluorene  
Concen: 1.638 ng  
RT: 15.403 min Scan# 1543  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:166 Resp: 19298  
Ion Ratio Lower Upper  
166 100  
165 96.1 78.1 117.1  
167 13.1 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument:

BNA\_N

ClientSampleId :

SSTDICC1.6

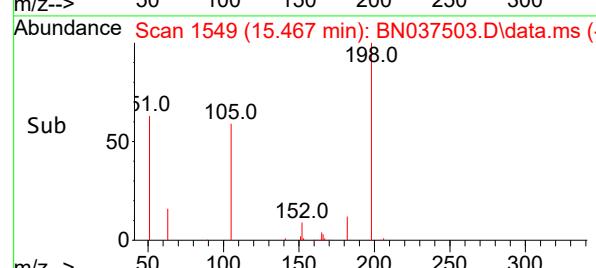
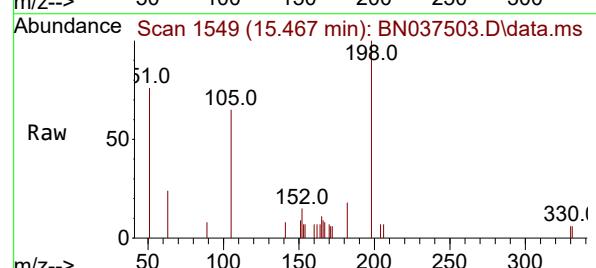
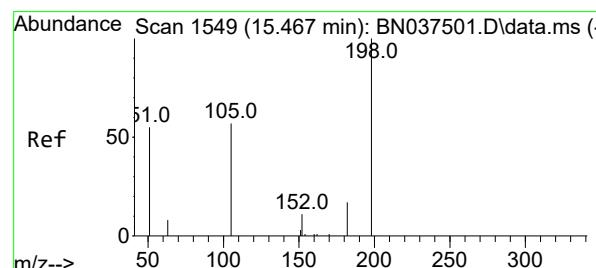
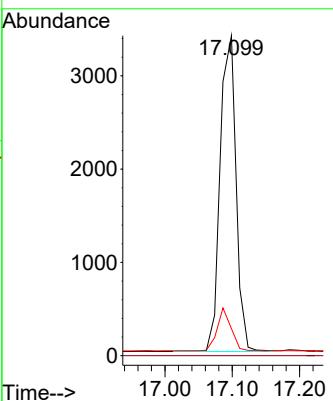
Tgt Ion:188 Resp: 5542

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.5 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 1.576 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

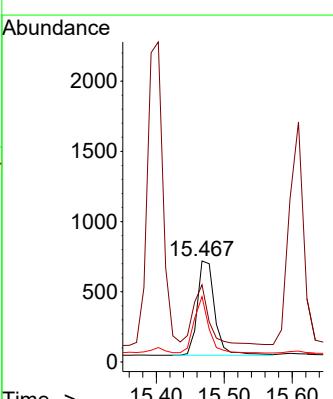
Tgt Ion:198 Resp: 1268

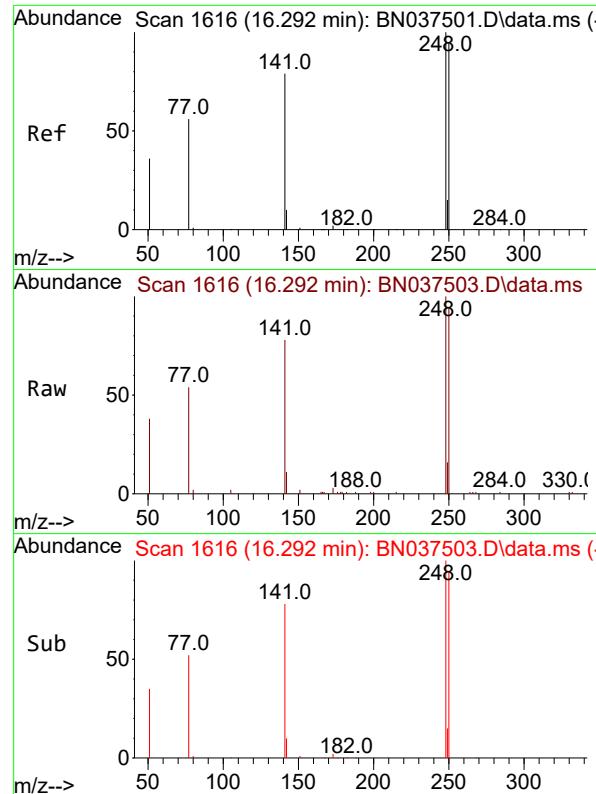
Ion Ratio Lower Upper

198 100

51 76.5 88.5 132.7#

105 64.7 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 1.674 ng

RT: 16.292 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

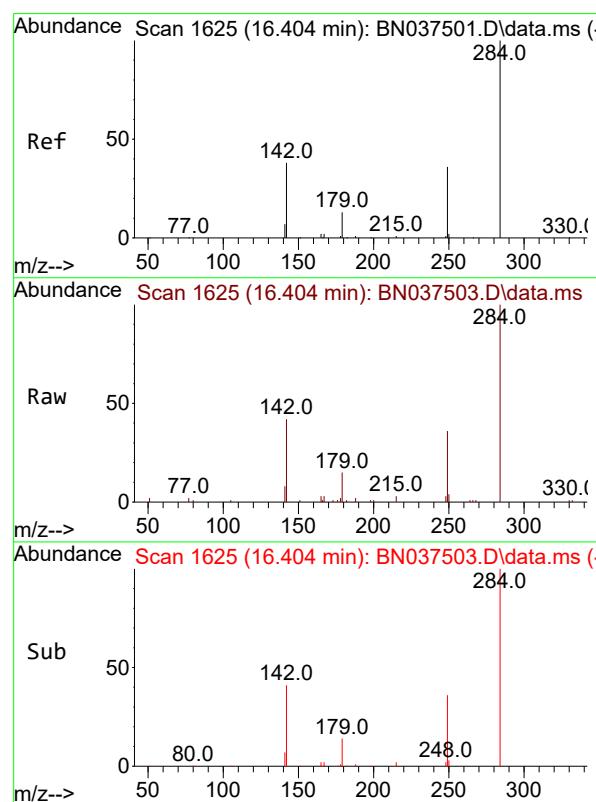
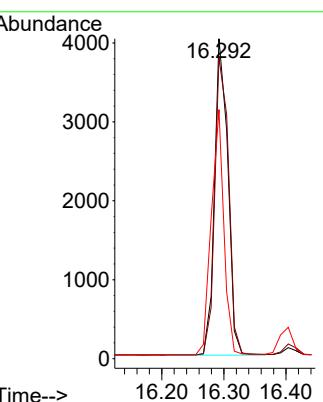
Tgt Ion:248 Resp: 5943

Ion Ratio Lower Upper

248 100

250 94.1 76.2 114.2

141 77.8 63.9 95.9



#22

Hexachlorobenzene

Concen: 1.668 ng

RT: 16.404 min Scan# 1625

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

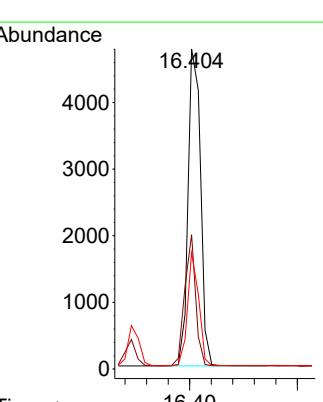
Tgt Ion:284 Resp: 7650

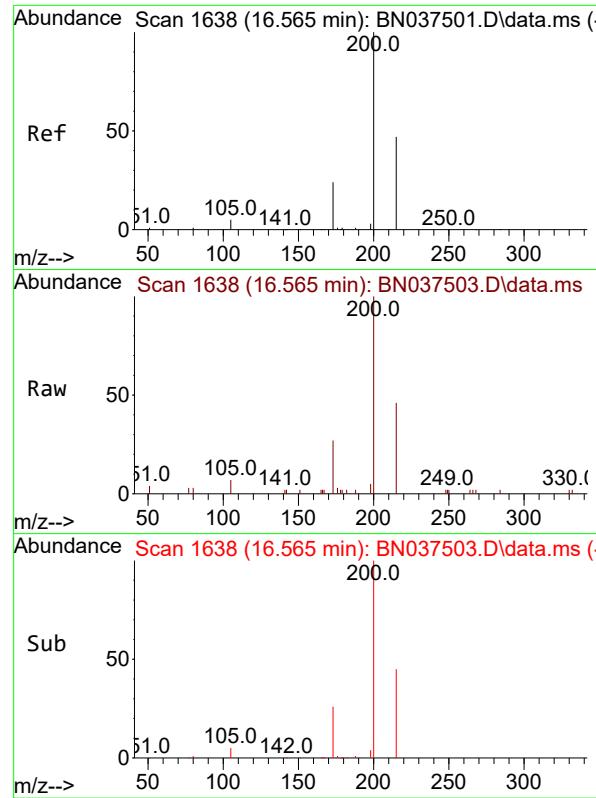
Ion Ratio Lower Upper

284 100

142 36.4 28.9 43.3

249 32.1 25.8 38.6

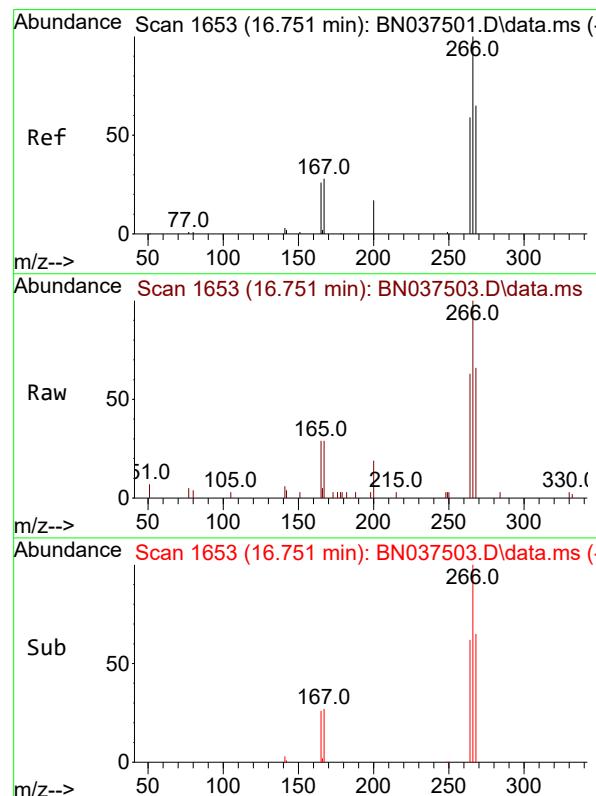
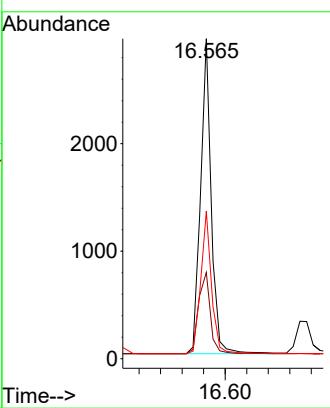




#23  
Atrazine  
Concen: 1.621 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

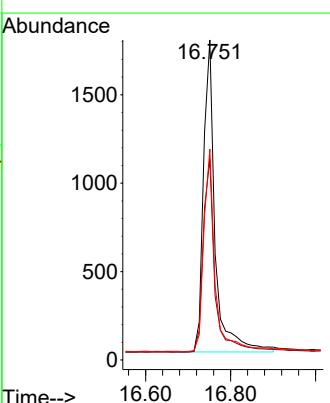
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

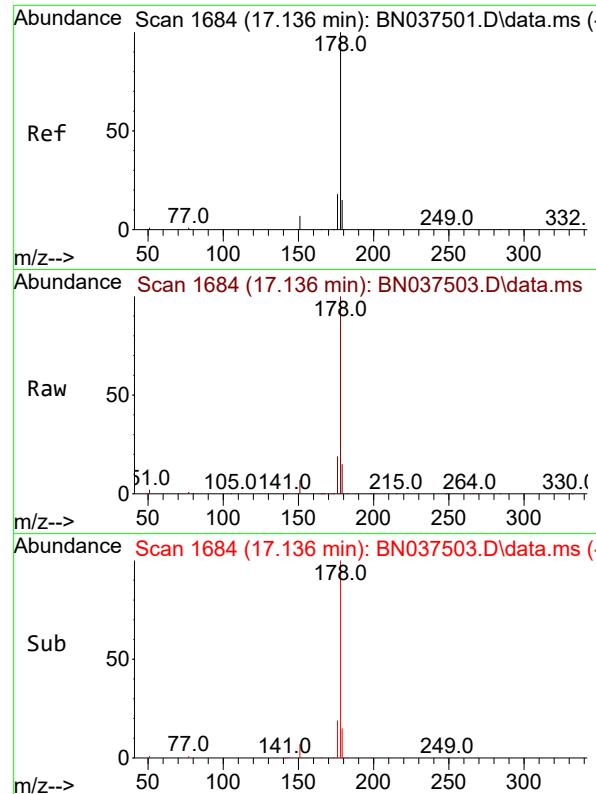
Tgt Ion:200 Resp: 4016  
Ion Ratio Lower Upper  
200 100  
173 27.0 23.2 34.8  
215 46.1 40.2 60.4



#24  
Pentachlorophenol  
Concen: 1.627 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:266 Resp: 3347  
Ion Ratio Lower Upper  
266 100  
264 62.6 49.3 73.9  
268 64.1 51.6 77.4

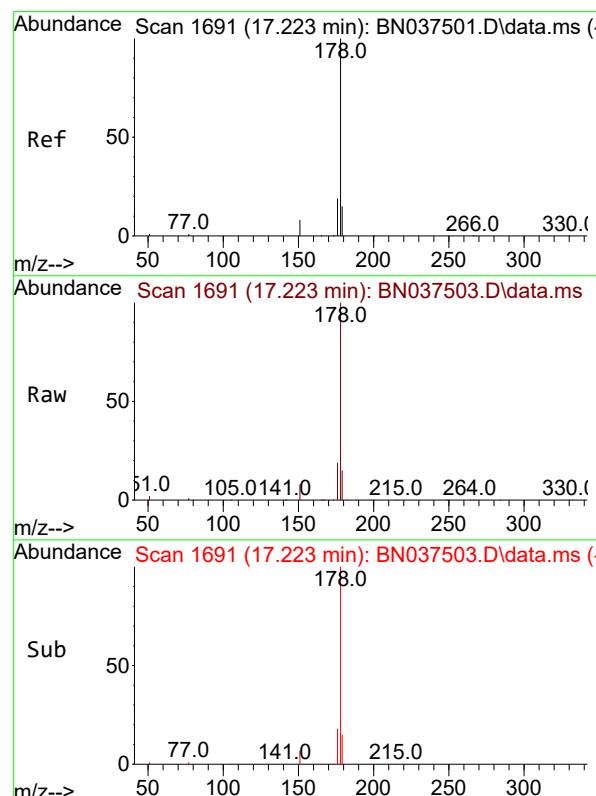
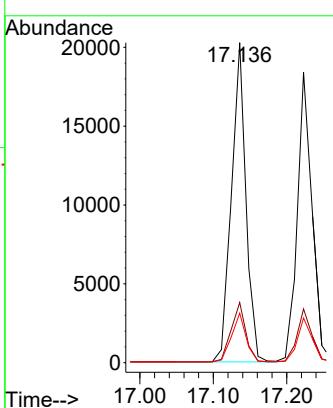




#25  
Phenanthrene  
Concen: 1.666 ng  
RT: 17.136 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

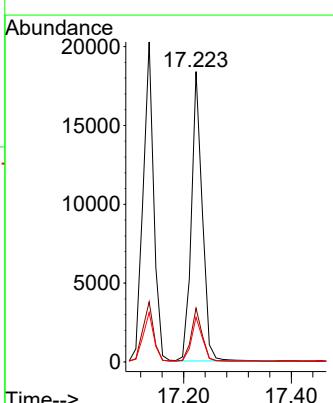
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

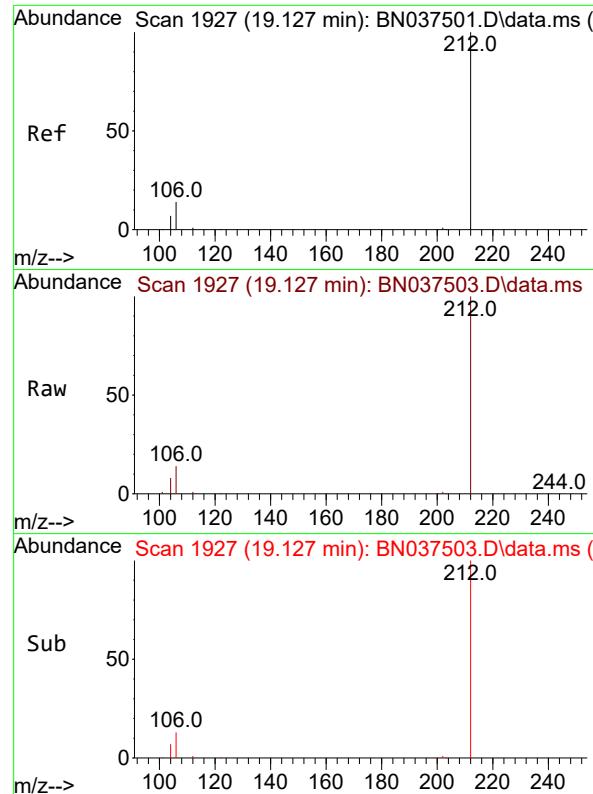
Tgt Ion:178 Resp: 27669  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.0 22.6  
179 15.3 12.2 18.2



#26  
Anthracene  
Concen: 1.697 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:178 Resp: 25717  
Ion Ratio Lower Upper  
178 100  
176 18.4 14.7 22.1  
179 15.3 12.3 18.5

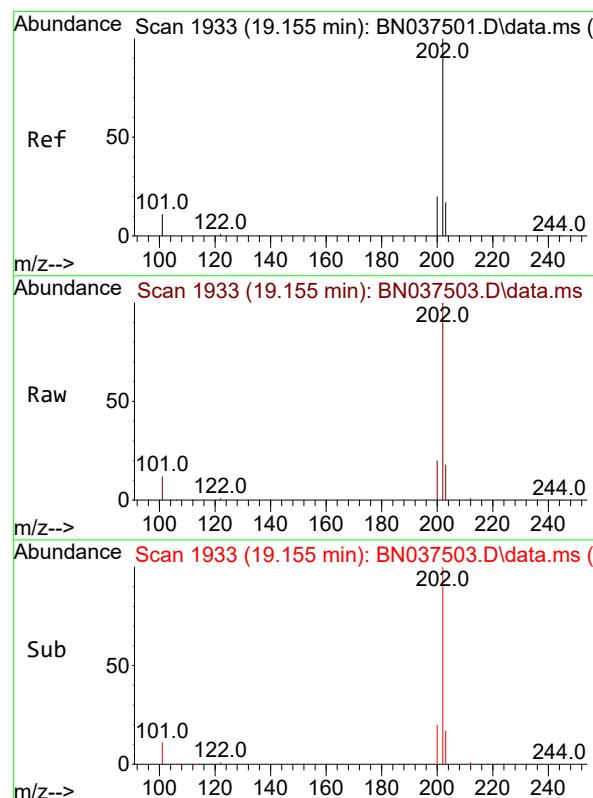
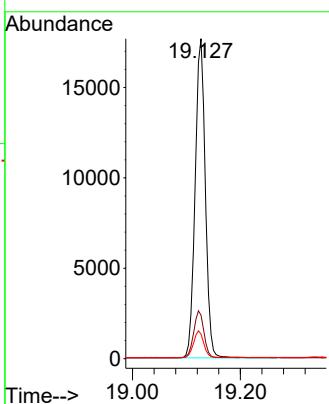




#27  
 Fluoranthene-d10  
 Concen: 1.572 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

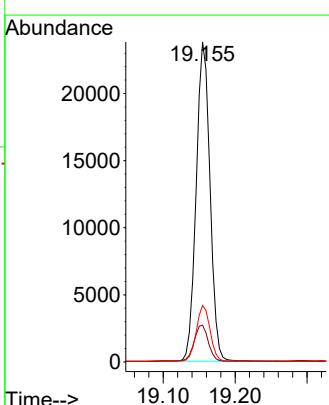
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

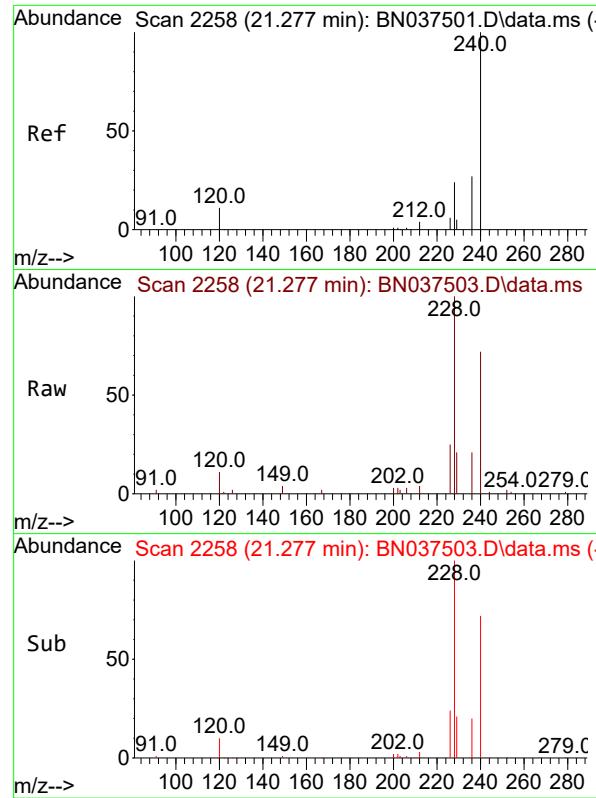
Tgt Ion:212 Resp: 23071  
 Ion Ratio Lower Upper  
 212 100  
 106 14.8 12.2 18.4  
 104 8.3 6.7 10.1



#28  
 Fluoranthene  
 Concen: 1.654 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:202 Resp: 31674  
 Ion Ratio Lower Upper  
 202 100  
 101 11.7 9.8 14.6  
 203 17.3 13.6 20.4

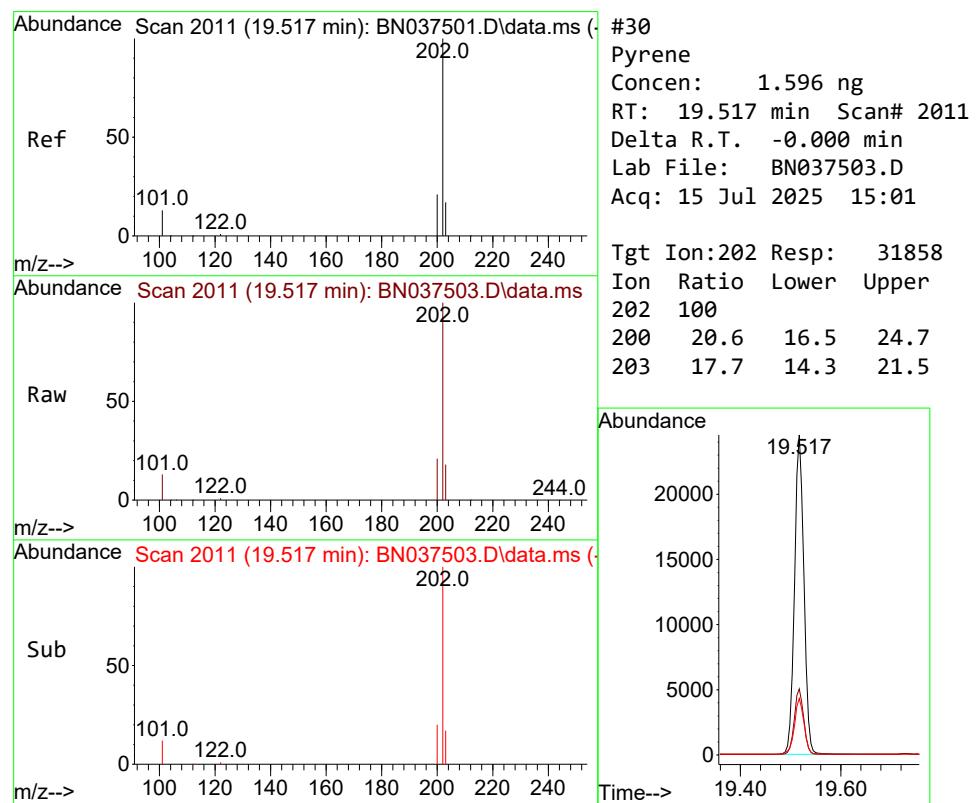
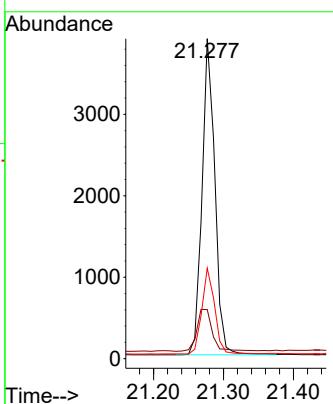




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

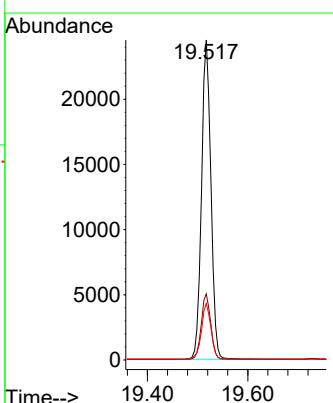
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

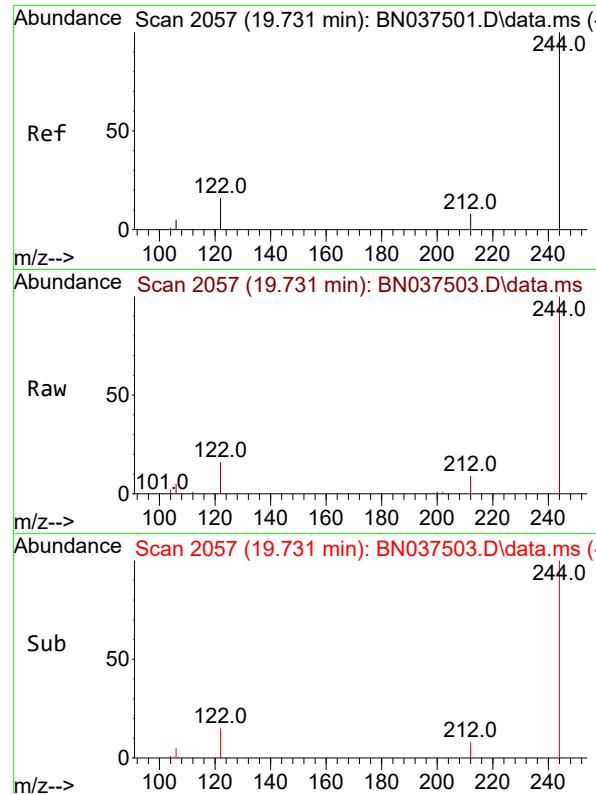
Tgt Ion:240 Resp: 4955  
 Ion Ratio Lower Upper  
 240 100  
 120 15.4 10.7 16.1  
 236 28.3 22.6 33.8



#30  
 Pyrene  
 Concen: 1.596 ng  
 RT: 19.517 min Scan# 2011  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:202 Resp: 31858  
 Ion Ratio Lower Upper  
 202 100  
 200 20.6 16.5 24.7  
 203 17.7 14.3 21.5

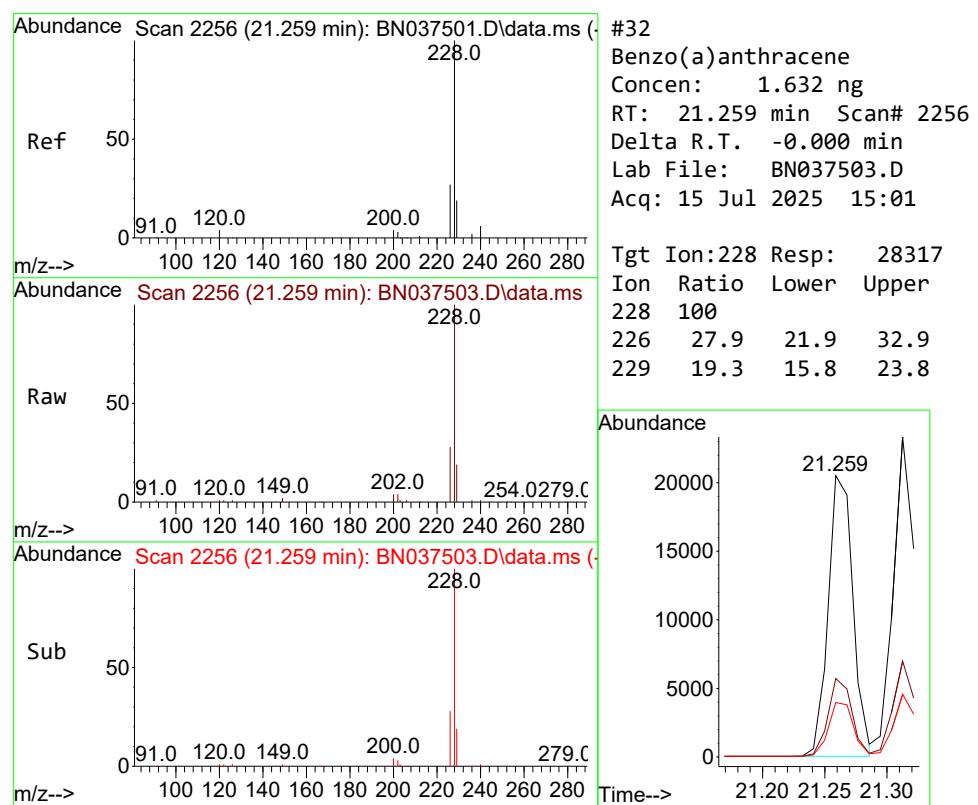
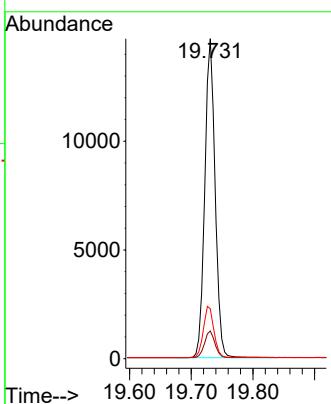




#31  
 Terphenyl-d14  
 Concen: 1.591 ng  
 RT: 19.731 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

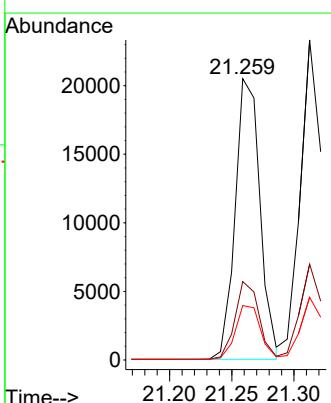
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

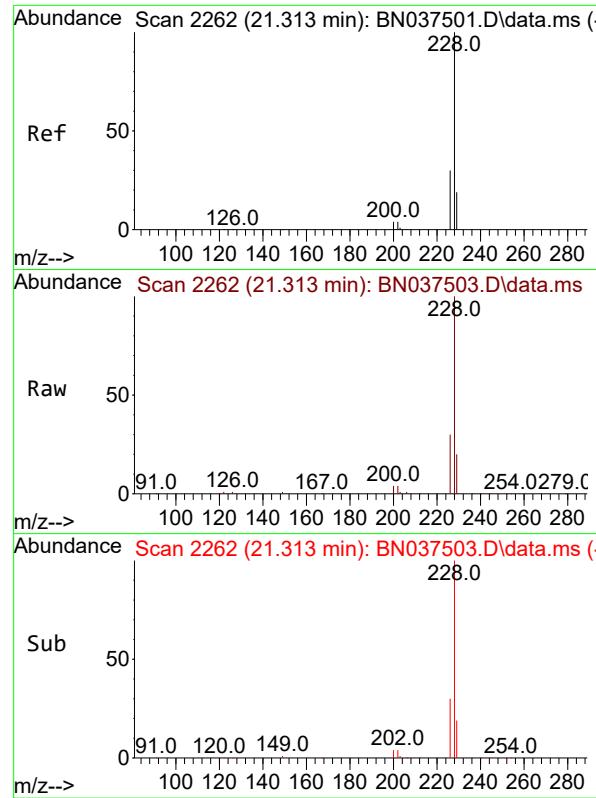
Tgt Ion:244 Resp: 16936  
 Ion Ratio Lower Upper  
 244 100  
 212 8.6 7.4 11.2  
 122 15.6 13.6 20.4



#32  
 Benzo(a)anthracene  
 Concen: 1.632 ng  
 RT: 21.259 min Scan# 2256  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

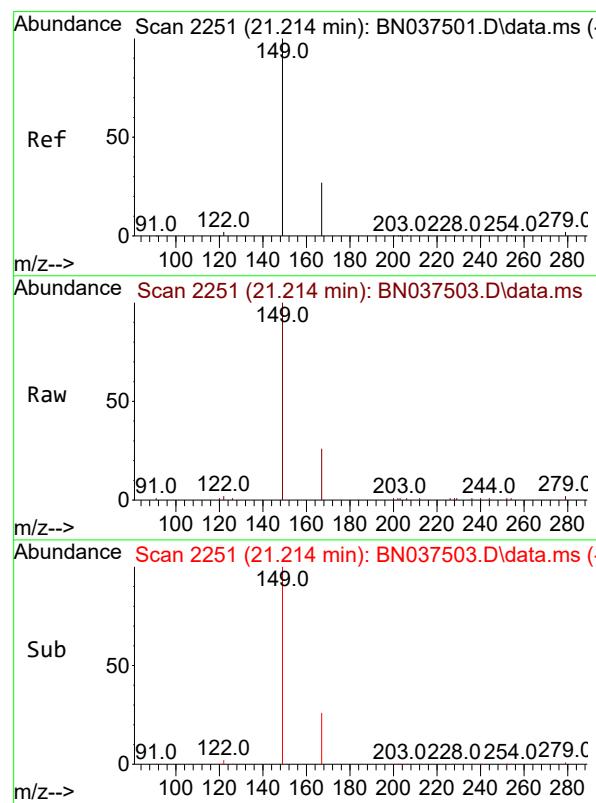
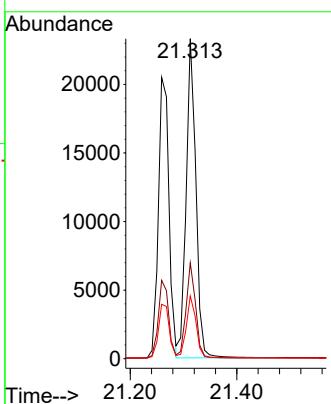
Tgt Ion:228 Resp: 28317  
 Ion Ratio Lower Upper  
 228 100  
 226 27.9 21.9 32.9  
 229 19.3 15.8 23.8





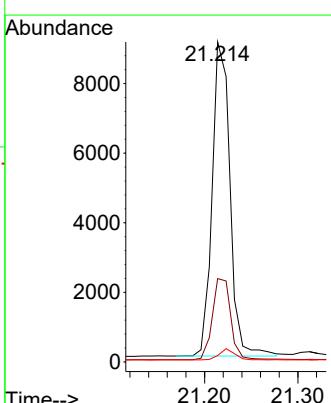
#33  
Chrysene  
Concen: 1.632 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01  
ClientSampleId : SSTDICC1.6

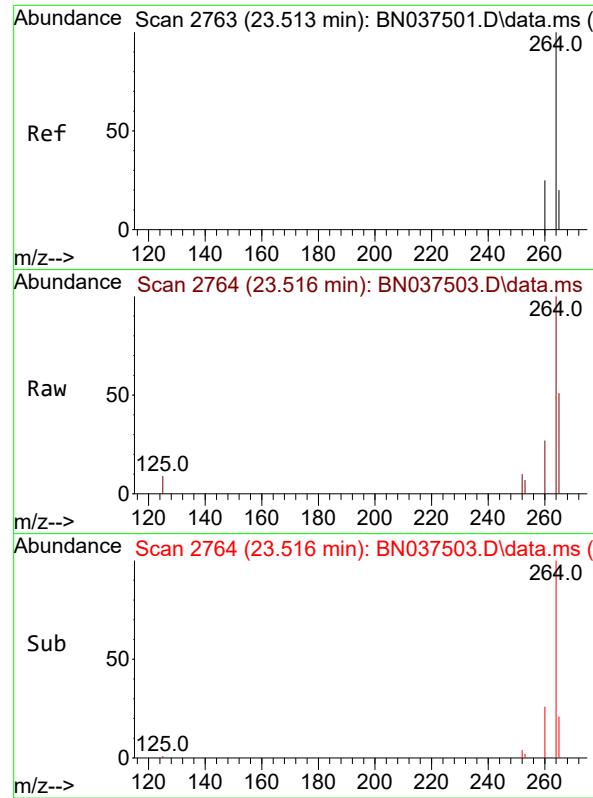
Tgt Ion:228 Resp: 29489  
Ion Ratio Lower Upper  
228 100  
226 30.0 24.2 36.4  
229 19.6 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 1.532 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:149 Resp: 11959  
Ion Ratio Lower Upper  
149 100  
167 26.5 21.8 32.8  
279 3.1 3.0 4.4

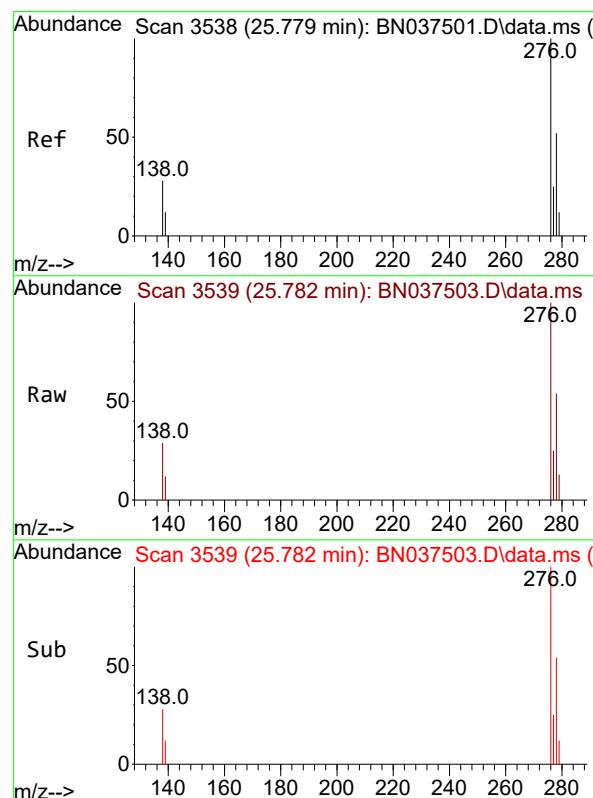
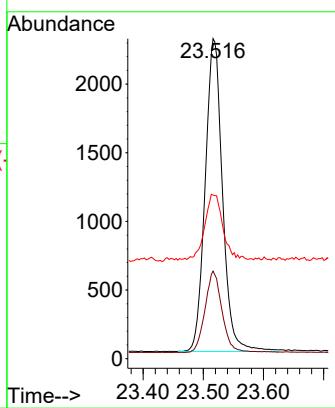




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

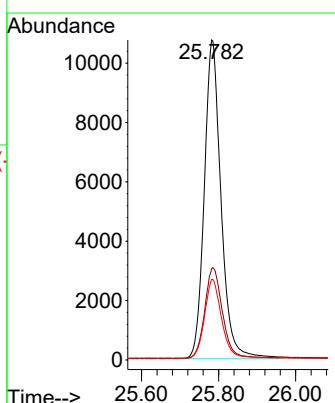
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

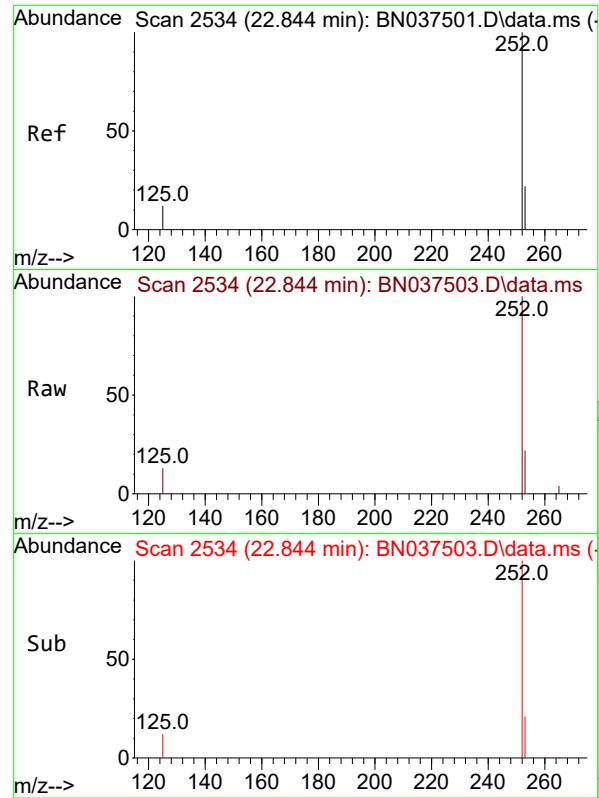
Tgt Ion:264 Resp: 4551  
Ion Ratio Lower Upper  
264 100  
260 27.3 21.2 31.8  
265 51.1 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 1.701 ng  
RT: 25.782 min Scan# 3539  
Delta R.T. 0.003 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Tgt Ion:276 Resp: 32244  
Ion Ratio Lower Upper  
276 100  
138 30.1 24.0 36.0  
277 25.1 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 1.675 ng

RT: 22.844 min Scan# 2

Delta R.T. -0.000 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

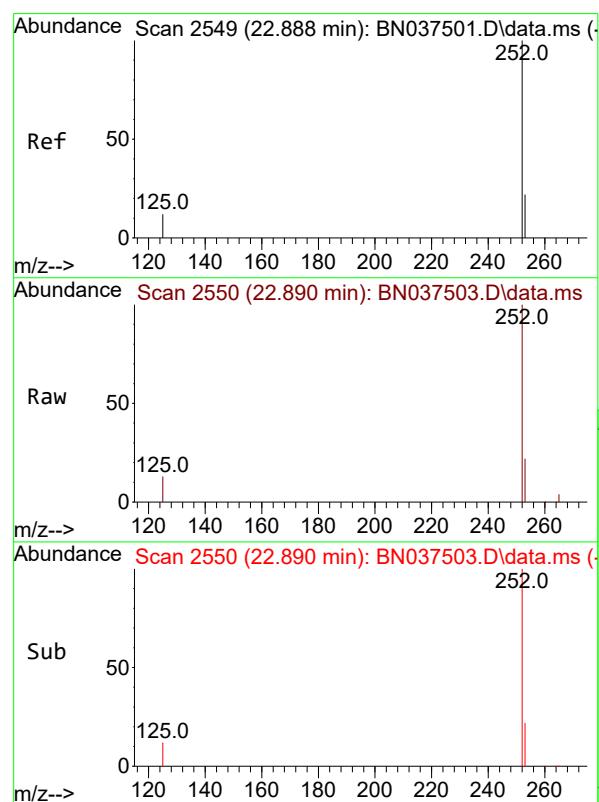
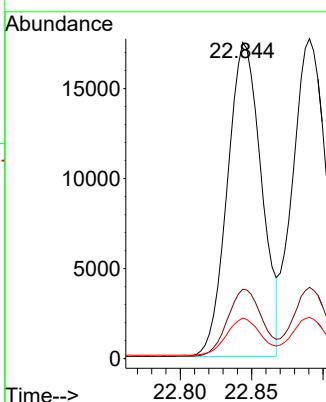
Tgt Ion:252 Resp: 28933

Ion Ratio Lower Upper

252 100

253 22.0 19.5 29.3

125 12.9 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 1.696 ng

RT: 22.890 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037503.D

Acq: 15 Jul 2025 15:01

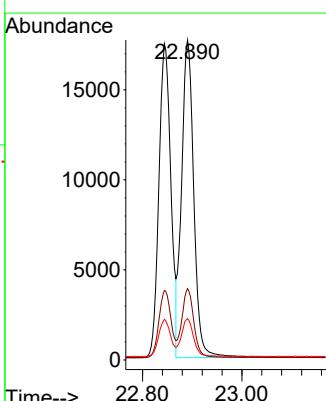
Tgt Ion:252 Resp: 30228

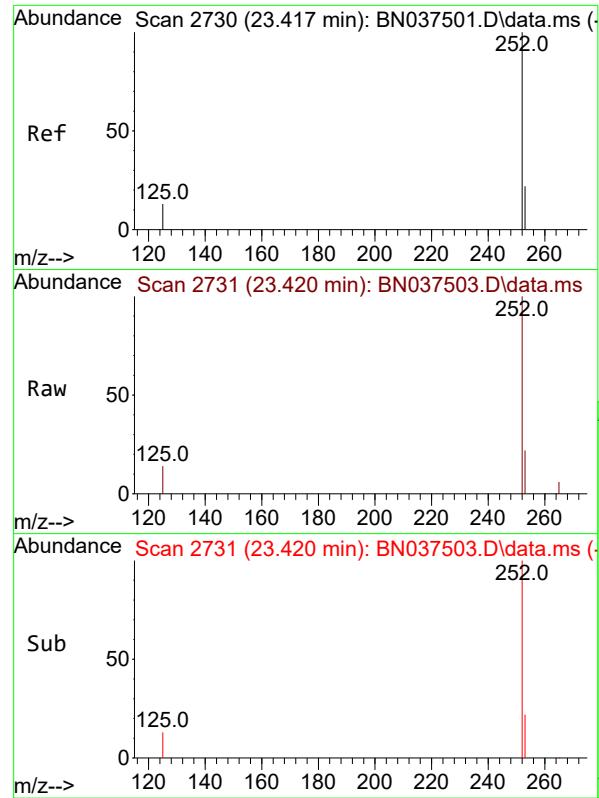
Ion Ratio Lower Upper

252 100

253 22.3 19.5 29.3

125 12.9 13.1 19.7#

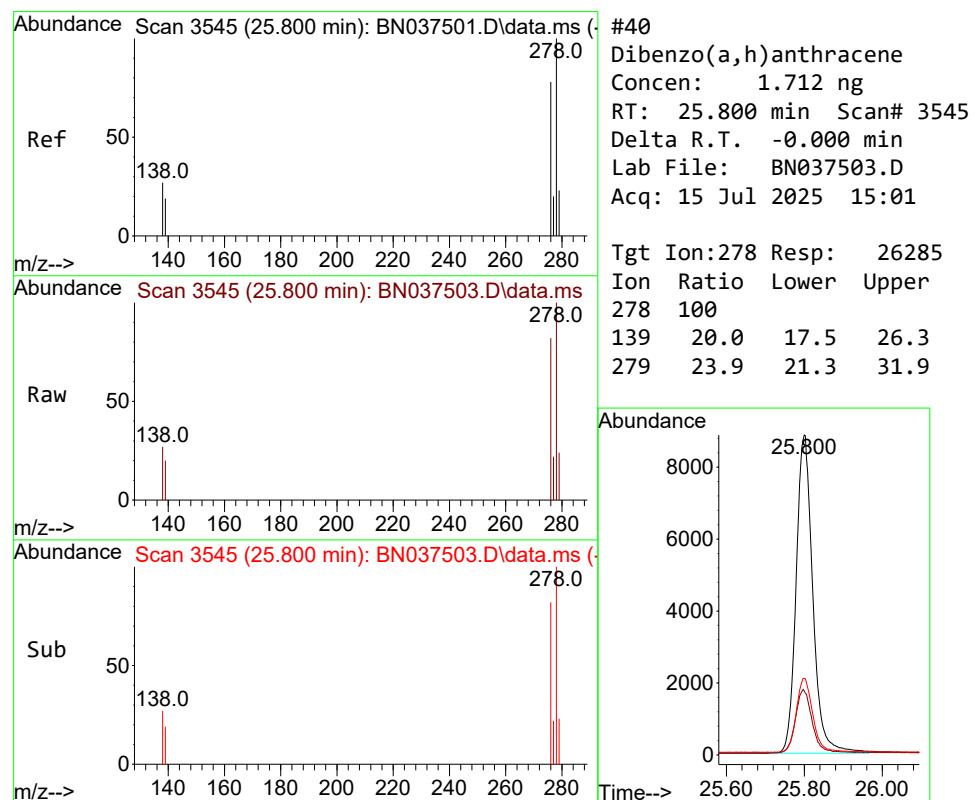
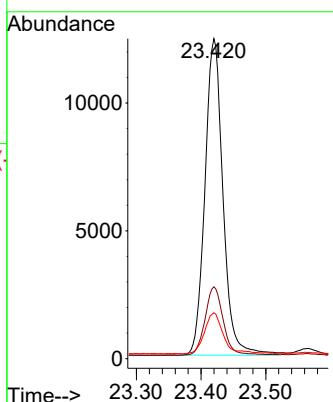




#39  
 Benzo(a)pyrene  
 Concen: 1.668 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

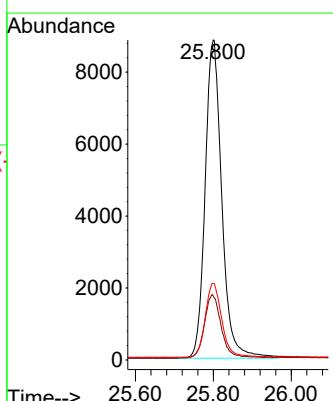
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

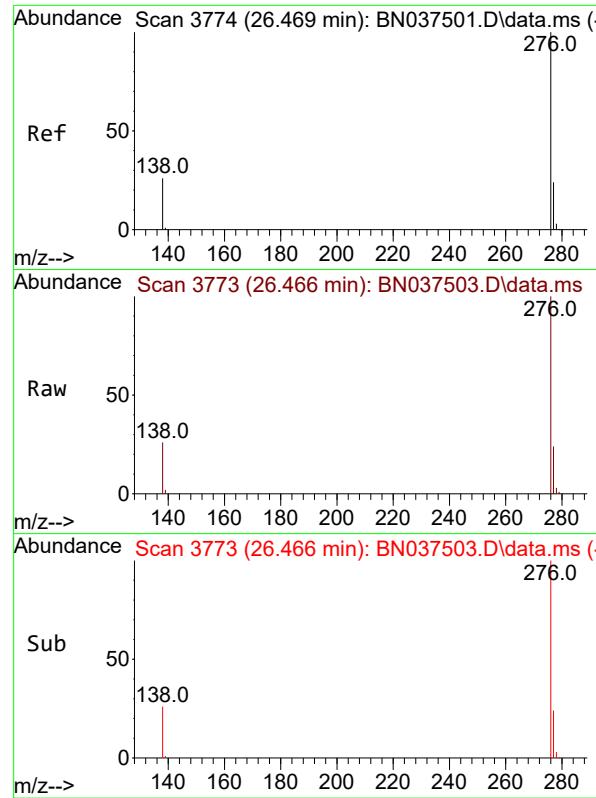
Tgt Ion:252 Resp: 24034  
 Ion Ratio Lower Upper  
 252 100  
 253 22.5 19.9 29.9  
 125 14.3 15.2 22.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 1.712 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. -0.000 min  
 Lab File: BN037503.D  
 Acq: 15 Jul 2025 15:01

Tgt Ion:278 Resp: 26285  
 Ion Ratio Lower Upper  
 278 100  
 139 20.0 17.5 26.3  
 279 23.9 21.3 31.9

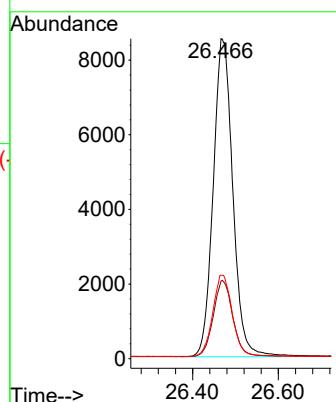




#41  
Benzo(g,h,i)perylene  
Concen: 1.697 ng  
RT: 26.466 min Scan# 3  
Delta R.T. -0.003 min  
Lab File: BN037503.D  
Acq: 15 Jul 2025 15:01

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Tgt Ion:276 Resp: 26971  
Ion Ratio Lower Upper  
276 100  
277 24.3 20.9 31.3  
138 26.1 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037504.D  
 Acq On : 15 Jul 2025 15:38  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICC3.2

Quant Time: Jul 15 17:28:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

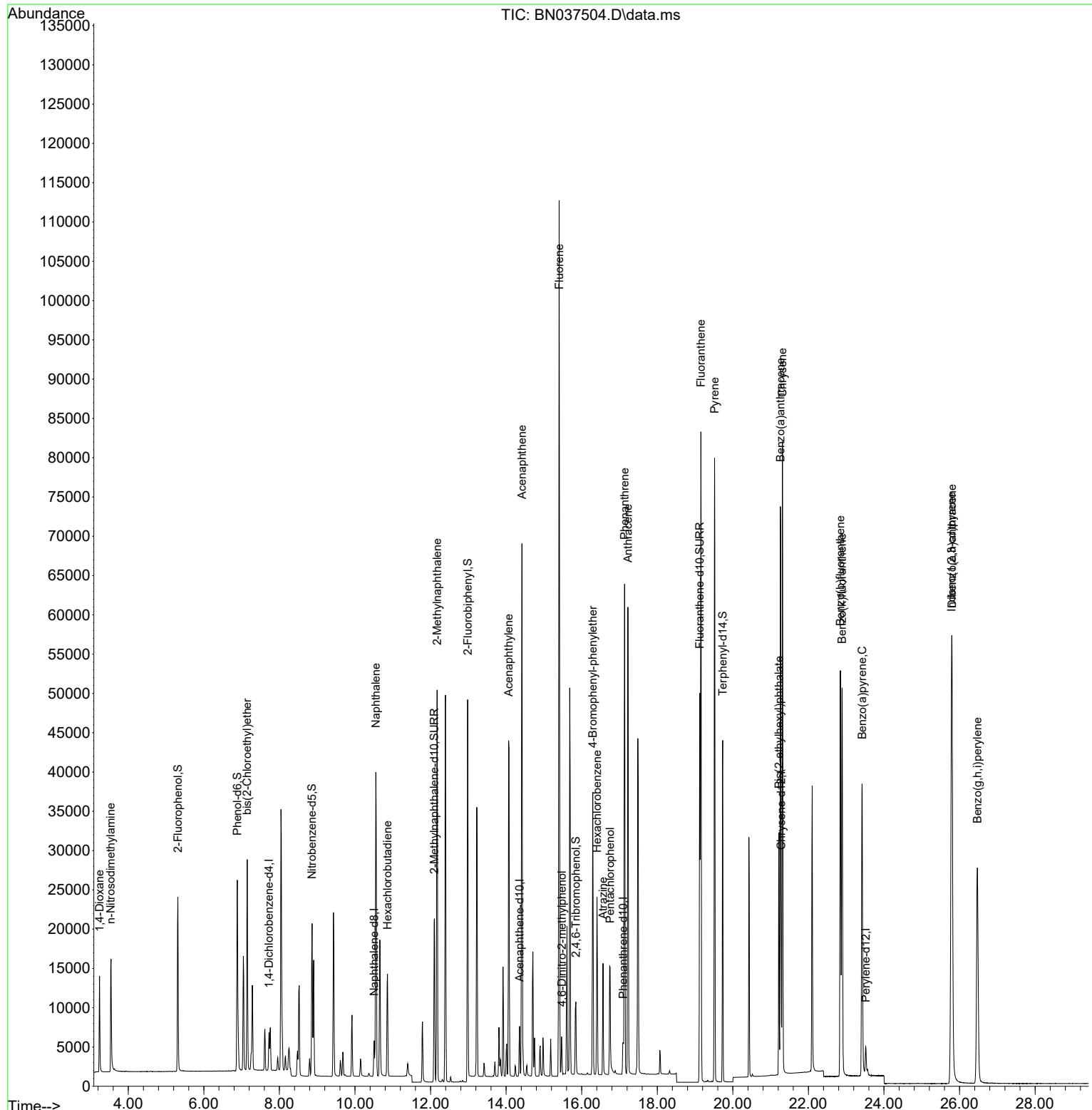
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2243	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5878	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3382	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	6204	0.400	ng	0.00
29) Chrysene-d12	21.277	240	5331	0.400	ng	0.00
35) Perylene-d12	23.519	264	4672	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	17416	3.140	ng	0.00
5) Phenol-d6	6.887	99	22047	3.169	ng	0.00
8) Nitrobenzene-d5	8.865	82	14330	3.261	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	27759	3.293	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	5808	3.494	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	59667	3.393	ng	0.00
27) Fluoranthene-d10	19.127	212	53521	3.257	ng	0.00
31) Terphenyl-d14	19.731	244	38458	3.357	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	6815	3.161	ng	98
3) n-Nitrosodimethylamine	3.535	42	8946	3.298	ng	# 93
6) bis(2-Chloroethyl)ether	7.147	93	18545	3.203	ng	98
9) Naphthalene	10.552	128	50467	3.219	ng	98
10) Hexachlorobutadiene	10.861	225	11106	3.206	ng	# 100
12) 2-Methylnaphthalene	12.172	142	34611	3.358	ng	99
16) Acenaphthylene	14.067	152	51277	3.385	ng	99
17) Acenaphthene	14.420	154	33858	3.286	ng	98
18) Fluorene	15.403	166	43450	3.276	ng	100
20) 4,6-Dinitro-2-methylph...	15.478	198	3484	3.233	ng	# 28
21) 4-Bromophenyl-phenylether	16.292	248	13494	3.395	ng	96
22) Hexachlorobenzene	16.404	284	16890	3.289	ng	99
23) Atrazine	16.565	200	9939	3.584	ng	95
24) Pentachlorophenol	16.751	266	8417	3.654	ng	99
25) Phenanthrene	17.136	178	61959	3.333	ng	100
26) Anthracene	17.223	178	58358	3.441	ng	100
28) Fluoranthene	19.155	202	71018	3.313	ng	99
30) Pyrene	19.517	202	71002	3.306	ng	100
32) Benzo(a)anthracene	21.259	228	62418	3.343	ng	99
33) Chrysene	21.313	228	63542	3.268	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	29561	3.519	ng	99
36) Indeno(1,2,3-cd)pyrene	25.788	276	67476	3.467	ng	99
37) Benzo(b)fluoranthene	22.847	252	60420	3.407	ng	# 93
38) Benzo(k)fluoranthene	22.891	252	63137	3.450	ng	# 93
39) Benzo(a)pyrene	23.420	252	51171	3.459	ng	# 92
40) Dibenzo(a,h)anthracene	25.800	278	55412	3.516	ng	95
41) Benzo(g,h,i)perylene	26.472	276	55959	3.430	ng	96

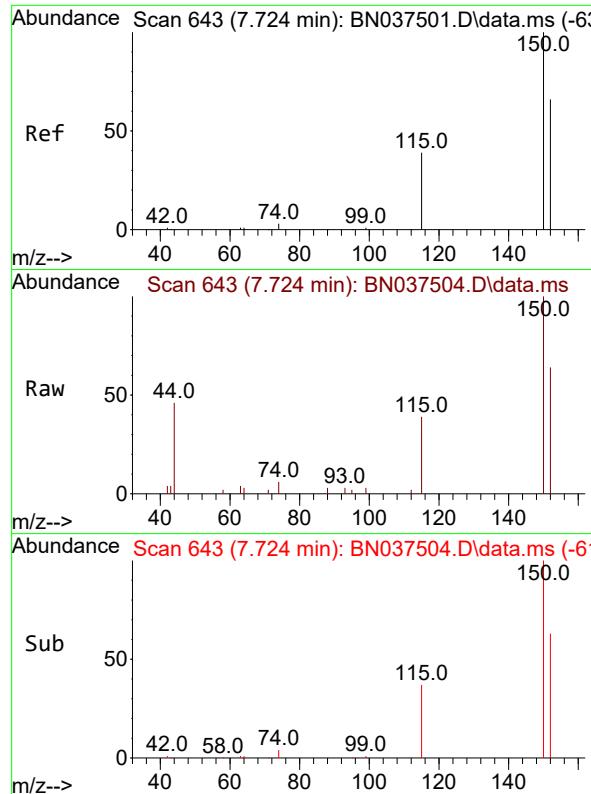
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037504.D  
 Acq On : 15 Jul 2025 15:38  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Jul 15 17:28:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

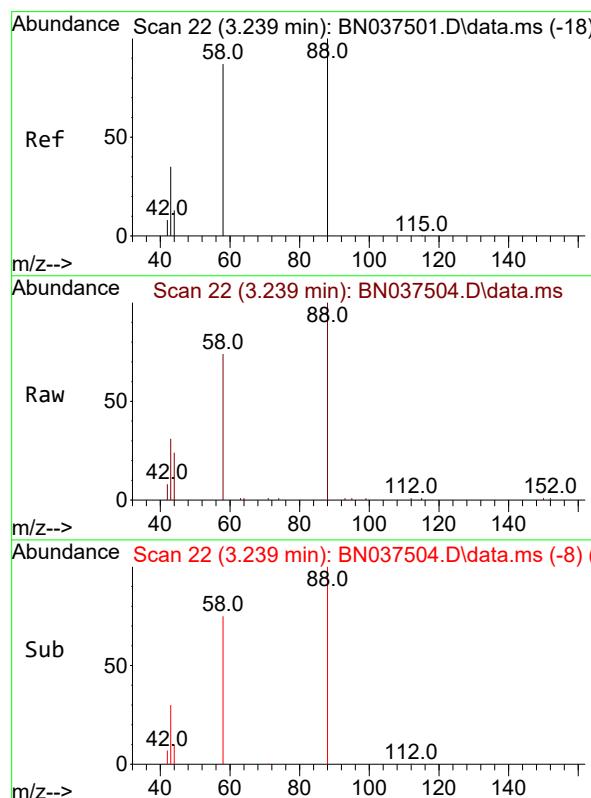
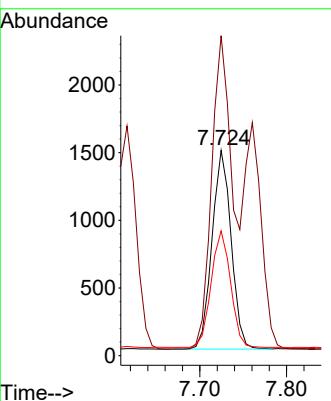




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

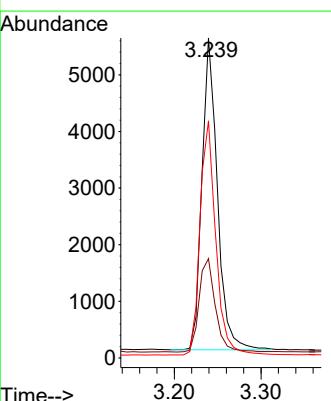
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

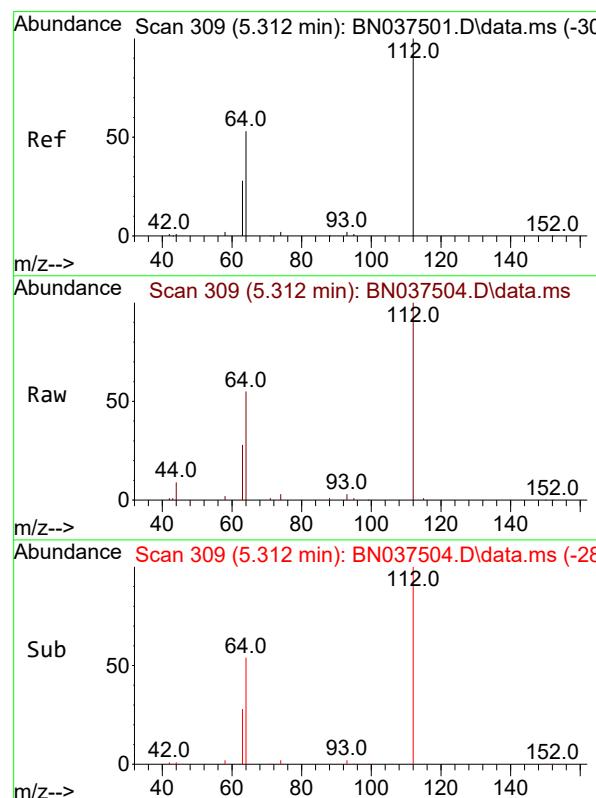
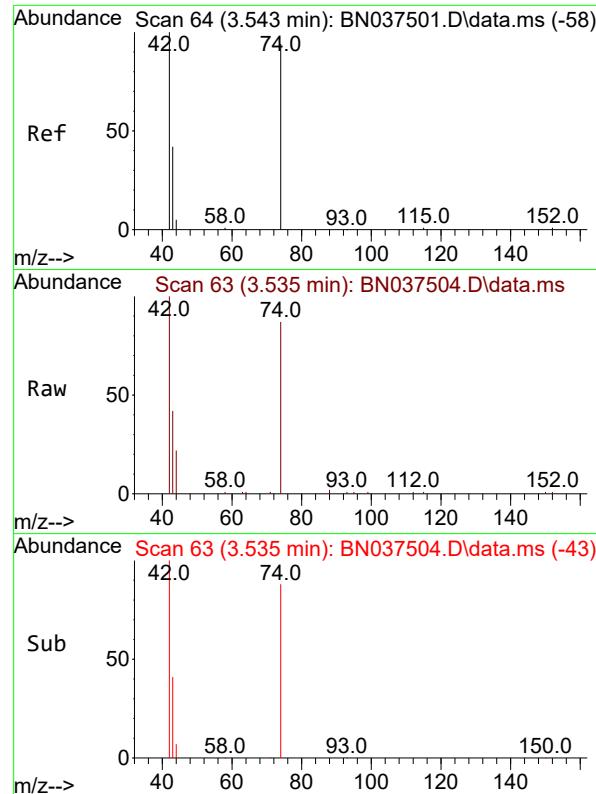
Tgt Ion:152 Resp: 2243  
Ion Ratio Lower Upper  
152 100  
150 155.8 119.8 179.8  
115 60.8 49.1 73.7



#2  
1,4-Dioxane  
Concen: 3.161 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

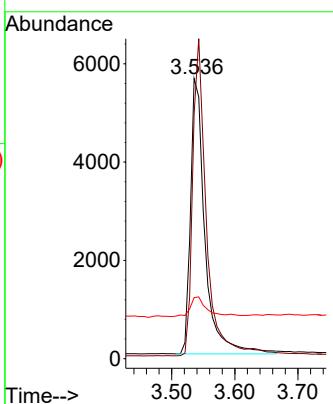
Tgt Ion: 88 Resp: 6815  
Ion Ratio Lower Upper  
88 100  
43 31.7 27.5 41.3  
58 77.1 62.7 94.1





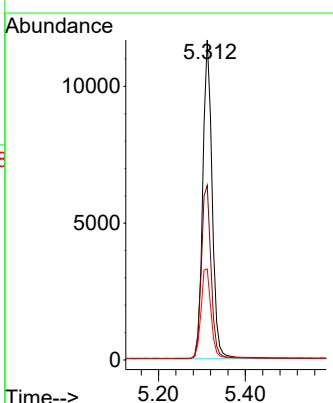
#3  
n-Nitrosodimethylamine  
Concen: 3.298 ng  
RT: 3.535 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.007 min  
Lab File: BN037504.D  
ClientSampleId : SSTDICC3.2  
Acq: 15 Jul 2025 15:38

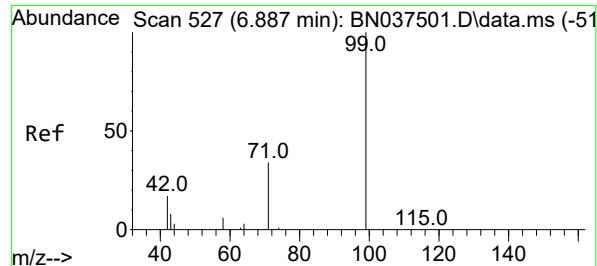
Tgt Ion: 42 Resp: 8946  
Ion Ratio Lower Upper  
42 100  
74 110.0 91.8 137.6  
44 8.4 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 3.140 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

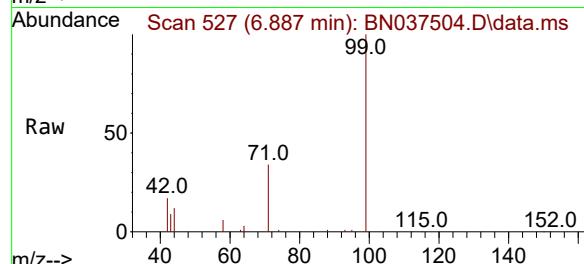
Tgt Ion: 112 Resp: 17416  
Ion Ratio Lower Upper  
112 100  
64 56.7 45.1 67.7  
63 29.6 23.8 35.8



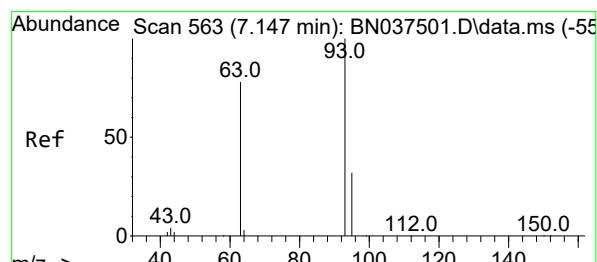
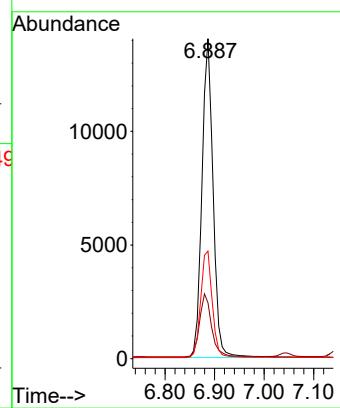
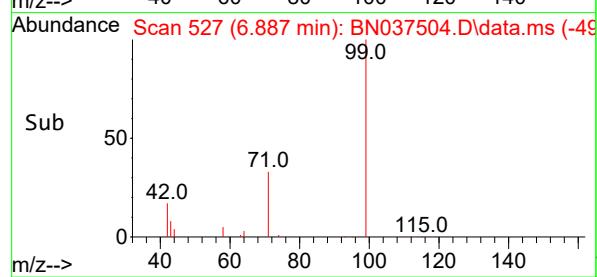


#5  
 Phenol-d6  
 Concen: 3.169 ng  
 RT: 6.887 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

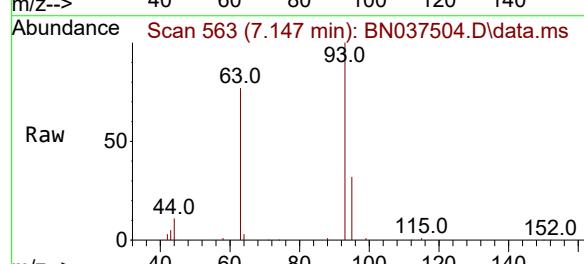
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2



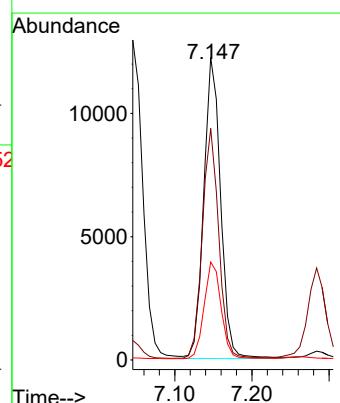
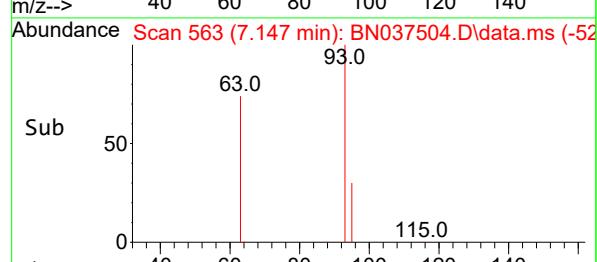
Tgt Ion: 99 Resp: 22047  
 Ion Ratio Lower Upper  
 99 100  
 42 21.2 17.1 25.7  
 71 34.8 27.8 41.8

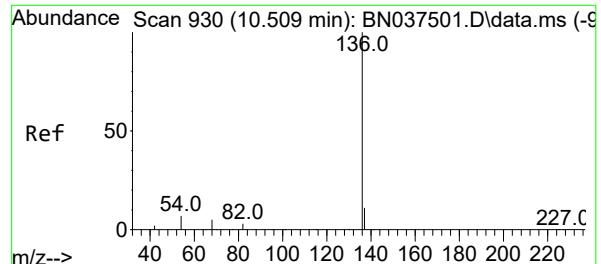


#6  
 bis(2-Chloroethyl)ether  
 Concen: 3.203 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

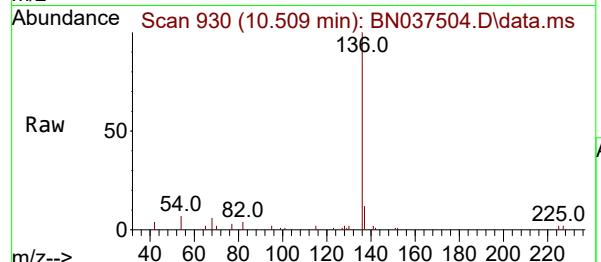


Tgt Ion: 93 Resp: 18545  
 Ion Ratio Lower Upper  
 93 100  
 63 74.3 58.2 87.4  
 95 32.2 25.3 37.9

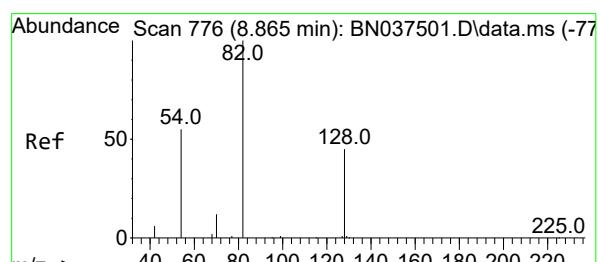
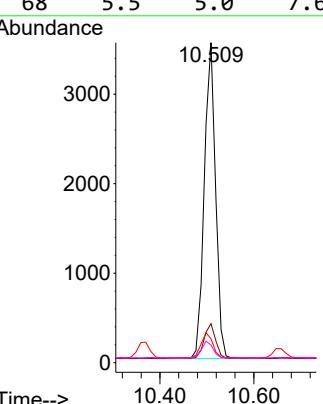
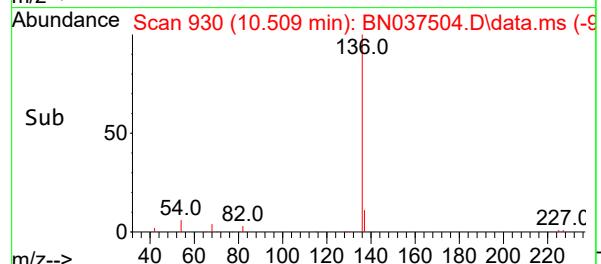




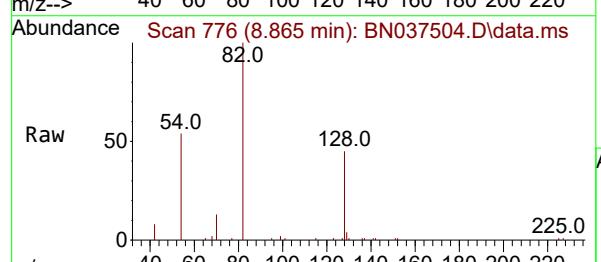
#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.509 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38  
ClientSampleId : SSTDICC3.2



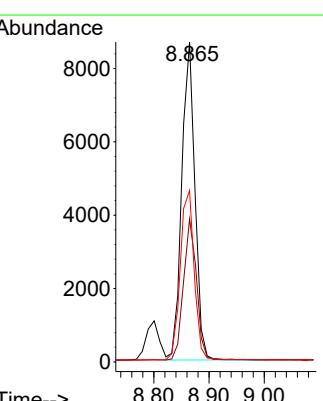
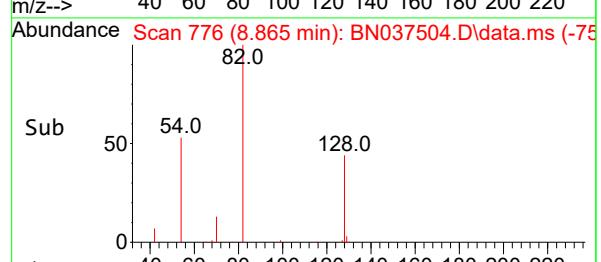
Tgt Ion:136 Resp: 5878  
Ion Ratio Lower Upper  
136 100  
137 12.2 9.8 14.8  
54 7.5 6.6 9.8  
68 5.5 5.0 7.6

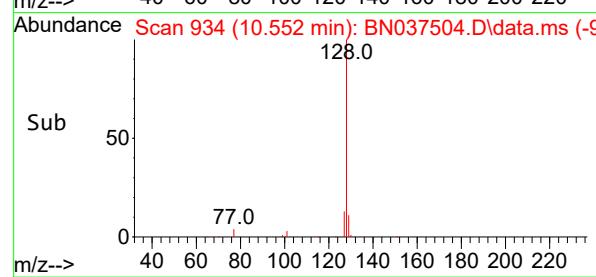
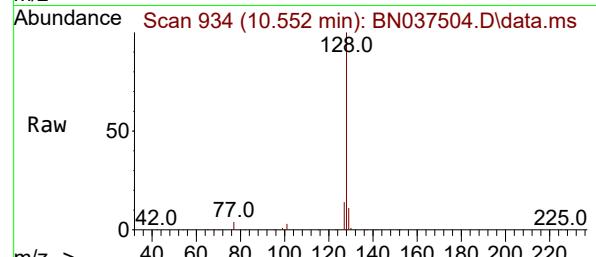
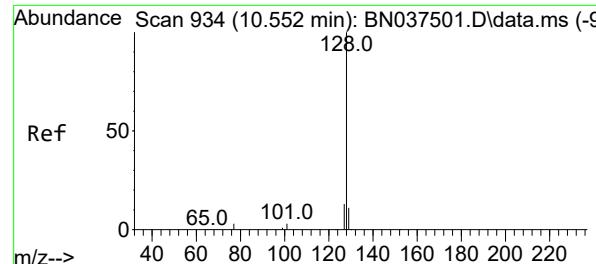


#8  
Nitrobenzene-d5  
Concen: 3.261 ng  
RT: 8.865 min Scan# 776  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38



Tgt Ion: 82 Resp: 14330  
Ion Ratio Lower Upper  
82 100  
128 44.7 37.5 56.3  
54 53.6 45.3 67.9





#9

Naphthalene

Concen: 3.219 ng

RT: 10.552 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

Tgt Ion:128 Resp: 50467

Ion Ratio Lower Upper

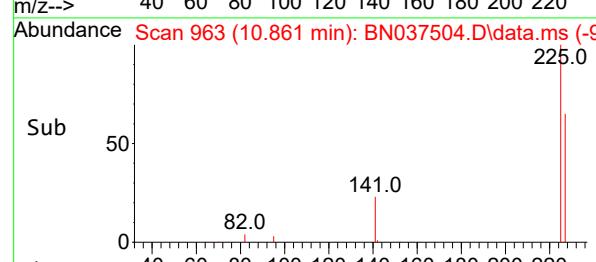
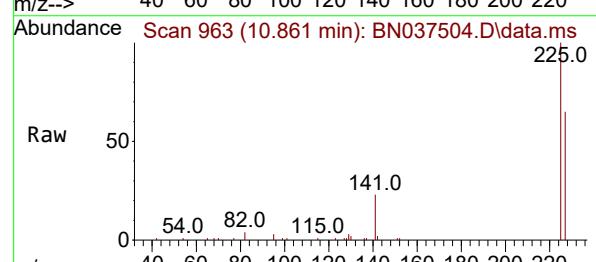
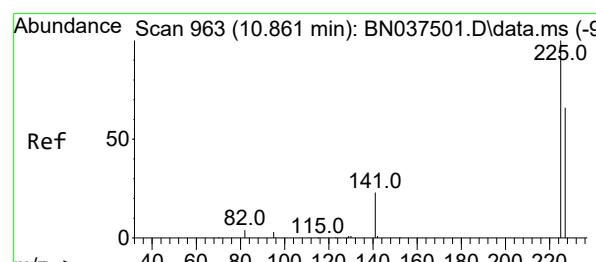
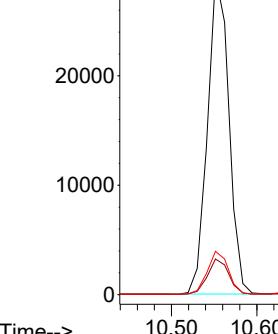
128 100

129 11.1 9.7 14.5

127 13.6 11.5 17.3

Abundance

10.552



#10

Hexachlorobutadiene

Concen: 3.206 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Tgt Ion:225 Resp: 11106

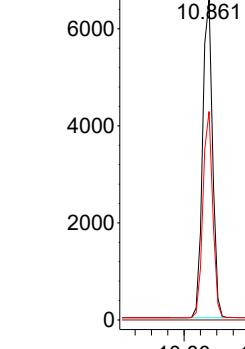
Ion Ratio Lower Upper

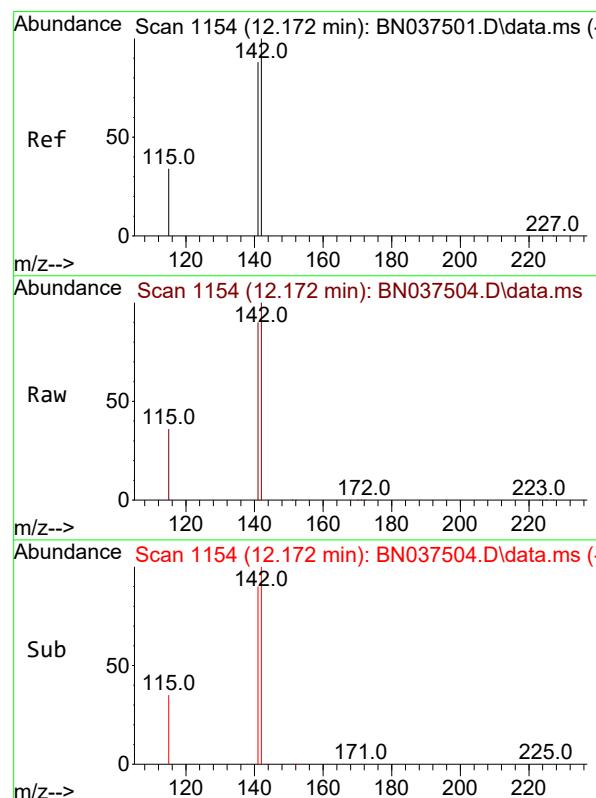
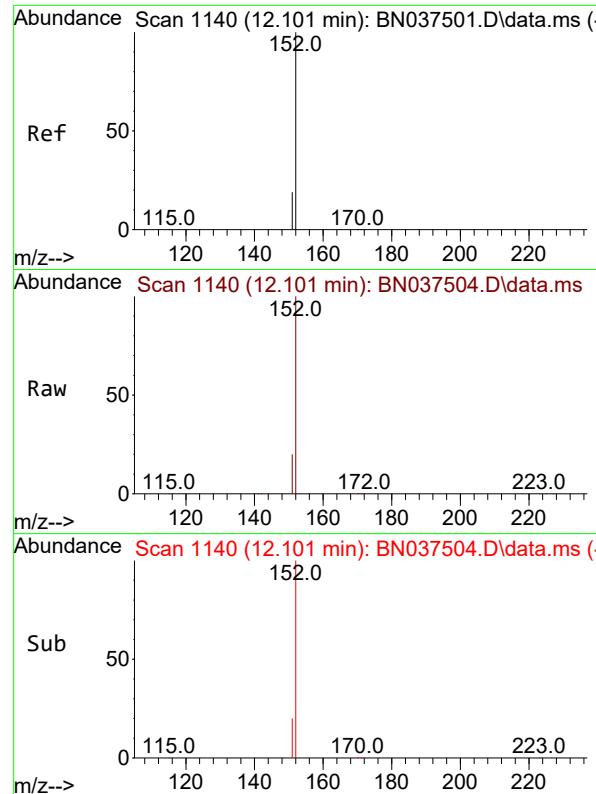
225 100

223 0.0 0.0 0.0

227 63.5 51.0 76.4

Abundance





#11

2-Methylnaphthalene-d10

Concen: 3.293 ng

RT: 12.101 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

Tgt Ion:152 Resp: 27759

Ion Ratio Lower Upper

152 100

151 21.1 16.8 25.2

Abundance

152.01

12.101

11.101

10.101

9.101

8.101

7.101

6.101

5.101

4.101

3.101

2.101

1.101

0.101

Time--&gt;

12.00 12.10 12.20

#12

2-Methylnaphthalene

Concen: 3.358 ng

RT: 12.172 min Scan# 1154

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Tgt Ion:142 Resp: 34611

Ion Ratio Lower Upper

142 100

141 90.0 71.0 106.4

115 35.5 29.0 43.4

Abundance

142.02

12.172

11.172

10.172

9.172

8.172

7.172

6.172

5.172

4.172

3.172

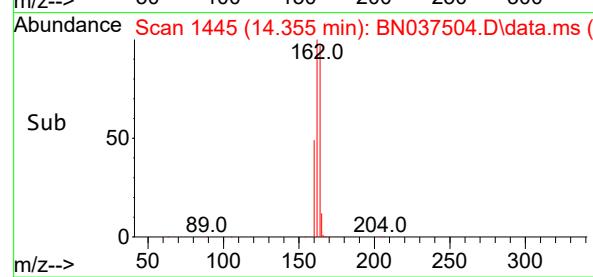
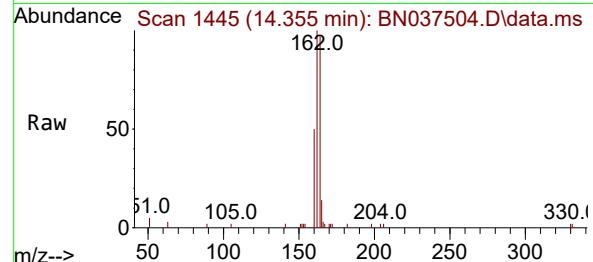
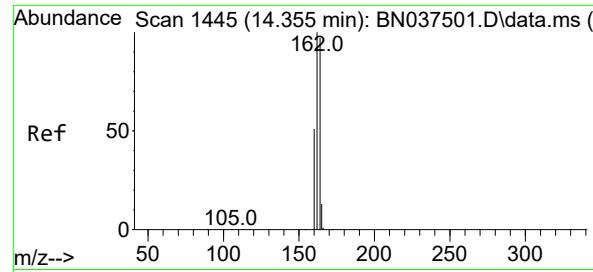
2.172

1.172

0.172

Time--&gt;

12.00 12.10 12.20



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

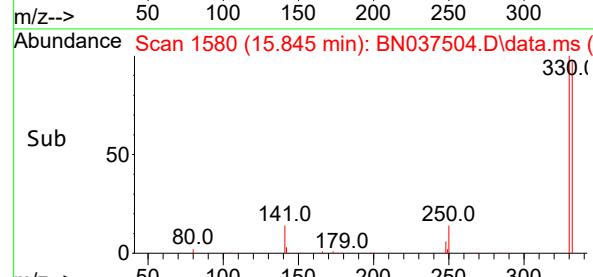
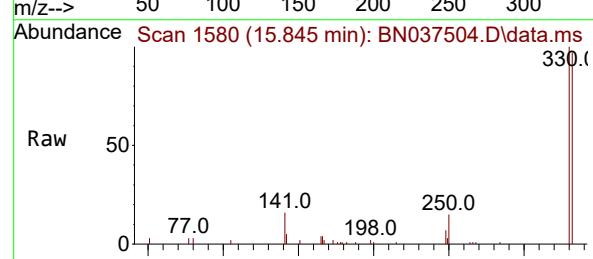
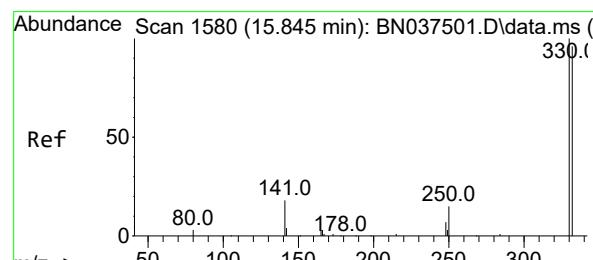
Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2



#14

2,4,6-Tribromophenol

Concen: 3.494 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

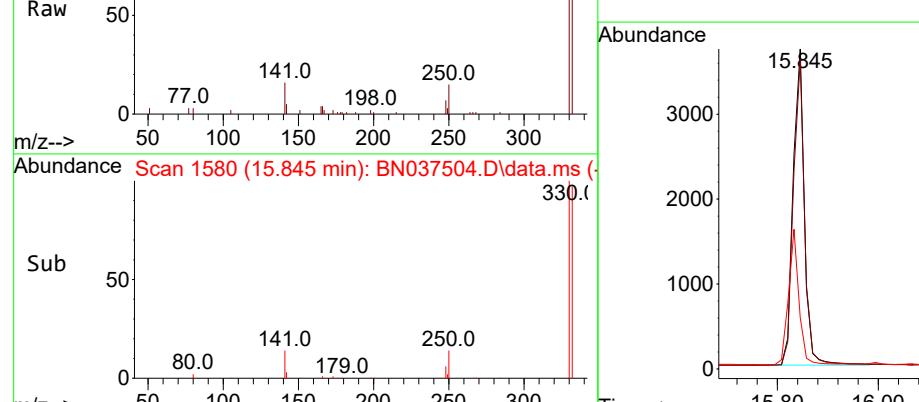
Tgt Ion:330 Resp: 5808

Ion Ratio Lower Upper

330 100

332 95.7 76.1 114.1

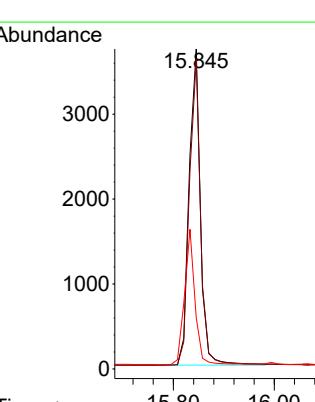
141 39.8 33.4 50.0



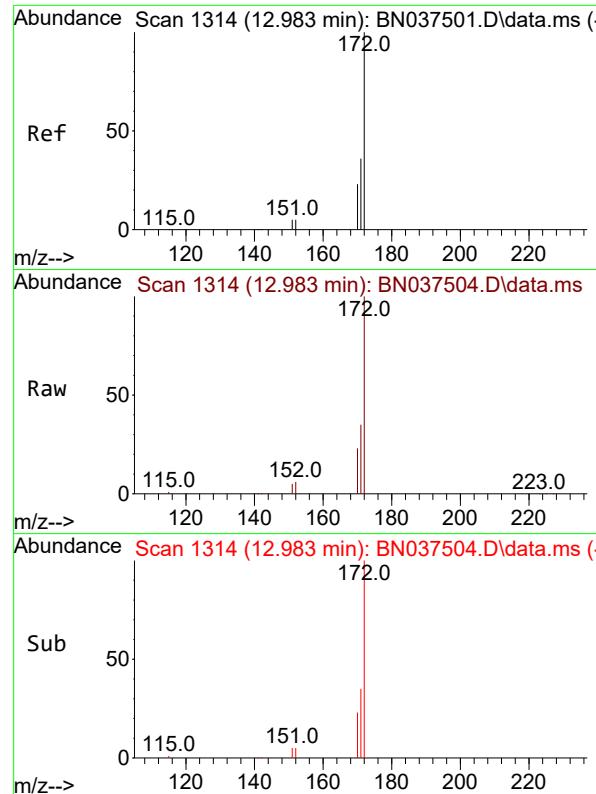
Abundance

Time--&gt; 14.20 14.30 14.40

14.356

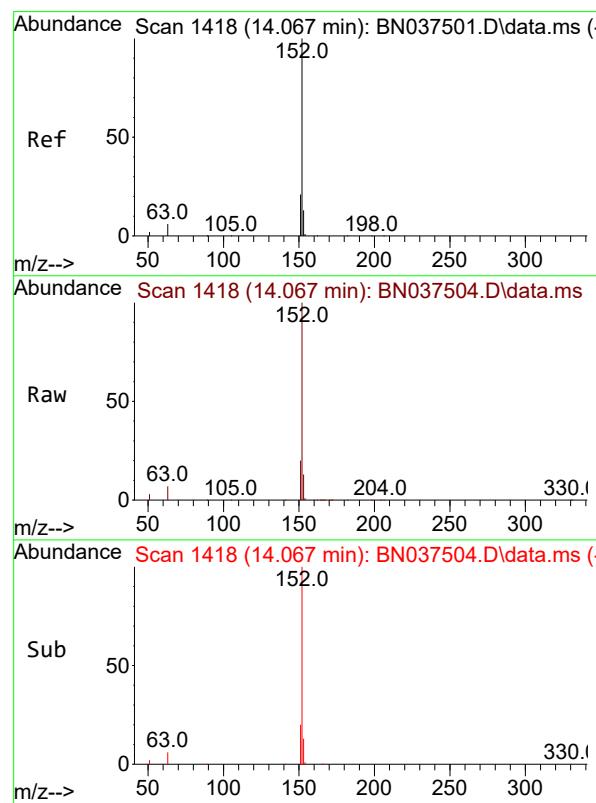
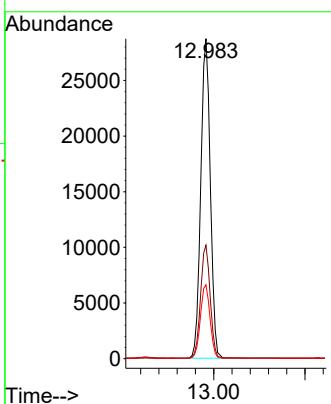


15.845



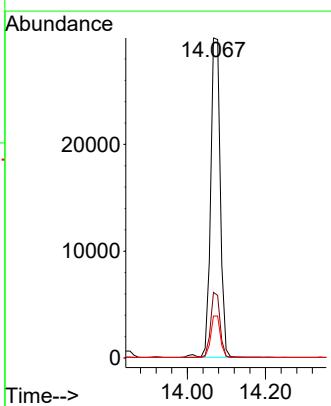
#15  
2-Fluorobiphenyl  
Concen: 3.393 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38  
ClientSampleId : SSTDICC3.2

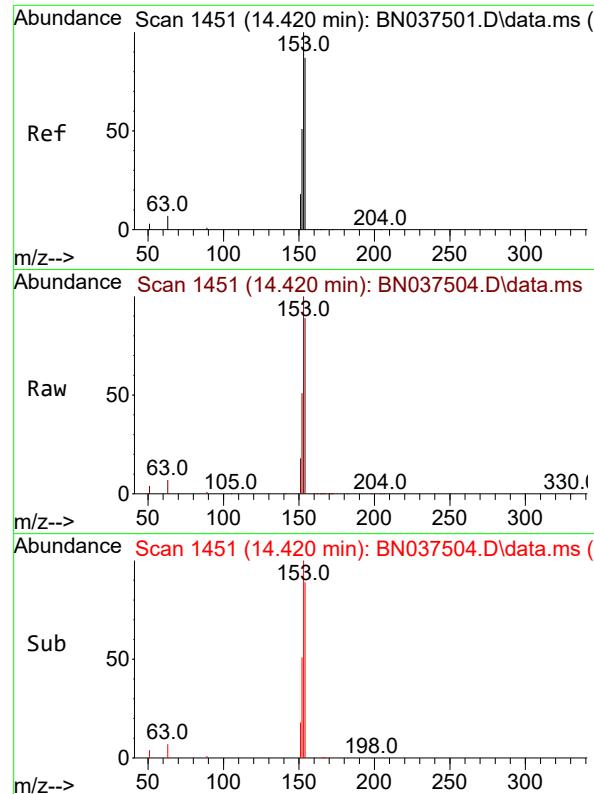
Tgt Ion:172 Resp: 59667  
Ion Ratio Lower Upper  
172 100  
171 35.4 29.4 44.2  
170 23.1 19.4 29.0



#16  
Acenaphthylene  
Concen: 3.385 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:152 Resp: 51277  
Ion Ratio Lower Upper  
152 100  
151 19.8 15.9 23.9  
153 13.0 10.7 16.1





#17

Acenaphthene

Concen: 3.286 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

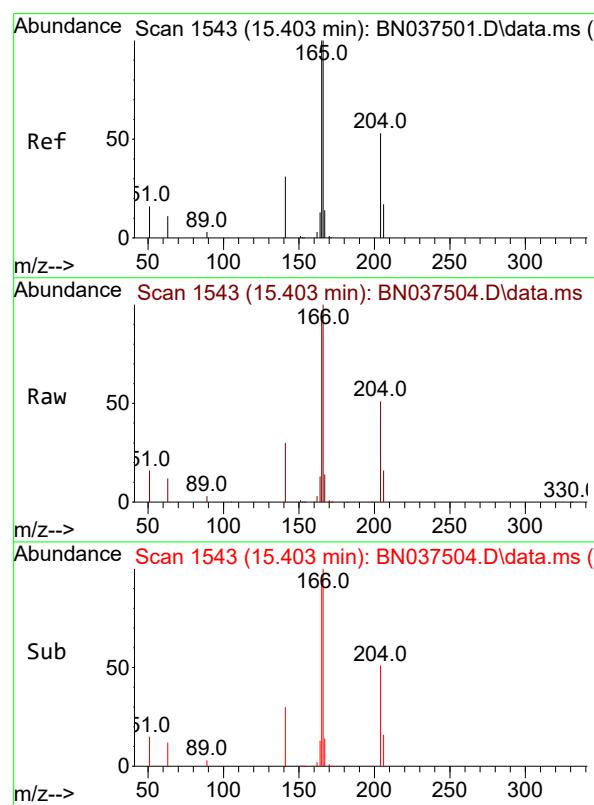
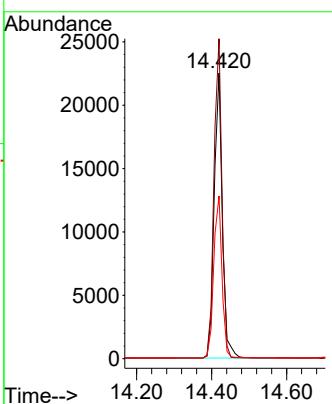
Tgt Ion:154 Resp: 33858

Ion Ratio Lower Upper

154 100

153 109.6 89.2 133.8

152 57.7 48.0 72.0



#18

Fluorene

Concen: 3.276 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

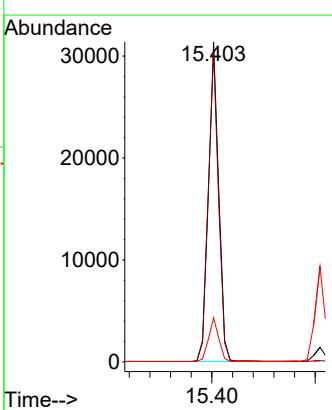
Tgt Ion:166 Resp: 43450

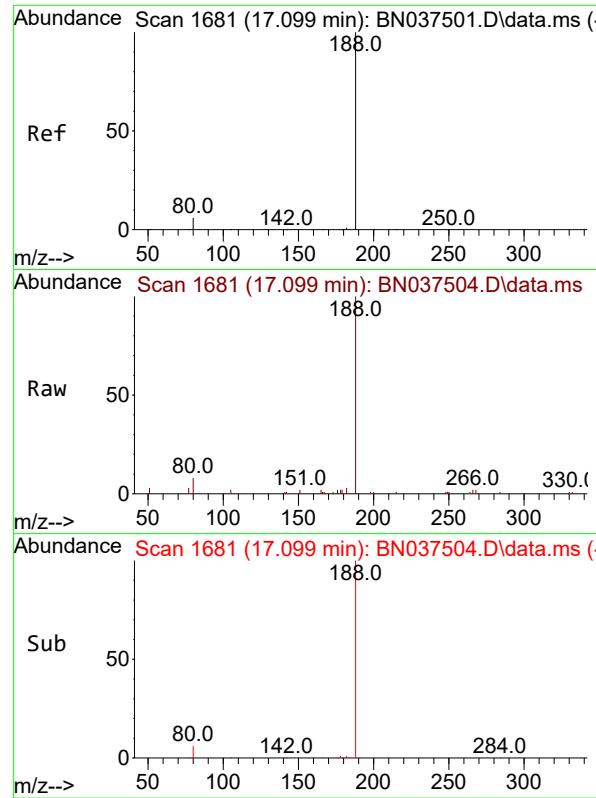
Ion Ratio Lower Upper

166 100

165 97.5 78.1 117.1

167 13.4 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

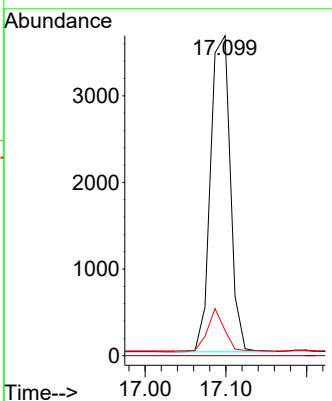
Tgt Ion:188 Resp: 6204

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.9 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 3.233 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.011 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

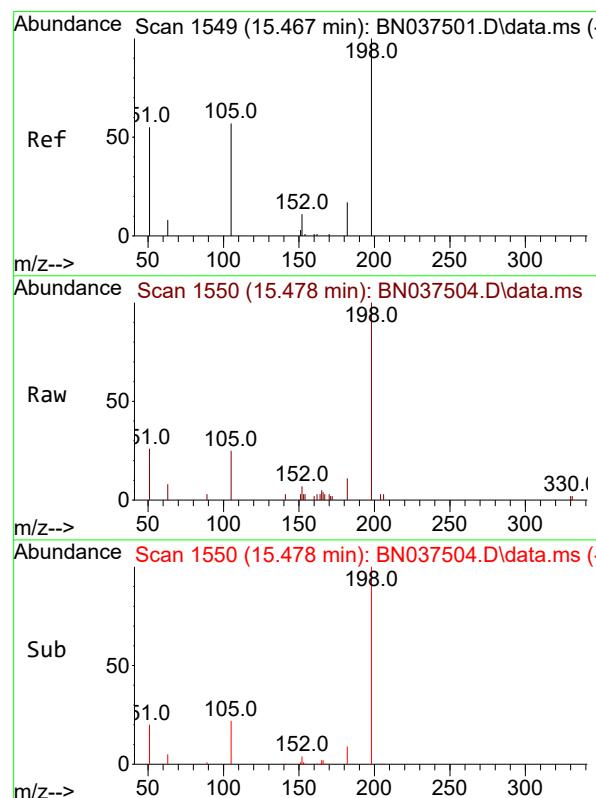
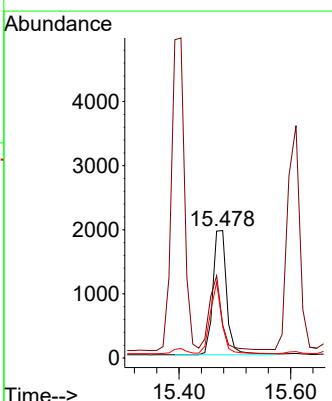
Tgt Ion:198 Resp: 3484

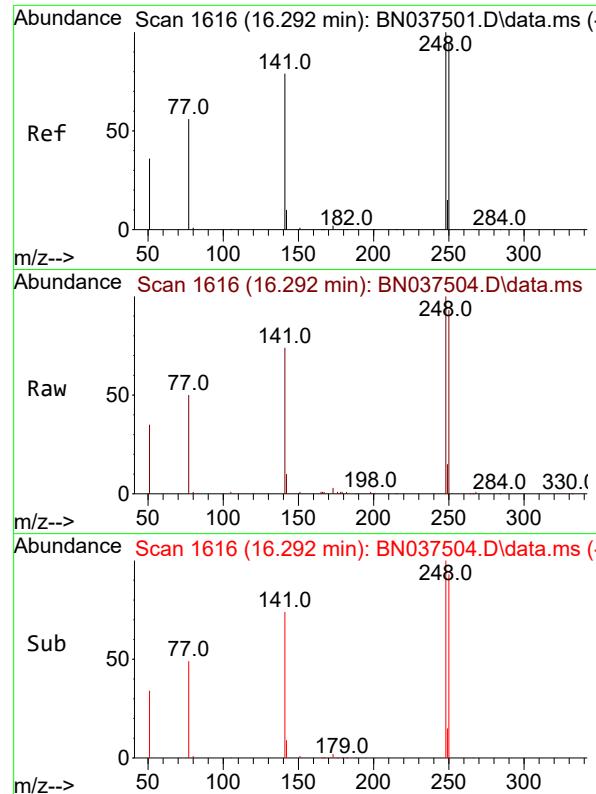
Ion Ratio Lower Upper

198 100

51 25.8 88.5 132.7#

105 24.7 61.2 91.8#

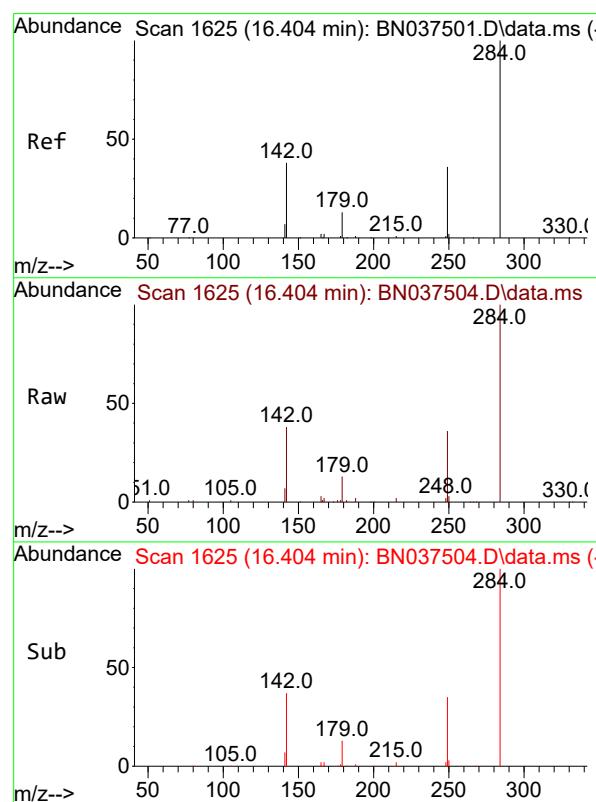
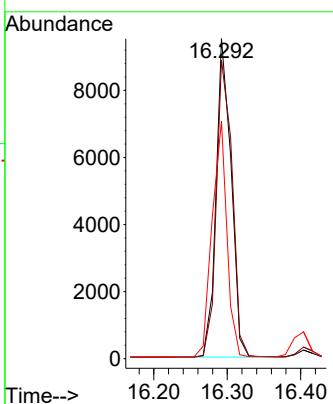




#21  
4-Bromophenyl-phenylether  
Concen: 3.395 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

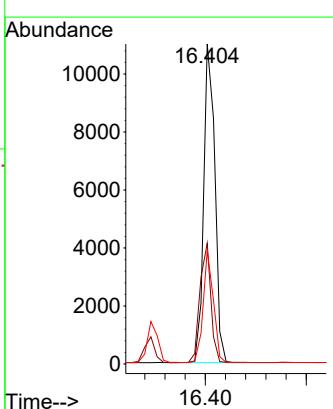
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

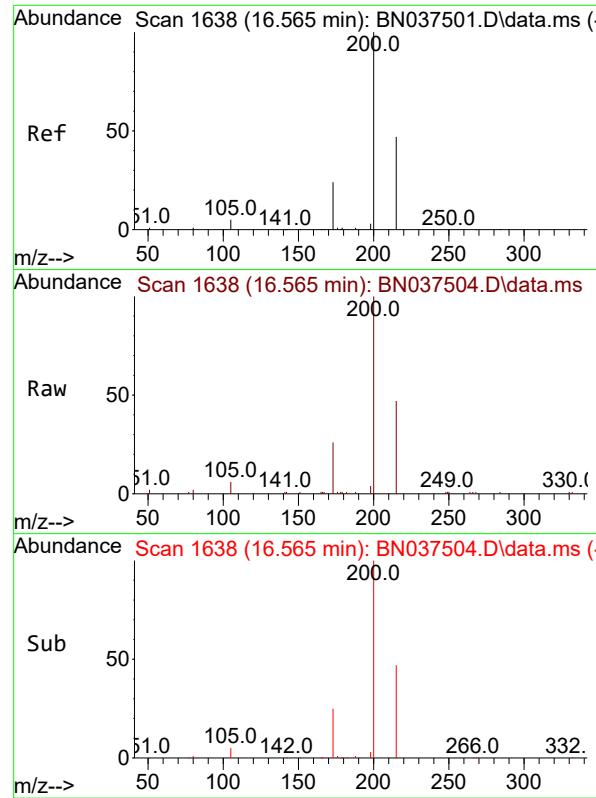
Tgt Ion:248 Resp: 13494  
Ion Ratio Lower Upper  
248 100  
250 93.3 76.2 114.2  
141 74.3 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 3.289 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:284 Resp: 16890  
Ion Ratio Lower Upper  
284 100  
142 36.7 28.9 43.3  
249 32.2 25.8 38.6





#23

Atrazine

Concen: 3.584 ng

RT: 16.565 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument:

BNA\_N

ClientSampleId :

SSTDICC3.2

Tgt Ion:200 Resp: 9939

Ion Ratio Lower Upper

200 100

173 25.8 23.2 34.8

215 47.3 40.2 60.4

Abundance

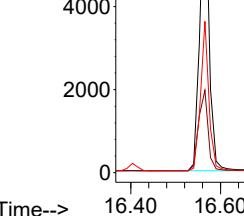
16.565

6000

4000

2000

0



#24

Pentachlorophenol

Concen: 3.654 ng

RT: 16.751 min Scan# 1653

Delta R.T. 0.000 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Tgt Ion:266 Resp: 8417

Ion Ratio Lower Upper

266 100

264 62.4 49.3 73.9

268 63.0 51.6 77.4

Abundance

16.751

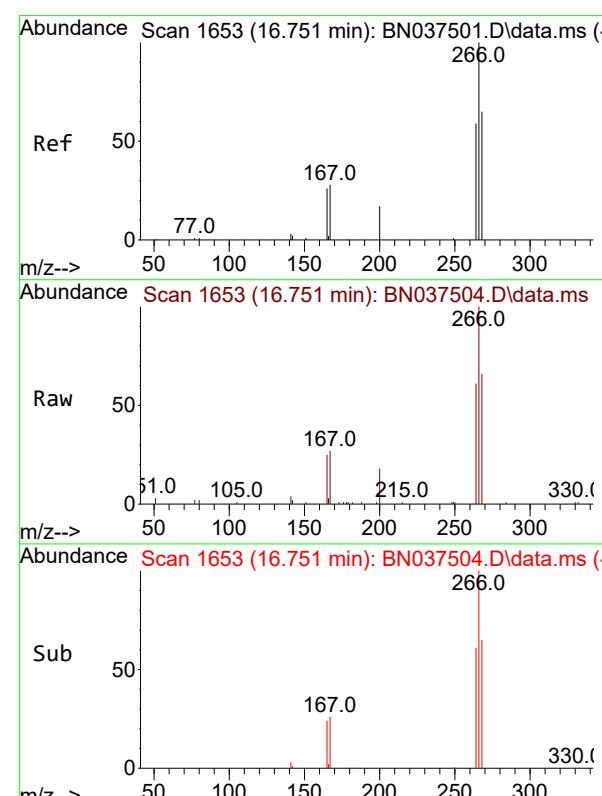
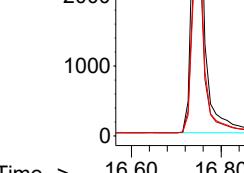
4000

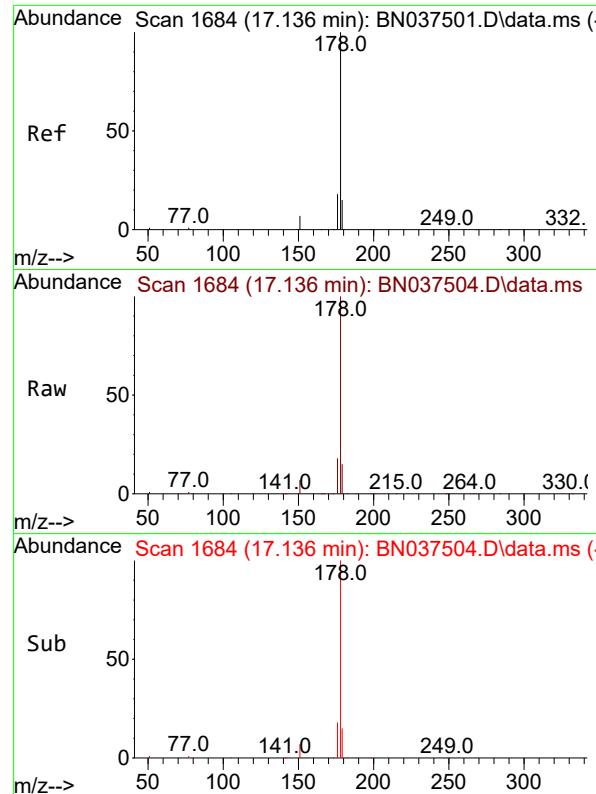
3000

2000

1000

0

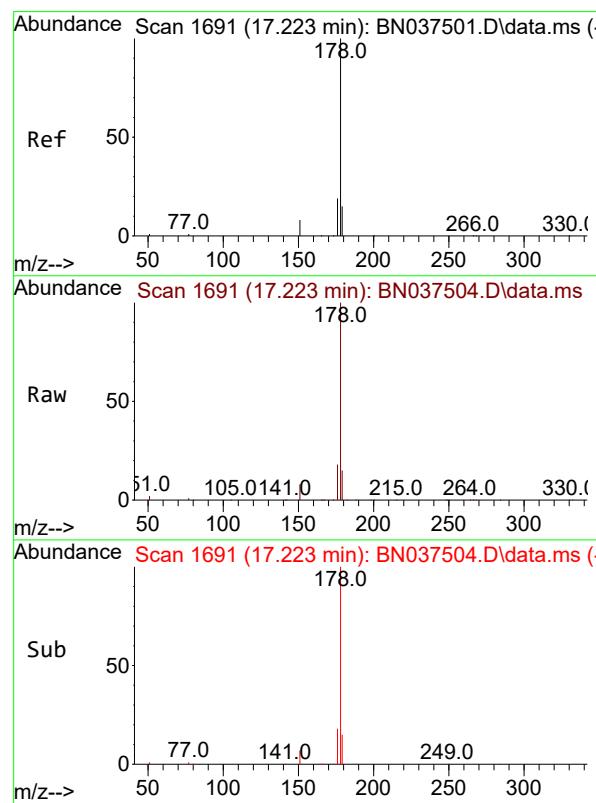
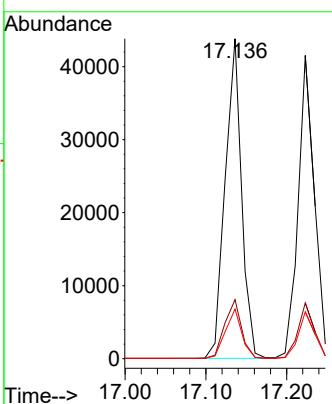




#25  
 Phenanthrene  
 Concen: 3.333 ng  
 RT: 17.136 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

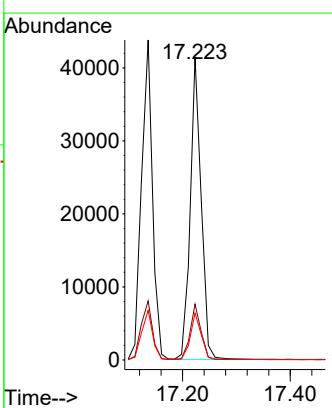
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

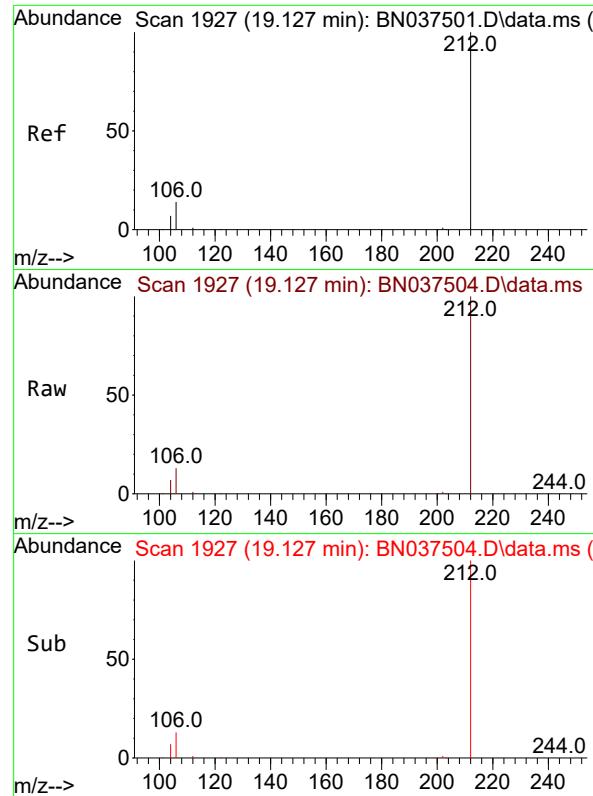
Tgt Ion:178 Resp: 61959  
 Ion Ratio Lower Upper  
 178 100  
 176 18.7 15.0 22.6  
 179 15.3 12.2 18.2



#26  
 Anthracene  
 Concen: 3.441 ng  
 RT: 17.223 min Scan# 1691  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion:178 Resp: 58358  
 Ion Ratio Lower Upper  
 178 100  
 176 18.2 14.7 22.1  
 179 15.4 12.3 18.5

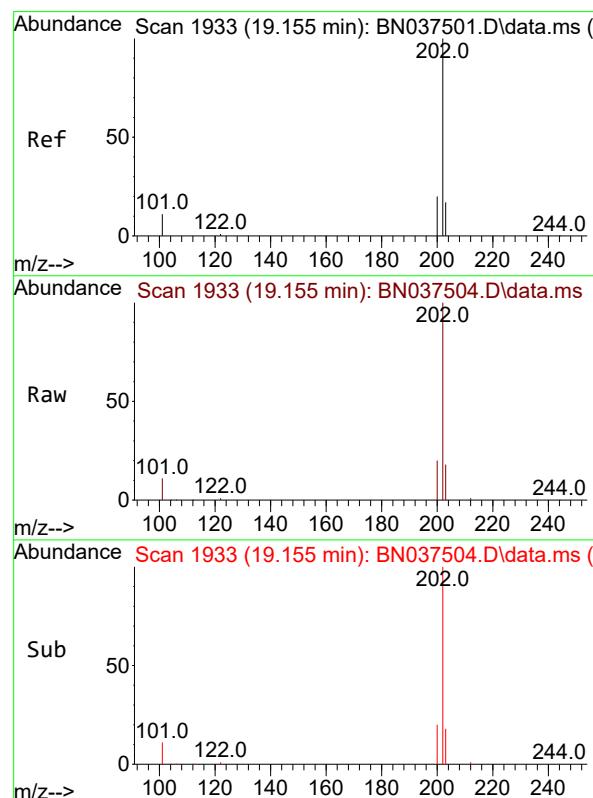
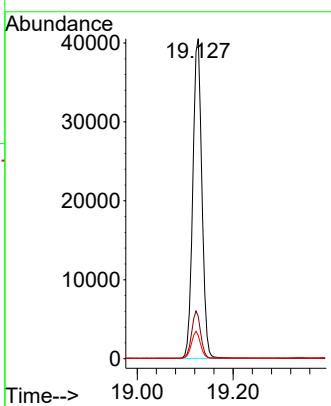




#27  
 Fluoranthene-d10  
 Concen: 3.257 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

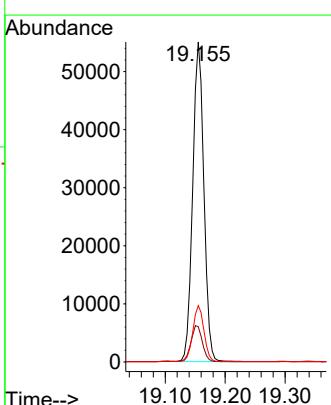
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

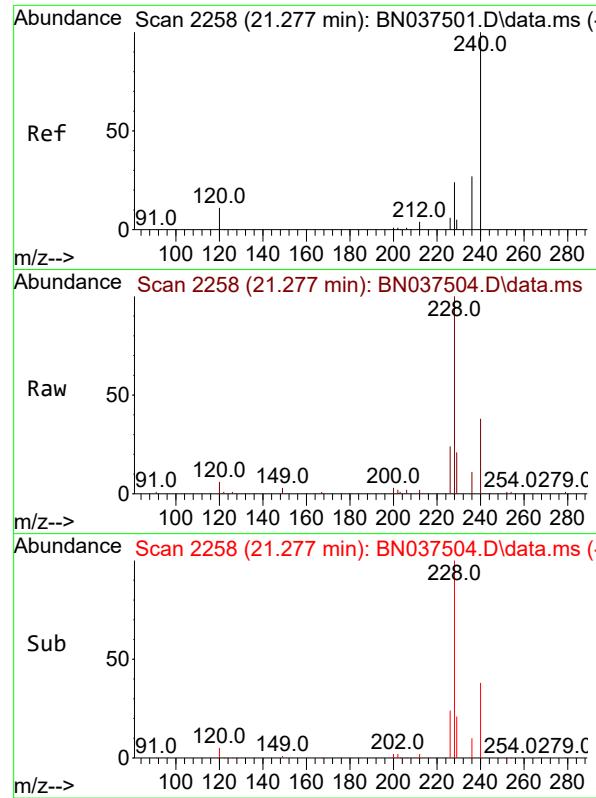
Tgt Ion:212 Resp: 53521  
 Ion Ratio Lower Upper  
 212 100  
 106 14.6 12.2 18.4  
 104 8.2 6.7 10.1



#28  
 Fluoranthene  
 Concen: 3.313 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion:202 Resp: 71018  
 Ion Ratio Lower Upper  
 202 100  
 101 11.7 9.8 14.6  
 203 17.4 13.6 20.4

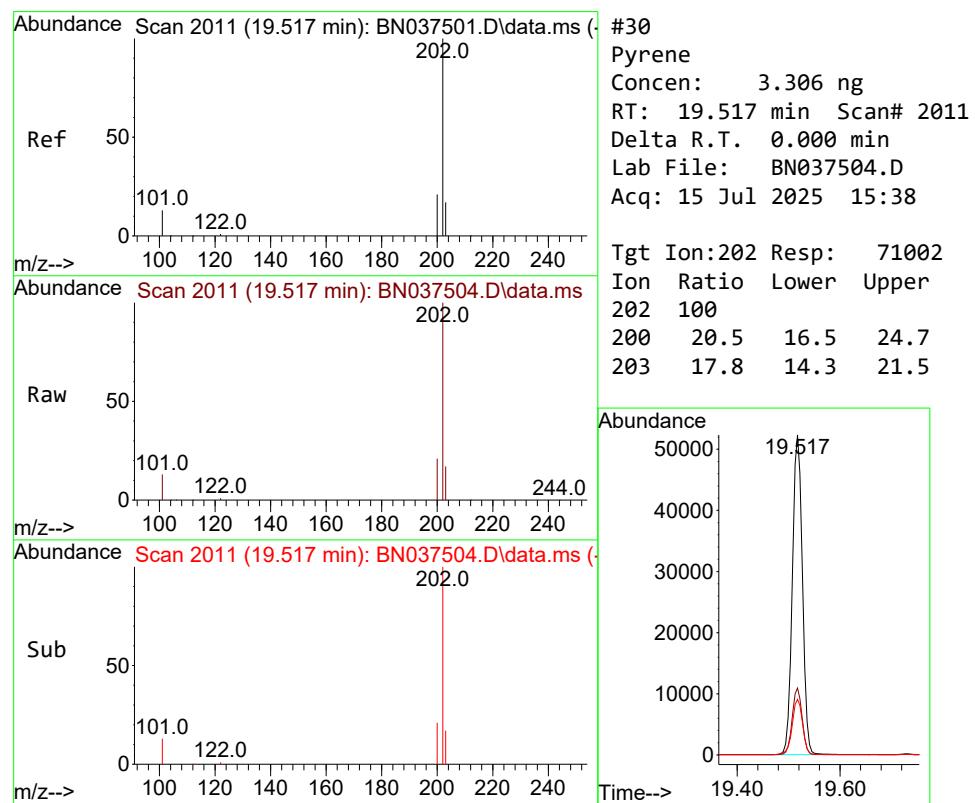
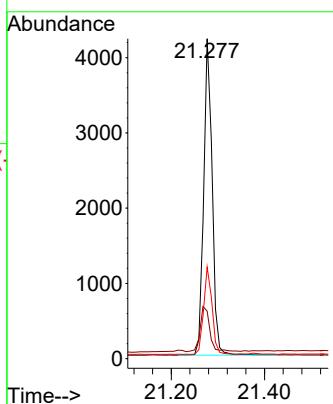




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

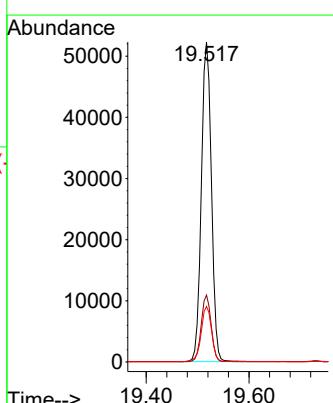
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

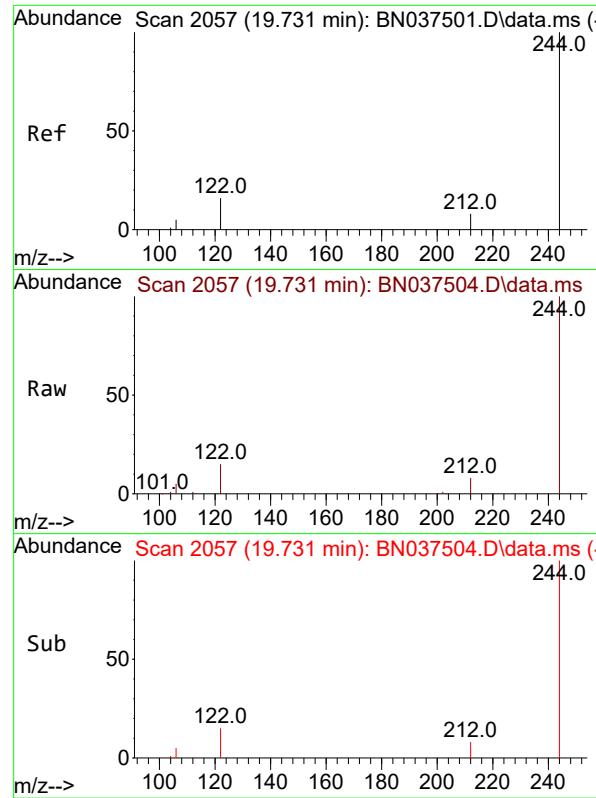
Tgt Ion:240 Resp: 5331  
Ion Ratio Lower Upper  
240 100  
120 14.9 10.7 16.1  
236 28.6 22.6 33.8



#30  
Pyrene  
Concen: 3.306 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

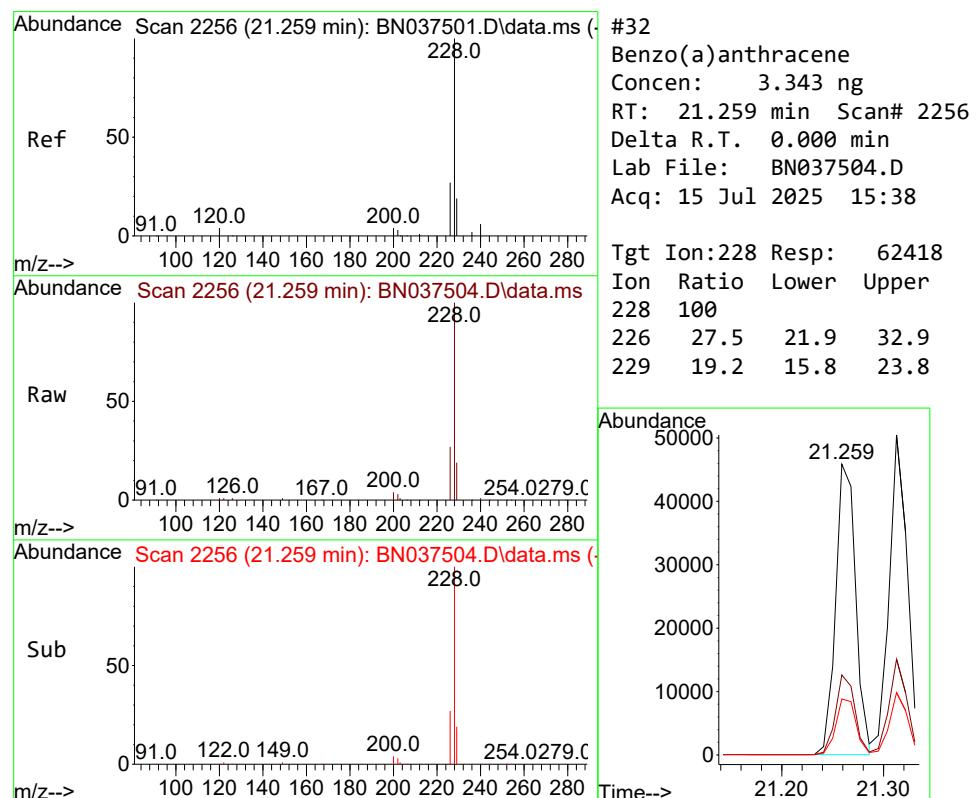
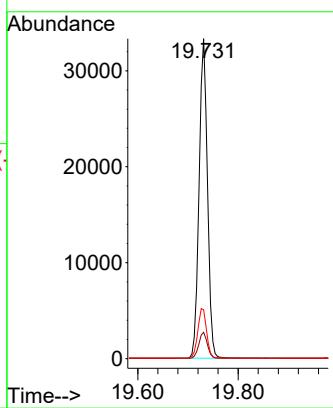
Tgt Ion:202 Resp: 71002  
Ion Ratio Lower Upper  
202 100  
200 20.5 16.5 24.7  
203 17.8 14.3 21.5





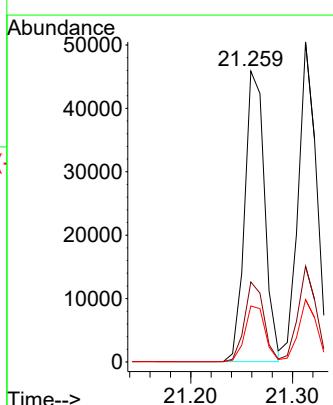
#31  
Terphenyl-d14  
Concen: 3.357 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38  
ClientSampleId : SSTDICC3.2

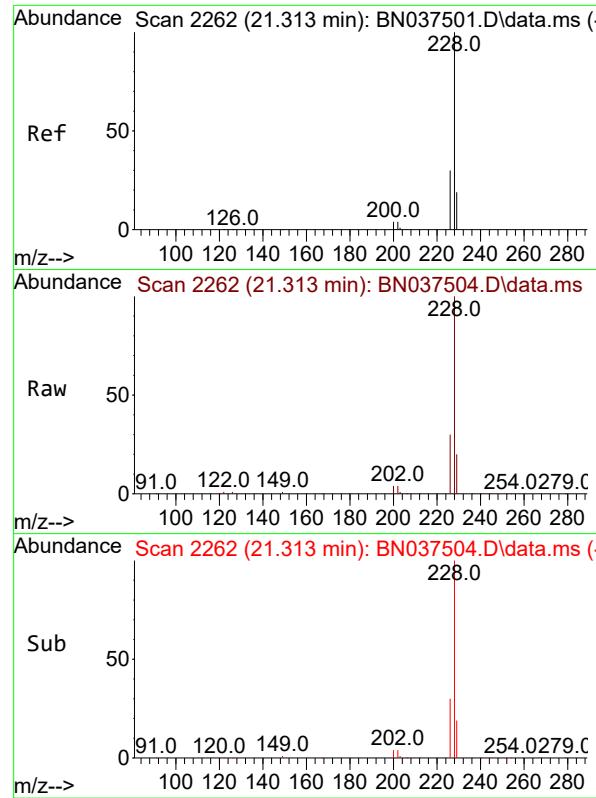
Tgt Ion:244 Resp: 38458  
Ion Ratio Lower Upper  
244 100  
212 8.3 7.4 11.2  
122 15.3 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 3.343 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:228 Resp: 62418  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.9 32.9  
229 19.2 15.8 23.8

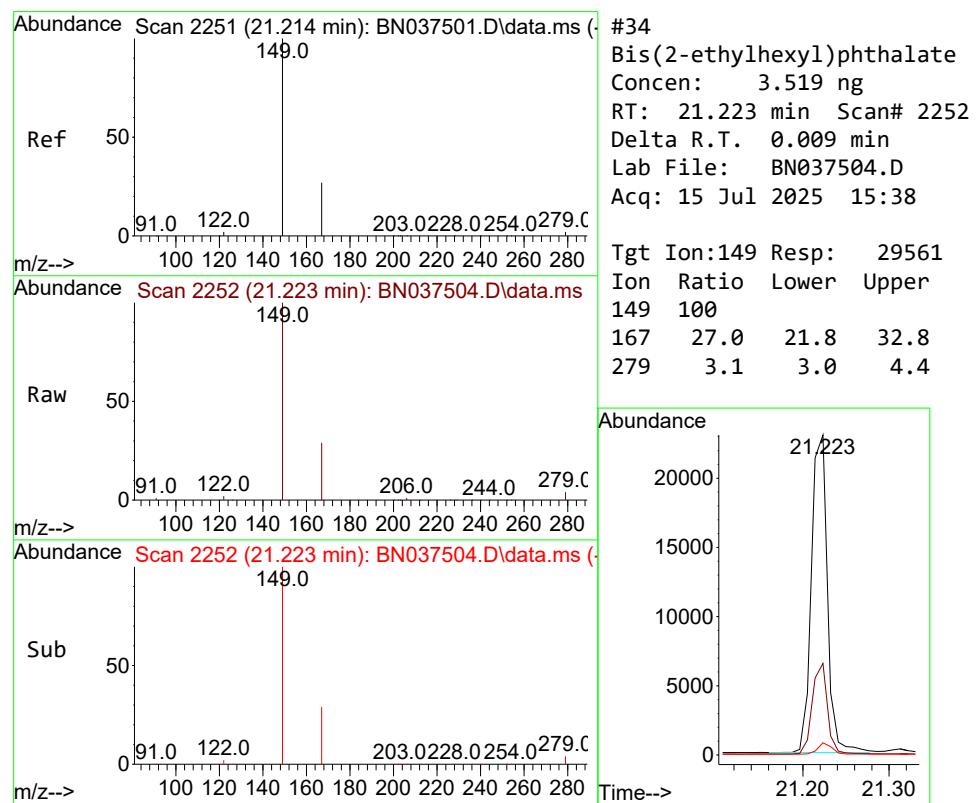
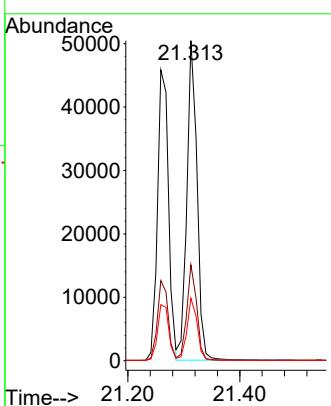




#33  
Chrysene  
Concen: 3.268 ng  
RT: 21.313 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

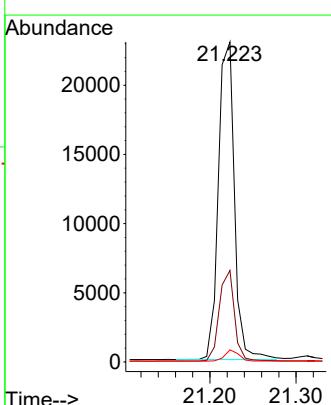
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

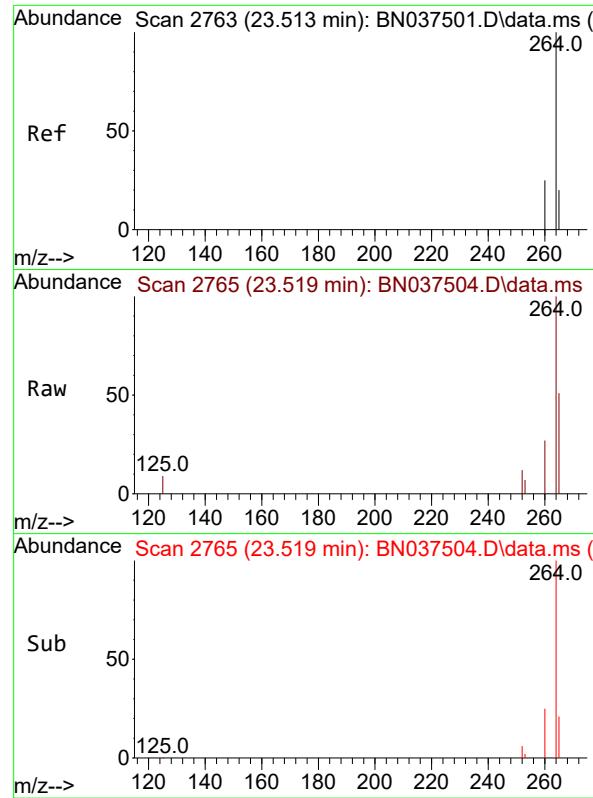
Tgt Ion:228 Resp: 63542  
Ion Ratio Lower Upper  
228 100  
226 30.0 24.2 36.4  
229 19.5 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 3.519 ng  
RT: 21.223 min Scan# 2252  
Delta R.T. 0.009 min  
Lab File: BN037504.D  
Acq: 15 Jul 2025 15:38

Tgt Ion:149 Resp: 29561  
Ion Ratio Lower Upper  
149 100  
167 27.0 21.8 32.8  
279 3.1 3.0 4.4

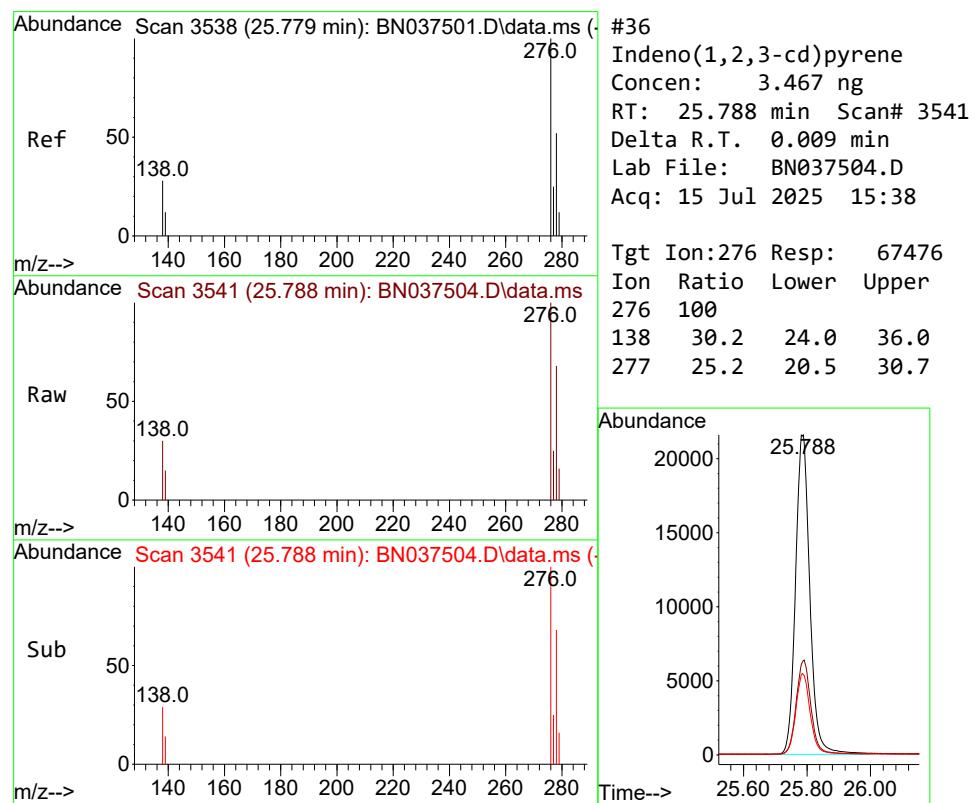
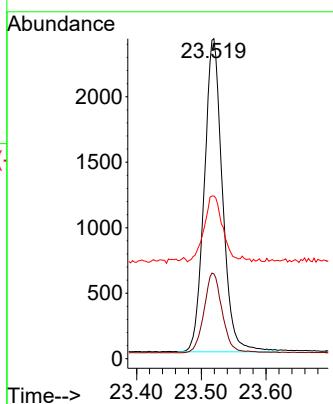




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.519 min Scan# 2  
 Delta R.T. 0.006 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

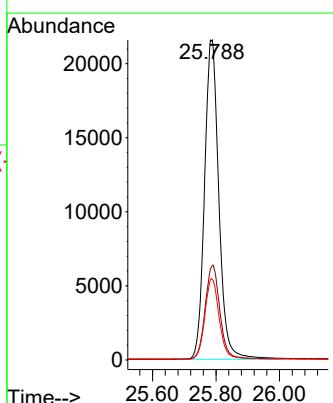
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

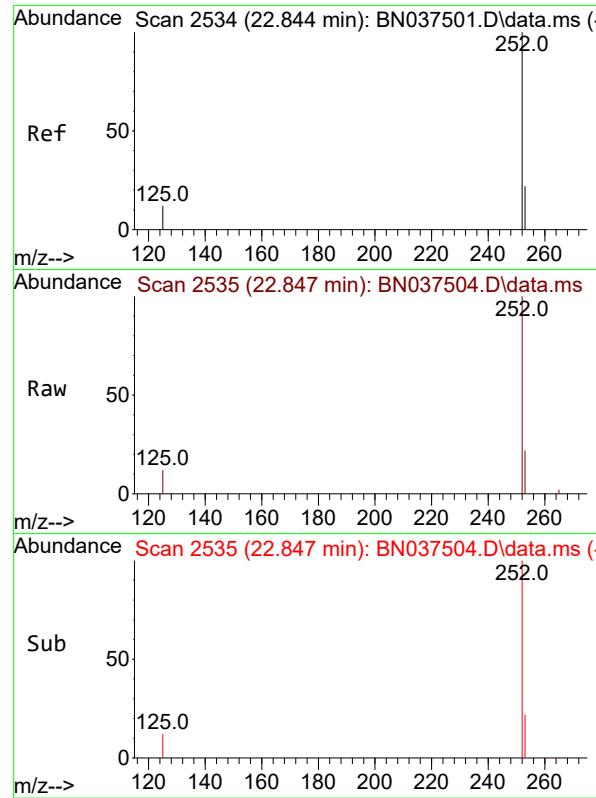
Tgt Ion:264 Resp: 4672  
 Ion Ratio Lower Upper  
 264 100  
 260 26.5 21.2 31.8  
 265 50.8 40.4 60.6



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 3.467 ng  
 RT: 25.788 min Scan# 3541  
 Delta R.T. 0.009 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion:276 Resp: 67476  
 Ion Ratio Lower Upper  
 276 100  
 138 30.2 24.0 36.0  
 277 25.2 20.5 30.7





#37

Benzo(b)fluoranthene

Concen: 3.407 ng

RT: 22.847 min Scan# 2

Delta R.T. 0.003 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

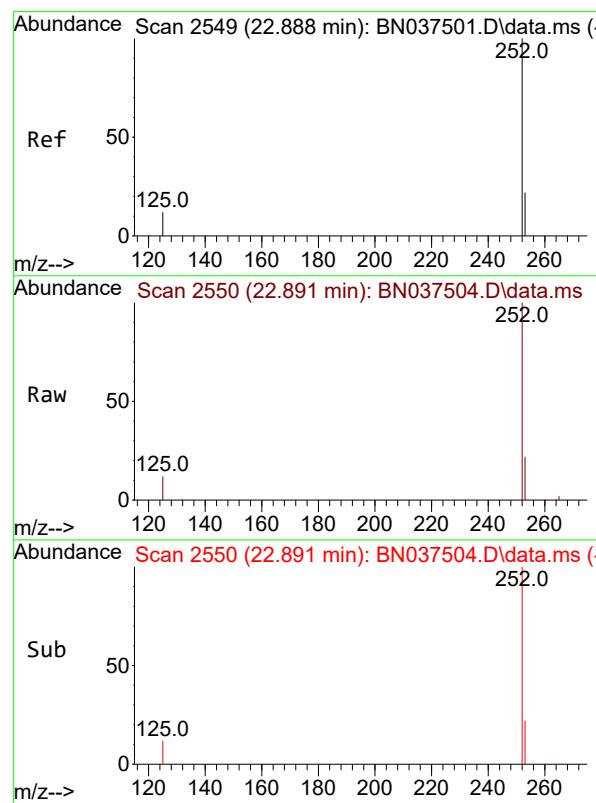
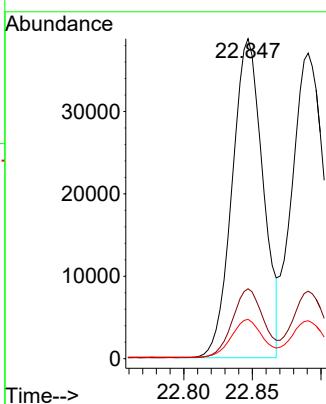
Tgt Ion:252 Resp: 60420

Ion Ratio Lower Upper

252 100

253 21.9 19.5 29.3

125 12.3 13.0 19.6#



#38

Benzo(k)fluoranthene

Concen: 3.450 ng

RT: 22.891 min Scan# 2550

Delta R.T. 0.003 min

Lab File: BN037504.D

Acq: 15 Jul 2025 15:38

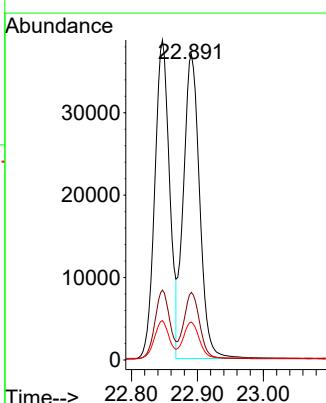
Tgt Ion:252 Resp: 63137

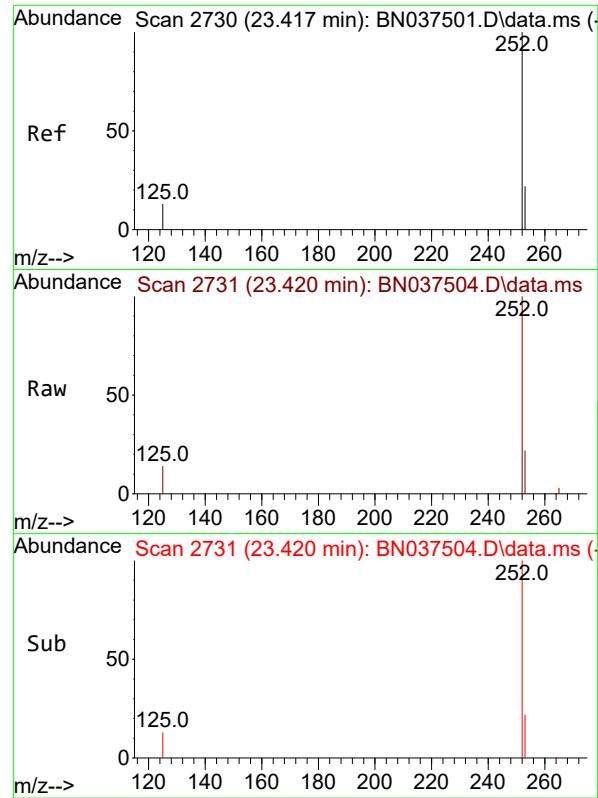
Ion Ratio Lower Upper

252 100

253 22.1 19.5 29.3

125 12.4 13.1 19.7#

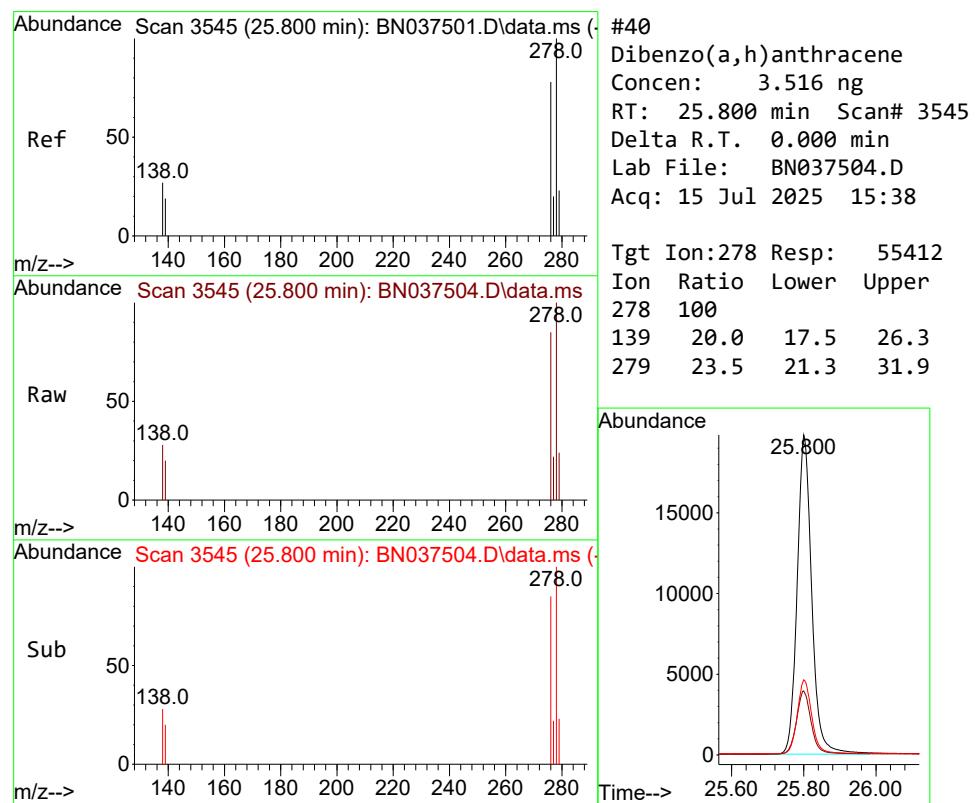
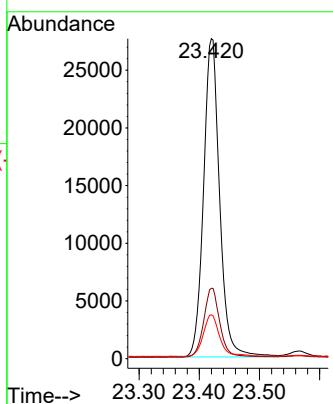




#39  
 Benzo(a)pyrene  
 Concen: 3.459 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

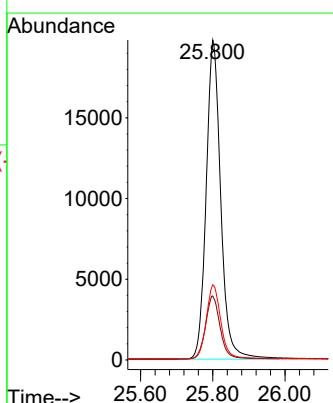
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

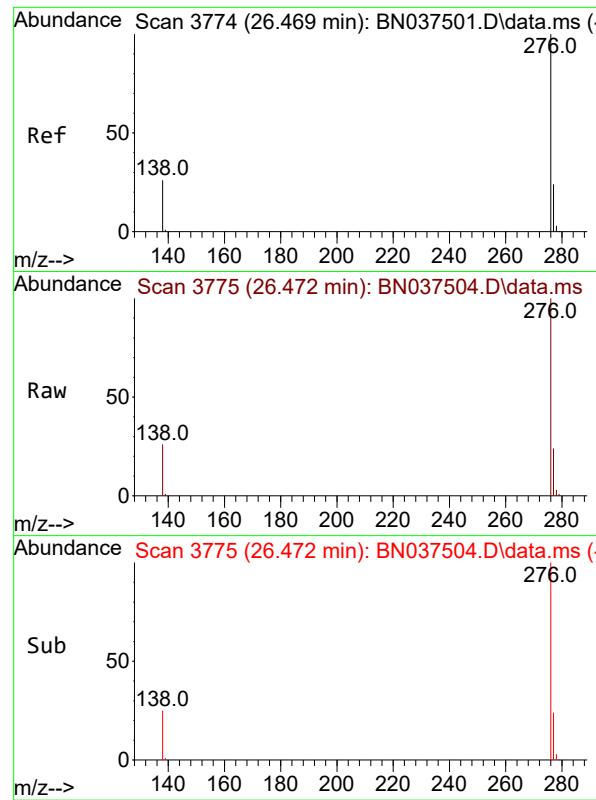
Tgt Ion:252 Resp: 51171  
 Ion Ratio Lower Upper  
 252 100  
 253 22.0 19.9 29.9  
 125 13.7 15.2 22.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 3.516 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. 0.000 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Tgt Ion:278 Resp: 55412  
 Ion Ratio Lower Upper  
 278 100  
 139 20.0 17.5 26.3  
 279 23.5 21.3 31.9

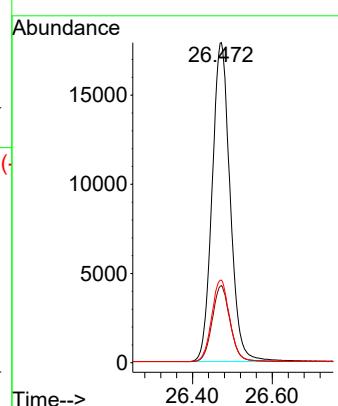




#41  
 Benzo(g,h,i)perylene  
 Concen: 3.430 ng  
 RT: 26.472 min Scan# 3  
 Delta R.T. 0.003 min  
 Lab File: BN037504.D  
 Acq: 15 Jul 2025 15:38

Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

Tgt Ion:276 Resp: 55959  
 Ion Ratio Lower Upper  
 276 100  
 277 24.1 20.9 31.3  
 138 25.8 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037505.D  
 Acq On : 15 Jul 2025 16:14  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICC5.0

Quant Time: Jul 15 17:28:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

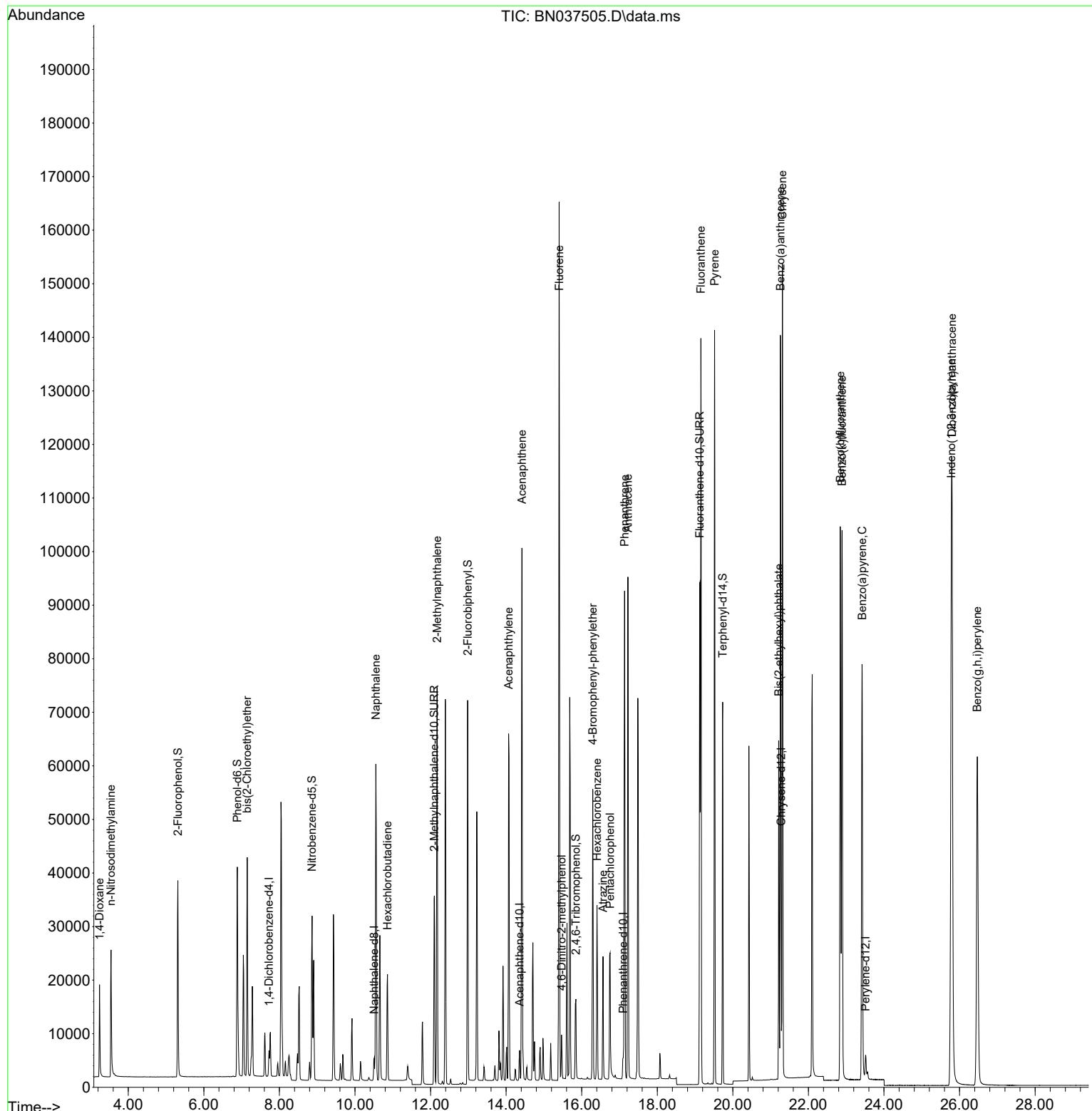
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2230	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5395	0.400	ng	0.00
13) Acenaphthene-d10	14.356	164	3026	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	5918	0.400	ng	0.00
29) Chrysene-d12	21.277	240	6176	0.400	ng	0.00
35) Perylene-d12	23.516	264	5810	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	28715	5.207	ng	0.00
5) Phenol-d6	6.887	99	35549	5.139	ng	0.00
8) Nitrobenzene-d5	8.865	82	22676	5.623	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	47958	6.198	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	9399	6.319	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	90652	5.761	ng	0.00
27) Fluoranthene-d10	19.127	212	102473	6.537	ng	0.00
31) Terphenyl-d14	19.731	244	66764	5.031	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.240	88	9864	4.601	ng	97
3) n-Nitrosodimethylamine	3.543	42	13961	5.177	ng	# 93
6) bis(2-Chloroethyl)ether	7.147	93	28323	4.920	ng	99
9) Naphthalene	10.552	128	75946	5.279	ng	97
10) Hexachlorobutadiene	10.861	225	16562	5.208	ng	# 100
12) 2-Methylnaphthalene	12.172	142	50973	5.388	ng	99
16) Acenaphthylene	14.067	152	74932	5.528	ng	99
17) Acenaphthene	14.420	154	49935	5.417	ng	96
18) Fluorene	15.403	166	64957	5.474	ng	97
20) 4,6-Dinitro-2-methylph...	15.467	198	5939	4.991	ng	# 58
21) 4-Bromophenyl-phenylether	16.292	248	20263	5.344	ng	95
22) Hexachlorobenzene	16.404	284	25010	5.106	ng	99
23) Atrazine	16.565	200	16269	6.150	ng	95
24) Pentachlorophenol	16.751	266	13954	6.351	ng	99
25) Phenanthrene	17.136	178	94181	5.312	ng	100
26) Anthracene	17.223	178	91147	5.634	ng	100
28) Fluoranthene	19.155	202	117280	5.736	ng	99
30) Pyrene	19.517	202	118804	4.775	ng	100
32) Benzo(a)anthracene	21.259	228	117117	5.414	ng	99
33) Chrysene	21.313	228	117985	5.239	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	60154	6.181	ng	99
36) Indeno(1,2,3-cd)pyrene	25.782	276	144593	5.975	ng	99
37) Benzo(b)fluoranthene	22.844	252	122848	5.570	ng	# 93
38) Benzo(k)fluoranthene	22.891	252	125226	5.503	ng	# 93
39) Benzo(a)pyrene	23.420	252	106654	5.797	ng	# 91
40) Dibenzo(a,h)anthracene	25.800	278	118164	6.029	ng	95
41) Benzo(g,h,i)perylene	26.469	276	120757	5.952	ng	95

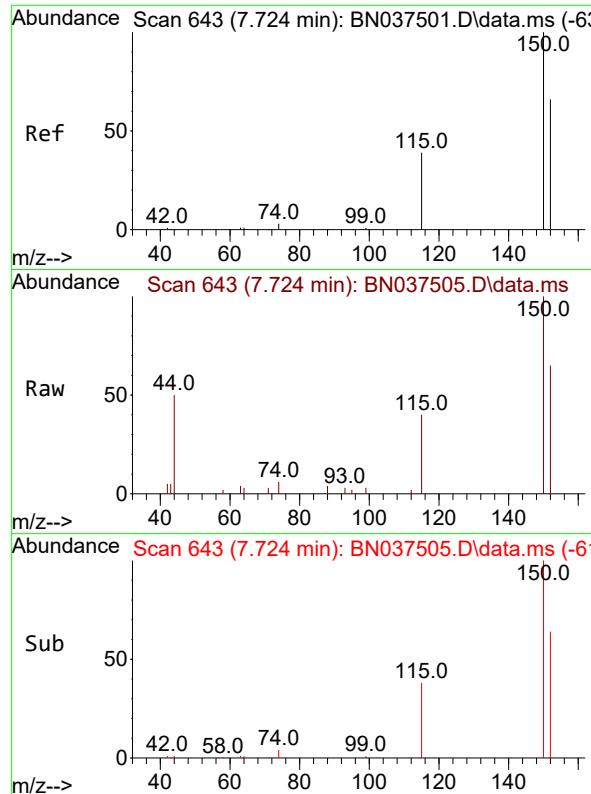
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037505.D  
 Acq On : 15 Jul 2025 16:14  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Jul 15 17:28:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 16:45:15 2025  
 Response via : Initial Calibration

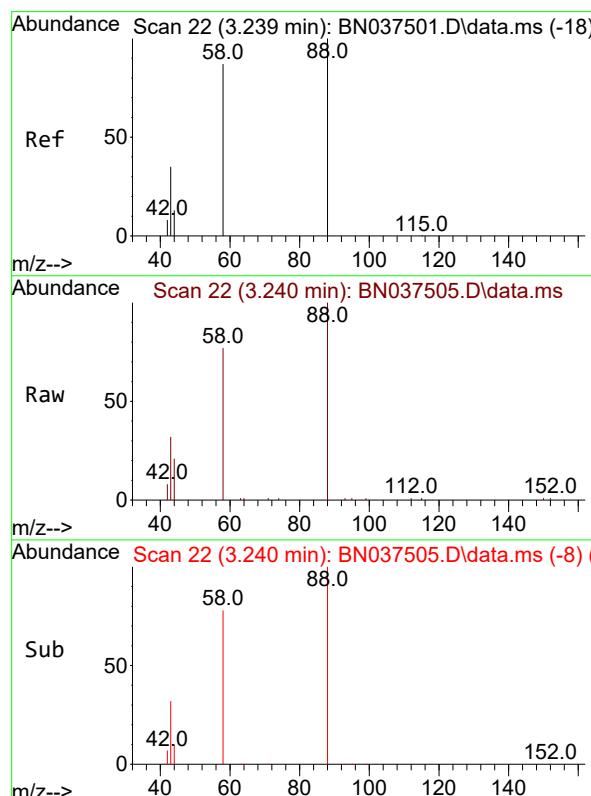
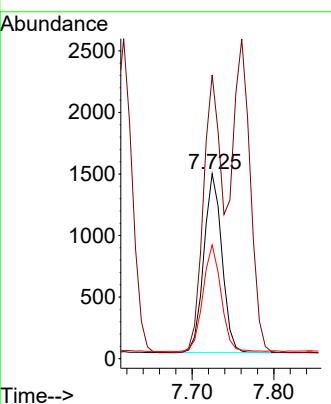




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

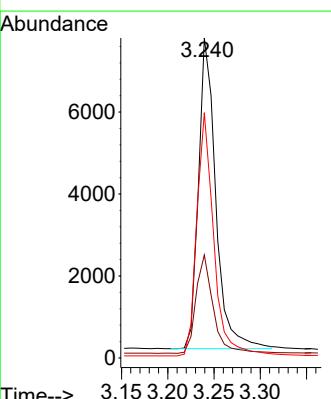
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

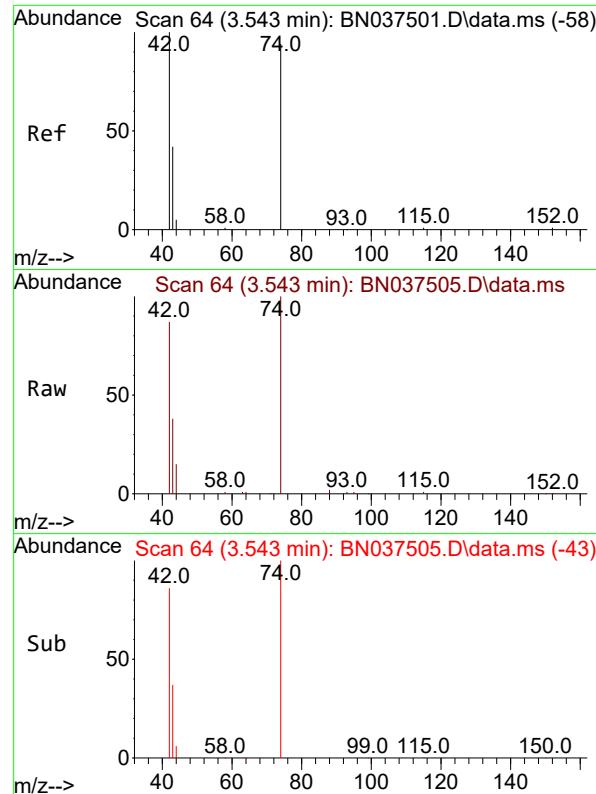
Tgt Ion:152 Resp: 2230  
Ion Ratio Lower Upper  
152 100  
150 153.4 119.8 179.8  
115 61.5 49.1 73.7



#2  
1,4-Dioxane  
Concen: 4.601 ng  
RT: 3.240 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion: 88 Resp: 9864  
Ion Ratio Lower Upper  
88 100  
43 31.4 27.5 41.3  
58 76.9 62.7 94.1

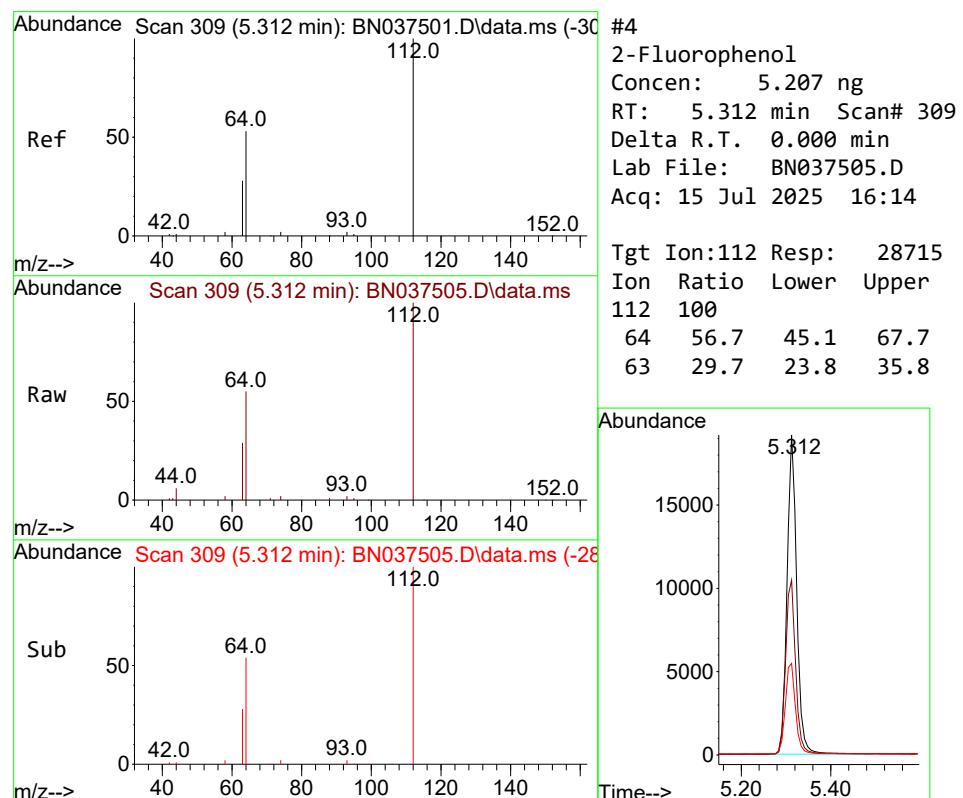
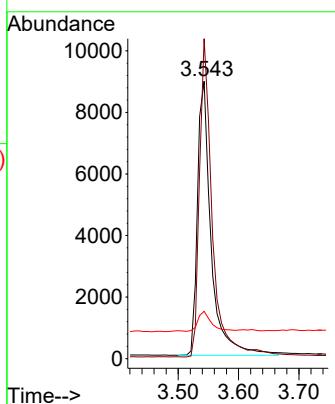




#3  
n-Nitrosodimethylamine  
Concen: 5.177 ng  
RT: 3.543 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

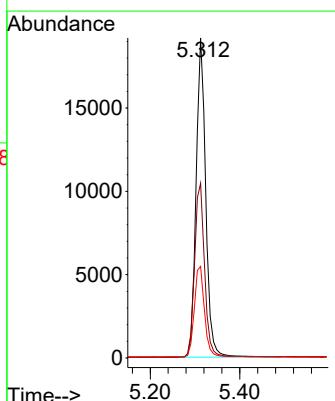
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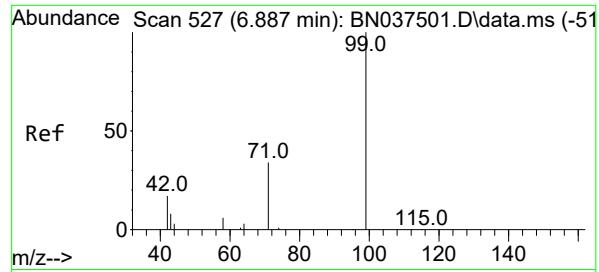
Tgt Ion: 42 Resp: 13961  
Ion Ratio Lower Upper  
42 100  
74 110.6 91.8 137.6  
44 7.0 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 5.207 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

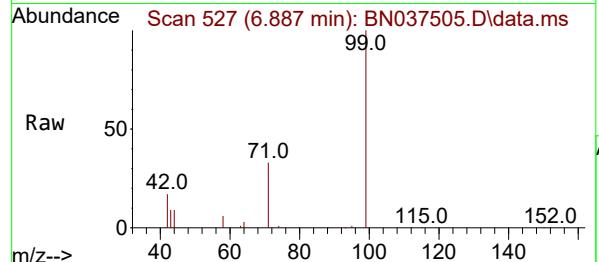
Tgt Ion: 112 Resp: 28715  
Ion Ratio Lower Upper  
112 100  
64 56.7 45.1 67.7  
63 29.7 23.8 35.8



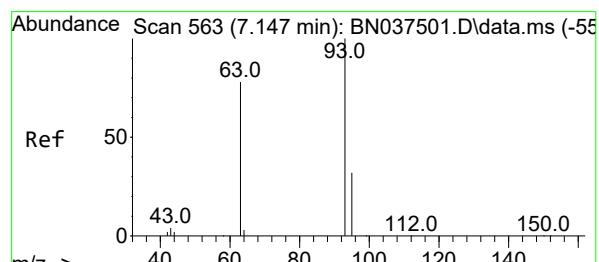
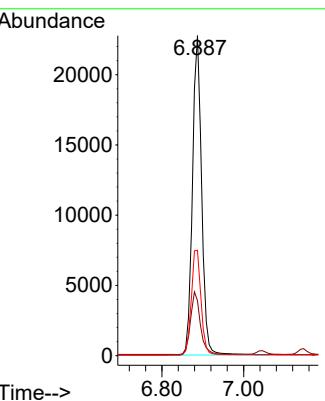
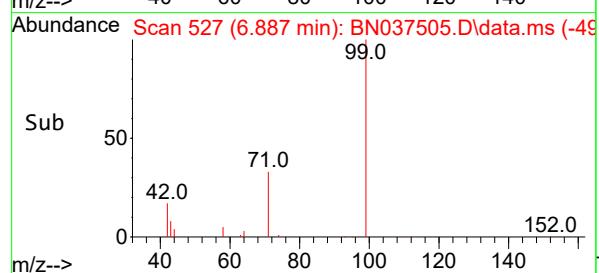


#5  
Phenol-d6  
Concen: 5.139 ng  
RT: 6.887 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

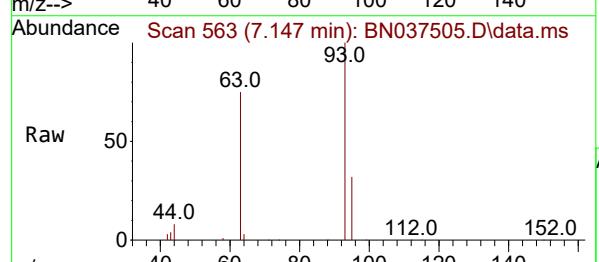
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0



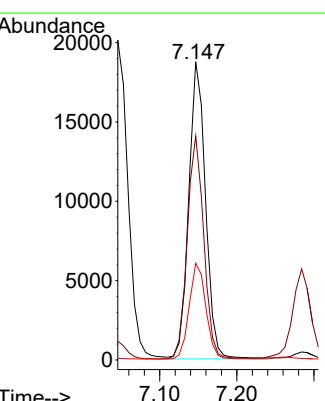
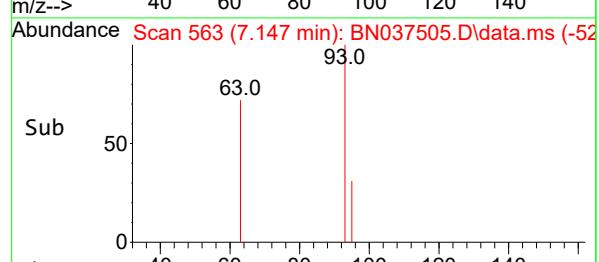
Tgt Ion: 99 Resp: 35549  
Ion Ratio Lower Upper  
99 100  
42 21.0 17.1 25.7  
71 34.9 27.8 41.8

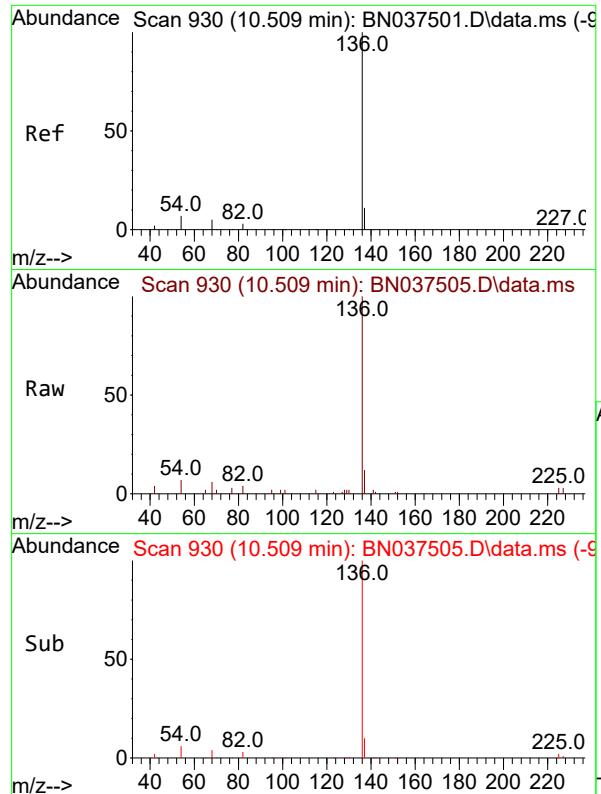


#6  
bis(2-Chloroethyl)ether  
Concen: 4.920 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14



Tgt Ion: 93 Resp: 28323  
Ion Ratio Lower Upper  
93 100  
63 73.7 58.2 87.4  
95 32.2 25.3 37.9





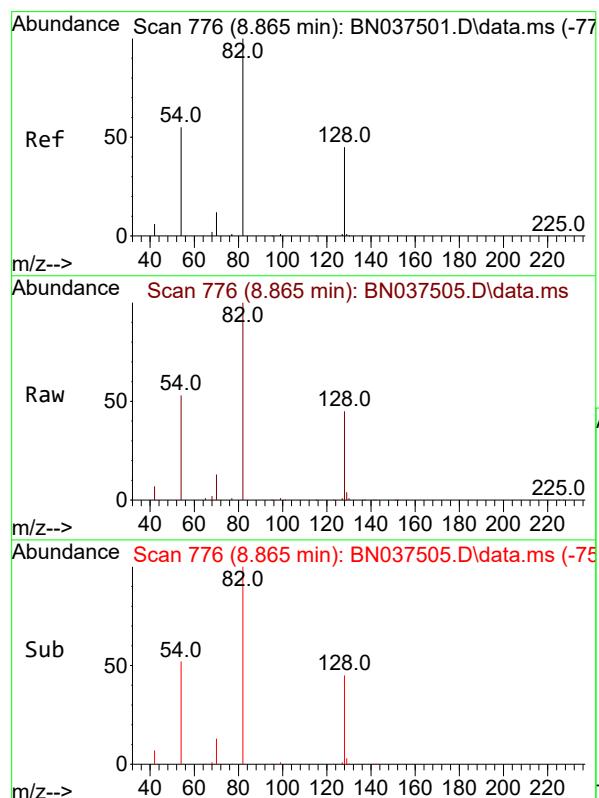
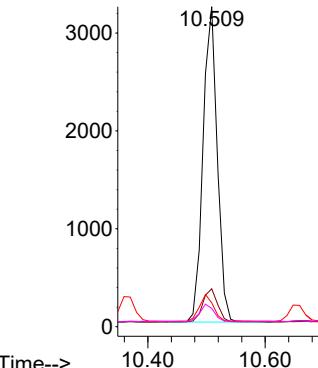
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

Tgt Ion:136 Resp: 5395

Ion	Ratio	Lower	Upper
136	100		
137	11.9	9.8	14.8
54	7.5	6.6	9.8
68	5.7	5.0	7.6

Abundance

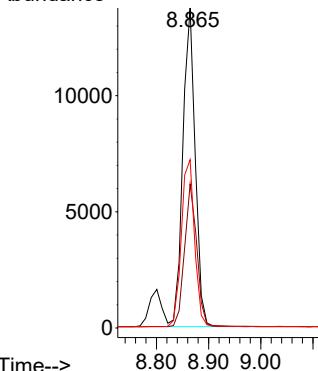


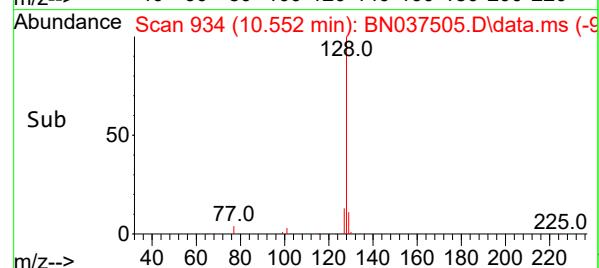
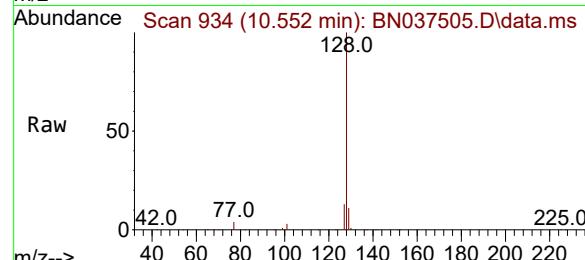
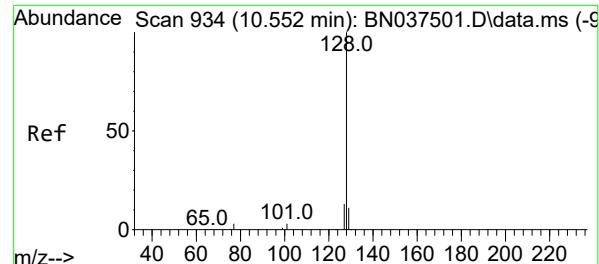
#8  
 Nitrobenzene-d5  
 Concen: 5.623 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion: 82 Resp: 22676

Ion	Ratio	Lower	Upper
82	100		
128	45.0	37.5	56.3
54	52.6	45.3	67.9

Abundance





#9

Naphthalene

Concen: 5.279 ng

RT: 10.552 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:128 Resp: 75946

Ion Ratio Lower Upper

128 100

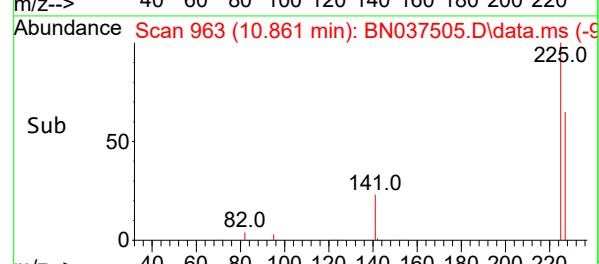
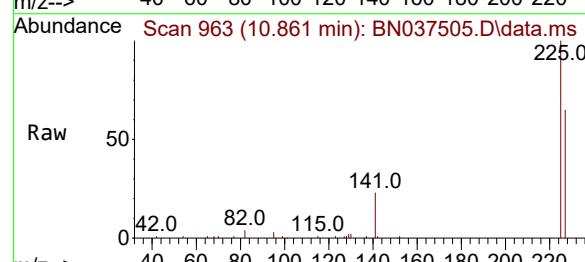
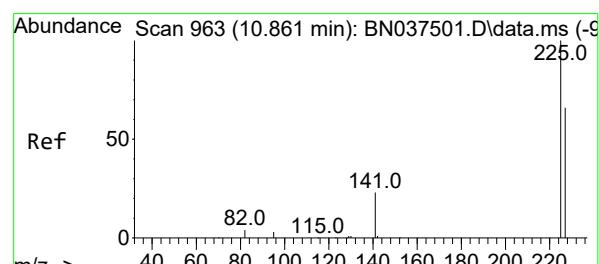
129 11.0 9.7 14.5

127 13.5 11.5 17.3

Abundance

10.552

Time--&gt;



#10

Hexachlorobutadiene

Concen: 5.208 ng

RT: 10.861 min Scan# 963

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Tgt Ion:225 Resp: 16562

Ion Ratio Lower Upper

225 100

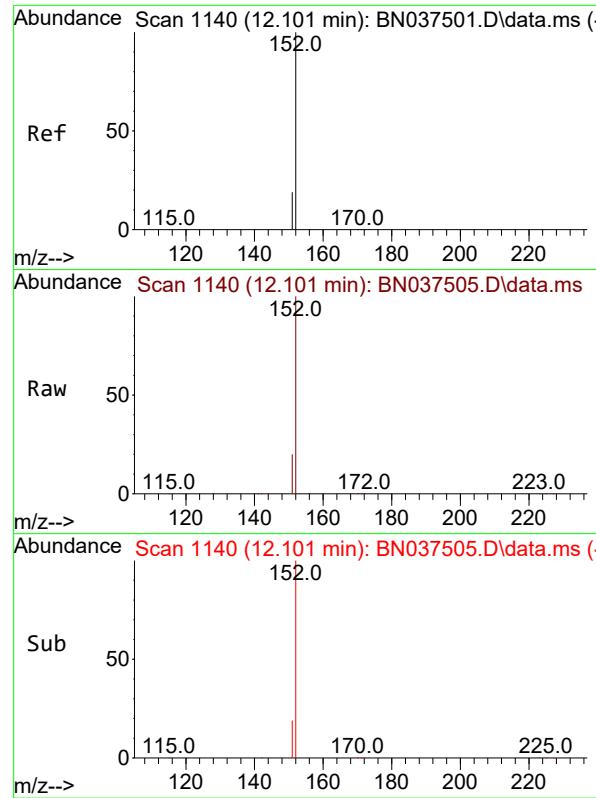
223 0.0 0.0 0.0

227 63.7 51.0 76.4

Abundance

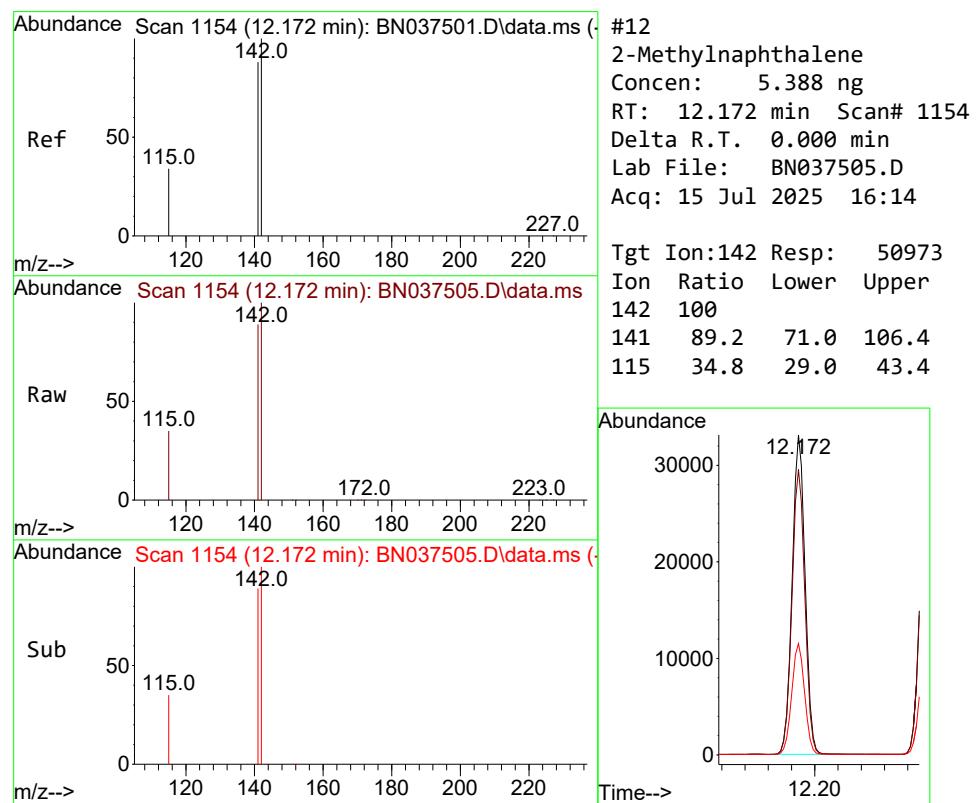
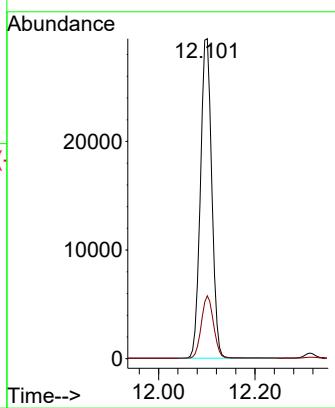
10.861

Time--&gt;



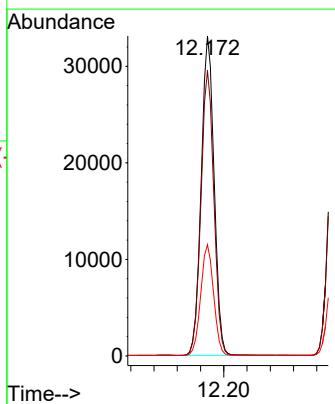
#11  
2-Methylnaphthalene-d10  
Concen: 6.198 ng  
RT: 12.101 min Scan# 1:Instrument :  
Delta R.T. 0.000 min BNA\_N  
Lab File: BN037505.D ClientSampleId :  
Acq: 15 Jul 2025 16:14 SSTDICC5.0

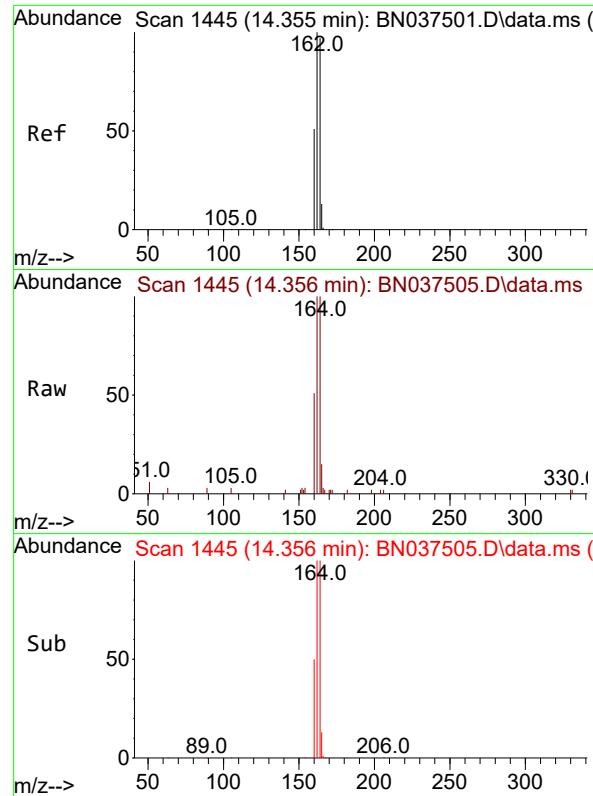
Tgt Ion:152 Resp: 47958  
Ion Ratio Lower Upper  
152 100  
151 20.9 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 5.388 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:142 Resp: 50973  
Ion Ratio Lower Upper  
142 100  
141 89.2 71.0 106.4  
115 34.8 29.0 43.4

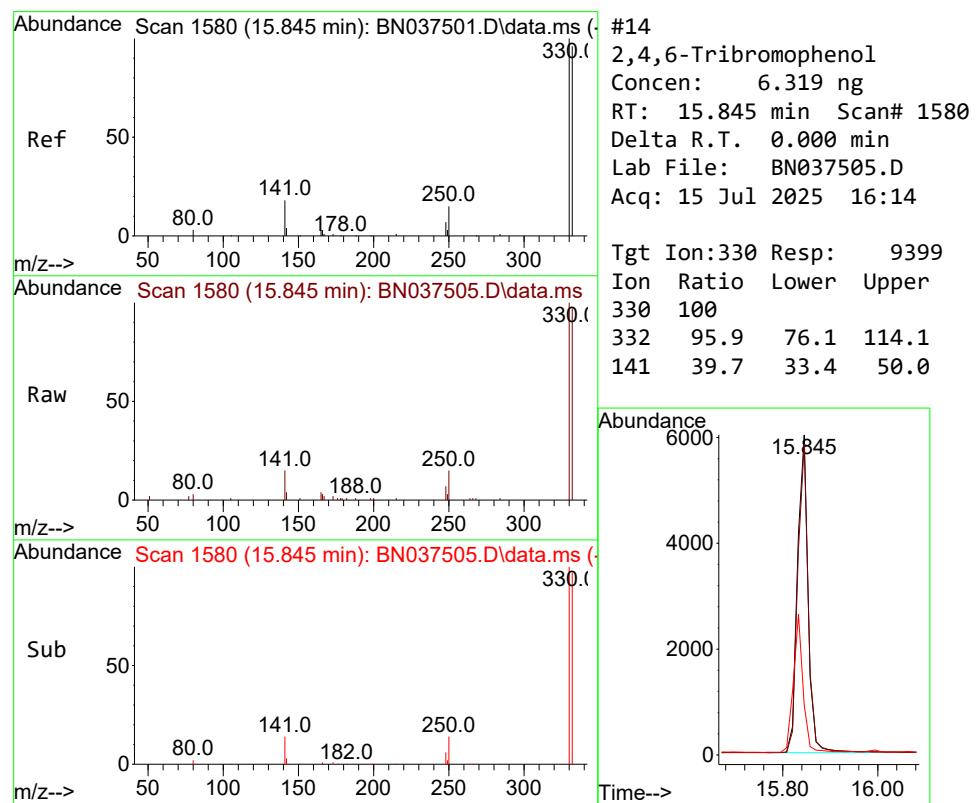
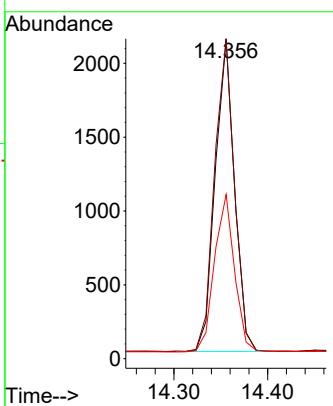




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.356 min Scan# 1445  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

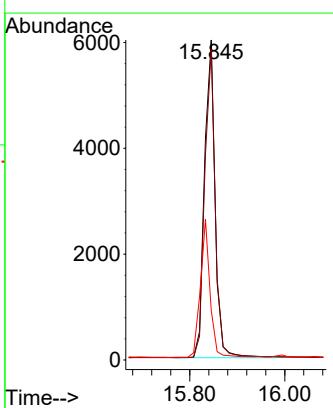
Instrument : BNA\_N  
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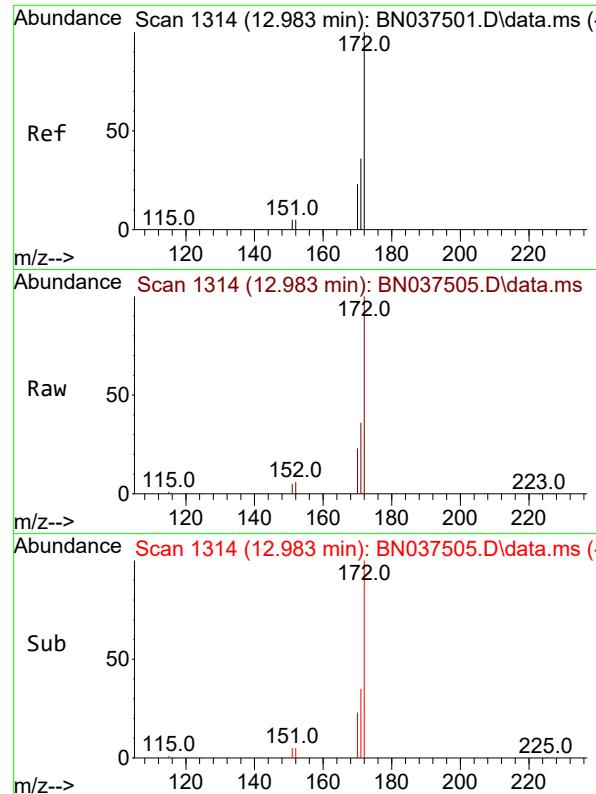
Tgt Ion:164 Resp: 3026  
 Ion Ratio Lower Upper  
 164 100  
 162 100.1 82.0 123.0  
 160 51.4 42.4 63.6



#14  
 2,4,6-Tribromophenol  
 Concen: 6.319 ng  
 RT: 15.845 min Scan# 1580  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

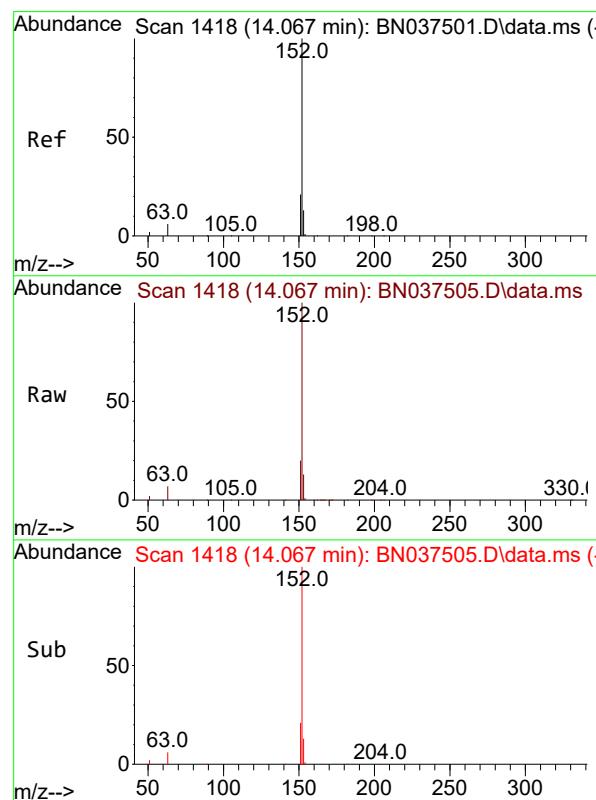
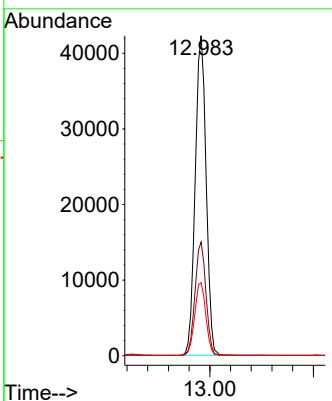
Tgt Ion:330 Resp: 9399  
 Ion Ratio Lower Upper  
 330 100  
 332 95.9 76.1 114.1  
 141 39.7 33.4 50.0





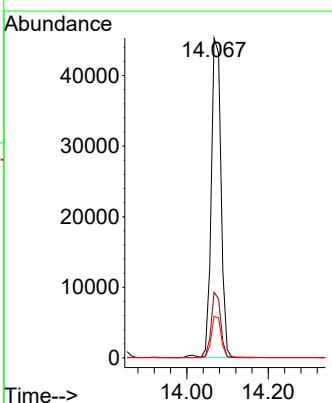
#15  
2-Fluorobiphenyl  
Concen: 5.761 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D ClientSampleId : SSTDICC5.0  
Acq: 15 Jul 2025 16:14

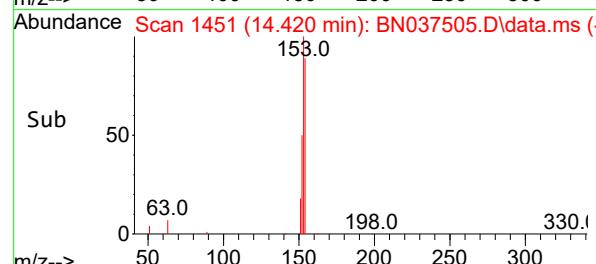
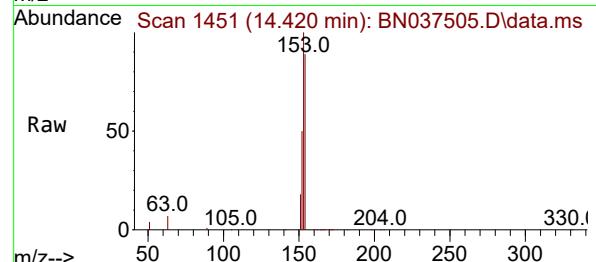
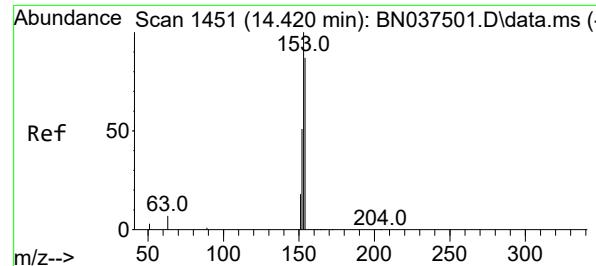
Tgt Ion:172 Resp: 90652  
Ion Ratio Lower Upper  
172 100  
171 35.5 29.4 44.2  
170 22.9 19.4 29.0



#16  
Acenaphthylene  
Concen: 5.528 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:152 Resp: 74932  
Ion Ratio Lower Upper  
152 100  
151 19.7 15.9 23.9  
153 13.0 10.7 16.1





#17

Acenaphthene

Concen: 5.417 ng

RT: 14.420 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

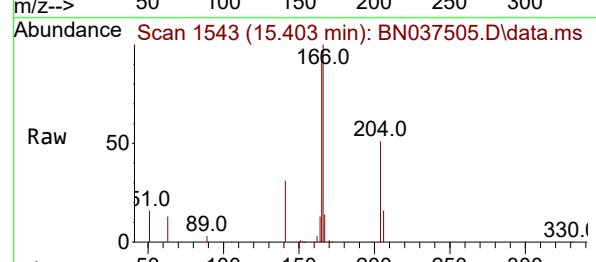
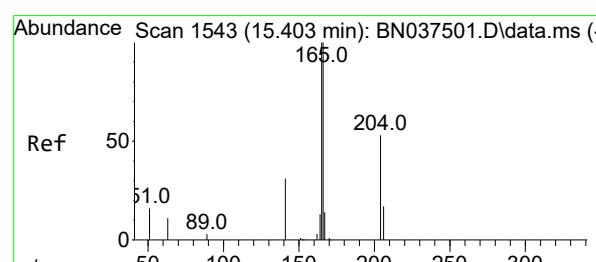
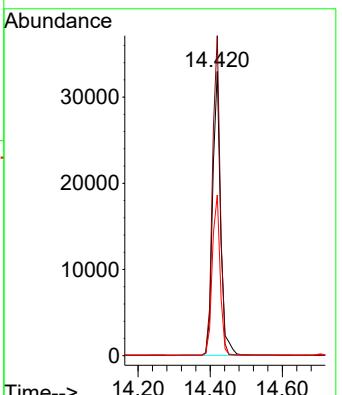
Tgt Ion:154 Resp: 49935

Ion Ratio Lower Upper

154 100

153 108.5 89.2 133.8

152 56.3 48.0 72.0



#18

Fluorene

Concen: 5.474 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

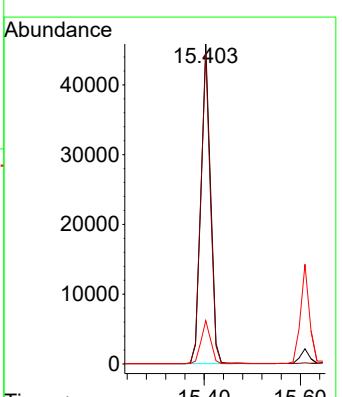
Tgt Ion:166 Resp: 64957

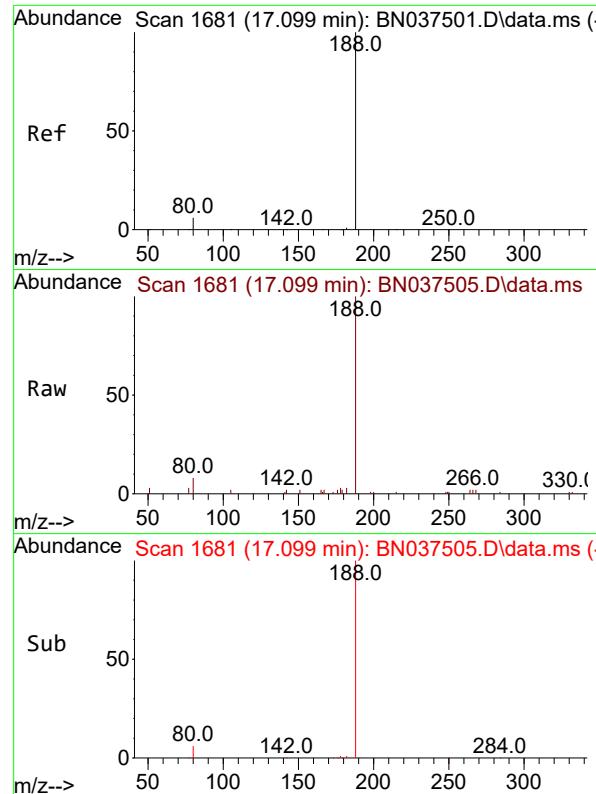
Ion Ratio Lower Upper

166 100

165 95.0 78.1 117.1

167 13.1 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:188 Resp: 5918

Ion Ratio Lower Upper

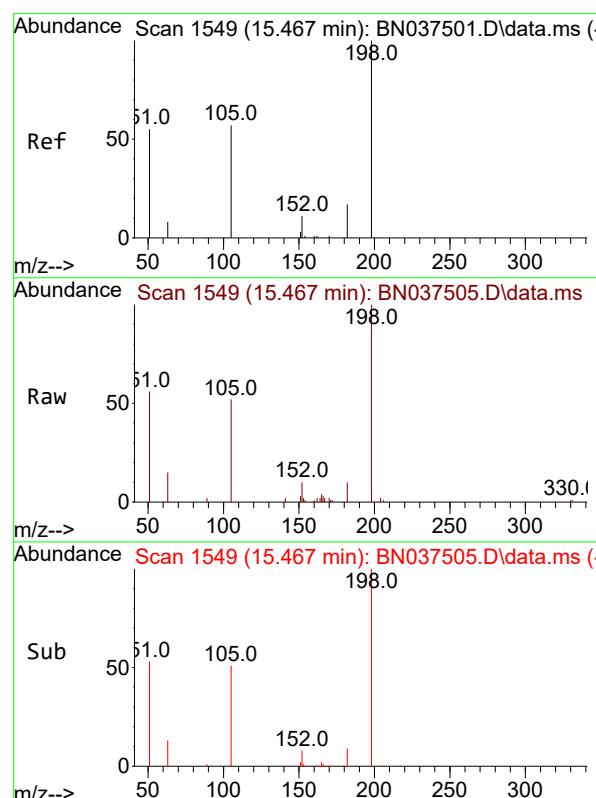
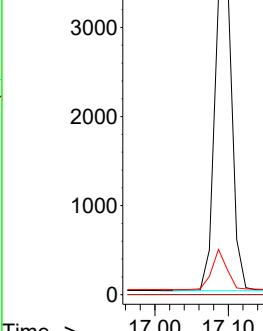
188 100

94 0.0 0.0 0.0

80 7.6 6.0 9.0

Abundance

17.099



#20

4,6-Dinitro-2-methylphenol

Concen: 4.991 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Tgt Ion:198 Resp: 5939

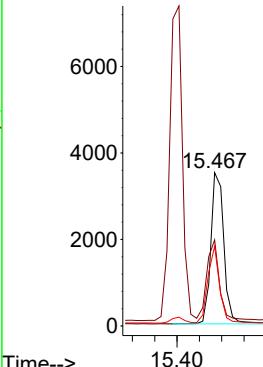
Ion Ratio Lower Upper

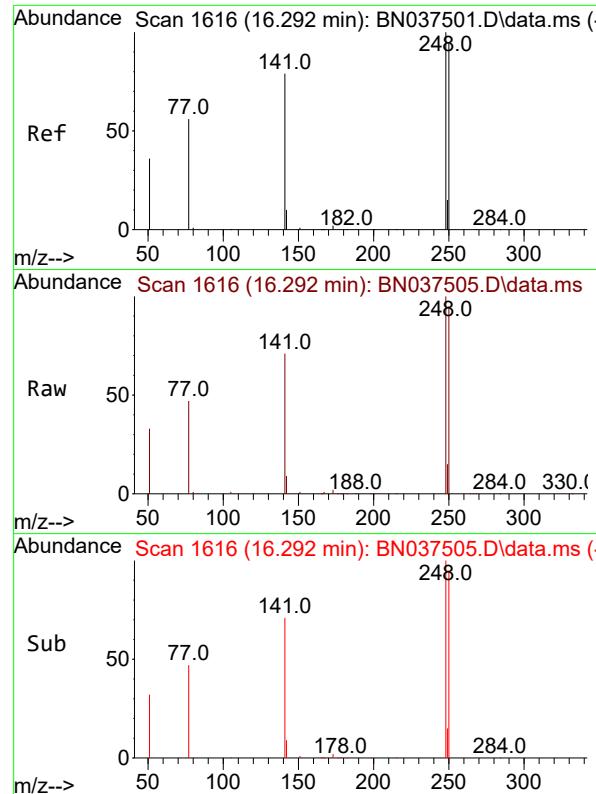
198 100

51 56.1 88.5 132.7#

105 52.0 61.2 91.8#

Abundance





#21

4-Bromophenyl-phenylether

Concen: 5.344 ng

RT: 16.292 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:248 Resp: 20263

Ion Ratio Lower Upper

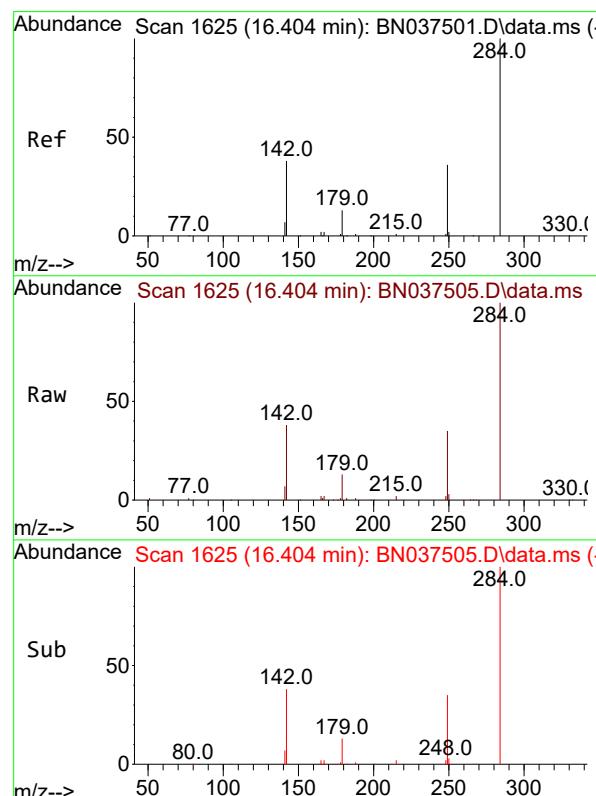
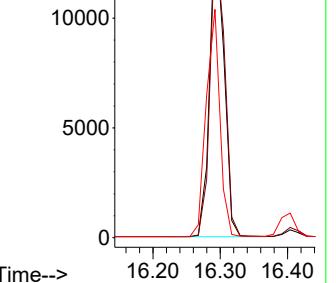
248 100

250 95.0 76.2 114.2

141 71.4 63.9 95.9

Abundance

16.292



#22

Hexachlorobenzene

Concen: 5.106 ng

RT: 16.404 min Scan# 1625

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Tgt Ion:284 Resp: 25010

Ion Ratio Lower Upper

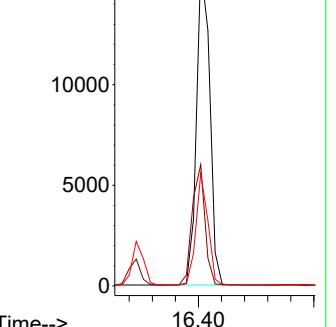
284 100

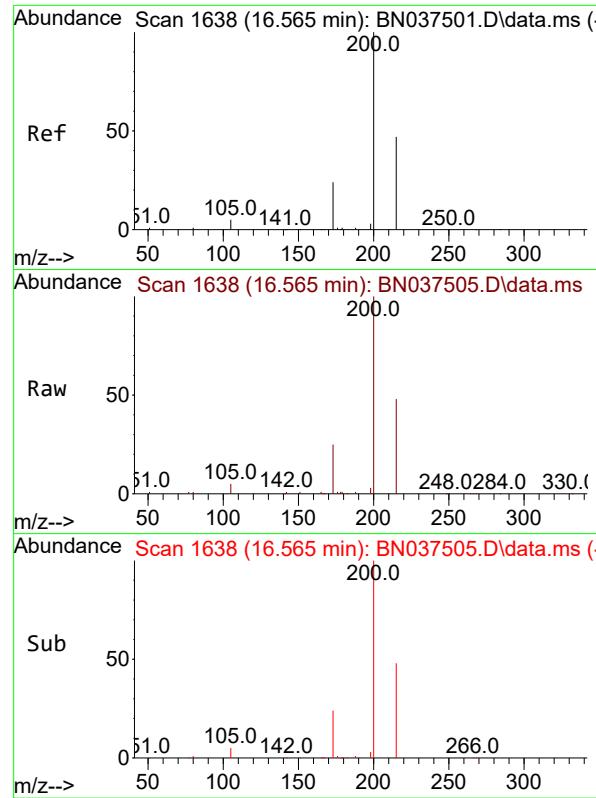
142 36.4 28.9 43.3

249 31.8 25.8 38.6

Abundance

16.404

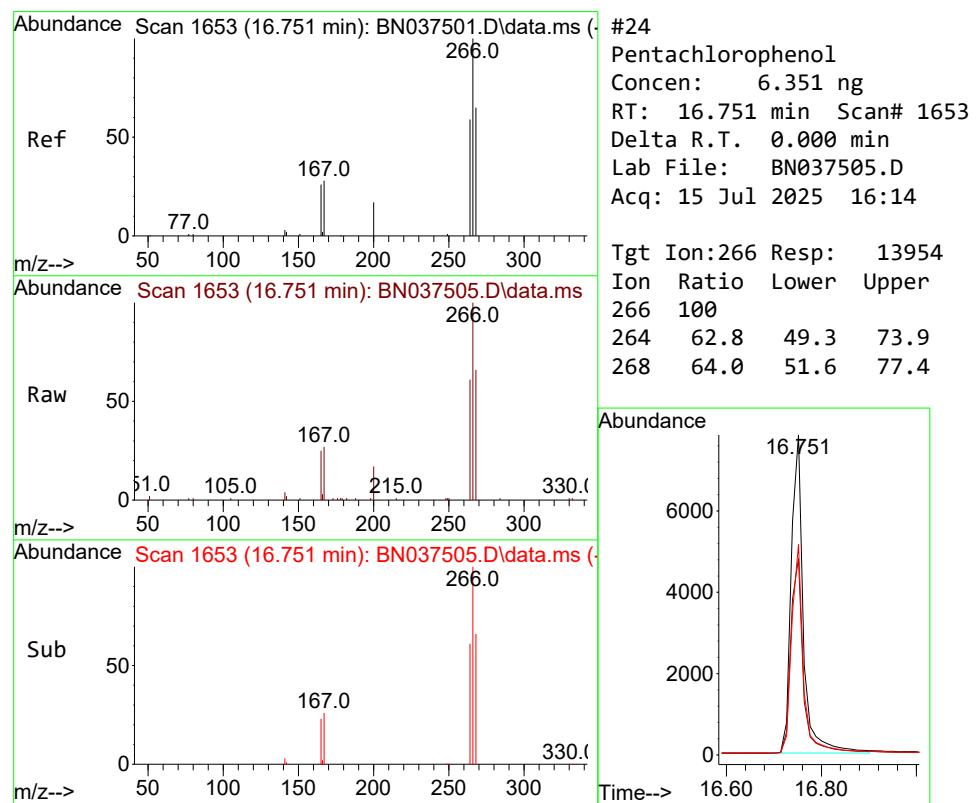
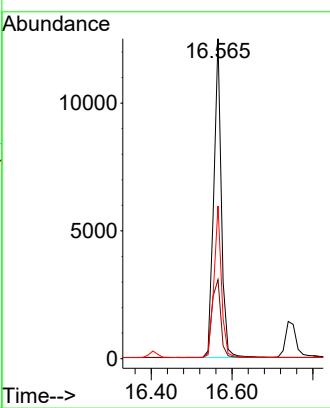




#23  
Atrazine  
Concen: 6.150 ng  
RT: 16.565 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

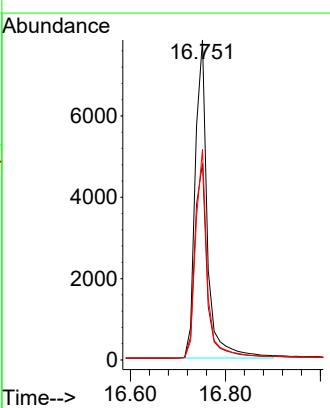
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

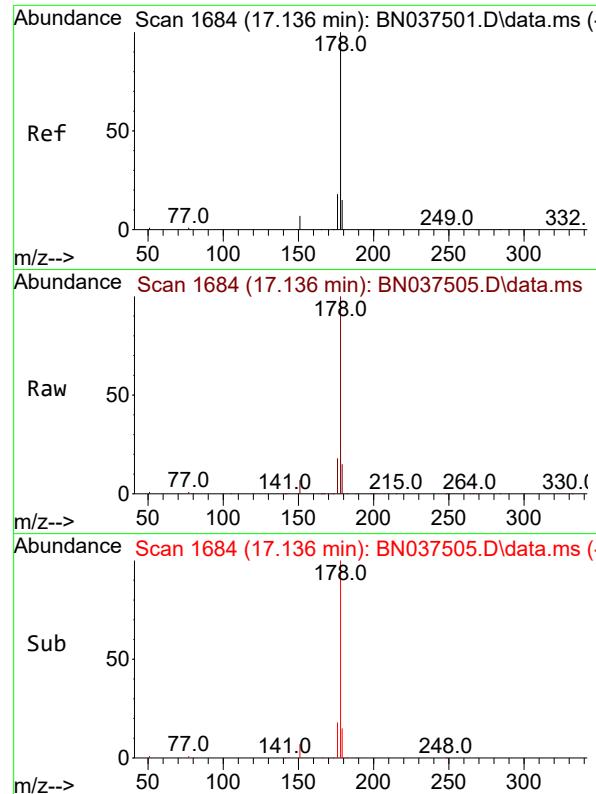
Tgt Ion:200 Resp: 16269  
Ion Ratio Lower Upper  
200 100  
173 24.7 23.2 34.8  
215 47.7 40.2 60.4



#24  
Pentachlorophenol  
Concen: 6.351 ng  
RT: 16.751 min Scan# 1653  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:266 Resp: 13954  
Ion Ratio Lower Upper  
266 100  
264 62.8 49.3 73.9  
268 64.0 51.6 77.4





#25

Phenanthrene

Concen: 5.312 ng

RT: 17.136 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Instrument : BNA\_N

ClientSampleId : SSTDICC5.0

Tgt Ion:178 Resp: 94181

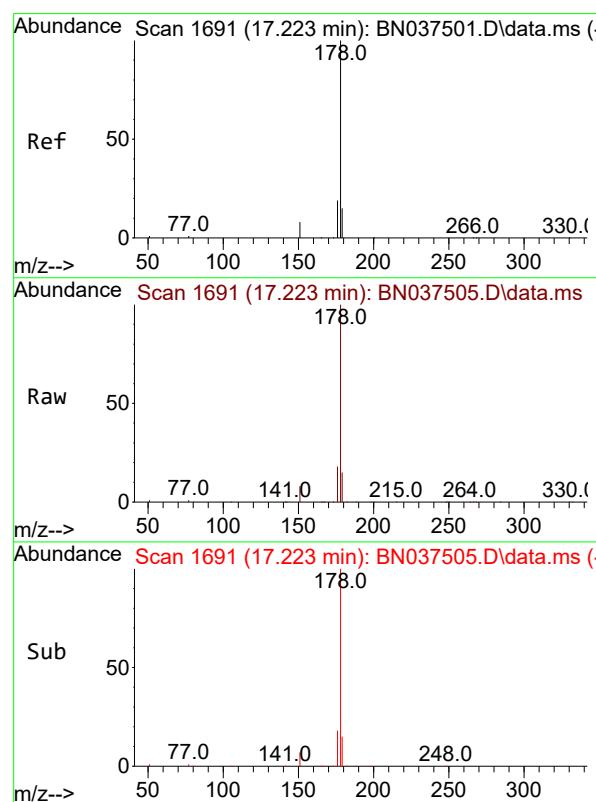
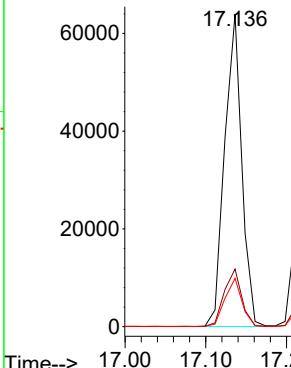
Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.3 12.2 18.2

Abundance



#26

Anthracene

Concen: 5.634 ng

RT: 17.223 min Scan# 1691

Delta R.T. 0.000 min

Lab File: BN037505.D

Acq: 15 Jul 2025 16:14

Tgt Ion:178 Resp: 91147

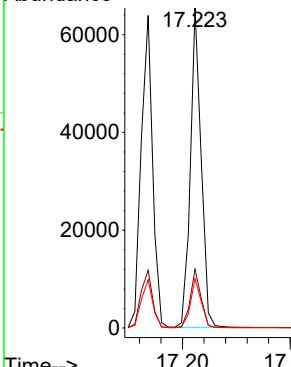
Ion Ratio Lower Upper

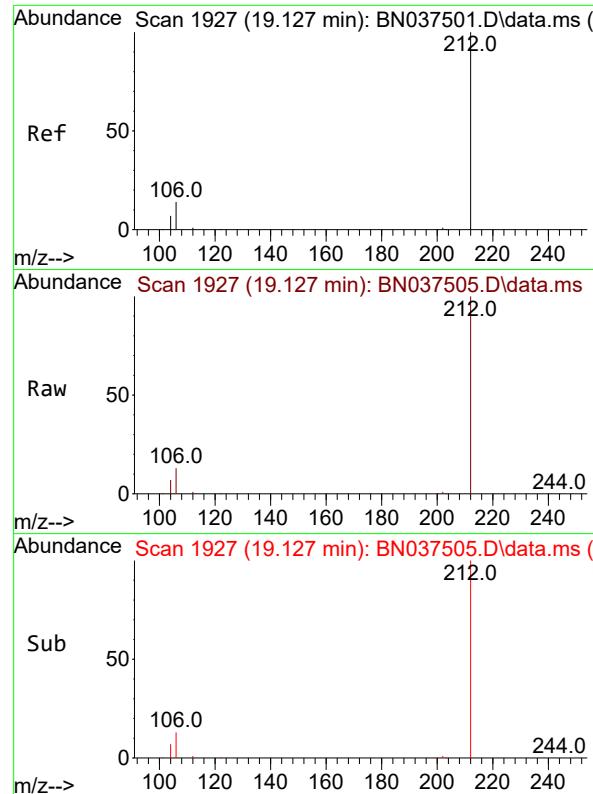
178 100

176 18.2 14.7 22.1

179 15.3 12.3 18.5

Abundance

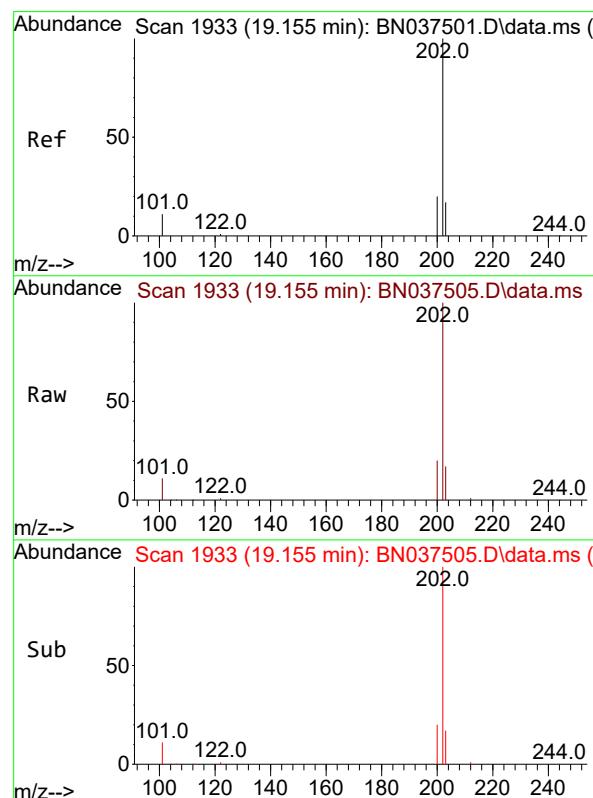
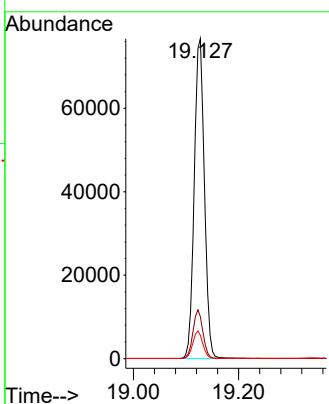




#27  
 Fluoranthene-d10  
 Concen: 6.537 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

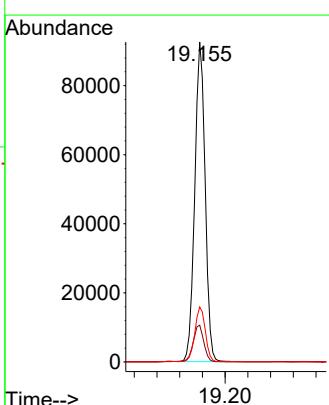
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

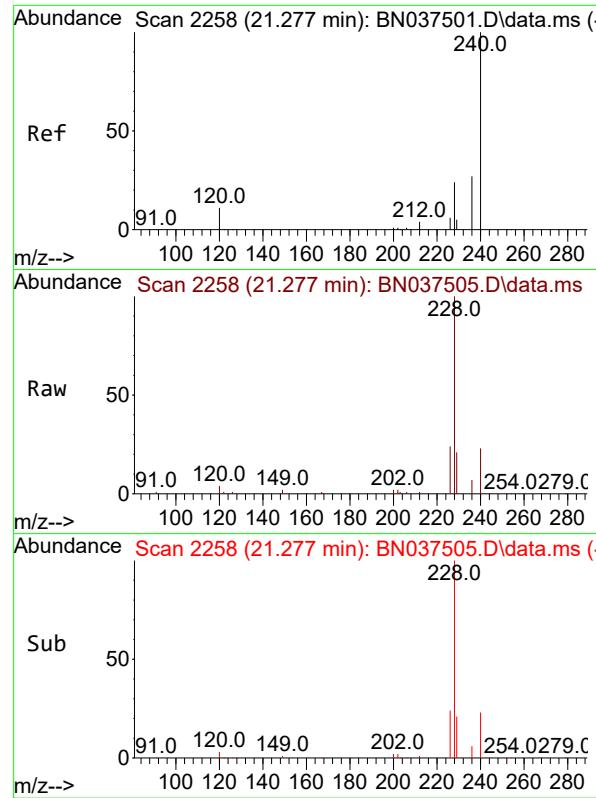
Tgt Ion:212 Resp: 102473  
 Ion Ratio Lower Upper  
 212 100  
 106 14.8 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 5.736 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:202 Resp: 117280  
 Ion Ratio Lower Upper  
 202 100  
 101 11.8 9.8 14.6  
 203 17.3 13.6 20.4

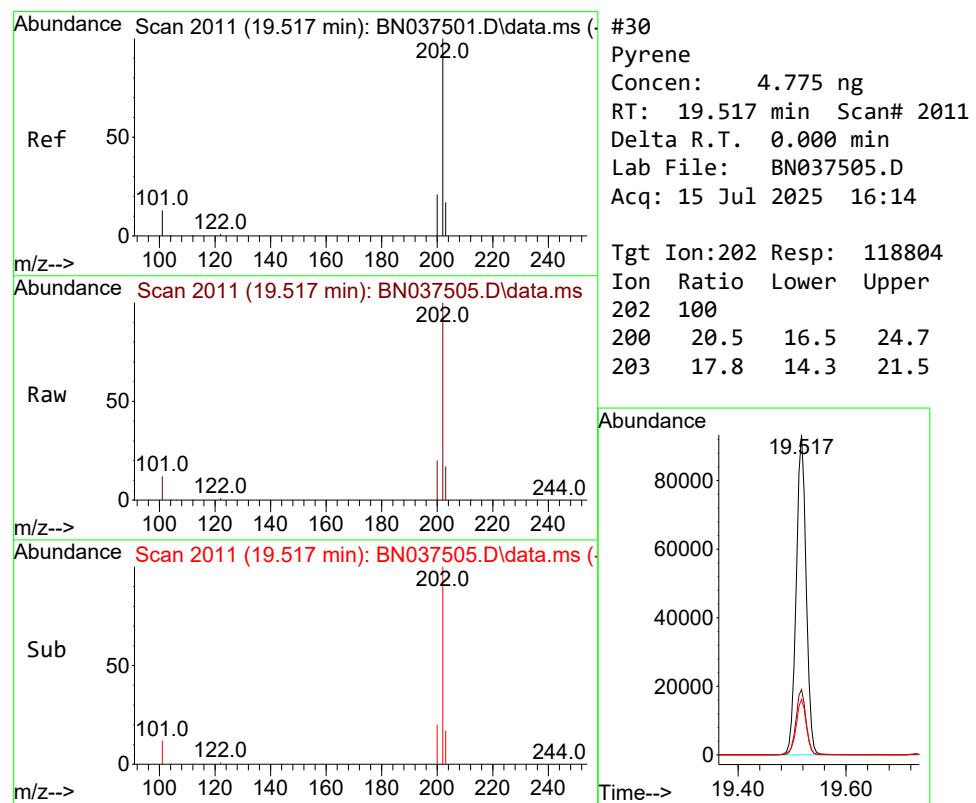
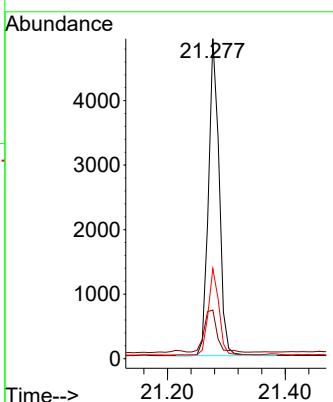




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

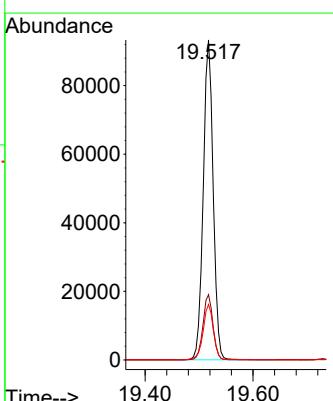
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

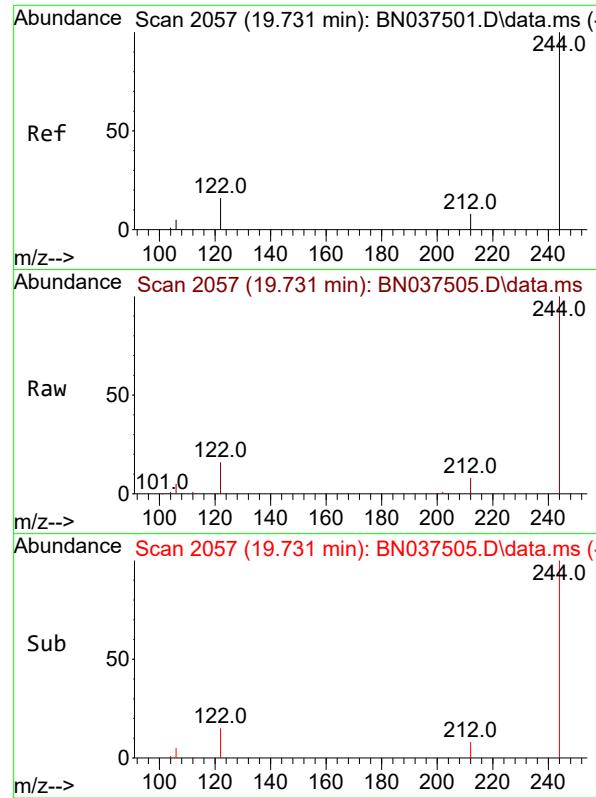
Tgt Ion:240 Resp: 6176  
Ion Ratio Lower Upper  
240 100  
120 15.2 10.7 16.1  
236 28.1 22.6 33.8



#30  
Pyrene  
Concen: 4.775 ng  
RT: 19.517 min Scan# 2011  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

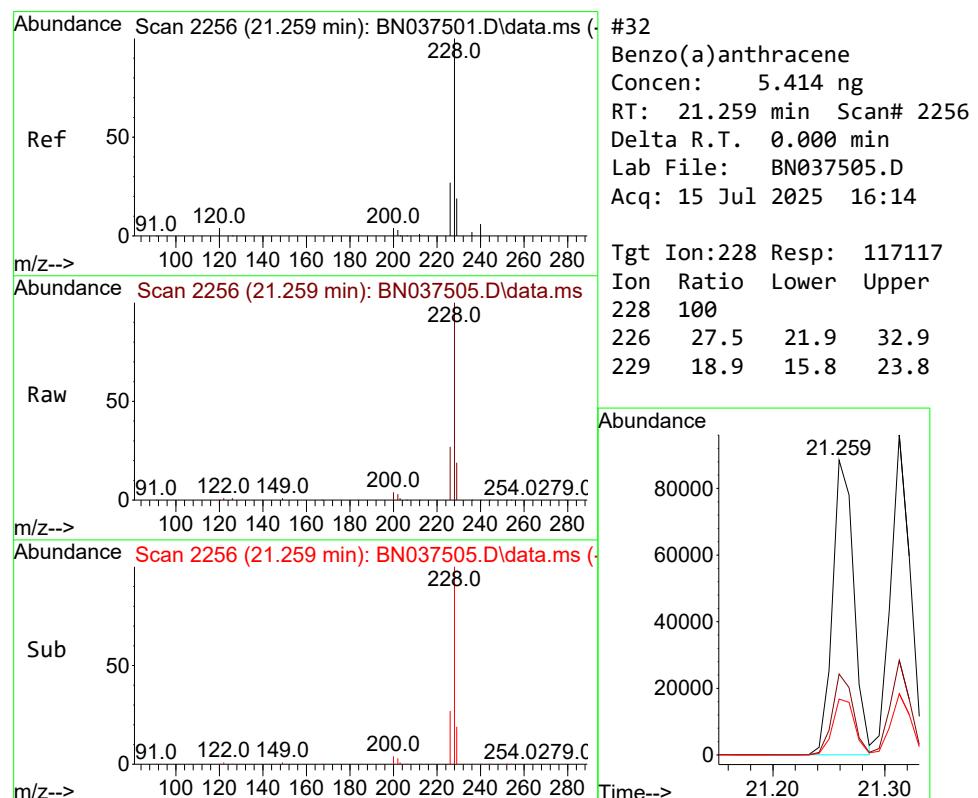
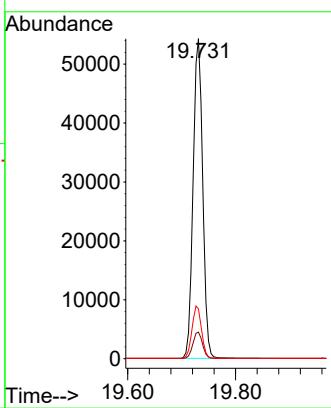
Tgt Ion:202 Resp: 118804  
Ion Ratio Lower Upper  
202 100  
200 20.5 16.5 24.7  
203 17.8 14.3 21.5





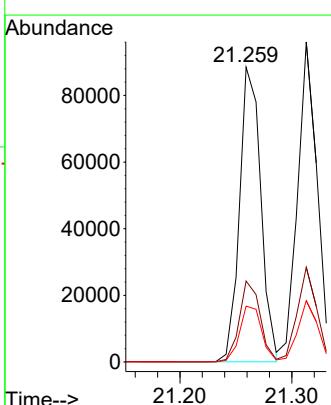
#31  
Terphenyl-d14  
Concen: 5.031 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D ClientSampleId : SSTDICC5.0  
Acq: 15 Jul 2025 16:14

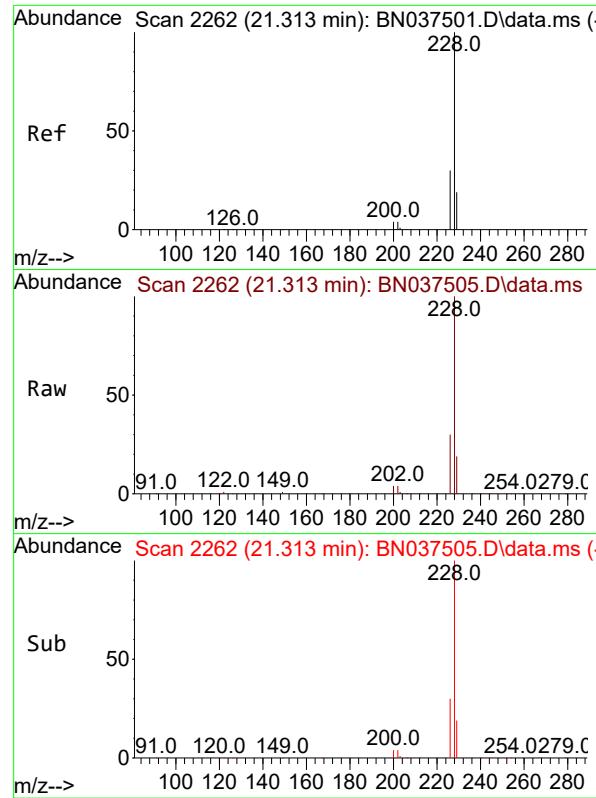
Tgt Ion:244 Resp: 66764  
Ion Ratio Lower Upper  
244 100  
212 8.3 7.4 11.2  
122 15.6 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 5.414 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

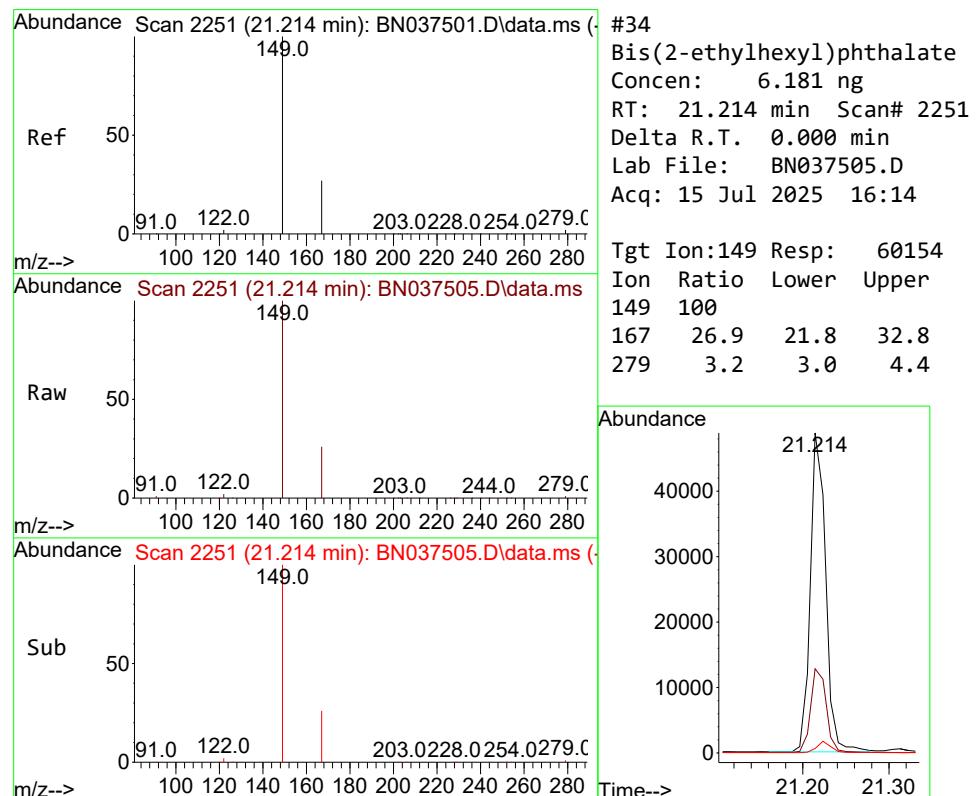
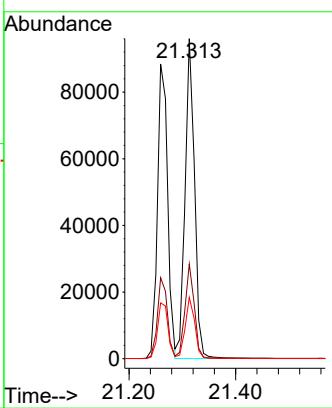
Tgt Ion:228 Resp: 117117  
Ion Ratio Lower Upper  
228 100  
226 27.5 21.9 32.9  
229 18.9 15.8 23.8





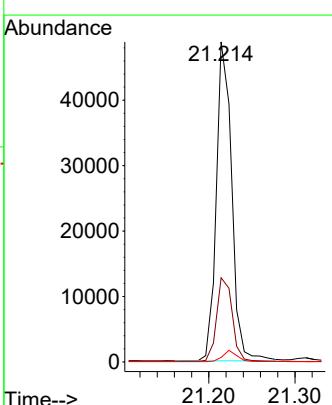
#33  
Chrysene  
Concen: 5.239 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037505.D ClientSampleId : SSTDICC5.0  
Acq: 15 Jul 2025 16:14

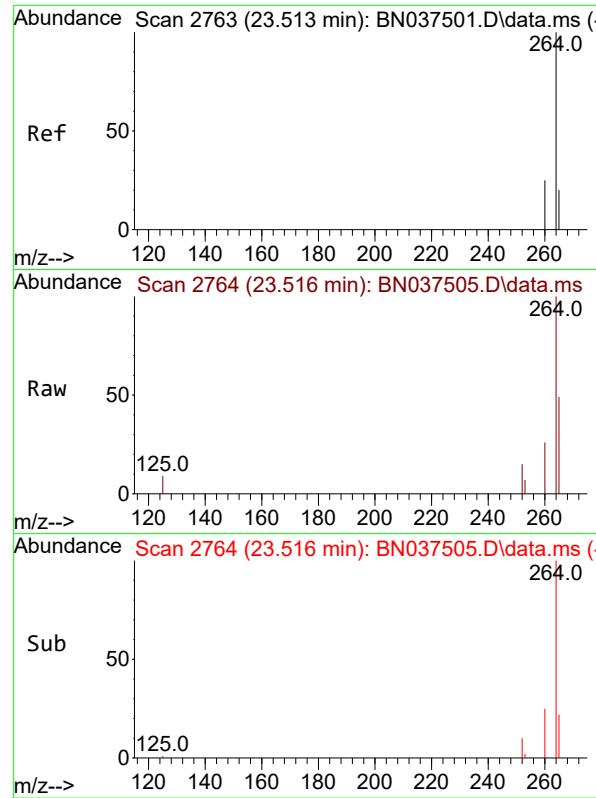
Tgt Ion:228 Resp: 117985  
Ion Ratio Lower Upper  
228 100  
226 29.6 24.2 36.4  
229 19.2 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 6.181 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:149 Resp: 60154  
Ion Ratio Lower Upper  
149 100  
167 26.9 21.8 32.8  
279 3.2 3.0 4.4

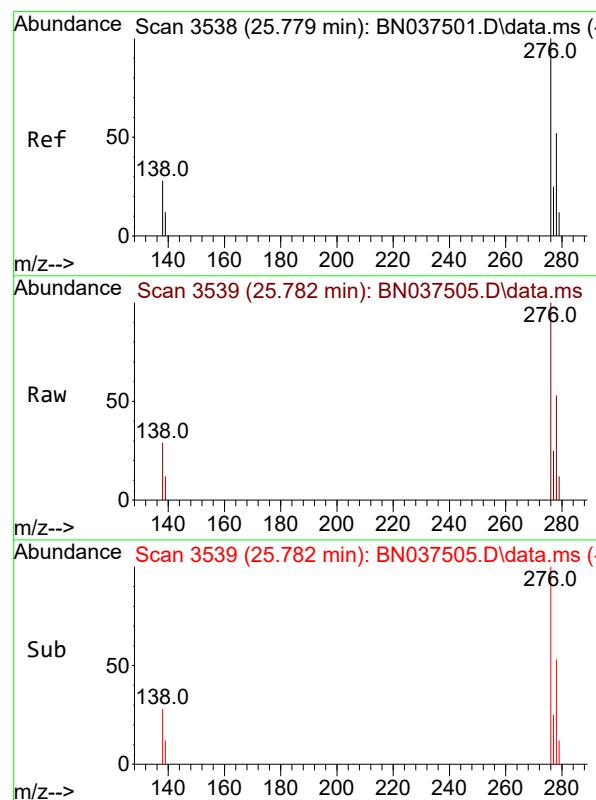
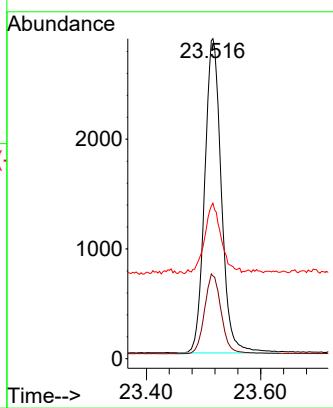




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

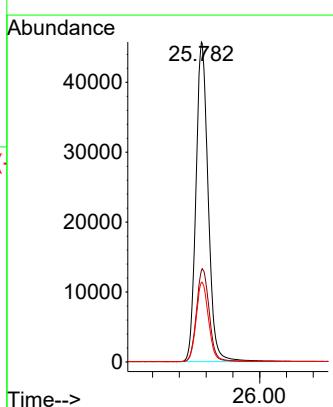
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

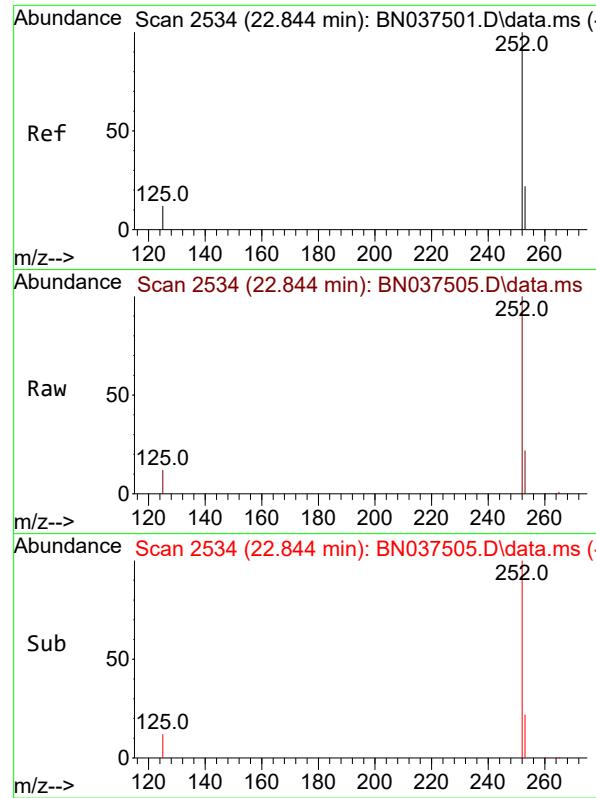
Tgt Ion:264 Resp: 5810  
Ion Ratio Lower Upper  
264 100  
260 25.9 21.2 31.8  
265 48.6 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 5.975 ng  
RT: 25.782 min Scan# 3539  
Delta R.T. 0.003 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Tgt Ion:276 Resp: 144593  
Ion Ratio Lower Upper  
276 100  
138 30.3 24.0 36.0  
277 25.2 20.5 30.7

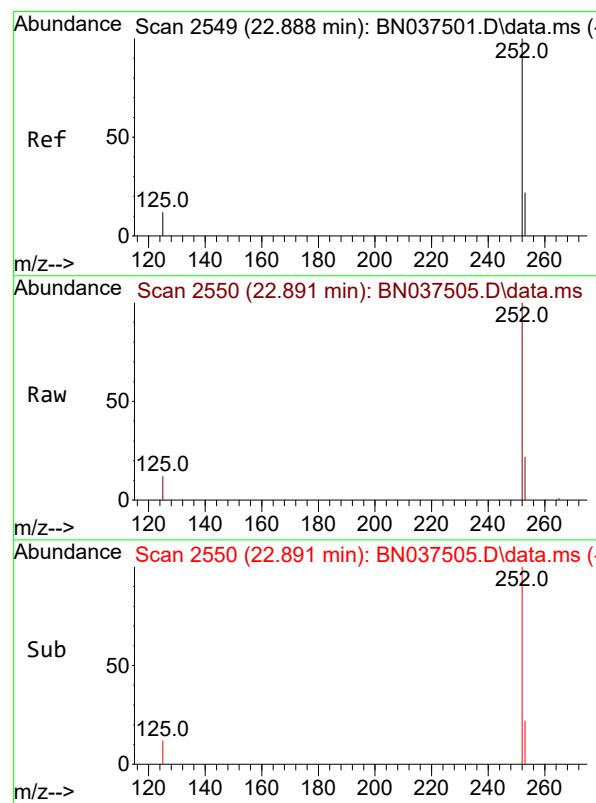
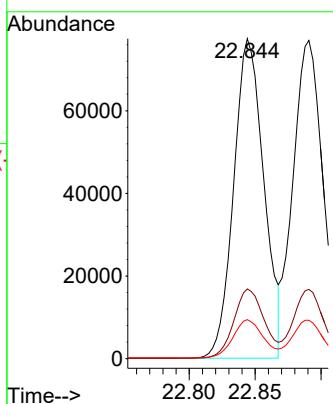




#37  
 Benzo(b)fluoranthene  
 Concen: 5.570 ng  
 RT: 22.844 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

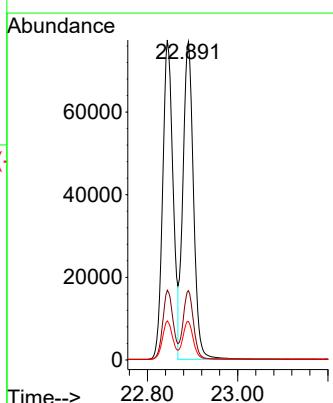
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

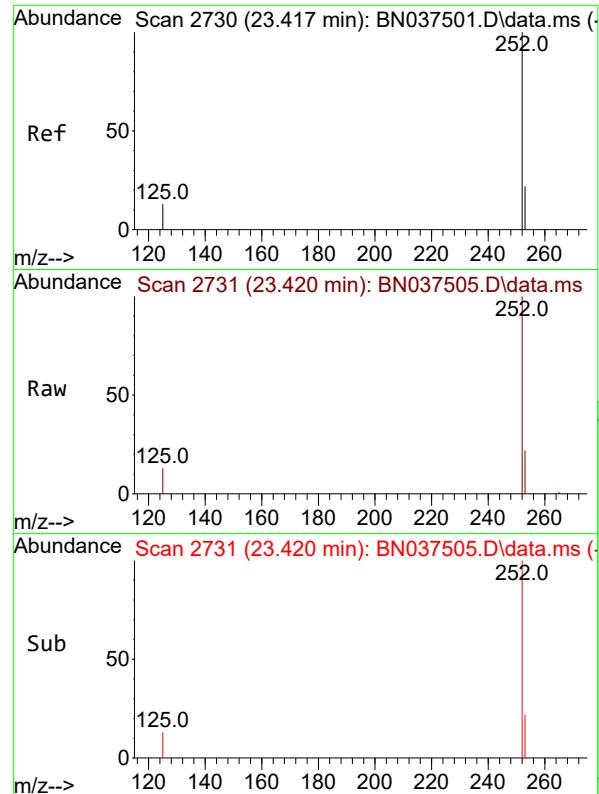
Tgt Ion:252 Resp: 122848  
 Ion Ratio Lower Upper  
 252 100  
 253 21.8 19.5 29.3  
 125 12.2 13.0 19.6#



#38  
 Benzo(k)fluoranthene  
 Concen: 5.503 ng  
 RT: 22.891 min Scan# 2550  
 Delta R.T. 0.003 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:252 Resp: 125226  
 Ion Ratio Lower Upper  
 252 100  
 253 21.8 19.5 29.3  
 125 12.1 13.1 19.7#

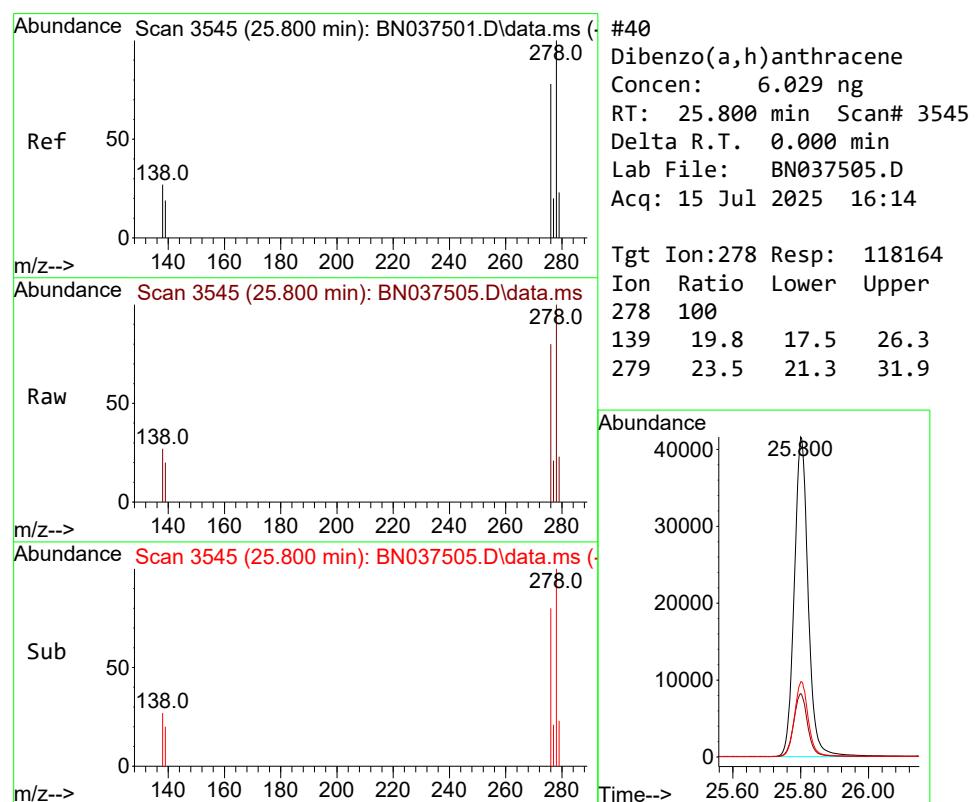
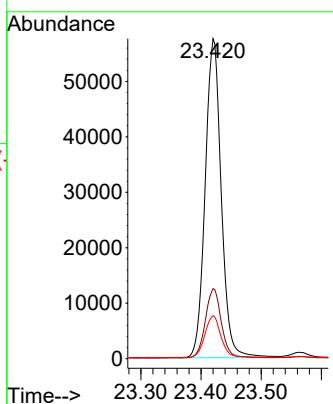




#39  
 Benzo(a)pyrene  
 Concen: 5.797 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

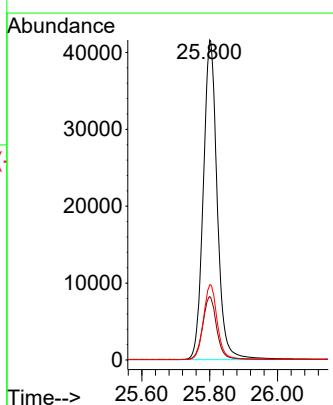
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

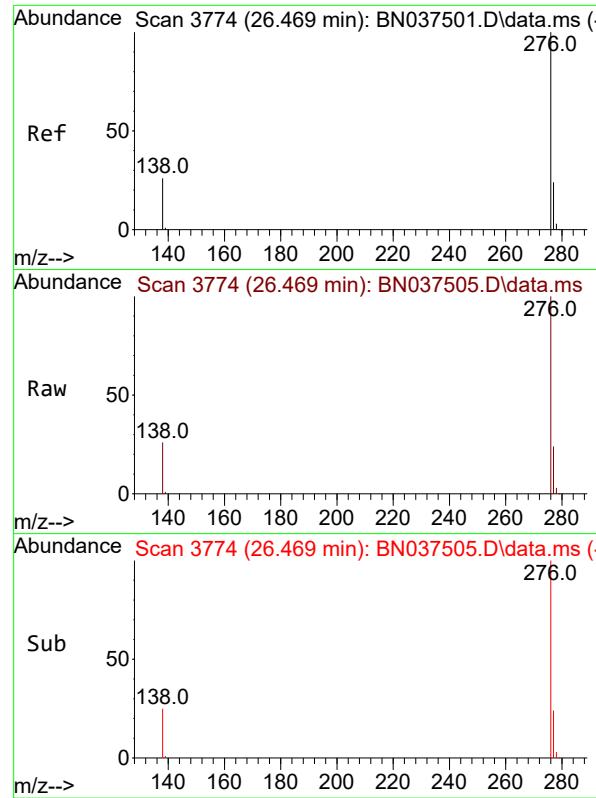
Tgt Ion:252 Resp: 106654  
 Ion Ratio Lower Upper  
 252 100  
 253 21.9 19.9 29.9  
 125 13.5 15.2 22.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 6.029 ng  
 RT: 25.800 min Scan# 3545  
 Delta R.T. 0.000 min  
 Lab File: BN037505.D  
 Acq: 15 Jul 2025 16:14

Tgt Ion:278 Resp: 118164  
 Ion Ratio Lower Upper  
 278 100  
 139 19.8 17.5 26.3  
 279 23.5 21.3 31.9

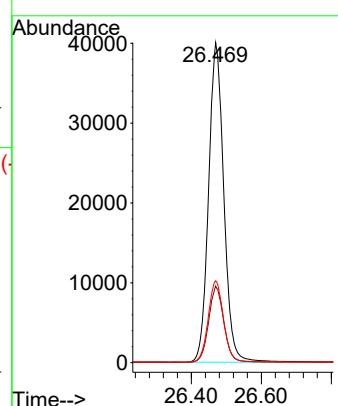




#41  
Benzo(g,h,i)perylene  
Concen: 5.952 ng  
RT: 26.469 min Scan# 3  
Delta R.T. 0.000 min  
Lab File: BN037505.D  
Acq: 15 Jul 2025 16:14

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Tgt Ion:276 Resp: 120757  
Ion Ratio Lower Upper  
276 100  
277 24.0 20.9 31.3  
138 25.6 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037506.D  
 Acq On : 15 Jul 2025 16:58  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
ICVBN071525

Quant Time: Jul 15 17:34:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 17:33:01 2025  
 Response via : Initial Calibration

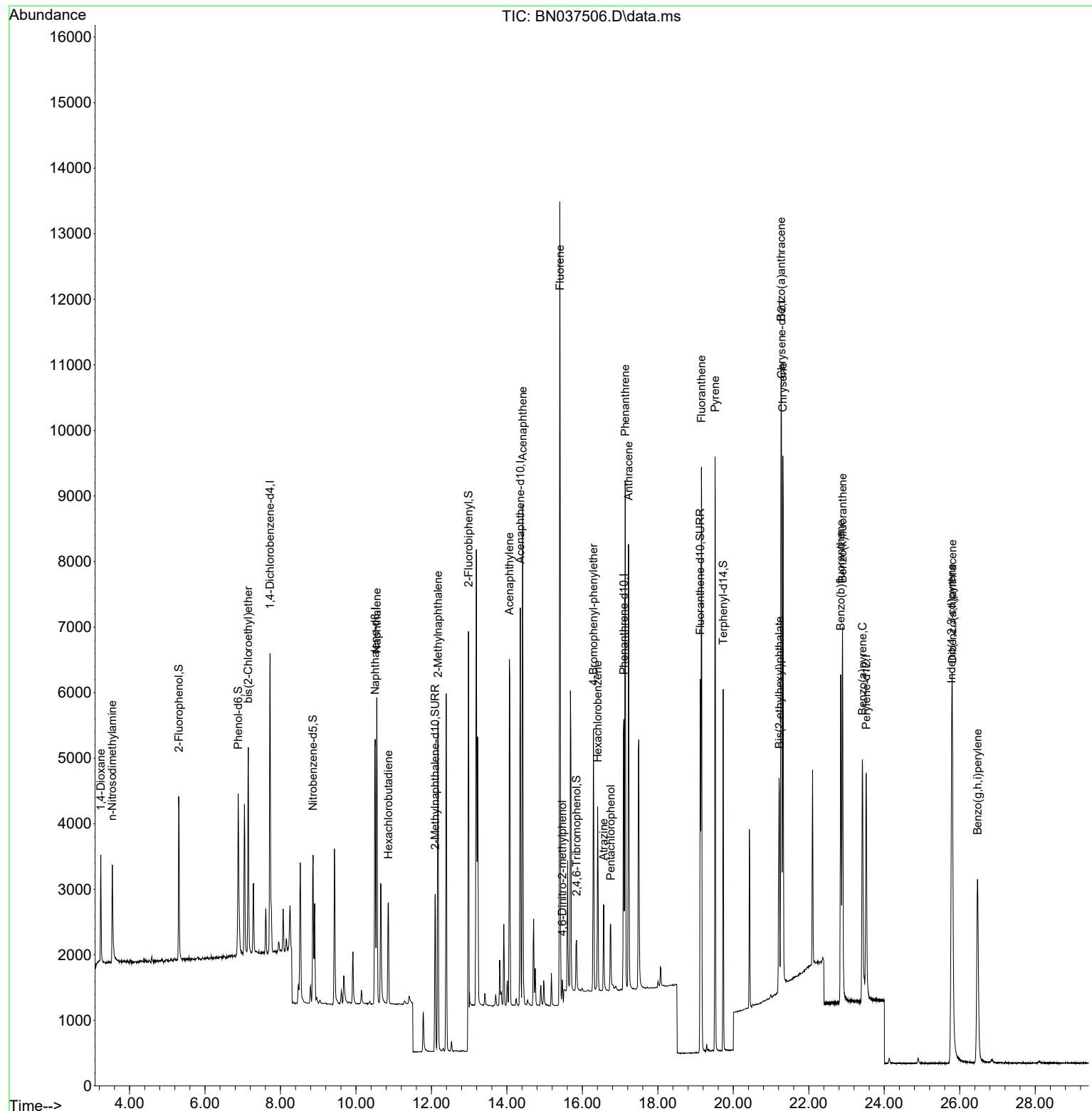
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2236	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5813	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3335	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	6334	0.400	ng	0.00
29) Chrysene-d12	21.277	240	5040	0.400	ng	# 0.00
35) Perylene-d12	23.522	264	4669	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.305	112	2030	0.367	ng	0.00
5) Phenol-d6	6.879	99	2407	0.347	ng	0.00
8) Nitrobenzene-d5	8.865	82	1802	0.415	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	3375	0.405	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	531	0.324	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	8001	0.461	ng	0.00
27) Fluoranthene-d10	19.127	212	6495	0.387	ng	0.00
31) Terphenyl-d14	19.731	244	5056	0.467	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
2) 1,4-Dioxane	3.239	88	1011	0.470	ng	95
3) n-Nitrosodimethylamine	3.543	42	1083	0.401	ng	# 95
6) bis(2-Chloroethyl)ether	7.147	93	2398	0.415	ng	99
9) Naphthalene	10.551	128	6033	0.389	ng	100
10) Hexachlorobutadiene	10.861	225	1386	0.405	ng	# 99
12) 2-Methylnaphthalene	12.172	142	3595	0.353	ng	100
16) Acenaphthylene	14.067	152	6226	0.417	ng	99
17) Acenaphthene	14.420	154	3826	0.377	ng	99
18) Fluorene	15.403	166	5028	0.384	ng	99
20) 4,6-Dinitro-2-methylph...	15.467	198	267	0.401	ng	95
21) 4-Bromophenyl-phenylether	16.292	248	1563	0.385	ng	100
22) Hexachlorobenzene	16.404	284	2158	0.412	ng	99
23) Atrazine	16.565	200	1050	0.371	ng	98
24) Pentachlorophenol	16.751	266	679	0.289	ng	99
25) Phenanthrene	17.136	178	7640	0.403	ng	99
26) Anthracene	17.223	178	6928	0.400	ng	100
28) Fluoranthene	19.155	202	8063	0.368	ng	100
30) Pyrene	19.517	202	8002	0.394	ng	100
32) Benzo(a)anthracene	21.268	228	6891	0.390	ng	99
33) Chrysene	21.313	228	7126	0.388	ng	99
34) Bis(2-ethylhexyl)phtha...	21.223	149	2705	0.341	ng	98
36) Indeno(1,2,3-cd)pyrene	25.785	276	7666	0.394	ng	99
37) Benzo(b)fluoranthene	22.847	252	6430	0.363	ng	100
38) Benzo(k)fluoranthene	22.894	252	7254	0.397	ng	98
39) Benzo(a)pyrene	23.420	252	5792	0.392	ng	99
40) Dibenzo(a,h)anthracene	25.806	278	6203	0.394	ng	98
41) Benzo(g,h,i)perylene	26.472	276	6018	0.369	ng	98

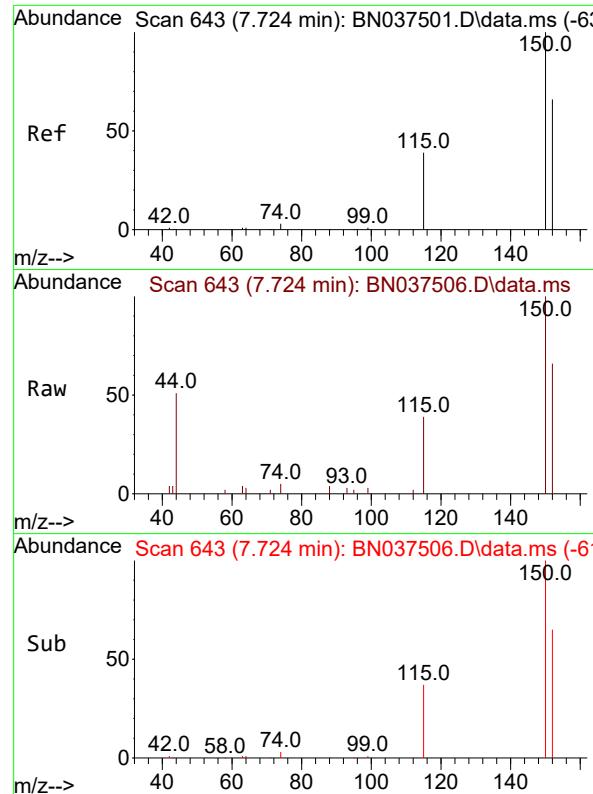
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037506.D  
 Acq On : 15 Jul 2025 16:58  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN071525

Quant Time: Jul 15 17:34:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 17:33:01 2025  
 Response via : Initial Calibration

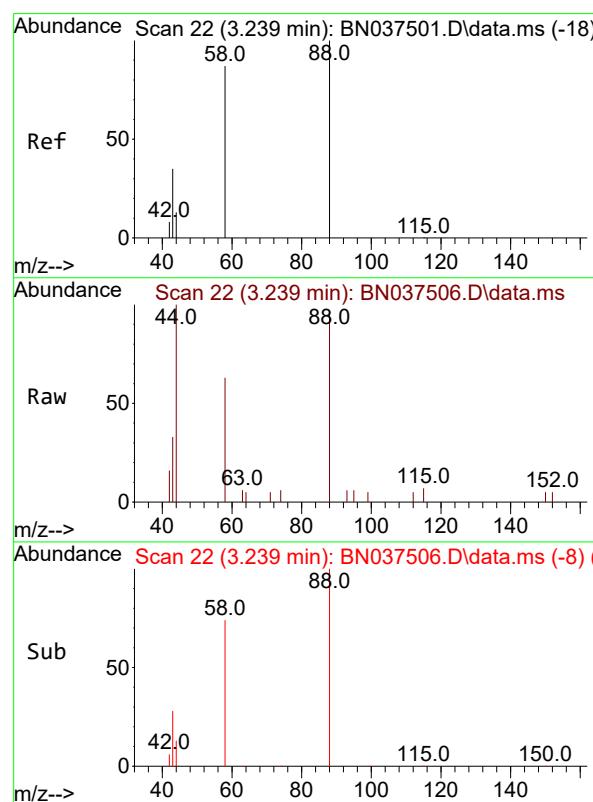
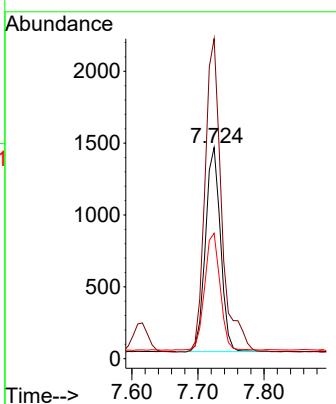




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

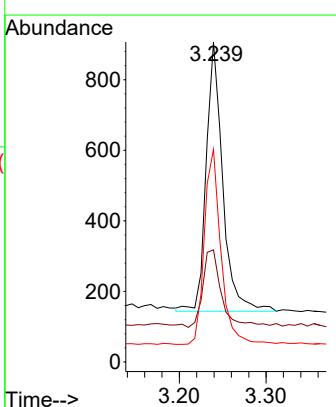
Instrument : BNA\_N  
ClientSampleId : ICVBN071525

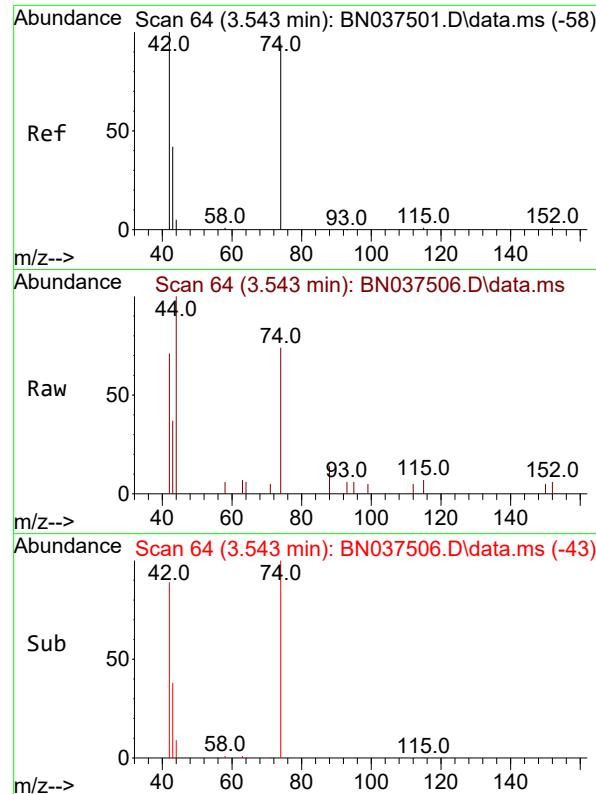
Tgt Ion:152 Resp: 2236  
Ion Ratio Lower Upper  
152 100  
150 151.5 119.8 179.8  
115 59.4 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.470 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion: 88 Resp: 1011  
Ion Ratio Lower Upper  
88 100  
43 33.0 27.5 41.3  
58 72.9 62.7 94.1

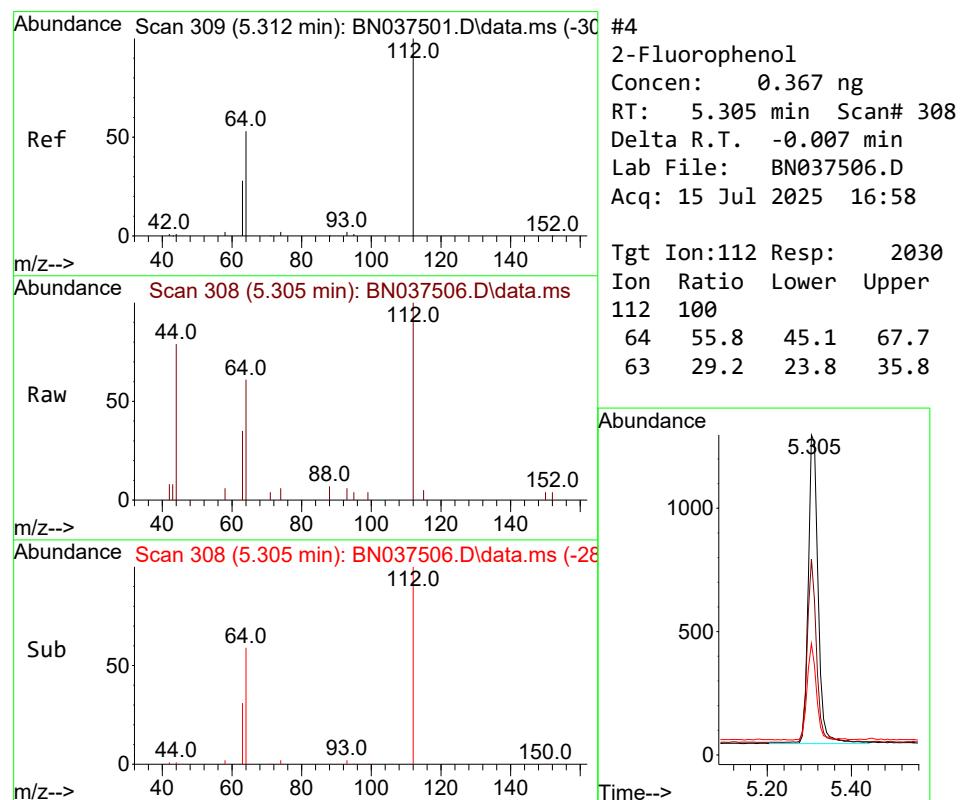
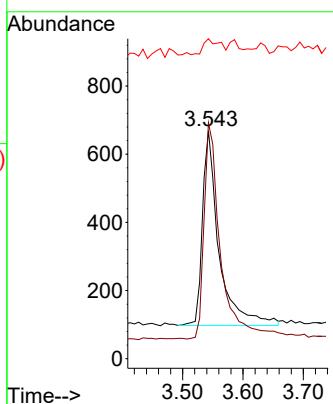




#3  
n-Nitrosodimethylamine  
Concen: 0.401 ng  
RT: 3.543 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

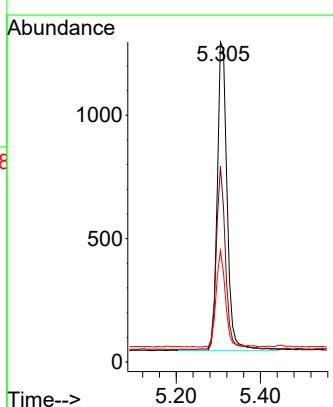
Instrument : BNA\_N  
ClientSampleId : ICVBN071525

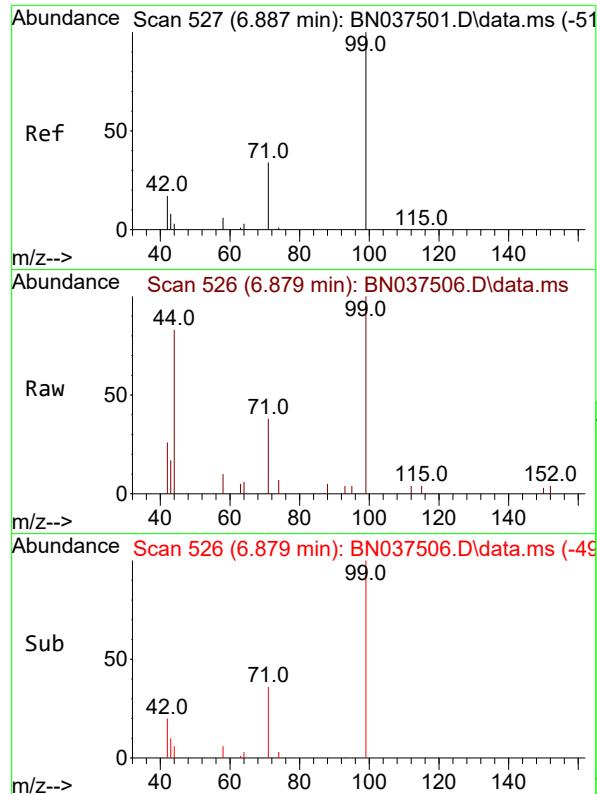
Tgt Ion: 42 Resp: 1083  
Ion Ratio Lower Upper  
42 100  
74 112.8 91.8 137.6  
44 8.5 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.367 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion: 112 Resp: 2030  
Ion Ratio Lower Upper  
112 100  
64 55.8 45.1 67.7  
63 29.2 23.8 35.8

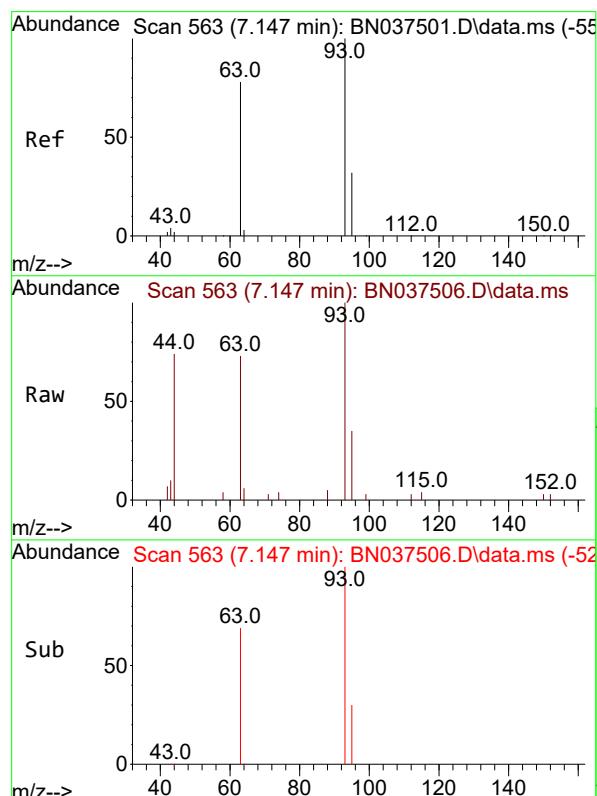
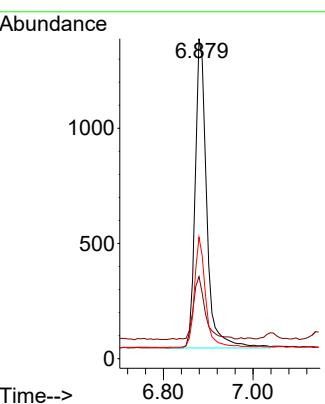




#5  
Phenol-d6  
Concen: 0.347 ng  
RT: 6.879 min Scan# 5  
Delta R.T. -0.007 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

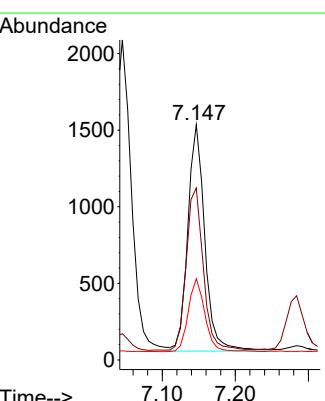
Instrument : BNA\_N  
ClientSampleId : ICVBN071525

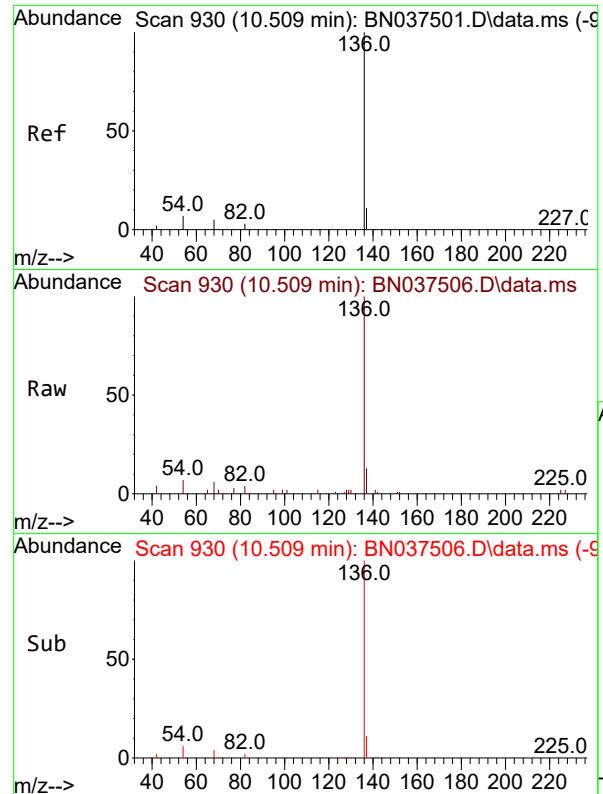
Tgt Ion: 99 Resp: 2407  
Ion Ratio Lower Upper  
99 100  
42 20.7 17.1 25.7  
71 34.6 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.415 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion: 93 Resp: 2398  
Ion Ratio Lower Upper  
93 100  
63 71.8 58.2 87.4  
95 31.4 25.3 37.9



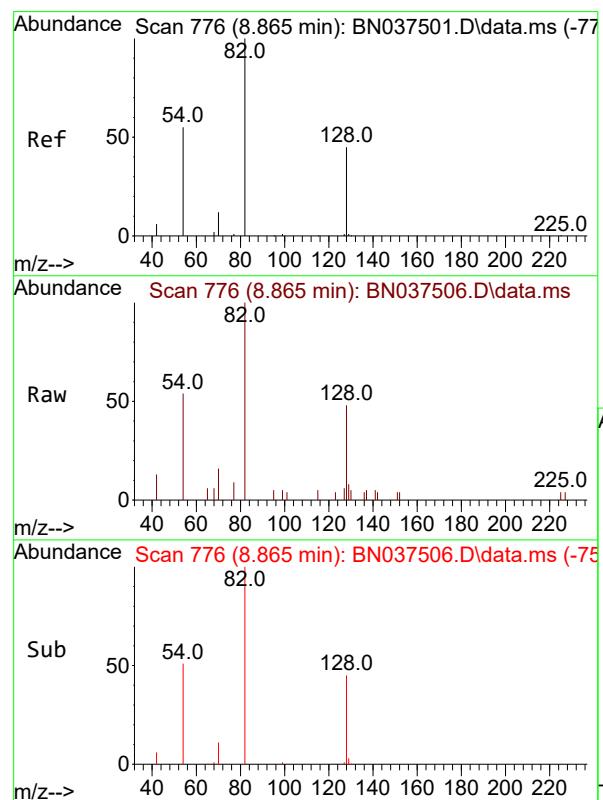
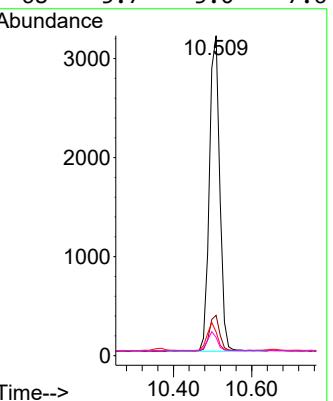


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

Tgt Ion:136 Resp: 5813

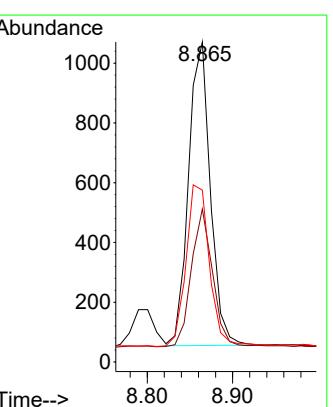
Ion	Ratio	Lower	Upper
136	100		
137	12.6	9.8	14.8
54	7.4	6.6	9.8
68	5.7	5.0	7.6

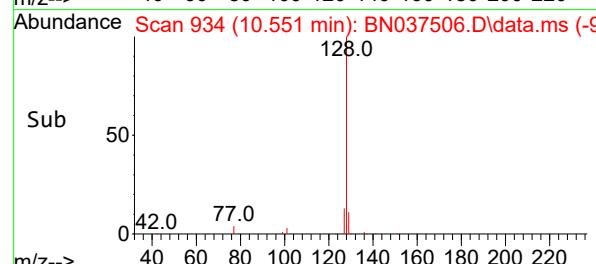
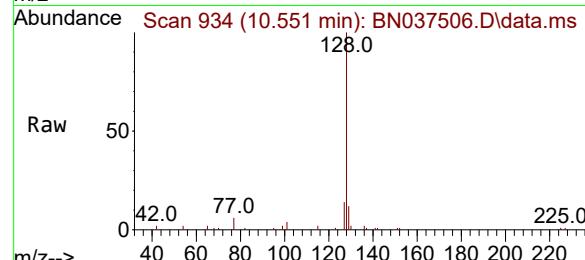
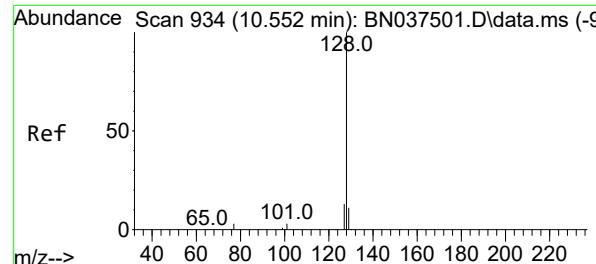


#8  
 Nitrobenzene-d5  
 Concen: 0.415 ng  
 RT: 8.865 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Tgt Ion: 82 Resp: 1802

Ion	Ratio	Lower	Upper
82	100		
128	47.8	37.5	56.3
54	53.7	45.3	67.9





#9

Naphthalene

Concen: 0.389 ng

RT: 10.551 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

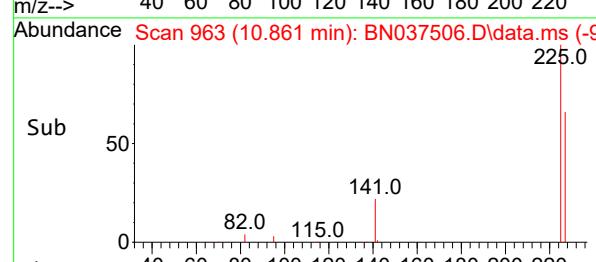
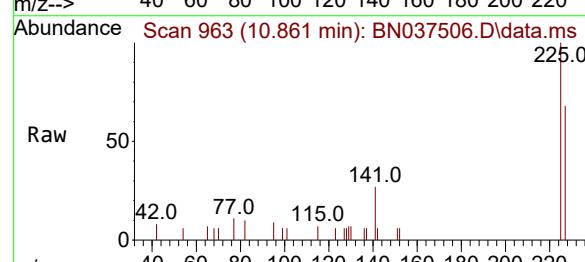
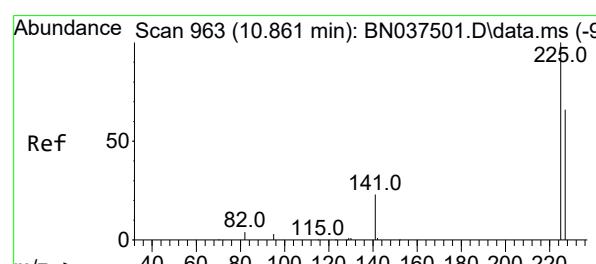
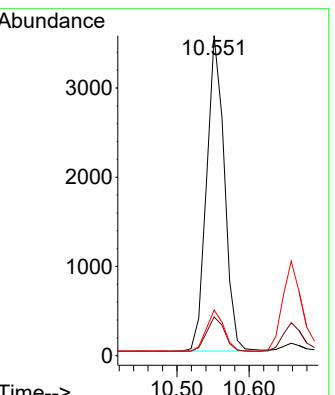
Tgt Ion:128 Resp: 6033

Ion Ratio Lower Upper

128 100

129 12.1 9.7 14.5

127 14.2 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.405 ng

RT: 10.861 min Scan# 963

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

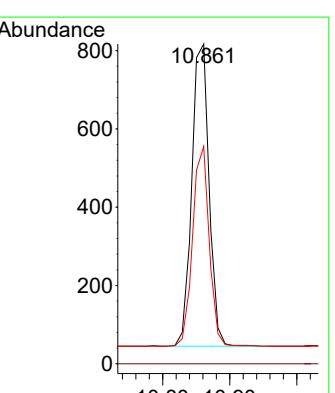
Tgt Ion:225 Resp: 1386

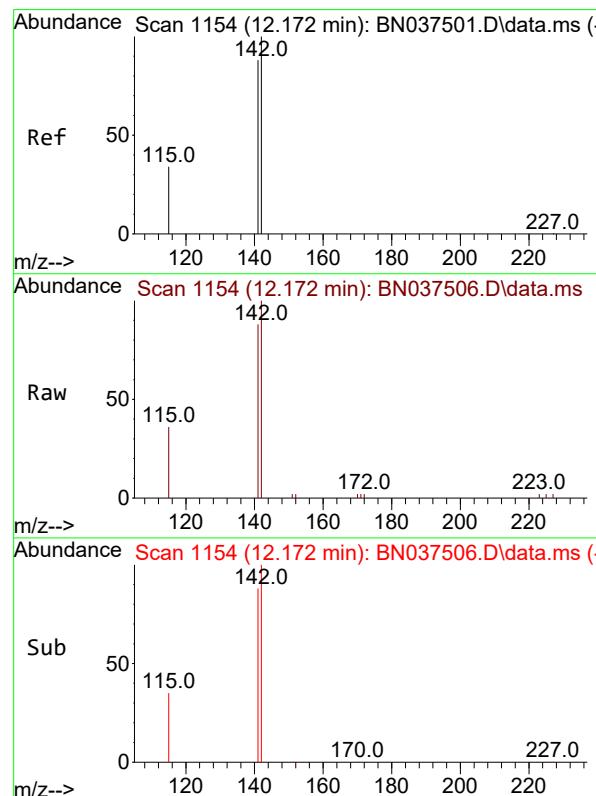
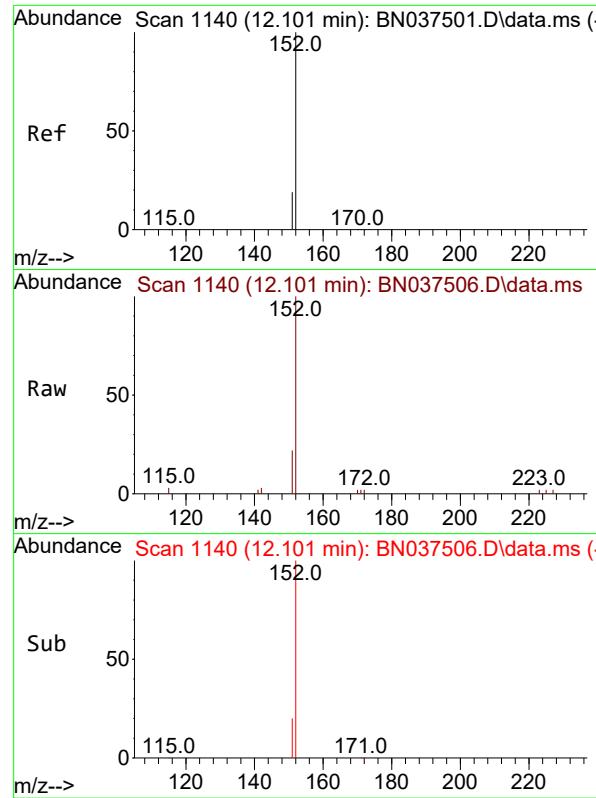
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

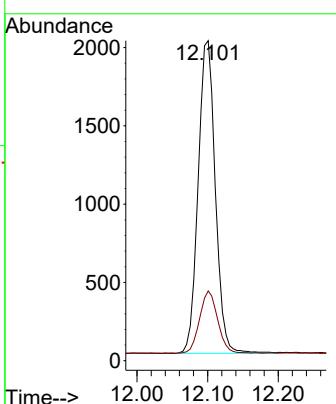
227 63.2 51.0 76.4





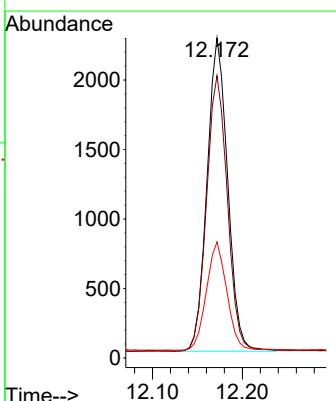
#11  
2-Methylnaphthalene-d10  
Concen: 0.405 ng  
RT: 12.101 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
ClientSampleId : ICVBN071525  
Acq: 15 Jul 2025 16:58

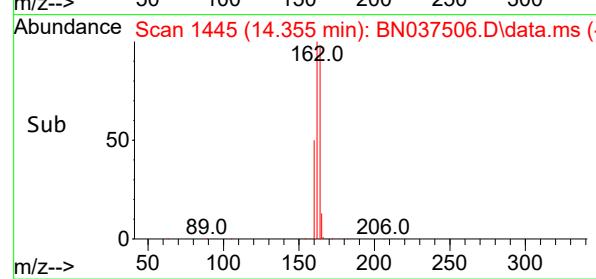
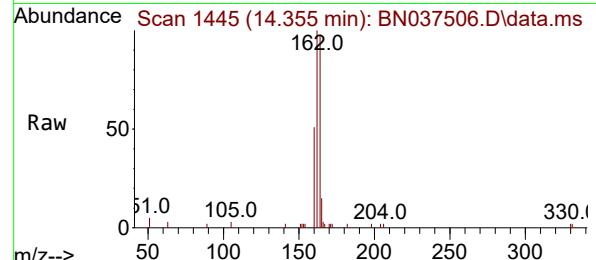
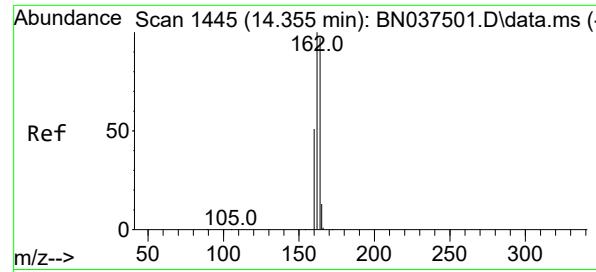
Tgt Ion:152 Resp: 3375  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.353 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:142 Resp: 3595  
Ion Ratio Lower Upper  
142 100  
141 88.2 71.0 106.4  
115 36.3 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

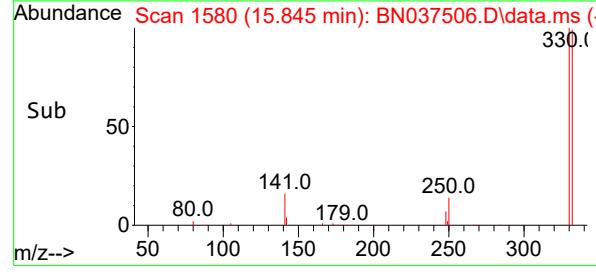
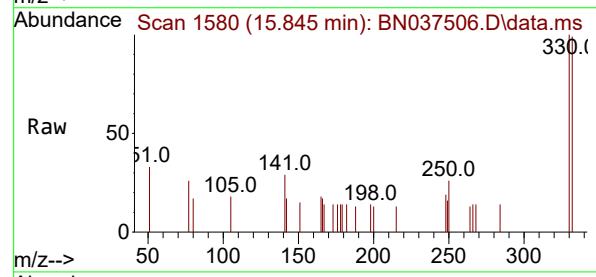
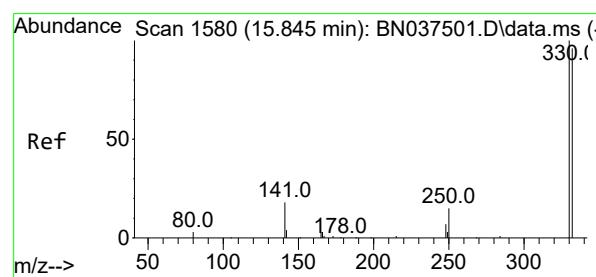
Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525



#14

2,4,6-Tribromophenol

Concen: 0.324 ng

RT: 15.845 min Scan# 1580

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

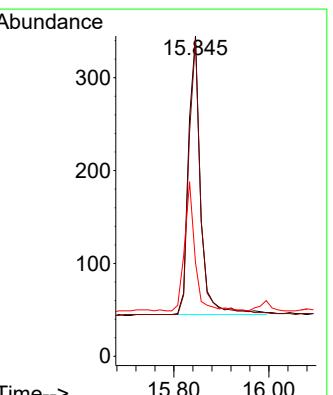
Tgt Ion:330 Resp: 531

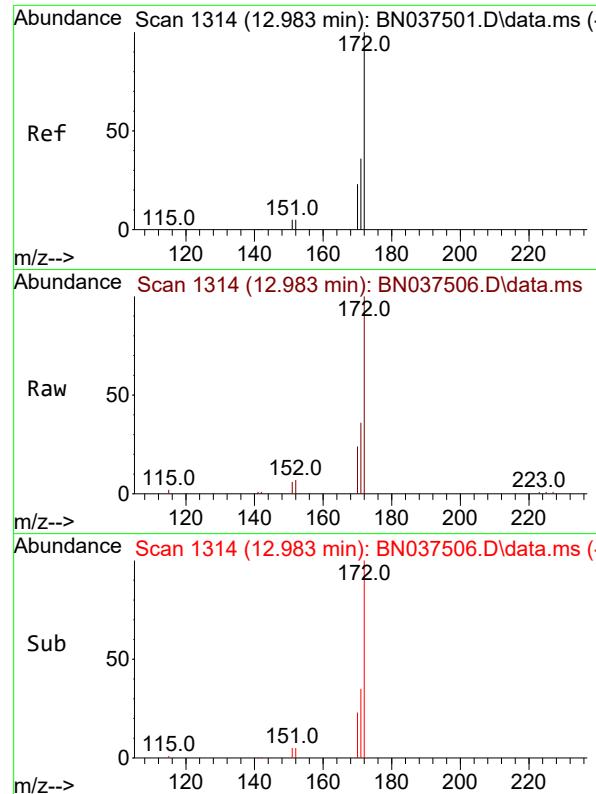
Ion Ratio Lower Upper

330 100

332 95.9 76.1 114.1

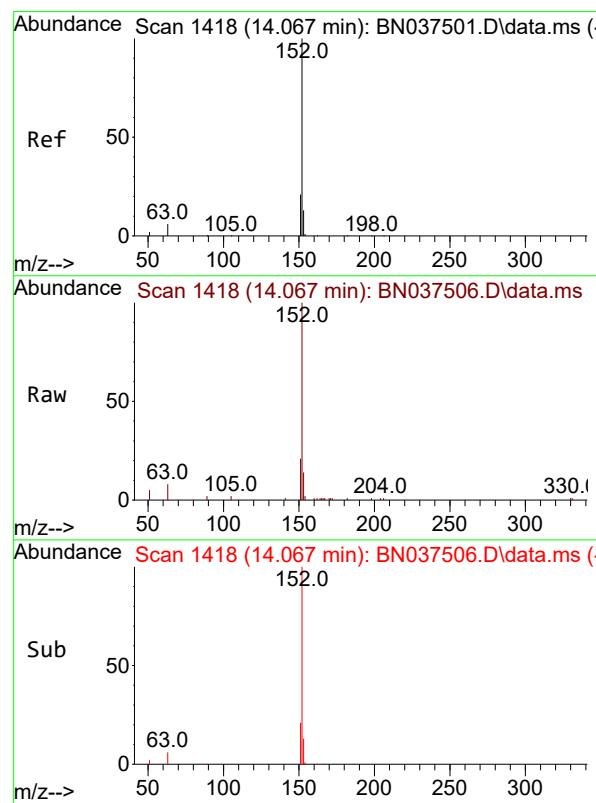
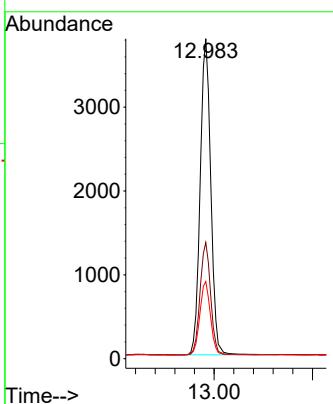
141 39.9 33.4 50.0





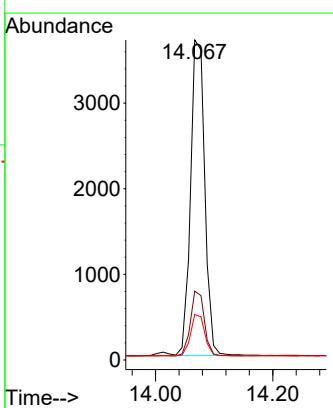
#15  
2-Fluorobiphenyl  
Concen: 0.461 ng  
RT: 12.983 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58  
ClientSampleId : ICVBN071525

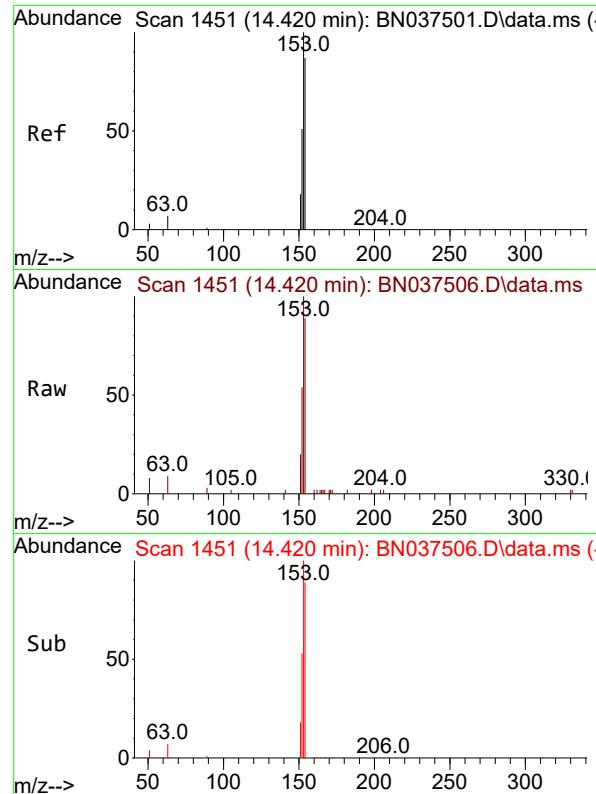
Tgt Ion:172 Resp: 8001  
Ion Ratio Lower Upper  
172 100  
171 36.3 29.4 44.2  
170 24.1 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.417 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:152 Resp: 6226  
Ion Ratio Lower Upper  
152 100  
151 20.1 15.9 23.9  
153 13.2 10.7 16.1





#17

Acenaphthene

Concen: 0.377 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525

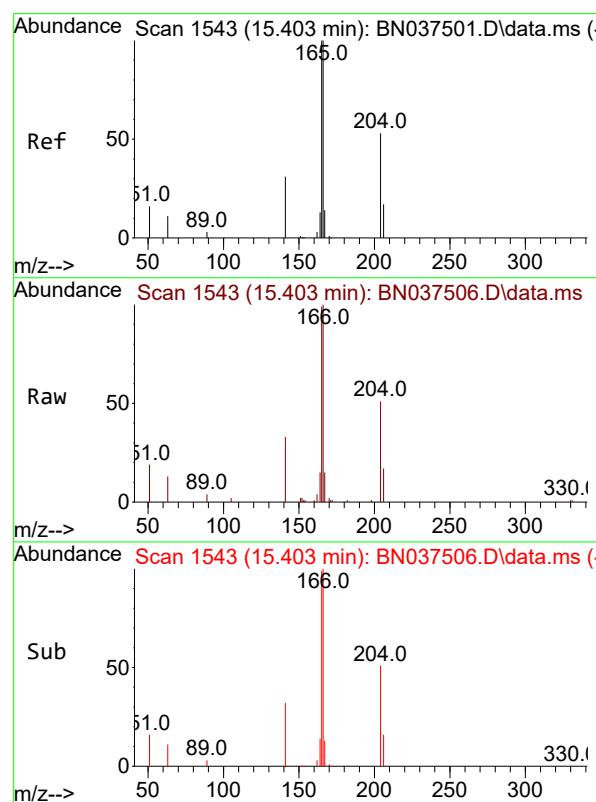
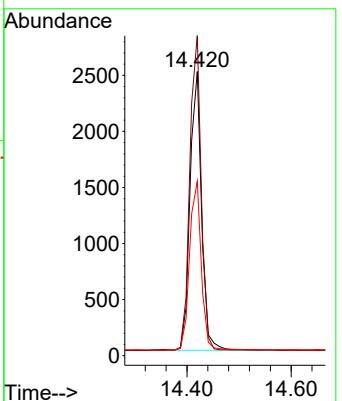
Tgt Ion:154 Resp: 3826

Ion Ratio Lower Upper

154 100

153 111.6 89.2 133.8

152 61.6 48.0 72.0



#18

Fluorene

Concen: 0.384 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

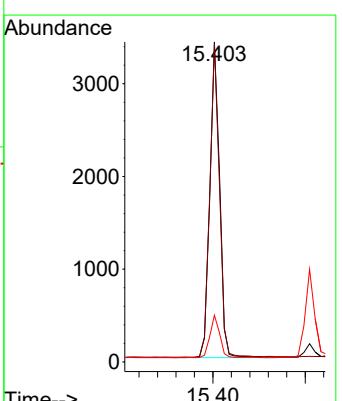
Tgt Ion:166 Resp: 5028

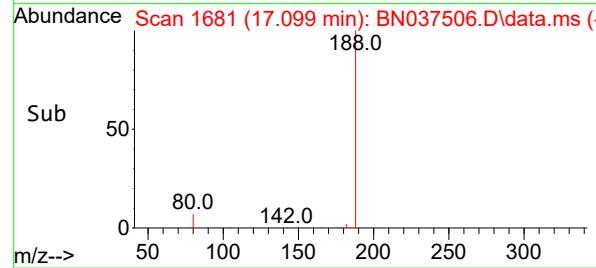
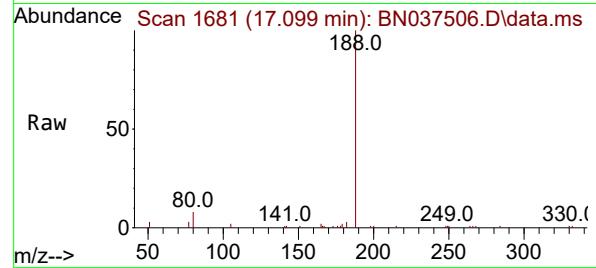
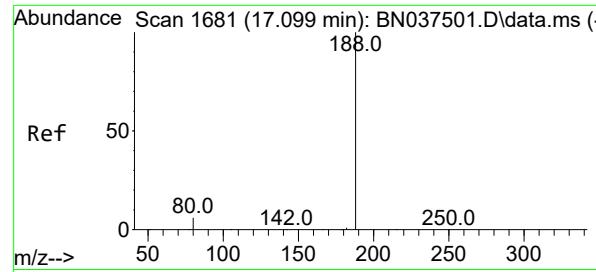
Ion Ratio Lower Upper

166 100

165 96.8 78.1 117.1

167 13.2 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.099 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument:

BNA\_N

ClientSampleId :

ICVBN071525

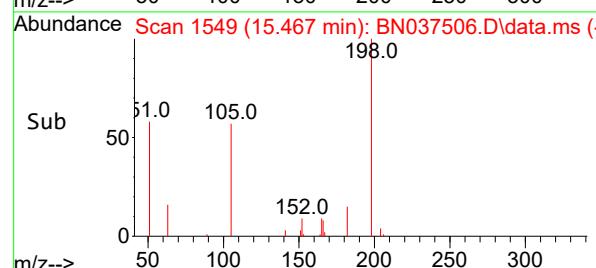
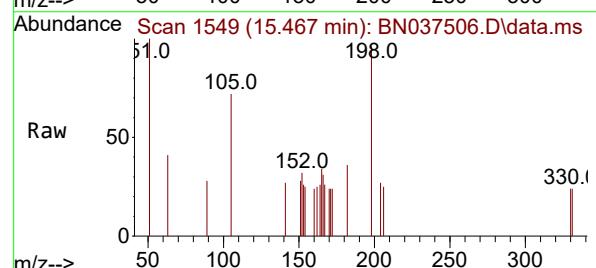
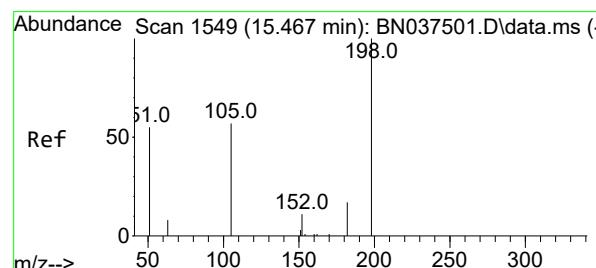
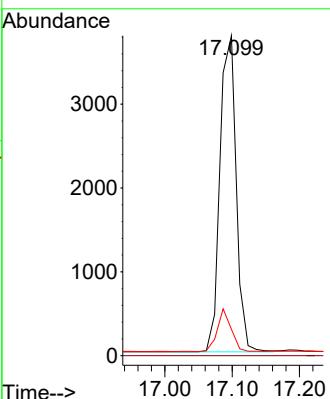
Tgt Ion:188 Resp: 6334

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.2 6.0 9.0



#20

4,6-Dinitro-2-methylphenol

Concen: 0.401 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

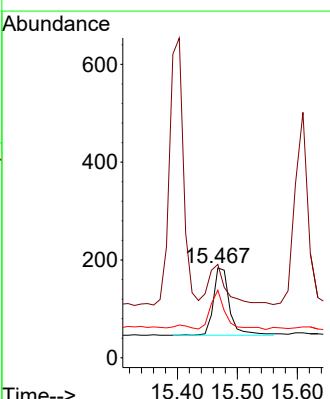
Tgt Ion:198 Resp: 267

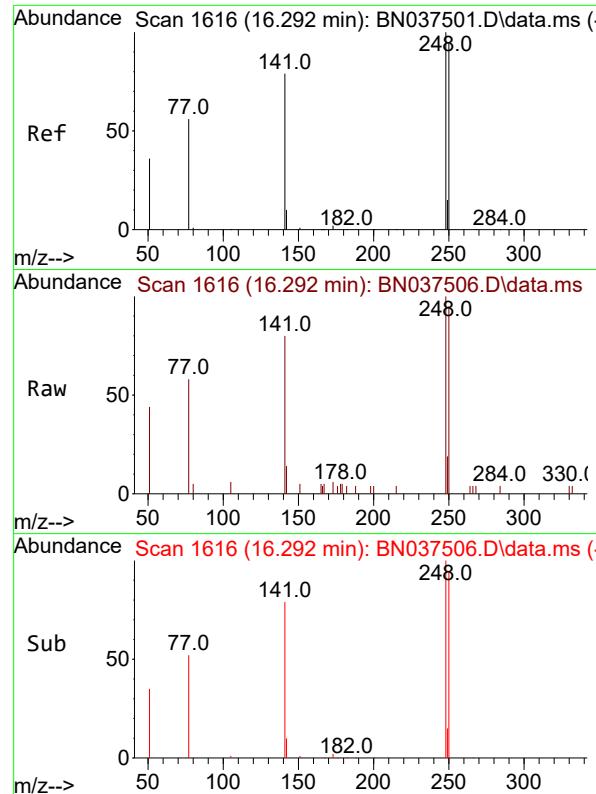
Ion Ratio Lower Upper

198 100

51 103.8 88.5 132.7

105 75.0 61.2 91.8





#21

4-Bromophenyl-phenylether

Concen: 0.385 ng

RT: 16.292 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

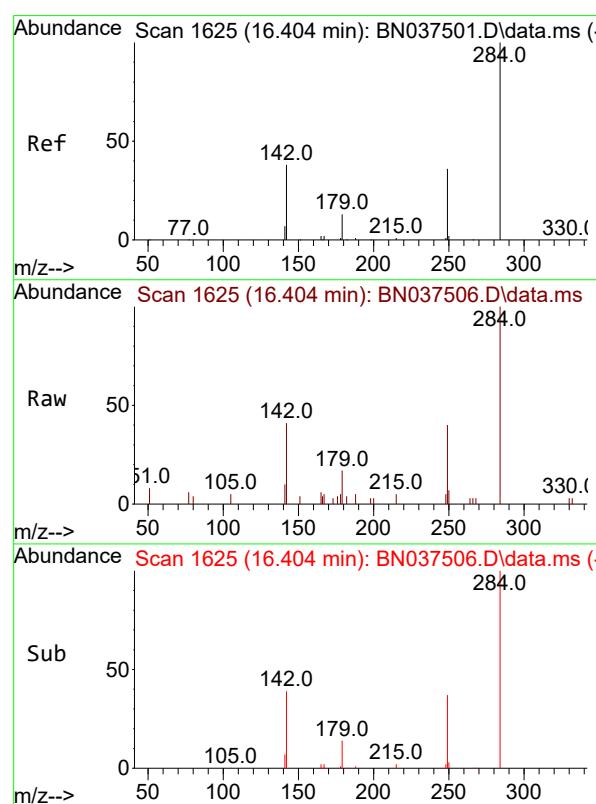
Acq: 15 Jul 2025 16:58

Instrument :

BNA\_N

ClientSampleId :

ICVBN071525



#22

Hexachlorobenzene

Concen: 0.412 ng

RT: 16.404 min Scan# 1625

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

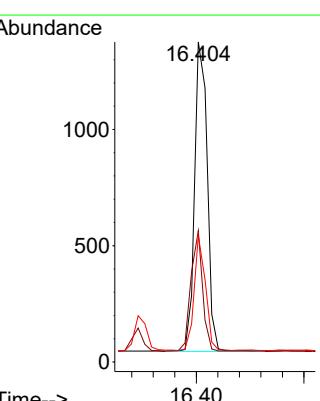
Tgt Ion:284 Resp: 2158

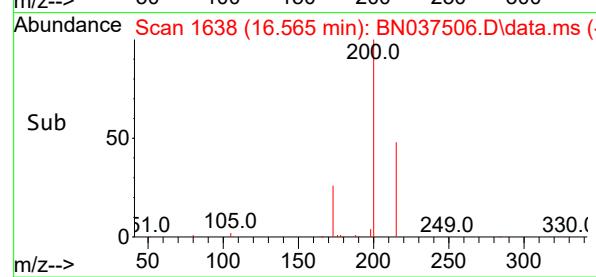
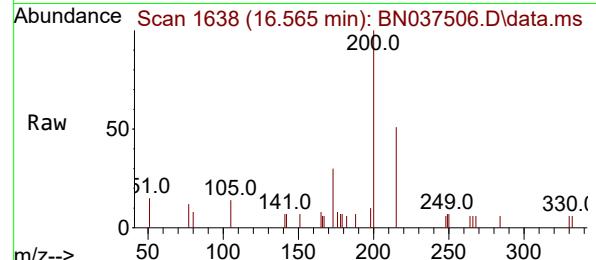
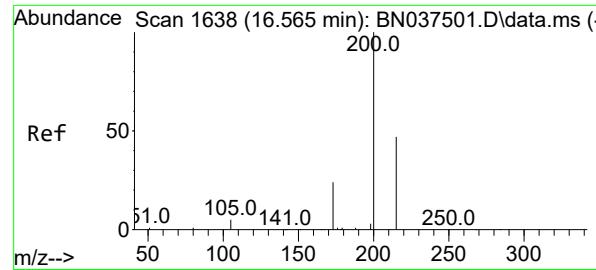
Ion Ratio Lower Upper

284 100

142 35.9 28.9 43.3

249 33.0 25.8 38.6





#23

Atrazine

Concen: 0.371 ng

RT: 16.565 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument:

BNA\_N

ClientSampleId :

ICVBN071525

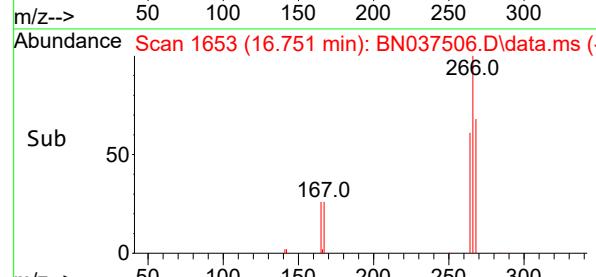
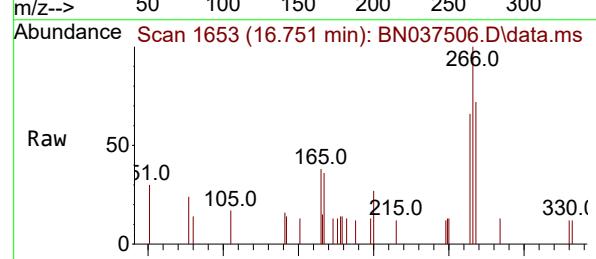
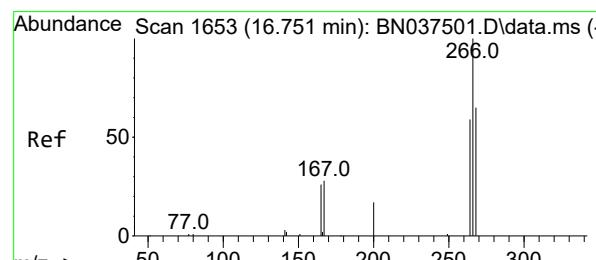
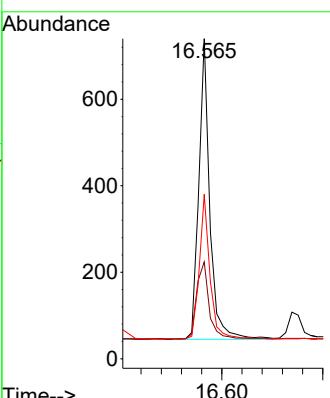
Tgt Ion:200 Resp: 1050

Ion Ratio Lower Upper

200 100

173 30.3 23.2 34.8

215 51.4 40.2 60.4



#24

Pentachlorophenol

Concen: 0.289 ng

RT: 16.751 min Scan# 1653

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

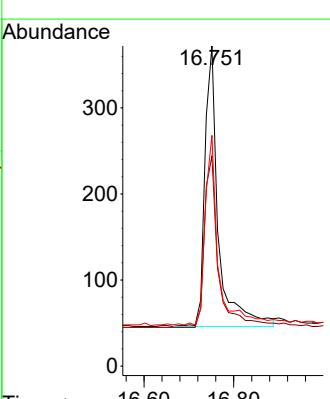
Tgt Ion:266 Resp: 679

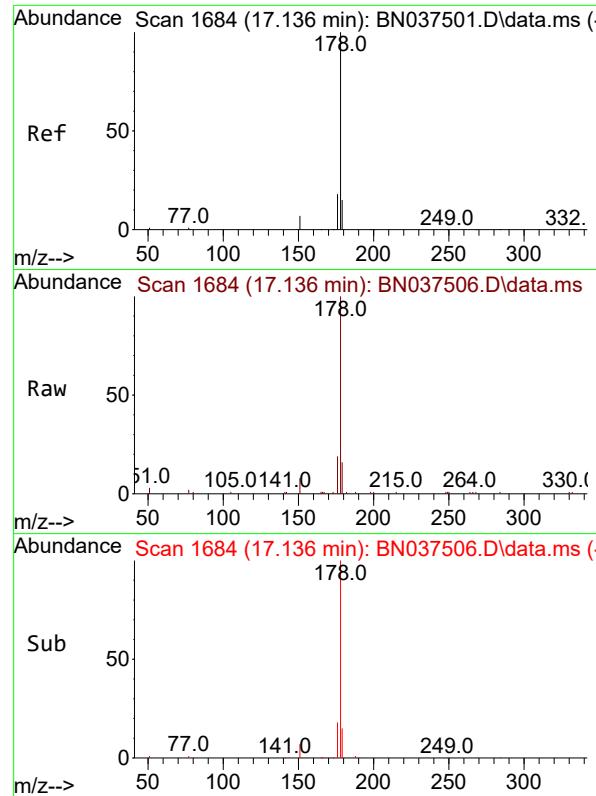
Ion Ratio Lower Upper

266 100

264 62.9 49.3 73.9

268 65.2 51.6 77.4





#25

Phenanthrene

Concen: 0.403 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Instrument:

BNA\_N

ClientSampleId :

ICVBN071525

Tgt Ion:178 Resp: 7640

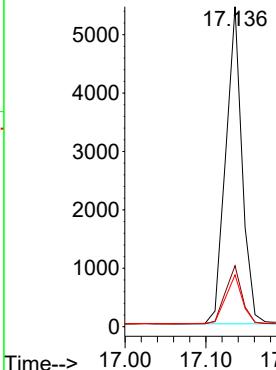
Ion Ratio Lower Upper

178 100

176 18.6 15.0 22.6

179 15.6 12.2 18.2

Abundance



#26

Anthracene

Concen: 0.400 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037506.D

Acq: 15 Jul 2025 16:58

Tgt Ion:178 Resp: 6928

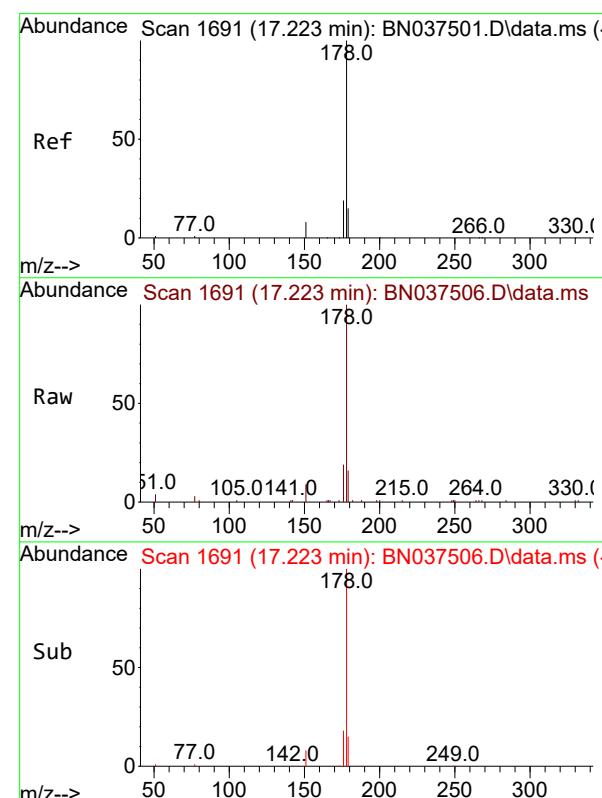
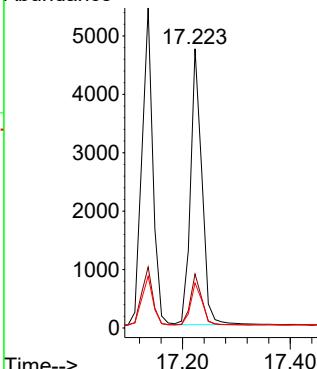
Ion Ratio Lower Upper

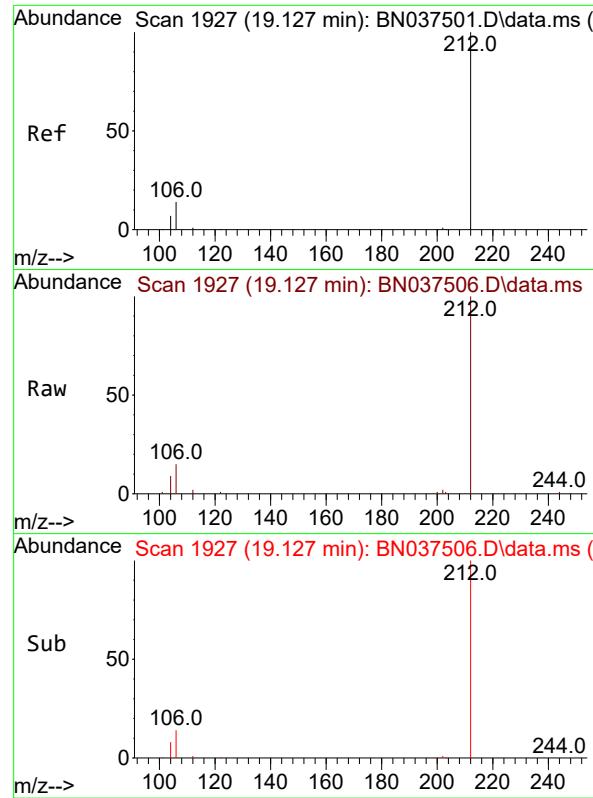
178 100

176 18.4 14.7 22.1

179 15.4 12.3 18.5

Abundance

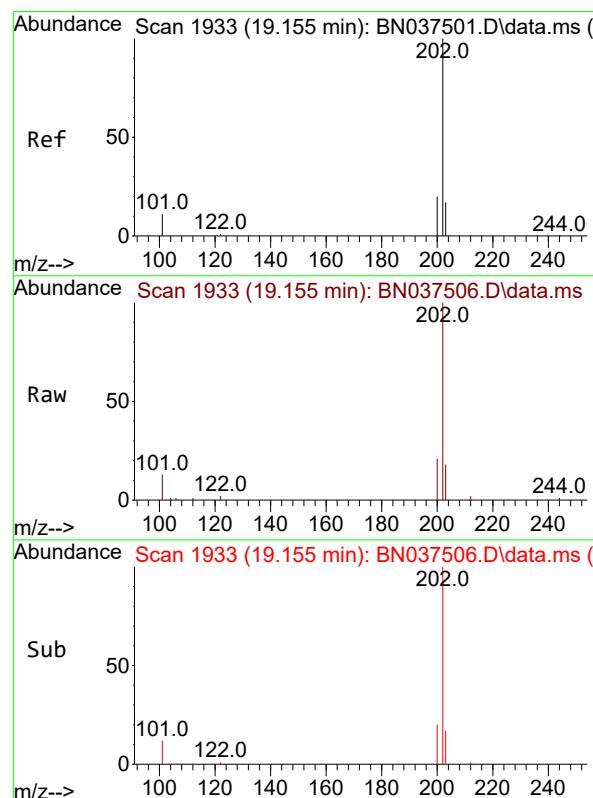
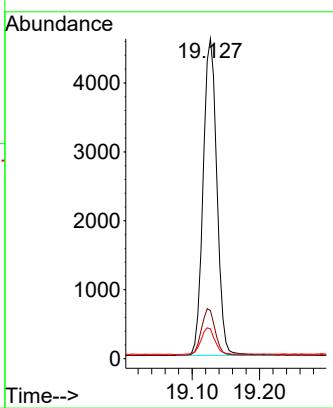




#27  
 Fluoranthene-d10  
 Concen: 0.387 ng  
 RT: 19.127 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

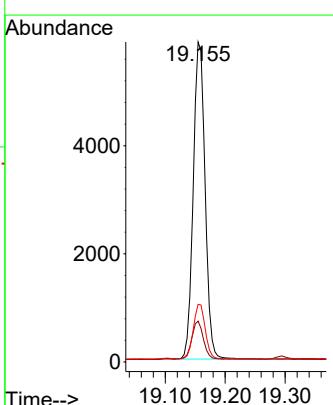
Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

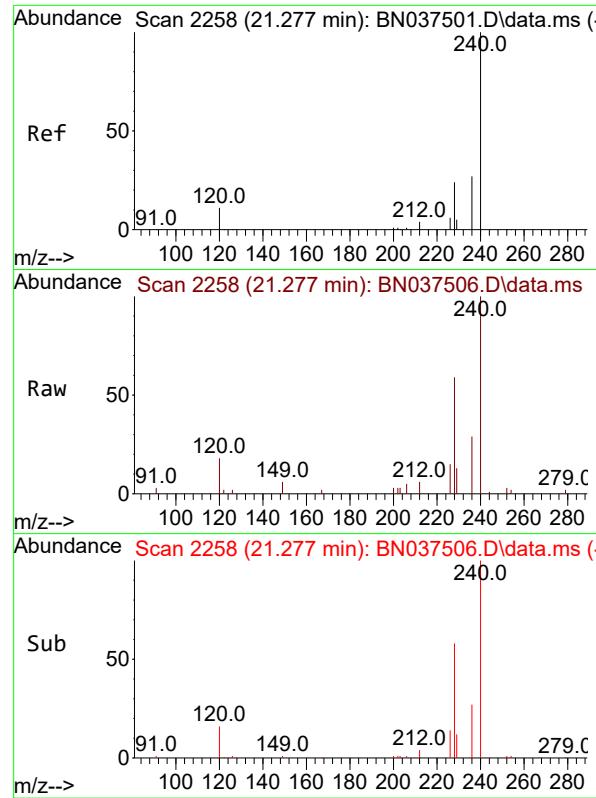
Tgt Ion:212 Resp: 6495  
 Ion Ratio Lower Upper  
 212 100  
 106 14.6 12.2 18.4  
 104 8.6 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.368 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Tgt Ion:202 Resp: 8063  
 Ion Ratio Lower Upper  
 202 100  
 101 12.0 9.8 14.6  
 203 17.2 13.6 20.4

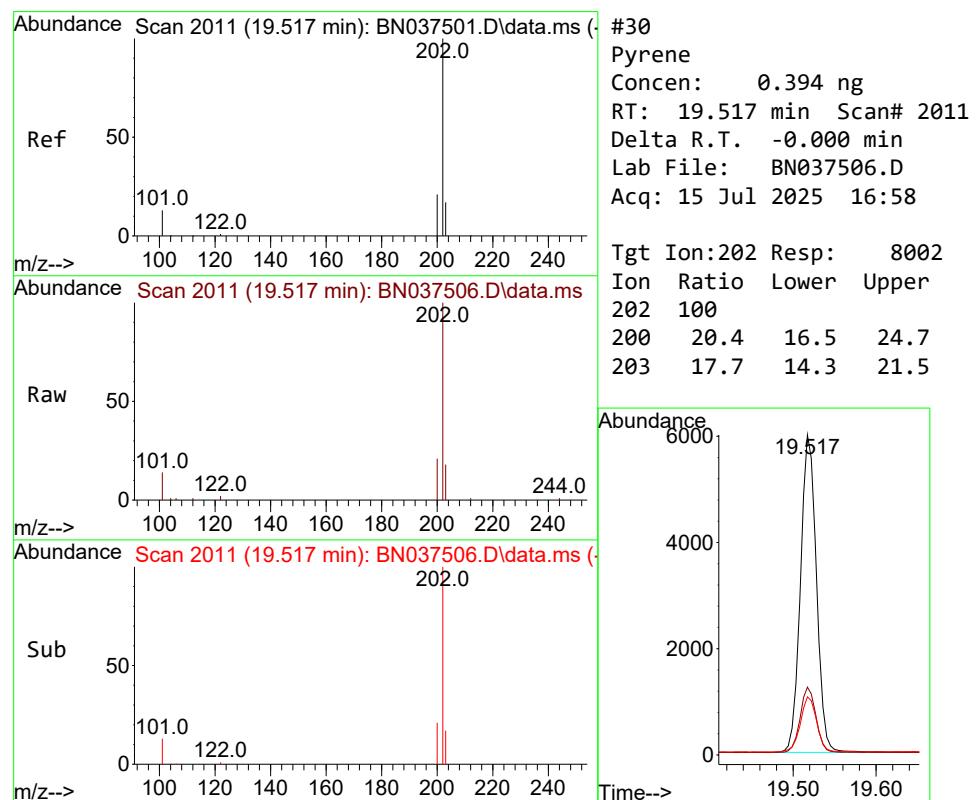
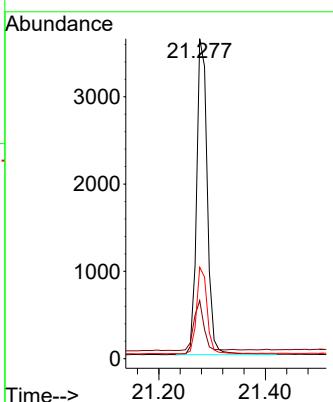




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

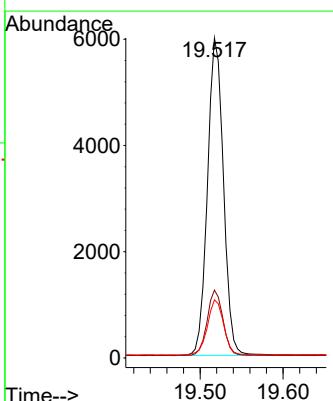
Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

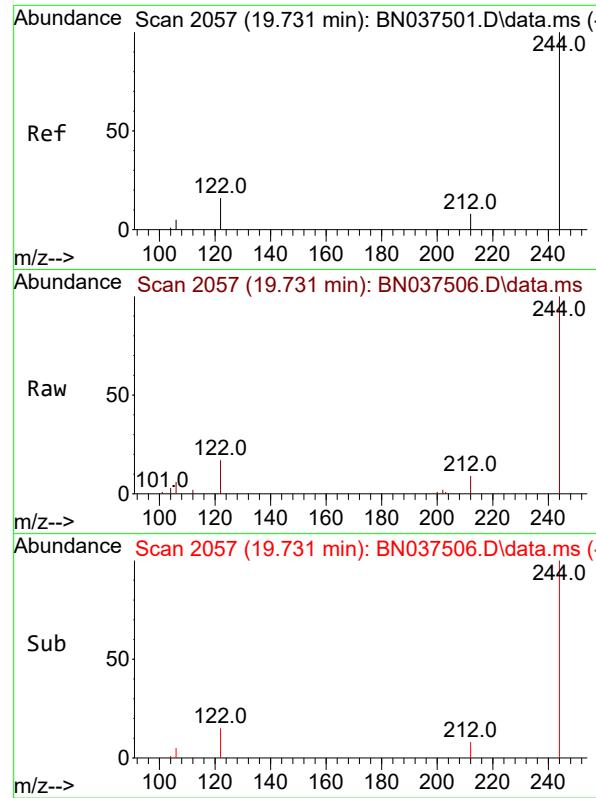
Tgt Ion:240 Resp: 5040  
 Ion Ratio Lower Upper  
 240 100  
 120 18.1 10.7 16.1#  
 236 28.5 22.6 33.8



#30  
 Pyrene  
 Concen: 0.394 ng  
 RT: 19.517 min Scan# 2011  
 Delta R.T. -0.000 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

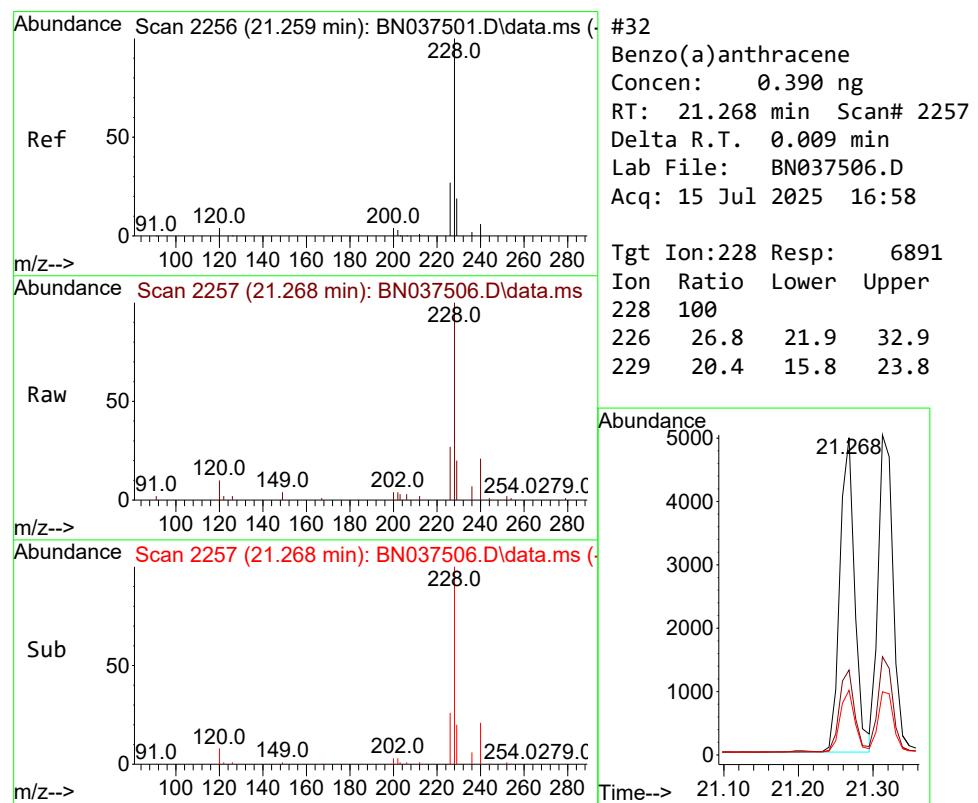
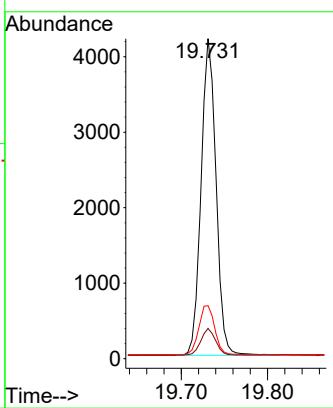
Tgt Ion:202 Resp: 8002  
 Ion Ratio Lower Upper  
 202 100  
 200 20.4 16.5 24.7  
 203 17.7 14.3 21.5





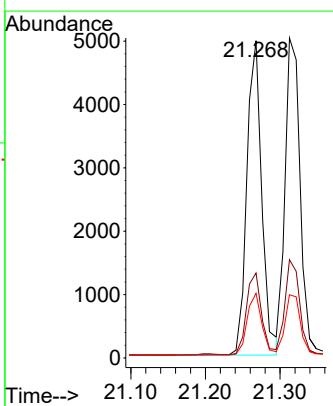
#31  
Terphenyl-d14  
Concen: 0.467 ng  
RT: 19.731 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58  
ClientSampleId : ICVBN071525

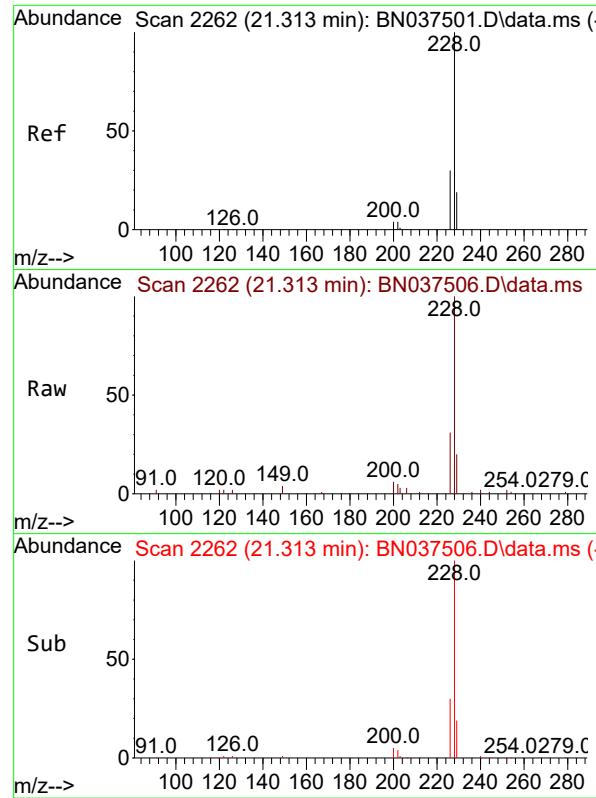
Tgt Ion:244 Resp: 5056  
Ion Ratio Lower Upper  
244 100  
212 9.4 7.4 11.2  
122 16.6 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.390 ng  
RT: 21.268 min Scan# 2257  
Delta R.T. 0.009 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

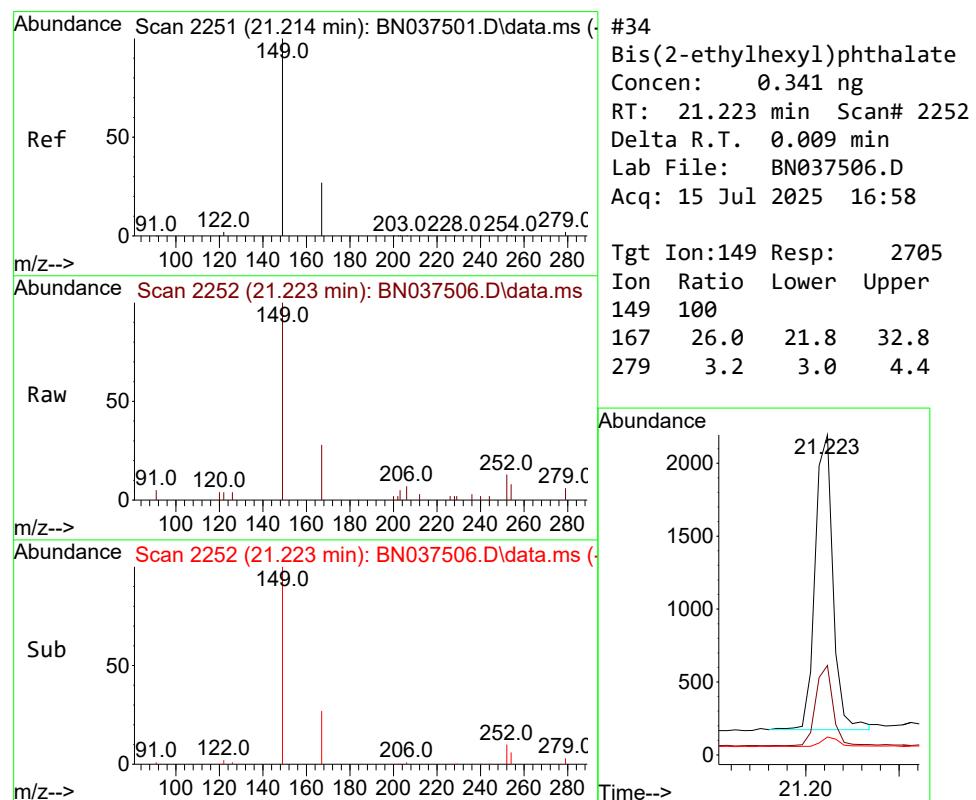
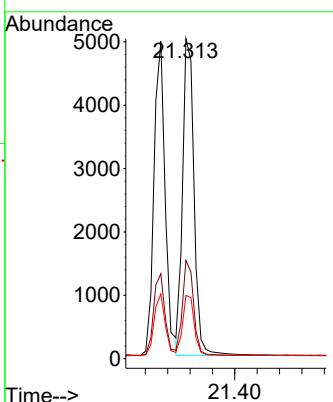
Tgt Ion:228 Resp: 6891  
Ion Ratio Lower Upper  
228 100  
226 26.8 21.9 32.9  
229 20.4 15.8 23.8





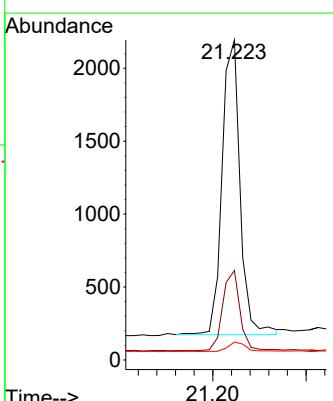
#33  
Chrysene  
Concen: 0.388 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58  
ClientSampleId : ICBN071525

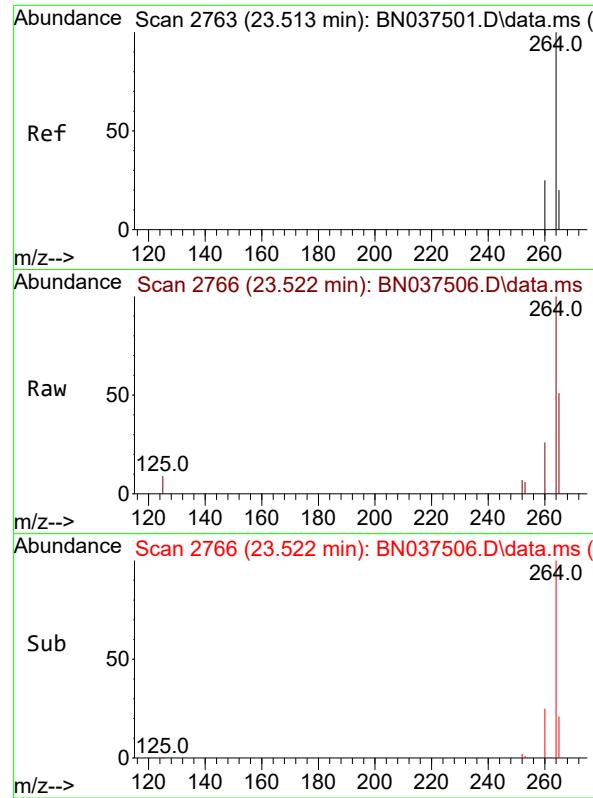
Tgt Ion:228 Resp: 7126  
Ion Ratio Lower Upper  
228 100  
226 30.7 24.2 36.4  
229 19.8 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.341 ng  
RT: 21.223 min Scan# 2252  
Delta R.T. 0.009 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:149 Resp: 2705  
Ion Ratio Lower Upper  
149 100  
167 26.0 21.8 32.8  
279 3.2 3.0 4.4

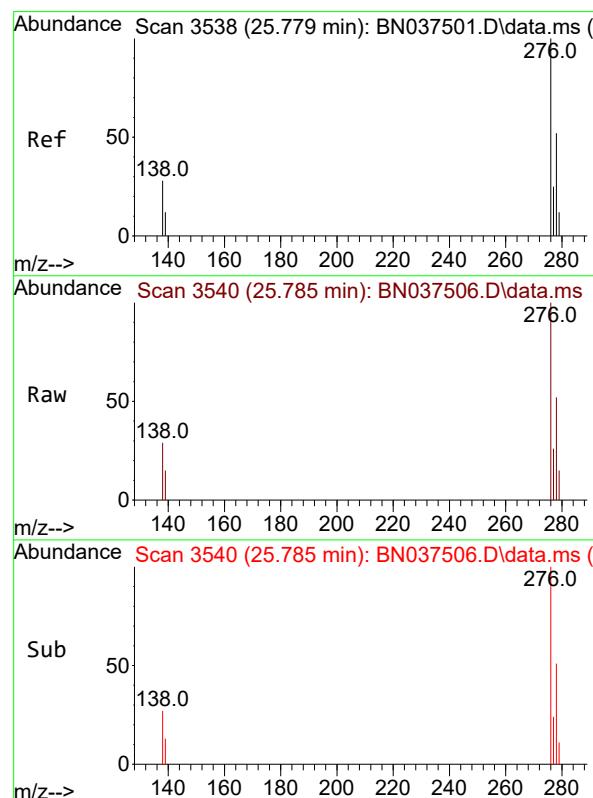
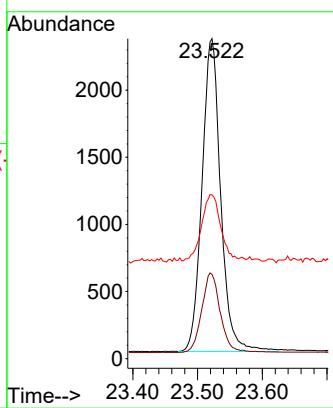




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.522 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

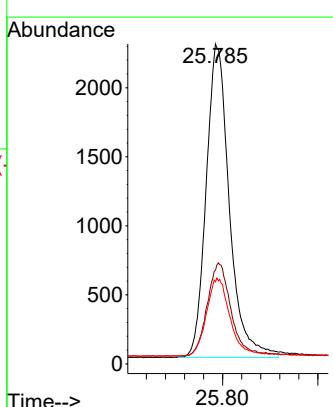
Instrument : BNA\_N  
ClientSampleId : ICVBN071525

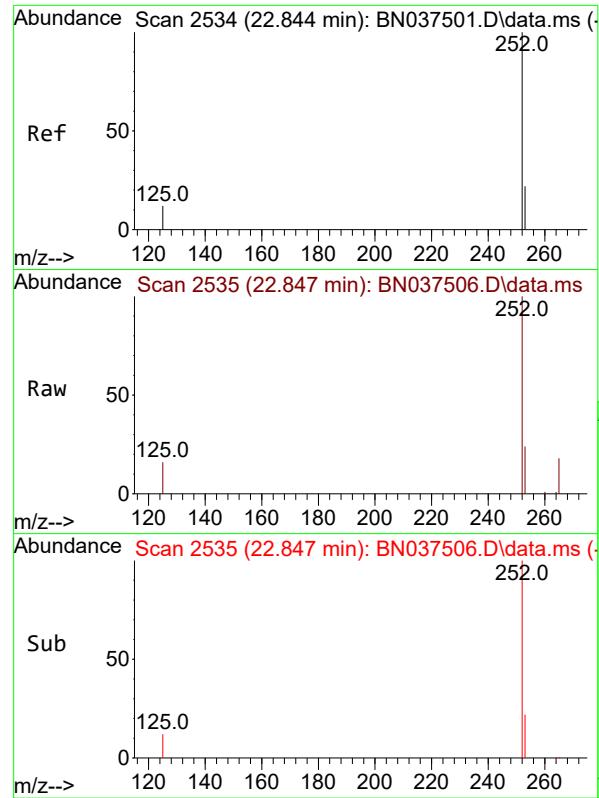
Tgt Ion:264 Resp: 4669  
Ion Ratio Lower Upper  
264 100  
260 26.3 21.2 31.8  
265 51.2 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.394 ng  
RT: 25.785 min Scan# 3540  
Delta R.T. 0.006 min  
Lab File: BN037506.D  
Acq: 15 Jul 2025 16:58

Tgt Ion:276 Resp: 7666  
Ion Ratio Lower Upper  
276 100  
138 30.2 24.0 36.0  
277 25.0 20.5 30.7

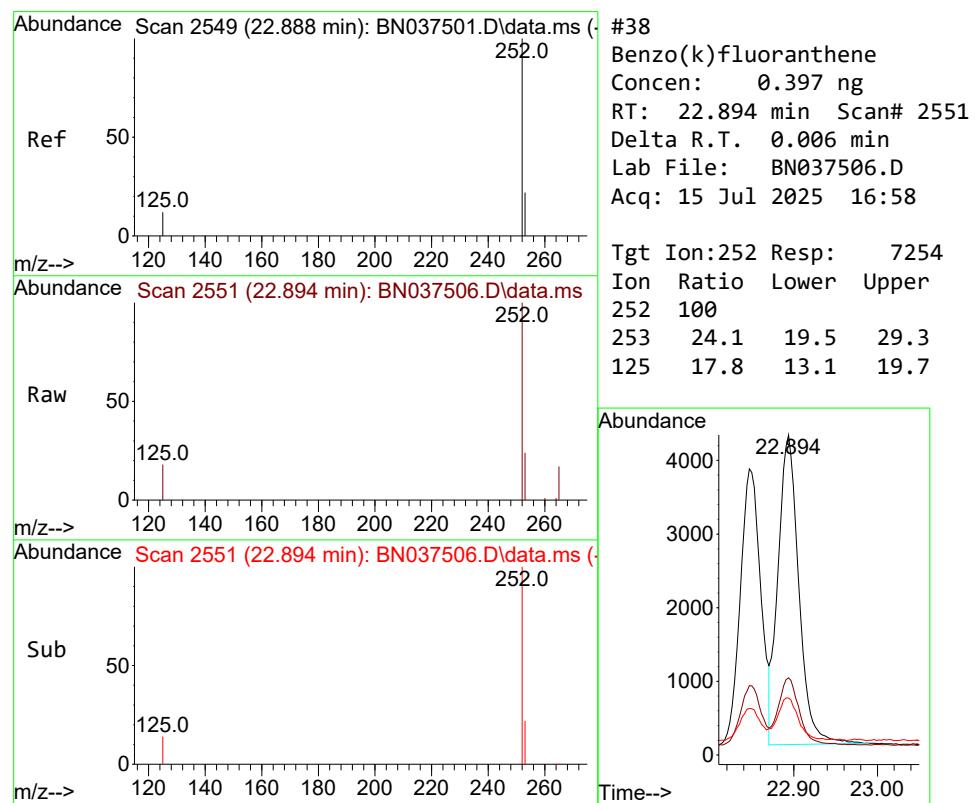
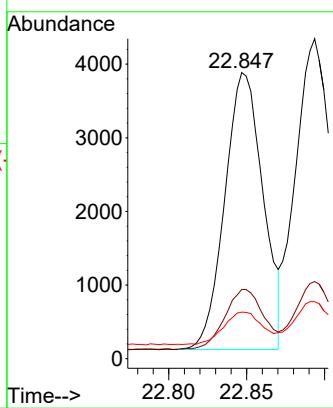




#37  
 Benzo(b)fluoranthene  
 Concen: 0.363 ng  
 RT: 22.847 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

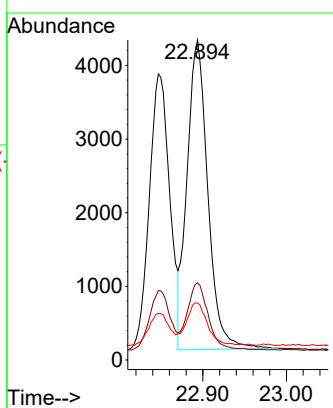
Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

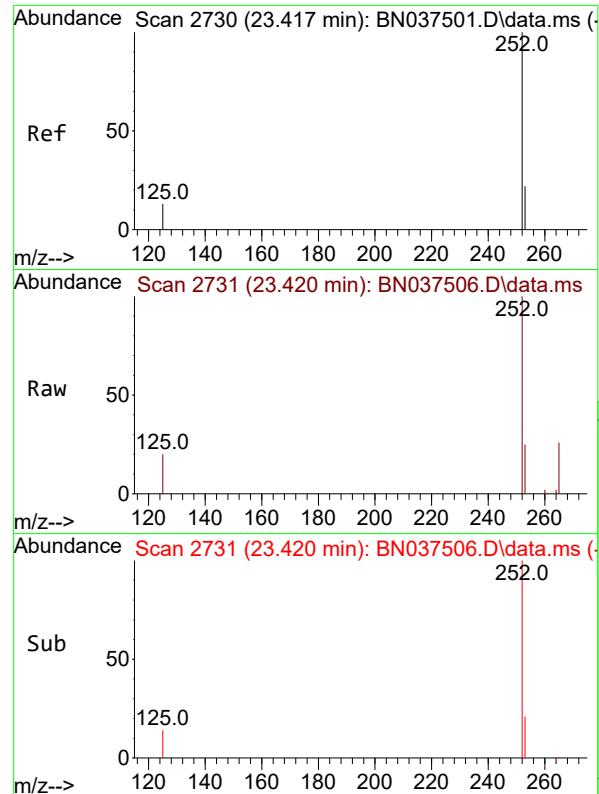
Tgt Ion:252 Resp: 6430  
 Ion Ratio Lower Upper  
 252 100  
 253 24.2 19.5 29.3  
 125 16.3 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.397 ng  
 RT: 22.894 min Scan# 2551  
 Delta R.T. 0.006 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Tgt Ion:252 Resp: 7254  
 Ion Ratio Lower Upper  
 252 100  
 253 24.1 19.5 29.3  
 125 17.8 13.1 19.7

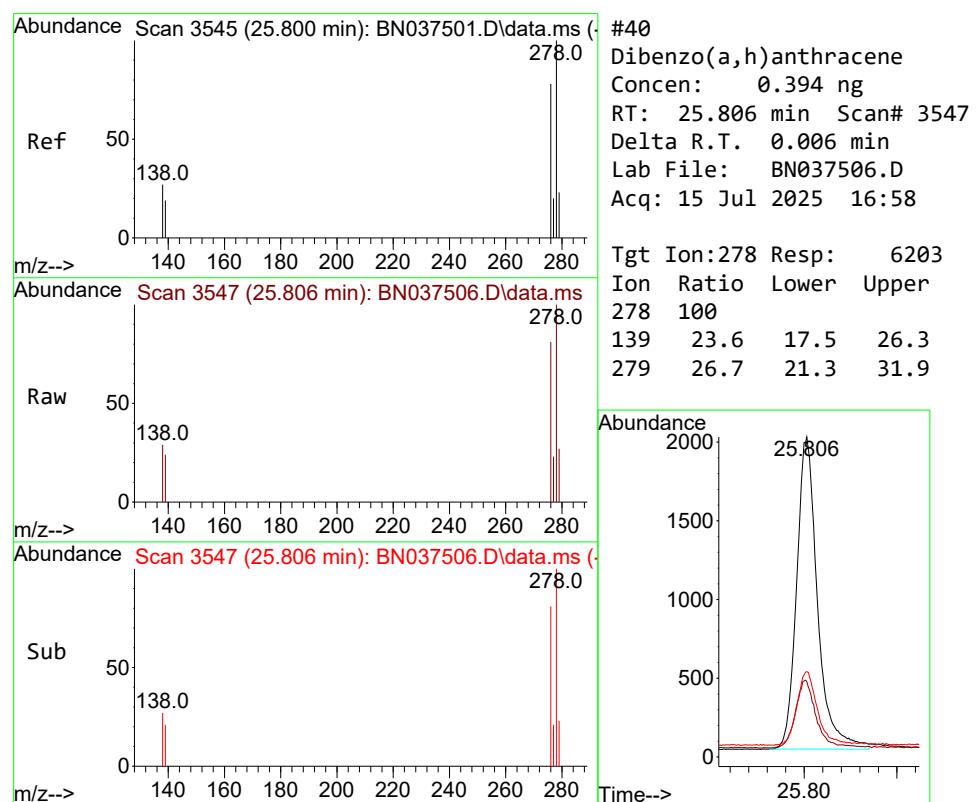
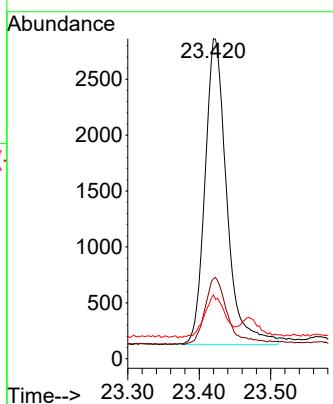




#39  
 Benzo(a)pyrene  
 Concen: 0.392 ng  
 RT: 23.420 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

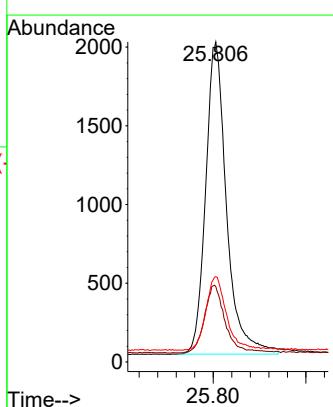
Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

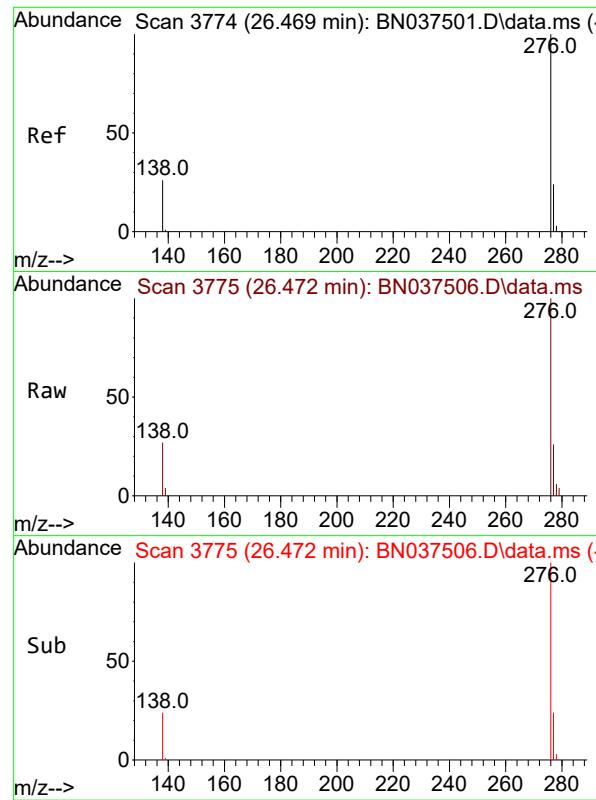
Tgt Ion:252 Resp: 5792  
 Ion Ratio Lower Upper  
 252 100  
 253 25.0 19.9 29.9  
 125 19.9 15.2 22.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.394 ng  
 RT: 25.806 min Scan# 3547  
 Delta R.T. 0.006 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Tgt Ion:278 Resp: 6203  
 Ion Ratio Lower Upper  
 278 100  
 139 23.6 17.5 26.3  
 279 26.7 21.3 31.9

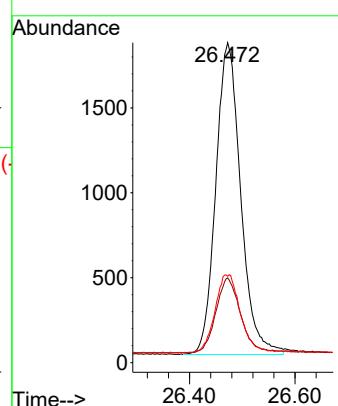




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.369 ng  
 RT: 26.472 min Scan# 3  
 Delta R.T. 0.003 min  
 Lab File: BN037506.D  
 Acq: 15 Jul 2025 16:58

Instrument : BNA\_N  
 ClientSampleId : ICVBN071525

Tgt Ion:276 Resp: 6018  
 Ion Ratio Lower Upper  
 276 100  
 277 26.5 20.9 31.3  
 138 27.0 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037506.D  
 Acq On : 15 Jul 2025 16:58  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN071525**

Quant Time: Jul 15 17:34:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 17:33:01 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	98	0.00
2	1,4-Dioxane	0.385	0.452	-17.4	112	0.00
3	n-Nitrosodimethylamine	0.484	0.484	0.0	102	0.00
4 S	2-Fluorophenol	0.989	0.908	8.2	90	0.00
5 S	Phenol-d6	1.241	1.076	13.3	88	0.00
6	bis(2-Chloroethyl)ether	1.033	1.072	-3.8	102	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	100	0.00
8 S	Nitrobenzene-d5	0.299	0.310	-3.7	109	0.00
9	Naphthalene	1.067	1.038	2.7	99	0.00
10	Hexachlorobutadiene	0.236	0.238	-0.8	101	0.00
11 SURR	2-Methylnaphthalene-d10	0.574	0.581	-1.2	107	0.00
12	2-Methylnaphthalene	0.701	0.618	11.8	91	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	100	0.00
14 S	2,4,6-Tribromophenol	0.197	0.159	19.3	92	0.00
15 S	2-Fluorobiphenyl	2.080	2.399	-15.3	118	0.00
16	Acenaphthylene	1.792	1.867	-4.2	109	0.00
17	Acenaphthene	1.218	1.147	5.8	98	0.00
18	Fluorene	1.569	1.508	3.9	102	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	98	0.00
20	4,6-Dinitro-2-methylphenol	0.057	0.042	26.3#	100	0.00
21	4-Bromophenyl-phenylether	0.256	0.247	3.5	99	0.00
22	Hexachlorobenzene	0.331	0.341	-3.0	102	0.00
23	Atrazine	0.179	0.166	7.3	102	0.00
24	Pentachlorophenol	0.149	0.107	28.2#	84	0.00
25	Phenanthrene	1.198	1.206	-0.7	102	0.00
26	Anthracene	1.093	1.094	-0.1	106	0.00
27 SURR	Fluoranthene-d10	1.060	1.025	3.3	104	0.00
28	Fluoranthene	1.382	1.273	7.9	97	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	97	0.00
30	Pyrene	1.612	1.588	1.5	96	0.00
31 S	Terphenyl-d14	0.859	1.003	-16.8	115	0.00
32	Benzo(a)anthracene	1.401	1.367	2.4	99	0.00
33	Chrysene	1.459	1.414	3.1	95	0.00
34	Bis(2-ethylhexyl)phthalate	0.630	0.537	14.8	92	0.00
35 I	Perylene-d12	1.000	1.000	0.0	97	0.00
36	Indeno(1,2,3-cd)pyrene	1.666	1.642	1.4	105	0.00
37	Benzo(b)fluoranthene	1.518	1.377	9.3	92	0.00
38	Benzo(k)fluoranthene	1.567	1.554	0.8	102	0.00
39 C	Benzo(a)pyrene	1.267	1.241	2.1	101	0.00
40	Dibenzo(a,h)anthracene	1.349	1.329	1.5	106	0.00
41	Benzo(g,h,i)perylene	1.397	1.289	7.7	96	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037506.D  
 Acq On : 15 Jul 2025 16:58  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN071525**

Quant Time: Jul 15 17:34:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Jul 15 17:33:01 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	98	0.00
2	1,4-Dioxane	0.400	0.470	-17.5	112	0.00
3	n-Nitrosodimethylamine	0.400	0.401	-0.3	102	0.00
4 S	2-Fluorophenol	0.400	0.367	8.3	90	0.00
5 S	Phenol-d6	0.400	0.347	13.3	88	0.00
6	bis(2-Chloroethyl)ether	0.400	0.415	-3.7	102	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	100	0.00
8 S	Nitrobenzene-d5	0.400	0.415	-3.7	109	0.00
9	Naphthalene	0.400	0.389	2.8	99	0.00
10	Hexachlorobutadiene	0.400	0.405	-1.3	101	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.405	-1.3	107	0.00
12	2-Methylnaphthalene	0.400	0.353	11.8	91	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	100	0.00
14 S	2,4,6-Tribromophenol	0.400	0.324	19.0	92	0.00
15 S	2-Fluorobiphenyl	0.400	0.461	-15.3	118	0.00
16	Acenaphthylene	0.400	0.417	-4.2	109	0.00
17	Acenaphthene	0.400	0.377	5.8	98	0.00
18	Fluorene	0.400	0.384	4.0	102	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	98	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.401	-0.3	100	0.00
21	4-Bromophenyl-phenylether	0.400	0.385	3.8	99	0.00
22	Hexachlorobenzene	0.400	0.412	-3.0	102	0.00
23	Atrazine	0.400	0.371	7.3	102	0.00
24	Pentachlorophenol	0.400	0.289	27.8#	84	0.00
25	Phenanthrene	0.400	0.403	-0.8	102	0.00
26	Anthracene	0.400	0.400	0.0	106	0.00
27 SURR	Fluoranthene-d10	0.400	0.387	3.3	104	0.00
28	Fluoranthene	0.400	0.368	8.0	97	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	97	0.00
30	Pyrene	0.400	0.394	1.5	96	0.00
31 S	Terphenyl-d14	0.400	0.467	-16.8	115	0.00
32	Benzo(a)anthracene	0.400	0.390	2.5	99	0.00
33	Chrysene	0.400	0.388	3.0	95	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.341	14.8	92	0.00
35 I	Perylene-d12	0.400	0.400	0.0	97	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.394	1.5	105	0.00
37	Benzo(b)fluoranthene	0.400	0.363	9.3	92	0.00
38	Benzo(k)fluoranthene	0.400	0.397	0.8	102	0.00
39 C	Benzo(a)pyrene	0.400	0.392	2.0	101	0.00
40	Dibenzo(a,h)anthracene	0.400	0.394	1.5	106	0.00
41	Benzo(g,h,i)perylene	0.400	0.369	7.8	96	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: AllianceContract: TETR06Lab Code: ACESDG No.: Q2644Instrument ID: BNA\_NCalibration Date/Time: 07/22/2025 10:51Lab File ID: BN037532.DInit. Calib. Date(s): 07/15/2025 07/15/2025EPA Sample No.: SSTDCCC0.4Init. Calib. Time(s): 12:36 16:14GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.525		-8.5	20.0
Fluoranthene-d10	1.060	0.922		-13.0	20.0
2-Fluorophenol	0.989	0.964		-2.5	20.0
Phenol-d6	1.241	1.193		-3.9	20.0
Nitrobenzene-d5	0.299	0.268		-10.4	20.0
2-Fluorobiphenyl	2.080	2.108		1.3	20.0
2,4,6-Tribromophenol	0.197	0.146		-25.9	20.0
Terphenyl-d14	0.859	0.750		-12.7	20.0
1,4-Dioxane	0.385	0.413		7.3	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
Data File : BN037532.D  
Acq On : 22 Jul 2025 10:51  
Operator : RC/JU  
Sample : SSTDCCC0.4  
Misc :  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

Quant Time: Jul 22 11:15:42 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

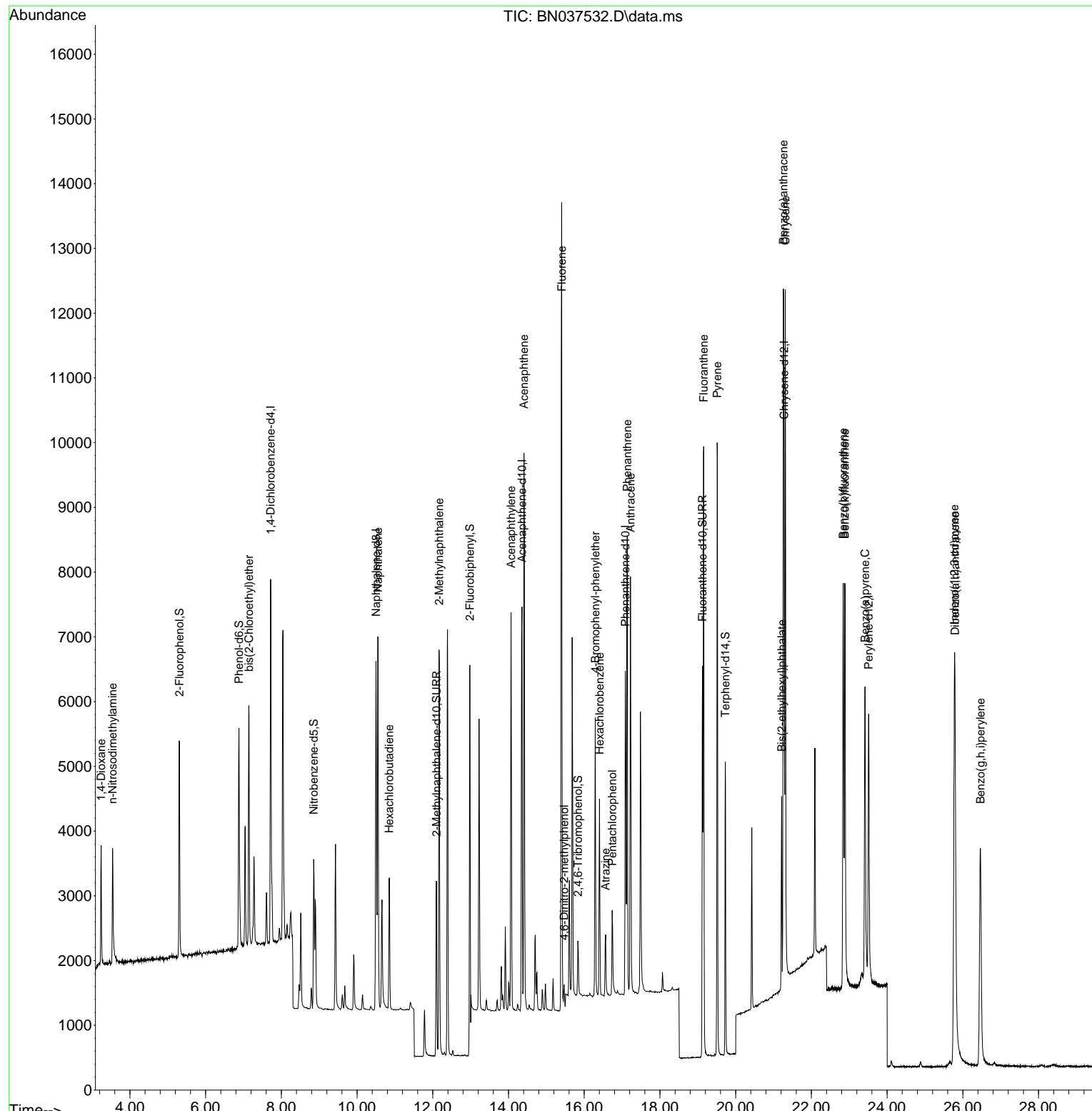
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.717	152	2751	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	7206	0.400	ng	-0.01
13) Acenaphthene-d10	14.355	164	3790	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	7043	0.400	ng	#-0.01
29) Chrysene-d12	21.277	240	6014	0.400	ng	0.00
35) Perylene-d12	23.513	264	5778	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.305	112	2652	0.390	ng	0.00
5) Phenol-d6	6.879	99	3282	0.385	ng	0.00
8) Nitrobenzene-d5	8.854	82	1931	0.358	ng	-0.01
11) 2-Methylnaphthalene-d10	12.095	152	3783	0.366	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	553	0.297	ng	-0.01
15) 2-Fluorobiphenyl	12.978	172	7991	0.405	ng	0.00
27) Fluoranthene-d10	19.122	212	6491	0.348	ng	0.00
31) Terphenyl-d14	19.726	244	4509	0.349	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	1135	0.429	ng	93
3) n-Nitrosodimethylamine	3.543	42	1226	0.369	ng	# 97
6) bis(2-Chloroethyl)ether	7.146	93	2858	0.402	ng	99
9) Naphthalene	10.551	128	7455	0.388	ng	100
10) Hexachlorobutadiene	10.850	225	1651	0.389	ng	# 99
12) 2-Methylnaphthalene	12.166	142	4760	0.377	ng	99
16) Acenaphthylene	14.067	152	6666	0.393	ng	100
17) Acenaphthene	14.409	154	4419	0.383	ng	99
18) Fluorene	15.403	166	5599	0.377	ng	100
20) 4,6-Dinitro-2-methylph...	15.467	198	281	0.385	ng	86
21) 4-Bromophenyl-phenylether	16.292	248	1722	0.382	ng	# 90
22) Hexachlorobenzene	16.404	284	2345	0.402	ng	99
23) Atrazine	16.565	200	919	0.292	ng	98
24) Pentachlorophenol	16.739	266	796	0.304	ng	97
25) Phenanthrene	17.136	178	8137	0.386	ng	100
26) Anthracene	17.223	178	7179	0.373	ng	100
28) Fluoranthene	19.155	202	8766	0.360	ng	100
30) Pyrene	19.513	202	8728	0.360	ng	100
32) Benzo(a)anthracene	21.259	228	7938	0.377	ng	100
33) Chrysene	21.313	228	9201	0.420	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	2745	0.290	ng	98
36) Indeno(1,2,3-cd)pyrene	25.779	276	9143	0.380	ng	99
37) Benzo(b)fluoranthene	22.841	252	7956	0.363	ng	99
38) Benzo(k)fluoranthene	22.885	252	8593	0.380	ng	97
39) Benzo(a)pyrene	23.417	252	7309	0.399	ng	98
40) Dibenzo(a,h)anthracene	25.794	278	6954	0.357	ng	97
41) Benzo(g,h,i)perylene	26.466	276	7290	0.361	ng	99

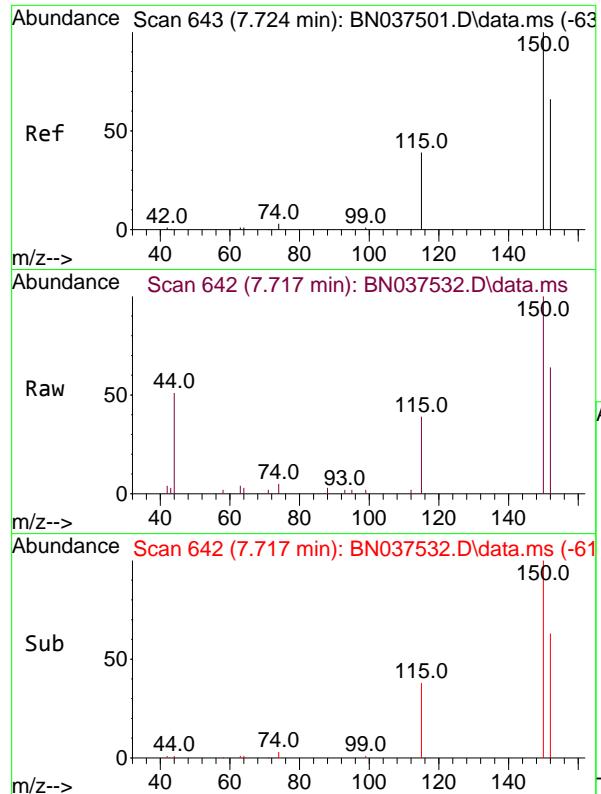
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037532.D  
 Acq On : 22 Jul 2025 10:51  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Jul 22 11:15:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

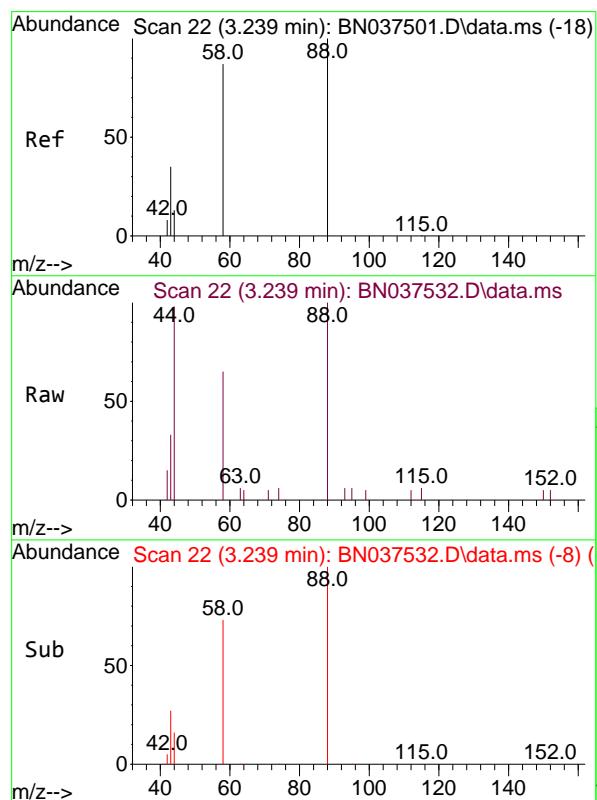
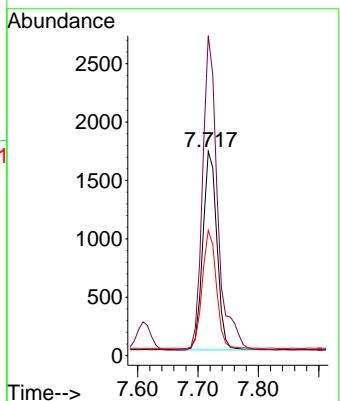




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.717 min Scan# 64  
Delta R.T. -0.007 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

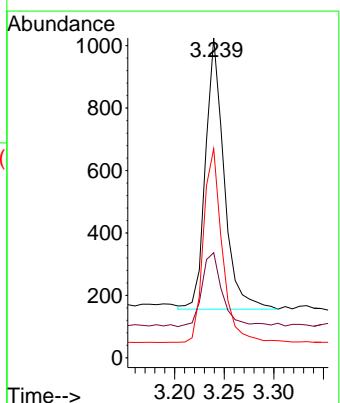
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ClientSampleId : SSTDCCC0.4

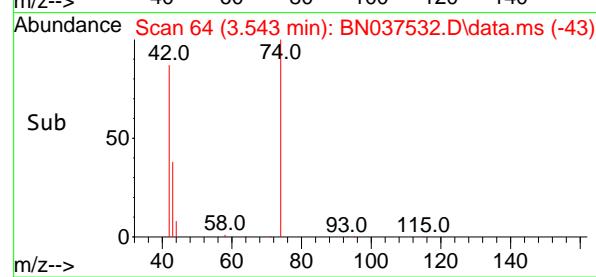
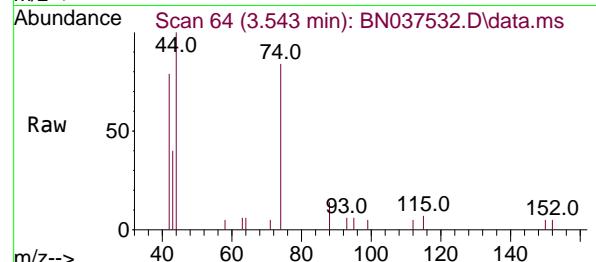
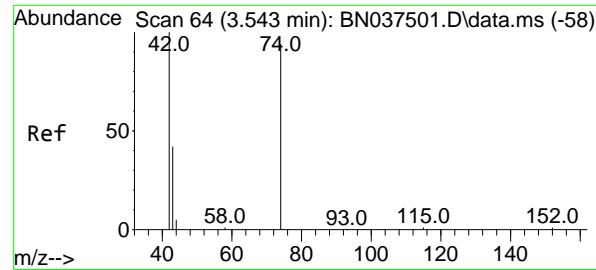
Tgt Ion:152 Resp: 2751  
Ion Ratio Lower Upper  
152 100  
150 156.7 119.8 179.8  
115 61.4 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.429 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion: 88 Resp: 1135  
Ion Ratio Lower Upper  
88 100  
43 30.3 27.5 41.3  
58 72.5 62.7 94.1

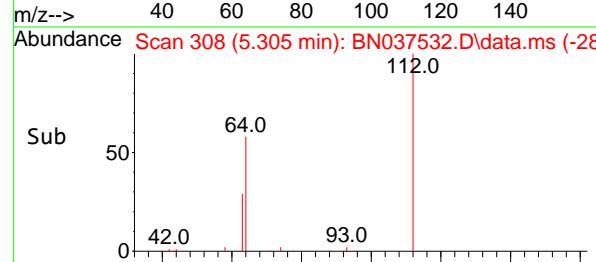
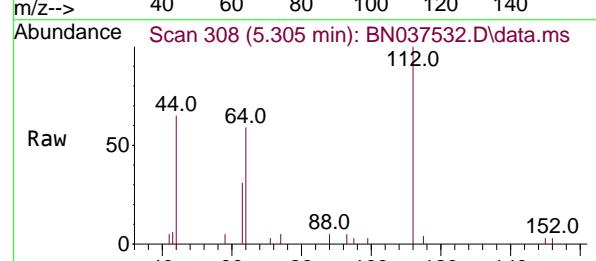
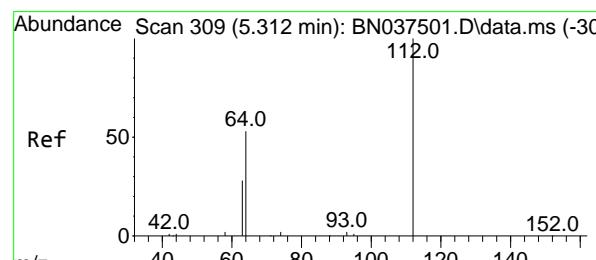
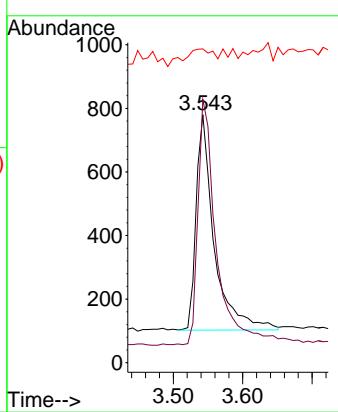




#3  
n-Nitrosodimethylamine  
Concen: 0.369 ng  
RT: 3.543 min Scan# 64  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

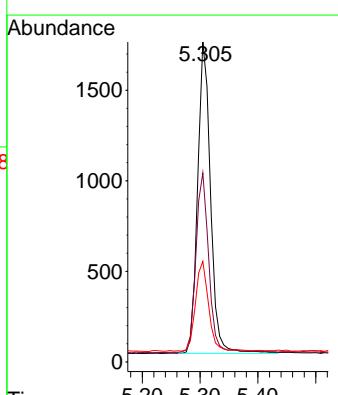
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

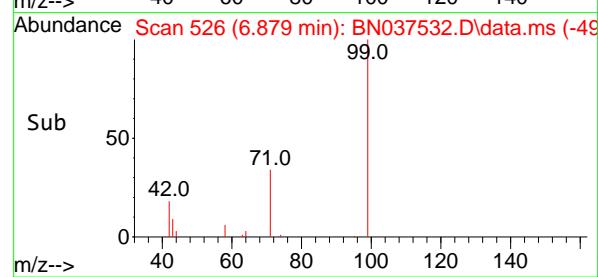
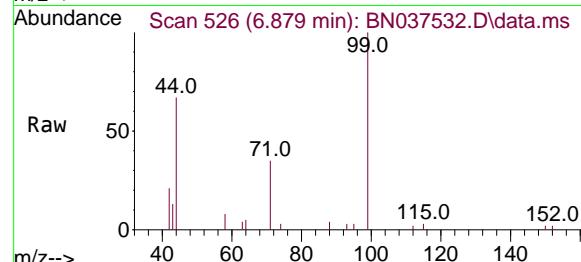
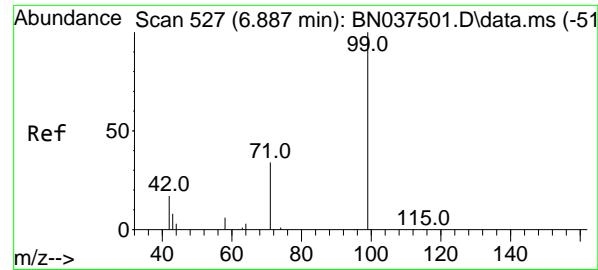
Tgt Ion: 42 Resp: 1226  
Ion Ratio Lower Upper  
42 100  
74 115.9 91.8 137.6  
44 13.2 15.0 22.6#



#4  
2-Fluorophenol  
Concen: 0.390 ng  
RT: 5.305 min Scan# 308  
Delta R.T. -0.007 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion: 112 Resp: 2652  
Ion Ratio Lower Upper  
112 100  
64 58.3 45.1 67.7  
63 28.8 23.8 35.8

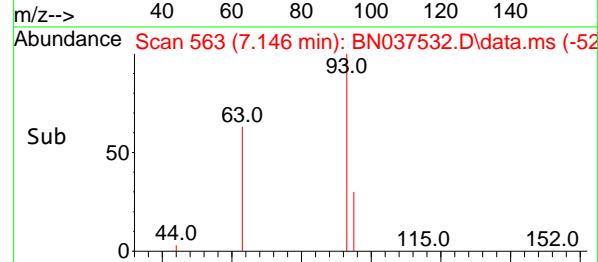
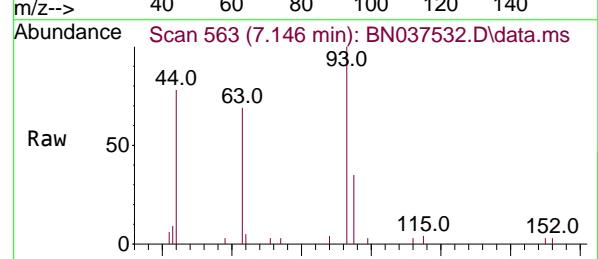
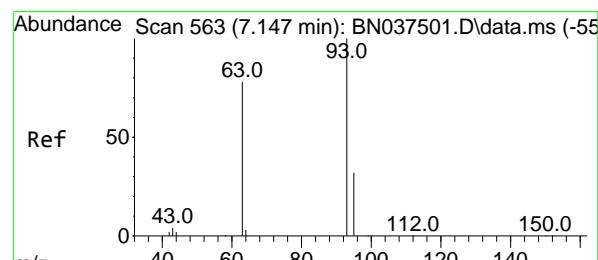
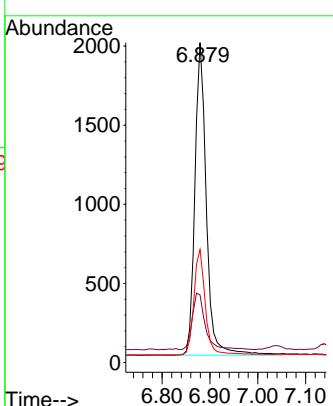




#5  
 Phenol-d6  
 Concen: 0.385 ng  
 RT: 6.879 min Scan# 51  
 Delta R.T. -0.007 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

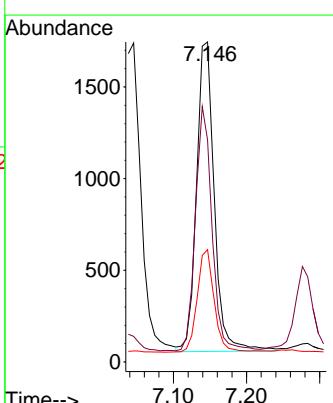
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

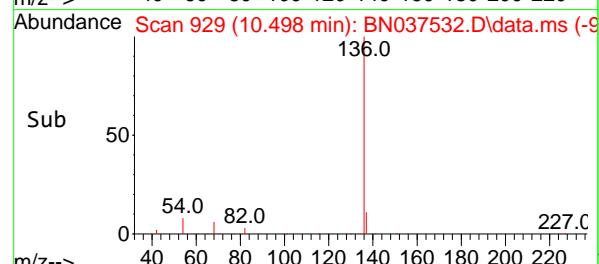
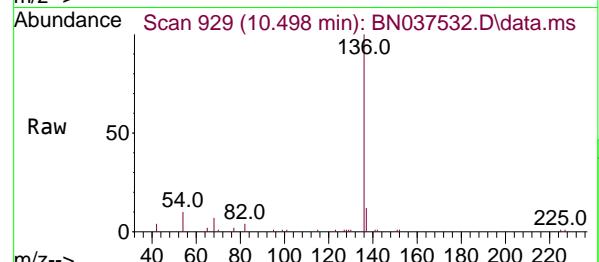
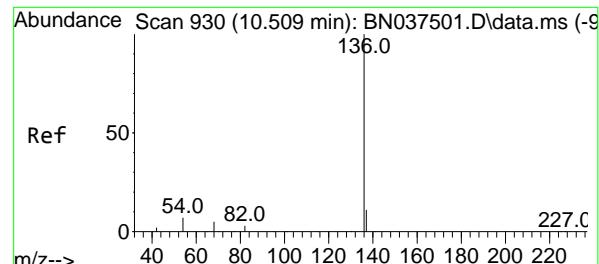
Tgt Ion: 99 Resp: 3282  
 Ion Ratio Lower Upper  
 99 100  
 42 20.7 17.1 25.7  
 71 33.7 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.402 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.000 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

Tgt Ion: 93 Resp: 2858  
 Ion Ratio Lower Upper  
 93 100  
 63 73.2 58.2 87.4  
 95 31.9 25.3 37.9

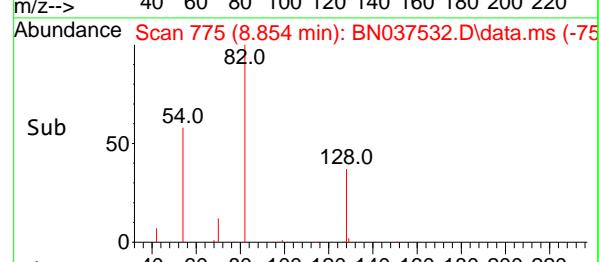
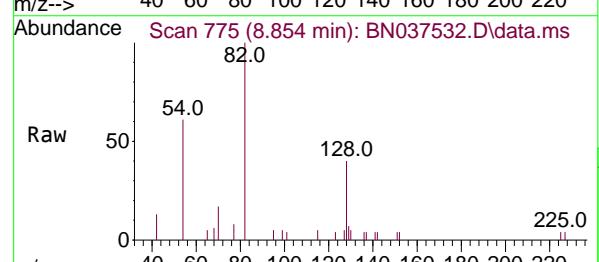
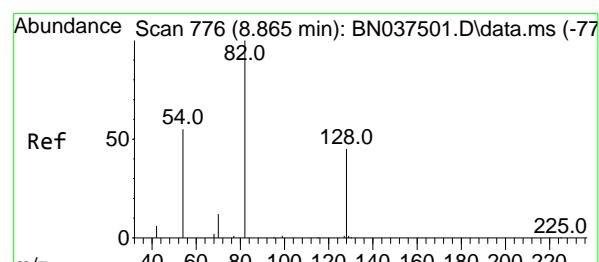
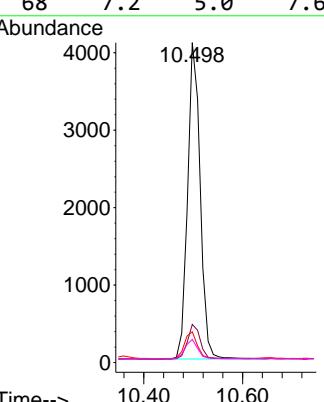




#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

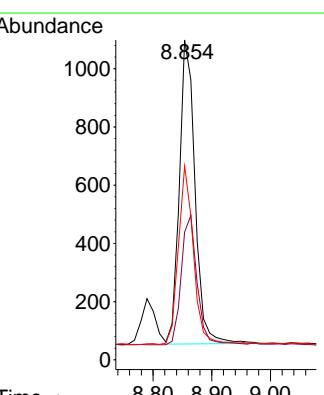
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

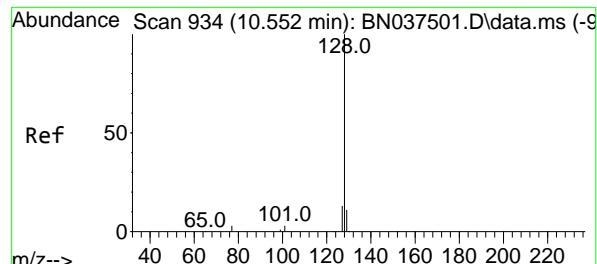
Tgt Ion:136 Resp: 7206  
 Ion Ratio Lower Upper  
 136 100  
 137 11.9 9.8 14.8  
 54 9.6 6.6 9.8  
 68 7.2 5.0 7.6



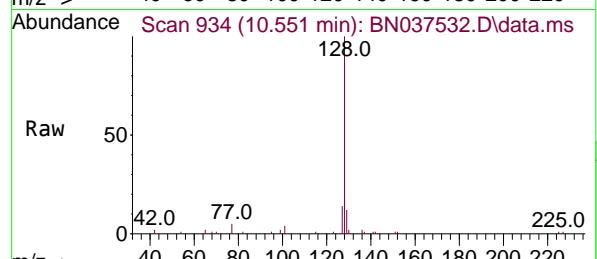
#8  
 Nitrobenzene-d5  
 Concen: 0.358 ng  
 RT: 8.854 min Scan# 775  
 Delta R.T. -0.011 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

Tgt Ion: 82 Resp: 1931  
 Ion Ratio Lower Upper  
 82 100  
 128 39.9 37.5 56.3  
 54 60.5 45.3 67.9

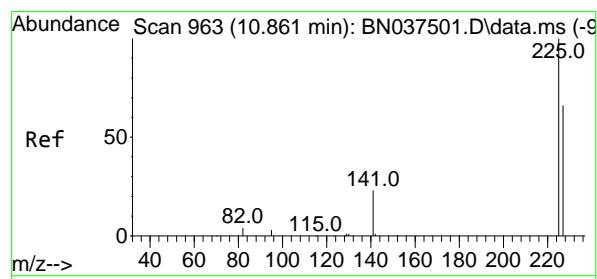
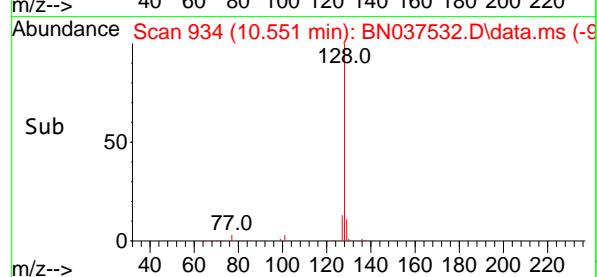
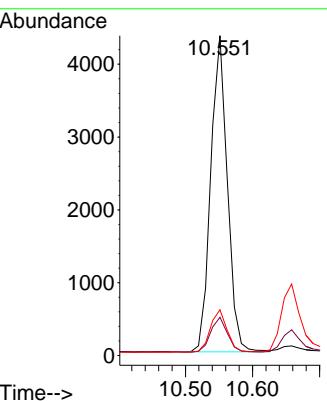




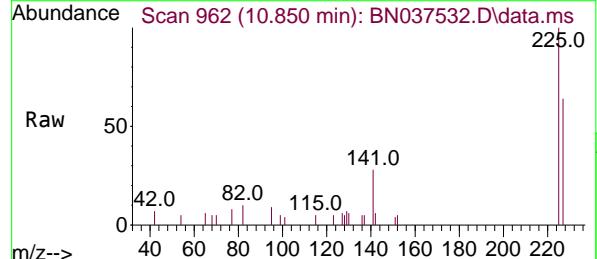
#9  
Naphthalene  
Concen: 0.388 ng  
RT: 10.551 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51  
ClientSampleId : SSTDCCC0.4



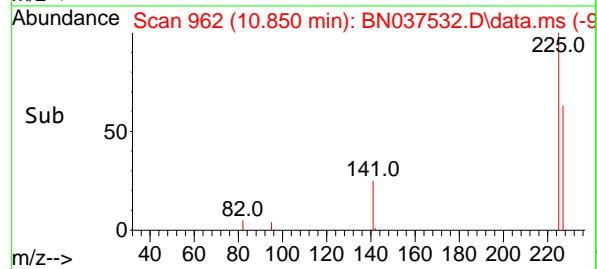
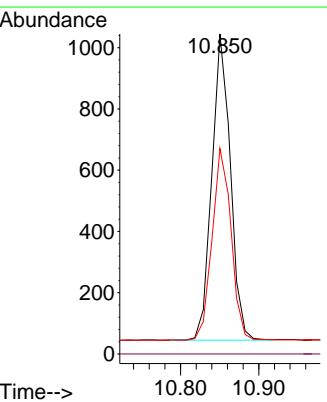
Tgt Ion:128 Resp: 7455  
Ion Ratio Lower Upper  
128 100  
129 12.0 9.7 14.5  
127 14.3 11.5 17.3

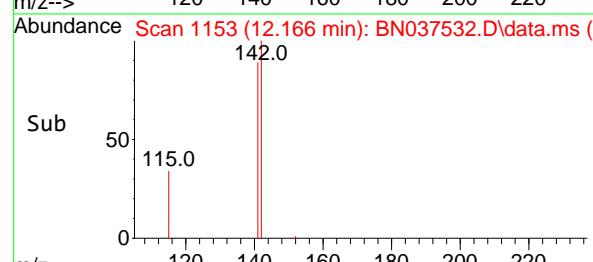
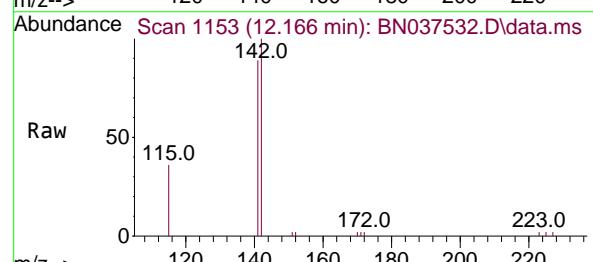
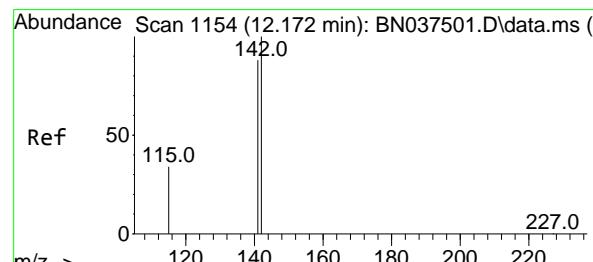
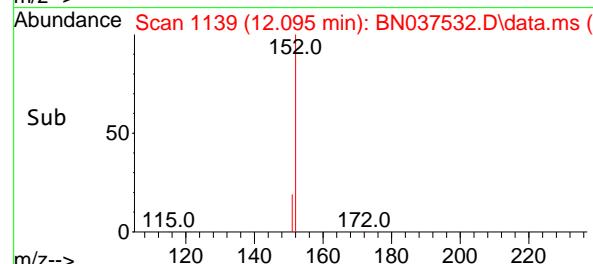
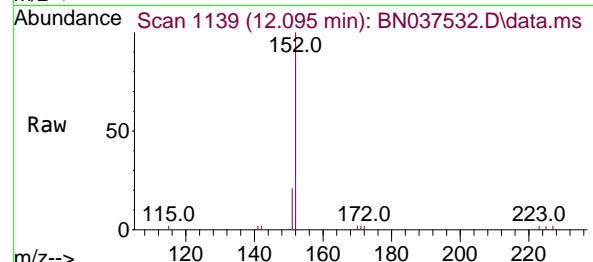
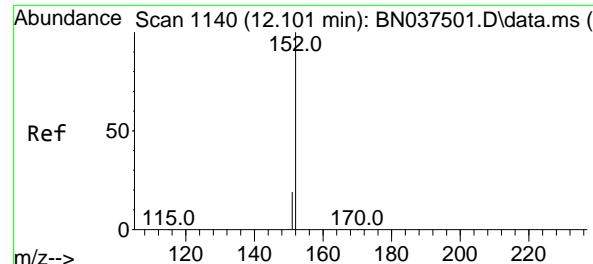


#10  
Hexachlorobutadiene  
Concen: 0.389 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51



Tgt Ion:225 Resp: 1651  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.3 51.0 76.4





#11

2-Methylnaphthalene-d10

Concen: 0.366 ng

RT: 12.095 min Scan# 1139

Delta R.T. -0.005 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

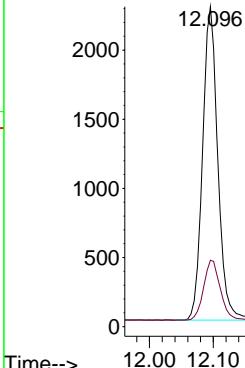
Tgt Ion:152 Resp: 3783

Ion Ratio Lower Upper

152 100

151 21.0 16.8 25.2

Abundance



#12

2-Methylnaphthalene

Concen: 0.377 ng

RT: 12.166 min Scan# 1153

Delta R.T. -0.005 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

Tgt Ion:142 Resp: 4760

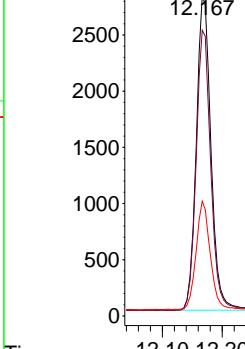
Ion Ratio Lower Upper

142 100

141 89.3 71.0 106.4

115 35.8 29.0 43.4

Abundance



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 14

Delta R.T. -0.000 min

Lab File: BN037532.D

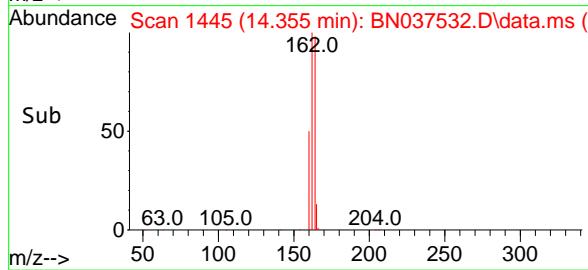
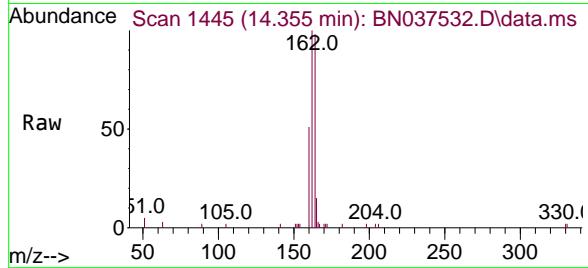
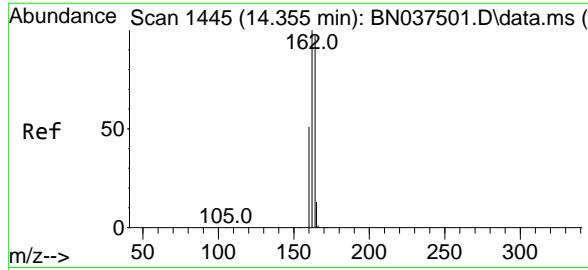
Acq: 22 Jul 2025 10:51

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4



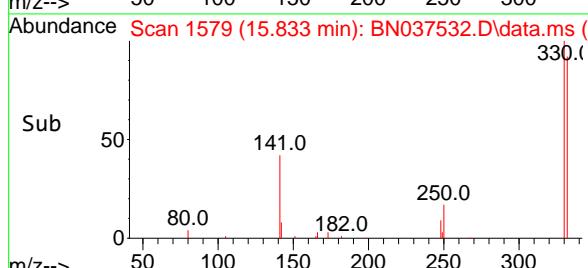
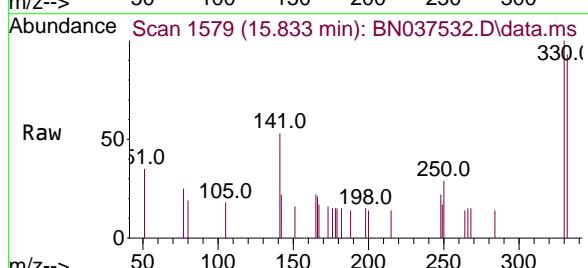
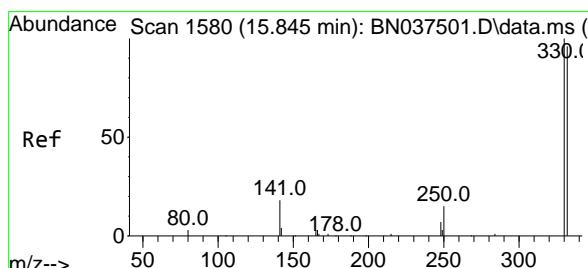
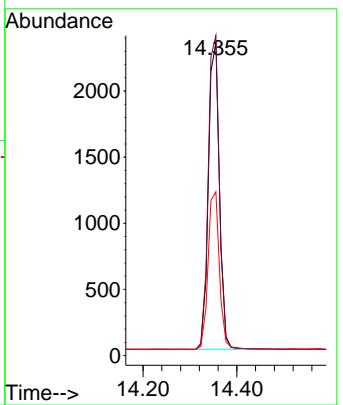
Tgt Ion:164 Resp: 3790

Ion Ratio Lower Upper

164 100

162 102.2 82.0 123.0

160 52.3 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.297 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.013 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

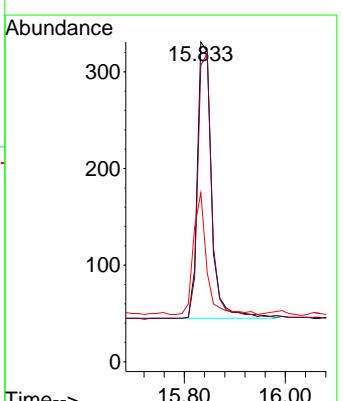
Tgt Ion:330 Resp: 553

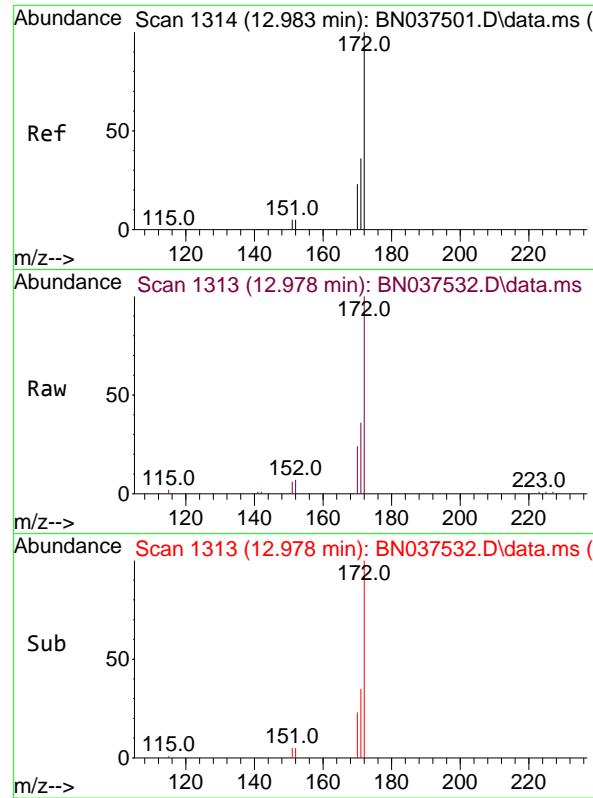
Ion Ratio Lower Upper

330 100

332 95.5 76.1 114.1

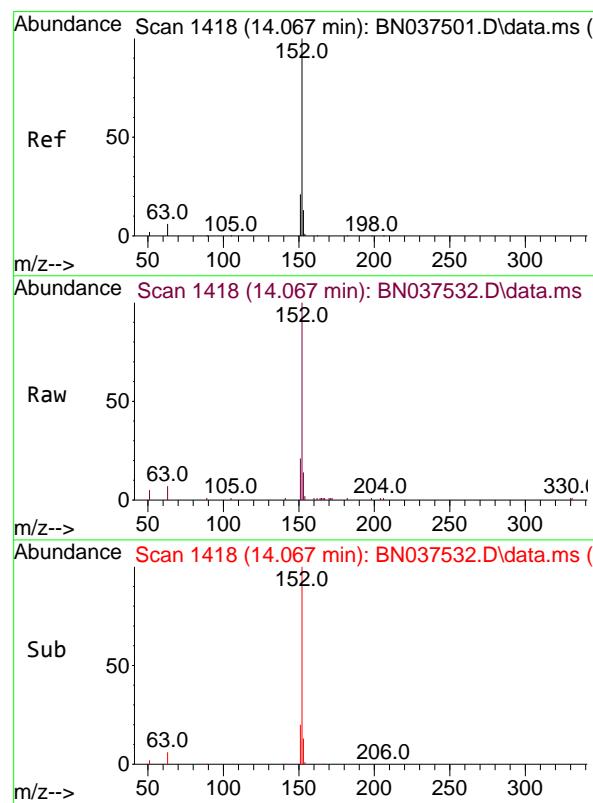
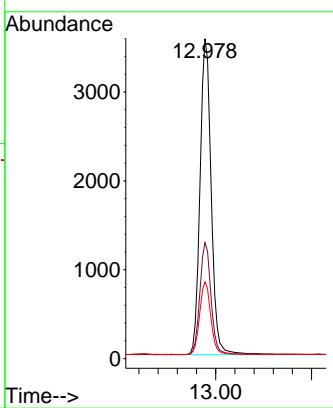
141 40.9 33.4 50.0





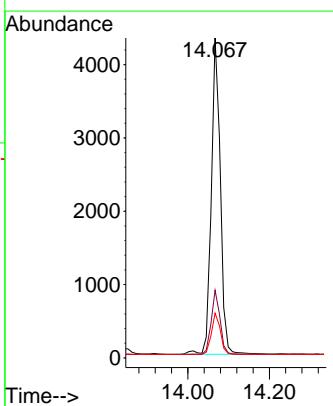
#15  
2-Fluorobiphenyl  
Concen: 0.405 ng  
RT: 12.978 min Scan# 1:Instrument :  
Delta R.T. -0.005 min BNA\_N  
Lab File: BN037532.D ClientSampleId :  
Acq: 22 Jul 2025 10:51 SSTDCCC0.4

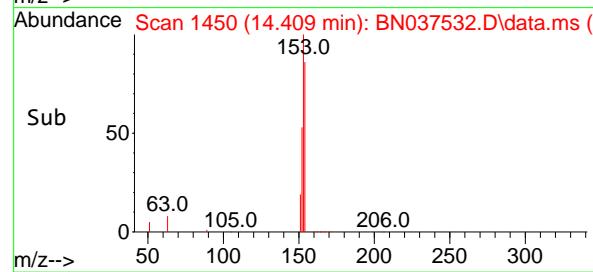
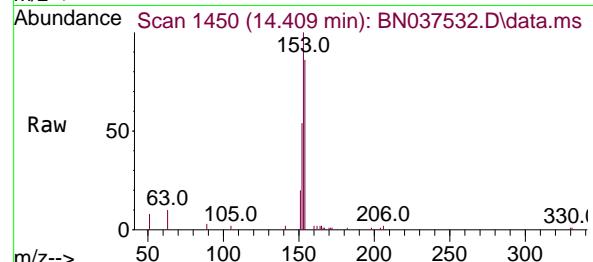
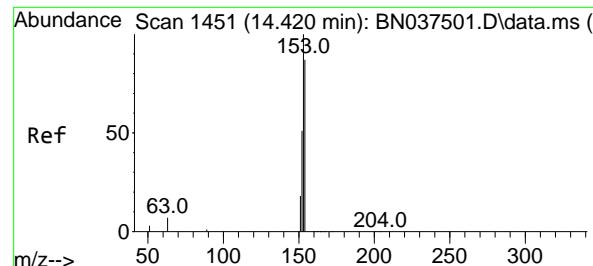
Tgt Ion:172 Resp: 7991  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.4 44.2  
170 24.0 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.393 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:152 Resp: 6666  
Ion Ratio Lower Upper  
152 100  
151 19.8 15.9 23.9  
153 13.1 10.7 16.1





#17

Acenaphthene

Concen: 0.383 ng

RT: 14.409 min Scan# 14

Delta R.T. -0.011 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

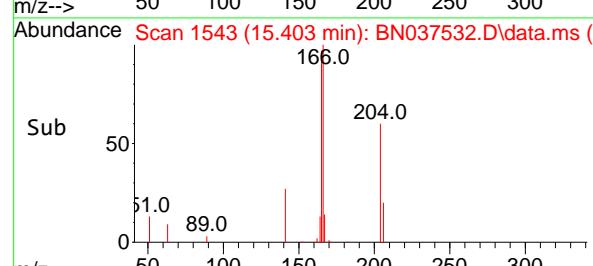
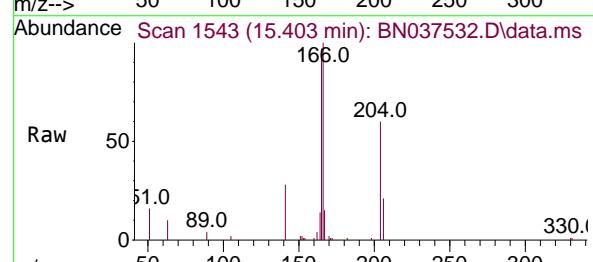
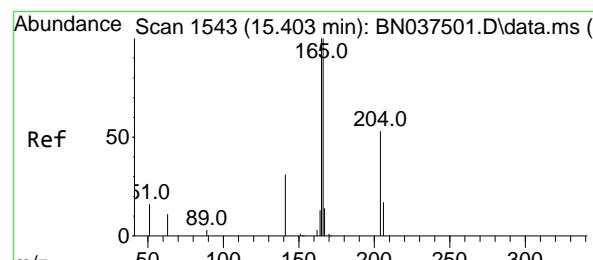
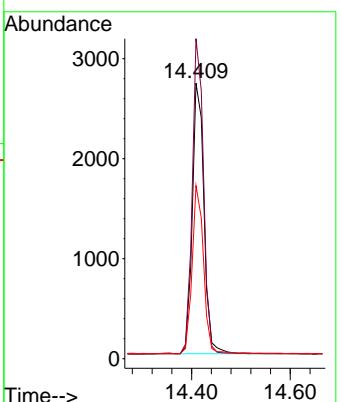
Tgt Ion:154 Resp: 4419

Ion Ratio Lower Upper

154 100

153 112.7 89.2 133.8

152 61.0 48.0 72.0



#18

Fluorene

Concen: 0.377 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

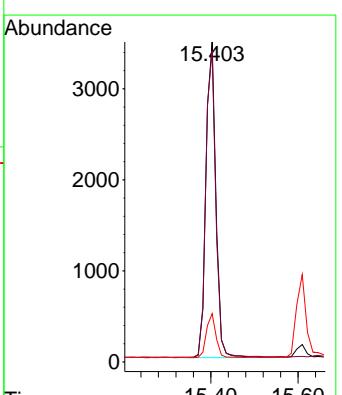
Tgt Ion:166 Resp: 5599

Ion Ratio Lower Upper

166 100

165 97.3 78.1 117.1

167 13.2 11.0 16.6



#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.013 min

Lab File: BN037532.D

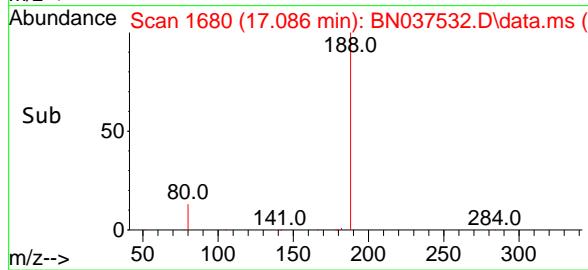
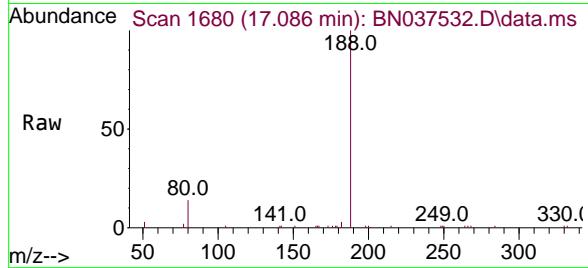
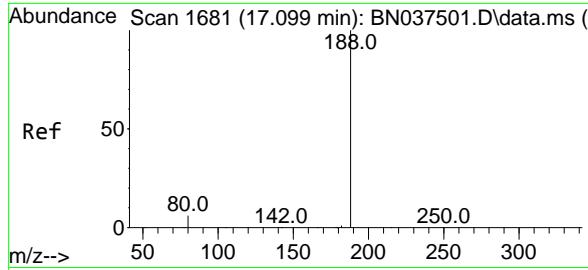
Acq: 22 Jul 2025 10:51

Instrument :

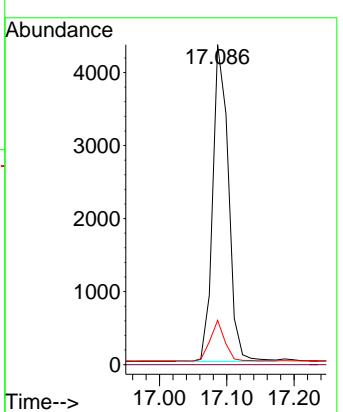
BNA\_N

ClientSampleId :

SSTDCCC0.4



Time--&gt;



#20

4,6-Dinitro-2-methylphenol

Concen: 0.385 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

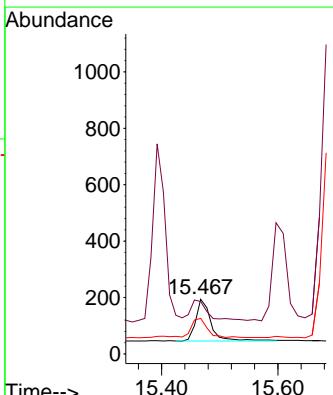
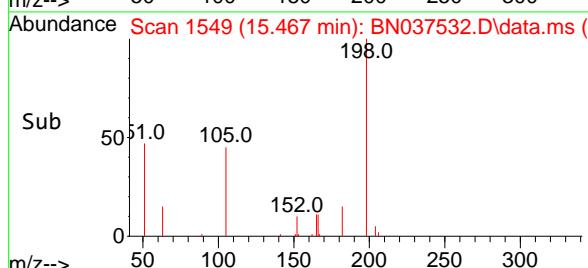
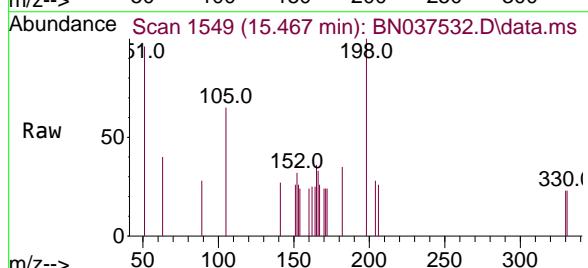
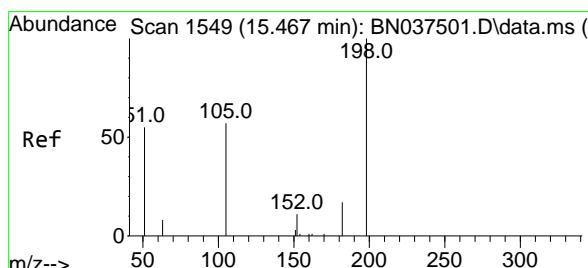
Tgt Ion:198 Resp: 281

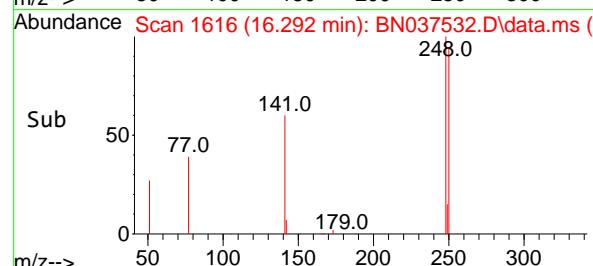
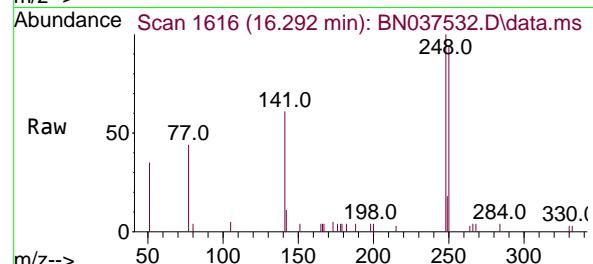
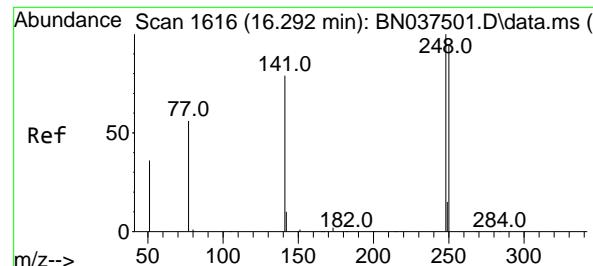
Ion Ratio Lower Upper

198 100

51 95.9 88.5 132.7

105 64.9 61.2 91.8

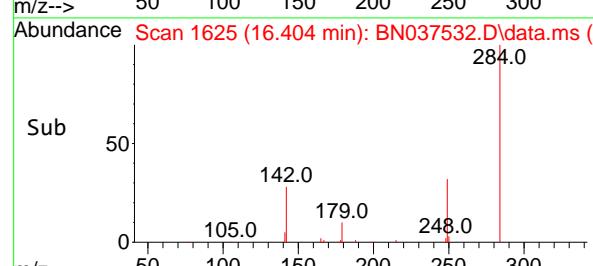
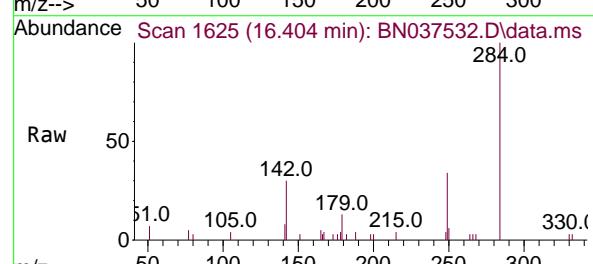
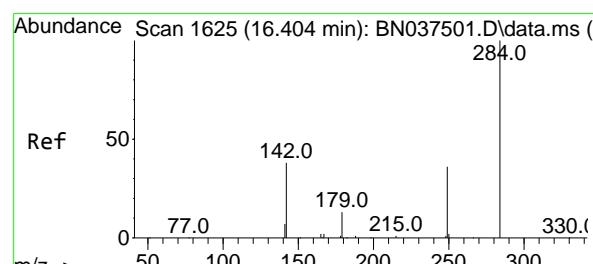
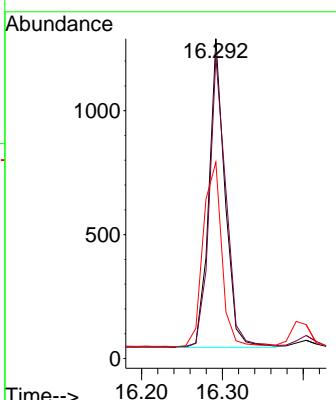




#21  
4-Bromophenyl-phenylether  
Concen: 0.382 ng  
RT: 16.292 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

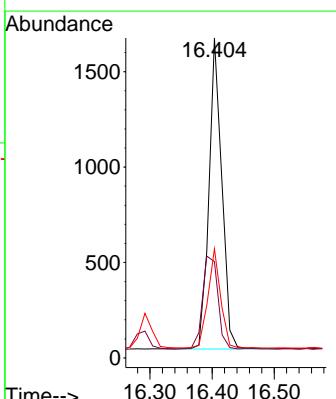
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

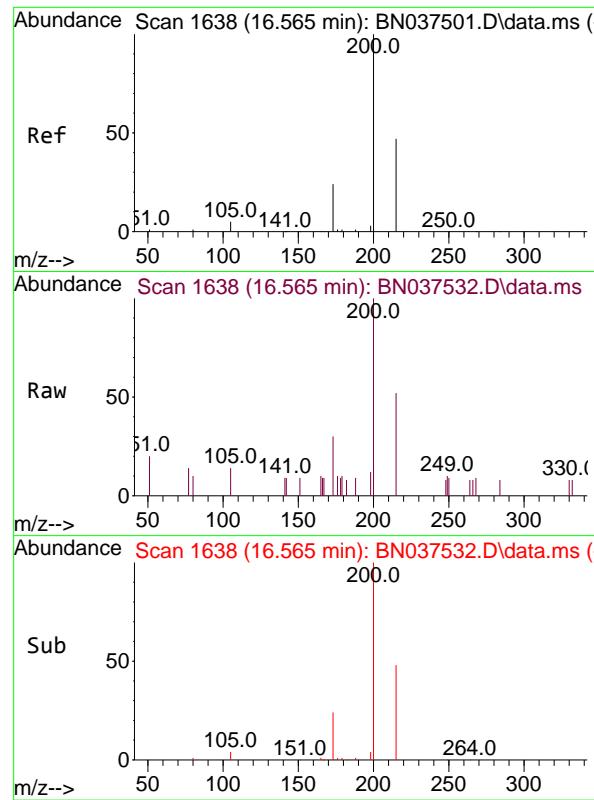
Tgt Ion:248 Resp: 1722  
Ion Ratio Lower Upper  
248 100  
250 94.3 76.2 114.2  
141 61.3 63.9 95.9#



#22  
Hexachlorobenzene  
Concen: 0.402 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:284 Resp: 2345  
Ion Ratio Lower Upper  
284 100  
142 35.7 28.9 43.3  
249 31.6 25.8 38.6

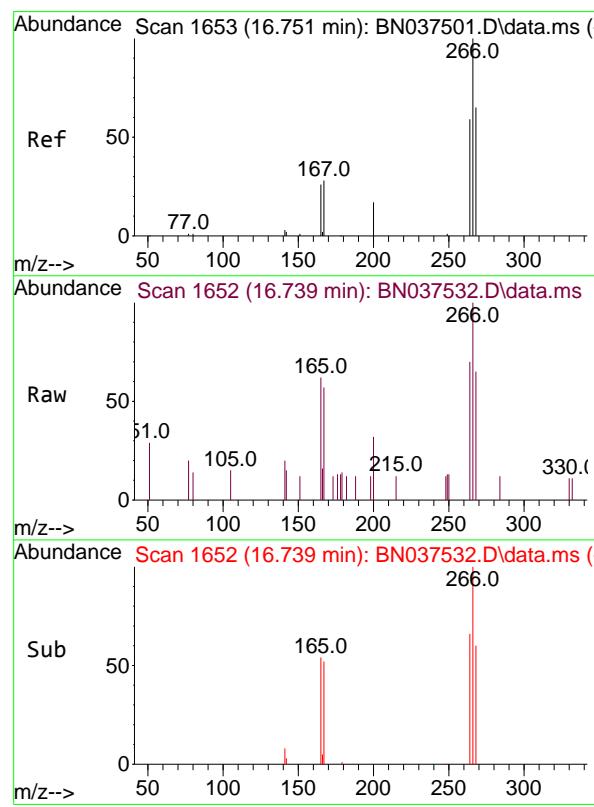
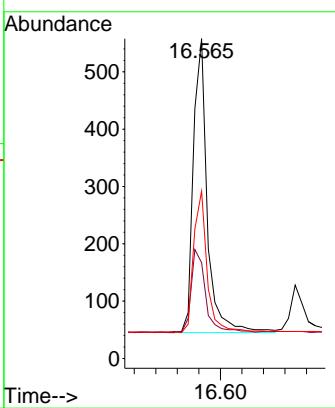




#23  
Atrazine  
Concen: 0.292 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

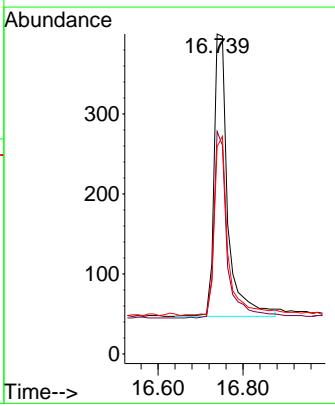
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

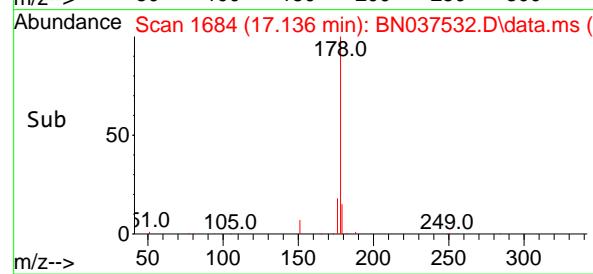
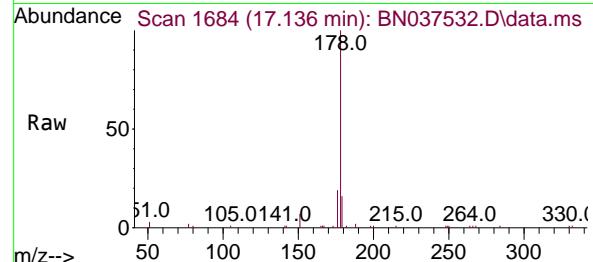
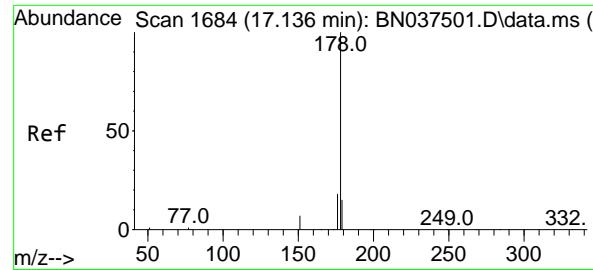
Tgt Ion:200 Resp: 919  
Ion Ratio Lower Upper  
200 100  
173 29.9 23.2 34.8  
215 52.3 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.304 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.013 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:266 Resp: 796  
Ion Ratio Lower Upper  
266 100  
264 63.2 49.3 73.9  
268 61.9 51.6 77.4





#25

Phenanthrene

Concen: 0.386 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037532.D

Acq: 22 Jul 2025 10:51

Instrument: BNA\_N

ClientSampleId: SSTDCCC0.4

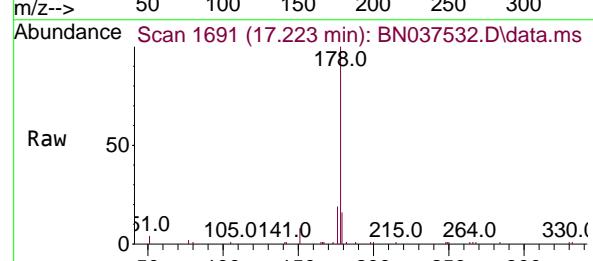
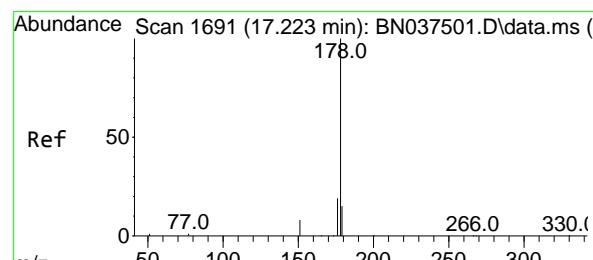
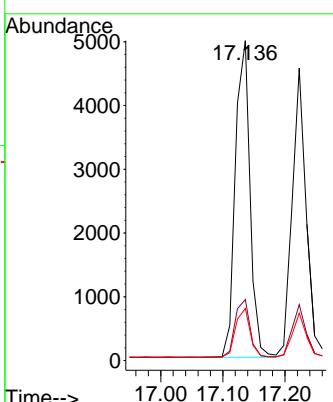
Tgt Ion:178 Resp: 8137

Ion Ratio Lower Upper

178 100

176 18.5 15.0 22.6

179 15.3 12.2 18.2



#26  
Anthracene  
Concen: 0.373 ng  
RT: 17.223 min Scan# 1691  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

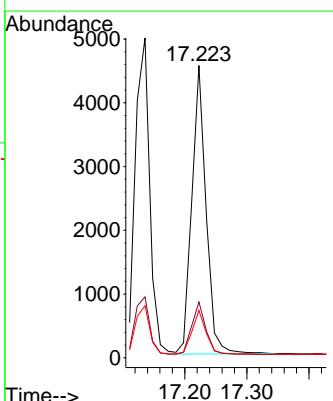
Tgt Ion:178 Resp: 7179

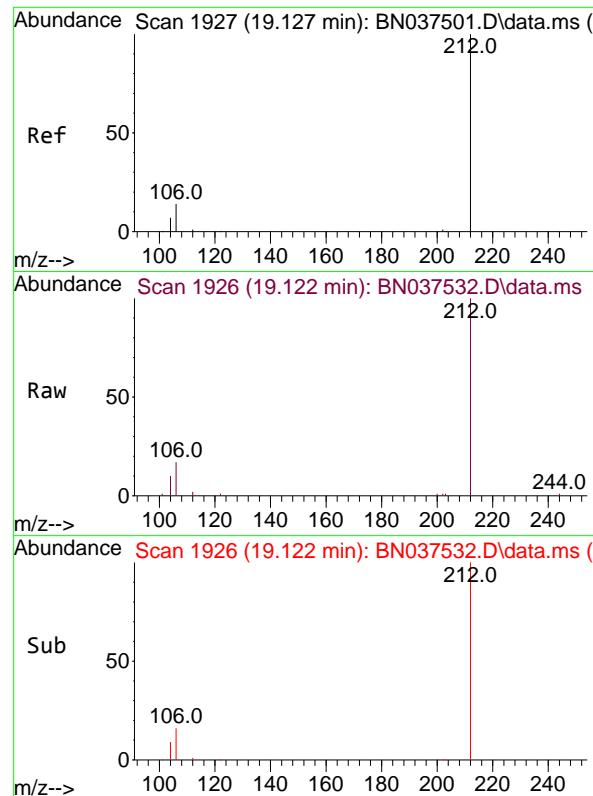
Ion Ratio Lower Upper

178 100

176 18.2 14.7 22.1

179 15.3 12.3 18.5

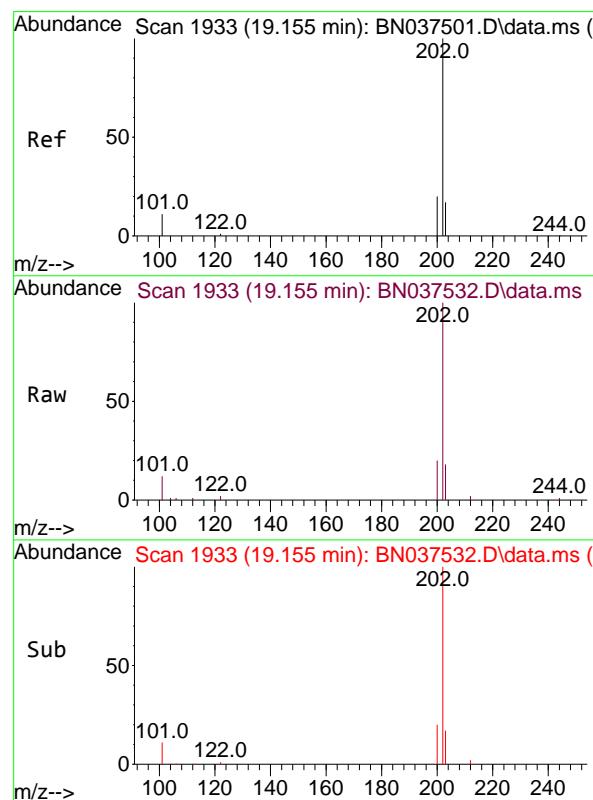
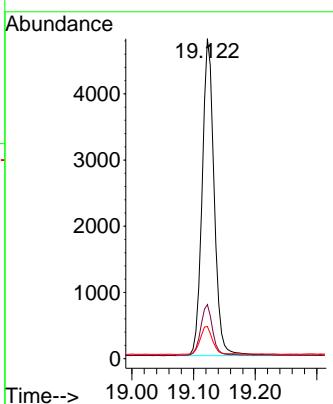




#27  
 Fluoranthene-d10  
 Concen: 0.348 ng  
 RT: 19.122 min Scan# 1926  
 Delta R.T. -0.005 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

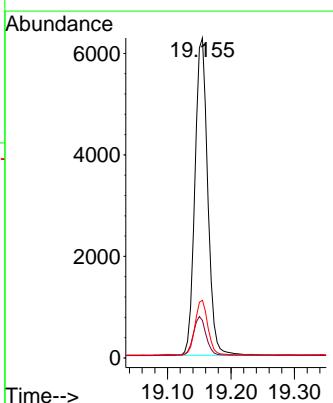
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

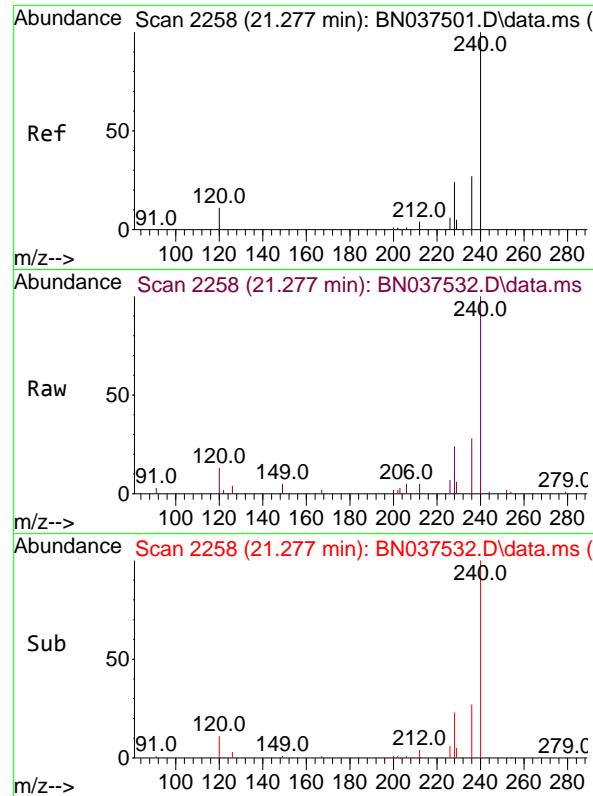
Tgt Ion:212 Resp: 6491  
 Ion Ratio Lower Upper  
 212 100  
 106 15.7 12.2 18.4  
 104 9.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.360 ng  
 RT: 19.155 min Scan# 1933  
 Delta R.T. -0.000 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

Tgt Ion:202 Resp: 8766  
 Ion Ratio Lower Upper  
 202 100  
 101 12.0 9.8 14.6  
 203 17.1 13.6 20.4

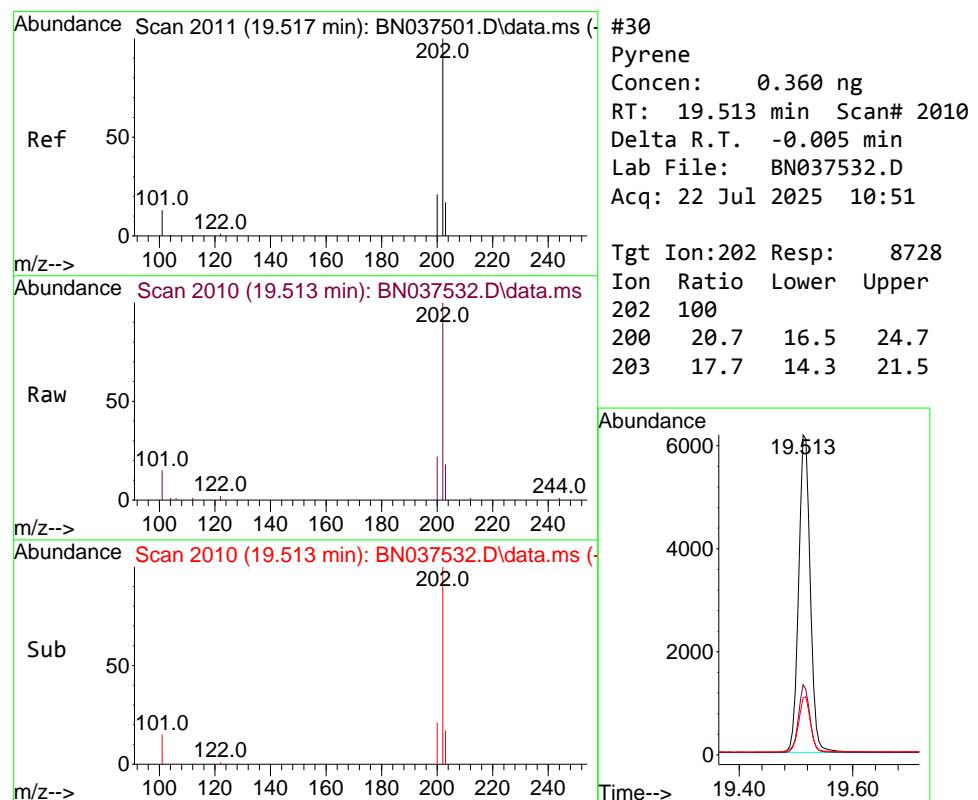
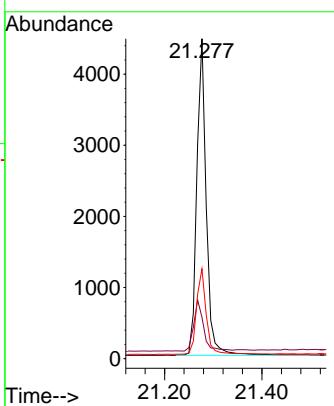




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

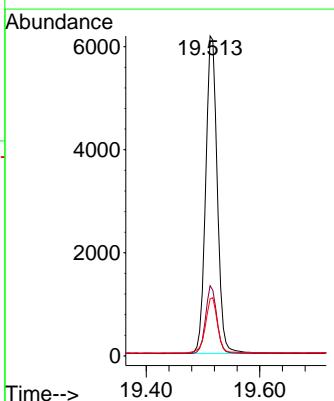
Instrument : BNA\_N  
ClientSampleId : SSTDCCCC0.4

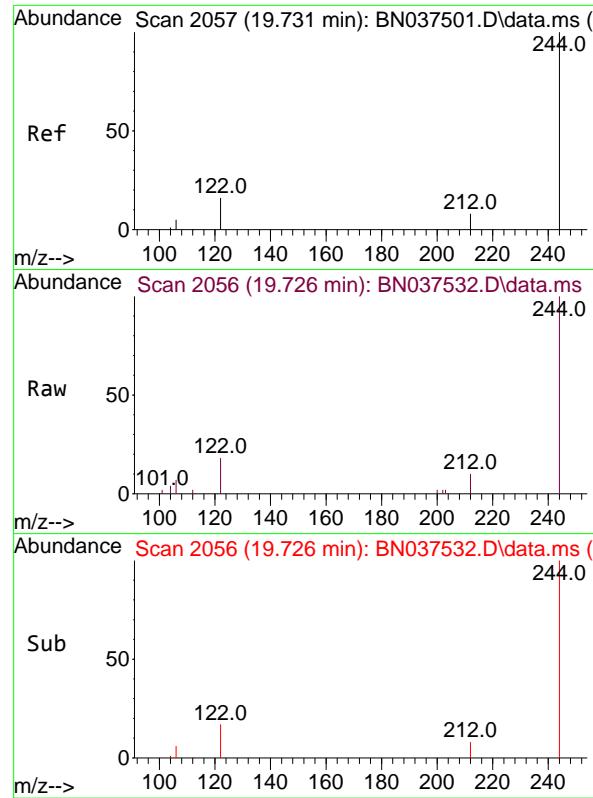
Tgt Ion:240 Resp: 6014  
Ion Ratio Lower Upper  
240 100  
120 12.9 10.7 16.1  
236 28.1 22.6 33.8



#30  
Pyrene  
Concen: 0.360 ng  
RT: 19.513 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:202 Resp: 8728  
Ion Ratio Lower Upper  
202 100  
200 20.7 16.5 24.7  
203 17.7 14.3 21.5

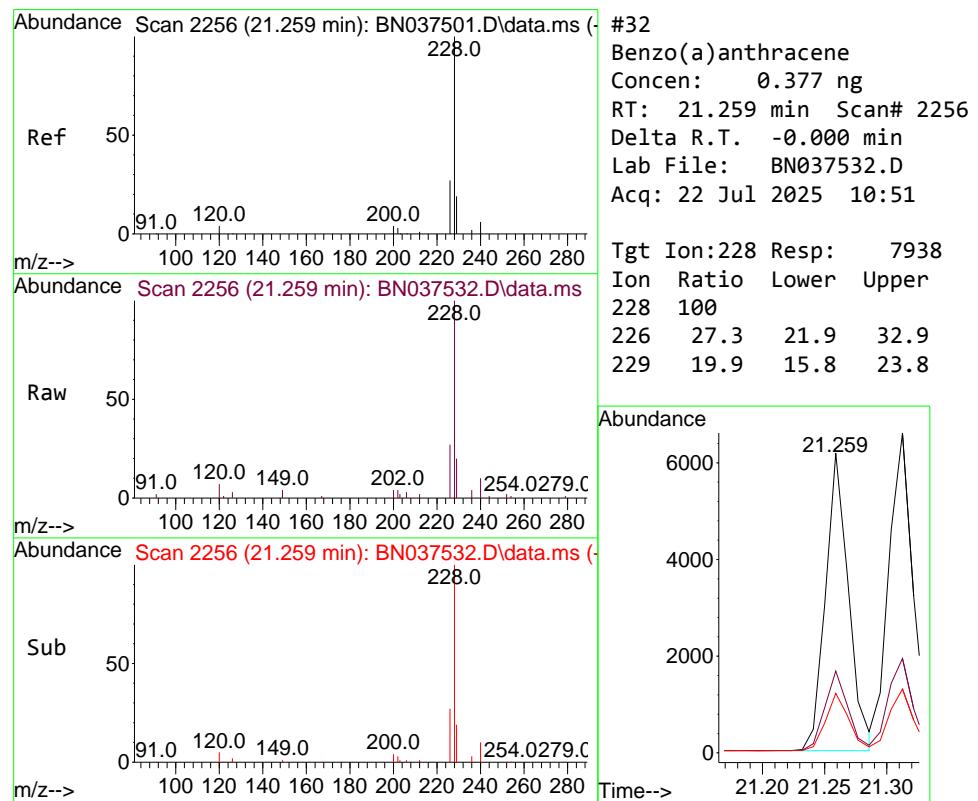
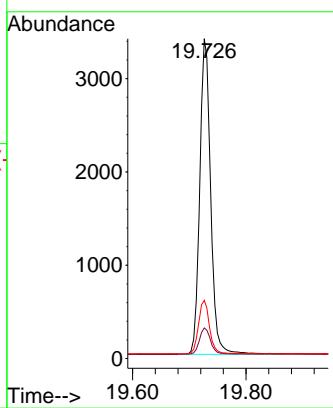




#31  
Terphenyl-d14  
Concen: 0.349 ng  
RT: 19.726 min Scan# 21  
Delta R.T. -0.005 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

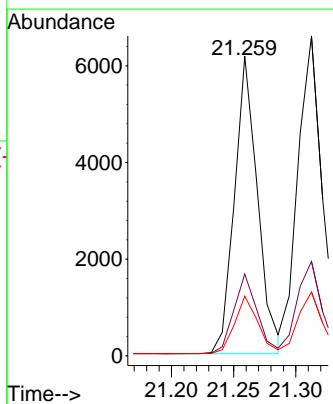
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

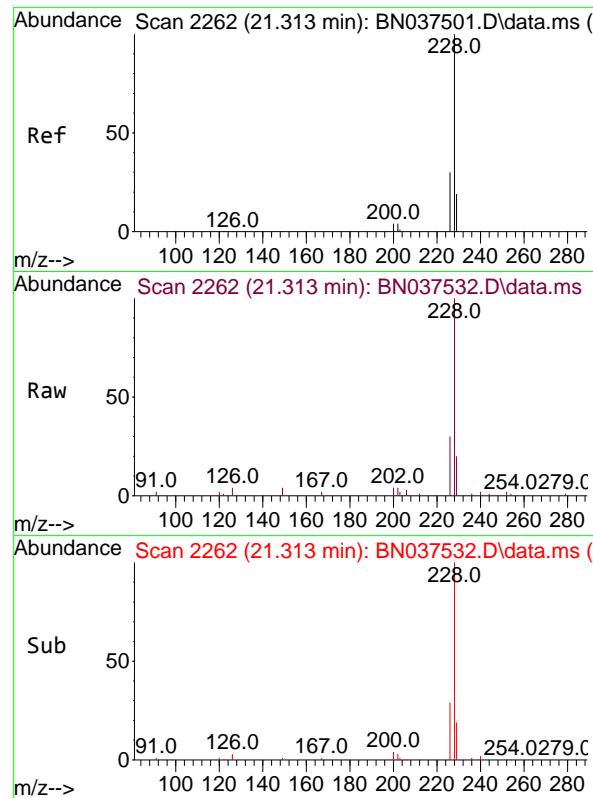
Tgt Ion:244 Resp: 4509  
Ion Ratio Lower Upper  
244 100  
212 9.6 7.4 11.2  
122 18.2 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.377 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

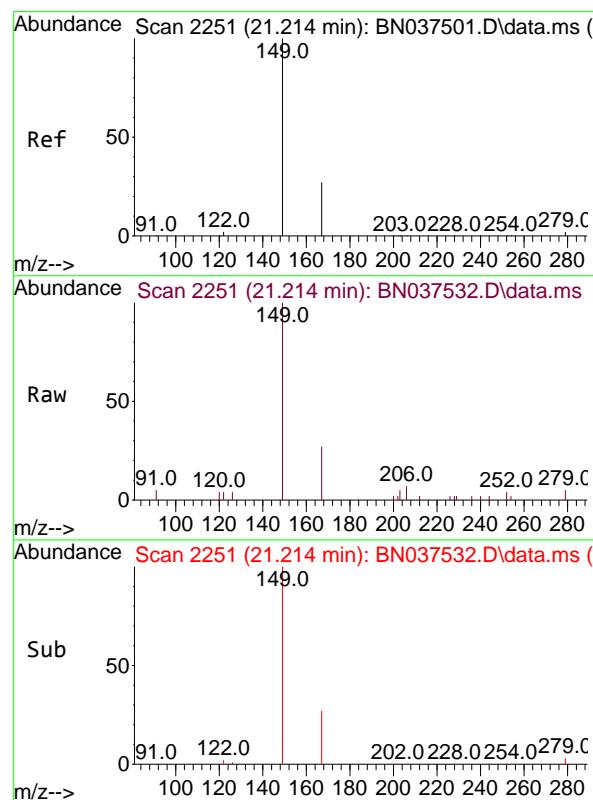
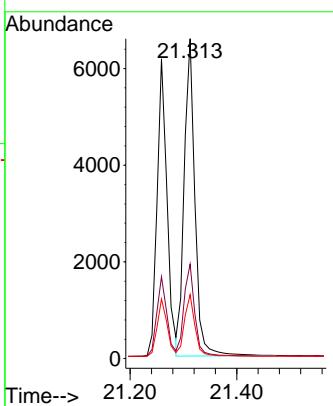
Tgt Ion:228 Resp: 7938  
Ion Ratio Lower Upper  
228 100  
226 27.3 21.9 32.9  
229 19.9 15.8 23.8





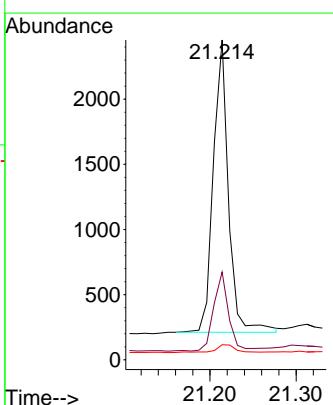
#33  
Chrysene  
Concen: 0.420 ng  
RT: 21.313 min Scan# 21  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51  
ClientSampleId : SSTDCCCC0.4

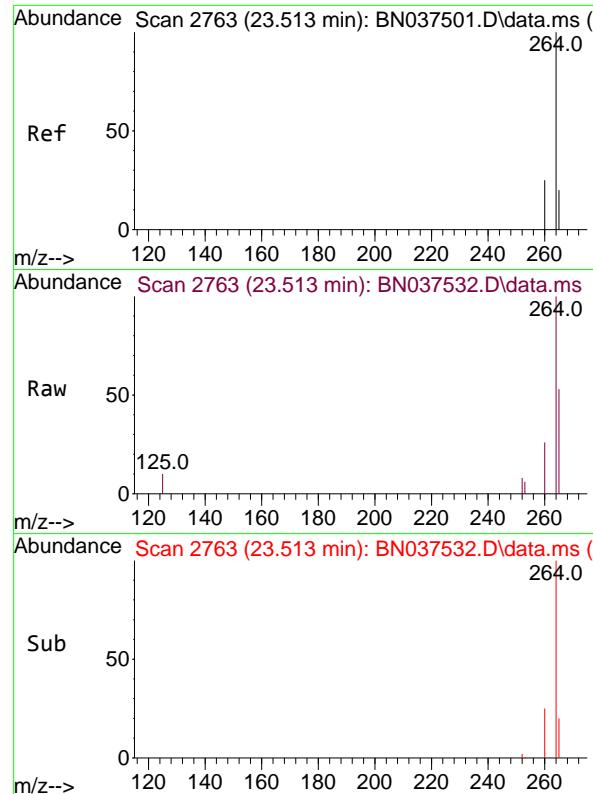
Tgt Ion:228 Resp: 9201  
Ion Ratio Lower Upper  
228 100  
226 29.5 24.2 36.4  
229 20.0 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.290 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:149 Resp: 2745  
Ion Ratio Lower Upper  
149 100  
167 26.2 21.8 32.8  
279 3.3 3.0 4.4

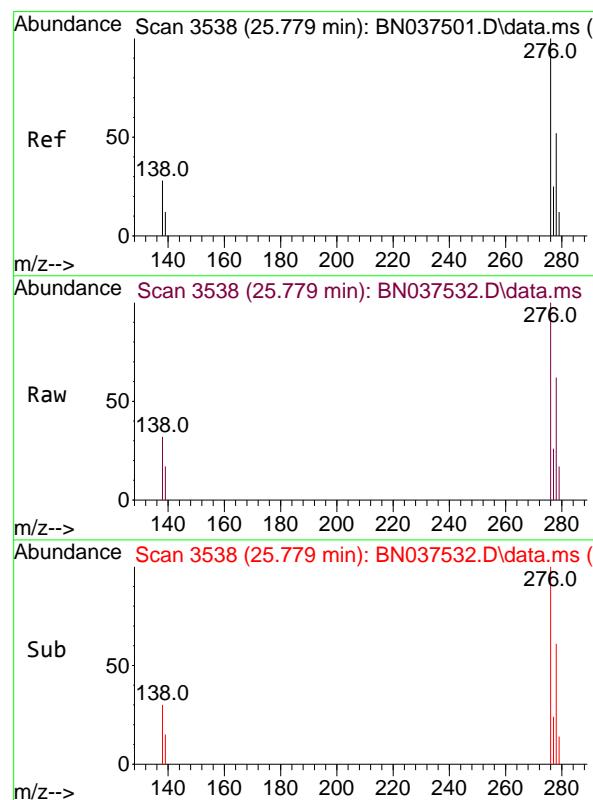
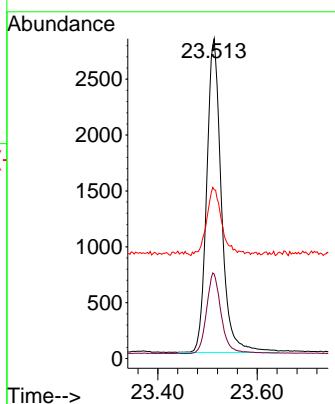




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

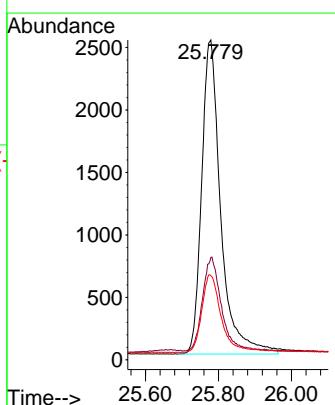
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

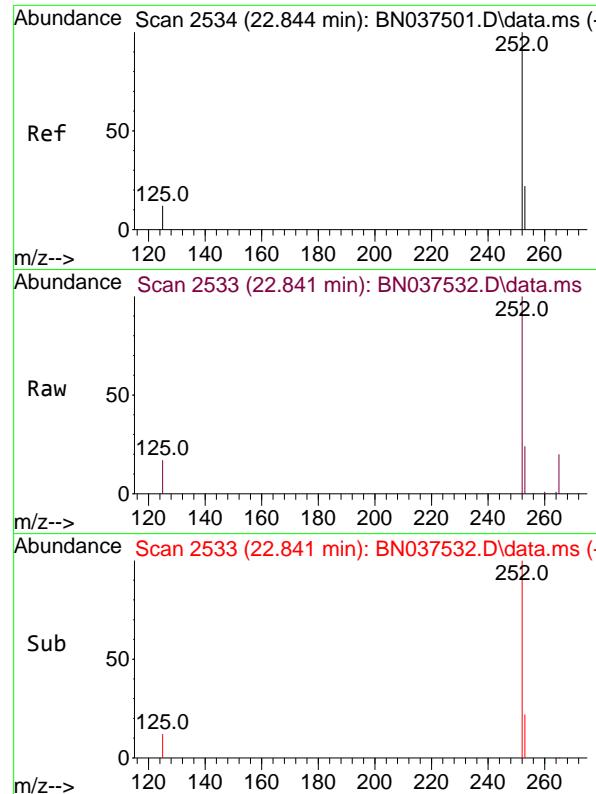
Tgt Ion:264 Resp: 5778  
Ion Ratio Lower Upper  
264 100  
260 26.4 21.2 31.8  
265 52.8 40.4 60.6



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.380 ng  
RT: 25.779 min Scan# 3538  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:276 Resp: 9143  
Ion Ratio Lower Upper  
276 100  
138 29.0 24.0 36.0  
277 25.1 20.5 30.7

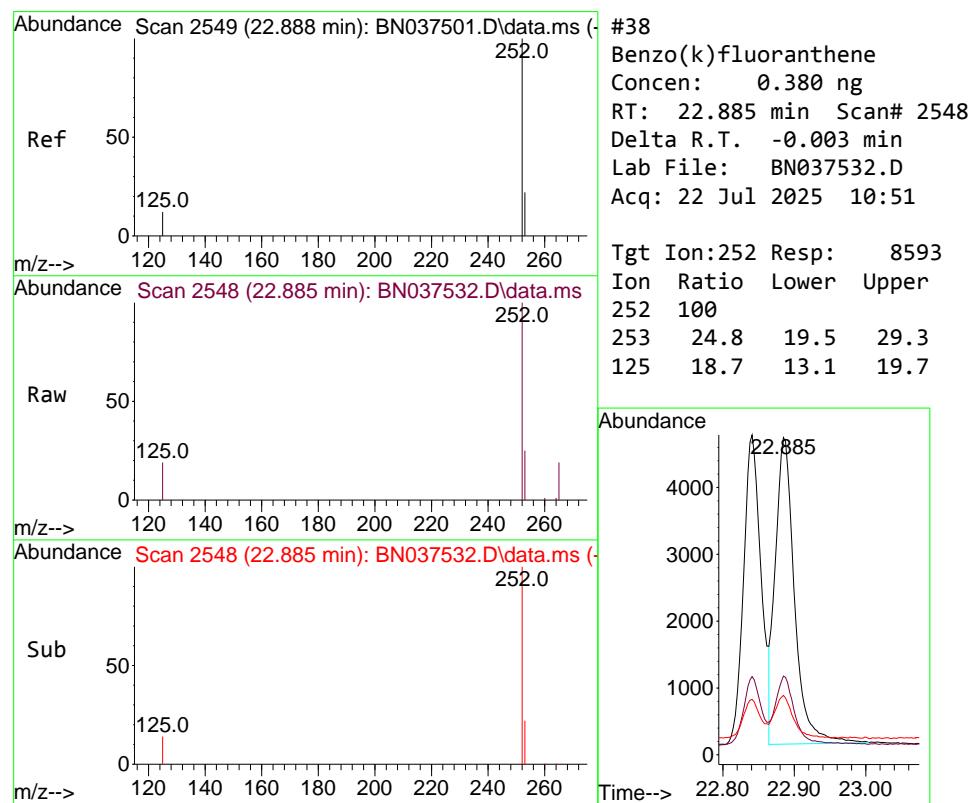
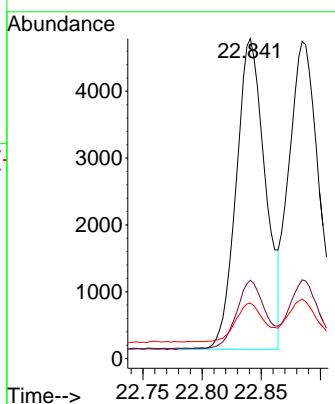




#37  
 Benzo(b)fluoranthene  
 Concen: 0.363 ng  
 RT: 22.841 min Scan# 21  
 Delta R.T. -0.003 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

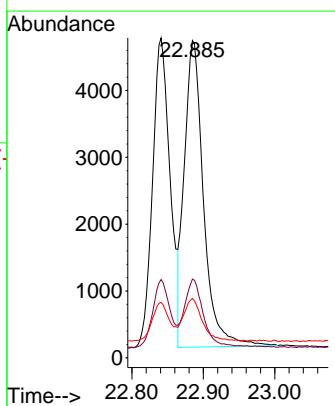
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

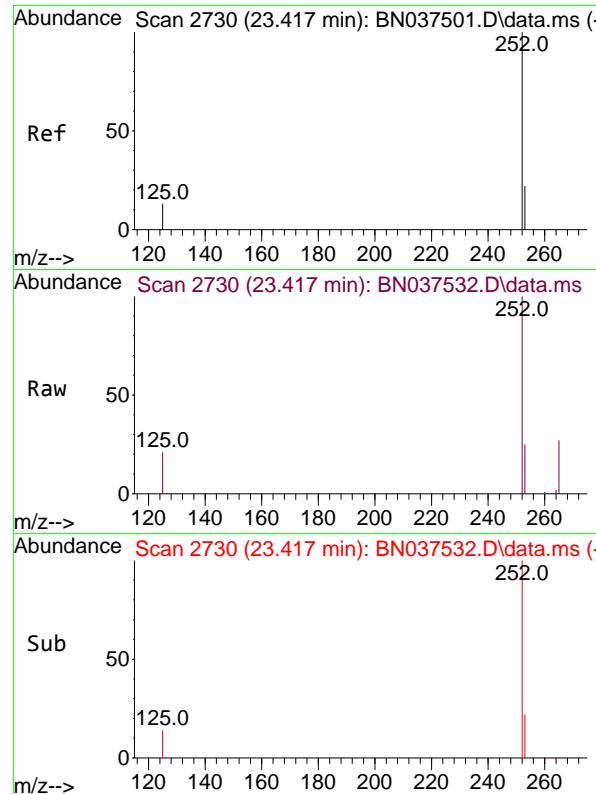
Tgt Ion:252 Resp: 7956  
 Ion Ratio Lower Upper  
 252 100  
 253 24.5 19.5 29.3  
 125 17.3 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.380 ng  
 RT: 22.885 min Scan# 2548  
 Delta R.T. -0.003 min  
 Lab File: BN037532.D  
 Acq: 22 Jul 2025 10:51

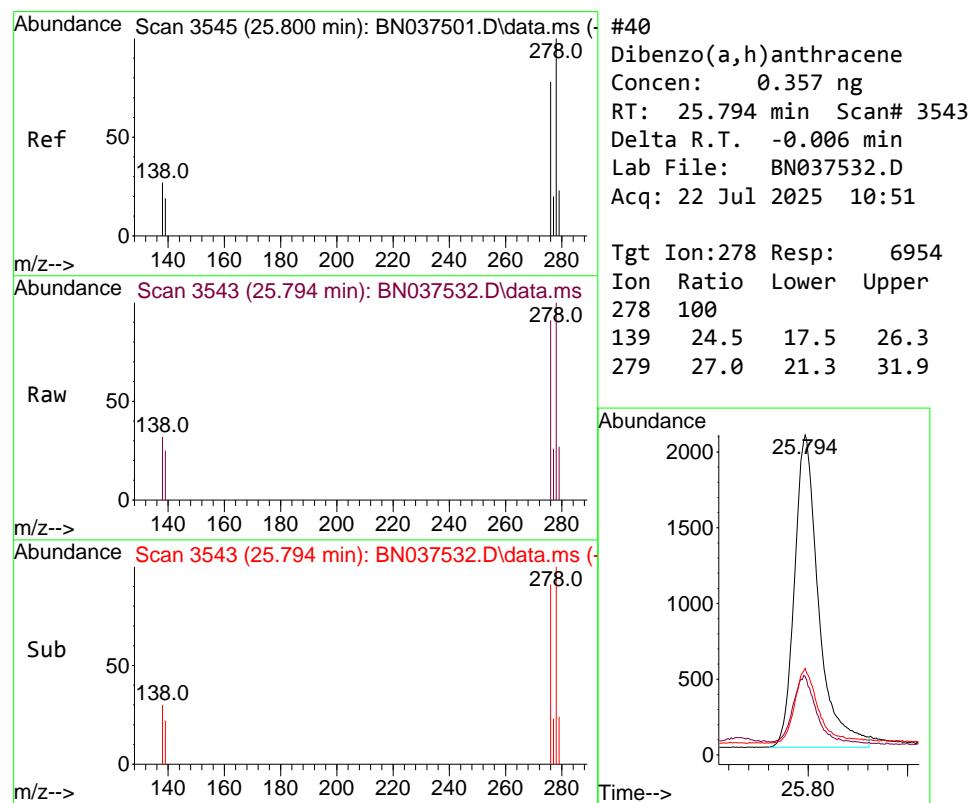
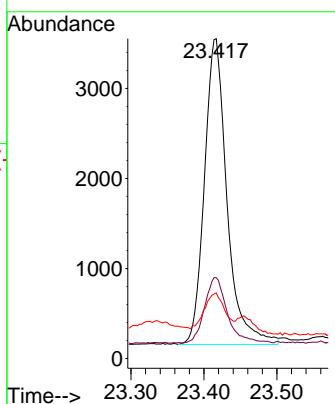
Tgt Ion:252 Resp: 8593  
 Ion Ratio Lower Upper  
 252 100  
 253 24.8 19.5 29.3  
 125 18.7 13.1 19.7





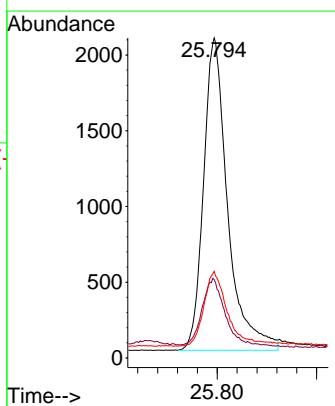
#39  
Benzo(a)pyrene  
Concen: 0.399 ng  
RT: 23.417 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51  
ClientSampleId : SSTDCCCC0.4

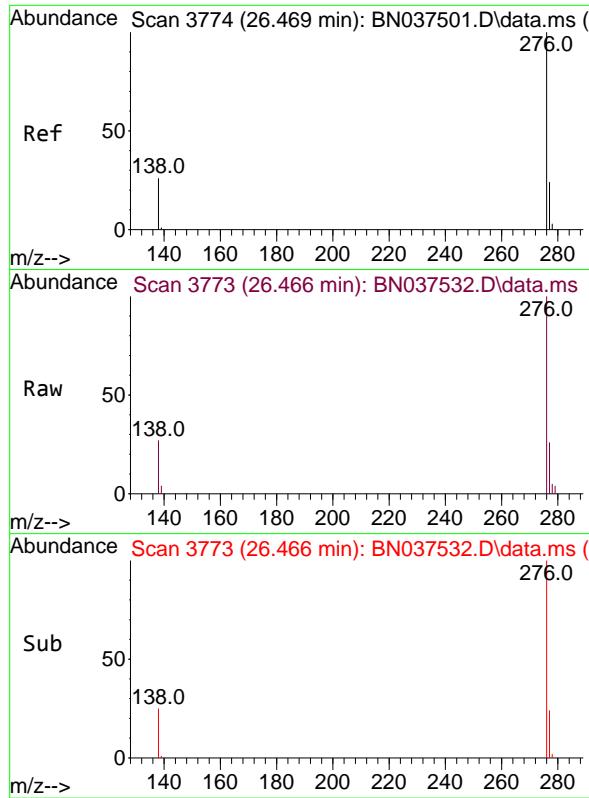
Tgt Ion:252 Resp: 7309  
Ion Ratio Lower Upper  
252 100  
253 25.3 19.9 29.9  
125 20.5 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.357 ng  
RT: 25.794 min Scan# 3543  
Delta R.T. -0.006 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Tgt Ion:278 Resp: 6954  
Ion Ratio Lower Upper  
278 100  
139 24.5 17.5 26.3  
279 27.0 21.3 31.9

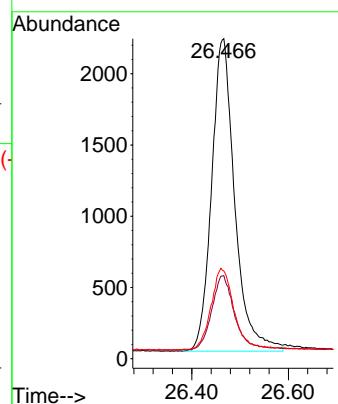




#41  
Benzo(g,h,i)perylene  
Concen: 0.361 ng  
RT: 26.466 min Scan# 3  
Delta R.T. -0.003 min  
Lab File: BN037532.D  
Acq: 22 Jul 2025 10:51

Instrument : BNA\_N  
ClientSampleId : SSTDCCCC0.4

Tgt Ion:276 Resp: 7290  
Ion Ratio Lower Upper  
276 100  
277 25.9 20.9 31.3  
138 27.4 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037532.D  
 Acq On : 22 Jul 2025 10:51  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 22 11:15:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 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	120	0.00
2	1,4-Dioxane	0.400	0.429	-7.2	126	0.00
3	n-Nitrosodimethylamine	0.400	0.369	7.8	116	0.00
4 S	2-Fluorophenol	0.400	0.390	2.5	118	0.00
5 S	Phenol-d6	0.400	0.385	3.8	121	0.00
6	bis(2-Chloroethyl)ether	0.400	0.402	-0.5	122	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	123	-0.01
8 S	Nitrobenzene-d5	0.400	0.358	10.5	117	-0.01
9	Naphthalene	0.400	0.388	3.0	122	0.00
10	Hexachlorobutadiene	0.400	0.389	2.8	120	-0.01
11 SURR	2-Methylnaphthalene-d10	0.400	0.366	8.5	120	0.00
12	2-Methylnaphthalene	0.400	0.377	5.8	120	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	114	0.00
14 S	2,4,6-Tribromophenol	0.400	0.297	25.8#	96	-0.01
15 S	2-Fluorobiphenyl	0.400	0.405	-1.3	117	0.00
16	Acenaphthylene	0.400	0.393	1.8	116	0.00
17	Acenaphthene	0.400	0.383	4.3	113	-0.01
18	Fluorene	0.400	0.377	5.8	113	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	109	-0.01
20	4,6-Dinitro-2-methylphenol	0.400	0.385	3.8	105	0.00
21	4-Bromophenyl-phenylether	0.400	0.382	4.5	109	0.00
22	Hexachlorobenzene	0.400	0.402	-0.5	110	0.00
23	Atrazine	0.400	0.292	27.0#	89	0.00
24	Pentachlorophenol	0.400	0.304	24.0	98	-0.01
25	Phenanthrene	0.400	0.386	3.5	108	0.00
26	Anthracene	0.400	0.373	6.8	109	0.00
27 SURR	Fluoranthene-d10	0.400	0.348	13.0	104	0.00
28	Fluoranthene	0.400	0.360	10.0	105	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	115	0.00
30	Pyrene	0.400	0.360	10.0	104	0.00
31 S	Terphenyl-d14	0.400	0.349	12.8	103	0.00
32	Benzo(a)anthracene	0.400	0.377	5.8	114	0.00
33	Chrysene	0.400	0.420	-5.0	123	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.290	27.5#	93	0.00
35 I	Perylene-d12	0.400	0.400	0.0	120	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.380	5.0	126	0.00
37	Benzo(b)fluoranthene	0.400	0.363	9.3	114	0.00
38	Benzo(k)fluoranthene	0.400	0.380	5.0	120	0.00
39 C	Benzo(a)pyrene	0.400	0.399	0.3	128	0.00
40	Dibenzo(a,h)anthracene	0.400	0.357	10.8	119	0.00
41	Benzo(g,h,i)perylene	0.400	0.361	9.8	116	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037532.D  
 Acq On : 22 Jul 2025 10:51  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 22 11:15:42 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 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	120	0.00
2	1,4-Dioxane	0.385	0.413	-7.3	126	0.00
3	n-Nitrosodimethylamine	0.484	0.446	7.9	116	0.00
4 S	2-Fluorophenol	0.989	0.964	2.5	118	0.00
5 S	Phenol-d6	1.241	1.193	3.9	121	0.00
6	bis(2-Chloroethyl)ether	1.033	1.039	-0.6	122	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	123	-0.01
8 S	Nitrobenzene-d5	0.299	0.268	10.4	117	-0.01
9	Naphthalene	1.067	1.035	3.0	122	0.00
10	Hexachlorobutadiene	0.236	0.229	3.0	120	-0.01
11 SURR	2-Methylnaphthalene-d10	0.574	0.525	8.5	120	0.00
12	2-Methylnaphthalene	0.701	0.661	5.7	120	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	114	0.00
14 S	2,4,6-Tribromophenol	0.197	0.146	25.9#	96	-0.01
15 S	2-Fluorobiphenyl	2.080	2.108	-1.3	117	0.00
16	Acenaphthylene	1.792	1.759	1.8	116	0.00
17	Acenaphthene	1.218	1.166	4.3	113	-0.01
18	Fluorene	1.569	1.477	5.9	113	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	109	-0.01
20	4,6-Dinitro-2-methylphenol	0.057	0.040	29.8#	105	0.00
21	4-Bromophenyl-phenylether	0.256	0.244	4.7	109	0.00
22	Hexachlorobenzene	0.331	0.333	-0.6	110	0.00
23	Atrazine	0.179	0.130	27.4#	89	0.00
24	Pentachlorophenol	0.149	0.113	24.2	98	-0.01
25	Phenanthrene	1.198	1.155	3.6	108	0.00
26	Anthracene	1.093	1.019	6.8	109	0.00
27 SURR	Fluoranthene-d10	1.060	0.922	13.0	104	0.00
28	Fluoranthene	1.382	1.245	9.9	105	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	115	0.00
30	Pyrene	1.612	1.451	10.0	104	0.00
31 S	Terphenyl-d14	0.859	0.750	12.7	103	0.00
32	Benzo(a)anthracene	1.401	1.320	5.8	114	0.00
33	Chrysene	1.459	1.530	-4.9	123	0.00
34	Bis(2-ethylhexyl)phthalate	0.630	0.456	27.6#	93	0.00
35 I	Perylene-d12	1.000	1.000	0.0	120	0.00
36	Indeno(1,2,3-cd)pyrene	1.666	1.582	5.0	126	0.00
37	Benzo(b)fluoranthene	1.518	1.377	9.3	114	0.00
38	Benzo(k)fluoranthene	1.567	1.487	5.1	120	0.00
39 C	Benzo(a)pyrene	1.267	1.265	0.2	128	0.00
40	Dibenzo(a,h)anthracene	1.349	1.204	10.7	119	0.00
41	Benzo(g,h,i)perylene	1.397	1.262	9.7	116	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: AllianceContract: TETR06Lab Code: ACESDG No.: Q2644Instrument ID: BNA\_NCalibration Date/Time: 07/22/2025 19:17Lab File ID: BN037546.DInit. Calib. Date(s): 07/15/2025 07/15/2025EPA Sample No.: SSTDCCC0.4ECInit. Calib. Time(s): 12:36 16:14GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.574	0.516		-10.1	50.0
Fluoranthene-d10	1.060	0.959		-9.5	50.0
2-Fluorophenol	0.989	0.861		-12.9	50.0
Phenol-d6	1.241	1.033		-16.8	50.0
Nitrobenzene-d5	0.299	0.280		-6.4	50.0
2-Fluorobiphenyl	2.080	2.268		9.0	50.0
2,4,6-Tribromophenol	0.197	0.151		-23.4	50.0
Terphenyl-d14	0.859	0.825		-4.0	50.0
1,4-Dioxane	0.385	0.403		4.7	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037546.D  
 Acq On : 22 Jul 2025 19:17  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Jul 23 04:24:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

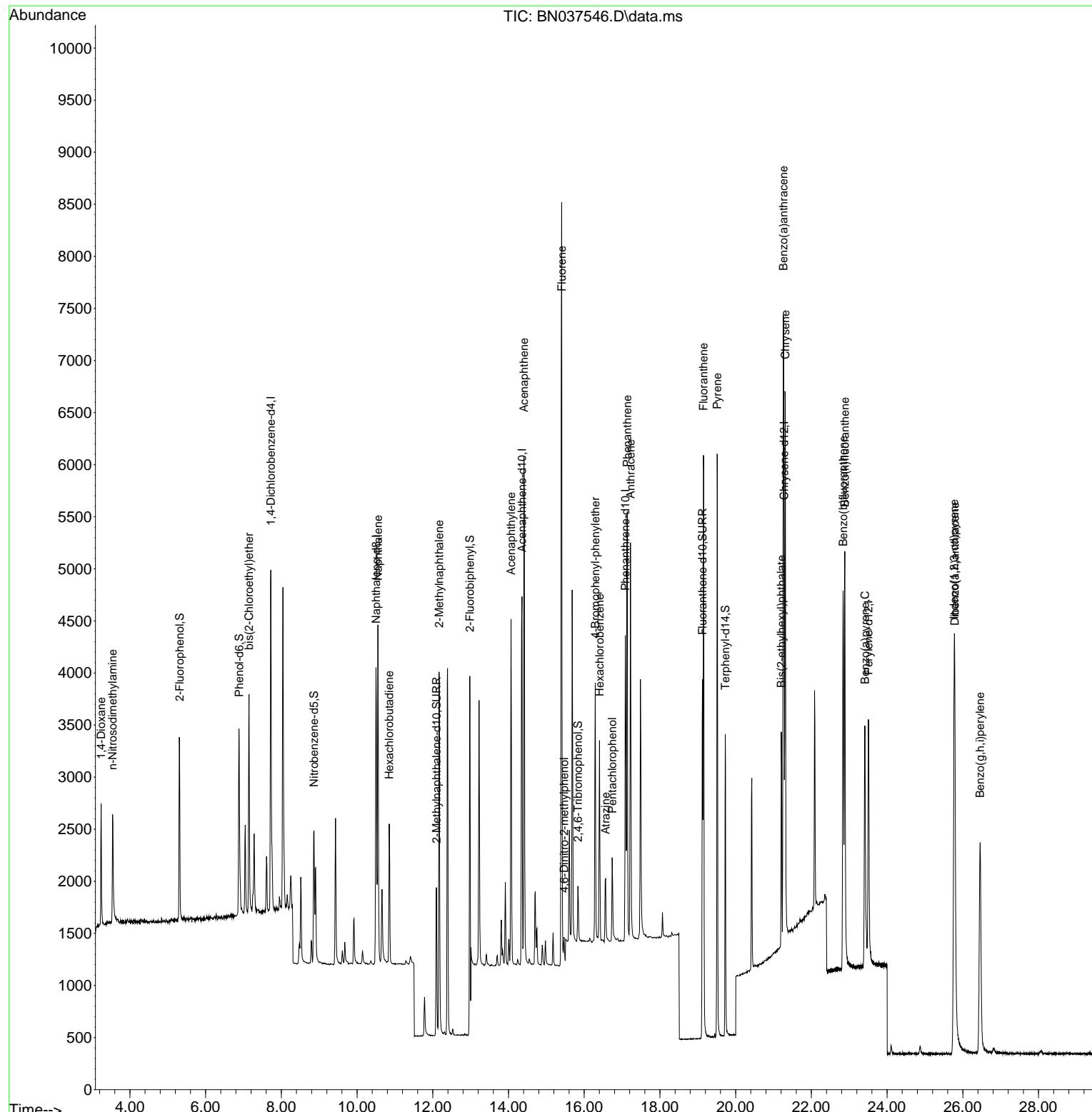
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	1676	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	4081	0.400	ng	#-0.01
13) Acenaphthene-d10	14.355	164	2127	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4107	0.400	ng	#-0.01
29) Chrysene-d12	21.277	240	3447	0.400	ng	0.00
35) Perylene-d12	23.504	264	3274	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	1443	0.348	ng	0.00
5) Phenol-d6	6.886	99	1731	0.333	ng	0.00
8) Nitrobenzene-d5	8.864	82	1141	0.374	ng	0.00
11) 2-Methylnaphthalene-d10	12.095	152	2105	0.360	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	322	0.308	ng	-0.01
15) 2-Fluorobiphenyl	12.978	172	4825	0.436	ng	0.00
27) Fluoranthene-d10	19.122	212	3937	0.362	ng	0.00
31) Terphenyl-d14	19.726	244	2844	0.384	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	676	0.420	ng	96
3) n-Nitrosodimethylamine	3.543	42	875	0.432	ng	# 80
6) bis(2-Chloroethyl)ether	7.146	93	1567	0.362	ng	98
9) Naphthalene	10.551	128	4201	0.386	ng	99
10) Hexachlorobutadiene	10.850	225	1101	0.458	ng	# 99
12) 2-Methylnaphthalene	12.166	142	2615	0.365	ng	96
16) Acenaphthylene	14.067	152	3609	0.379	ng	99
17) Acenaphthene	14.409	154	2497	0.385	ng	97
18) Fluorene	15.403	166	3214	0.385	ng	99
20) 4,6-Dinitro-2-methylph...	15.467	198	172	0.399	ng	91
21) 4-Bromophenyl-phenylether	16.292	248	995	0.378	ng	93
22) Hexachlorobenzene	16.404	284	1436	0.422	ng	98
23) Atrazine	16.565	200	630	0.343	ng	93
24) Pentachlorophenol	16.739	266	439	0.288	ng	99
25) Phenanthrene	17.136	178	4815	0.391	ng	99
26) Anthracene	17.223	178	4132	0.368	ng	100
28) Fluoranthene	19.150	202	5257	0.371	ng	98
30) Pyrene	19.512	202	5168	0.372	ng	99
32) Benzo(a)anthracene	21.259	228	4434	0.367	ng	99
33) Chrysene	21.312	228	5071	0.403	ng	98
34) Bis(2-ethylhexyl)phtha...	21.205	149	2039	0.375	ng	97
36) Indeno(1,2,3-cd)pyrene	25.770	276	5336	0.391	ng	98
37) Benzo(b)fluoranthene	22.838	252	4623	0.372	ng	99
38) Benzo(k)fluoranthene	22.882	252	5250	0.409	ng	98
39) Benzo(a)pyrene	23.414	252	3741	0.361	ng	96
40) Dibenzo(a,h)anthracene	25.788	278	4242	0.384	ng	97
41) Benzo(g,h,i)perylene	26.457	276	4357	0.381	ng	97

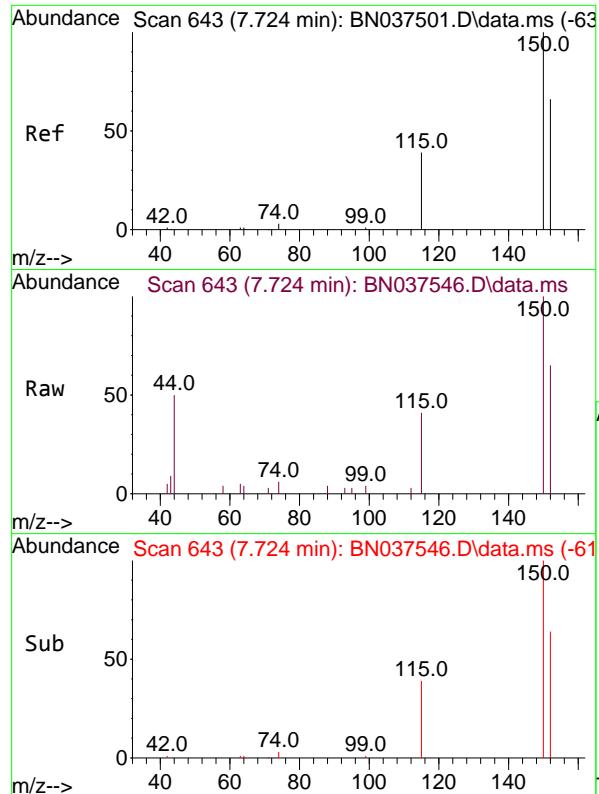
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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 Acq On : 22 Jul 2025 19:17  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Jul 23 04:24:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

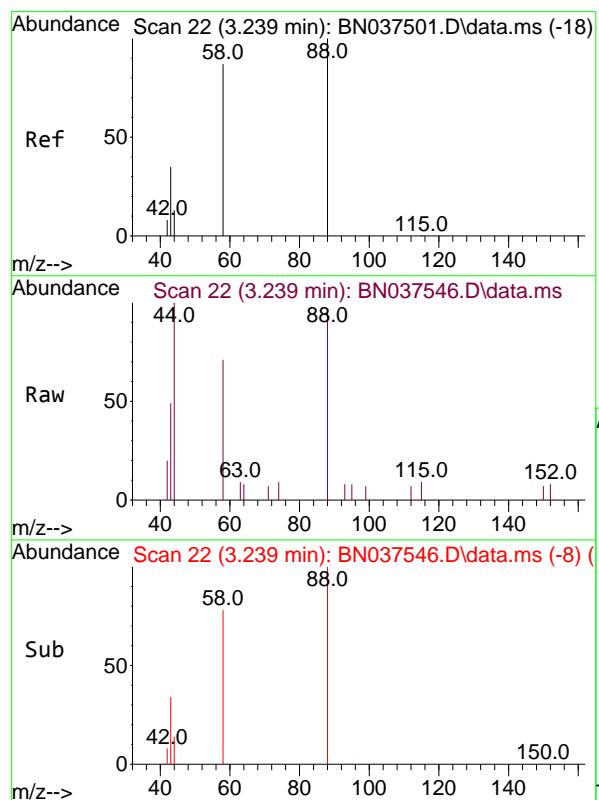
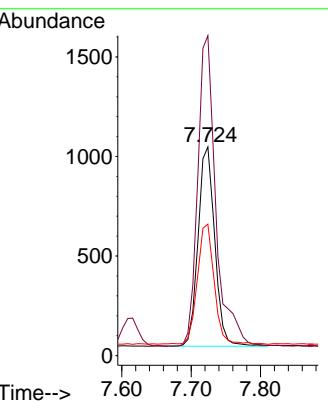




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

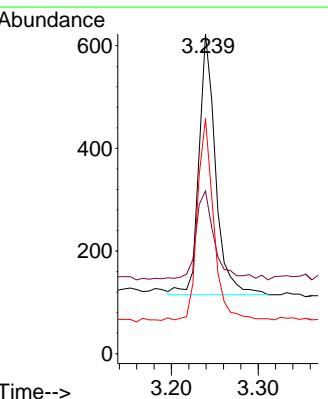
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ClientSampleId : SSTDCCC0.4EC

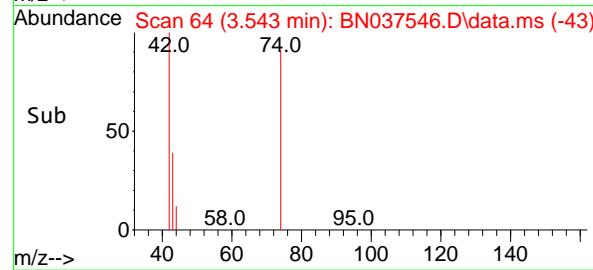
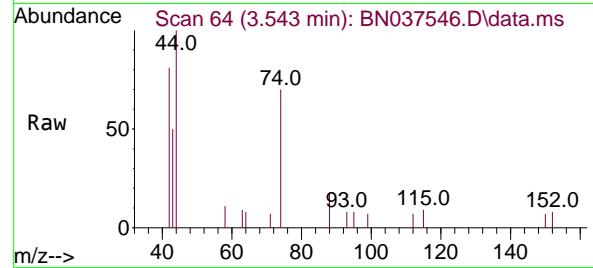
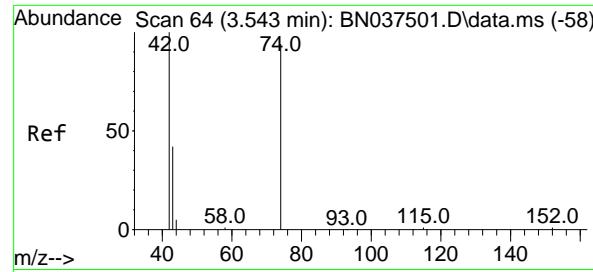
Tgt Ion:152 Resp: 1676  
Ion Ratio Lower Upper  
152 100  
150 153.3 119.8 179.8  
115 63.0 49.1 73.7



#2  
1,4-Dioxane  
Concen: 0.420 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion: 88 Resp: 676  
Ion Ratio Lower Upper  
88 100  
43 39.1 27.5 41.3  
58 75.9 62.7 94.1



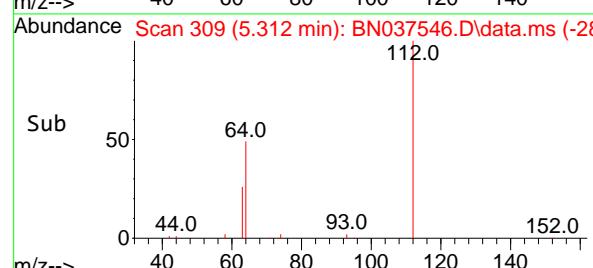
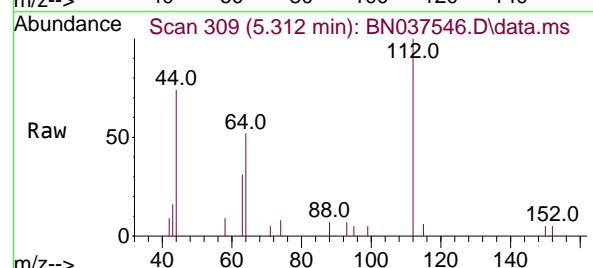
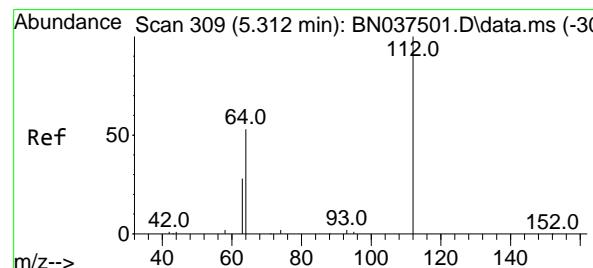
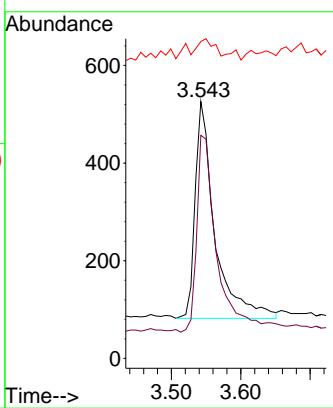


#3

n-Nitrosodimethylamine  
Concen: 0.432 ng  
RT: 3.543 min Scan# 64  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

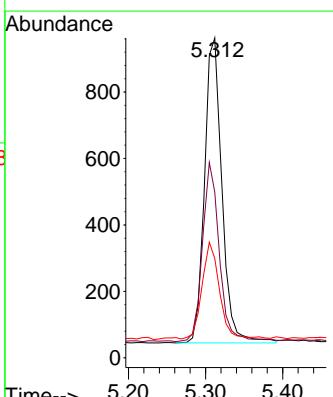
Tgt Ion: 42 Resp: 875  
Ion Ratio Lower Upper  
42 100  
74 94.5 91.8 137.6  
44 6.4 15.0 22.6#

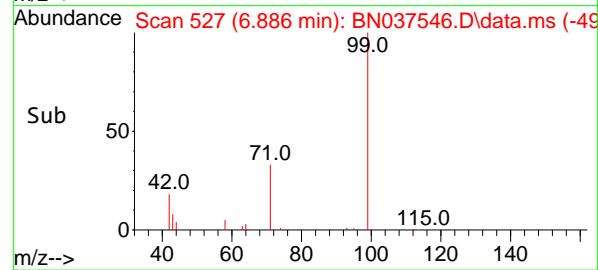
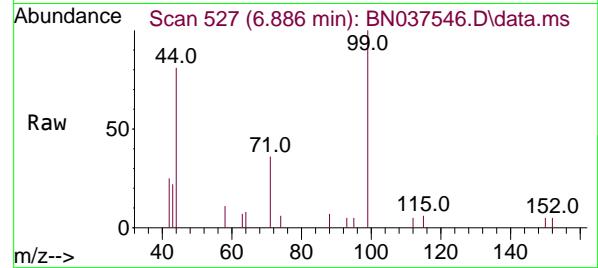
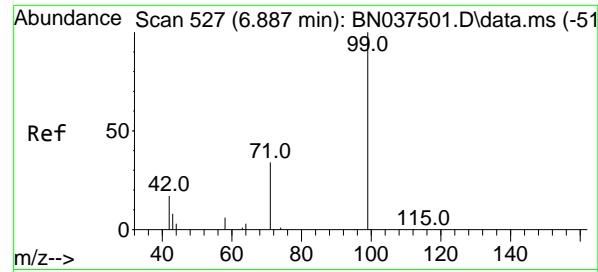


#4

2-Fluorophenol  
Concen: 0.348 ng  
RT: 5.312 min Scan# 309  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion: 112 Resp: 1443  
Ion Ratio Lower Upper  
112 100  
64 57.1 45.1 67.7  
63 31.9 23.8 35.8

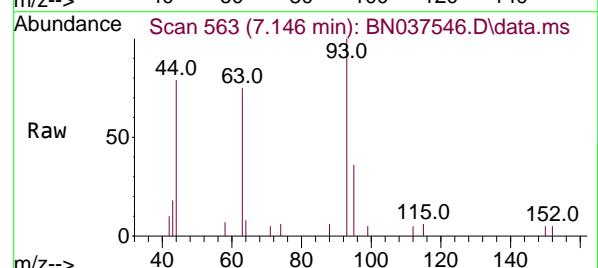
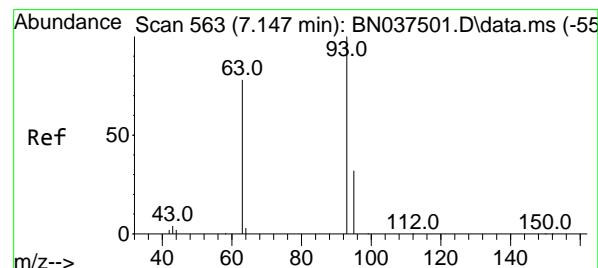
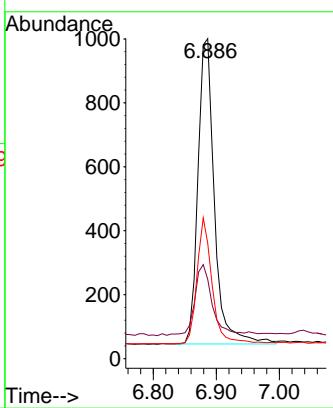




#5  
 Phenol-d6  
 Concen: 0.333 ng  
 RT: 6.886 min Scan# 51  
 Delta R.T. -0.000 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

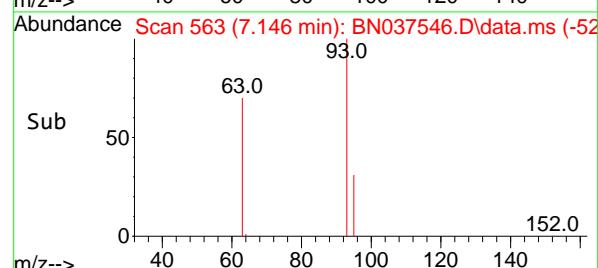
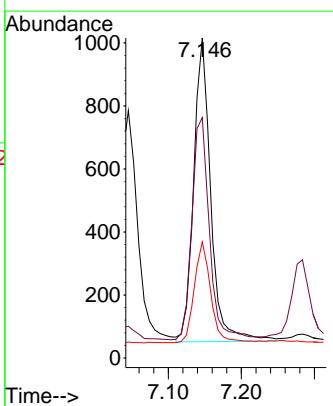
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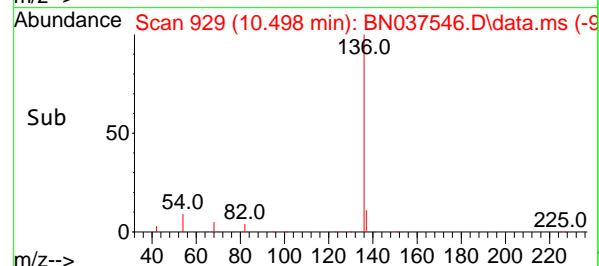
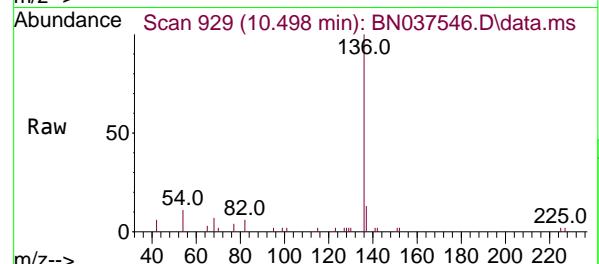
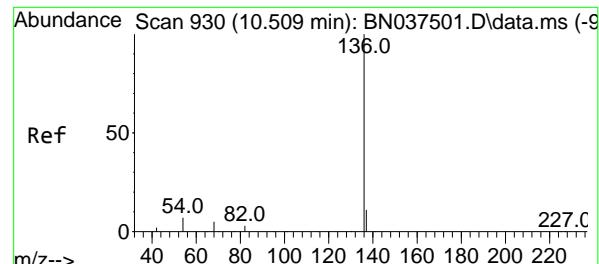
Tgt Ion: 99 Resp: 1731  
 Ion Ratio Lower Upper  
 99 100  
 42 24.8 17.1 25.7  
 71 38.2 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.362 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.000 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

Tgt Ion: 93 Resp: 1567  
 Ion Ratio Lower Upper  
 93 100  
 63 74.9 58.2 87.4  
 95 31.7 25.3 37.9





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Tgt Ion:136 Resp: 4081

Ion Ratio Lower Upper

136	100		
137	12.8	9.8	14.8
54	11.2	6.6	9.8#
68	7.1	5.0	7.6

Abundance

2000

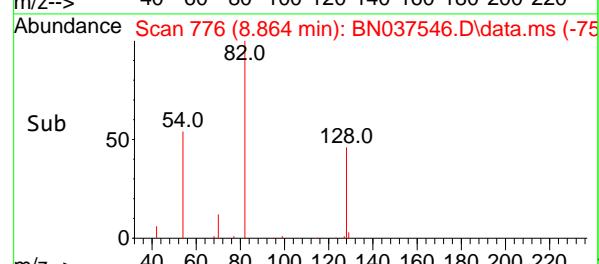
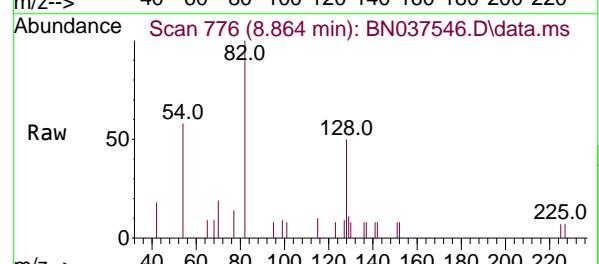
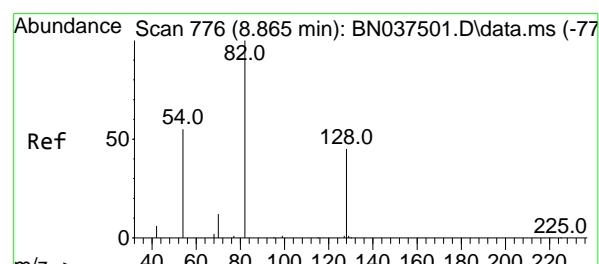
1500

1000

500

0

Time--> 10.40 10.498 10.60



#8  
 Nitrobenzene-d5  
 Concen: 0.374 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

Tgt Ion: 82 Resp: 1141

Ion Ratio Lower Upper

82	100		
128	50.3	37.5	56.3
54	57.5	45.3	67.9

Abundance

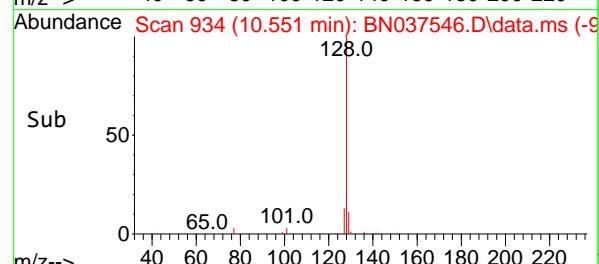
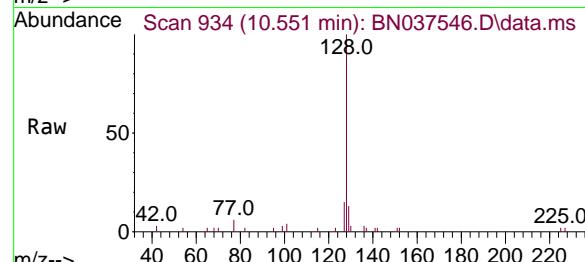
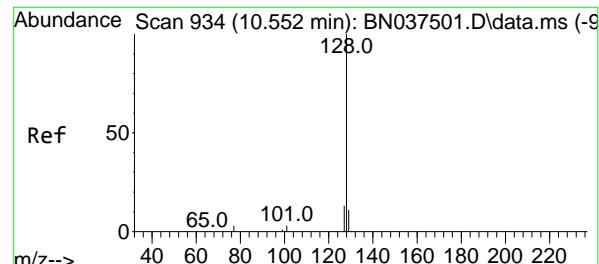
600

400

200

0

Time--> 8.80 8.864 9.00



#9

Naphthalene

Concen: 0.386 ng

RT: 10.551 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

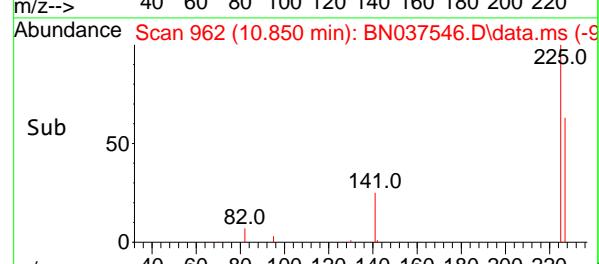
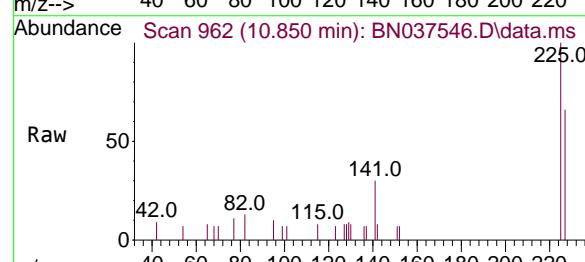
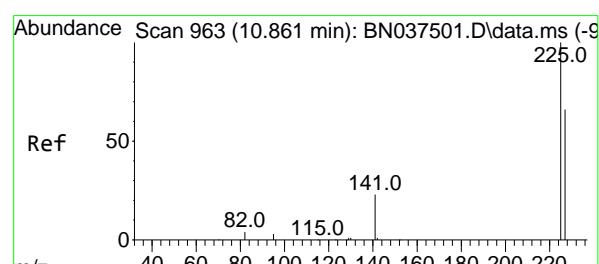
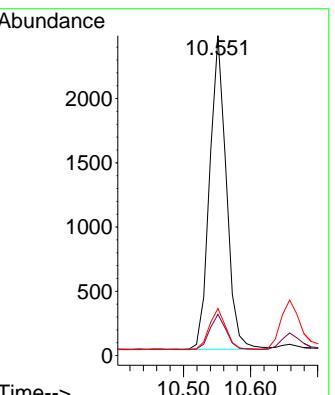
Tgt Ion:128 Resp: 4201

Ion Ratio Lower Upper

128 100

129 12.9 9.7 14.5

127 14.7 11.5 17.3



#10

Hexachlorobutadiene

Concen: 0.458 ng

RT: 10.850 min Scan# 962

Delta R.T. -0.011 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

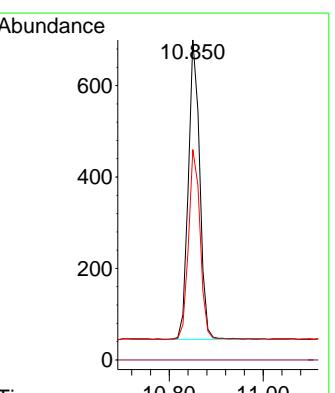
Tgt Ion:225 Resp: 1101

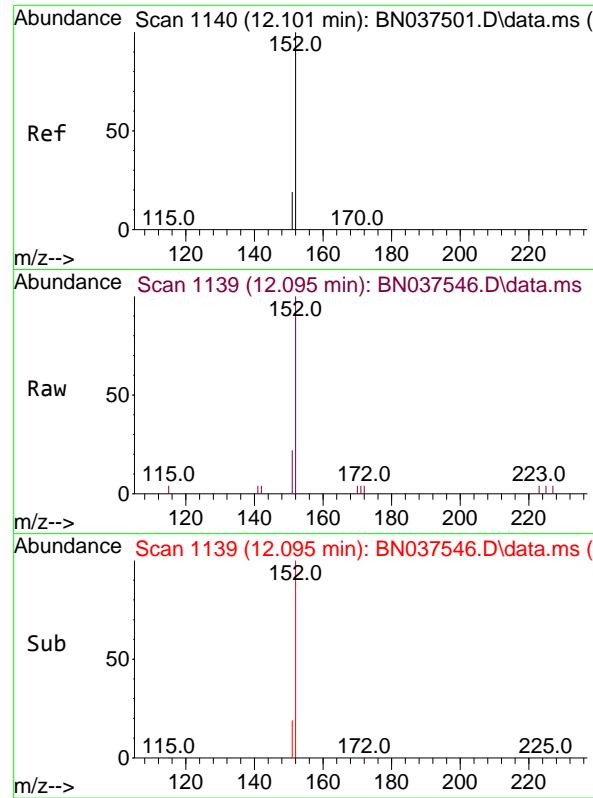
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

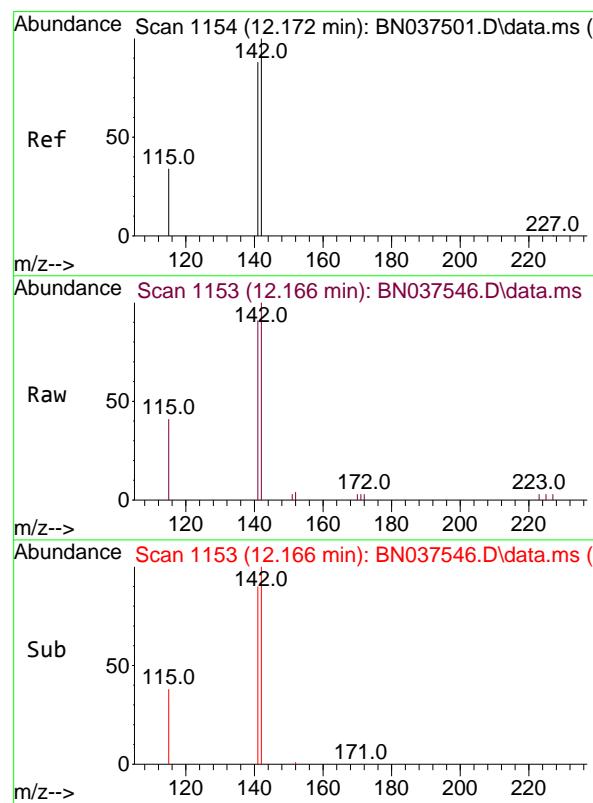
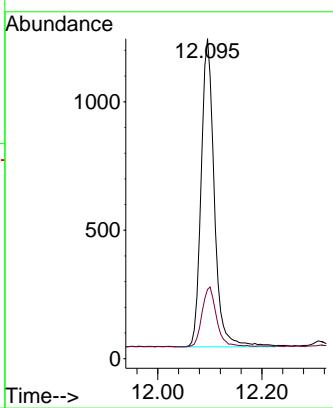
227 64.4 51.0 76.4





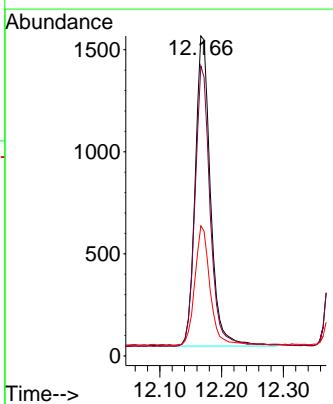
#11  
2-Methylnaphthalene-d10  
Concen: 0.360 ng  
RT: 12.095 min Scan# 1:Instrument :  
Delta R.T. -0.005 min BNA\_N  
Lab File: BN037546.D ClientSampleId :  
Acq: 22 Jul 2025 19:17 SSTDCCC0.4EC

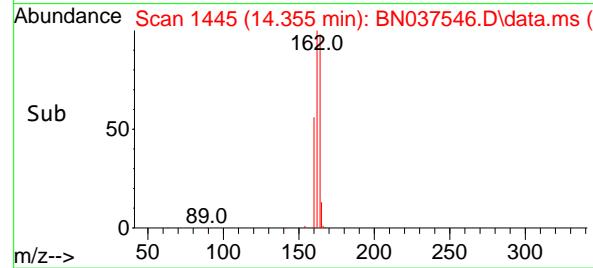
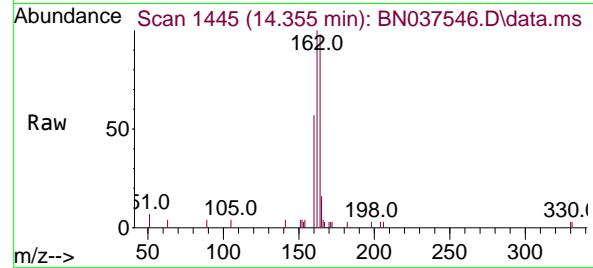
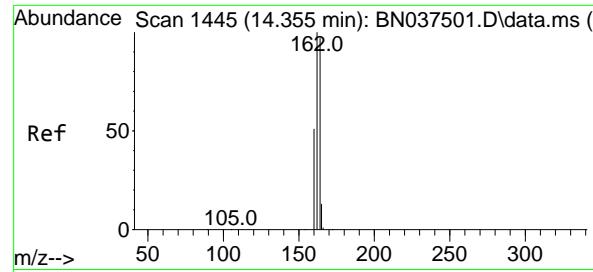
Tgt Ion:152 Resp: 2105  
Ion Ratio Lower Upper  
152 100  
151 21.6 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.365 ng  
RT: 12.166 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:142 Resp: 2615  
Ion Ratio Lower Upper  
142 100  
141 90.6 71.0 106.4  
115 40.6 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 14

Delta R.T. -0.000 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

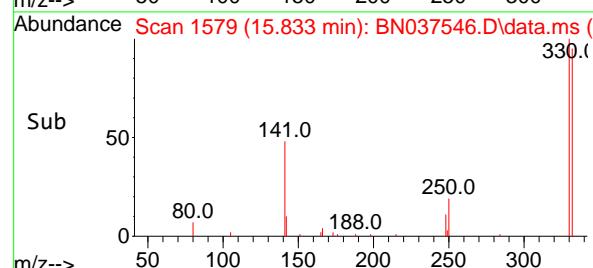
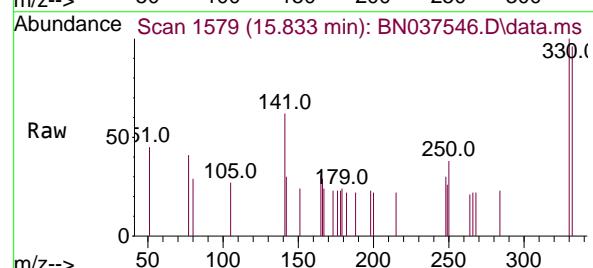
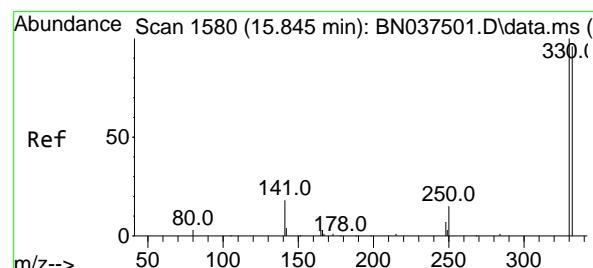
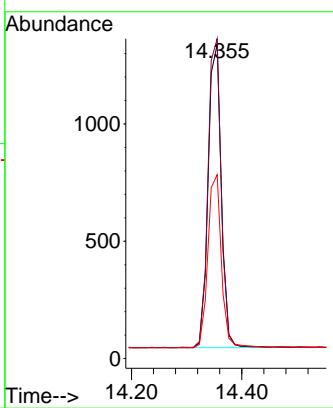
Tgt Ion:164 Resp: 2127

Ion Ratio Lower Upper

164 100

162 101.9 82.0 123.0

160 58.6 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.308 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.013 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

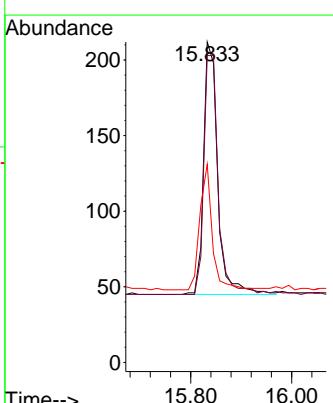
Tgt Ion:330 Resp: 322

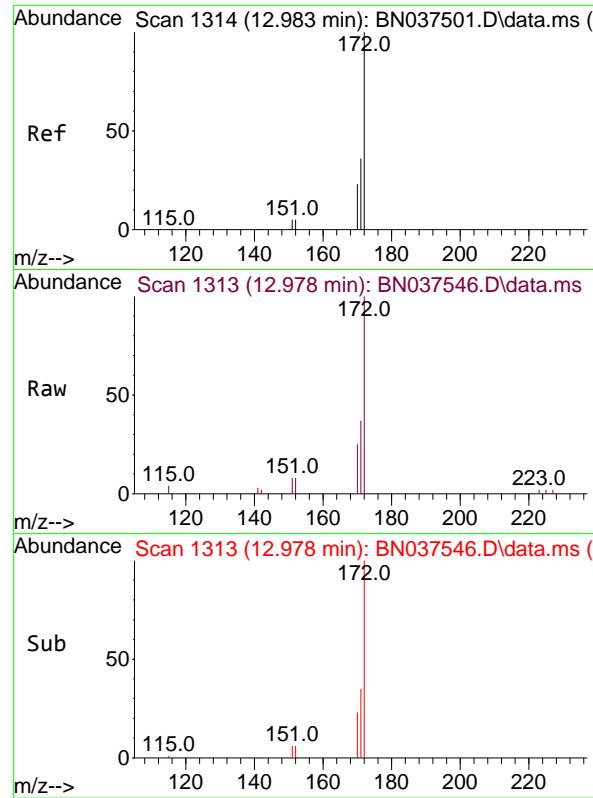
Ion Ratio Lower Upper

330 100

332 97.8 76.1 114.1

141 44.1 33.4 50.0

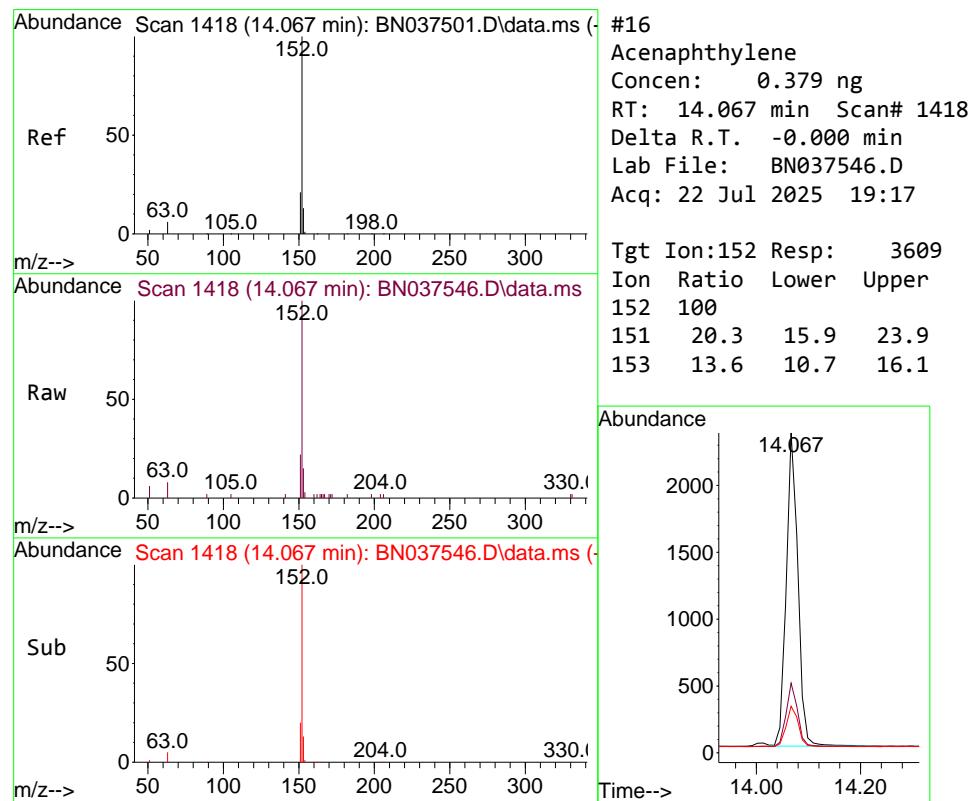
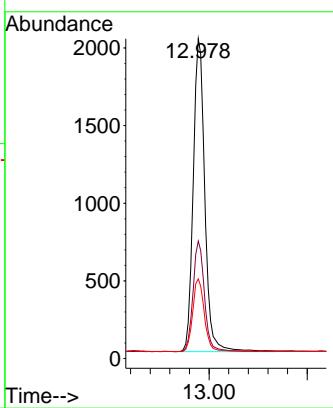




#15  
2-Fluorobiphenyl  
Concen: 0.436 ng  
RT: 12.978 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

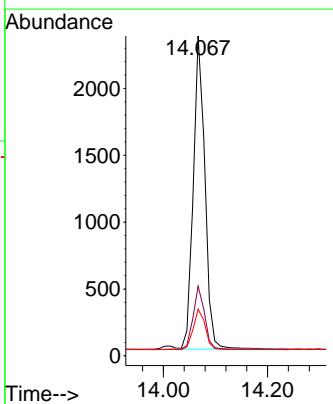
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

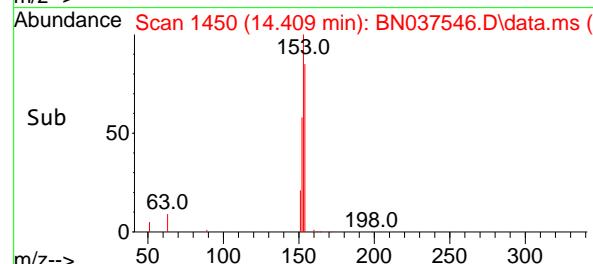
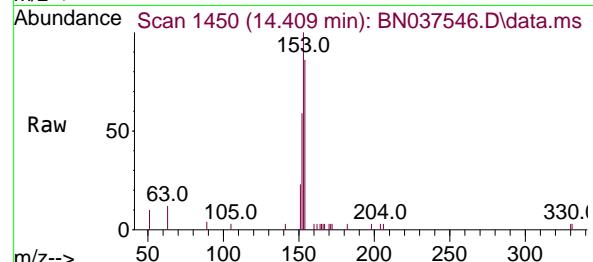
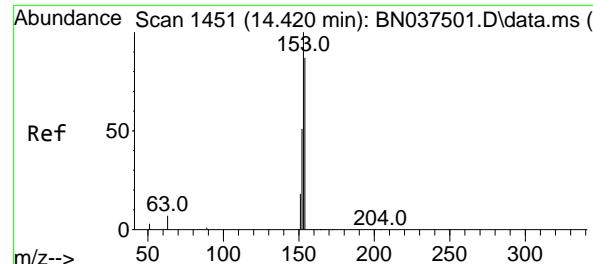
Tgt Ion:172 Resp: 4825  
Ion Ratio Lower Upper  
172 100  
171 36.7 29.4 44.2  
170 24.9 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.379 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:152 Resp: 3609  
Ion Ratio Lower Upper  
152 100  
151 20.3 15.9 23.9  
153 13.6 10.7 16.1





#17

Acenaphthene

Concen: 0.385 ng

RT: 14.409 min Scan# 1450

Delta R.T. -0.011 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

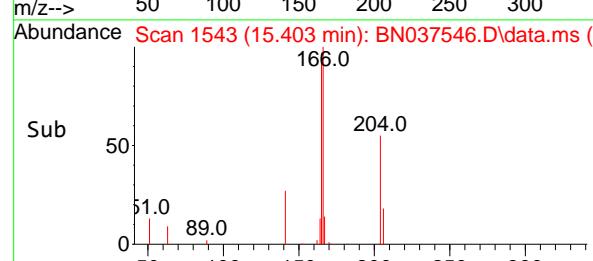
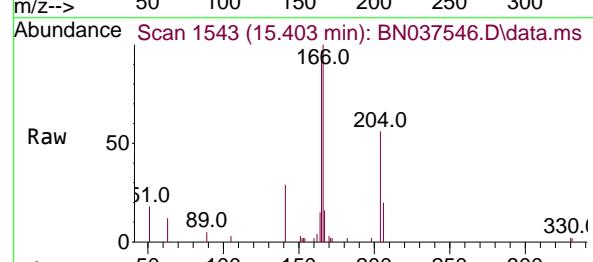
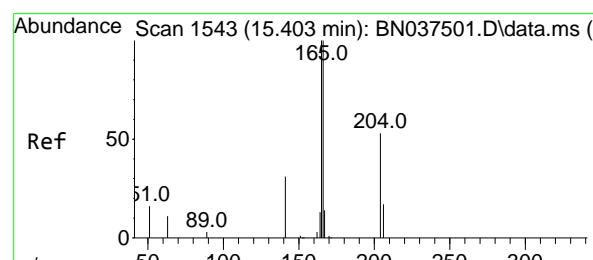
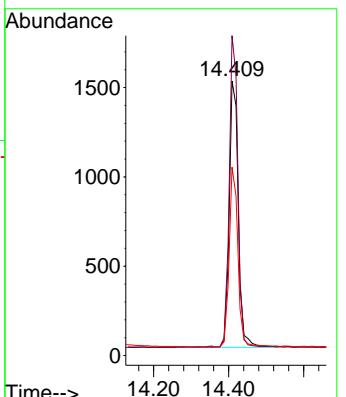
Tgt Ion:154 Resp: 2497

Ion Ratio Lower Upper

154 100

153 111.2 89.2 133.8

152 65.0 48.0 72.0



#18

Fluorene

Concen: 0.385 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

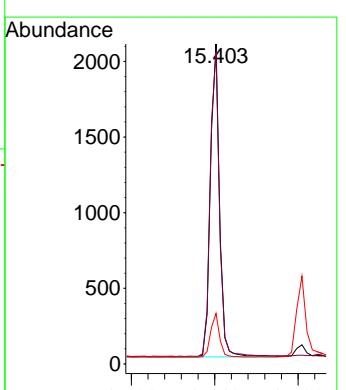
Tgt Ion:166 Resp: 3214

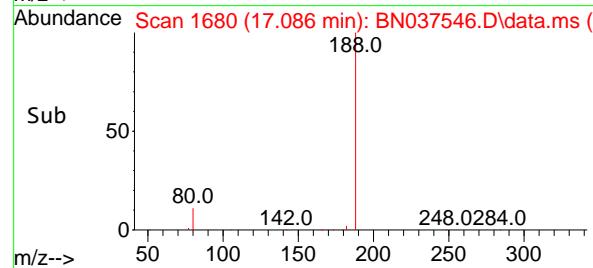
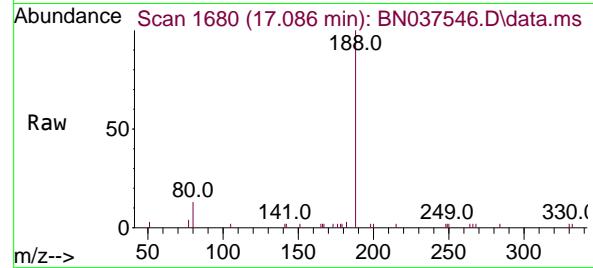
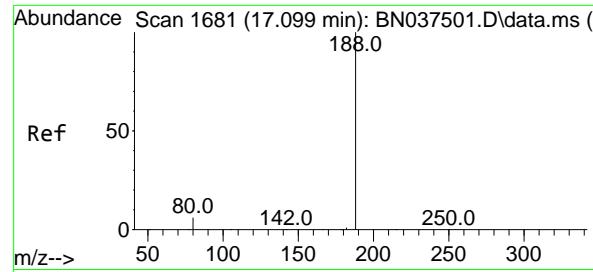
Ion Ratio Lower Upper

166 100

165 98.8 78.1 117.1

167 13.3 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.013 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

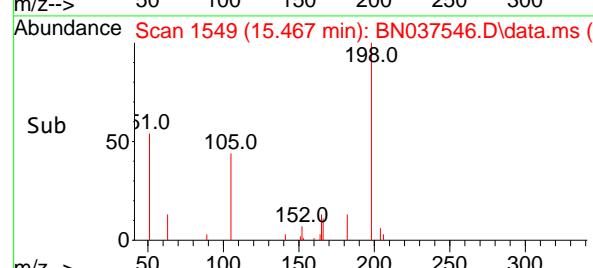
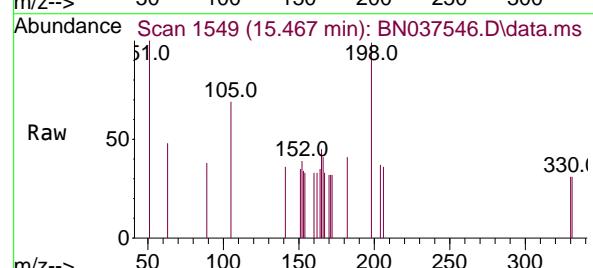
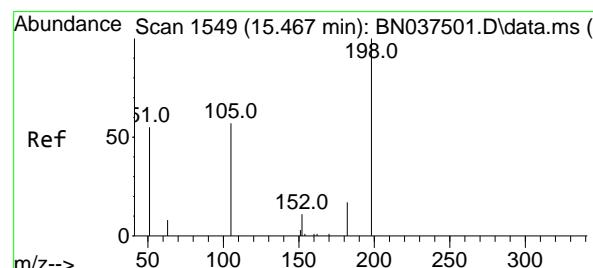
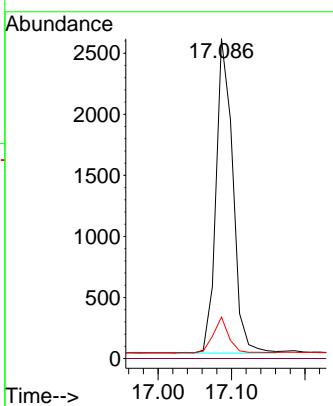
Tgt Ion:188 Resp: 4107

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.0 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.399 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

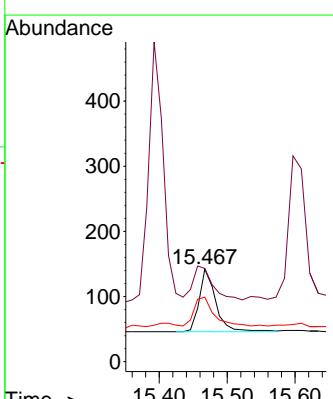
Tgt Ion:198 Resp: 172

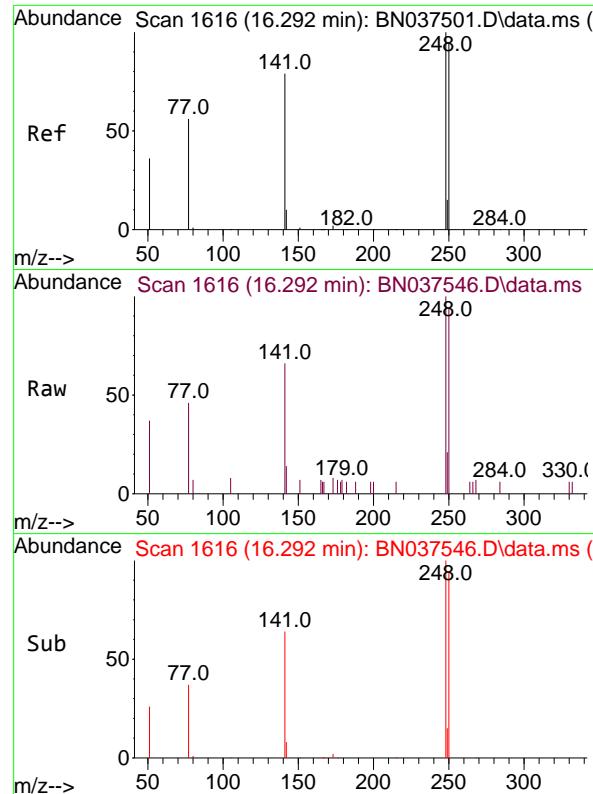
Ion Ratio Lower Upper

198 100

51 100.7 88.5 132.7

105 69.7 61.2 91.8

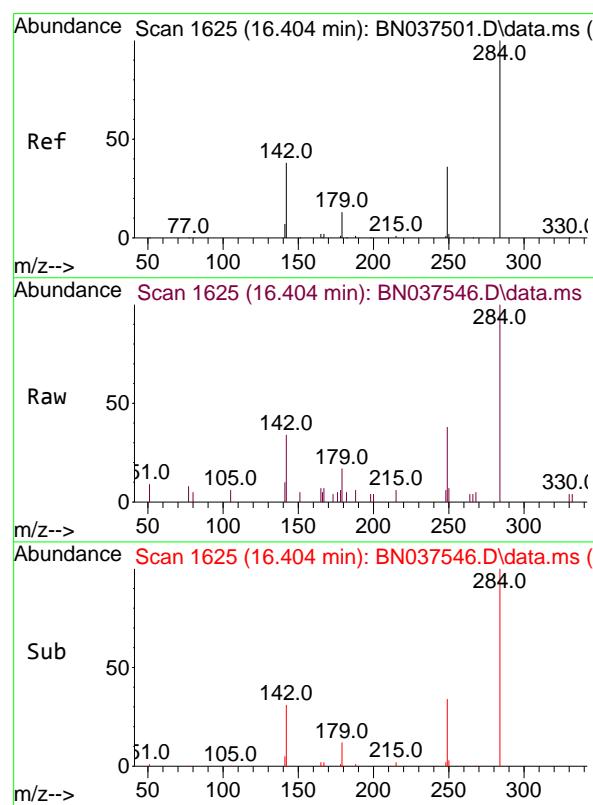
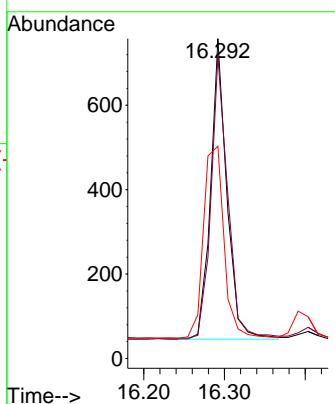




#21  
4-Bromophenyl-phenylether  
Concen: 0.378 ng  
RT: 16.292 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

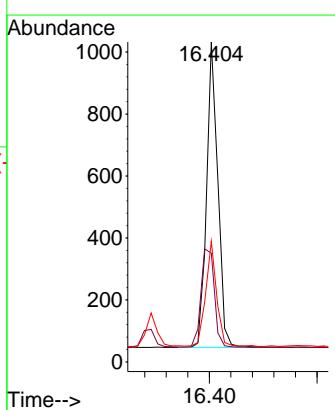
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

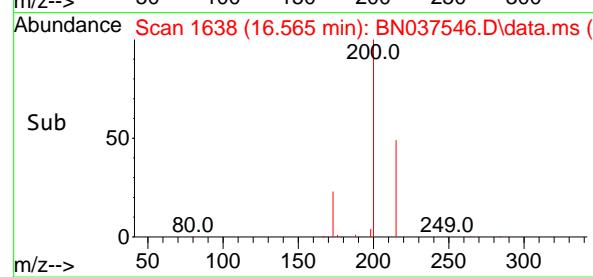
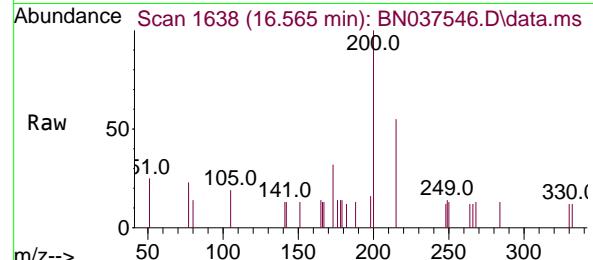
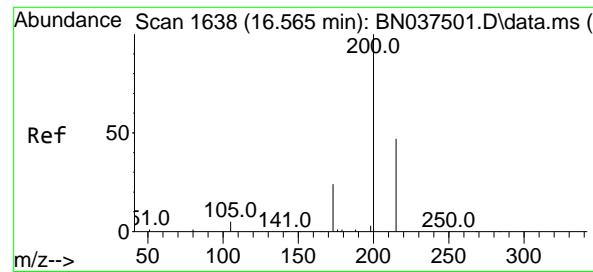
Tgt Ion:248 Resp: 995  
Ion Ratio Lower Upper  
248 100  
250 94.5 76.2 114.2  
141 66.4 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 0.422 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:284 Resp: 1436  
Ion Ratio Lower Upper  
284 100  
142 38.3 28.9 43.3  
249 32.8 25.8 38.6

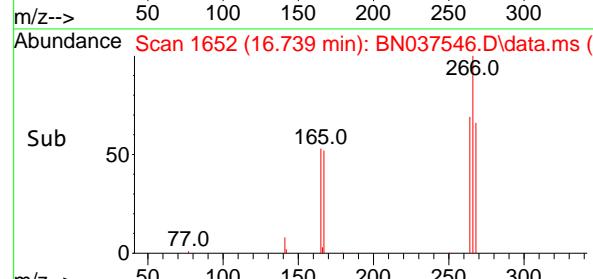
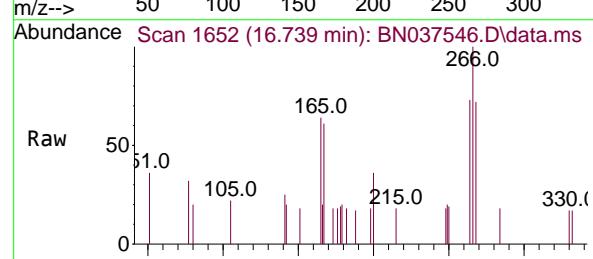
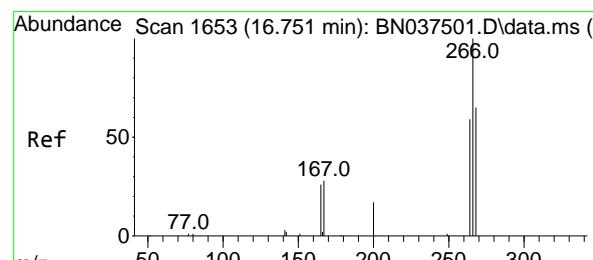
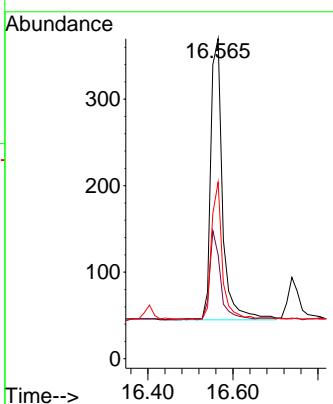




#23  
Atrazine  
Concen: 0.343 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

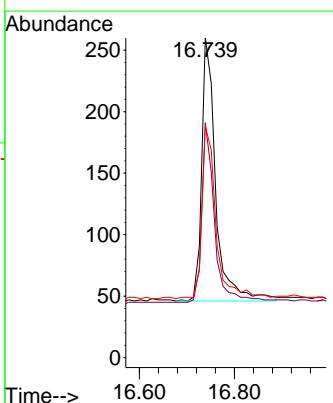
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

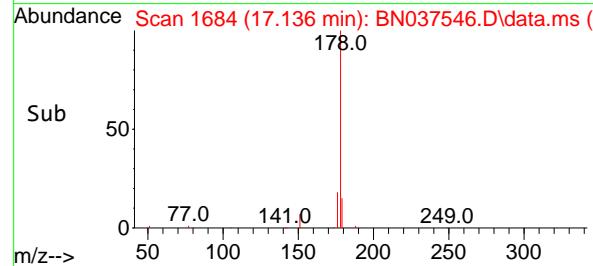
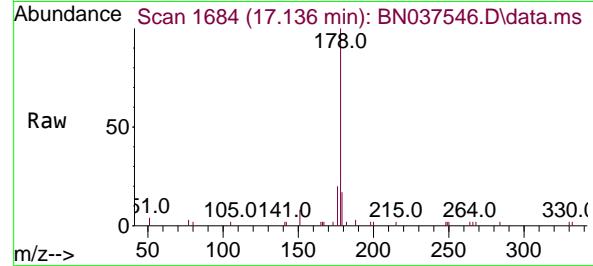
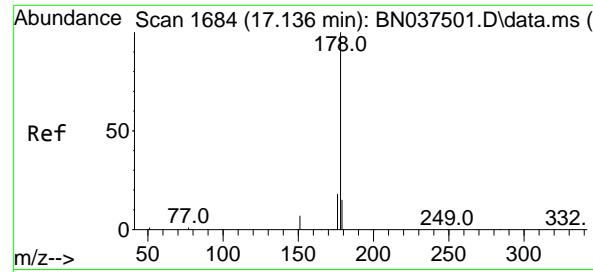
Tgt Ion:200 Resp: 630  
Ion Ratio Lower Upper  
200 100  
173 32.4 23.2 34.8  
215 55.1 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.288 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.013 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:266 Resp: 439  
Ion Ratio Lower Upper  
266 100  
264 61.5 49.3 73.9  
268 65.4 51.6 77.4





#25

Phenanthrene

Concen: 0.391 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

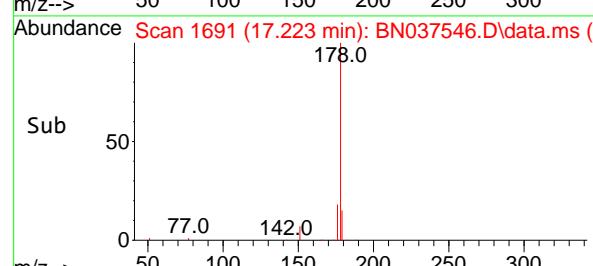
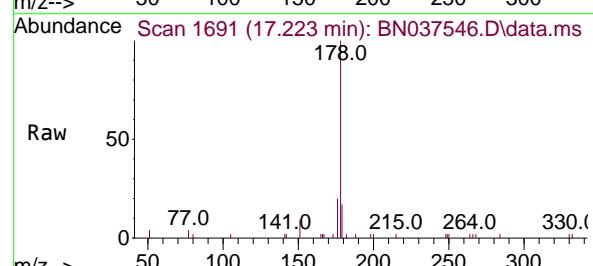
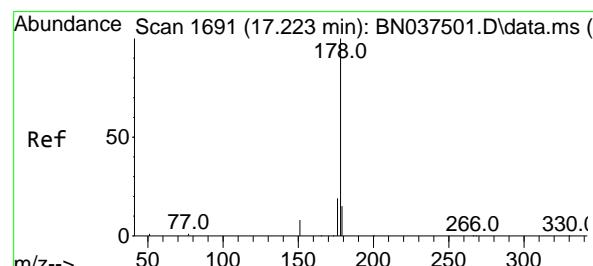
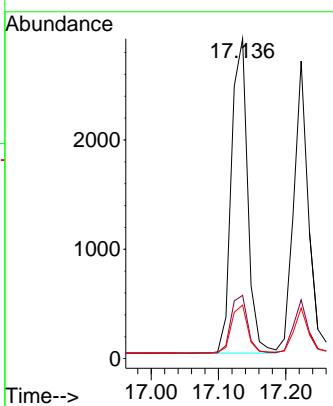
Tgt Ion:178 Resp: 4815

Ion Ratio Lower Upper

178 100

176 19.1 15.0 22.6

179 15.6 12.2 18.2



#26

Anthracene

Concen: 0.368 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037546.D

Acq: 22 Jul 2025 19:17

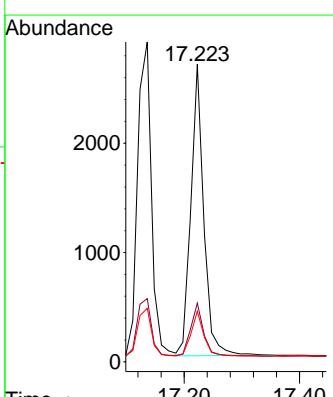
Tgt Ion:178 Resp: 4132

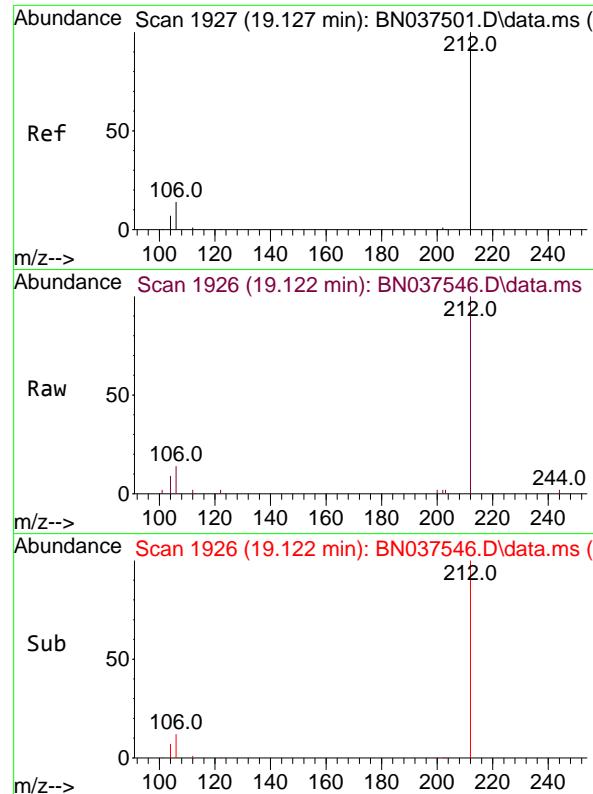
Ion Ratio Lower Upper

178 100

176 18.4 14.7 22.1

179 15.5 12.3 18.5

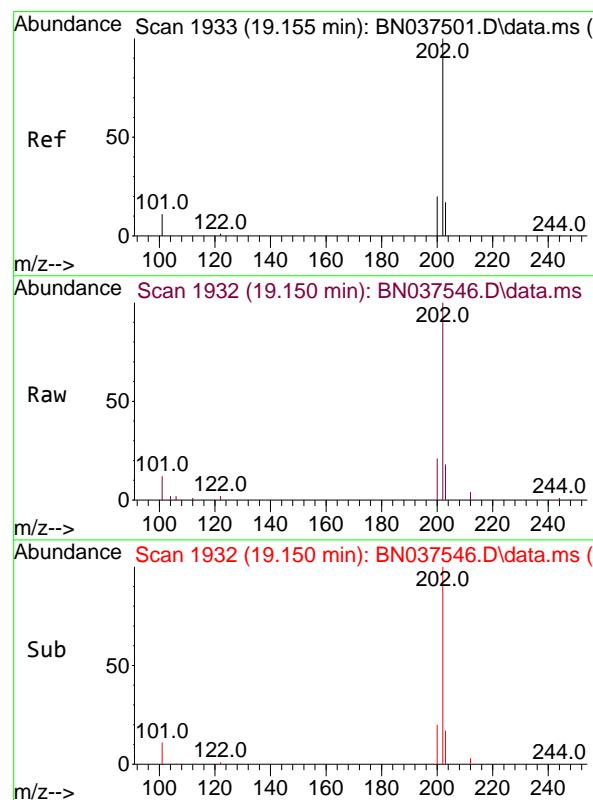
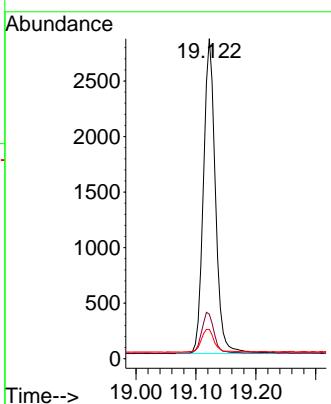




#27  
 Fluoranthene-d10  
 Concen: 0.362 ng  
 RT: 19.122 min Scan# 1926  
 Delta R.T. -0.005 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

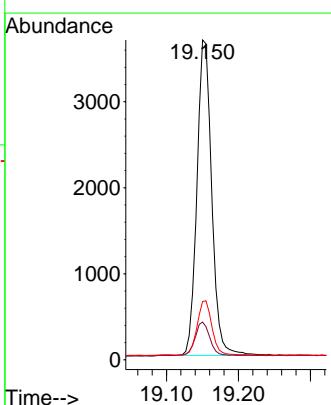
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

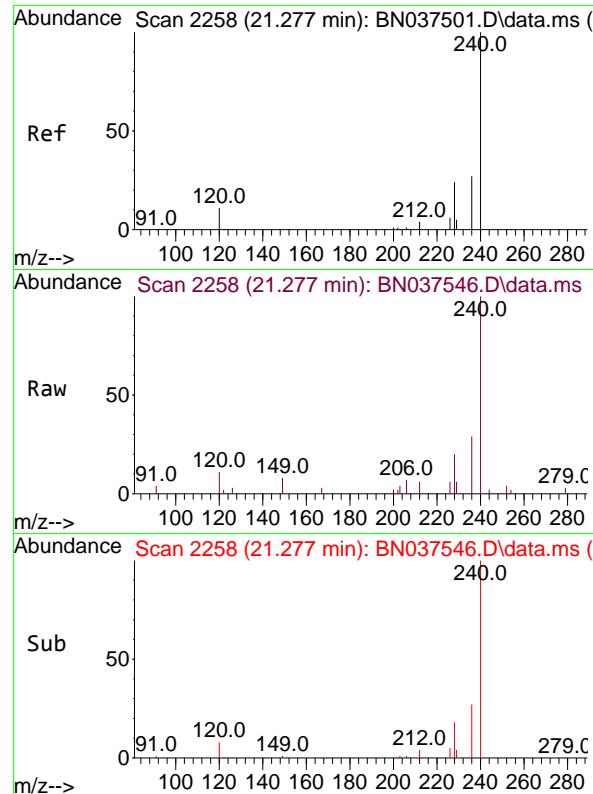
Tgt Ion:212 Resp: 3937  
 Ion Ratio Lower Upper  
 212 100  
 106 13.2 12.2 18.4  
 104 7.8 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.371 ng  
 RT: 19.150 min Scan# 1932  
 Delta R.T. -0.005 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

Tgt Ion:202 Resp: 5257  
 Ion Ratio Lower Upper  
 202 100  
 101 10.9 9.8 14.6  
 203 17.2 13.6 20.4

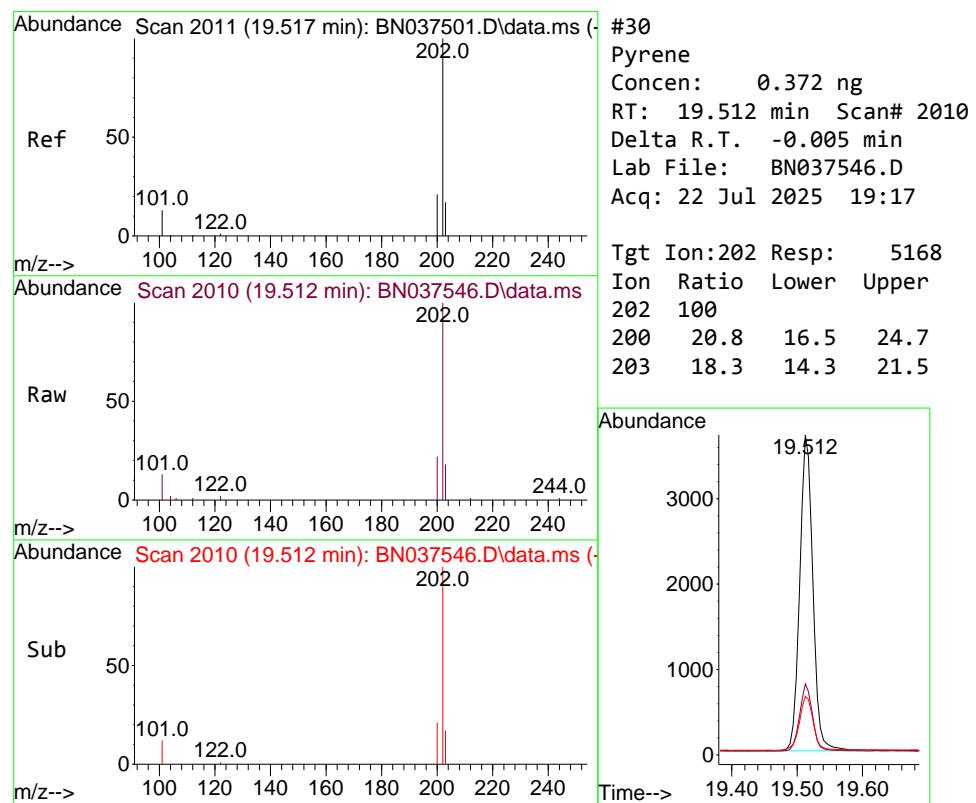
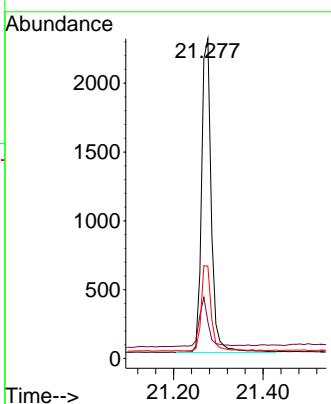




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

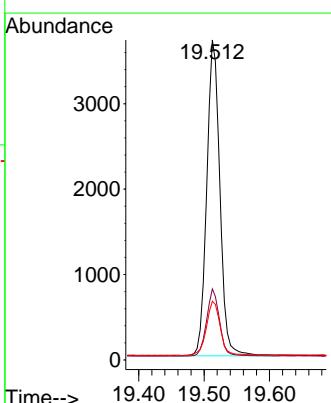
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

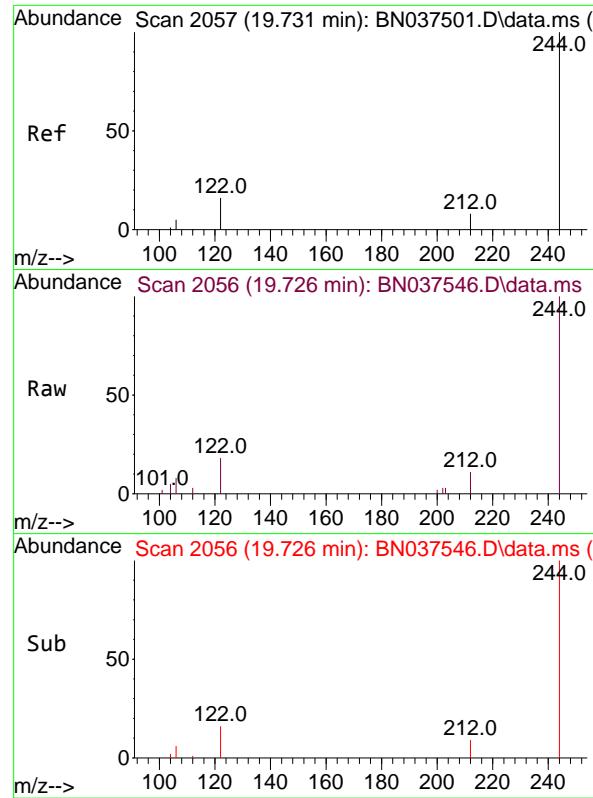
Tgt Ion:240 Resp: 3447  
Ion Ratio Lower Upper  
240 100  
120 11.5 10.7 16.1  
236 28.9 22.6 33.8



#30  
Pyrene  
Concen: 0.372 ng  
RT: 19.512 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

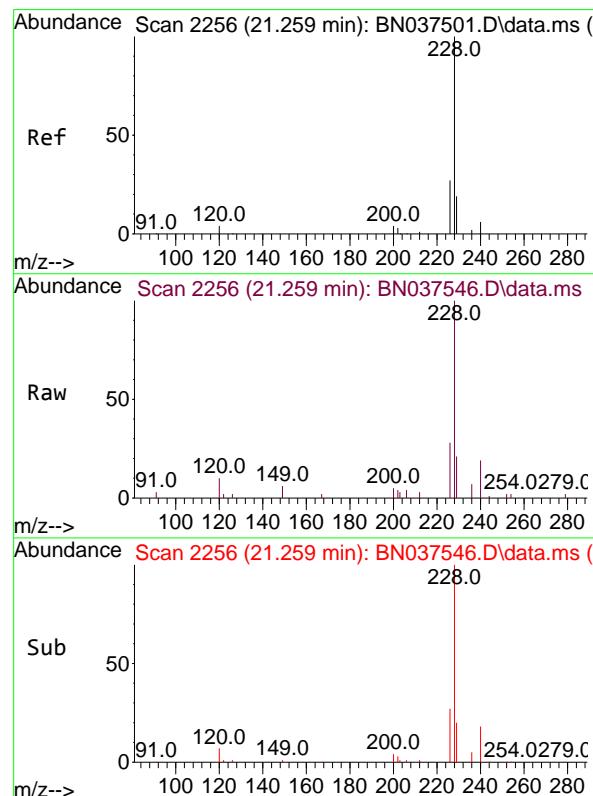
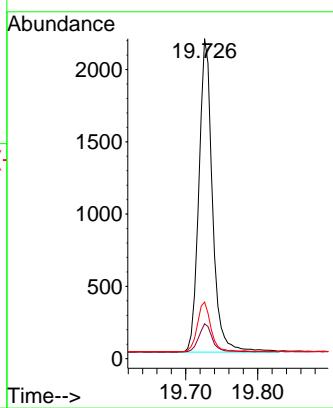
Tgt Ion:202 Resp: 5168  
Ion Ratio Lower Upper  
202 100  
200 20.8 16.5 24.7  
203 18.3 14.3 21.5





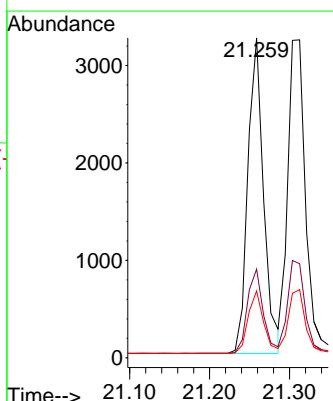
#31  
Terphenyl-d14  
Concen: 0.384 ng  
RT: 19.726 min Scan# 21  
Instrument: BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037546.D  
ClientSampleId : SSTDCCC0.4EC  
Acq: 22 Jul 2025 19:17

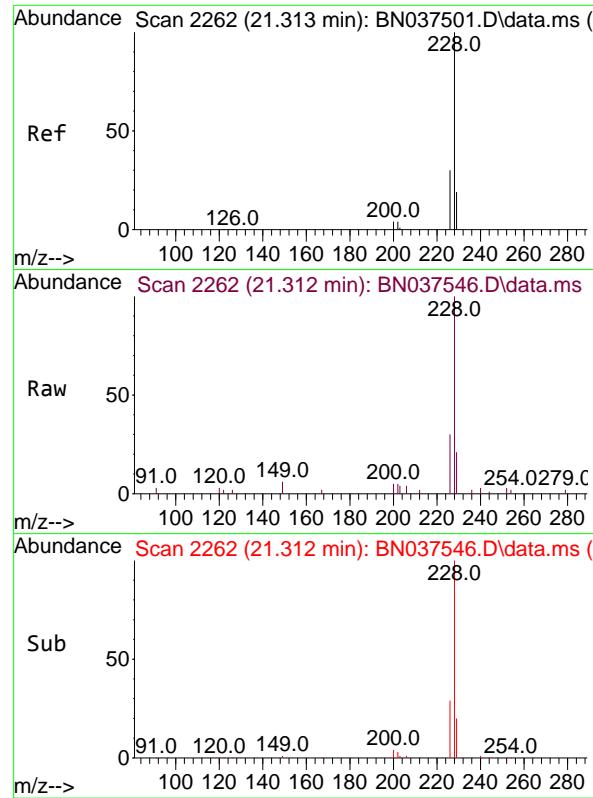
Tgt Ion:244 Resp: 2844  
Ion Ratio Lower Upper  
244 100  
212 10.9 7.4 11.2  
122 17.7 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.367 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:228 Resp: 4434  
Ion Ratio Lower Upper  
228 100  
226 27.7 21.9 32.9  
229 20.9 15.8 23.8

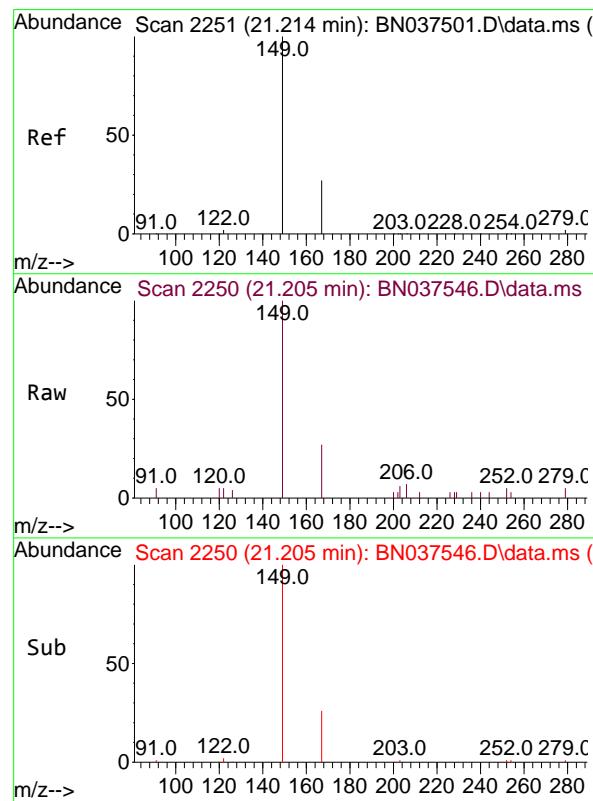
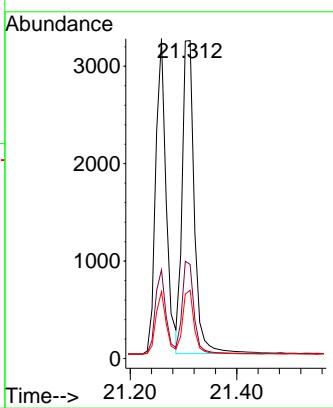




#33  
Chrysene  
Concen: 0.403 ng  
RT: 21.312 min Scan# 21  
Delta R.T. -0.000 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

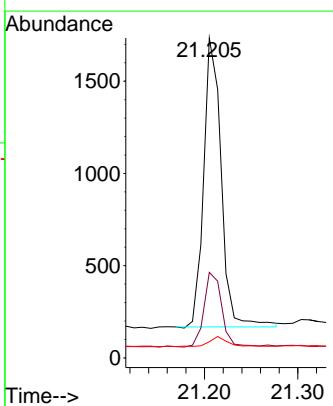
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

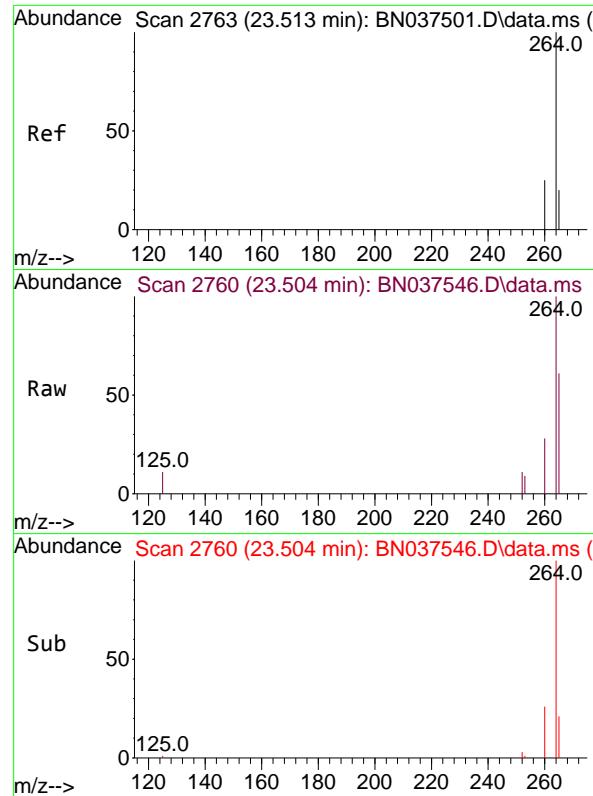
Tgt Ion:228 Resp: 5071  
Ion Ratio Lower Upper  
228 100  
226 29.6 24.2 36.4  
229 21.4 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.375 ng  
RT: 21.205 min Scan# 2250  
Delta R.T. -0.009 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:149 Resp: 2039  
Ion Ratio Lower Upper  
149 100  
167 25.8 21.8 32.8  
279 3.8 3.0 4.4

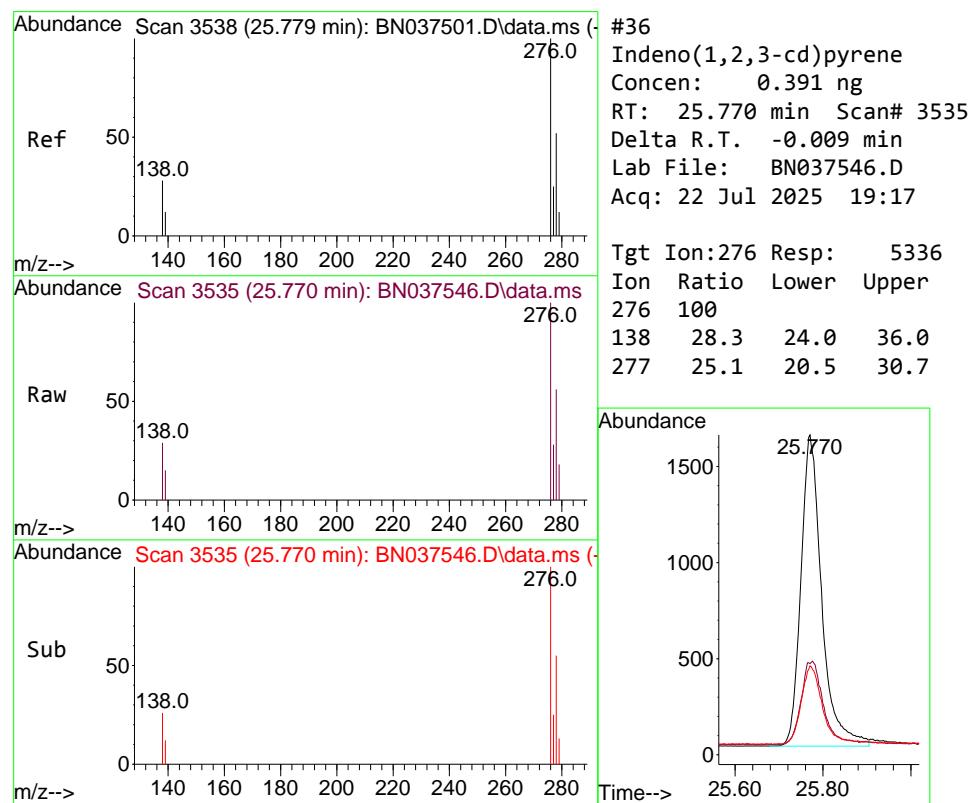
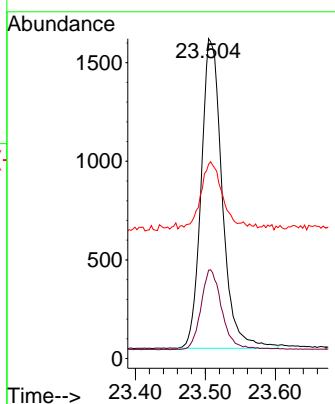




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.504 min Scan# 2  
Delta R.T. -0.009 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

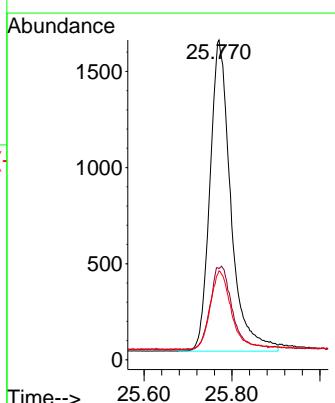
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

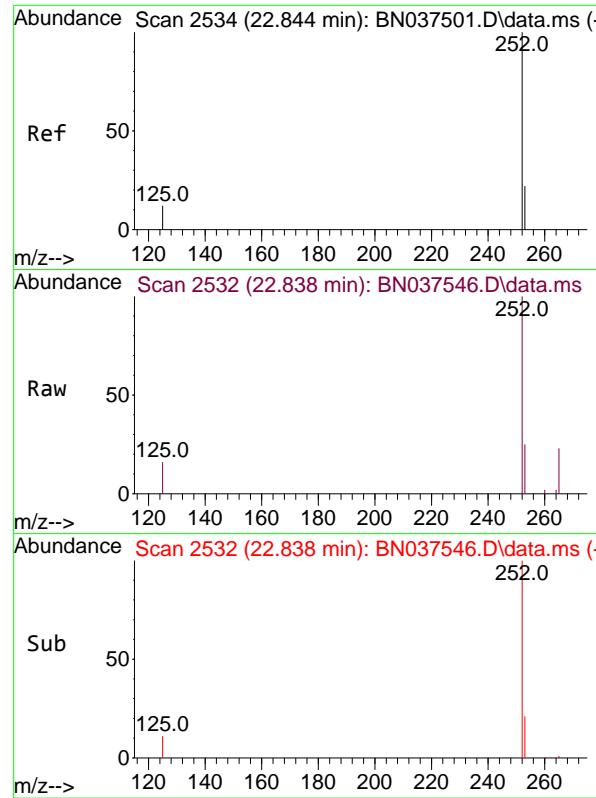
Tgt Ion:264 Resp: 3274  
Ion Ratio Lower Upper  
264 100  
260 27.6 21.2 31.8  
265 60.7 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.391 ng  
RT: 25.770 min Scan# 3535  
Delta R.T. -0.009 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:276 Resp: 5336  
Ion Ratio Lower Upper  
276 100  
138 28.3 24.0 36.0  
277 25.1 20.5 30.7

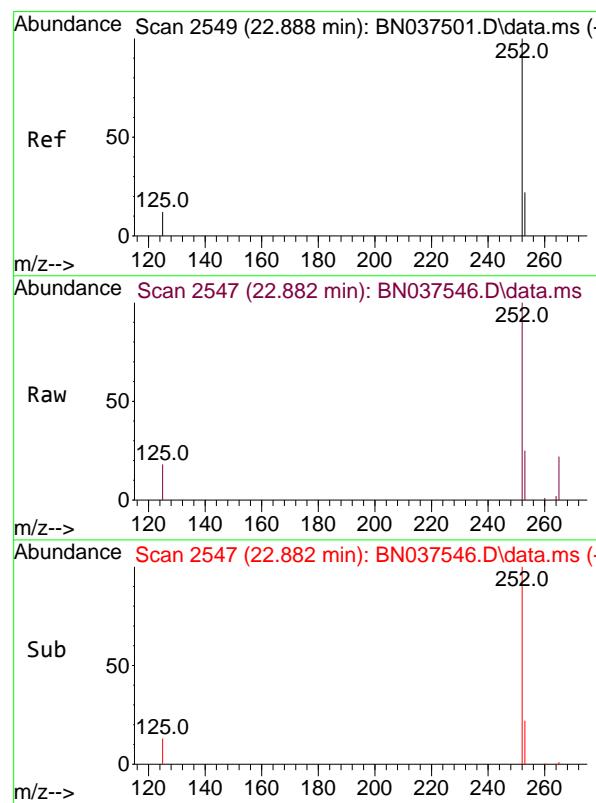
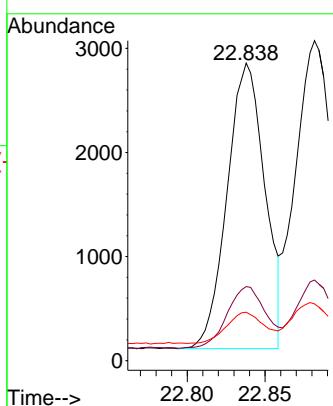




#37  
 Benzo(b)fluoranthene  
 Concen: 0.372 ng  
 RT: 22.838 min Scan# 21  
 Delta R.T. -0.006 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

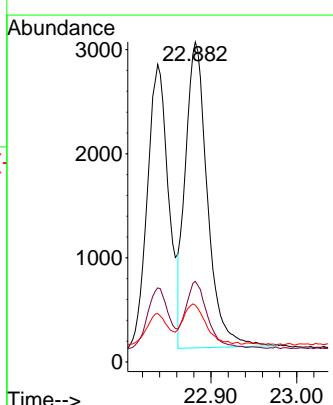
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

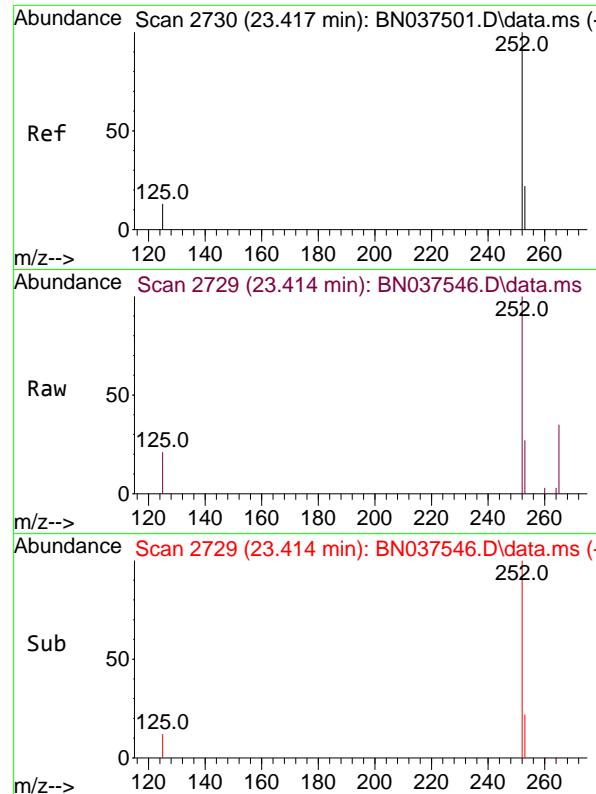
Tgt Ion:252 Resp: 4623  
 Ion Ratio Lower Upper  
 252 100  
 253 24.9 19.5 29.3  
 125 16.3 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.409 ng  
 RT: 22.882 min Scan# 2547  
 Delta R.T. -0.006 min  
 Lab File: BN037546.D  
 Acq: 22 Jul 2025 19:17

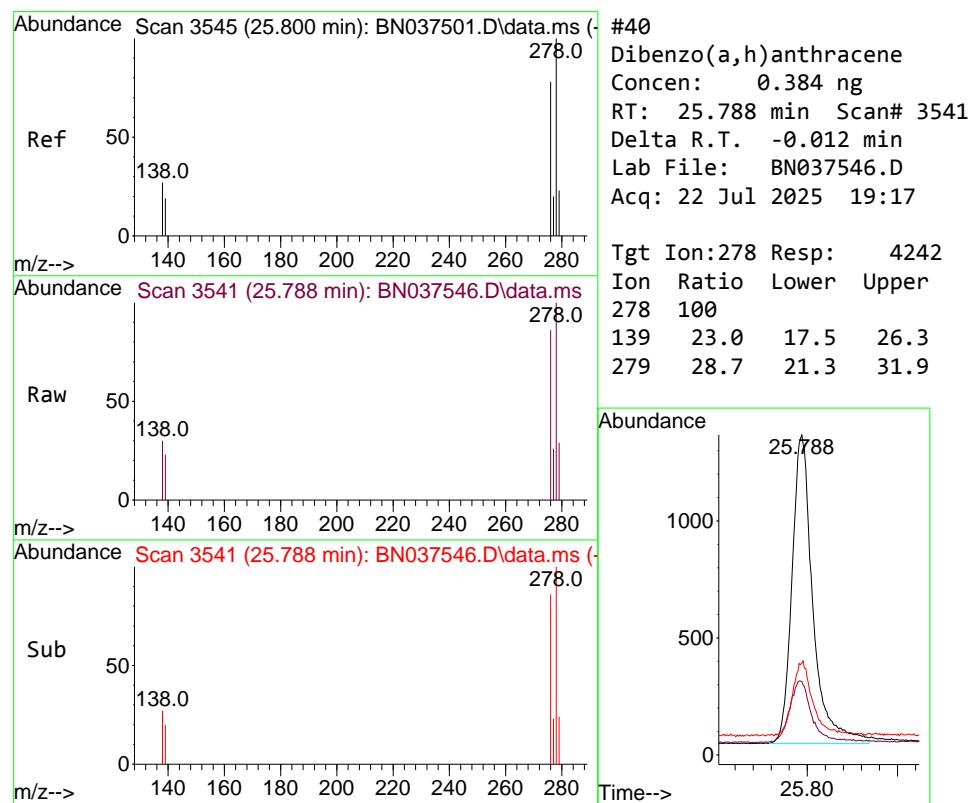
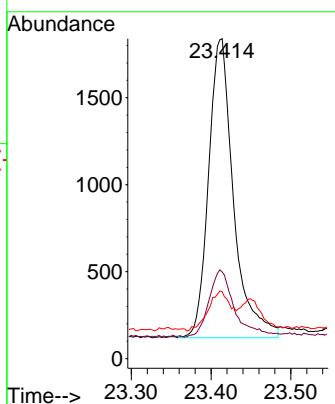
Tgt Ion:252 Resp: 5250  
 Ion Ratio Lower Upper  
 252 100  
 253 25.2 19.5 29.3  
 125 17.7 13.1 19.7





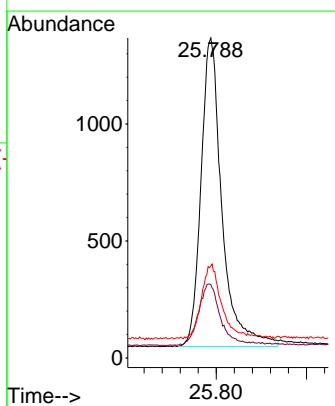
#39  
Benzo(a)pyrene  
Concen: 0.361 ng  
RT: 23.414 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.003 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17  
ClientSampleId : SSTDCCC0.4EC

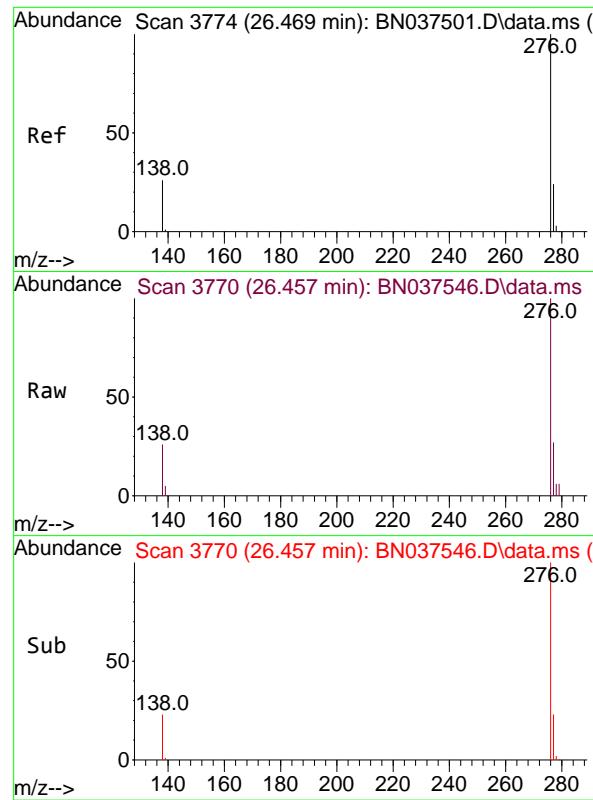
Tgt Ion:252 Resp: 3741  
Ion Ratio Lower Upper  
252 100  
253 27.1 19.9 29.9  
125 20.9 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.384 ng  
RT: 25.788 min Scan# 3541  
Delta R.T. -0.012 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Tgt Ion:278 Resp: 4242  
Ion Ratio Lower Upper  
278 100  
139 23.0 17.5 26.3  
279 28.7 21.3 31.9

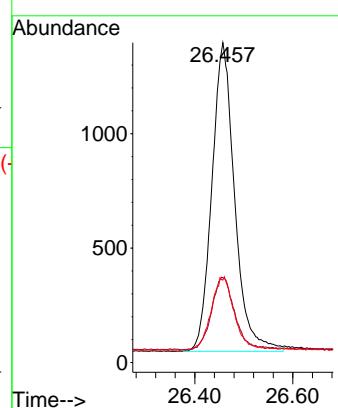




#41  
Benzo(g,h,i)perylene  
Concen: 0.381 ng  
RT: 26.457 min Scan# 3  
Delta R.T. -0.012 min  
Lab File: BN037546.D  
Acq: 22 Jul 2025 19:17

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

Tgt Ion:276 Resp: 4357  
Ion Ratio Lower Upper  
276 100  
277 26.5 20.9 31.3  
138 25.8 22.6 33.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037546.D  
 Acq On : 22 Jul 2025 19:17  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jul 23 04:24:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 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	73	0.00
2	1,4-Dioxane	0.385	0.403	-4.7	75	0.00
3	n-Nitrosodimethylamine	0.484	0.522	-7.9	82	0.00
4 S	2-Fluorophenol	0.989	0.861	12.9	64	0.00
5 S	Phenol-d6	1.241	1.033	16.8	64	0.00
6	bis(2-Chloroethyl)ether	1.033	0.935	9.5	67	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	70	-0.01
8 S	Nitrobenzene-d5	0.299	0.280	6.4	69	0.00
9	Naphthalene	1.067	1.029	3.6	69	0.00
10	Hexachlorobutadiene	0.236	0.270	-14.4	80	-0.01
11 SURR	2-Methylnaphthalene-d10	0.574	0.516	10.1	67	0.00
12	2-Methylnaphthalene	0.701	0.641	8.6	66	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	64	0.00
14 S	2,4,6-Tribromophenol	0.197	0.151	23.4	56	-0.01
15 S	2-Fluorobiphenyl	2.080	2.268	-9.0	71	0.00
16	Acenaphthylene	1.792	1.697	5.3	63	0.00
17	Acenaphthene	1.218	1.174	3.6	64	-0.01
18	Fluorene	1.569	1.511	3.7	65	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	63	-0.01
20	4,6-Dinitro-2-methylphenol	0.057	0.042	26.3#	64	0.00
21	4-Bromophenyl-phenylether	0.256	0.242	5.5	63	0.00
22	Hexachlorobenzene	0.331	0.350	-5.7	68	0.00
23	Atrazine	0.179	0.153	14.5	61	0.00
24	Pentachlorophenol	0.149	0.107	28.2#	54	-0.01
25	Phenanthrene	1.198	1.172	2.2	64	0.00
26	Anthracene	1.093	1.006	8.0	63	0.00
27 SURR	Fluoranthene-d10	1.060	0.959	9.5	63	0.00
28	Fluoranthene	1.382	1.280	7.4	63	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	66	0.00
30	Pyrene	1.612	1.499	7.0	62	0.00
31 S	Terphenyl-d14	0.859	0.825	4.0	65	0.00
32	Benzo(a)anthracene	1.401	1.286	8.2	63	0.00
33	Chrysene	1.459	1.471	-0.8	68	0.00
34	Bis(2-ethylhexyl)phthalate	0.630	0.592	6.0	69	0.00
35 I	Perylene-d12	1.000	1.000	0.0	68	0.00
36	Indeno(1,2,3-cd)pyrene	1.666	1.630	2.2	73	0.00
37	Benzo(b)fluoranthene	1.518	1.412	7.0	66	0.00
38	Benzo(k)fluoranthene	1.567	1.604	-2.4	73	0.00
39 C	Benzo(a)pyrene	1.267	1.143	9.8	65	0.00
40	Dibenzo(a,h)anthracene	1.349	1.296	3.9	73	-0.01
41	Benzo(g,h,i)perylene	1.397	1.331	4.7	69	-0.01

( # ) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037546.D  
 Acq On : 22 Jul 2025 19:17  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**LabSampleId :**  
SSTDCCC0.4

Quant Time: Jul 23 04:24:05 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 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	73	0.00
2	1,4-Dioxane	0.400	0.420	-5.0	75	0.00
3	n-Nitrosodimethylamine	0.400	0.432	-8.0	82	0.00
4 S	2-Fluorophenol	0.400	0.348	13.0	64	0.00
5 S	Phenol-d6	0.400	0.333	16.8	64	0.00
6	bis(2-Chloroethyl)ether	0.400	0.362	9.5	67	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	70	-0.01
8 S	Nitrobenzene-d5	0.400	0.374	6.5	69	0.00
9	Naphthalene	0.400	0.386	3.5	69	0.00
10	Hexachlorobutadiene	0.400	0.458	-14.5	80	-0.01
11 SURR	2-Methylnaphthalene-d10	0.400	0.360	10.0	67	0.00
12	2-Methylnaphthalene	0.400	0.365	8.8	66	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	64	0.00
14 S	2,4,6-Tribromophenol	0.400	0.308	23.0	56	-0.01
15 S	2-Fluorobiphenyl	0.400	0.436	-9.0	71	0.00
16	Acenaphthylene	0.400	0.379	5.3	63	0.00
17	Acenaphthene	0.400	0.385	3.8	64	-0.01
18	Fluorene	0.400	0.385	3.8	65	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	63	-0.01
20	4,6-Dinitro-2-methylphenol	0.400	0.399	0.3	64	0.00
21	4-Bromophenyl-phenylether	0.400	0.378	5.5	63	0.00
22	Hexachlorobenzene	0.400	0.422	-5.5	68	0.00
23	Atrazine	0.400	0.343	14.2	61	0.00
24	Pentachlorophenol	0.400	0.288	28.0#	54	-0.01
25	Phenanthrene	0.400	0.391	2.3	64	0.00
26	Anthracene	0.400	0.368	8.0	63	0.00
27 SURR	Fluoranthene-d10	0.400	0.362	9.5	63	0.00
28	Fluoranthene	0.400	0.371	7.3	63	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	66	0.00
30	Pyrene	0.400	0.372	7.0	62	0.00
31 S	Terphenyl-d14	0.400	0.384	4.0	65	0.00
32	Benzo(a)anthracene	0.400	0.367	8.3	63	0.00
33	Chrysene	0.400	0.403	-0.8	68	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.375	6.3	69	0.00
35 I	Perylene-d12	0.400	0.400	0.0	68	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.391	2.3	73	0.00
37	Benzo(b)fluoranthene	0.400	0.372	7.0	66	0.00
38	Benzo(k)fluoranthene	0.400	0.409	-2.2	73	0.00
39 C	Benzo(a)pyrene	0.400	0.361	9.8	65	0.00
40	Dibenzo(a,h)anthracene	0.400	0.384	4.0	73	-0.01
41	Benzo(g,h,i)perylene	0.400	0.381	4.8	69	-0.01

( # ) = Out of Range

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



# QC SAMPLE

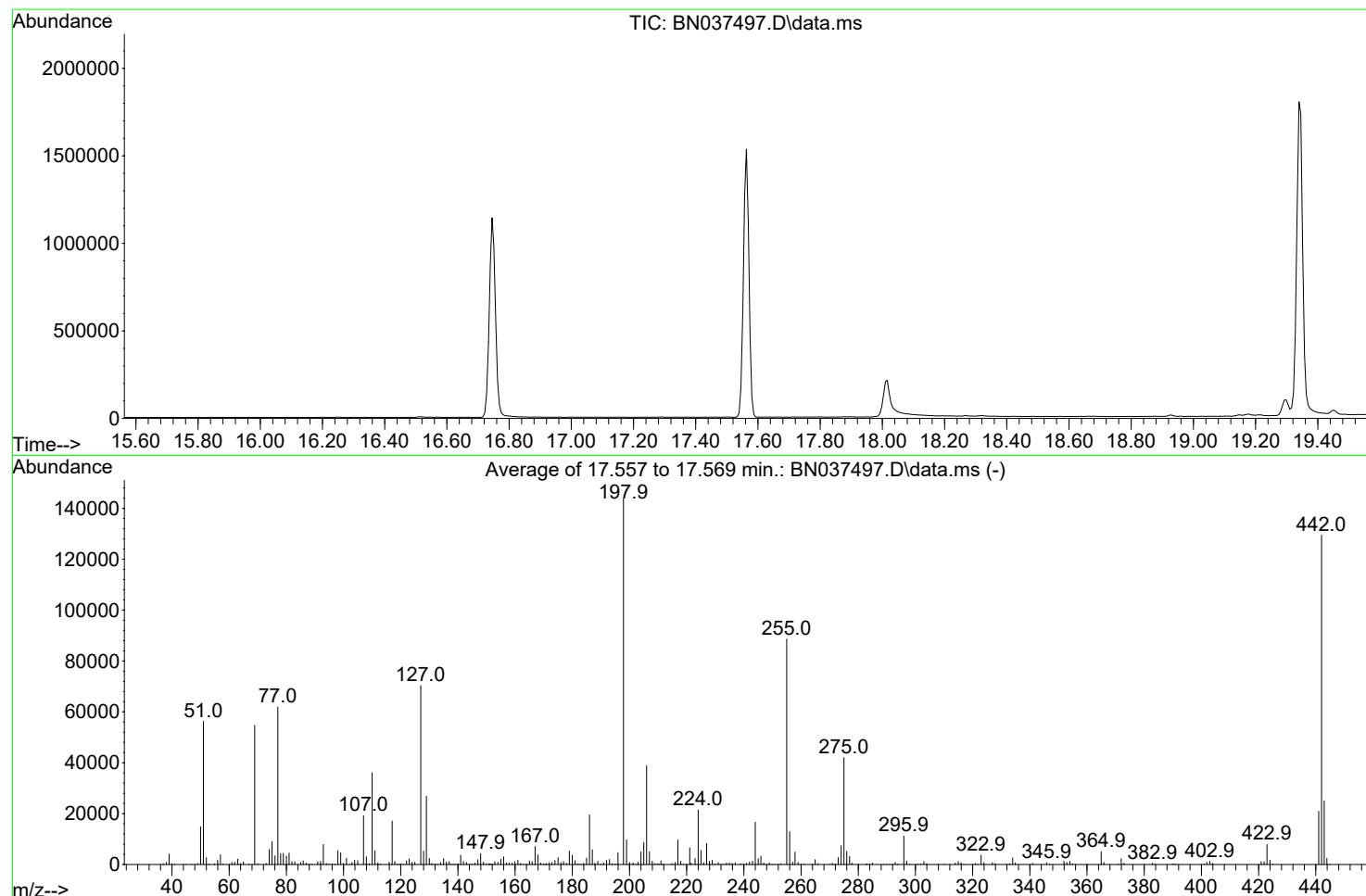
# DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037497.D  
 Acq On : 15 Jul 2025 10:57  
 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-BN071525.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Wed Jul 16 01:39:21 2025



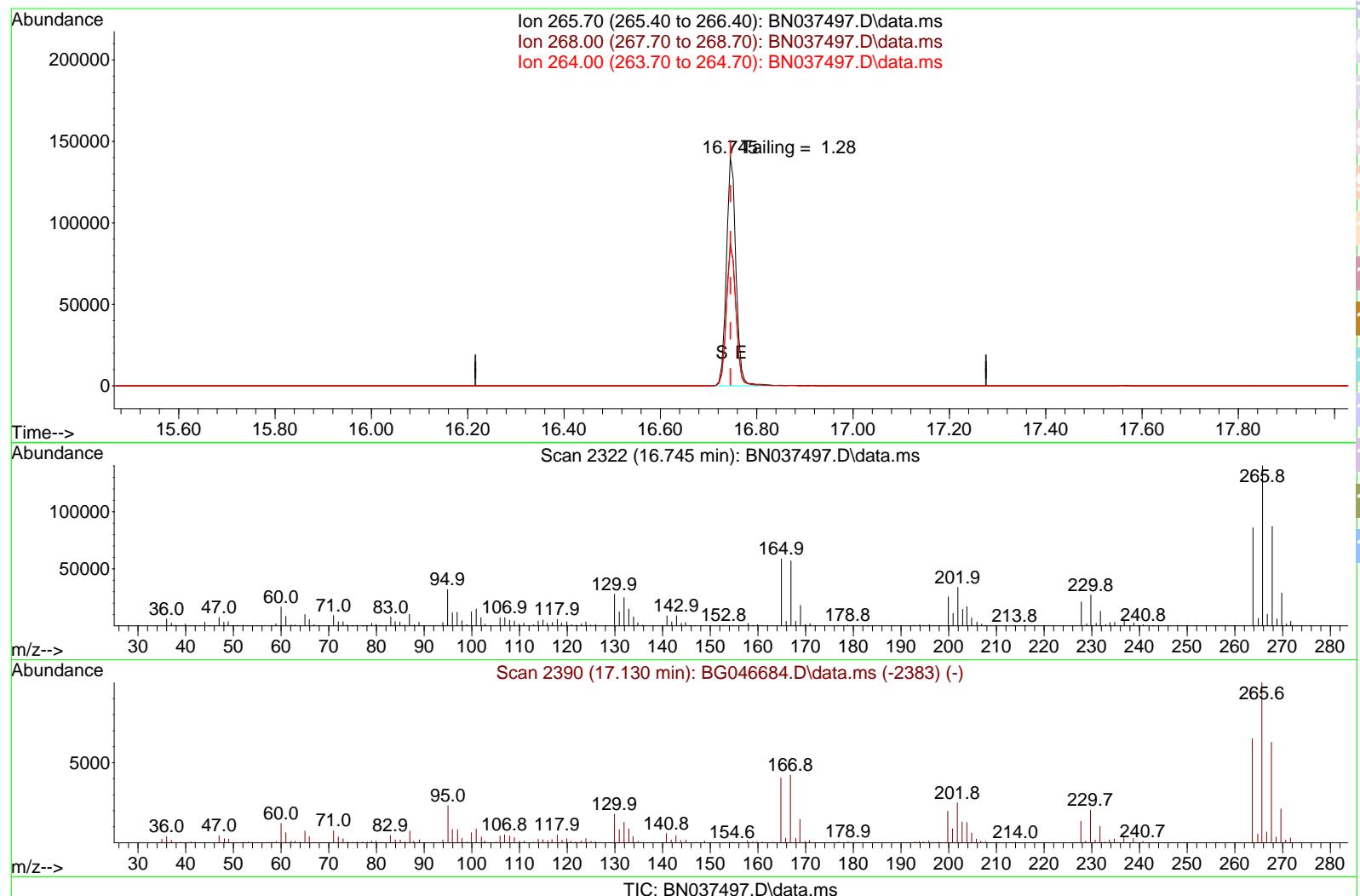
AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	54709	PASS
70	69	0.00	2	0.6	344	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	143808	PASS
199	198	5	9	6.7	9669	PASS
365	198	1	100	3.5	5100	PASS
441	443	0.01	150	83.6	20941	PASS
442	442	100	100	100.0	129491	PASS
443	442	15	24	19.4	25064	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037497.D  
 Acq On : 15 Jul 2025 10:57  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jul 15 18:10:23 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



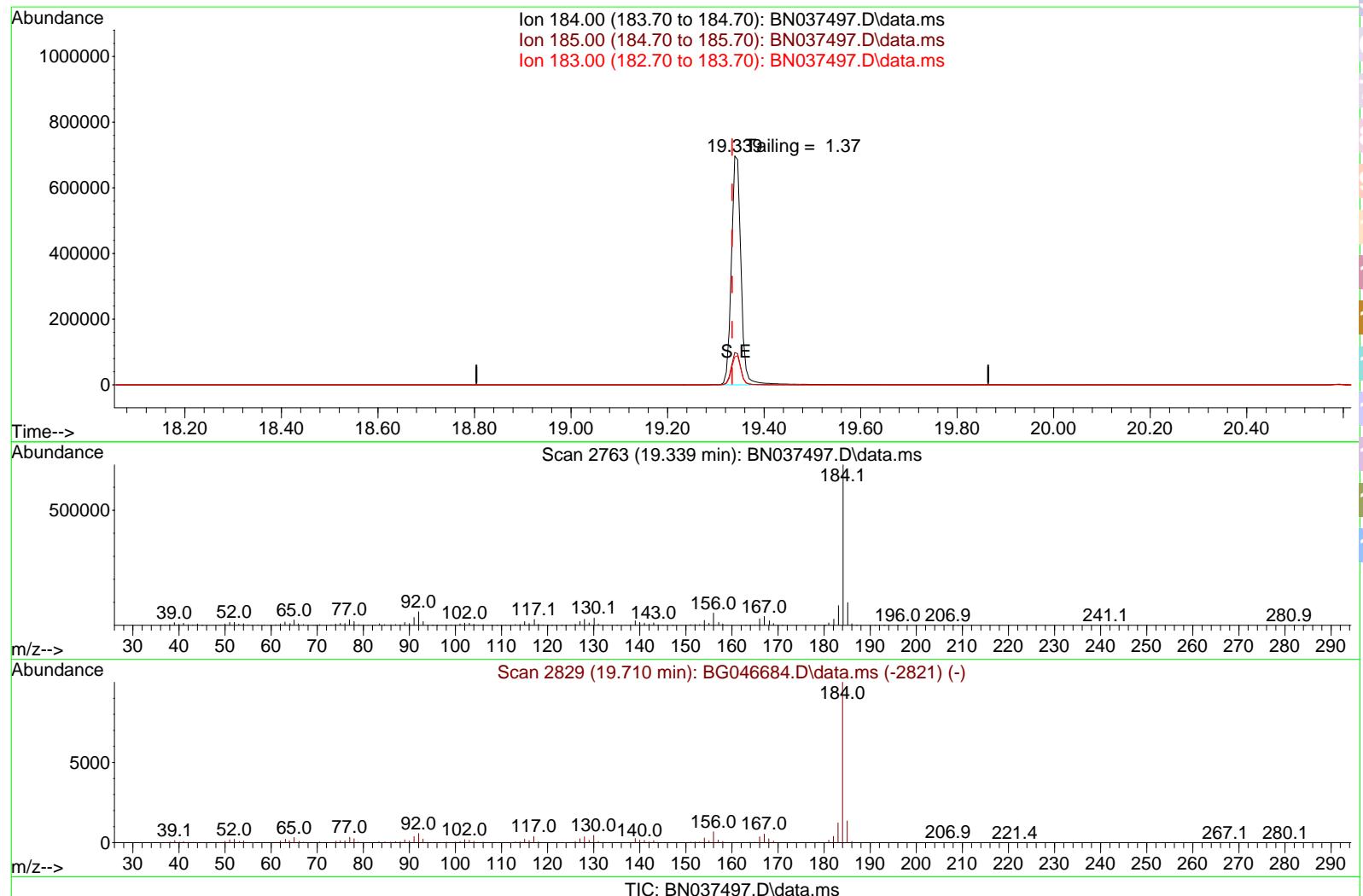
(70) Pentachlorophenol (C)  
 16.745min (-0.001) 31259.96 ng

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	62.06
264.00	61.60	61.25
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN071525\  
 Data File : BN037497.D  
 Acq On : 15 Jul 2025 10:57  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jul 15 18:10:23 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



## (77) Benzidine

19.339min (+ 0.005) 0.00 ng

response 963155

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.14
183.00	13.20	12.27
0.00	0.00	0.00

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

DDT Breakdown

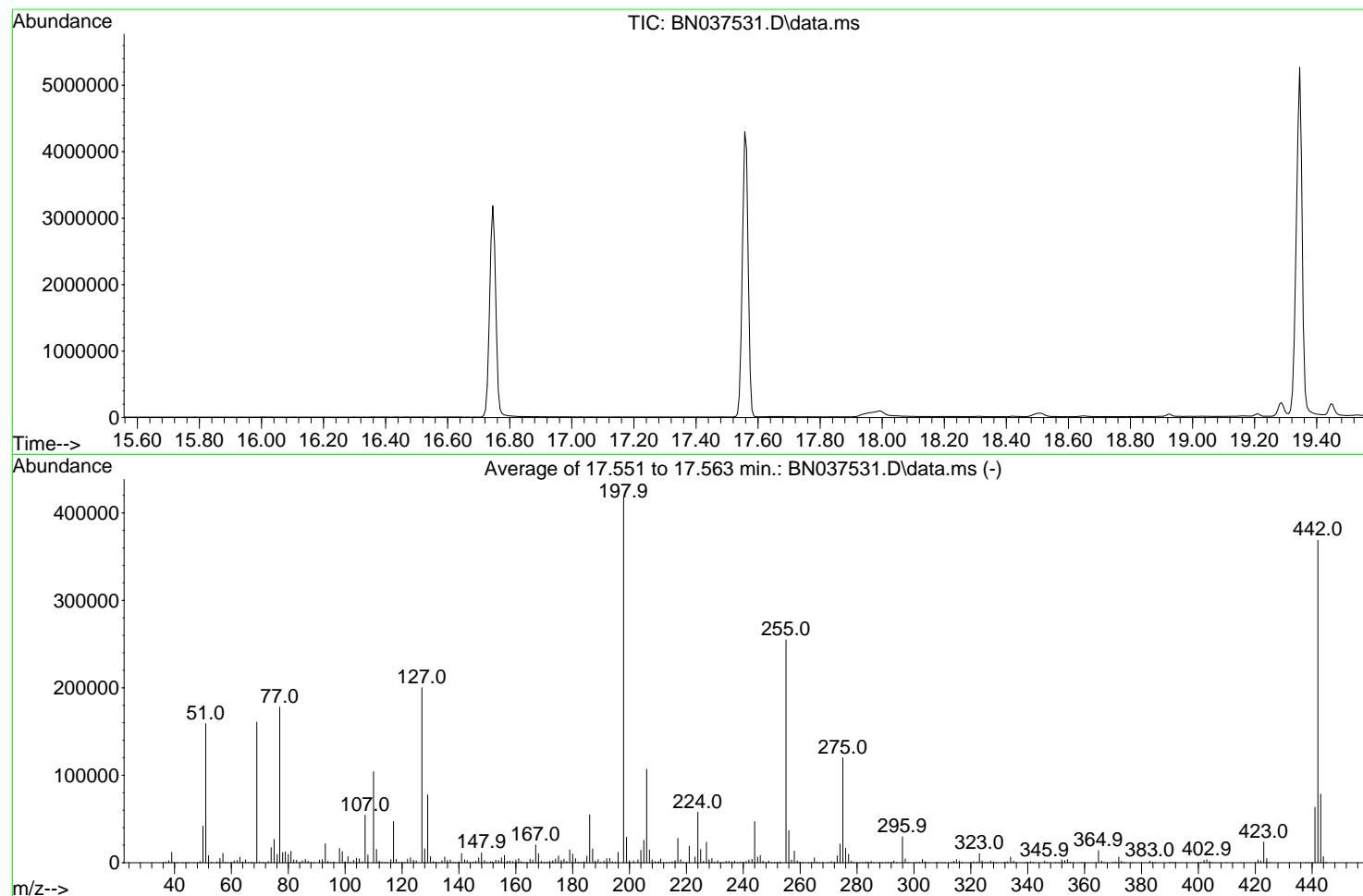
Date	Instrument Name	DFTPP Data File
7/15/2025	BNA_N	BN037497.D
Compound Name	Response	Retention Time
DDT	478094	20.592
DDD	7051	20.145
DDE	60	19.639
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
7111	485205	1.47

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037531.D  
 Acq On : 22 Jul 2025 10:07  
 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-BN071525.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Sat Jul 19 01:46:16 2025



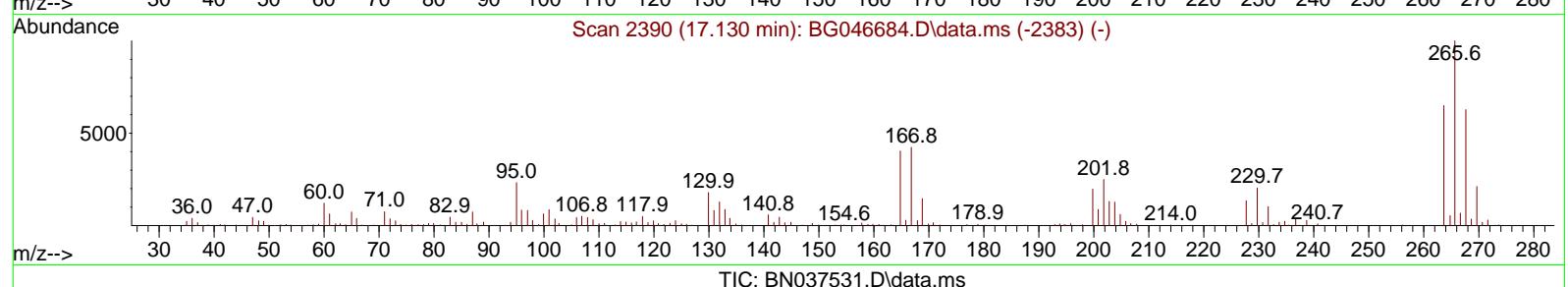
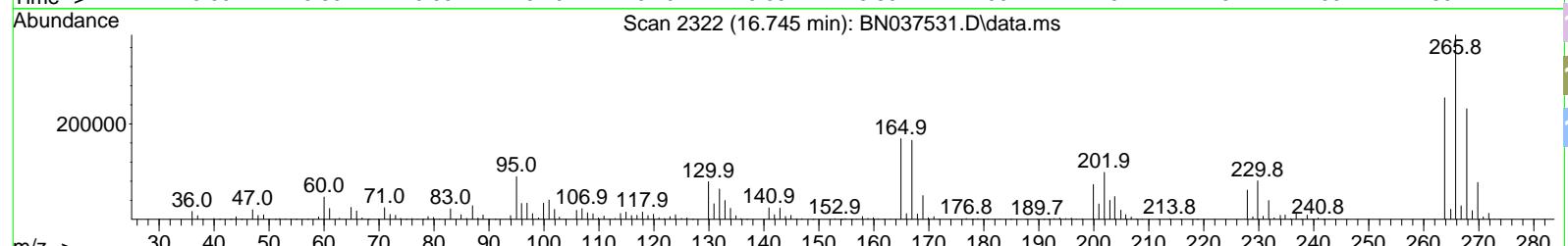
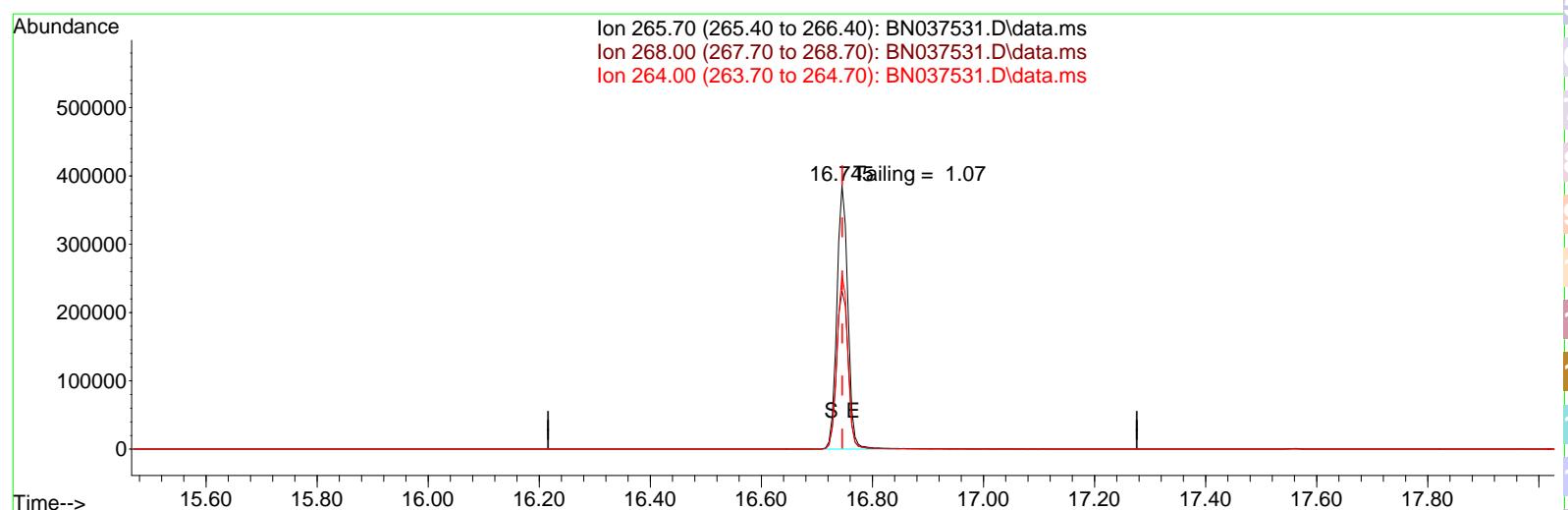
AutoFind: Scans 2459, 2460, 2461; Background Corrected with Scan 2452

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	160747	PASS
70	69	0.00	2	0.6	942	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	417557	PASS
199	198	5	9	7.0	29259	PASS
365	198	1	100	3.3	13803	PASS
441	443	0.01	150	80.9	63376	PASS
442	442	100	100	100.0	368768	PASS
443	442	15	24	21.3	78379	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037531.D  
 Acq On : 22 Jul 2025 10:07  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jul 22 18:01:51 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: BN037531.D\data.ms

(70) Pentachlorophenol (C)  
 16.745min (-0.001) 26722.11 ng

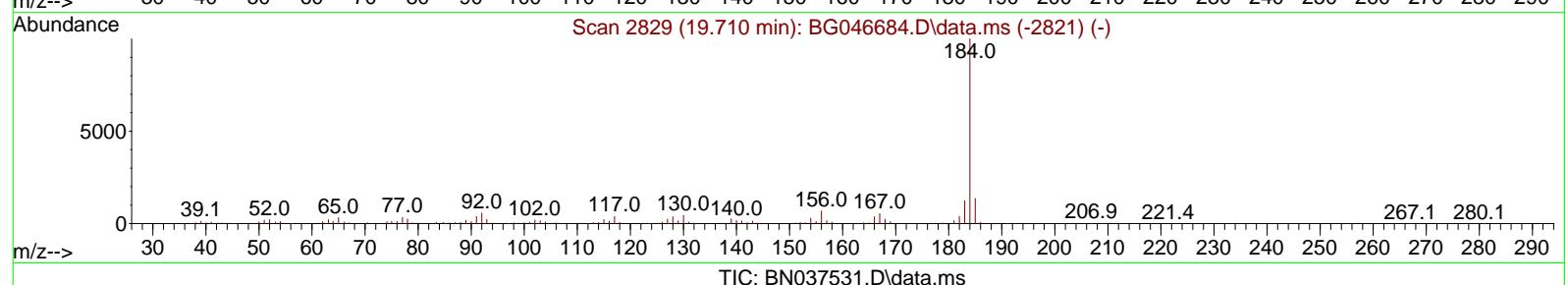
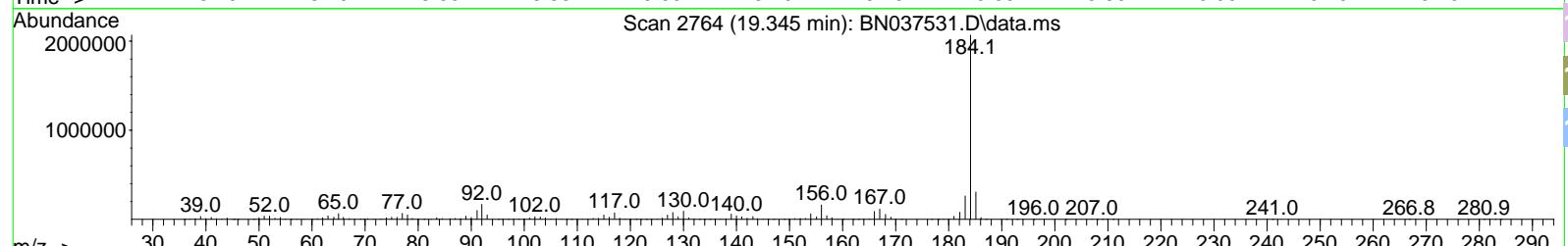
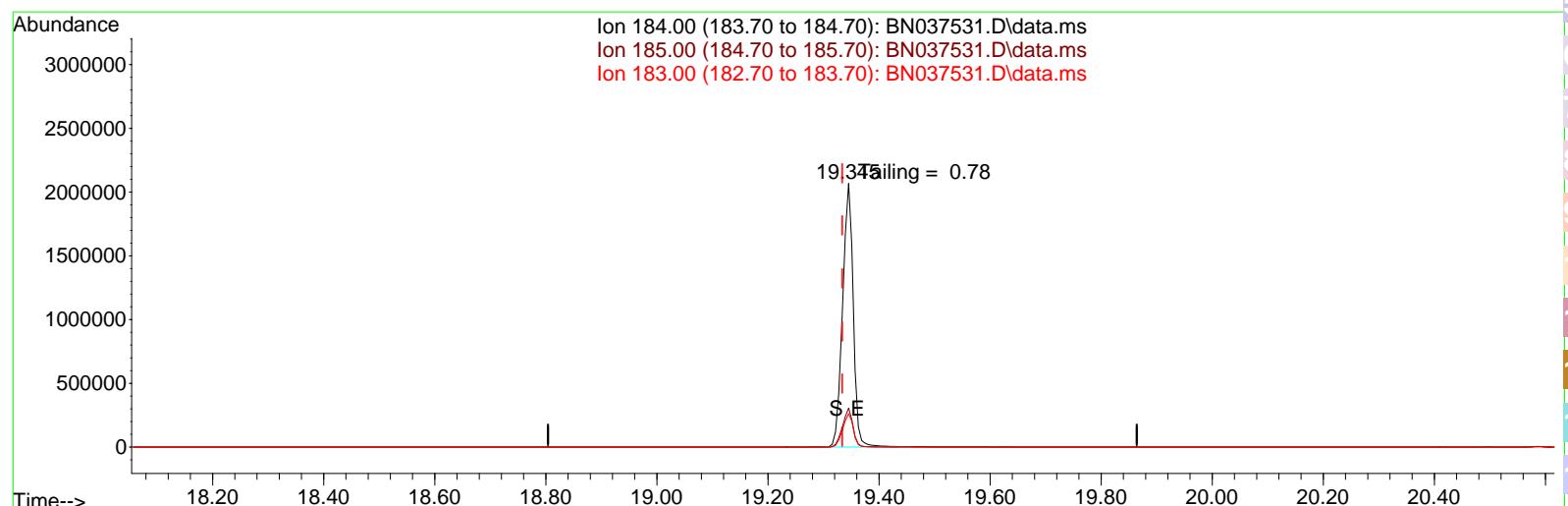
response 535805

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	60.01
264.00	61.60	65.98
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037531.D  
 Acq On : 22 Jul 2025 10:07  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jul 22 18:01:51 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



## (77) Benzidine

19.345min (+ 0.011) 0.00 ng

response 2779976

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.81
183.00	13.20	12.68
0.00	0.00	0.00

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

### DDT Breakdown

Date	Instrument Name	DFTPP Data File
7/22/2025	BNA_N	BN037531.D
Compound Name	Response	Retention Time
DDT	1254739	20.586
DDD	12905	20.198
DDE	284	19.633
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
13189	1267928	1.04



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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13			Date Received:	
Client Sample ID:	PB168952BL			SDG No.:	Q2644
Lab Sample ID:	PB168952BL			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
Prep Method :				PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037533.D	1	07/21/25 09:10	07/22/25 11:28	PB168952

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	3220		7.724			
1146-65-2	Naphthalene-d8	8000		10.509			
15067-26-2	Acenaphthene-d10	4010		14.356			
1517-22-2	Phenanthrene-d10	6960		17.099			
1719-03-5	Chrysene-d12	4780		21.277			
1520-96-3	Perylene-d12	4730		23.513			

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\BN072225\  
 Data File : BN037533.D  
 Acq On : 22 Jul 2025 11:28  
 Operator : RC/JU  
 Sample : PB168952BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB168952BL

Quant Time: Jul 22 11:54:45 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	3218	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	8001	0.400	ng	0.00
13) Acenaphthene-d10	14.356	164	4007	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	6964	0.400	ng	0.00
29) Chrysene-d12	21.277	240	4782	0.400	ng	0.00
35) Perylene-d12	23.513	264	4734	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	2663	0.335	ng	0.00
5) Phenol-d6	6.887	99	3019	0.302	ng	0.00
8) Nitrobenzene-d5	8.865	82	1976	0.330	ng	0.00
11) 2-Methylnaphthalene-d10	12.096	152	3640	0.317	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	232	0.118	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	7692	0.369	ng	0.00
27) Fluoranthene-d10	19.122	212	5631	0.305	ng	0.00
31) Terphenyl-d14	19.726	244	3896	0.379	ng	0.00

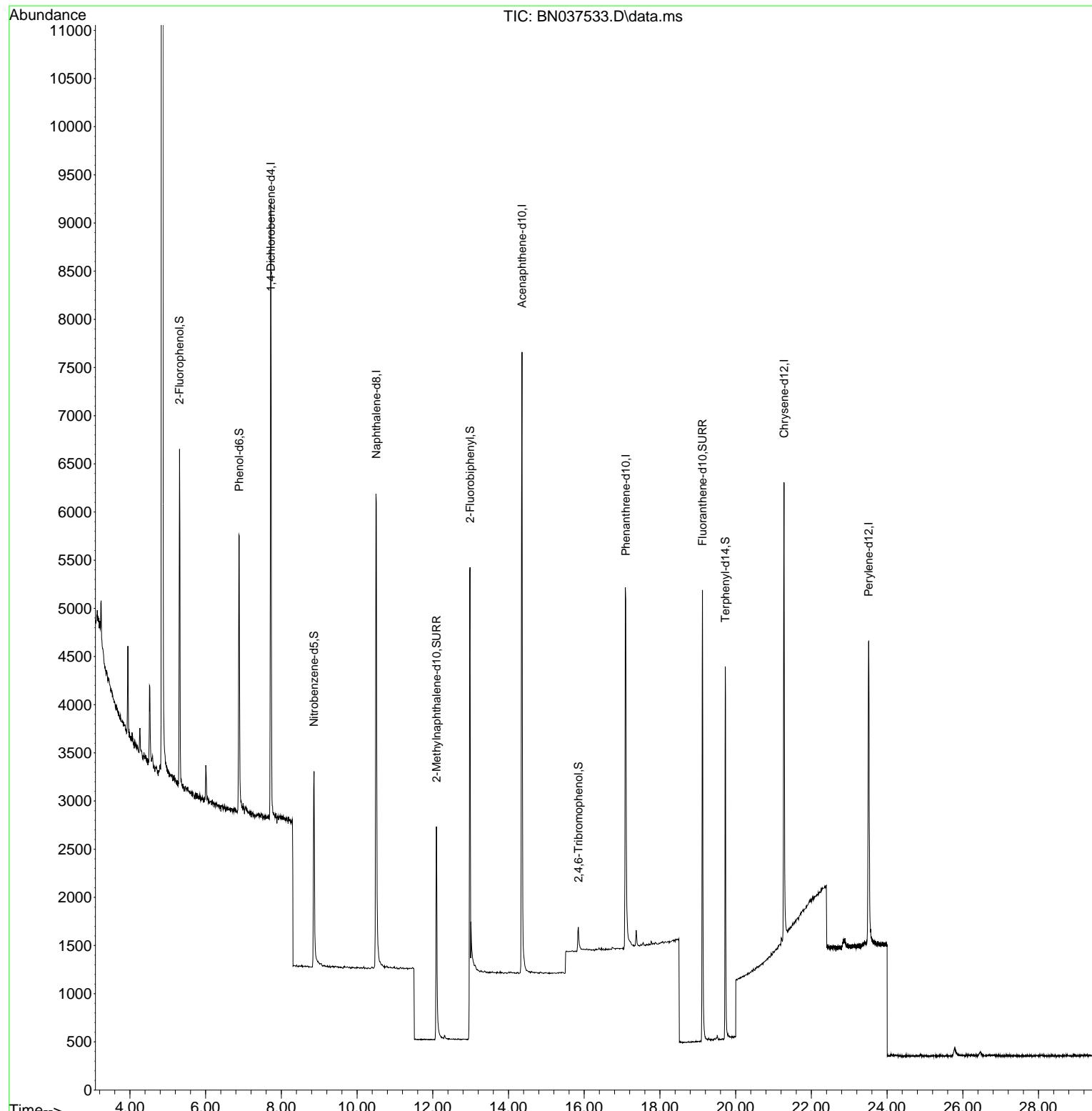
Target Compounds	Qvalue
(#= qualifier out of range (m) = manual integration (+) = signals summed	

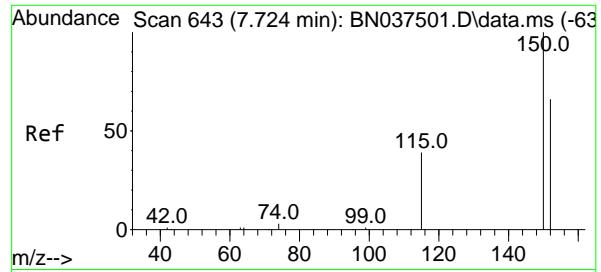
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037533.D  
 Acq On : 22 Jul 2025 11:28  
 Operator : RC/JU  
 Sample : PB168952BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB168952BL

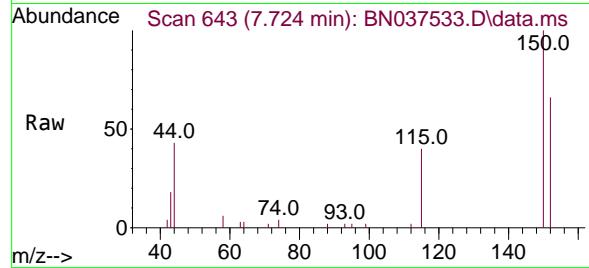
Quant Time: Jul 22 11:54:45 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration



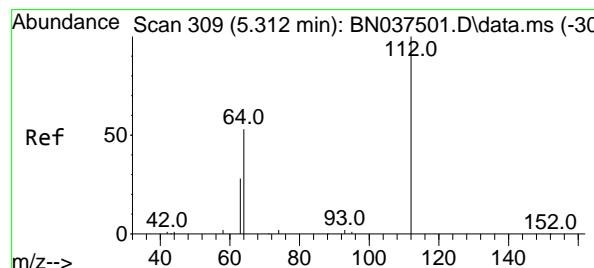
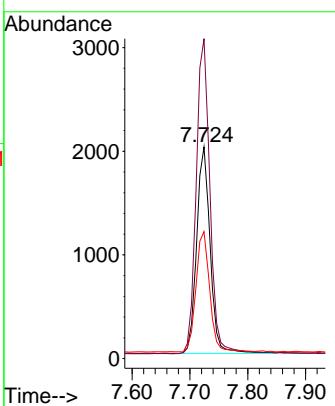
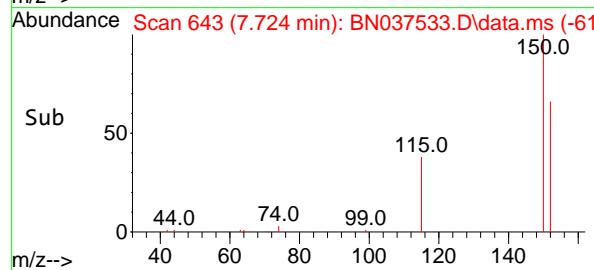


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037533.D  
Acq: 22 Jul 2025 11:28

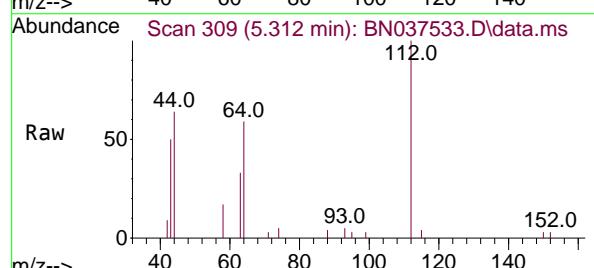
Instrument : BNA\_N  
ClientSampleId : PB168952BL



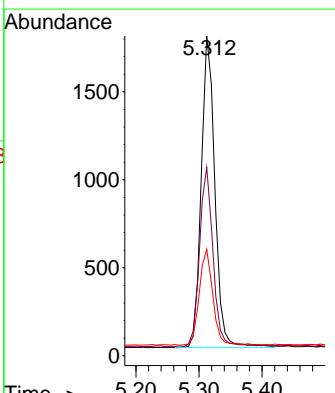
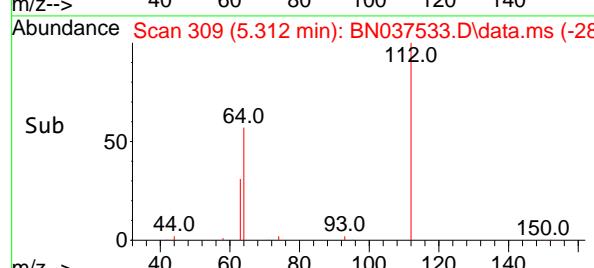
Tgt Ion:152 Resp: 3218  
Ion Ratio Lower Upper  
152 100  
150 151.2 119.8 179.8  
115 60.0 49.1 73.7

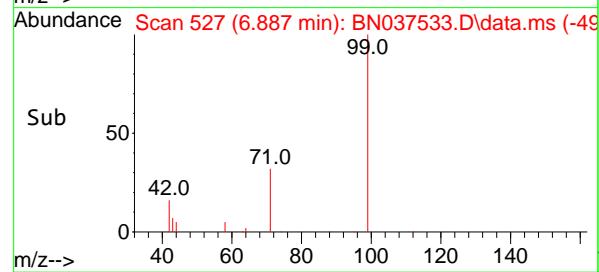
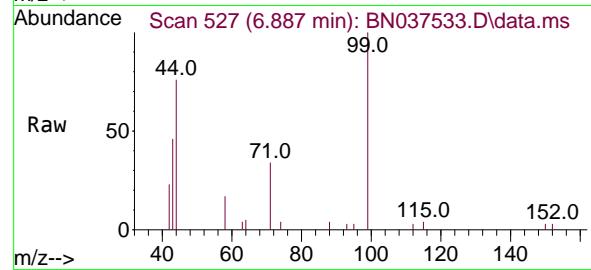
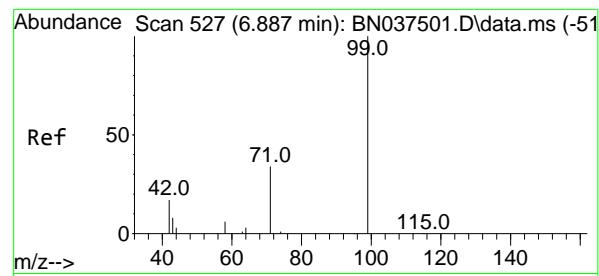


#4  
2-Fluorophenol  
Concen: 0.335 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037533.D  
Acq: 22 Jul 2025 11:28



Tgt Ion:112 Resp: 2663  
Ion Ratio Lower Upper  
112 100  
64 57.0 45.1 67.7  
63 30.3 23.8 35.8

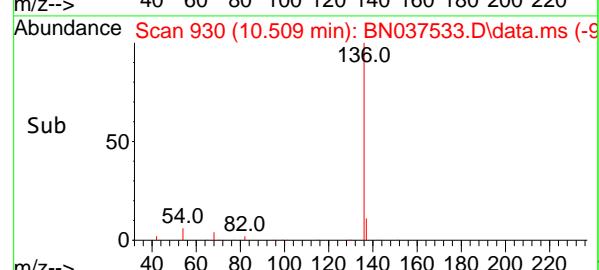
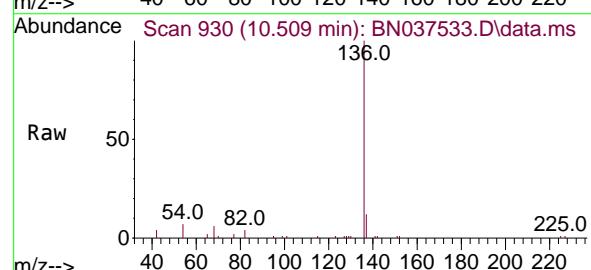
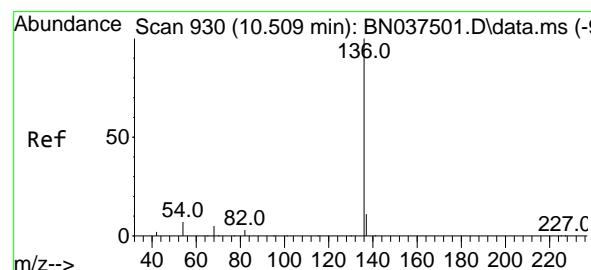
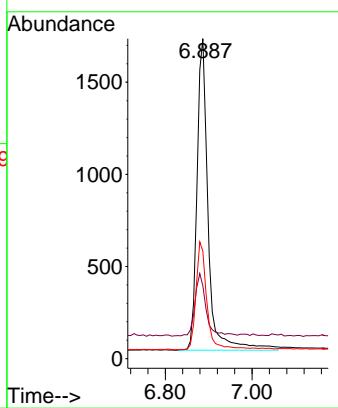




#5  
 Phenol-d6  
 Concen: 0.302 ng  
 RT: 6.887 min Scan# 51  
 Delta R.T. 0.000 min  
 Lab File: BN037533.D  
 Acq: 22 Jul 2025 11:28

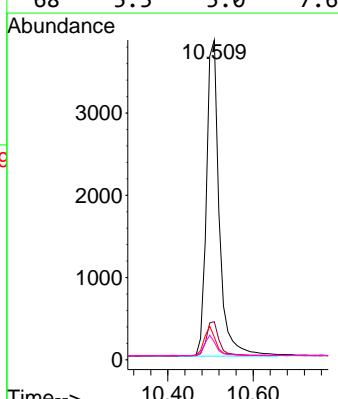
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB168952BL

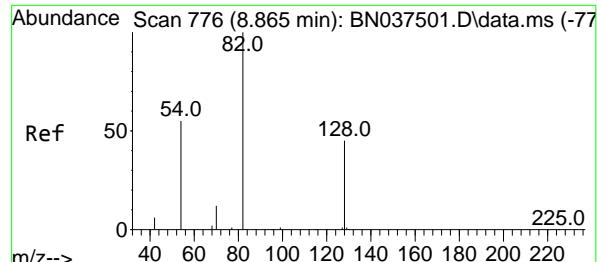
Tgt Ion: 99 Resp: 3019  
 Ion Ratio Lower Upper  
 99 100  
 42 19.4 17.1 25.7  
 71 33.8 27.8 41.8



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 930  
 Delta R.T. 0.000 min  
 Lab File: BN037533.D  
 Acq: 22 Jul 2025 11:28

Tgt Ion:136 Resp: 8001  
 Ion Ratio Lower Upper  
 136 100  
 137 11.9 9.8 14.8  
 54 7.0 6.6 9.8  
 68 5.5 5.0 7.6





#8

Nitrobenzene-d5

Concen: 0.330 ng

RT: 8.865 min Scan# 7

Instrument:

Delta R.T. 0.000 min

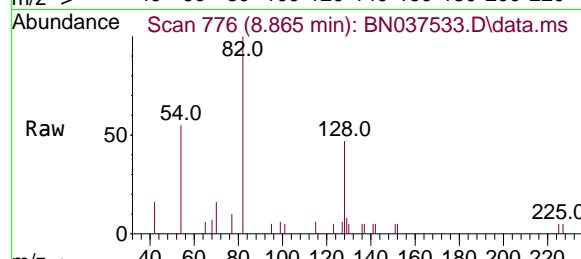
BNA\_N

Lab File: BN037533.D

ClientSampleId :

Acq: 22 Jul 2025 11:28

PB168952BL



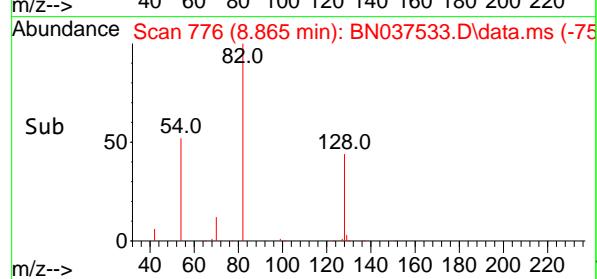
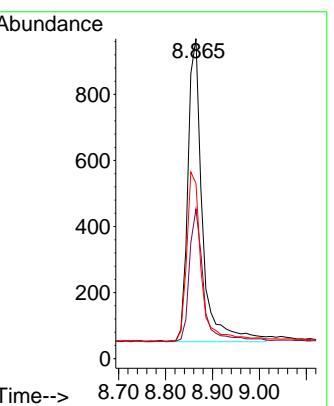
Tgt Ion: 82 Resp: 1976

Ion Ratio Lower Upper

82 100

128 46.7 37.5 56.3

54 54.8 45.3 67.9



#11

2-Methylnaphthalene-d10

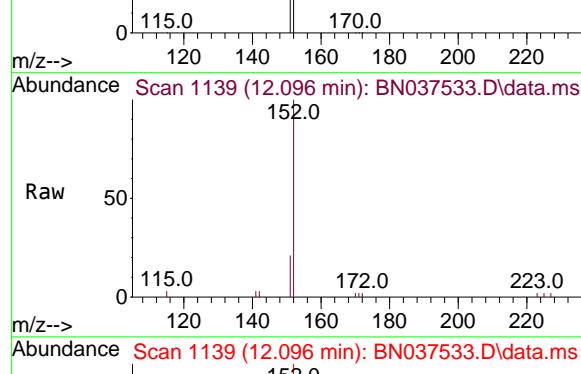
Concen: 0.317 ng

RT: 12.096 min Scan# 1139

Delta R.T. -0.005 min

Lab File: BN037533.D

Acq: 22 Jul 2025 11:28

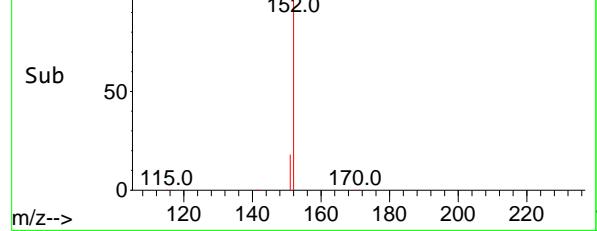
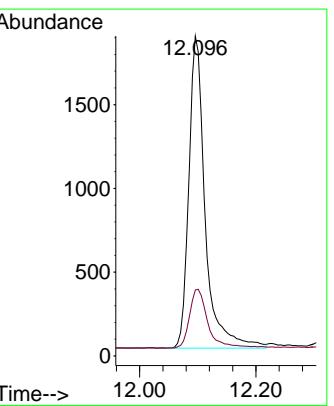


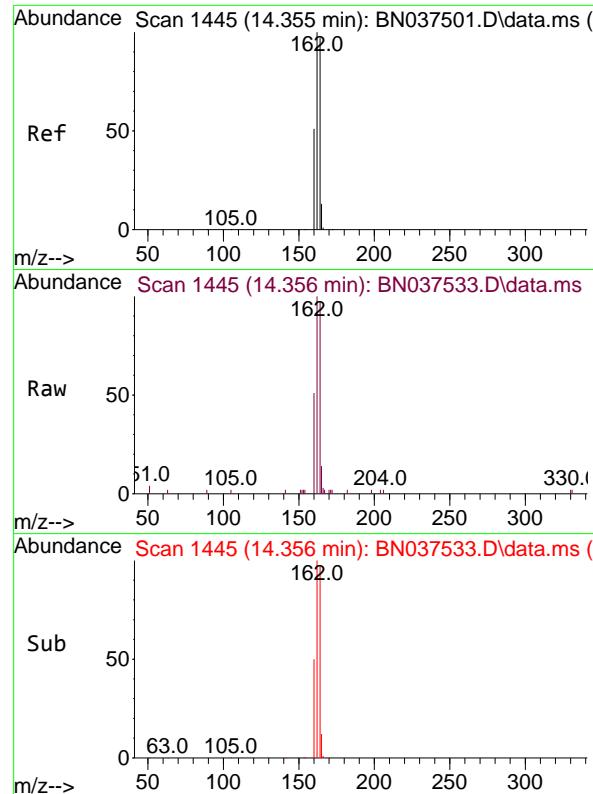
Tgt Ion:152 Resp: 3640

Ion Ratio Lower Upper

152 100

151 21.6 16.8 25.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.356 min Scan# 14

Delta R.T. 0.000 min

Lab File: BN037533.D

Acq: 22 Jul 2025 11:28

Instrument:

BNA\_N

ClientSampleId :

PB168952BL

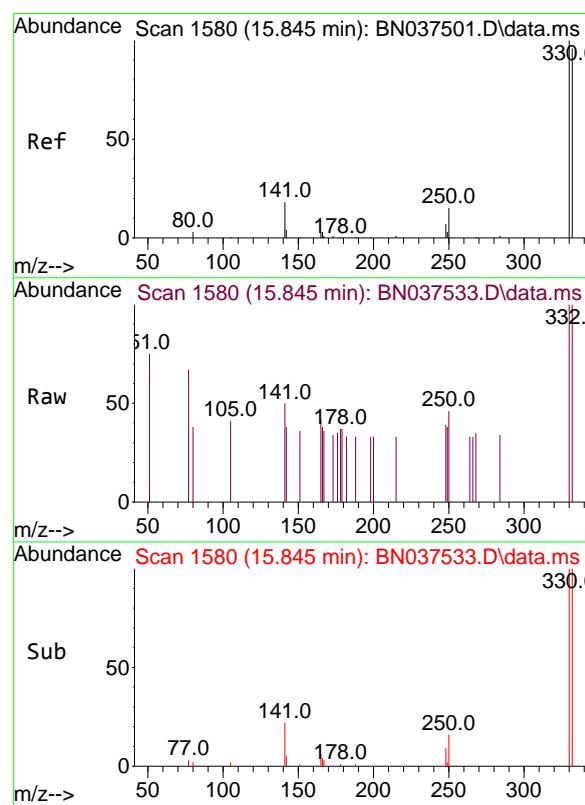
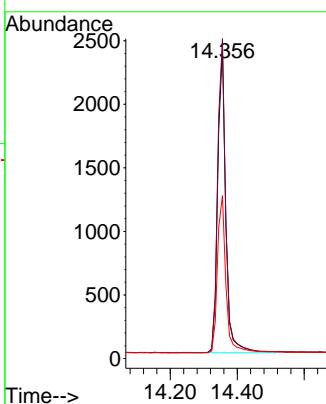
Tgt Ion:164 Resp: 4007

Ion Ratio Lower Upper

164 100

162 102.9 82.0 123.0

160 52.4 42.4 63.6



#14

2,4,6-Tribromophenol

Concen: 0.118 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.000 min

Lab File: BN037533.D

Acq: 22 Jul 2025 11:28

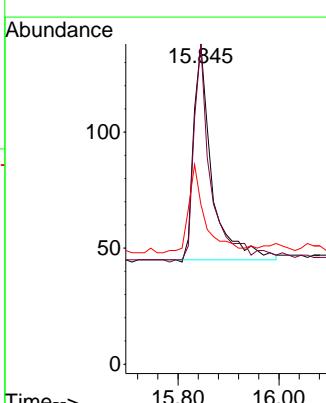
Tgt Ion:330 Resp: 232

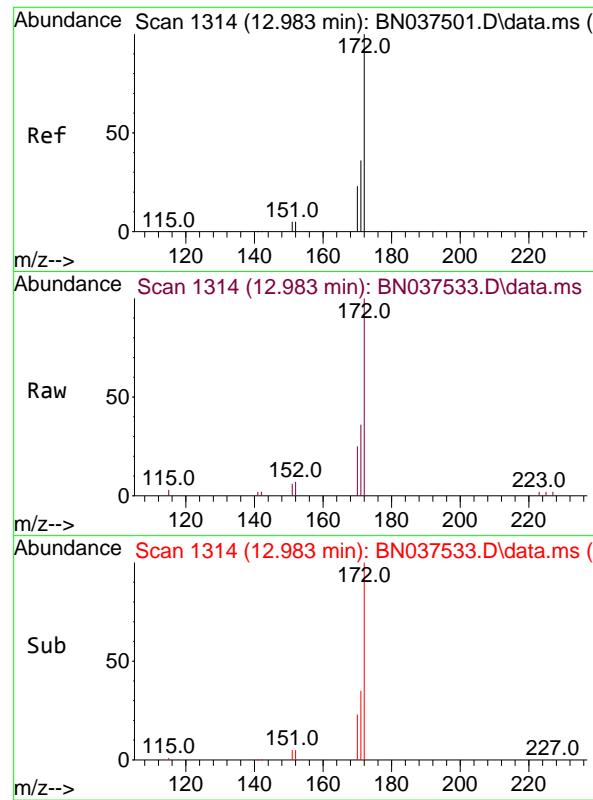
Ion Ratio Lower Upper

330 100

332 94.8 76.1 114.1

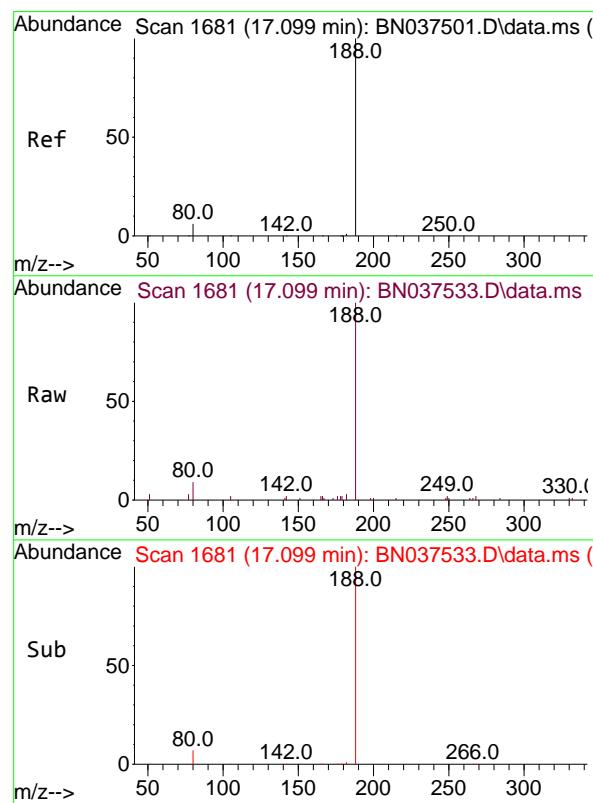
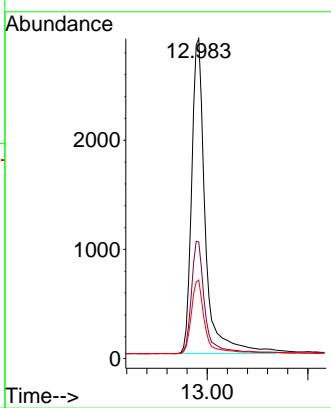
141 37.5 33.4 50.0





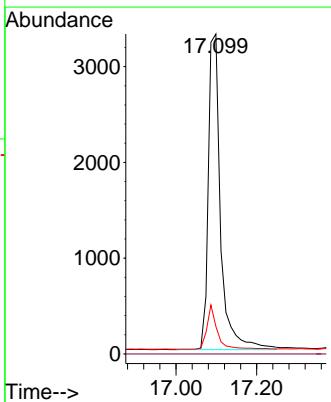
#15  
2-Fluorobiphenyl  
Concen: 0.369 ng  
RT: 12.983 min Scan# 1:Instrument :  
Delta R.T. 0.000 min BNA\_N  
Lab File: BN037533.D ClientSampleId :  
Acq: 22 Jul 2025 11:28 PB168952BL

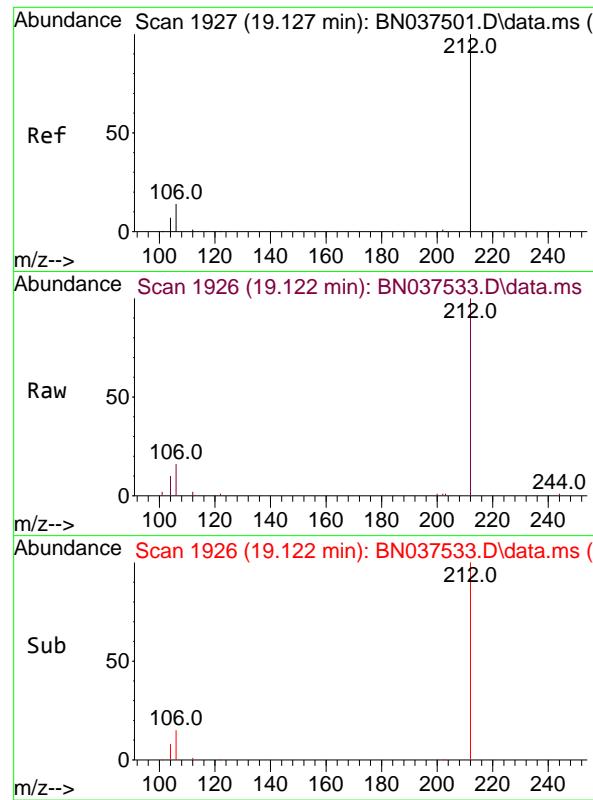
Tgt Ion:172 Resp: 7692  
Ion Ratio Lower Upper  
172 100  
171 36.4 29.4 44.2  
170 24.5 19.4 29.0



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.099 min Scan# 1681  
Delta R.T. 0.000 min  
Lab File: BN037533.D  
Acq: 22 Jul 2025 11:28

Tgt Ion:188 Resp: 6964  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 8.6 6.0 9.0

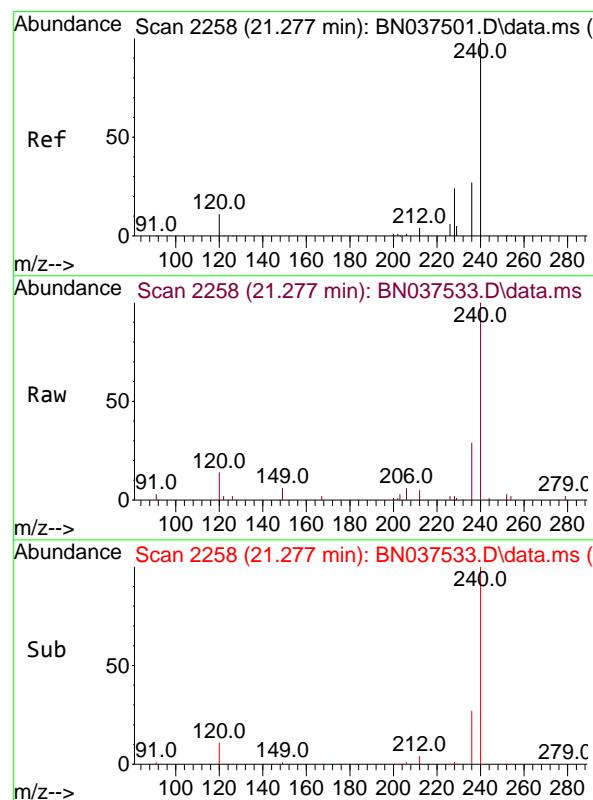
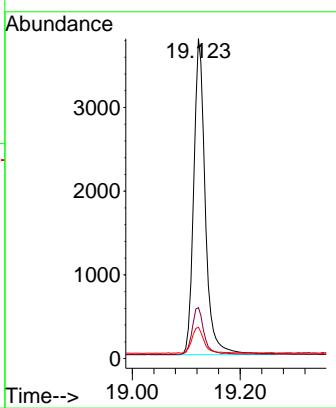




#27  
 Fluoranthene-d10  
 Concen: 0.305 ng  
 RT: 19.122 min Scan# 1926  
 Delta R.T. -0.005 min  
 Lab File: BN037533.D  
 Acq: 22 Jul 2025 11:28

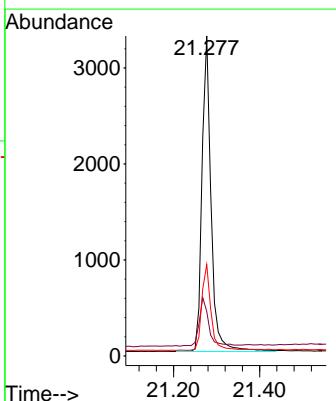
Instrument : BNA\_N  
 ClientSampleId : PB168952BL

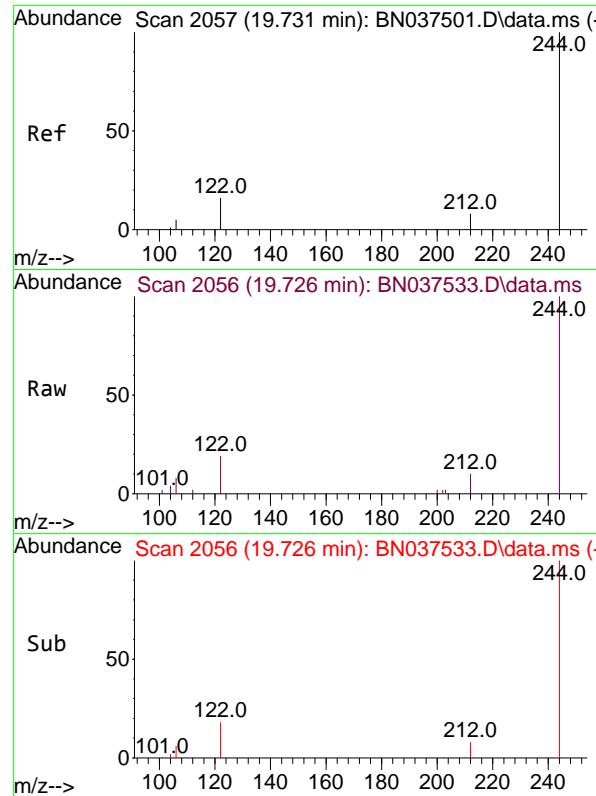
Tgt Ion:212 Resp: 5631  
 Ion Ratio Lower Upper  
 212 100  
 106 15.2 12.2 18.4  
 104 8.5 6.7 10.1



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.277 min Scan# 2258  
 Delta R.T. 0.000 min  
 Lab File: BN037533.D  
 Acq: 22 Jul 2025 11:28

Tgt Ion:240 Resp: 4782  
 Ion Ratio Lower Upper  
 240 100  
 120 13.9 10.7 16.1  
 236 28.5 22.6 33.8

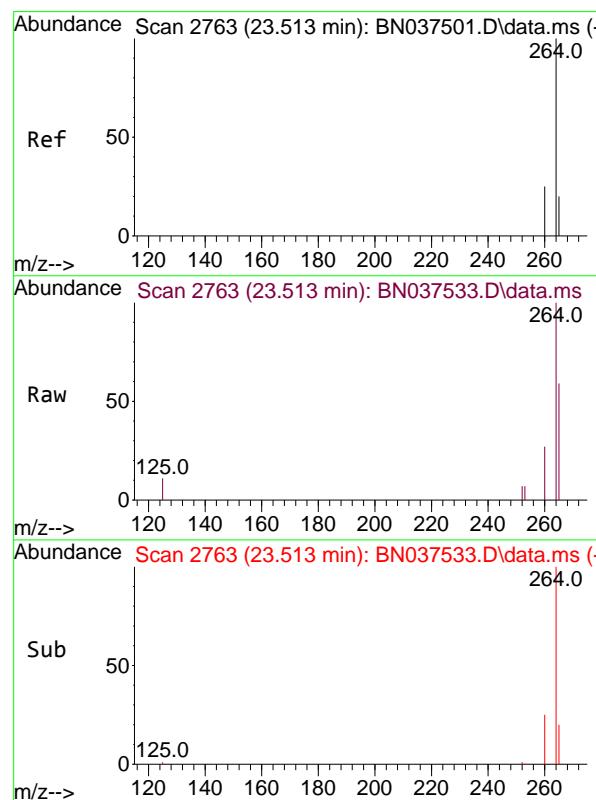
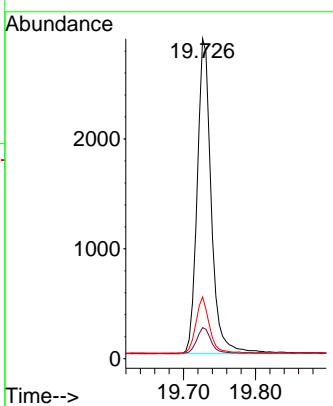




#31  
Terphenyl-d14  
Concen: 0.379 ng  
RT: 19.726 min Scan# 244  
Delta R.T. -0.005 min  
Lab File: BN037533.D  
Acq: 22 Jul 2025 11:28

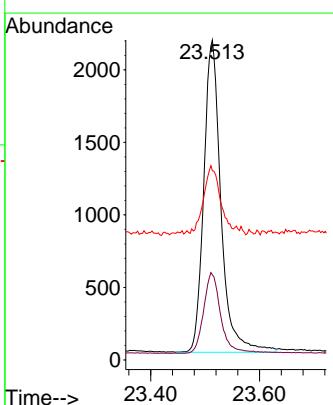
Instrument : BNA\_N  
ClientSampleId : PB168952BL

Tgt Ion:244 Resp: 3896  
Ion Ratio Lower Upper  
244 100  
212 9.7 7.4 11.2  
122 19.3 13.6 20.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2763  
Delta R.T. 0.000 min  
Lab File: BN037533.D  
Acq: 22 Jul 2025 11:28

Tgt Ion:264 Resp: 4734  
Ion Ratio Lower Upper  
264 100  
260 26.6 21.2 31.8  
265 59.1 40.4 60.6





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13			Date Received:	
Client Sample ID:	PB168952BS			SDG No.:	Q2644
Lab Sample ID:	PB168952BS			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
Prep Method :				PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037544.D	1	07/21/25 09:10	07/22/25 18:05	PB168952

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.36		30 - 150		90%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43	*	53 - 106		107%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.39		58 - 132		98%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2050		7.724			
1146-65-2	Naphthalene-d8	5020		10.498			
15067-26-2	Acenaphthene-d10	2410		14.355			
1517-22-2	Phenanthrene-d10	4510		17.086			
1719-03-5	Chrysene-d12	3060		21.268			
1520-96-3	Perylene-d12	2590		23.507			

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\BN072225\  
Data File : BN037544.D  
Acq On : 22 Jul 2025 18:05  
Operator : RC/JU  
Sample : PB168952BS  
Misc :  
ALS Vial : 14 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
PB168952BS

Quant Time: Jul 22 18:29:23 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Sat Jul 19 01:46:16 2025  
Response via : Initial Calibration

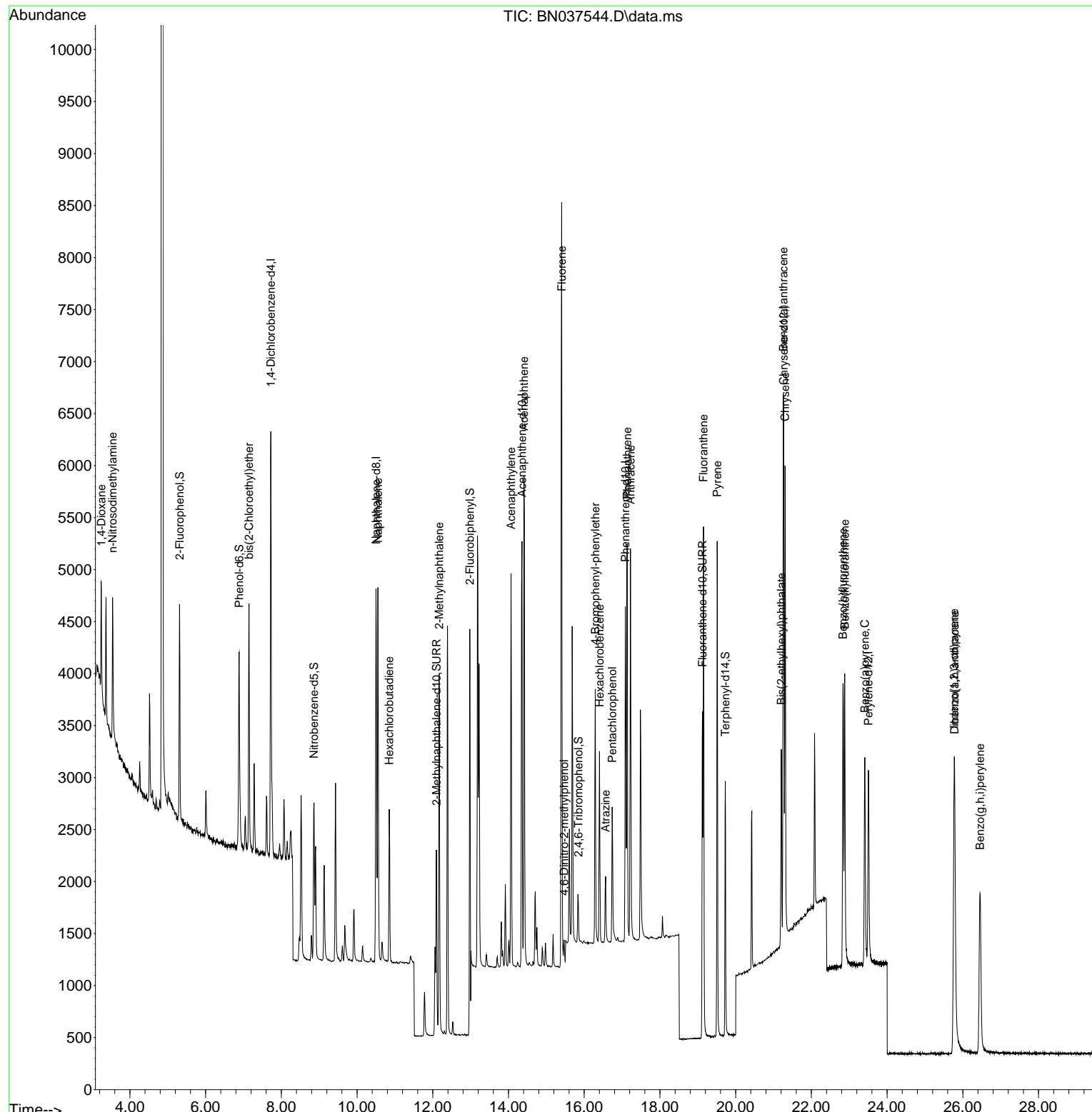
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2046	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	5016	0.400	ng	#-0.01
13) Acenaphthene-d10	14.355	164	2405	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4507	0.400	ng	#-0.01
29) Chrysene-d12	21.268	240	3057	0.400	ng	# 0.00
35) Perylene-d12	23.507	264	2587	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	1596	0.315	ng	0.00
5) Phenol-d6	6.886	99	1804	0.284	ng	0.00
8) Nitrobenzene-d5	8.864	82	1314	0.350	ng	0.00
11) 2-Methylnaphthalene-d10	12.095	152	2593	0.360	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	311	0.263	ng	0.00
15) 2-Fluorobiphenyl	12.978	172	5340	0.427	ng	0.00
27) Fluoranthene-d10	19.122	212	3618	0.303	ng	0.00
31) Terphenyl-d14	19.726	244	2569	0.391	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.246	88	595	0.303	ng	# 74
3) n-Nitrosodimethylamine	3.543	42	907	0.367	ng	89
6) bis(2-Chloroethyl)ether	7.146	93	1778	0.337	ng	98
9) Naphthalene	10.551	128	4609	0.345	ng	100
10) Hexachlorobutadiene	10.850	225	1216	0.411	ng	# 98
12) 2-Methylnaphthalene	12.166	142	2616	0.297	ng	95
16) Acenaphthylene	14.067	152	4254	0.395	ng	98
17) Acenaphthene	14.409	154	2497	0.341	ng	96
18) Fluorene	15.403	166	3212	0.341	ng	100
20) 4,6-Dinitro-2-methylph...	15.467	198	179	0.384	ng	90
21) 4-Bromophenyl-phenylether	16.292	248	978	0.339	ng	93
22) Hexachlorobenzene	16.404	284	1381	0.370	ng	97
23) Atrazine	16.565	200	628	0.312	ng	96
24) Pentachlorophenol	16.739	266	719	0.430	ng	99
25) Phenanthrene	17.136	178	4631	0.343	ng	99
26) Anthracene	17.223	178	4161	0.338	ng	100
28) Fluoranthene	19.150	202	4624	0.297	ng	98
30) Pyrene	19.512	202	4460	0.362	ng	100
32) Benzo(a)anthracene	21.259	228	3769	0.352	ng	98
33) Chrysene	21.304	228	4055	0.364	ng	98
34) Bis(2-ethylhexyl)phtha...	21.205	149	1538	0.319	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.770	276	4073	0.378	ng	96
37) Benzo(b)fluoranthene	22.835	252	3643	0.371	ng	96
38) Benzo(k)fluoranthene	22.879	252	3764	0.371	ng	95
39) Benzo(a)pyrene	23.411	252	3151	0.385	ng	94
40) Dibenzo(a,h)anthracene	25.785	278	3204	0.367	ng	93
41) Benzo(g,h,i)perylene	26.457	276	3511	0.389	ng	98

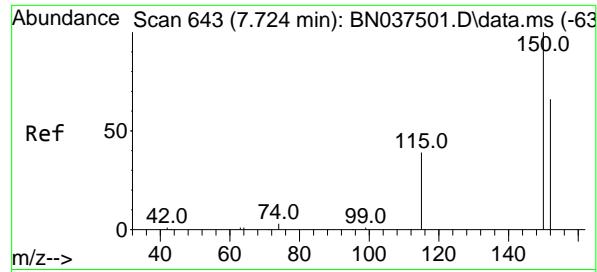
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037544.D  
 Acq On : 22 Jul 2025 18:05  
 Operator : RC/JU  
 Sample : PB168952BS  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB168952BS

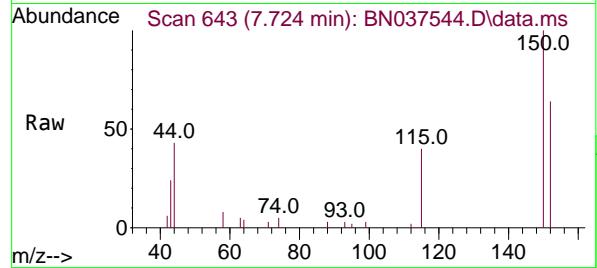
Quant Time: Jul 22 18:29:23 2025  
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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration



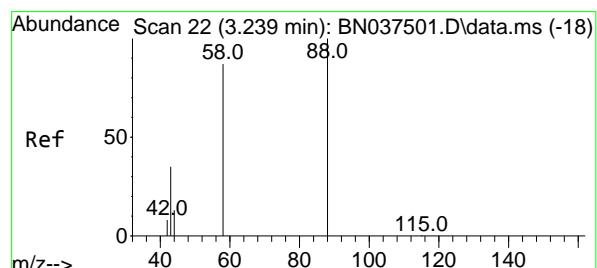
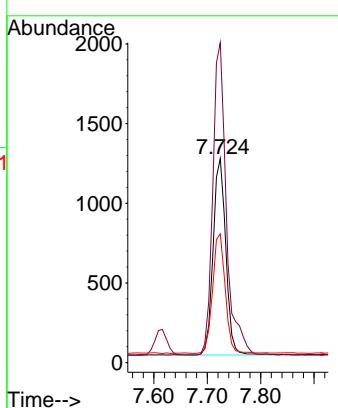
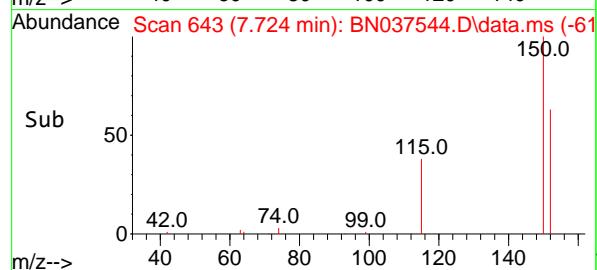


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

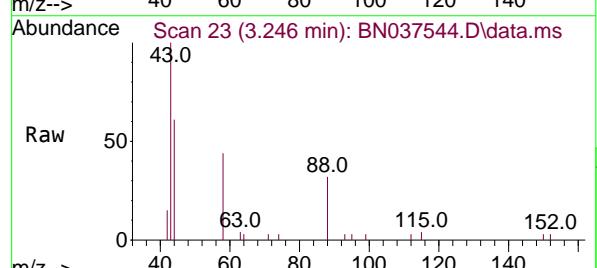
Instrument : BNA\_N  
ClientSampleId : PB168952BS



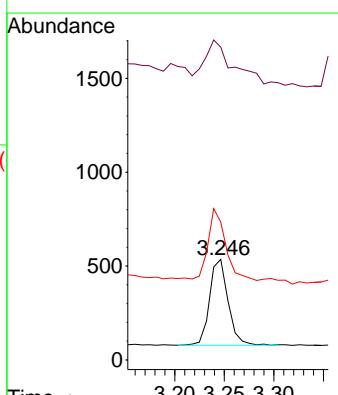
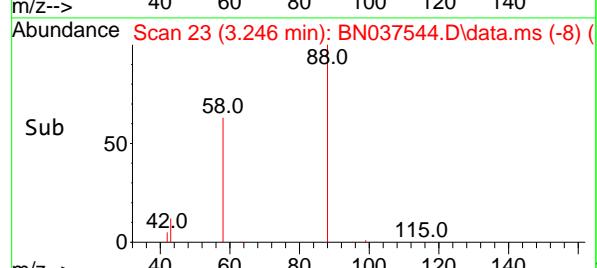
Tgt Ion:152 Resp: 2046  
Ion Ratio Lower Upper  
152 100  
150 156.8 119.8 179.8  
115 63.1 49.1 73.7

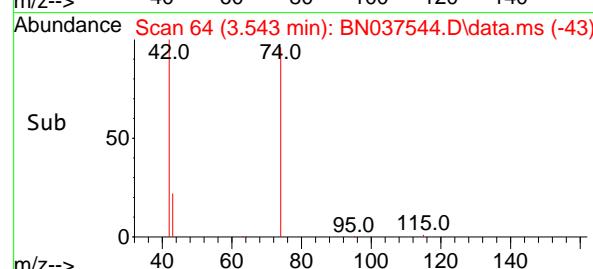
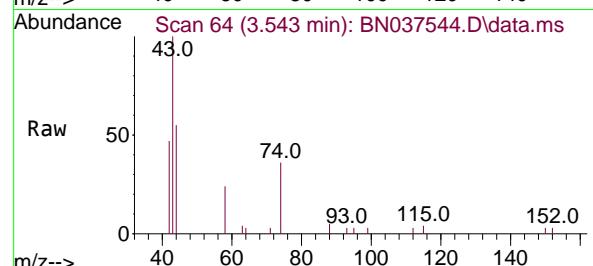
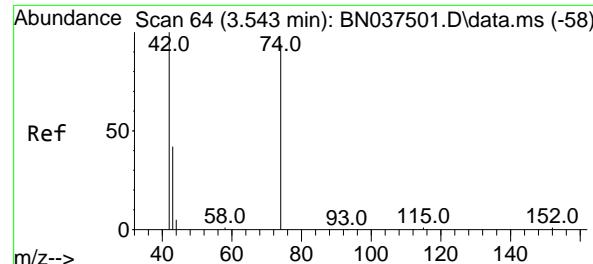


#2  
1,4-Dioxane  
Concen: 0.303 ng  
RT: 3.246 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05



Tgt Ion: 88 Resp: 595  
Ion Ratio Lower Upper  
88 100  
43 83.0 27.5 41.3#  
58 78.8 62.7 94.1





#3

n-Nitrosodimethylamine

Concen: 0.367 ng

RT: 3.543 min Scan# 64

Delta R.T. -0.000 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

Instrument :

BNA\_N

ClientSampleId :

PB168952BS

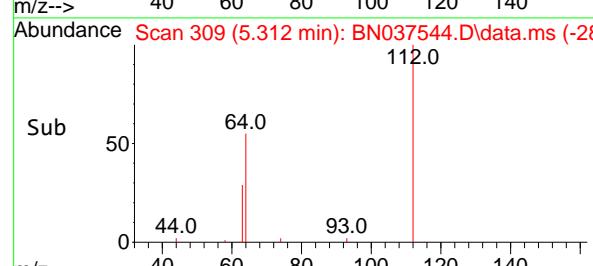
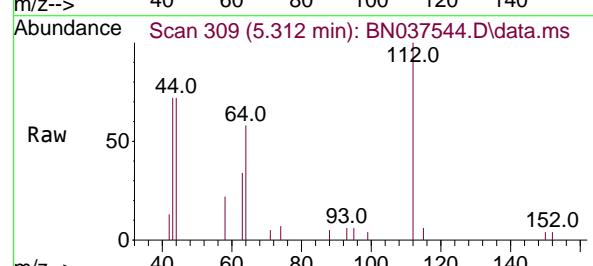
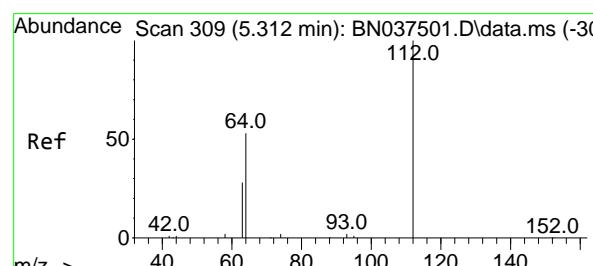
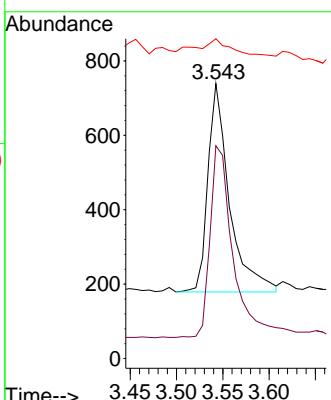
Tgt Ion: 42 Resp: 907

Ion Ratio Lower Upper

42 100

74 101.4 91.8 137.6

44 16.0 15.0 22.6



#4

2-Fluorophenol

Concen: 0.315 ng

RT: 5.312 min Scan# 309

Delta R.T. -0.000 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

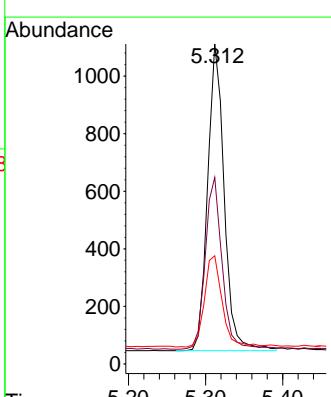
Tgt Ion: 112 Resp: 1596

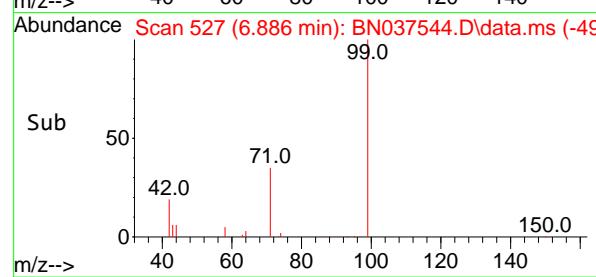
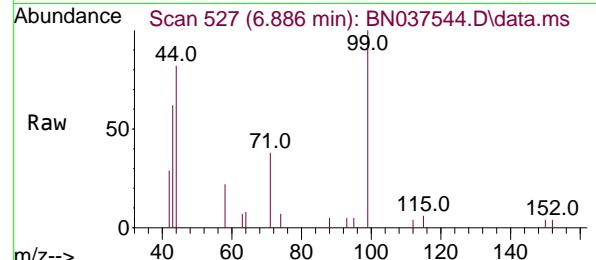
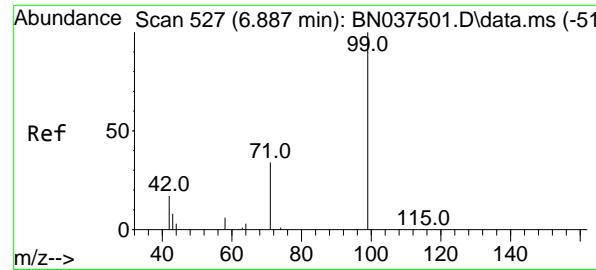
Ion Ratio Lower Upper

112 100

64 57.5 45.1 67.7

63 31.8 23.8 35.8

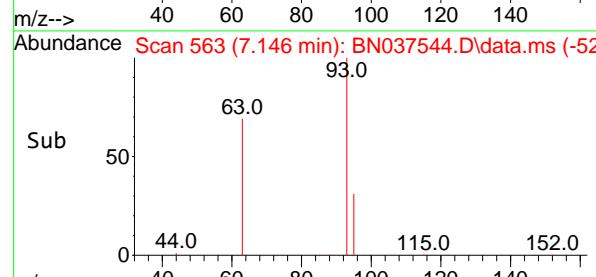
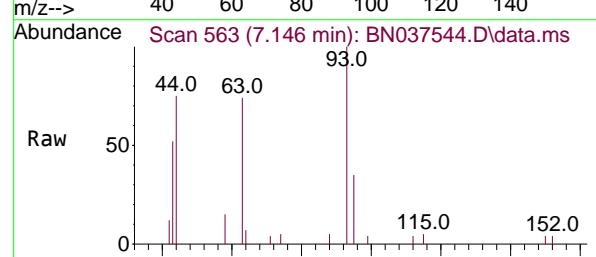
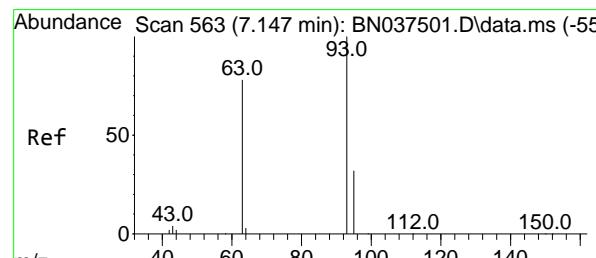
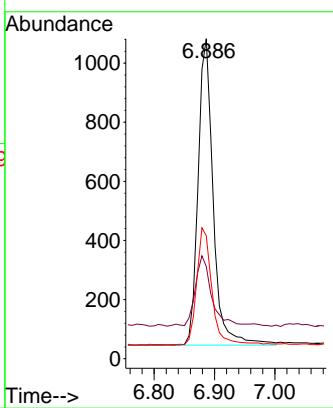




#5  
 Phenol-d6  
 Concen: 0.284 ng  
 RT: 6.886 min Scan# 51  
 Delta R.T. -0.000 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

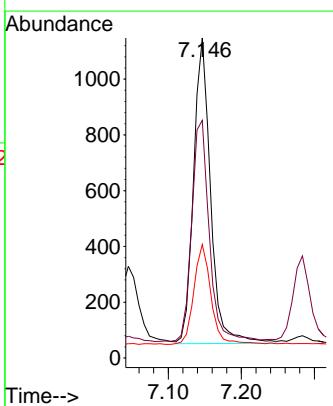
Instrument : BNA\_N  
 ClientSampleId : PB168952BS

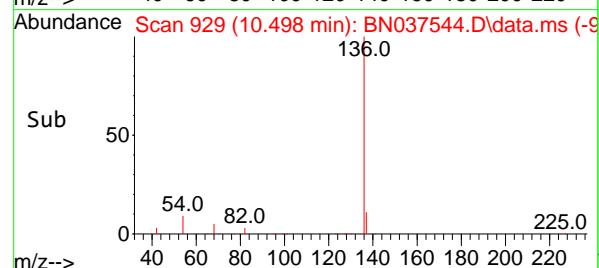
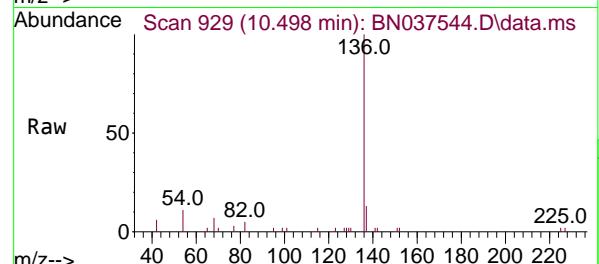
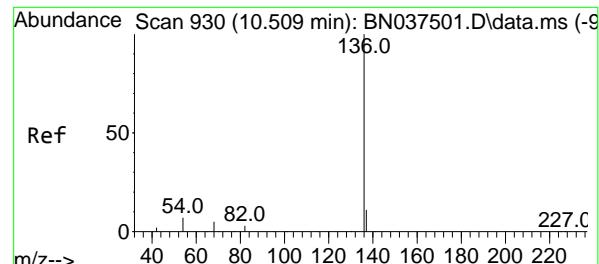
Tgt Ion: 99 Resp: 1804  
 Ion Ratio Lower Upper  
 99 100  
 42 24.9 17.1 25.7  
 71 38.5 27.8 41.8



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.337 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.000 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

Tgt Ion: 93 Resp: 1778  
 Ion Ratio Lower Upper  
 93 100  
 63 74.4 58.2 87.4  
 95 32.8 25.3 37.9



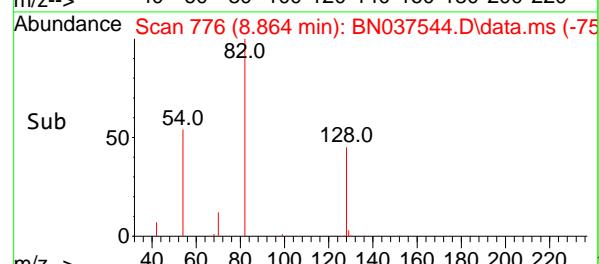
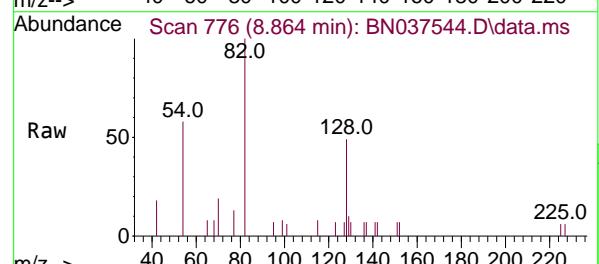
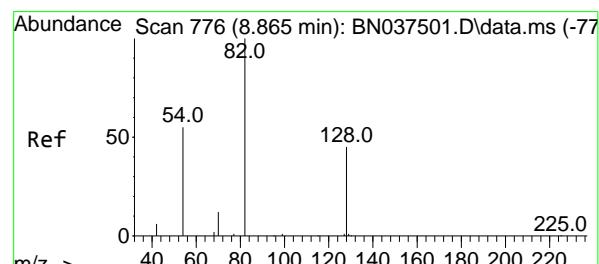
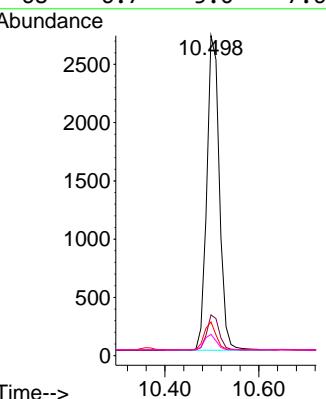


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.498 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

Instrument : BNA\_N  
 ClientSampleId : PB168952BS

Tgt Ion:136 Resp: 5016

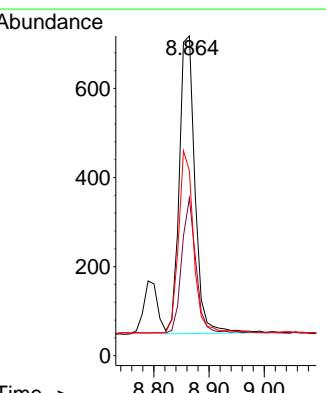
Ion	Ratio	Lower	Upper
136	100		
137	12.7	9.8	14.8
54	10.6	6.6	9.8#
68	6.7	5.0	7.6

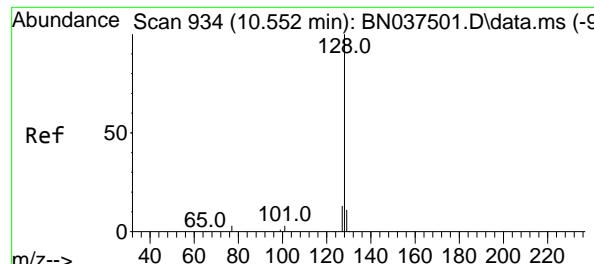


#8  
 Nitrobenzene-d5  
 Concen: 0.350 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.000 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

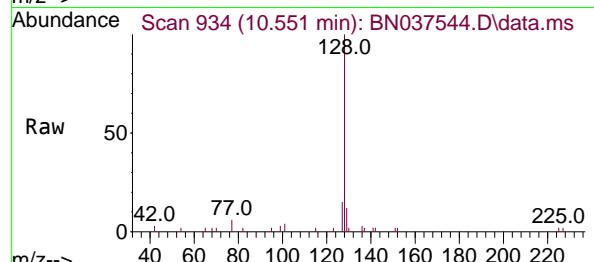
Tgt Ion: 82 Resp: 1314

Ion	Ratio	Lower	Upper
82	100		
128	49.3	37.5	56.3
54	57.8	45.3	67.9

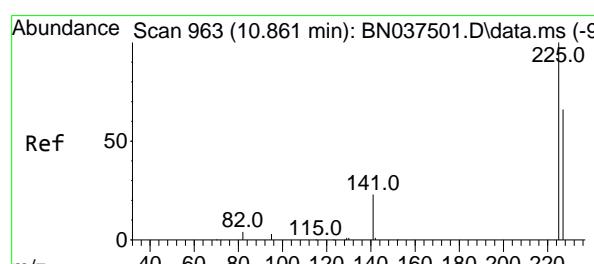
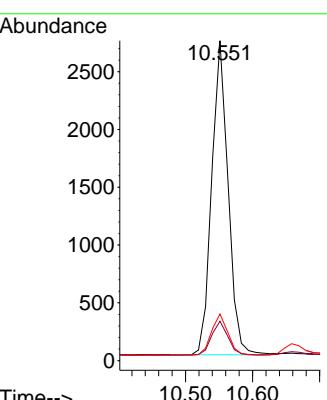
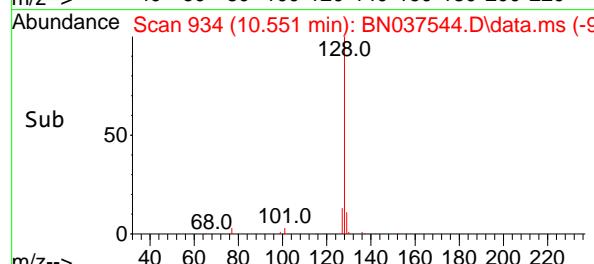




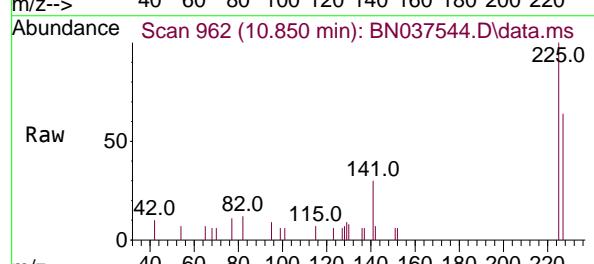
#9  
Naphthalene  
Concen: 0.345 ng  
RT: 10.551 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
ClientSampleId : PB168952BS  
Acq: 22 Jul 2025 18:05



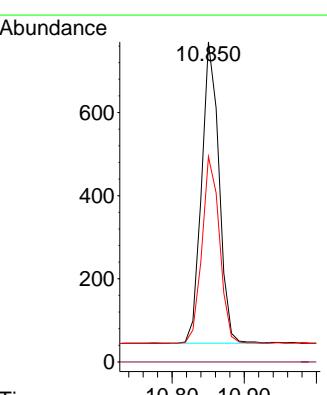
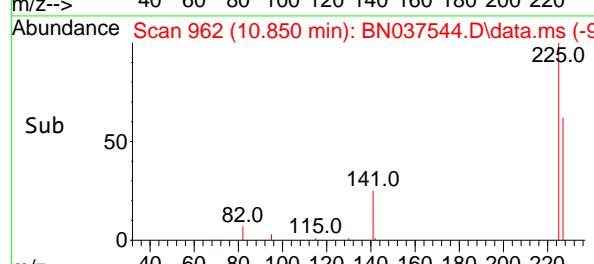
Tgt Ion:128 Resp: 4609  
Ion Ratio Lower Upper  
128 100  
129 12.3 9.7 14.5  
127 14.6 11.5 17.3

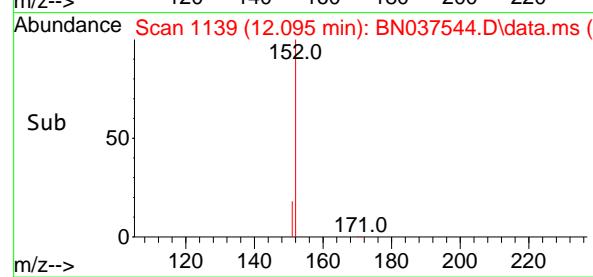
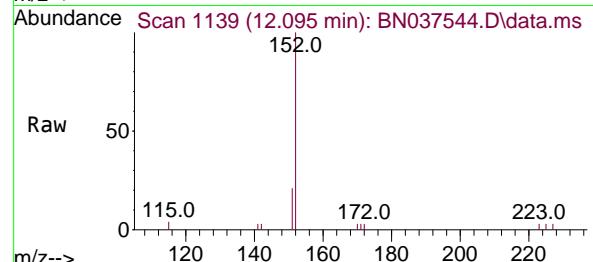
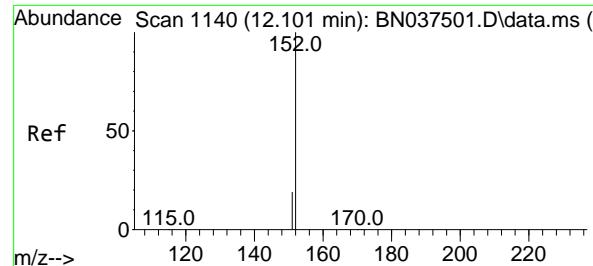


#10  
Hexachlorobutadiene  
Concen: 0.411 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05



Tgt Ion:225 Resp: 1216  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.3 51.0 76.4

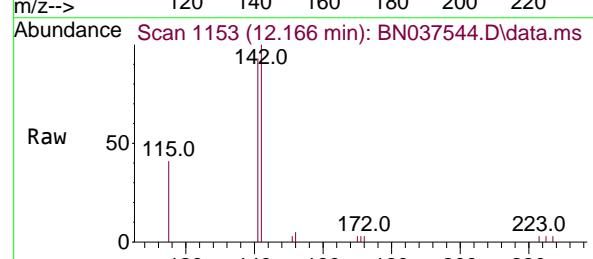
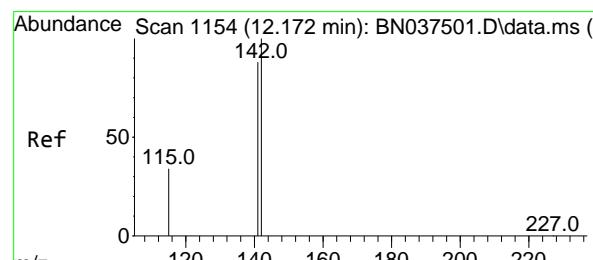
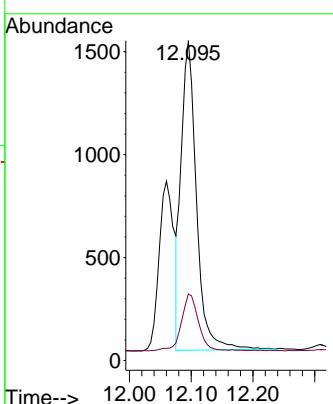




#11  
2-Methylnaphthalene-d10  
Concen: 0.360 ng  
RT: 12.095 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

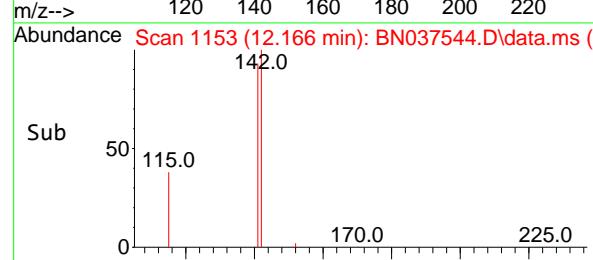
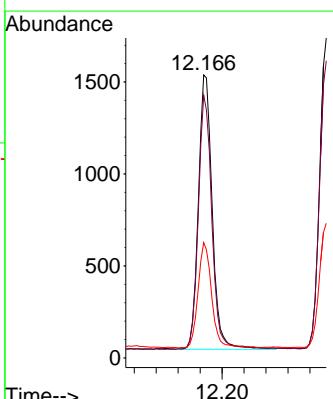
Instrument : BNA\_N  
ClientSampleId : PB168952BS

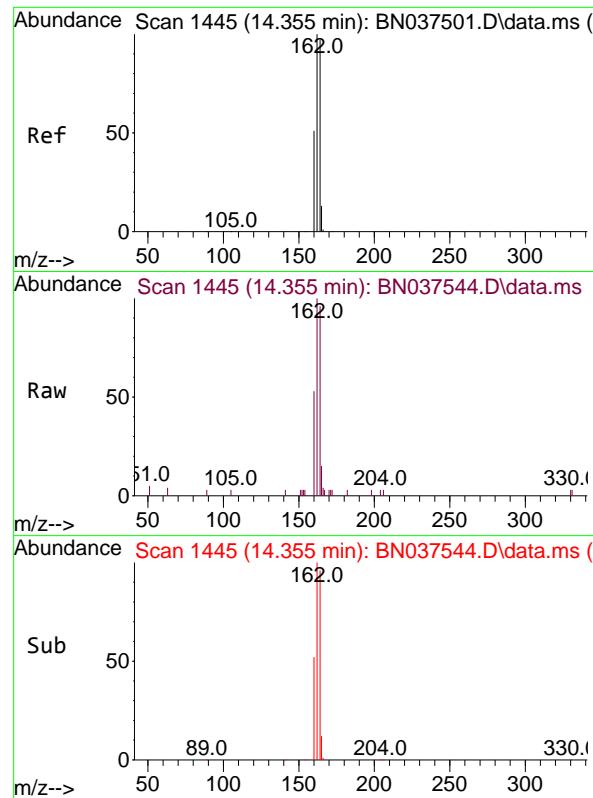
Tgt Ion:152 Resp: 2593  
Ion Ratio Lower Upper  
152 100  
151 20.4 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.297 ng  
RT: 12.166 min Scan# 1153  
Delta R.T. -0.005 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:142 Resp: 2616  
Ion Ratio Lower Upper  
142 100  
141 92.7 71.0 106.4  
115 40.7 29.0 43.4

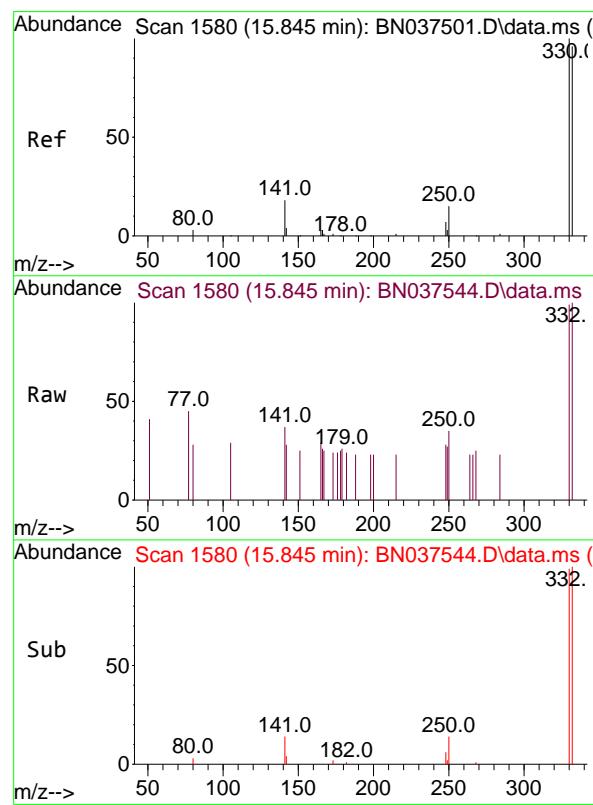
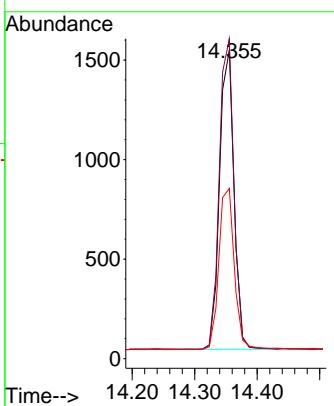




#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.355 min Scan# 14  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05Instrument :  
BNA\_N  
ClientSampleId :  
PB168952BS

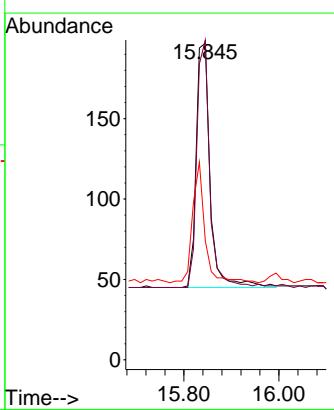
Tgt Ion:164 Resp: 2405

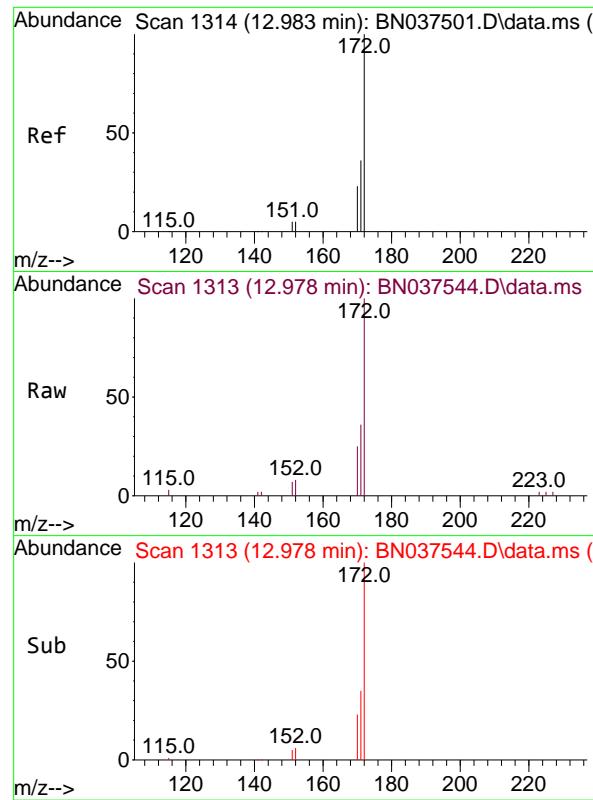
Ion Ratio Lower Upper  
164 100  
162 103.7 82.0 123.0  
160 55.2 42.4 63.6

#14

2,4,6-Tribromophenol  
Concen: 0.263 ng  
RT: 15.845 min Scan# 1580  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

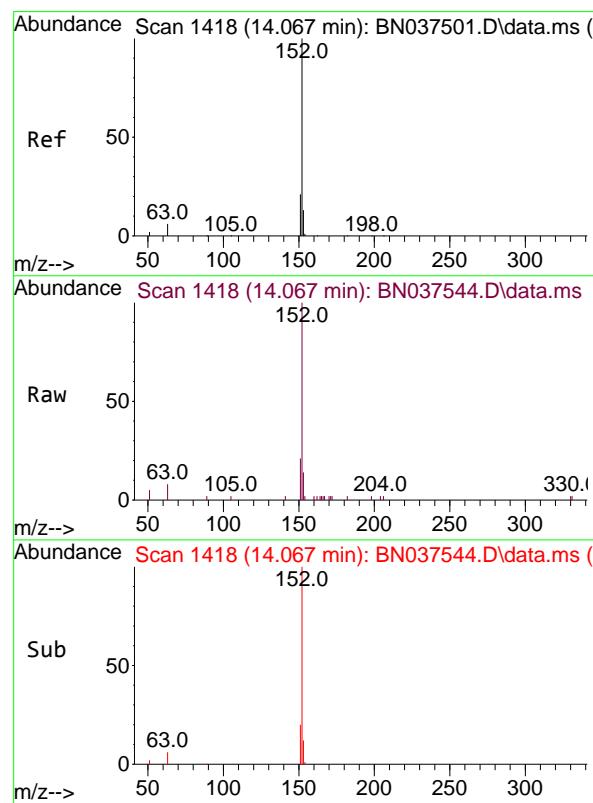
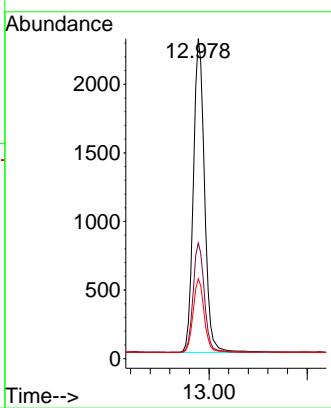
Tgt Ion:330 Resp: 311

Ion Ratio Lower Upper  
330 100  
332 93.9 76.1 114.1  
141 43.4 33.4 50.0



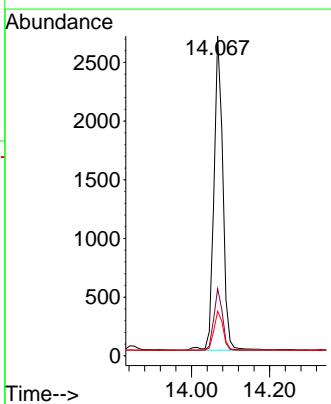
#15  
2-Fluorobiphenyl  
Concen: 0.427 ng  
RT: 12.978 min Scan# 1:Instrument :  
Delta R.T. -0.005 min BNA\_N  
Lab File: BN037544.D ClientSampleId :  
Acq: 22 Jul 2025 18:05 PB168952BS

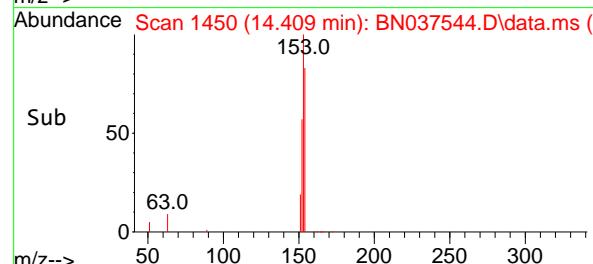
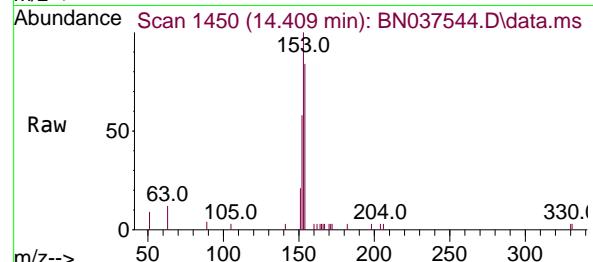
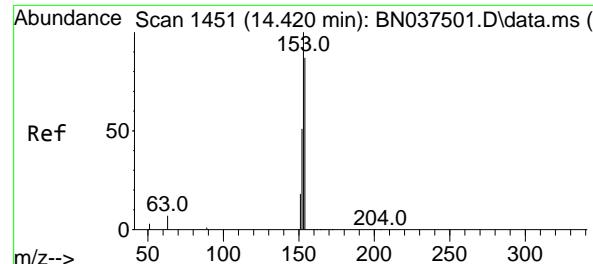
Tgt Ion:172 Resp: 5340  
Ion Ratio Lower Upper  
172 100  
171 36.1 29.4 44.2  
170 24.9 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.395 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:152 Resp: 4254  
Ion Ratio Lower Upper  
152 100  
151 19.2 15.9 23.9  
153 12.6 10.7 16.1





#17

Acenaphthene

Concen: 0.341 ng

RT: 14.409 min Scan# 14

Delta R.T. -0.011 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

Instrument:

BNA\_N

ClientSampleId :

PB168952BS

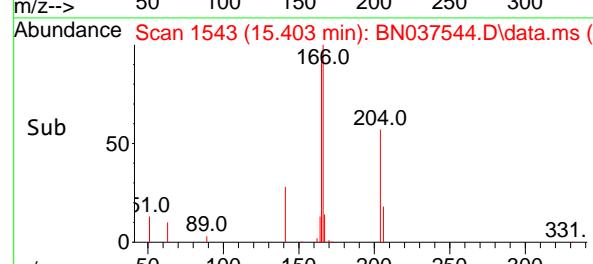
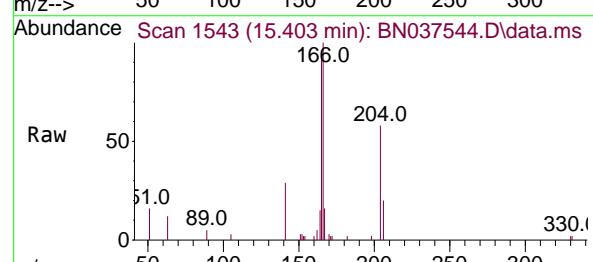
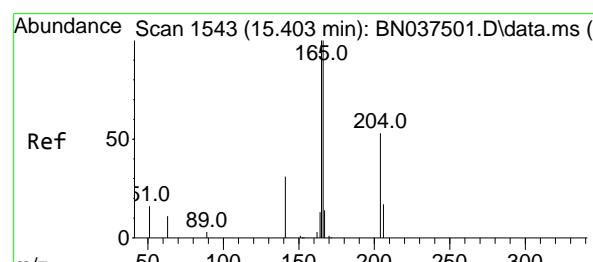
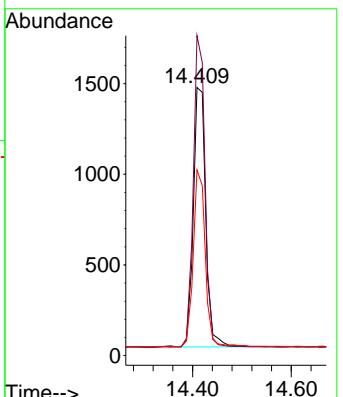
Tgt Ion:154 Resp: 2497

Ion Ratio Lower Upper

154 100

153 113.7 89.2 133.8

152 66.7 48.0 72.0



#18

Fluorene

Concen: 0.341 ng

RT: 15.403 min Scan# 1543

Delta R.T. -0.000 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

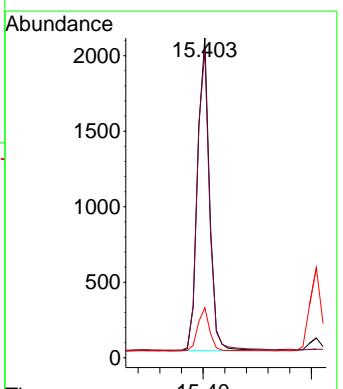
Tgt Ion:166 Resp: 3212

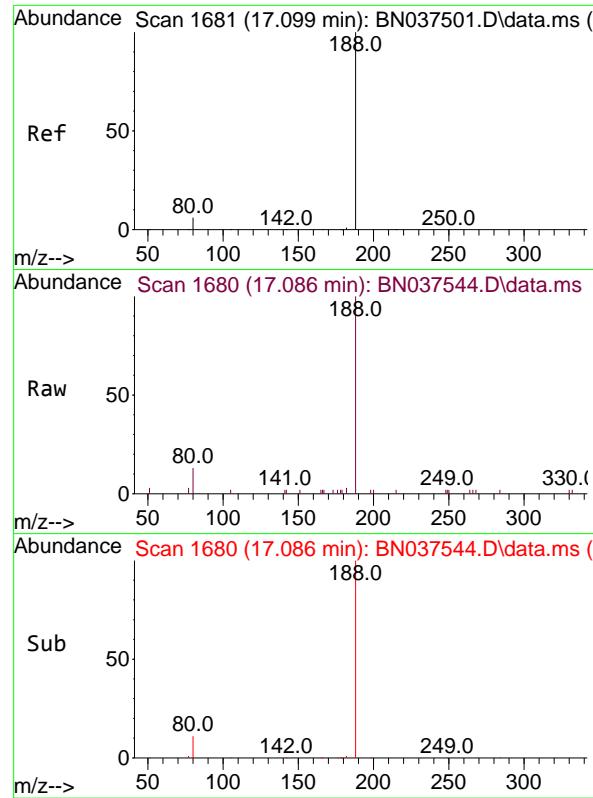
Ion Ratio Lower Upper

166 100

165 97.9 78.1 117.1

167 13.4 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.013 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

Instrument:

BNA\_N

ClientSampleId :

PB168952BS

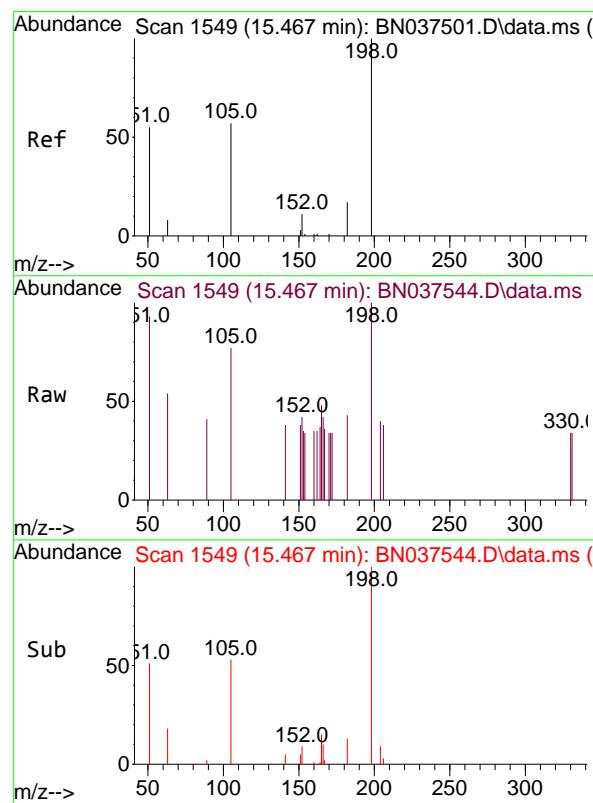
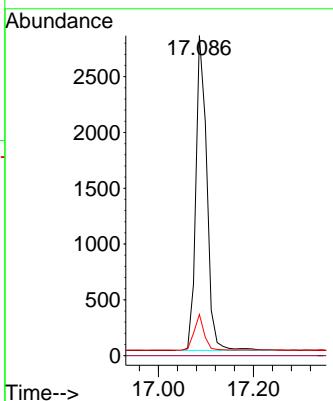
Tgt Ion:188 Resp: 4507

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 12.9 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.384 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

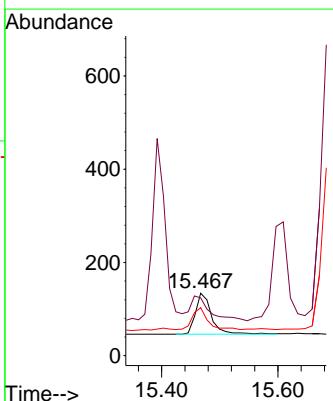
Tgt Ion:198 Resp: 179

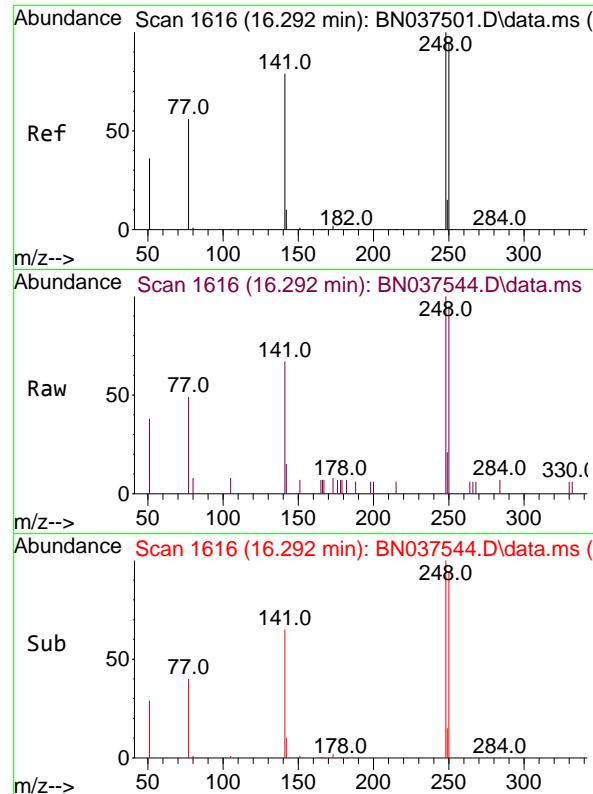
Ion Ratio Lower Upper

198 100

51 92.5 88.5 132.7

105 76.9 61.2 91.8

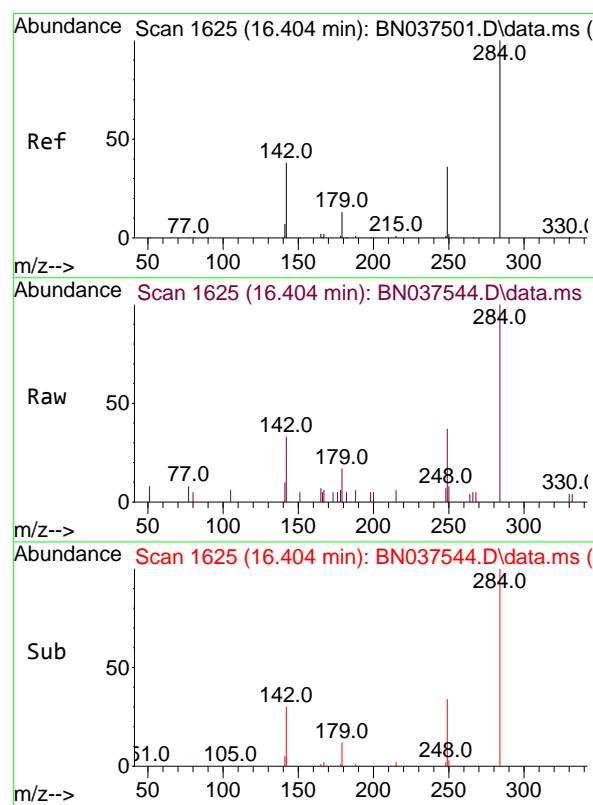
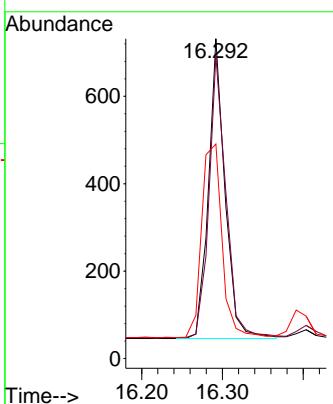




#21  
4-Bromophenyl-phenylether  
Concen: 0.339 ng  
RT: 16.292 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

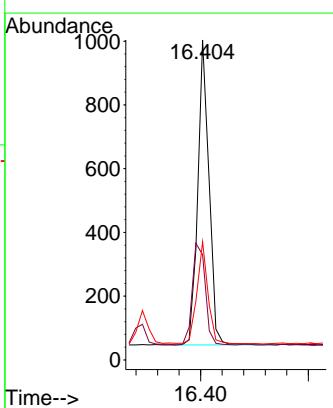
Instrument : BNA\_N  
ClientSampleId : PB168952BS

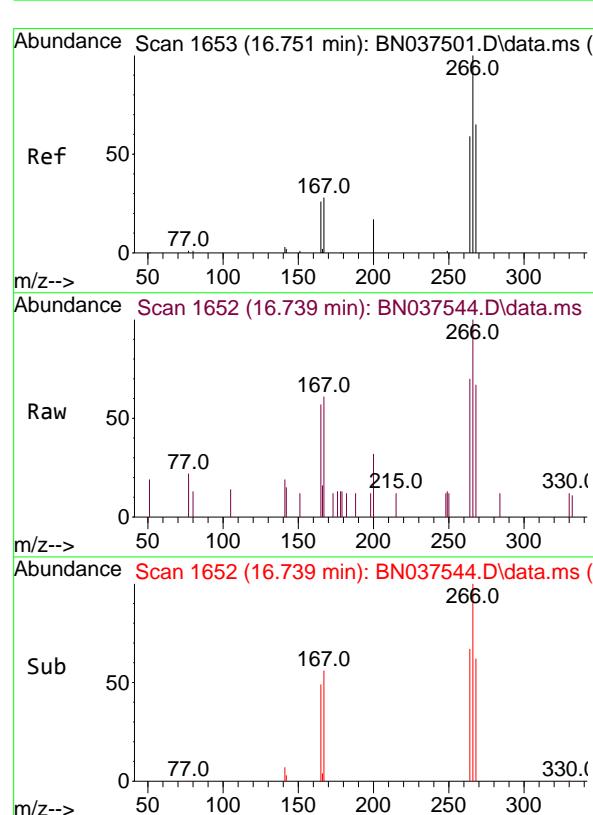
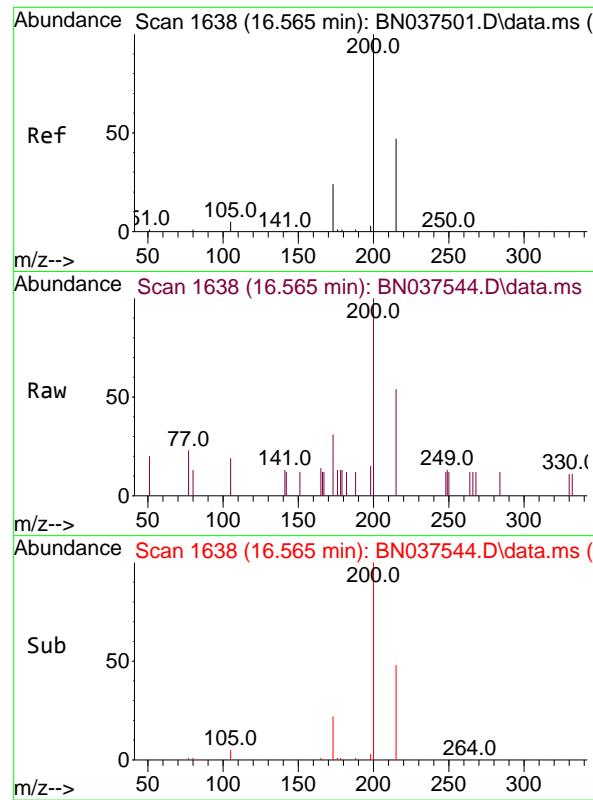
Tgt Ion:248 Resp: 978  
Ion Ratio Lower Upper  
248 100  
250 94.7 76.2 114.2  
141 67.1 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 0.370 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:284 Resp: 1381  
Ion Ratio Lower Upper  
284 100  
142 38.4 28.9 43.3  
249 33.5 25.8 38.6

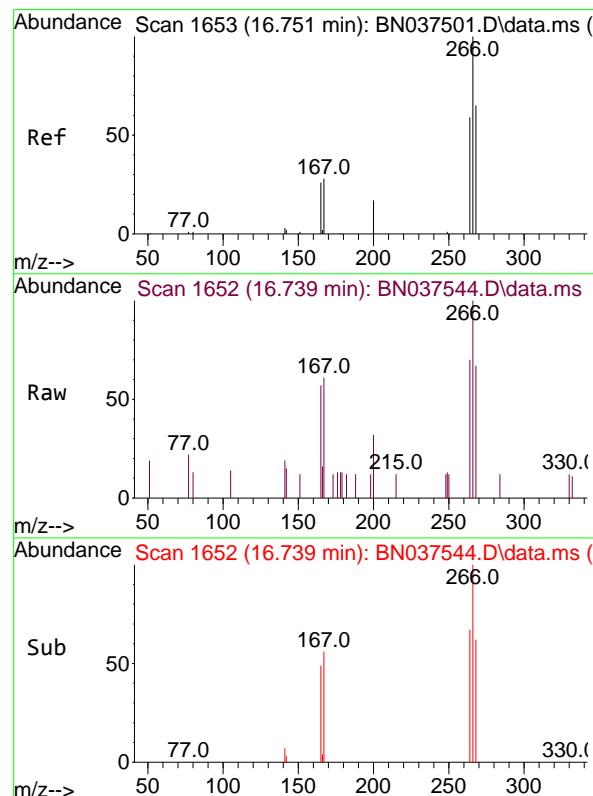
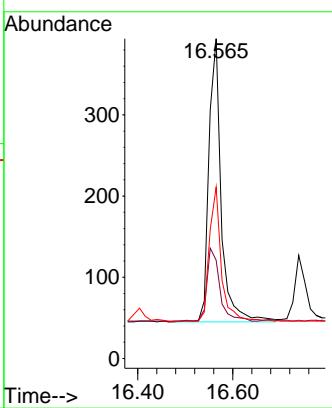




#23  
Atrazine  
Concen: 0.312 ng  
RT: 16.565 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

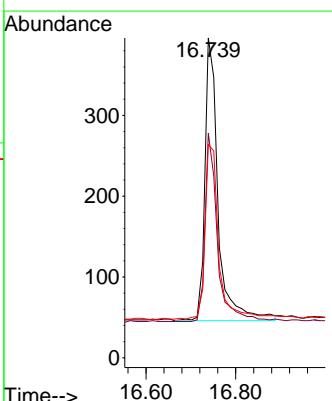
Instrument :  
BNA\_N  
ClientSampleId :  
PB168952BS

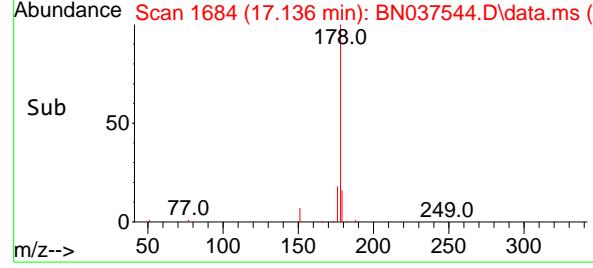
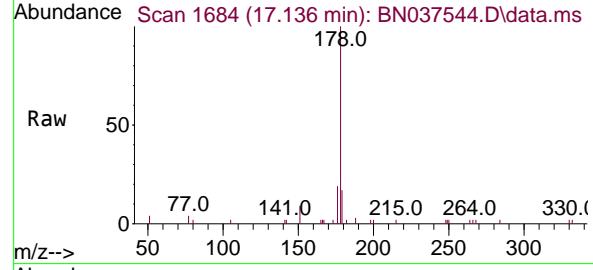
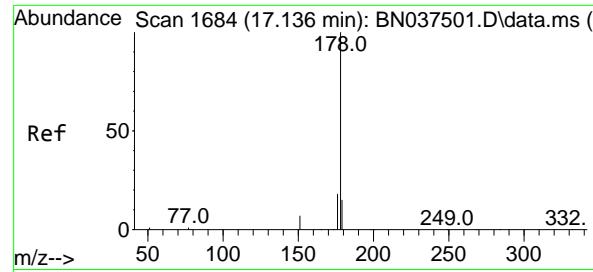
Tgt Ion:200 Resp: 628  
Ion Ratio Lower Upper  
200 100  
173 30.7 23.2 34.8  
215 53.6 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.430 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.013 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:266 Resp: 719  
Ion Ratio Lower Upper  
266 100  
264 62.2 49.3 73.9  
268 63.6 51.6 77.4





#25

Phenanthrene

Concen: 0.343 ng

RT: 17.136 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

Instrument:

BNA\_N

ClientSampleId :

PB168952BS

Tgt Ion:178 Resp: 4631

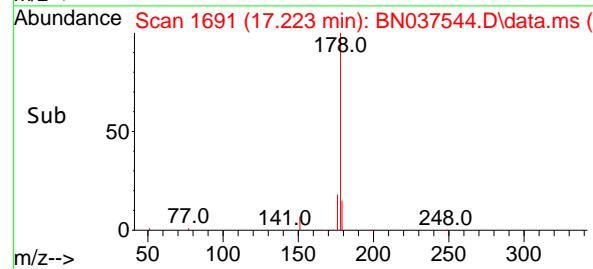
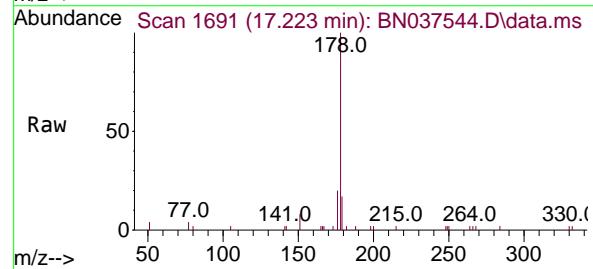
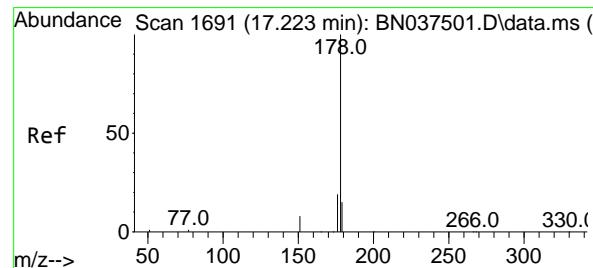
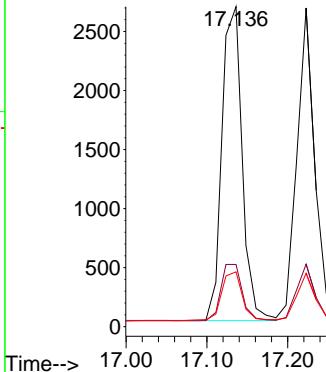
Ion Ratio Lower Upper

178 100

176 18.9 15.0 22.6

179 15.8 12.2 18.2

Abundance



#26

Anthracene

Concen: 0.338 ng

RT: 17.223 min Scan# 1691

Delta R.T. -0.000 min

Lab File: BN037544.D

Acq: 22 Jul 2025 18:05

Tgt Ion:178 Resp: 4161

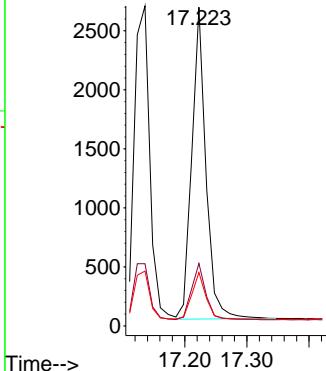
Ion Ratio Lower Upper

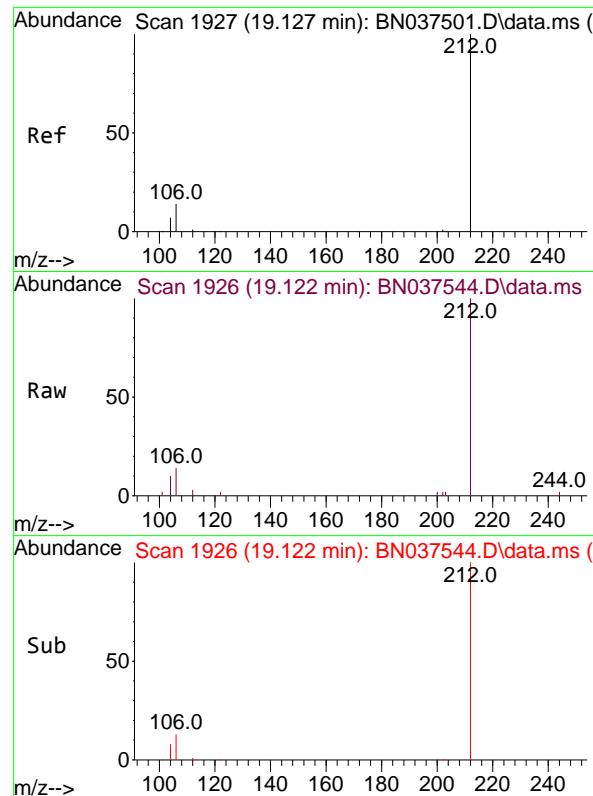
178 100

176 18.4 14.7 22.1

179 15.3 12.3 18.5

Abundance

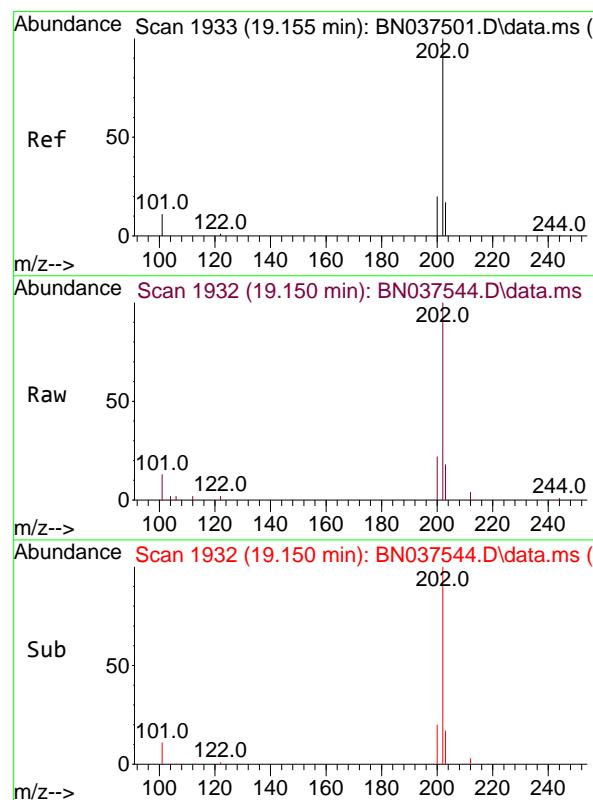
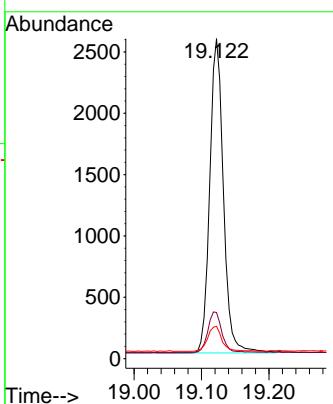




#27  
 Fluoranthene-d10  
 Concen: 0.303 ng  
 RT: 19.122 min Scan# 1926  
 Delta R.T. -0.005 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

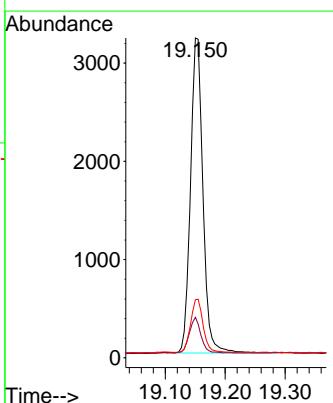
Instrument : BNA\_N  
 ClientSampleId : PB168952BS

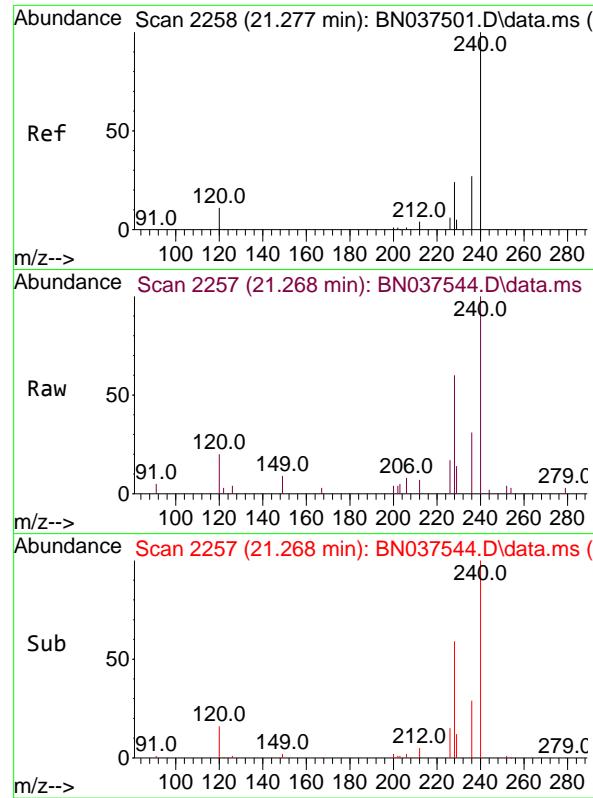
Tgt Ion:212 Resp: 3618  
 Ion Ratio Lower Upper  
 212 100  
 106 13.5 12.2 18.4  
 104 8.4 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.297 ng  
 RT: 19.150 min Scan# 1932  
 Delta R.T. -0.005 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

Tgt Ion:202 Resp: 4624  
 Ion Ratio Lower Upper  
 202 100  
 101 10.8 9.8 14.6  
 203 16.8 13.6 20.4

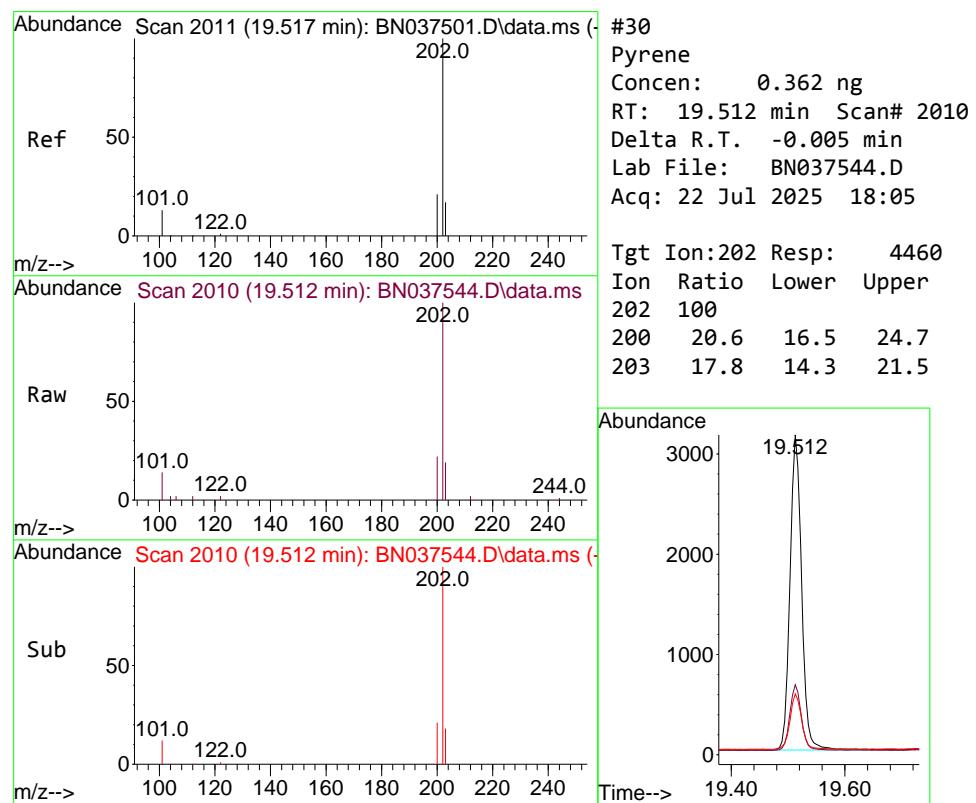
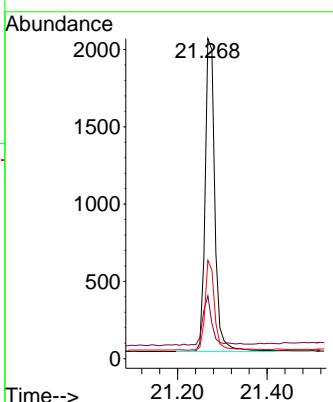




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

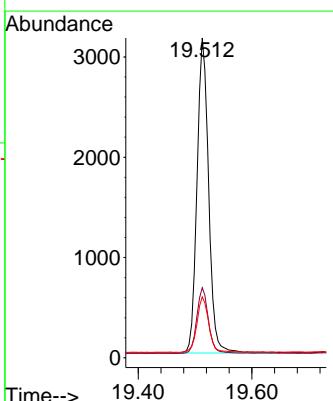
Instrument : BNA\_N  
ClientSampleId : PB168952BS

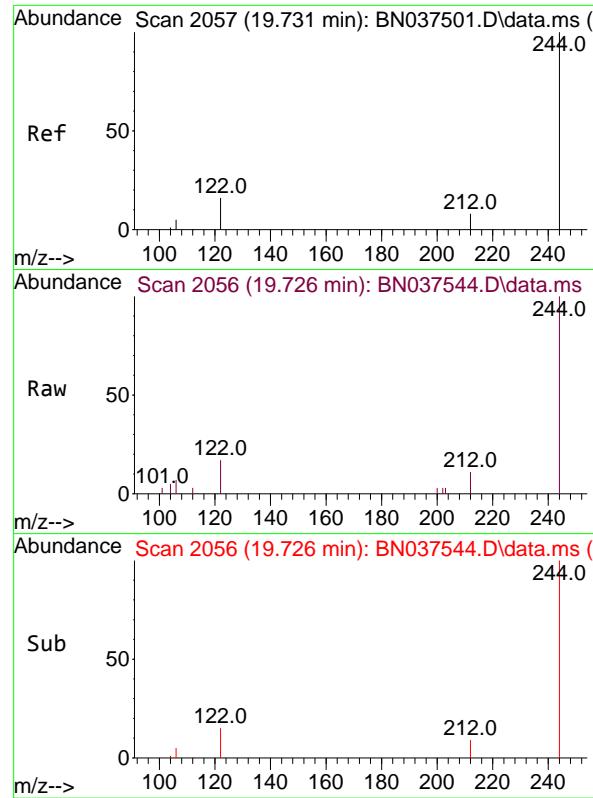
Tgt Ion:240 Resp: 3057  
Ion Ratio Lower Upper  
240 100  
120 19.7 10.7 16.1#  
236 30.7 22.6 33.8



#30  
Pyrene  
Concen: 0.362 ng  
RT: 19.512 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

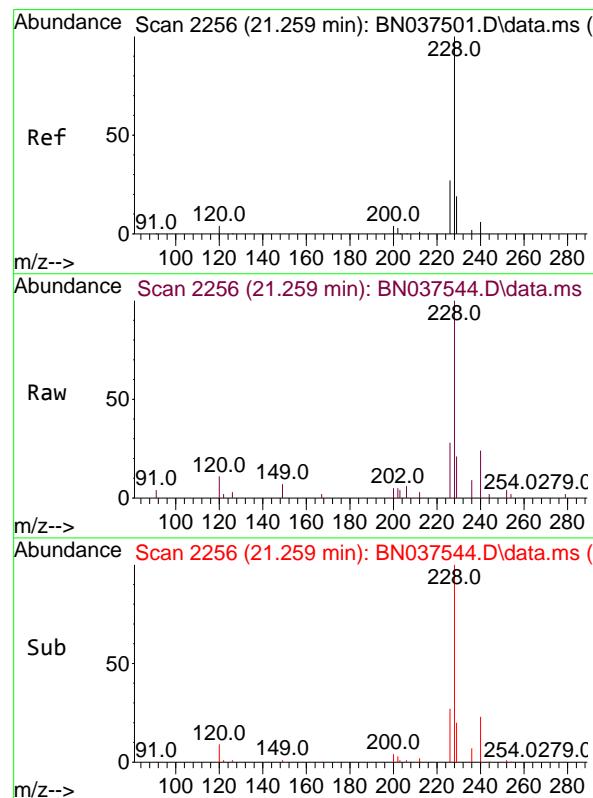
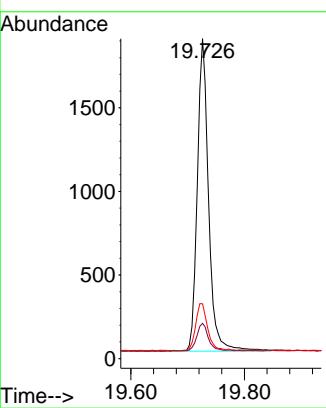
Tgt Ion:202 Resp: 4460  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 17.8 14.3 21.5





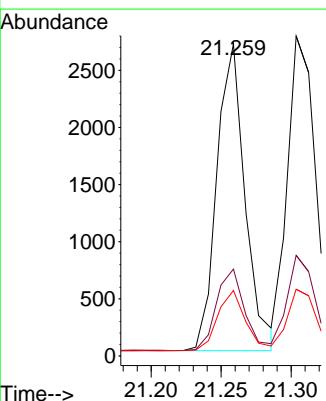
#31  
Terphenyl-d14  
Concen: 0.391 ng  
RT: 19.726 min Scan# 21  
Instrument: BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05  
ClientSampleId : PB168952BS

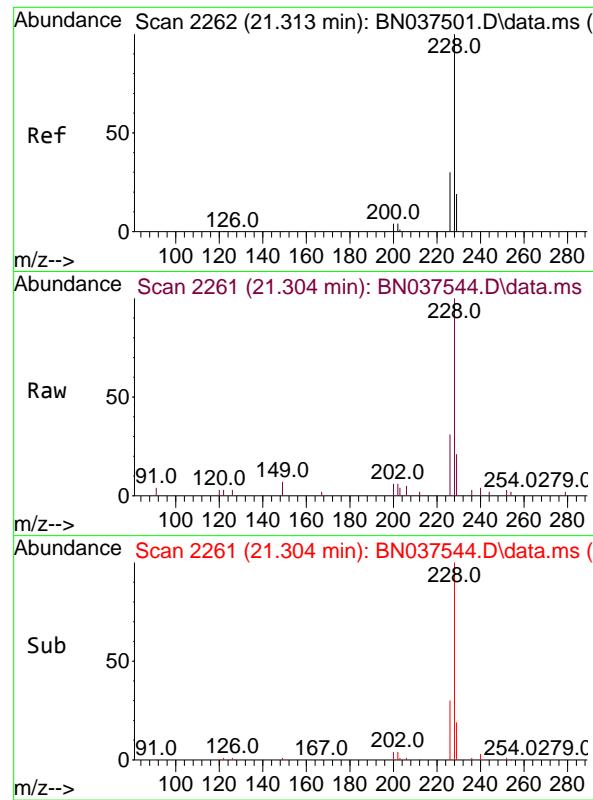
Tgt Ion:244 Resp: 2569  
Ion Ratio Lower Upper  
244 100  
212 11.0 7.4 11.2  
122 17.1 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.352 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:228 Resp: 3769  
Ion Ratio Lower Upper  
228 100  
226 27.8 21.9 32.9  
229 21.0 15.8 23.8

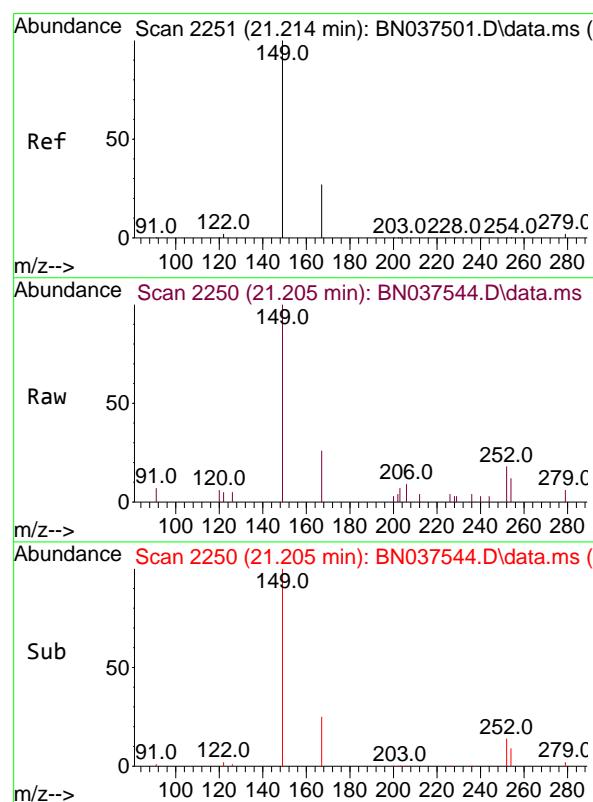
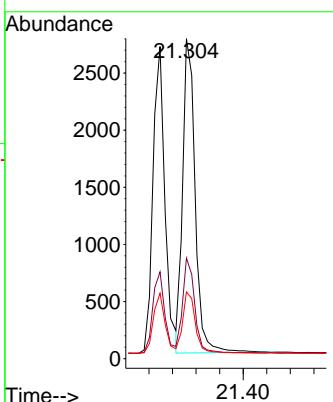




#33  
Chrysene  
Concen: 0.364 ng  
RT: 21.304 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

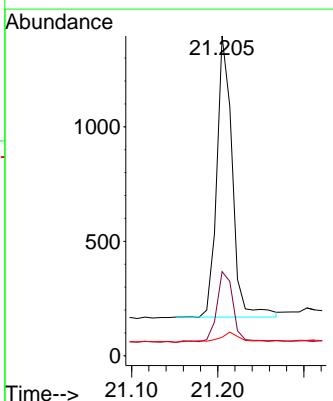
Instrument : BNA\_N  
ClientSampleId : PB168952BS

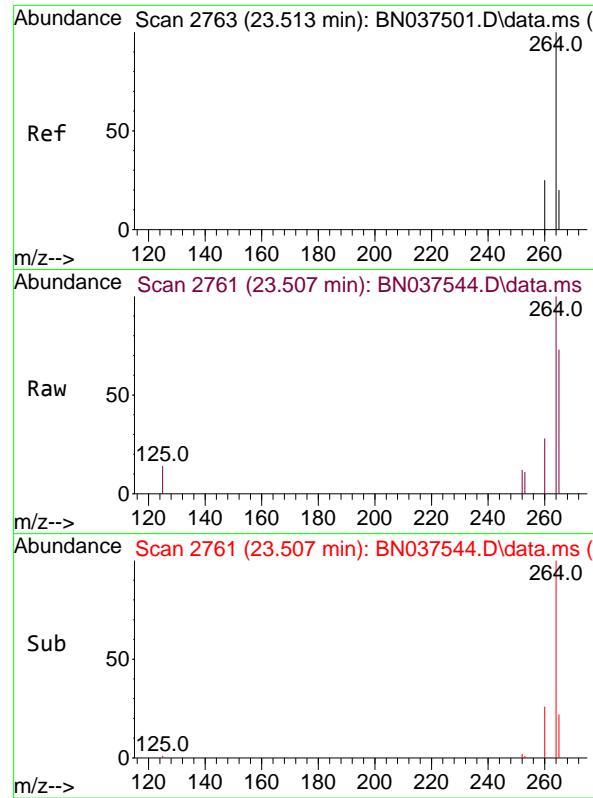
Tgt Ion:228 Resp: 4055  
Ion Ratio Lower Upper  
228 100  
226 31.4 24.2 36.4  
229 20.8 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.319 ng  
RT: 21.205 min Scan# 2250  
Delta R.T. -0.009 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:149 Resp: 1538  
Ion Ratio Lower Upper  
149 100  
167 27.1 21.8 32.8  
279 4.9 3.0 4.4#

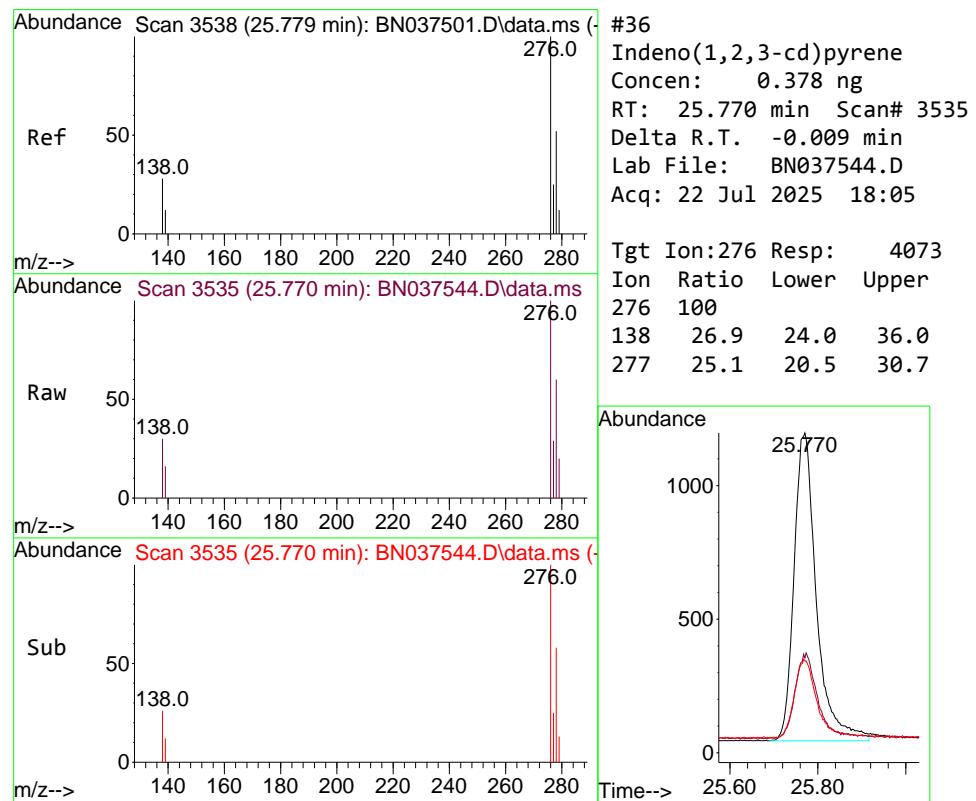
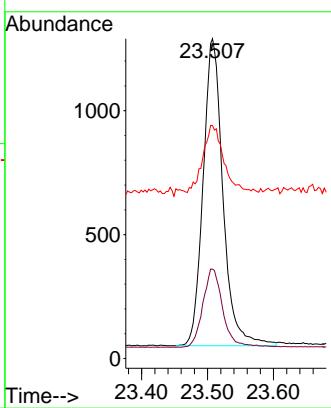




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.507 min Scan# 2  
Delta R.T. -0.006 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

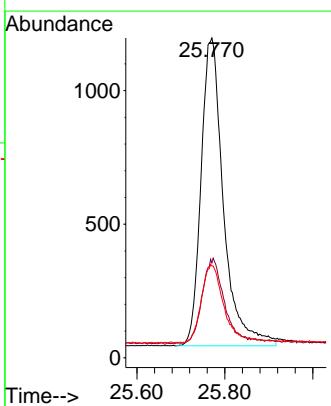
Instrument : BNA\_N  
ClientSampleId : PB168952BS

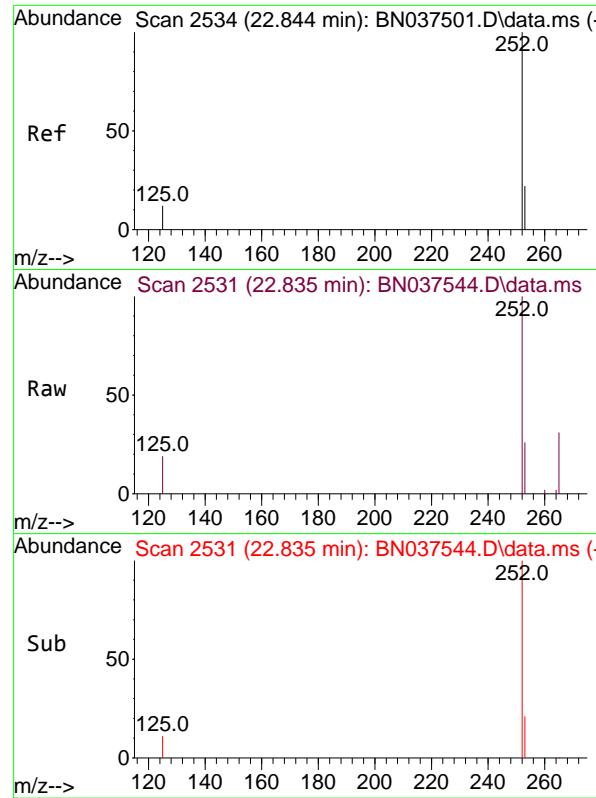
Tgt Ion:264 Resp: 2587  
Ion Ratio Lower Upper  
264 100  
260 28.0 21.2 31.8  
265 72.8 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.378 ng  
RT: 25.770 min Scan# 3535  
Delta R.T. -0.009 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:276 Resp: 4073  
Ion Ratio Lower Upper  
276 100  
138 26.9 24.0 36.0  
277 25.1 20.5 30.7

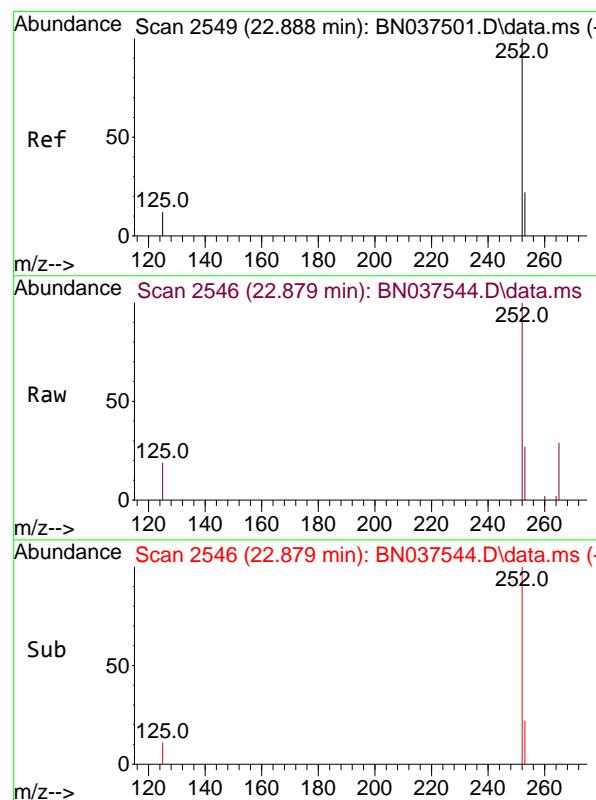
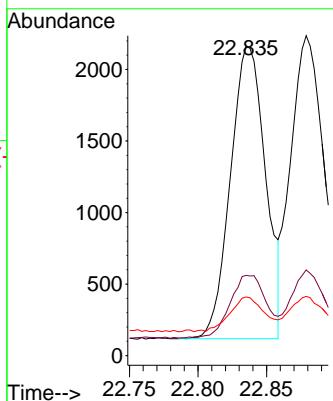




#37  
 Benzo(b)fluoranthene  
 Concen: 0.371 ng  
 RT: 22.835 min Scan# 21  
 Delta R.T. -0.009 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

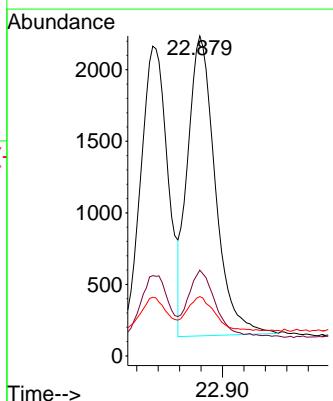
Instrument : BNA\_N  
 ClientSampleId : PB168952BS

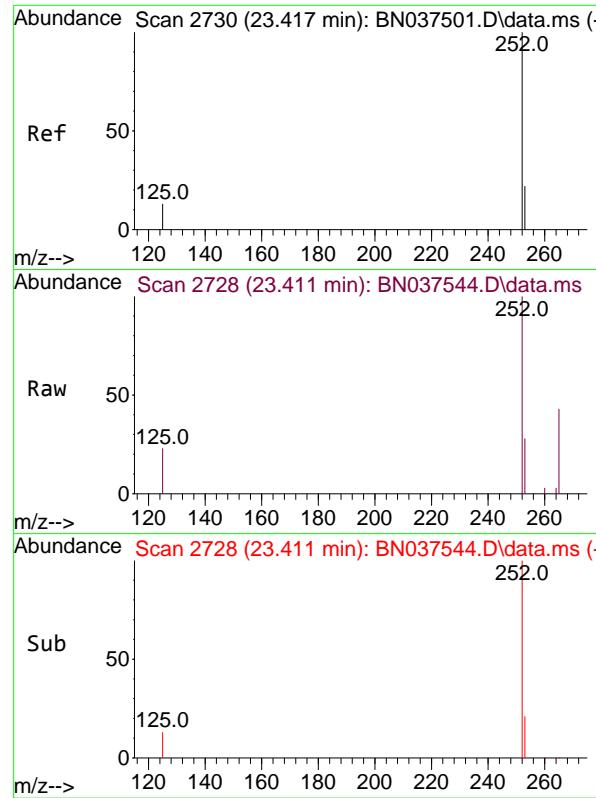
Tgt Ion:252 Resp: 3643  
 Ion Ratio Lower Upper  
 252 100  
 253 25.9 19.5 29.3  
 125 18.9 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.371 ng  
 RT: 22.879 min Scan# 2546  
 Delta R.T. -0.009 min  
 Lab File: BN037544.D  
 Acq: 22 Jul 2025 18:05

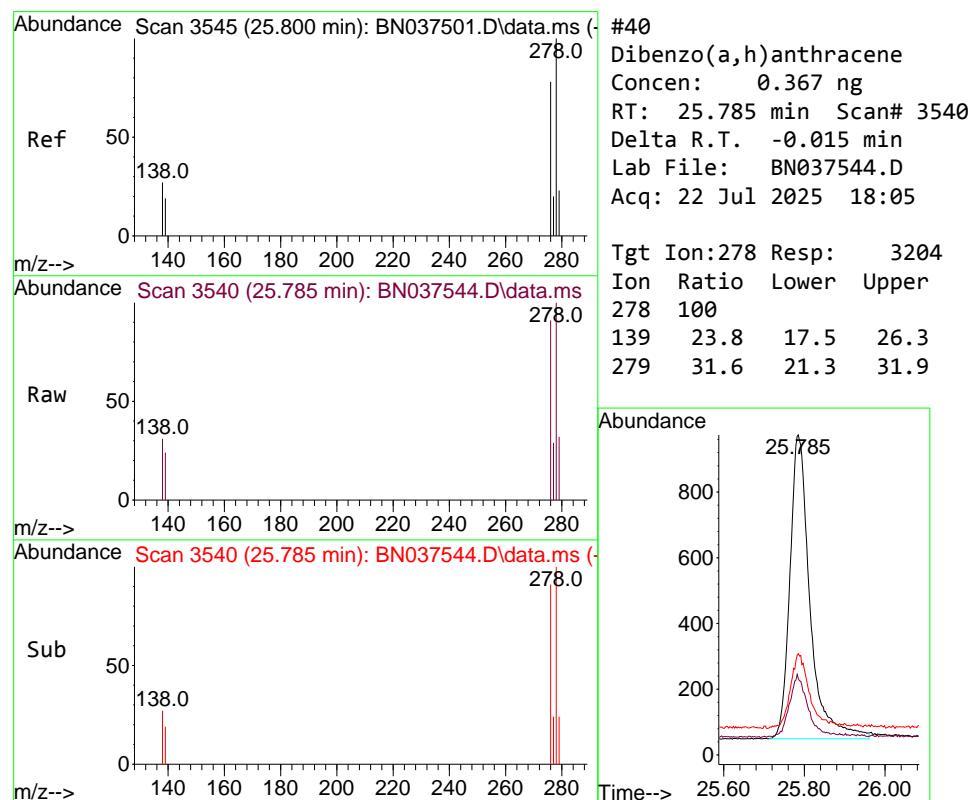
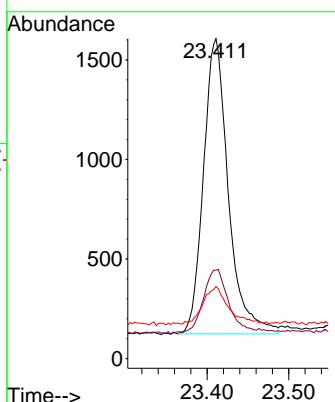
Tgt Ion:252 Resp: 3764  
 Ion Ratio Lower Upper  
 252 100  
 253 26.8 19.5 29.3  
 125 18.5 13.1 19.7





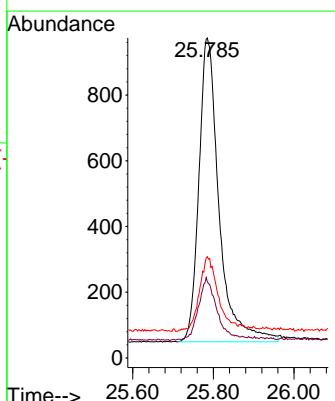
#39  
Benzo(a)pyrene  
Concen: 0.385 ng  
RT: 23.411 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.006 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05  
ClientSampleId : PB168952BS

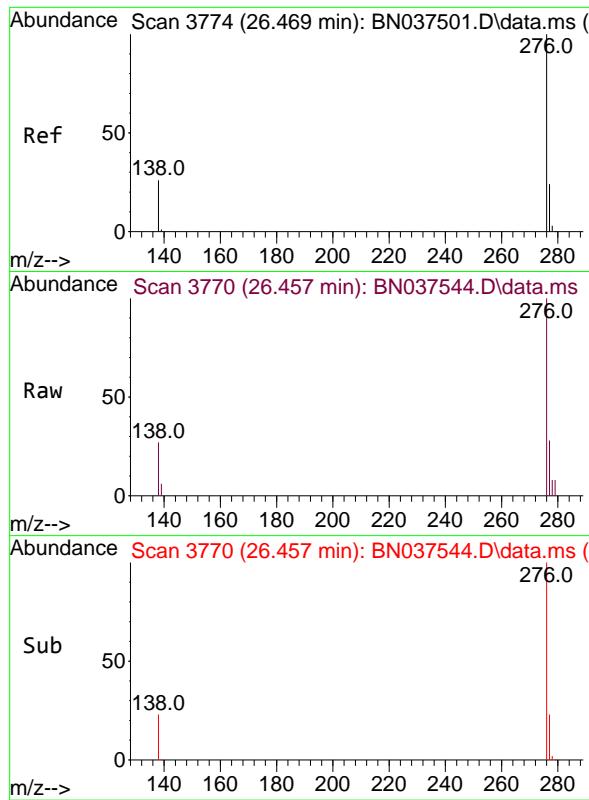
Tgt Ion:252 Resp: 3151  
Ion Ratio Lower Upper  
252 100  
253 27.6 19.9 29.9  
125 22.5 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.367 ng  
RT: 25.785 min Scan# 3540  
Delta R.T. -0.015 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Tgt Ion:278 Resp: 3204  
Ion Ratio Lower Upper  
278 100  
139 23.8 17.5 26.3  
279 31.6 21.3 31.9

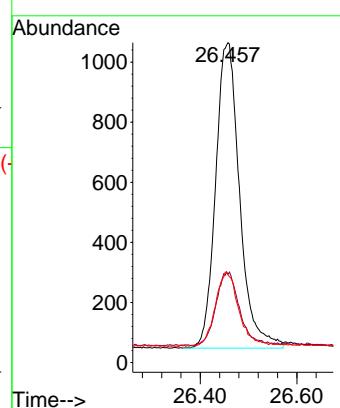




#41  
Benzo(g,h,i)perylene  
Concen: 0.389 ng  
RT: 26.457 min Scan# 3  
Delta R.T. -0.012 min  
Lab File: BN037544.D  
Acq: 22 Jul 2025 18:05

Instrument :  
BNA\_N  
ClientSampleId :  
PB168952BS

Tgt Ion:276 Resp: 3511  
Ion Ratio Lower Upper  
276 100  
277 27.6 20.9 31.3  
138 27.4 22.6 33.8





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13			Date Received:	
Client Sample ID:	PB168952BSD			SDG No.:	Q2644
Lab Sample ID:	PB168952BSD			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
Prep Method :				PH :	

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037545.D	1	07/21/25 09:10	07/22/25 18:41	PB168952

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.30		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.31		30 - 150		76%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		53 - 106		100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		58 - 132		89%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	1820		7.724			
1146-65-2	Naphthalene-d8	4390		10.498			
15067-26-2	Acenaphthene-d10	2110		14.355			
1517-22-2	Phenanthrene-d10	4030		17.086			
1719-03-5	Chrysene-d12	3050		21.268			
1520-96-3	Perylene-d12	2640		23.508			

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\BN072225\  
 Data File : BN037545.D  
 Acq On : 22 Jul 2025 18:41  
 Operator : RC/JU  
 Sample : PB168952BSD  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB168952BSD

Quant Time: Jul 23 04:23:40 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration

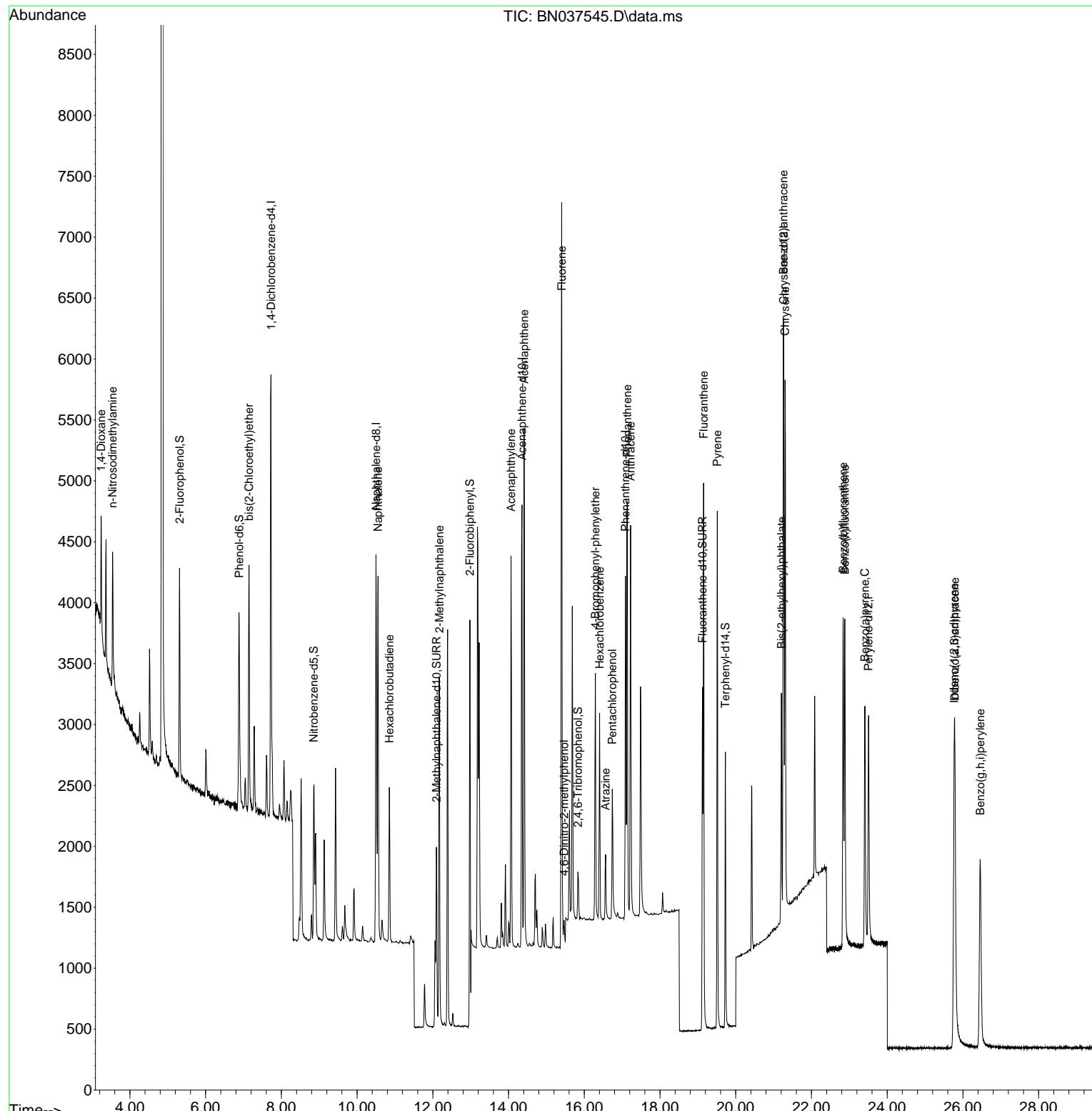
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	1815	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	4389	0.400	ng	#-0.01
13) Acenaphthene-d10	14.355	164	2110	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4034	0.400	ng	#-0.01
29) Chrysene-d12	21.268	240	3054	0.400	ng	# 0.00
35) Perylene-d12	23.508	264	2644	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	1350	0.301	ng	0.00
5) Phenol-d6	6.887	99	1563	0.278	ng	0.00
8) Nitrobenzene-d5	8.854	82	1117	0.340	ng	-0.01
11) 2-Methylnaphthalene-d10	12.096	152	2144	0.341	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	276	0.266	ng	-0.01
15) 2-Fluorobiphenyl	12.978	172	4388	0.400	ng	0.00
27) Fluoranthene-d10	19.122	212	3267	0.306	ng	0.00
31) Terphenyl-d14	19.726	244	2328	0.355	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	523	0.300	ng	# 62
3) n-Nitrosodimethylamine	3.543	42	786	0.358	ng	# 85
6) bis(2-Chloroethyl)ether	7.147	93	1493	0.319	ng	97
9) Naphthalene	10.552	128	3916	0.335	ng	98
10) Hexachlorobutadiene	10.850	225	1044	0.404	ng	# 99
12) 2-Methylnaphthalene	12.172	142	2196	0.285	ng	96
16) Acenaphthylene	14.067	152	3466	0.367	ng	99
17) Acenaphthene	14.409	154	2148	0.334	ng	97
18) Fluorene	15.403	166	2703	0.327	ng	97
20) 4,6-Dinitro-2-methylph...	15.467	198	158	0.380	ng	91
21) 4-Bromophenyl-phenylether	16.292	248	840	0.325	ng	94
22) Hexachlorobenzene	16.404	284	1231	0.369	ng	98
23) Atrazine	16.565	200	535	0.297	ng	92
24) Pentachlorophenol	16.739	266	608	0.406	ng	98
25) Phenanthrene	17.136	178	4083	0.338	ng	99
26) Anthracene	17.223	178	3611	0.327	ng	99
28) Fluoranthene	19.150	202	4137	0.297	ng	98
30) Pyrene	19.513	202	4042	0.329	ng	100
32) Benzo(a)anthracene	21.259	228	3607	0.337	ng	99
33) Chrysene	21.304	228	3931	0.353	ng	99
34) Bis(2-ethylhexyl)phtha...	21.205	149	1418	0.295	ng	96
36) Indeno(1,2,3-cd)pyrene	25.768	276	3827	0.348	ng	98
37) Benzo(b)fluoranthene	22.835	252	3530	0.352	ng	94
38) Benzo(k)fluoranthene	22.882	252	3802	0.367	ng	96
39) Benzo(a)pyrene	23.408	252	3017	0.360	ng	92
40) Dibenzo(a,h)anthracene	25.788	278	3088	0.346	ng	92
41) Benzo(g,h,i)perylene	26.458	276	3439	0.373	ng	98

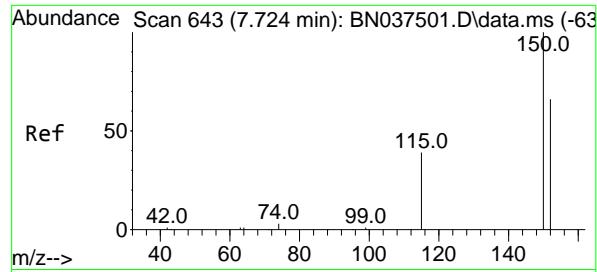
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN072225\  
 Data File : BN037545.D  
 Acq On : 22 Jul 2025 18:41  
 Operator : RC/JU  
 Sample : PB168952BSD  
 Misc :  
 ALS Vial : 15 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB168952BSD

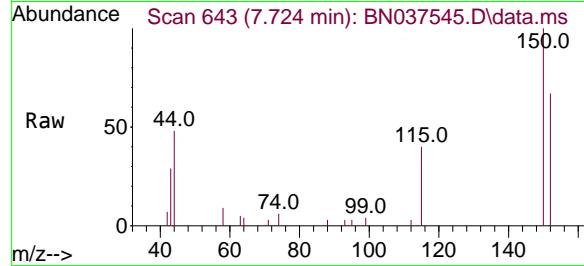
Quant Time: Jul 23 04:23:40 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN071525.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Jul 19 01:46:16 2025  
 Response via : Initial Calibration



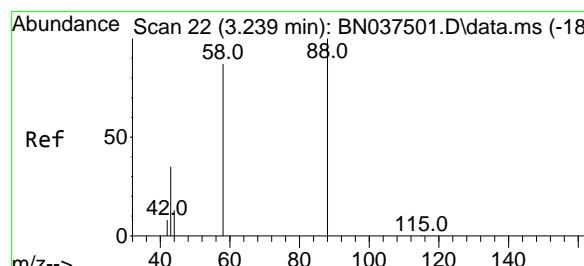
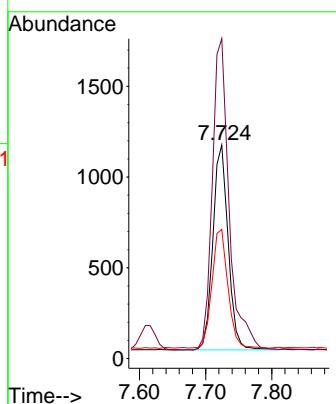
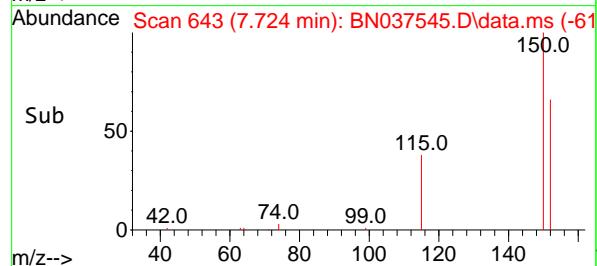


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

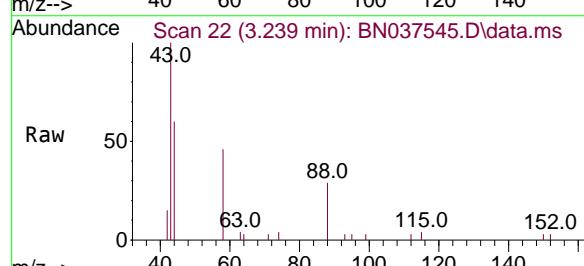
Instrument : BNA\_N  
ClientSampleId : PB168952BSD



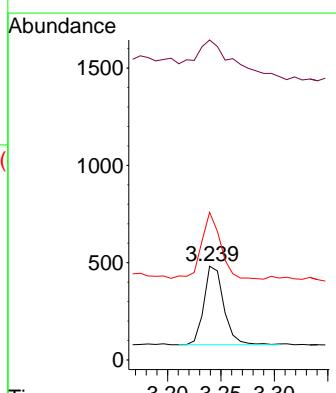
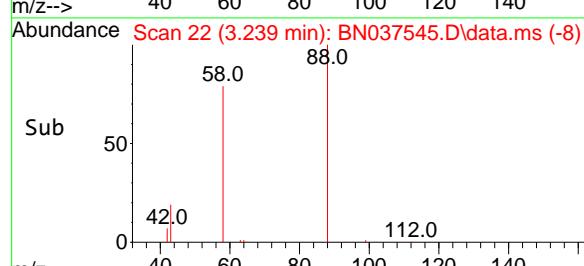
Tgt Ion:152 Resp: 1815  
Ion Ratio Lower Upper  
152 100  
150 149.8 119.8 179.8  
115 60.5 49.1 73.7

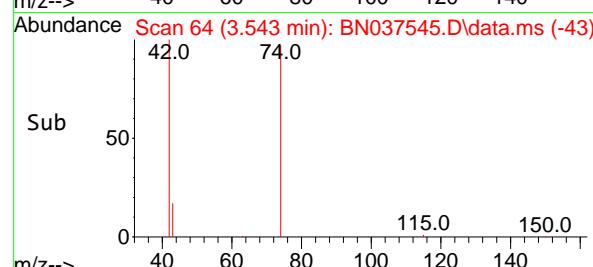
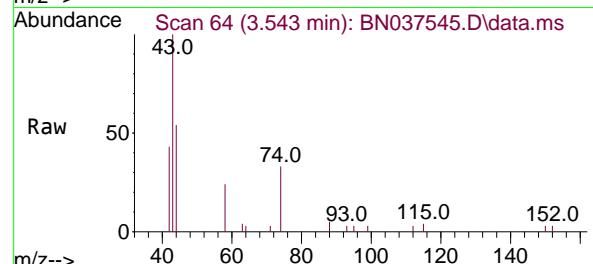
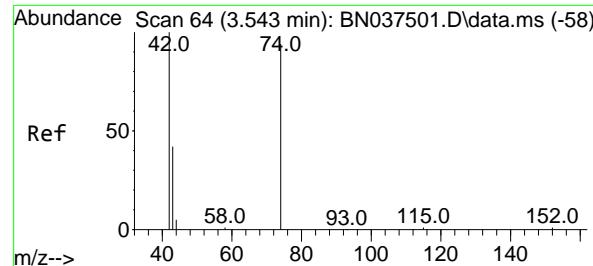


#2  
1,4-Dioxane  
Concen: 0.300 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41



Tgt Ion: 88 Resp: 523  
Ion Ratio Lower Upper  
88 100  
43 100.2 27.5 41.3#  
58 82.0 62.7 94.1



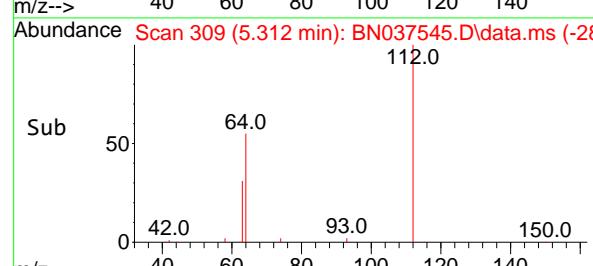
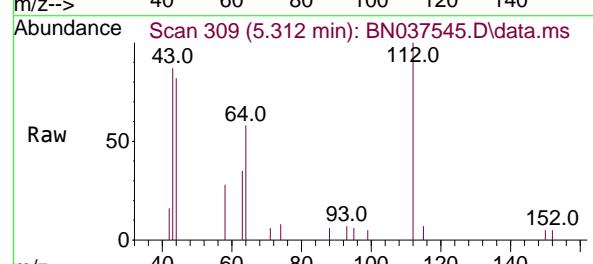
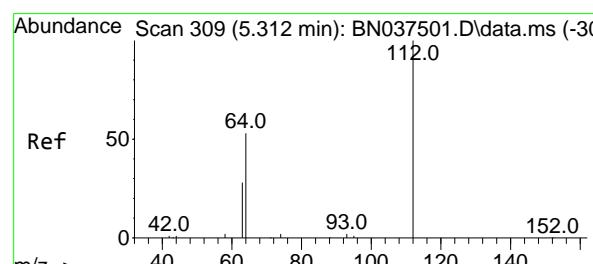
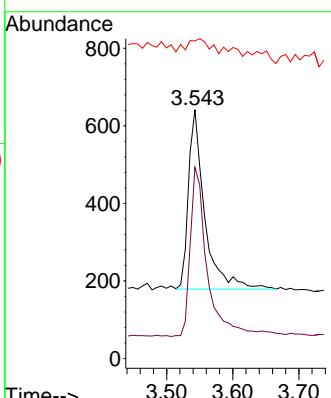


#3

n-Nitrosodimethylamine  
Concen: 0.358 ng  
RT: 3.543 min Scan# 64  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Instrument : BNA\_N  
ClientSampleId : PB168952BSD

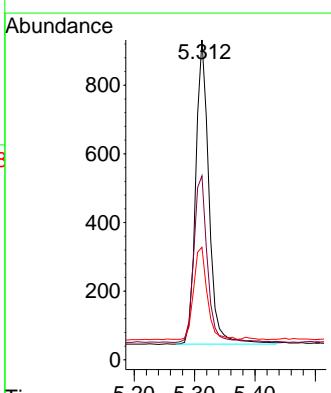
Tgt Ion: 42 Resp: 786  
Ion Ratio Lower Upper  
42 100  
74 99.7 91.8 137.6  
44 9.5 15.0 22.6#

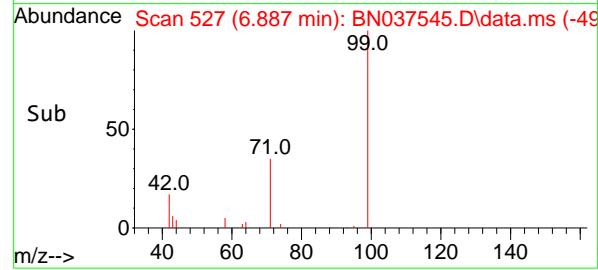
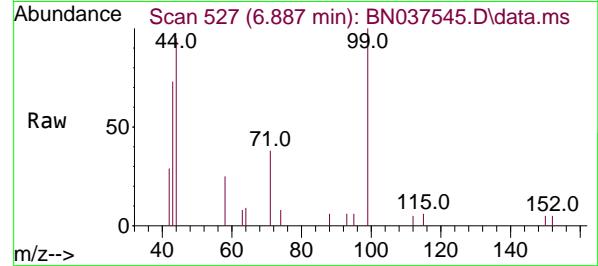
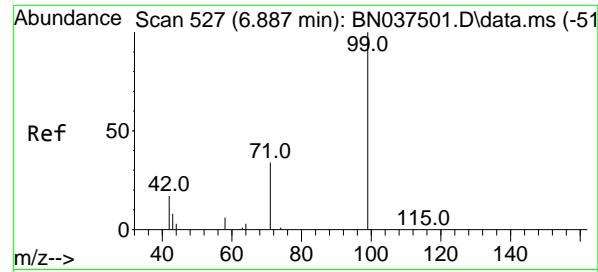


#4

2-Fluorophenol  
Concen: 0.301 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion: 112 Resp: 1350  
Ion Ratio Lower Upper  
112 100  
64 55.8 45.1 67.7  
63 30.9 23.8 35.8

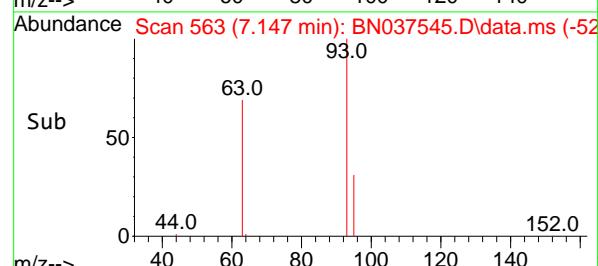
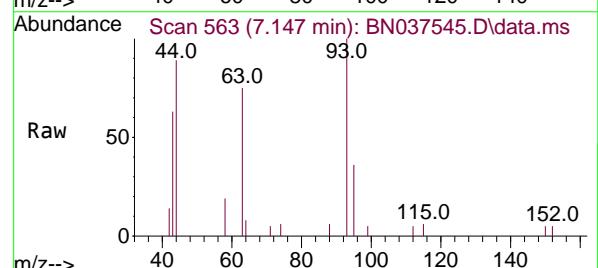
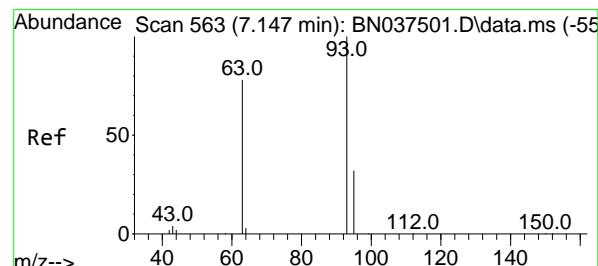
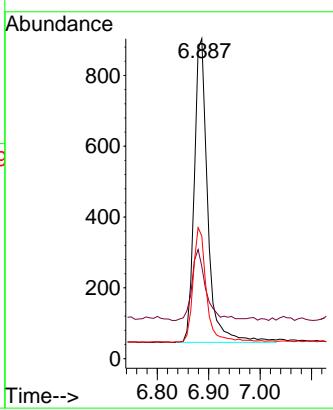




#5  
Phenol-d6  
Concen: 0.278 ng  
RT: 6.887 min Scan# 51  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

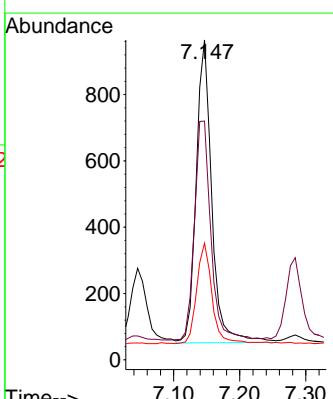
Instrument : BNA\_N  
ClientSampleId : PB168952BSD

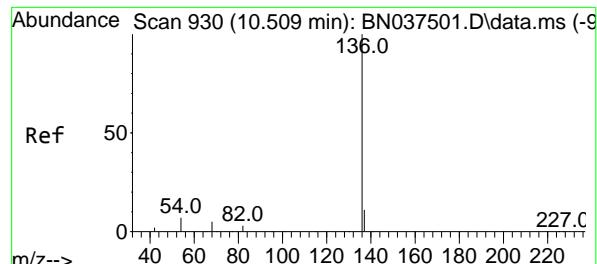
Tgt Ion: 99 Resp: 1563  
Ion Ratio Lower Upper  
99 100  
42 24.4 17.1 25.7  
71 38.3 27.8 41.8



#6  
bis(2-Chloroethyl)ether  
Concen: 0.319 ng  
RT: 7.147 min Scan# 563  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

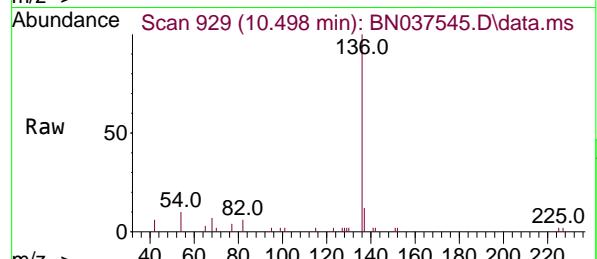
Tgt Ion: 93 Resp: 1493  
Ion Ratio Lower Upper  
93 100  
63 76.3 58.2 87.4  
95 32.5 25.3 37.9





#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.498 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Instrument : BNA\_N  
ClientSampleId : PB168952BSD

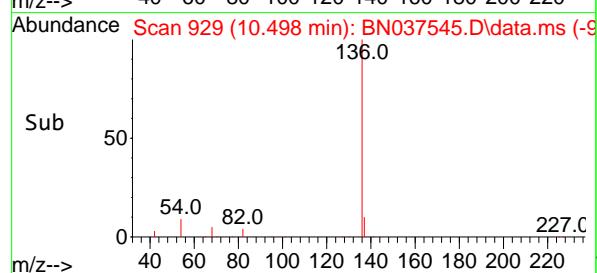
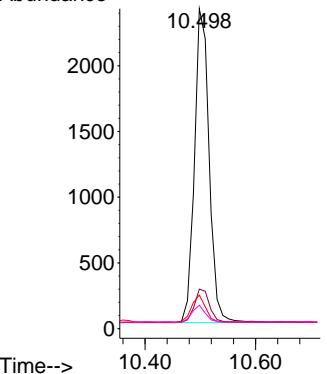


Tgt Ion:136 Resp: 4389

Ion Ratio Lower Upper

136	100
137	12.3
54	10.5
68	7.3
	9.8
	9.8#
	5.0
	7.6

Abundance

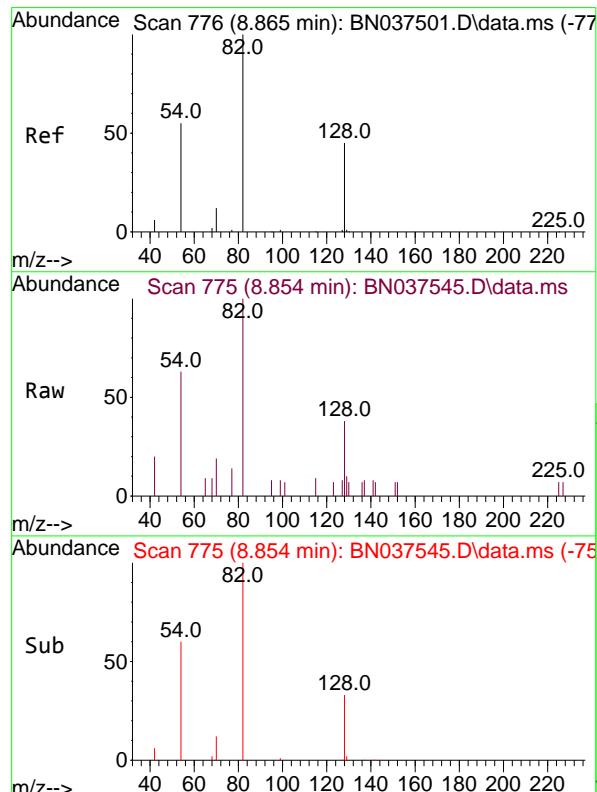
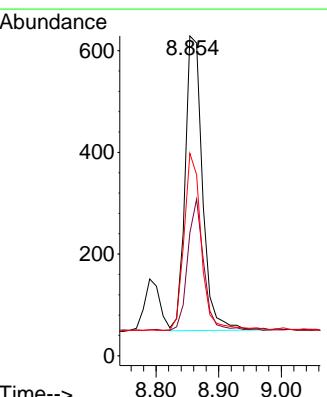


#8  
Nitrobenzene-d5  
Concen: 0.340 ng  
RT: 8.854 min Scan# 775  
Delta R.T. -0.011 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion: 82 Resp: 1117

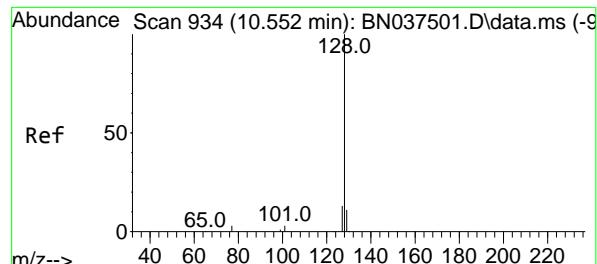
Ion Ratio Lower Upper

82	100
128	38.5
54	63.3
	37.5
	56.3
	45.3
	67.9

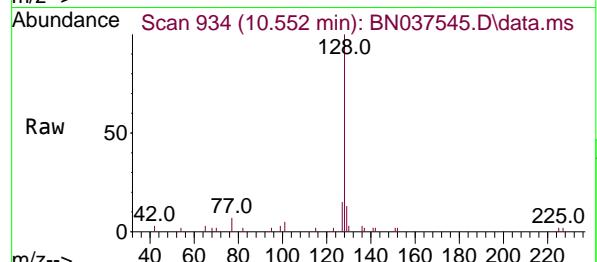


Abundance Scan 775 (8.854 min): BN037545.D\data.ms (-75)

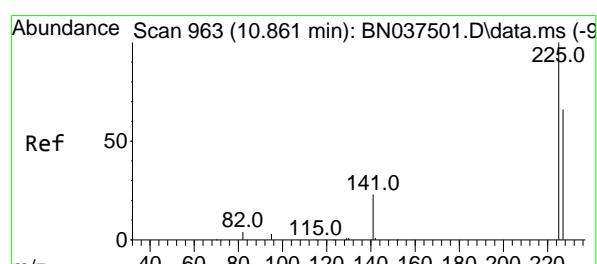
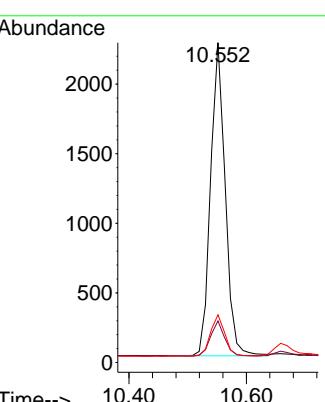
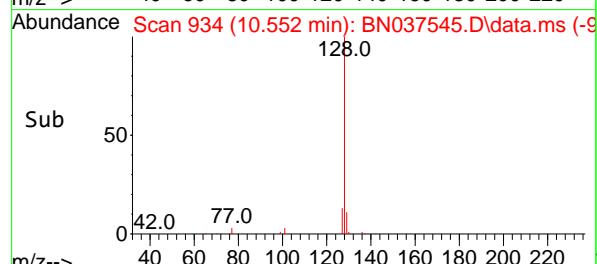




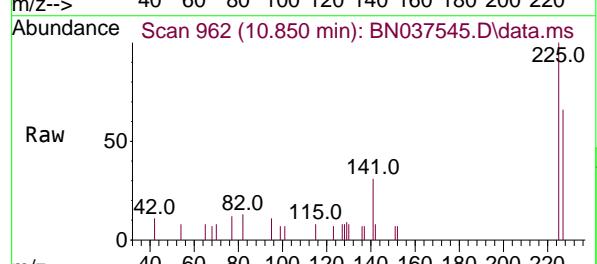
#9  
Naphthalene  
Concen: 0.335 ng  
RT: 10.552 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037545.D ClientSampleId :  
Acq: 22 Jul 2025 18:41 PB168952BSD



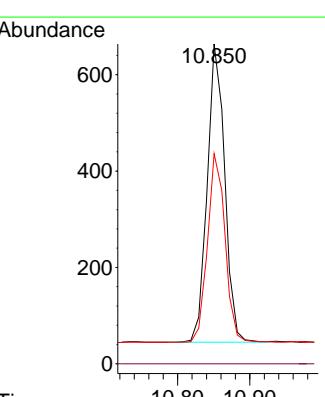
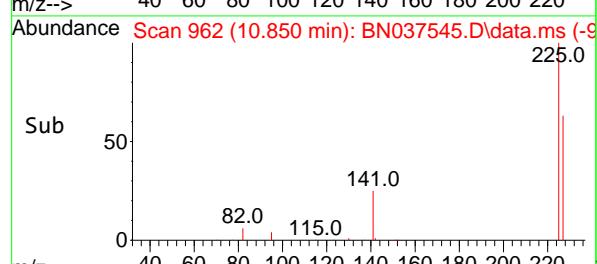
Tgt Ion:128 Resp: 3916  
Ion Ratio Lower Upper  
128 100  
129 13.0 9.7 14.5  
127 14.9 11.5 17.3

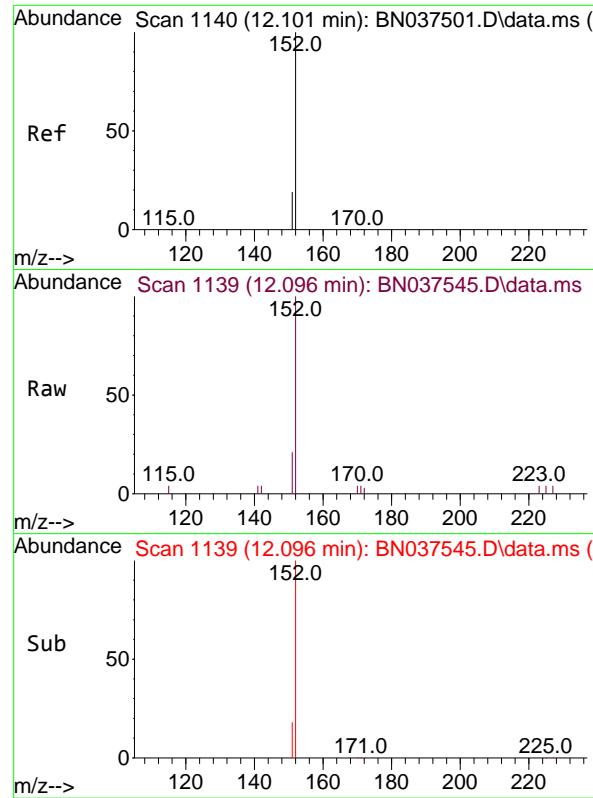


#10  
Hexachlorobutadiene  
Concen: 0.404 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.011 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41



Tgt Ion:225 Resp: 1044  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.2 51.0 76.4

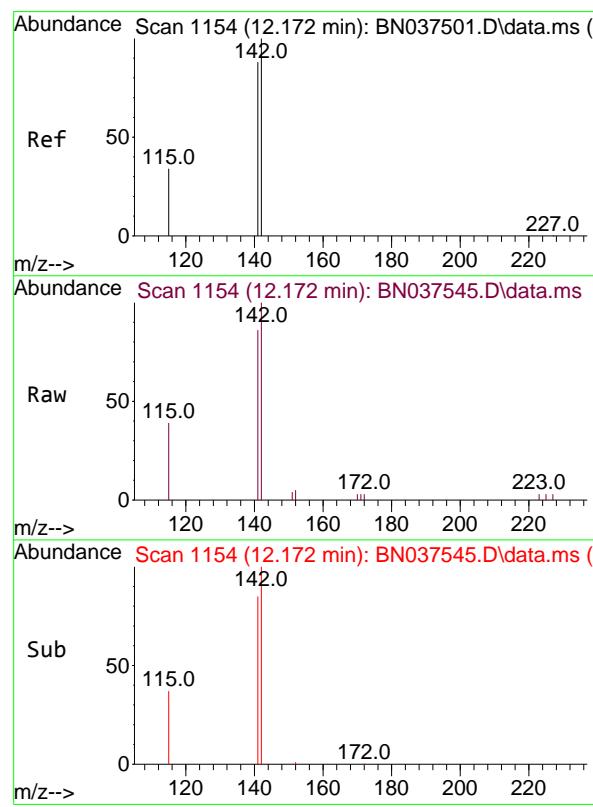
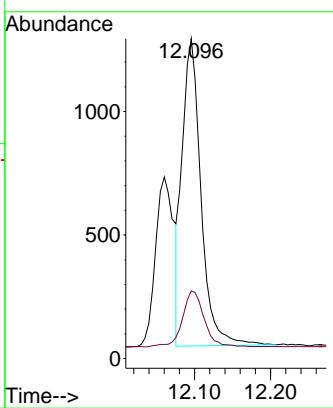




#11  
2-Methylnaphthalene-d10  
Concen: 0.341 ng  
RT: 12.096 min Scan# 1139  
Delta R.T. -0.005 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

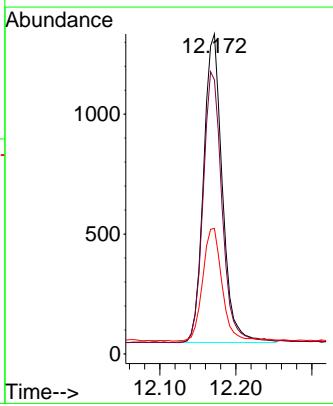
Instrument : BNA\_N  
ClientSampleId : PB168952BSD

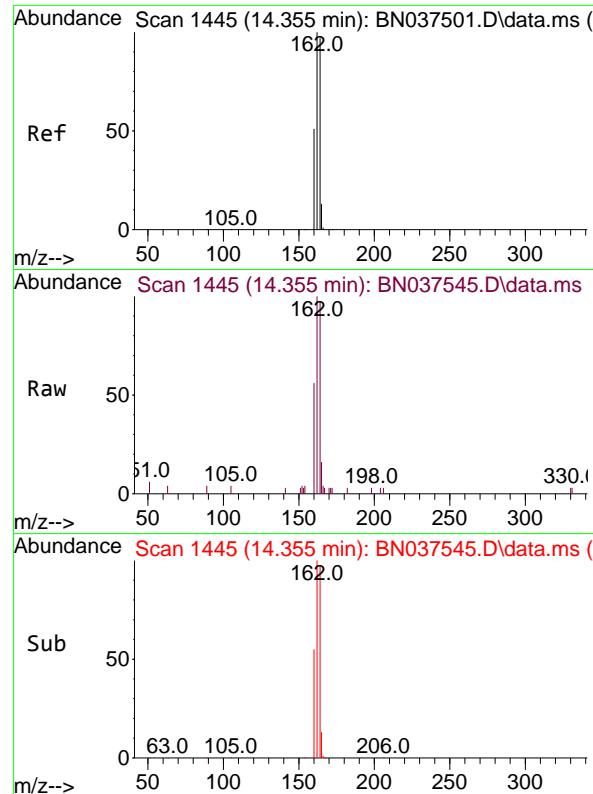
Tgt Ion:152 Resp: 2144  
Ion Ratio Lower Upper  
152 100  
151 21.4 16.8 25.2



#12  
2-Methylnaphthalene  
Concen: 0.285 ng  
RT: 12.172 min Scan# 1154  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:142 Resp: 2196  
Ion Ratio Lower Upper  
142 100  
141 85.6 71.0 106.4  
115 39.3 29.0 43.4





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.355 min Scan# 14

Delta R.T. 0.000 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

Instrument :

BNA\_N

ClientSampleId :

PB168952BSD

Tgt Ion:164 Resp: 2110

Ion Ratio Lower Upper

164 100

162 102.7 82.0 123.0

160 57.5 42.4 63.6

Abundance

14.356

1000

500

0

Time--&gt;

14.40

#14

2,4,6-Tribromophenol

Concen: 0.266 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

Tgt Ion:330 Resp: 276

Ion Ratio Lower Upper

330 100

332 90.9 76.1 114.1

141 38.8 33.4 50.0

Abundance

15.833

150

100

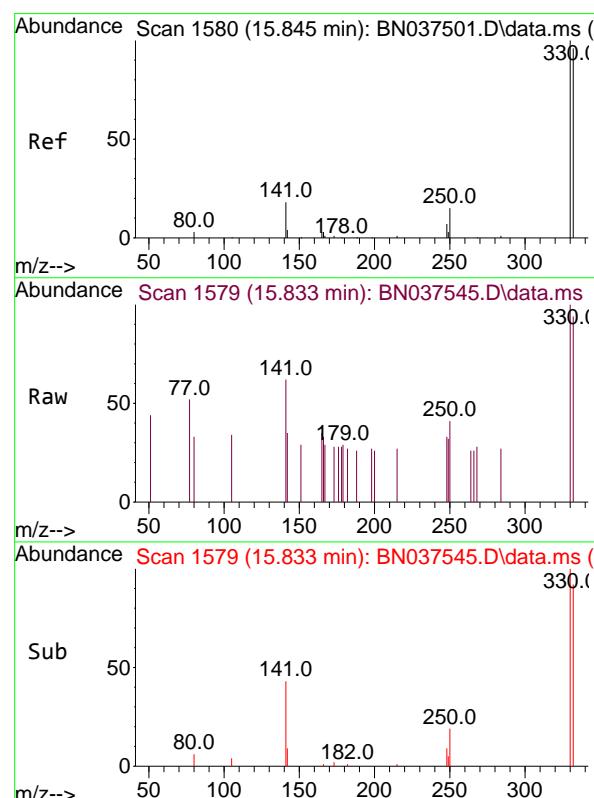
50

0

Time--&gt;

15.80

16.00



#14

2,4,6-Tribromophenol

Concen: 0.266 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.012 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

Tgt Ion:330 Resp: 276

Ion Ratio Lower Upper

330 100

332 90.9 76.1 114.1

141 38.8 33.4 50.0

Abundance

15.833

150

100

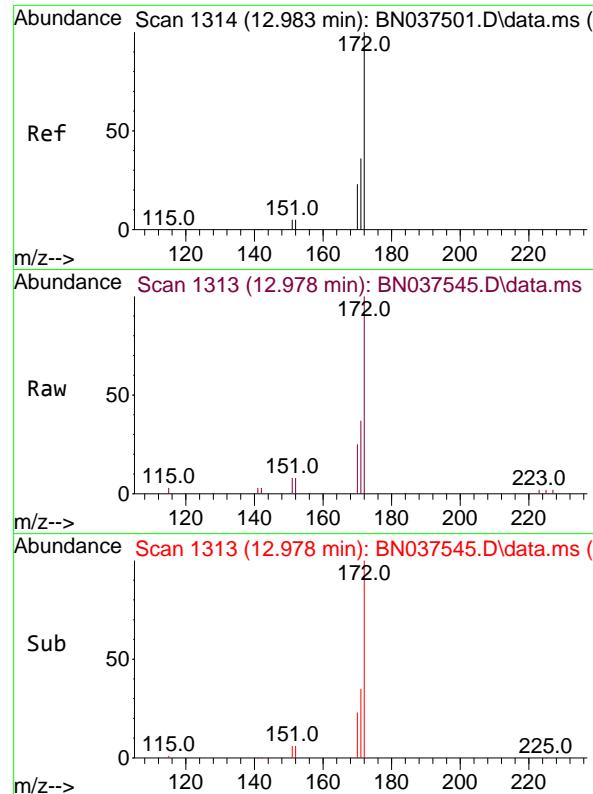
50

0

Time--&gt;

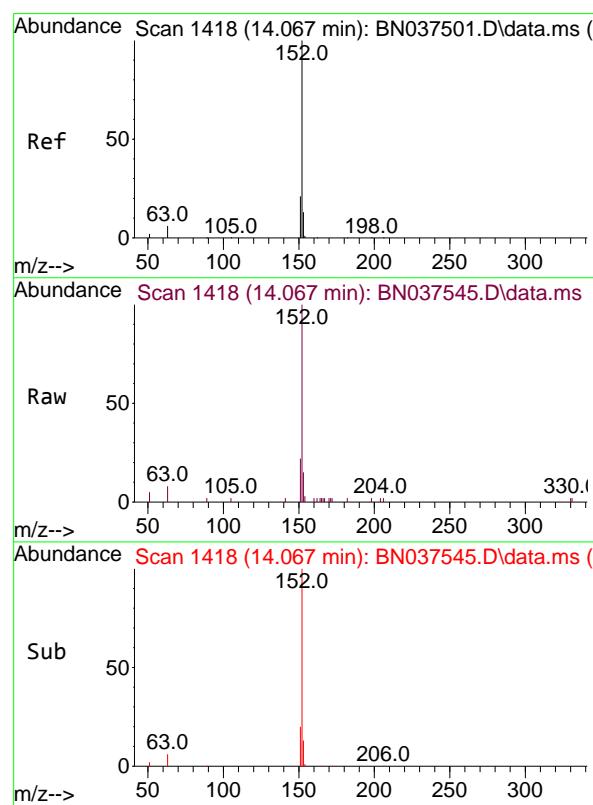
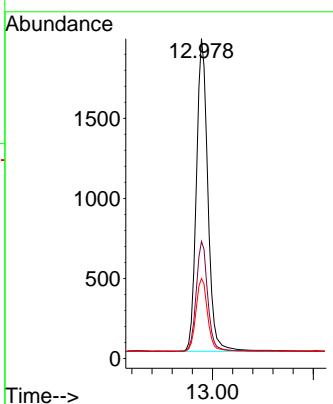
15.80

16.00



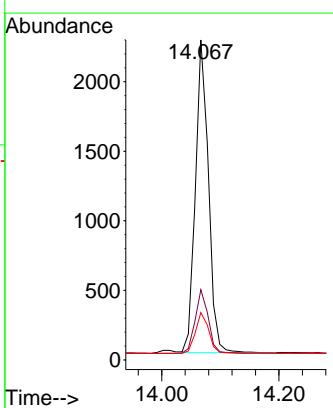
#15  
2-Fluorobiphenyl  
Concen: 0.400 ng  
RT: 12.978 min Scan# 1:Instrument :  
Delta R.T. -0.005 min BNA\_N  
Lab File: BN037545.D ClientSampleId :  
Acq: 22 Jul 2025 18:41 PB168952BSD

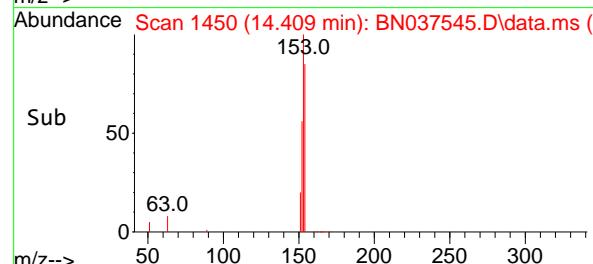
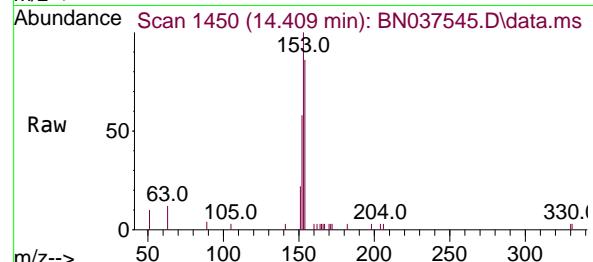
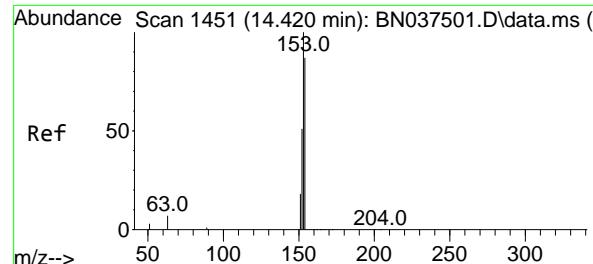
Tgt Ion:172 Resp: 4388  
Ion Ratio Lower Upper  
172 100  
171 36.6 29.4 44.2  
170 25.0 19.4 29.0



#16  
Acenaphthylene  
Concen: 0.367 ng  
RT: 14.067 min Scan# 1418  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:152 Resp: 3466  
Ion Ratio Lower Upper  
152 100  
151 20.6 15.9 23.9  
153 13.6 10.7 16.1





#17

Acenaphthene

Concen: 0.334 ng

RT: 14.409 min Scan# 14

Delta R.T. -0.011 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

Instrument:

BNA\_N

ClientSampleId :

PB168952BSD

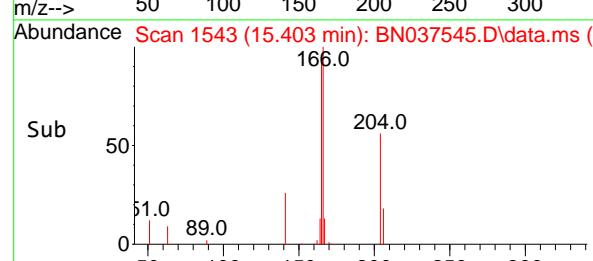
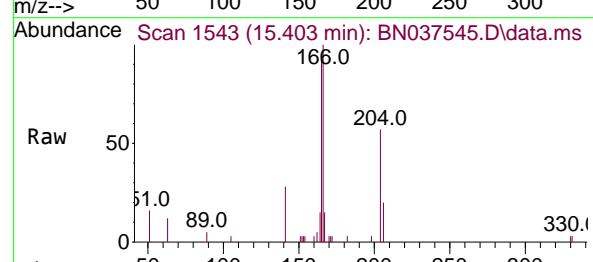
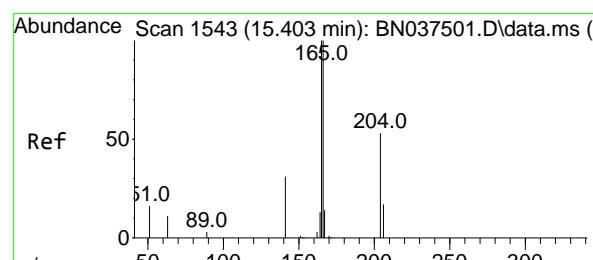
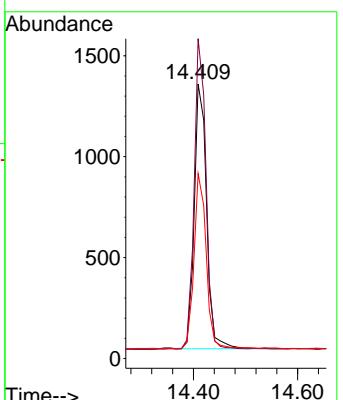
Tgt Ion:154 Resp: 2148

Ion Ratio Lower Upper

154 100

153 112.5 89.2 133.8

152 65.4 48.0 72.0



#18

Fluorene

Concen: 0.327 ng

RT: 15.403 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

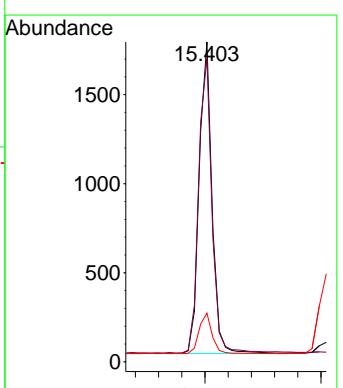
Tgt Ion:166 Resp: 2703

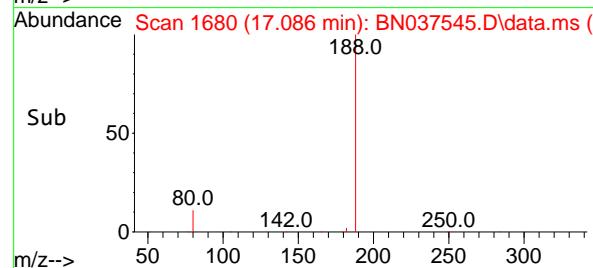
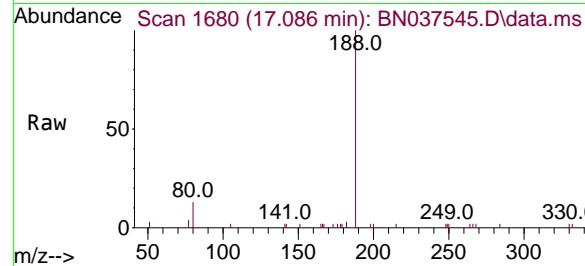
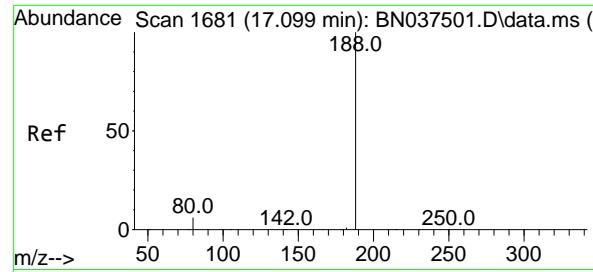
Ion Ratio Lower Upper

166 100

165 100.7 78.1 117.1

167 13.3 11.0 16.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. -0.012 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

Instrument:

BNA\_N

ClientSampleId :

PB168952BSD

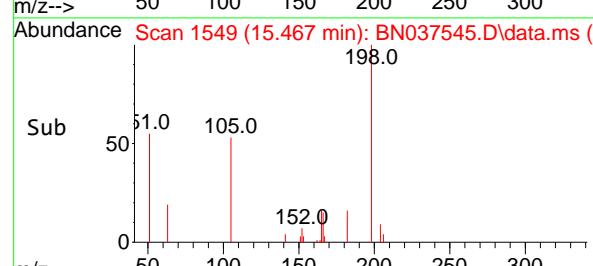
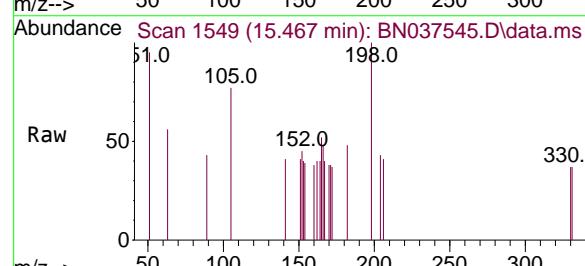
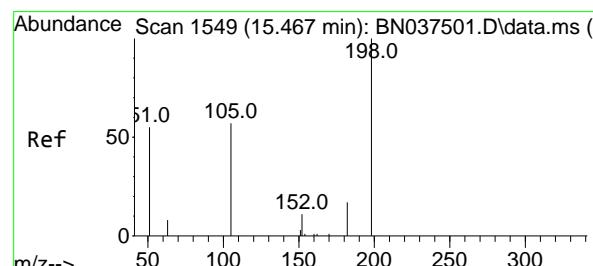
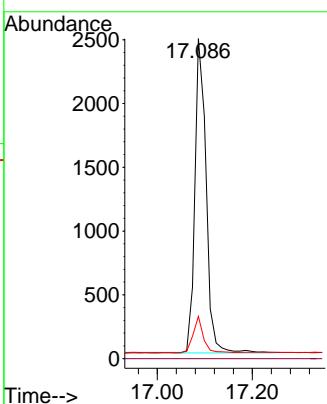
Tgt Ion:188 Resp: 4034

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.2 6.0 9.0#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.380 ng

RT: 15.467 min Scan# 1549

Delta R.T. 0.000 min

Lab File: BN037545.D

Acq: 22 Jul 2025 18:41

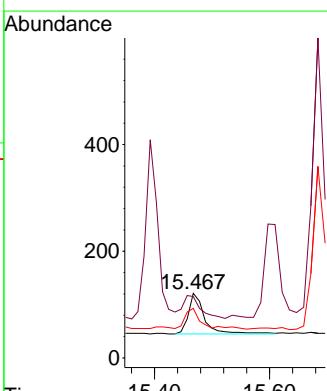
Tgt Ion:198 Resp: 158

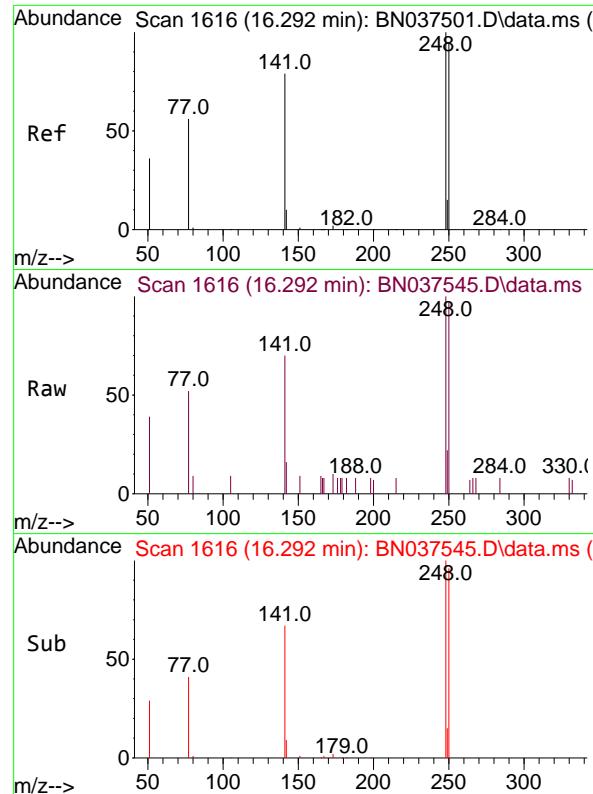
Ion Ratio Lower Upper

198 100

51 95.0 88.5 132.7

105 76.9 61.2 91.8

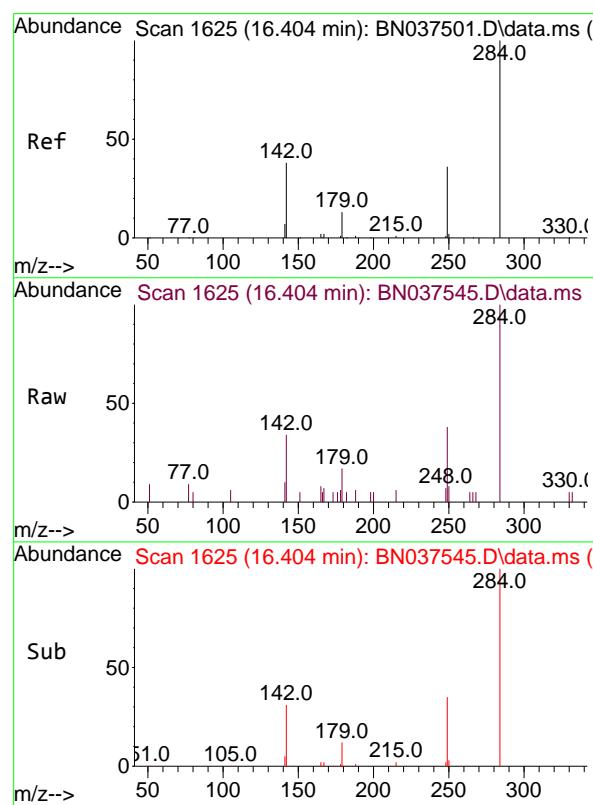
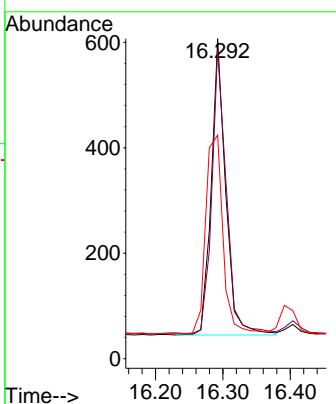




#21  
4-Bromophenyl-phenylether  
Concen: 0.325 ng  
RT: 16.292 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

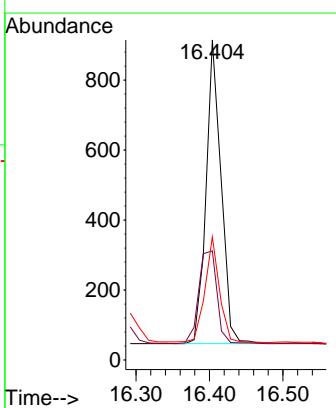
Instrument : BNA\_N  
ClientSampleId : PB168952BSD

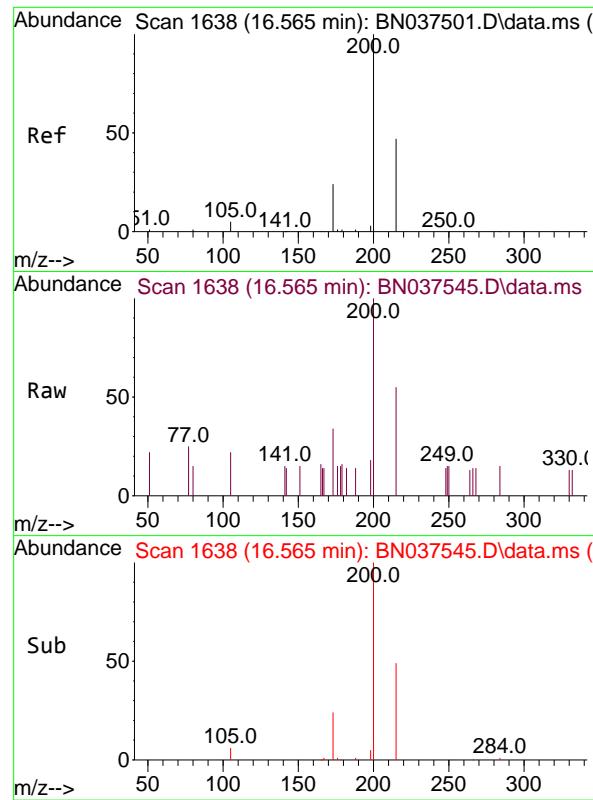
Tgt Ion:248 Resp: 840  
Ion Ratio Lower Upper  
248 100  
250 96.5 76.2 114.2  
141 69.9 63.9 95.9



#22  
Hexachlorobenzene  
Concen: 0.369 ng  
RT: 16.404 min Scan# 1625  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

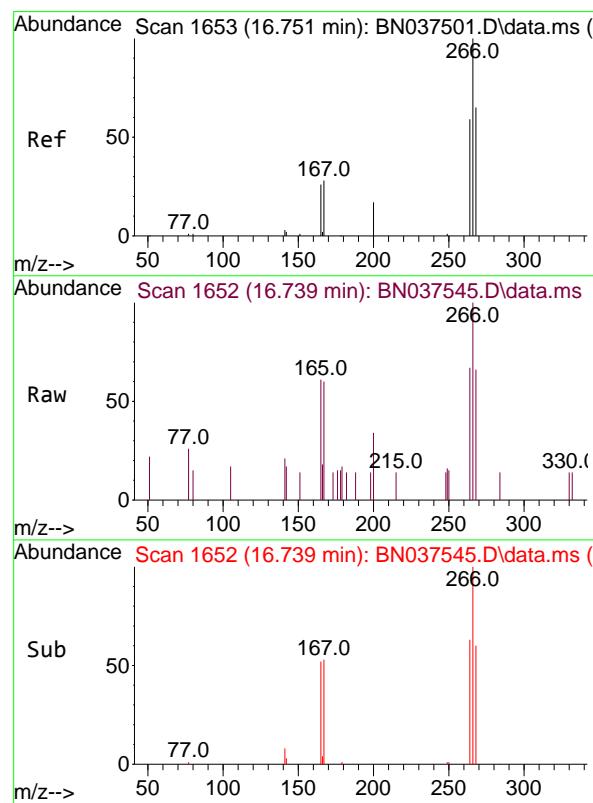
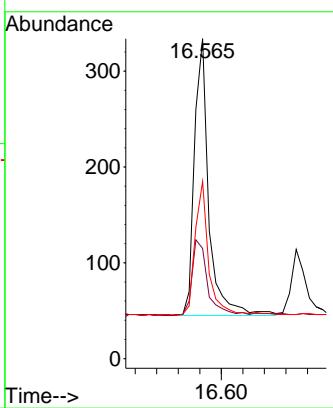
Tgt Ion:284 Resp: 1231  
Ion Ratio Lower Upper  
284 100  
142 37.2 28.9 43.3  
249 33.6 25.8 38.6





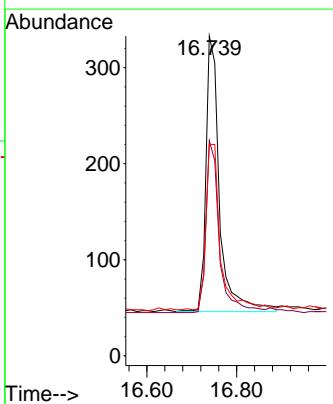
#23  
Atrazine  
Concen: 0.297 ng  
RT: 16.565 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN037545.D ClientSampleId :  
Acq: 22 Jul 2025 18:41 PB168952BSD

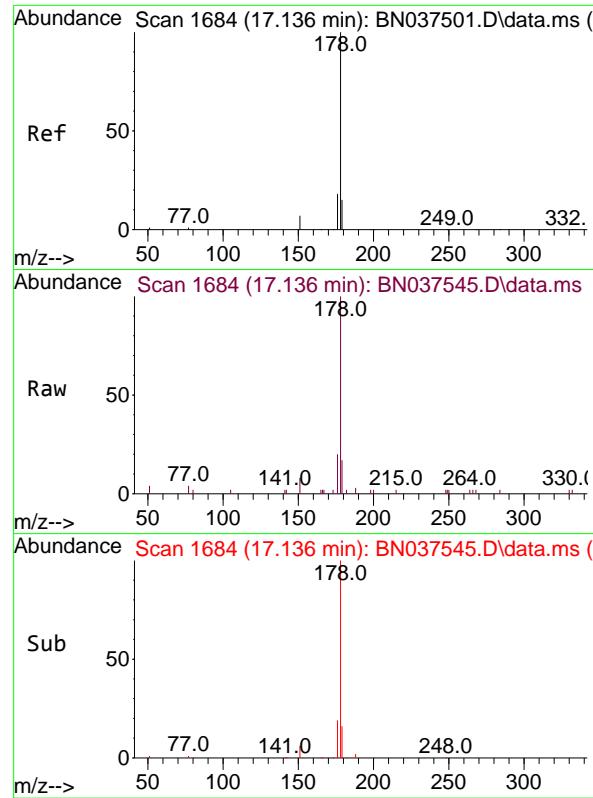
Tgt Ion:200 Resp: 535  
Ion Ratio Lower Upper  
200 100  
173 34.4 23.2 34.8  
215 55.4 40.2 60.4



#24  
Pentachlorophenol  
Concen: 0.406 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.012 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:266 Resp: 608  
Ion Ratio Lower Upper  
266 100  
264 60.9 49.3 73.9  
268 62.8 51.6 77.4

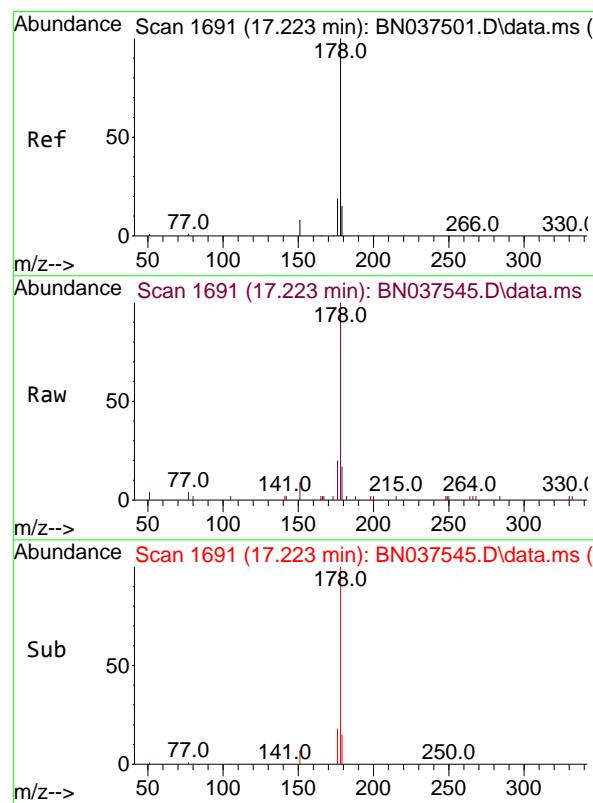
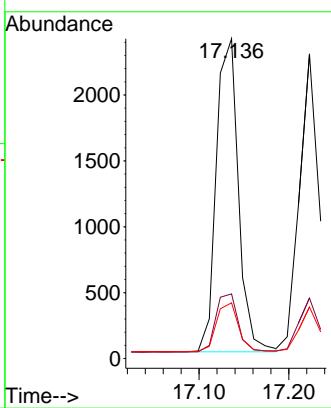




#25  
 Phenanthrene  
 Concen: 0.338 ng  
 RT: 17.136 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN037545.D  
 Acq: 22 Jul 2025 18:41

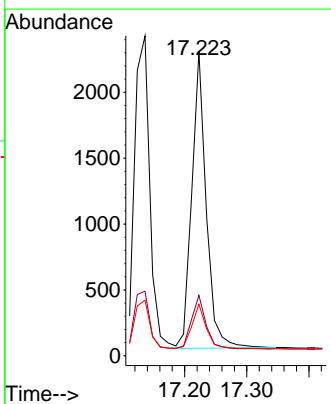
Instrument : BNA\_N  
 ClientSampleId : PB168952BSD

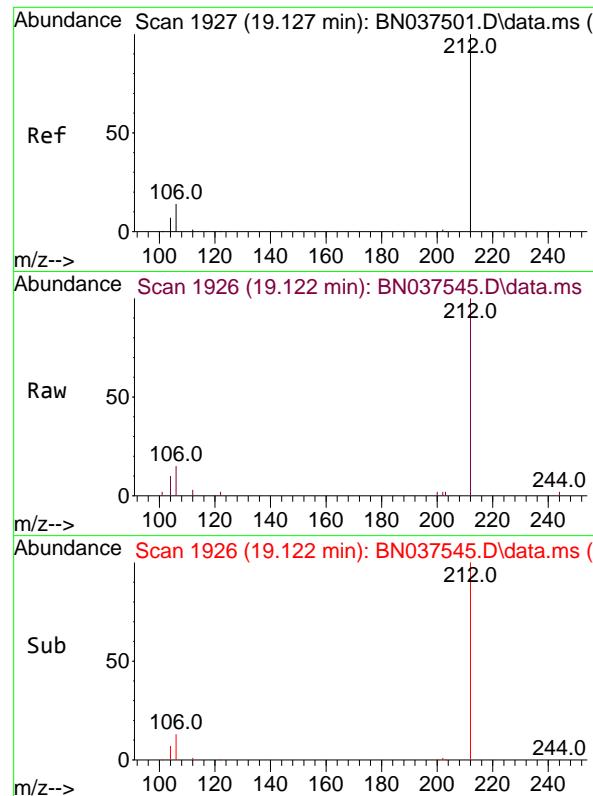
Tgt Ion:178 Resp: 4083  
 Ion Ratio Lower Upper  
 178 100  
 176 19.3 15.0 22.6  
 179 15.8 12.2 18.2



#26  
 Anthracene  
 Concen: 0.327 ng  
 RT: 17.223 min Scan# 1691  
 Delta R.T. 0.000 min  
 Lab File: BN037545.D  
 Acq: 22 Jul 2025 18:41

Tgt Ion:178 Resp: 3611  
 Ion Ratio Lower Upper  
 178 100  
 176 18.6 14.7 22.1  
 179 15.1 12.3 18.5

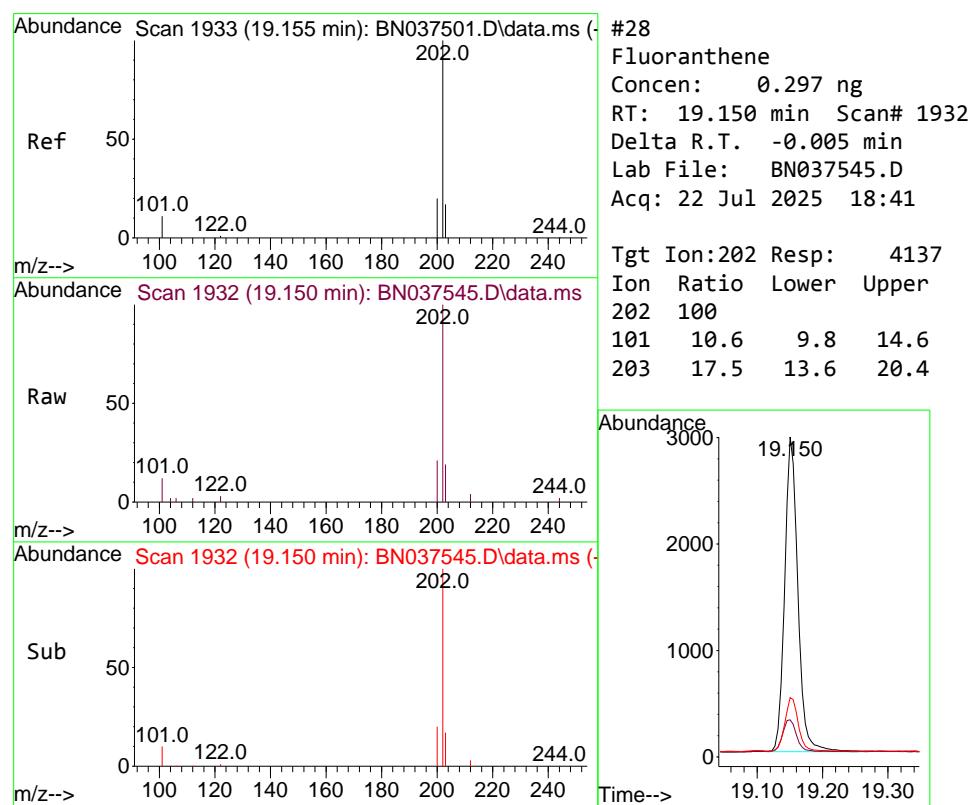
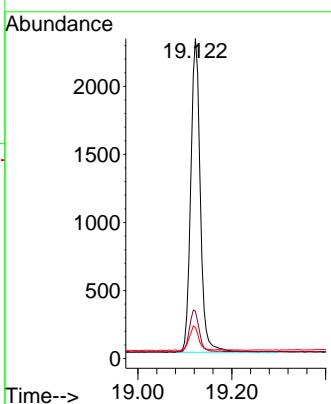




#27  
 Fluoranthene-d10  
 Concen: 0.306 ng  
 RT: 19.122 min Scan# 1926  
 Delta R.T. -0.005 min  
 Lab File: BN037545.D  
 Acq: 22 Jul 2025 18:41

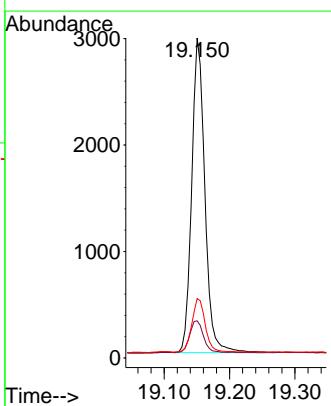
Instrument : BNA\_N  
 ClientSampleId : PB168952BSD

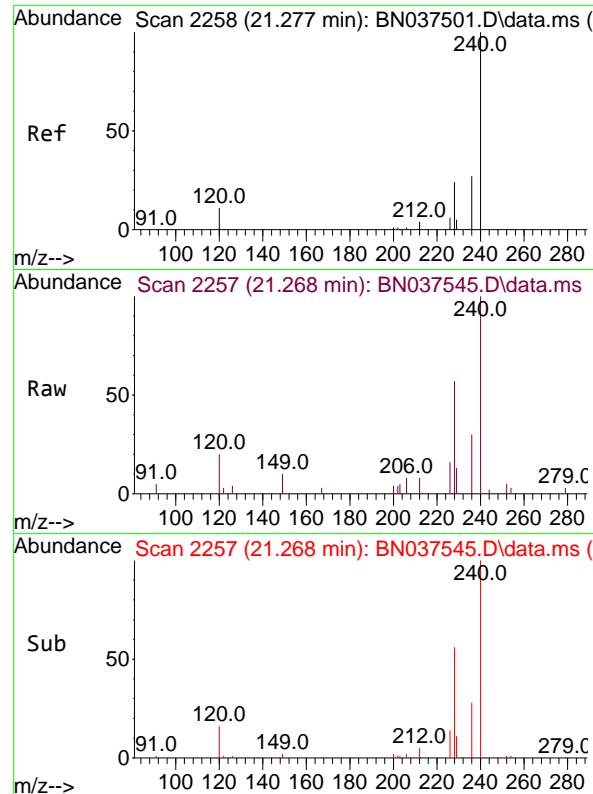
Tgt Ion:212 Resp: 3267  
 Ion Ratio Lower Upper  
 212 100  
 106 13.6 12.2 18.4  
 104 7.8 6.7 10.1



#28  
 Fluoranthene  
 Concen: 0.297 ng  
 RT: 19.150 min Scan# 1932  
 Delta R.T. -0.005 min  
 Lab File: BN037545.D  
 Acq: 22 Jul 2025 18:41

Tgt Ion:202 Resp: 4137  
 Ion Ratio Lower Upper  
 202 100  
 101 10.6 9.8 14.6  
 203 17.5 13.6 20.4

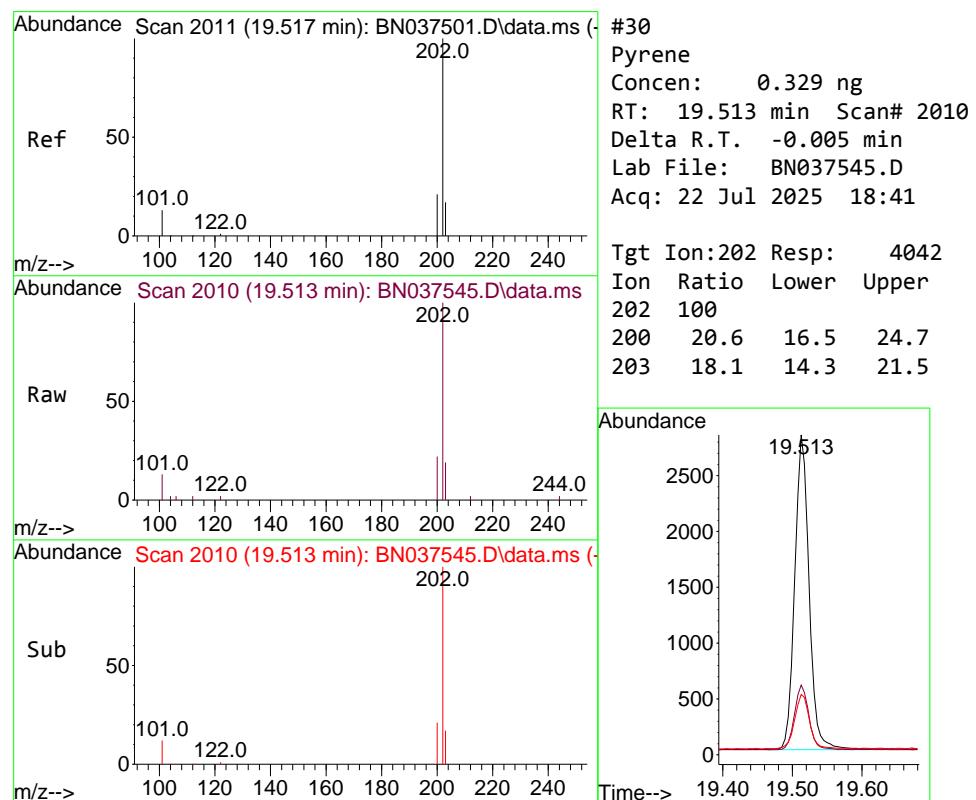
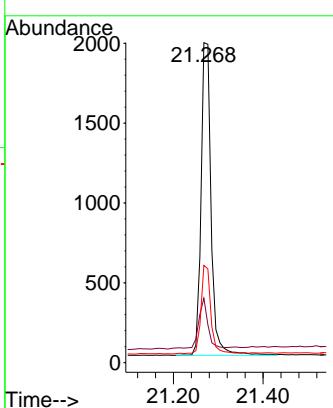




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

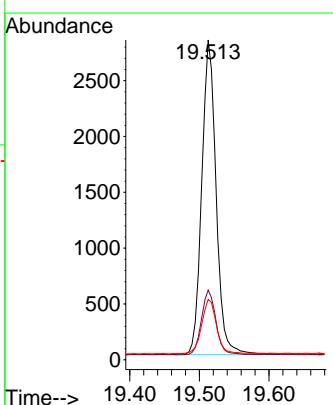
Instrument : BNA\_N  
ClientSampleId : PB168952BSD

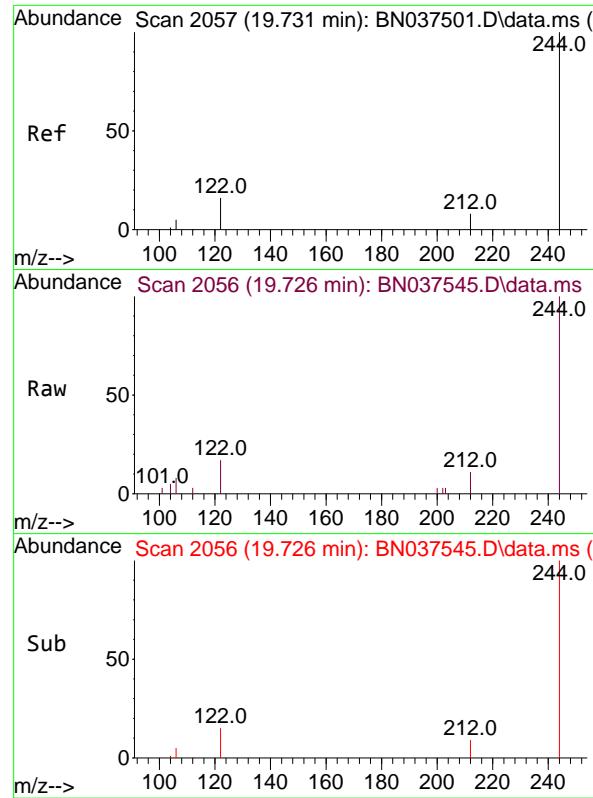
Tgt Ion:240 Resp: 3054  
Ion Ratio Lower Upper  
240 100  
120 20.1 10.7 16.1#  
236 30.4 22.6 33.8



#30  
Pyrene  
Concen: 0.329 ng  
RT: 19.513 min Scan# 2010  
Delta R.T. -0.005 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

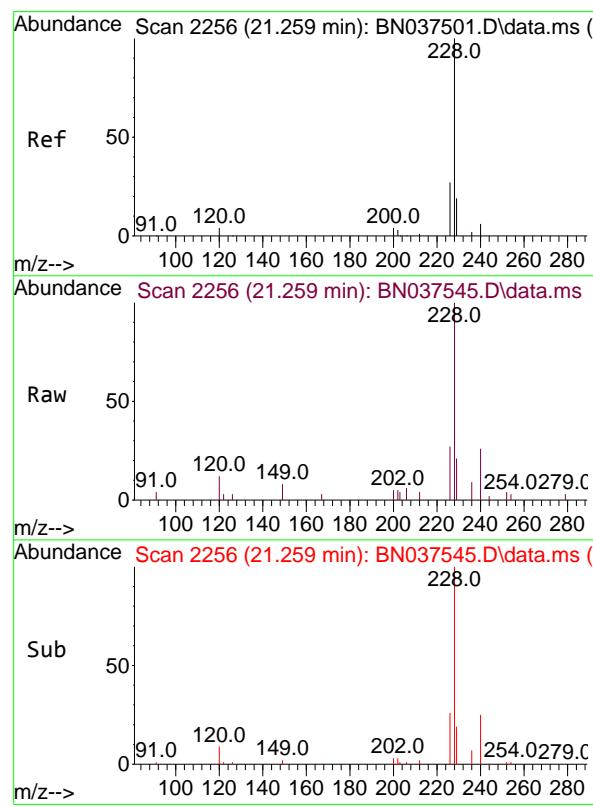
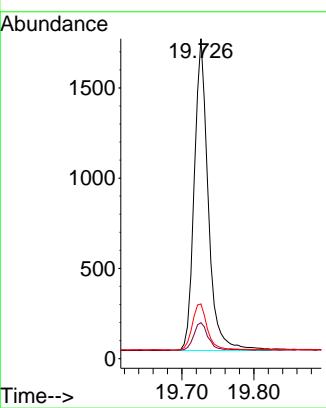
Tgt Ion:202 Resp: 4042  
Ion Ratio Lower Upper  
202 100  
200 20.6 16.5 24.7  
203 18.1 14.3 21.5





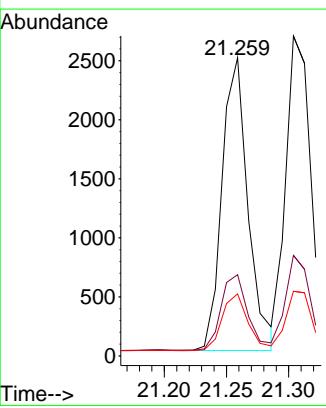
#31  
Terphenyl-d14  
Concen: 0.355 ng  
RT: 19.726 min Scan# 21  
Instrument: BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN037545.D  
ClientSampleId : PB168952BSD  
Acq: 22 Jul 2025 18:41

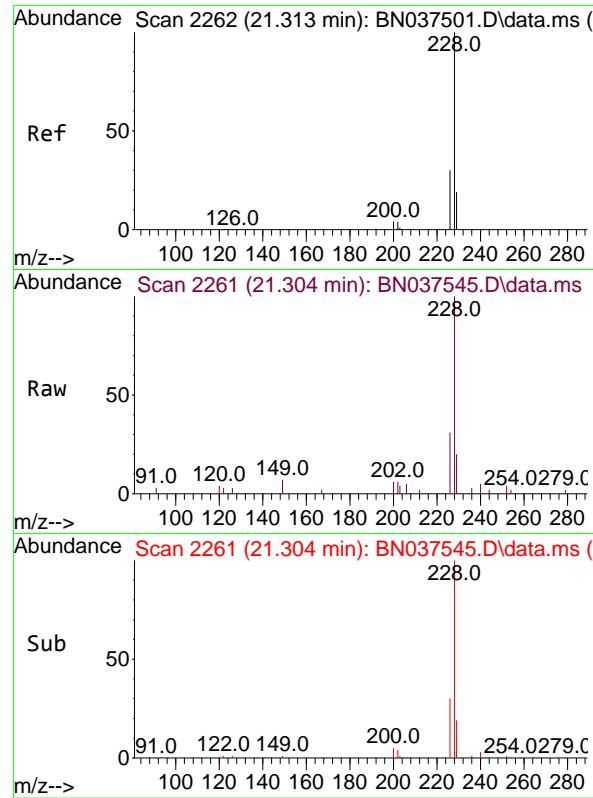
Tgt Ion:244 Resp: 2328  
Ion Ratio Lower Upper  
244 100  
212 11.2 7.4 11.2#  
122 17.1 13.6 20.4



#32  
Benzo(a)anthracene  
Concen: 0.337 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:228 Resp: 3607  
Ion Ratio Lower Upper  
228 100  
226 27.2 21.9 32.9  
229 20.8 15.8 23.8

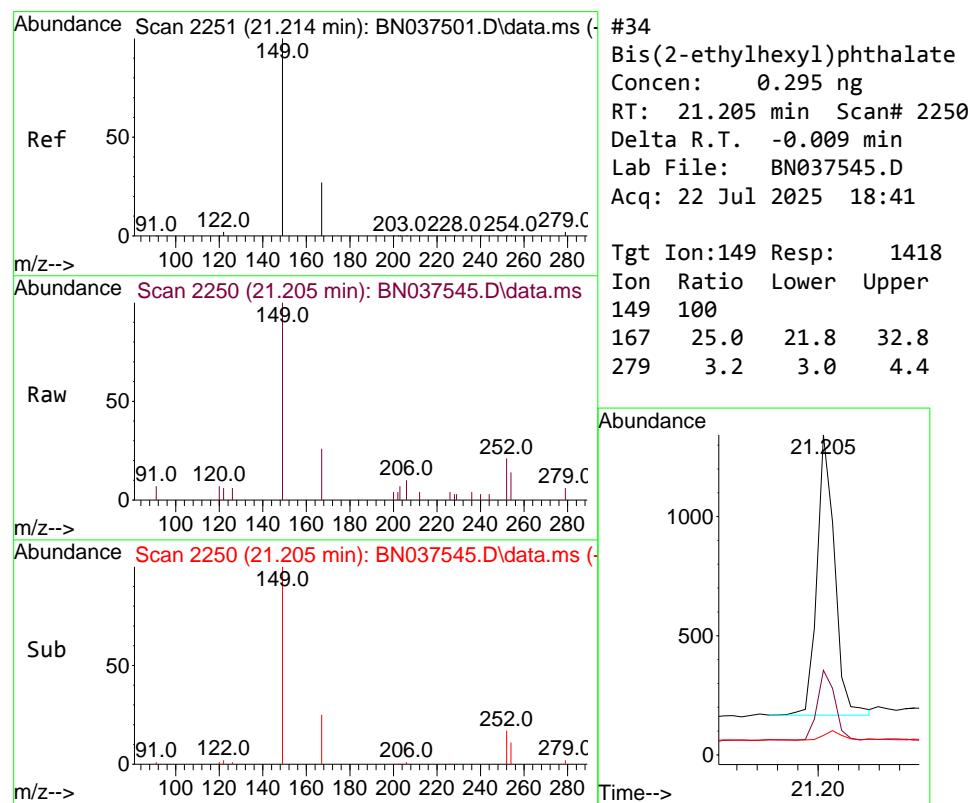
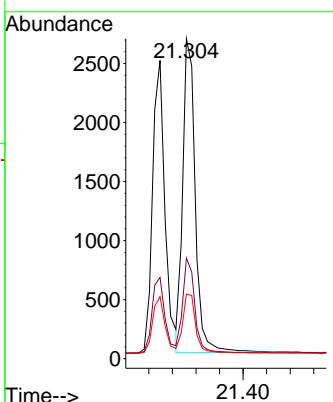




#33  
Chrysene  
Concen: 0.353 ng  
RT: 21.304 min Scan# 21  
Delta R.T. -0.009 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

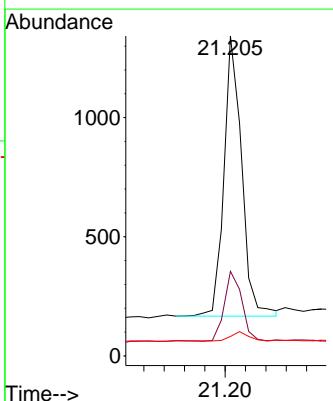
Instrument : BNA\_N  
ClientSampleId : PB168952BSD

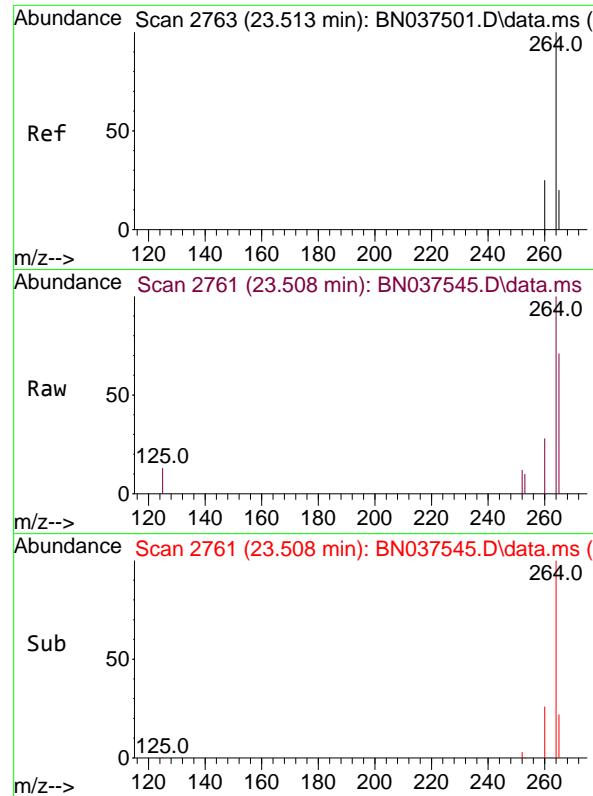
Tgt Ion:228 Resp: 3931  
Ion Ratio Lower Upper  
228 100  
226 31.4 24.2 36.4  
229 20.2 16.1 24.1



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.295 ng  
RT: 21.205 min Scan# 2250  
Delta R.T. -0.009 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:149 Resp: 1418  
Ion Ratio Lower Upper  
149 100  
167 25.0 21.8 32.8  
279 3.2 3.0 4.4

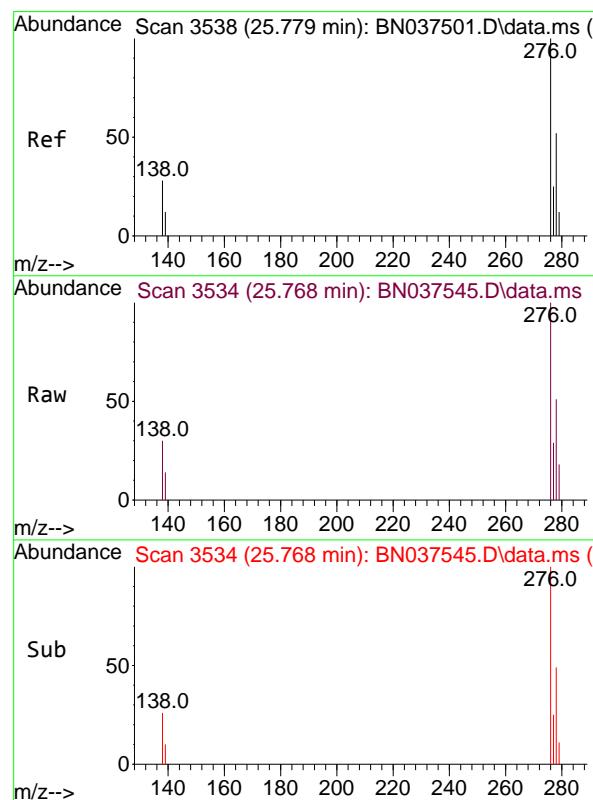
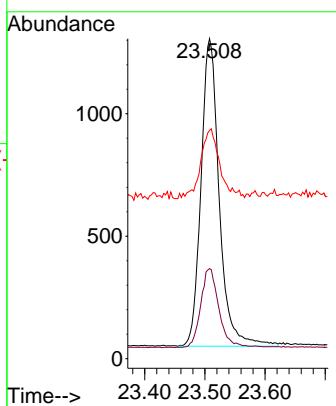




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.508 min Scan# 21  
Delta R.T. -0.006 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

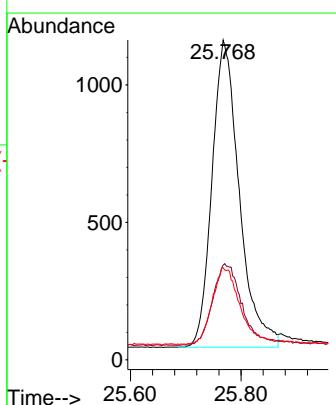
Instrument : BNA\_N  
ClientSampleId : PB168952BSD

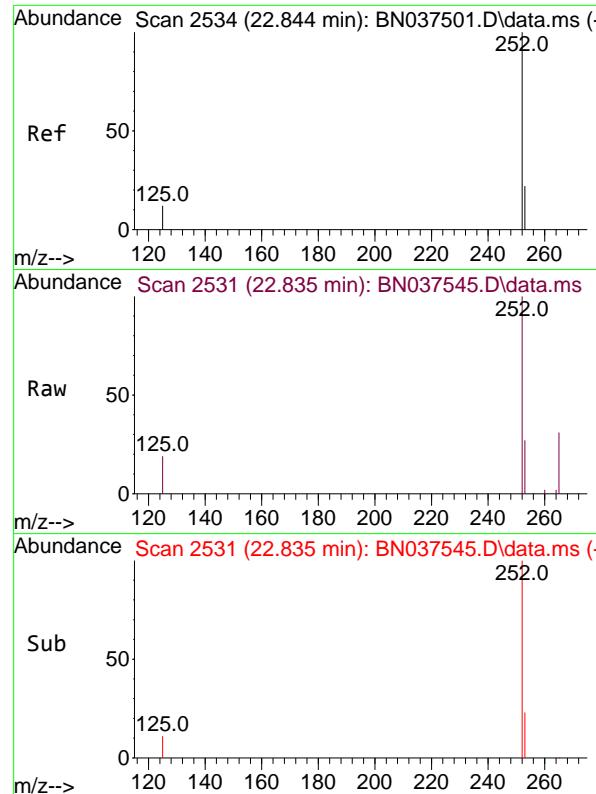
Tgt Ion:264 Resp: 2644  
Ion Ratio Lower Upper  
264 100  
260 28.2 21.2 31.8  
265 71.3 40.4 60.6#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.348 ng  
RT: 25.768 min Scan# 3534  
Delta R.T. -0.012 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:276 Resp: 3827  
Ion Ratio Lower Upper  
276 100  
138 27.9 24.0 36.0  
277 25.9 20.5 30.7

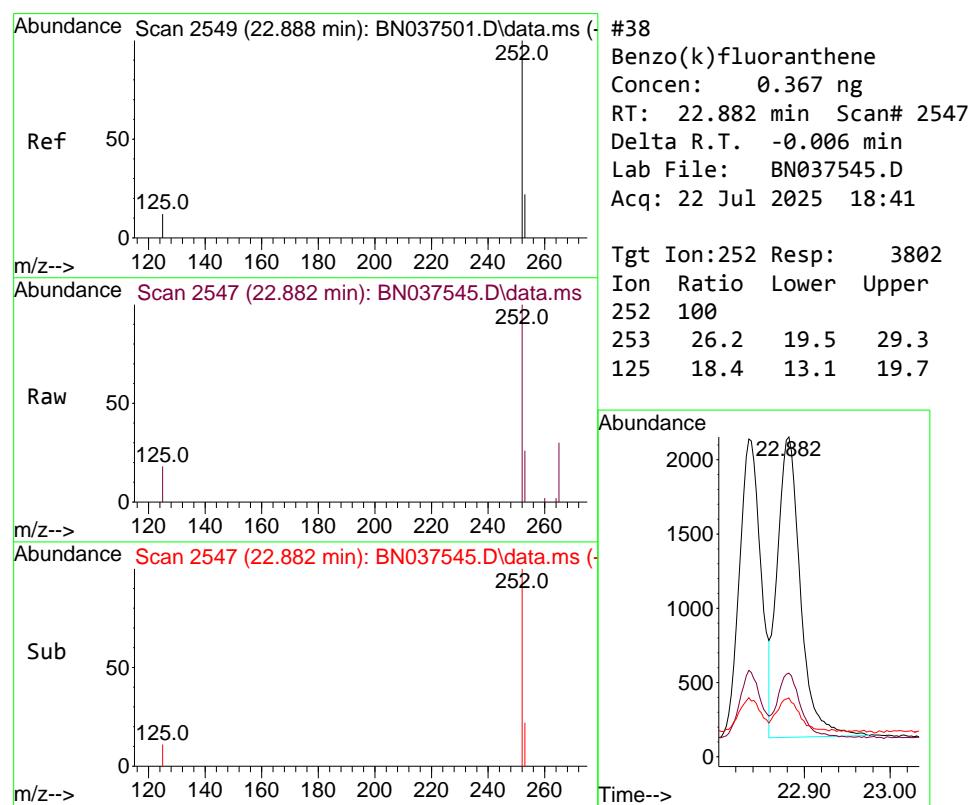
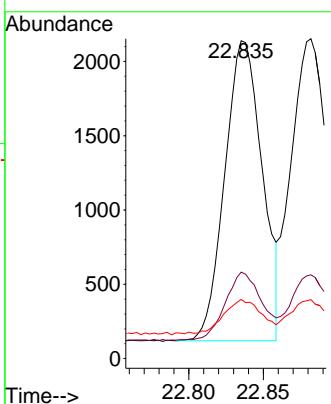




#37  
 Benzo(b)fluoranthene  
 Concen: 0.352 ng  
 RT: 22.835 min Scan# 21  
 Delta R.T. -0.009 min  
 Lab File: BN037545.D  
 Acq: 22 Jul 2025 18:41

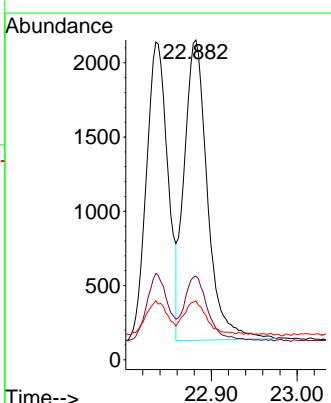
Instrument : BNA\_N  
 ClientSampleId : PB168952BSD

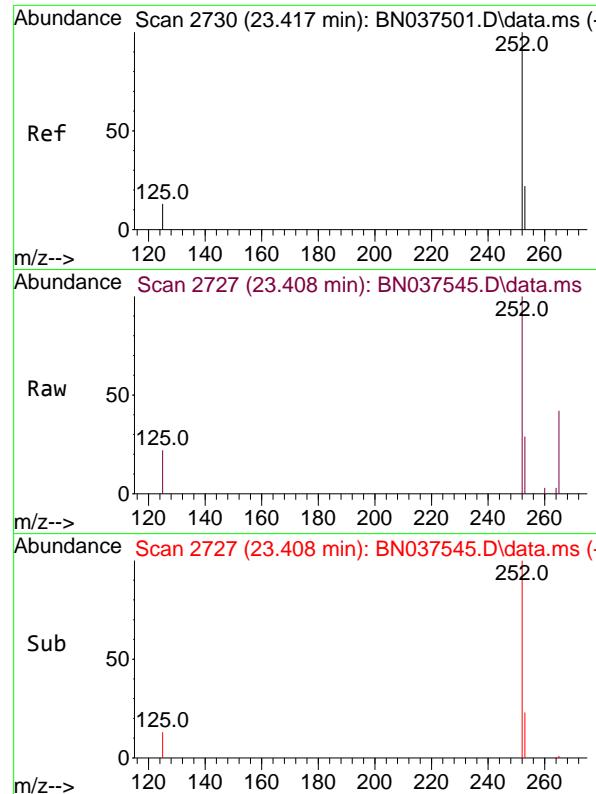
Tgt Ion:252 Resp: 3530  
 Ion Ratio Lower Upper  
 252 100  
 253 27.2 19.5 29.3  
 125 18.6 13.0 19.6



#38  
 Benzo(k)fluoranthene  
 Concen: 0.367 ng  
 RT: 22.882 min Scan# 2547  
 Delta R.T. -0.006 min  
 Lab File: BN037545.D  
 Acq: 22 Jul 2025 18:41

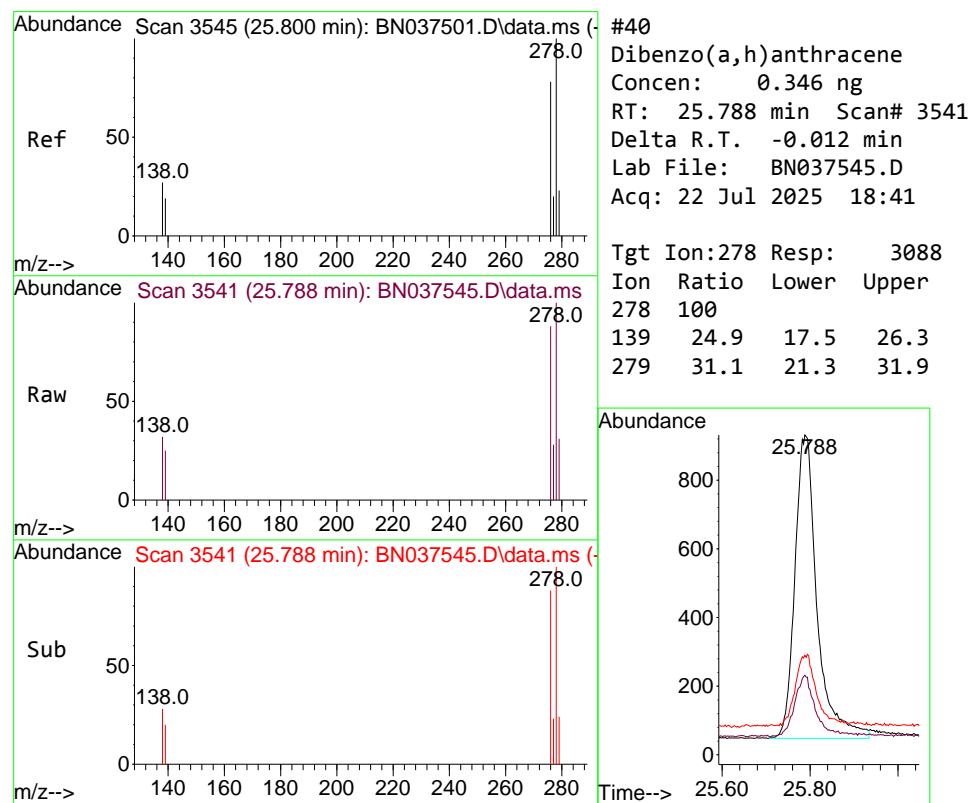
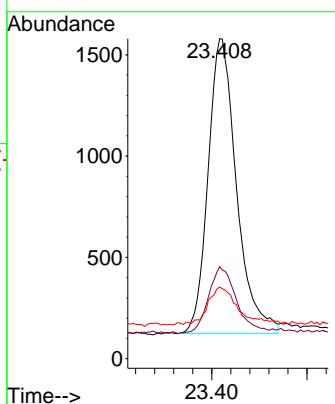
Tgt Ion:252 Resp: 3802  
 Ion Ratio Lower Upper  
 252 100  
 253 26.2 19.5 29.3  
 125 18.4 13.1 19.7





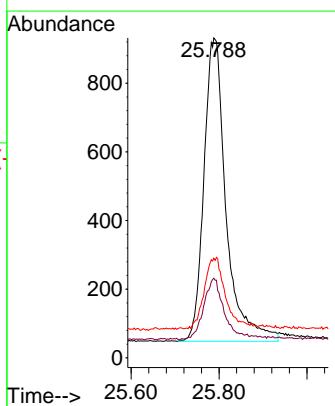
#39  
Benzo(a)pyrene  
Concen: 0.360 ng  
RT: 23.408 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. -0.009 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41  
ClientSampleId : PB168952BSD

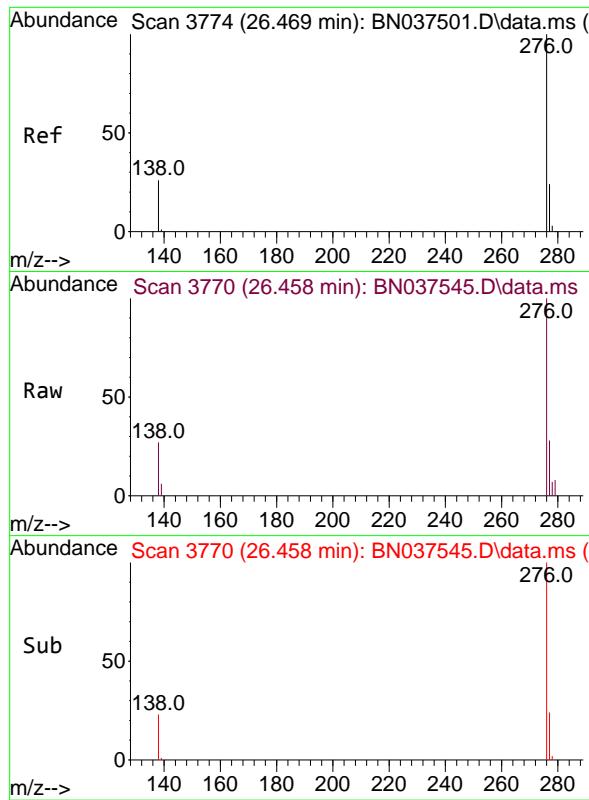
Tgt Ion:252 Resp: 3017  
Ion Ratio Lower Upper  
252 100  
253 28.7 19.9 29.9  
125 22.4 15.2 22.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.346 ng  
RT: 25.788 min Scan# 3541  
Delta R.T. -0.012 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Tgt Ion:278 Resp: 3088  
Ion Ratio Lower Upper  
278 100  
139 24.9 17.5 26.3  
279 31.1 21.3 31.9

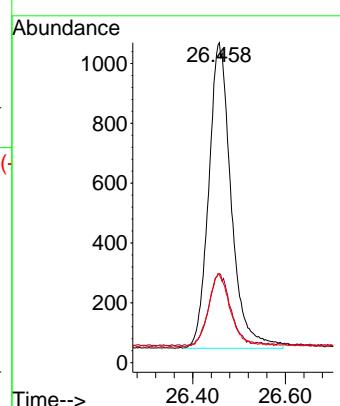




#41  
Benzo(g,h,i)perylene  
Concen: 0.373 ng  
RT: 26.458 min Scan# 3  
Delta R.T. -0.012 min  
Lab File: BN037545.D  
Acq: 22 Jul 2025 18:41

Instrument :  
BNA\_N  
ClientSampleId :  
PB168952BSD

Tgt Ion:276 Resp: 3439  
Ion Ratio Lower Upper  
276 100  
277 27.9 20.9 31.3  
138 27.4 22.6 33.8





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

## Manual Integration Report

Sequence:	BN071525	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

1  
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15  
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17



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

## Manual Integration Report

Sequence:	BN072225	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

1  
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Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN071525**

Review By	Rahul	Review On	7/16/2025 11:47:41 AM
Supervise By	Jagrut	Supervise On	7/16/2025 12:31:26 PM
SubDirectory	BN071525	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method BN071525
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6757 SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6846 SP6740,1ul/100ul sample SP6854		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN037497.D	15 Jul 2025 10:57	RC/JU	Ok
2	SSTDCCC0.4	BN037498.D	15 Jul 2025 11:37	RC/JU	Not Ok
3	SSTDICC0.1	BN037499.D	15 Jul 2025 12:36	RC/JU	Ok
4	SSTDICC0.2	BN037500.D	15 Jul 2025 13:12	RC/JU	Ok
5	SSTDICCC0.4	BN037501.D	15 Jul 2025 13:49	RC/JU	Ok
6	SSTDICC0.8	BN037502.D	15 Jul 2025 14:25	RC/JU	Ok
7	SSTDICC1.6	BN037503.D	15 Jul 2025 15:01	RC/JU	Ok
8	SSTDICC3.2	BN037504.D	15 Jul 2025 15:38	RC/JU	Ok
9	SSTDICC5.0	BN037505.D	15 Jul 2025 16:14	RC/JU	Ok
10	SSTDICV0.4	BN037506.D	15 Jul 2025 16:58	RC/JU	Ok
11	PB168696BL	BN037507.D	15 Jul 2025 17:34	RC/JU	Ok
12	SSTDCCC0.4	BN037508.D	15 Jul 2025 18:11	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN072225**

Review By	Rahul	Review On	7/23/2025 10:34:43 AM
Supervise By	Jagrut	Supervise On	7/23/2025 12:28:20 PM
SubDirectory	BN072225	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method BN071525
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6757 SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6846 SP6740,1ul/100ul sample SP6854		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN037531.D	22 Jul 2025 10:07	RC/JU	Ok
2	SSTDCCC0.4	BN037532.D	22 Jul 2025 10:51	RC/JU	Ok
3	PB168952BL	BN037533.D	22 Jul 2025 11:28	RC/JU	Ok
4	Q2642-01	BN037534.D	22 Jul 2025 12:04	RC/JU	Dilution
5	Q2642-02	BN037535.D	22 Jul 2025 12:40	RC/JU	Ok
6	Q2642-03	BN037536.D	22 Jul 2025 13:16	RC/JU	Ok
7	Q2643-01	BN037537.D	22 Jul 2025 13:52	RC/JU	Ok
8	Q2643-02	BN037538.D	22 Jul 2025 14:28	RC/JU	Ok
9	Q2643-03	BN037539.D	22 Jul 2025 15:04	RC/JU	Ok
10	Q2643-04	BN037540.D	22 Jul 2025 15:40	RC/JU	Ok
11	Q2644-01	BN037541.D	22 Jul 2025 16:16	RC/JU	Ok
12	Q2644-02	BN037542.D	22 Jul 2025 16:53	RC/JU	Ok
13	Q2642-01DL	BN037543.D	22 Jul 2025 17:29	RC/JU	Ok
14	PB168952BS	BN037544.D	22 Jul 2025 18:05	RC/JU	Ok
15	PB168952BSD	BN037545.D	22 Jul 2025 18:41	RC/JU	Ok
16	SSTDCCC0.4	BN037546.D	22 Jul 2025 19:17	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA\_N

### Daily Analysis Runlog For Sequence/QCBatch ID # BN071525

Review By	Rahul	Review On	7/16/2025 11:47:41 AM	
Supervise By	Jagrut	Supervise On	7/16/2025 12:31:26 PM	
SubDirectory	BN071525	HP Acquire Method	BNA_N, 8270_HP Processing Method	BN071525
STD. NAME	STD REF.#			
Tune/Reschk Initial Calibration Stds	SP6757 SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848			
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6846 SP6740,1ul/100ul sample SP6854			

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN037497.D	15 Jul 2025 10:57		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN037498.D	15 Jul 2025 11:37	A Fresh Calibration is required.	RC/JU	Not Ok
3	SSTDICC0.1	SSTDICC0.1	BN037499.D	15 Jul 2025 12:36		RC/JU	Ok
4	SSTDICC0.2	SSTDICC0.2	BN037500.D	15 Jul 2025 13:12		RC/JU	Ok
5	SSTDICCC0.4	SSTDICCC0.4	BN037501.D	15 Jul 2025 13:49	Compound #20 kept on QR	RC/JU	Ok
6	SSTDICC0.8	SSTDICC0.8	BN037502.D	15 Jul 2025 14:25		RC/JU	Ok
7	SSTDICC1.6	SSTDICC1.6	BN037503.D	15 Jul 2025 15:01		RC/JU	Ok
8	SSTDICC3.2	SSTDICC3.2	BN037504.D	15 Jul 2025 15:38		RC/JU	Ok
9	SSTDICC5.0	SSTDICC5.0	BN037505.D	15 Jul 2025 16:14		RC/JU	Ok
10	SSTDICV0.4	ICVBN071525	BN037506.D	15 Jul 2025 16:58		RC/JU	Ok
11	PB168696BL	PB168696BL	BN037507.D	15 Jul 2025 17:34		RC/JU	Ok
12	SSTDCCC0.4	SSTDCCC0.4EC	BN037508.D	15 Jul 2025 18:11		RC/JU	Ok

M : Manual Integration

Instrument ID: BNA\_N

### Daily Analysis Runlog For Sequence/QCBatch ID # BN072225

Review By	Rahul	Review On	7/23/2025 10:34:43 AM
Supervise By	Jagrut	Supervise On	7/23/2025 12:28:20 PM
SubDirectory	BN072225	HP Acquire Method	BNA_N, 8270_HP Processing Method BN071525
STD. NAME	STD REF.#		
Tune/Reschk	SP6757 SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6846 SP6740,1ul/100ul sample SP6854		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN037531.D	22 Jul 2025 10:07		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN037532.D	22 Jul 2025 10:51		RC/JU	Ok
3	PB168952BL	PB168952BL	BN037533.D	22 Jul 2025 11:28		RC/JU	Ok
4	Q2642-01	RW5-SP100-20250717	BN037534.D	22 Jul 2025 12:04	Need 2X dilution	RC/JU	Dilution
5	Q2642-02	RW5-SP201-20250717	BN037535.D	22 Jul 2025 12:40		RC/JU	Ok
6	Q2642-03	RW5-SP303-20250717	BN037536.D	22 Jul 2025 13:16		RC/JU	Ok
7	Q2643-01	RW7-SP100-20250717	BN037537.D	22 Jul 2025 13:52		RC/JU	Ok
8	Q2643-02	RW7-SP201-20250717	BN037538.D	22 Jul 2025 14:28		RC/JU	Ok
9	Q2643-03	RW7-SP302-20250717	BN037539.D	22 Jul 2025 15:04		RC/JU	Ok
10	Q2643-04	RW7-SP303-20250717	BN037540.D	22 Jul 2025 15:40		RC/JU	Ok
11	Q2644-01	RW8-SP100-20250717	BN037541.D	22 Jul 2025 16:16		RC/JU	Ok
12	Q2644-02	RW8-SP303-20250717	BN037542.D	22 Jul 2025 16:53		RC/JU	Ok
13	Q2642-01DL	RW5-SP100-20250717	BN037543.D	22 Jul 2025 17:29		RC/JU	Ok
14	PB168952BS	PB168952BS	BN037544.D	22 Jul 2025 18:05		RC/JU	Ok
15	PB168952BSD	PB168952BSD	BN037545.D	22 Jul 2025 18:41		RC/JU	Ok
16	SSTDCCC0.4	SSTDCCC0.4EC	BN037546.D	22 Jul 2025 19:17		RC/JU	Ok

M : Manual Integration

**SOP ID:** M3510C,3580A-Extraction SVOC-21

<b>Clean Up SOP #:</b>	N/A	<b>Extraction Start Date :</b>	07/21/2025
<b>Matrix :</b>	Water	<b>Extraction Start Time :</b>	09:10
<b>Weigh By:</b>	N/A	<b>Extraction End Date :</b>	07/21/2025
<b>Balance check:</b>	N/A	<b>Extraction End Time :</b>	14:10
<b>Balance ID:</b>	N/A	<b>Concentration By:</b>	EH
<b>pH Strip Lot#:</b>	E3880	<b>Hood ID:</b>	4,6,7
<b>Supervisor By :</b>	RUPESH		
<b>Extraction Method:</b>	<input checked="" type="checkbox"/> Separatory Funnel		<input type="checkbox"/> Continous Liquid/Liquid
			<input type="checkbox"/> Sonication
			<input type="checkbox"/> Waste Dilution
			<input type="checkbox"/> 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
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3954
Baked Na2SO4	N/A	EP2625
10N NaOH	N/A	EP2609
H2SO4 1:1	N/A	EP2610
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
7/21/25 14:15	RS (Ext-6ab) Preparation Group	JH  SVOC Analysis Group

Analytical Method: M3510C,3580A-Extraction SVOC-21

Concentration Date: 07/21/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB168952BL	SBLK952	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			SEP-1
PB168952BS	SLCS952	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			2
PB168952BS D	SLCSD952	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			3
Q2642-01	RW5-SP100-20250717	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			4
Q2642-02	RW5-SP201-20250717	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			5
Q2642-03	RW5-SP303-20250717	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			6
Q2643-01	RW7-SP100-20250717	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			7
Q2643-02	RW7-SP201-20250717	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			8
Q2643-03	RW7-SP302-20250717	SVOC-SIMGrou p1	990	6	RUPESH	ritesh	1			9
Q2643-04	RW7-SP303-20250717	SVOC-SIMGrou p1	970	6	RUPESH	ritesh	1			10
Q2644-01	RW8-SP100-20250717	SVOC-SIMGrou p1	990	6	RUPESH	ritesh	1	D		11
Q2644-02	RW8-SP303-20250717	SVOC-SIMGrou p1	990	6	RUPESH	ritesh	1	D		12

RS  
7/21

\* Extracts relinquished on the same date as received.

Q2644-SVOC-SIMGroup1

## WORKLIST(Hardcopy Internal Chain)

WorkList Name :	Q2642	WorkList ID :	190871	Department :	Extraction	Date :	07-21-2025 09:03:28
Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date Method
Q2642-01	RW5-SP100-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O11	07/17/2025 8270-Modified
Q2642-02	RW5-SP201-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O11	07/17/2025 8270-Modified
Q2642-03	RW5-SP303-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O11	07/17/2025 8270-Modified
Q2643-01	RW7-SP100-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O52	07/17/2025 8270-Modified
Q2643-02	RW7-SP201-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O52	07/17/2025 8270-Modified
Q2643-03	RW7-SP302-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O52	07/17/2025 8270-Modified
Q2643-04	RW7-SP303-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O52	07/17/2025 8270-Modified
Q2644-01	RW8-SP100-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O33	07/17/2025 8270-Modified
Q2644-02	RW8-SP303-20250717	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	O33	07/17/2025 8270-Modified

Date/Time 7/21/25 9:05  
 Raw Sample Received by: RS (Ext (lab))  
 Raw Sample Relinquished by: DR S/N

Date/Time  
Raw Sample Received by:  
Raw Sample Relinquished by:

CD S/N  
RS (Ext (lab))

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## Prep Standard - Chemical Standard Summary

**Order ID :** Q2644

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB168952,

**Sequence ID/Qc Batch ID:** BN072225,

**Standard ID :**

EP2609,EP2610,EP2625,SP6740,SP6756,SP6757,SP6830,SP6831,SP6841,SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848,SP6853,SP6854,

**Chemical ID :**

1ul/100ul  
sample,E3551,E3657,E3874,E3902,E3904,E3940,E3942,E3943,E3954,M6157,S10105,S11073,S11496,S11650,S11788,S11828,S12115,S12195,S12197,S12216,S12220,S12273,S12486,S12499,S12533,S12552,S12577,S12651,S12670,S12974,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	<a href="#">EP2609</a>	05/07/2025	11/07/2025	RUPESHKUMA R SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/07/2025

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	<a href="#">EP2610</a>	05/07/2025	11/07/2025	RUPESHKUMA R SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/07/2025

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	<a href="#">EP2625</a>	07/15/2025	12/04/2025	RUPESHKUMA R SHAH	Extraction_SC ALE_2 (EX-SC-2)	None	Riteshkumar Patel 07/15/2025

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	<a href="#">SP6740</a>	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	<a href="#">SP6756</a>	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	<a href="#">SP6757</a>	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>
3493	Internal Standard 0.4 PPM	<a href="#">SP6830</a>	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

<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	<a href="#">SP6831</a>	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

## 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>
3339	8270 sim calibration stock 10ppm (CPI)	<a href="#">SP6841</a>	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

<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	<a href="#">SP6842</a>	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

## 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>
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	<a href="#">SP6843</a>	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

<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	<a href="#">SP6844</a>	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

## 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>
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	<a href="#">SP6845</a>	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

<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	<a href="#">SP6846</a>	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

## 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>
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	<a href="#">SP6847</a>	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

<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	<a href="#">SP6848</a>	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

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND	<a href="#">SP6853</a>	07/02/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli 07/08/2025
<u>SOURCE</u>								
<u>FROM</u> 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								

<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	<a href="#">SP6854</a>	07/02/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli 07/16/2025
<u>SOURCE</u>								
<u>FROM</u> 0.87500ml of E3943 + 0.01000ml of SP6830 + 0.12500ml of SP6853 = Final Quantity: 1.010 ml								

### CHEMICAL RECEIPT LOG BOOK

<b>Supplier</b>	<b>ItemCode / ItemName</b>	<b>Lot #</b>	<b>Expiration Date</b>	<b>Date Opened / Opened By</b>	<b>Received Date / Received By</b>	<b>Chemtech Lot #</b>
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
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
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
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	09/18/2025	03/18/2025 / RUPESH	02/12/2025 / RUPESH	E3902
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	01/07/2026	03/13/2025 / RUPESH	12/27/2024 / RUPESH	E3904
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H1462005	12/11/2025	06/11/2025 / Rajesh	06/04/2025 / Rajesh	E3940

### CHEMICAL RECEIPT LOG BOOK

<b>Supplier</b>	<b>ItemCode / ItemName</b>	<b>Lot #</b>	<b>Expiration Date</b>	<b>Date Opened / Opened By</b>	<b>Received Date / Received By</b>	<b>Chemtech Lot #</b>
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
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
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25B1862001	03/19/2026	07/14/2025 / RUPESH	06/11/2025 / RUPESH	E3954
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
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
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

<b>Supplier</b>	<b>ItemCode / ItemName</b>	<b>Lot #</b>	<b>Expiration Date</b>	<b>Date Opened / Opened By</b>	<b>Received Date / Received By</b>	<b>Chemtech Lot #</b>
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
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0201728	07/29/2025	01/29/2025 / anahy	11/09/2023 / Yogesh	S11650
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	09/10/2025	03/10/2025 / anahy	11/21/2023 / Rahul	S11788
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0201976	12/09/2025	06/09/2025 / Jagrut	11/21/2023 / rahul	S11828
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
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12195

### 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	01/02/2026	07/02/2025 / Jagrut	03/15/2024 / Rahul	S12197
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12216
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	01/02/2026	07/02/2025 / Jagrut	03/15/2024 / Rahul	S12220
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
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]						
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]						

## CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0214017	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	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 <sub>2</sub> Cl <sub>2</sub> , 1mL,	A0212955	06/30/2027	03/31/2025 / Rahul	08/01/2024 / Rahul	S12577
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 <sub>2</sub> Cl <sub>2</sub> , 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 <sub>2</sub> Cl <sub>2</sub> , 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 <sub>2</sub> Cl <sub>2</sub> [New Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ]	A0219438	09/10/2025	03/10/2025 / anahy	12/11/2024 / anahy	S12974

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> [New Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ]	A0219438	09/30/2025	06/04/2025 / Jagrut	12/11/2024 / anahy	S12986
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
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112



5580 Skylane Blvd  
Santa Rosa, CA 95403

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:  
Z-112090 440246  $\leq -10^{\circ}\text{C}$  Methylene Chloride 2/16/2026 CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL  
-04

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
2-chlorophenol-d <sub>4</sub>	93951-73-6	99.3	248.12.7P	7487 $\pm$ 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 $\pm$ 17.26
phenol-d <sub>6</sub>	13127-88-3	99.9	949.120.8P	7481 $\pm$ 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 $\pm$ 17.17

Received on

02/25/21

by  
CG

S9236  
+0

S9240

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:



Erica Castiglione  
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.



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](http://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  
02/06/23

b1

c6

§ 11071

to

§ 11075

Catalog No. : 31853

Lot No.: A0187043

Description : 1,4-dioxane

1,4-Dioxane 2,000 $\mu$ g/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

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane CAS # 123-91-1 Purity 99%	2,019.0 $\mu$ g/mL	+/- 11.8486 $\mu$ g/mL	+/- 43.2570 $\mu$ g/mL	+/- 44.5129 $\mu$ g/mL

Solvent: Methylene chloride

CAS # 75-09-2

Purity 99%

**Column:**

105m x 0.53mm x 3.0 $\mu$ m  
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:**

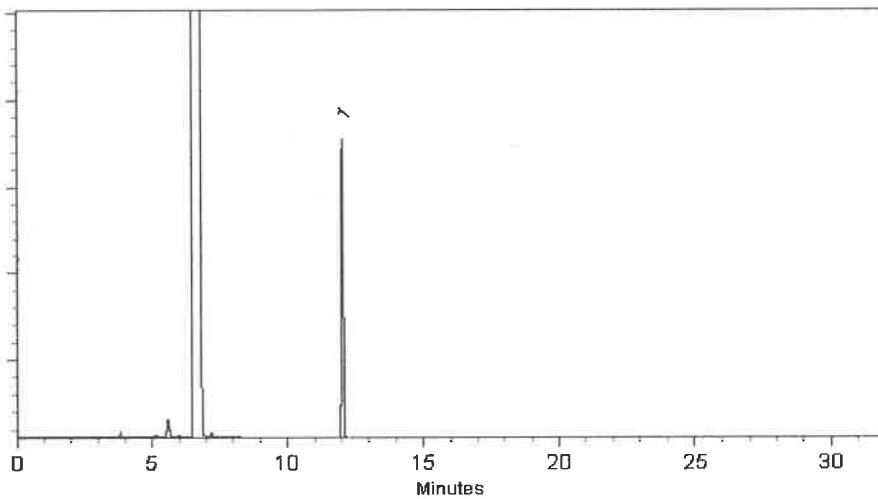
200°C

**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

  
Marina 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 <sub>2</sub> SO <sub>4</sub>
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na <sub>2</sub> SO <sub>4</sub> )	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 <sub>4</sub> )	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

### COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/29/23 [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:  
Pellets

Manufacture Date: 12/14/2022  
Expiration Date: 12/31/2025  
Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

Additional Information

We certify that this batch conforms to the specifications listed.

Analysis may have been rounded to significant digits in specification limits.

This document has been electronically produced and is valid without a signature.

Product meets analytical specifications of the grades listed.

Leona Edwardson, Quality Control Sr. Manager - Solon  
VWR Chemicals, LLC.  
28600 Fountain Parkway, Solon OH 44139 USA

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4

Batch No.: 25A0262002

Manufactured Date: 2024-11-21

Expiration Date: 2026-02-20

Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) (ng/mL)	Single Impurity Peak <= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide)	Single Peak <= 10 (pg/mL)	4
Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (μeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr &amp; 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



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 <sub>3</sub> ) <sub>2</sub> 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
Titrable Acid (μeq/g)	<= 0.3	0.2
Titrable Base (μeq/g)	<= 0.6	<0.1
Water (H <sub>2</sub> O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3902

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Page 1 of 1

Acetone

BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



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 <sub>3</sub> ) <sub>2</sub> 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
Titrable Acid (μeq/g)	<= 0.3	0.2
Titrable Base (μeq/g)	<= 0.6	<0.1
Water (H <sub>2</sub> O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 6/11/25

E3940

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 HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Titrable Acid ( $\mu\text{eq/g}$ )	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3942

A handwritten signature in black ink that reads "Jamie 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

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 ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Titrable Acid ( $\mu\text{eq/g}$ )	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

E 3942

A handwritten signature in black ink that reads "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

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 25B1862001  
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 <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Titrable Acid (μeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr & DC

RS  
7/14/25

E3954

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



M6157  
B

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 <sub>2</sub> SO <sub>4</sub> )	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 <sub>2</sub> )	<= 2 ppm	<2 ppm
Ammonium (NH <sub>4</sub> )	<= 1 ppm	<1 ppm
Chloride (Cl)	<= 0.1 ppm	<0.1 ppm
Nitrate (NO <sub>3</sub> )	<= 0.2 ppm	0.1 ppm
Phosphate (PO <sub>4</sub> )	<= 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



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

A handwritten signature in black ink that reads "Jamie Croak".

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 <sub>4</sub>	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-d <sub>5</sub>	4165-60-0	99.67	7.9.3P	4988 ± 27.32
p-terphenyl-d <sub>14</sub>	1718-51-0	99.3	9.120.8P	5005 ± 27.85

511494 } Y.P.  
↓ } 08/11/2023  
511498

\*Not a certified value

Certified By: \_\_\_\_\_

Clint Tipton  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](http://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 25,000 $\mu$ g/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

### C E R T I F I E D V A L U E S

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 $\mu$ g/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/ $\mu$ 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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

$k$  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](http://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 2,000 $\mu$ g/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

SI1749  
↓ { RC /  
SI1794 } 11/30/23

### C E R T I F I E D   V A L U E S

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 $\mu$ g/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 0.25 $\mu$ m  
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:**

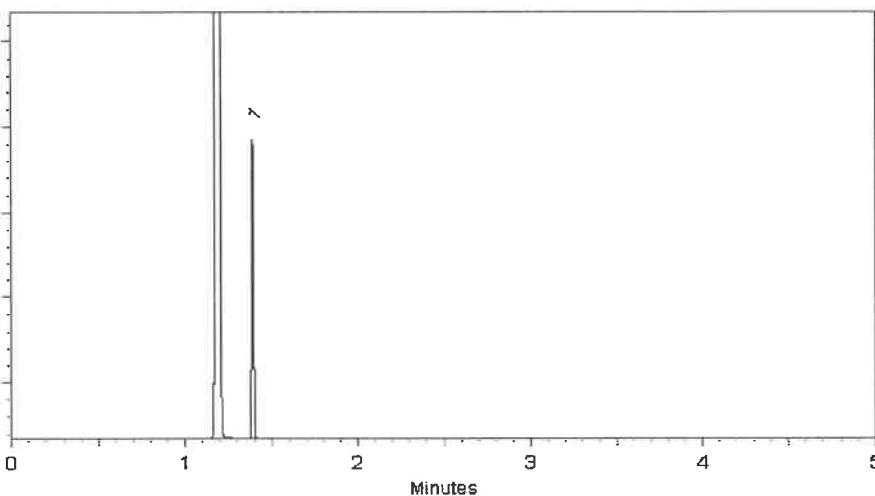
FID

**Split Vent:**

100 mL/min.

**Inj. Vol**

1 $\mu$ L



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 Moodier*  
Sam Moodier - 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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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  
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[www.restek.com](http://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 2000 $\mu$ g/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

511828  
↓  
511832 } RC/  
11/30/23 }

### C E R T I F I E D V A L U E S

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 $\mu$ g/mL	+/- 90.8098
2	Fluoranthene-d10	93951-69-0	PR-32557	99%	2,020.0 $\mu$ g/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 0.25 $\mu$ m  
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:**

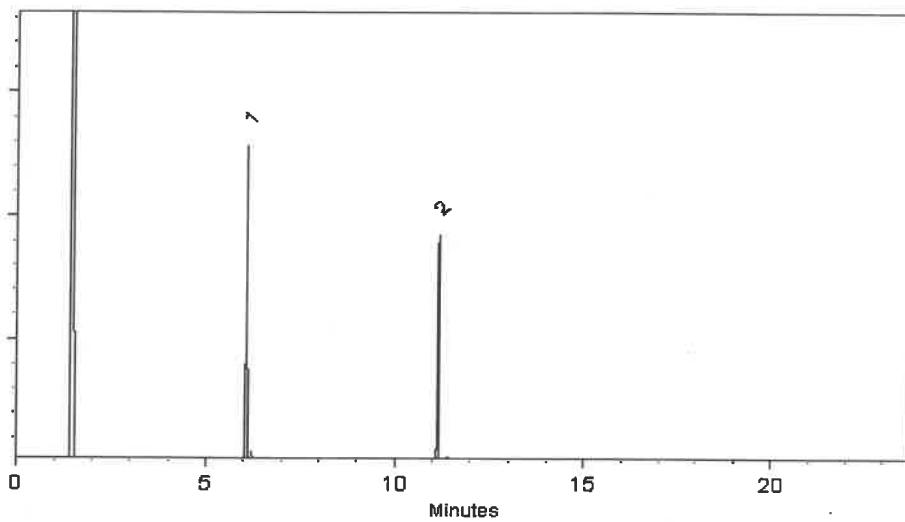
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

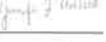
1 $\mu$ l



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/ $\mu$ 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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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/  
↓  
512116 } 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  
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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31087

**Lot No.:** A0206206

512187 } RC/  
↓ } 03/18/24  
512206 }

**Description :** Acid Surrogate Mix (4/89 SOW)

Acid Surrogate 10,000 $\mu$ g/mL, Methanol, 5mL/ampul

**Container Size :** 5 mL

**Pkg Amt:** > 5 mL

**Expiration Date :** January 31, 2032

**Storage:** 10°C or colder

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

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 $\mu$ g/mL	+/- 302.5390
2	Phenol-d6	13127-88-3	PR-33287A	99%	10,005.5 $\mu$ g/mL	+/- 302.5475
3	2,4,6-Tribromophenol	118-79-6	RP230831RSR	99%	10,006.6 $\mu$ g/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 0.25 $\mu$ m  
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:**

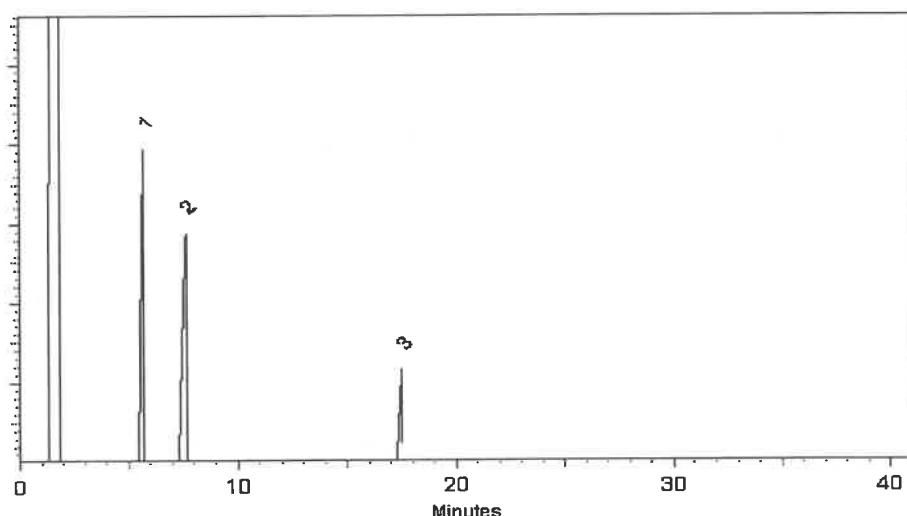
FID

**Split Vent:**

2 mL/min.

**Inj. Vol**

1 $\mu$ L



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 Regin - Operations Tech I

Date Mixed: 04-Jan-2024 Balance Serial #: 1128360905

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Jan-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31086

**Lot No.:** A0206381

**Description :** B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000 $\mu$ g/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

512207 } RC /  
↓ } 03/18/24  
512221 }

### C E R T I F I E D   V A L U E S

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 $\mu$ g/mL	+/- 226.5204
2	2-Fluorobiphenyl	321-60-8	00021384	99%	5,030.9 $\mu$ g/mL	+/- 226.5936
3	p-Terphenyl-d14	1718-51-0	PR-32599	99%	5,026.4 $\mu$ g/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 0.25 $\mu$ m  
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:**

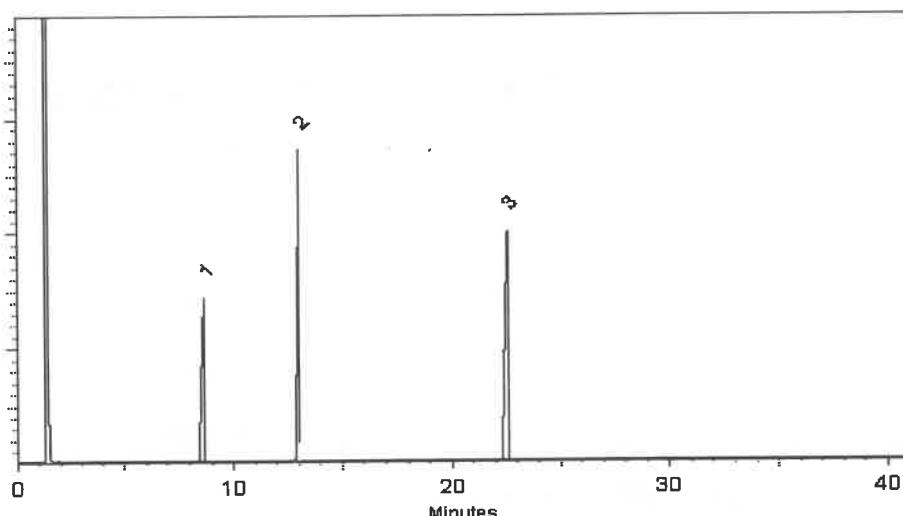
FID

**Split Vent:**

2 mL/min.

**Inj. Vol**

1 $\mu$ L



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



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

512270 } Rcf  
↓ 512274 } 05/24/24

\*Not a certified value

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: \_\_\_\_\_

Kerry Kane  
Chemist

# 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

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

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

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17

\*Not a certified value

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  
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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*gravimetric*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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

### C E R T I F I E D   V A L U E S

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/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:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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](http://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 1,000 $\mu$ g/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

### C E R T I F I E D   V A L U E S

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 $\mu$ g/mL	+/- 29.541899
2	Acetophenone	98-86-2	STBH8205	99%	1,005.0 $\mu$ g/mL	+/- 29.541899
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,008.0 $\mu$ g/mL	+/- 29.630084
4	Benzoic acid	65-85-0	MKCR2694	99%	1,010.0 $\mu$ g/mL	+/- 29.688874
5	Biphenyl	92-52-4	MKCS5928	99%	1,008.0 $\mu$ g/mL	+/- 29.630084

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

512509  
↓  
512568 } RC / 7/24/24

  
Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024 Balance: 1128360905

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

# General Certified Reference Material Notes

## Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

## Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

## Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

## Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

## Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.





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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*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 1,000 $\mu$ g/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

### C E R T I F I E D   V A L U E S

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 $\mu$ g/mL	+/- 44.8902
2	DFTPP (Decafluorotriphenylphosphine)	5074-71-5	Q117-147	99%	1,004.5 $\mu$ g/mL	+/- 44.8902
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 $\mu$ g/mL	+/- 44.9572
4	4,4'-DDT	50-29-3	S240530RSR	97%	1,000.1 $\mu$ g/mL	+/- 44.6922

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12577  
↓  
S12579 } 8/2/24

rc }

# Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
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:**

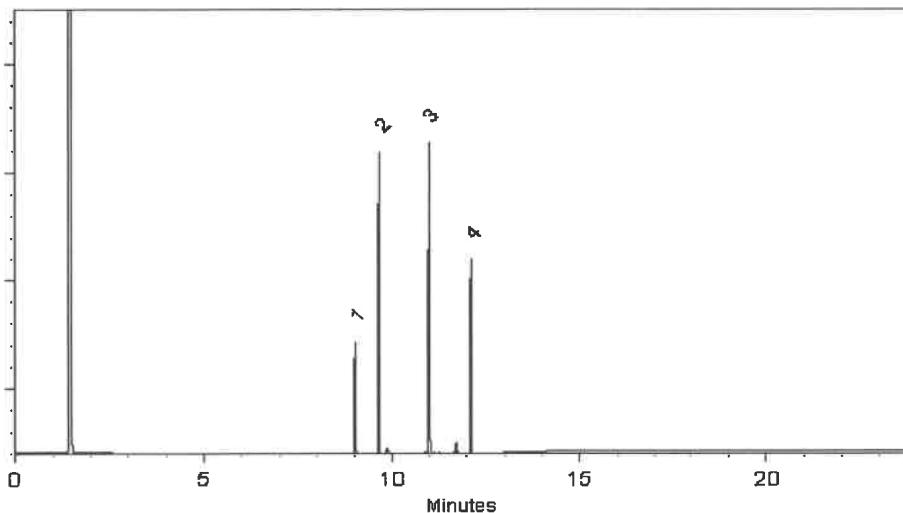
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1 $\mu$ l



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*  
Ethan Winiarski - Operations Tech I

Date Mixed: 19-Jun-2024 Balance Serial #: 1128353505

*Jennifer Pollino*  
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



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## CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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

### C E R T I F I E D   V A L U E S

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 } AC  
↓  
S12674 } 10/1/24



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Bellefonte, PA 16823-8812  
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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850  
**Description :** 8270 MegaMix®  
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul  
**Container Size :** 2 mL  
**Expiration Date :** September 30, 2025  
**Handling:** Sonication required. Mix is photosensitive.

**Lot No.:** A0219438  
**Pkg Amt:** > 1 mL  
**Storage:** 0°C or colder  
**Ship:** Ambient

S12963 }  
↓ AC  
S12992 } 12/17/25

### C E R T I F I E D V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/-	36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/-	36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/-	36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/-	36.6257
22	2,4-Dichlorophenol	120-83-2	BCCK6969	99%	1,001.5	µg/mL	+/-	36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/-	36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/-	36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/-	36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/-	36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/-	36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/-	36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/-	36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/-	36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/-	36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/-	36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/-	36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/-	36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/-	36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/-	36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/-	36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/-	36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/-	36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/-	36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/-	36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/-	36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/-	36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/-	36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/-	36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/-	36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/-	36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/-	36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/-	36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/-	36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/-	36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/-	36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/-	36.4938
55	Azobenzene	103-33-3	BCCK0887	99%	1,002.4	µg/mL	+/-	36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/-	36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/-	36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/-	36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/-	36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/-	36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/-	36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/-	36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/-	36.5120
64	Pyrene	129-00-0	BCCK2592	99%	1,002.0	µg/mL	+/-	36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/-	36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/-	36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/-	36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/-	36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/-	36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/-	36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/-	36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/-	36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/-	36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/-	36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/-	36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/-	36.5217

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%

#### Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.





5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-110816-01	531243	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

SI3057 } AC  
↓ SI3061 } 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

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:

Melissa Workoff  
Chemist



# SHIPPING DOCUMENTS

**CHEMTECH**  
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092  
(908) 789-8900 Fax: (908) 78-8922  
www.chemtech.net

Chemtech Project Number:

Q 2644

COC Number:

**CLIENT INFORMATION**

**PROJECT INFORMATION**

**BILLING INFORMATION**

COMPANY: Tetra Tech  
ADDRESS: 4433 Corporation Ln, Suite 300  
CITY: Virginia Beach STATE: VA ZIP: 23462  
ATTENTION: Ernie Wu  
PHONE: 757-466-4901 FAX: 757-461-4148

PROJECT NAME: NWIRP Bethpage  
PROJECT #: 112G08005-WE13 LOCATION: RW8  
PROJECT MANAGER: Ernie Wu  
E-MAIL: ernie.wu@tetrach.com  
PHONE: 757-466-4901 FAX: 757-461-4148

BILL TO: PO#  
ADDRESS:  
CITY: STATE: ZIP:  
ATTENTION: PHONE:

**DATA TURNAROUND INFORMATION**

**DATA DELIVERABLE INFORMATION**

**ANALYSIS**

FAX: 10 DAYS\*  
HARD COPY: 10 DAYS\*  
EDD 10 DAYS\*  
\* TO BE APPROVED BY CHEMTECH  
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

- RESULTS ONLY  USEPA CLP.  
 RESULTS + QC  New York State ASP "B"  
 New Jersey REDUCED  New York State ASP "A"  
 New Jersey CLP  Other \_\_\_\_\_  
 EDD Format

1/4-Dioxane SW46 8270 SIM	Iron, Total	TSS	TDS									
				1	2	3	4	5	6	7	8	9

**PRESERVATIVES**

**COMMENTS**

<-- Specify Preservatives  
A-HCl B-HNO3  
C-H2SO4 D-NaOH  
E-ICE F-Other

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	B										
			COMP	GRAB	DATE	TIME			1	2	3	4	5	6	7	8	9	
1.	RW8-SP100-20250717	GW		X	7/17/25	13:05	4	X	X	X	X							
2.	RW8-SP303-20250717	GW		X	7/17/25	13:13	4	X	X	X	X							
3.																		
4.																		
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY**

RELINQUISHED BY SAMPLER 1. <i>[Signature]</i>	DATE/TIME 7/17/25 14:00	RECEIVED BY 1. <i>[Signature]</i>	Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp <i>23-1</i> MeOH extraction requires an additional 4oz. Jar for percent solid
RELINQUISHED BY 2. <i>[Signature]</i>	DATE/TIME 7/18/25 09:55	RECEIVED BY 2. <i>[Signature]</i>	Comments: <i>If Cont.</i>
RELINQUISHED BY 3. <i>[Signature]</i>	DATE/TIME 7/18/25	RECEIVED FOR LAB BY 3. <i>[Signature]</i>	SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight

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