

## Cover Page

**Order ID :** Q1199

**Project ID :** CTO WE13

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

### Lab Sample Number

Q1199-01  
Q1199-02  
Q1199-03  
Q1199-04  
Q1199-05  
Q1199-06  
Q1199-07

### Client Sample Number

BP-VPB-192-TB-20250123  
BP-VPB-192-EB-20250124  
BP-VPB-192-GW-280-282  
BP-VPB-192-GW-260-262  
BP-VPB-192-GW-240-242  
BP-VPB-192-GW-220-222  
BP-VPB-192-DUP-20250123

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

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

Date: 2/8/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** CTO WE13

**Project Manager:** Ernie Wu

**Chemtech Project #** Q1199

**Test Name:** SVOC-SIMGroup1

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

7 Water samples were received on 01/27/2025.

### **B. Parameters**

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

### **C. Analytical Techniques:**

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

### **D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for PB166297BL [Terphenyl-d14 - 141%], PB166297BS [Terphenyl-d14 - 133%], PB166297BSD [Terphenyl-d14 - 137%], BP-VPB-192-EB-20250124 [Terphenyl-d14 - 134%], BP-VPB-192-GW-260-262 [Terphenyl-d14 - 143%], BP-VPB-192-GW-240-242 [Terphenyl-d14 - 134%] and BP-VPB-192-GW-220-222 [Terphenyl-d14 - 137%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration File ID BN036112.D met the requirements except for Phenol-d6, The failure compound not associated with the client parameters list, therefore no corrective action was taken.

The Tuning criteria met requirements.



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**E. Additional Comments:**

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

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

The not QT review data is reported in the Miscellaneous.

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

**F. Manual Integration Comments:**

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

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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
<b>U</b>	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.
<b>ND</b>	Indicates the analyte was analyzed for, but not detected
<b>J</b>	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>B</b>	Indicates the analyte was found in the blank as well as the sample report as "12 B".
<b>E</b>	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
<b>D</b>	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
<b>P</b>	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".
<b>N</b>	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.
<b>A</b>	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
<b>Q</b>	Indicates the LCS did not meet the control limits requirements

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

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

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

CHEMTECH PROJECT NUMBER: Q1199

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 BN036112.D met the requirements except for Phenol-d6, The failure compound not associated with the client parameters list, therefore no corrective action was taken. .			
6. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
7. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
The Surrogate recoveries met the acceptable criteria except for PB166297BL [Terphenyl-d14 - 141%], PB166297BS [Terphenyl-d14 - 133%], PB166297BSD [Terphenyl-d14 - 137%], BP-VPB-192-EB-20250124 [Terphenyl-d14 - 134%], BP-VPB-192-GW-260-262 [Terphenyl-d14 - 143%], BP-VPB-192-GW-240-242 [Terphenyl-d14 - 134%] and BP-VPB-192-GW-220-222 [Terphenyl-d14 - 137%], The failure surrogates not associated with the client parameters list, therefore no corrective action was taken.			
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓

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

The Blank Spike met requirements for all samples .  
The Blank Spike Duplicate met requirements for all samples .

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

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

**(CONTINUED)**

NA      NO      YES

9. Internal Standard Area/Retention Time Shift Meet Criteria

Comments:

10. Extraction Holding Time Met

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

11. Analysis Holding Time Met

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

**ADDITIONAL COMMENTS:**

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

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

The not QT review data is reported in the Miscellaneous.

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

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QA REVIEW

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Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1199

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 ✓

## LAB CHRONICLE

<b>OrderID:</b>	Q1199	<b>OrderDate:</b>	1/27/2025 3:35:00 PM					
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	CTO WE13					
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	N21,VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
<b>Q1199-02</b>	<b>BP-VPB-192-EB-2025 0124</b>	<b>Water</b>			<b>01/24/25</b>			<b>01/27/25</b>
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
<b>Q1199-03</b>	<b>BP-VPB-192-GW-280- 282</b>	<b>Water</b>			<b>01/24/25</b>			<b>01/27/25</b>
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
<b>Q1199-04</b>	<b>BP-VPB-192-GW-260- 262</b>	<b>Water</b>			<b>01/23/25</b>			<b>01/27/25</b>
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
<b>Q1199-05</b>	<b>BP-VPB-192-GW-240- 242</b>	<b>Water</b>			<b>01/23/25</b>			<b>01/27/25</b>
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	
<b>Q1199-06</b>	<b>BP-VPB-192-GW-220- 222</b>	<b>Water</b>			<b>01/23/25</b>			<b>01/27/25</b>
			SVOC-SIMGroup1	8270-Modified		01/28/25	01/29/25	



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**Hit Summary Sheet  
SW-846**

**SDG No.:** Q1199

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

Sample ID	Client ID	Parameter	Concentration	C	MDL	LOD	RDL	Units
<b>Client ID :</b> Q1199-03	<b>BP-VPB-192-GW-280-282</b> BP-VPB-192-GW-280-28 WATER	1,4-Dioxane	0.360	0.09	0.25	0.25	0.25	ug/L
		<b>Total Svoc :</b>			<b>0.36</b>			
		<b>Total Concentration:</b>			<b>0.36</b>			
<b>Client ID :</b> Q1199-04	<b>BP-VPB-192-GW-260-262</b> BP-VPB-192-GW-260-26 WATER	1,4-Dioxane	0.830	0.08	0.25	0.25	0.25	ug/L
		<b>Total Svoc :</b>			<b>0.83</b>			
		<b>Total Concentration:</b>			<b>0.83</b>			
<b>Client ID :</b> Q1199-05	<b>BP-VPB-192-GW-240-242</b> BP-VPB-192-GW-240-24 WATER	1,4-Dioxane	0.490	0.09	0.25	0.25	0.25	ug/L
		<b>Total Svoc :</b>			<b>0.49</b>			
		<b>Total Concentration:</b>			<b>0.49</b>			
<b>Client ID :</b> Q1199-06	<b>BP-VPB-192-GW-220-222</b> BP-VPB-192-GW-220-22 WATER	1,4-Dioxane	0.250	0.08	0.24	0.24	0.24	ug/L
		<b>Total Svoc :</b>			<b>0.25</b>			
		<b>Total Concentration:</b>			<b>0.25</b>			



QC

SUMMARY

### Surrogate Summary

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB166297BL	PB166297BL	2-Methylnaphthalene-d10	0.4	0.43	108		30	150
		Fluoranthene-d10	0.4	0.43	108		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.56	141	*	58	132
PB166297BS	PB166297BS	2-Methylnaphthalene-d10	0.4	0.59	146		30	150
		Fluoranthene-d10	0.4	0.40	99		30	150
		Nitrobenzene-d5	0.4	0.43	108		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.53	133	*	58	132
PB166297BSD	PB166297BSD	2-Methylnaphthalene-d10	0.4	0.57	143		30	150
		Fluoranthene-d10	0.4	0.40	100		30	150
		Nitrobenzene-d5	0.4	0.42	105		55	111
		2-Fluorobiphenyl	0.4	0.37	93		53	106
		Terphenyl-d14	0.4	0.55	137	*	58	132
Q1199-02	BP-VPB-192-EB-20250124	2-Methylnaphthalene-d10	0.4	0.38	96		30	150
		Fluoranthene-d10	0.4	0.45	113		30	150
		Nitrobenzene-d5	0.4	0.37	93		55	111
		2-Fluorobiphenyl	0.4	0.31	76		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132
Q1199-03	BP-VPB-192-GW-280-282	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.35	87		55	111
		2-Fluorobiphenyl	0.4	0.30	76		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
Q1199-04	BP-VPB-192-GW-260-262	2-Methylnaphthalene-d10	0.4	0.39	97		30	150
		Fluoranthene-d10	0.4	0.47	118		30	150
		Nitrobenzene-d5	0.4	0.38	94		55	111
		2-Fluorobiphenyl	0.4	0.32	80		53	106
		Terphenyl-d14	0.4	0.57	143	*	58	132
Q1199-05	BP-VPB-192-GW-240-242	2-Methylnaphthalene-d10	0.4	0.34	85		30	150
		Fluoranthene-d10	0.4	0.44	110		30	150
		Nitrobenzene-d5	0.4	0.35	87		55	111
		2-Fluorobiphenyl	0.4	0.31	77		53	106
		Terphenyl-d14	0.4	0.54	134	*	58	132
Q1199-06	BP-VPB-192-GW-220-222	2-Methylnaphthalene-d10	0.4	0.38	95		30	150
		Fluoranthene-d10	0.4	0.48	119		30	150
		Nitrobenzene-d5	0.4	0.38	94		55	111
		2-Fluorobiphenyl	0.4	0.32	80		53	106
		Terphenyl-d14	0.4	0.55	137	*	58	132



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

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036126.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		
									Low	High	
PB166297BS	1,4-Dioxane	0.4	0.32	ug/L	80				70	130	



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

SW-846

SDG No.: Q1199

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN036127.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		
									RPD	Low	High
PB166297BSD	1,4-Dioxane	0.4	0.30	ug/L	75	6			70	130	20



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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB166297BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM Case No.: Q1199

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: BN036113.D

Lab Sample ID: PB166297BL

Instrument ID: BNA\_N

Date Extracted: 01/28/2025

Matrix: (soil/water) Water

Date Analyzed: 01/29/2025

Level: (low/med) LOW

Time Analyzed: 18:42

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB166297BS	PB166297BS	BN036126.D	01/30/2025
BP-VPB-192-EB-20250124	Q1199-02	BN036115.D	01/29/2025
BP-VPB-192-GW-280-282	Q1199-03	BN036116.D	01/29/2025
BP-VPB-192-GW-260-262	Q1199-04	BN036117.D	01/29/2025
PB166297BSD	PB166297BSD	BN036127.D	01/30/2025
BP-VPB-192-GW-220-222	Q1199-06	BN036114.D	01/29/2025
BP-VPB-192-GW-240-242	Q1199-05	BN036118.D	01/29/2025

COMMENTS:



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5B

SEMICVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: BN036009.D

DFTPP Injection Date: 01/22/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 09:44

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

1-Value is % mass 69

2-Value is % mass 442

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

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



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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: Q1199 SDG NO.: Q1199

Lab File ID: BN036111.D

DFTPP Injection Date: 01/29/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 17:27

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	42.5
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
69	Mass 69 relative abundance	42.8
70	Less than 2.0% of mass 69	0.2 ( 0.5 ) 1
127	10.0 - 80.0% of mass 198	47.9
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	7.2
275	10.0 - 60.0% of mass 198	26.8
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	11.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	12.7 (18.8) 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	BN036112.D	01/29/2025	18:06
PB166297BL	PB166297BL	BN036113.D	01/29/2025	18:42
BP-VPB-192-GW-220-222	Q1199-06	BN036114.D	01/29/2025	19:19
BP-VPB-192-EB-20250124	Q1199-02	BN036115.D	01/29/2025	19:55
BP-VPB-192-GW-280-282	Q1199-03	BN036116.D	01/29/2025	20:31
BP-VPB-192-GW-260-262	Q1199-04	BN036117.D	01/29/2025	21:07
BP-VPB-192-GW-240-242	Q1199-05	BN036118.D	01/29/2025	21:43
PB166297BS	PB166297BS	BN036126.D	01/30/2025	02:31
PB166297BSD	PB166297BSD	BN036127.D	01/30/2025	03:07
SSTDCCC0.4EC	SSTDCCC0.4	BN036128.D	01/30/2025	03:43



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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1199 SAS No.: Q1199 SDG No.: Q1199  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 01/29/2025  
Lab File ID: BN036112.D Time Analyzed: 18:06  
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	2094	7.803	4943	10.60	2715	14.44
	4188	8.303	9886	11.1	5430	14.937
	1047	7.303	2471.5	10.1	1357.5	13.937
EPA SAMPLE NO.						
01 PB166297BL	2136	7.80	4915	10.60	2707	14.44
02 BP-VPB-192-GW-220-222	2008	7.80	4878	10.60	2770	14.44
03 BP-VPB-192-EB-20250124	2206	7.80	5271	10.60	2988	14.44
04 BP-VPB-192-GW-280-282	2253	7.80	5222	10.60	2653	14.44
05 BP-VPB-192-GW-260-262	2145	7.80	4867	10.60	2939	14.44
06 BP-VPB-192-GW-240-242	2471	7.80	5780	10.60	3178	14.44
07 PB166297BS	2324	7.80	5152	10.59	2819	14.44
08 PB166297BSD	2359	7.80	5174	10.59	2851	14.44

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:	CHEMTECH				
Lab Code:	CHEM	Case No.:	Q1199		
		SAS No.:	Q1199		
EPA Sample No.:	SSTDCCCC0.4		Date Analyzed:	01/29/2025	
Lab File ID:	BN036112.D		Time Analyzed:	18:06	
Instrument ID:	BNA_N		GC Column:	ZB-GR	ID: 0.25 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	5698	17.194	4562	21.376	5021	23.677
	11396	17.694	9124	21.876	10042	24.177
	2849	16.694	2281	20.876	2510.5	23.177
EPA SAMPLE NO.						
01 PB166297BL	5606	17.19	4293	21.38	4681	23.68
02 BP-VPB-192-GW-220-222	6230	17.19	5536	21.38	5180	23.68
03 BP-VPB-192-EB-20250124	6578	17.19	5317	21.38	5108	23.68
04 BP-VPB-192-GW-280-282	5259	17.19	4932	21.38	5685	23.67
05 BP-VPB-192-GW-260-262	6485	17.19	5413	21.38	5178	23.67
06 BP-VPB-192-GW-240-242	6949	17.19	5738	21.38	5850	23.67
07 PB166297BS	5724	17.18	4238	21.38	4580	23.67
08 PB166297BSD	6109	17.19	4365	21.37	4649	23.67

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



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:	01/24/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-EB-20250124			SDG No.:	Q1199	
Lab Sample ID:	Q1199-02			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	900	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
BN036115.D	1	01/28/25 09:50	01/29/25 19:55	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.22	U	0.080	0.22	0.22	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		96%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.45		30 - 150		113%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.37		55 - 111		93%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		134%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2210	7.803				
1146-65-2	Naphthalene-d8	5270	10.6				
15067-26-2	Acenaphthene-d10	2990	14.441				
1517-22-2	Phenanthrene-d10	6580	17.186				
1719-03-5	Chrysene-d12	5320	21.376				
1520-96-3	Perylene-d12	5110	23.675				

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\BN012925\  
 Data File : BN036115.D  
 Acq On : 29 Jan 2025 19:55  
 Operator : RC/JU  
 Sample : Q1199-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-EB-20250124**

Quant Time: Jan 30 00:36:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2206	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	5271m	0.400	ng	-0.01
13) Acenaphthene-d10	14.441	164	2988	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6578	0.400	ng	# 0.00
29) Chrysene-d12	21.376	240	5317	0.400	ng	0.00
35) Perylene-d12	23.675	264	5108	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	871	0.152	ng	0.03
5) Phenol-d6	7.023	99	665	0.099	ng	0.05
8) Nitrobenzene-d5	8.956	82	1840	0.370	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2755	0.384	ng	-0.01
14) 2,4,6-Tribromophenol	15.932	330	608	0.317	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4082	0.306	ng	0.00
27) Fluoranthene-d10	19.220	212	7666	0.450	ng	0.00
31) Terphenyl-d14	19.815	244	5937	0.538	ng	0.00
<b>Target Compounds</b>						
34) Bis(2-ethylhexyl)phtha...	21.295	149	8450	0.800	ng	99

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

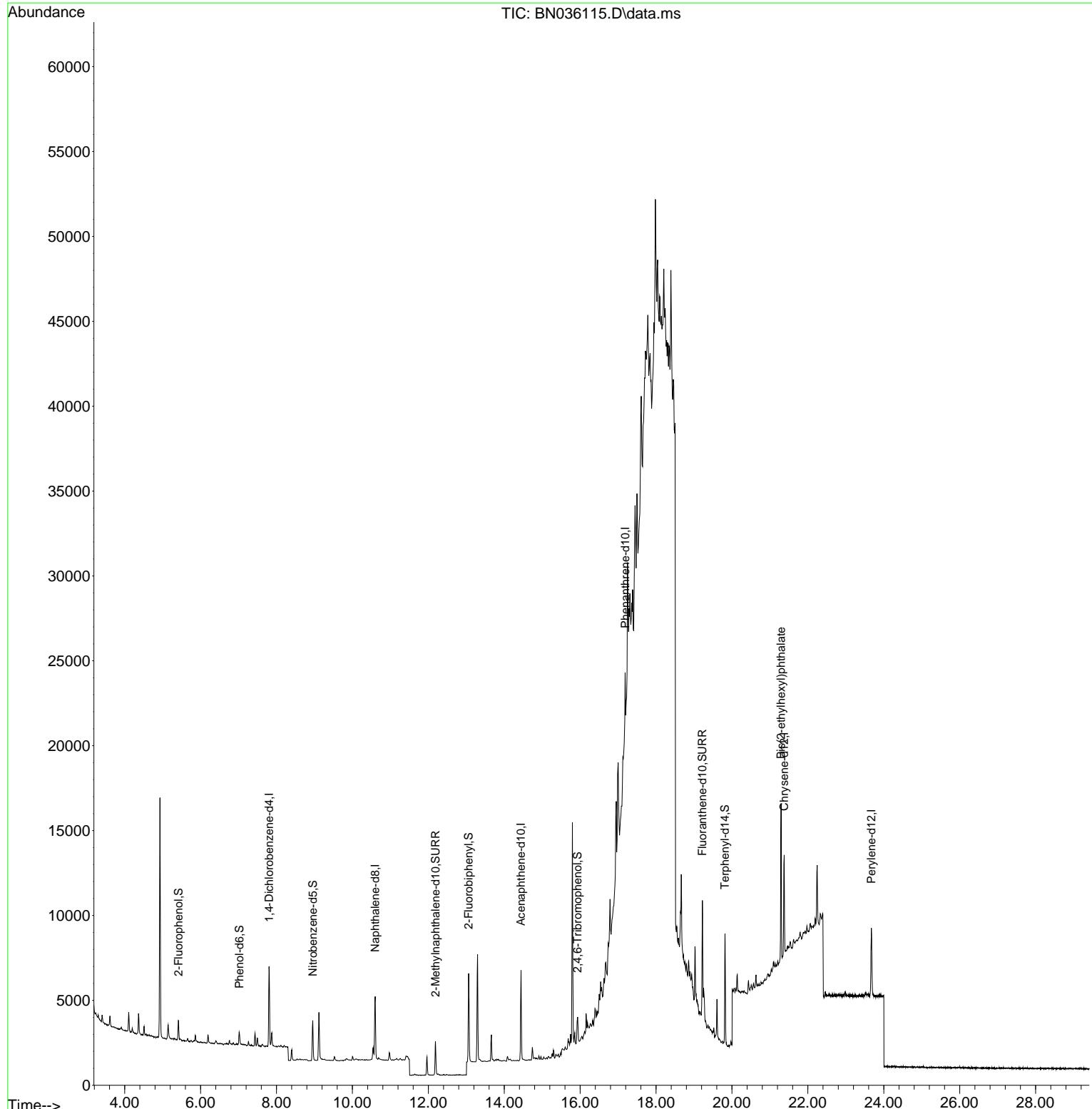
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 Data File : BN036115.D  
 Acq On : 29 Jan 2025 19:55  
 Operator : RC/JU  
 Sample : Q1199-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

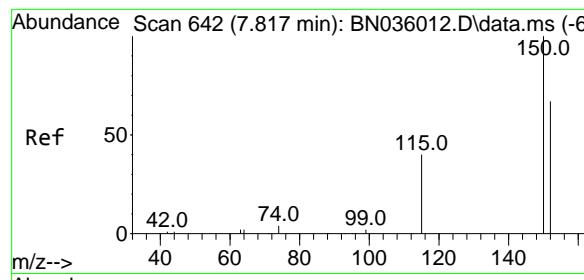
Quant Time: Jan 30 00:36:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-VPB-192-EB-20250124

**Manual Integrations  
APPROVED**

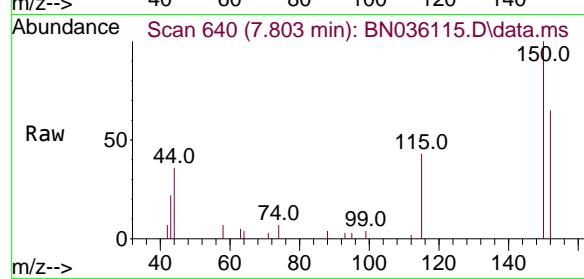
Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

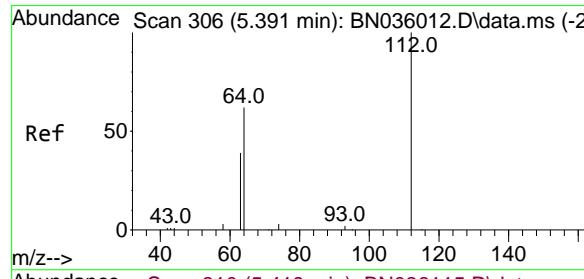
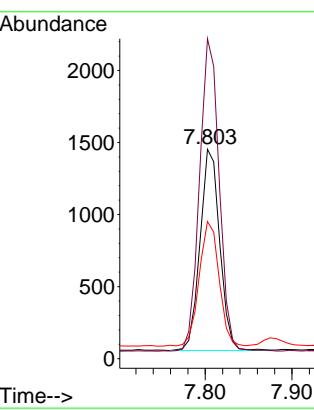
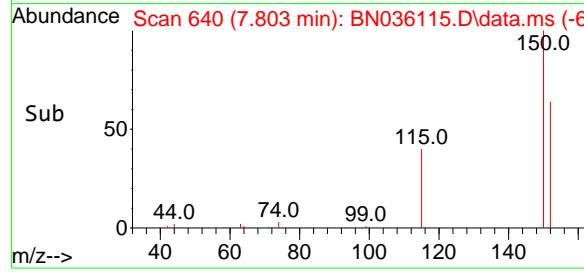
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124



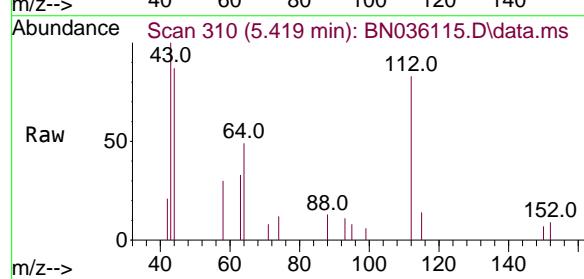
Tgt Ion:152 Resp: 2200  
Ion Ratio Lower Upper  
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150 152.8 117.4 176.2  
115 65.4 51.0 76.4

### Manual Integrations APPROVED

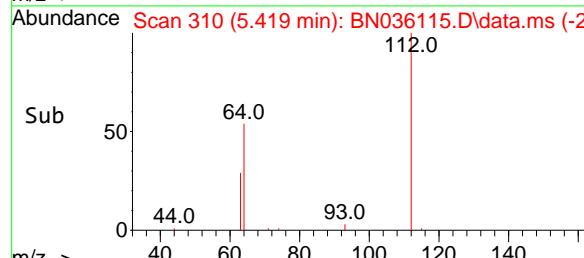
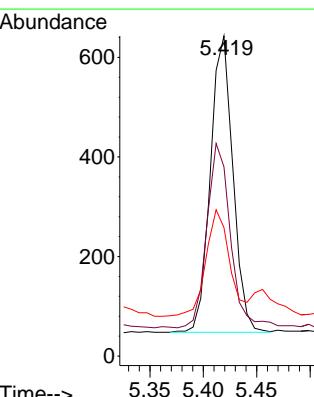
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

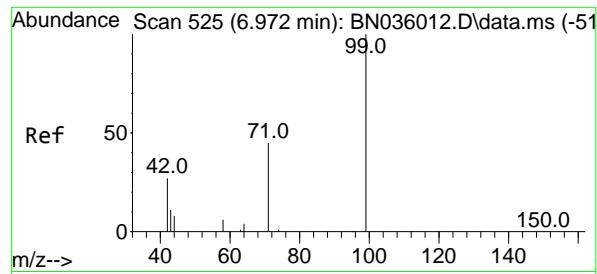


#4  
2-Fluorophenol  
Concen: 0.152 ng  
RT: 5.419 min Scan# 310  
Delta R.T. 0.029 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55



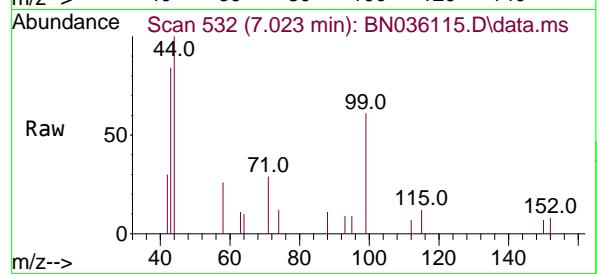
Tgt Ion:112 Resp: 871  
Ion Ratio Lower Upper  
112 100  
64 65.6 50.0 75.0  
63 38.2 30.7 46.1





#5  
 Phenol-d6  
 Concen: 0.099 ng  
 RT: 7.023 min Scan# 5  
 Delta R.T. 0.050 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

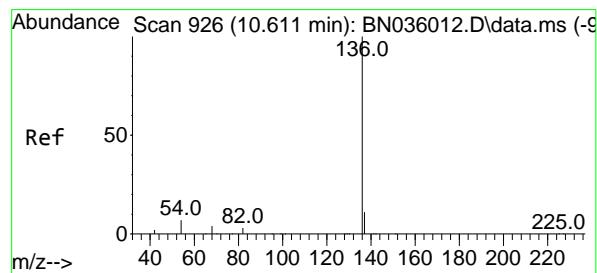
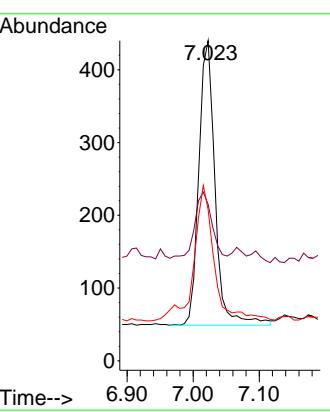
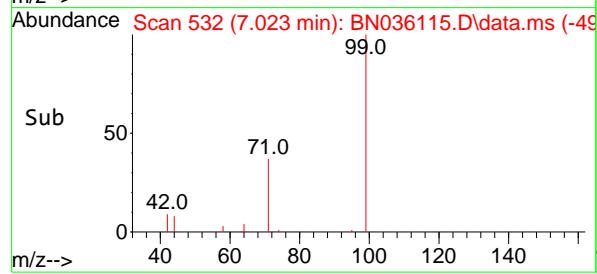
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-EB-20250124



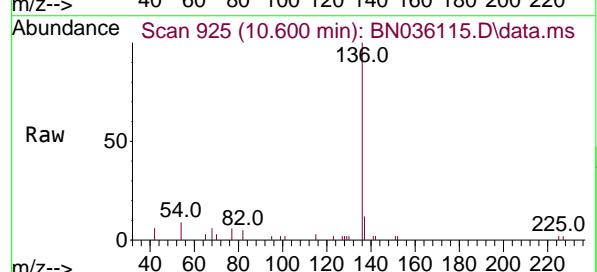
Tgt Ion: 99 Resp: 669  
 Ion Ratio Lower Upper  
 99 100  
 42 24.1 26.8 40.2  
 71 59.4 36.6 55.0

Manual Integrations  
**APPROVED**

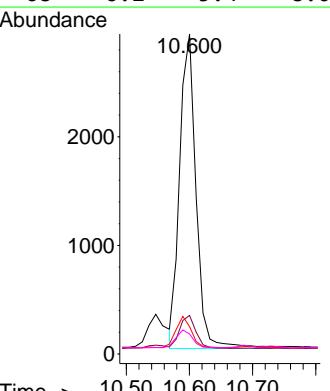
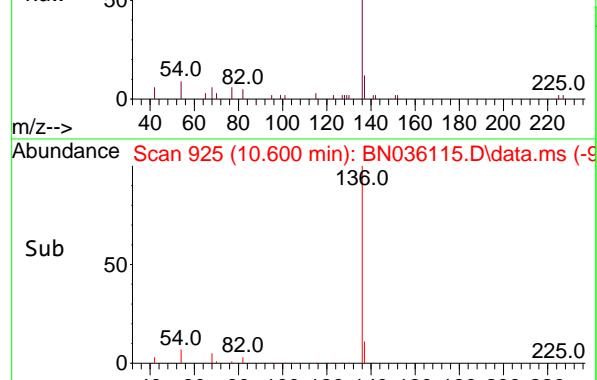
Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025

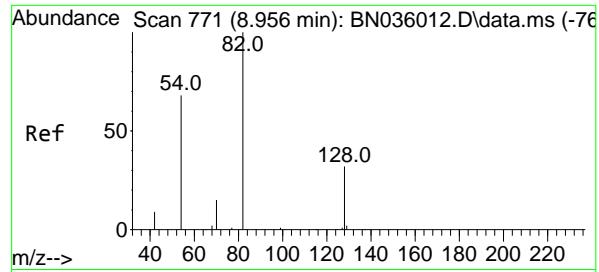


#7  
 Naphthalene-d8  
 Concen: 0.400 ng m  
 RT: 10.600 min Scan# 925  
 Delta R.T. -0.011 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

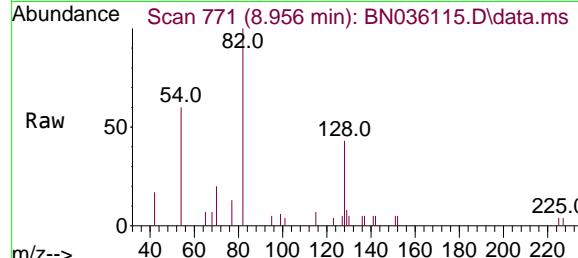


Tgt Ion:136 Resp: 5271  
 Ion Ratio Lower Upper  
 136 100  
 137 12.1 10.4 15.6  
 54 8.6 7.7 11.5  
 68 6.2 5.4 8.0





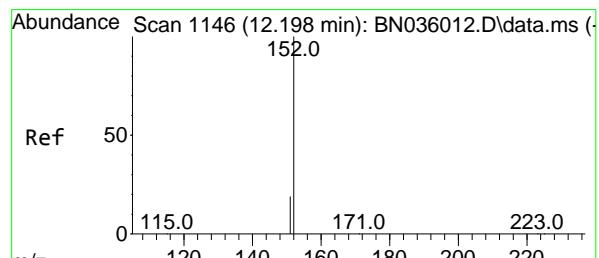
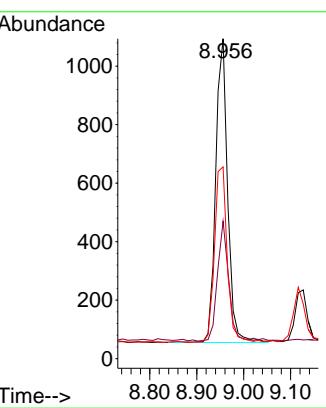
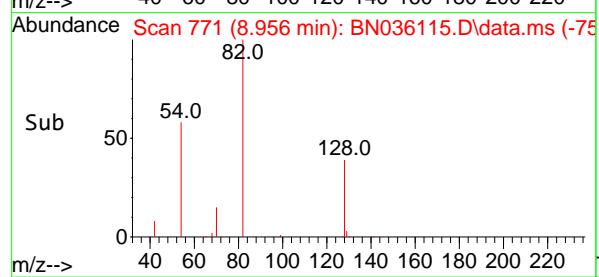
#8  
Nitrobenzene-d5  
Concen: 0.370 ng  
RT: 8.956 min Scan# 7  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55



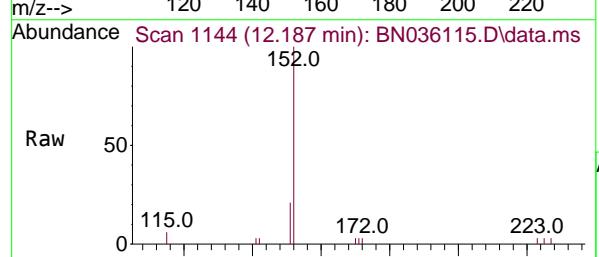
Tgt Ion: 82 Resp: 1840  
Ion Ratio Lower Upper  
82 100  
128 43.0 28.8 43.2  
54 60.0 55.8 83.8

### Manual Integrations APPROVED

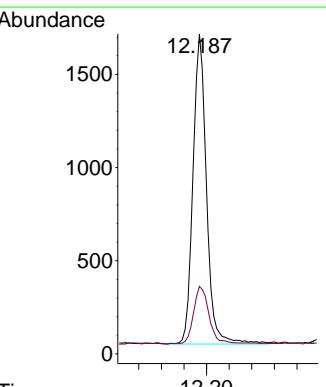
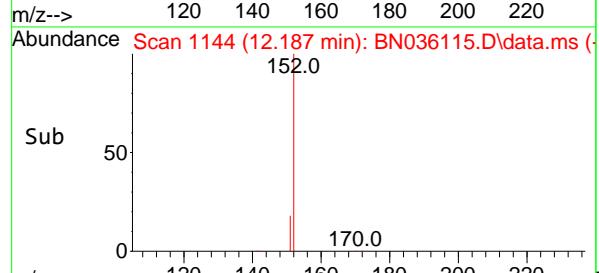
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

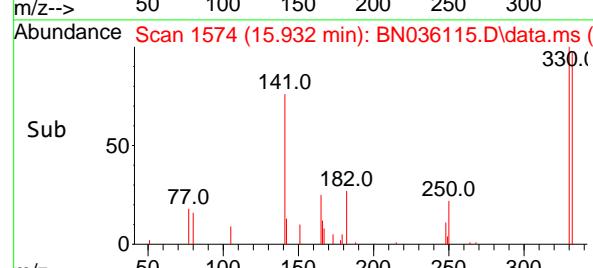
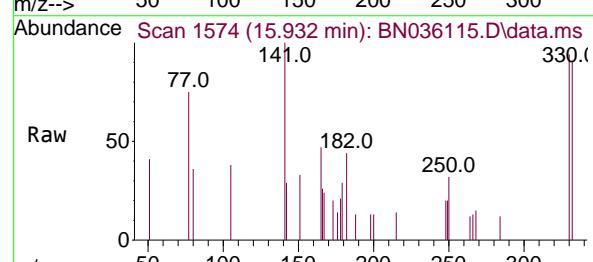
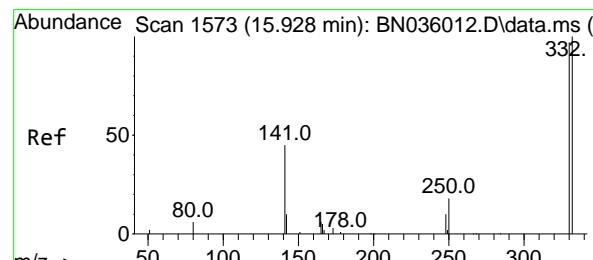
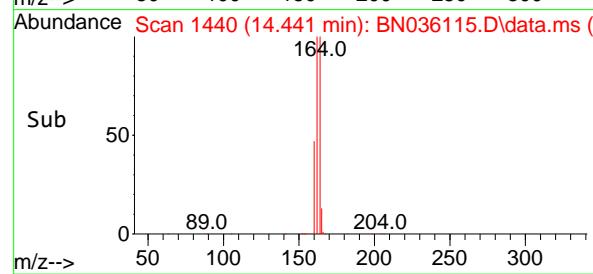
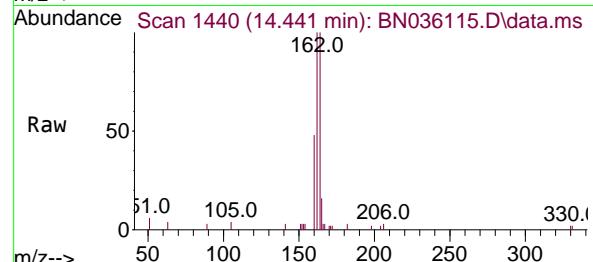
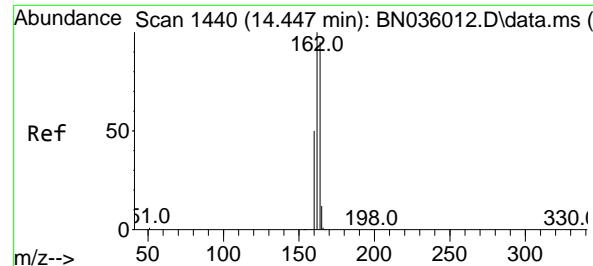


#11  
2-Methylnaphthalene-d10  
Concen: 0.384 ng  
RT: 12.187 min Scan# 1144  
Delta R.T. -0.010 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

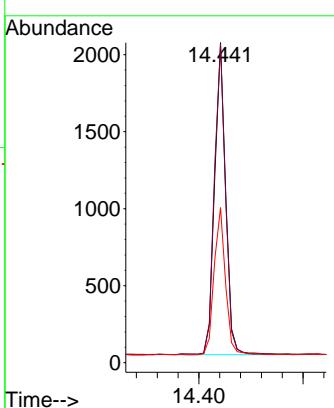


Tgt Ion:152 Resp: 2755  
Ion Ratio Lower Upper  
152 100  
151 21.4 16.6 25.0

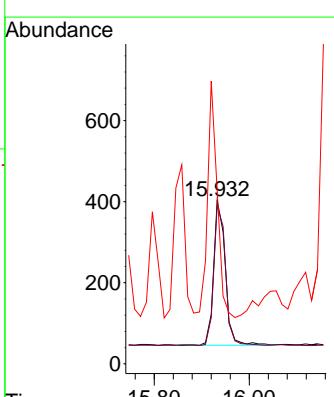


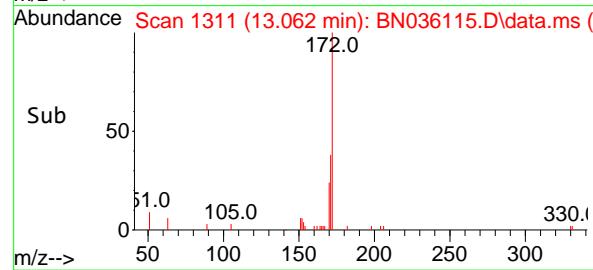
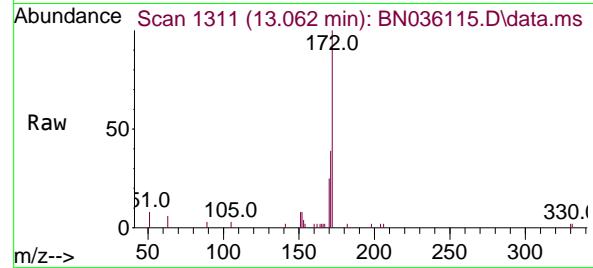
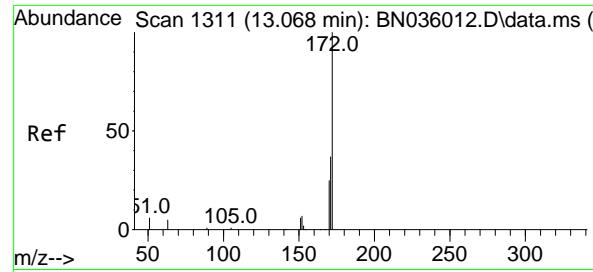


#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.441 min Scan# 1440  
Delta R.T. -0.006 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124**Manual Integrations  
APPROVED**Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

#14

2,4,6-Tribromophenol  
Concen: 0.317 ng  
RT: 15.932 min Scan# 1574  
Delta R.T. 0.005 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55Tgt Ion:330 Resp: 608  
Ion Ratio Lower Upper  
330 100  
332 97.4 81.0 121.4  
141 136.7 36.7 55.1#

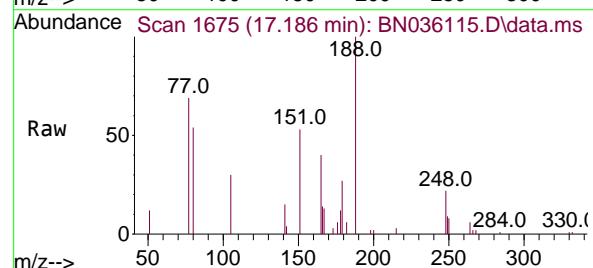
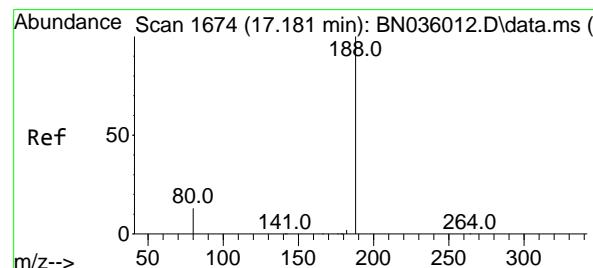
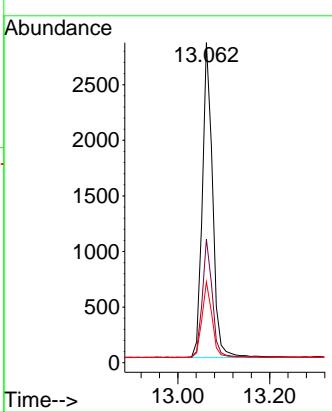


#15  
2-Fluorobiphenyl  
Concen: 0.306 ng  
RT: 13.062 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124

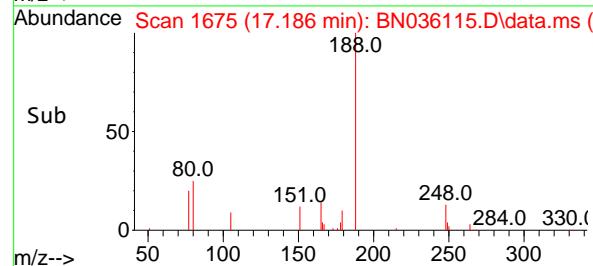
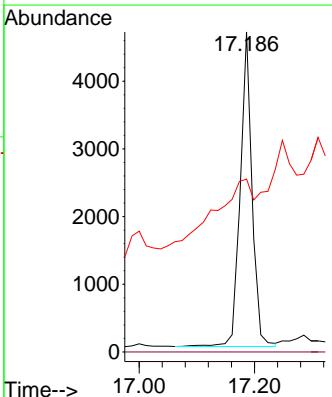
### Manual Integrations APPROVED

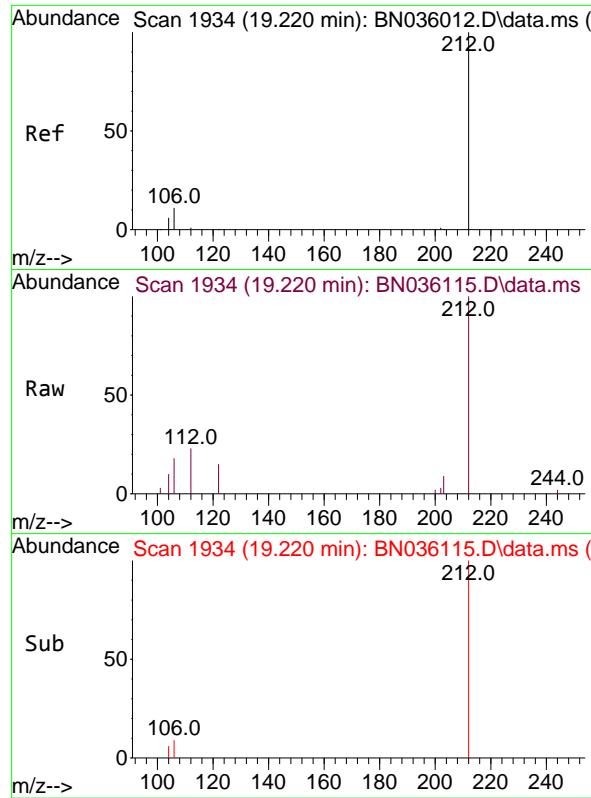
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.186 min Scan# 1675  
Delta R.T. 0.005 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

Tgt Ion:188 Resp: 6578  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 54.1 12.3 18.5#



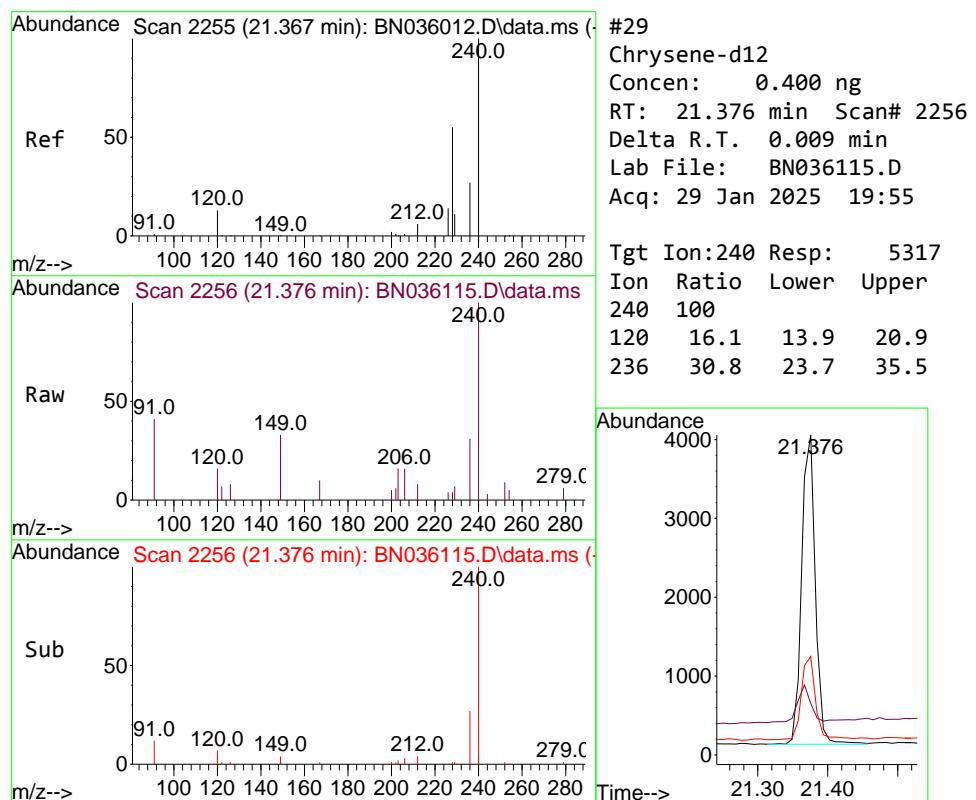
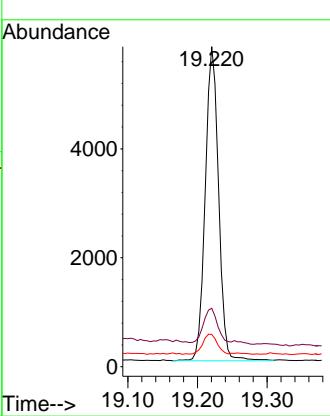


#27  
 Fluoranthene-d10  
 Concen: 0.450 ng  
 RT: 19.220 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-EB-20250124

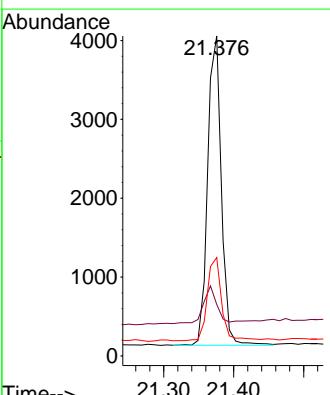
**Manual Integrations**  
**APPROVED**

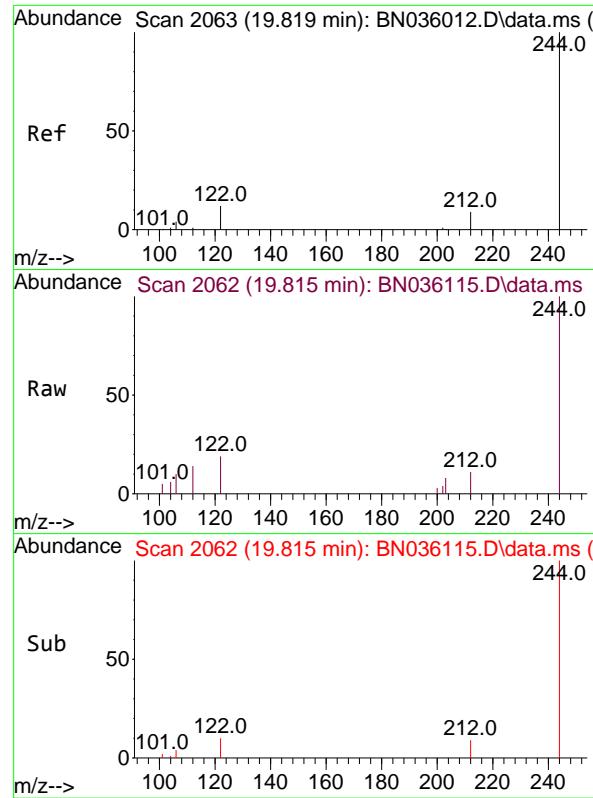
Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.376 min Scan# 2256  
 Delta R.T. 0.009 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

Tgt Ion:240 Resp: 5317  
 Ion Ratio Lower Upper  
 240 100  
 120 16.1 13.9 20.9  
 236 30.8 23.7 35.5



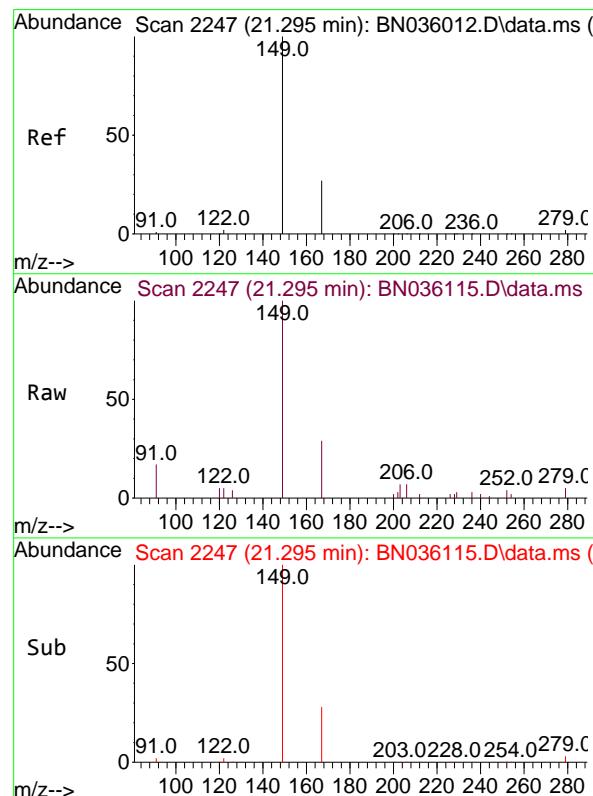
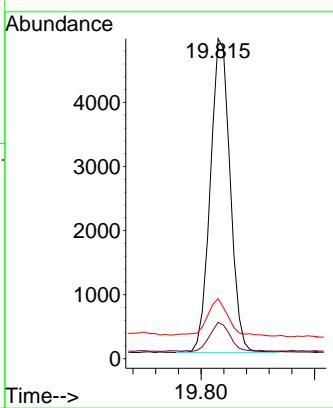


#31  
Terphenyl-d14  
Concen: 0.538 ng  
RT: 19.815 min Scan# 2  
Delta R.T. -0.004 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124

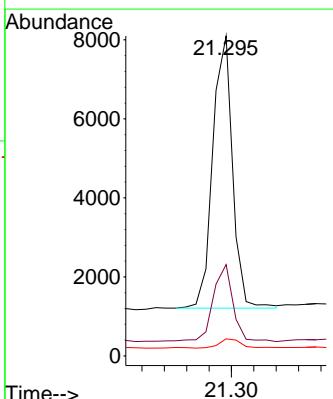
**Manual Integrations**  
**APPROVED**

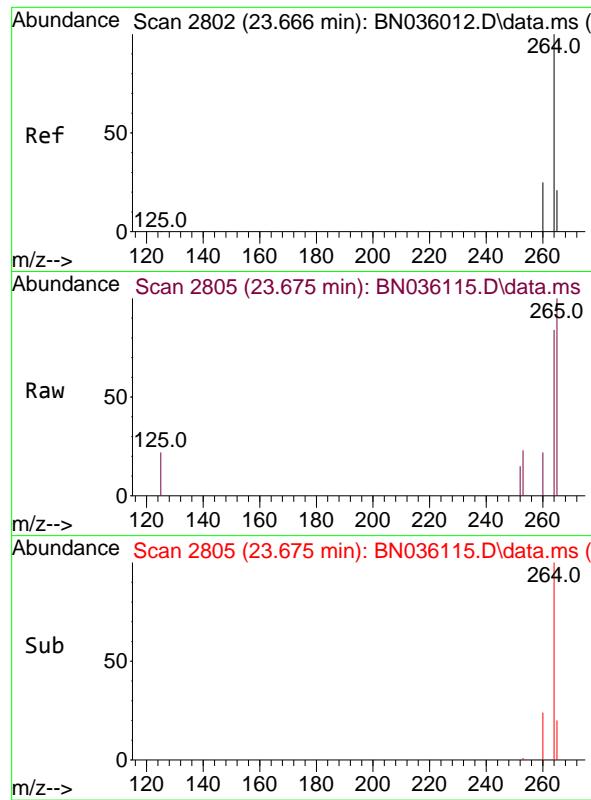
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.800 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

Tgt Ion:149 Resp: 8450  
Ion Ratio Lower Upper  
149 100  
167 28.2 21.9 32.9  
279 4.0 3.0 4.6





#35

Perylene-d<sub>12</sub>

Concen: 0.400 ng

RT: 23.675 min Scan# 2

Delta R.T. 0.009 min

Lab File: BN036115.D

Acq: 29 Jan 2025 19:55

Instrument :

BNA\_N

ClientSampleId :

BP-VPB-192-EB-20250124

Tgt Ion:264 Resp: 5100

Ion Ratio Lower Upper

264 100

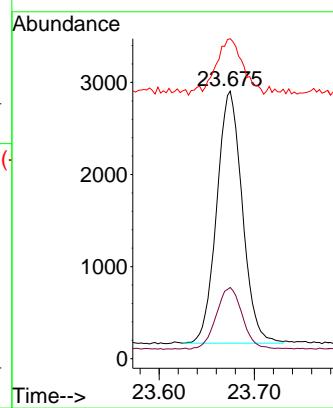
260 26.6 21.8 32.6

265 119.6 56.6 84.8

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025





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:	01/24/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-280-282			SDG No.:	Q1199	
Lab Sample ID:	Q1199-03			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	800	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
BN036116.D	1	01/28/25 09:50	01/29/25 20:31	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.36		0.090	0.25	0.25	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.30		53 - 106		76%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2250		7.803			
1146-65-2	Naphthalene-d8	5220		10.6			
15067-26-2	Acenaphthene-d10	2650		14.442			
1517-22-2	Phenanthrene-d10	5260		17.186			
1719-03-5	Chrysene-d12	4930		21.376			
1520-96-3	Perylene-d12	5690		23.672			

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\BN012925\  
 Data File : BN036116.D  
 Acq On : 29 Jan 2025 20:31  
 Operator : RC/JU  
 Sample : Q1199-03  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-GW-280-282**

Quant Time: Jan 30 00:36:17 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

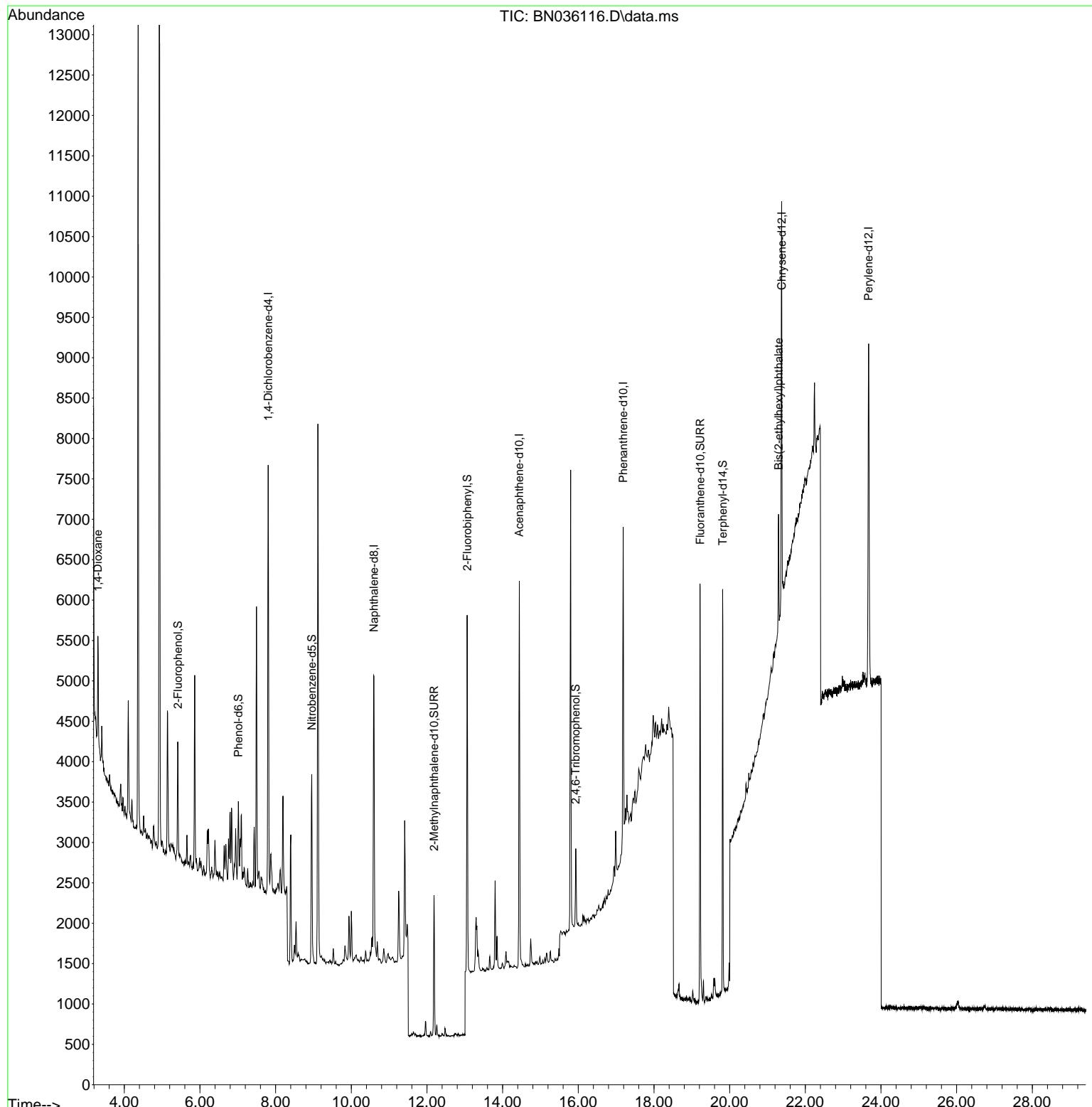
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2253	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	5222	0.400	ng	-0.01
13) Acenaphthene-d10	14.442	164	2653	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	5259	0.400	ng	# 0.00
29) Chrysene-d12	21.376	240	4932	0.400	ng	# 0.00
35) Perylene-d12	23.672	264	5685	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	991	0.169	ng	0.03
5) Phenol-d6	7.016	99	772	0.112	ng	0.04
8) Nitrobenzene-d5	8.956	82	1715	0.348	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2254	0.317	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	508	0.299	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	3593	0.303	ng	0.00
27) Fluoranthene-d10	19.221	212	5985	0.439	ng	0.00
31) Terphenyl-d14	19.815	244	4809	0.469	ng	0.00
<b>Target Compounds</b>						
					Qvalue	
2) 1,4-Dioxane	3.303	88	715	0.284	ng	97
34) Bis(2-ethylhexyl)phtha...	21.295	149	1483	0.151	ng	97

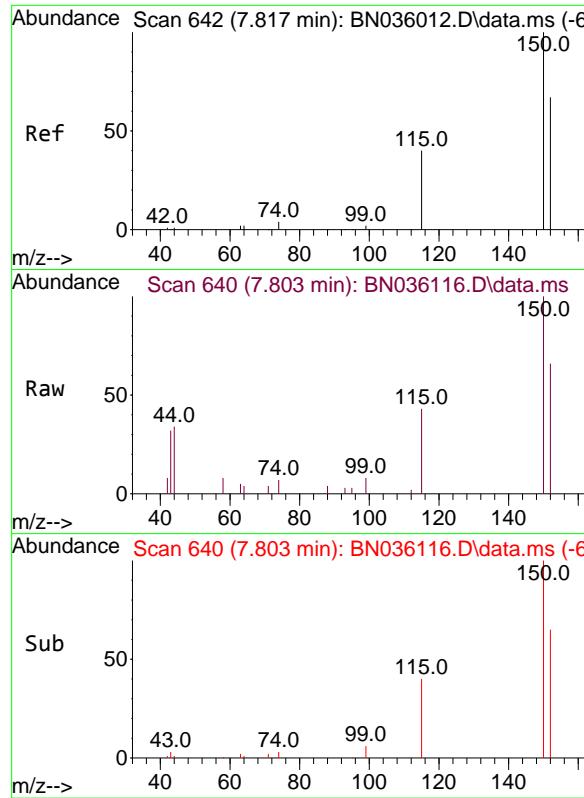
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036116.D  
 Acq On : 29 Jan 2025 20:31  
 Operator : RC/JU  
 Sample : Q1199-03  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-280-282

Quant Time: Jan 30 00:36:17 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

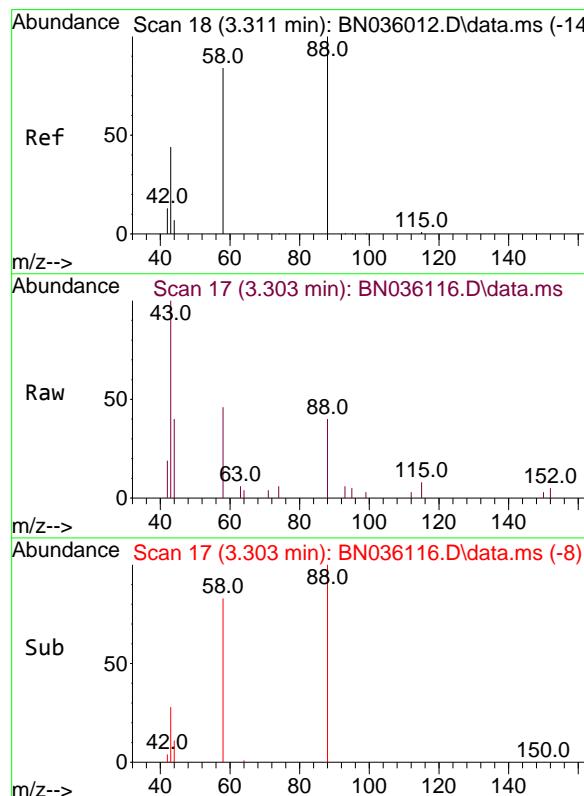
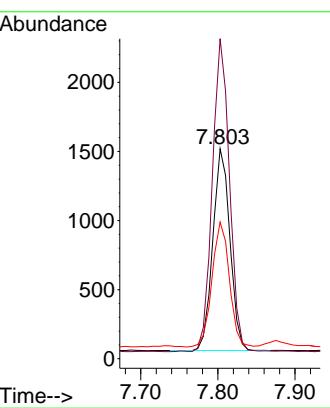




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31

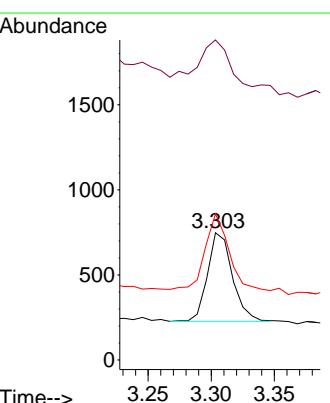
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-280-282

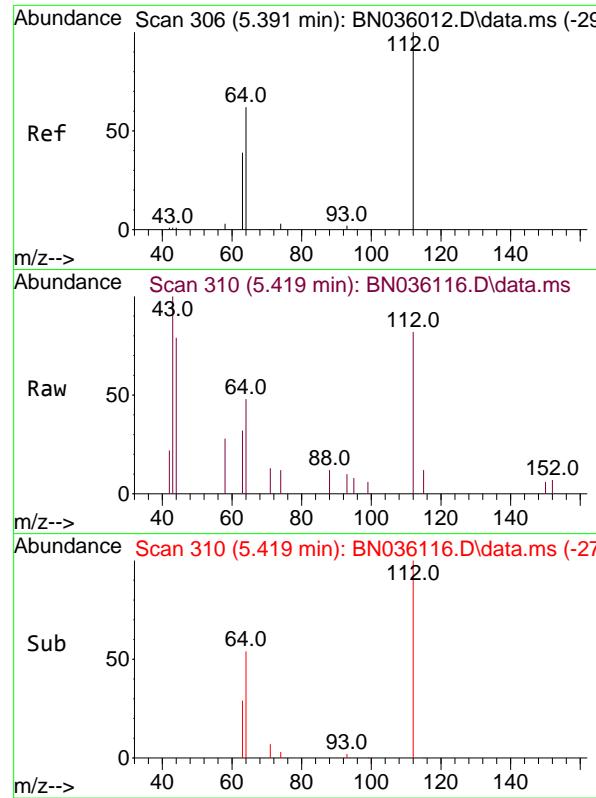
Tgt Ion:152 Resp: 2253  
Ion Ratio Lower Upper  
152 100  
150 152.5 117.4 176.2  
115 65.1 51.0 76.4



#2  
1,4-Dioxane  
Concen: 0.284 ng  
RT: 3.303 min Scan# 17  
Delta R.T. -0.007 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31

Tgt Ion: 88 Resp: 715  
Ion Ratio Lower Upper  
88 100  
43 52.9 38.5 57.7  
58 82.1 66.6 99.8

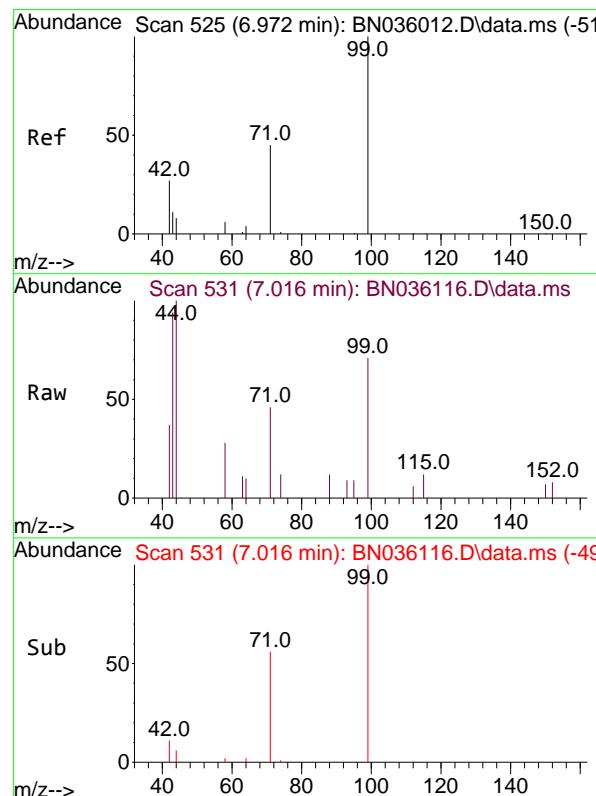
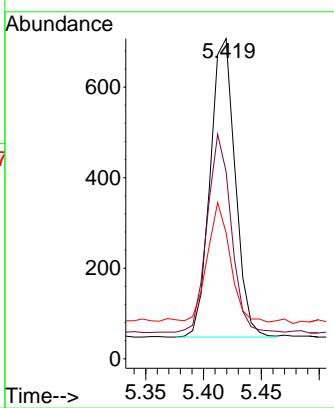




#4  
 2-Fluorophenol  
 Concen: 0.169 ng  
 RT: 5.419 min Scan# 3  
 Delta R.T. 0.029 min  
 Lab File: BN036116.D  
 Acq: 29 Jan 2025 20:31

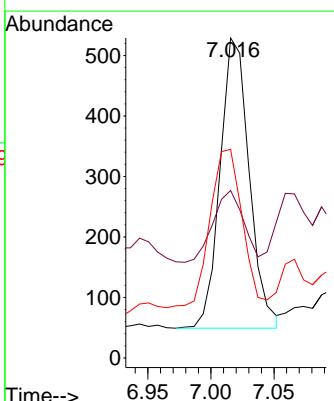
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-280-282

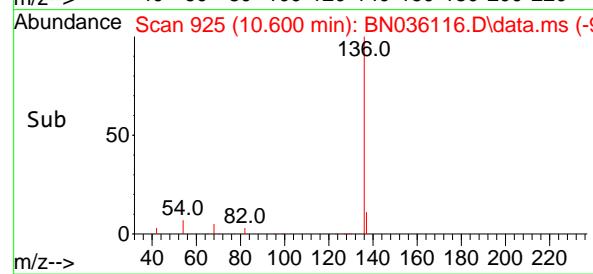
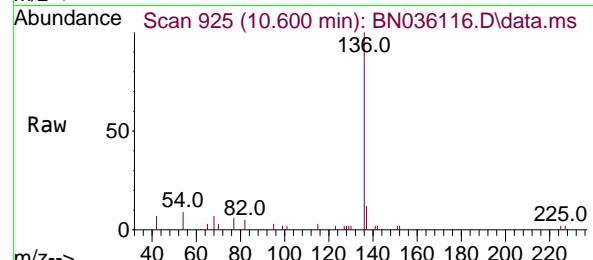
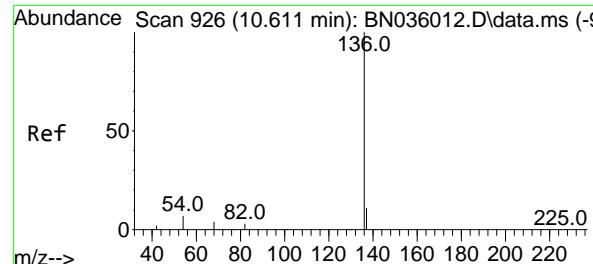
Tgt Ion:112 Resp: 991  
 Ion Ratio Lower Upper  
 112 100  
 64 63.8 50.0 75.0  
 63 37.4 30.7 46.1



#5  
 Phenol-d6  
 Concen: 0.112 ng  
 RT: 7.016 min Scan# 531  
 Delta R.T. 0.043 min  
 Lab File: BN036116.D  
 Acq: 29 Jan 2025 20:31

Tgt Ion: 99 Resp: 772  
 Ion Ratio Lower Upper  
 99 100  
 42 25.6 26.8 40.2#  
 71 71.0 36.6 55.0#



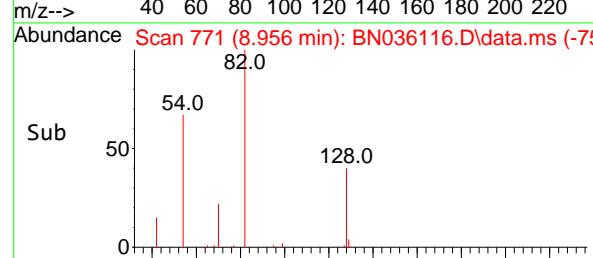
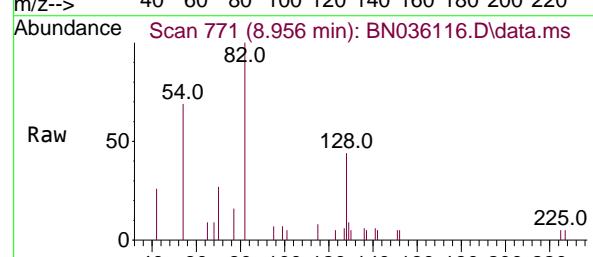
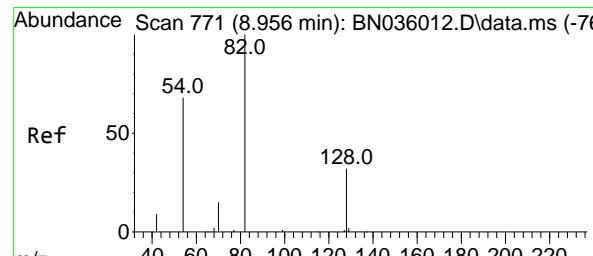
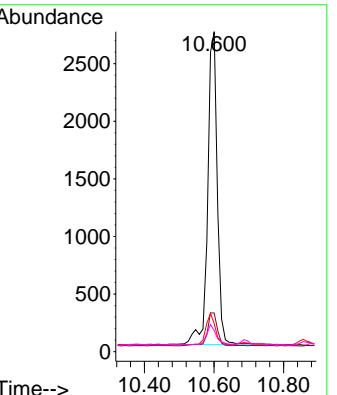


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036116.D  
 Acq: 29 Jan 2025 20:31

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-280-282

Tgt Ion:136 Resp: 5222

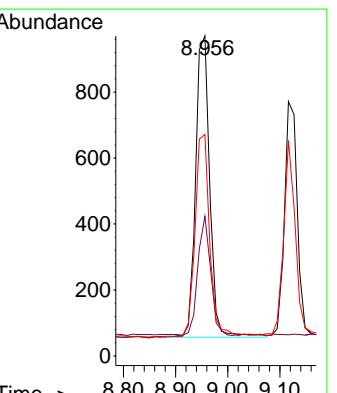
Ion	Ratio	Lower	Upper
136	100		
137	12.1	10.4	15.6
54	8.8	7.7	11.5
68	6.6	5.4	8.0

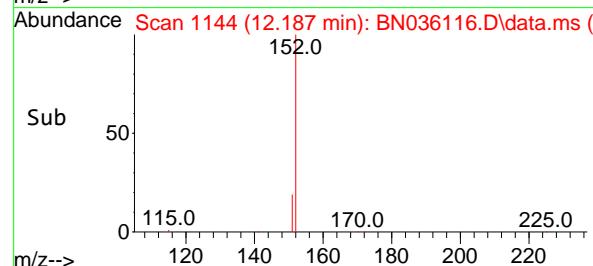
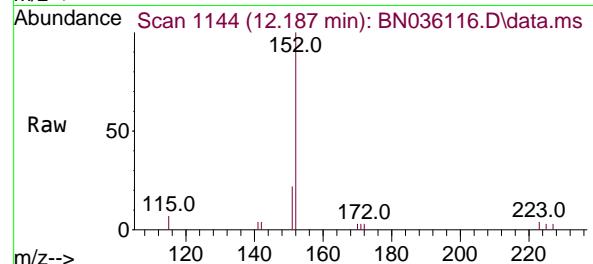
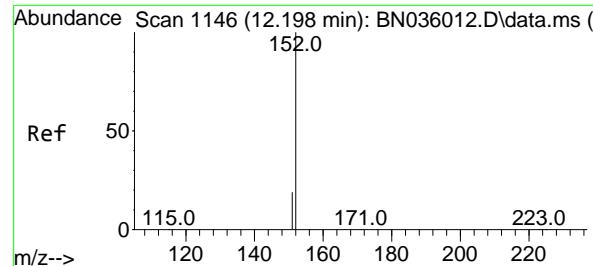


#8  
 Nitrobenzene-d5  
 Concen: 0.348 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. 0.000 min  
 Lab File: BN036116.D  
 Acq: 29 Jan 2025 20:31

Tgt Ion: 82 Resp: 1715

Ion	Ratio	Lower	Upper
82	100		
128	43.6	28.8	43.2
54	69.3	55.8	83.8

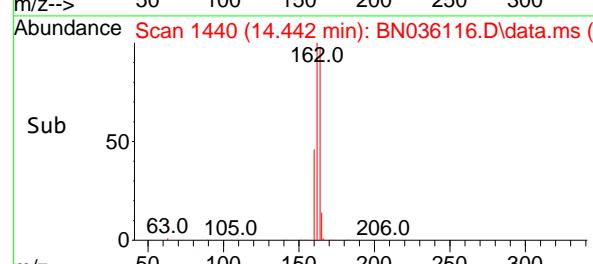
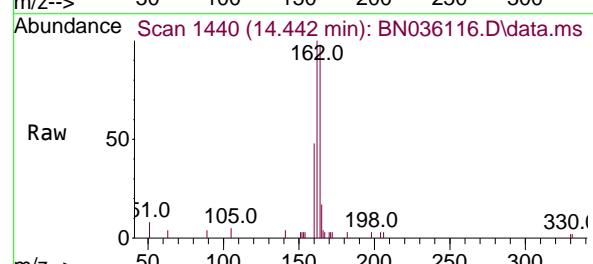
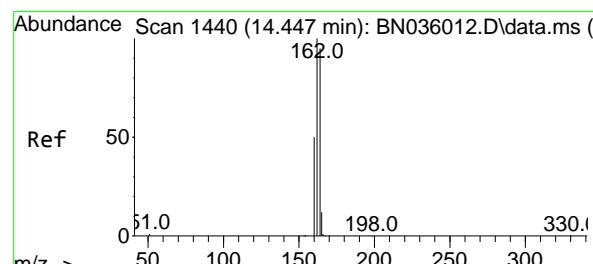
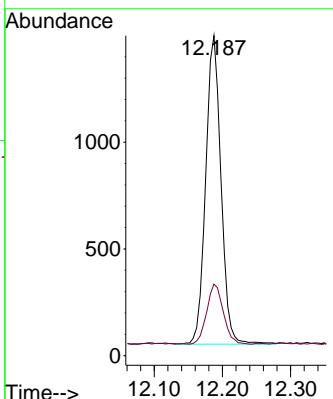




#11  
2-Methylnaphthalene-d10  
Concen: 0.317 ng  
RT: 12.187 min Scan# 1  
Delta R.T. -0.010 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31

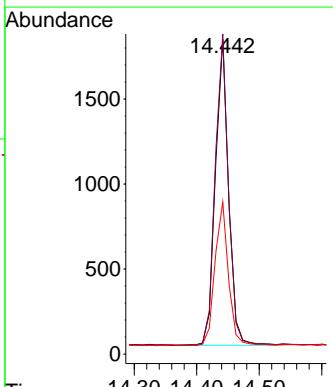
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-280-282

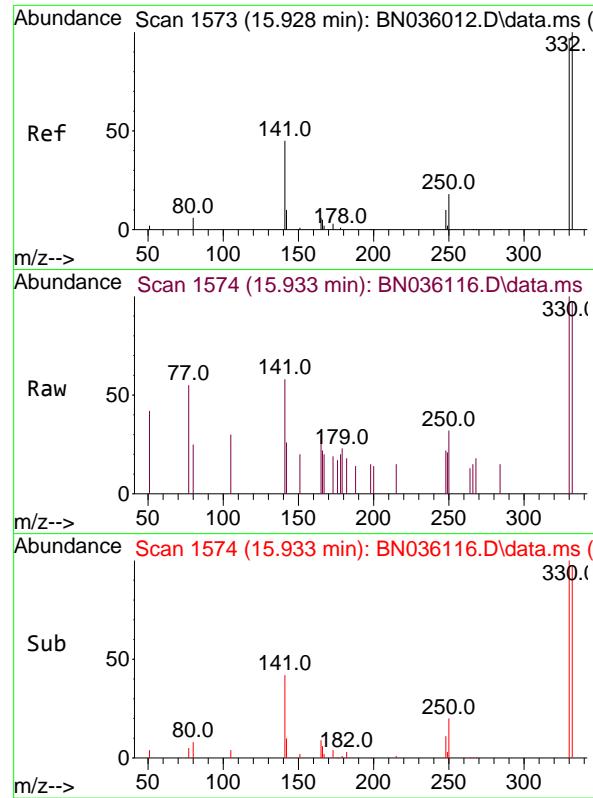
Tgt Ion:152 Resp: 2254  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0



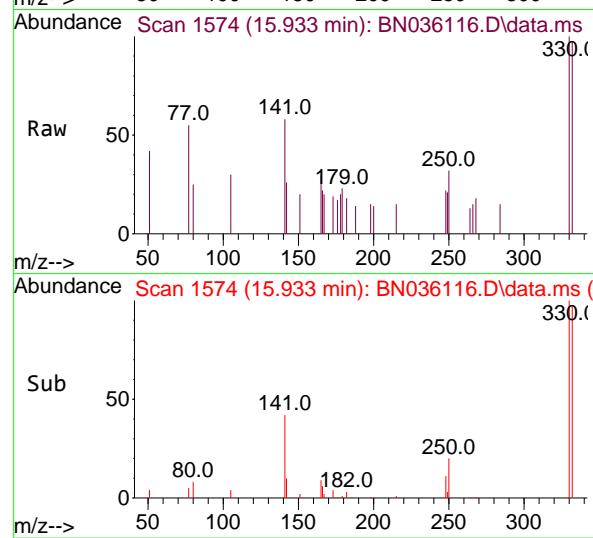
#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.442 min Scan# 1440  
Delta R.T. -0.006 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31

Tgt Ion:164 Resp: 2653  
Ion Ratio Lower Upper  
164 100  
162 101.7 84.1 126.1  
160 48.3 43.8 65.8

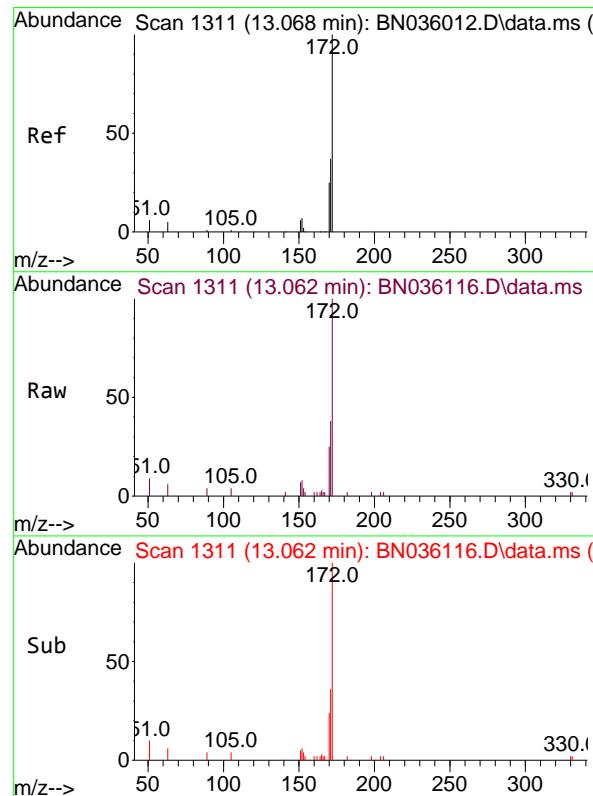
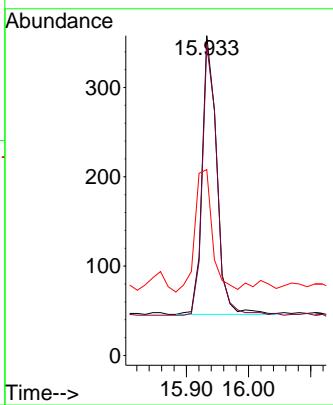
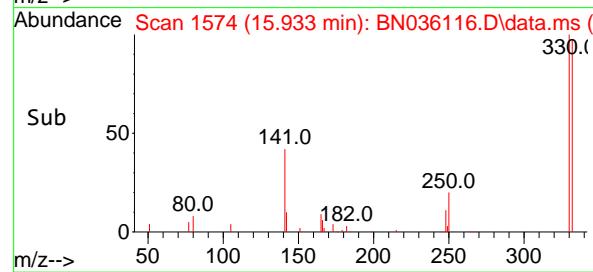




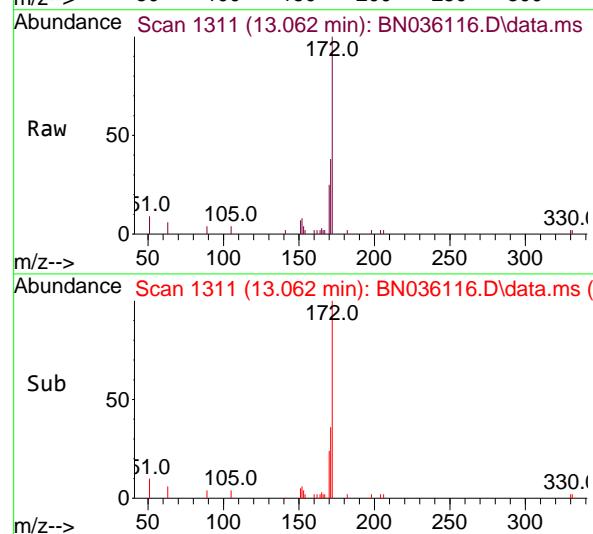
#14  
2,4,6-Tribromophenol  
Concen: 0.299 ng  
RT: 15.933 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31  
ClientSampleId : BP-VPB-192-GW-280-282



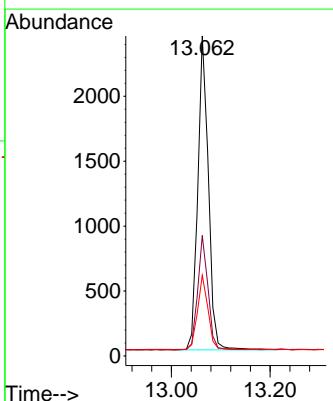
Tgt Ion:330 Resp: 508  
Ion Ratio Lower Upper  
330 100  
332 98.4 81.0 121.4  
141 53.0 36.7 55.1

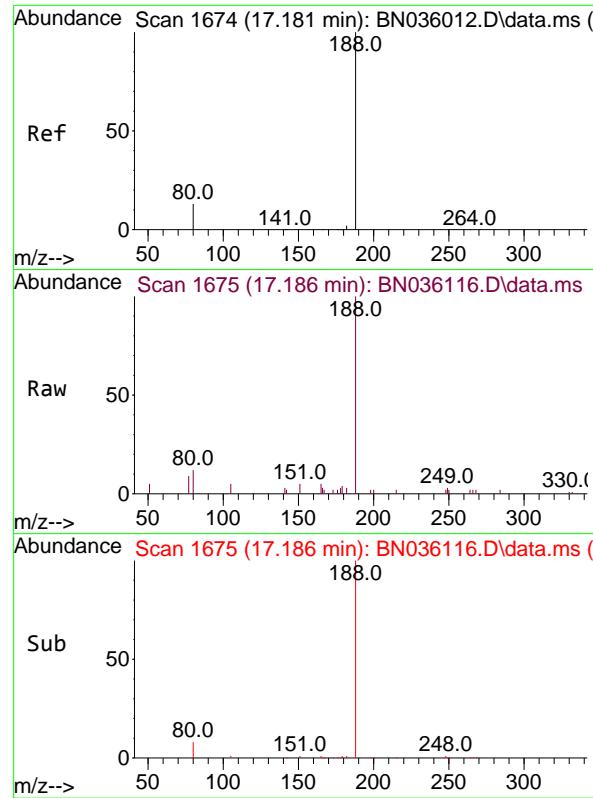


#15  
2-Fluorobiphenyl  
Concen: 0.303 ng  
RT: 13.062 min Scan# 1311  
Delta R.T. -0.006 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31



Tgt Ion:172 Resp: 3593  
Ion Ratio Lower Upper  
172 100  
171 37.6 30.9 46.3  
170 25.2 21.2 31.8

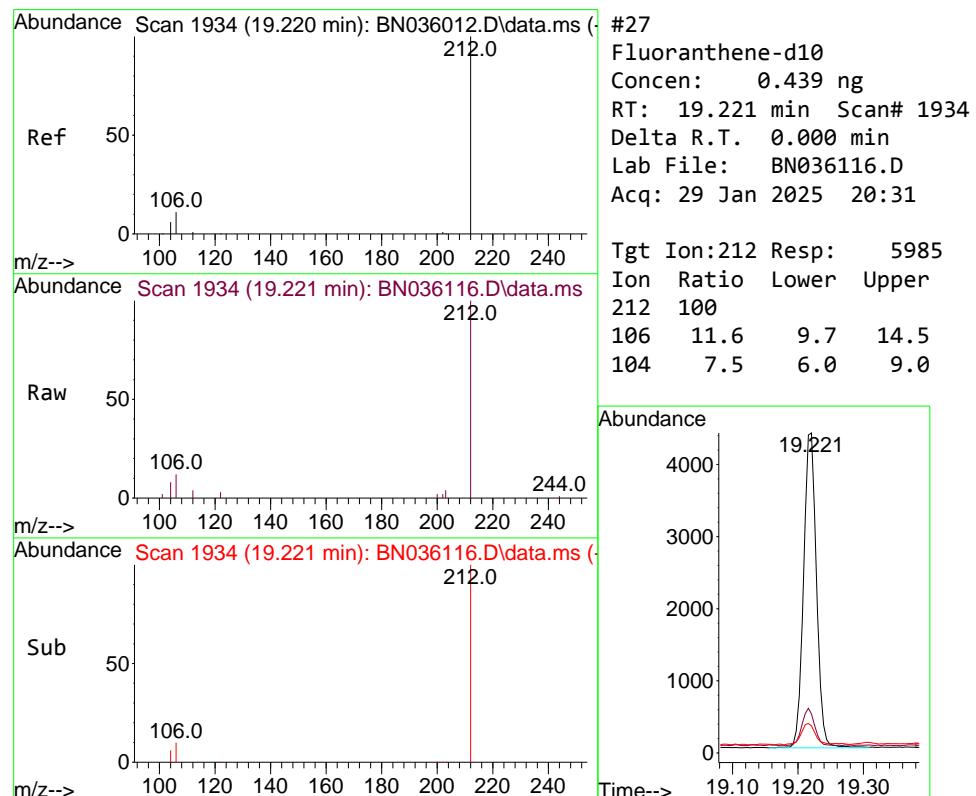
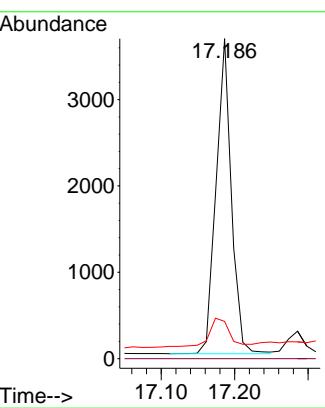




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.186 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036116.D  
 Acq: 29 Jan 2025 20:31

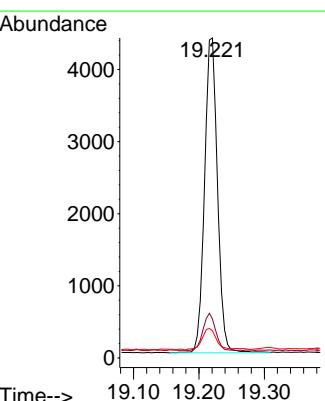
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-280-282

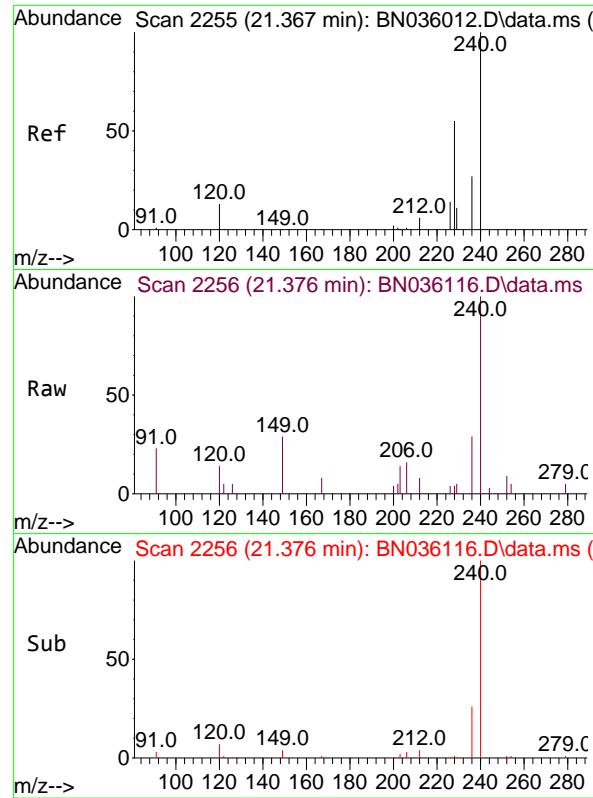
Tgt Ion:188 Resp: 5259  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 11.6 12.3 18.5#



#27  
 Fluoranthene-d10  
 Concen: 0.439 ng  
 RT: 19.221 min Scan# 1934  
 Delta R.T. 0.000 min  
 Lab File: BN036116.D  
 Acq: 29 Jan 2025 20:31

Tgt Ion:212 Resp: 5985  
 Ion Ratio Lower Upper  
 212 100  
 106 11.6 9.7 14.5  
 104 7.5 6.0 9.0

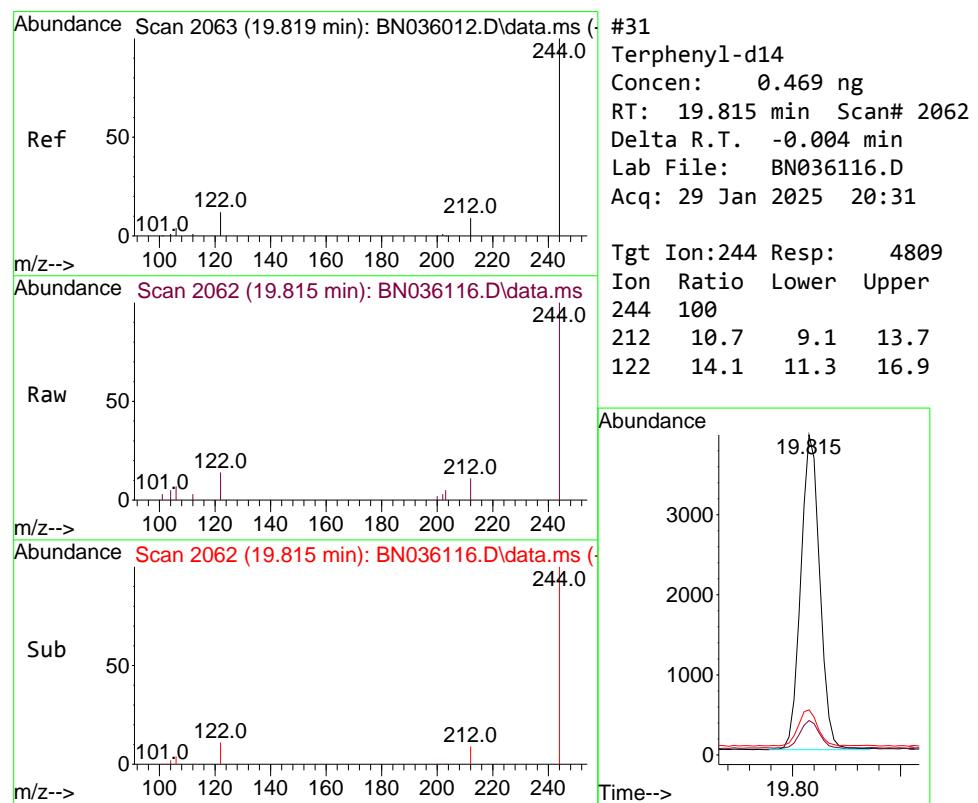
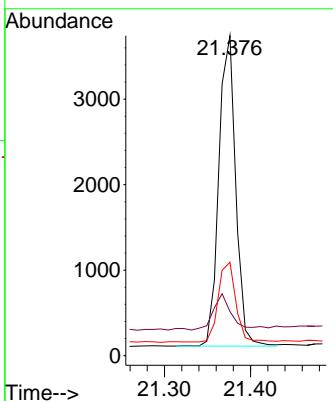




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31

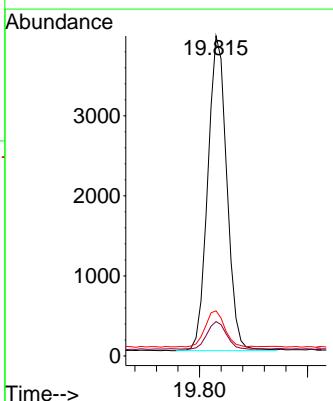
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-280-282

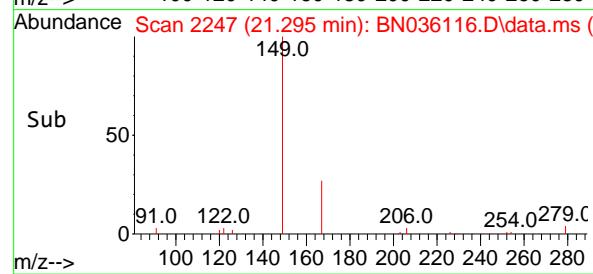
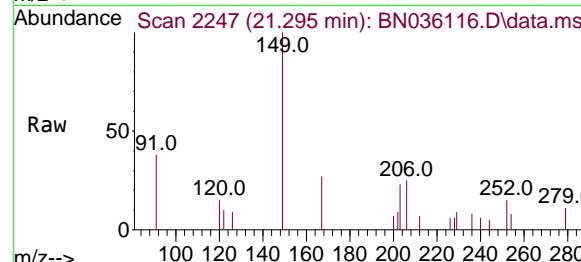
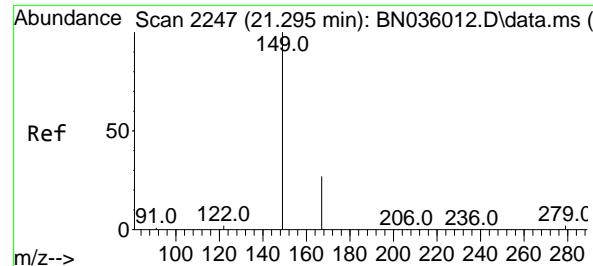
Tgt Ion:240 Resp: 4932  
Ion Ratio Lower Upper  
240 100  
120 13.8 13.9 20.9#  
236 29.2 23.7 35.5



#31  
Terphenyl-d<sub>14</sub>  
Concen: 0.469 ng  
RT: 19.815 min Scan# 2062  
Delta R.T. -0.004 min  
Lab File: BN036116.D  
Acq: 29 Jan 2025 20:31

Tgt Ion:244 Resp: 4809  
Ion Ratio Lower Upper  
244 100  
212 10.7 9.1 13.7  
122 14.1 11.3 16.9





#34

Bis(2-ethylhexyl)phthalate

Concen: 0.151 ng

RT: 21.295 min Scan# 2 Instrument:

Delta R.T. 0.000 min BNA\_N

Lab File: BN036116.D ClientSampleId :

Acq: 29 Jan 2025 20:31 BP-VPB-192-GW-280-282

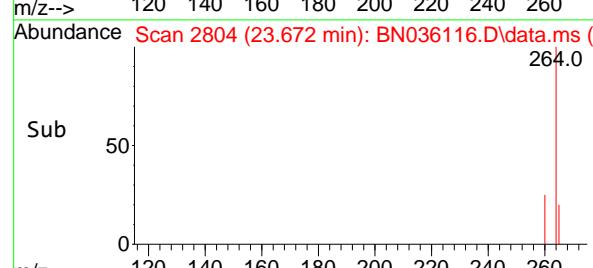
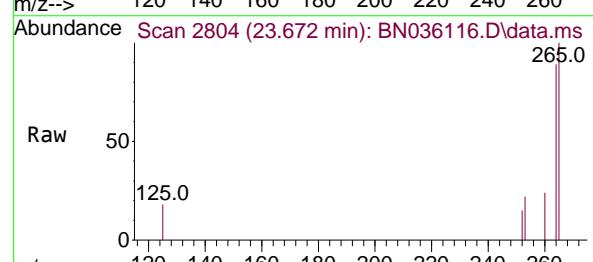
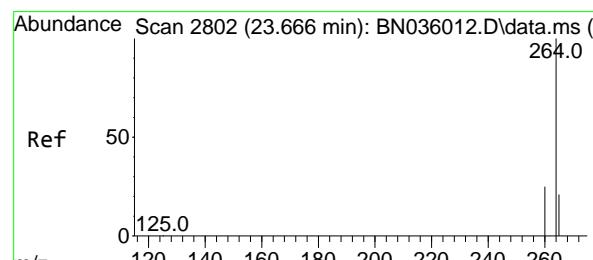
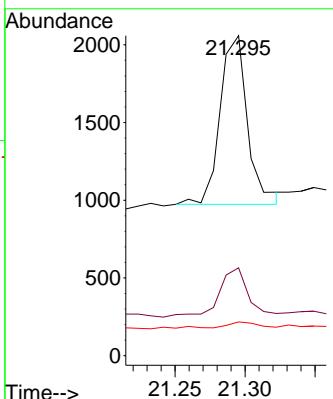
Tgt Ion:149 Resp: 1483

Ion Ratio Lower Upper

149 100

167 26.0 21.9 32.9

279 3.6 3.0 4.6



#35

Perylene-d<sub>12</sub>

Concen: 0.400 ng

RT: 23.672 min Scan# 2804

Delta R.T. 0.006 min

Lab File: BN036116.D

Acq: 29 Jan 2025 20:31

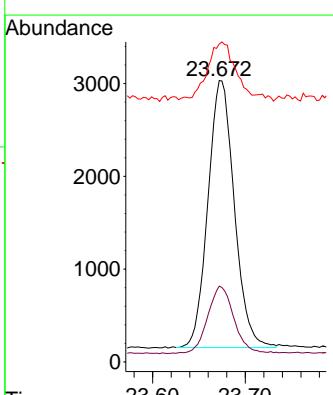
Tgt Ion:264 Resp: 5685

Ion Ratio Lower Upper

264 100

260 27.0 21.8 32.6

265 113.0 56.6 84.8#





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:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-260-262			SDG No.:	Q1199	
Lab Sample ID:	Q1199-04			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	810	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
BN036117.D	1	01/28/25 09:50	01/29/25 21:07	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.83		0.080	0.25	0.25	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		97%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.47		30 - 150		118%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		80%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	58 - 132		143%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2150		7.803			
1146-65-2	Naphthalene-d8	4870		10.6			
15067-26-2	Acenaphthene-d10	2940		14.441			
1517-22-2	Phenanthrene-d10	6490		17.186			
1719-03-5	Chrysene-d12	5410		21.376			
1520-96-3	Perylene-d12	5180		23.672			

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\BN012925\  
 Data File : BN036117.D  
 Acq On : 29 Jan 2025 21:07  
 Operator : RC/JU  
 Sample : Q1199-04  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Quant Time: Jan 30 00:36:33 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

**Instrument :**  
 BNA\_N  
**ClientSampleId :**  
 BP-VPB-192-GW-260-262

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2145	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	4867m	0.400	ng	-0.01
13) Acenaphthene-d10	14.441	164	2939	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6485	0.400	ng	0.00
29) Chrysene-d12	21.376	240	5413	0.400	ng	# 0.00
35) Perylene-d12	23.672	264	5178	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	1044	0.187	ng	0.03
5) Phenol-d6	7.015	99	832	0.127	ng	0.04
8) Nitrobenzene-d5	8.956	82	1721	0.375	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2566	0.388	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	663	0.352	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4208	0.321	ng	0.00
27) Fluoranthene-d10	19.216	212	7943	0.473	ng	0.00
31) Terphenyl-d14	19.815	244	6452	0.574	ng	0.00
<b>Target Compounds</b>						
					Qvalue	
2) 1,4-Dioxane	3.303	88	1618	0.675	ng	91
9) Naphthalene	10.643	128	343	0.024	ng	# 60
25) Phenanthrene	17.223	178	1069	0.055	ng	# 28
28) Fluoranthene	19.248	202	541	0.024	ng	# 72
30) Pyrene	19.611	202	460	0.021	ng	# 93
34) Bis(2-ethylhexyl)phtha...	21.295	149	1569	0.146	ng	96

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

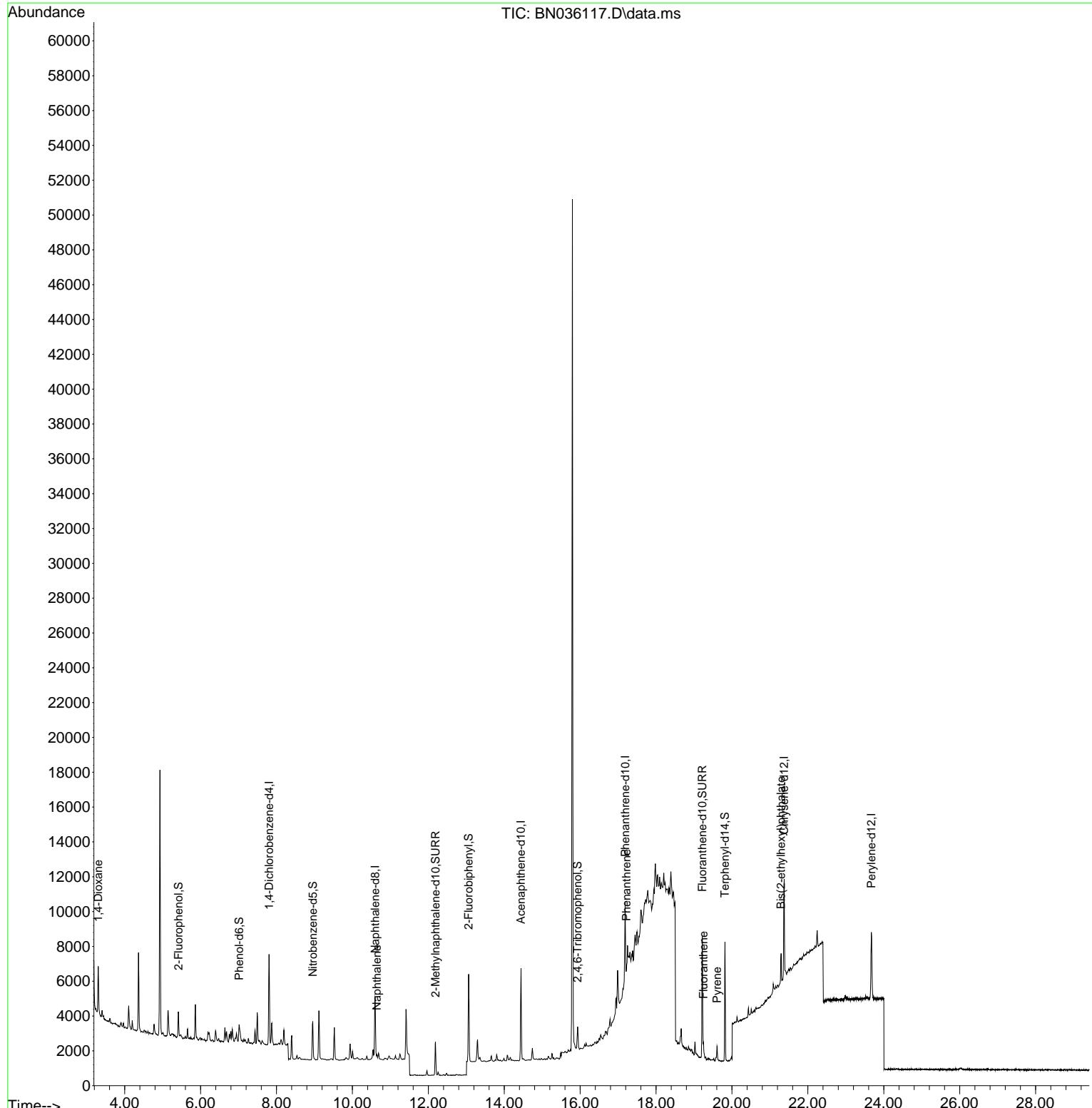
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 Data File : BN036117.D  
 Acq On : 29 Jan 2025 21:07  
 Operator : RC/JU  
 Sample : Q1199-04  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

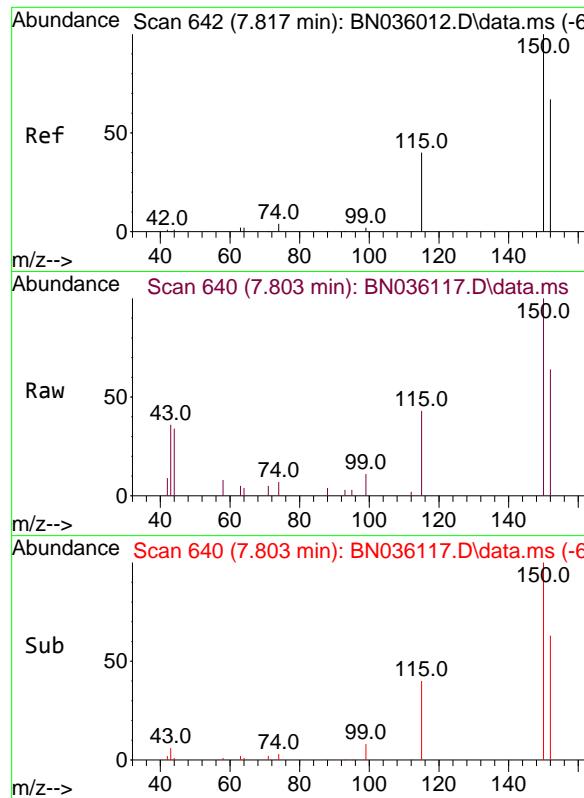
Quant Time: Jan 30 00:36:33 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

**Instrument :**  
 BNA\_N  
**ClientSampleId :**  
 BP-VPB-192-GW-260-262

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025



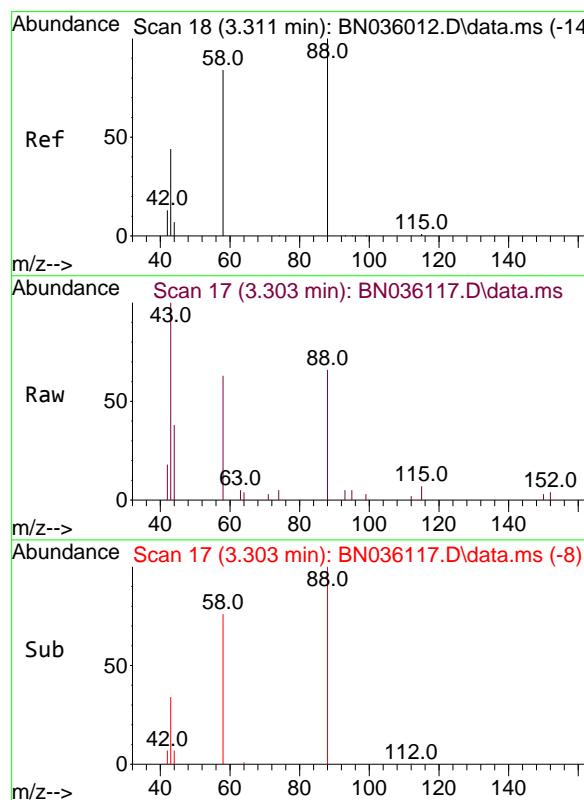
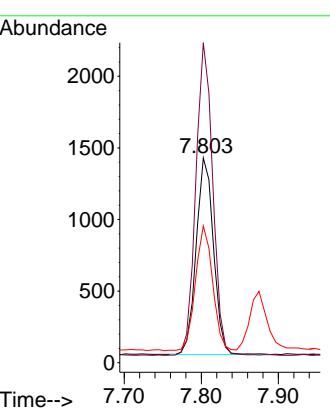


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262

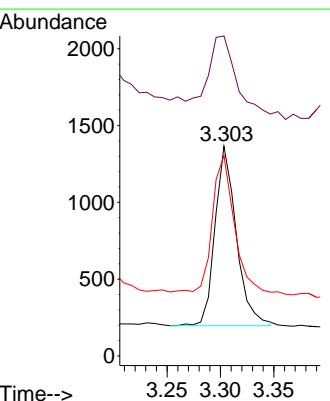
### Manual Integrations APPROVED

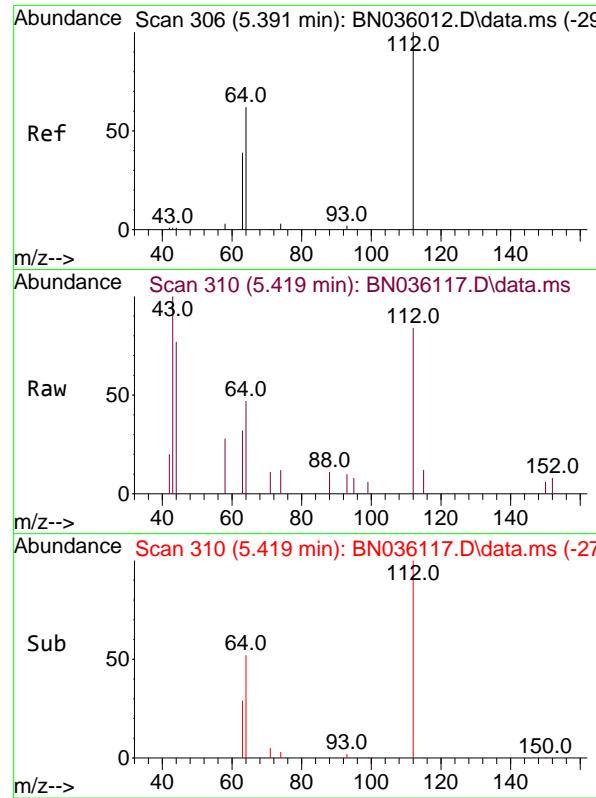
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#2  
1,4-Dioxane  
Concen: 0.675 ng  
RT: 3.303 min Scan# 17  
Delta R.T. -0.007 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt Ion: 88 Resp: 1618  
Ion Ratio Lower Upper  
88 100  
43 56.9 38.5 57.7  
58 76.5 66.6 99.8



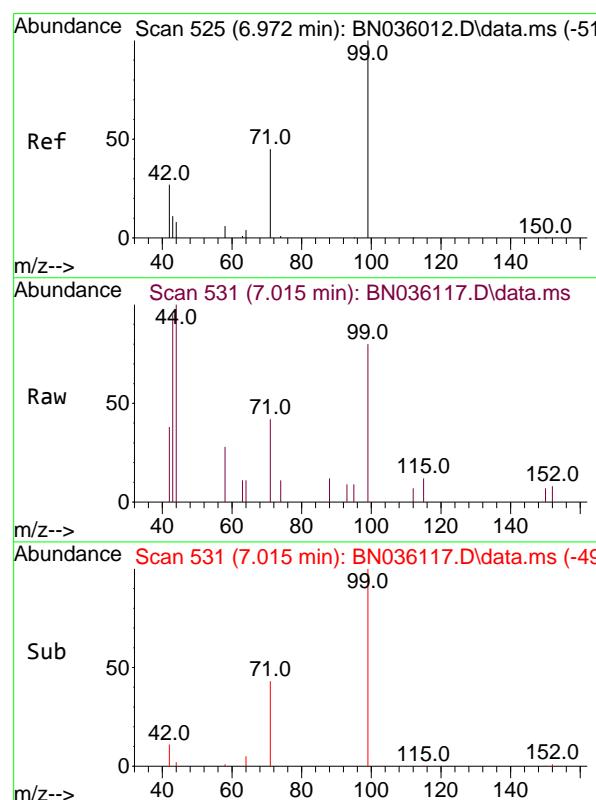


#4  
2-Fluorophenol  
Concen: 0.187 ng  
RT: 5.419 min Scan# 3  
Delta R.T. 0.029 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262

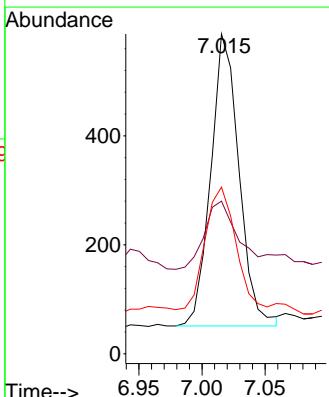
#### Manual Integrations APPROVED

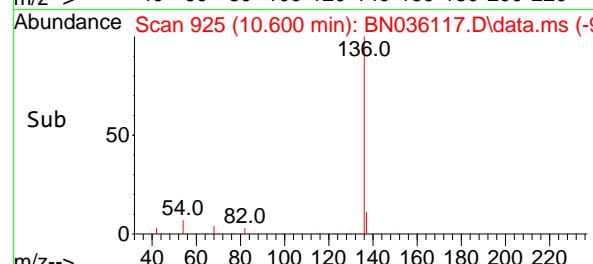
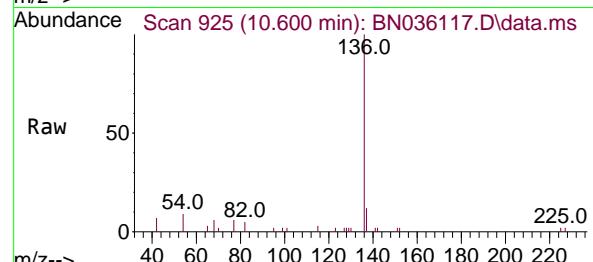
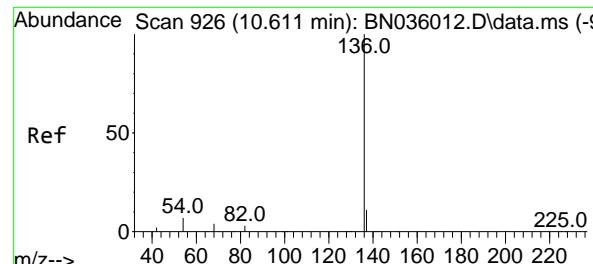
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#5  
Phenol-d6  
Concen: 0.127 ng  
RT: 7.015 min Scan# 531  
Delta R.T. 0.043 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt Ion: 99 Resp: 832  
Ion Ratio Lower Upper  
99 100  
42 40.6 26.8 40.2#  
71 45.3 36.6 55.0





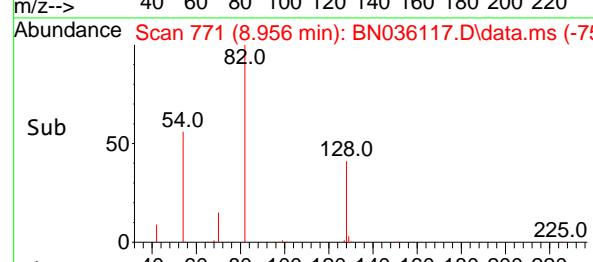
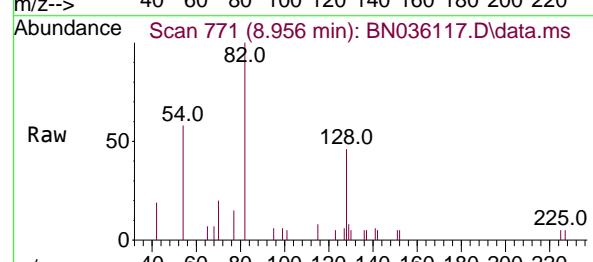
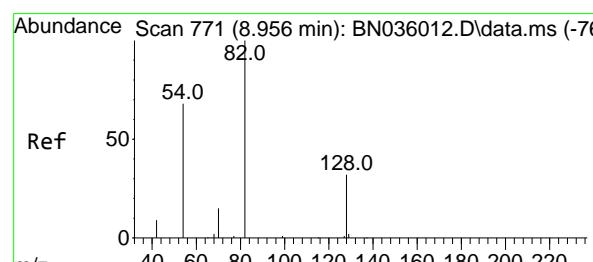
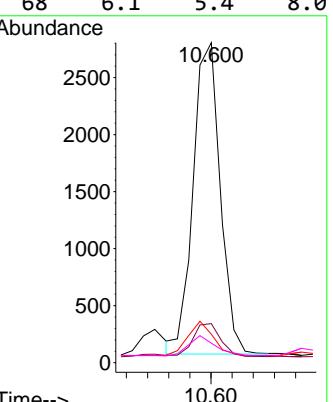
#7  
Naphthalene-d8  
Concen: 0.400 ng m  
RT: 10.600 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

### Manual Integrations APPROVED

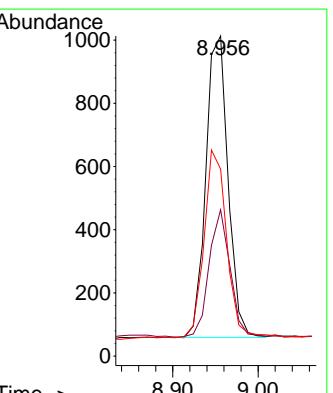
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

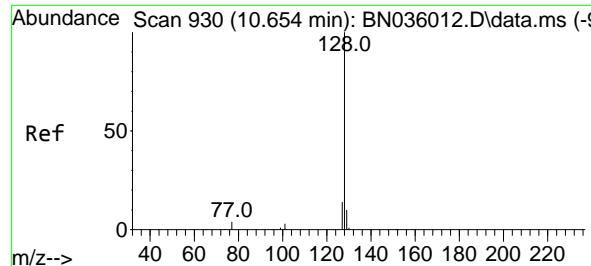
Tgt	Ion:136	Resp:	486.0
Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.4	15.6
54	8.9	7.7	11.5
68	6.1	5.4	8.0



#8  
Nitrobenzene-d5  
Concen: 0.375 ng  
RT: 8.956 min Scan# 771  
Delta R.T. -0.000 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt	Ion: 82	Resp:	1721
Ion	Ratio	Lower	Upper
82	100		
128	45.7	28.8	43.2
54	58.4	55.8	83.8





#9

Naphthalene

Concen: 0.024 ng

RT: 10.643 min Scan# 9

Delta R.T. -0.011 min

Lab File: BN036117.D

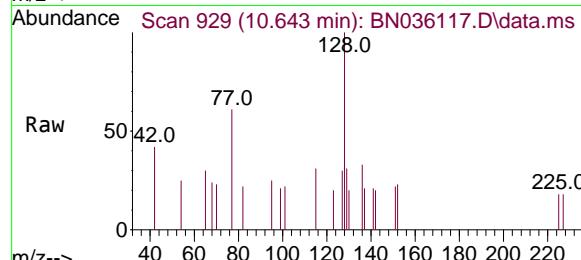
Acq: 29 Jan 2025 21:07

Instrument :

BNA\_N

ClientSampleId :

BP-VPB-192-GW-260-262



Tgt Ion:128 Resp: 343

Ion Ratio Lower Upper

128 100

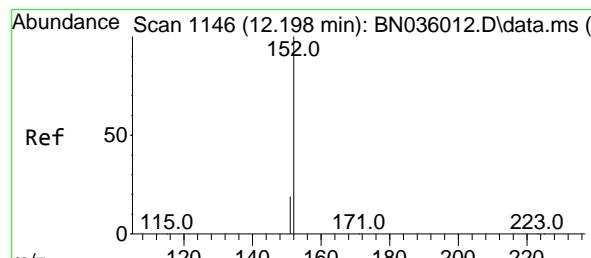
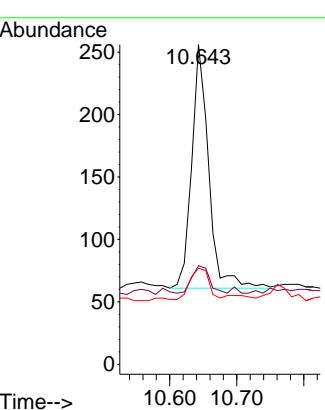
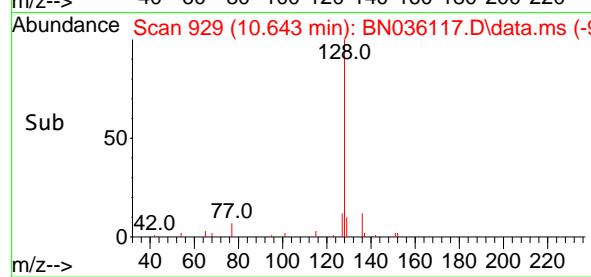
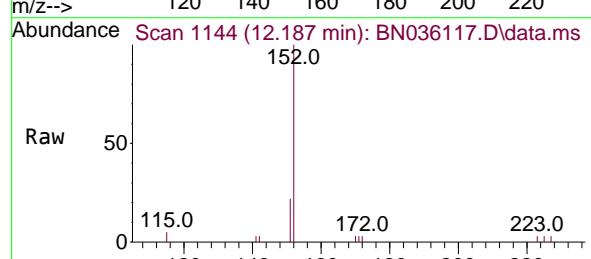
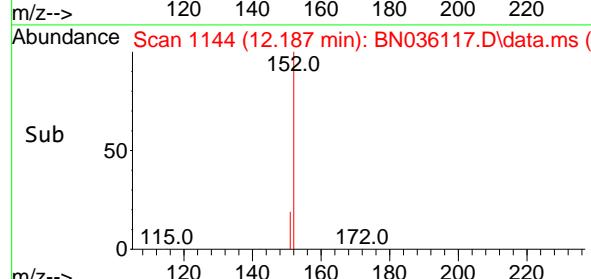
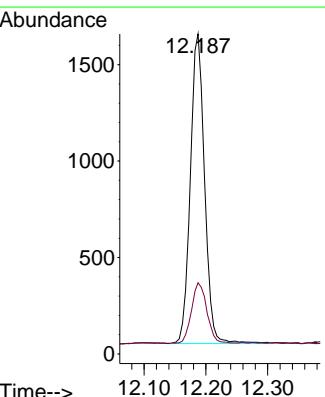
129 30.9 9.4 14.2

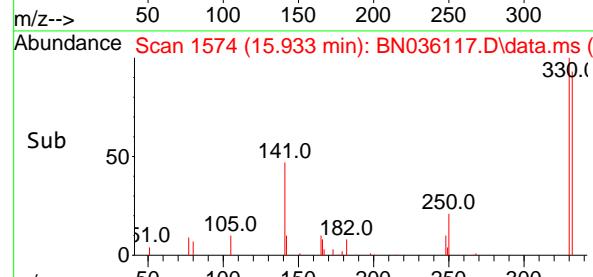
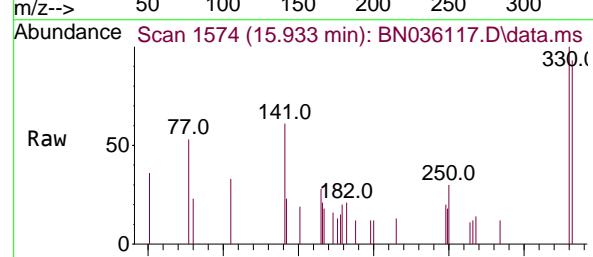
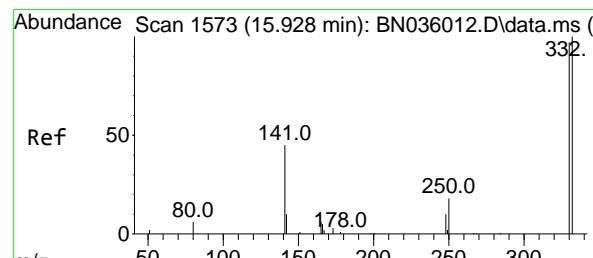
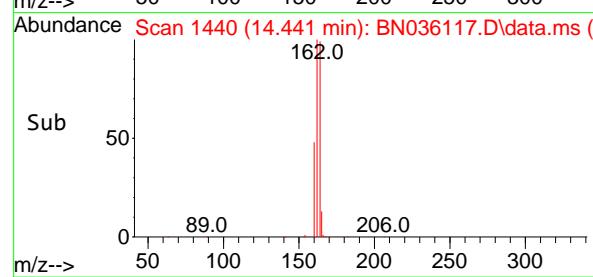
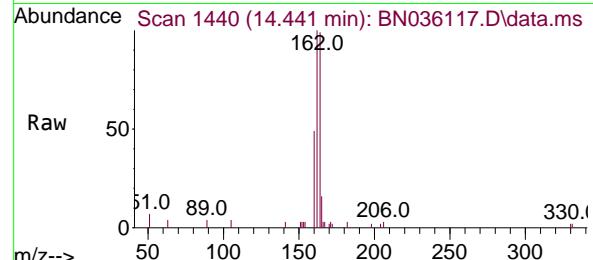
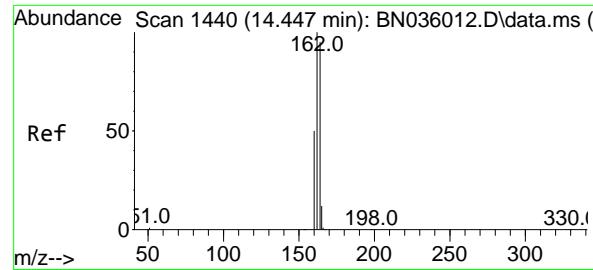
127 30.1 12.6 19.0

**Manual Integrations****APPROVED**

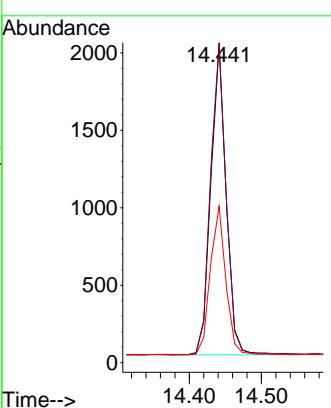
Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025

#11  
2-Methylnaphthalene-d10  
Concen: 0.388 ng  
RT: 12.187 min Scan# 1144  
Delta R.T. -0.010 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07Tgt Ion:152 Resp: 2566  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0

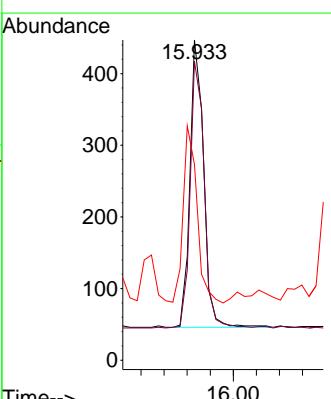


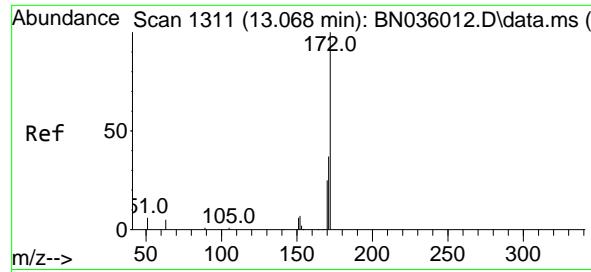
#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.441 min Scan# 1440  
Delta R.T. -0.006 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262**Manual Integrations  
APPROVED**Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

#14  
2,4,6-Tribromophenol  
Concen: 0.352 ng  
RT: 15.933 min Scan# 1574  
Delta R.T. 0.005 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

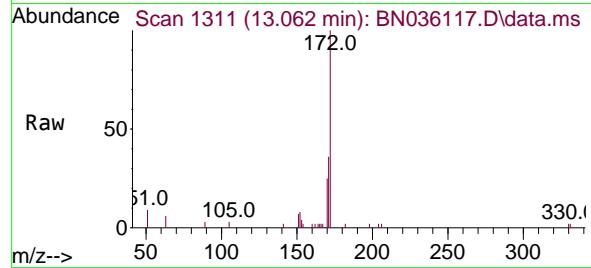
Tgt Ion:330 Resp: 663  
Ion Ratio Lower Upper  
330 100  
332 95.0 81.0 121.4  
141 61.7 36.7 55.1#





#15  
2-Fluorobiphenyl  
Concen: 0.321 ng  
RT: 13.062 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

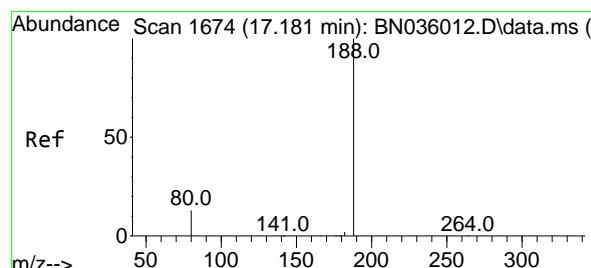
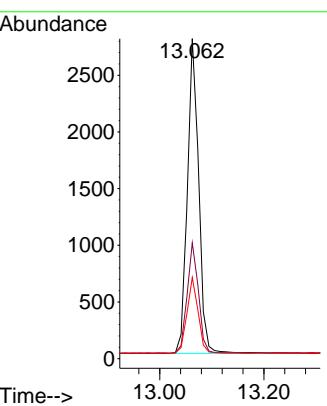
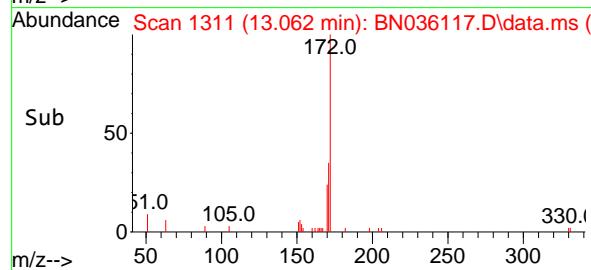
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262



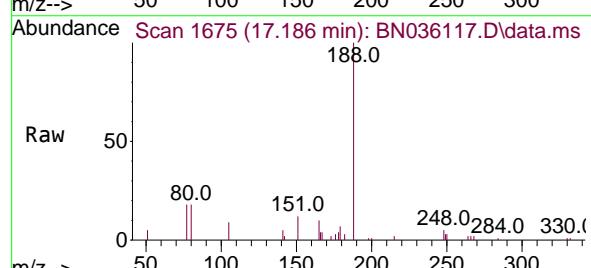
Tgt Ion:172 Resp: 4203  
Ion Ratio Lower Upper  
172 100  
171 36.2 30.9 46.3  
170 25.3 21.2 31.8

Manual Integrations  
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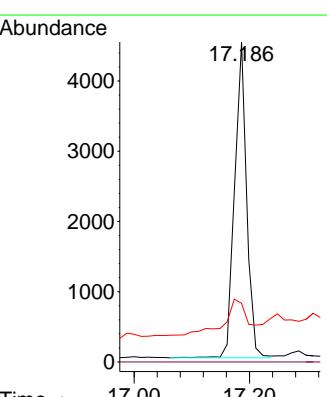
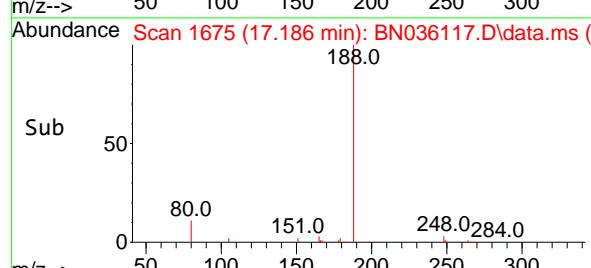
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

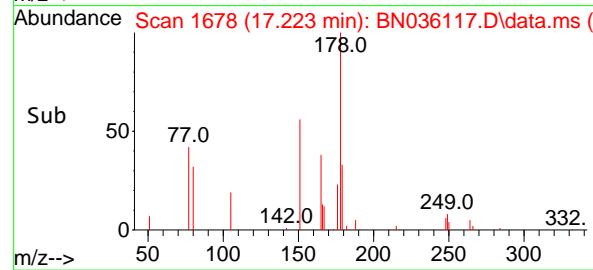
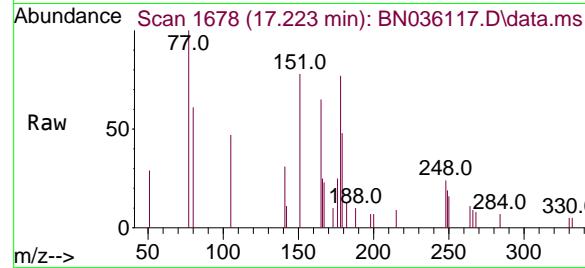
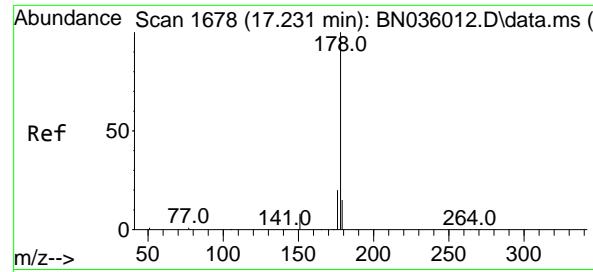


#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.186 min Scan# 1675  
Delta R.T. 0.005 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07



Tgt Ion:188 Resp: 6485  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 18.3 12.3 18.5





#25

Phenanthrene

Concen: 0.055 ng

RT: 17.223 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036117.D

Acq: 29 Jan 2025 21:07

Instrument :

BNA\_N

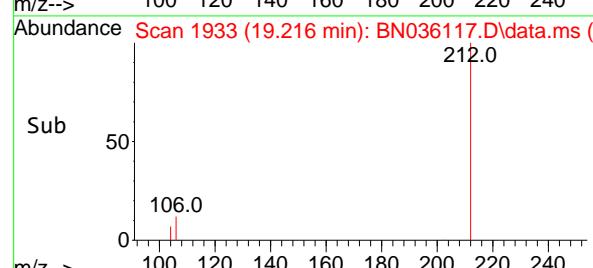
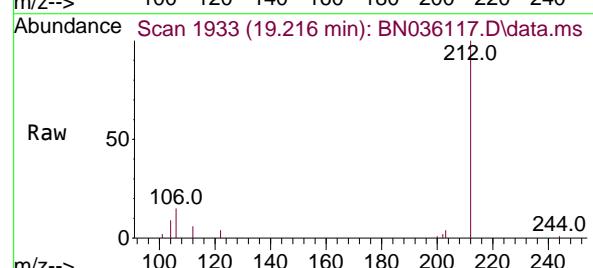
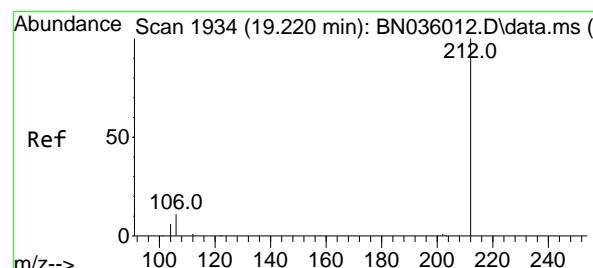
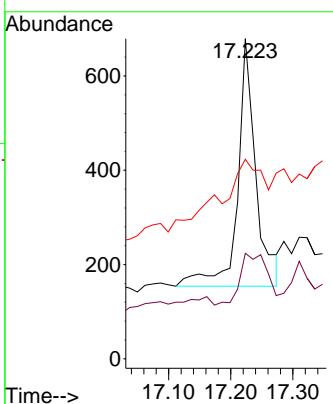
ClientSampleId :

BP-VPB-192-GW-260-262

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#27

Fluoranthene-d10

Concen: 0.473 ng

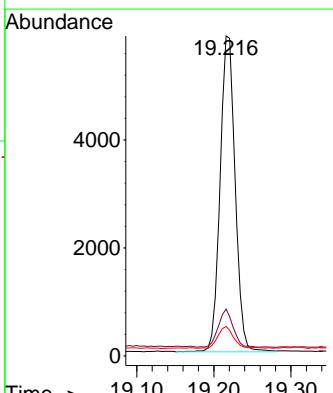
RT: 19.216 min Scan# 1933

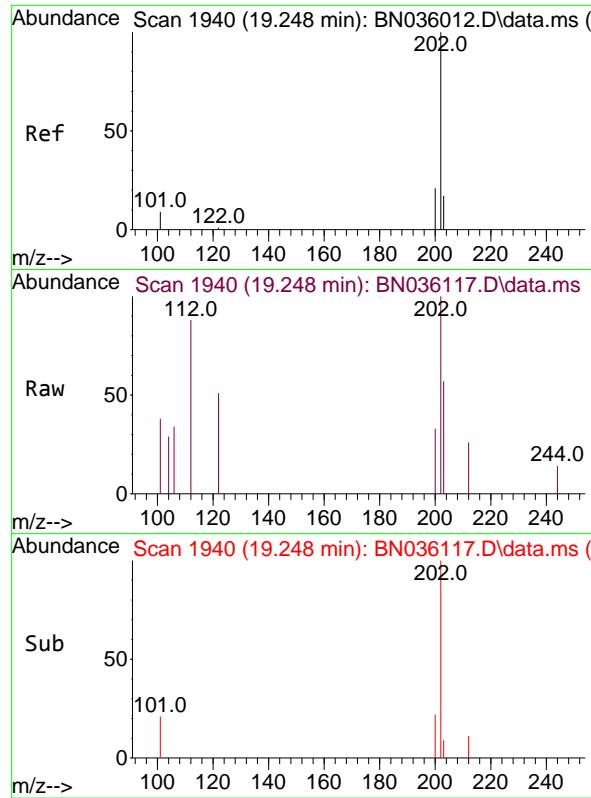
Delta R.T. -0.004 min

Lab File: BN036117.D

Acq: 29 Jan 2025 21:07

Tgt	Ion:212	Resp:	7943
Ion	Ratio	Lower	Upper
212	100		
106	11.7	9.7	14.5
104	6.9	6.0	9.0



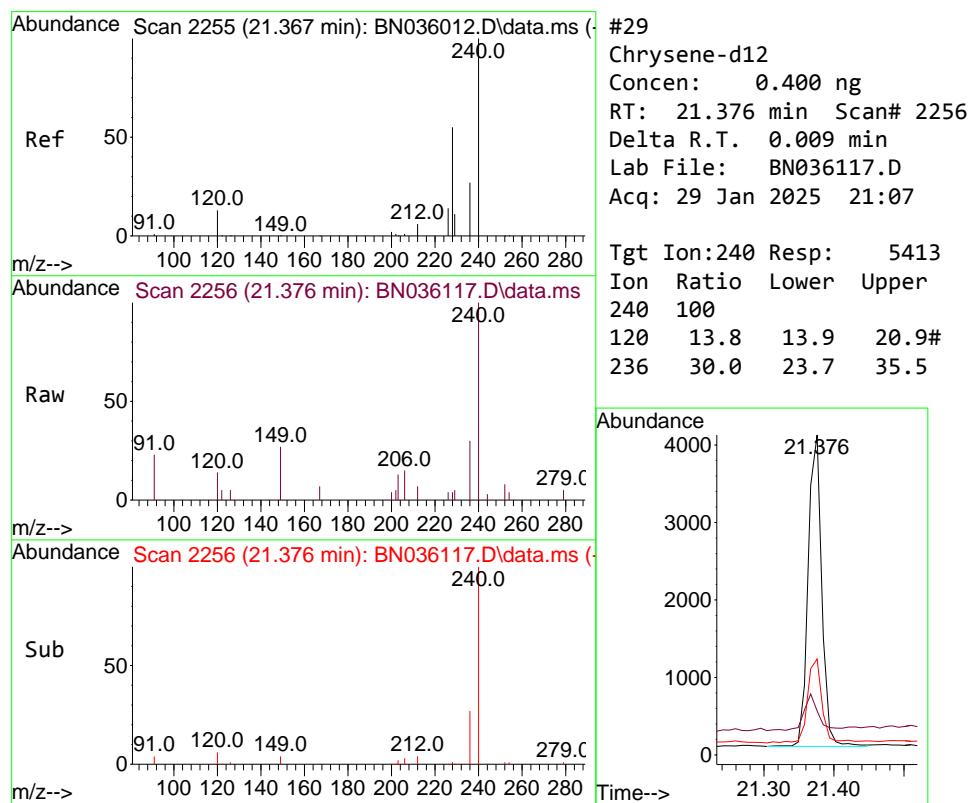
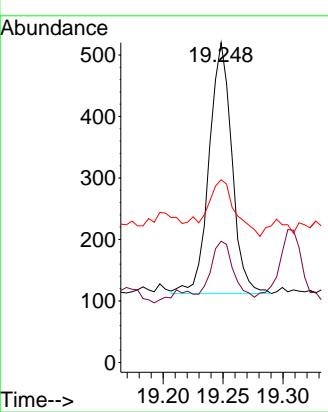


#28  
Fluoranthene  
Concen: 0.024 ng  
RT: 19.248 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262

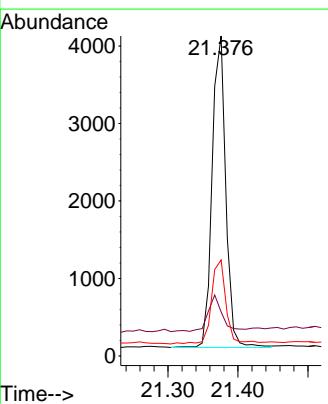
### Manual Integrations APPROVED

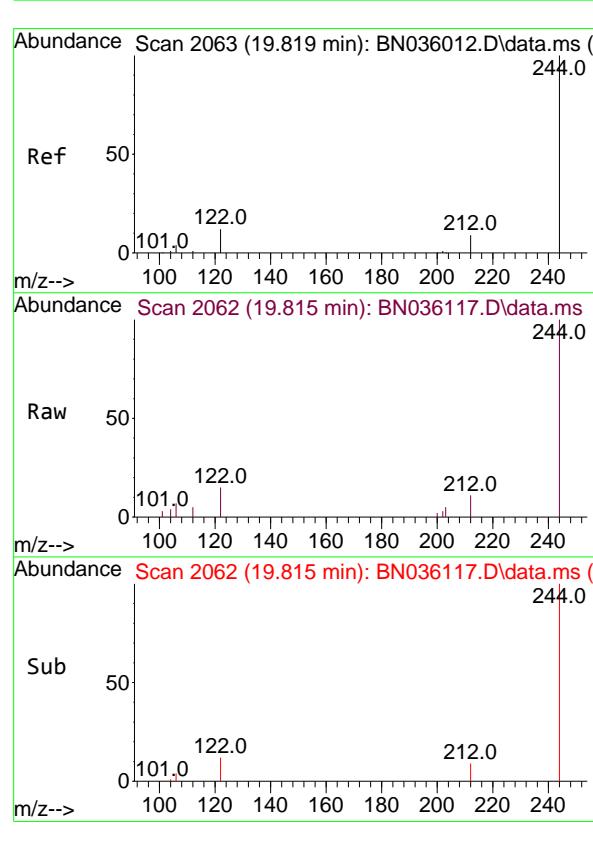
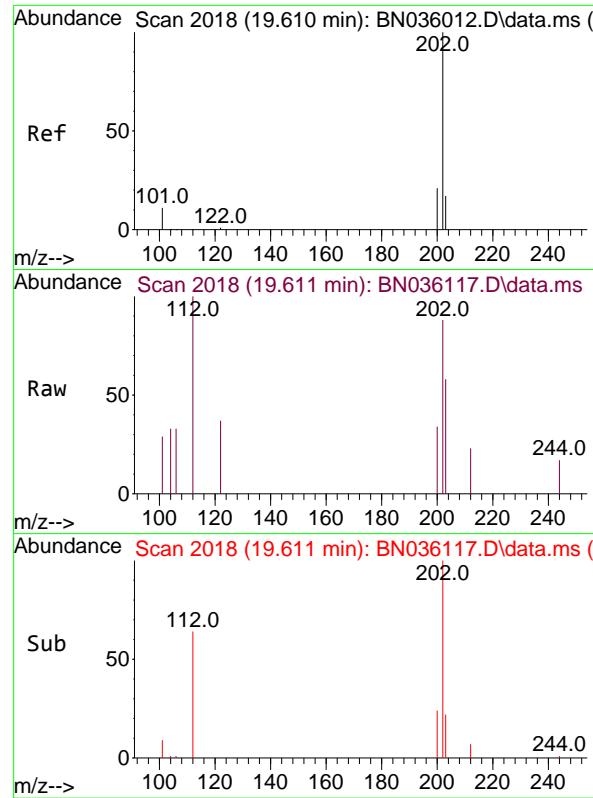
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2256  
Delta R.T. 0.009 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt Ion:240 Resp: 5413  
Ion Ratio Lower Upper  
240 100  
120 13.8 13.9 20.9#  
236 30.0 23.7 35.5





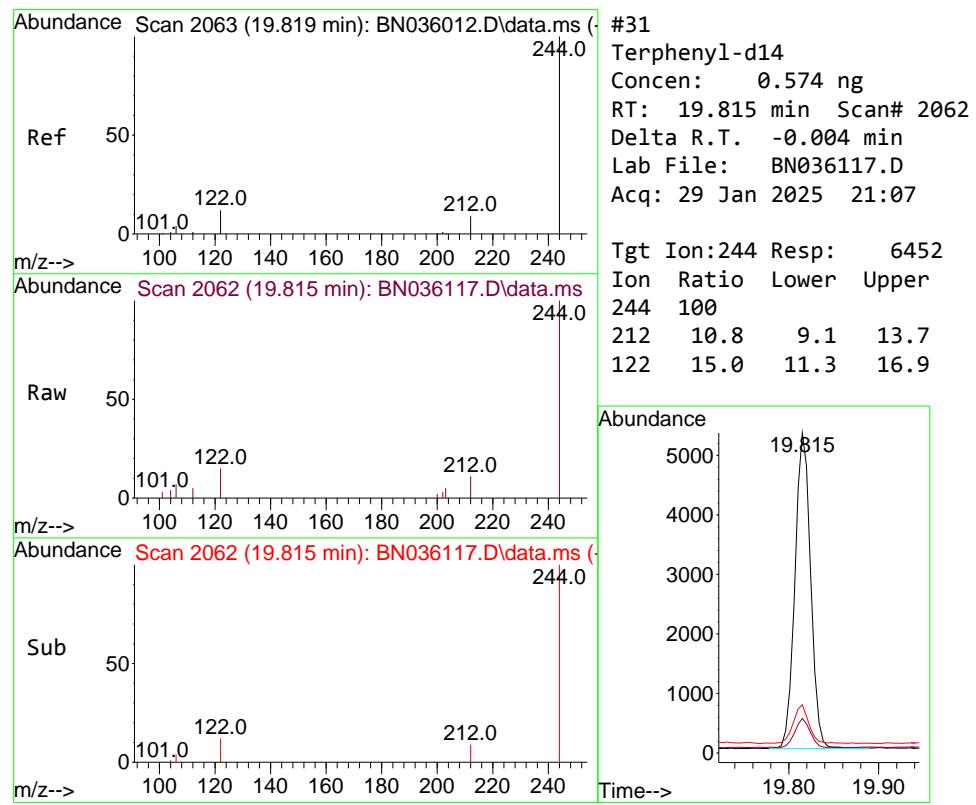
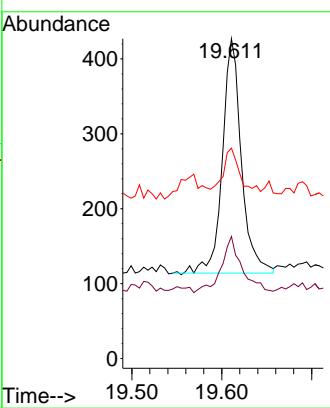
#30  
Pyrene  
Concen: 0.021 ng  
RT: 19.611 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Instrument : BNA\_N

ClientSampleId : BP-VPB-192-GW-260-262

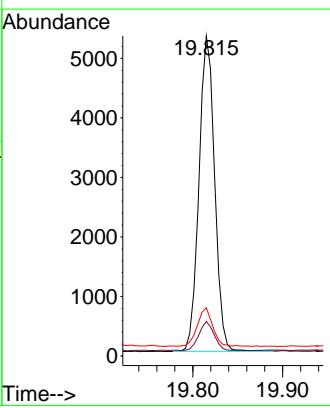
### Manual Integrations APPROVED

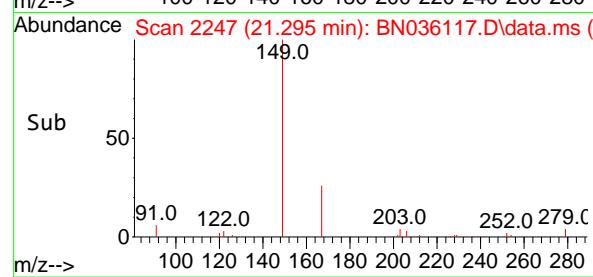
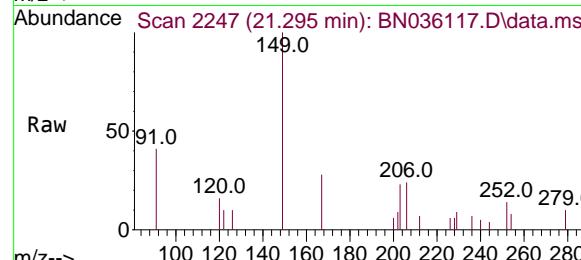
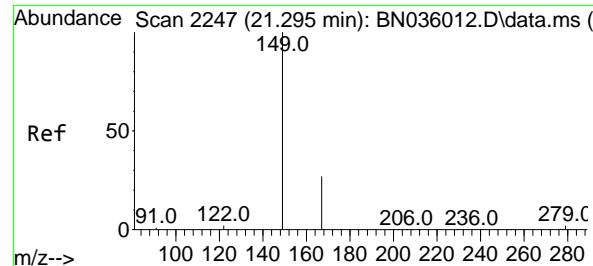
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#31  
Terphenyl-d14  
Concen: 0.574 ng  
RT: 19.815 min Scan# 2062  
Delta R.T. -0.004 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt Ion:244 Resp: 6452  
Ion Ratio Lower Upper  
244 100  
212 10.8 9.1 13.7  
122 15.0 11.3 16.9





#34

Bis(2-ethylhexyl)phthalate

Concen: 0.146 ng

RT: 21.295 min Scan# 2

Delta R.T. 0.000 min

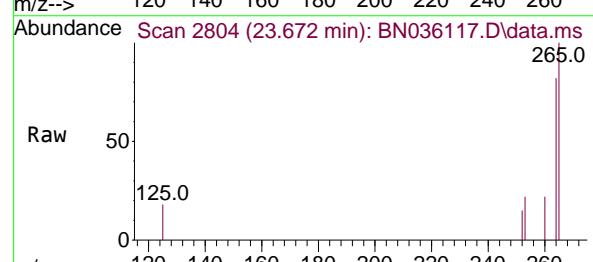
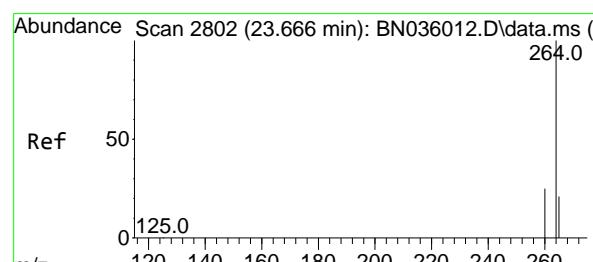
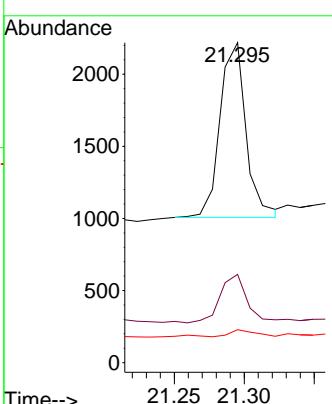
Lab File: BN036117.D

Acq: 29 Jan 2025 21:07

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

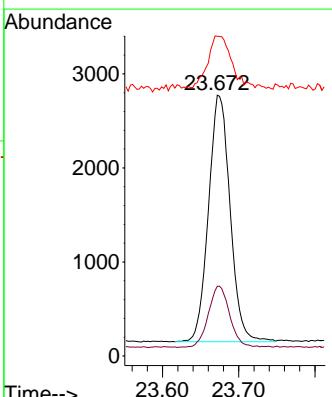
### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.672 min Scan# 2804  
Delta R.T. 0.006 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt Ion:264 Resp: 5178  
Ion Ratio Lower Upper  
264 100  
260 26.7 21.8 32.6  
265 122.6 56.6 84.8#





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:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-240-242			SDG No.:	Q1199	
Lab Sample ID:	Q1199-05			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	800	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
BN036118.D	1	01/28/25 09:50	01/29/25 21:43	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.49		0.090	0.25	0.25	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		85%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 - 150		110%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.31		53 - 106		77%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.54	*	58 - 132		134%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2470		7.803			
1146-65-2	Naphthalene-d8	5780		10.6			
15067-26-2	Acenaphthene-d10	3180		14.442			
1517-22-2	Phenanthrene-d10	6950		17.186			
1719-03-5	Chrysene-d12	5740		21.376			
1520-96-3	Perylene-d12	5850		23.672			

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\BN012925\  
 Data File : BN036118.D  
 Acq On : 29 Jan 2025 21:43  
 Operator : RC/JU  
 Sample : Q1199-05  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-GW-240-242**

Quant Time: Jan 30 00:36:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2471	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	5780	0.400	ng	-0.01
13) Acenaphthene-d10	14.442	164	3178	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6949	0.400	ng	0.00
29) Chrysene-d12	21.376	240	5738	0.400	ng	# 0.00
35) Perylene-d12	23.672	264	5850	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	1197	0.186	ng	0.03
5) Phenol-d6	7.016	99	986	0.131	ng	0.04
8) Nitrobenzene-d5	8.956	82	1901	0.348	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2677	0.341	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	666	0.327	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4374	0.308	ng	0.00
27) Fluoranthene-d10	19.216	212	7927	0.440	ng	0.00
31) Terphenyl-d14	19.815	244	6416	0.538	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.303	88	1080	0.391	ng	# 88
9) Naphthalene	10.643	128	521	0.031	ng	# 70
16) Acenaphthylene	14.153	152	318	0.021	ng	97
25) Phenanthrene	17.224	178	739m	0.035	ng	
34) Bis(2-ethylhexyl)phtha...	21.295	149	1619	0.142	ng	# 99

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

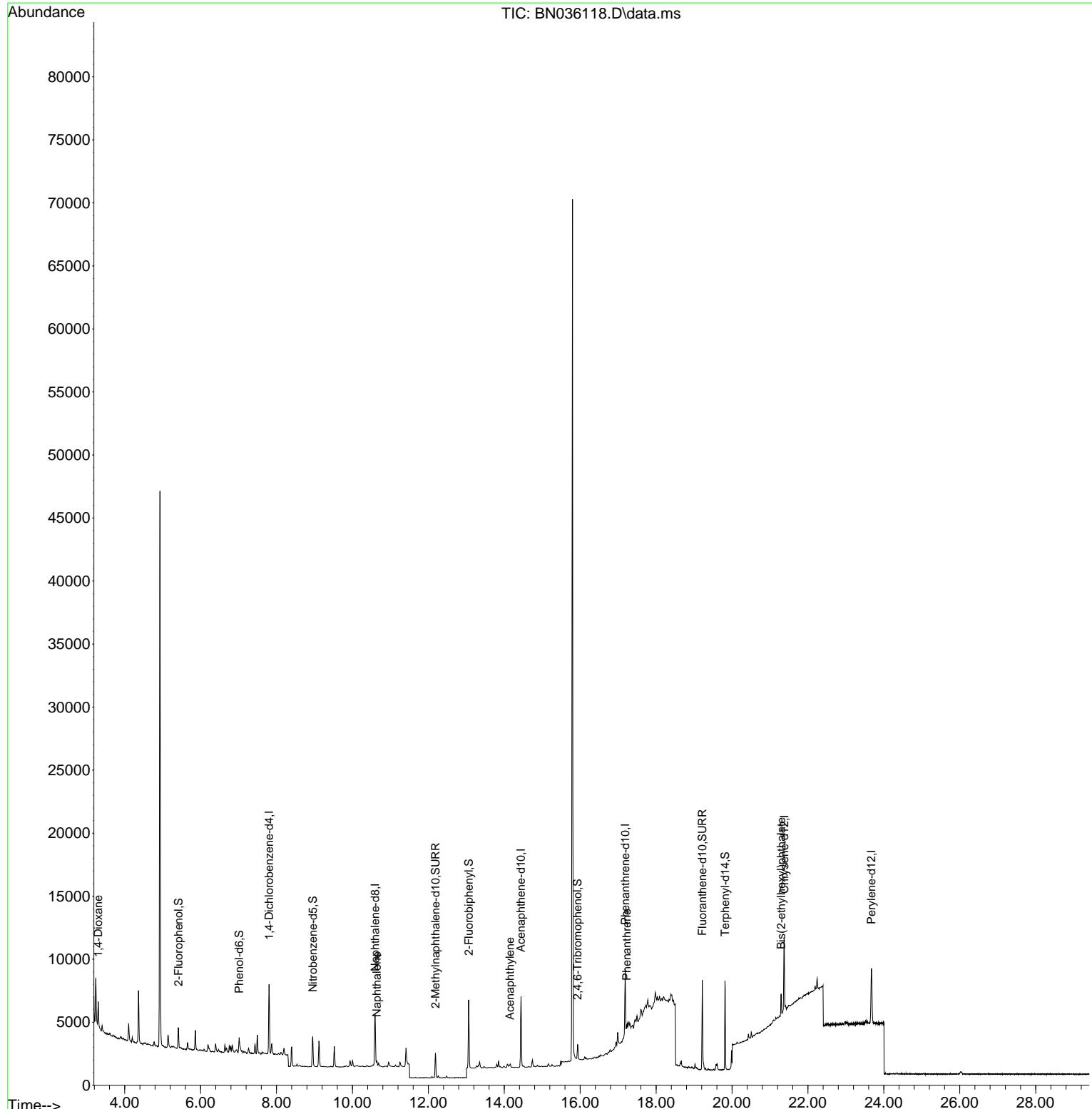
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036118.D  
 Acq On : 29 Jan 2025 21:43  
 Operator : RC/JU  
 Sample : Q1199-05  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

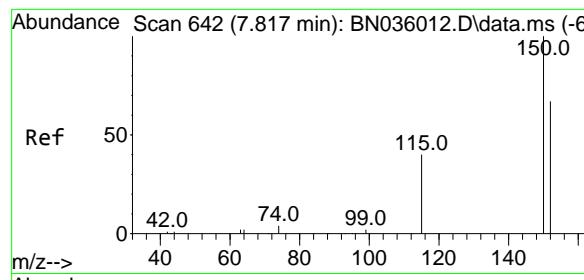
Quant Time: Jan 30 00:36:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-240-242

**Manual Integrations**  
**APPROVED**

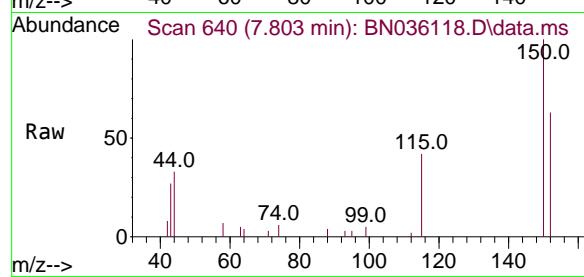
Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

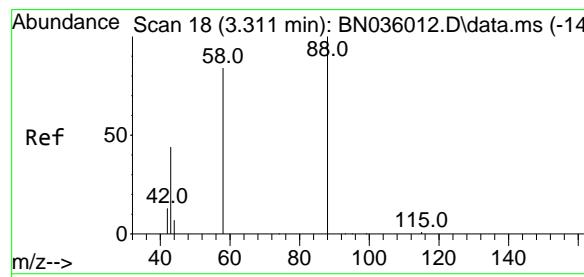
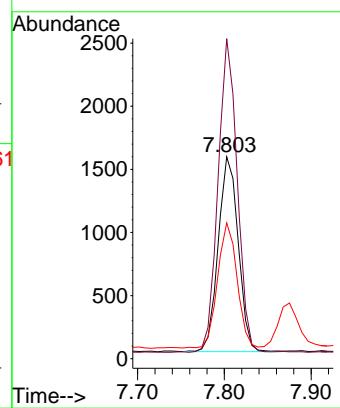
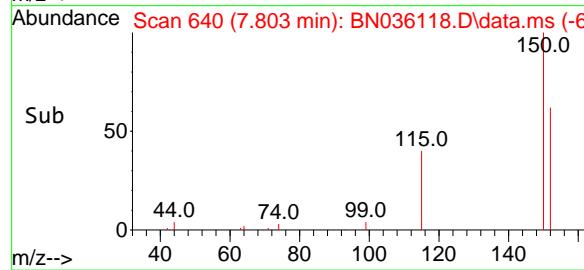
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-240-242



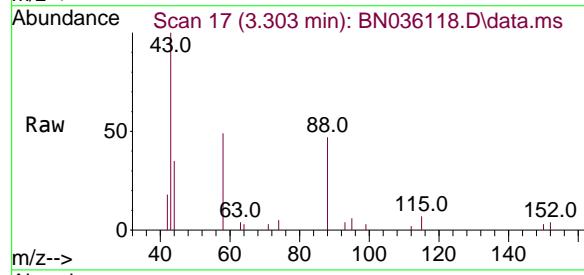
Tgt Ion:152 Resp: 247:  
Ion Ratio Lower Upper  
152 100  
150 158.4 117.4 176.2  
115 67.3 51.0 76.4

### Manual Integrations APPROVED

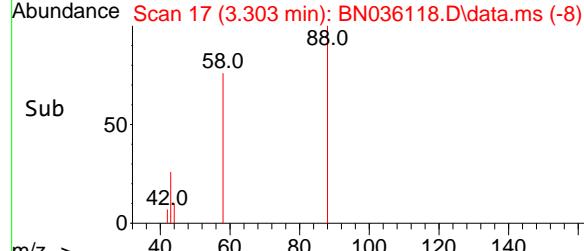
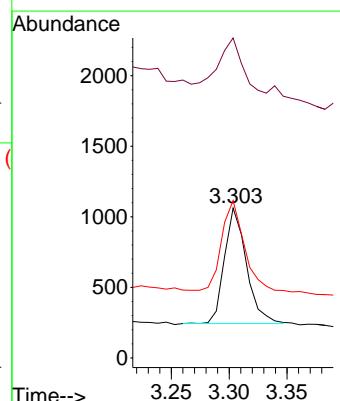
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

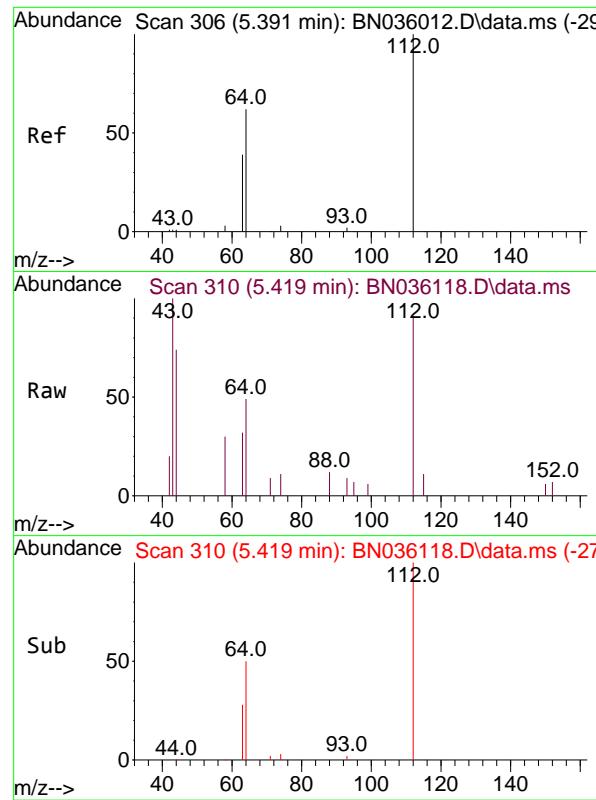


#2  
1,4-Dioxane  
Concen: 0.391 ng  
RT: 3.303 min Scan# 17  
Delta R.T. -0.007 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43



Tgt Ion: 88 Resp: 1080  
Ion Ratio Lower Upper  
88 100  
43 64.4 38.5 57.7#  
58 78.7 66.6 99.8





#4

2-Fluorophenol

Concen: 0.186 ng

RT: 5.419 min Scan# 3

Delta R.T. 0.029 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Instrument :

BNA\_N

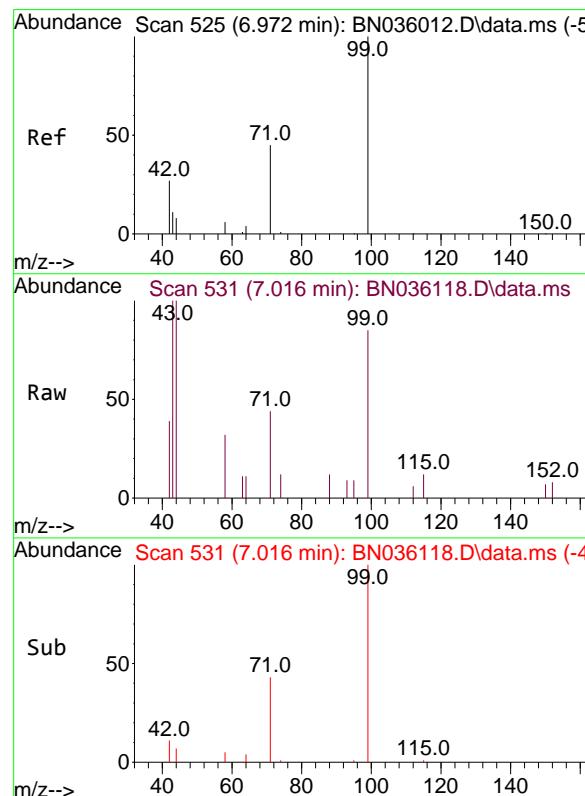
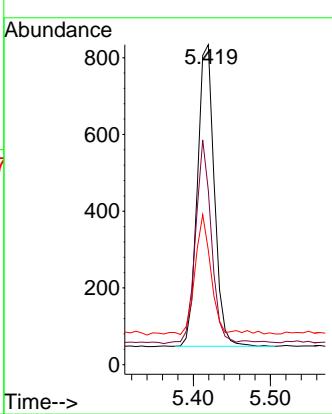
ClientSampleId :

BP-VPB-192-GW-240-242

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#5

Phenol-d6

Concen: 0.131 ng

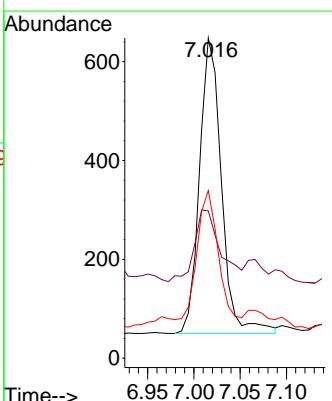
RT: 7.016 min Scan# 531

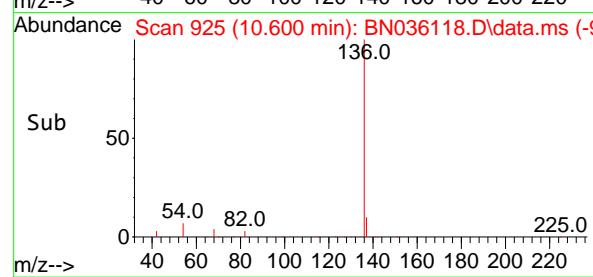
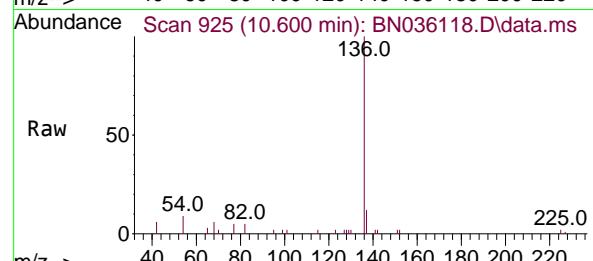
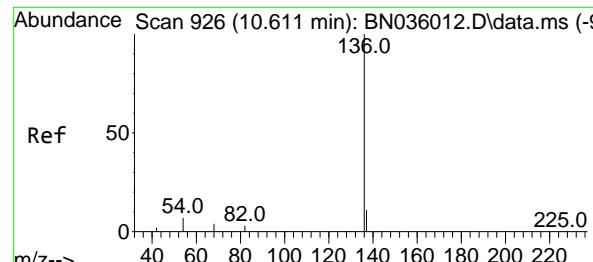
Delta R.T. 0.043 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Tgt	Ion:	99	Resp:	986
Ion	Ratio	Lower	Upper	
99	100			
42	28.6	26.8	40.2	
71	49.0	36.6	55.0	



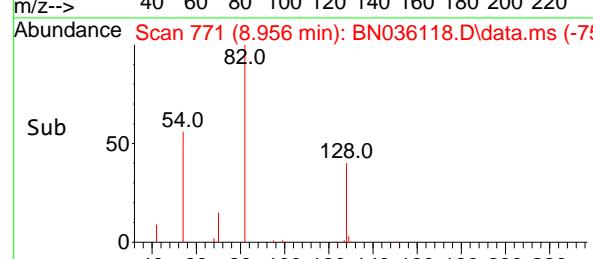
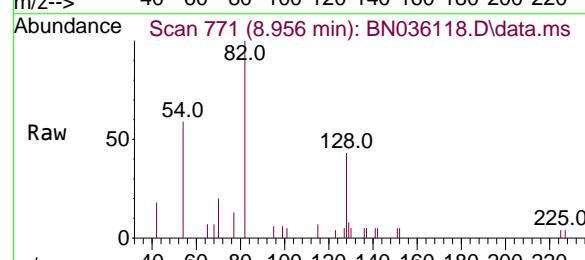
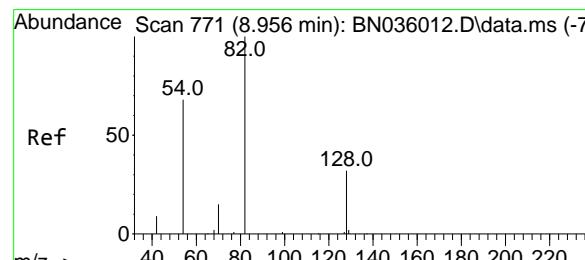


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-240-242

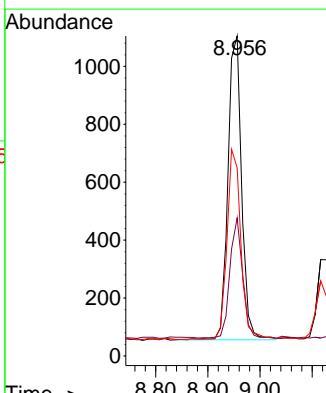
### Manual Integrations APPROVED

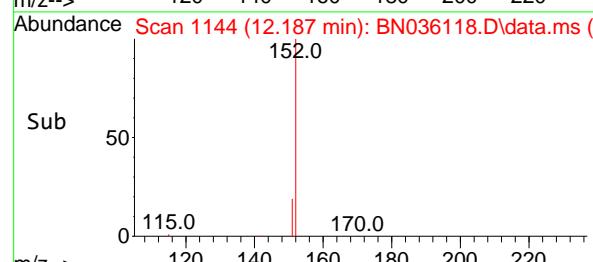
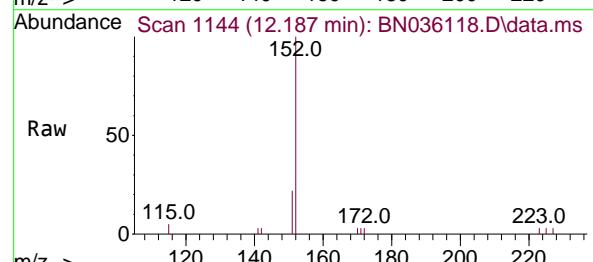
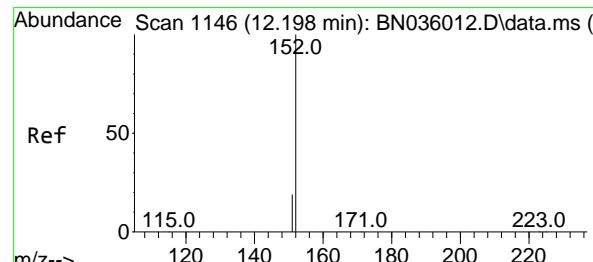
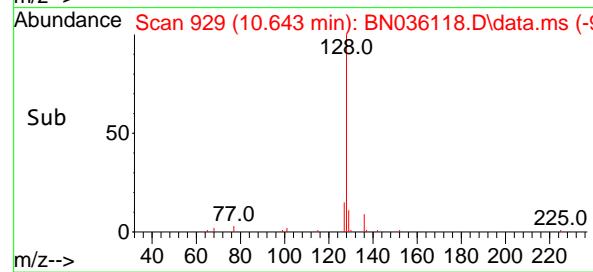
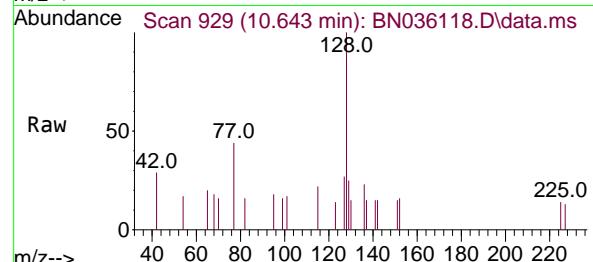
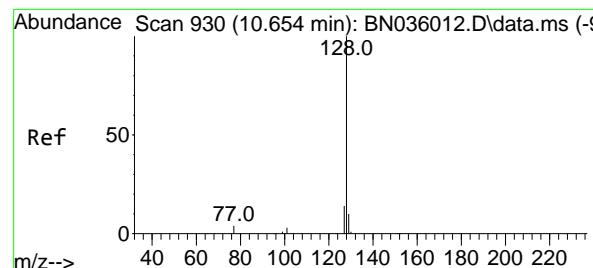
Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025



#8  
 Nitrobenzene-d5  
 Concen: 0.348 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. 0.000 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Tgt Ion: 82 Resp: 1901  
 Ion Ratio Lower Upper  
 82 100  
 128 43.2 28.8 43.2  
 54 58.8 55.8 83.8





#9

Naphthalene

Concen: 0.031 ng

RT: 10.643 min Scan# 9

Delta R.T. -0.011 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Instrument :

BNA\_N

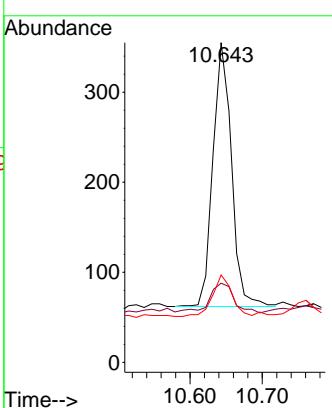
ClientSampleId :

BP-VPB-192-GW-240-242

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#11

2-Methylnaphthalene-d10

Concen: 0.341 ng

RT: 12.187 min Scan# 1144

Delta R.T. -0.010 min

Lab File: BN036118.D

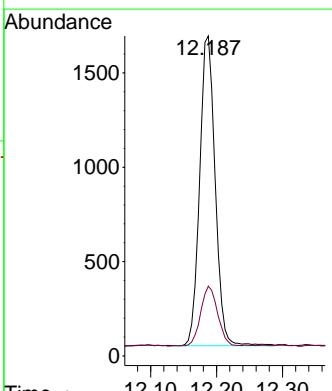
Acq: 29 Jan 2025 21:43

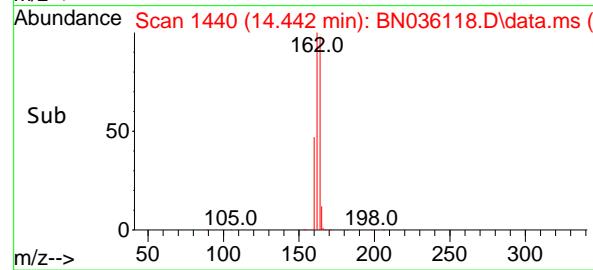
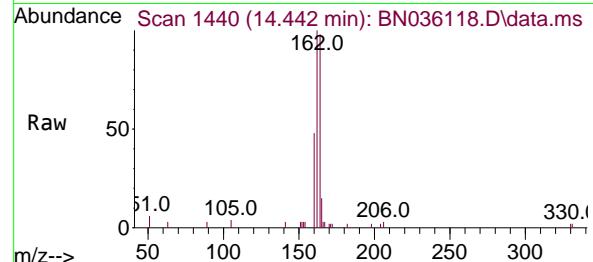
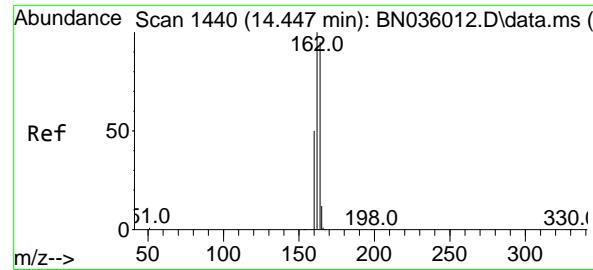
Tgt Ion:152 Resp: 2677

Ion Ratio Lower Upper

152 100

151 21.1 16.6 25.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.442 min Scan# 1440

Delta R.T. -0.006 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Instrument :

BNA\_N

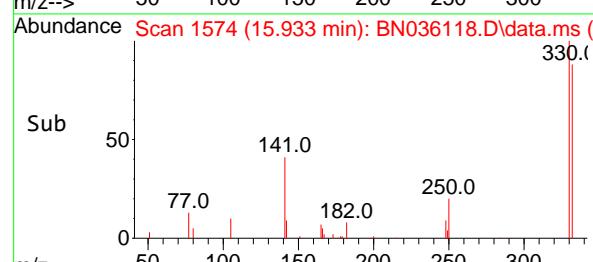
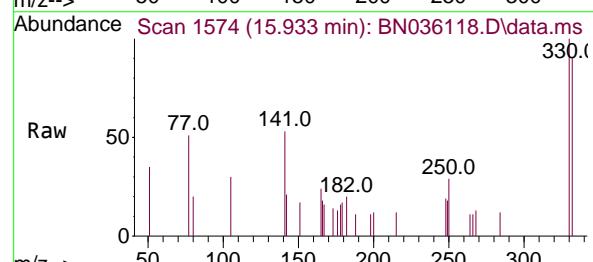
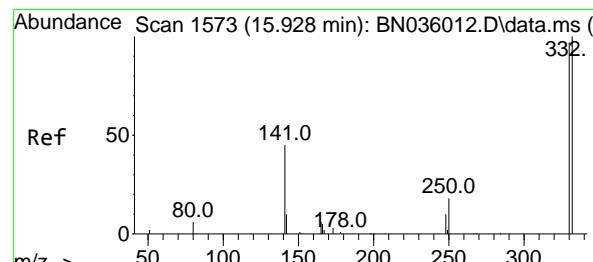
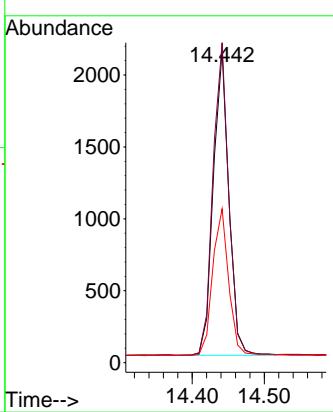
ClientSampleId :

BP-VPB-192-GW-240-242

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#14

2,4,6-Tribromophenol

Concen: 0.327 ng

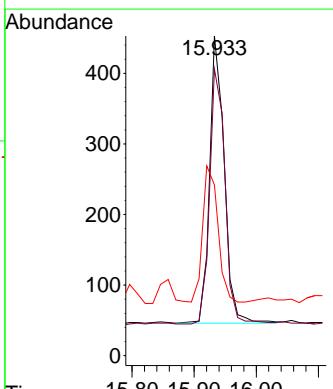
RT: 15.933 min Scan# 1574

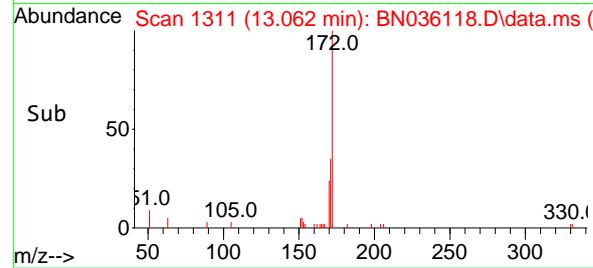
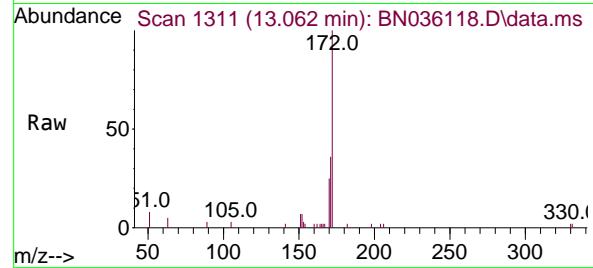
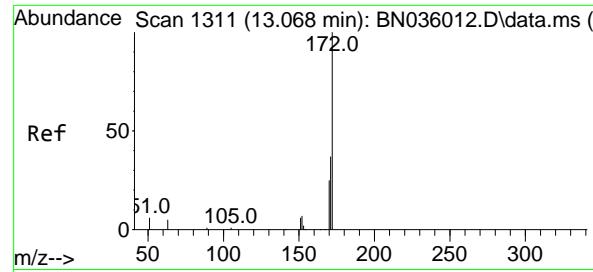
Delta R.T. 0.005 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Tgt	Ion:330	Resp:	666
Ion	Ratio	Lower	Upper
330	100		
332	93.5	81.0	121.4
141	50.5	36.7	55.1



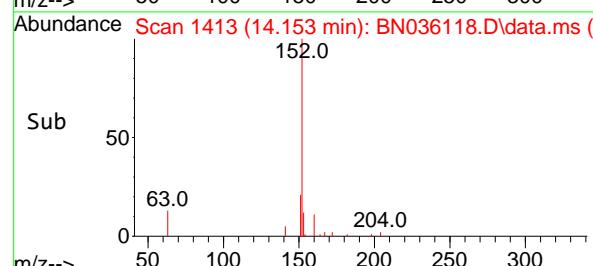
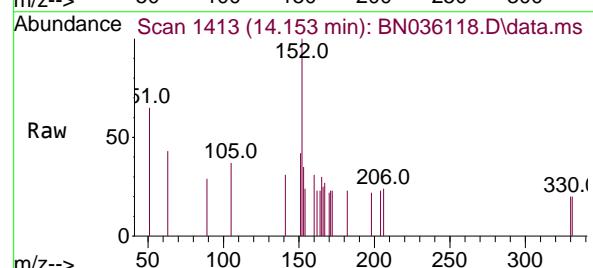
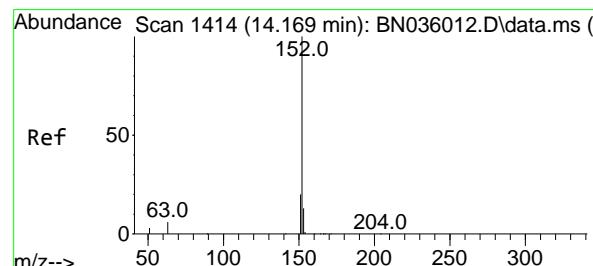
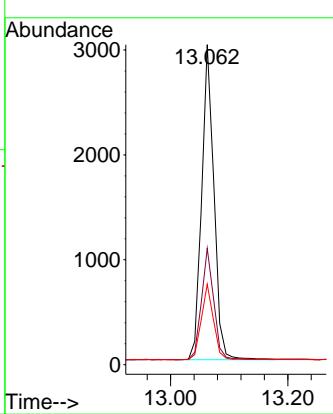


#15  
2-Fluorobiphenyl  
Concen: 0.308 ng  
RT: 13.062 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

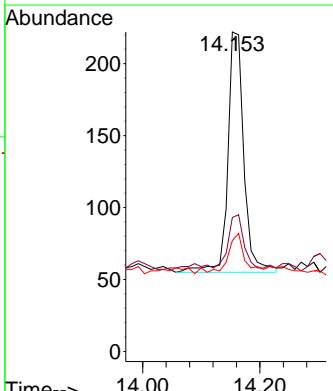
**Manual Integrations**  
**APPROVED**

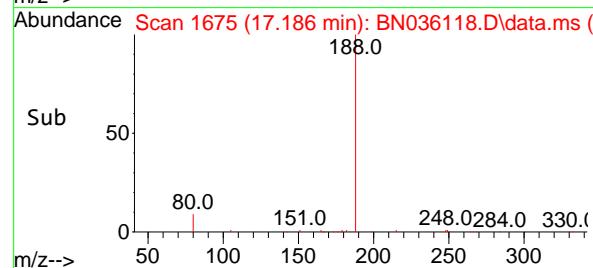
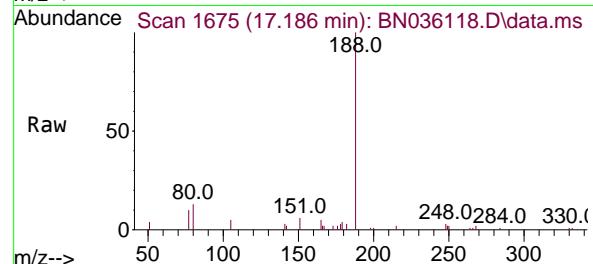
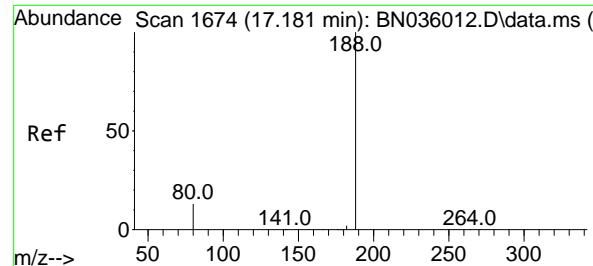
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#16  
Acenaphthylene  
Concen: 0.021 ng  
RT: 14.153 min Scan# 1413  
Delta R.T. -0.016 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

Tgt Ion:152 Resp: 318  
Ion Ratio Lower Upper  
152 100  
151 20.8 16.2 24.2  
153 15.4 10.4 15.6





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Instrument :

BNA\_N

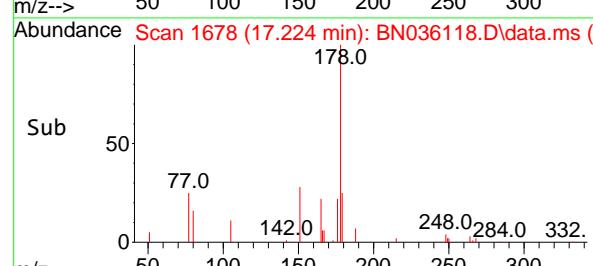
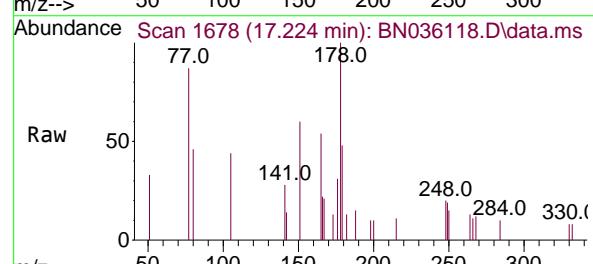
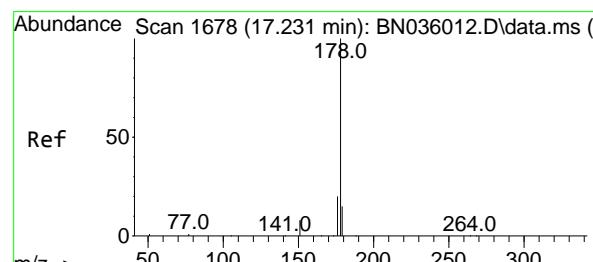
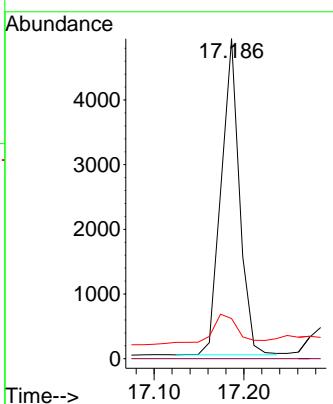
ClientSampleId :

BP-VPB-192-GW-240-242

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#25

Phenanthrene

Concen: 0.035 ng m

RT: 17.224 min Scan# 1678

Delta R.T. -0.007 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

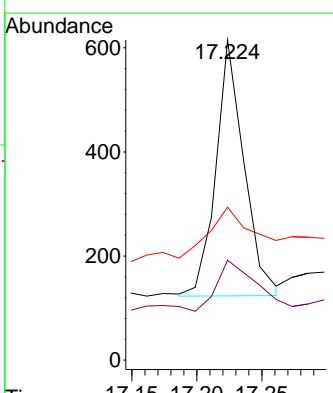
Tgt Ion:178 Resp: 739

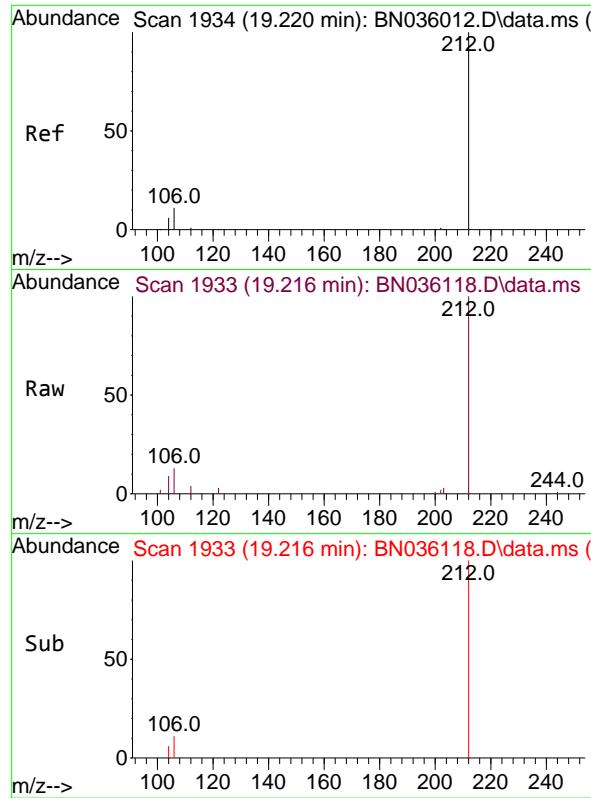
Ion Ratio Lower Upper

178 100

176 28.4 16.0 24.0#

179 68.1 12.4 18.6#



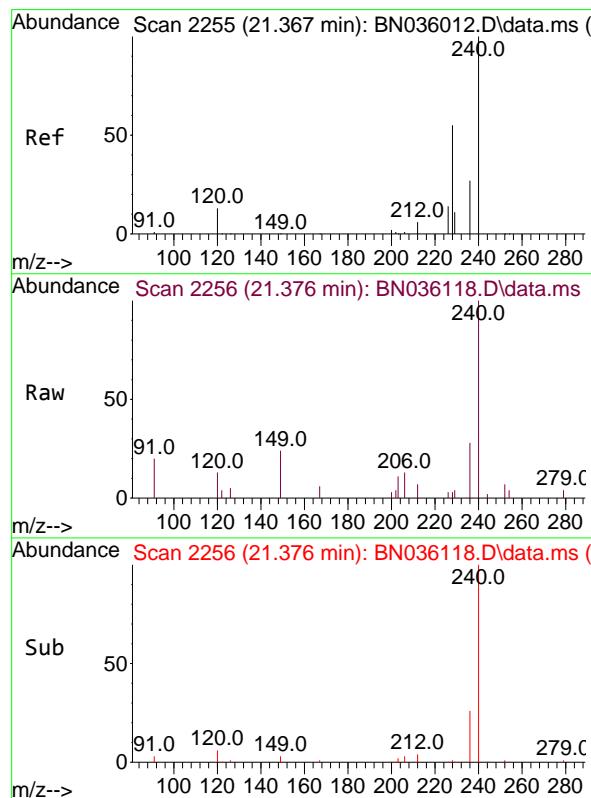
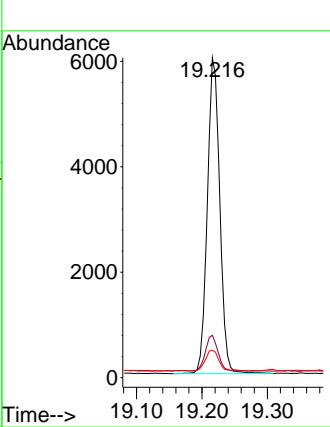


#27  
Fluoranthene-d10  
Concen: 0.440 ng  
RT: 19.216 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-240-242

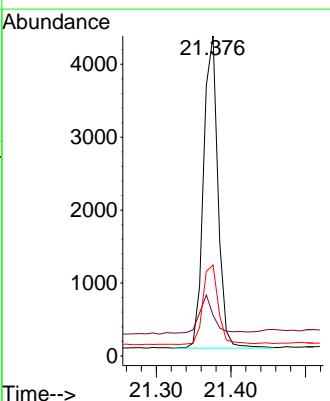
**Manual Integrations**  
**APPROVED**

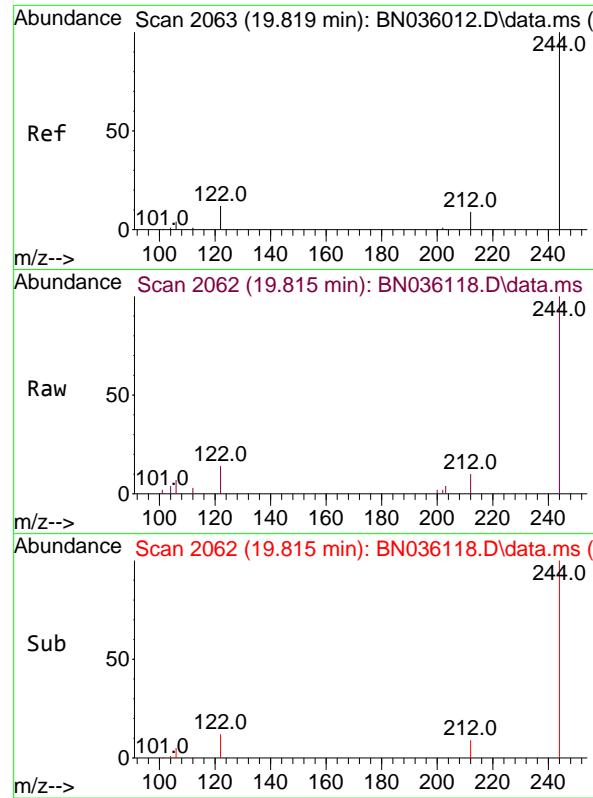
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2256  
Delta R.T. 0.009 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

Tgt Ion:240 Resp: 5738  
Ion Ratio Lower Upper  
240 100  
120 12.8 13.9 20.9#  
236 28.5 23.7 35.5



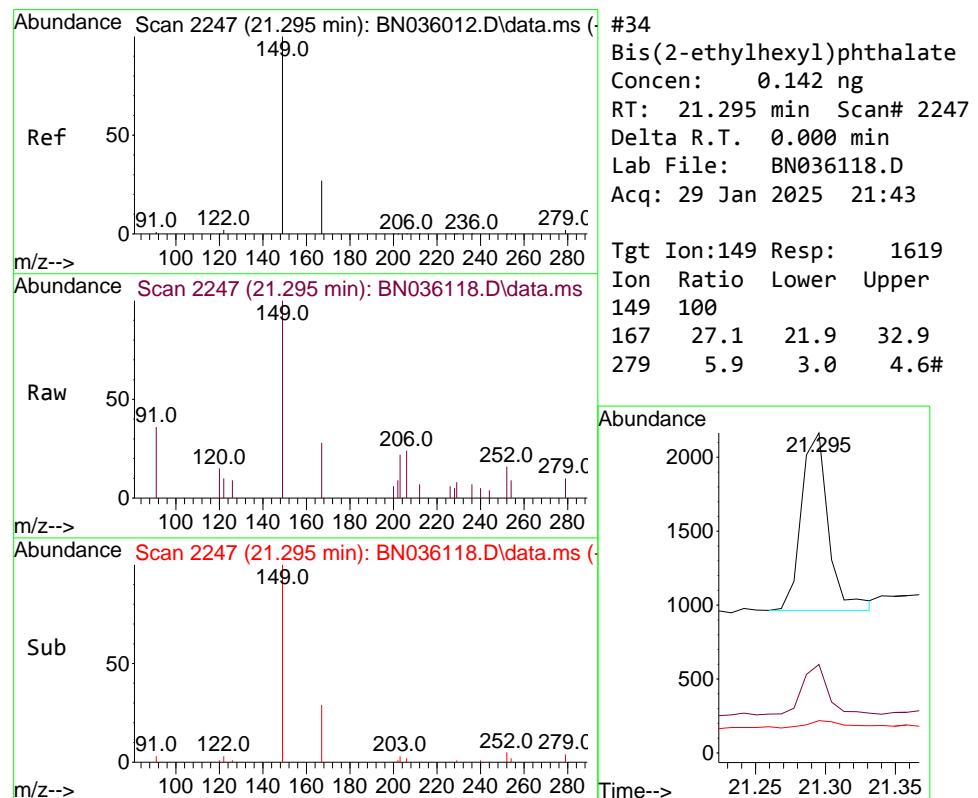
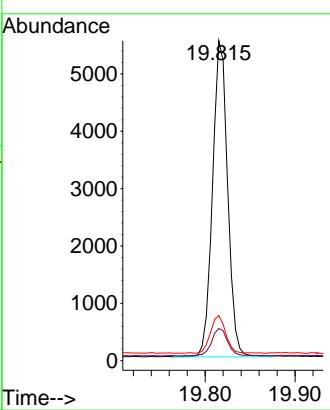


#31  
Terphenyl-d14  
Concen: 0.538 ng  
RT: 19.815 min Scan# 2  
Delta R.T. -0.004 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-240-242

Manual Integrations  
APPROVED

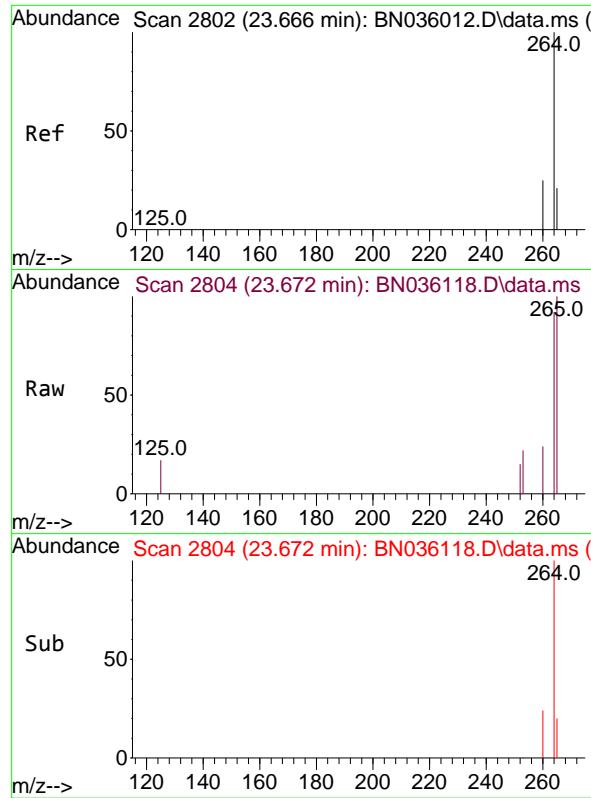
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.142 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

Abundance

Time-->



#35

Perylene-d<sub>12</sub>

Concen: 0.400 ng

RT: 23.672 min Scan# 2

Delta R.T. 0.006 min

Lab File: BN036118.D

Acq: 29 Jan 2025 21:43

Instrument :

BNA\_N

ClientSampleId :

BP-VPB-192-GW-240-242

Tgt Ion:264 Resp: 5850

Ion Ratio Lower Upper

264 100

260 26.2 21.8 32.6

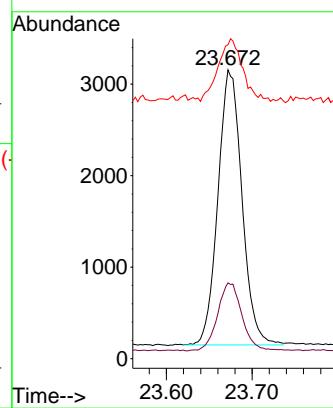
265 108.7 56.6 84.8

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025





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:	01/23/25	
Project:	CTO WE13			Date Received:	01/27/25	
Client Sample ID:	BP-VPB-192-GW-220-222			SDG No.:	Q1199	
Lab Sample ID:	Q1199-06			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	820	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
BN036114.D	1	01/28/25 09:50	01/29/25 19:19	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.25		0.080	0.24	0.24	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.38		30 - 150		95%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.48		30 - 150		119%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.38		55 - 111		94%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.32		53 - 106		80%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		137%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2010		7.803			
1146-65-2	Naphthalene-d8	4880		10.6			
15067-26-2	Acenaphthene-d10	2770		14.441			
1517-22-2	Phenanthrene-d10	6230		17.186			
1719-03-5	Chrysene-d12	5540		21.376			
1520-96-3	Perylene-d12	5180		23.675			

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\BN012925\  
 Data File : BN036114.D  
 Acq On : 29 Jan 2025 19:19  
 Operator : RC/JU  
 Sample : Q1199-06  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-GW-220-222**

Quant Time: Jan 30 00:35:48 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

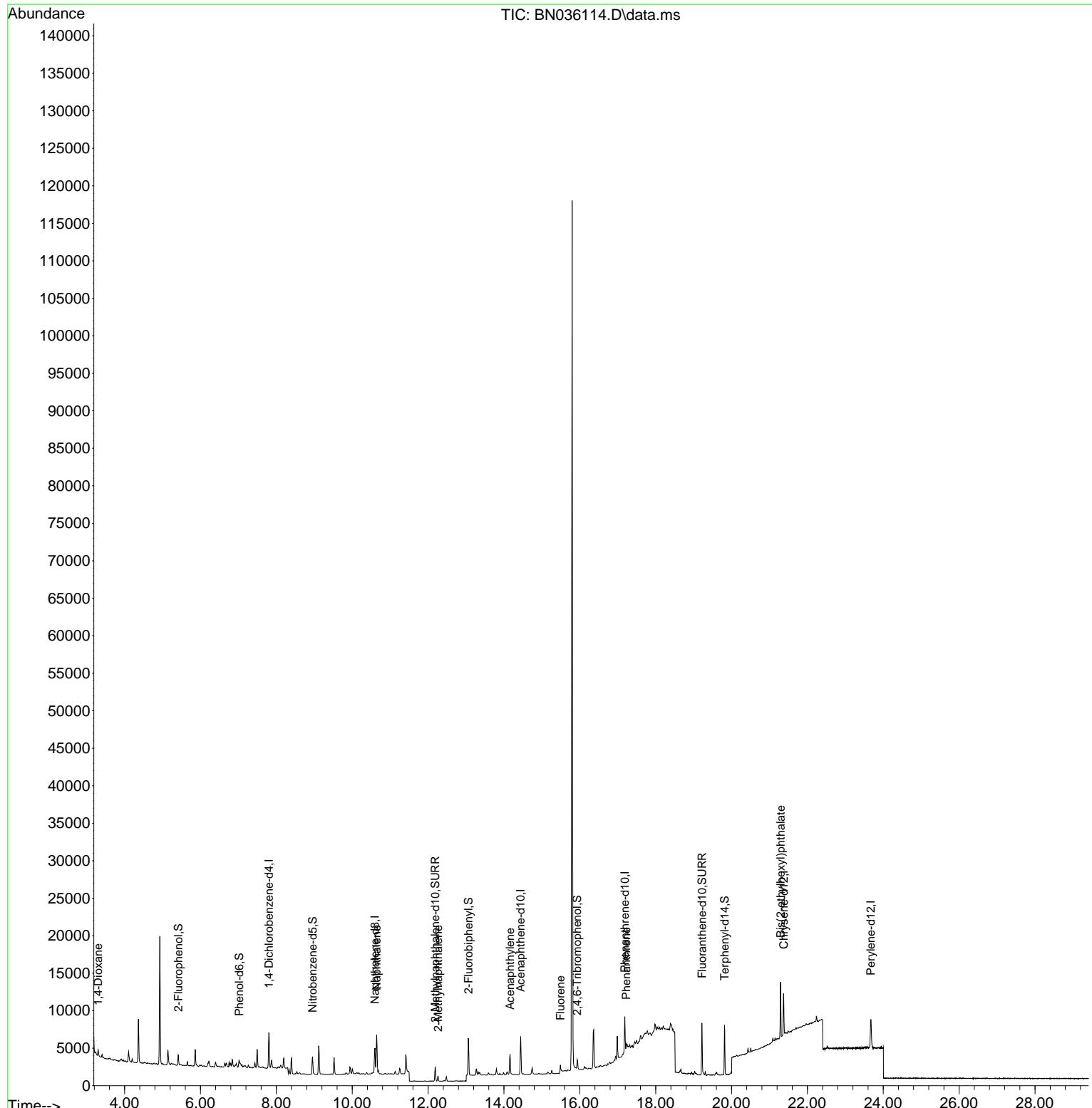
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2008	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	4878	0.400	ng	-0.01
13) Acenaphthene-d10	14.441	164	2770	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6230	0.400	ng	0.00
29) Chrysene-d12	21.376	240	5536	0.400	ng	0.00
35) Perylene-d12	23.675	264	5180	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	964	0.185	ng	0.03
5) Phenol-d6	7.023	99	755	0.123	ng	0.05
8) Nitrobenzene-d5	8.956	82	1735	0.377	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2524	0.381	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	633	0.356	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	3954	0.320	ng	0.00
27) Fluoranthene-d10	19.220	212	7712	0.478	ng	0.00
31) Terphenyl-d14	19.815	244	6318	0.549	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.303	88	461	0.205	ng	# 71
9) Naphthalene	10.643	128	6561	0.463	ng	99
12) 2-Methylnaphthalene	12.263	142	460	0.052	ng	95
16) Acenaphthylene	14.163	152	3125	0.238	ng	98
18) Fluorene	15.489	166	718	0.064	ng	# 94
25) Phenanthrene	17.223	178	1212	0.065	ng	# 90
34) Bis(2-ethylhexyl)phtha...	21.295	149	7282	0.662	ng	99

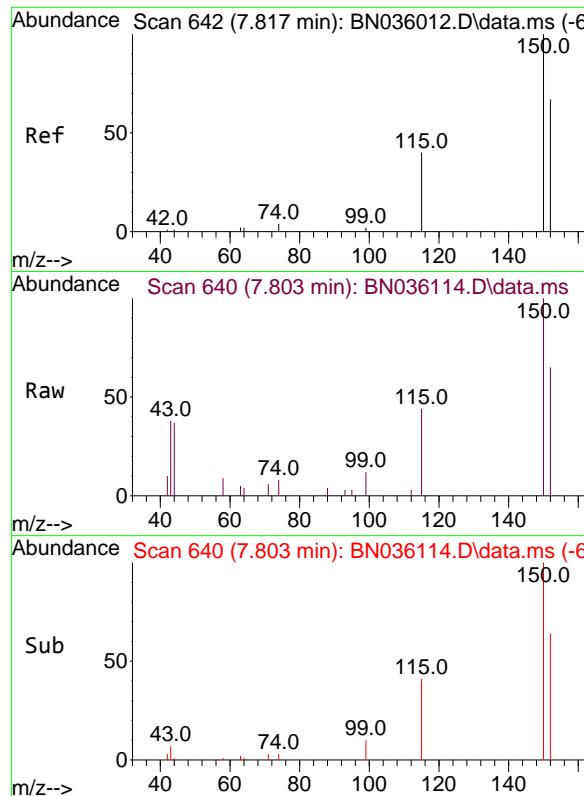
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036114.D  
 Acq On : 29 Jan 2025 19:19  
 Operator : RC/JU  
 Sample : Q1199-06  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-VPB-192-GW-220-222

Quant Time: Jan 30 00:35:48 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

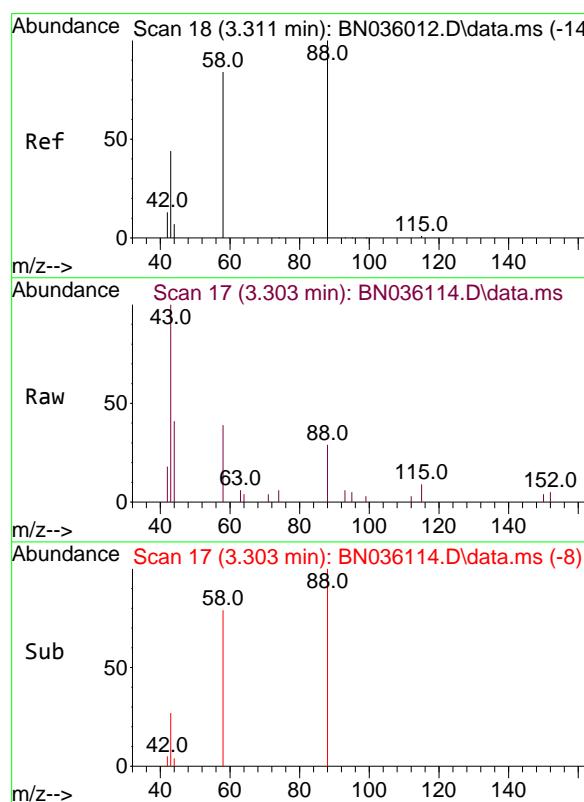
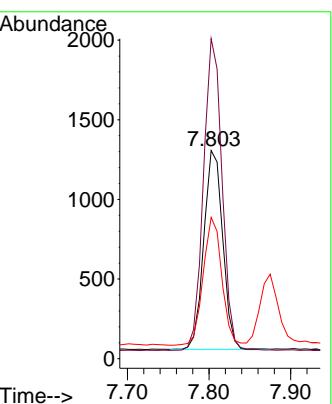




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.803 min Scan# 6  
 Delta R.T. -0.014 min  
 Lab File: BN036114.D  
 Acq: 29 Jan 2025 19:19

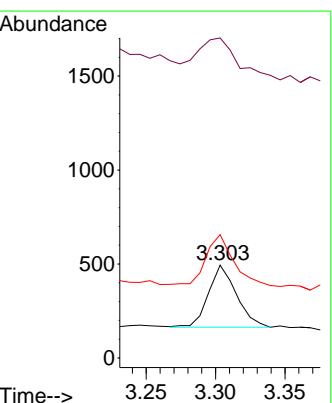
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-220-222

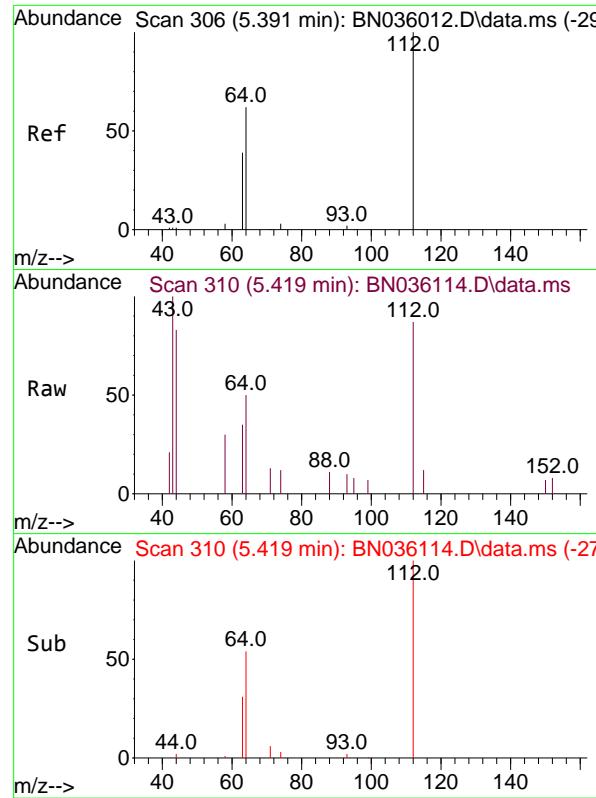
Tgt Ion:152 Resp: 2008  
 Ion Ratio Lower Upper  
 152 100  
 150 153.7 117.4 176.2  
 115 67.9 51.0 76.4



#2  
 1,4-Dioxane  
 Concen: 0.205 ng  
 RT: 3.303 min Scan# 17  
 Delta R.T. -0.007 min  
 Lab File: BN036114.D  
 Acq: 29 Jan 2025 19:19

Tgt Ion: 88 Resp: 461  
 Ion Ratio Lower Upper  
 88 100  
 43 98.9 38.5 57.7#  
 58 85.0 66.6 99.8

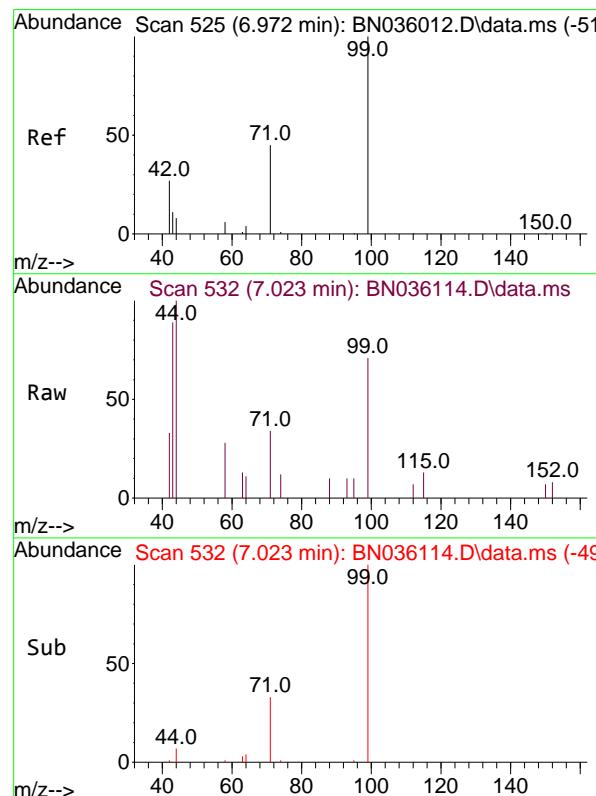
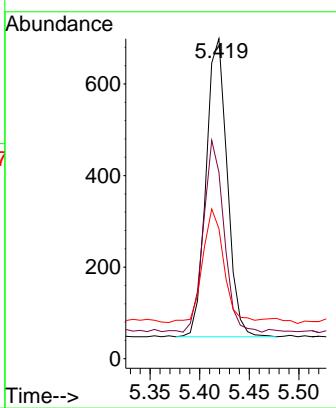




#4  
 2-Fluorophenol  
 Concen: 0.185 ng  
 RT: 5.419 min Scan# 3  
 Delta R.T. 0.029 min  
 Lab File: BN036114.D  
 Acq: 29 Jan 2025 19:19

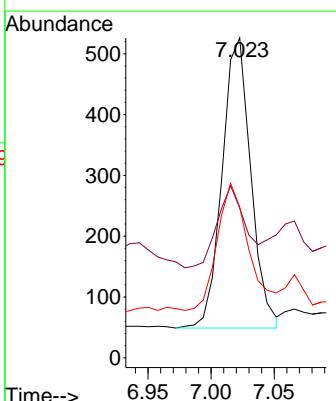
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-220-222

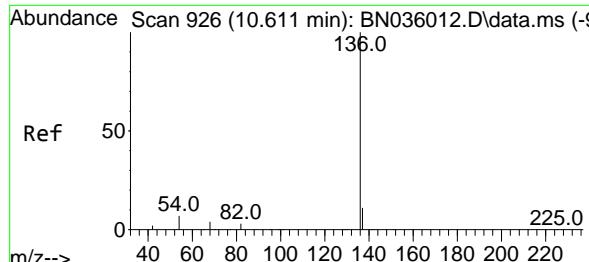
Tgt Ion:112 Resp: 964  
 Ion Ratio Lower Upper  
 112 100  
 64 62.3 50.0 75.0  
 63 38.0 30.7 46.1



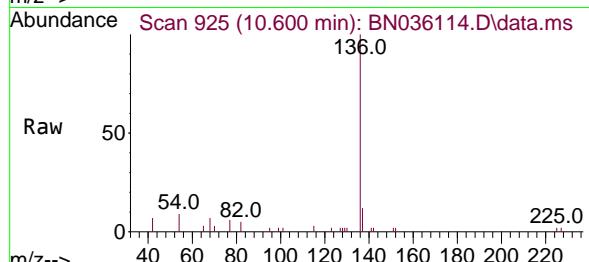
#5  
 Phenol-d6  
 Concen: 0.123 ng  
 RT: 7.023 min Scan# 532  
 Delta R.T. 0.050 min  
 Lab File: BN036114.D  
 Acq: 29 Jan 2025 19:19

Tgt Ion: 99 Resp: 755  
 Ion Ratio Lower Upper  
 99 100  
 42 27.7 26.8 40.2  
 71 54.3 36.6 55.0

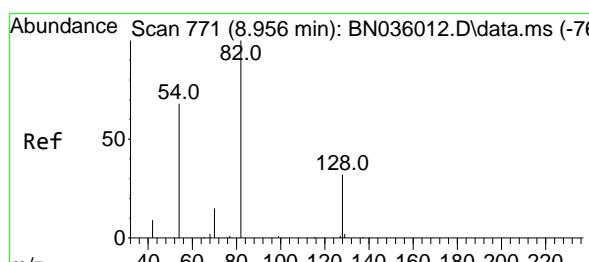
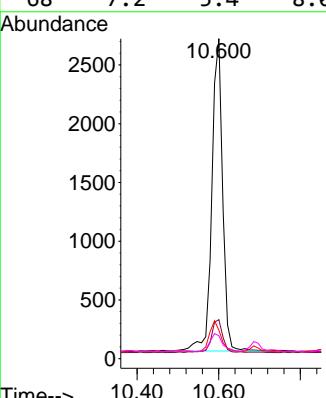
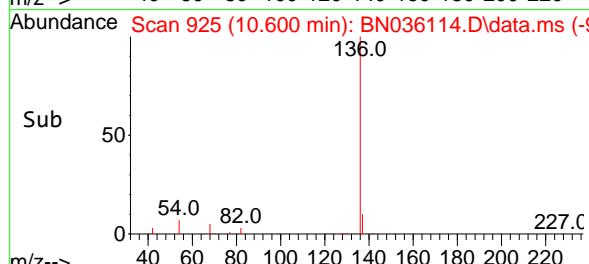




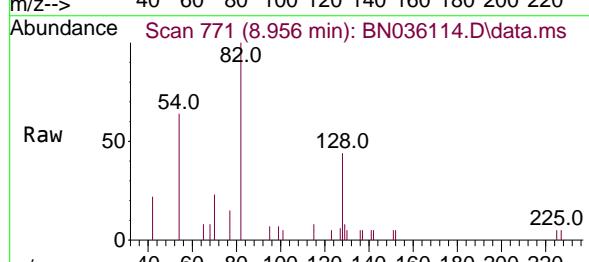
#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.600 min Scan# 9 Instrument :  
Delta R.T. -0.011 min BNA\_N  
Lab File: BN036114.D ClientSampleId :  
Acq: 29 Jan 2025 19:19 BP-VPB-192-GW-220-222



Tgt	Ion:136	Resp:	4878
Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.4	15.6
54	8.9	7.7	11.5
68	7.2	5.4	8.9



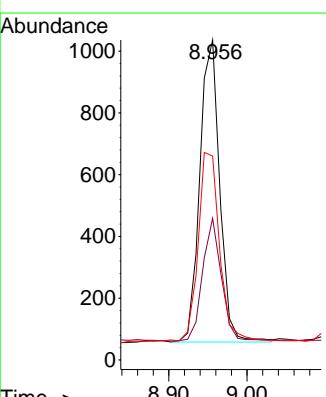
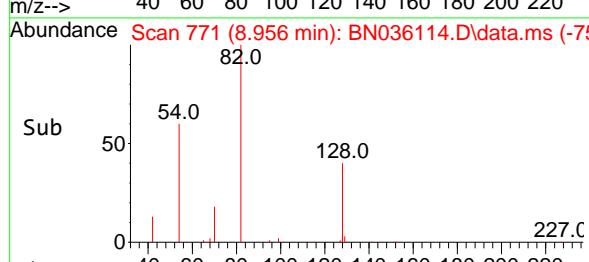
#8  
Nitrobenzene-d5  
Concen: 0.377 ng  
RT: 8.956 min Scan# 771  
Delta R.T. -0.000 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

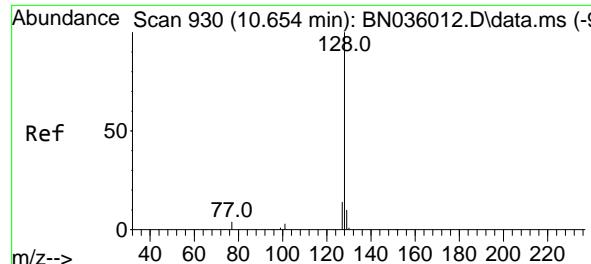


```

Tgt Ion: 82 Resp:    1735
Ion Ratio Lower Upper
 82 100
128 44.3   28.8   43.2#
 54 63.7   55.8   82.8

```





#9

Naphthalene

Concen: 0.463 ng

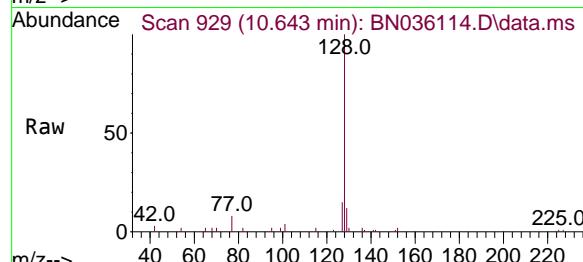
RT: 10.643 min Scan# 9

Delta R.T. -0.011 min

Lab File: BN036114.D

Acq: 29 Jan 2025 19:19

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222



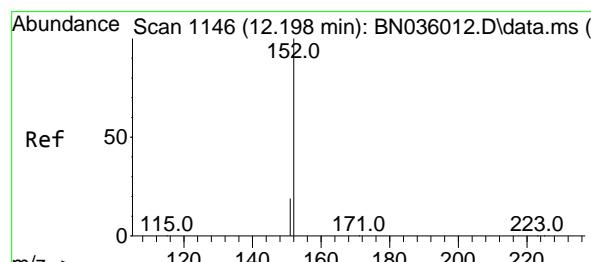
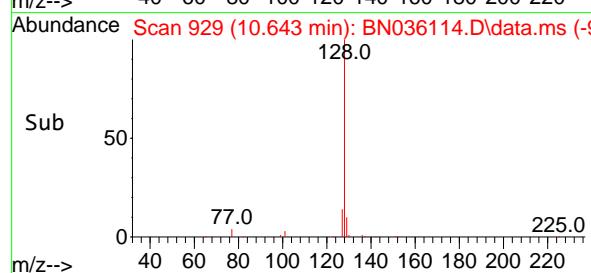
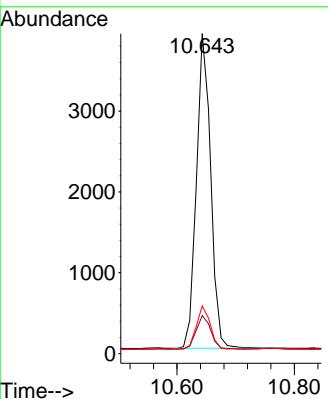
Tgt Ion:128 Resp: 6561

Ion Ratio Lower Upper

128 100

129 11.9 9.4 14.2

127 15.0 12.6 19.0



#11

2-Methylnaphthalene-d10

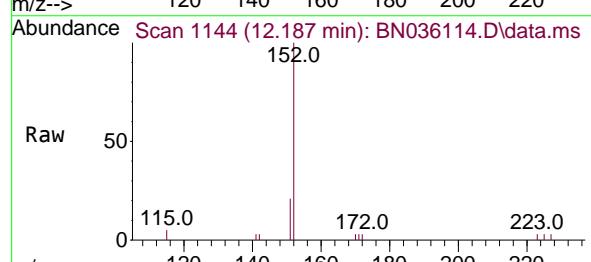
Concen: 0.381 ng

RT: 12.187 min Scan# 1144

Delta R.T. -0.010 min

Lab File: BN036114.D

Acq: 29 Jan 2025 19:19

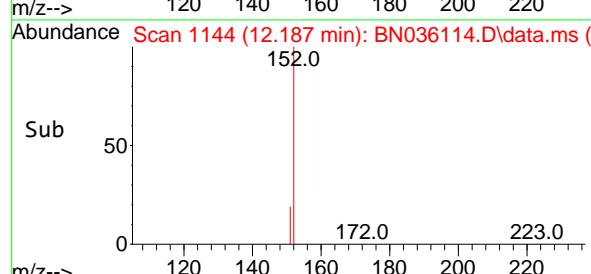
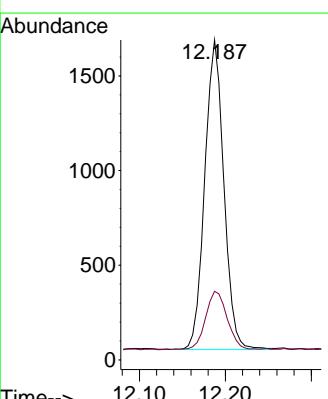


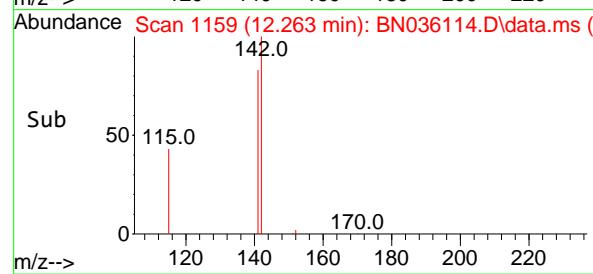
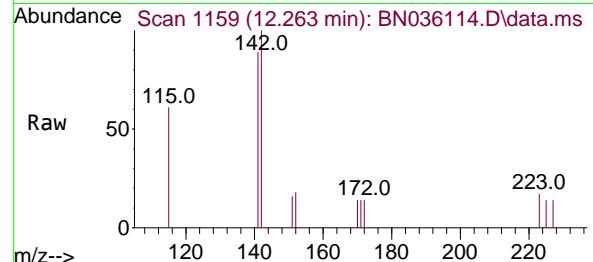
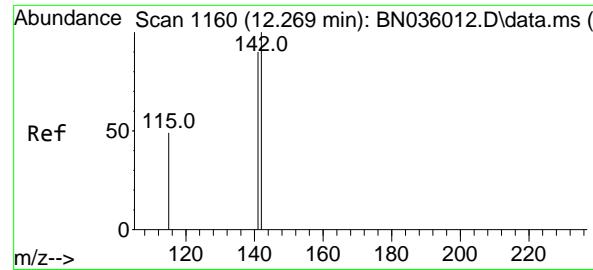
Tgt Ion:152 Resp: 2524

Ion Ratio Lower Upper

152 100

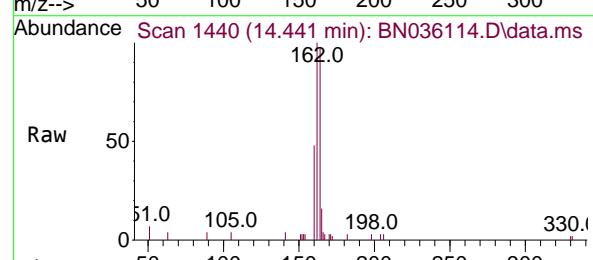
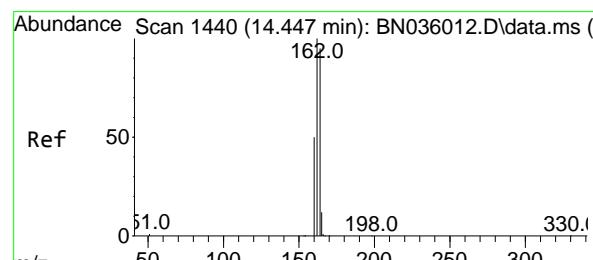
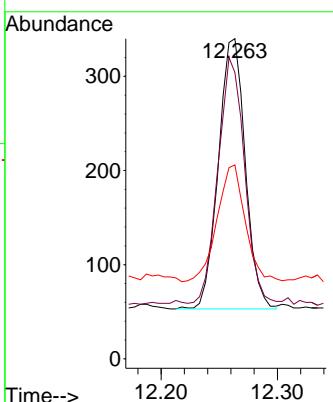
151 21.2 16.6 25.0





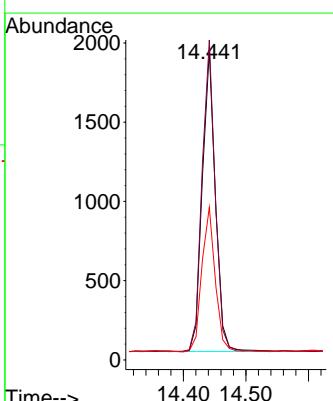
#12  
2-Methylnaphthalene  
Concen: 0.052 ng  
RT: 12.263 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN036114.D  
ClientSampleId : BP-VPB-192-GW-220-222  
Acq: 29 Jan 2025 19:19

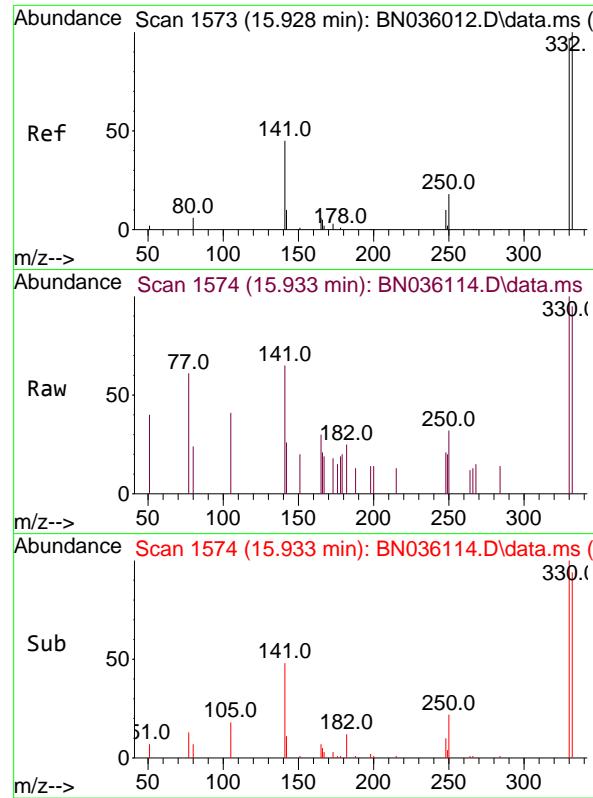
Tgt Ion:142 Resp: 460  
Ion Ratio Lower Upper  
142 100  
141 89.4 72.2 108.2  
115 60.6 41.2 61.8



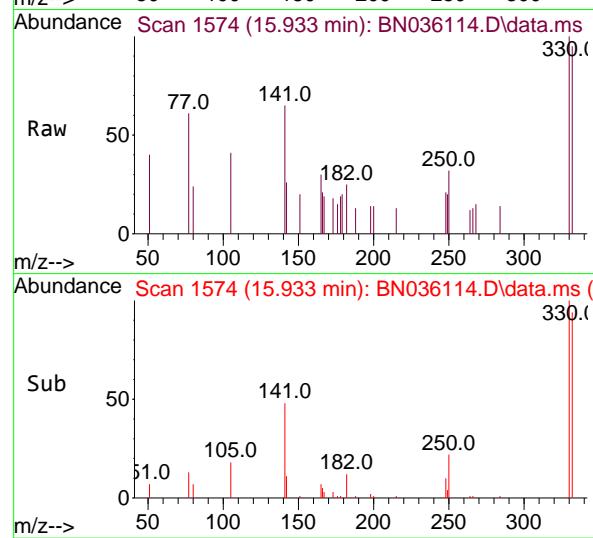
#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.441 min Scan# 1440  
Delta R.T. -0.006 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

Tgt Ion:164 Resp: 2770  
Ion Ratio Lower Upper  
164 100  
162 103.4 84.1 126.1  
160 49.3 43.8 65.8

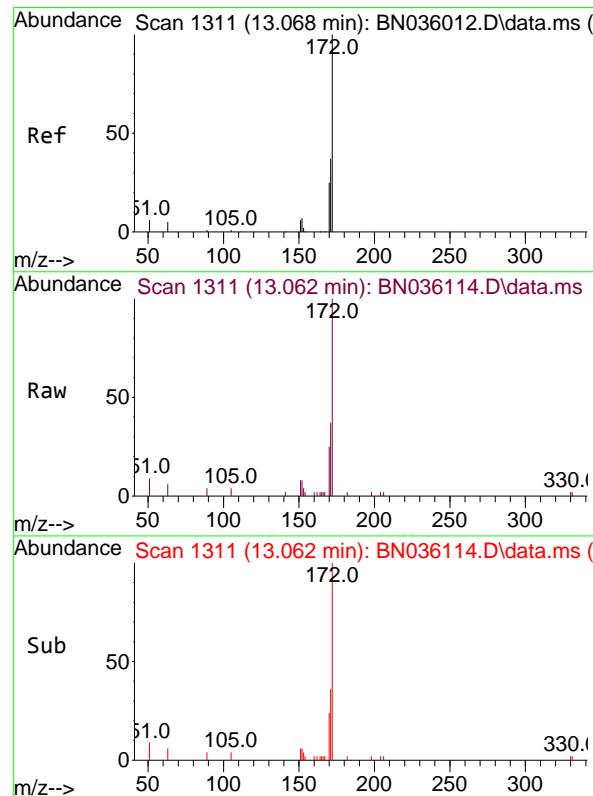
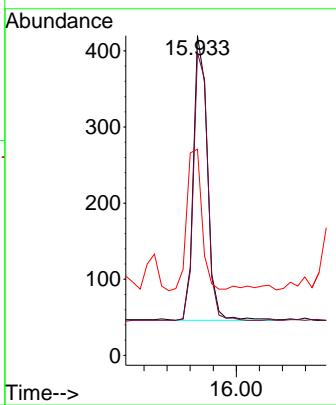
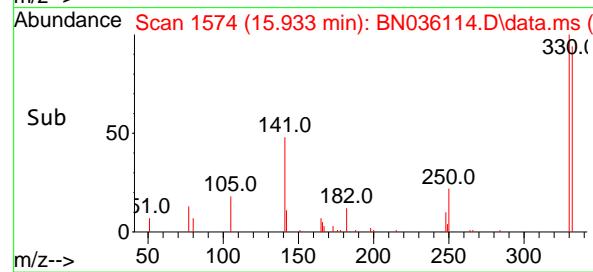




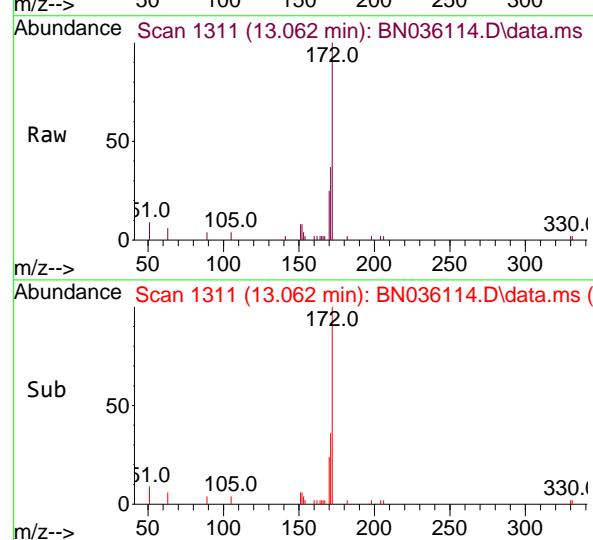
#14  
2,4,6-Tribromophenol  
Concen: 0.356 ng  
RT: 15.933 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19  
ClientSampleId : BP-VPB-192-GW-220-222



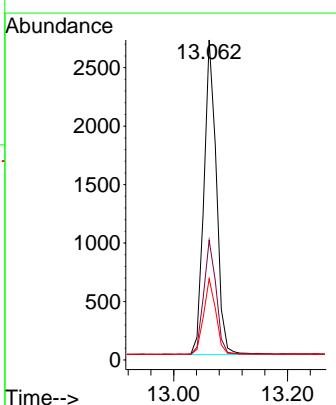
Tgt Ion:330 Resp: 633  
Ion Ratio Lower Upper  
330 100  
332 94.9 81.0 121.4  
141 53.7 36.7 55.1

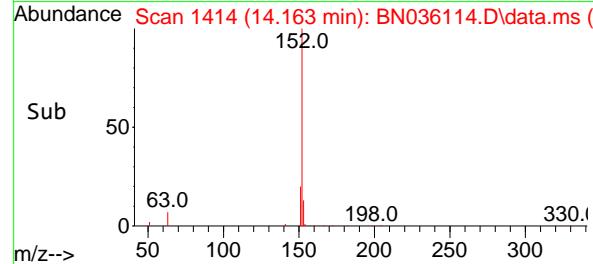
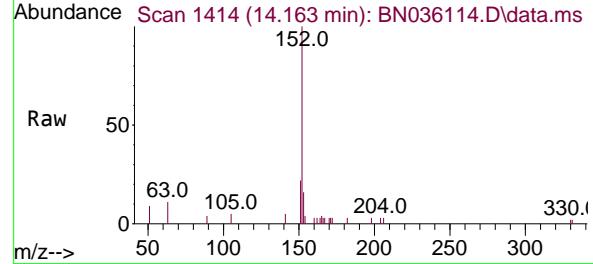
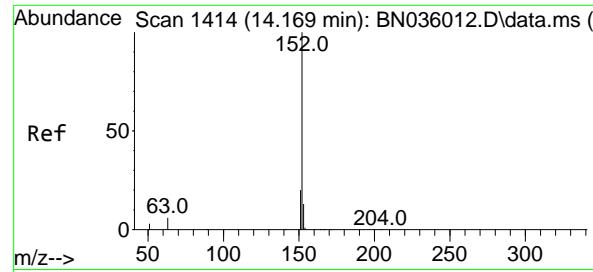


#15  
2-Fluorobiphenyl  
Concen: 0.320 ng  
RT: 13.062 min Scan# 1311  
Delta R.T. -0.006 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19



Tgt Ion:172 Resp: 3954  
Ion Ratio Lower Upper  
172 100  
171 37.4 30.9 46.3  
170 25.4 21.2 31.8





#16

Acenaphthylene

Concen: 0.238 ng

RT: 14.163 min Scan# 14163

Delta R.T. -0.006 min

Lab File: BN036114.D

Acq: 29 Jan 2025 19:19

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-220-222

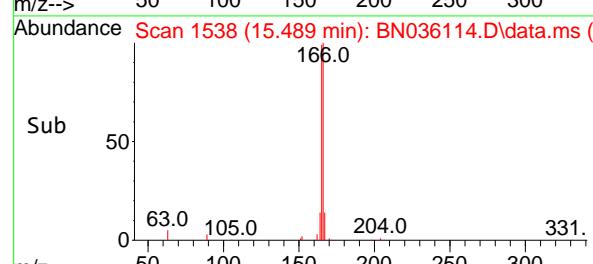
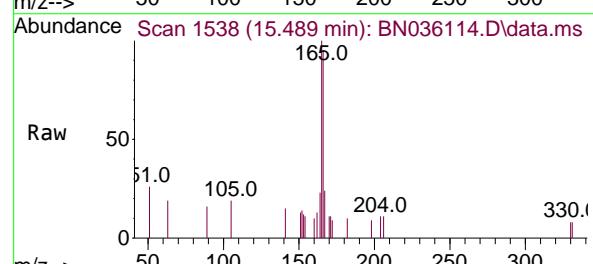
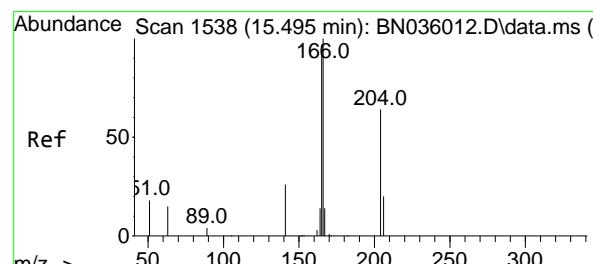
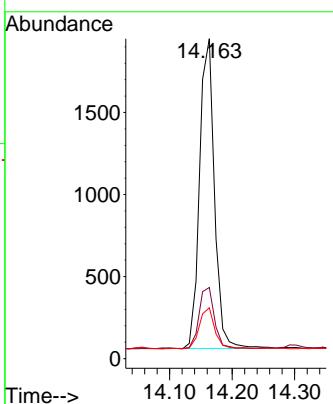
Tgt Ion:152 Resp: 3125

Ion Ratio Lower Upper

152 100

151 20.9 16.2 24.2

153 13.8 10.4 15.6



#18

Fluorene

Concen: 0.064 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036114.D

Acq: 29 Jan 2025 19:19

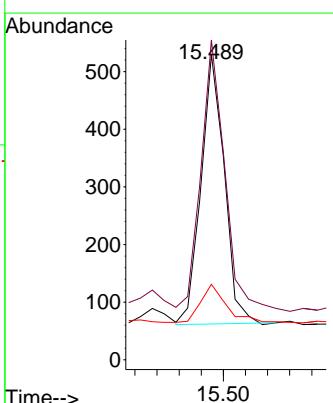
Tgt Ion:166 Resp: 718

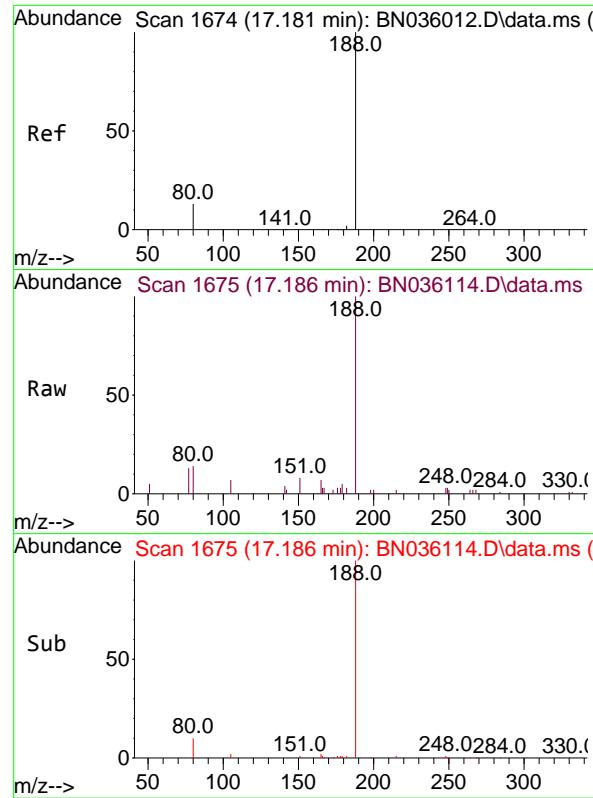
Ion Ratio Lower Upper

166 100

165 103.9 78.5 117.7

167 16.2 10.7 16.1#

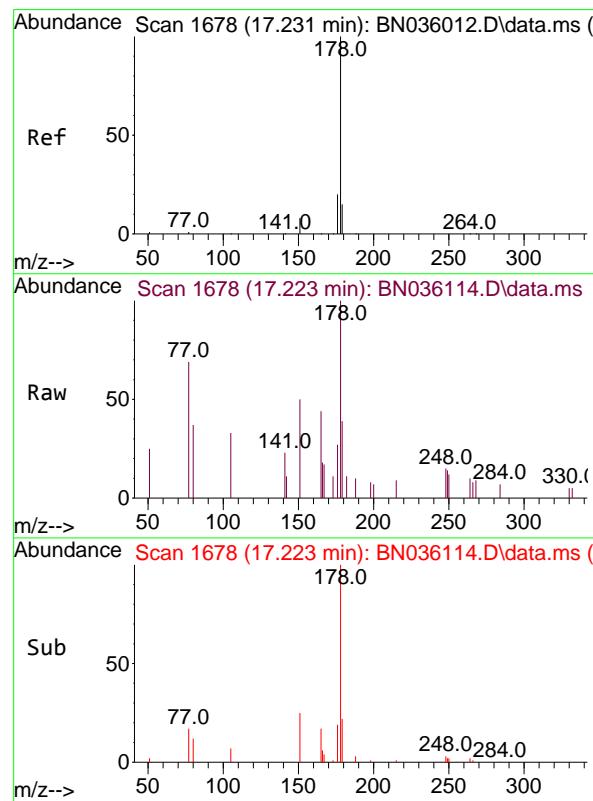
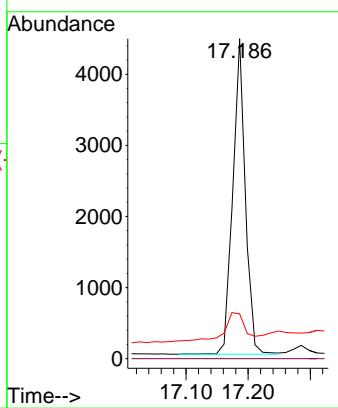




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.186 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036114.D  
 Acq: 29 Jan 2025 19:19

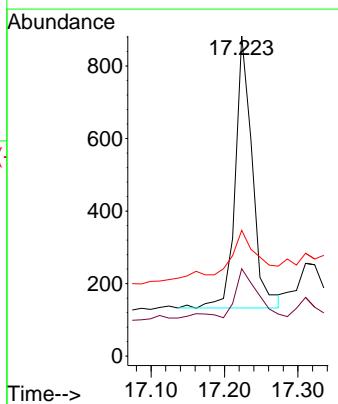
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-220-222

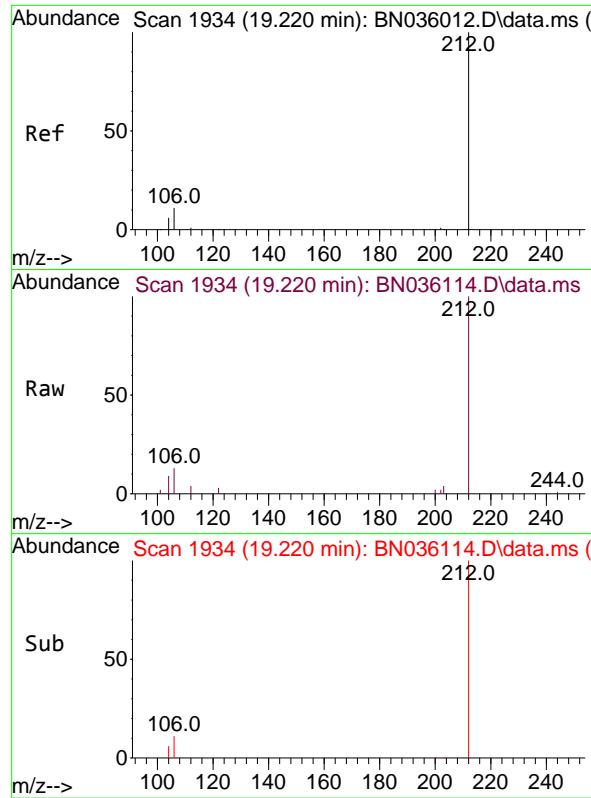
Tgt Ion:188 Resp: 6230  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 14.0 12.3 18.5



#25  
 Phenanthrene  
 Concen: 0.065 ng  
 RT: 17.223 min Scan# 1678  
 Delta R.T. -0.007 min  
 Lab File: BN036114.D  
 Acq: 29 Jan 2025 19:19

Tgt Ion:178 Resp: 1212  
 Ion Ratio Lower Upper  
 178 100  
 176 22.5 16.0 24.0  
 179 22.4 12.4 18.6#

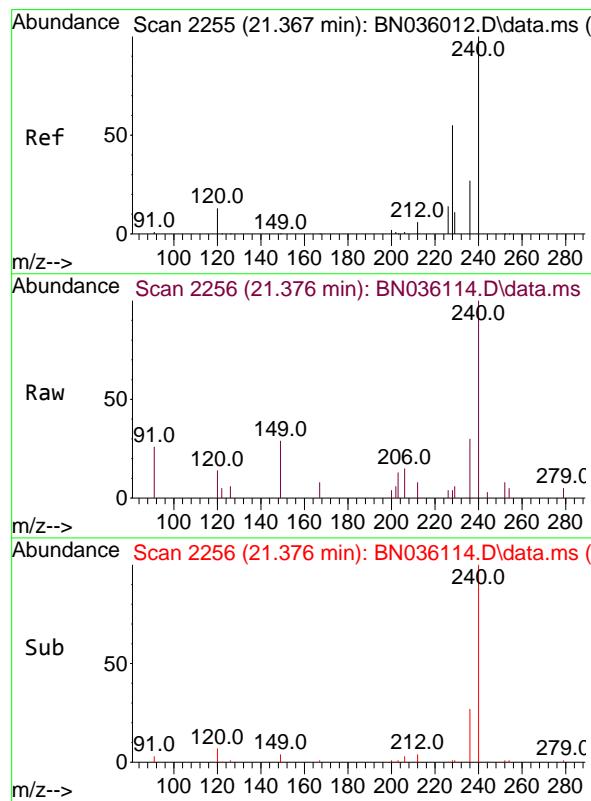
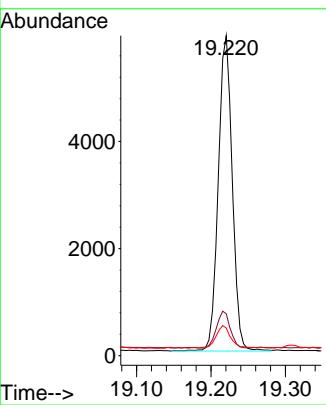




#27  
Fluoranthene-d10  
Concen: 0.478 ng  
RT: 19.220 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

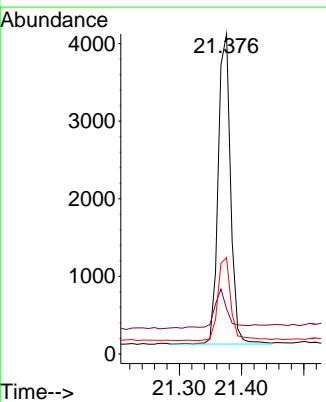
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-220-222

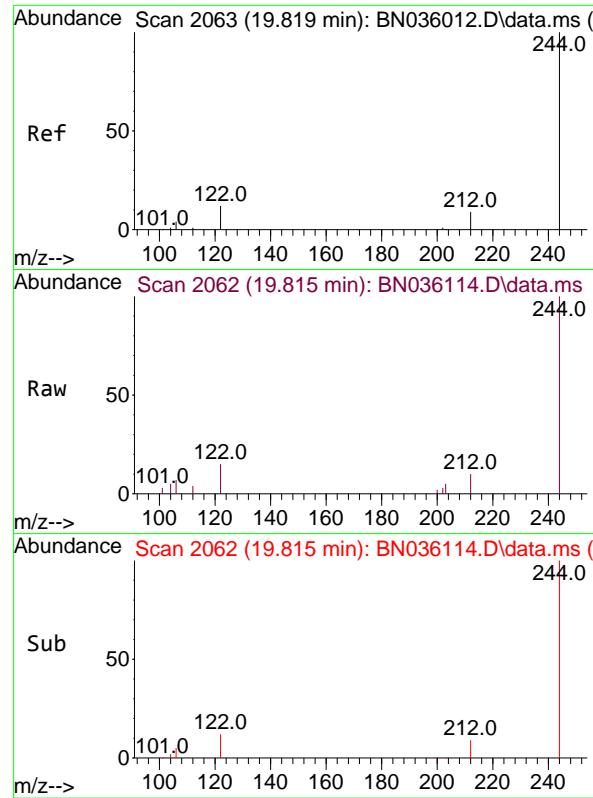
Tgt Ion:212 Resp: 7712  
Ion Ratio Lower Upper  
212 100  
106 11.5 9.7 14.5  
104 7.4 6.0 9.0



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2256  
Delta R.T. 0.009 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

Tgt Ion:240 Resp: 5536  
Ion Ratio Lower Upper  
240 100  
120 14.1 13.9 20.9  
236 30.1 23.7 35.5

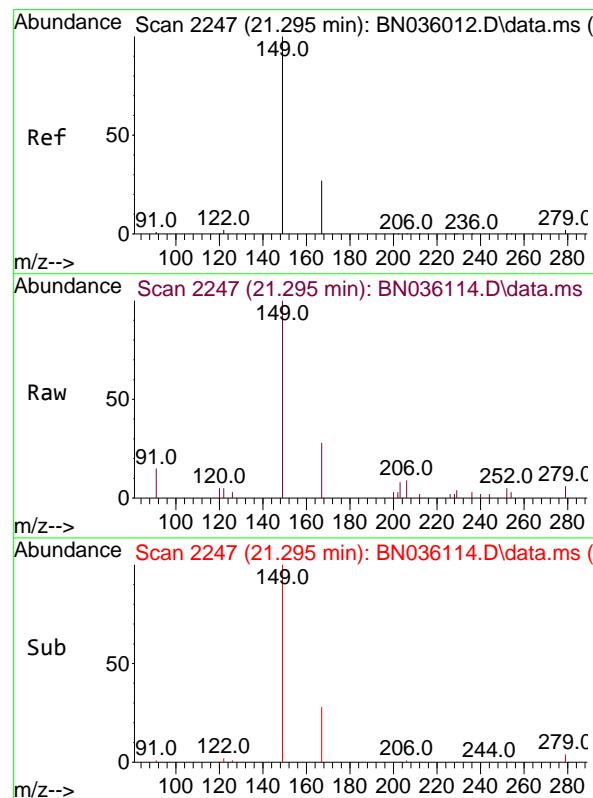
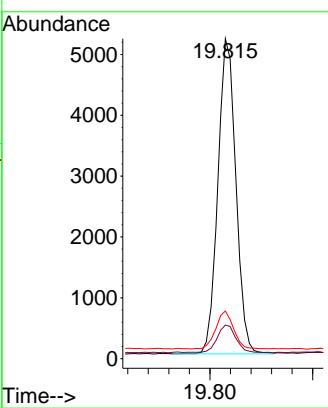




#31  
Terphenyl-d14  
Concen: 0.549 ng  
RT: 19.815 min Scan# 2  
Delta R.T. -0.004 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

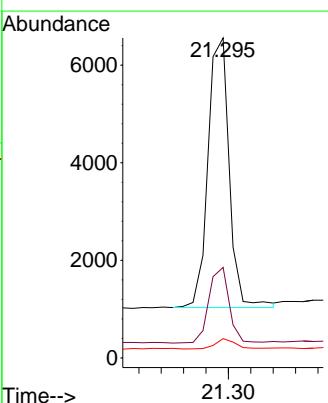
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-220-222

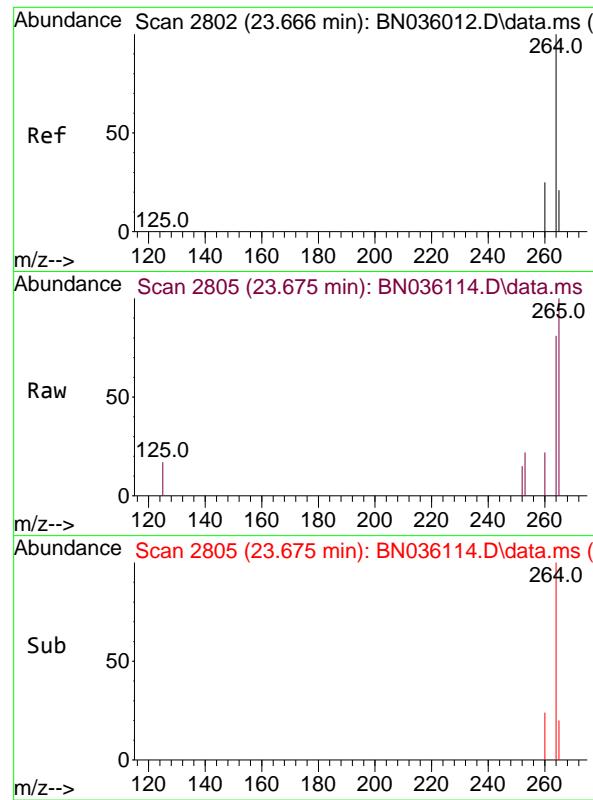
Tgt Ion:244 Resp: 6318  
Ion Ratio Lower Upper  
244 100  
212 10.5 9.1 13.7  
122 14.9 11.3 16.9



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.662 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

Tgt Ion:149 Resp: 7282  
Ion Ratio Lower Upper  
149 100  
167 26.8 21.9 32.9  
279 3.8 3.0 4.6

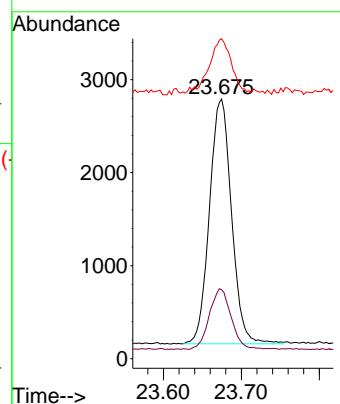




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.675 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036114.D  
Acq: 29 Jan 2025 19:19

Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-220-222

Tgt Ion:264 Resp: 5180  
Ion Ratio Lower Upper  
264 100  
260 26.6 21.8 32.6  
265 123.2 56.6 84.8#





# CALIBRATION

# SUMMARY

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

## Calibration Files

0.1 =BN036010.D 0.2 =BN036011.D 0.4 =BN036012.D 0.8 =BN036013.D 1.6 =BN036014.D 3.2 =BN036015.D 5.0 =BN036016.D

Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD
----------	-----	-----	-----	-----	-----	-----	-----	-----	------

1) I	1,4-Dichlorobenzen...	-----	ISTD-----						
2)	1,4-Dioxane	0.452	0.460	0.469	0.477	0.447	0.408	0.417	0.447
3)	n-Nitrosodimet...	0.798	0.749	0.877	0.883	0.829	0.781	0.759	0.811
4) S	2-Fluorophenol	1.032	1.012	1.092	1.099	1.042	0.997	1.010	1.040
5) S	Phenol-d6	1.284	1.195	1.270	1.155	1.230	1.210	1.209	1.222
6)	bis(2-Chloroet...	1.024	0.979	1.056	0.929	0.993	0.952	0.952	0.984
7) I	Naphthalene-d8	-----	-----	ISTD-----					
8) S	Nitrobenzene-d5	0.377	0.356	0.399	0.333	0.397	0.388	0.394	0.378
9)	Naphthalene	1.149	1.141	1.250	1.137	1.184	1.141	1.131	1.162
10)	Hexachlorobuta...	0.383	0.369	0.404	0.371	0.388	0.359	0.353	0.375
11)	SURR2-Methylnaphth...	0.522	0.527	0.578	0.528	0.556	0.550	0.545	0.544
12)	2-Methylnaphth...	0.702	0.688	0.760	0.700	0.741	0.735	0.721	0.721
13) I	Acenaphthene-d10	-----	-----	ISTD-----					
14) S	2,4,6-Tribromo...	0.240	0.238	0.256	0.238	0.268	0.275	0.282	0.257
15) S	2-Fluorobiphenyl	1.806	1.736	1.934	1.787	1.819	1.693	1.724	1.786
16)	Acenaphthylene	1.835	1.826	2.011	1.840	1.940	1.889	1.936	1.897
17)	Acenaphthene	1.248	1.236	1.365	1.266	1.338	1.310	1.327	1.299
18)	Fluorene	1.583	1.482	1.633	1.550	1.739	1.703	1.700	1.627
19) I	Phenanthrene-d10	-----	-----	ISTD-----					
20)	4,6-Dinitro-2....	0.071	0.081	0.095	0.089	0.101	0.107	0.108	0.093
21)	4-Bromophenyl....	0.285	0.269	0.307	0.287	0.293	0.273	0.281	0.285
22)	Hexachlorobenzene	0.391	0.358	0.407	0.374	0.380	0.355	0.361	0.375
23)	Atrazine	0.185	0.194	0.218	0.204	0.216	0.209	0.215	0.206
24)	Pentachlorophenol	0.131	0.131	0.164	0.155	0.179	0.185	0.192	0.162
25)	Phenanthrene	1.154	1.158	1.302	1.172	1.226	1.182	1.219	1.202
26)	Anthracene	1.019	1.016	1.151	1.064	1.128	1.123	1.151	1.093
27)	SURRFluoranthene-d10	1.005	1.006	1.111	0.994	0.959	1.078	1.101	1.036
28)	Fluoranthene	1.312	1.350	1.507	1.357	1.317	1.506	1.533	1.412
29) I	Chrysene-d12	-----	-----	ISTD-----					
30)	Pyrene	1.657	1.588	1.693	1.636	1.646	1.552	1.575	1.621
31) S	Terphenyl-d14	0.821	0.807	0.871	0.831	0.860	0.804	0.822	0.831
32)	Benzo(a)anthra...	1.445	1.403	1.503	1.411	1.513	1.448	1.433	1.451
33)	Chrysene	1.501	1.476	1.545	1.448	1.515	1.435	1.463	1.483
34)	Bis(2-ethylhex...	0.919	0.793	0.798	0.748	0.791	0.748	0.768	0.795
35) I	Perylene-d12	-----	-----	ISTD-----					

Response Factor Report BNA\_N

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN012225.M

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

(#) = Out of Range

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.1

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

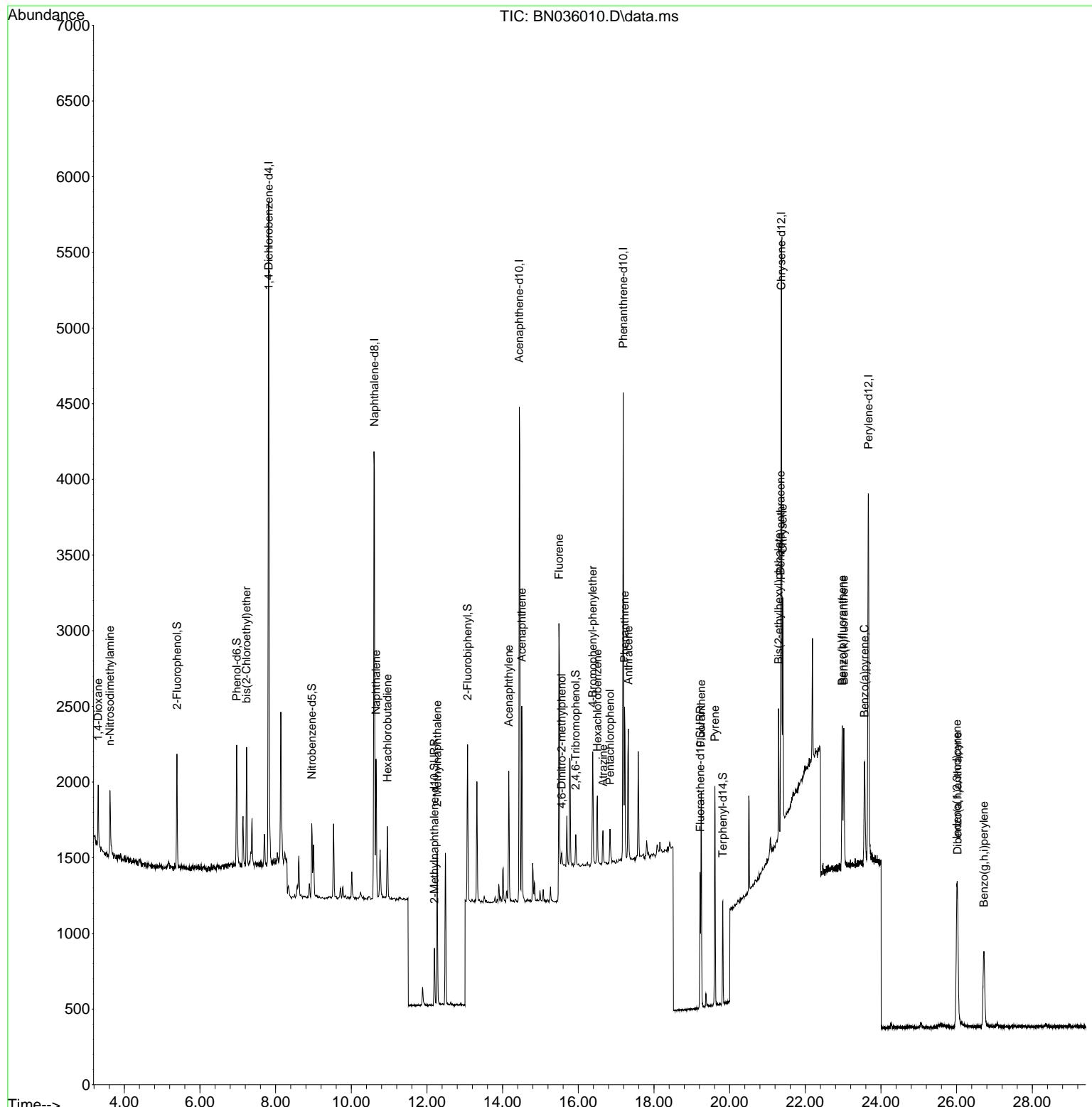
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	2035	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3938	0.400	ng	0.00
13) Acenaphthene-d10	14.441	164	1936	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3874	0.400	ng	# 0.00
29) Chrysene-d12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

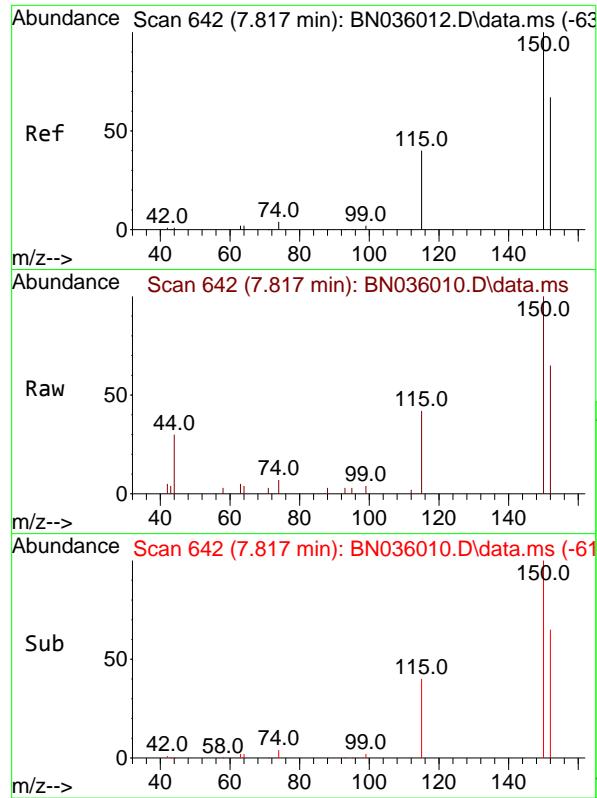
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 Data File : BN036010.D  
 Acq On : 22 Jan 2025 11:02  
 Operator : RC/JU  
 Sample : SSTDICC0.1  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.1

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

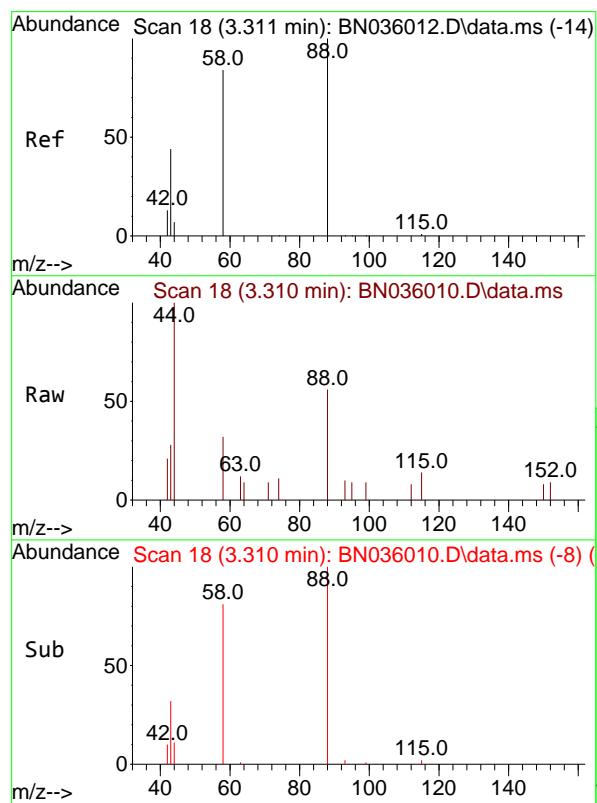
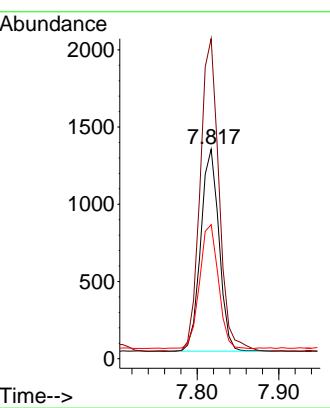




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

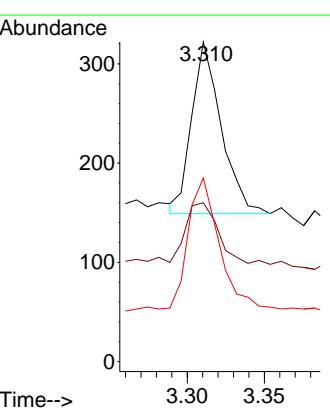
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ClientSampleId : SSTDICCO.1

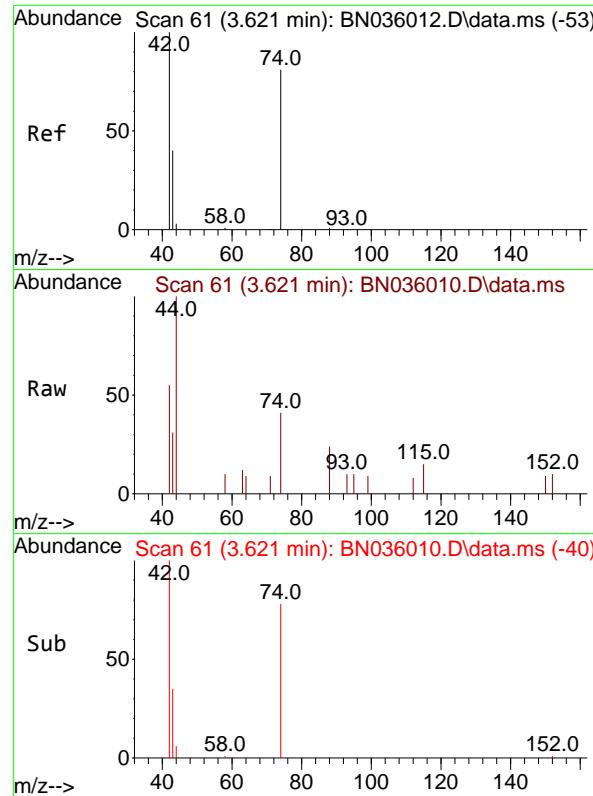
Tgt Ion:152 Resp: 2035  
Ion Ratio Lower Upper  
152 100  
150 152.8 117.4 176.2  
115 64.0 51.0 76.4



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

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

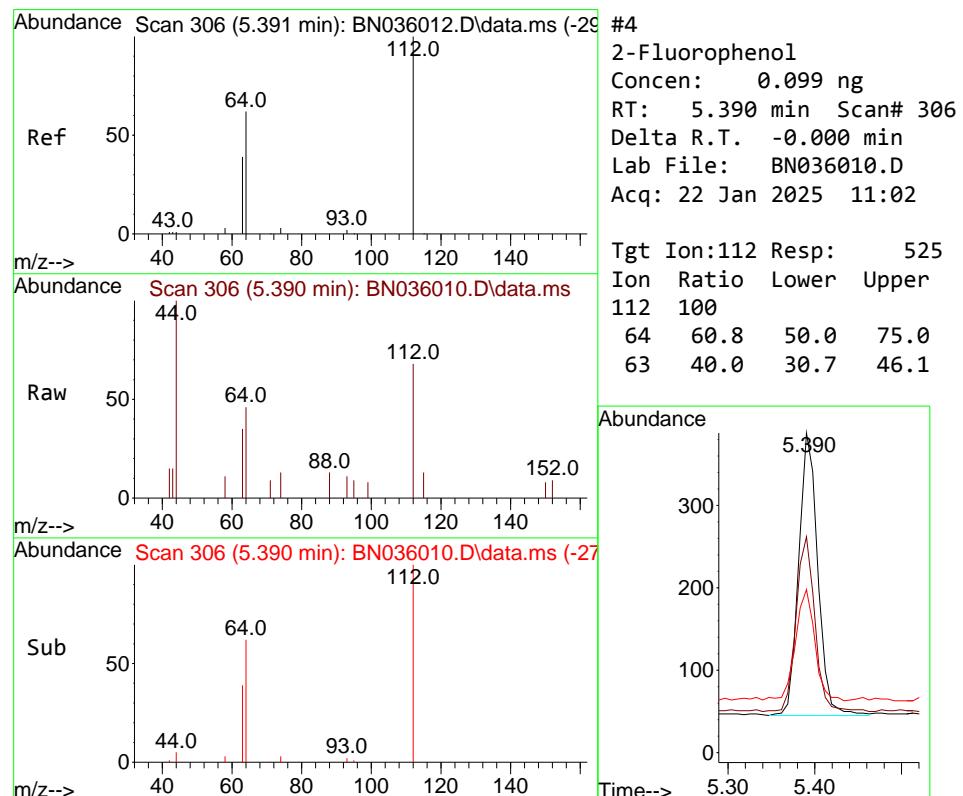
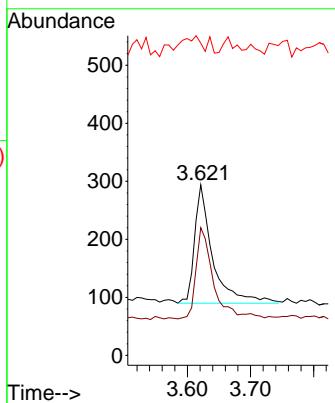




#3  
 n-Nitrosodimethylamine  
 Concen: 0.098 ng  
 RT: 3.621 min Scan# 6  
 Delta R.T. -0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

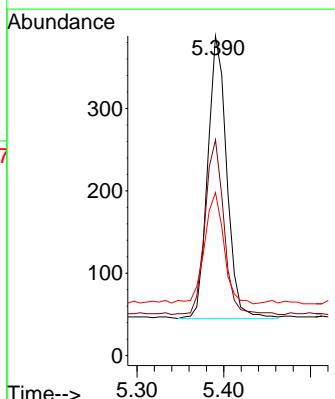
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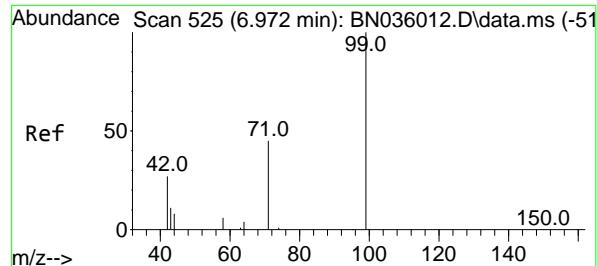
Tgt Ion: 42 Resp: 406  
 Ion Ratio Lower Upper  
 42 100  
 74 70.9 58.1 87.1  
 44 14.5 6.2 9.4#



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

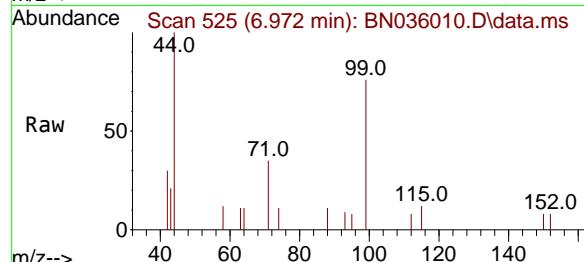
Tgt Ion: 112 Resp: 525  
 Ion Ratio Lower Upper  
 112 100  
 64 60.8 50.0 75.0  
 63 40.0 30.7 46.1



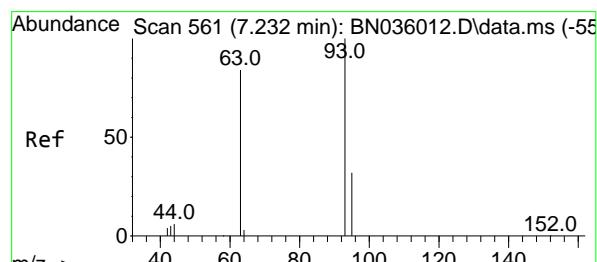
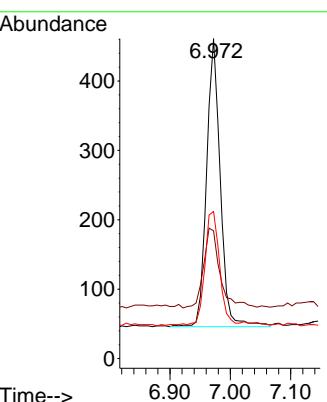
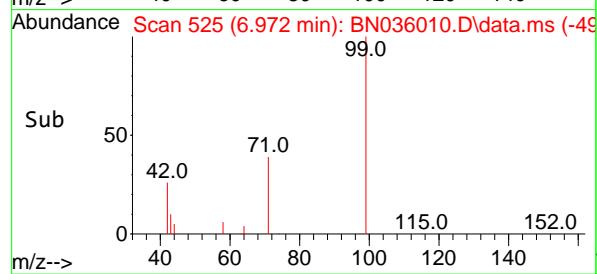


#5  
 Phenol-d6  
 Concen: 0.105 ng  
 RT: 6.972 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

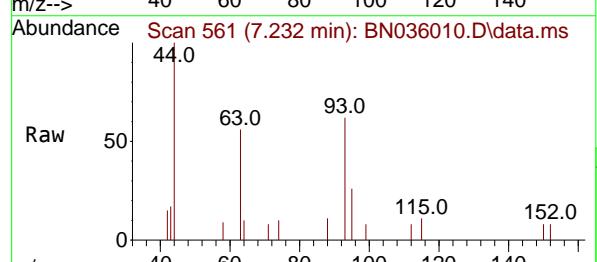
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 ClientSampleId : SSTDICCO.1



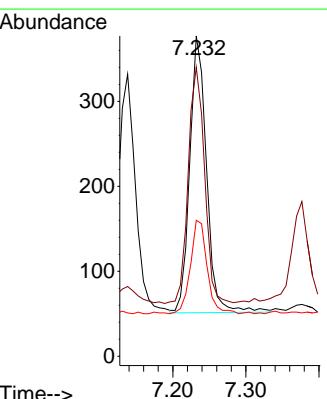
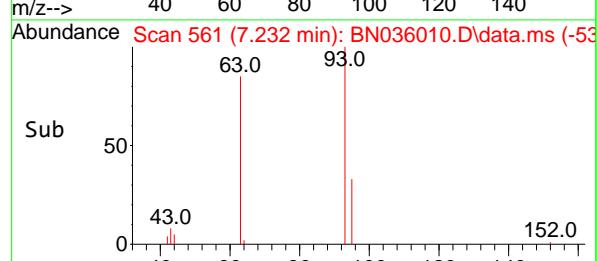
Tgt Ion: 99 Resp: 653  
 Ion Ratio Lower Upper  
 99 100  
 42 33.1 26.8 40.2  
 71 44.0 36.6 55.0

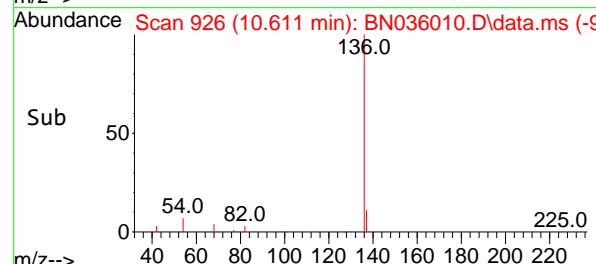
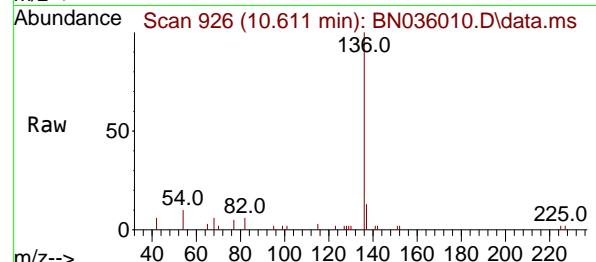
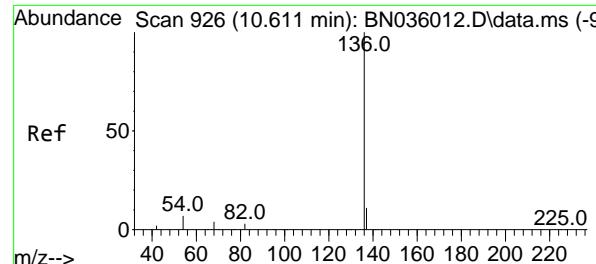


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.104 ng  
 RT: 7.232 min Scan# 561  
 Delta R.T. -0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02



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





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.611 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.1

Tgt Ion:136 Resp: 3938

Ion Ratio Lower Upper

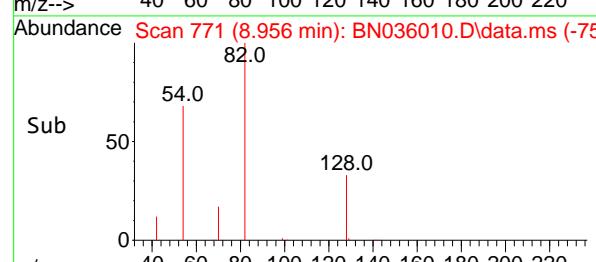
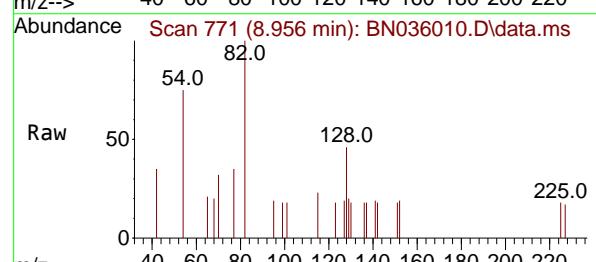
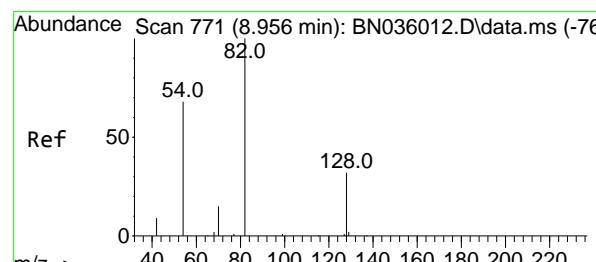
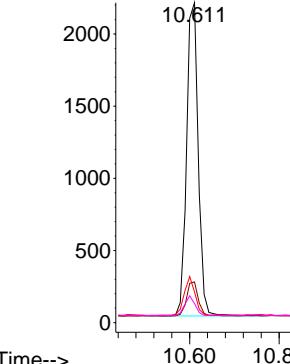
136 100

137 12.7 10.4 15.6

54 9.6 7.7 11.5

68 5.9 5.4 8.0

Abundance



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

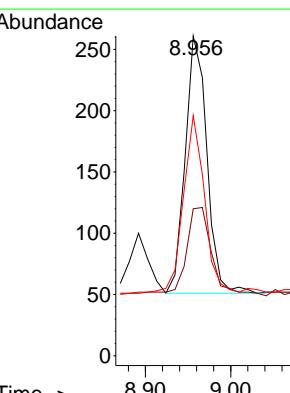
Tgt Ion: 82 Resp: 371

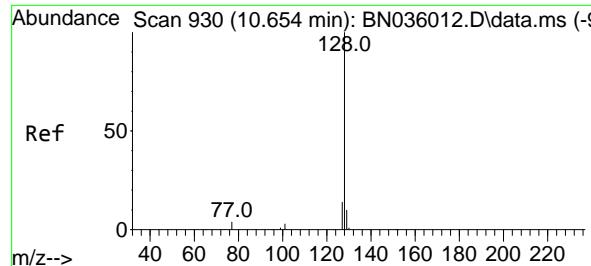
Ion Ratio Lower Upper

82 100

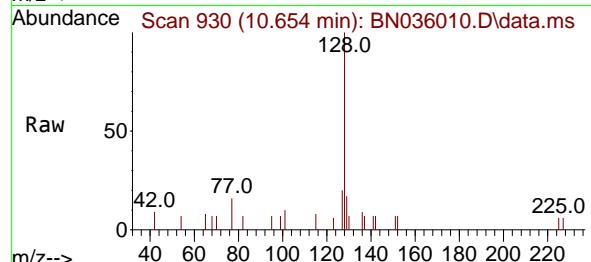
128 46.0 28.8 43.2#

54 75.1 55.8 83.8

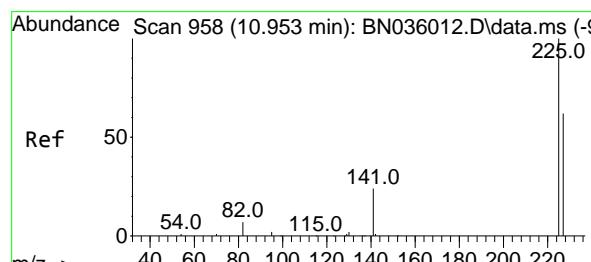
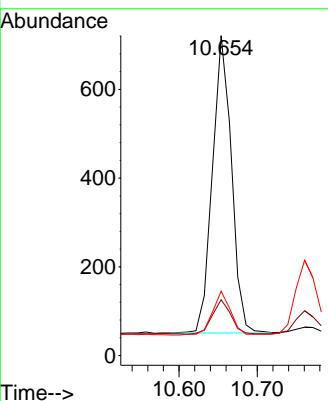
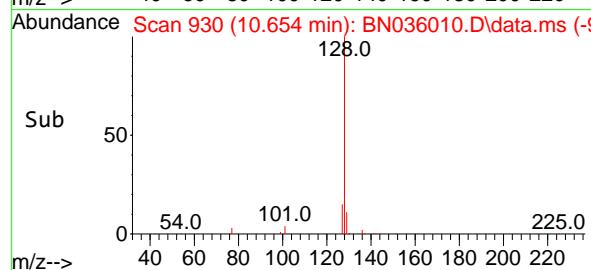




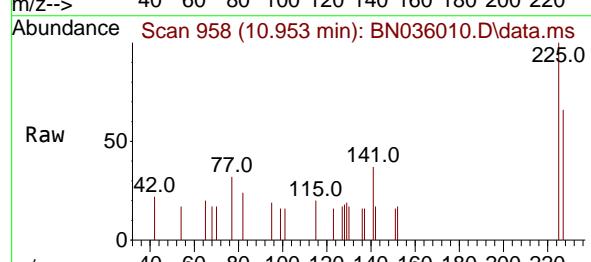
#9  
Naphthalene  
Concen: 0.099 ng  
RT: 10.654 min Scan# 9  
Instrument :  
Delta R.T. -0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02



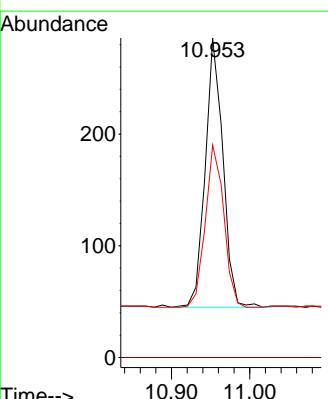
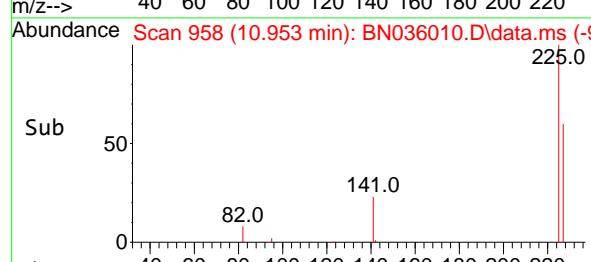
Tgt Ion:128 Resp: 1131  
Ion Ratio Lower Upper  
128 100  
129 17.5 9.4 14.2#  
127 20.1 12.6 19.0#

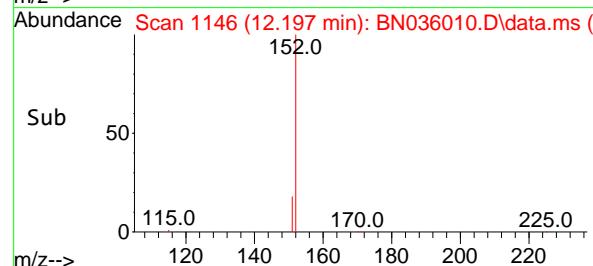
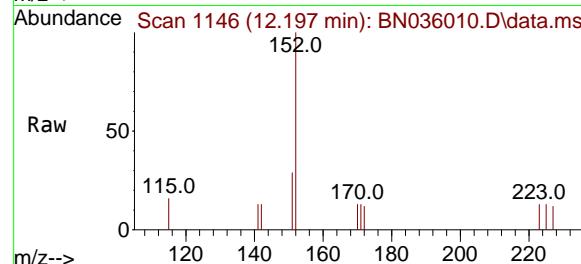
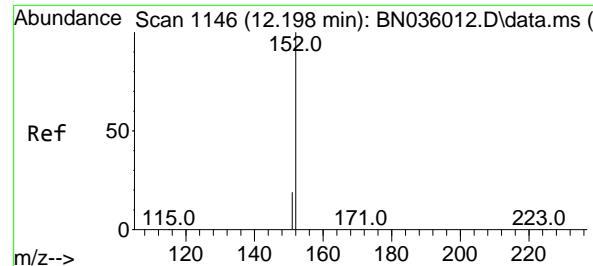


#10  
Hexachlorobutadiene  
Concen: 0.102 ng  
RT: 10.953 min Scan# 958  
Delta R.T. -0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02



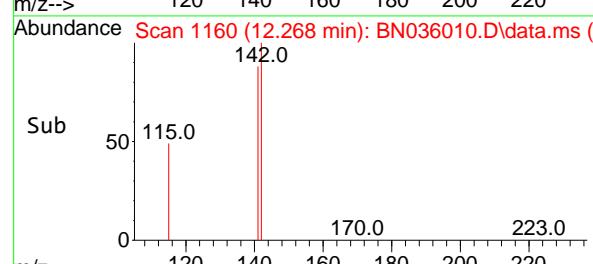
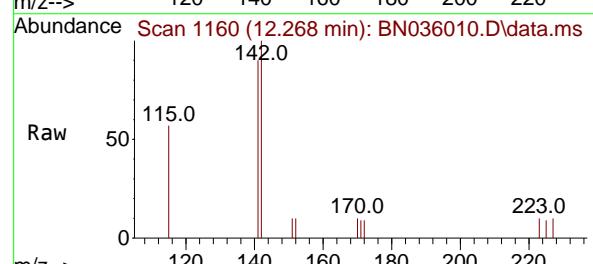
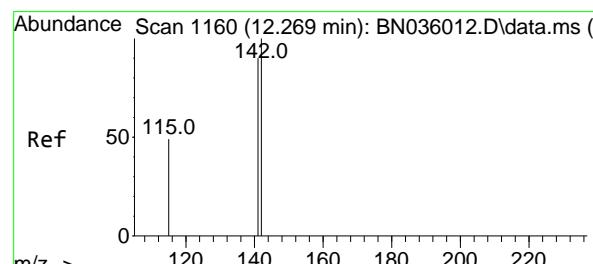
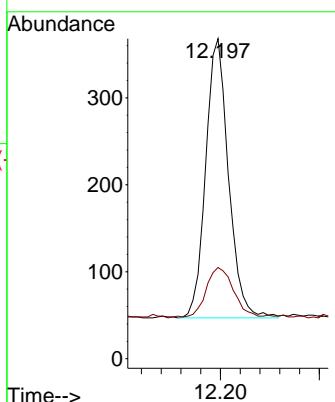
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Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.9 51.0 76.6





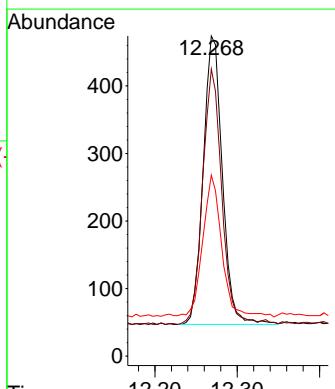
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2-Methylnaphthalene-d10  
Concen: 0.096 ng  
RT: 12.197 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02  
ClientSampleId : SSTDICCO.1

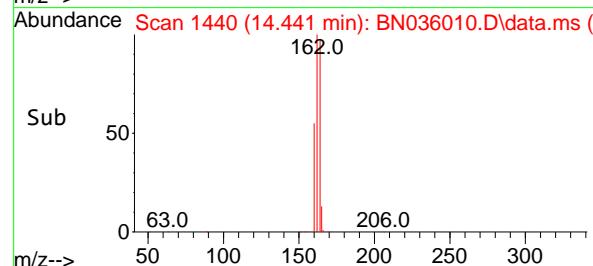
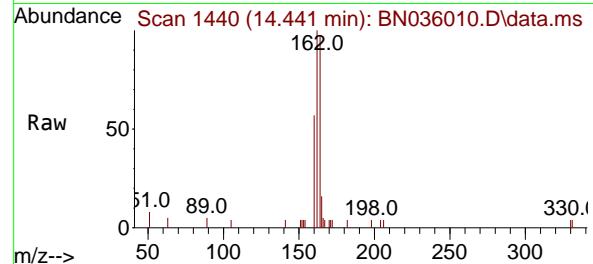
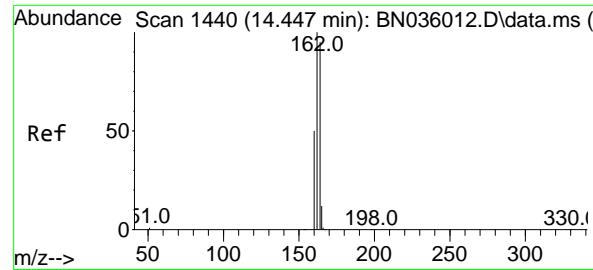
Tgt Ion:152 Resp: 514  
Ion Ratio Lower Upper  
152 100  
151 22.0 16.6 25.0



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

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





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.441 min Scan# 1441

Delta R.T. -0.006 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

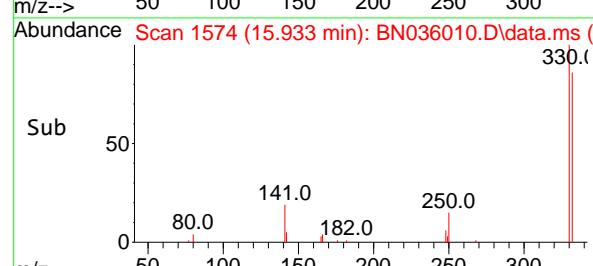
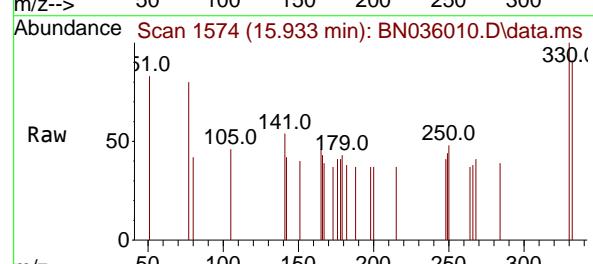
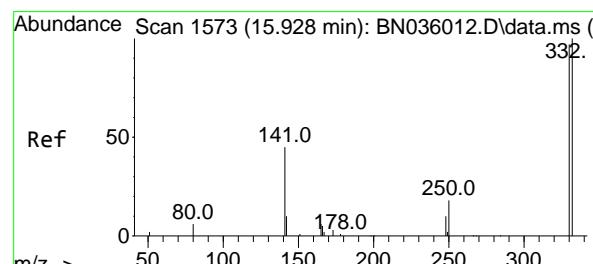
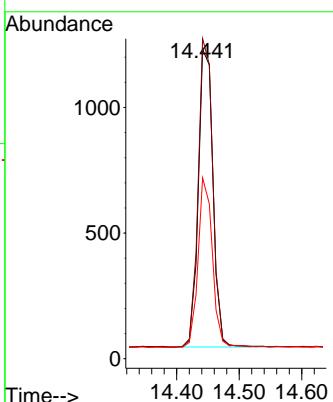
Tgt Ion:164 Resp: 1936

Ion Ratio Lower Upper

164 100

162 103.4 84.1 126.1

160 58.4 43.8 65.8



#14

2,4,6-Tribromophenol

Concen: 0.093 ng

RT: 15.933 min Scan# 1574

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

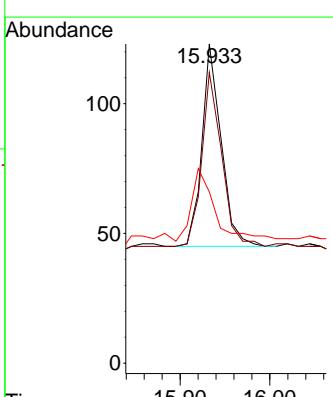
Tgt Ion:330 Resp: 116

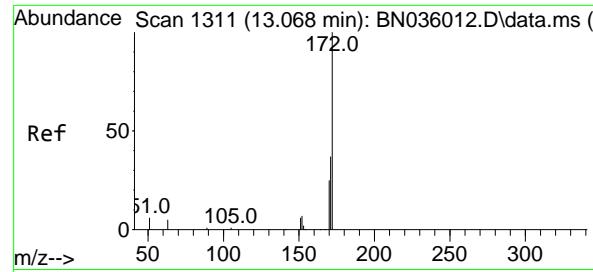
Ion Ratio Lower Upper

330 100

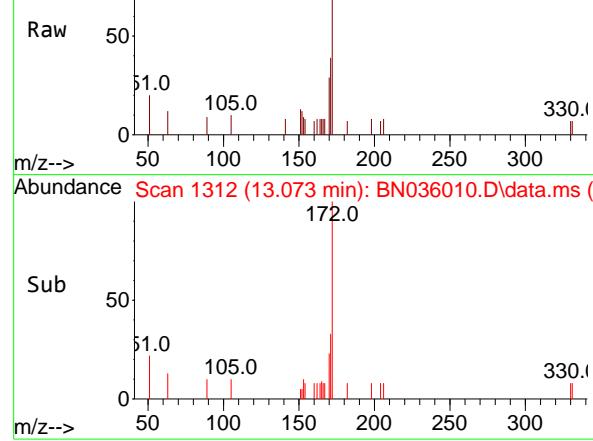
332 89.7 81.0 121.4

141 43.1 36.7 55.1





Abundance Scan 1312 (13.073 min): BN036010.D\data.ms (-)



#15

2-Fluorobiphenyl

Concen: 0.101 ng

RT: 13.073 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

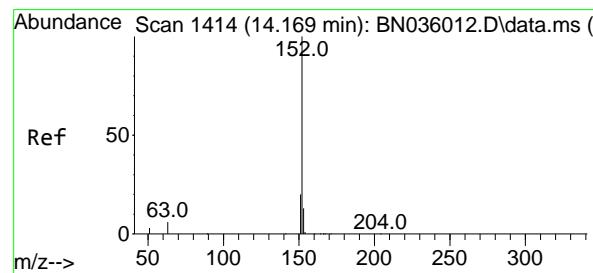
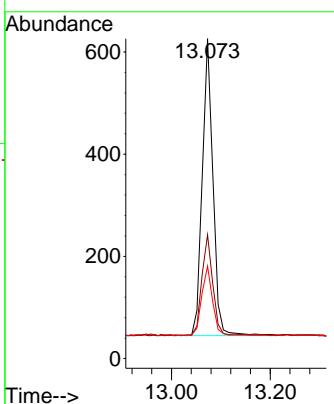
Tgt Ion:172 Resp: 874

Ion Ratio Lower Upper

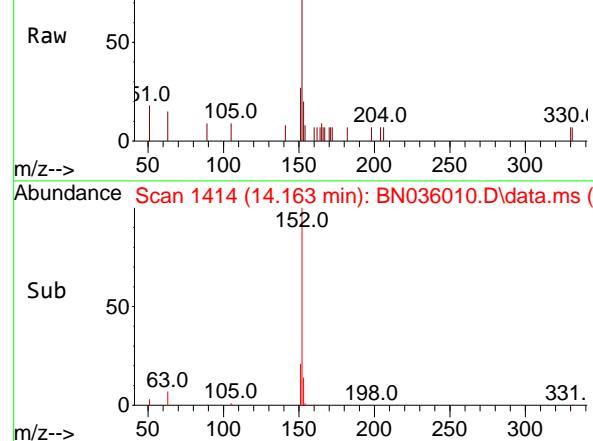
172 100

171 38.7 30.9 46.3

170 28.9 21.2 31.8



Abundance Scan 1414 (14.163 min): BN036010.D\data.ms (-)



#16

Acenaphthylene

Concen: 0.097 ng

RT: 14.163 min Scan# 1414

Delta R.T. -0.006 min

Lab File: BN036010.D

Acq: 22 Jan 2025 11:02

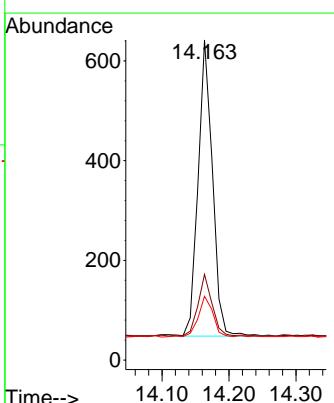
Tgt Ion:152 Resp: 888

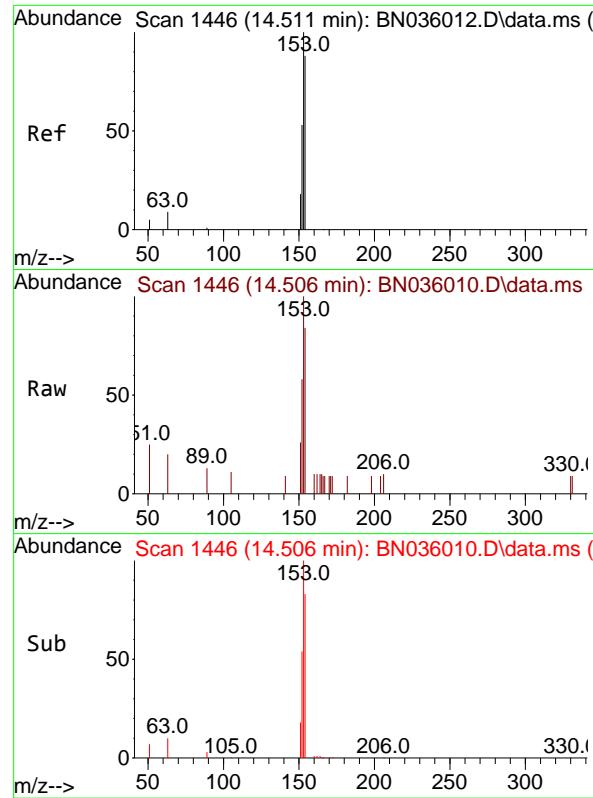
Ion Ratio Lower Upper

152 100

151 21.3 16.2 24.2

153 14.0 10.4 15.6

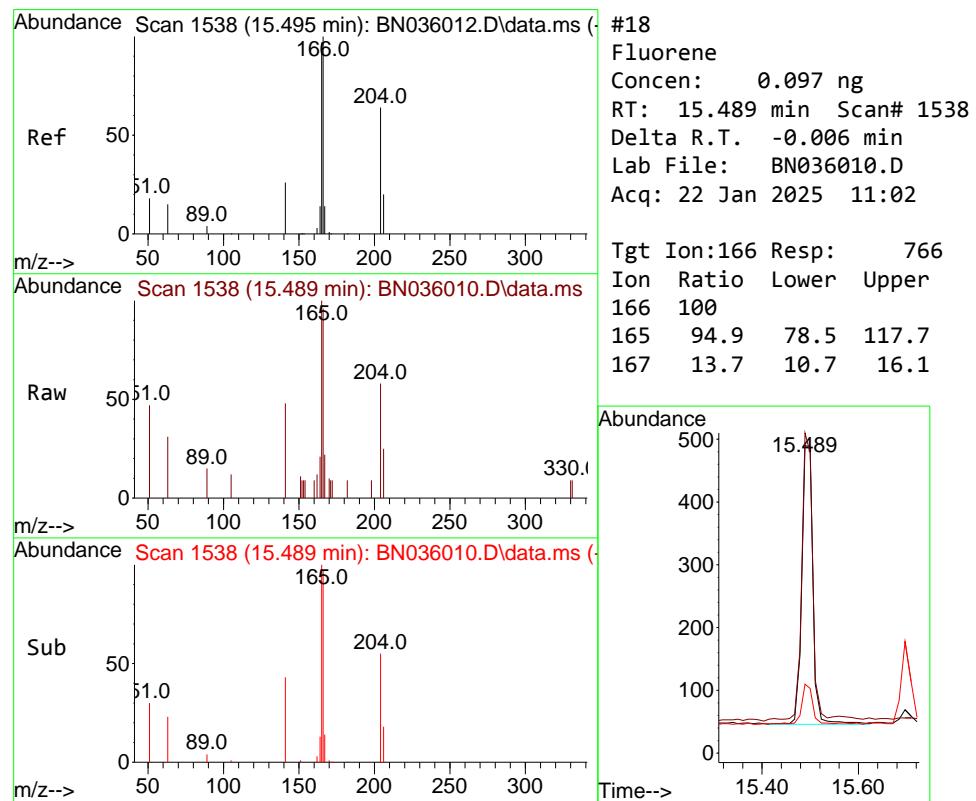
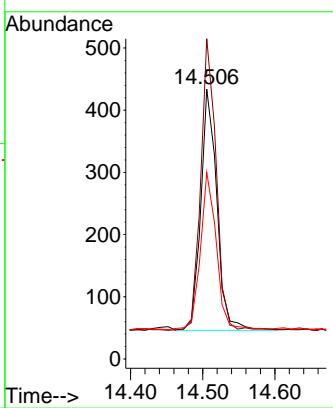




#17  
Acenaphthene  
Concen: 0.096 ng  
RT: 14.506 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

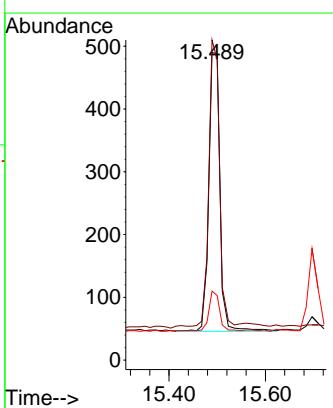
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

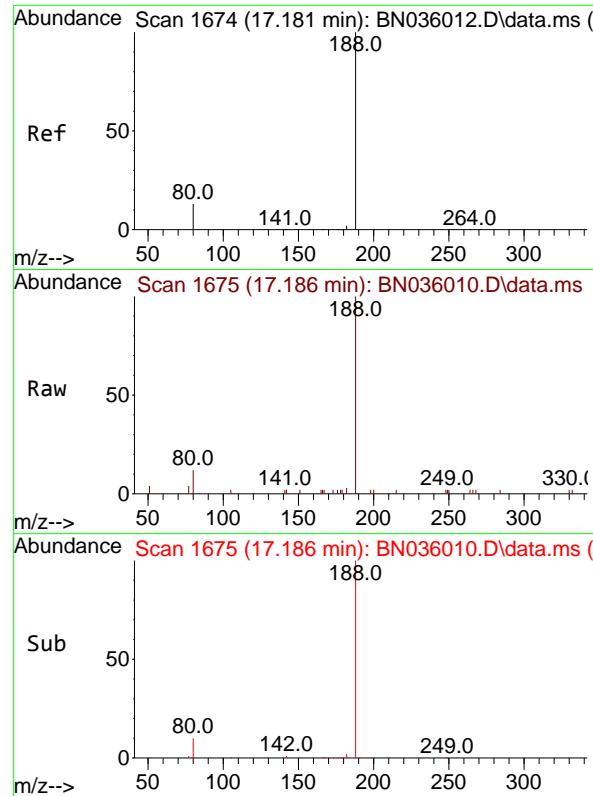
Tgt Ion:154 Resp: 604  
Ion Ratio Lower Upper  
154 100  
153 116.6 88.9 133.3  
152 64.2 48.1 72.1



#18  
Fluorene  
Concen: 0.097 ng  
RT: 15.489 min Scan# 1538  
Delta R.T. -0.006 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Tgt Ion:166 Resp: 766  
Ion Ratio Lower Upper  
166 100  
165 94.9 78.5 117.7  
167 13.7 10.7 16.1

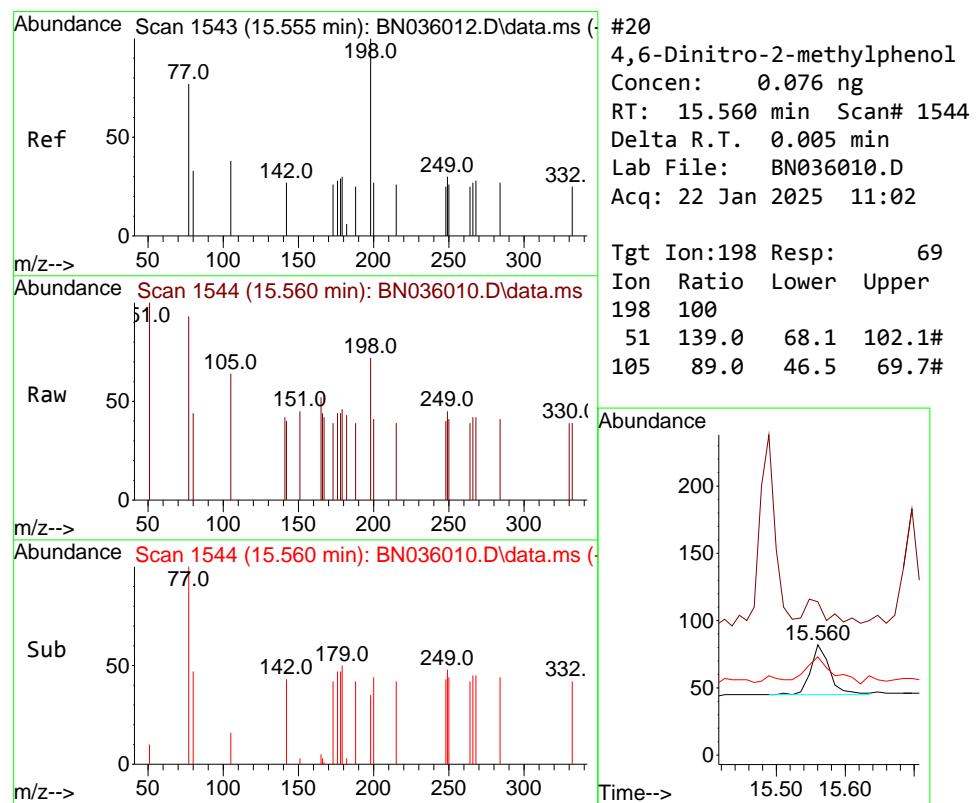
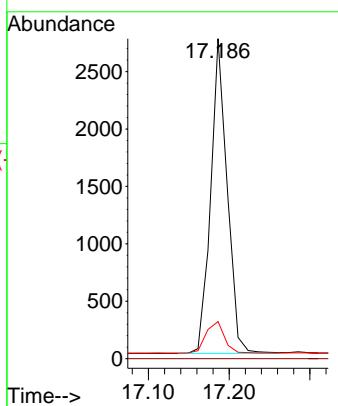




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.186 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

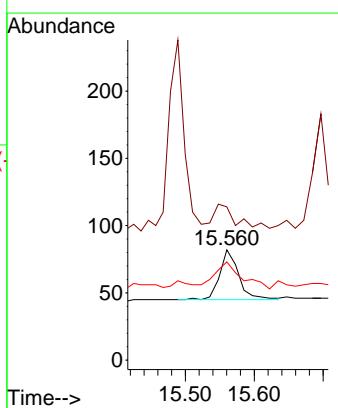
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

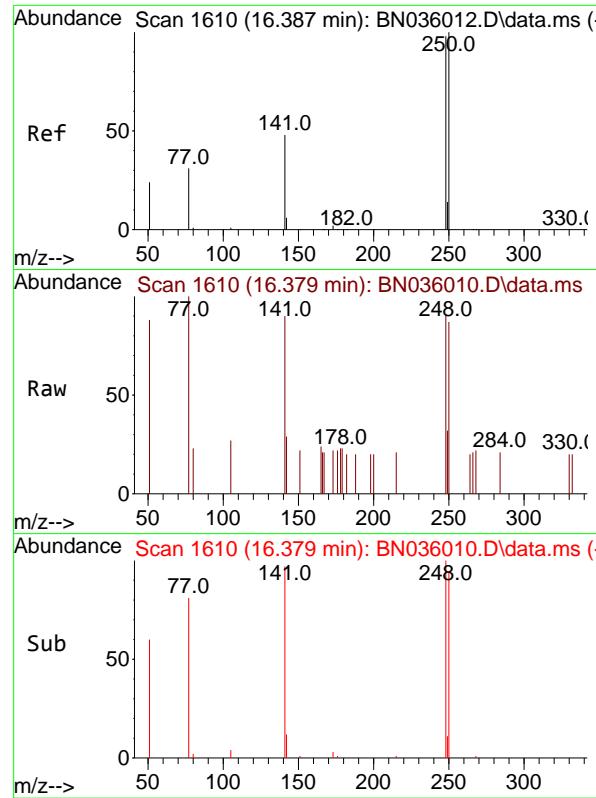
Tgt Ion:188 Resp: 3874  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 11.6 12.3 18.5#



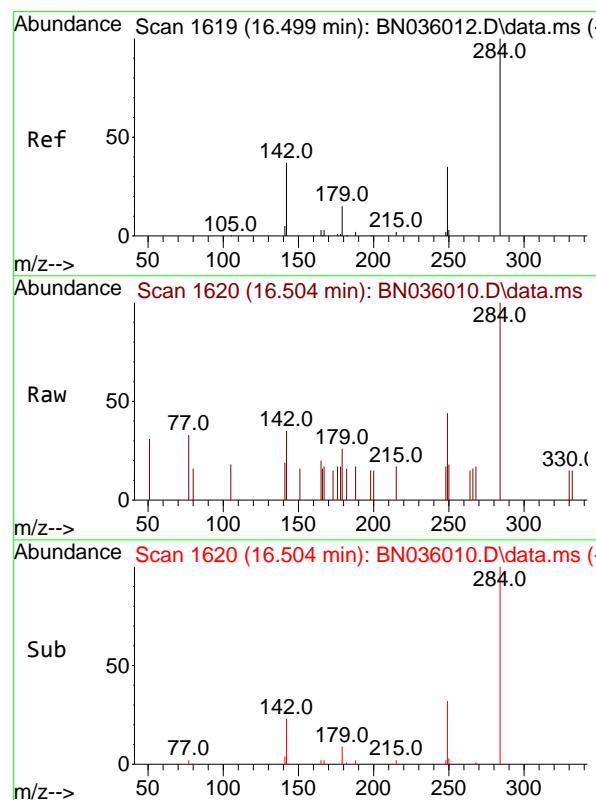
#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.076 ng  
 RT: 15.560 min Scan# 1544  
 Delta R.T. 0.005 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

Tgt Ion:198 Resp: 69  
 Ion Ratio Lower Upper  
 198 100  
 51 139.0 68.1 102.1#  
 105 89.0 46.5 69.7#

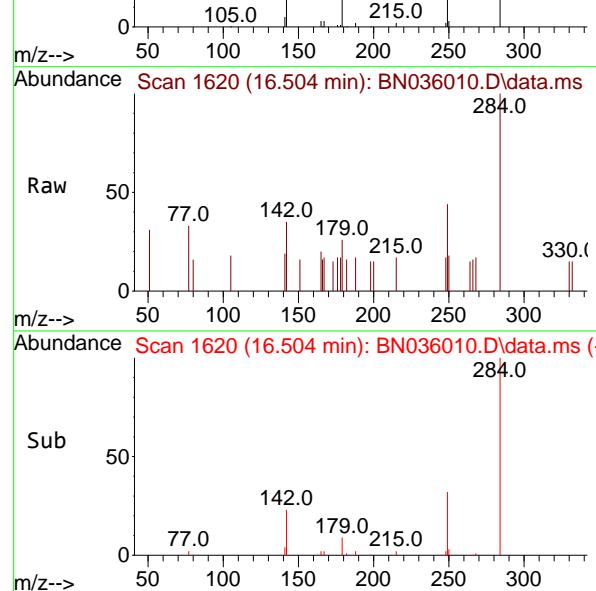




#21  
4-Bromophenyl-phenylether  
Concen: 0.100 ng  
RT: 16.379 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.007 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02  
ClientSampleId : SSTDICCO.1

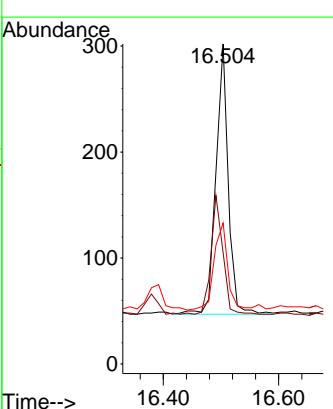
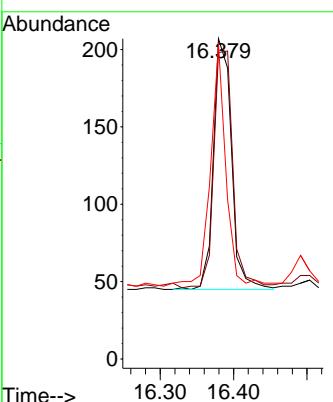


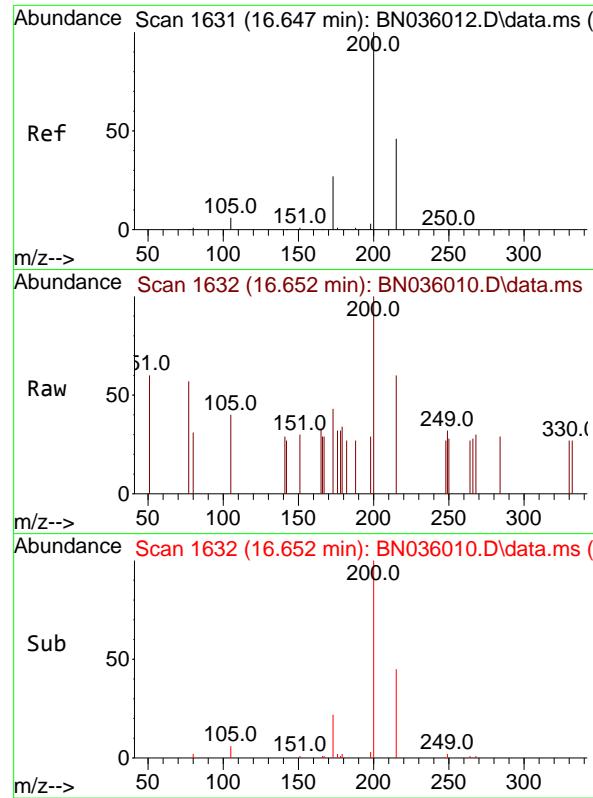
#22  
Hexachlorobenzene  
Concen: 0.104 ng  
RT: 16.504 min Scan# 1620  
Delta R.T. 0.005 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02



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

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

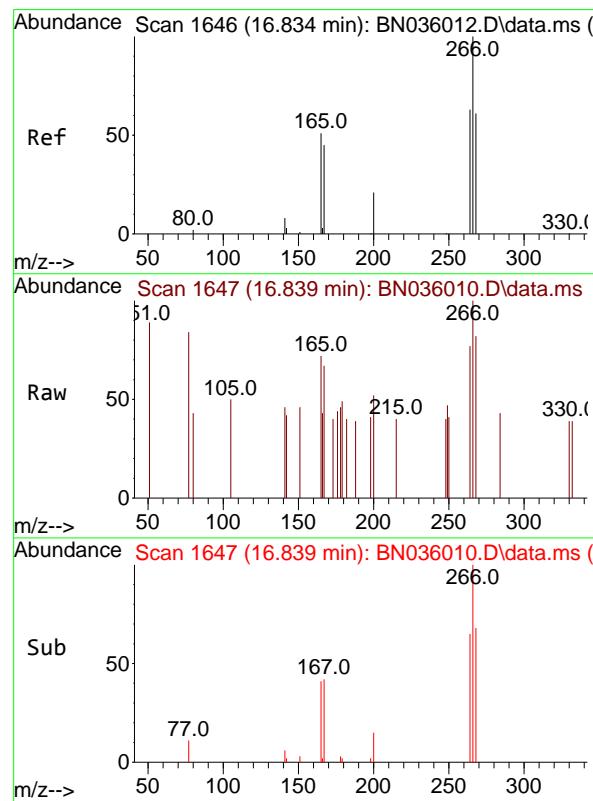
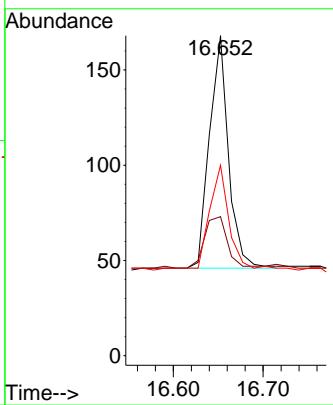




#23  
Atrazine  
Concen: 0.090 ng  
RT: 16.652 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

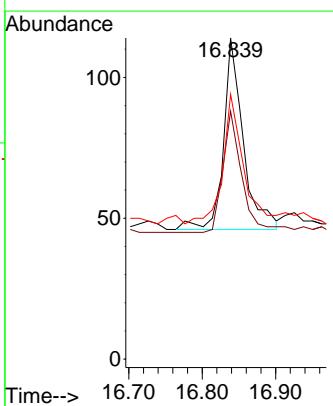
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

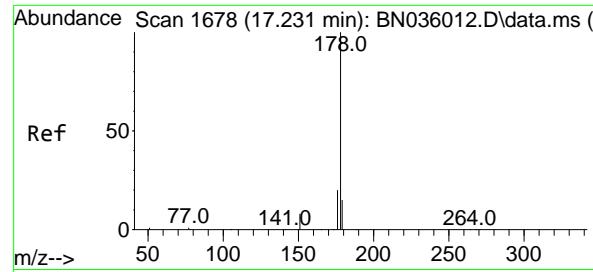
Tgt Ion:200 Resp: 179  
Ion Ratio Lower Upper  
200 100  
173 43.5 26.6 40.0#  
215 59.5 40.6 61.0



#24  
Pentachlorophenol  
Concen: 0.081 ng  
RT: 16.839 min Scan# 1647  
Delta R.T. 0.005 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Tgt Ion:266 Resp: 127  
Ion Ratio Lower Upper  
266 100  
264 61.4 48.2 72.2  
268 70.1 51.6 77.4



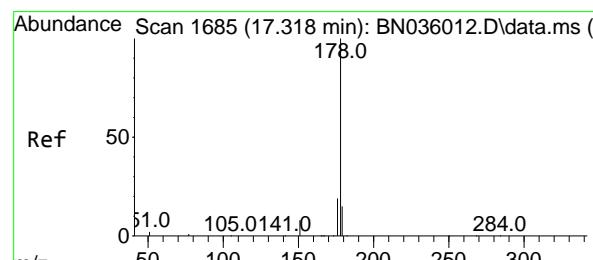
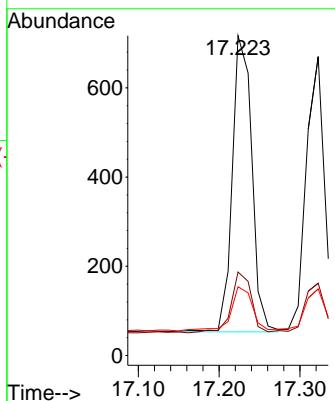


#25  
Phenanthrene  
Concen: 0.096 ng  
RT: 17.223 min Scan# 1  
Delta R.T. -0.007 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

Tgt Ion:178 Resp: 1118

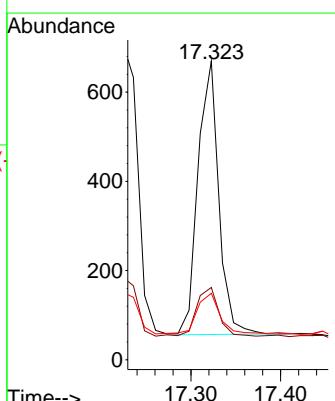
Ion	Ratio	Lower	Upper
178	100		
176	21.4	16.0	24.0
179	16.7	12.4	18.6

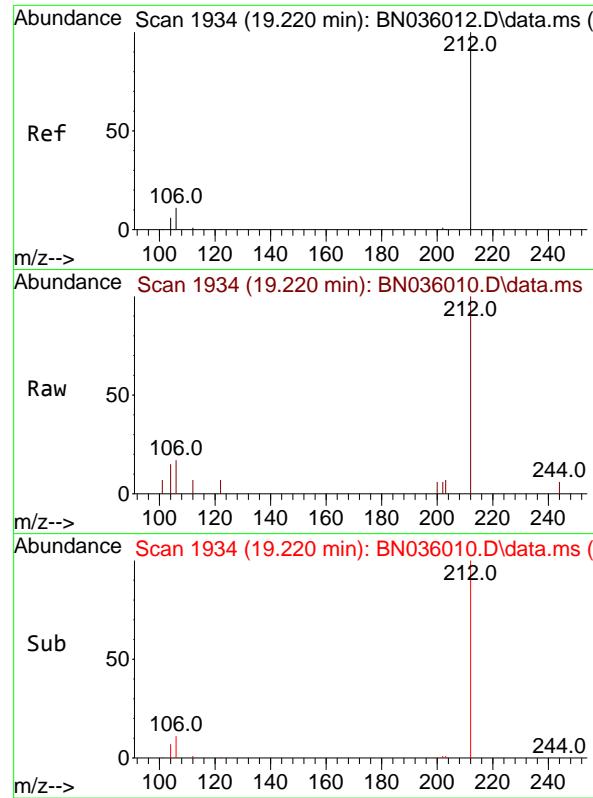


#26  
Anthracene  
Concen: 0.093 ng  
RT: 17.323 min Scan# 1686  
Delta R.T. 0.005 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Tgt Ion:178 Resp: 987

Ion	Ratio	Lower	Upper
178	100		
176	19.7	15.4	23.2
179	17.6	12.0	18.0

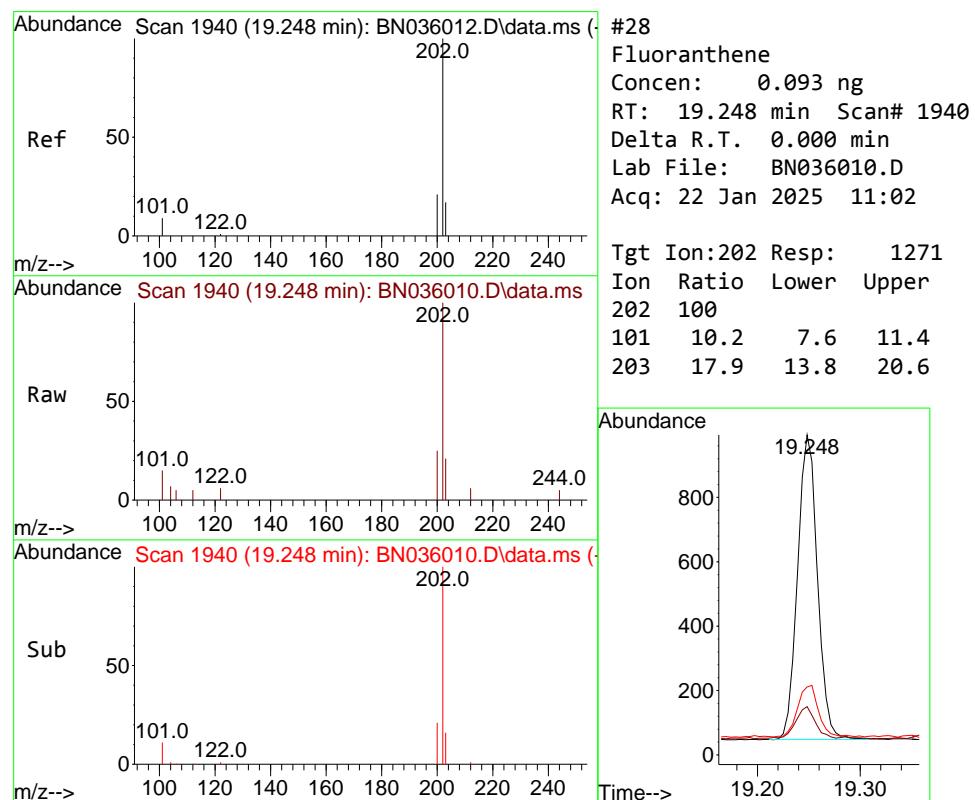
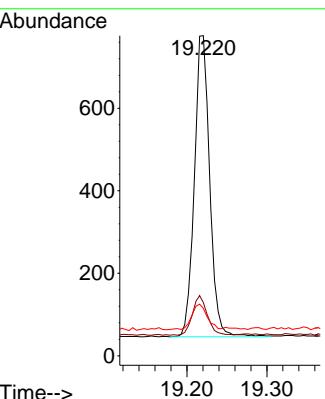




#27  
 Fluoranthene-d10  
 Concen: 0.097 ng  
 RT: 19.220 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

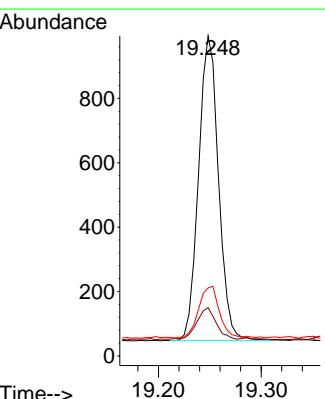
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

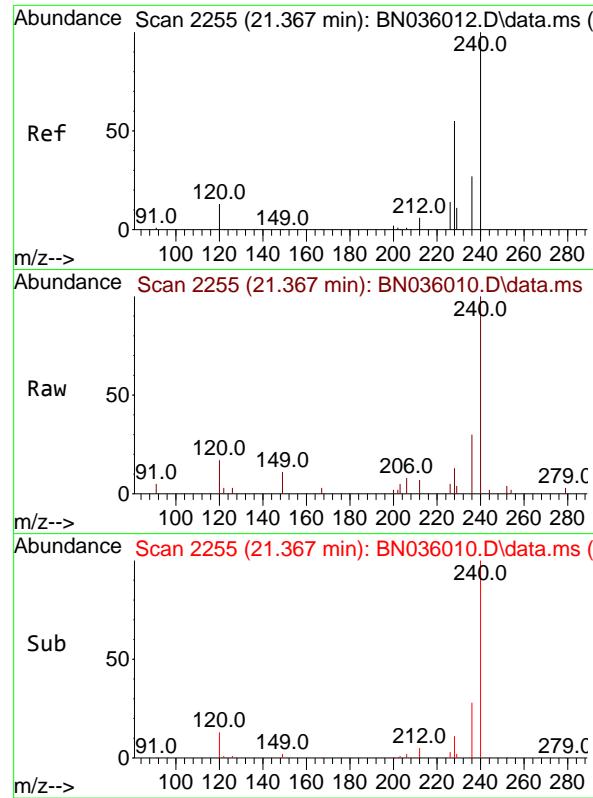
Tgt Ion:212 Resp: 973  
 Ion Ratio Lower Upper  
 212 100  
 106 12.6 9.7 14.5  
 104 8.6 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.093 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

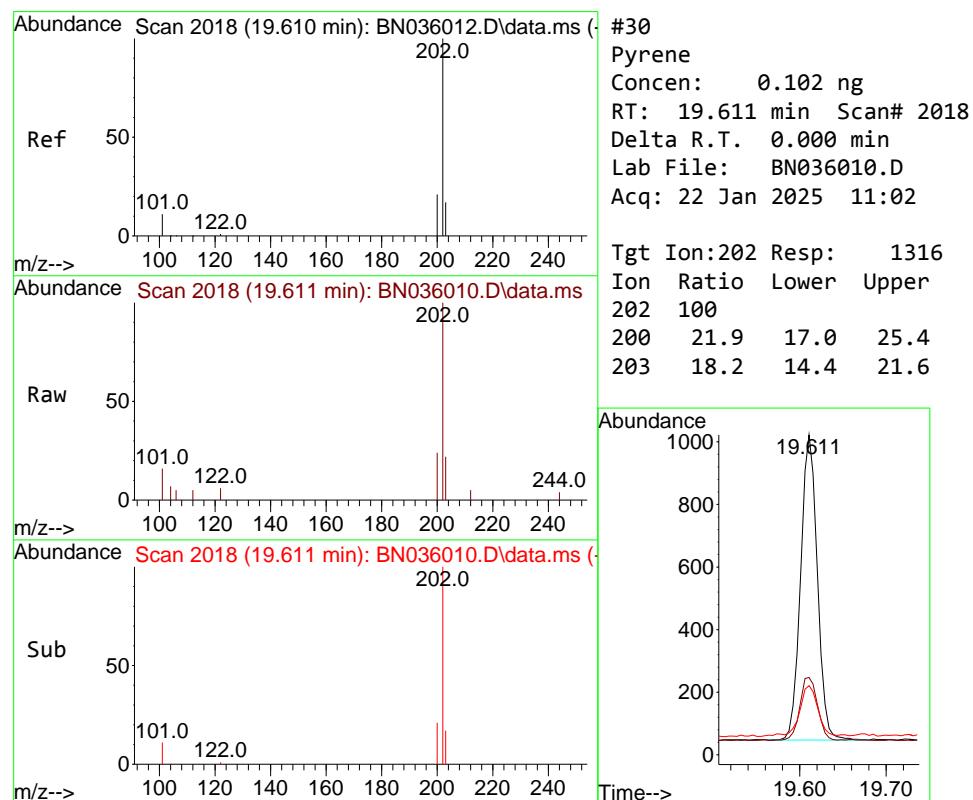
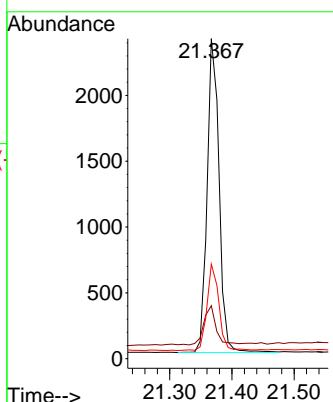
Tgt Ion:202 Resp: 1271  
 Ion Ratio Lower Upper  
 202 100  
 101 10.2 7.6 11.4  
 203 17.9 13.8 20.6





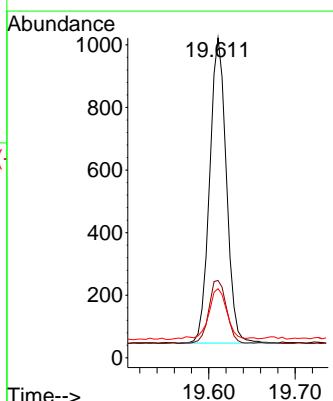
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036010.D  
ClientSampleId : SSTDICCO.1  
Acq: 22 Jan 2025 11:02

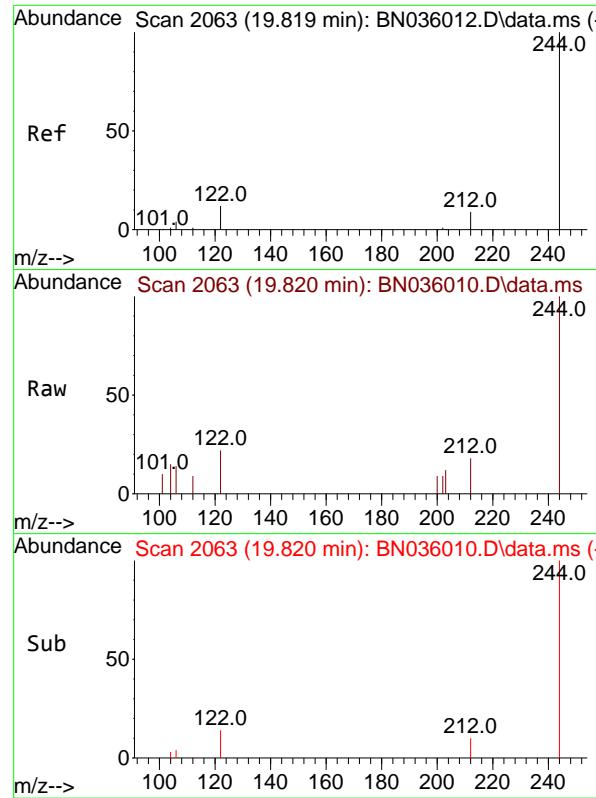
Tgt Ion:240 Resp: 3177  
Ion Ratio Lower Upper  
240 100  
120 16.5 13.9 20.9  
236 29.5 23.7 35.5



#30  
Pyrene  
Concen: 0.102 ng  
RT: 19.611 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Tgt Ion:202 Resp: 1316  
Ion Ratio Lower Upper  
202 100  
200 21.9 17.0 25.4  
203 18.2 14.4 21.6

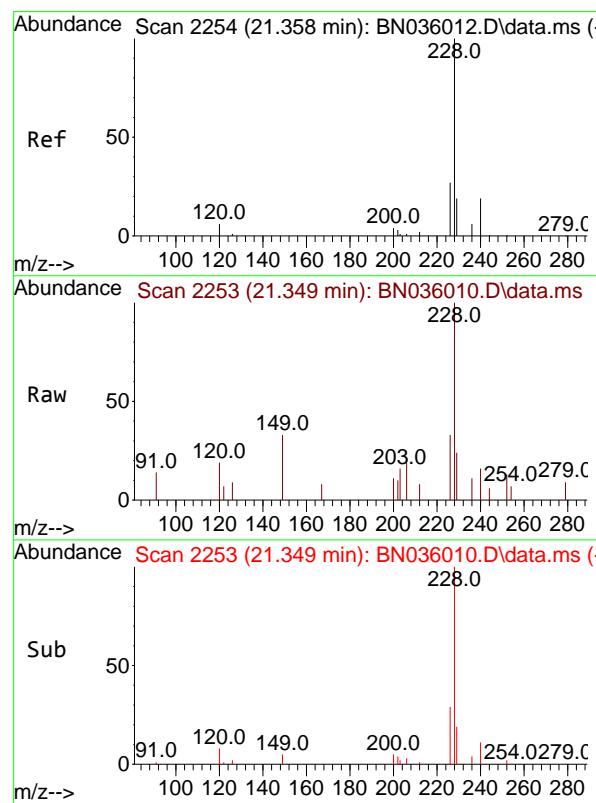
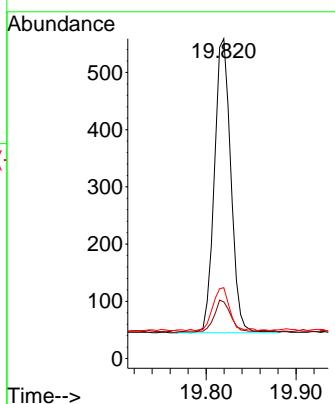




#31  
 Terphenyl-d14  
 Concen: 0.099 ng  
 RT: 19.820 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

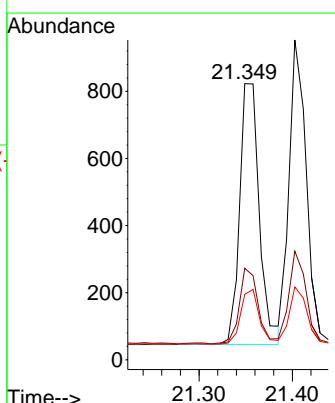
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

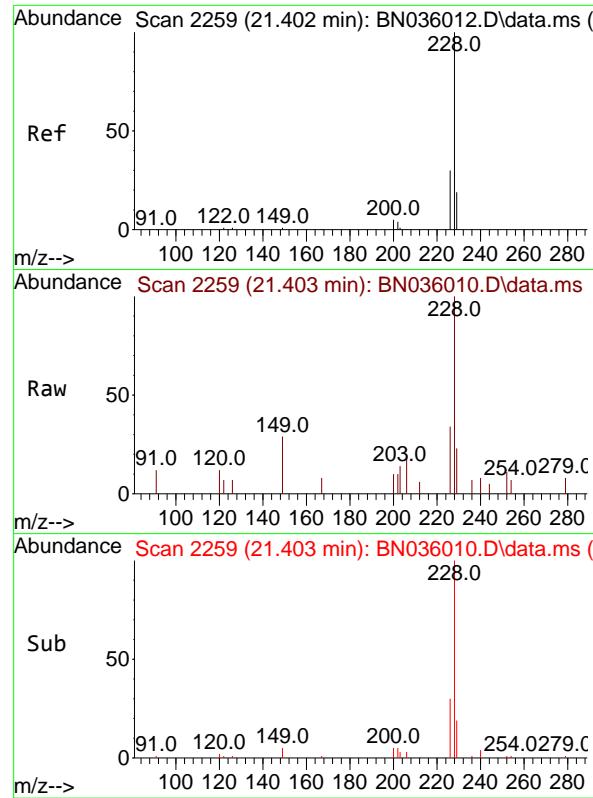
Tgt Ion:244 Resp: 652  
 Ion Ratio Lower Upper  
 244 100  
 212 17.7 9.1 13.7#  
 122 22.2 11.3 16.9#



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

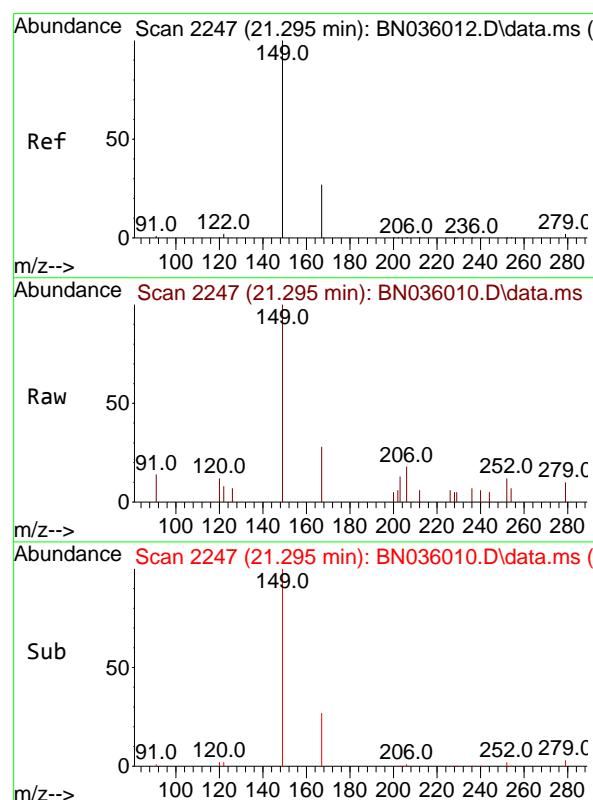
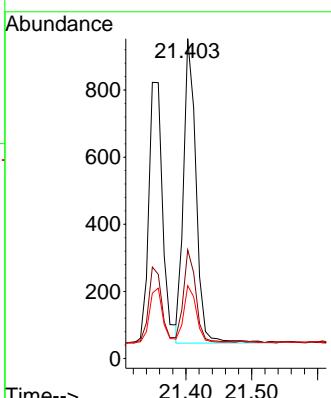
Tgt Ion:228 Resp: 1148  
 Ion Ratio Lower Upper  
 228 100  
 226 33.2 22.6 34.0  
 229 23.7 16.5 24.7





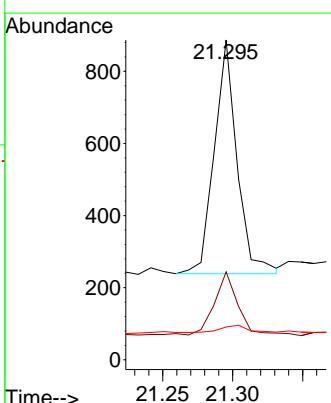
#33  
Chrysene  
Concen: 0.101 ng  
RT: 21.403 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036010.D ClientSampleId : SSTDICCO.1  
Acq: 22 Jan 2025 11:02

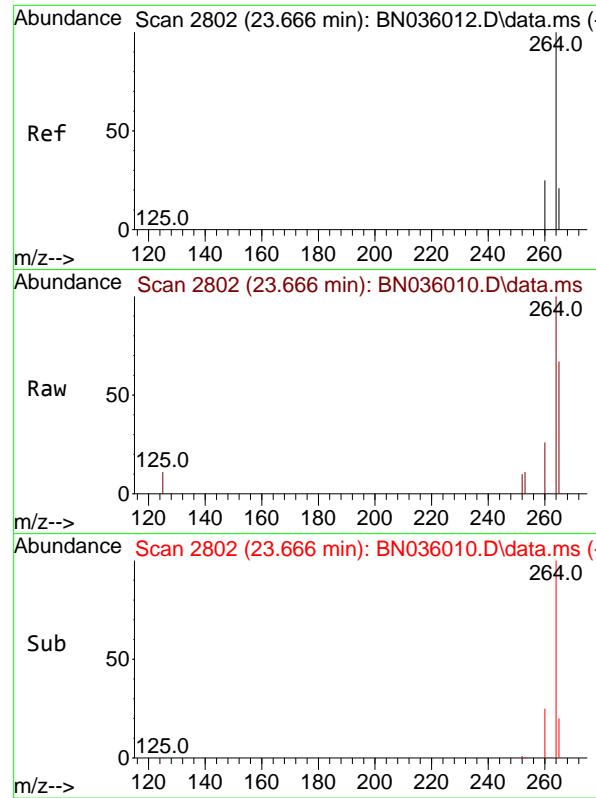
Tgt Ion:228 Resp: 1192  
Ion Ratio Lower Upper  
228 100  
226 34.0 25.3 37.9  
229 22.8 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.116 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Tgt Ion:149 Resp: 730  
Ion Ratio Lower Upper  
149 100  
167 29.3 21.9 32.9  
279 3.6 3.0 4.6

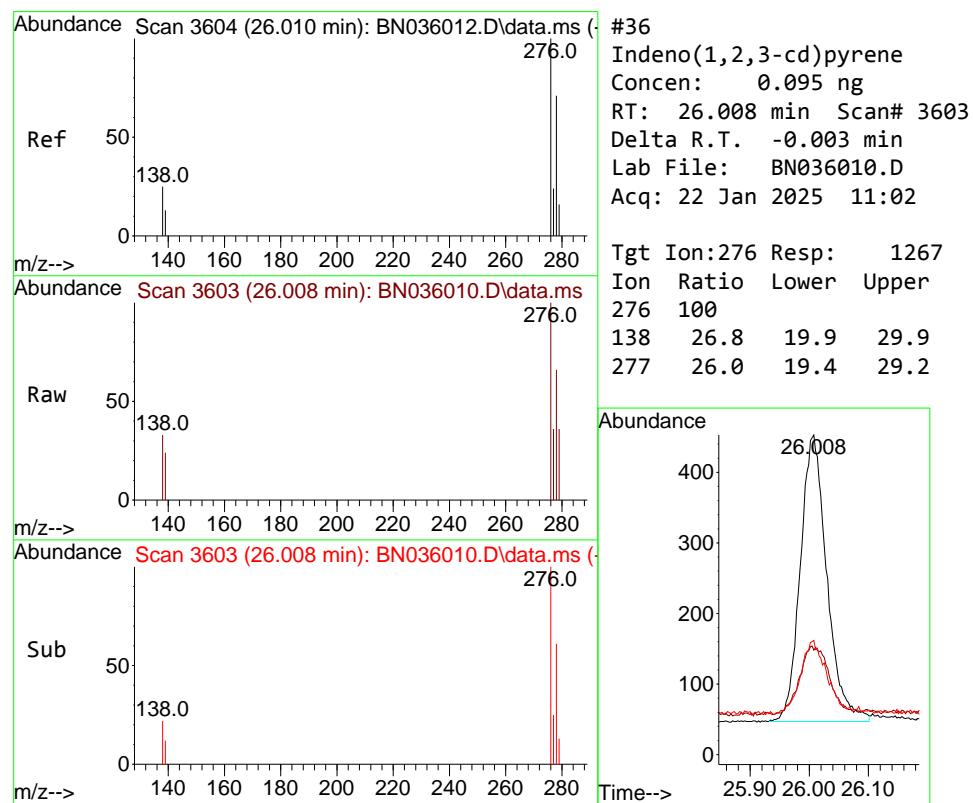
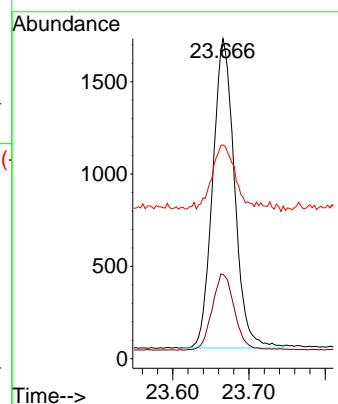




#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.666 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

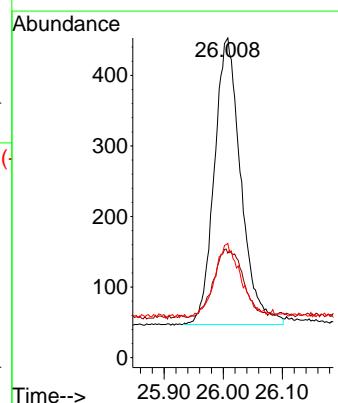
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

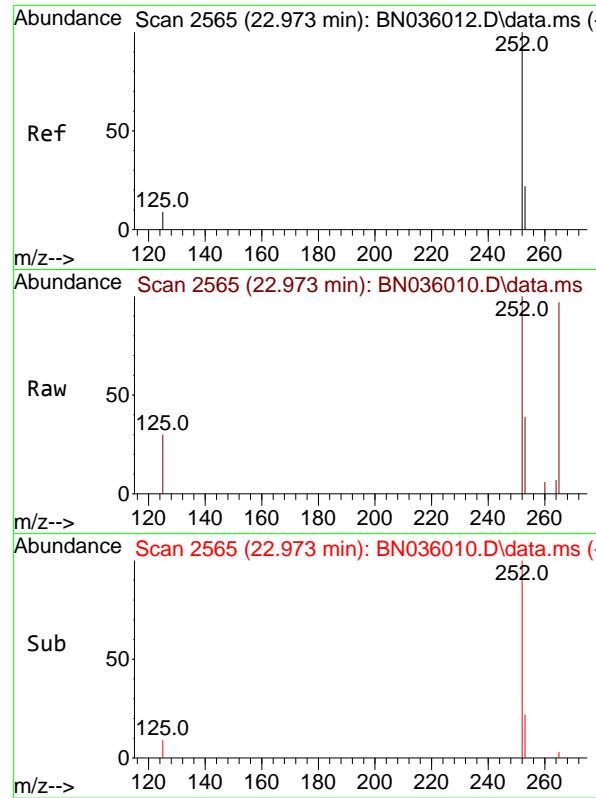
Tgt Ion:264 Resp: 3324  
 Ion Ratio Lower Upper  
 264 100  
 260 26.4 21.8 32.6  
 265 66.8 56.6 84.8



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

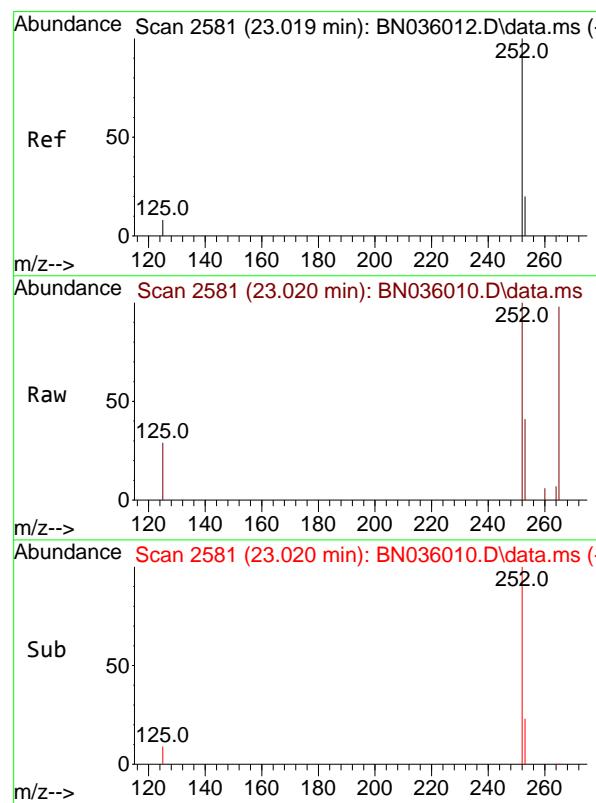
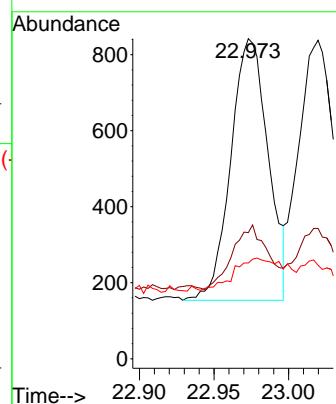
Tgt Ion:276 Resp: 1267  
 Ion Ratio Lower Upper  
 276 100  
 138 26.8 19.9 29.9  
 277 26.0 19.4 29.2





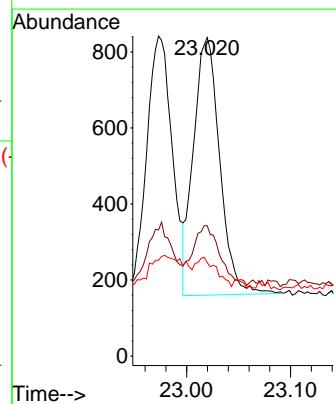
#37  
Benzo(b)fluoranthene  
Concen: 0.099 ng  
RT: 22.973 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02  
ClientSampleId : SSTDICCO.1

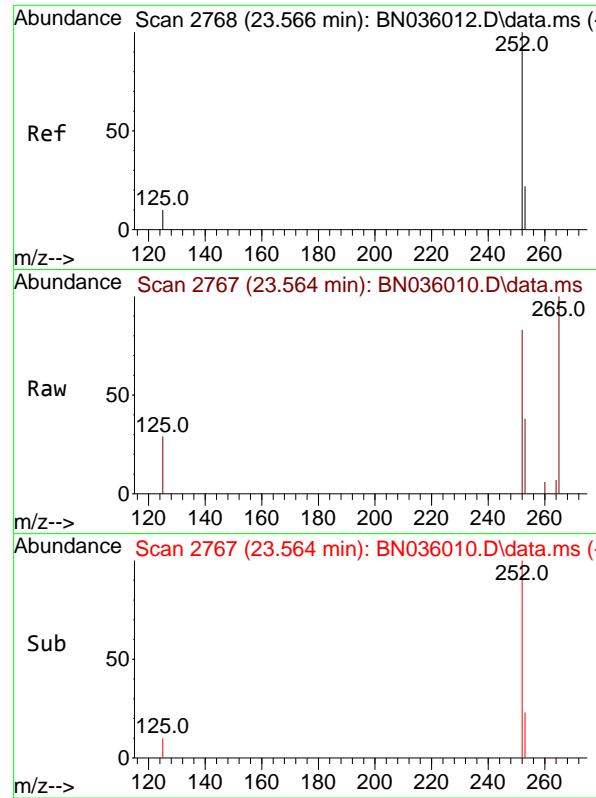
Tgt Ion:252 Resp: 1199  
Ion Ratio Lower Upper  
252 100  
253 39.4 22.5 33.7#  
125 29.9 11.9 17.9#



#38  
Benzo(k)fluoranthene  
Concen: 0.097 ng  
RT: 23.020 min Scan# 2581  
Delta R.T. 0.000 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

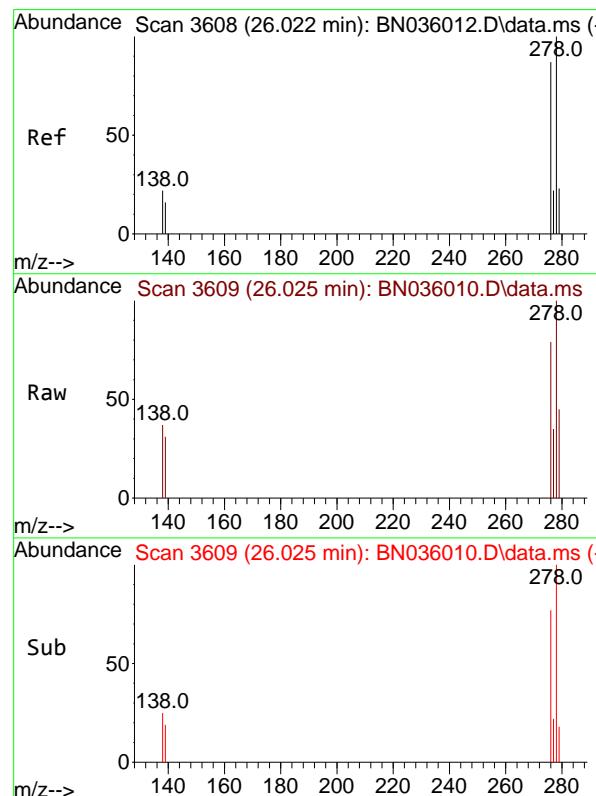
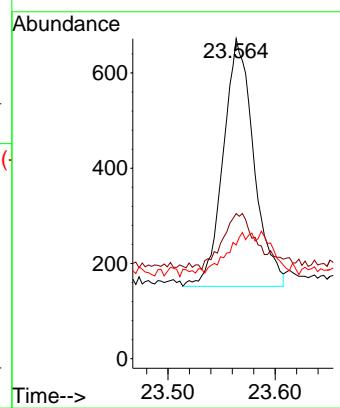
Tgt Ion:252 Resp: 1186  
Ion Ratio Lower Upper  
252 100  
253 40.9 21.3 31.9#  
125 29.4 11.9 17.9#





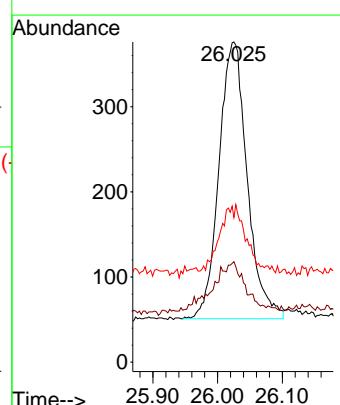
#39  
Benzo(a)pyrene  
Concen: 0.100 ng  
RT: 23.564 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.003 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02  
ClientSampleId : SSTDICCO.1

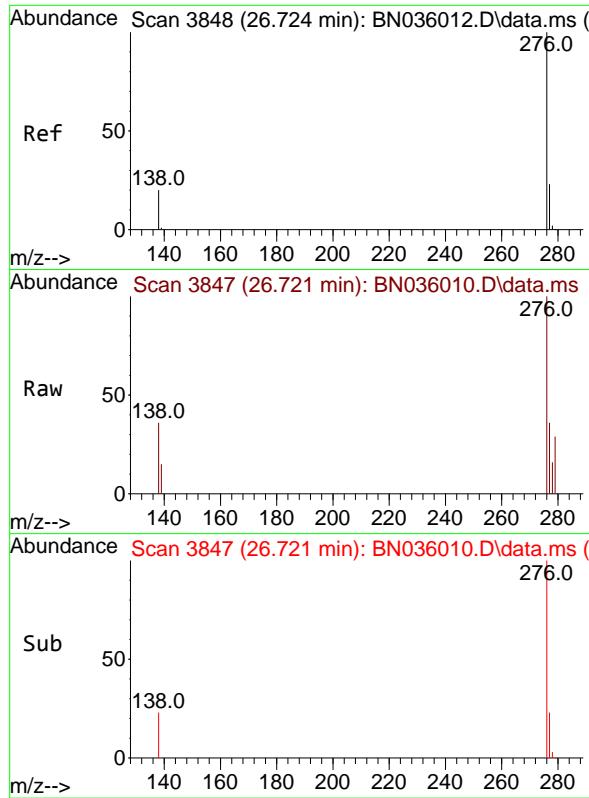
Tgt Ion:252 Resp: 1028  
Ion Ratio Lower Upper  
252 100  
253 45.4 23.8 35.6#  
125 35.6 14.6 21.8#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.093 ng  
RT: 26.025 min Scan# 3609  
Delta R.T. 0.003 min  
Lab File: BN036010.D  
Acq: 22 Jan 2025 11:02

Tgt Ion:278 Resp: 986  
Ion Ratio Lower Upper  
278 100  
139 31.4 16.0 24.0#  
279 45.2 23.8 35.8#

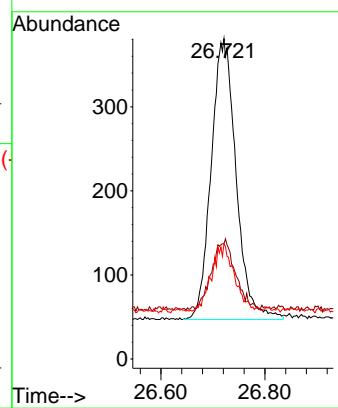




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.096 ng  
 RT: 26.721 min Scan# 3  
 Delta R.T. -0.003 min  
 Lab File: BN036010.D  
 Acq: 22 Jan 2025 11:02

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

Tgt Ion:276 Resp: 1112  
 Ion Ratio Lower Upper  
 276 100  
 277 36.0 21.3 31.9#  
 138 36.0 19.2 28.8#



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

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

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

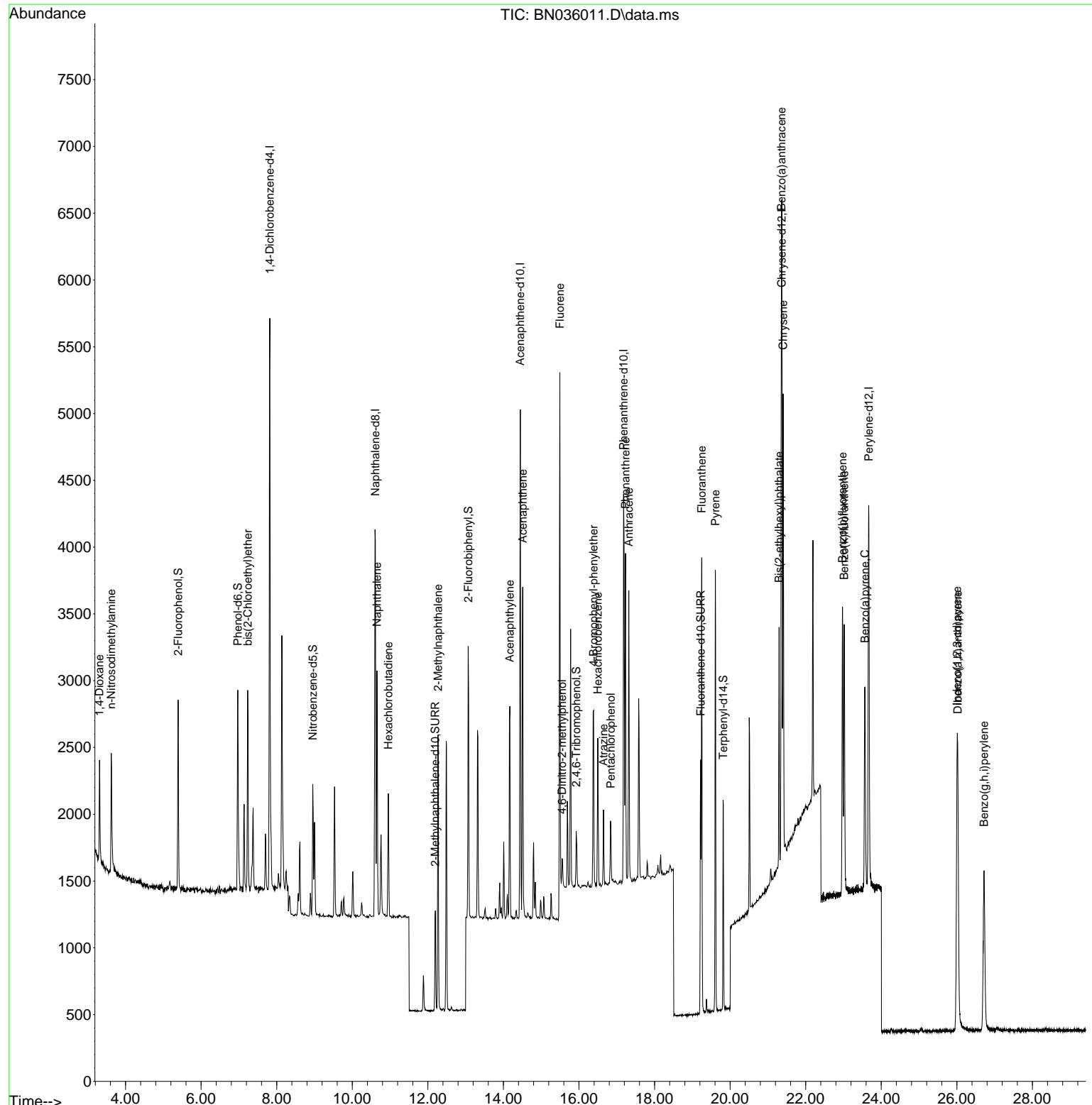
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	2018	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3893	0.400	ng	0.00
13) Acenaphthene-d10	14.447	164	2029	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	4283	0.400	ng	0.00
29) Chrysene-d12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

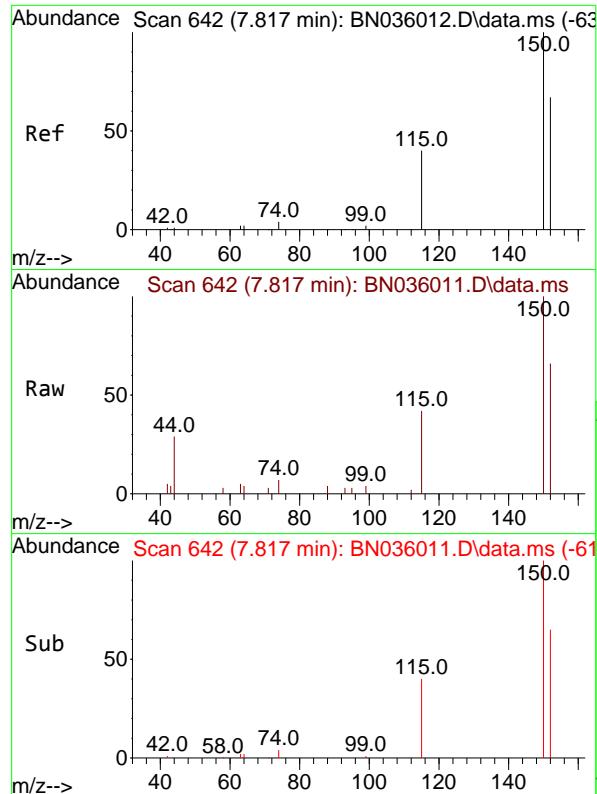
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

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

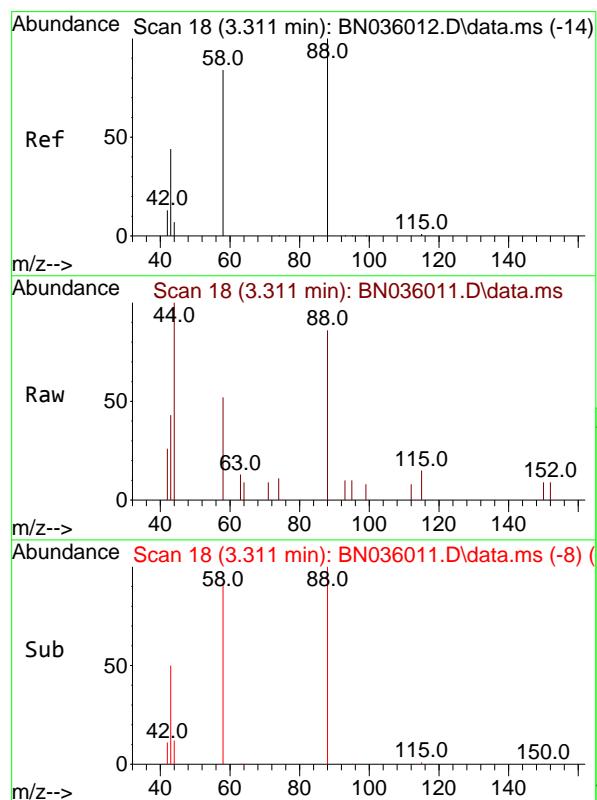
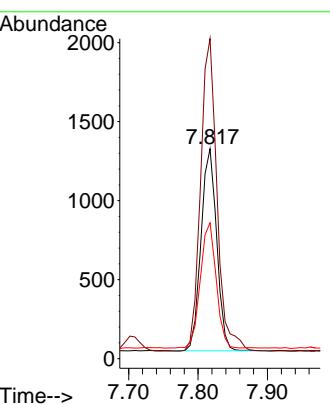




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

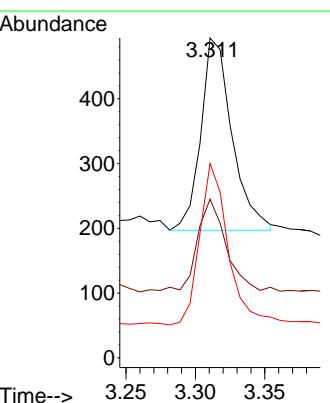
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

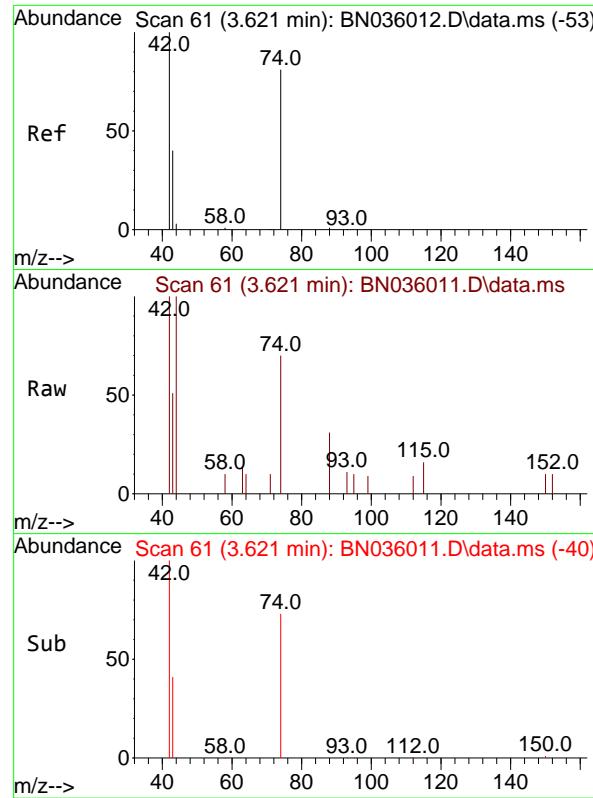
Tgt Ion:152 Resp: 2018  
Ion Ratio Lower Upper  
152 100  
150 152.5 117.4 176.2  
115 64.8 51.0 76.4



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

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

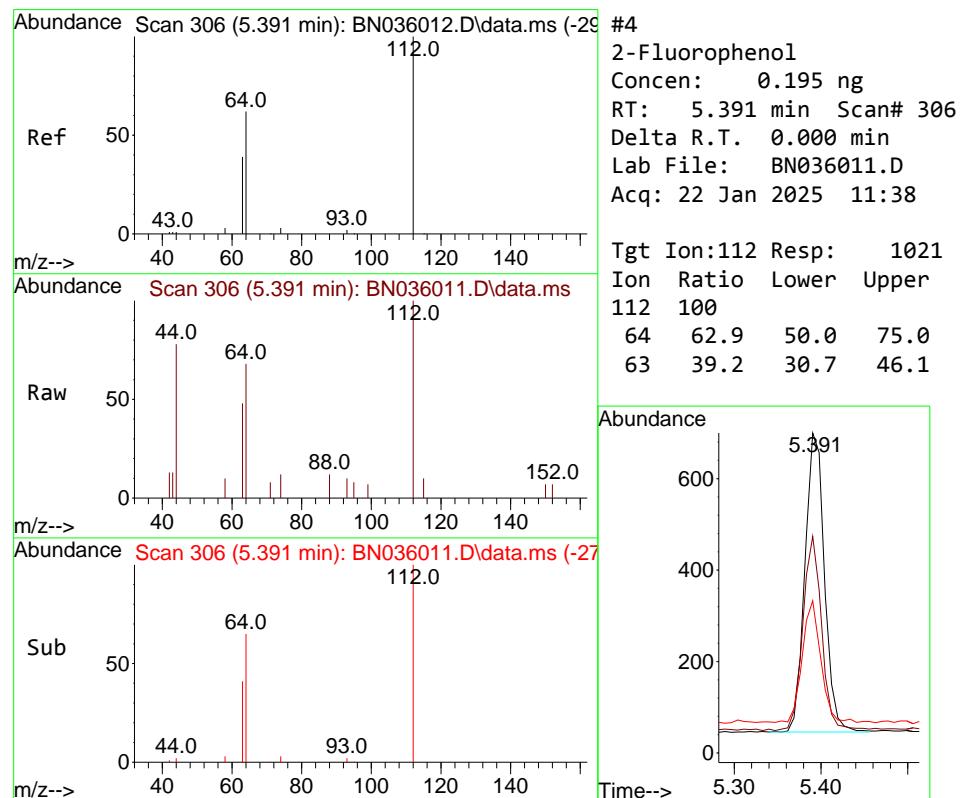
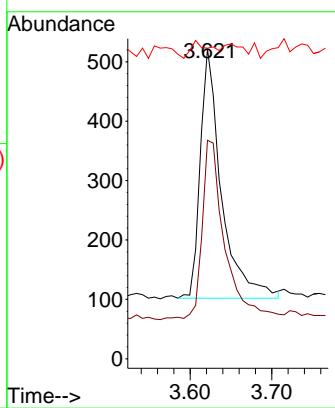




#3  
n-Nitrosodimethylamine  
Concen: 0.185 ng  
RT: 3.621 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

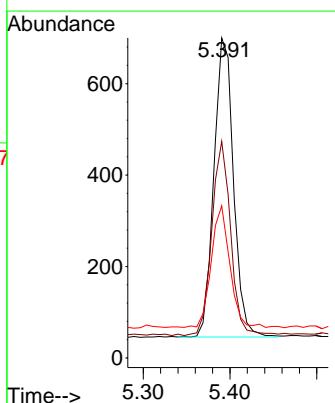
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

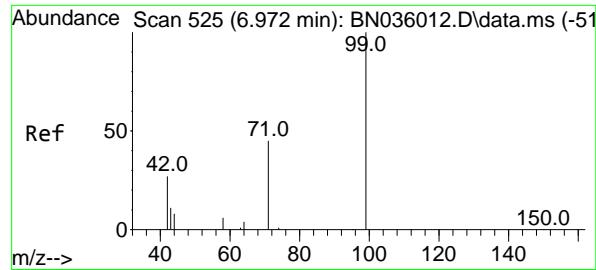
Tgt Ion: 42 Resp: 756  
Ion Ratio Lower Upper  
42 100  
74 77.5 58.1 87.1  
44 4.5 6.2 9.4#



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

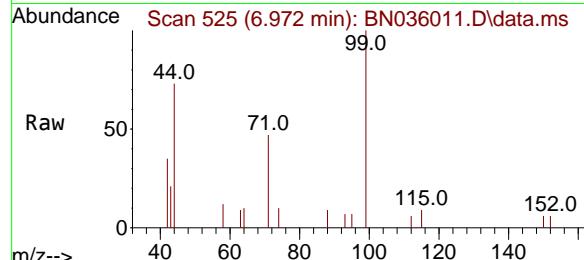
Tgt Ion: 112 Resp: 1021  
Ion Ratio Lower Upper  
112 100  
64 62.9 50.0 75.0  
63 39.2 30.7 46.1



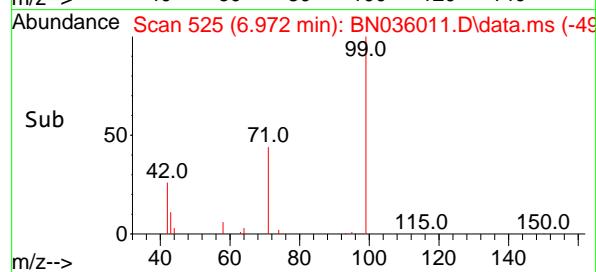
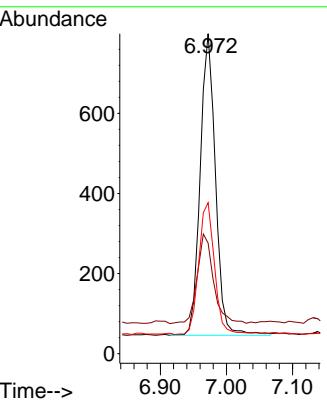


#5  
 Phenol-d6  
 Concen: 0.196 ng  
 RT: 6.972 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

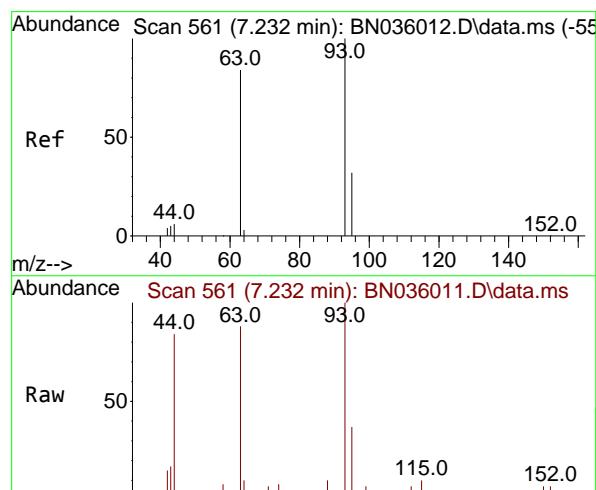
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2



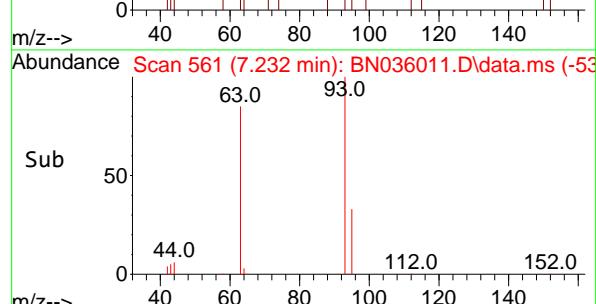
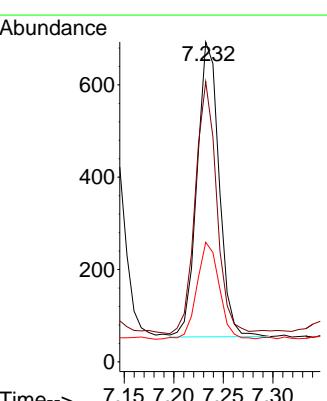
Tgt Ion: 99 Resp: 1206  
 Ion Ratio Lower Upper  
 99 100  
 42 31.6 26.8 40.2  
 71 45.4 36.6 55.0

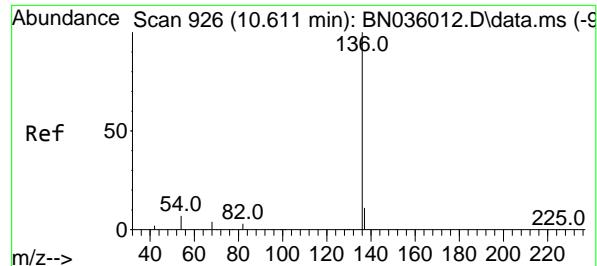


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.199 ng  
 RT: 7.232 min Scan# 561  
 Delta R.T. 0.000 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38



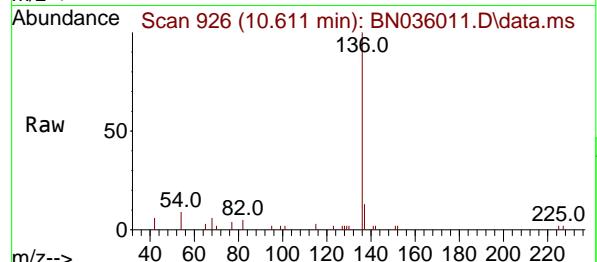
Tgt Ion: 93 Resp: 988  
 Ion Ratio Lower Upper  
 93 100  
 63 83.2 65.8 98.6  
 95 33.4 25.8 38.6





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.611 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

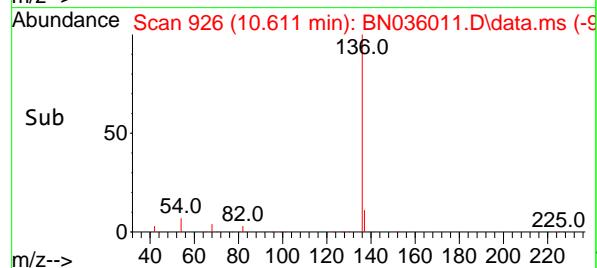
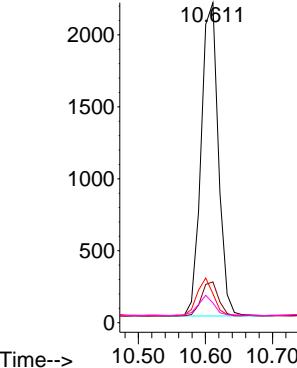


Tgt Ion:136 Resp: 3893

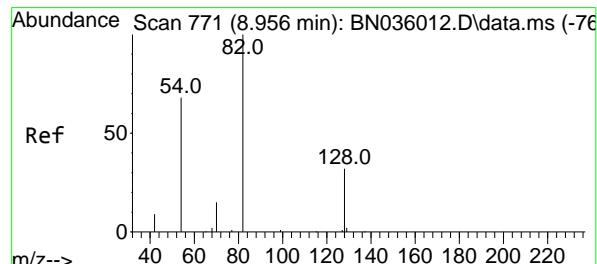
Ion Ratio Lower Upper

136	100		
137	12.7	10.4	15.6
54	9.0	7.7	11.5
68	6.2	5.4	8.0

Abundance



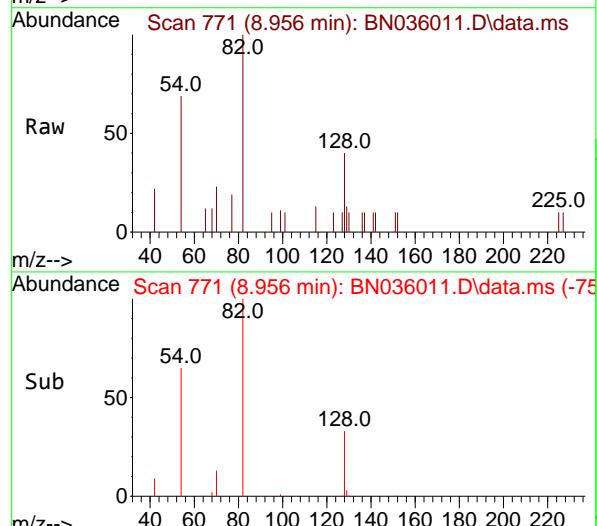
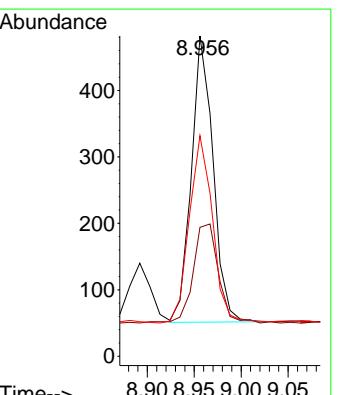
#8  
 Nitrobenzene-d5  
 Concen: 0.188 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. 0.000 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

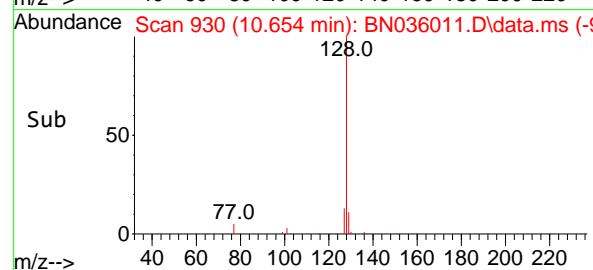
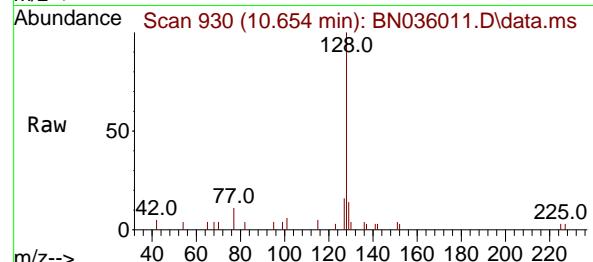
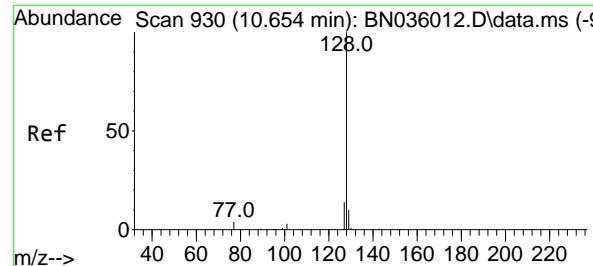


Tgt Ion: 82 Resp: 692

Ion Ratio Lower Upper

82	100		
128	40.2	28.8	43.2
54	68.9	55.8	83.8





#9

Naphthalene

Concen: 0.196 ng

RT: 10.654 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

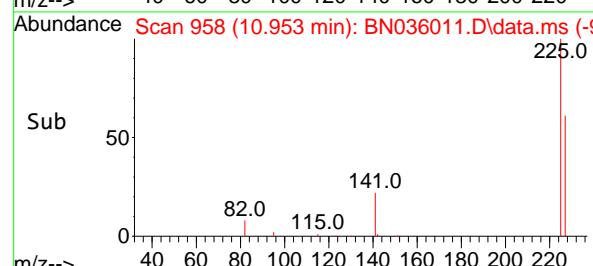
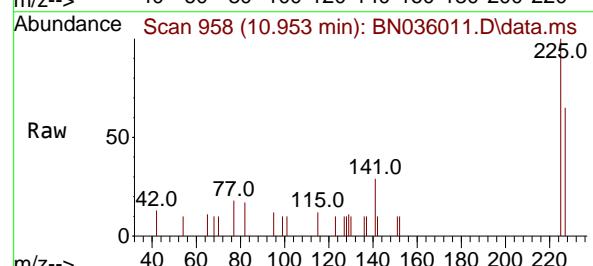
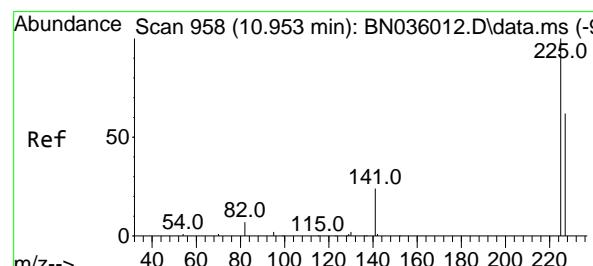
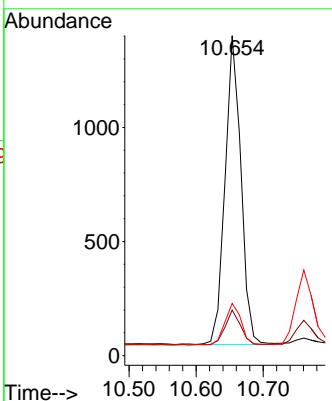
Tgt Ion:128 Resp: 2221

Ion Ratio Lower Upper

128 100

129 14.3 9.4 14.2#

127 16.3 12.6 19.0



#10

Hexachlorobutadiene

Concen: 0.197 ng

RT: 10.953 min Scan# 958

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

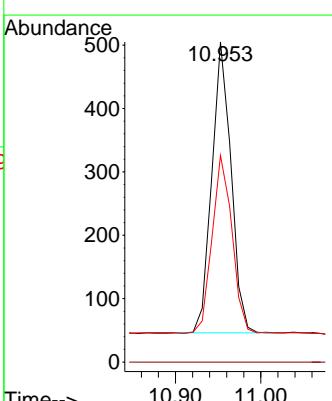
Tgt Ion:225 Resp: 718

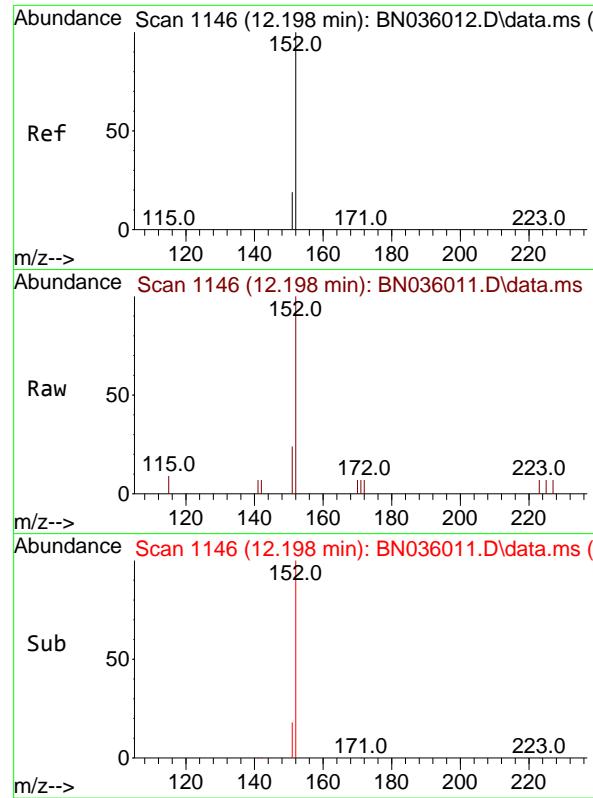
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 64.1 51.0 76.6

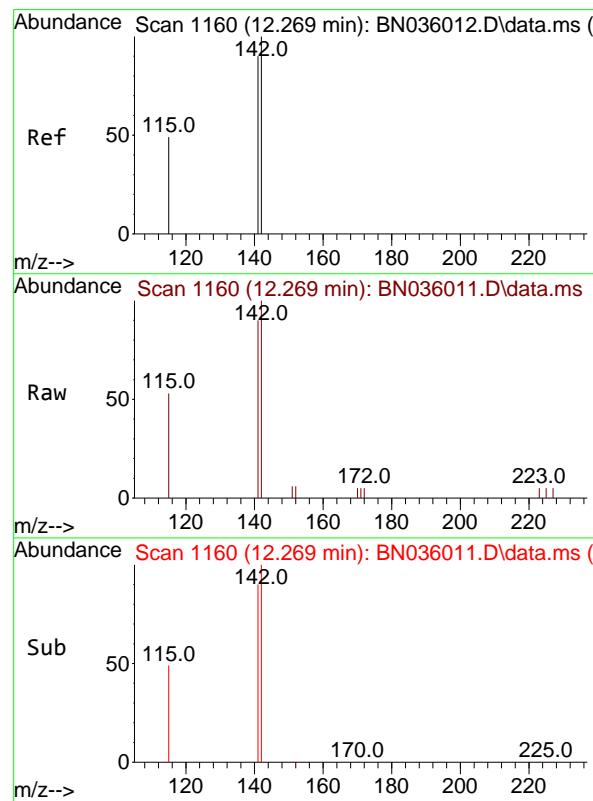
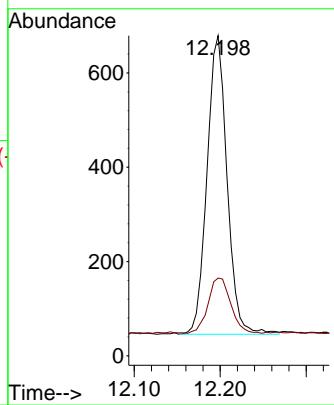




#11  
2-Methylnaphthalene-d10  
Concen: 0.194 ng  
RT: 12.198 min Scan# 1146  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

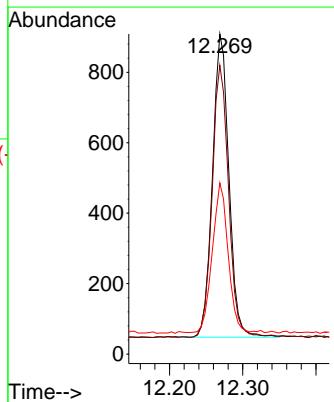
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

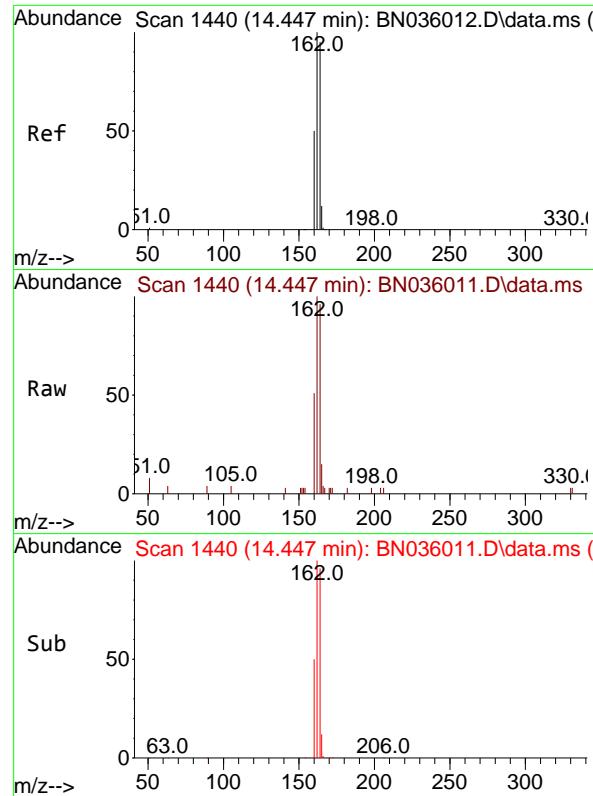
Tgt Ion:152 Resp: 1026  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0



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

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

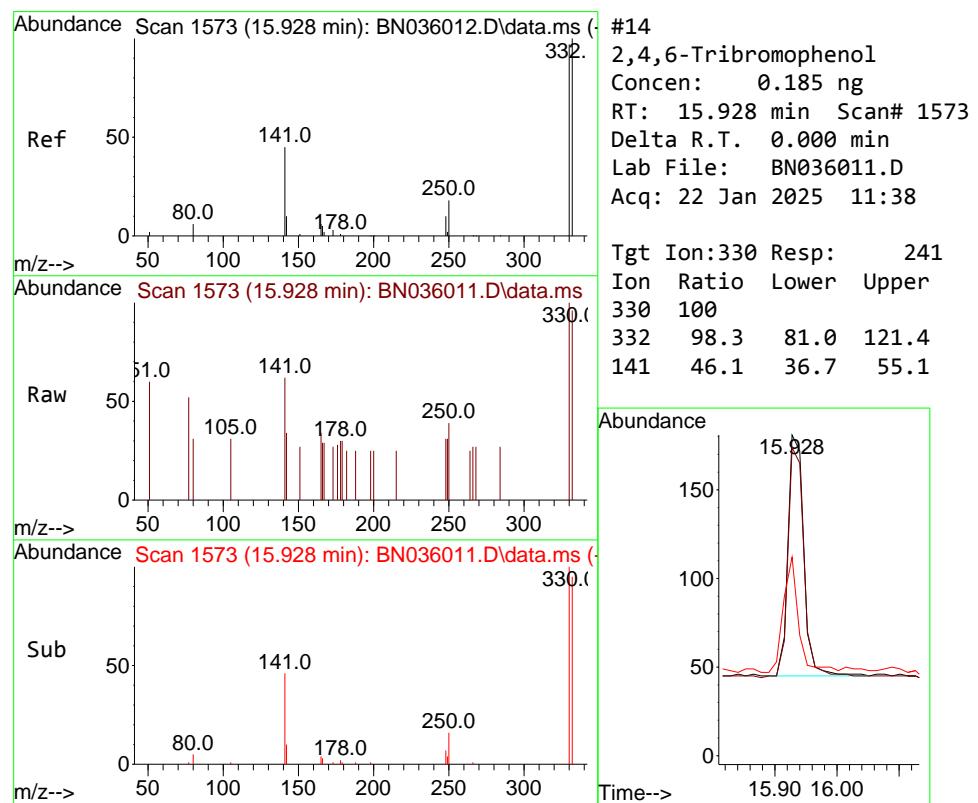
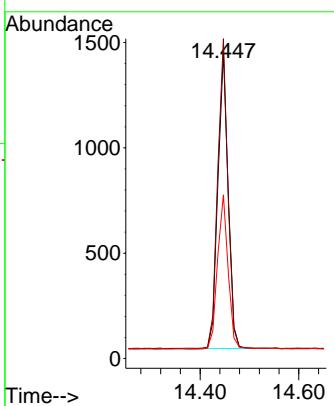




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.447 min Scan# 1440  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

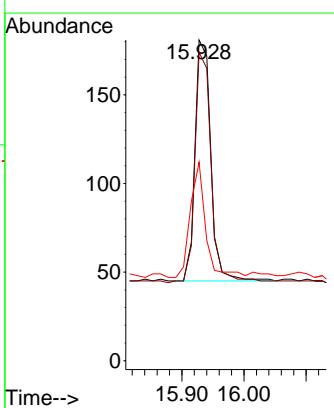
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

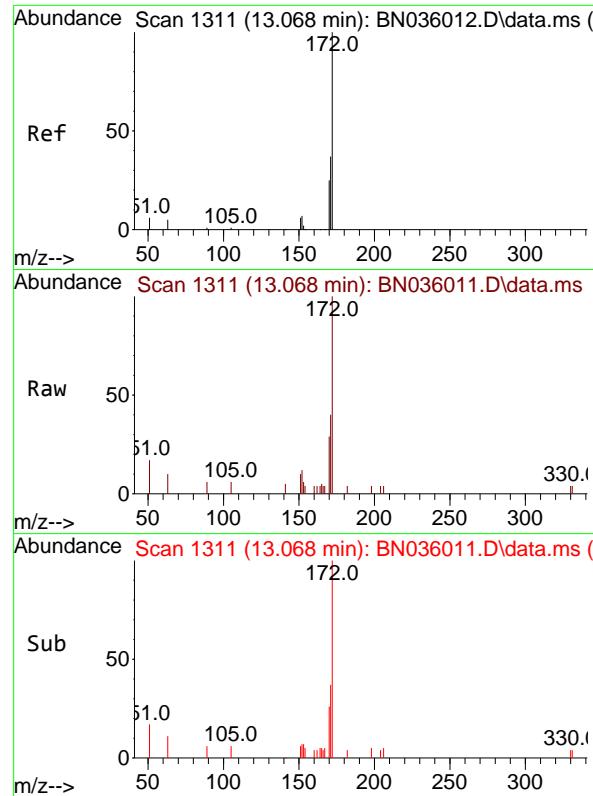
Tgt Ion:164 Resp: 2029  
Ion Ratio Lower Upper  
164 100  
162 104.4 84.1 126.1  
160 53.4 43.8 65.8



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

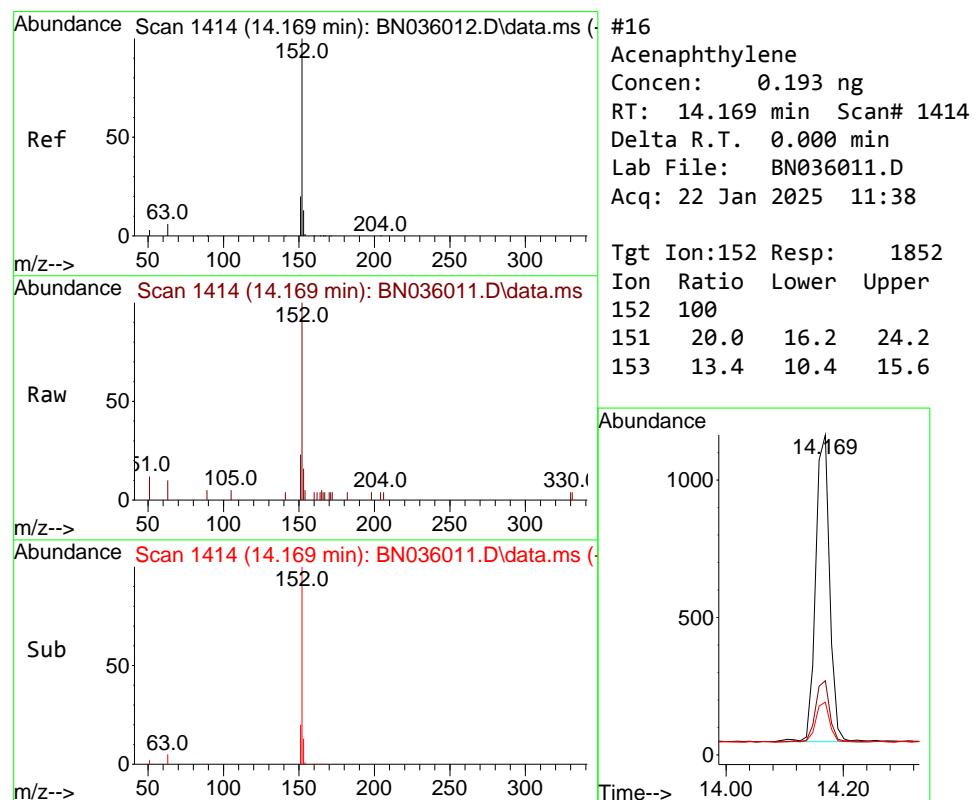
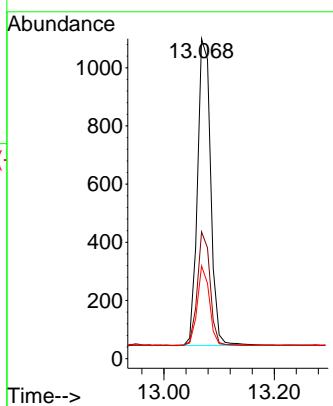
Tgt Ion:330 Resp: 241  
Ion Ratio Lower Upper  
330 100  
332 98.3 81.0 121.4  
141 46.1 36.7 55.1





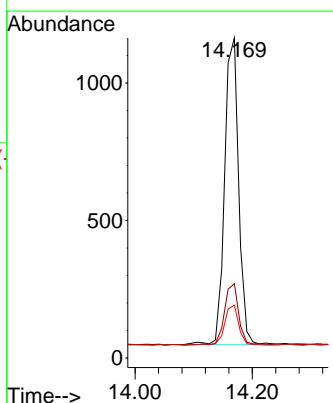
#15  
2-Fluorobiphenyl  
Concen: 0.194 ng  
RT: 13.068 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036011.D ClientSampleId : SSTDICCO.2  
Acq: 22 Jan 2025 11:38

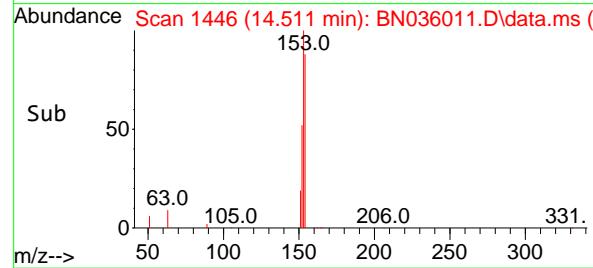
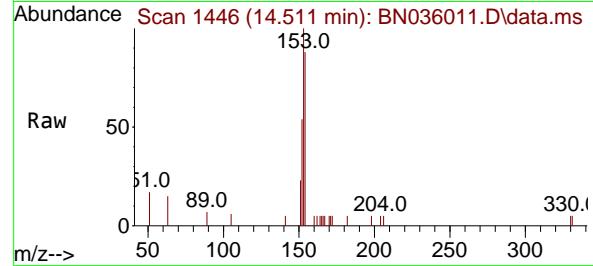
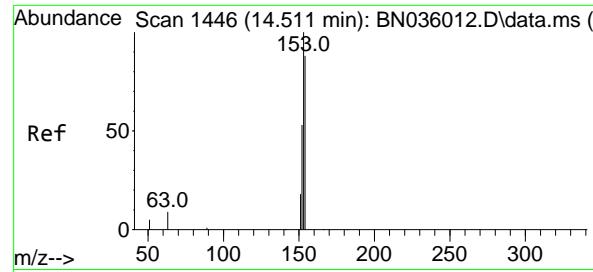
Tgt Ion:172 Resp: 1761  
Ion Ratio Lower Upper  
172 100  
171 39.6 30.9 46.3  
170 29.0 21.2 31.8



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

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





#17

Acenaphthene

Concen: 0.190 ng

RT: 14.511 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

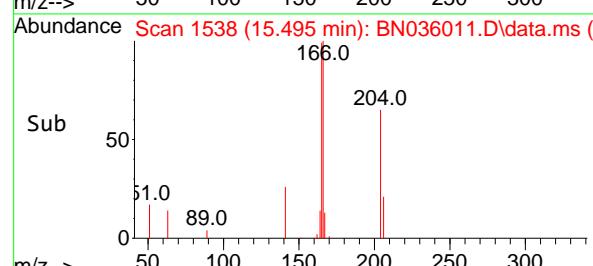
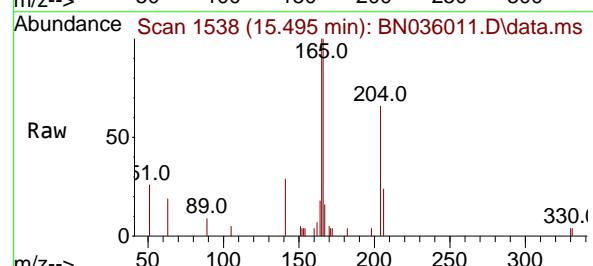
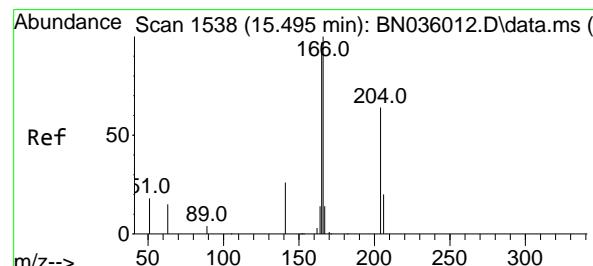
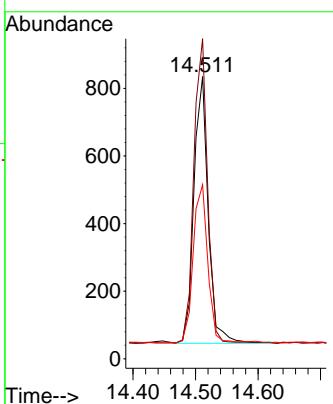
Tgt Ion:154 Resp: 1254

Ion Ratio Lower Upper

154 100

153 110.2 88.9 133.3

152 59.4 48.1 72.1



#18

Fluorene

Concen: 0.182 ng

RT: 15.495 min Scan# 1538

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

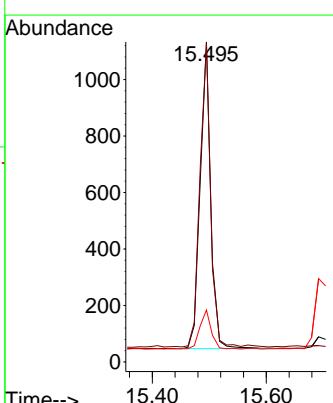
Tgt Ion:166 Resp: 1503

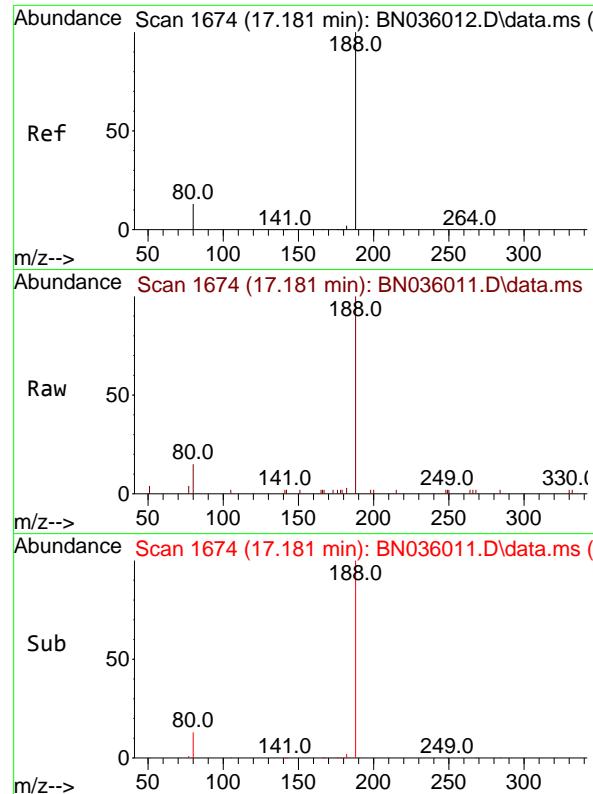
Ion Ratio Lower Upper

166 100

165 95.7 78.5 117.7

167 13.1 10.7 16.1

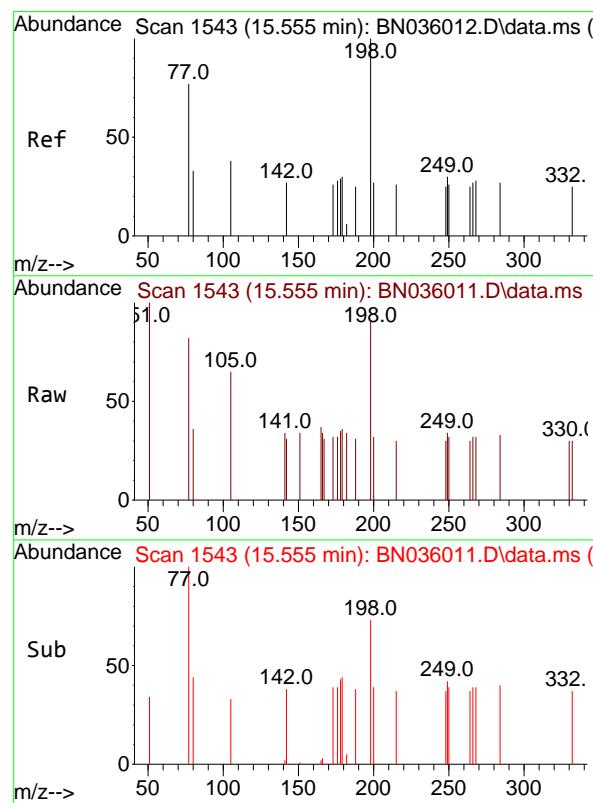
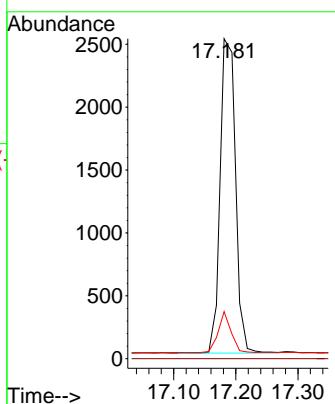




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.181 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

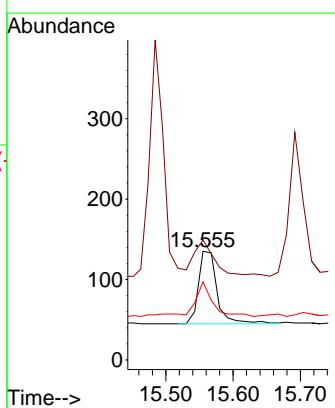
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

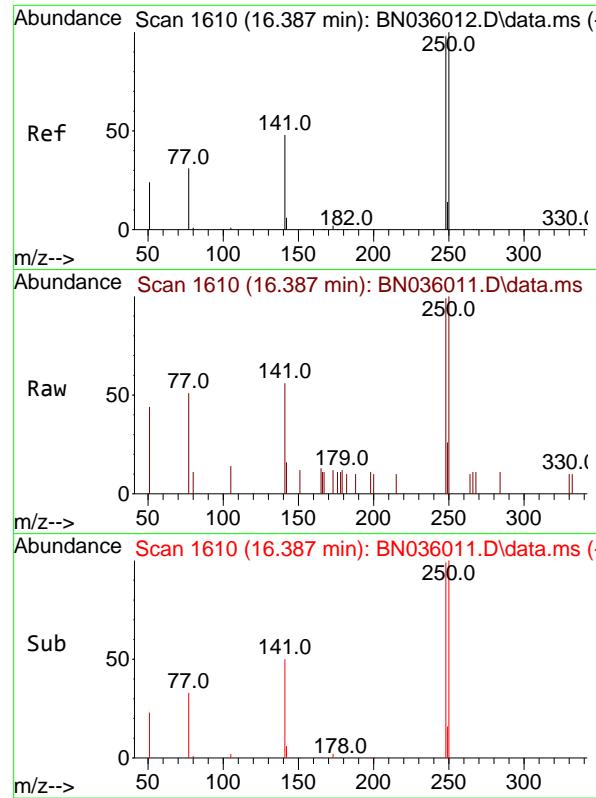
Tgt Ion:188 Resp: 4283  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 14.7 12.3 18.5



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.174 ng  
 RT: 15.555 min Scan# 1543  
 Delta R.T. 0.000 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

Tgt Ion:198 Resp: 174  
 Ion Ratio Lower Upper  
 198 100  
 51 110.4 68.1 102.1#  
 105 71.9 46.5 69.7#





#21

4-Bromophenyl-phenylether

Concen: 0.189 ng

RT: 16.387 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

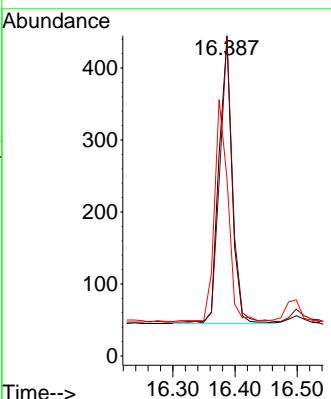
Tgt Ion:248 Resp: 576

Ion Ratio Lower Upper

248 100

250 101.1 81.5 122.3

141 56.1 41.8 62.6



#22

Hexachlorobenzene

Concen: 0.191 ng

RT: 16.499 min Scan# 1619

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

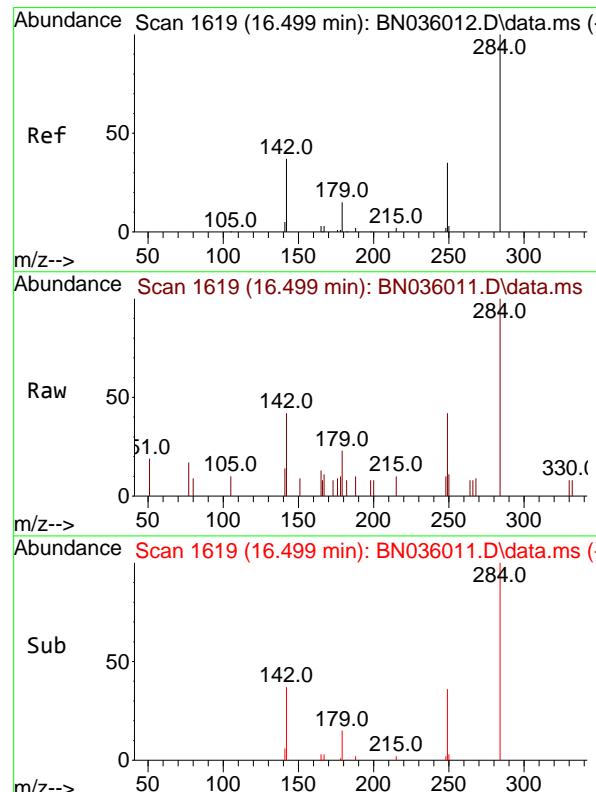
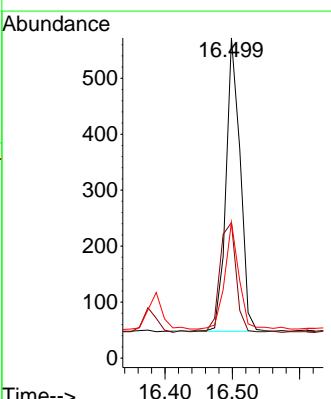
Tgt Ion:284 Resp: 766

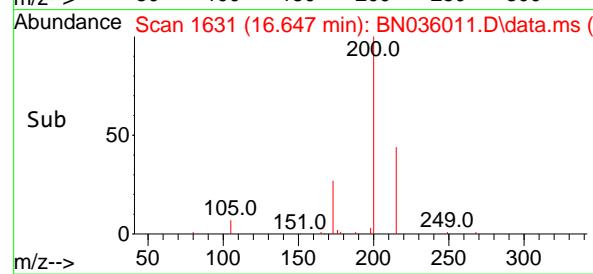
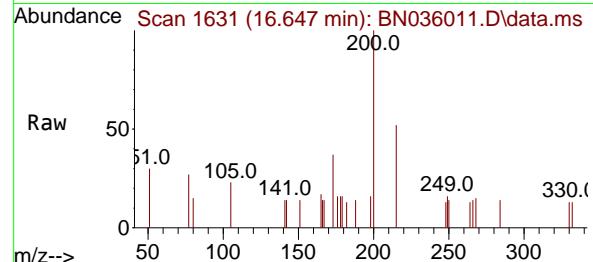
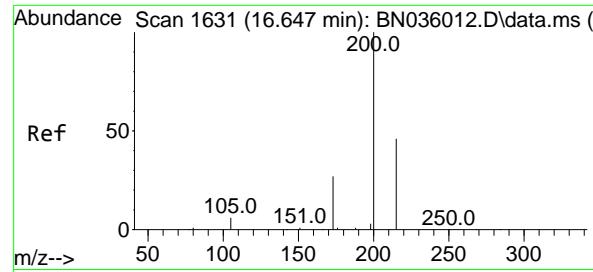
Ion Ratio Lower Upper

284 100

142 42.3 33.6 50.4

249 37.1 28.8 43.2

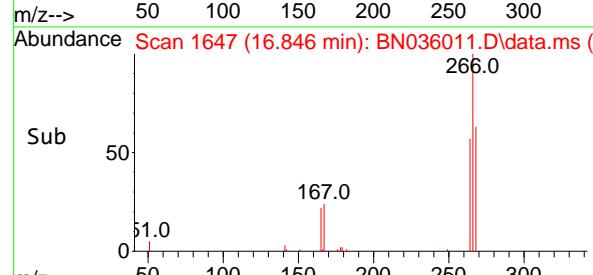
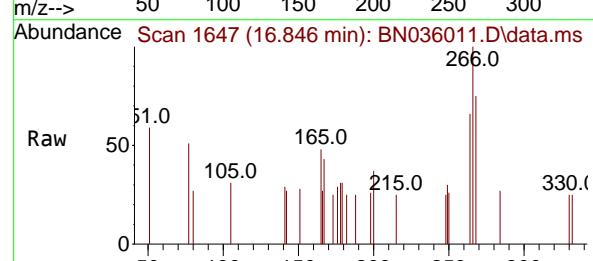
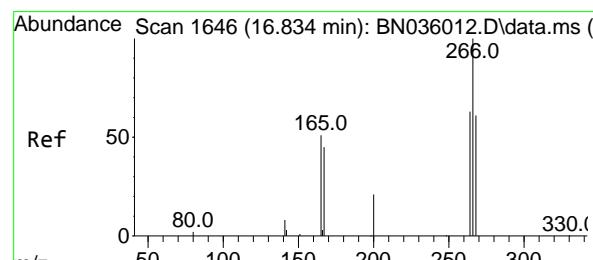
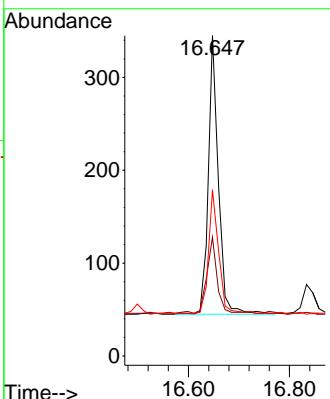




Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

Tgt Ion:200 Resp: 415

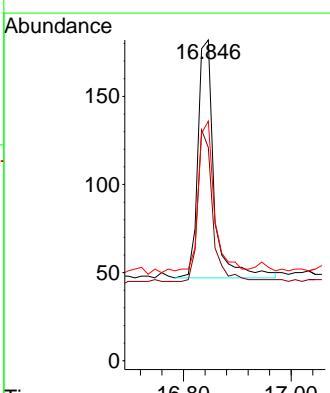
Ion	Ratio	Lower	Upper
200	100		
173	37.1	26.6	40.0
215	51.9	40.6	61.0

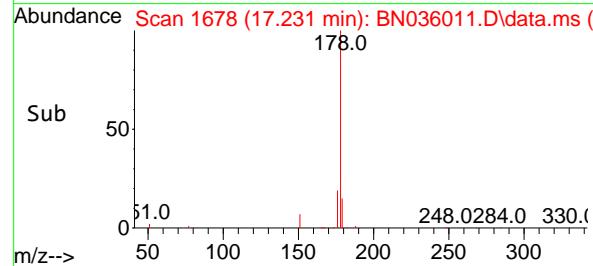
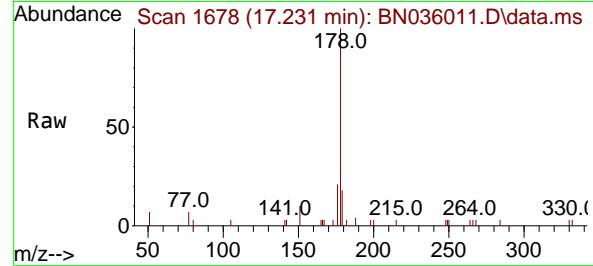
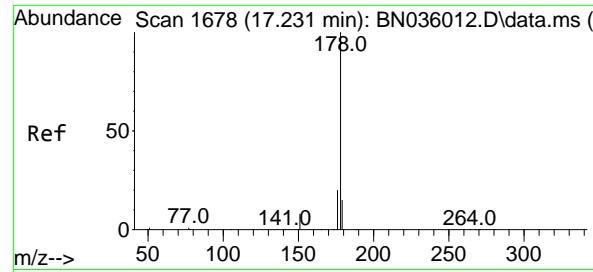


#24  
Pentachlorophenol  
Concen: 0.162 ng  
RT: 16.846 min Scan# 1647  
Delta R.T. 0.012 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

Tgt Ion:266 Resp: 281

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





#25

Phenanthrene

Concen: 0.193 ng

RT: 17.231 min Scan# 1

Instrument:

BNA\_N

Delta R.T. 0.000 min

Lab File: BN036011.D

ClientSampleId :

Acq: 22 Jan 2025 11:38

SSTDICCO.2

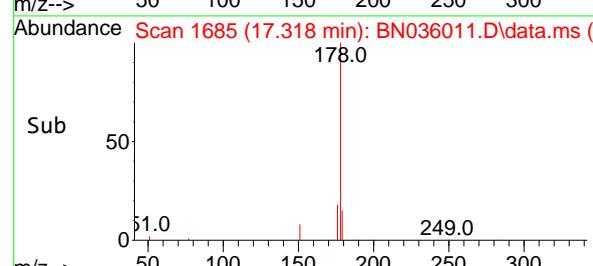
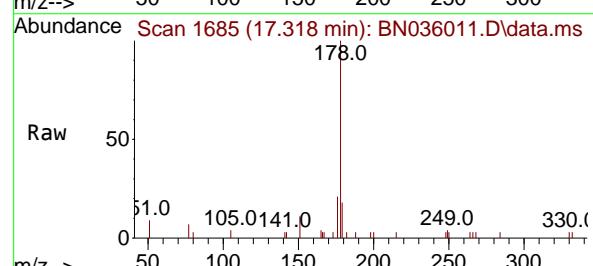
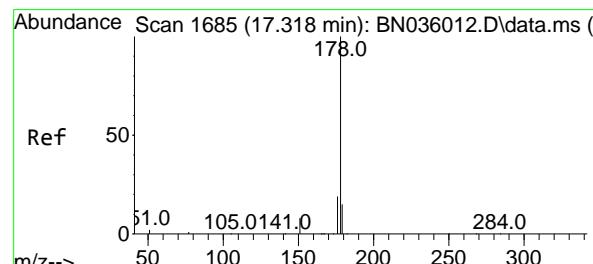
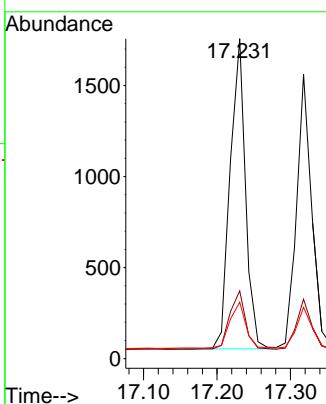
Tgt Ion:178 Resp: 2480

Ion Ratio Lower Upper

178 100

176 19.1 16.0 24.0

179 16.0 12.4 18.6



#26

Anthracene

Concen: 0.186 ng

RT: 17.318 min Scan# 1685

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

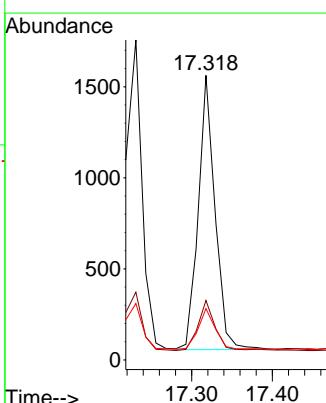
Tgt Ion:178 Resp: 2175

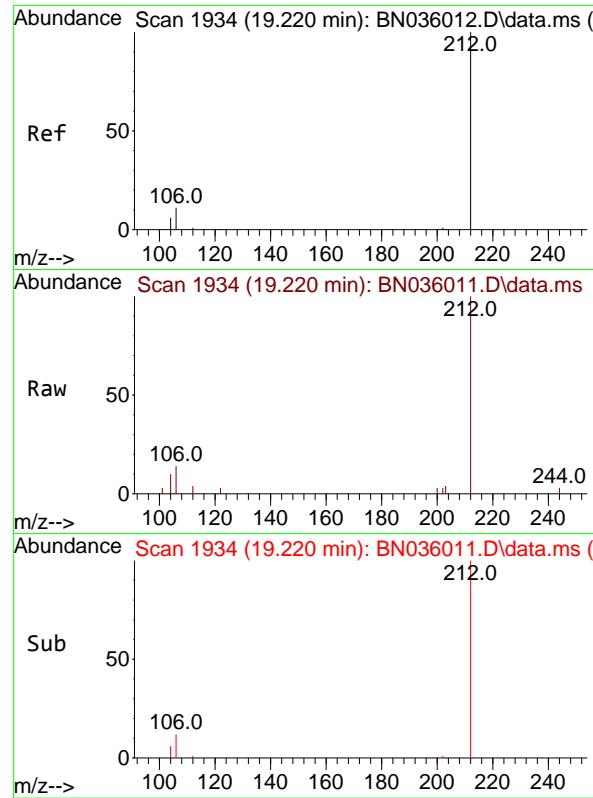
Ion Ratio Lower Upper

178 100

176 18.7 15.4 23.2

179 15.4 12.0 18.0

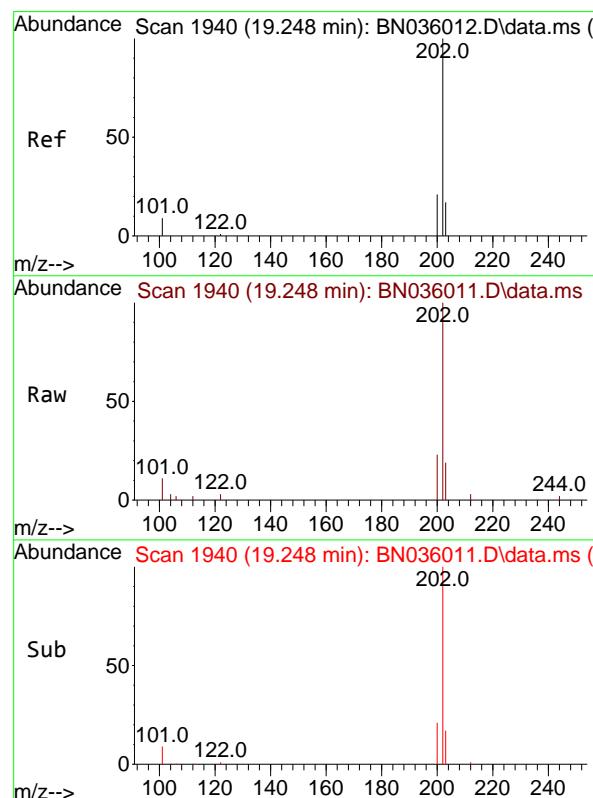
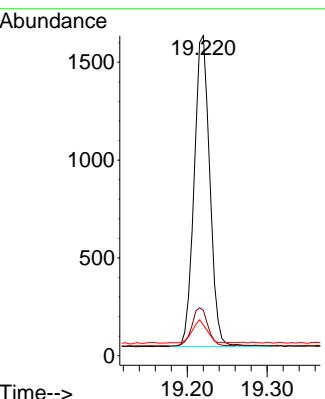




#27  
Fluoranthene-d10  
Concen: 0.194 ng  
RT: 19.220 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

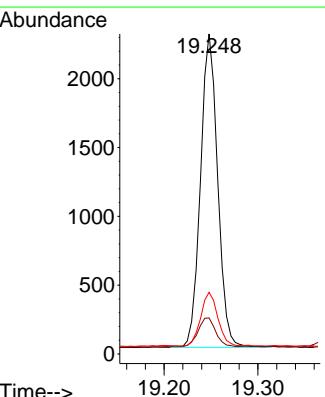
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

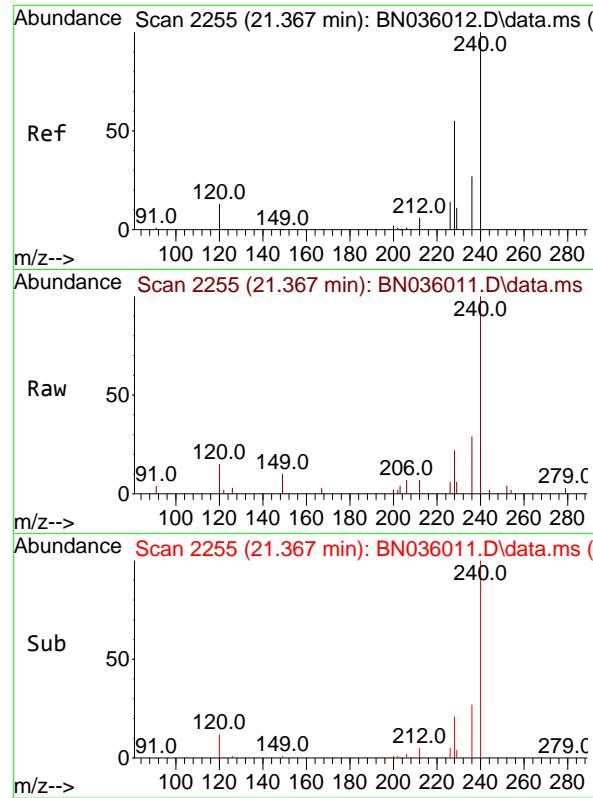
Tgt Ion:212 Resp: 2155  
Ion Ratio Lower Upper  
212 100  
106 12.5 9.7 14.5  
104 7.1 6.0 9.0



#28  
Fluoranthene  
Concen: 0.191 ng  
RT: 19.248 min Scan# 1940  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

Tgt Ion:202 Resp: 2891  
Ion Ratio Lower Upper  
202 100  
101 9.8 7.6 11.4  
203 16.9 13.8 20.6

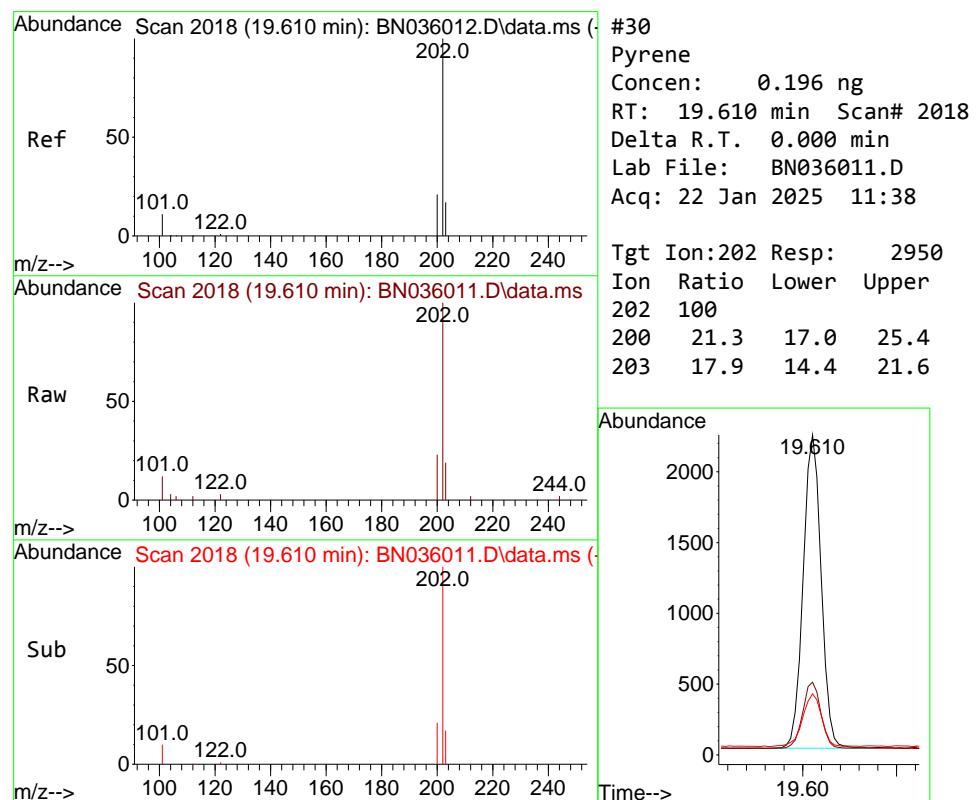
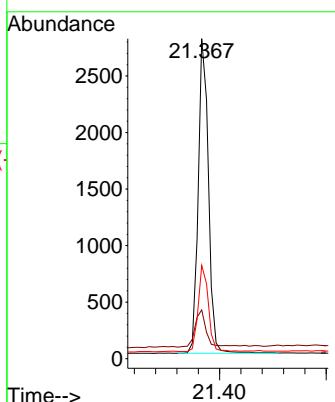




Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

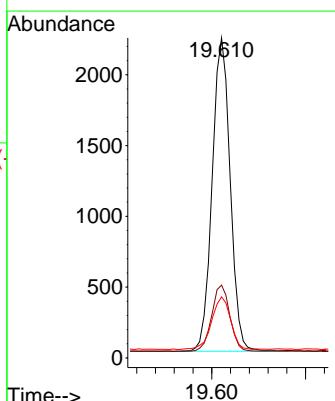
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

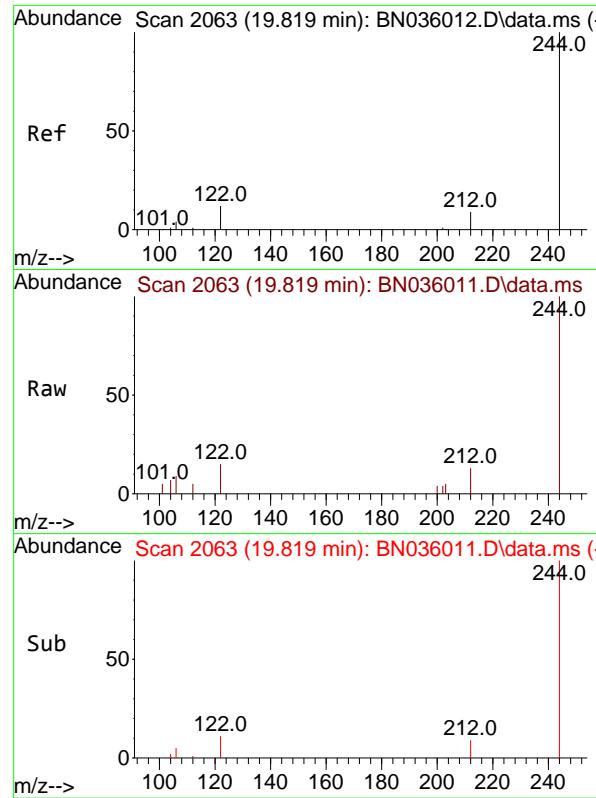
Tgt Ion:240 Resp: 3716  
Ion Ratio Lower Upper  
240 100  
120 15.2 13.9 20.9  
236 29.2 23.7 35.5



Pyrene  
Concen: 0.196 ng  
RT: 19.610 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

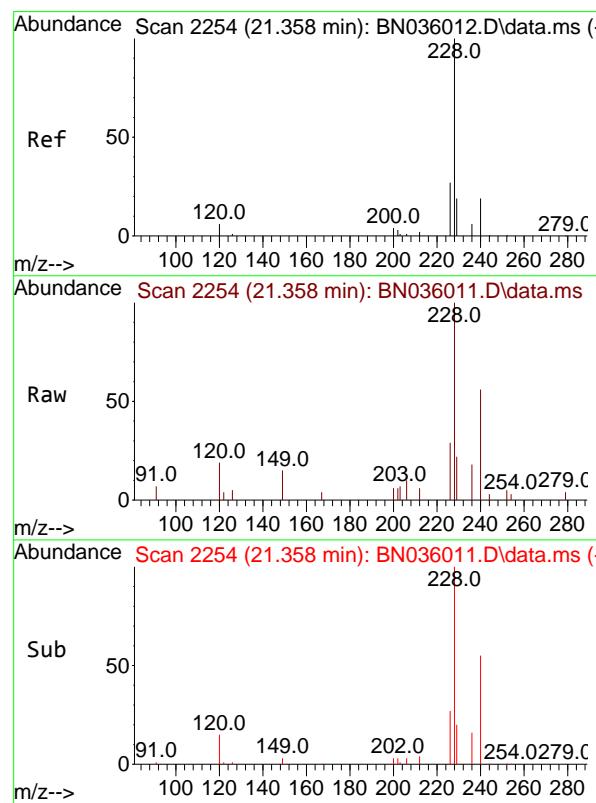
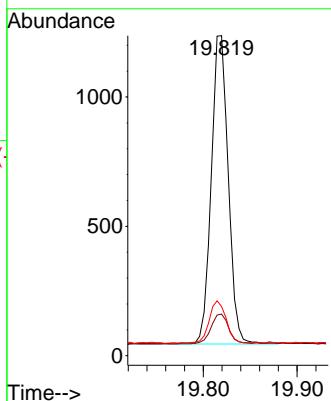
Tgt Ion:202 Resp: 2950  
Ion Ratio Lower Upper  
202 100  
200 21.3 17.0 25.4  
203 17.9 14.4 21.6





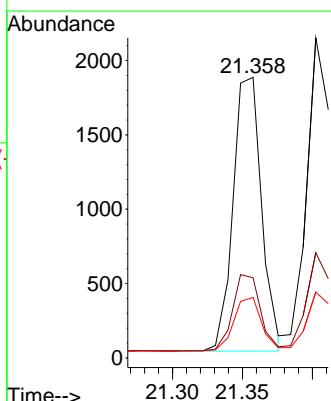
#31  
Terphenyl-d14  
Concen: 0.194 ng  
RT: 19.819 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38  
ClientSampleId : SSTDICCO.2

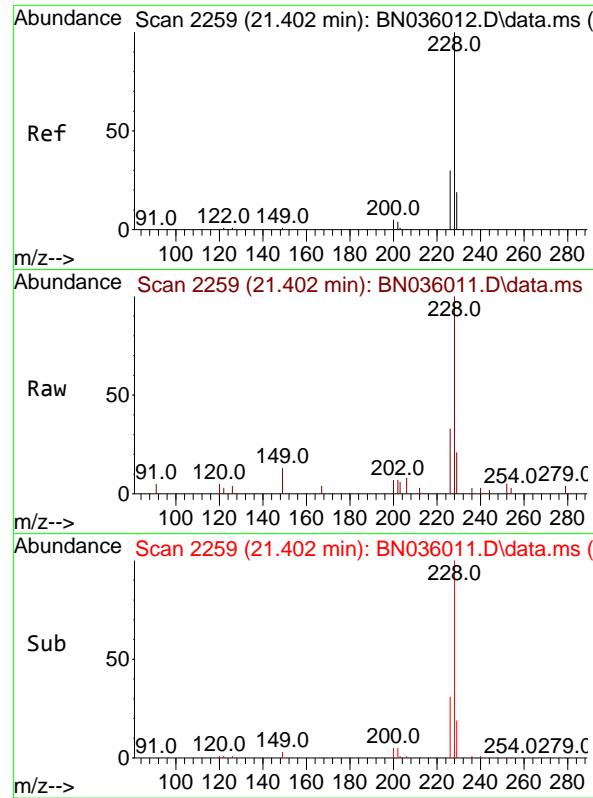
Tgt Ion:244 Resp: 1499  
Ion Ratio Lower Upper  
244 100  
212 13.0 9.1 13.7  
122 15.4 11.3 16.9



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

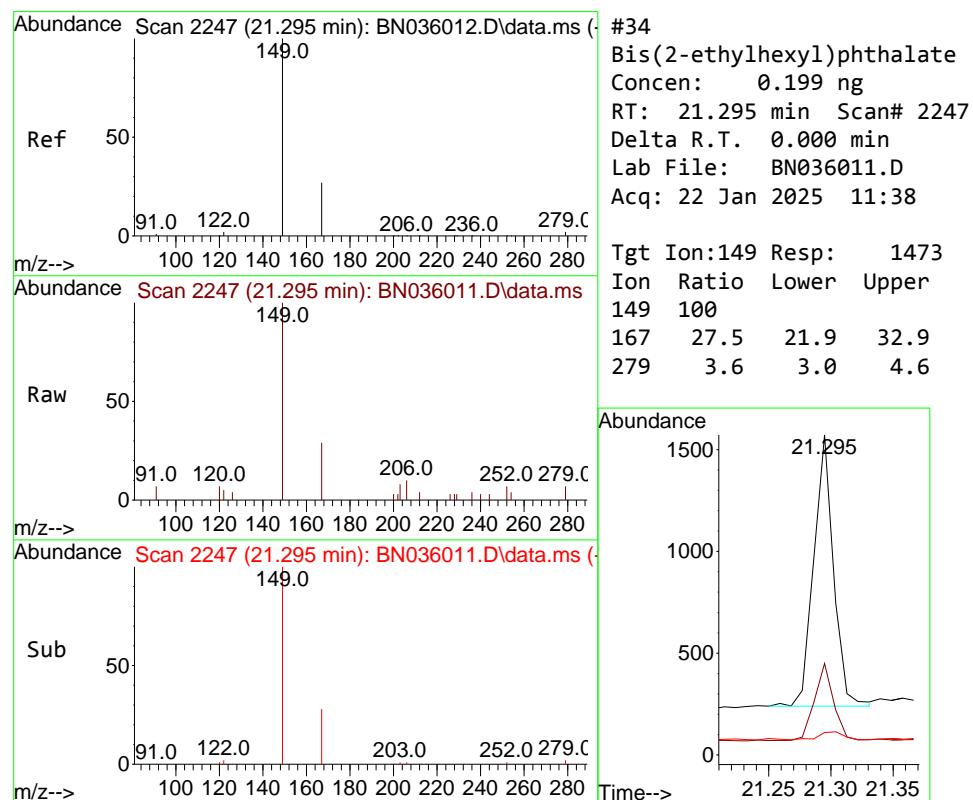
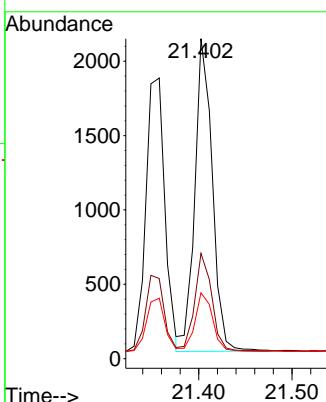
Tgt Ion:228 Resp: 2607  
Ion Ratio Lower Upper  
228 100  
226 28.6 22.6 34.0  
229 21.5 16.5 24.7





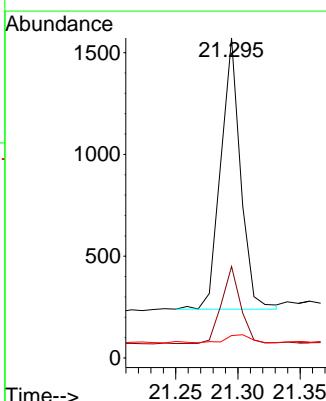
#33  
Chrysene  
Concen: 0.199 ng  
RT: 21.402 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38  
ClientSampleId : SSTDICCO.2

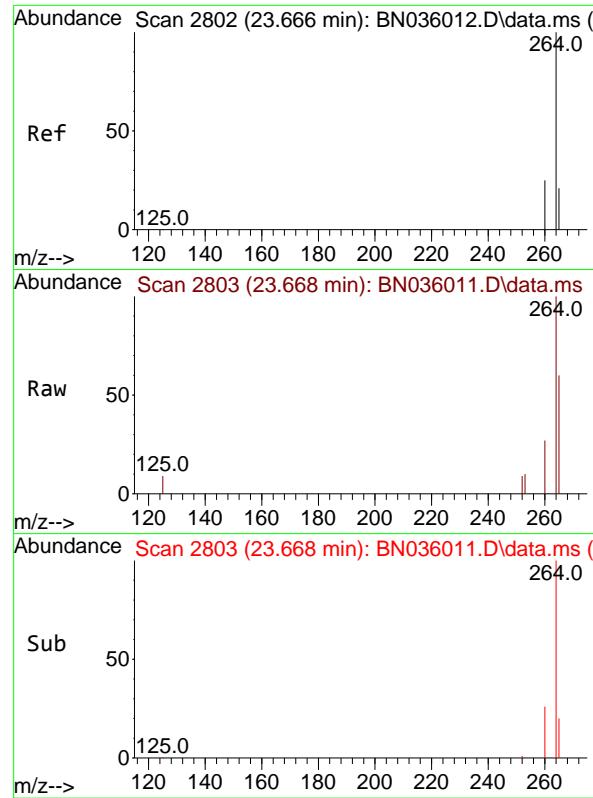
Tgt Ion:228 Resp: 2742  
Ion Ratio Lower Upper  
228 100  
226 32.9 25.3 37.9  
229 20.6 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.199 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

Tgt Ion:149 Resp: 1473  
Ion Ratio Lower Upper  
149 100  
167 27.5 21.9 32.9  
279 3.6 3.0 4.6

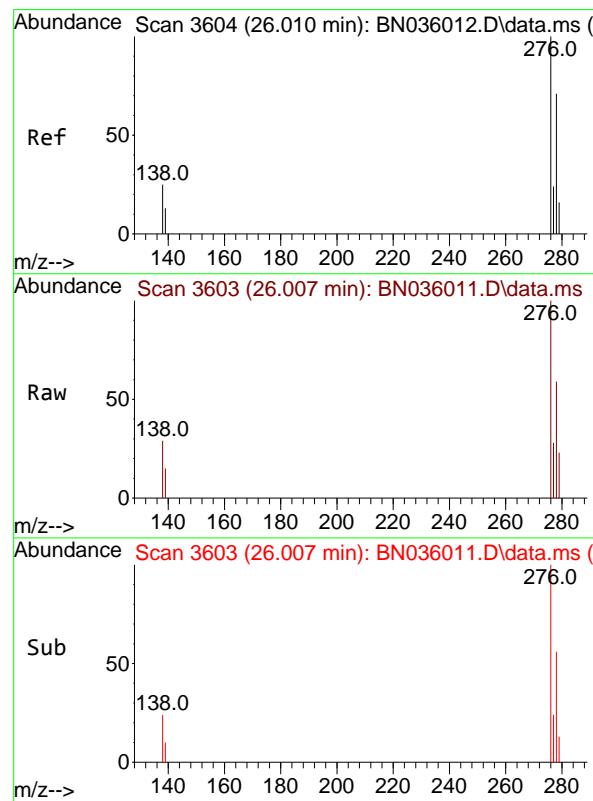
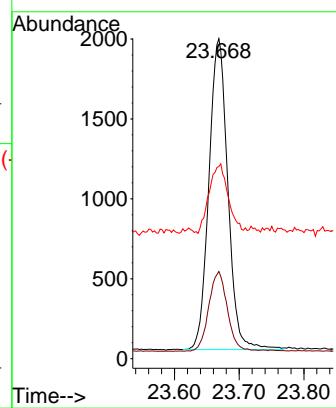




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.668 min Scan# 21  
 Delta R.T. 0.003 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

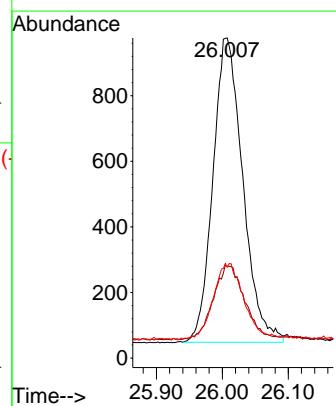
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

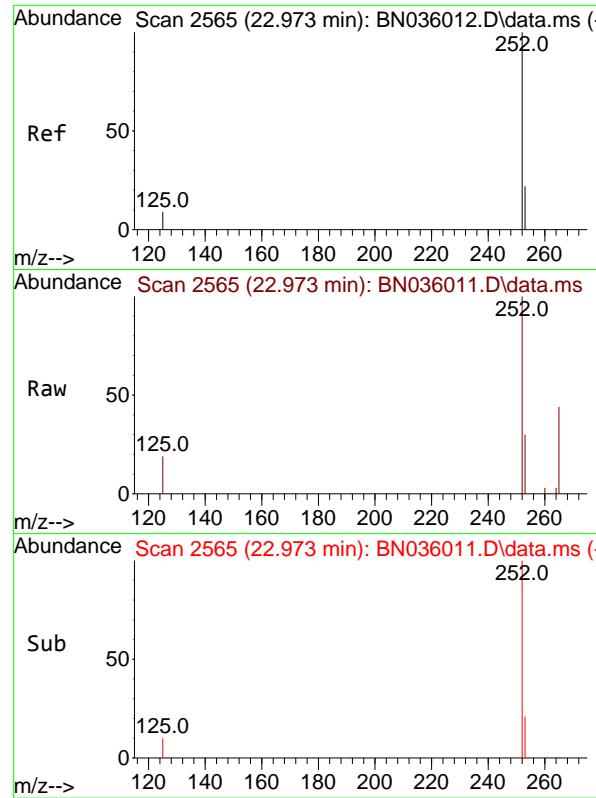
Tgt Ion:264 Resp: 3953  
 Ion Ratio Lower Upper  
 264 100  
 260 27.3 21.8 32.6  
 265 60.0 56.6 84.8



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.184 ng  
 RT: 26.007 min Scan# 3603  
 Delta R.T. -0.003 min  
 Lab File: BN036011.D  
 Acq: 22 Jan 2025 11:38

Tgt Ion:276 Resp: 2919  
 Ion Ratio Lower Upper  
 276 100  
 138 25.4 19.9 29.9  
 277 26.0 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.190 ng

RT: 22.973 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

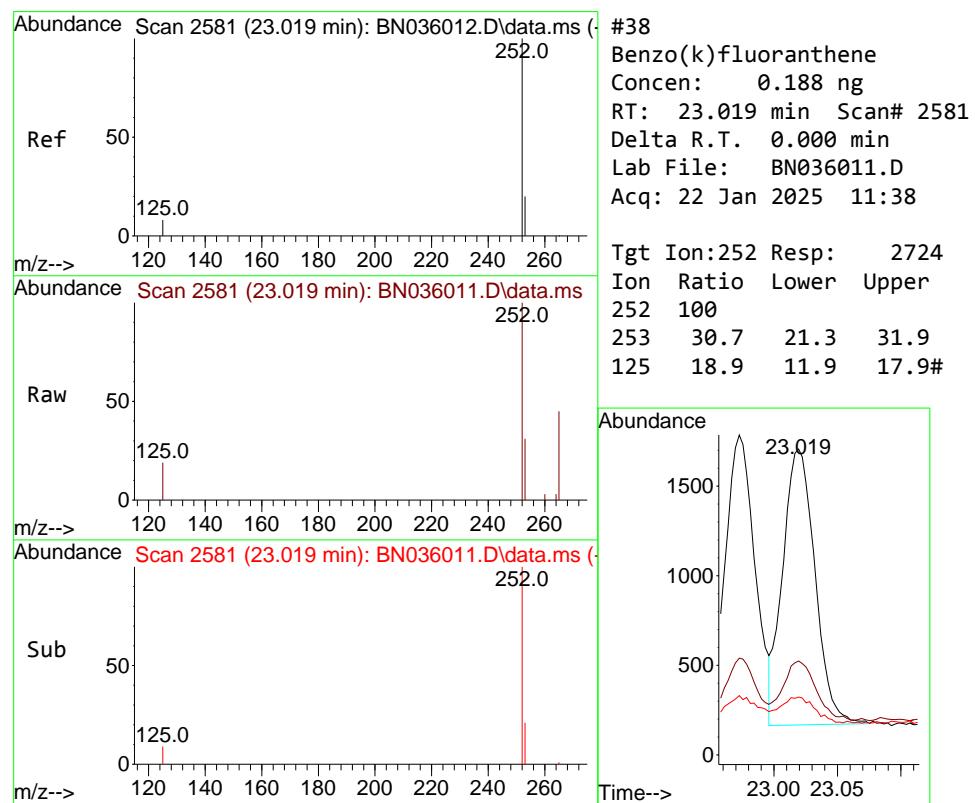
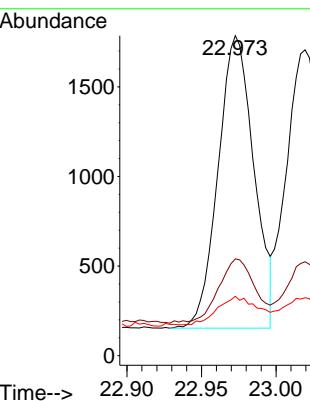
Tgt Ion:252 Resp: 2728

Ion Ratio Lower Upper

252 100

253 30.2 22.5 33.7

125 18.5 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.188 ng

RT: 23.019 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036011.D

Acq: 22 Jan 2025 11:38

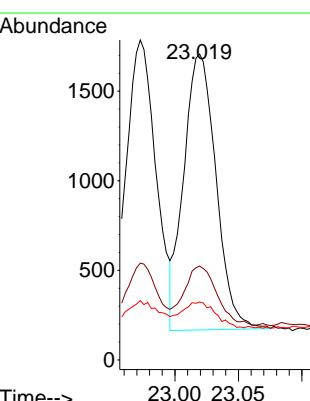
Tgt Ion:252 Resp: 2724

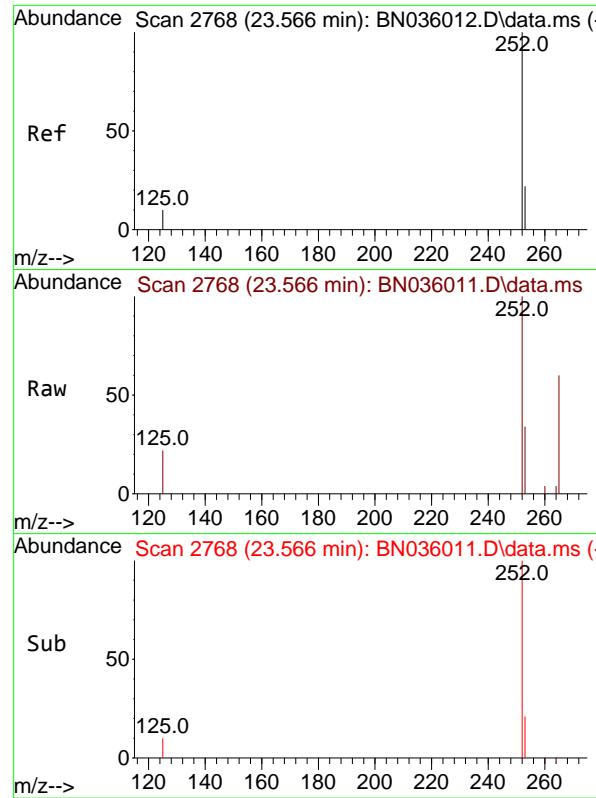
Ion Ratio Lower Upper

252 100

253 30.7 21.3 31.9

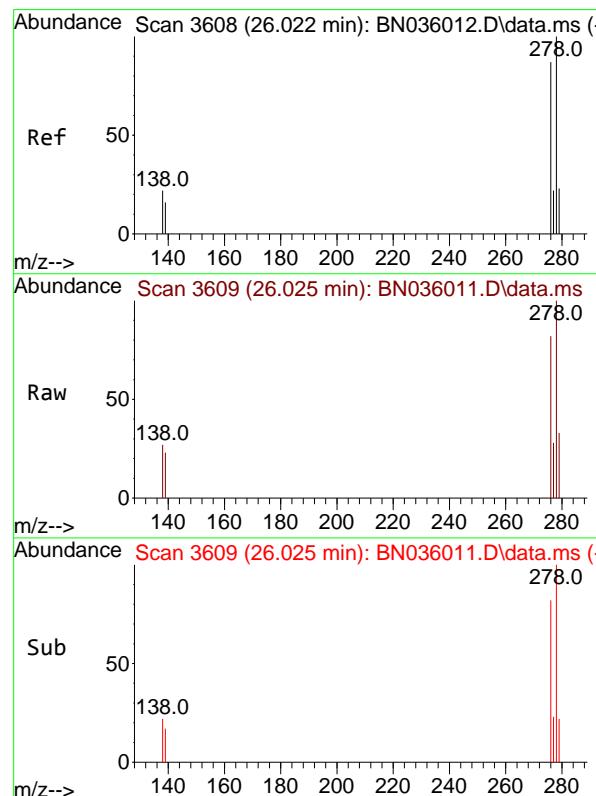
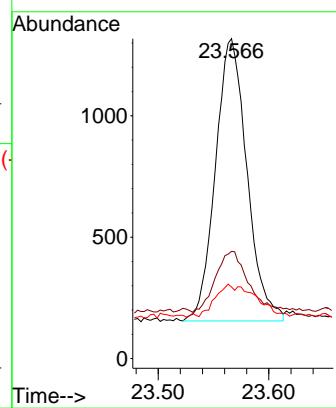
125 18.9 11.9 17.9#





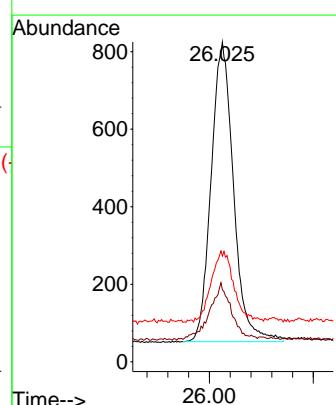
#39  
Benzo(a)pyrene  
Concen: 0.187 ng  
RT: 23.566 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38  
ClientSampleId : SSTDICCO.2

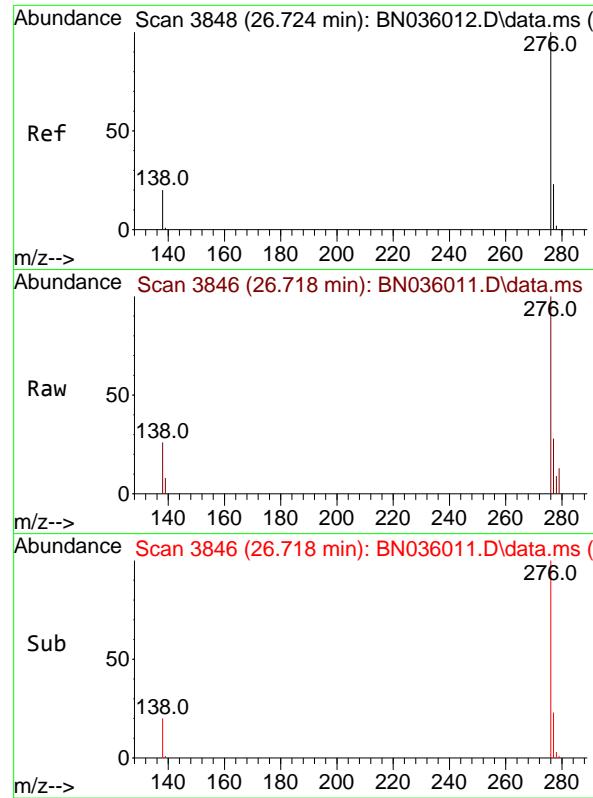
Tgt Ion:252 Resp: 2301  
Ion Ratio Lower Upper  
252 100  
253 33.5 23.8 35.6  
125 22.4 14.6 21.8#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.183 ng  
RT: 26.025 min Scan# 3609  
Delta R.T. 0.003 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

Tgt Ion:278 Resp: 2310  
Ion Ratio Lower Upper  
278 100  
139 22.5 16.0 24.0  
279 33.1 23.8 35.8

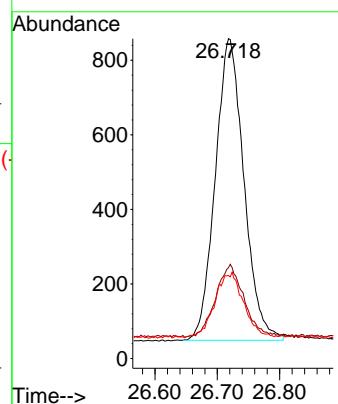




#41  
Benzo(g,h,i)perylene  
Concen: 0.188 ng  
RT: 26.718 min Scan# 3  
Delta R.T. -0.006 min  
Lab File: BN036011.D  
Acq: 22 Jan 2025 11:38

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

Tgt Ion:276 Resp: 2585  
Ion Ratio Lower Upper  
276 100  
277 28.4 21.3 31.9  
138 26.0 19.2 28.8



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

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

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

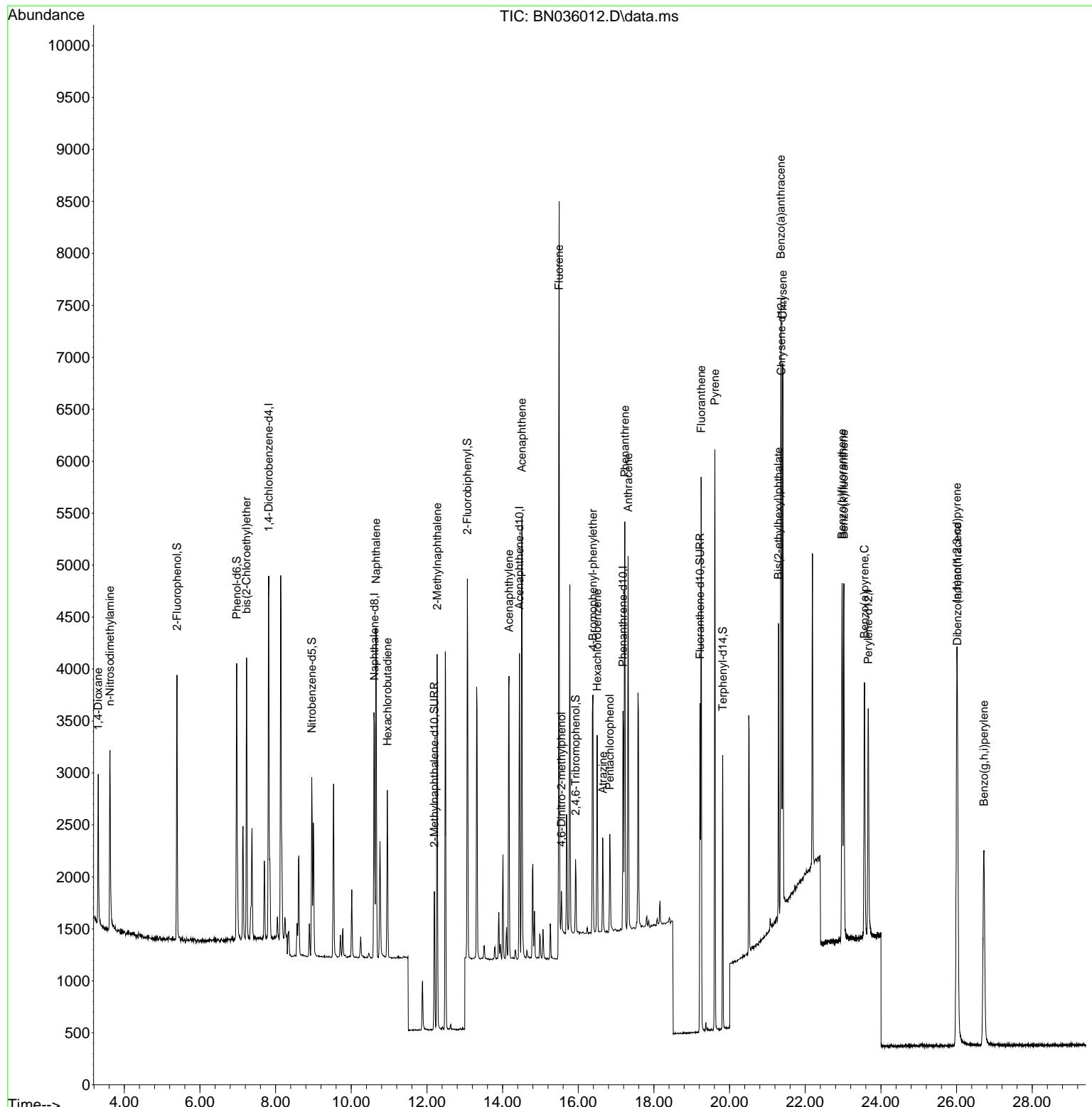
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	1648	0.400	ng	0.00
7) Naphthalene-d8	10.611	136	3123	0.400	ng	0.00
13) Acenaphthene-d10	14.447	164	1581	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	3136	0.400	ng	0.00
29) Chrysene-d12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

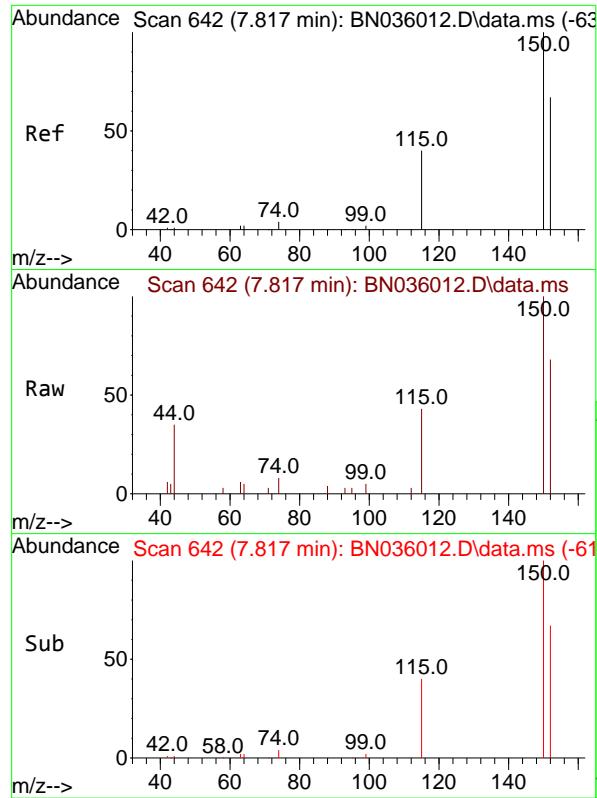
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

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

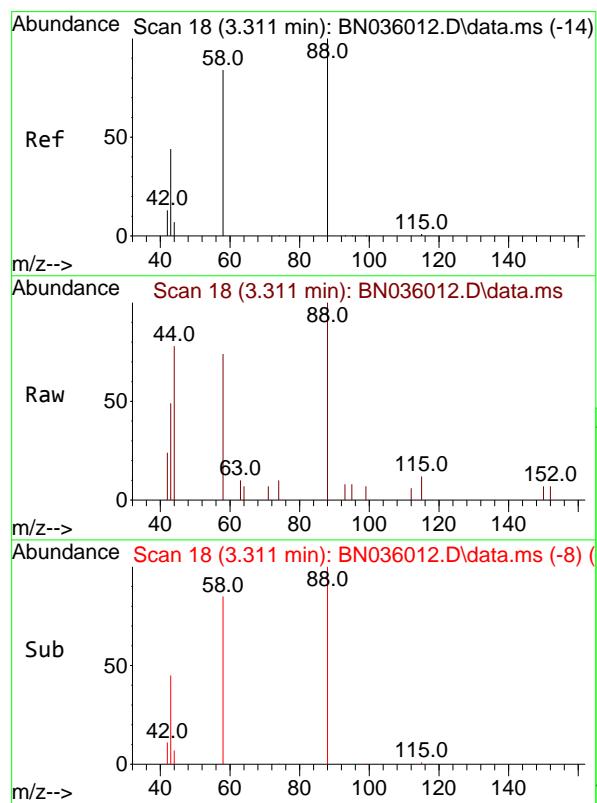
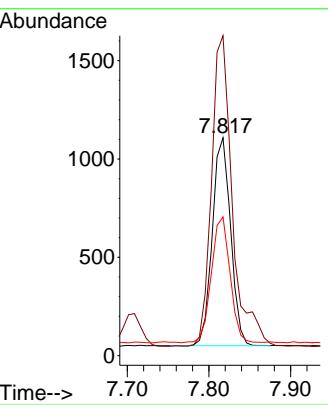




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

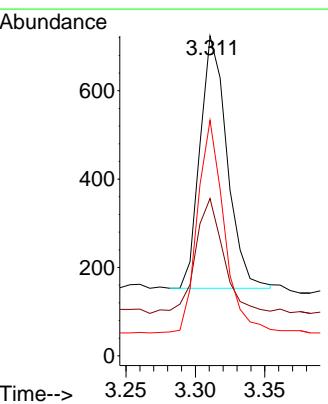
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

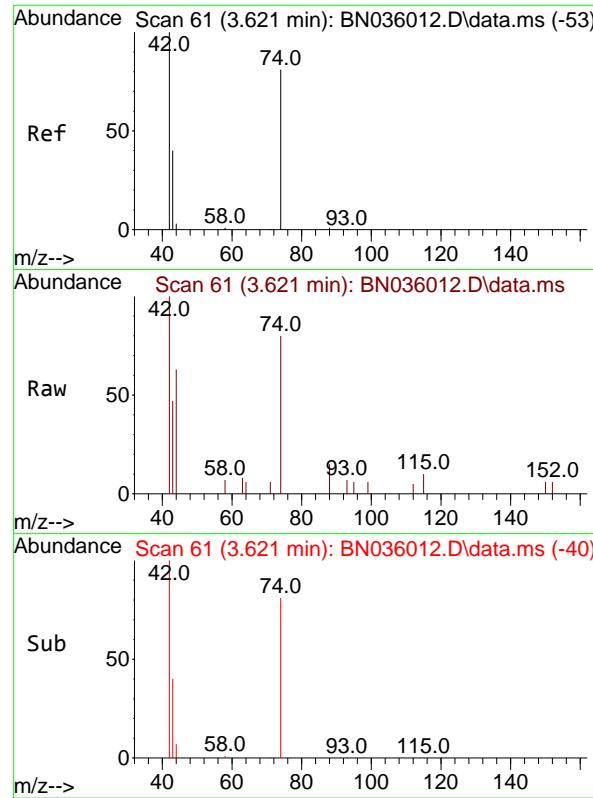
Tgt Ion:152 Resp: 1648  
Ion Ratio Lower Upper  
152 100  
150 146.8 117.4 176.2  
115 63.7 51.0 76.4



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

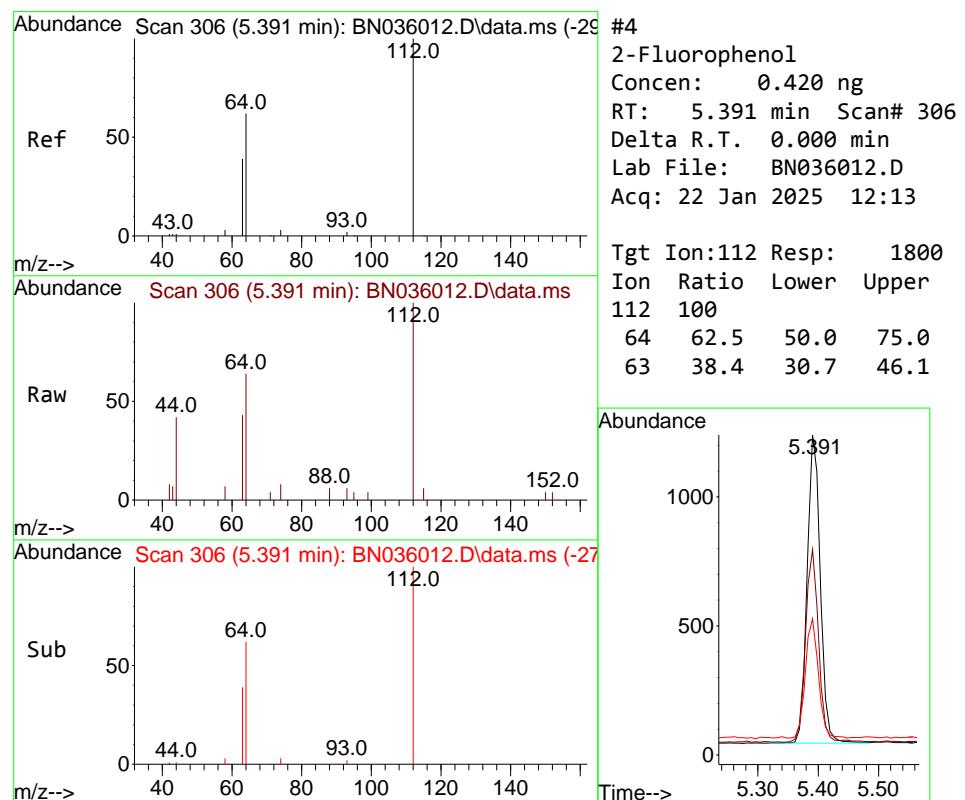
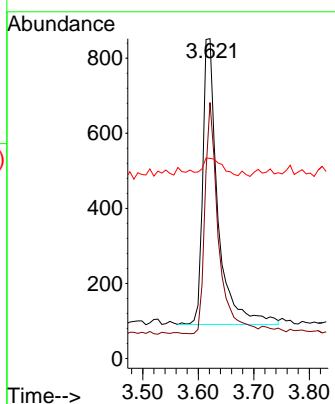
Tgt Ion: 88 Resp: 773  
Ion Ratio Lower Upper  
88 100  
43 48.1 38.5 57.7  
58 83.2 66.6 99.8





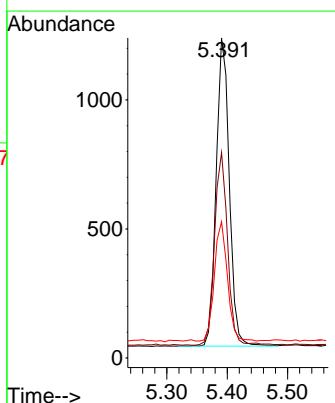
#3  
n-Nitrosodimethylamine  
Concen: 0.433 ng  
RT: 3.621 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
ClientSampleId : SSTDICCC0.4  
Acq: 22 Jan 2025 12:13

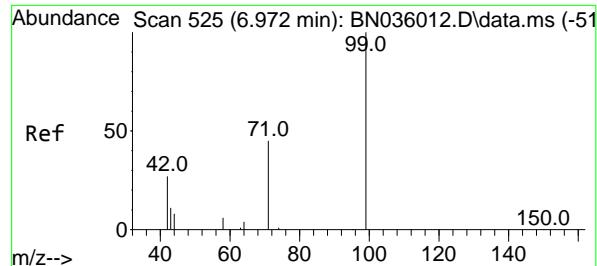
Tgt Ion: 42 Resp: 1446  
Ion Ratio Lower Upper  
42 100  
74 72.6 58.1 87.1  
44 7.8 6.2 9.4



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

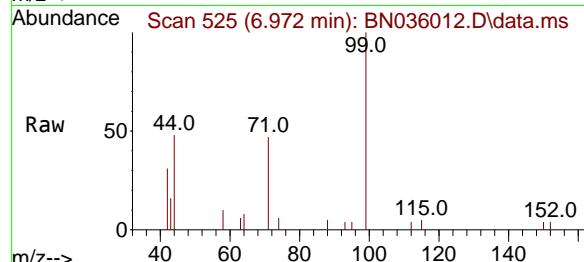
Tgt Ion:112 Resp: 1800  
Ion Ratio Lower Upper  
112 100  
64 62.5 50.0 75.0  
63 38.4 30.7 46.1



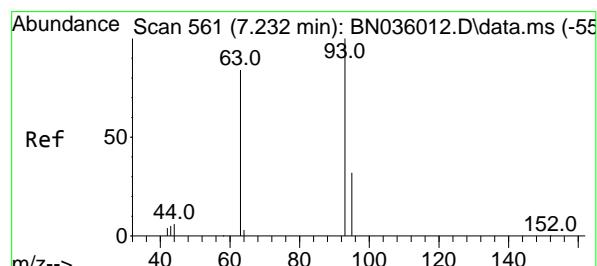
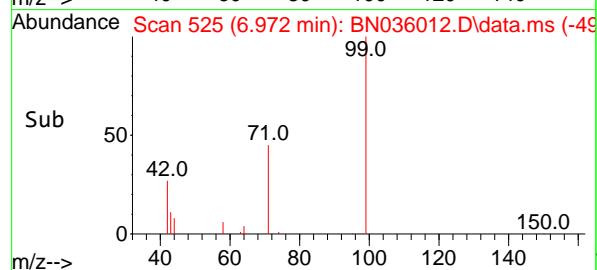
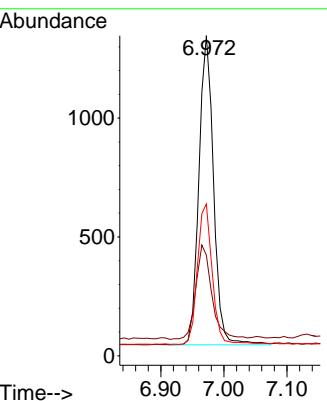


#5  
 Phenol-d6  
 Concen: 0.416 ng  
 RT: 6.972 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

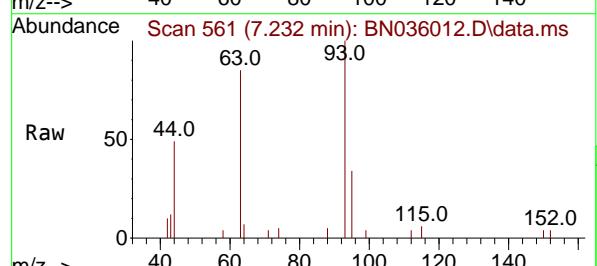
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4



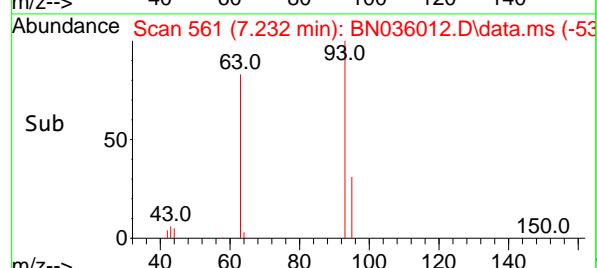
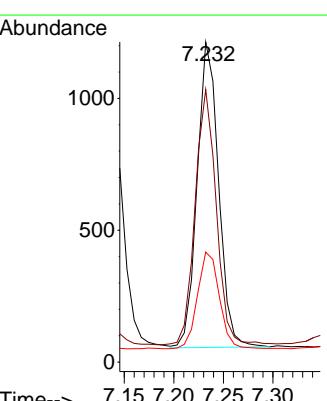
Tgt Ion: 99 Resp: 2093  
 Ion Ratio Lower Upper  
 99 100  
 42 33.5 26.8 40.2  
 71 45.8 36.6 55.0

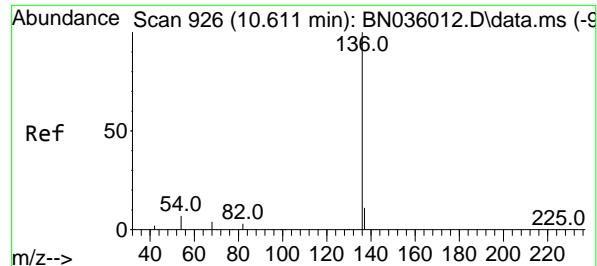


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.429 ng  
 RT: 7.232 min Scan# 561  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13



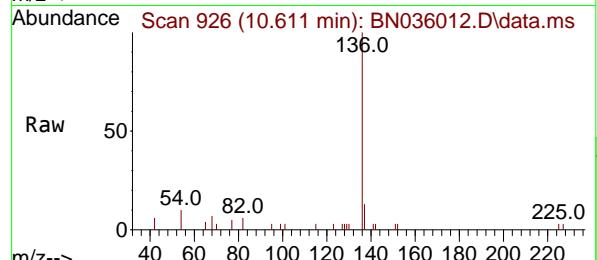
Tgt Ion: 93 Resp: 1740  
 Ion Ratio Lower Upper  
 93 100  
 63 82.2 65.8 98.6  
 95 32.2 25.8 38.6





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.611 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

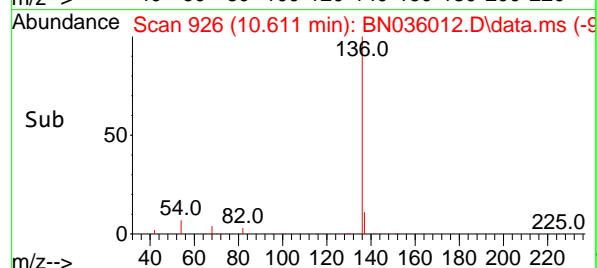
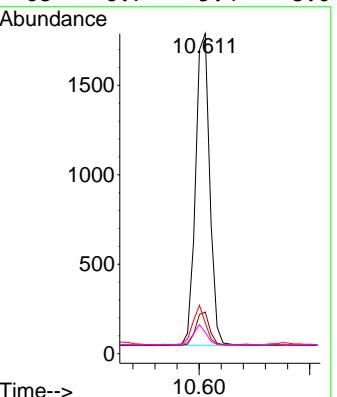
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4



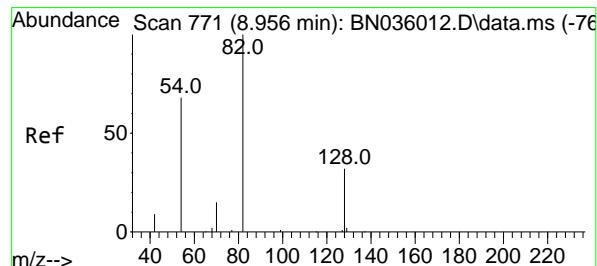
Tgt Ion:136 Resp: 3123

Ion Ratio Lower Upper

136	100		
137	13.0	10.4	15.6
54	9.6	7.7	11.5
68	6.7	5.4	8.0



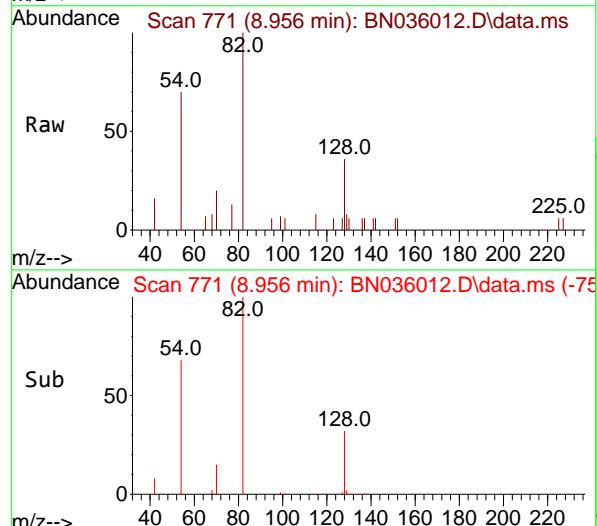
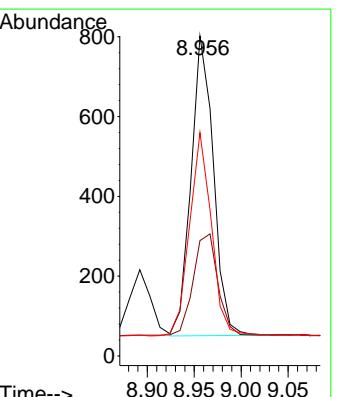
#8  
 Nitrobenzene-d5  
 Concen: 0.423 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

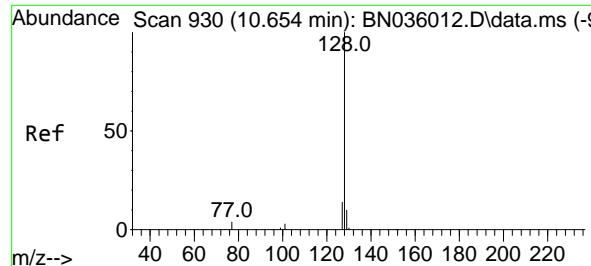


Tgt Ion: 82 Resp: 1246

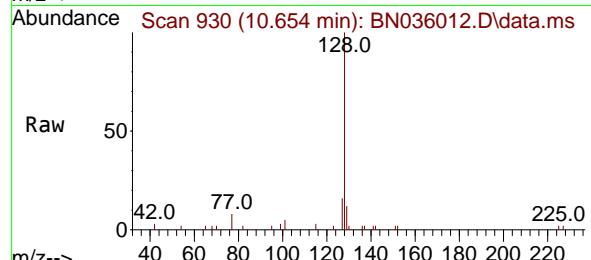
Ion Ratio Lower Upper

82	100		
128	36.0	28.8	43.2
54	69.8	55.8	83.8

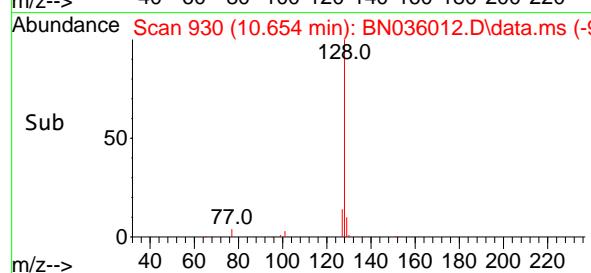
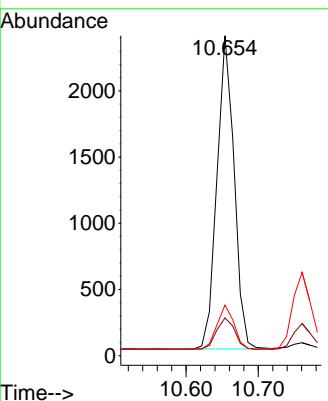




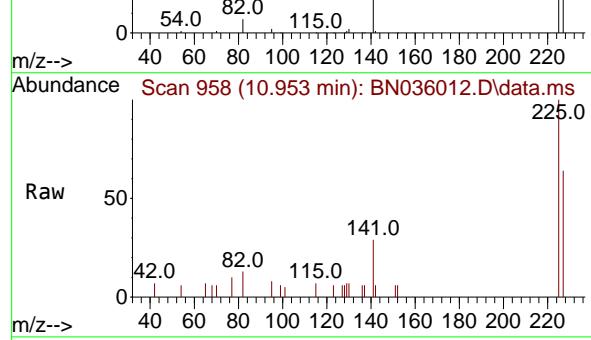
#9  
Naphthalene  
Concen: 0.431 ng  
RT: 10.654 min Scan# 9  
Instrument :  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13  
ClientSampleId : SSTDICCC0.4



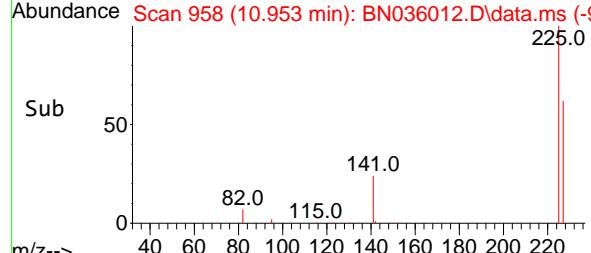
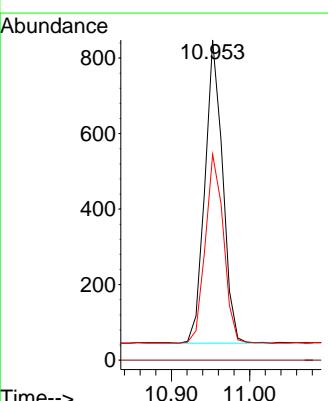
Tgt Ion:128 Resp: 3905  
Ion Ratio Lower Upper  
128 100  
129 11.8 9.4 14.2  
127 15.8 12.6 19.0



#10  
Hexachlorobutadiene  
Concen: 0.431 ng  
RT: 10.953 min Scan# 958  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

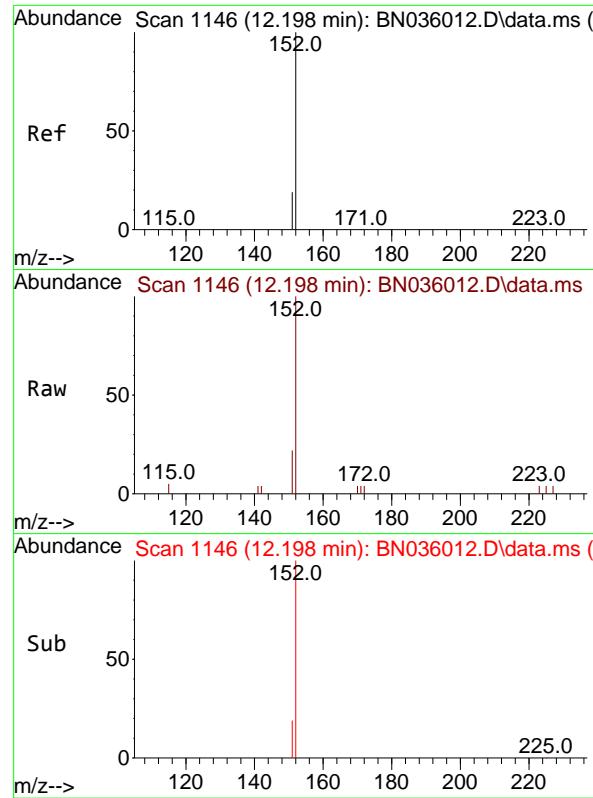


Tgt Ion:225 Resp: 1263  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.8 51.0 76.6



Sub 50

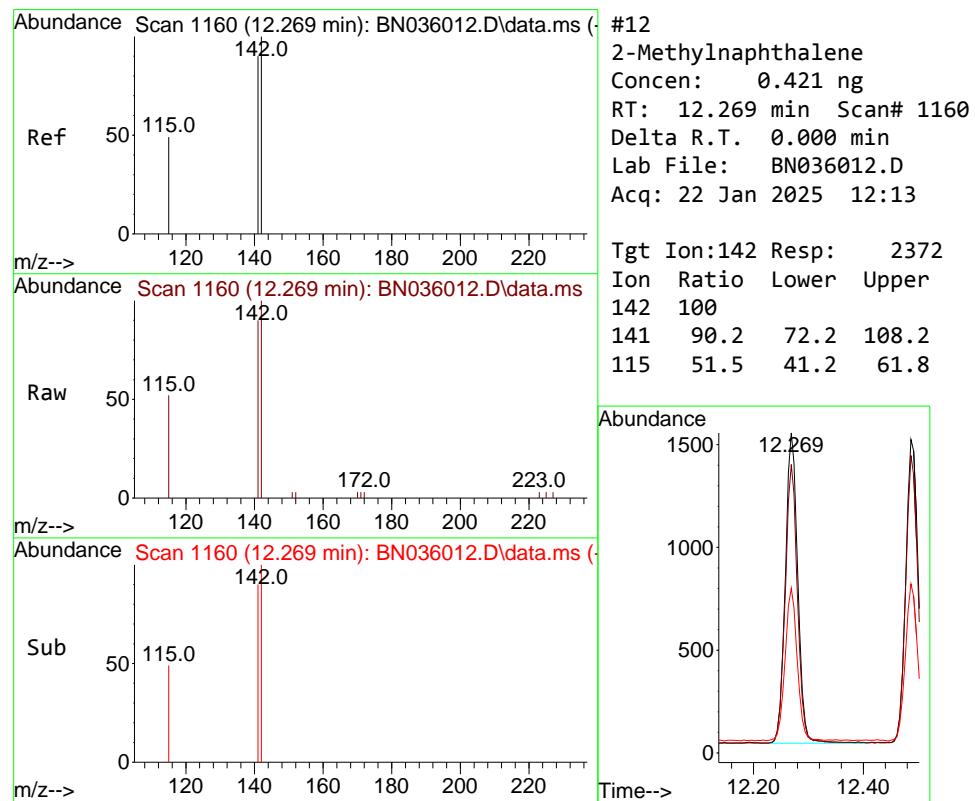
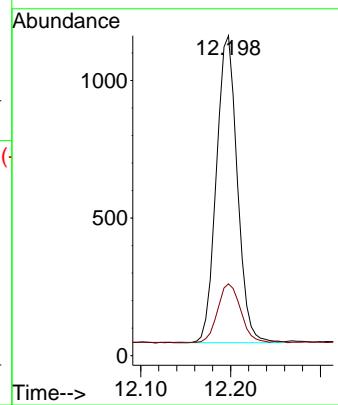
225.0  
82.0  
115.0  
141.0



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

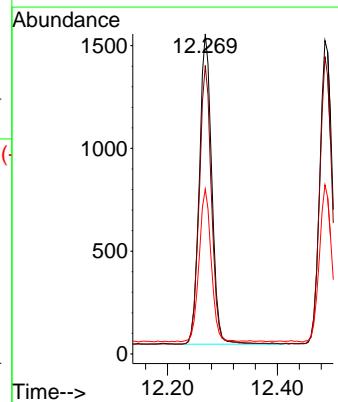
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

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



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

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



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.447 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036012.D

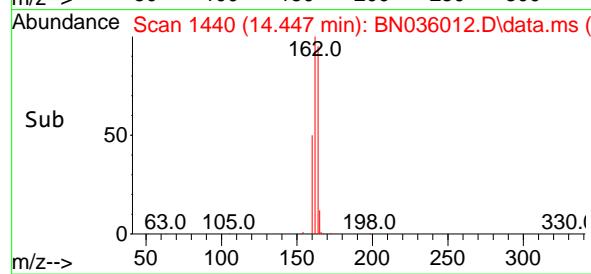
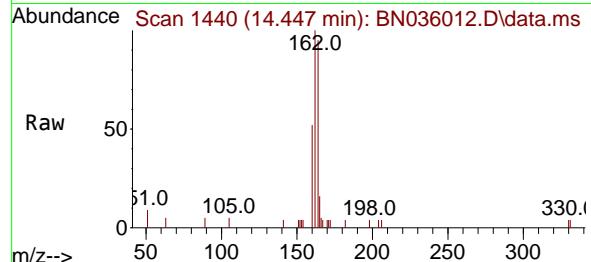
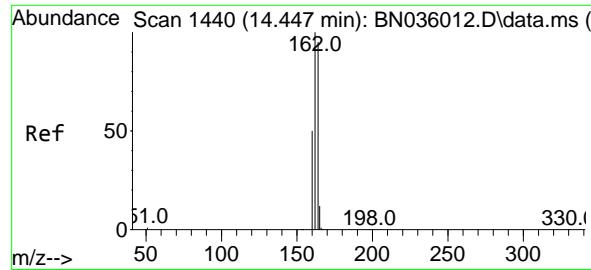
Acq: 22 Jan 2025 12:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4



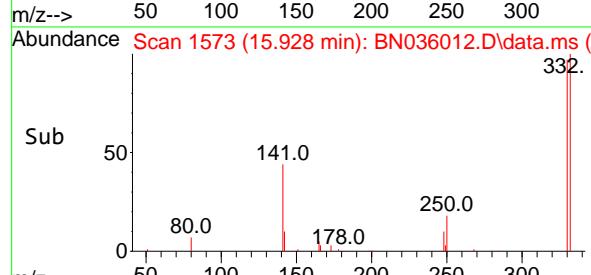
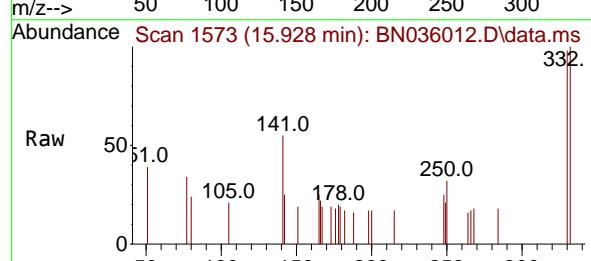
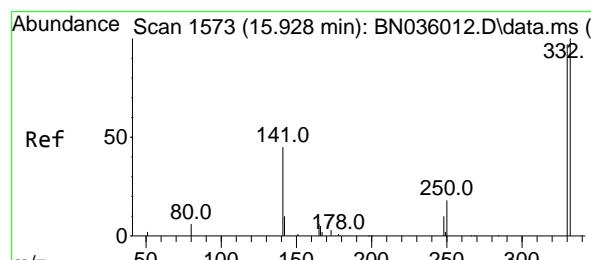
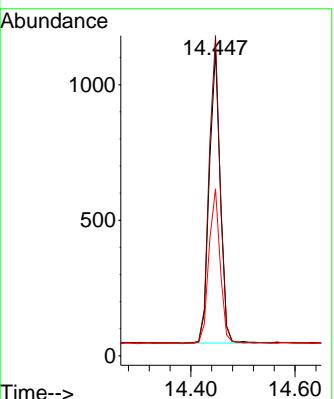
Tgt Ion:164 Resp: 1581

Ion Ratio Lower Upper

164 100

162 105.1 84.1 126.1

160 54.8 43.8 65.8



#14

2,4,6-Tribromophenol

Concen: 0.399 ng

RT: 15.928 min Scan# 1573

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

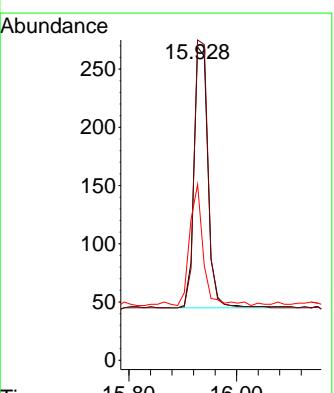
Tgt Ion:330 Resp: 405

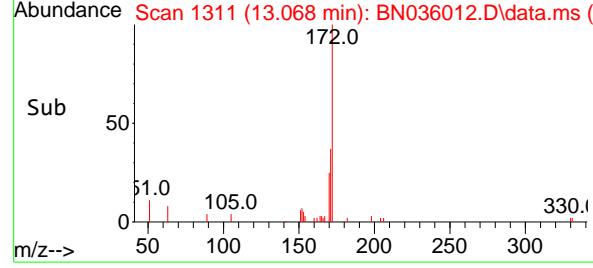
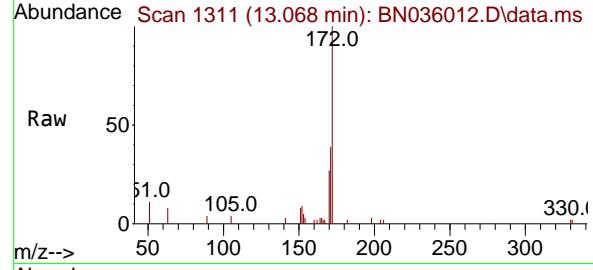
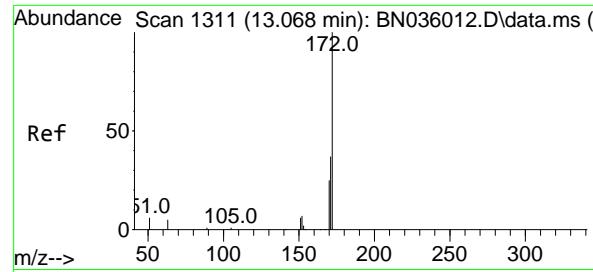
Ion Ratio Lower Upper

330 100

332 101.2 81.0 121.4

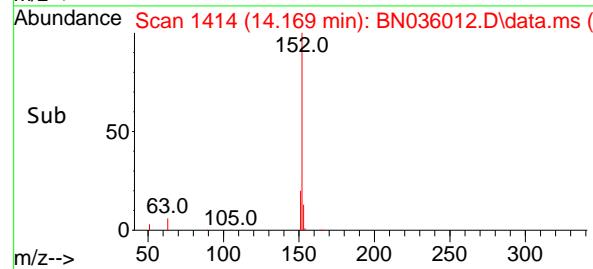
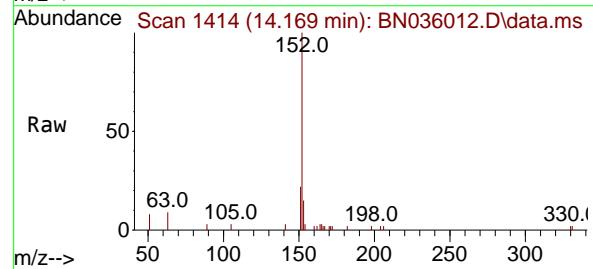
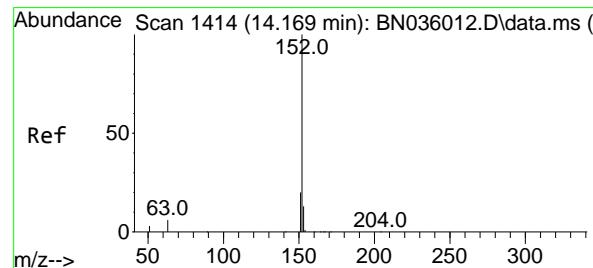
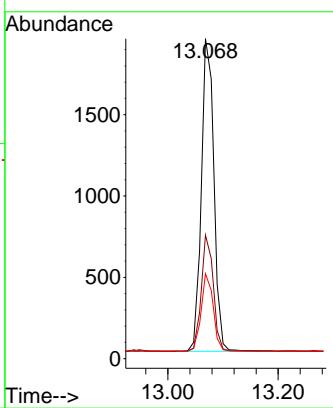
141 45.9 36.7 55.1





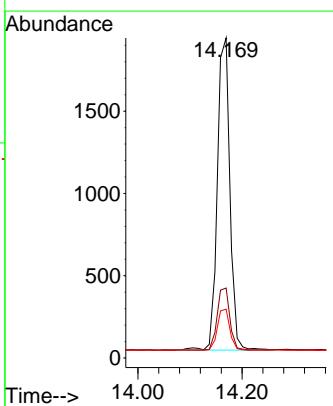
#15  
2-Fluorobiphenyl  
Concen: 0.433 ng  
RT: 13.068 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
ClientSampleId : SSTDICCC0.4  
Acq: 22 Jan 2025 12:13

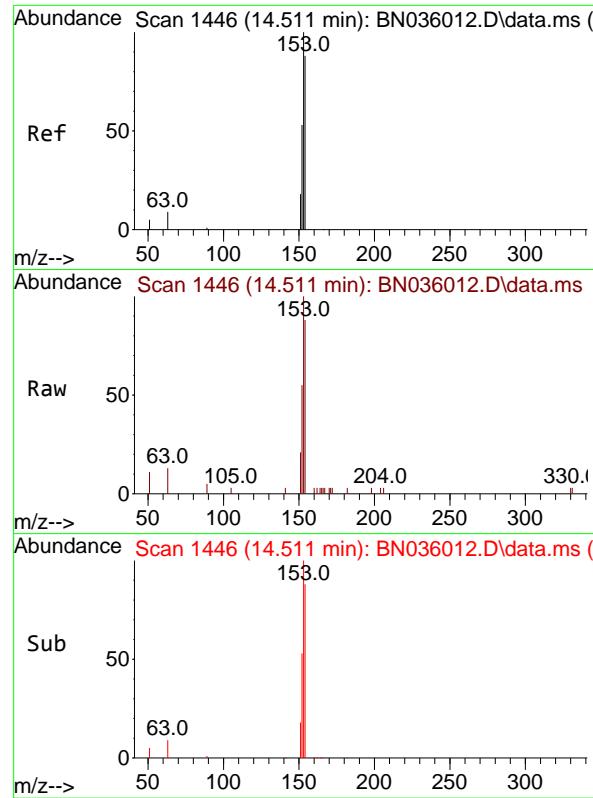
Tgt Ion:172 Resp: 3057  
Ion Ratio Lower Upper  
172 100  
171 38.6 30.9 46.3  
170 26.5 21.2 31.8



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

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

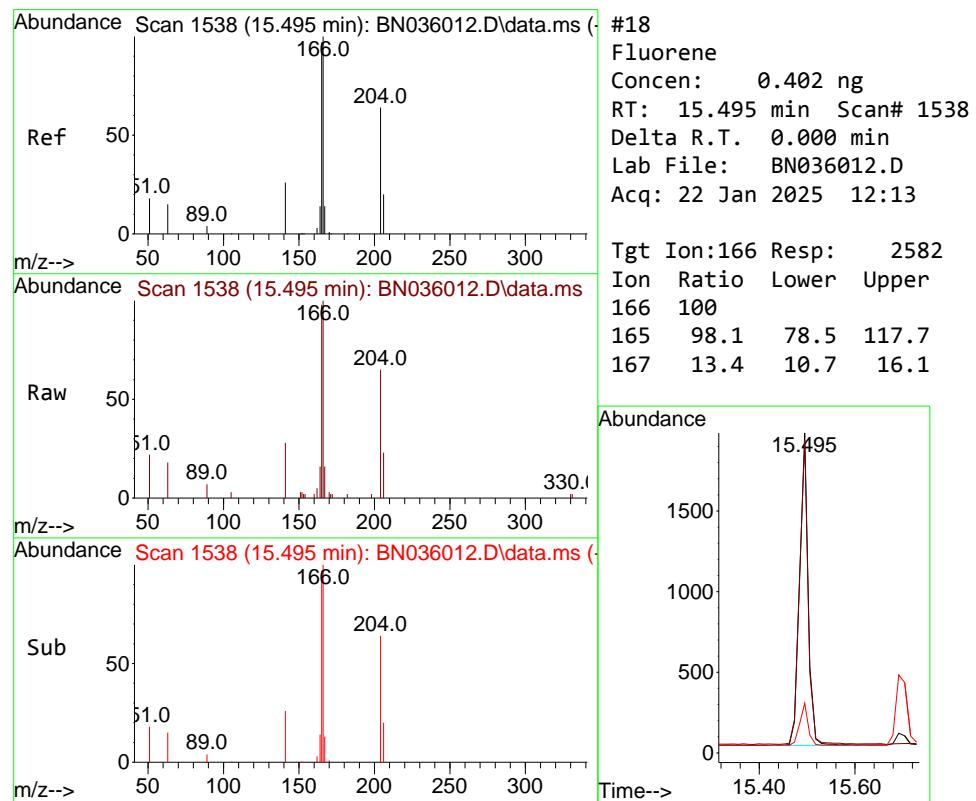
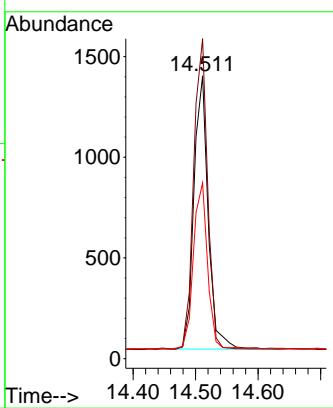




#17  
 Acenaphthene  
 Concen: 0.420 ng  
 RT: 14.511 min Scan# 1446  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

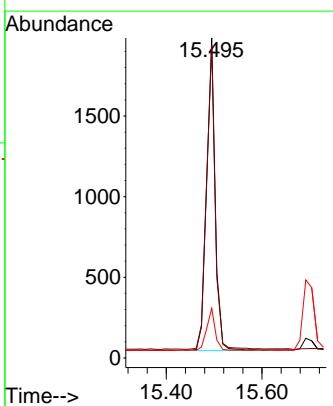
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

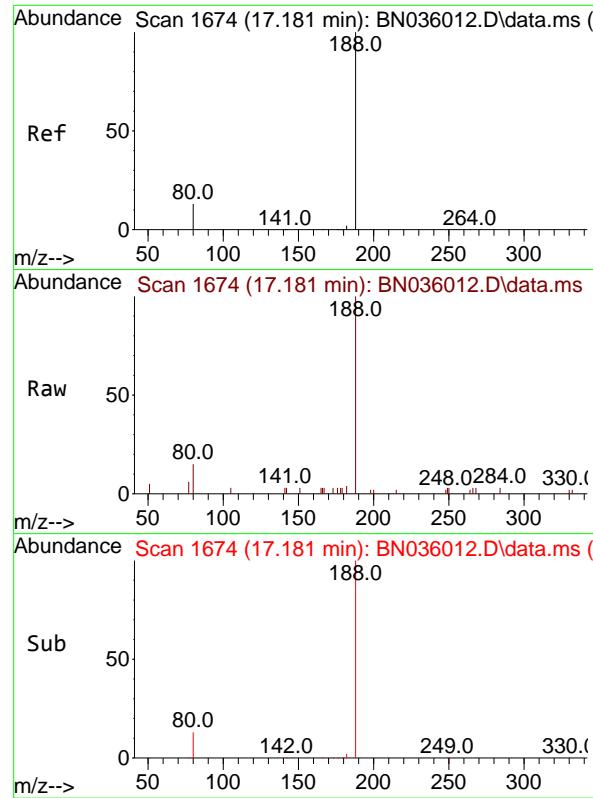
Tgt Ion:154 Resp: 2158  
 Ion Ratio Lower Upper  
 154 100  
 153 111.1 88.9 133.3  
 152 60.1 48.1 72.1



#18  
 Fluorene  
 Concen: 0.402 ng  
 RT: 15.495 min Scan# 1538  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

Tgt Ion:166 Resp: 2582  
 Ion Ratio Lower Upper  
 166 100  
 165 98.1 78.5 117.7  
 167 13.4 10.7 16.1





#19

Phenanthrene-d10  
Concen: 0.400 ng

RT: 17.181 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion:188 Resp: 3136

Ion Ratio Lower Upper

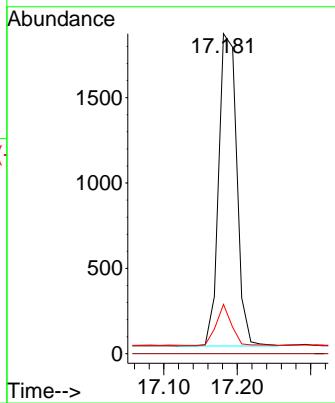
188 100

94 0.0

80 15.4

12.3

18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.408 ng

RT: 15.555 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN036012.D

Acq: 22 Jan 2025 12:13

Tgt Ion:198 Resp: 298

Ion Ratio Lower Upper

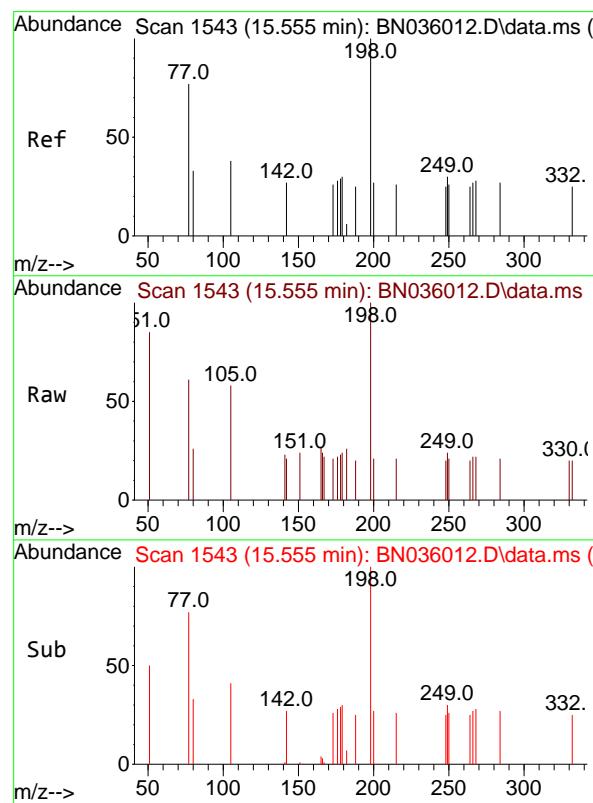
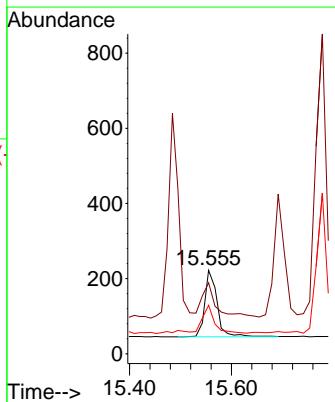
198 100

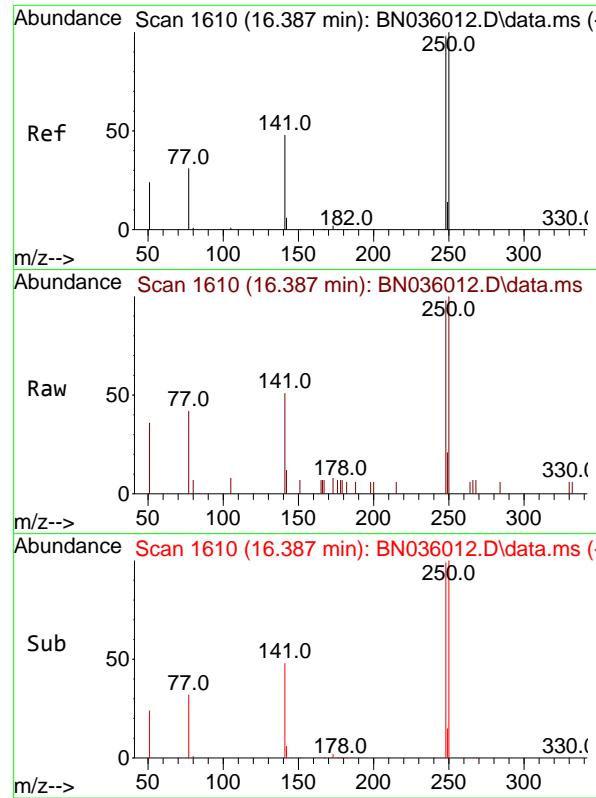
51 85.1

105 58.1

68.1 102.1

46.5 69.7

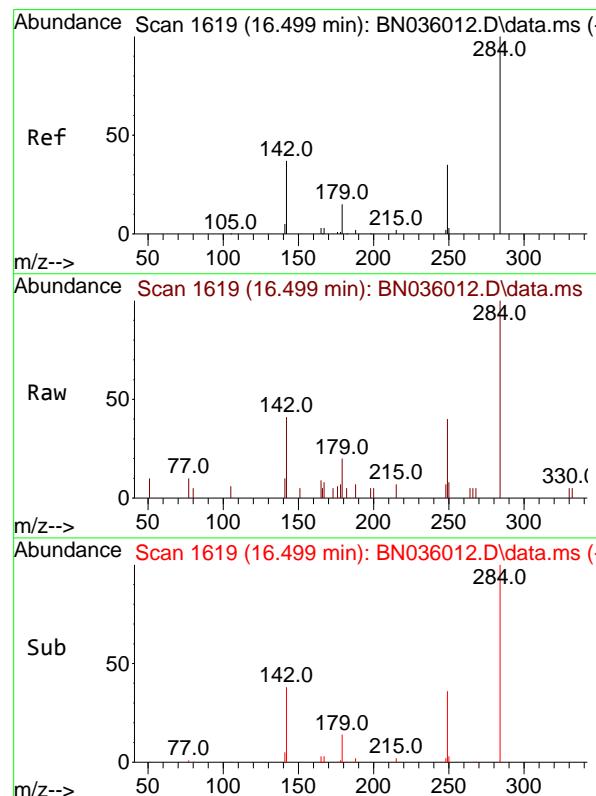
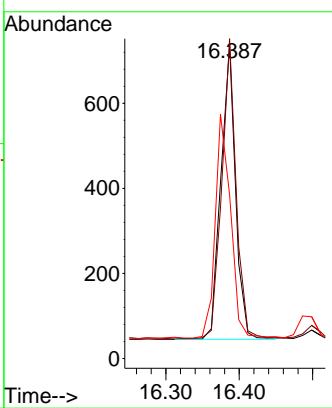




#21  
4-Bromophenyl-phenylether  
Concen: 0.431 ng  
RT: 16.387 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

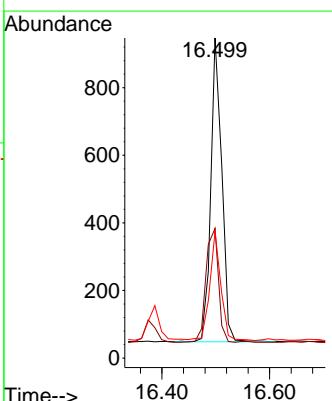
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

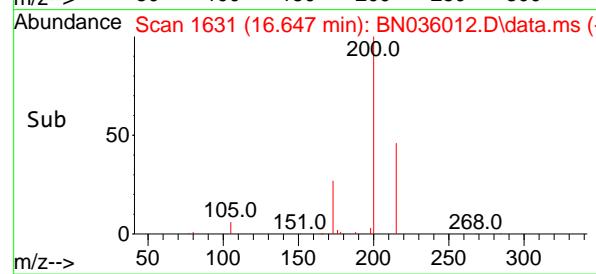
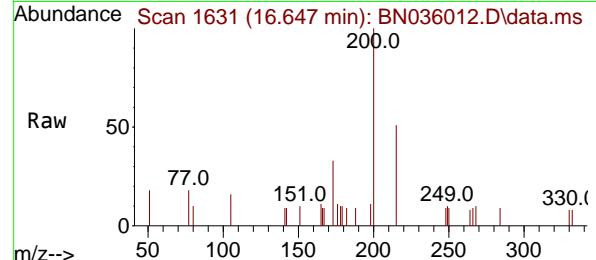
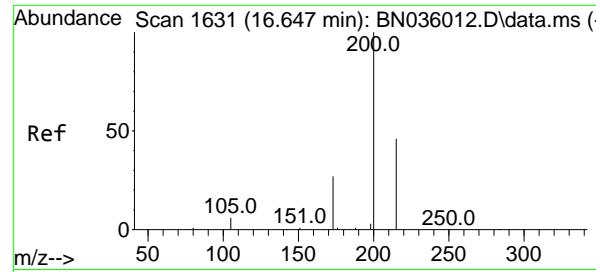
Tgt Ion:248 Resp: 962  
Ion Ratio Lower Upper  
248 100  
250 101.9 81.5 122.3  
141 52.2 41.8 62.6



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

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

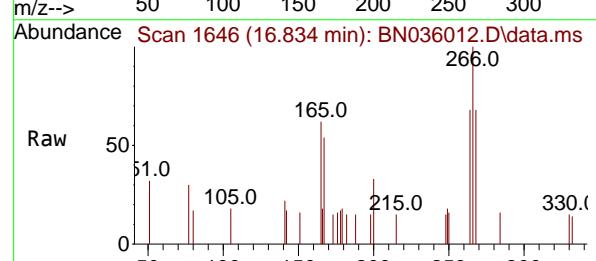
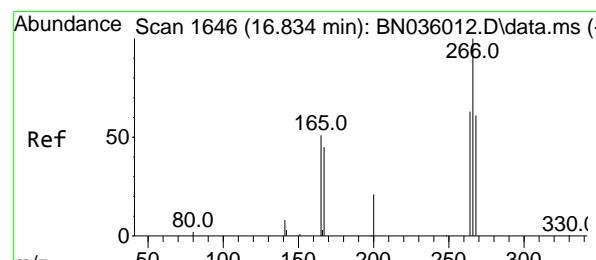
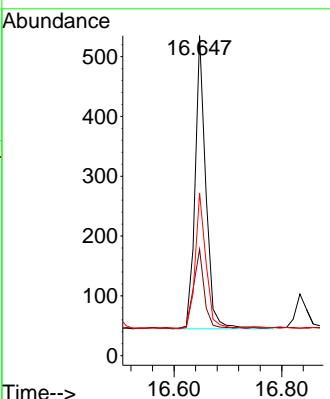




#23  
Atrazine  
Concen: 0.424 ng  
RT: 16.647 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

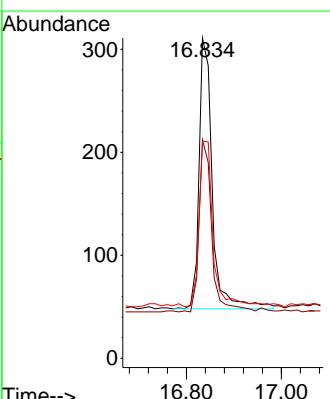
Instrument: BNA\_N  
ClientSampleId : SSTDICCC0.4

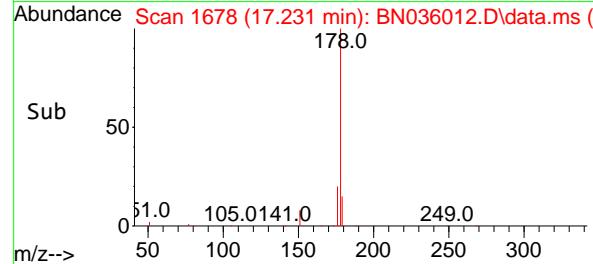
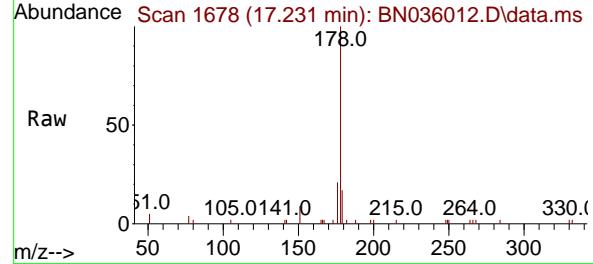
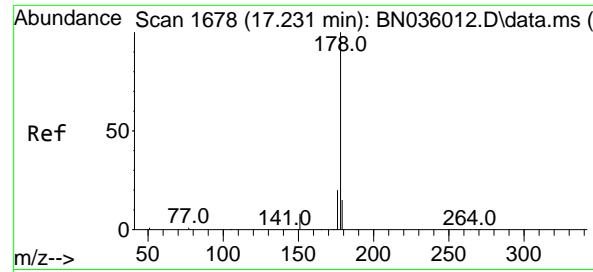
Tgt Ion:200 Resp: 684  
Ion Ratio Lower Upper  
200 100  
173 33.3 26.6 40.0  
215 50.8 40.6 61.0



#24  
Pentachlorophenol  
Concen: 0.403 ng  
RT: 16.834 min Scan# 1646  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

Tgt Ion:266 Resp: 513  
Ion Ratio Lower Upper  
266 100  
264 60.2 48.2 72.2  
268 64.5 51.6 77.4

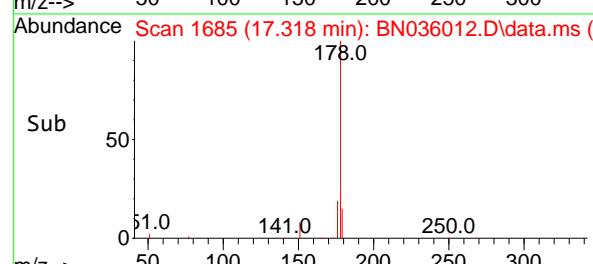
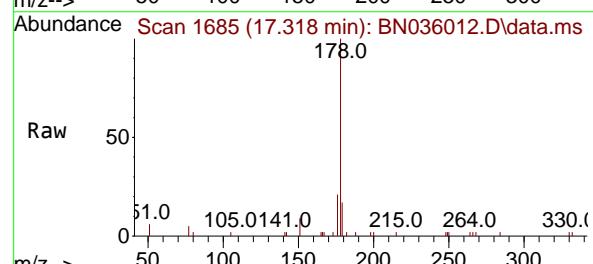
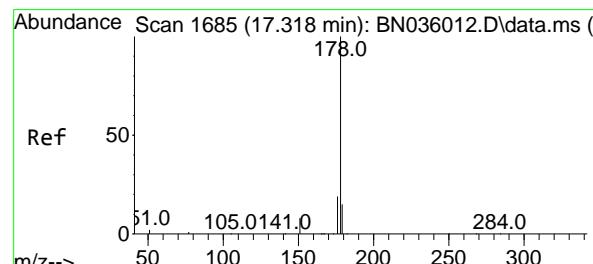
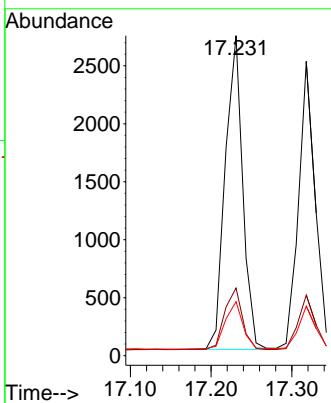




#25  
 Phenanthrene  
 Concen: 0.433 ng  
 RT: 17.231 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

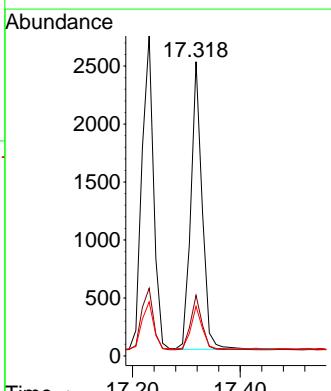
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

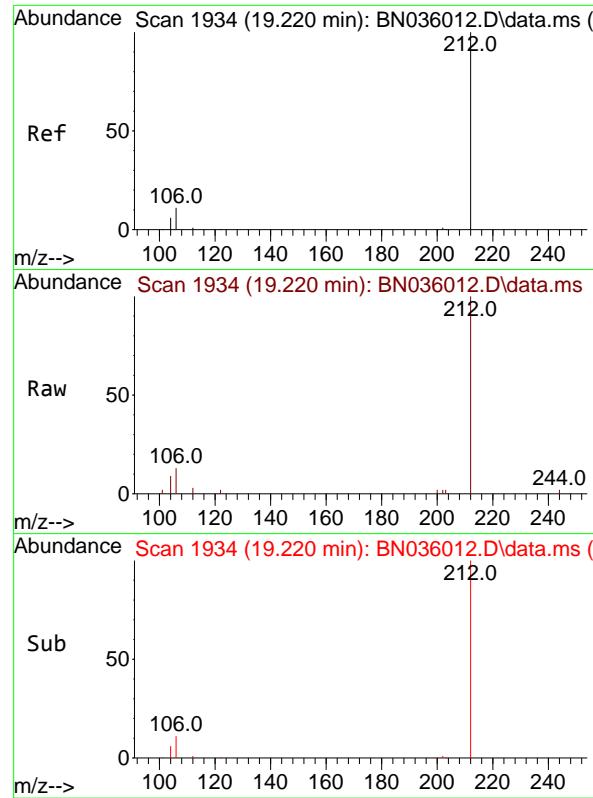
Tgt Ion:178 Resp: 4082  
 Ion Ratio Lower Upper  
 178 100  
 176 20.0 16.0 24.0  
 179 15.5 12.4 18.6



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

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

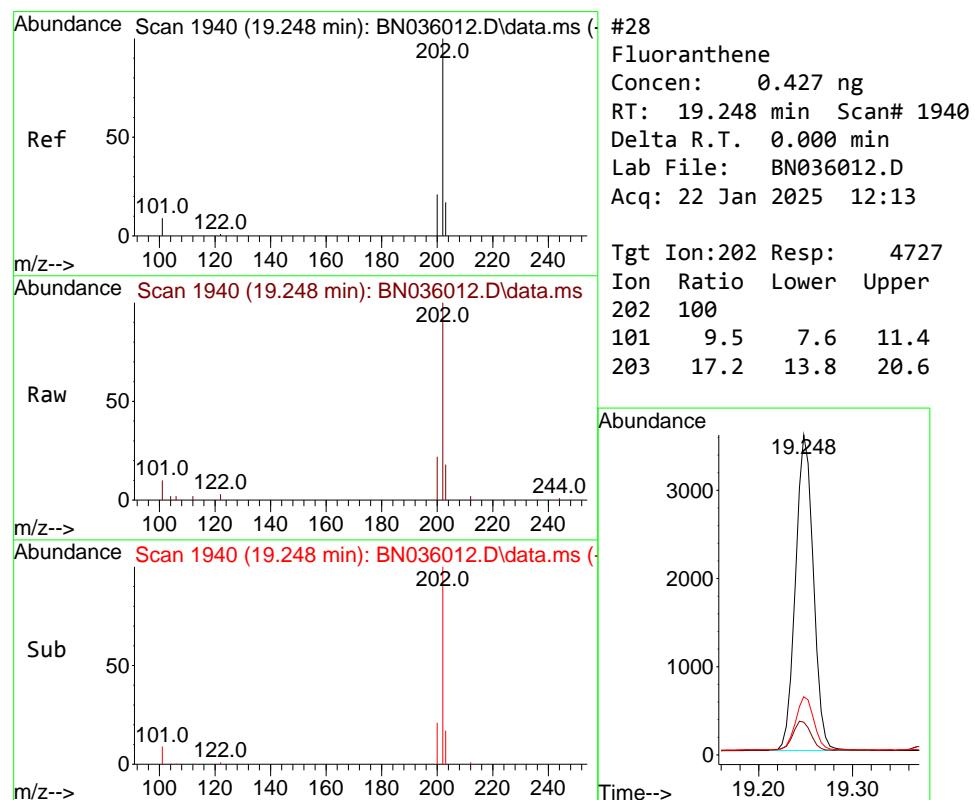
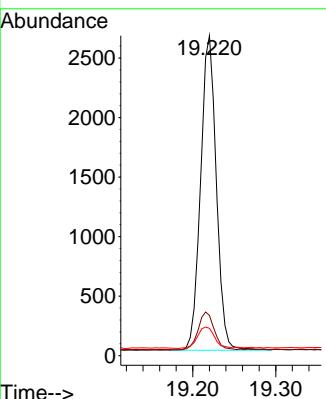




#27  
 Fluoranthene-d10  
 Concen: 0.429 ng  
 RT: 19.220 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

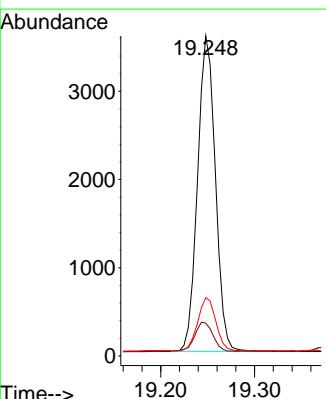
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

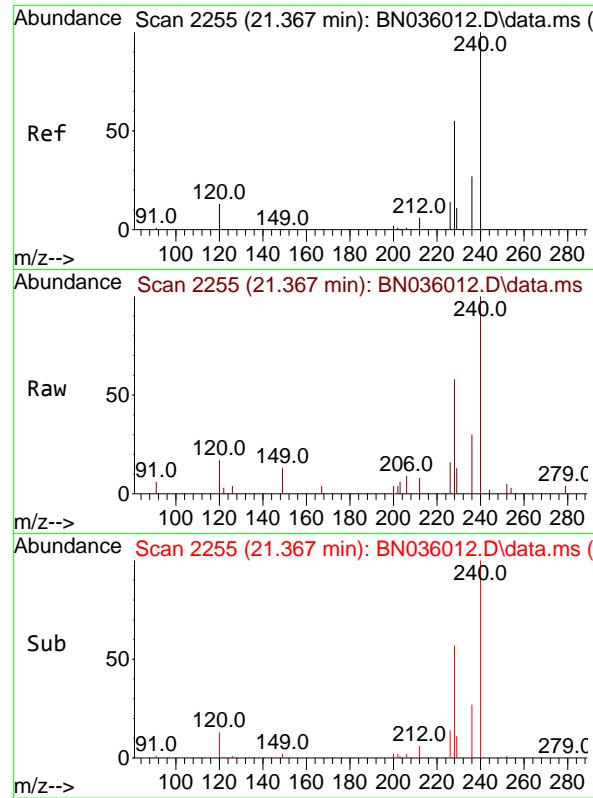
Tgt Ion:212 Resp: 3484  
 Ion Ratio Lower Upper  
 212 100  
 106 12.1 9.7 14.5  
 104 7.5 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.427 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

Tgt Ion:202 Resp: 4727  
 Ion Ratio Lower Upper  
 202 100  
 101 9.5 7.6 11.4  
 203 17.2 13.8 20.6

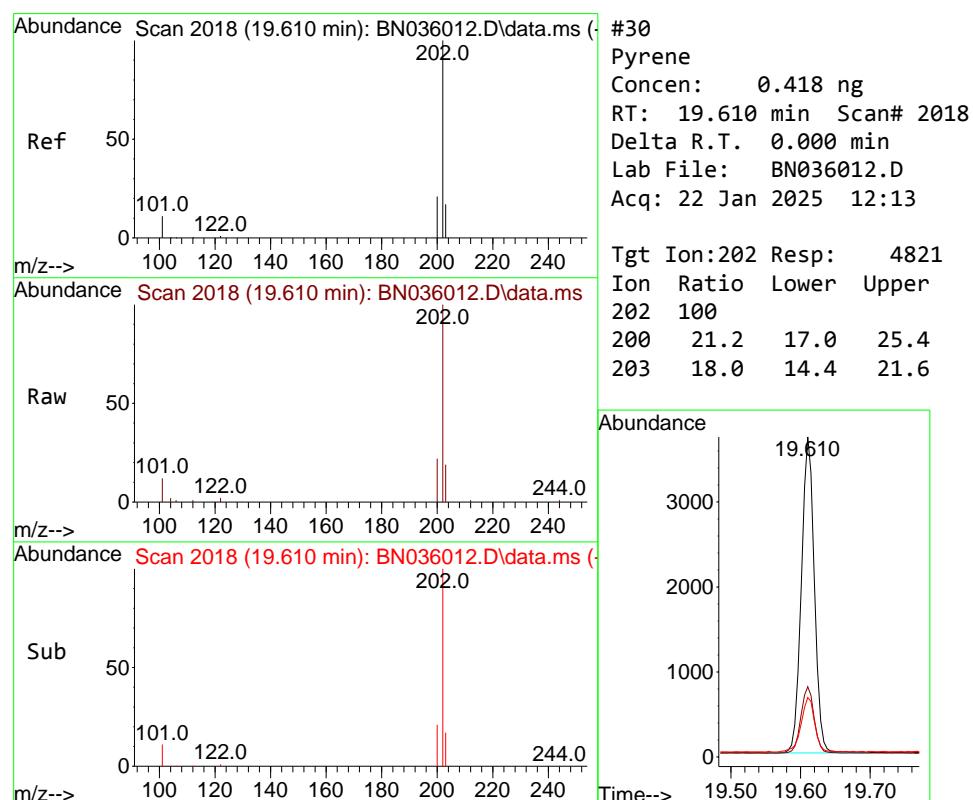
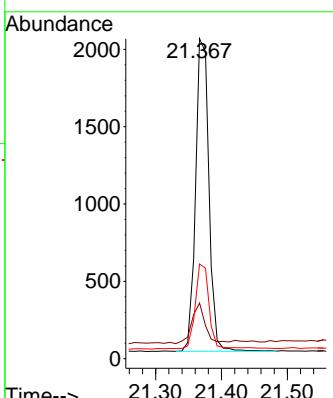




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.367 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

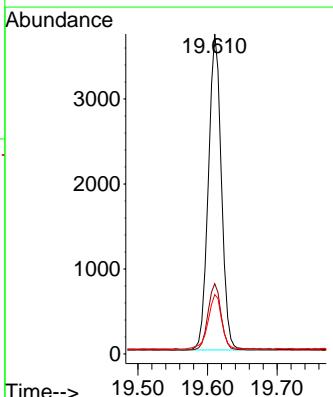
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

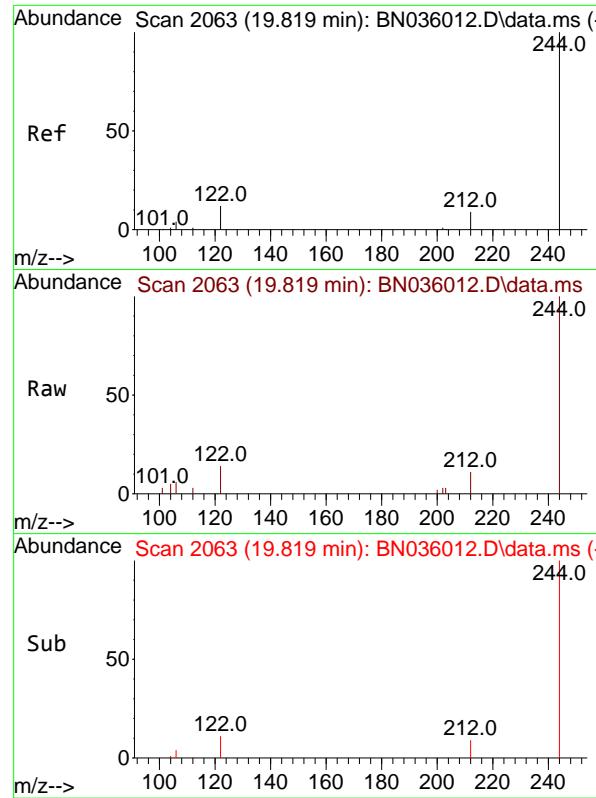
Tgt Ion:240 Resp: 2848  
 Ion Ratio Lower Upper  
 240 100  
 120 17.4 13.9 20.9  
 236 29.6 23.7 35.5



#30  
 Pyrene  
 Concen: 0.418 ng  
 RT: 19.610 min Scan# 2018  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

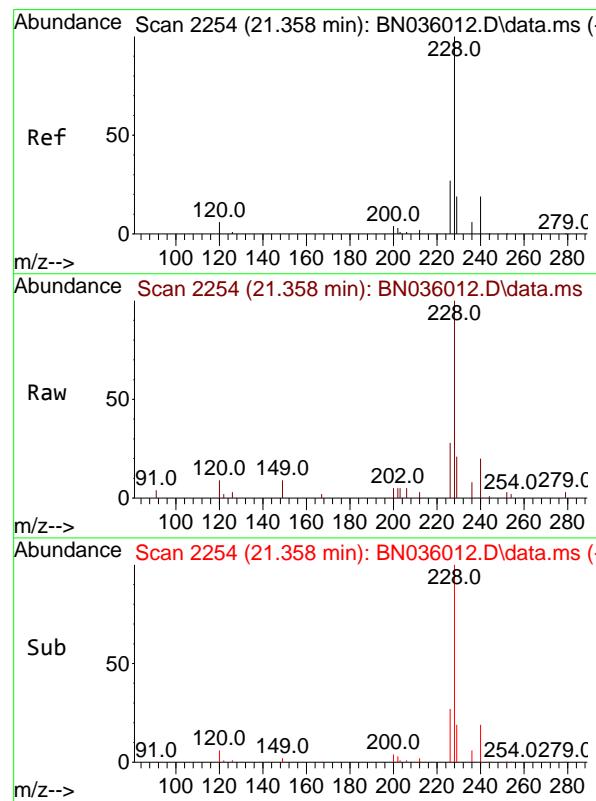
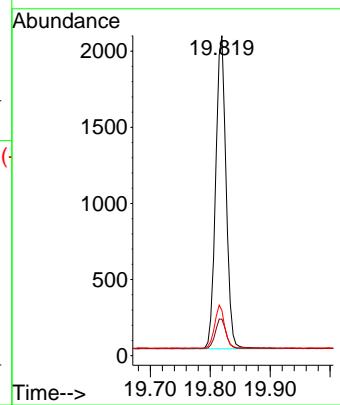
Tgt Ion:202 Resp: 4821  
 Ion Ratio Lower Upper  
 202 100  
 200 21.2 17.0 25.4  
 203 18.0 14.4 21.6





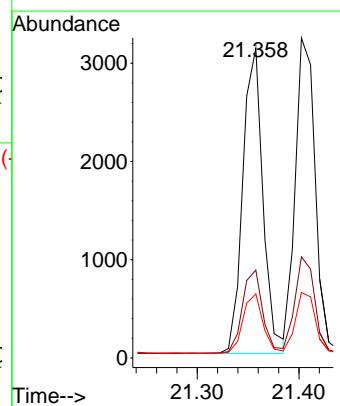
#31  
Terphenyl-d14  
Concen: 0.420 ng  
RT: 19.819 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036012.D ClientSampleId : SSTDICCC0.4  
Acq: 22 Jan 2025 12:13

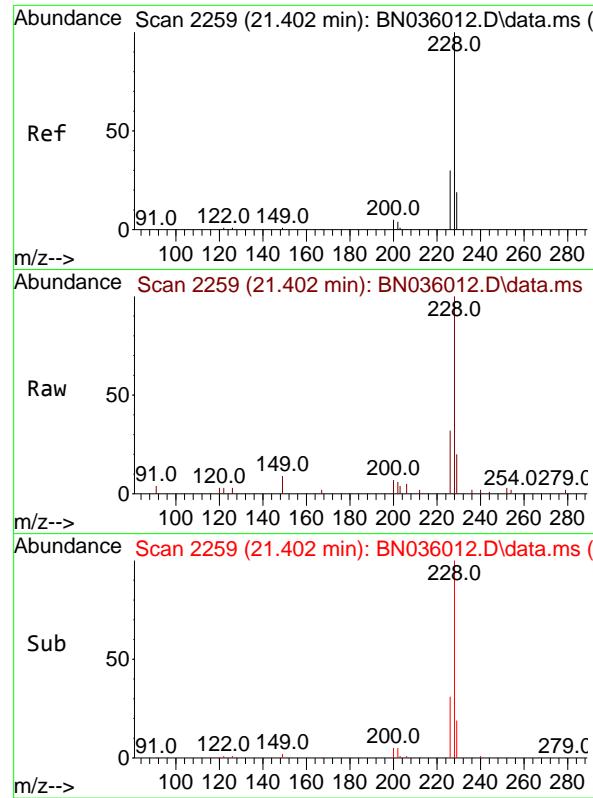
Tgt Ion:244 Resp: 2482  
Ion Ratio Lower Upper  
244 100  
212 11.4 9.1 13.7  
122 14.1 11.3 16.9



#32  
Benzo(a)anthracene  
Concen: 0.414 ng  
RT: 21.358 min Scan# 2254  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

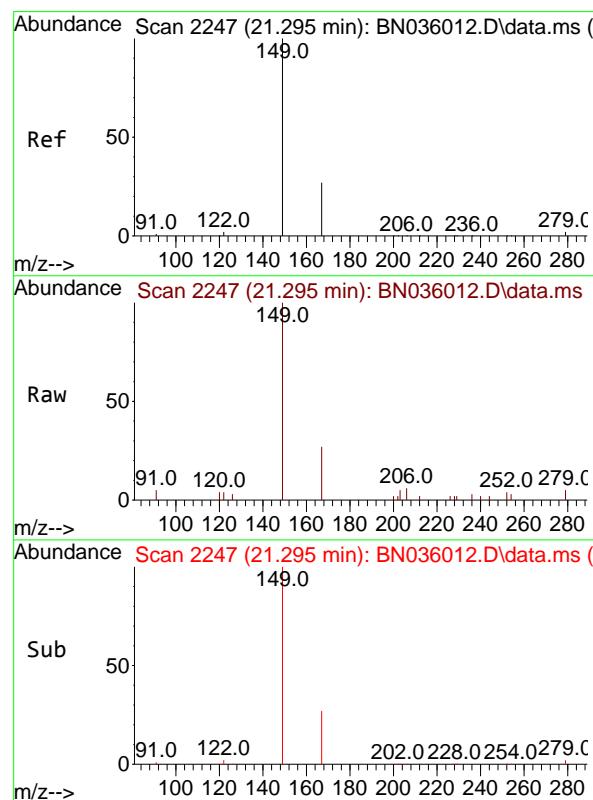
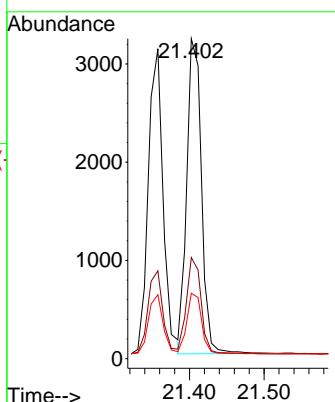
Tgt Ion:228 Resp: 4281  
Ion Ratio Lower Upper  
228 100  
226 28.3 22.6 34.0  
229 20.6 16.5 24.7





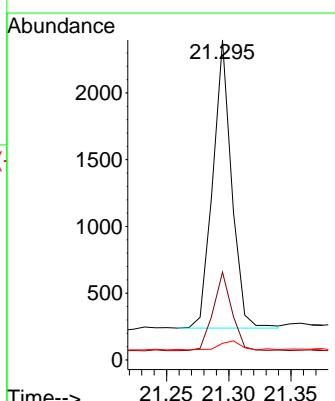
#33  
Chrysene  
Concen: 0.417 ng  
RT: 21.402 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13 ClientSampleId : SSTDICCC0.4

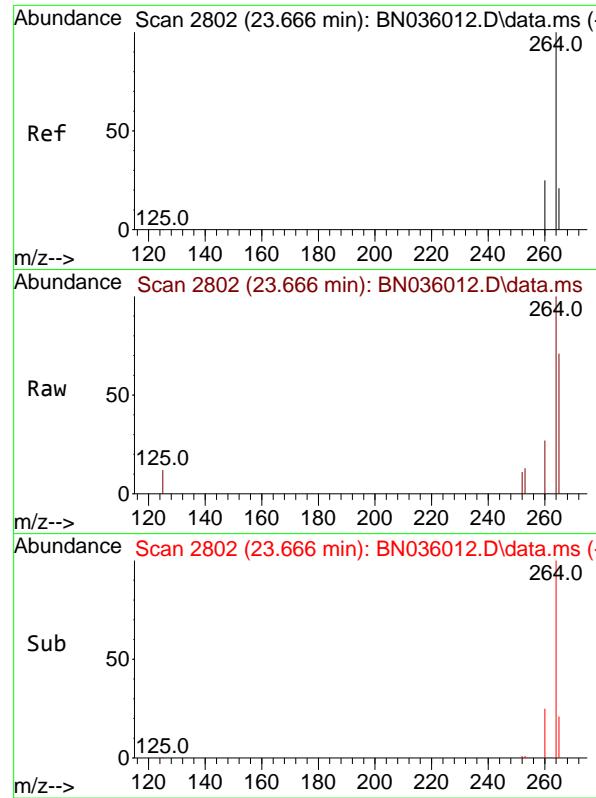
Tgt Ion:228 Resp: 4399  
Ion Ratio Lower Upper  
228 100  
226 31.6 25.3 37.9  
229 20.4 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.402 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

Tgt Ion:149 Resp: 2273  
Ion Ratio Lower Upper  
149 100  
167 27.4 21.9 32.9  
279 3.8 3.0 4.6

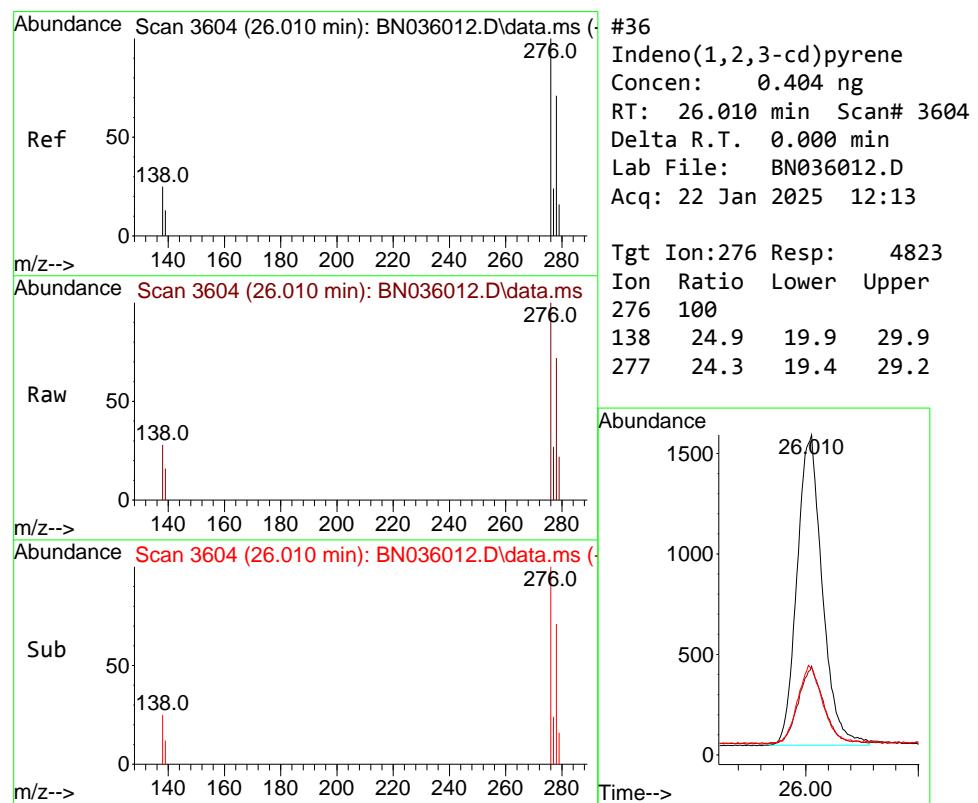
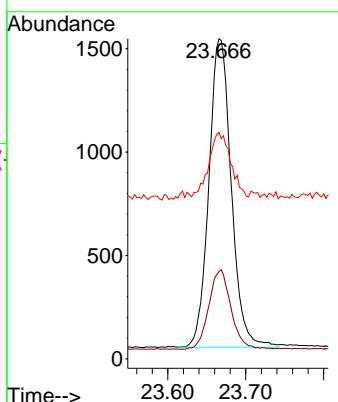




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.666 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

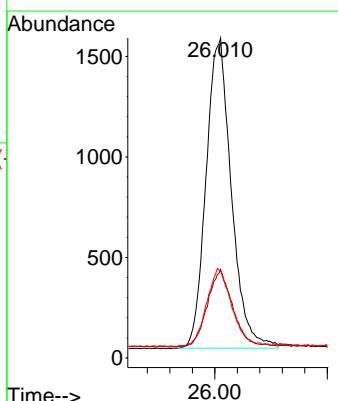
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

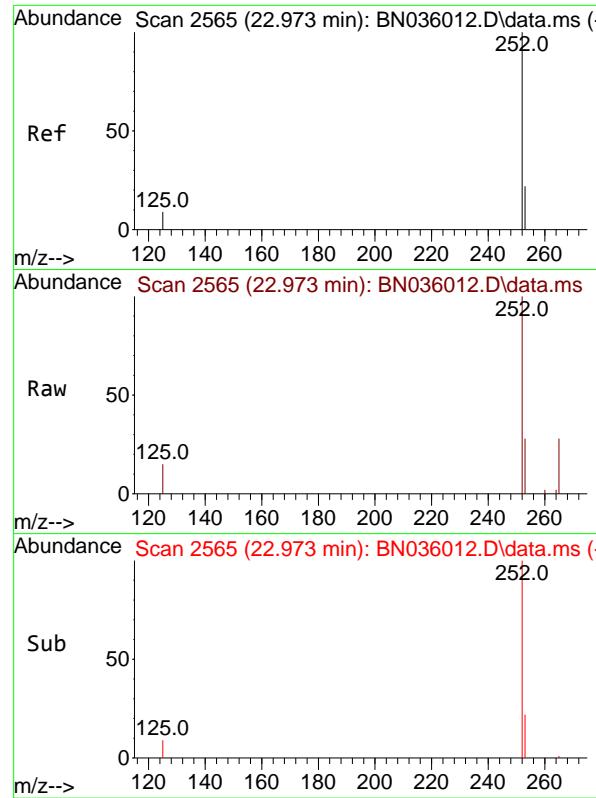
Tgt Ion:264 Resp: 2976  
Ion Ratio Lower Upper  
264 100  
260 27.2 21.8 32.6  
265 70.7 56.6 84.8



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.404 ng  
RT: 26.010 min Scan# 3604  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

Tgt Ion:276 Resp: 4823  
Ion Ratio Lower Upper  
276 100  
138 24.9 19.9 29.9  
277 24.3 19.4 29.2

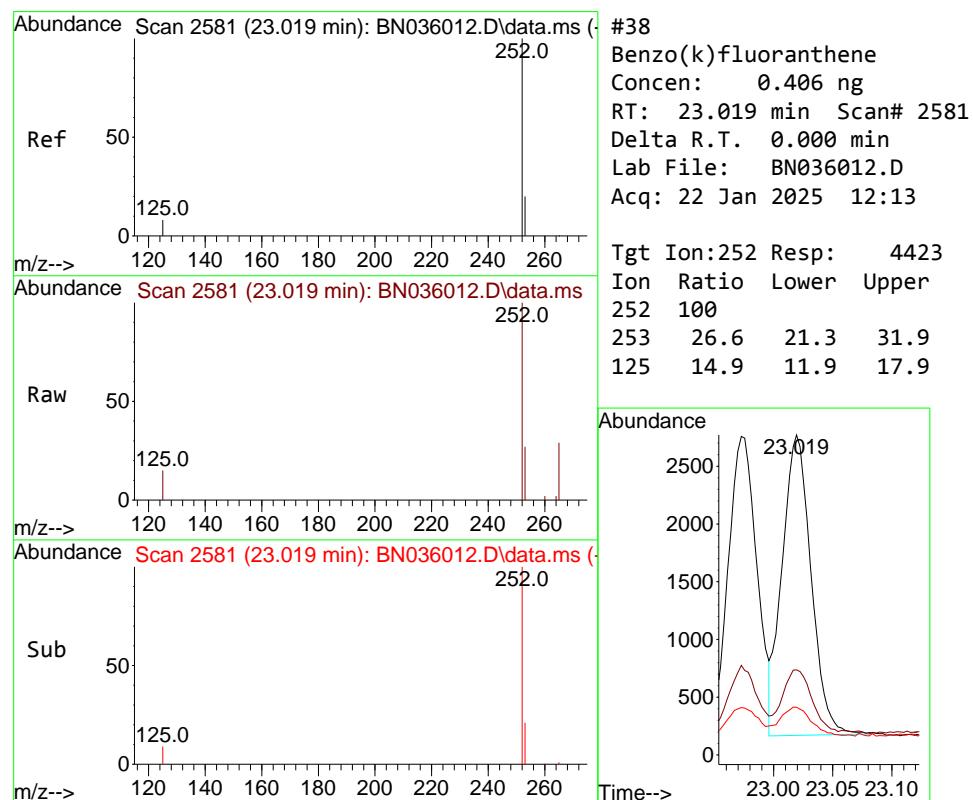
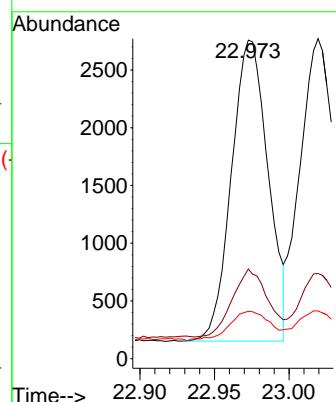




#37  
 Benzo(b)fluoranthene  
 Concen: 0.412 ng  
 RT: 22.973 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

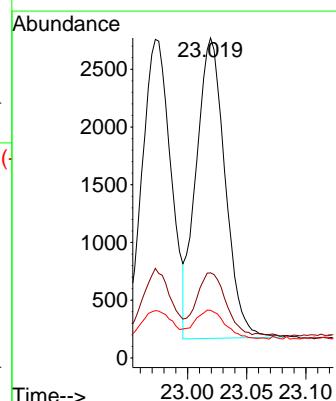
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

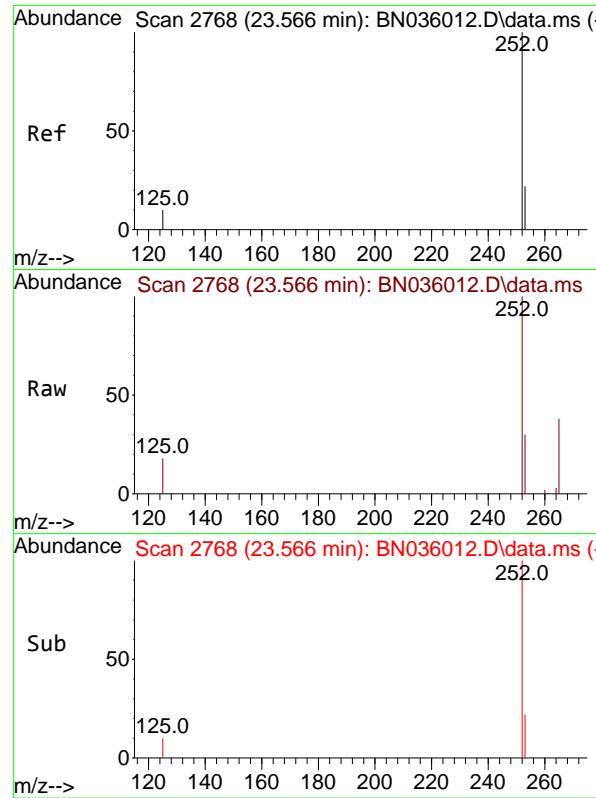
Tgt Ion:252 Resp: 4454  
 Ion Ratio Lower Upper  
 252 100  
 253 28.1 22.5 33.7  
 125 14.9 11.9 17.9



#38  
 Benzo(k)fluoranthene  
 Concen: 0.406 ng  
 RT: 23.019 min Scan# 2581  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

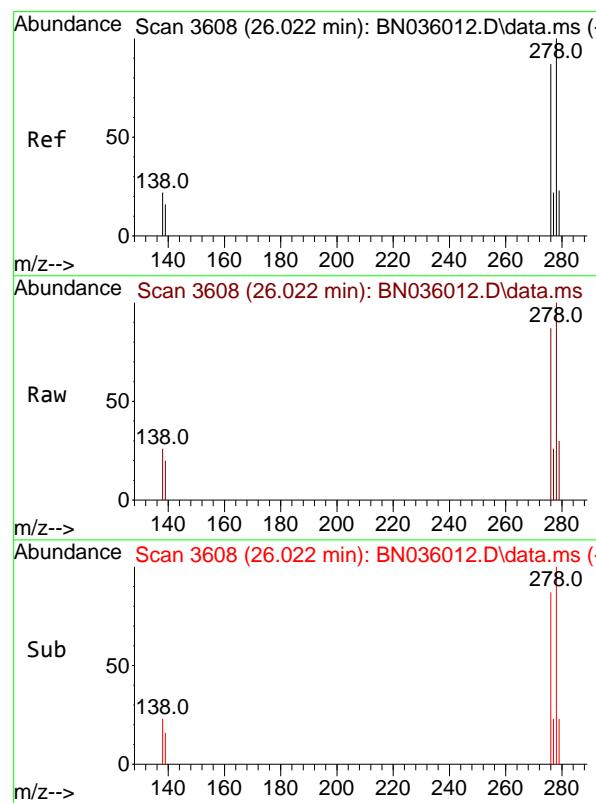
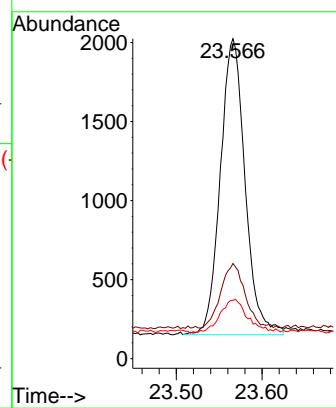
Tgt Ion:252 Resp: 4423  
 Ion Ratio Lower Upper  
 252 100  
 253 26.6 21.3 31.9  
 125 14.9 11.9 17.9





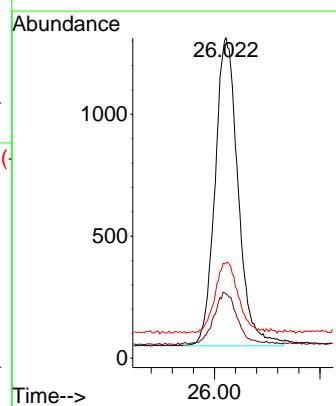
#39  
Benzo(a)pyrene  
Concen: 0.407 ng  
RT: 23.566 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13  
ClientSampleId : SSTDICCC0.4

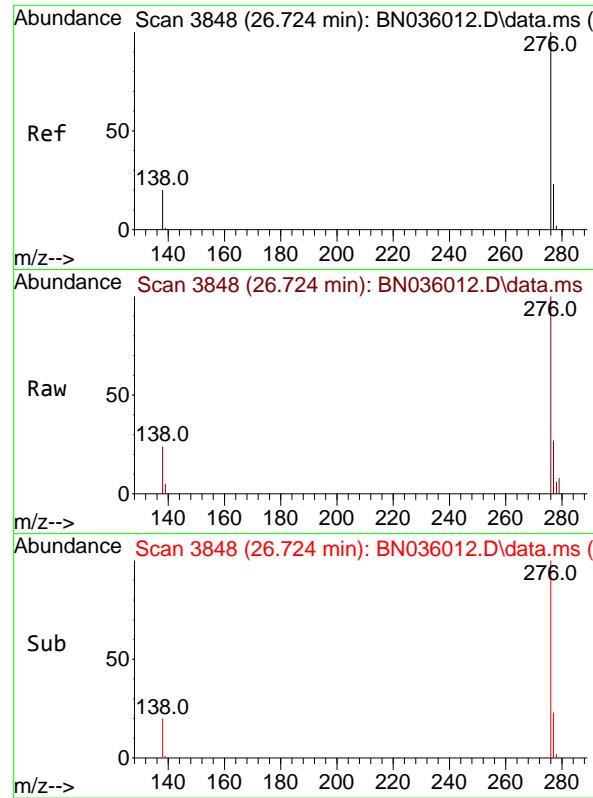
Tgt Ion:252 Resp: 3759  
Ion Ratio Lower Upper  
252 100  
253 29.7 23.8 35.6  
125 18.2 14.6 21.8



#40  
Dibenzo(a,h)anthracene  
Concen: 0.403 ng  
RT: 26.022 min Scan# 3608  
Delta R.T. 0.000 min  
Lab File: BN036012.D  
Acq: 22 Jan 2025 12:13

Tgt Ion:278 Resp: 3838  
Ion Ratio Lower Upper  
278 100  
139 20.0 16.0 24.0  
279 29.8 23.8 35.8

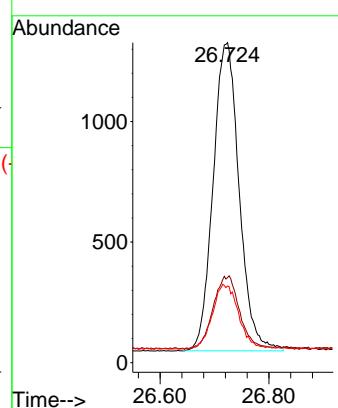




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.409 ng  
 RT: 26.724 min Scan# 3  
 Delta R.T. 0.000 min  
 Lab File: BN036012.D  
 Acq: 22 Jan 2025 12:13

Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

Tgt Ion:276 Resp: 4244  
 Ion Ratio Lower Upper  
 276 100  
 277 26.6 21.3 31.9  
 138 24.0 19.2 28.8



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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.8

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

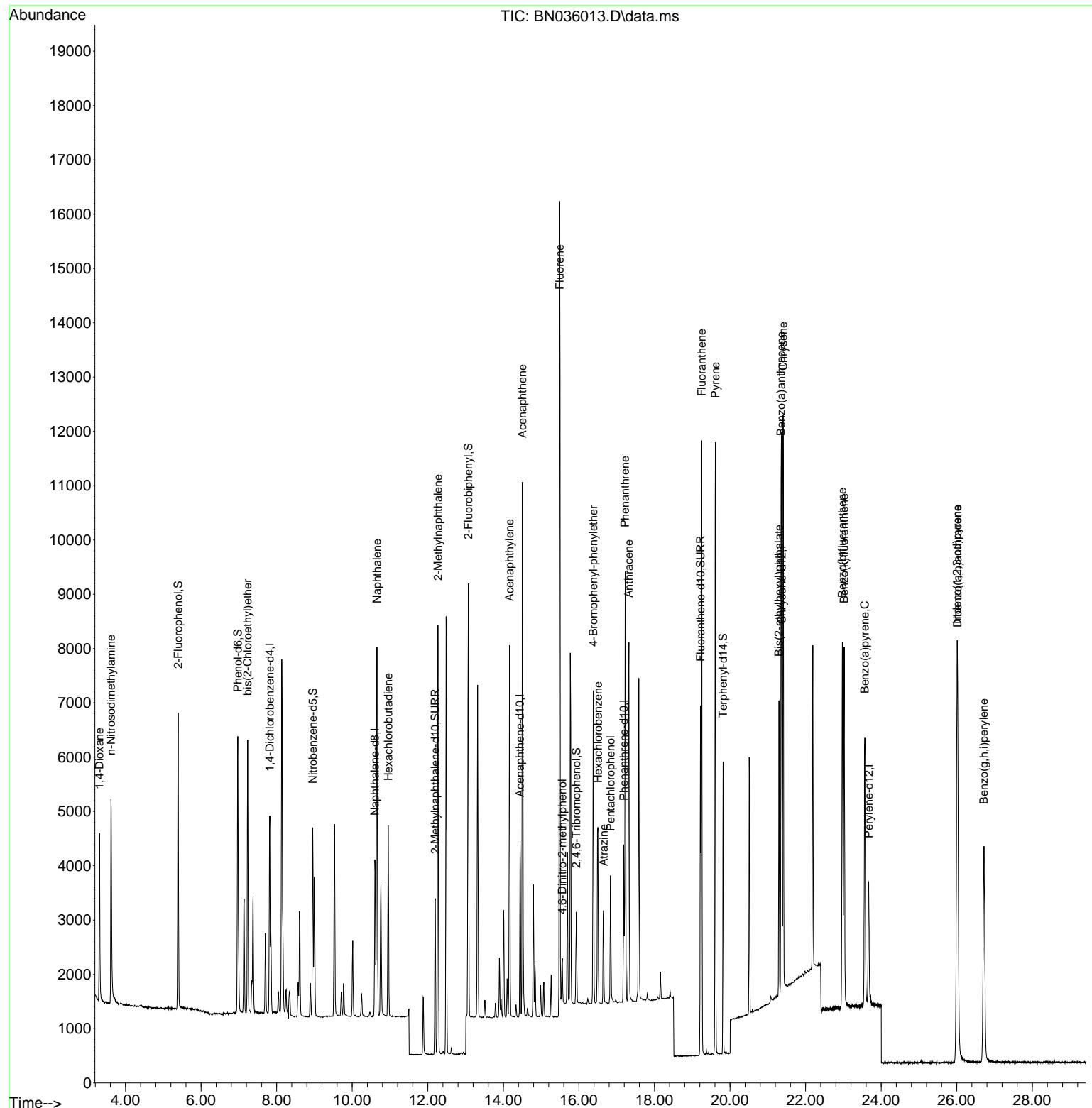
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	1730	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3641	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	1841	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3559	0.400	ng	# 0.00
29) Chrysene-d12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

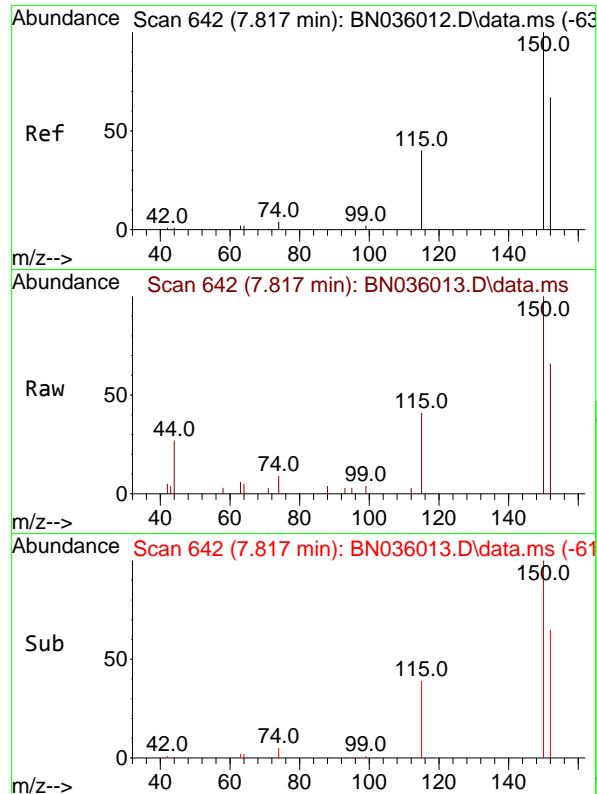
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.8

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

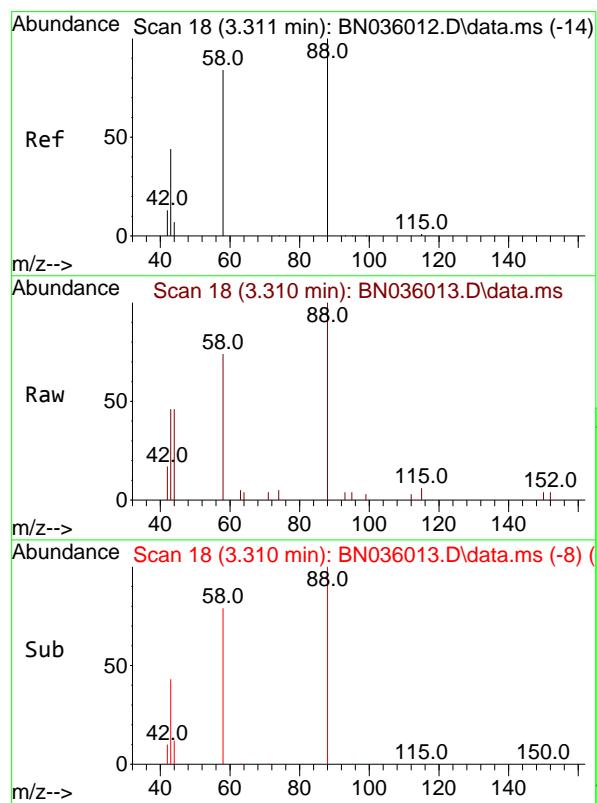
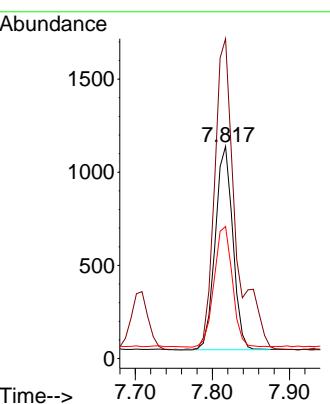




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

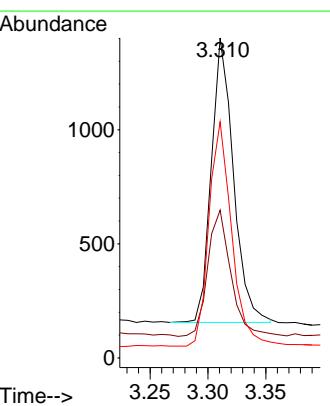
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

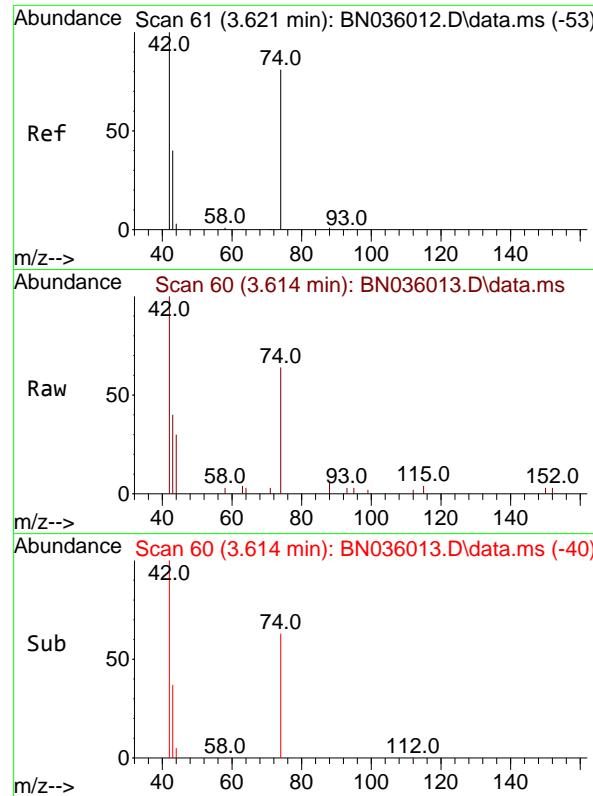
Tgt Ion:152 Resp: 1730  
Ion Ratio Lower Upper  
152 100  
150 150.7 117.4 176.2  
115 62.2 51.0 76.4



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

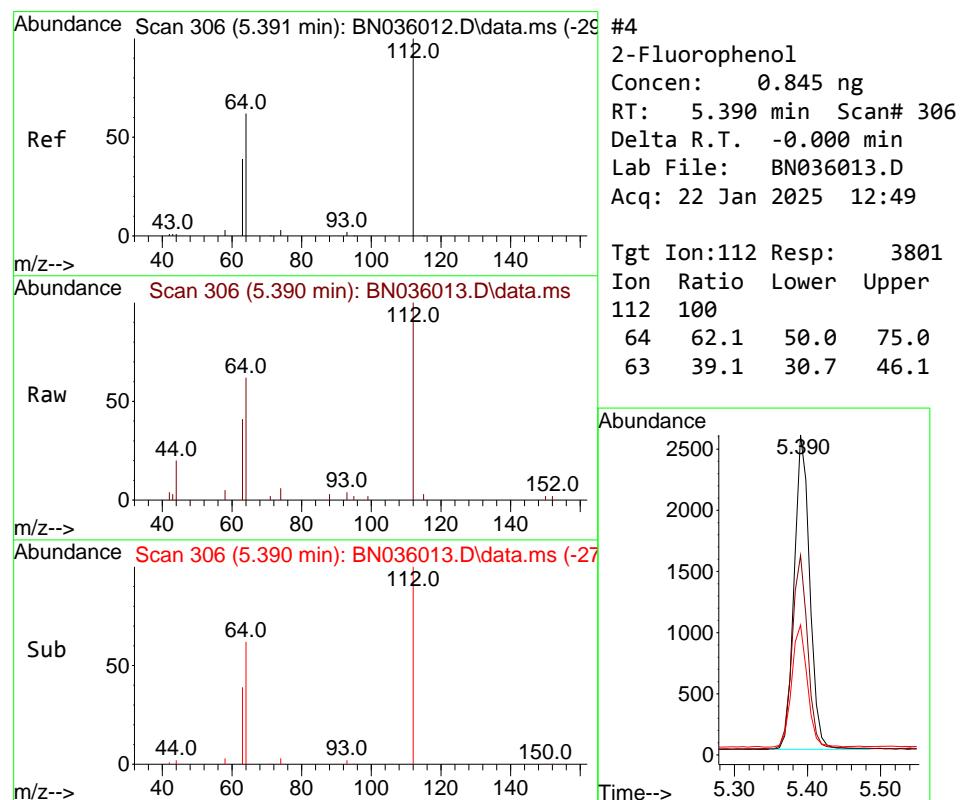
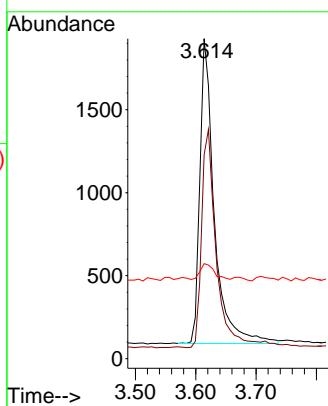
Tgt Ion: 88 Resp: 1651  
Ion Ratio Lower Upper  
88 100  
43 46.4 38.5 57.7  
58 80.8 66.6 99.8





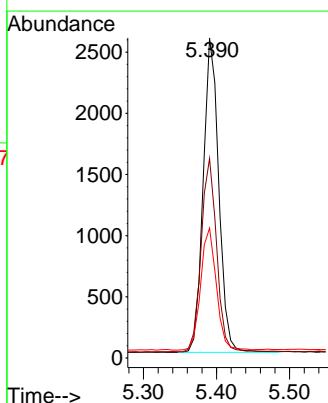
#3  
n-Nitrosodimethylamine  
Concen: 0.871 ng  
RT: 3.614 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.007 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49  
ClientSampleId : SSTDICCO.8

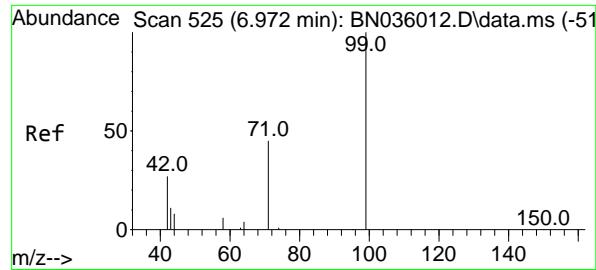
Tgt Ion: 42 Resp: 3054  
Ion Ratio Lower Upper  
42 100  
74 73.9 58.1 87.1  
44 5.5 6.2 9.4#



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

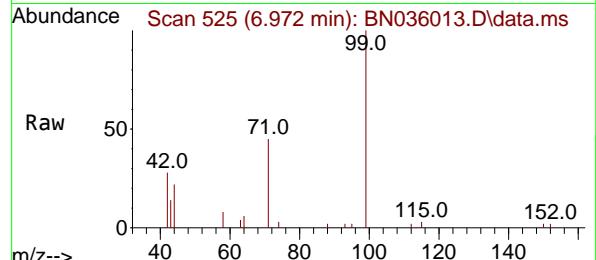
Tgt Ion: 112 Resp: 3801  
Ion Ratio Lower Upper  
112 100  
64 62.1 50.0 75.0  
63 39.1 30.7 46.1



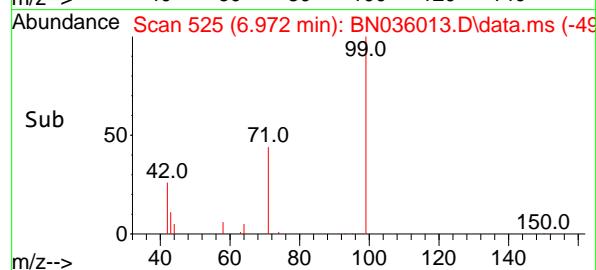
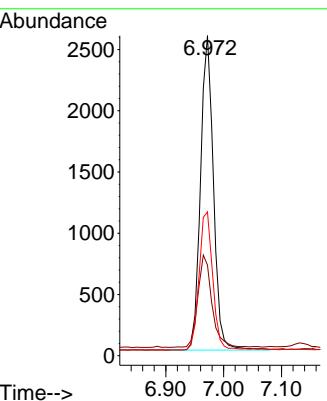


#5  
Phenol-d6  
Concen: 0.756 ng  
RT: 6.972 min Scan# 5  
Delta R.T. -0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

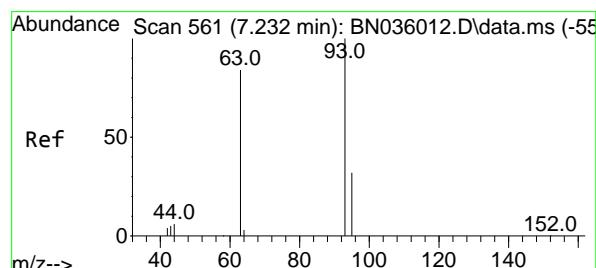
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8



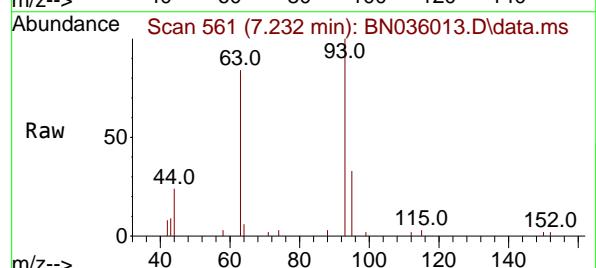
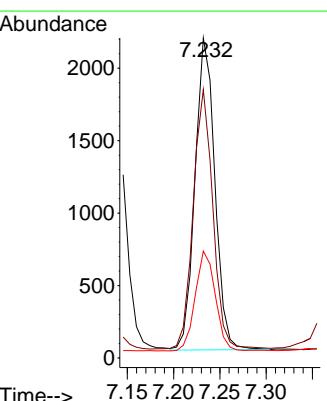
Tgt Ion: 99 Resp: 3996  
Ion Ratio Lower Upper  
99 100  
42 31.9 26.8 40.2  
71 46.0 36.6 55.0



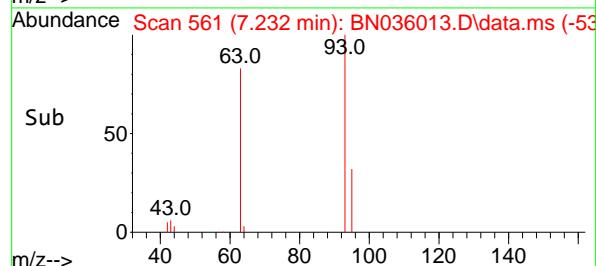
#6  
bis(2-Chloroethyl)ether  
Concen: 0.756 ng  
RT: 7.232 min Scan# 561  
Delta R.T. -0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

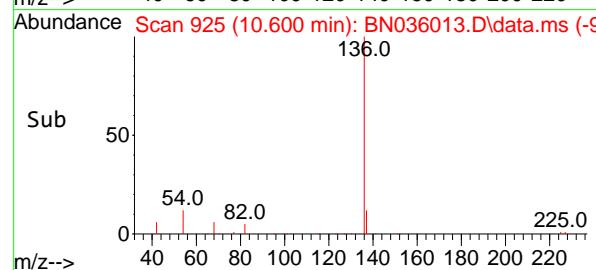
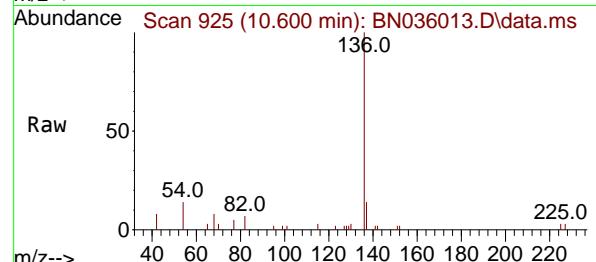
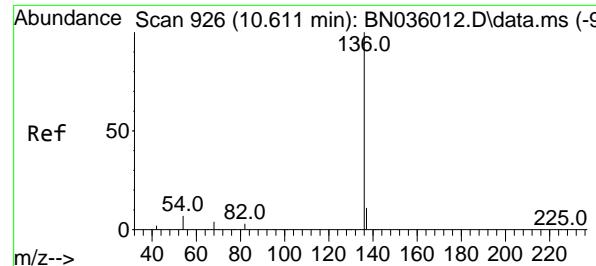


Tgt Ion: 93 Resp: 3216  
Ion Ratio Lower Upper  
93 100  
63 82.4 65.8 98.6  
95 32.3 25.8 38.6



Abundance Scan 561 (7.232 min): BN036013.D\data.ms (-53)

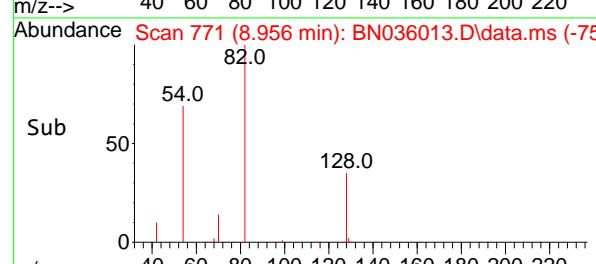
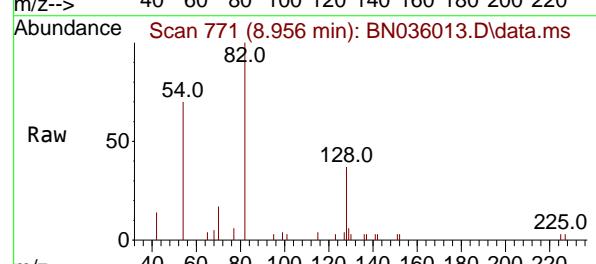
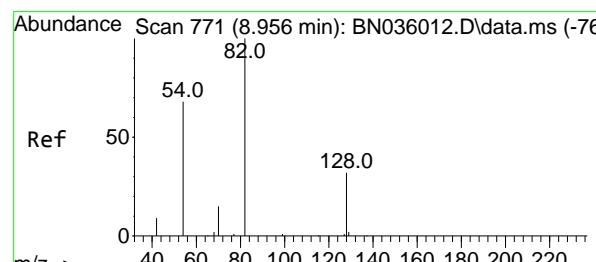
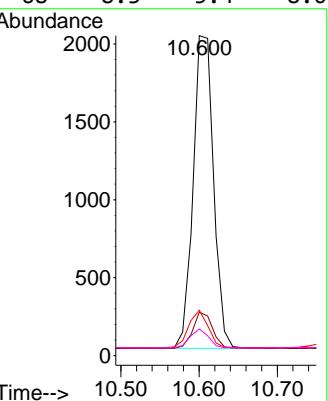




#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

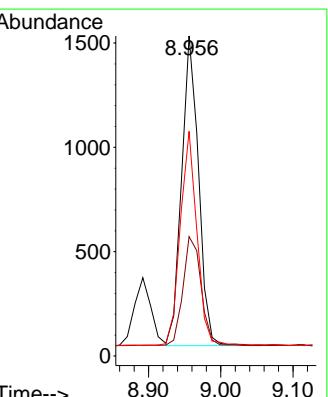
Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.8

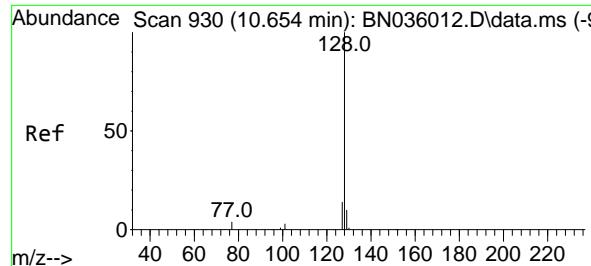
Tgt Ion:136 Resp: 3641  
 Ion Ratio Lower Upper  
 136 100  
 137 13.6 10.4 15.6  
 54 14.2 7.7 11.5#  
 68 8.3 5.4 8.0#



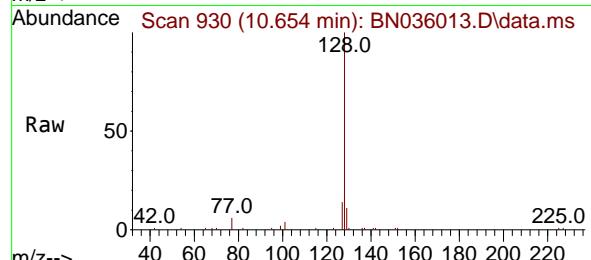
#8  
 Nitrobenzene-d5  
 Concen: 0.706 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. -0.000 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

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

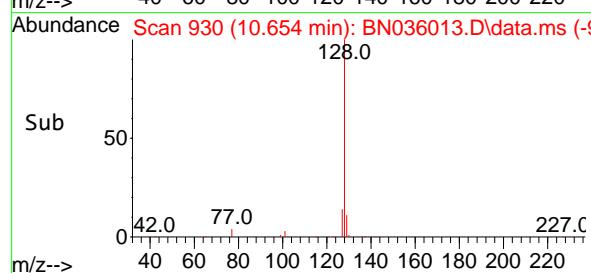
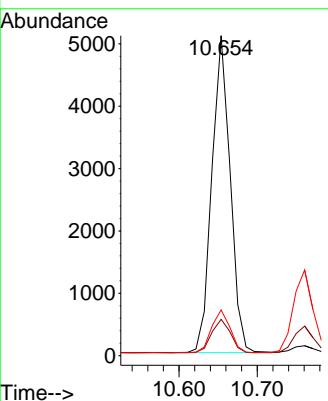




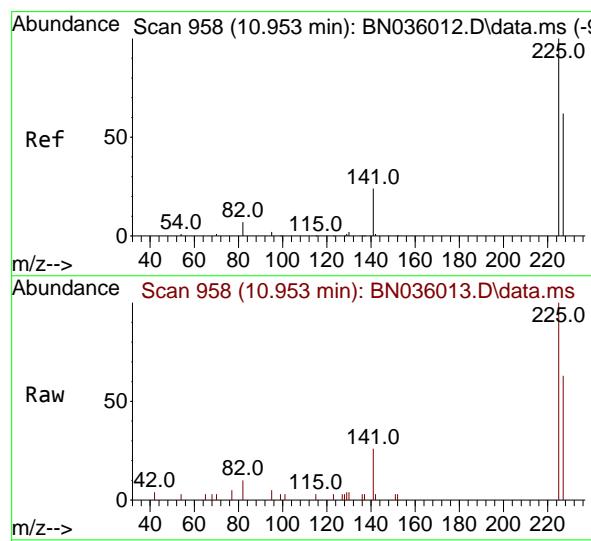
#9  
Naphthalene  
Concen: 0.783 ng  
RT: 10.654 min Scan# 9  
Instrument :  
Delta R.T. -0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49  
ClientSampleId : SSTDICCO.8



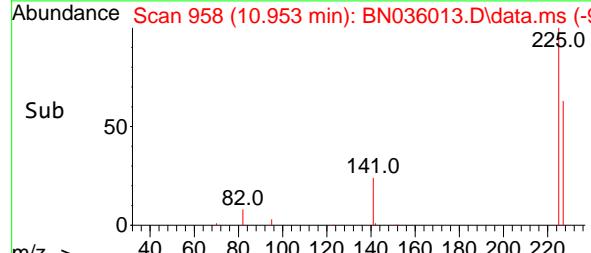
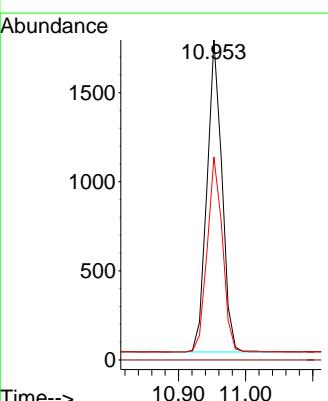
Tgt Ion:128 Resp: 8279  
Ion Ratio Lower Upper  
128 100  
129 11.4 9.4 14.2  
127 14.3 12.6 19.0



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

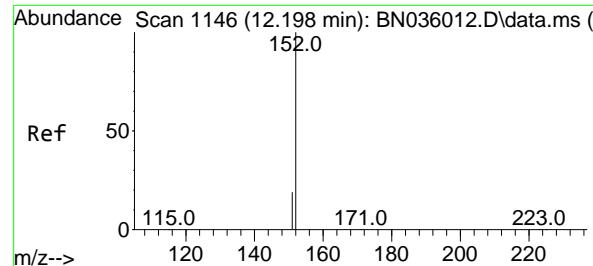


Tgt Ion:225 Resp: 2705  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.4 51.0 76.6

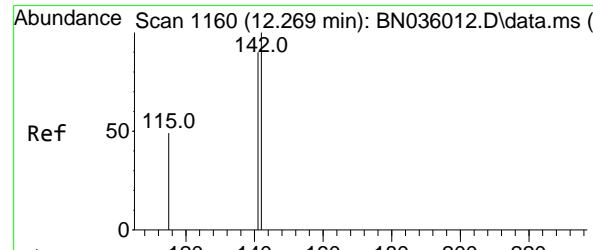
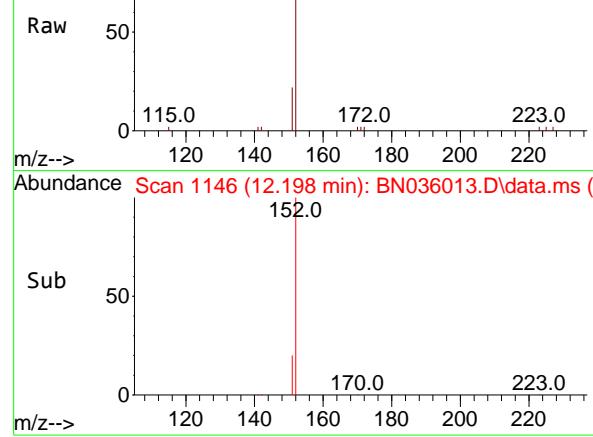


Sub 50

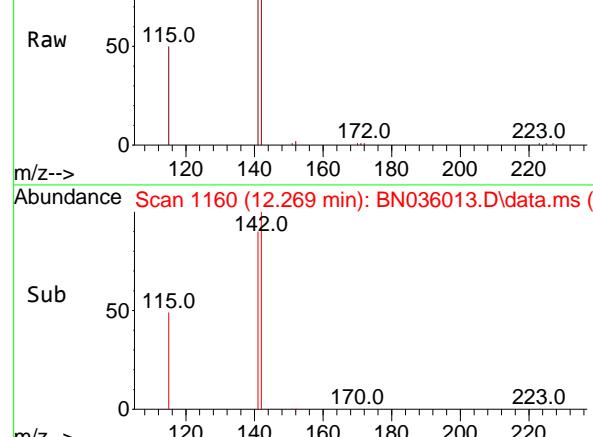
225.0  
82.0 141.0



Abundance Scan 1146 (12.198 min): BN036013.D\data.ms (-)



Abundance Scan 1160 (12.269 min): BN036013.D\data.ms (-)



#11

2-Methylnaphthalene-d10

Concen: 0.777 ng

RT: 12.198 min Scan# 1146

Delta R.T. -0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA\_N

ClientSampleId :

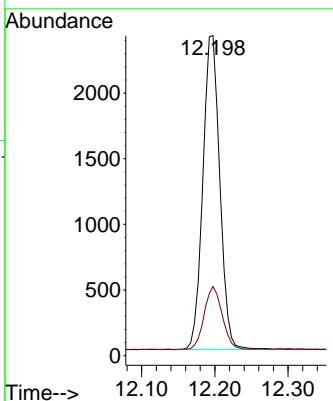
SSTDICC0.8

Tgt Ion:152 Resp: 3847

Ion Ratio Lower Upper

152 100

151 21.2 16.6 25.0



#12

2-Methylnaphthalene

Concen: 0.777 ng

RT: 12.269 min Scan# 1160

Delta R.T. -0.000 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

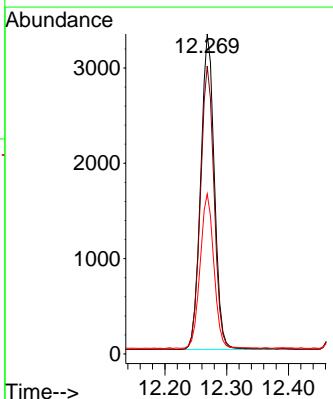
Tgt Ion:142 Resp: 5096

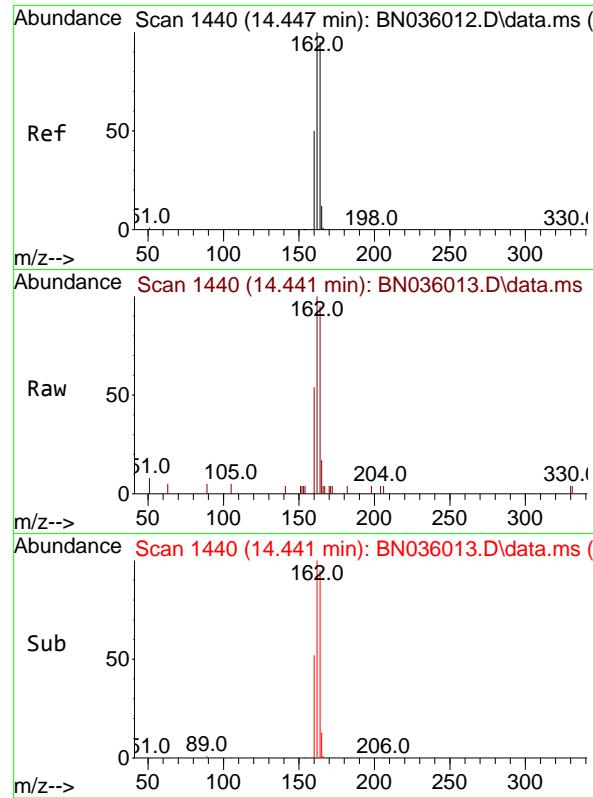
Ion Ratio Lower Upper

142 100

141 90.0 72.2 108.2

115 50.0 41.2 61.8

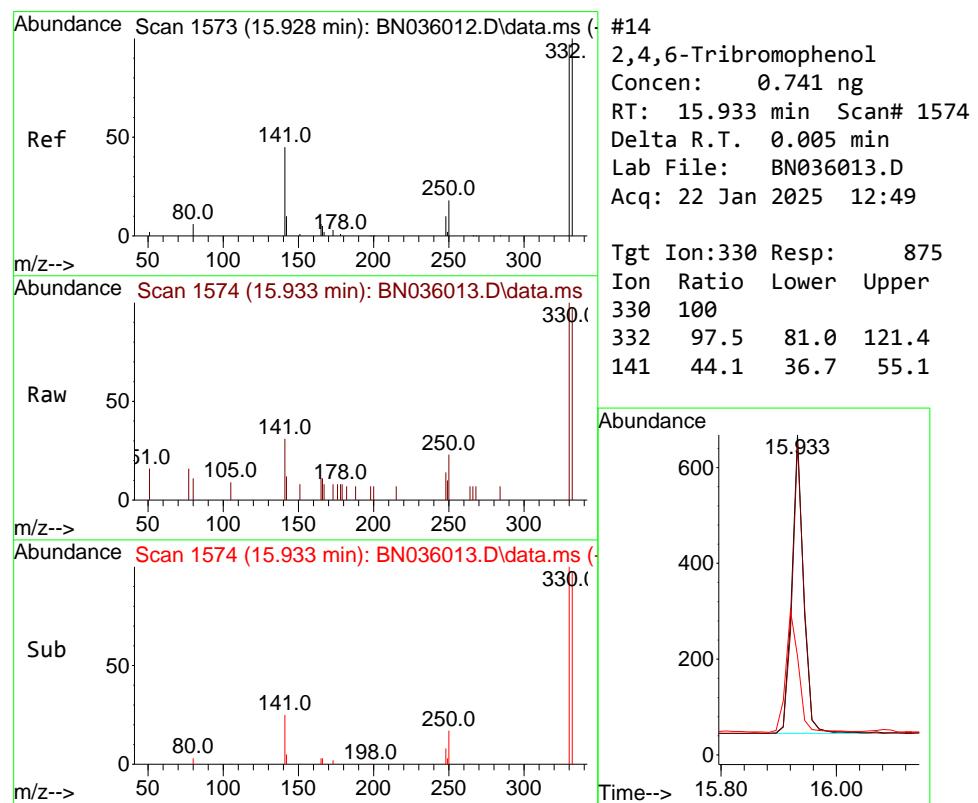
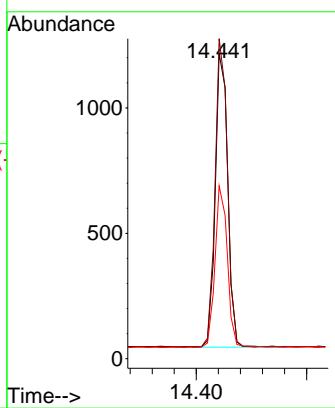




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.441 min Scan# 1441  
 Delta R.T. -0.006 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

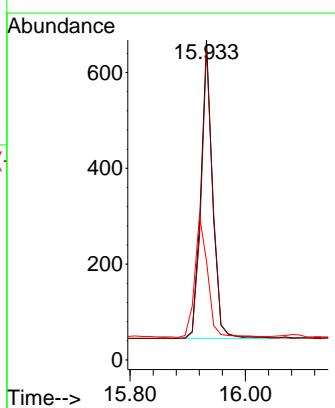
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

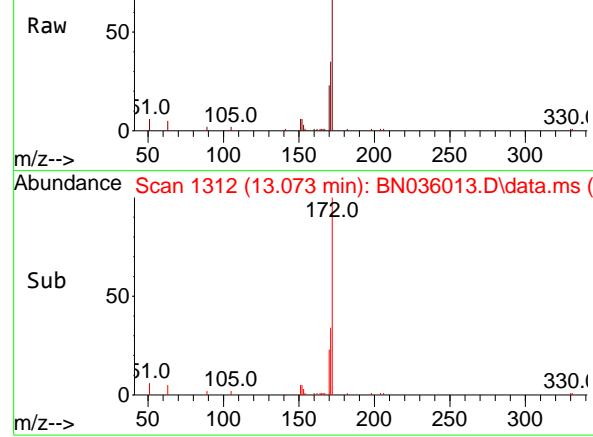
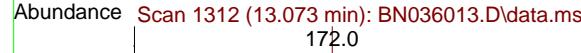
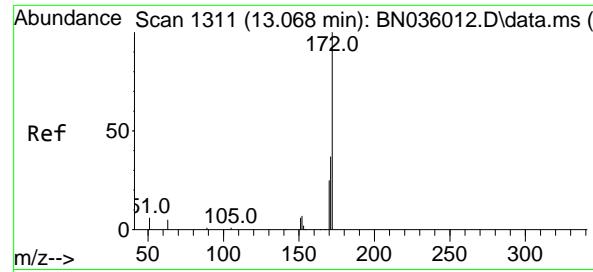
Tgt Ion:164 Resp: 1841  
 Ion Ratio Lower Upper  
 164 100  
 162 104.9 84.1 126.1  
 160 56.7 43.8 65.8



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

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

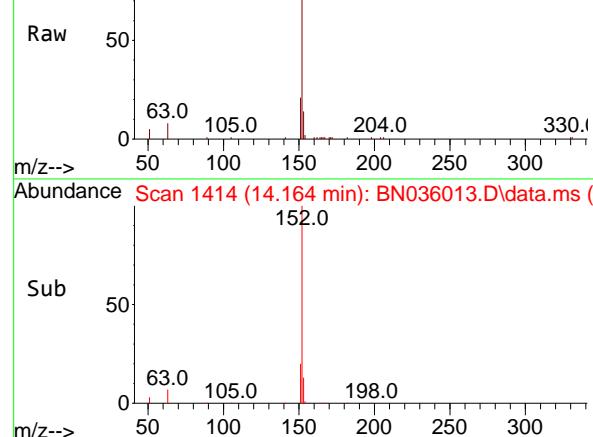
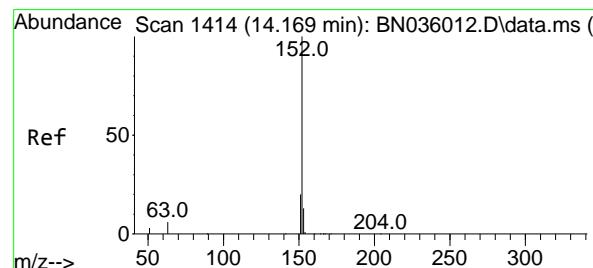
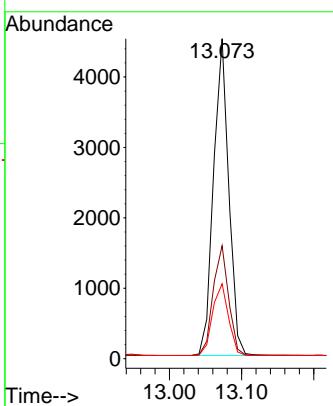




#15  
2-Fluorobiphenyl  
Concen: 0.801 ng  
RT: 13.073 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

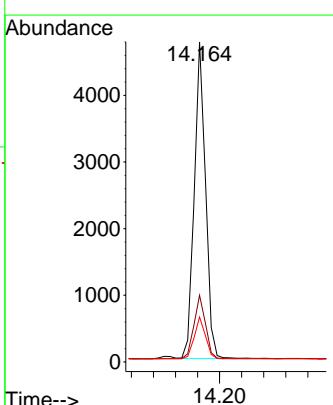
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

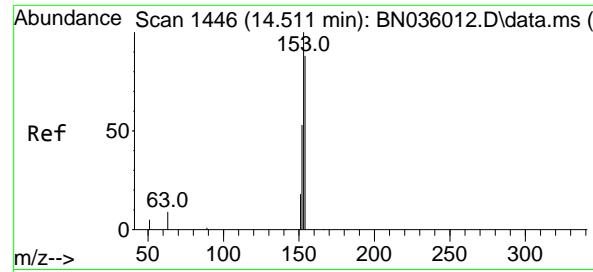
Tgt Ion:172 Resp: 6581  
Ion Ratio Lower Upper  
172 100  
171 35.3 30.9 46.3  
170 23.4 21.2 31.8



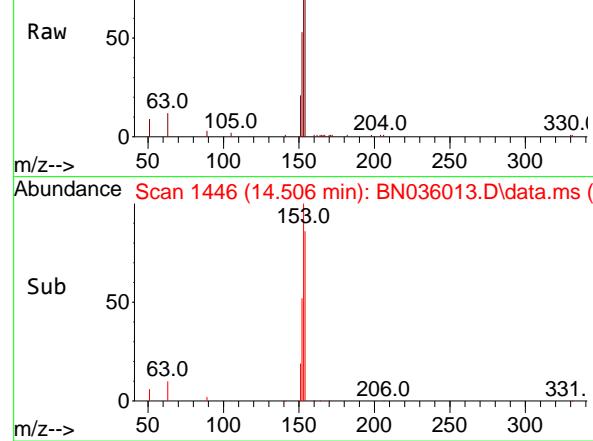
#16  
Acenaphthylene  
Concen: 0.776 ng  
RT: 14.164 min Scan# 1414  
Delta R.T. -0.006 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

Tgt Ion:152 Resp: 6775  
Ion Ratio Lower Upper  
152 100  
151 20.7 16.2 24.2  
153 13.5 10.4 15.6





Abundance Scan 1446 (14.506 min): BN036013.D\data.ms



#17

Acenaphthene

Concen: 0.780 ng

RT: 14.506 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.8

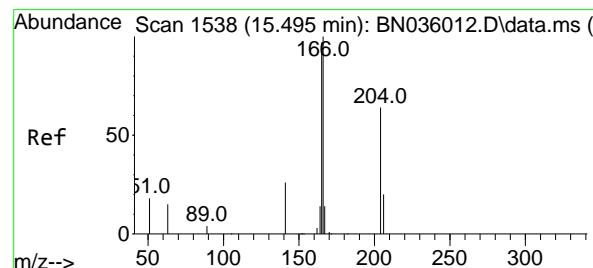
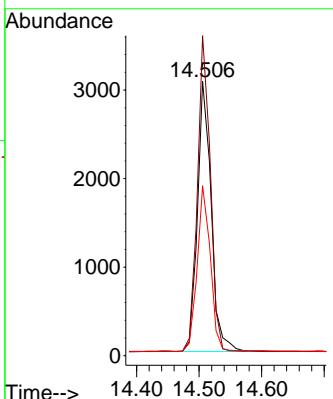
Tgt Ion:154 Resp: 4661

Ion Ratio Lower Upper

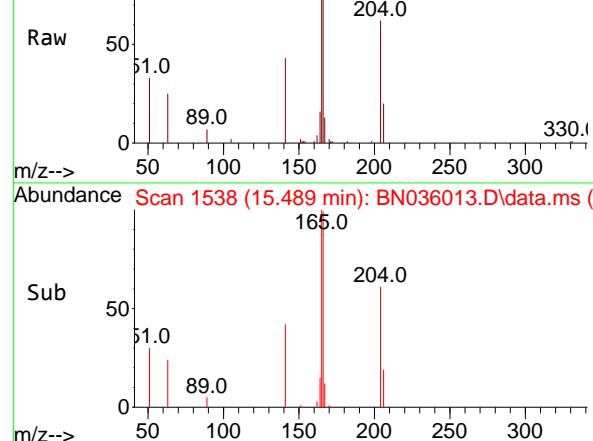
154 100

153 110.1 88.9 133.3

152 59.3 48.1 72.1



Abundance Scan 1538 (15.489 min): BN036013.D\data.ms



#18

Fluorene

Concen: 0.762 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

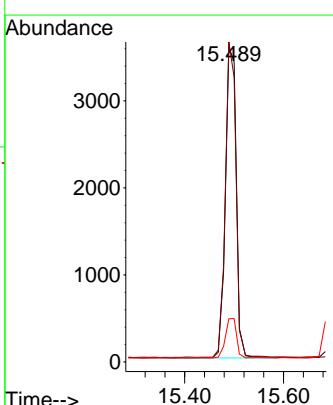
Tgt Ion:166 Resp: 5707

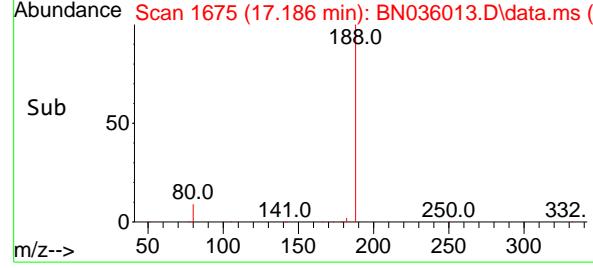
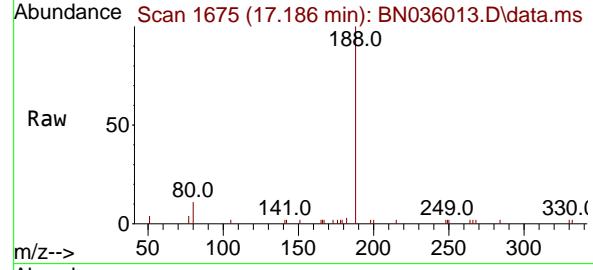
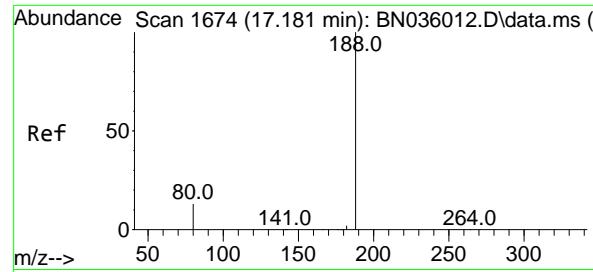
Ion Ratio Lower Upper

166 100

165 101.9 78.5 117.7

167 13.2 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

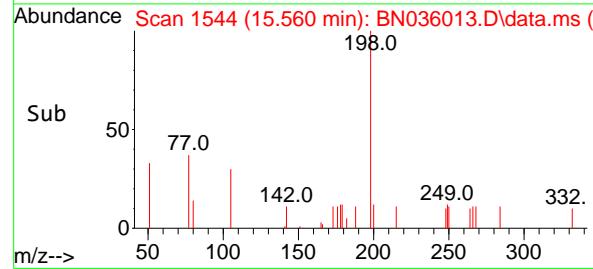
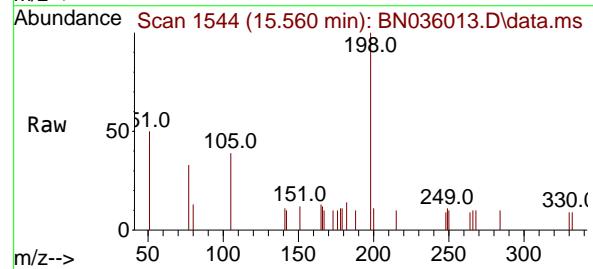
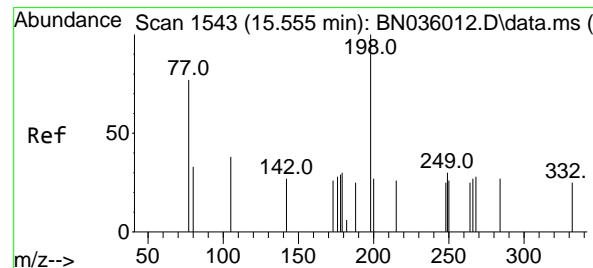
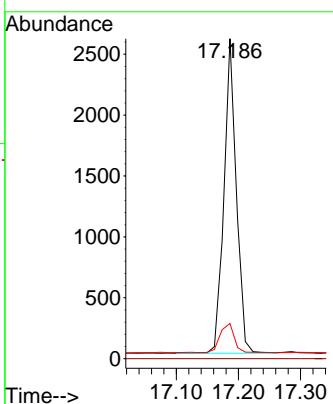
Tgt Ion:188 Resp: 3559

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.0 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.762 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

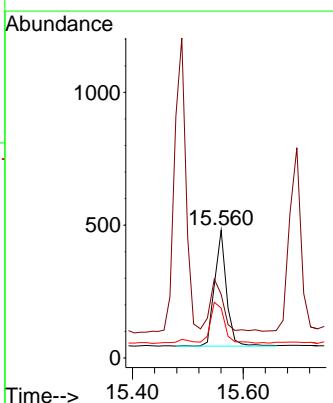
Tgt Ion:198 Resp: 632

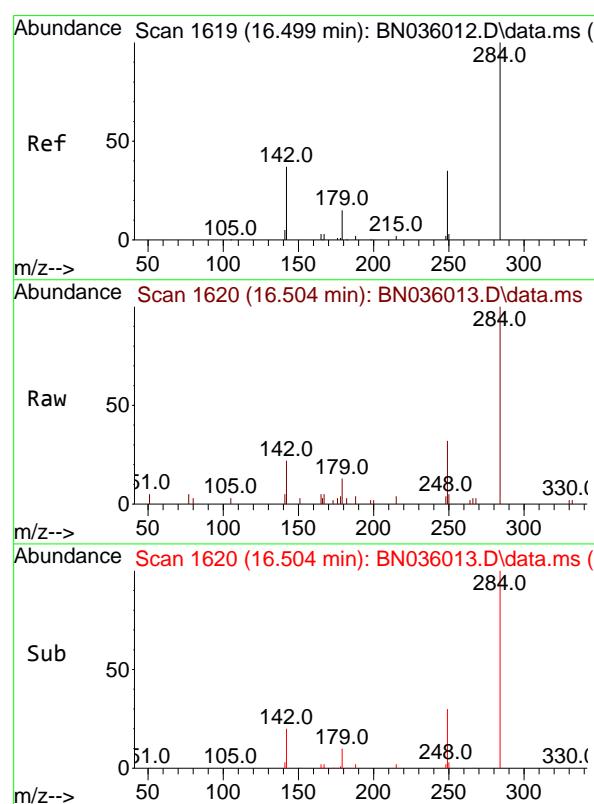
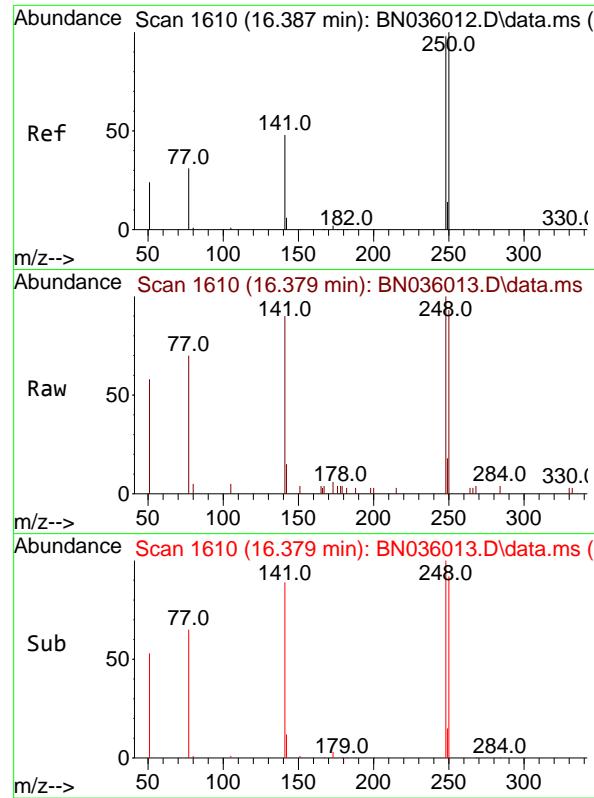
Ion Ratio Lower Upper

198 100

51 49.9 68.1 102.1#

105 39.1 46.5 69.7#





#21

4-Bromophenyl-phenylether

Concen: 0.805 ng

RT: 16.379 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

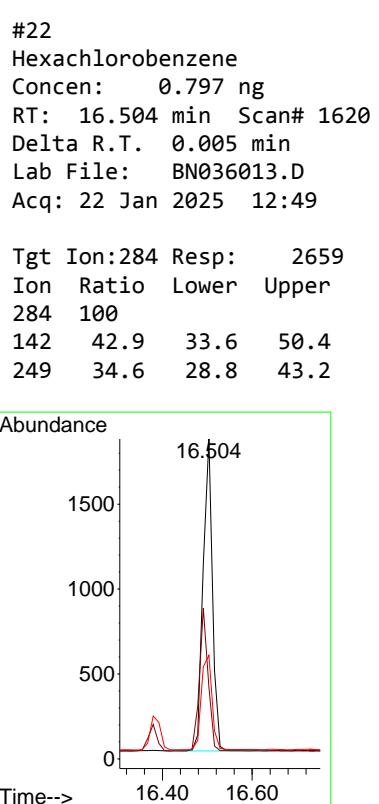
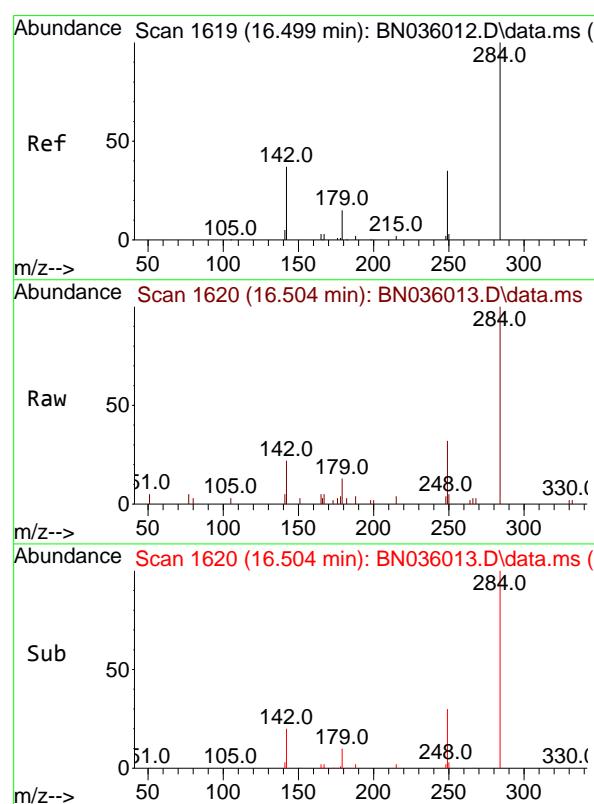
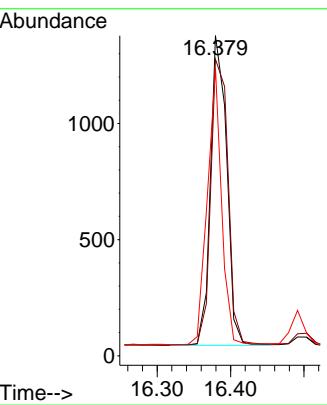
Tgt Ion:248 Resp: 2040

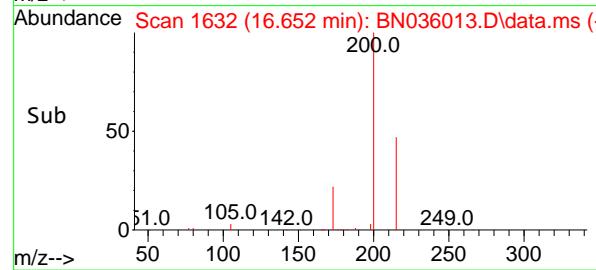
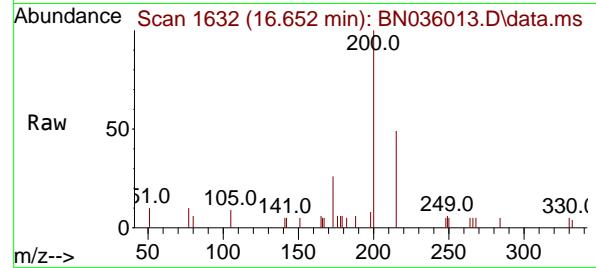
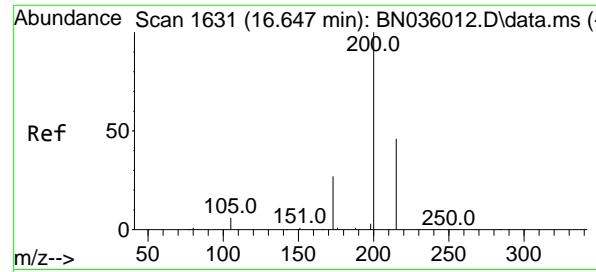
Ion Ratio Lower Upper

248 100

250 92.7 81.5 122.3

141 89.9 41.8 62.6#

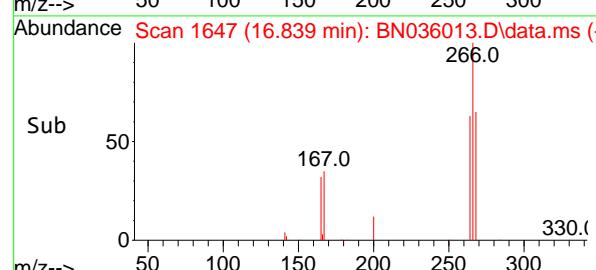
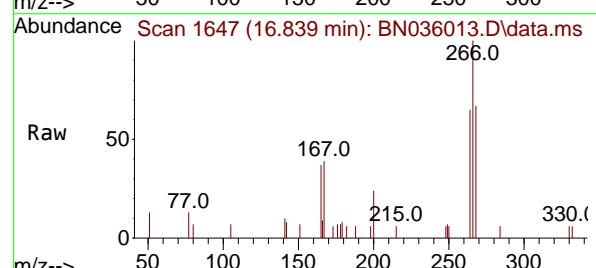
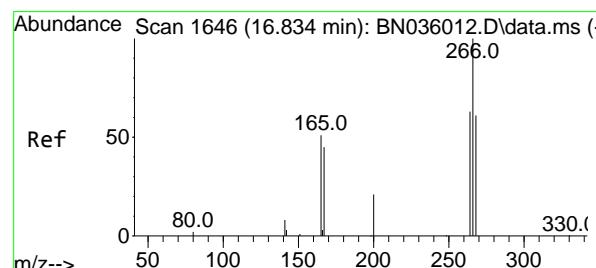
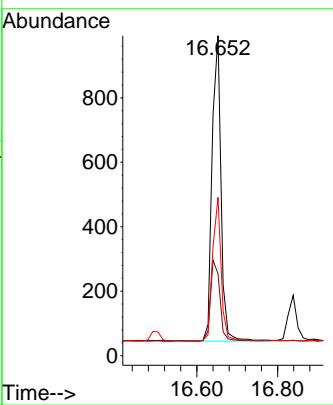




#23  
Atrazine  
Concen: 0.794 ng  
RT: 16.652 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

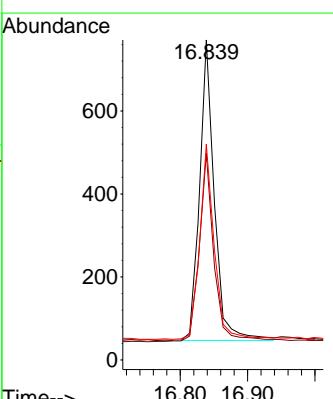
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

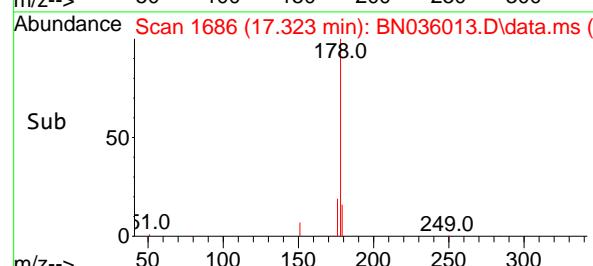
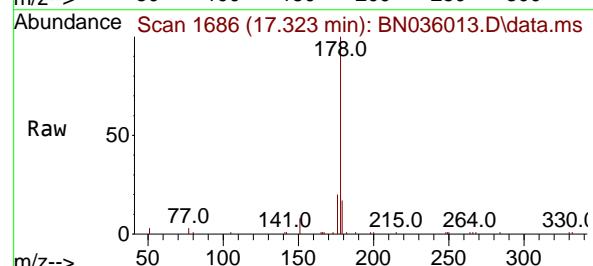
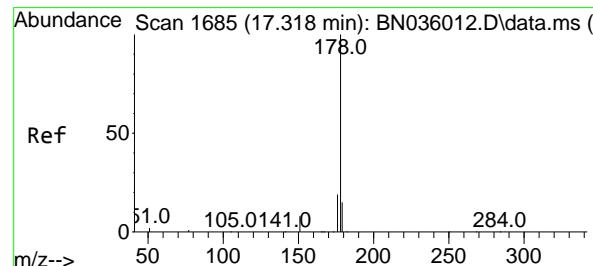
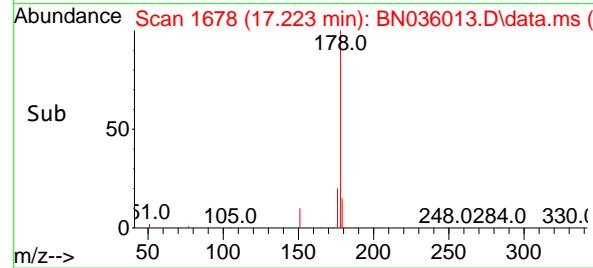
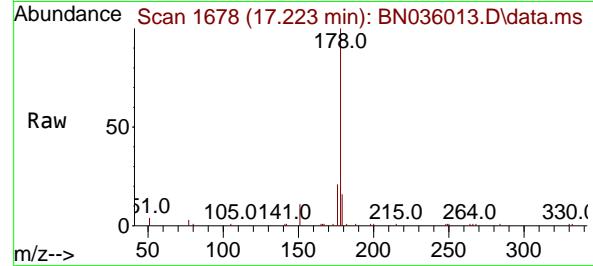
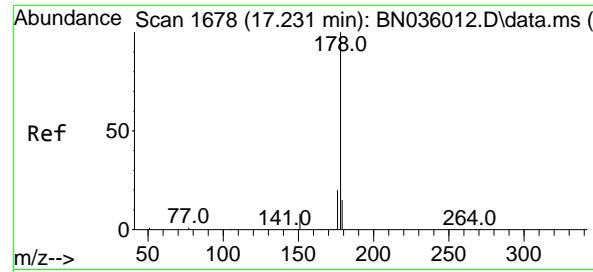
Tgt Ion:200 Resp: 1455  
Ion Ratio Lower Upper  
200 100  
173 25.6 26.6 40.0#  
215 49.4 40.6 61.0



#24  
Pentachlorophenol  
Concen: 0.765 ng  
RT: 16.839 min Scan# 1647  
Delta R.T. 0.005 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

Tgt Ion:266 Resp: 1105  
Ion Ratio Lower Upper  
266 100  
264 63.4 48.2 72.2  
268 64.3 51.6 77.4





#25

Phenanthrene

Concen: 0.780 ng

RT: 17.223 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

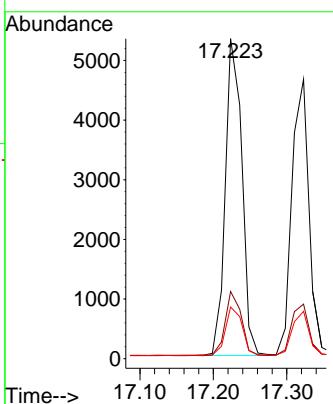
Tgt Ion:178 Resp: 8345

Ion Ratio Lower Upper

178 100

176 19.6 16.0 24.0

179 15.5 12.4 18.6



#26

Anthracene

Concen: 0.779 ng

RT: 17.323 min Scan# 1686

Delta R.T. 0.005 min

Lab File: BN036013.D

Acq: 22 Jan 2025 12:49

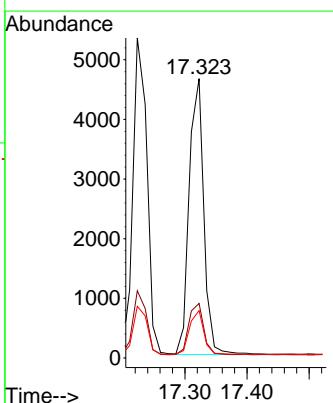
Tgt Ion:178 Resp: 7575

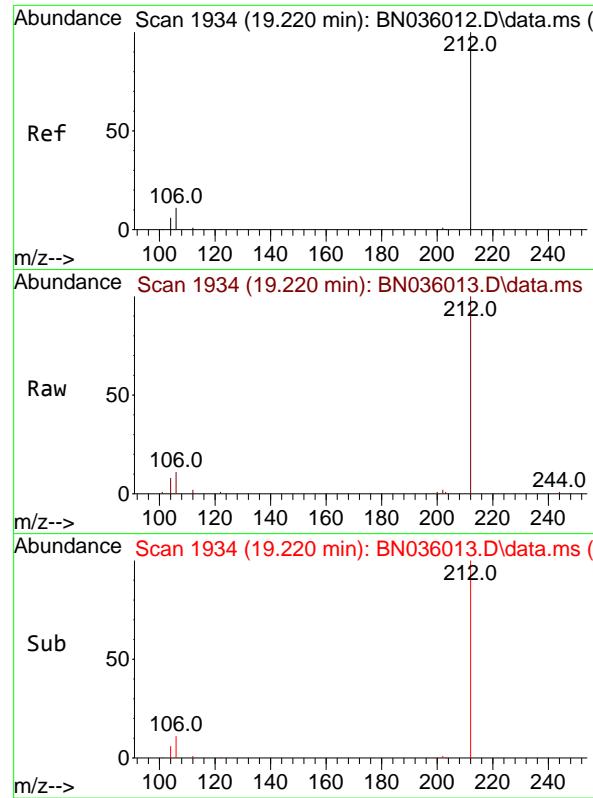
Ion Ratio Lower Upper

178 100

176 19.2 15.4 23.2

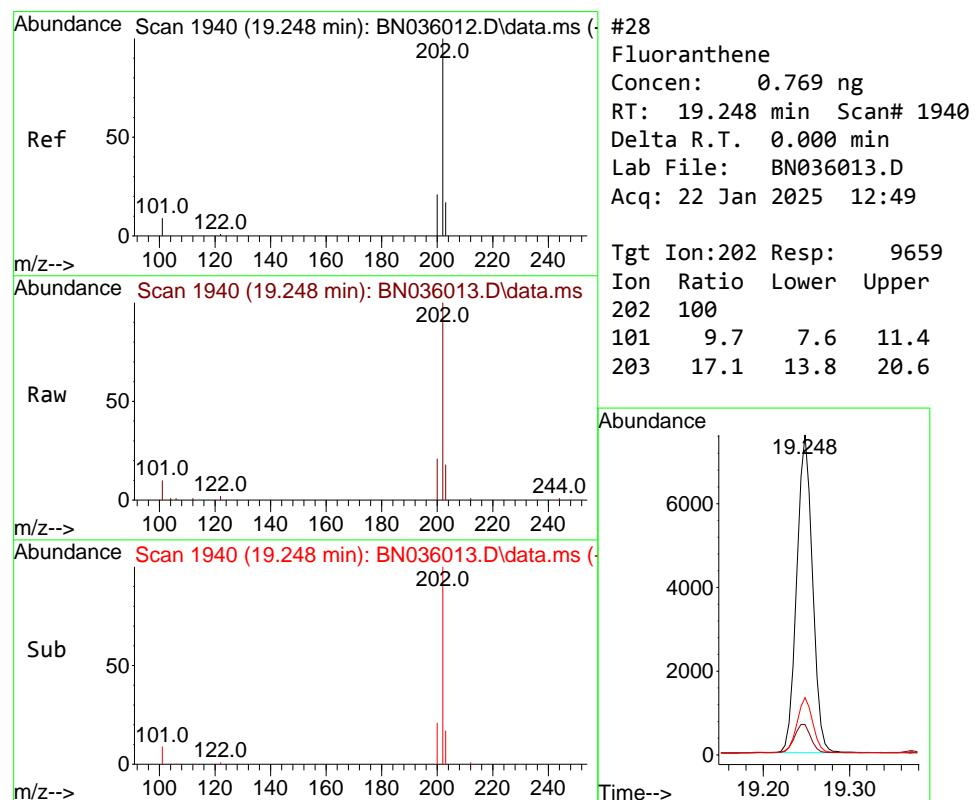
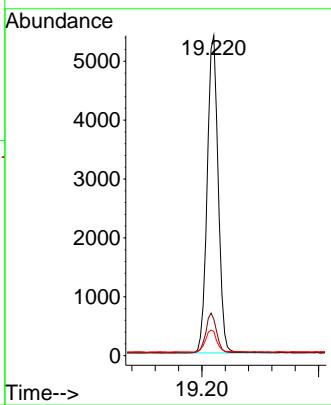
179 15.4 12.0 18.0





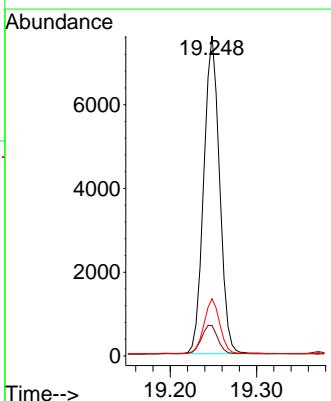
#27  
Fluoranthene-d10  
Concen: 0.767 ng  
RT: 19.220 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49 ClientSampleId : SSTDICCO.8

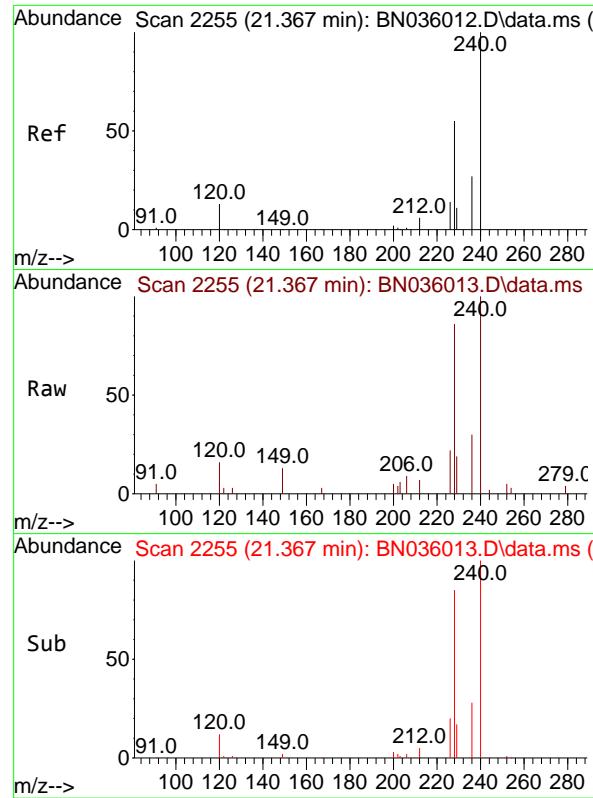
Tgt Ion:212 Resp: 7073  
Ion Ratio Lower Upper  
212 100  
106 12.2 9.7 14.5  
104 7.2 6.0 9.0



#28  
Fluoranthene  
Concen: 0.769 ng  
RT: 19.248 min Scan# 1940  
Delta R.T. 0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

Tgt Ion:202 Resp: 9659  
Ion Ratio Lower Upper  
202 100  
101 9.7 7.6 11.4  
203 17.1 13.8 20.6

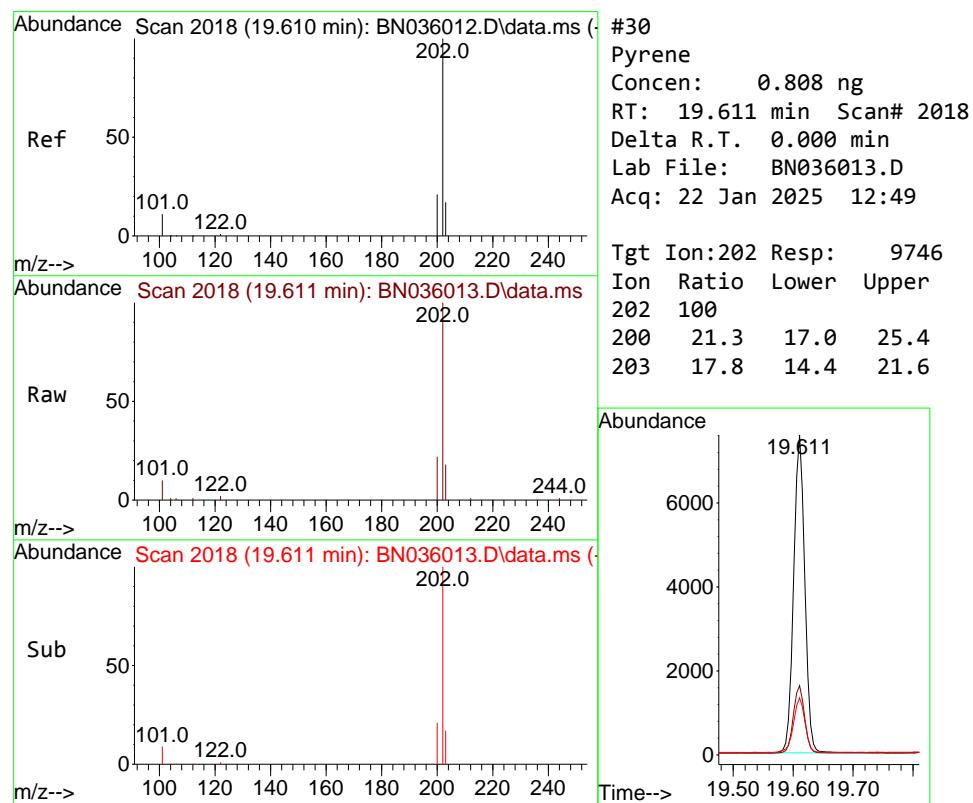
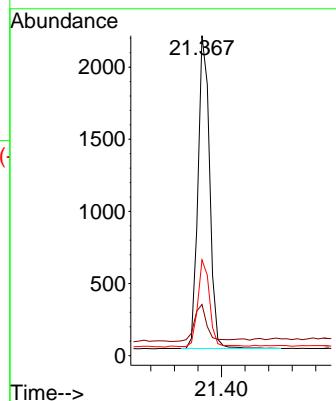




Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

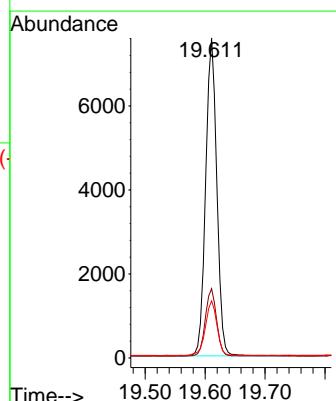
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

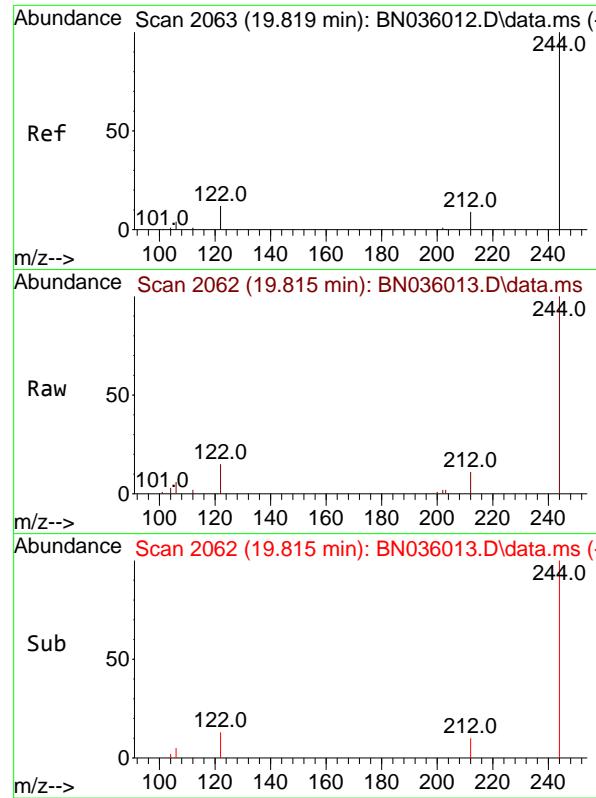
Tgt Ion:240 Resp: 2978  
Ion Ratio Lower Upper  
240 100  
120 16.0 13.9 20.9  
236 29.9 23.7 35.5



Pyrene  
Concen: 0.808 ng  
RT: 19.611 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

Tgt Ion:202 Resp: 9746  
Ion Ratio Lower Upper  
202 100  
200 21.3 17.0 25.4  
203 17.8 14.4 21.6

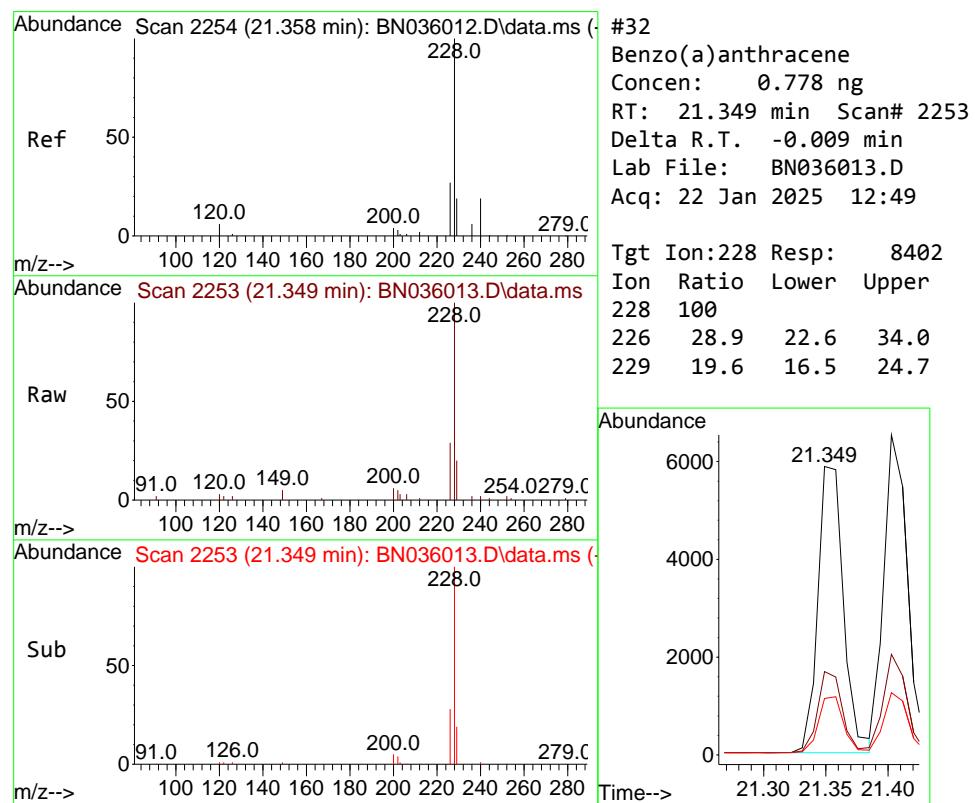
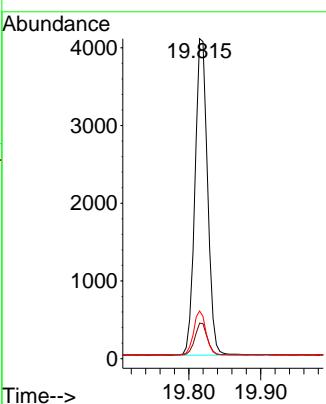




#31  
 Terphenyl-d14  
 Concen: 0.800 ng  
 RT: 19.815 min Scan# 2  
 Delta R.T. -0.004 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

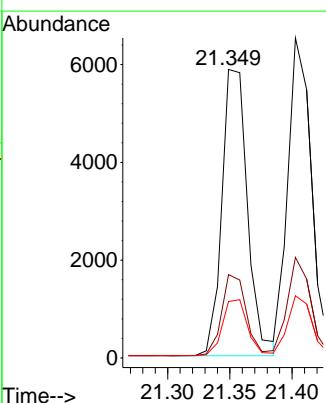
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

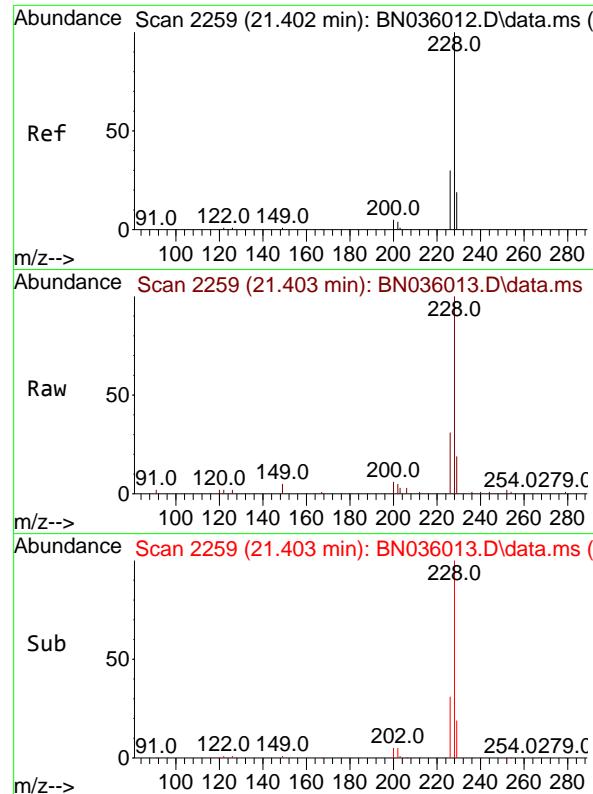
Tgt Ion:244 Resp: 4949  
 Ion Ratio Lower Upper  
 244 100  
 212 11.1 9.1 13.7  
 122 14.9 11.3 16.9



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

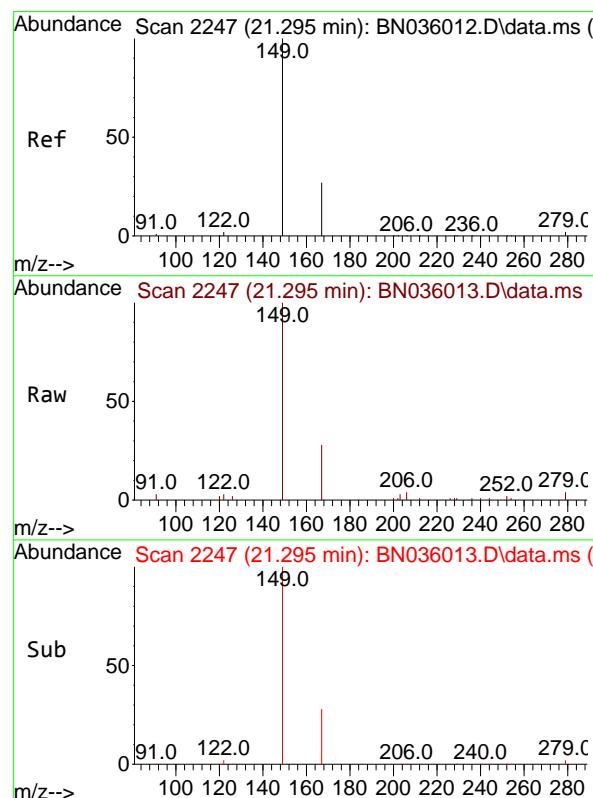
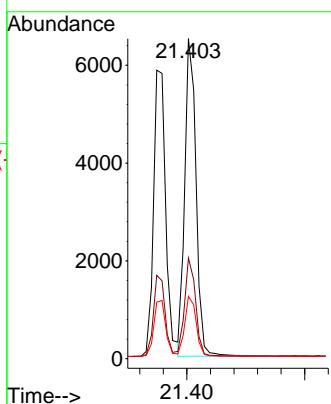
Tgt Ion:228 Resp: 8402  
 Ion Ratio Lower Upper  
 228 100  
 226 28.9 22.6 34.0  
 229 19.6 16.5 24.7





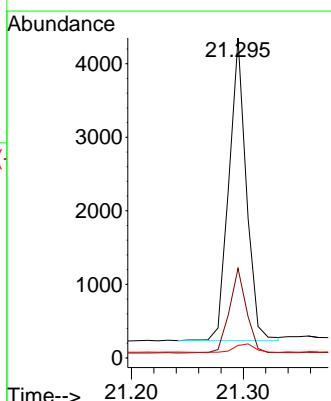
#33  
Chrysene  
Concen: 0.781 ng  
RT: 21.403 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036013.D ClientSampleId : SSTDICCO.8  
Acq: 22 Jan 2025 12:49

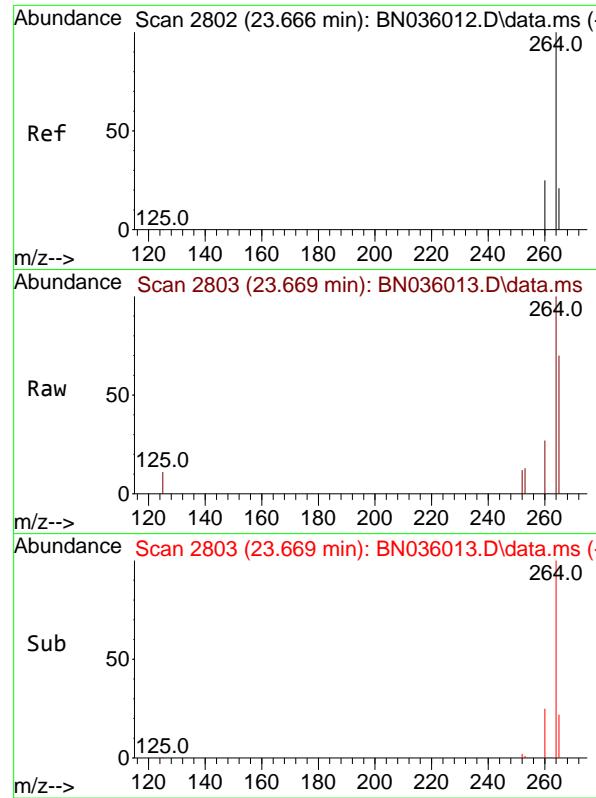
Tgt Ion:228 Resp: 8622  
Ion Ratio Lower Upper  
228 100  
226 31.4 25.3 37.9  
229 19.5 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.753 ng  
RT: 21.295 min Scan# 2247  
Delta R.T. 0.000 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

Tgt Ion:149 Resp: 4455  
Ion Ratio Lower Upper  
149 100  
167 27.5 21.9 32.9  
279 3.3 3.0 4.6

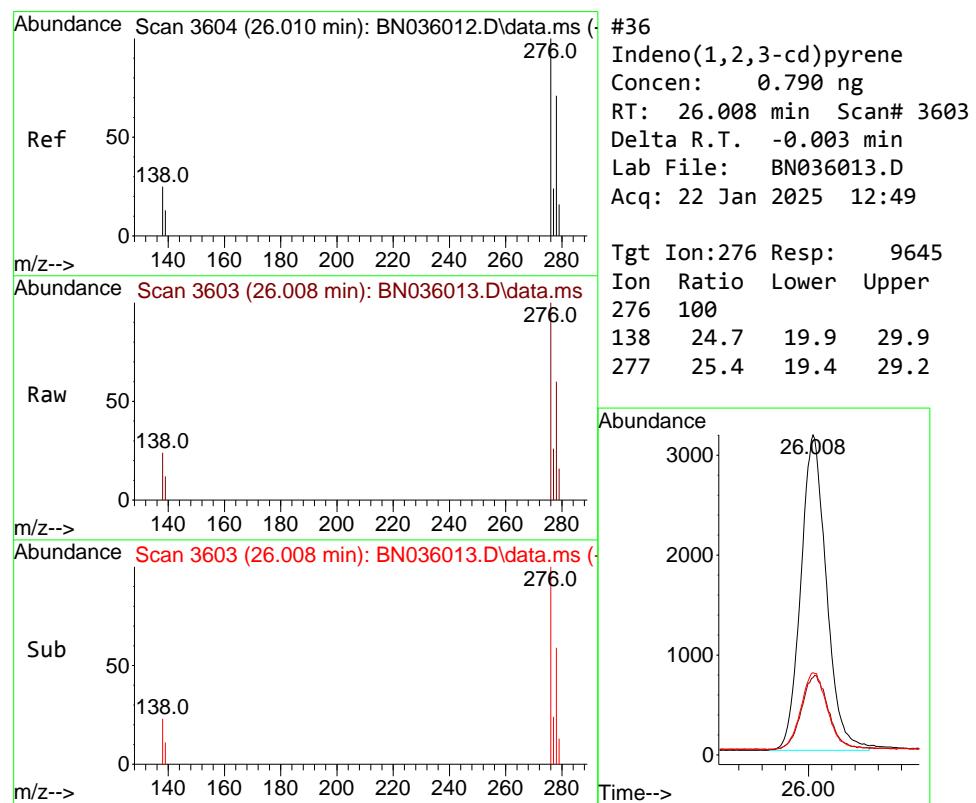
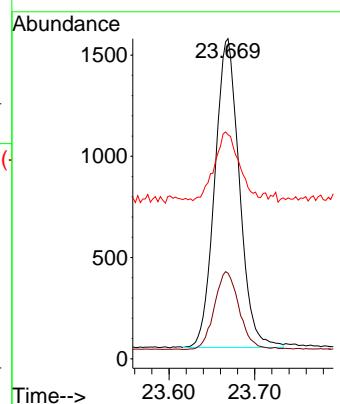




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.669 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

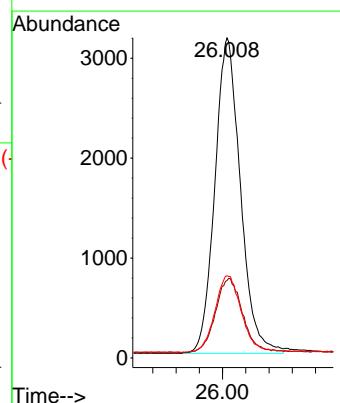
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

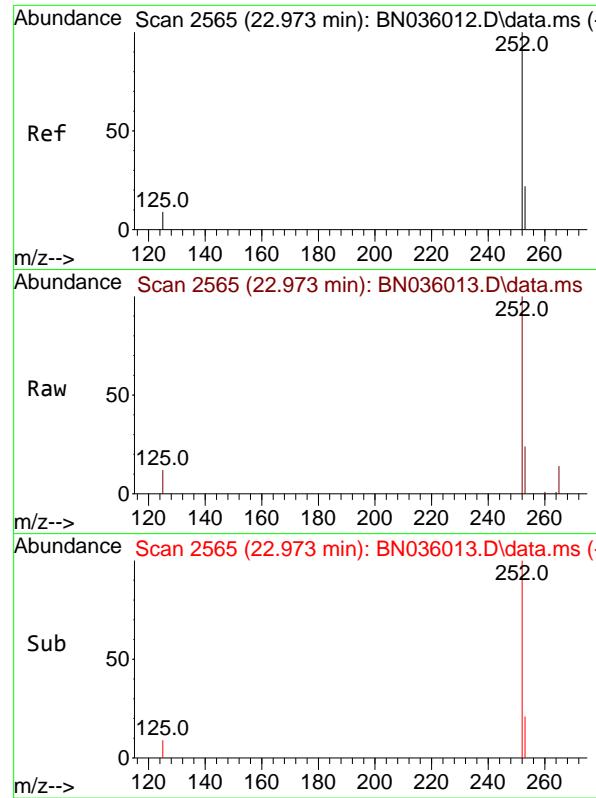
Tgt Ion:264 Resp: 3042  
Ion Ratio Lower Upper  
264 100  
260 26.8 21.8 32.6  
265 70.0 56.6 84.8



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

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

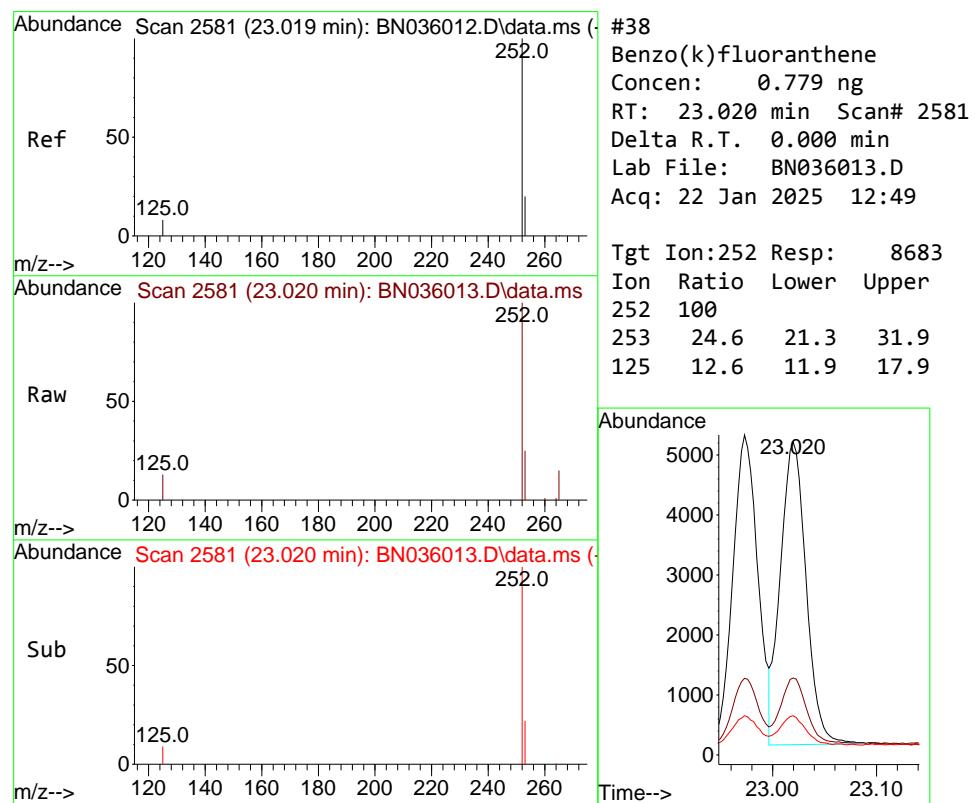
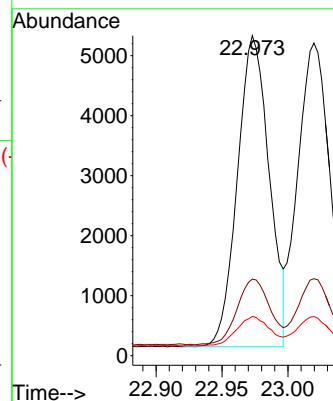




#37  
 Benzo(b)fluoranthene  
 Concen: 0.786 ng  
 RT: 22.973 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

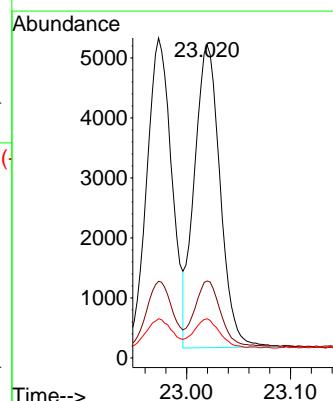
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

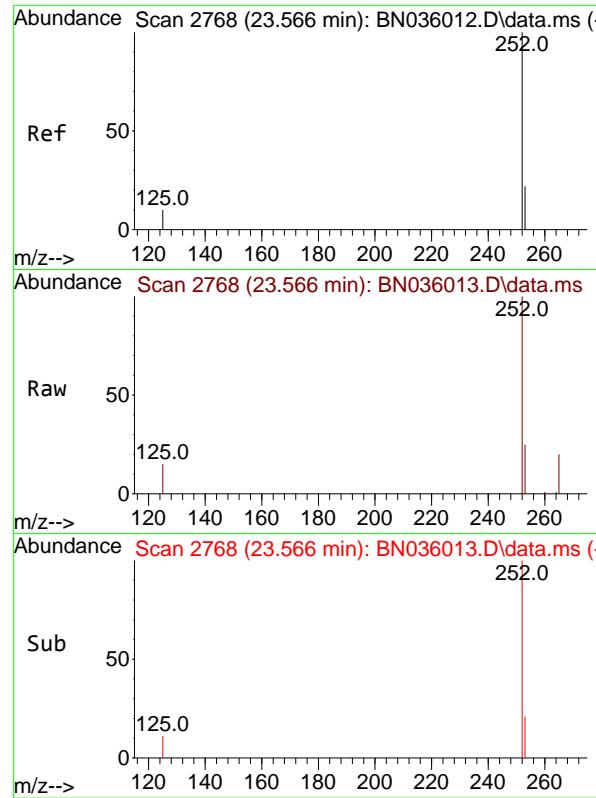
Tgt Ion:252 Resp: 8692  
 Ion Ratio Lower Upper  
 252 100  
 253 23.9 22.5 33.7  
 125 12.2 11.9 17.9



#38  
 Benzo(k)fluoranthene  
 Concen: 0.779 ng  
 RT: 23.020 min Scan# 2581  
 Delta R.T. 0.000 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

Tgt Ion:252 Resp: 8683  
 Ion Ratio Lower Upper  
 252 100  
 253 24.6 21.3 31.9  
 125 12.6 11.9 17.9

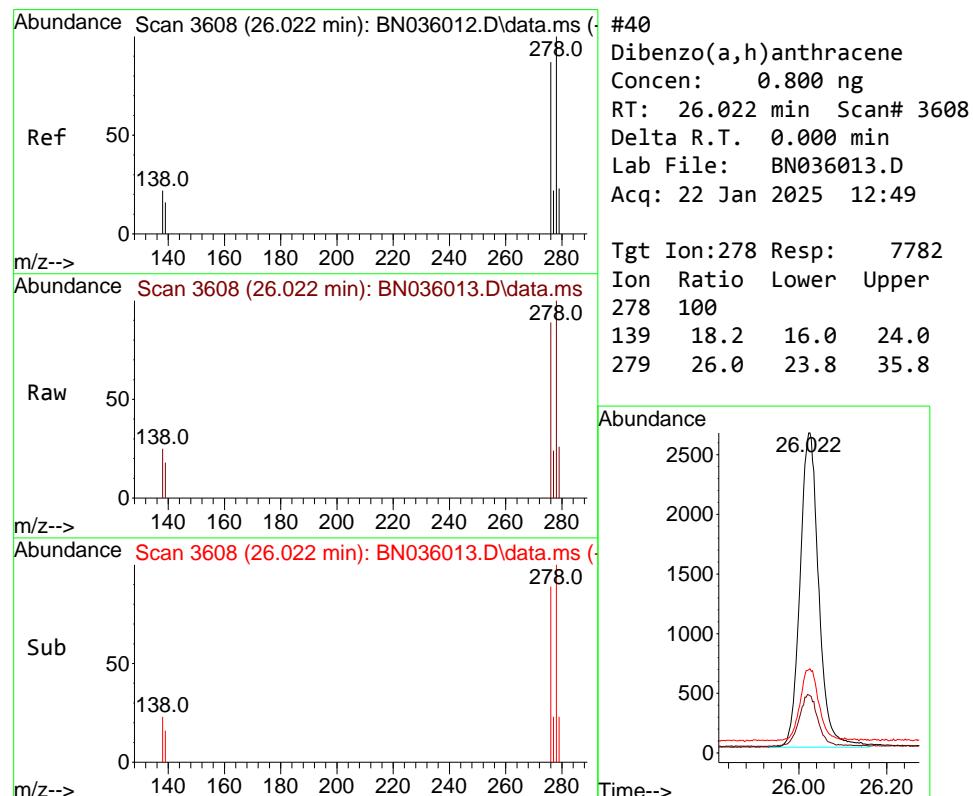
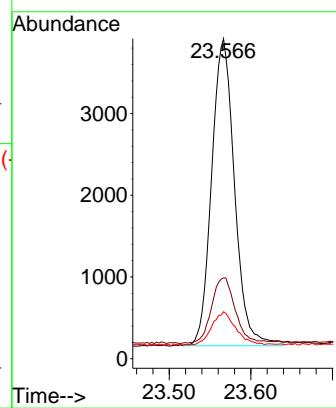




#39  
 Benzo(a)pyrene  
 Concen: 0.775 ng  
 RT: 23.566 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

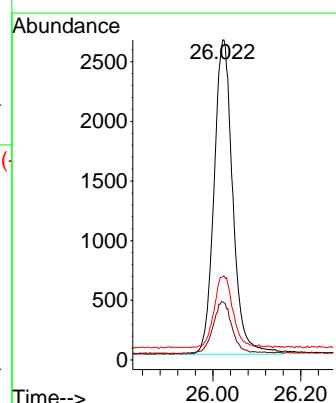
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

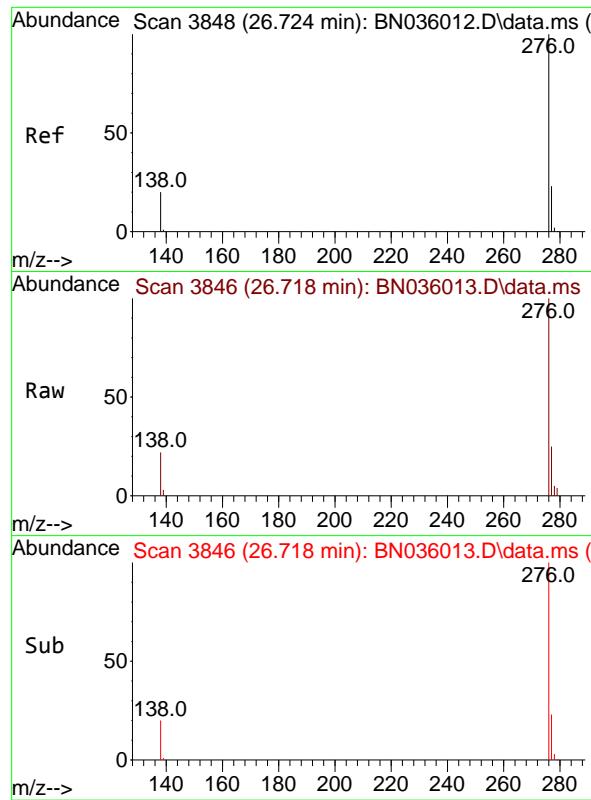
Tgt Ion:252 Resp: 7317  
 Ion Ratio Lower Upper  
 252 100  
 253 25.3 23.8 35.6  
 125 14.7 14.6 21.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.800 ng  
 RT: 26.022 min Scan# 3608  
 Delta R.T. 0.000 min  
 Lab File: BN036013.D  
 Acq: 22 Jan 2025 12:49

Tgt Ion:278 Resp: 7782  
 Ion Ratio Lower Upper  
 278 100  
 139 18.2 16.0 24.0  
 279 26.0 23.8 35.8

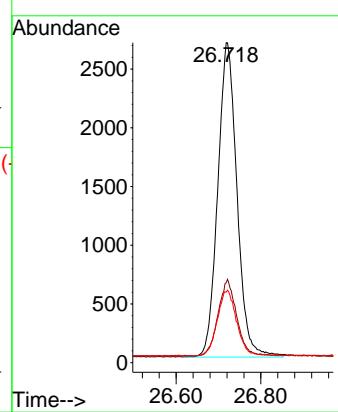




#41  
Benzo(g,h,i)perylene  
Concen: 0.796 ng  
RT: 26.718 min Scan# 3  
Delta R.T. -0.006 min  
Lab File: BN036013.D  
Acq: 22 Jan 2025 12:49

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

Tgt Ion:276 Resp: 8439  
Ion Ratio Lower Upper  
276 100  
277 25.0 21.3 31.9  
138 22.1 19.2 28.8



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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

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

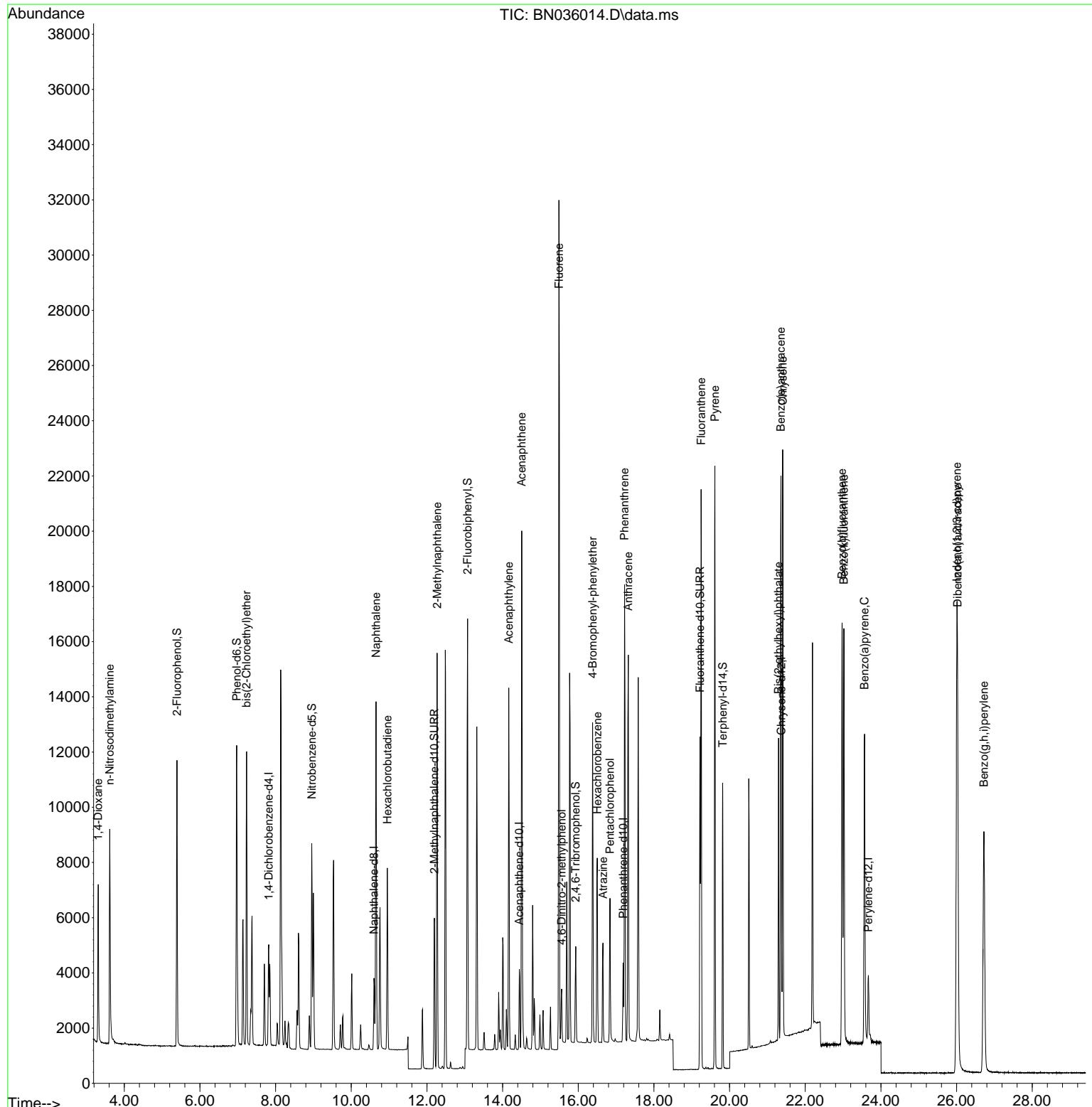
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	1724	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3282	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	1710	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	3501	0.400	ng	# 0.00
29) Chrysene-d12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

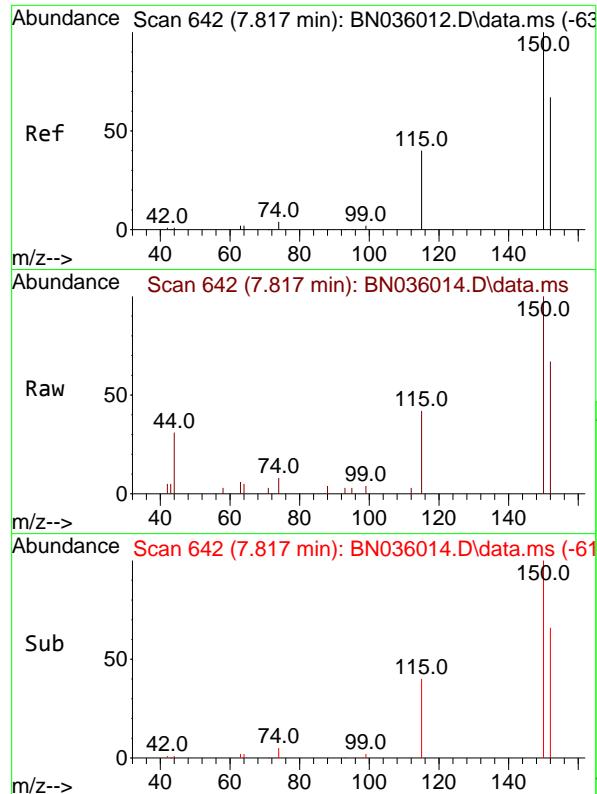
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

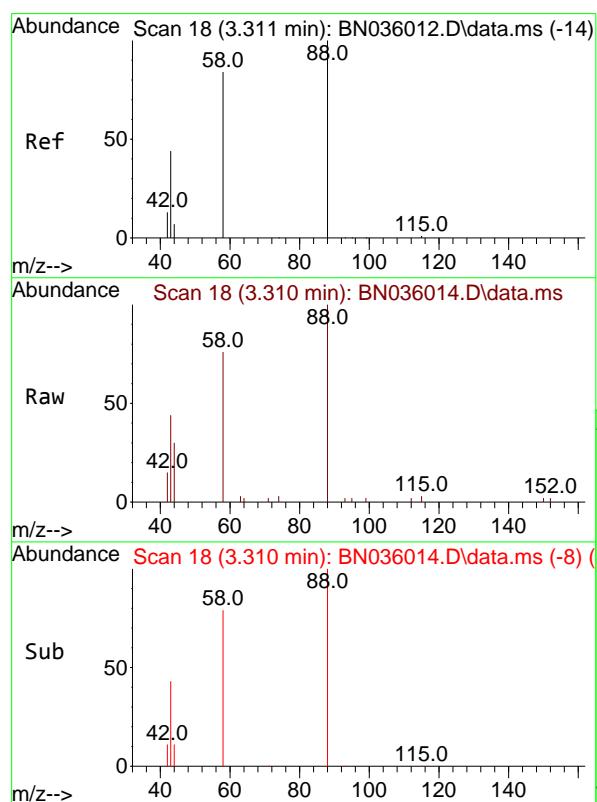
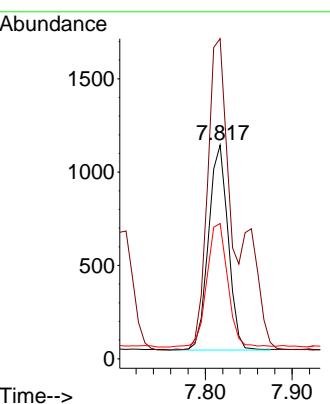
Quant Time: Jan 23 00:28:41 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:26:39 2025  
 Response via : Initial Calibration





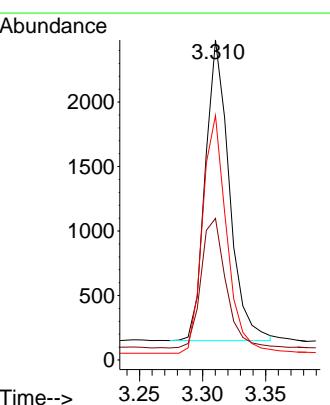
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036014.D  
ClientSampleId : SSTDICC1.6  
Acq: 22 Jan 2025 13:25

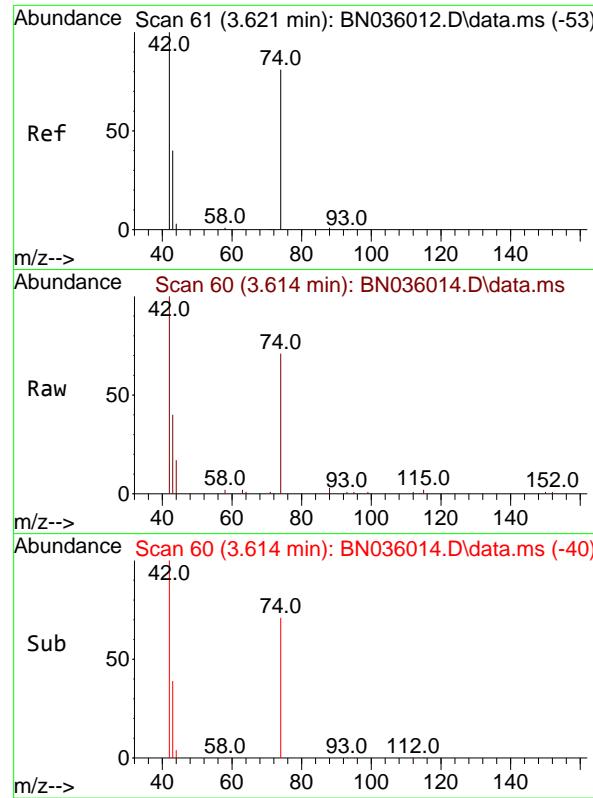
Tgt Ion:152 Resp: 1724  
Ion Ratio Lower Upper  
152 100  
150 149.8 117.4 176.2  
115 63.3 51.0 76.4



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

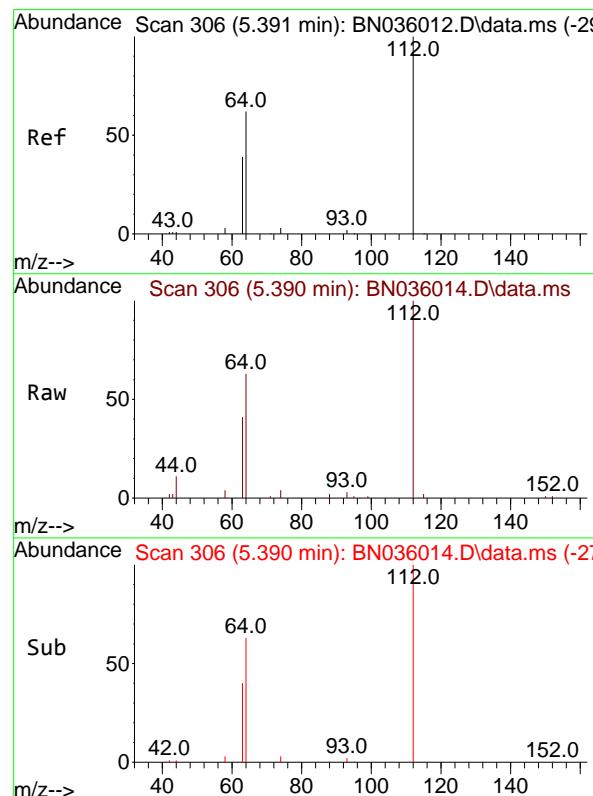
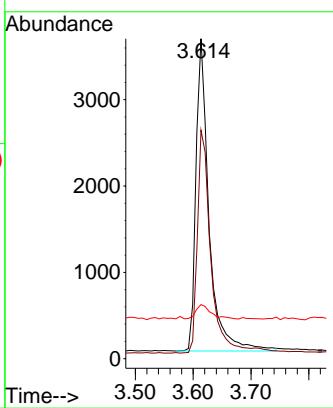
Tgt Ion: 88 Resp: 3084  
Ion Ratio Lower Upper  
88 100  
43 44.6 38.5 57.7  
58 79.4 66.6 99.8





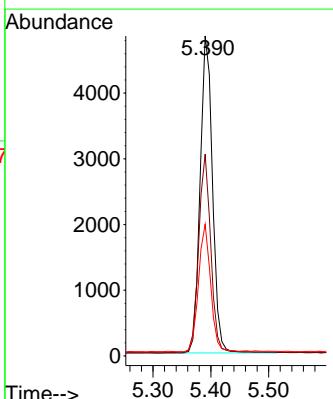
#3  
n-Nitrosodimethylamine  
Concen: 1.635 ng  
RT: 3.614 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.008 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25  
ClientSampleId : SSTDICC1.6

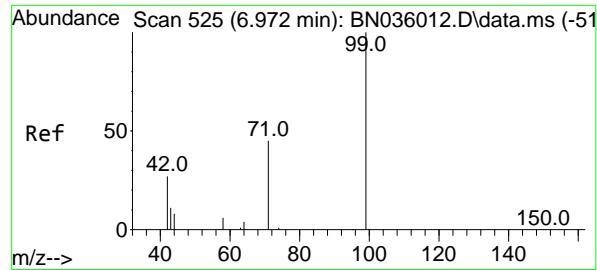
Tgt Ion: 42 Resp: 5714  
Ion Ratio Lower Upper  
42 100  
74 73.7 58.1 87.1  
44 5.4 6.2 9.4#



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

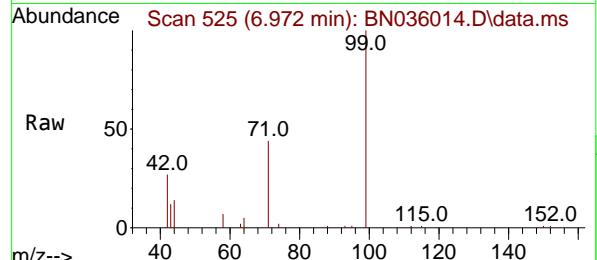
Tgt Ion: 112 Resp: 7183  
Ion Ratio Lower Upper  
112 100  
64 61.4 50.0 75.0  
63 39.4 30.7 46.1



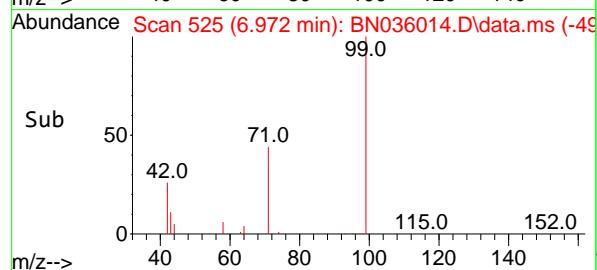
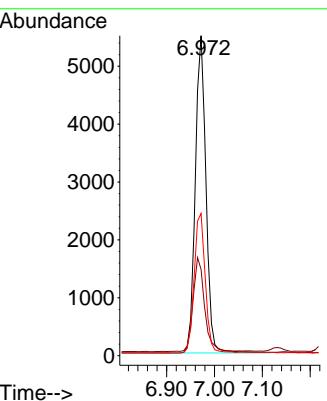


#5  
Phenol-d6  
Concen: 1.611 ng  
RT: 6.972 min Scan# 5  
Delta R.T. -0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

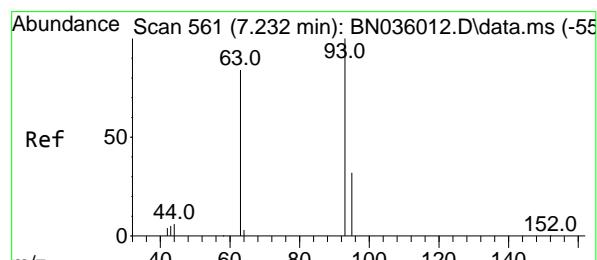
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6



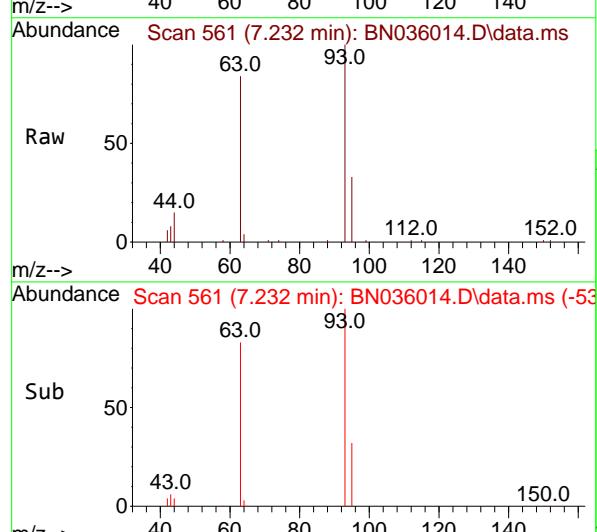
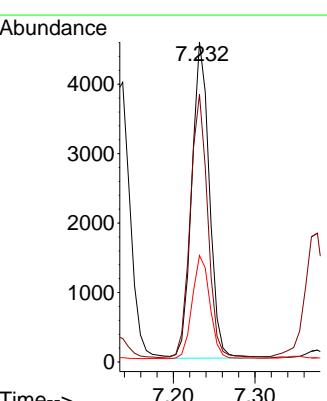
Tgt Ion: 99 Resp: 8484  
Ion Ratio Lower Upper  
99 100  
42 32.0 26.8 40.2  
71 45.6 36.6 55.0

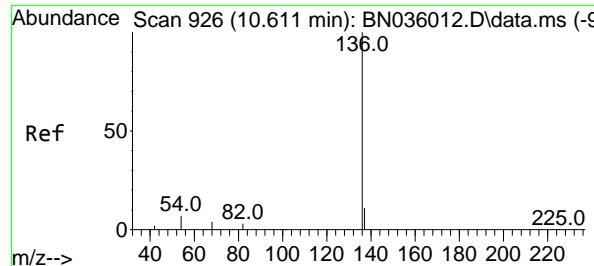


#6  
bis(2-Chloroethyl)ether  
Concen: 1.615 ng  
RT: 7.232 min Scan# 561  
Delta R.T. -0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

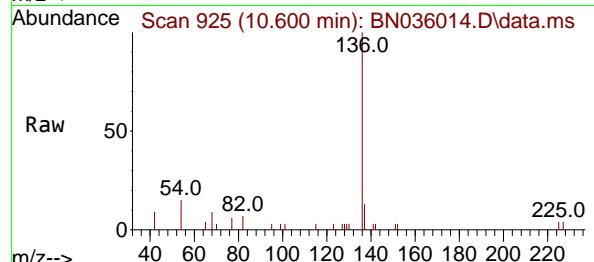


Tgt Ion: 93 Resp: 6845  
Ion Ratio Lower Upper  
93 100  
63 82.3 65.8 98.6  
95 32.7 25.8 38.6

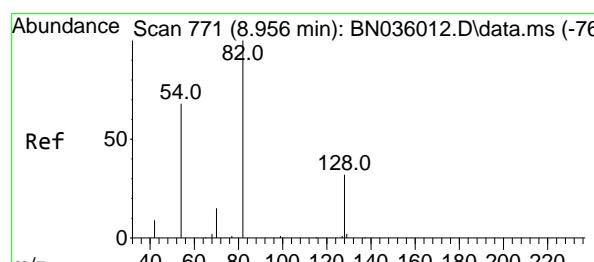
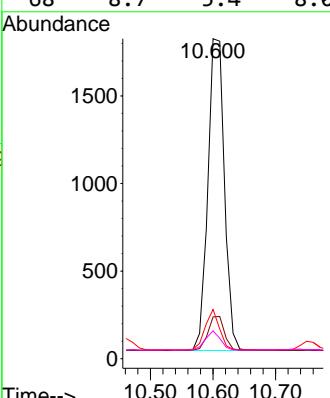
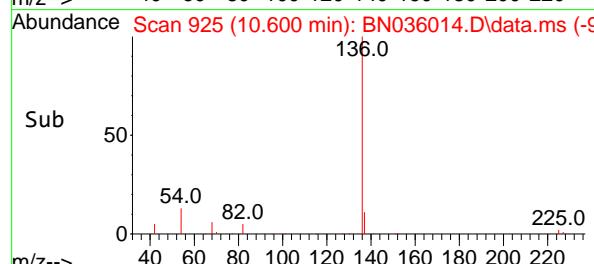




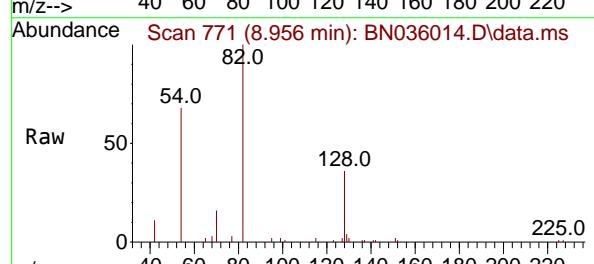
#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.600 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.011 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25



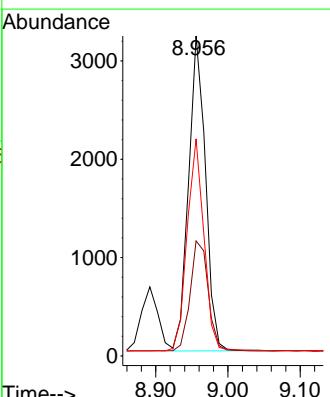
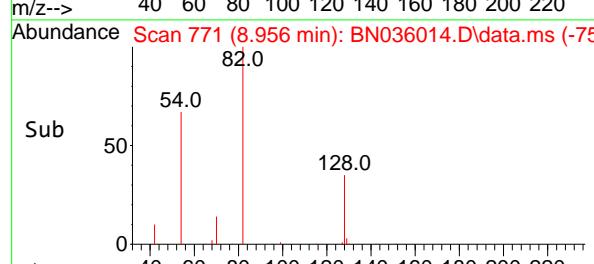
Tgt Ion:136 Resp: 3282  
Ion Ratio Lower Upper  
136 100  
137 13.0 10.4 15.6  
54 15.4 7.7 11.5#  
68 8.7 5.4 8.0#

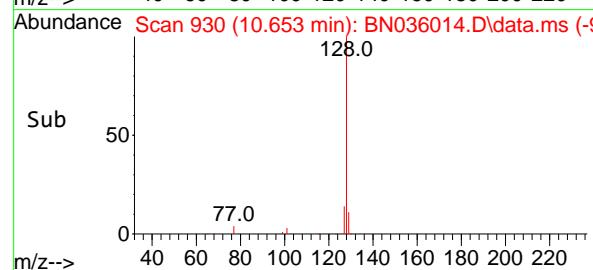
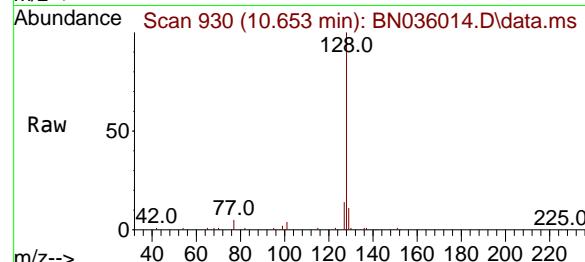
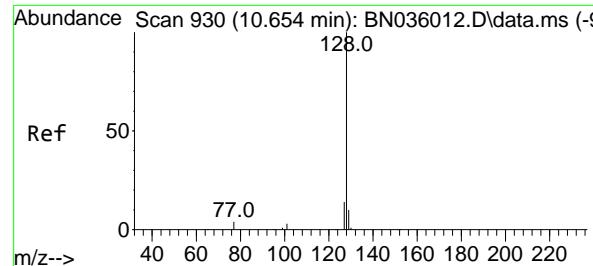


#8  
Nitrobenzene-d5  
Concen: 1.683 ng  
RT: 8.956 min Scan# 771  
Delta R.T. -0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25



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





#9

Naphthalene

Concen: 1.630 ng

RT: 10.653 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

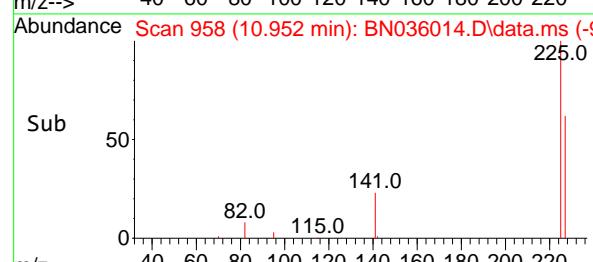
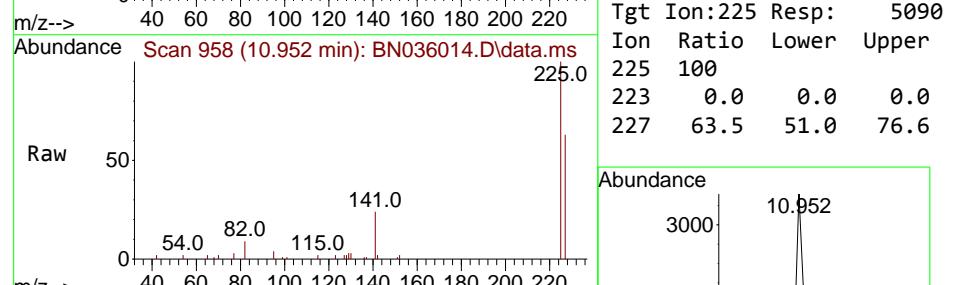
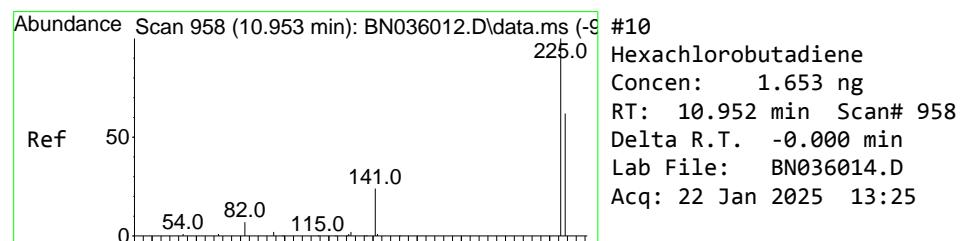
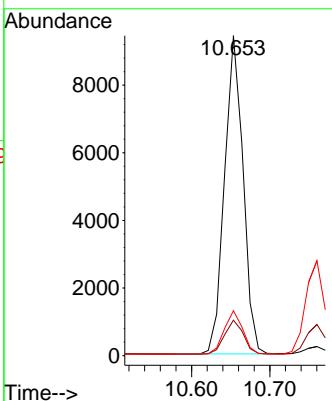
Tgt Ion:128 Resp: 15537

Ion Ratio Lower Upper

128 100

129 11.1 9.4 14.2

127 14.1 12.6 19.0



#10

Hexachlorobutadiene

Concen: 1.653 ng

RT: 10.952 min Scan# 958

Delta R.T. -0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

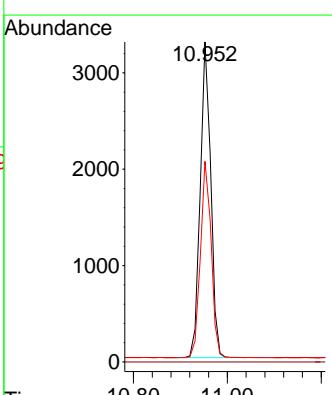
Tgt Ion:225 Resp: 5090

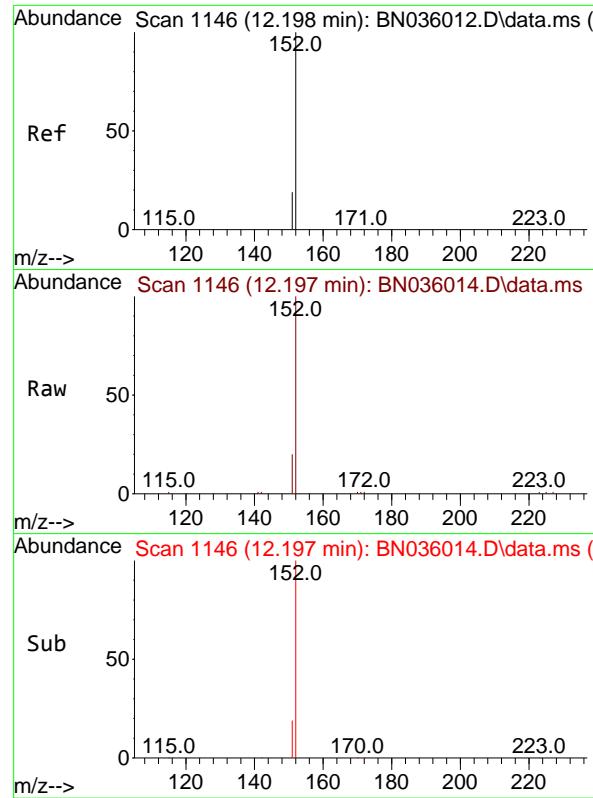
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

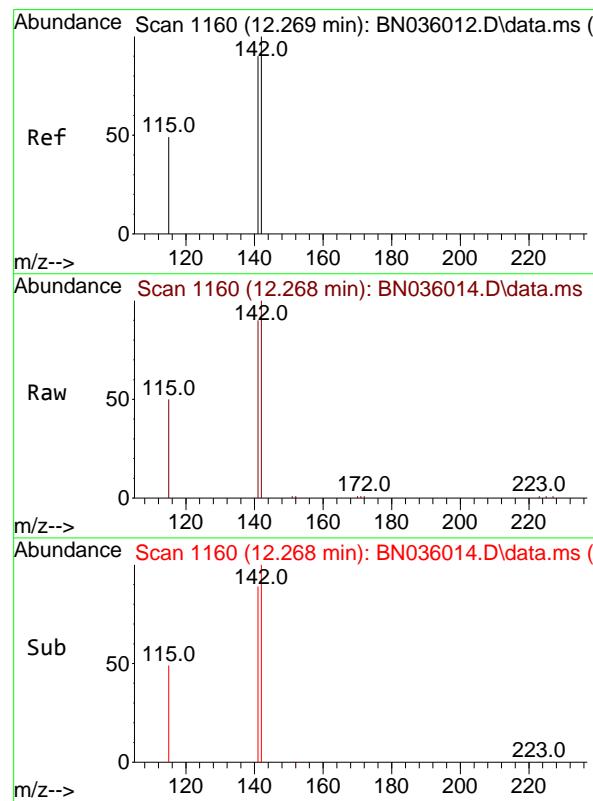
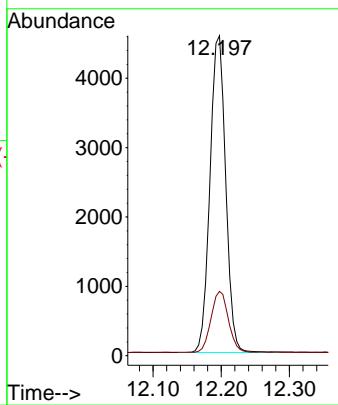
227 63.5 51.0 76.6





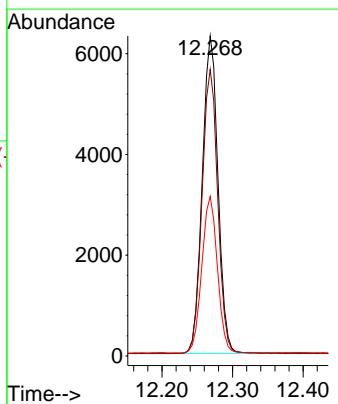
#11  
2-Methylnaphthalene-d10  
Concen: 1.636 ng  
RT: 12.197 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25  
ClientSampleId : SSTDICC1.6

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



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

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



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.441 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036014.D

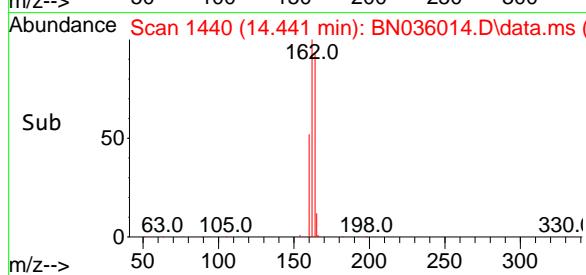
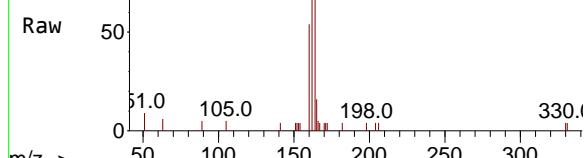
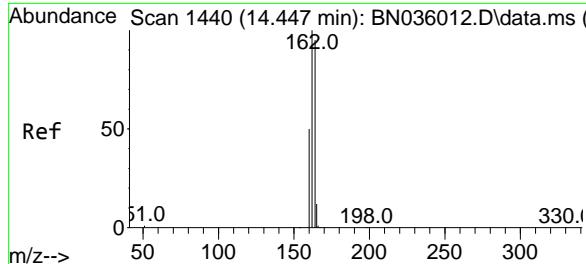
Acq: 22 Jan 2025 13:25

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6



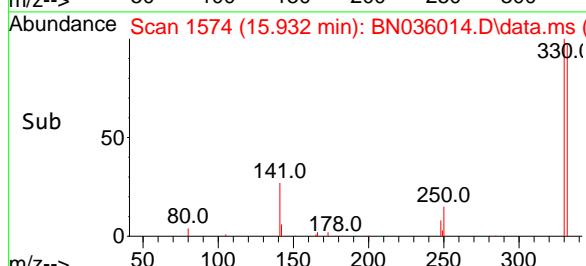
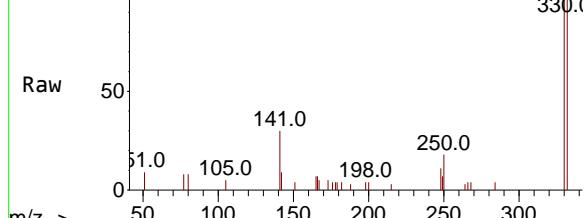
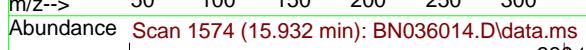
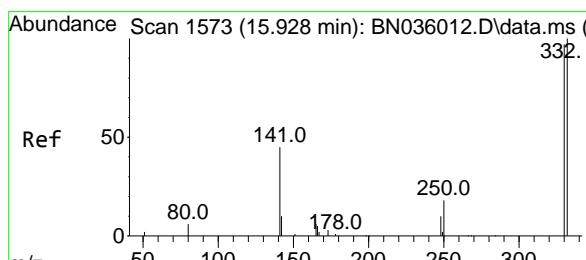
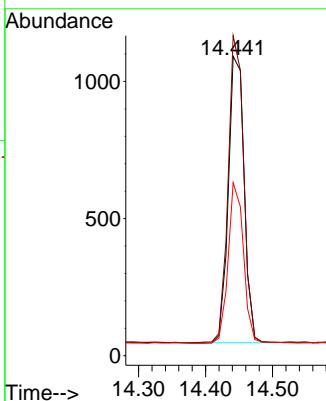
Tgt Ion:164 Resp: 1710

Ion Ratio Lower Upper

164 100

162 106.9 84.1 126.1

160 57.8 43.8 65.8



#14

2,4,6-Tribromophenol

Concen: 1.669 ng

RT: 15.932 min Scan# 1574

Delta R.T. 0.005 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

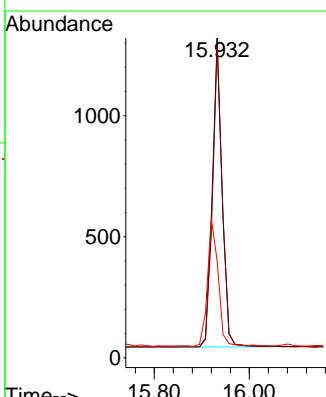
Tgt Ion:330 Resp: 1830

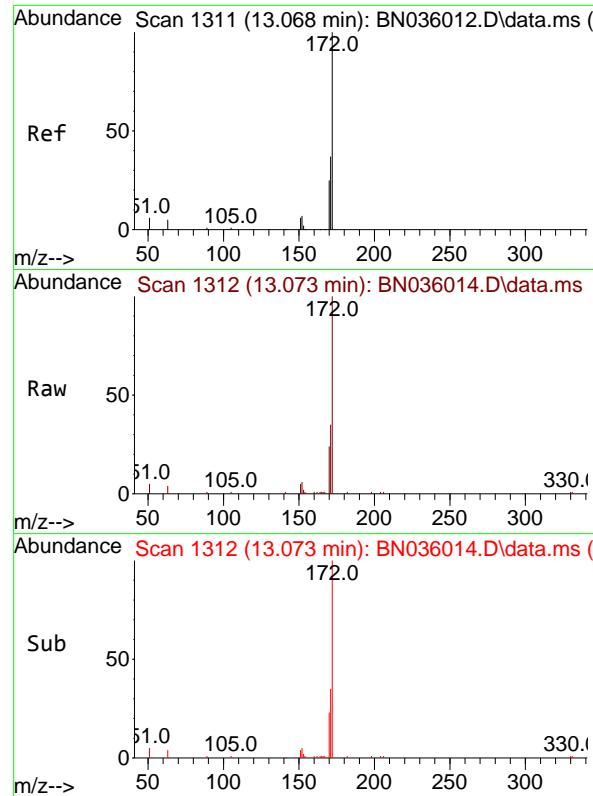
Ion Ratio Lower Upper

330 100

332 96.1 81.0 121.4

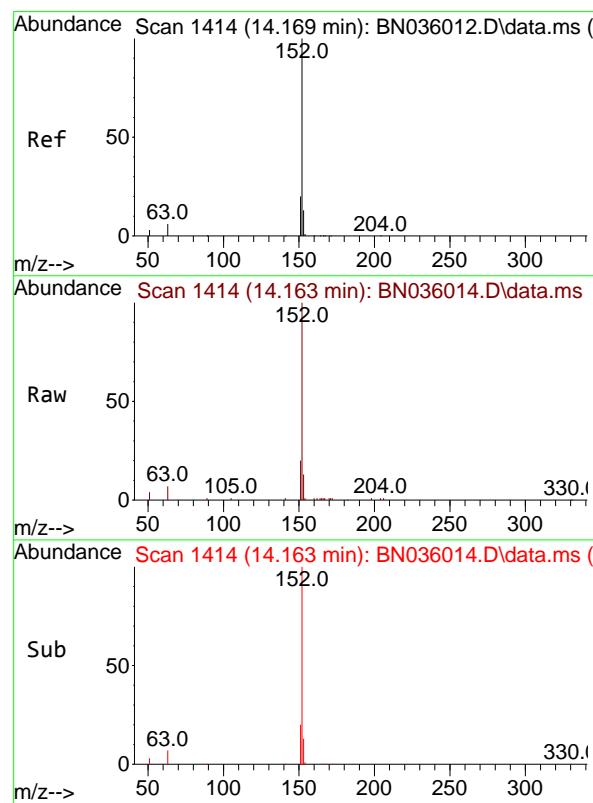
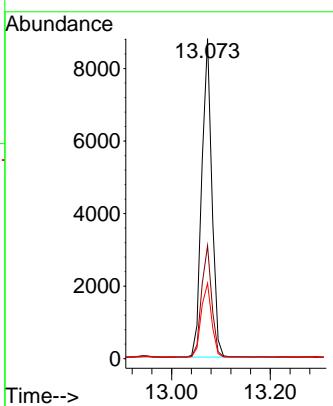
141 44.4 36.7 55.1





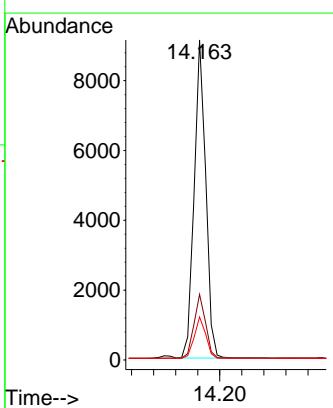
#15  
2-Fluorobiphenyl  
Concen: 1.630 ng  
RT: 13.073 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

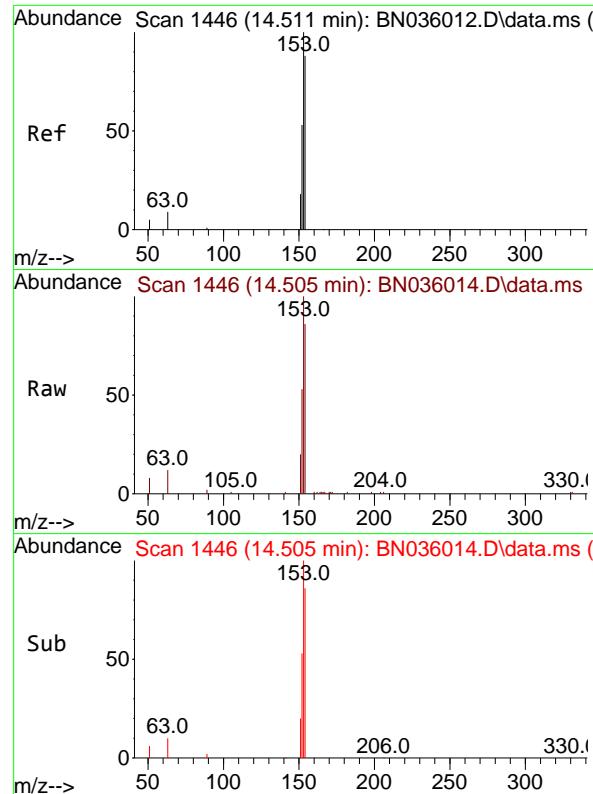
Tgt Ion:172 Resp: 12443  
Ion Ratio Lower Upper  
172 100  
171 35.3 30.9 46.3  
170 23.6 21.2 31.8



#16  
Acenaphthylene  
Concen: 1.636 ng  
RT: 14.163 min Scan# 1414  
Delta R.T. -0.006 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

Tgt Ion:152 Resp: 13268  
Ion Ratio Lower Upper  
152 100  
151 20.2 16.2 24.2  
153 13.2 10.4 15.6

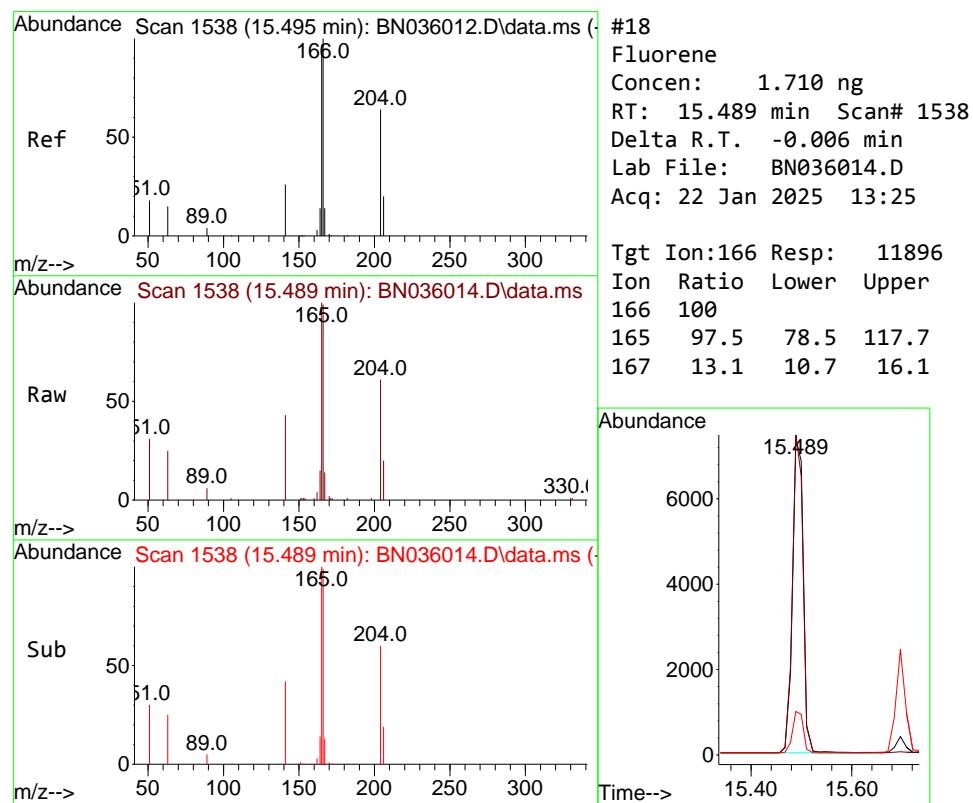
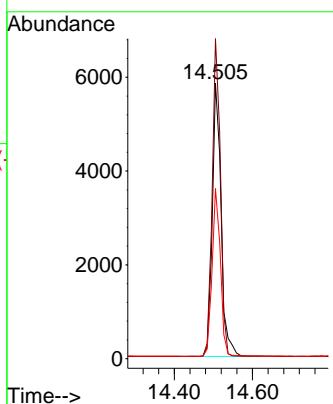




#17  
Acenaphthene  
Concen: 1.649 ng  
RT: 14.505 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

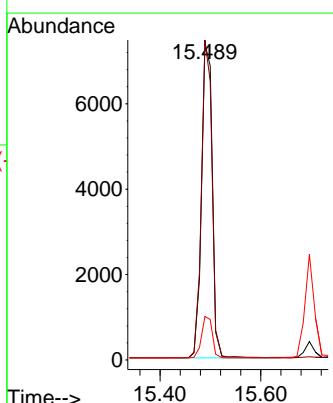
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

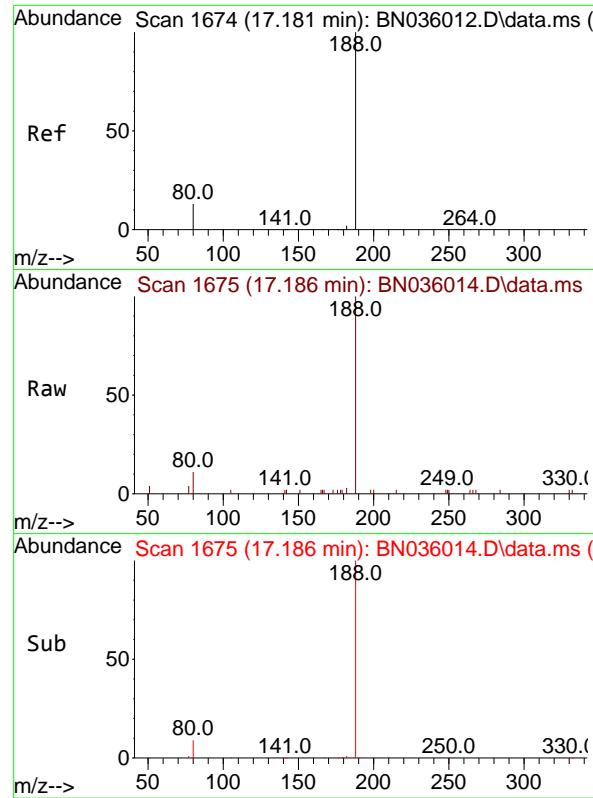
Tgt Ion:154 Resp: 9155  
Ion Ratio Lower Upper  
154 100  
153 108.8 88.9 133.3  
152 58.1 48.1 72.1



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

Tgt Ion:166 Resp: 11896  
Ion Ratio Lower Upper  
166 100  
165 97.5 78.5 117.7  
167 13.1 10.7 16.1

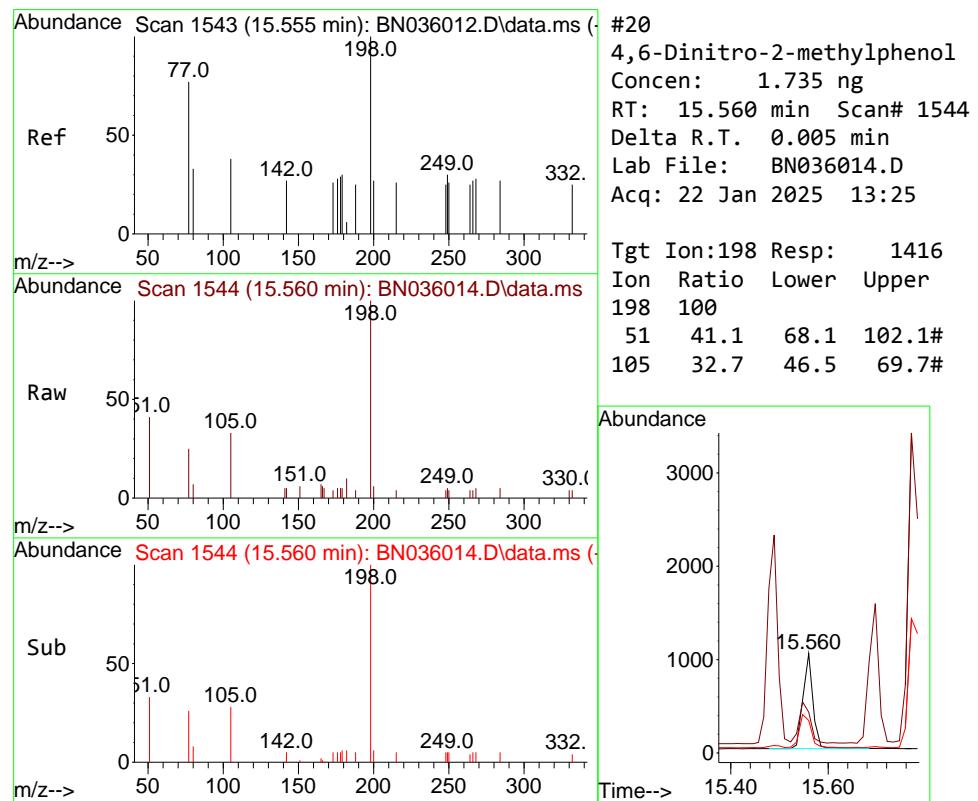
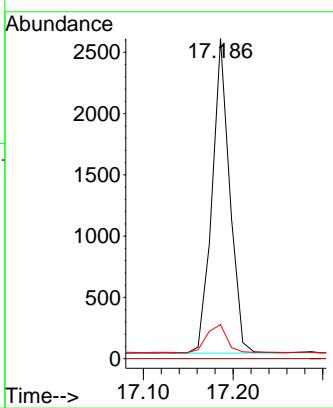




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.186 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

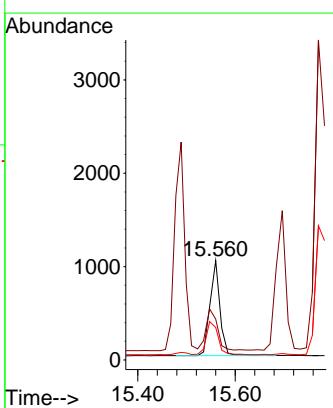
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

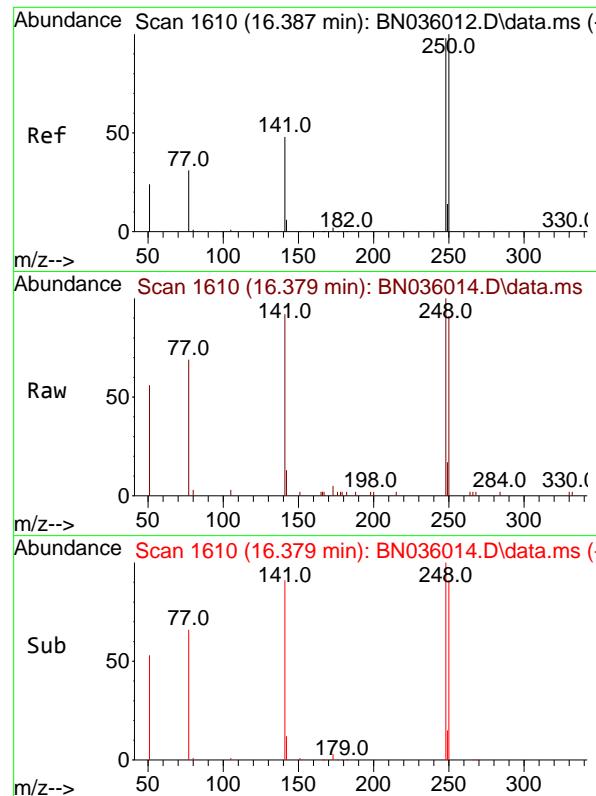
Tgt Ion:188 Resp: 3501  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 10.6 12.3 18.5#



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 1.735 ng  
 RT: 15.560 min Scan# 1544  
 Delta R.T. 0.005 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

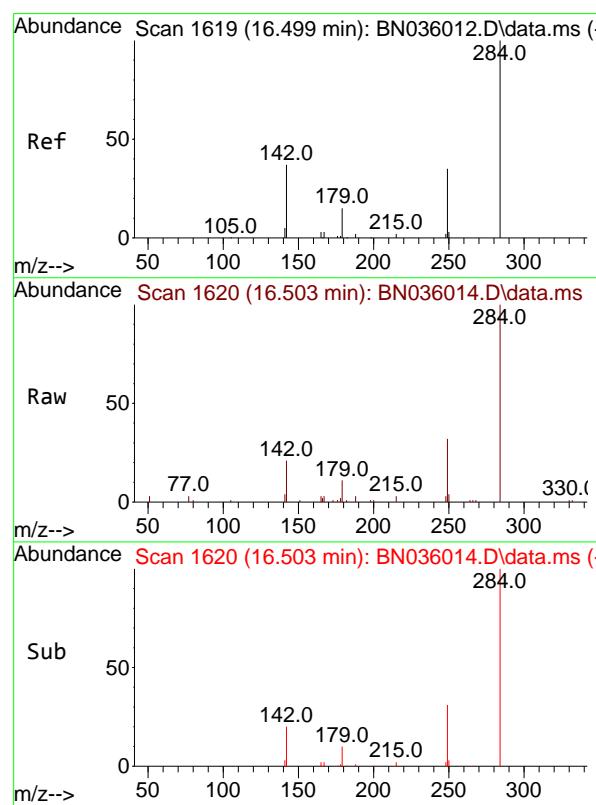
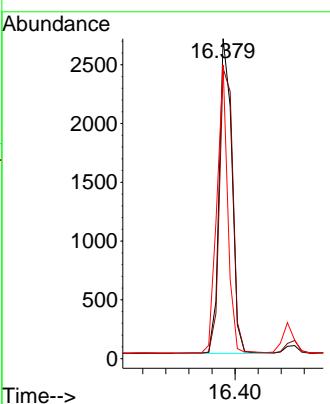
Tgt Ion:198 Resp: 1416  
 Ion Ratio Lower Upper  
 198 100  
 51 41.1 68.1 102.1#  
 105 32.7 46.5 69.7#





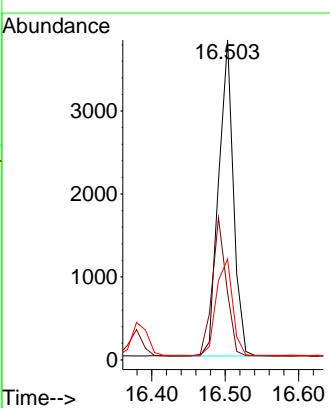
#21  
4-Bromophenyl-phenylether  
Concen: 1.646 ng  
RT: 16.379 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.008 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25  
ClientSampleId : SSTDICC1.6

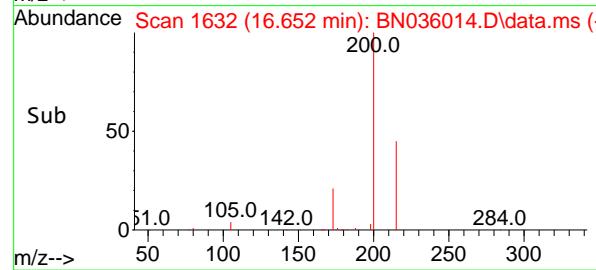
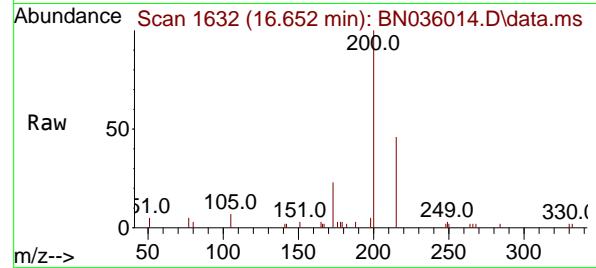
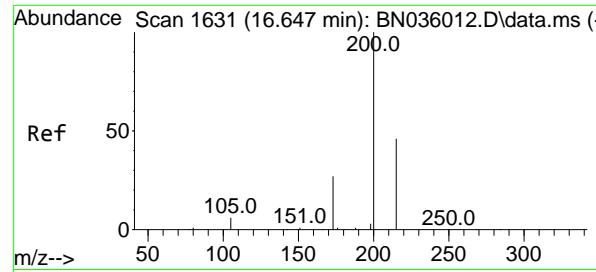
Tgt Ion:248 Resp: 4105  
Ion Ratio Lower Upper  
248 100  
250 90.8 81.5 122.3  
141 91.7 41.8 62.6#



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

Tgt Ion:284 Resp: 5322  
Ion Ratio Lower Upper  
284 100  
142 42.4 33.6 50.4  
249 33.8 28.8 43.2



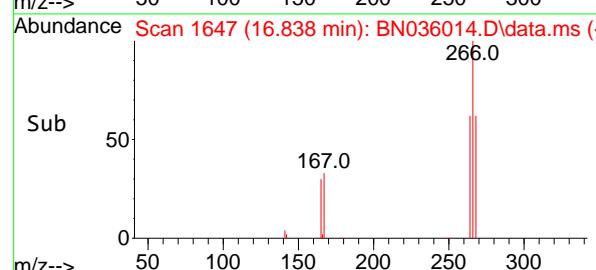
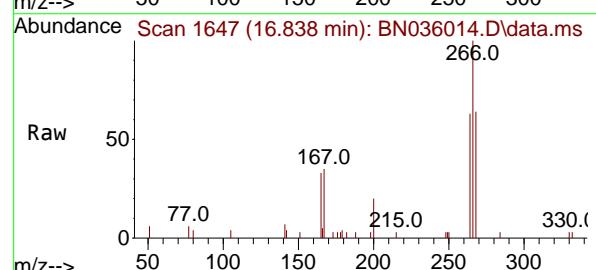
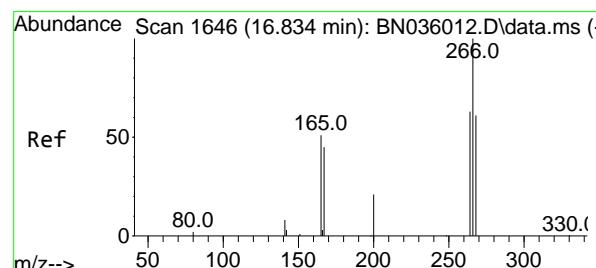
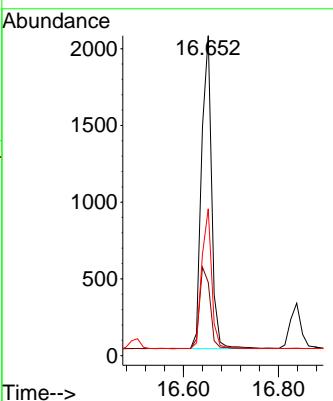


#23  
Atrazine  
Concen: 1.678 ng  
RT: 16.652 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

Tgt Ion:200 Resp: 3024

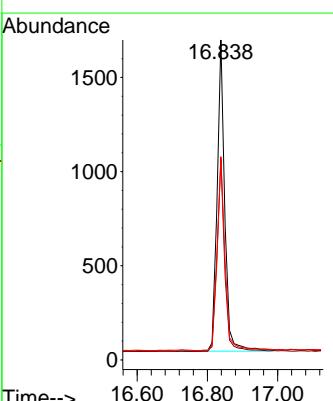
Ion	Ratio	Lower	Upper
200	100		
173	22.9	26.6	40.0#
215	45.9	40.6	61.0

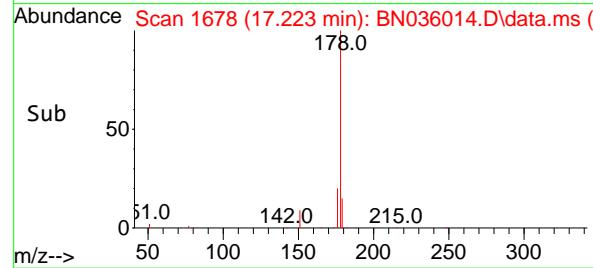
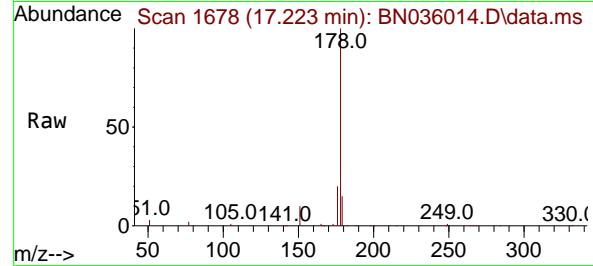
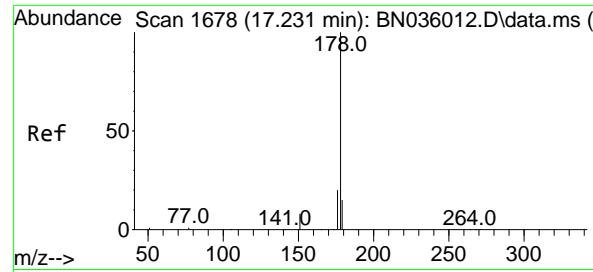


#24  
Pentachlorophenol  
Concen: 1.762 ng  
RT: 16.838 min Scan# 1647  
Delta R.T. 0.005 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

Tgt Ion:266 Resp: 2504

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

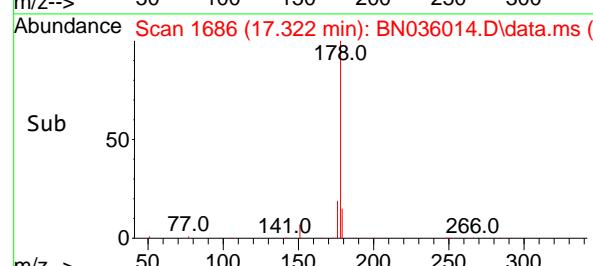
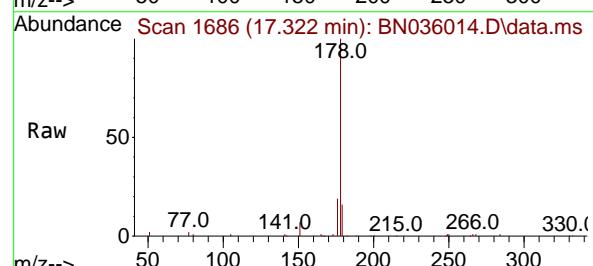
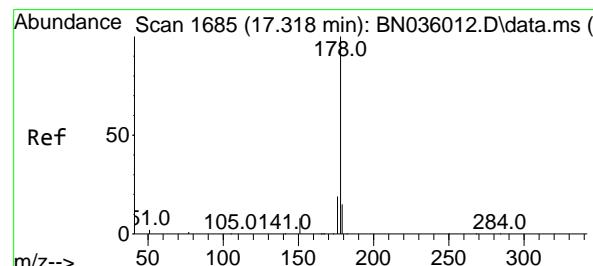
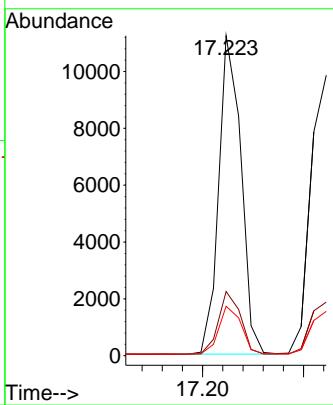




#25  
 Phenanthrene  
 Concen: 1.632 ng  
 RT: 17.223 min Scan# 1  
 Delta R.T. -0.008 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

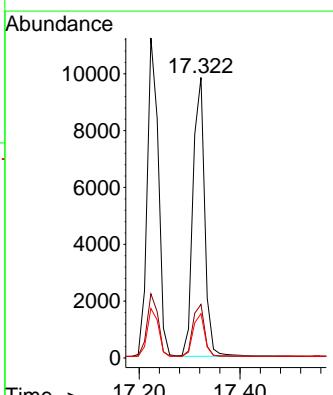
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

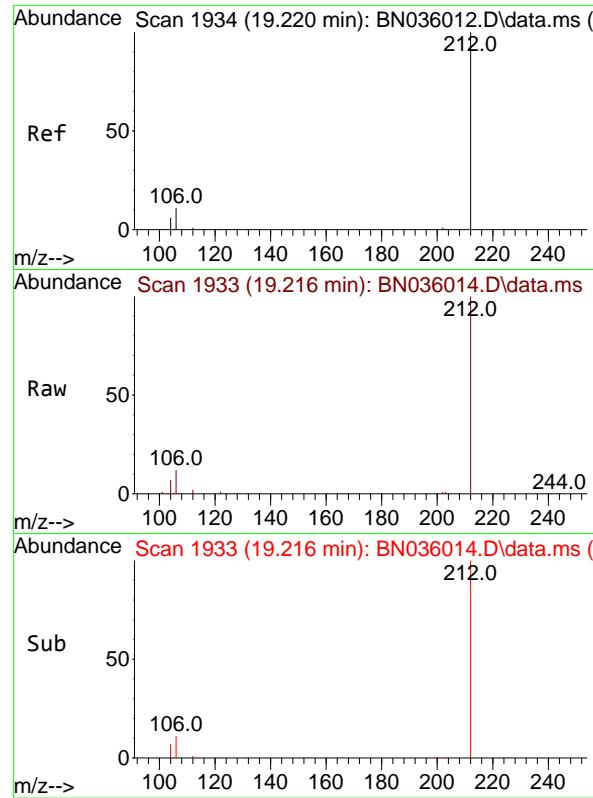
Tgt Ion:178 Resp: 17172  
 Ion Ratio Lower Upper  
 178 100  
 176 19.6 16.0 24.0  
 179 15.2 12.4 18.6



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

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

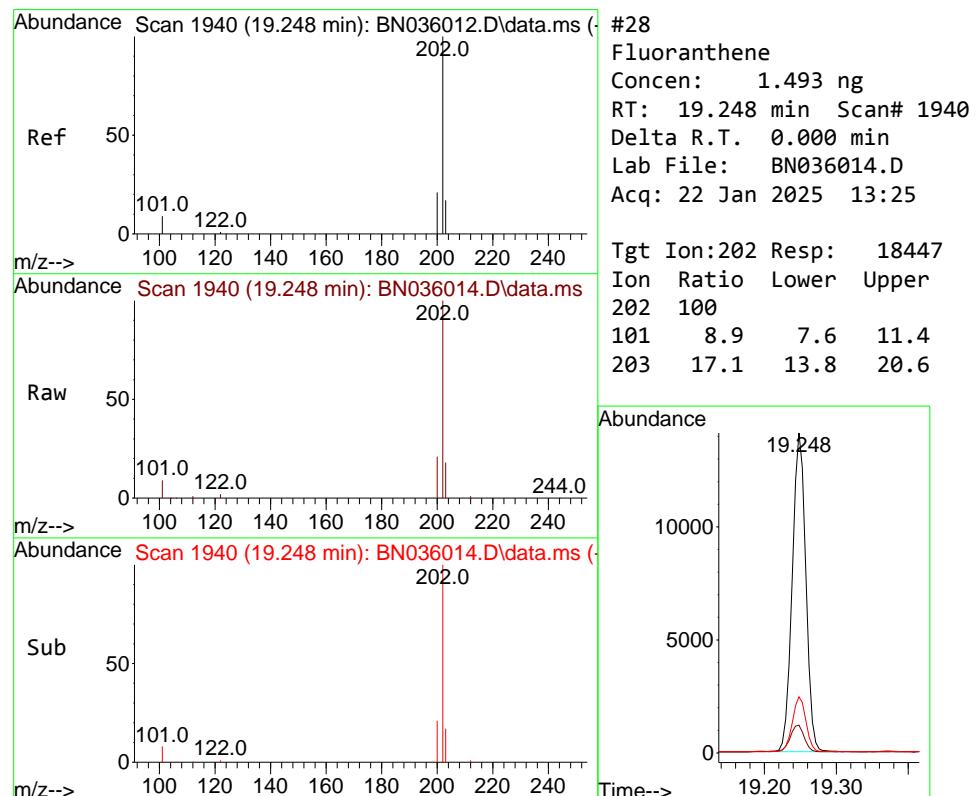
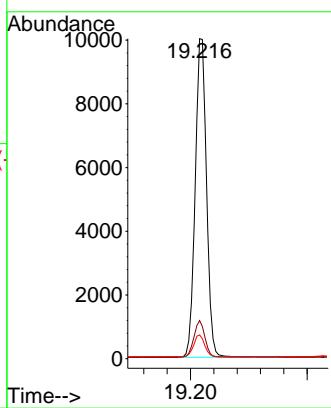




#27  
 Fluoranthene-d10  
 Concen: 1.480 ng  
 RT: 19.216 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

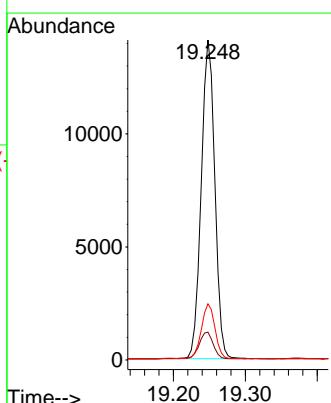
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

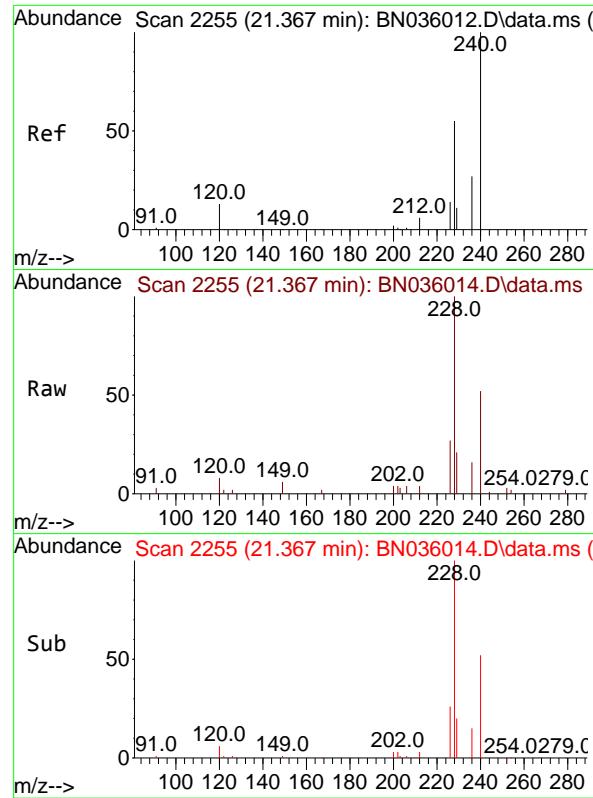
Tgt Ion:212 Resp: 13423  
 Ion Ratio Lower Upper  
 212 100  
 106 11.1 9.7 14.5  
 104 6.6 6.0 9.0



#28  
 Fluoranthene  
 Concen: 1.493 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

Tgt Ion:202 Resp: 18447  
 Ion Ratio Lower Upper  
 202 100  
 101 8.9 7.6 11.4  
 203 17.1 13.8 20.6

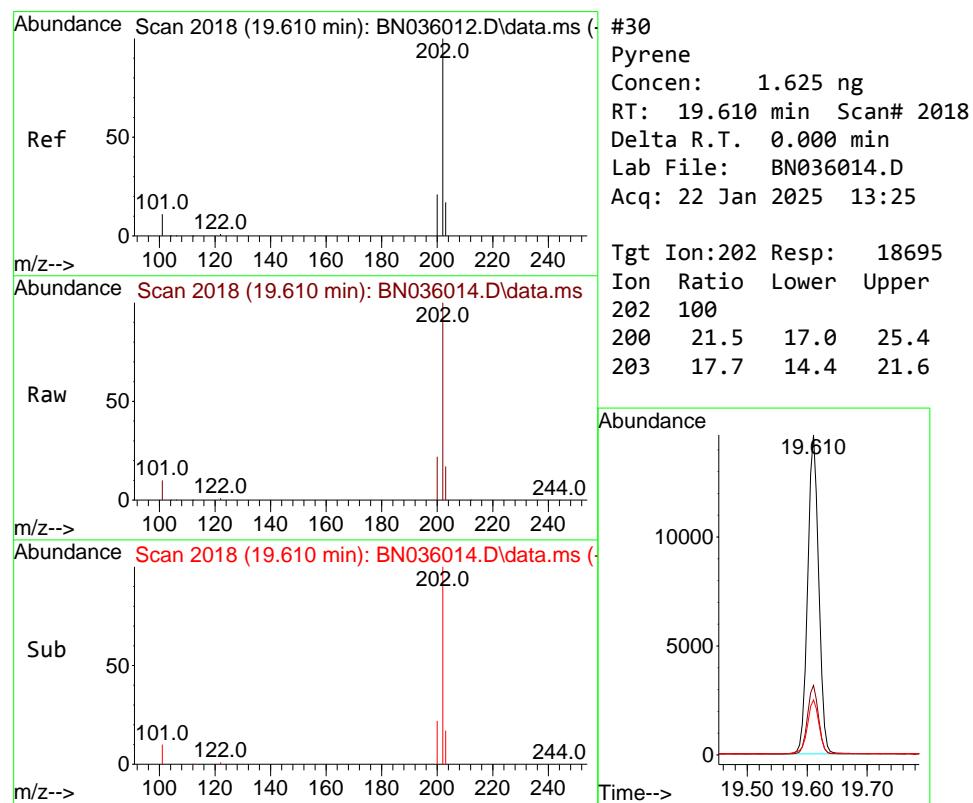
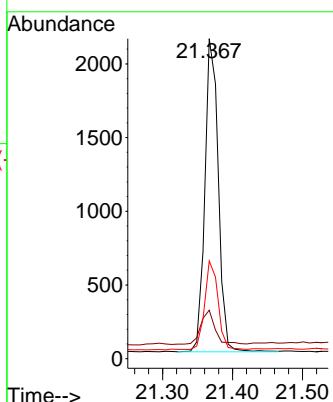




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

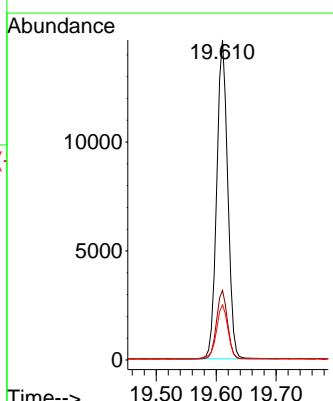
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

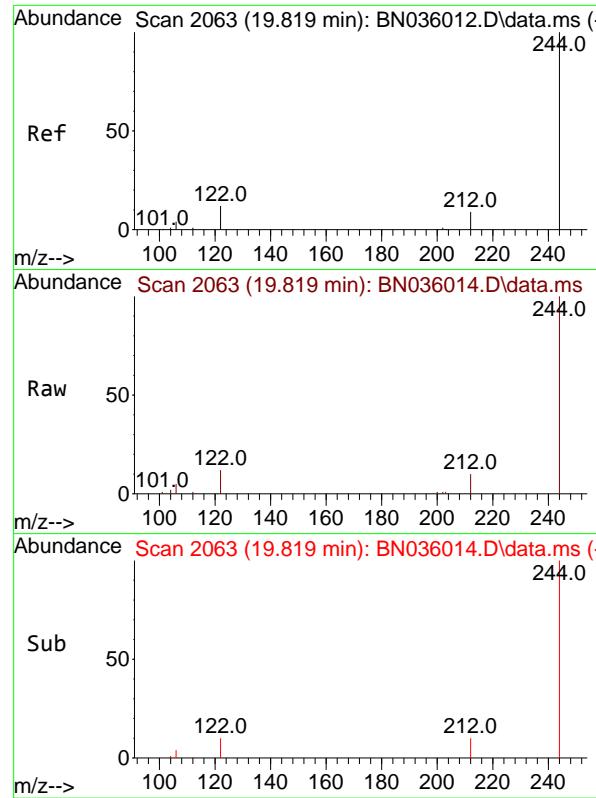
Tgt Ion:240 Resp: 2839  
Ion Ratio Lower Upper  
240 100  
120 15.2 13.9 20.9  
236 30.5 23.7 35.5



#30  
Pyrene  
Concen: 1.625 ng  
RT: 19.610 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

Tgt Ion:202 Resp: 18695  
Ion Ratio Lower Upper  
202 100  
200 21.5 17.0 25.4  
203 17.7 14.4 21.6

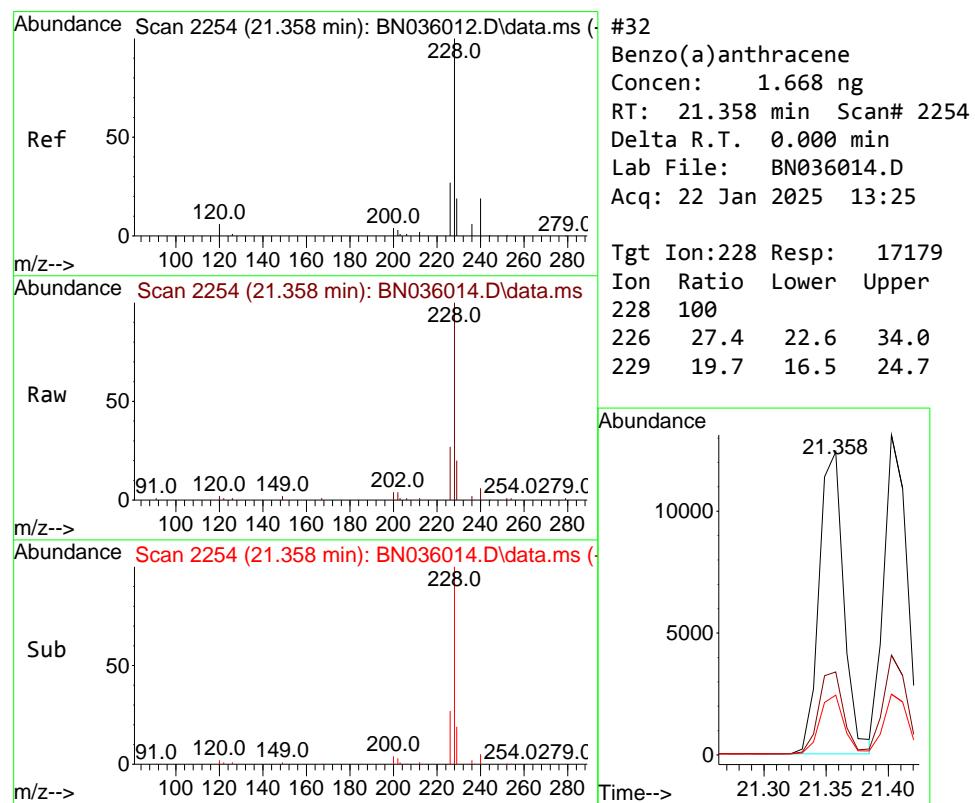
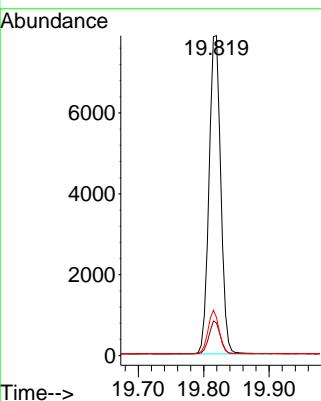




#31  
**Terphenyl-d14**  
Concen: 1.656 ng  
RT: 19.819 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

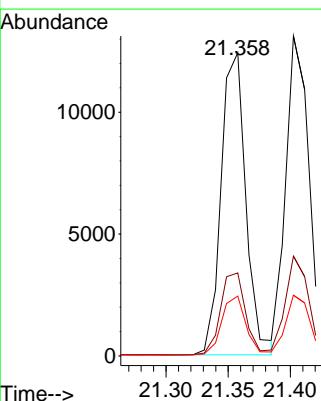
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

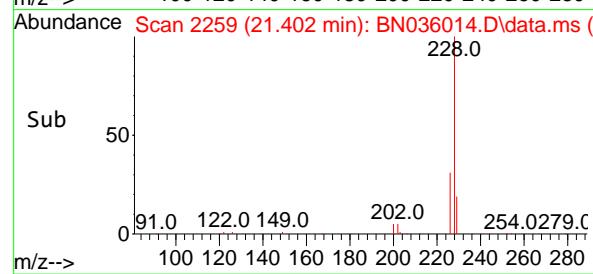
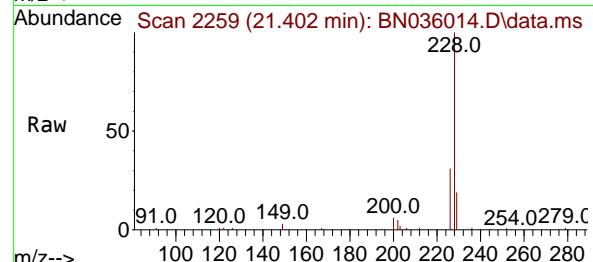
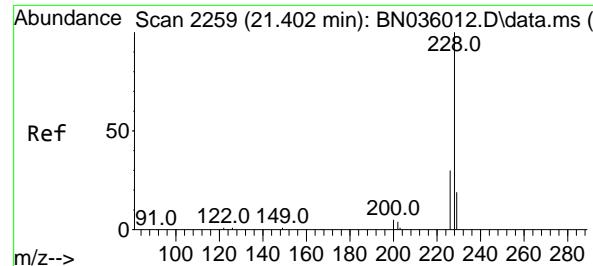
Tgt Ion:244 Resp: 9765  
Ion Ratio Lower Upper  
244 100  
212 10.3 9.1 13.7  
122 12.0 11.3 16.9



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

Tgt Ion:228 Resp: 17179  
Ion Ratio Lower Upper  
228 100  
226 27.4 22.6 34.0  
229 19.7 16.5 24.7





#33

Chrysene

Concen: 1.634 ng

RT: 21.402 min Scan# 2

Instrument :

Delta R.T. 0.000 min

BNA\_N

Lab File: BN036014.D

ClientSampleId :

Acq: 22 Jan 2025 13:25

SSTDICC1.6

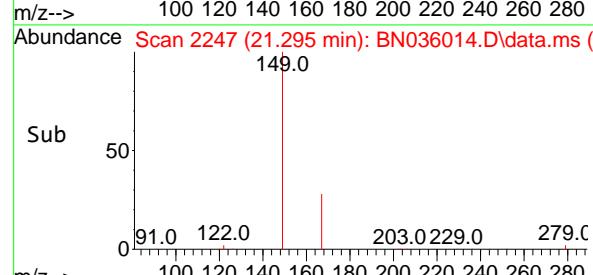
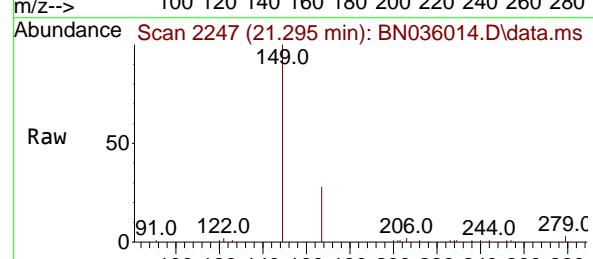
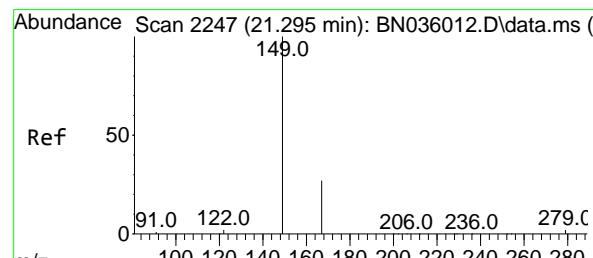
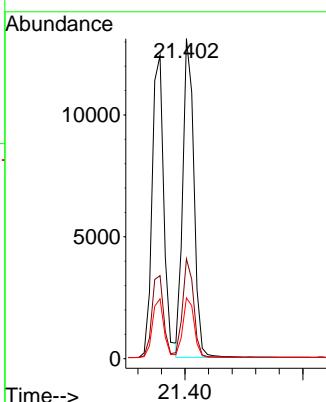
Tgt Ion:228 Resp: 17200

Ion Ratio Lower Upper

228 100

226 31.2 25.3 37.9

229 19.0 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.592 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

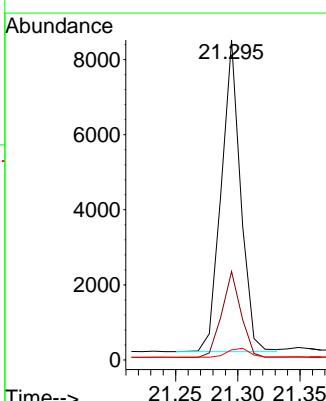
Tgt Ion:149 Resp: 8981

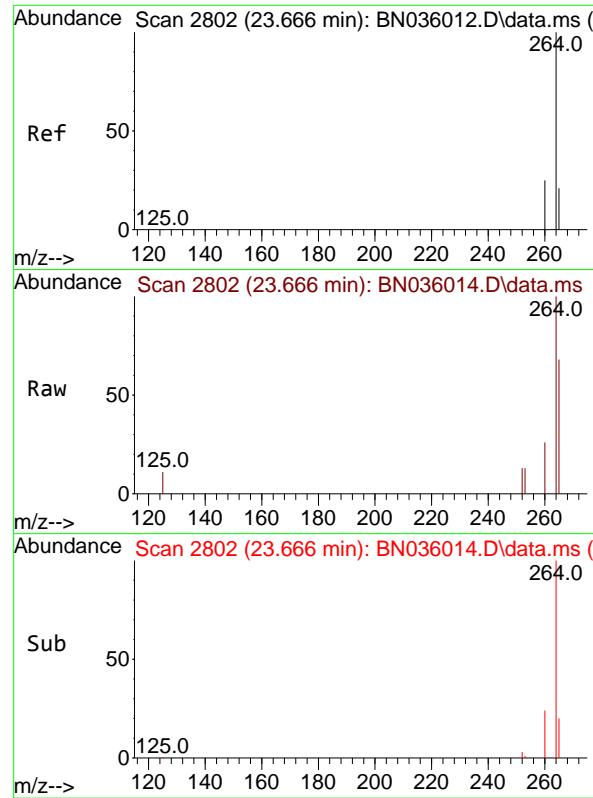
Ion Ratio Lower Upper

149 100

167 27.6 21.9 32.9

279 3.3 3.0 4.6

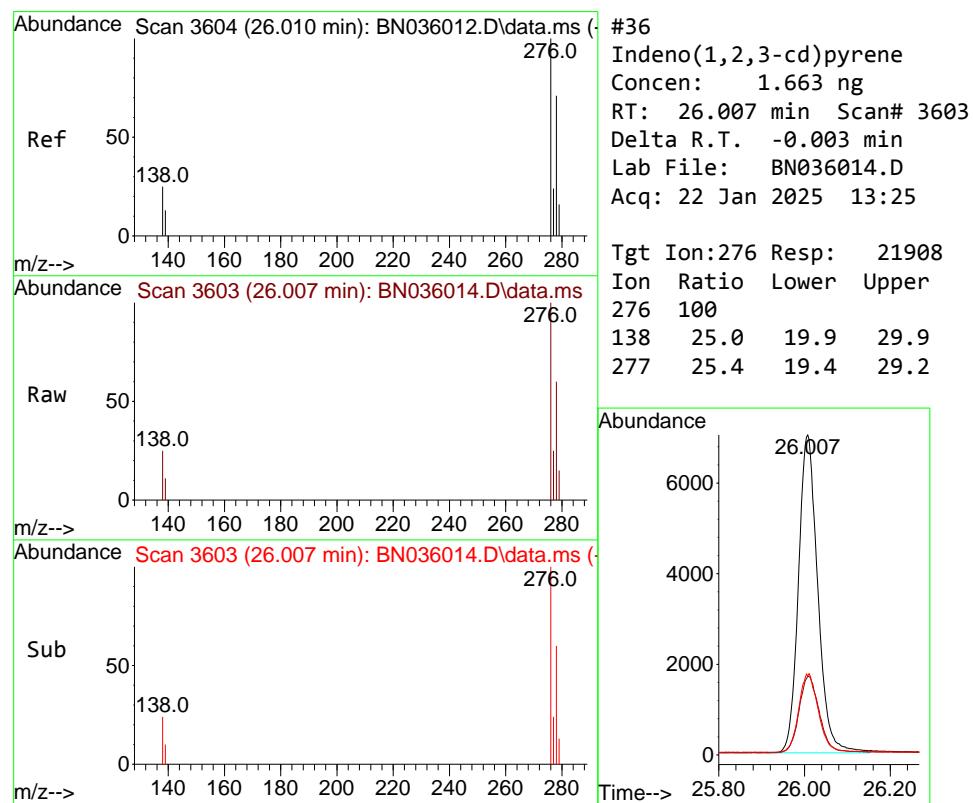
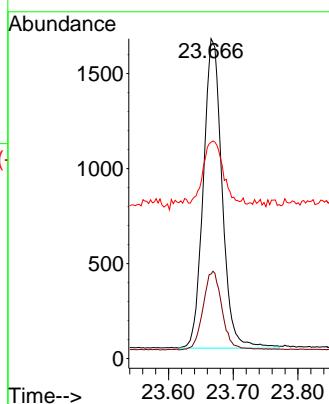




#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.666 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

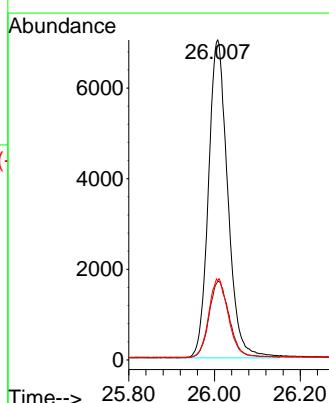
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

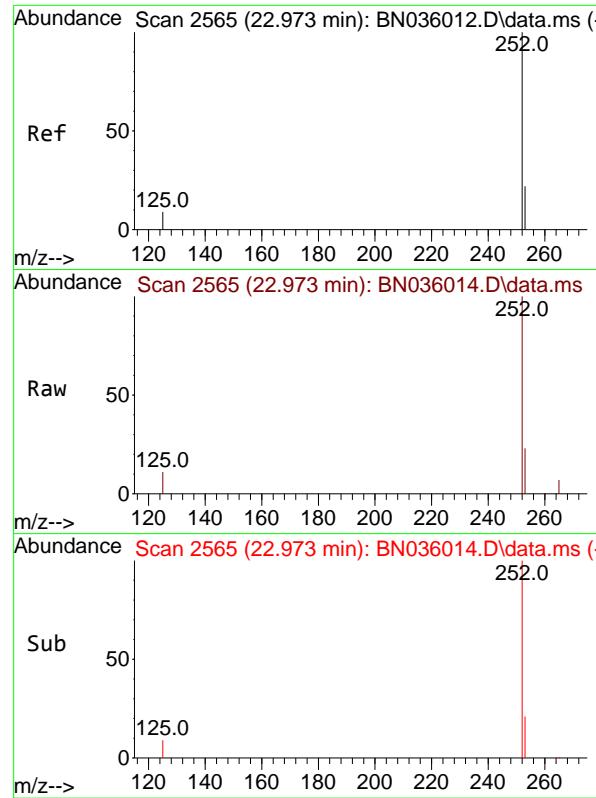
Tgt Ion:264 Resp: 3282  
 Ion Ratio Lower Upper  
 264 100  
 260 26.4 21.8 32.6  
 265 67.6 56.6 84.8



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 1.663 ng  
 RT: 26.007 min Scan# 3603  
 Delta R.T. -0.003 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

Tgt Ion:276 Resp: 21908  
 Ion Ratio Lower Upper  
 276 100  
 138 25.0 19.9 29.9  
 277 25.4 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 1.623 ng

RT: 22.973 min Scan# 2

Instrument :

BNA\_N

Delta R.T. 0.000 min

Lab File: BN036014.D

ClientSampleId :

Acq: 22 Jan 2025 13:25

SSTDICC1.6

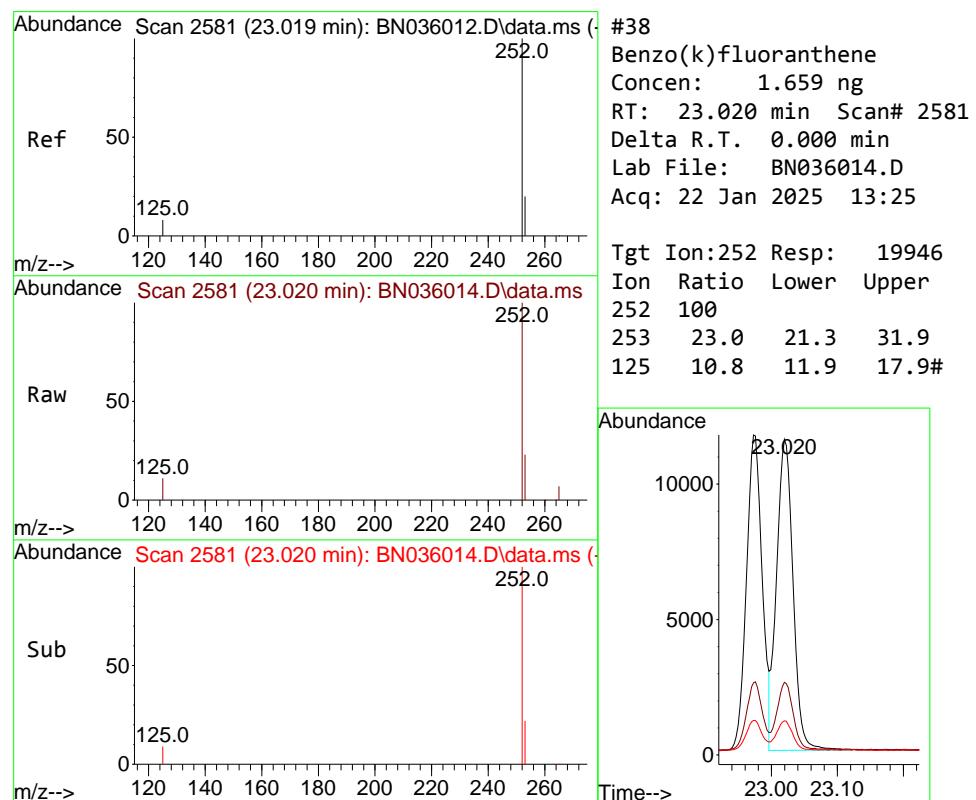
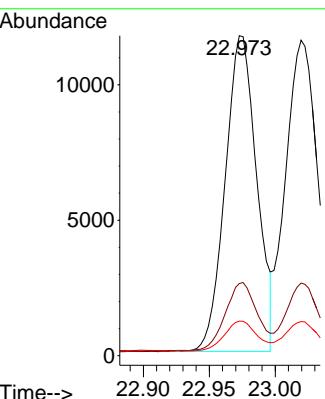
Tgt Ion:252 Resp: 19366

Ion Ratio Lower Upper

252 100

253 22.6 22.5 33.7

125 10.8 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 1.659 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036014.D

Acq: 22 Jan 2025 13:25

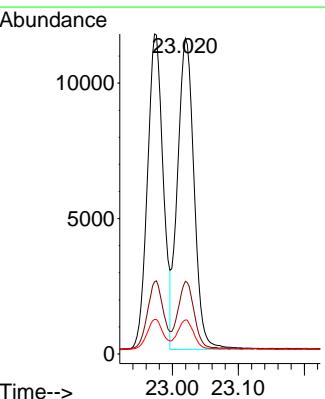
Tgt Ion:252 Resp: 19946

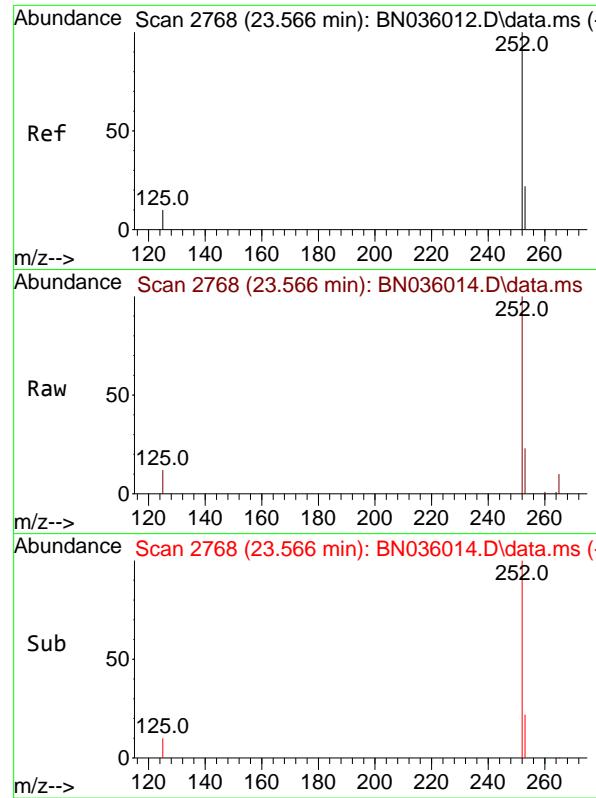
Ion Ratio Lower Upper

252 100

253 23.0 21.3 31.9

125 10.8 11.9 17.9#

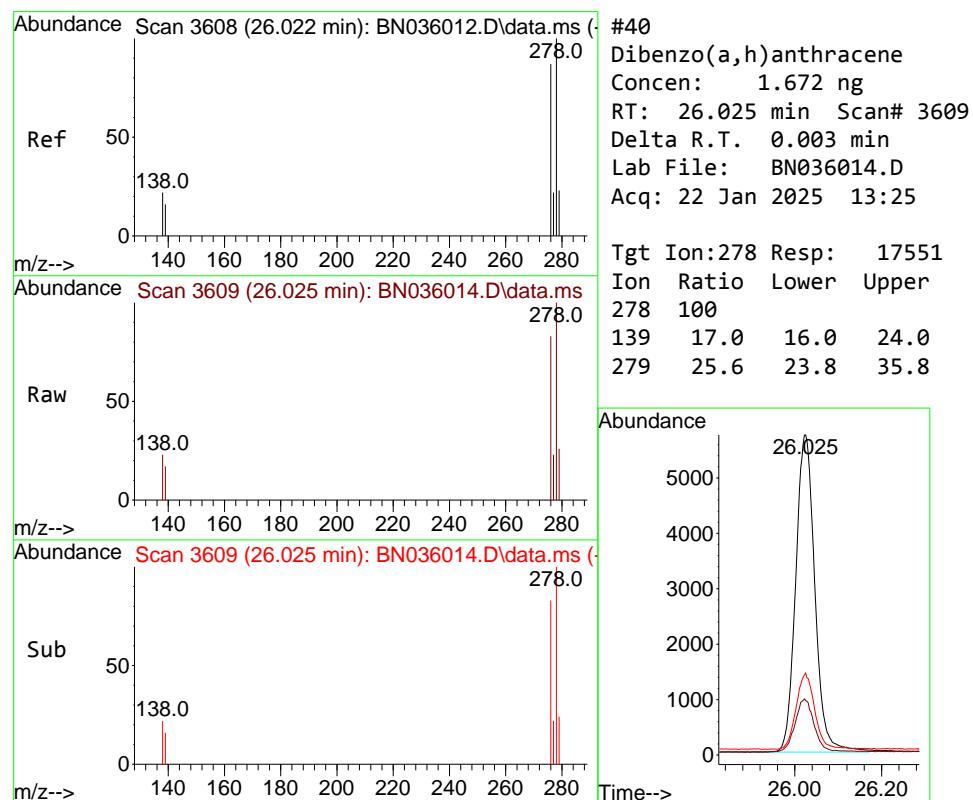
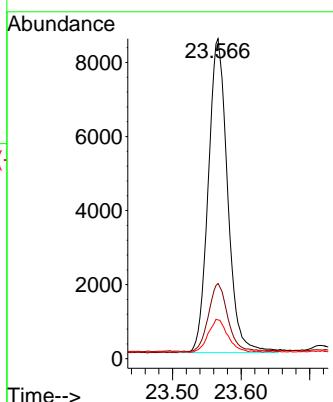




#39  
 Benzo(a)pyrene  
 Concen: 1.629 ng  
 RT: 23.566 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

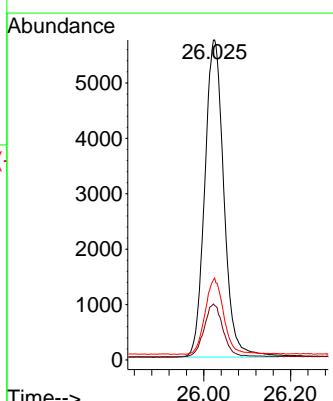
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

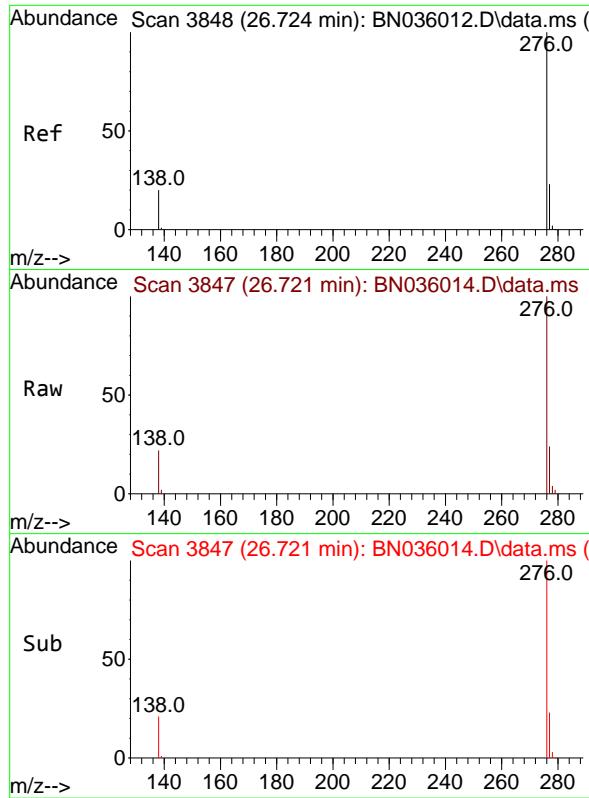
Tgt Ion:252 Resp: 16597  
 Ion Ratio Lower Upper  
 252 100  
 253 23.5 23.8 35.6#  
 125 12.1 14.6 21.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 1.672 ng  
 RT: 26.025 min Scan# 3609  
 Delta R.T. 0.003 min  
 Lab File: BN036014.D  
 Acq: 22 Jan 2025 13:25

Tgt Ion:278 Resp: 17551  
 Ion Ratio Lower Upper  
 278 100  
 139 17.0 16.0 24.0  
 279 25.6 23.8 35.8

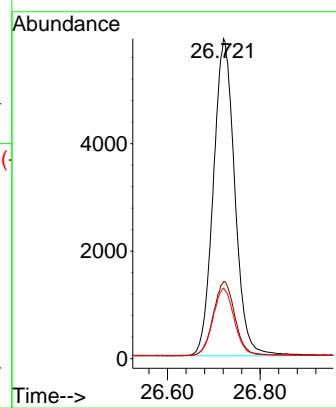




#41  
Benzo(g,h,i)perylene  
Concen: 1.650 ng  
RT: 26.721 min Scan# 3  
Delta R.T. -0.003 min  
Lab File: BN036014.D  
Acq: 22 Jan 2025 13:25

Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

Tgt Ion:276 Resp: 18875  
Ion Ratio Lower Upper  
276 100  
277 24.1 21.3 31.9  
138 22.1 19.2 28.8



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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

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

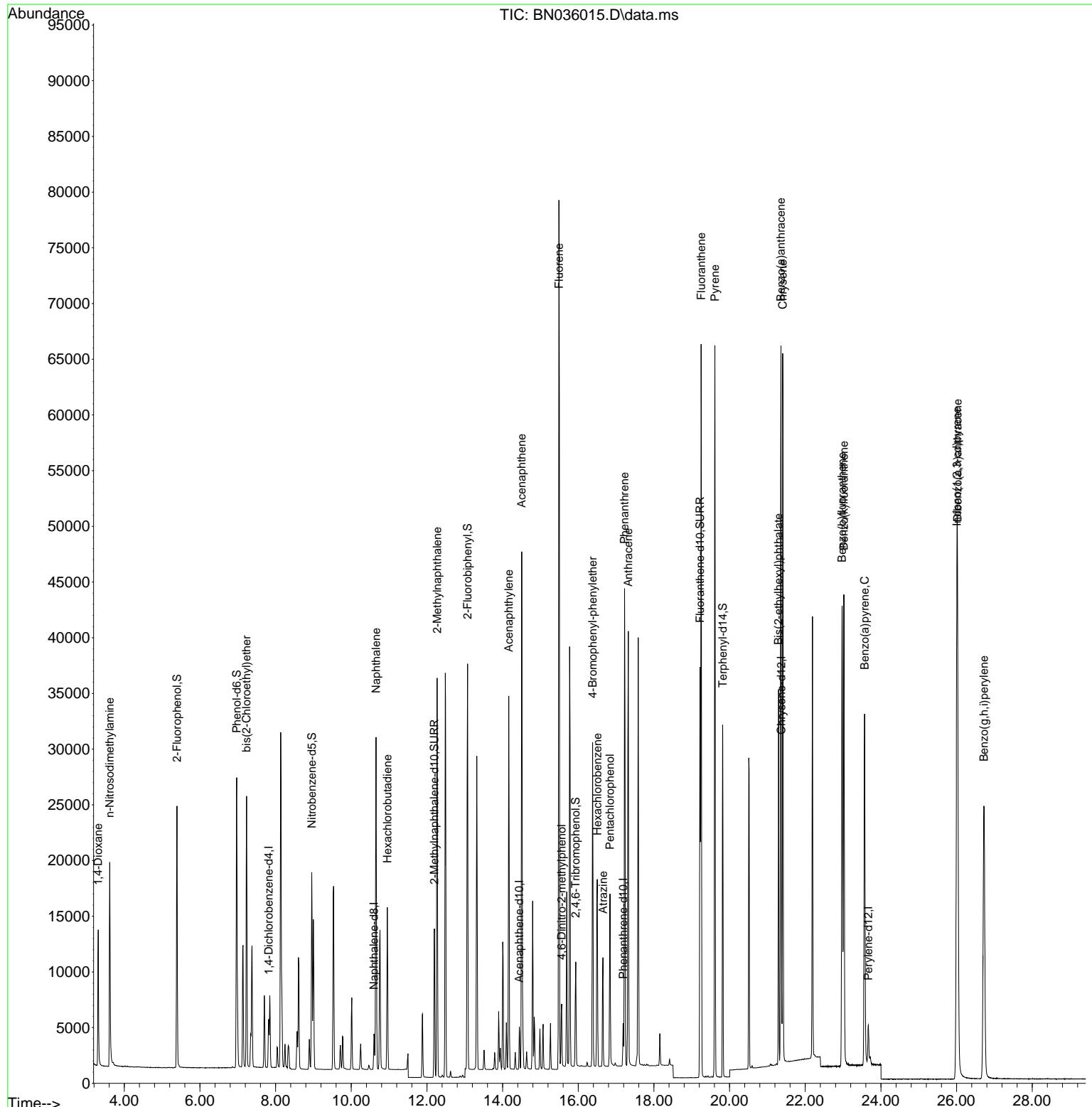
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	2044	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3907	0.400	ng	#-0.01
13) Acenaphthene-d10	14.441	164	2182	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	4618	0.400	ng	# 0.00
29) Chrysene-d12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

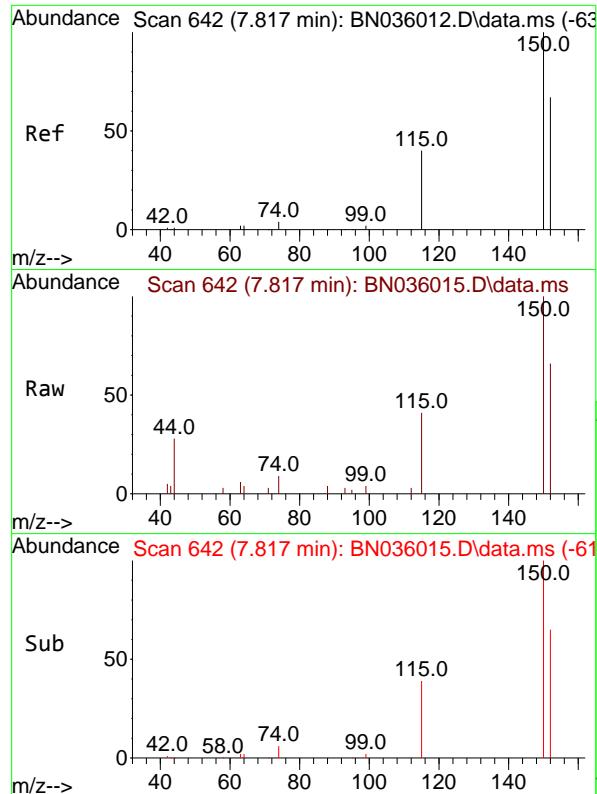
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

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

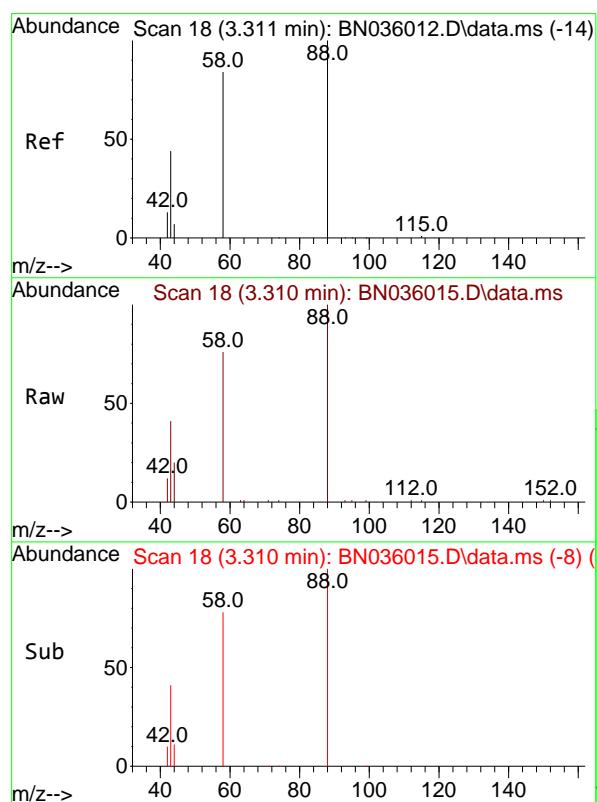
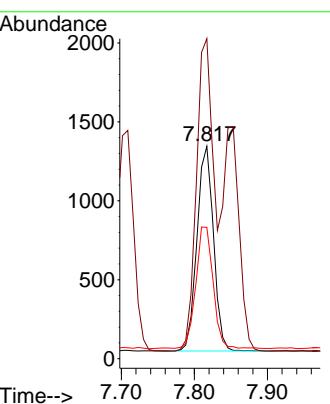




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.817 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

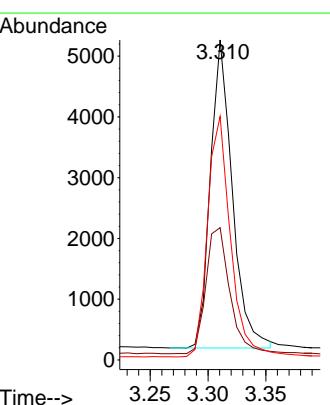
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

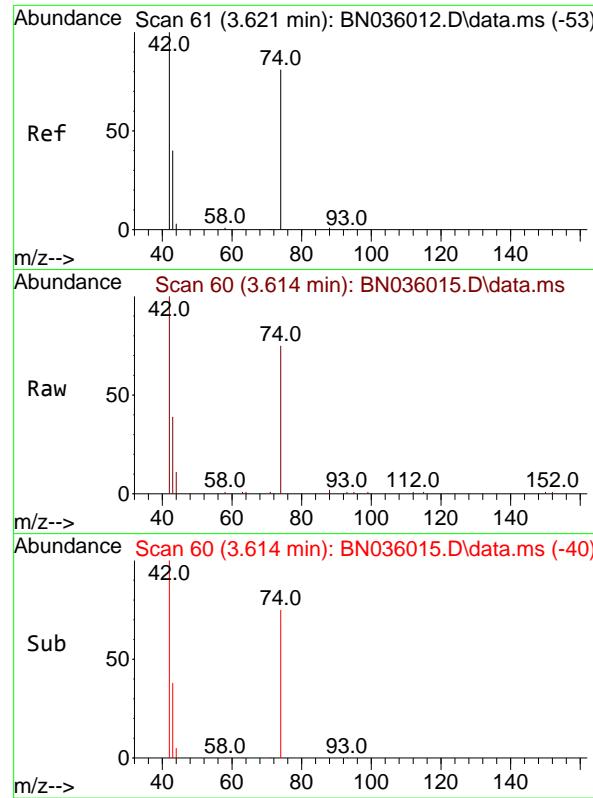
Tgt Ion:152 Resp: 2044  
 Ion Ratio Lower Upper  
 152 100  
 150 150.7 117.4 176.2  
 115 61.9 51.0 76.4



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

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

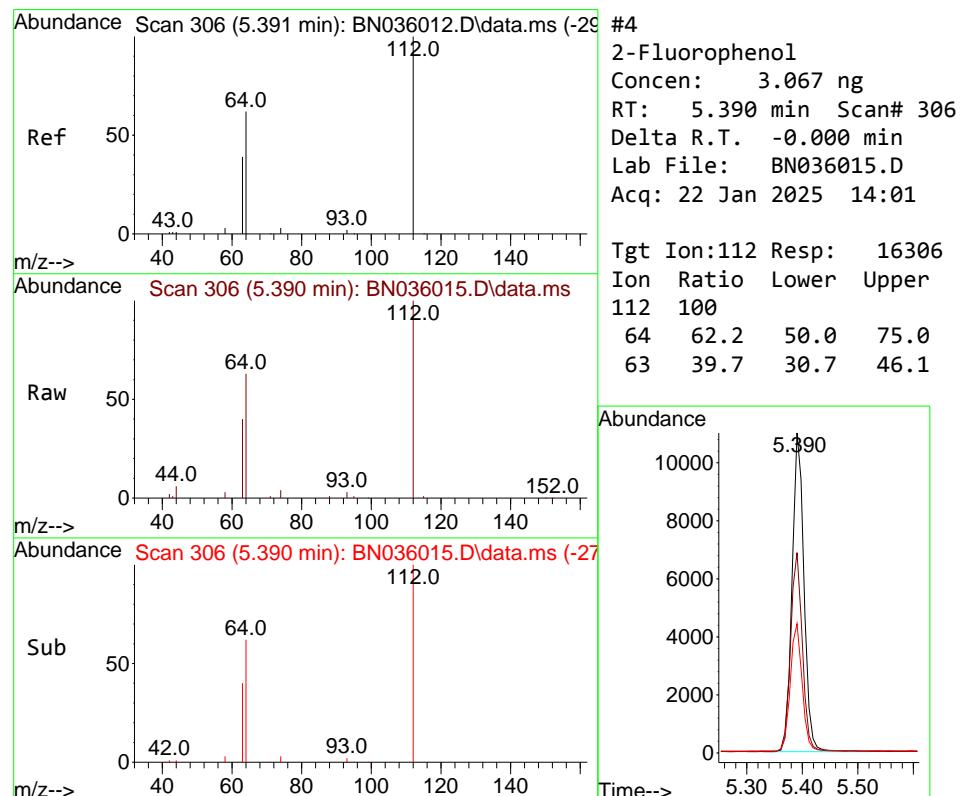
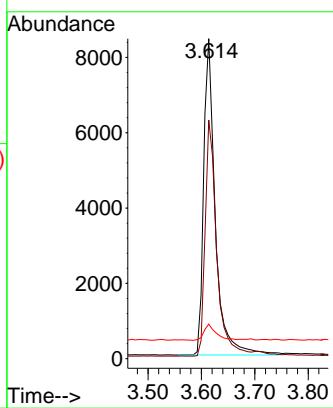




#3  
n-Nitrosodimethylamine  
Concen: 3.082 ng  
RT: 3.614 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01

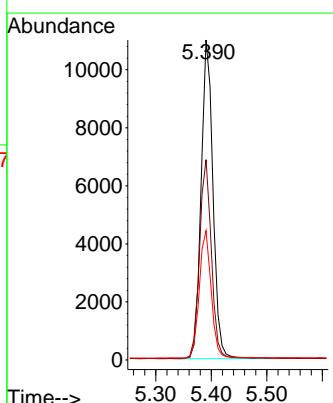
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

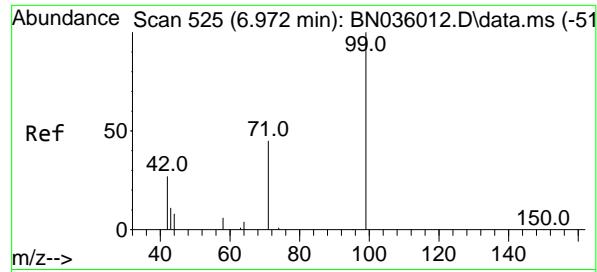
Tgt Ion: 42 Resp: 12771  
Ion Ratio Lower Upper  
42 100  
74 73.6 58.1 87.1  
44 5.3 6.2 9.4#



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

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

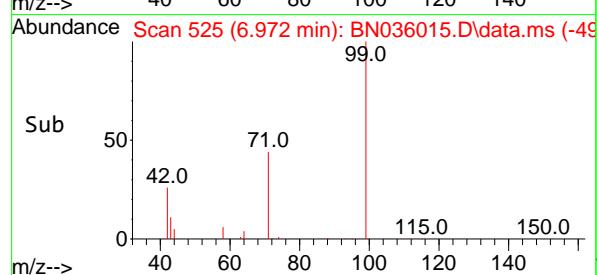
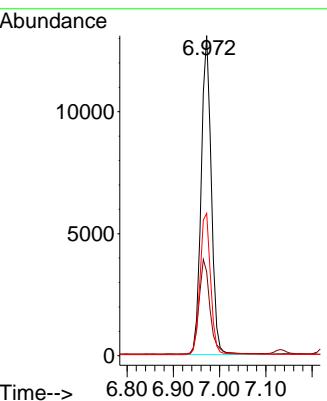




#5  
 Phenol-d6  
 Concen: 3.168 ng  
 RT: 6.972 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

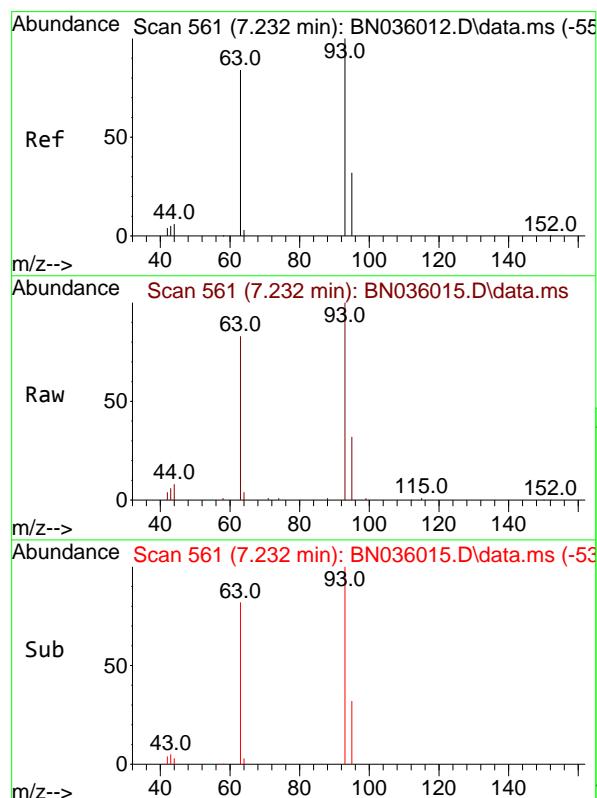
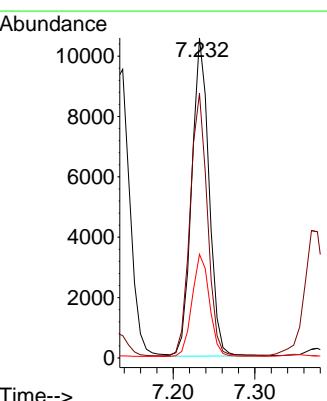
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

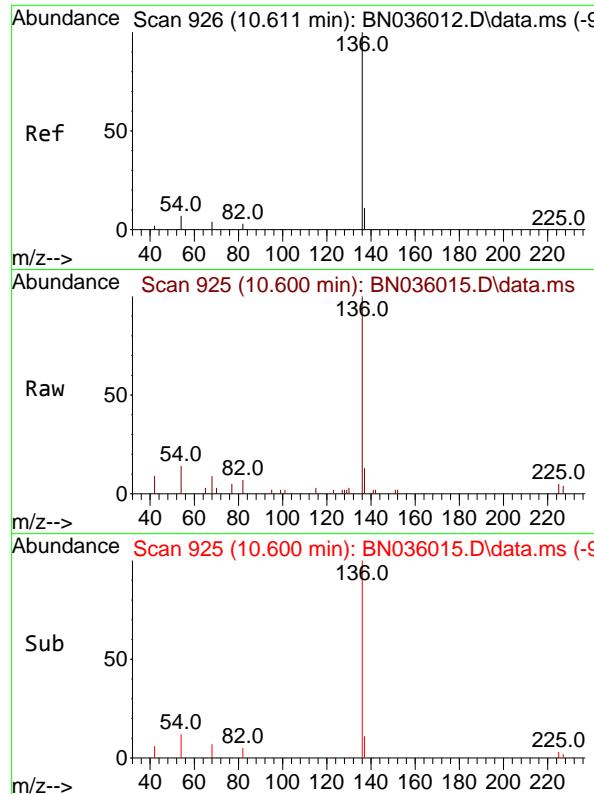
Tgt Ion: 99 Resp: 19779  
 Ion Ratio Lower Upper  
 99 100  
 42 31.9 26.8 40.2  
 71 46.2 36.6 55.0



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

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

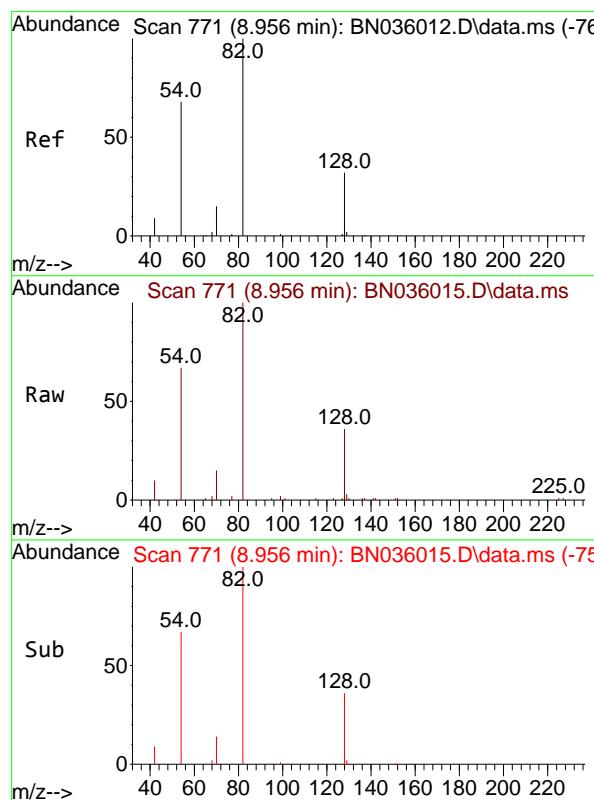
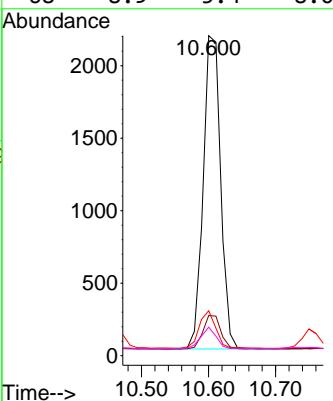




#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

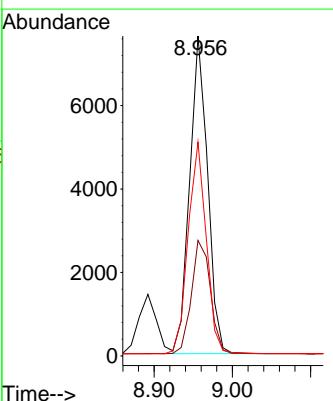
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

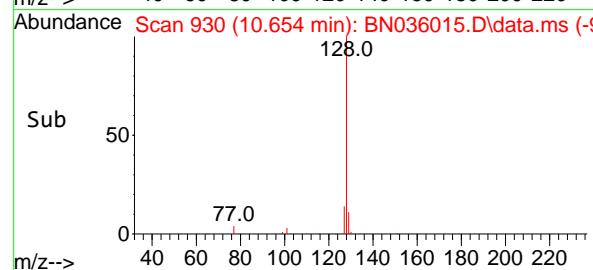
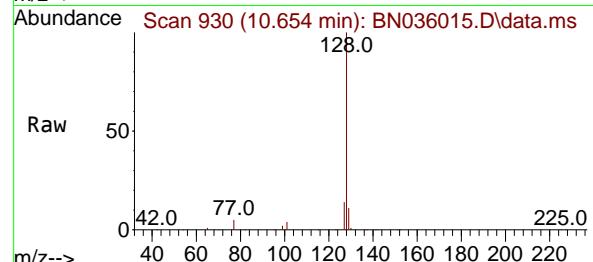
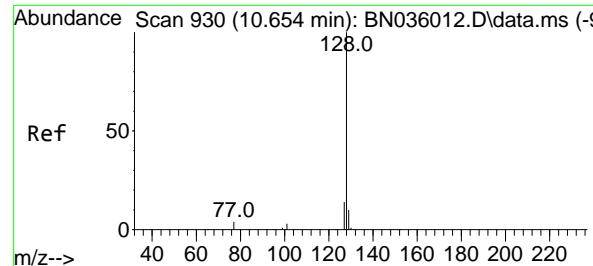
Tgt Ion:136 Resp: 3907  
 Ion Ratio Lower Upper  
 136 100  
 137 12.6 10.4 15.6  
 54 14.0 7.7 11.5#  
 68 8.9 5.4 8.0#



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

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





#9

Naphthalene

Concen: 3.142 ng

RT: 10.654 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

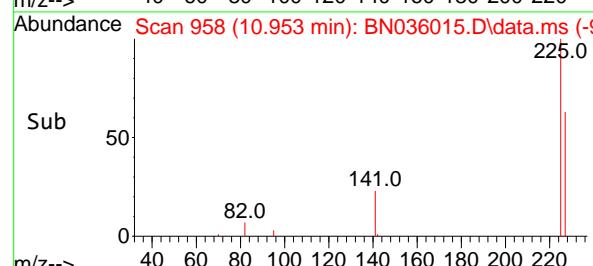
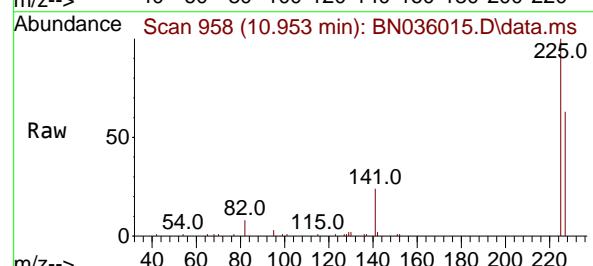
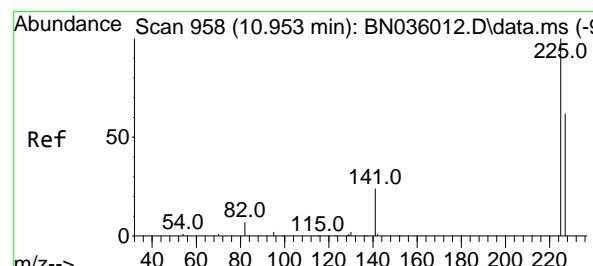
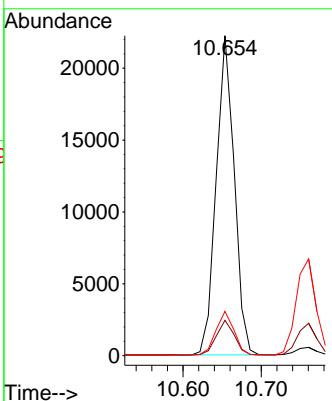
Tgt Ion:128 Resp: 35650

Ion Ratio Lower Upper

128 100

129 11.0 9.4 14.2

127 13.8 12.6 19.0



#10

Hexachlorobutadiene

Concen: 3.061 ng

RT: 10.953 min Scan# 958

Delta R.T. -0.000 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

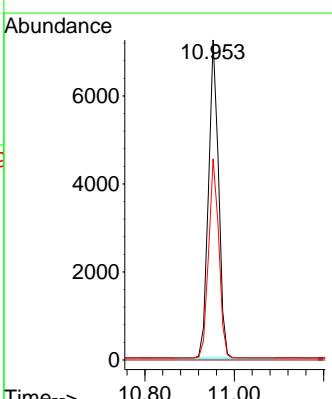
Tgt Ion:225 Resp: 11222

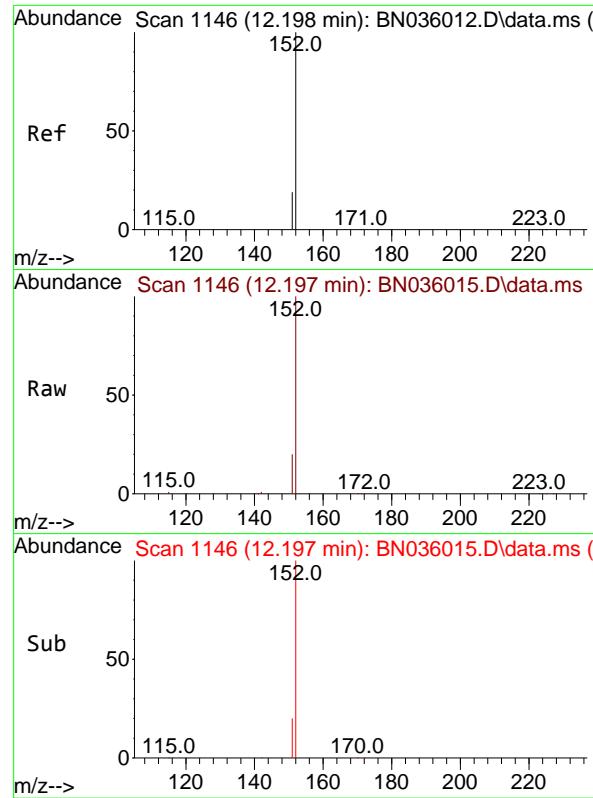
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

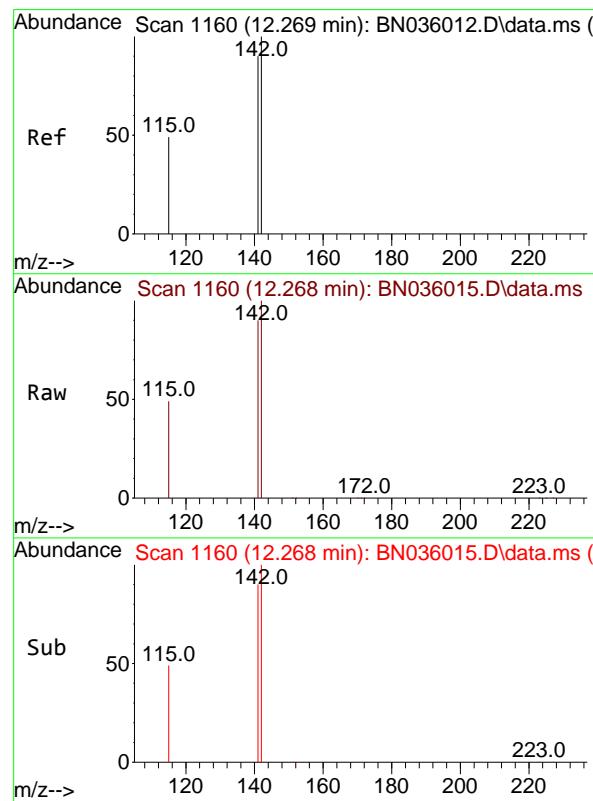
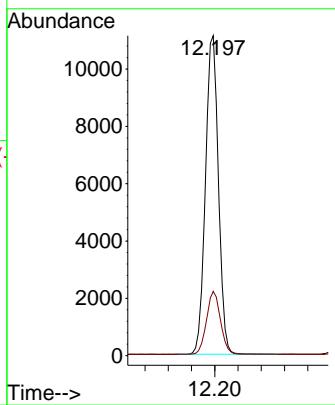
227 63.6 51.0 76.6





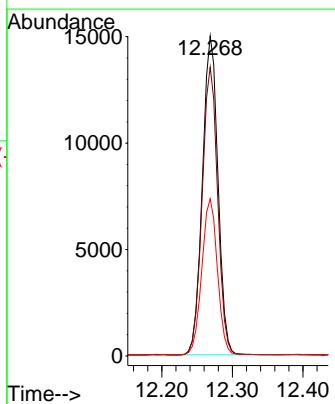
#11  
2-Methylnaphthalene-d10  
Concen: 3.237 ng  
RT: 12.197 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01  
ClientSampleId : SSTDICC3.2

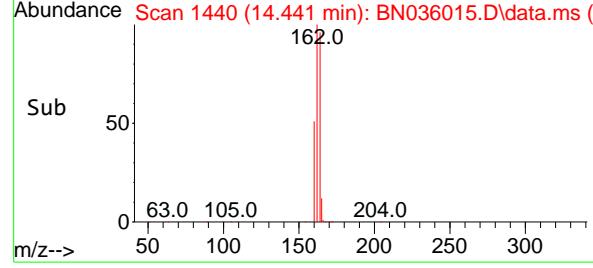
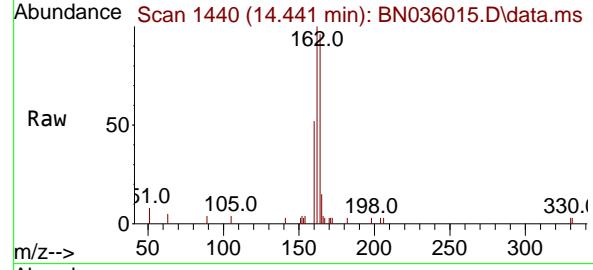
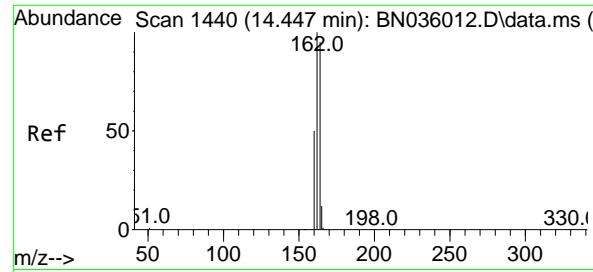
Tgt Ion:152 Resp: 17194  
Ion Ratio Lower Upper  
152 100  
151 21.2 16.6 25.0



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

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





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.441 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

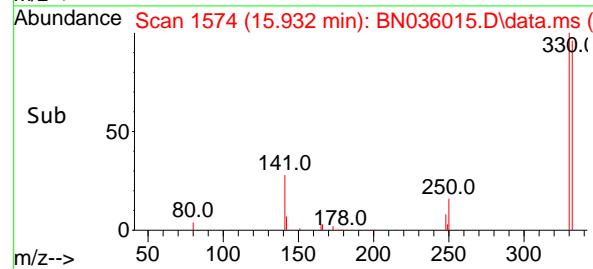
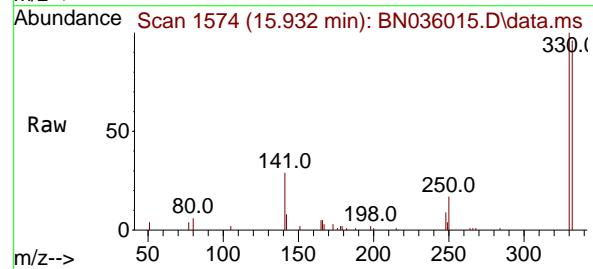
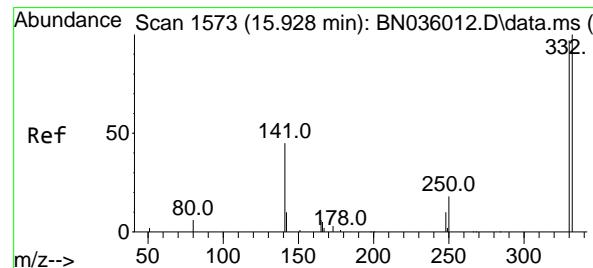
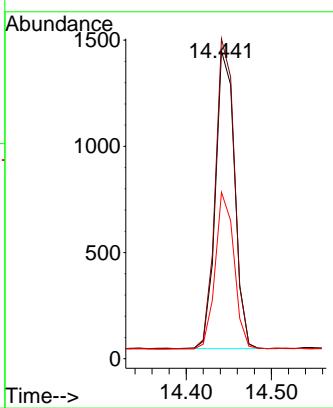
Tgt Ion:164 Resp: 2182

Ion Ratio Lower Upper

164 100

162 104.0 84.1 126.1

160 54.1 43.8 65.8



#14

2,4,6-Tribromophenol

Concen: 3.427 ng

RT: 15.932 min Scan# 1574

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

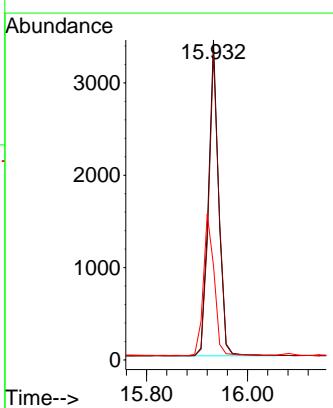
Tgt Ion:330 Resp: 4795

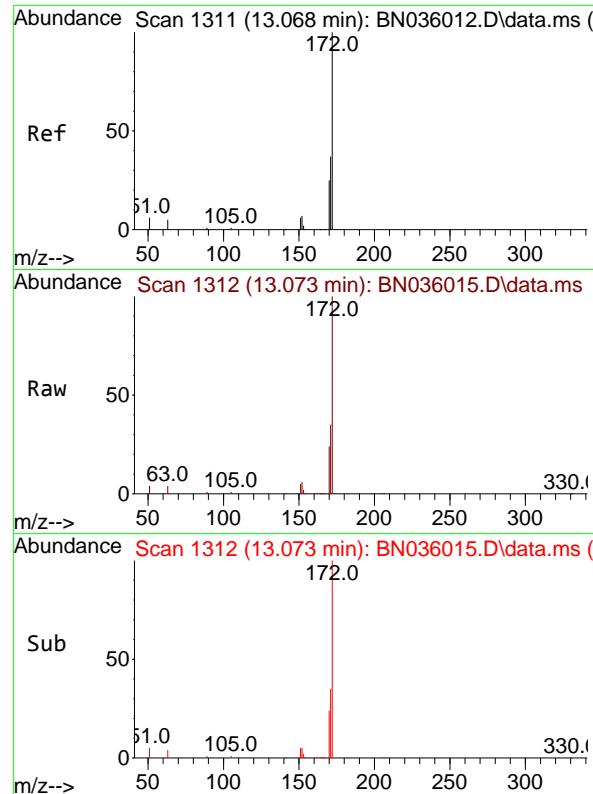
Ion Ratio Lower Upper

330 100

332 97.1 81.0 121.4

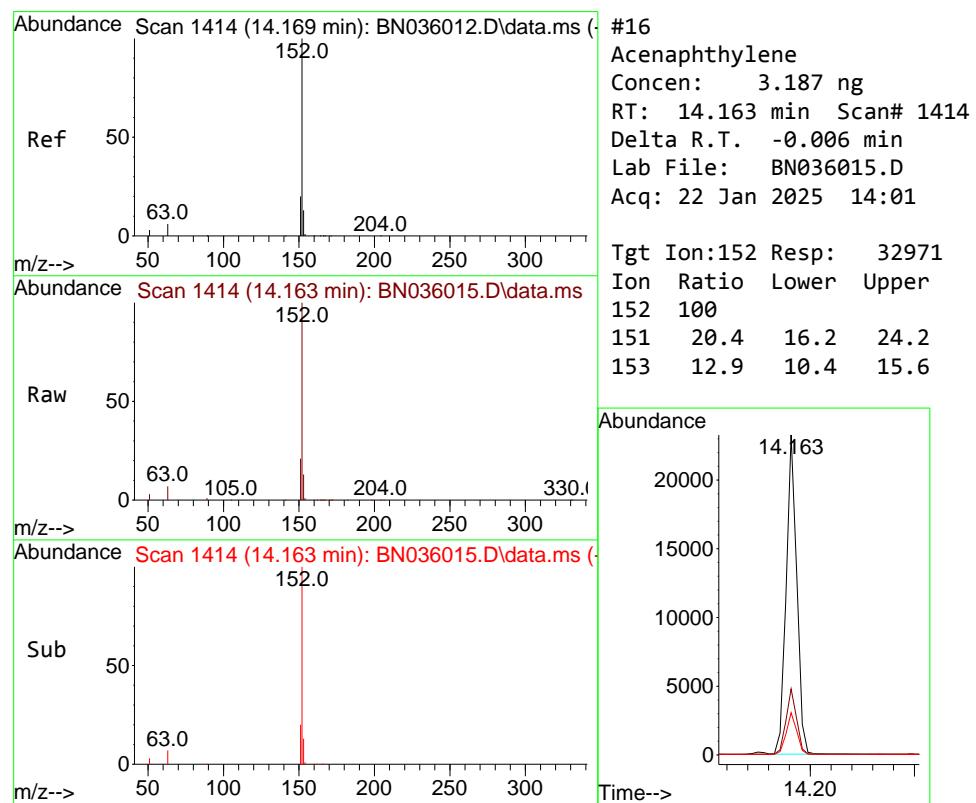
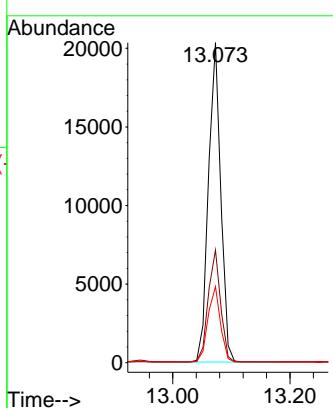
141 47.9 36.7 55.1





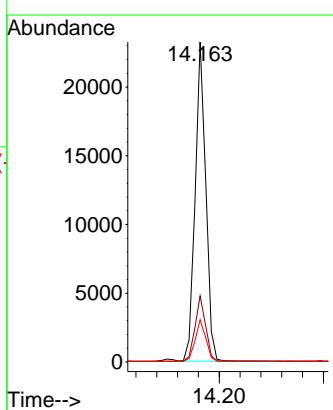
#15  
2-Fluorobiphenyl  
Concen: 3.035 ng  
RT: 13.073 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01 ClientSampleId : SSTDICC3.2

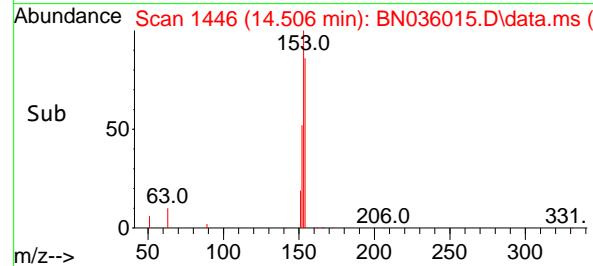
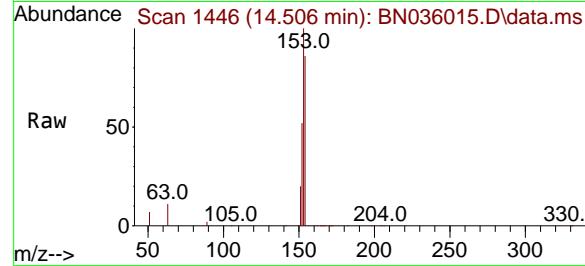
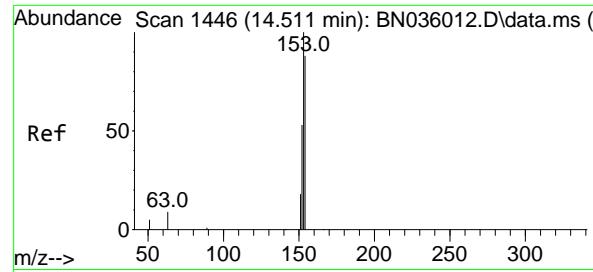
Tgt Ion:172 Resp: 29561  
Ion Ratio Lower Upper  
172 100  
171 35.2 30.9 46.3  
170 23.8 21.2 31.8



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

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





#17

Acenaphthene

Concen: 3.229 ng

RT: 14.506 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

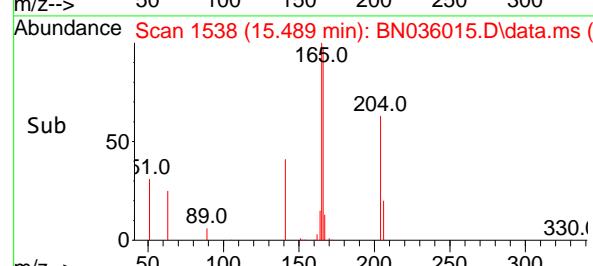
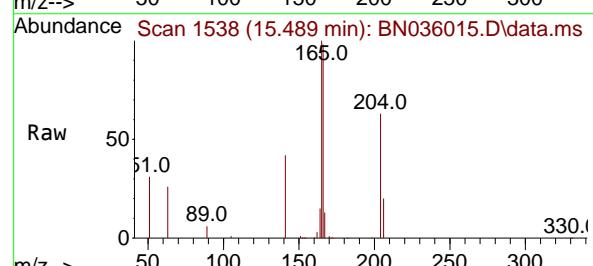
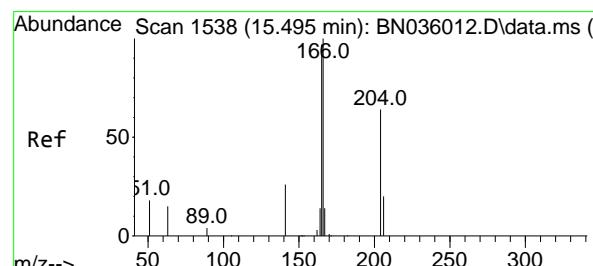
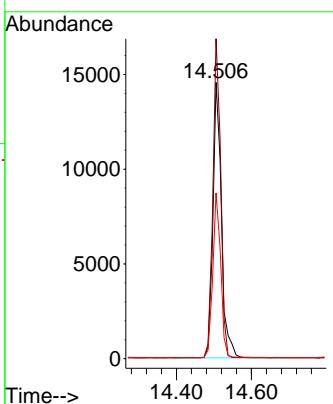
Tgt Ion:154 Resp: 22876

Ion Ratio Lower Upper

154 100

153 106.9 88.9 133.3

152 55.7 48.1 72.1



#18

Fluorene

Concen: 3.349 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

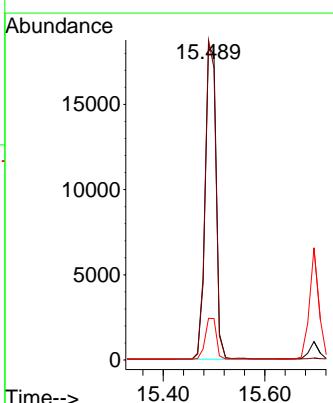
Tgt Ion:166 Resp: 29724

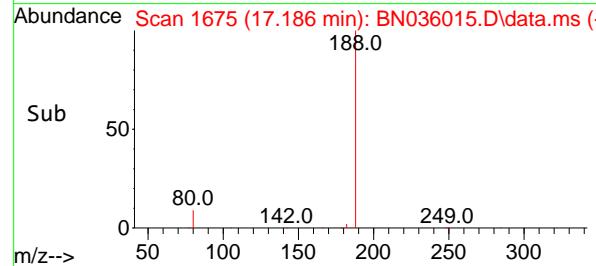
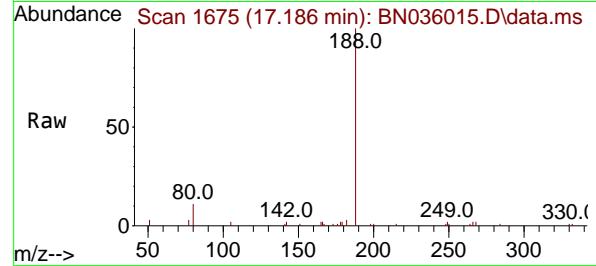
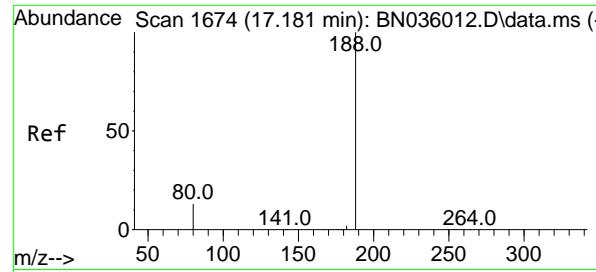
Ion Ratio Lower Upper

166 100

165 100.2 78.5 117.7

167 12.6 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

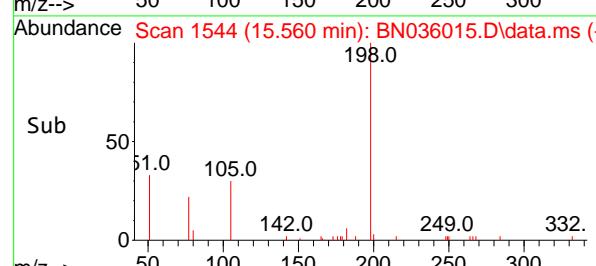
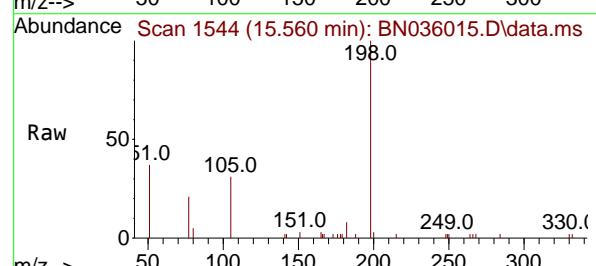
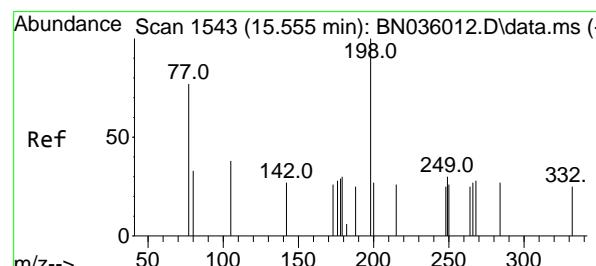
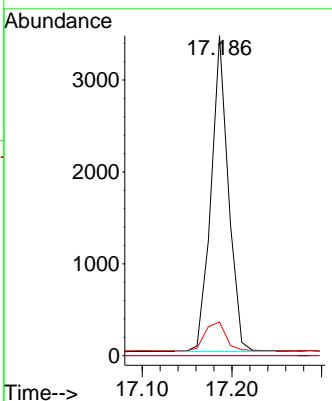
Tgt Ion:188 Resp: 4618

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.5 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 3.686 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

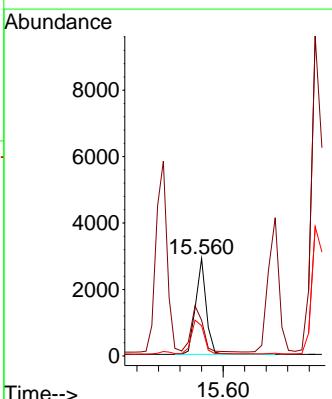
Tgt Ion:198 Resp: 3969

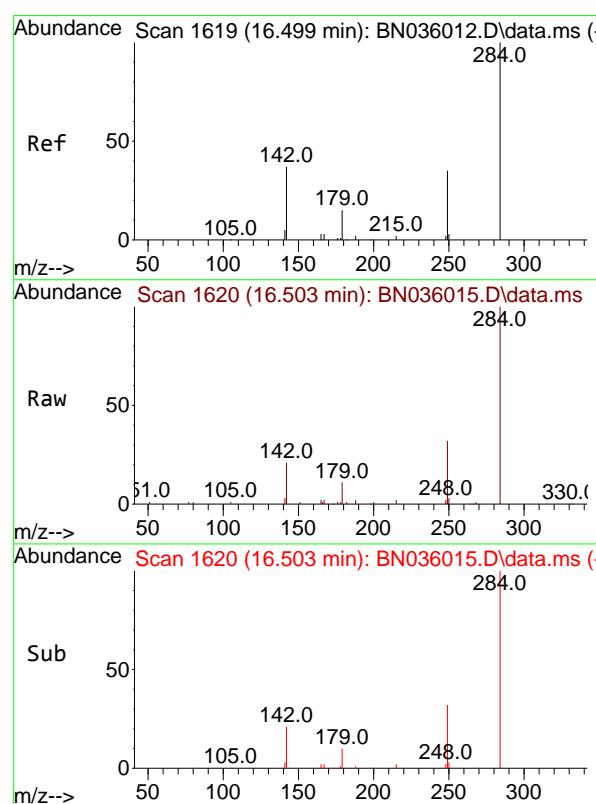
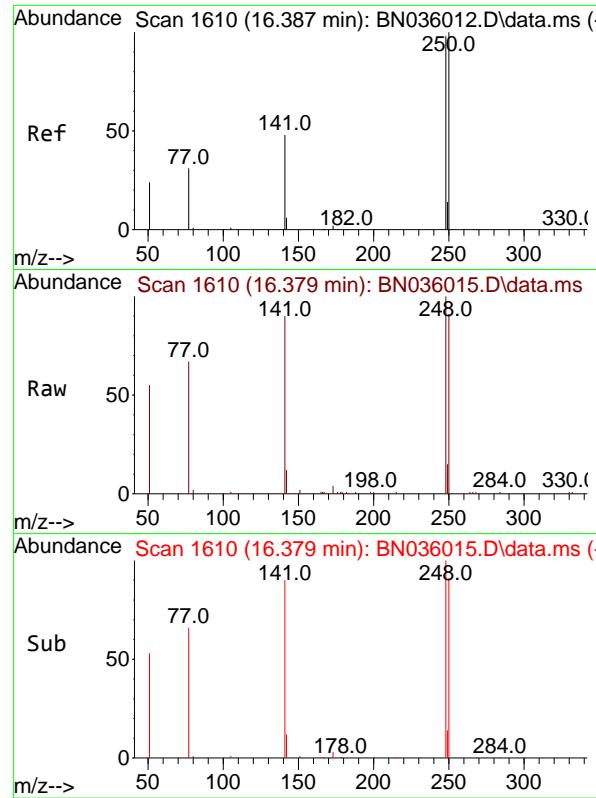
Ion Ratio Lower Upper

198 100

51 36.7 68.1 102.1#

105 31.1 46.5 69.7#





#21

4-Bromophenyl-phenylether

Concen: 3.071 ng

RT: 16.379 min Scan# 1

Delta R.T. -0.008 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

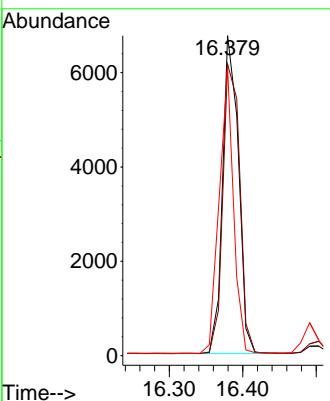
Tgt Ion:248 Resp: 10101

Ion Ratio Lower Upper

248 100

250 91.1 81.5 122.3

141 90.0 41.8 62.6#



#22

Hexachlorobenzene

Concen: 3.031 ng

RT: 16.503 min Scan# 1620

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

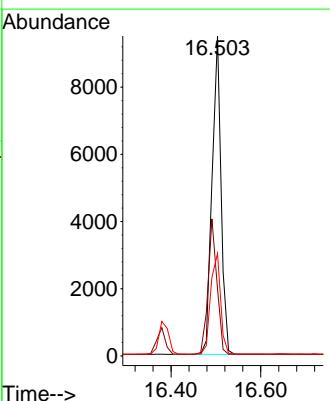
Tgt Ion:284 Resp: 13128

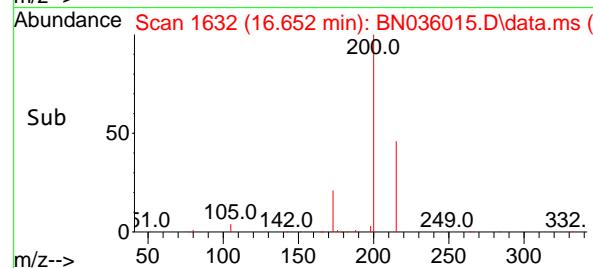
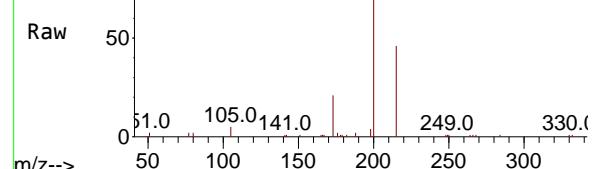
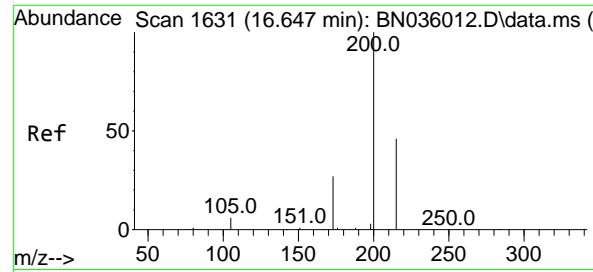
Ion Ratio Lower Upper

284 100

142 42.2 33.6 50.4

249 34.8 28.8 43.2





#23

Atrazine

Concen: 3.256 ng

RT: 16.652 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

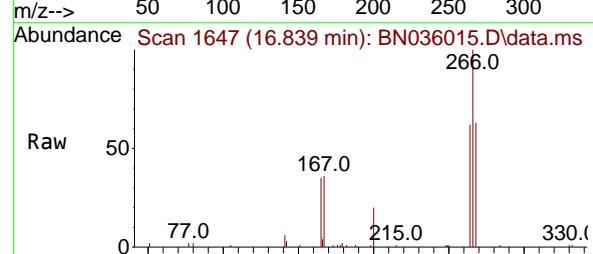
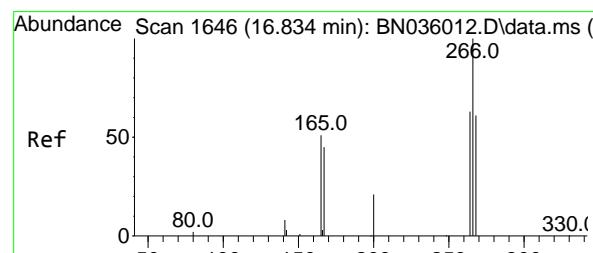
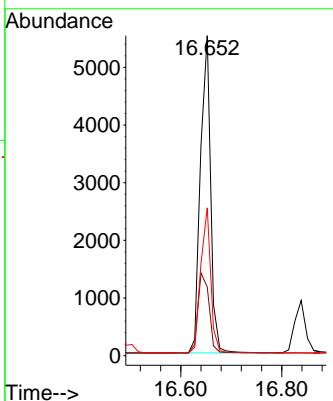
Tgt Ion:200 Resp: 7739

Ion Ratio Lower Upper

200 100

173 21.5 26.6 40.0#

215 46.2 40.6 61.0



#24

Pentachlorophenol

Concen: 3.645 ng

RT: 16.839 min Scan# 1647

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

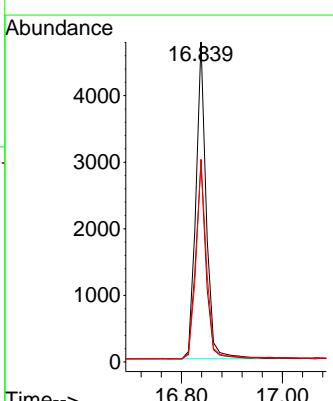
Tgt Ion:266 Resp: 6833

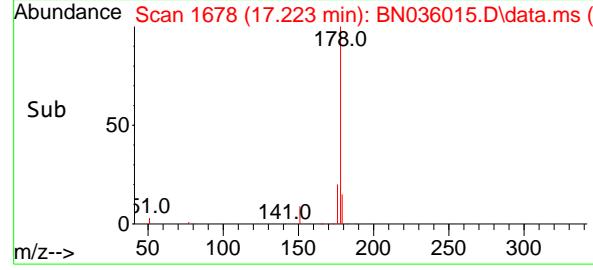
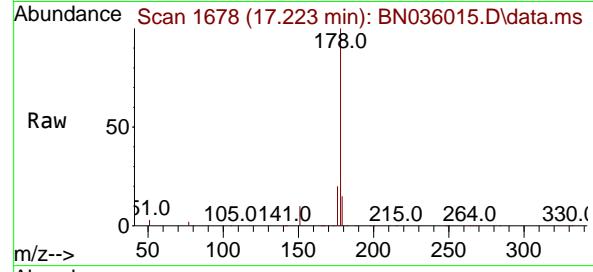
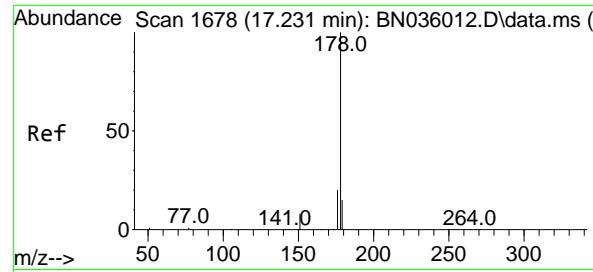
Ion Ratio Lower Upper

266 100

264 62.6 48.2 72.2

268 63.9 51.6 77.4





#25

Phenanthrene

Concen: 3.148 ng

RT: 17.223 min Scan# 1

Delta R.T. -0.008 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

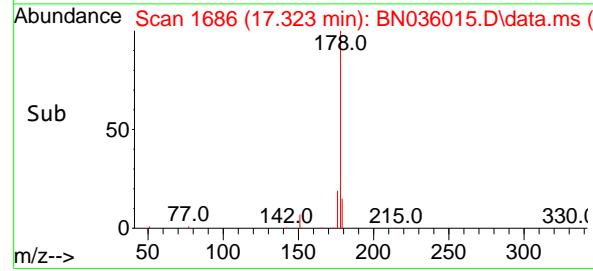
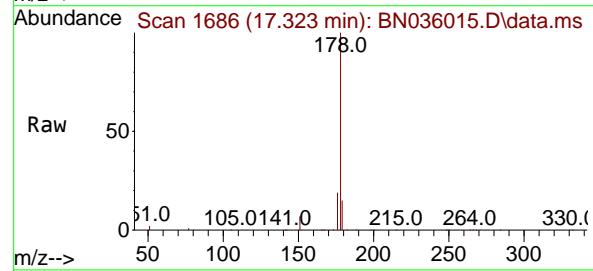
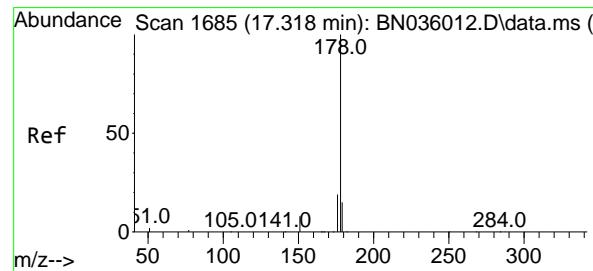
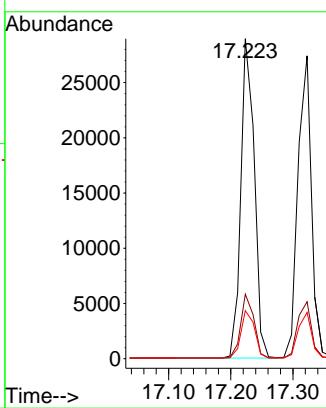
Tgt Ion:178 Resp: 43683

Ion Ratio Lower Upper

178 100

176 19.6 16.0 24.0

179 15.0 12.4 18.6



#26

Anthracene

Concen: 3.288 ng

RT: 17.323 min Scan# 1686

Delta R.T. 0.005 min

Lab File: BN036015.D

Acq: 22 Jan 2025 14:01

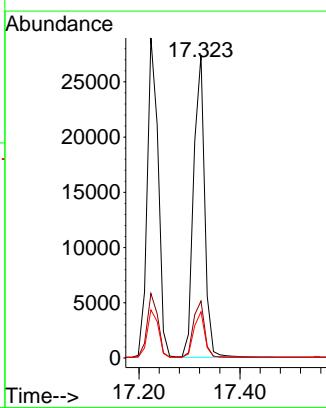
Tgt Ion:178 Resp: 41492

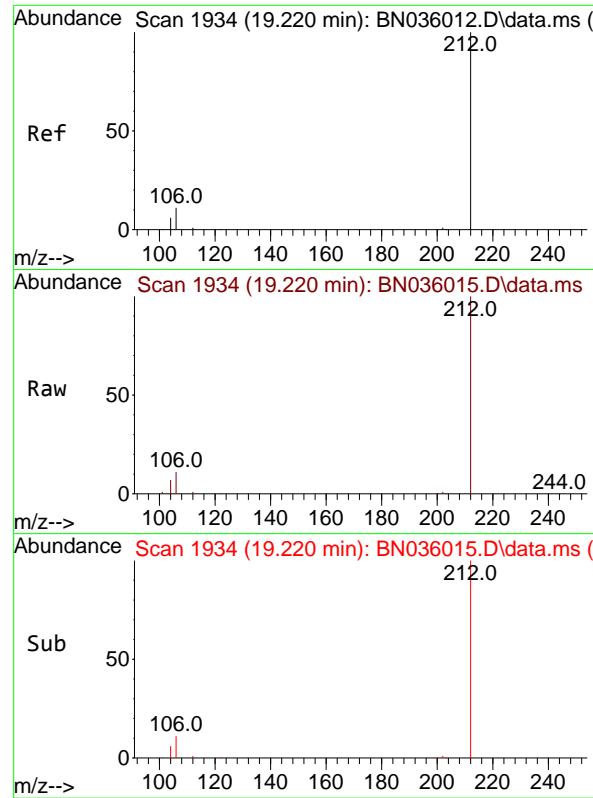
Ion Ratio Lower Upper

178 100

176 19.0 15.4 23.2

179 15.1 12.0 18.0

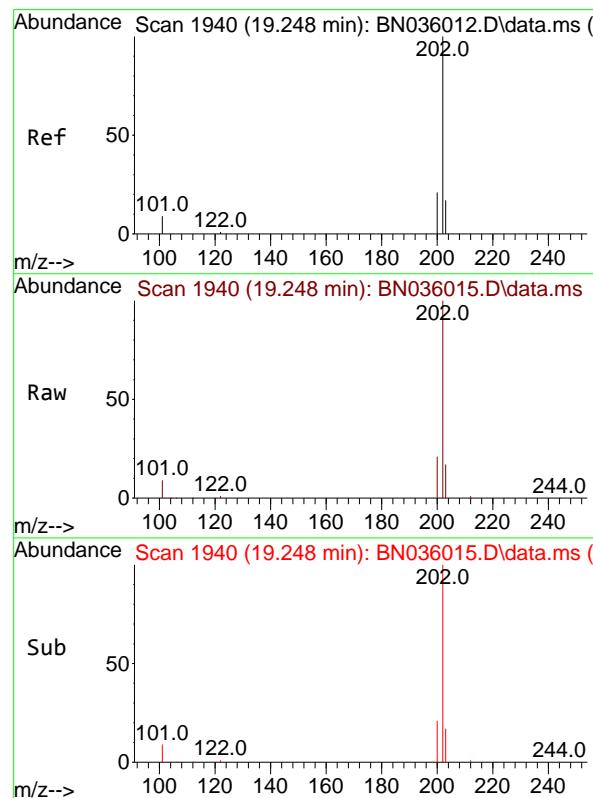
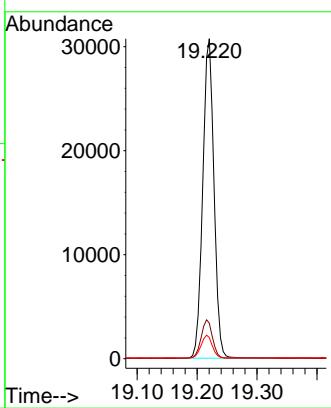




#27  
 Fluoranthene-d10  
 Concen: 3.328 ng  
 RT: 19.220 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

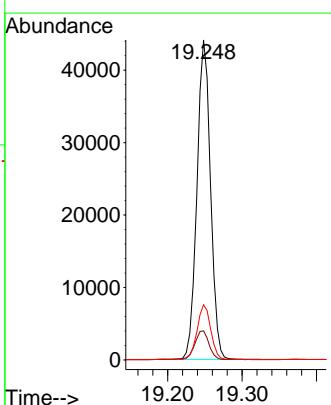
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

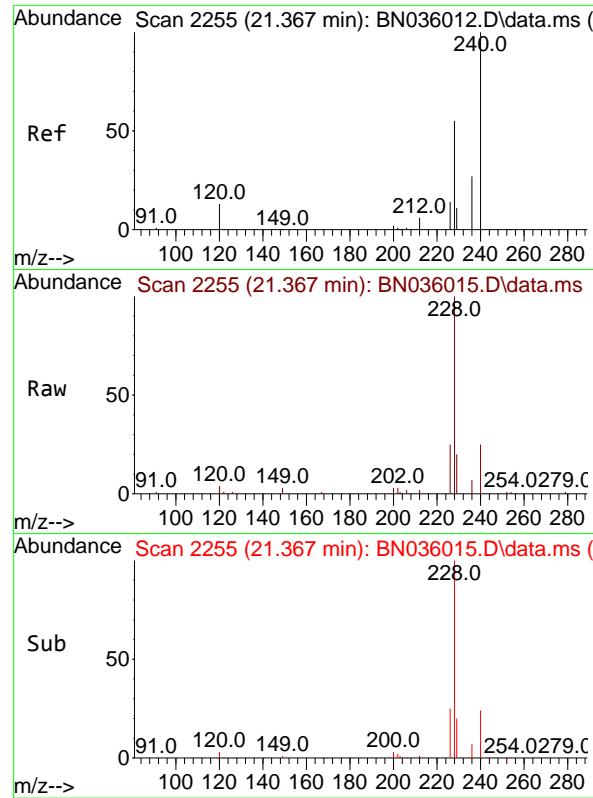
Tgt Ion:212 Resp: 39812  
 Ion Ratio Lower Upper  
 212 100  
 106 12.1 9.7 14.5  
 104 7.1 6.0 9.0



#28  
 Fluoranthene  
 Concen: 3.414 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

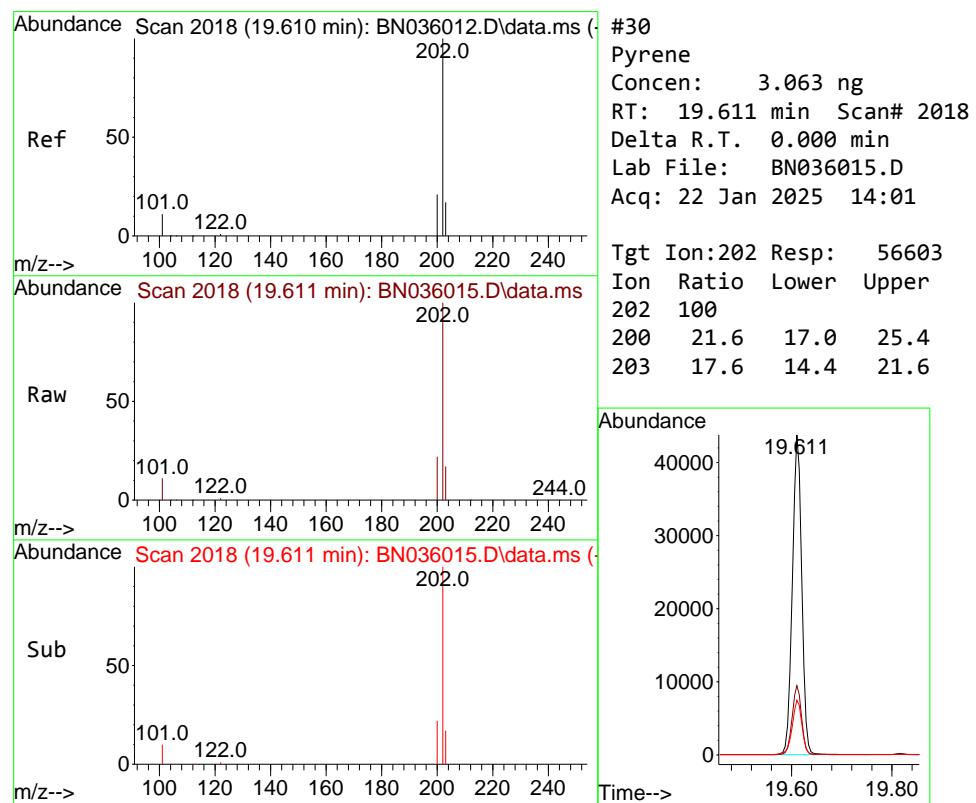
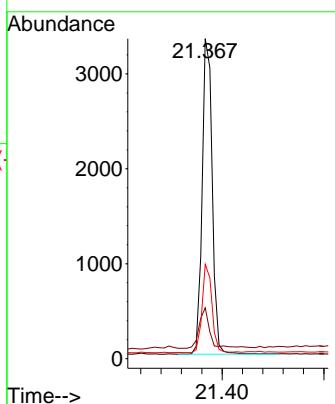
Tgt Ion:202 Resp: 55650  
 Ion Ratio Lower Upper  
 202 100  
 101 9.6 7.6 11.4  
 203 17.1 13.8 20.6





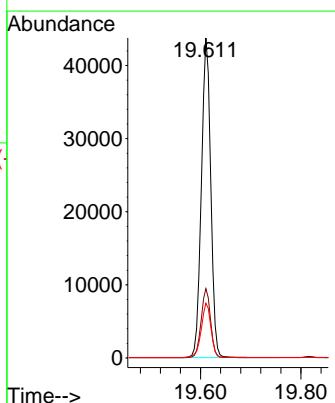
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01 ClientSampleId : SSTDICC3.2

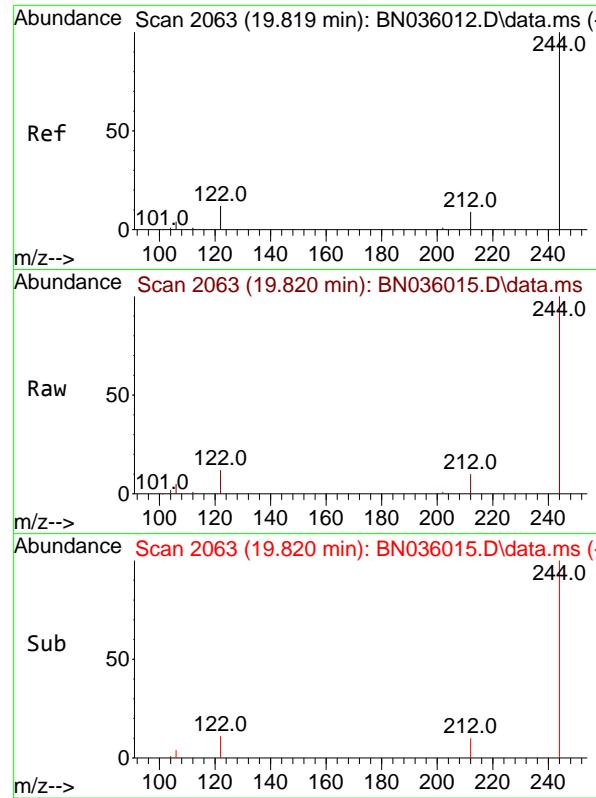
Tgt Ion:240 Resp: 4560  
Ion Ratio Lower Upper  
240 100  
120 15.9 13.9 20.9  
236 29.5 23.7 35.5



#30  
Pyrene  
Concen: 3.063 ng  
RT: 19.611 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01

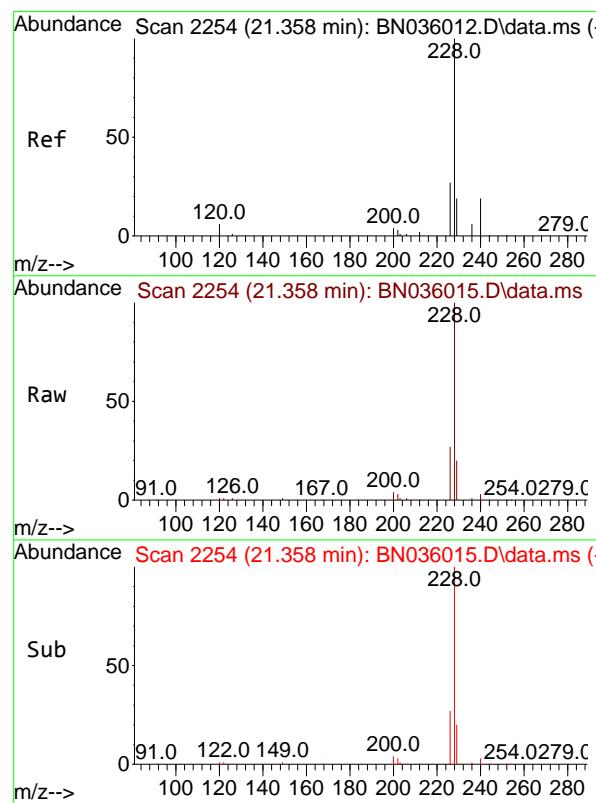
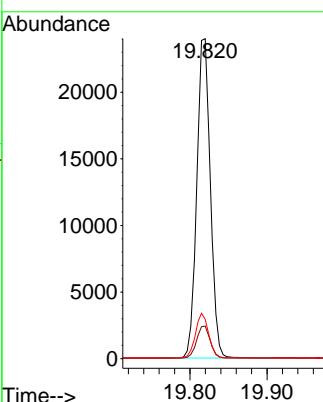
Tgt Ion:202 Resp: 56603  
Ion Ratio Lower Upper  
202 100  
200 21.6 17.0 25.4  
203 17.6 14.4 21.6





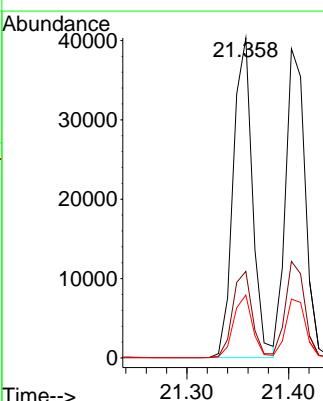
#31  
Terphenyl-d14  
Concen: 3.096 ng  
RT: 19.820 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01 ClientSampleId : SSTDICC3.2

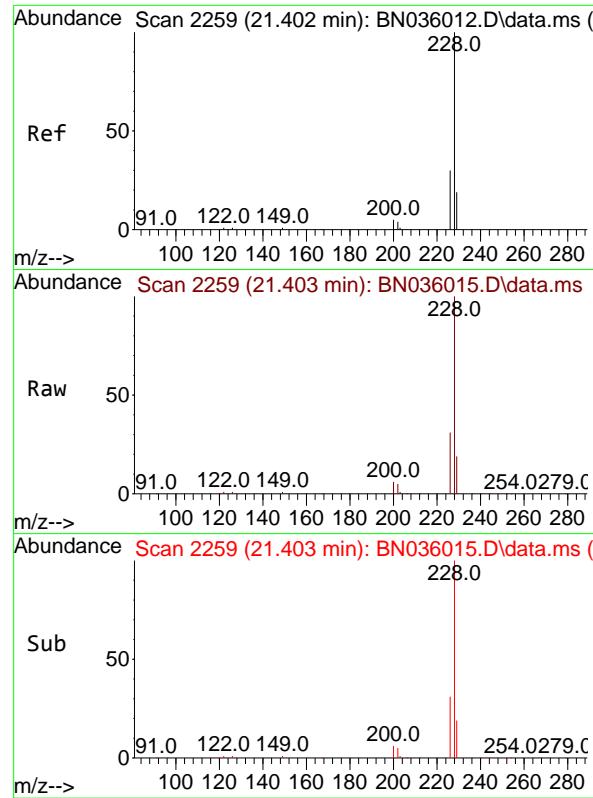
Tgt Ion:244 Resp: 29331  
Ion Ratio Lower Upper  
244 100  
212 10.2 9.1 13.7  
122 12.3 11.3 16.9



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

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

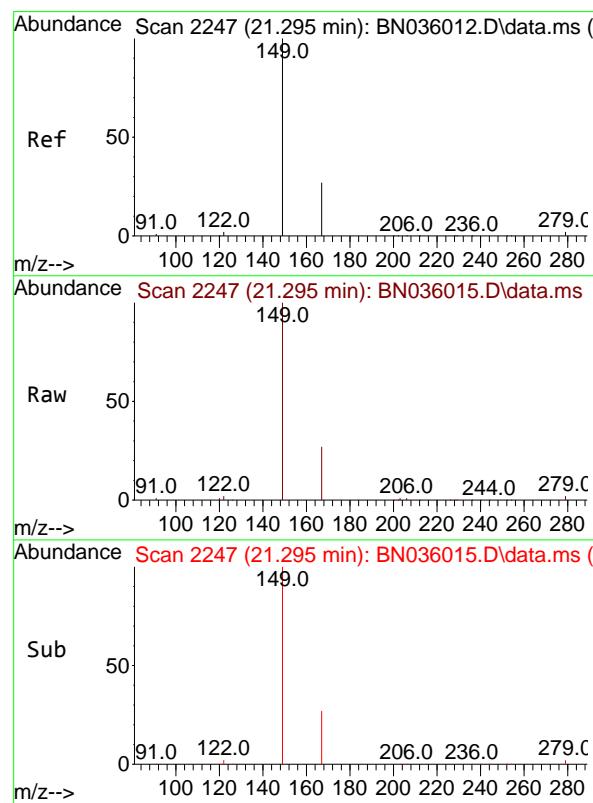
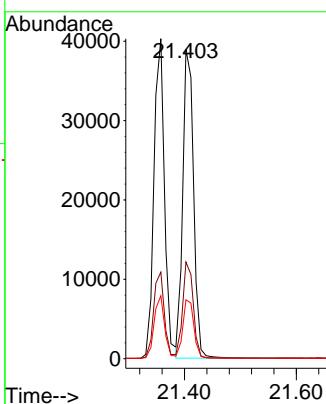




#33  
 Chrysene  
 Concen: 3.095 ng  
 RT: 21.403 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

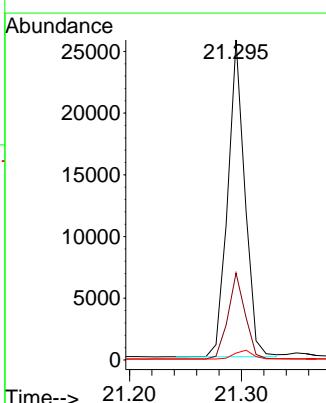
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

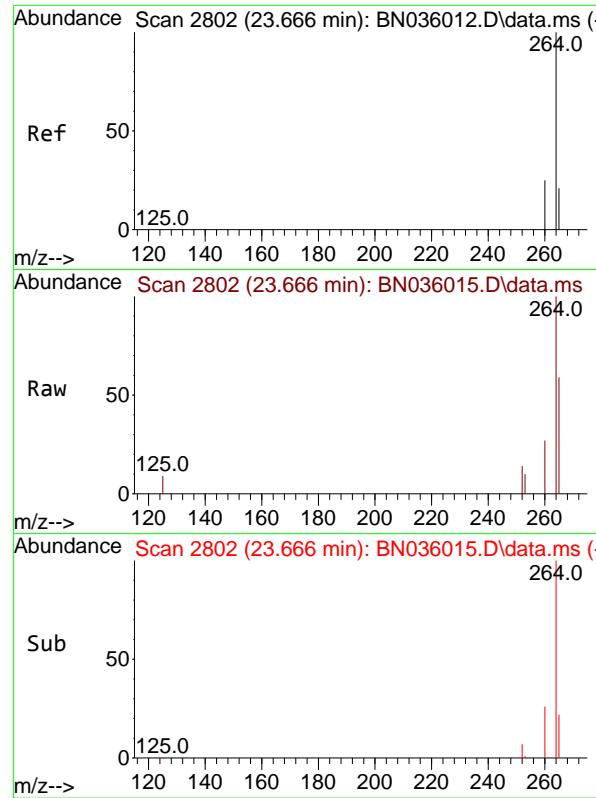
Tgt Ion:228 Resp: 52334  
 Ion Ratio Lower Upper  
 228 100  
 226 31.2 25.3 37.9  
 229 19.1 16.3 24.5



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 3.013 ng  
 RT: 21.295 min Scan# 2247  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

Tgt Ion:149 Resp: 27304  
 Ion Ratio Lower Upper  
 149 100  
 167 27.3 21.9 32.9  
 279 3.0 3.0 4.6#

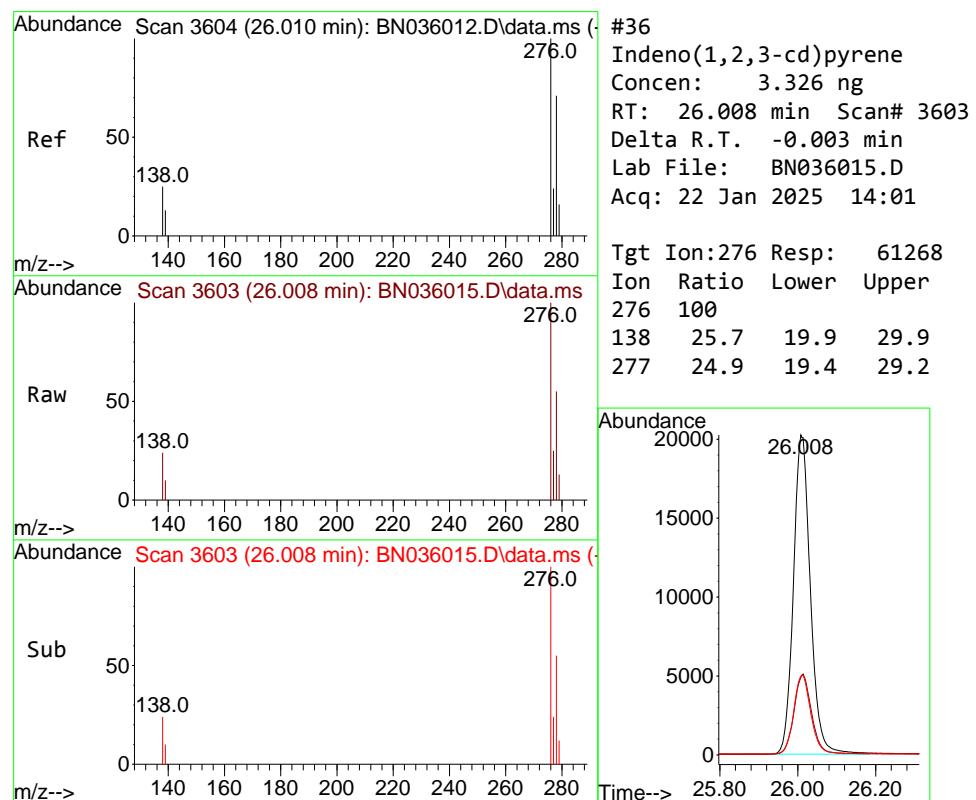
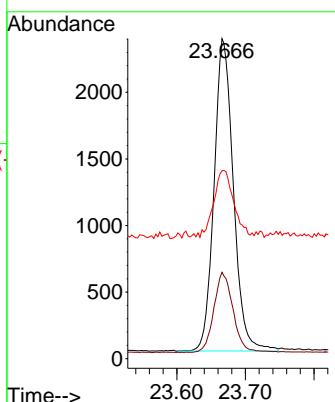




#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.666 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

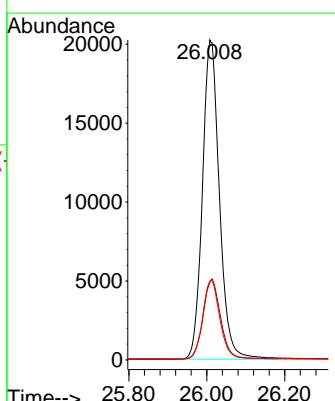
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

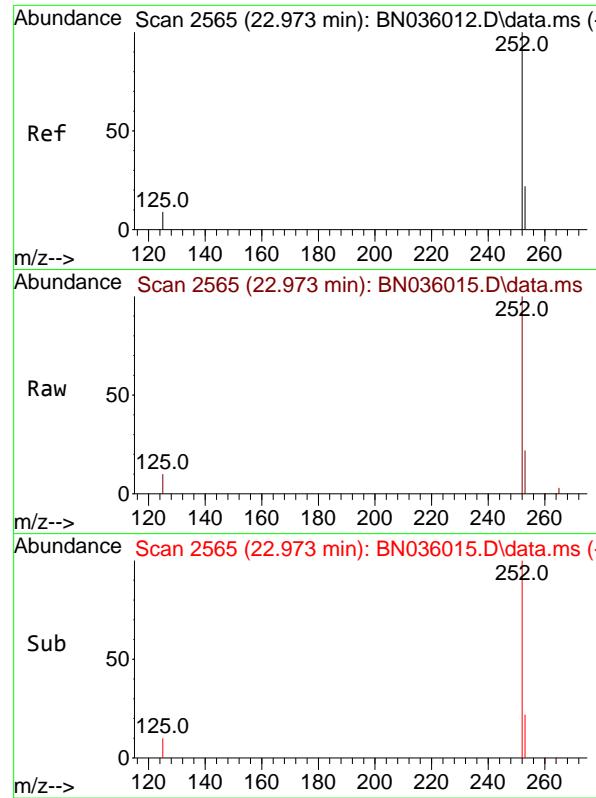
Tgt Ion:264 Resp: 4591  
 Ion Ratio Lower Upper  
 264 100  
 260 27.0 21.8 32.6  
 265 58.7 56.6 84.8



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 3.326 ng  
 RT: 26.008 min Scan# 3603  
 Delta R.T. -0.003 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

Tgt Ion:276 Resp: 61268  
 Ion Ratio Lower Upper  
 276 100  
 138 25.7 19.9 29.9  
 277 24.9 19.4 29.2

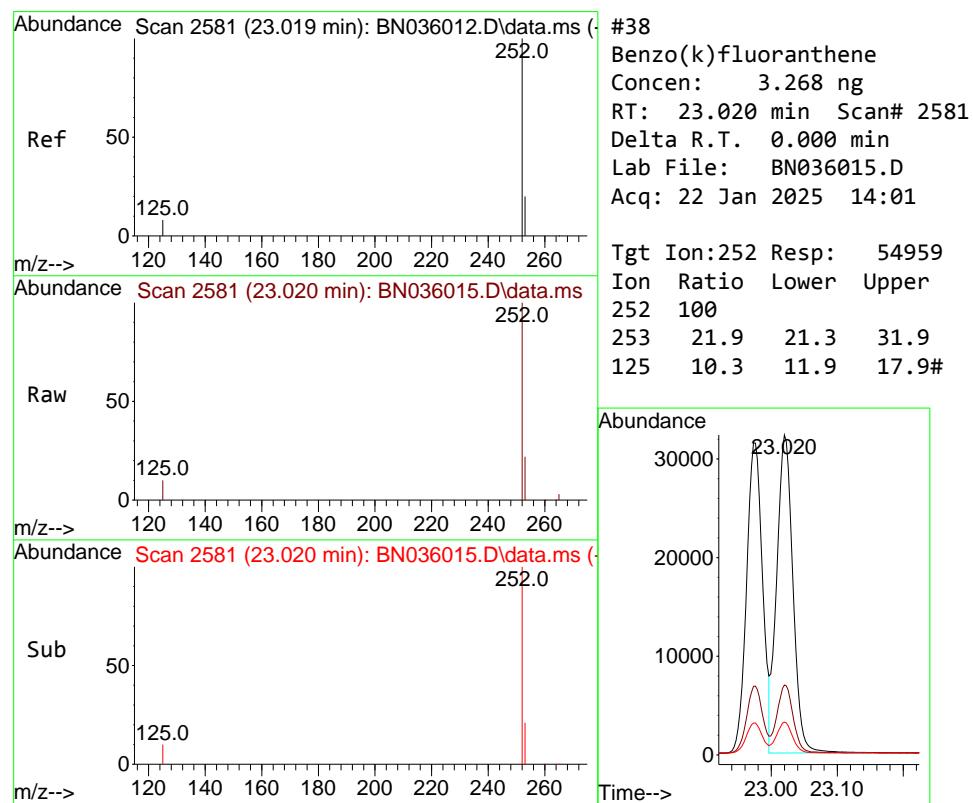
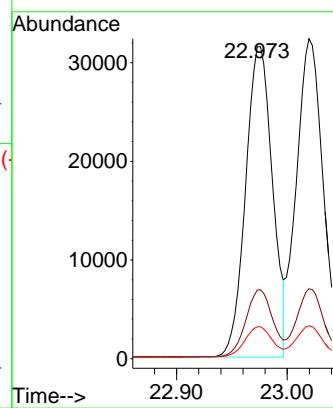




#37  
 Benzo(b)fluoranthene  
 Concen: 3.178 ng  
 RT: 22.973 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

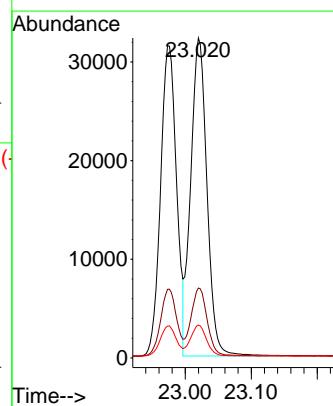
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

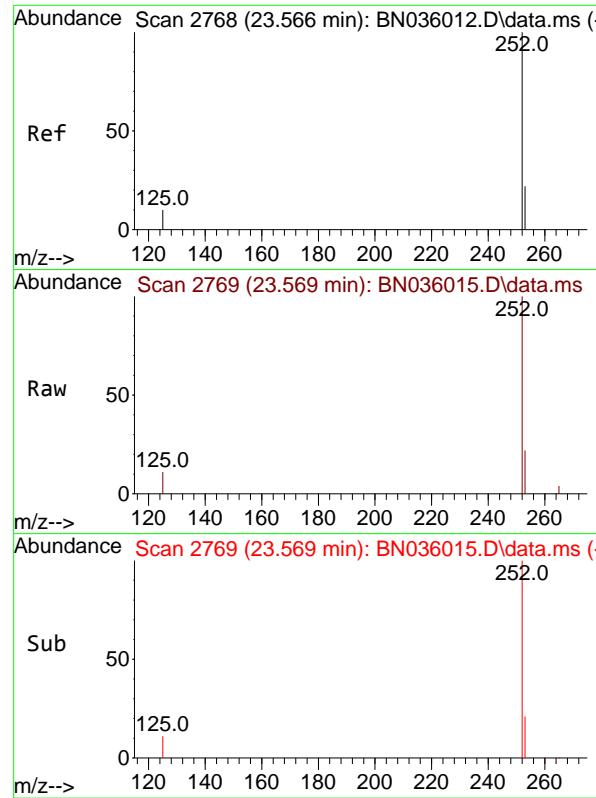
Tgt Ion:252 Resp: 53035  
 Ion Ratio Lower Upper  
 252 100  
 253 22.0 22.5 33.7#  
 125 10.2 11.9 17.9#



#38  
 Benzo(k)fluoranthene  
 Concen: 3.268 ng  
 RT: 23.020 min Scan# 2581  
 Delta R.T. 0.000 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

Tgt Ion:252 Resp: 54959  
 Ion Ratio Lower Upper  
 252 100  
 253 21.9 21.3 31.9  
 125 10.3 11.9 17.9#

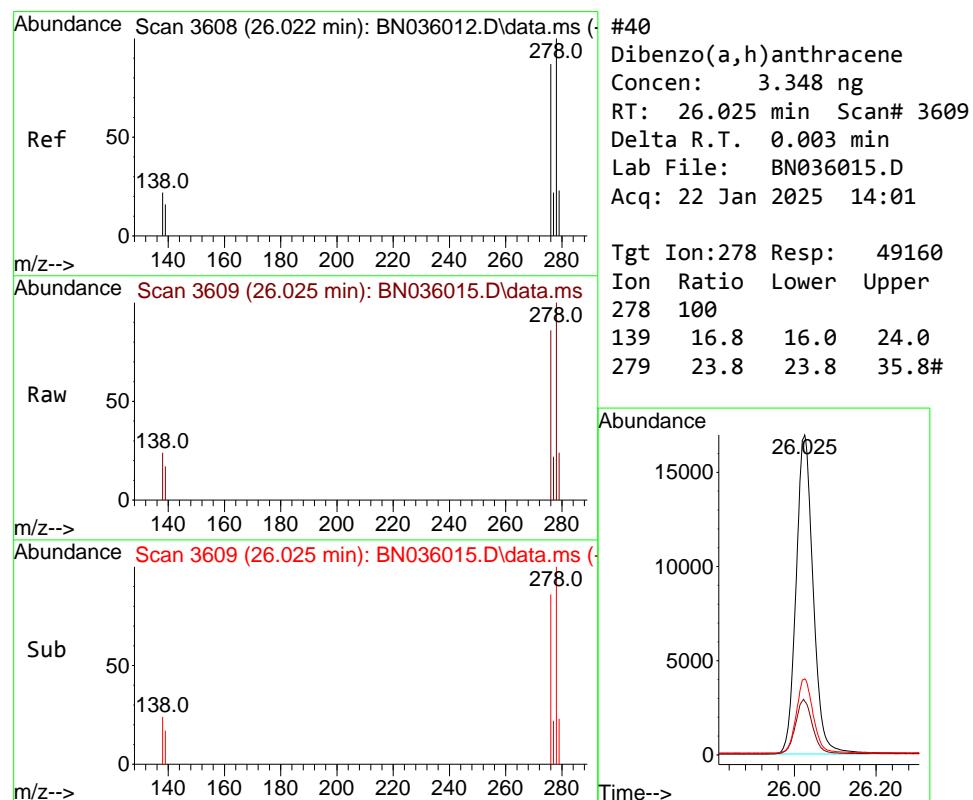
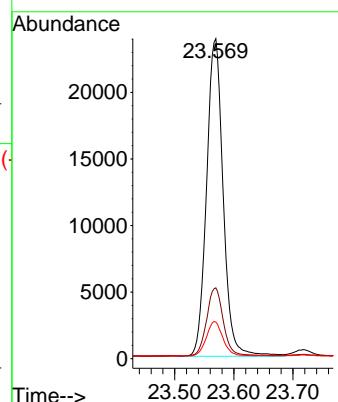




#39  
 Benzo(a)pyrene  
 Concen: 3.261 ng  
 RT: 23.569 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

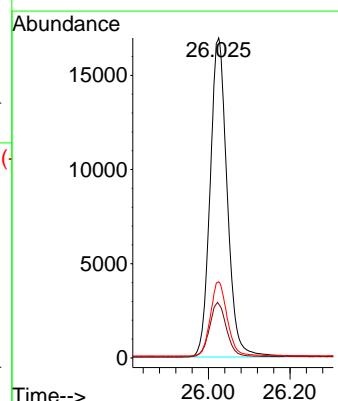
Instrument : BNA\_N  
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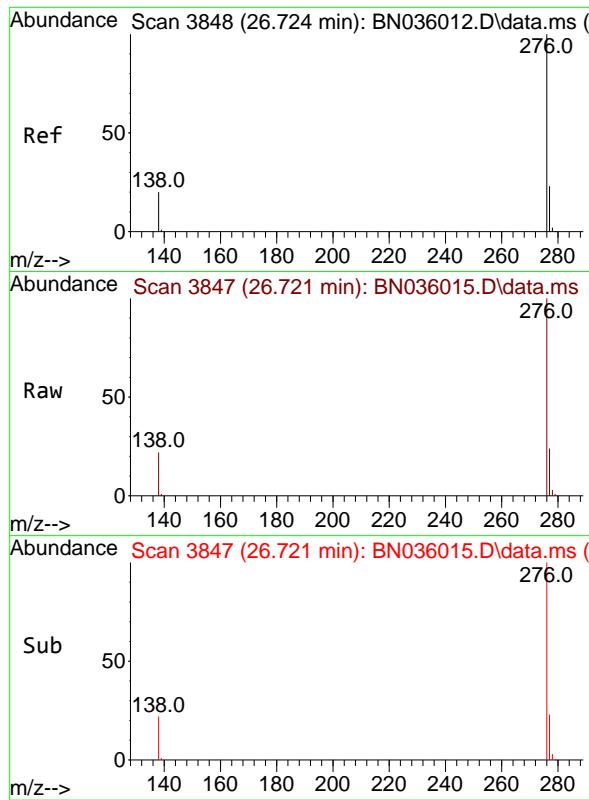
Tgt Ion:252 Resp: 46474  
 Ion Ratio Lower Upper  
 252 100  
 253 22.2 23.8 35.6#  
 125 11.5 14.6 21.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 3.348 ng  
 RT: 26.025 min Scan# 3609  
 Delta R.T. 0.003 min  
 Lab File: BN036015.D  
 Acq: 22 Jan 2025 14:01

Tgt Ion:278 Resp: 49160  
 Ion Ratio Lower Upper  
 278 100  
 139 16.8 16.0 24.0  
 279 23.8 23.8 35.8#

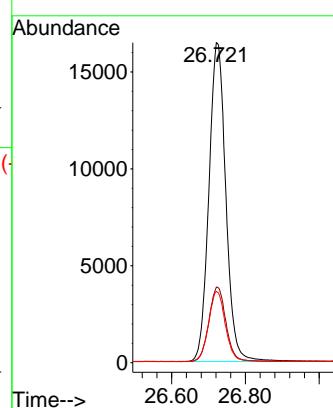




#41  
Benzo(g,h,i)perylene  
Concen: 3.277 ng  
RT: 26.721 min Scan# 3  
Delta R.T. -0.003 min  
Lab File: BN036015.D  
Acq: 22 Jan 2025 14:01

Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

Tgt Ion:276 Resp: 52446  
Ion Ratio Lower Upper  
276 100  
277 23.6 21.3 31.9  
138 22.2 19.2 28.8



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

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

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

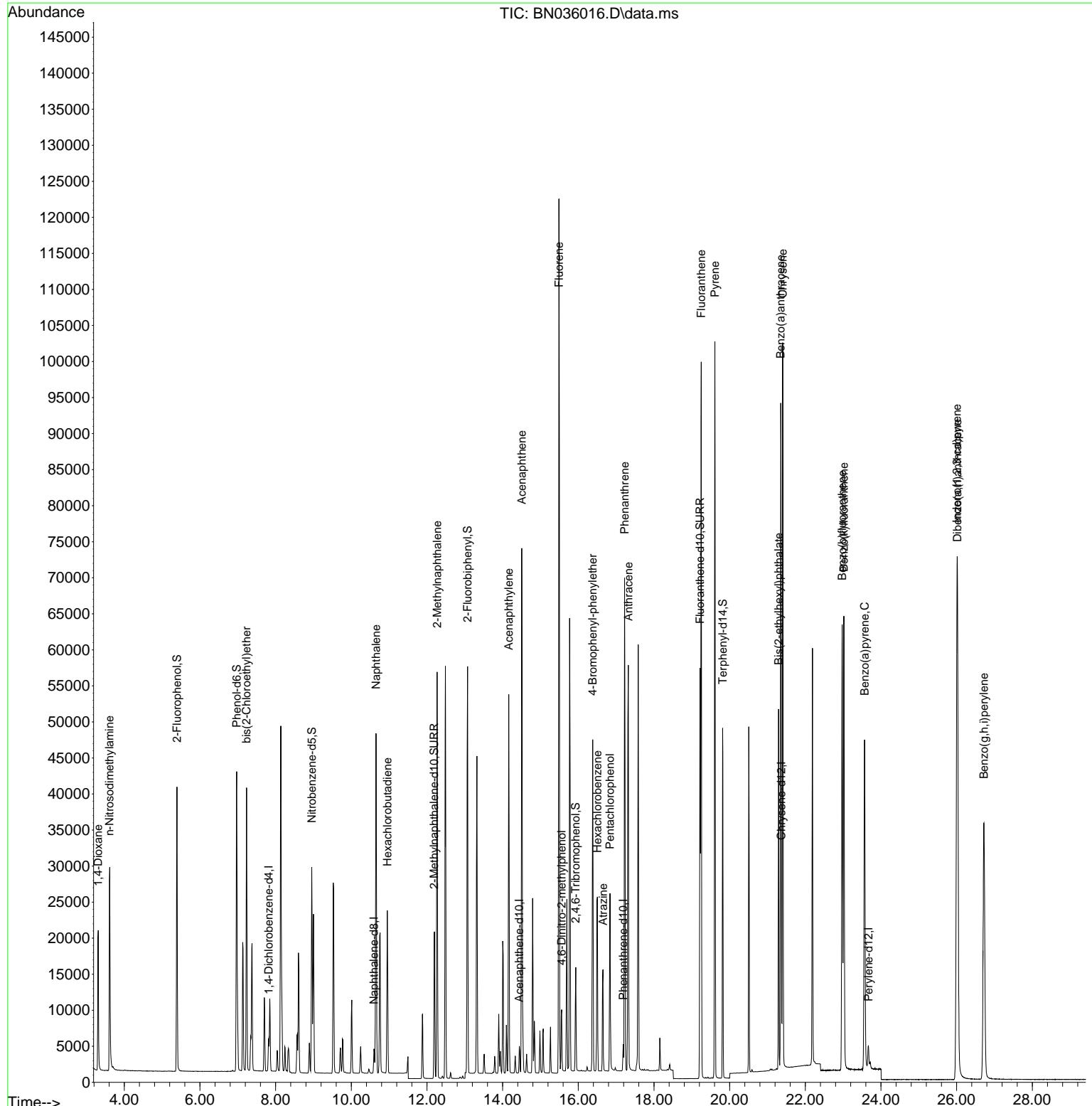
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	2110	0.400	ng	0.00
7) Naphthalene-d8	10.600	136	3989	0.400	ng	#-0.01
13) Acenaphthene-d10	14.442	164	2132	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	4417	0.400	ng	# 0.00
29) Chrysene-d12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

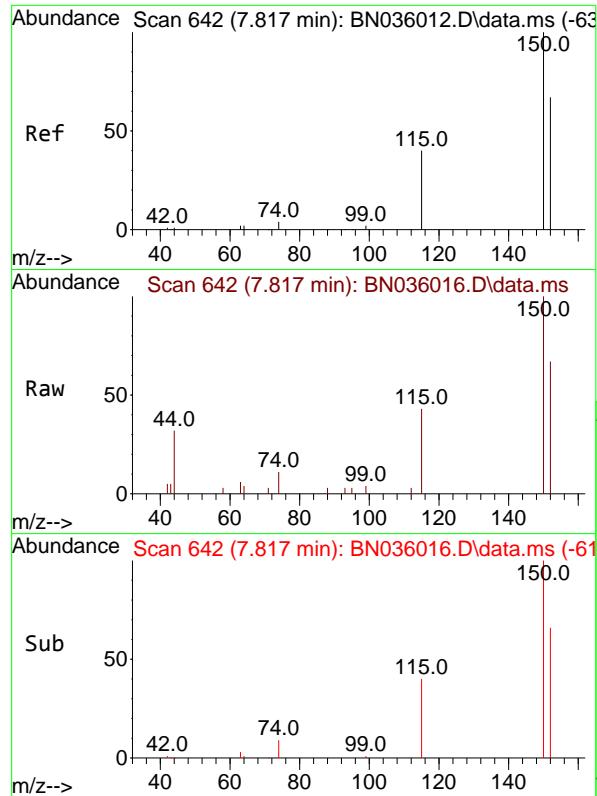
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

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

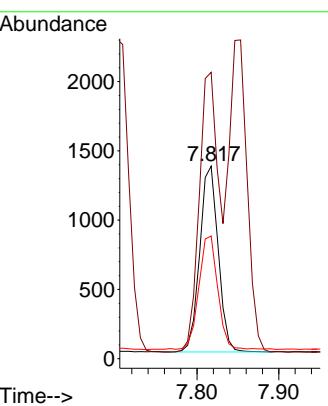




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

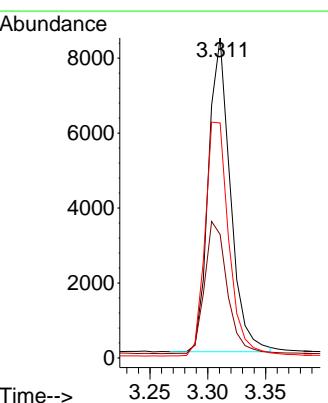
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

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



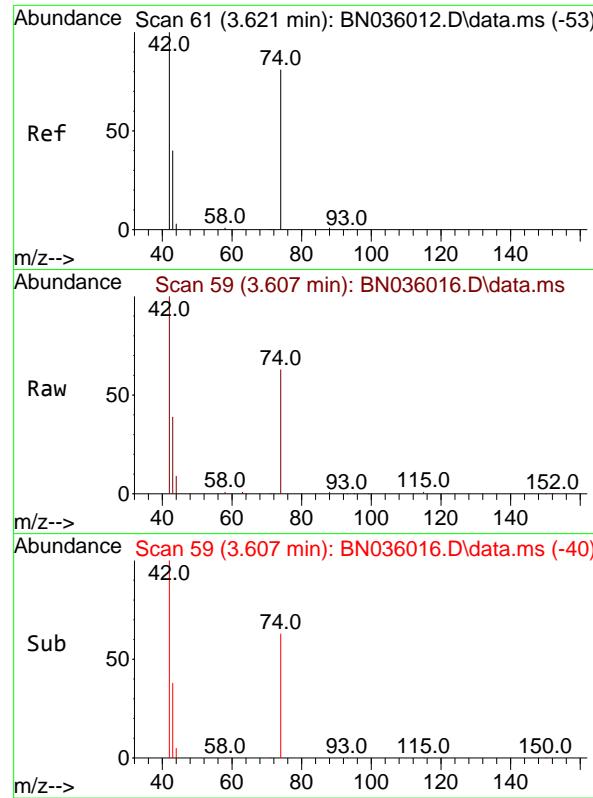
#2  
1,4-Dioxane  
Concen: 4.660 ng  
RT: 3.311 min Scan# 18  
Delta R.T. 0.000 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

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



Abundance Scan 18 (3.311 min): BN036016.D\data.ms (-8)

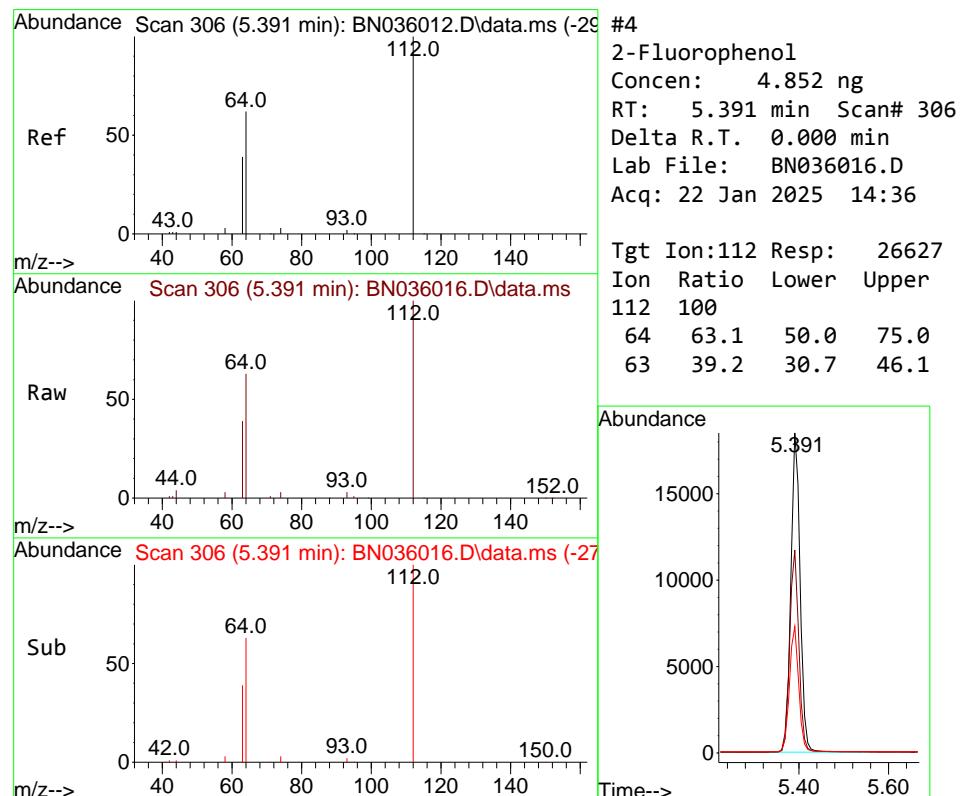
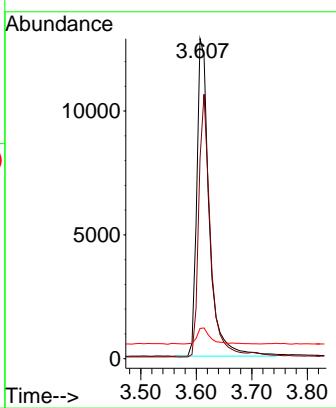




#3  
n-Nitrosodimethylamine  
Concen: 4.679 ng  
RT: 3.607 min Scan# 5  
Delta R.T. -0.014 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

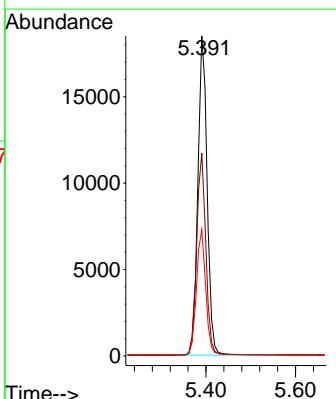
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

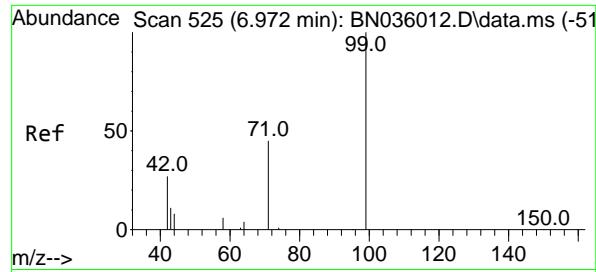
Tgt Ion: 42 Resp: 20013  
Ion Ratio Lower Upper  
42 100  
74 77.4 58.1 87.1  
44 5.5 6.2 9.4#



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

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

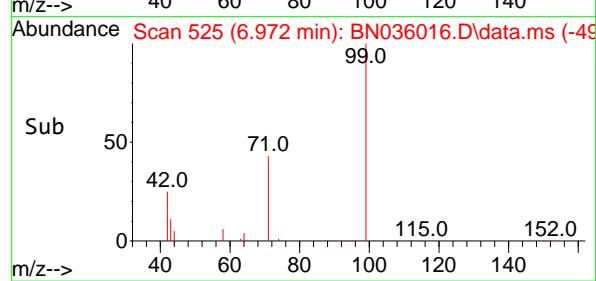
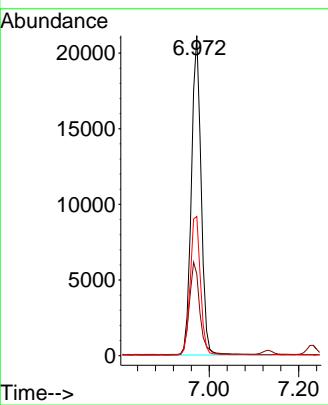




#5  
 Phenol-d6  
 Concen: 4.948 ng  
 RT: 6.972 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

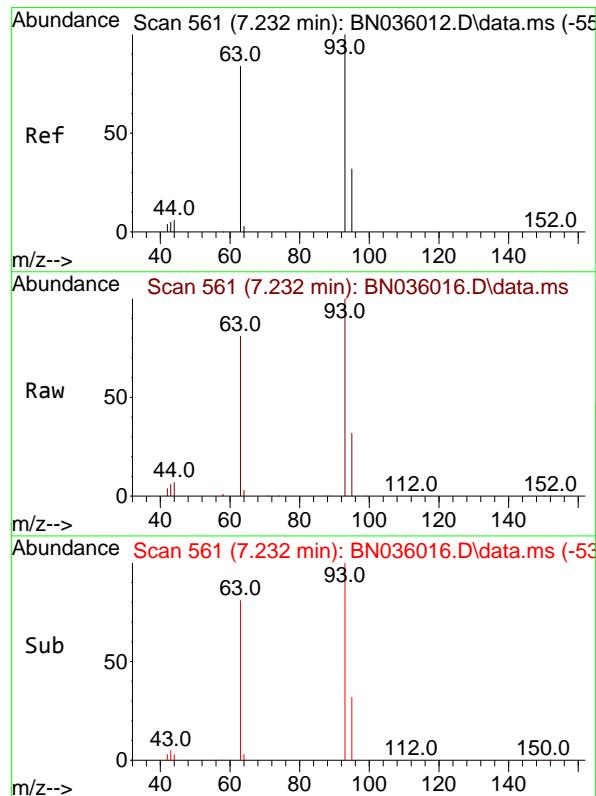
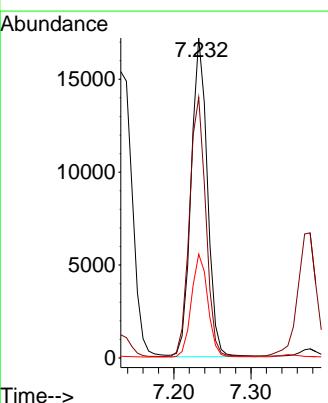
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

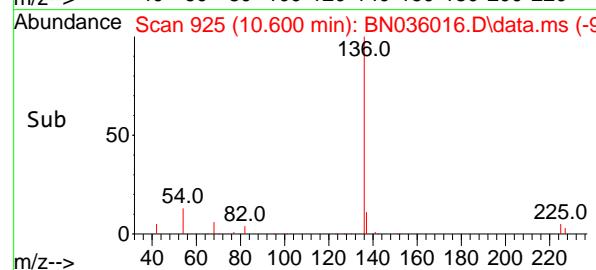
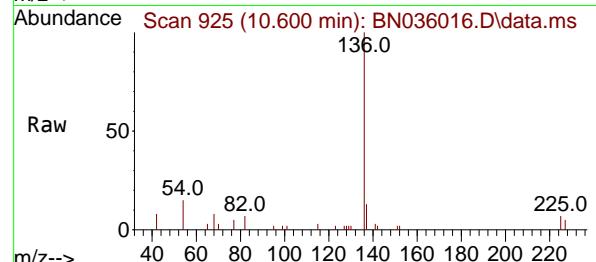
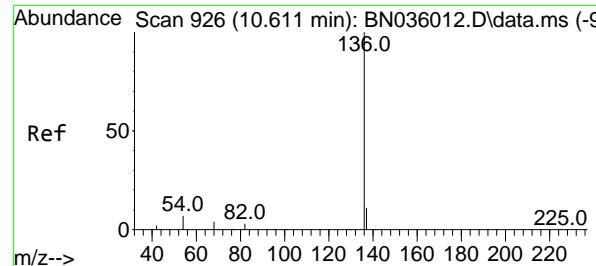
Tgt Ion: 99 Resp: 31890  
 Ion Ratio Lower Upper  
 99 100  
 42 31.1 26.8 40.2  
 71 45.9 36.6 55.0



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

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

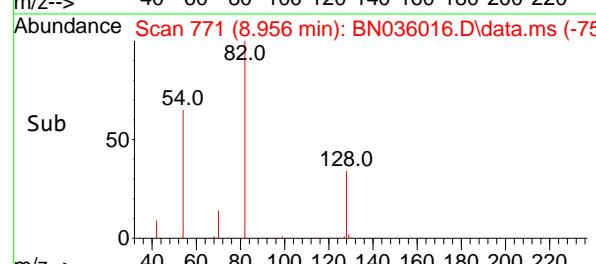
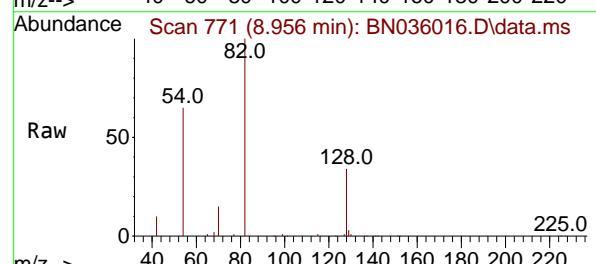
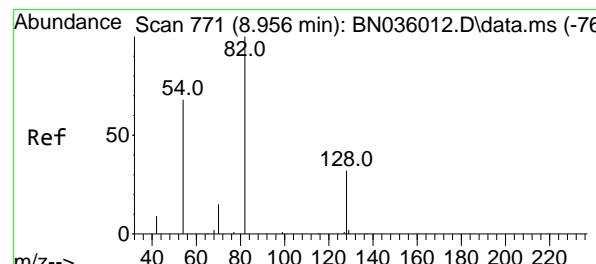
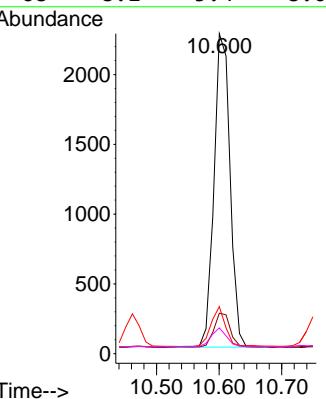




#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

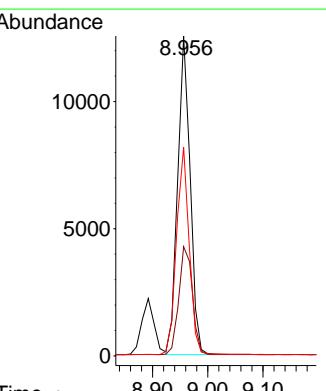
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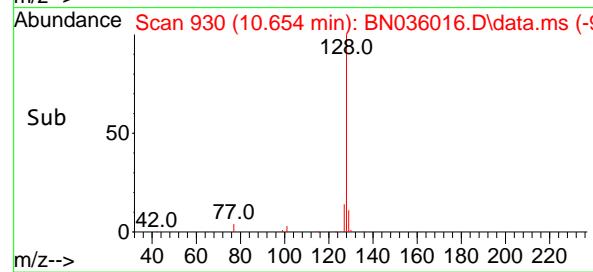
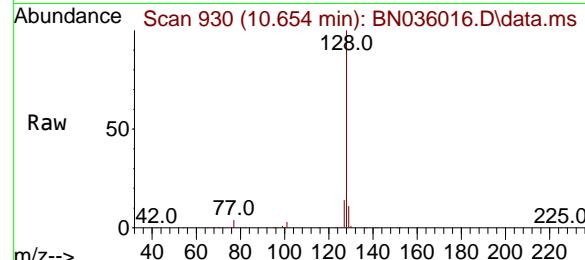
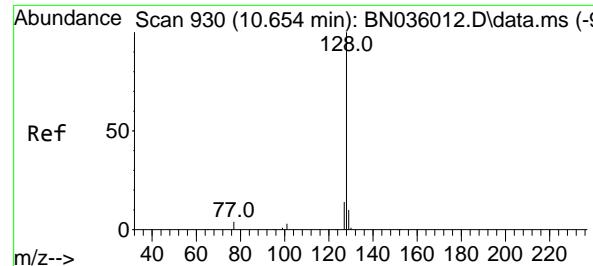
Tgt Ion:136 Resp: 3989  
 Ion Ratio Lower Upper  
 136 100  
 137 12.6 10.4 15.6  
 54 14.7 7.7 11.5#  
 68 8.1 5.4 8.0#



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

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





#9

Naphthalene

Concen: 4.866 ng

RT: 10.654 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

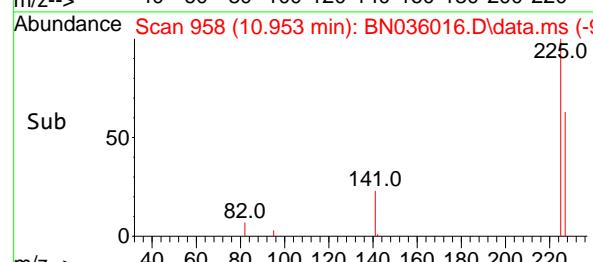
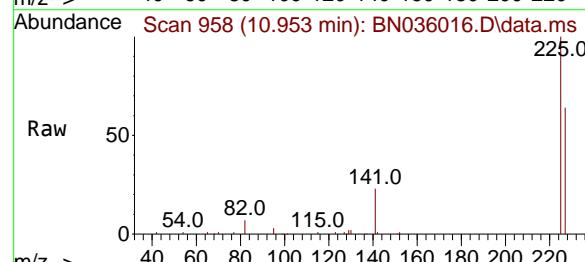
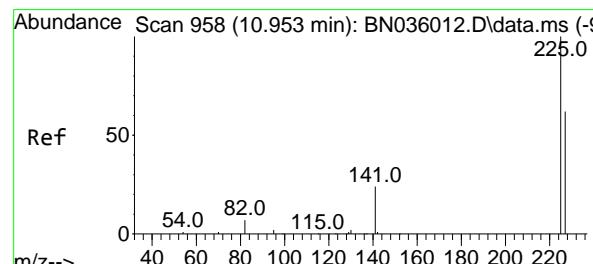
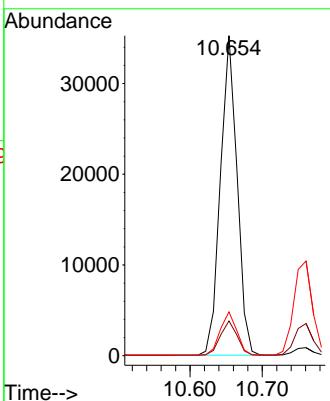
Tgt Ion:128 Resp: 56372

Ion Ratio Lower Upper

128 100

129 10.8 9.4 14.2

127 13.7 12.6 19.0



#10

Hexachlorobutadiene

Concen: 4.698 ng

RT: 10.953 min Scan# 958

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

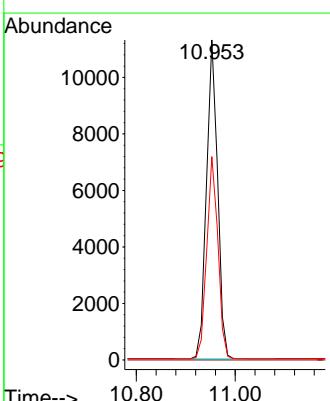
Tgt Ion:225 Resp: 17582

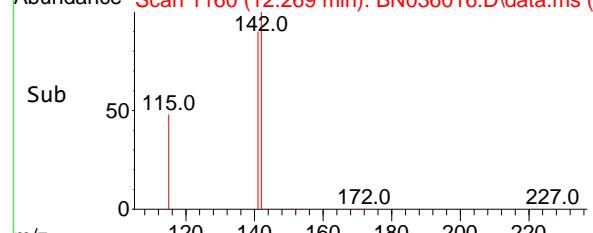
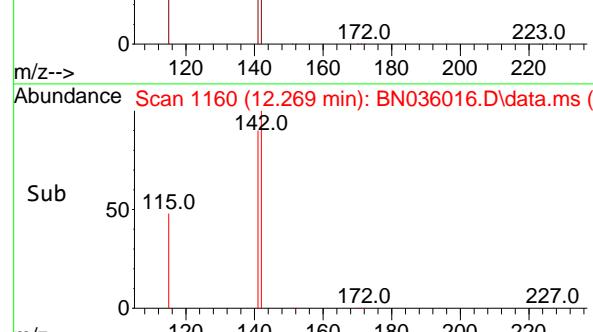
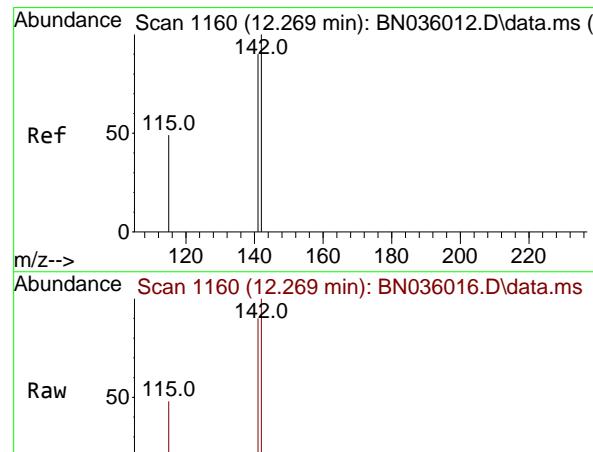
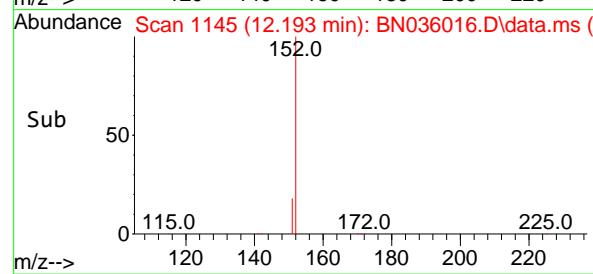
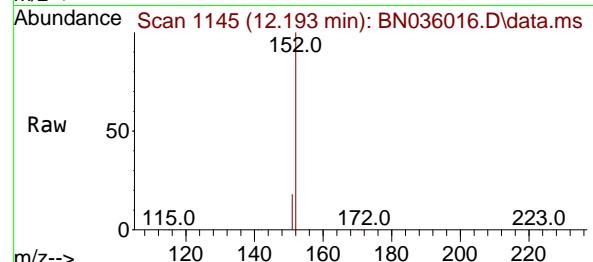
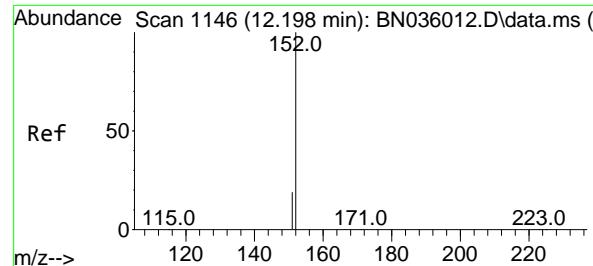
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.7 51.0 76.6





#11

2-Methylnaphthalene-d10

Concen: 5.012 ng

RT: 12.193 min Scan# 1146

Delta R.T. -0.005 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA\_N

ClientSampleId :

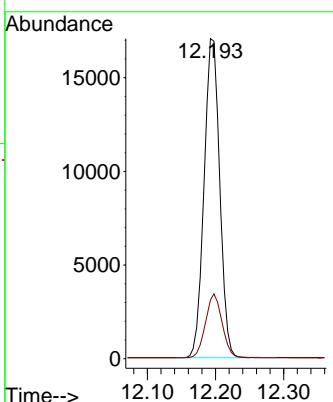
SSTDICC5.0

Tgt Ion:152 Resp: 27183

Ion Ratio Lower Upper

152 100

151 21.2 16.6 25.0



#12

2-Methylnaphthalene

Concen: 4.999 ng

RT: 12.269 min Scan# 1160

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

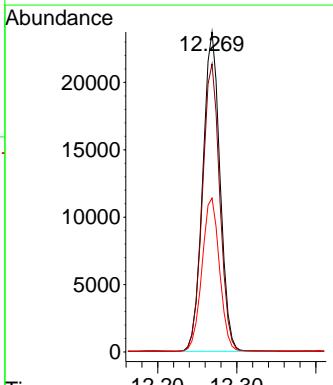
Tgt Ion:142 Resp: 35942

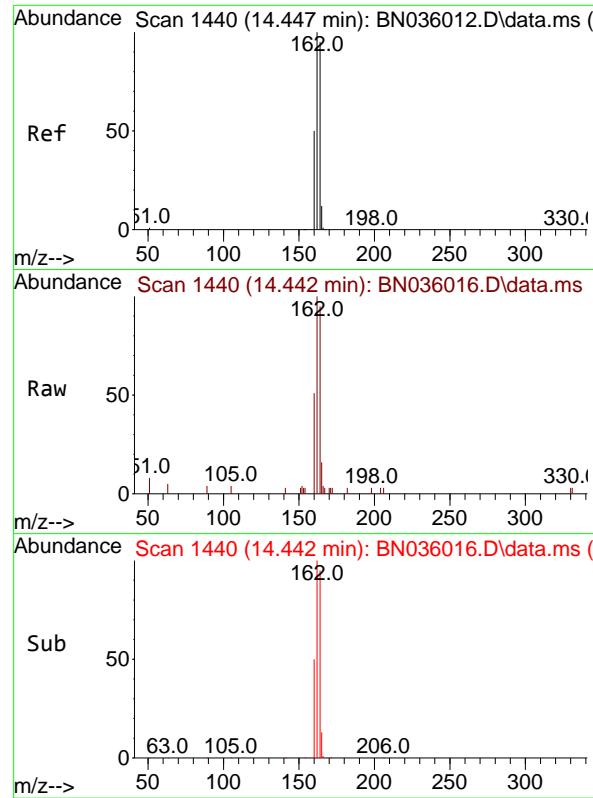
Ion Ratio Lower Upper

142 100

141 90.0 72.2 108.2

115 48.1 41.2 61.8

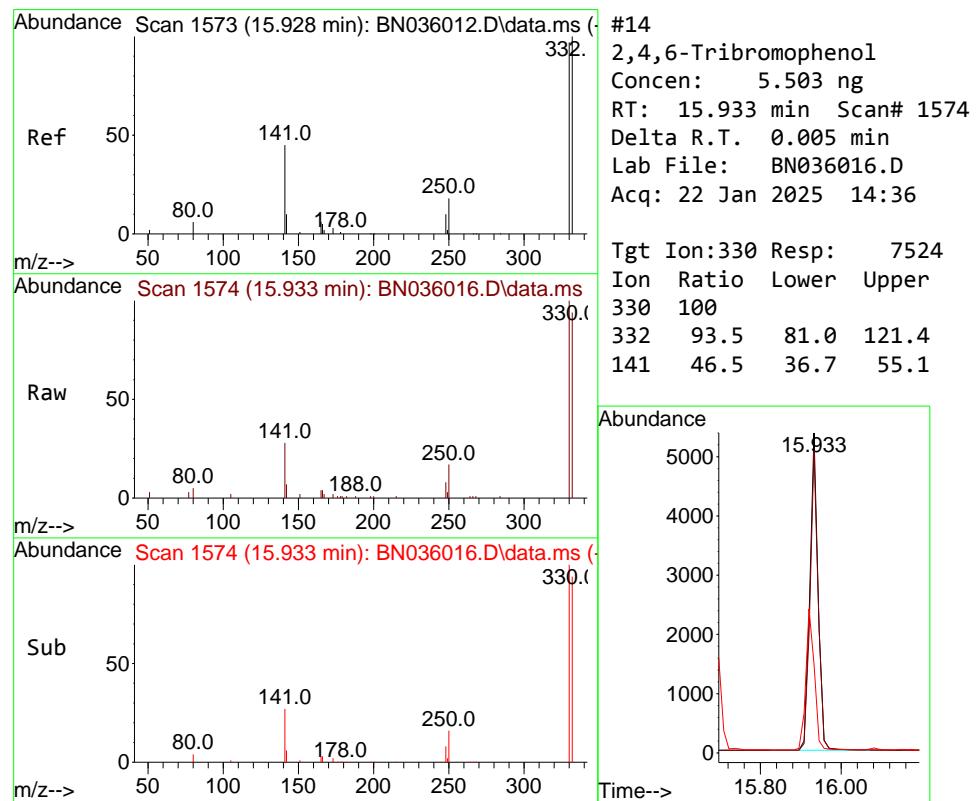
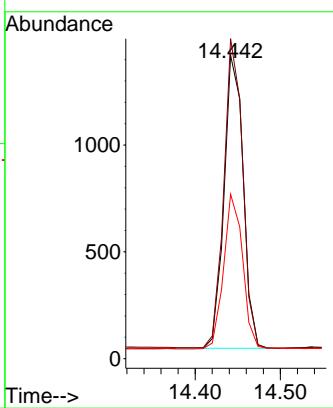




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.442 min Scan# 1442  
 Delta R.T. -0.006 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

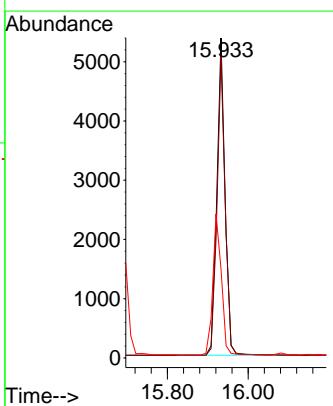
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

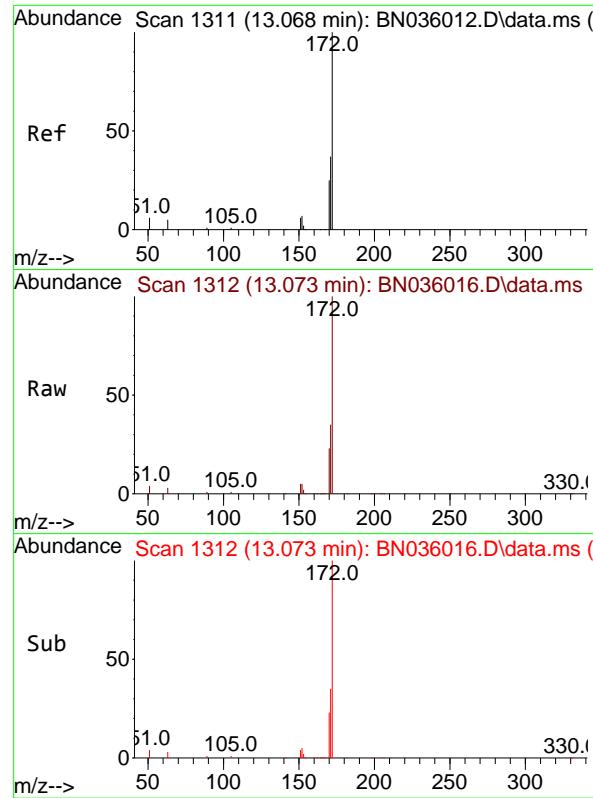
Tgt Ion:164 Resp: 2132  
 Ion Ratio Lower Upper  
 164 100  
 162 105.5 84.1 126.1  
 160 54.2 43.8 65.8



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

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

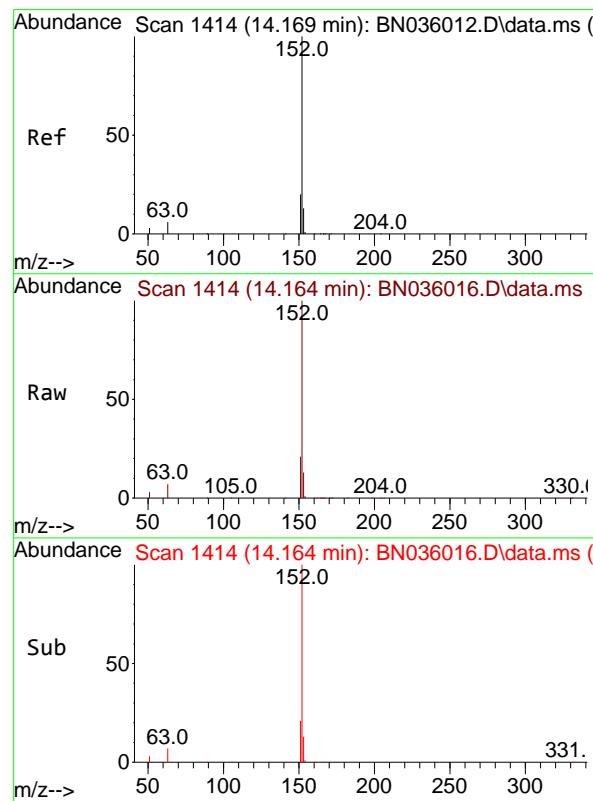
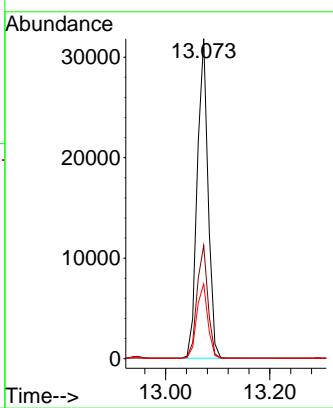




#15  
2-Fluorobiphenyl  
Concen: 4.827 ng  
RT: 13.073 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

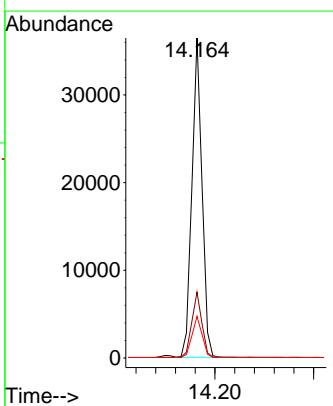
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

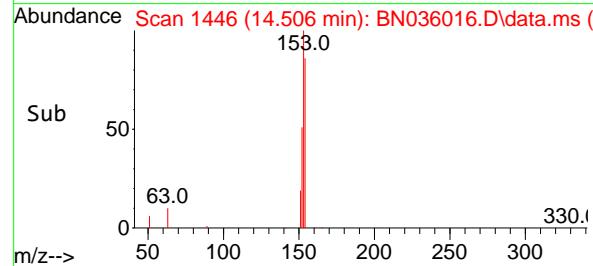
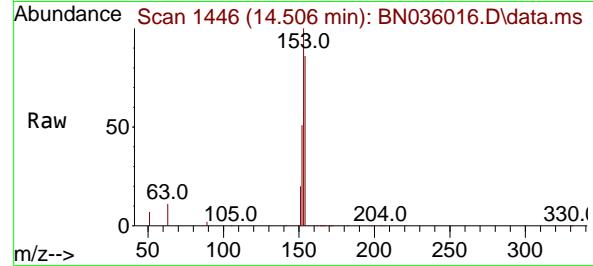
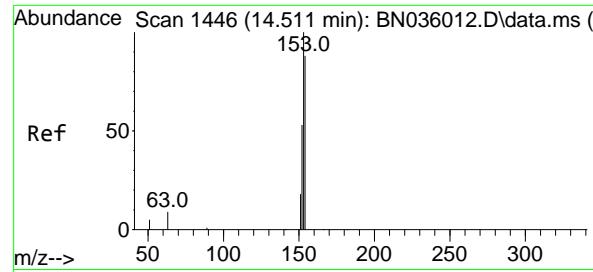
Tgt Ion:172 Resp: 45936  
Ion Ratio Lower Upper  
172 100  
171 35.4 30.9 46.3  
170 23.4 21.2 31.8



#16  
Acenaphthylene  
Concen: 5.104 ng  
RT: 14.164 min Scan# 1414  
Delta R.T. -0.006 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

Tgt Ion:152 Resp: 51595  
Ion Ratio Lower Upper  
152 100  
151 20.5 16.2 24.2  
153 13.0 10.4 15.6





#17

Acenaphthene

Concen: 5.109 ng

RT: 14.506 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

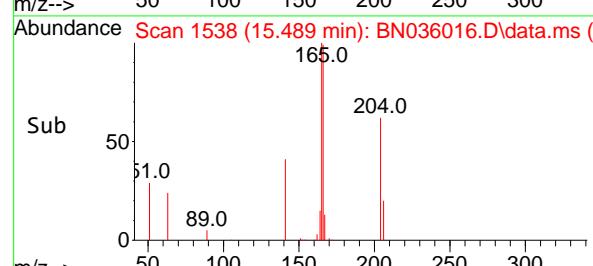
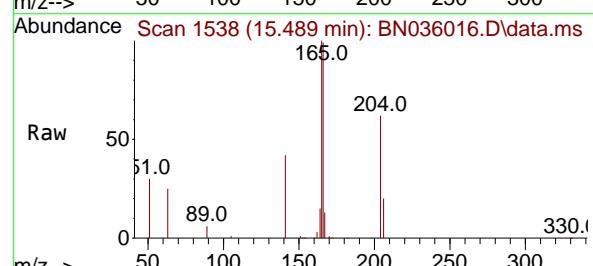
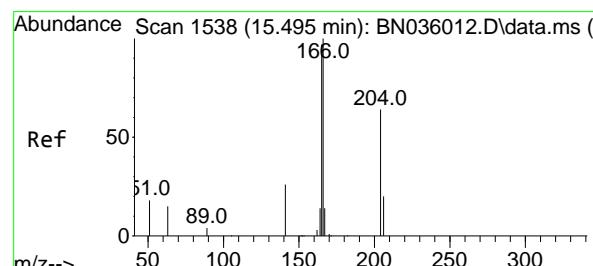
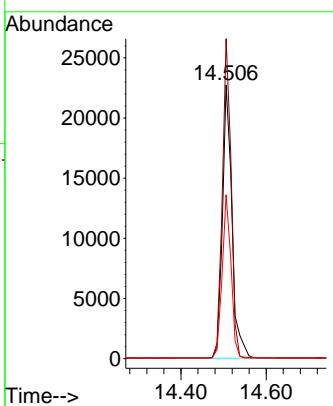
Tgt Ion:154 Resp: 35366

Ion Ratio Lower Upper

154 100

153 107.5 88.9 133.3

152 55.4 48.1 72.1



#18

Fluorene

Concen: 5.223 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

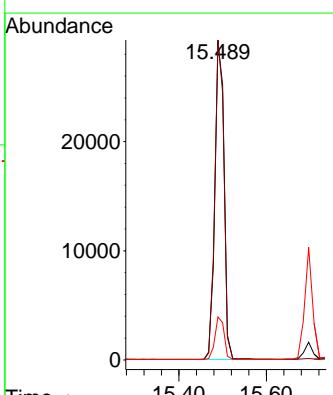
Tgt Ion:166 Resp: 45293

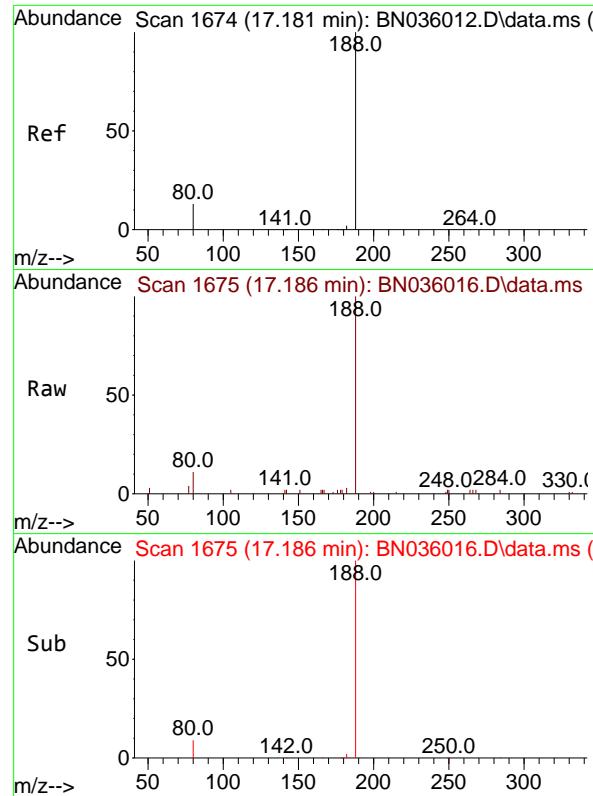
Ion Ratio Lower Upper

166 100

165 100.5 78.5 117.7

167 12.8 10.7 16.1

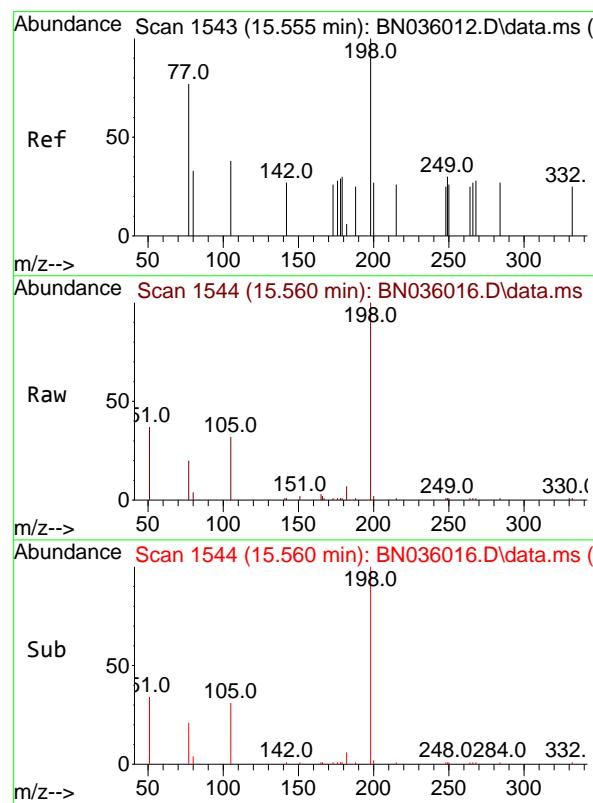
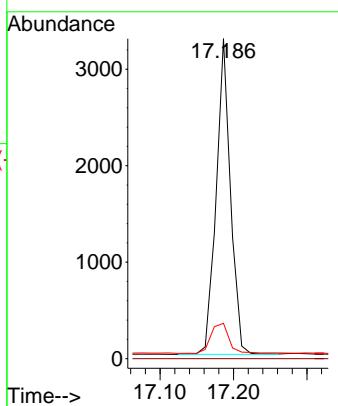




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.186 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

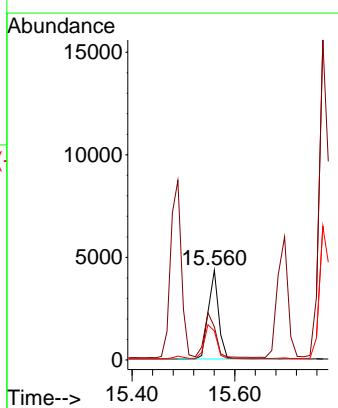
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

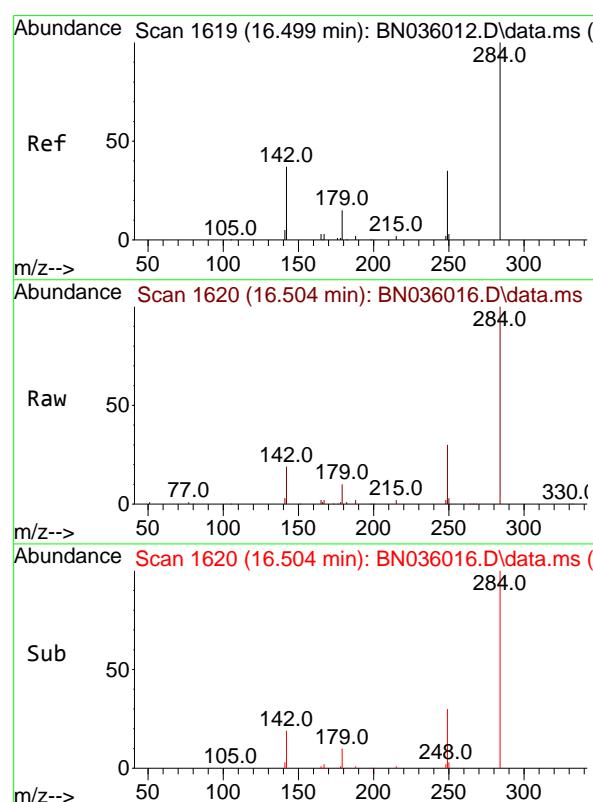
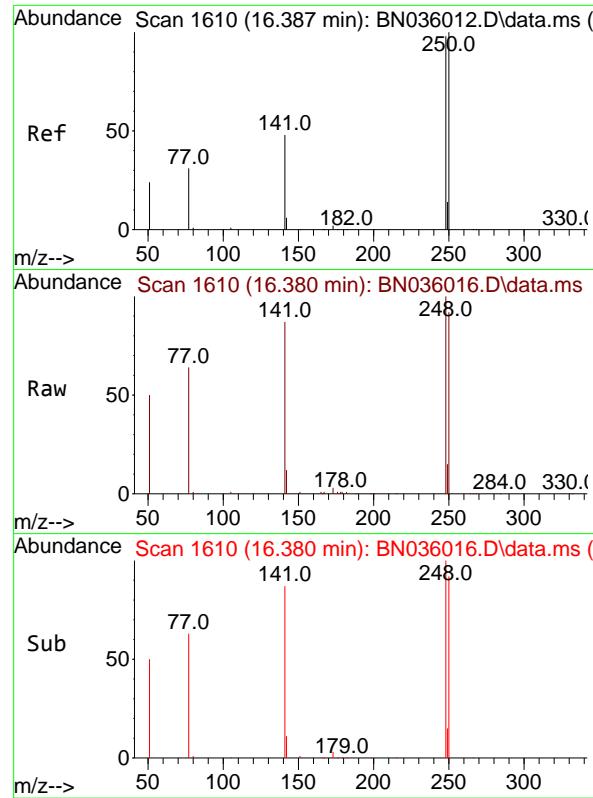
Tgt Ion:188 Resp: 4417  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 11.0 12.3 18.5#



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 5.790 ng  
 RT: 15.560 min Scan# 1544  
 Delta R.T. 0.005 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

Tgt Ion:198 Resp: 5963  
 Ion Ratio Lower Upper  
 198 100  
 51 36.8 68.1 102.1#  
 105 32.2 46.5 69.7#





#21

4-Bromophenyl-phenylether

Concen: 4.925 ng

RT: 16.380 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

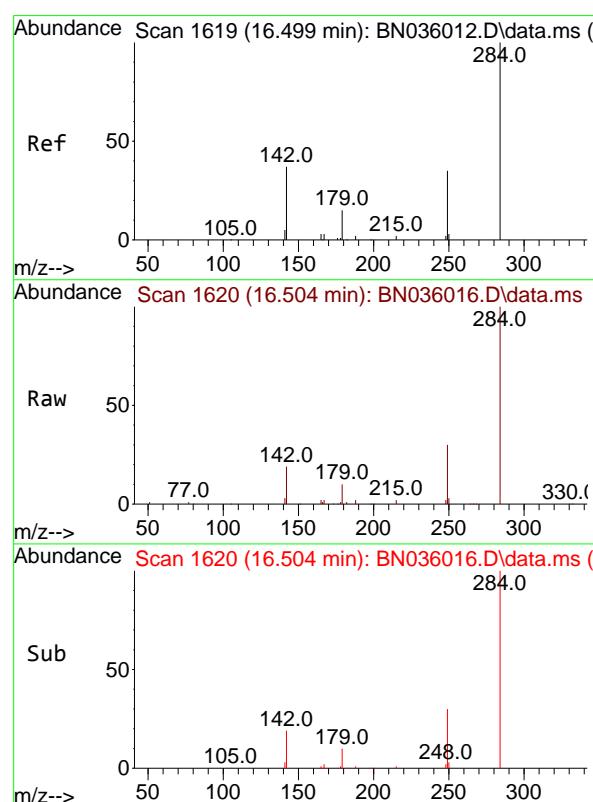
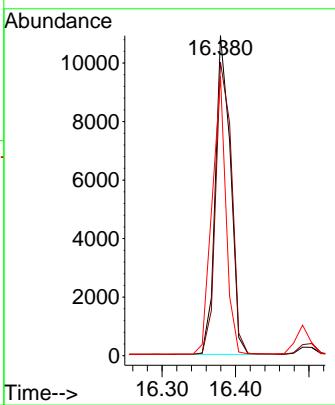
Tgt Ion:248 Resp: 15495

Ion Ratio Lower Upper

248 100

250 91.8 81.5 122.3

141 87.3 41.8 62.6#



#22

Hexachlorobenzene

Concen: 4.816 ng

RT: 16.504 min Scan# 1620

Delta R.T. 0.005 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

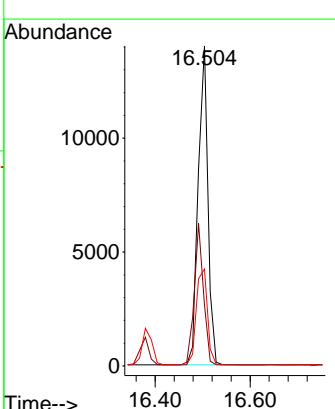
Tgt Ion:284 Resp: 19953

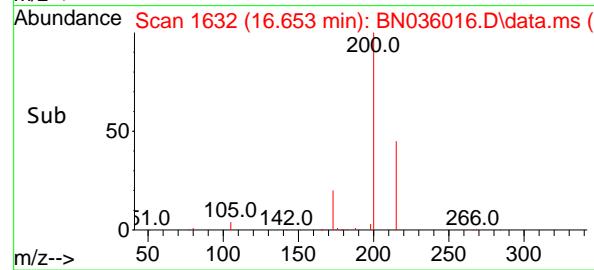
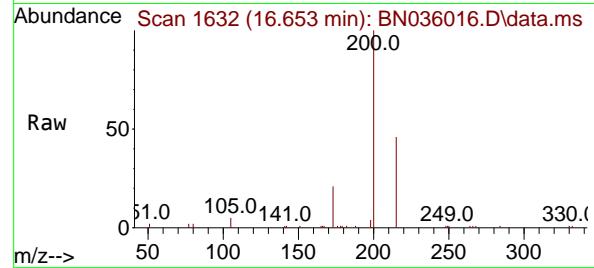
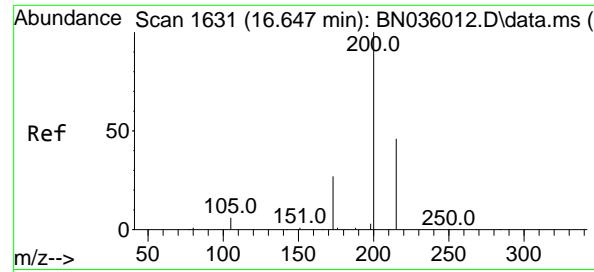
Ion Ratio Lower Upper

284 100

142 41.8 33.6 50.4

249 34.2 28.8 43.2

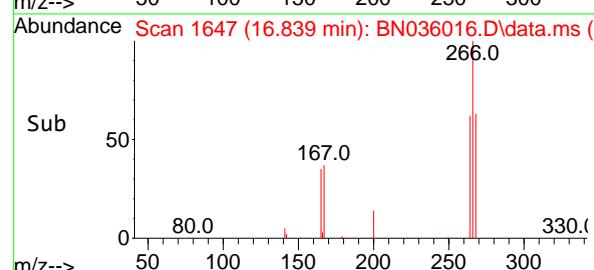
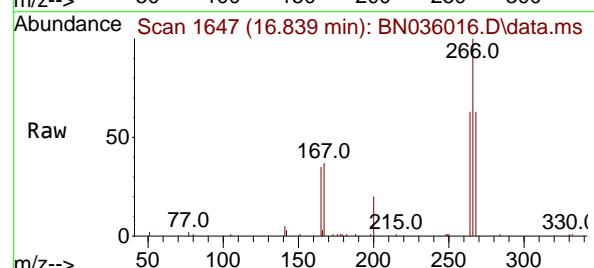
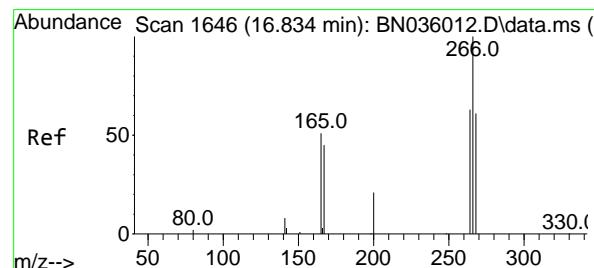
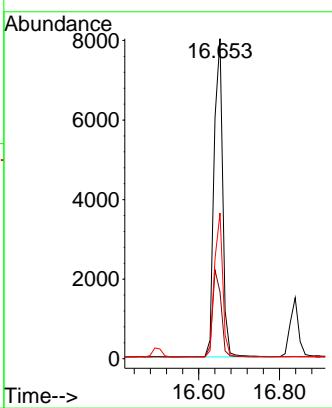




#23  
Atrazine  
Concen: 5.212 ng  
RT: 16.653 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

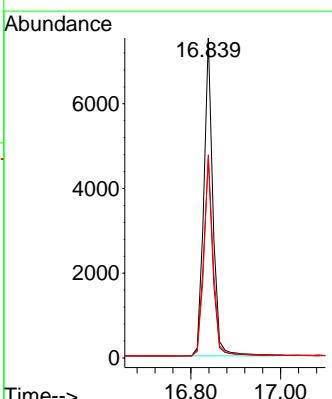
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

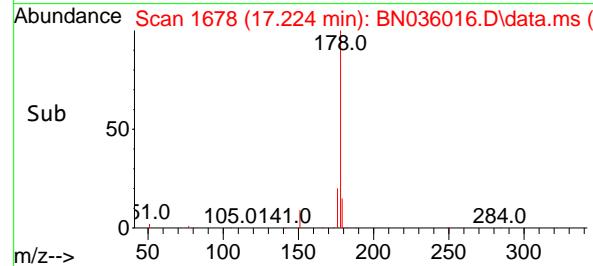
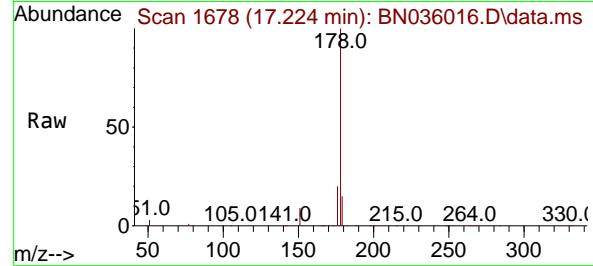
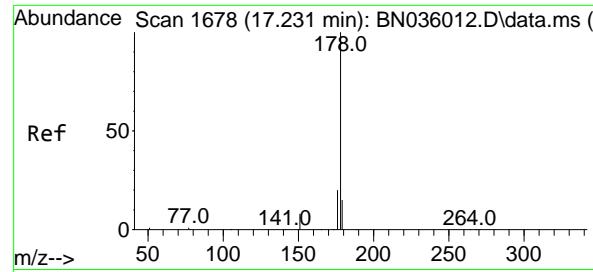
Tgt Ion:200 Resp: 11848  
Ion Ratio Lower Upper  
200 100  
173 20.9 26.6 40.0#  
215 45.5 40.6 61.0



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

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





#25

Phenanthrene

Concen: 5.072 ng

RT: 17.224 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

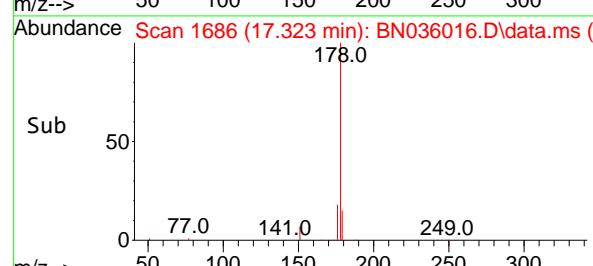
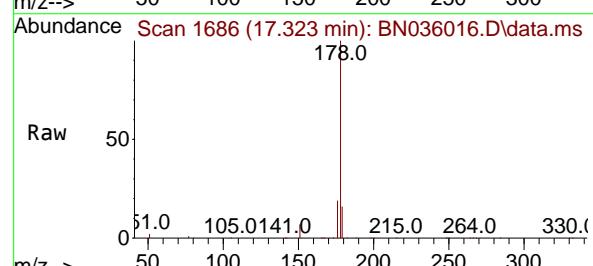
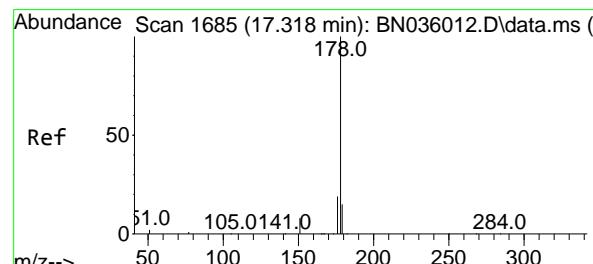
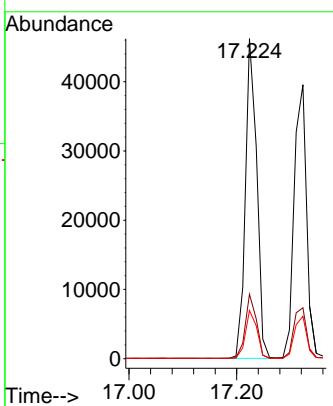
Tgt Ion:178 Resp: 67322

Ion Ratio Lower Upper

178 100

176 19.7 16.0 24.0

179 15.1 12.4 18.6



#26

Anthracene

Concen: 5.265 ng

RT: 17.323 min Scan# 1686

Delta R.T. 0.005 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

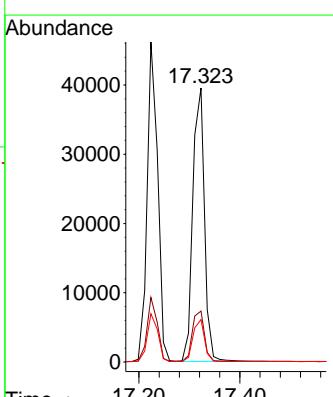
Tgt Ion:178 Resp: 63551

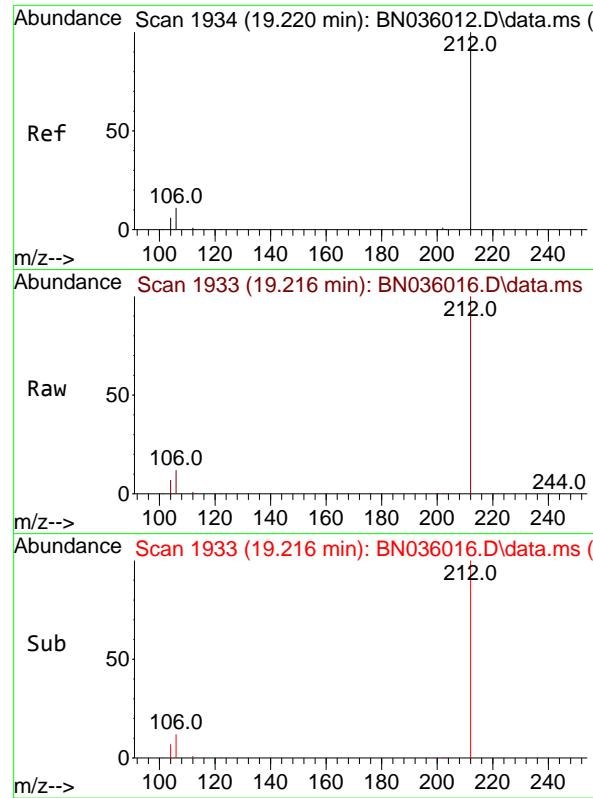
Ion Ratio Lower Upper

178 100

176 19.2 15.4 23.2

179 15.2 12.0 18.0

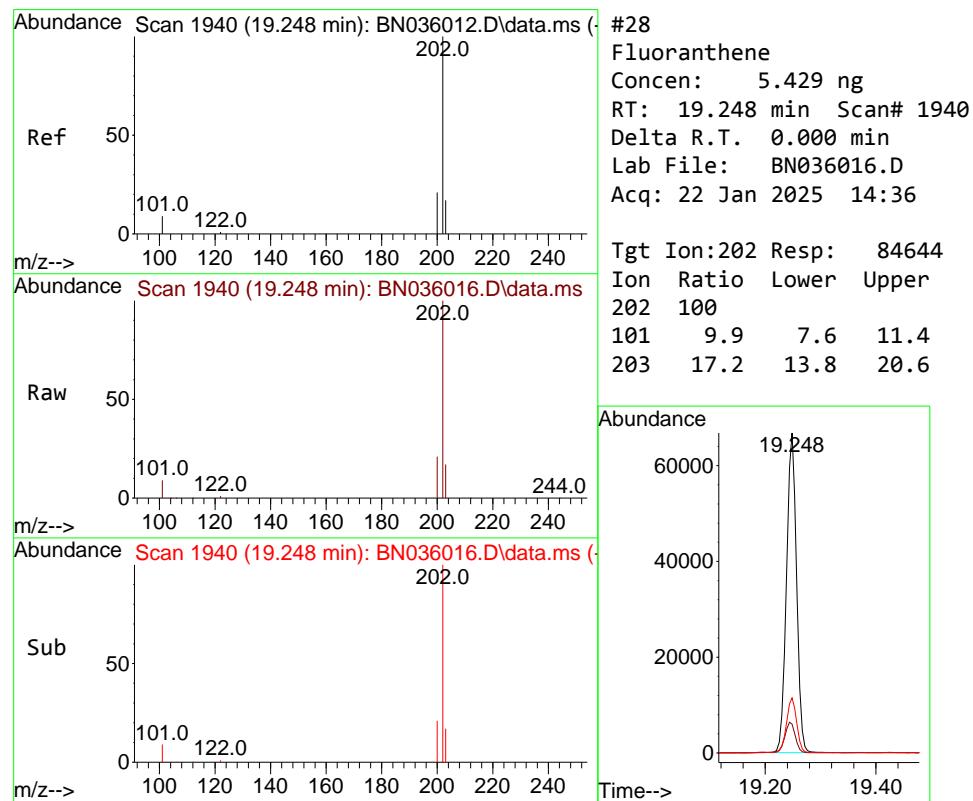
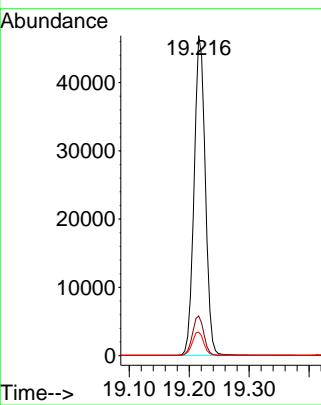




#27  
 Fluoranthene-d10  
 Concen: 5.315 ng  
 RT: 19.216 min Scan# 1  
 Delta R.T. -0.004 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

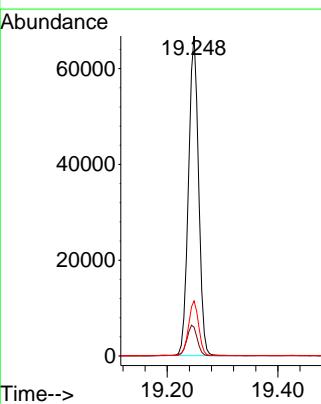
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

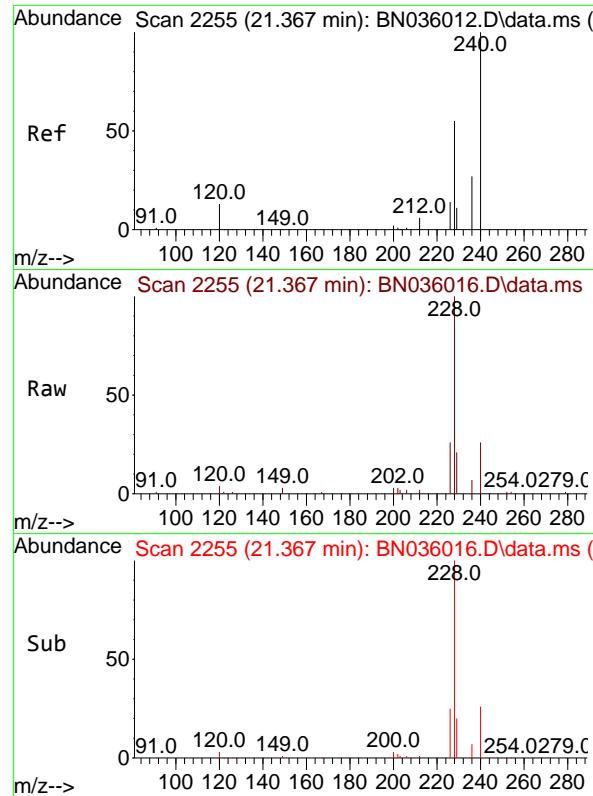
Tgt Ion:212 Resp: 60810  
 Ion Ratio Lower Upper  
 212 100  
 106 12.4 9.7 14.5  
 104 7.4 6.0 9.0



#28  
 Fluoranthene  
 Concen: 5.429 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

Tgt Ion:202 Resp: 84644  
 Ion Ratio Lower Upper  
 202 100  
 101 9.9 7.6 11.4  
 203 17.2 13.8 20.6

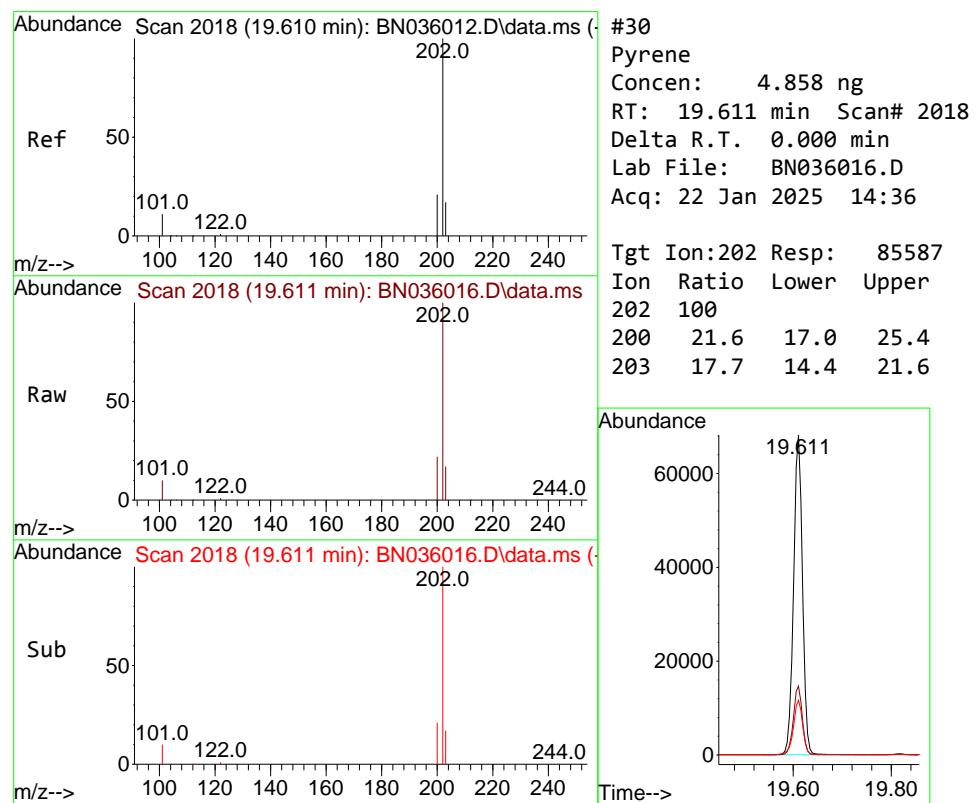
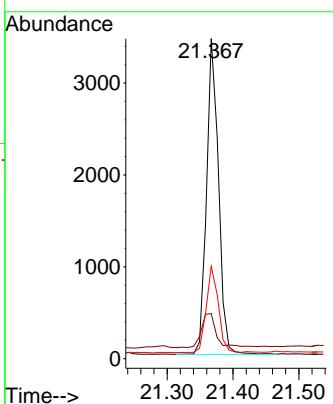




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

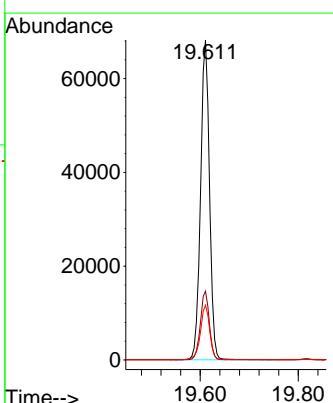
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

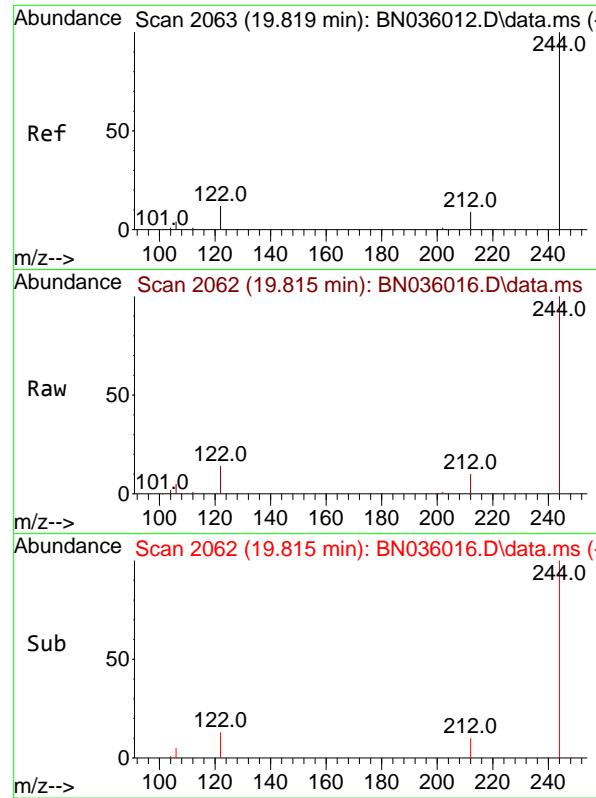
Tgt Ion:240 Resp: 4348  
Ion Ratio Lower Upper  
240 100  
120 14.1 13.9 20.9  
236 28.9 23.7 35.5



#30  
Pyrene  
Concen: 4.858 ng  
RT: 19.611 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

Tgt Ion:202 Resp: 85587  
Ion Ratio Lower Upper  
202 100  
200 21.6 17.0 25.4  
203 17.7 14.4 21.6

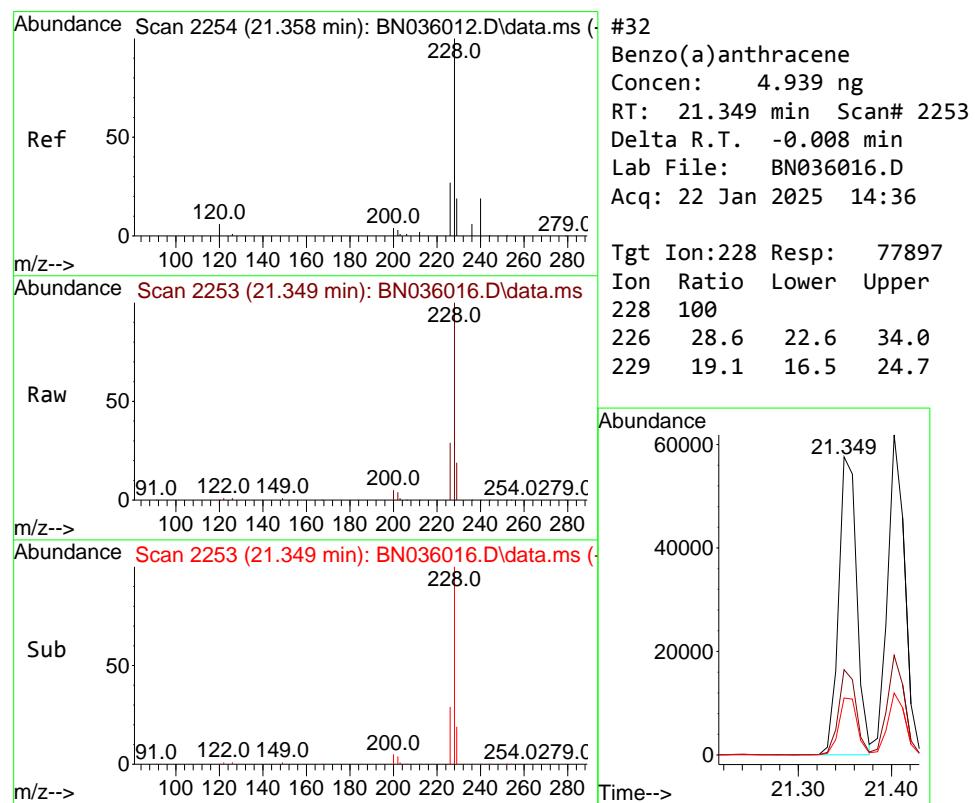
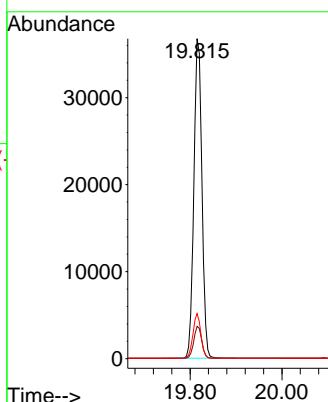




#31  
 Terphenyl-d14  
 Concen: 4.949 ng  
 RT: 19.815 min Scan# 2  
 Delta R.T. -0.004 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

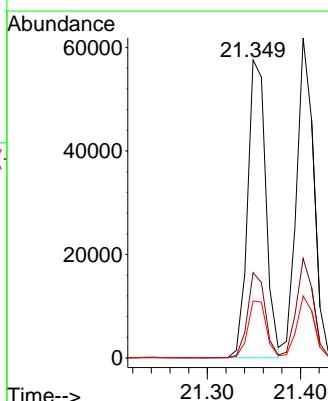
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

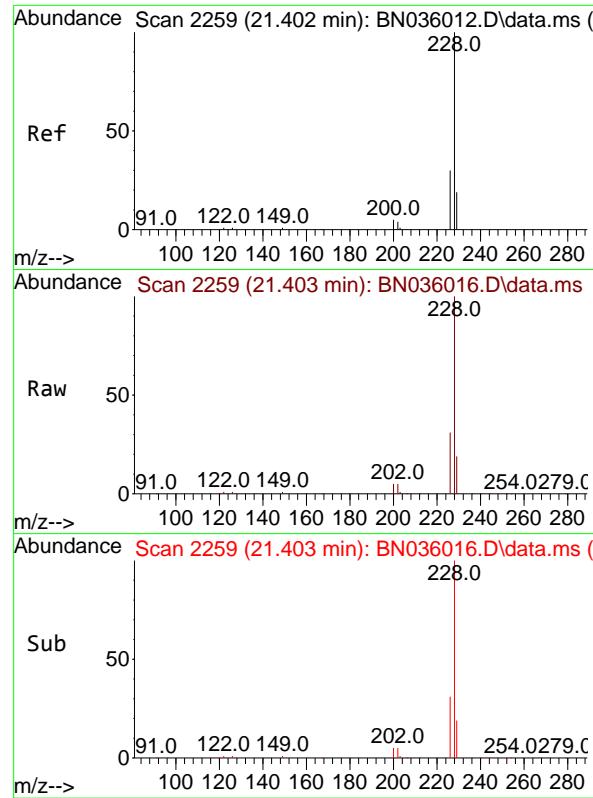
Tgt Ion:244 Resp: 44701  
 Ion Ratio Lower Upper  
 244 100  
 212 10.1 9.1 13.7  
 122 14.1 11.3 16.9



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

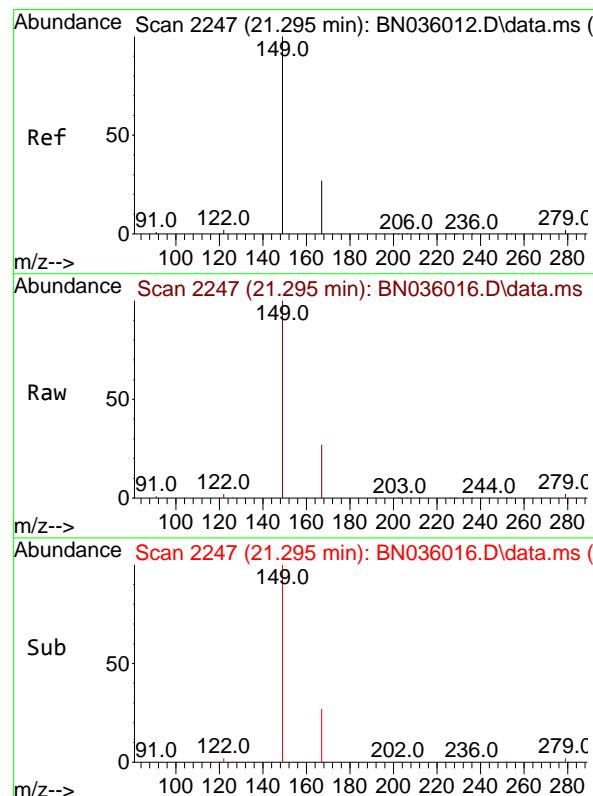
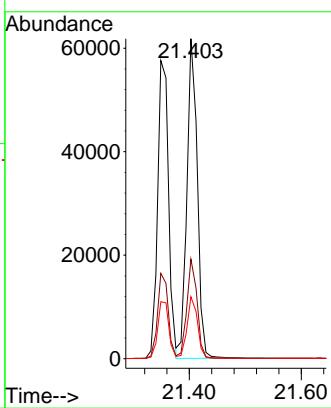
Tgt Ion:228 Resp: 77897  
 Ion Ratio Lower Upper  
 228 100  
 226 28.6 22.6 34.0  
 229 19.1 16.5 24.7





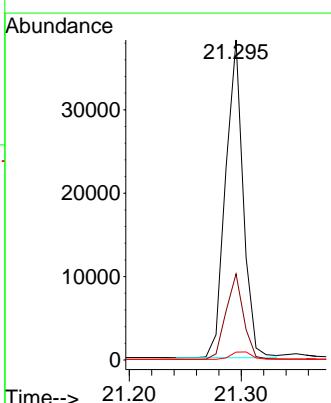
#33  
Chrysene  
Concen: 4.933 ng  
RT: 21.403 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036016.D ClientSampleId : SSTDICC5.0  
Acq: 22 Jan 2025 14:36

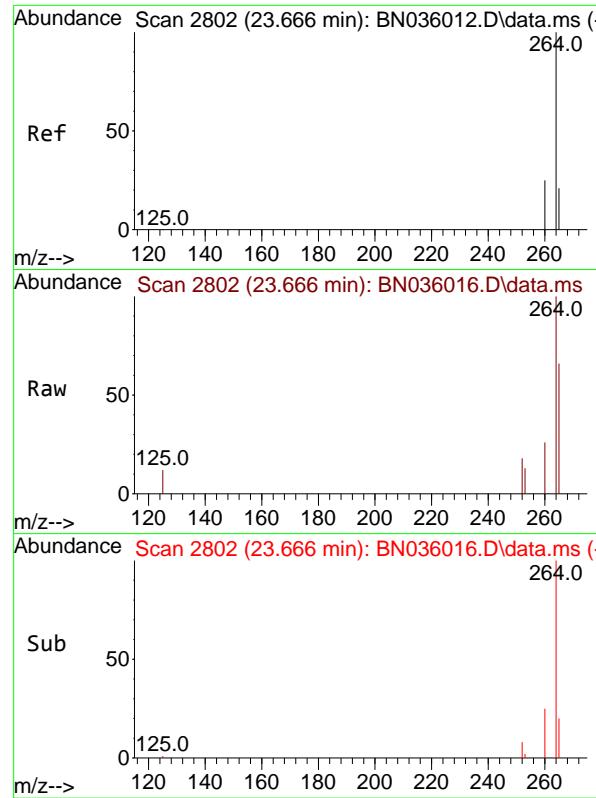
Tgt Ion:228 Resp: 79531  
Ion Ratio Lower Upper  
228 100  
226 31.1 25.3 37.9  
229 19.3 16.3 24.5



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

Tgt Ion:149 Resp: 41726  
Ion Ratio Lower Upper  
149 100  
167 26.9 21.9 32.9  
279 2.8 3.0 4.6#

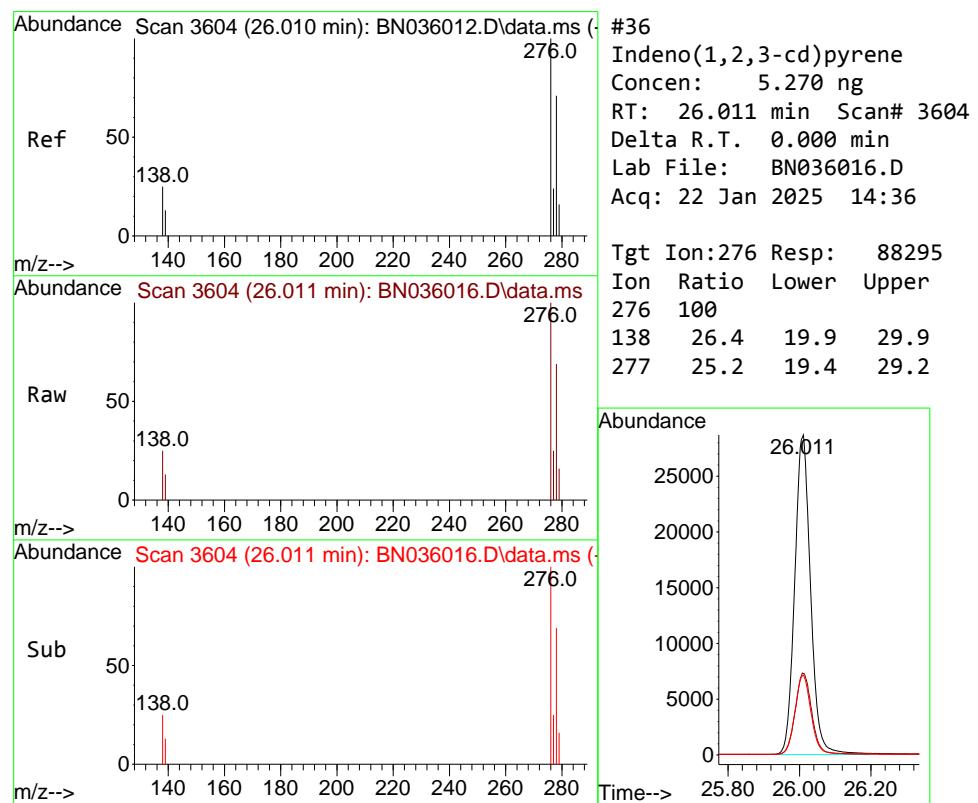
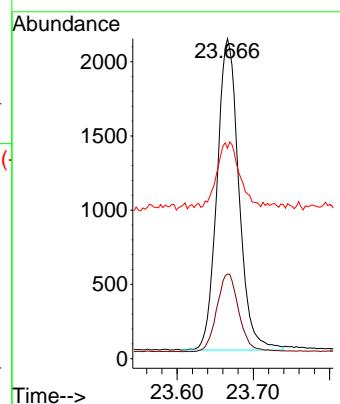




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.666 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

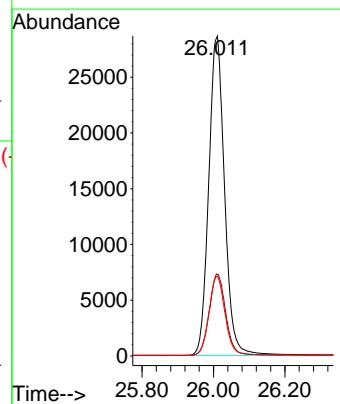
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

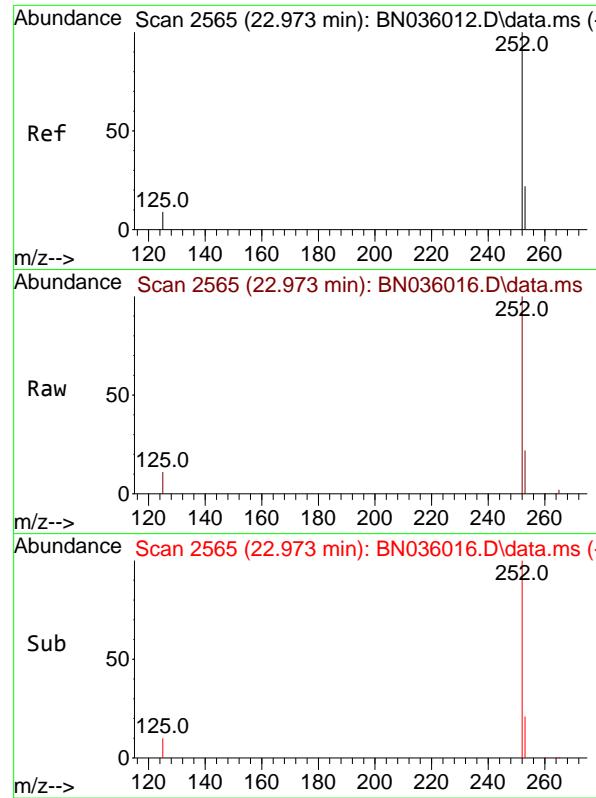
Tgt Ion:264 Resp: 4175  
Ion Ratio Lower Upper  
264 100  
260 26.5 21.8 32.6  
265 65.8 56.6 84.8



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 5.270 ng  
RT: 26.011 min Scan# 3604  
Delta R.T. 0.000 min  
Lab File: BN036016.D  
Acq: 22 Jan 2025 14:36

Tgt Ion:276 Resp: 88295  
Ion Ratio Lower Upper  
276 100  
138 26.4 19.9 29.9  
277 25.2 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 5.192 ng

RT: 22.973 min Scan# 2

Instrument :

BNA\_N

Delta R.T. 0.000 min

Lab File: BN036016.D

ClientSampleId :

Acq: 22 Jan 2025 14:36 SSTDICC5.0

Tgt Ion:252 Resp: 78788

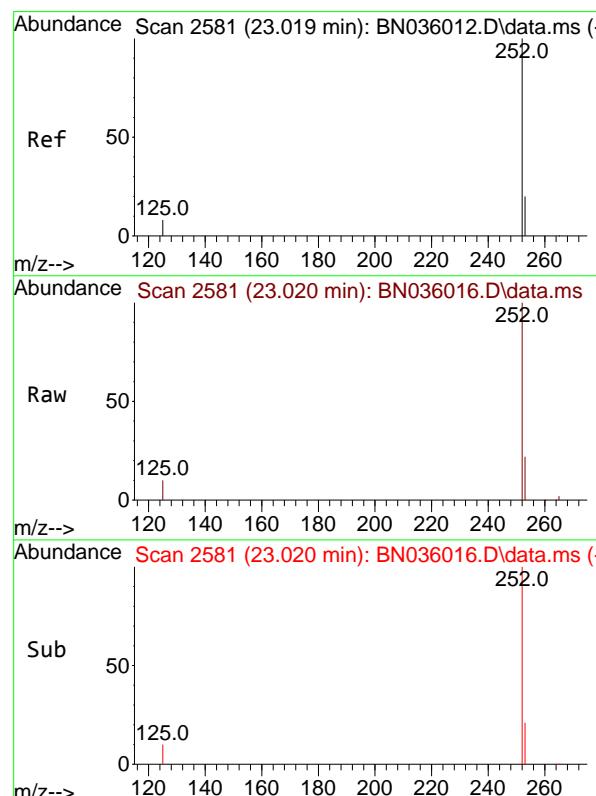
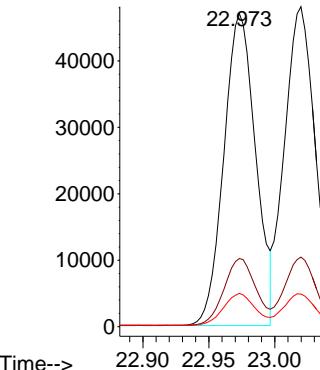
Ion Ratio Lower Upper

252 100

253 21.7 22.5 33.7#

125 10.6 11.9 17.9#

Abundance



#38

Benzo(k)fluoranthene

Concen: 5.198 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036016.D

Acq: 22 Jan 2025 14:36

Tgt Ion:252 Resp: 79510

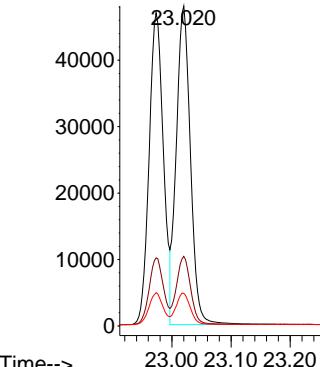
Ion Ratio Lower Upper

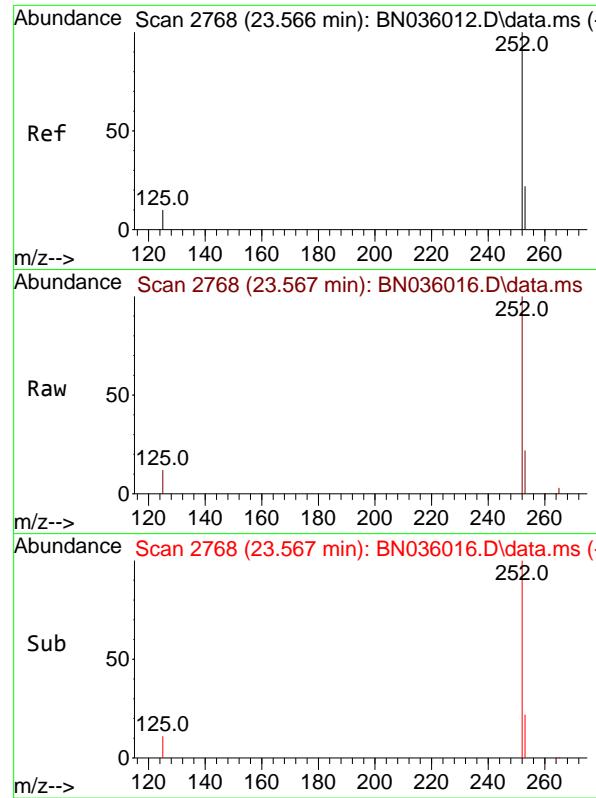
252 100

253 21.8 21.3 31.9

125 10.2 11.9 17.9#

Abundance

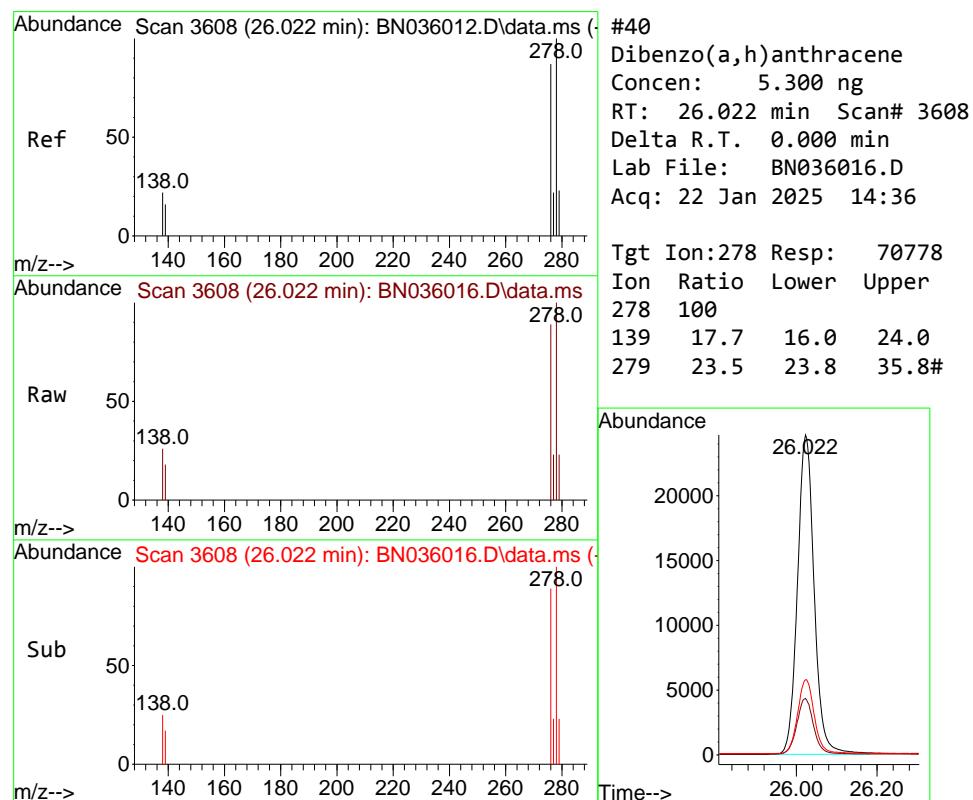
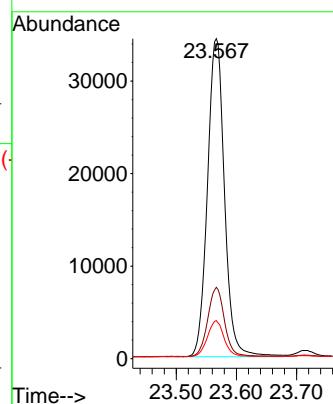




#39  
 Benzo(a)pyrene  
 Concen: 5.218 ng  
 RT: 23.567 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

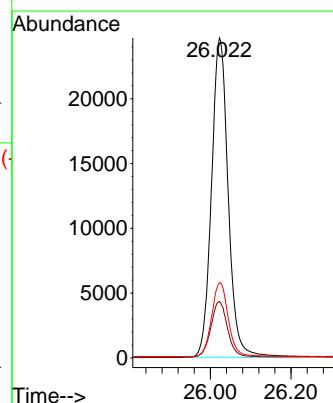
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

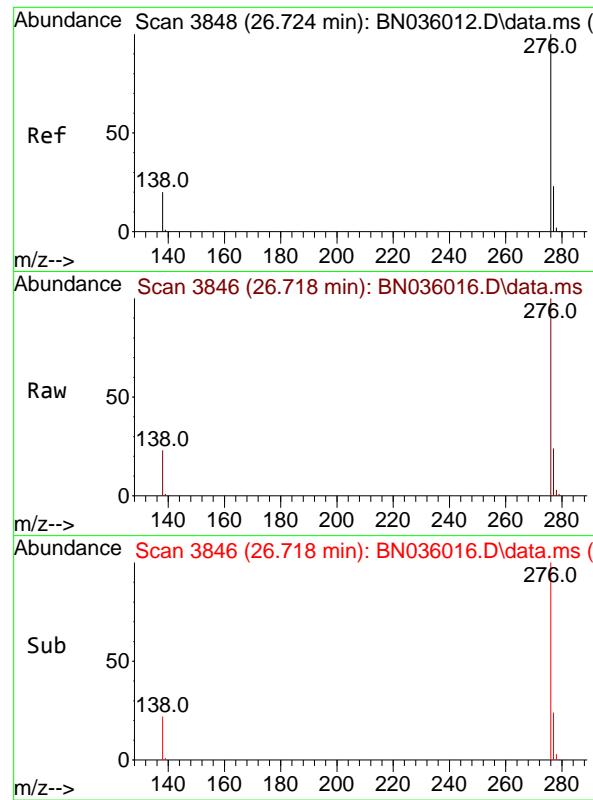
Tgt Ion:252 Resp: 67637  
 Ion Ratio Lower Upper  
 252 100  
 253 22.3 23.8 35.6#  
 125 11.9 14.6 21.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 5.300 ng  
 RT: 26.022 min Scan# 3608  
 Delta R.T. 0.000 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

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

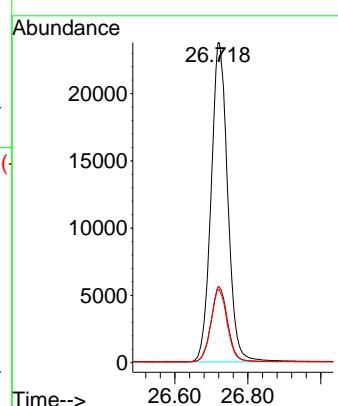




#41  
 Benzo(g,h,i)perylene  
 Concen: 5.148 ng  
 RT: 26.718 min Scan# 3  
 Delta R.T. -0.005 min  
 Lab File: BN036016.D  
 Acq: 22 Jan 2025 14:36

Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

Tgt Ion:276 Resp: 74927  
 Ion Ratio Lower Upper  
 276 100  
 277 23.7 21.3 31.9  
 138 22.6 19.2 28.8



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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN012225**

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

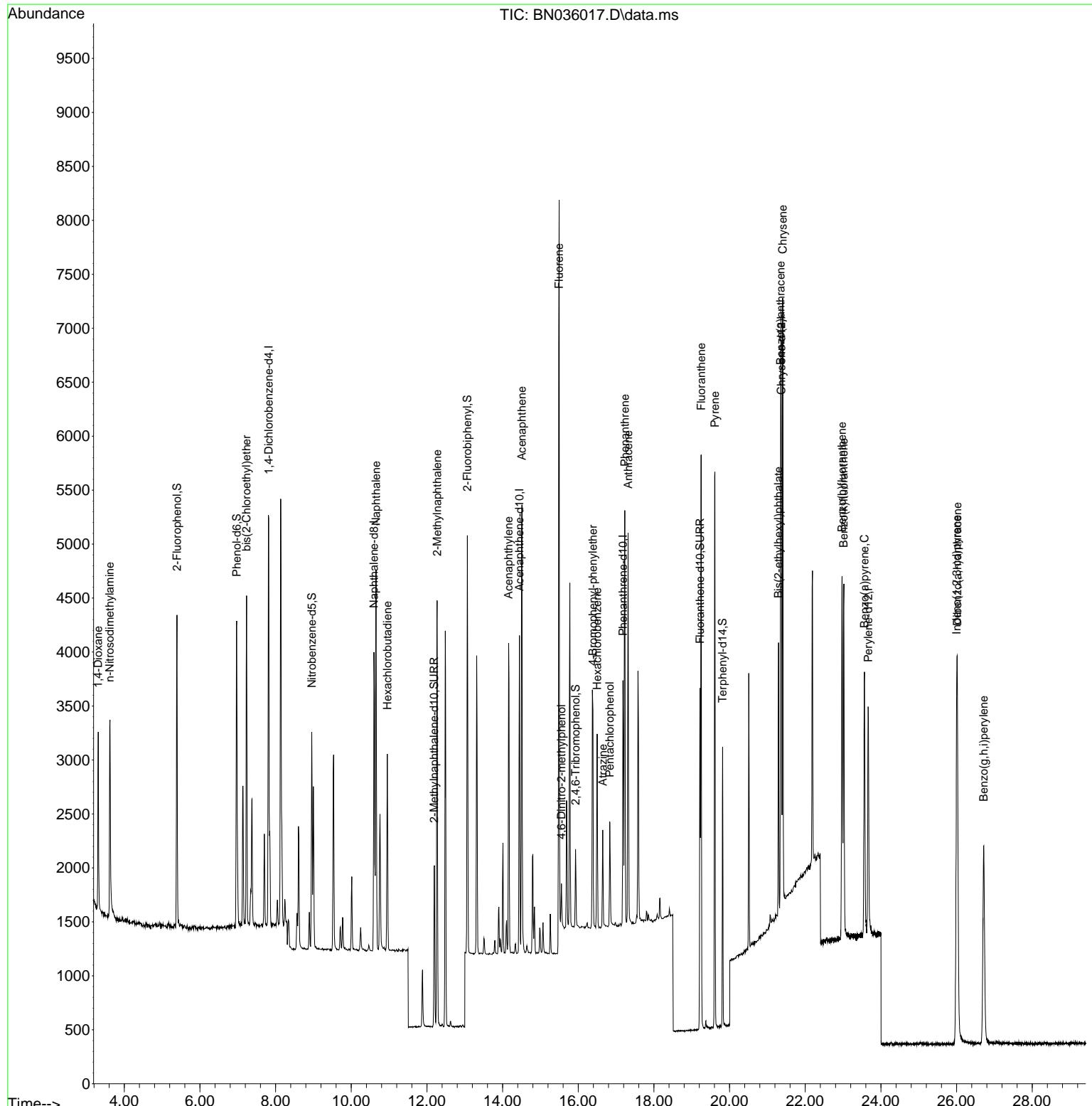
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.817	152	1865	0.400	ng	0.00
7) Naphthalene-d8	10.601	136	3525	0.400	ng	#-0.01
13) Acenaphthene-d10	14.447	164	1598	0.400	ng	0.00
19) Phenanthrene-d10	17.181	188	3132	0.400	ng	0.00
29) Chrysene-d12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

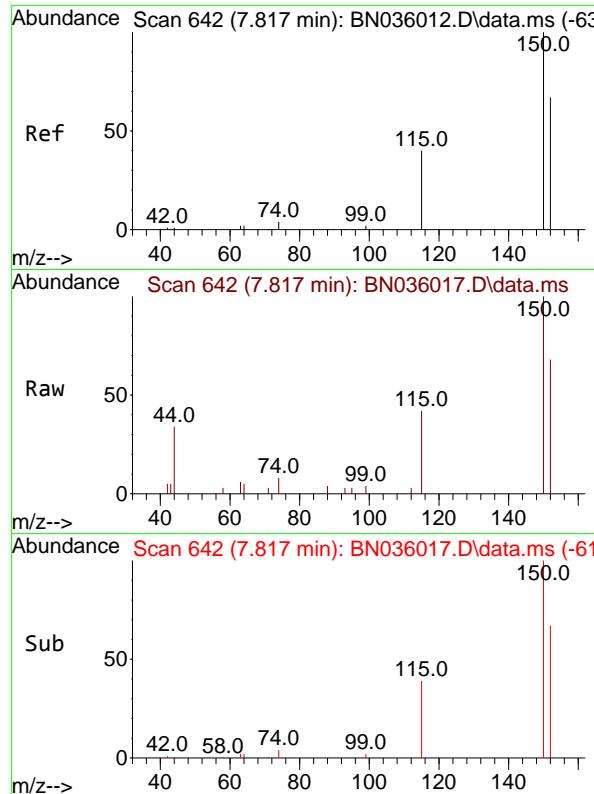
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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

**Instrument :**  
 BNA\_N  
**ClientSampleId :**  
 ICVBN012225

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

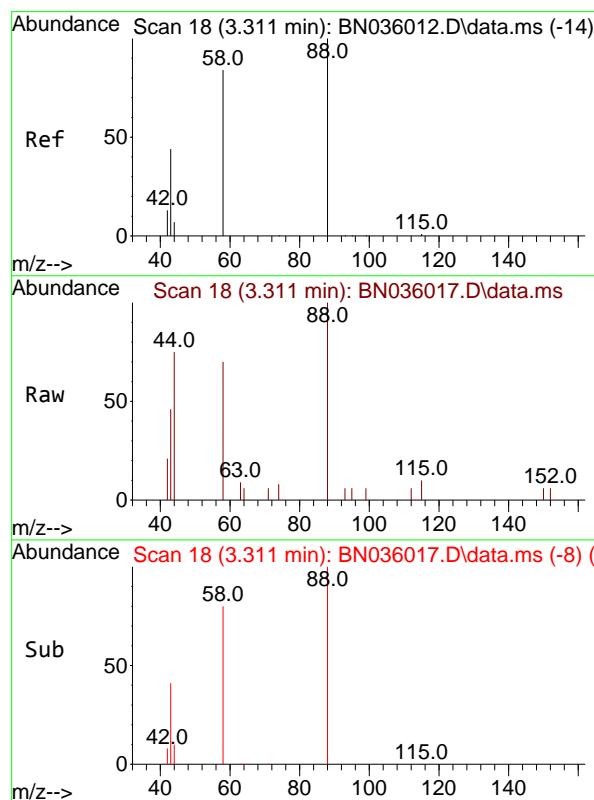
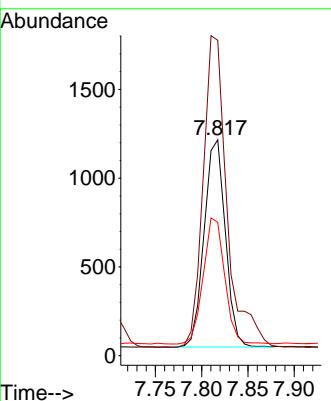




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.817 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

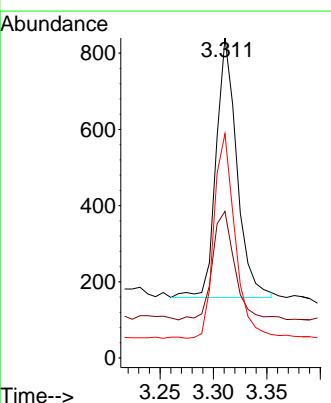
Instrument : BNA\_N  
ClientSampleId : ICVBN012225

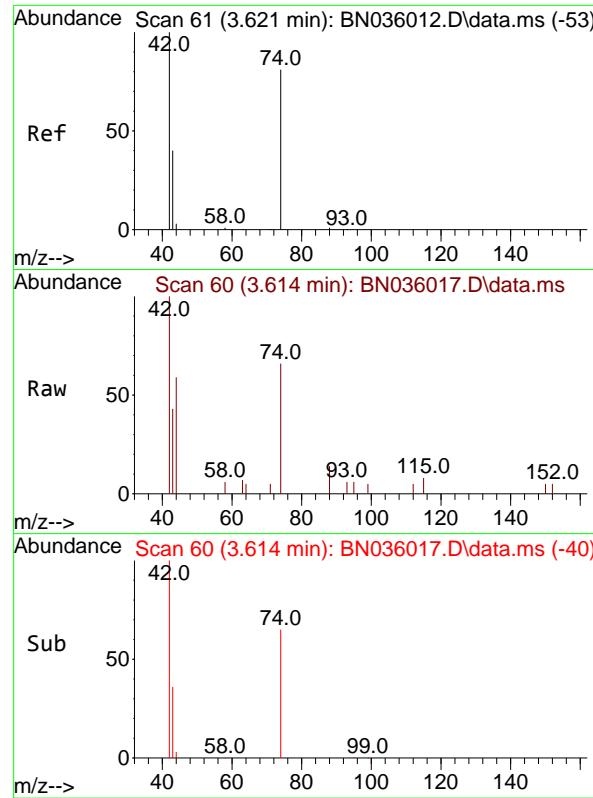
Tgt Ion:152 Resp: 1865  
Ion Ratio Lower Upper  
152 100  
150 146.1 117.4 176.2  
115 61.8 51.0 76.4



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

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

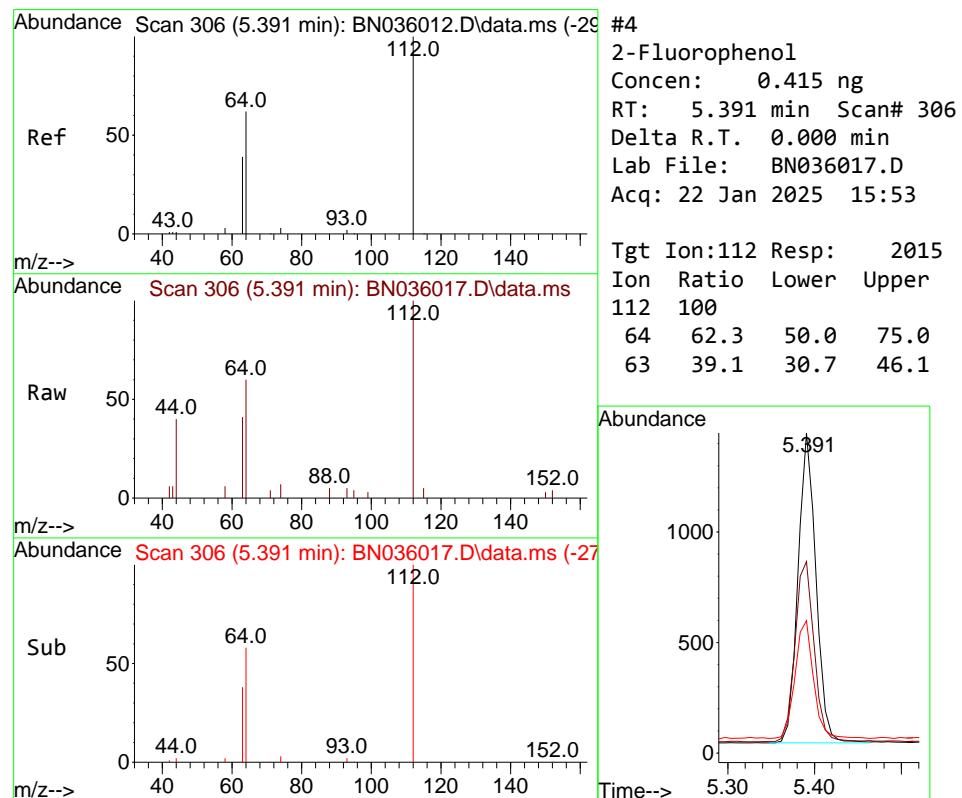
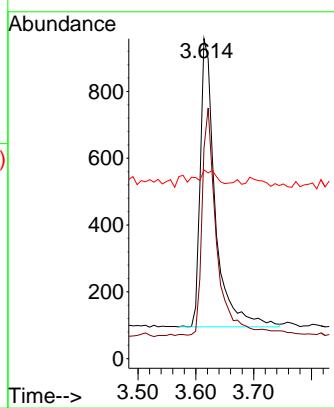




#3  
 n-Nitrosodimethylamine  
 Concen: 0.413 ng  
 RT: 3.614 min Scan# 6  
 Delta R.T. -0.007 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

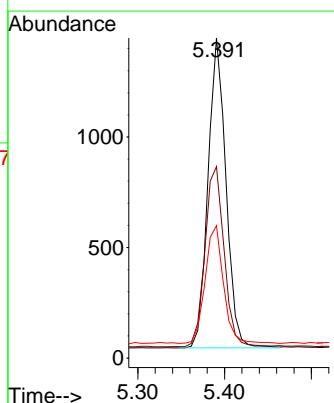
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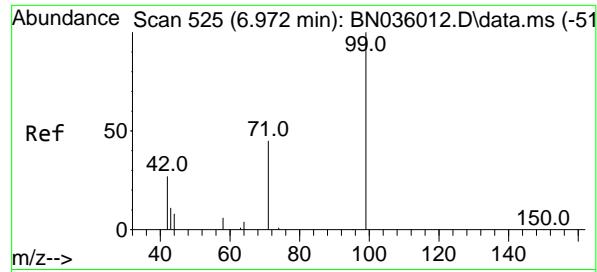
Tgt Ion: 42 Resp: 1560  
 Ion Ratio Lower Upper  
 42 100  
 74 76.9 58.1 87.1  
 44 4.4 6.2 9.4#



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

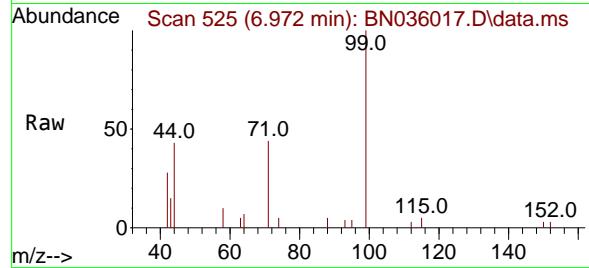
Tgt Ion: 112 Resp: 2015  
 Ion Ratio Lower Upper  
 112 100  
 64 62.3 50.0 75.0  
 63 39.1 30.7 46.1



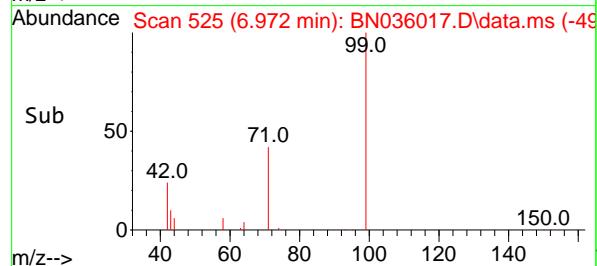
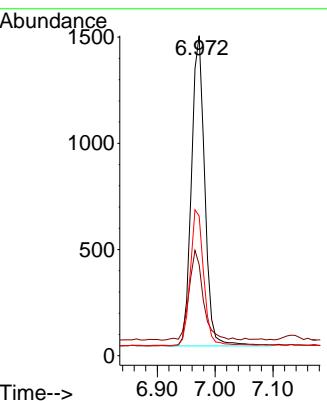


#5  
Phenol-d6  
Concen: 0.413 ng  
RT: 6.972 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

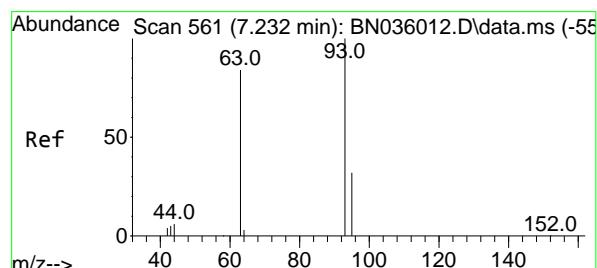
Instrument : BNA\_N  
ClientSampleId : ICVBN012225



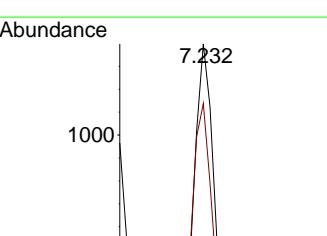
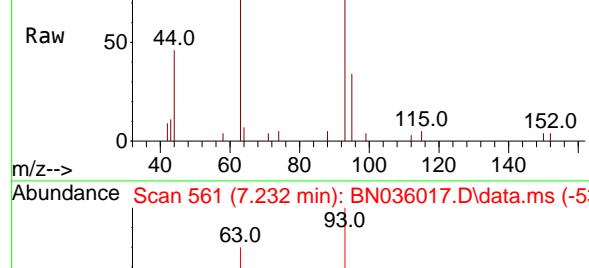
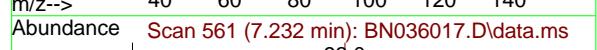
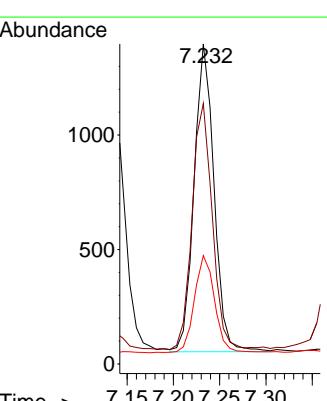
Tgt Ion: 99 Resp: 2353  
Ion Ratio Lower Upper  
99 100  
42 31.0 26.8 40.2  
71 44.4 36.6 55.0

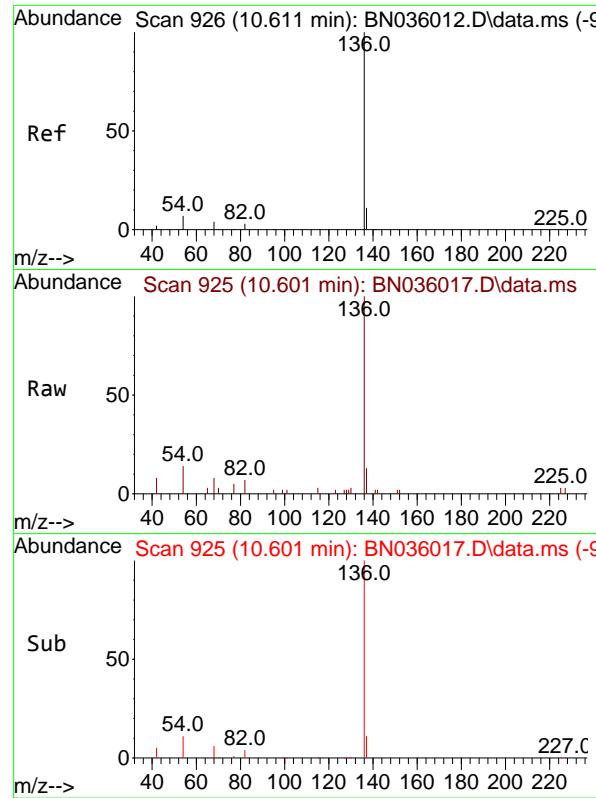


#6  
bis(2-Chloroethyl)ether  
Concen: 0.439 ng  
RT: 7.232 min Scan# 561  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53



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

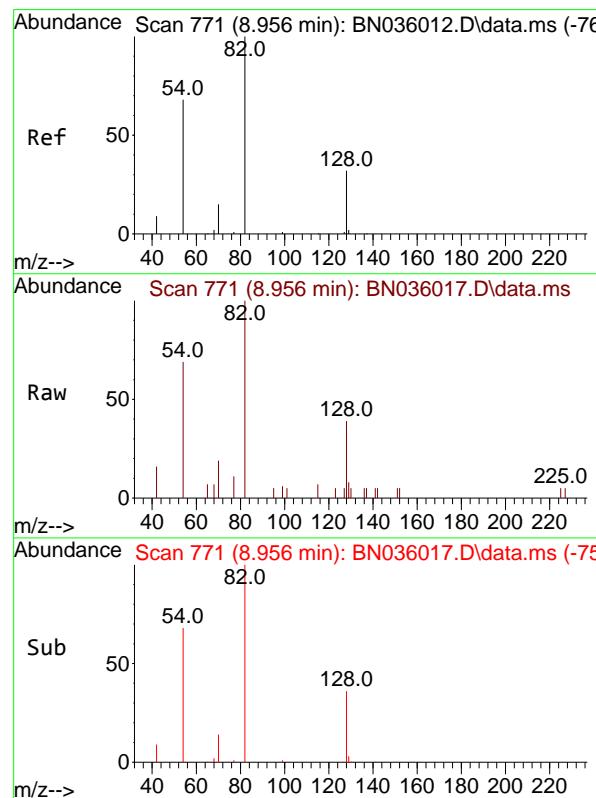
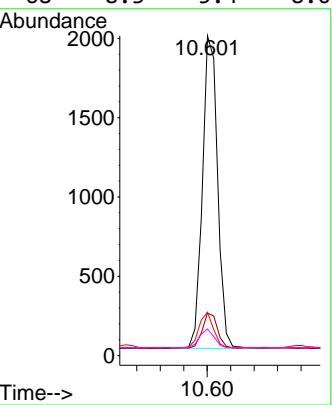




#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.601 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

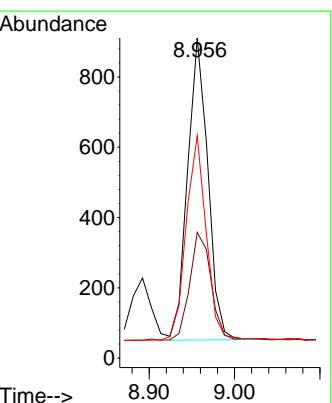
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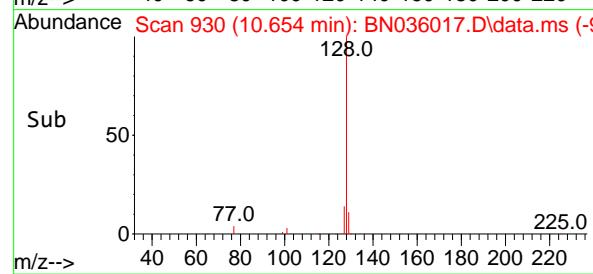
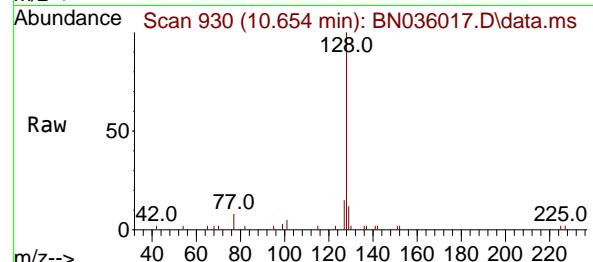
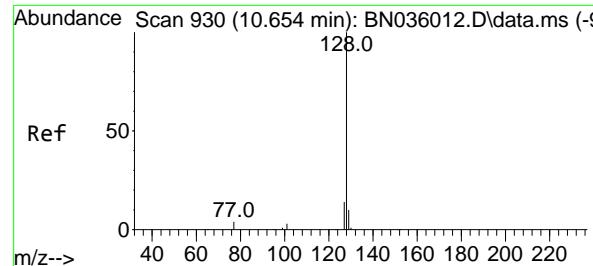
Tgt Ion:136 Resp: 3525  
 Ion Ratio Lower Upper  
 136 100  
 137 13.3 10.4 15.6  
 54 13.6 7.7 11.5#  
 68 8.3 5.4 8.0#



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

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





#9

Naphthalene

Concen: 0.428 ng

RT: 10.654 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA\_N

ClientSampleId :

ICVBN012225

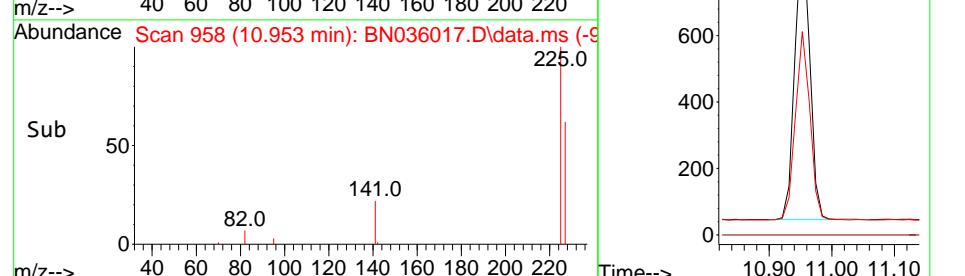
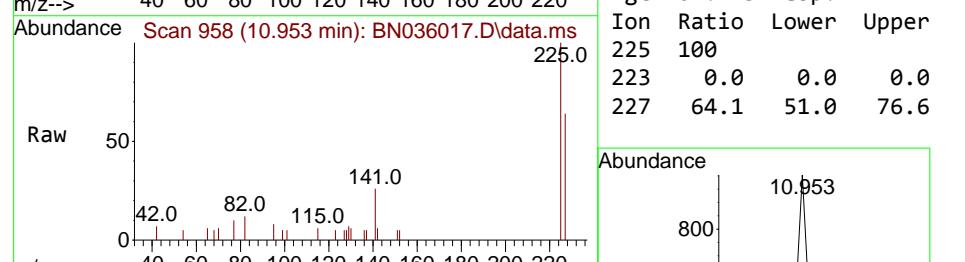
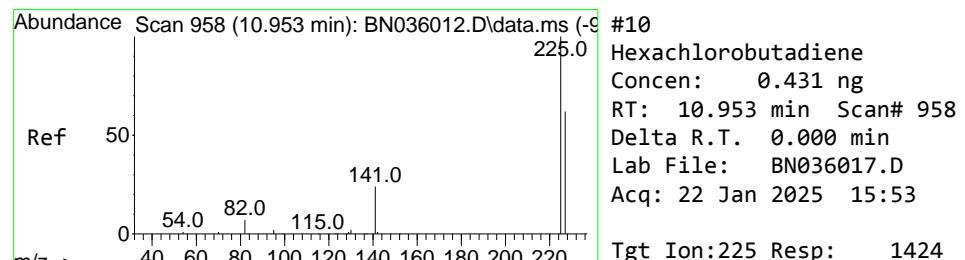
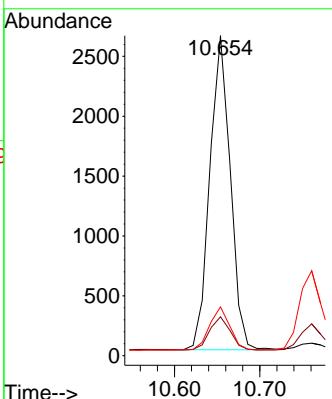
Tgt Ion:128 Resp: 4380

Ion Ratio Lower Upper

128 100

129 12.2 9.4 14.2

127 15.3 12.6 19.0



#10

Hexachlorobutadiene

Concen: 0.431 ng

RT: 10.953 min Scan# 958

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

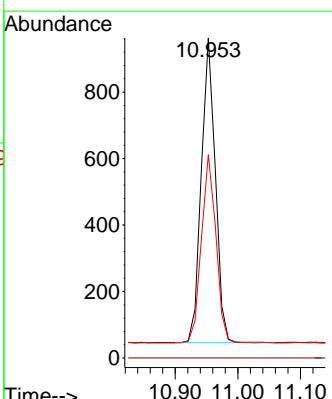
Tgt Ion:225 Resp: 1424

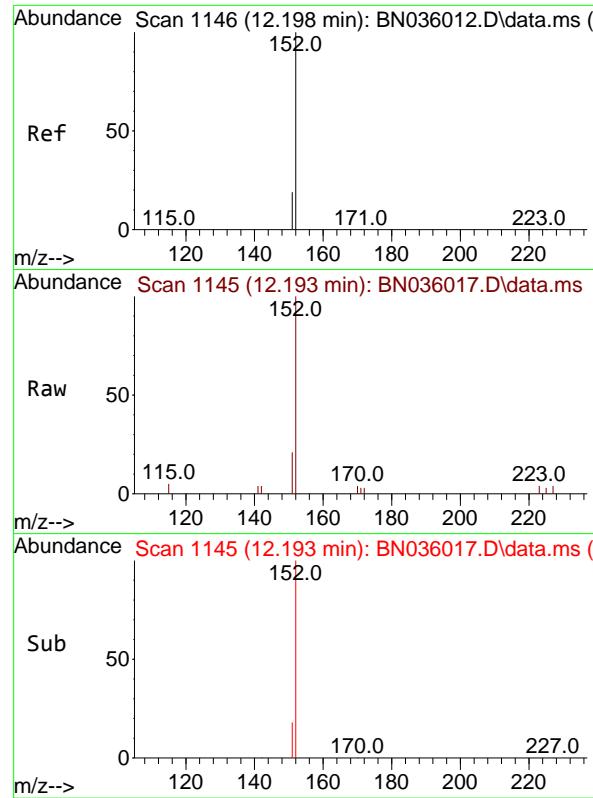
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 64.1 51.0 76.6

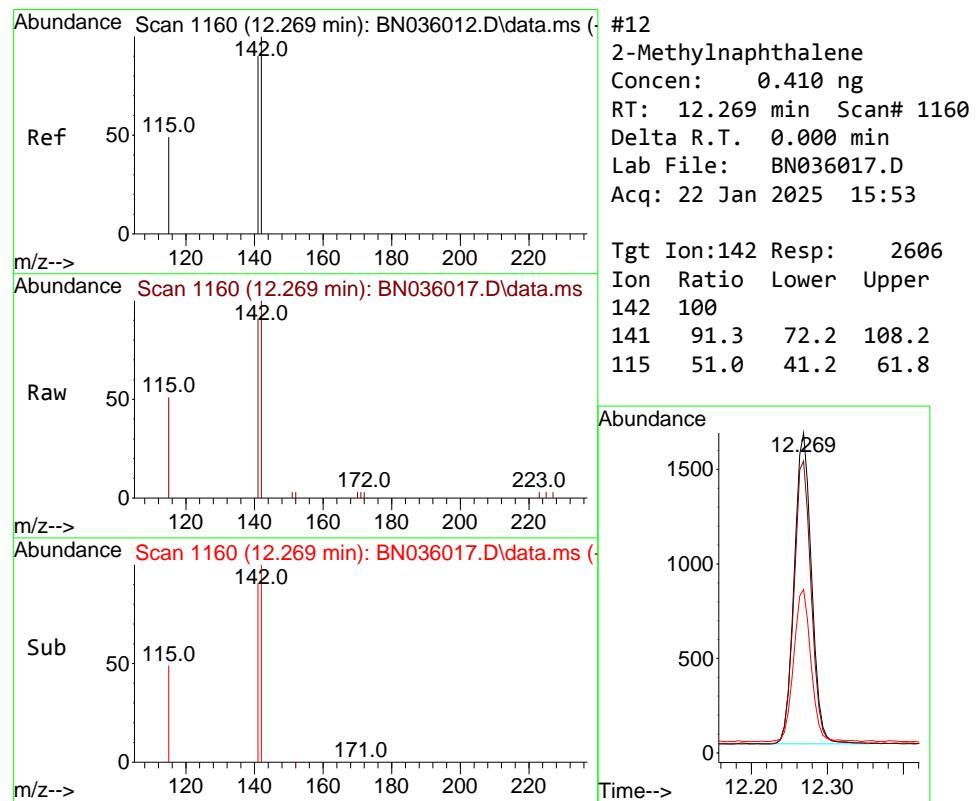
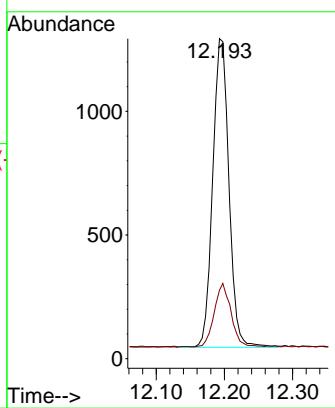




#11  
2-Methylnaphthalene-d10  
Concen: 0.431 ng  
RT: 12.193 min Scan# 1145  
Delta R.T. -0.005 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

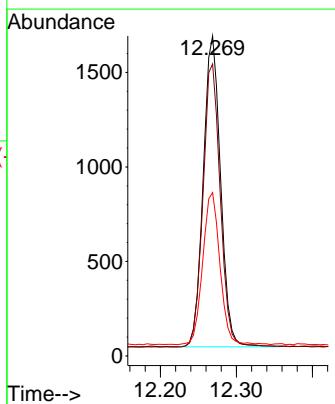
Instrument : BNA\_N  
ClientSampleId : ICVBN012225

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



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

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



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.447 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036017.D

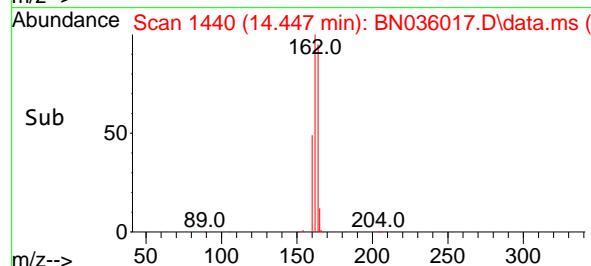
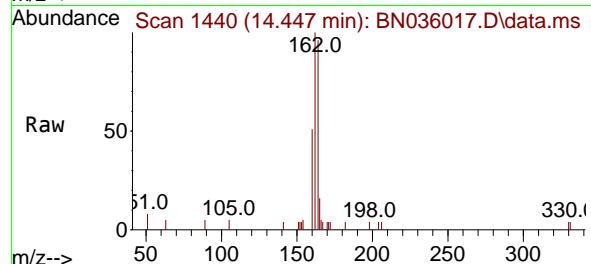
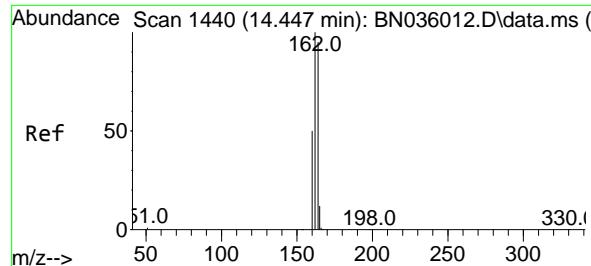
Acq: 22 Jan 2025 15:53

Instrument :

BNA\_N

ClientSampleId :

ICVBN012225



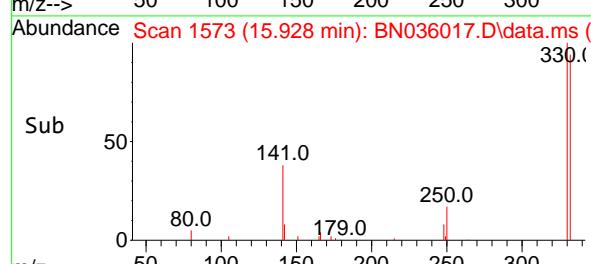
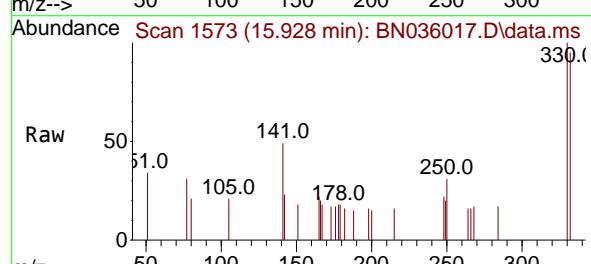
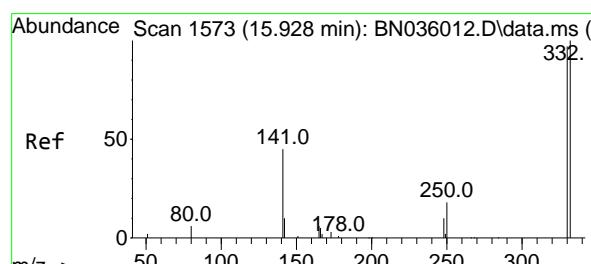
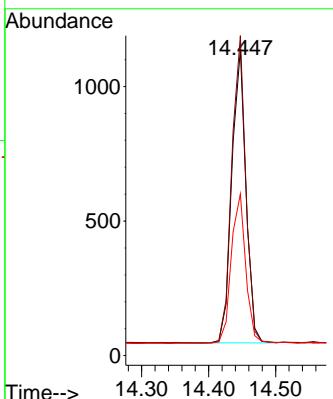
Tgt Ion:164 Resp: 1598

Ion Ratio Lower Upper

164 100

162 104.5 84.1 126.1

160 52.8 43.8 65.8



#14

2,4,6-Tribromophenol

Concen: 0.391 ng

RT: 15.928 min Scan# 1573

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

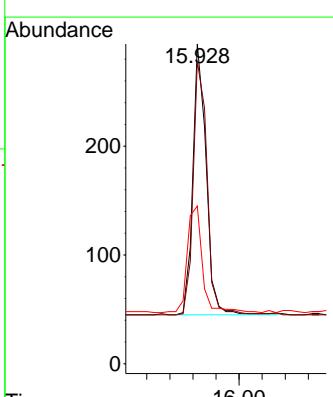
Tgt Ion:330 Resp: 401

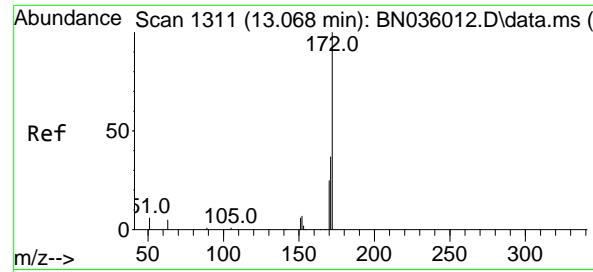
Ion Ratio Lower Upper

330 100

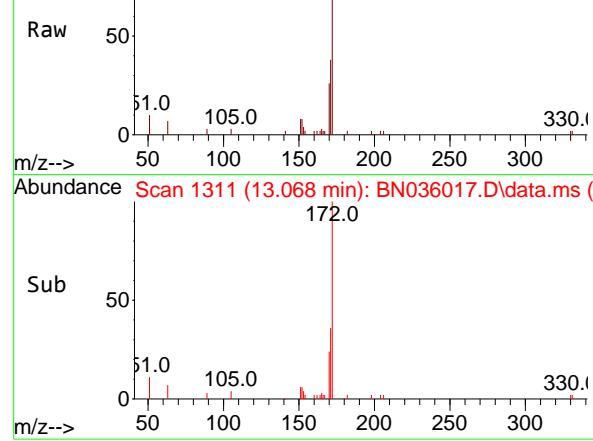
332 97.0 81.0 121.4

141 44.6 36.7 55.1

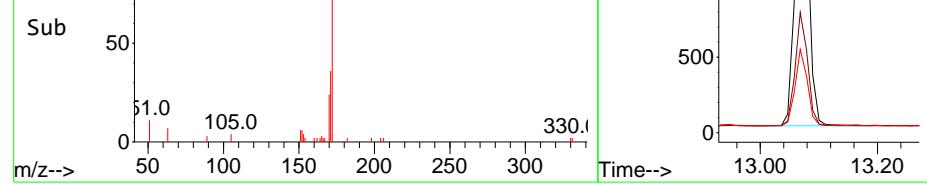




Abundance Scan 1311 (13.068 min): BN036017.D\data.ms (-)



Abundance Scan 1311 (13.068 min): BN036017.D\data.ms (-)



#15

2-Fluorobiphenyl

Concen: 0.433 ng

RT: 13.068 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA\_N

ClientSampleId :

ICVBN012225

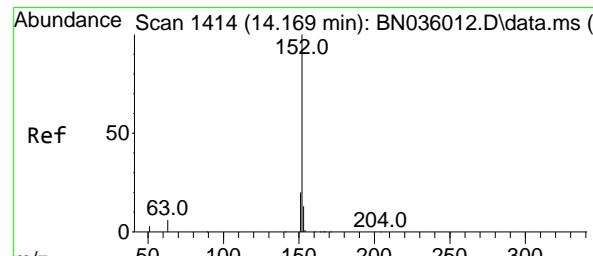
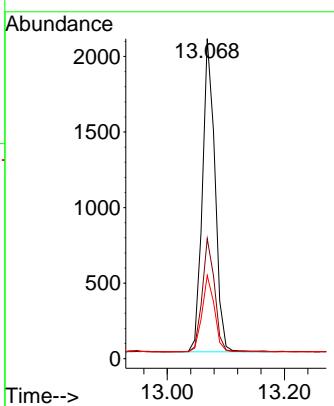
Tgt Ion:172 Resp: 3089

Ion Ratio Lower Upper

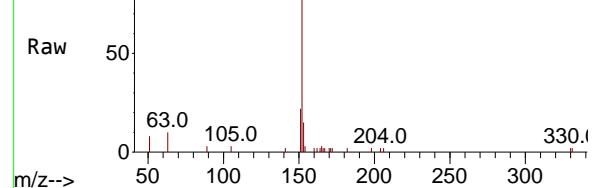
172 100

171 37.5 30.9 46.3

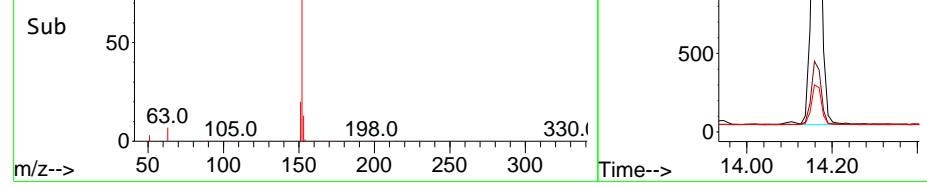
170 26.0 21.2 31.8



Abundance Scan 1413 (14.159 min): BN036017.D\data.ms (-)



Abundance Scan 1413 (14.159 min): BN036017.D\data.ms (-)



#16

Acenaphthylene

Concen: 0.431 ng

RT: 14.159 min Scan# 1413

Delta R.T. -0.011 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

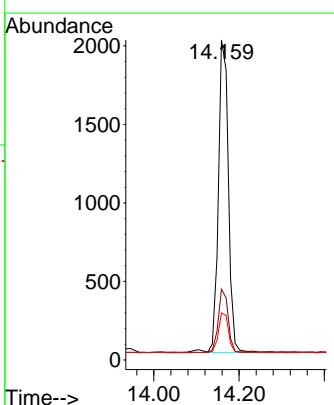
Tgt Ion:152 Resp: 3265

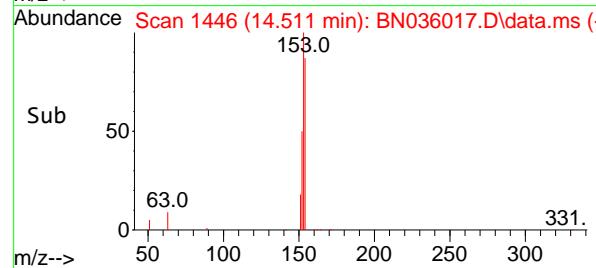
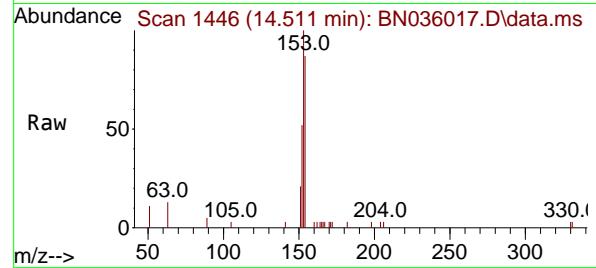
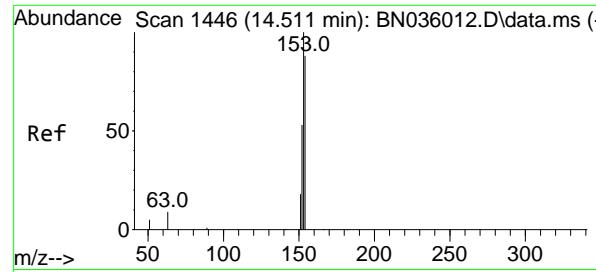
Ion Ratio Lower Upper

152 100

151 19.8 16.2 24.2

153 12.9 10.4 15.6





#17

Acenaphthene

Concen: 0.419 ng

RT: 14.511 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA\_N

ClientSampleId :

ICVBN012225

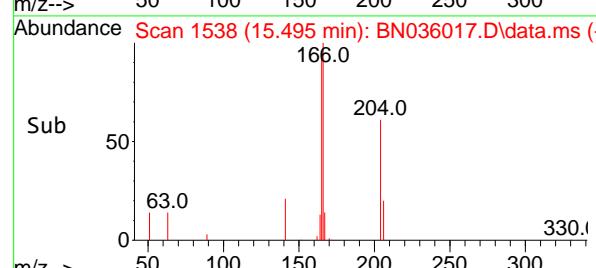
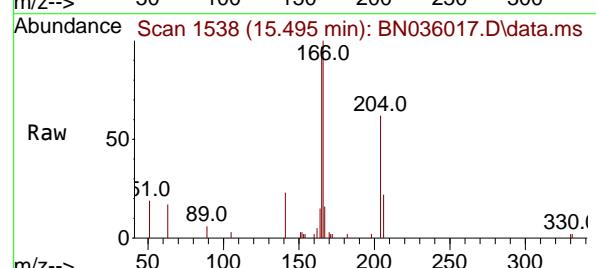
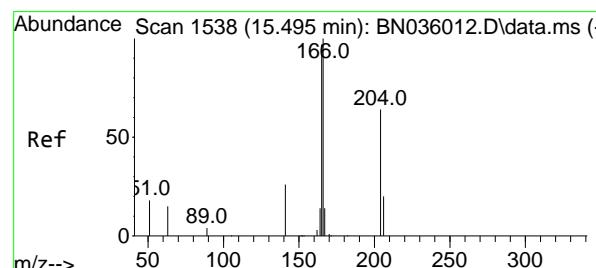
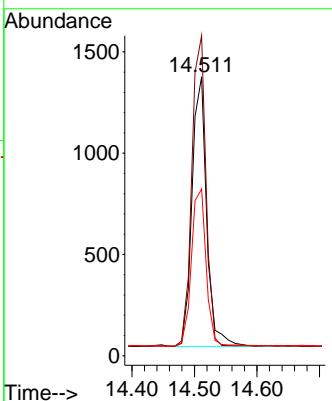
Tgt Ion:154 Resp: 2176

Ion Ratio Lower Upper

154 100

153 111.3 88.9 133.3

152 59.1 48.1 72.1



#18

Fluorene

Concen: 0.396 ng

RT: 15.495 min Scan# 1538

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

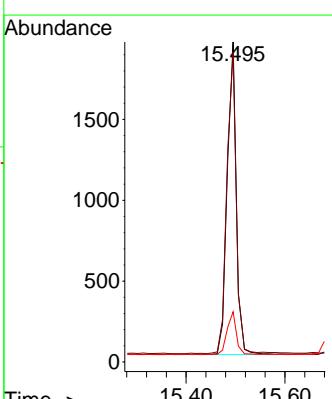
Tgt Ion:166 Resp: 2572

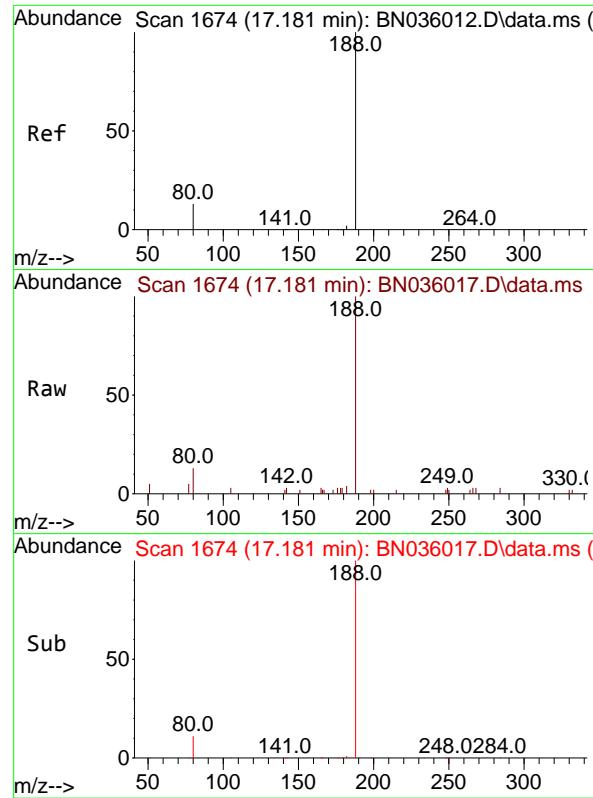
Ion Ratio Lower Upper

166 100

165 104.2 78.5 117.7

167 14.2 10.7 16.1





#19

Phenanthrene-d10  
Concen: 0.400 ng

RT: 17.181 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument : BNA\_N

ClientSampleId : ICVBN012225

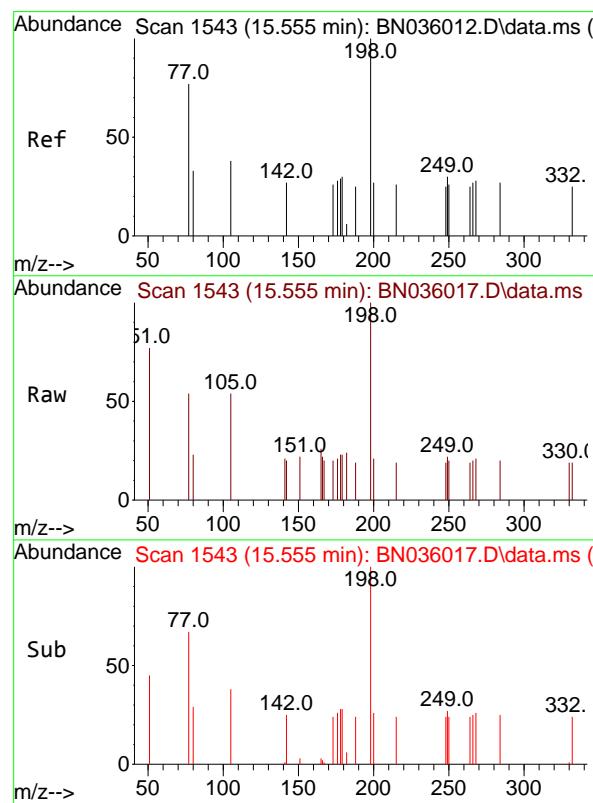
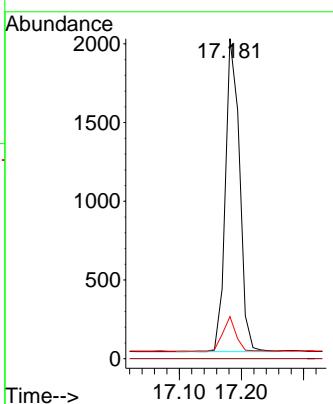
Tgt Ion:188 Resp: 3132

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.1 12.3 18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.414 ng

RT: 15.555 min Scan# 1543

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

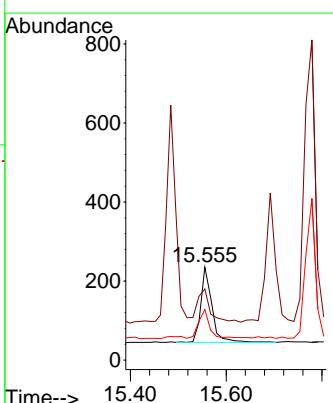
Tgt Ion:198 Resp: 302

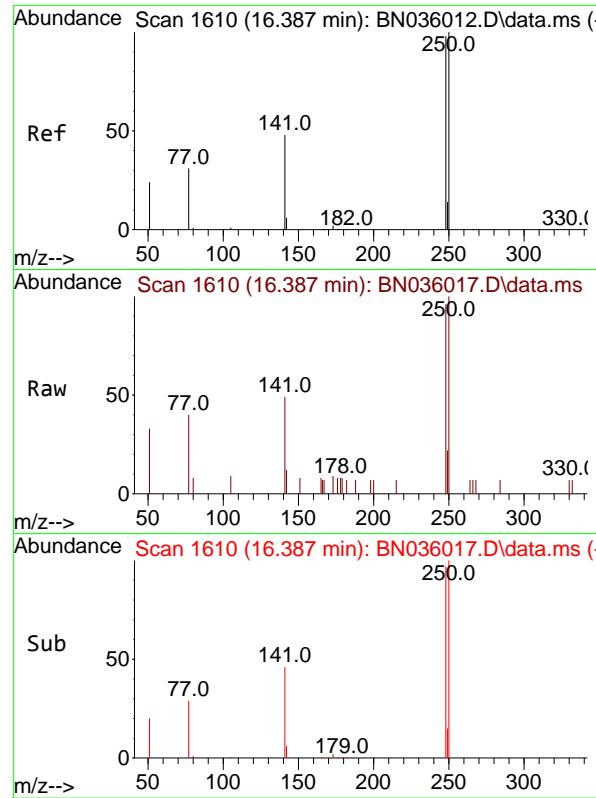
Ion Ratio Lower Upper

198 100

51 76.6 68.1 102.1

105 54.5 46.5 69.7

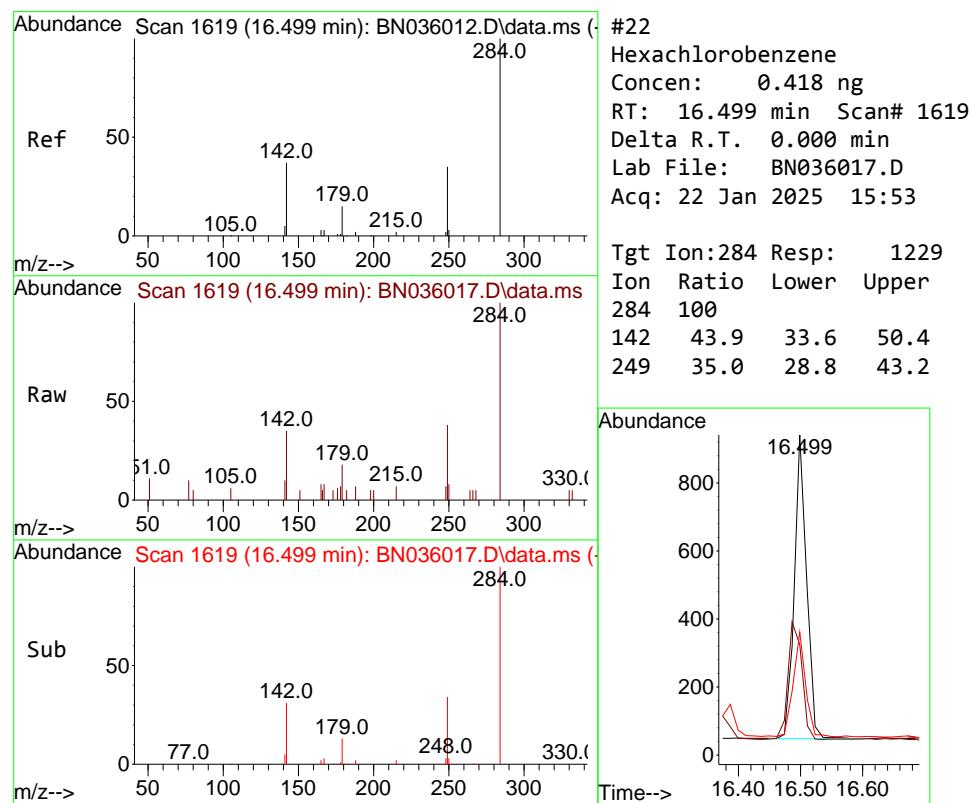
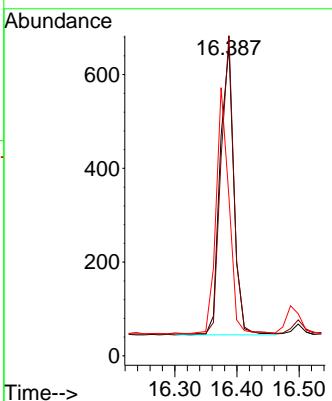




#21  
 4-Bromophenyl-phenylether  
 Concen: 0.423 ng  
 RT: 16.387 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

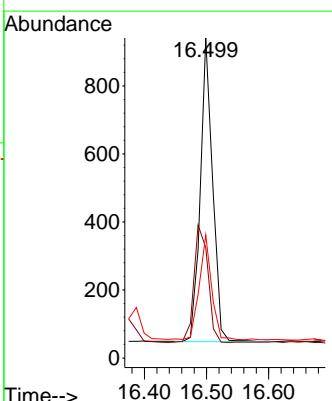
Instrument : BNA\_N  
 ClientSampleId : ICVBN012225

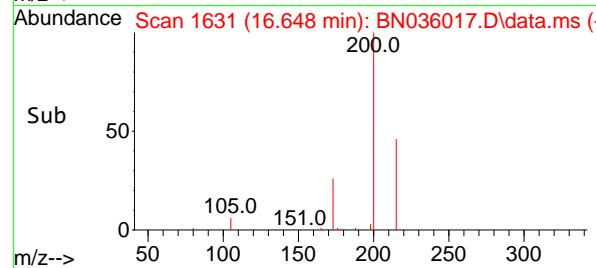
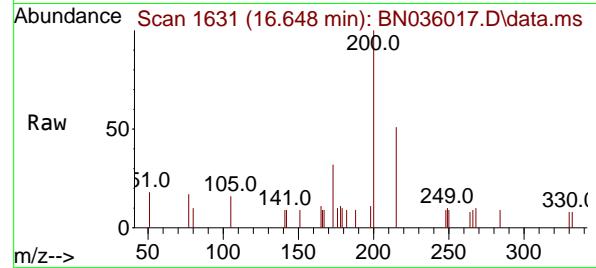
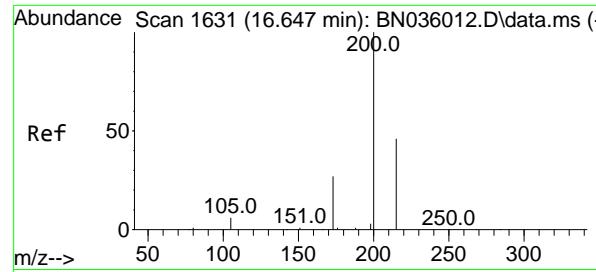
Tgt Ion:248 Resp: 944  
 Ion Ratio Lower Upper  
 248 100  
 250 103.6 81.5 122.3  
 141 51.3 41.8 62.6



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

Tgt Ion:284 Resp: 1229  
 Ion Ratio Lower Upper  
 284 100  
 142 43.9 33.6 50.4  
 249 35.0 28.8 43.2

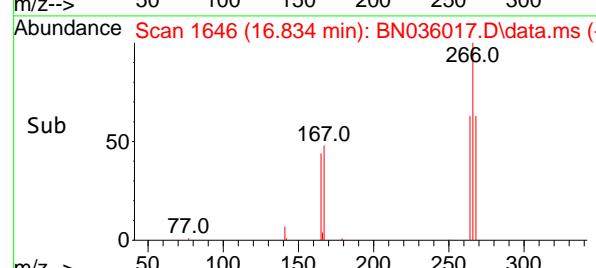
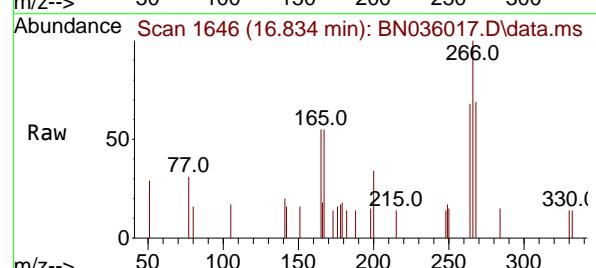
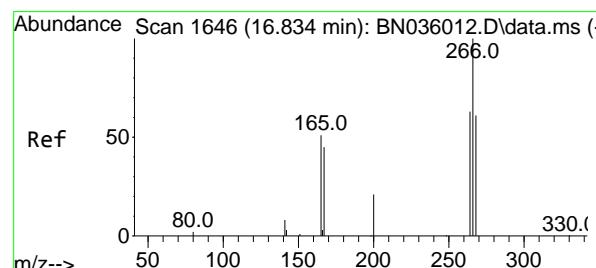
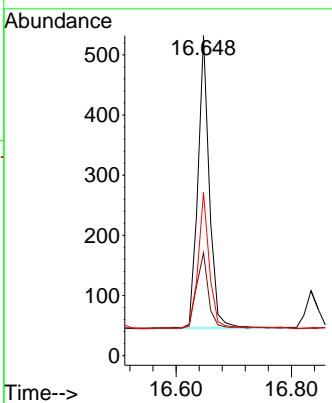




#23  
Atrazine  
Concen: 0.414 ng  
RT: 16.648 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

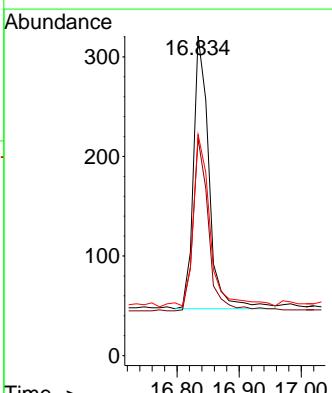
Instrument : BNA\_N  
ClientSampleId : ICVBN012225

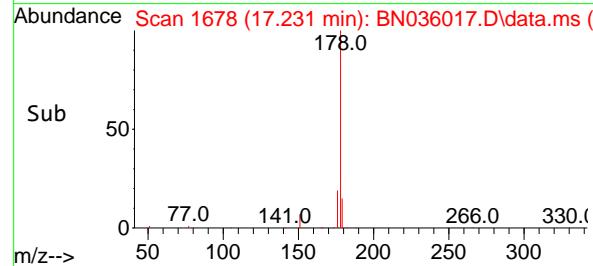
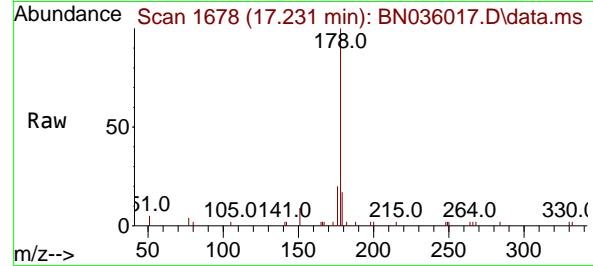
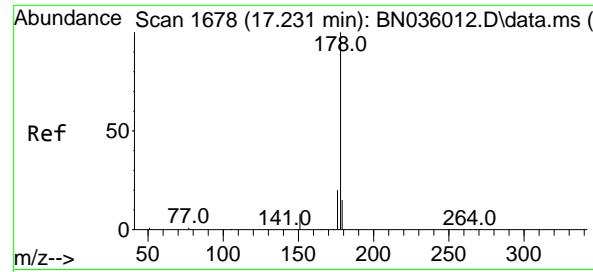
Tgt Ion:200 Resp: 667  
Ion Ratio Lower Upper  
200 100  
173 32.1 26.6 40.0  
215 50.9 40.6 61.0



#24  
Pentachlorophenol  
Concen: 0.377 ng  
RT: 16.834 min Scan# 1646  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

Tgt Ion:266 Resp: 479  
Ion Ratio Lower Upper  
266 100  
264 62.4 48.2 72.2  
268 68.7 51.6 77.4

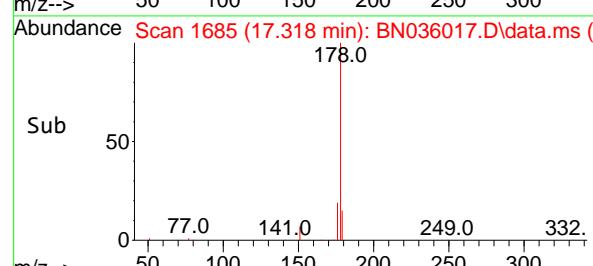
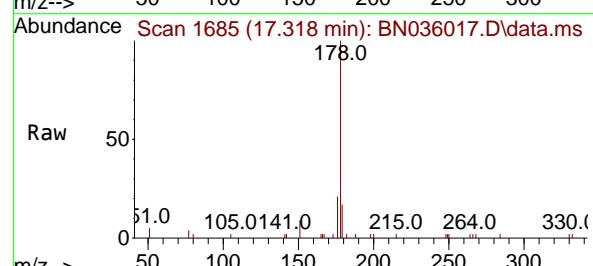
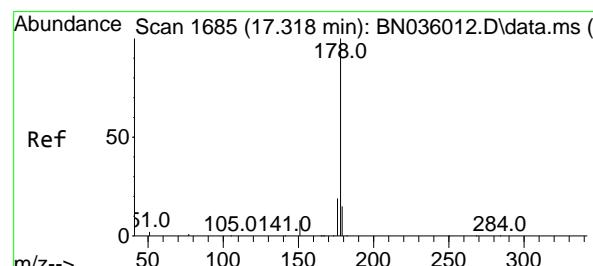
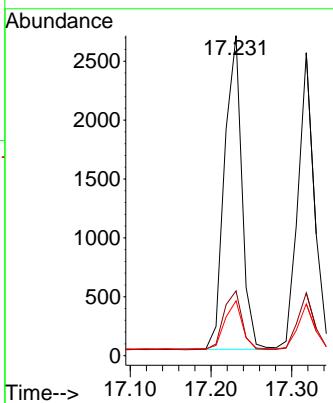




#25  
Phenanthrene  
Concen: 0.422 ng  
RT: 17.231 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

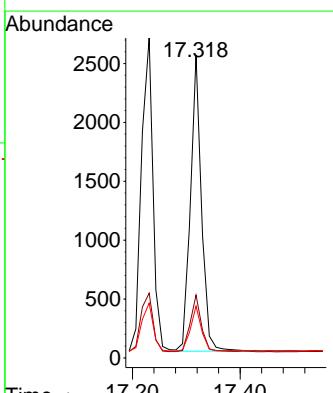
Instrument : BNA\_N  
ClientSampleId : ICVBN012225

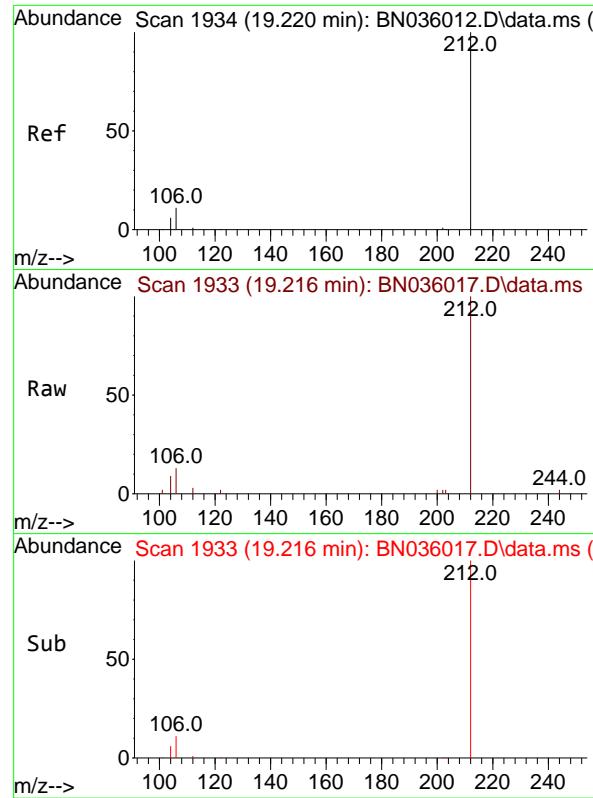
Tgt Ion:178 Resp: 3969  
Ion Ratio Lower Upper  
178 100  
176 19.8 16.0 24.0  
179 15.3 12.4 18.6



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

Tgt Ion:178 Resp: 3591  
Ion Ratio Lower Upper  
178 100  
176 19.2 15.4 23.2  
179 15.0 12.0 18.0

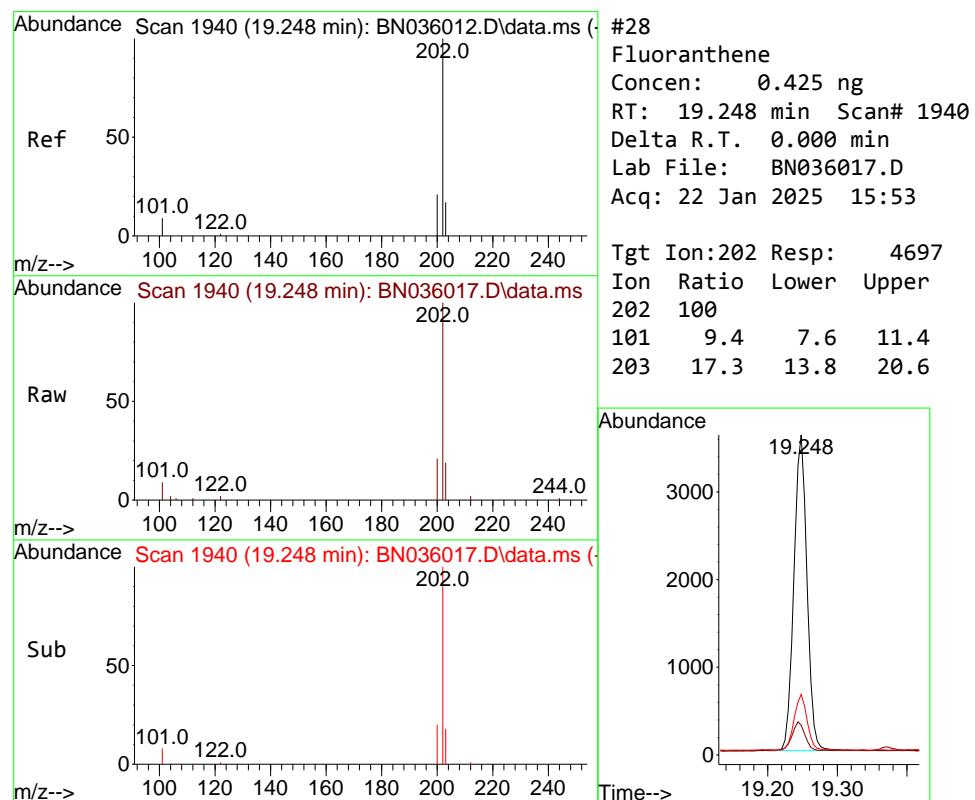
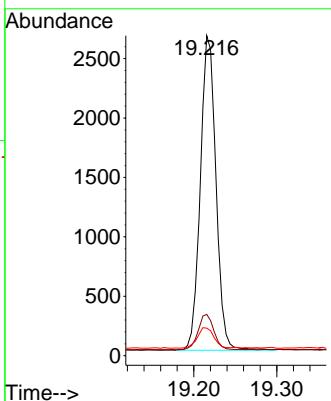




#27  
 Fluoranthene-d10  
 Concen: 0.428 ng  
 RT: 19.216 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

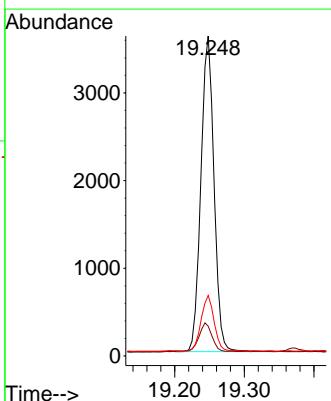
Instrument : BNA\_N  
 ClientSampleId : ICVBN012225

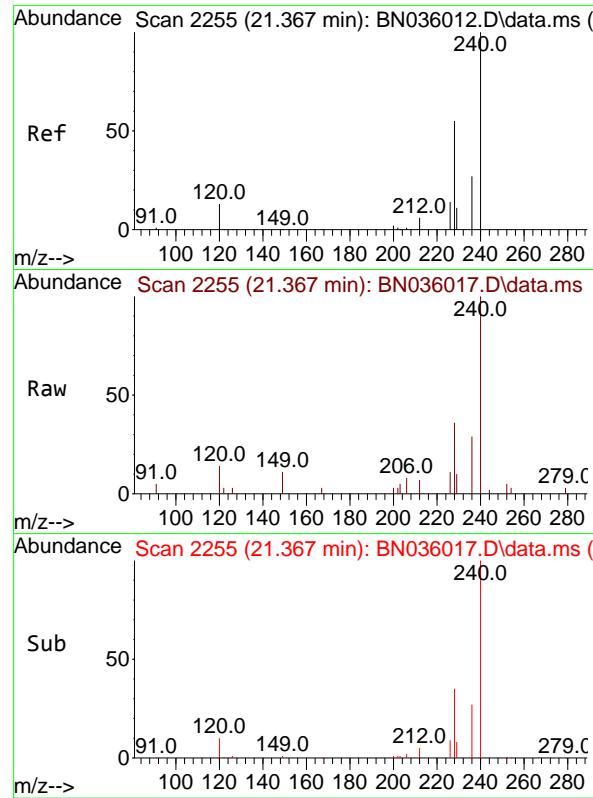
Tgt Ion:212 Resp: 3474  
 Ion Ratio Lower Upper  
 212 100  
 106 11.4 9.7 14.5  
 104 6.8 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.425 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

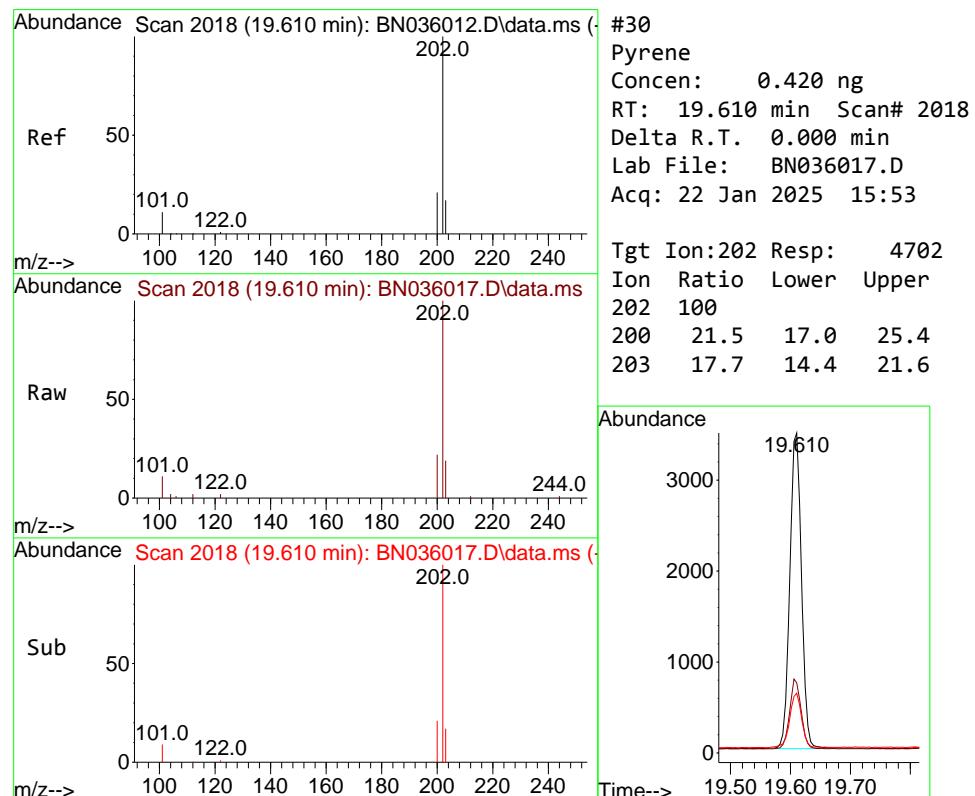
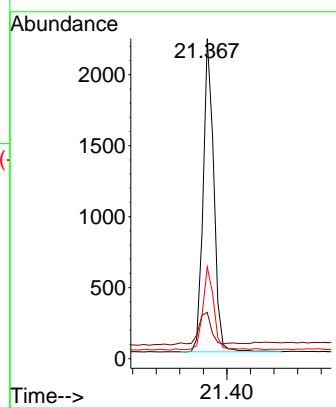
Tgt Ion:202 Resp: 4697  
 Ion Ratio Lower Upper  
 202 100  
 101 9.4 7.6 11.4  
 203 17.3 13.8 20.6





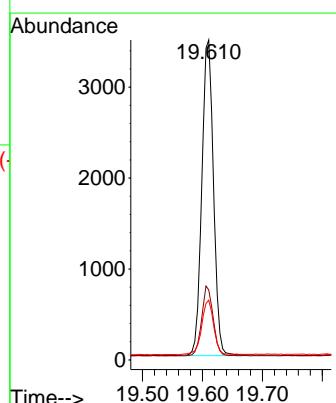
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
ClientSampleId : ICBN012225  
Acq: 22 Jan 2025 15:53

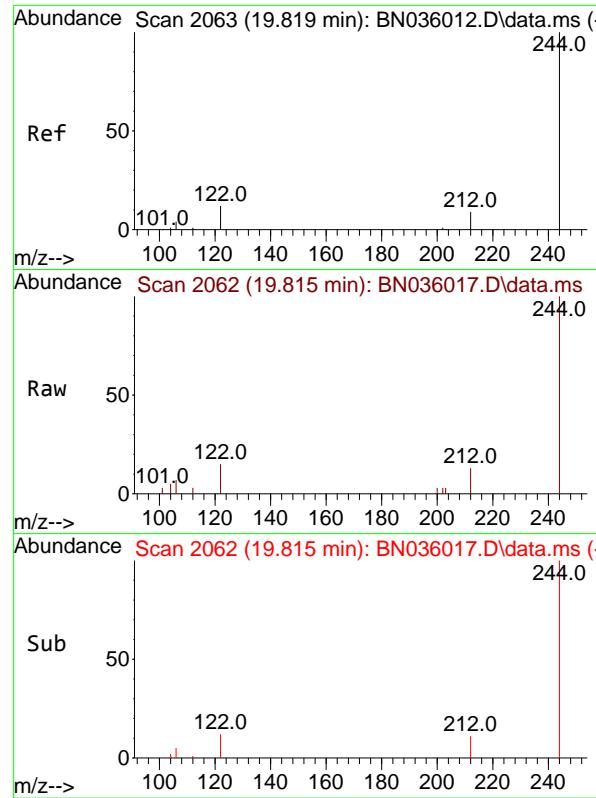
Tgt Ion:240 Resp: 2762  
Ion Ratio Lower Upper  
240 100  
120 14.4 13.9 20.9  
236 28.7 23.7 35.5



#30  
Pyrene  
Concen: 0.420 ng  
RT: 19.610 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

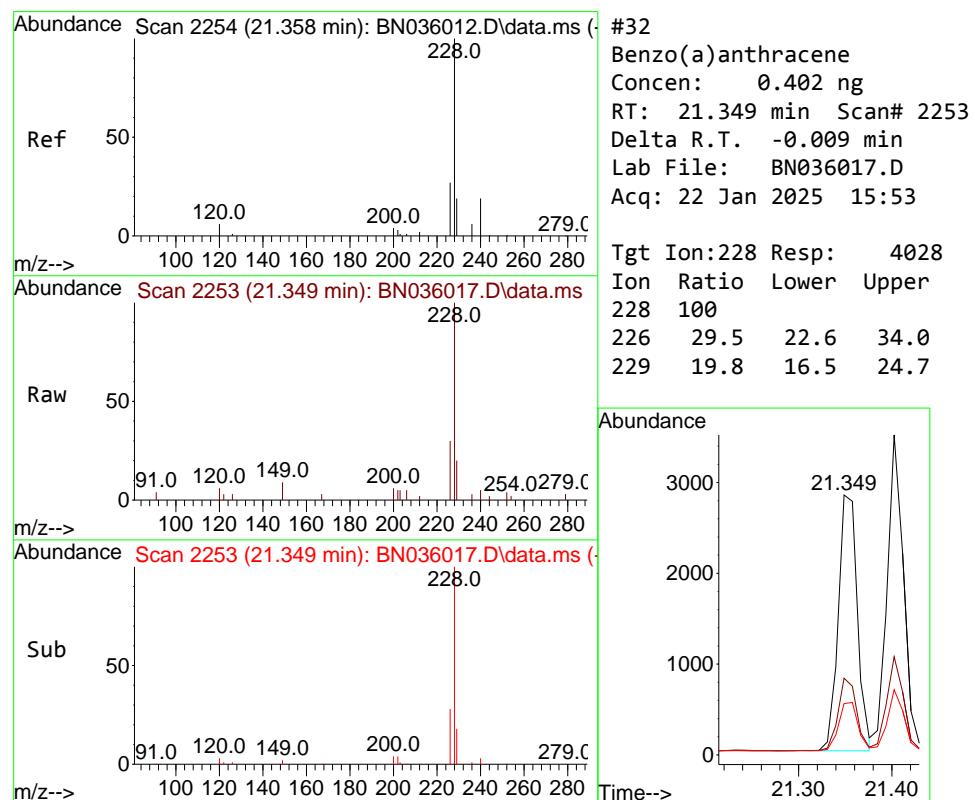
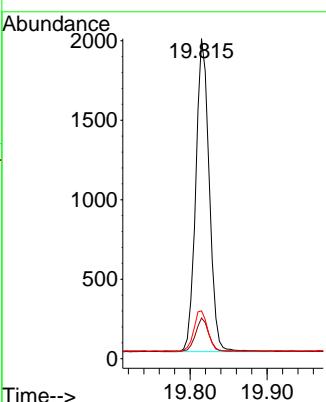
Tgt Ion:202 Resp: 4702  
Ion Ratio Lower Upper  
202 100  
200 21.5 17.0 25.4  
203 17.7 14.4 21.6





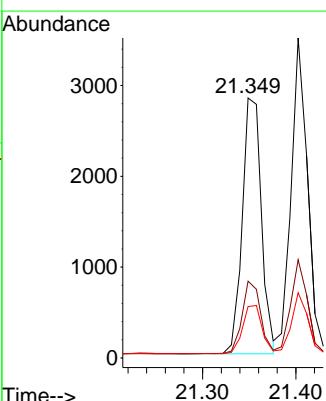
#31  
Terphenyl-d14  
Concen: 0.417 ng  
RT: 19.815 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53  
ClientSampleId : ICVBN012225

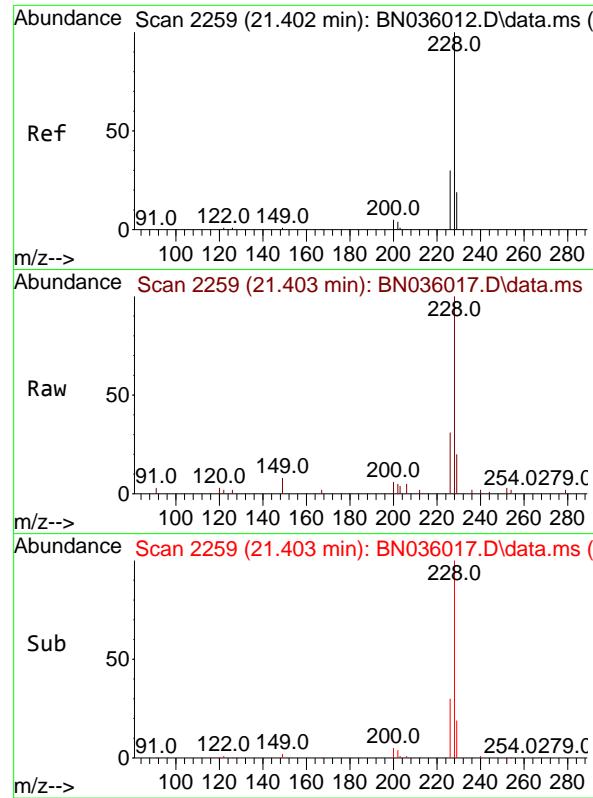
Tgt Ion:244 Resp: 2392  
Ion Ratio Lower Upper  
244 100  
212 12.7 9.1 13.7  
122 15.0 11.3 16.9



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

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

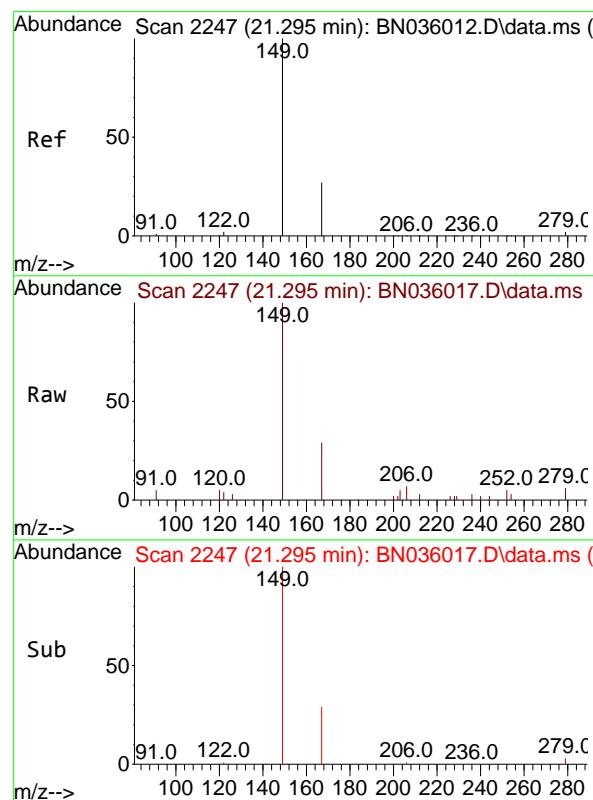
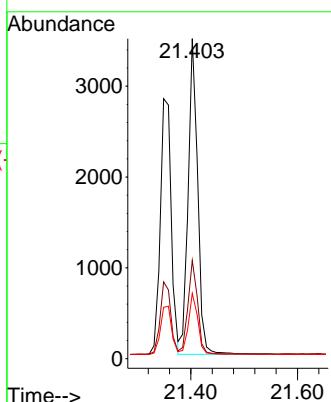




#33  
 Chrysene  
 Concen: 0.422 ng  
 RT: 21.403 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

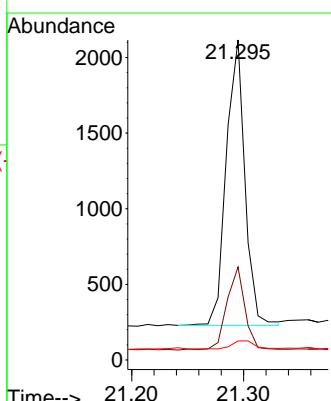
Instrument : BNA\_N  
 ClientSampleId : ICVBN012225

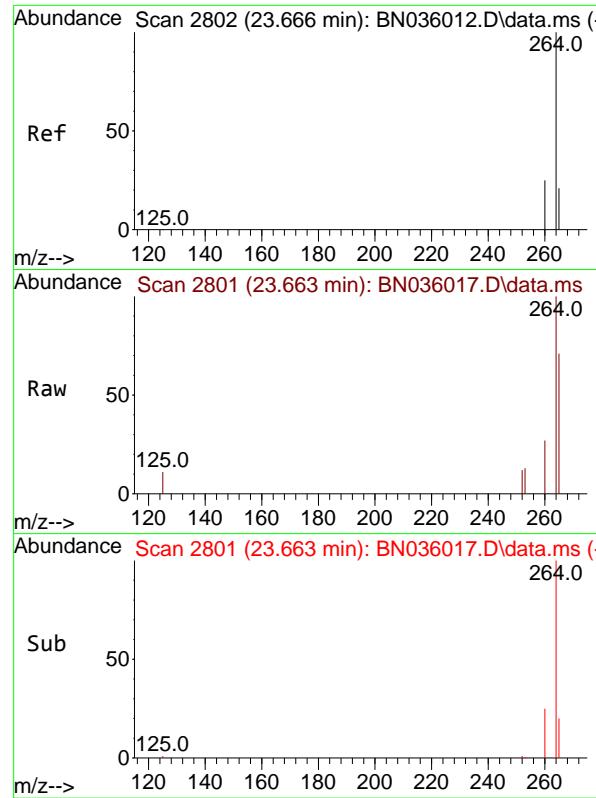
Tgt Ion:228 Resp: 4317  
 Ion Ratio Lower Upper  
 228 100  
 226 30.7 25.3 37.9  
 229 20.4 16.3 24.5



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.398 ng  
 RT: 21.295 min Scan# 2247  
 Delta R.T. 0.000 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

Tgt Ion:149 Resp: 2187  
 Ion Ratio Lower Upper  
 149 100  
 167 28.5 21.9 32.9  
 279 3.3 3.0 4.6

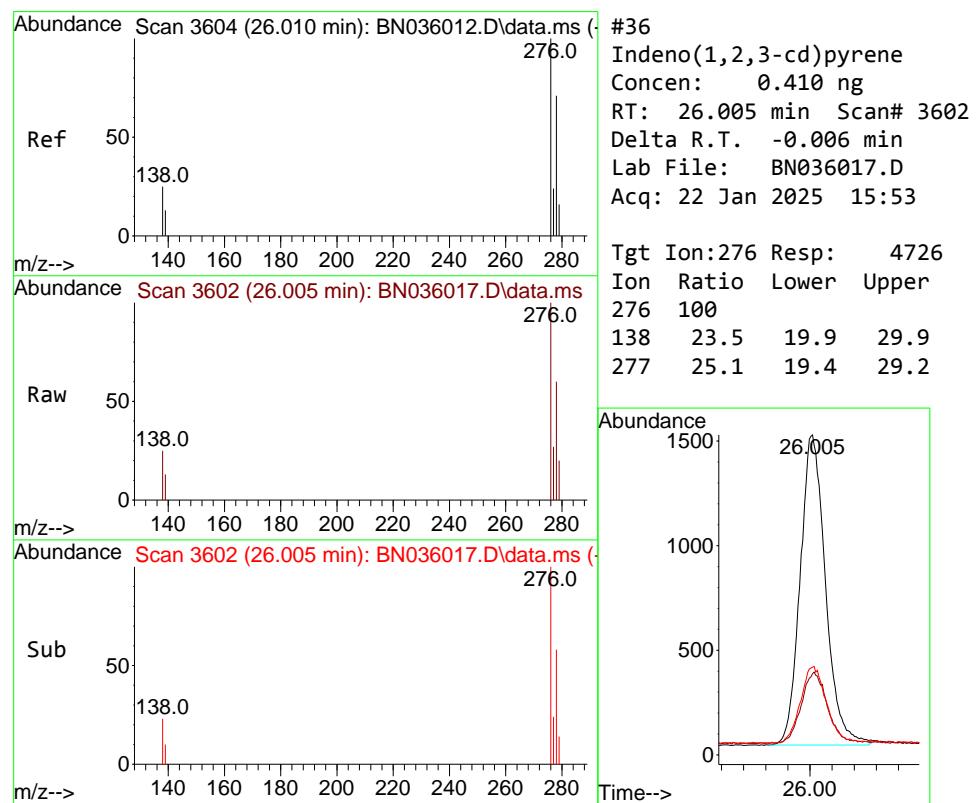
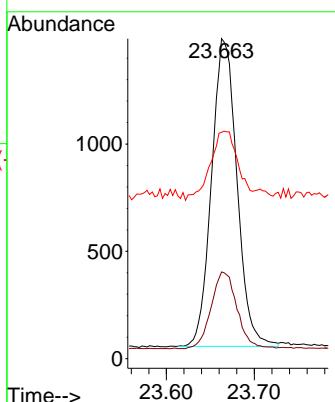




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.663 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

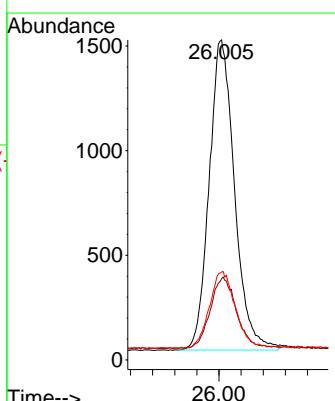
Instrument : BNA\_N  
ClientSampleId : ICVBN012225

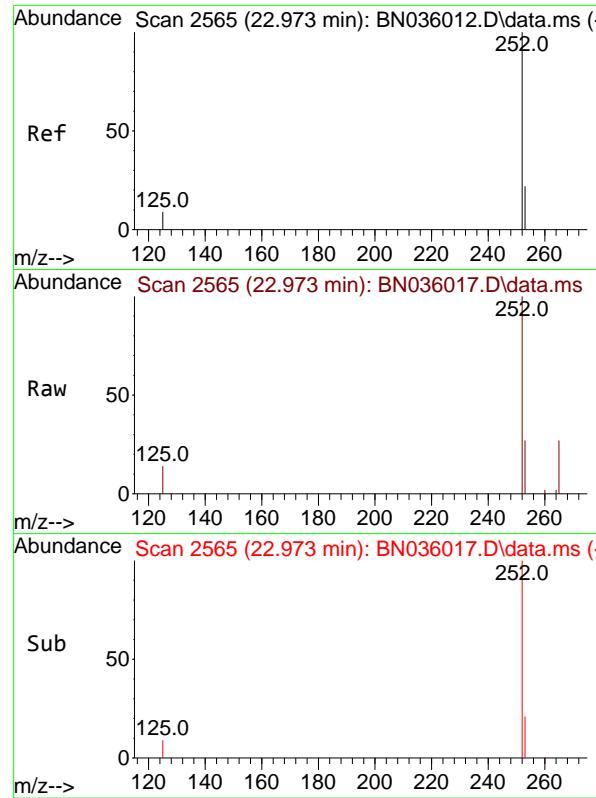
Tgt Ion:264 Resp: 2873  
Ion Ratio Lower Upper  
264 100  
260 27.1 21.8 32.6  
265 70.8 56.6 84.8



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.410 ng  
RT: 26.005 min Scan# 3602  
Delta R.T. -0.006 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

Tgt Ion:276 Resp: 4726  
Ion Ratio Lower Upper  
276 100  
138 23.5 19.9 29.9  
277 25.1 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.418 ng

RT: 22.973 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Instrument :

BNA\_N

ClientSampleId :

ICVBN012225

Tgt Ion:252 Resp: 4364

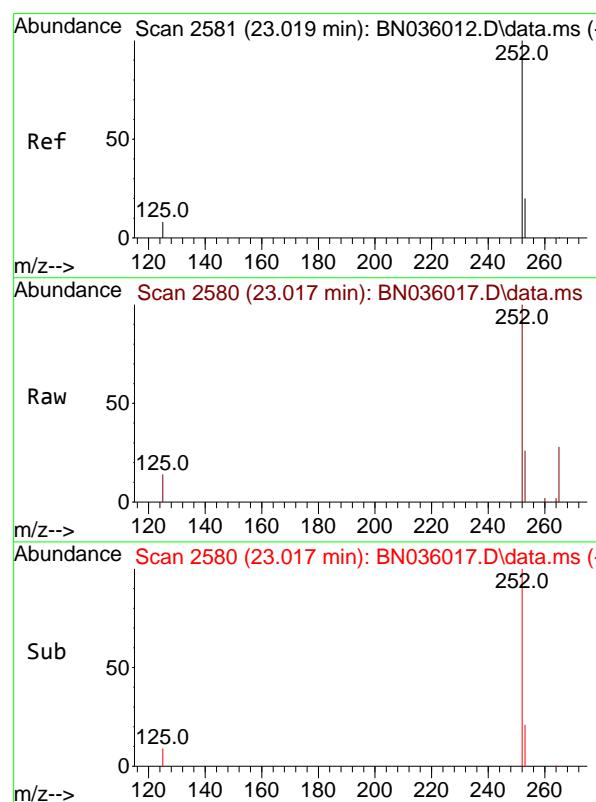
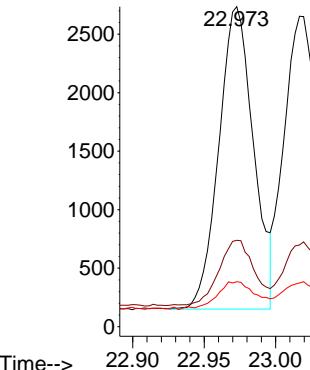
Ion Ratio Lower Upper

252 100

253 27.0 22.5 33.7

125 14.0 11.9 17.9

Abundance



#38

Benzo(k)fluoranthene

Concen: 0.401 ng

RT: 23.017 min Scan# 2580

Delta R.T. -0.003 min

Lab File: BN036017.D

Acq: 22 Jan 2025 15:53

Tgt Ion:252 Resp: 4219

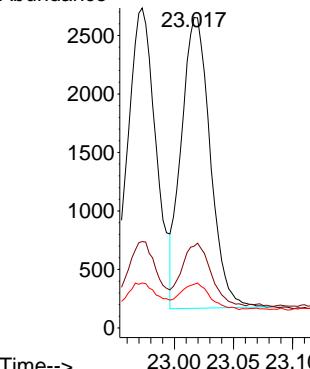
Ion Ratio Lower Upper

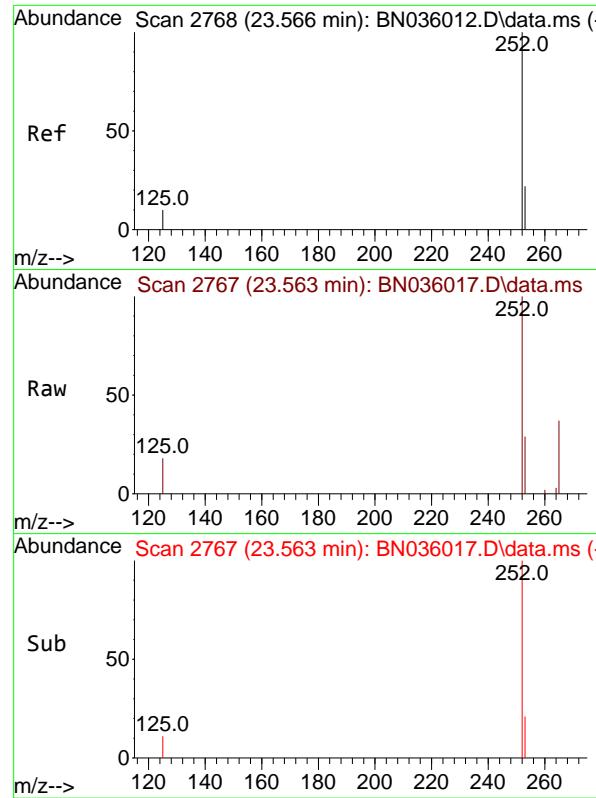
252 100

253 26.3 21.3 31.9

125 14.1 11.9 17.9

Abundance

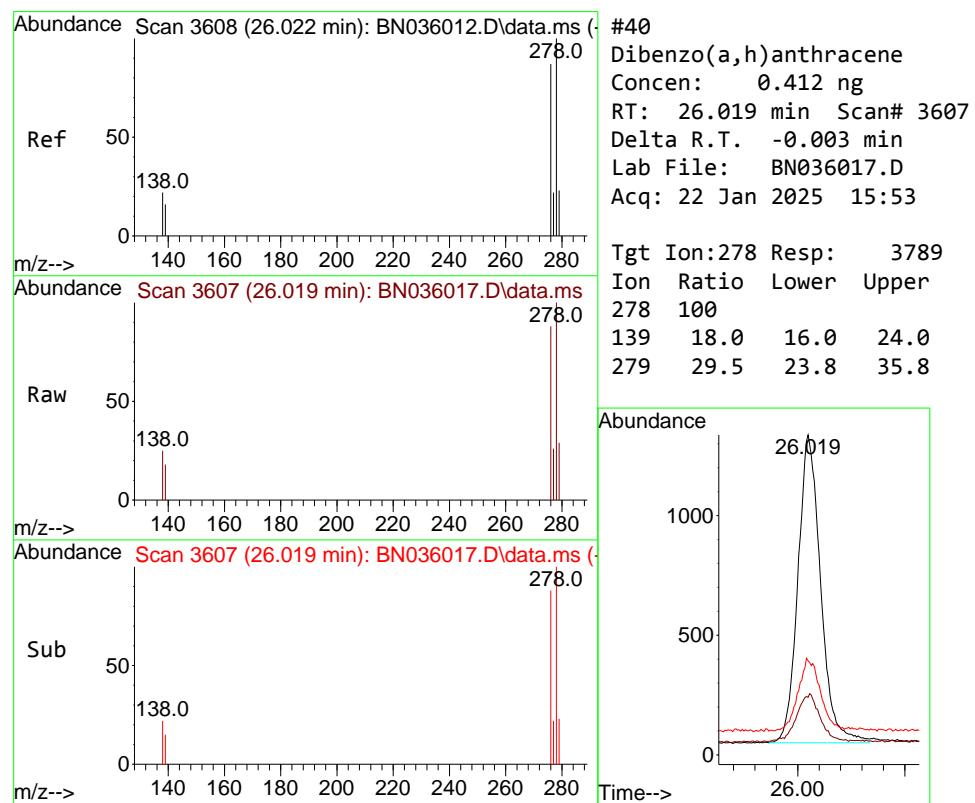
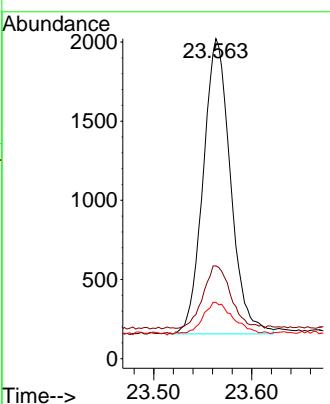




#39  
 Benzo(a)pyrene  
 Concen: 0.405 ng  
 RT: 23.563 min Scan# 2  
 Delta R.T. -0.003 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

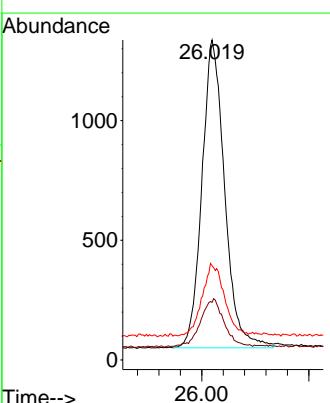
Instrument : BNA\_N  
 ClientSampleId : ICVBN012225

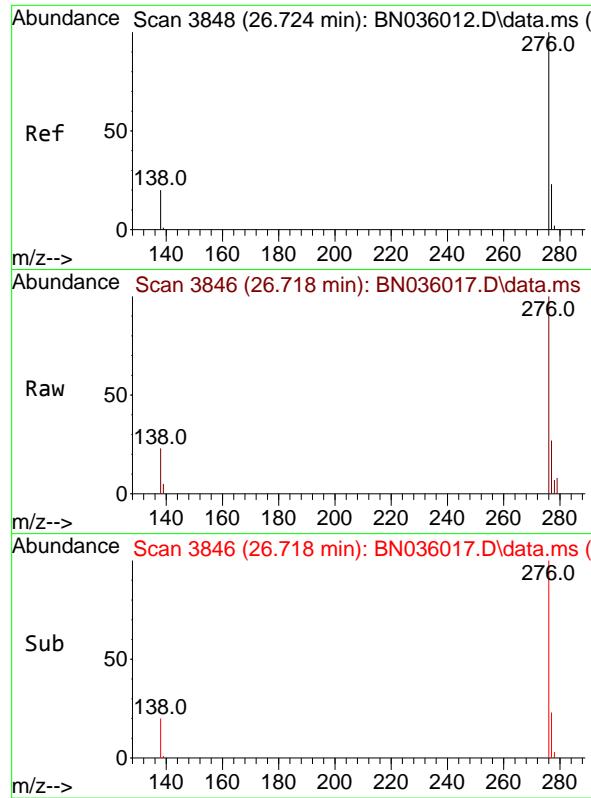
Tgt Ion:252 Resp: 3611  
 Ion Ratio Lower Upper  
 252 100  
 253 29.0 23.8 35.6  
 125 17.6 14.6 21.8



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.412 ng  
 RT: 26.019 min Scan# 3607  
 Delta R.T. -0.003 min  
 Lab File: BN036017.D  
 Acq: 22 Jan 2025 15:53

Tgt Ion:278 Resp: 3789  
 Ion Ratio Lower Upper  
 278 100  
 139 18.0 16.0 24.0  
 279 29.5 23.8 35.8

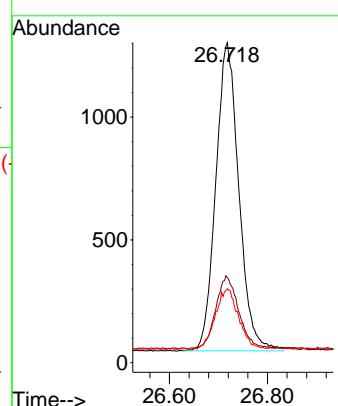




#41  
Benzo(g,h,i)perylene  
Concen: 0.410 ng  
RT: 26.718 min Scan# 3  
Delta R.T. -0.006 min  
Lab File: BN036017.D  
Acq: 22 Jan 2025 15:53

Instrument : BNA\_N  
ClientSampleId : ICVBN012225

Tgt Ion:276 Resp: 4102  
Ion Ratio Lower Upper  
276 100  
277 26.6 21.3 31.9  
138 23.1 19.2 28.8



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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN012225**

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

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

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

(#) = Out of Range

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

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

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN012225**

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

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

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

(#) = Out of Range

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



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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>CHEMTECH</u>		Contract:	<u>TETR06</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1199</u>	SAS No.:	<u>Q1199</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>01/29/2025</u>	<u>18:06</u>
Lab File ID:	<u>BN036112.D</u>		Init. Calib. Date(s):	<u>01/22/2025</u>	<u>01/22/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4</u>		Init. Calib. Time(s):	<u>11:02</u>	<u>14:36</u>
GC Column:	<u>ZB-GR</u>	ID: <u>0.25</u>	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.594		9.2	20.0
Fluoranthene-d10	1.036	1.092		5.4	20.0
2-Fluorophenol	1.040	1.195		14.9	20.0
Phenol-d6	1.222	1.488		21.8	20.0
Nitrobenzene-d5	0.378	0.398		5.3	20.0
2-Fluorobiphenyl	1.786	1.681		-5.9	20.0
2,4,6-Tribromophenol	0.257	0.246		-4.3	20.0
Terphenyl-d14	0.831	0.973		17.1	20.0
1,4-Dioxane	0.447	0.405		-9.4	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036112.D  
 Acq On : 29 Jan 2025 18:06  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Jan 30 00:35:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2094	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	4943	0.400	ng	-0.01
13) Acenaphthene-d10	14.437	164	2715	0.400	ng	-0.01
19) Phenanthrene-d10	17.194	188	5698	0.400	ng	# 0.01
29) Chrysene-d12	21.376	240	4562	0.400	ng	0.00
35) Perylene-d12	23.677	264	5021	0.400	ng	# 0.01
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	2503	0.460	ng	0.03
5) Phenol-d6	7.023	99	3116	0.487	ng	0.05
8) Nitrobenzene-d5	8.956	82	1965	0.421	ng	0.00
11) 2-Methylnaphthalene-d10	12.188	152	2935	0.437	ng	-0.01
14) 2,4,6-Tribromophenol	15.940	330	668	0.384	ng	0.01
15) 2-Fluorobiphenyl	13.068	172	4563	0.377	ng	0.00
27) Fluoranthene-d10	19.220	212	6225	0.422	ng	0.00
31) Terphenyl-d14	19.819	244	4439	0.468	ng	0.00
<b>Target Compounds</b>						
					Qvalue	
2) 1,4-Dioxane	3.303	88	848	0.362	ng	93
3) n-Nitrosodimethylamine	3.614	42	1532	0.361	ng	# 82
6) bis(2-Chloroethyl)ether	7.225	93	2347	0.456	ng	97
9) Naphthalene	10.643	128	5445	0.379	ng	99
10) Hexachlorobutadiene	10.942	225	1612	0.348	ng	# 100
12) 2-Methylnaphthalene	12.264	142	3554	0.399	ng	97
16) Acenaphthylene	14.159	152	5031	0.391	ng	100
17) Acenaphthene	14.501	154	3433	0.389	ng	97
18) Fluorene	15.495	166	4221	0.382	ng	97
20) 4,6-Dinitro-2-methylph...	15.568	198	413	0.311	ng	93
21) 4-Bromophenyl-phenylether	16.387	248	1542	0.380	ng	97
22) Hexachlorobenzene	16.499	284	1993	0.373	ng	97
23) Atrazine	16.660	200	1238	0.422	ng	96
24) Pentachlorophenol	16.859	266	920	0.398	ng	93
25) Phenanthrene	17.231	178	6643	0.388	ng	99
26) Anthracene	17.318	178	5960	0.383	ng	98
28) Fluoranthene	19.253	202	7565	0.376	ng	99
30) Pyrene	19.615	202	7732	0.418	ng	98
32) Benzo(a)anthracene	21.358	228	6361	0.384	ng	97
33) Chrysene	21.411	228	6253	0.370	ng	96
34) Bis(2-ethylhexyl)phtha...	21.295	149	4681	0.516	ng	99
36) Indeno(1,2,3-cd)pyrene	26.019	276	7721	0.383	ng	98
37) Benzo(b)fluoranthene	22.982	252	6433	0.352	ng	# 84
38) Benzo(k)fluoranthene	23.025	252	6417m	0.349	ng	
39) Benzo(a)pyrene	23.575	252	5774	0.370	ng	# 79
40) Dibenzo(a,h)anthracene	26.037	278	6242	0.389	ng	# 89
41) Benzo(g,h,i)perylene	26.738	276	6621	0.378	ng	98

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

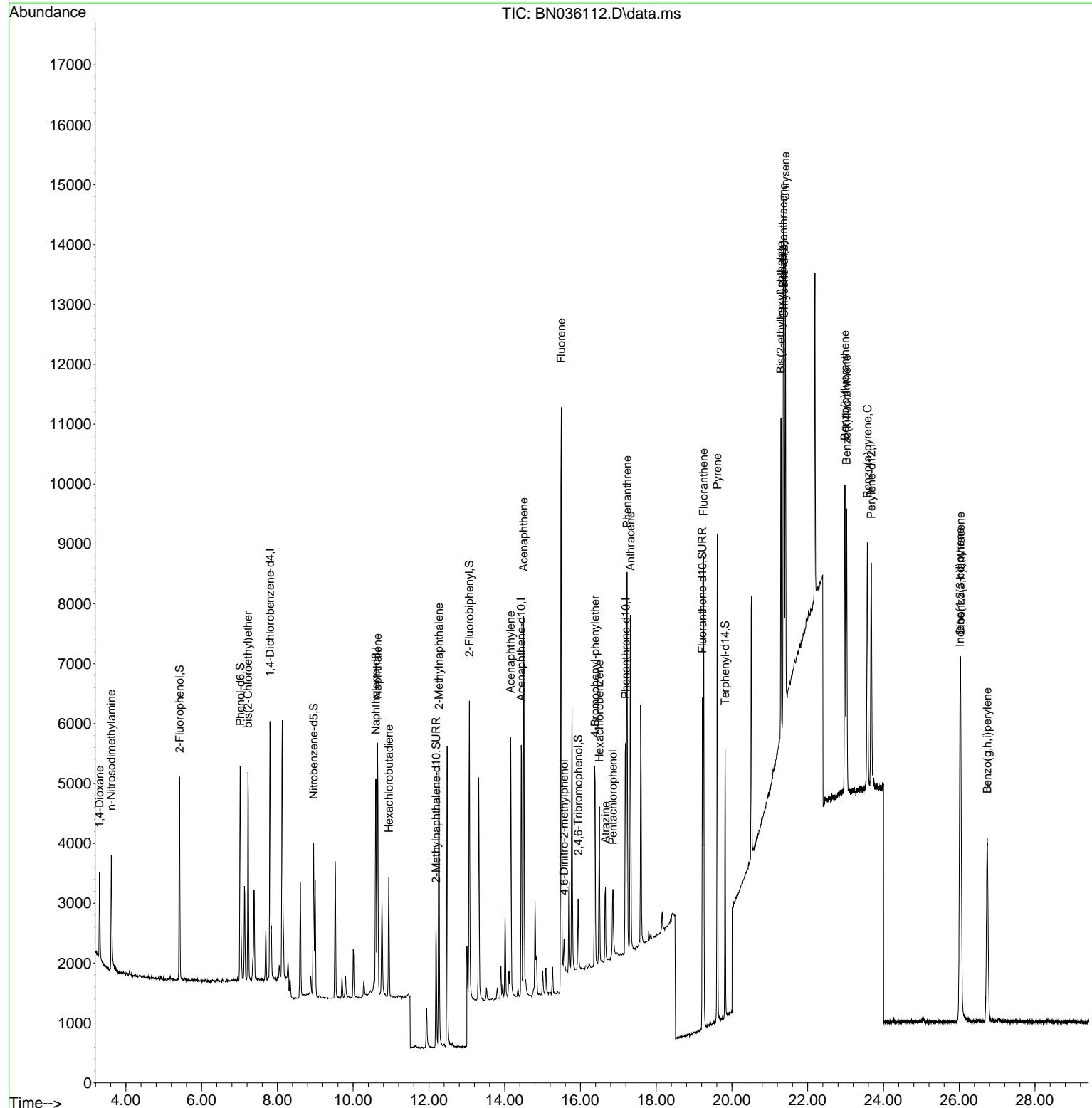
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036112.D  
 Acq On : 29 Jan 2025 18:06  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

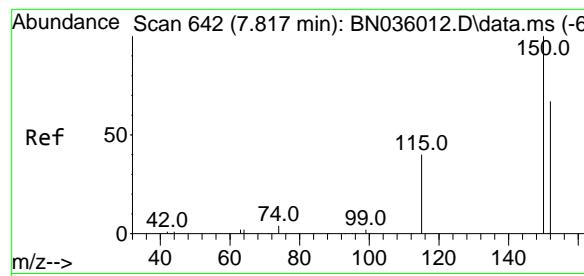
Quant Time: Jan 30 00:35:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

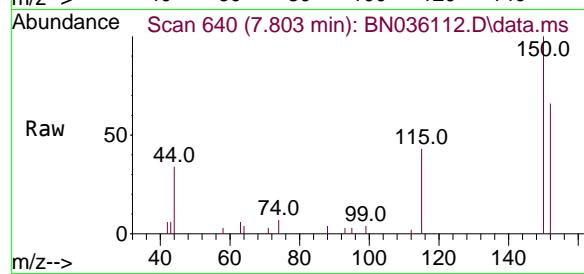
**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025





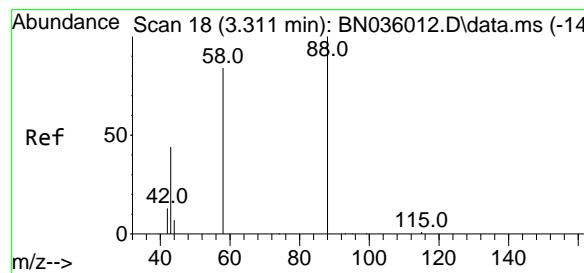
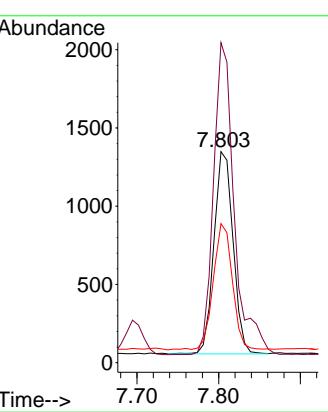
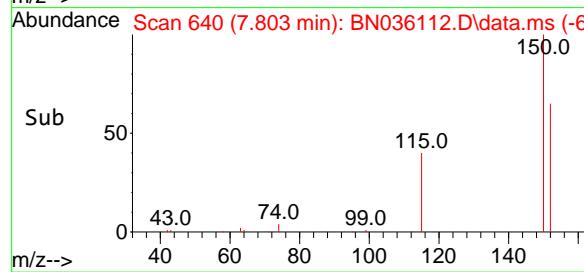
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



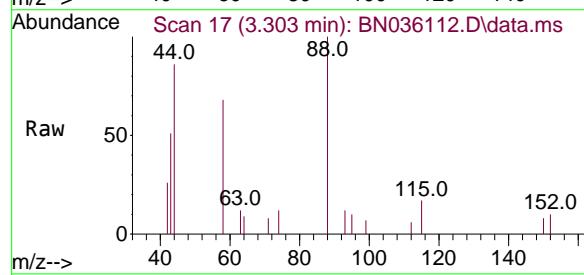
Tgt Ion:152 Resp: 209.4  
Ion Ratio Lower Upper  
152 100  
150 151.6 117.4 176.2  
115 65.9 51.0 76.4

### Manual Integrations APPROVED

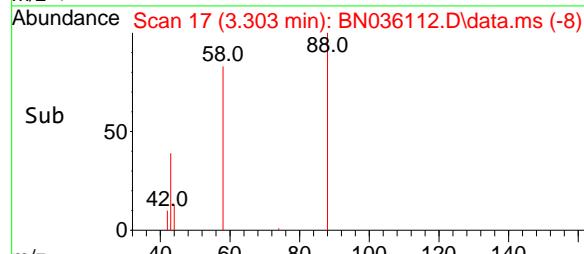
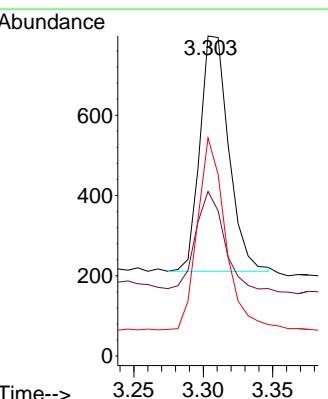
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

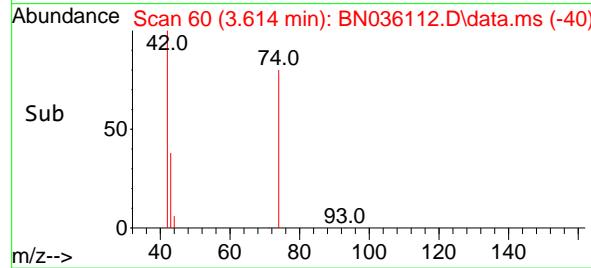
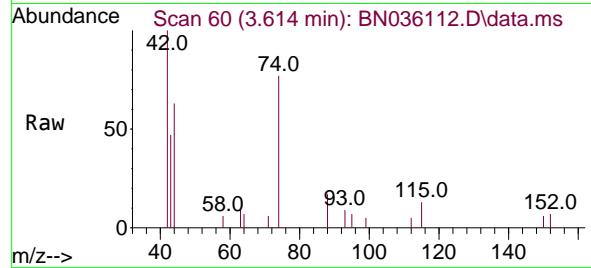
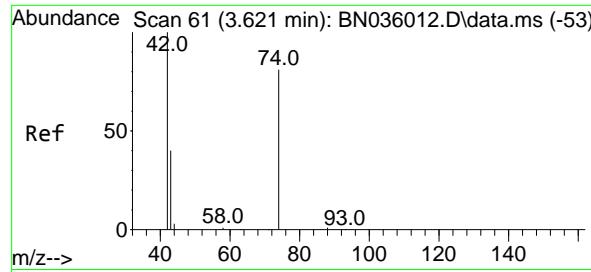


#2  
1,4-Dioxane  
Concen: 0.362 ng  
RT: 3.303 min Scan# 17  
Delta R.T. -0.007 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



Tgt Ion: 88 Resp: 848  
Ion Ratio Lower Upper  
88 100  
43 39.9 38.5 57.7  
58 78.9 66.6 99.8





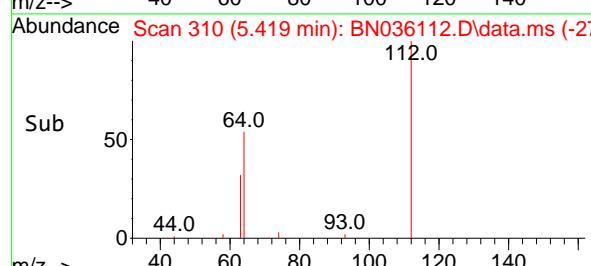
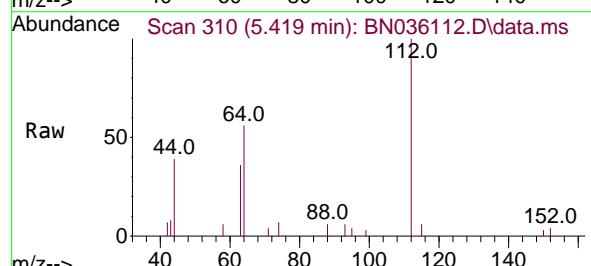
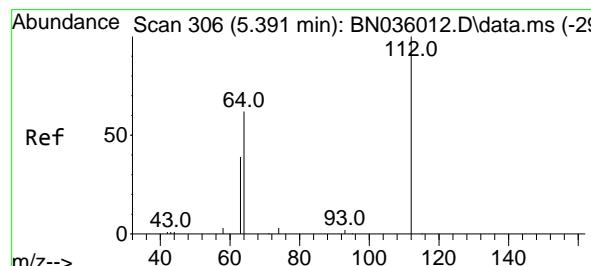
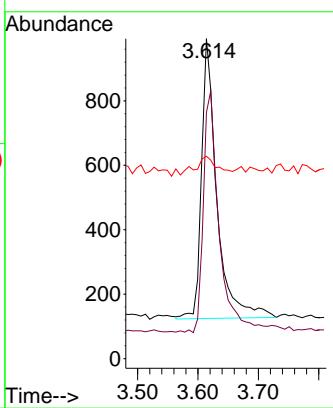
#3

n-Nitrosodimethylamine  
Concen: 0.361 ng  
RT: 3.614 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

### Manual Integrations APPROVED

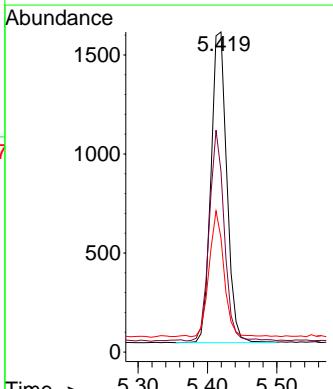
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

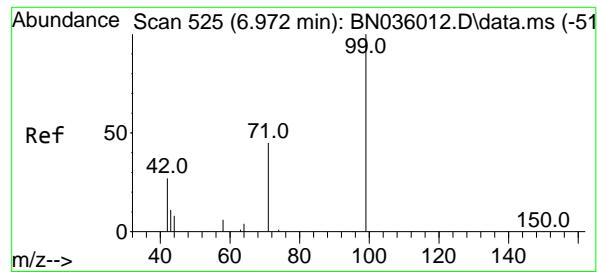


#4

2-Fluorophenol  
Concen: 0.460 ng  
RT: 5.419 min Scan# 310  
Delta R.T. 0.029 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:112 Resp: 2503  
Ion Ratio Lower Upper  
112 100  
64 64.4 50.0 75.0  
63 37.6 30.7 46.1





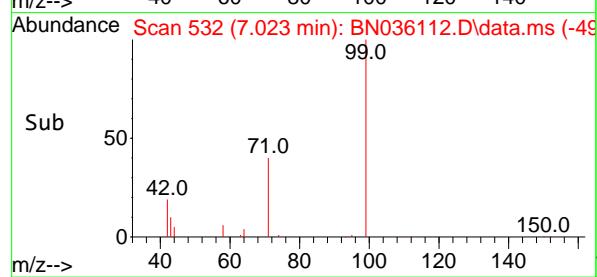
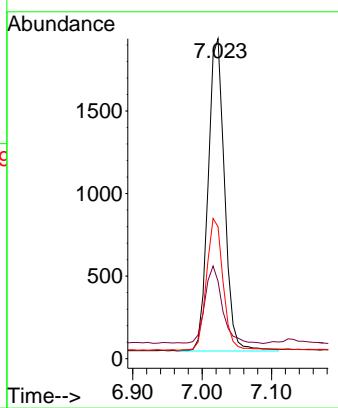
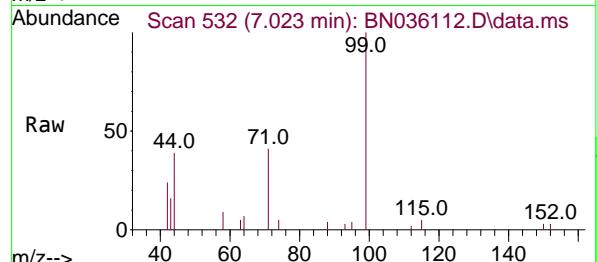
#5  
 Phenol-d6  
 Concen: 0.487 ng  
 RT: 7.023 min Scan# 51  
 Delta R.T. 0.051 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Instrument : BNA\_N  
 ClientSampleId : SSTDCCCC0.4

Tgt Ion: 99 Resp: 3110  
 Ion Ratio Lower Upper  
 99 100  
 42 26.1 26.8 40.2  
 71 43.0 36.6 55.0

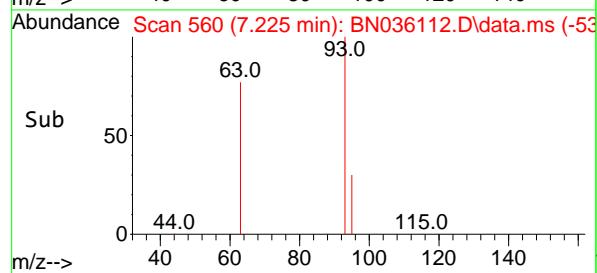
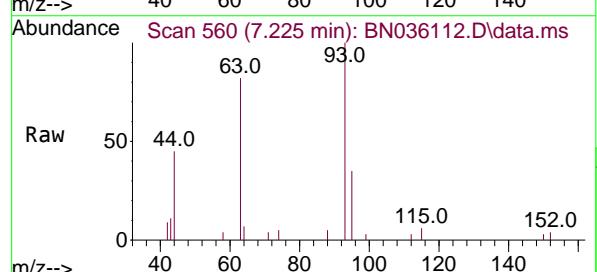
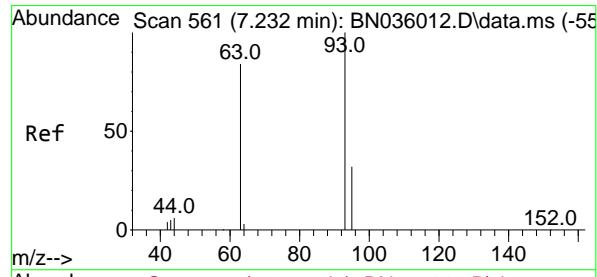
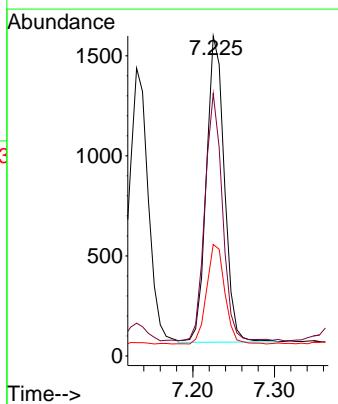
### Manual Integrations APPROVED

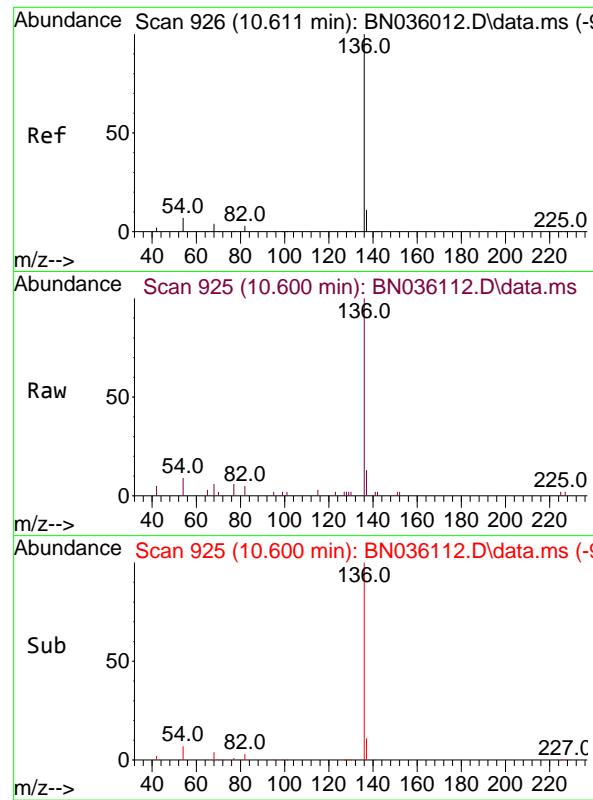
Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.456 ng  
 RT: 7.225 min Scan# 560  
 Delta R.T. -0.007 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion: 93 Resp: 2347  
 Ion Ratio Lower Upper  
 93 100  
 63 78.8 65.8 98.6  
 95 32.8 25.8 38.6





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.600 min Scan# 9

Delta R.T. -0.011 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

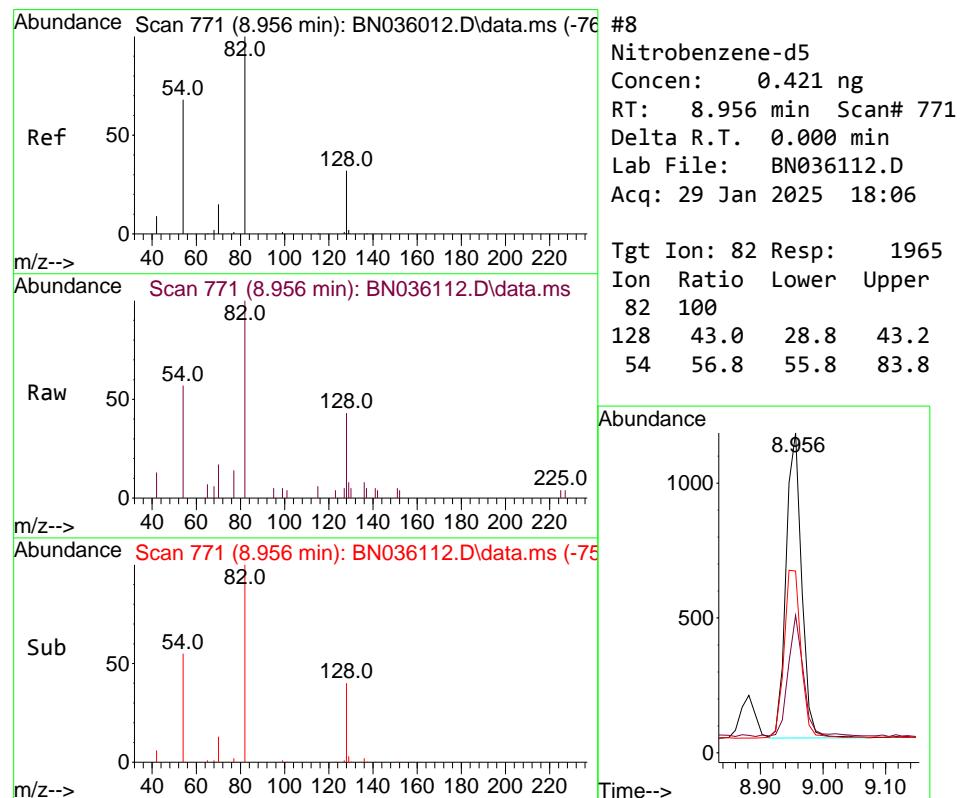
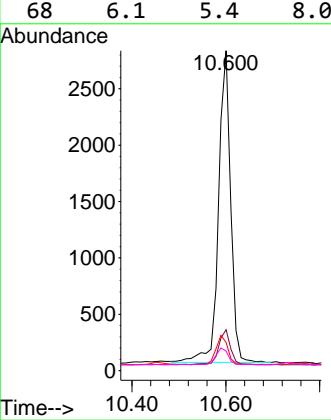
Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025


#8

Nitrobenzene-d5

Concen: 0.421 ng

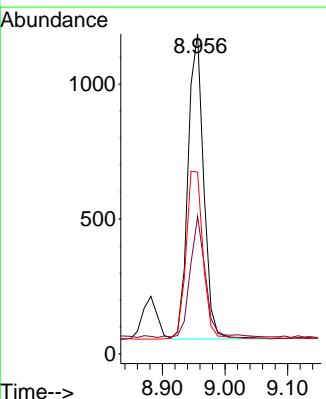
RT: 8.956 min Scan# 771

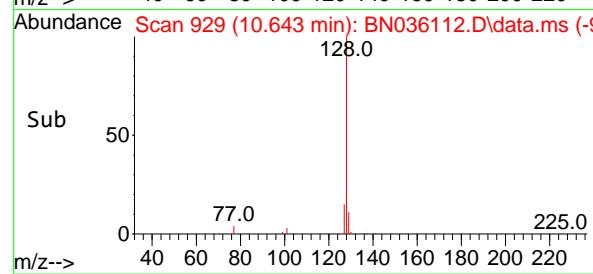
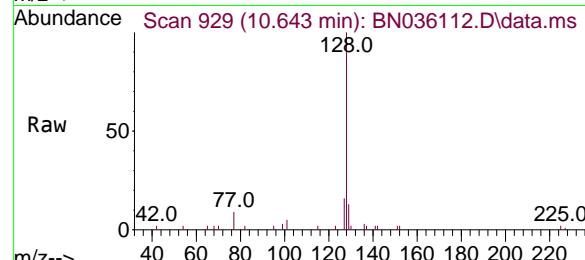
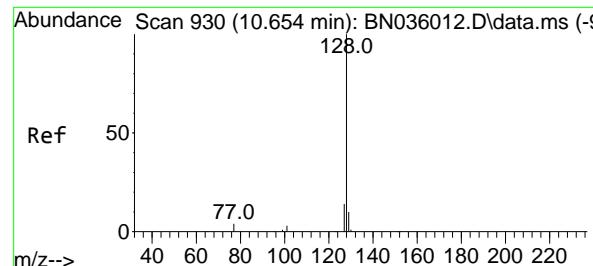
Delta R.T. 0.000 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Tgt	Ion:	82	Resp:	1965
Ion	Ratio	Lower	Upper	
82	100			
128	43.0	28.8	43.2	
54	56.8	55.8	83.8	





#9

Naphthalene

Concen: 0.379 ng

RT: 10.643 min Scan# 9

Delta R.T. -0.011 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

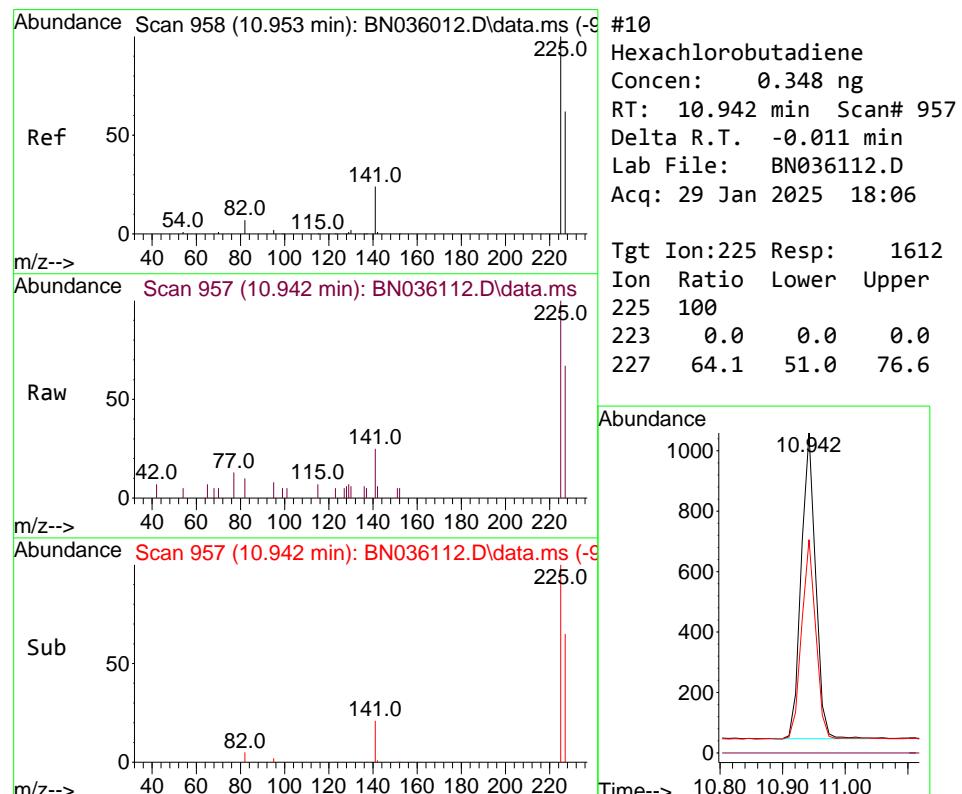
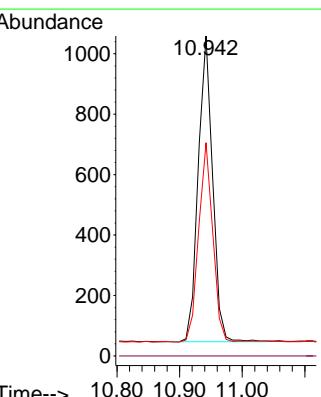
Instrument :

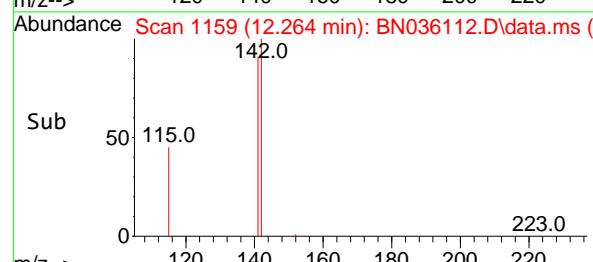
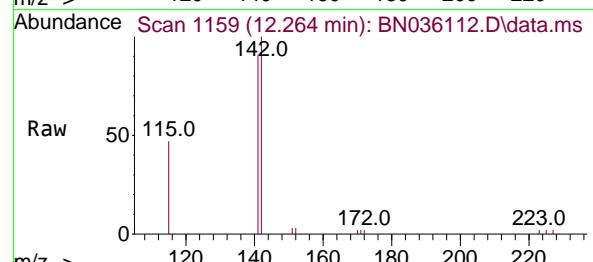
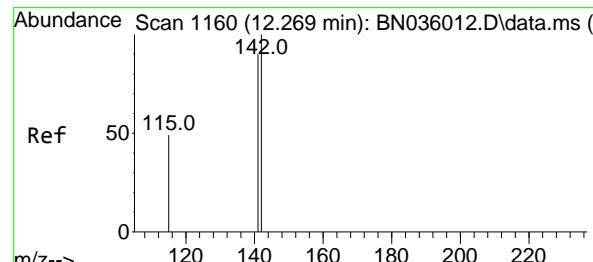
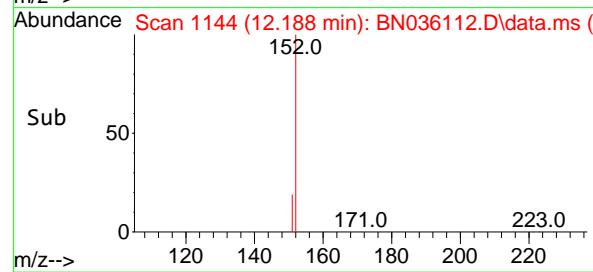
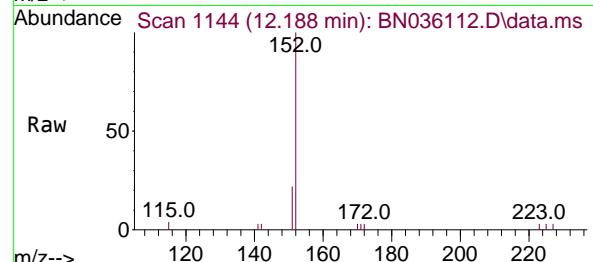
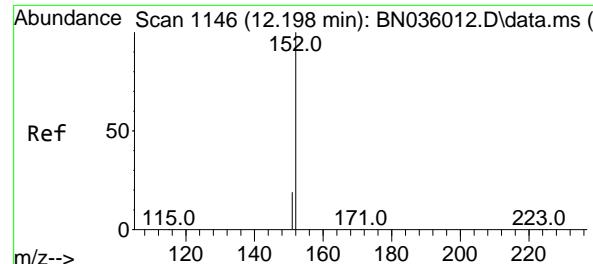
BNA\_N

ClientSampleId :

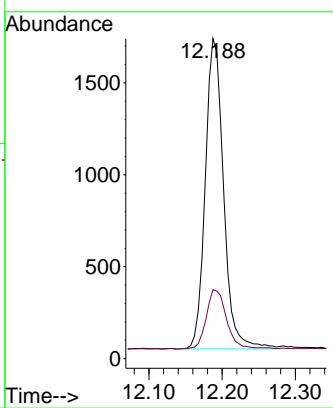
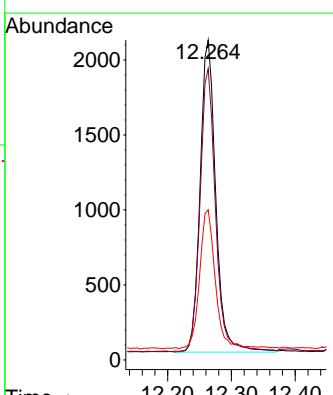
SSTDCCC0.4

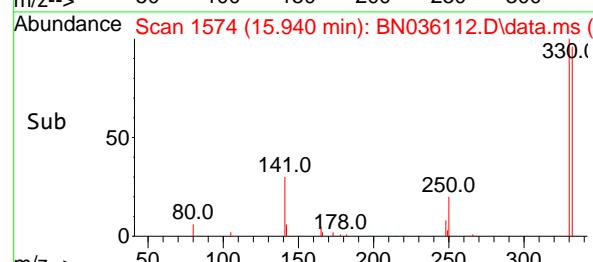
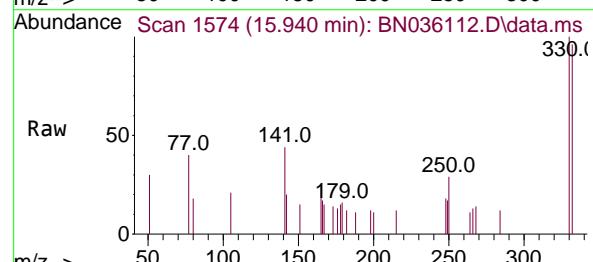
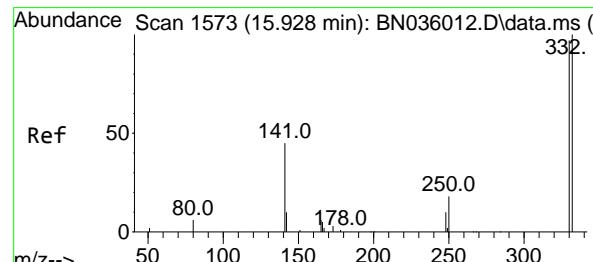
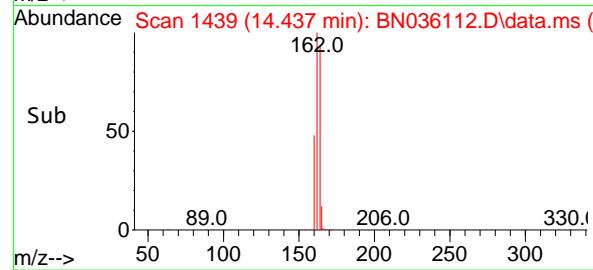
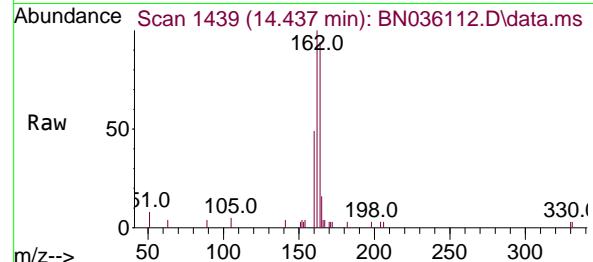
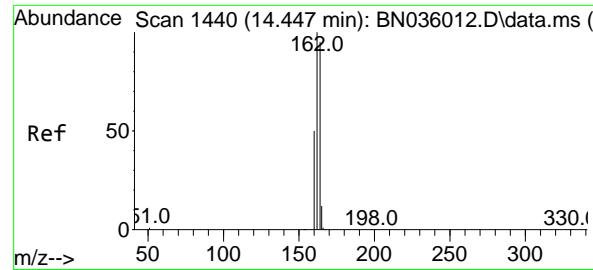
**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 01/30/2025  
 Supervised By :mohammad ahmed 01/31/2025

 Tgt Ion:225 Resp: 1612  
 Ion Ratio Lower Upper  
 225 100  
 223 0.0 0.0 0.0  
 227 64.1 51.0 76.6




#11

2-Methylnaphthalene-d10  
Concen: 0.437 ngRT: 12.188 min Scan# 1146  
Delta R.T. -0.010 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4Tgt Ion:152 Resp: 2935  
Ion Ratio Lower Upper  
152 100  
151 21.2 16.6 25.0**Manual Integrations  
APPROVED**Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025#12  
2-Methylnaphthalene  
Concen: 0.399 ng  
RT: 12.264 min Scan# 1159  
Delta R.T. -0.005 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06Tgt Ion:142 Resp: 3554  
Ion Ratio Lower Upper  
142 100  
141 91.0 72.2 108.2  
115 46.9 41.2 61.8



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.437 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Instrument :

BNA\_N

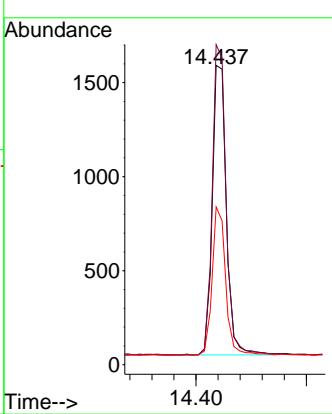
ClientSampleId :

SSTDCCC0.4

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#14

2,4,6-Tribromophenol

Concen: 0.384 ng

RT: 15.940 min Scan# 1574

Delta R.T. 0.012 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

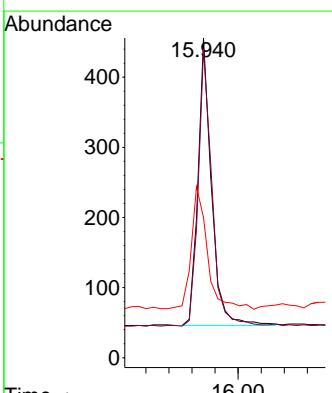
Tgt Ion:330 Resp: 668

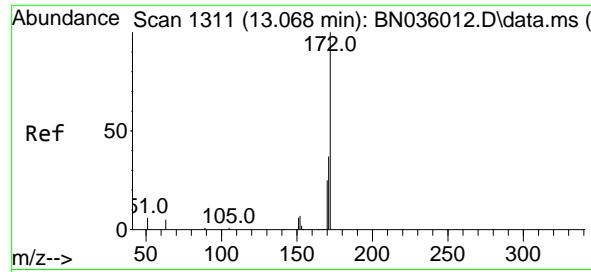
Ion Ratio Lower Upper

330 100

332 98.1 81.0 121.4

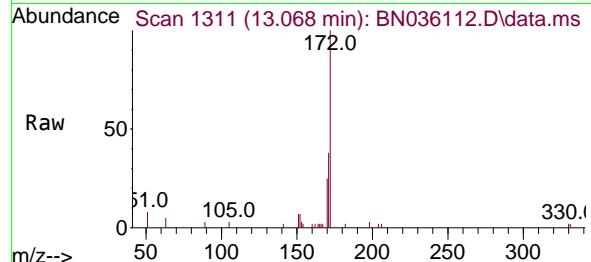
141 50.7 36.7 55.1





#15  
2-Fluorobiphenyl  
Concen: 0.377 ng  
RT: 13.068 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

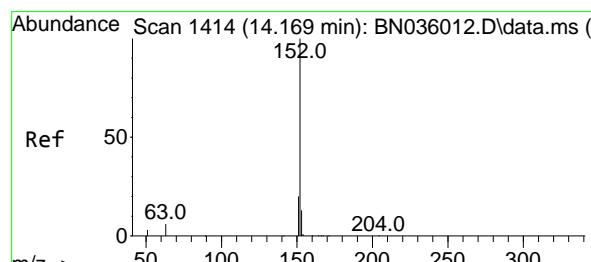
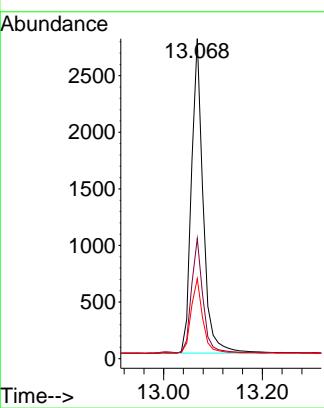
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



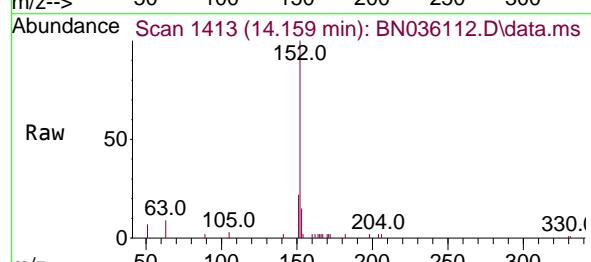
Tgt Ion:172 Resp: 4561  
Ion Ratio Lower Upper  
172 100  
171 37.5 30.9 46.3  
170 25.0 21.2 31.8

### Manual Integrations APPROVED

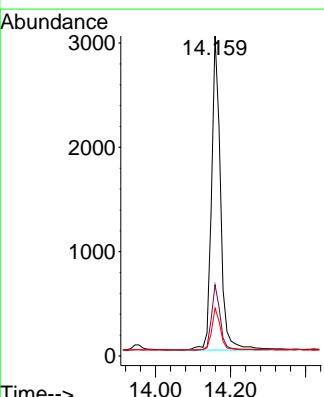
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025

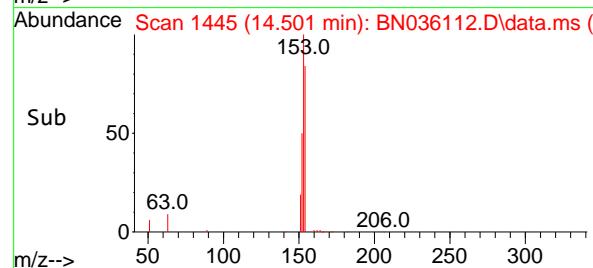
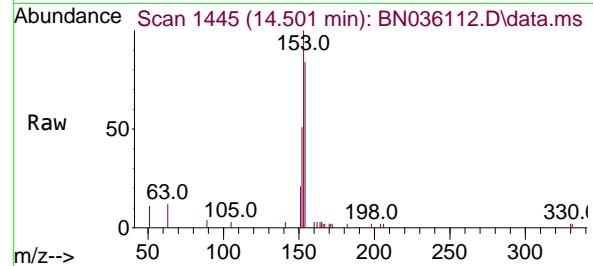
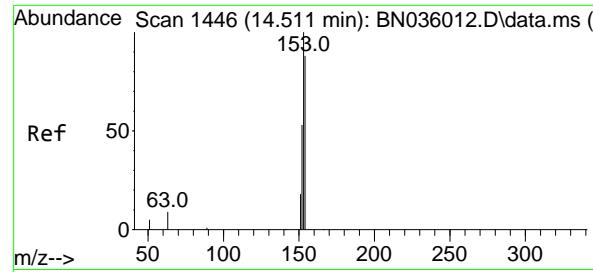


#16  
Acenaphthylene  
Concen: 0.391 ng  
RT: 14.159 min Scan# 1413  
Delta R.T. -0.011 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



Tgt Ion:152 Resp: 5031  
Ion Ratio Lower Upper  
152 100  
151 20.5 16.2 24.2  
153 13.0 10.4 15.6





#17

Acenaphthene

Concen: 0.389 ng

RT: 14.501 min Scan# 1446

Delta R.T. -0.011 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Instrument :

BNA\_N

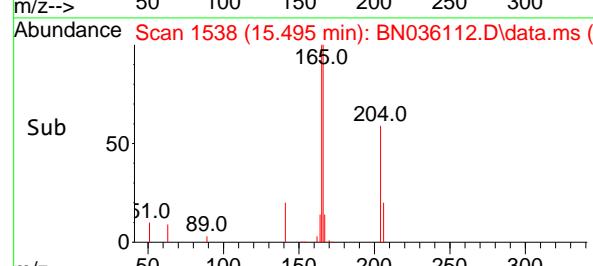
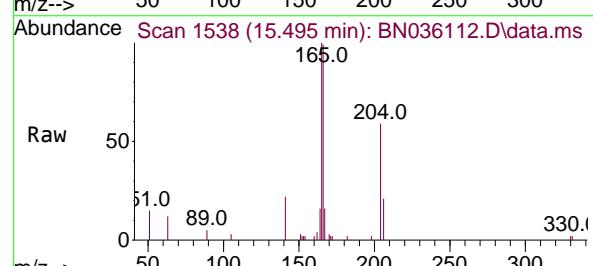
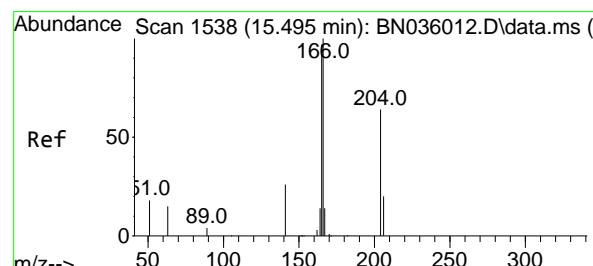
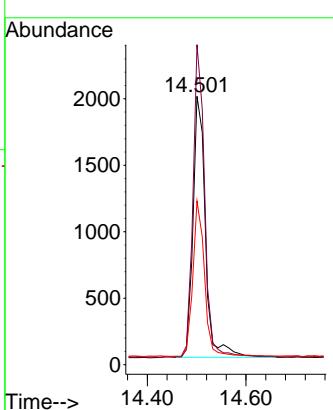
ClientSampleId :

SSTDCCC0.4

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#18

Fluorene

Concen: 0.382 ng

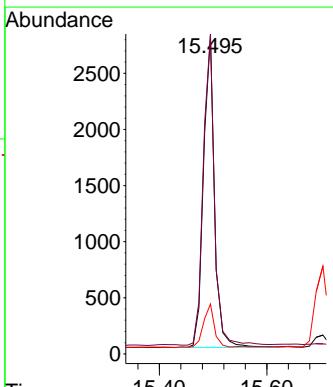
RT: 15.495 min Scan# 1538

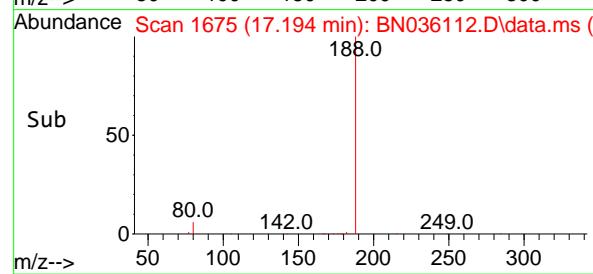
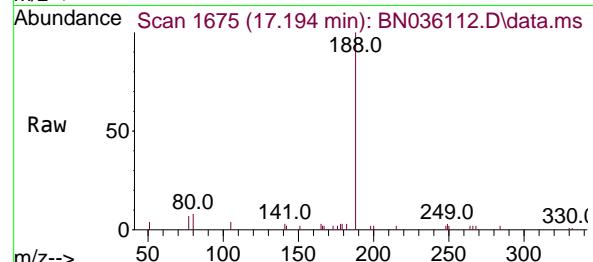
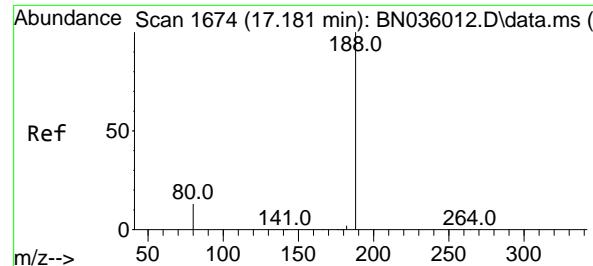
Delta R.T. 0.000 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Tgt	Ion:166	Resp:	4221
Ion	Ratio	Lower	Upper
166	100		
165	101.1	78.5	117.7
167	13.6	10.7	16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.194 min Scan# 1

Delta R.T. 0.012 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Instrument :

BNA\_N

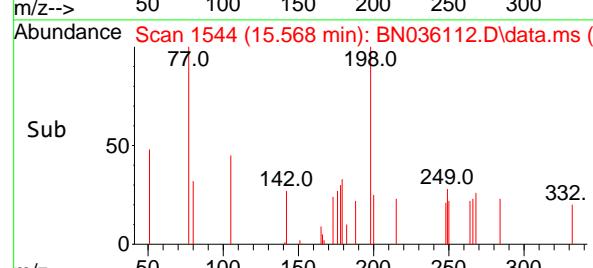
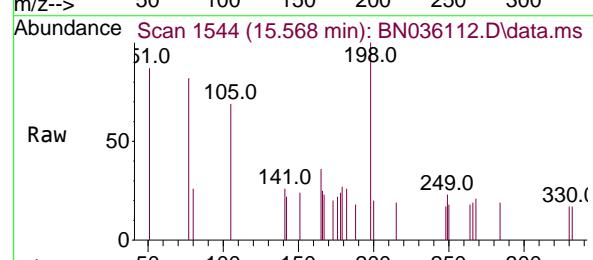
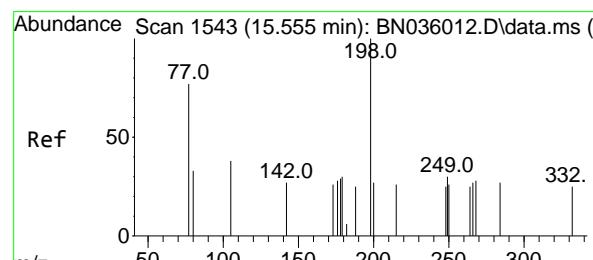
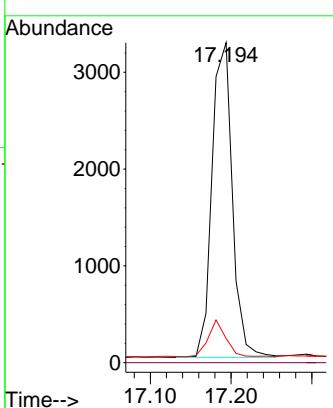
ClientSampleId :

SSTDCCC0.4

**Manual Integrations  
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Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#20

4,6-Dinitro-2-methylphenol

Concen: 0.311 ng

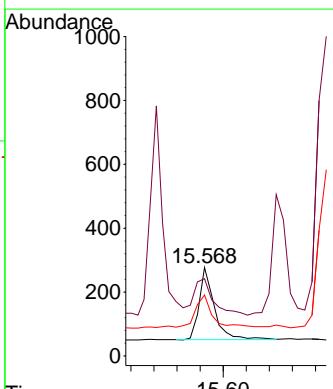
RT: 15.568 min Scan# 1544

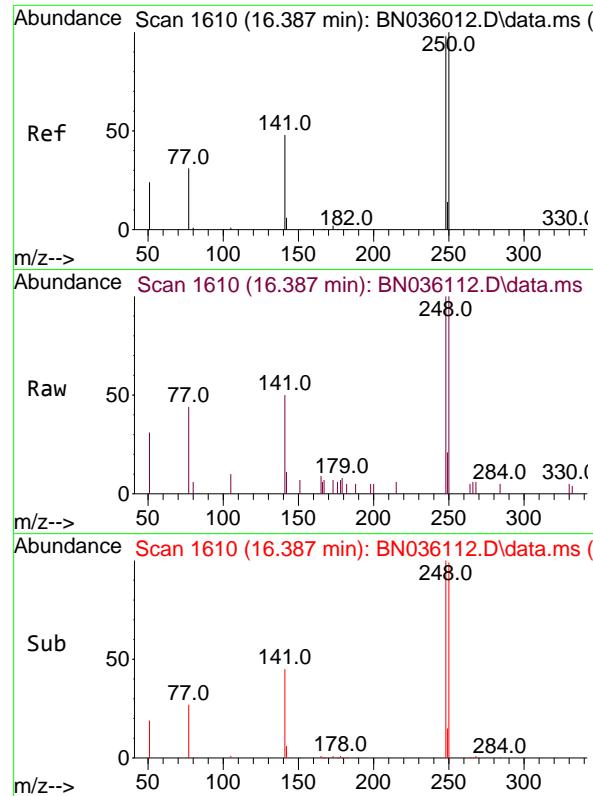
Delta R.T. 0.013 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Tgt	Ion:198	Resp:	413
Ion	Ratio	Lower	Upper
198	100		
51	87.4	68.1	102.1
105	69.0	46.5	69.7



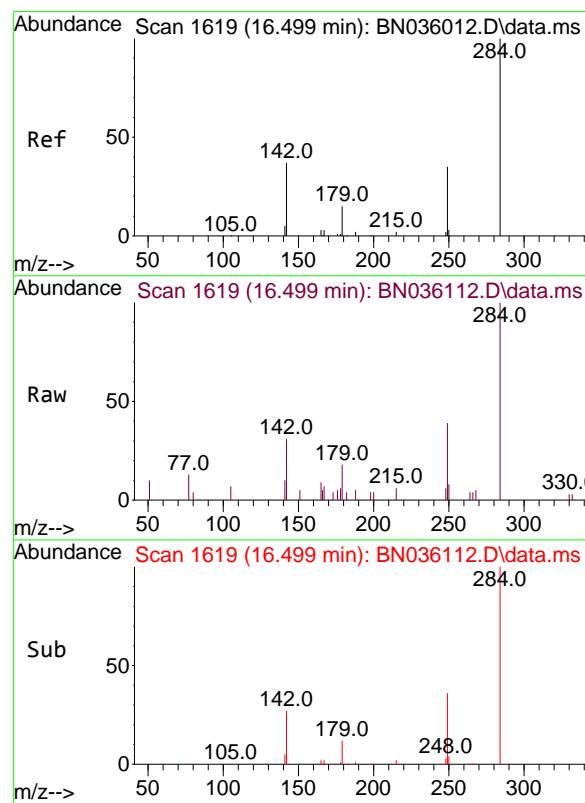
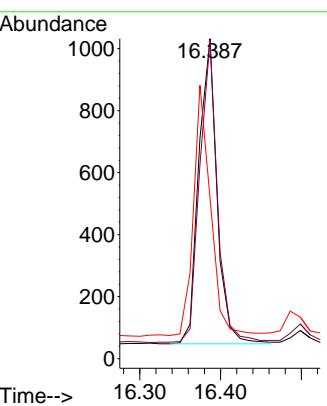


#21  
4-Bromophenyl-phenylether  
Concen: 0.380 ng  
RT: 16.387 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

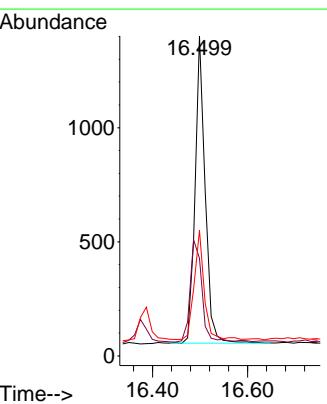
### Manual Integrations APPROVED

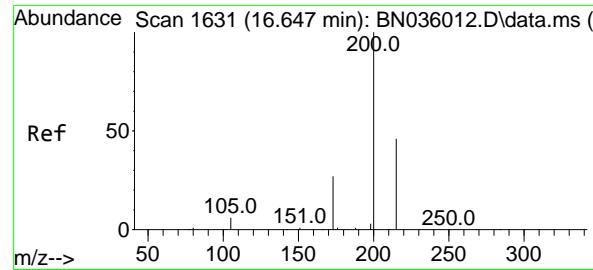
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



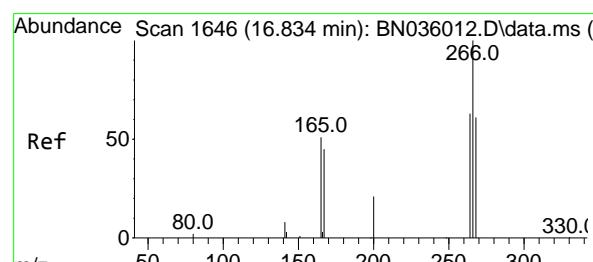
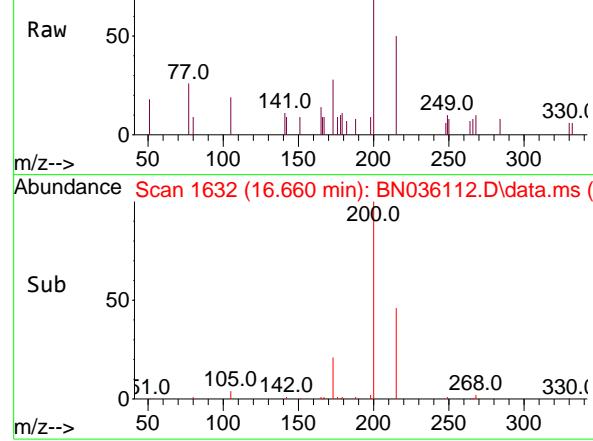
#22  
Hexachlorobenzene  
Concen: 0.373 ng  
RT: 16.499 min Scan# 1619  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:284 Resp: 1993  
Ion Ratio Lower Upper  
284 100  
142 38.3 33.6 50.4  
249 35.6 28.8 43.2

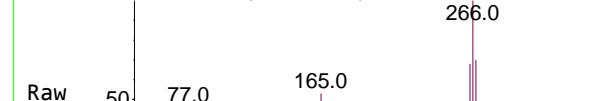




Abundance Scan 1632 (16.660 min): BN036112.D\data.ms (-)



Abundance Scan 1646 (16.834 min): BN036012.D\data.ms (-)

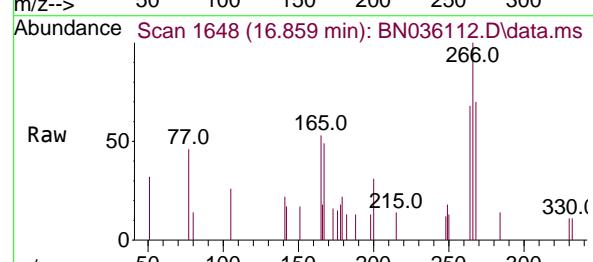


#23  
Atrazine  
Concen: 0.422 ng  
RT: 16.660 min Scan# 1  
Delta R.T. 0.012 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

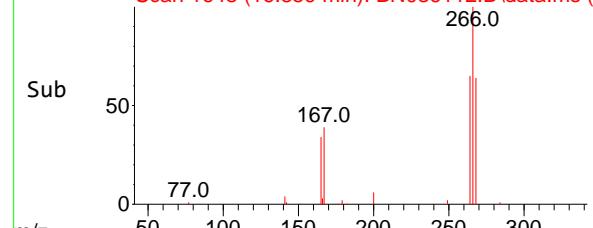
Tgt Ion:200 Resp: 1238  
Ion Ratio Lower Upper  
200 100  
173 27.8 26.6 40.0  
215 50.5 40.6 61.0

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Supervised By :mohammad ahmed 01/31/2025



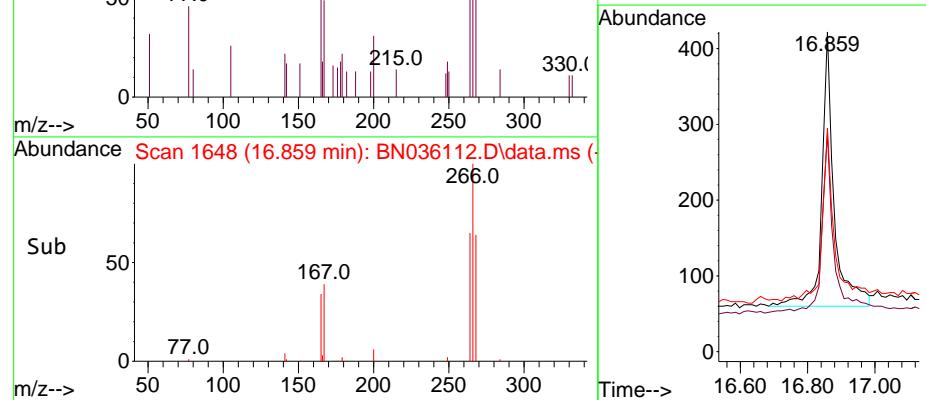
Abundance Scan 1648 (16.859 min): BN036112.D\data.ms (-)

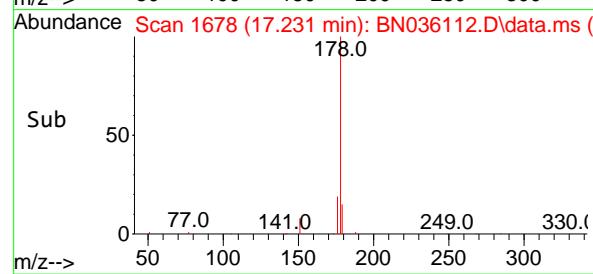
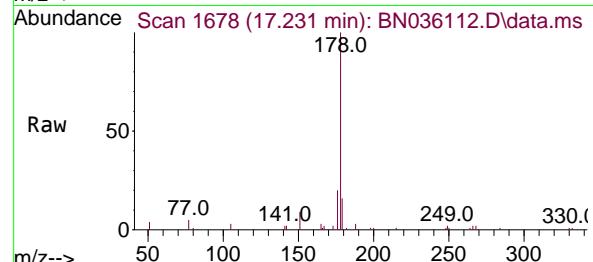
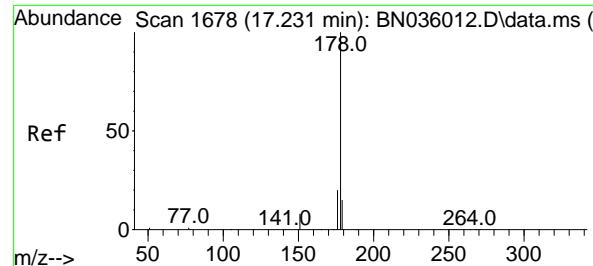


Abundance Scan 1646 (16.834 min): BN036012.D\data.ms (-)

#24  
Pentachlorophenol  
Concen: 0.398 ng  
RT: 16.859 min Scan# 1648  
Delta R.T. 0.025 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:266 Resp: 920  
Ion Ratio Lower Upper  
266 100  
264 65.7 48.2 72.2  
268 59.8 51.6 77.4





#25

Phenanthrene

Concen: 0.388 ng

RT: 17.231 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Instrument :

BNA\_N

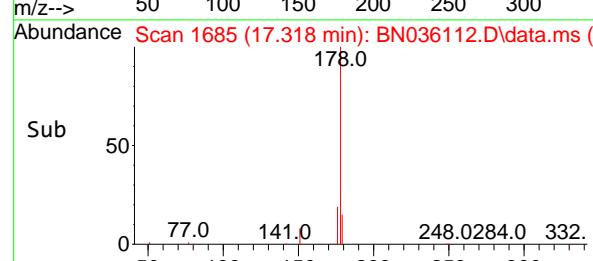
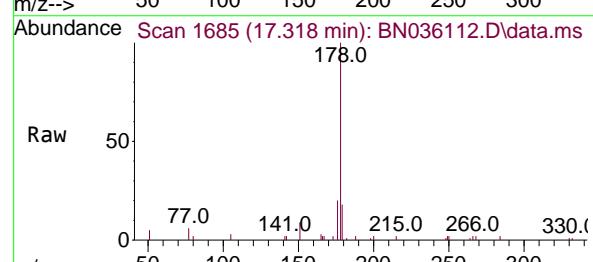
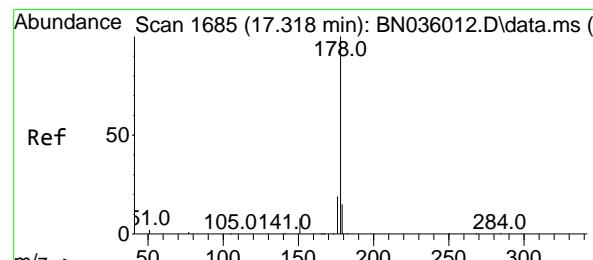
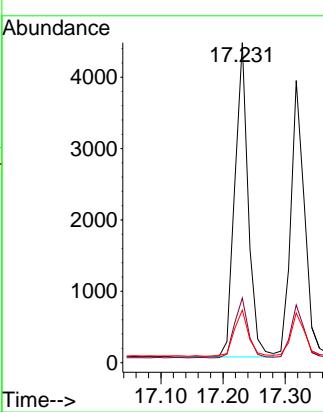
ClientSampleId :

SSTDCCC0.4

**Manual Integrations  
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Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#26

Anthracene

Concen: 0.383 ng

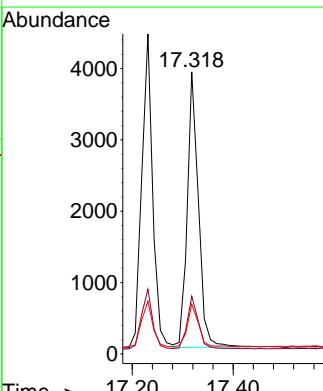
RT: 17.318 min Scan# 1685

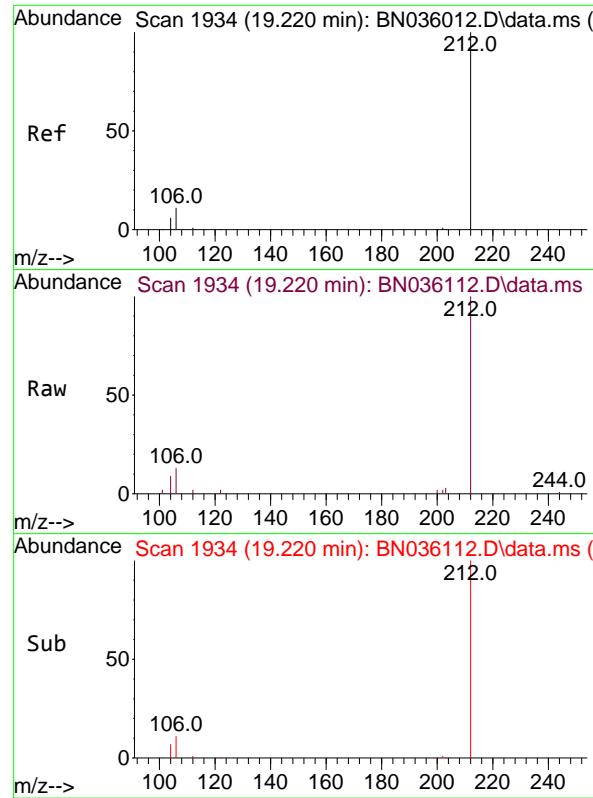
Delta R.T. 0.000 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Tgt	Ion:178	Resp:	5960
Ion	Ratio	Lower	Upper
178	100		
176	19.5	15.4	23.2
179	16.3	12.0	18.0



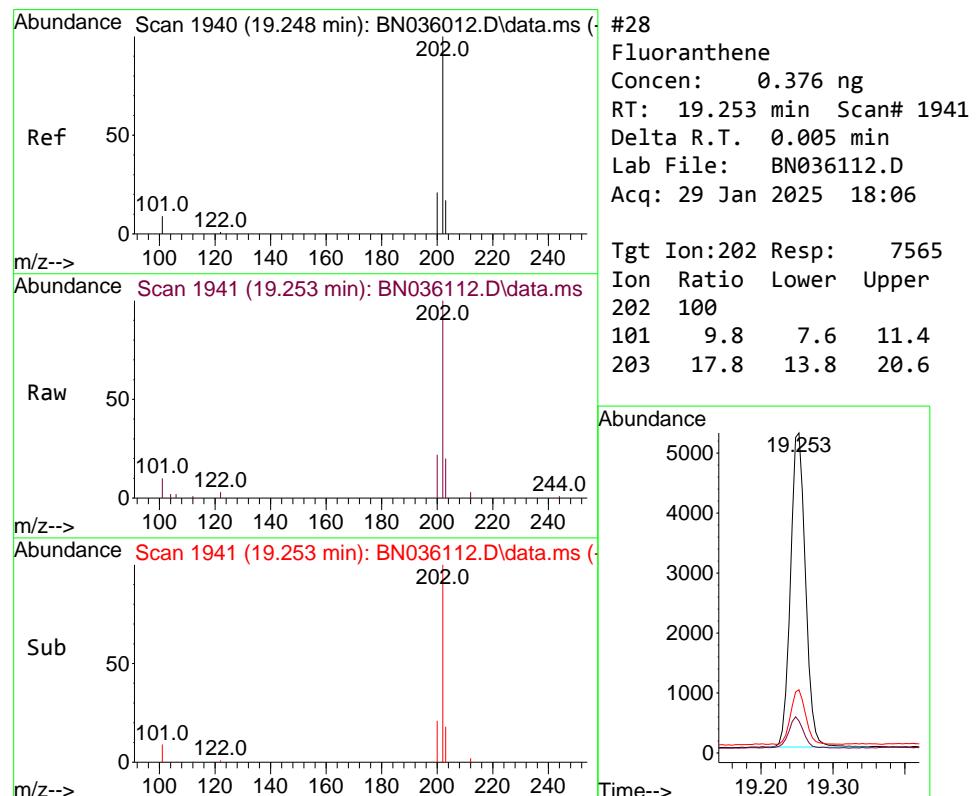
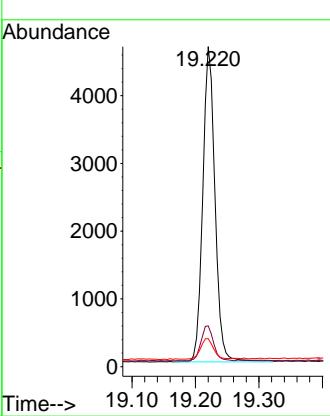


#27  
**Fluoranthene-d10**  
Concen: 0.422 ng  
RT: 19.220 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

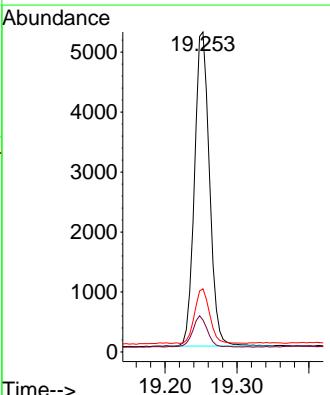
**Manual Integrations**  
**APPROVED**

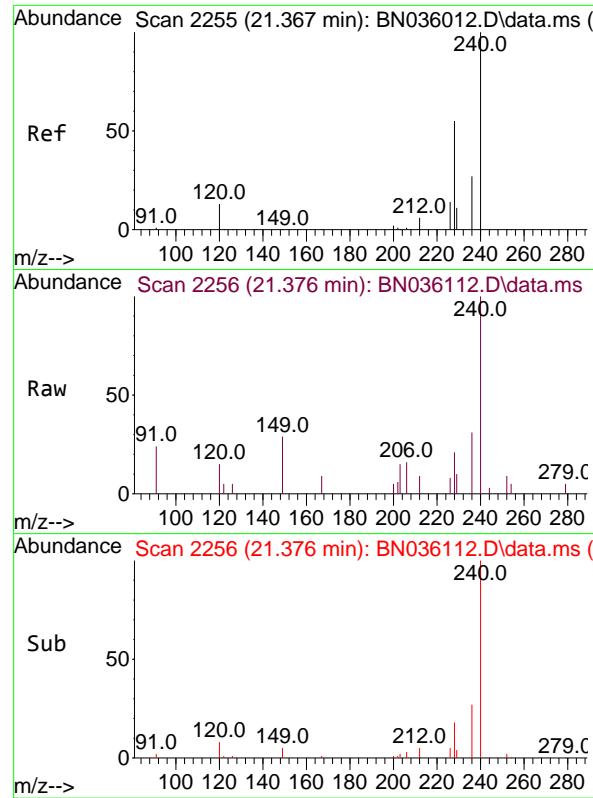
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#28  
**Fluoranthene**  
Concen: 0.376 ng  
RT: 19.253 min Scan# 1941  
Delta R.T. 0.005 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:202 Resp: 7565  
Ion Ratio Lower Upper  
202 100  
101 9.8 7.6 11.4  
203 17.8 13.8 20.6





#29

Chrysene-d<sub>12</sub>

Concen: 0.400 ng

RT: 21.376 min Scan# 2

Delta R.T. 0.009 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Instrument :

BNA\_N

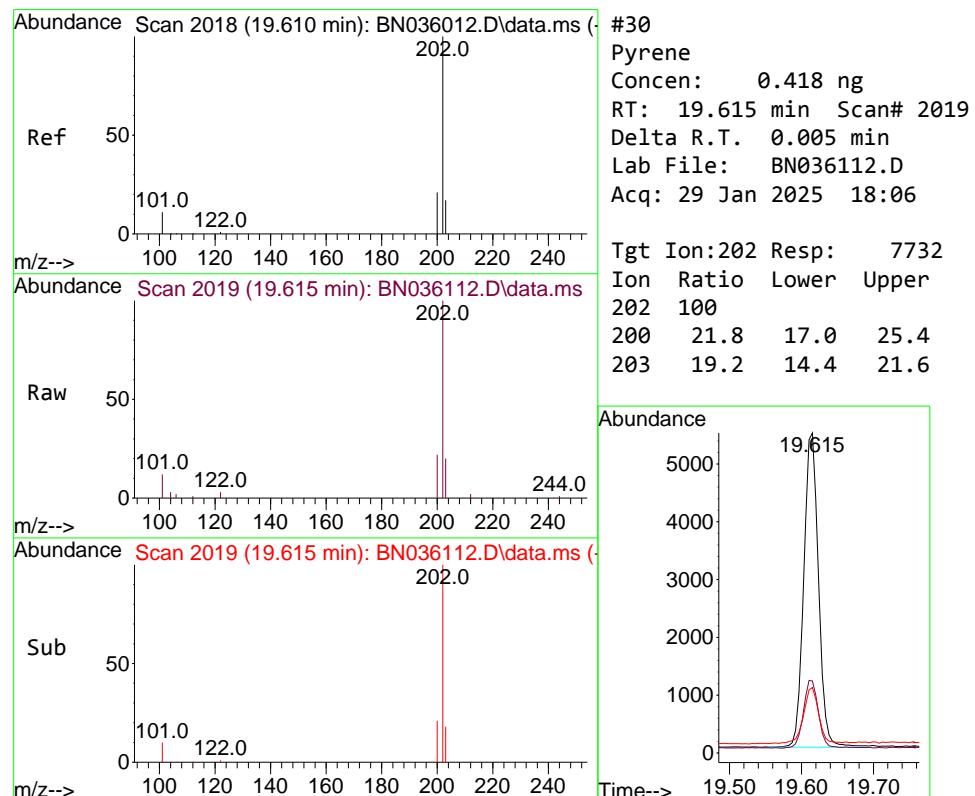
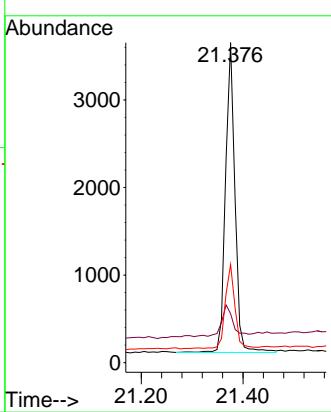
ClientSampleId :

SSTDCCC0.4

**Manual Integrations  
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Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#30

Pyrene

Concen: 0.418 ng

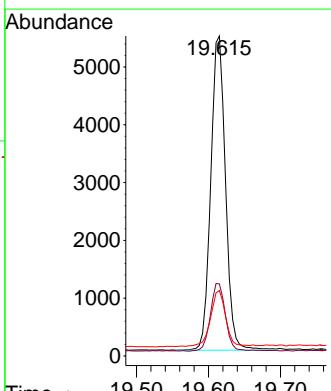
RT: 19.615 min Scan# 2019

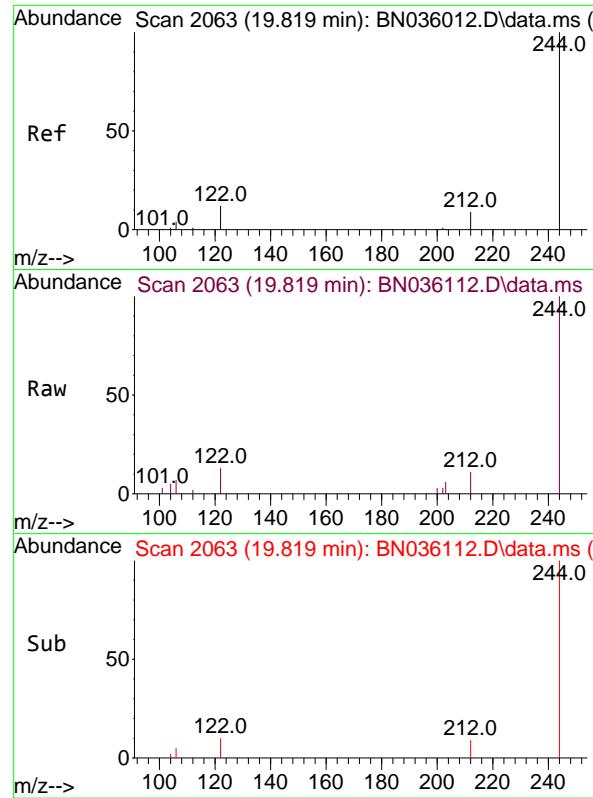
Delta R.T. 0.005 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Tgt	Ion:202	Resp:	7732
Ion	Ratio	Lower	Upper
202	100		
200	21.8	17.0	25.4
203	19.2	14.4	21.6



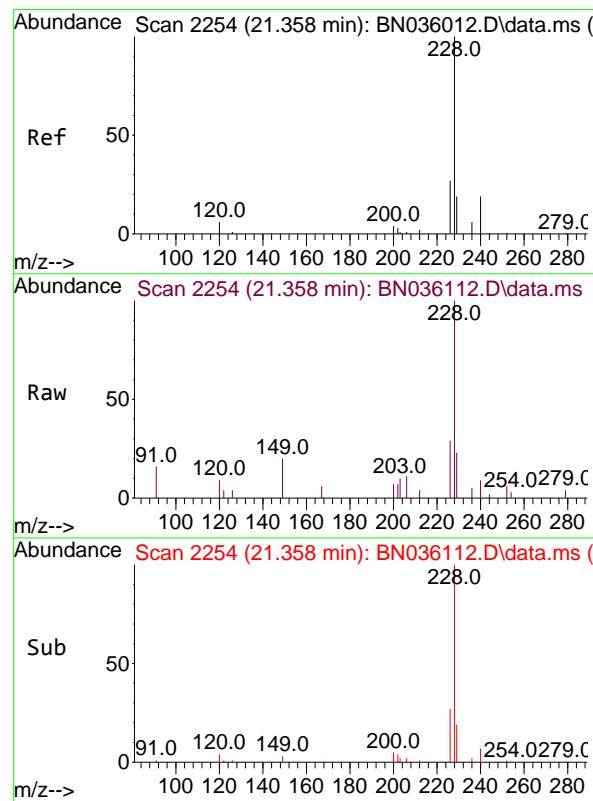
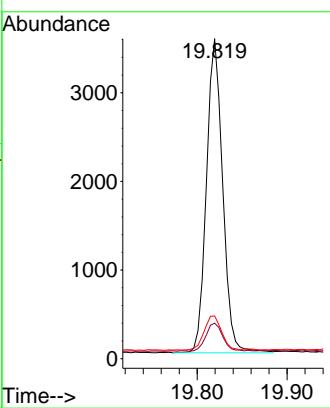


#31  
Terphenyl-d14  
Concen: 0.468 ng  
RT: 19.819 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

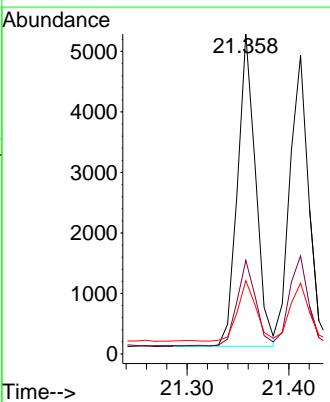
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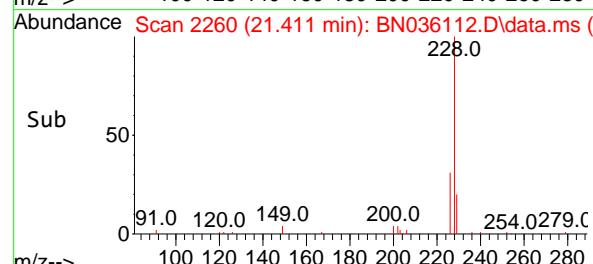
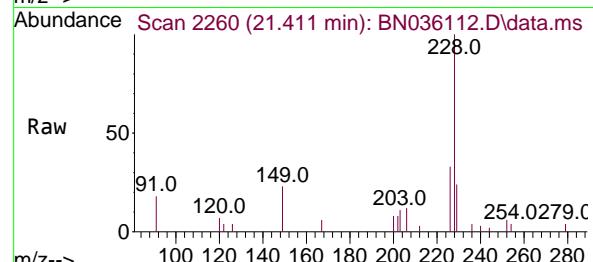
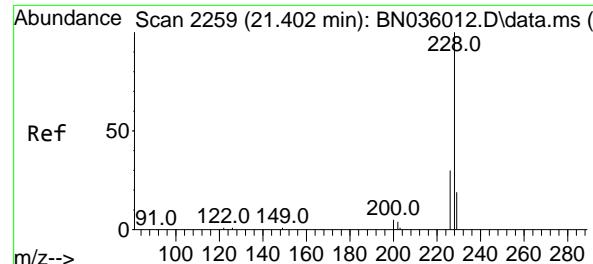
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#32  
Benzo(a)anthracene  
Concen: 0.384 ng  
RT: 21.358 min Scan# 2254  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:228 Resp: 6361  
Ion Ratio Lower Upper  
228 100  
226 29.2 22.6 34.0  
229 22.9 16.5 24.7





#33

Chrysene

Concen: 0.370 ng

RT: 21.411 min Scan# 2

Delta R.T. 0.009 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

Instrument :

BNA\_N

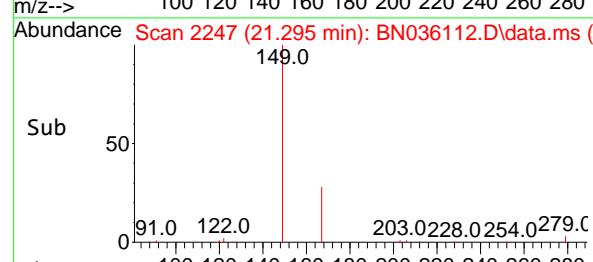
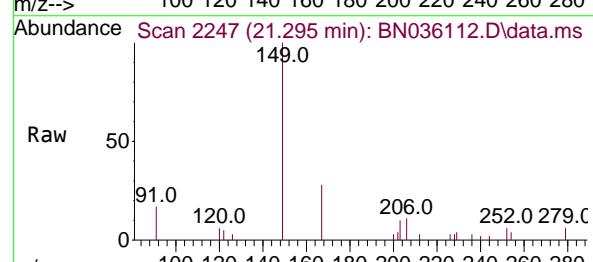
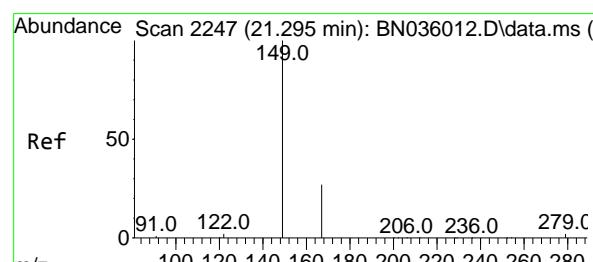
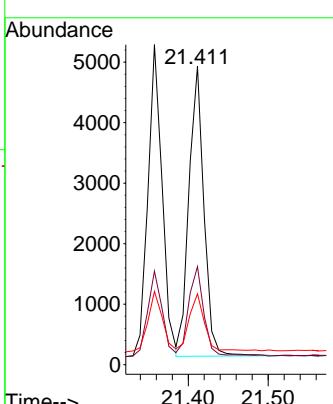
ClientSampleId :

SSTDCCC0.4

**Manual Integrations  
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Reviewed By :Yogesh Patel 01/30/2025

Supervised By :mohammad ahmed 01/31/2025



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.516 ng

RT: 21.295 min Scan# 2247

Delta R.T. 0.000 min

Lab File: BN036112.D

Acq: 29 Jan 2025 18:06

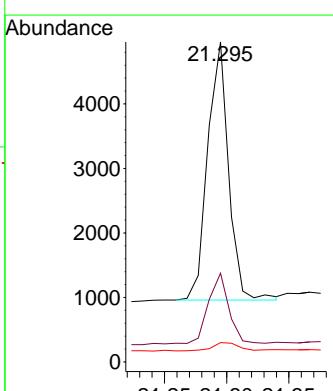
Tgt Ion:149 Resp: 4681

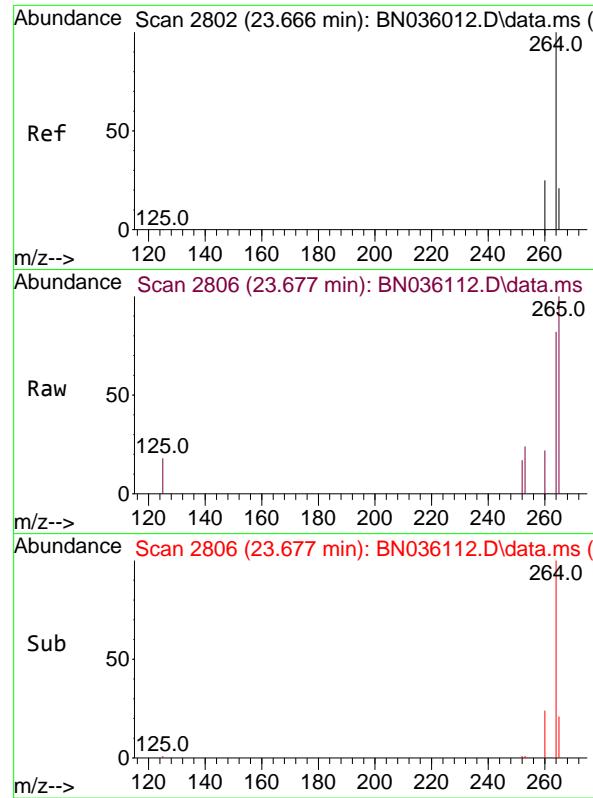
Ion Ratio Lower Upper

149 100

167 27.0 21.9 32.9

279 4.1 3.0 4.6



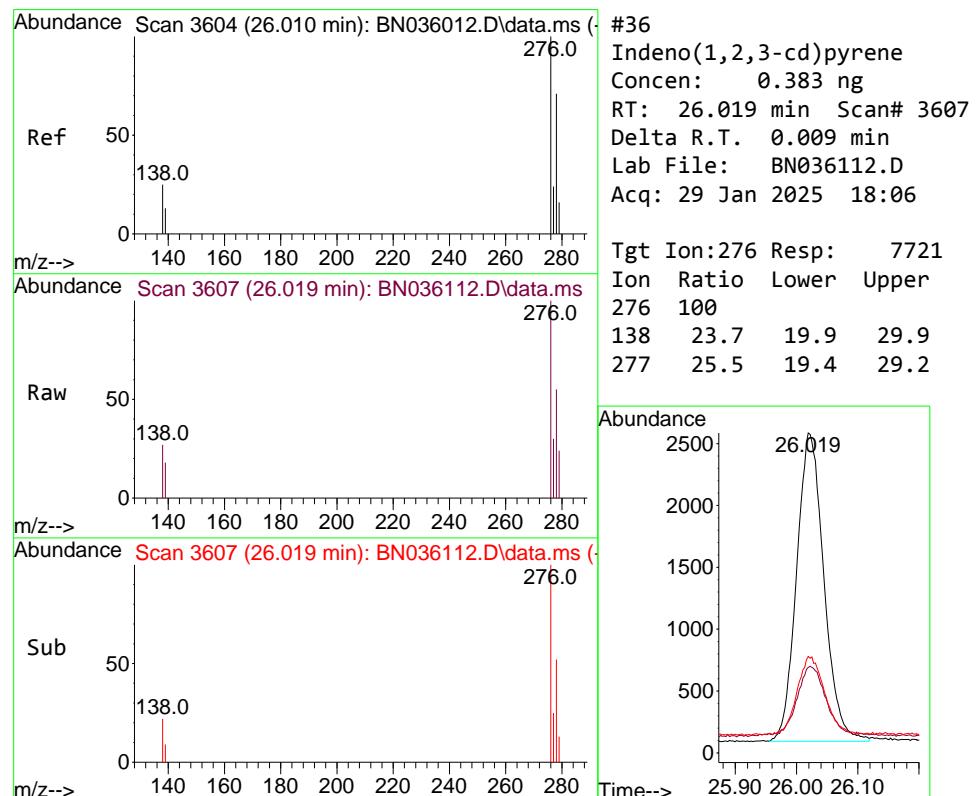
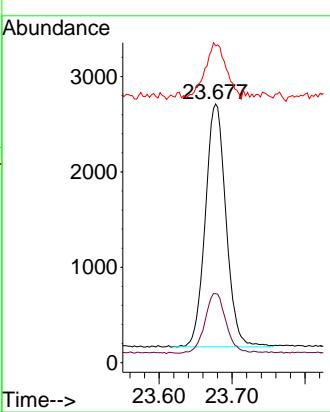


#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.677 min Scan# 21  
Delta R.T. 0.012 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

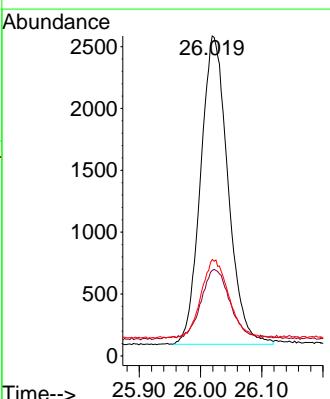
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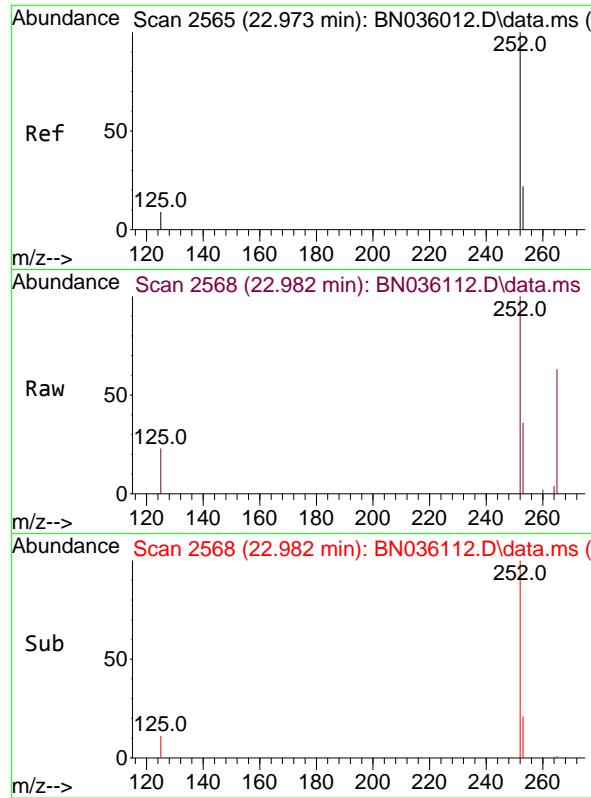
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.383 ng  
RT: 26.019 min Scan# 3607  
Delta R.T. 0.009 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:276 Resp: 7721  
Ion Ratio Lower Upper  
276 100  
138 23.7 19.9 29.9  
277 25.5 19.4 29.2



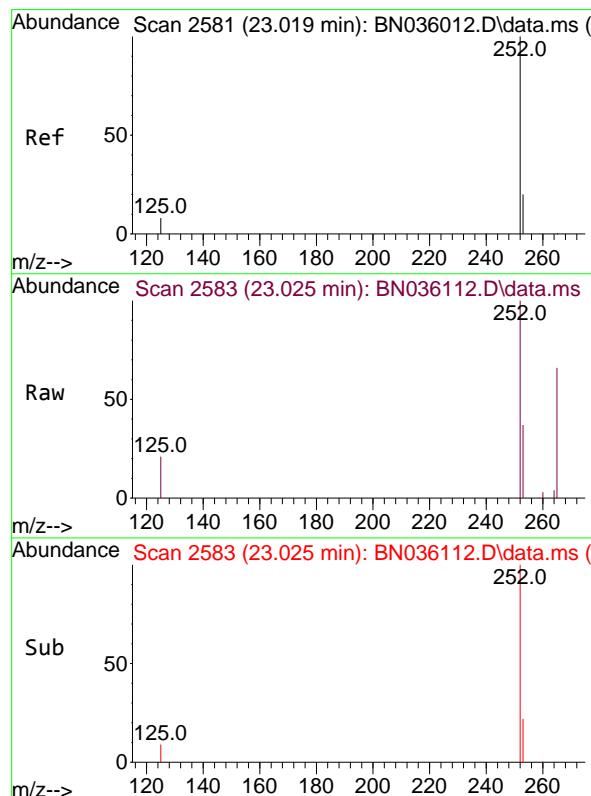
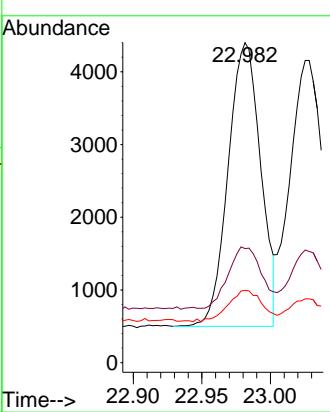


#37  
Benzo(b)fluoranthene  
Concen: 0.352 ng  
RT: 22.982 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

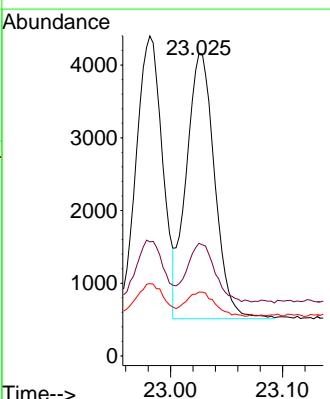
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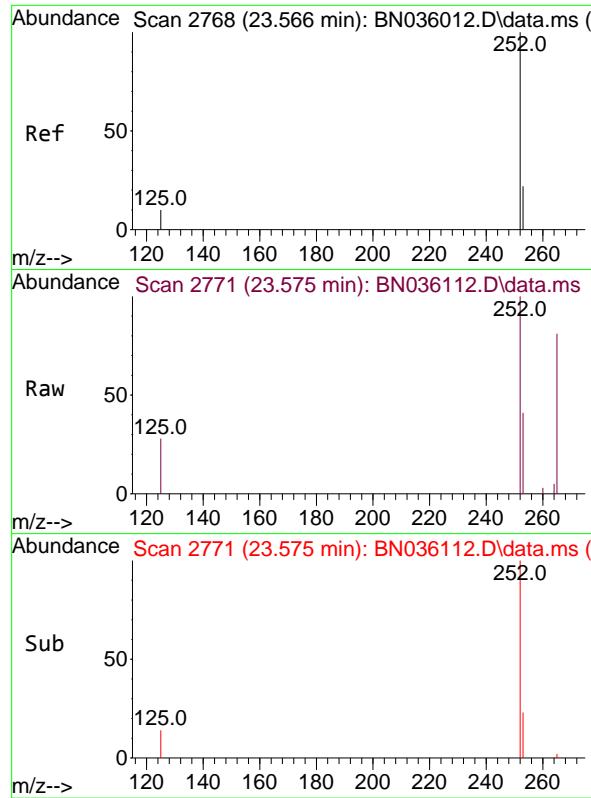
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#38  
Benzo(k)fluoranthene  
Concen: 0.349 ng  
RT: 23.025 min Scan# 2583  
Delta R.T. 0.006 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Tgt Ion:252 Resp: 6417  
Ion Ratio Lower Upper  
252 100  
253 37.3 21.3 31.9#  
125 21.1 11.9 17.9#





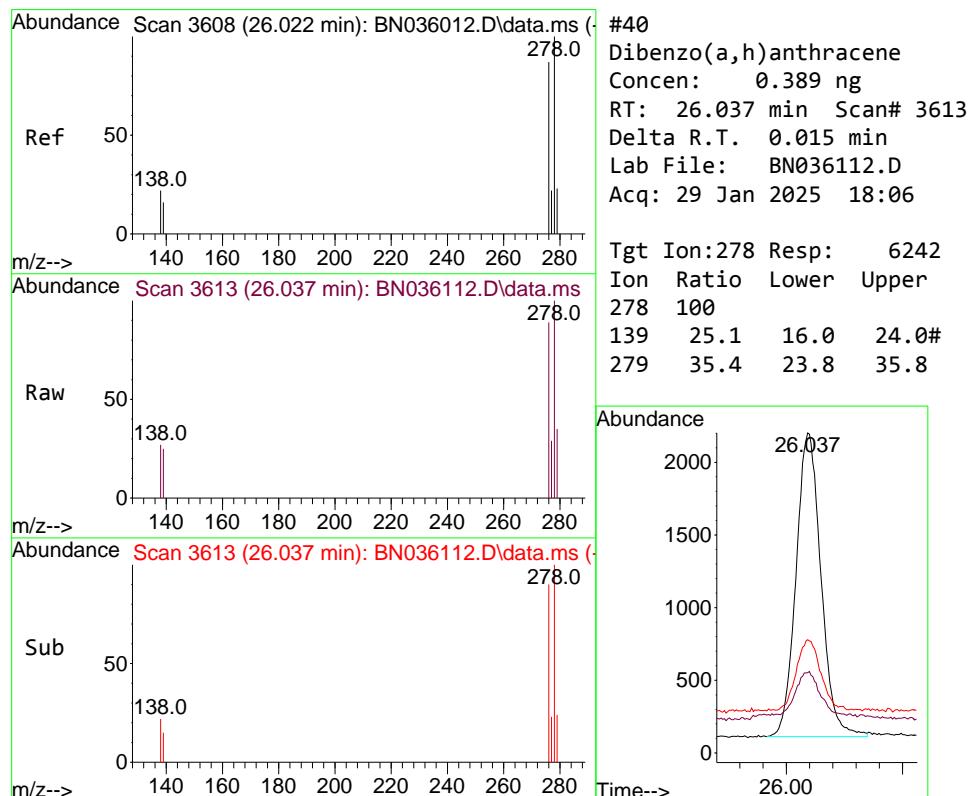
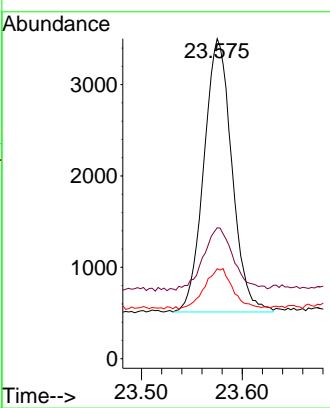
#39  
Benzo(a)pyrene  
Concen: 0.370 ng  
RT: 23.575 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

Tgt Ion:252 Resp: 5774  
Ion Ratio Lower Upper  
252 100  
253 40.9 23.8 35.6#  
125 28.1 14.6 21.8#

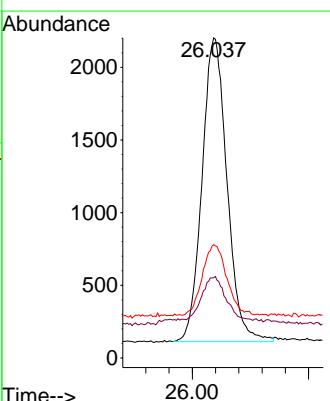
### Manual Integrations APPROVED

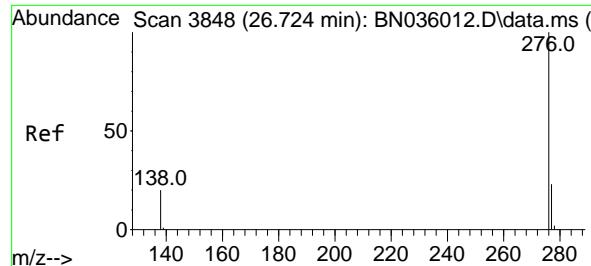
Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



#40  
Dibenzo(a,h)anthracene  
Concen: 0.389 ng  
RT: 26.037 min Scan# 3613  
Delta R.T. 0.015 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

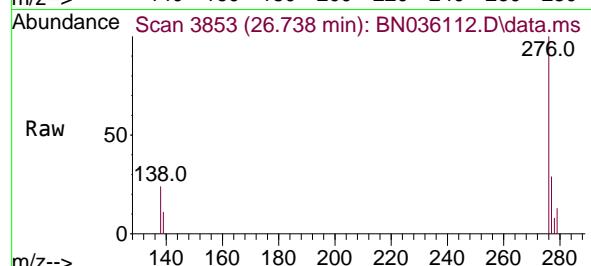
Tgt Ion:278 Resp: 6242  
Ion Ratio Lower Upper  
278 100  
139 25.1 16.0 24.0#  
279 35.4 23.8 35.8





#41  
Benzo(g,h,i)perylene  
Concen: 0.378 ng  
RT: 26.738 min Scan# 3  
Delta R.T. 0.015 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

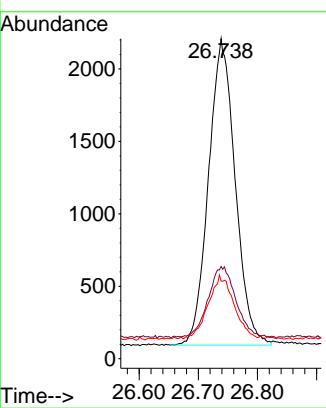
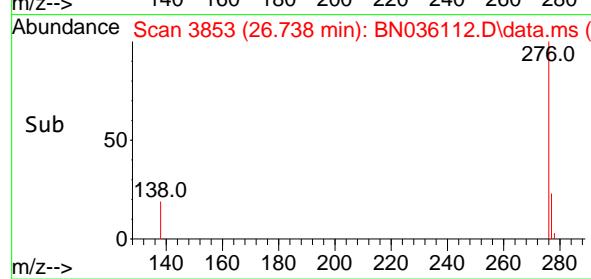
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4



Tgt Ion:276 Resp: 662:  
Ion Ratio Lower Upper  
276 100  
277 28.8 21.3 31.9  
138 24.3 19.2 28.8

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 01/30/2025  
Supervised By :mohammad ahmed 01/31/2025



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036112.D  
 Acq On : 29 Jan 2025 18:06  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jan 30 00:35:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	127	-0.01
2	1,4-Dioxane	0.447	0.405	9.4	110	0.00
3	n-Nitrosodimethylamine	0.811	0.732	9.7	106	0.00
4 S	2-Fluorophenol	1.040	1.195	-14.9	139	0.03
5 S	Phenol-d6	1.222	1.488	-21.8	149	0.05
6	bis(2-Chloroethyl)ether	0.984	1.121	-13.9	135	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	158#	-0.01
8 S	Nitrobenzene-d5	0.378	0.398	-5.3	158#	0.00
9	Naphthalene	1.162	1.102	5.2	139	-0.01
10	Hexachlorobutadiene	0.375	0.326	13.1	128	-0.01
11 SURR	2-Methylnaphthalene-d10	0.544	0.594	-9.2	163#	-0.01
12	2-Methylnaphthalene	0.721	0.719	0.3	150	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	172#	-0.01
14 S	2,4,6-Tribromophenol	0.257	0.246	4.3	165#	0.01
15 S	2-Fluorobiphenyl	1.786	1.681	5.9	149	0.00
16	Acenaphthylene	1.897	1.853	2.3	158#	-0.01
17	Acenaphthene	1.299	1.264	2.7	159#	-0.01
18	Fluorene	1.627	1.555	4.4	163#	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	182#	0.01
20	4,6-Dinitro-2-methylphenol	0.093	0.072	22.6	139	0.01
21	4-Bromophenyl-phenylether	0.285	0.271	4.9	160#	0.00
22	Hexachlorobenzene	0.375	0.350	6.7	156#	0.00
23	Atrazine	0.206	0.217	-5.3	181#	0.01
24	Pentachlorophenol	0.162	0.161	0.6	179#	0.02
25	Phenanthrene	1.202	1.166	3.0	163#	0.00
26	Anthracene	1.093	1.046	4.3	165#	0.00
27 SURR	Fluoranthene-d10	1.036	1.092	-5.4	179#	0.00
28	Fluoranthene	1.412	1.328	5.9	160#	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	160#	0.00
30	Pyrene	1.621	1.695	-4.6	160#	0.00
31 S	Terphenyl-d14	0.831	0.973	-17.1	179#	0.00
32	Benzo(a)anthracene	1.451	1.394	3.9	149	0.00
33	Chrysene	1.483	1.371	7.6	142	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	1.026	-29.1#	206#	0.00
35 I	Perylene-d12	1.000	1.000	0.0	169#	0.01
36	Indeno(1,2,3-cd)pyrene	1.605	1.538	4.2	160#	0.00
37	Benzo(b)fluoranthene	1.454	1.281	11.9	144	0.00
38	Benzo(k)fluoranthene	1.465	1.278	12.8	145	0.00
39 C	Benzo(a)pyrene	1.242	1.150	7.4	154#	0.00
40	Dibenzo(a,h)anthracene	1.279	1.243	2.8	163#	0.01
41	Benzo(g,h,i)perylene	1.394	1.319	5.4	156#	0.01

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036112.D  
 Acq On : 29 Jan 2025 18:06  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jan 30 00:35:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	127	-0.01
2	1,4-Dioxane	0.400	0.362	9.5	110	0.00
3	n-Nitrosodimethylamine	0.400	0.361	9.8	106	0.00
4 S	2-Fluorophenol	0.400	0.460	-15.0	139	0.03
5 S	Phenol-d6	0.400	0.487	-21.7	149	0.05
6	bis(2-Chloroethyl)ether	0.400	0.456	-14.0	135	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	158	-0.01
8 S	Nitrobenzene-d5	0.400	0.421	-5.2	158	0.00
9	Naphthalene	0.400	0.379	5.3	139	-0.01
10	Hexachlorobutadiene	0.400	0.348	13.0	128	-0.01
11 SURR	2-Methylnaphthalene-d10	0.400	0.437	-9.2	163	-0.01
12	2-Methylnaphthalene	0.400	0.399	0.3	150	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	172	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.384	4.0	165	0.01
15 S	2-Fluorobiphenyl	0.400	0.377	5.8	149	0.00
16	Acenaphthylene	0.400	0.391	2.3	158	-0.01
17	Acenaphthene	0.400	0.389	2.8	159	-0.01
18	Fluorene	0.400	0.382	4.5	163	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	182	0.01
20	4,6-Dinitro-2-methylphenol	0.400	0.311	22.3	139	0.01
21	4-Bromophenyl-phenylether	0.400	0.380	5.0	160	0.00
22	Hexachlorobenzene	0.400	0.373	6.8	156	0.00
23	Atrazine	0.400	0.422	-5.5	181	0.01
24	Pentachlorophenol	0.400	0.398	0.5	179	0.02
25	Phenanthrene	0.400	0.388	3.0	163	0.00
26	Anthracene	0.400	0.383	4.3	165	0.00
27 SURR	Fluoranthene-d10	0.400	0.422	-5.5	179	0.00
28	Fluoranthene	0.400	0.376	6.0	160	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	160	0.00
30	Pyrene	0.400	0.418	-4.5	160	0.00
31 S	Terphenyl-d14	0.400	0.468	-17.0	179	0.00
32	Benzo(a)anthracene	0.400	0.384	4.0	149	0.00
33	Chrysene	0.400	0.370	7.5	142	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.516	-29.0#	206	0.00
35 I	Perylene-d12	0.400	0.400	0.0	169	0.01
36	Indeno(1,2,3-cd)pyrene	0.400	0.383	4.3	160	0.00
37	Benzo(b)fluoranthene	0.400	0.352	12.0	144	0.00
38	Benzo(k)fluoranthene	0.400	0.349	12.8	145	0.00
39 C	Benzo(a)pyrene	0.400	0.370	7.5	154	0.00
40	Dibenzo(a,h)anthracene	0.400	0.389	2.8	163	0.01
41	Benzo(g,h,i)perylene	0.400	0.378	5.5	156	0.01

(#) = Out of Range

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



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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>CHEMTECH</u>		Contract:	<u>TETR06</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1199</u>	SAS No.:	<u>Q1199</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>01/30/2025</u>	<u>03:43</u>
Lab File ID:	<u>BN036128.D</u>		Init. Calib. Date(s):	<u>01/22/2025</u>	<u>01/22/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4EC</u>		Init. Calib. Time(s):	<u>11:02</u>	<u>14:36</u>
GC Column:	<u>ZB-GR</u>	ID: <u>0.25</u>	(mm)		

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.601		10.5	50.0
Fluoranthene-d10	1.036	1.159		11.9	50.0
2-Fluorophenol	1.040	1.189		14.3	50.0
Phenol-d6	1.222	1.499		22.7	50.0
Nitrobenzene-d5	0.378	0.413		9.3	50.0
2-Fluorobiphenyl	1.786	1.729		-3.2	50.0
2,4,6-Tribromophenol	0.257	0.251		-2.3	50.0
Terphenyl-d14	0.831	1.004		20.8	50.0
1,4-Dioxane	0.447	0.408		-8.7	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036128.D  
 Acq On : 30 Jan 2025 03:43  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Jan 30 04:17:35 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

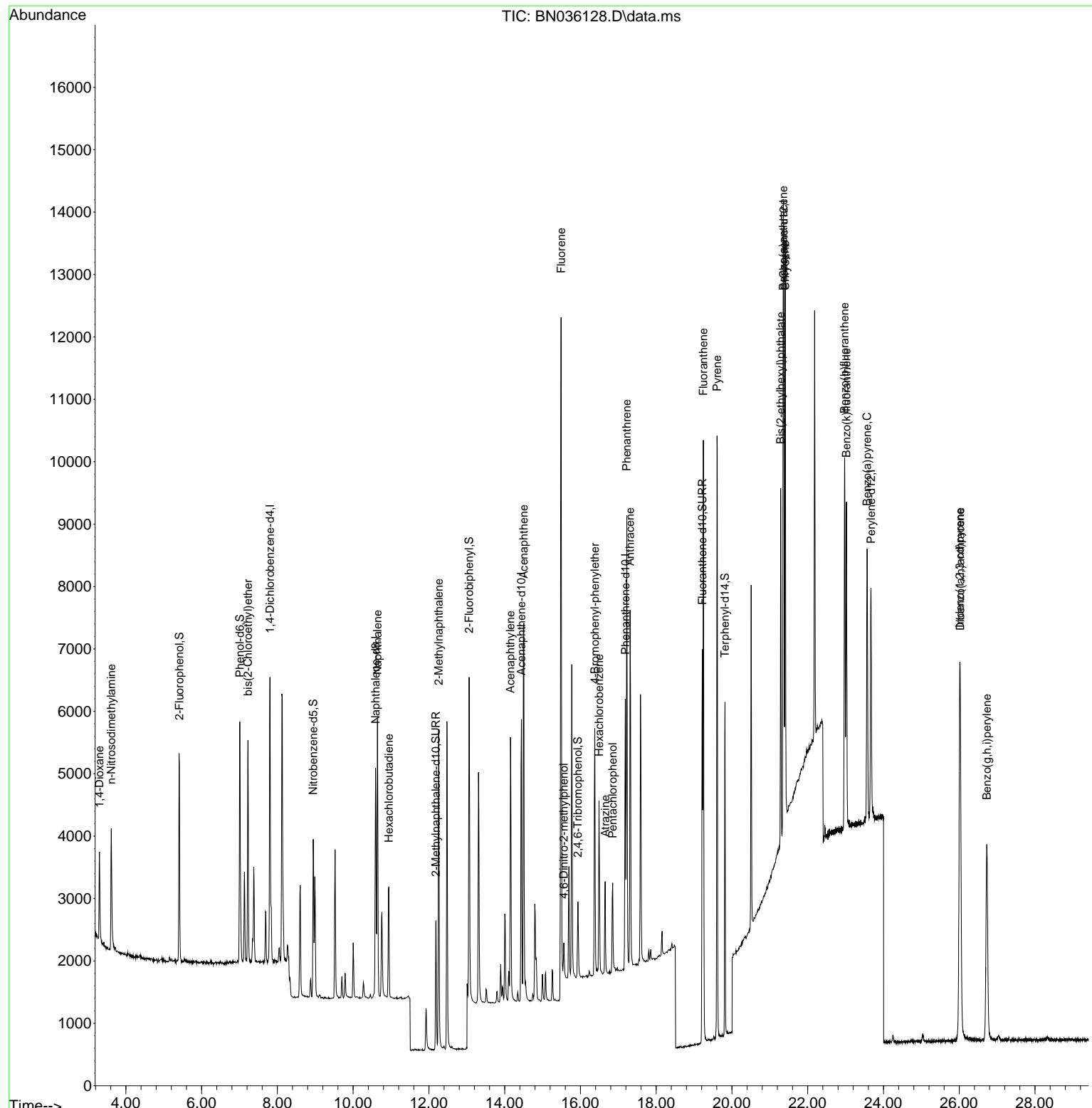
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2131	0.400	ng	-0.01
7) Naphthalene-d8	10.590	136	4862	0.400	ng	#-0.02
13) Acenaphthene-d10	14.442	164	2750	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6103	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	5116	0.400	ng	0.00
35) Perylene-d12	23.669	264	5085	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.412	112	2533	0.457	ng	0.02
5) Phenol-d6	7.008	99	3195	0.491	ng	0.04
8) Nitrobenzene-d5	8.946	82	2006	0.437	ng	-0.01
11) 2-Methylnaphthalene-d10	12.182	152	2922	0.442	ng	-0.02
14) 2,4,6-Tribromophenol	15.933	330	689	0.391	ng	0.00
15) 2-Fluorobiphenyl	13.063	172	4754	0.387	ng	0.00
27) Fluoranthene-d10	19.216	212	7072	0.447	ng	0.00
31) Terphenyl-d14	19.815	244	5137	0.483	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.303	88	869	0.365	ng	94
3) n-Nitrosodimethylamine	3.614	42	1517	0.351	ng	# 76
6) bis(2-Chloroethyl)ether	7.225	93	2420	0.462	ng	98
9) Naphthalene	10.643	128	5630	0.399	ng	98
10) Hexachlorobutadiene	10.942	225	1633	0.358	ng	# 98
12) 2-Methylnaphthalene	12.259	142	3632	0.414	ng	96
16) Acenaphthylene	14.153	152	5132	0.394	ng	99
17) Acenaphthene	14.506	154	3570	0.400	ng	98
18) Fluorene	15.489	166	4914	0.439	ng	98
20) 4,6-Dinitro-2-methylph...	15.560	198	402	0.283	ng	# 80
21) 4-Bromophenyl-phenylether	16.380	248	1615	0.371	ng	# 91
22) Hexachlorobenzene	16.491	284	2151	0.376	ng	96
23) Atrazine	16.653	200	1263	0.402	ng	96
24) Pentachlorophenol	16.851	266	843	0.340	ng	99
25) Phenanthrene	17.224	178	7295	0.398	ng	99
26) Anthracene	17.311	178	6577	0.394	ng	99
28) Fluoranthene	19.244	202	8878	0.412	ng	99
30) Pyrene	19.606	202	9070	0.438	ng	100
32) Benzo(a)anthracene	21.358	228	7250	0.391	ng	98
33) Chrysene	21.403	228	7502	0.396	ng	99
34) Bis(2-ethylhexyl)phtha...	21.286	149	5061	0.498	ng	100
36) Indeno(1,2,3-cd)pyrene	26.014	276	8019	0.393	ng	99
37) Benzo(b)fluoranthene	22.973	252	7092	0.384	ng	# 90
38) Benzo(k)fluoranthene	23.020	252	6802	0.365	ng	# 88
39) Benzo(a)pyrene	23.567	252	6171	0.391	ng	# 83
40) Dibenzo(a,h)anthracene	26.025	278	6330	0.389	ng	94
41) Benzo(g,h,i)perylene	26.727	276	6952	0.392	ng	99

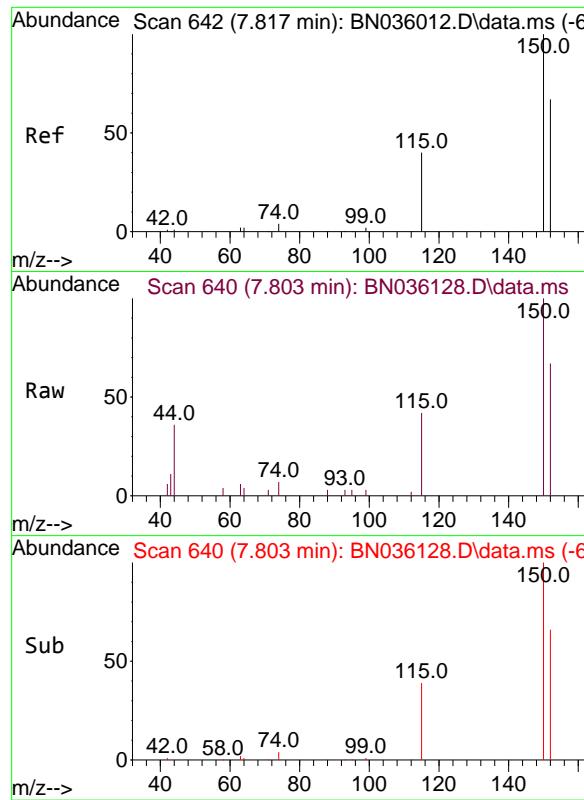
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036128.D  
 Acq On : 30 Jan 2025 03:43  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Jan 30 04:17:35 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

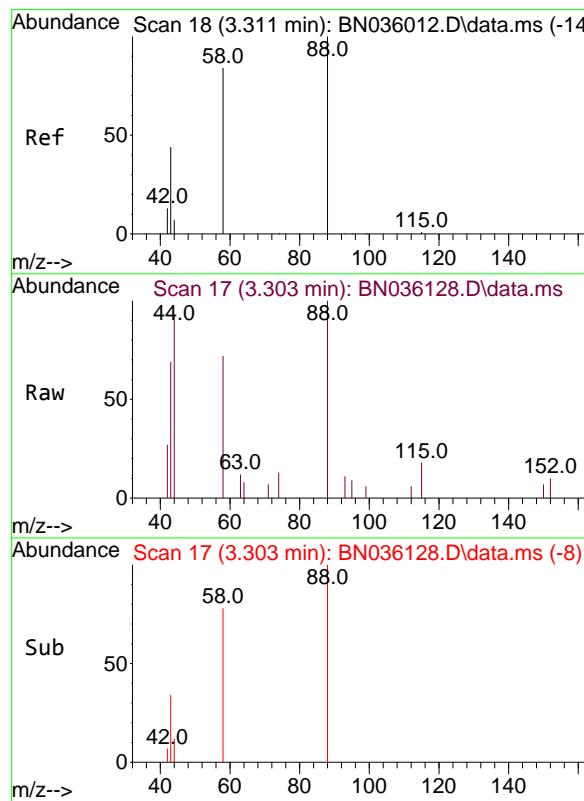
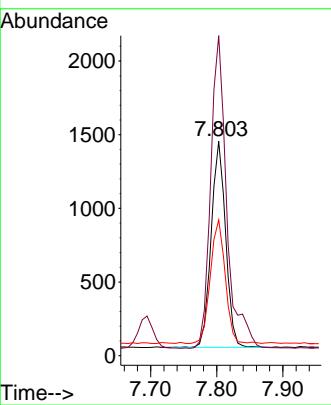




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.803 min Scan# 6  
 Delta R.T. -0.014 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

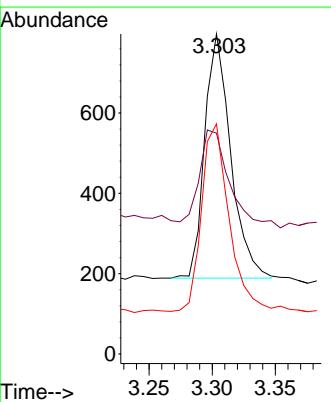
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

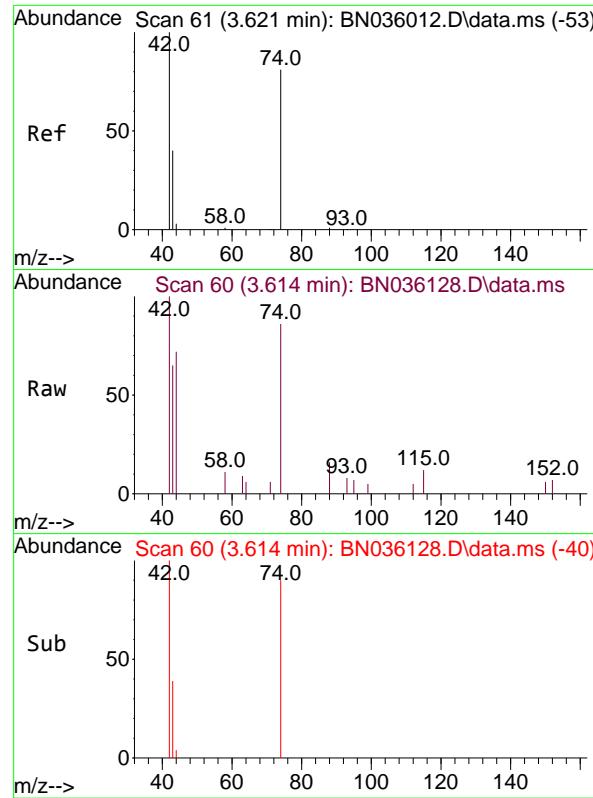
Tgt Ion:152 Resp: 2131  
 Ion Ratio Lower Upper  
 152 100  
 150 149.3 117.4 176.2  
 115 63.4 51.0 76.4



#2  
 1,4-Dioxane  
 Concen: 0.365 ng  
 RT: 3.303 min Scan# 17  
 Delta R.T. -0.007 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Tgt Ion: 88 Resp: 869  
 Ion Ratio Lower Upper  
 88 100  
 43 39.2 38.5 57.7  
 58 81.2 66.6 99.8

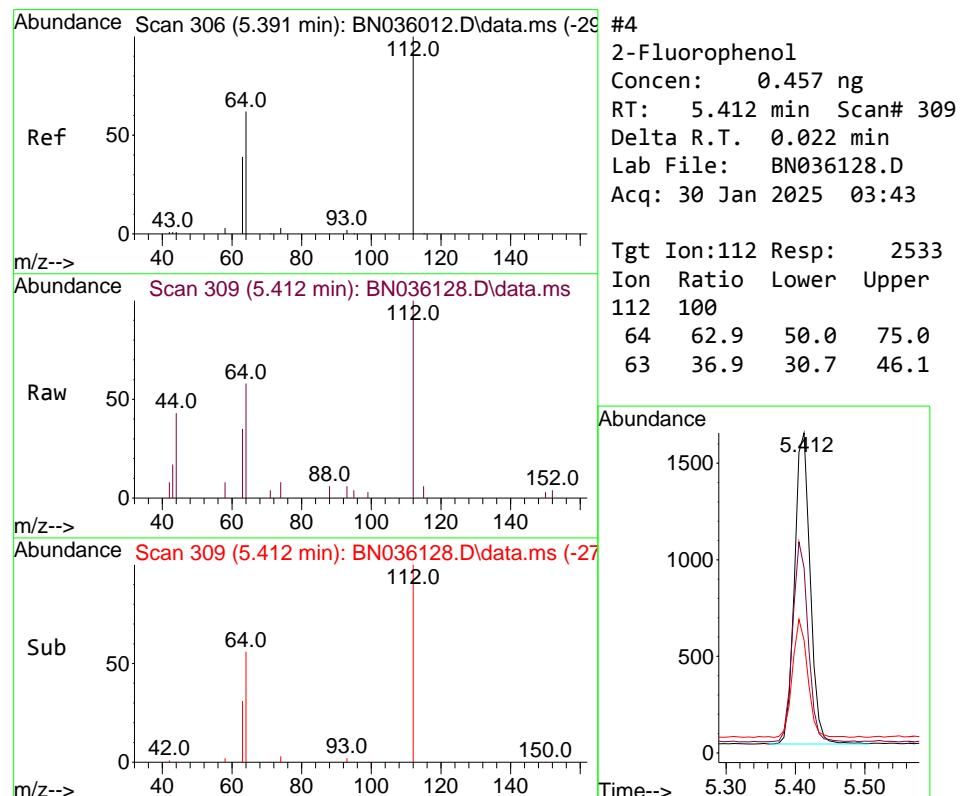
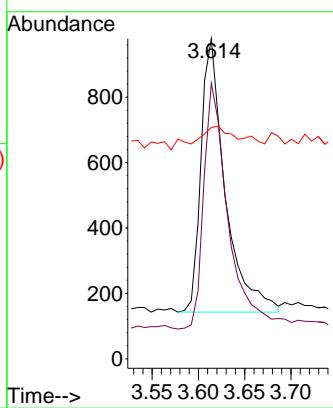




#3  
 n-Nitrosodimethylamine  
 Concen: 0.351 ng  
 RT: 3.614 min Scan# 6  
 Delta R.T. -0.007 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

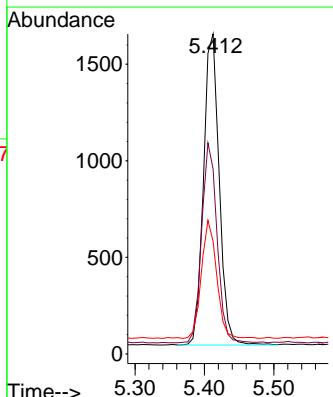
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

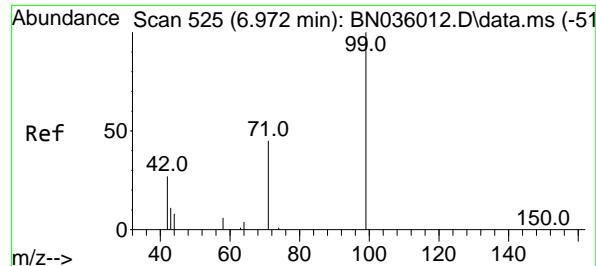
Tgt Ion: 42 Resp: 1517  
 Ion Ratio Lower Upper  
 42 100  
 74 92.4 58.1 87.1#  
 44 15.8 6.2 9.4#



#4  
 2-Fluorophenol  
 Concen: 0.457 ng  
 RT: 5.412 min Scan# 309  
 Delta R.T. 0.022 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

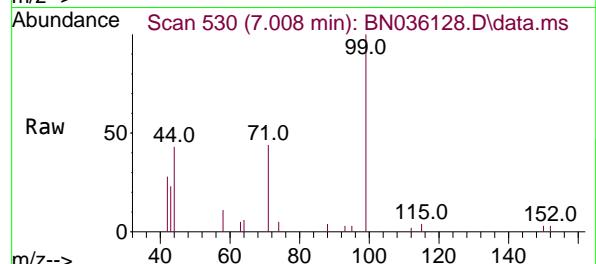
Tgt Ion: 112 Resp: 2533  
 Ion Ratio Lower Upper  
 112 100  
 64 62.9 50.0 75.0  
 63 36.9 30.7 46.1



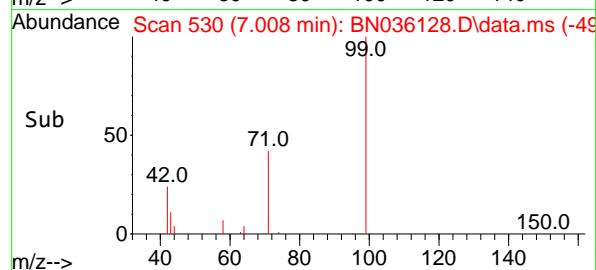
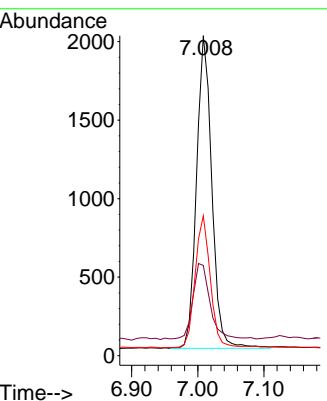


#5  
 Phenol-d6  
 Concen: 0.491 ng  
 RT: 7.008 min Scan# 5  
 Delta R.T. 0.036 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

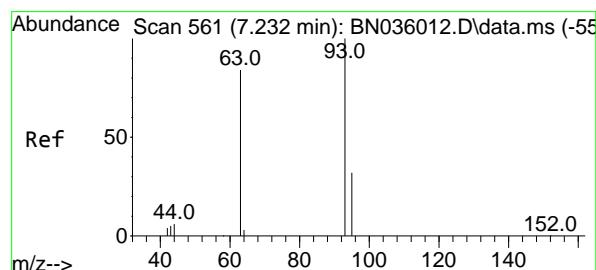
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC



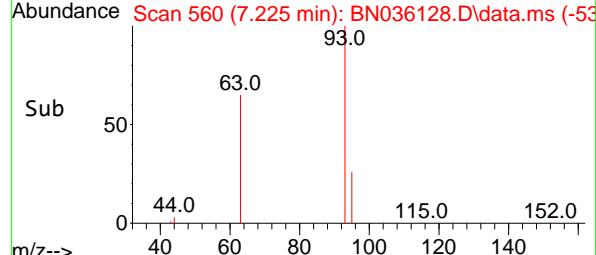
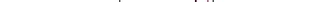
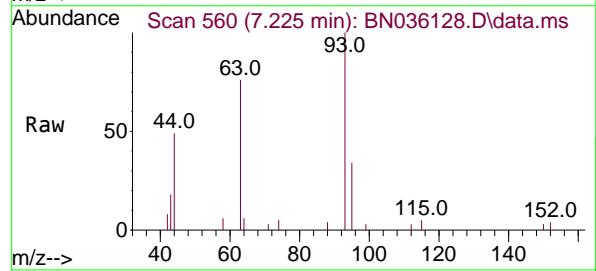
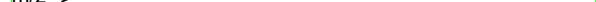
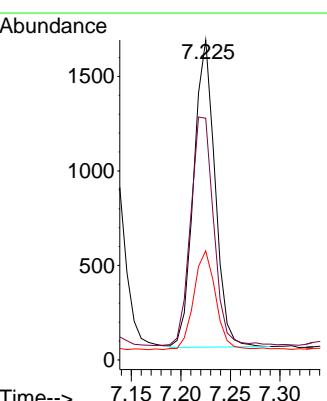
Tgt Ion: 99 Resp: 3195  
 Ion Ratio Lower Upper  
 99 100  
 42 27.9 26.8 40.2  
 71 42.7 36.6 55.0

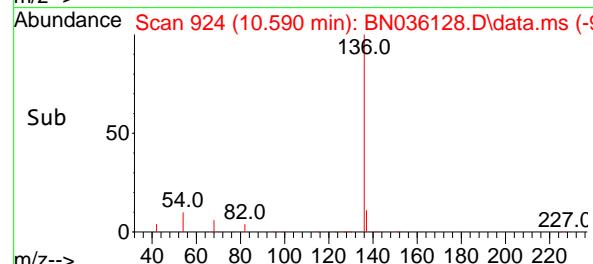
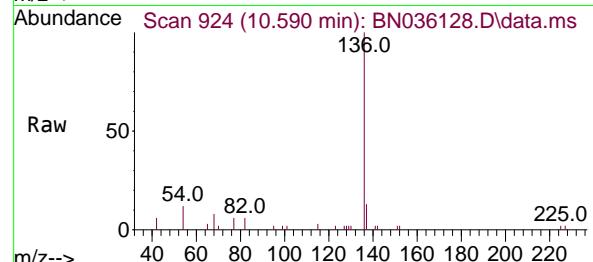
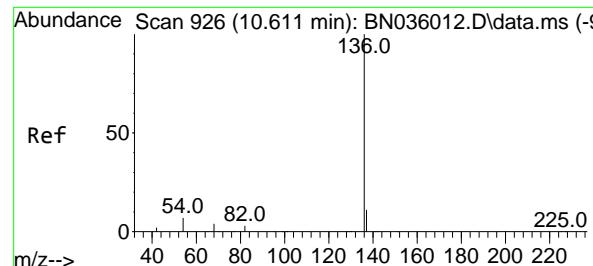


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.462 ng  
 RT: 7.225 min Scan# 560  
 Delta R.T. -0.007 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43



Tgt Ion: 93 Resp: 2420  
 Ion Ratio Lower Upper  
 93 100  
 63 81.2 65.8 98.6  
 95 33.8 25.8 38.6



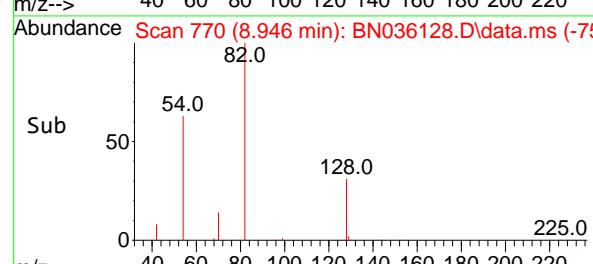
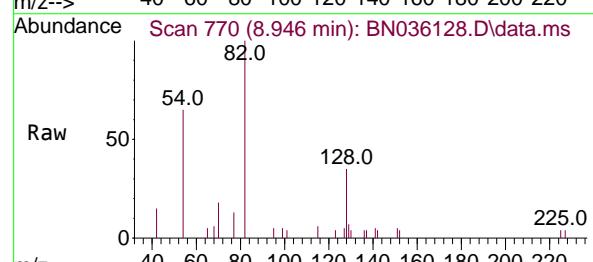
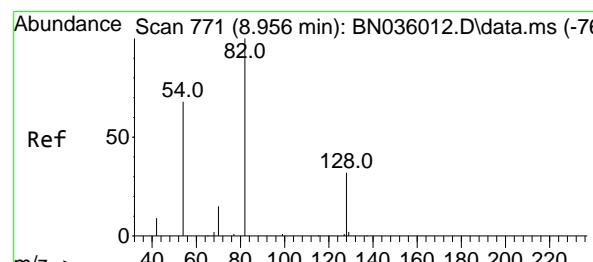
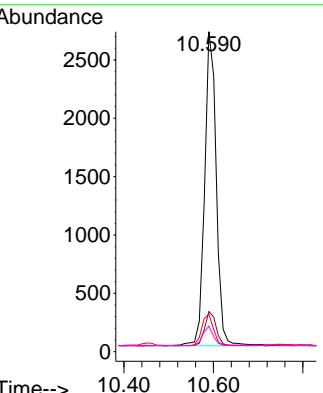


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.590 min Scan# 9  
 Delta R.T. -0.021 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Tgt Ion:136 Resp: 4862

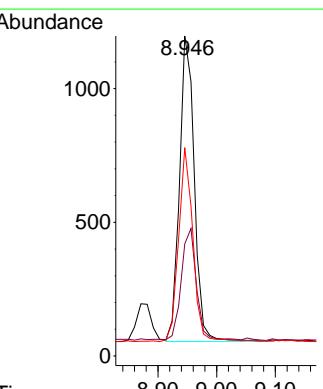
Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.4	15.6
54	11.8	7.7	11.5
68	8.0	5.4	8.0

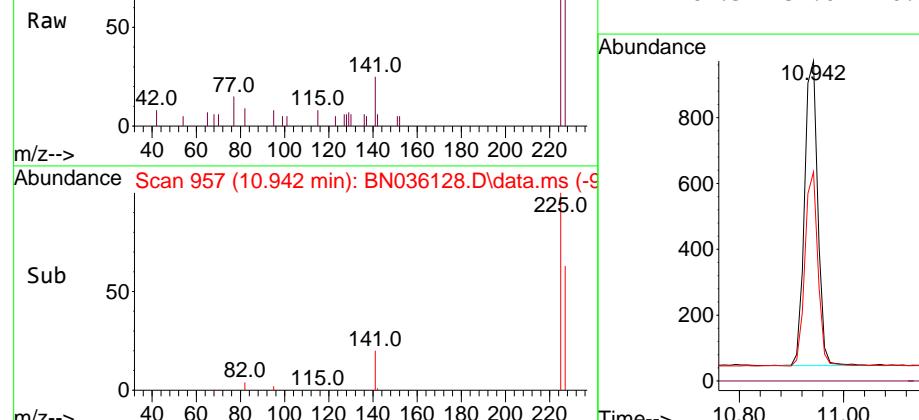
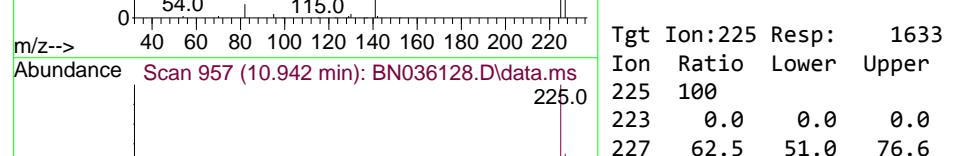
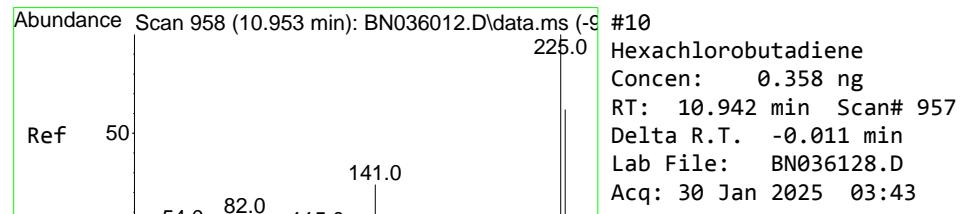
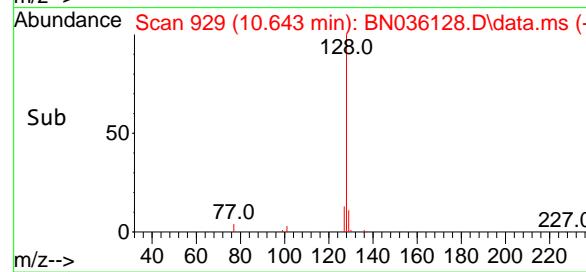
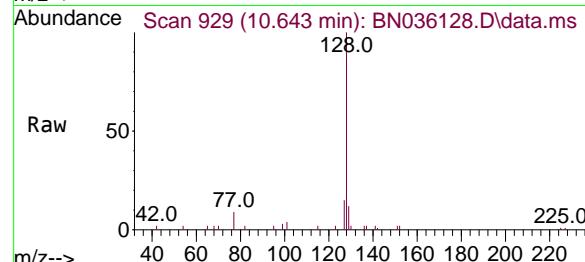
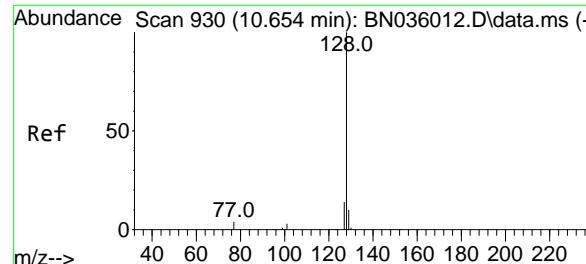


#8  
 Nitrobenzene-d5  
 Concen: 0.437 ng  
 RT: 8.946 min Scan# 770  
 Delta R.T. -0.011 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Tgt Ion: 82 Resp: 2006

Ion	Ratio	Lower	Upper
82	100		
128	35.0	28.8	43.2
54	65.1	55.8	83.8

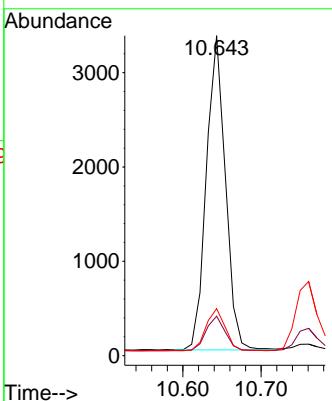




#9  
Naphthalene  
Concen: 0.399 ng  
RT: 10.643 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

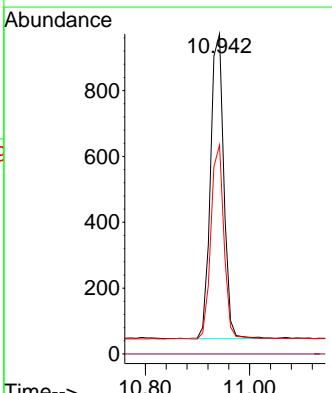
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

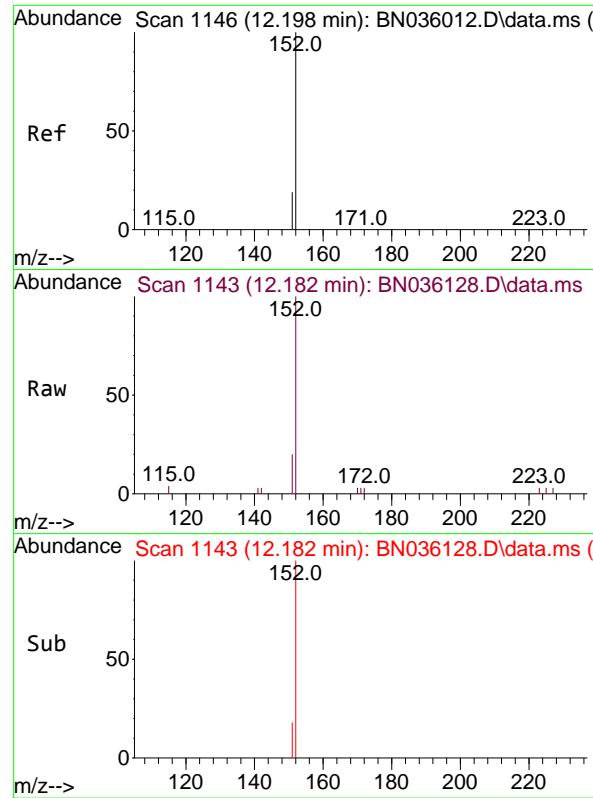
Tgt Ion:128 Resp: 5630  
Ion Ratio Lower Upper  
128 100  
129 12.3 9.4 14.2  
127 14.7 12.6 19.0



#10  
Hexachlorobutadiene  
Concen: 0.358 ng  
RT: 10.942 min Scan# 957  
Delta R.T. -0.011 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

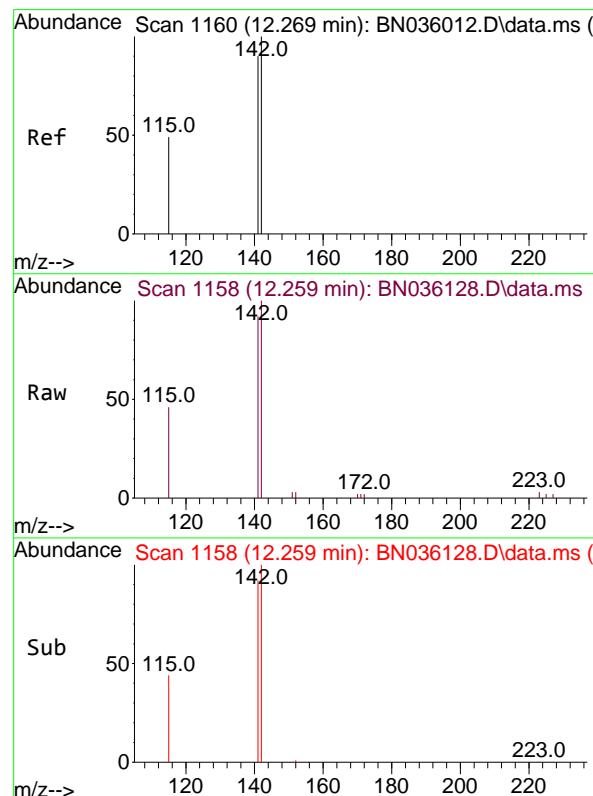
Tgt Ion:225 Resp: 1633  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 62.5 51.0 76.6





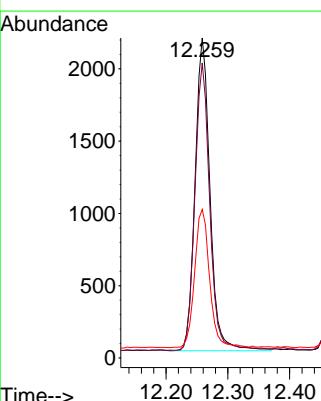
#11  
2-Methylnaphthalene-d10  
Concen: 0.442 ng  
RT: 12.182 min Scan# 1  
Delta R.T. -0.015 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

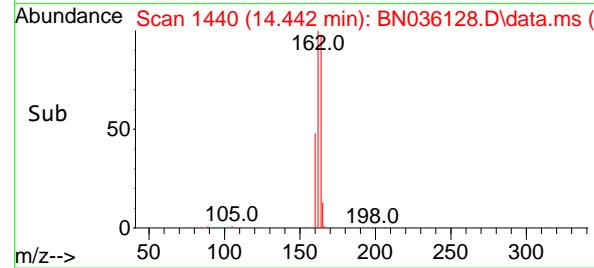
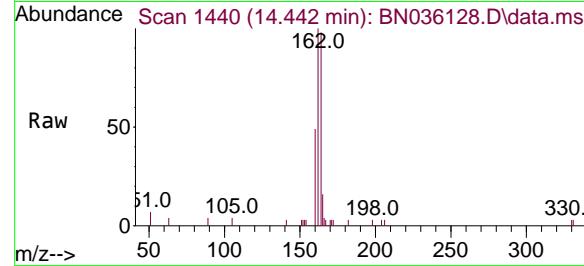
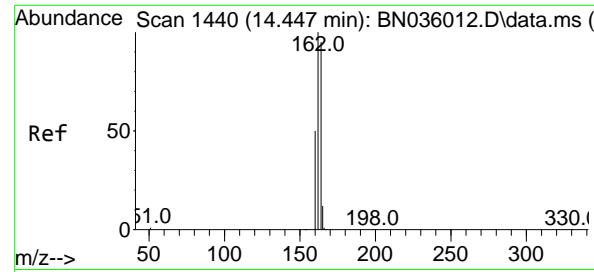
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC



#12  
2-Methylnaphthalene  
Concen: 0.414 ng  
RT: 12.259 min Scan# 1158  
Delta R.T. -0.010 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

Tgt Ion:142 Resp: 3632  
Ion Ratio Lower Upper  
142 100  
141 92.2 72.2 108.2  
115 46.4 41.2 61.8





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.442 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion:164 Resp: 2750

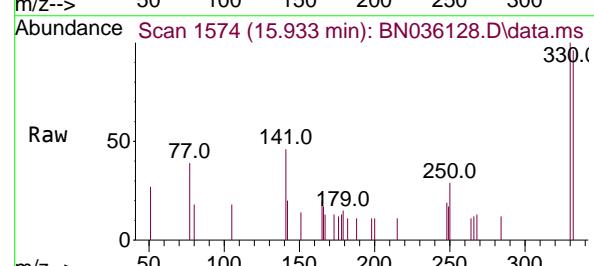
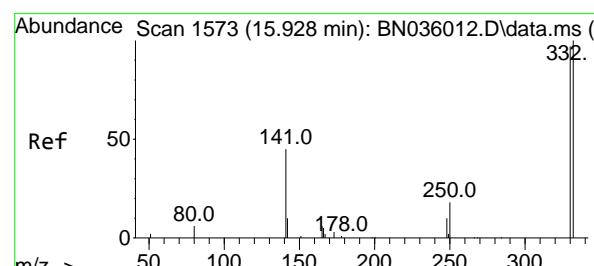
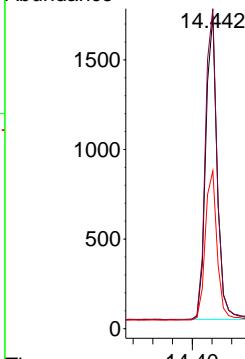
Ion Ratio Lower Upper

164 100

162 102.2 84.1 126.1

160 50.4 43.8 65.8

Abundance



#14

2,4,6-Tribromophenol

Concen: 0.391 ng

RT: 15.933 min Scan# 1574

Delta R.T. 0.005 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

Tgt Ion:330 Resp: 689

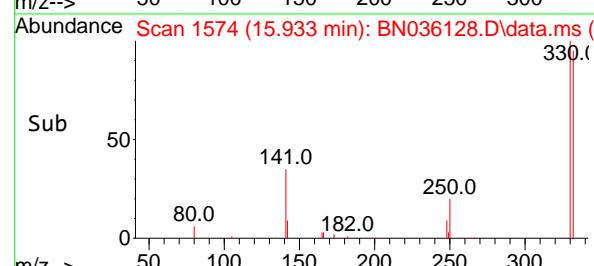
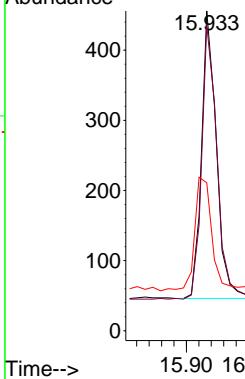
Ion Ratio Lower Upper

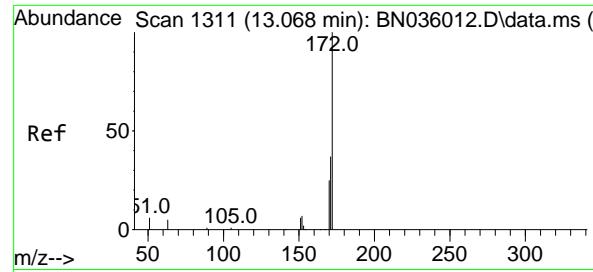
330 100

332 98.8 81.0 121.4

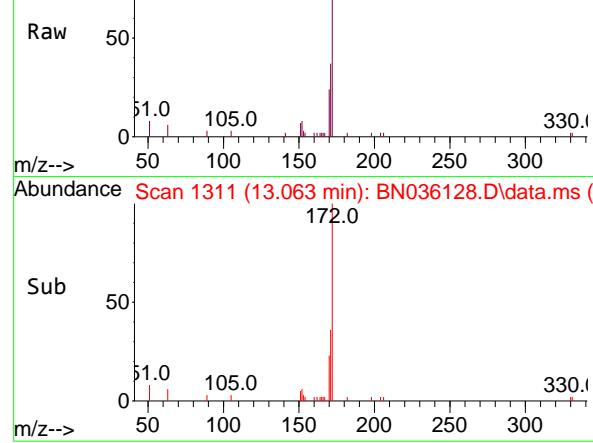
141 46.7 36.7 55.1

Abundance





Abundance Scan 1311 (13.063 min): BN036128.D\data.ms (-)



#15

2-Fluorobiphenyl

Concen: 0.387 ng

RT: 13.063 min Scan# 1311

Delta R.T. -0.006 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

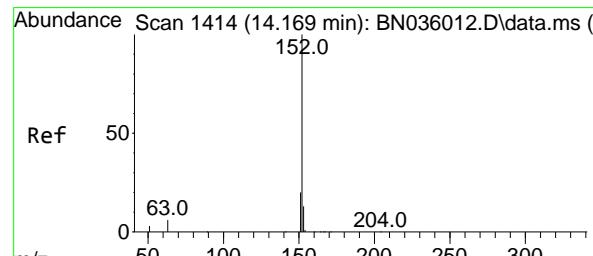
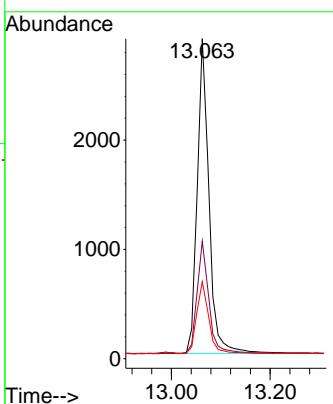
Tgt Ion:172 Resp: 4754

Ion Ratio Lower Upper

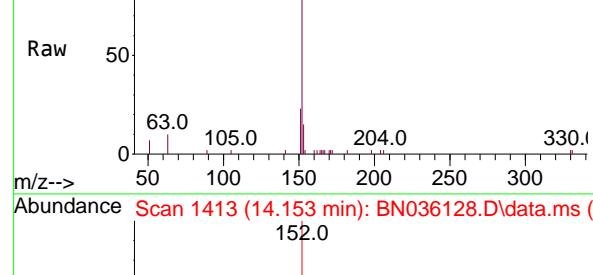
172 100

171 36.7 30.9 46.3

170 24.0 21.2 31.8



Abundance Scan 1413 (14.153 min): BN036128.D\data.ms (-)



#16

Acenaphthylene

Concen: 0.394 ng

RT: 14.153 min Scan# 1413

Delta R.T. -0.016 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

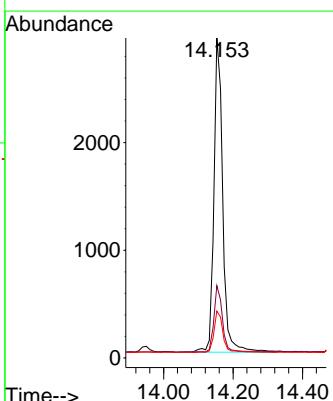
Tgt Ion:152 Resp: 5132

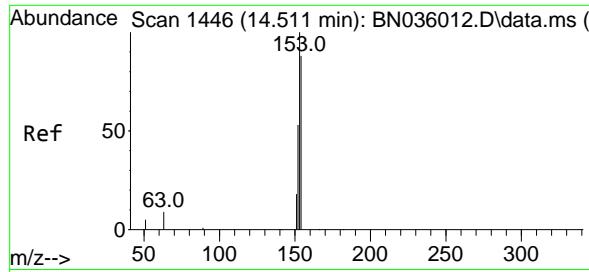
Ion Ratio Lower Upper

152 100

151 20.1 16.2 24.2

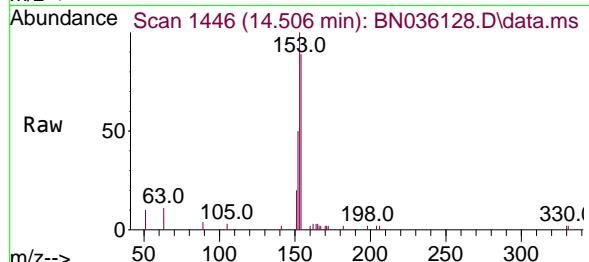
153 13.8 10.4 15.6



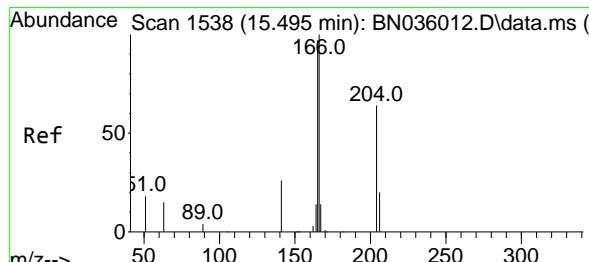
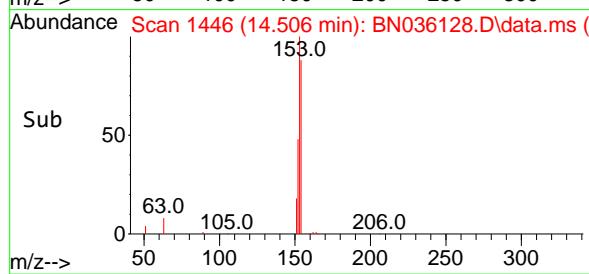
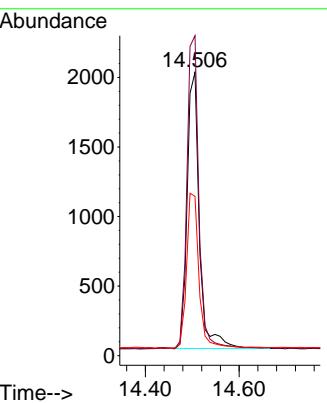


#17  
 Acenaphthene  
 Concen: 0.400 ng  
 RT: 14.506 min Scan# 1  
 Delta R.T. -0.006 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

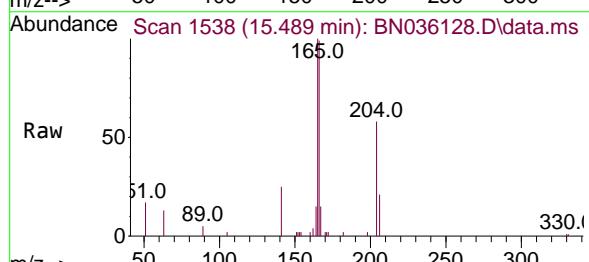
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC



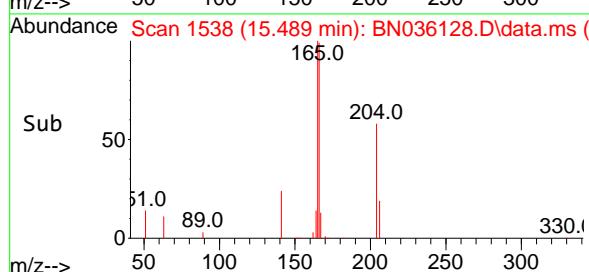
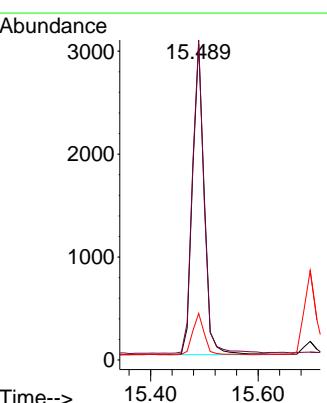
Tgt Ion:154 Resp: 3570  
 Ion Ratio Lower Upper  
 154 100  
 153 111.6 88.9 133.3  
 152 56.6 48.1 72.1

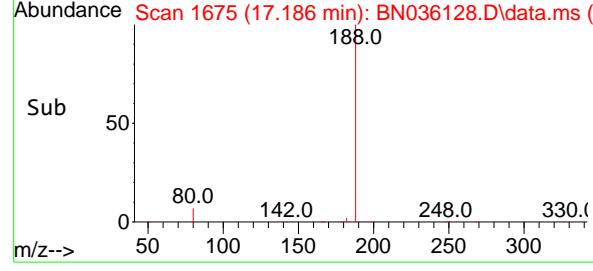
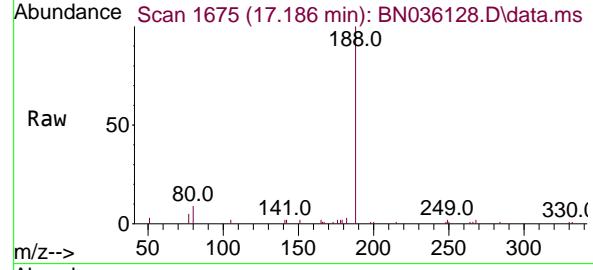
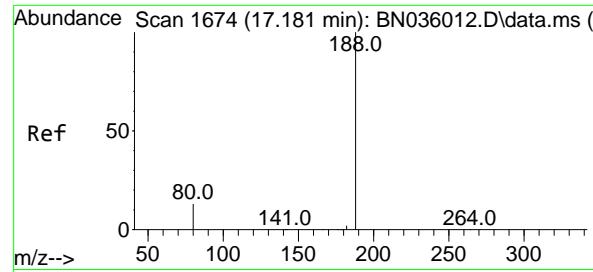


#18  
 Fluorene  
 Concen: 0.439 ng  
 RT: 15.489 min Scan# 1538  
 Delta R.T. -0.006 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43



Tgt Ion:166 Resp: 4914  
 Ion Ratio Lower Upper  
 166 100  
 165 99.9 78.5 117.7  
 167 13.2 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

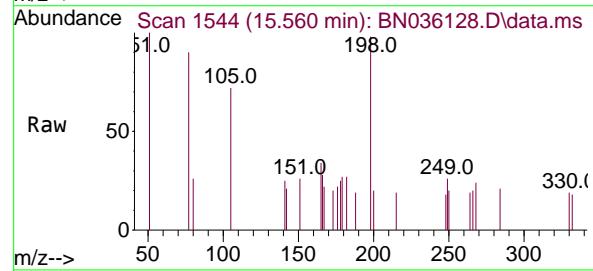
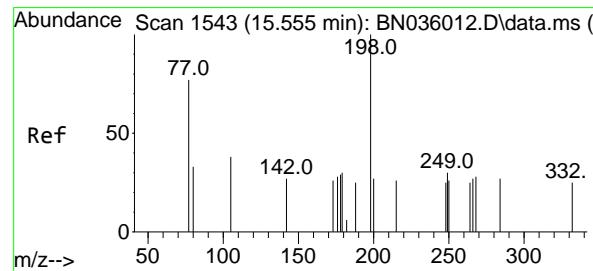
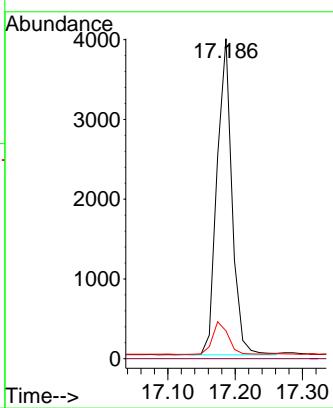
Tgt Ion:188 Resp: 6103

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 8.7 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.283 ng

RT: 15.560 min Scan# 1544

Delta R.T. 0.005 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

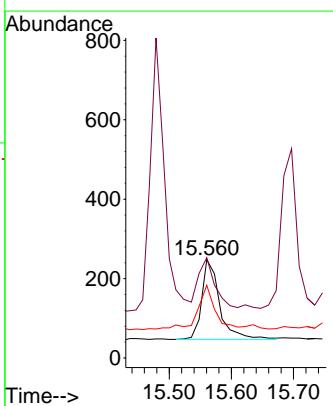
Tgt Ion:198 Resp: 402

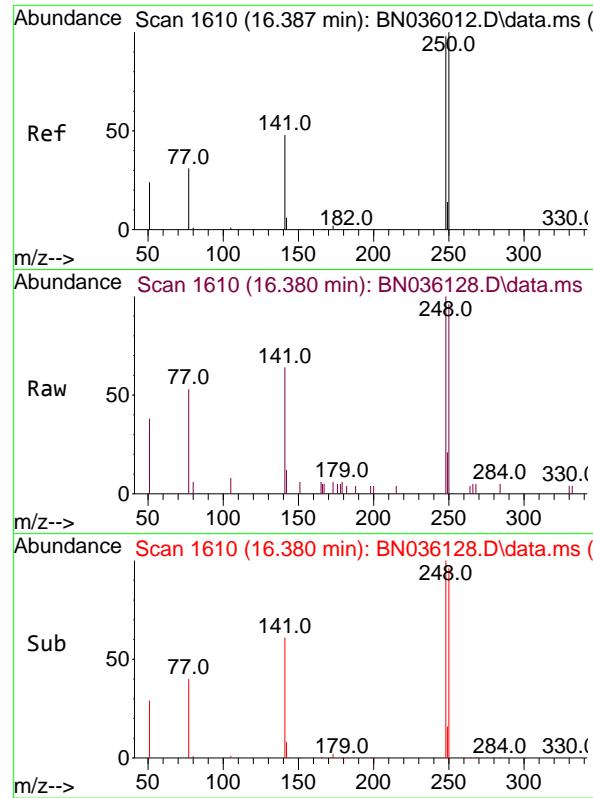
Ion Ratio Lower Upper

198 100

51 102.0 68.1 102.1

105 73.8 46.5 69.7#

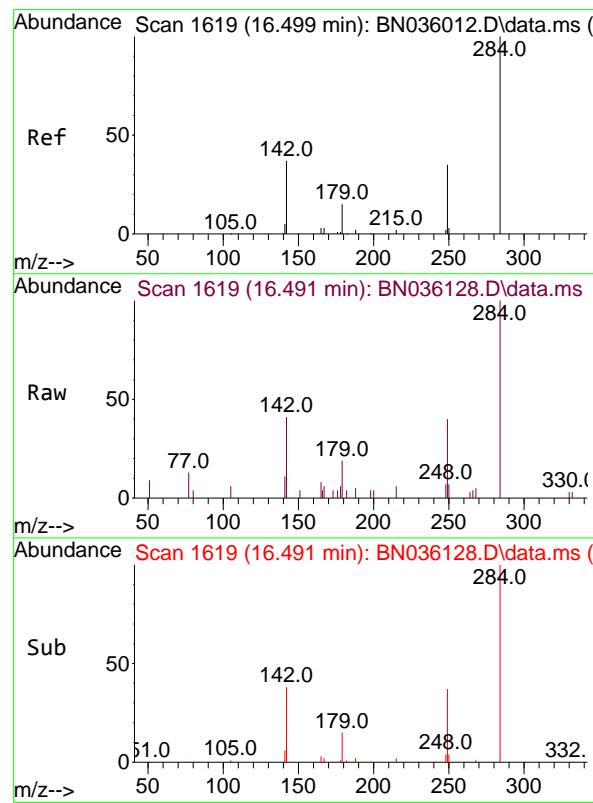
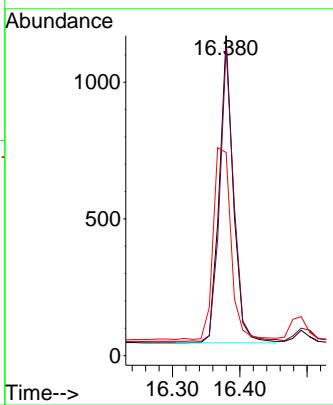




#21  
 4-Bromophenyl-phenylether  
 Concen: 0.371 ng  
 RT: 16.380 min Scan# 1  
 Delta R.T. -0.007 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

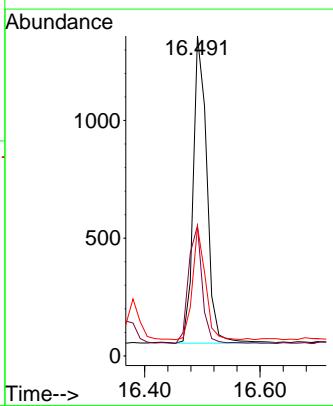
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

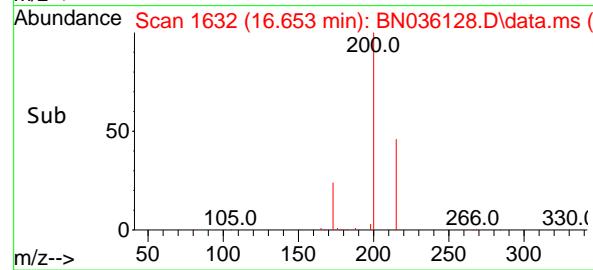
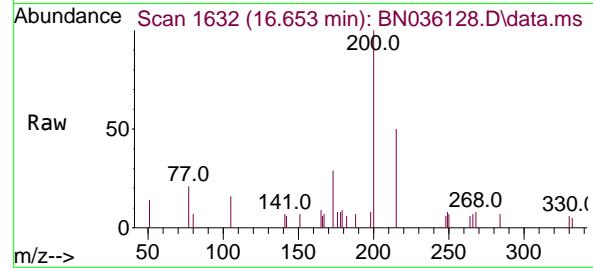
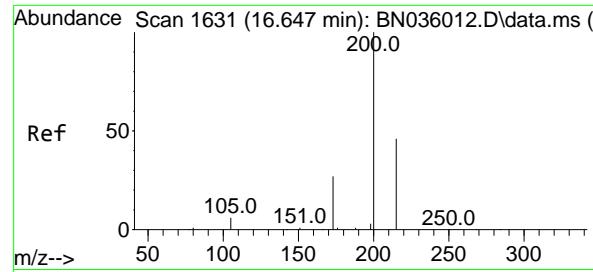
Tgt Ion:248 Resp: 1615  
 Ion Ratio Lower Upper  
 248 100  
 250 96.2 81.5 122.3  
 141 63.5 41.8 62.6#



#22  
 Hexachlorobenzene  
 Concen: 0.376 ng  
 RT: 16.491 min Scan# 1619  
 Delta R.T. -0.007 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Tgt Ion:284 Resp: 2151  
 Ion Ratio Lower Upper  
 284 100  
 142 38.7 33.6 50.4  
 249 34.4 28.8 43.2

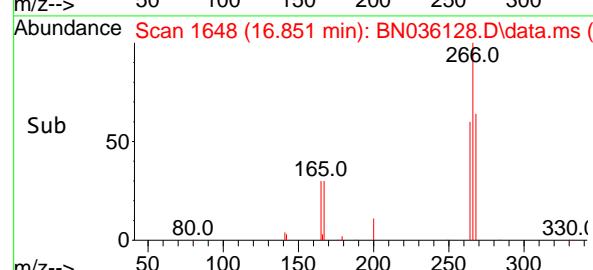
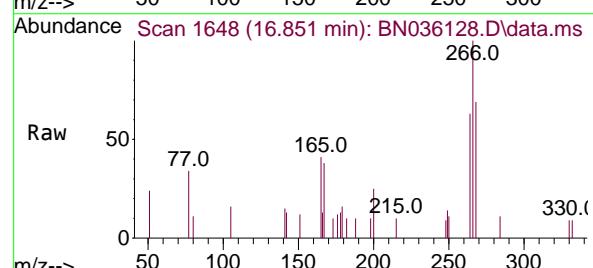
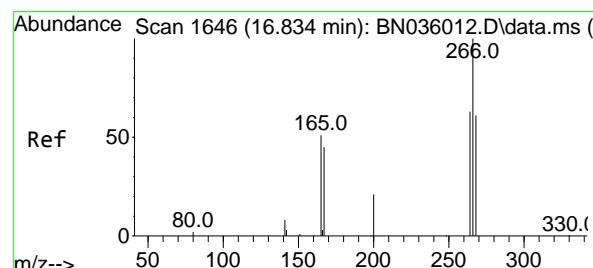
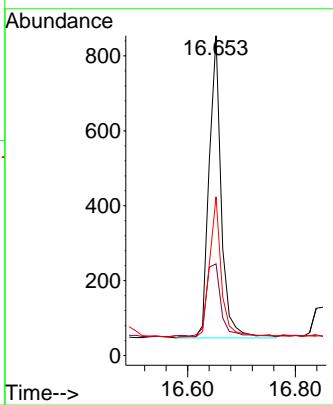




#23  
Atrazine  
Concen: 0.402 ng  
RT: 16.653 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

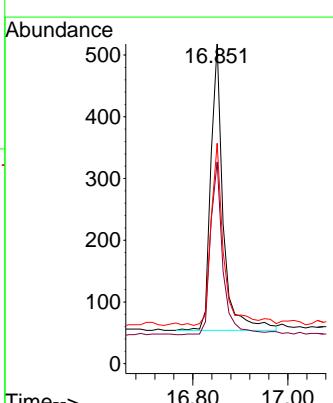
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

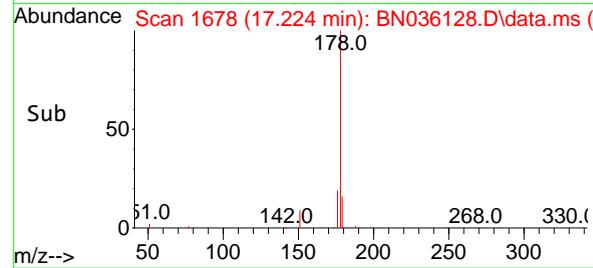
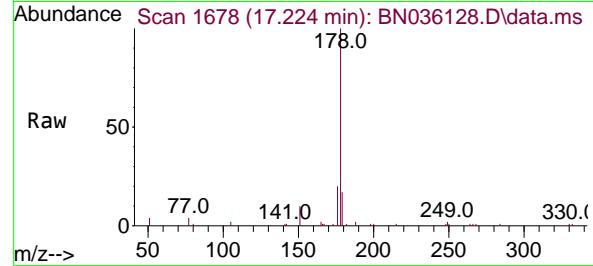
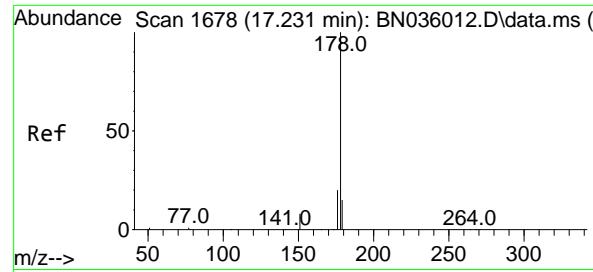
Tgt Ion:200 Resp: 1263  
Ion Ratio Lower Upper  
200 100  
173 28.7 26.6 40.0  
215 49.6 40.6 61.0



#24  
Pentachlorophenol  
Concen: 0.340 ng  
RT: 16.851 min Scan# 1648  
Delta R.T. 0.018 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

Tgt Ion:266 Resp: 843  
Ion Ratio Lower Upper  
266 100  
264 61.0 48.2 72.2  
268 65.2 51.6 77.4





#25

Phenanthrene

Concen: 0.398 ng

RT: 17.224 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

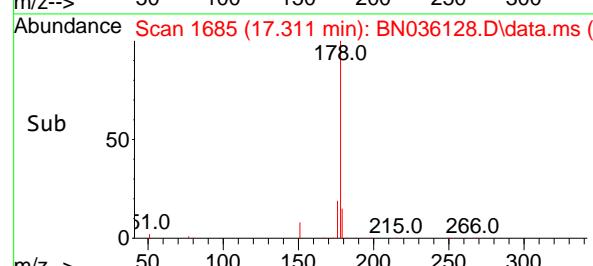
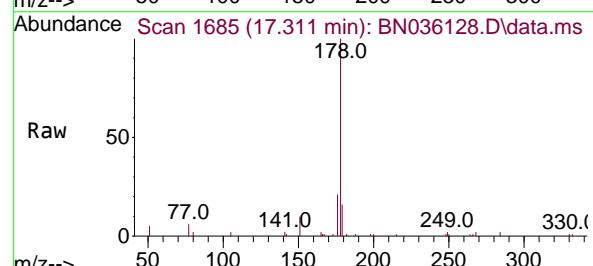
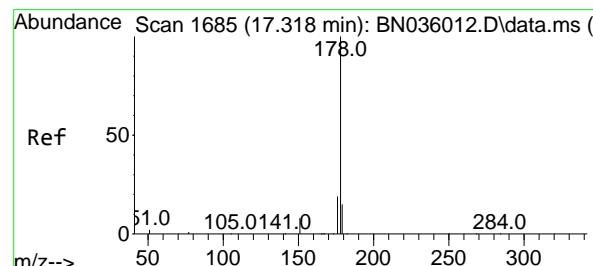
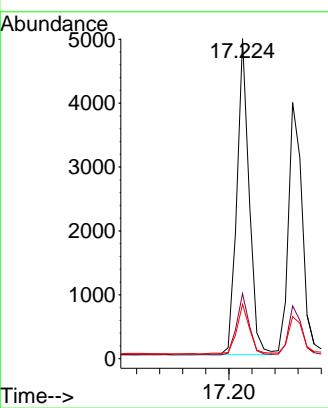
Tgt Ion:178 Resp: 7295

Ion Ratio Lower Upper

178 100

176 19.4 16.0 24.0

179 16.1 12.4 18.6



#26

Anthracene

Concen: 0.394 ng

RT: 17.311 min Scan# 1685

Delta R.T. -0.007 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

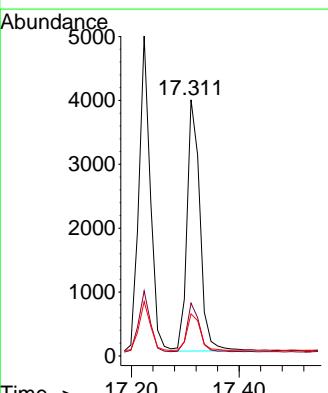
Tgt Ion:178 Resp: 6577

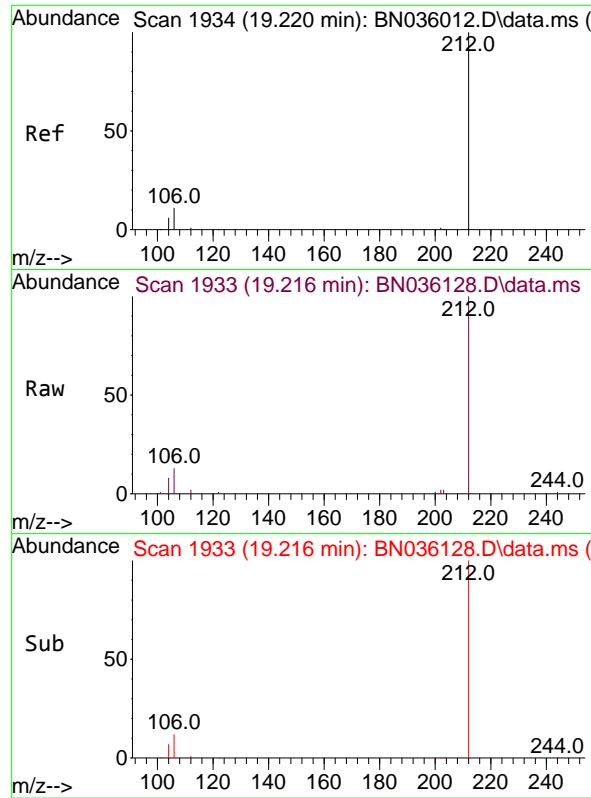
Ion Ratio Lower Upper

178 100

176 18.5 15.4 23.2

179 15.0 12.0 18.0

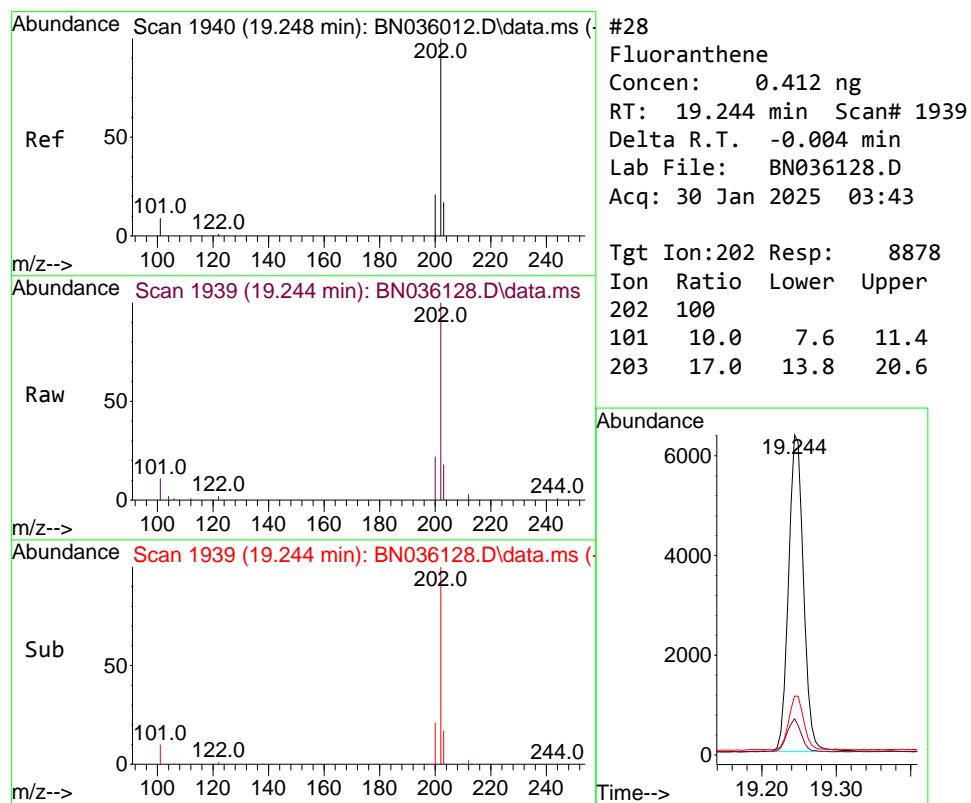
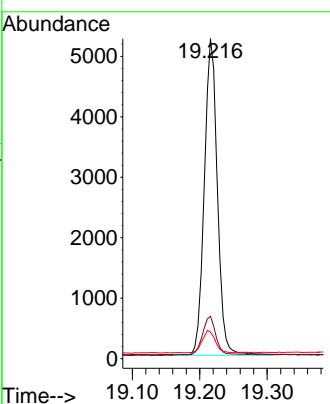




#27  
 Fluoranthene-d10  
 Concen: 0.447 ng  
 RT: 19.216 min Scan# 1  
 Delta R.T. -0.004 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

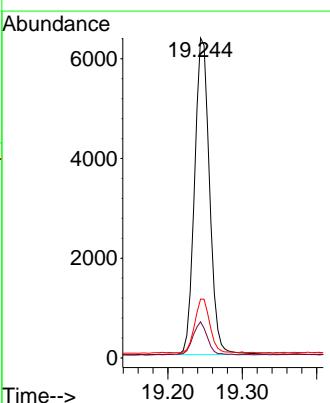
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

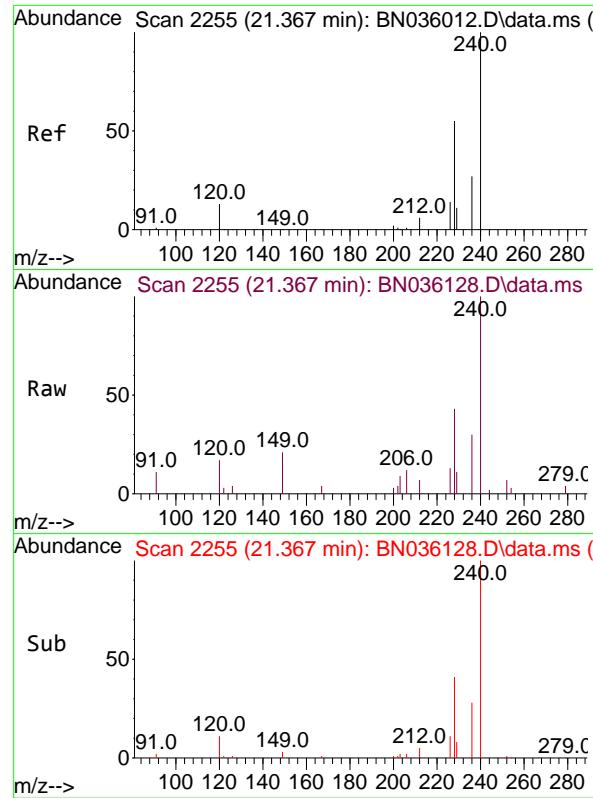
Tgt Ion:212 Resp: 7072  
 Ion Ratio Lower Upper  
 212 100  
 106 12.1 9.7 14.5  
 104 6.8 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.412 ng  
 RT: 19.244 min Scan# 1939  
 Delta R.T. -0.004 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Tgt Ion:202 Resp: 8878  
 Ion Ratio Lower Upper  
 202 100  
 101 10.0 7.6 11.4  
 203 17.0 13.8 20.6

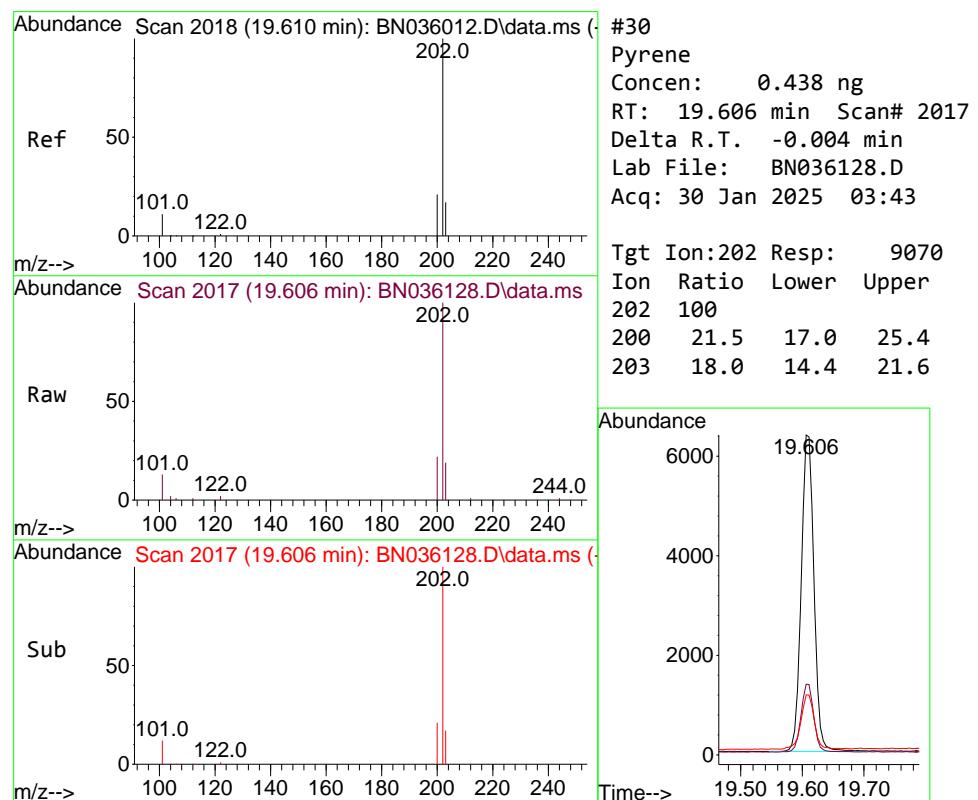
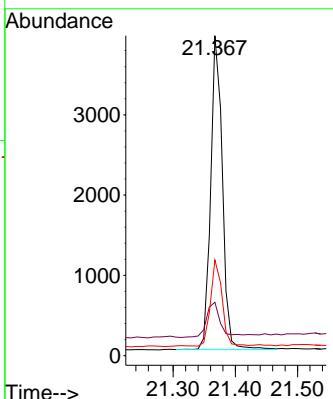




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

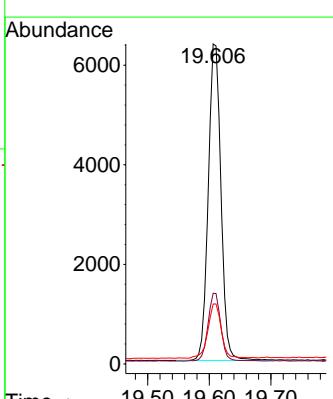
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

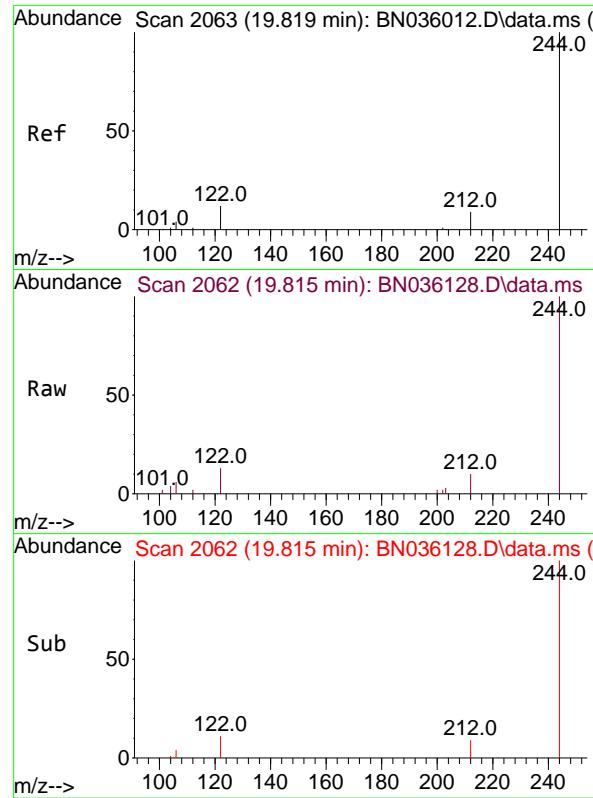
Tgt Ion:240 Resp: 5116  
Ion Ratio Lower Upper  
240 100  
120 16.7 13.9 20.9  
236 29.9 23.7 35.5



#30  
Pyrene  
Concen: 0.438 ng  
RT: 19.606 min Scan# 2017  
Delta R.T. -0.004 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

Tgt Ion:202 Resp: 9070  
Ion Ratio Lower Upper  
202 100  
200 21.5 17.0 25.4  
203 18.0 14.4 21.6

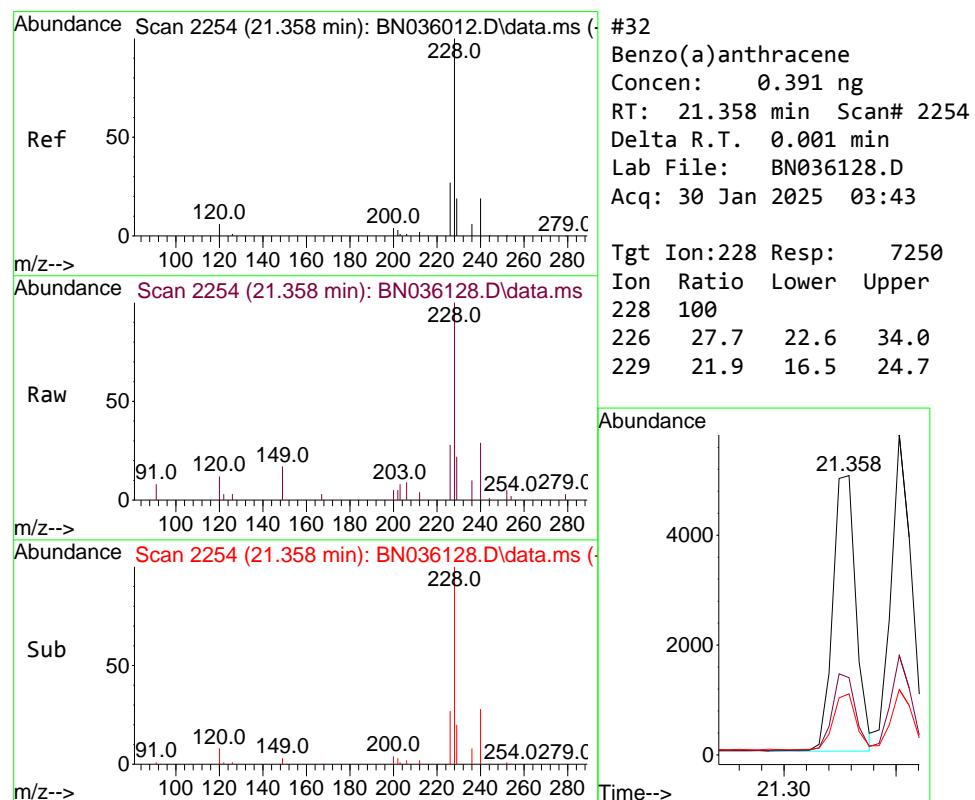
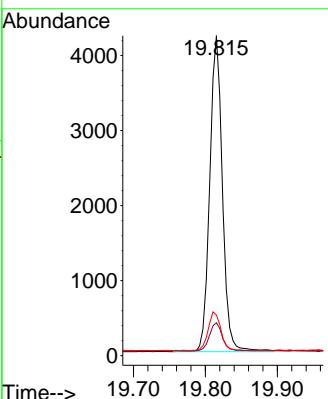




#31  
 Terphenyl-d14  
 Concen: 0.483 ng  
 RT: 19.815 min Scan# 2  
 Delta R.T. -0.004 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

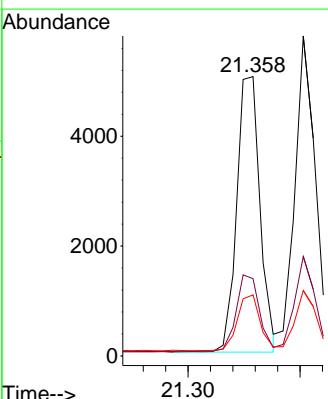
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

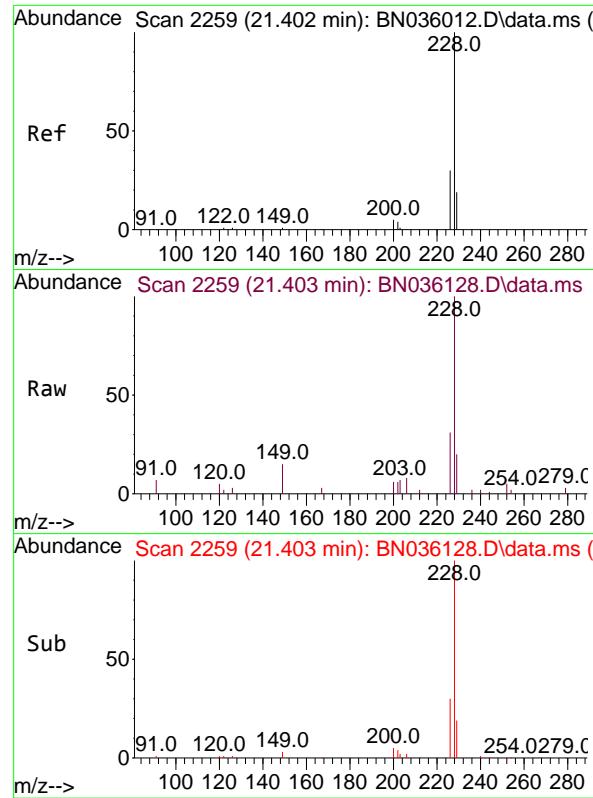
Tgt Ion:244 Resp: 5137  
 Ion Ratio Lower Upper  
 244 100  
 212 10.3 9.1 13.7  
 122 12.7 11.3 16.9



#32  
 Benzo(a)anthracene  
 Concen: 0.391 ng  
 RT: 21.358 min Scan# 2254  
 Delta R.T. 0.001 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Tgt Ion:228 Resp: 7250  
 Ion Ratio Lower Upper  
 228 100  
 226 27.7 22.6 34.0  
 229 21.9 16.5 24.7

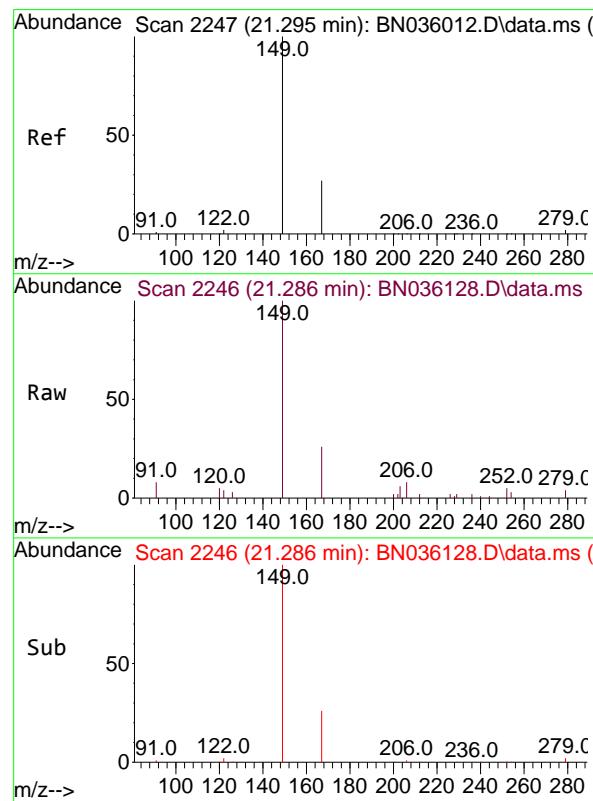
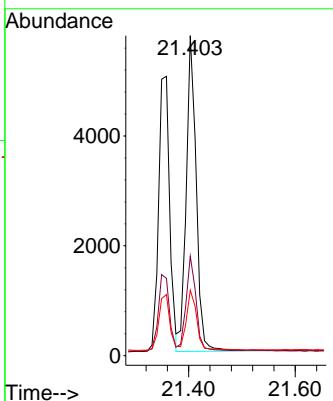




#33  
 Chrysene  
 Concen: 0.396 ng  
 RT: 21.403 min Scan# 2  
 Delta R.T. 0.001 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

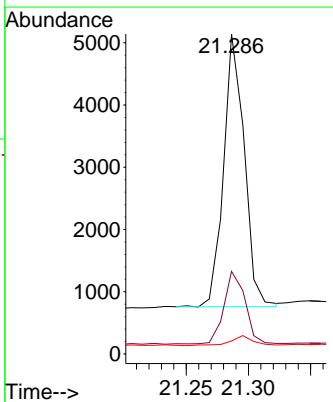
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

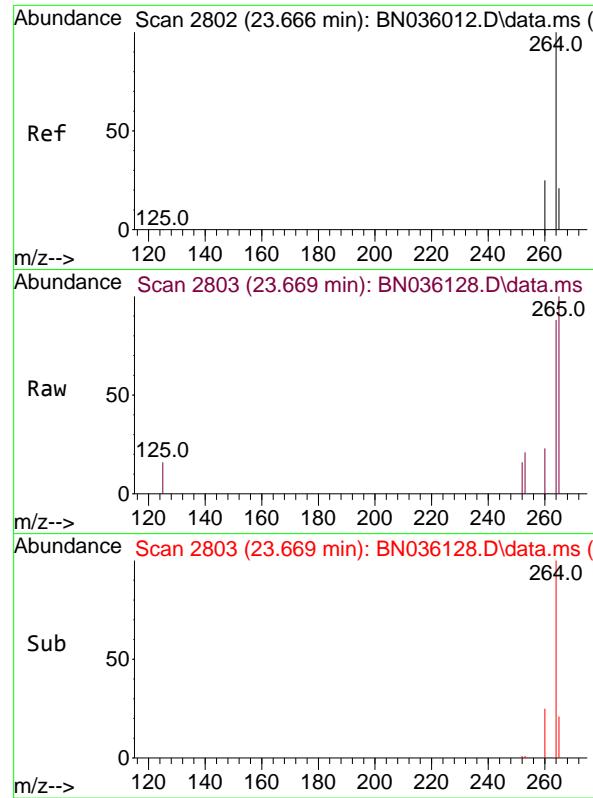
Tgt Ion:228 Resp: 7502  
 Ion Ratio Lower Upper  
 228 100  
 226 31.1 25.3 37.9  
 229 20.4 16.3 24.5



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.498 ng  
 RT: 21.286 min Scan# 2246  
 Delta R.T. -0.008 min  
 Lab File: BN036128.D  
 Acq: 30 Jan 2025 03:43

Tgt Ion:149 Resp: 5061  
 Ion Ratio Lower Upper  
 149 100  
 167 27.3 21.9 32.9  
 279 3.9 3.0 4.6

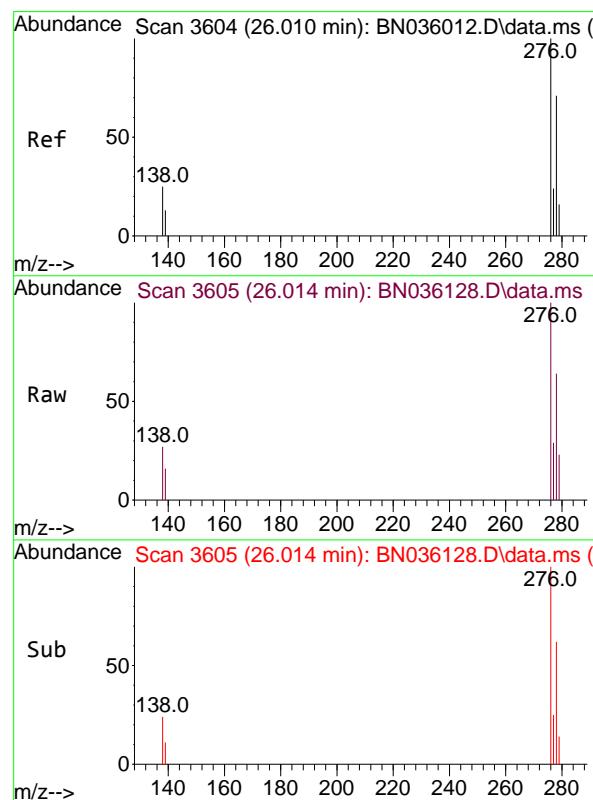
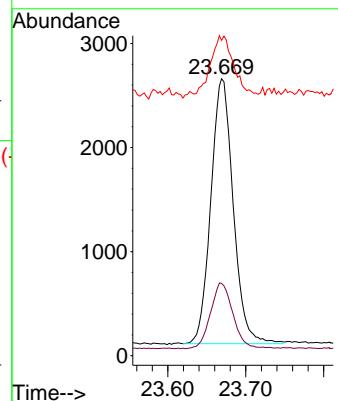




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.669 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

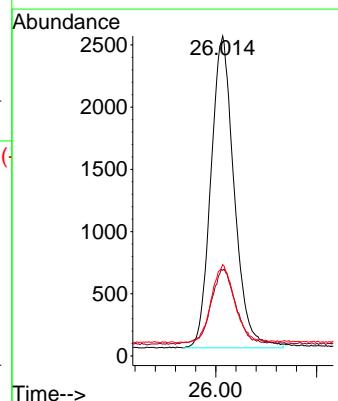
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

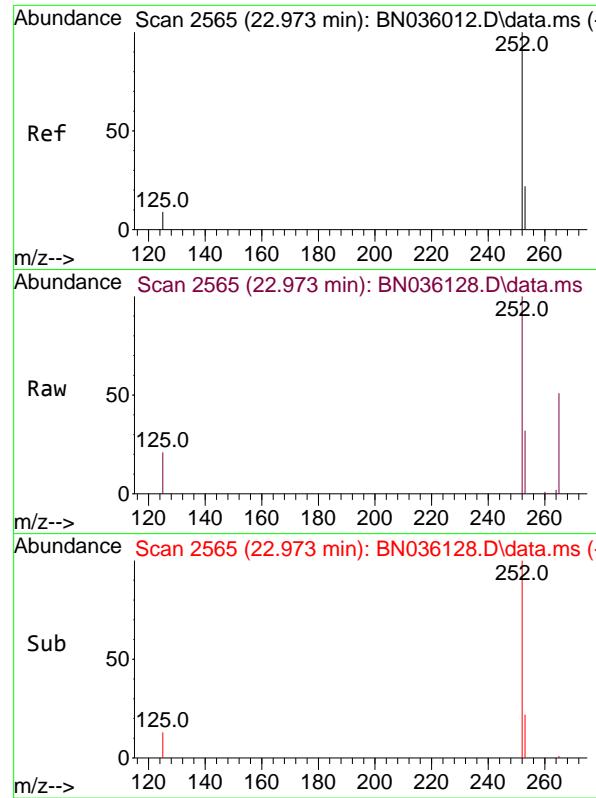
Tgt Ion:264 Resp: 5085  
Ion Ratio Lower Upper  
264 100  
260 26.1 21.8 32.6  
265 113.9 56.6 84.8#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.393 ng  
RT: 26.014 min Scan# 3605  
Delta R.T. 0.003 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

Tgt Ion:276 Resp: 8019  
Ion Ratio Lower Upper  
276 100  
138 25.7 19.9 29.9  
277 24.9 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.384 ng

RT: 22.973 min Scan# 2

Delta R.T. 0.001 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

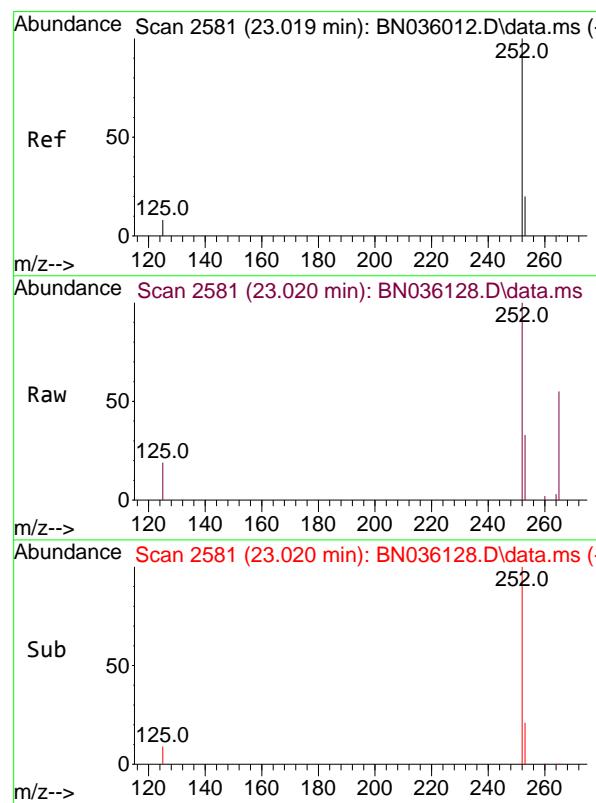
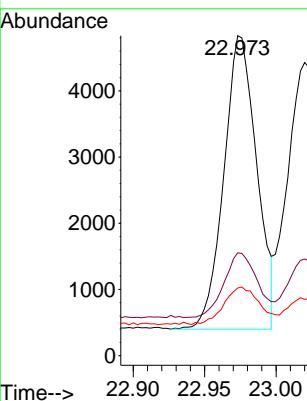
Tgt Ion:252 Resp: 7092

Ion Ratio Lower Upper

252 100

253 32.1 22.5 33.7

125 21.1 11.9 17.9#



#38

Benzo(k)fluoranthene

Concen: 0.365 ng

RT: 23.020 min Scan# 2581

Delta R.T. 0.000 min

Lab File: BN036128.D

Acq: 30 Jan 2025 03:43

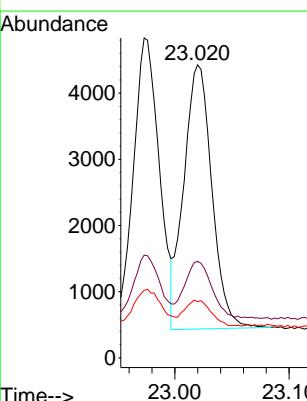
Tgt Ion:252 Resp: 6802

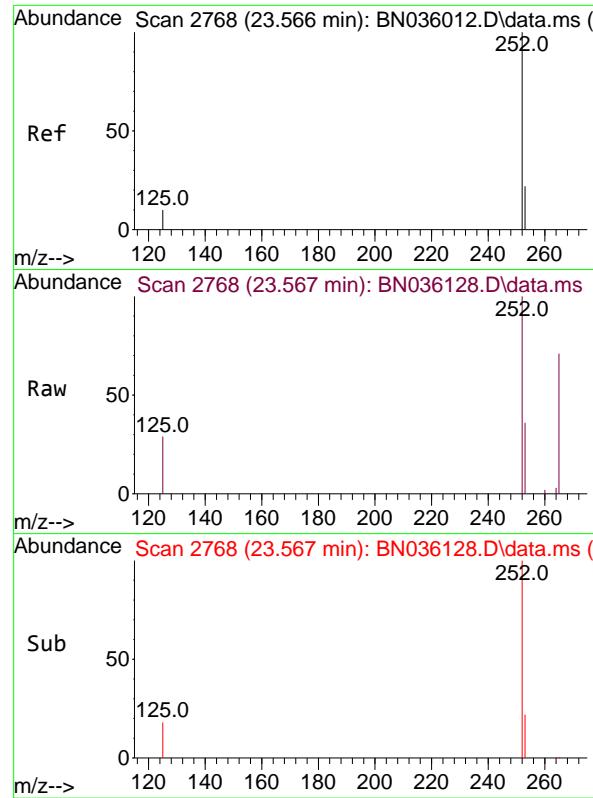
Ion Ratio Lower Upper

252 100

253 32.9 21.3 31.9#

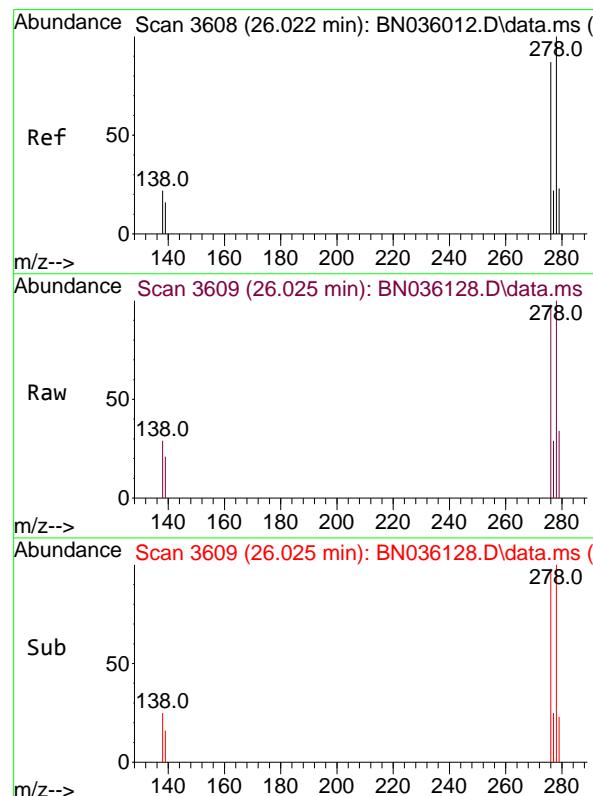
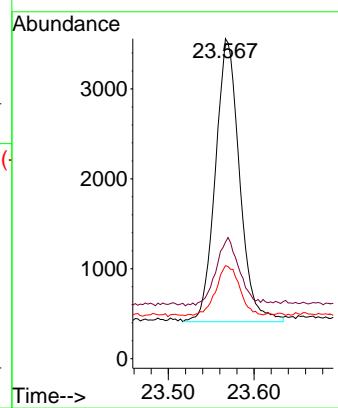
125 19.2 11.9 17.9#





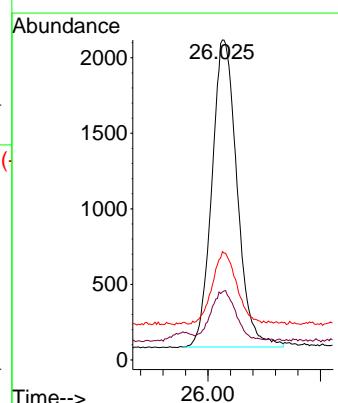
#39  
Benzo(a)pyrene  
Concen: 0.391 ng  
RT: 23.567 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.001 min  
Lab File: BN036128.D ClientSampleId : SSTDCCC0.4EC  
Acq: 30 Jan 2025 03:43

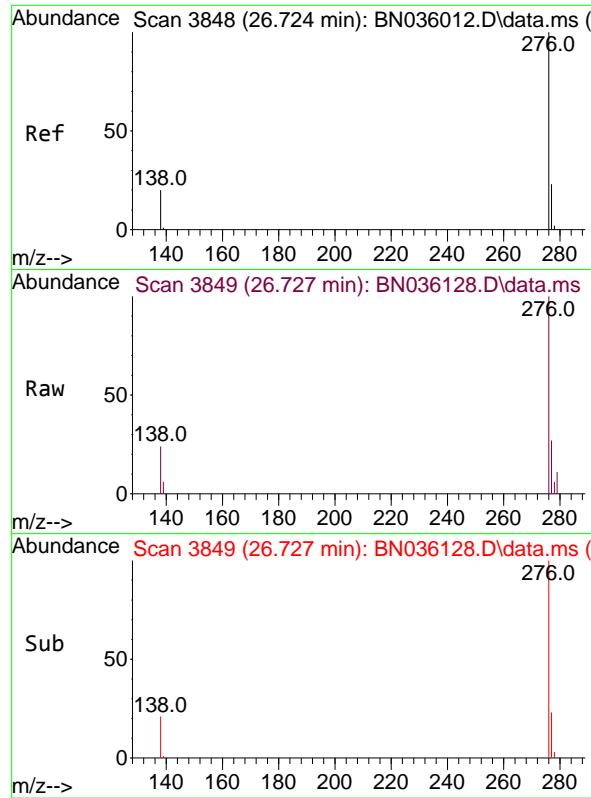
Tgt Ion:252 Resp: 6171  
Ion Ratio Lower Upper  
252 100  
253 36.4 23.8 35.6#  
125 29.0 14.6 21.8#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.389 ng  
RT: 26.025 min Scan# 3609  
Delta R.T. 0.003 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

Tgt Ion:278 Resp: 6330  
Ion Ratio Lower Upper  
278 100  
139 21.2 16.0 24.0  
279 33.9 23.8 35.8

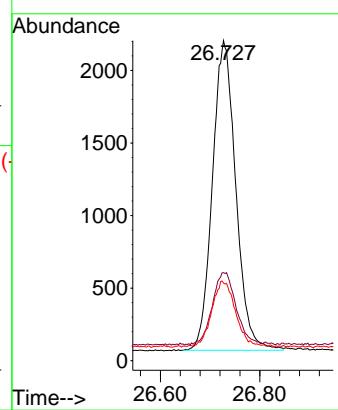




#41  
Benzo(g,h,i)perylene  
Concen: 0.392 ng  
RT: 26.727 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN036128.D  
Acq: 30 Jan 2025 03:43

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

Tgt Ion:276 Resp: 6952  
Ion Ratio Lower Upper  
276 100  
277 27.5 21.3 31.9  
138 24.3 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036128.D  
 Acq On : 30 Jan 2025 03:43  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jan 30 04:17:35 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	129	-0.01
2	1,4-Dioxane	0.447	0.408	8.7	112	0.00
3	n-Nitrosodimethylamine	0.811	0.712	12.2	105	0.00
4 S	2-Fluorophenol	1.040	1.189	-14.3	141	0.02
5 S	Phenol-d6	1.222	1.499	-22.7	153#	0.04
6	bis(2-Chloroethyl)ether	0.984	1.136	-15.4	139	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	156#	-0.02
8 S	Nitrobenzene-d5	0.378	0.413	-9.3	161#	-0.01
9	Naphthalene	1.162	1.158	0.3	144	-0.01
10	Hexachlorobutadiene	0.375	0.336	10.4	129	-0.01
11 SURR	2-Methylnaphthalene-d10	0.544	0.601	-10.5	162#	-0.02
12	2-Methylnaphthalene	0.721	0.747	-3.6	153#	-0.01
13 I	Acenaphthene-d10	1.000	1.000	0.0	174#	0.00
14 S	2,4,6-Tribromophenol	0.257	0.251	2.3	170#	0.00
15 S	2-Fluorobiphenyl	1.786	1.729	3.2	156#	0.00
16	Acenaphthylene	1.897	1.866	1.6	161#	-0.02
17	Acenaphthene	1.299	1.298	0.1	165#	0.00
18	Fluorene	1.627	1.787	-9.8	190#	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	195#	0.00
20	4,6-Dinitro-2-methylphenol	0.093	0.066	29.0#	135	0.00
21	4-Bromophenyl-phenylether	0.285	0.265	7.0	168#	0.00
22	Hexachlorobenzene	0.375	0.352	6.1	169#	0.00
23	Atrazine	0.206	0.207	-0.5	185#	0.00
24	Pentachlorophenol	0.162	0.138	14.8	164#	0.02
25	Phenanthrene	1.202	1.195	0.6	179#	0.00
26	Anthracene	1.093	1.078	1.4	182#	0.00
27 SURR	Fluoranthene-d10	1.036	1.159	-11.9	203#	0.00
28	Fluoranthene	1.412	1.455	-3.0	188#	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	180#	0.00
30	Pyrene	1.621	1.773	-9.4	188#	0.00
31 S	Terphenyl-d14	0.831	1.004	-20.8	207#	0.00
32	Benzo(a)anthracene	1.451	1.417	2.3	169#	0.00
33	Chrysene	1.483	1.466	1.1	171#	0.00
34	Bis(2-ethylhexyl)phthalate	0.795	0.989	-24.4	223#	0.00
35 I	Perylene-d12	1.000	1.000	0.0	171#	0.00
36	Indeno(1,2,3-cd)pyrene	1.605	1.577	1.7	166#	0.00
37	Benzo(b)fluoranthene	1.454	1.395	4.1	159#	0.00
38	Benzo(k)fluoranthene	1.465	1.338	8.7	154#	0.00
39 C	Benzo(a)pyrene	1.242	1.214	2.3	164#	0.00
40	Dibenzo(a,h)anthracene	1.279	1.245	2.7	165#	0.00
41	Benzo(g,h,i)perylene	1.394	1.367	1.9	164#	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036128.D  
 Acq On : 30 Jan 2025 03:43  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Jan 30 04:17:35 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	129	-0.01
2	1,4-Dioxane	0.400	0.365	8.8	112	0.00
3	n-Nitrosodimethylamine	0.400	0.351	12.3	105	0.00
4 S	2-Fluorophenol	0.400	0.457	-14.2	141	0.02
5 S	Phenol-d6	0.400	0.491	-22.7	153	0.04
6	bis(2-Chloroethyl)ether	0.400	0.462	-15.5	139	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	156	-0.02
8 S	Nitrobenzene-d5	0.400	0.437	-9.2	161	-0.01
9	Naphthalene	0.400	0.399	0.3	144	-0.01
10	Hexachlorobutadiene	0.400	0.358	10.5	129	-0.01
11 SURR	2-Methylnaphthalene-d10	0.400	0.442	-10.5	162	-0.02
12	2-Methylnaphthalene	0.400	0.414	-3.5	153	-0.01
13 I	Acenaphthene-d10	0.400	0.400	0.0	174	0.00
14 S	2,4,6-Tribromophenol	0.400	0.391	2.3	170	0.00
15 S	2-Fluorobiphenyl	0.400	0.387	3.3	156	0.00
16	Acenaphthylene	0.400	0.394	1.5	161	-0.02
17	Acenaphthene	0.400	0.400	0.0	165	0.00
18	Fluorene	0.400	0.439	-9.7	190	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	195	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.283	29.3#	135	0.00
21	4-Bromophenyl-phenylether	0.400	0.371	7.3	168	0.00
22	Hexachlorobenzene	0.400	0.376	6.0	169	0.00
23	Atrazine	0.400	0.402	-0.5	185	0.00
24	Pentachlorophenol	0.400	0.340	15.0	164	0.02
25	Phenanthrene	0.400	0.398	0.5	179	0.00
26	Anthracene	0.400	0.394	1.5	182	0.00
27 SURR	Fluoranthene-d10	0.400	0.447	-11.7	203	0.00
28	Fluoranthene	0.400	0.412	-3.0	188	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	180	0.00
30	Pyrene	0.400	0.438	-9.5	188	0.00
31 S	Terphenyl-d14	0.400	0.483	-20.7	207	0.00
32	Benzo(a)anthracene	0.400	0.391	2.3	169	0.00
33	Chrysene	0.400	0.396	1.0	171	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.498	-24.5	223	0.00
35 I	Perylene-d12	0.400	0.400	0.0	171	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.393	1.8	166	0.00
37	Benzo(b)fluoranthene	0.400	0.384	4.0	159	0.00
38	Benzo(k)fluoranthene	0.400	0.365	8.8	154	0.00
39 C	Benzo(a)pyrene	0.400	0.391	2.3	164	0.00
40	Dibenzo(a,h)anthracene	0.400	0.389	2.8	165	0.00
41	Benzo(g,h,i)perylene	0.400	0.392	2.0	164	0.00

(#) = Out of Range

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



# QC SAMPLE

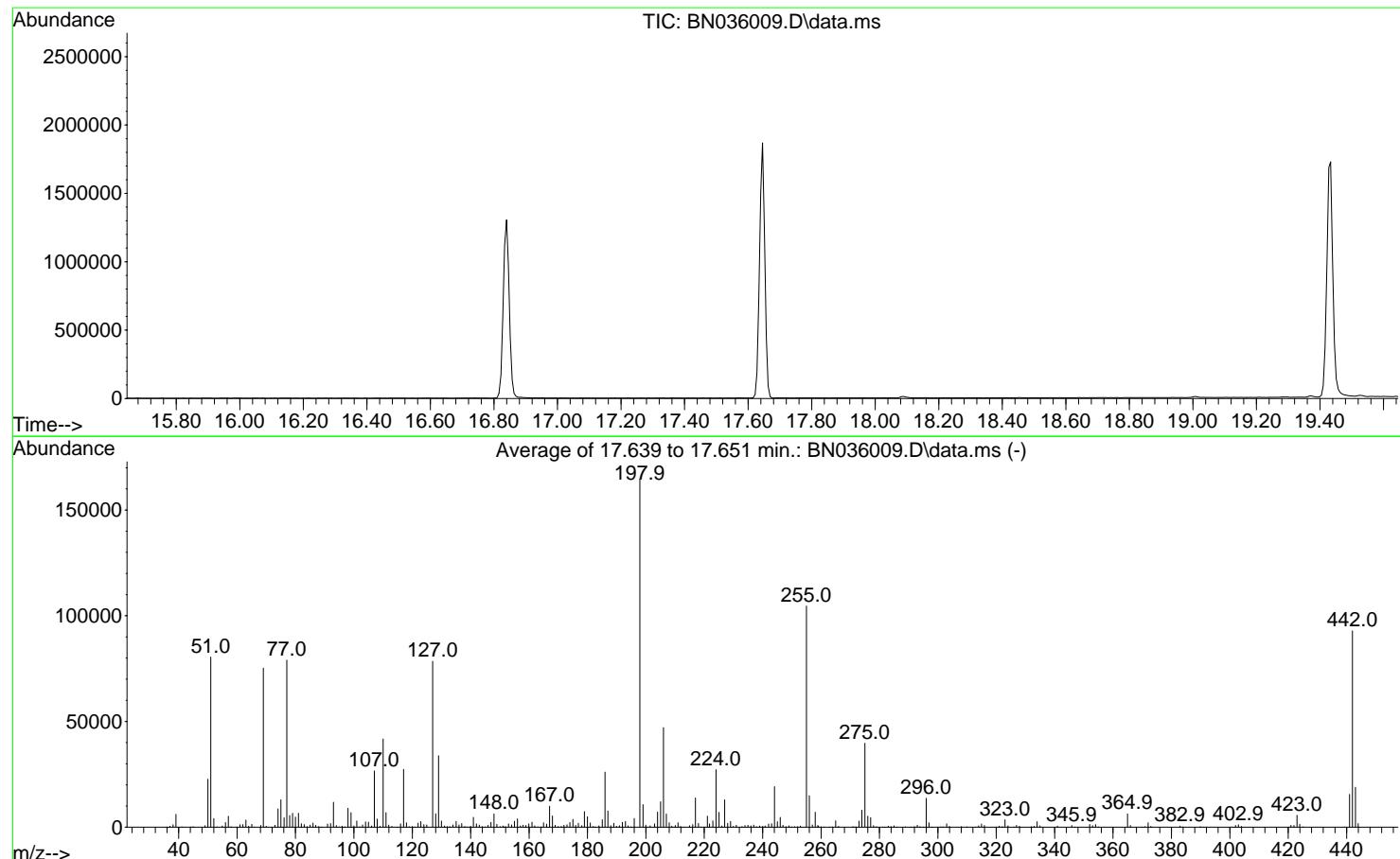
# DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012225\  
 Data File : BN036009.D  
 Acq On : 22 Jan 2025 09:44  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Jan 23 00:34:56 2025



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

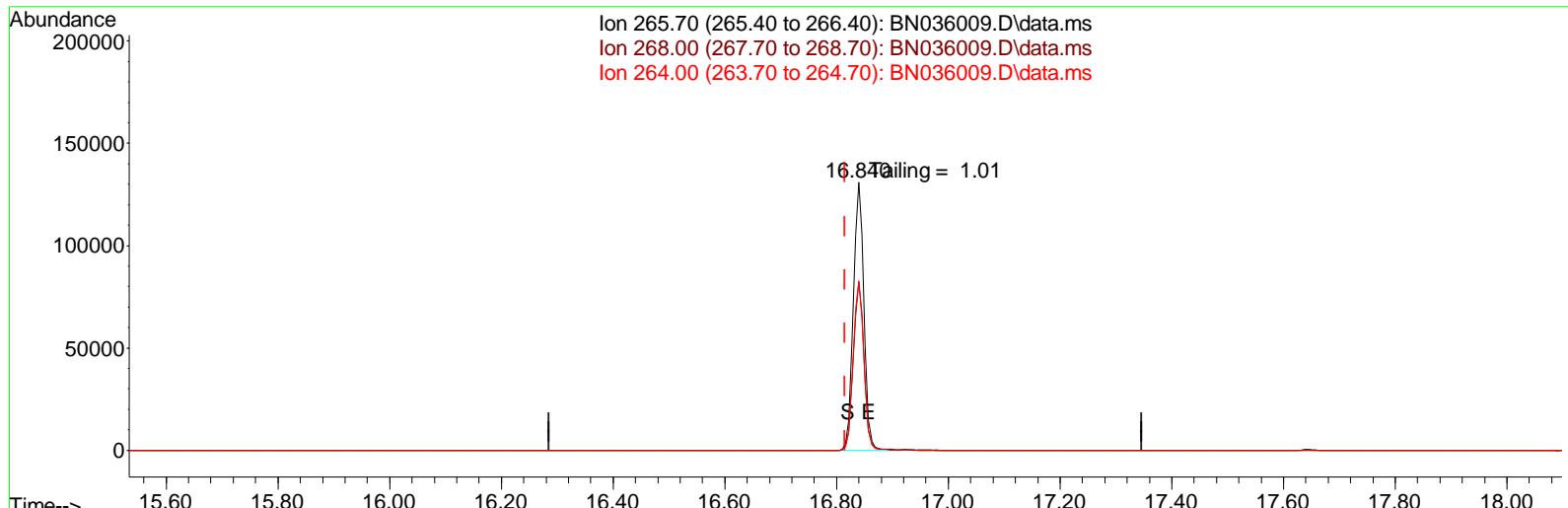
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	48.9	80440	PASS
68	69	0.00	2	1.1	792	PASS
69	198	0.00	100	45.7	75224	PASS
70	69	0.00	2	0.6	433	PASS
127	198	10	80	47.7	78488	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	164608	PASS
199	198	5	9	6.5	10652	PASS
275	198	10	60	24.1	39749	PASS
365	198	1	100	3.8	6294	PASS
441	198	0.01	100	9.4	15532	PASS
442	442	50	100	100.0	92893	PASS
443	442	15	24	20.4	18924	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012225\  
 Data File : BN036009.D  
 Acq On : 22 Jan 2025 09:44  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Virtual : 1 Sample Multiplier: 1

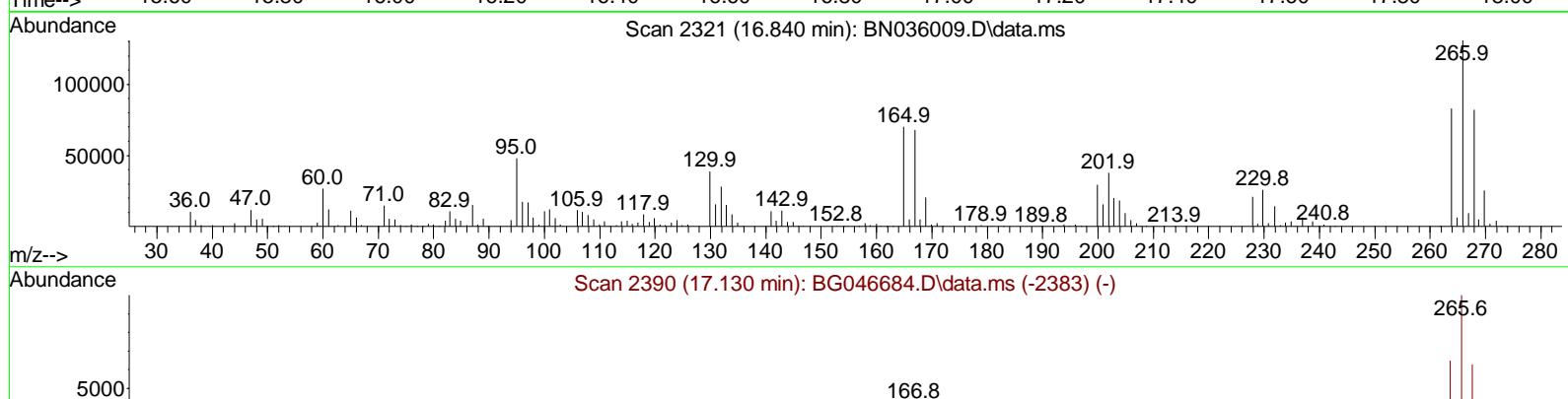
Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jan 23 00:54:46 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 25 04:23:53 2024  
 Response via : Initial Calibration

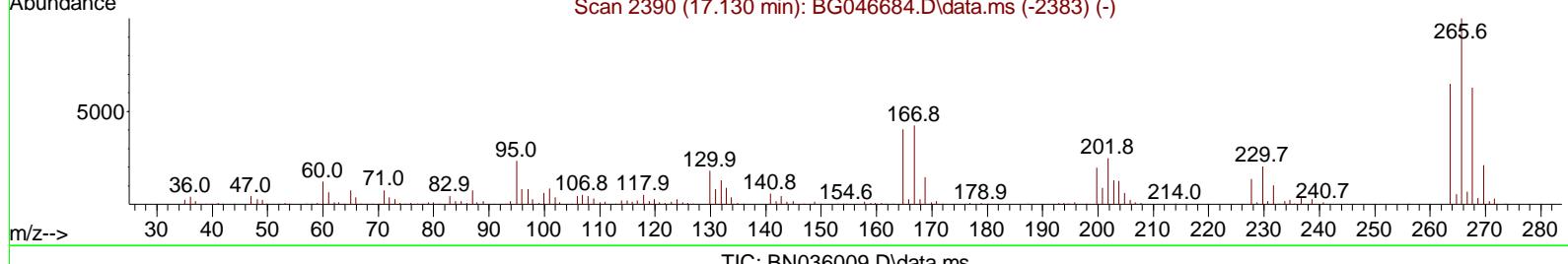
Ion 265.70 (265.40 to 266.40): BN036009.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN036009.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN036009.D\data.ms



Scan 2321 (16.840 min): BN036009.D\data.ms



Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)



TIC: BN036009.D\data.ms

## (70) Pentachlorophenol (C)

16.840min (+ 0.024) 21048.35 ng

response 172285

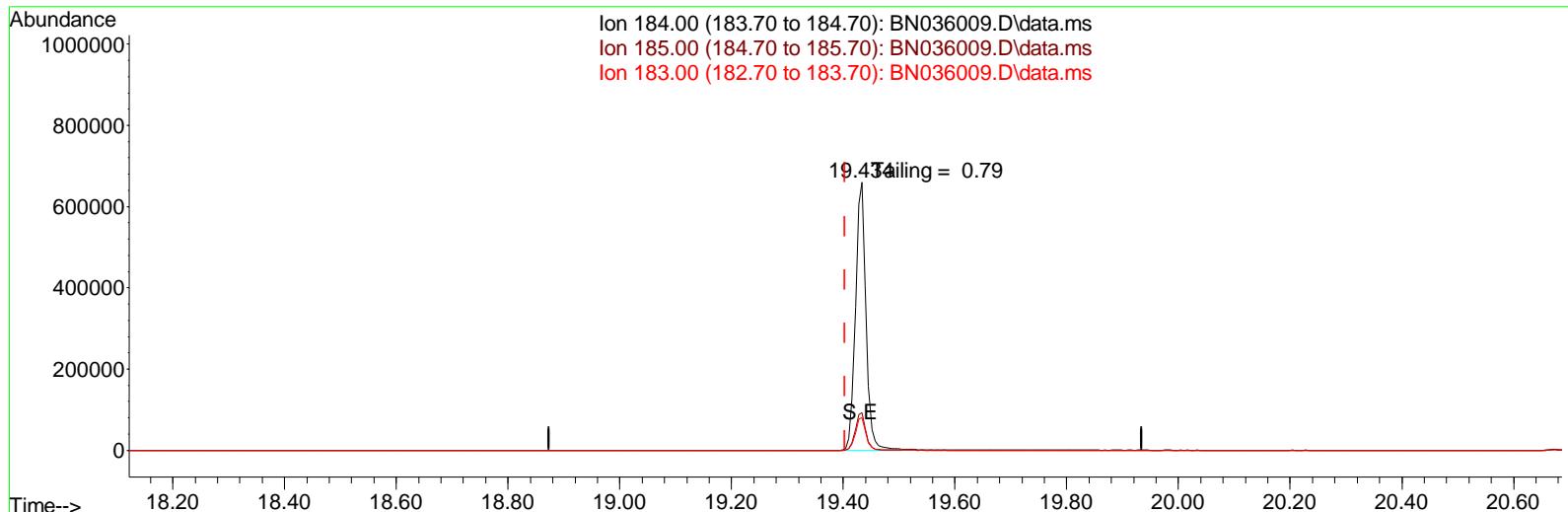
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	62.84
264.00	61.60	63.34
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012225\  
 Data File : BN036009.D  
 Acq On : 22 Jan 2025 09:44  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Virtual : 1 Sample Multiplier: 1

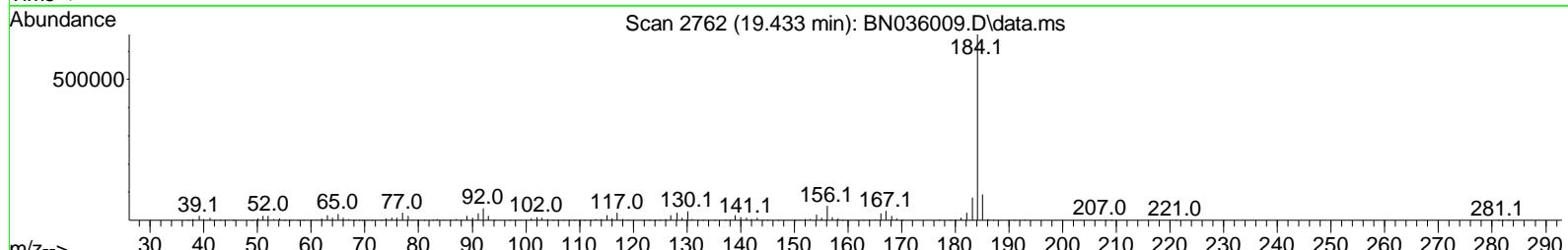
Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jan 23 00:54:46 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 25 04:23:53 2024  
 Response via : Initial Calibration

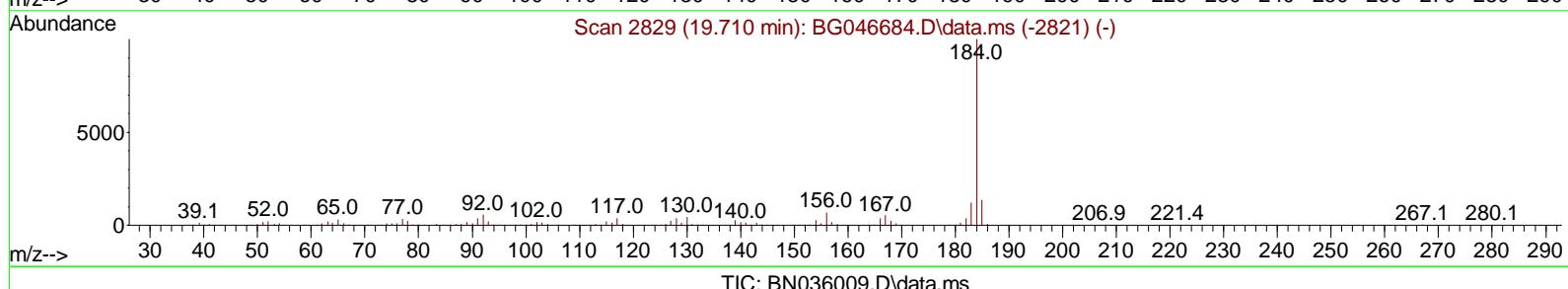
Ion 184.00 (183.70 to 184.70): BN036009.D\data.ms  
 Ion 185.00 (184.70 to 185.70): BN036009.D\data.ms  
 Ion 183.00 (182.70 to 183.70): BN036009.D\data.ms



Scan 2762 (19.433 min): BN036009.D\data.ms



Scan 2829 (19.710 min): BG046684.D\data.ms (-2821) (-)



TIC: BN036009.D\data.ms

#### (77) Benzidine

19.433min (+ 0.029) 0.00 ng

response 875464

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.96
183.00	13.20	12.24
0.00	0.00	0.00

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
DFTPP

### DDT Breakdown

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036111.D  
 Acq On : 29 Jan 2025 17:27  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

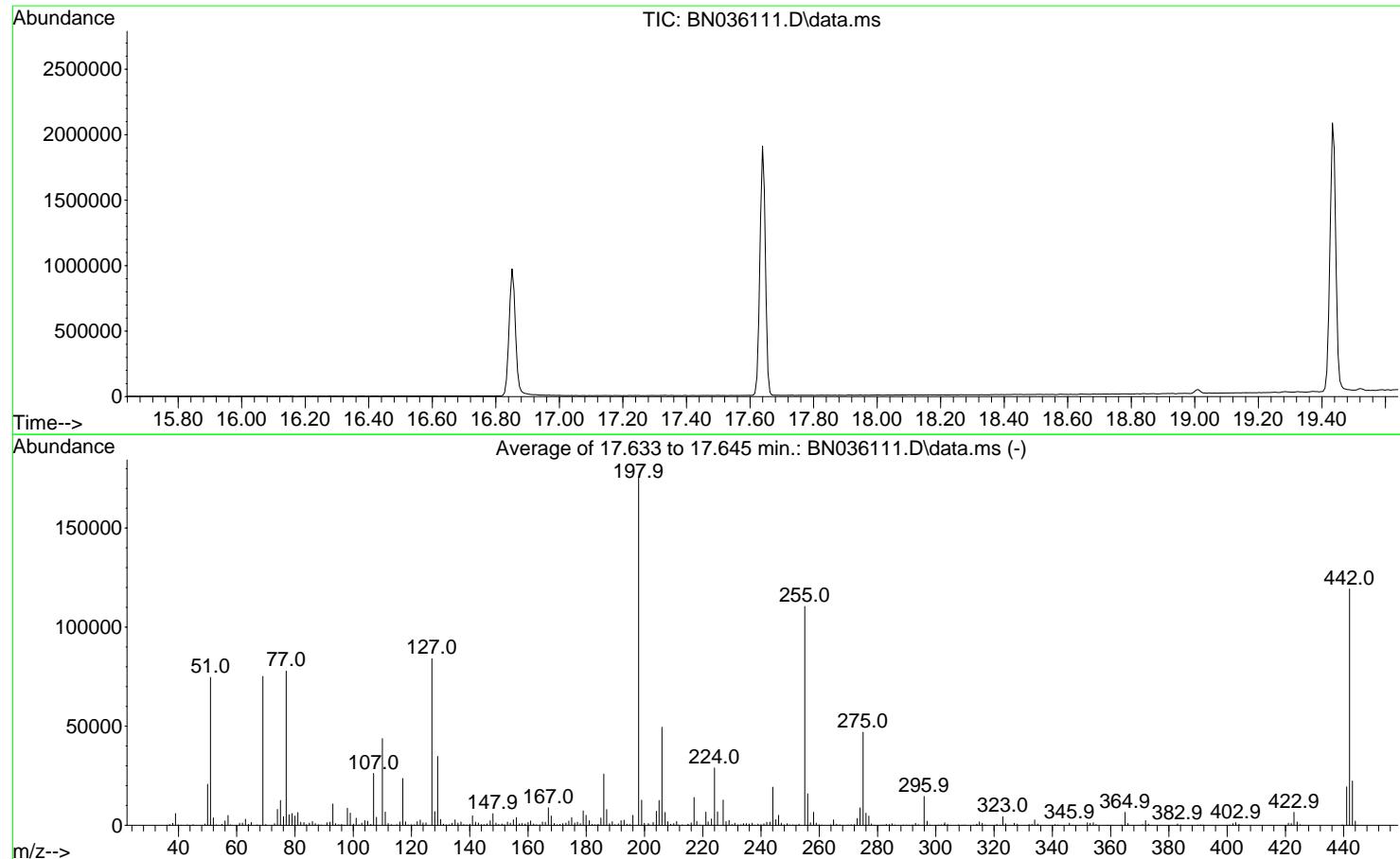
Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M

Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

Last Update : Thu Jan 23 00:34:56 2025



AutoFind: Scans 2456, 2457, 2458; Background Corrected with Scan 2450

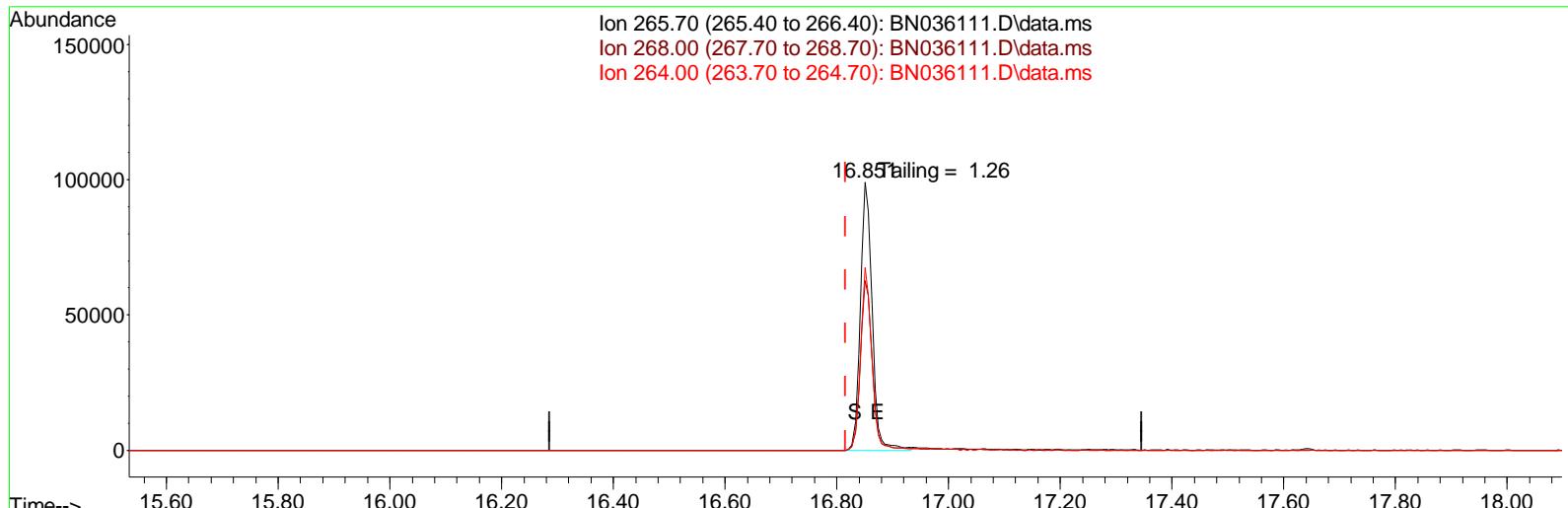
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.5	74616	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	42.8	75133	PASS
70	69	0.00	2	0.5	408	PASS
127	198	10	80	47.9	84115	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	175616	PASS
199	198	5	9	7.2	12719	PASS
275	198	10	60	26.8	46979	PASS
365	198	1	100	3.7	6563	PASS
441	198	0.01	100	11.1	19439	PASS
442	442	50	100	100.0	119304	PASS
443	442	15	24	18.8	22371	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036111.D  
 Acq On : 29 Jan 2025 17:27  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Virtual : 1 Sample Multiplier: 1

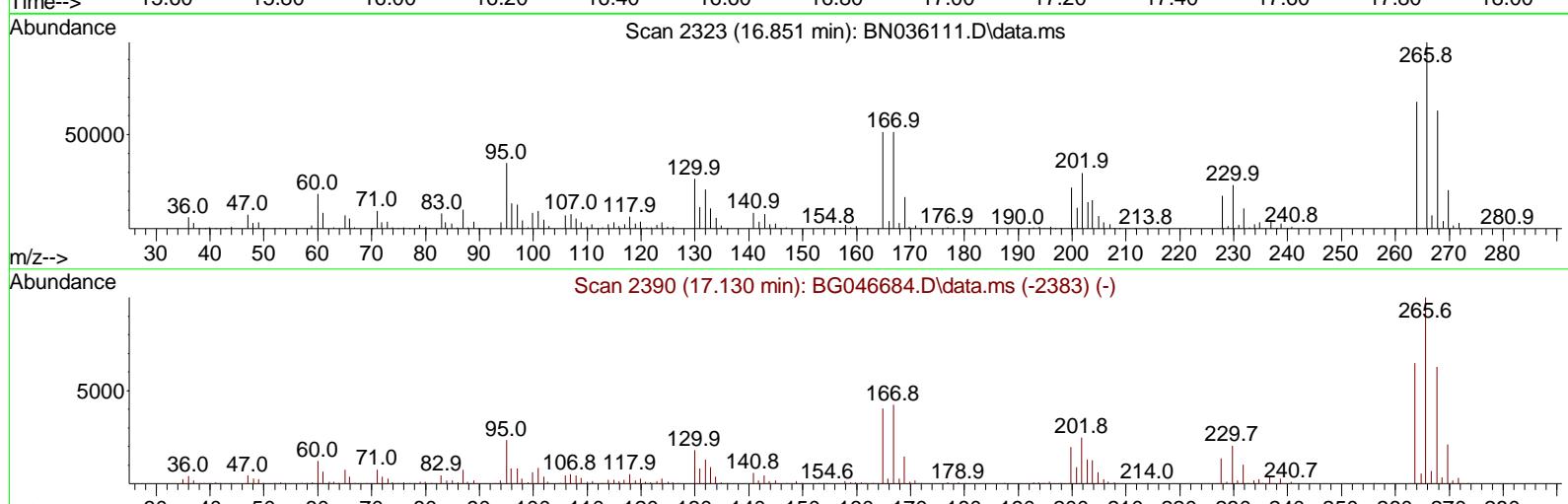
Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jan 30 04:00:46 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 25 04:23:53 2024  
 Response via : Initial Calibration

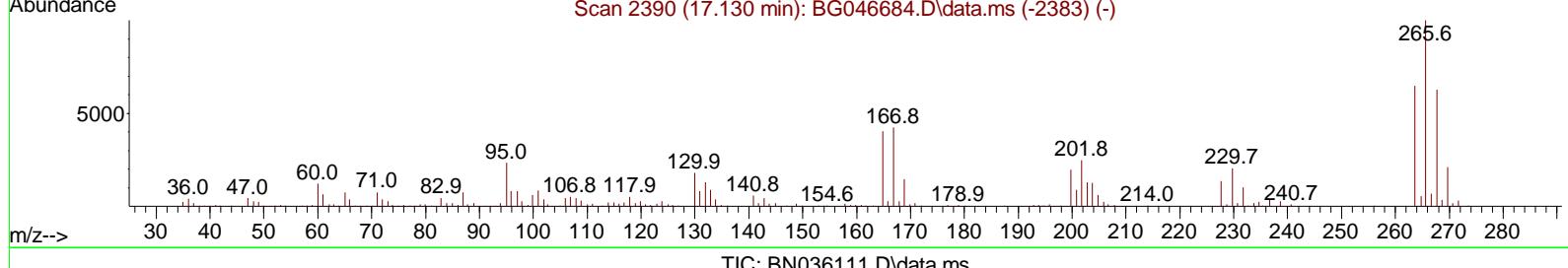
Ion 265.70 (265.40 to 266.40): BN036111.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN036111.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN036111.D\data.ms



Scan 2323 (16.851 min): BN036111.D\data.ms



Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)



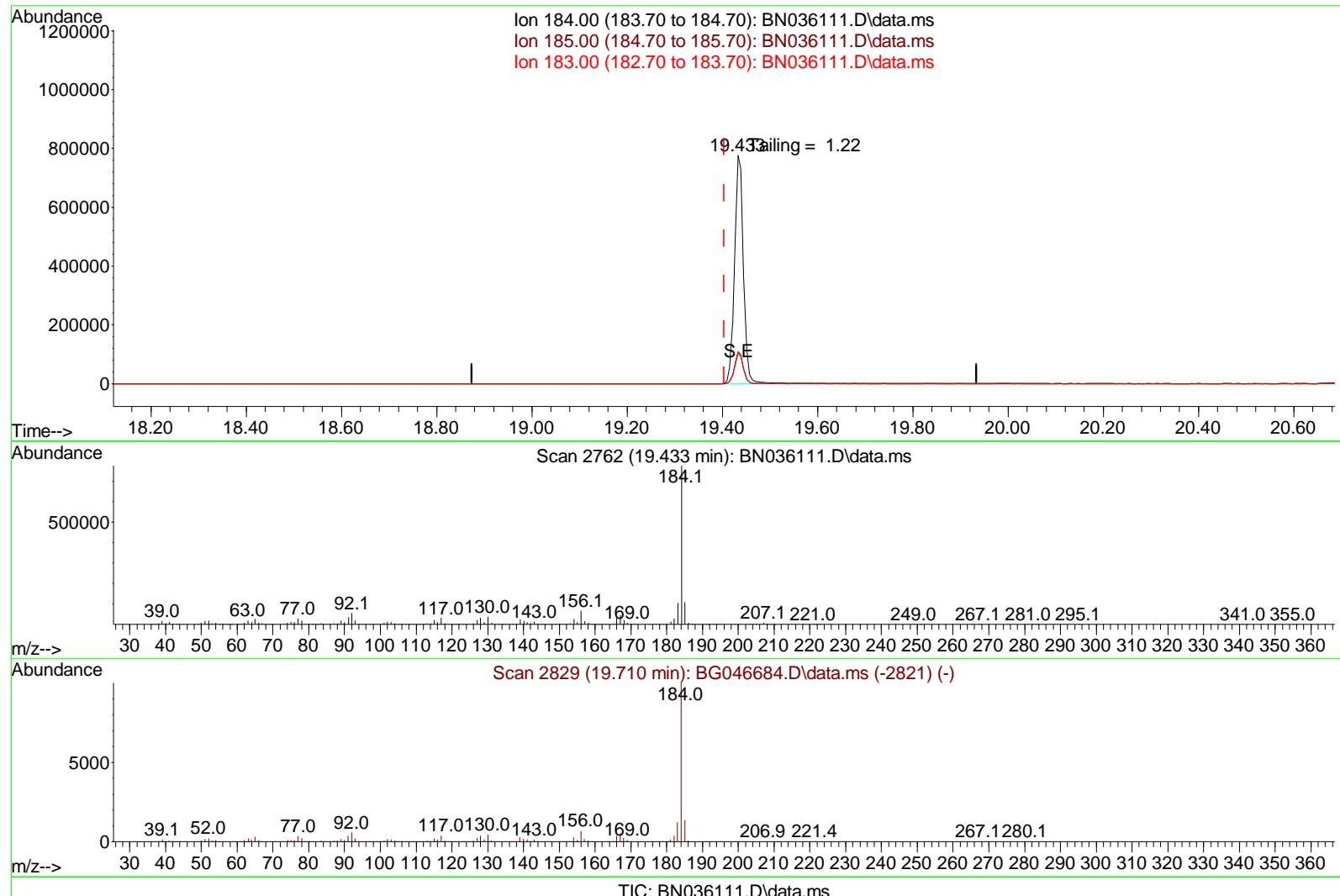
(70) Pentachlorophenol (C)  
 16.851min (+ 0.035) 14413.06 ng  
 response 143876

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	63.30
264.00	61.60	68.17
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036111.D  
 Acq On : 29 Jan 2025 17:27  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Virtual : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Jan 30 04:00:46 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 25 04:23:53 2024  
 Response via : Initial Calibration



## (77) Benzidine

19.433min (+ 0.029) 611311.00 ng

response 1017570

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.96
183.00	13.20	13.44
0.00	0.00	0.00

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
DFTPP

### DDT Breakdown

Date	Instrument Name	DFTPP Data File
1/29/2025	BNA_N	<u>BN036111.D</u>
Compound Name	Response	Retention Time
DDT	544371	20.674
DDD	19172	20.233
DDE	1649	19.721
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
20821	565192	3.68



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:	CTO WE13			Date Received:	
Client Sample ID:	PB166297BL			SDG No.:	Q1199
Lab Sample ID:	PB166297BL			Matrix:	Water
Analytical Method:	SW8270ESIM			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N			Level :	LOW
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036113.D	1	01/28/25 09:50	01/29/25 18:42	PB166297

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	0.43		30 - 150		108%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.43		30 - 150		108%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.56	*	58 - 132		141%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2140	7.803				
1146-65-2	Naphthalene-d8	4920	10.6				
15067-26-2	Acenaphthene-d10	2710	14.442				
1517-22-2	Phenanthrene-d10	5610	17.186				
1719-03-5	Chrysene-d12	4290	21.376				
1520-96-3	Perylene-d12	4680	23.678				

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\BN012925\  
 Data File : BN036113.D  
 Acq On : 29 Jan 2025 18:42  
 Operator : RC/JU  
 Sample : PB166297BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**PB166297BL**

Quant Time: Jan 30 00:35:33 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

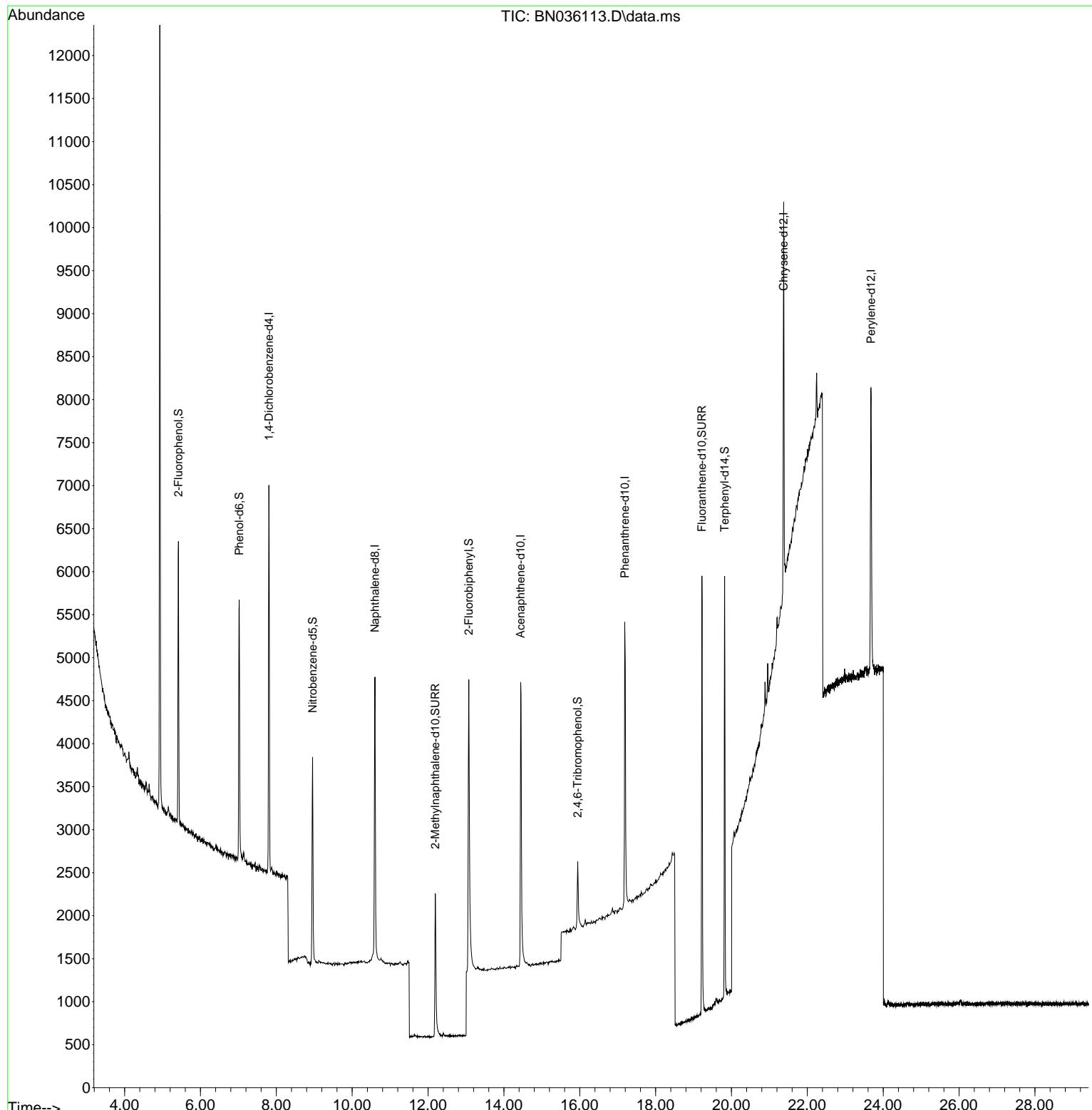
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2136	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	4915	0.400	ng	-0.01
13) Acenaphthene-d10	14.442	164	2707	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	5606	0.400	ng	0.00
29) Chrysene-d12	21.376	240	4293	0.400	ng	0.00
35) Perylene-d12	23.678	264	4681	0.400	ng	# 0.01
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	2354	0.424	ng	0.03
5) Phenol-d6	7.023	99	2714	0.416	ng	0.05
8) Nitrobenzene-d5	8.956	82	1959	0.422	ng	0.00
11) 2-Methylnaphthalene-d10	12.192	152	2885	0.432	ng	0.00
14) 2,4,6-Tribromophenol	15.945	330	538	0.310	ng	0.02
15) 2-Fluorobiphenyl	13.073	172	4491	0.372	ng	0.00
27) Fluoranthene-d10	19.220	212	6282	0.433	ng	0.00
31) Terphenyl-d14	19.820	244	5035	0.565	ng	0.00

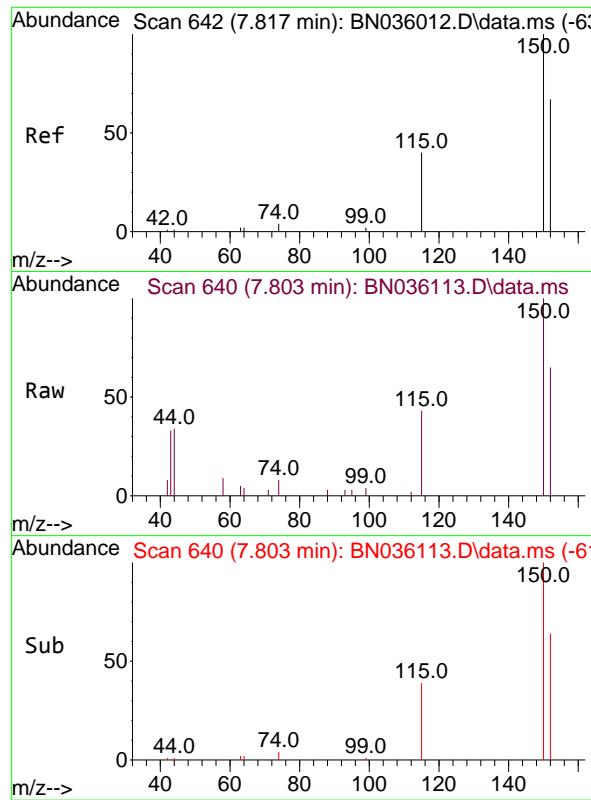
Target Compounds	Qvalue
(#= qualifier out of range (m)= manual integration (+)= signals summed	

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036113.D  
 Acq On : 29 Jan 2025 18:42  
 Operator : RC/JU  
 Sample : PB166297BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB166297BL

Quant Time: Jan 30 00:35:33 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

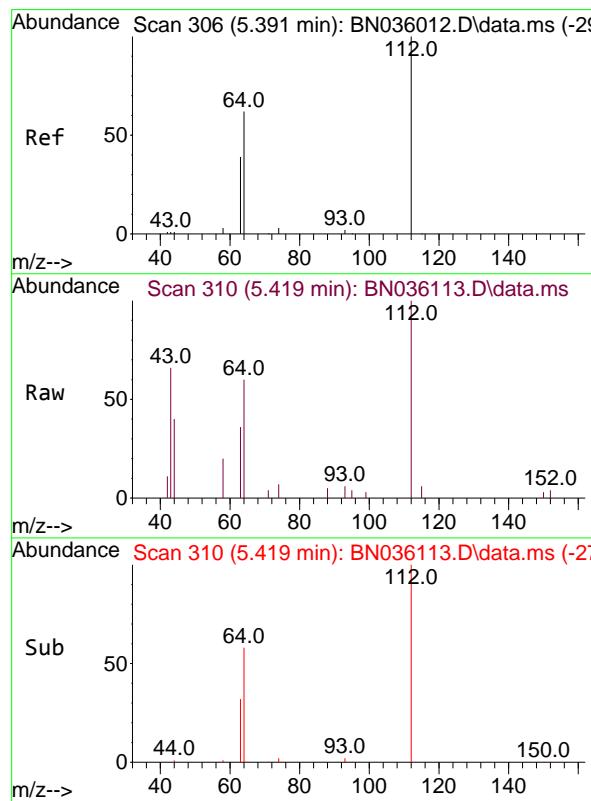
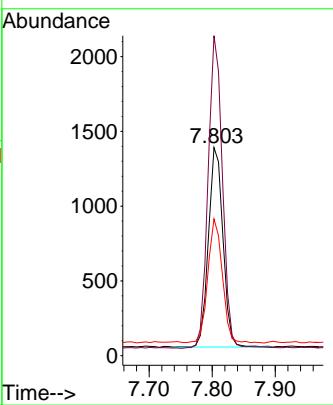




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42

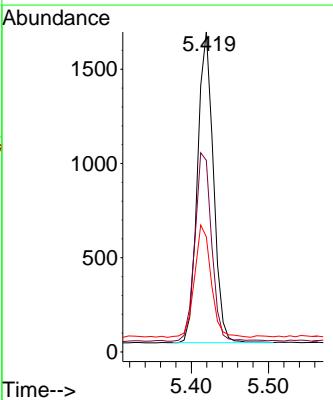
Instrument : BNA\_N  
ClientSampleId : PB166297BL

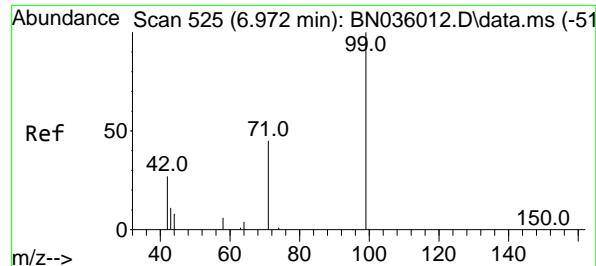
Tgt Ion:152 Resp: 2136  
Ion Ratio Lower Upper  
152 100  
150 153.7 117.4 176.2  
115 65.7 51.0 76.4



#4  
2-Fluorophenol  
Concen: 0.424 ng  
RT: 5.419 min Scan# 310  
Delta R.T. 0.029 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42

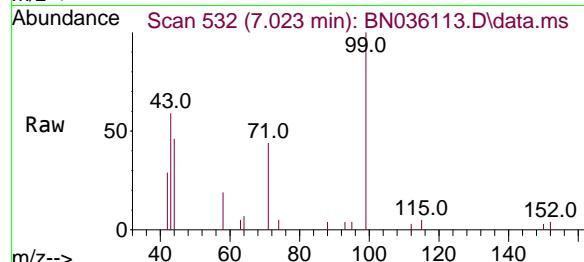
Tgt Ion:112 Resp: 2354  
Ion Ratio Lower Upper  
112 100  
64 64.1 50.0 75.0  
63 37.8 30.7 46.1



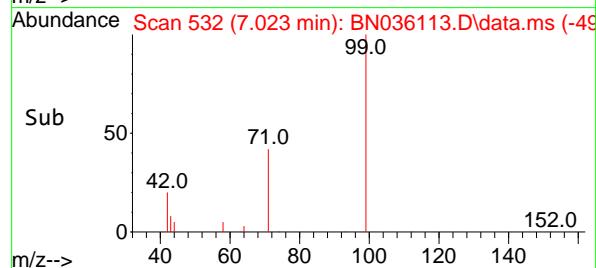
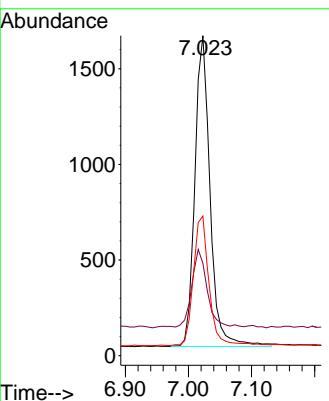


#5  
 Phenol-d6  
 Concen: 0.416 ng  
 RT: 7.023 min Scan# 5  
 Delta R.T. 0.051 min  
 Lab File: BN036113.D  
 Acq: 29 Jan 2025 18:42

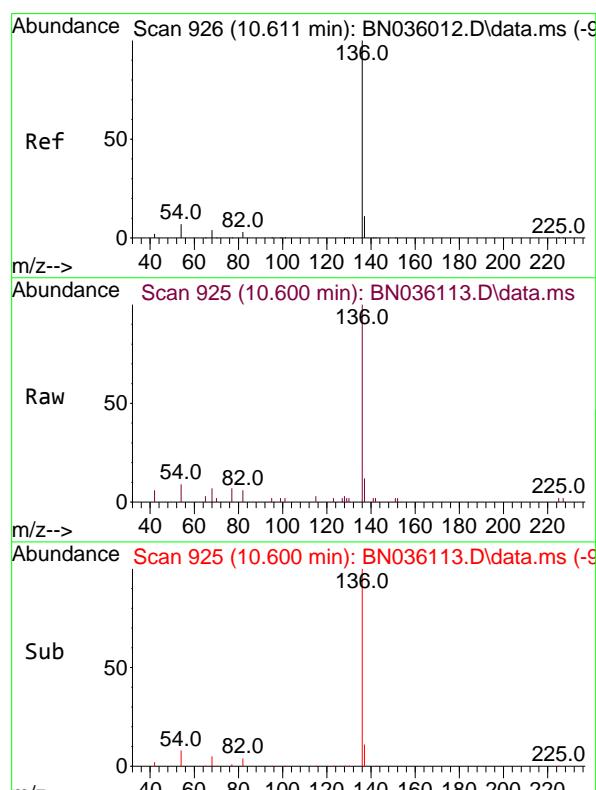
Instrument : BNA\_N  
 ClientSampleId : PB166297BL



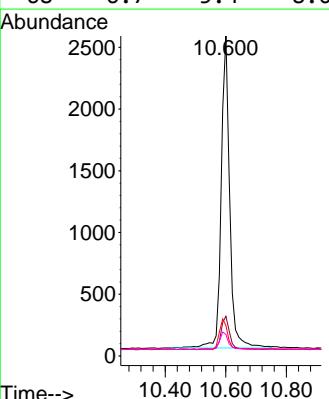
Tgt Ion: 99 Resp: 2714  
 Ion Ratio Lower Upper  
 99 100  
 42 25.2 26.8 40.2#  
 71 43.1 36.6 55.0

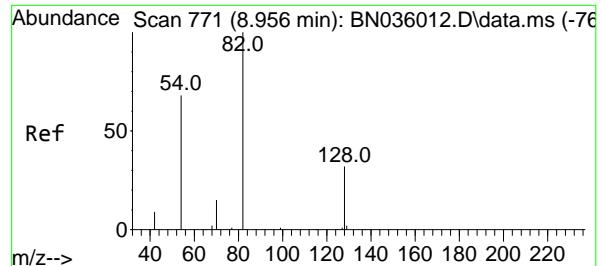


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 925  
 Delta R.T. -0.011 min  
 Lab File: BN036113.D  
 Acq: 29 Jan 2025 18:42

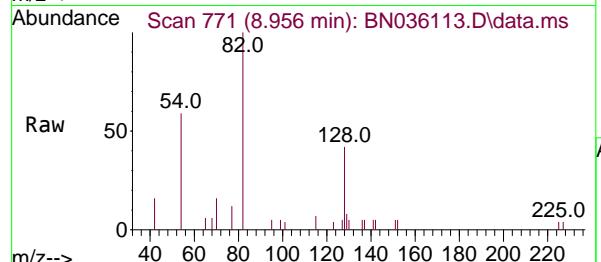


Tgt Ion:136 Resp: 4915  
 Ion Ratio Lower Upper  
 136 100  
 137 12.4 10.4 15.6  
 54 9.5 7.7 11.5  
 68 6.7 5.4 8.0

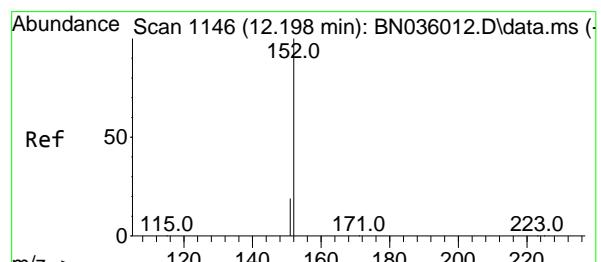
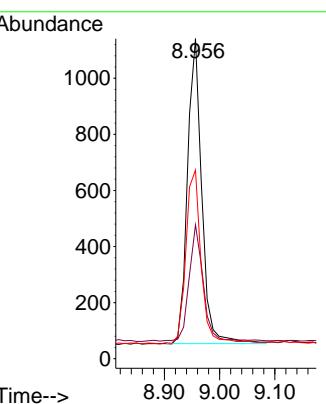
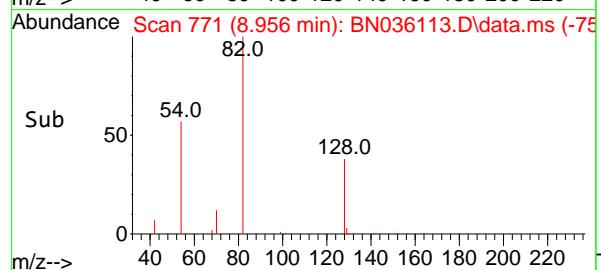




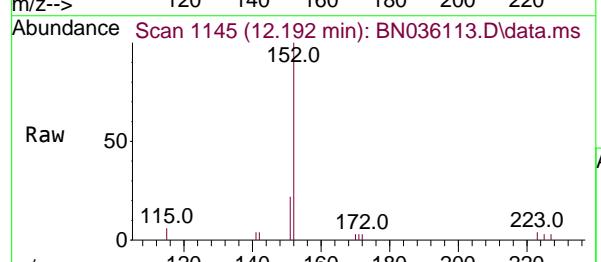
#8  
Nitrobenzene-d5  
Concen: 0.422 ng  
RT: 8.956 min Scan# 7  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42  
ClientSampleId : PB166297BL



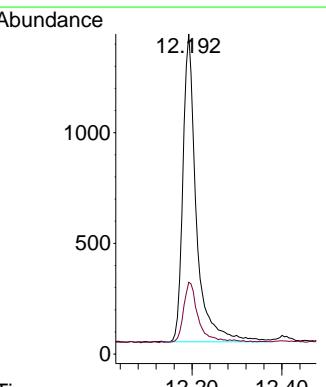
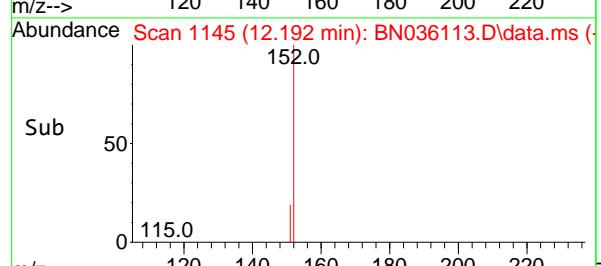
Tgt Ion: 82 Resp: 1959  
Ion Ratio Lower Upper  
82 100  
128 41.8 28.8 43.2  
54 59.0 55.8 83.8

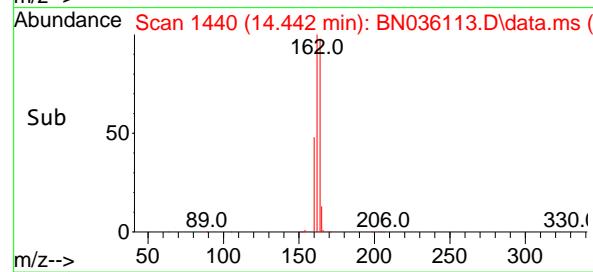
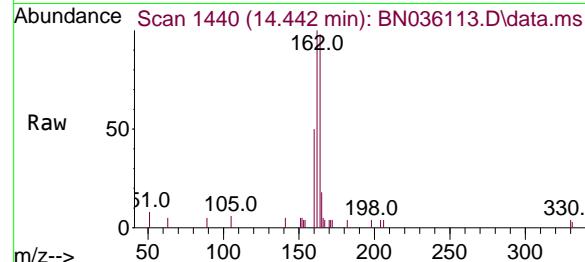
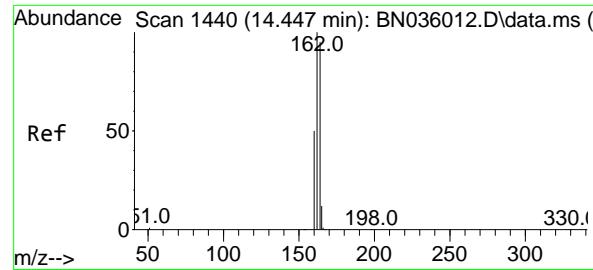


#11  
2-Methylnaphthalene-d10  
Concen: 0.432 ng  
RT: 12.192 min Scan# 1145  
Delta R.T. -0.005 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42



Tgt Ion:152 Resp: 2885  
Ion Ratio Lower Upper  
152 100  
151 20.6 16.6 25.0





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.442 min Scan# 1440

Delta R.T. -0.006 min

Lab File: BN036113.D

Acq: 29 Jan 2025 18:42

Instrument:

BNA\_N

ClientSampleId :

PB166297BL

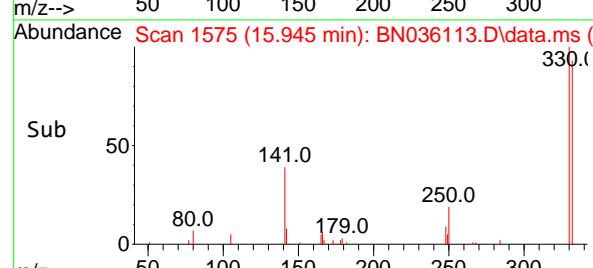
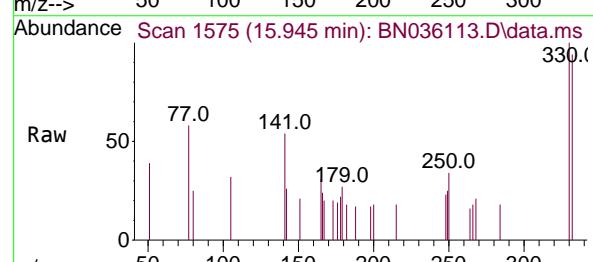
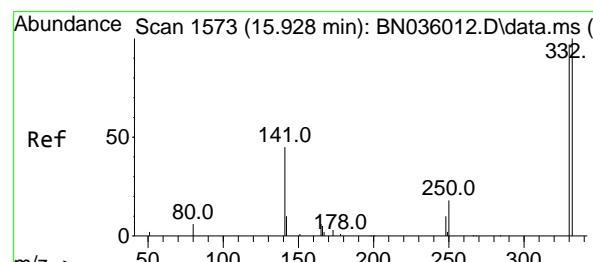
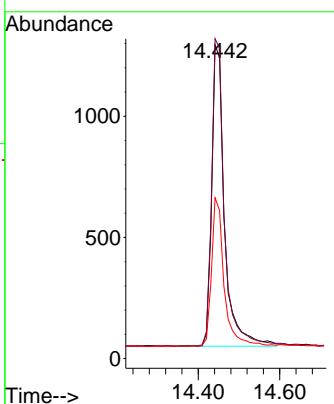
Tgt Ion:164 Resp: 2707

Ion Ratio Lower Upper

164 100

162 101.9 84.1 126.1

160 51.3 43.8 65.8



#14

2,4,6-Tribromophenol

Concen: 0.310 ng

RT: 15.945 min Scan# 1575

Delta R.T. 0.017 min

Lab File: BN036113.D

Acq: 29 Jan 2025 18:42

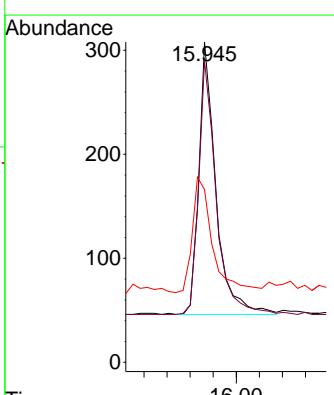
Tgt Ion:330 Resp: 538

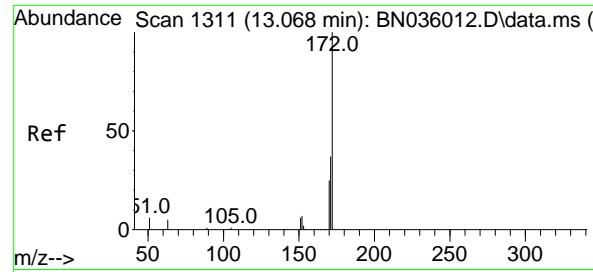
Ion Ratio Lower Upper

330 100

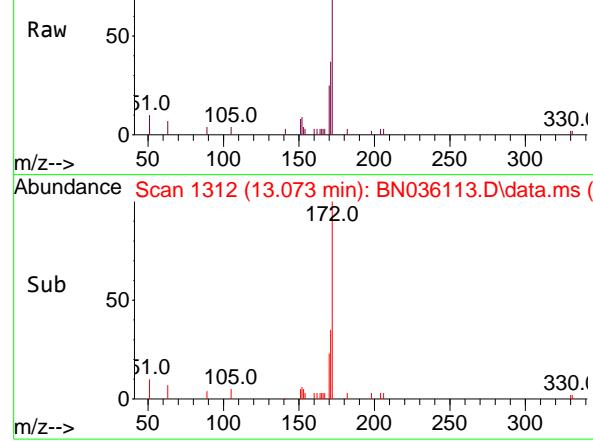
332 94.6 81.0 121.4

141 50.2 36.7 55.1





Abundance Scan 1312 (13.073 min): BN036113.D\data.ms (-)



#15

2-Fluorobiphenyl

Concen: 0.372 ng

RT: 13.073 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036113.D

Acq: 29 Jan 2025 18:42

Instrument :

BNA\_N

ClientSampleId :

PB166297BL

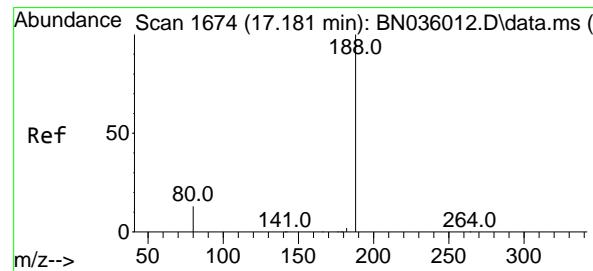
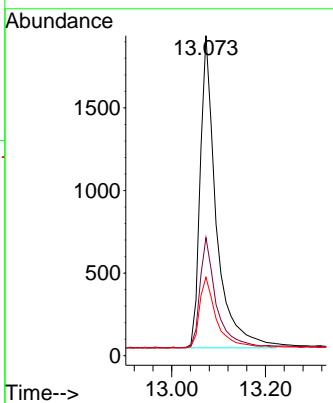
Tgt Ion:172 Resp: 4491

Ion Ratio Lower Upper

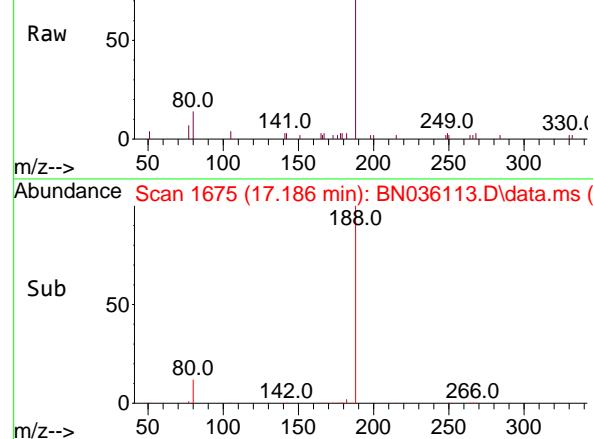
172 100

171 36.9 30.9 46.3

170 24.5 21.2 31.8



Abundance Scan 1675 (17.186 min): BN036113.D\data.ms (-)



#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1675

Delta R.T. 0.005 min

Lab File: BN036113.D

Acq: 29 Jan 2025 18:42

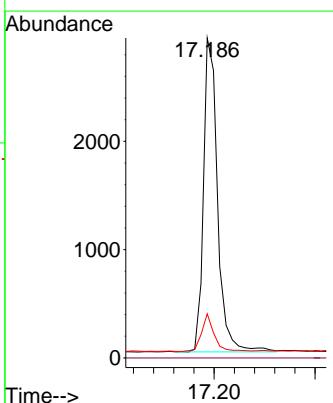
Tgt Ion:188 Resp: 5606

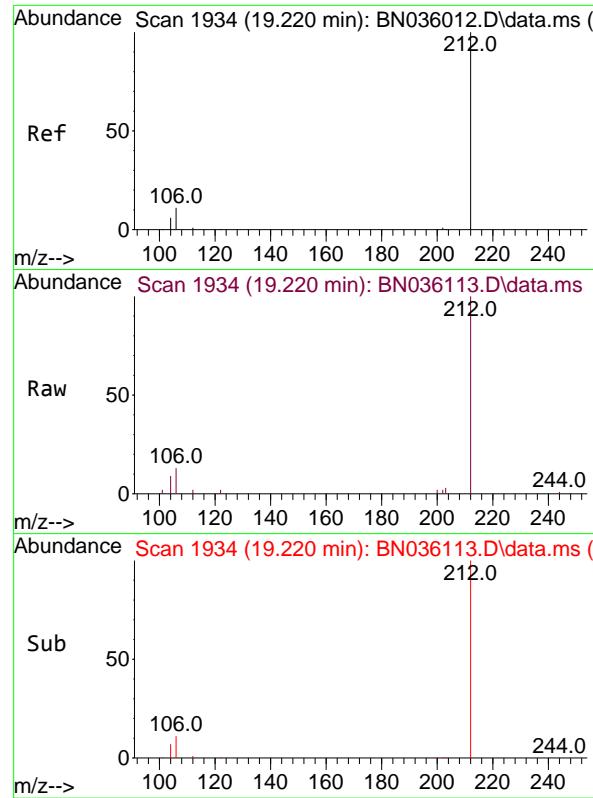
Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.8 12.3 18.5

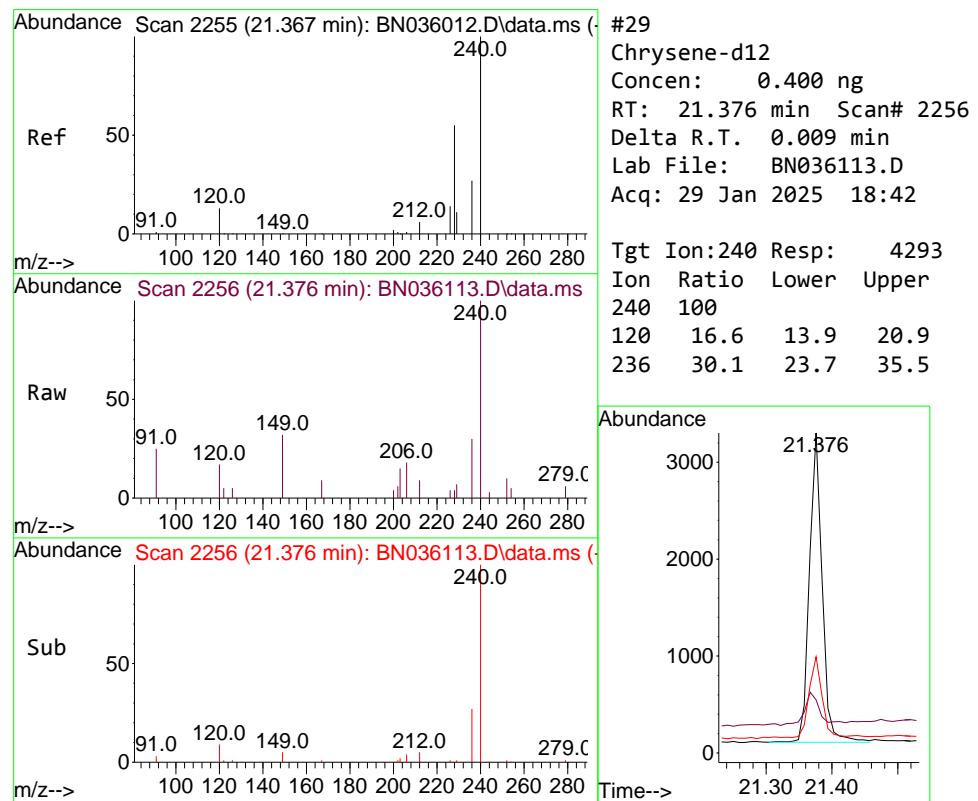
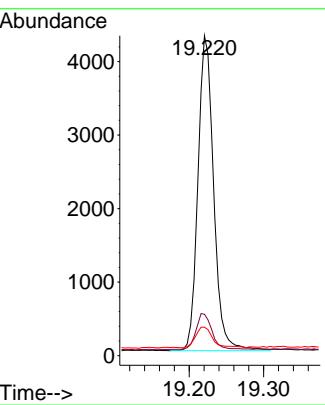




#27  
Fluoranthene-d10  
Concen: 0.433 ng  
RT: 19.220 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42

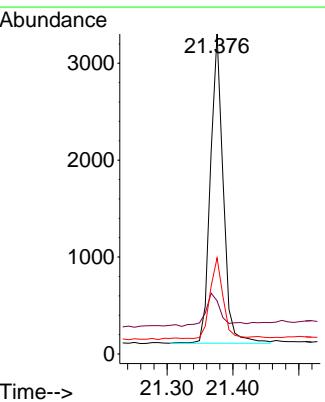
Instrument : BNA\_N  
ClientSampleId : PB166297BL

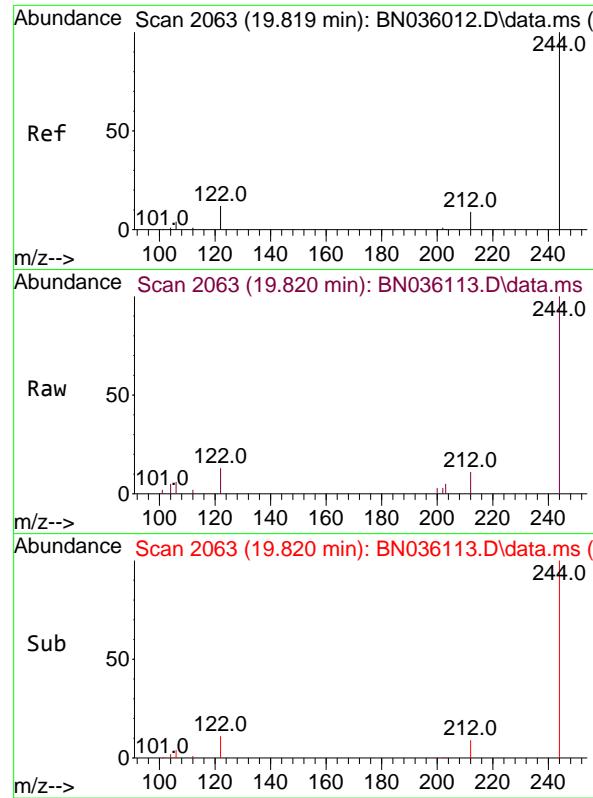
Tgt Ion:212 Resp: 6282  
Ion Ratio Lower Upper  
212 100  
106 11.6 9.7 14.5  
104 7.3 6.0 9.0



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2256  
Delta R.T. 0.009 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42

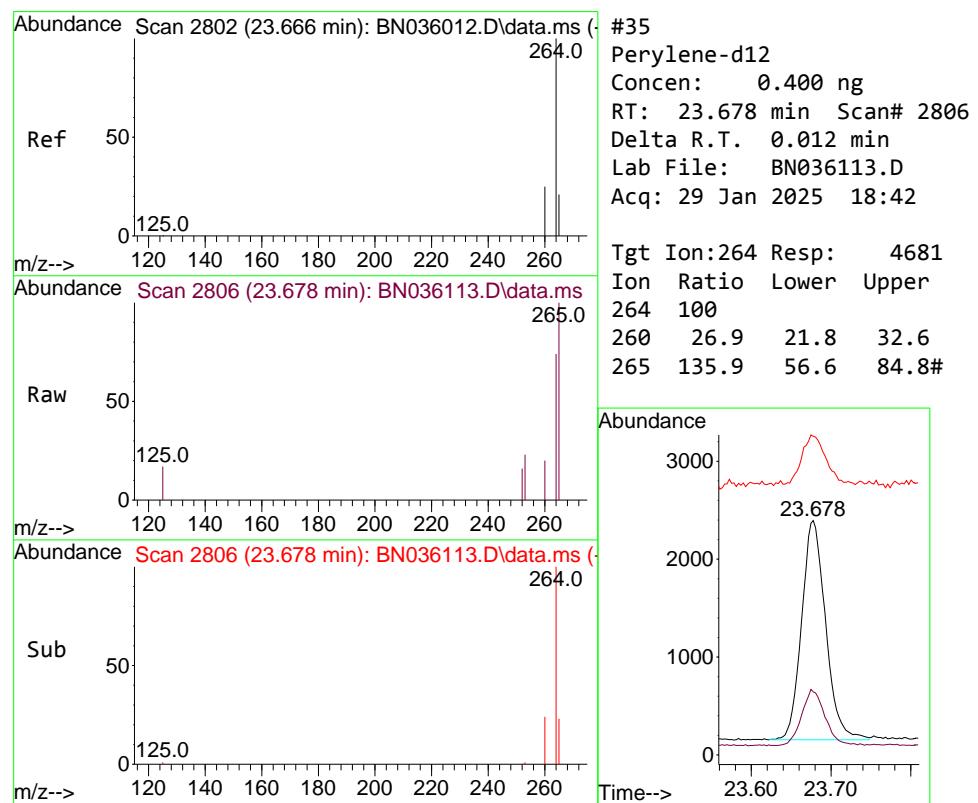
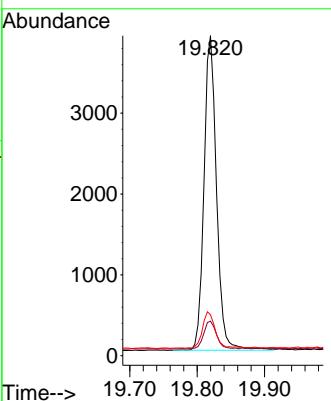
Tgt Ion:240 Resp: 4293  
Ion Ratio Lower Upper  
240 100  
120 16.6 13.9 20.9  
236 30.1 23.7 35.5





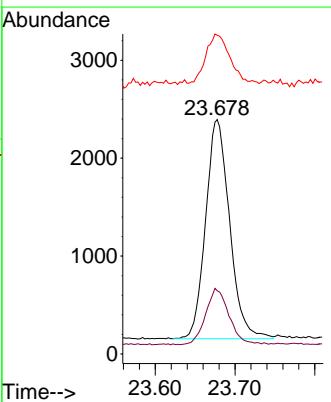
#31  
Terphenyl-d14  
Concen: 0.565 ng  
RT: 19.820 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036113.D ClientSampleId :  
Acq: 29 Jan 2025 18:42 PB166297BL

Tgt Ion:244 Resp: 5035  
Ion Ratio Lower Upper  
244 100  
212 10.8 9.1 13.7  
122 12.8 11.3 16.9



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.678 min Scan# 2806  
Delta R.T. 0.012 min  
Lab File: BN036113.D  
Acq: 29 Jan 2025 18:42

Tgt Ion:264 Resp: 4681  
Ion Ratio Lower Upper  
264 100  
260 26.9 21.8 32.6  
265 135.9 56.6 84.8#





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:	CTO WE13			Date Received:	
Client Sample ID:	PB166297BS			SDG No.:	Q1199
Lab Sample ID:	PB166297BS			Matrix:	Water
Analytical Method:	SW8270ESIM			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N			Level :	LOW
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036126.D	1	01/28/25 09:50	01/30/25 02:31	PB166297

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.32		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.59		30 - 150		146%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.43		55 - 111		108%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.53	*	58 - 132		133%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2320	7.803				
1146-65-2	Naphthalene-d8	5150	10.59				
15067-26-2	Acenaphthene-d10	2820	14.436				
1517-22-2	Phenanthrene-d10	5720	17.181				
1719-03-5	Chrysene-d12	4240	21.375				
1520-96-3	Perylene-d12	4580	23.671				

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\BN012925\  
 Data File : BN036126.D  
 Acq On : 30 Jan 2025 02:31  
 Operator : RC/JU  
 Sample : PB166297BS  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB166297BS

Quant Time: Jan 30 03:06:03 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

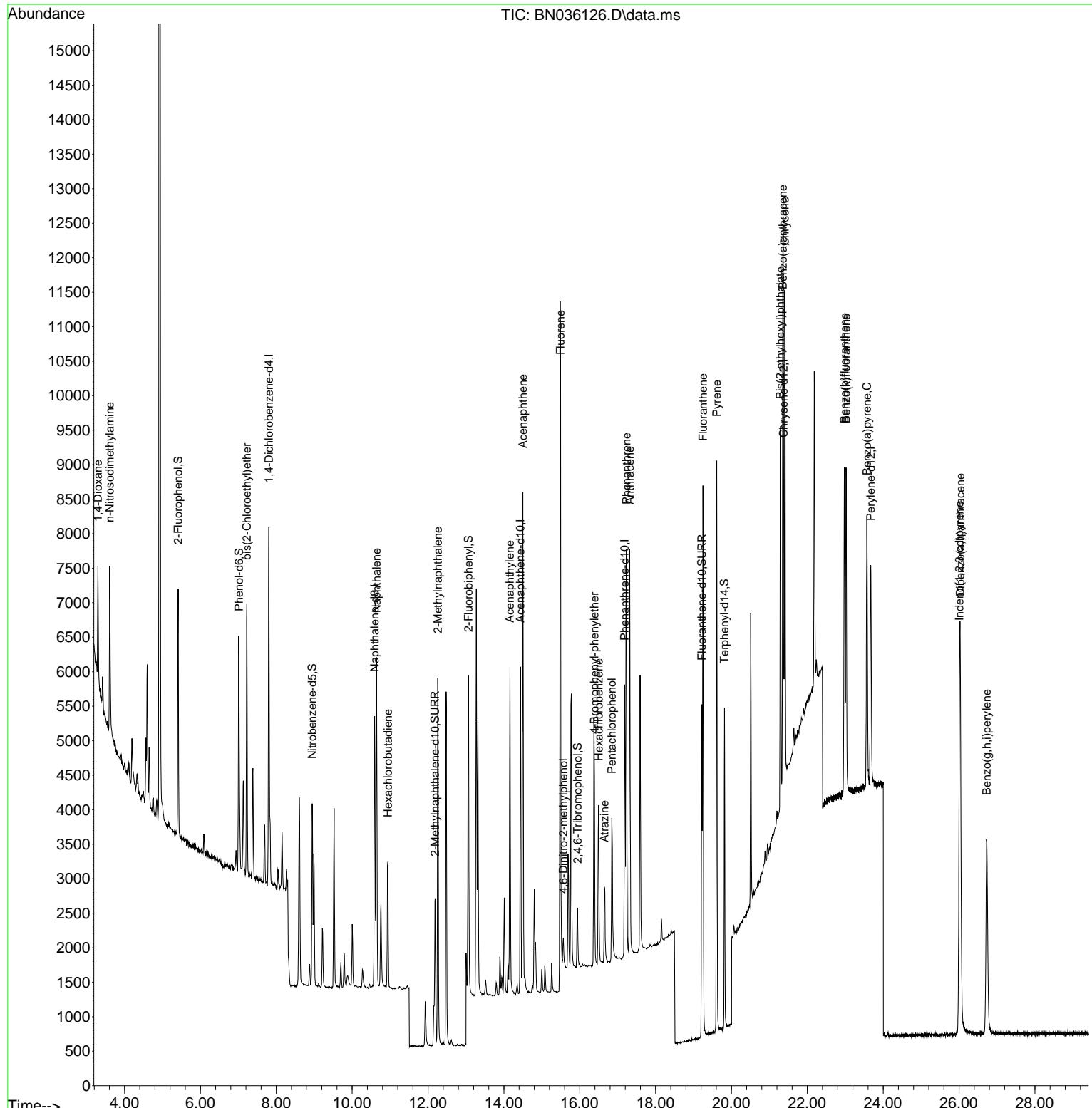
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2324	0.400	ng	-0.01
7) Naphthalene-d8	10.590	136	5152	0.400	ng	#-0.02
13) Acenaphthene-d10	14.436	164	2819	0.400	ng	-0.01
19) Phenanthrene-d10	17.181	188	5724	0.400	ng	0.00
29) Chrysene-d12	21.375	240	4238	0.400	ng	# 0.00
35) Perylene-d12	23.671	264	4580	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.412	112	2438	0.403	ng	0.02
5) Phenol-d6	7.015	99	2900	0.409	ng	0.04
8) Nitrobenzene-d5	8.945	82	2099	0.432	ng	-0.01
11) 2-Methylnaphthalene-d10	12.182	152	4100	0.585	ng	-0.02
14) 2,4,6-Tribromophenol	15.940	330	549	0.304	ng	0.01
15) 2-Fluorobiphenyl	13.068	172	4785	0.380	ng	0.00
27) Fluoranthene-d10	19.220	212	5879	0.396	ng	0.00
31) Terphenyl-d14	19.815	244	4693	0.533	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.296	88	825	0.318	ng	# 73
3) n-Nitrosodimethylamine	3.607	42	1564	0.332	ng	# 73
6) bis(2-Chloroethyl)ether	7.225	93	2731	0.478	ng	98
9) Naphthalene	10.643	128	5912	0.395	ng	98
10) Hexachlorobutadiene	10.942	225	1671	0.346	ng	# 97
12) 2-Methylnaphthalene	12.258	142	3823	0.412	ng	97
16) Acenaphthylene	14.159	152	5477	0.410	ng	99
17) Acenaphthene	14.501	154	3594	0.393	ng	98
18) Fluorene	15.495	166	4479	0.391	ng	97
20) 4,6-Dinitro-2-methylph...	15.568	198	365	0.273	ng	95
21) 4-Bromophenyl-phenylether	16.387	248	1543	0.378	ng	94
22) Hexachlorobenzene	16.499	284	1982	0.369	ng	98
23) Atrazine	16.647	200	1189	0.404	ng	94
24) Pentachlorophenol	16.846	266	1244	0.535	ng	97
25) Phenanthrene	17.231	178	6947	0.404	ng	99
26) Anthracene	17.318	178	6389	0.408	ng	100
28) Fluoranthene	19.248	202	7362	0.364	ng	99
30) Pyrene	19.610	202	7662	0.446	ng	100
32) Benzo(a)anthracene	21.358	228	6274	0.408	ng	99
33) Chrysene	21.402	228	6273	0.399	ng	98
34) Bis(2-ethylhexyl)phtha...	21.286	149	4400	0.522	ng	97
36) Indeno(1,2,3-cd)pyrene	26.013	276	7961	0.433	ng	99
37) Benzo(b)fluoranthene	22.976	252	6217	0.373	ng	# 87
38) Benzo(k)fluoranthene	23.022	252	6456	0.385	ng	# 86
39) Benzo(a)pyrene	23.572	252	5942	0.418	ng	# 87
40) Dibenzo(a,h)anthracene	26.031	278	6235	0.426	ng	93
41) Benzo(g,h,i)perylene	26.727	276	6298	0.394	ng	97

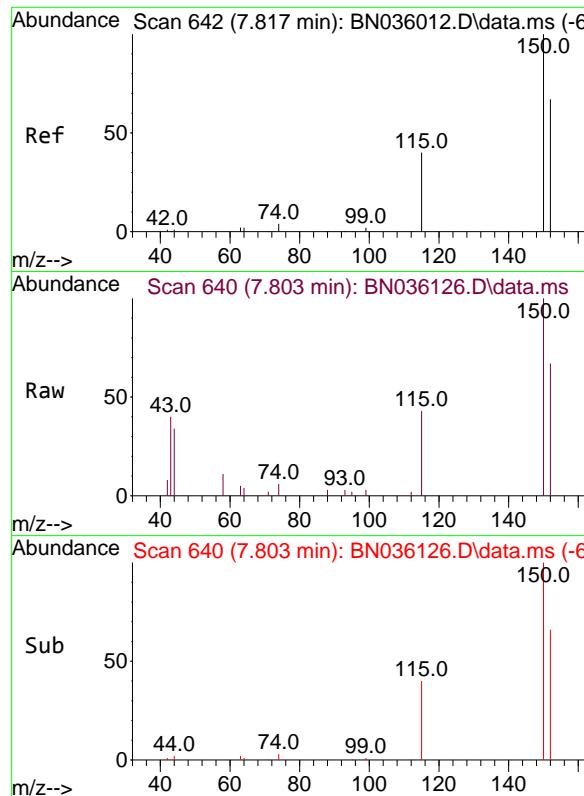
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036126.D  
 Acq On : 30 Jan 2025 02:31  
 Operator : RC/JU  
 Sample : PB166297BS  
 Misc :  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB166297BS

Quant Time: Jan 30 03:06:03 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

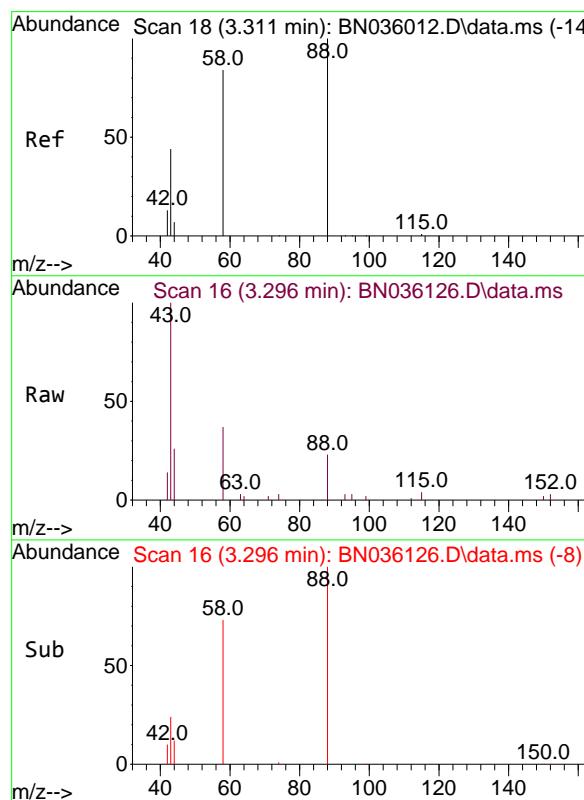
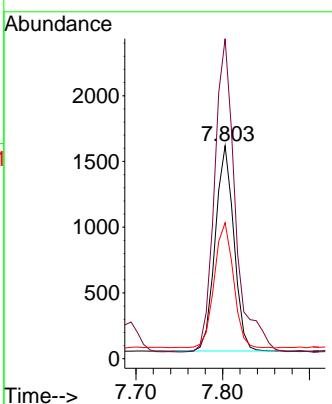




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.803 min Scan# 6  
 Delta R.T. -0.014 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

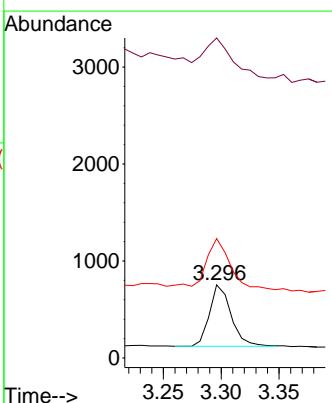
Instrument : BNA\_N  
 ClientSampleId : PB166297BS

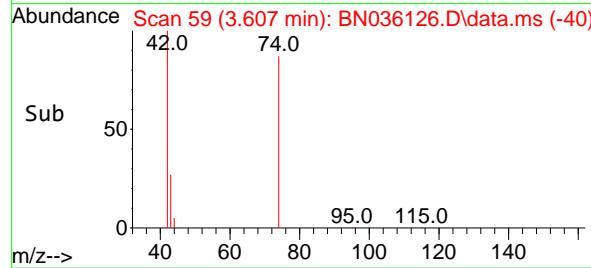
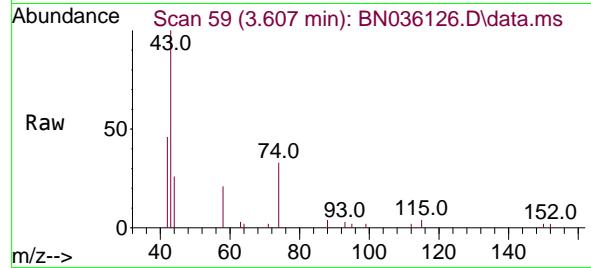
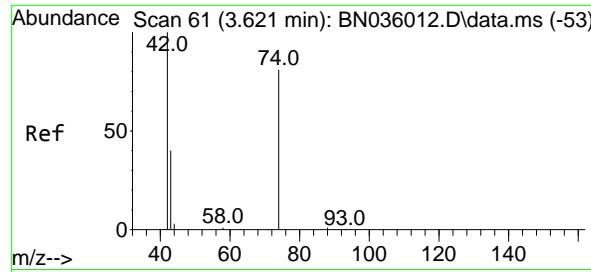
Tgt Ion:152 Resp: 2324  
 Ion Ratio Lower Upper  
 152 100  
 150 150.2 117.4 176.2  
 115 63.9 51.0 76.4



#2  
 1,4-Dioxane  
 Concen: 0.318 ng  
 RT: 3.296 min Scan# 16  
 Delta R.T. -0.014 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

Tgt Ion: 88 Resp: 825  
 Ion Ratio Lower Upper  
 88 100  
 43 85.0 38.5 57.7#  
 58 93.6 66.6 99.8

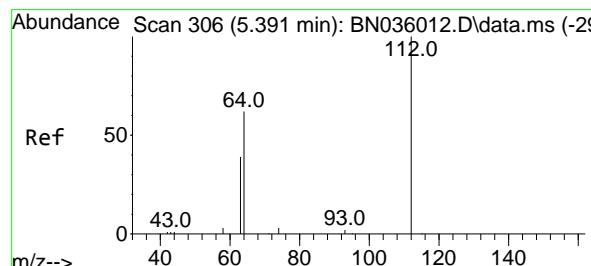
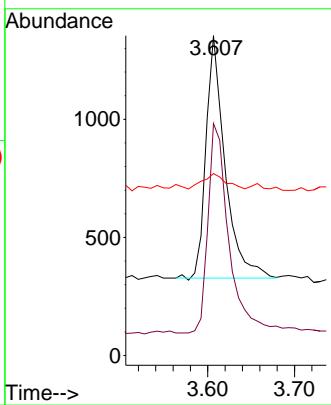




#3  
n-Nitrosodimethylamine  
Concen: 0.332 ng  
RT: 3.607 min Scan# 5  
Delta R.T. -0.014 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

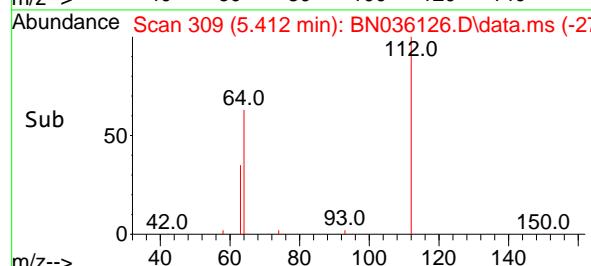
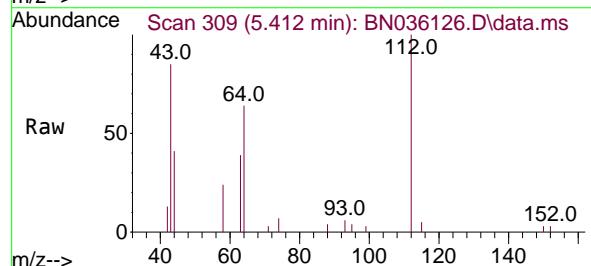
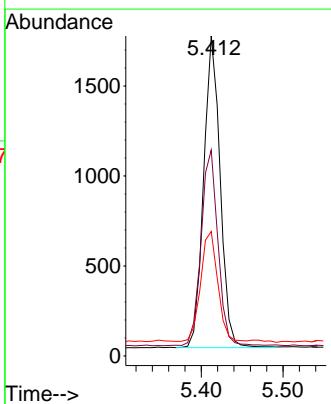
Instrument : BNA\_N  
ClientSampleId : PB166297BS

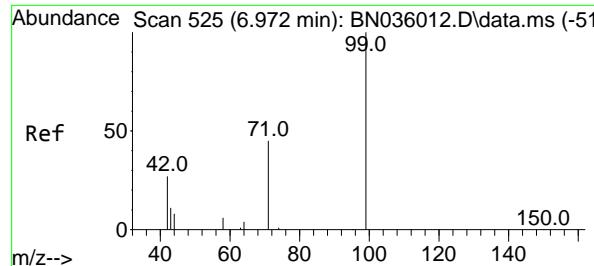
Tgt Ion: 42 Resp: 1564  
Ion Ratio Lower Upper  
42 100  
74 96.8 58.1 87.1#  
44 9.3 6.2 9.4



#4  
2-Fluorophenol  
Concen: 0.403 ng  
RT: 5.412 min Scan# 309  
Delta R.T. 0.022 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

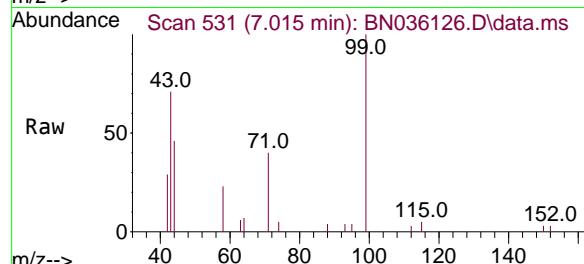
Tgt Ion: 112 Resp: 2438  
Ion Ratio Lower Upper  
112 100  
64 64.1 50.0 75.0  
63 36.5 30.7 46.1



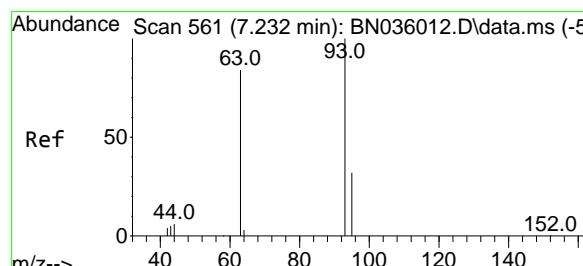
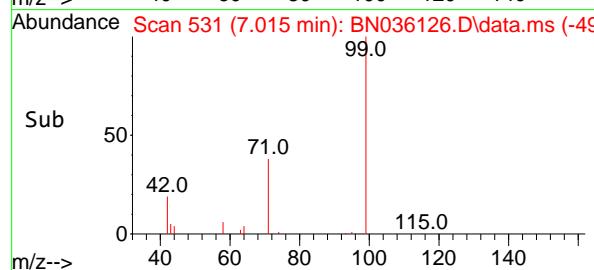
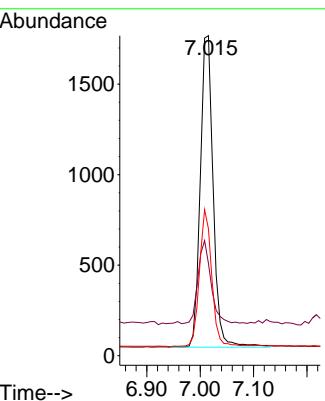


#5  
 Phenol-d6  
 Concen: 0.409 ng  
 RT: 7.015 min Scan# 5  
 Delta R.T. 0.043 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

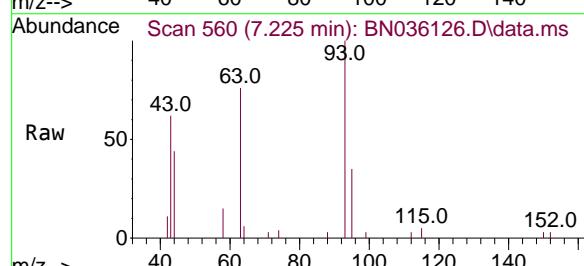
Instrument : BNA\_N  
 ClientSampleId : PB166297BS



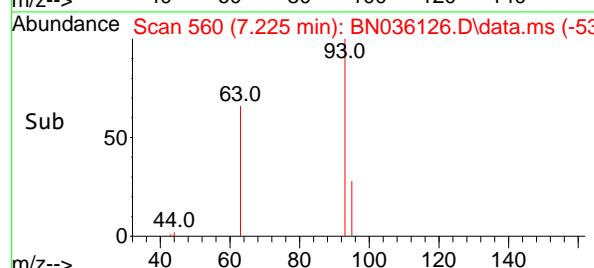
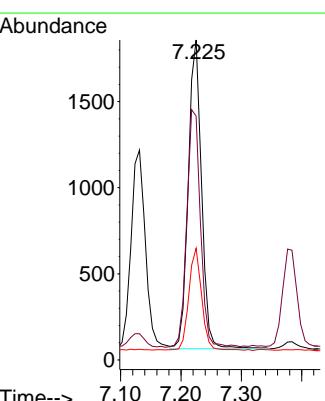
Tgt Ion: 99 Resp: 2900  
 Ion Ratio Lower Upper  
 99 100  
 42 26.8 26.8 40.2#  
 71 42.1 36.6 55.0

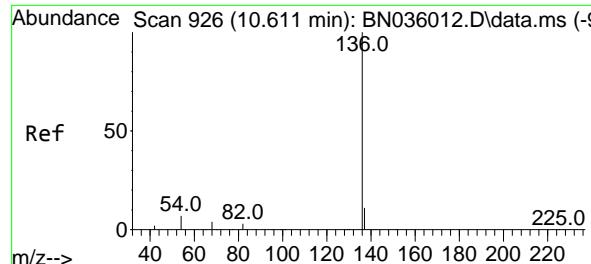


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.478 ng  
 RT: 7.225 min Scan# 560  
 Delta R.T. -0.007 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31



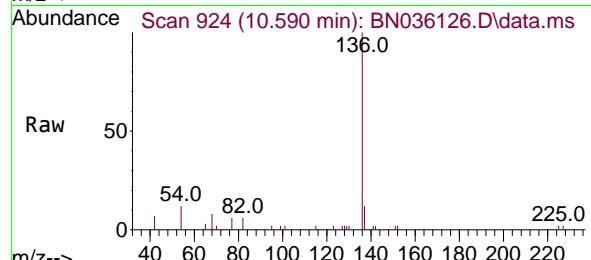
Tgt Ion: 93 Resp: 2731  
 Ion Ratio Lower Upper  
 93 100  
 63 79.6 65.8 98.6  
 95 32.0 25.8 38.6



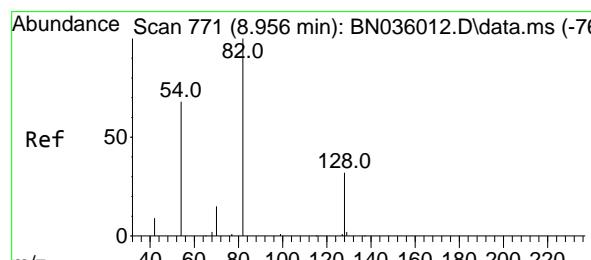
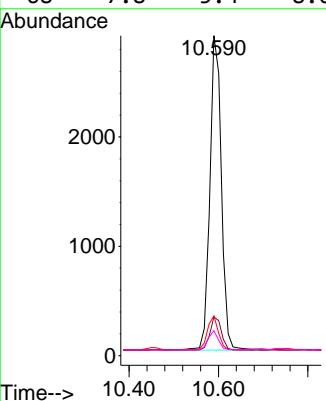
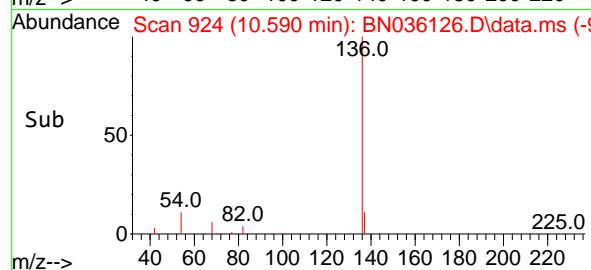


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.590 min Scan# 9  
 Delta R.T. -0.021 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

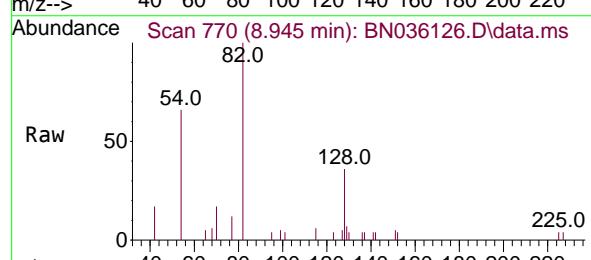
Instrument : BNA\_N  
 ClientSampleId : PB166297BS



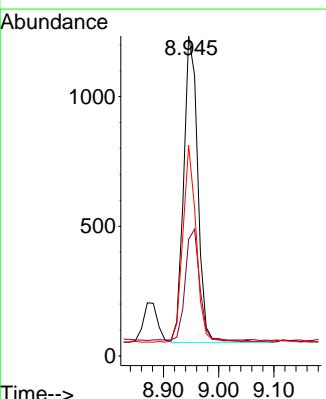
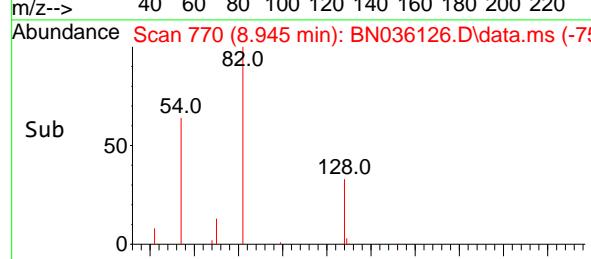
Tgt Ion:136 Resp: 5152  
 Ion Ratio Lower Upper  
 136 100  
 137 12.1 10.4 15.6  
 54 12.4 7.7 11.5#  
 68 7.8 5.4 8.0

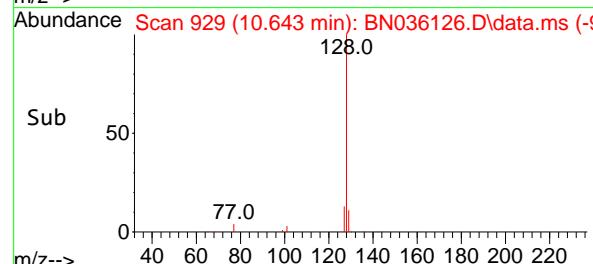
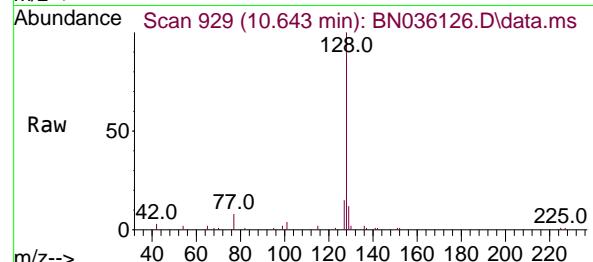
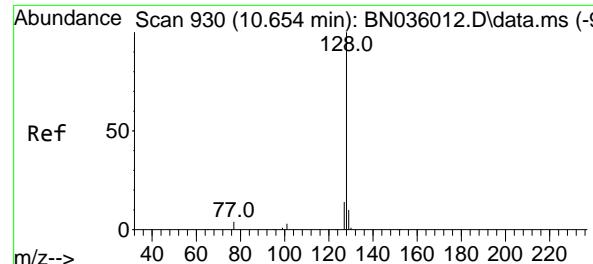


#8  
 Nitrobenzene-d5  
 Concen: 0.432 ng  
 RT: 8.945 min Scan# 770  
 Delta R.T. -0.011 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31



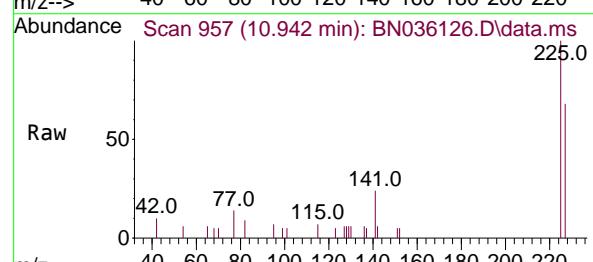
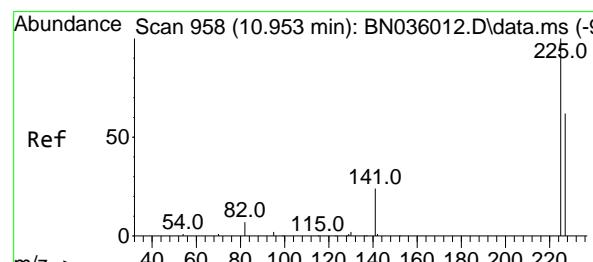
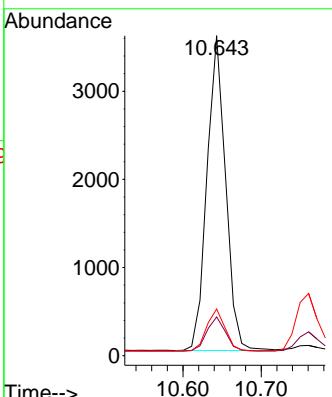
Tgt Ion: 82 Resp: 2099  
 Ion Ratio Lower Upper  
 82 100  
 128 36.5 28.8 43.2  
 54 65.8 55.8 83.8





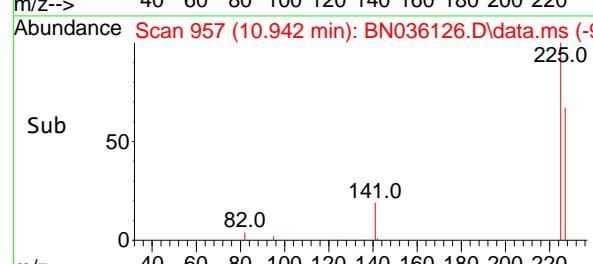
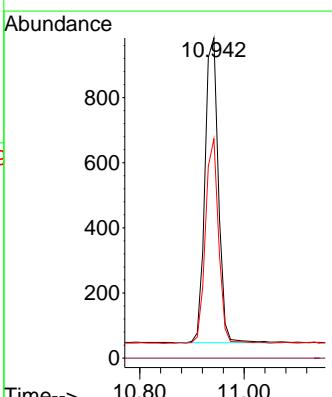
#9  
Naphthalene  
Concen: 0.395 ng  
RT: 10.643 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.011 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31  
ClientSampleId : PB166297BS

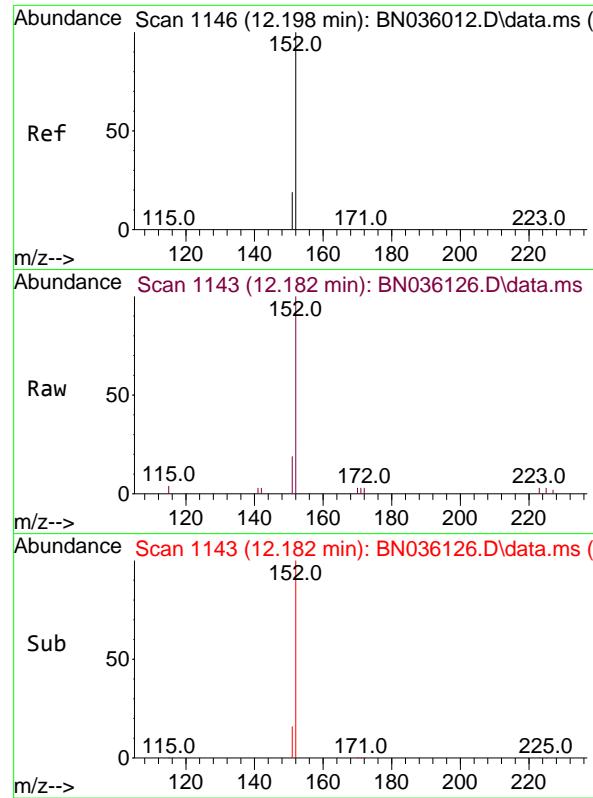
Tgt Ion:128 Resp: 5912  
Ion Ratio Lower Upper  
128 100  
129 12.1 9.4 14.2  
127 14.6 12.6 19.0



#10  
Hexachlorobutadiene  
Concen: 0.346 ng  
RT: 10.942 min Scan# 957  
Delta R.T. -0.011 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:225 Resp: 1671  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.9 51.0 76.6

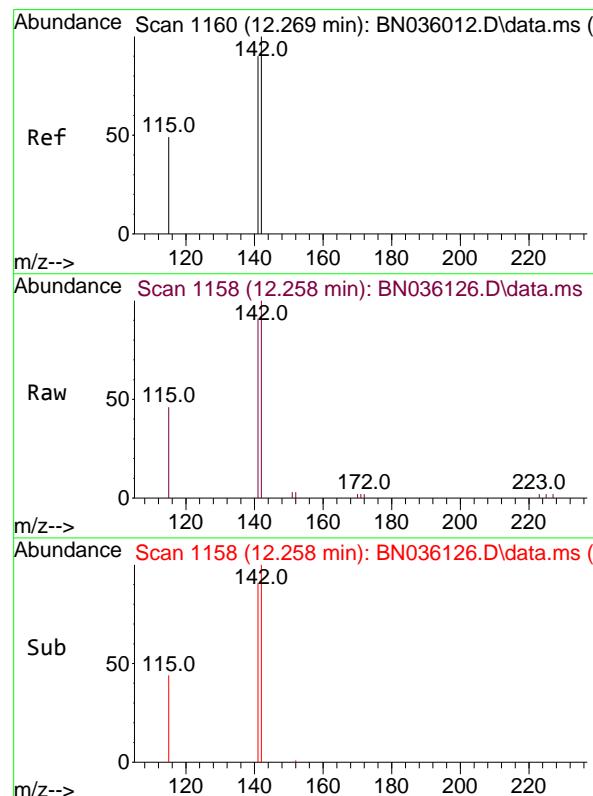
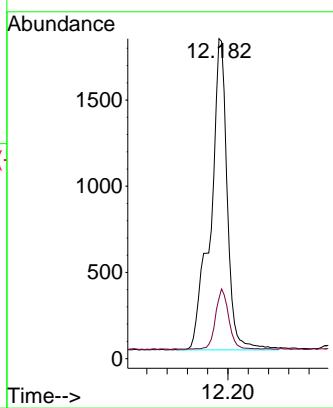




#11  
2-Methylnaphthalene-d10  
Concen: 0.585 ng  
RT: 12.182 min Scan# 1143  
Delta R.T. -0.015 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

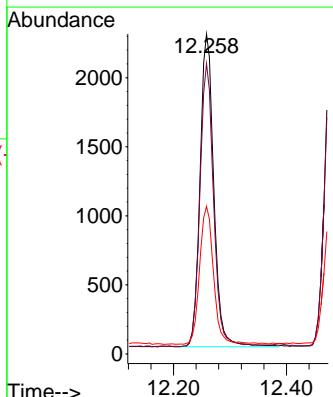
Instrument : BNA\_N  
ClientSampleId : PB166297BS

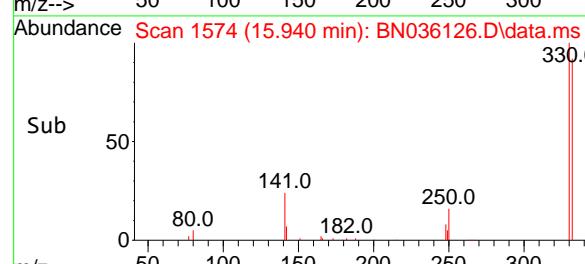
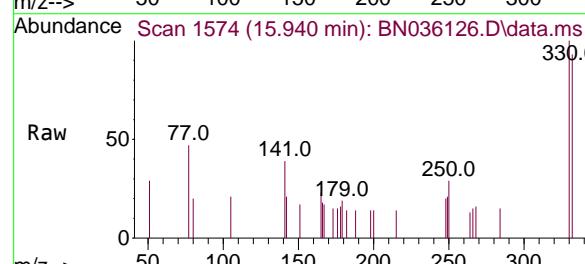
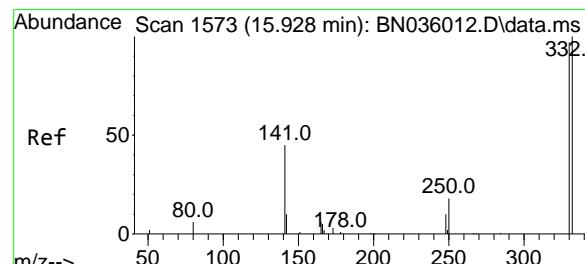
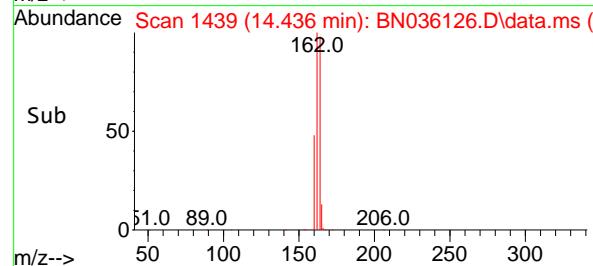
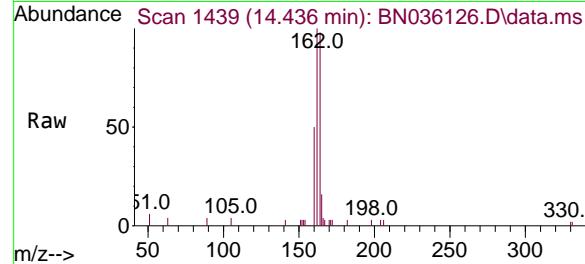
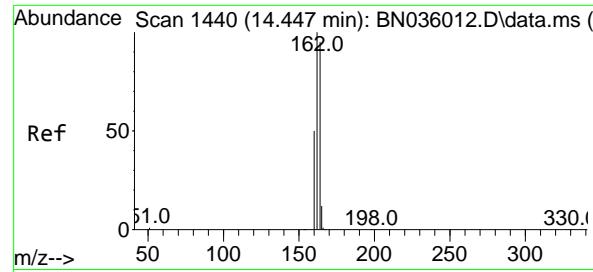
Tgt Ion:152 Resp: 4100  
Ion Ratio Lower Upper  
152 100  
151 15.2 16.6 25.0#



#12  
2-Methylnaphthalene  
Concen: 0.412 ng  
RT: 12.258 min Scan# 1158  
Delta R.T. -0.010 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:142 Resp: 3823  
Ion Ratio Lower Upper  
142 100  
141 90.8 72.2 108.2  
115 46.1 41.2 61.8

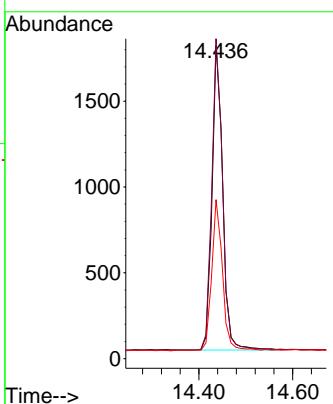




#13

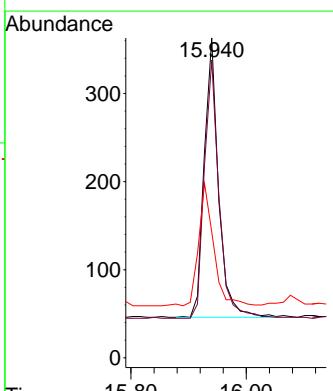
Acenaphthene-d10  
Concen: 0.400 ngRT: 14.436 min Scan# 1  
Delta R.T. -0.011 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31Instrument :  
BNA\_N  
ClientSampleId :  
PB166297BS

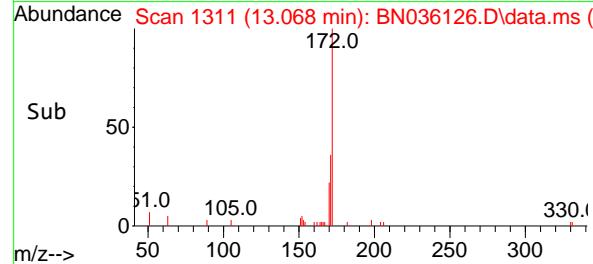
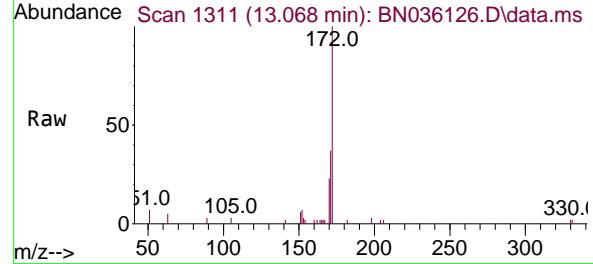
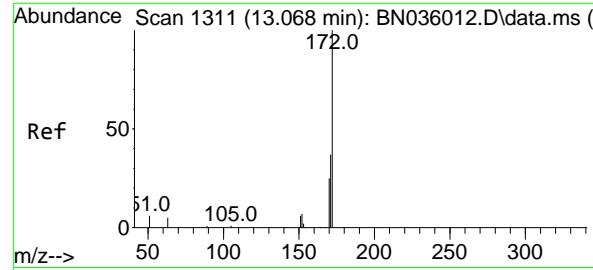
Tgt Ion:164 Resp: 2819  
Ion Ratio Lower Upper  
164 100  
162 102.0 84.1 126.1  
160 50.7 43.8 65.8



#14  
2,4,6-Tribromophenol  
Concen: 0.304 ng  
RT: 15.940 min Scan# 1574  
Delta R.T. 0.012 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

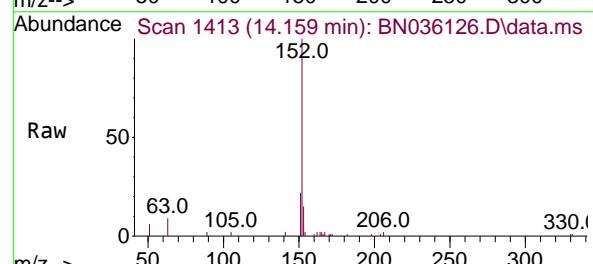
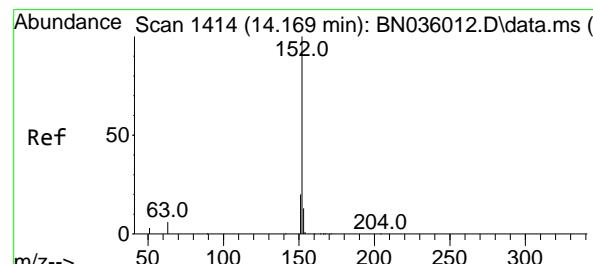
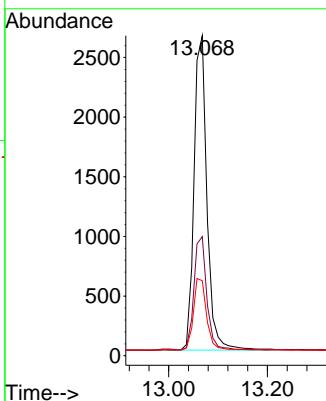
Tgt Ion:330 Resp: 549  
Ion Ratio Lower Upper  
330 100  
332 94.5 81.0 121.4  
141 45.9 36.7 55.1





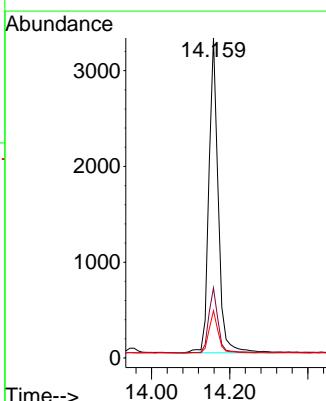
#15  
2-Fluorobiphenyl  
Concen: 0.380 ng  
RT: 13.068 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31  
ClientSampleId : PB166297BS

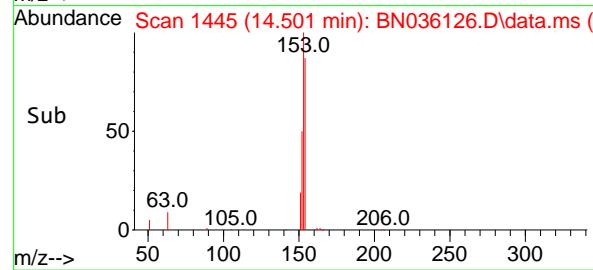
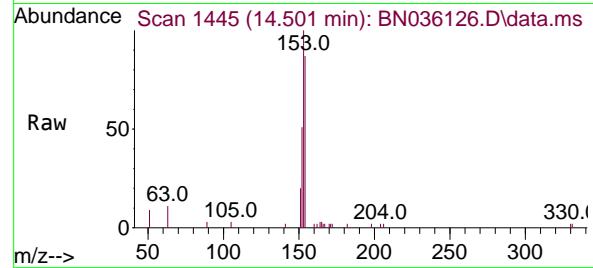
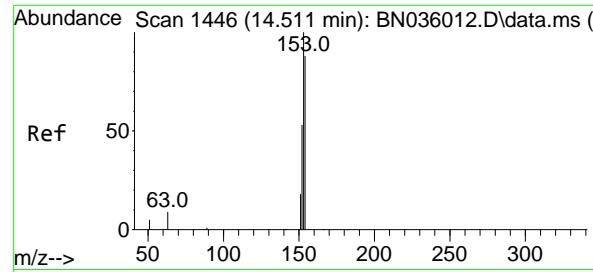
Tgt Ion:172 Resp: 4785  
Ion Ratio Lower Upper  
172 100  
171 37.2 30.9 46.3  
170 23.4 21.2 31.8



#16  
Acenaphthylene  
Concen: 0.410 ng  
RT: 14.159 min Scan# 1413  
Delta R.T. -0.011 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:152 Resp: 5477  
Ion Ratio Lower Upper  
152 100  
151 20.6 16.2 24.2  
153 13.4 10.4 15.6





#17

Acenaphthene

Concen: 0.393 ng

RT: 14.501 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

Instrument :

BNA\_N

ClientSampleId :

PB166297BS

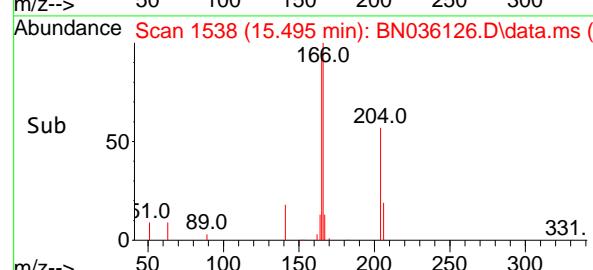
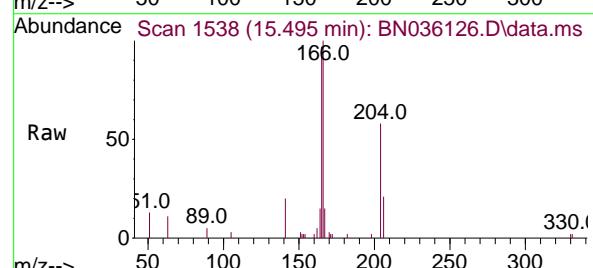
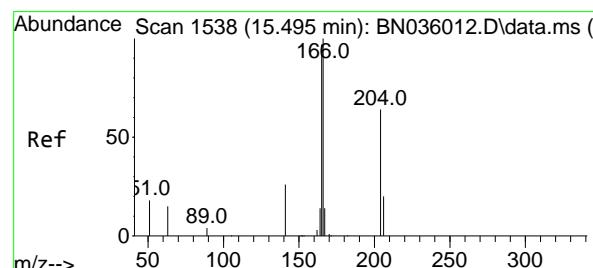
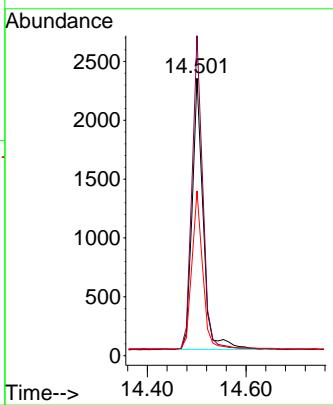
Tgt Ion:154 Resp: 3594

Ion Ratio Lower Upper

154 100

153 112.7 88.9 133.3

152 56.9 48.1 72.1



#18

Fluorene

Concen: 0.391 ng

RT: 15.495 min Scan# 1538

Delta R.T. -0.000 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

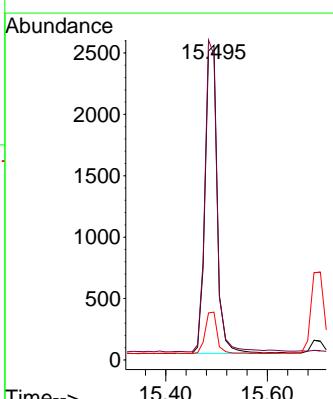
Tgt Ion:166 Resp: 4479

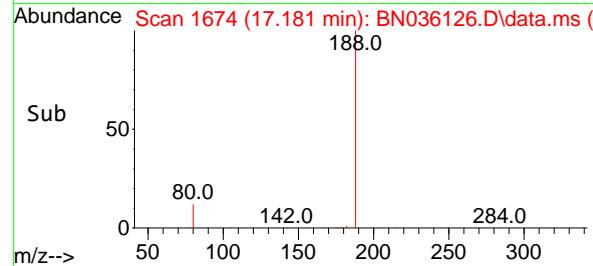
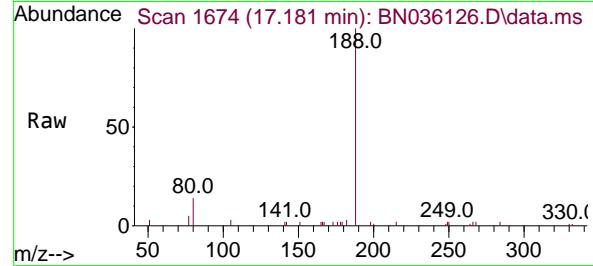
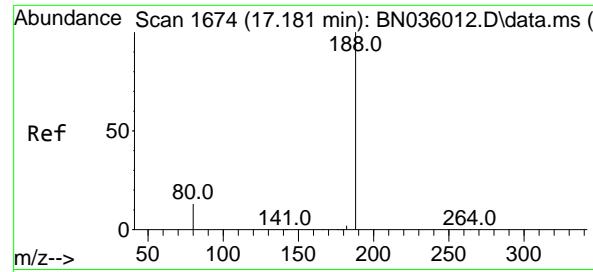
Ion Ratio Lower Upper

166 100

165 101.7 78.5 117.7

167 13.4 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.181 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

Instrument:

BNA\_N

ClientSampleId :

PB166297BS

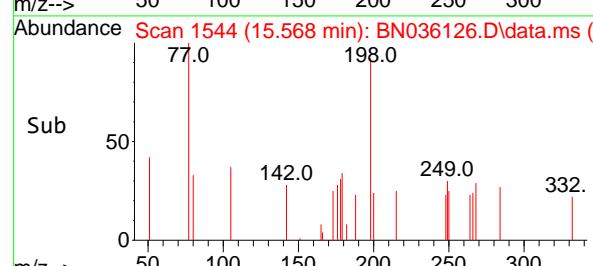
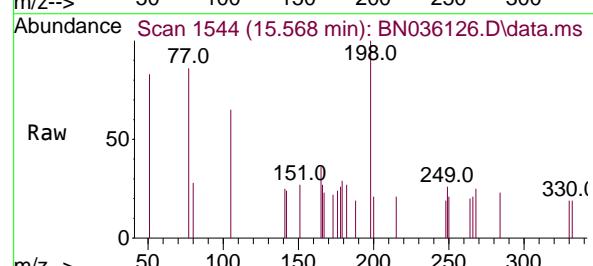
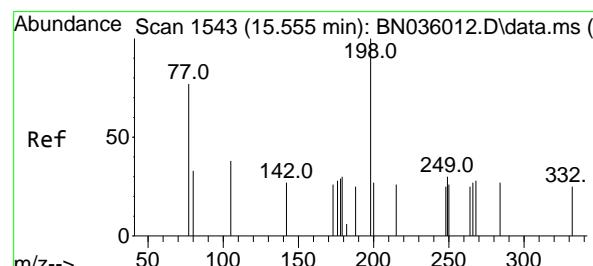
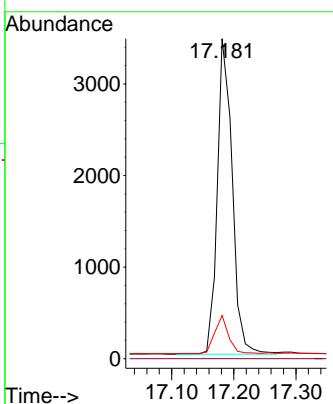
Tgt Ion:188 Resp: 5724

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.5 12.3 18.5



#20

4,6-Dinitro-2-methylphenol

Concen: 0.273 ng

RT: 15.568 min Scan# 1544

Delta R.T. 0.012 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

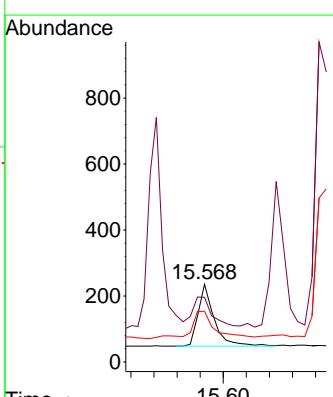
Tgt Ion:198 Resp: 365

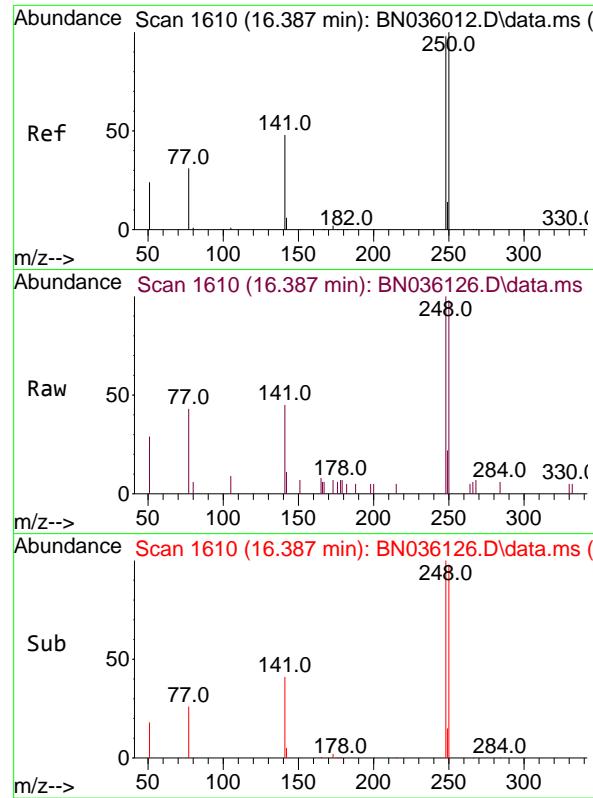
Ion Ratio Lower Upper

198 100

51 83.1 68.1 102.1

105 65.3 46.5 69.7

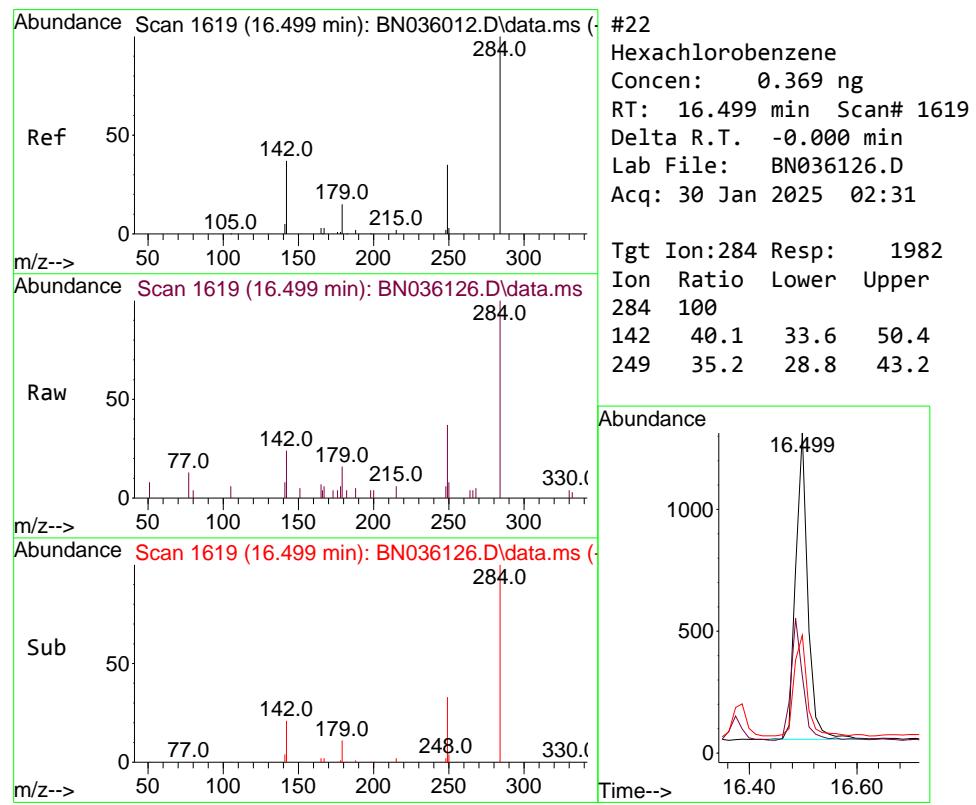
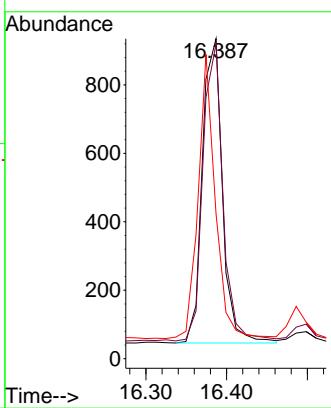




#21  
4-Bromophenyl-phenylether  
Concen: 0.378 ng  
RT: 16.387 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

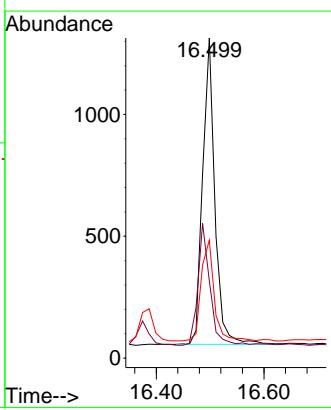
Instrument :  
BNA\_N  
ClientSampleId :  
PB166297BS

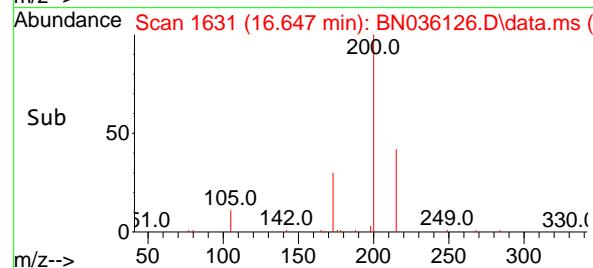
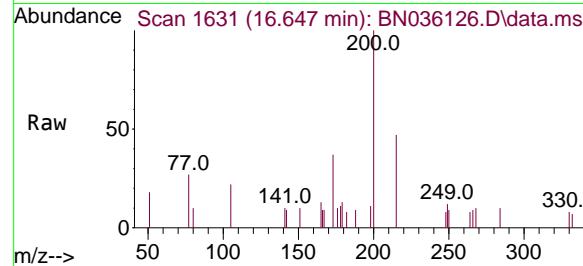
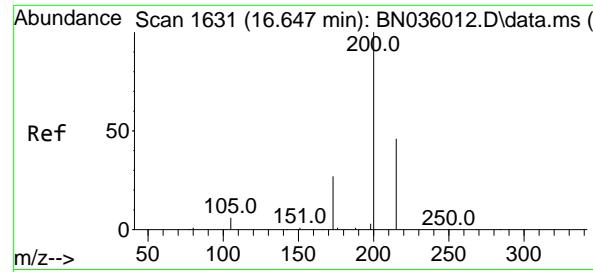
Tgt Ion:248 Resp: 1543  
Ion Ratio Lower Upper  
248 100  
250 98.4 81.5 122.3  
141 45.2 41.8 62.6



#22  
Hexachlorobenzene  
Concen: 0.369 ng  
RT: 16.499 min Scan# 1619  
Delta R.T. -0.000 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:284 Resp: 1982  
Ion Ratio Lower Upper  
284 100  
142 40.1 33.6 50.4  
249 35.2 28.8 43.2

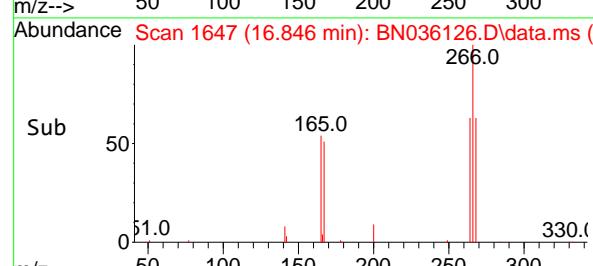
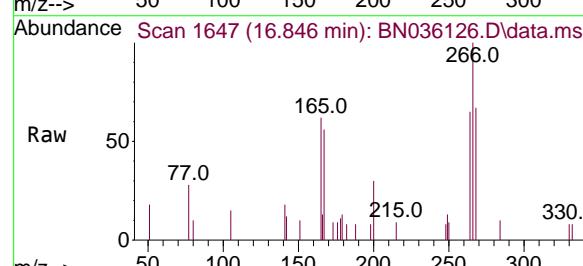
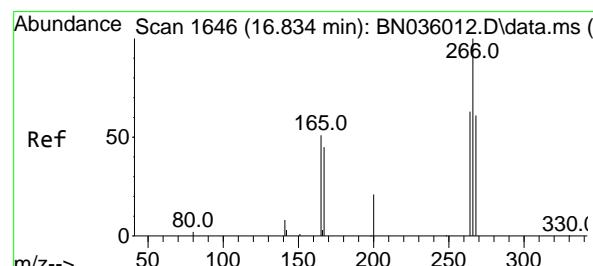
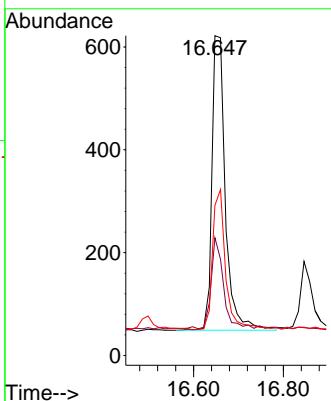




#23  
Atrazine  
Concen: 0.404 ng  
RT: 16.647 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

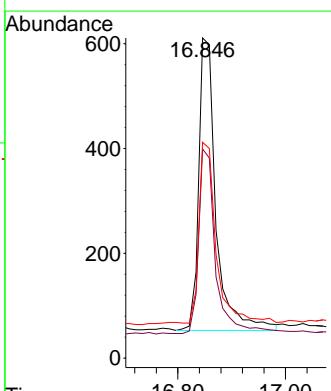
Instrument : BNA\_N  
ClientSampleId : PB166297BS

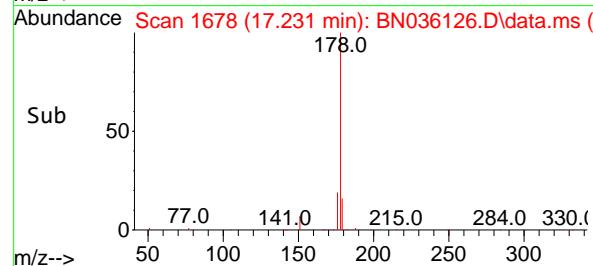
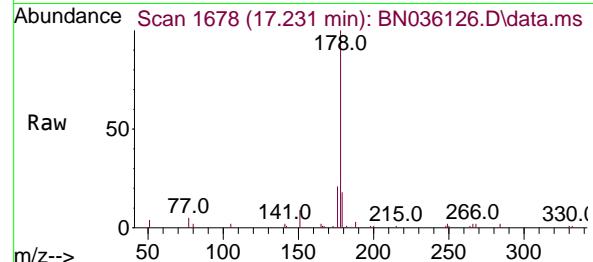
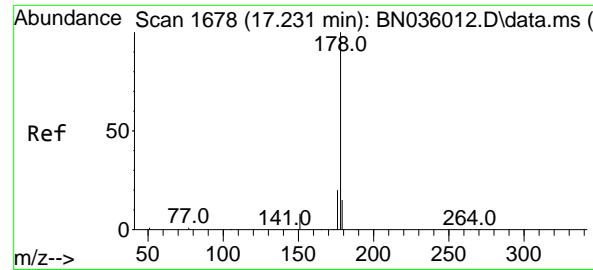
Tgt Ion:200 Resp: 1189  
Ion Ratio Lower Upper  
200 100  
173 36.8 26.6 40.0  
215 46.9 40.6 61.0



#24  
Pentachlorophenol  
Concen: 0.535 ng  
RT: 16.846 min Scan# 1647  
Delta R.T. 0.012 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:266 Resp: 1244  
Ion Ratio Lower Upper  
266 100  
264 61.6 48.2 72.2  
268 62.0 51.6 77.4





#25

Phenanthrene

Concen: 0.404 ng

RT: 17.231 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

Instrument:

BNA\_N

ClientSampleId :

PB166297BS

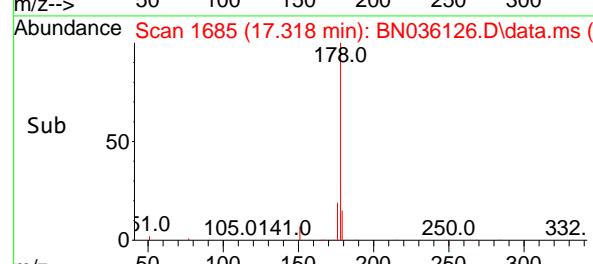
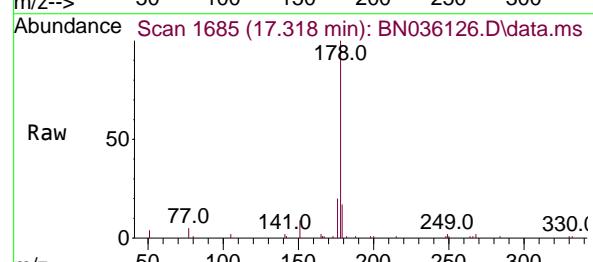
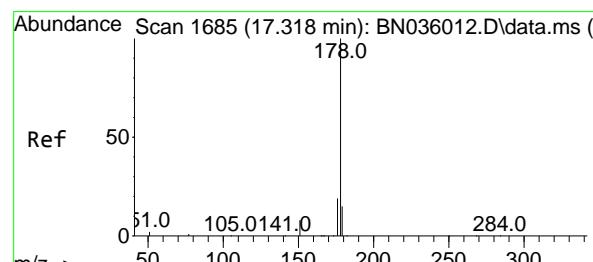
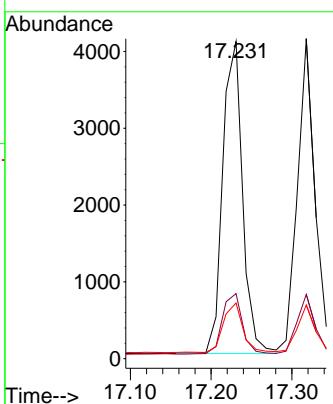
Tgt Ion:178 Resp: 6947

Ion Ratio Lower Upper

178 100

176 19.5 16.0 24.0

179 15.7 12.4 18.6



#26

Anthracene

Concen: 0.408 ng

RT: 17.318 min Scan# 1685

Delta R.T. -0.000 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

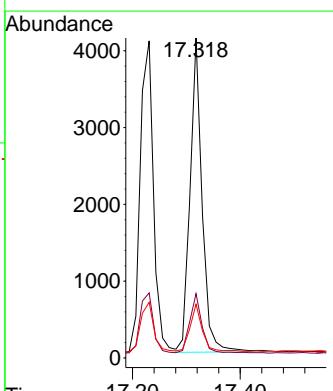
Tgt Ion:178 Resp: 6389

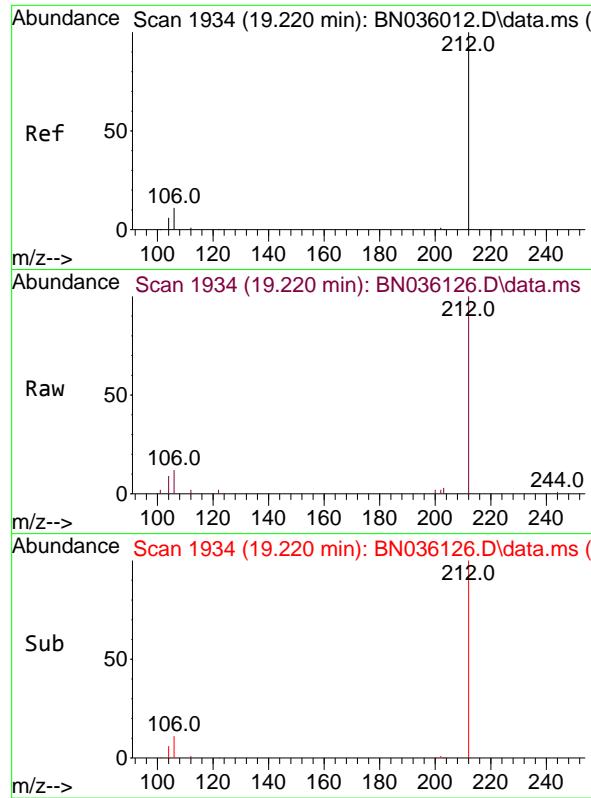
Ion Ratio Lower Upper

178 100

176 19.6 15.4 23.2

179 15.0 12.0 18.0

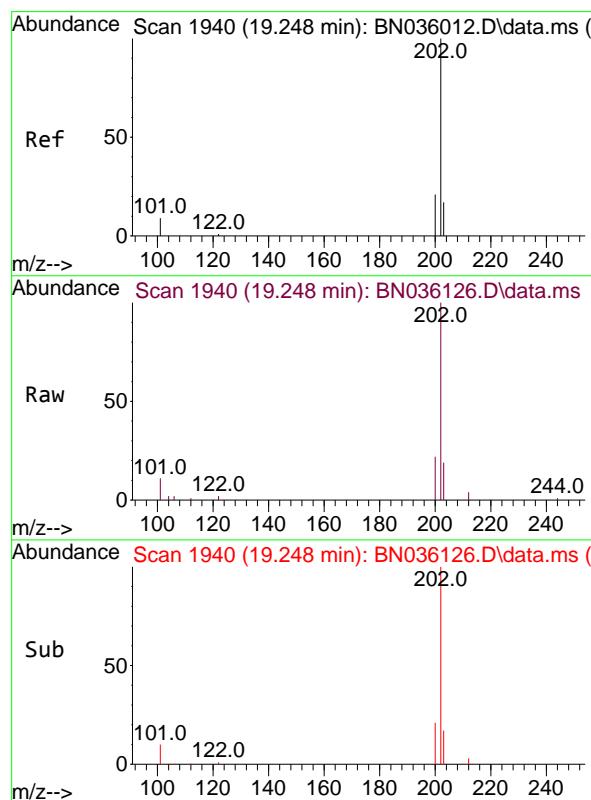
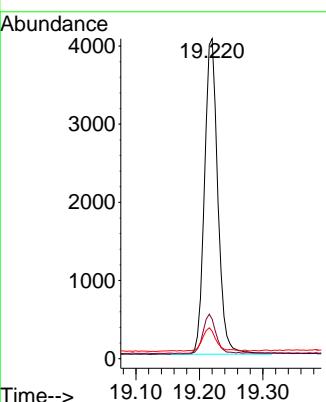




#27  
 Fluoranthene-d10  
 Concen: 0.396 ng  
 RT: 19.220 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

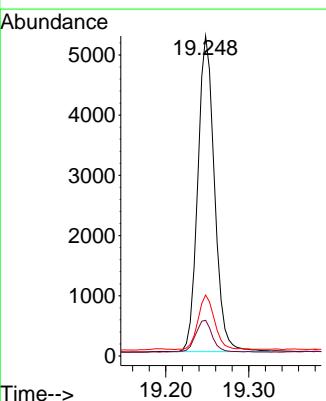
Instrument : BNA\_N  
 ClientSampleId : PB166297BS

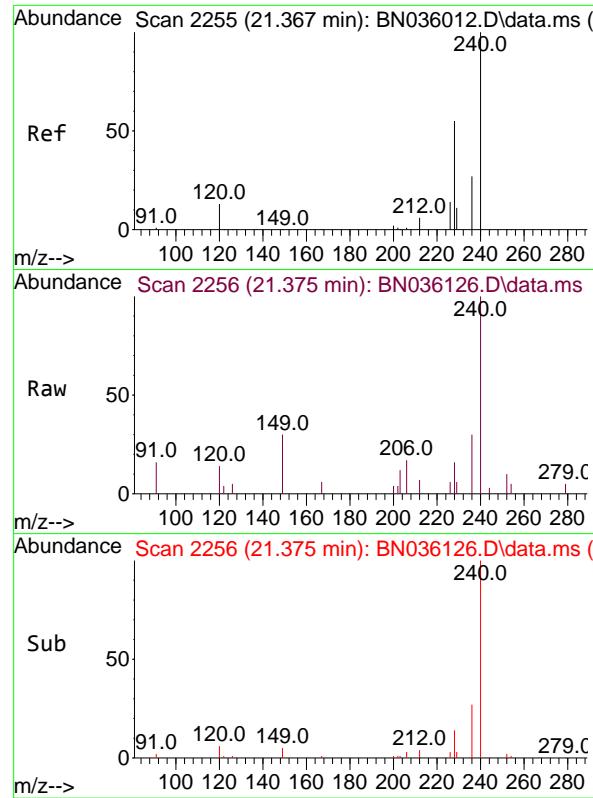
Tgt Ion:212 Resp: 5879  
 Ion Ratio Lower Upper  
 212 100  
 106 12.1 9.7 14.5  
 104 7.5 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.364 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. -0.000 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

Tgt Ion:202 Resp: 7362  
 Ion Ratio Lower Upper  
 202 100  
 101 10.3 7.6 11.4  
 203 17.4 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.375 min Scan# 2

Instrument: BNA\_N

Delta R.T. 0.009 min

Lab File: BN036126.D ClientSampleId :

Acq: 30 Jan 2025 02:31 PB166297BS

Tgt Ion:240 Resp: 4238

Ion Ratio Lower Upper

240 100

120 13.8 13.9 20.9#

236 30.2 23.7 35.5

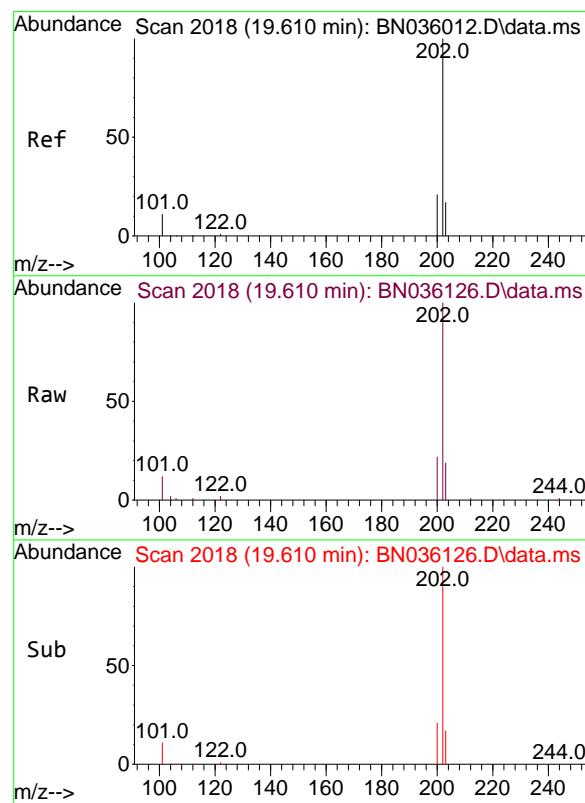
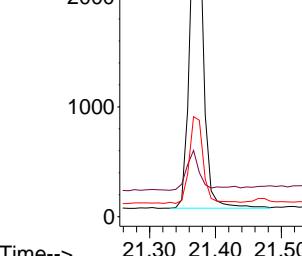
Abundance

21.375

2000

1000

0



#30

Pyrene

Concen: 0.446 ng

RT: 19.610 min Scan# 2018

Delta R.T. -0.000 min

Lab File: BN036126.D

Acq: 30 Jan 2025 02:31

Tgt Ion:202 Resp: 7662

Ion Ratio Lower Upper

202 100

200 21.4 17.0 25.4

203 18.0 14.4 21.6

Abundance

19.610

5000

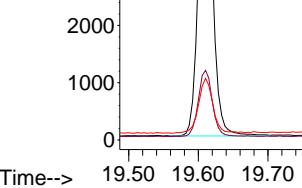
4000

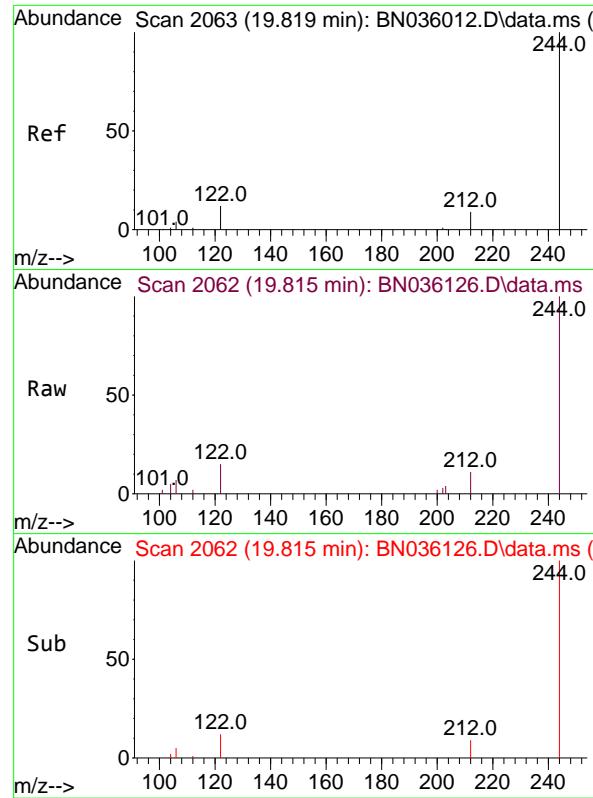
3000

2000

1000

0

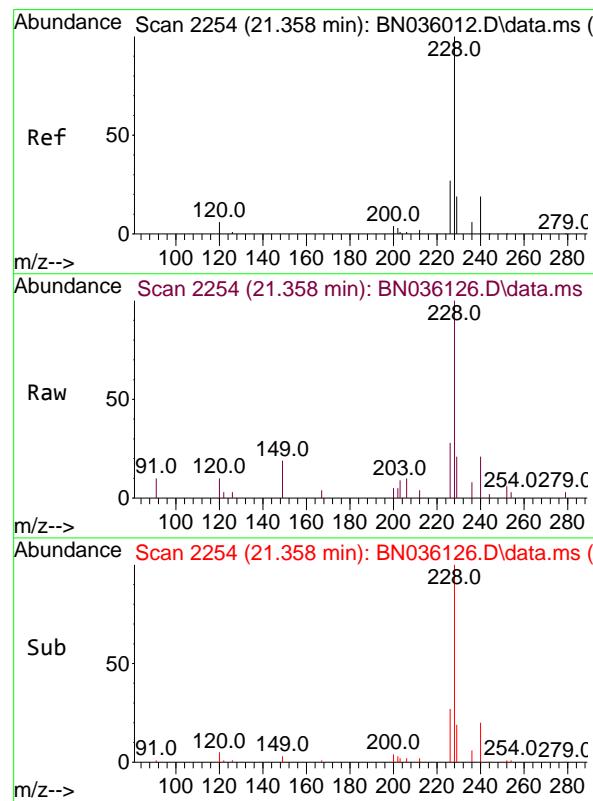
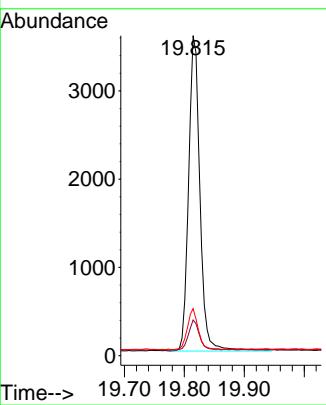




#31  
Terphenyl-d14  
Concen: 0.533 ng  
RT: 19.815 min Scan# 2  
Delta R.T. -0.005 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

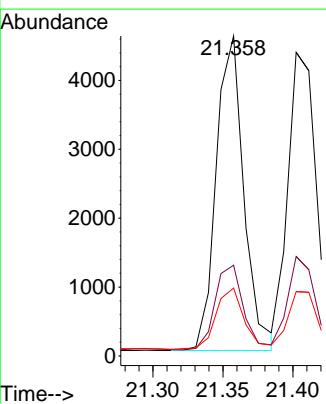
Instrument : BNA\_N  
ClientSampleId : PB166297BS

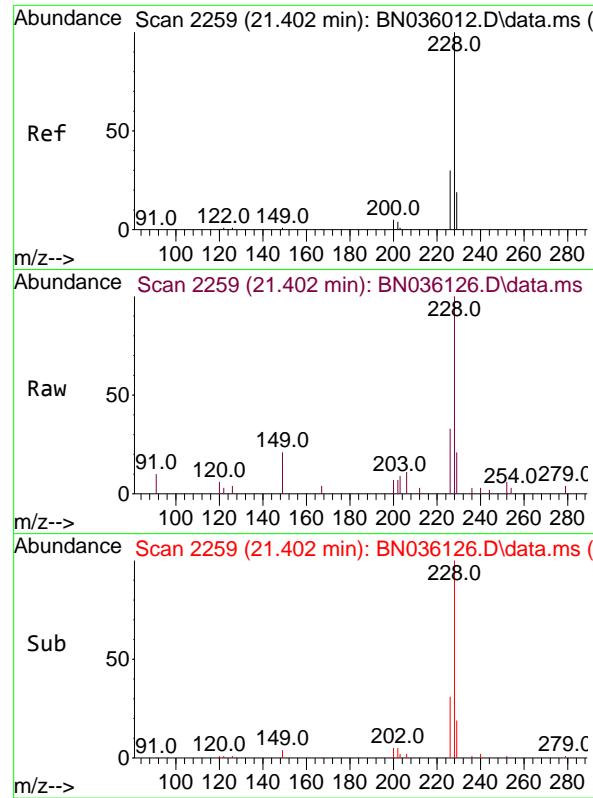
Tgt Ion:244 Resp: 4693  
Ion Ratio Lower Upper  
244 100  
212 11.1 9.1 13.7  
122 14.7 11.3 16.9



#32  
Benzo(a)anthracene  
Concen: 0.408 ng  
RT: 21.358 min Scan# 2254  
Delta R.T. 0.000 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

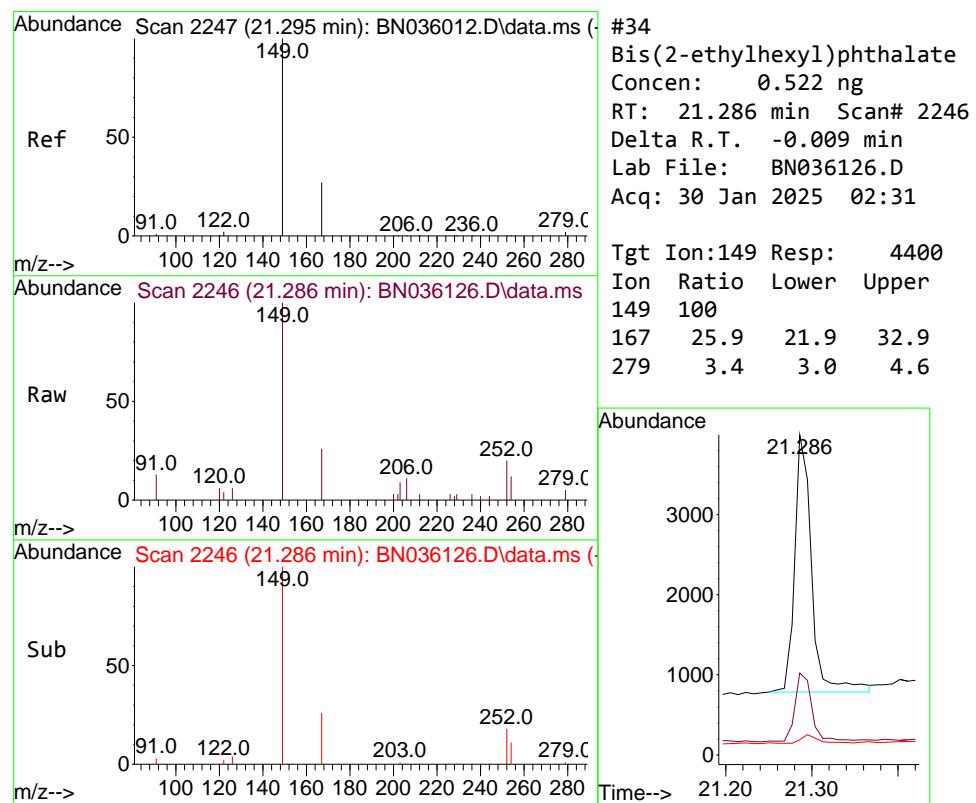
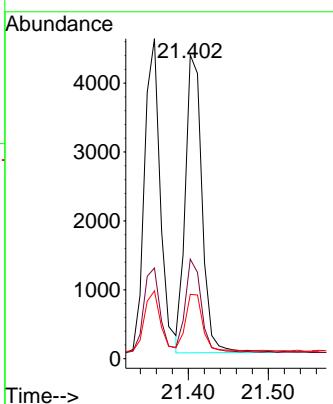
Tgt Ion:228 Resp: 6274  
Ion Ratio Lower Upper  
228 100  
226 28.4 22.6 34.0  
229 21.2 16.5 24.7





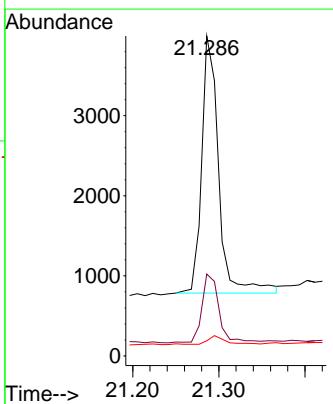
#33  
Chrysene  
Concen: 0.399 ng  
RT: 21.402 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036126.D ClientSampleId :  
Acq: 30 Jan 2025 02:31 PB166297BS

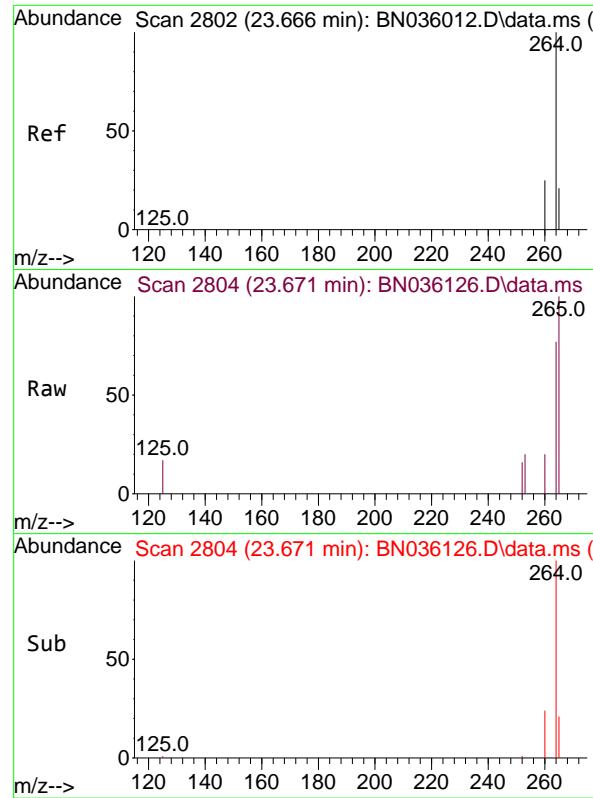
Tgt Ion:228 Resp: 6273  
Ion Ratio Lower Upper  
228 100  
226 32.8 25.3 37.9  
229 21.2 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.522 ng  
RT: 21.286 min Scan# 2246  
Delta R.T. -0.009 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:149 Resp: 4400  
Ion Ratio Lower Upper  
149 100  
167 25.9 21.9 32.9  
279 3.4 3.0 4.6

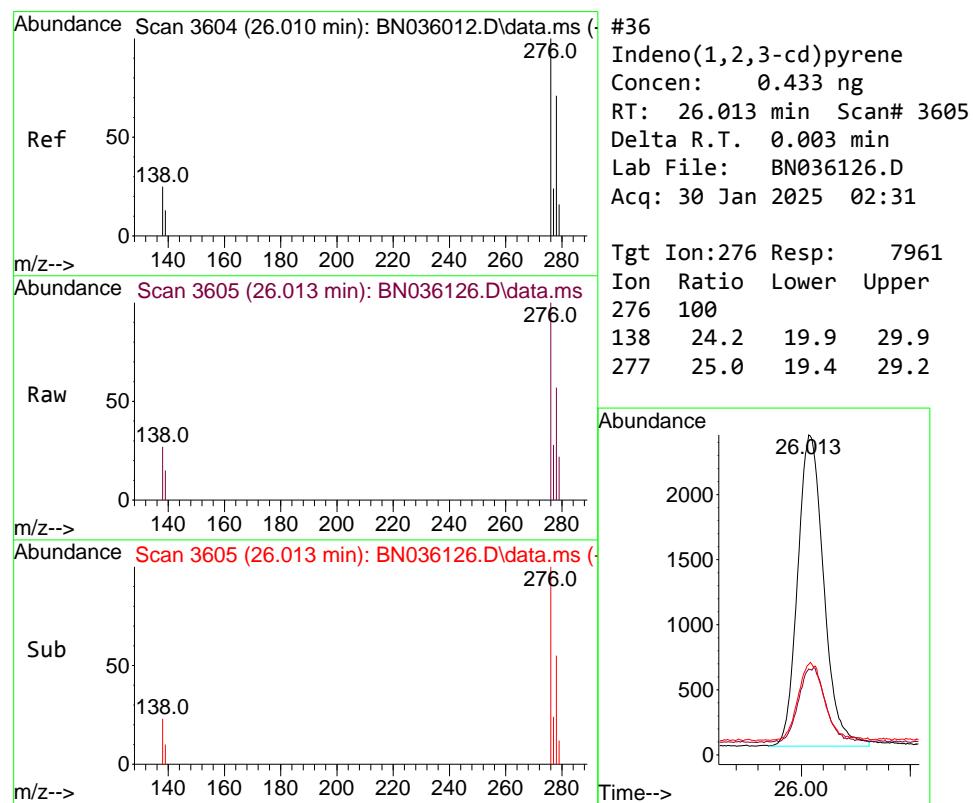
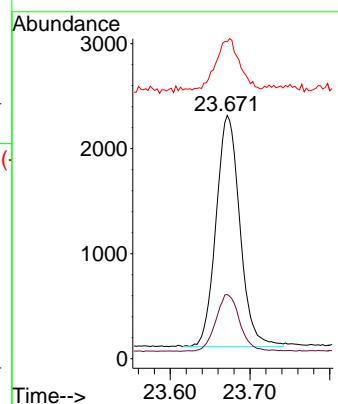




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.671 min Scan# 2  
Delta R.T. 0.006 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

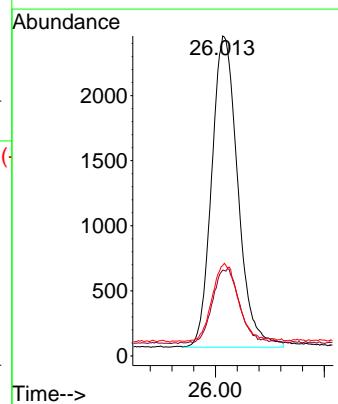
Instrument : BNA\_N  
ClientSampleId : PB166297BS

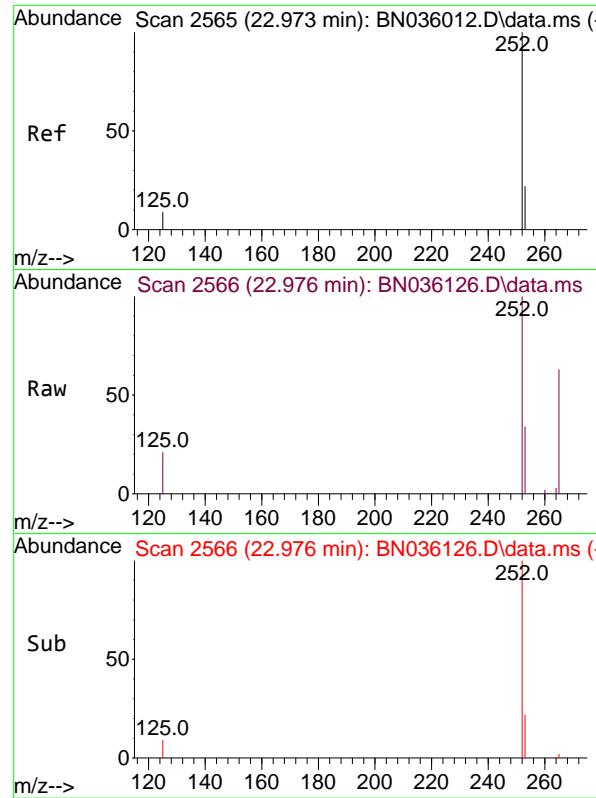
Tgt Ion:264 Resp: 4580  
Ion Ratio Lower Upper  
264 100  
260 26.4 21.8 32.6  
265 130.3 56.6 84.8#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.433 ng  
RT: 26.013 min Scan# 3605  
Delta R.T. 0.003 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

Tgt Ion:276 Resp: 7961  
Ion Ratio Lower Upper  
276 100  
138 24.2 19.9 29.9  
277 25.0 19.4 29.2

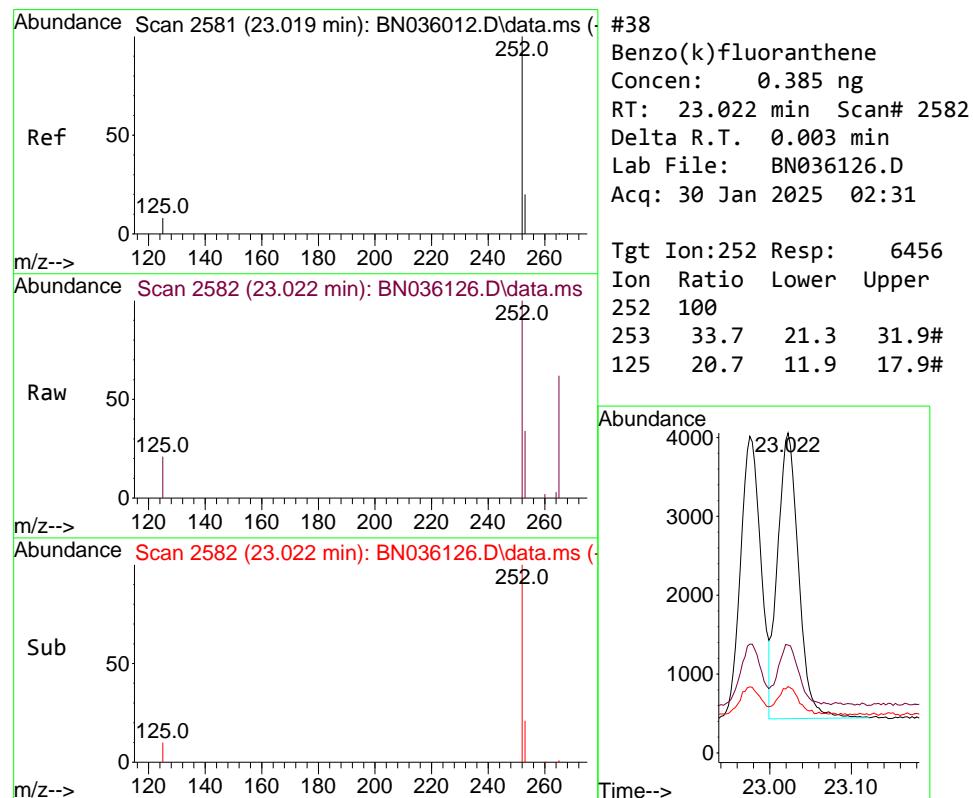
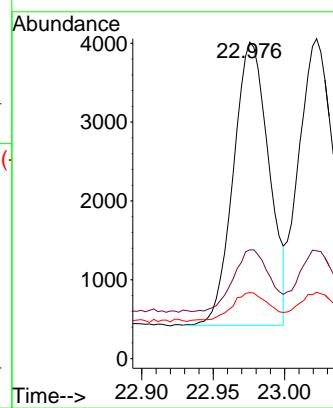




#37  
 Benzo(b)fluoranthene  
 Concen: 0.373 ng  
 RT: 22.976 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

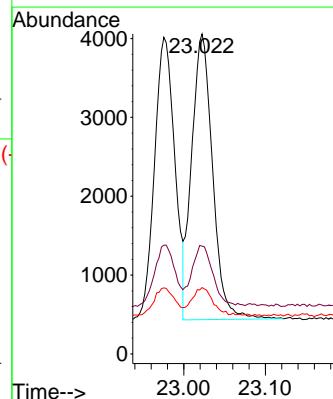
Instrument : BNA\_N  
 ClientSampleId : PB166297BS

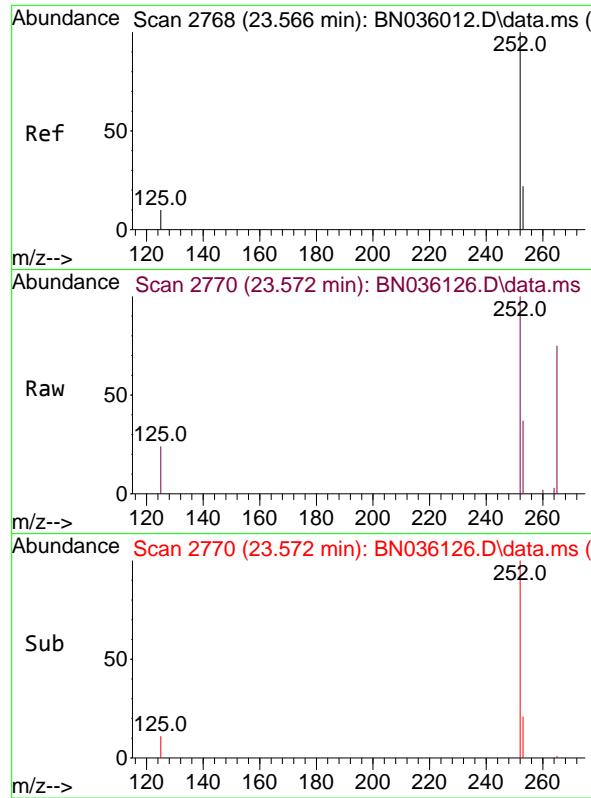
Tgt Ion:252 Resp: 6217  
 Ion Ratio Lower Upper  
 252 100  
 253 34.3 22.5 33.7#  
 125 20.9 11.9 17.9#



#38  
 Benzo(k)fluoranthene  
 Concen: 0.385 ng  
 RT: 23.022 min Scan# 2582  
 Delta R.T. 0.003 min  
 Lab File: BN036126.D  
 Acq: 30 Jan 2025 02:31

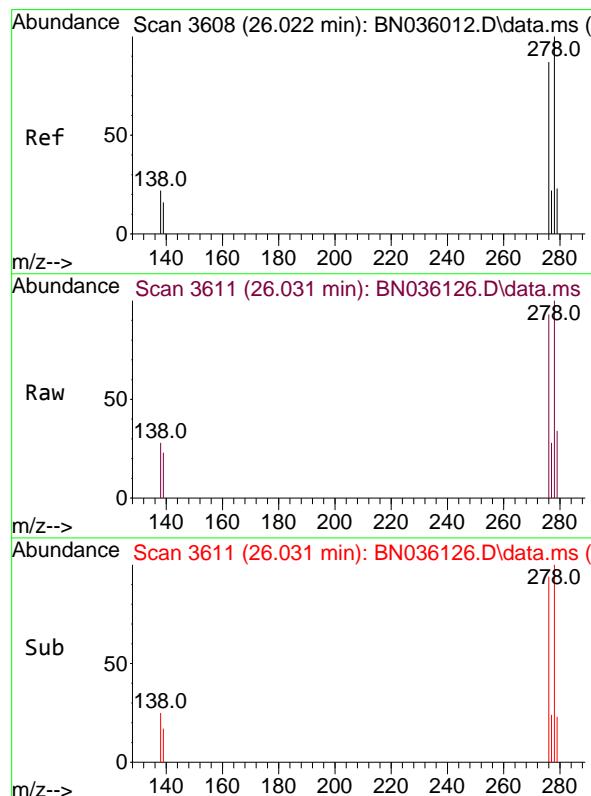
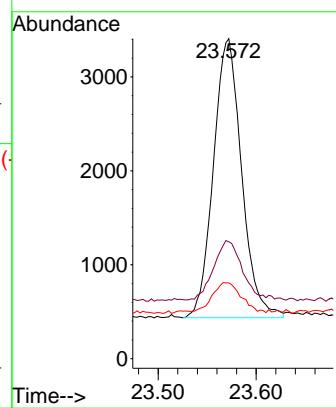
Tgt Ion:252 Resp: 6456  
 Ion Ratio Lower Upper  
 252 100  
 253 33.7 21.3 31.9#  
 125 20.7 11.9 17.9#





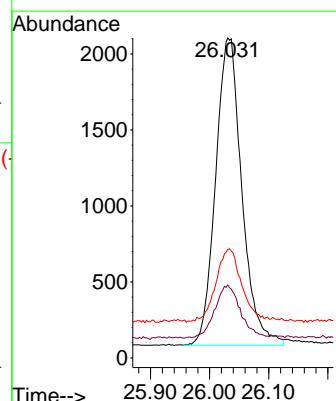
#39  
Benzo(a)pyrene  
Concen: 0.418 ng  
RT: 23.572 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. 0.006 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31 ClientSampleId : PB166297BS

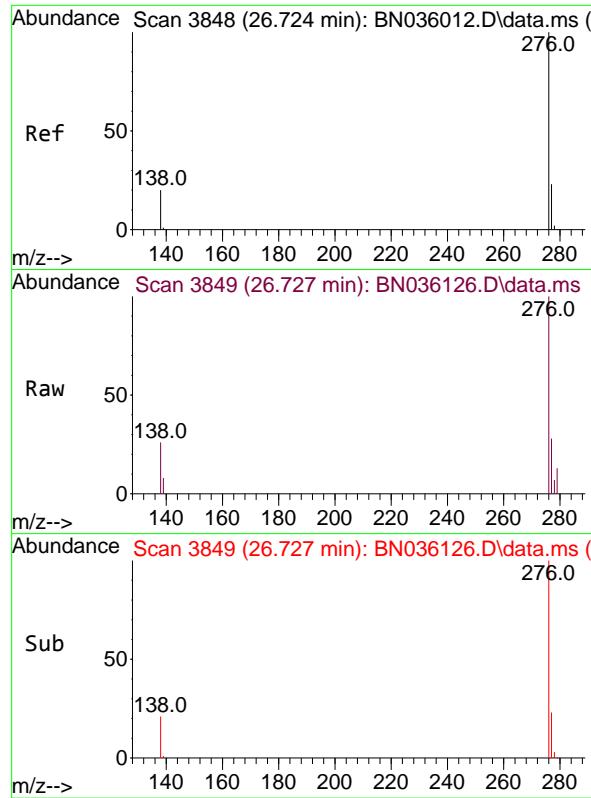
Tgt Ion:252 Resp: 5942  
Ion Ratio Lower Upper  
252 100  
253 36.6 23.8 35.6#  
125 23.7 14.6 21.8#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.426 ng  
RT: 26.031 min Scan# 3611  
Delta R.T. 0.009 min  
Lab File: BN036126.D  
Acq: 30 Jan 2025 02:31

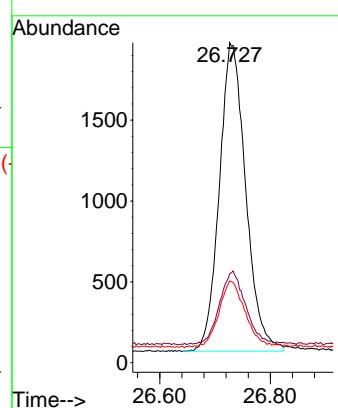
Tgt Ion:278 Resp: 6235  
Ion Ratio Lower Upper  
278 100  
139 22.8 16.0 24.0  
279 33.9 23.8 35.8





#41  
Benzo(g,h,i)perylene  
Concen: 0.394 ng  
RT: 26.727 min Scan# 3  
Instrument :  
Delta R.T. 0.003 min  
Lab File: BN036126.D ClientSampleId :  
Acq: 30 Jan 2025 02:31 PB166297BS

Tgt Ion:276 Resp: 6298  
Ion Ratio Lower Upper  
276 100  
277 27.8 21.3 31.9  
138 25.6 19.2 28.8





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:	CTO WE13			Date Received:	
Client Sample ID:	PB166297BSD			SDG No.:	Q1199
Lab Sample ID:	PB166297BSD			Matrix:	Water
Analytical Method:	SW8270ESIM			% Solid:	0
Sample Wt/Vol:	1000	Units:	mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL			Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N			Level :	LOW
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N PH :
Prep Method :					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036127.D	1	01/28/25 09:50	01/30/25 03:07	PB166297

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	0.57		30 - 150		143%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 - 150		100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		55 - 111		105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		53 - 106		93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.55	*	58 - 132		137%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	2360		7.803			
1146-65-2	Naphthalene-d8	5170		10.59			
15067-26-2	Acenaphthene-d10	2850		14.442			
1517-22-2	Phenanthrene-d10	6110		17.186			
1719-03-5	Chrysene-d12	4370		21.367			
1520-96-3	Perylene-d12	4650		23.672			

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\BN012925\  
 Data File : BN036127.D  
 Acq On : 30 Jan 2025 03:07  
 Operator : RC/JU  
 Sample : PB166297BSD  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB166297BSD

Quant Time: Jan 30 03:51:19 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

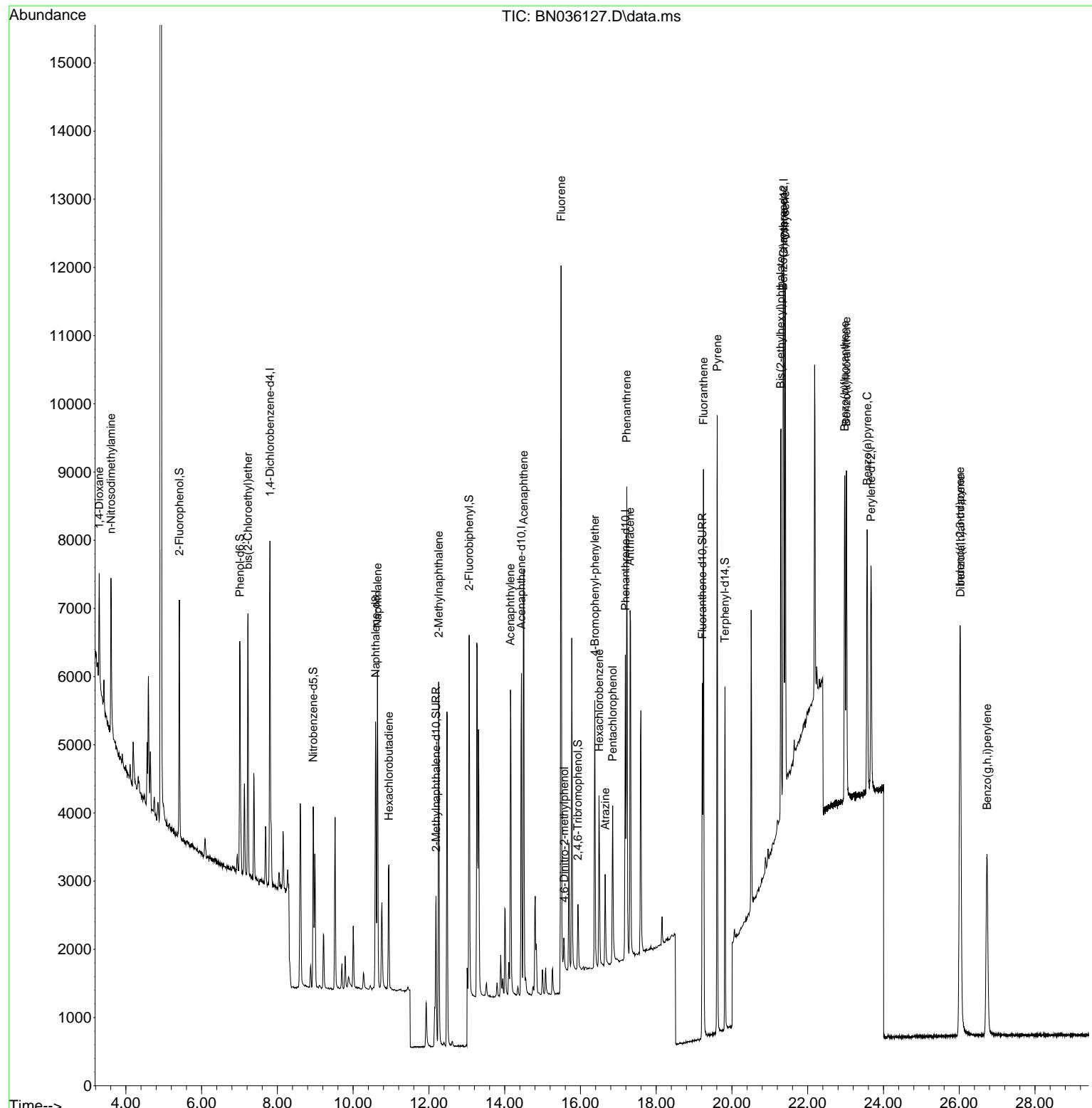
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2359	0.400	ng	-0.01
7) Naphthalene-d8	10.590	136	5174	0.400	ng	#-0.02
13) Acenaphthene-d10	14.442	164	2851	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6109	0.400	ng	# 0.00
29) Chrysene-d12	21.367	240	4365	0.400	ng	0.00
35) Perylene-d12	23.672	264	4649	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.412	112	2425	0.395	ng	0.02
5) Phenol-d6	7.008	99	2832	0.393	ng	0.04
8) Nitrobenzene-d5	8.945	82	2059	0.422	ng	-0.01
11) 2-Methylnaphthalene-d10	12.187	152	4030	0.573	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	554	0.303	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4749	0.373	ng	0.00
27) Fluoranthene-d10	19.221	212	6292	0.398	ng	0.00
31) Terphenyl-d14	19.815	244	4977	0.549	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.296	88	796	0.302	ng	# 81
3) n-Nitrosodimethylamine	3.607	42	1674	0.350	ng	# 81
6) bis(2-Chloroethyl)ether	7.225	93	2660	0.459	ng	98
9) Naphthalene	10.643	128	5830	0.388	ng	98
10) Hexachlorobutadiene	10.942	225	1628	0.335	ng	# 97
12) 2-Methylnaphthalene	12.258	142	3738	0.401	ng	96
16) Acenaphthylene	14.153	152	5520	0.408	ng	99
17) Acenaphthene	14.506	154	3625	0.392	ng	98
18) Fluorene	15.489	166	4779	0.412	ng	99
20) 4,6-Dinitro-2-methylph...	15.573	198	378	0.265	ng	93
21) 4-Bromophenyl-phenylether	16.379	248	1534	0.353	ng	# 84
22) Hexachlorobenzene	16.491	284	2010	0.351	ng	98
23) Atrazine	16.653	200	1254	0.399	ng	96
24) Pentachlorophenol	16.851	266	1309	0.528	ng	97
25) Phenanthrene	17.224	178	7274	0.396	ng	100
26) Anthracene	17.310	178	6568	0.393	ng	99
28) Fluoranthene	19.248	202	7852	0.364	ng	99
30) Pyrene	19.611	202	8088	0.457	ng	99
32) Benzo(a)anthracene	21.358	228	6389	0.404	ng	99
33) Chrysene	21.403	228	6455	0.399	ng	100
34) Bis(2-ethylhexyl)phtha...	21.286	149	4596	0.530	ng	98
36) Indeno(1,2,3-cd)pyrene	26.020	276	7883	0.423	ng	98
37) Benzo(b)fluoranthene	22.976	252	6234	0.369	ng	# 87
38) Benzo(k)fluoranthene	23.020	252	6275	0.368	ng	# 86
39) Benzo(a)pyrene	23.570	252	5915	0.410	ng	# 87
40) Dibenzo(a,h)anthracene	26.031	278	6282	0.422	ng	93
41) Benzo(g,h,i)perylene	26.733	276	6224	0.384	ng	97

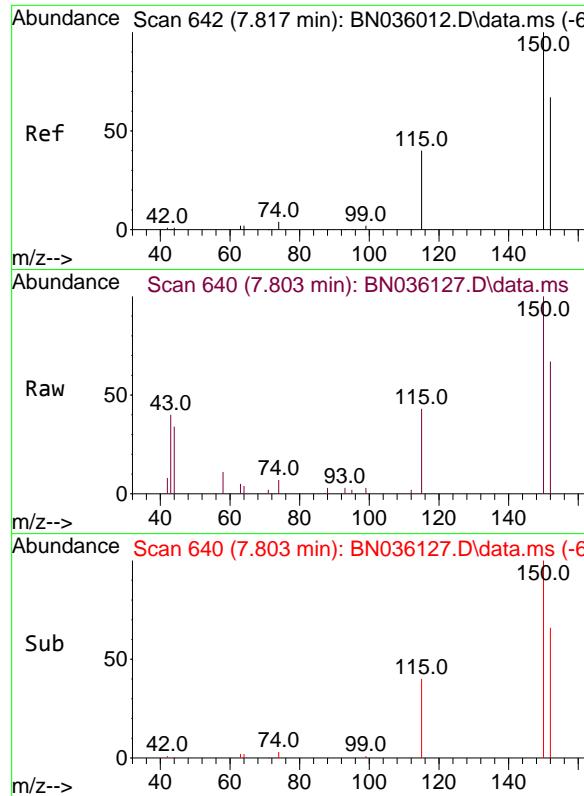
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036127.D  
 Acq On : 30 Jan 2025 03:07  
 Operator : RC/JU  
 Sample : PB166297BSD  
 Misc :  
 ALS Vial : 17 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB166297BSD

Quant Time: Jan 30 03:51:19 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

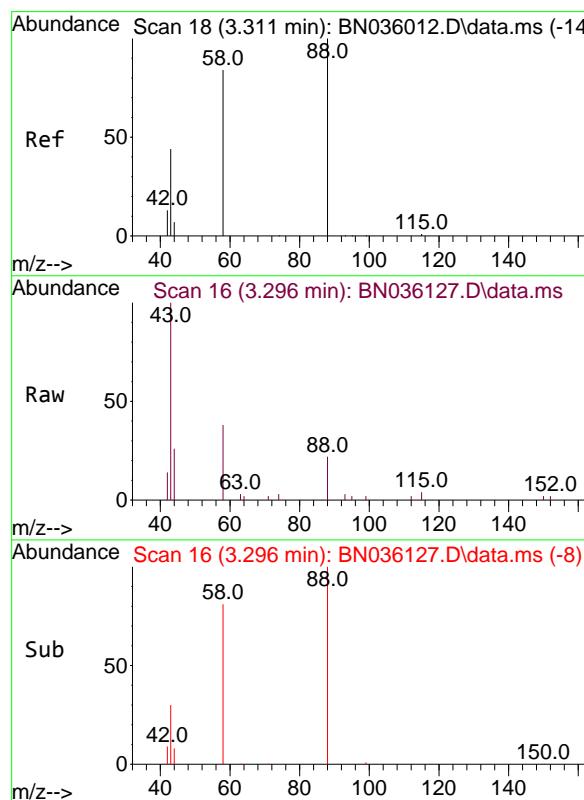
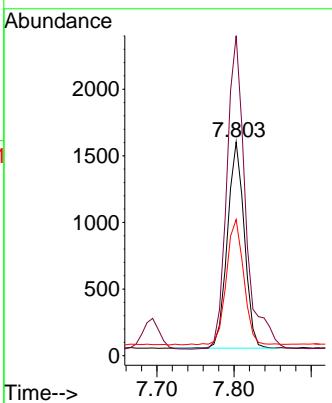




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.803 min Scan# 6  
 Delta R.T. -0.014 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

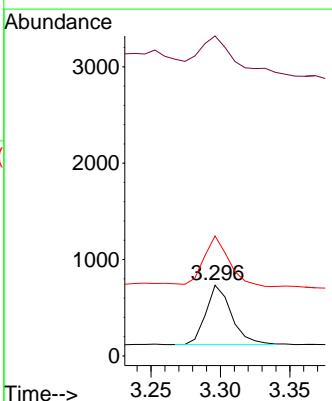
Instrument : BNA\_N  
 ClientSampleId : PB166297BSD

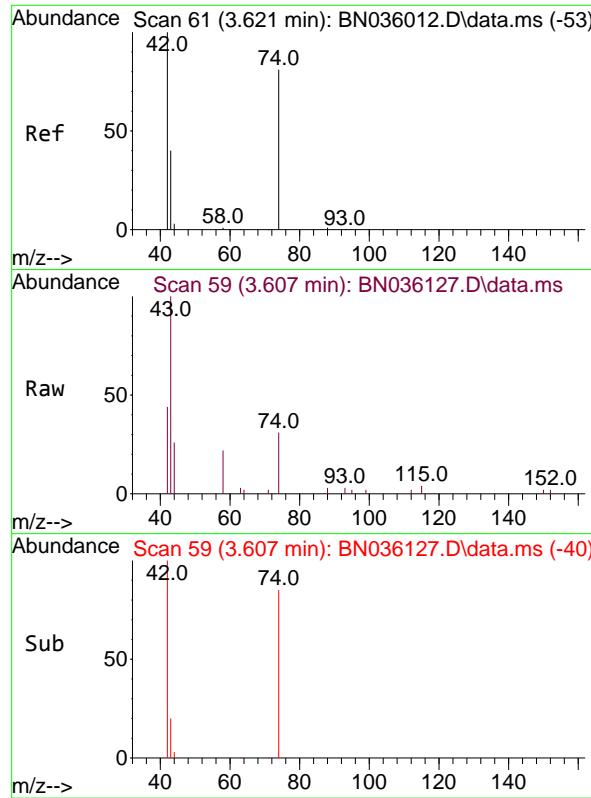
Tgt Ion:152 Resp: 2359  
 Ion Ratio Lower Upper  
 152 100  
 150 149.8 117.4 176.2  
 115 63.7 51.0 76.4



#2  
 1,4-Dioxane  
 Concen: 0.302 ng  
 RT: 3.296 min Scan# 16  
 Delta R.T. -0.014 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Tgt Ion: 88 Resp: 796  
 Ion Ratio Lower Upper  
 88 100  
 43 82.9 38.5 57.7#  
 58 83.5 66.6 99.8

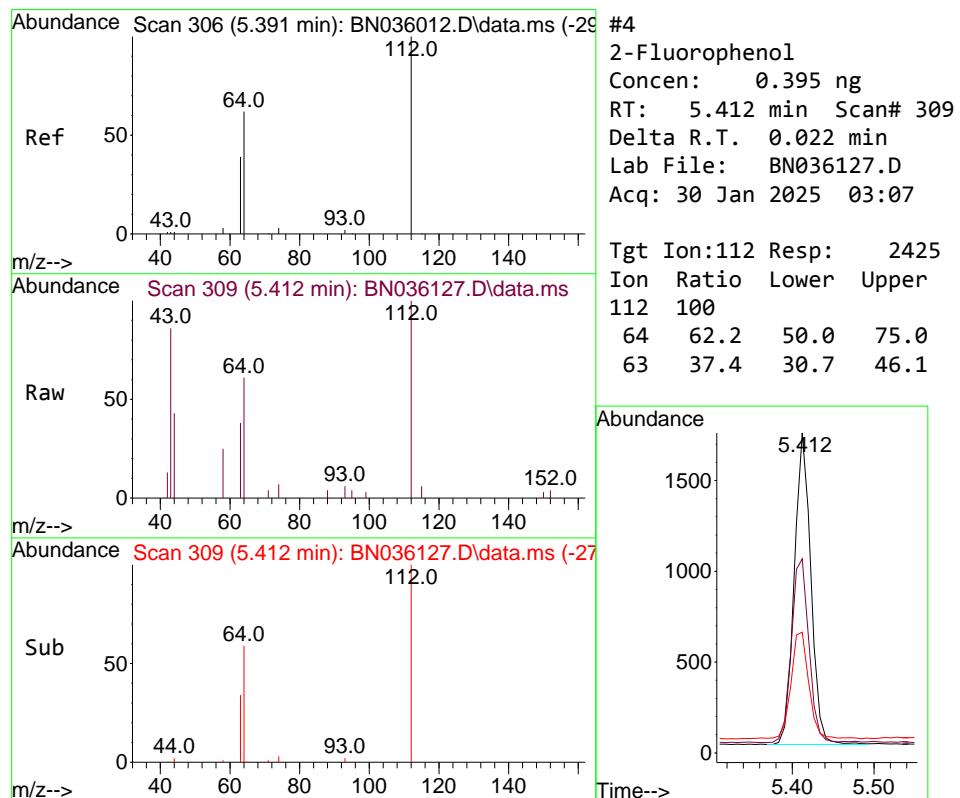
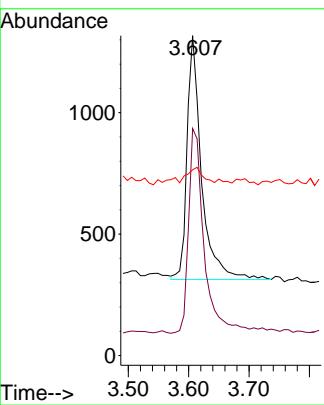




#3  
n-Nitrosodimethylamine  
Concen: 0.350 ng  
RT: 3.607 min Scan# 5  
Delta R.T. -0.014 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

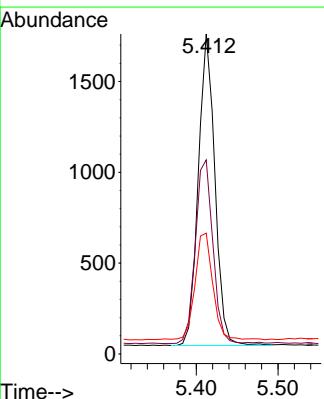
Instrument : BNA\_N  
ClientSampleId : PB166297BSD

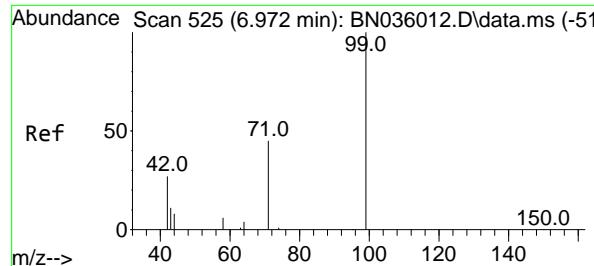
Tgt Ion: 42 Resp: 1674  
Ion Ratio Lower Upper  
42 100  
74 89.1 58.1 87.1#  
44 10.8 6.2 9.4#



#4  
2-Fluorophenol  
Concen: 0.395 ng  
RT: 5.412 min Scan# 309  
Delta R.T. 0.022 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

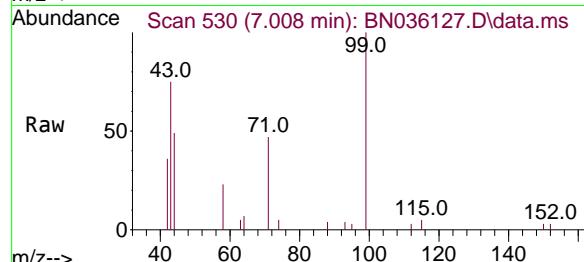
Tgt Ion: 112 Resp: 2425  
Ion Ratio Lower Upper  
112 100  
64 62.2 50.0 75.0  
63 37.4 30.7 46.1



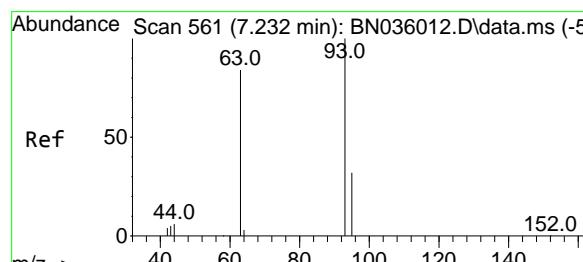
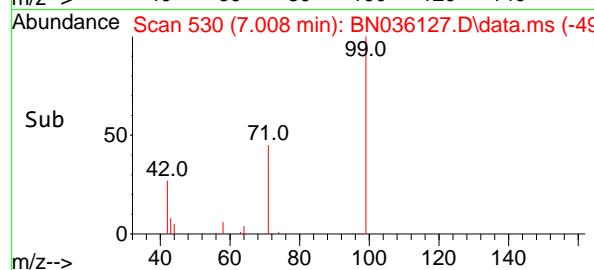
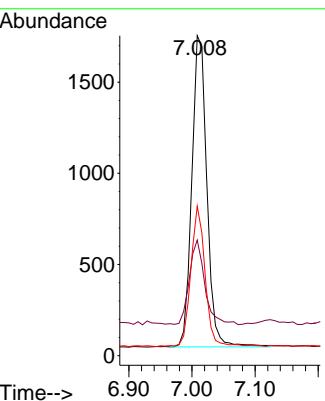


#5  
 Phenol-d6  
 Concen: 0.393 ng  
 RT: 7.008 min Scan# 5  
 Delta R.T. 0.036 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

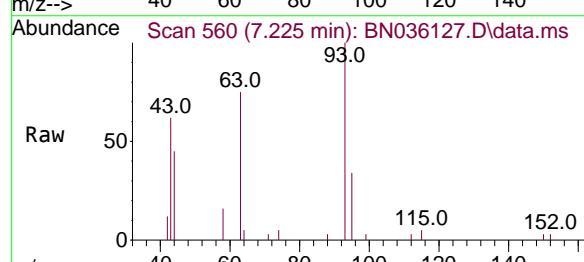
Instrument : BNA\_N  
 ClientSampleId : PB166297BSD



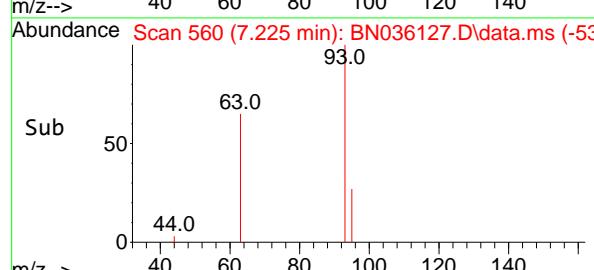
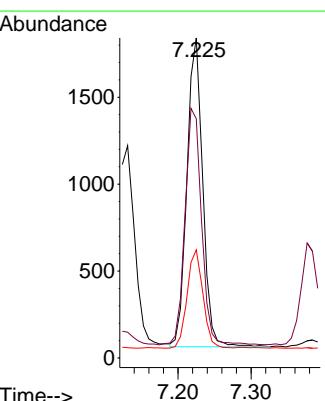
Tgt Ion: 99 Resp: 2832  
 Ion Ratio Lower Upper  
 99 100  
 42 27.4 26.8 40.2  
 71 42.7 36.6 55.0

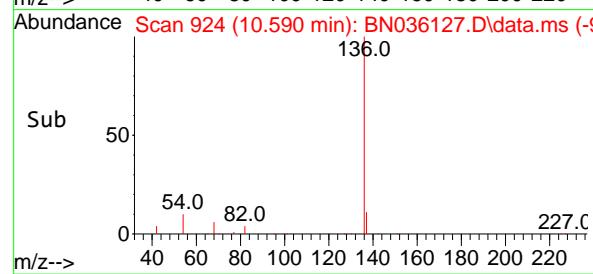
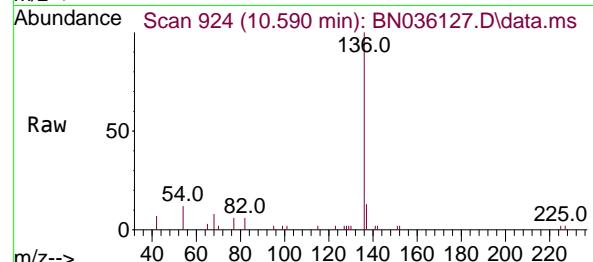
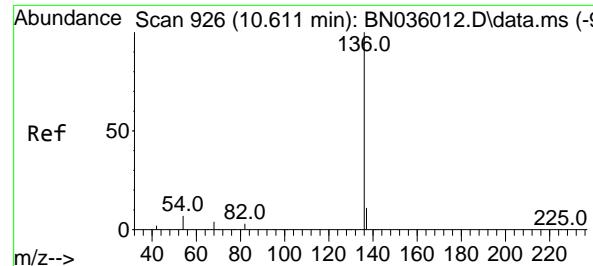


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.459 ng  
 RT: 7.225 min Scan# 560  
 Delta R.T. -0.007 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07



Tgt Ion: 93 Resp: 2660  
 Ion Ratio Lower Upper  
 93 100  
 63 80.2 65.8 98.6  
 95 32.0 25.8 38.6





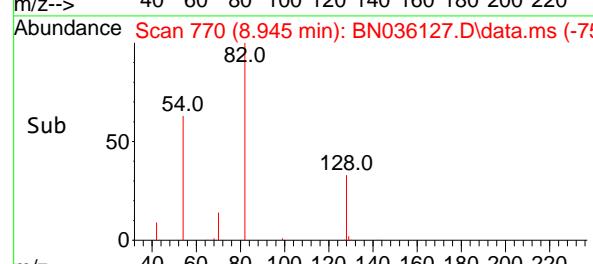
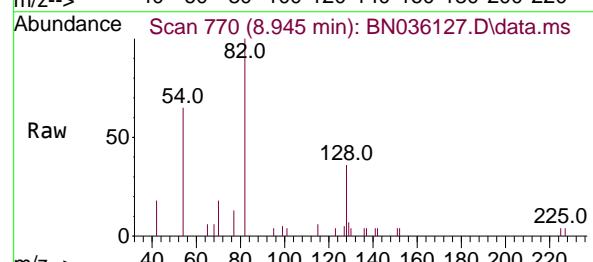
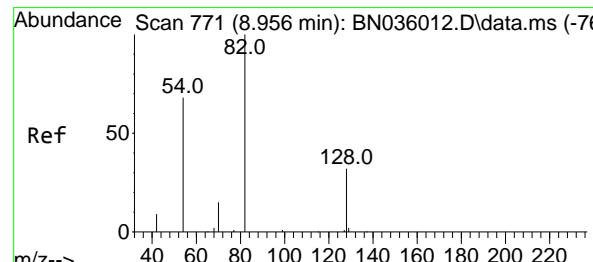
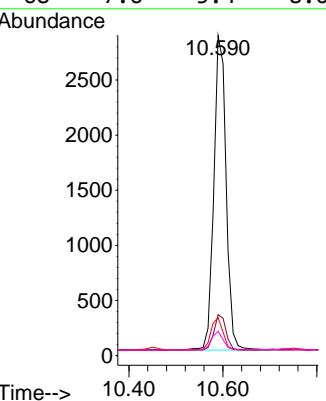
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.590 min Scan# 9  
 Delta R.T. -0.021 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB166297BSD

Tgt Ion:136 Resp: 5174

Ion Ratio Lower Upper

136	100
137	12.8
54	11.9
68	7.6
	10.4 15.6
	7.7 11.5#
	5.4 8.0

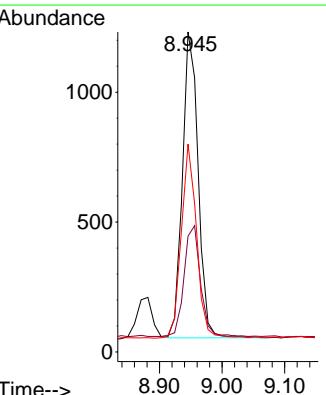


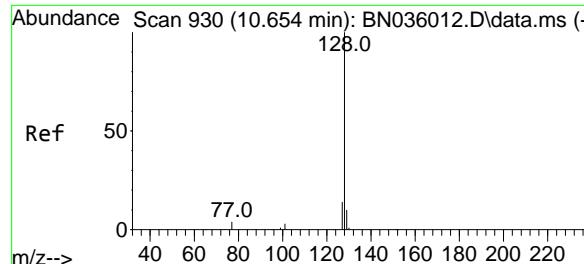
#8  
 Nitrobenzene-d5  
 Concen: 0.422 ng  
 RT: 8.945 min Scan# 770  
 Delta R.T. -0.011 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Tgt Ion: 82 Resp: 2059

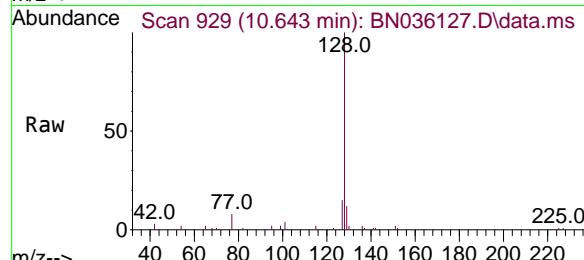
Ion Ratio Lower Upper

82	100
128	36.2
54	64.9
	28.8 43.2
	55.8 83.8

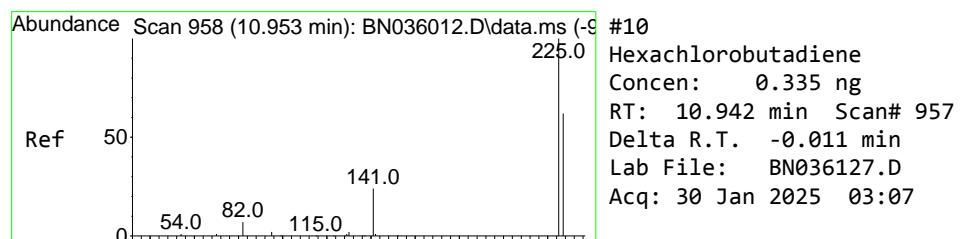
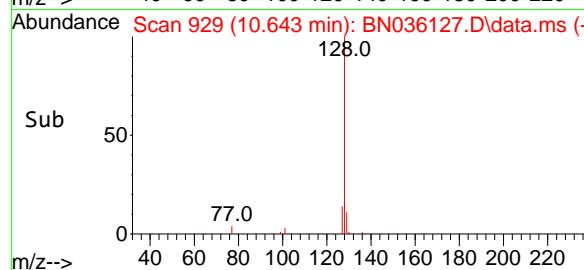
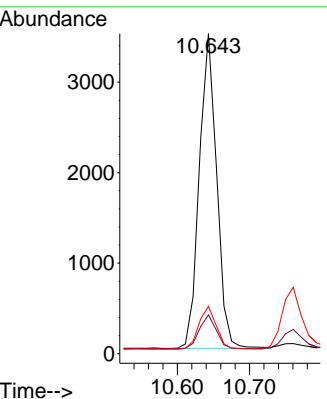




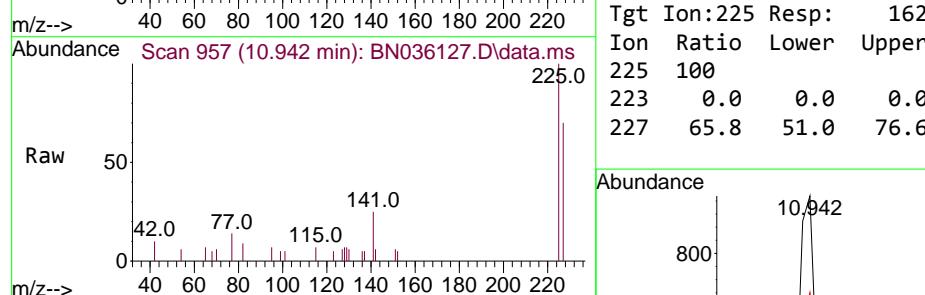
#9  
Naphthalene  
Concen: 0.388 ng  
RT: 10.643 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.011 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07  
ClientSampleId : PB166297BSD



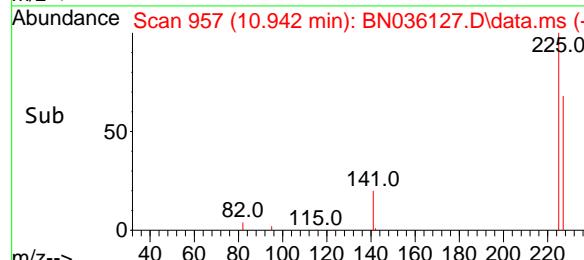
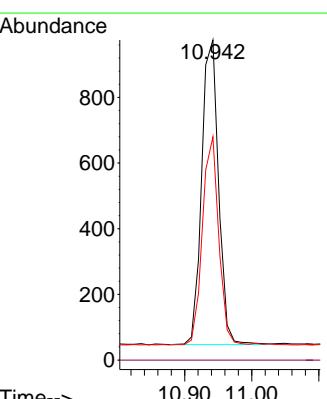
Tgt Ion:128 Resp: 5830  
Ion Ratio Lower Upper  
128 100  
129 12.1 9.4 14.2  
127 14.8 12.6 19.0

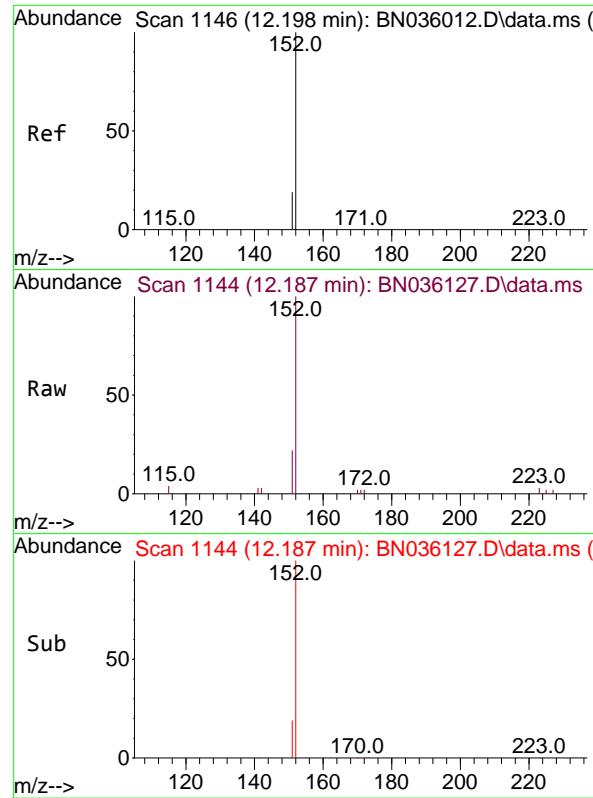


#10  
Hexachlorobutadiene  
Concen: 0.335 ng  
RT: 10.942 min Scan# 957  
Delta R.T. -0.011 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07



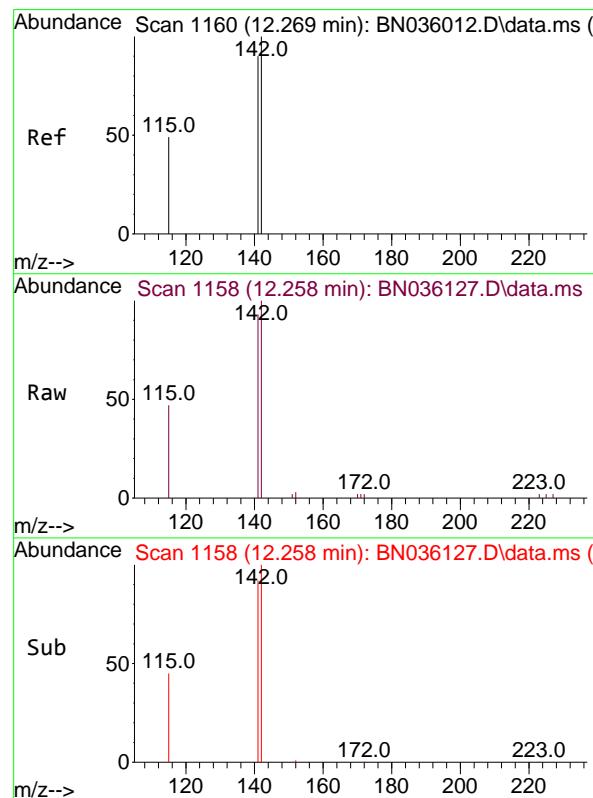
Tgt Ion:225 Resp: 1628  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.8 51.0 76.6



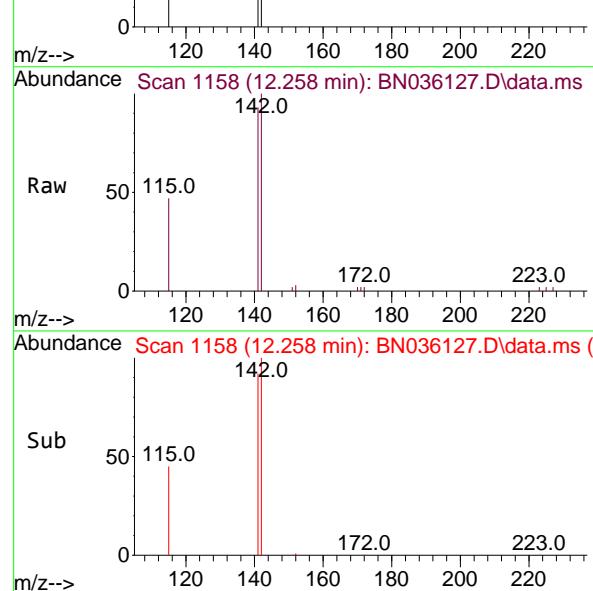


#11  
2-Methylnaphthalene-d10  
Concen: 0.573 ng  
RT: 12.187 min Scan# 1144  
Delta R.T. -0.010 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

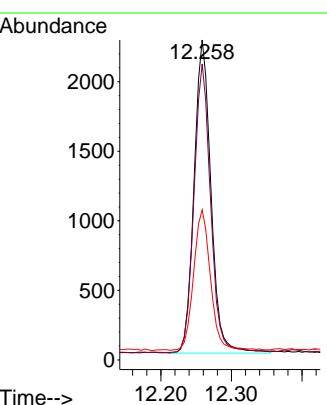
Instrument : BNA\_N  
ClientSampleId : PB166297BSD

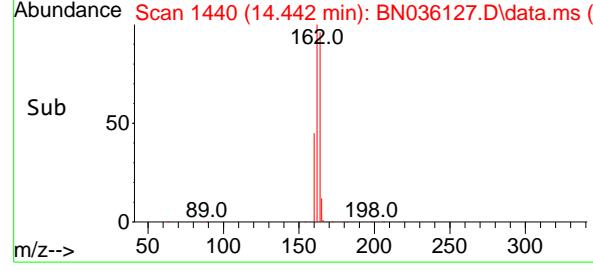
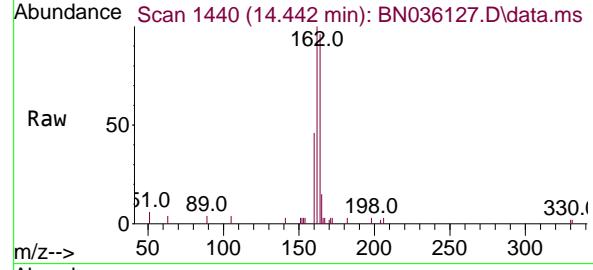
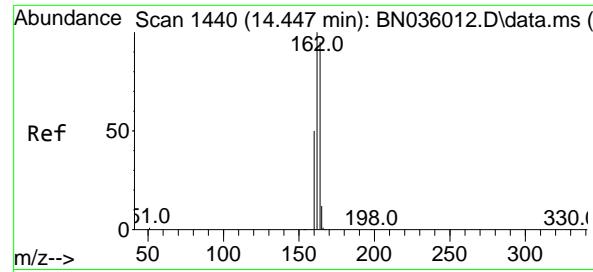


#12  
2-Methylnaphthalene  
Concen: 0.401 ng  
RT: 12.258 min Scan# 1158  
Delta R.T. -0.010 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07



Tgt Ion:142 Resp: 3738  
Ion Ratio Lower Upper  
142 100  
141 92.5 72.2 108.2  
115 47.0 41.2 61.8

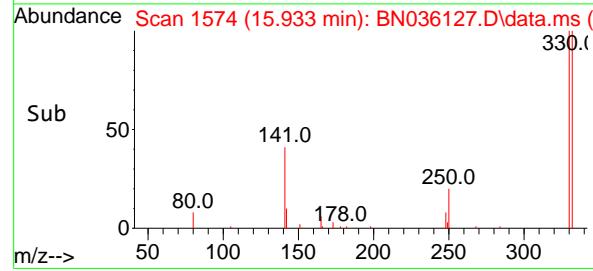
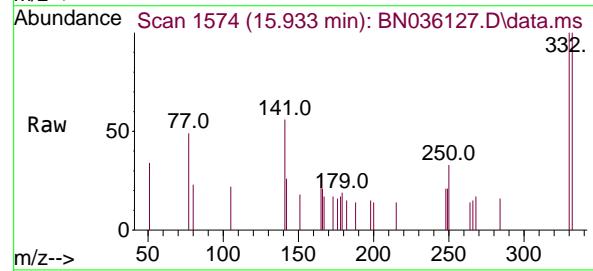
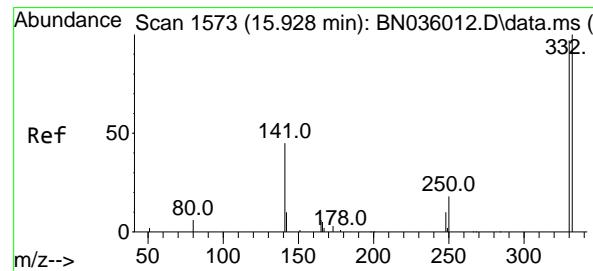
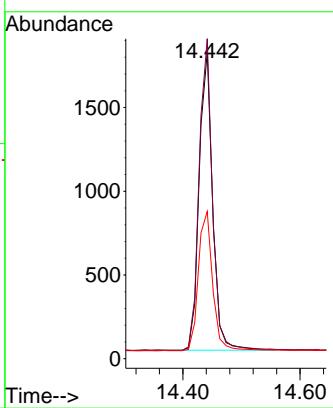




#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.442 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07Instrument :  
BNA\_N  
ClientSampleId :  
PB166297BSD

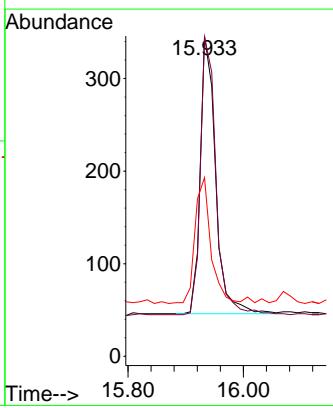
Tgt Ion:164 Resp: 2851  
Ion Ratio Lower Upper  
164 100  
162 104.4 84.1 126.1  
160 48.0 43.8 65.8

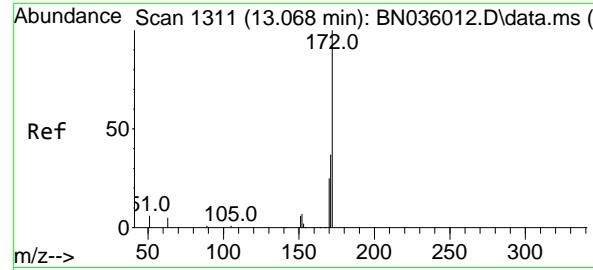


#14

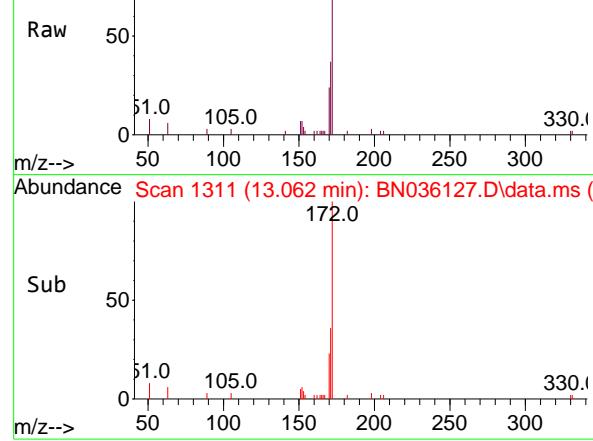
2,4,6-Tribromophenol  
Concen: 0.303 ng  
RT: 15.933 min Scan# 1574  
Delta R.T. 0.005 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Tgt Ion:330 Resp: 554  
Ion Ratio Lower Upper  
330 100  
332 101.4 81.0 121.4  
141 46.9 36.7 55.1





Abundance Scan 1311 (13.062 min): BN036127.D\data.ms (-)



#15

2-Fluorobiphenyl

Concen: 0.373 ng

RT: 13.062 min Scan# 1

Delta R.T. -0.006 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

Instrument:

BNA\_N

ClientSampleId :

PB166297BSD

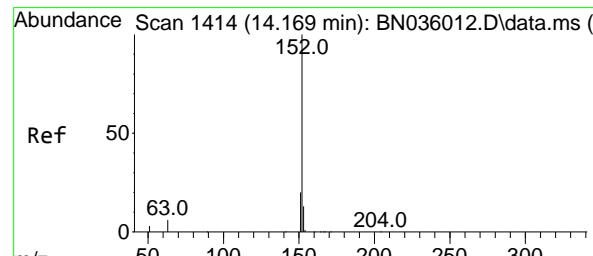
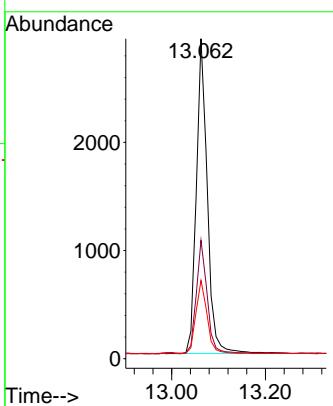
Tgt Ion:172 Resp: 4749

Ion Ratio Lower Upper

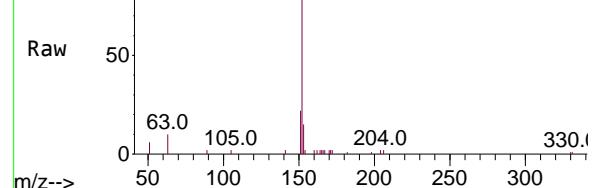
172 100

171 37.0 30.9 46.3

170 24.5 21.2 31.8



Abundance Scan 1413 (14.153 min): BN036127.D\data.ms (-)



#16

Acenaphthylene

Concen: 0.408 ng

RT: 14.153 min Scan# 1413

Delta R.T. -0.016 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

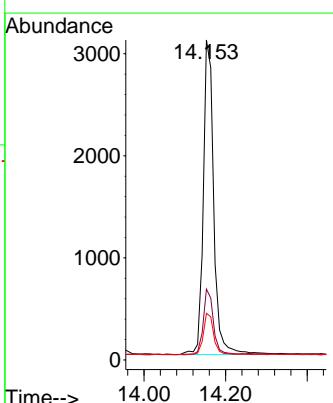
Tgt Ion:152 Resp: 5520

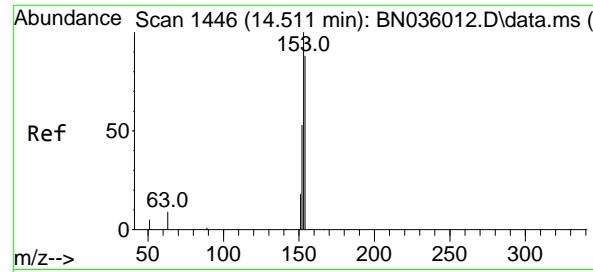
Ion Ratio Lower Upper

152 100

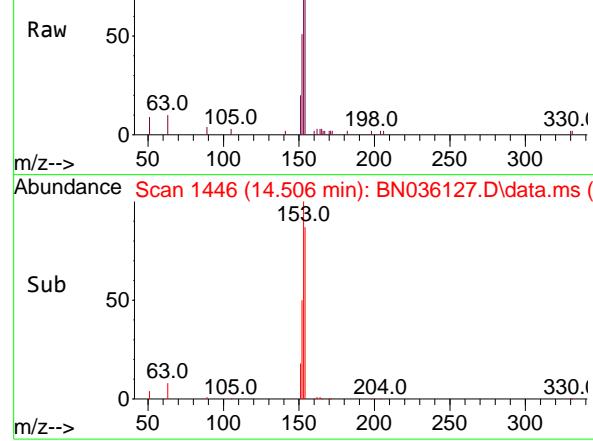
151 19.9 16.2 24.2

153 13.2 10.4 15.6





Abundance Scan 1446 (14.506 min): BN036127.D\data.ms (-)



#17

Acenaphthene

Concen: 0.392 ng

RT: 14.506 min Scan# 1446

Delta R.T. -0.006 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

Instrument:

BNA\_N

ClientSampleId :

PB166297BSD

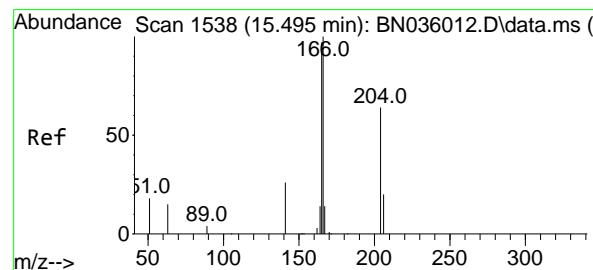
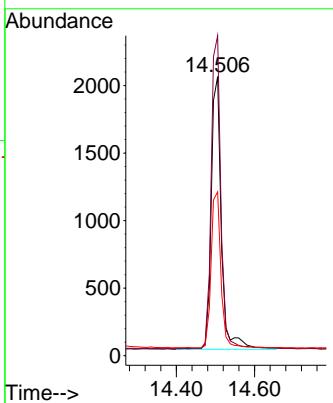
Tgt Ion:154 Resp: 3625

Ion Ratio Lower Upper

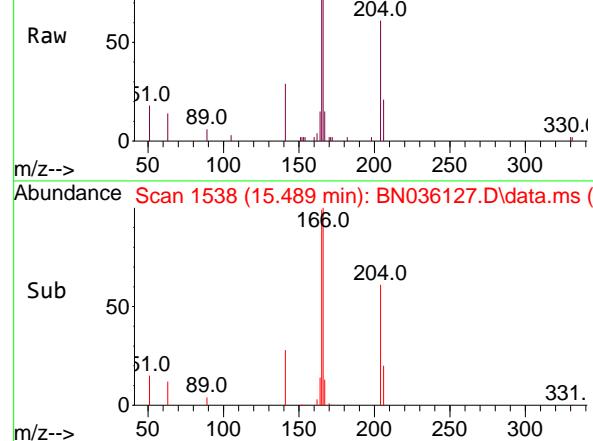
154 100

153 110.7 88.9 133.3

152 55.6 48.1 72.1



Abundance Scan 1538 (15.489 min): BN036127.D\data.ms (-)



#18

Fluorene

Concen: 0.412 ng

RT: 15.489 min Scan# 1538

Delta R.T. -0.006 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

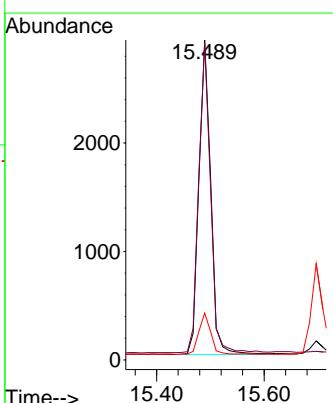
Tgt Ion:166 Resp: 4779

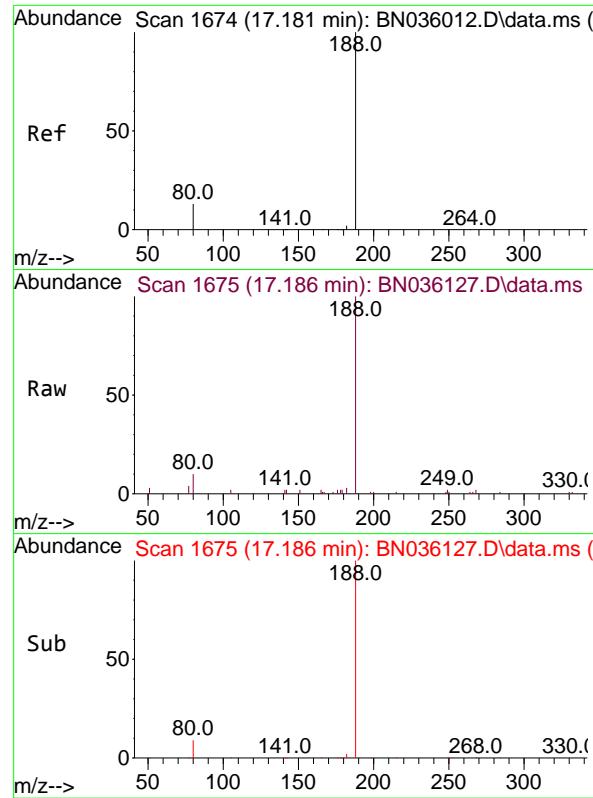
Ion Ratio Lower Upper

166 100

165 97.7 78.5 117.7

167 12.6 10.7 16.1





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.186 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

Instrument :

BNA\_N

ClientSampleId :

PB166297BSD

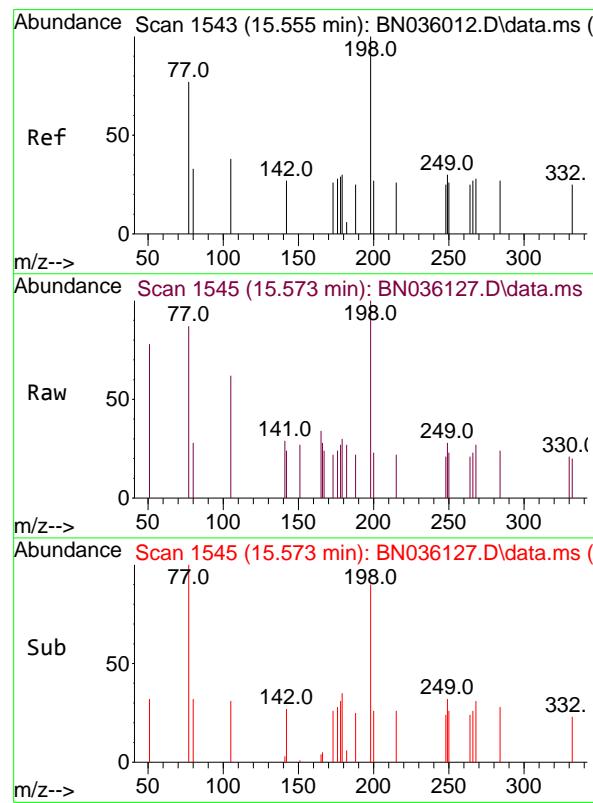
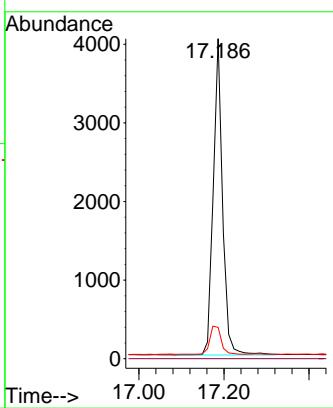
Tgt Ion:188 Resp: 6109

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.8 12.3 18.5#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.265 ng

RT: 15.573 min Scan# 1545

Delta R.T. 0.017 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

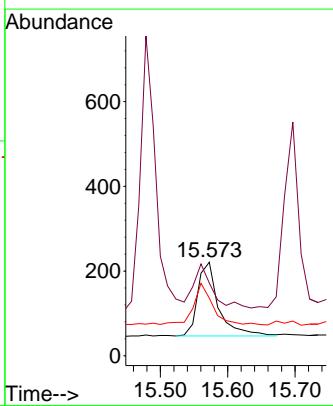
Tgt Ion:198 Resp: 378

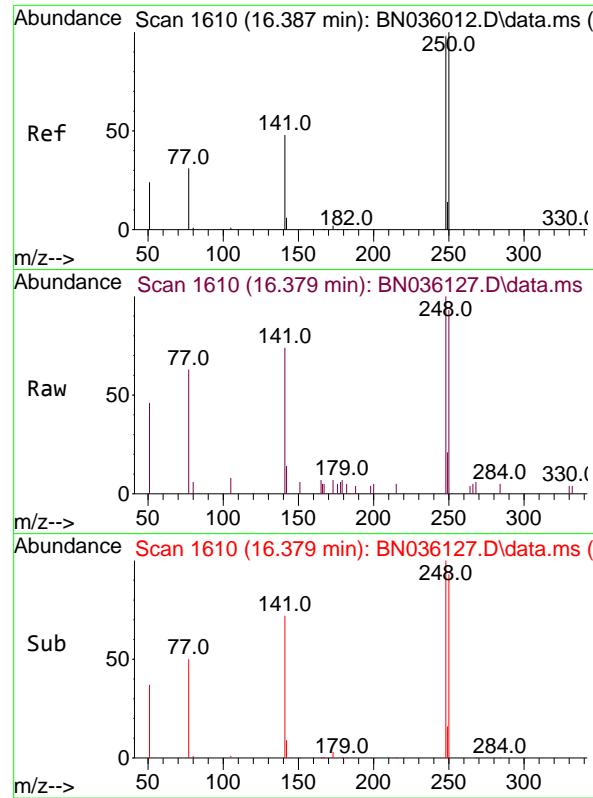
Ion Ratio Lower Upper

198 100

51 77.8 68.1 102.1

105 61.5 46.5 69.7

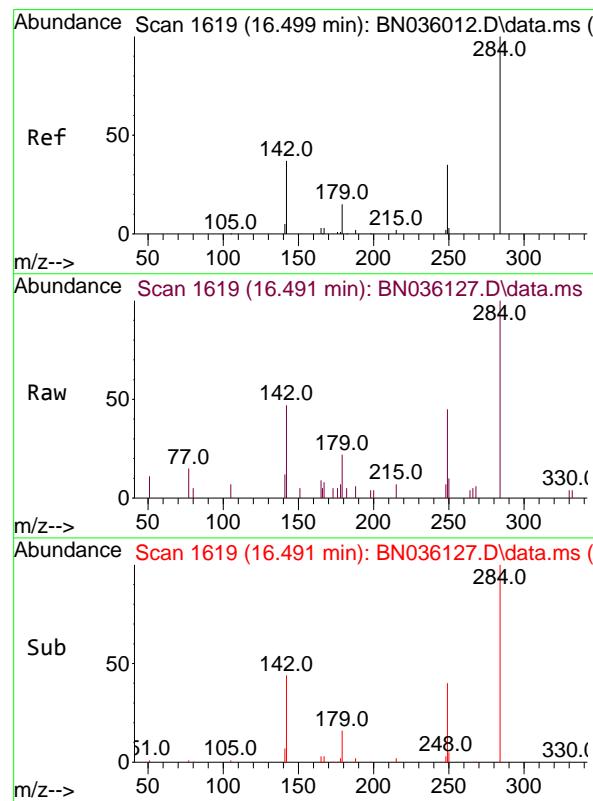
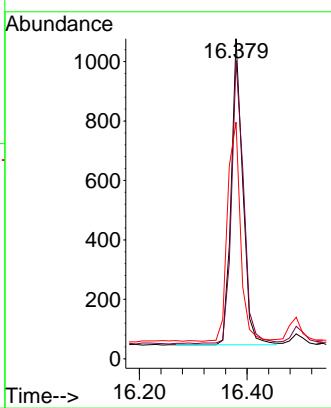




#21  
 4-Bromophenyl-phenylether  
 Concen: 0.353 ng  
 RT: 16.379 min Scan# 1  
 Delta R.T. -0.007 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

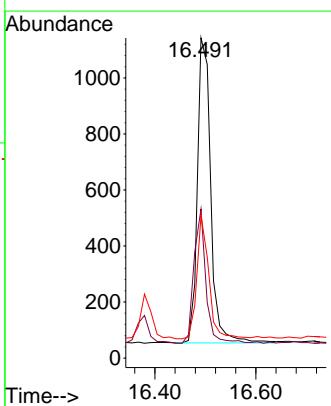
Instrument : BNA\_N  
 ClientSampleId : PB166297BSD

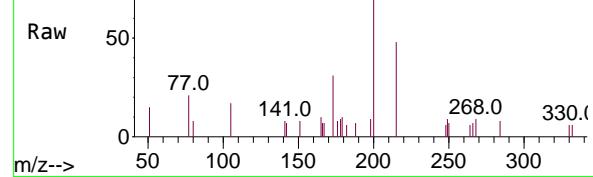
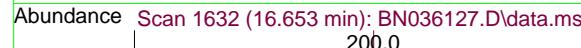
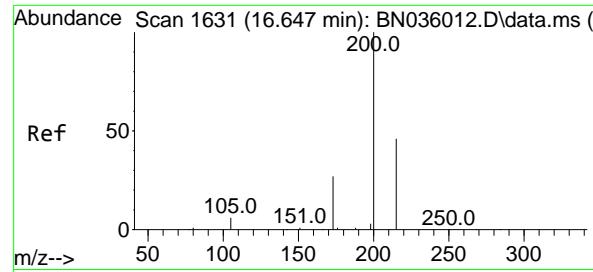
Tgt Ion:248 Resp: 1534  
 Ion Ratio Lower Upper  
 248 100  
 250 93.2 81.5 122.3  
 141 73.9 41.8 62.6#



#22  
 Hexachlorobenzene  
 Concen: 0.351 ng  
 RT: 16.491 min Scan# 1619  
 Delta R.T. -0.007 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Tgt Ion:284 Resp: 2010  
 Ion Ratio Lower Upper  
 284 100  
 142 39.7 33.6 50.4  
 249 36.2 28.8 43.2



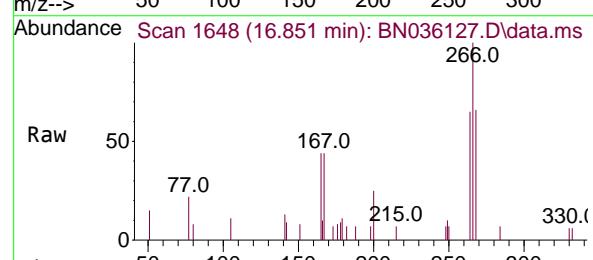
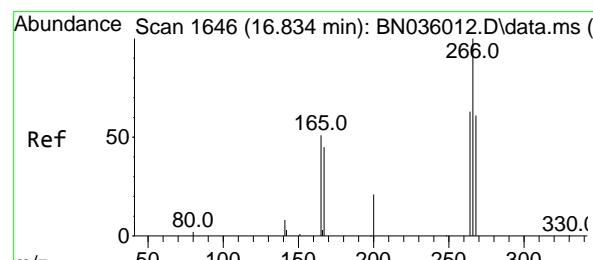
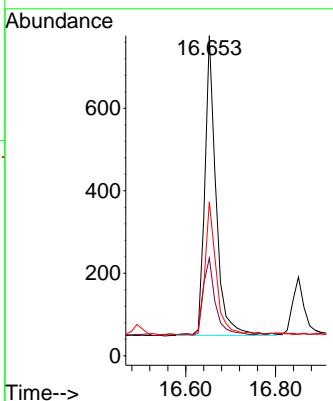


#23  
Atrazine  
Concen: 0.399 ng  
RT: 16.653 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Instrument : BNA\_N  
ClientSampleId : PB166297BSD

Tgt Ion:200 Resp: 1254

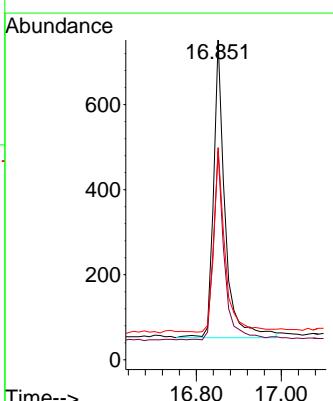
Ion	Ratio	Lower	Upper
200	100		
173	30.5	26.6	40.0
215	48.1	40.6	61.0

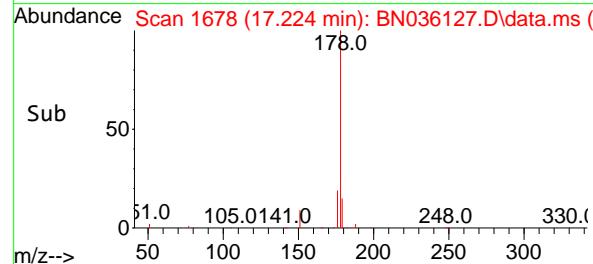
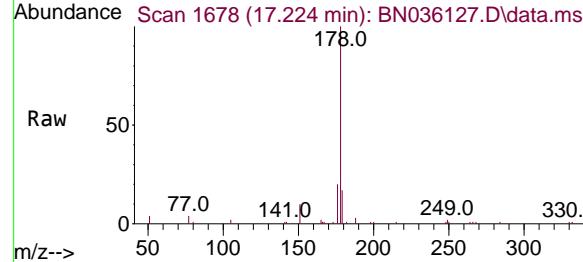
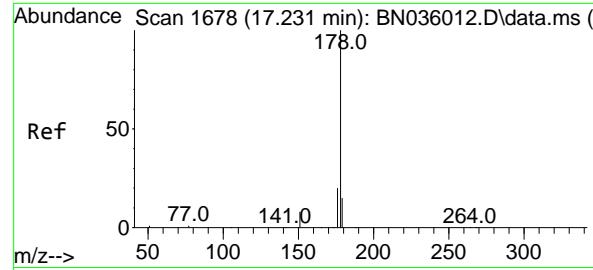


#24  
Pentachlorophenol  
Concen: 0.528 ng  
RT: 16.851 min Scan# 1648  
Delta R.T. 0.017 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Tgt Ion:266 Resp: 1309

Ion	Ratio	Lower	Upper
266	100		
264	59.4	48.2	72.2
268	60.5	51.6	77.4





#25

Phenanthrene

Concen: 0.396 ng

RT: 17.224 min Scan# 1

Delta R.T. -0.007 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

Instrument:

BNA\_N

ClientSampleId :

PB166297BSD

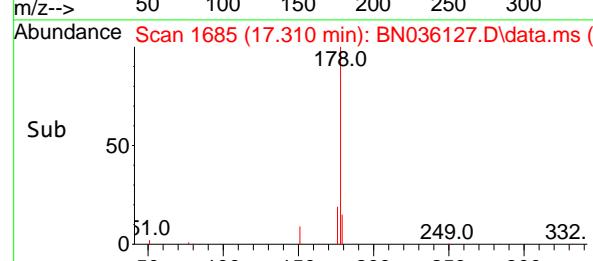
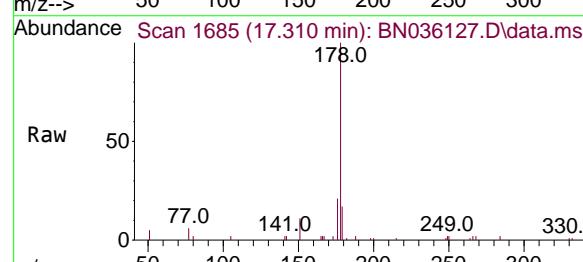
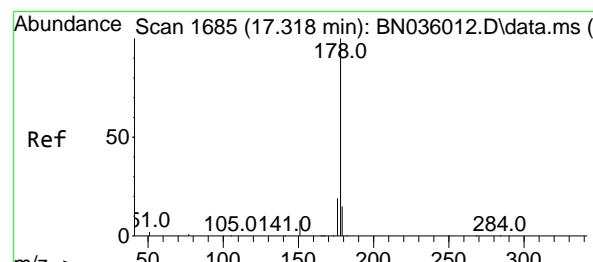
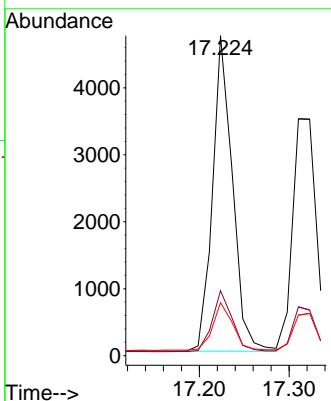
Tgt Ion:178 Resp: 7274

Ion Ratio Lower Upper

178 100

176 19.7 16.0 24.0

179 15.5 12.4 18.6



#26

Anthracene

Concen: 0.393 ng

RT: 17.310 min Scan# 1685

Delta R.T. -0.007 min

Lab File: BN036127.D

Acq: 30 Jan 2025 03:07

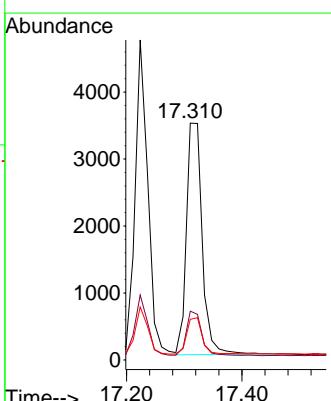
Tgt Ion:178 Resp: 6568

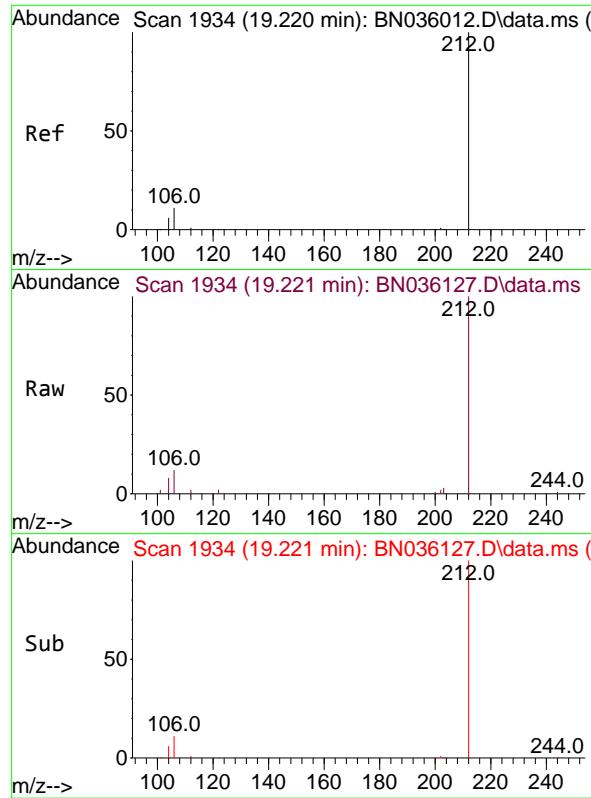
Ion Ratio Lower Upper

178 100

176 18.8 15.4 23.2

179 15.7 12.0 18.0

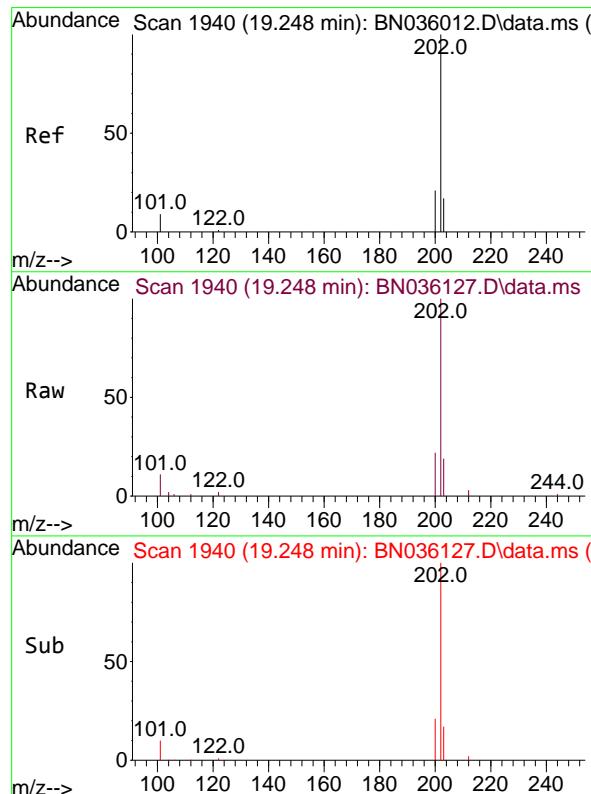
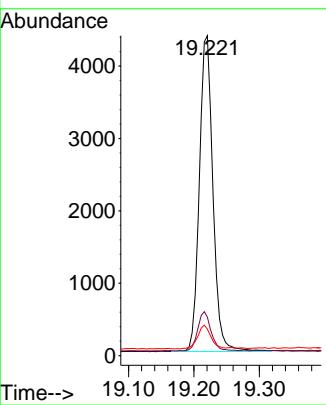




#27  
 Fluoranthene-d10  
 Concen: 0.398 ng  
 RT: 19.221 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

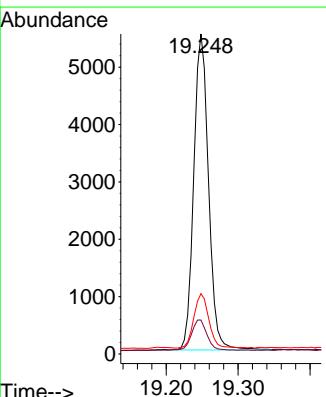
Instrument : BNA\_N  
 ClientSampleId : PB166297BSD

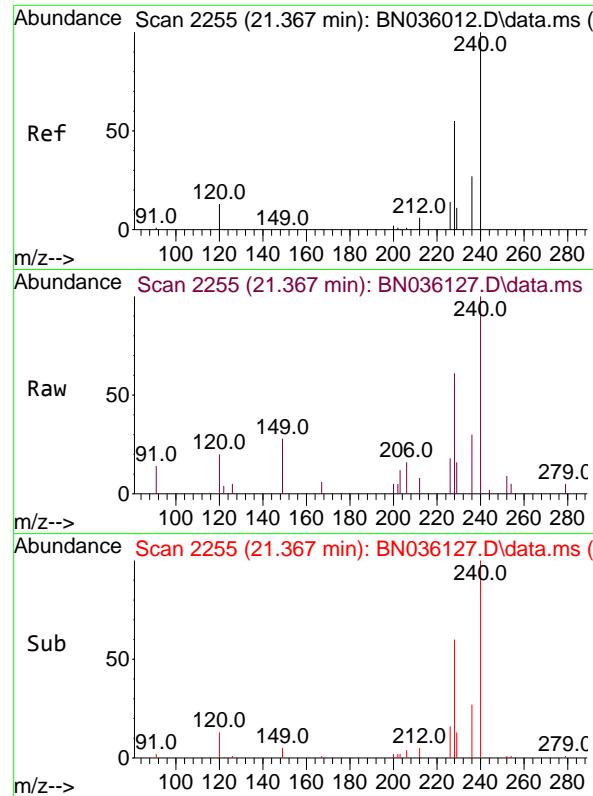
Tgt Ion:212 Resp: 6292  
 Ion Ratio Lower Upper  
 212 100  
 106 12.1 9.7 14.5  
 104 7.4 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.364 ng  
 RT: 19.248 min Scan# 1940  
 Delta R.T. 0.000 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Tgt Ion:202 Resp: 7852  
 Ion Ratio Lower Upper  
 202 100  
 101 10.0 7.6 11.4  
 203 17.4 13.8 20.6

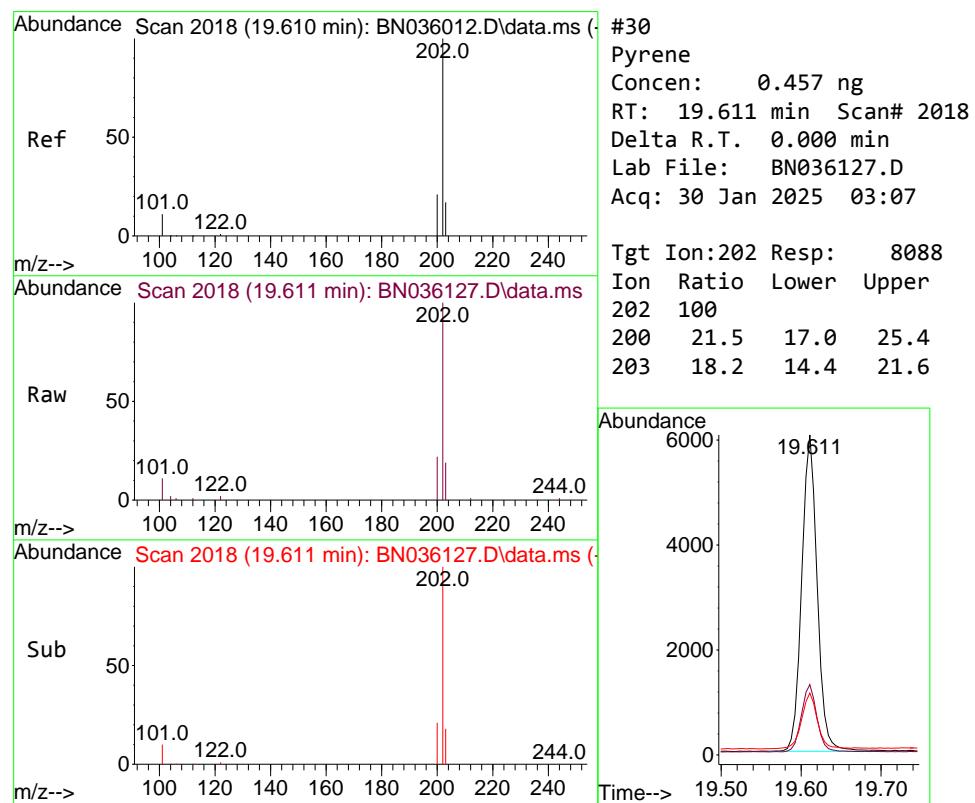
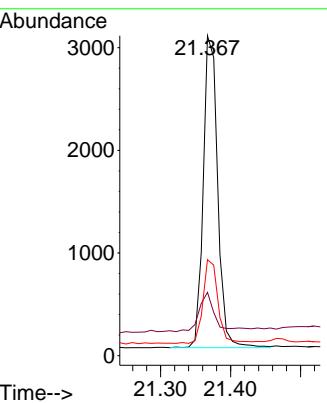




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.367 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

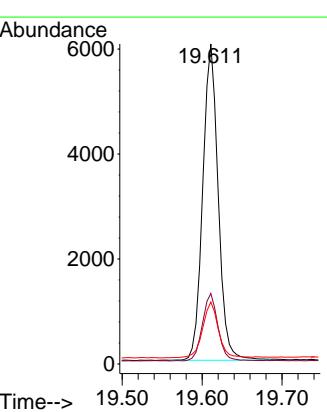
Instrument : BNA\_N  
ClientSampleId : PB166297BSD

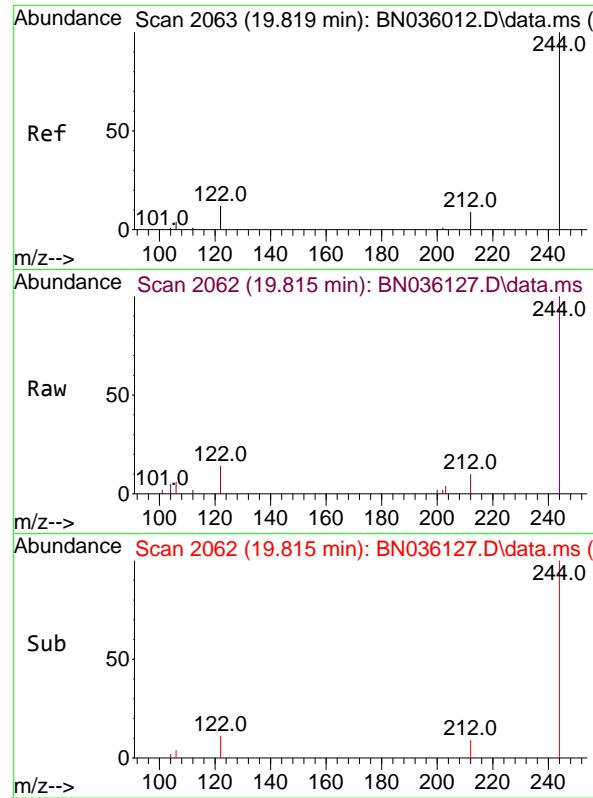
Tgt Ion:240 Resp: 4365  
Ion Ratio Lower Upper  
240 100  
120 19.8 13.9 20.9  
236 30.0 23.7 35.5



#30  
Pyrene  
Concen: 0.457 ng  
RT: 19.611 min Scan# 2018  
Delta R.T. 0.000 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Tgt Ion:202 Resp: 8088  
Ion Ratio Lower Upper  
202 100  
200 21.5 17.0 25.4  
203 18.2 14.4 21.6

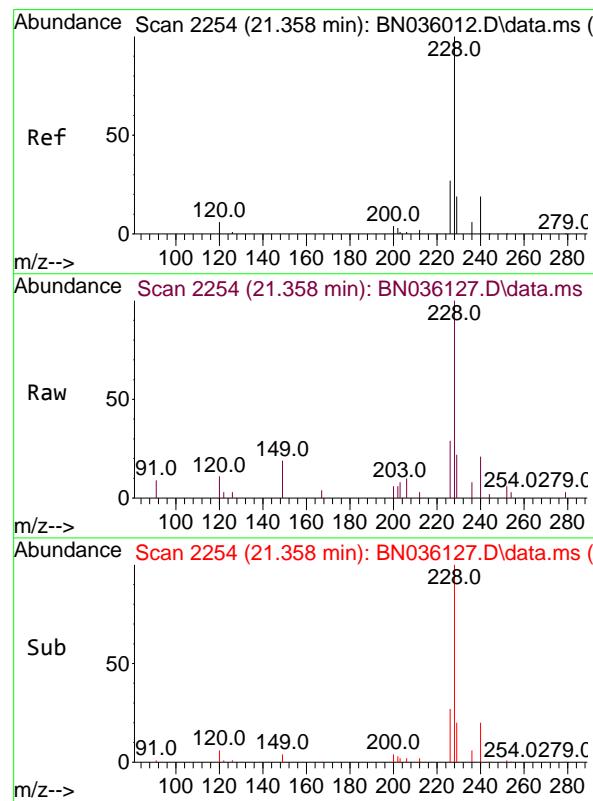
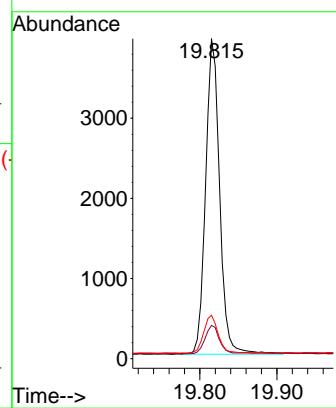




#31  
Terphenyl-d14  
Concen: 0.549 ng  
RT: 19.815 min Scan# 2  
Delta R.T. -0.004 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

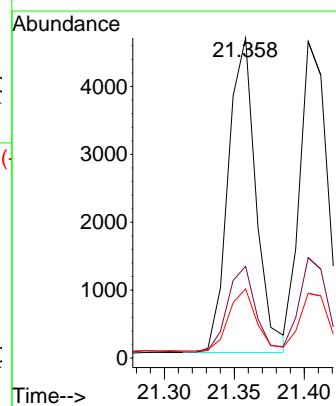
Instrument : BNA\_N  
ClientSampleId : PB166297BSD

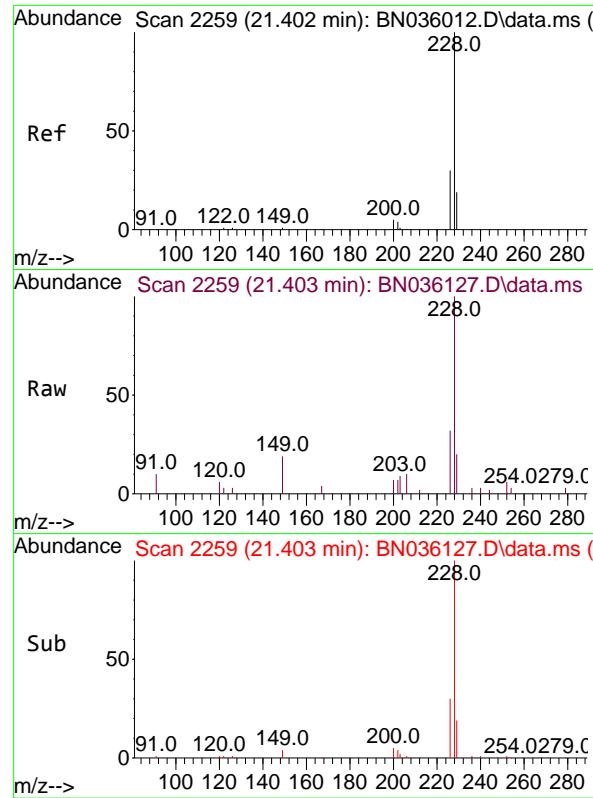
Tgt Ion:244 Resp: 4977  
Ion Ratio Lower Upper  
244 100  
212 10.4 9.1 13.7  
122 13.5 11.3 16.9



#32  
Benzo(a)anthracene  
Concen: 0.404 ng  
RT: 21.358 min Scan# 2254  
Delta R.T. 0.000 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

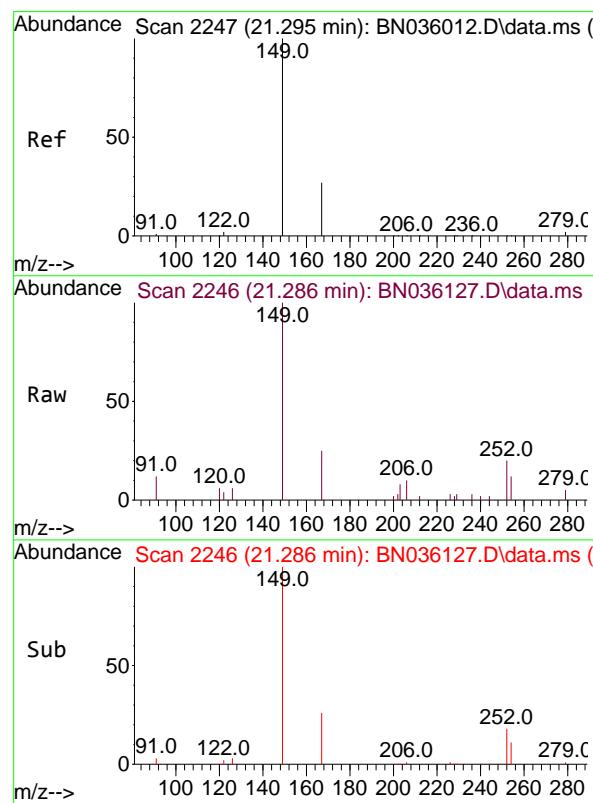
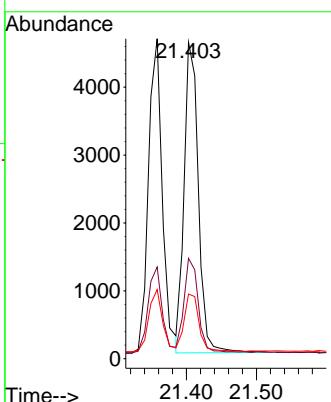
Tgt Ion:228 Resp: 6389  
Ion Ratio Lower Upper  
228 100  
226 28.7 22.6 34.0  
229 21.6 16.5 24.7





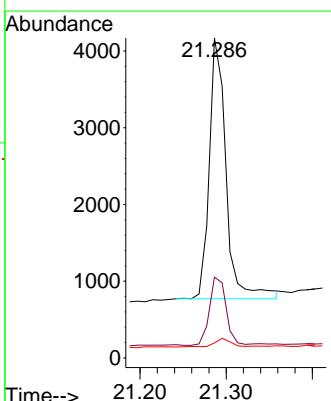
#33  
Chrysene  
Concen: 0.399 ng  
RT: 21.403 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07  
ClientSampleId : PB166297BSD

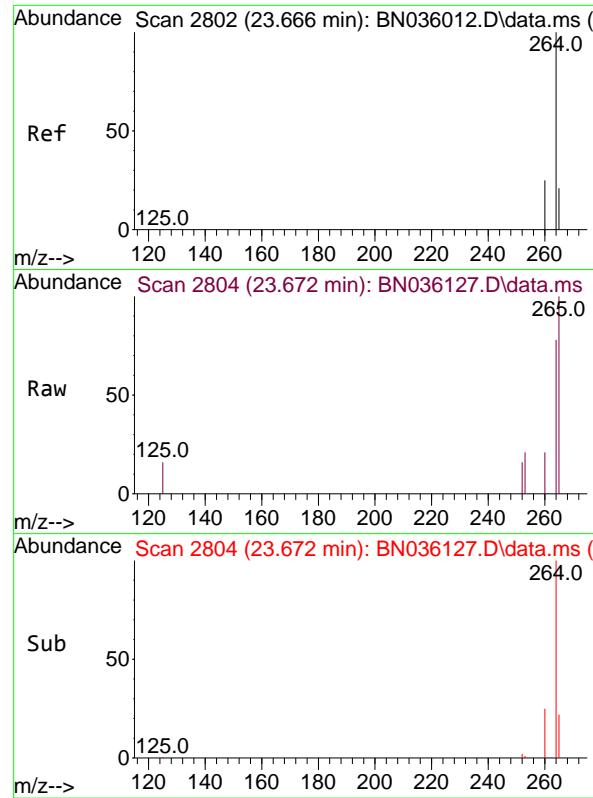
Tgt Ion:228 Resp: 6455  
Ion Ratio Lower Upper  
228 100  
226 31.7 25.3 37.9  
229 20.4 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.530 ng  
RT: 21.286 min Scan# 2246  
Delta R.T. -0.009 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Tgt Ion:149 Resp: 4596  
Ion Ratio Lower Upper  
149 100  
167 26.1 21.9 32.9  
279 3.2 3.0 4.6

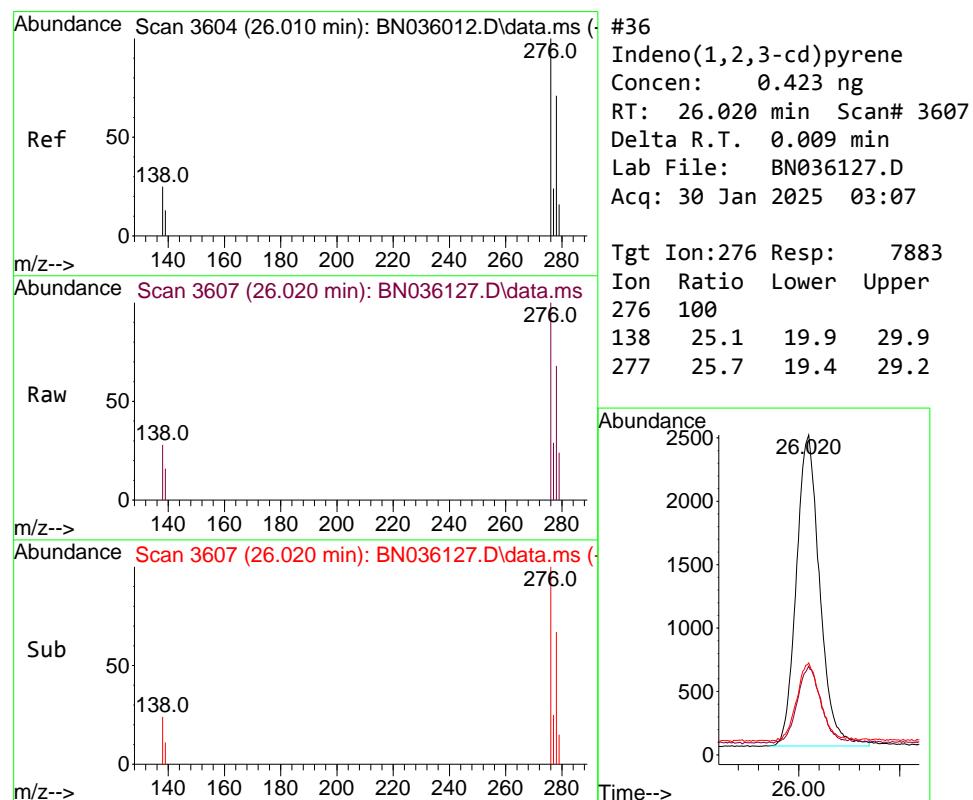
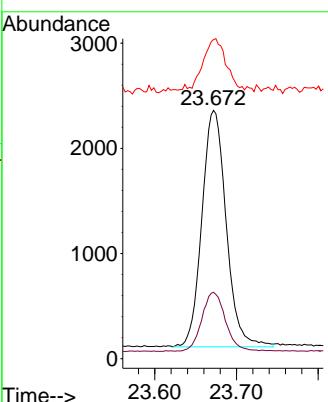




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.672 min Scan# 2  
Delta R.T. 0.006 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

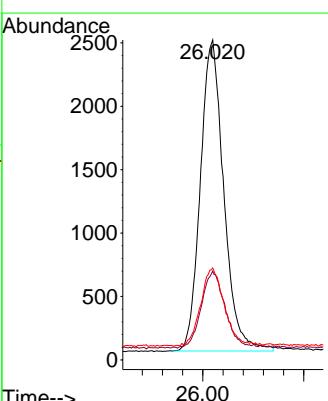
Instrument : BNA\_N  
ClientSampleId : PB166297BSD

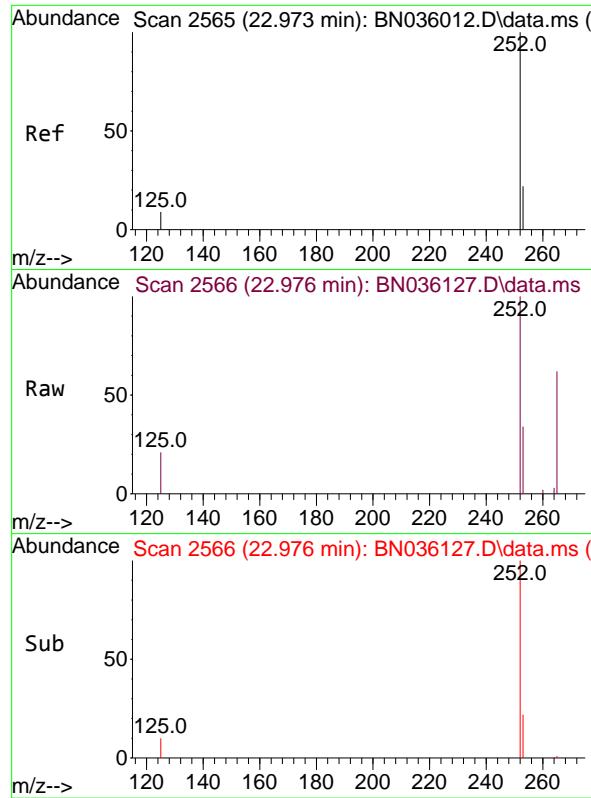
Tgt Ion:264 Resp: 4649  
Ion Ratio Lower Upper  
264 100  
260 26.8 21.8 32.6  
265 128.5 56.6 84.8#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.423 ng  
RT: 26.020 min Scan# 3607  
Delta R.T. 0.009 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Tgt Ion:276 Resp: 7883  
Ion Ratio Lower Upper  
276 100  
138 25.1 19.9 29.9  
277 25.7 19.4 29.2

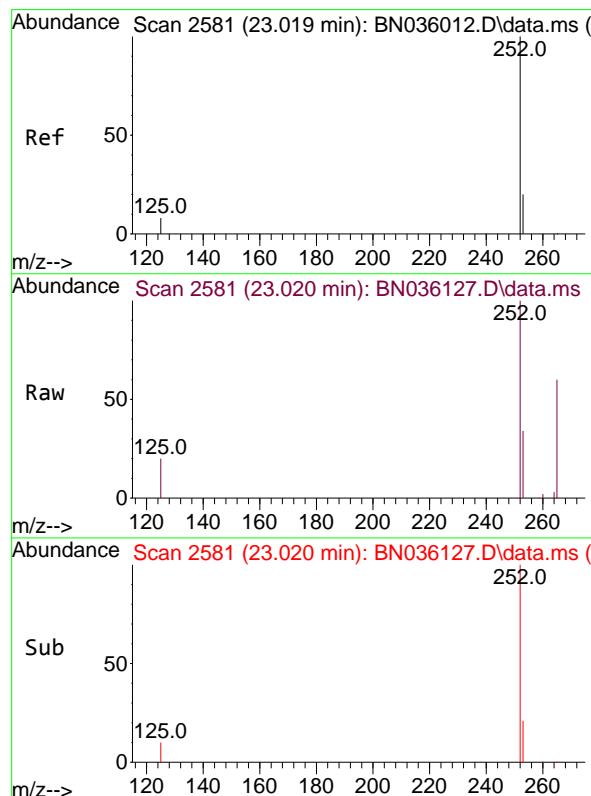
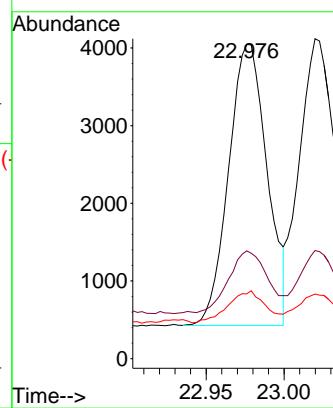




#37  
 Benzo(b)fluoranthene  
 Concen: 0.369 ng  
 RT: 22.976 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

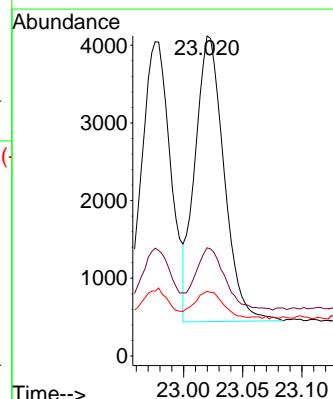
Instrument : BNA\_N  
 ClientSampleId : PB166297BSD

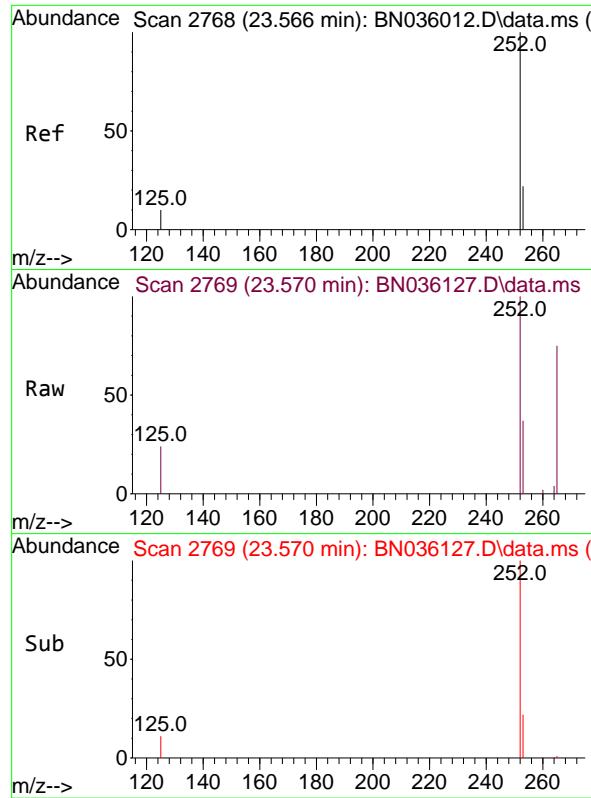
Tgt Ion:252 Resp: 6234  
 Ion Ratio Lower Upper  
 252 100  
 253 34.3 22.5 33.7#  
 125 20.6 11.9 17.9#



#38  
 Benzo(k)fluoranthene  
 Concen: 0.368 ng  
 RT: 23.020 min Scan# 2581  
 Delta R.T. 0.000 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Tgt Ion:252 Resp: 6275  
 Ion Ratio Lower Upper  
 252 100  
 253 33.8 21.3 31.9#  
 125 20.2 11.9 17.9#

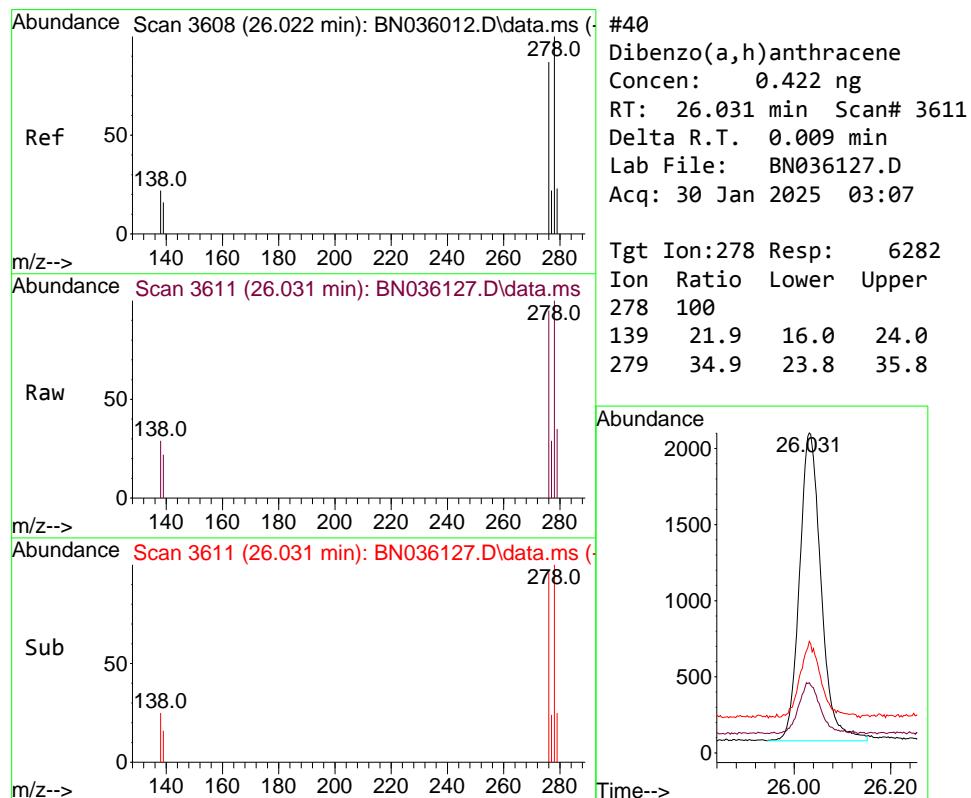
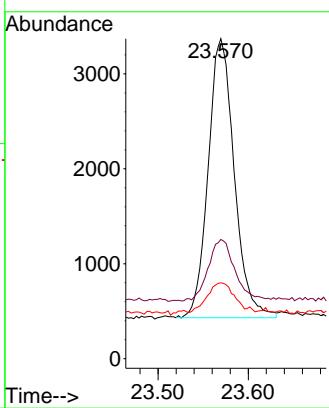




#39  
 Benzo(a)pyrene  
 Concen: 0.410 ng  
 RT: 23.570 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

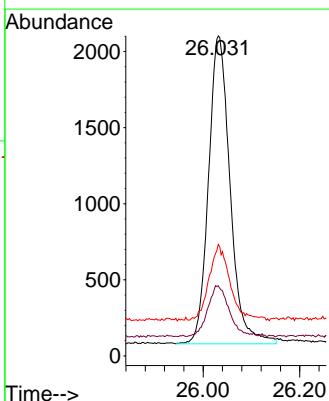
Instrument : BNA\_N  
 ClientSampleId : PB166297BSD

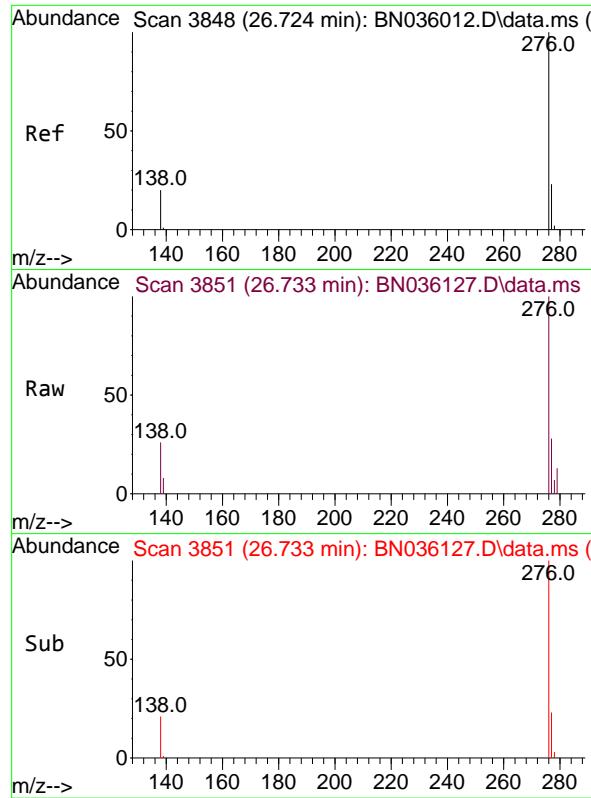
Tgt Ion:252 Resp: 5915  
 Ion Ratio Lower Upper  
 252 100  
 253 37.2 23.8 35.6#  
 125 23.7 14.6 21.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.422 ng  
 RT: 26.031 min Scan# 3611  
 Delta R.T. 0.009 min  
 Lab File: BN036127.D  
 Acq: 30 Jan 2025 03:07

Tgt Ion:278 Resp: 6282  
 Ion Ratio Lower Upper  
 278 100  
 139 21.9 16.0 24.0  
 279 34.9 23.8 35.8

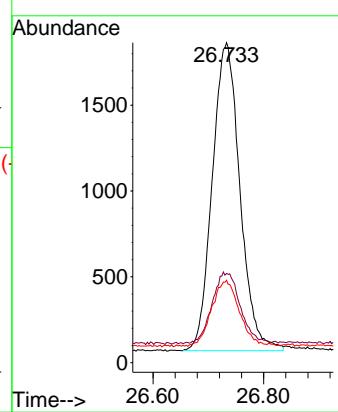




#41  
Benzo(g,h,i)perylene  
Concen: 0.384 ng  
RT: 26.733 min Scan# 3  
Delta R.T. 0.009 min  
Lab File: BN036127.D  
Acq: 30 Jan 2025 03:07

Instrument : BNA\_N  
ClientSampleId : PB166297BSD

Tgt Ion:276 Resp: 6224  
Ion Ratio Lower Upper  
276 100  
277 27.9 21.3 31.9  
138 25.8 19.2 28.8





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### Manual Integration Report

Sequence:	BN012225	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason



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## Manual Integration Report

Sequence:	BN012925	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC0.4	BN036112.D	Benzo(k)fluoranthene	yogesh	1/30/2025 7:52:22 AM	mohammad	1/31/2025 6:40:50 AM	Peak Integrated by Software
Q1199-02	BN036115.D	Naphthalene-d8	yogesh	1/30/2025 7:52:38 AM	mohammad	1/31/2025 6:40:50 AM	Peak Integrated by Software
Q1199-04	BN036117.D	Naphthalene-d8	yogesh	1/30/2025 7:52:58 AM	mohammad	1/31/2025 6:40:50 AM	Peak Integrated by Software
Q1199-05	BN036118.D	Phenanthrene	yogesh	1/30/2025 7:53:05 AM	mohammad	1/31/2025 6:40:50 AM	Peak Integrated by Software



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Fax : 908 789 8922

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN012225**

Review By	yogesh	Review On	1/24/2025 8:01:29 AM
Supervise By	mohammad	Supervise On	1/24/2025 8:08:50 AM
SubDirectory	BN012225	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6717 SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6661 SP6682,1ul/100ul sample SP6684		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036009.D	22 Jan 2025 09:44	RC/JU	Ok
2	SSTDICC0.1	BN036010.D	22 Jan 2025 11:02	RC/JU	Ok
3	SSTDICC0.2	BN036011.D	22 Jan 2025 11:38	RC/JU	Ok
4	SSTDICCC0.4	BN036012.D	22 Jan 2025 12:13	RC/JU	Ok
5	SSTDICC0.8	BN036013.D	22 Jan 2025 12:49	RC/JU	Ok
6	SSTDICC1.6	BN036014.D	22 Jan 2025 13:25	RC/JU	Ok
7	SSTDICC3.2	BN036015.D	22 Jan 2025 14:01	RC/JU	Ok
8	SSTDICC5.0	BN036016.D	22 Jan 2025 14:36	RC/JU	Ok
9	SSTDICCV0.4	BN036017.D	22 Jan 2025 15:53	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN012925**

Review By	yogesh	Review On	1/30/2025 7:53:37 AM
Supervise By	mohammad	Supervise On	1/31/2025 6:40:50 AM
SubDirectory	BN012925	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6717 SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6661 SP6682,1ul/100ul sample SP6684		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036111.D	29 Jan 2025 17:27	RC/JU	Ok
2	SSTDCCC0.4	BN036112.D	29 Jan 2025 18:06	RC/JU	Ok,M
3	PB166297BL	BN036113.D	29 Jan 2025 18:42	RC/JU	Ok
4	Q1199-06	BN036114.D	29 Jan 2025 19:19	RC/JU	Ok
5	Q1199-02	BN036115.D	29 Jan 2025 19:55	RC/JU	Ok,M
6	Q1199-03	BN036116.D	29 Jan 2025 20:31	RC/JU	Ok
7	Q1199-04	BN036117.D	29 Jan 2025 21:07	RC/JU	Ok,M
8	Q1199-05	BN036118.D	29 Jan 2025 21:43	RC/JU	Ok,M
9	Q1173-02	BN036119.D	29 Jan 2025 22:19	RC/JU	Ok,M
10	Q1173-03	BN036120.D	29 Jan 2025 22:55	RC/JU	Ok,M
11	Q1173-04	BN036121.D	29 Jan 2025 23:31	RC/JU	Ok
12	Q1173-05	BN036122.D	30 Jan 2025 00:07	RC/JU	Ok
13	Q1173-06	BN036123.D	30 Jan 2025 00:43	RC/JU	ReRun
14	PB166237BS	BN036124.D	30 Jan 2025 01:19	RC/JU	Ok
15	PB166237BSD	BN036125.D	30 Jan 2025 01:55	RC/JU	Ok
16	PB166297BS	BN036126.D	30 Jan 2025 02:31	RC/JU	Ok
17	PB166297BSD	BN036127.D	30 Jan 2025 03:07	RC/JU	Ok
18	SSTDCCC0.4	BN036128.D	30 Jan 2025 03:43	RC/JU	Ok

M : Manual Integration



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Fax : 908 789 8922

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN012225**

Review By	yogesh	Review On	1/24/2025 8:01:29 AM
Supervise By	mohammad	Supervise On	1/24/2025 8:08:50 AM
SubDirectory	BN012225	HP Acquire Method	BNA_N, 8270_HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6717 SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6661 SP6682,1ul/100ul sample SP6684		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN036009.D	22 Jan 2025 09:44		RC/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN036010.D	22 Jan 2025 11:02		RC/JU	Ok
3	SSTDICC0.2	SSTDICC0.2	BN036011.D	22 Jan 2025 11:38		RC/JU	Ok
4	SSTDICCC0.4	SSTDICCC0.4	BN036012.D	22 Jan 2025 12:13	The Calibration is Good For DOD	RC/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN036013.D	22 Jan 2025 12:49		RC/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN036014.D	22 Jan 2025 13:25		RC/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN036015.D	22 Jan 2025 14:01		RC/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN036016.D	22 Jan 2025 14:36		RC/JU	Ok
9	SSTDICV0.4	ICVBN012225	BN036017.D	22 Jan 2025 15:53		RC/JU	Ok

M : Manual Integration



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Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN012925**

Review By	yogesh	Review On	1/30/2025 7:53:37 AM
Supervise By	mohammad	Supervise On	1/31/2025 6:40:50 AM
SubDirectory	BN012925	HP Acquire Method	BNA_N, 8270_HP Processing Method bn012225
STD. NAME	STD REF.#		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC	SP6661		
Internal Standard/PEM	SP6682,1ul/100ul sample		
ICV/I.BLK	SP6684		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN036111.D	29 Jan 2025 17:27		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036112.D	29 Jan 2025 18:06		RC/JU	Ok,M
3	PB166297BL	PB166297BL	BN036113.D	29 Jan 2025 18:42		RC/JU	Ok
4	Q1199-06	BP-VPB-192-GW-220-2	BN036114.D	29 Jan 2025 19:19		RC/JU	Ok
5	Q1199-02	BP-VPB-192-EB-20250	BN036115.D	29 Jan 2025 19:55		RC/JU	Ok,M
6	Q1199-03	BP-VPB-192-GW-280-2	BN036116.D	29 Jan 2025 20:31		RC/JU	Ok
7	Q1199-04	BP-VPB-192-GW-260-2	BN036117.D	29 Jan 2025 21:07		RC/JU	Ok,M
8	Q1199-05	BP-VPB-192-GW-240-2	BN036118.D	29 Jan 2025 21:43		RC/JU	Ok,M
9	Q1173-02	BP-VPB-192-GW-60-62	BN036119.D	29 Jan 2025 22:19		RC/JU	Ok,M
10	Q1173-03	BP-VPB-192-GW-100-1	BN036120.D	29 Jan 2025 22:55		RC/JU	Ok,M
11	Q1173-04	BP-VPB-192-GW-140-1	BN036121.D	29 Jan 2025 23:31		RC/JU	Ok
12	Q1173-05	BP-VPB-192-GW-200-2	BN036122.D	30 Jan 2025 00:07		RC/JU	Ok
13	Q1173-06	VPB-192-HYD-2025012	BN036123.D	30 Jan 2025 00:43	Surrogate Fail	RC/JU	ReRun
14	PB166237BS	PB166237BS	BN036124.D	30 Jan 2025 01:19		RC/JU	Ok
15	PB166237BSD	PB166237BSD	BN036125.D	30 Jan 2025 01:55		RC/JU	Ok
16	PB166297BS	PB166297BS	BN036126.D	30 Jan 2025 02:31		RC/JU	Ok
17	PB166297BSD	PB166297BSD	BN036127.D	30 Jan 2025 03:07		RC/JU	Ok
18	SSTDCCC0.4	SSTDCCC0.4EC	BN036128.D	30 Jan 2025 03:43		RC/JU	Ok

**Instrument ID:** BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN012925**

Review By	yogesh	Review On	1/30/2025 7:53:37 AM
Supervise By	mohammad	Supervise On	1/31/2025 6:40:50 AM
SubDirectory	BN012925	HP Acquire Method	BNA_N, 8270_HP Processing Method bn012225
STD. NAME	<b>STD REF.#</b>		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6663,SP6662,SP6661,SP6660,SP6659,SP6658,SP6657		
CCC	SP6661		
Internal Standard/PEM	SP6682,1ul/100ul sample		
ICV/I.BLK	SP6684		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

M : Manual Integration

SOP ID:	M3510C,3580A-Extraction SVOC-20		
Clean Up SOP #:	N/A	Extraction Start Date :	01/28/2025
Matrix :	Water	Extraction Start Time :	09:50
Weigh By:	N/A	Extraction End Date :	01/28/2025
Balance check:	N/A	Extraction End Time :	14:50
Balance ID:	N/A	pH Meter ID:	N/A
pH Strip Lot#:	E3574	Hood ID:	4,5,6,7
Extraction Method:	<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	SP6616
Surrogate	1.0ML	0.4 PPM	SP6718
LOD	1.0ML	N/A	SP6711
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3871
Baked Na2SO4	N/A	EP2580
10N NaOH	N/A	EP2559
H2SO4 1:1	N/A	EP2565
N/A	N/A	N/A

**Extraction Conformance/Non-Conformance Comments:**

1.5 ML Vial lot# 2210673. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID: Water bath -01,02 Envap ID: NEVAP-02  
 KD Bath Temperature: 60 °C Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
01/28/25	R.P (Ext 1ab)	RC/SVOC
14:55	Preparation Group	Analysis Group

Analytical Method: M3510C,3580A-Extraction SVOC-20

Concentration Date: 01/28/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB166297BL	SBLK297	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			SEP-01
PB166297BS	SLCS297	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			2
PB166297BS D	SLCSD297	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			3
Q1168-09	MDL-WATER-03-QT1-202 5	SVOC-SIMGrou p1	1000	6	RUPESH	ritesh	1			4
Q1199-02	BP-VPB-192-EB-2025012 4	SVOC-SIMGrou p1	900	6	RUPESH	ritesh	1	C		5
Q1199-03	BP-VPB-192-GW-280-282	SVOC-SIMGrou p1	800	6	RUPESH	ritesh	1	C		6
Q1199-04	BP-VPB-192-GW-260-262	SVOC-SIMGrou p1	810	6	RUPESH	ritesh	1	C		7
Q1199-05	BP-VPB-192-GW-240-242	SVOC-SIMGrou p1	800	6	RUPESH	ritesh	1	C		8
Q1199-06	BP-VPB-192-220-222	SVOC-SIMGrou p1	820	6	RUPESH	ritesh	1	C		9

16291  
g.50

## WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1199

WorkList ID : 187210

Department : Extraction

Date : 01-28-2025 09:48:22

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1168-09	MDL-WATER-03-QT1-2025	Water	SVOC-SIMGroup1	Cool 4 deg C	CHEM02	QA Of	01/23/2025	8270-Modified
Q1199-02	BP-VPB-192-EB-20250124	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N21	01/24/2025	8270-Modified
Q1199-03	BP-VPB-192-GW-280-282	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N21	01/24/2025	8270-Modified
Q1199-04	BP-VPB-192-GW-260-262	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N21	01/23/2025	8270-Modified
Q1199-05	BP-VPB-192-GW-240-242	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N21	01/23/2025	8270-Modified
Q1199-06	BP-VPB-192-220-222	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	N21	01/23/2025	8270-Modified

DateTime

01/28/25 9:49

Raw Sample Received by:

RSP 01/28/25

Raw Sample Relinquished by:

CD 01/28/25

DateTime

01/28/25 10:10

Raw Sample Received by:

CD 01/28/25

Raw Sample Relinquished by:

RSP 01/28/25



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## Prep Standard - Chemical Standard Summary

**Order ID :** Q1199

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB166297,

**Sequence ID/Qc Batch ID:** BN012925,

**Standard ID :**

EP2559,EP2565,EP2580,SP6616,SP6629,SP6656,SP6657,SP6658,SP6659,SP6660,SP6661,SP6662,SP6663,SP6682,SP6683,SP6684,SP6705,SP6710,SP6711,SP6717,SP6718,

**Chemical ID :**

1ul/100ul  
sample,E3551,E3657,E3788,E3791,E3817,E3828,E3846,E3848,E3871,M5173,S10103,S10246,S11011,S11074,S11097,S11494,S11781,S11792,S11831,S12077,S12079,S12105,S12113,S12126,S12142,S12189,S12208,S12314,S12328,S12453,S12469,S12470,S12517,S12518,W3112,

## Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1874	10 N SODIUM HYDROXIDE SOLN	<a href="#">EP2559</a>	11/14/2024	05/14/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 11/14/2024

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
314	1.1 H2SO4 SOLN	<a href="#">EP2565</a>	11/20/2024	05/20/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/20/2024

FROM 1000.00000ml of M5173 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

## Extractions STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3923	Baked Sodium Sulfate	<a href="#">EP2580</a>	01/17/2025	07/01/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 01/17/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3492	8270-SIM-Spike 0.4 PPM	<a href="#">SP6616</a>	09/06/2024	02/12/2025	Rahul Chavli	None	None	mohammad ahmed 09/11/2024

FROM 0.00160ml of S11011 + 0.02000ml of S11792 + 0.04000ml of S12105 + 0.04000ml of S12126 + 0.04000ml of S12453 + 99.85840ml of E3788 = Final Quantity: 100.000 ml

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	<a href="#">SP6629</a>	09/12/2024	03/04/2025	Jagrut Upadhyay	None	None	Yogesh Patel 10/14/2024

FROM 0.10000ml of S12314 + 4.90000ml of E3791 = Final Quantity: 5.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3339	8270 sim calibration stock 10ppm (CPI)	<a href="#">SP6656</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.03350ml of S10103 + 0.05000ml of S11494 + 0.05000ml of S12079 + 0.12500ml of S11831 + 0.12500ml of S12113 + 0.20000ml of S12077 + 0.25000ml of S11097 + 24.16650ml of E3817 = Final Quantity: 25.000 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	<a href="#">SP6657</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.50000ml of E3817 + 0.01000ml of SP6629 + 0.50000ml of SP6656 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	<a href="#">SP6658</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.68000ml of E3817 + 0.01000ml of SP6629 + 0.32000ml of SP6656 = Final Quantity: 1.010 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	<a href="#">SP6659</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.84000ml of E3817 + 0.01000ml of SP6629 + 0.16000ml of SP6656 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	<a href="#">SP6660</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.92000ml of E3817 + 0.01000ml of SP6629 + 0.08000ml of SP6656 = Final Quantity: 1.010 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	<a href="#">SP6661</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.96000ml of E3817 + 0.01000ml of SP6629 + 0.04000ml of SP6656 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	<a href="#">SP6662</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.50000ml of E3817 + 0.01000ml of SP6629 + 0.50000ml of SP6661 = Final Quantity: 1.010 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	<a href="#">SP6663</a>	10/24/2024	02/08/2025	Jagrut Upadhyay	None	None	Yogesh Patel 11/28/2024

FROM 0.75000ml of E3817 + 0.01000ml of SP6629 + 0.25000ml of SP6661 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	<a href="#">SP6682</a>	11/15/2024	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 12/03/2024

FROM 0.10000ml of S12328 + 4.90000ml of E3828 = Final Quantity: 5.000 ml



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# **SVOC STANDARD PREPARATION LOG**

### SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1366	LOQ & LOD 20 PPM	<a href="#">SP6705</a>	01/03/2025	04/30/2025	Jagrut Upadhyay	None	None	mohammad ahmed 01/03/2025

**FROM** 0.20000ml of S11781 + 0.40000ml of S12142 + 0.40000ml of S12470 + 0.40000ml of S12518 + 18.60000ml of E3848 = Final  
 Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1374	LOQ & LOD 1 PPM	<a href="#">SP6710</a>	01/03/2025	04/30/2025	Jagrut Upadhyay	None	None	mohammad ahmed 01/03/2025

**FROM** 23.75000ml of E3848 + 1.25000ml of SP6705 = Final Quantity: 25.000 ml

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
2151	LOQ & LOD 0.1 PPM	<a href="#">SP6711</a>	01/03/2025	04/30/2025	Jagrut Upadhyay	None	None	mohammad ahmed 01/03/2025

FROM 9.00000ml of E3848 + 1.00000ml of SP6710 = Final Quantity: 10.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3895	50 ug/ml DFTPP 8270E	<a href="#">SP6717</a>	01/15/2025	03/31/2025	Rahul Chavli	None	None	Yogesh Patel 01/16/2025

FROM 1.00000ml of S10246 + 19.00000ml of E3871 = Final Quantity: 20.000 ml



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# **SVOC STANDARD PREPARATION LOG**



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### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	07/01/2025	01/03/2024 / Rajesh	07/20/2023 / Rajesh	E3551
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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G2362009	03/09/2025	09/09/2024 / Rajesh	09/03/2024 / Rajesh	E3791
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24H2762011	04/09/2025	10/09/2024 / Rajesh	10/09/2024 / Rajesh	E3817
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828

### CHEMICAL RECEIPT LOG BOOK

<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-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	06/26/2025	12/26/2024 / Rajesh	12/13/2024 / Rajesh	E3846
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	06/18/2025	12/18/2024 / Rajesh	12/09/2024 / Rajesh	E3848
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	07/14/2025	01/14/2025 / Rajesh	12/27/2024 / Rajesh	E3871
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000281827	06/02/2025	06/01/2022 / Rajesh	04/05/2022 / william	M5173
CPI International	Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml	440246	02/08/2025	08/08/2024 / Jagrut	12/09/2021 / Christian	S10103
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL,	A0182667	03/31/2025	01/15/2025 / Rahul	03/18/2022 / Christian	S10246

### CHEMICAL RECEIPT LOG BOOK

<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>
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0193449	02/20/2025	08/20/2024 / yogesh	01/13/2023 / Christian	S11011
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0187043	05/15/2025	11/15/2024 / Jagrut	02/06/2023 / Christian	S11074
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	495831	02/08/2025	08/08/2024 / Jagrut	02/07/2023 / Christian	S11097
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	02/08/2025	08/08/2024 / Jagrut	08/11/2023 / Yogesh	S11494
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	06/26/2025	12/26/2024 / Jagrut	11/21/2023 / Rahul	S11781
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	02/21/2025	08/21/2024 / Jagrut	11/21/2023 / Rahul	S11792



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

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0201976	04/11/2025	10/11/2024 / Jagrut	11/21/2023 / rahul	S11831
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	02/08/2025	08/08/2024 / Jagrut	01/31/2024 / Rahul	S12077
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	04/24/2025	10/24/2024 / Jagrut	01/31/2024 / Rahul	S12079
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0207706	02/12/2025	08/12/2024 / Rahul	02/05/2024 / Rahul	S12105
[CS 4978-2]						
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	02/09/2025	08/09/2024 / Jagrut	03/08/2024 / Rahul	S12113
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> ]	A0203726	02/12/2025	08/12/2024 / Rahul	03/15/2024 / Rahul	S12126

### 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> ]	A0203726	04/30/2025	11/14/2024 / anahy	03/15/2024 / Rahul	S12142
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	04/10/2025	10/10/2024 / anahy	03/15/2024 / Rahul	S12189
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH <sub>2</sub> Cl <sub>2</sub> ,5ml	A0206381	05/15/2025	11/15/2024 / Jagrut	03/15/2024 / Rahul	S12208
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> , 1mL	A0206540	03/04/2025	09/04/2024 / anahy	05/30/2024 / Rahul	S12314
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> , 1mL	A0206540	05/13/2025	11/13/2024 / anahy	05/30/2024 / Rahul	S12328
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0214021	02/12/2025	08/12/2024 / Rahul	07/23/2024 / RAHUL	S12453

[CS 4978-1]



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

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0214021	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12469
[CS 4978-1]						
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0214021	05/26/2025	11/26/2024 / Jagrut	07/23/2024 / RAHUL	S12470
[CS 4978-1]						
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0214017	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12517
[CS 4978-2]						
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0214017	07/03/2025	01/03/2025 / Jagrut	07/23/2024 / RAHUL	S12518
[CS 4978-2]						
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / 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

  
All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certified By:

Erica Castiglione  
Chemist



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Received on  
02/07/23 by C6

SH067 S11096  
to  
S11099

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 4

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:  
Z-110381-01 495831 ≤ -10 °C Methylene Chloride 10/30/2027 Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1003 ± 17.27
acenaphthylene	208-96-8	97.6	14.290.1P	999.8 ± 17.22
aniline	62-53-3	99.9	64.7.1P	995 ± 17.13
anthracene	120-12-7	99.5	15.7.1P	1001 ± 17.24
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 17.21
benzo[a]anthracene	56-55-3	100	16.7.3P	1001 ± 17.24
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1001 ± 19.91
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 17.92
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 19.88
benzo[a]pyrene	50-32-8	97	20.286.2P	999.1 ± 26.35
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 17.24
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	999.7 ± 17.89
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1001 ± 17.23
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.13P	999.5 ± 17.89
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 17.21
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 19.86
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1P	999.1 ± 17.2
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 19.58
carbazole	86-74-8	99.4	239.7.2P	1000 ± 17.22

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:

Briana Smith  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 495831

Expiration Date: 10/30/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	1000 ± 17.22
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	1000 ± 17.22
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1002 ± 17.25

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:



Briana Smith  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# RESTEK® 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  
 03/11/2022

b7  
 CG

S10242  
 to

S10247

Catalog No. : 31615

Lot No.: A0182667

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 : March 31, 2025

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	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachlorophenol <b>CAS #</b> 87-86-5 <b>Purity</b> 99%	1,003.6 $\mu$ g/mL	+/- 5.8897 $\mu$ g/mL	+/- 45.7132 $\mu$ g/mL	+/- 66.0037 $\mu$ g/mL
2	DFTPP (Decafluorotriphenylphosphine) <b>CAS #</b> 5074-71-5 <b>Purity</b> 95%	1,006.6 $\mu$ g/mL	+/- 5.9074 $\mu$ g/mL	+/- 45.8508 $\mu$ g/mL	+/- 66.2023 $\mu$ g/mL
3	Benzidine <b>CAS #</b> 92-87-5 <b>Purity</b> 99%	1,008.4 $\mu$ g/mL	+/- 5.9179 $\mu$ g/mL	+/- 45.9318 $\mu$ g/mL	+/- 66.3193 $\mu$ g/mL
4	4,4'-DDT <b>CAS #</b> 50-29-3 <b>Purity</b> 99%	1,007.6 $\mu$ g/mL	+/- 5.9132 $\mu$ g/mL	+/- 45.8954 $\mu$ g/mL	+/- 66.2667 $\mu$ g/mL

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

**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:**

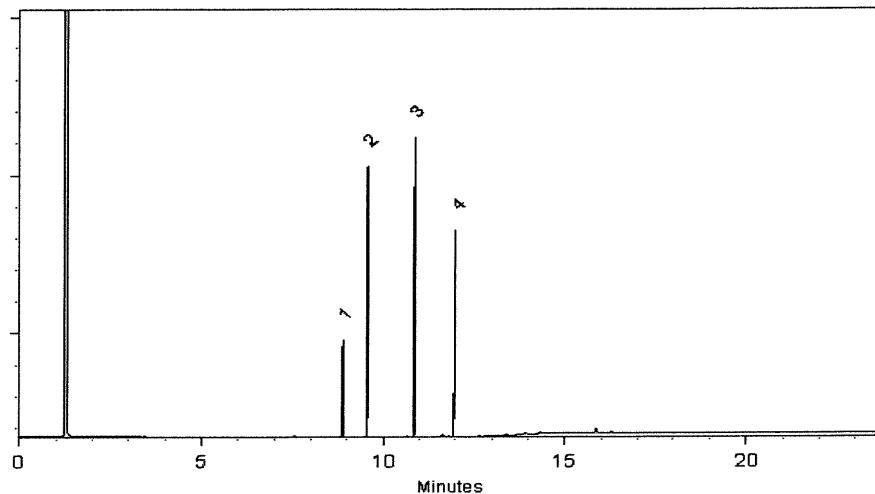
250°C

**Det. Temp:**

330°C

**Det. Type:**

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 08-Mar-2022 Balance: B345965662

Marilina Cowan - Operations Tech I

Date Passed: 10-Mar-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

[www.restek.com](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

CG

S 11/071

to

S 11/075

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:**

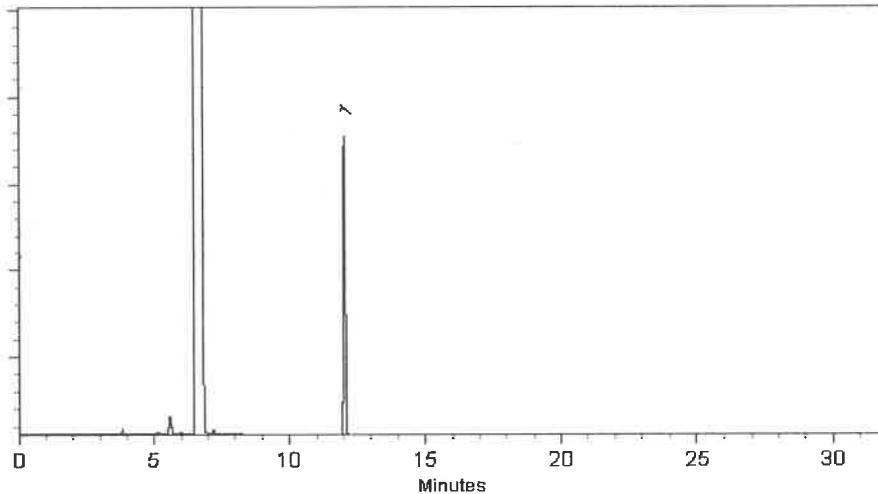
200°C

**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

  
Mariana Cowan - Operations Tech II ARM QC

Date Passed: 12-Jul-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*gravimetric*



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555872

**Lot No.:** A0193449

**Description :** Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000 $\mu$ g/mL, Methanol,  
1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

Received on

01/13/23

by

C6

S11011

to

S11015

### 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	RP221012	99%	25,050.0 $\mu$ g/mL	+/- 778.6378

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Jan-2023 Balance: B442140311

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ 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.



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      Manufacture Date: 12/14/2022  
Molecular Weight: 40      Expiration Date: 12/31/2025  
CAS #: 1310-73-2  
Appearance: Storage: Room Temperature

Pellets

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

Acetone

BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

avantor™



Material No.: 9254-03  
Batch No.: 23H1462005  
Manufactured Date: 2023-07-26  
Expiration Date: 2026-07-25  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (μeq/g)	≤ 0.3	0.1
Titrable Base (μeq/g)	≤ 0.6	< 0.1
Water (H <sub>2</sub> O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 8/13/24

E 3788

*Ken Koehlein*  
Ken Koehlein  
Sr. Manager, Quality Assurance

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24G2362009  
Manufactured Date: 2024-06-10  
Expiration Date: 2025-09-09  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 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: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24F10024

E3791

*J. Croak*  
Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone 610.386.1700  
Page 1 of 1

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24H2762011  
Manufactured Date: 2024-06-05  
Expiration Date: 2025-09-04  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) (ng/mL)	Single Impurity Peak <= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	5
Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
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

E 3817

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.: 24J0862003  
Manufactured Date: 2024-09-12  
Expiration Date: 2025-12-12  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) (ng/mL)	Single Impurity Peak <= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) (pg/mL)	Single Peak <= 10	1
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 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 3828

A handwritten signature of the name "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

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

Rec'd by RP On 12/13/24

E 3846

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4

Batch No.: 24K1762005

Manufactured Date: 2024-10-08

Expiration Date: 2026-01-07

Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid ( $\mu\text{eq/g}$ )	<= 0.3	0.0
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr &amp; DC

E 3848

 A handwritten signature in black ink, appearing to read '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

Avantor Performance Materials,LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

12129194

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4

Batch No.: 24K1762005

Manufactured Date: 2024-10-08

Expiration Date: 2026-01-07

Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.5 ppm
Titrable Acid (μeq/g)	<= 0.3	0.0
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr &amp; DC

E 3871

*J.Croak*  
Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087 U.S.A. Phone 610.386.1700

Hydrochloric Acid, 36.5-38.0%  
 BAKER INSTRUMENTS ANALYZED® Reagent  
 For Trace Metal Analysis



Material No.: 9530-33  
 Batch No.: 0000281827  
 Manufactured Date: 2021/03/30  
 Retest Date: 2026/03/29  
 Revision No.: 1

## Certificate of Analysis

Test	Specification	Result
ACS – Assay (as HCl) (by acid-base titrn)	36.5 – 38.0 %	37.6
ACS – Color (APHA)	<= 10	5
ACS – Residue after Ignition	<= 3 ppm	1
ACS – Specific Gravity at 60°/60°F	1.185 – 1.192	1.189
ACS – Bromide (Br)	<= 0.005 %	< 0.005
ACS – Extractable Organic Substances	<= 5 ppm	< 1
ACS – Free Chlorine (as Cl <sub>2</sub> )	<= 0.5 ppm	< 0.5
Phosphate (PO <sub>4</sub> )	<= 0.05 ppm	< 0.03
Sulfate (SO <sub>4</sub> )	<= 0.5 ppm	< 0.3
Sulfite (SO <sub>3</sub> )	<= 0.8 ppm	0.3
Ammonium (NH <sub>4</sub> )	<= 3 ppm	< 1
Trace Impurities – Arsenic (As)	<= 0.010 ppm	< 0.003
Trace Impurities – Aluminum (Al)	<= 10.0 ppb	0.5
Arsenic and Antimony (as As)	<= 5 ppb	< 3
Trace Impurities – Barium (Ba)	<= 1.0 ppb	< 0.2
Trace Impurities – Beryllium (Be)	<= 1.0 ppb	< 0.2
Trace Impurities – Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities – Boron (B)	<= 20.0 ppb	< 5.0
Trace Impurities – Cadmium (Cd)	<= 1.0 ppb	< 0.3
Trace Impurities – Calcium (Ca)	<= 50.0 ppb	15.0
Trace Impurities – Chromium (Cr)	<= 1.0 ppb	< 0.4
Trace Impurities – Cobalt (Co)	<= 1.0 ppb	< 0.3
Trace Impurities – Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities – Gallium (Ga)	<= 1.0 ppb	< 0.2

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC  
 100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700

Test	Specification	Result
Trace Impurities – Germanium (Ge)	<= 3.0 ppb	< 2.0
Trace Impurities – Gold (Au)	<= 4.0 ppb	3.0
Heavy Metals (as Pb)	<= 100 ppb	< 50
Trace Impurities – Iron (Fe)	<= 15.0 ppb	1.0
Trace Impurities – Lead (Pb)	<= 1.0 ppb	< 0.5
Trace Impurities – Lithium (Li)	<= 1.0 ppb	< 0.2
Trace Impurities – Magnesium (Mg)	<= 10.0 ppb	< 0.4
Trace Impurities – Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities – Mercury (Hg)	<= 0.5 ppb	0.2
Trace Impurities – Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities – Nickel (Ni)	<= 4.0 ppb	< 0.3
Trace Impurities – Niobium (Nb)	<= 1.0 ppb	< 0.2
Trace Impurities – Potassium (K)	<= 9.0 ppb	< 2.0
Trace Impurities – Selenium (Se), For Information Only	ppb	1.0
Trace Impurities – Silicon (Si)	<= 100.0 ppb	18.0
Trace Impurities – Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities – Sodium (Na)	<= 100.0 ppb	< 5.0
Trace Impurities – Strontium (Sr)	<= 1.0 ppb	< 0.2
Trace Impurities – Tantalum (Ta)	<= 1.0 ppb	< 0.9
Trace Impurities – Thallium (Tl)	<= 5.0 ppb	< 2.0
Trace Impurities – Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities – Titanium (Ti)	<= 1.0 ppb	< 0.2
Trace Impurities – Vanadium (V)	<= 1.0 ppb	< 0.2
Trace Impurities – Zinc (Zn)	<= 5.0 ppb	0.4
Trace Impurities – Zirconium (Zr)	<= 1.0 ppb	< 0.1

For Laboratory, Research or Manufacturing Use

Product Information (not specifications):

Appearance (clear, fuming liquid)

Meets ACS Specifications

Country of Origin: US

Packaging Site: Phillipsburg Mfg Ctr & DC



Jamie Ethier  
Vice President Global Quality

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA 19087. U.S.A. Phone: 610.386.1700



5580 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: \_\_\_\_\_

A handwritten signature in black ink, appearing to read "Thomas C. Tipton".

Clint Tipton  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](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

511749  
↓ { RC /  
511794 } 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:**

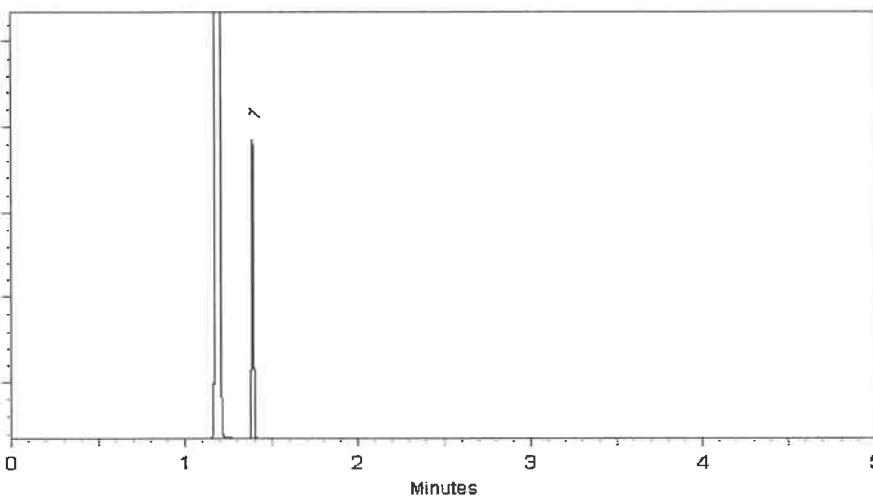
FID

**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.

*Samuel 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  
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

511749  
↓ { RC /  
511794 } 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:**

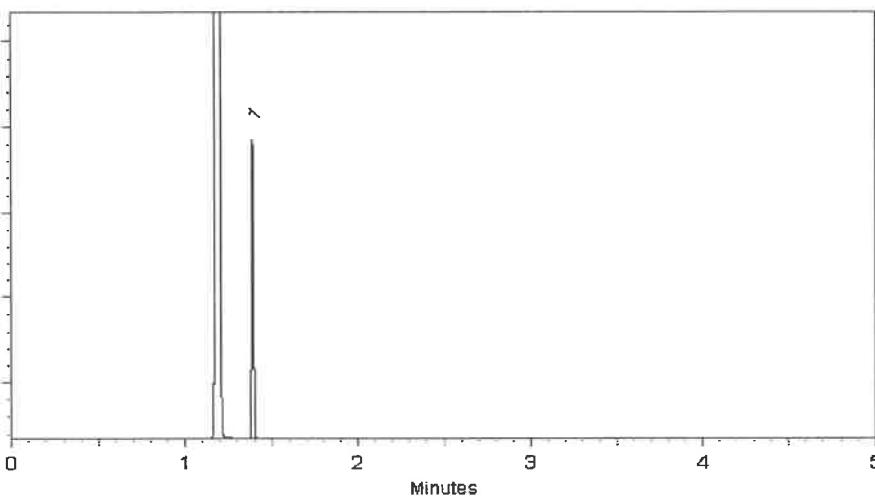
FID

**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  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL



ILAC  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



ILAC  
ACCREDITED  
ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

## Certificate of Analysis *chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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:**

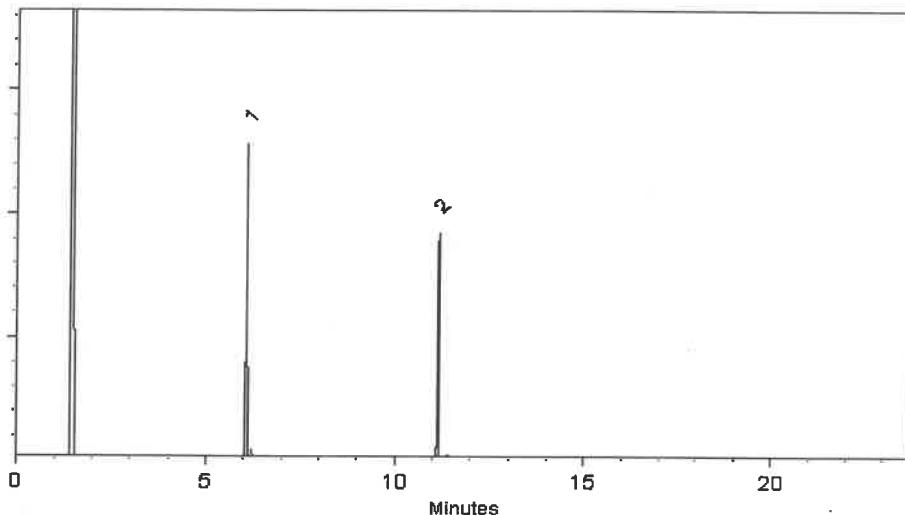
330°C

**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-110816-01	414127	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine		1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine		92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam		105-60-2	99.9	271.1.6P	999 ± 5.82

512075 }  
↓ } RC  
512079 } 02/01/24

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

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:

Shane Overcash  
Chemist



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-110816-01	414127	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine		1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine		92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam		105-60-2	99.9	271.1.6P	999 ± 5.82

SI2075 } RC  
↓ } 02/01/24  
SI2079 }

\*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:

Shane Overcash  
Chemist



110 Benner Circle  
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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224

**Lot No.:** A0207706

**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 :** February 28, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

S12082  
↓  
S12111 } RC /  
} 02/22/24

### 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%	1,001.0 $\mu$ g/mL	+/- 29.424320
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 $\mu$ g/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,005.0 $\mu$ g/mL	+/- 29.541899
4	Benzoic acid	65-85-0	MKCR2694	99%	1,003.0 $\mu$ g/mL	+/- 29.483110
5	Biphenyl	92-52-4	MKCL6515	99%	1,006.0 $\mu$ g/mL	+/- 29.571294

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024

Balance: B345965662

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 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.



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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850

**Lot No.:** A0203726

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025

**Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

512117 } RC/  
↓            } 03/18/24  
512146

### 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%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/-	36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/-	36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/-	36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/-	36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/-	36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/-	36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/-	36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/-	36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/-	36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/-	36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/-	36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/-	36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/-	36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/-	36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/-	36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/-	36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/-	36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/-	36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/-	36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/-	36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/-	36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/-	36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/-	36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/-	36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/-	36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/-	36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/-	36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/-	36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/-	36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/-	36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/-	36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/-	36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/-	36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/-	36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/-	36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/-	36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%





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. :** 31850

**Lot No.:** A0203726

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025

**Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

512117 } RC/  
↓            } 03/18/24  
512146

### 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%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/-	36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/-	36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/-	36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/-	36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/-	36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/-	36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/-	36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/-	36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/-	36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/-	36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/-	36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/-	36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/-	36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/-	36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/-	36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/-	36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/-	36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/-	36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/-	36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/-	36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/-	36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/-	36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/-	36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/-	36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/-	36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/-	36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/-	36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/-	36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/-	36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/-	36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/-	36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/-	36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/-	36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/-	36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/-	36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/-	36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%





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Certificate #3222.02

## Certificate of Analysis *chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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:**

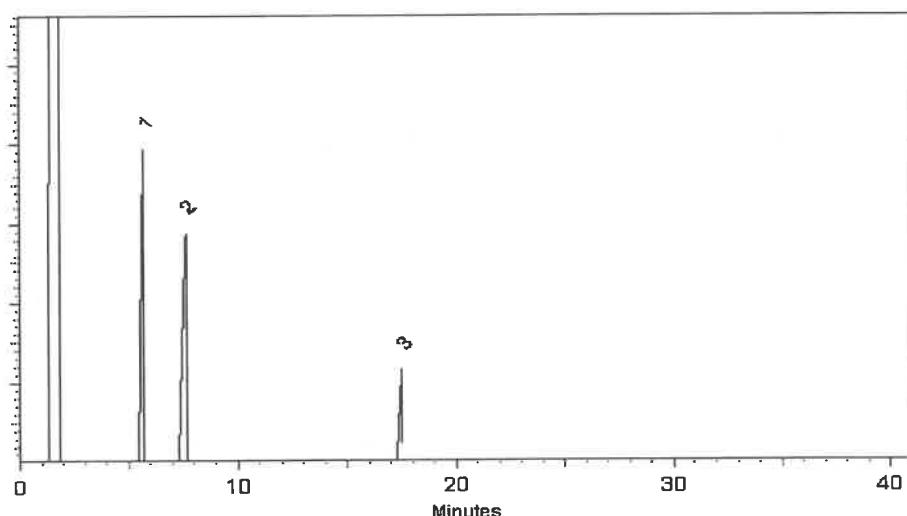
FID

**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 |

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  
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Certificate #FM 80397



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## 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

S12207 } RC /  
↓      } 03/18/24  
S12221 }

### 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:**

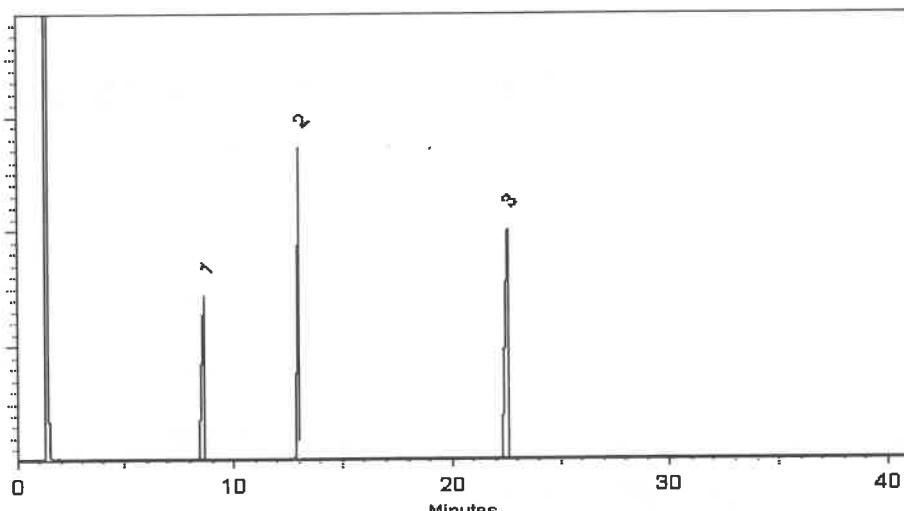
FID

**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  
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Certificate #FM 80397



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## CERTIFIED REFERENCE MATERIAL



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Certificate #3222.02

## Certificate of Analysis *chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No.:** 31206

**Lot No.:** A0206540

**Description:** SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride,  
1mL/ampul

**Container Size:** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date:** December 31, 2029

**Storage:** 10°C or colder

**Handling:** Sonication required. Mix is  
photosensitive.

**Ship:** Ambient

512312 } RC/  
↓           } 05/30/24  
512331 }

### 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%	2,007.1 µg/mL	+/- 90.4025
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,005.9 µg/mL	+/- 90.3454
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,007.9 µg/mL	+/- 90.4385
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,006.7 µg/mL	+/- 90.3845
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,015.5 µg/mL	+/- 90.7778
6	Perylene-d12	1520-96-3	PR-33205	99%	2,014.7 µg/mL	+/- 90.7448

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

# Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25 $\mu$ 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:**

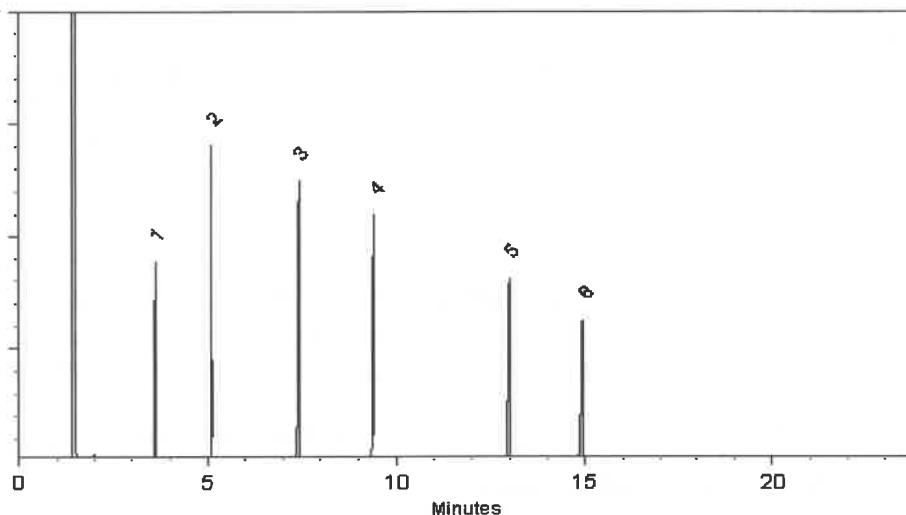
FID

**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.

*Malina Homan*  
**Malina Homan - Operations Technician |**

Date Mixed: 12-Jan-2024      Balance Serial #: 1128360905

*Jennifer Pollino*  
**Jennifer Pollino - Operations Tech III - ARM QC**

Date Passed: 16-Jan-2024

Manufactured under Restek's ISO 9001:2015  
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Certificate #3222.02

## Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No.:** 31206

**Lot No.:** A0206540

**Description:** SV Internal Standard Mix 2mg/ml  
SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride,  
1mL/ampul

**Container Size:** 2 mL

**Expiration Date:** December 31, 2029

**Handling:** Sonication required. Mix is photosensitive.

**Pkg Amt:** > 1 mL

**Storage:** 10°C or colder

**Ship:** Ambient

S12312 } RC /  
↓            } 05/30/24  
S12331 }

### 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%	2,007.1 µg/mL	+/- 90.4025
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,005.9 µg/mL	+/- 90.3454
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,007.9 µg/mL	+/- 90.4385
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,006.7 µg/mL	+/- 90.3845
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,015.5 µg/mL	+/- 90.7778
6	Perylene-d12	1520-96-3	PR-33205	99%	2,014.7 µg/mL	+/- 90.7448

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

# Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25 $\mu$ 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:**

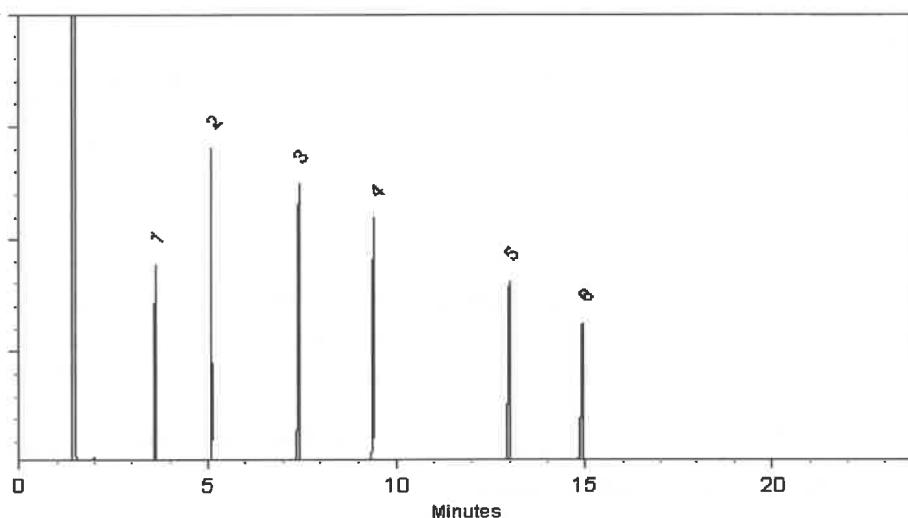
FID

**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.

*Malina Homan*  
Malina Homan - Operations Technician |

Date Mixed: 12-Jan-2024 Balance Serial #: 1128360905

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 16-Jan-2024

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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 1,000 $\mu$ g/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL      **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026      **Storage:** 10°C or colder

**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 $\mu$ g/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 $\mu$ g/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 $\mu$ g/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 $\mu$ g/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.



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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 1,000 $\mu$ g/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL      **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026      **Storage:** 10°C or colder

**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 $\mu$ g/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 $\mu$ g/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 $\mu$ g/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 $\mu$ g/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. :** 555223      **Lot No.:** A0214021

**Description :** Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 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

**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 $\mu$ g/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 $\mu$ g/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 $\mu$ g/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 $\mu$ g/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.
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- 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:

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$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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.
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## CERTIFIED REFERENCE MATERIAL



**ILAC**  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



**ILAC**  
ACCREDITED  
ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

## Certificate of Analysis

*gravimetric*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224      **Lot No.:** A0214017

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL      **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026      **Storage:** 10°C or colder

**Ship:** Ambient

### 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 µg/mL	+/- 29.541899
2	Acetophenone	98-86-2	STBH8205	99%	1,005.0 µg/mL	+/- 29.541899
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,008.0 µg/mL	+/- 29.630084
4	Benzoic acid	65-85-0	MKCR2694	99%	1,010.0 µg/mL	+/- 29.688874
5	Biphenyl	92-52-4	MKCS5928	99%	1,008.0 µg/mL	+/- 29.630084

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

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.
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- 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:

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*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.

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- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
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[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL



**ILAC**  
ACCREDITED  
ISO 17034 Accredited  
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Certificate #3222.01



**ILAC**  
ACCREDITED  
ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

## Certificate of Analysis

*gravimetric*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224      **Lot No.:** A0214017

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL      **Pkg Amt:** > 1 mL

**Expiration Date :** July 31, 2026      **Storage:** 10°C or colder

**Ship:** Ambient

### 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)
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**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

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# SHIPPING DOCUMENTS

CETTECH

**284 Sheffield Street, Mountainside, NJ 07092**  
**(908) 789-8900 Fax: (908) 78-8922**

SIGN OF HISTORY REGRES

Chemtech Project Number:

169

<b>CHEMTECH</b> CHAIN OF CUSTODY RECORD		284 Sheffield Street, Mountainside, NJ 07092 (908) 789-8900 Fax: (908) 78-8922 <a href="http://www.chemtech.net">www.chemtech.net</a>	Chemtech Project Number: <b>Q11199</b>															
<b>CLIENT INFORMATION</b>		<b>PROJECT INFORMATION</b>																
COMPANY: Tetra Tech ADDRESS: 4433 Corporation Lane Suite 300 CITY: Virginia Beach STATE: VA ZIP: 23462 ATTENTION: Ernie Wu PHONE: 757-466-4901 FAX: 757-461-4148		PROJECT NAME: NWIRP Bethpage PROJECT #: 112G08005-WE13 LOCATION: VPB-192 PROJECT MANAGER: Ernie Wu E-MAIL: ernie.wu@tetratech.com PHONE: 757-466-4901 FAX: 757-461-4148																
<b>DATA TURNAROUND INFORMATION</b>		<b>DATA DELIVERABLE INFORMATION</b>																
FAX: <u>10</u> DAYS* HARD COPY: <u>10</u> DAYS* EDD <u>10</u> DAYS*		<input type="checkbox"/> RESULTS ONLY <input checked="" type="checkbox"/> USEPA CLP <input checked="" type="checkbox"/> RESULTS + QC <input checked="" type="checkbox"/> New York State ASP "B" <input checked="" type="checkbox"/> New Jersey REDUCED <input checked="" type="checkbox"/> New York State ASP "A" <input checked="" type="checkbox"/> New Jersey CLP <input checked="" type="checkbox"/> Other _____ q EDD Format																
* TO BE APPROVED BY CHEMTECH STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS		<b>PRESERVATIVES</b> <table border="1"> <tr> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> </tr> </table> <b>COMMENTS</b> <table border="1"> <tr> <td>A-HCl</td> <td>B-HNO3</td> <td>C-H2SO4</td> <td>D-NaOH</td> <td>E-ICE</td> <td>F-Other</td> </tr> </table>		1	2	3	4	5	6	7	8	9	A-HCl	B-HNO3	C-H2SO4	D-NaOH	E-ICE	F-Other
1	2	3	4	5	6	7	8	9										
A-HCl	B-HNO3	C-H2SO4	D-NaOH	E-ICE	F-Other													
<b>CHEMTECH SAMPLE ID</b>	<b>PROJECT SAMPLE IDENTIFICATION</b>	<b>SAMPLE MATRIX</b>	<b>SAMPLE TYPE</b>	<b>SAMPLE COLLECTION</b>	# of Bottles	A												
			COMP	GRAB								DATE	TIME					
1.	BP-VPB-192-TB-20250123	QA	X	1/23/25	9:00	2												
2.	BP-VPB-192-EB-20250124	QA	X	1/24/25	12:15	3	2	1										
3.	BP-VPB-192-GW-280-282	AQ	X	1/24/25	11:45	3	2	1										
4.	BP-VPB-192-GW-260-262	AQ	X	1/23/25	14:45	3	2	1										
5.	BP-VPB-192-GW-240-242	AQ	X	1/23/25	12:50	3	2	1										
6.	BP-VPB-192-GW-220-222	AQ	X	1/23/25	10:55	3	2	1										
7.	BP-VPB-192-GW-DUP-20250123	AQ	X	1/23/25	12:00	3	2					8260B Duplicate						
8.																		
9.																		
10.																		
<b>SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSES INCLUDING COURIER DELIVERY</b>																		
RELINQUISHED BY SAMPLER		DATETIME	RECEIVED BY	RECENTLY														
1. <u>Ernie Wu</u>		1/27/25 15:25	1. <u>Ernie Wu</u>	15:25														
RELINQUISHED BY		DATETIME	RECEIVED BY	Comments: Standard TAT														
2.				Conditions of bottles or coolers at receipt: <input checked="" type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp <u>2,2</u> MeOH extraction requires an additional 4oz. Jar for percent solid q Ice in Cooler?														
BEING DUSHED BY		DATETIME	RECEIVED FOR LAB BY	Page <u>1</u> of <u>1</u> SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input checked="" type="checkbox"/> Overnight CHEMTECH: <input checked="" type="checkbox"/> Picked Up <input type="checkbox"/> Overnight Shipment Complete <input type="checkbox"/> YES <input type="checkbox"/> NO														
3. <u>Ernie Wu</u>		1/27/25 15:25	3.															

**Laboratory Certification**

<b>Certified By</b>	<b>License No.</b>
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1199	TETR06	Order Date : 1/27/2025 3:35:00 PM	Project Mgr :
Client Name : Tetra Tech NUS, Inc.		Project Name : CTO WE13	Report Type : Level 4
Client Contact : Ernie Wu		Receive DateTime : 1/27/2025 12:00:00 AM	EDD Type : ADAPT
Invoice Name : Tetra Tech NUS, Inc.		Purchase Order : 18:20	Hard Copy Date :
Invoice Contact : Ernie Wu			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DU <sup>E</sup> DATES
Q1199-01	BP-VPB-192-TB-20250123	Water	01/23/2025	09:00	VOCMS Group1		8260-Low	10 Bus. Days	
Q1199-02	BP-VPB-192-EB-20250124	Water	01/24/2025	12:15	VOCMS Group1		8260-Low	10 Bus. Days	
Q1199-03	BP-VPB-192-GW-280-282	Water	01/24/2025	11:45	VOCMS Group1		8260-Low	10 Bus. Days	
Q1199-04	BP-VPB-192-GW-260-262	Water	01/23/2025	14:45	VOCMS Group1		8260-Low	10 Bus. Days	
Q1199-05	BP-VPB-192-GW-240-242	Water	01/23/2025	12:50	VOCMS Group1		8260-Low	10 Bus. Days	
Q1199-06	BP-VPB-192-220-222 BP-VPB-192-GW-220-222	Water	01/23/2025	10:55	VOCMS Group1		8260-Low	10 Bus. Days	
Q1199-07	BP-VPB-192-GW-DUP-20250123	Water	01/23/2025	12:00	VOCMS Group1		8260-Low	10 Bus. Days	
	YG 02/03/25								

**LOGIN REPORT/SAMPLE TRANSFER**

Order ID : Q1199 TETR06

Order Date : 1/27/2025 3:35:00 PM

Project Mgr :

Client Name : Tetra Tech NUS, Inc.

Project Name : CTO WE13

Report Type : Level 4

Client Contact : Ernie Wu

Receive DateTime : 1/27/2025 12:00:00 AM

EDD Type : ADAPT

Invoice Name : Tetra Tech NUS, Inc.

Purchase Order : 18:20

Hard Copy Date :

Invoice Contact : Ernie Wu

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
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Relinquished By:

Date / Time : 1/28/25 0845

Received By:

Date / Time : 01/28/25 0845 1844

Storage Area : VOA Refrigerator Room

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036112.D  
 Acq On : 29 Jan 2025 18:06  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDCCC0.4**

Quant Time: Jan 30 00:35:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

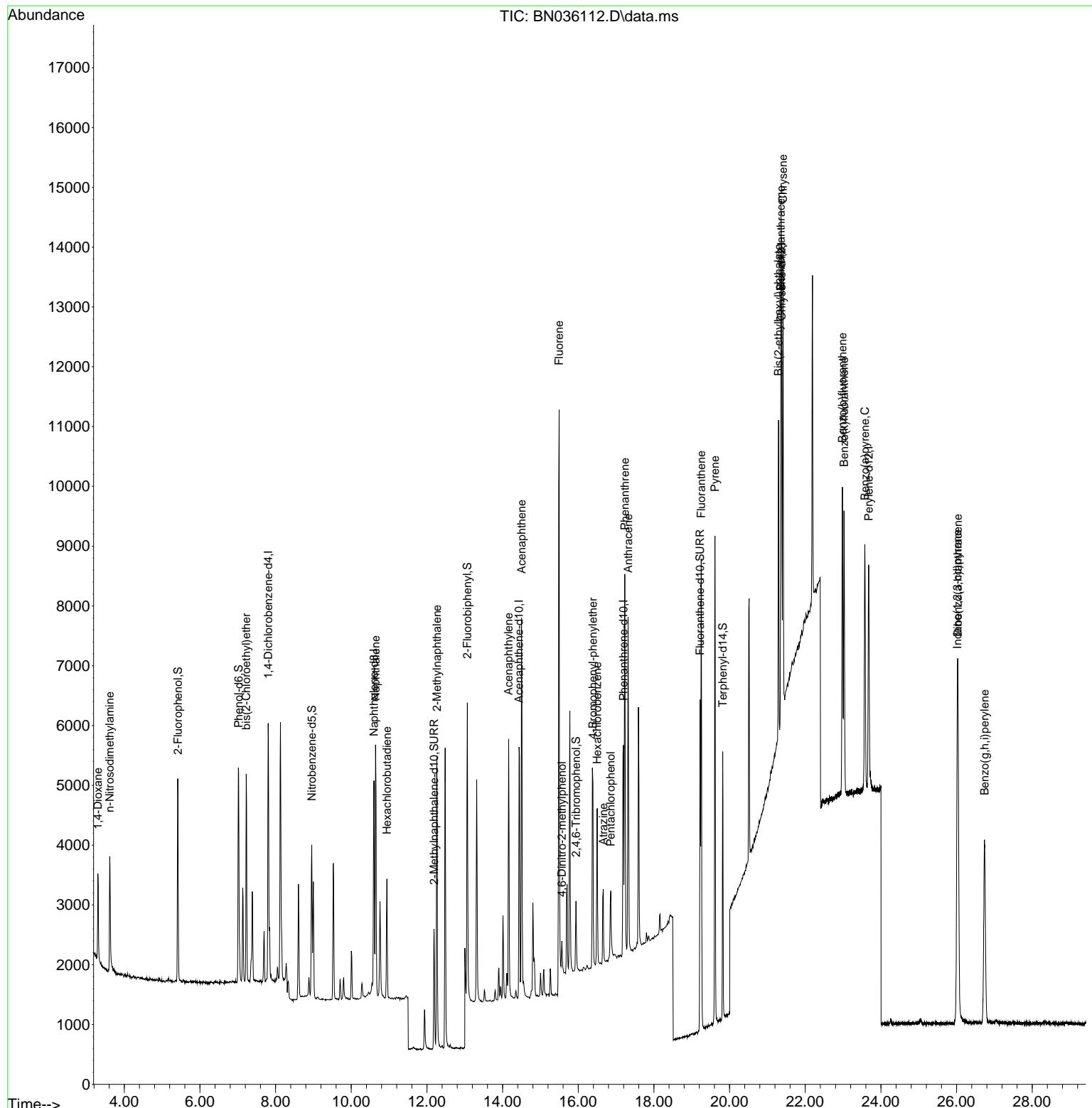
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2094	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	4943	0.400	ng	-0.01
13) Acenaphthene-d10	14.437	164	2715	0.400	ng	-0.01
19) Phenanthrene-d10	17.194	188	5698	0.400	ng	# 0.01
29) Chrysene-d12	21.376	240	4562	0.400	ng	0.00
35) Perylene-d12	23.677	264	5021	0.400	ng	# 0.01
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	2503	0.460	ng	0.03
5) Phenol-d6	7.023	99	3116	0.487	ng	0.05
8) Nitrobenzene-d5	8.956	82	1965	0.421	ng	0.00
11) 2-Methylnaphthalene-d10	12.188	152	2935	0.437	ng	-0.01
14) 2,4,6-Tribromophenol	15.940	330	668	0.384	ng	0.01
15) 2-Fluorobiphenyl	13.068	172	4563	0.377	ng	0.00
27) Fluoranthene-d10	19.220	212	6225	0.422	ng	0.00
31) Terphenyl-d14	19.819	244	4439	0.468	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
2) 1,4-Dioxane	3.303	88	848	0.362	ng	93
3) n-Nitrosodimethylamine	3.614	42	1532	0.361	ng	# 82
6) bis(2-Chloroethyl)ether	7.225	93	2347	0.456	ng	97
9) Naphthalene	10.643	128	5445	0.379	ng	99
10) Hexachlorobutadiene	10.942	225	1612	0.348	ng	# 100
12) 2-Methylnaphthalene	12.264	142	3554	0.399	ng	97
16) Acenaphthylene	14.159	152	5031	0.391	ng	100
17) Acenaphthene	14.501	154	3433	0.389	ng	97
18) Fluorene	15.495	166	4221	0.382	ng	97
20) 4,6-Dinitro-2-methylph...	15.568	198	413	0.311	ng	93
21) 4-Bromophenyl-phenylether	16.387	248	1542	0.380	ng	97
22) Hexachlorobenzene	16.499	284	1993	0.373	ng	97
23) Atrazine	16.660	200	1238	0.422	ng	96
24) Pentachlorophenol	16.859	266	920	0.398	ng	93
25) Phenanthrene	17.231	178	6643	0.388	ng	99
26) Anthracene	17.318	178	5960	0.383	ng	98
28) Fluoranthene	19.253	202	7565	0.376	ng	99
30) Pyrene	19.615	202	7732	0.418	ng	98
32) Benzo(a)anthracene	21.358	228	6361	0.384	ng	97
33) Chrysene	21.411	228	6253	0.370	ng	96
34) Bis(2-ethylhexyl)phtha...	21.295	149	4681	0.516	ng	99
36) Indeno(1,2,3-cd)pyrene	26.019	276	7721	0.383	ng	98
37) Benzo(b)fluoranthene	22.982	252	6433	0.352	ng	# 84
38) Benzo(k)fluoranthene	23.025	252	6208	0.337	ng	# 81
39) Benzo(a)pyrene	23.575	252	5774	0.370	ng	# 79
40) Dibenzo(a,h)anthracene	26.037	278	6242	0.389	ng	# 89
41) Benzo(g,h,i)perylene	26.738	276	6621	0.378	ng	98

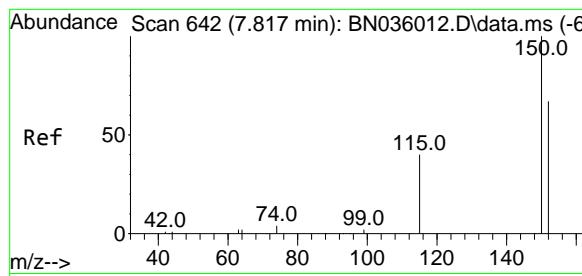
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036112.D  
 Acq On : 29 Jan 2025 18:06  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDCCC0.4**

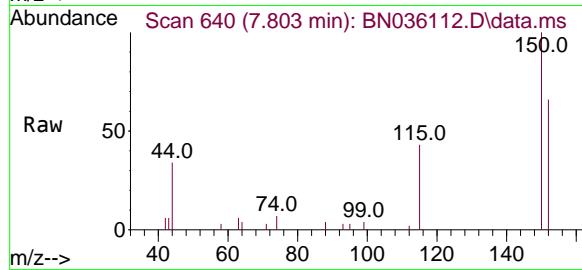
Quant Time: Jan 30 00:35:09 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration



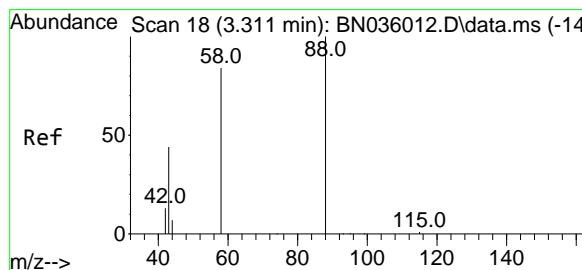
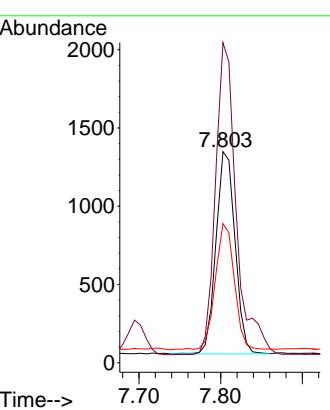
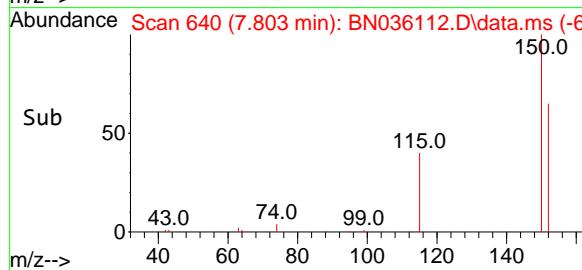


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

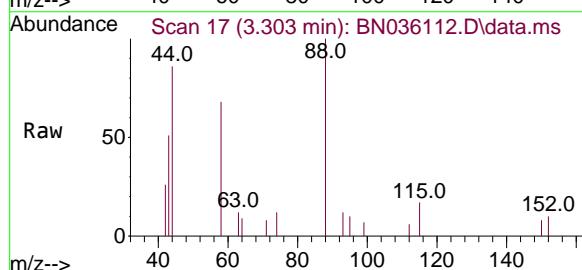
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



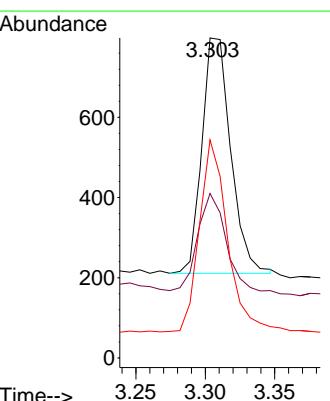
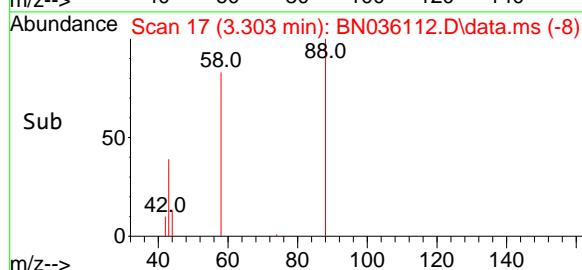
Tgt Ion:152 Resp: 2094  
Ion Ratio Lower Upper  
152 100  
150 151.6 117.4 176.2  
115 65.9 51.0 76.4

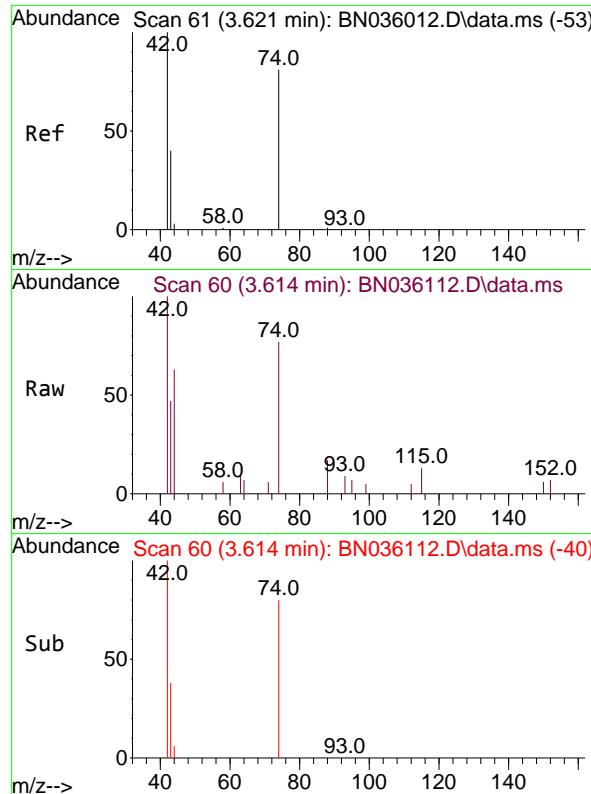


#2  
1,4-Dioxane  
Concen: 0.362 ng  
RT: 3.303 min Scan# 17  
Delta R.T. -0.007 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



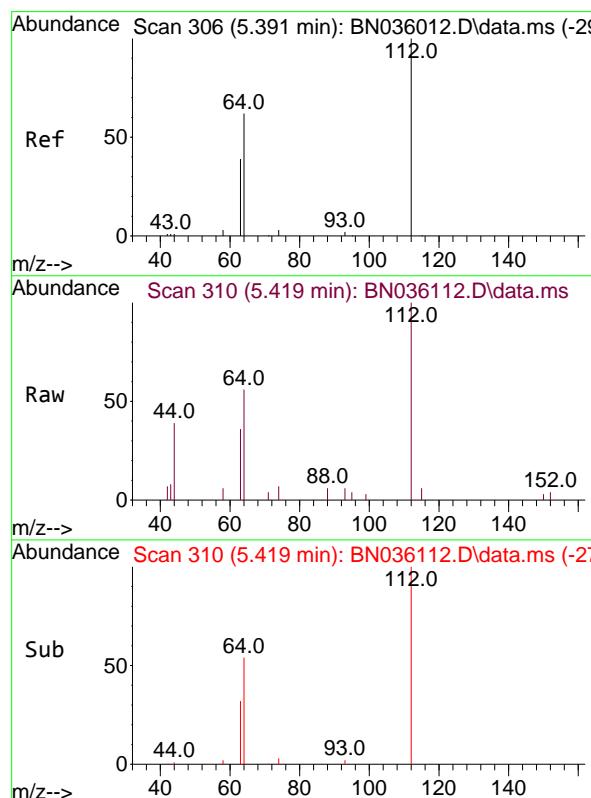
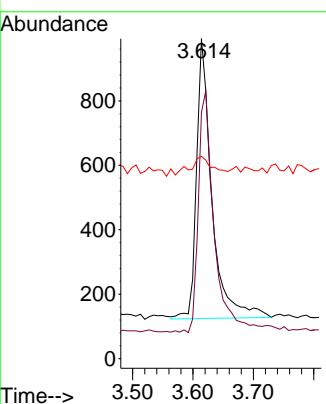
Tgt Ion: 88 Resp: 848  
Ion Ratio Lower Upper  
88 100  
43 39.9 38.5 57.7  
58 78.9 66.6 99.8





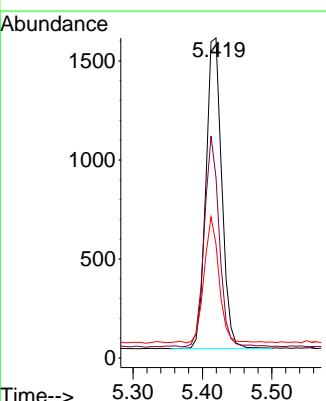
#3  
n-Nitrosodimethylamine  
Concen: 0.361 ng  
RT: 3.614 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.007 min  
Lab File: BN036112.D  
ClientSampleId : SSTDCCC0.4  
Acq: 29 Jan 2025 18:06

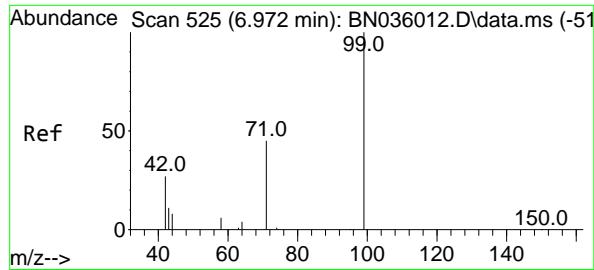
Tgt Ion: 42 Resp: 1532  
Ion Ratio Lower Upper  
42 100  
74 88.7 58.1 87.1#  
44 11.1 6.2 9.4#



#4  
2-Fluorophenol  
Concen: 0.460 ng  
RT: 5.419 min Scan# 310  
Delta R.T. 0.029 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

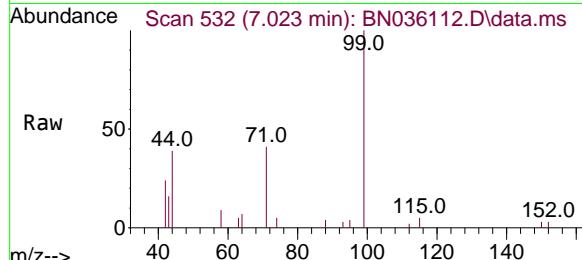
Tgt Ion:112 Resp: 2503  
Ion Ratio Lower Upper  
112 100  
64 64.4 50.0 75.0  
63 37.6 30.7 46.1



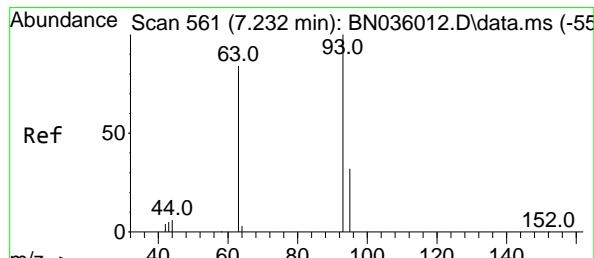
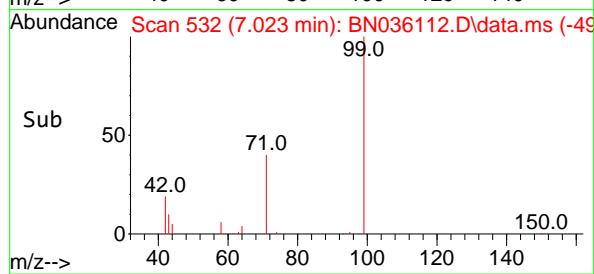
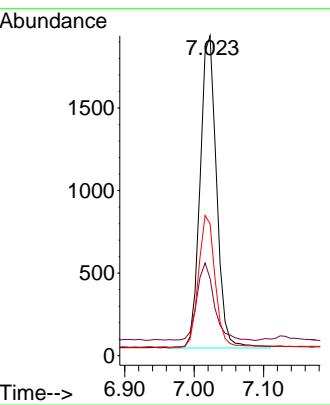


#5  
Phenol-d6  
Concen: 0.487 ng  
RT: 7.023 min Scan# 5  
Delta R.T. 0.051 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

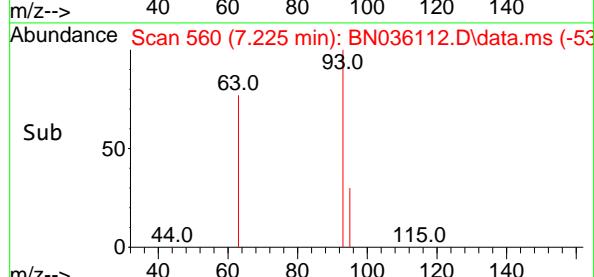
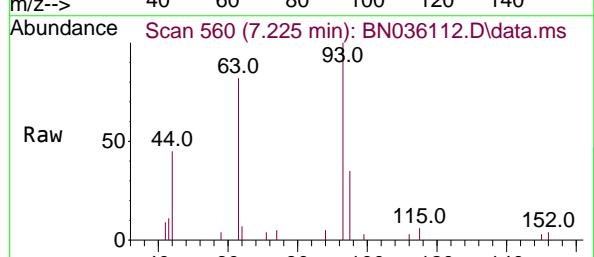
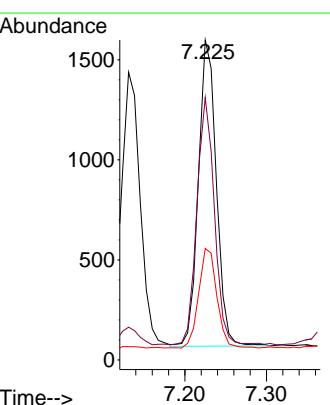


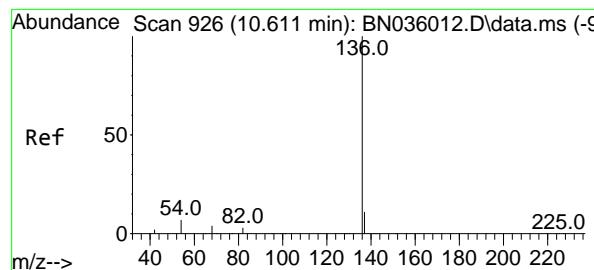
Tgt Ion: 99 Resp: 3116  
Ion Ratio Lower Upper  
99 100  
42 26.1 26.8 40.2#  
71 43.0 36.6 55.0



#6  
bis(2-Chloroethyl)ether  
Concen: 0.456 ng  
RT: 7.225 min Scan# 560  
Delta R.T. -0.007 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

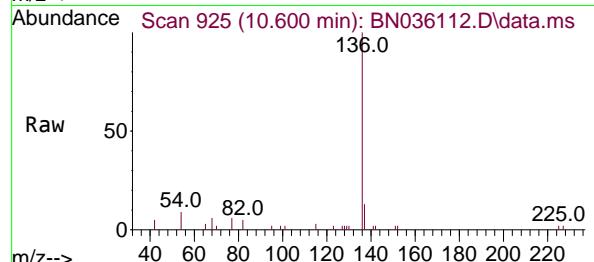
Tgt Ion: 93 Resp: 2347  
Ion Ratio Lower Upper  
93 100  
63 78.8 65.8 98.6  
95 32.8 25.8 38.6





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

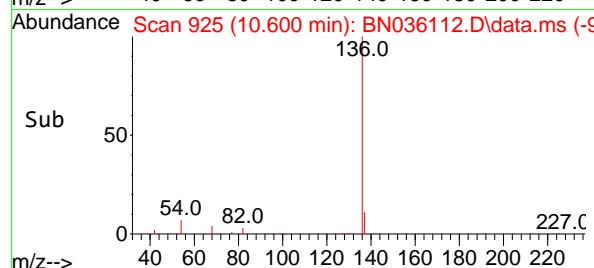
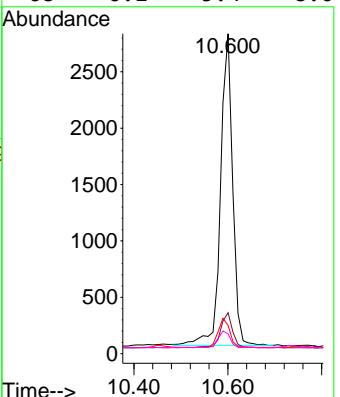
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4



Tgt Ion:136 Resp: 4943

Ion Ratio Lower Upper

136	100		
137	12.8	10.4	15.6
54	8.8	7.7	11.5
68	6.1	5.4	8.0

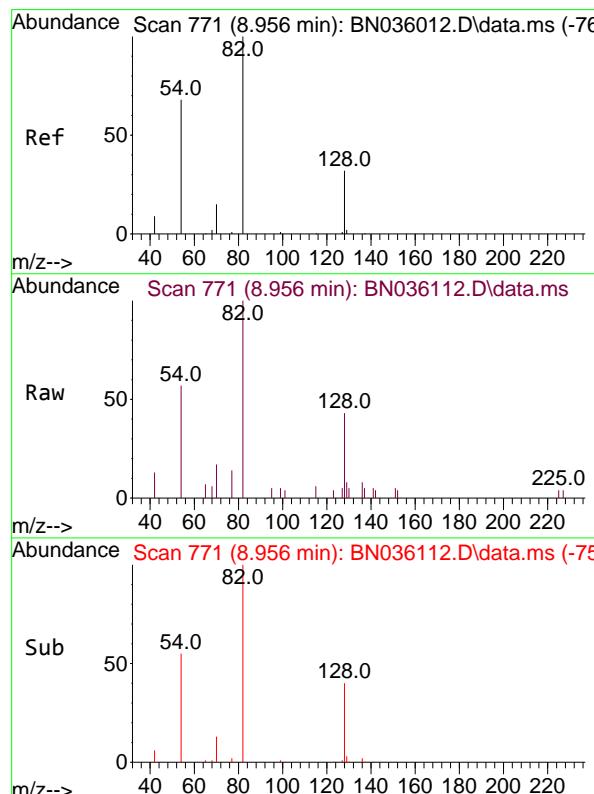
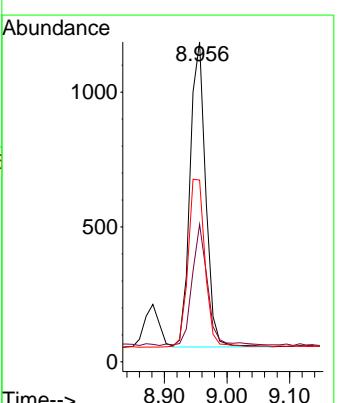


#8  
 Nitrobenzene-d5  
 Concen: 0.421 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion: 82 Resp: 1965

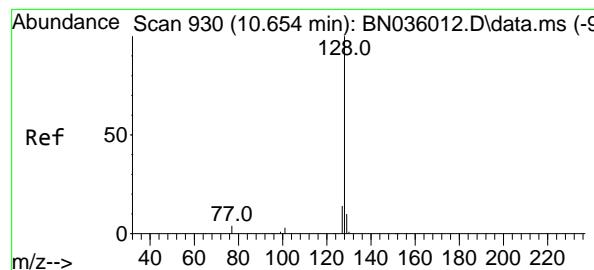
Ion Ratio Lower Upper

82	100		
128	43.0	28.8	43.2
54	56.8	55.8	83.8



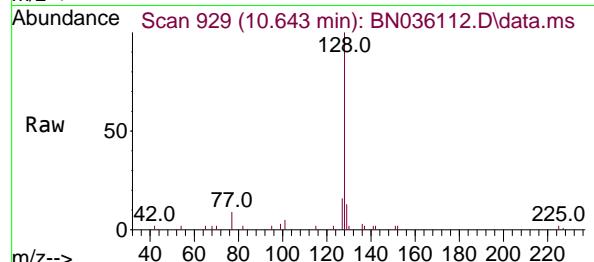
Abundance Scan 771 (8.956 min): BN036112.D\data.ms (-75)

m/z-->

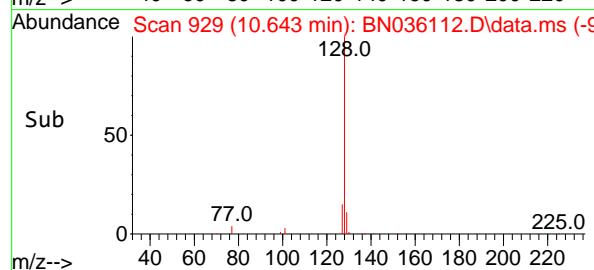
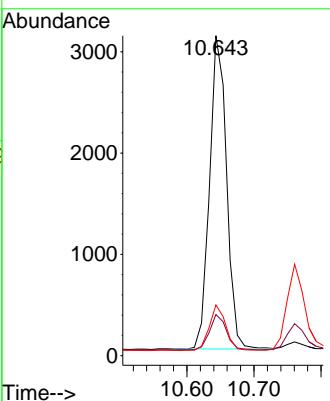


#9  
Naphthalene  
Concen: 0.379 ng  
RT: 10.643 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

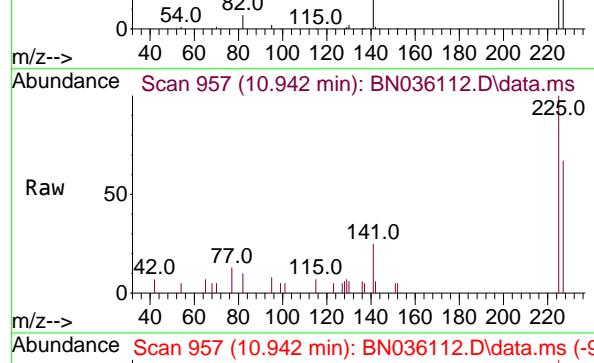
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



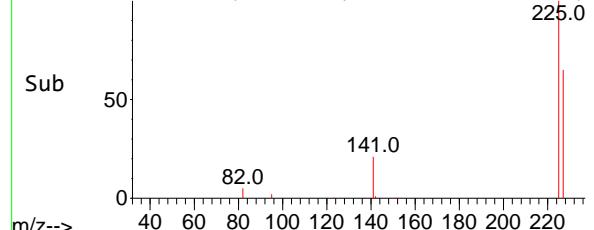
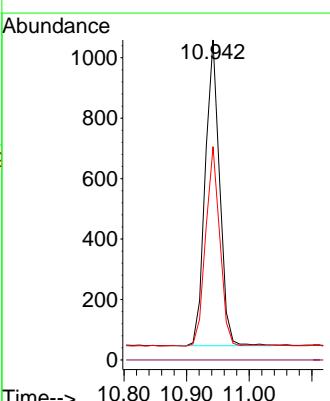
Tgt Ion:128 Resp: 5445  
Ion Ratio Lower Upper  
128 100  
129 12.8 9.4 14.2  
127 15.8 12.6 19.0

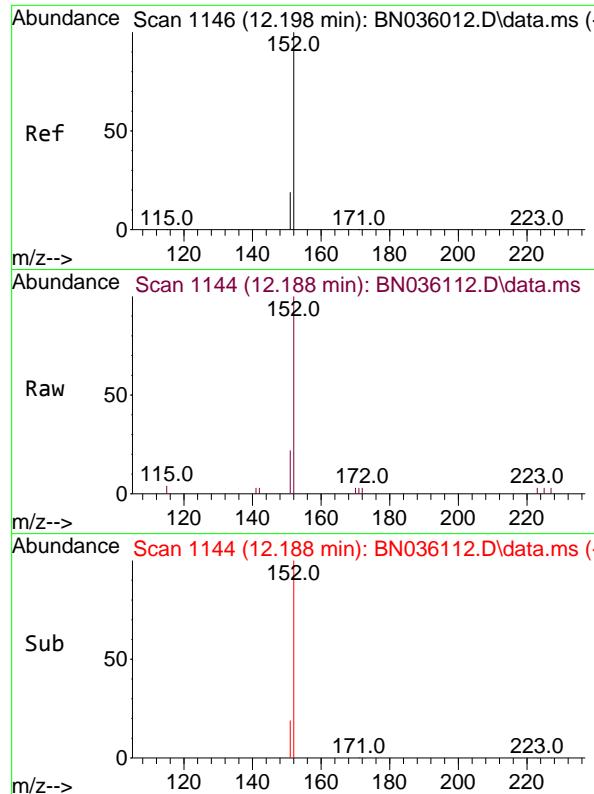


#10  
Hexachlorobutadiene  
Concen: 0.348 ng  
RT: 10.942 min Scan# 957  
Delta R.T. -0.011 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



Tgt Ion:225 Resp: 1612  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.1 51.0 76.6

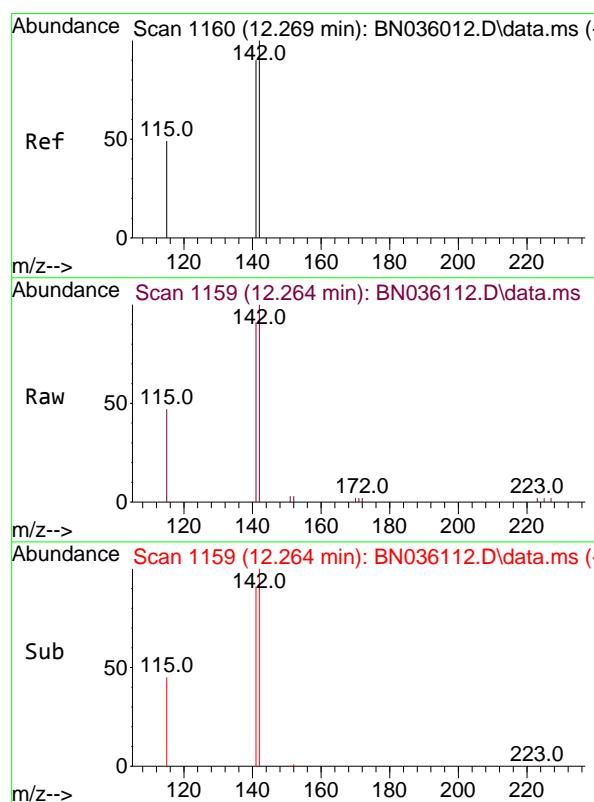
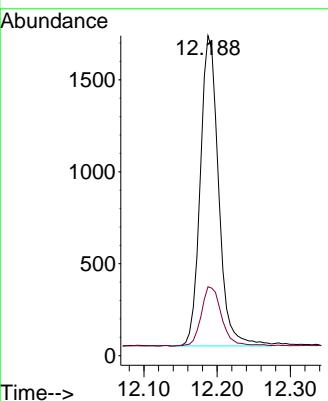




#11  
2-Methylnaphthalene-d10  
Concen: 0.437 ng  
RT: 12.188 min Scan# 1146  
Delta R.T. -0.010 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

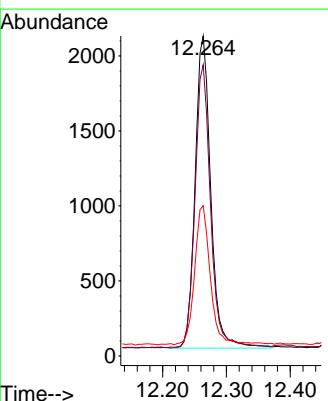
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ClientSampleId : SSTDCCC0.4

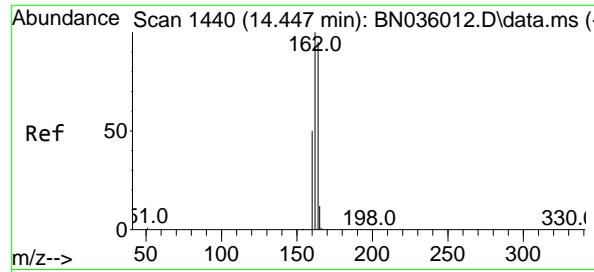
Tgt Ion:152 Resp: 2935  
Ion Ratio Lower Upper  
152 100  
151 21.2 16.6 25.0



#12  
2-Methylnaphthalene  
Concen: 0.399 ng  
RT: 12.264 min Scan# 1159  
Delta R.T. -0.005 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

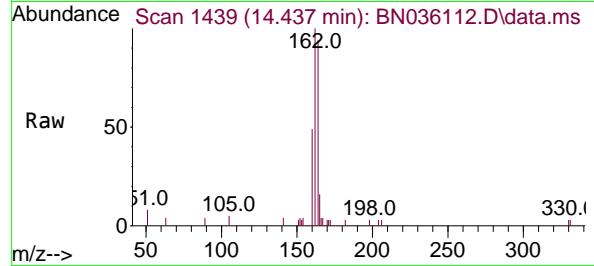
Tgt Ion:142 Resp: 3554  
Ion Ratio Lower Upper  
142 100  
141 91.0 72.2 108.2  
115 46.9 41.2 61.8



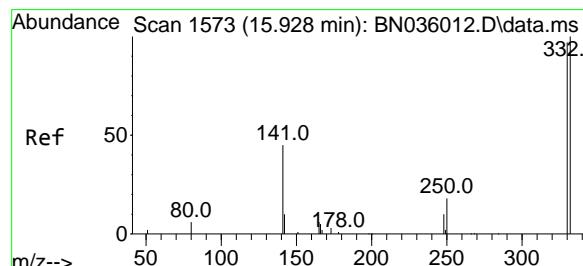
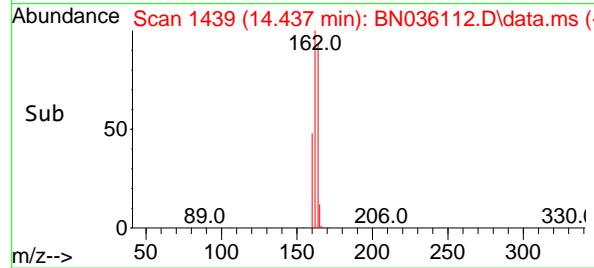
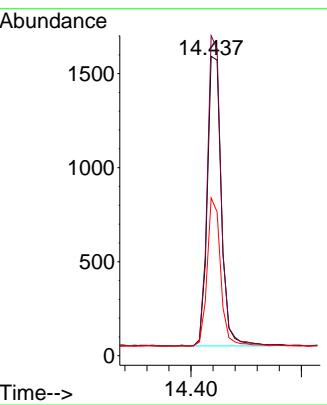


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.437 min Scan# 1  
 Delta R.T. -0.011 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

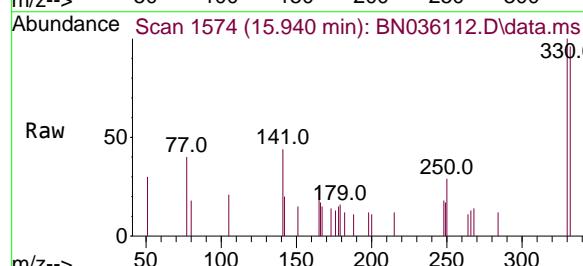
Instrument : BNA\_N  
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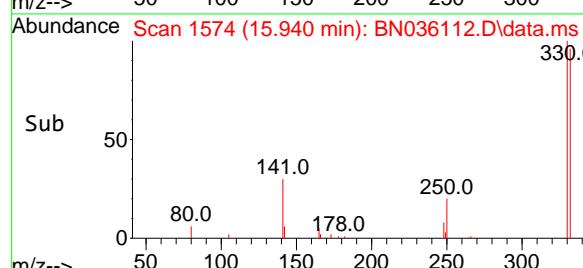
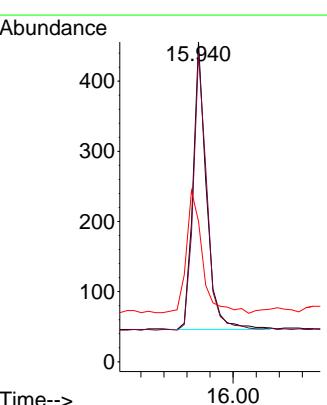
Tgt Ion:164 Resp: 2715  
 Ion Ratio Lower Upper  
 164 100  
 162 106.9 84.1 126.1  
 160 52.7 43.8 65.8

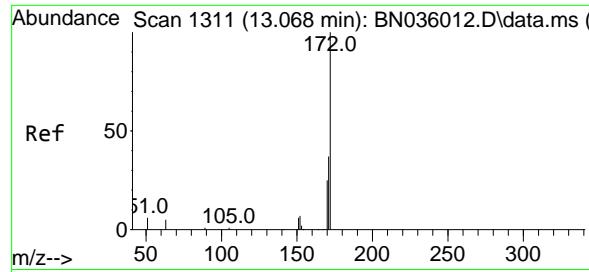


#14  
 2,4,6-Tribromophenol  
 Concen: 0.384 ng  
 RT: 15.940 min Scan# 1574  
 Delta R.T. 0.012 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06



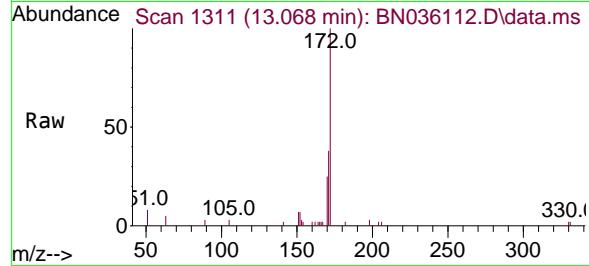
Tgt Ion:330 Resp: 668  
 Ion Ratio Lower Upper  
 330 100  
 332 98.1 81.0 121.4  
 141 50.7 36.7 55.1



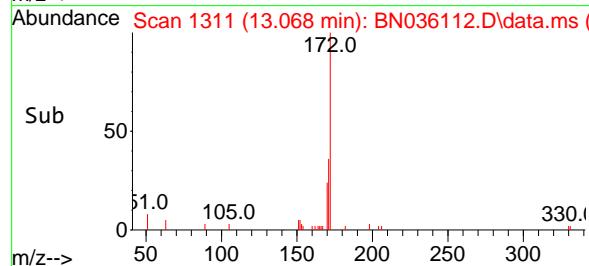
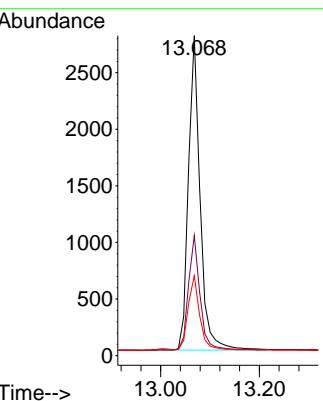


#15  
2-Fluorobiphenyl  
Concen: 0.377 ng  
RT: 13.068 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

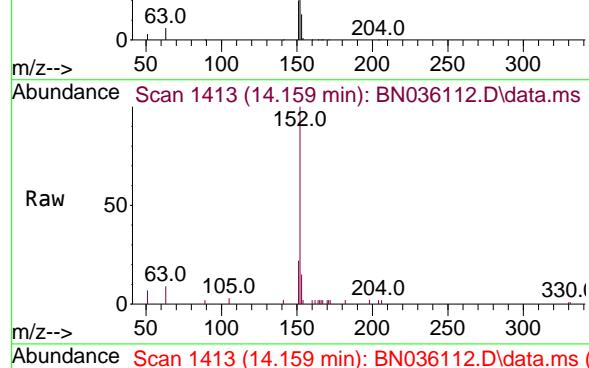
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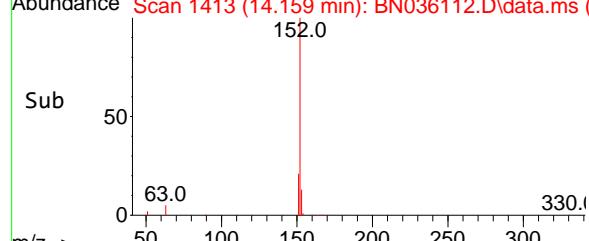
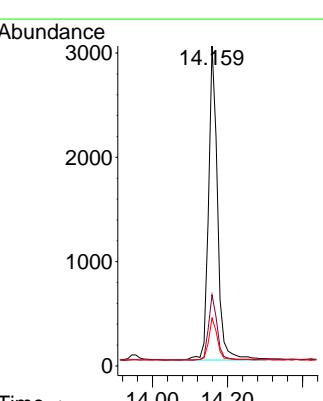
Tgt Ion:172 Resp: 4563  
Ion Ratio Lower Upper  
172 100  
171 37.5 30.9 46.3  
170 25.0 21.2 31.8

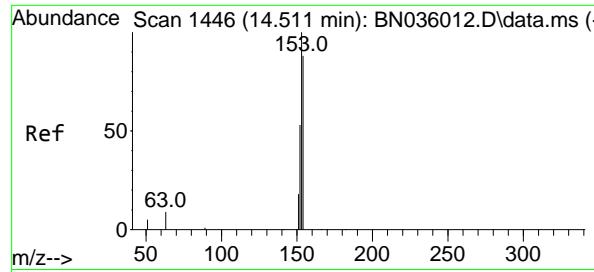


#16  
Acenaphthylene  
Concen: 0.391 ng  
RT: 14.159 min Scan# 1413  
Delta R.T. -0.011 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



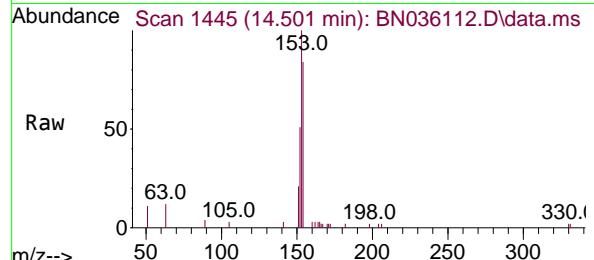
Tgt Ion:152 Resp: 5031  
Ion Ratio Lower Upper  
152 100  
151 20.5 16.2 24.2  
153 13.0 10.4 15.6



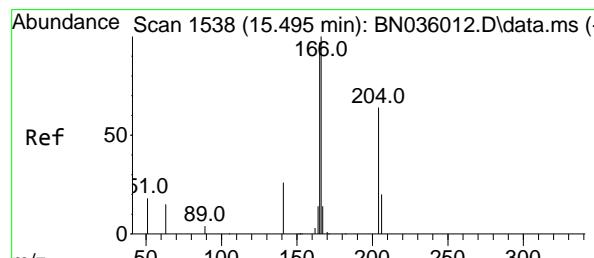
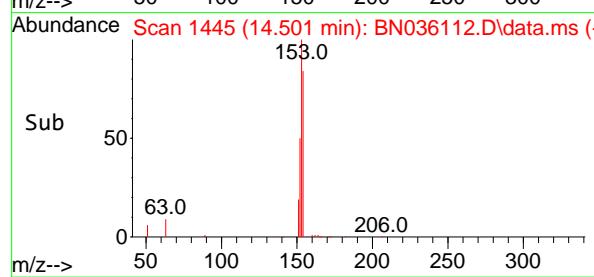
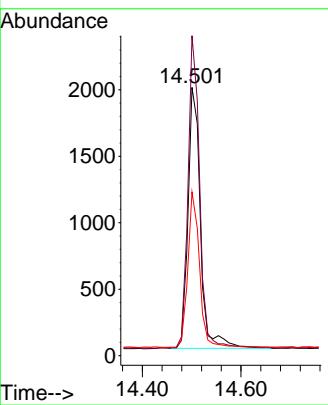


#17  
Acenaphthene  
Concen: 0.389 ng  
RT: 14.501 min Scan# 1  
Delta R.T. -0.011 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

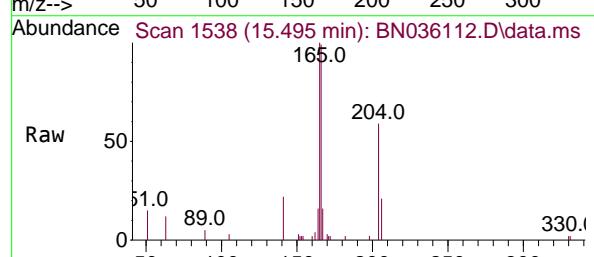
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



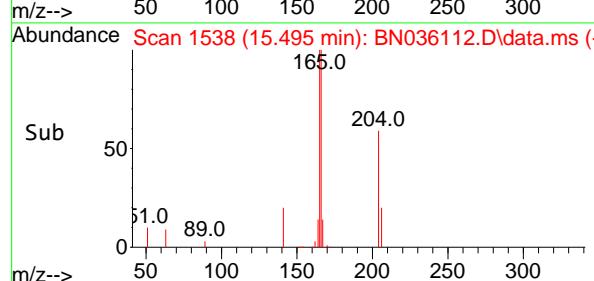
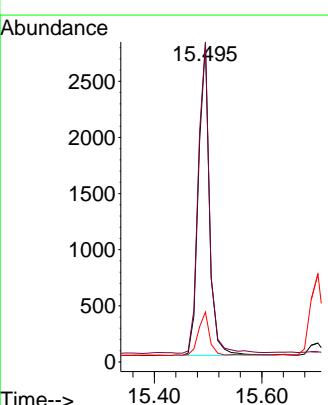
Tgt Ion:154 Resp: 3433  
Ion Ratio Lower Upper  
154 100  
153 113.0 88.9 133.3  
152 55.8 48.1 72.1

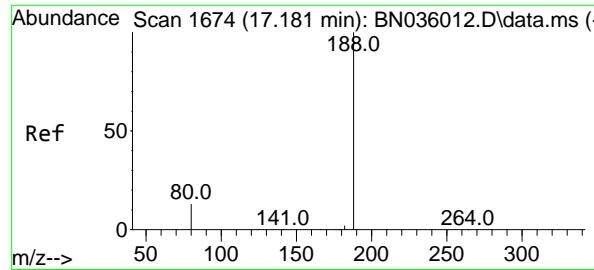


#18  
Fluorene  
Concen: 0.382 ng  
RT: 15.495 min Scan# 1538  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



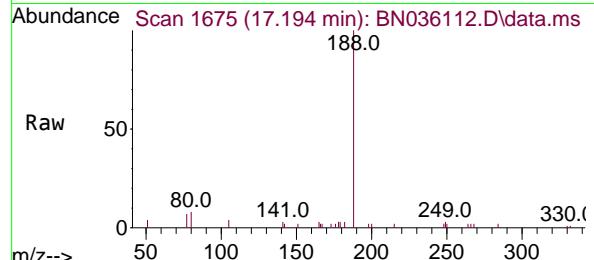
Tgt Ion:166 Resp: 4221  
Ion Ratio Lower Upper  
166 100  
165 101.1 78.5 117.7  
167 13.6 10.7 16.1



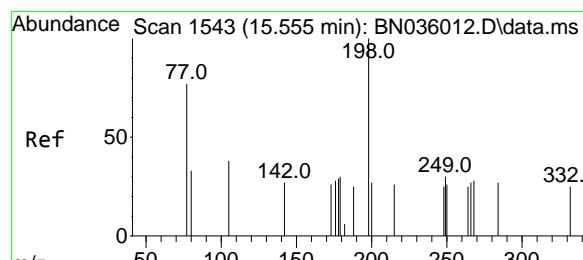
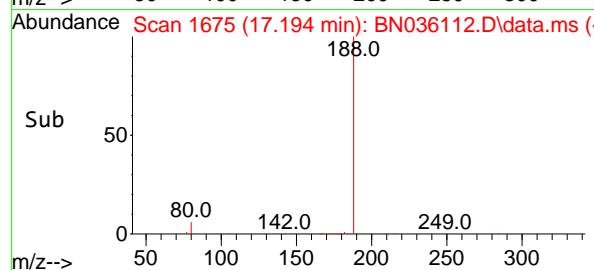
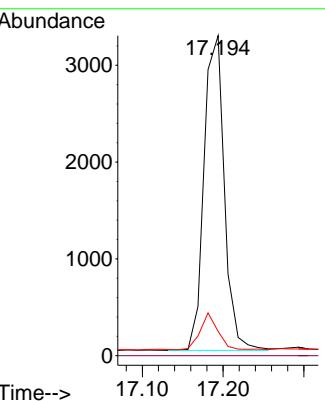


#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.194 min Scan# 1  
 Delta R.T. 0.012 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

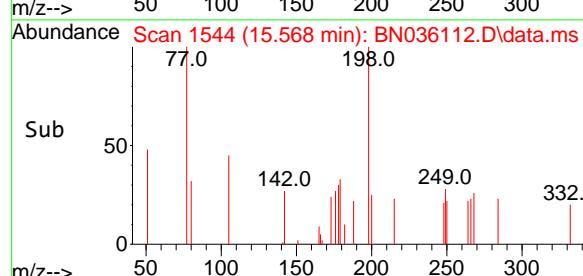
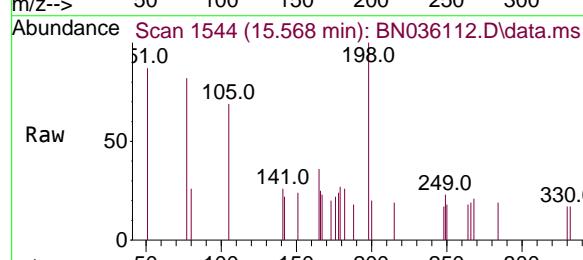
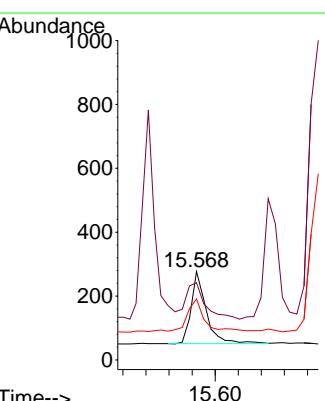


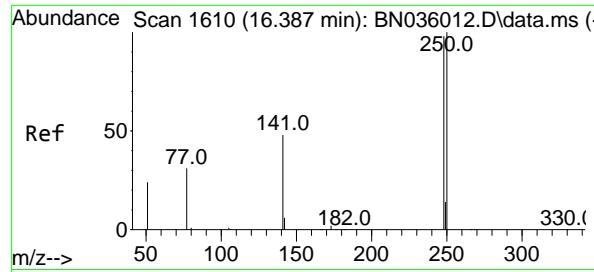
Tgt Ion:188 Resp: 5698  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 7.6 12.3 18.5#



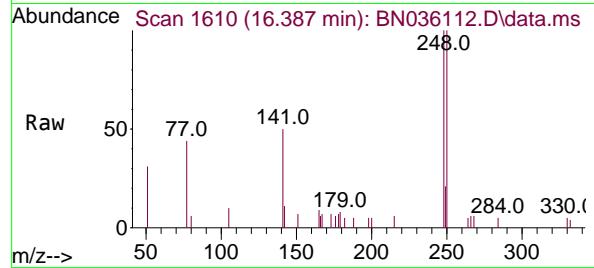
#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.311 ng  
 RT: 15.568 min Scan# 1544  
 Delta R.T. 0.013 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:198 Resp: 413  
 Ion Ratio Lower Upper  
 198 100  
 51 87.4 68.1 102.1  
 105 69.0 46.5 69.7

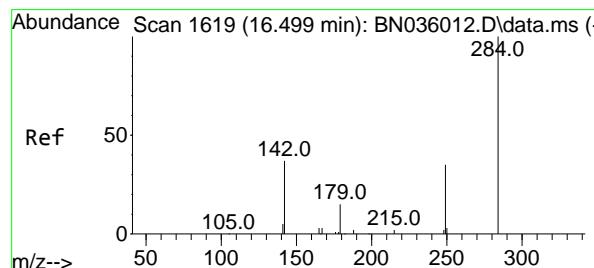
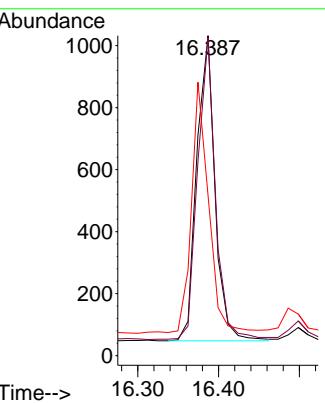
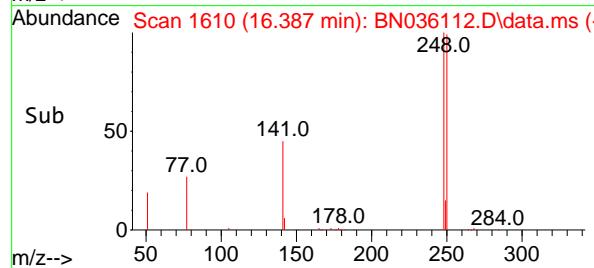




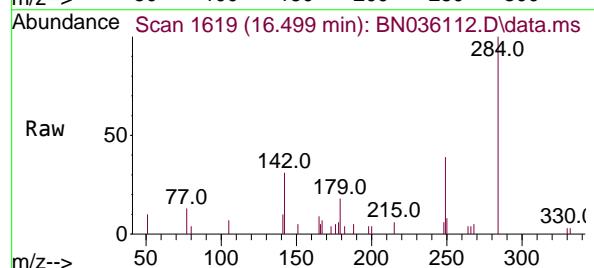
#21  
4-Bromophenyl-phenylether  
Concen: 0.380 ng  
RT: 16.387 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
ClientSampleId : SSTDCCC0.4  
Acq: 29 Jan 2025 18:06



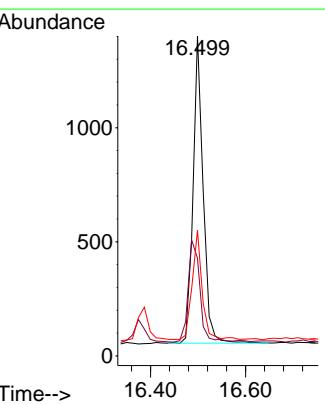
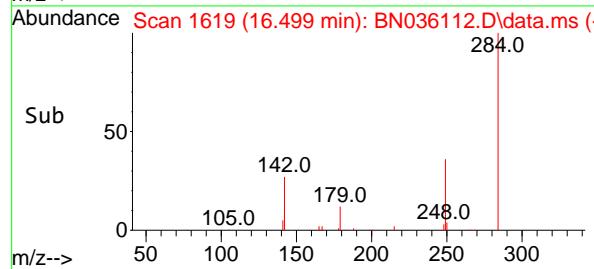
Tgt Ion:248 Resp: 1542  
Ion Ratio Lower Upper  
248 100  
250 99.6 81.5 122.3  
141 50.1 41.8 62.6

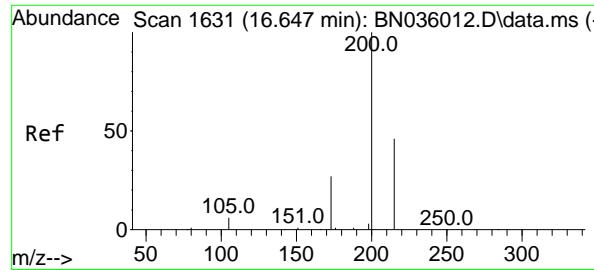


#22  
Hexachlorobenzene  
Concen: 0.373 ng  
RT: 16.499 min Scan# 1619  
Delta R.T. 0.000 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



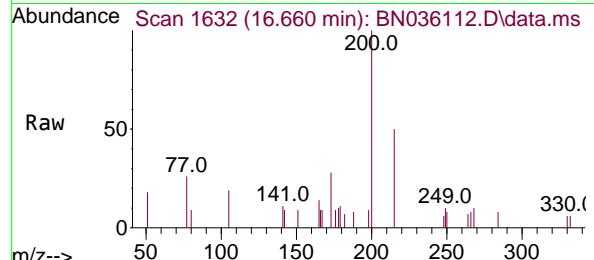
Tgt Ion:284 Resp: 1993  
Ion Ratio Lower Upper  
284 100  
142 38.3 33.6 50.4  
249 35.6 28.8 43.2



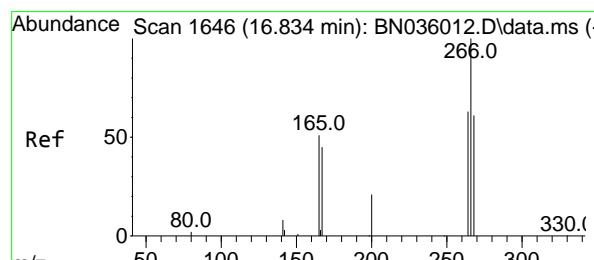
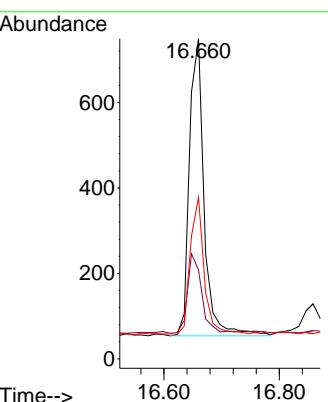
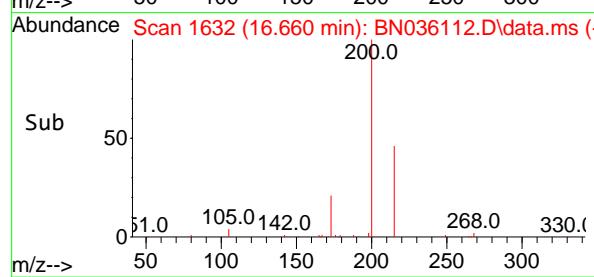


#23  
Atrazine  
Concen: 0.422 ng  
RT: 16.660 min Scan# 1  
Delta R.T. 0.012 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06

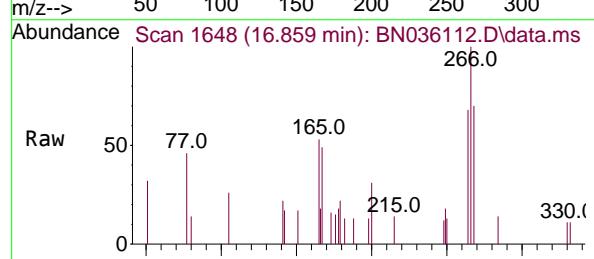
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



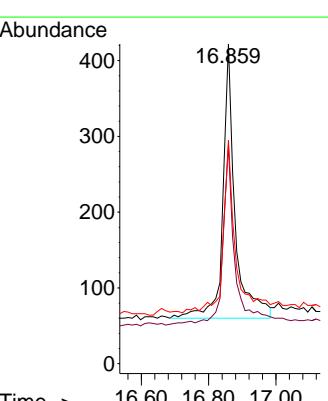
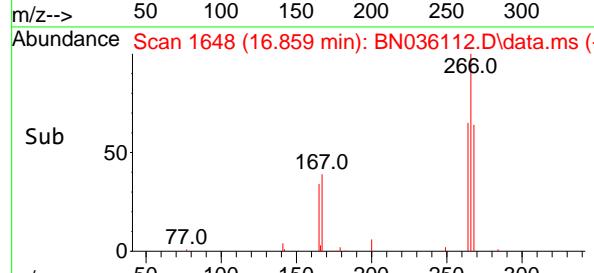
Tgt Ion:200 Resp: 1238  
Ion Ratio Lower Upper  
200 100  
173 27.8 26.6 40.0  
215 50.5 40.6 61.0

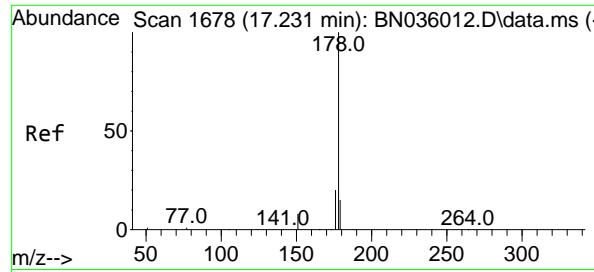


#24  
Pentachlorophenol  
Concen: 0.398 ng  
RT: 16.859 min Scan# 1648  
Delta R.T. 0.025 min  
Lab File: BN036112.D  
Acq: 29 Jan 2025 18:06



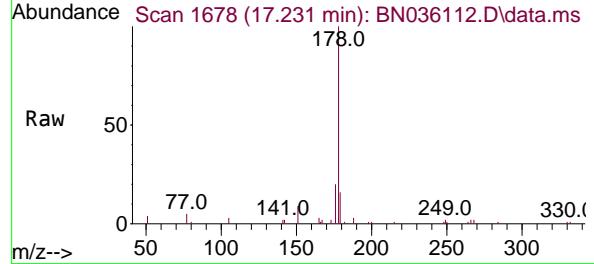
Tgt Ion:266 Resp: 920  
Ion Ratio Lower Upper  
266 100  
264 65.7 48.2 72.2  
268 59.8 51.6 77.4



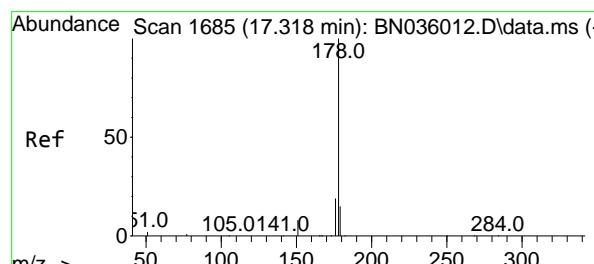
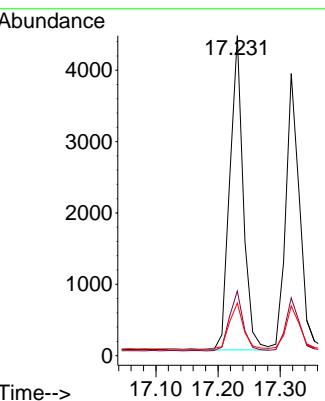
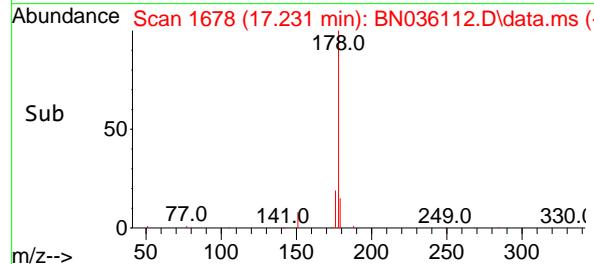


#25  
 Phenanthrene  
 Concen: 0.388 ng  
 RT: 17.231 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

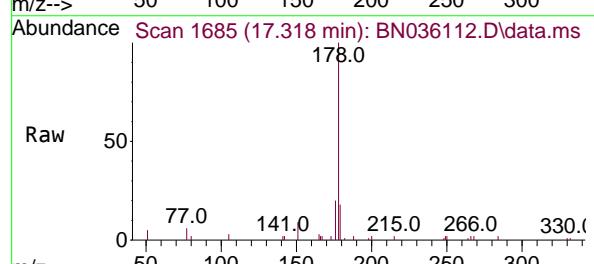
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4



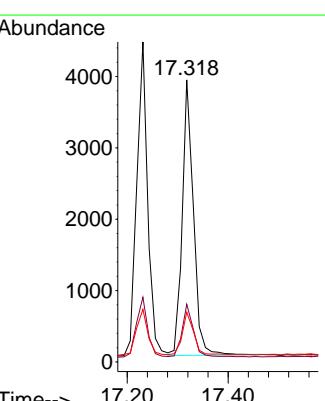
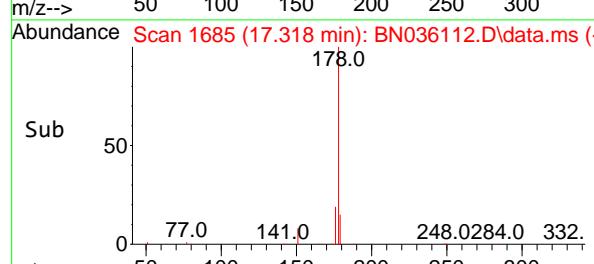
Tgt Ion:178 Resp: 6643  
 Ion Ratio Lower Upper  
 178 100  
 176 19.6 16.0 24.0  
 179 15.6 12.4 18.6

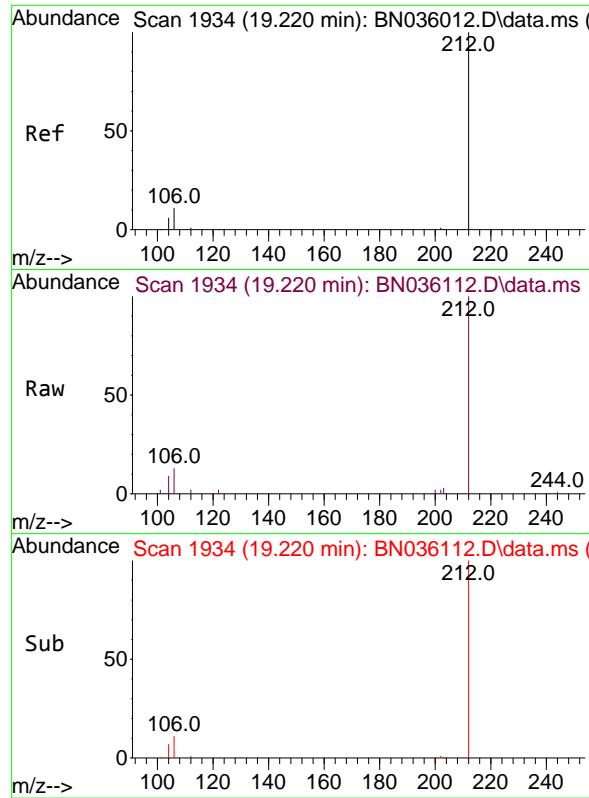


#26  
 Anthracene  
 Concen: 0.383 ng  
 RT: 17.318 min Scan# 1685  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06



Tgt Ion:178 Resp: 5960  
 Ion Ratio Lower Upper  
 178 100  
 176 19.5 15.4 23.2  
 179 16.3 12.0 18.0

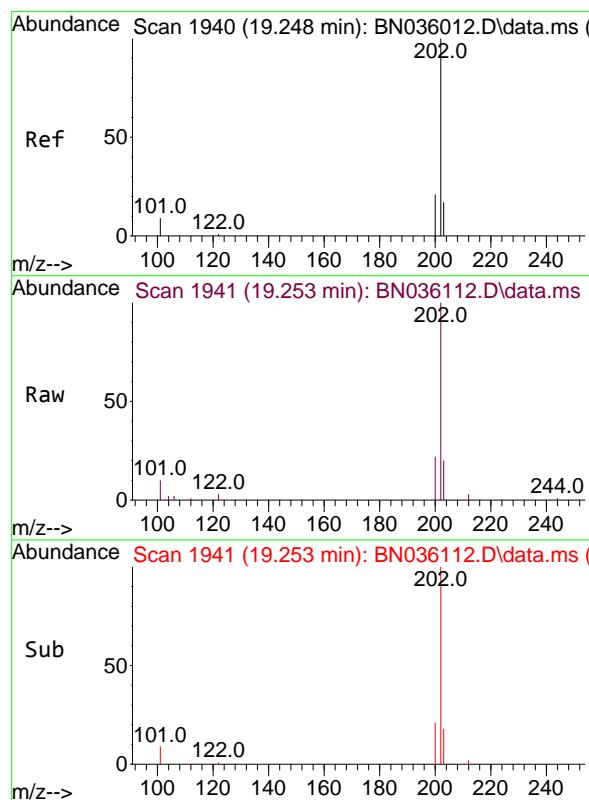
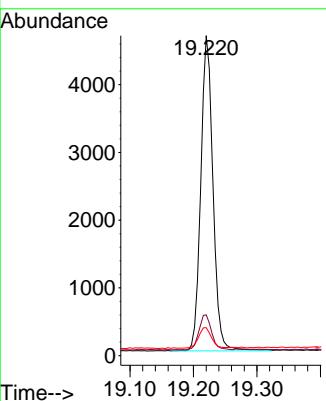




#27  
 Fluoranthene-d10  
 Concen: 0.422 ng  
 RT: 19.220 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

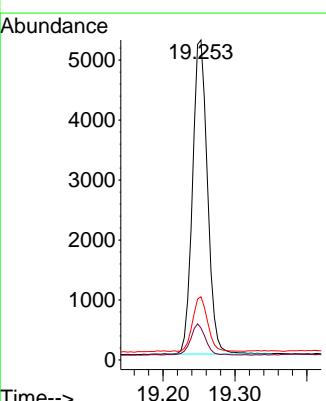
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

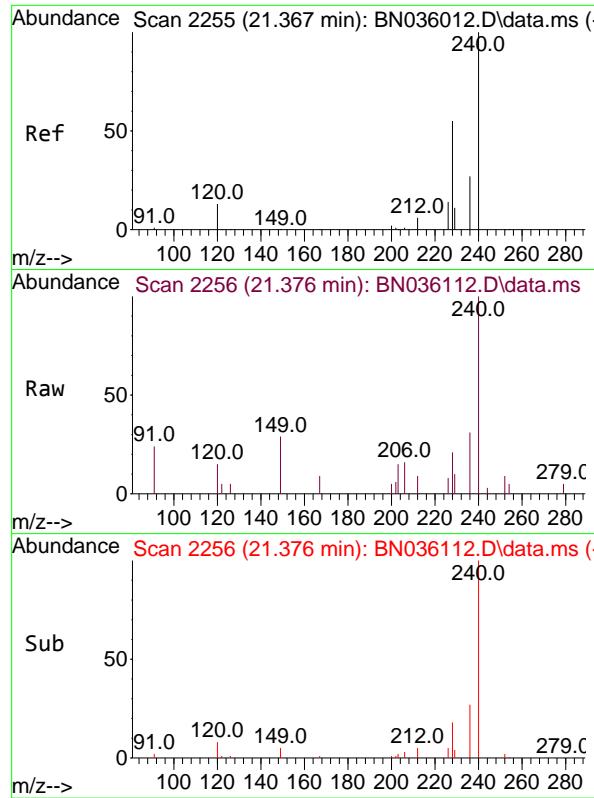
Tgt Ion:212 Resp: 6225  
 Ion Ratio Lower Upper  
 212 100  
 106 11.2 9.7 14.5  
 104 6.9 6.0 9.0



#28  
 Fluoranthene  
 Concen: 0.376 ng  
 RT: 19.253 min Scan# 1941  
 Delta R.T. 0.005 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:202 Resp: 7565  
 Ion Ratio Lower Upper  
 202 100  
 101 9.8 7.6 11.4  
 203 17.8 13.8 20.6

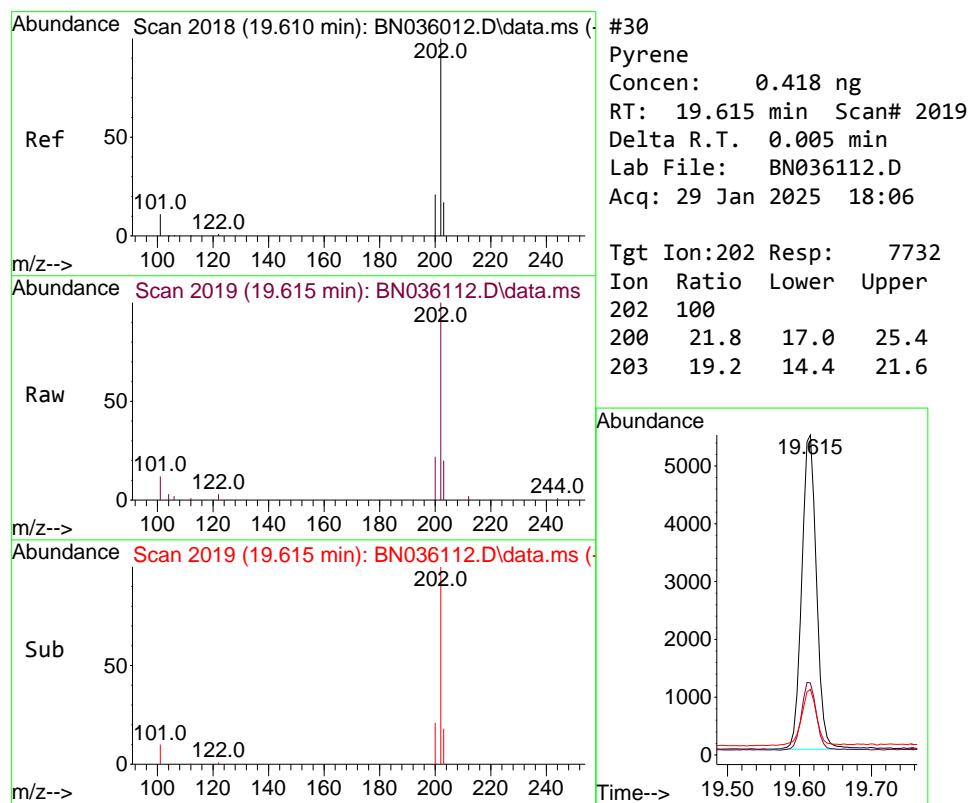
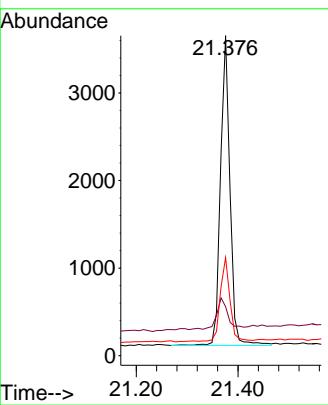




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.376 min Scan# 2  
 Delta R.T. 0.009 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

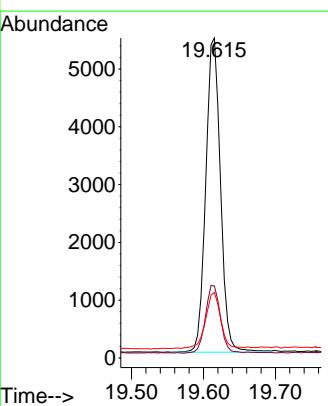
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

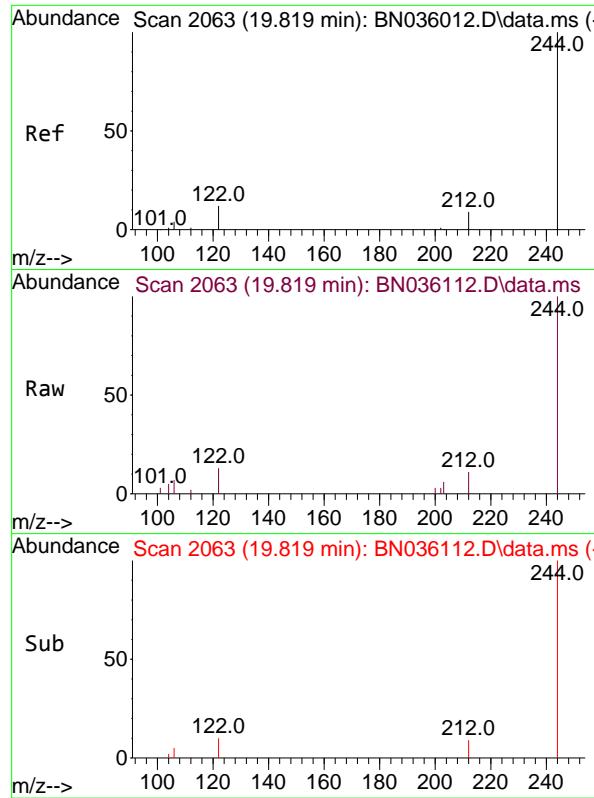
Tgt Ion:240 Resp: 4562  
 Ion Ratio Lower Upper  
 240 100  
 120 15.3 13.9 20.9  
 236 30.6 23.7 35.5



#30  
 Pyrene  
 Concen: 0.418 ng  
 RT: 19.615 min Scan# 2019  
 Delta R.T. 0.005 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:202 Resp: 7732  
 Ion Ratio Lower Upper  
 202 100  
 200 21.8 17.0 25.4  
 203 19.2 14.4 21.6

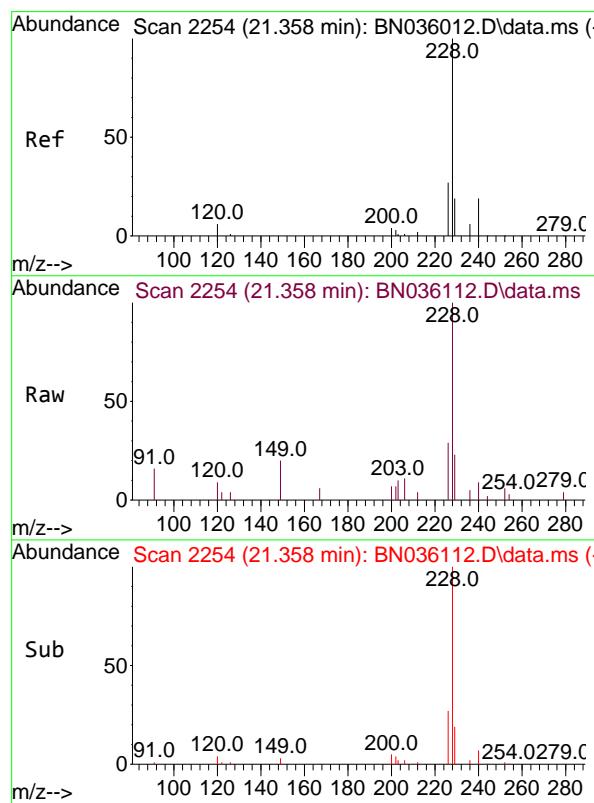
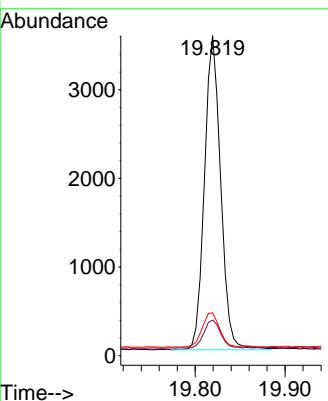




#31  
 Terphenyl-d14  
 Concen: 0.468 ng  
 RT: 19.819 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

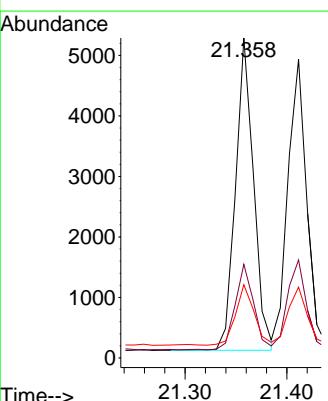
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

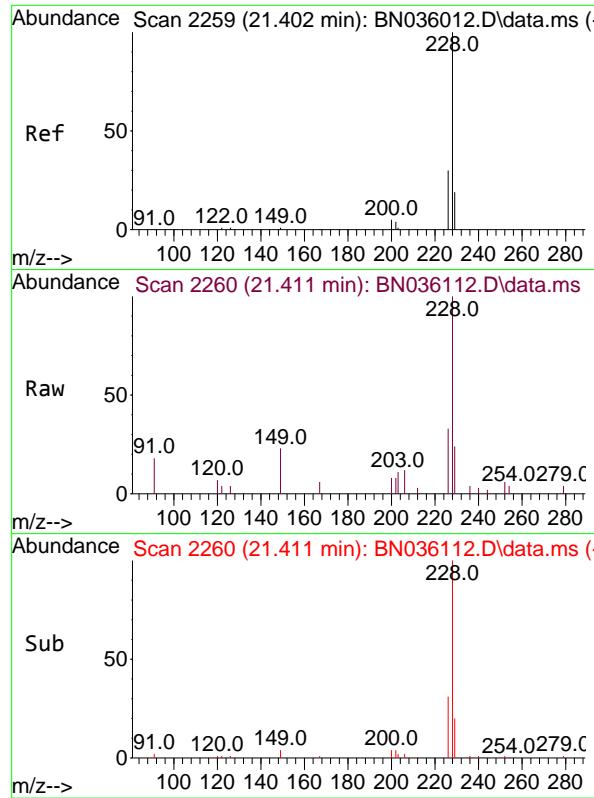
Tgt Ion:244 Resp: 4439  
 Ion Ratio Lower Upper  
 244 100  
 212 11.1 9.1 13.7  
 122 13.4 11.3 16.9



#32  
 Benzo(a)anthracene  
 Concen: 0.384 ng  
 RT: 21.358 min Scan# 2254  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:228 Resp: 6361  
 Ion Ratio Lower Upper  
 228 100  
 226 29.2 22.6 34.0  
 229 22.9 16.5 24.7

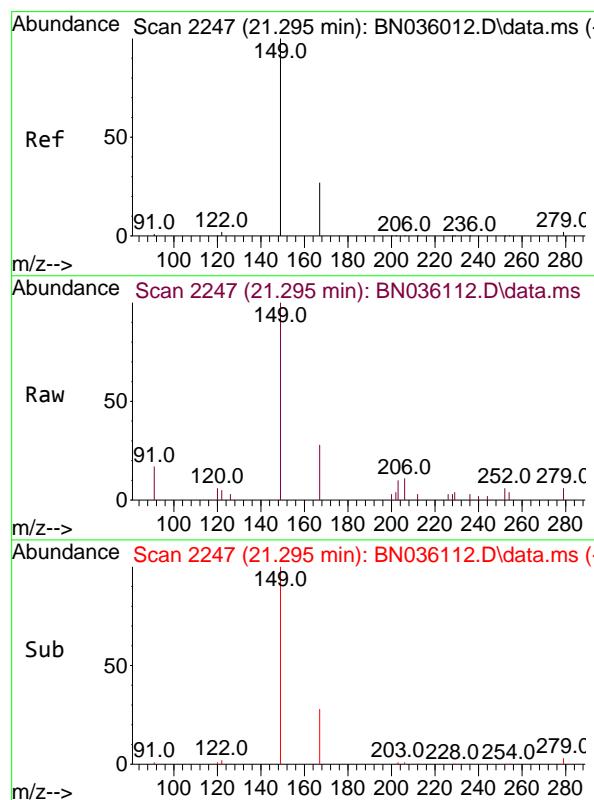
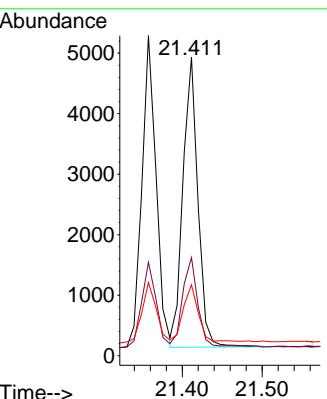




#33  
 Chrysene  
 Concen: 0.370 ng  
 RT: 21.411 min Scan# 2  
 Delta R.T. 0.009 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

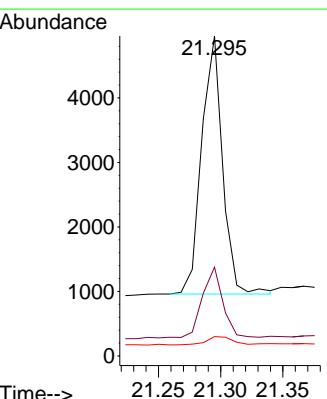
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

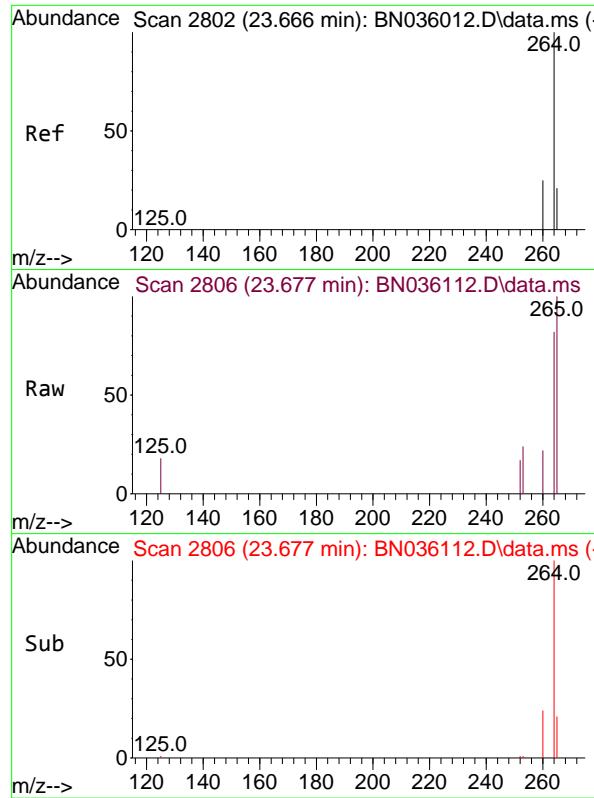
Tgt Ion:228 Resp: 6253  
 Ion Ratio Lower Upper  
 228 100  
 226 32.8 25.3 37.9  
 229 23.8 16.3 24.5



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.516 ng  
 RT: 21.295 min Scan# 2247  
 Delta R.T. 0.000 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:149 Resp: 4681  
 Ion Ratio Lower Upper  
 149 100  
 167 27.0 21.9 32.9  
 279 4.1 3.0 4.6

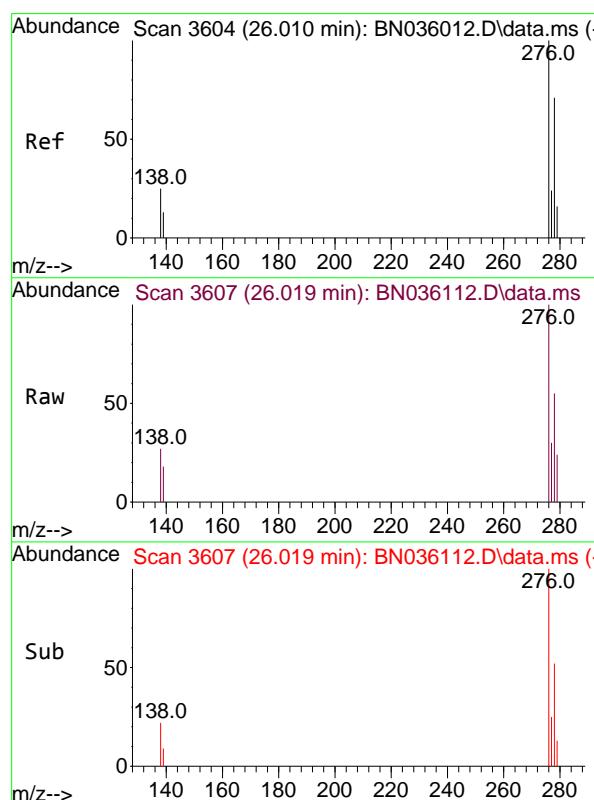
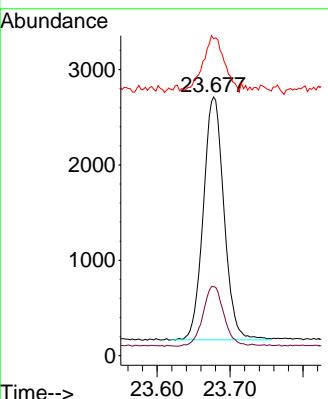




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.677 min Scan# 2  
 Delta R.T. 0.012 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

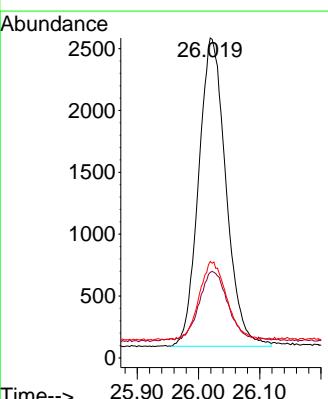
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

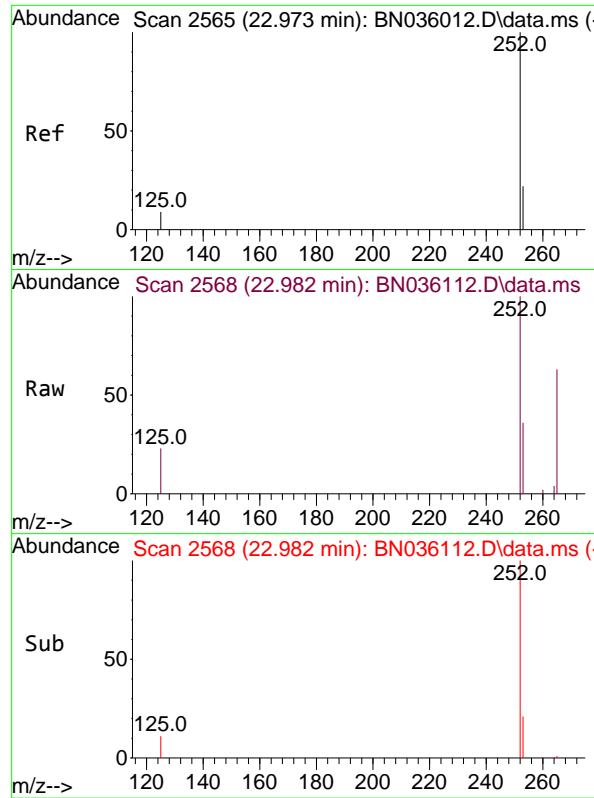
Tgt Ion:264 Resp: 5021  
 Ion Ratio Lower Upper  
 264 100  
 260 26.6 21.8 32.6  
 265 122.5 56.6 84.8#



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.383 ng  
 RT: 26.019 min Scan# 3607  
 Delta R.T. 0.009 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:276 Resp: 7721  
 Ion Ratio Lower Upper  
 276 100  
 138 23.7 19.9 29.9  
 277 25.5 19.4 29.2

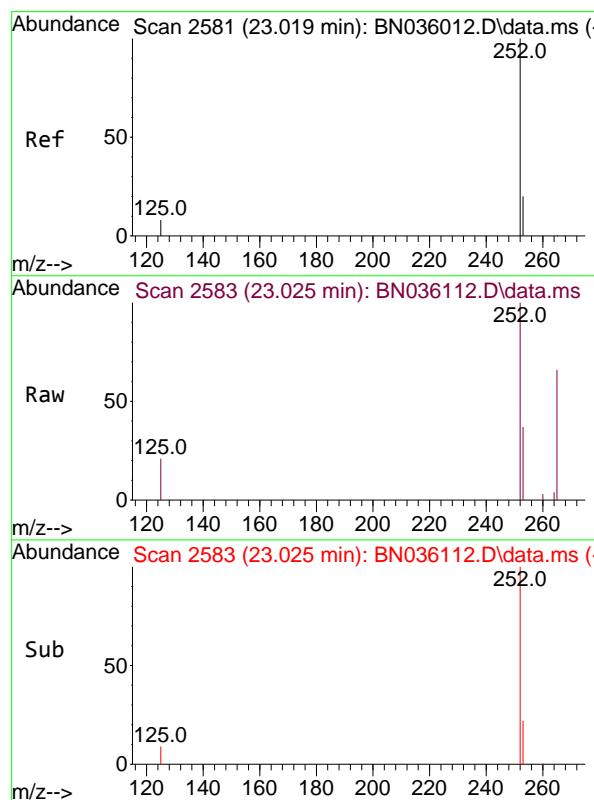
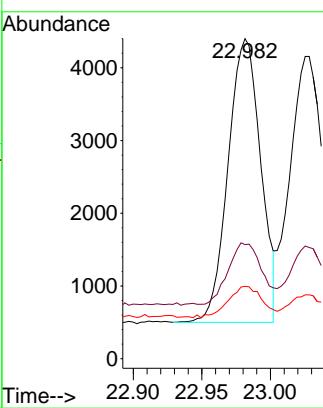




#37  
 Benzo(b)fluoranthene  
 Concen: 0.352 ng  
 RT: 22.982 min Scan# 2  
 Delta R.T. 0.009 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

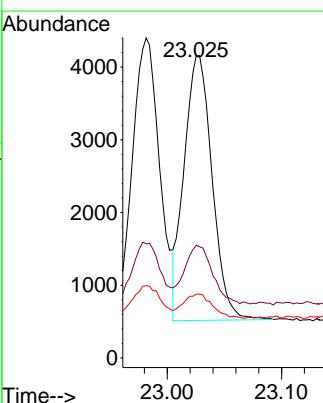
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 ClientSampleId : SSTDCCC0.4

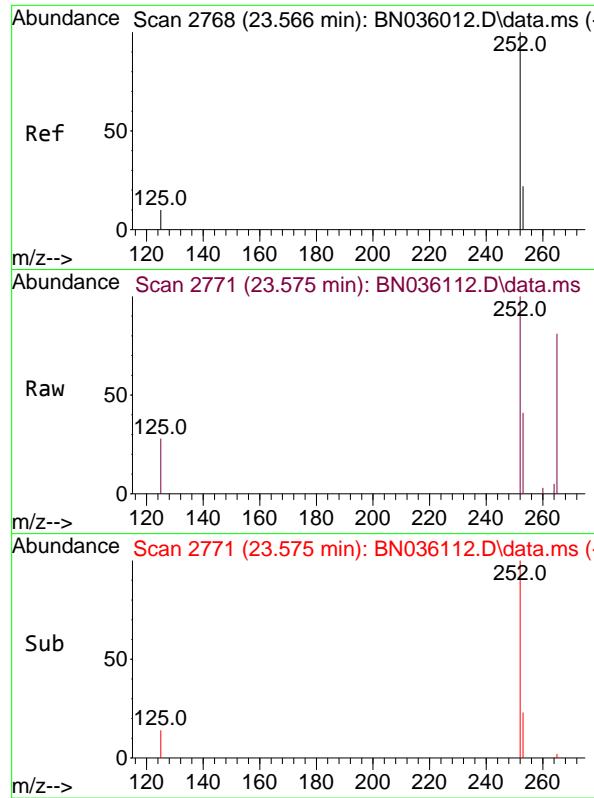
Tgt Ion:252 Resp: 6433  
 Ion Ratio Lower Upper  
 252 100  
 253 35.7 22.5 33.7#  
 125 22.6 11.9 17.9#



#38  
 Benzo(k)fluoranthene  
 Concen: 0.337 ng  
 RT: 23.025 min Scan# 2583  
 Delta R.T. 0.006 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:252 Resp: 6208  
 Ion Ratio Lower Upper  
 252 100  
 253 37.3 21.3 31.9#  
 125 21.1 11.9 17.9#

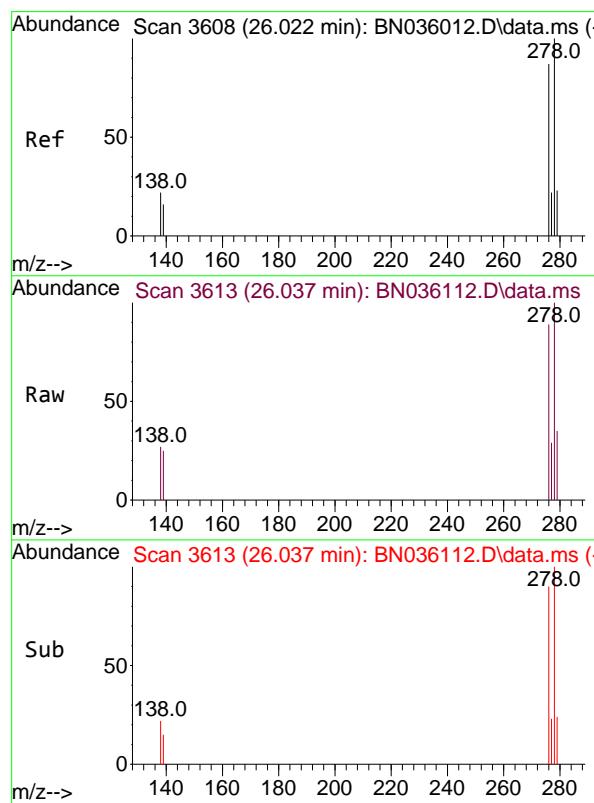
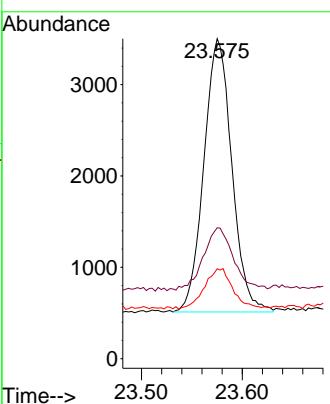




#39  
 Benzo(a)pyrene  
 Concen: 0.370 ng  
 RT: 23.575 min Scan# 2  
 Delta R.T. 0.009 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

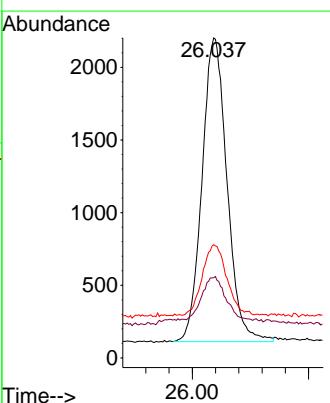
Instrument : BNA\_N  
 ClientSampleId : SSTDCCCC0.4

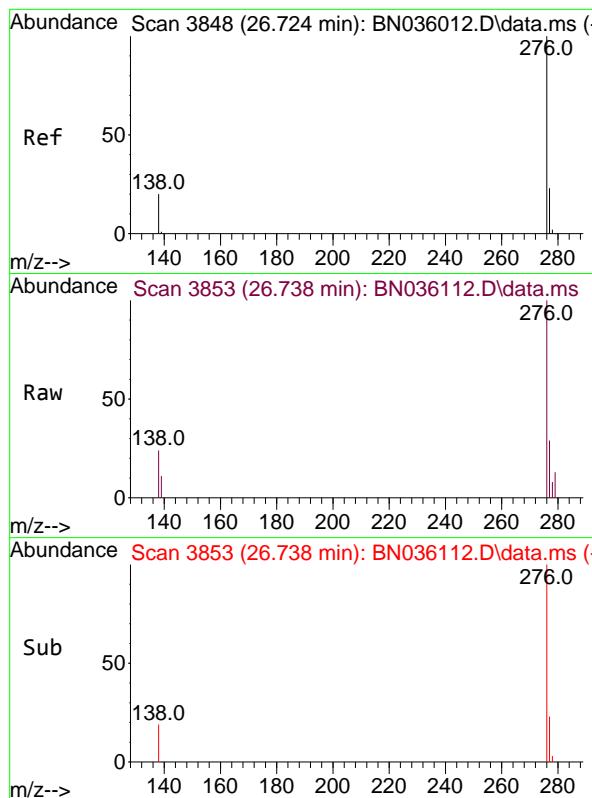
Tgt Ion:252 Resp: 5774  
 Ion Ratio Lower Upper  
 252 100  
 253 40.9 23.8 35.6#  
 125 28.1 14.6 21.8#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.389 ng  
 RT: 26.037 min Scan# 3613  
 Delta R.T. 0.015 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Tgt Ion:278 Resp: 6242  
 Ion Ratio Lower Upper  
 278 100  
 139 25.1 16.0 24.0#  
 279 35.4 23.8 35.8

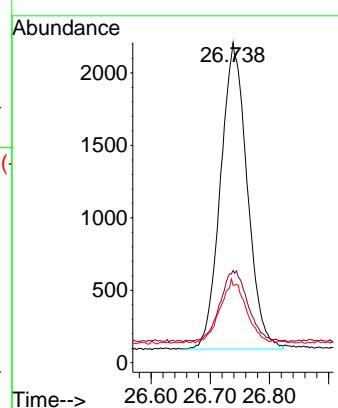




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.378 ng  
 RT: 26.738 min Scan# 3  
 Delta R.T. 0.015 min  
 Lab File: BN036112.D  
 Acq: 29 Jan 2025 18:06

Instrument : BNA\_N  
 ClientSampleId : SSTDCCCC0.4

Tgt Ion:276 Resp: 6621  
 Ion Ratio Lower Upper  
 276 100  
 277 28.8 21.3 31.9  
 138 24.3 19.2 28.8



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036115.D  
 Acq On : 29 Jan 2025 19:55  
 Operator : RC/JU  
 Sample : Q1199-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-EB-20250124**

Quant Time: Jan 30 00:36:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

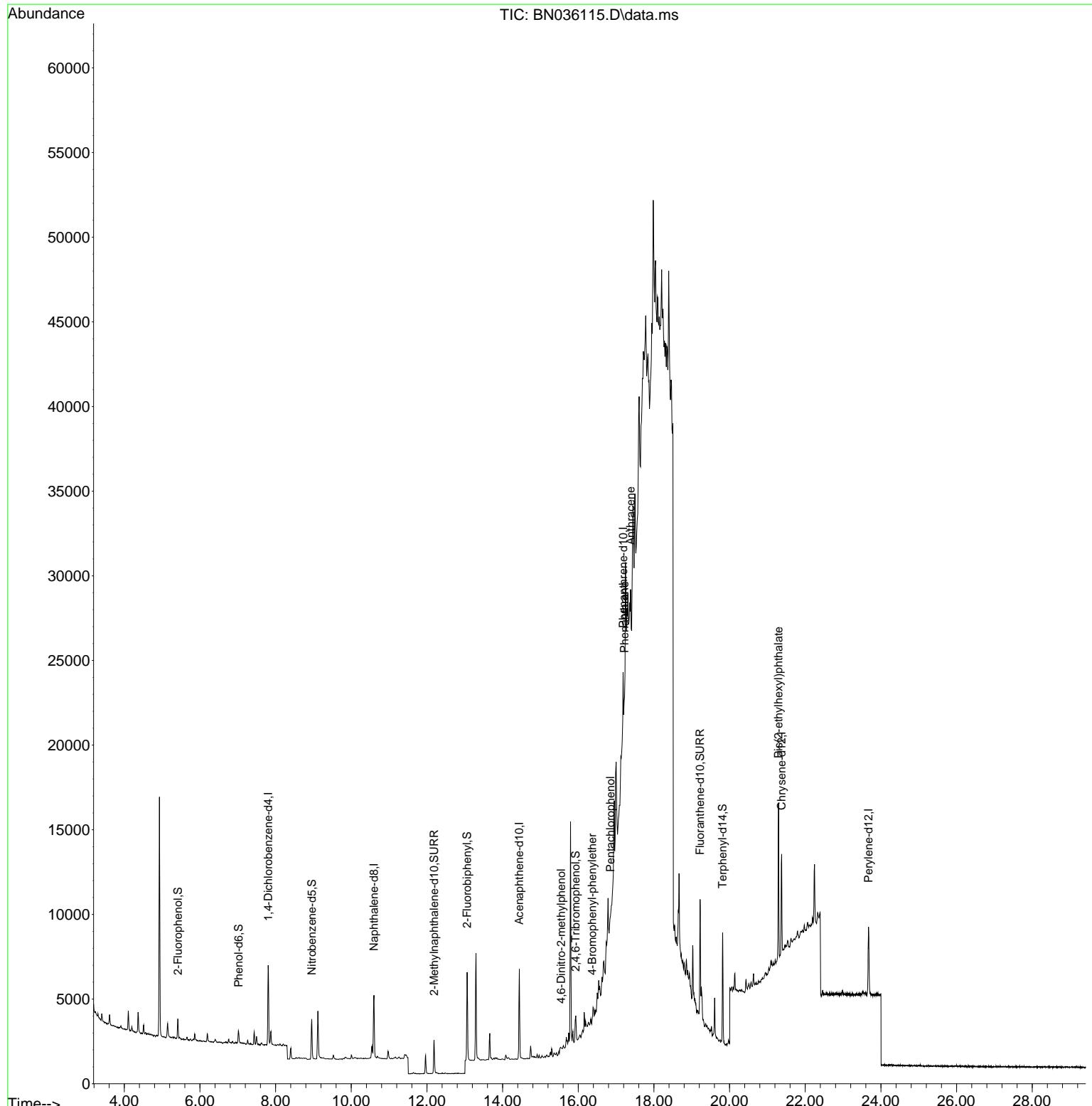
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2206	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	5767	0.400	ng	-0.01
13) Acenaphthene-d10	14.441	164	2988	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6578	0.400	ng	# 0.00
29) Chrysene-d12	21.376	240	5317	0.400	ng	0.00
35) Perylene-d12	23.675	264	5108	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	871	0.152	ng	0.03
5) Phenol-d6	7.023	99	665	0.099	ng	0.05
8) Nitrobenzene-d5	8.956	82	1840	0.338	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2755	0.351	ng	-0.01
14) 2,4,6-Tribromophenol	15.932	330	608	0.317	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4082	0.306	ng	0.00
27) Fluoranthene-d10	19.220	212	7666	0.450	ng	0.00
31) Terphenyl-d14	19.815	244	5937	0.538	ng	0.00
<b>Target Compounds</b>						
20) 4,6-Dinitro-2-methylph...	15.548	198	37	0.024	ng	# 1
21) 4-Bromophenyl-phenylether	16.367	248	118	0.025	ng	# 1
24) Pentachlorophenol	16.851	266	54	0.020	ng	# 19
25) Phenanthrene	17.223	178	2143	0.108	ng	# 59
26) Anthracene	17.385	178	412	0.023	ng	# 60
34) Bis(2-ethylhexyl)phtha...	21.295	149	8450	0.800	ng	99

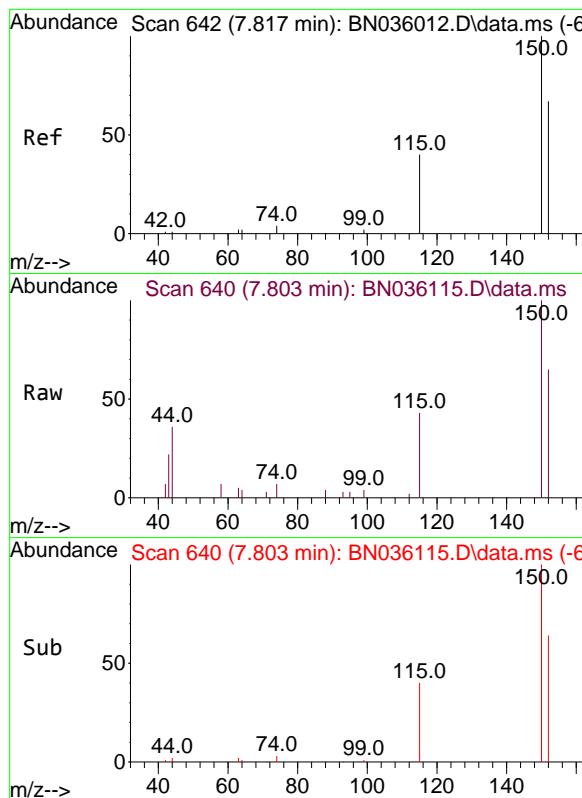
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
Data File : BN036115.D  
Acq On : 29 Jan 2025 19:55  
Operator : RC/JU  
Sample : Q1199-02  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-EB-20250124

Quant Time: Jan 30 00:36:02 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jan 23 00:34:56 2025  
Response via : Initial Calibration

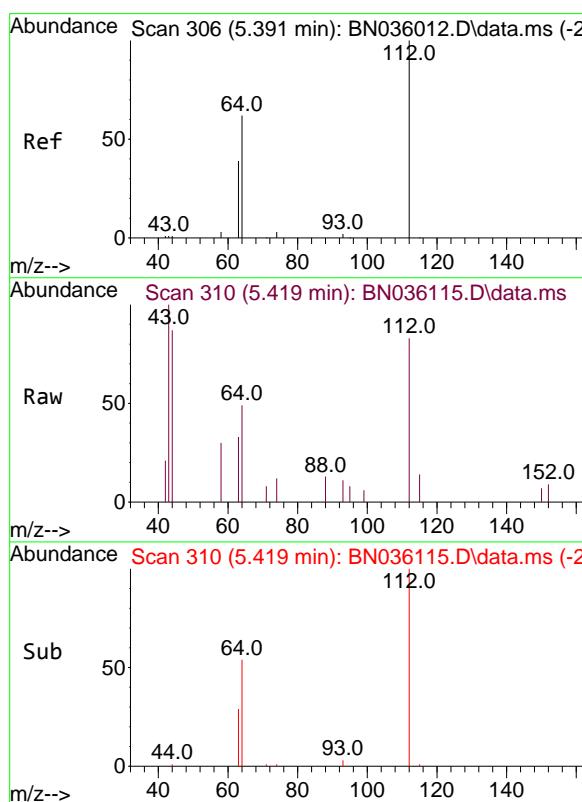
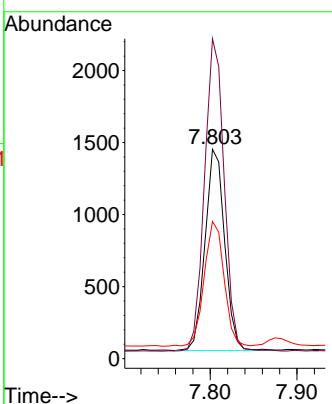




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

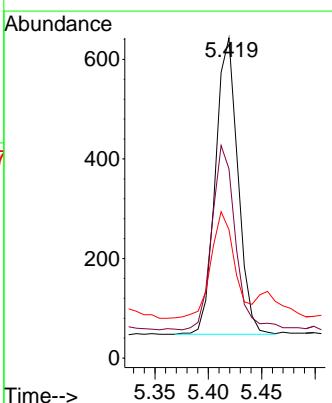
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124

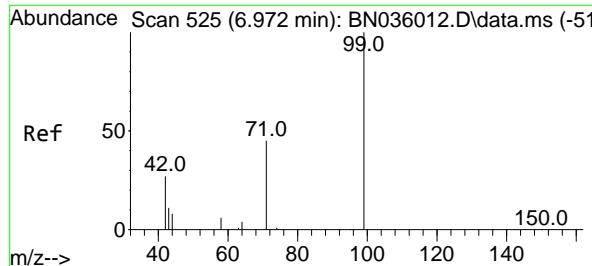
Tgt Ion:152 Resp: 2206  
Ion Ratio Lower Upper  
152 100  
150 152.8 117.4 176.2  
115 65.4 51.0 76.4



#4  
2-Fluorophenol  
Concen: 0.152 ng  
RT: 5.419 min Scan# 310  
Delta R.T. 0.029 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

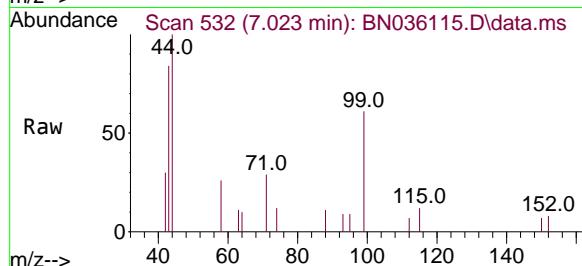
Tgt Ion:112 Resp: 871  
Ion Ratio Lower Upper  
112 100  
64 65.6 50.0 75.0  
63 38.2 30.7 46.1



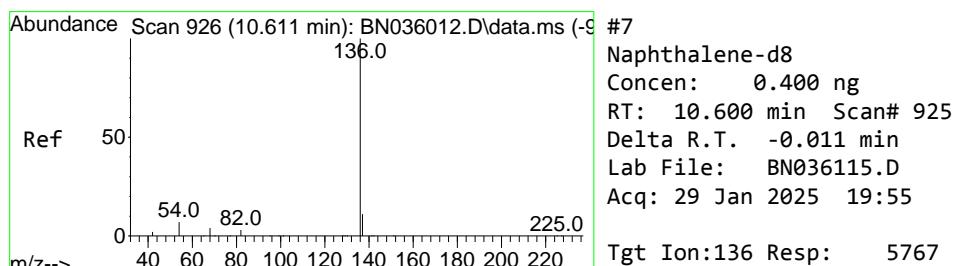
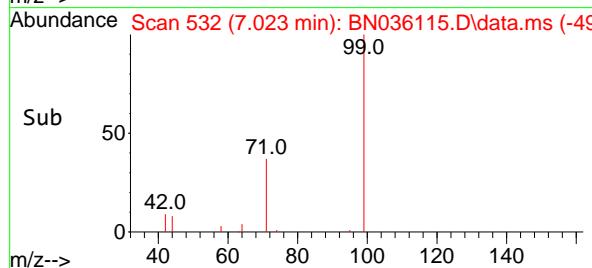
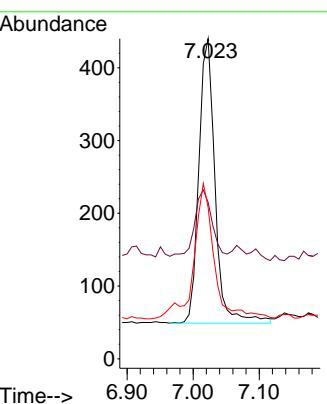


#5  
Phenol-d6  
Concen: 0.099 ng  
RT: 7.023 min Scan# 5  
Delta R.T. 0.050 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

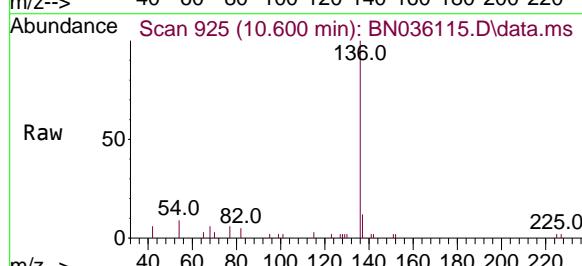
**Instrument:** BNA\_N  
**ClientSampleId :** BP-VPB-192-EB-20250124



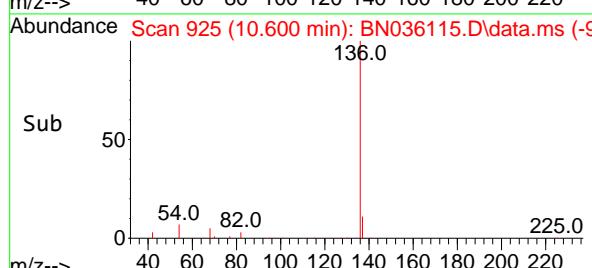
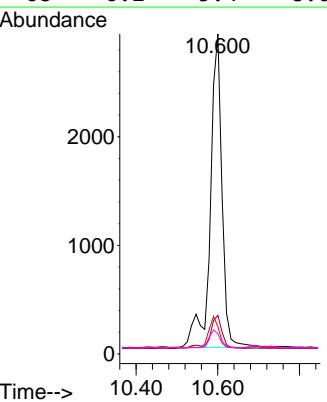
Tgt Ion: 99 Resp: 665  
Ion Ratio Lower Upper  
99 100  
42 24.1 26.8 40.2#  
71 59.4 36.6 55.0#

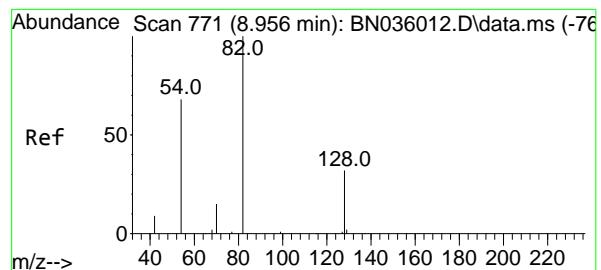


#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.600 min Scan# 925  
Delta R.T. -0.011 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

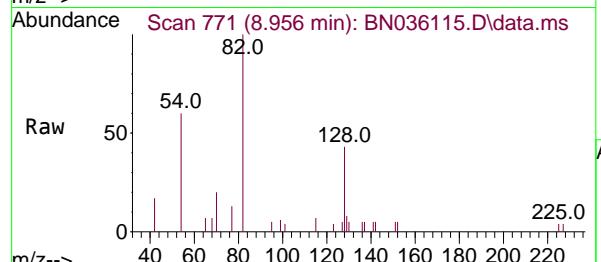


Tgt Ion:136 Resp: 5767  
Ion Ratio Lower Upper  
136 100  
137 12.1 10.4 15.6  
54 8.6 7.7 11.5  
68 6.2 5.4 8.0

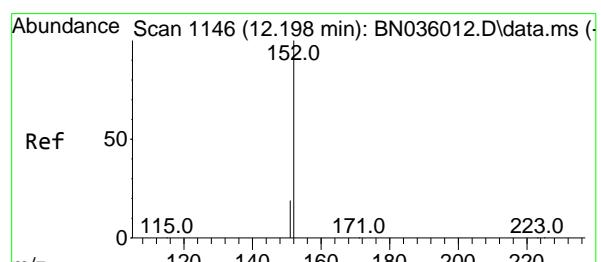
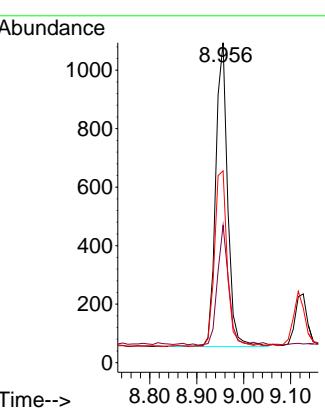
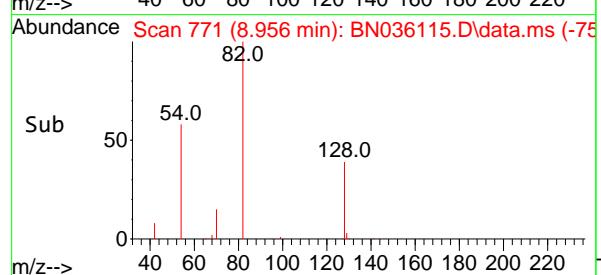




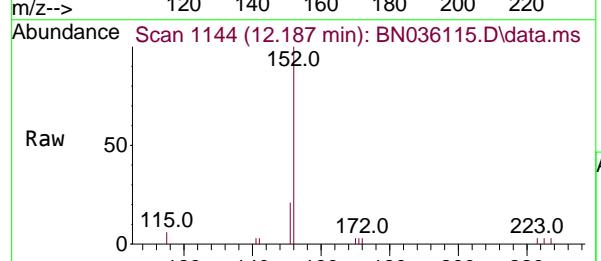
#8  
 Nitrobenzene-d5  
 Concen: 0.338 ng  
 RT: 8.956 min Scan# 7  
**Instrument :**  
 Delta R.T. -0.000 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55  
**ClientSampleId :**  
 BP-VPB-192-EB-20250124



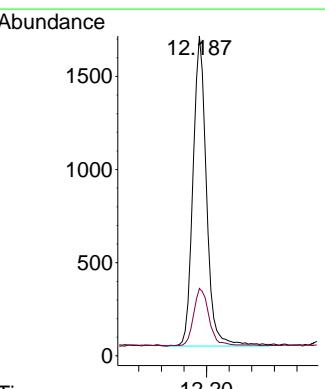
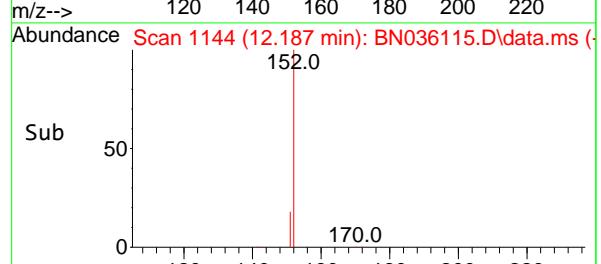
Tgt Ion: 82 Resp: 1840  
 Ion Ratio Lower Upper  
 82 100  
 128 43.0 28.8 43.2  
 54 60.0 55.8 83.8

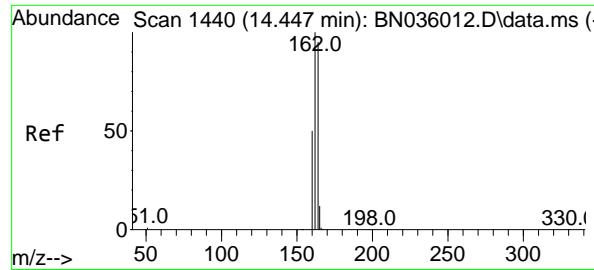


#11  
 2-Methylnaphthalene-d10  
 Concen: 0.351 ng  
 RT: 12.187 min Scan# 1144  
 Delta R.T. -0.010 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55



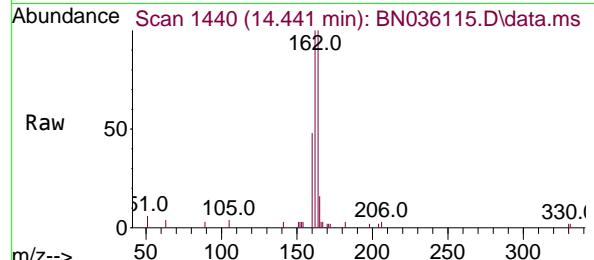
Tgt Ion:152 Resp: 2755  
 Ion Ratio Lower Upper  
 152 100  
 151 21.4 16.6 25.0



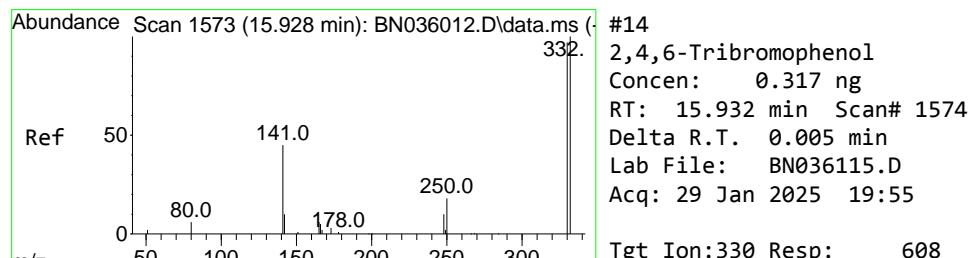
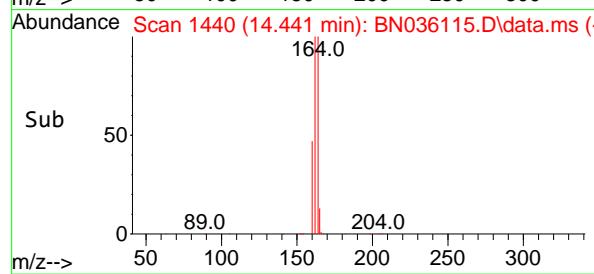
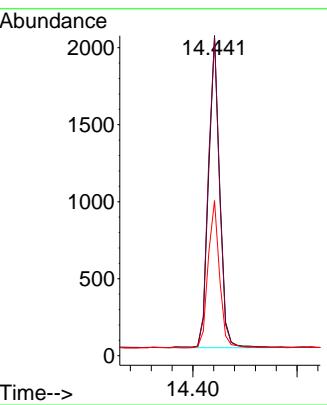


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.441 min Scan# 1441  
 Delta R.T. -0.006 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

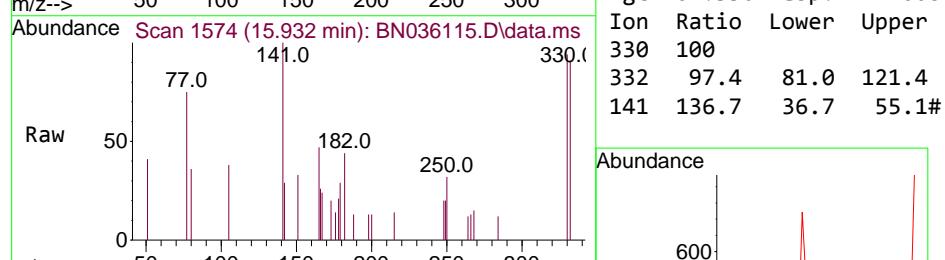
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-EB-20250124



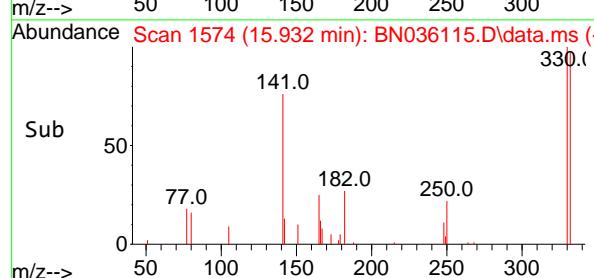
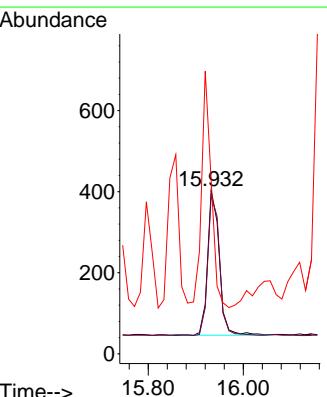
Tgt Ion:164 Resp: 2988  
 Ion Ratio Lower Upper  
 164 100  
 162 99.6 84.1 126.1  
 160 48.5 43.8 65.8

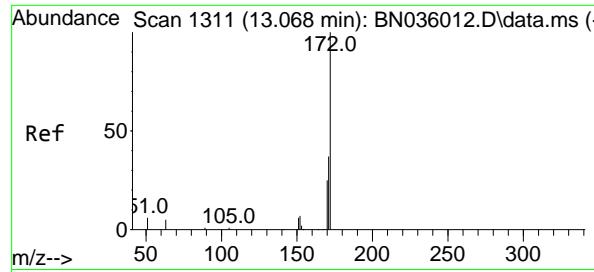


#14  
 2,4,6-Tribromophenol  
 Concen: 0.317 ng  
 RT: 15.932 min Scan# 1574  
 Delta R.T. 0.005 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55



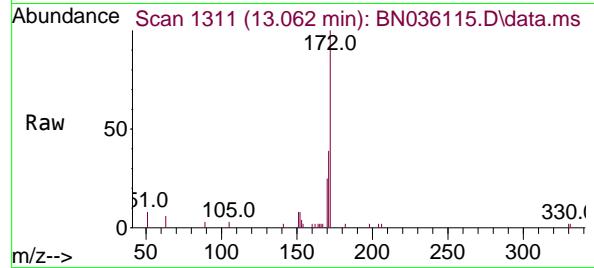
Tgt Ion:330 Resp: 608  
 Ion Ratio Lower Upper  
 330 100  
 332 97.4 81.0 121.4  
 141 136.7 36.7 55.1#



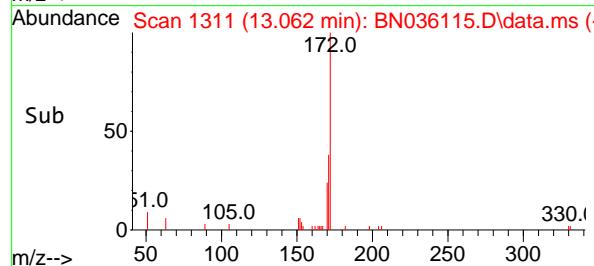
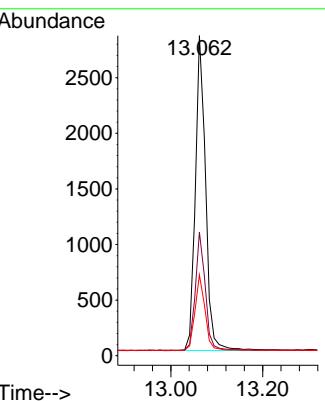


#15  
2-Fluorobiphenyl  
Concen: 0.306 ng  
RT: 13.062 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

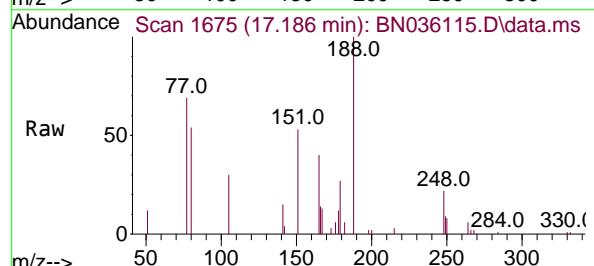
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124



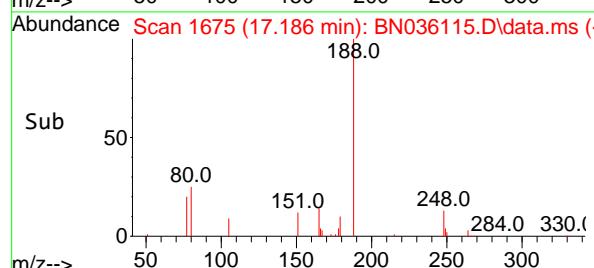
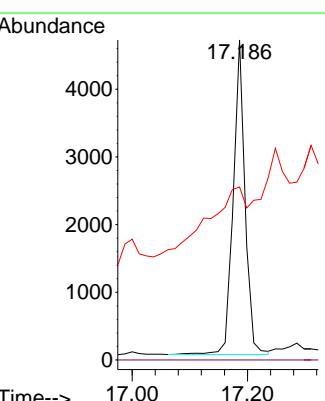
Tgt Ion:172 Resp: 4082  
Ion Ratio Lower Upper  
172 100  
171 38.7 30.9 46.3  
170 25.3 21.2 31.8

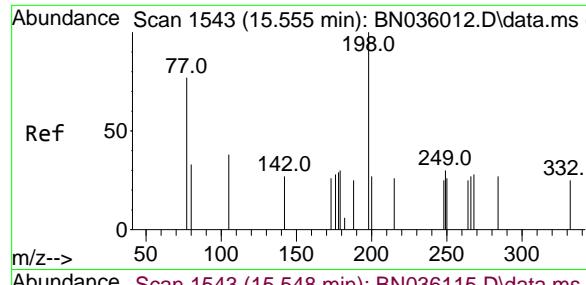


#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.186 min Scan# 1675  
Delta R.T. 0.005 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55



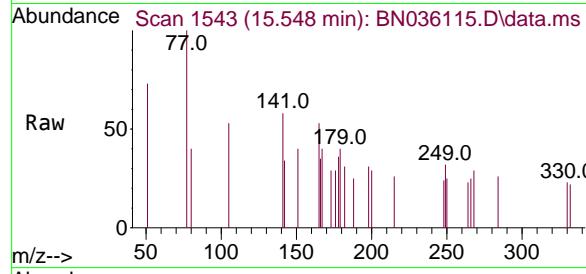
Tgt Ion:188 Resp: 6578  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 54.1 12.3 18.5#



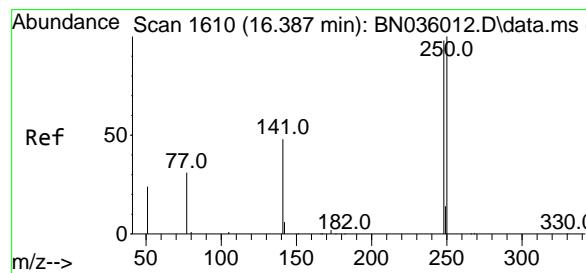
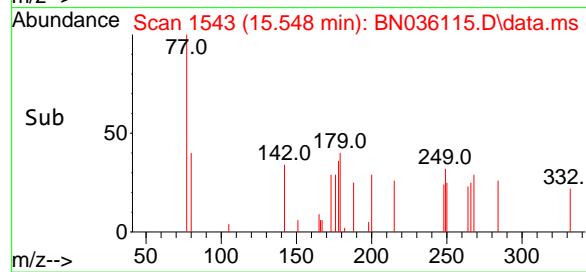
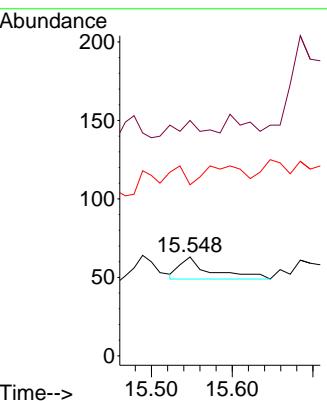


#20  
4,6-Dinitro-2-methylphenol  
Concen: 0.024 ng  
RT: 15.548 min Scan# 1  
Delta R.T. -0.008 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

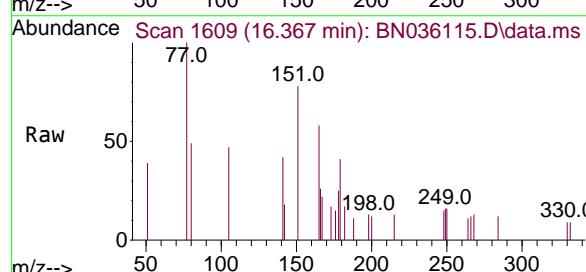
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124



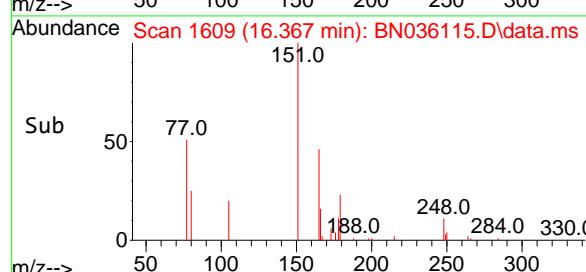
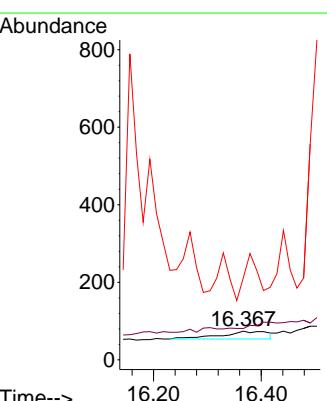
Tgt Ion:198 Resp: 37  
Ion Ratio Lower Upper  
198 100  
51 238.1 68.1 102.1#  
105 173.0 46.5 69.7#

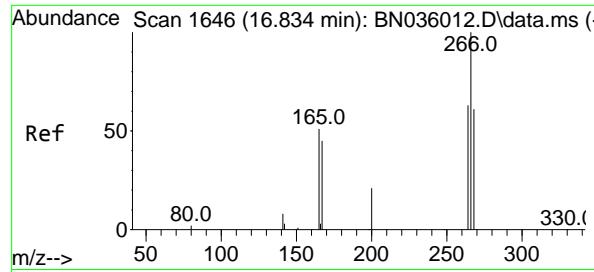


#21  
4-Bromophenyl-phenylether  
Concen: 0.025 ng  
RT: 16.367 min Scan# 1609  
Delta R.T. -0.020 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55



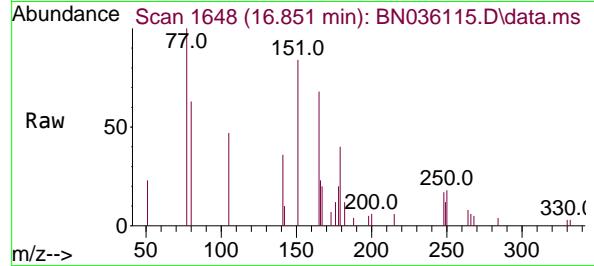
Tgt Ion:248 Resp: 118  
Ion Ratio Lower Upper  
248 100  
250 109.5 81.5 122.3  
141 287.8 41.8 62.6#



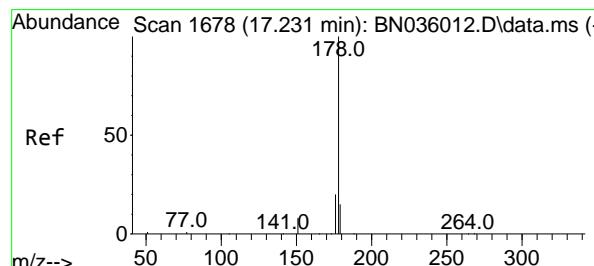
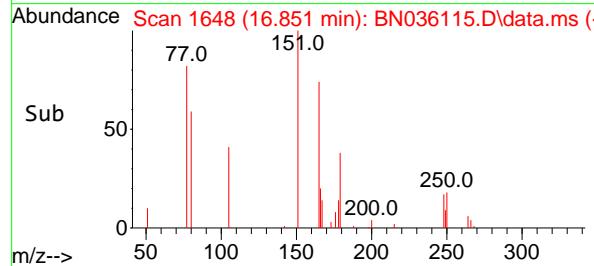
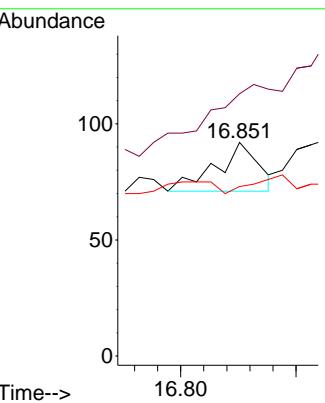


#24  
 Pentachlorophenol  
 Concen: 0.020 ng  
 RT: 16.851 min Scan# 1  
 Delta R.T. 0.017 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

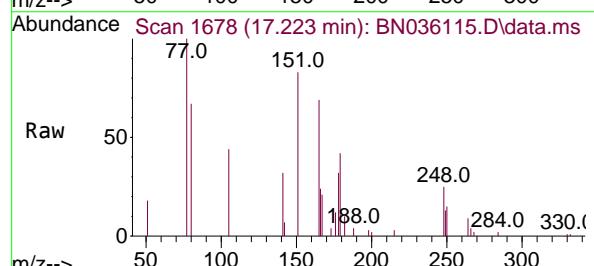
**Instrument :** BNA\_N  
**ClientSampleId :** BP-VPB-192-EB-20250124



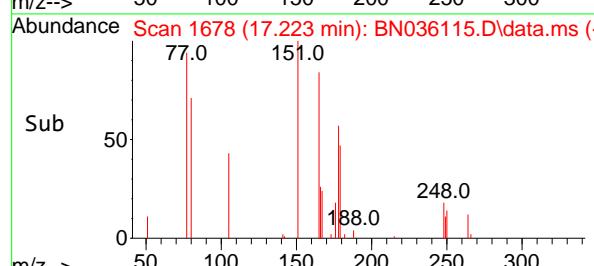
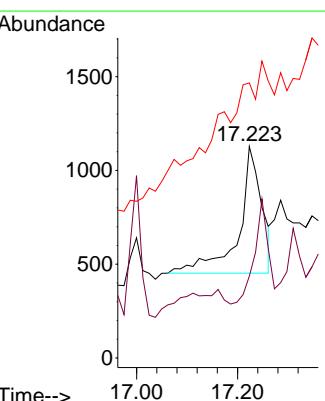
Tgt Ion:266 Resp: 54  
 Ion Ratio Lower Upper  
 266 100  
 264 0.0 48.2 72.2#  
 268 0.0 51.6 77.4#

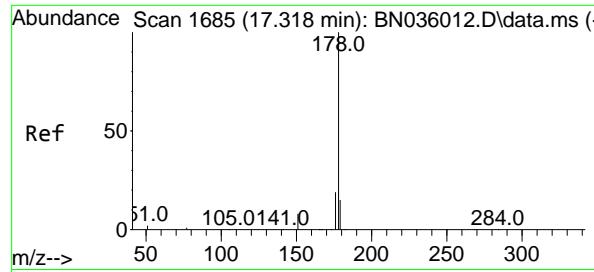


#25  
 Phenanthrene  
 Concen: 0.108 ng  
 RT: 17.223 min Scan# 1678  
 Delta R.T. -0.008 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55



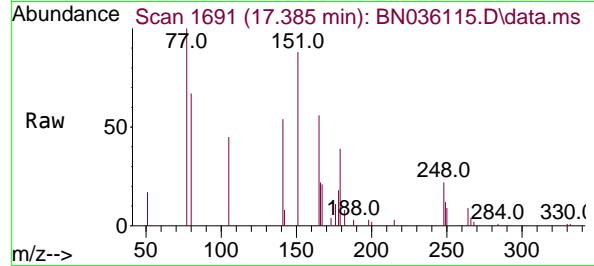
Tgt Ion:178 Resp: 2143  
 Ion Ratio Lower Upper  
 178 100  
 176 0.0 16.0 24.0#  
 179 0.0 12.4 18.6#



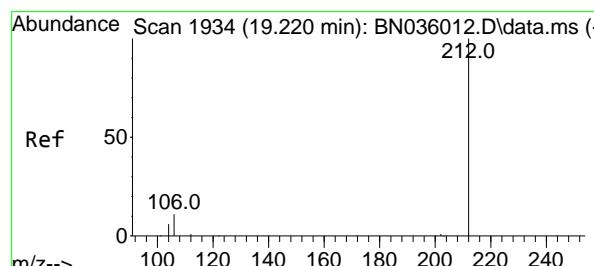
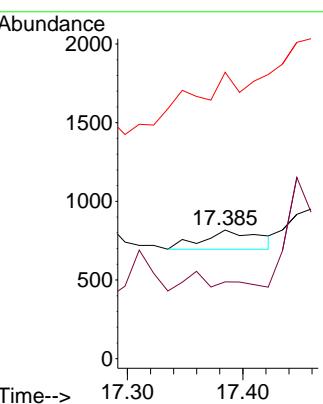
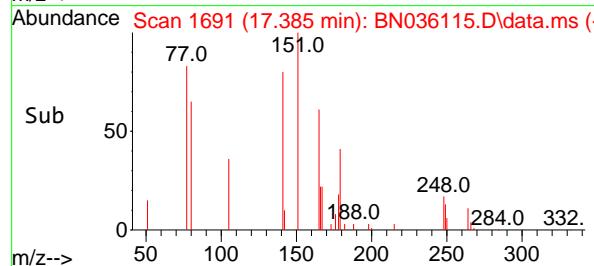


#26  
 Anthracene  
 Concen: 0.023 ng  
 RT: 17.385 min Scan# 1  
 Delta R.T. 0.067 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55

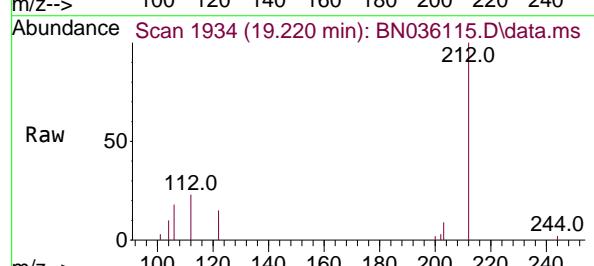
**Instrument :** BNA\_N  
**ClientSampleId :** BP-VPB-192-EB-20250124



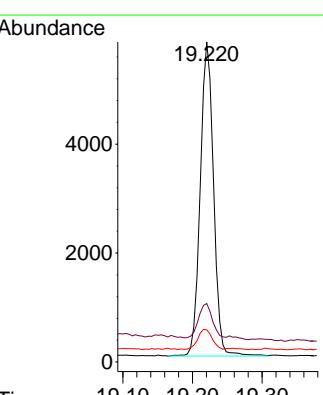
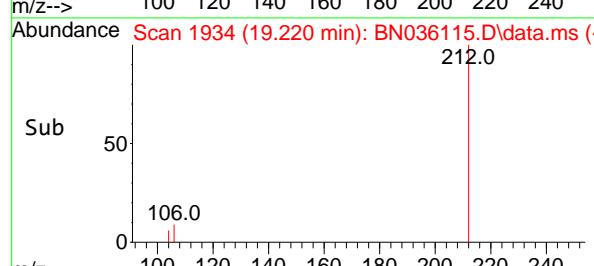
Tgt Ion:178 Resp: 412  
 Ion Ratio Lower Upper  
 178 100  
 176 0.0 15.4 23.2#  
 179 0.0 12.0 18.0#

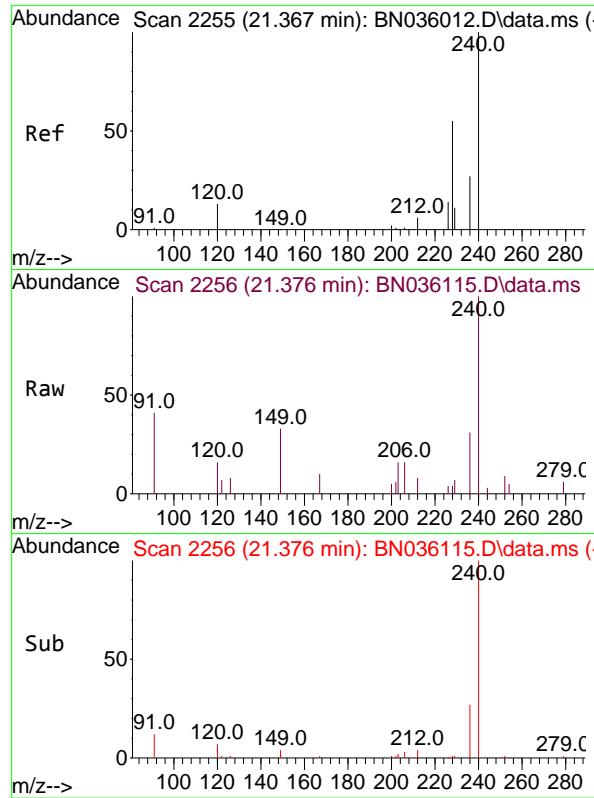


#27  
 Fluoranthene-d10  
 Concen: 0.450 ng  
 RT: 19.220 min Scan# 1934  
 Delta R.T. 0.000 min  
 Lab File: BN036115.D  
 Acq: 29 Jan 2025 19:55



Tgt Ion:212 Resp: 7666  
 Ion Ratio Lower Upper  
 212 100  
 106 11.1 9.7 14.5  
 104 6.8 6.0 9.0

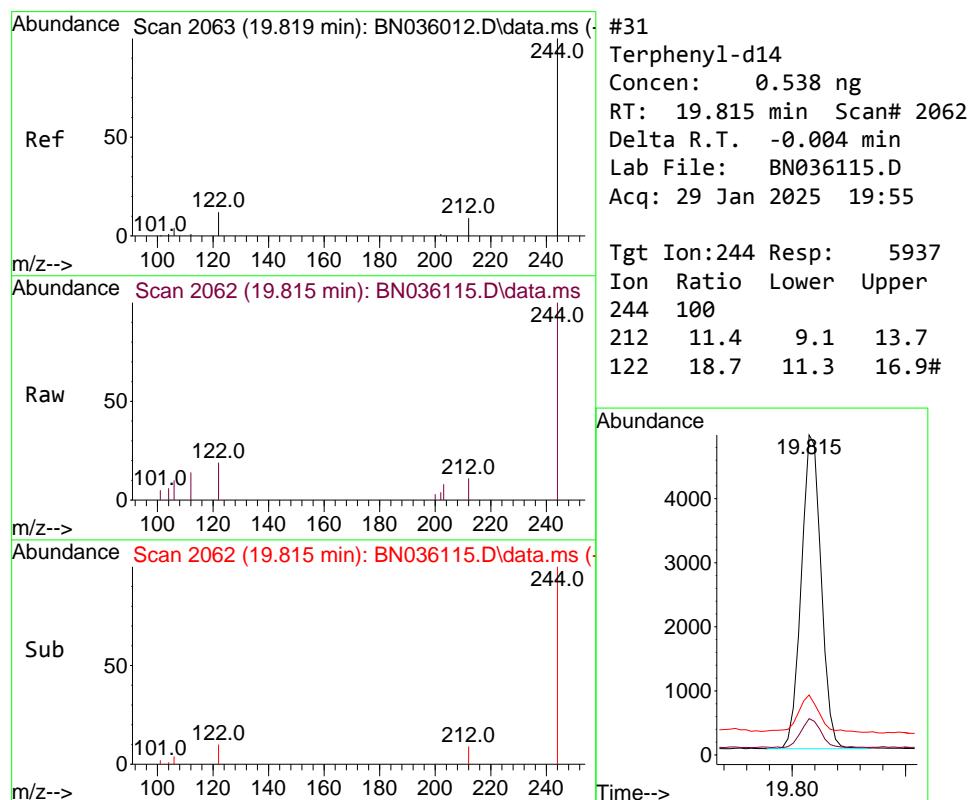
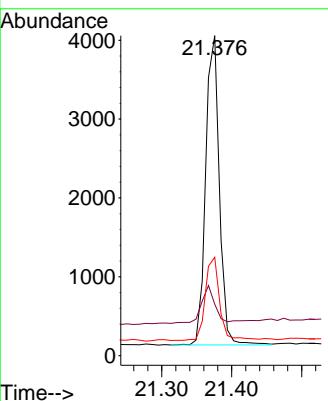




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

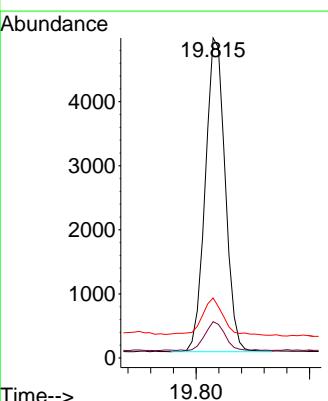
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-EB-20250124

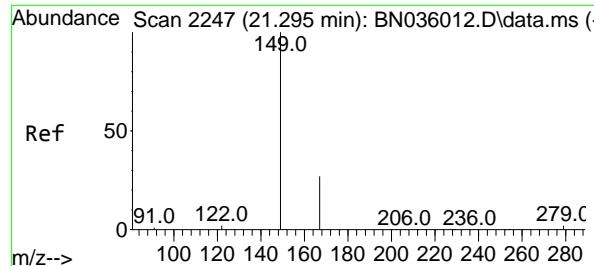
Tgt Ion:240 Resp: 5317  
Ion Ratio Lower Upper  
240 100  
120 16.1 13.9 20.9  
236 30.8 23.7 35.5



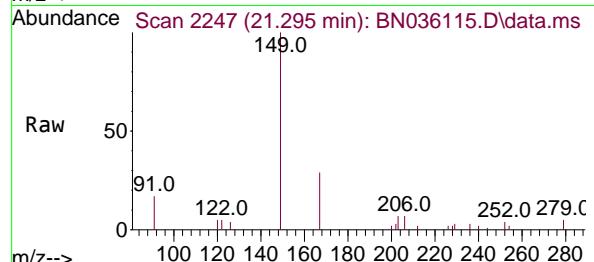
#31  
Terphenyl-d14  
Concen: 0.538 ng  
RT: 19.815 min Scan# 2062  
Delta R.T. -0.004 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55

Tgt Ion:244 Resp: 5937  
Ion Ratio Lower Upper  
244 100  
212 11.4 9.1 13.7  
122 18.7 11.3 16.9#

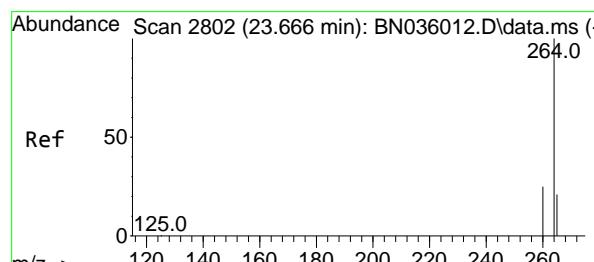
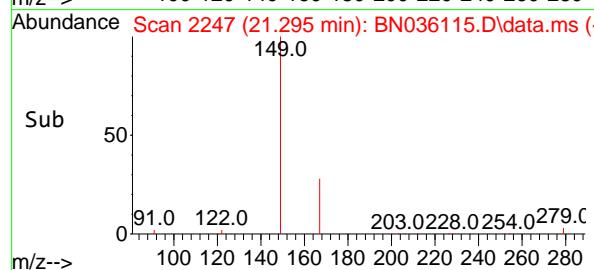
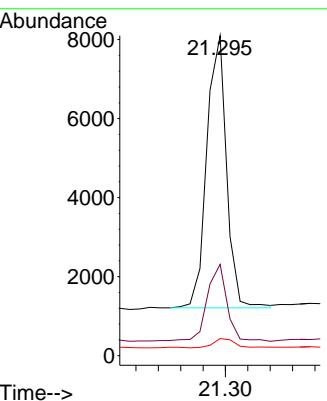




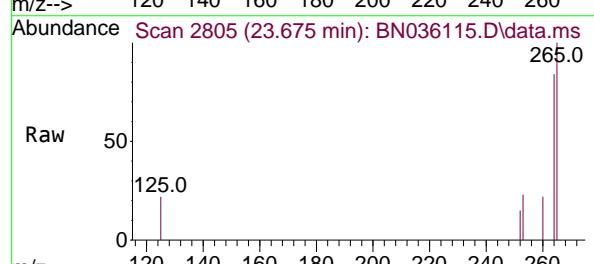
#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.800 ng  
RT: 21.295 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036115.D ClientSampleId :  
Acq: 29 Jan 2025 19:55 BP-VPB-192-EB-20250124



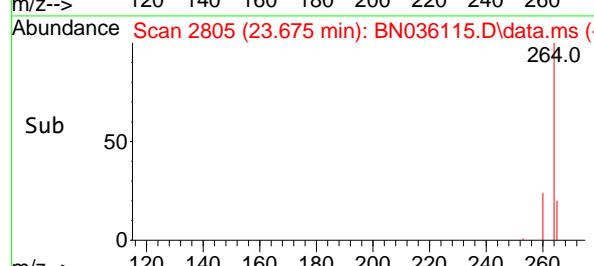
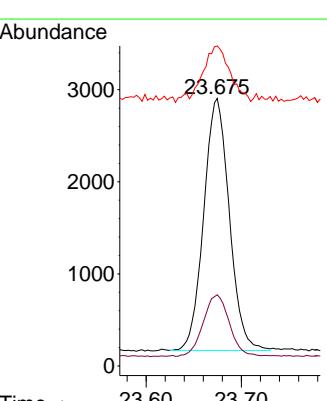
Tgt Ion:149 Resp: 8450  
Ion Ratio Lower Upper  
149 100  
167 28.2 21.9 32.9  
279 4.0 3.0 4.6



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.675 min Scan# 2805  
Delta R.T. 0.009 min  
Lab File: BN036115.D  
Acq: 29 Jan 2025 19:55



Tgt Ion:264 Resp: 5108  
Ion Ratio Lower Upper  
264 100  
260 26.6 21.8 32.6  
265 119.6 56.6 84.8#



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036117.D  
 Acq On : 29 Jan 2025 21:07  
 Operator : RC/JU  
 Sample : Q1199-04  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-GW-260-262**

Quant Time: Jan 30 00:36:33 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

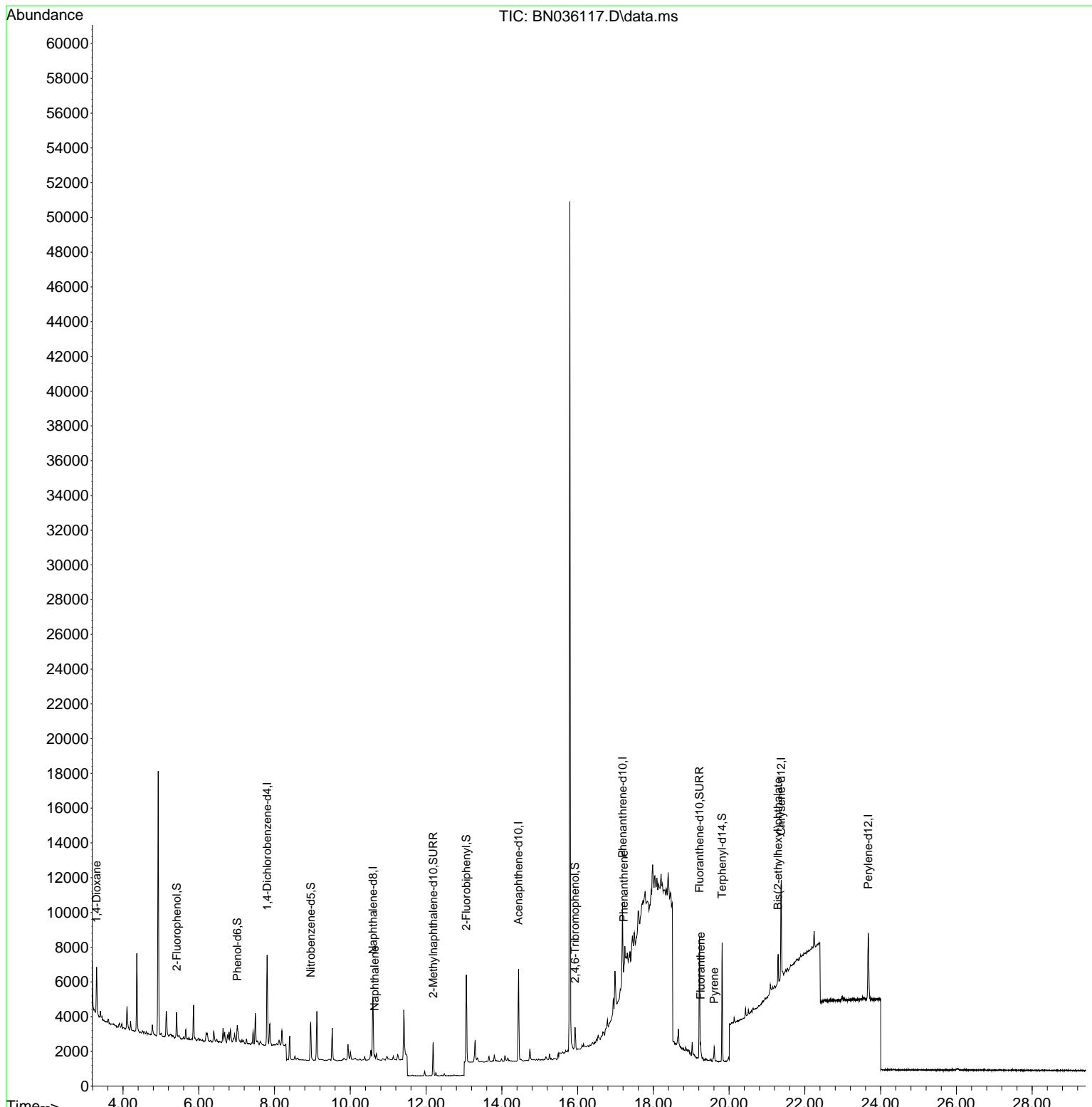
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2145	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	5426	0.400	ng	-0.01
13) Acenaphthene-d10	14.441	164	2939	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6485	0.400	ng	0.00
29) Chrysene-d12	21.376	240	5413	0.400	ng	# 0.00
35) Perylene-d12	23.672	264	5178	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	1044	0.187	ng	0.03
5) Phenol-d6	7.015	99	832	0.127	ng	0.04
8) Nitrobenzene-d5	8.956	82	1721	0.336	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2566	0.348	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	663	0.352	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4208	0.321	ng	0.00
27) Fluoranthene-d10	19.216	212	7943	0.473	ng	0.00
31) Terphenyl-d14	19.815	244	6452	0.574	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.303	88	1618	0.675	ng	91
9) Naphthalene	10.643	128	343	0.022	ng	# 60
25) Phenanthrene	17.223	178	1069	0.055	ng	# 28
28) Fluoranthene	19.248	202	541	0.024	ng	# 72
30) Pyrene	19.611	202	460	0.021	ng	# 93
34) Bis(2-ethylhexyl)phtha...	21.295	149	1569	0.146	ng	96

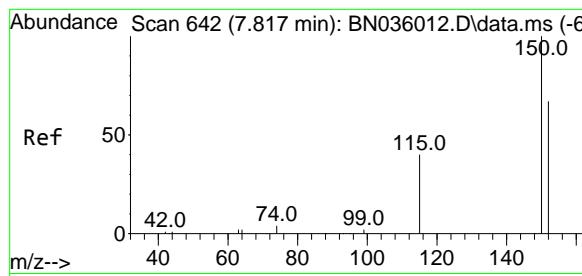
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
Data File : BN036117.D  
Acq On : 29 Jan 2025 21:07  
Operator : RC/JU  
Sample : Q1199-04  
Misc :  
ALS Vial : 7 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-260-262

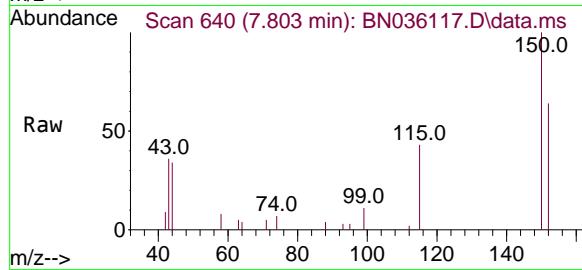
Quant Time: Jan 30 00:36:33 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jan 23 00:34:56 2025  
Response via : Initial Calibration



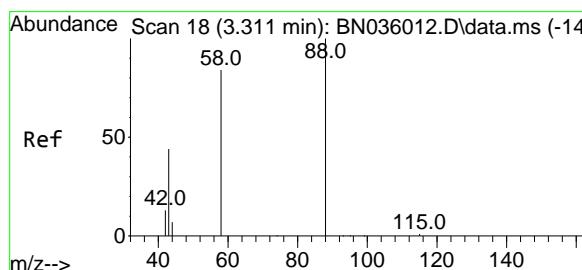
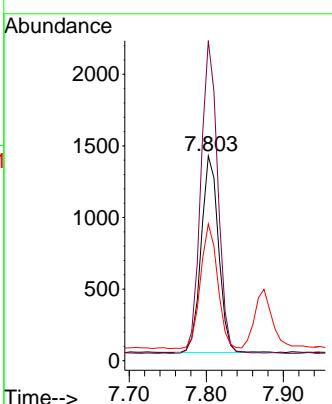
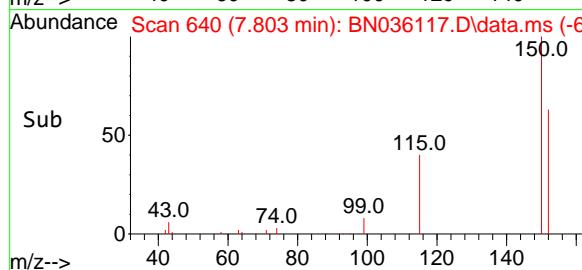


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.803 min Scan# 6  
Delta R.T. -0.014 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

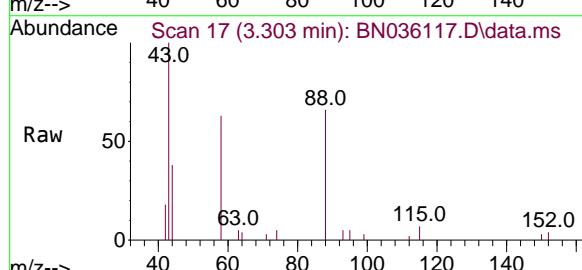
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262



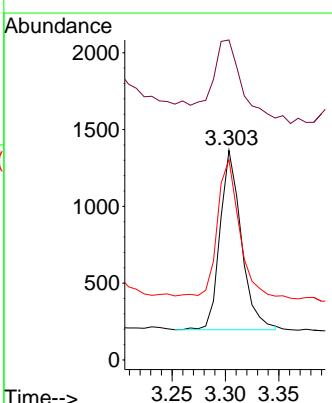
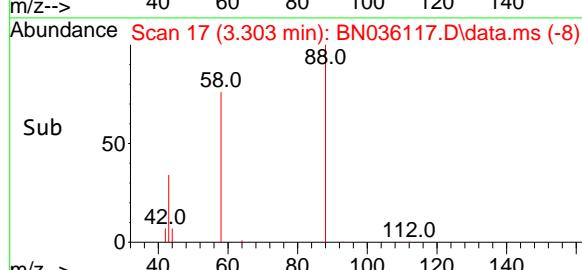
Tgt Ion:152 Resp: 2145  
Ion Ratio Lower Upper  
152 100  
150 156.2 117.4 176.2  
115 66.7 51.0 76.4

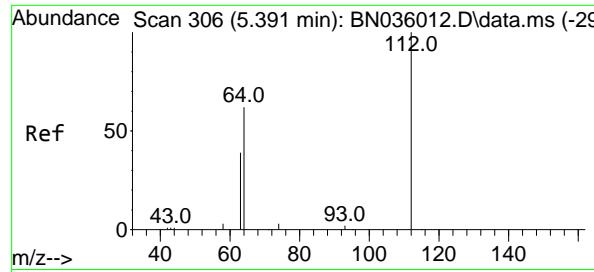


#2  
1,4-Dioxane  
Concen: 0.675 ng  
RT: 3.303 min Scan# 17  
Delta R.T. -0.007 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07



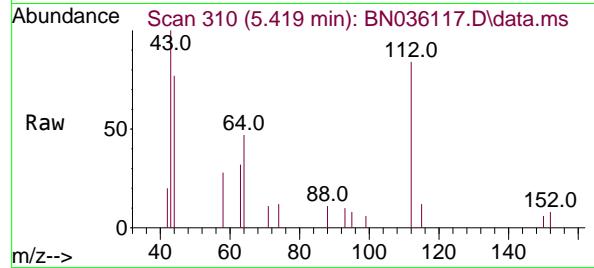
Tgt Ion: 88 Resp: 1618  
Ion Ratio Lower Upper  
88 100  
43 56.9 38.5 57.7  
58 76.5 66.6 99.8



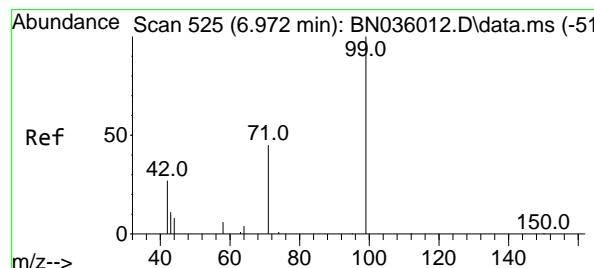
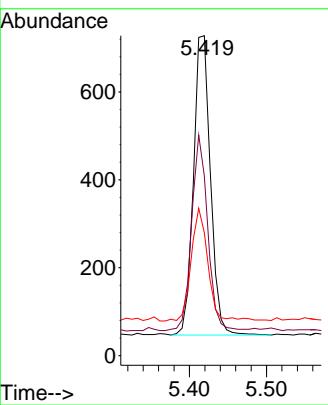
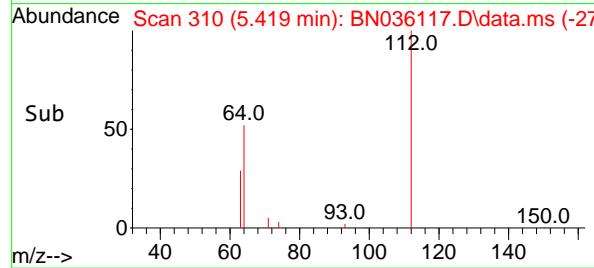


#4  
2-Fluorophenol  
Concen: 0.187 ng  
RT: 5.419 min Scan# 3  
Delta R.T. 0.029 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

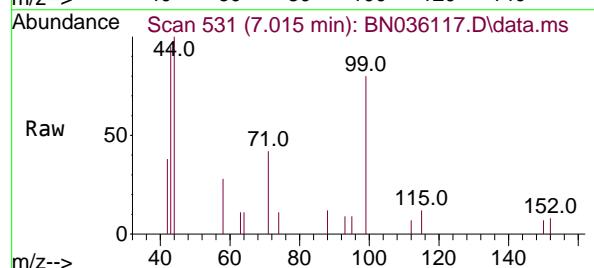
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262



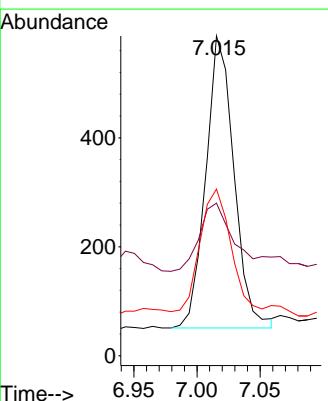
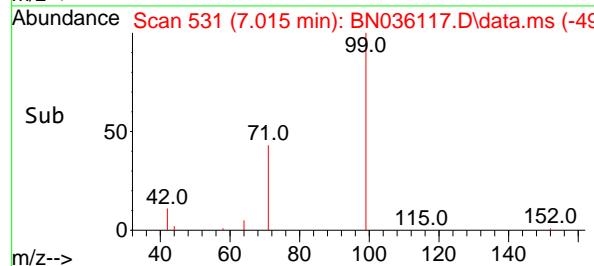
Tgt Ion:112 Resp: 1044  
Ion Ratio Lower Upper  
112 100  
64 61.7 50.0 75.0  
63 36.9 30.7 46.1

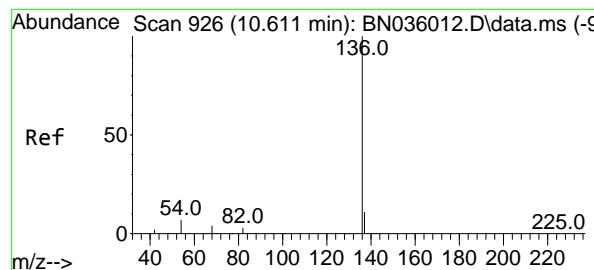


#5  
Phenol-d6  
Concen: 0.127 ng  
RT: 7.015 min Scan# 531  
Delta R.T. 0.043 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07



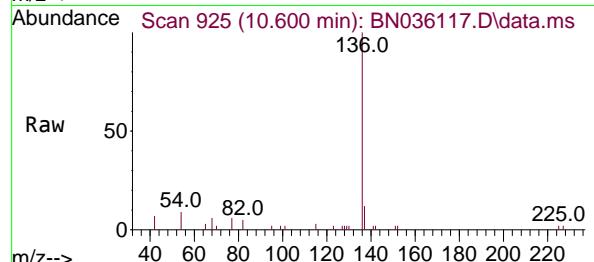
Tgt Ion: 99 Resp: 832  
Ion Ratio Lower Upper  
99 100  
42 40.6 26.8 40.2#  
71 45.3 36.6 55.0



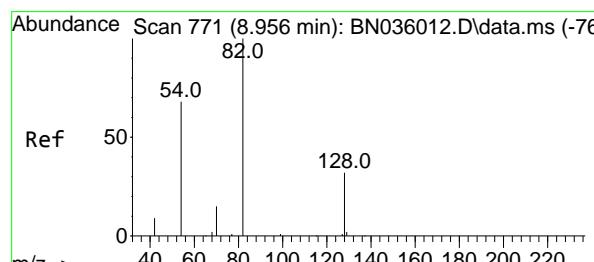
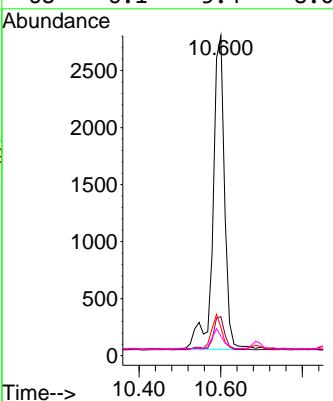
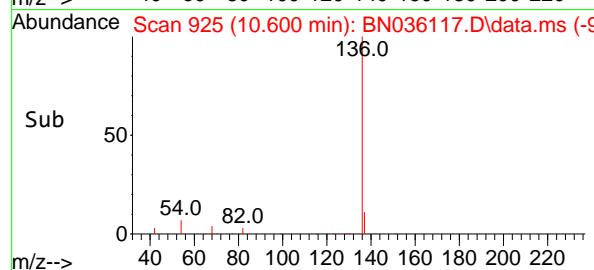


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036117.D  
 Acq: 29 Jan 2025 21:07

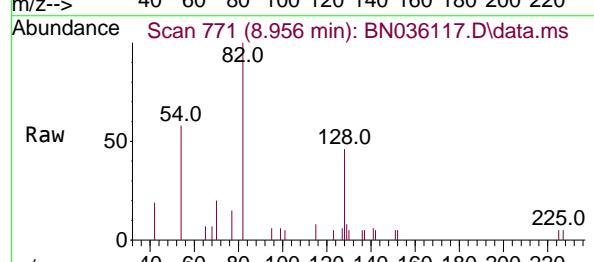
**Instrument :** BNA\_N  
**ClientSampleId :** BP-VPB-192-GW-260-262



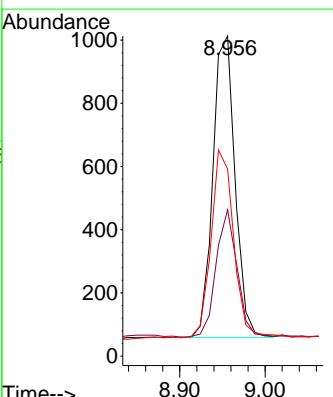
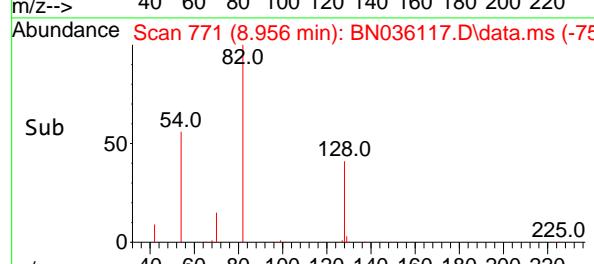
Tgt Ion:136 Resp: 5426  
 Ion Ratio Lower Upper  
 136 100  
 137 12.2 10.4 15.6  
 54 8.9 7.7 11.5  
 68 6.1 5.4 8.0

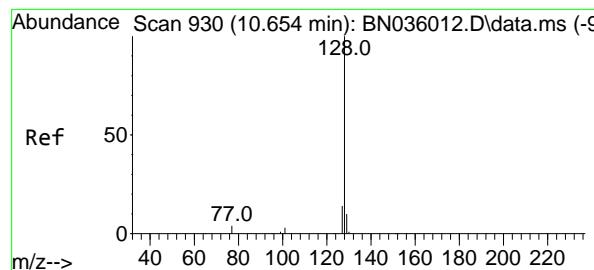


#8  
 Nitrobenzene-d5  
 Concen: 0.336 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. -0.000 min  
 Lab File: BN036117.D  
 Acq: 29 Jan 2025 21:07



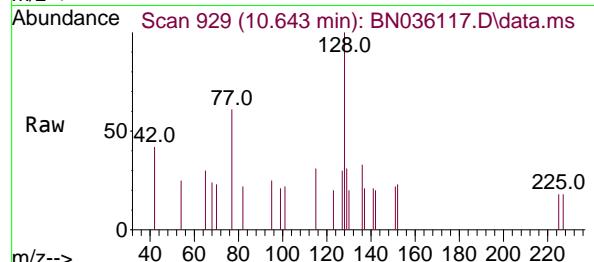
Tgt Ion: 82 Resp: 1721  
 Ion Ratio Lower Upper  
 82 100  
 128 45.7 28.8 43.2#  
 54 58.4 55.8 83.8



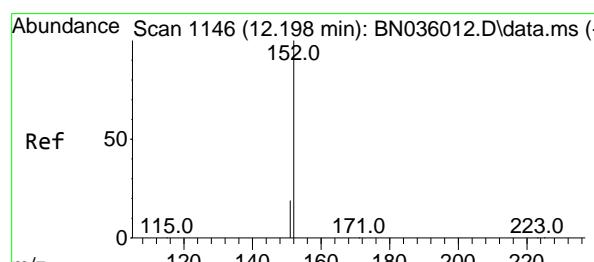
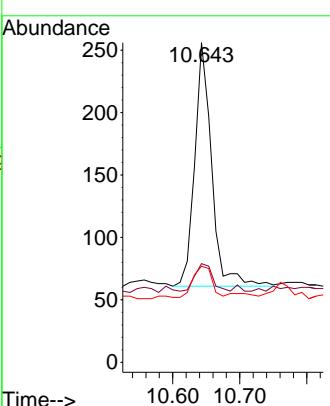
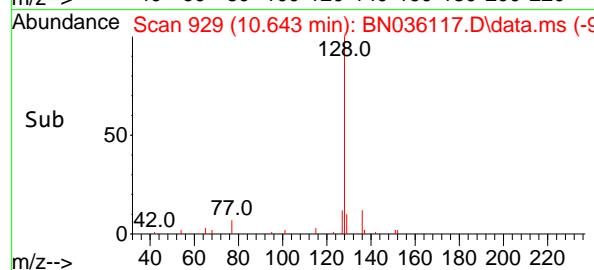


#9  
Naphthalene  
Concen: 0.022 ng  
RT: 10.643 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

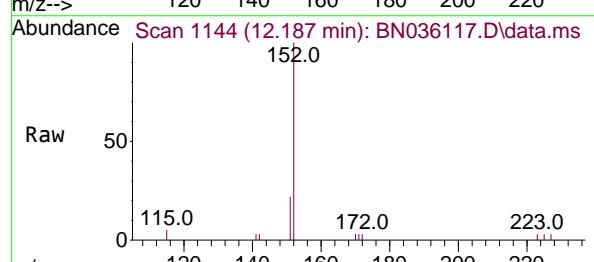
**Instrument:** BNA\_N  
**ClientSampleId :** BP-VPB-192-GW-260-262



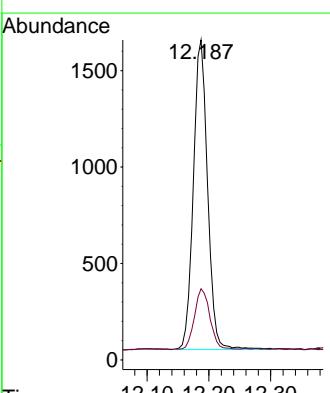
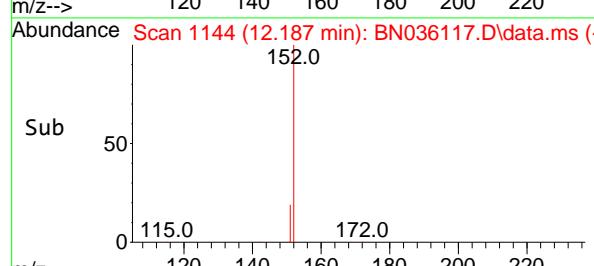
Tgt Ion:128 Resp: 343  
Ion Ratio Lower Upper  
128 100  
129 30.9 9.4 14.2#  
127 30.1 12.6 19.0#

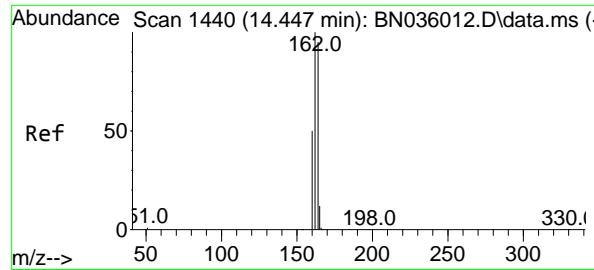


#11  
2-Methylnaphthalene-d10  
Concen: 0.348 ng  
RT: 12.187 min Scan# 1144  
Delta R.T. -0.010 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07



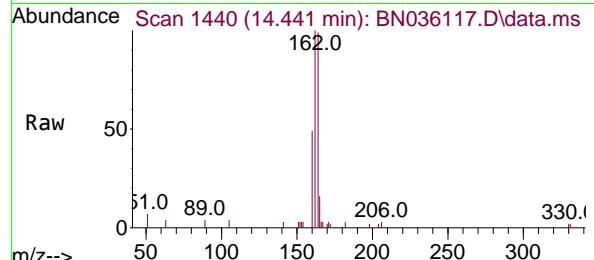
Tgt Ion:152 Resp: 2566  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0



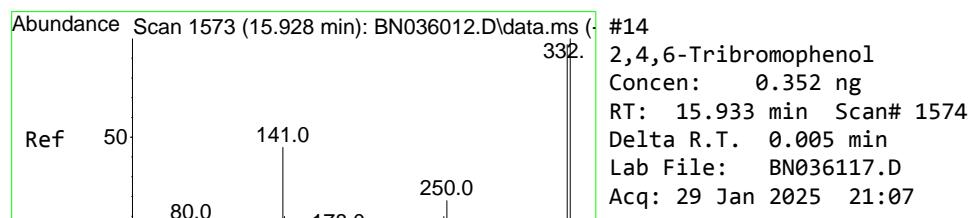
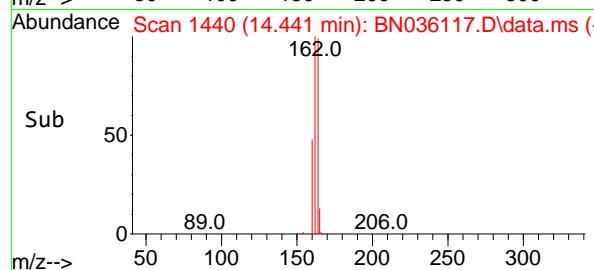
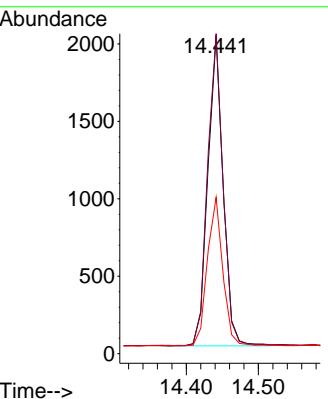


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.441 min Scan# 1441  
 Delta R.T. -0.006 min  
 Lab File: BN036117.D  
 Acq: 29 Jan 2025 21:07

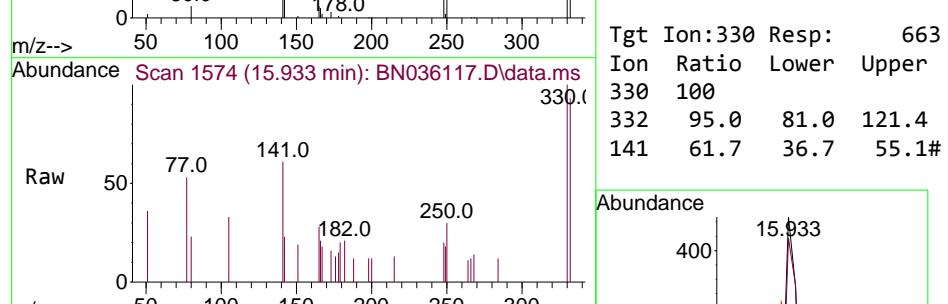
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-260-262



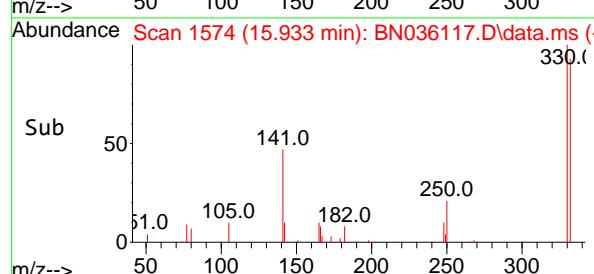
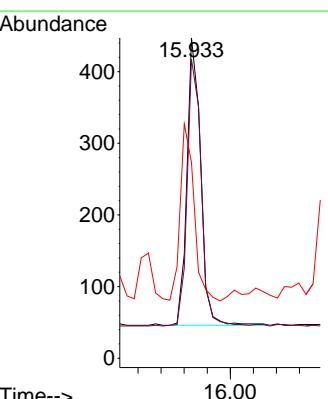
Tgt Ion:164 Resp: 2939  
 Ion Ratio Lower Upper  
 164 100  
 162 100.7 84.1 126.1  
 160 49.2 43.8 65.8

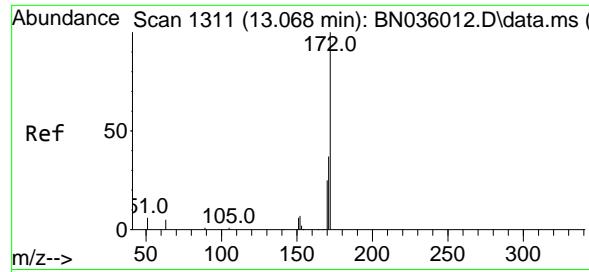


#14  
 2,4,6-Tribromophenol  
 Concen: 0.352 ng  
 RT: 15.933 min Scan# 1574  
 Delta R.T. 0.005 min  
 Lab File: BN036117.D  
 Acq: 29 Jan 2025 21:07



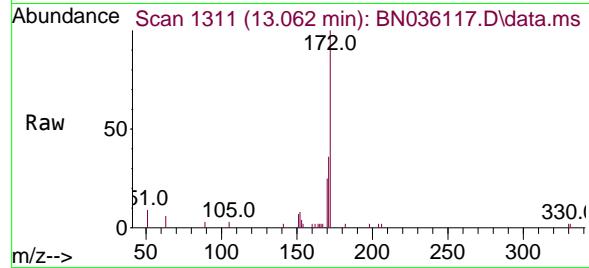
Tgt Ion:330 Resp: 663  
 Ion Ratio Lower Upper  
 330 100  
 332 95.0 81.0 121.4  
 141 61.7 36.7 55.1#



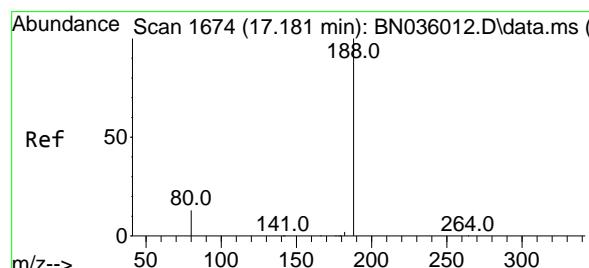
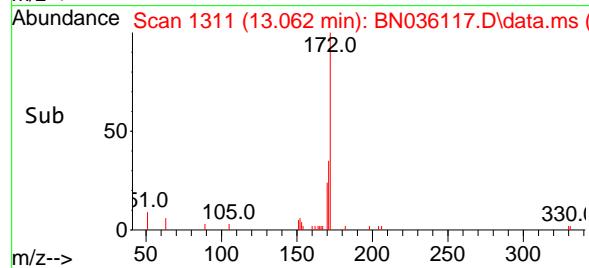
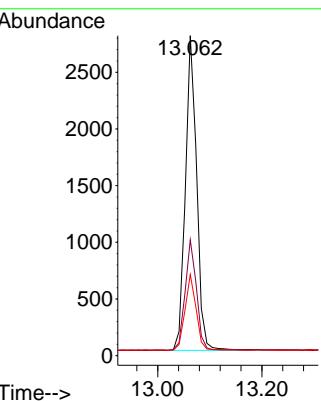


#15  
2-Fluorobiphenyl  
Concen: 0.321 ng  
RT: 13.062 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

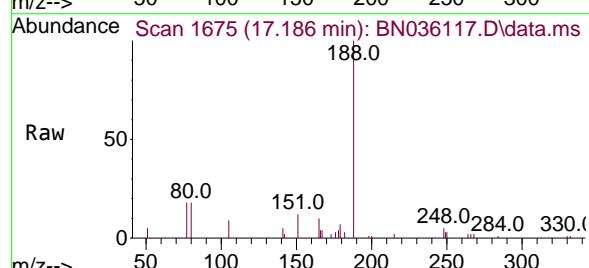
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262



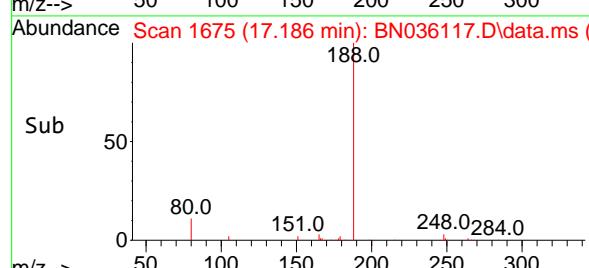
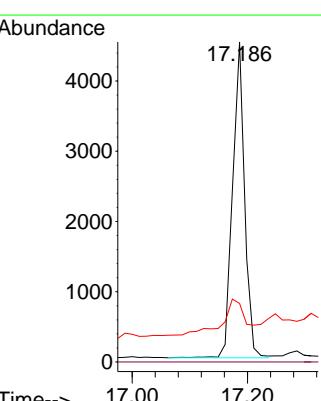
Tgt Ion:172 Resp: 4208  
Ion Ratio Lower Upper  
172 100  
171 36.2 30.9 46.3  
170 25.3 21.2 31.8

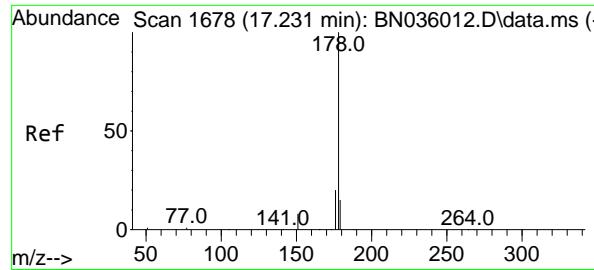


#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.186 min Scan# 1675  
Delta R.T. 0.005 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07



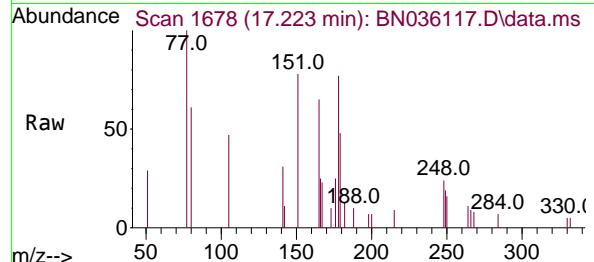
Tgt Ion:188 Resp: 6485  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 18.3 12.3 18.5



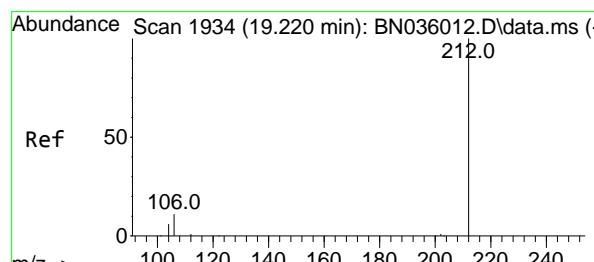
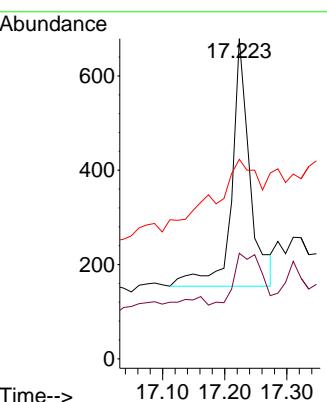
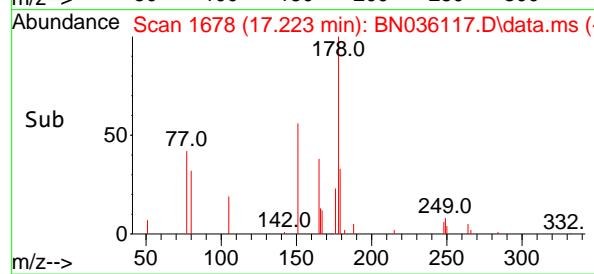


#25  
Phenanthrene  
Concen: 0.055 ng  
RT: 17.223 min Scan# 1  
Delta R.T. -0.007 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

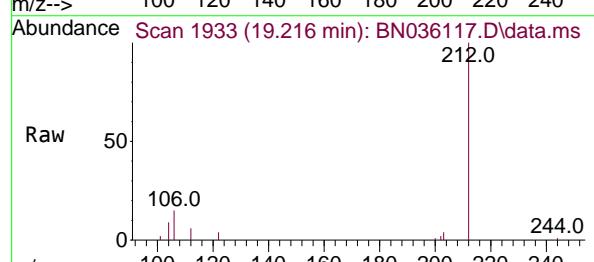
**Instrument:** BNA\_N  
**ClientSampleId :** BP-VPB-192-GW-260-262



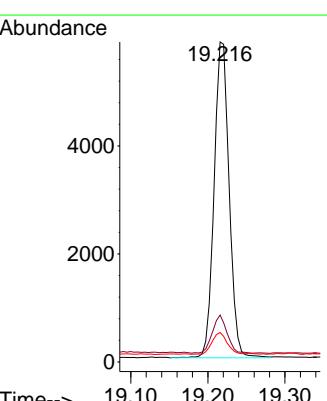
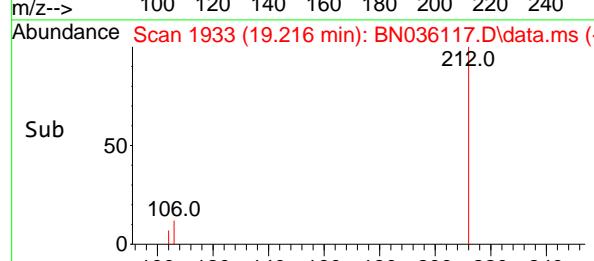
Tgt Ion:178 Resp: 1069  
Ion Ratio Lower Upper  
178 100  
176 31.0 16.0 24.0#  
179 71.5 12.4 18.6#

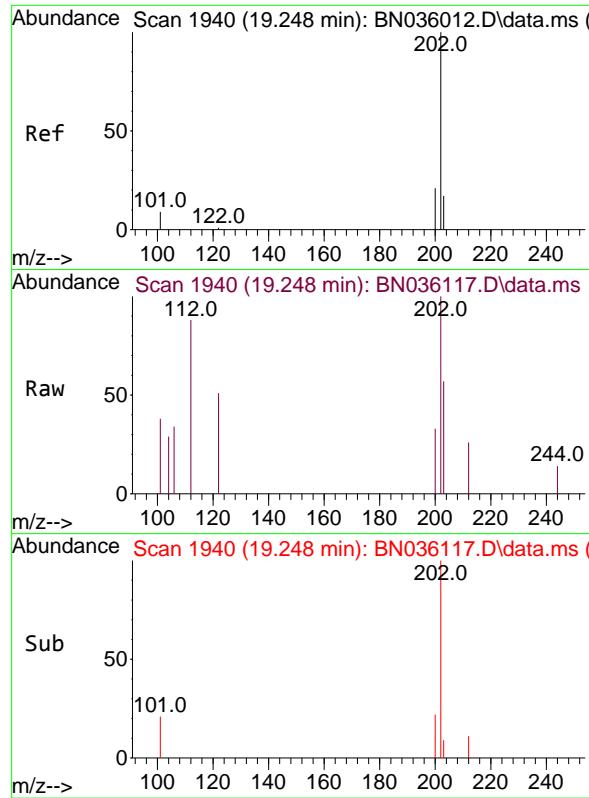


#27  
Fluoranthene-d10  
Concen: 0.473 ng  
RT: 19.216 min Scan# 1933  
Delta R.T. -0.004 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07



Tgt Ion:212 Resp: 7943  
Ion Ratio Lower Upper  
212 100  
106 11.7 9.7 14.5  
104 6.9 6.0 9.0

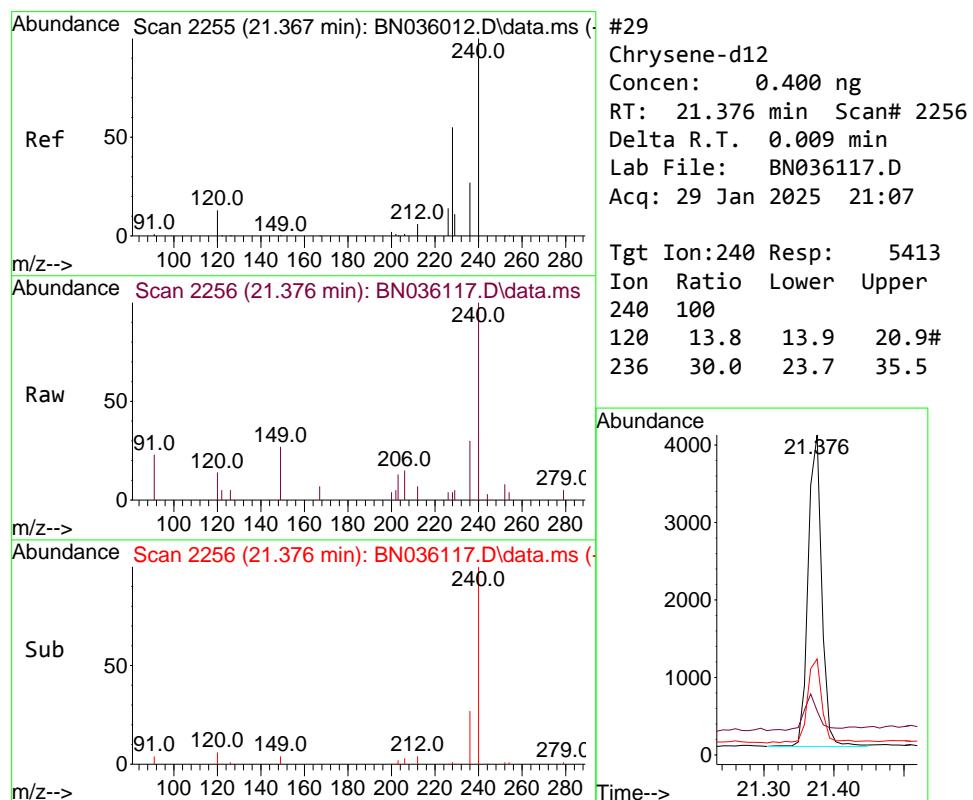
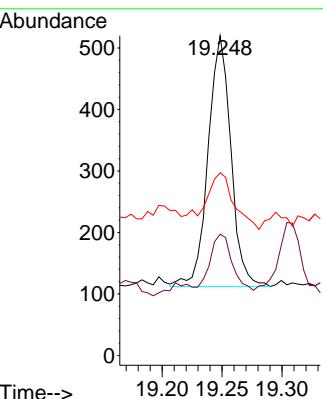




#28  
**Fluoranthene**  
Concen: 0.024 ng  
RT: 19.248 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

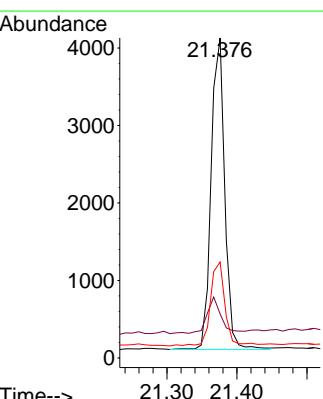
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-260-262

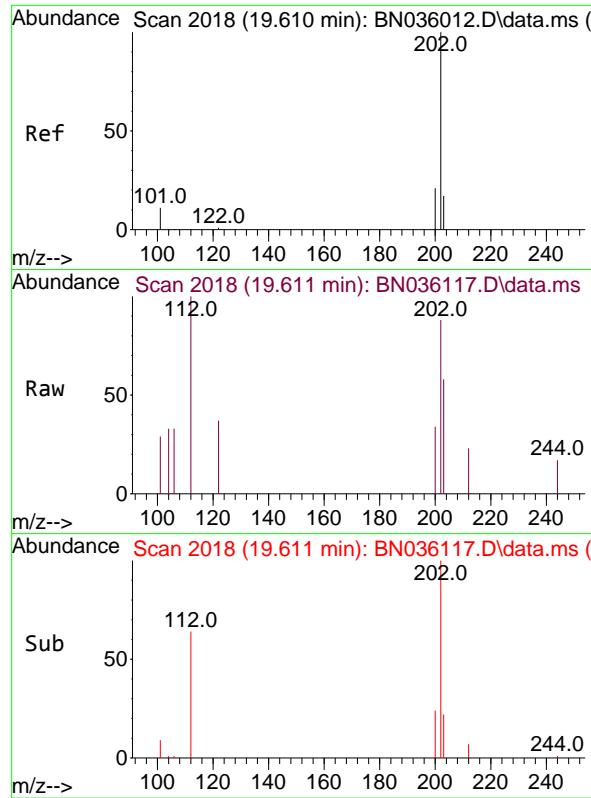
Tgt Ion:202 Resp: 541  
Ion Ratio Lower Upper  
202 100  
101 22.4 7.6 11.4#  
203 27.9 13.8 20.6#



#29  
**Chrysene-d12**  
Concen: 0.400 ng  
RT: 21.376 min Scan# 2256  
Delta R.T. 0.009 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

Tgt Ion:240 Resp: 5413  
Ion Ratio Lower Upper  
240 100  
120 13.8 13.9 20.9#  
236 30.0 23.7 35.5

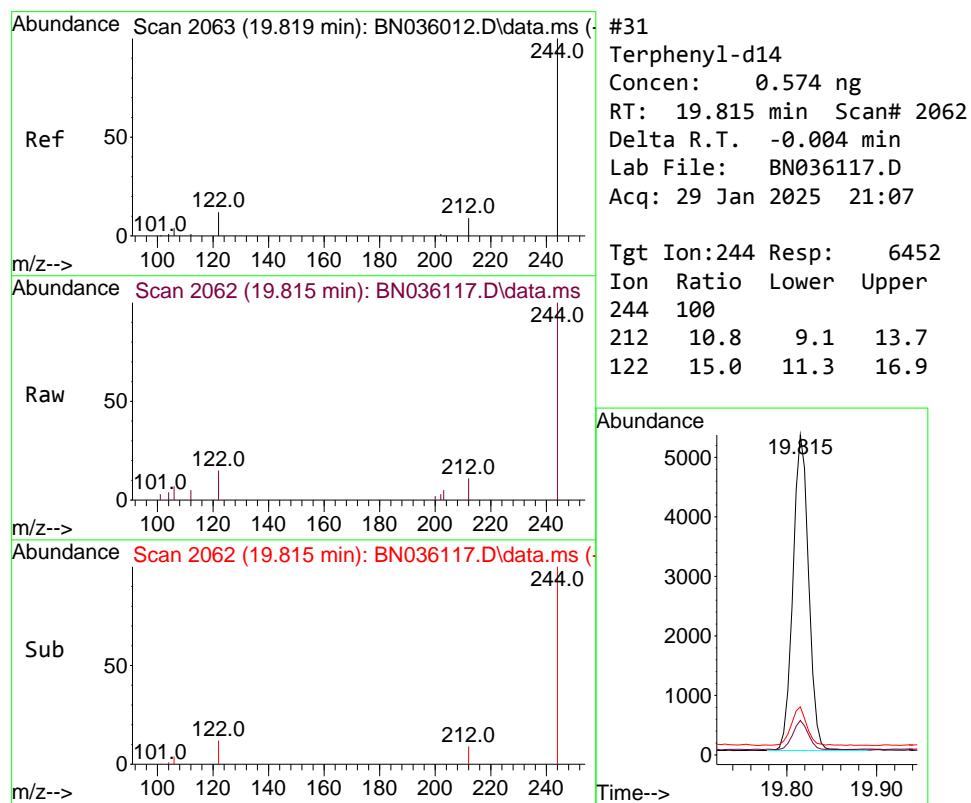
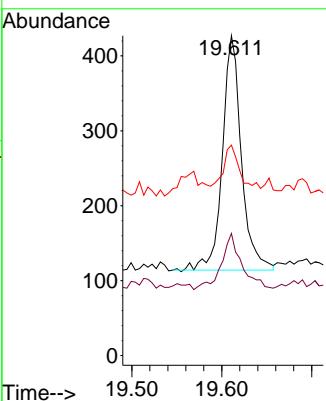




#30  
Pyrene  
Concen: 0.021 ng  
RT: 19.611 min Scan# 2102.0  
Delta R.T. 0.000 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

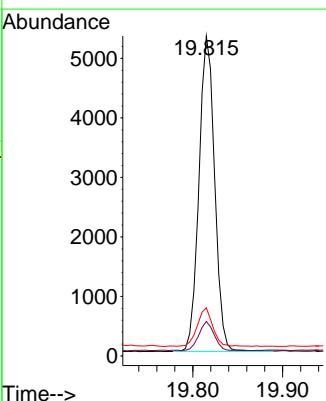
Instrument: BNA\_N  
ClientSampleId: BP-VPB-192-GW-260-262

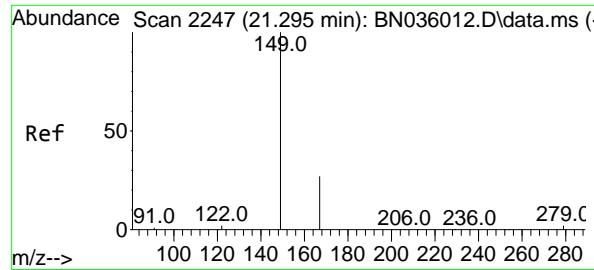
Tgt Ion:202 Resp: 460  
Ion Ratio Lower Upper  
202 100  
200 26.1 17.0 25.4#  
203 16.7 14.4 21.6



#31  
Terphenyl-d14  
Concen: 0.574 ng  
RT: 19.815 min Scan# 2062  
Delta R.T. -0.004 min  
Lab File: BN036117.D  
Acq: 29 Jan 2025 21:07

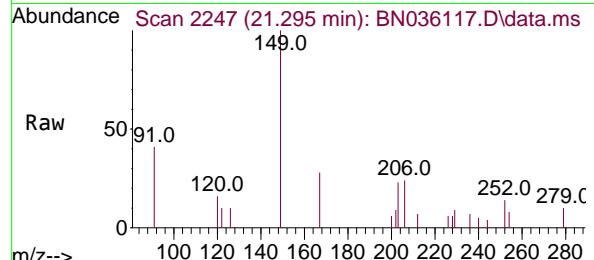
Tgt Ion:244 Resp: 6452  
Ion Ratio Lower Upper  
244 100  
212 10.8 9.1 13.7  
122 15.0 11.3 16.9



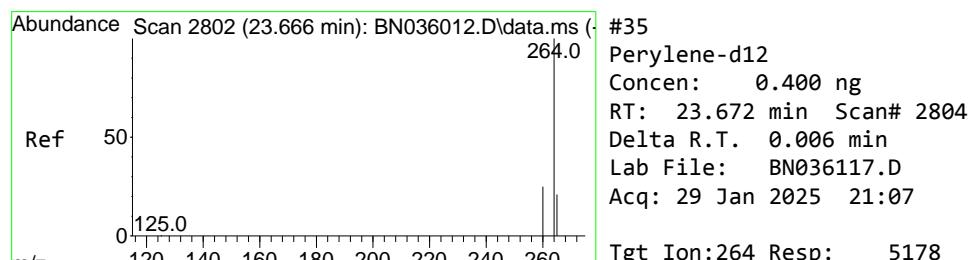
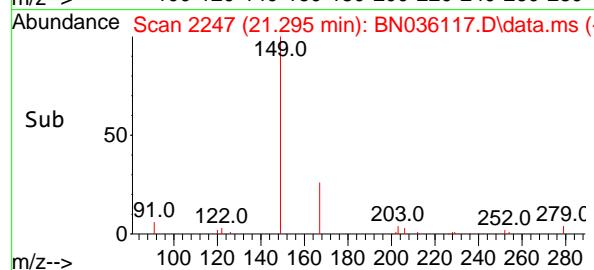
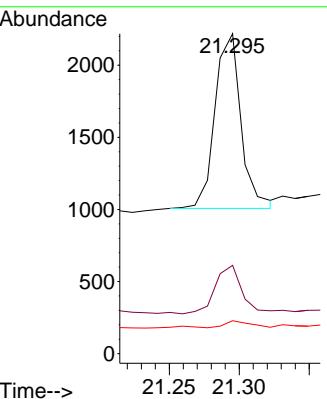


#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.146 ng  
 RT: 21.295 min Scan# 2  
 Delta R.T. 0.000 min Lab File: BN036117.D  
 Acq: 29 Jan 2025 21:07

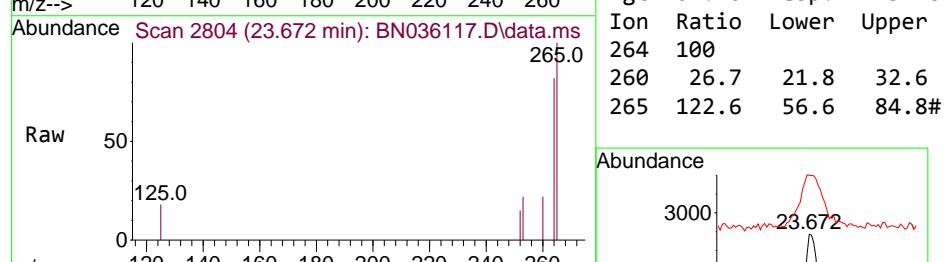
**Instrument:** BNA\_N  
**ClientSampleId:** BP-VPB-192-GW-260-262



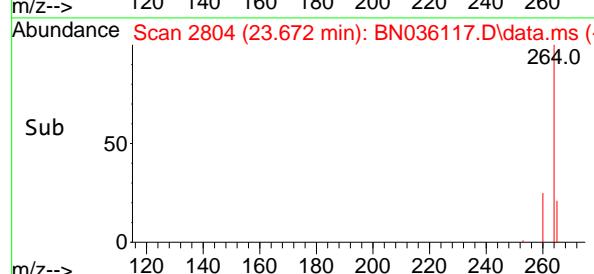
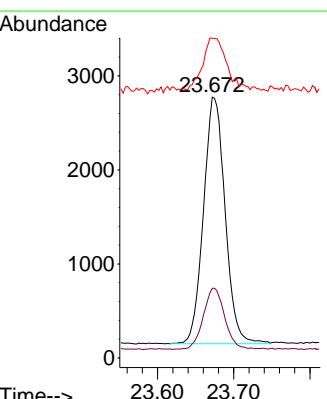
Tgt Ion:149 Resp: 1569  
 Ion Ratio Lower Upper  
 149 100  
 167 30.0 21.9 32.9  
 279 4.0 3.0 4.6



#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.672 min Scan# 2804  
 Delta R.T. 0.006 min Lab File: BN036117.D  
 Acq: 29 Jan 2025 21:07



Tgt Ion:264 Resp: 5178  
 Ion Ratio Lower Upper  
 264 100  
 260 26.7 21.8 32.6  
 265 122.6 56.6 84.8#



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN012925\  
 Data File : BN036118.D  
 Acq On : 29 Jan 2025 21:43  
 Operator : RC/JU  
 Sample : Q1199-05  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-VPB-192-GW-240-242**

Quant Time: Jan 30 00:36:47 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Jan 23 00:34:56 2025  
 Response via : Initial Calibration

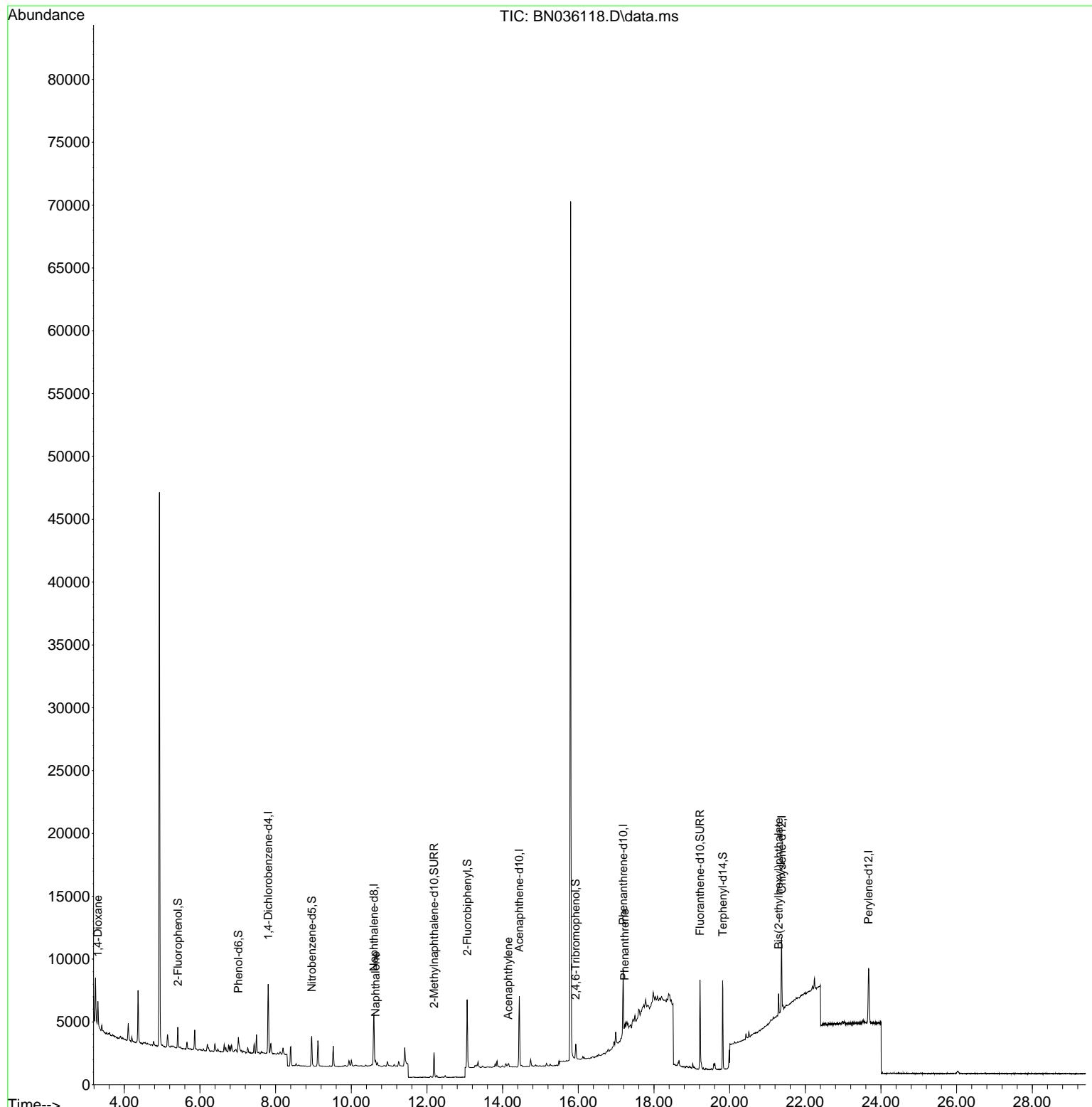
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.803	152	2471	0.400	ng	-0.01
7) Naphthalene-d8	10.600	136	5780	0.400	ng	-0.01
13) Acenaphthene-d10	14.442	164	3178	0.400	ng	0.00
19) Phenanthrene-d10	17.186	188	6949	0.400	ng	0.00
29) Chrysene-d12	21.376	240	5738	0.400	ng	# 0.00
35) Perylene-d12	23.672	264	5850	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.419	112	1197	0.186	ng	0.03
5) Phenol-d6	7.016	99	986	0.131	ng	0.04
8) Nitrobenzene-d5	8.956	82	1901	0.348	ng	0.00
11) 2-Methylnaphthalene-d10	12.187	152	2677	0.341	ng	-0.01
14) 2,4,6-Tribromophenol	15.933	330	666	0.327	ng	0.00
15) 2-Fluorobiphenyl	13.062	172	4374	0.308	ng	0.00
27) Fluoranthene-d10	19.216	212	7927	0.440	ng	0.00
31) Terphenyl-d14	19.815	244	6416	0.538	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
2) 1,4-Dioxane	3.303	88	1080	0.391	ng	# 88
9) Naphthalene	10.643	128	521	0.031	ng	# 70
16) Acenaphthylene	14.153	152	318	0.021	ng	97
25) Phenanthrene	17.224	178	856	0.041	ng	# 49
34) Bis(2-ethylhexyl)phtha...	21.295	149	1619	0.142	ng	# 99

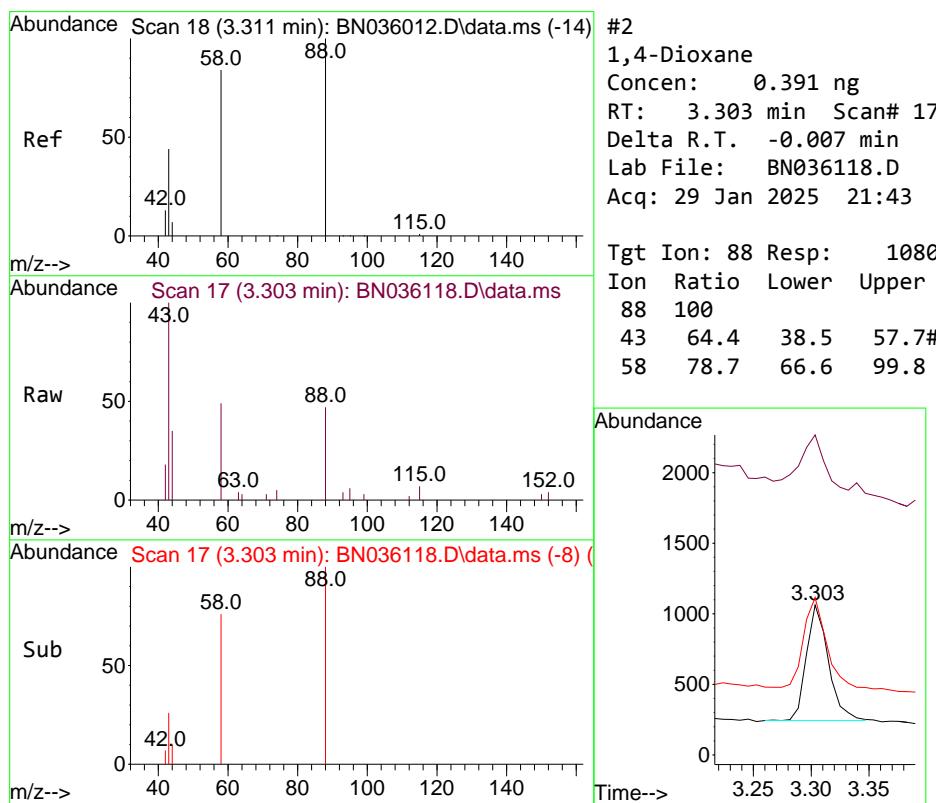
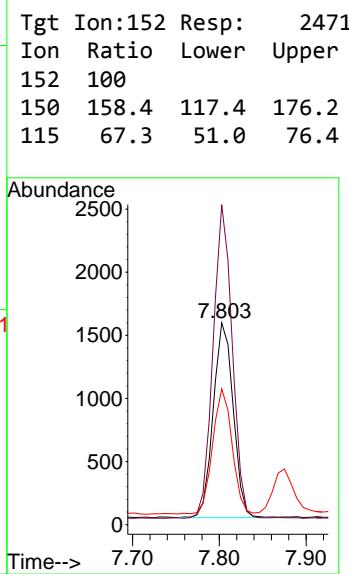
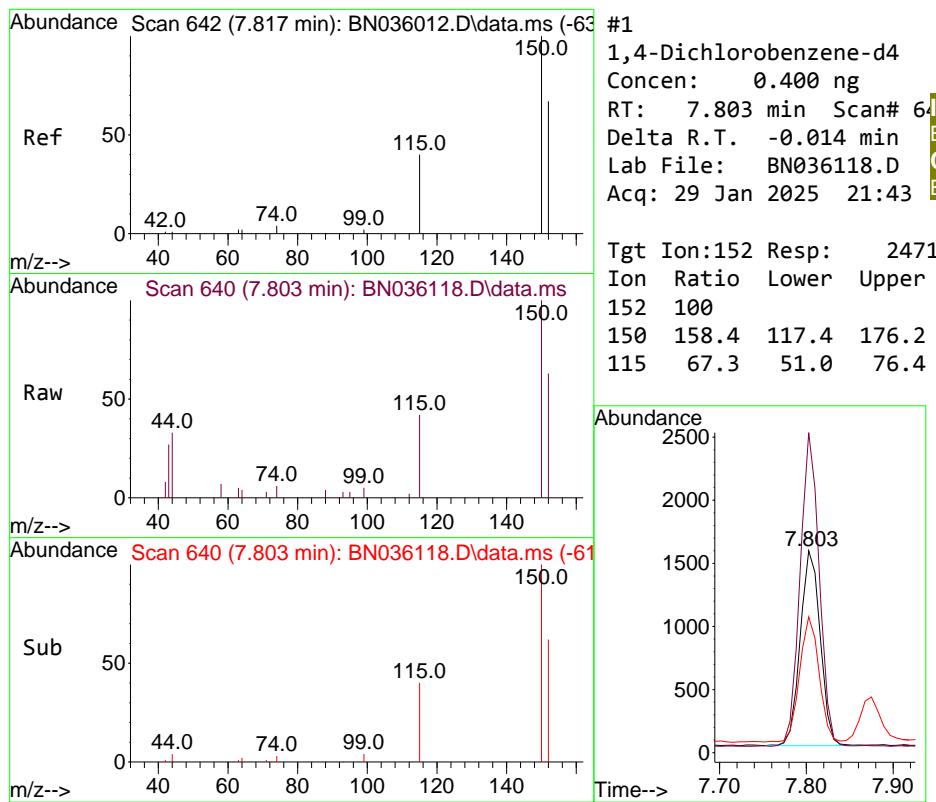
(#) = qualifier out of range (m) = manual integration (+) = signals summed

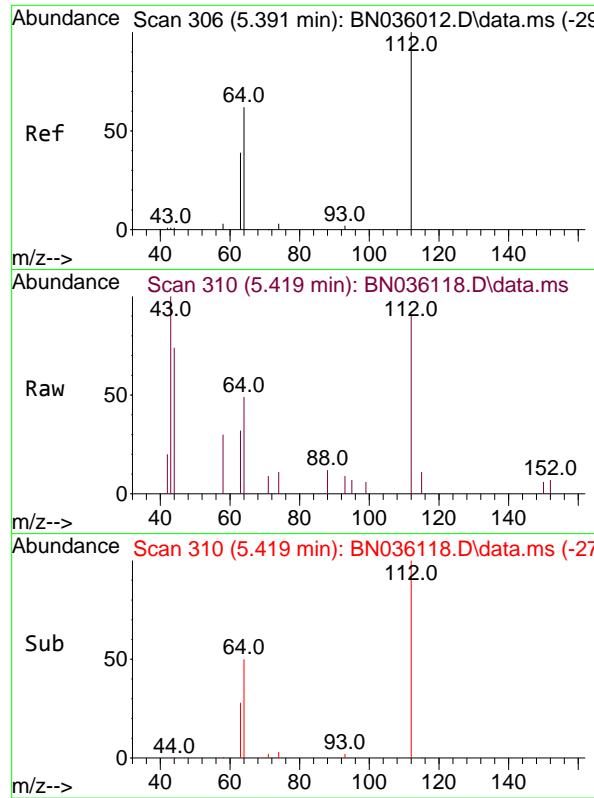
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Data File : BN036118.D  
Acq On : 29 Jan 2025 21:43  
Operator : RC/JU  
Sample : Q1199-05  
Misc :  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
BNA\_N  
ClientSampleId :  
BP-VPB-192-GW-240-242

Quant Time: Jan 30 00:36:47 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN012225.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Thu Jan 23 00:34:56 2025  
Response via : Initial Calibration



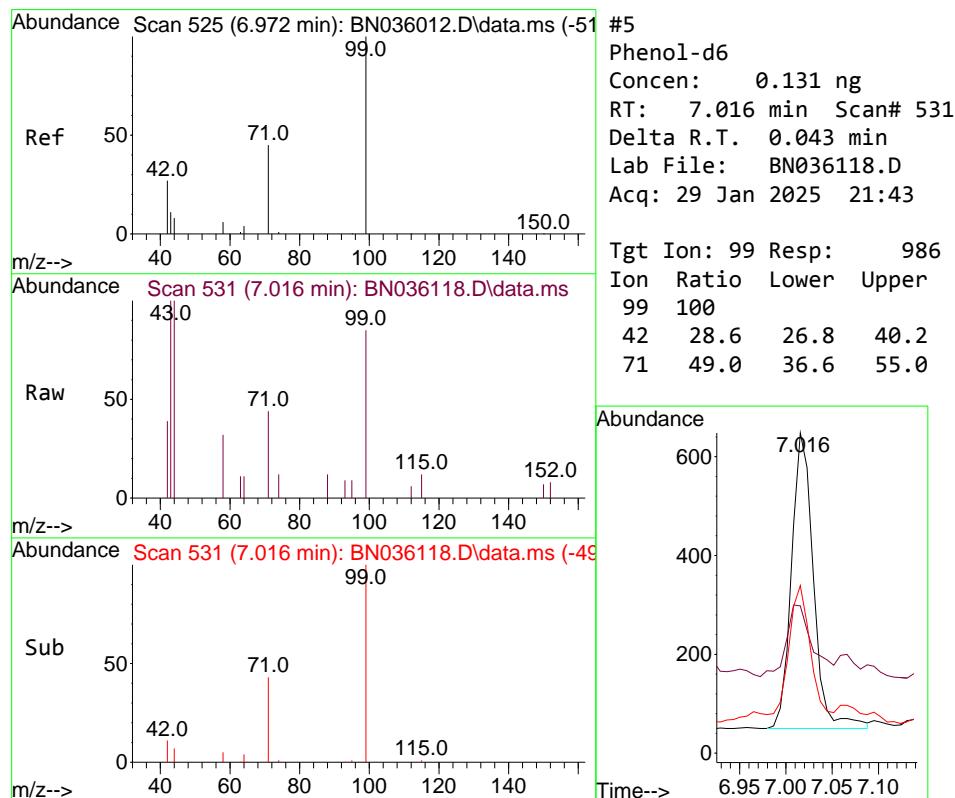
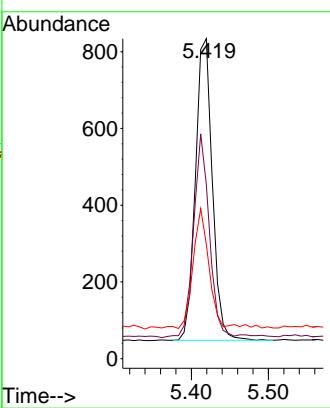




#4  
 2-Fluorophenol  
 Concen: 0.186 ng  
 RT: 5.419 min Scan# 3  
 Delta R.T. 0.029 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

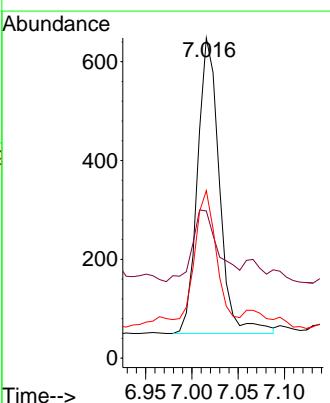
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-240-242

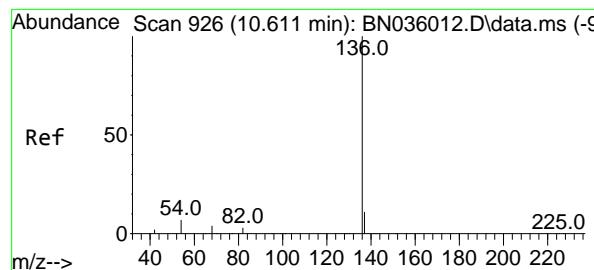
Tgt Ion:112 Resp: 1197  
 Ion Ratio Lower Upper  
 112 100  
 64 63.2 50.0 75.0  
 63 38.3 30.7 46.1



#5  
 Phenol-d6  
 Concen: 0.131 ng  
 RT: 7.016 min Scan# 531  
 Delta R.T. 0.043 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

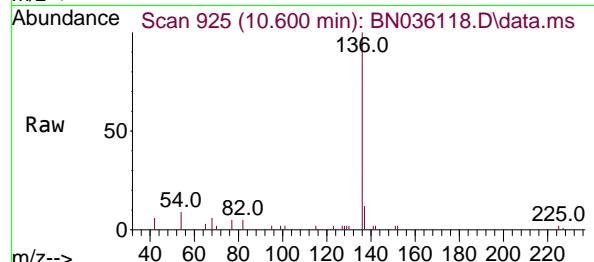
Tgt Ion: 99 Resp: 986  
 Ion Ratio Lower Upper  
 99 100  
 42 28.6 26.8 40.2  
 71 49.0 36.6 55.0





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.600 min Scan# 9  
 Delta R.T. -0.011 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-240-242



Tgt Ion:136 Resp: 5780

Ion Ratio Lower Upper

136	100		
137	11.7	10.4	15.6
54	8.6	7.7	11.5
68	6.1	5.4	8.0

Abundance

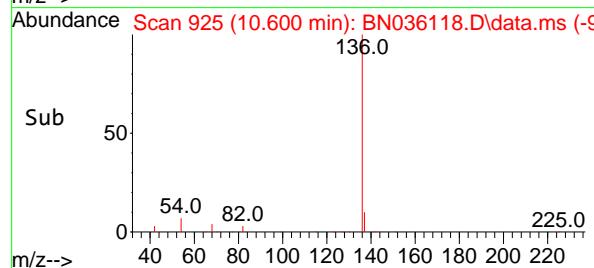
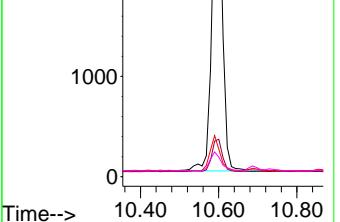
3000

2000

1000

0

10.500

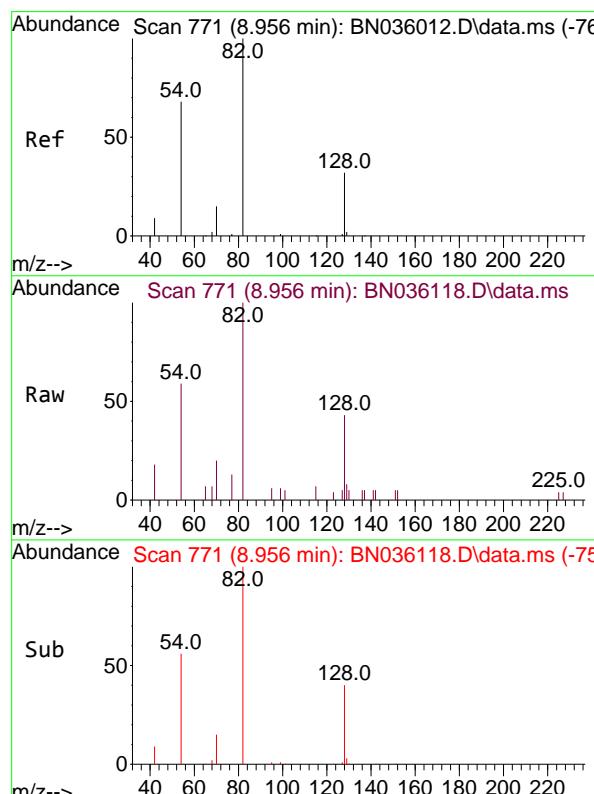
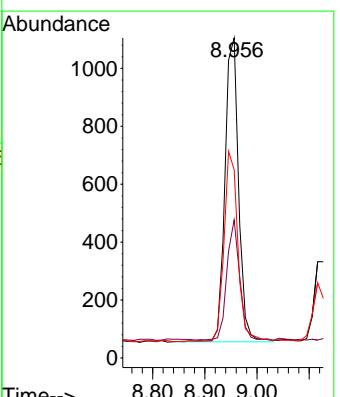


#8  
 Nitrobenzene-d5  
 Concen: 0.348 ng  
 RT: 8.956 min Scan# 771  
 Delta R.T. 0.000 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Tgt Ion: 82 Resp: 1901

Ion Ratio Lower Upper

82	100		
128	43.2	28.8	43.2
54	58.8	55.8	83.8



Abundance Scan 771 (8.956 min): BN036118.D\data.ms (-75)

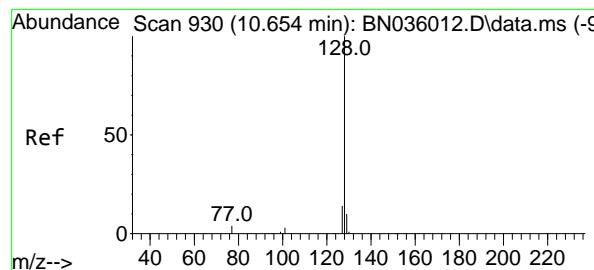
m/z-->

Sub

50

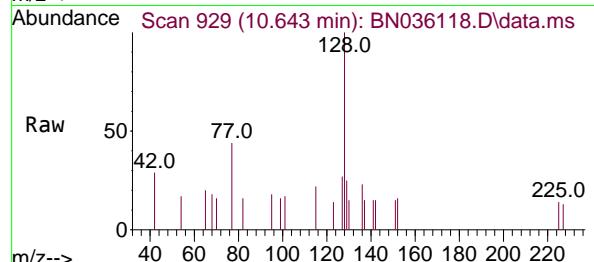
0

54.0 82.0 128.0

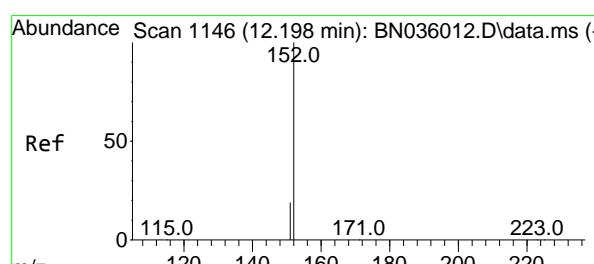
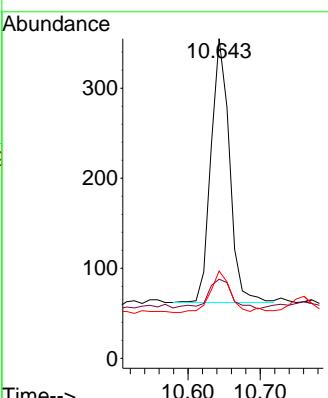
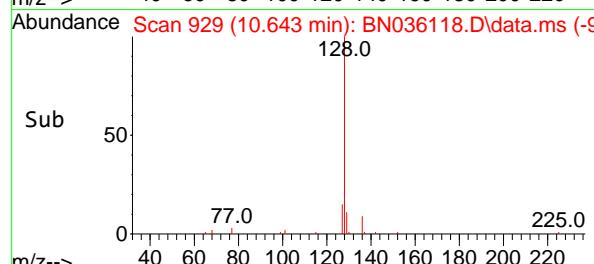


#9  
Naphthalene  
Concen: 0.031 ng  
RT: 10.643 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

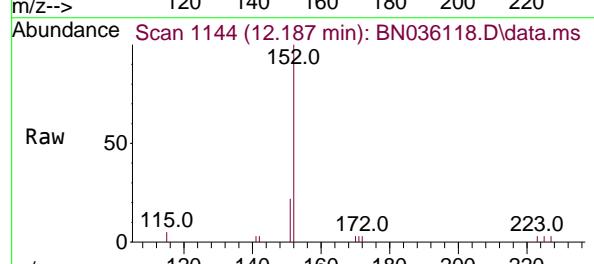
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-240-242



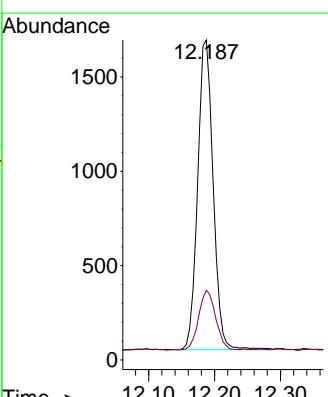
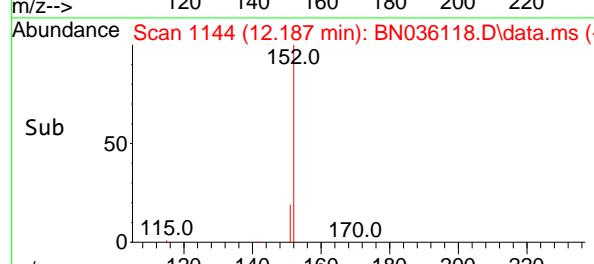
Tgt Ion:128 Resp: 521  
Ion Ratio Lower Upper  
128 100  
129 24.8 9.4 14.2#  
127 27.3 12.6 19.0#

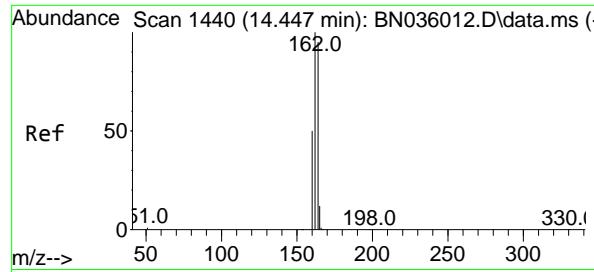


#11  
2-Methylnaphthalene-d10  
Concen: 0.341 ng  
RT: 12.187 min Scan# 1144  
Delta R.T. -0.010 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43



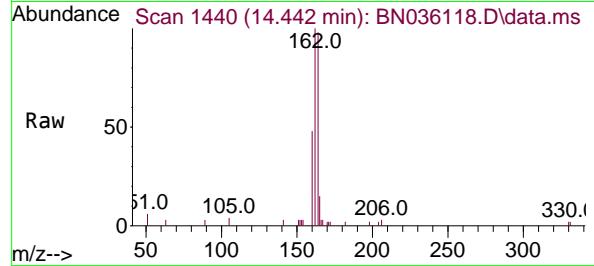
Tgt Ion:152 Resp: 2677  
Ion Ratio Lower Upper  
152 100  
151 21.1 16.6 25.0



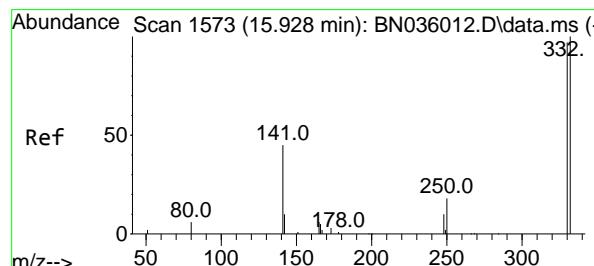
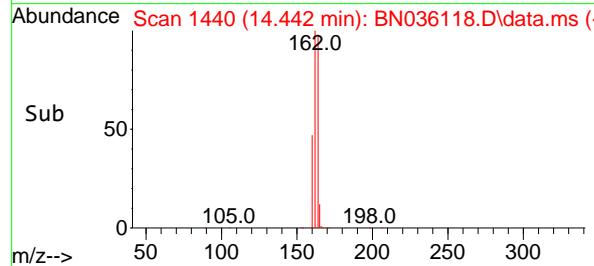
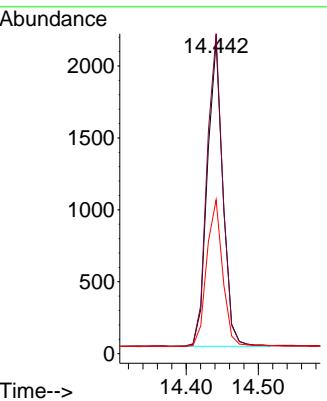


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.442 min Scan# 1440  
 Delta R.T. -0.006 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

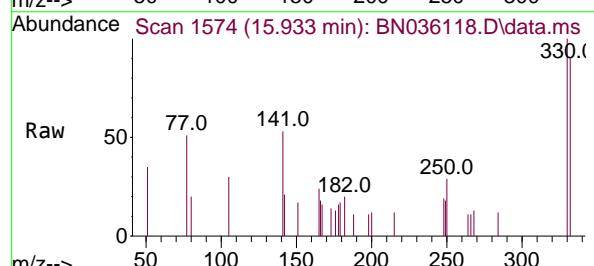
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-240-242



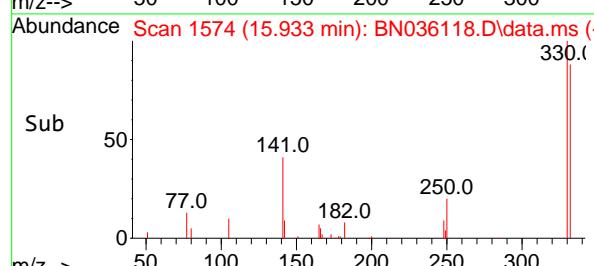
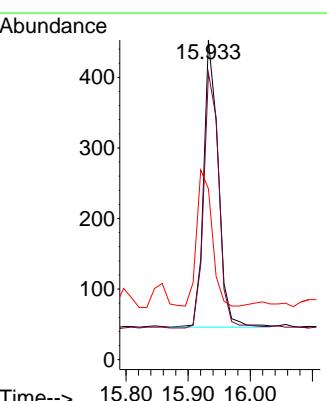
Tgt Ion:164 Resp: 3178  
 Ion Ratio Lower Upper  
 164 100  
 162 102.5 84.1 126.1  
 160 49.3 43.8 65.8

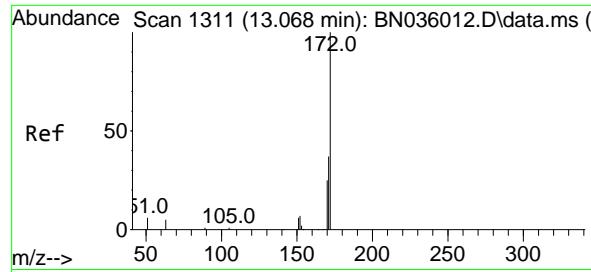


#14  
 2,4,6-Tribromophenol  
 Concen: 0.327 ng  
 RT: 15.933 min Scan# 1574  
 Delta R.T. 0.005 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43



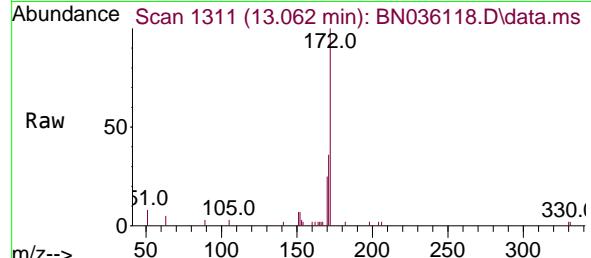
Tgt Ion:330 Resp: 666  
 Ion Ratio Lower Upper  
 330 100  
 332 93.5 81.0 121.4  
 141 50.5 36.7 55.1



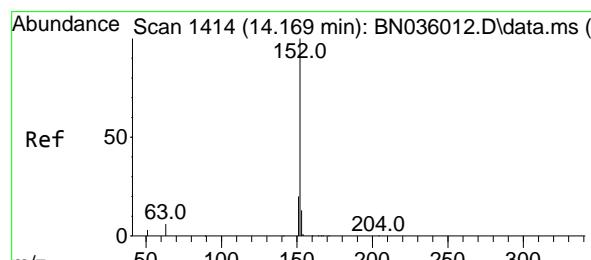
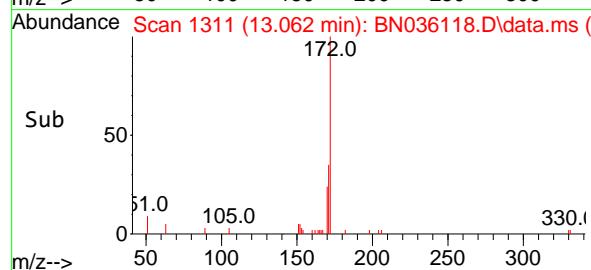
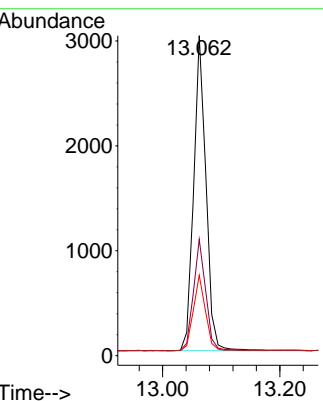


#15  
2-Fluorobiphenyl  
Concen: 0.308 ng  
RT: 13.062 min Scan# 1  
Delta R.T. -0.006 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43

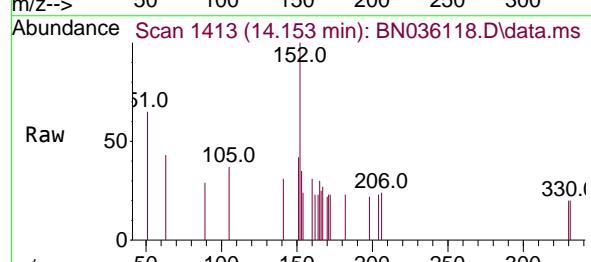
Instrument : BNA\_N  
ClientSampleId : BP-VPB-192-GW-240-242



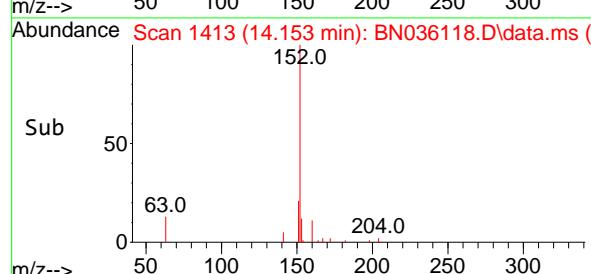
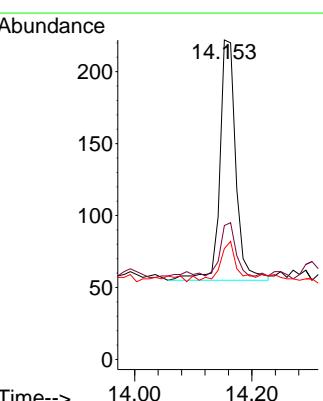
Tgt Ion:172 Resp: 4374  
Ion Ratio Lower Upper  
172 100  
171 36.3 30.9 46.3  
170 25.1 21.2 31.8

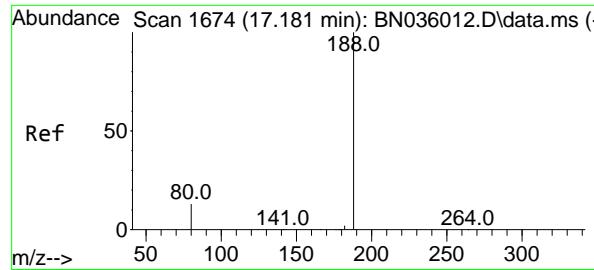


#16  
Acenaphthylene  
Concen: 0.021 ng  
RT: 14.153 min Scan# 1413  
Delta R.T. -0.016 min  
Lab File: BN036118.D  
Acq: 29 Jan 2025 21:43



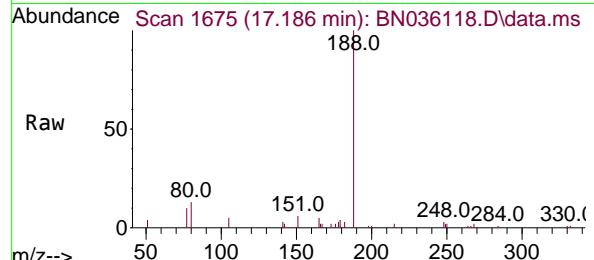
Tgt Ion:152 Resp: 318  
Ion Ratio Lower Upper  
152 100  
151 20.8 16.2 24.2  
153 15.4 10.4 15.6



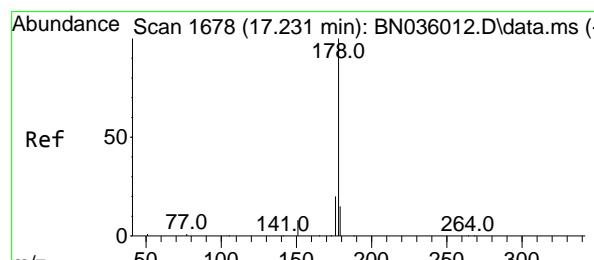
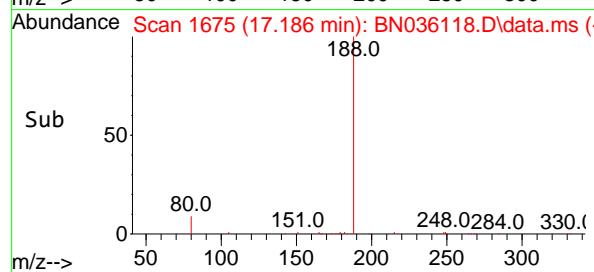
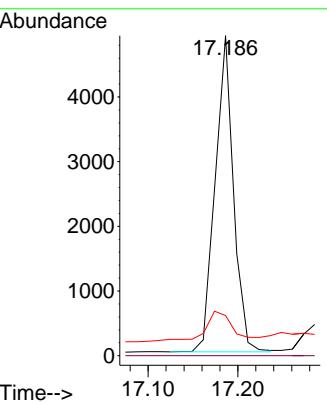


#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.186 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

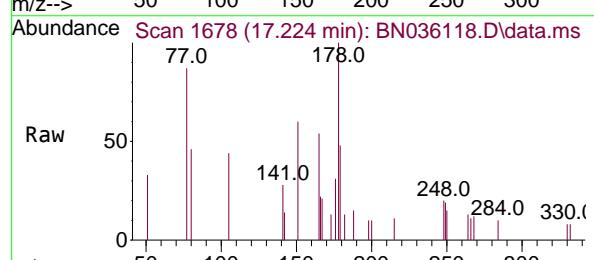
**Instrument :** BNA\_N  
**ClientSampleId :** BP-VPB-192-GW-240-242



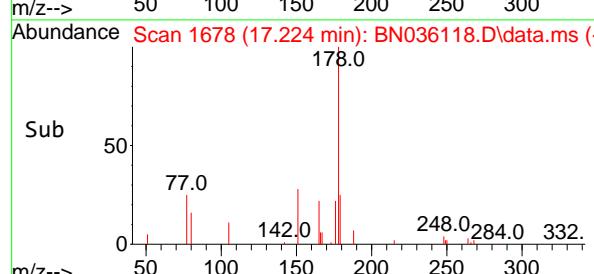
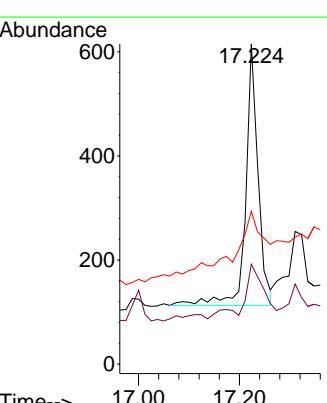
Tgt Ion:188 Resp: 6949  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 12.6 12.3 18.5

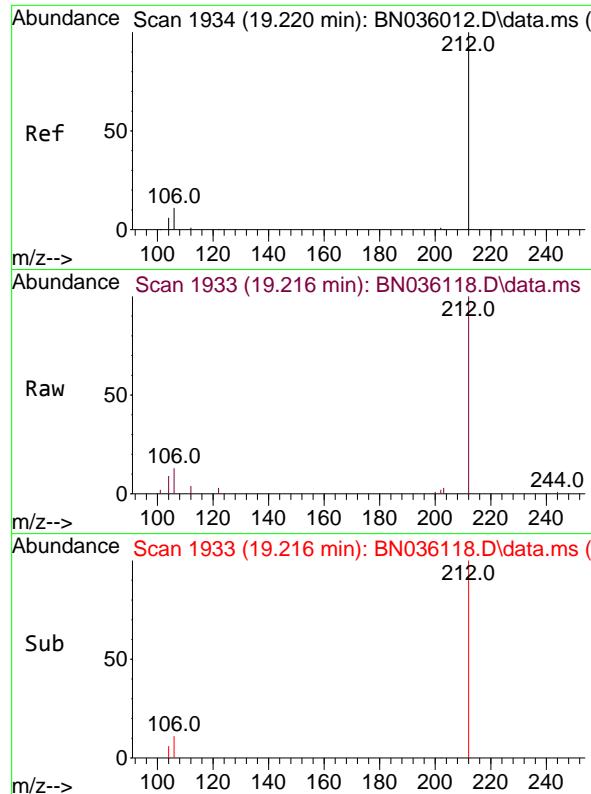


#25  
 Phenanthrene  
 Concen: 0.041 ng  
 RT: 17.224 min Scan# 1678  
 Delta R.T. -0.007 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43



Tgt Ion:178 Resp: 856  
 Ion Ratio Lower Upper  
 178 100  
 176 24.5 16.0 24.0#  
 179 58.8 12.4 18.6#

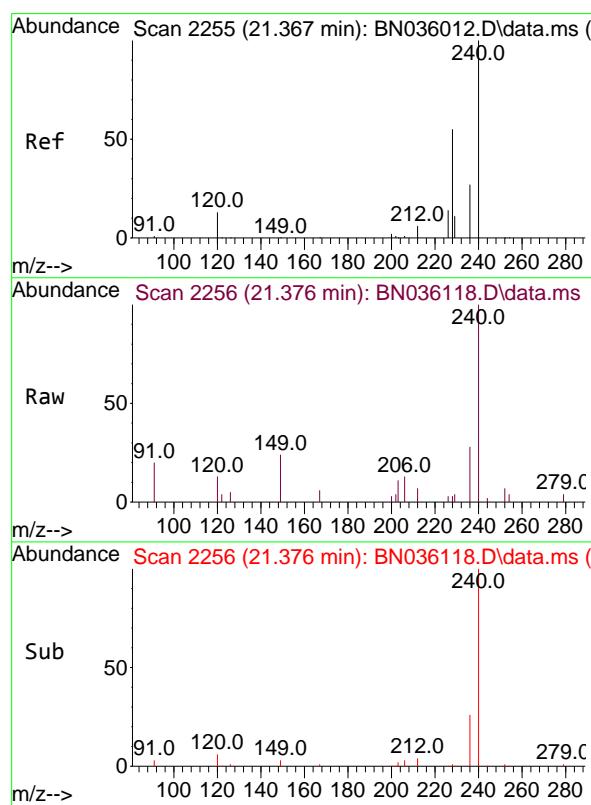
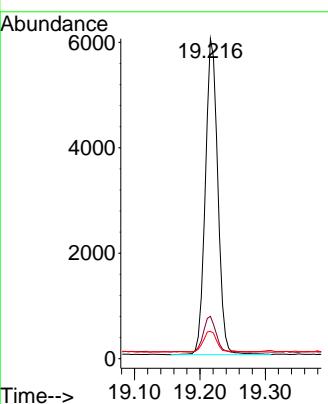




#27  
 Fluoranthene-d10  
 Concen: 0.440 ng  
 RT: 19.216 min Scan# 1  
 Delta R.T. -0.004 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

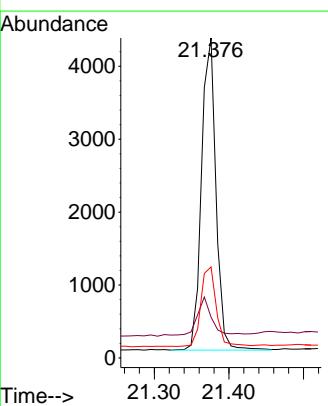
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-240-242

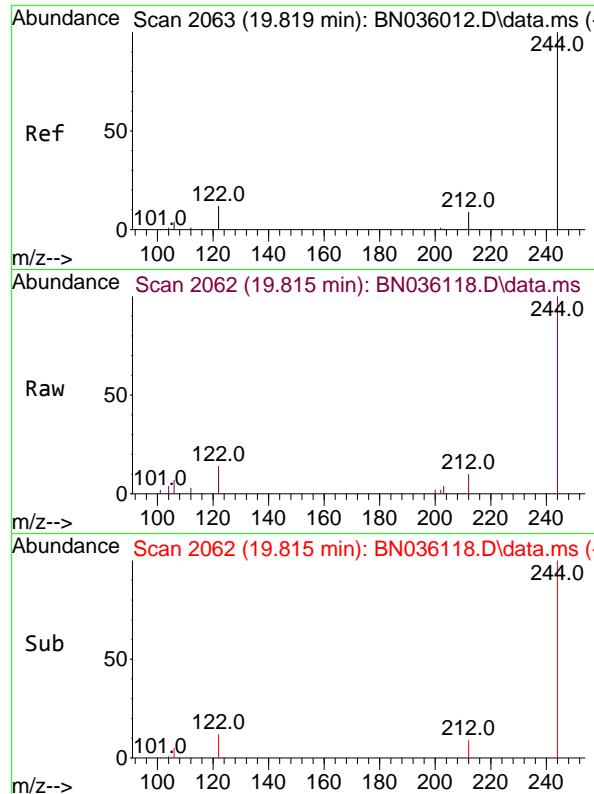
Tgt Ion:212 Resp: 7927  
 Ion Ratio Lower Upper  
 212 100  
 106 11.4 9.7 14.5  
 104 6.9 6.0 9.0



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.376 min Scan# 2256  
 Delta R.T. 0.009 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Tgt Ion:240 Resp: 5738  
 Ion Ratio Lower Upper  
 240 100  
 120 12.8 13.9 20.9#  
 236 28.5 23.7 35.5

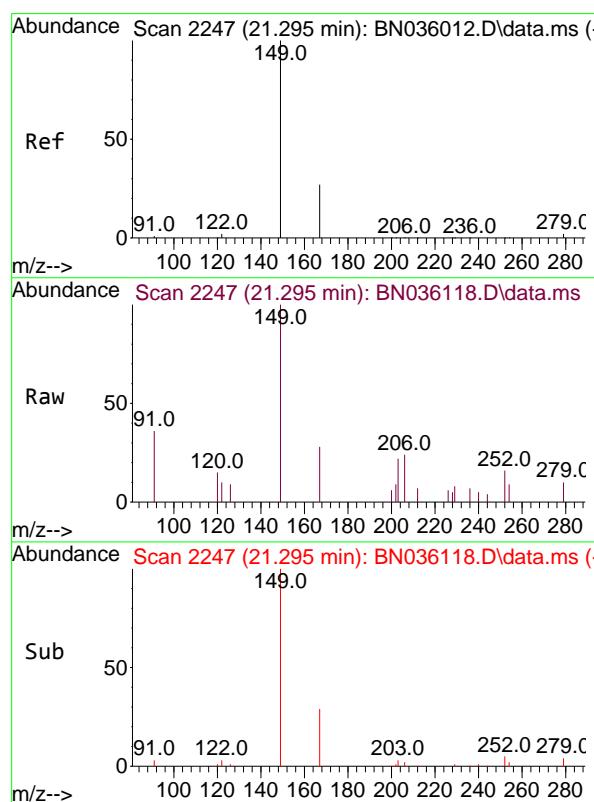
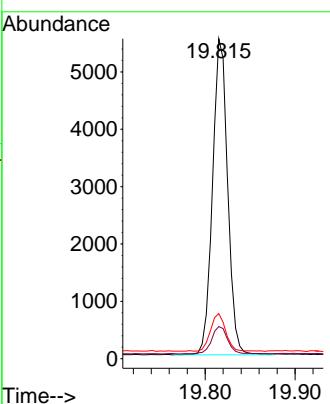




#31  
 Terphenyl-d14  
 Concen: 0.538 ng  
 RT: 19.815 min Scan# 2  
 Delta R.T. -0.004 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

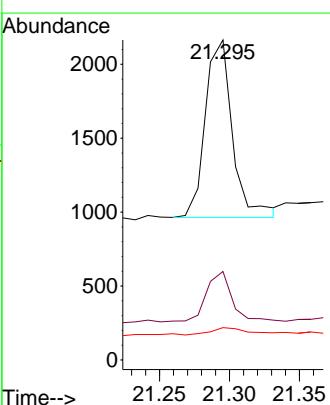
Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-240-242

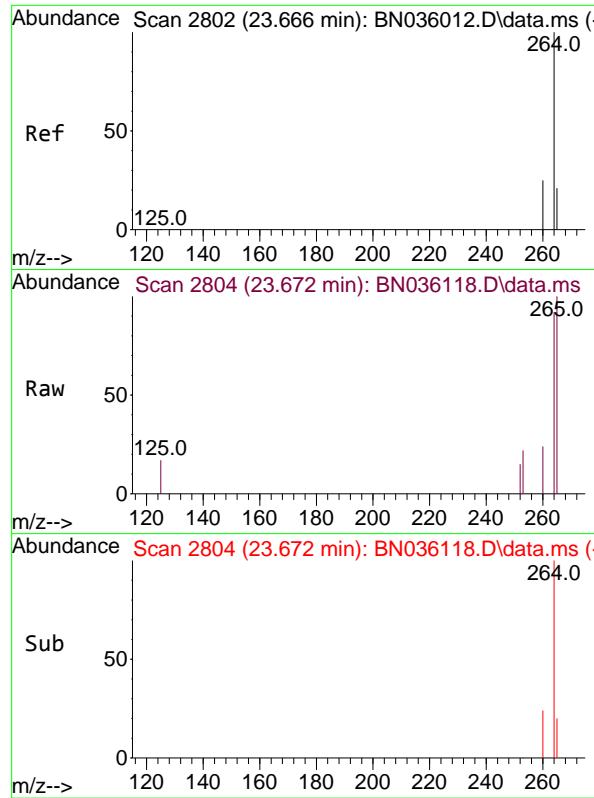
Tgt Ion:244 Resp: 6416  
 Ion Ratio Lower Upper  
 244 100  
 212 10.0 9.1 13.7  
 122 14.1 11.3 16.9



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.142 ng  
 RT: 21.295 min Scan# 2247  
 Delta R.T. 0.000 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Tgt Ion:149 Resp: 1619  
 Ion Ratio Lower Upper  
 149 100  
 167 27.1 21.9 32.9  
 279 5.9 3.0 4.6#





#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.672 min Scan# 21  
 Delta R.T. 0.006 min  
 Lab File: BN036118.D  
 Acq: 29 Jan 2025 21:43

Instrument : BNA\_N  
 ClientSampleId : BP-VPB-192-GW-240-242

Tgt Ion:264 Resp: 5850  
 Ion Ratio Lower Upper  
 264 100  
 260 26.2 21.8 32.6  
 265 108.7 56.6 84.8#

