

## Cover Page

**Order ID :** Q1731

**Project ID :** Former Schlumberger STC PTC Site D3868221

**Client :** JACOBS Engineering Group, Inc.

### Lab Sample Number

Q1731-01  
Q1731-02  
Q1731-03  
Q1731-04  
Q1731-05  
Q1731-06  
Q1731-07

### Client Sample Number

RMW-01B-82-040325  
RMW-04B-91-040325  
RMW-01B-82-040325-FD  
RMW-03B-90-040325  
EB01-040325  
EB01-040325  
TB01-040325

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: 4/12/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012



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

## CASE NARRATIVE

**JACOBS Engineering Group, Inc.**

**Project Name:** Former Schlumberger STC PTC Site D3868221

**Project #** N/A

**Chemtech Project #** Q1731

**Test Name:** SVOC-SIMGroup1

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

7 Water samples were received on 04/03/2025.

**B. Parameters**

According to the Chain of Custody document, the following analyses were requested: Alkalinity, Anions Group1, Dissolved ICP-Group2, Dissolved Metals Group3, Metals Group4, SVOC-SIMGroup1, TDS and VOCMS Group3. This data package contains results for SVOC-SIMGroup1.

**C. Analytical Techniques:**

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

**D. QA/ QC Samples:**

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for RMW-01B-82-040325 [Terphenyl-d14 - 173%] and RMW-03B-90-040325DL [Terphenyl-d14 - 145%], these compounds did not meet the NJDKQP criteria but met the in-house criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

Sample RMW-03B-90-040325 was diluted due to high concentration.

**E. Additional Comments:**

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



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

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

**F. Manual Integration Comments:**

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

---

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

Signature\_\_\_\_\_

**DATA REPORTING QUALIFIERS- ORGANIC**

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

Value	If the result is a value greater than or equal to the detection limit, report the value
<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: Q1731

MATRIX: Water

METHOD: 8270-Modified/3510

	NA	NO	YES
1. Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2. GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3. GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4. GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5. GC/MS Calibration Requirements.			✓
	The Initial Calibration met the requirements . The Continuous Calibration met the requirements .		
6. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
7. Surrogate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.		
	The Surrogate recoveries met the acceptable criteria except for RMW-01B-82-040325 [Terphenyl-d14 - 173%] and RMW-03B-90-040325DL [Terphenyl-d14 - 145%], these compounds did not meet the NJDKQP criteria but met the in-house criteria .		
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.		
	The Blank Spike met requirements for all samples . The Blank Spike Duplicate met requirements for all samples .		
9. Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:		

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

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

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

**(CONTINUED)**

NA      NO      YES

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:**

Sample RMW-03B-90-040325 was diluted due to high concentration.

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

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

---

QA REVIEW

---

Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

Project #: Q1731

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>	Q1731	<b>OrderDate:</b>	4/4/2025 10:52:00 AM					
<b>Client:</b>	JACOBS Engineering Group, Inc.	<b>Project:</b>	Former Schlumberger STC PTC Site D3868221					
<b>Contact:</b>	John Ynfante	<b>Location:</b>	L31,VOA Ref. #3 Water					
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q1731-01	RMW-01B-82-040325	Water	SVOC-SIMGroup1	8270-Modified	<b>04/03/25</b>	04/04/25	04/04/25	<b>04/03/25</b>
Q1731-02	RMW-04B-91-040325	Water	SVOC-SIMGroup1	8270-Modified	<b>04/03/25</b>	04/04/25	04/04/25	<b>04/03/25</b>
Q1731-03	RMW-01B-82-040325-FD	Water	SVOC-SIMGroup1	8270-Modified	<b>04/03/25</b>	04/04/25	04/04/25	<b>04/03/25</b>
Q1731-04	RMW-03B-90-040325	Water	SVOC-SIMGroup1	8270-Modified	<b>04/03/25</b>	04/04/25	04/04/25	<b>04/03/25</b>
Q1731-04DL	RMW-03B-90-040325-DL	Water	SVOC-SIMGroup1	8270-Modified	<b>04/03/25</b>	04/04/25	04/07/25	<b>04/03/25</b>
Q1731-05	EB01-040325	Water	SVOC-SIMGroup1	8270-Modified	<b>04/03/25</b>	04/04/25	04/04/25	<b>04/03/25</b>



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

**Hit Summary Sheet  
SW-846**

**SDG No.:** Q1731

**Client:** JACOBS Engineering Group, Inc.

Sample ID	Client ID	Parameter	Concentration	C	MDL	RDL	Units
<b>Client ID :</b> Q1731-01	<b>RMW-01B-82-040325</b> RMW-01B-82-040325	WATER 1,4-Dioxane	0.390	0.07	0.2	ug/L	
		<b>Total Svoc :</b>	<b>0.39</b>				
		<b>Total Concentration:</b>	<b>0.39</b>				
<b>Client ID :</b> Q1731-02	<b>RMW-04B-91-040325</b> RMW-04B-91-040325	WATER 1,4-Dioxane	0.290	0.07	0.2	ug/L	
		<b>Total Svoc :</b>	<b>0.29</b>				
		<b>Total Concentration:</b>	<b>0.29</b>				
<b>Client ID :</b> Q1731-03	<b>RMW-01B-82-040325-FD</b> RMW-01B-82-040325-FI	WATER 1,4-Dioxane	0.430	0.07	0.2	ug/L	
		<b>Total Svoc :</b>	<b>0.43</b>				
		<b>Total Concentration:</b>	<b>0.43</b>				
<b>Client ID :</b> Q1731-04	<b>RMW-03B-90-040325</b> RMW-03B-90-040325	WATER 1,4-Dioxane	7.500	E	0.07	0.2	ug/L
		<b>Total Svoc :</b>	<b>7.50</b>				
		<b>Total Concentration:</b>	<b>7.50</b>				
<b>Client ID :</b> Q1731-04DL	<b>RMW-03B-90-040325DL</b> RMW-03B-90-040325DI	WATER 1,4-Dioxane	9.500	D	0.35	1	ug/L
		<b>Total Svoc :</b>	<b>9.50</b>				
		<b>Total Concentration:</b>	<b>9.50</b>				



QC

SUMMARY

### Surrogate Summary

SW-846

**SDG No.:** Q1731

**Client:** JACOBS Engineering Group, Inc.

**Analytical Method:** 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
PB167468BL	PB167468BL	2-Methylnaphthalene-d10	0.4	0.35	88		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.44	109		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.32	80		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.29	72		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.37	91		30 (54)	130 (175)
PB167468BS	PB167468BS	2-Methylnaphthalene-d10	0.4	0.40	99		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.40	99		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.35	88		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.38	95		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.37	91		30 (54)	130 (175)
PB167468BSD	PB167468BSD	2-Methylnaphthalene-d10	0.4	0.40	99		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.40	100		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.35	87		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.37	92		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.36	90		30 (54)	130 (175)
Q1731-01	RMW-01B-82-040325	2-Methylnaphthalene-d10	0.4	0.37	93		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.50	125		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.34	85		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.40	100		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.69	173	*	30 (54)	130 (175)
Q1731-02	RMW-04B-91-040325	2-Methylnaphthalene-d10	0.4	0.35	87		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.48	119		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.31	78		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.37	93		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.47	117		30 (54)	130 (175)
Q1731-03	RMW-01B-82-040325-FD	2-Methylnaphthalene-d10	0.4	0.37	93		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.50	126		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.35	88		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.38	94		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.49	122		30 (54)	130 (175)
Q1731-04	RMW-03B-90-040325	2-Methylnaphthalene-d10	0.4	0.40	100		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.51	126		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.33	83		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.43	108		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.49	122		30 (54)	130 (175)
Q1731-04DL	RMW-03B-90-040325DL	2-Methylnaphthalene-d10	0.4	0.47	117		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.60	149		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.44	109		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.41	101		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.58	145	*	30 (54)	130 (175)
Q1731-05	EB01-040325	2-Methylnaphthalene-d10	0.4	0.40	100		30 (20)	150 (139)
		Fluoranthene-d10	0.4	0.51	128		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.35	88		30 (27)	130 (154)
		2-Fluorobiphenyl	0.4	0.41	103		30 (25)	130 (149)
		Terphenyl-d14	0.4	0.48	120		30 (54)	130 (175)



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

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

SW-846

SDG No.: Q1731

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified DataFile: BN036844.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits			RPD
									Low	High	RPD	
PB167468BS	1,4-Dioxane	0.4	0.38	ug/L	95				20 (42)	160 (127)		



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

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

SW-846

SDG No.: Q1731

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified DataFile: BN036845.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		
									RPD	Low	High
PB167468BSD	1,4-Dioxane	0.4	0.37	ug/L	93	3			20 (42)	160 (127)	20 (20)



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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB167468BL

Lab Name: CHEMTECH

Contract: JACO05

Lab Code: CHEM

Case No.: Q1731

SAS No.: Q1731 SDG NO.: Q1731

Lab File ID: BN036848.D

Lab Sample ID: PB167468BL

Instrument ID: BNA\_N

Date Extracted: 04/04/2025

Matrix: (soil/water) Water

Date Analyzed: 04/07/2025

Level: (low/med) LOW

Time Analyzed: 09:46

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB167468BS	PB167468BS	BN036844.D	04/04/2025
PB167468BSD	PB167468BSD	BN036845.D	04/04/2025
RMW-01B-82-040325	Q1731-01	BN036839.D	04/04/2025
RMW-04B-91-040325	Q1731-02	BN036840.D	04/04/2025
RMW-01B-82-040325-FD	Q1731-03	BN036841.D	04/04/2025
RMW-03B-90-040325	Q1731-04	BN036842.D	04/04/2025
EB01-040325	Q1731-05	BN036843.D	04/04/2025

COMMENTS:



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

5B

SEMICVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: JAC005

Lab Code: CHEM

SAS No.: Q1731 SDG NO.: Q1731

Lab File ID: BN036556.D

DFTPP Injection Date: 03/10/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 11:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	58.6
68	Less than 2.0% of mass 69	0.0 ( 0.0 ) 1
69	Mass 69 relative abundance	52.3
70	Less than 2.0% of mass 69	0.3 ( 0.7 ) 1
127	10.0 - 80.0% of mass 198	50.7
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	6.9
275	10.0 - 60.0% of mass 198	24.8
365	Greater than 1% of mass 198	3.8
441	Present, but less than mass 443	9.3
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.9 (19.6) 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	BN036557.D	03/10/2025	11:42
SSTDICC0.2	SSTDICC0.2	BN036558.D	03/10/2025	12:18
SSTDICCC0.4	SSTDICCC0.4	BN036559.D	03/10/2025	12:54
SSTDICC0.8	SSTDICC0.8	BN036560.D	03/10/2025	13:31
SSTDICC1.6	SSTDICC1.6	BN036561.D	03/10/2025	14:07
SSTDICC3.2	SSTDICC3.2	BN036562.D	03/10/2025	14:43
SSTDICC5.0	SSTDICC5.0	BN036563.D	03/10/2025	15:19



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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: JAC005

Lab Code: CHEM

SAS No.: Q1731 SDG NO.: Q1731

Lab File ID: BN036836.D

DFTPP Injection Date: 04/04/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 13:03

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	61.1
68	Less than 2.0% of mass 69	0.4 ( 0.8 ) 1
69	Mass 69 relative abundance	53.1
70	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
127	10.0 - 80.0% of mass 198	51.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	24.1
365	Greater than 1% of mass 198	3.7
441	Present, but less than mass 443	9.1
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.9 (19.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDCCC0.4	SSTDCCC0.4	BN036837.D	04/04/2025	13:42
RMW-01B-82-040325	Q1731-01	BN036839.D	04/04/2025	17:22
RMW-04B-91-040325	Q1731-02	BN036840.D	04/04/2025	17:58
RMW-01B-82-040325-FD	Q1731-03	BN036841.D	04/04/2025	18:34
RMW-03B-90-040325	Q1731-04	BN036842.D	04/04/2025	19:10
EB01-040325	Q1731-05	BN036843.D	04/04/2025	19:46
PB167468BS	PB167468BS	BN036844.D	04/04/2025	20:22
PB167468BSD	PB167468BSD	BN036845.D	04/04/2025	20:58



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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: JAC005

Lab Code: CHEM

SAS No.: Q1731 SDG NO.: Q1731

Lab File ID: BN036846.D

DFTPP Injection Date: 04/07/2025

Instrument ID: BNA\_N

DFTPP Injection Time: 08:31

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	64.1
68	Less than 2.0% of mass 69	0.9 ( 1.6 ) 1
69	Mass 69 relative abundance	54
70	Less than 2.0% of mass 69	0.3 ( 0.5 ) 1
127	10.0 - 80.0% of mass 198	51.4
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	23.9
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	8.8
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	10.4 (18.7) 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	BN036847.D	04/07/2025	09:10
PB167468BL	PB167468BL	BN036848.D	04/07/2025	09:46
RMW-03B-90-040325DL	Q1731-04DL	BN036849.D	04/07/2025	10:22



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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1731 SAS No.: Q1731 SDG No.: Q1731  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/04/2025  
Lab File ID: BN036837.D Time Analyzed: 13:42  
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	2261	7.688	5761	10.48	3391	14.33
	4522	8.188	11522	10.977	6782	14.834
	1130.5	7.188	2880.5	9.977	1695.5	13.834
EPA SAMPLE NO.						
01 RMW-01B-82-040325	1599	7.70	3869	10.48	2334	14.33
02 PB167468BS	1969	7.70	4826	10.48	2640	14.33
03 RMW-04B-91-040325	1693	7.70	4270	10.48	2557	14.33
04 PB167468BSD	1816	7.70	4421	10.48	2443	14.33
05 RMW-01B-82-040325-FD	1722	7.70	4117	10.49	2520	14.33
06 RMW-03B-90-040325	1670	7.70	4185	10.48	2430	14.33
07 EB01-040325	1624	7.70	4101	10.48	2430	14.33

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. :	Q1731	
		SAS No. :	Q1731	
EPA Sample No. :	SSTDCCCC0.4		Date Analyzed:	04/04/2025
Lab File ID:	BN036837.D		Time Analyzed:	13:42
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	7218	17.074	6202	21.268	5846	23.511
	14436	17.574	12404	21.768	11692	24.011
	3609	16.574	3101	20.768	2923	23.011
EPA SAMPLE NO.						
01 RMW-01B-82-040325	4949	17.09	4533	21.27	4219	23.51
02 PB167468BS	5356	17.07	4128	21.27	3662	23.51
03 RMW-04B-91-040325	5530	17.07	4895	21.27	4713	23.51
04 PB167468BSD	5048	17.07	4039	21.27	3561	23.51
05 RMW-01B-82-040325-FD	5203	17.09	4655	21.27	4312	23.51
06 RMW-03B-90-040325	5085	17.09	4539	21.27	4155	23.51
07 EB01-040325	5123	17.07	4847	21.27	4314	23.51

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.



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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: Q1731 SAS No.: Q1731 SDG NO.: Q1731  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 04/07/2025  
Lab File ID: BN036847.D Time Analyzed: 09:10  
Instrument ID: BNA\_N GC Column: ZB-GR ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	1549	7.688	3923	10.48	2335	14.33
UPPER LIMIT	3098	8.188	7846	10.977	4670	14.834
LOWER LIMIT	774.5	7.188	1961.5	9.977	1167.5	13.834
EPA SAMPLE NO.						
01 PB167468BL	1482	7.70	3397	10.49	1996	14.35
02 RMW-03B-90-040325DL	1423	7.70	3367	10.49	2092	14.33

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.:	Q1731	SAS No.:	Q1731	SDG NO.:	Q1731
EPA Sample No.:	SSTDCCC0.4		Date Analyzed:	04/07/2025			
Lab File ID:	BN036847.D		Time Analyzed:	09:10			
Instrument ID:	BNA_N		GC Column:	ZB-GR	ID:	0.25 (mm)	

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	5079	17.074	4233	21.277	3968	23.516
	10158	17.574	8466	21.777	7936	24.016
	2539.5	16.574	2116.5	20.777	1984	23.016
EPA SAMPLE NO.						
01 PB167468BL	4124	17.10	3561	21.28	3343	23.52
02 RMW-03B-90-040325DL	4259	17.09	3832	21.28	3500	23.52

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:	JACOBS Engineering Group, Inc.			Date Collected:	04/03/25	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	04/03/25	
Client Sample ID:	RMW-01B-82-040325			SDG No.:	Q1731	
Lab Sample ID:	Q1731-01			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	980	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
BN036839.D	1	04/04/25 11:35	04/04/25 17:22	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.39		0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.37		30 (20) - 150 (139)	93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.50		30 (30) - 150 (150)	125%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		30 (27) - 130 (154)	85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		30 (25) - 130 (149)	100%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.69	*	30 (54) - 130 (175)	173%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1600	7.695			
1146-65-2	Naphthalene-d8	3870	10.477			
15067-26-2	Acenaphthene-d10	2330	14.334			
1517-22-2	Phenanthrene-d10	4950	17.086			
1719-03-5	Chrysene-d12	4530	21.268			
1520-96-3	Perylene-d12	4220	23.513			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036839.D  
 Acq On : 04 Apr 2025 17:22  
 Operator : RC/JU  
 Sample : Q1731-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RMW-01B-82-040325**

Quant Time: Apr 04 17:44:45 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

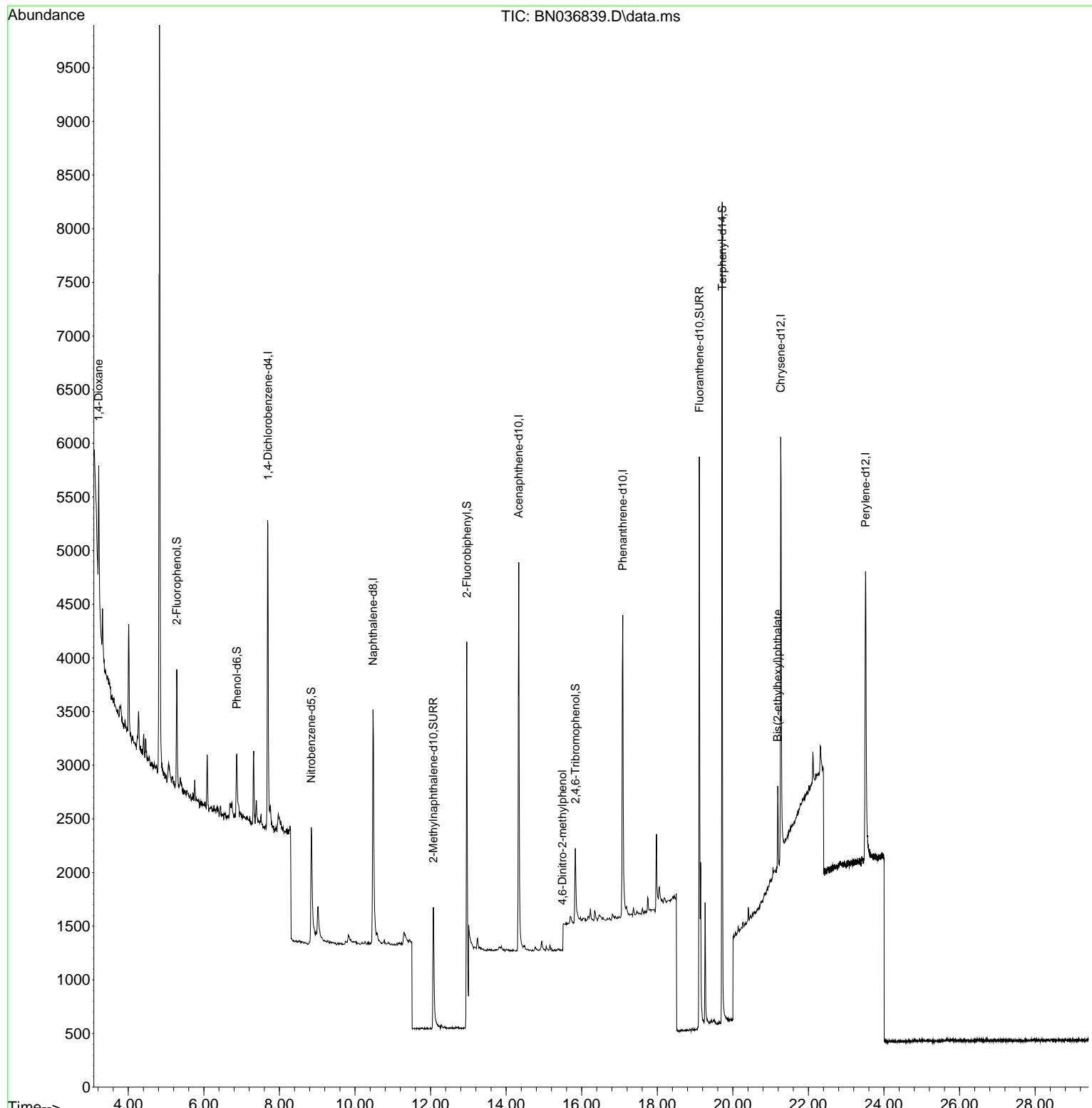
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.695	152	1599	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	3869	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2334	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4949	0.400	ng	0.01
29) Chrysene-d12	21.268	240	4533	0.400	ng	0.00
35) Perylene-d12	23.513	264	4219	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.283	112	823	0.221	ng	0.00
5) Phenol-d6	6.872	99	728	0.158	ng	0.00
8) Nitrobenzene-d5	8.843	82	1425	0.339	ng	0.00
11) 2-Methylnaphthalene-d10	12.075	152	2127	0.370	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	491	0.464	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	5425	0.400	ng	0.00
27) Fluoranthene-d10	19.113	212	6327	0.499	ng	0.00
31) Terphenyl-d14	19.717	244	7494	0.690	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.218	88	671	0.378	ng	# 54
20) 4,6-Dinitro-2-methylph... 34) Bis(2-ethylhexyl)phtha...	15.489 21.187	198 149	1 831	0.146 0.074	ng	# 1 # 98

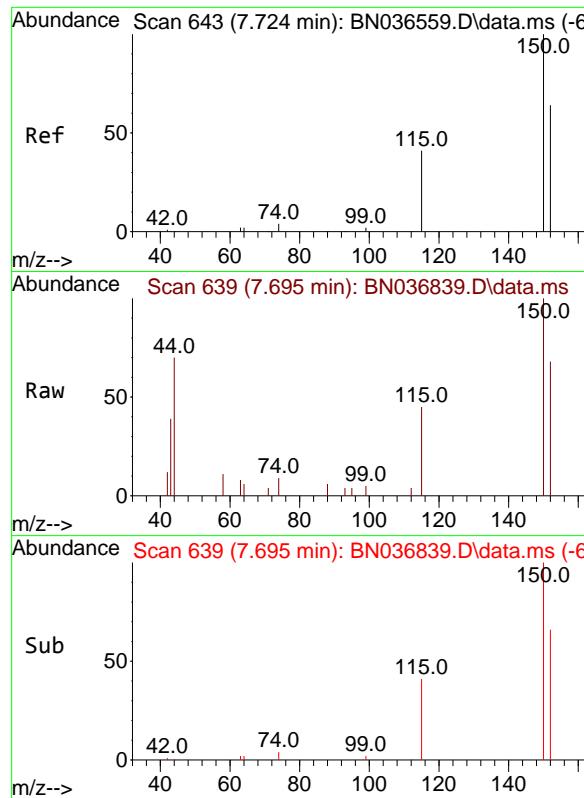
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036839.D  
 Acq On : 04 Apr 2025 17:22  
 Operator : RC/JU  
 Sample : Q1731-01  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RMW-01B-82-040325

Quant Time: Apr 04 17:44:45 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

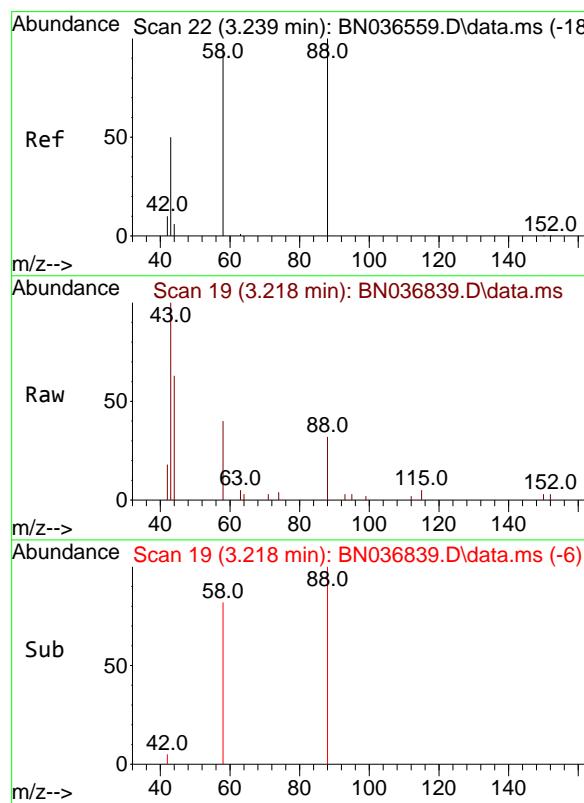
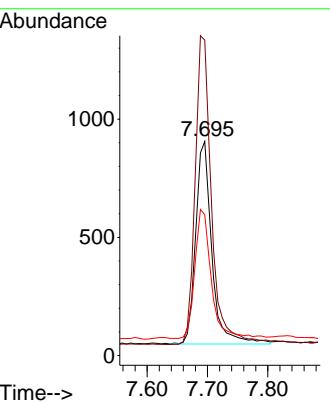




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.695 min Scan# 6  
 Delta R.T. 0.007 min  
 Lab File: BN036839.D  
 Acq: 04 Apr 2025 17:22

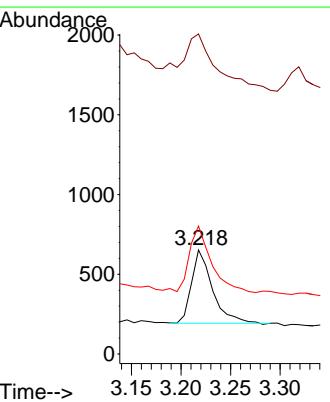
Instrument : BNA\_N  
 ClientSampleId : RMW-01B-82-040325

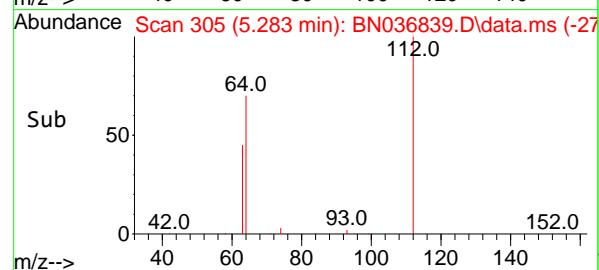
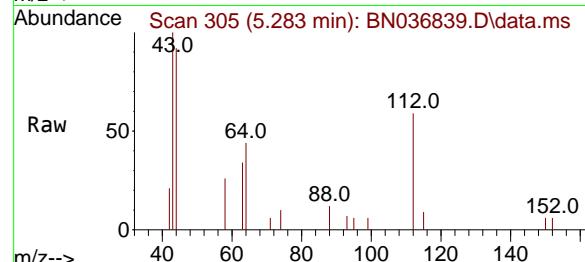
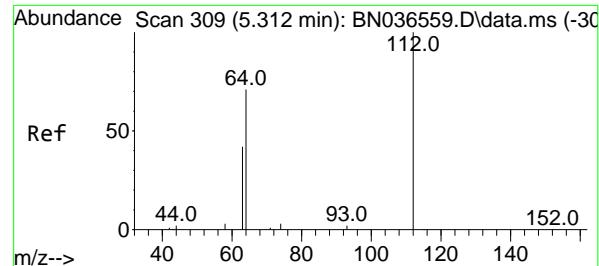
Tgt Ion:152 Resp: 1599  
 Ion Ratio Lower Upper  
 152 100  
 150 147.2 123.7 185.5  
 115 65.8 54.3 81.5



#2  
 1,4-Dioxane  
 Concen: 0.378 ng  
 RT: 3.218 min Scan# 19  
 Delta R.T. -0.007 min  
 Lab File: BN036839.D  
 Acq: 04 Apr 2025 17:22

Tgt Ion: 88 Resp: 671  
 Ion Ratio Lower Upper  
 88 100  
 43 115.8 37.8 56.8#  
 58 97.0 67.4 101.2



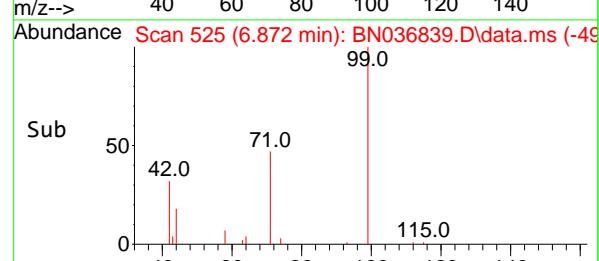
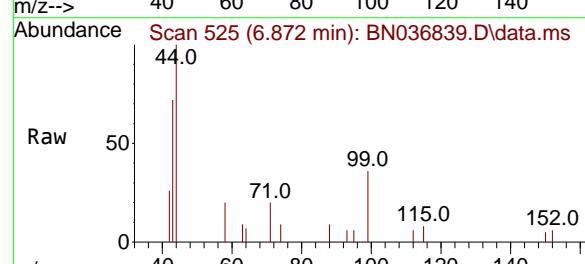
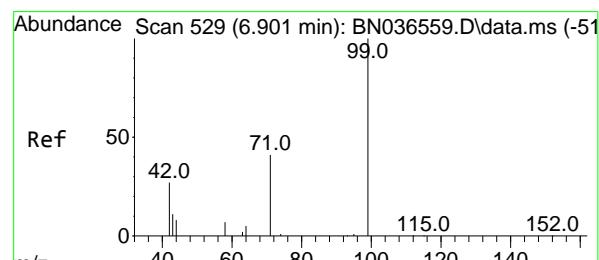
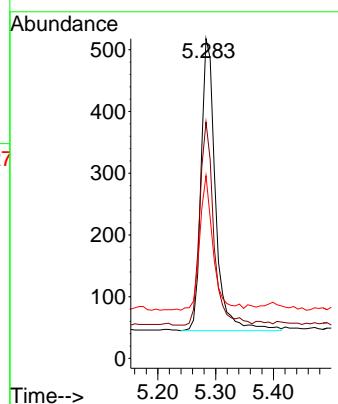


#4

2-Fluorophenol  
Concen: 0.221 ng  
RT: 5.283 min Scan# 3  
Delta R.T. -0.000 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

Instrument :  
BNA\_N  
ClientSampleId :  
RMW-01B-82-040325

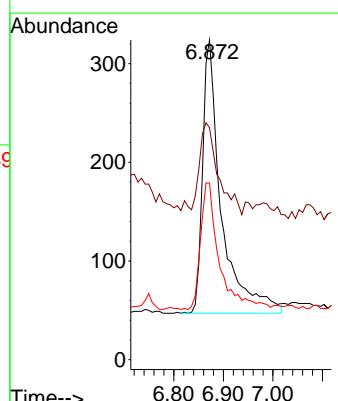
Tgt Ion:112 Resp: 823  
Ion Ratio Lower Upper  
112 100  
64 67.3 53.1 79.7  
63 42.4 31.8 47.8

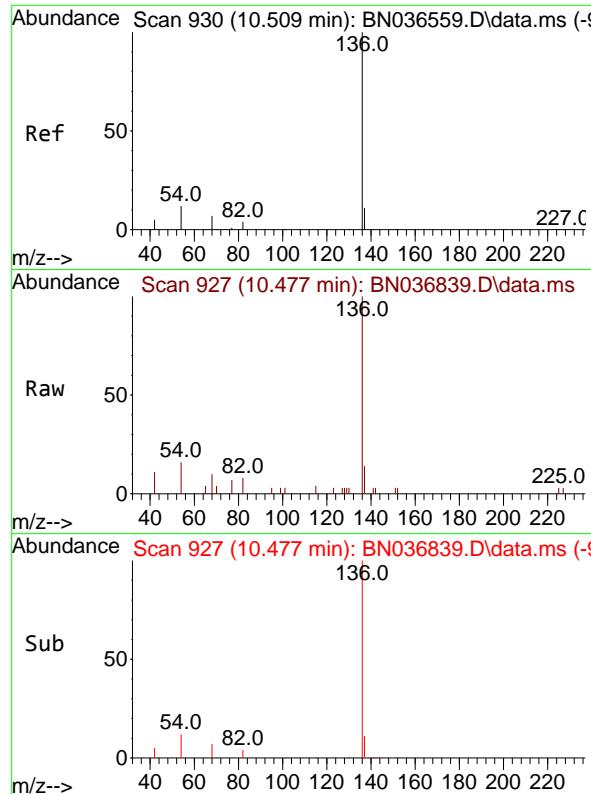


#5

Phenol-d6  
Concen: 0.158 ng  
RT: 6.872 min Scan# 525  
Delta R.T. 0.007 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

Tgt Ion: 99 Resp: 728  
Ion Ratio Lower Upper  
99 100  
42 33.7 26.5 39.7  
71 46.0 34.1 51.1



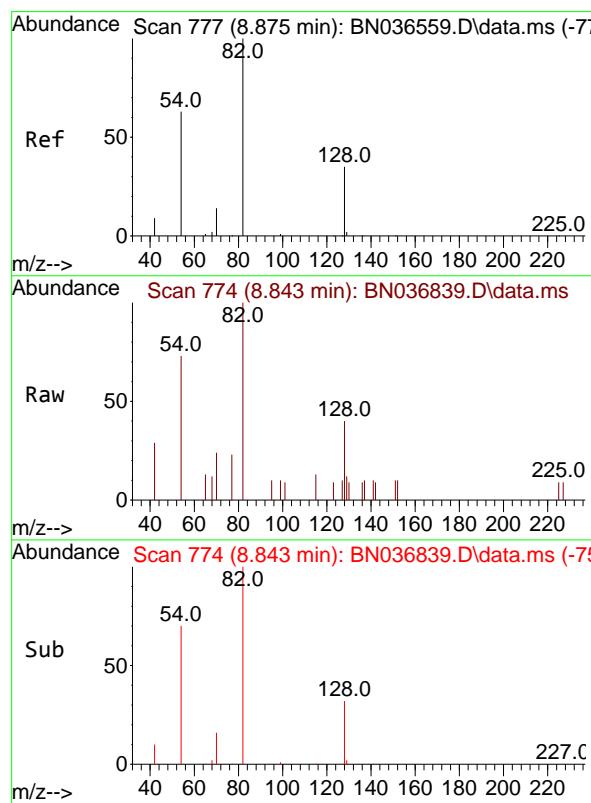
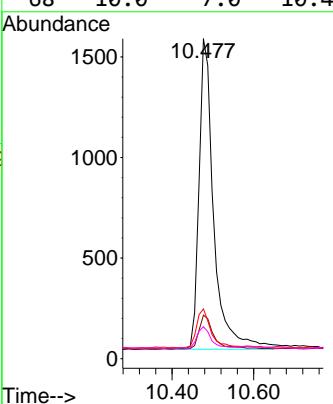


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.477 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN036839.D  
 Acq: 04 Apr 2025 17:22

Instrument : BNA\_N  
 ClientSampleId : RMW-01B-82-040325

Tgt Ion:136 Resp: 3869

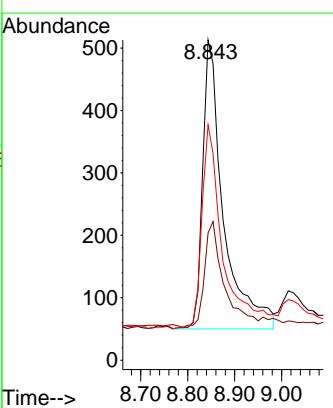
Ion	Ratio	Lower	Upper
136	100		
137	13.6	10.3	15.5
54	15.5	11.5	17.3
68	10.0	7.0	10.4

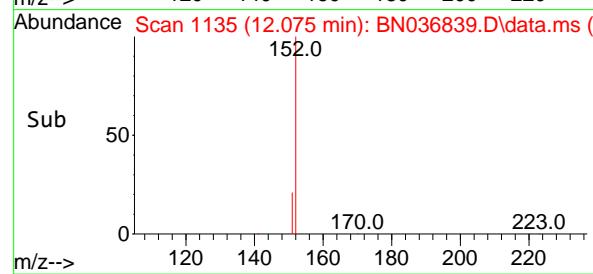
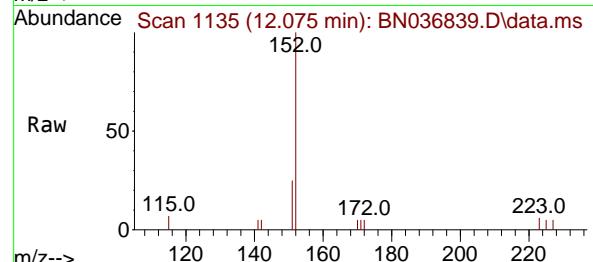
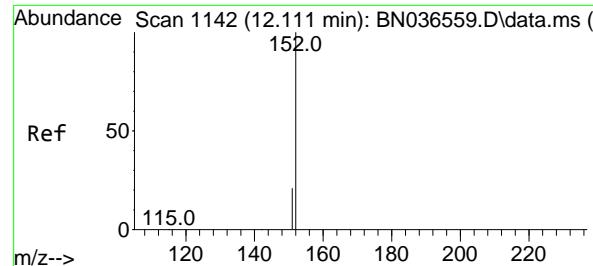


#8  
 Nitrobenzene-d5  
 Concen: 0.339 ng  
 RT: 8.843 min Scan# 774  
 Delta R.T. -0.000 min  
 Lab File: BN036839.D  
 Acq: 04 Apr 2025 17:22

Tgt Ion: 82 Resp: 1425

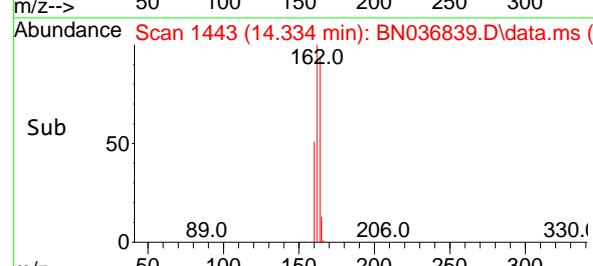
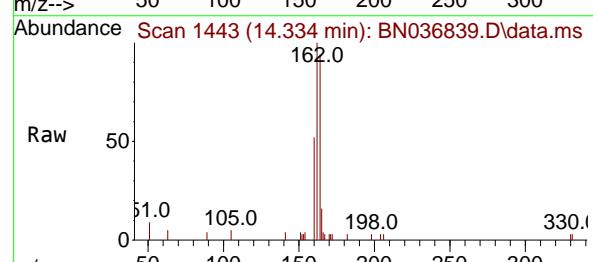
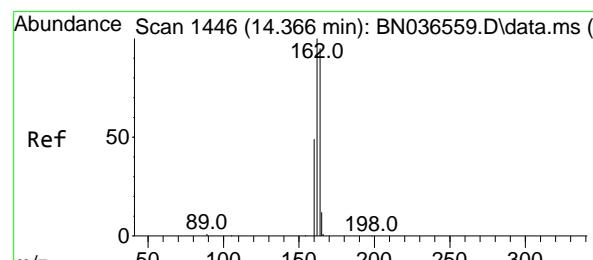
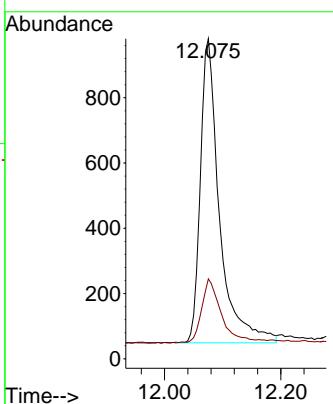
Ion	Ratio	Lower	Upper
82	100		
128	39.8	30.6	45.8
54	73.5	52.2	78.4





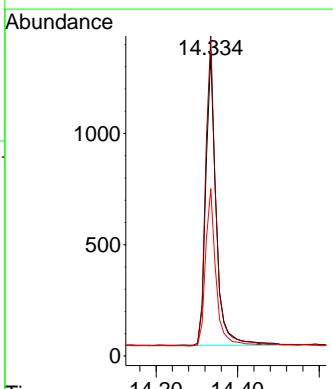
#11  
2-Methylnaphthalene-d10  
Concen: 0.370 ng  
RT: 12.075 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036839.D  
ClientSampleId : RMW-01B-82-040325  
Acq: 04 Apr 2025 17:22

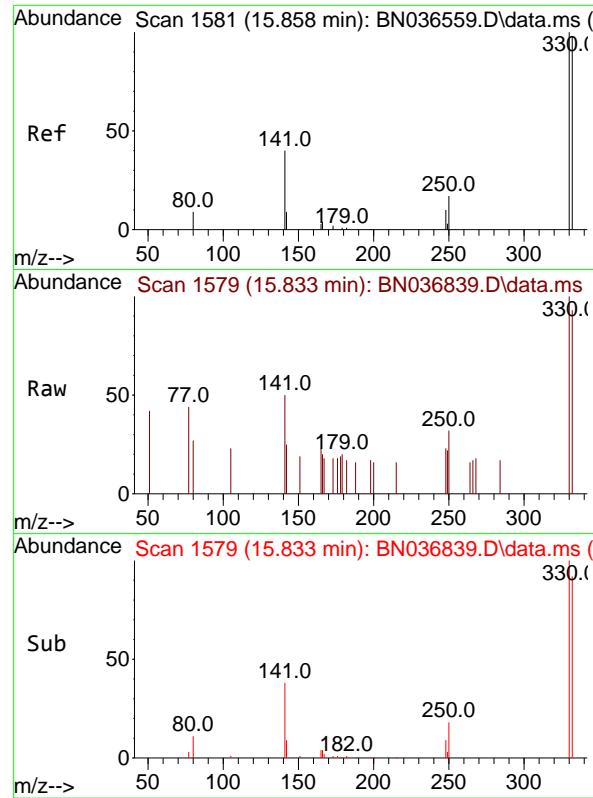
Tgt Ion:152 Resp: 2127  
Ion Ratio Lower Upper  
152 100  
151 21.9 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

Tgt Ion:164 Resp: 2334  
Ion Ratio Lower Upper  
164 100  
162 106.0 84.2 126.2  
160 55.5 42.2 63.2

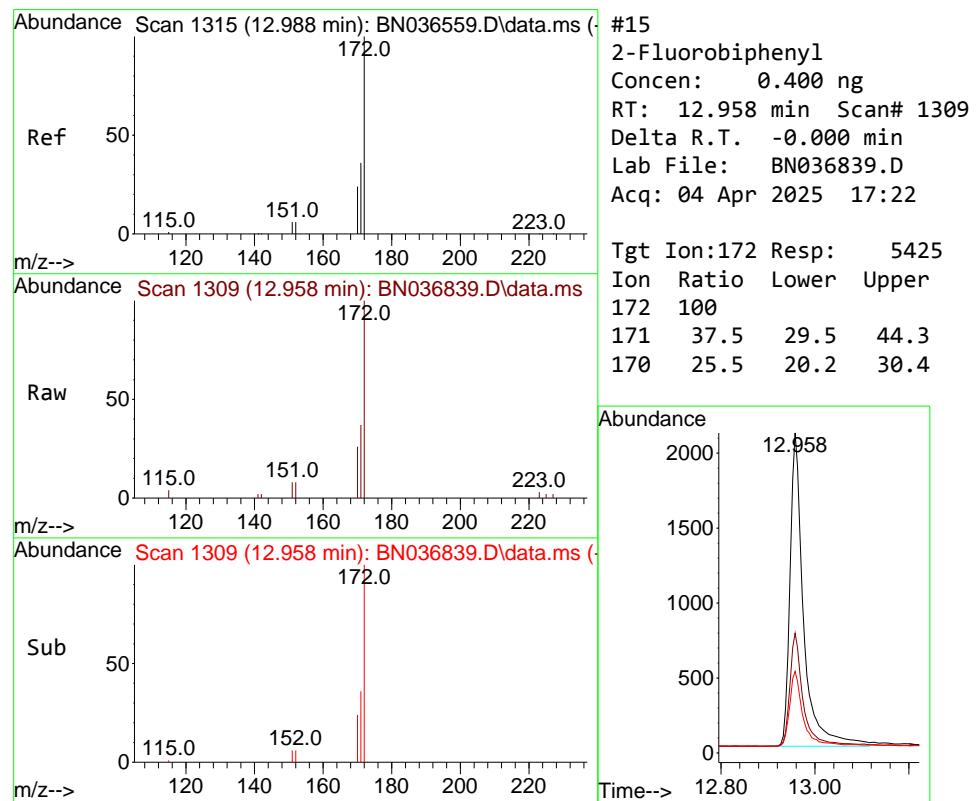
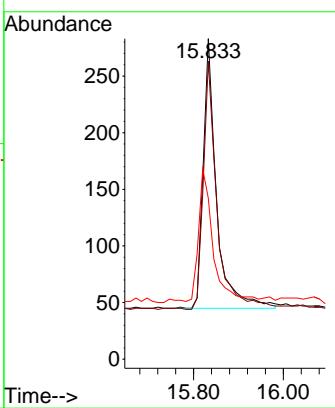




#14  
2,4,6-Tribromophenol  
Concen: 0.464 ng  
RT: 15.833 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

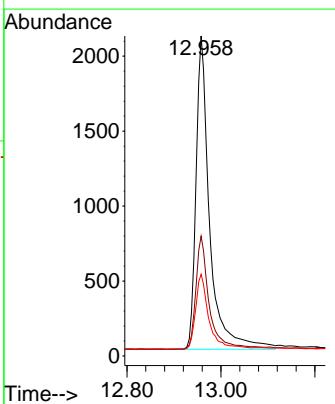
Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325

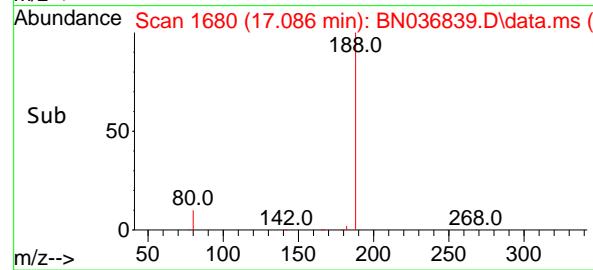
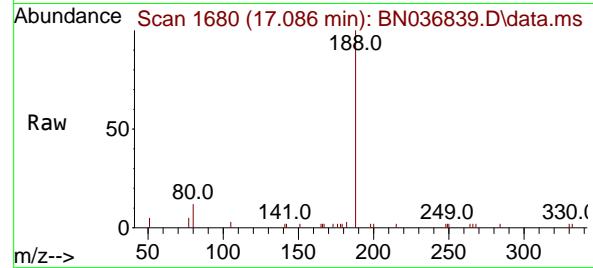
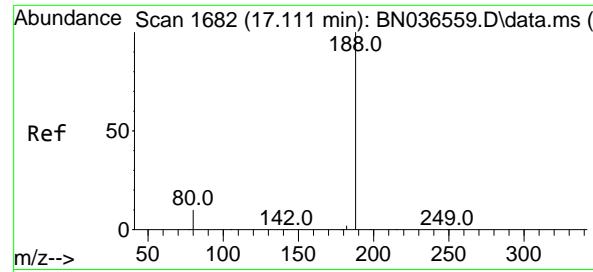
Tgt Ion:330 Resp: 491  
Ion Ratio Lower Upper  
330 100  
332 94.5 75.2 112.8  
141 52.5 43.4 65.2



#15  
2-Fluorobiphenyl  
Concen: 0.400 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. -0.000 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

Tgt Ion:172 Resp: 5425  
Ion Ratio Lower Upper  
172 100  
171 37.5 29.5 44.3  
170 25.5 20.2 30.4





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. 0.012 min

Lab File: BN036839.D

Acq: 04 Apr 2025 17:22

Instrument :

BNA\_N

ClientSampleId :

RMW-01B-82-040325

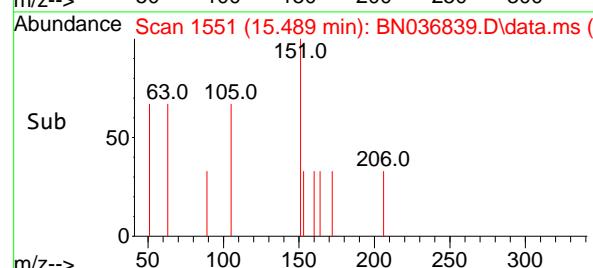
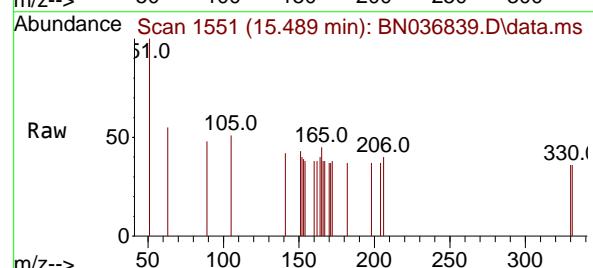
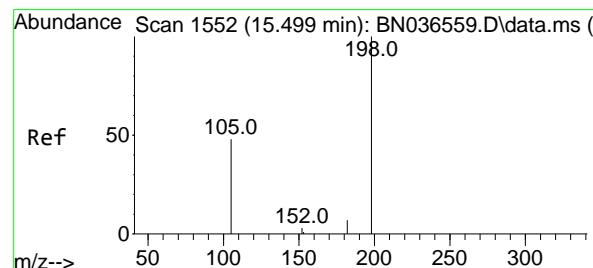
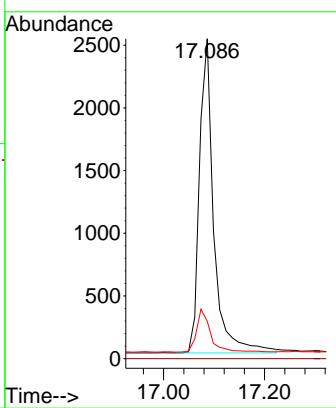
Tgt Ion:188 Resp: 4949

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.7 8.8 13.2



#20

4,6-Dinitro-2-methylphenol

Concen: 0.146 ng

RT: 15.489 min Scan# 1551

Delta R.T. 0.011 min

Lab File: BN036839.D

Acq: 04 Apr 2025 17:22

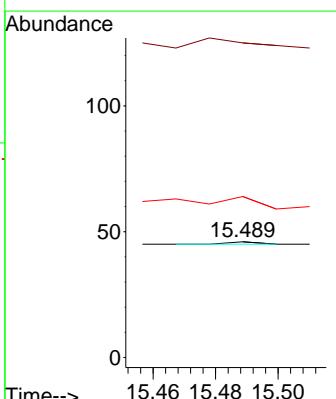
Tgt Ion:198 Resp: 1

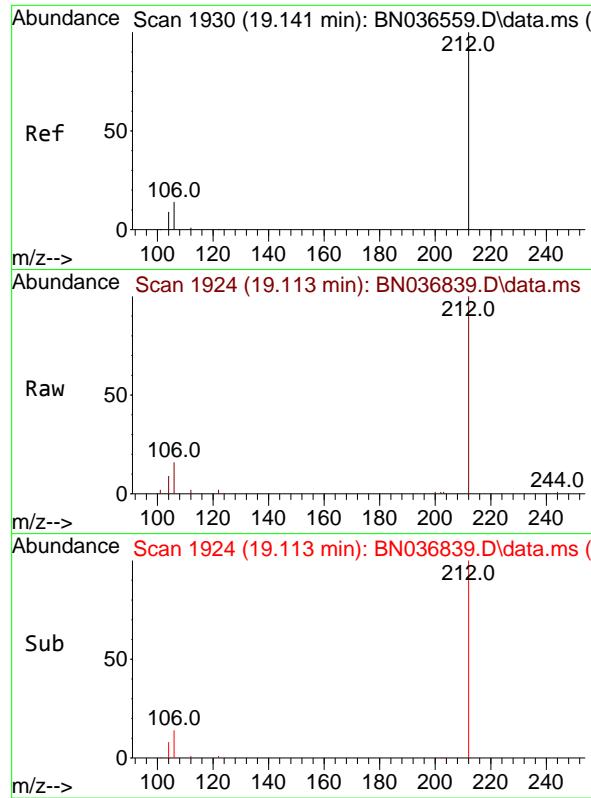
Ion Ratio Lower Upper

198 100

51 271.7 107.9 161.9#

105 139.1 56.2 84.2#

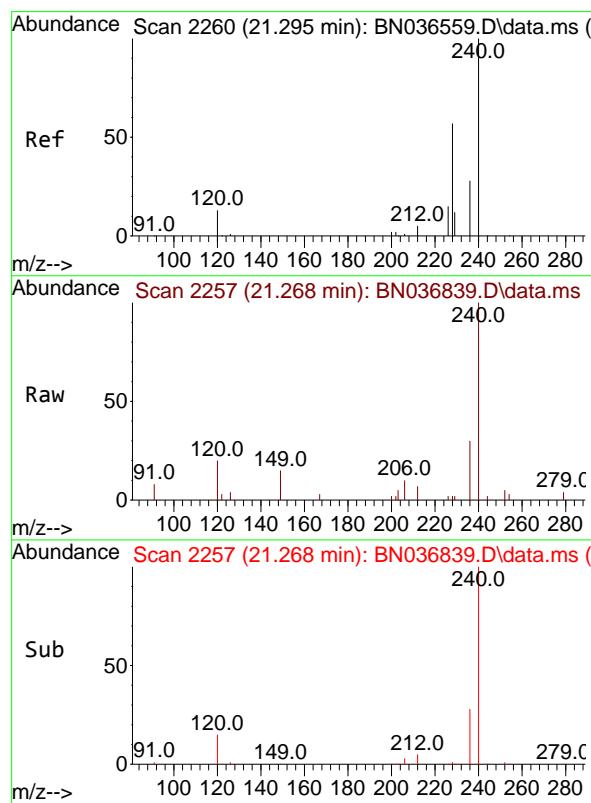
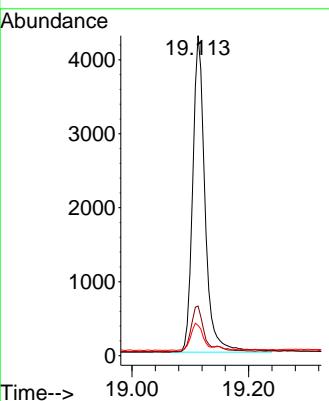




#27  
 Fluoranthene-d10  
 Concen: 0.499 ng  
 RT: 19.113 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN036839.D  
 Acq: 04 Apr 2025 17:22

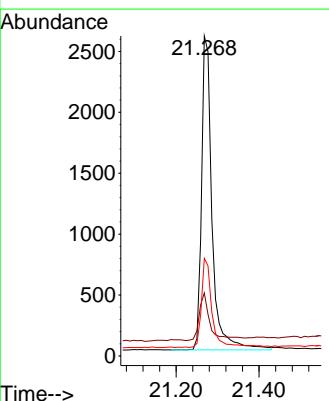
Instrument : BNA\_N  
 ClientSampleId : RMW-01B-82-040325

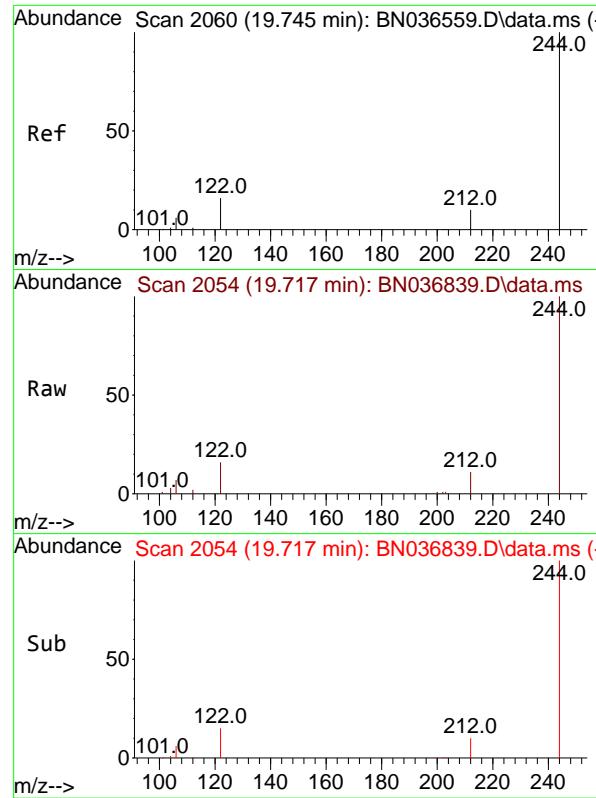
Tgt Ion:212 Resp: 6327  
 Ion Ratio Lower Upper  
 212 100  
 106 16.1 11.8 17.6  
 104 8.3 7.3 10.9



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.268 min Scan# 2257  
 Delta R.T. -0.000 min  
 Lab File: BN036839.D  
 Acq: 04 Apr 2025 17:22

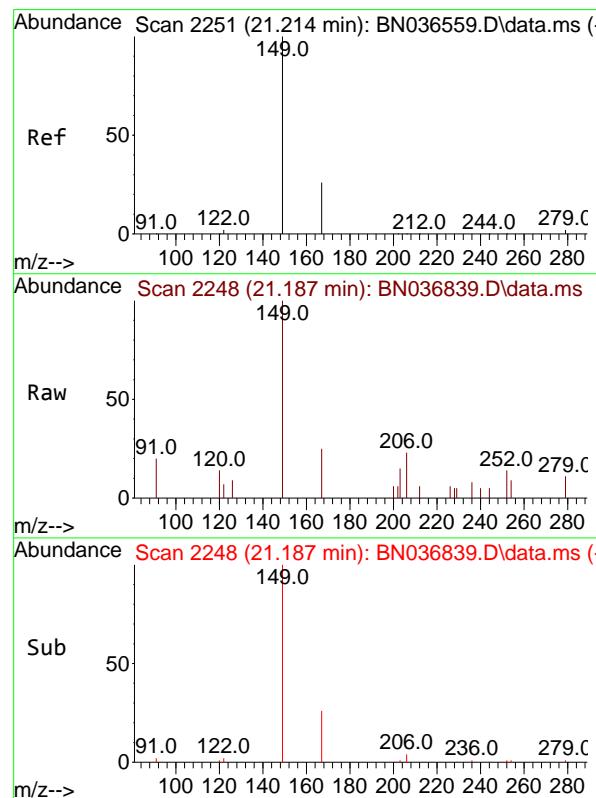
Tgt Ion:240 Resp: 4533  
 Ion Ratio Lower Upper  
 240 100  
 120 19.7 14.6 22.0  
 236 30.5 24.1 36.1





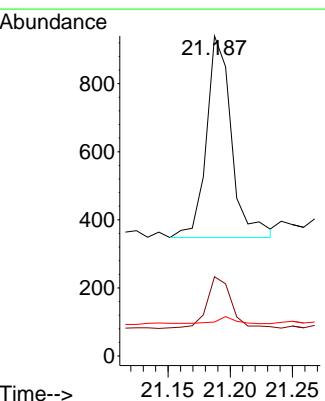
#31  
Terphenyl-d14  
Concen: 0.690 ng  
RT: 19.717 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

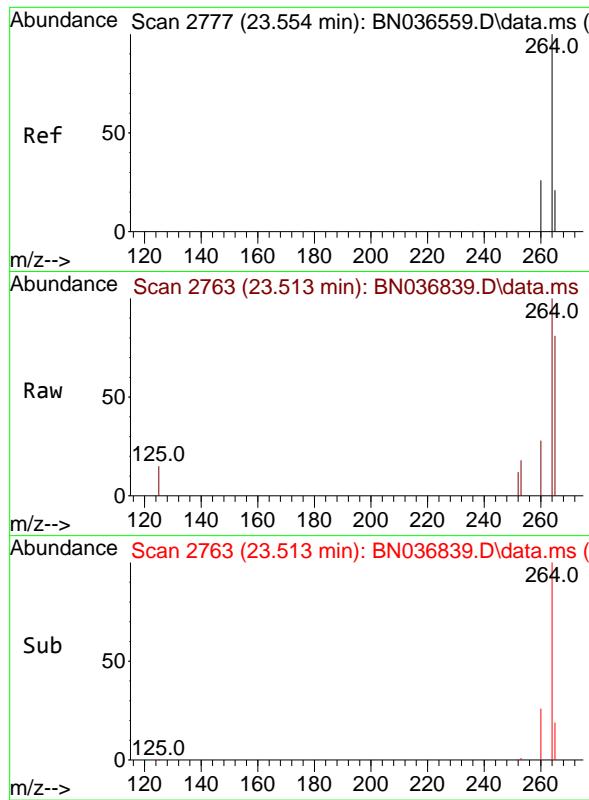
Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.074 ng  
RT: 21.187 min Scan# 2248  
Delta R.T. -0.000 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

Tgt Ion:149 Resp: 831  
Ion Ratio Lower Upper  
149 100  
167 25.3 20.7 31.1  
279 2.4 3.6 5.4#

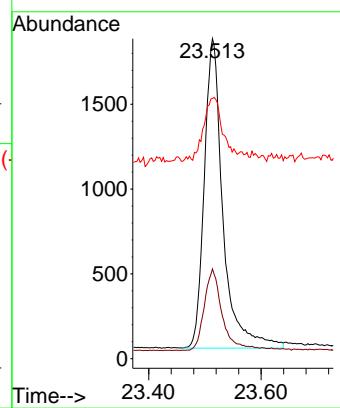




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN036839.D  
Acq: 04 Apr 2025 17:22

Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325

Tgt Ion:264 Resp: 4219  
Ion Ratio Lower Upper  
264 100  
260 28.0 22.6 33.8  
265 81.3 88.1 132.1#





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	04/03/25	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	04/03/25	
Client Sample ID:	RMW-04B-91-040325			SDG No.:	Q1731	
Lab Sample ID:	Q1731-02			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	980	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
BN036840.D	1	04/04/25 11:35	04/04/25 17:58	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.29		0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.35		30 (20) - 150 (139)	87%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.48		30 (30) - 150 (150)	119%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.31		30 (27) - 130 (154)	78%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		30 (25) - 130 (149)	93%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		30 (54) - 130 (175)	117%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1690	7.696			
1146-65-2	Naphthalene-d8	4270	10.477			
15067-26-2	Acenaphthene-d10	2560	14.334			
1517-22-2	Phenanthrene-d10	5530	17.074			
1719-03-5	Chrysene-d12	4900	21.268			
1520-96-3	Perylene-d12	4710	23.508			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036840.D  
 Acq On : 04 Apr 2025 17:58  
 Operator : RC/JU  
 Sample : Q1731-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RMW-04B-91-040325**

Quant Time: Apr 04 18:23:00 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

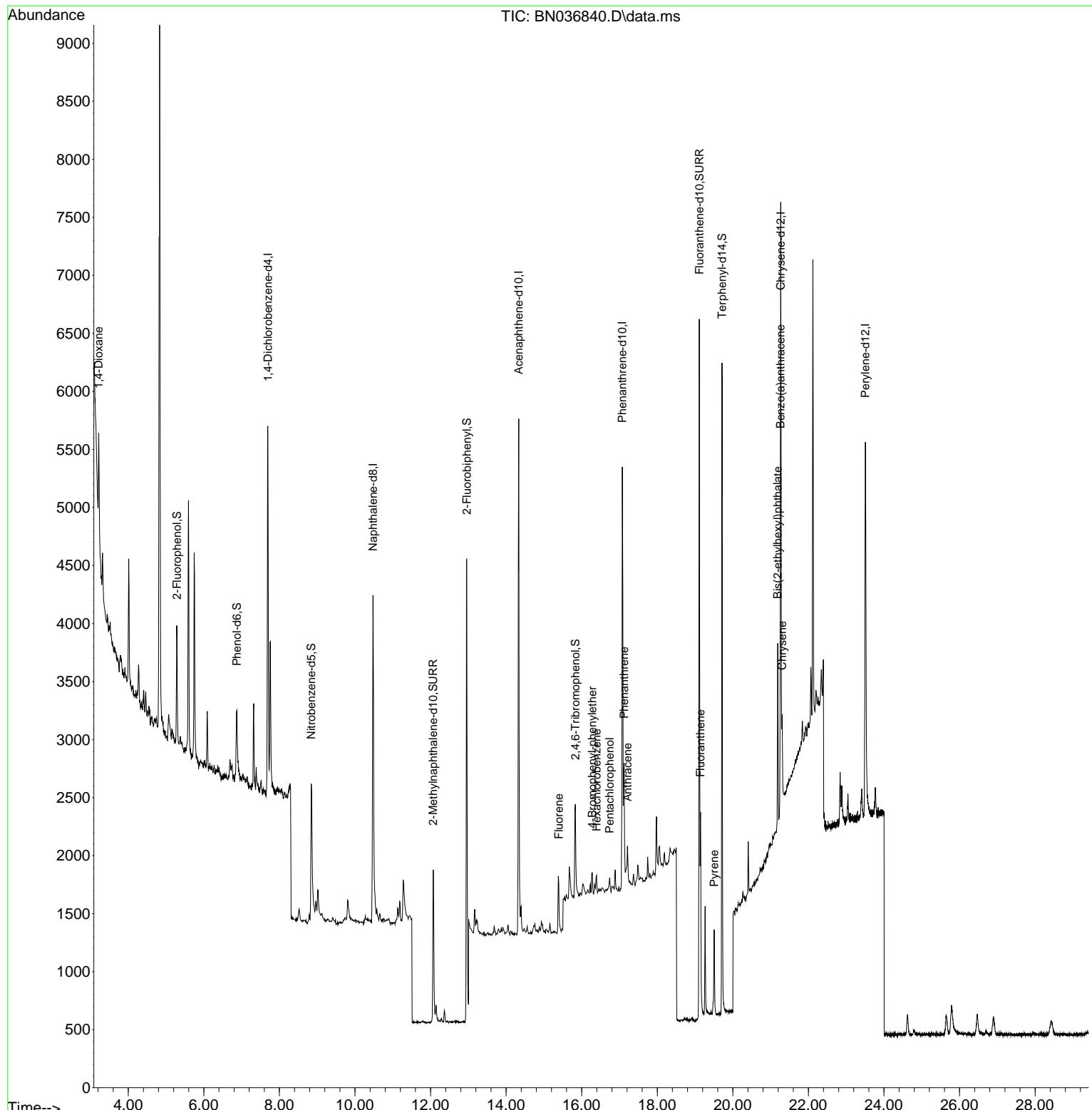
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.696	152	1693	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	4270	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2557	0.400	ng	0.00
19) Phenanthrene-d10	17.074	188	5530	0.400	ng	# 0.00
29) Chrysene-d12	21.268	240	4895	0.400	ng	0.00
35) Perylene-d12	23.508	264	4713	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.291	112	739	0.187	ng	0.00
5) Phenol-d6	6.872	99	704	0.144	ng	0.00
8) Nitrobenzene-d5	8.843	82	1455	0.313	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	2214	0.349	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	536	0.462	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	5497	0.370	ng	0.00
27) Fluoranthene-d10	19.113	212	6769	0.478	ng	0.00
31) Terphenyl-d14	19.712	244	5514	0.470	ng	0.00
<b>Target Compounds</b>						
2) 1,4-Dioxane	3.218	88	541	0.288	ng	# 27
18) Fluorene	15.393	166	231	0.022	ng	# 88
21) 4-Bromophenyl-phenylether	16.280	248	84	0.024	ng	91
22) Hexachlorobenzene	16.391	284	126	0.030	ng	92
24) Pentachlorophenol	16.739	266	77	0.040	ng	91
25) Phenanthrene	17.124	178	1209	0.073	ng	98
26) Anthracene	17.211	178	423	0.028	ng	98
28) Fluoranthene	19.141	202	856	0.046	ng	# 55
30) Pyrene	19.508	202	677	0.028	ng	# 94
32) Benzo(a)anthracene	21.259	228	378	0.022	ng	# 73
33) Chrysene	21.304	228	501	0.027	ng	# 77
34) Bis(2-ethylhexyl)phtha...	21.187	149	1446	0.119	ng	# 98

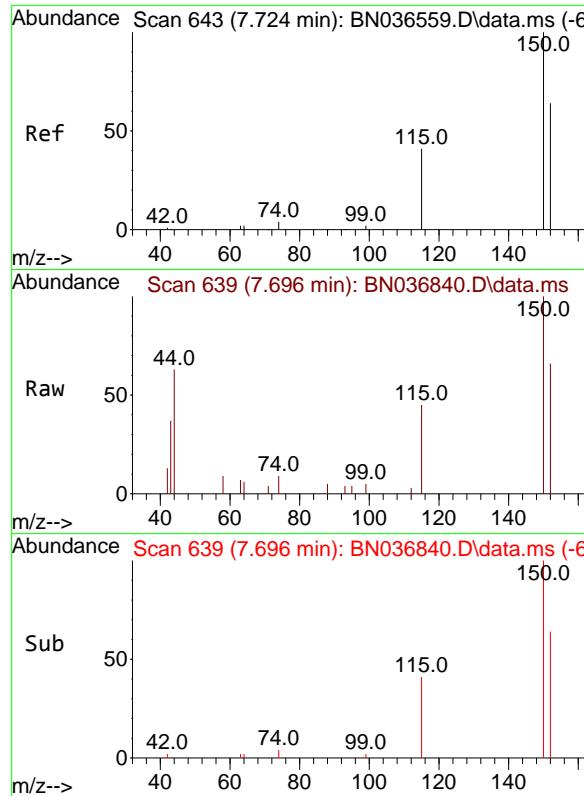
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036840.D  
 Acq On : 04 Apr 2025 17:58  
 Operator : RC/JU  
 Sample : Q1731-02  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RMW-04B-91-040325

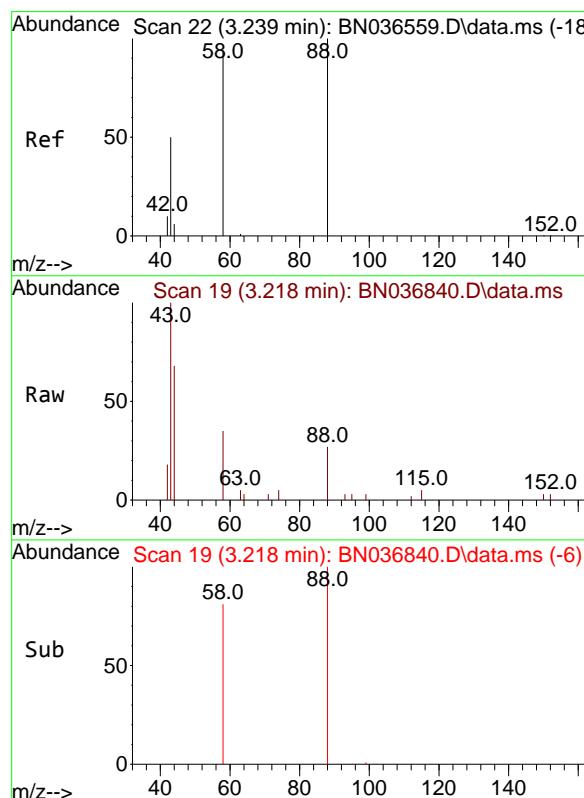
Quant Time: Apr 04 18:23:00 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration



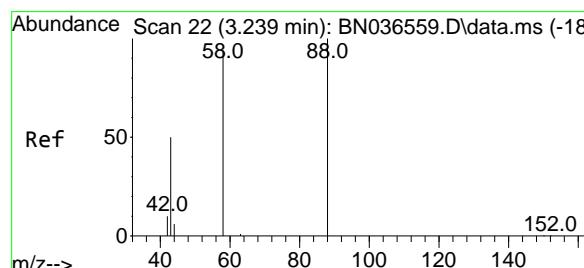
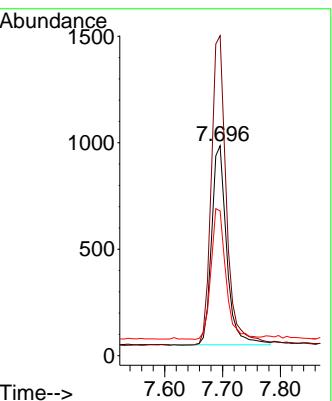


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.696 min Scan# 6  
Delta R.T. 0.008 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

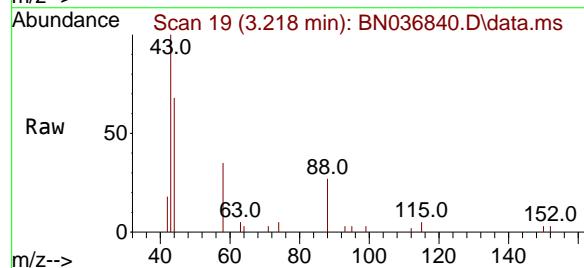
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325



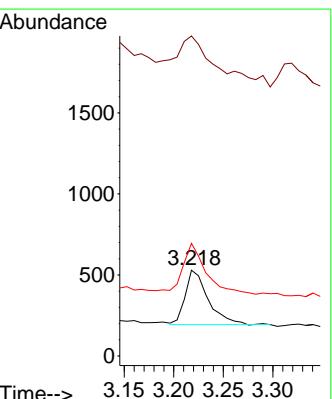
Tgt Ion:152 Resp: 1693  
Ion Ratio Lower Upper  
152 100  
150 152.4 123.7 185.5  
115 69.0 54.3 81.5

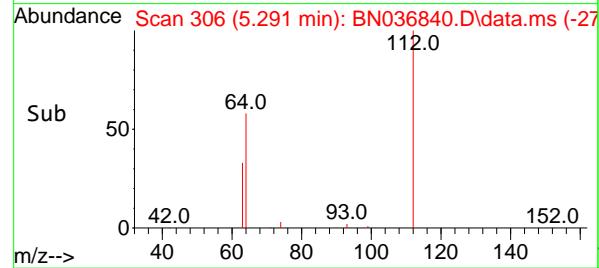
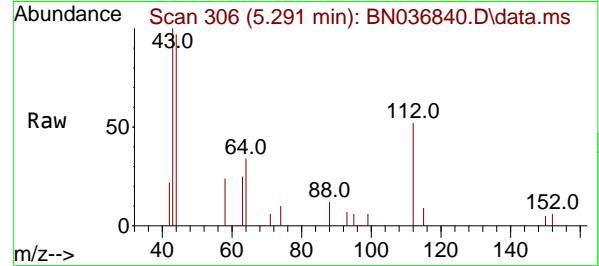
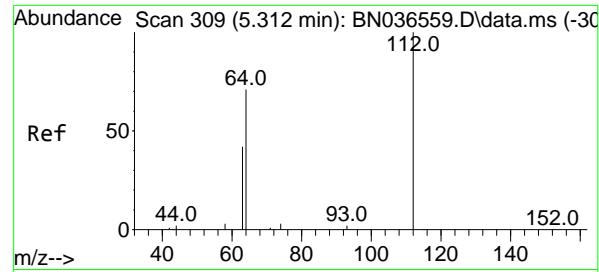


#2  
1,4-Dioxane  
Concen: 0.288 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.007 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58



Tgt Ion: 88 Resp: 541  
Ion Ratio Lower Upper  
88 100  
43 166.7 37.8 56.8#  
58 96.9 67.4 101.2

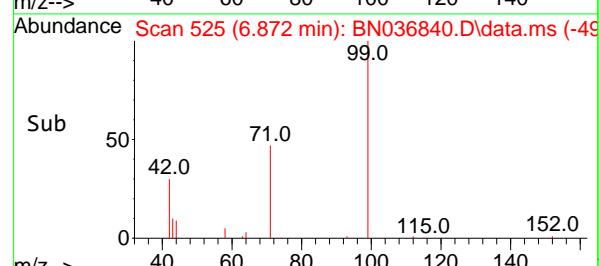
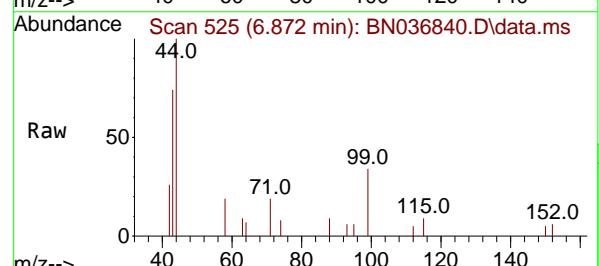
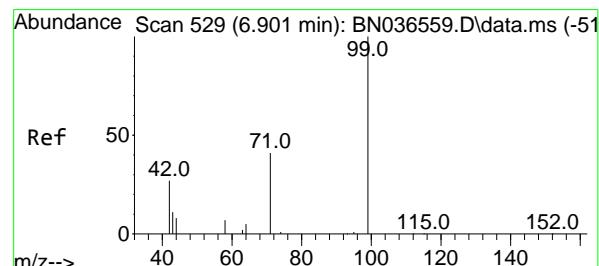
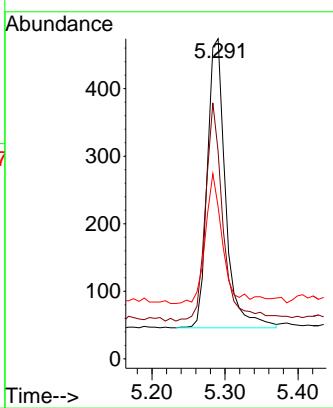




#4  
2-Fluorophenol  
Concen: 0.187 ng  
RT: 5.291 min Scan# 3  
Delta R.T. 0.007 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

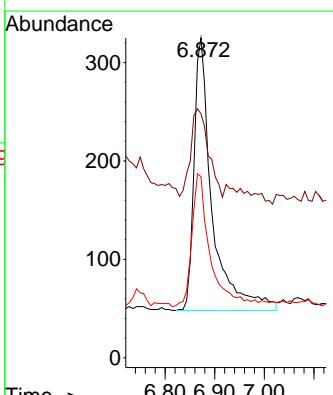
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325

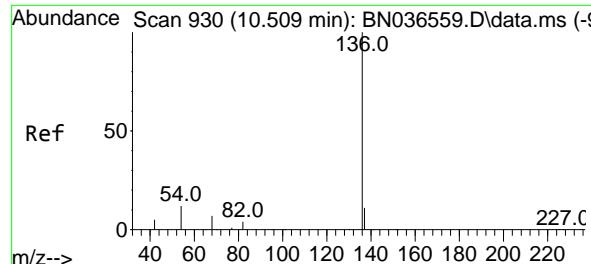
Tgt Ion:112 Resp: 739  
Ion Ratio Lower Upper  
112 100  
64 74.3 53.1 79.7  
63 44.4 31.8 47.8



#5  
Phenol-d6  
Concen: 0.144 ng  
RT: 6.872 min Scan# 525  
Delta R.T. 0.007 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

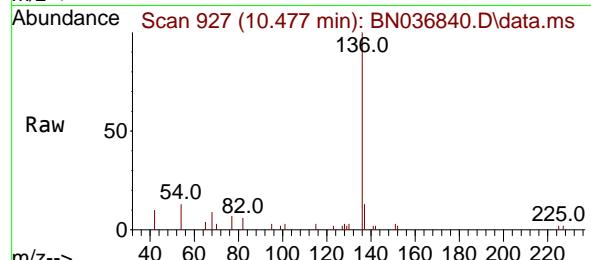
Tgt Ion: 99 Resp: 704  
Ion Ratio Lower Upper  
99 100  
42 31.5 26.5 39.7  
71 49.9 34.1 51.1





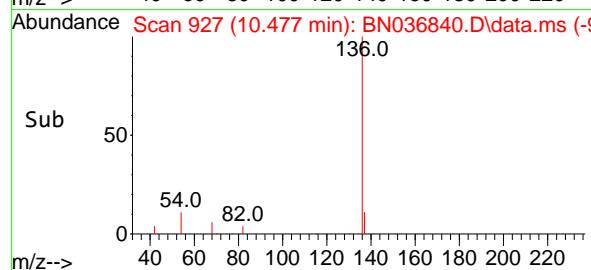
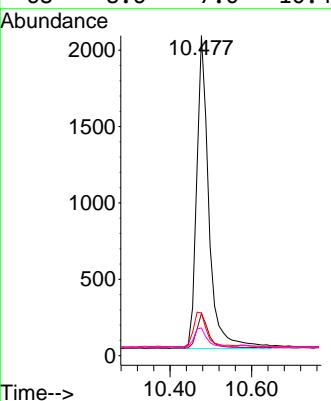
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.477 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036840.D  
 Acq: 04 Apr 2025 17:58

Instrument : BNA\_N  
 ClientSampleId : RMW-04B-91-040325



Tgt Ion:136 Resp: 4270

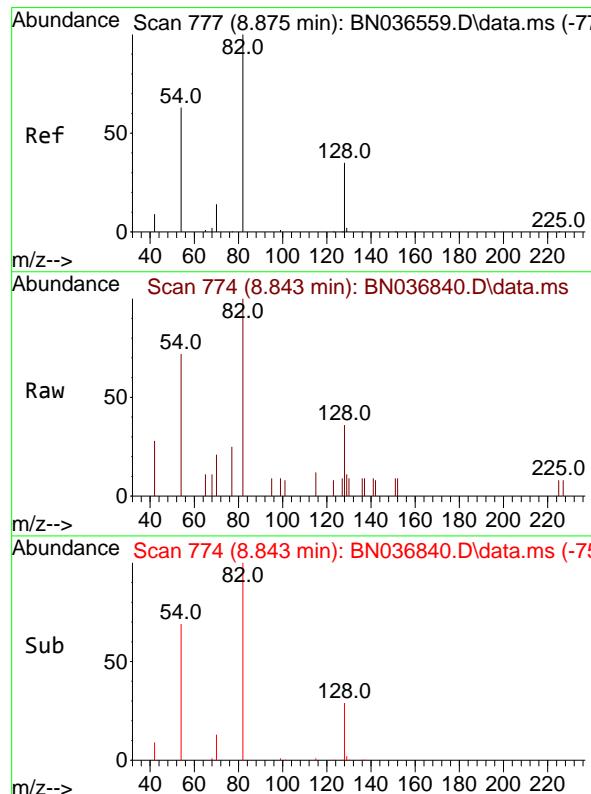
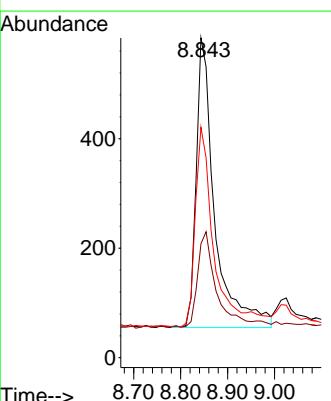
Ion	Ratio	Lower	Upper
136	100		
137	13.2	10.3	15.5
54	13.4	11.5	17.3
68	8.6	7.0	10.4



#8  
 Nitrobenzene-d5  
 Concen: 0.313 ng  
 RT: 8.843 min Scan# 774  
 Delta R.T. 0.000 min  
 Lab File: BN036840.D  
 Acq: 04 Apr 2025 17:58

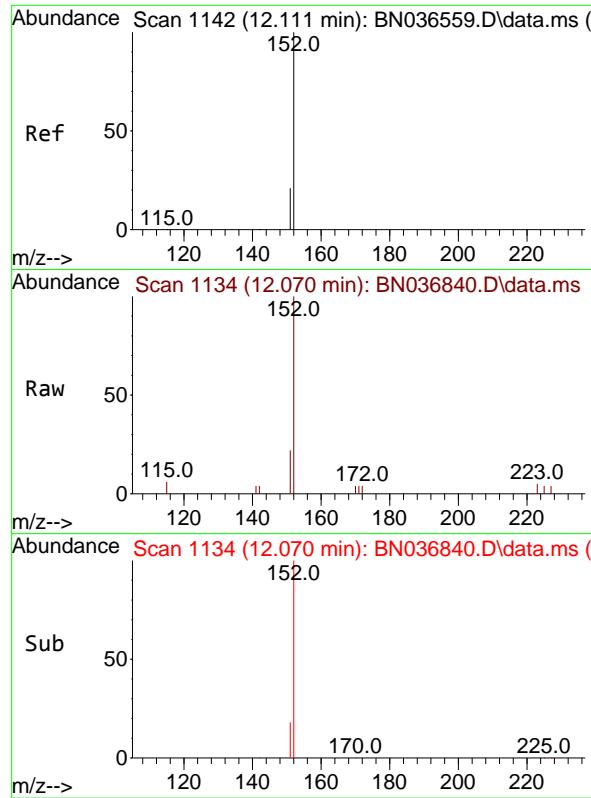
Tgt Ion: 82 Resp: 1455

Ion	Ratio	Lower	Upper
82	100		
128	35.6	30.6	45.8
54	72.1	52.2	78.4



Scan 774 (8.843 min): BN036840.D\data.ms (-75)

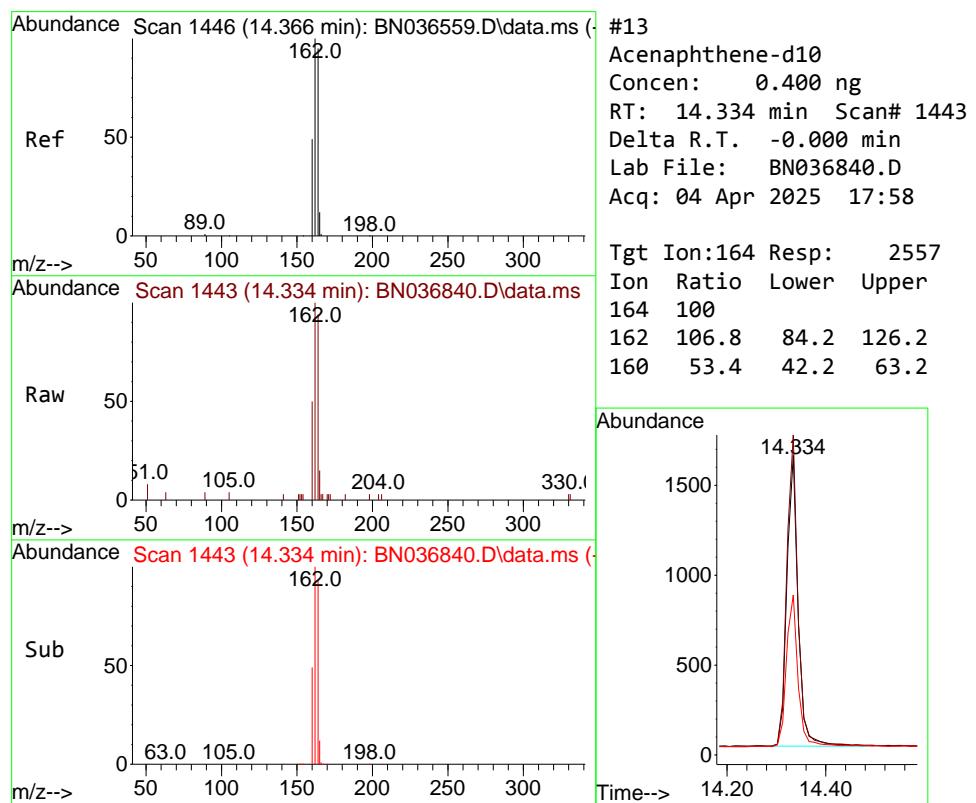
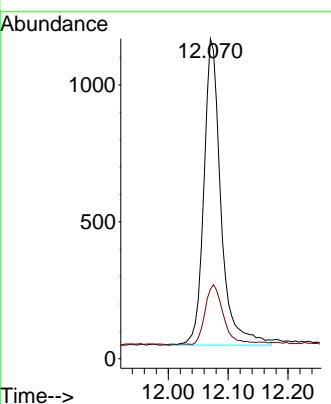
Scan 774 (8.843 min): BN036840.D\data.ms (-75)



#11  
2-Methylnaphthalene-d10  
Concen: 0.349 ng  
RT: 12.070 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

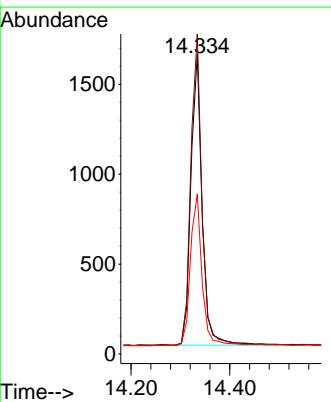
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325

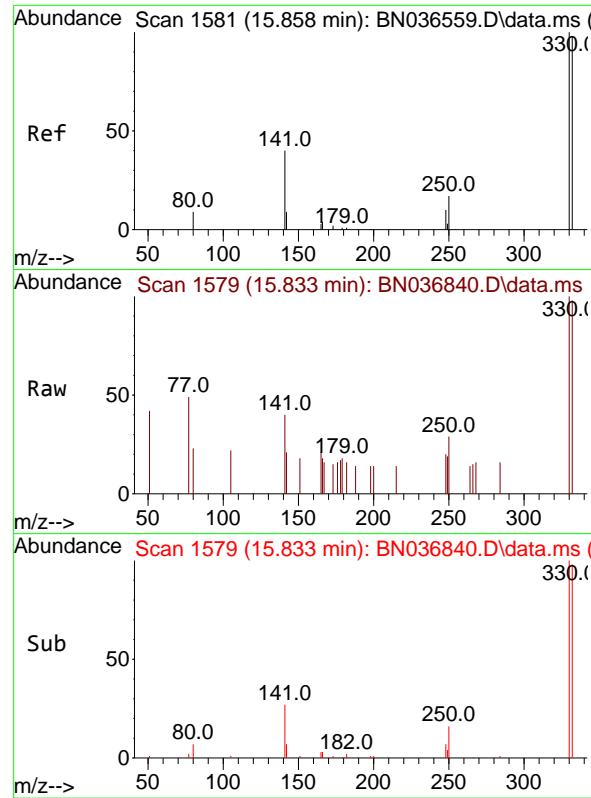
Tgt Ion:152 Resp: 2214  
Ion Ratio Lower Upper  
152 100  
151 20.5 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

Tgt Ion:164 Resp: 2557  
Ion Ratio Lower Upper  
164 100  
162 106.8 84.2 126.2  
160 53.4 42.2 63.2

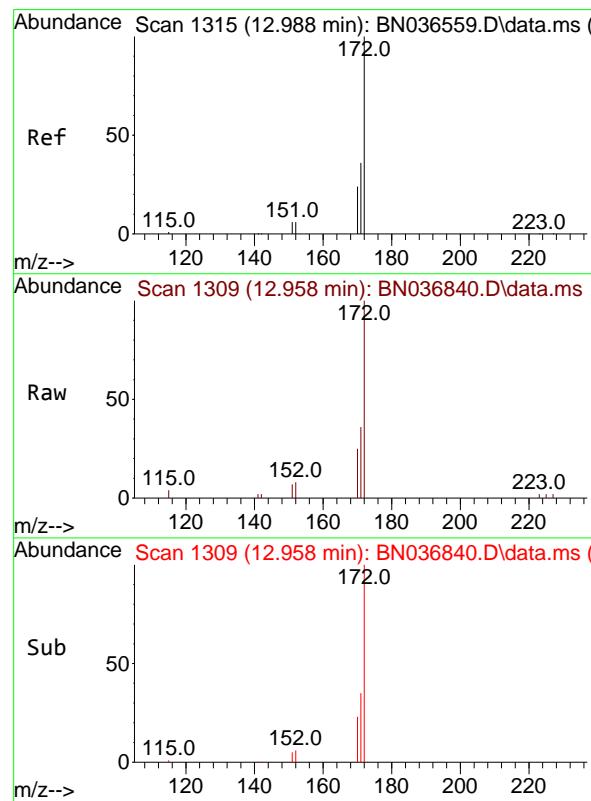
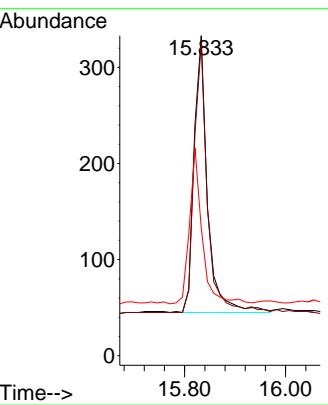




#14  
2,4,6-Tribromophenol  
Concen: 0.462 ng  
RT: 15.833 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

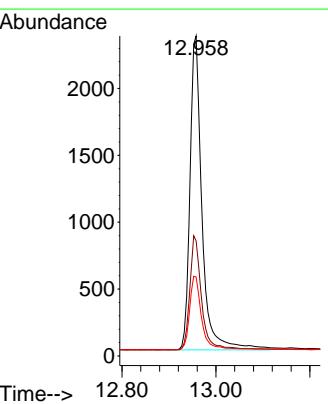
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325

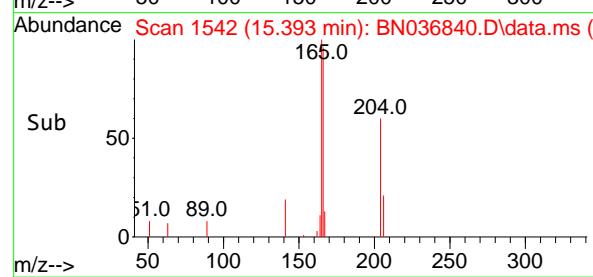
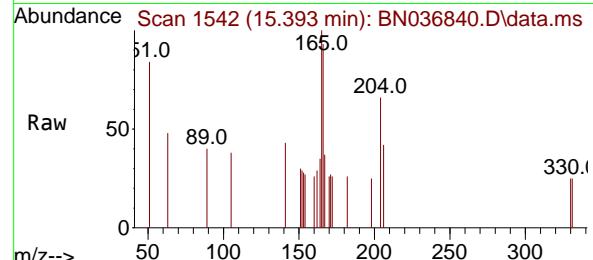
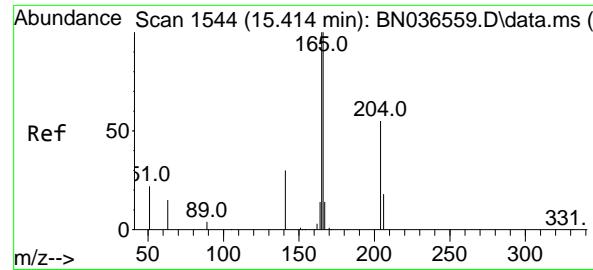
Tgt Ion:330 Resp: 536  
Ion Ratio Lower Upper  
330 100  
332 95.7 75.2 112.8  
141 52.4 43.4 65.2



#15  
2-Fluorobiphenyl  
Concen: 0.370 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

Tgt Ion:172 Resp: 5497  
Ion Ratio Lower Upper  
172 100  
171 35.9 29.5 44.3  
170 24.7 20.2 30.4

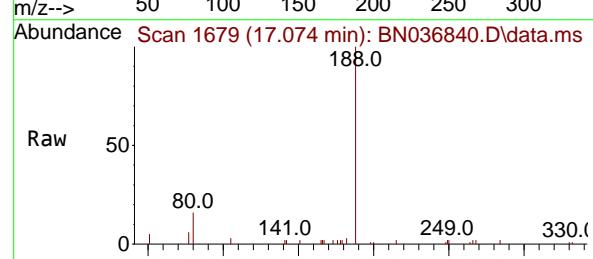
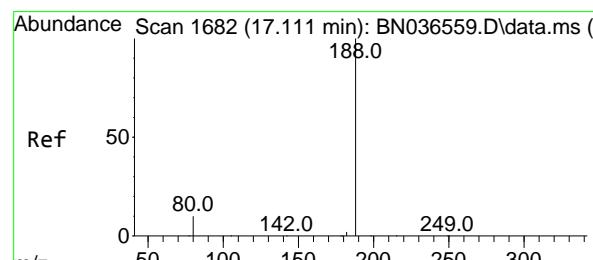
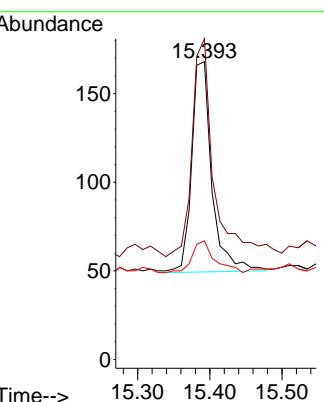




#18  
Fluorene  
Concen: 0.022 ng  
RT: 15.393 min Scan# 1  
Delta R.T. 0.011 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

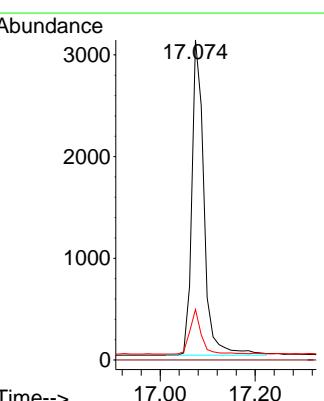
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325

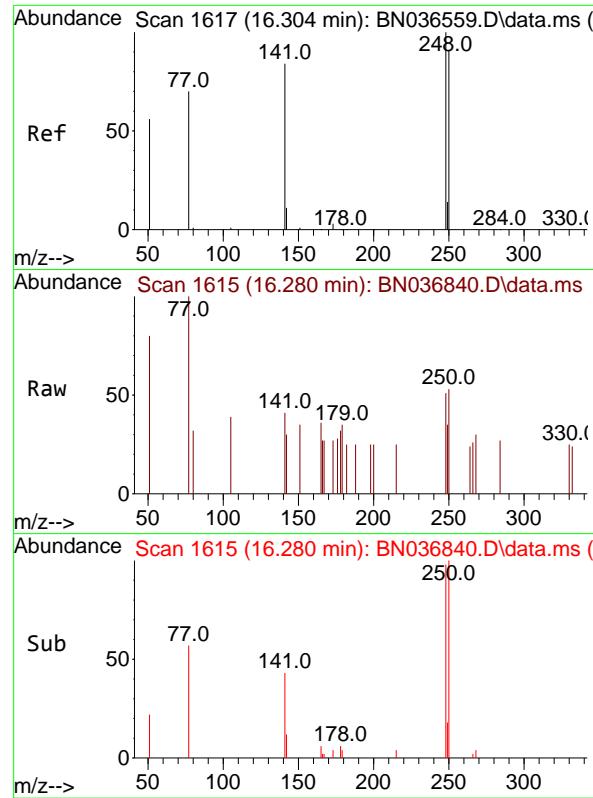
Tgt Ion:166 Resp: 231  
Ion Ratio Lower Upper  
166 100  
165 112.1 79.8 119.8  
167 16.9 10.6 15.8#



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.074 min Scan# 1679  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

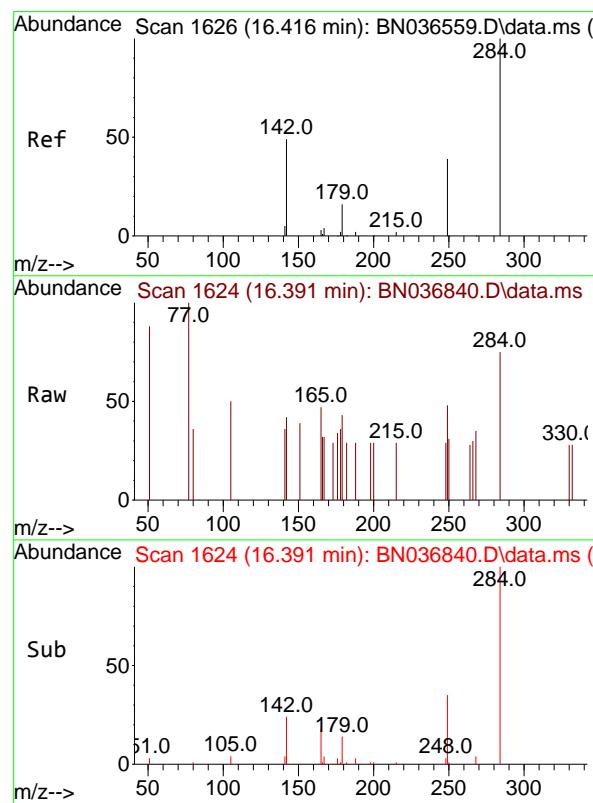
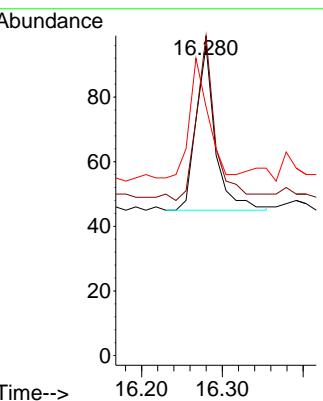
Tgt Ion:188 Resp: 5530  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 15.8 8.8 13.2#





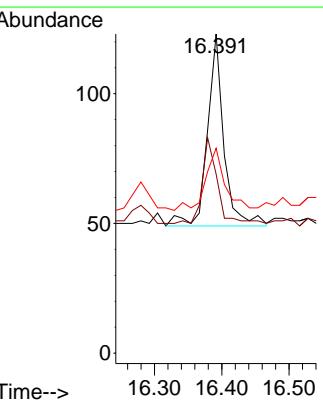
#21  
4-Bromophenyl-phenylether  
Concen: 0.024 ng  
RT: 16.280 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
ClientSampleId : RMW-04B-91-040325  
Acq: 04 Apr 2025 17:58

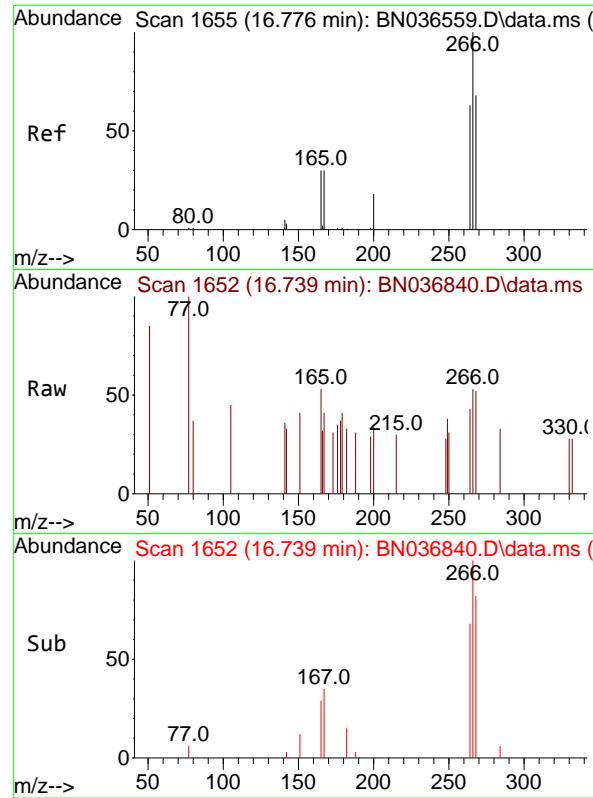
Tgt Ion:248 Resp: 84  
Ion Ratio Lower Upper  
248 100  
250 103.1 73.0 109.6  
141 80.2 68.6 103.0



#22  
Hexachlorobenzene  
Concen: 0.030 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. 0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

Tgt Ion:284 Resp: 126  
Ion Ratio Lower Upper  
284 100  
142 39.7 37.0 55.4  
249 38.9 28.1 42.1





#24

Pentachlorophenol

Concen: 0.040 ng

RT: 16.739 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036840.D

Acq: 04 Apr 2025 17:58

Instrument :

BNA\_N

ClientSampleId :

RMW-04B-91-040325

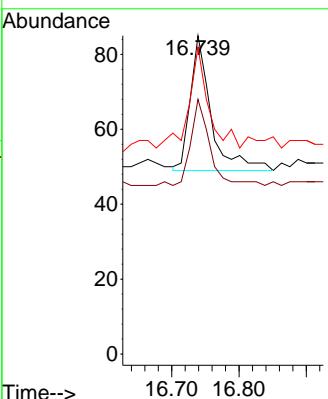
Tgt Ion:266 Resp: 77

Ion Ratio Lower Upper

266 100

264 58.4 49.6 74.4

268 74.0 50.9 76.3



#25

Phenanthrene

Concen: 0.073 ng

RT: 17.124 min Scan# 1683

Delta R.T. -0.000 min

Lab File: BN036840.D

Acq: 04 Apr 2025 17:58

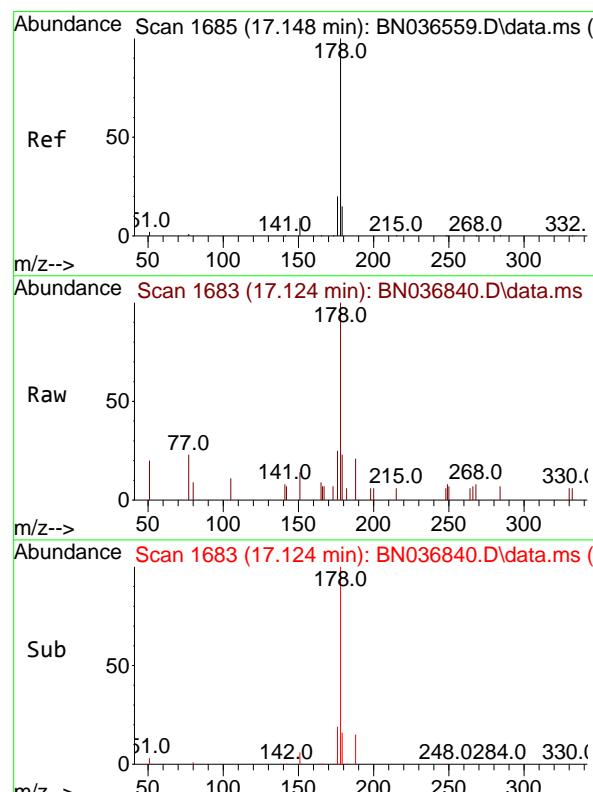
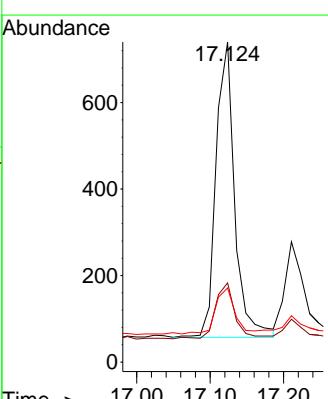
Tgt Ion:178 Resp: 1209

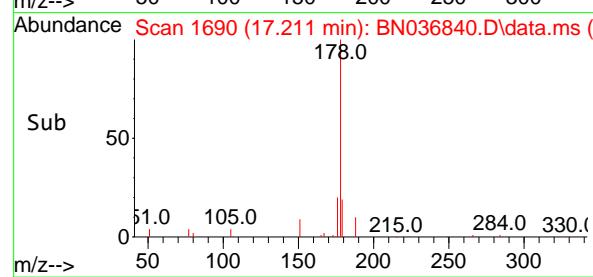
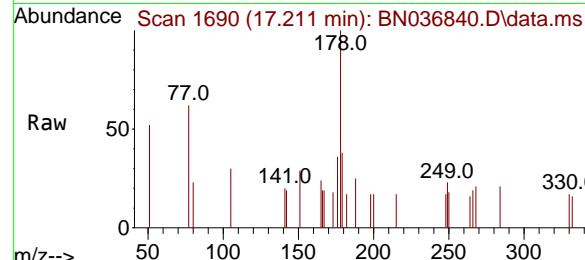
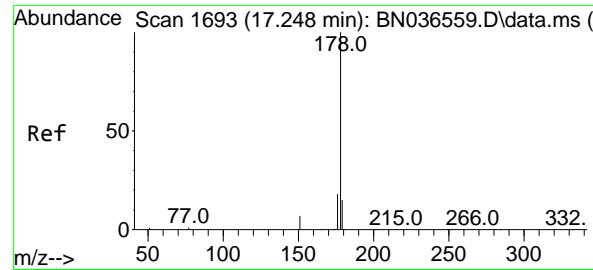
Ion Ratio Lower Upper

178 100

176 18.7 15.9 23.9

179 16.1 12.2 18.4





#26

Anthracene

Concen: 0.028 ng

RT: 17.211 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036840.D

Acq: 04 Apr 2025 17:58

Instrument:

BNA\_N

ClientSampleId :

RMW-04B-91-040325

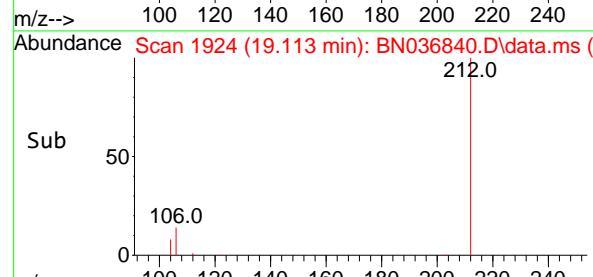
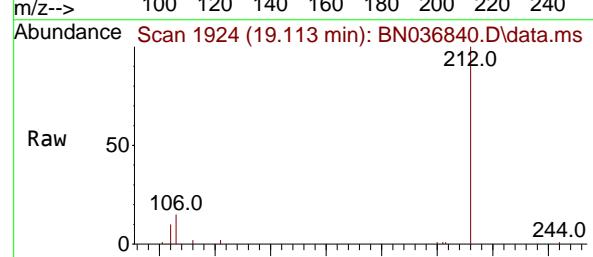
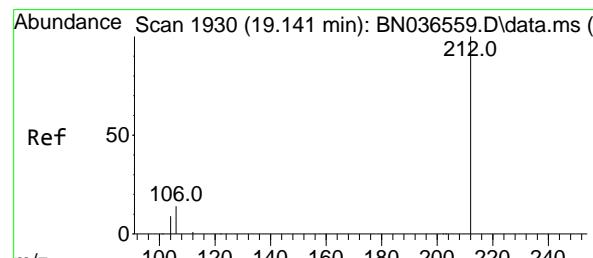
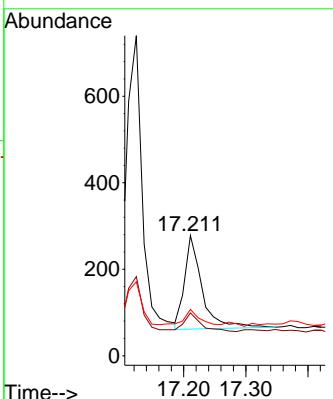
Tgt Ion:178 Resp: 423

Ion Ratio Lower Upper

178 100

176 18.4 15.4 23.2

179 14.7 12.6 18.8



#27

Fluoranthene-d10

Concen: 0.478 ng

RT: 19.113 min Scan# 1924

Delta R.T. -0.000 min

Lab File: BN036840.D

Acq: 04 Apr 2025 17:58

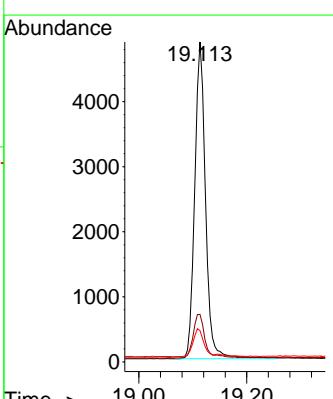
Tgt Ion:212 Resp: 6769

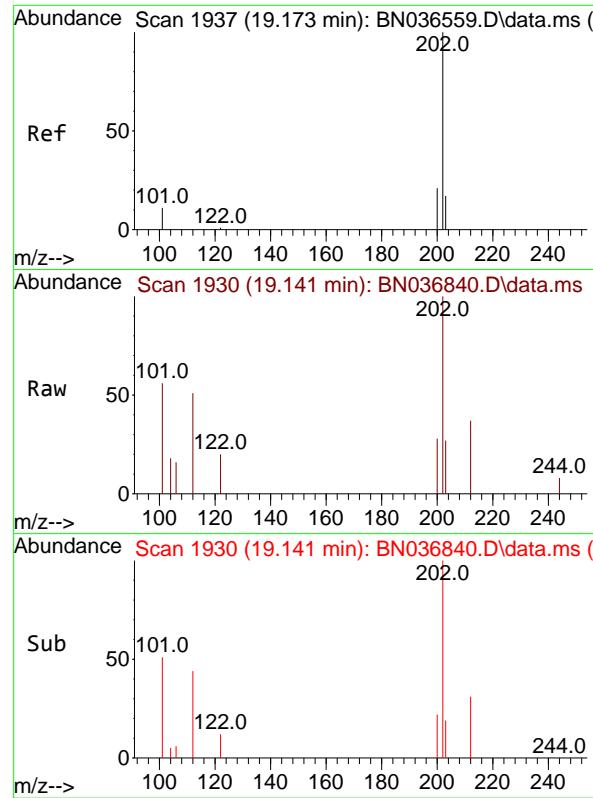
Ion Ratio Lower Upper

212 100

106 15.1 11.8 17.6

104 8.8 7.3 10.9

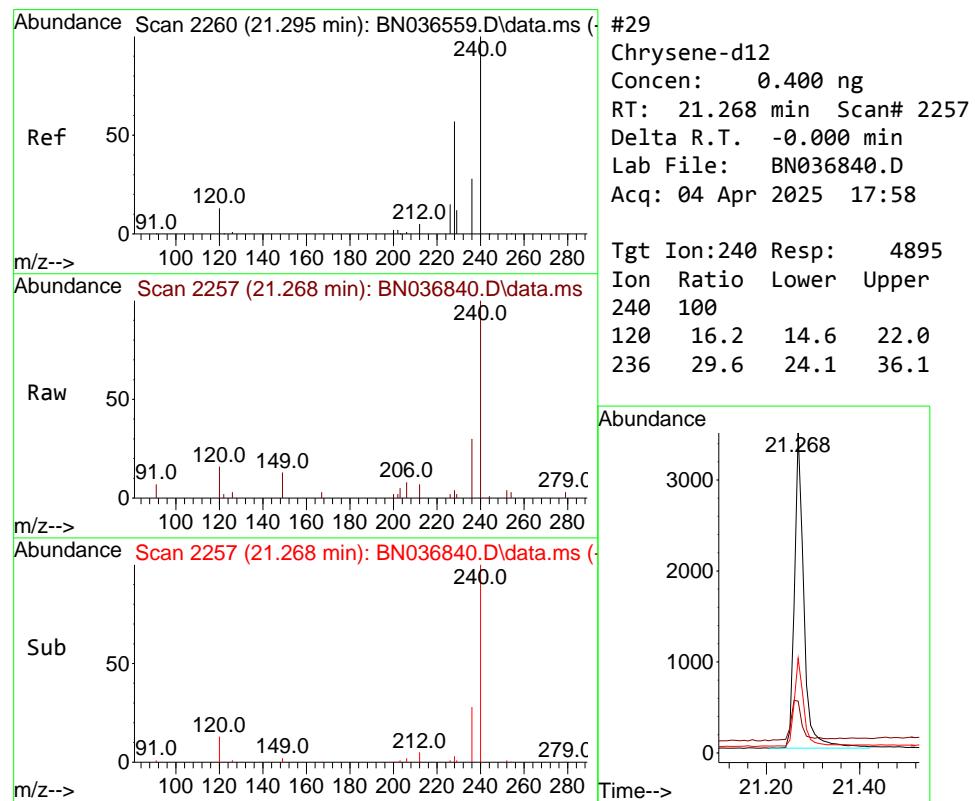
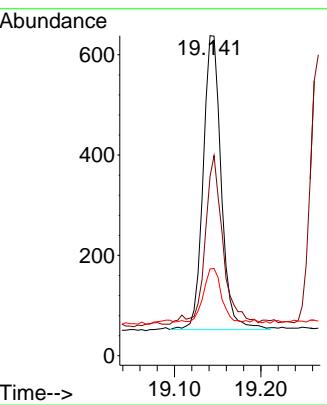




#28  
Fluoranthene  
Concen: 0.046 ng  
RT: 19.141 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

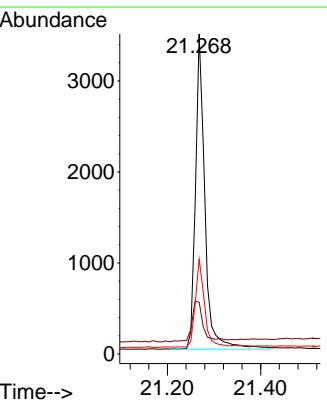
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325

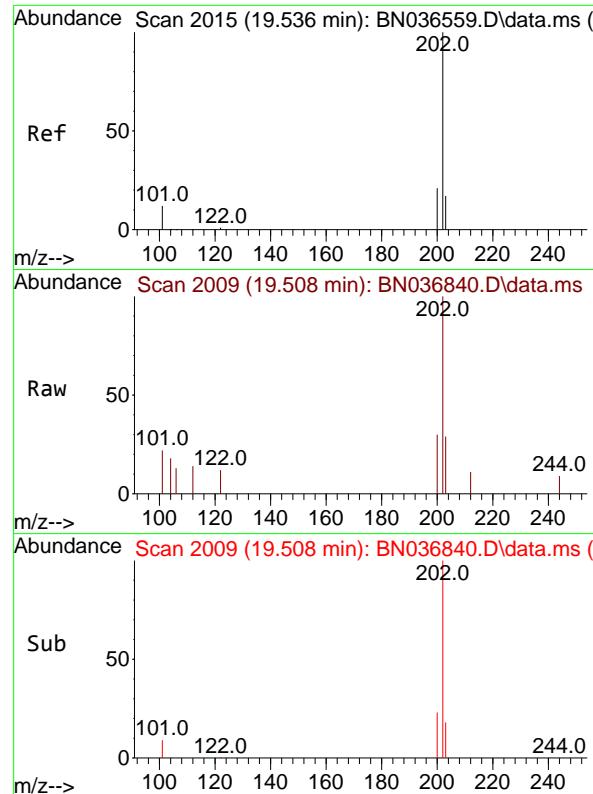
Tgt Ion:202 Resp: 856  
Ion Ratio Lower Upper  
202 100  
101 53.3 9.4 14.0#  
203 17.9 13.5 20.3



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.268 min Scan# 2257  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

Tgt Ion:240 Resp: 4895  
Ion Ratio Lower Upper  
240 100  
120 16.2 14.6 22.0  
236 29.6 24.1 36.1

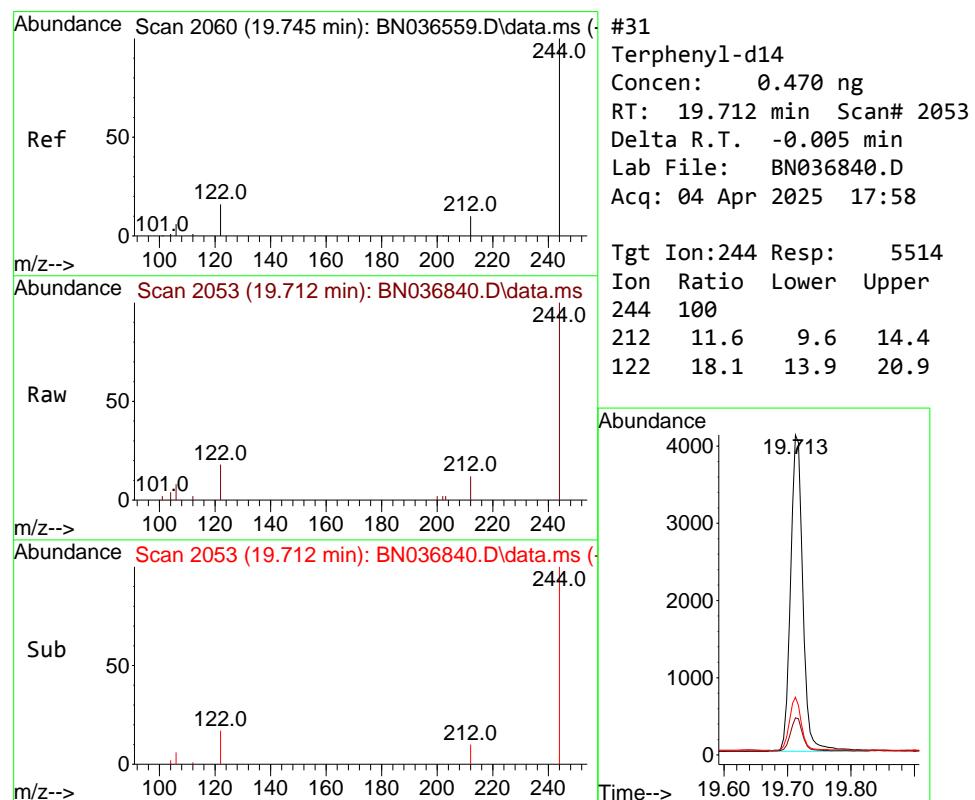
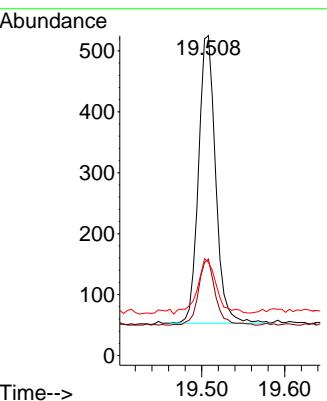




#30  
Pyrene  
Concen: 0.028 ng  
RT: 19.508 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

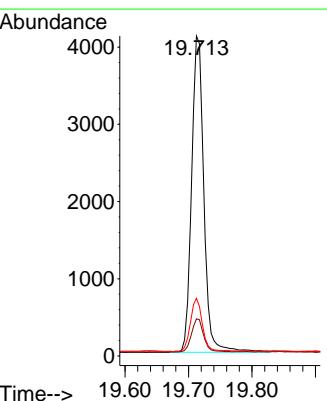
Instrument : BNA\_N  
ClientSampleId : RMW-04B-91-040325

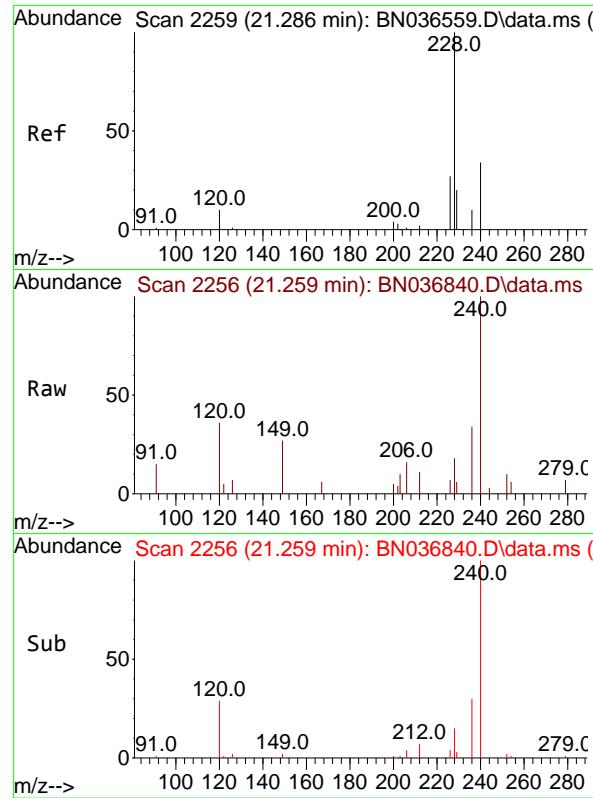
Tgt Ion:202 Resp: 677  
Ion Ratio Lower Upper  
202 100  
200 22.6 17.1 25.7  
203 22.0 14.1 21.1#



#31  
Terphenyl-d14  
Concen: 0.470 ng  
RT: 19.712 min Scan# 2053  
Delta R.T. -0.005 min  
Lab File: BN036840.D  
Acq: 04 Apr 2025 17:58

Tgt Ion:244 Resp: 5514  
Ion Ratio Lower Upper  
244 100  
212 11.6 9.6 14.4  
122 18.1 13.9 20.9

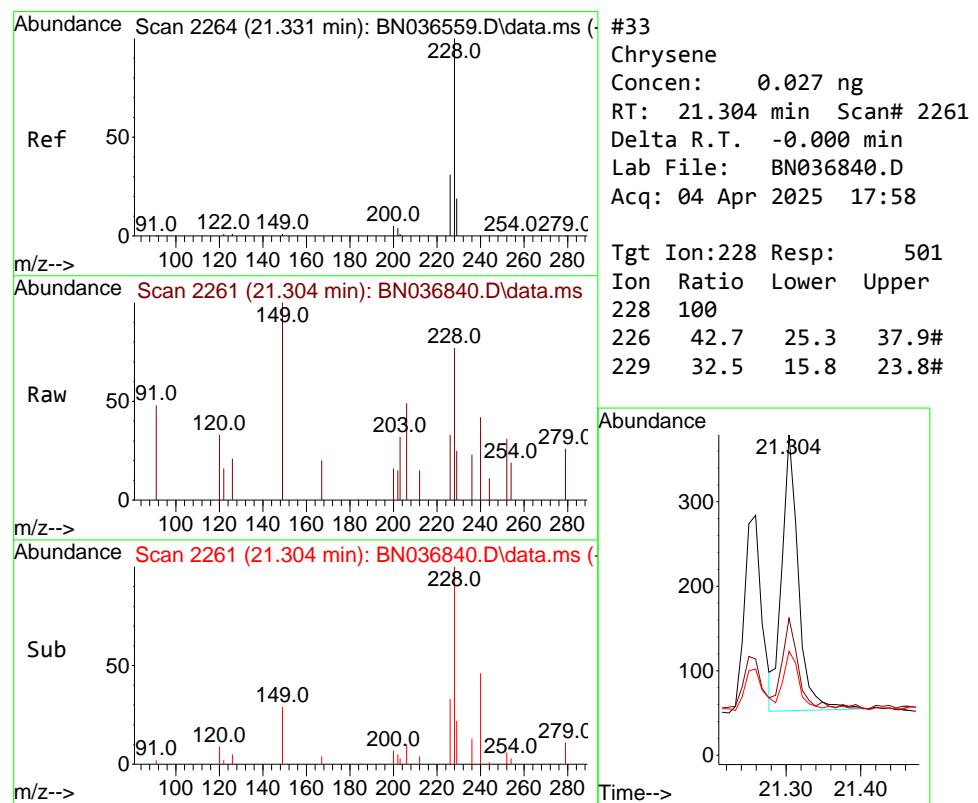
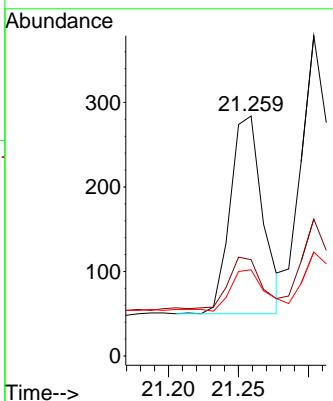




#32  
 Benzo(a)anthracene  
 Concen: 0.022 ng  
 RT: 21.259 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN036840.D  
 Acq: 04 Apr 2025 17:58

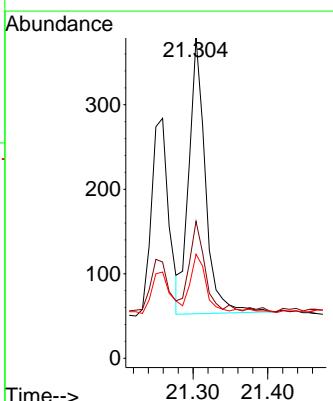
Instrument :  
 BNA\_N  
 ClientSampleId :  
 RMW-04B-91-040325

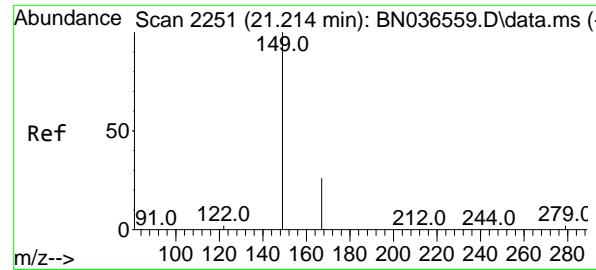
Tgt Ion:228 Resp: 378  
 Ion Ratio Lower Upper  
 228 100  
 226 40.1 22.5 33.7#  
 229 35.9 16.6 25.0#



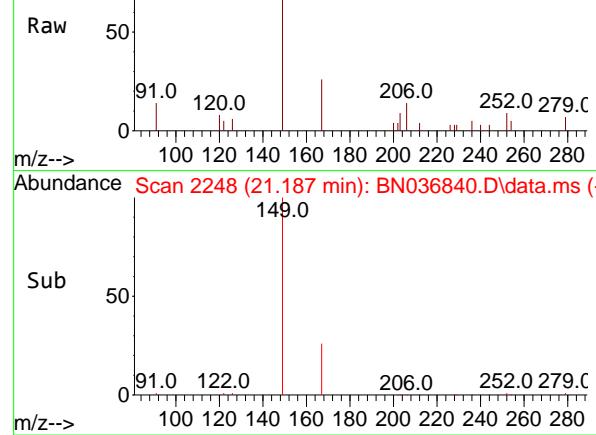
#33  
 Chrysene  
 Concen: 0.027 ng  
 RT: 21.304 min Scan# 2261  
 Delta R.T. -0.000 min  
 Lab File: BN036840.D  
 Acq: 04 Apr 2025 17:58

Tgt Ion:228 Resp: 501  
 Ion Ratio Lower Upper  
 228 100  
 226 42.7 25.3 37.9#  
 229 32.5 15.8 23.8#

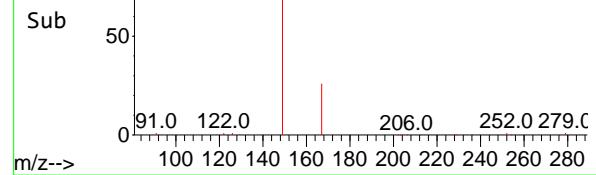




Abundance Scan 2248 (21.187 min): BN036840.D\data.ms (-)



Abundance Scan 2248 (21.187 min): BN036840.D\data.ms (-)



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.119 ng

RT: 21.187 min Scan# 2

Delta R.T. -0.000 min

Lab File: BN036840.D

Acq: 04 Apr 2025 17:58

Instrument :

BNA\_N

ClientSampleId :

RMW-04B-91-040325

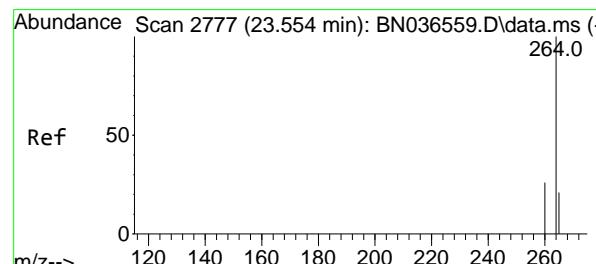
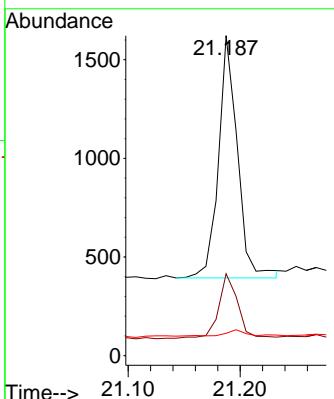
Tgt Ion:149 Resp: 1446

Ion Ratio Lower Upper

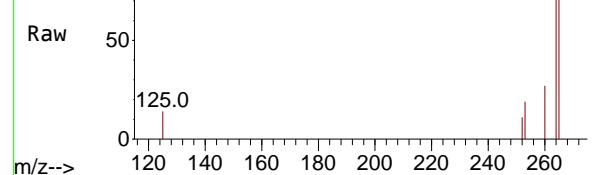
149 100

167 26.8 20.7 31.1

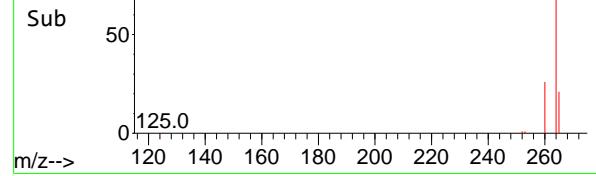
279 3.0 3.6 5.4#



Abundance Scan 2761 (23.508 min): BN036840.D\data.ms (-)



Abundance Scan 2761 (23.508 min): BN036840.D\data.ms (-)



#35

Perylene-d<sub>12</sub>

Concen: 0.400 ng

RT: 23.508 min Scan# 2761

Delta R.T. -0.003 min

Lab File: BN036840.D

Acq: 04 Apr 2025 17:58

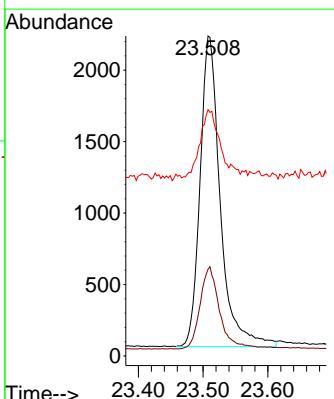
Tgt Ion:264 Resp: 4713

Ion Ratio Lower Upper

264 100

260 27.1 22.6 33.8

265 77.0 88.1 132.1#





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	04/03/25	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	04/03/25	
Client Sample ID:	RMW-01B-82-040325-FD			SDG No.:	Q1731	
Lab Sample ID:	Q1731-03			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	980	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
BN036841.D	1	04/04/25 11:35	04/04/25 18:34	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.43		0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.37		30 (20) - 150 (139)	93%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.50		30 (30) - 150 (150)	126%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		30 (27) - 130 (154)	88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		30 (25) - 130 (149)	94%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		30 (54) - 130 (175)	122%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1720	7.696			
1146-65-2	Naphthalene-d8	4120	10.488			
15067-26-2	Acenaphthene-d10	2520	14.334			
1517-22-2	Phenanthrene-d10	5200	17.087			
1719-03-5	Chrysene-d12	4660	21.268			
1520-96-3	Perylene-d12	4310	23.513			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036841.D  
 Acq On : 04 Apr 2025 18:34  
 Operator : RC/JU  
 Sample : Q1731-03  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RMW-01B-82-040325-FD**

Quant Time: Apr 04 18:56:39 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

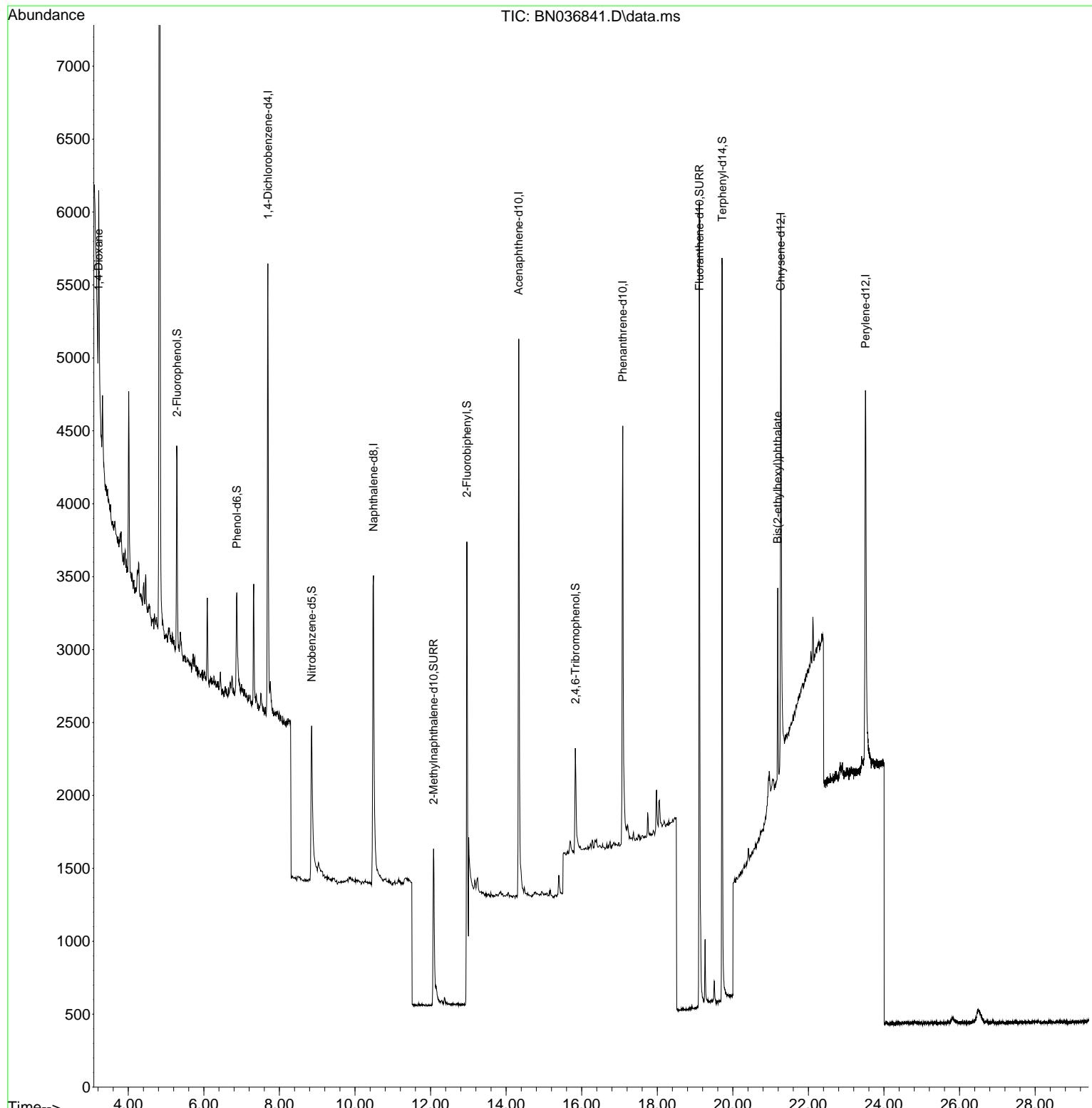
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.696	152	1722	0.400	ng	0.00
7) Naphthalene-d8	10.488	136	4117	0.400	ng	0.01
13) Acenaphthene-d10	14.334	164	2520	0.400	ng	0.00
19) Phenanthrene-d10	17.087	188	5203	0.400	ng	0.01
29) Chrysene-d12	21.268	240	4655	0.400	ng	0.00
35) Perylene-d12	23.513	264	4312	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.291	112	1092	0.272	ng	0.00
5) Phenol-d6	6.872	99	861	0.174	ng	0.00
8) Nitrobenzene-d5	8.854	82	1569	0.350	ng	0.01
11) 2-Methylnaphthalene-d10	12.080	152	2267	0.370	ng	0.01
14) 2,4,6-Tribromophenol	15.833	330	527	0.461	ng	0.00
15) 2-Fluorobiphenyl	12.963	172	5512	0.376	ng	0.00
27) Fluoranthene-d10	19.113	212	6709	0.503	ng	0.00
31) Terphenyl-d14	19.717	244	5437	0.487	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.218	88	800	0.419	ng	# 68
34) Bis(2-ethylhexyl)phtha...	21.187	149	1126	0.098	ng	# 96

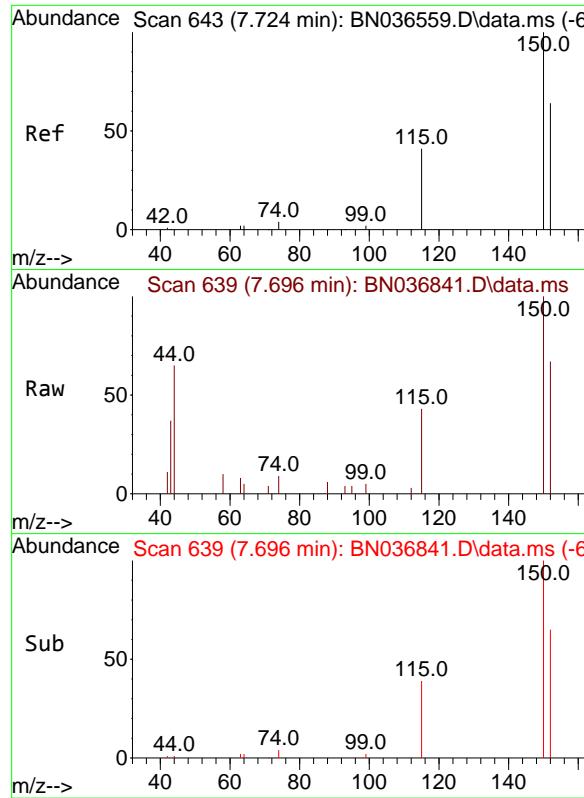
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036841.D  
 Acq On : 04 Apr 2025 18:34  
 Operator : RC/JU  
 Sample : Q1731-03  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RMW-01B-82-040325-FD

Quant Time: Apr 04 18:56:39 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

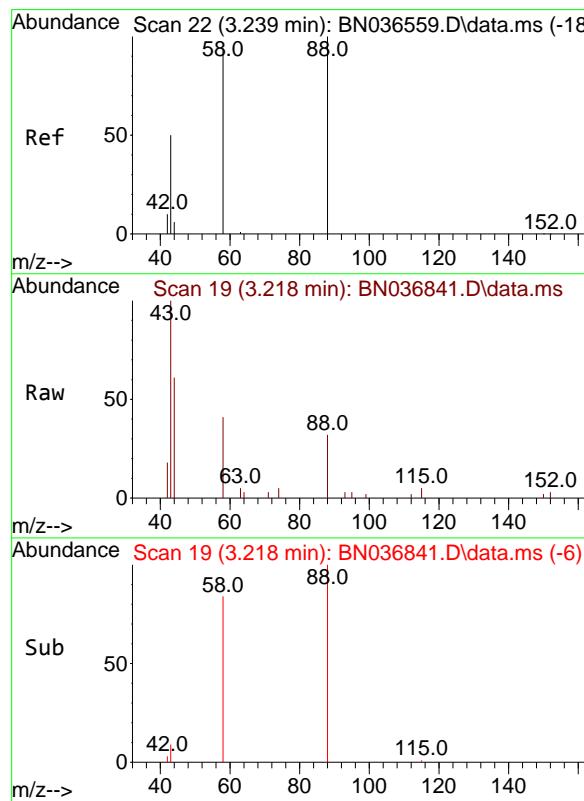
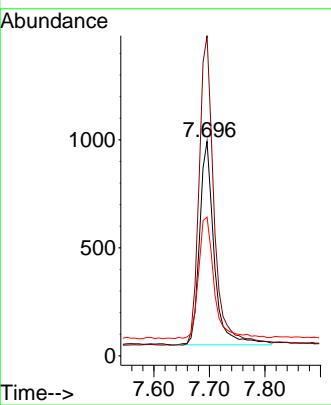




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.696 min Scan# 6  
 Delta R.T. 0.008 min  
 Lab File: BN036841.D  
 Acq: 04 Apr 2025 18:34

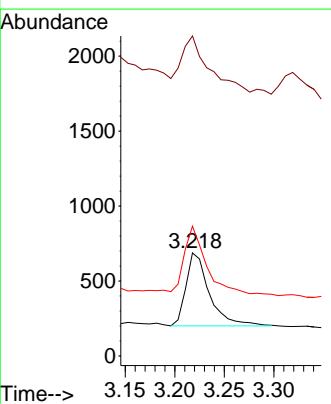
Instrument : BNA\_N  
 ClientSampleId : RMW-01B-82-040325-FD

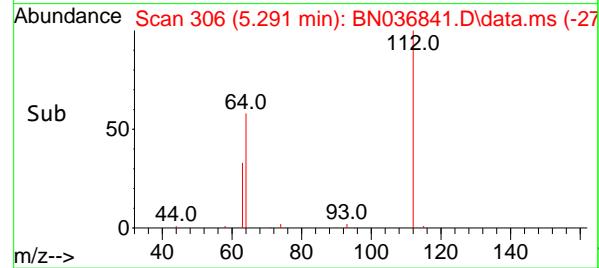
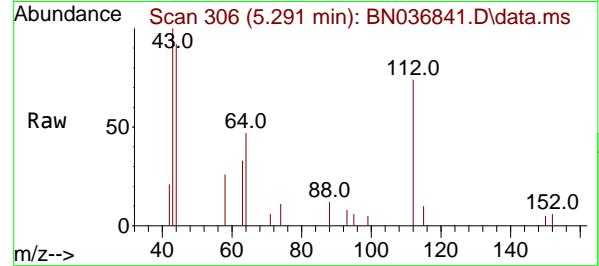
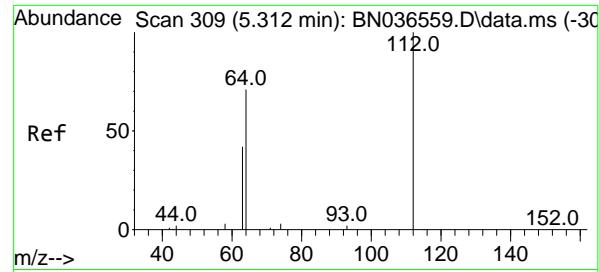
Tgt Ion:152 Resp: 1722  
 Ion Ratio Lower Upper  
 152 100  
 150 149.4 123.7 185.5  
 115 64.7 54.3 81.5



#2  
 1,4-Dioxane  
 Concen: 0.419 ng  
 RT: 3.218 min Scan# 19  
 Delta R.T. -0.007 min  
 Lab File: BN036841.D  
 Acq: 04 Apr 2025 18:34

Tgt Ion: 88 Resp: 800  
 Ion Ratio Lower Upper  
 88 100  
 43 100.5 37.8 56.8#  
 58 88.9 67.4 101.2





#4

2-Fluorophenol

Concen: 0.272 ng

RT: 5.291 min Scan# 3

Delta R.T. 0.007 min

Lab File: BN036841.D

Acq: 04 Apr 2025 18:34

Instrument :

BNA\_N

ClientSampleId :

RMW-01B-82-040325-FD

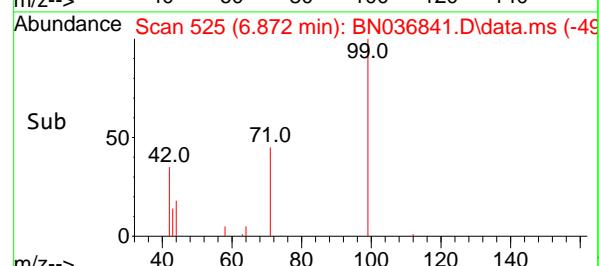
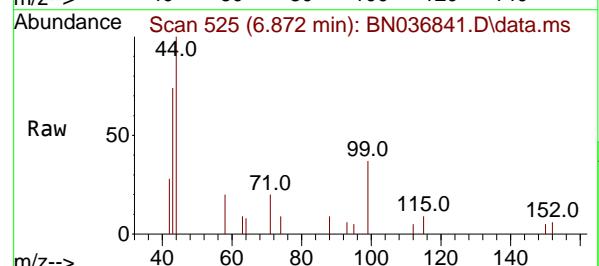
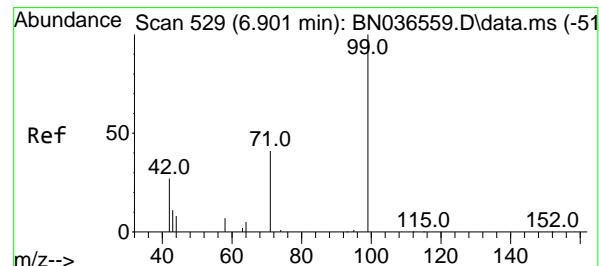
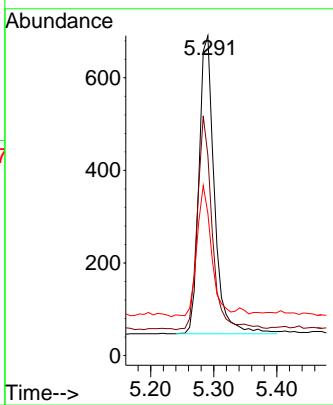
Tgt Ion:112 Resp: 1092

Ion Ratio Lower Upper

112 100

64 68.8 53.1 79.7

63 41.5 31.8 47.8



#5

Phenol-d6

Concen: 0.174 ng

RT: 6.872 min Scan# 525

Delta R.T. 0.007 min

Lab File: BN036841.D

Acq: 04 Apr 2025 18:34

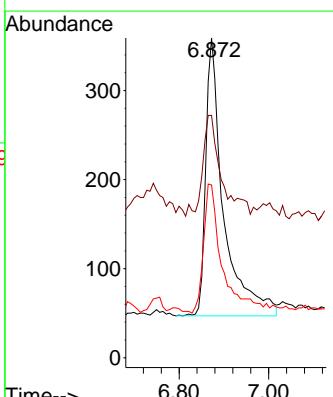
Tgt Ion: 99 Resp: 861

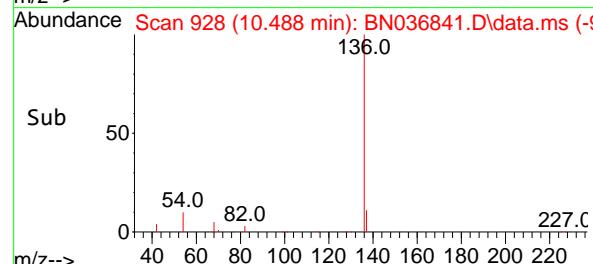
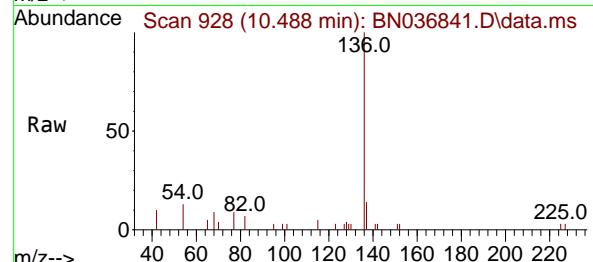
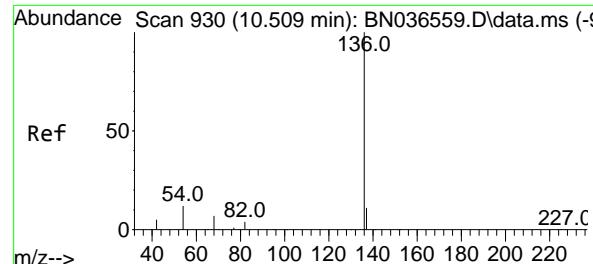
Ion Ratio Lower Upper

99 100

42 37.6 26.5 39.7

71 47.4 34.1 51.1



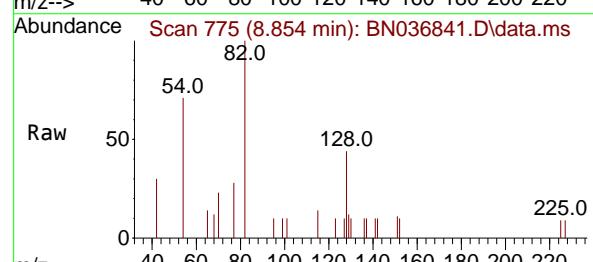
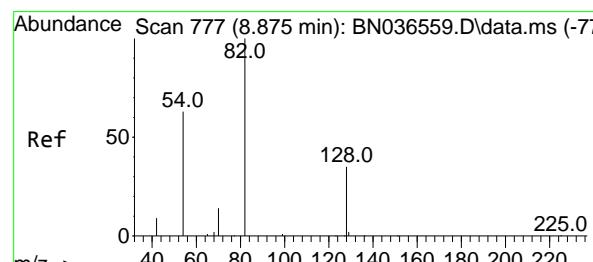
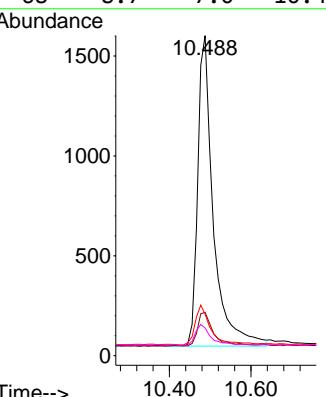


#7  
**Naphthalene-d8**  
Concen: 0.400 ng  
RT: 10.488 min Scan# 9  
Delta R.T. 0.011 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325-FD

Tgt Ion:136 Resp: 4117

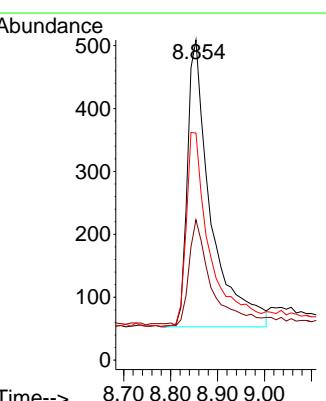
Ion	Ratio	Lower	Upper
136	100		
137	13.5	10.3	15.5
54	13.0	11.5	17.3
68	8.7	7.0	10.4

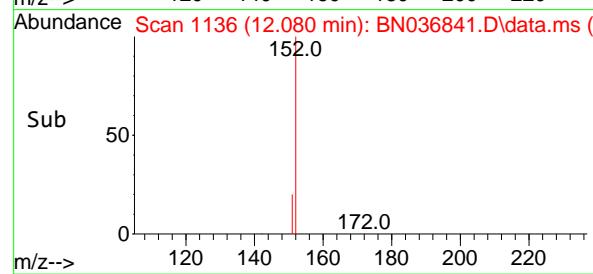
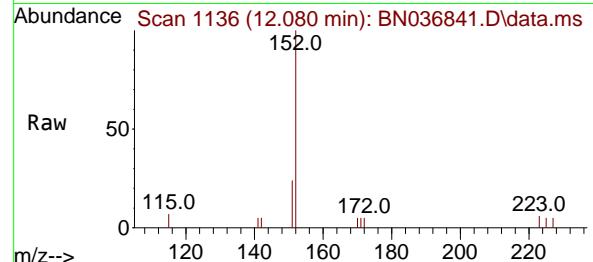
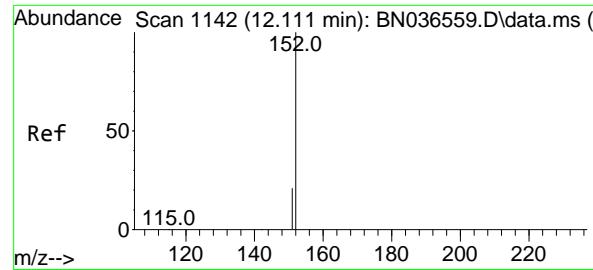


#8  
**Nitrobenzene-d5**  
Concen: 0.350 ng  
RT: 8.854 min Scan# 775  
Delta R.T. 0.011 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

Tgt Ion: 82 Resp: 1569

Ion	Ratio	Lower	Upper
82	100		
128	43.8	30.6	45.8
54	70.9	52.2	78.4

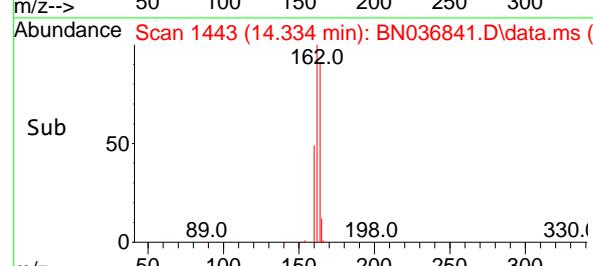
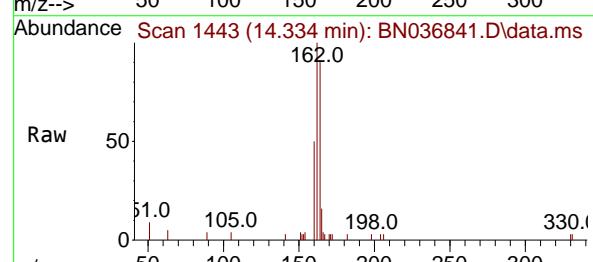
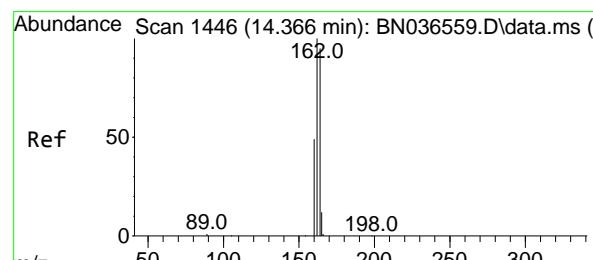
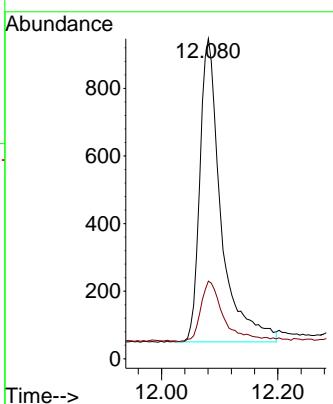




#11  
2-Methylnaphthalene-d10  
Concen: 0.370 ng  
RT: 12.080 min Scan# 1  
Delta R.T. 0.010 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

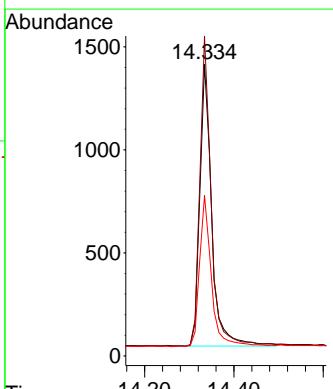
Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325-FD

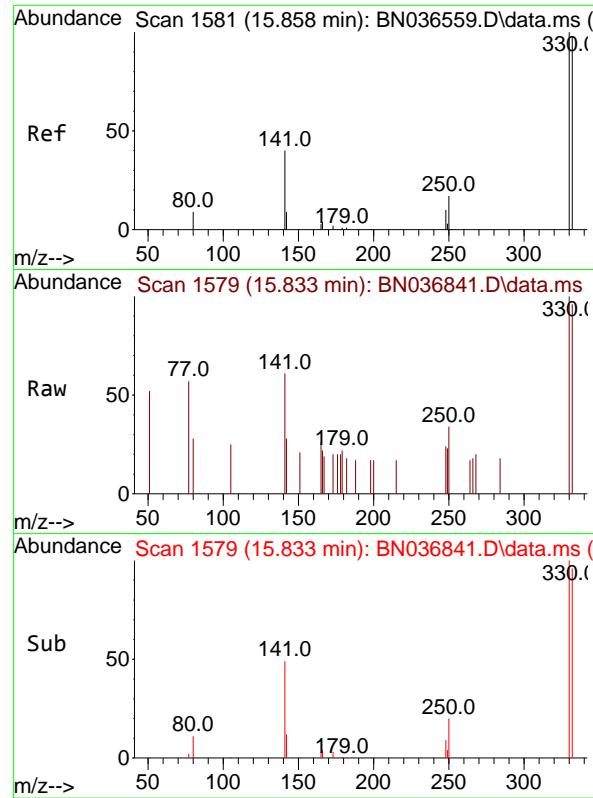
Tgt Ion:152 Resp: 2267  
Ion Ratio Lower Upper  
152 100  
151 21.6 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

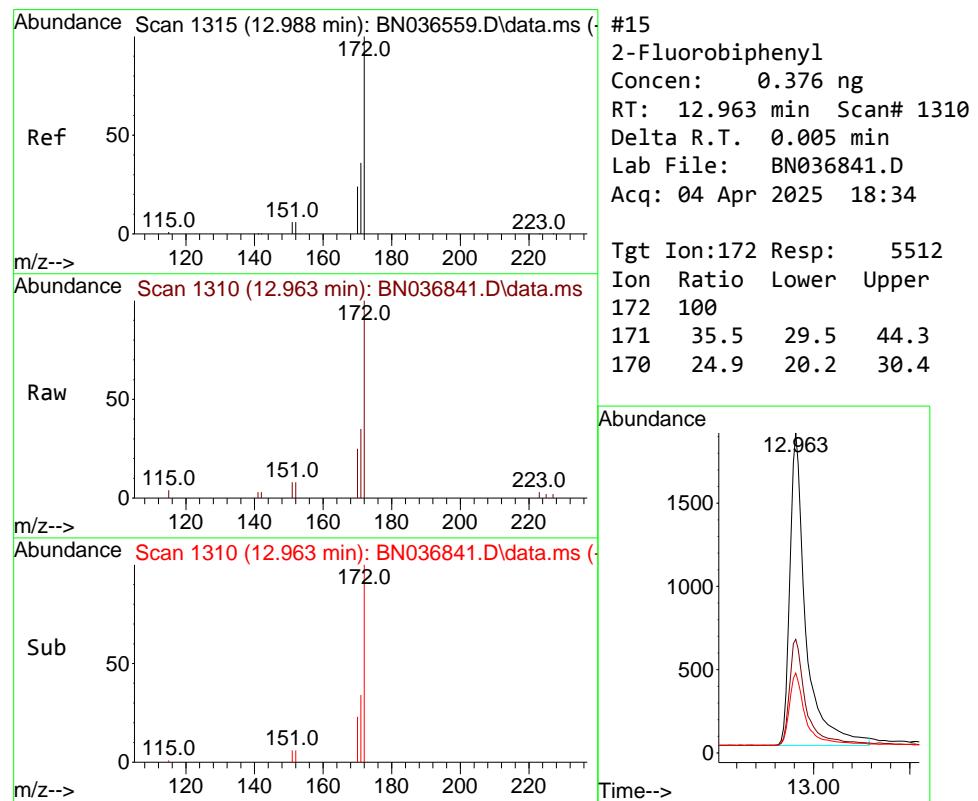
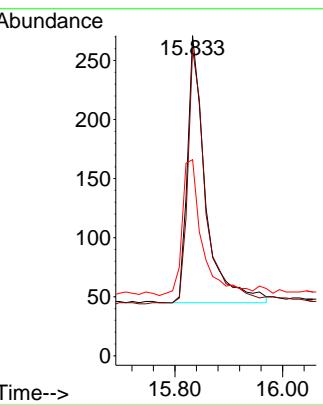
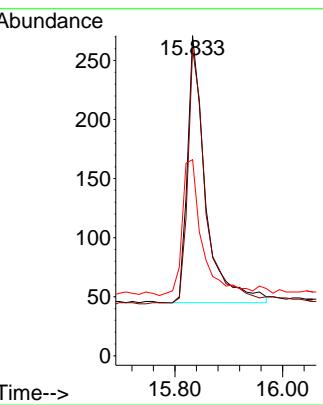
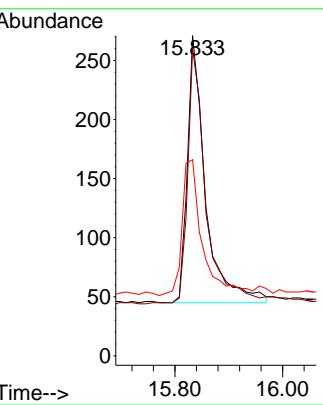
Tgt Ion:164 Resp: 2520  
Ion Ratio Lower Upper  
164 100  
162 109.8 84.2 126.2  
160 55.1 42.2 63.2





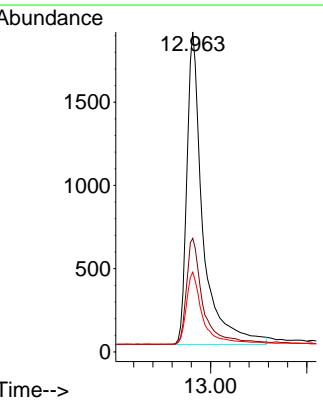
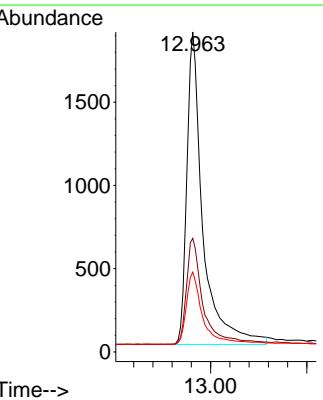
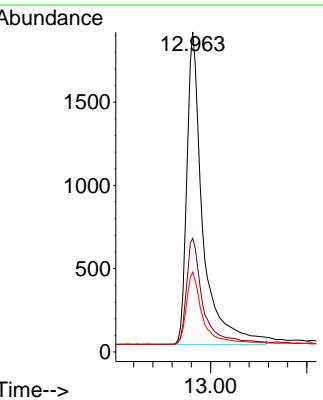
#14  
2,4,6-Tribromophenol  
Concen: 0.461 ng  
RT: 15.833 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34  
ClientSampleId : RMW-01B-82-040325-FD

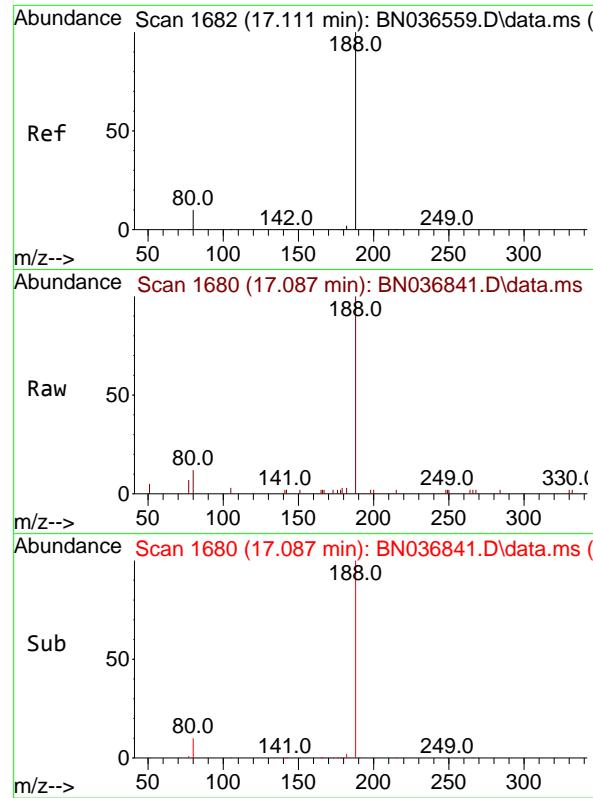
Tgt	Ion:330	Resp:	527
Ion	Ratio	Lower	Upper
330	100		
332	97.2	75.2	112.8
141	56.9	43.4	65.2



#15  
2-Fluorobiphenyl  
Concen: 0.376 ng  
RT: 12.963 min Scan# 1310  
Delta R.T. 0.005 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

Tgt	Ion:172	Resp:	5512
Ion	Ratio	Lower	Upper
172	100		
171	35.5	29.5	44.3
170	24.9	20.2	30.4

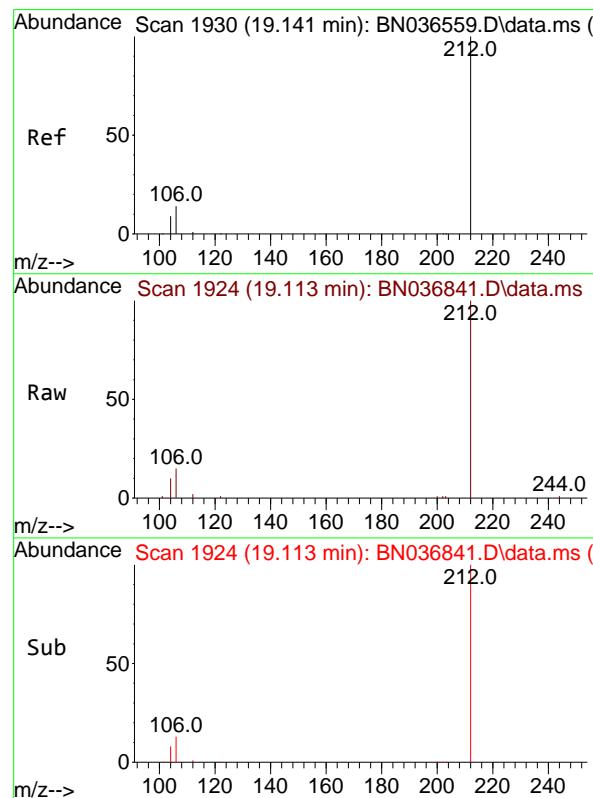
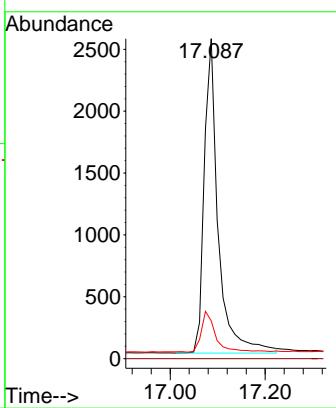




#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.087 min Scan# 1  
Delta R.T. 0.012 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

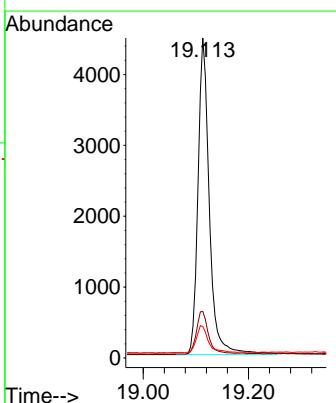
Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325-FD

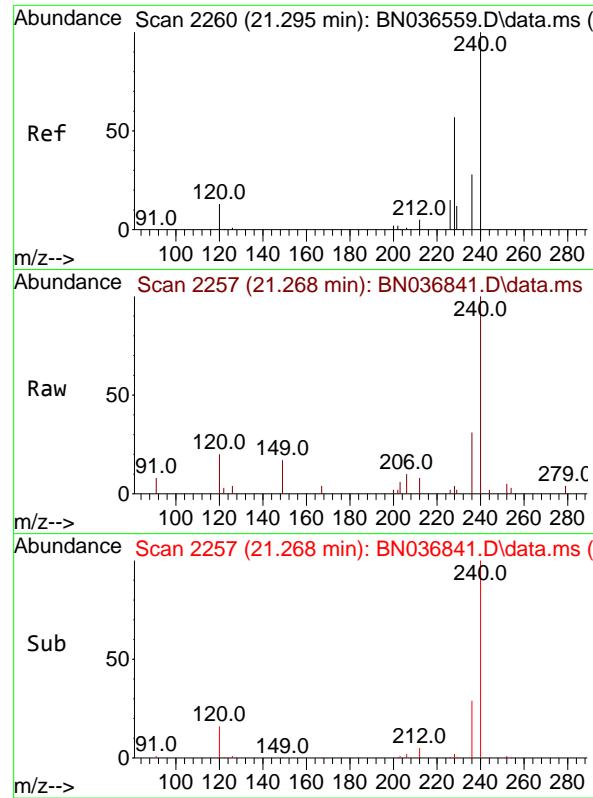
Tgt Ion:188 Resp: 5203  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.8 8.8 13.2



#27  
Fluoranthene-d10  
Concen: 0.503 ng  
RT: 19.113 min Scan# 1924  
Delta R.T. -0.000 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

Tgt Ion:212 Resp: 6709  
Ion Ratio Lower Upper  
212 100  
106 14.2 11.8 17.6  
104 9.0 7.3 10.9

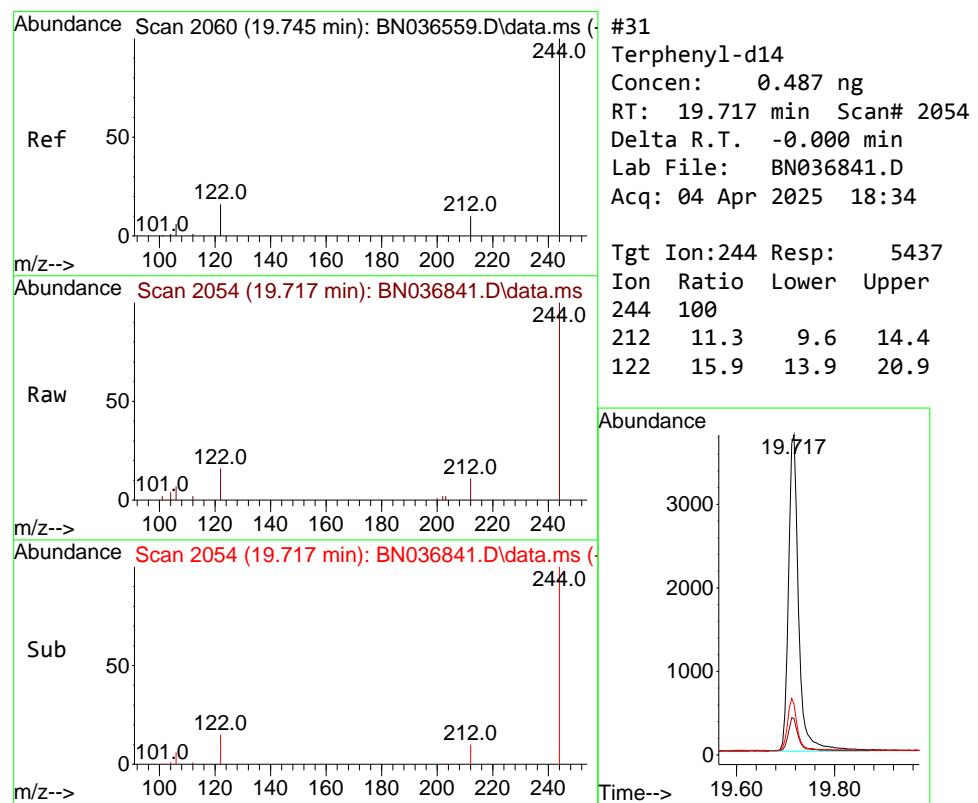
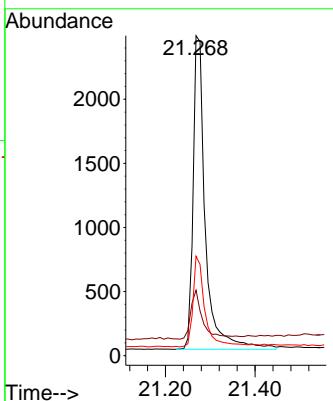




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.268 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

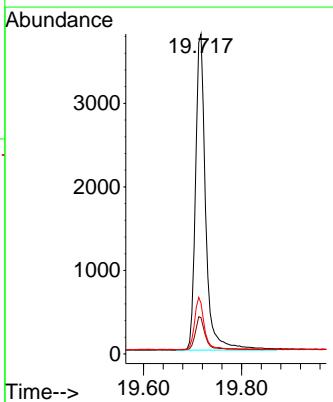
Instrument : BNA\_N  
ClientSampleId : RMW-01B-82-040325-FD

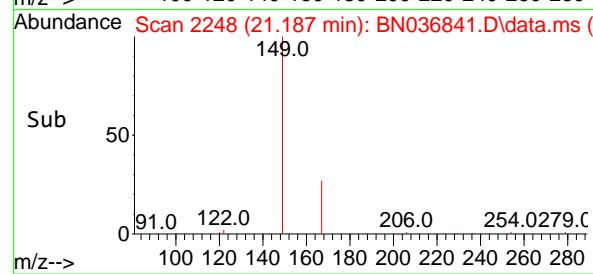
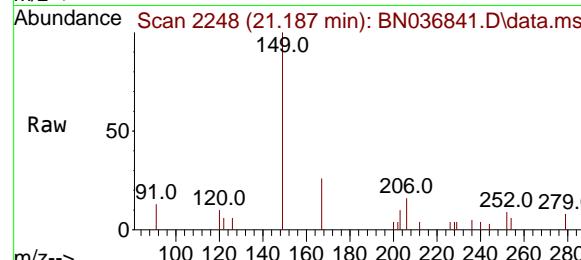
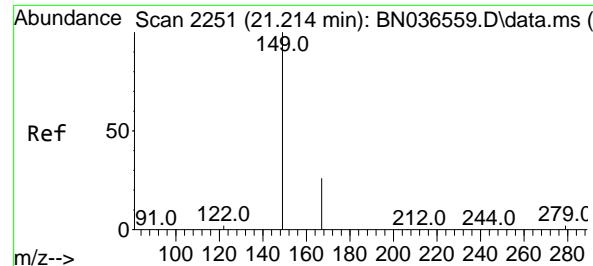
Tgt Ion:240 Resp: 4655  
Ion Ratio Lower Upper  
240 100  
120 20.4 14.6 22.0  
236 31.1 24.1 36.1



#31  
Terphenyl-d<sub>14</sub>  
Concen: 0.487 ng  
RT: 19.717 min Scan# 2054  
Delta R.T. -0.000 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

Tgt Ion:244 Resp: 5437  
Ion Ratio Lower Upper  
244 100  
212 11.3 9.6 14.4  
122 15.9 13.9 20.9

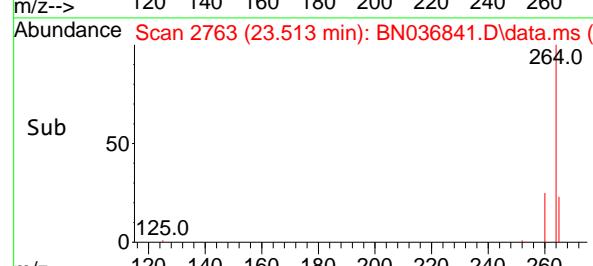
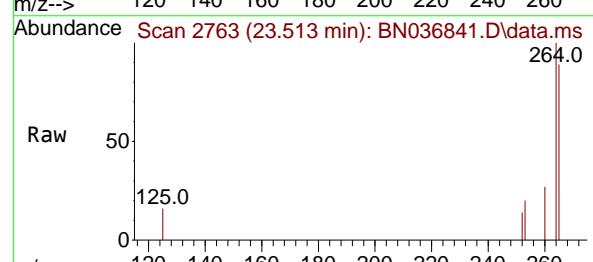
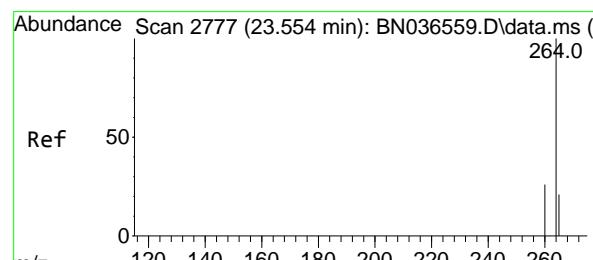
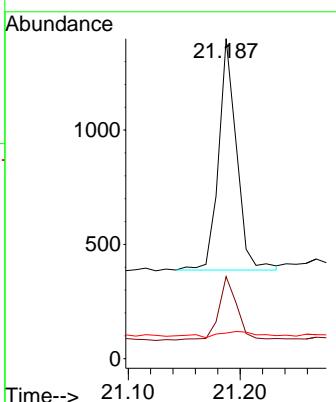




#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.098 ng  
RT: 21.187 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

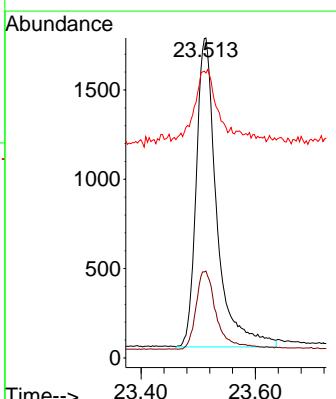
Instrument :  
BNA\_N  
ClientSampleId :  
RMW-01B-82-040325-FD

Tgt Ion:149 Resp: 1126  
Ion Ratio Lower Upper  
149 100  
167 27.9 20.7 31.1  
279 6.7 3.6 5.4#



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.513 min Scan# 2763  
Delta R.T. 0.003 min  
Lab File: BN036841.D  
Acq: 04 Apr 2025 18:34

Tgt Ion:264 Resp: 4312  
Ion Ratio Lower Upper  
264 100  
260 27.1 22.6 33.8  
265 89.1 88.1 132.1





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	04/03/25	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	04/03/25	
Client Sample ID:	RMW-03B-90-040325			SDG No.:	Q1731	
Lab Sample ID:	Q1731-04			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	980	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
BN036842.D	1	04/04/25 11:35	04/04/25 19:10	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	7.50	E	0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.40		30 (20) - 150 (139)	100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.51		30 (30) - 150 (150)	126%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		30 (27) - 130 (154)	83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.43		30 (25) - 130 (149)	108%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.49		30 (54) - 130 (175)	122%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1670	7.696			
1146-65-2	Naphthalene-d8	4190	10.477			
15067-26-2	Acenaphthene-d10	2430	14.334			
1517-22-2	Phenanthrene-d10	5090	17.087			
1719-03-5	Chrysene-d12	4540	21.268			
1520-96-3	Perylene-d12	4160	23.511			

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\BN040425\  
 Data File : BN036842.D  
 Acq On : 04 Apr 2025 19:10  
 Operator : RC/JU  
 Sample : Q1731-04  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RMW-03B-90-040325**

Quant Time: Apr 04 22:49:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

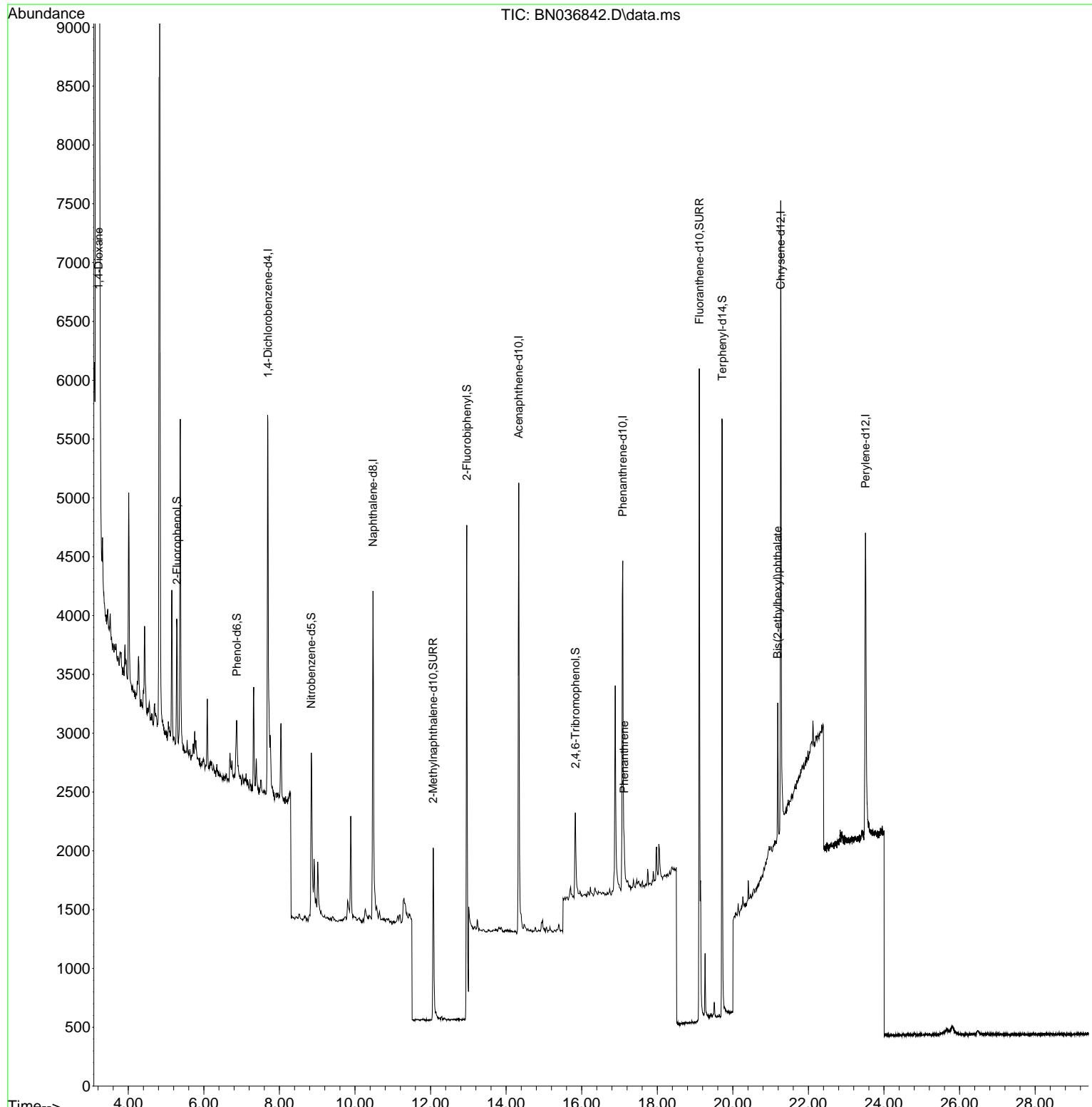
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.696	152	1670	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	4185	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2430	0.400	ng	0.00
19) Phenanthrene-d10	17.087	188	5085	0.400	ng	0.01
29) Chrysene-d12	21.268	240	4539	0.400	ng	0.00
35) Perylene-d12	23.511	264	4155	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.291	112	770	0.198	ng	0.00
5) Phenol-d6	6.872	99	545	0.113	ng	0.00
8) Nitrobenzene-d5	8.843	82	1507	0.331	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	2477	0.398	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	529	0.480	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	6138	0.434	ng	0.00
27) Fluoranthene-d10	19.113	212	6590	0.506	ng	0.00
31) Terphenyl-d14	19.717	244	5322	0.489	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.218	88	13527	7.302	ng	98
25) Phenanthrene	17.124	178	308	0.020	ng	# 86
34) Bis(2-ethylhexyl)phtha...	21.187	149	1089	0.097	ng	98

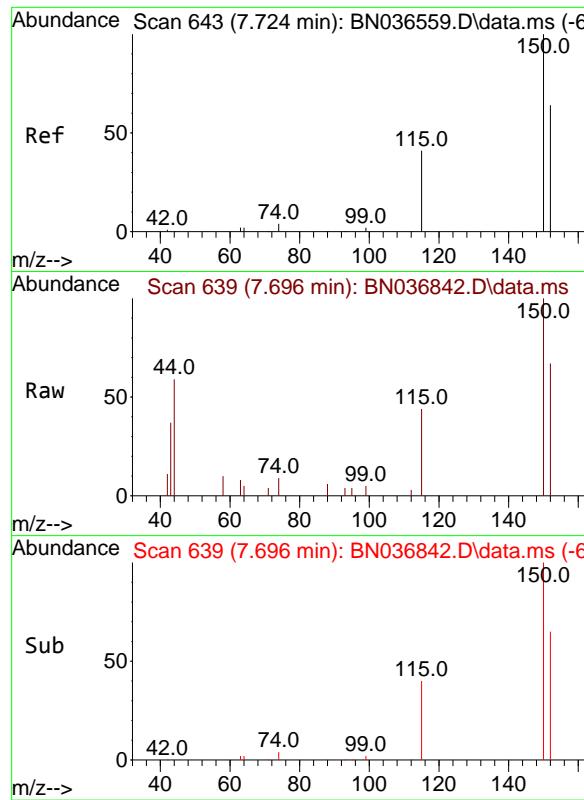
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036842.D  
 Acq On : 04 Apr 2025 19:10  
 Operator : RC/JU  
 Sample : Q1731-04  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RMW-03B-90-040325

Quant Time: Apr 04 22:49:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

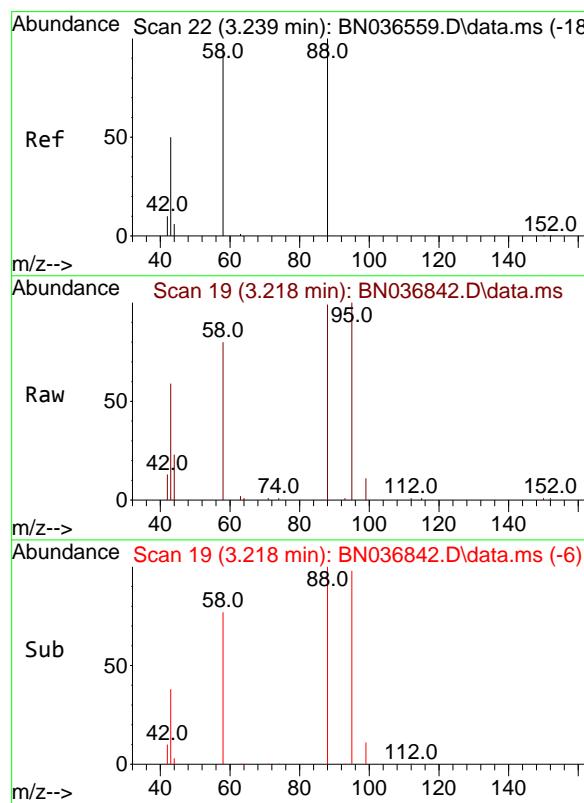
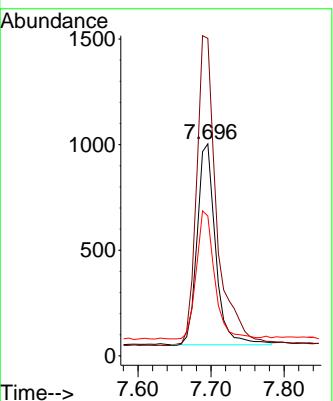




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.696 min Scan# 6  
 Delta R.T. 0.008 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

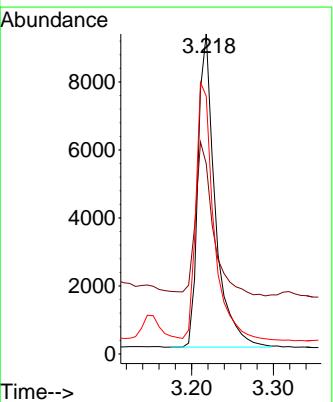
Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325

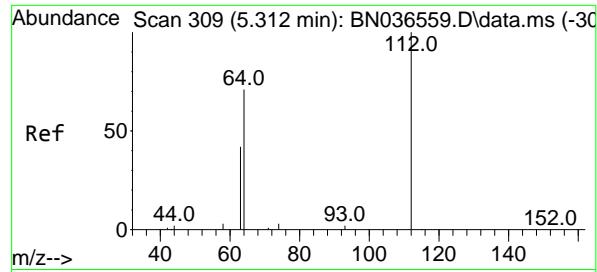
Tgt Ion:152 Resp: 1670  
 Ion Ratio Lower Upper  
 152 100  
 150 149.7 123.7 185.5  
 115 65.9 54.3 81.5



#2  
 1,4-Dioxane  
 Concen: 7.302 ng  
 RT: 3.218 min Scan# 19  
 Delta R.T. -0.007 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

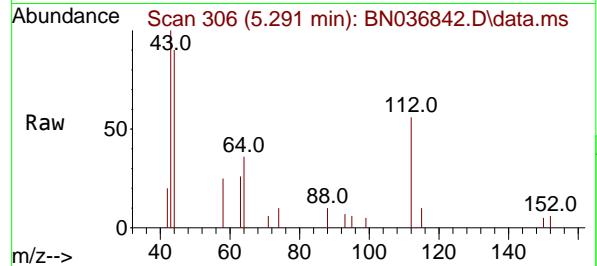
Tgt Ion: 88 Resp: 13527  
 Ion Ratio Lower Upper  
 88 100  
 43 50.4 37.8 56.8  
 58 84.9 67.4 101.2



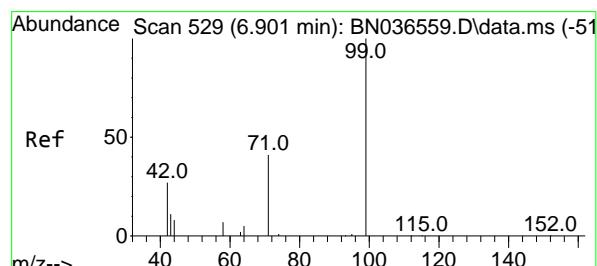
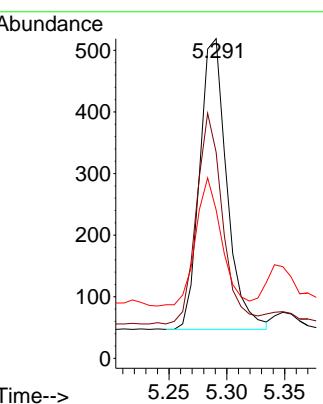
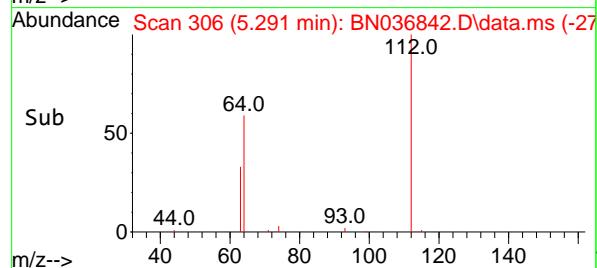


#4  
2-Fluorophenol  
Concen: 0.198 ng  
RT: 5.291 min Scan# 3  
Delta R.T. 0.007 min  
Lab File: BN036842.D  
Acq: 04 Apr 2025 19:10

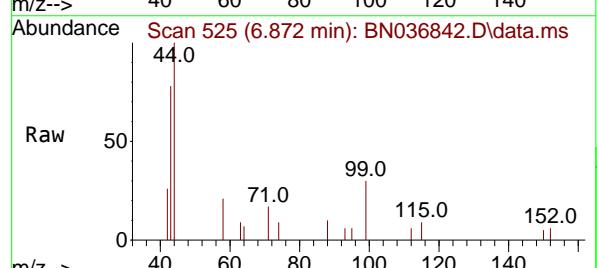
Instrument : BNA\_N  
ClientSampleId : RMW-03B-90-040325



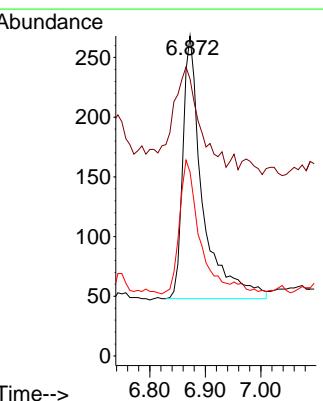
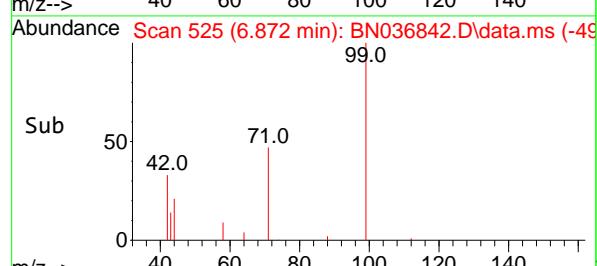
Tgt Ion:112 Resp: 770  
Ion Ratio Lower Upper  
112 100  
64 69.7 53.1 79.7  
63 42.9 31.8 47.8

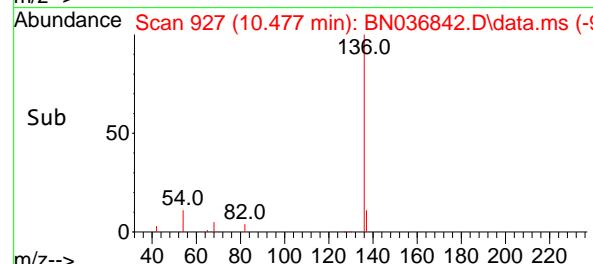
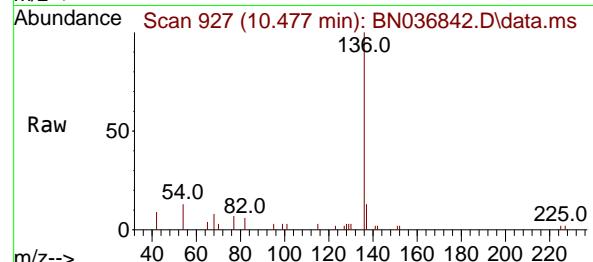
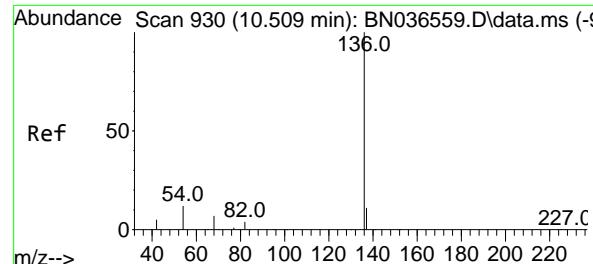


#5  
Phenol-d6  
Concen: 0.113 ng  
RT: 6.872 min Scan# 525  
Delta R.T. 0.007 min  
Lab File: BN036842.D  
Acq: 04 Apr 2025 19:10



Tgt Ion: 99 Resp: 545  
Ion Ratio Lower Upper  
99 100  
42 48.3 26.5 39.7#  
71 50.8 34.1 51.1



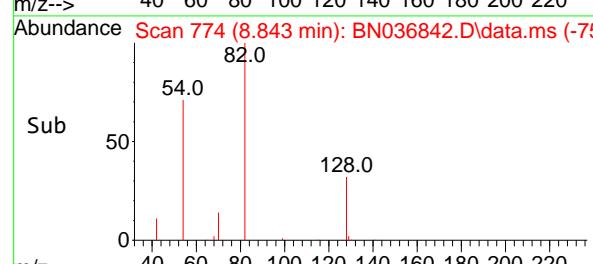
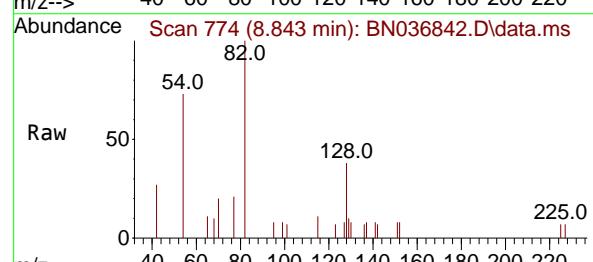
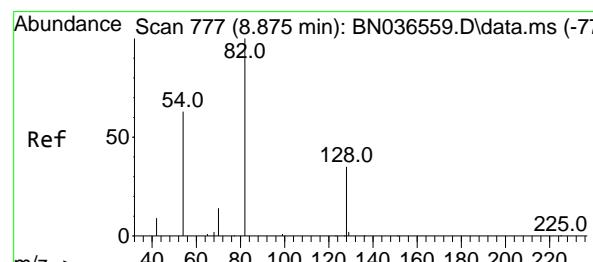
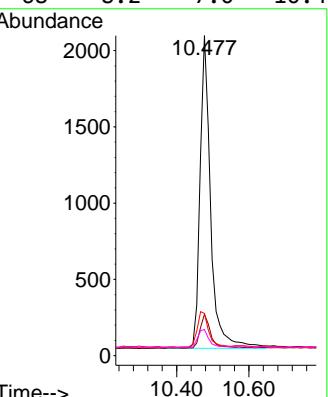


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.477 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325

Tgt Ion:136 Resp: 4185

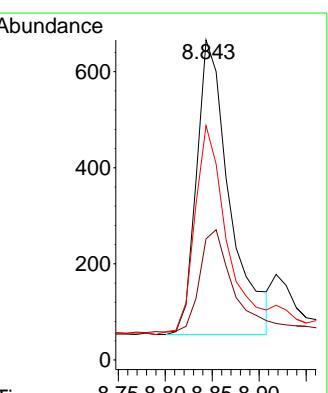
Ion	Ratio	Lower	Upper
136	100		
137	13.0	10.3	15.5
54	13.2	11.5	17.3
68	8.2	7.0	10.4

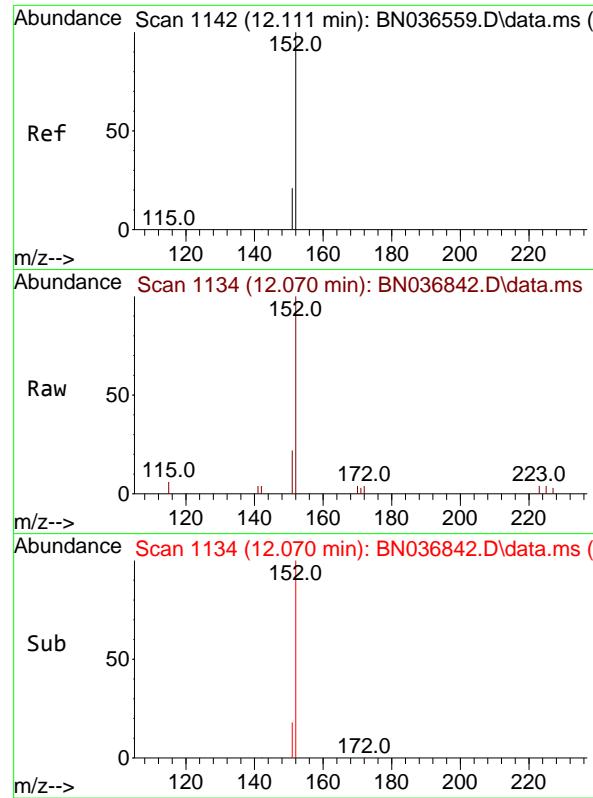


#8  
 Nitrobenzene-d5  
 Concen: 0.331 ng  
 RT: 8.843 min Scan# 774  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

Tgt Ion: 82 Resp: 1507

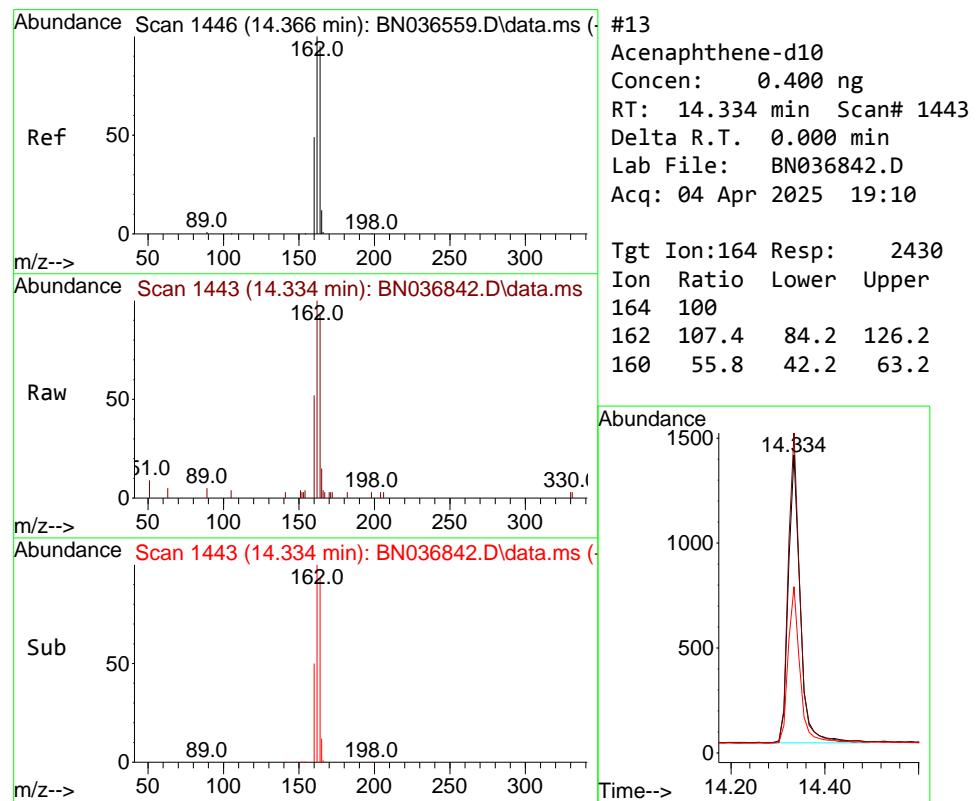
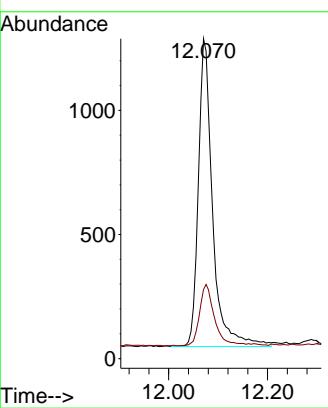
Ion	Ratio	Lower	Upper
82	100		
128	37.8	30.6	45.8
54	73.3	52.2	78.4





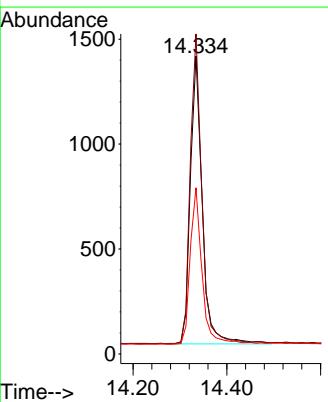
#11  
2-Methylnaphthalene-d10  
Concen: 0.398 ng  
RT: 12.070 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036842.D  
ClientSampleId : RMW-03B-90-040325  
Acq: 04 Apr 2025 19:10

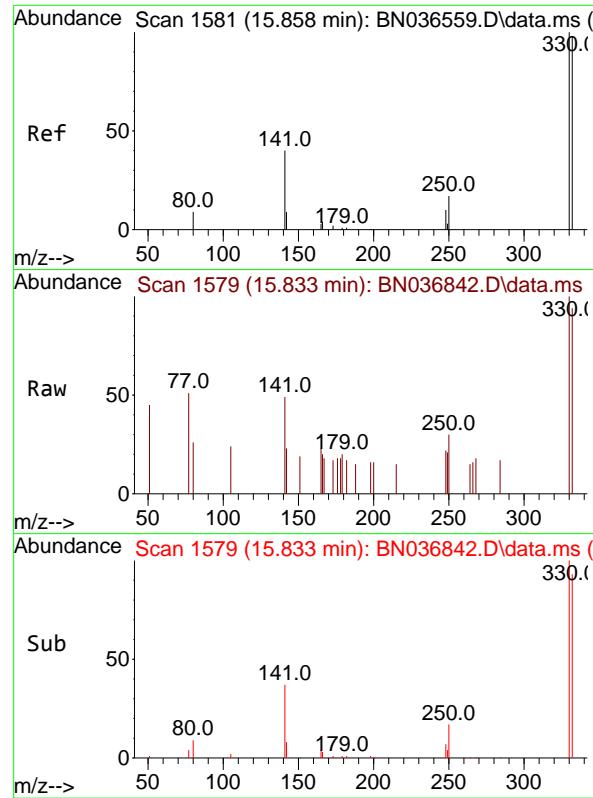
Tgt Ion:152 Resp: 2477  
Ion Ratio Lower Upper  
152 100  
151 20.9 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. 0.000 min  
Lab File: BN036842.D  
Acq: 04 Apr 2025 19:10

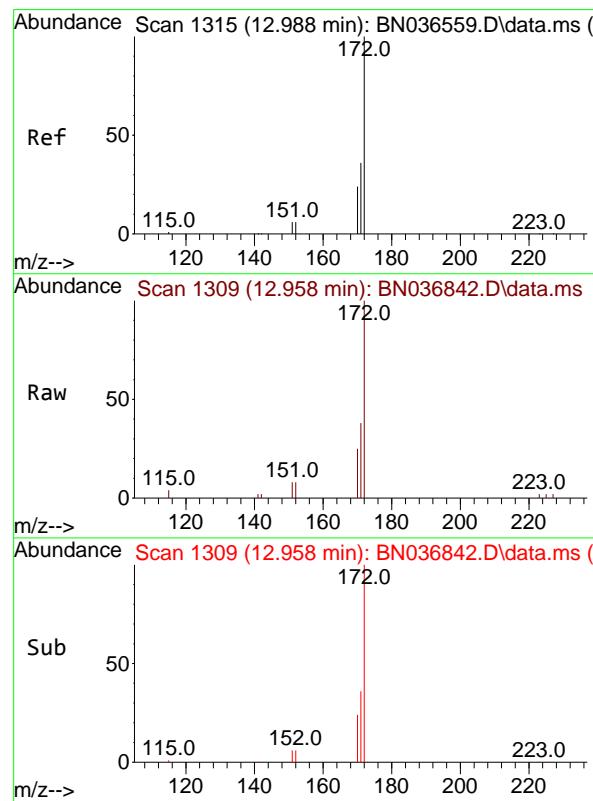
Tgt Ion:164 Resp: 2430  
Ion Ratio Lower Upper  
164 100  
162 107.4 84.2 126.2  
160 55.8 42.2 63.2





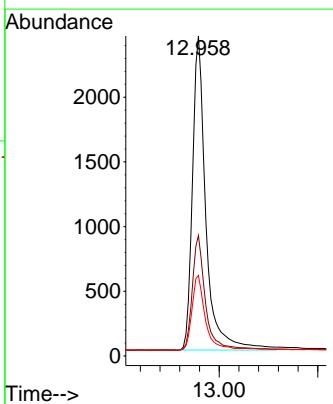
#14  
2,4,6-Tribromophenol  
Concen: 0.480 ng  
RT: 15.833 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036842.D  
Acq: 04 Apr 2025 19:10

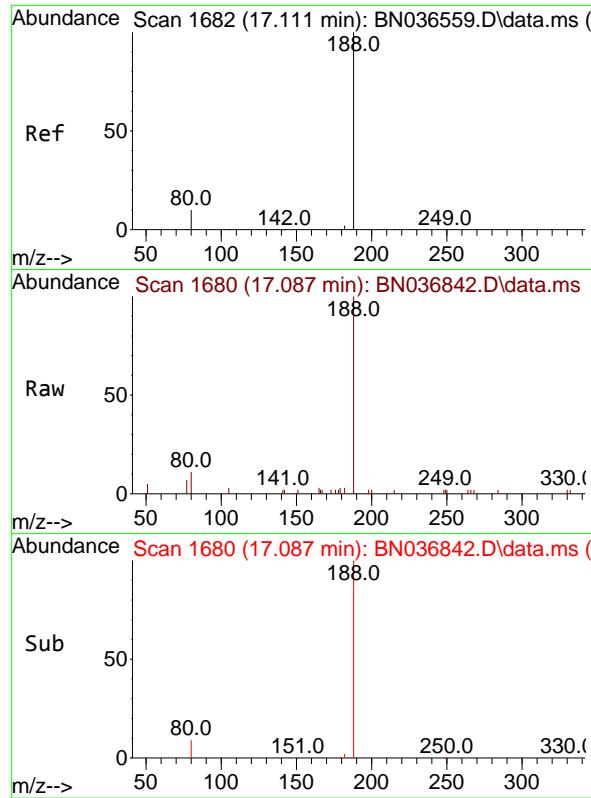
Instrument : BNA\_N  
ClientSampleId : RMW-03B-90-040325



#15  
2-Fluorobiphenyl  
Concen: 0.434 ng  
RT: 12.958 min Scan# 1309  
Delta R.T. 0.000 min  
Lab File: BN036842.D  
Acq: 04 Apr 2025 19:10

Tgt Ion:172 Resp: 6138  
Ion Ratio Lower Upper  
172 100  
171 37.7 29.5 44.3  
170 25.1 20.2 30.4

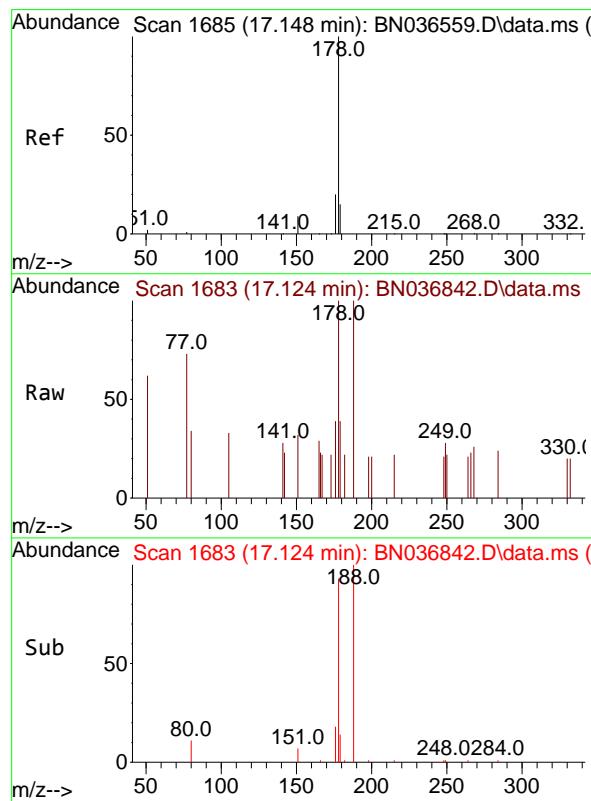
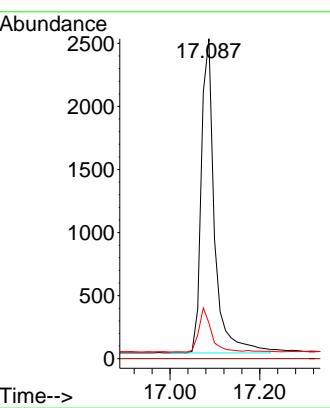




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.087 min Scan# 1  
 Delta R.T. 0.012 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

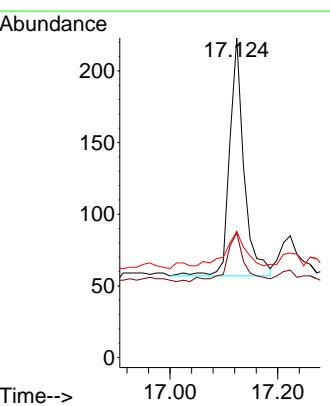
Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325

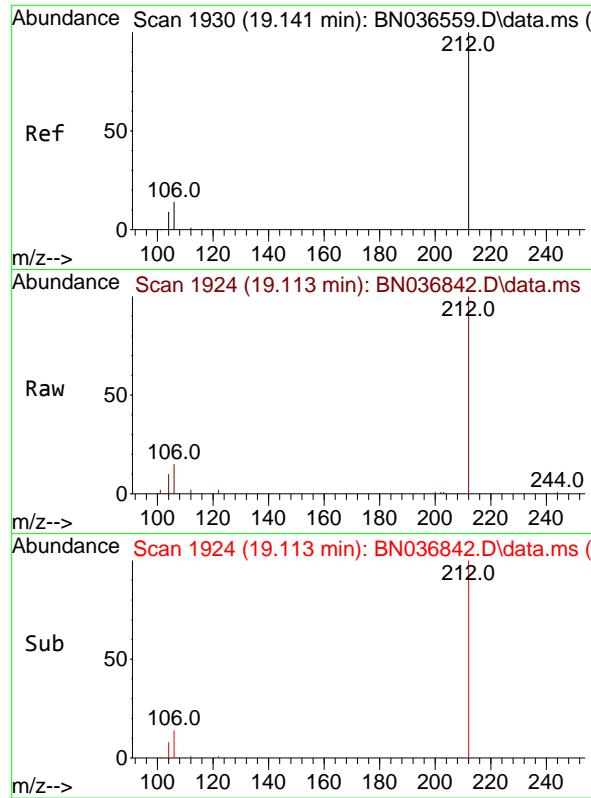
Tgt Ion:188 Resp: 5085  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 11.2 8.8 13.2



#25  
 Phenanthrene  
 Concen: 0.020 ng  
 RT: 17.124 min Scan# 1683  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

Tgt Ion:178 Resp: 308  
 Ion Ratio Lower Upper  
 178 100  
 176 25.3 15.9 23.9#  
 179 22.4 12.2 18.4#

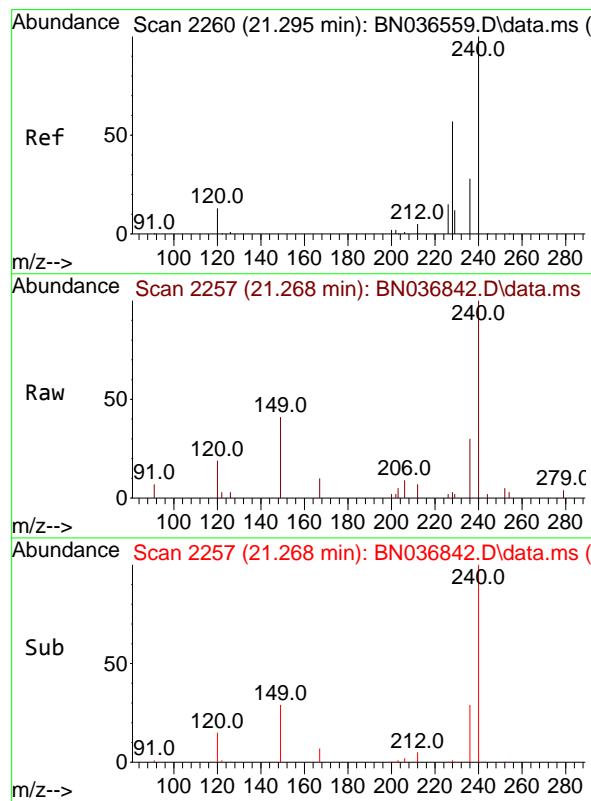
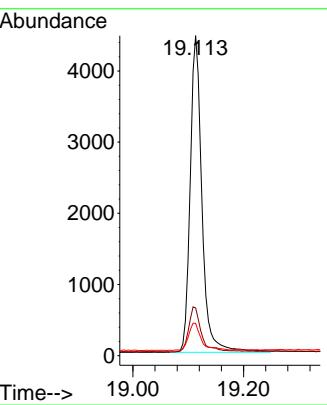




#27  
 Fluoranthene-d10  
 Concen: 0.506 ng  
 RT: 19.113 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

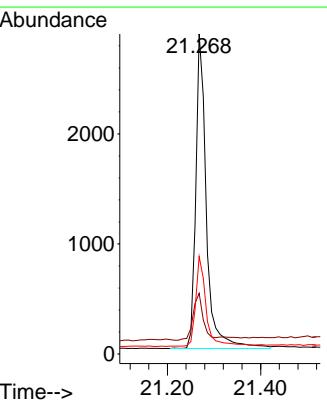
Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325

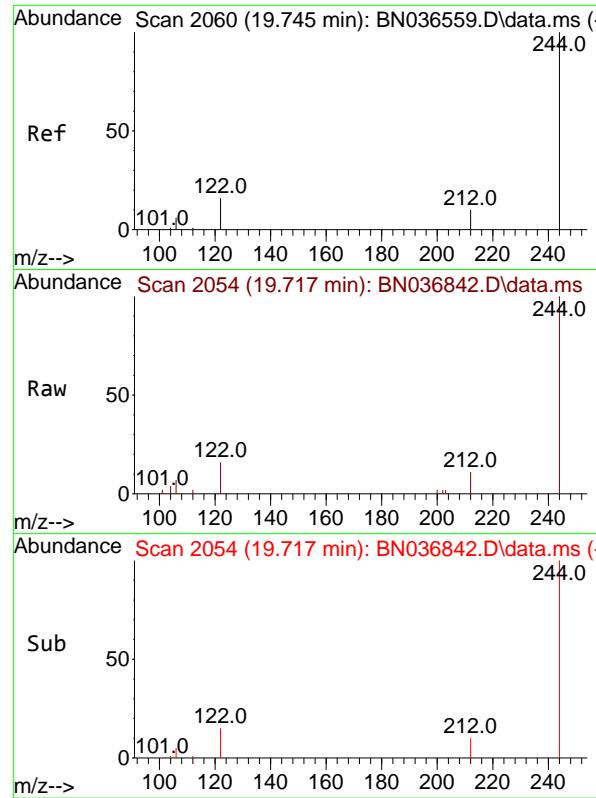
Tgt Ion:212 Resp: 6590  
 Ion Ratio Lower Upper  
 212 100  
 106 15.2 11.8 17.6  
 104 9.4 7.3 10.9



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.268 min Scan# 2257  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

Tgt Ion:240 Resp: 4539  
 Ion Ratio Lower Upper  
 240 100  
 120 18.9 14.6 22.0  
 236 30.4 24.1 36.1

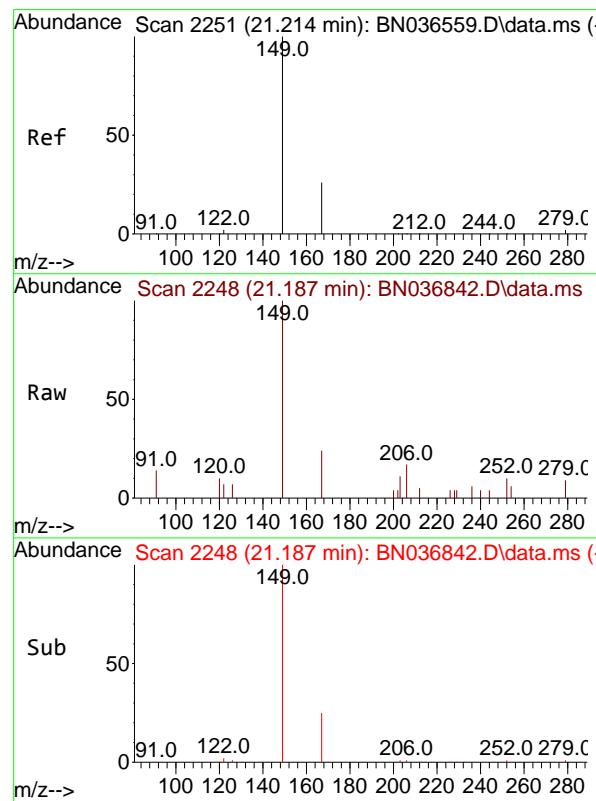
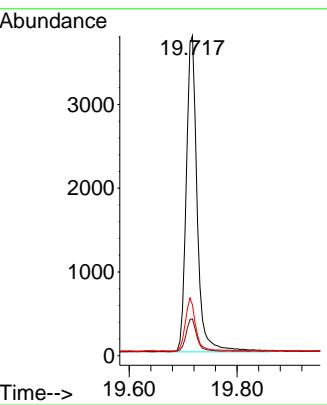




#31  
 Terphenyl-d14  
 Concen: 0.489 ng  
 RT: 19.717 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

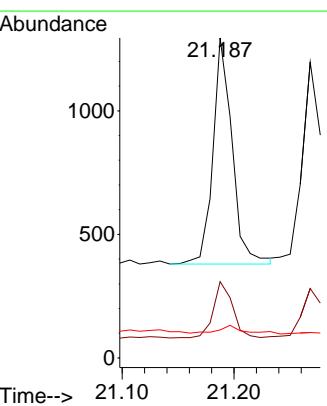
Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325

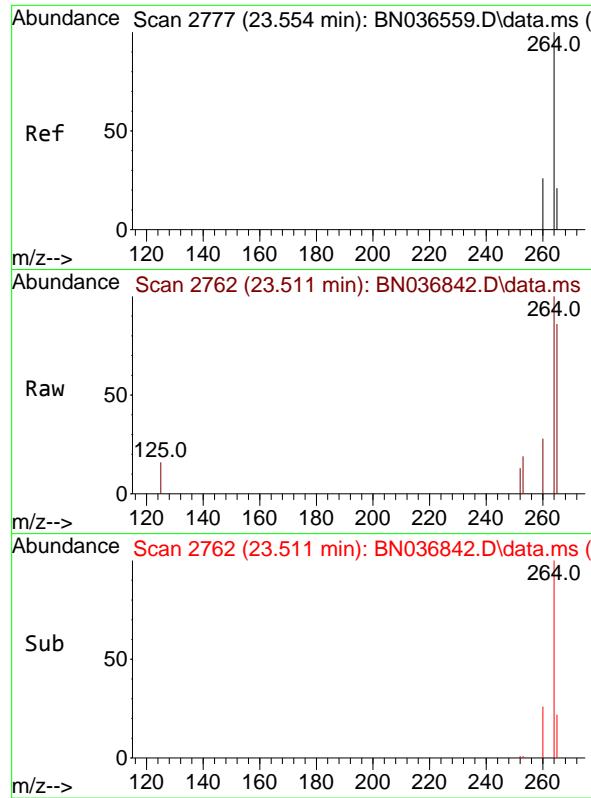
Tgt Ion:244 Resp: 5322  
 Ion Ratio Lower Upper  
 244 100  
 212 11.5 9.6 14.4  
 122 15.9 13.9 20.9



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.097 ng  
 RT: 21.187 min Scan# 2248  
 Delta R.T. 0.000 min  
 Lab File: BN036842.D  
 Acq: 04 Apr 2025 19:10

Tgt Ion:149 Resp: 1089  
 Ion Ratio Lower Upper  
 149 100  
 167 24.9 20.7 31.1  
 279 5.1 3.6 5.4

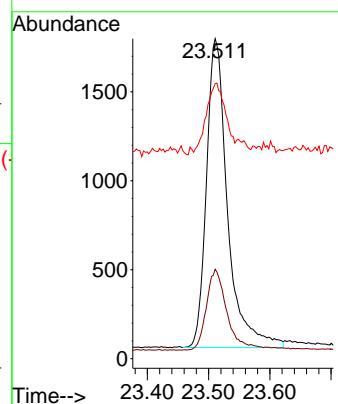




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.511 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036842.D  
Acq: 04 Apr 2025 19:10

Instrument : BNA\_N  
ClientSampleId : RMW-03B-90-040325

Tgt Ion:264 Resp: 4155  
Ion Ratio Lower Upper  
264 100  
260 28.0 22.6 33.8  
265 85.9 88.1 132.1#





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	04/03/25	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	04/03/25	
Client Sample ID:	RMW-03B-90-040325DL			SDG No.:	Q1731	
Lab Sample ID:	Q1731-04DL			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	980	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
BN036849.D	5	04/04/25 11:35	04/07/25 10:22	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	9.50	D	0.35	1.00	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.47		30 (20) - 150 (139)	117%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.60		30 (30) - 150 (150)	149%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.44		30 (27) - 130 (154)	109%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		30 (25) - 130 (149)	101%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.58	*	30 (54) - 130 (175)	145%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1420	7.695			
1146-65-2	Naphthalene-d8	3370	10.487			
15067-26-2	Acenaphthene-d10	2090	14.334			
1517-22-2	Phenanthrene-d10	4260	17.086			
1719-03-5	Chrysene-d12	3830	21.277			
1520-96-3	Perylene-d12	3500	23.519			

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\BN040725\  
 Data File : BN036849.D  
 Acq On : 07 Apr 2025 10:22  
 Operator : RC/JU  
 Sample : Q1731-04DL 5X  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**RMW-03B-90-040325DL**

Quant Time: Apr 07 10:46:15 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

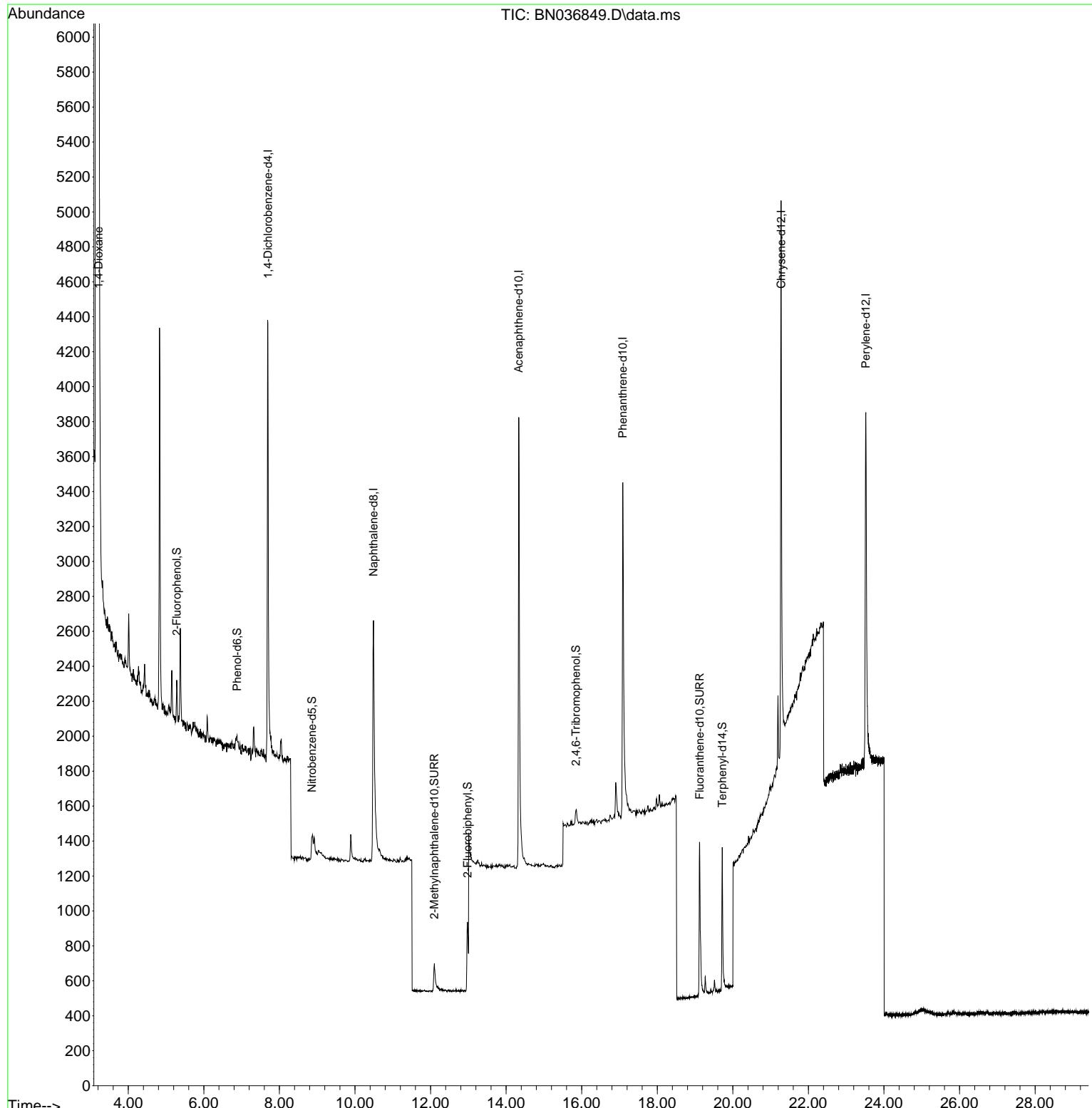
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.695	152	1423	0.400	ng	0.00
7) Naphthalene-d8	10.487	136	3367	0.400	ng	# 0.01
13) Acenaphthene-d10	14.334	164	2092	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4259	0.400	ng	# 0.01
29) Chrysene-d12	21.277	240	3832	0.400	ng	0.00
35) Perylene-d12	23.519	264	3500	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.283	112	163	0.049	ng	0.00
5) Phenol-d6	6.879	99	106	0.026	ng	0.01
8) Nitrobenzene-d5	8.864	82	318	0.087	ng	0.02
11) 2-Methylnaphthalene-d10	12.101	152	469	0.094	ng	0.03
14) 2,4,6-Tribromophenol	15.845	330	110	0.116	ng	0.01
15) 2-Fluorobiphenyl	12.978	172	982	0.081	ng	0.02
27) Fluoranthene-d10	19.122	212	1303	0.119	ng	0.00
31) Terphenyl-d14	19.722	244	1067	0.116	ng	0.00
<b>Target Compounds</b>						
2) 1,4-Dioxane	3.218	88	2931	1.857	ng	96

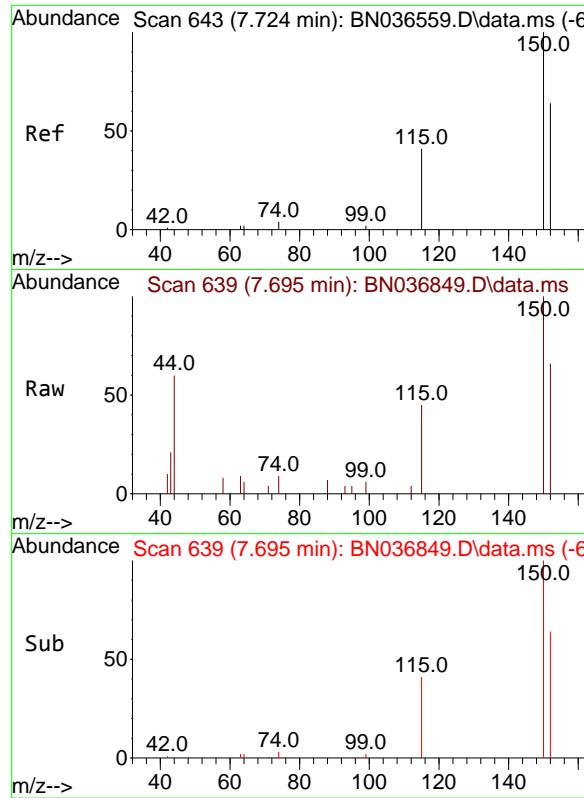
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036849.D  
 Acq On : 07 Apr 2025 10:22  
 Operator : RC/JU  
 Sample : Q1731-04DL 5X  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 RMW-03B-90-040325DL

Quant Time: Apr 07 10:46:15 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

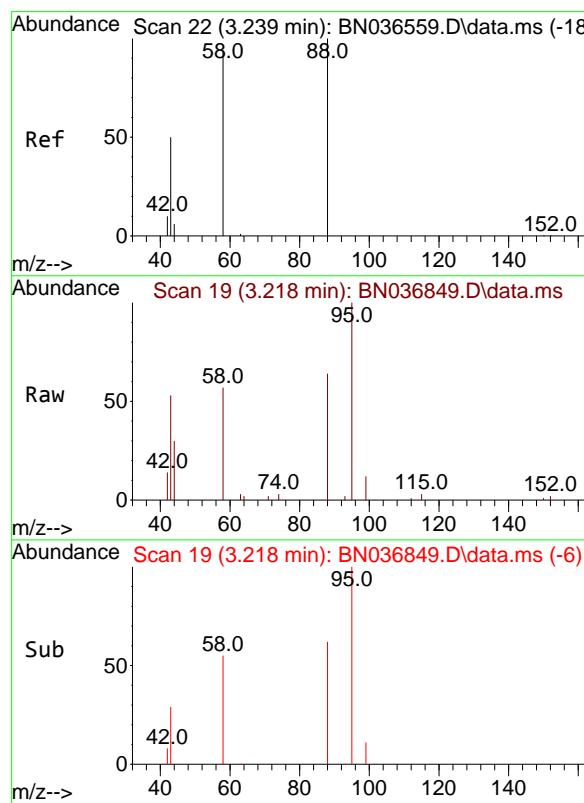
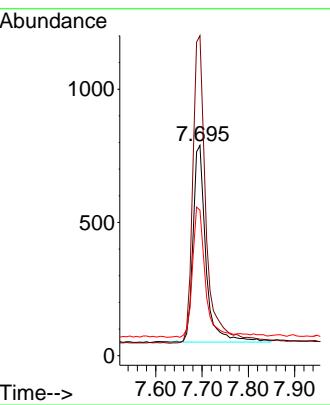




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

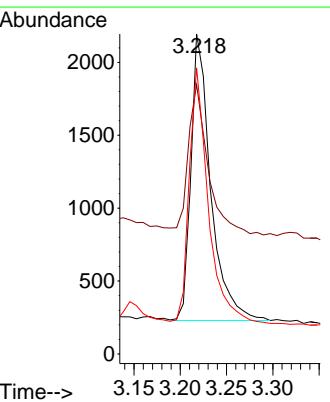
Instrument : BNA\_N  
ClientSampleId : RMW-03B-90-040325DL

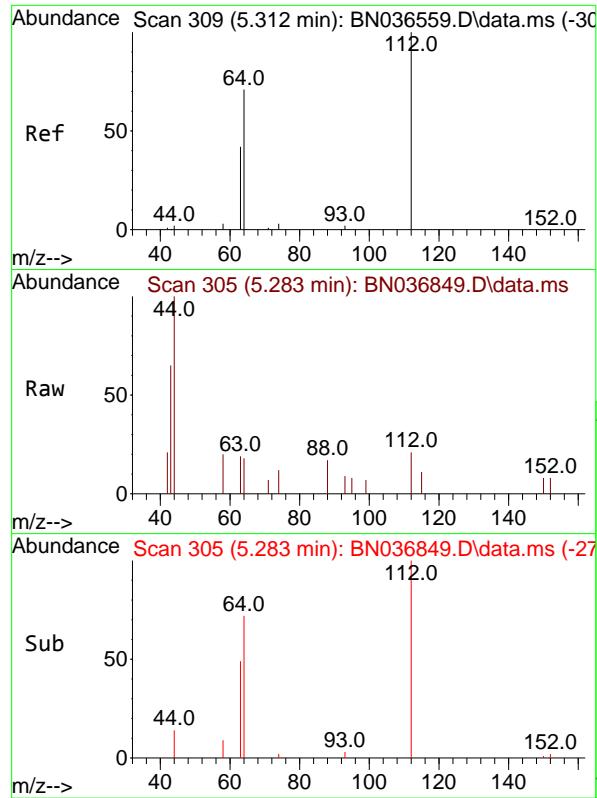
Tgt Ion:152 Resp: 1423  
Ion Ratio Lower Upper  
152 100  
150 152.2 123.7 185.5  
115 69.2 54.3 81.5



#2  
1,4-Dioxane  
Concen: 1.857 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.007 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

Tgt Ion: 88 Resp: 2931  
Ion Ratio Lower Upper  
88 100  
43 52.9 37.8 56.8  
58 86.1 67.4 101.2

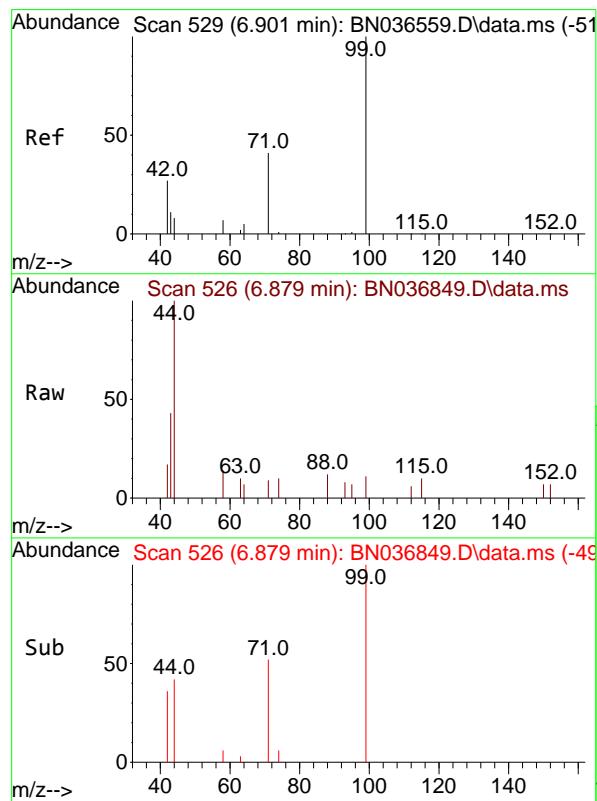
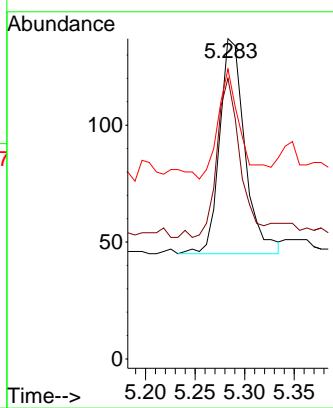




#4  
 2-Fluorophenol  
 Concen: 0.049 ng  
 RT: 5.283 min Scan# 3  
 Delta R.T. -0.000 min  
 Lab File: BN036849.D  
 Acq: 07 Apr 2025 10:22

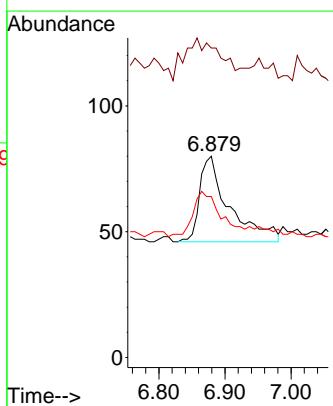
Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325DL

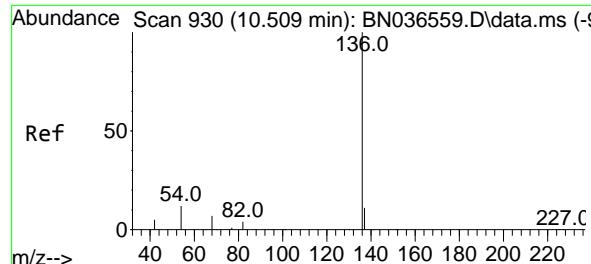
Tgt Ion:112 Resp: 163  
 Ion Ratio Lower Upper  
 112 100  
 64 68.1 53.1 79.7  
 63 41.7 31.8 47.8



#5  
 Phenol-d6  
 Concen: 0.026 ng  
 RT: 6.879 min Scan# 526  
 Delta R.T. 0.014 min  
 Lab File: BN036849.D  
 Acq: 07 Apr 2025 10:22

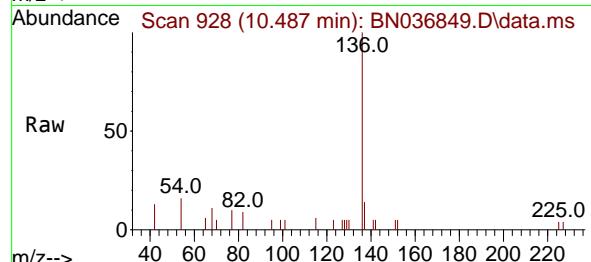
Tgt Ion: 99 Resp: 106  
 Ion Ratio Lower Upper  
 99 100  
 42 0.0 26.5 39.7#  
 71 0.0 34.1 51.1#



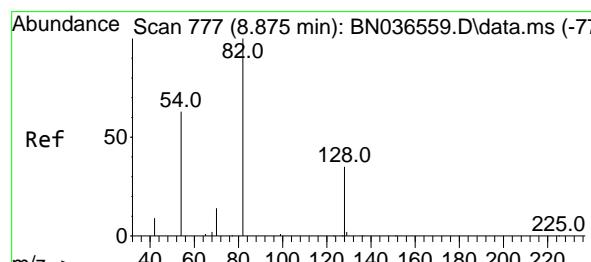
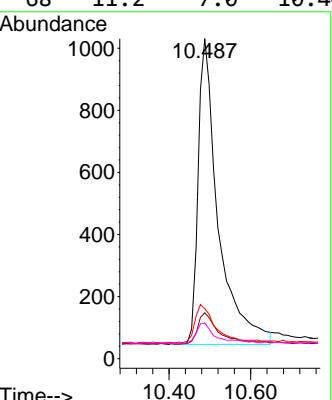
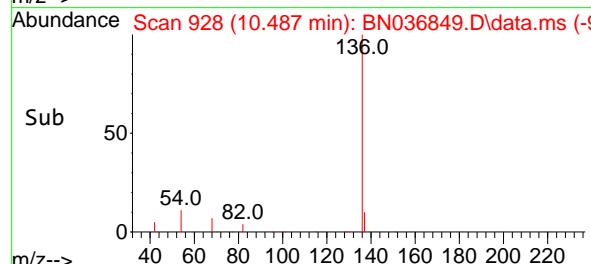


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.487 min Scan# 9  
 Delta R.T. 0.011 min  
 Lab File: BN036849.D  
 Acq: 07 Apr 2025 10:22

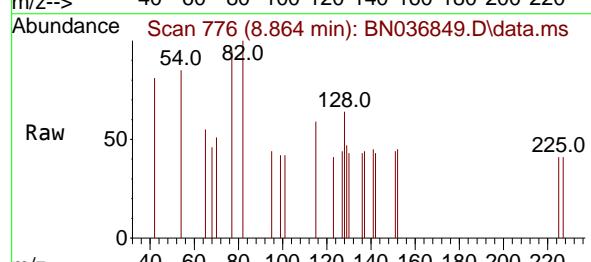
Instrument : BNA\_N  
 ClientSampleId : RMW-03B-90-040325DL



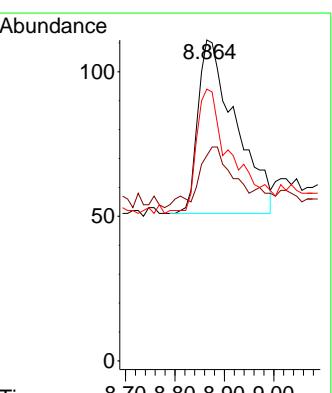
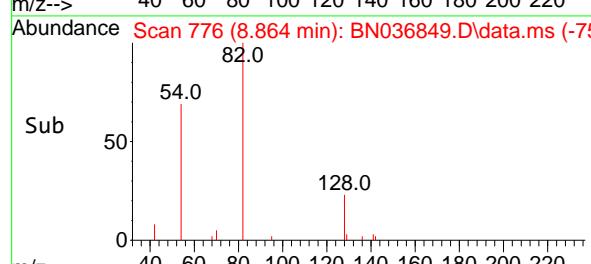
Tgt Ion:136 Resp: 3367  
 Ion Ratio Lower Upper  
 136 100  
 137 14.4 10.3 15.5  
 54 15.6 11.5 17.3  
 68 11.2 7.0 10.4#

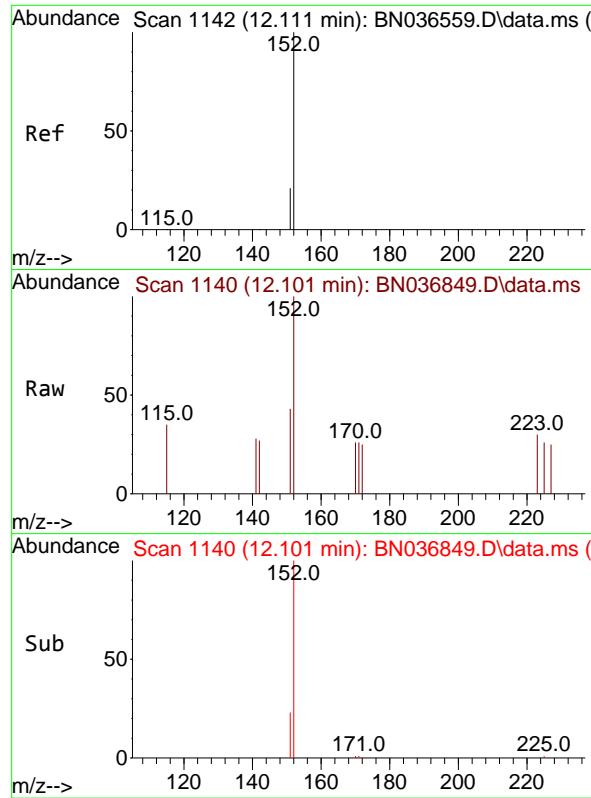


#8  
 Nitrobenzene-d5  
 Concen: 0.087 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. 0.021 min  
 Lab File: BN036849.D  
 Acq: 07 Apr 2025 10:22



Tgt Ion: 82 Resp: 318  
 Ion Ratio Lower Upper  
 82 100  
 128 64.0 30.6 45.8#  
 54 84.7 52.2 78.4#

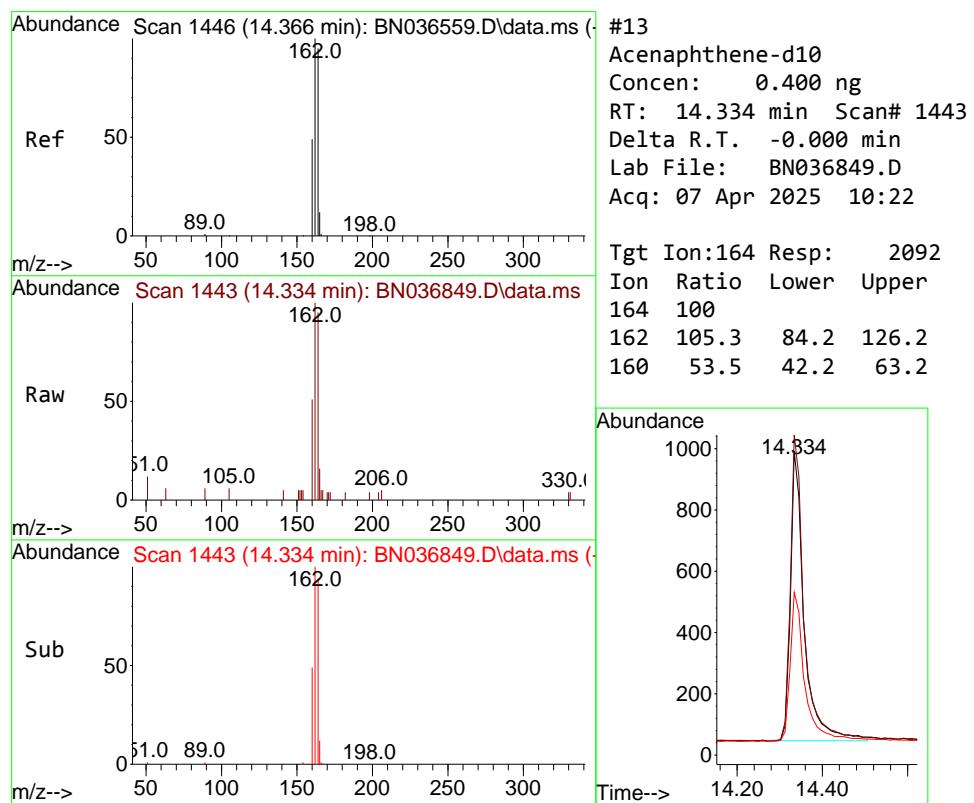
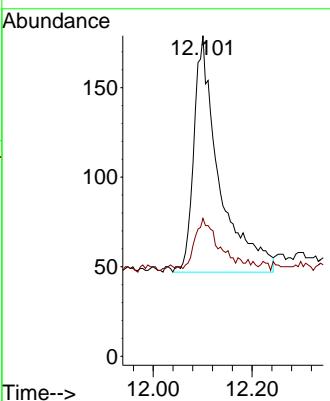




#11  
2-Methylnaphthalene-d10  
Concen: 0.094 ng  
RT: 12.101 min Scan# 1142  
Delta R.T. 0.030 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

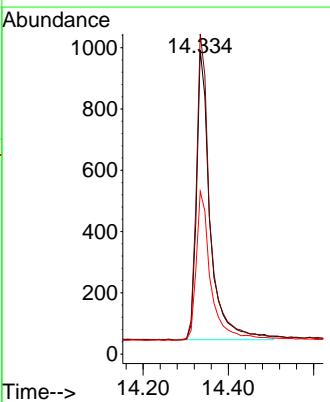
Instrument : BNA\_N  
ClientSampleId : RMW-03B-90-040325DL

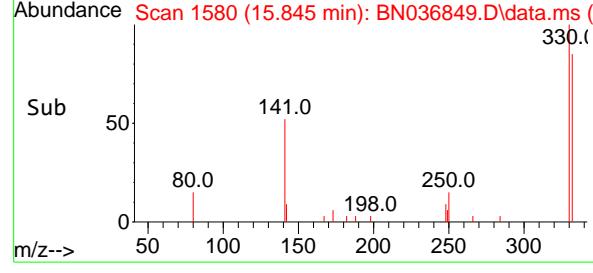
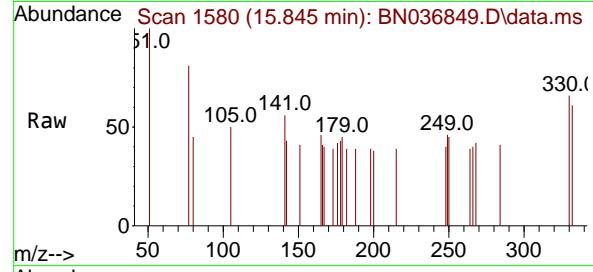
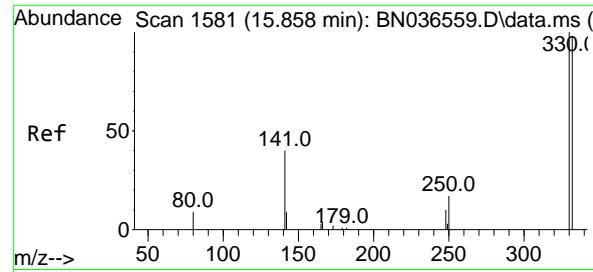
Tgt Ion:152 Resp: 469  
Ion Ratio Lower Upper  
152 100  
151 18.6 17.0 25.6



#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.334 min Scan# 1443  
Delta R.T. -0.000 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

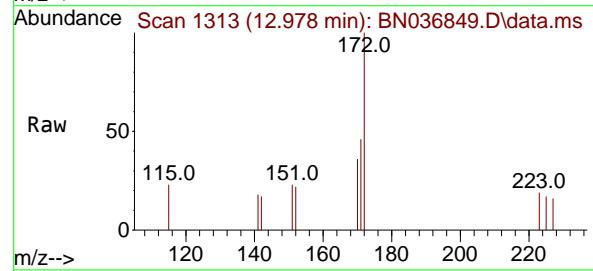
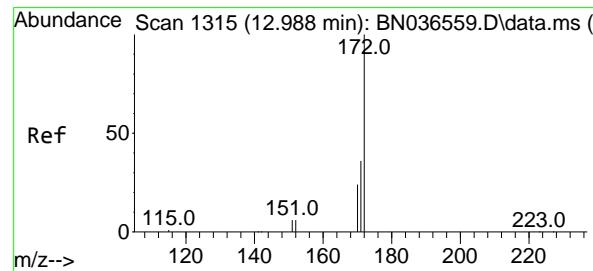
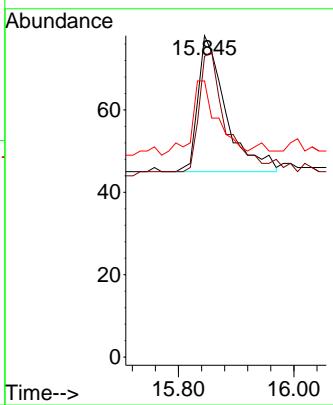
Tgt Ion:164 Resp: 2092  
Ion Ratio Lower Upper  
164 100  
162 105.3 84.2 126.2  
160 53.5 42.2 63.2





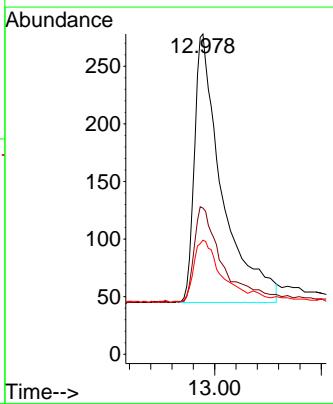
#14  
2,4,6-Tribromophenol  
Concen: 0.116 ng  
RT: 15.845 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.012 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22  
ClientSampleId : RMW-03B-90-040325DL

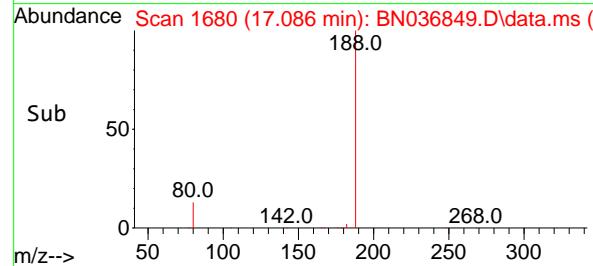
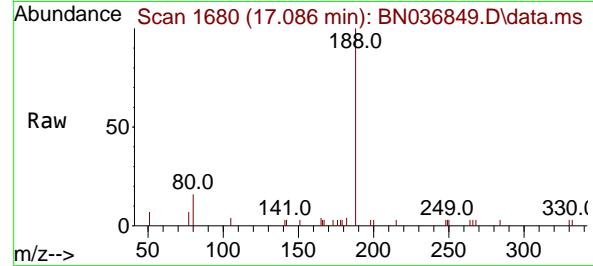
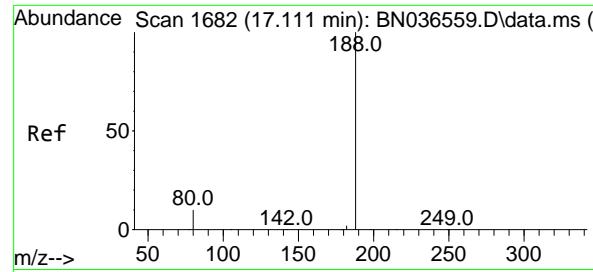
Tgt Ion:330 Resp: 110  
Ion Ratio Lower Upper  
330 100  
332 83.6 75.2 112.8  
141 0.0 43.4 65.2#



#15  
2-Fluorobiphenyl  
Concen: 0.081 ng  
RT: 12.978 min Scan# 1313  
Delta R.T. 0.020 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

Tgt Ion:172 Resp: 982  
Ion Ratio Lower Upper  
172 100  
171 45.7 29.5 44.3#  
170 35.6 20.2 30.4#





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.086 min Scan# 1

Delta R.T. 0.012 min

Lab File: BN036849.D

Acq: 07 Apr 2025 10:22

Instrument :  
BNA\_N  
ClientSampleId :  
RMW-03B-90-040325DL

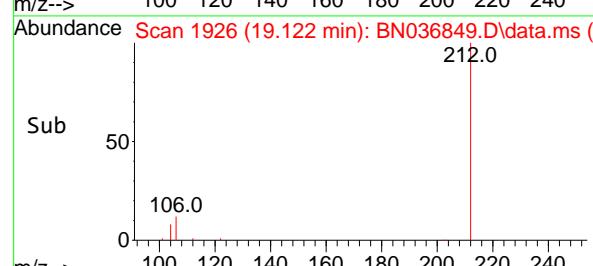
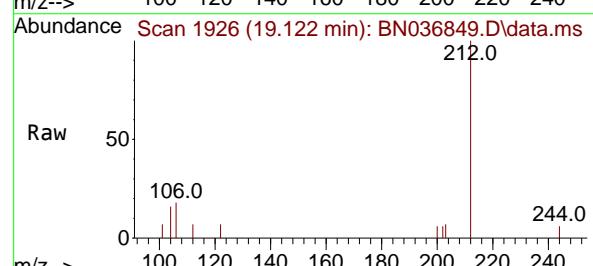
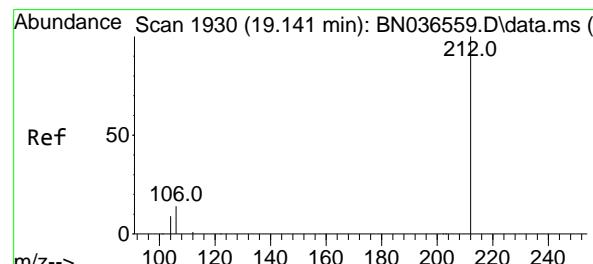
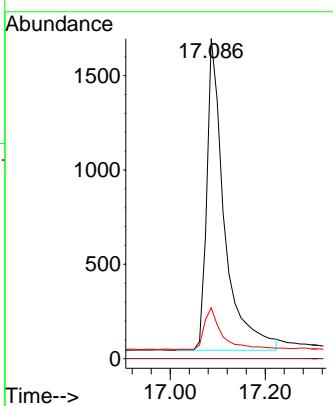
Tgt Ion:188 Resp: 4259

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 15.9 8.8 13.2#



#27

Fluoranthene-d10

Concen: 0.119 ng

RT: 19.122 min Scan# 1926

Delta R.T. 0.009 min

Lab File: BN036849.D

Acq: 07 Apr 2025 10:22

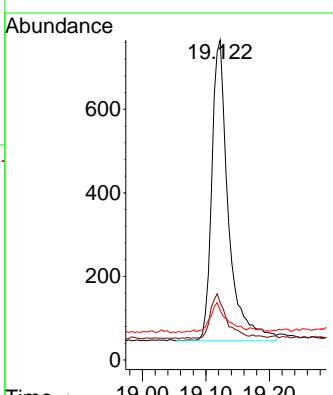
Tgt Ion:212 Resp: 1303

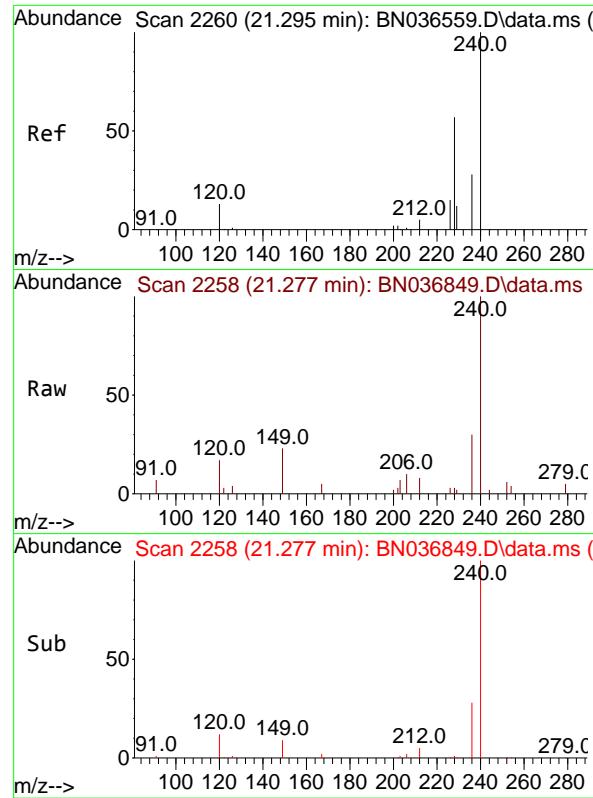
Ion Ratio Lower Upper

212 100

106 13.7 11.8 17.6

104 9.1 7.3 10.9

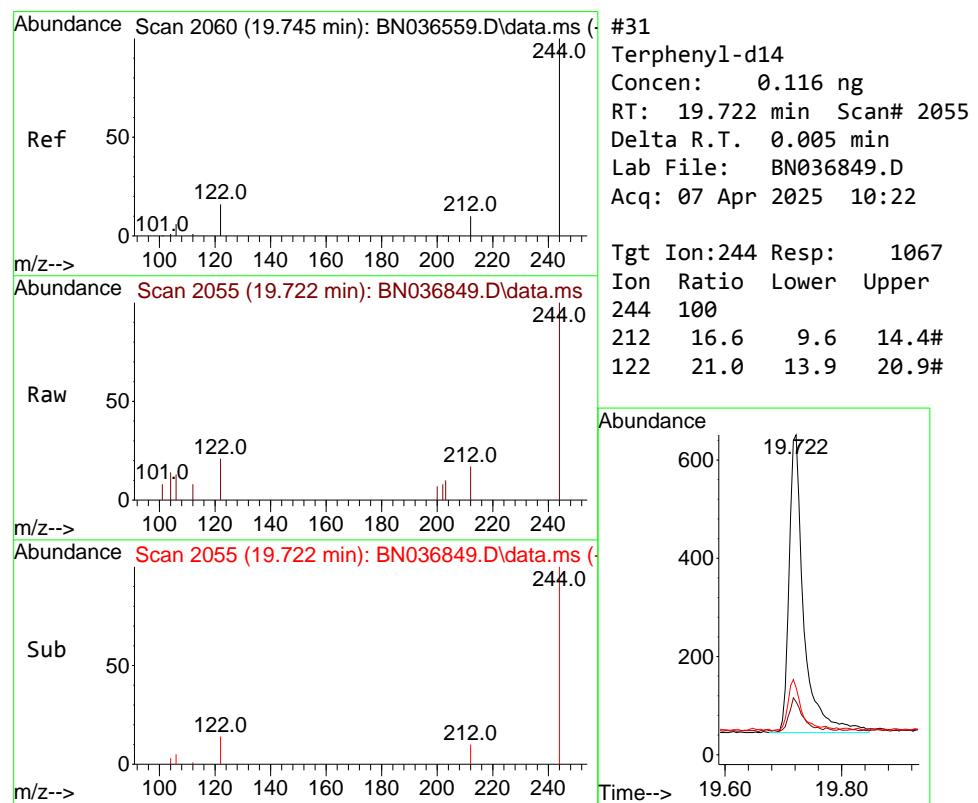
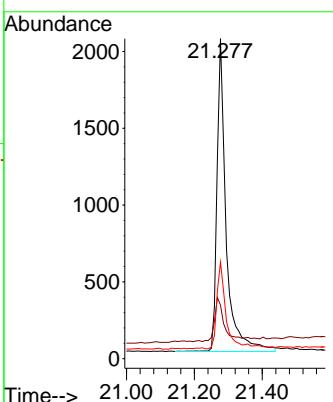




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

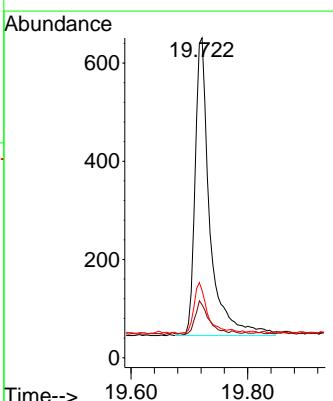
Instrument : BNA\_N  
ClientSampleId : RMW-03B-90-040325DL

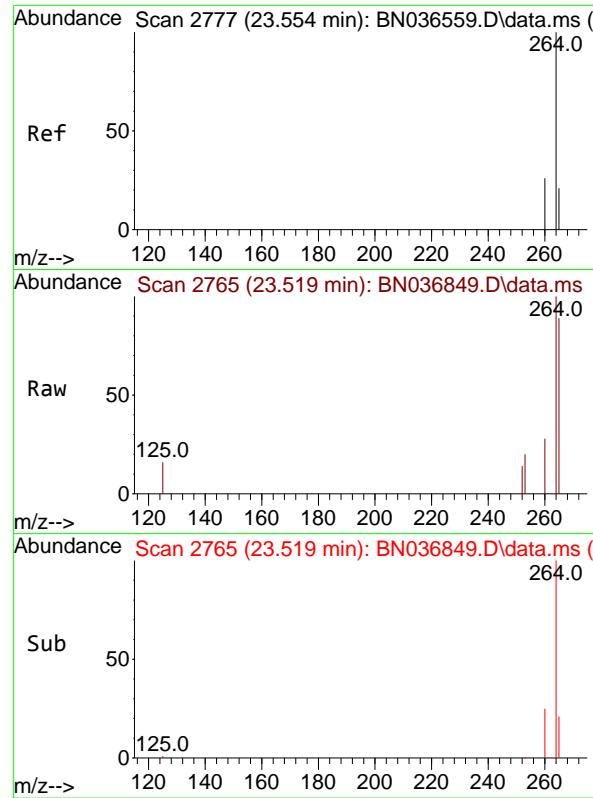
Tgt Ion:240 Resp: 3832  
Ion Ratio Lower Upper  
240 100  
120 16.8 14.6 22.0  
236 30.2 24.1 36.1



#31  
Terphenyl-d14  
Concen: 0.116 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. 0.005 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

Tgt Ion:244 Resp: 1067  
Ion Ratio Lower Upper  
244 100  
212 16.6 9.6 14.4#  
122 21.0 13.9 20.9#

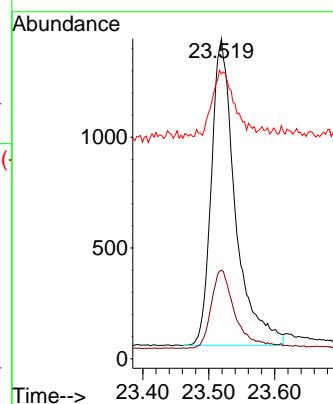




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.519 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036849.D  
Acq: 07 Apr 2025 10:22

Instrument :  
BNA\_N  
ClientSampleId :  
RMW-03B-90-040325DL

Tgt	Ion:264	Resp:	3500
Ion	Ratio	Lower	Upper
264	100		
260	27.7	22.6	33.8
265	89.0	88.1	132.1





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	04/03/25	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	04/03/25	
Client Sample ID:	EB01-040325			SDG No.:	Q1731	
Lab Sample ID:	Q1731-05			Matrix:	Water	
Analytical Method:	SW8270ESIM			% Solid:	0	
Sample Wt/Vol:	960	Units:	mL	Final Vol:	1000	uL
Soil Aliquot Vol:	uL			Test:	SVOC-SIMGroup1	
Extraction Type :	Decanted : N			Level :	LOW	
Injection Volume :	GPC Factor : 1.0			GPC Cleanup :	N	PH :
Prep Method :						

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN036843.D	1	04/04/25 11:35	04/04/25 19:46	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.070	U	0.070	0.21	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.40		30 (20) - 150 (139)	100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.51		30 (30) - 150 (150)	128%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		30 (27) - 130 (154)	88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.41		30 (25) - 130 (149)	103%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		30 (54) - 130 (175)	120%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1620	7.696			
1146-65-2	Naphthalene-d8	4100	10.477			
15067-26-2	Acenaphthene-d10	2430	14.334			
1517-22-2	Phenanthrene-d10	5120	17.074			
1719-03-5	Chrysene-d12	4850	21.268			
1520-96-3	Perylene-d12	4310	23.508			

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036843.D  
 Acq On : 04 Apr 2025 19:46  
 Operator : RC/JU  
 Sample : Q1731-05  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 EB01-040325

Quant Time: Apr 04 22:49:48 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

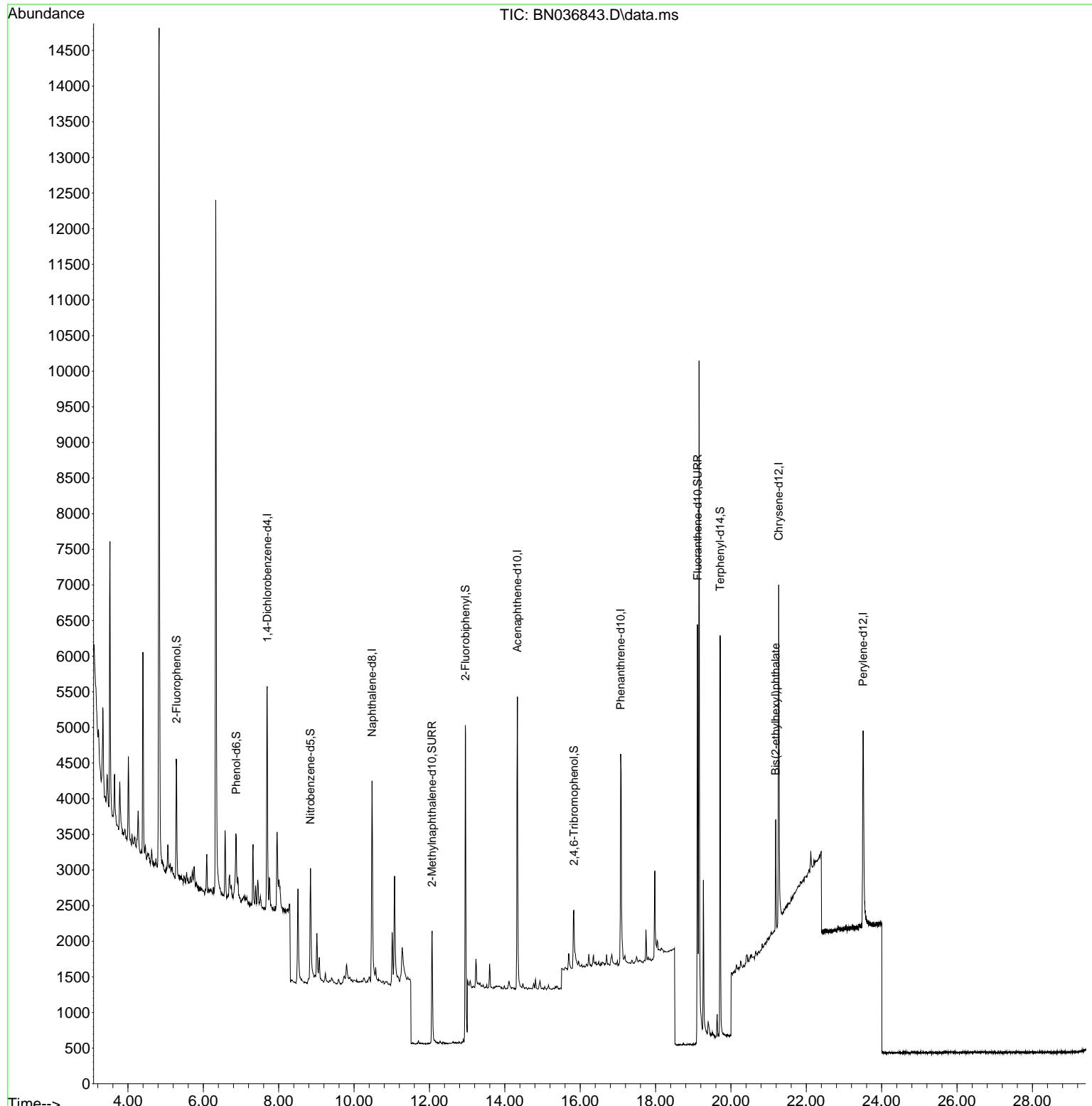
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.696	152	1624	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	4101	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2430	0.400	ng	0.00
19) Phenanthrene-d10	17.074	188	5123	0.400	ng	# 0.00
29) Chrysene-d12	21.268	240	4847	0.400	ng	0.00
35) Perylene-d12	23.508	264	4314	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.291	112	1203	0.318	ng	0.00
5) Phenol-d6	6.872	99	962	0.206	ng	0.00
8) Nitrobenzene-d5	8.843	82	1575	0.353	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	2439	0.400	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	565	0.512	ng	0.00
15) 2-Fluorobiphenyl	12.953	172	5843	0.413	ng	0.00
27) Fluoranthene-d10	19.113	212	6737	0.513	ng	0.00
31) Terphenyl-d14	19.712	244	5575	0.480	ng	0.00
<b>Target Compounds</b>						
34) Bis(2-ethylhexyl)phtha...	21.187	149	1349	0.112	ng	99

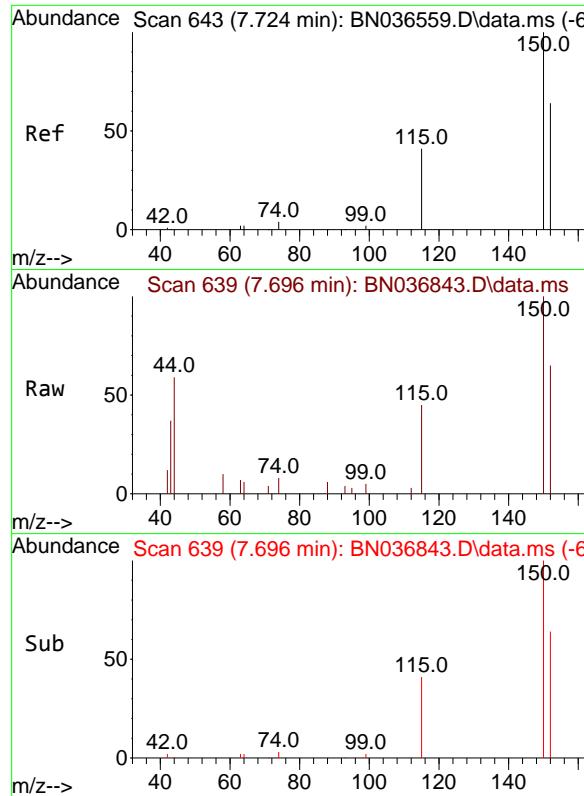
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036843.D  
 Acq On : 04 Apr 2025 19:46  
 Operator : RC/JU  
 Sample : Q1731-05  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 EB01-040325

Quant Time: Apr 04 22:49:48 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

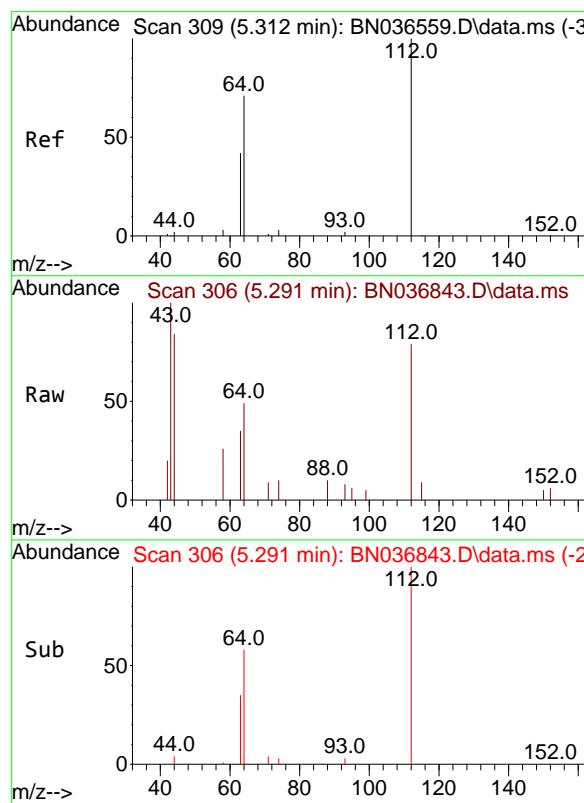
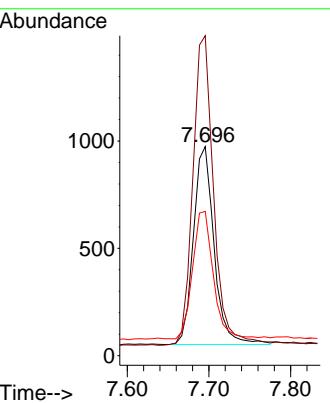




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.696 min Scan# 6  
Delta R.T. 0.008 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

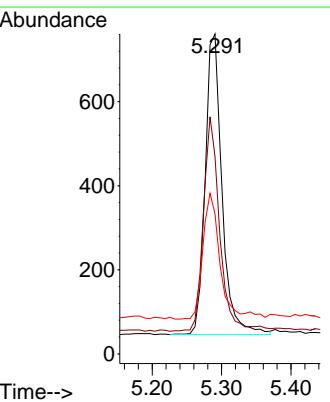
Instrument : BNA\_N  
ClientSampleId : EB01-040325

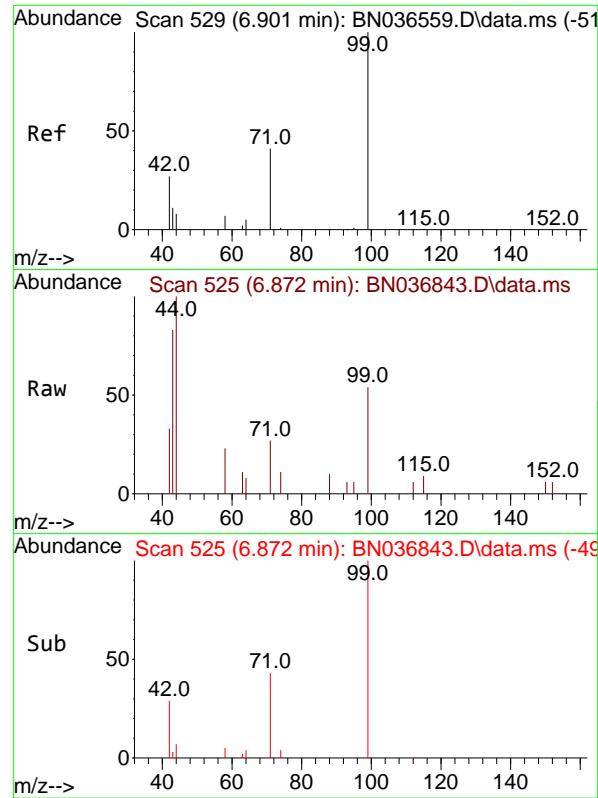
Tgt Ion:152 Resp: 1624  
Ion Ratio Lower Upper  
152 100  
150 153.1 123.7 185.5  
115 69.0 54.3 81.5



#4  
2-Fluorophenol  
Concen: 0.318 ng  
RT: 5.291 min Scan# 306  
Delta R.T. 0.007 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

Tgt Ion:112 Resp: 1203  
Ion Ratio Lower Upper  
112 100  
64 67.8 53.1 79.7  
63 41.4 31.8 47.8

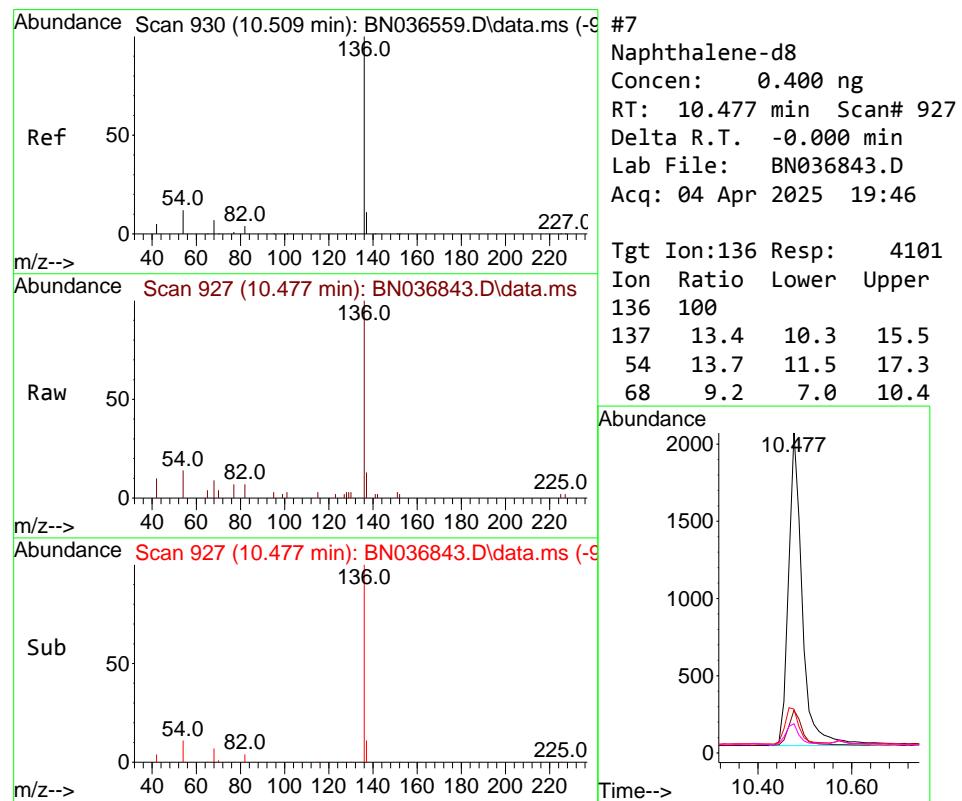
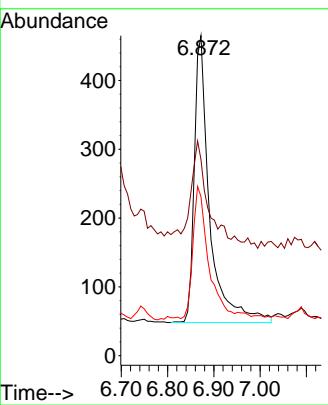




#5  
 Phenol-d6  
 Concen: 0.206 ng  
 RT: 6.872 min Scan# 5  
 Delta R.T. 0.007 min  
 Lab File: BN036843.D  
 Acq: 04 Apr 2025 19:46

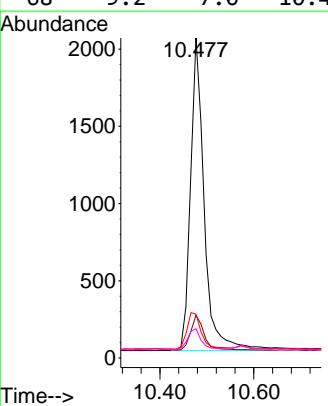
Instrument : BNA\_N  
 ClientSampleId : EB01-040325

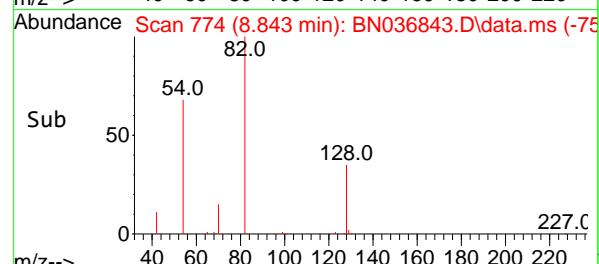
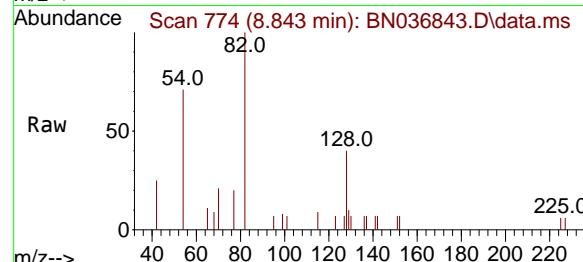
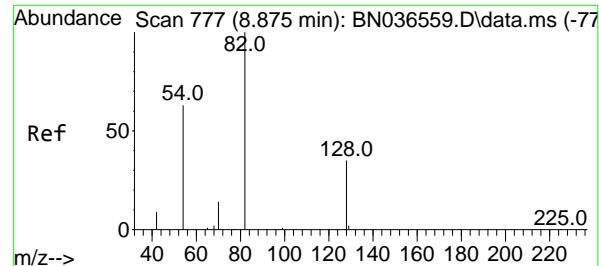
Tgt Ion: 99 Resp: 962  
 Ion Ratio Lower Upper  
 99 100  
 42 35.6 26.5 39.7  
 71 45.9 34.1 51.1



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.477 min Scan# 927  
 Delta R.T. -0.000 min  
 Lab File: BN036843.D  
 Acq: 04 Apr 2025 19:46

Tgt Ion:136 Resp: 4101  
 Ion Ratio Lower Upper  
 136 100  
 137 13.4 10.3 15.5  
 54 13.7 11.5 17.3  
 68 9.2 7.0 10.4





#8

Nitrobenzene-d5

Concen: 0.353 ng

RT: 8.843 min Scan# 7

Instrument :

BNA\_N

Delta R.T. -0.000 min

Lab File: BN036843.D

ClientSampleId :

Acq: 04 Apr 2025 19:46

EB01-040325

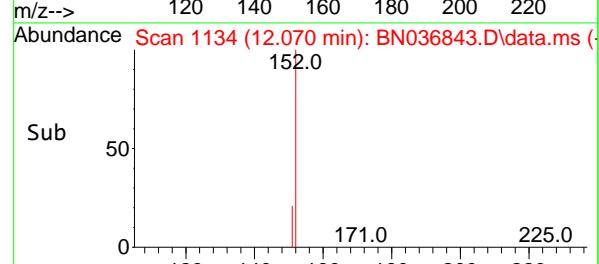
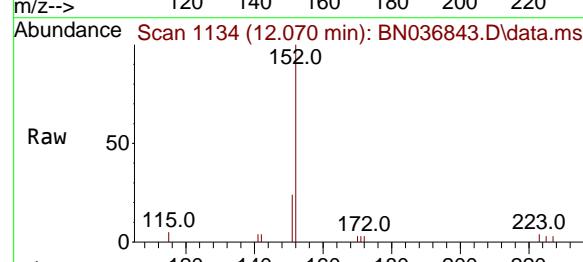
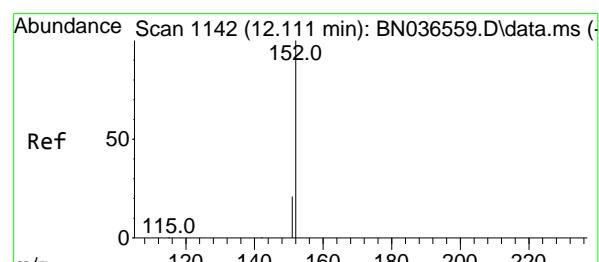
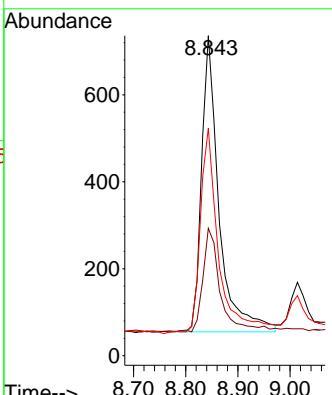
Tgt Ion: 82 Resp: 1575

Ion Ratio Lower Upper

82 100

128 39.8 30.6 45.8

54 71.1 52.2 78.4



#11

2-Methylnaphthalene-d10

Concen: 0.400 ng

RT: 12.070 min Scan# 1134

Delta R.T. -0.000 min

Lab File: BN036843.D

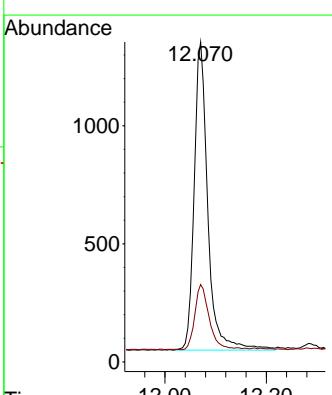
Acq: 04 Apr 2025 19:46

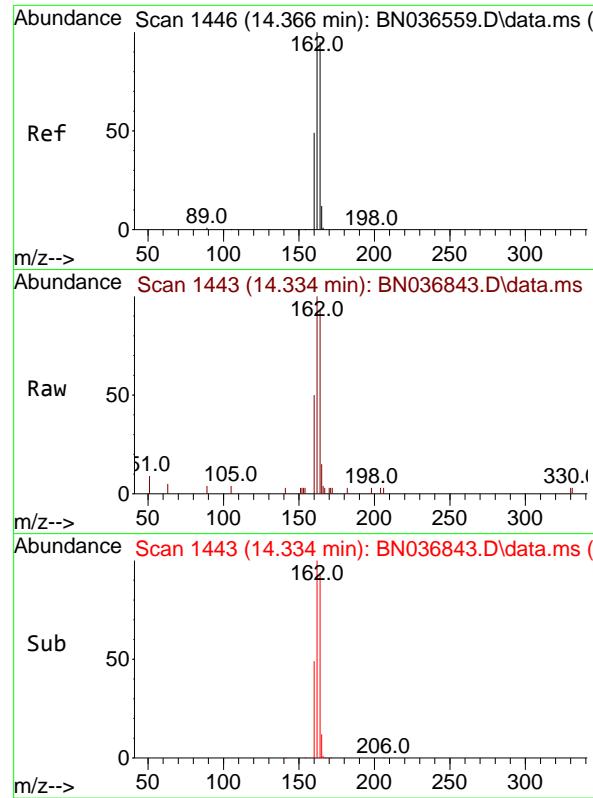
Tgt Ion: 152 Resp: 2439

Ion Ratio Lower Upper

152 100

151 22.5 17.0 25.6

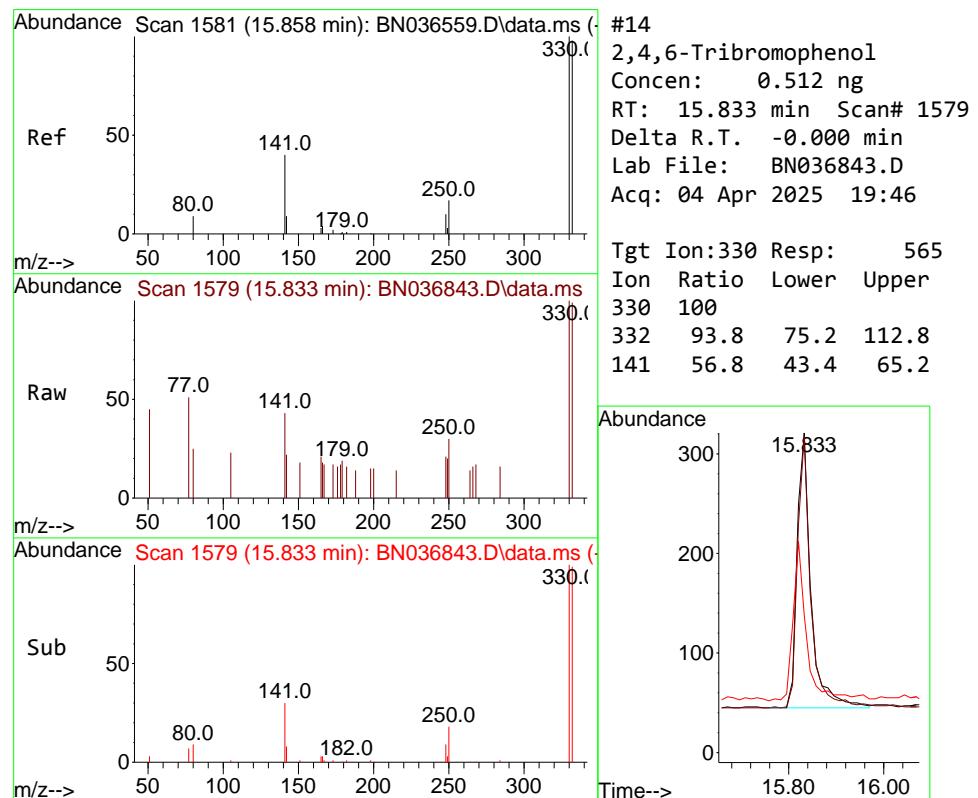
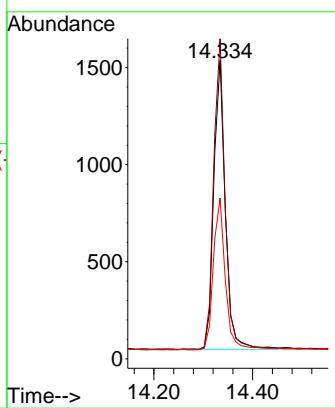




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.334 min Scan# 1443  
 Delta R.T. -0.000 min  
 Lab File: BN036843.D  
 Acq: 04 Apr 2025 19:46

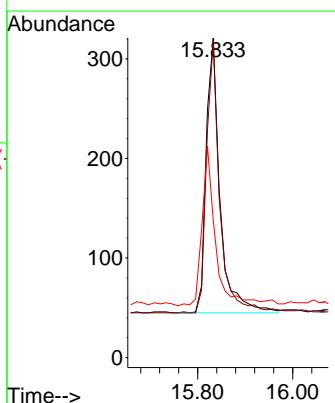
Instrument : BNA\_N  
 ClientSampleId : EB01-040325

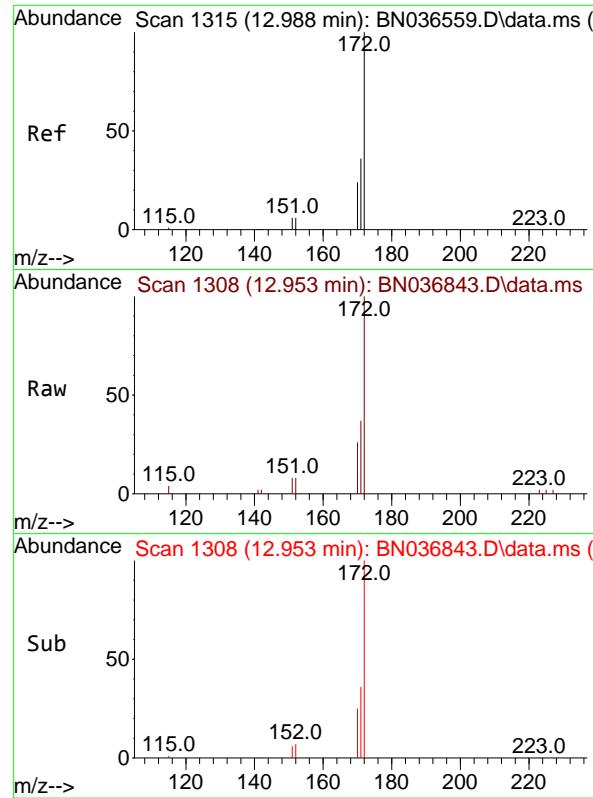
Tgt Ion:164 Resp: 2430  
 Ion Ratio Lower Upper  
 164 100  
 162 107.2 84.2 126.2  
 160 53.8 42.2 63.2



#14  
 2,4,6-Tribromophenol  
 Concen: 0.512 ng  
 RT: 15.833 min Scan# 1579  
 Delta R.T. -0.000 min  
 Lab File: BN036843.D  
 Acq: 04 Apr 2025 19:46

Tgt Ion:330 Resp: 565  
 Ion Ratio Lower Upper  
 330 100  
 332 93.8 75.2 112.8  
 141 56.8 43.4 65.2

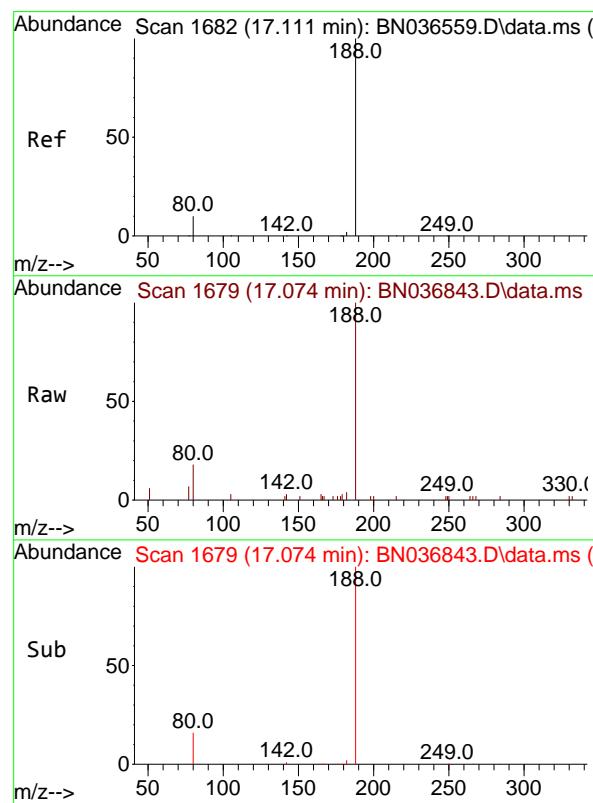
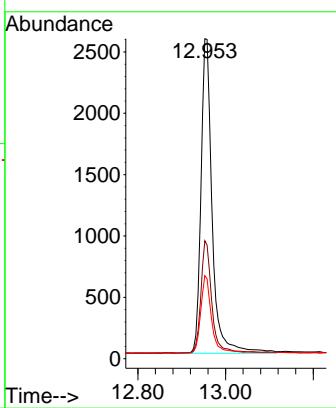




#15  
2-Fluorobiphenyl  
Concen: 0.413 ng  
RT: 12.953 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

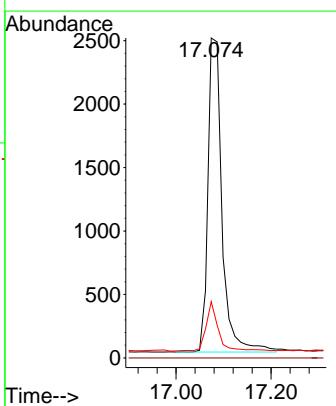
Instrument : BNA\_N  
ClientSampleId : EB01-040325

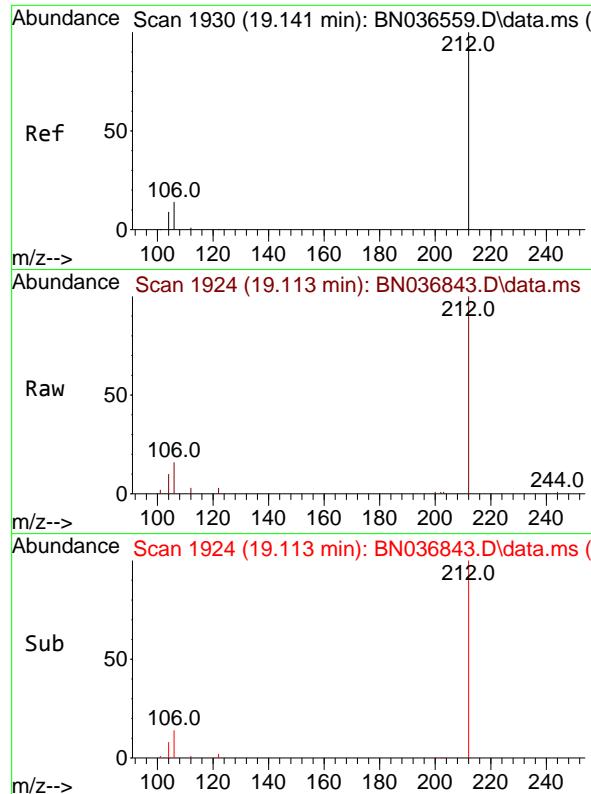
Tgt Ion:172 Resp: 5843  
Ion Ratio Lower Upper  
172 100  
171 36.8 29.5 44.3  
170 26.0 20.2 30.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.074 min Scan# 1679  
Delta R.T. -0.000 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

Tgt Ion:188 Resp: 5123  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 17.6 8.8 13.2#

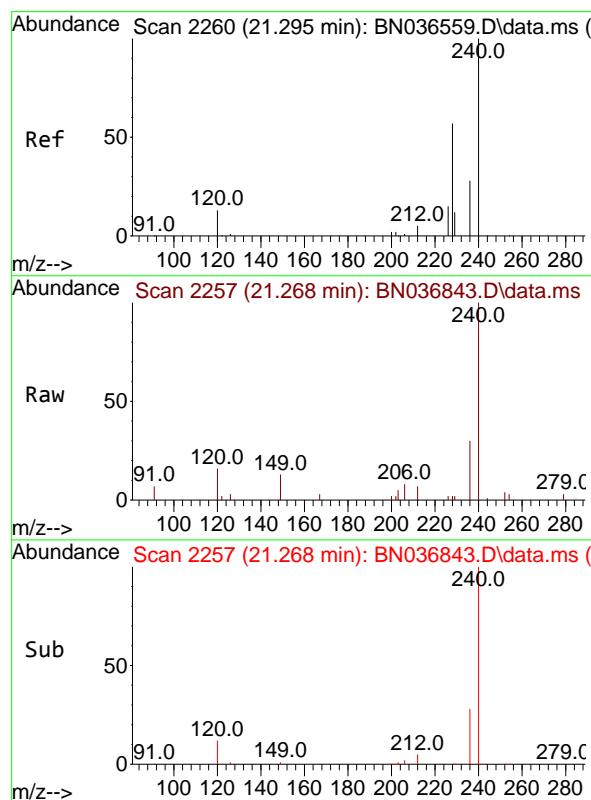
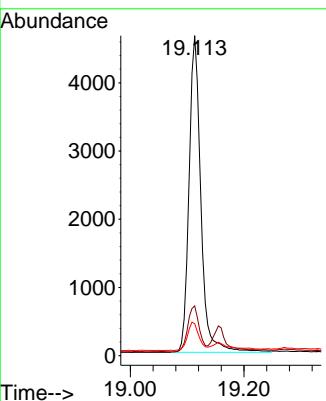




#27  
 Fluoranthene-d10  
 Concen: 0.513 ng  
 RT: 19.113 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN036843.D  
 Acq: 04 Apr 2025 19:46

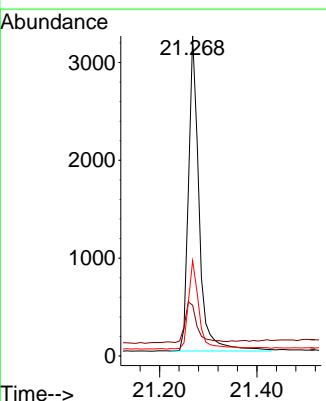
Instrument : BNA\_N  
 ClientSampleId : EB01-040325

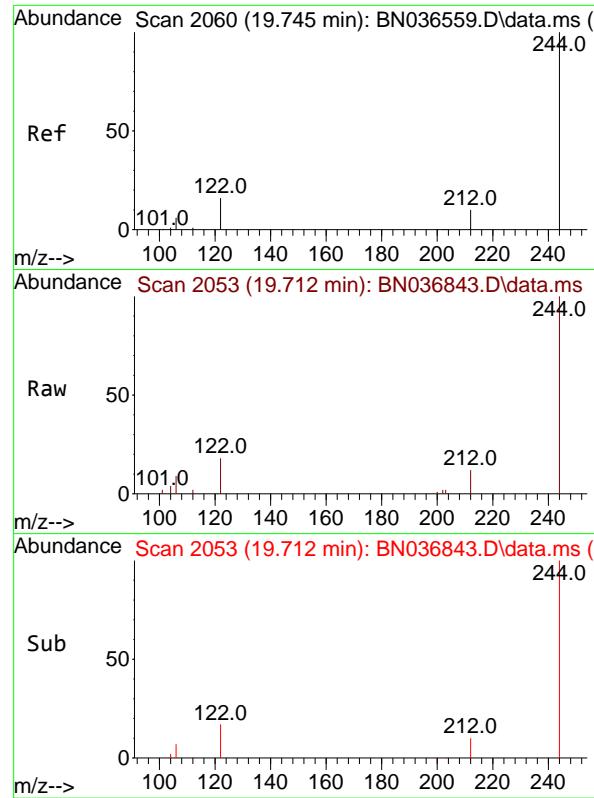
Tgt Ion:212 Resp: 6737  
 Ion Ratio Lower Upper  
 212 100  
 106 14.4 11.8 17.6  
 104 8.6 7.3 10.9



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.268 min Scan# 2257  
 Delta R.T. -0.000 min  
 Lab File: BN036843.D  
 Acq: 04 Apr 2025 19:46

Tgt Ion:240 Resp: 4847  
 Ion Ratio Lower Upper  
 240 100  
 120 15.9 14.6 22.0  
 236 29.8 24.1 36.1

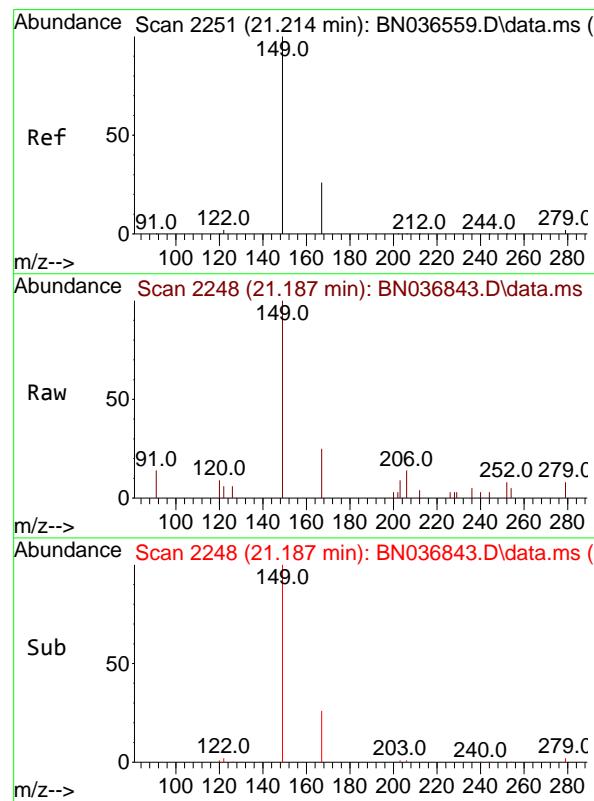
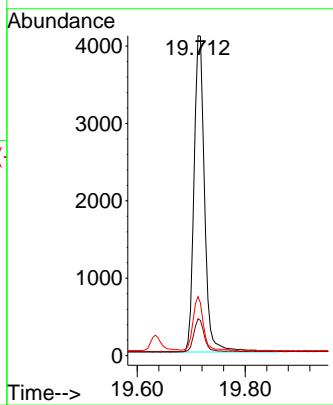




#31  
Terphenyl-d14  
Concen: 0.480 ng  
RT: 19.712 min Scan# 2  
Delta R.T. -0.005 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

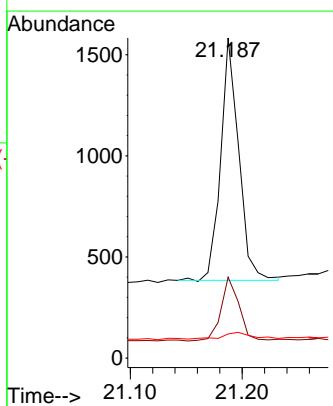
Instrument : BNA\_N  
ClientSampleId : EB01-040325

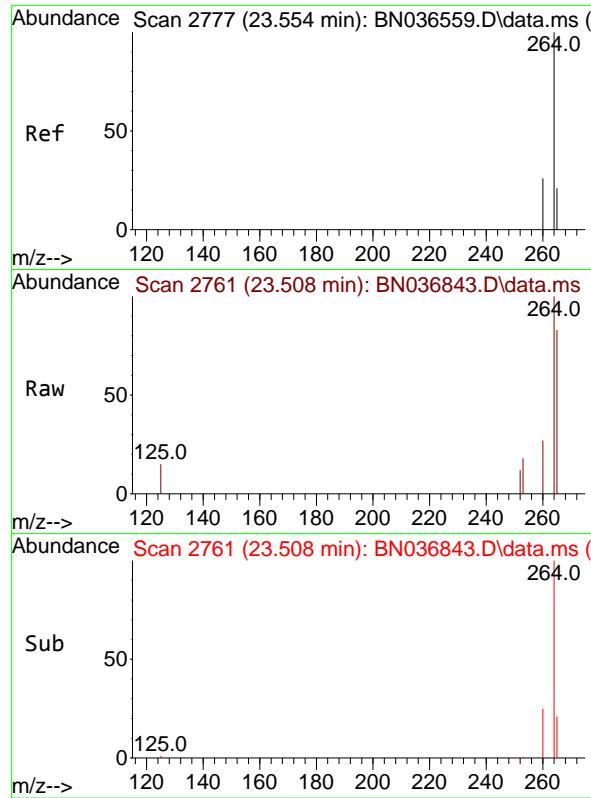
Tgt Ion:244 Resp: 5575  
Ion Ratio Lower Upper  
244 100  
212 11.6 9.6 14.4  
122 18.4 13.9 20.9



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.112 ng  
RT: 21.187 min Scan# 2248  
Delta R.T. -0.000 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

Tgt Ion:149 Resp: 1349  
Ion Ratio Lower Upper  
149 100  
167 26.5 20.7 31.1  
279 4.4 3.6 5.4

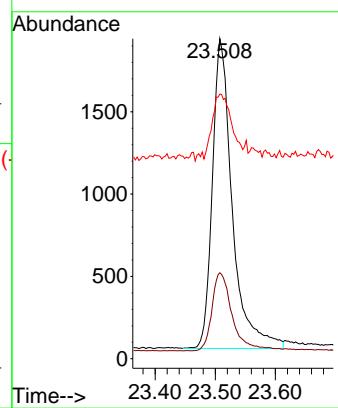




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.508 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN036843.D  
Acq: 04 Apr 2025 19:46

Instrument : BNA\_N  
ClientSampleId : EB01-040325

Tgt Ion:264 Resp: 4314  
Ion Ratio Lower Upper  
264 100  
260 26.9 22.6 33.8  
265 82.7 88.1 132.1#





# CALIBRATION

# SUMMARY

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN031025.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Mon Mar 10 16:06:28 2025  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN036557.D 0.2 =BN036558.D 0.4 =BN036559.D 0.8 =BN036560.D 1.6 =BN036561.D 3.2 =BN036562.D 5.0 =BN036563.D

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

1) I	1,4-Dichlorobenzene	-----	ISTD-----						
2)	1,4-Dioxane	0.434	0.439	0.498	0.451	0.440	0.445	0.399	0.444
3)	n-Nitrosodimethylamine	1.112	0.874	0.935	0.841	0.850	0.883	0.789	0.898
4) S	2-Fluorophenol	0.931	0.908	0.987	0.878	0.914	0.996	0.911	0.932
5) S	Phenol-d6	1.243	1.057	1.128	1.067	1.133	1.254	1.180	1.152
6)	bis(2-Chloroethyl)ether	1.426	1.150	1.183	1.129	1.132	1.210	1.104	1.190
7) I	Naphthalene-d8	-----	ISTD-----						
8) S	Nitrobenzene-d5	0.572	0.396	0.415	0.401	0.402	0.450	0.411	0.435
9)	Naphthalene	1.371	1.125	1.206	1.111	1.108	1.222	1.094	1.177
10)	Hexachlorobutane	0.296	0.283	0.294	0.267	0.261	0.286	0.251	0.277
11)	SURR2-Methylnaphthalene	0.656	0.549	0.606	0.562	0.577	0.633	0.581	0.595
12)	2-Methylnaphthalene	0.810	0.696	0.765	0.703	0.734	0.802	0.731	0.749
13) I	Acenaphthene-d10	-----	ISTD-----						
14) S	2,4,6-Tribromoethane	0.181	0.160	0.187	0.169	0.188	0.197	0.188	0.182
15) S	2-Fluorobiphenyl	2.208	1.982	2.398	2.350	2.364	2.566	2.419	2.327
16)	Acenaphthylene	1.882	1.756	1.938	1.794	1.834	2.074	1.935	1.888
17)	Acenaphthene	1.257	1.159	1.281	1.171	1.199	1.339	1.243	1.236
18)	Fluorene	1.629	1.600	1.764	1.609	1.670	1.778	1.650	1.672
19) I	Phenanthrene-d10	-----	ISTD-----						
20)	4,6-Dinitro-2-phenol	0.057	0.077	0.075	0.088	0.110	0.111	0.086	24.66
21)	4-Bromophenylmethanol	0.243	0.227	0.274	0.238	0.241	0.278	0.253	0.251
22)	Hexachlorobenzene	0.306	0.288	0.336	0.295	0.283	0.322	0.289	0.303
23)	Atrazine	0.193	0.191	0.213	0.192	0.200	0.216	0.200	0.201
24)	Pentachlorophenol	0.140	0.116	0.137	0.122	0.135	0.161	0.155	0.138
25)	Phenanthrene	1.190	1.111	1.297	1.141	1.165	1.300	1.195	1.200
26)	Anthracene	1.026	0.971	1.147	1.033	1.075	1.215	1.112	1.083
27)	SURRFluoranthene-d10	1.037	0.955	1.116	0.956	1.025	1.087	1.000	1.025
28)	Fluoranthene	1.341	1.243	1.452	1.272	1.364	1.447	1.316	1.348
29) I	Chrysene-d12	-----	ISTD-----						
30)	Pyrene	1.945	2.005	2.131	1.910	1.870	1.992	1.837	1.956
31) S	Terphenyl-d14	0.962	0.965	1.028	0.924	0.915	0.987	0.926	0.958
32)	Benzo(a)anthracene	1.389	1.315	1.437	1.304	1.347	1.528	1.415	1.391
33)	Chrysene	1.486	1.509	1.610	1.507	1.462	1.616	1.448	1.520
34)	Bis(2-ethylhexylphthalate)	1.196	1.100	1.044	0.865	0.946	0.912	0.870	0.990
35) I	Perylene-d12	-----	ISTD-----						

Response Factor Report BNA\_N

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN031025.M

36)	Indeno(1,2,3-c... 1.160	1.316	1.546	1.404	1.417	1.693	1.571	1.444	12.27	
37)	Benzo(b)fluora...	1.311	1.360	1.547	1.402	1.477	1.595	1.498	1.456	7.04
38)	Benzo(k)fluora...	1.504	1.397	1.620	1.481	1.521	1.635	1.534	1.527	5.34
39) C	Benzo(a)pyrene	1.090	1.152	1.303	1.195	1.223	1.350	1.268	1.226	7.29
40)	Dibenzo(a,h)an...	0.893	0.981	1.163	1.126	1.102	1.351	1.252	1.124	13.76
41)	Benzo(g,h,i)pe...	1.138	1.213	1.382	1.250	1.233	1.449	1.334	1.286	8.36

---

(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036557.D  
 Acq On : 10 Mar 2025 11:42  
 Operator : RC/JU  
 Sample : SSTDI CCO.1  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

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

Quant Time: Mar 10 16:00:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025

Compound	R. T.	Ql on	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1, 4-Dichlorobenzene-d4	7. 724	152	2755	0. 400	ng	0. 00
7) Naphthalene-d8	10. 509	136	6575	0. 400	ng	0. 00
13) Acenaphthene-d10	14. 366	164	3958	0. 400	ng	0. 00
19) Phenanthrene-d10	17. 111	188	8269	0. 400	ng	0. 00
29) Chrysene-d12	21. 295	240	5886	0. 400	ng	0. 00
35) Perylene-d12	23. 554	264	5207	0. 400	ng	0. 00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5. 312	112	641	0. 100	ng	0. 00
5) Phenol-d6	6. 901	99	856	0. 108	ng	0. 00
8) Nitrobenzene-d5	8. 875	82	940	0. 131	ng	0. 00
11) 2-Methyl naphthalene-d10	12. 111	152	1079	0. 110	ng	0. 00
14) 2, 4, 6-Tribromophenol	15. 858	330	179	0. 100	ng	0. 00
15) 2-Fluorobi phenyl	12. 993	172	2185	0. 095	ng	0. 00
27) Fluoranthene-d10	19. 141	212	2144	0. 101	ng	0. 00
31) Terphenyl-d14	19. 745	244	1416	0. 100	ng	0. 00
<b>Target Compounds</b>						
2) 1, 4-Dioxane	3. 247	88	299m	0. 098	ng	Value
3) n-Nitrosodimethylamine	3. 557	42	766	0. 124	ng	# 95
6) bis(2-Chloroethyl)ether	7. 154	93	982	0. 120	ng	98
9) Naphthalene	10. 562	128	2254	0. 117	ng	# 94
10) Hexachlorobutadiene	10. 850	225	486	0. 107	ng	# 100
12) 2-Methyl naphthalene	12. 187	142	1331	0. 108	ng	96
16) Acenaphthylene	14. 078	152	1862	0. 100	ng	99
17) Acenaphthene	14. 430	154	1244	0. 102	ng	99
18) Fluorene	15. 414	166	1612	0. 097	ng	99
21) 4-Bromophenyl-phenyl ether	16. 304	248	502	0. 097	ng	95
22) Hexachlorobenzene	16. 416	284	632	0. 101	ng	98
23) Atrazine	16. 578	200	400	0. 096	ng	# 90
24) Pentachlorophenol	16. 776	266	290	0. 102	ng	98
25) Phenanthrene	17. 148	178	2459	0. 099	ng	99
26) Anthracene	17. 248	178	2121	0. 095	ng	100
28) Fluoranthene	19. 174	202	2772	0. 099	ng	97
30) Pyrene	19. 536	202	2862	0. 099	ng	100
32) Benzo(a)anthracene	21. 286	228	2044	0. 100	ng	94
33) Chrysene	21. 331	228	2187	0. 098	ng	93
34) Bis(2-ethyl hexyl)phtha...	21. 214	149	1760	0. 121	ng	96
36) Indeno(1, 2, 3-cd)pyrene	25. 841	276	1510	0. 080	ng	98
37) Benzo(b)fluoranthene	22. 876	252	1707	0. 090	ng	# 62
38) Benzo(k)fluoranthene	22. 923	252	1958	0. 098	ng	# 62
39) Benzo(a)pyrene	23. 458	252	1419	0. 089	ng	# 51
40) Dibenz(a, h)anthracene	25. 861	278	1163	0. 079	ng	# 59
41) Benzo(g, h, i)perylene	26. 539	276	1482	0. 089	ng	# 84

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

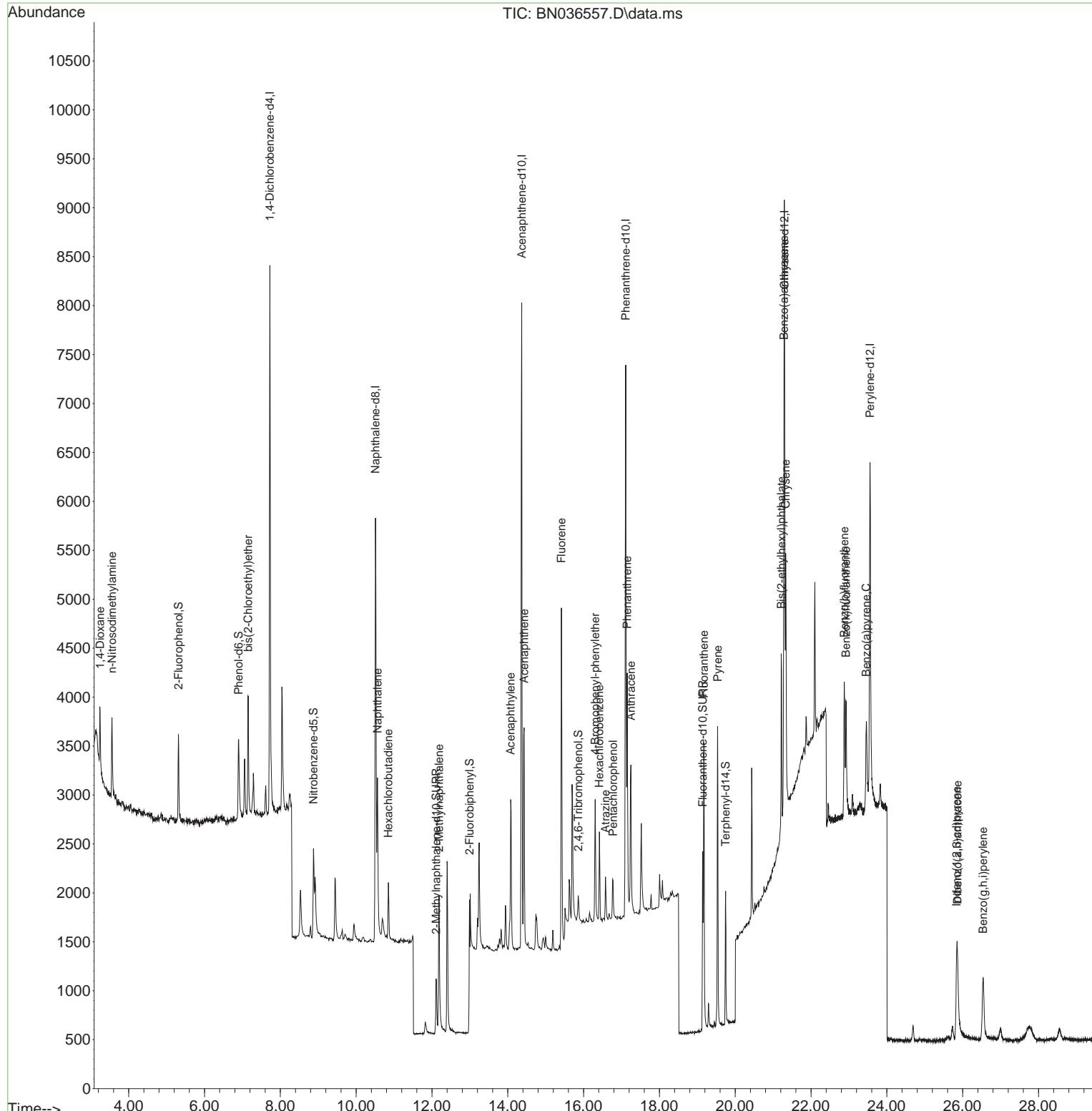
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036557.D  
 Acq On : 10 Mar 2025 11:42  
 Operator : RC/JU  
 Sample : SSTDI CCO.1  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

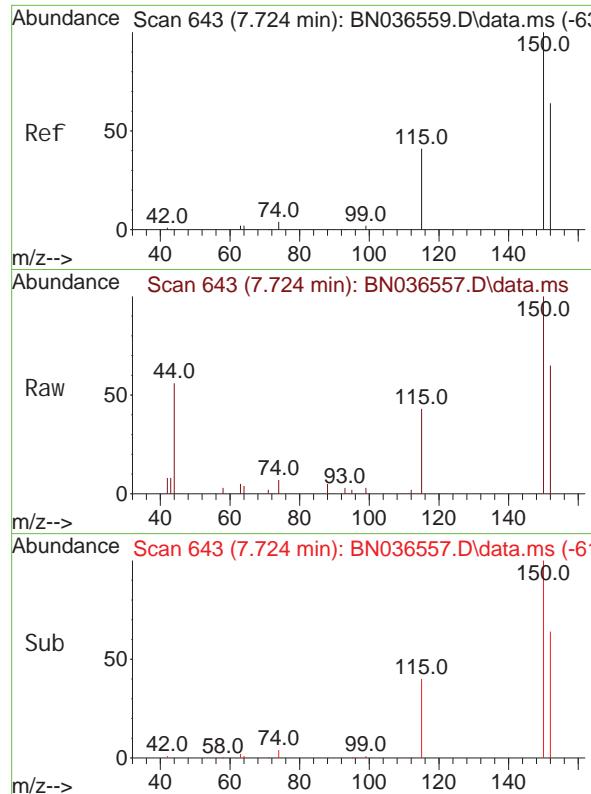
Quant Time: Mar 10 16:00:30 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

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

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025



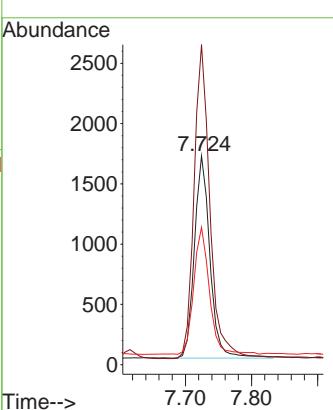


#1  
 1, 4-Di chl orobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.724 min Scan# 6  
 Delta R. T. 0.000 min  
 Lab File: BN036557.D  
 Acq: 10 Mar 2025 11:42

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

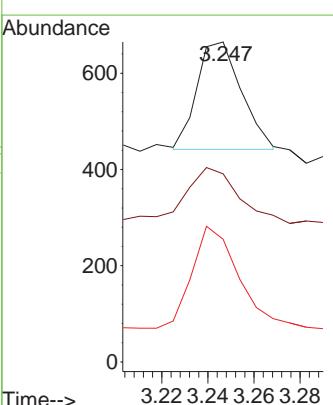
**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025

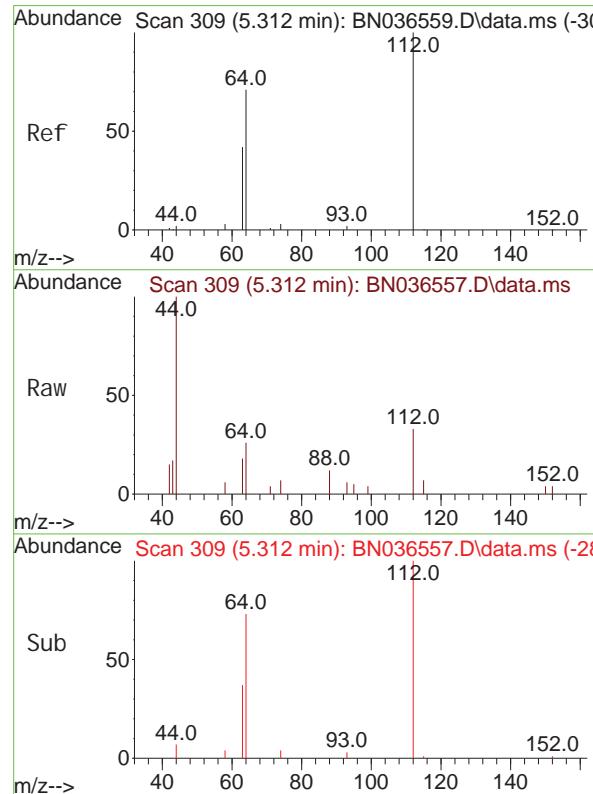
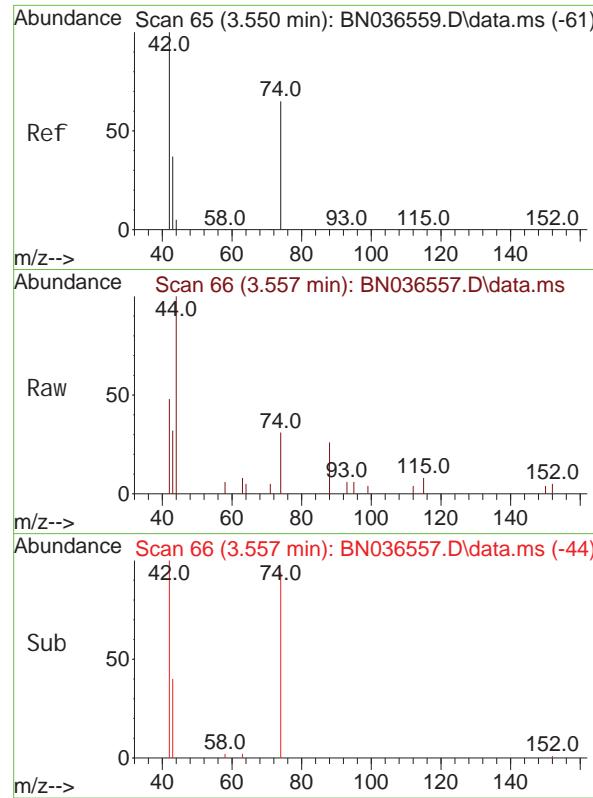


#2  
 1, 4-Di oxane  
 Concen: 0.098 ng m  
 RT: 3.247 min Scan# 23  
 Delta R. T. 0.007 min  
 Lab File: BN036557.D  
 Acq: 10 Mar 2025 11:42

Tgt Ion: 88 Resp: 299  
 Ion Ratio Lower Upper  
 88 100  
 43 94.6 37.8 56.8#  
 58 102.3 67.4 101.2#



Abundance Scan 23 (3.247 min): BN036557.D\data.ms (-8)



#3

n-Ni trosodi methyl ami ne

Concen: 0.124 ng

RT: 3.557 min Scan# 6

Delta R. T. 0.007 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

Tgt Ion: 42 Resp: 760

Ion Ratio Lower Upper

42 100

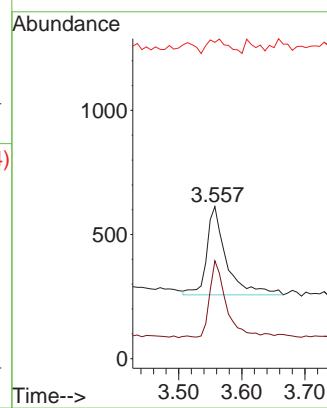
74 73.0 60.6 90.8

44 16.6 6.3 9.5

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#4

2-Fluorophenol

Concen: 0.100 ng

RT: 5.312 min Scan# 309

Delta R. T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

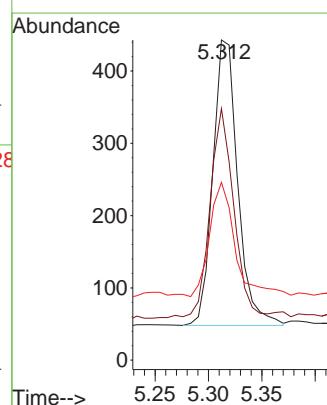
Tgt Ion: 112 Resp: 641

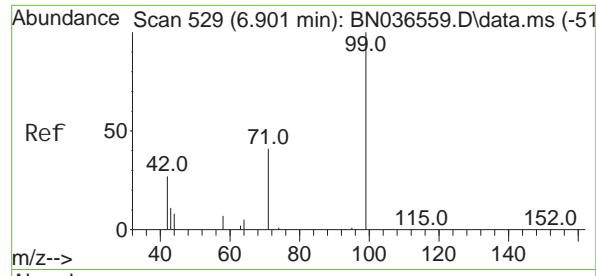
Ion Ratio Lower Upper

112 100

64 70.4 53.1 79.7

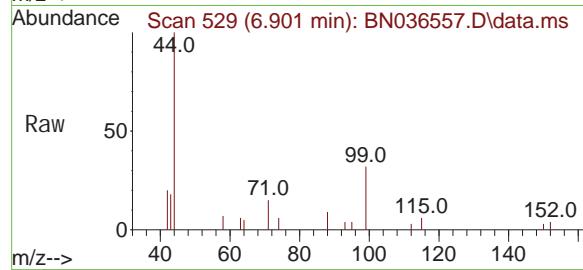
63 40.9 31.8 47.8





#5  
Phenol -d6  
Concen: 0.108 ng  
RT: 6.901 min Scan# 51  
Delta R. T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

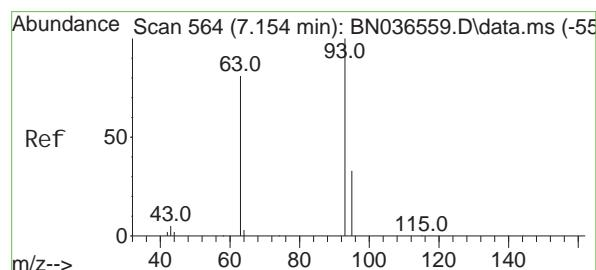
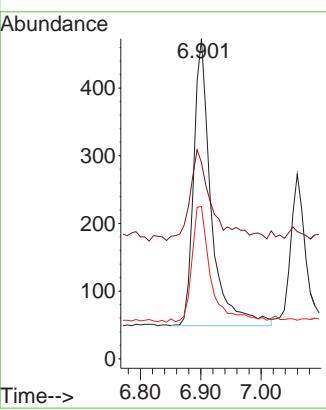
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.1



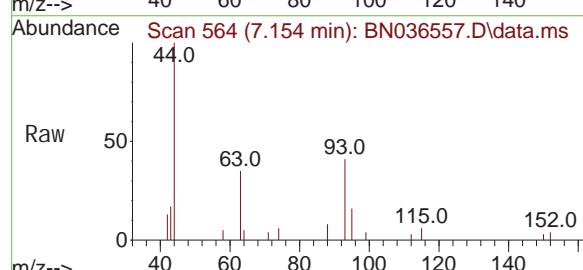
Tgt Ion: 99 Resp: 850  
Ion Ratio Lower Upper  
99 100  
42 39.8 26.5 39.7  
71 42.8 34.1 51.1

### Manual Integrations APPROVED

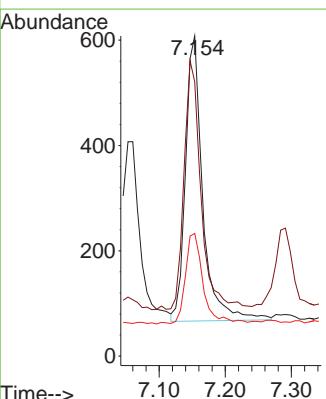
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

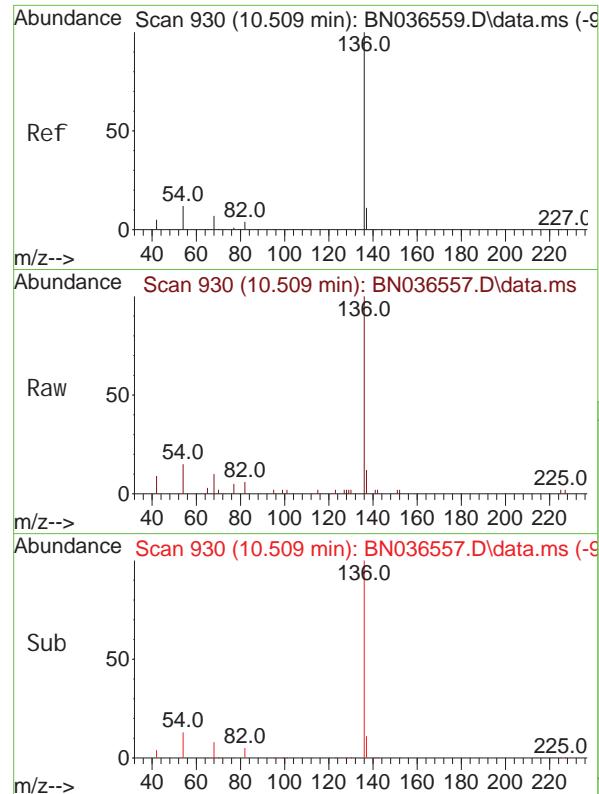


#6  
bis(2-Chloroethyl)ether  
Concen: 0.120 ng  
RT: 7.154 min Scan# 564  
Delta R. T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42



Tgt Ion: 93 Resp: 982  
Ion Ratio Lower Upper  
93 100  
63 86.7 67.7 101.5  
95 33.0 25.6 38.4





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.509 min Scan# 9

Delta R. T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

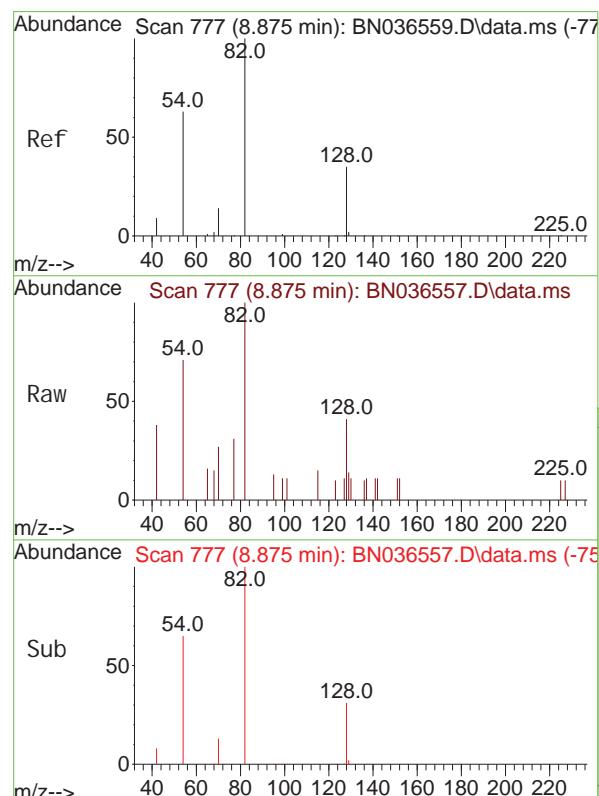
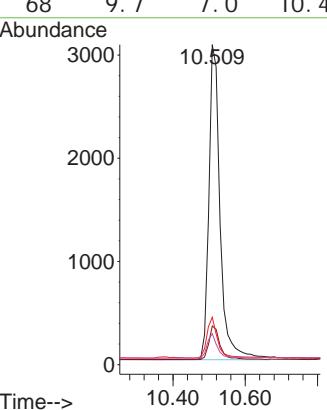
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#8

Ni trobenzene-d5

Concen: 0.131 ng

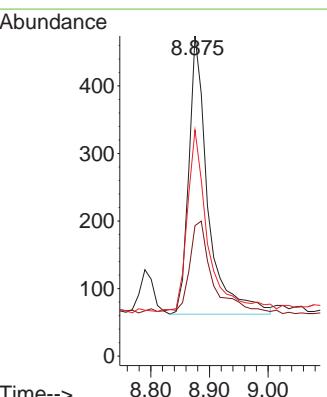
RT: 8.875 min Scan# 777

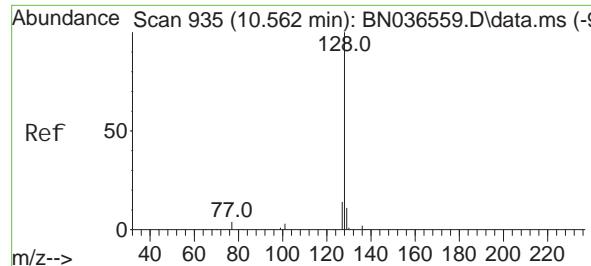
Delta R. T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Tgt	Ion:	82	Resp:	940
Ion	Ratio	Lower	Upper	
82	100			
128	40.7	30.6	45.8	
54	70.7	52.2	78.4	





#9

Naphthalene

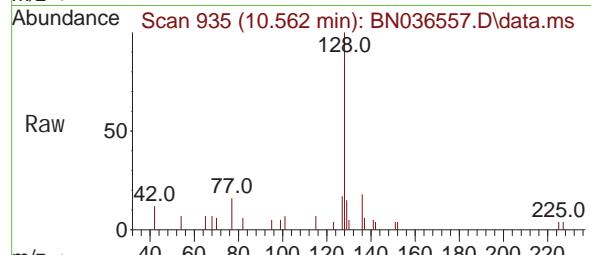
Concen: 0.117 ng

RT: 10.562 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42



Tgt Ion: 128 Resp: 225

Ion Ratio Lower Upper

128 100

129 14.7 9.8 14.6

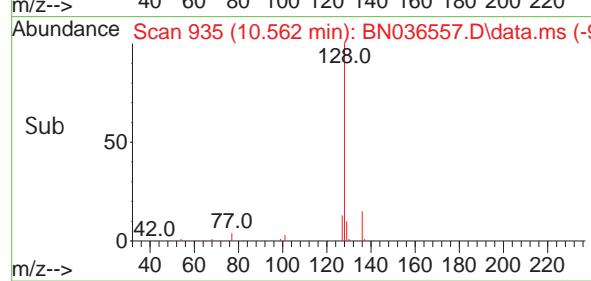
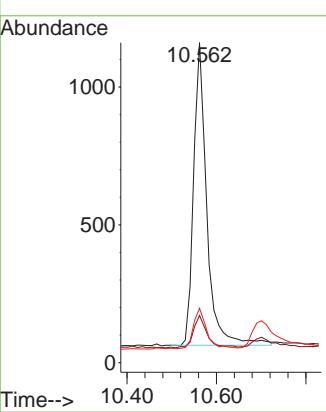
127 17.0 11.8 17.8

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.1

**Manual Integrations  
APPROVED**
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

#10

Hexachlorobutadiene

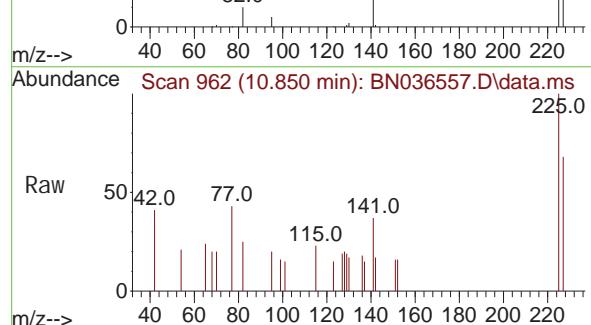
Concen: 0.107 ng

RT: 10.850 min Scan# 962

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42



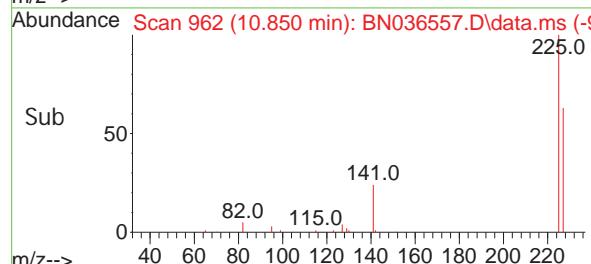
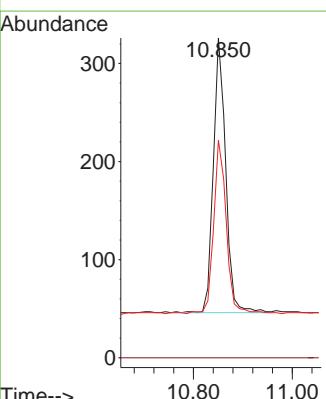
Tgt Ion: 225 Resp: 486

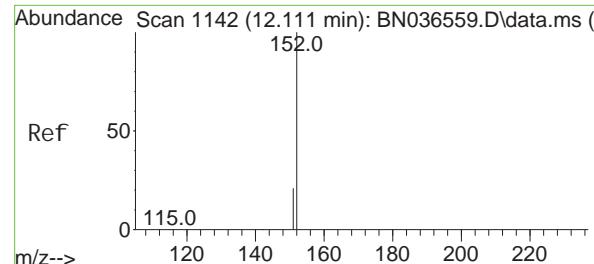
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 64.8 51.8 77.8





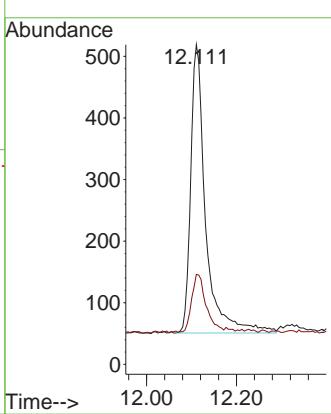
#11  
2-Methyl naphthalene-d10  
Concen: 0.110 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

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

Tgt Ion: 152 Resp: 1079  
Ion Ratio Lower Upper  
152 100  
151 19.5 17.0 25.6

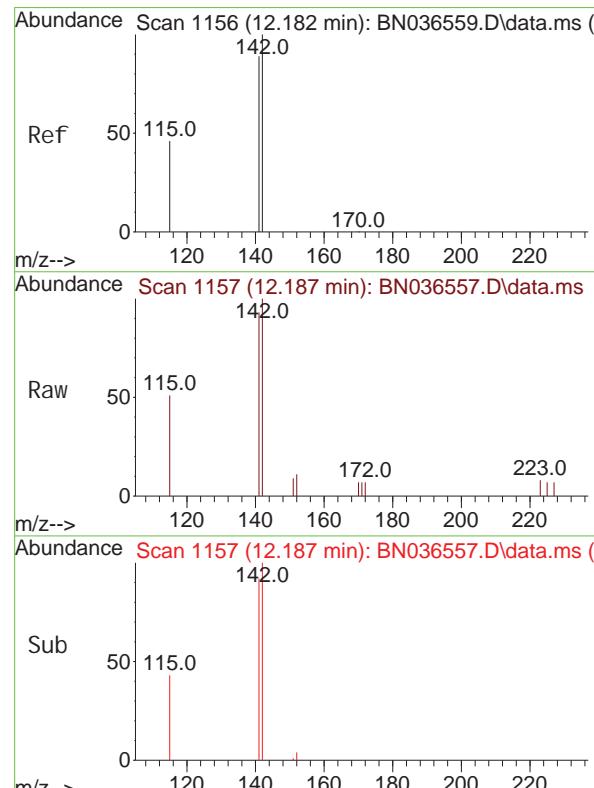
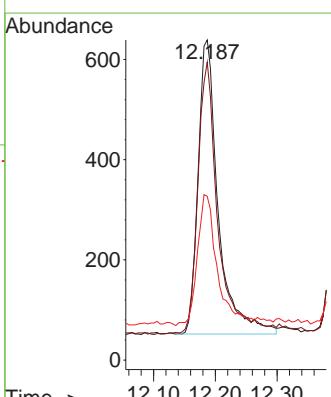
### Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#12  
2-Methyl naphthalene  
Concen: 0.108 ng  
RT: 12.187 min Scan# 1157  
Delta R.T. 0.005 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 142 Resp: 1331  
Ion Ratio Lower Upper  
142 100  
141 93.1 71.7 107.5  
115 51.2 38.3 57.5



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

**Instrument :**

BNA\_N

**ClientSampleId :**

SSTDICCO.1

Tgt Ion: 164 Resp: 3958

Ion Ratio Lower Upper

164 100

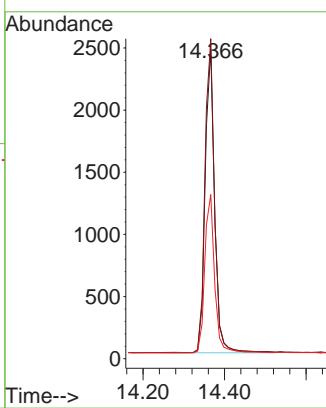
162 103.3 84.2 126.2

160 53.0 42.2 63.2

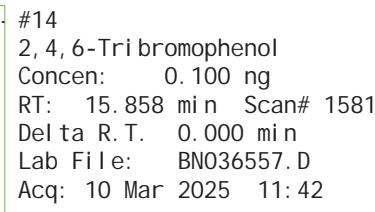
**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



Time--&gt; 14.20 14.366 14.40



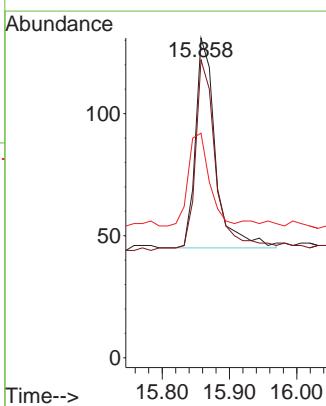
Tgt Ion: 330 Resp: 179

Ion Ratio Lower Upper

330 100

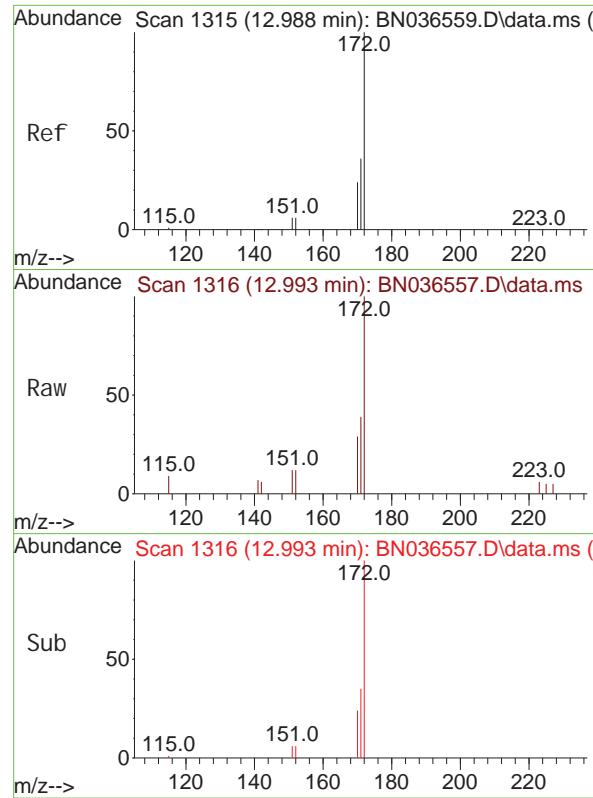
332 96.1 75.2 112.8

141 46.4 43.4 65.2



Time--&gt; 15.80 15.858 15.90 16.00

BN036557.D 8270-SIM-BN031025.M Tue Mar 11 03:09:44 2025

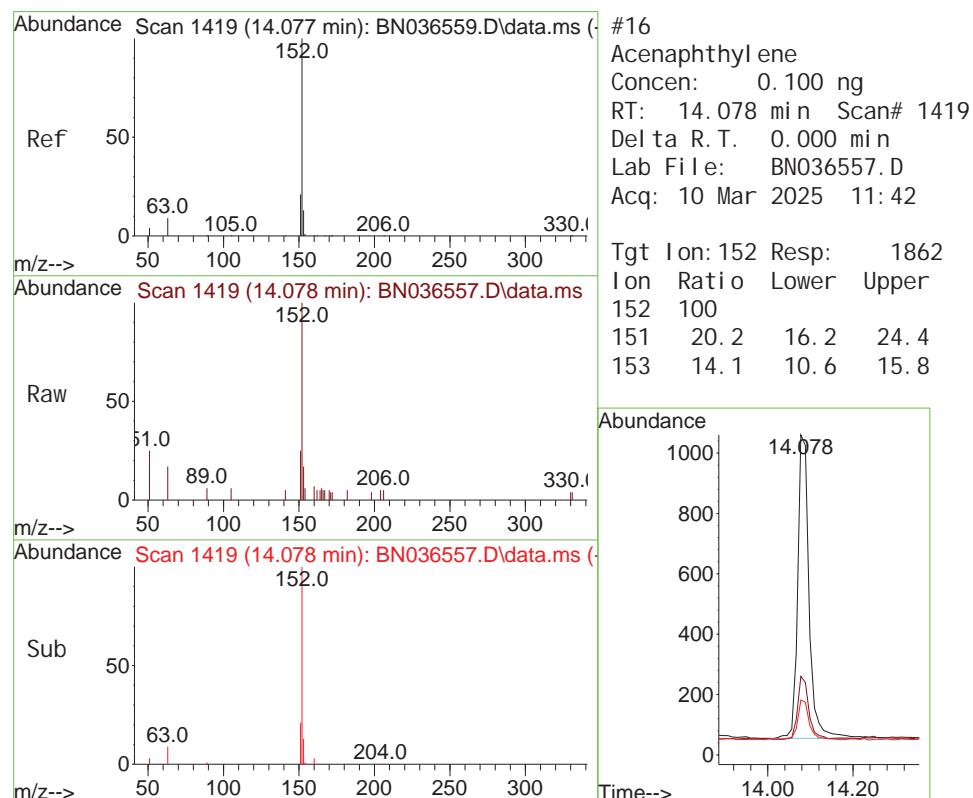
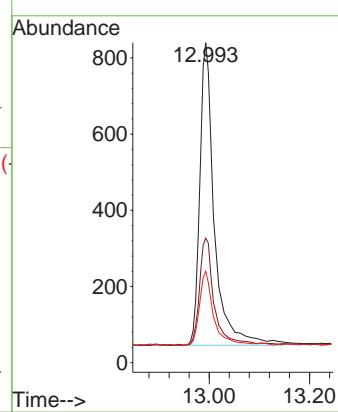


#15  
2-Fluorobiphenyl  
Concen: 0.095 ng  
RT: 12.993 min Scan# 1315  
Delta R.T. 0.005 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

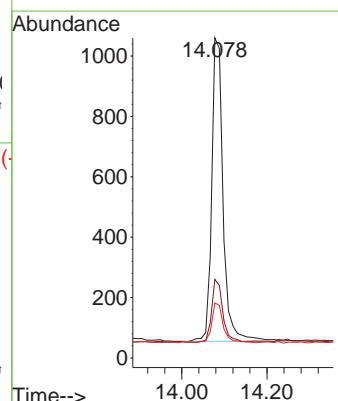
### Manual Integrations APPROVED

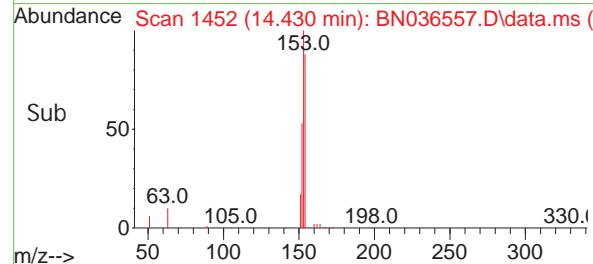
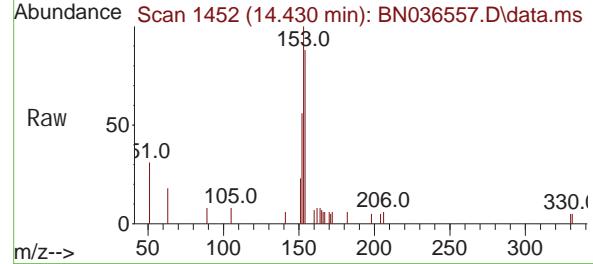
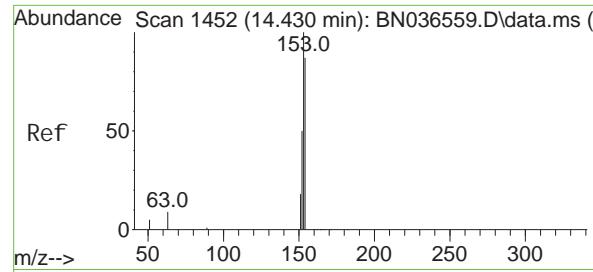
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#16  
Acenaphthylene  
Concen: 0.100 ng  
RT: 14.078 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 152 Resp: 1862  
Ion Ratio Lower Upper  
152 100  
151 20.2 16.2 24.4  
153 14.1 10.6 15.8





#17

Acenaphthene

Concen: 0.102 ng

RT: 14.430 min Scan# 1452

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

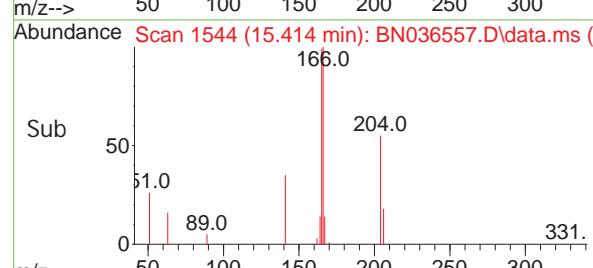
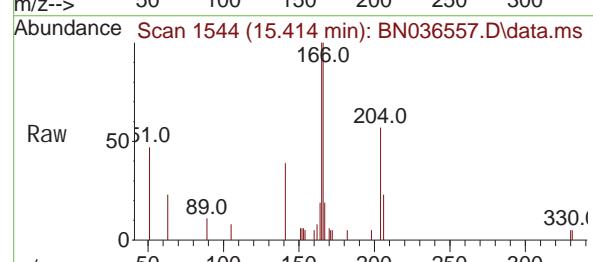
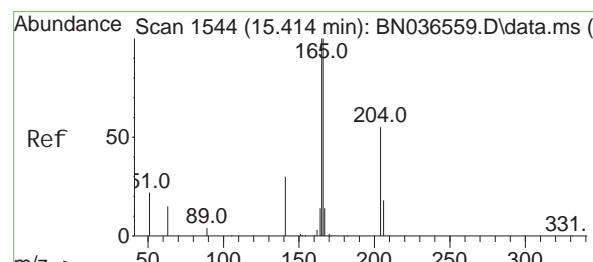
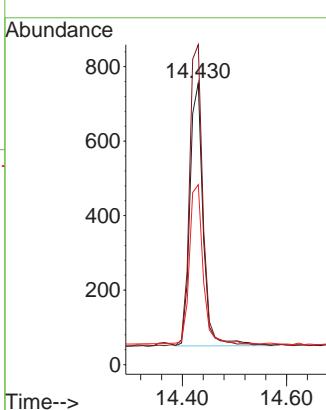
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#18

Fluorene

Concen: 0.097 ng

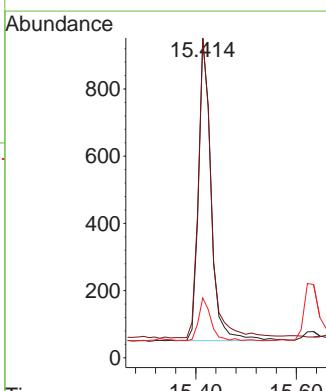
RT: 15.414 min Scan# 1544

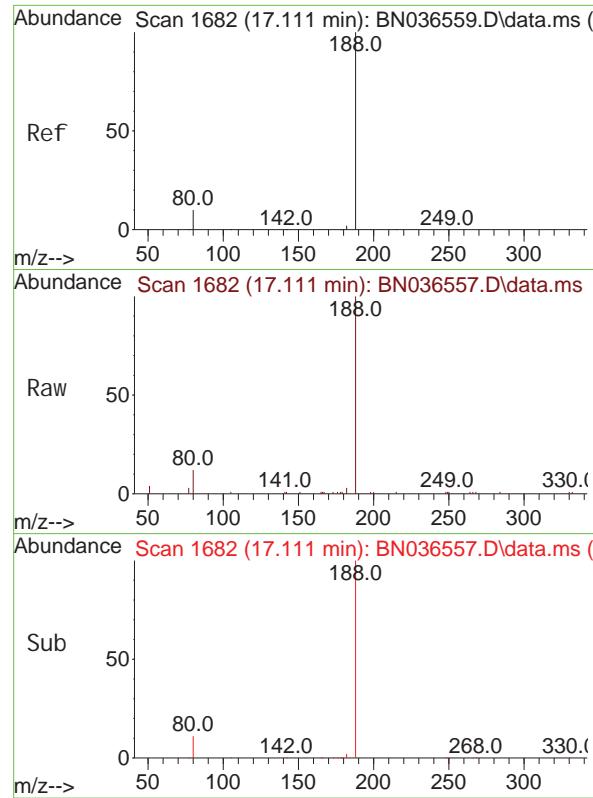
Delta R.T. 0.000 min

Lab File: BN036557.D

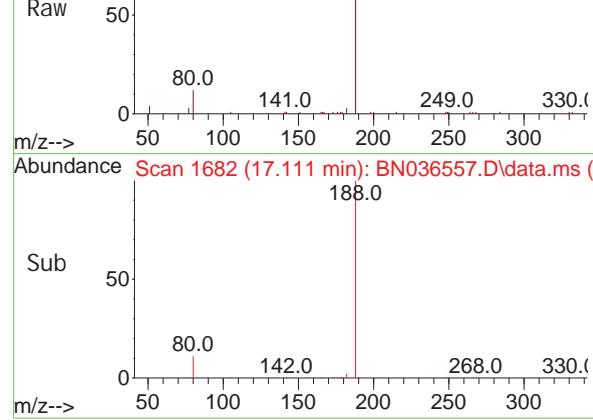
Acq: 10 Mar 2025 11:42

Tgt	Ion:	Resp:	1612
Ion	Ratio	Lower	Upper
166	100		
165	100.9	79.8	119.8
167	13.9	10.6	15.8

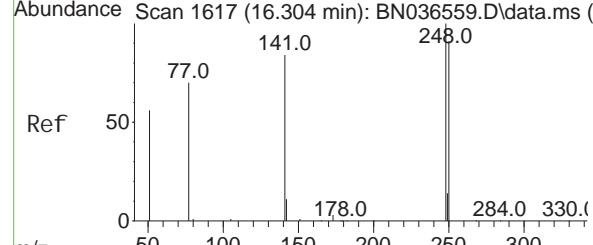
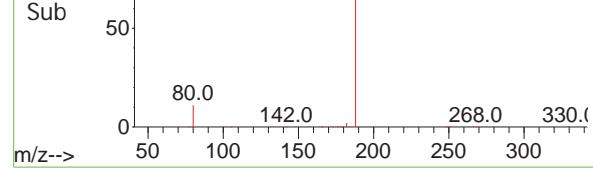




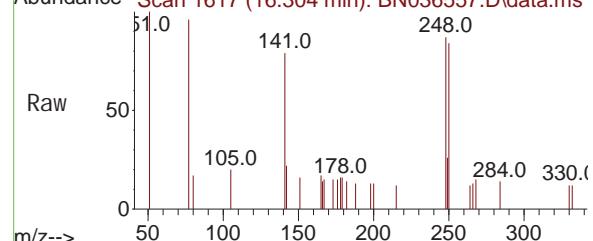
Abundance Scan 1682 (17.111 min): BN036557.D\data.ms (-)



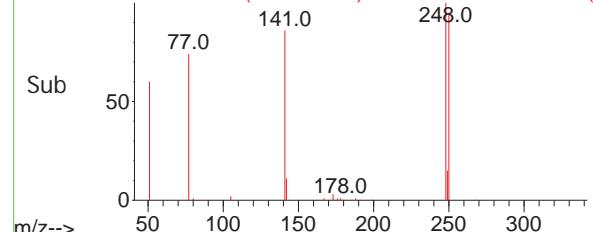
Abundance Scan 1682 (17.111 min): BN036557.D\data.ms (-)



Abundance Scan 1617 (16.304 min): BN036557.D\data.ms (-)



Abundance Scan 1617 (16.304 min): BN036557.D\data.ms (-)



#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1682

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

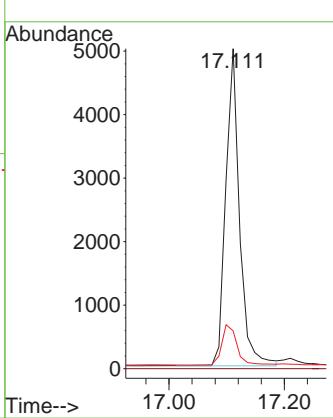
BNA\_N

ClientSampleId :

SSTDICCO.1

### Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#21

4-Bromophenyl -phenyl ether

Concen: 0.097 ng

RT: 16.304 min Scan# 1617

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

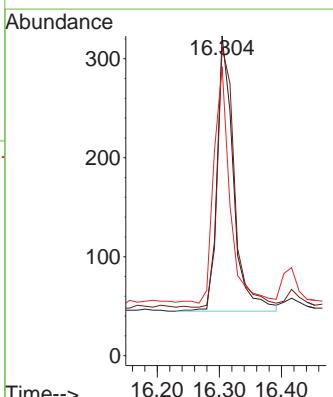
Tgt Ion: 248 Resp: 502

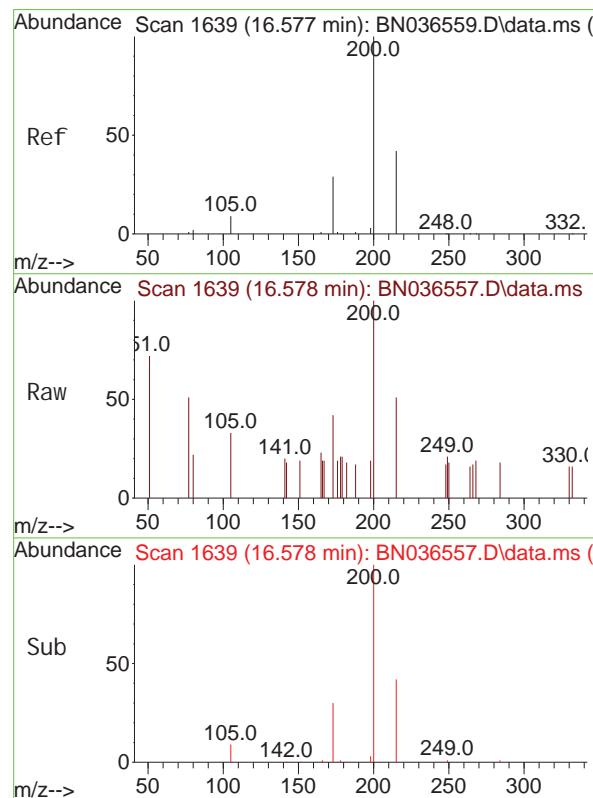
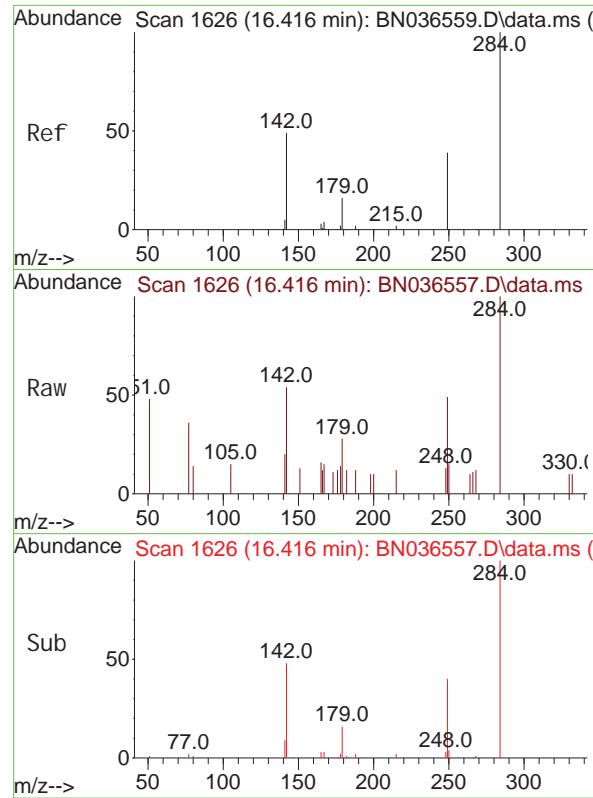
Ion Ratio Lower Upper

248 100

250 96.6 73.0 109.6

141 90.4 68.6 103.0



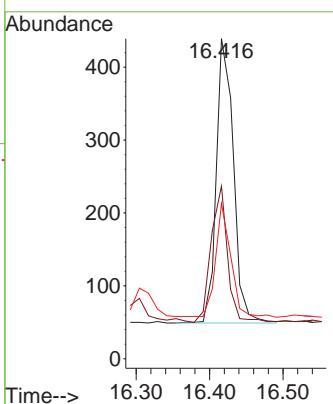


#22  
Hexachlorobenzene  
Concen: 0.101 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

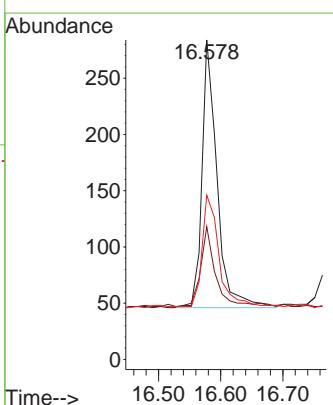
### Manual Integrations APPROVED

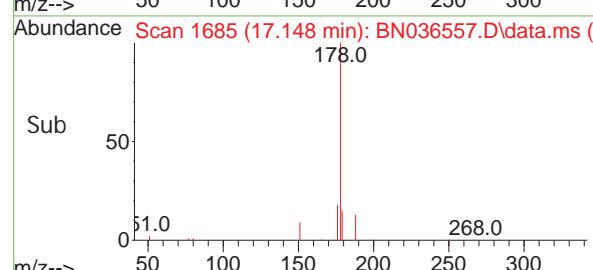
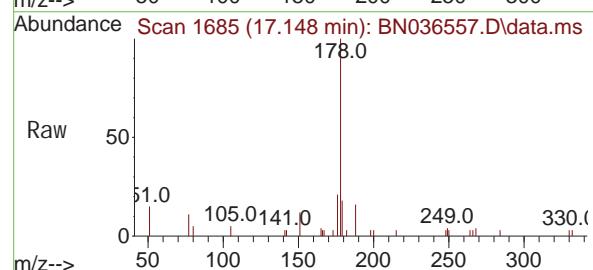
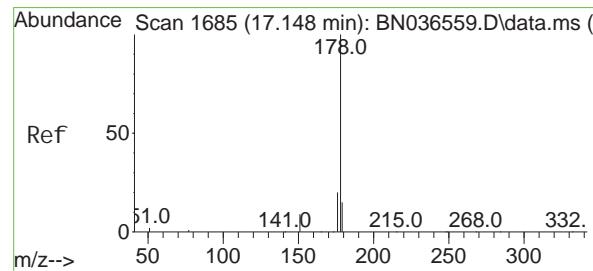
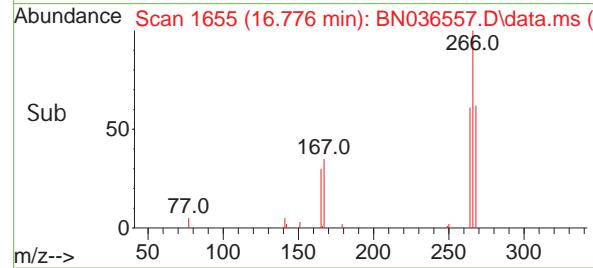
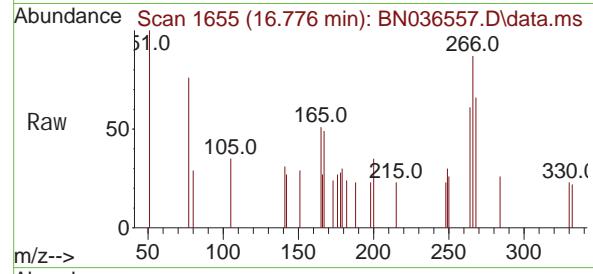
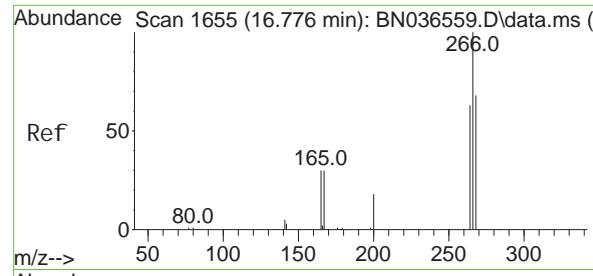
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#23  
Atrazine  
Concen: 0.096 ng  
RT: 16.578 min Scan# 1639  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 200 Resp: 400  
Ion Ratio Lower Upper  
200 100  
173 41.5 27.3 40.9#  
215 51.4 36.8 55.2





#24

Pentachlorophenol

Concen: 0.102 ng

RT: 16.776 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

Tgt Ion: 266 Resp: 290

Ion Ratio Lower Upper

266 100

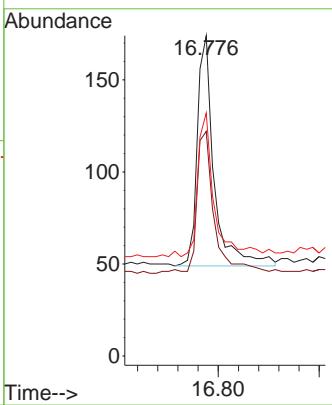
264 64.8 49.6 74.4

268 62.8 50.9 76.3

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#25

Phenanthrene

Concen: 0.099 ng

RT: 17.148 min Scan# 1685

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

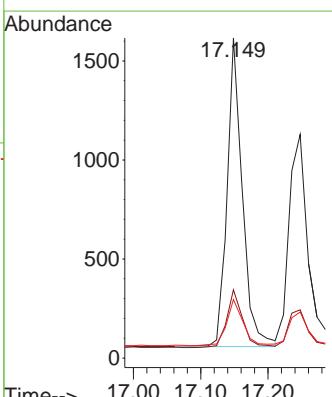
Tgt Ion: 178 Resp: 2459

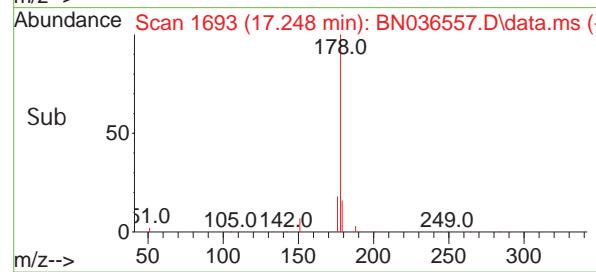
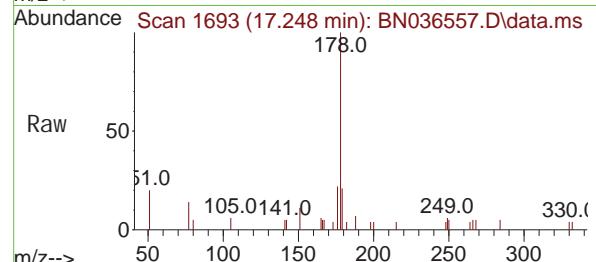
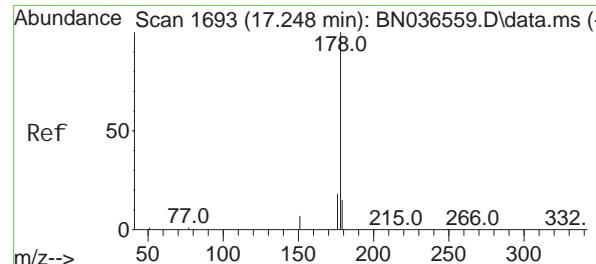
Ion Ratio Lower Upper

178 100

176 19.6 15.9 23.9

179 16.1 12.2 18.4





#26

Anthracene

Concen: 0.095 ng

RT: 17.248 min Scan# 1693

Delta R. T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument :

BNA\_N

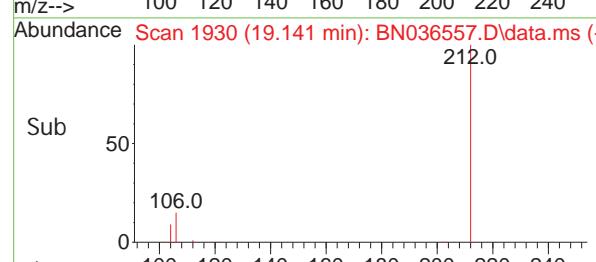
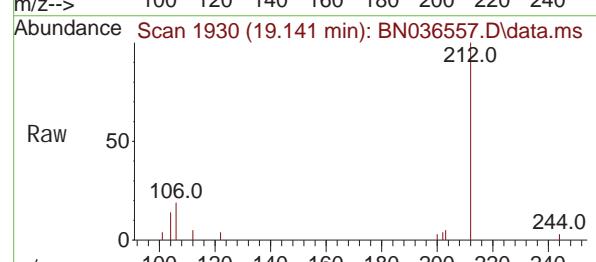
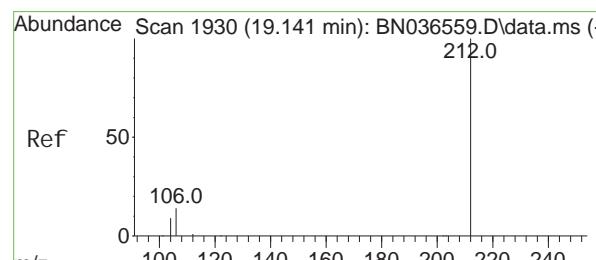
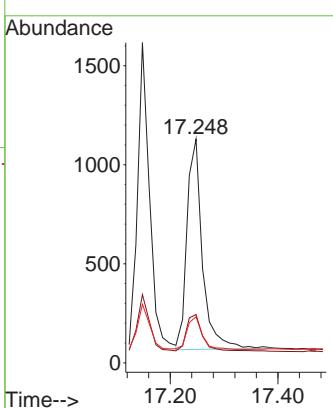
ClientSampleId :

SSTDICCO.1

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#27

Fluoranthene-d10

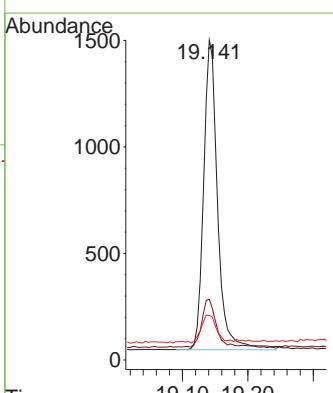
Concen: 0.101 ng

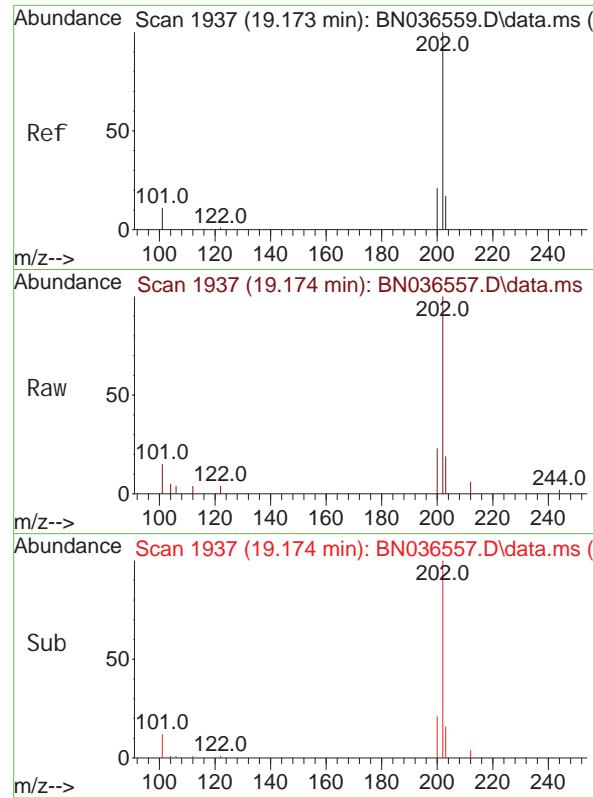
RT: 19.141 min Scan# 1930

Delta R. T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42



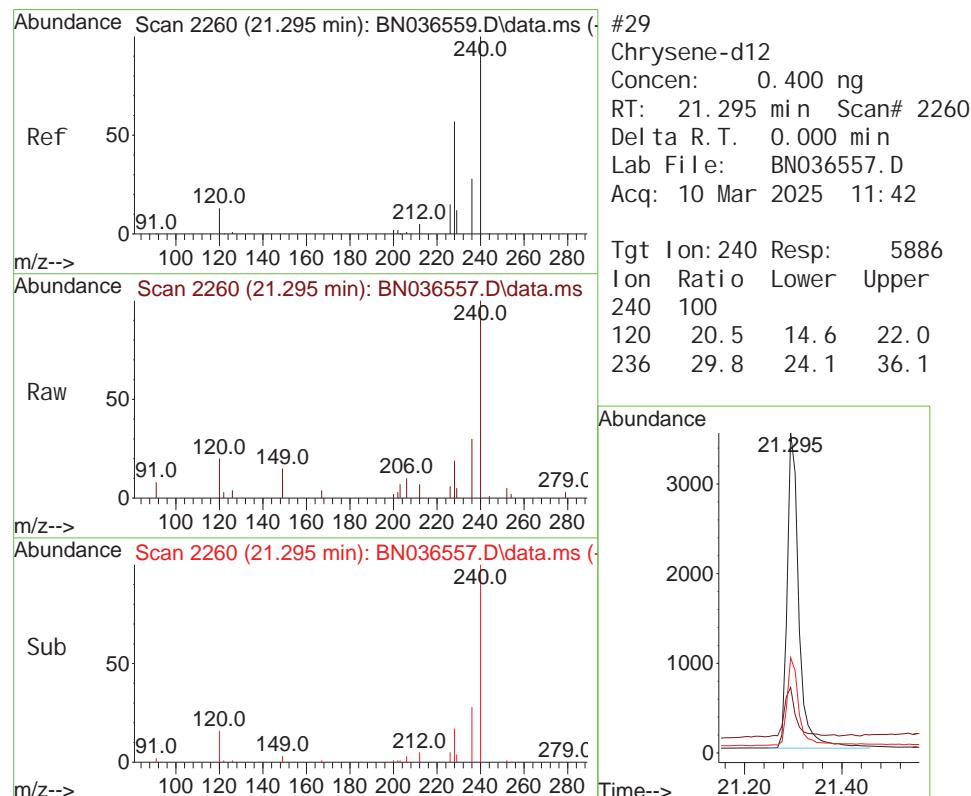
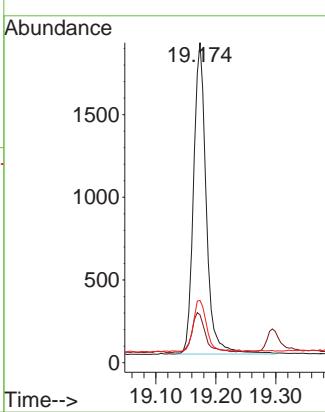


#28  
Fluoranthene  
Concen: 0.099 ng  
RT: 19.174 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

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

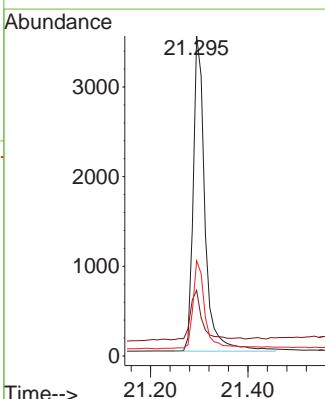
**Manual Integrations**  
**APPROVED**

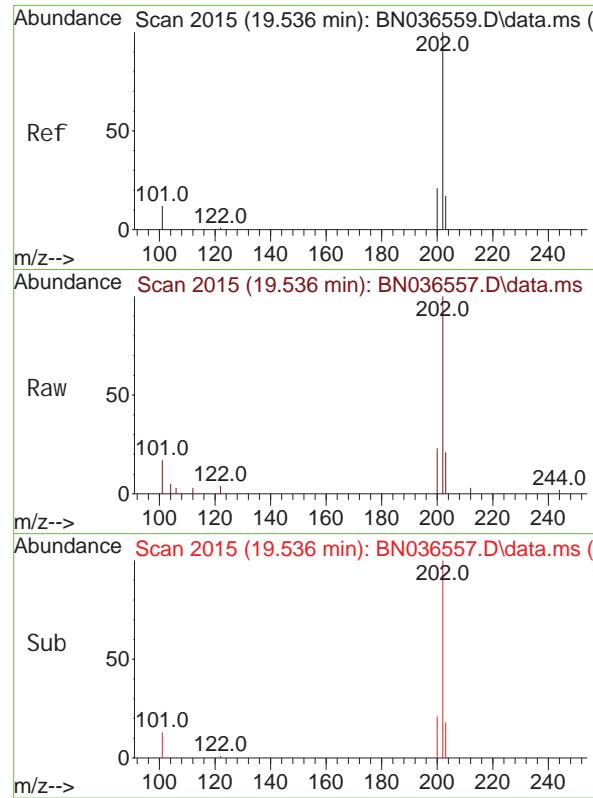
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.295 min Scan# 2260  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 240 Resp: 5886  
Ion Ratio Lower Upper  
240 100  
120 20.5 14.6 22.0  
236 29.8 24.1 36.1



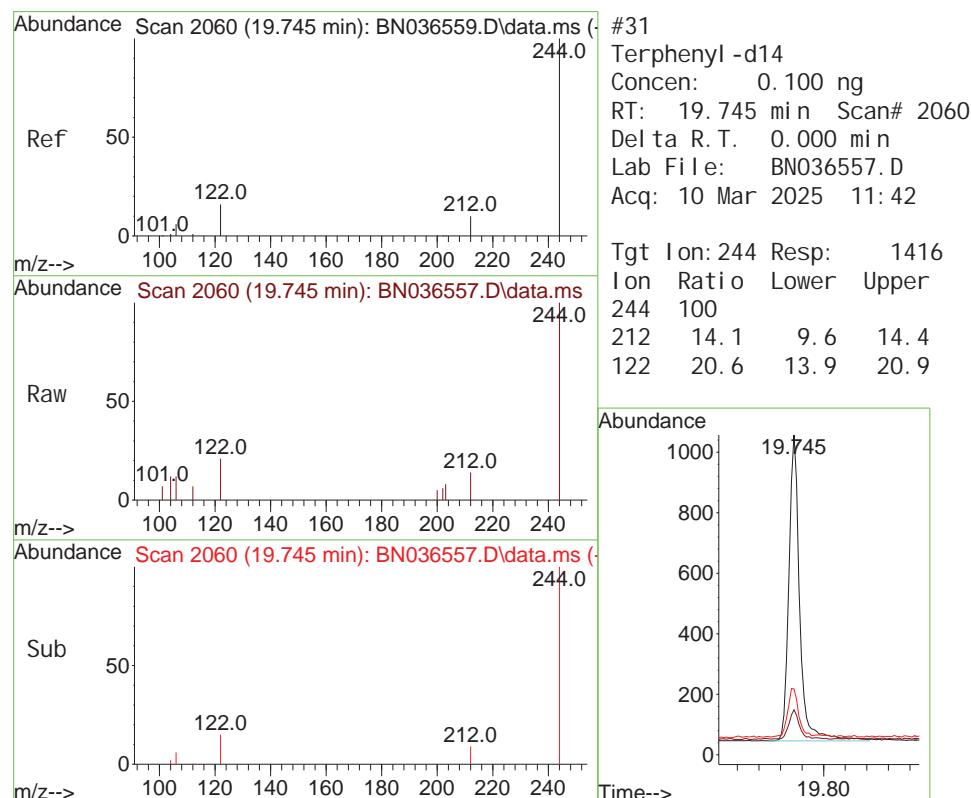
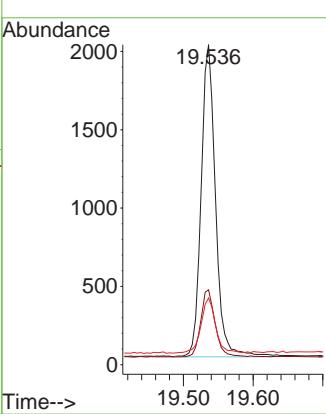


#30  
Pyrene  
Concen: 0.099 ng  
RT: 19.536 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

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

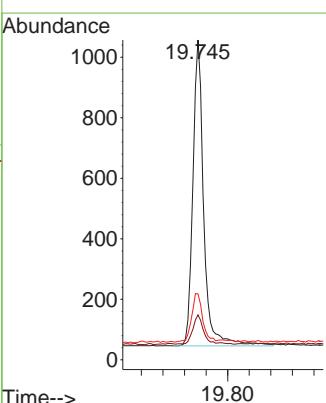
**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#31  
Terphenyl -d14  
Concen: 0.100 ng  
RT: 19.745 min Scan# 2060  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 244 Resp: 1416  
Ion Ratio Lower Upper  
244 100  
212 14.1 9.6 14.4  
122 20.6 13.9 20.9



#32

Benzo(a)anthracene

Concen: 0.100 ng

RT: 21.286 min Scan# 2

Delta R. T. 0.000 min

Lab File: BN036557.D

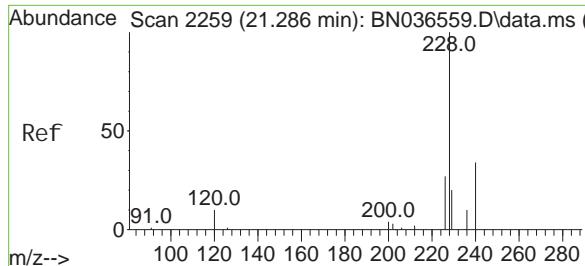
Acq: 10 Mar 2025 11:42

Instrument :

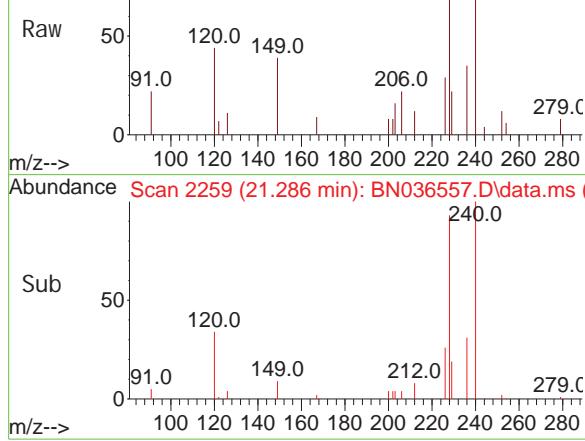
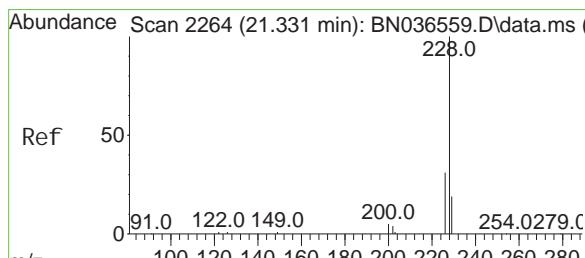
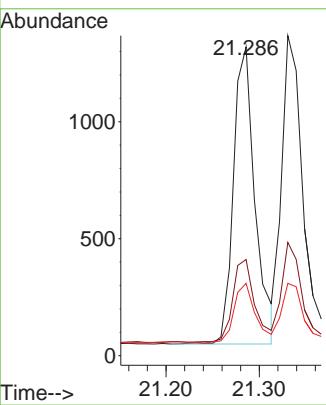
BNA\_N

ClientSampleId :

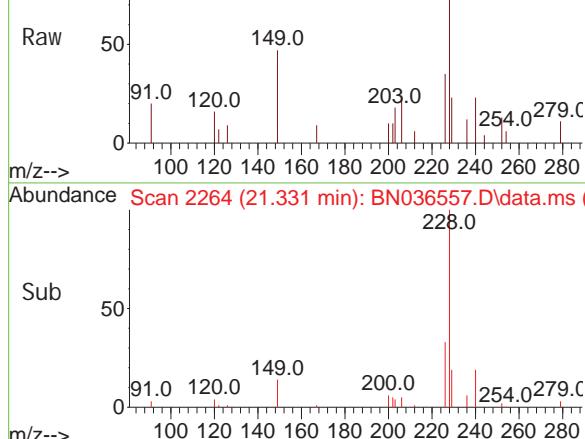
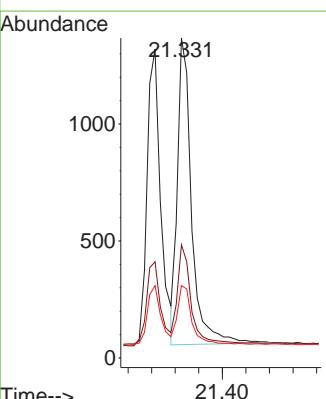
SSTDICCO.1



Abundance Scan 2259 (21.286 min): BN036557.D\data.ms

Tgt Ion: 228 Resp: 204  
Ion Ratio Lower Upper228 100  
226 31.1 22.5 33.7  
229 23.4 16.6 25.0**Manual Integrations  
APPROVED**Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

Abundance Scan 2264 (21.331 min): BN036557.D\data.ms

#33  
Chrysene  
Concen: 0.098 ng  
RT: 21.331 min Scan# 2264  
Delta R. T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42Tgt Ion: 228 Resp: 2187  
Ion Ratio Lower Upper  
228 100  
226 35.4 25.3 37.9  
229 22.6 15.8 23.8

#34

Bi(s(2-ethyl hexyl)phthalate

Concen: 0.121 ng

RT: 21.214 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument : BNA\_N

ClientSampleId : SSTDICCO.1

Tgt Ion: 149 Resp: 1760

Ion Ratio Lower Upper

149 100

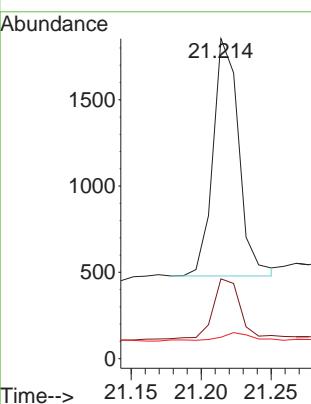
167 27.9 20.7 31.1

279 4.9 3.6 5.4

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 03/11/2025

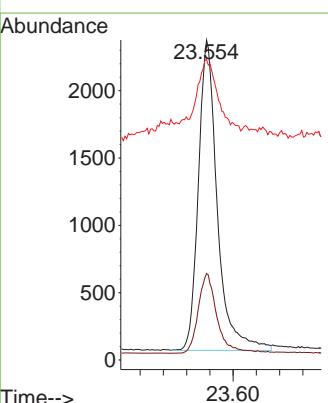
Supervised By :Jagrut Upadhyay 03/11/2025



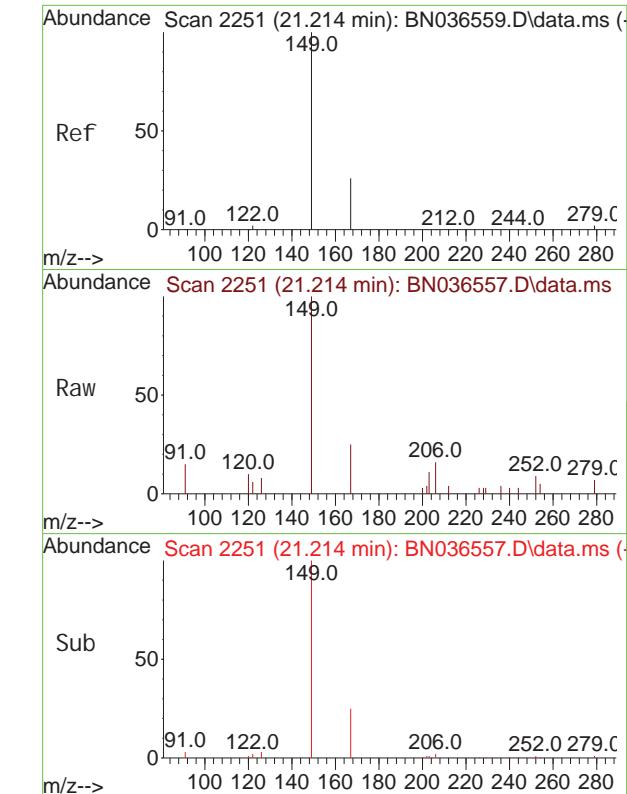
Time--&gt; 21.15 21.20 21.25

#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.554 min Scan# 2777  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 264 Resp: 5207  
Ion Ratio Lower Upper  
264 100  
260 27.0 22.6 33.8  
265 93.9 88.1 132.1



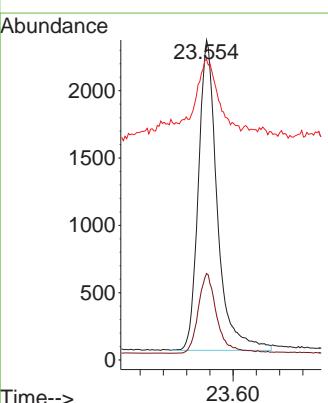
Time--&gt; 23.554 23.60



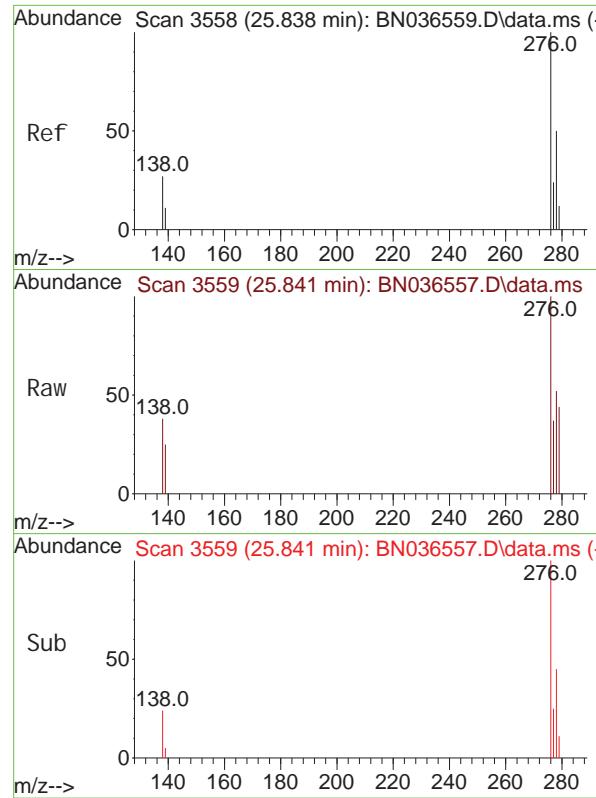
Time--&gt; 21.15 21.20 21.25

#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.554 min Scan# 2777  
Delta R.T. 0.000 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 264 Resp: 5207  
Ion Ratio Lower Upper  
264 100  
260 27.0 22.6 33.8  
265 93.9 88.1 132.1



Time--&gt; 23.554 23.60



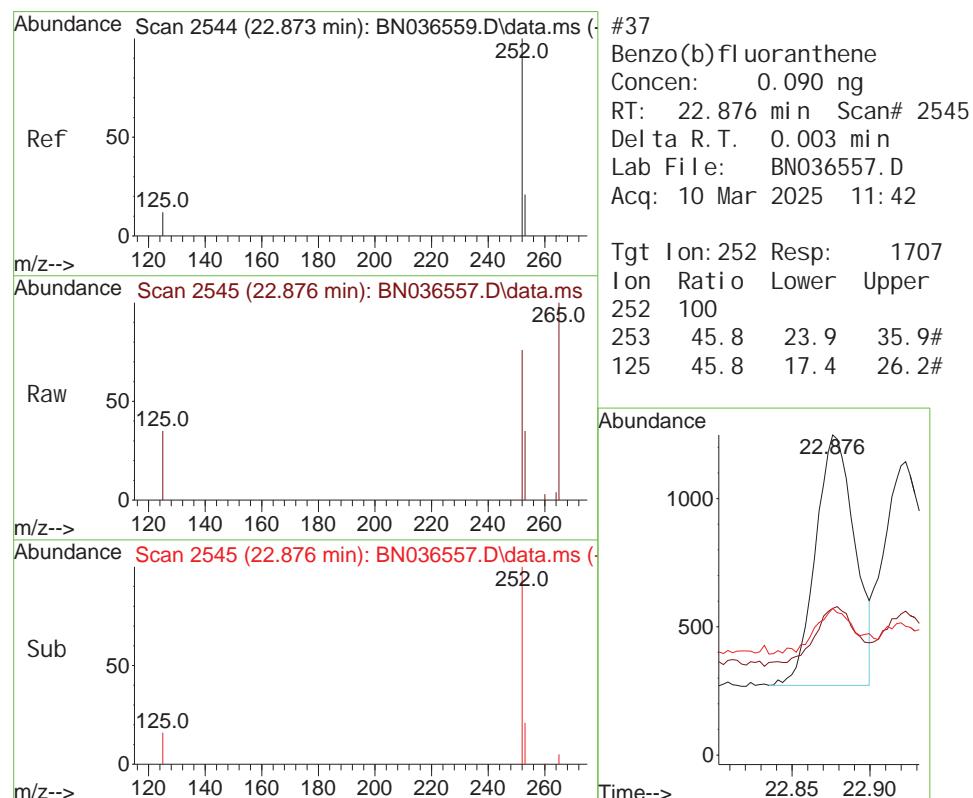
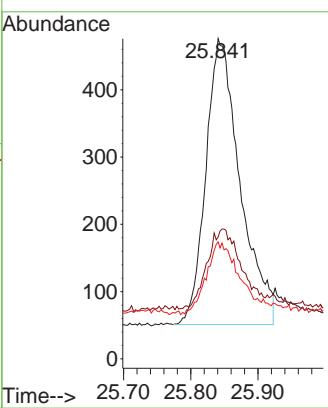
#36

Indeno(1, 2, 3-cd)pyrene  
Concen: 0.080 ng  
RT: 25.841 min Scan# 3  
Delta R. T. 0.003 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

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

### Manual Integrations APPROVED

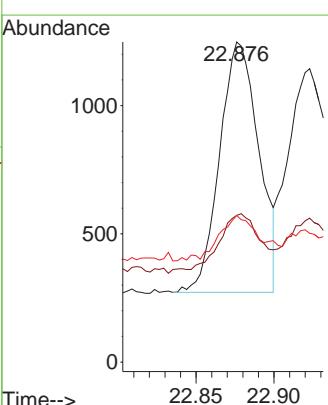
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#37

Benzo(b)fl uoranthene  
Concen: 0.090 ng  
RT: 22.876 min Scan# 2545  
Delta R. T. 0.003 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 252 Resp: 1707  
Ion Ratio Lower Upper  
252 100  
253 45.8 23.9 35.9#  
125 45.8 17.4 26.2#



#38

Benzo(k)fluoranthene

Concen: 0.098 ng

RT: 22.923 min Scan# 2

Delta R.T. 0.006 min

Lab File: BN036557.D

Acq: 10 Mar 2025 11:42

Instrument : BNA\_N

ClientSampleId : SSTDICCO.1

Tgt Ion: 252 Resp: 1958

Ion Ratio Lower Upper

252 100

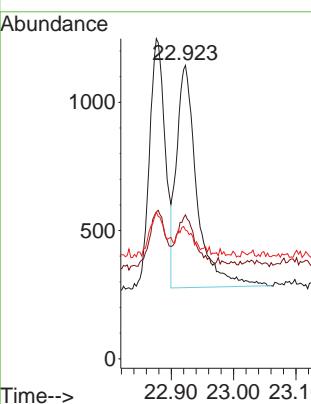
253 49.0 24.6 36.8#

125 43.9 17.8 26.8#

**Manual Integrations****APPROVED**

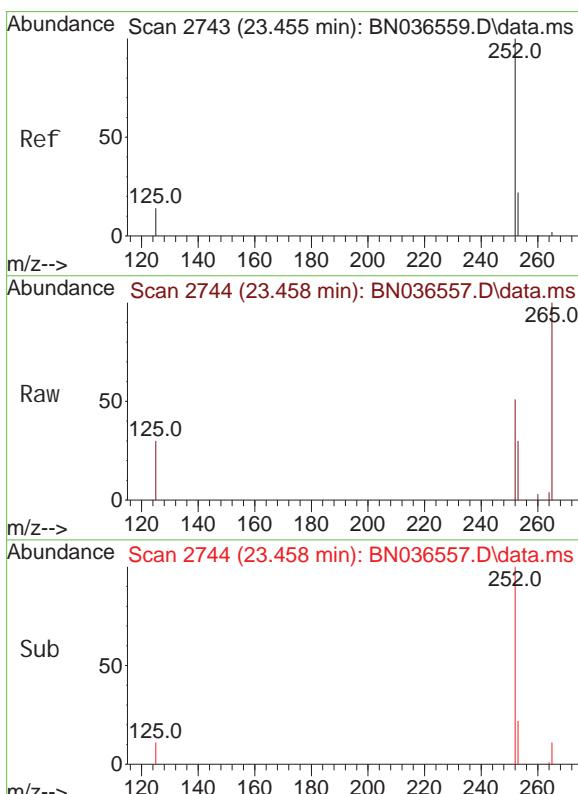
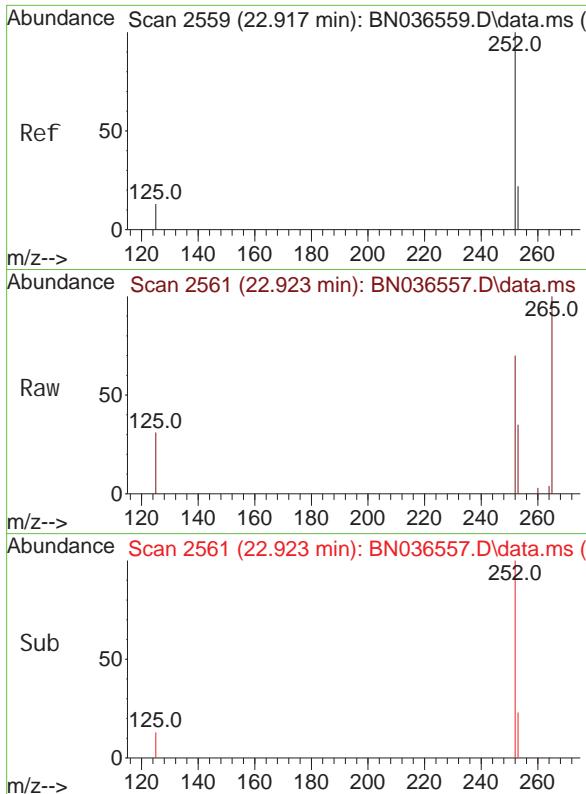
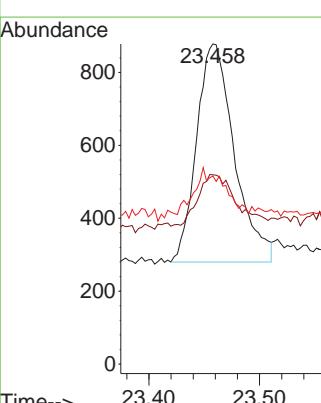
Reviewed By :Anahy Claudio 03/11/2025

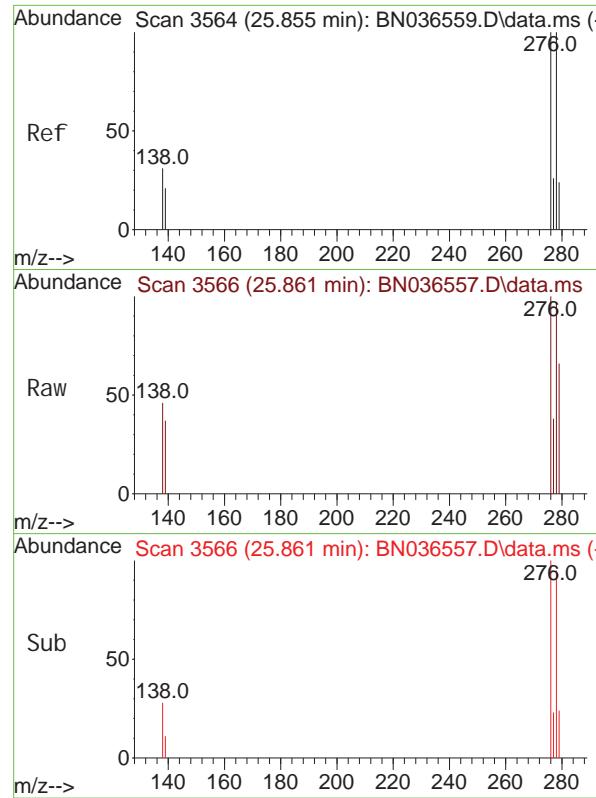
Supervised By :Jagrut Upadhyay 03/11/2025



#39  
Benzo(a)pyrene  
Concen: 0.089 ng  
RT: 23.458 min Scan# 2744  
Delta R.T. 0.003 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 252 Resp: 1419  
Ion Ratio Lower Upper  
252 100  
253 59.1 27.8 41.8#  
125 58.8 22.7 34.1#



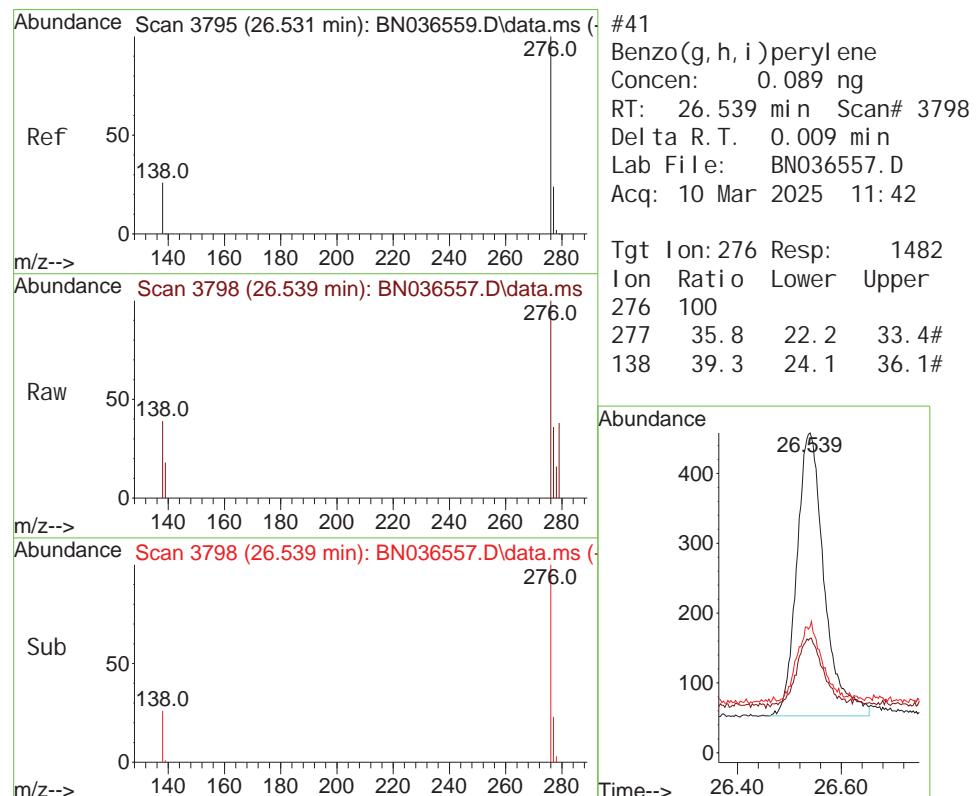
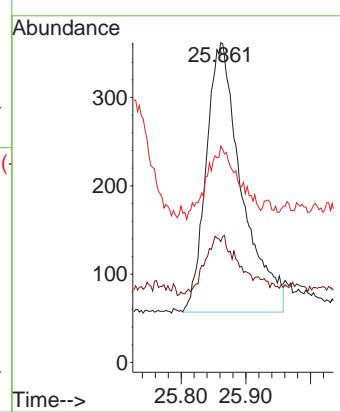


#40  
Di benzo(a, h)anthracene  
Concen: 0.079 ng  
RT: 25.861 min Scan# 3  
Delta R. T. 0.006 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

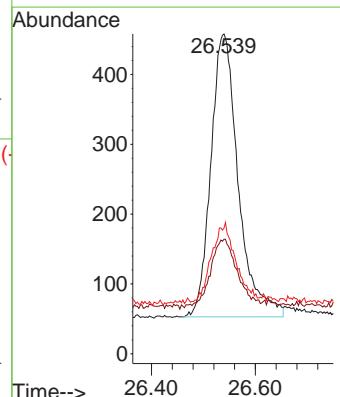
### Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#41  
Benzo(g, h, i )perylene  
Concen: 0.089 ng  
RT: 26.539 min Scan# 3798  
Delta R. T. 0.009 min  
Lab File: BN036557.D  
Acq: 10 Mar 2025 11:42

Tgt Ion: 276 Resp: 1482  
Ion Ratio Lower Upper  
276 100  
277 35.8 22.2 33.4#  
138 39.3 24.1 36.1#



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036558.D  
 Acq On : 10 Mar 2025 12:18  
 Operator : RC/JU  
 Sample : SSTDICCO.2  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

Quant Time: Mar 10 16:00:58 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2504	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5844	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	3516	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	7506	0.400	ng	0.00
29) Chrysene-d12	21.295	240	4730	0.400	ng	0.00
35) Perylene-d12	23.554	264	4241	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	1137	0.195	ng	0.00
5) Phenol-d6	6.901	99	1323	0.184	ng	0.00
8) Nitrobenzene-d5	8.875	82	1156	0.182	ng	0.00
11) 2-Methylnaphthalene-d10	12.111	152	1603	0.184	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	282	0.177	ng	0.00
15) 2-Fluorobiphenyl	12.993	172	3485	0.170	ng	0.00
27) Fluoranthene-d10	19.146	212	3583	0.186	ng	0.00
31) Terphenyl-d14	19.745	244	2283	0.201	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.247	88	550m	0.198	ng	
3) n-Nitrosodimethylamine	3.557	42	1094	0.195	ng	92
6) bis(2-Chloroethyl)ether	7.154	93	1440	0.193	ng	99
9) Naphthalene	10.562	128	3286	0.191	ng	97
10) Hexachlorobutadiene	10.850	225	828	0.205	ng	# 97
12) 2-Methylnaphthalene	12.187	142	2034	0.186	ng	97
16) Acenaphthylene	14.088	152	3087	0.186	ng	100
17) Acenaphthene	14.430	154	2038	0.188	ng	99
18) Fluorene	15.414	166	2813	0.191	ng	99
20) 4,6-Dinitro-2-methylph...	15.510	198	214	0.258	ng	# 69
21) 4-Bromophenyl-phenylether	16.304	248	853	0.181	ng	93
22) Hexachlorobenzene	16.416	284	1079	0.190	ng	99
23) Atrazine	16.578	200	716	0.190	ng	97
24) Pentachlorophenol	16.776	266	435	0.168	ng	98
25) Phenanthrene	17.148	178	4171	0.185	ng	100
26) Anthracene	17.248	178	3645	0.179	ng	99
28) Fluoranthene	19.174	202	4666	0.184	ng	99
30) Pyrene	19.536	202	4742	0.205	ng	100
32) Benzo(a)anthracene	21.286	228	3111	0.189	ng	97
33) Chrysene	21.331	228	3568	0.199	ng	97
34) Bis(2-ethylhexyl)phtha...	21.214	149	2601	0.222	ng	# 97
36) Indeno(1,2,3-cd)pyrene	25.844	276	2790	0.182	ng	98
37) Benzo(b)fluoranthene	22.876	252	2883	0.187	ng	# 83
38) Benzo(k)fluoranthene	22.917	252	2962	0.183	ng	# 86
39) Benzo(a)pyrene	23.458	252	2443	0.188	ng	# 76
40) Dibenzo(a,h)anthracene	25.858	278	2080	0.175	ng	# 83
41) Benzo(g,h,i)perylene	26.536	276	2573	0.189	ng	95

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

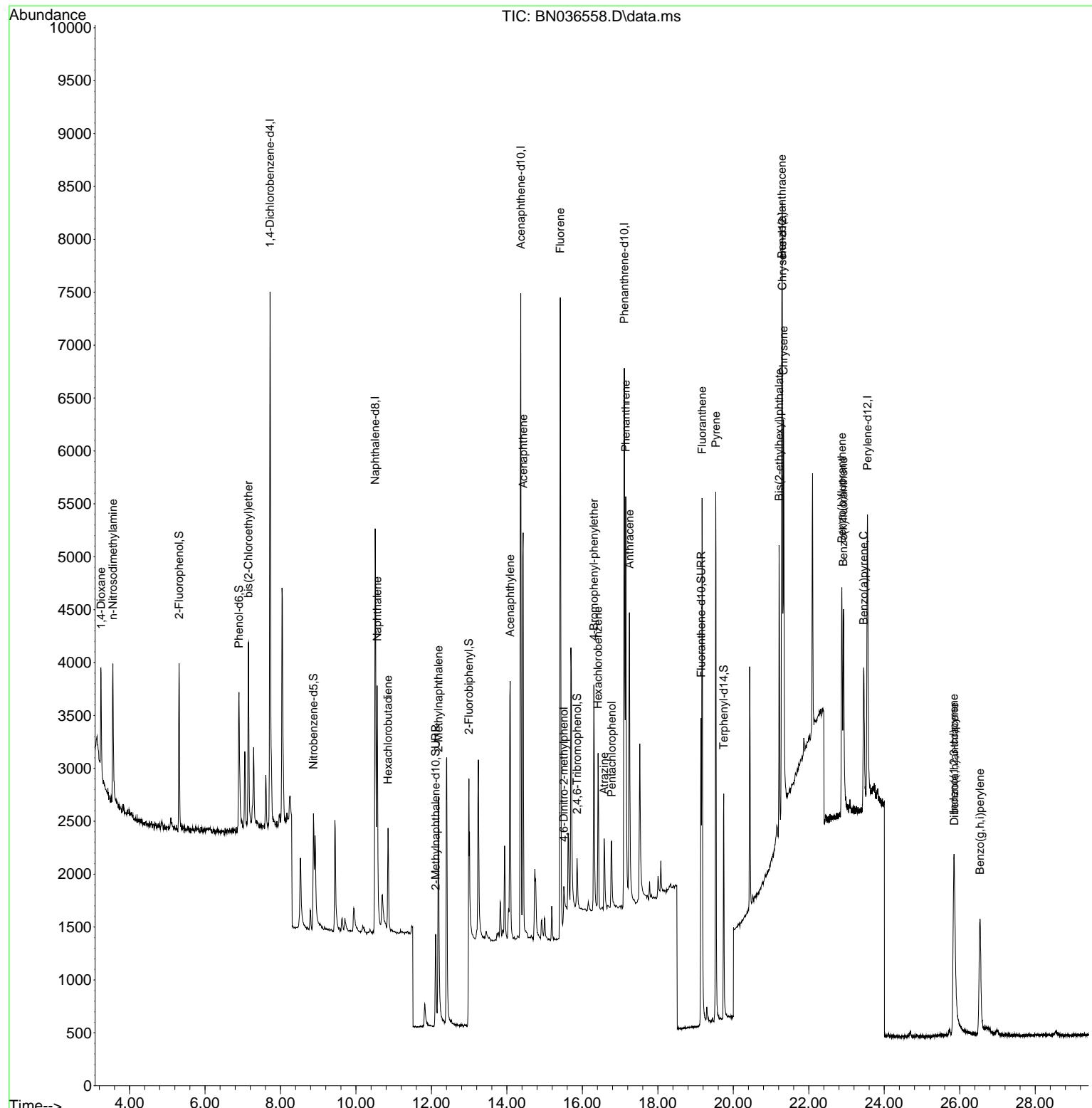
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036558.D  
Acq On : 10 Mar 2025 12:18  
Operator : RC/JU  
Sample : SSTDICC0.2  
Misc :  
ALS Vial : 3 Sample Multiplier: 1

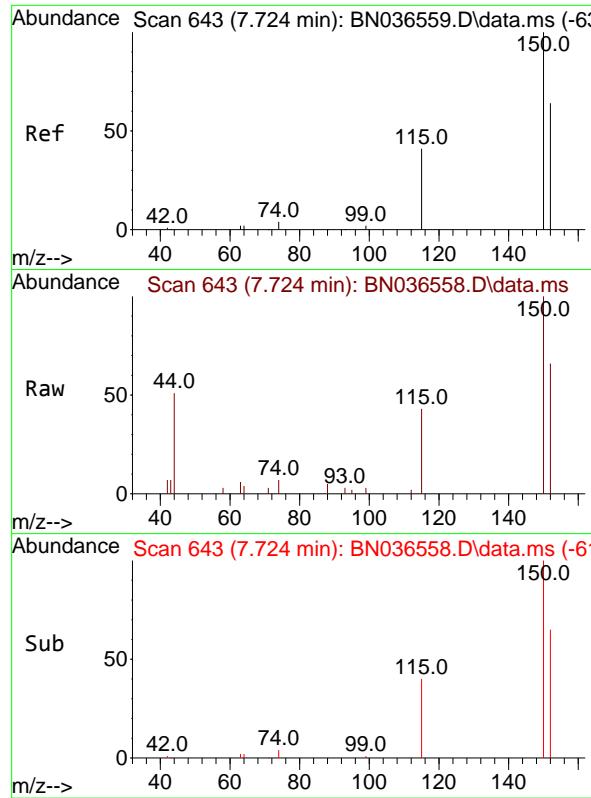
Quant Time: Mar 10 16:00:58 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICC0.2

## Manual Integrations APPROVED

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



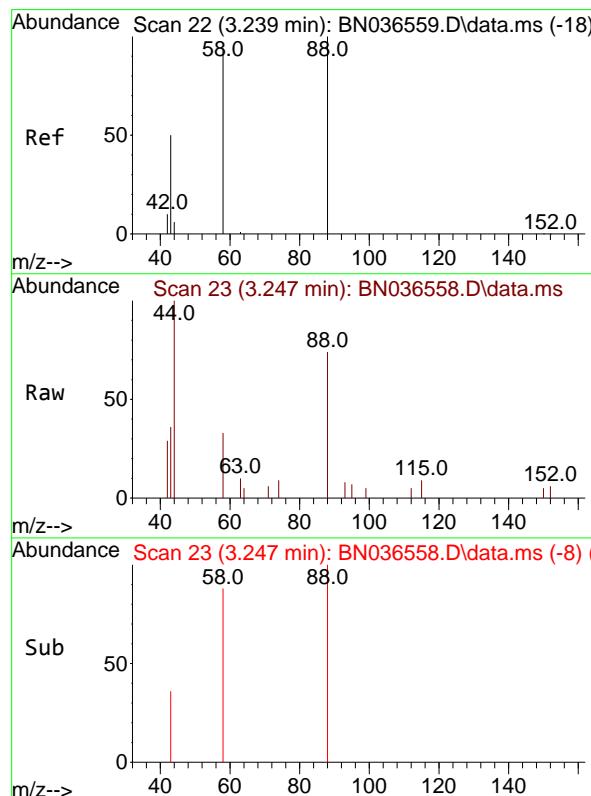
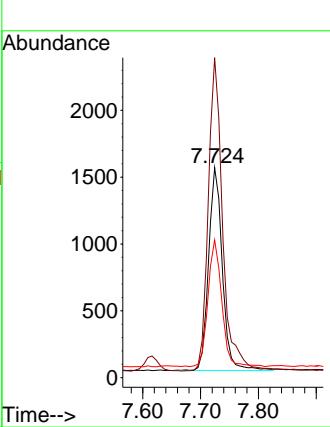


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

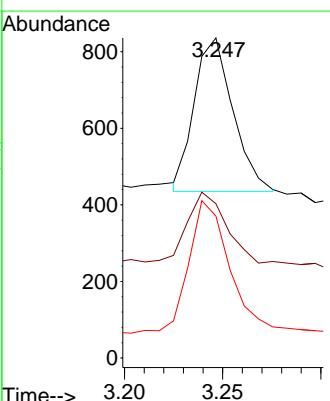
### Manual Integrations APPROVED

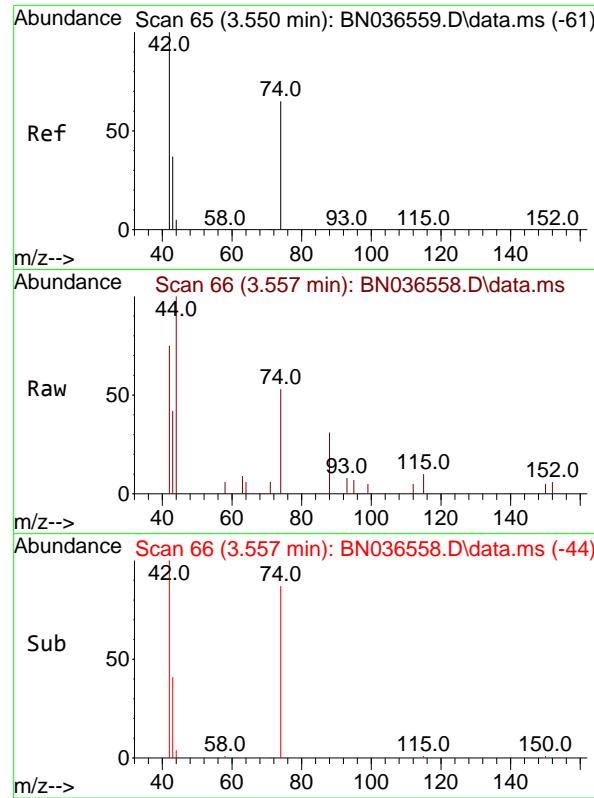
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#2  
1,4-Dioxane  
Concen: 0.198 ng m  
RT: 3.247 min Scan# 23  
Delta R.T. 0.007 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion: 88 Resp: 550  
Ion Ratio Lower Upper  
88 100  
43 56.5 37.8 56.8  
58 93.8 67.4 101.2



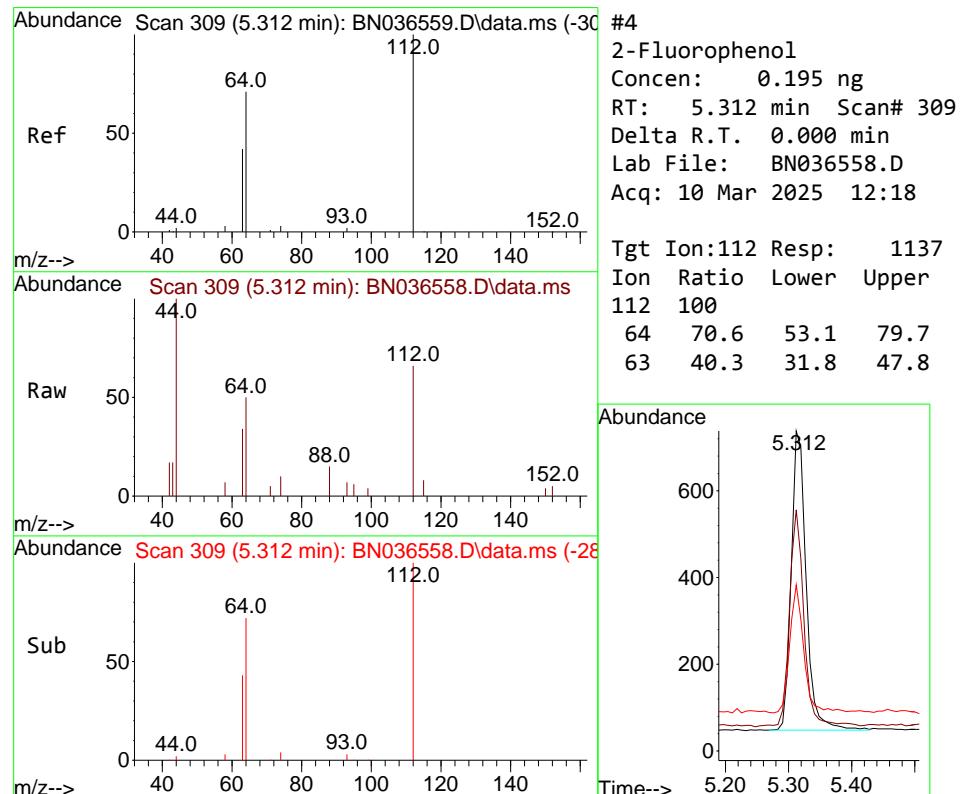
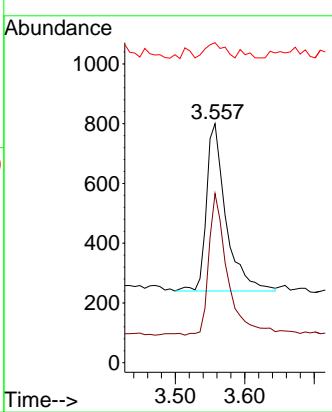


#3  
n-Nitrosodimethylamine  
Concen: 0.195 ng  
RT: 3.557 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCO.2

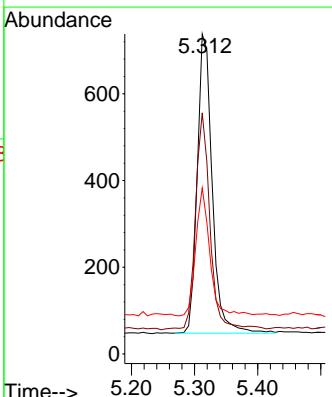
### Manual Integrations APPROVED

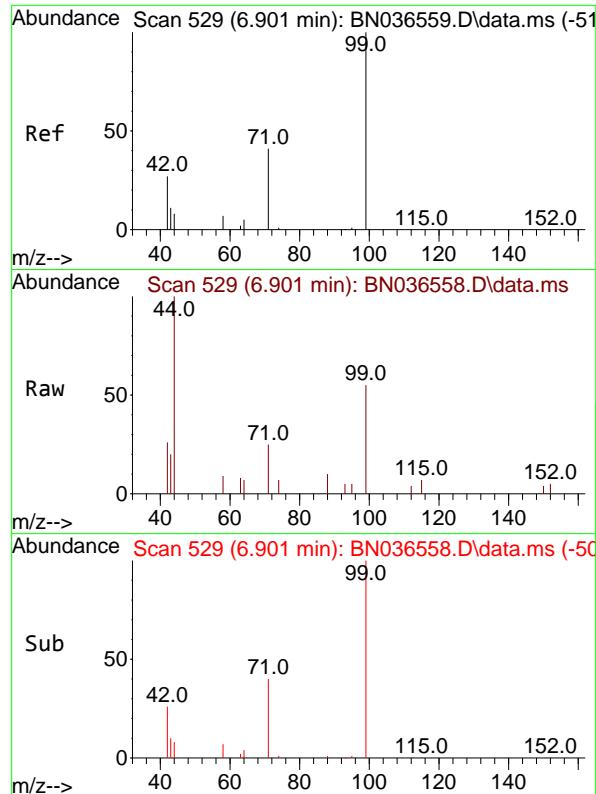
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#4  
2-Fluorophenol  
Concen: 0.195 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:112 Resp: 1137  
Ion Ratio Lower Upper  
112 100  
64 70.6 53.1 79.7  
63 40.3 31.8 47.8



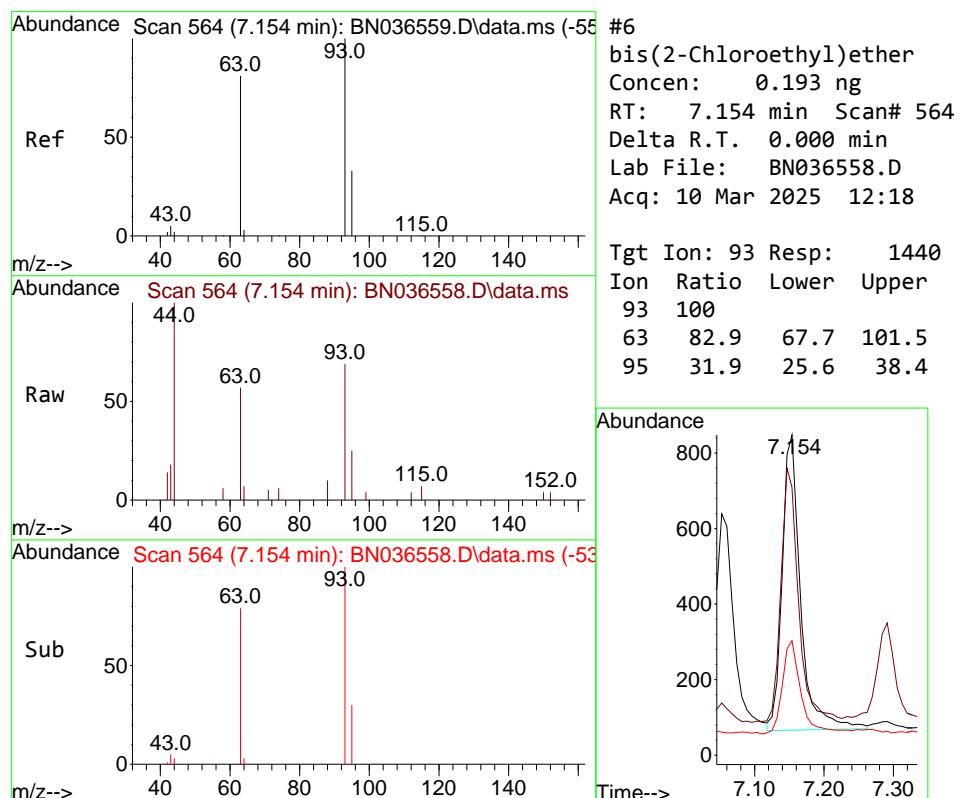
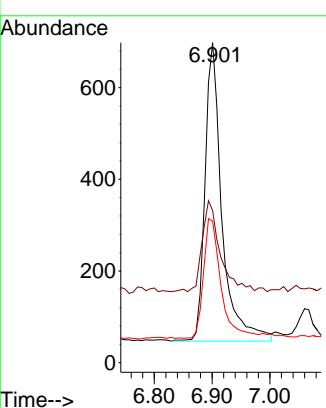


#5  
Phenol-d6  
Concen: 0.184 ng  
RT: 6.901 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

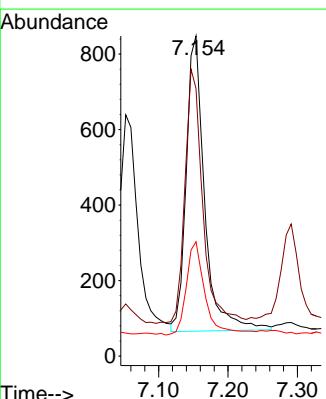
**Manual Integrations**  
**APPROVED**

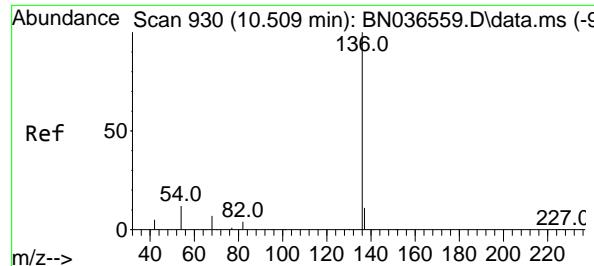
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#6  
bis(2-Chloroethyl)ether  
Concen: 0.193 ng  
RT: 7.154 min Scan# 564  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

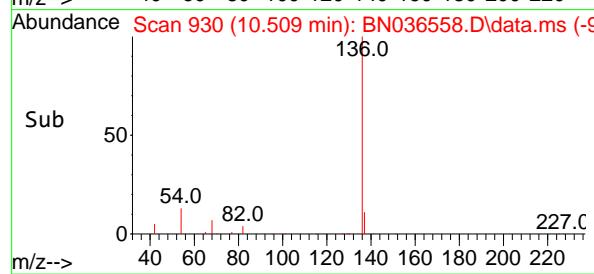
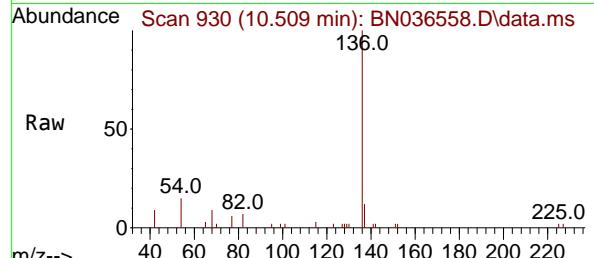
Tgt Ion: 93 Resp: 1440  
Ion Ratio Lower Upper  
93 100  
63 82.9 67.7 101.5  
95 31.9 25.6 38.4





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036558.D  
 Acq: 10 Mar 2025 12:18

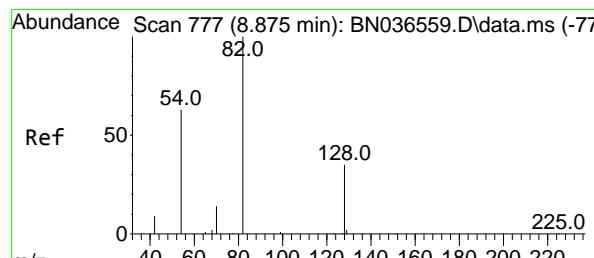
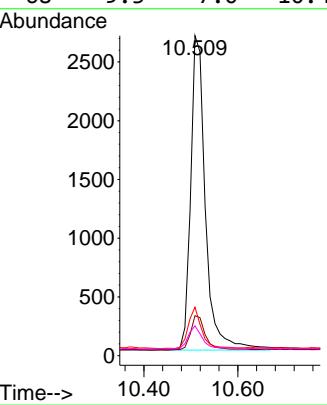
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2



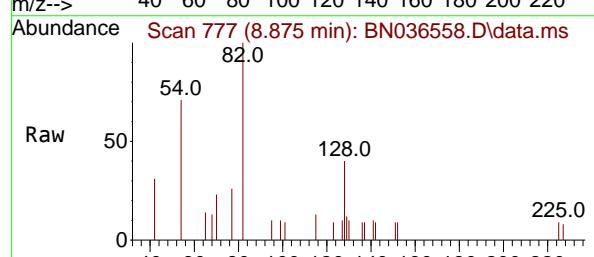
Tgt Ion:136 Resp: 5844  
 Ion Ratio Lower Upper  
 136 100  
 137 12.5 10.3 15.5  
 54 15.1 11.5 17.3  
 68 9.3 7.0 10.4

### Manual Integrations APPROVED

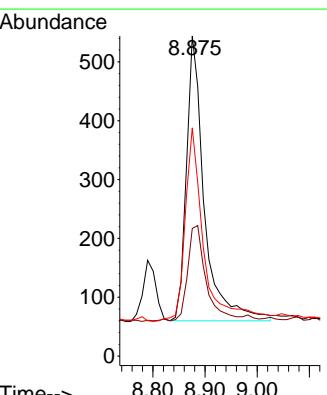
Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025

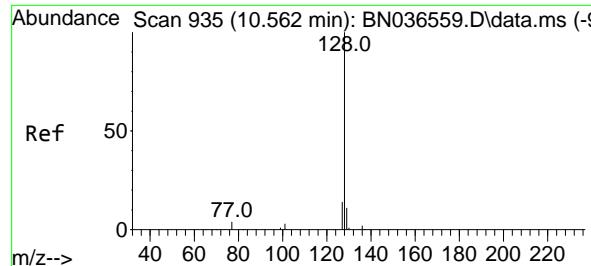


#8  
 Nitrobenzene-d5  
 Concen: 0.182 ng  
 RT: 8.875 min Scan# 777  
 Delta R.T. 0.000 min  
 Lab File: BN036558.D  
 Acq: 10 Mar 2025 12:18



Tgt Ion: 82 Resp: 1156  
 Ion Ratio Lower Upper  
 82 100  
 128 39.9 30.6 45.8  
 54 71.3 52.2 78.4





#9

Naphthalene

Concen: 0.191 ng

RT: 10.562 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036558.D

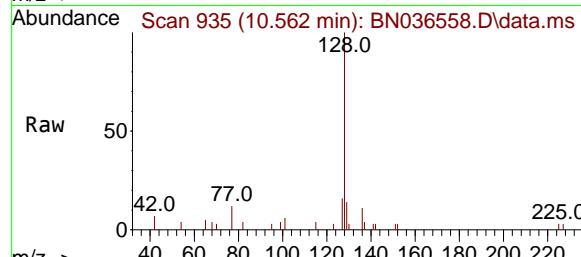
Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2



Tgt Ion:128 Resp: 3280

Ion Ratio Lower Upper

128 100

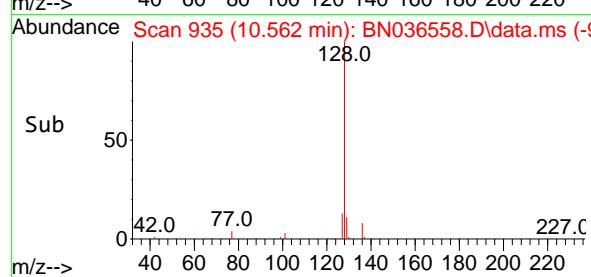
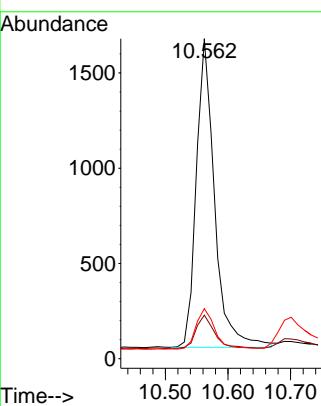
129 13.6 9.8 14.6

127 15.7 11.8 17.8

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 03/11/2025

Supervised By :Jagrut Upadhyay 03/11/2025



#10

Hexachlorobutadiene

Concen: 0.205 ng

RT: 10.850 min Scan# 962

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

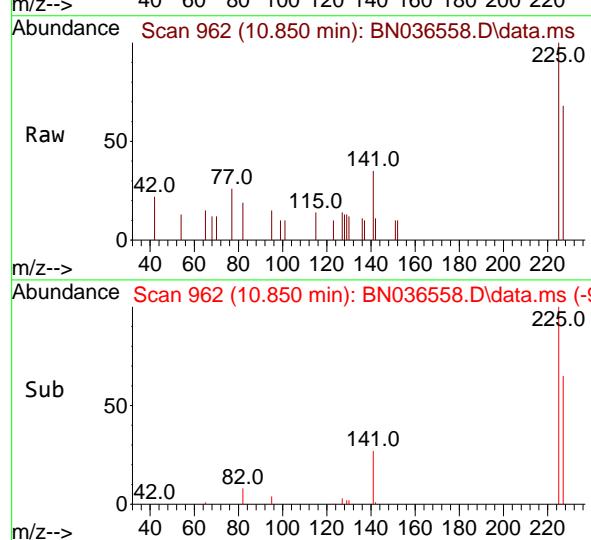
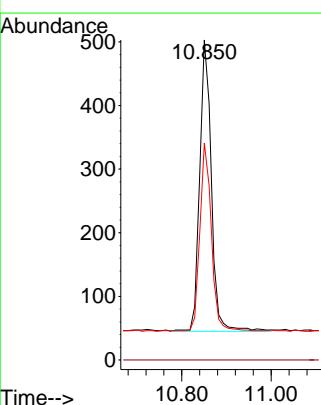
Tgt Ion:225 Resp: 828

Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 62.6 51.8 77.8



#9

Naphthalene

Concen: 0.191 ng

RT: 10.562 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036558.D

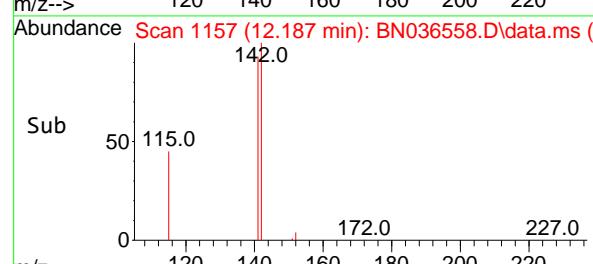
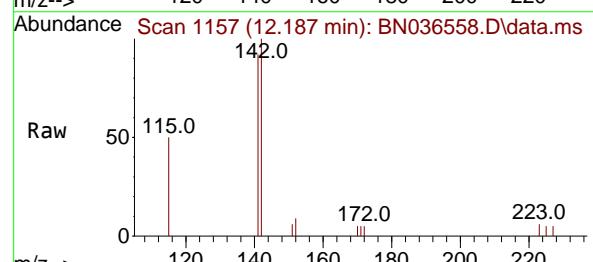
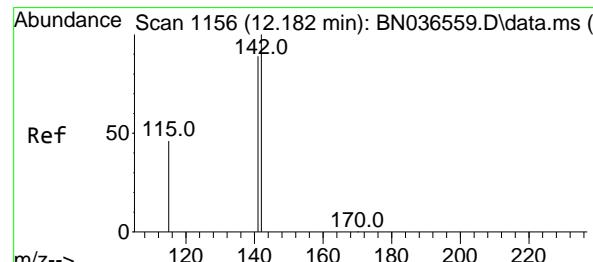
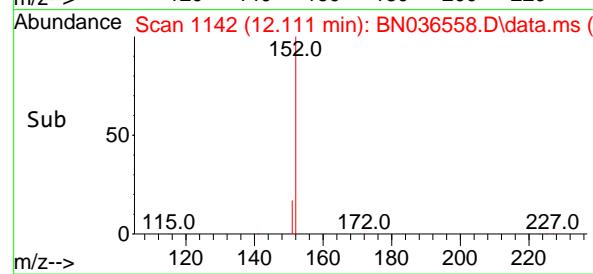
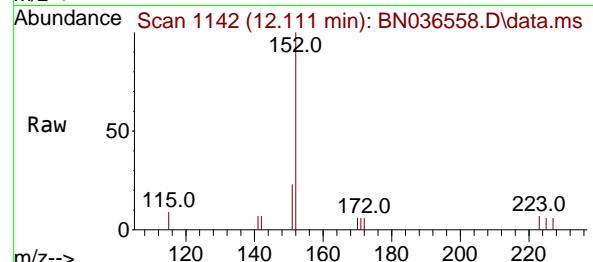
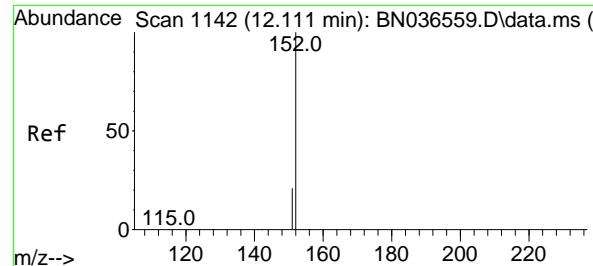
Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

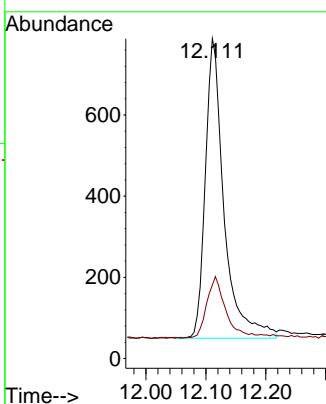


#11  
2-Methylnaphthalene-d10  
Concen: 0.184 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

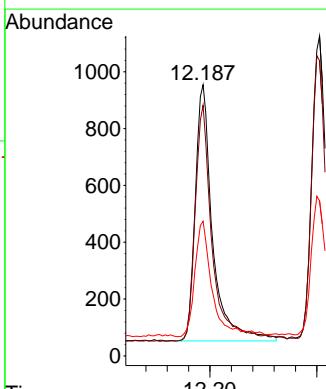
### Manual Integrations APPROVED

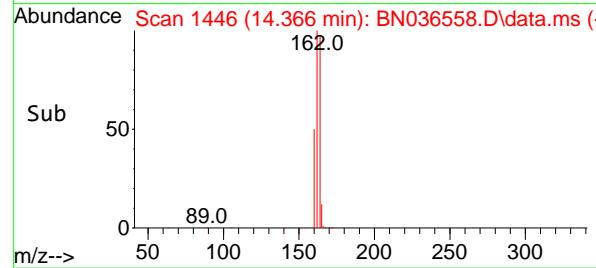
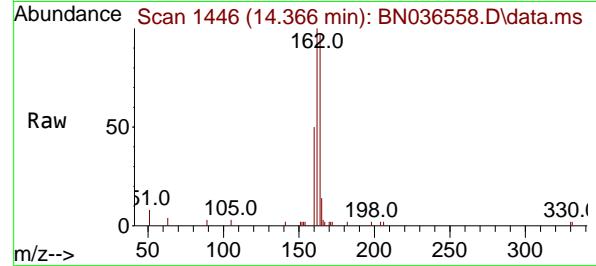
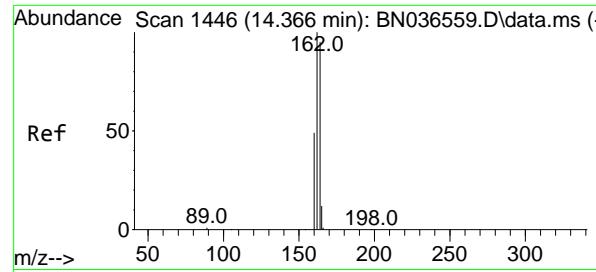
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#12  
2-Methylnaphthalene  
Concen: 0.186 ng  
RT: 12.187 min Scan# 1157  
Delta R.T. 0.005 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:142 Resp: 2034  
Ion Ratio Lower Upper  
142 100  
141 92.5 71.7 107.5  
115 49.7 38.3 57.5





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1446

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

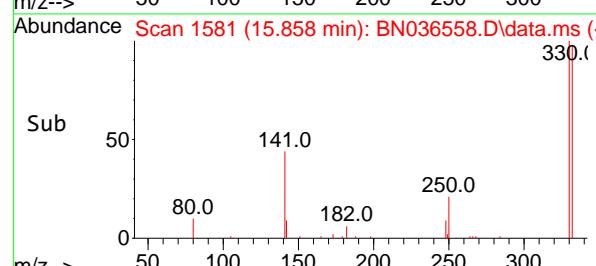
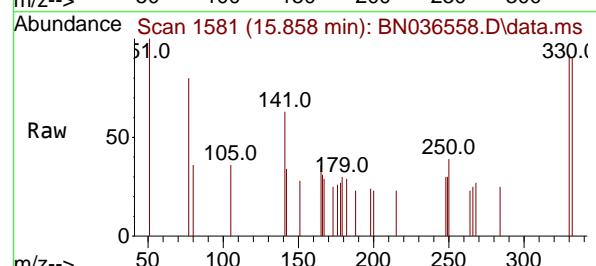
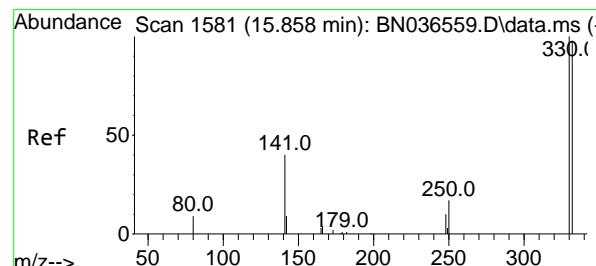
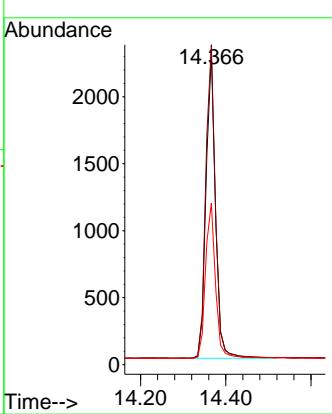
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#14

2,4,6-Tribromophenol

Concen: 0.177 ng

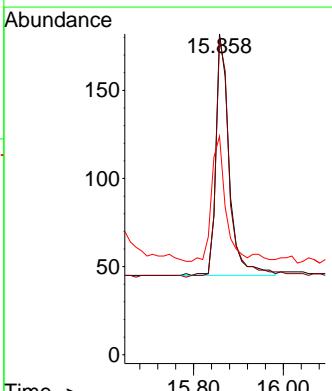
RT: 15.858 min Scan# 1581

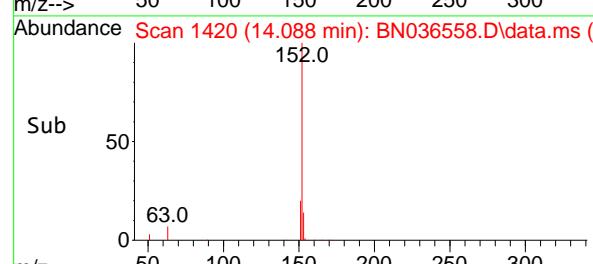
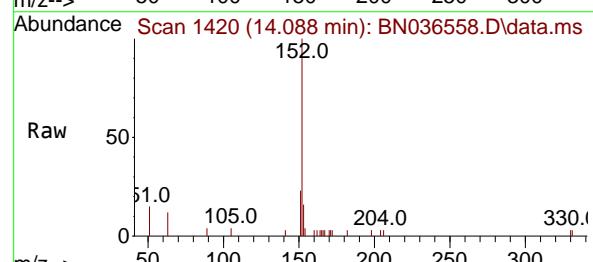
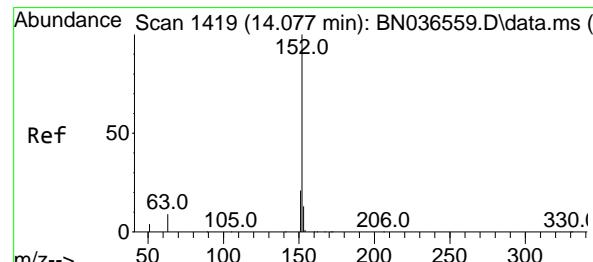
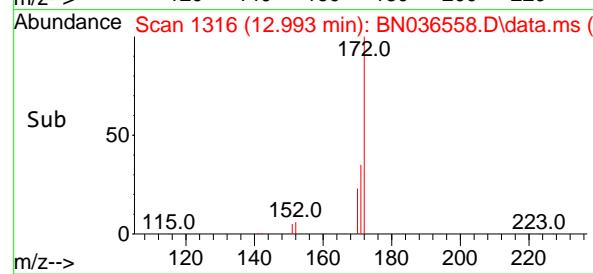
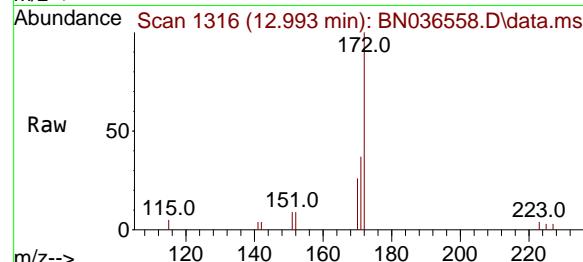
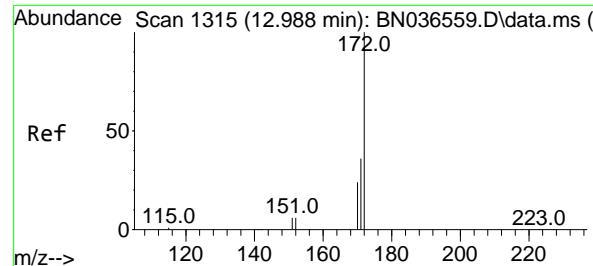
Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Tgt	Ion:330	Resp:	282
Ion	Ratio	Lower	Upper
330	100		
332	103.5	75.2	112.8
141	53.9	43.4	65.2





#15

2-Fluorobiphenyl

Concen: 0.170 ng

RT: 12.993 min Scan# 1

Delta R.T. 0.005 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

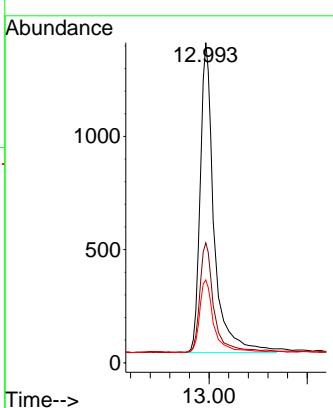
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#16

Acenaphthylene

Concen: 0.186 ng

RT: 14.088 min Scan# 1420

Delta R.T. 0.011 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

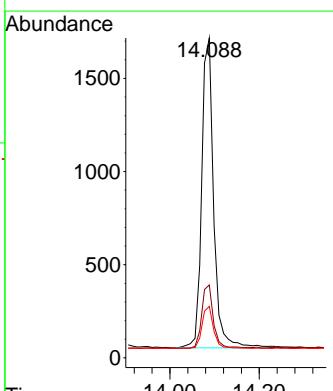
Tgt Ion:152 Resp: 3087

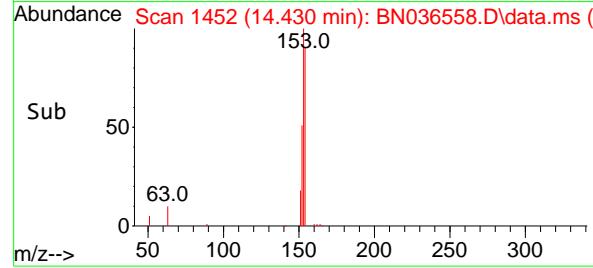
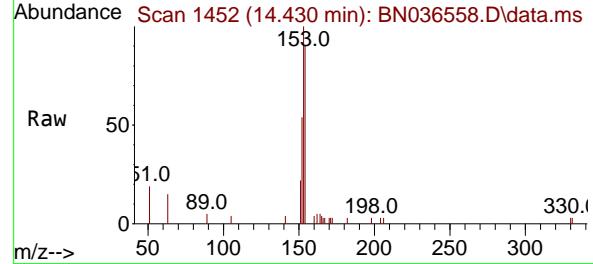
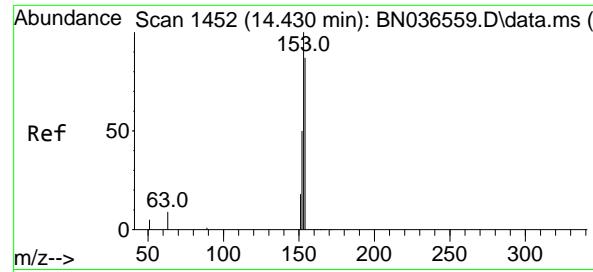
Ion Ratio Lower Upper

152 100

151 20.4 16.2 24.4

153 13.0 10.6 15.8





#17

Acenaphthene

Concen: 0.188 ng

RT: 14.430 min Scan# 1452

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

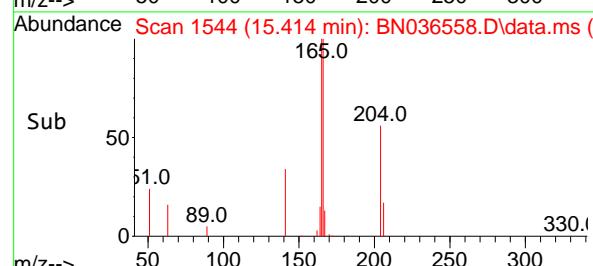
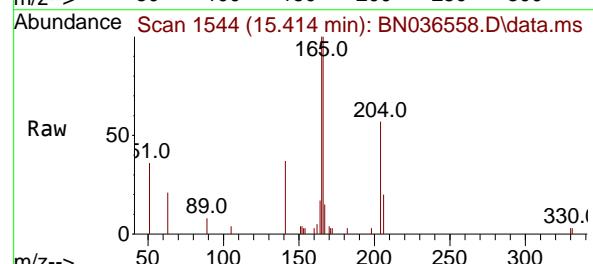
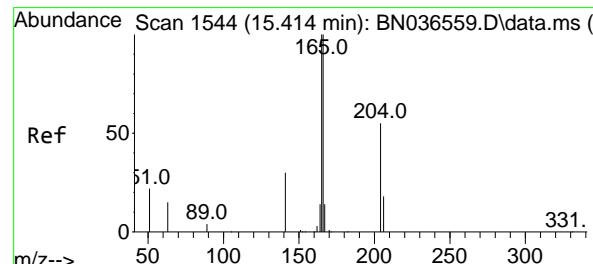
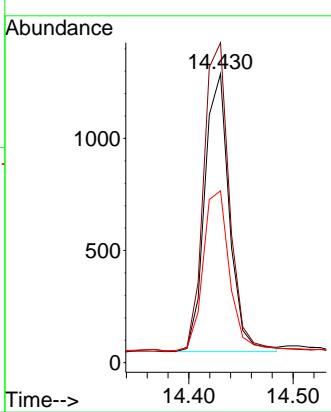
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#18

Fluorene

Concen: 0.191 ng

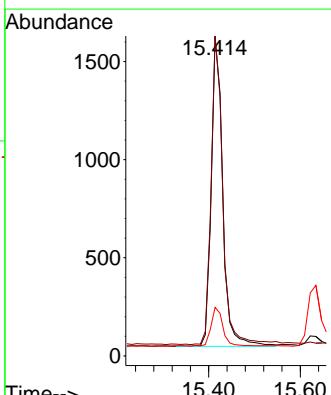
RT: 15.414 min Scan# 1544

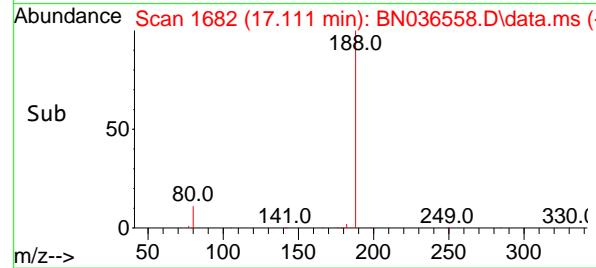
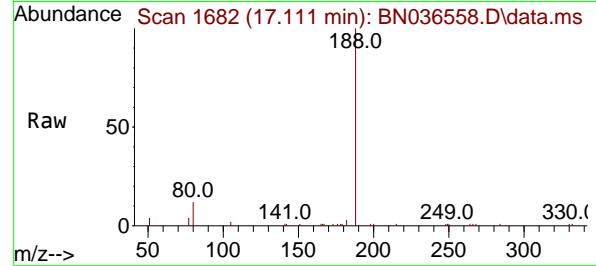
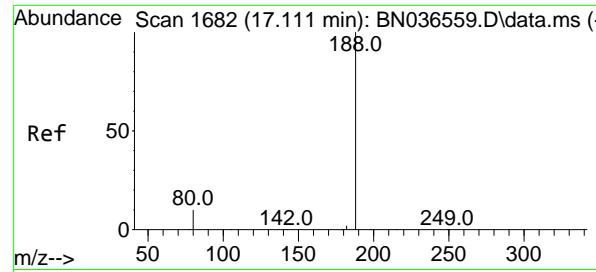
Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Tgt	Ion	Ion Ratio	Resp:	Lower	Upper
166	100		2813		
165	101.1	79.8	119.8		
167	12.6	10.6	15.8		





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.111 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

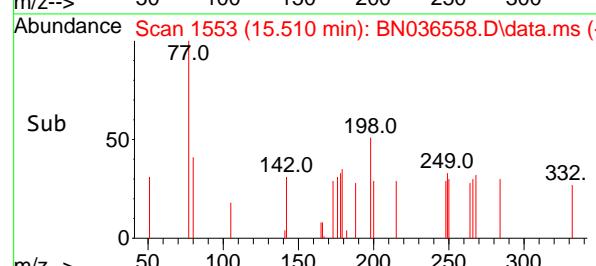
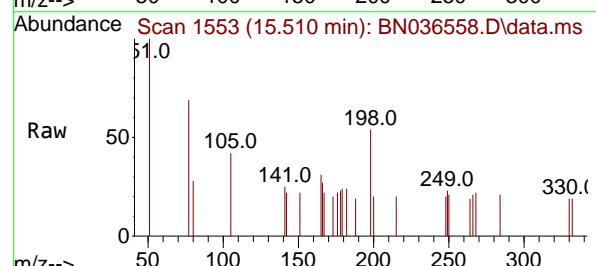
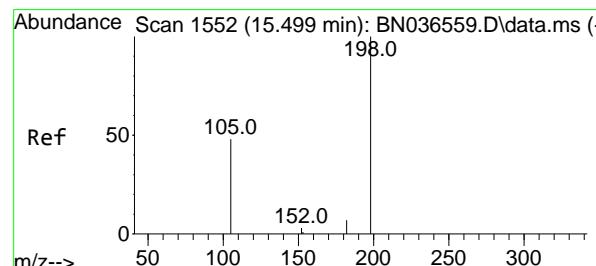
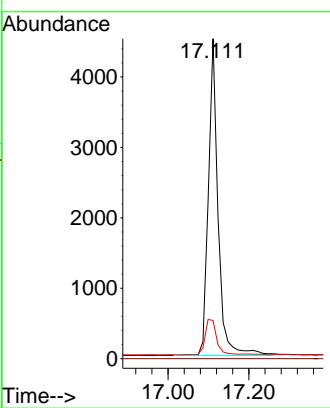
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#20

4,6-Dinitro-2-methylphenol

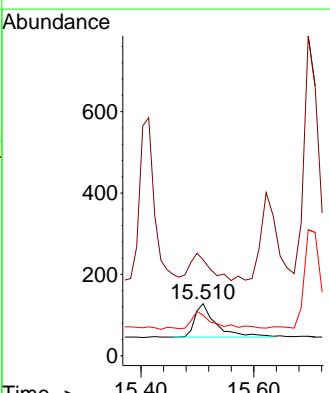
Concen: 0.258 ng

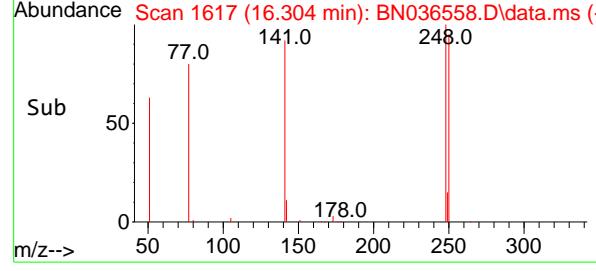
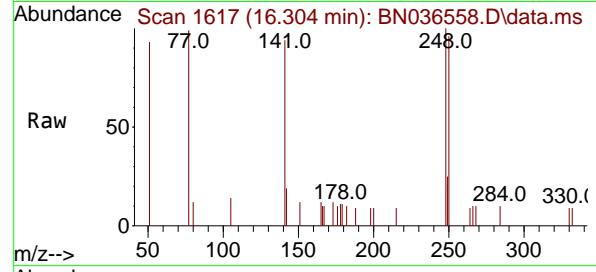
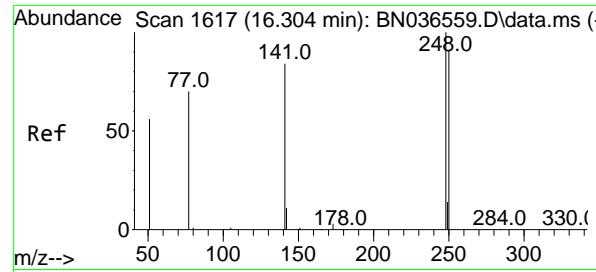
RT: 15.510 min Scan# 1553

Delta R.T. 0.011 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

 Tgt Ion:198 Resp: 214  
 Ion Ratio Lower Upper  
 198 100  
 51 184.4 107.9 161.9#  
 105 78.1 56.2 84.2


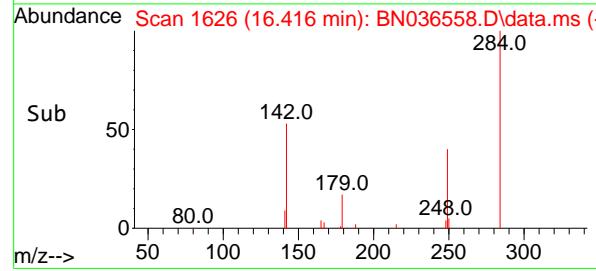
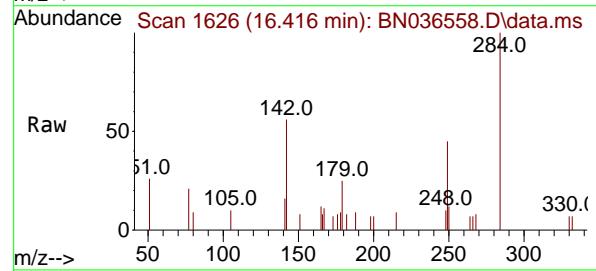
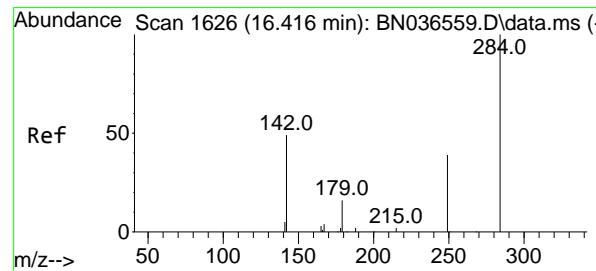
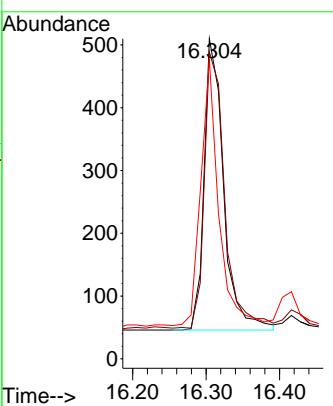


#21  
4-Bromophenyl-phenylether  
Concen: 0.181 ng  
RT: 16.304 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCO.2

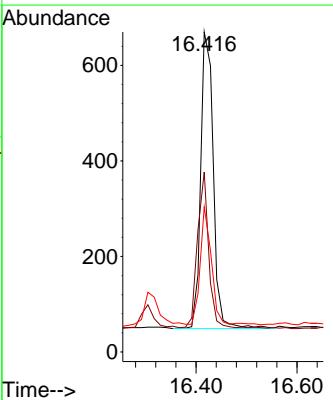
### Manual Integrations APPROVED

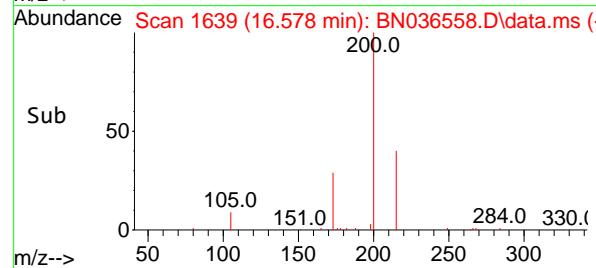
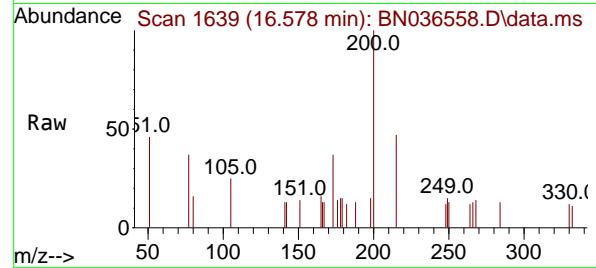
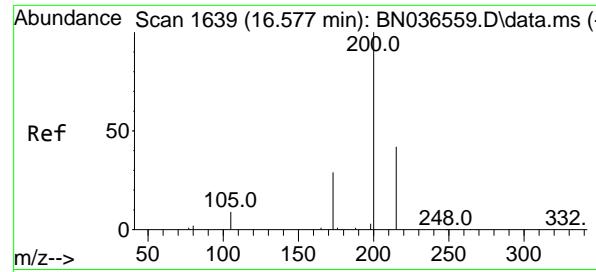
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#22  
Hexachlorobenzene  
Concen: 0.190 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:284 Resp: 1079  
Ion Ratio Lower Upper  
284 100  
142 47.0 37.0 55.4  
249 34.8 28.1 42.1





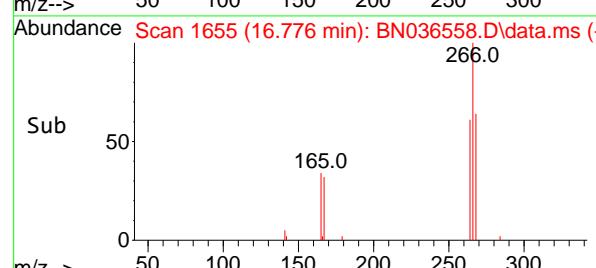
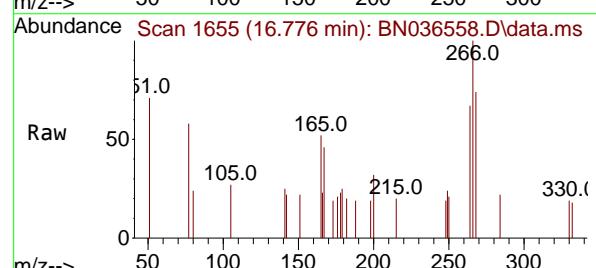
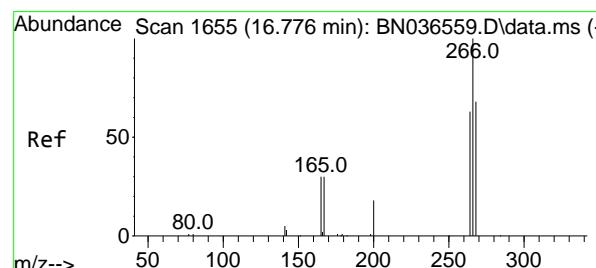
#23

Atrazine  
Concen: 0.190 ng  
RT: 16.578 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

### Manual Integrations APPROVED

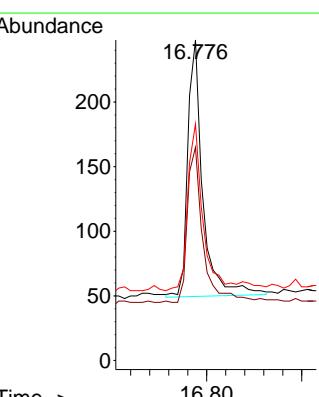
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

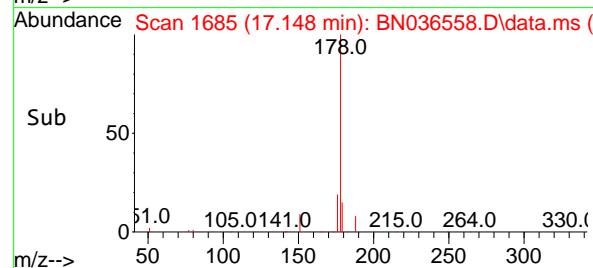
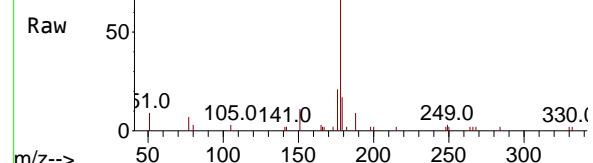
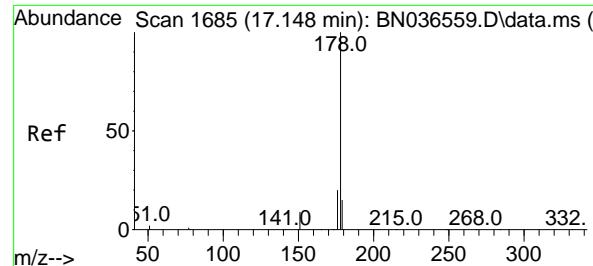


#24

Pentachlorophenol  
Concen: 0.168 ng  
RT: 16.776 min Scan# 1655  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:266 Resp: 435  
Ion Ratio Lower Upper  
266 100  
264 63.4 49.6 74.4  
268 65.7 50.9 76.3





#25

Phenanthrene

Concen: 0.185 ng

RT: 17.148 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

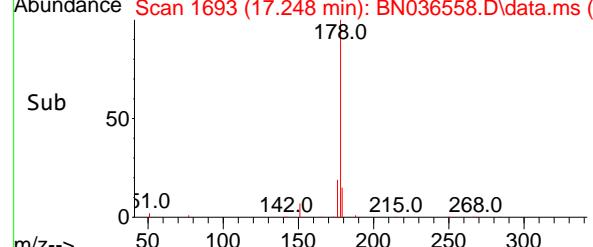
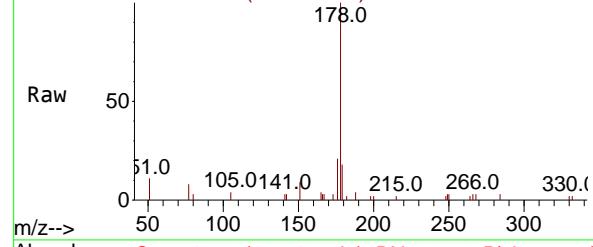
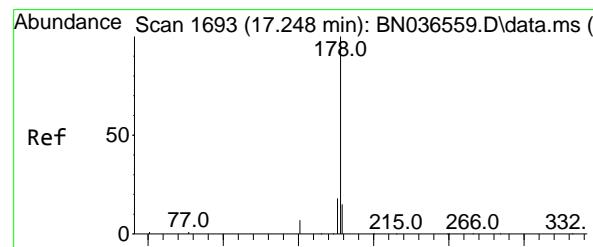
Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.2

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#26

Anthracene

Concen: 0.179 ng

RT: 17.248 min Scan# 1693

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

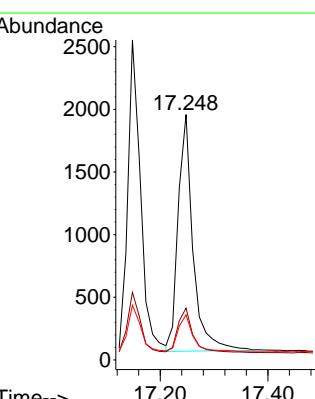
Tgt Ion:178 Resp: 3645

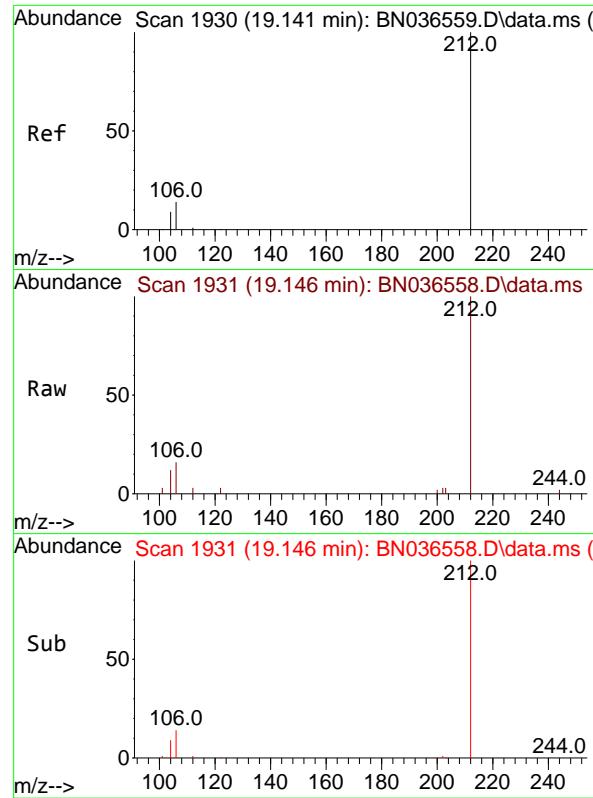
Ion Ratio Lower Upper

178 100

176 19.1 15.4 23.2

179 15.1 12.6 18.8



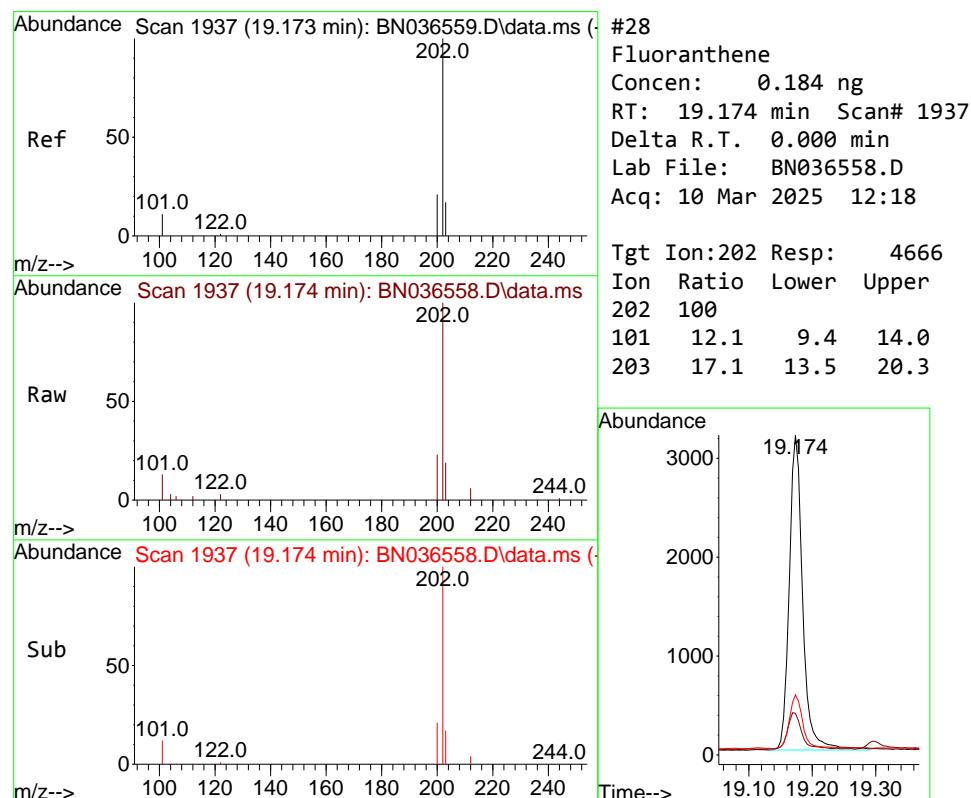
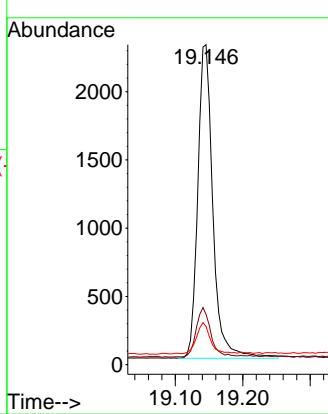


#27  
 Fluoranthene-d10  
 Concen: 0.186 ng  
 RT: 19.146 min Scan# 1  
 Delta R.T. 0.005 min  
 Lab File: BN036558.D  
 Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

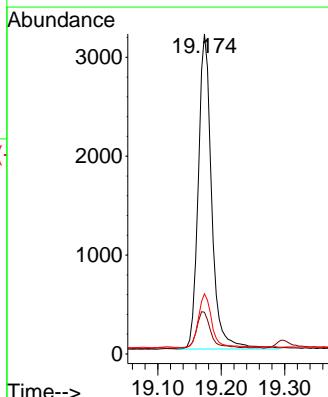
**Manual Integrations**  
**APPROVED**

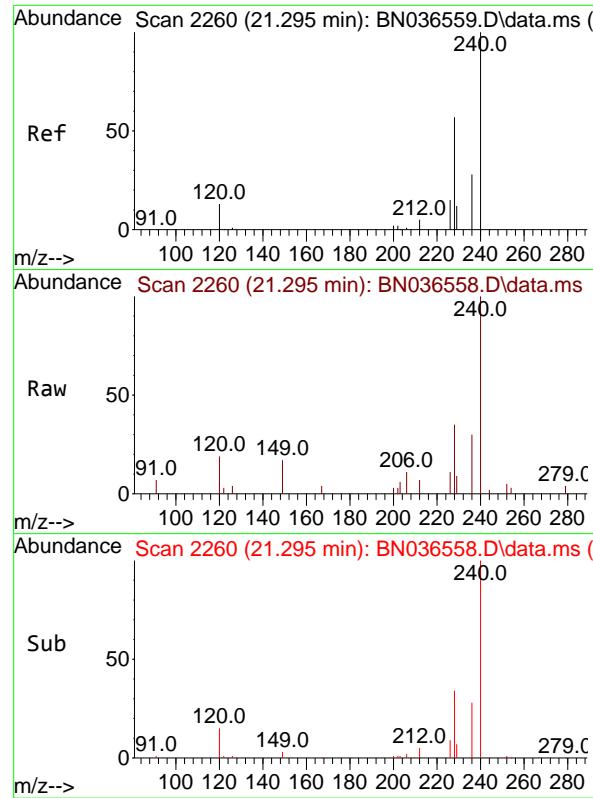
Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025



#28  
 Fluoranthene  
 Concen: 0.184 ng  
 RT: 19.174 min Scan# 1937  
 Delta R.T. 0.000 min  
 Lab File: BN036558.D  
 Acq: 10 Mar 2025 12:18

Tgt Ion:202 Resp: 4666  
 Ion Ratio Lower Upper  
 202 100  
 101 12.1 9.4 14.0  
 203 17.1 13.5 20.3





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.295 min Scan# 2

Delta R.T. 0.000 min

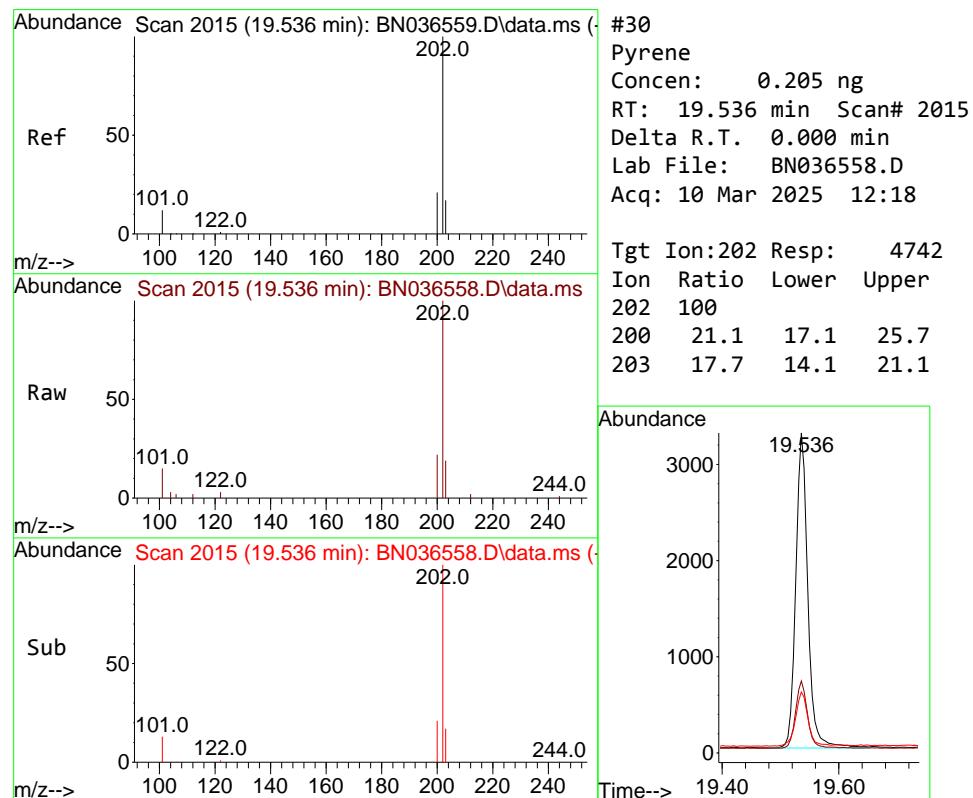
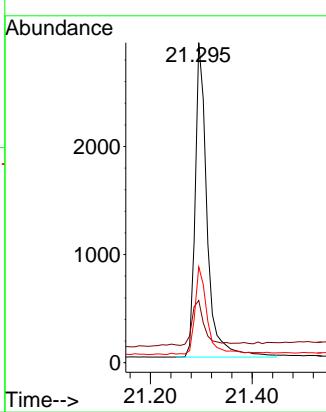
Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument : BNA\_N

ClientSampleId : SSTDICCO.2

**Manual Integrations**  
**APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#30

Pyrene

Concen: 0.205 ng

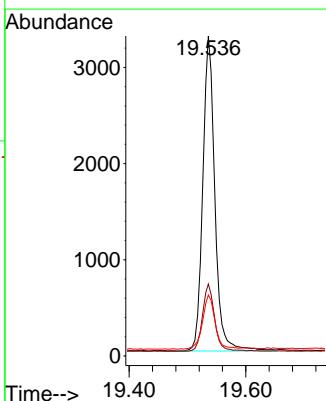
RT: 19.536 min Scan# 2015

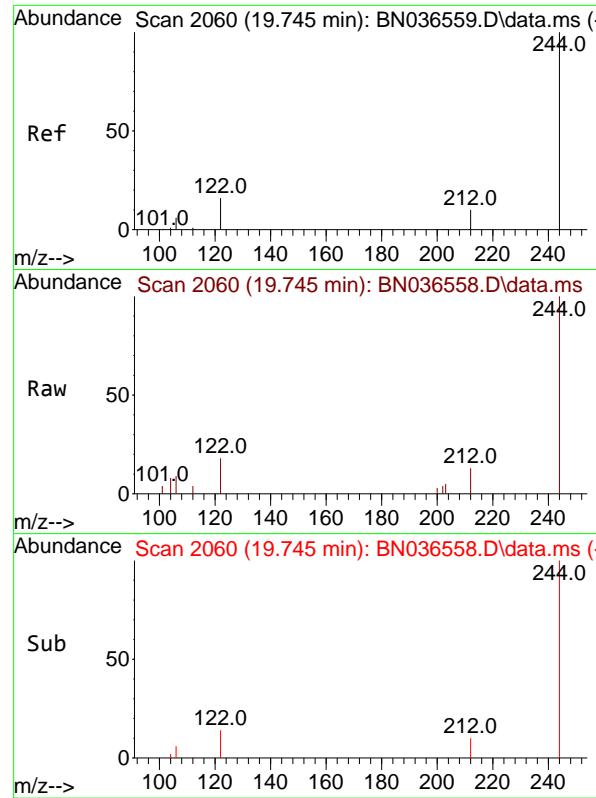
Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Tgt	Ion:202	Resp:	4742
Ion	Ratio	Lower	Upper
202	100		
200	21.1	17.1	25.7
203	17.7	14.1	21.1





#31

Terphenyl-d14

Concen: 0.201 ng

RT: 19.745 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

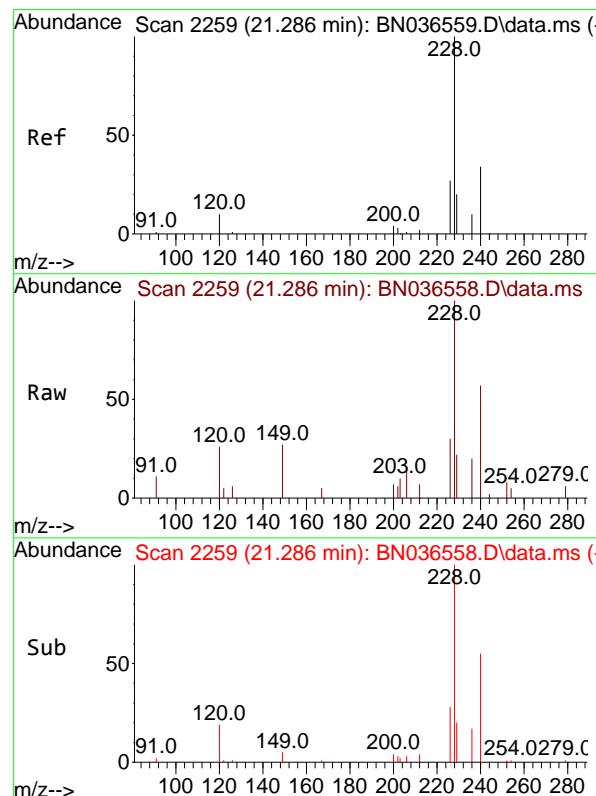
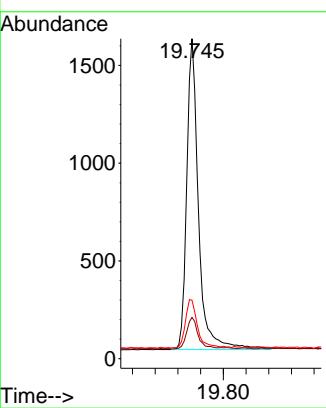
Tgt Ion:244 Resp: 228.0

Ion Ratio Lower Upper

244 100

212 12.9 9.6 14.4

122 18.3 13.9 20.9

**Manual Integrations****APPROVED**Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025

#32

Benzo(a)anthracene

Concen: 0.189 ng

RT: 21.286 min Scan# 2259

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

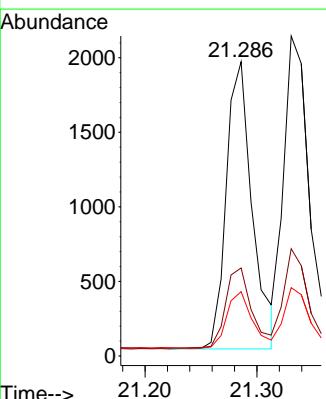
Tgt Ion:228 Resp: 3111

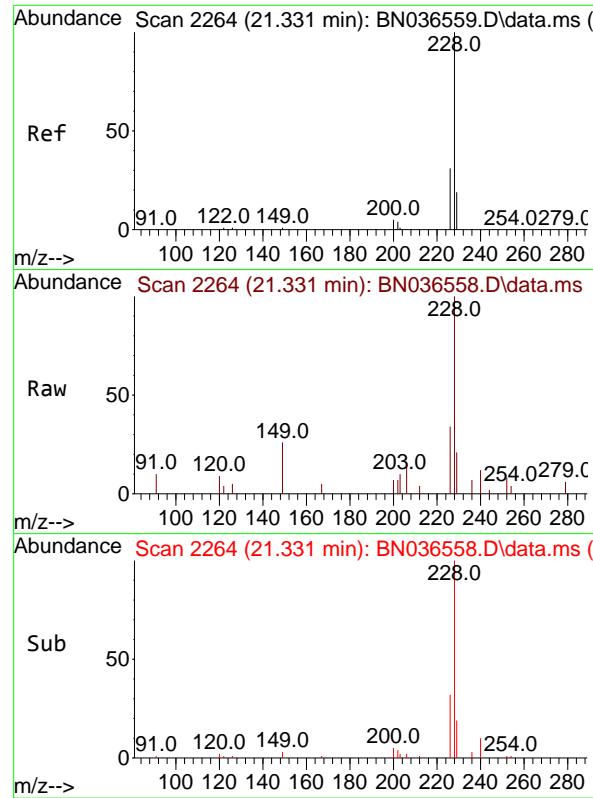
Ion Ratio Lower Upper

228 100

226 29.9 22.5 33.7

229 21.9 16.6 25.0



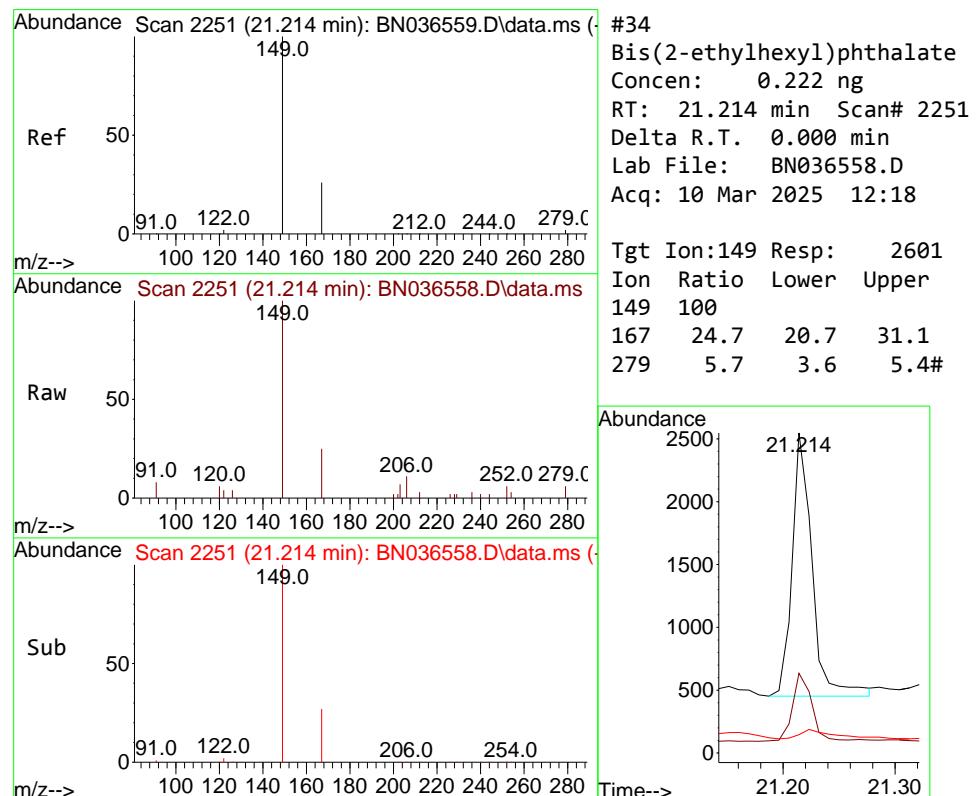
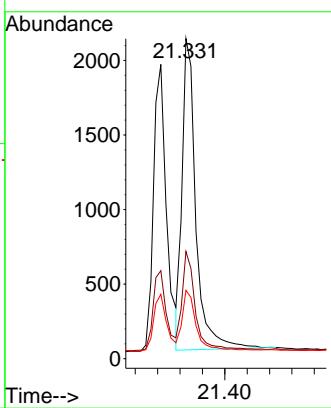


#33  
Chrysene  
Concen: 0.199 ng  
RT: 21.331 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

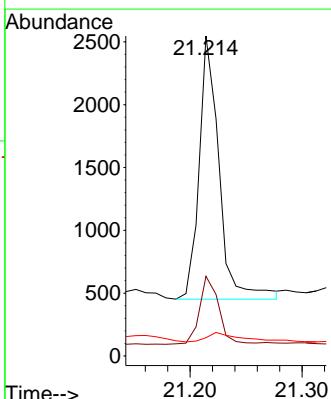
### Manual Integrations APPROVED

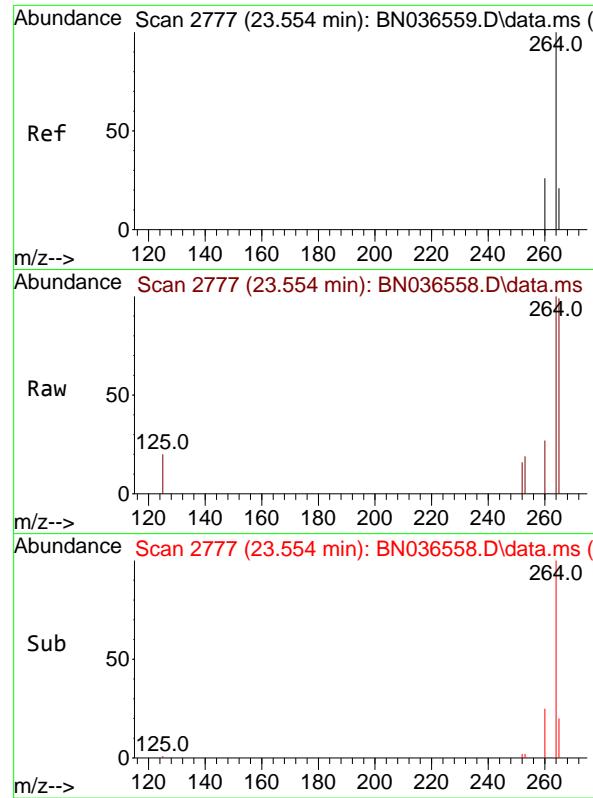
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.222 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:149 Resp: 2601  
Ion Ratio Lower Upper  
149 100  
167 24.7 20.7 31.1  
279 5.7 3.6 5.4#



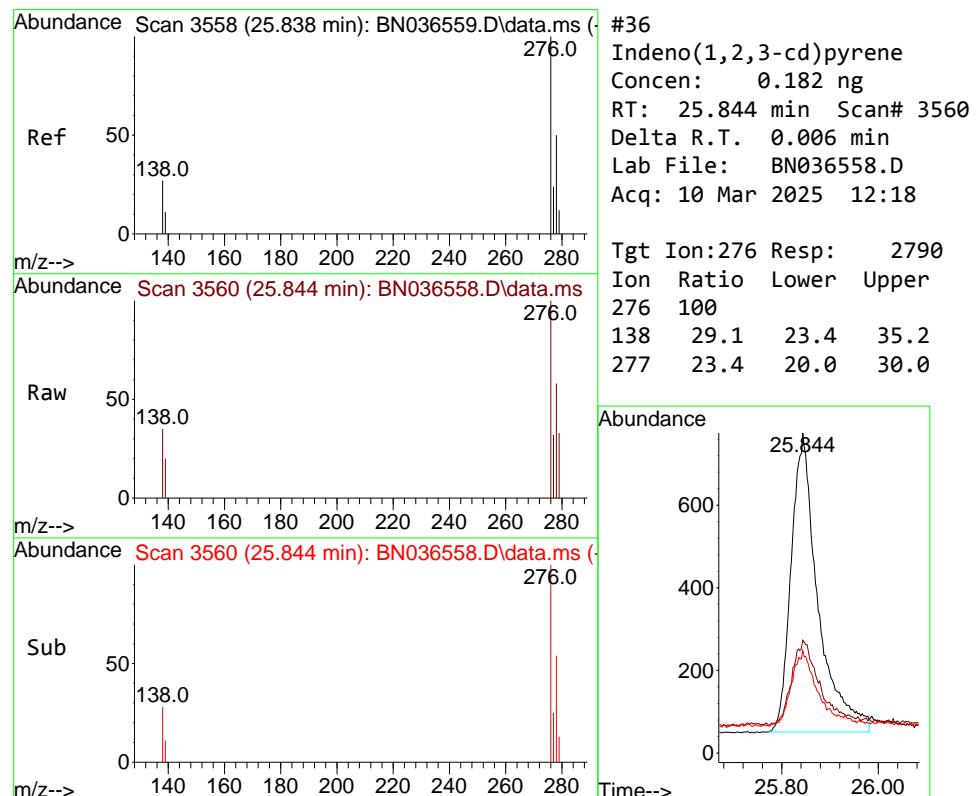
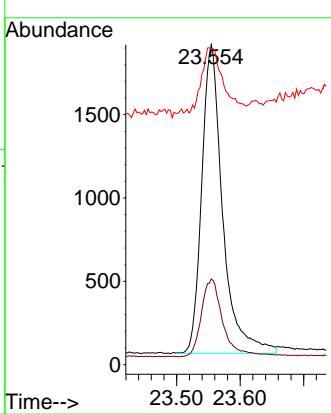


#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.554 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

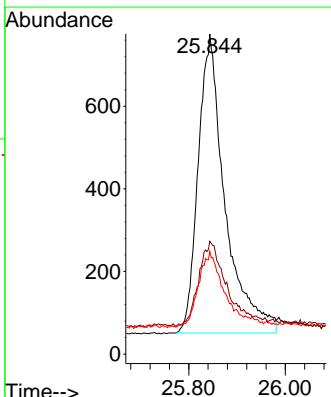
**Manual Integrations**  
**APPROVED**

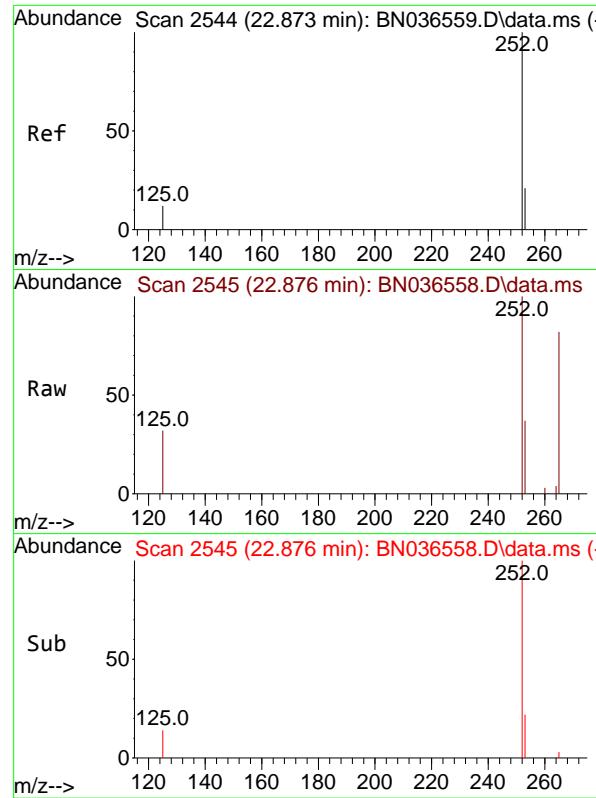
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.182 ng  
RT: 25.844 min Scan# 3560  
Delta R.T. 0.006 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:276 Resp: 2790  
Ion Ratio Lower Upper  
276 100  
138 29.1 23.4 35.2  
277 23.4 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.187 ng

RT: 22.876 min Scan# 2

Delta R.T. 0.003 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

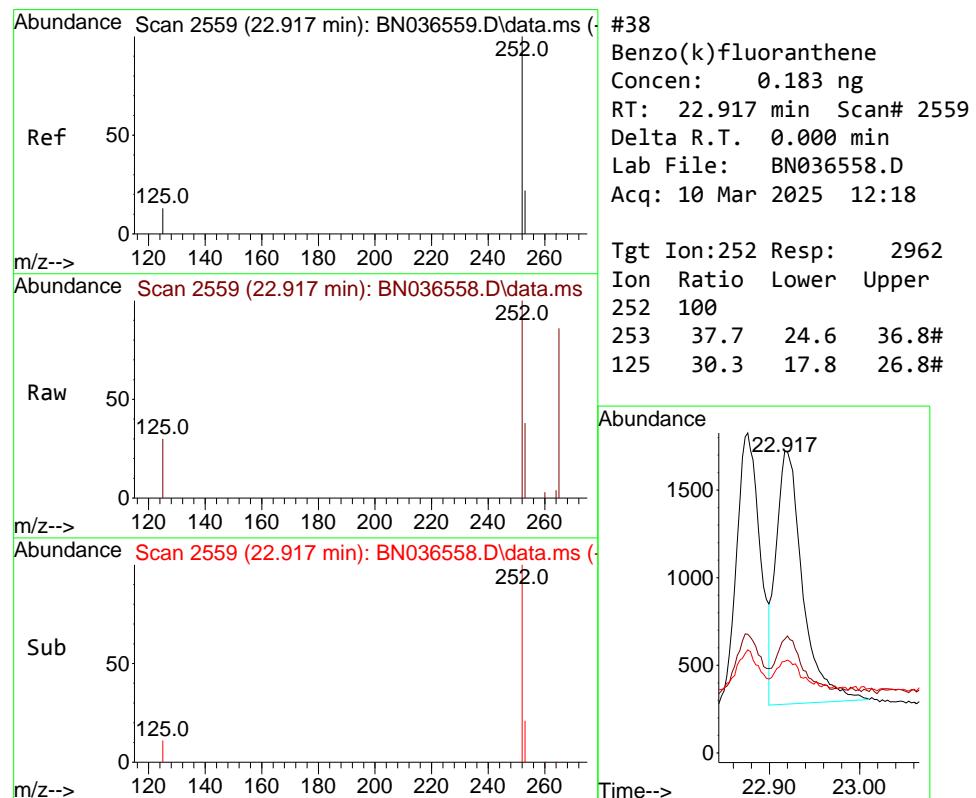
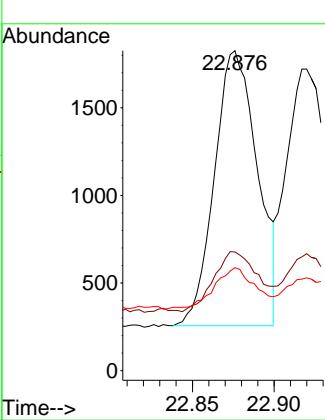
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 03/11/2025  
 Supervised By :Jagrut Upadhyay 03/11/2025


#38

Benzo(k)fluoranthene

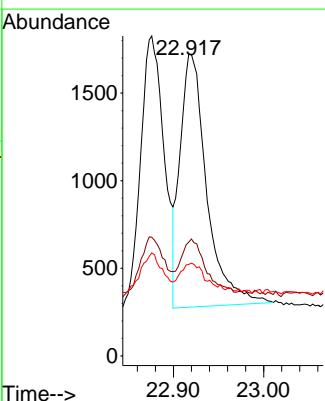
Concen: 0.183 ng

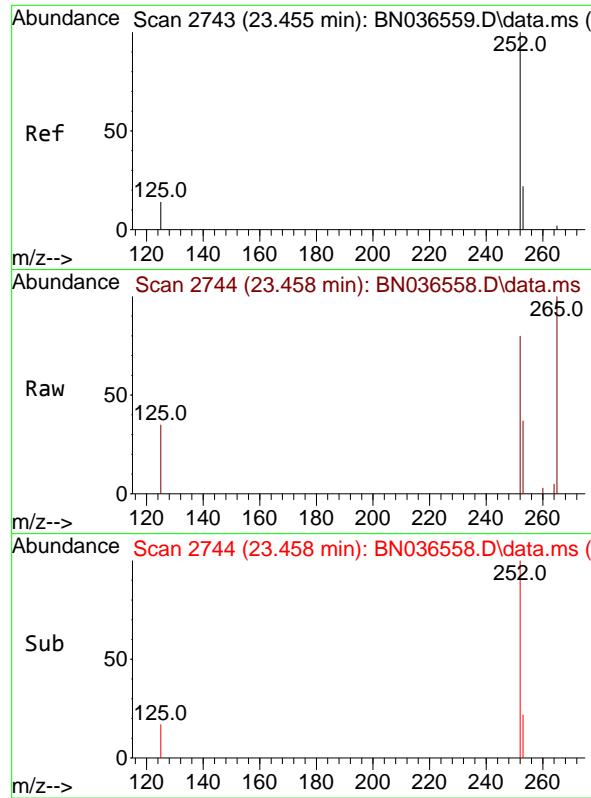
RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036558.D

Acq: 10 Mar 2025 12:18

 Tgt Ion:252 Resp: 2962  
 Ion Ratio Lower Upper  
 252 100  
 253 37.7 24.6 36.8#  
 125 30.3 17.8 26.8#


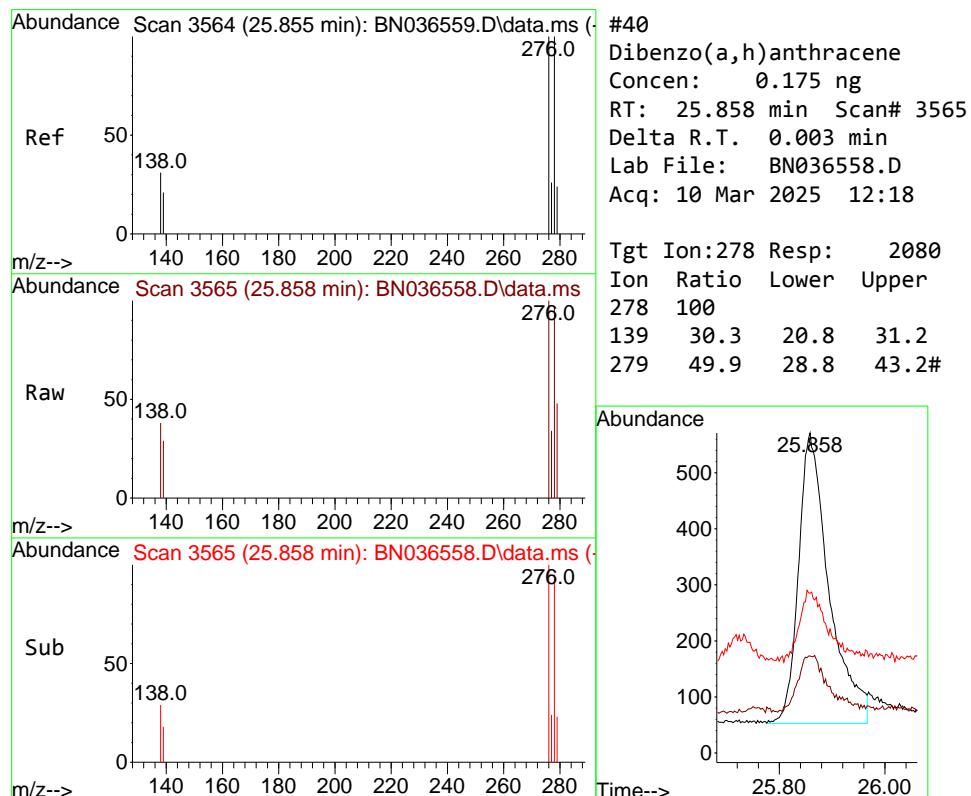
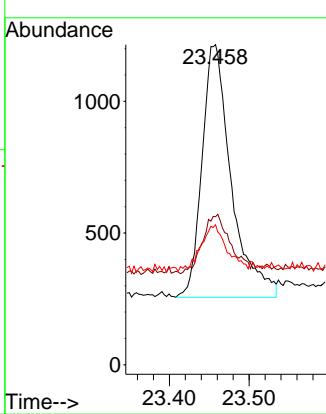


#39  
Benzo(a)pyrene  
Concen: 0.188 ng  
RT: 23.458 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

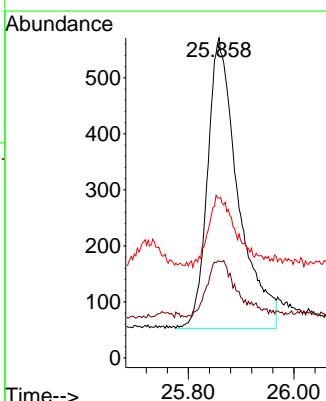
**Manual Integrations**  
**APPROVED**

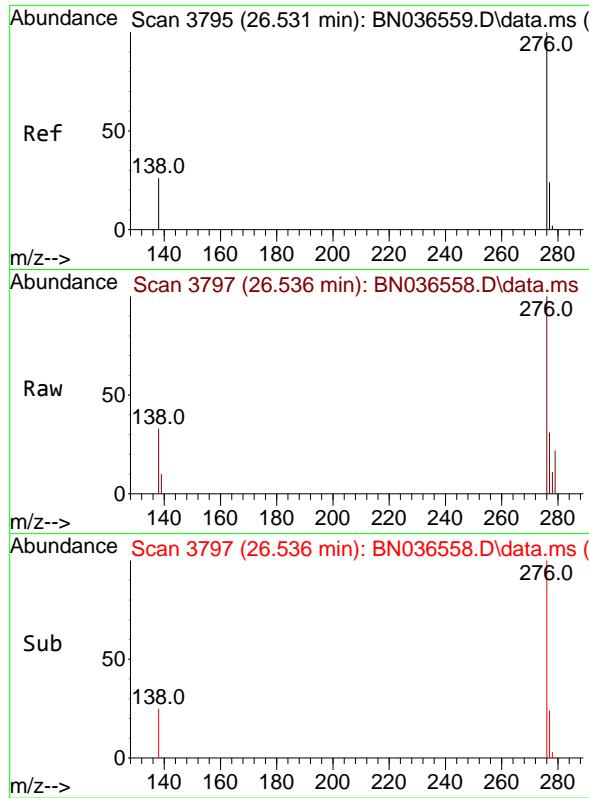
Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



#40  
Dibenzo(a,h)anthracene  
Concen: 0.175 ng  
RT: 25.858 min Scan# 3565  
Delta R.T. 0.003 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Tgt Ion:278 Resp: 2080  
Ion Ratio Lower Upper  
278 100  
139 30.3 20.8 31.2  
279 49.9 28.8 43.2#



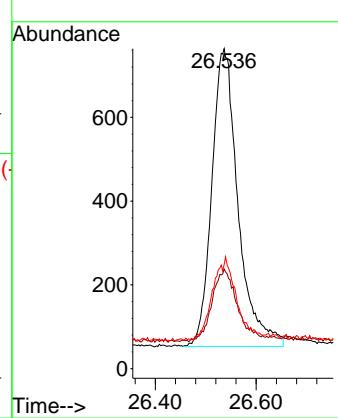


#41  
Benzo(g,h,i)perylene  
Concen: 0.189 ng  
RT: 26.536 min Scan# 3  
Delta R.T. 0.006 min  
Lab File: BN036558.D  
Acq: 10 Mar 2025 12:18

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCO.2

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 03/11/2025  
Supervised By :Jagrut Upadhyay 03/11/2025



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036559.D  
 Acq On : 10 Mar 2025 12:54  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

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

Quant Time: Mar 10 16:01:26 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

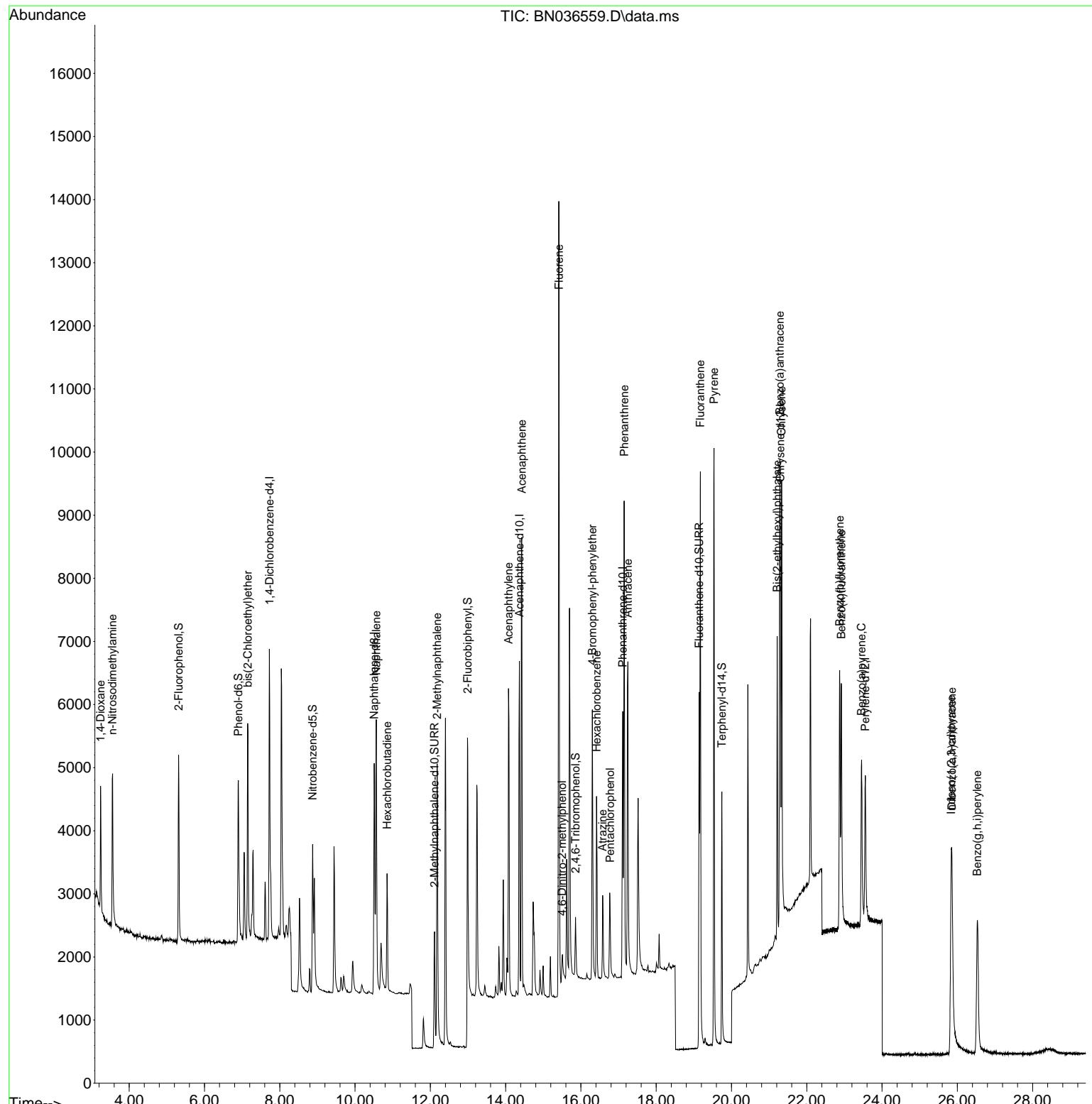
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2207	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5091	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	3026	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	6005	0.400	ng	0.00
29) Chrysene-d12	21.295	240	4110	0.400	ng	0.00
35) Perylene-d12	23.554	264	3539	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	2178	0.423	ng	0.00
5) Phenol-d6	6.901	99	2489	0.392	ng	0.00
8) Nitrobenzene-d5	8.875	82	2113	0.382	ng	0.00
11) 2-Methylnaphthalene-d10	12.111	152	3085	0.407	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	567	0.413	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	7257	0.412	ng	0.00
27) Fluoranthene-d10	19.141	212	6699	0.435	ng	0.00
31) Terphenyl-d14	19.745	244	4226	0.429	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	1099	0.449	ng	100
3) n-Nitrosodimethylamine	3.550	42	2063	0.417	ng	100
6) bis(2-Chloroethyl)ether	7.154	93	2610	0.397	ng	100
9) Naphthalene	10.562	128	6139	0.410	ng	100
10) Hexachlorobutadiene	10.850	225	1498	0.425	ng	# 100
12) 2-Methylnaphthalene	12.182	142	3897	0.409	ng	100
16) Acenaphthylene	14.077	152	5865	0.411	ng	100
17) Acenaphthene	14.430	154	3877	0.415	ng	100
18) Fluorene	15.414	166	5338	0.422	ng	100
20) 4,6-Dinitro-2-methylph...	15.499	198	462	0.447	ng	100
21) 4-Bromophenyl-phenylether	16.304	248	1644	0.437	ng	100
22) Hexachlorobenzene	16.416	284	2018	0.444	ng	100
23) Atrazine	16.577	200	1279	0.424	ng	100
24) Pentachlorophenol	16.776	266	821	0.396	ng	100
25) Phenanthrene	17.148	178	7786	0.432	ng	100
26) Anthracene	17.248	178	6886	0.424	ng	100
28) Fluoranthene	19.173	202	8717	0.431	ng	100
30) Pyrene	19.536	202	8759	0.436	ng	100
32) Benzo(a)anthracene	21.286	228	5908	0.413	ng	100
33) Chrysene	21.331	228	6617	0.424	ng	100
34) Bis(2-ethylhexyl)phtha...	21.214	149	4291	0.422	ng	100
36) Indeno(1,2,3-cd)pyrene	25.838	276	5470	0.428	ng	100
37) Benzo(b)fluoranthene	22.873	252	5475	0.425	ng	100
38) Benzo(k)fluoranthene	22.917	252	5732	0.424	ng	100
39) Benzo(a)pyrene	23.455	252	4612	0.425	ng	100
40) Dibenzo(a,h)anthracene	25.855	278	4117	0.414	ng	100
41) Benzo(g,h,i)perylene	26.531	276	4891	0.430	ng	100

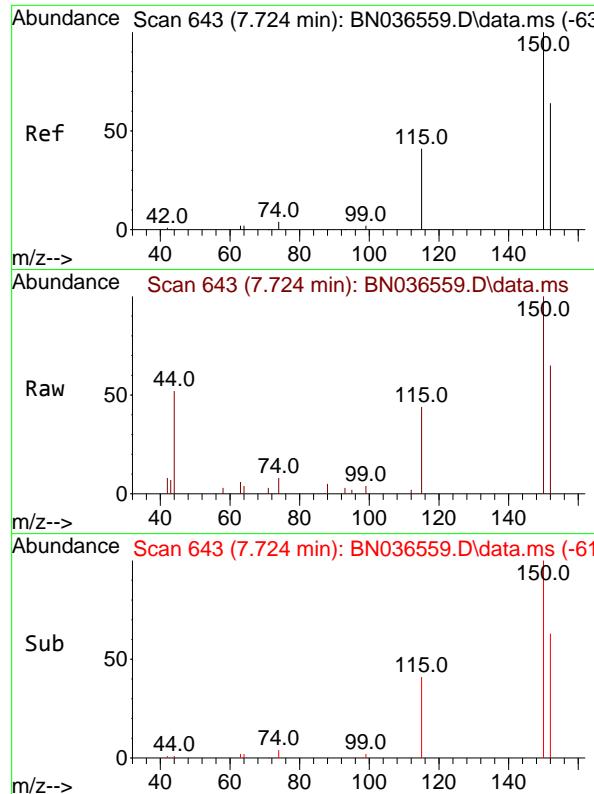
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036559.D  
Acq On : 10 Mar 2025 12:54  
Operator : RC/JU  
Sample : SSTDICCC0.4  
Misc :  
ALS Vial : 4 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICCC04

Quant Time: Mar 10 16:01:26 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

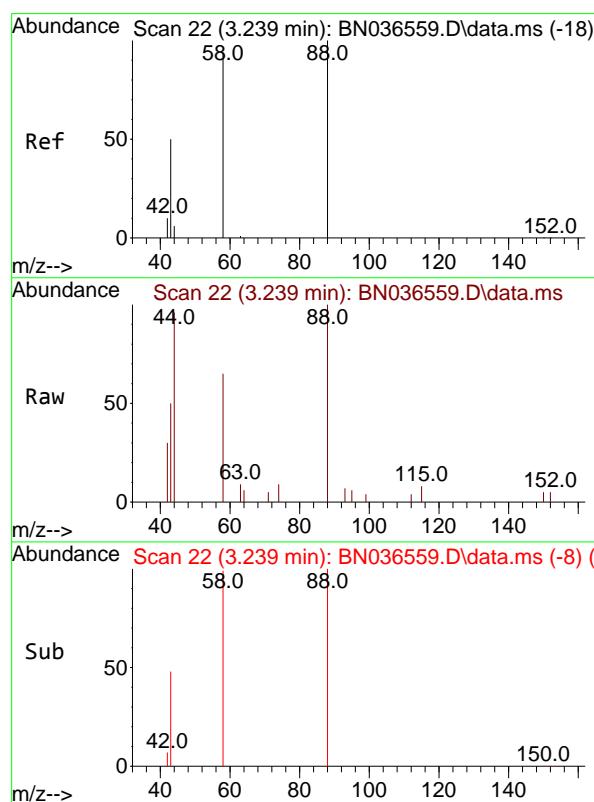
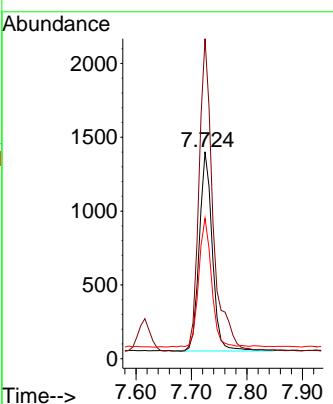




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.724 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

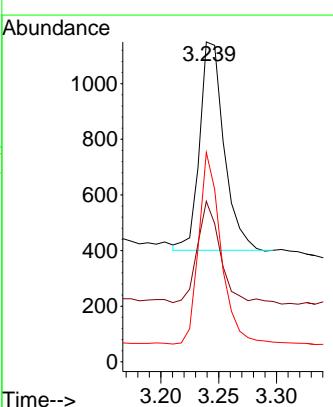
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

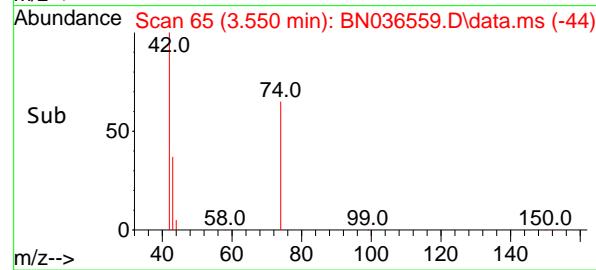
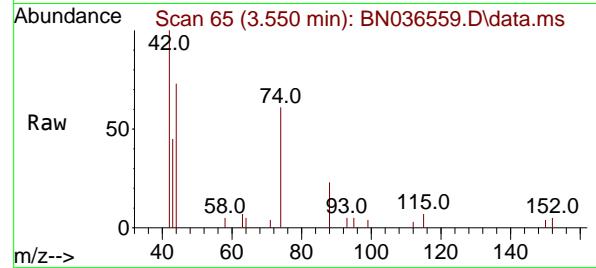
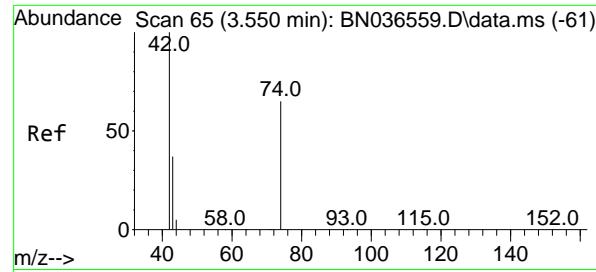
Tgt Ion:152 Resp: 2207  
 Ion Ratio Lower Upper  
 152 100  
 150 154.6 123.7 185.5  
 115 67.9 54.3 81.5



#2  
 1,4-Dioxane  
 Concen: 0.449 ng  
 RT: 3.239 min Scan# 22  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

Tgt Ion: 88 Resp: 1099  
 Ion Ratio Lower Upper  
 88 100  
 43 47.3 37.8 56.8  
 58 84.3 67.4 101.2





#3

n-Nitrosodimethylamine  
Concen: 0.417 ng  
RT: 3.550 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Instrument :

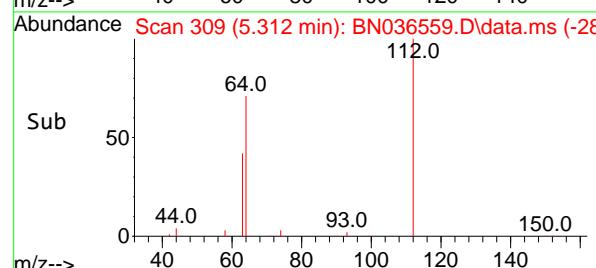
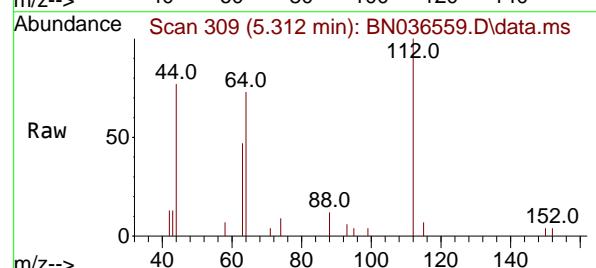
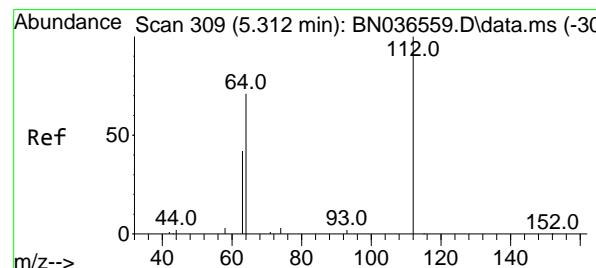
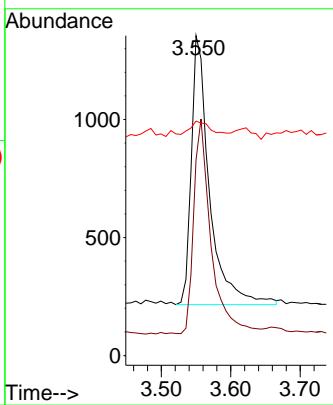
BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion: 42 Resp: 2063

Ion Ratio	Lower	Upper
42	100	
74	75.7	60.6
44	7.9	6.3
		90.8
		9.5

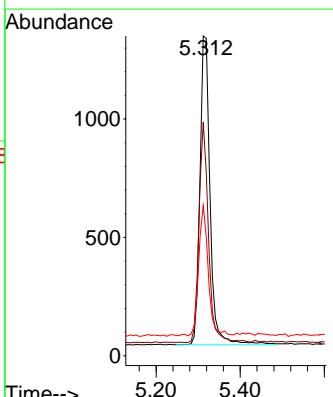


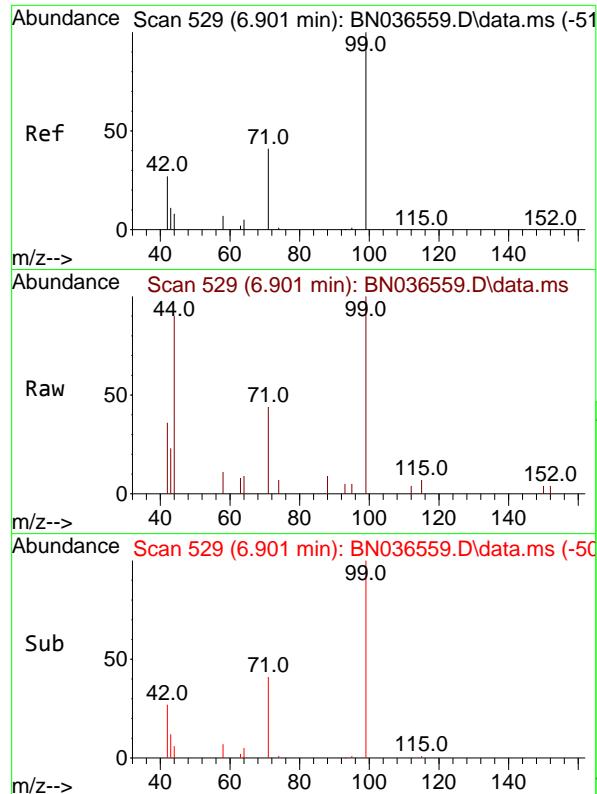
#4

2-Fluorophenol  
Concen: 0.423 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion: 112 Resp: 2178

Ion Ratio	Lower	Upper
112	100	
64	66.4	53.1
63	39.8	31.8
		79.7
		47.8

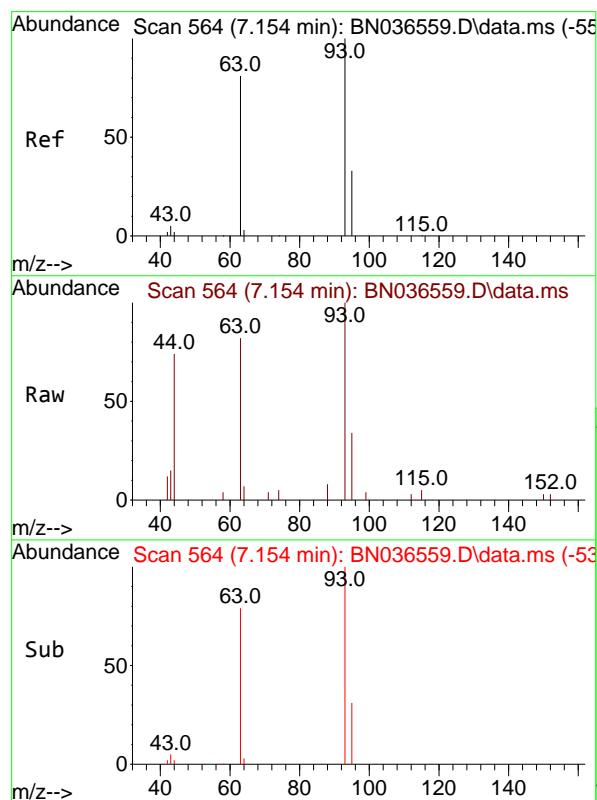
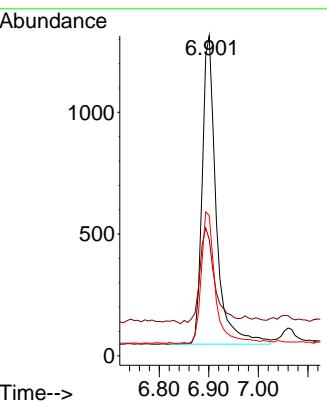




#5  
 Phenol-d6  
 Concen: 0.392 ng  
 RT: 6.901 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

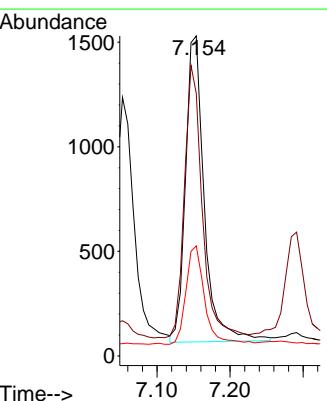
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

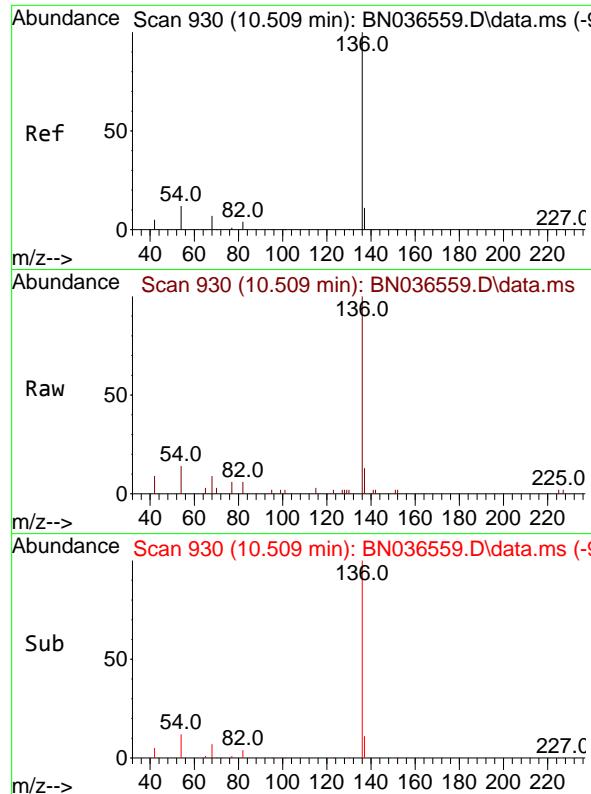
Tgt Ion: 99 Resp: 2489  
 Ion Ratio Lower Upper  
 99 100  
 42 33.1 26.5 39.7  
 71 42.6 34.1 51.1



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.397 ng  
 RT: 7.154 min Scan# 564  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

Tgt Ion: 93 Resp: 2610  
 Ion Ratio Lower Upper  
 93 100  
 63 84.6 67.7 101.5  
 95 32.0 25.6 38.4



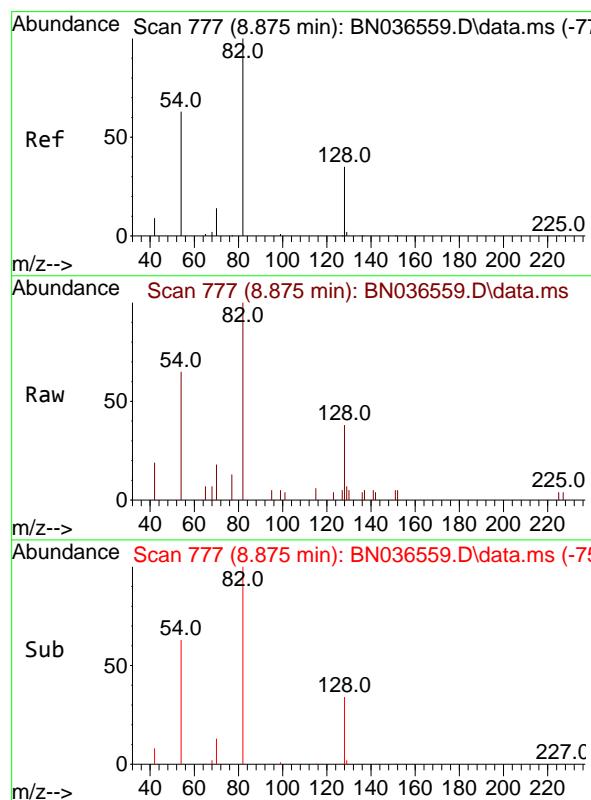
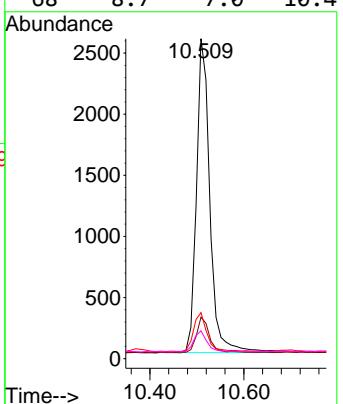


#7  
**Naphthalene-d8**  
Concen: 0.400 ng  
RT: 10.509 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

Tgt Ion:136 Resp: 5091

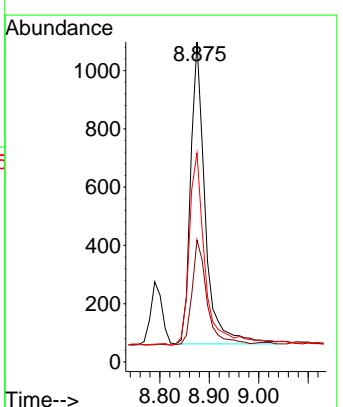
Ion	Ratio	Lower	Upper
136	100		
137	12.9	10.3	15.5
54	14.4	11.5	17.3
68	8.7	7.0	10.4

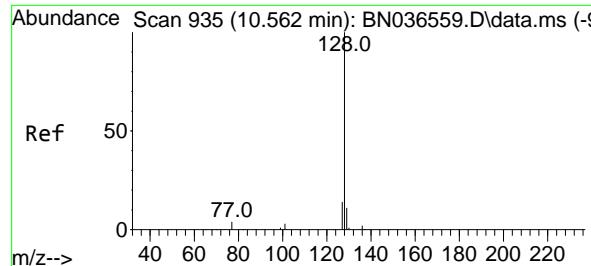


#8  
**Nitrobenzene-d5**  
Concen: 0.382 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion: 82 Resp: 2113

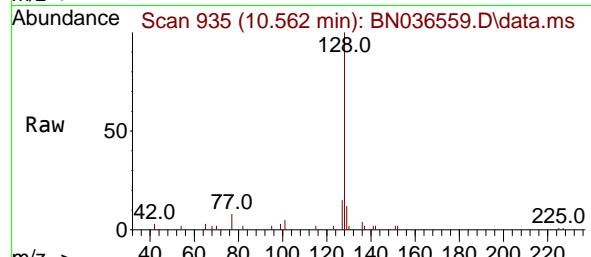
Ion	Ratio	Lower	Upper
82	100		
128	38.2	30.6	45.8
54	65.3	52.2	78.4



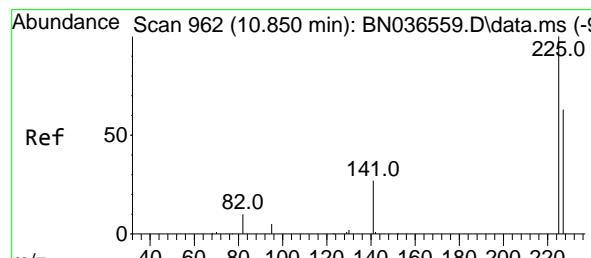
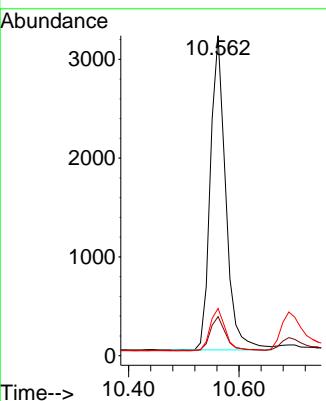
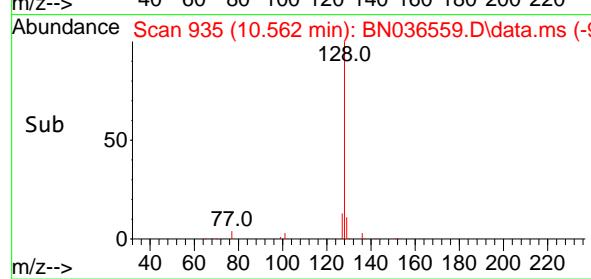


#9  
Naphthalene  
Concen: 0.410 ng  
RT: 10.562 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

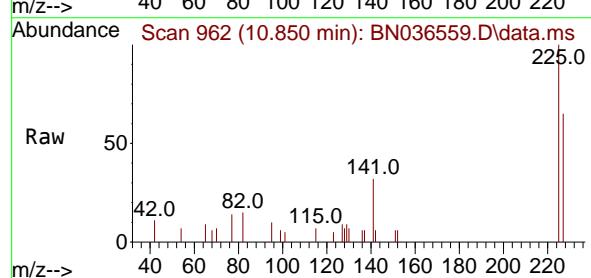
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4



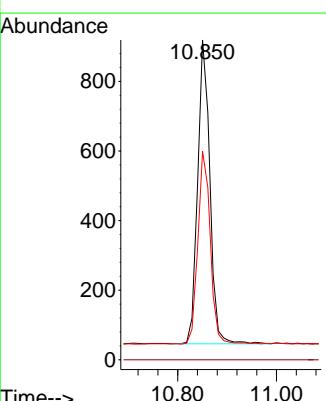
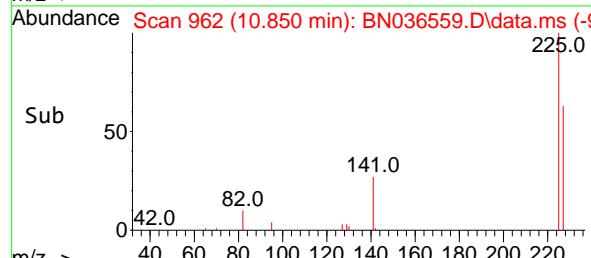
Tgt Ion:128 Resp: 6139  
Ion Ratio Lower Upper  
128 100  
129 12.2 9.8 14.6  
127 14.8 11.8 17.8

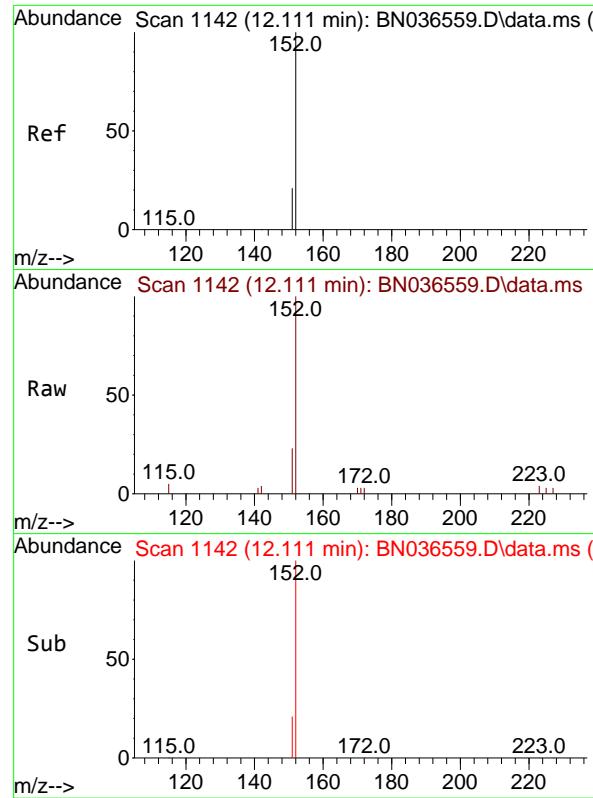


#10  
Hexachlorobutadiene  
Concen: 0.425 ng  
RT: 10.850 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54



Tgt Ion:225 Resp: 1498  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.8 51.8 77.8

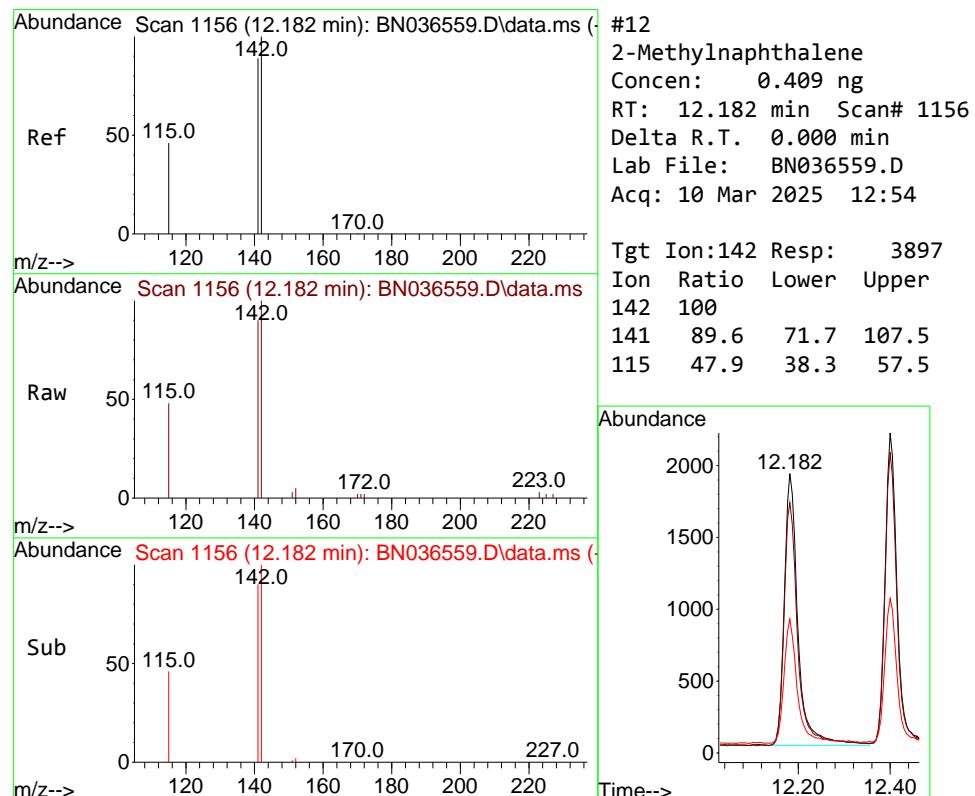
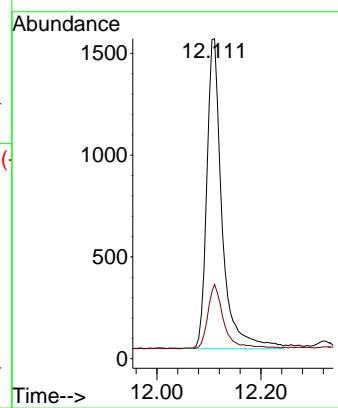




#11  
2-Methylnaphthalene-d10  
Concen: 0.407 ng  
RT: 12.111 min Scan# 1142  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

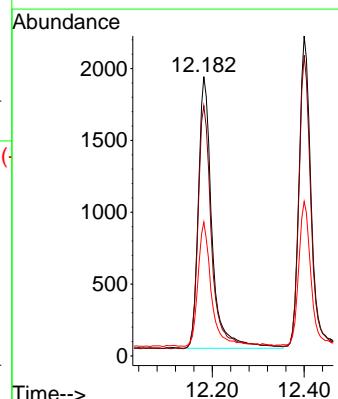
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

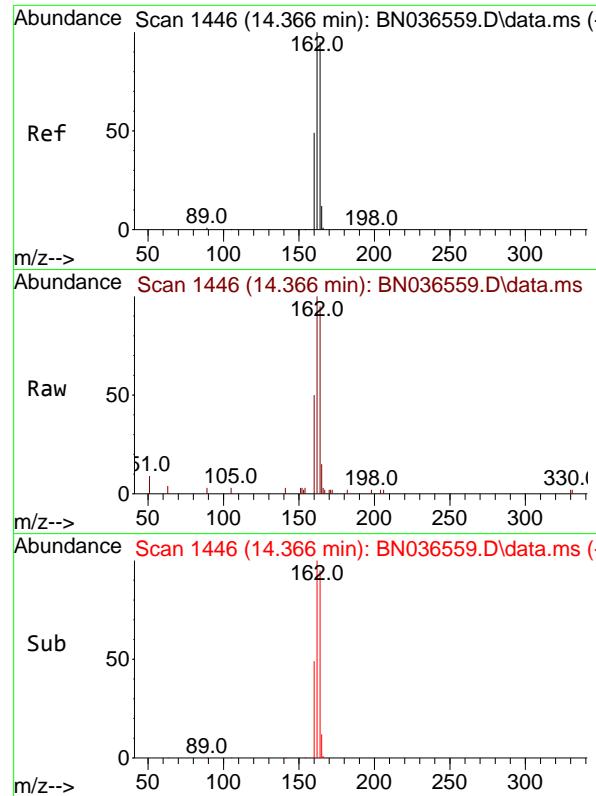
Tgt Ion:152 Resp: 3085  
Ion Ratio Lower Upper  
152 100  
151 21.3 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.409 ng  
RT: 12.182 min Scan# 1156  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:142 Resp: 3897  
Ion Ratio Lower Upper  
142 100  
141 89.6 71.7 107.5  
115 47.9 38.3 57.5





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

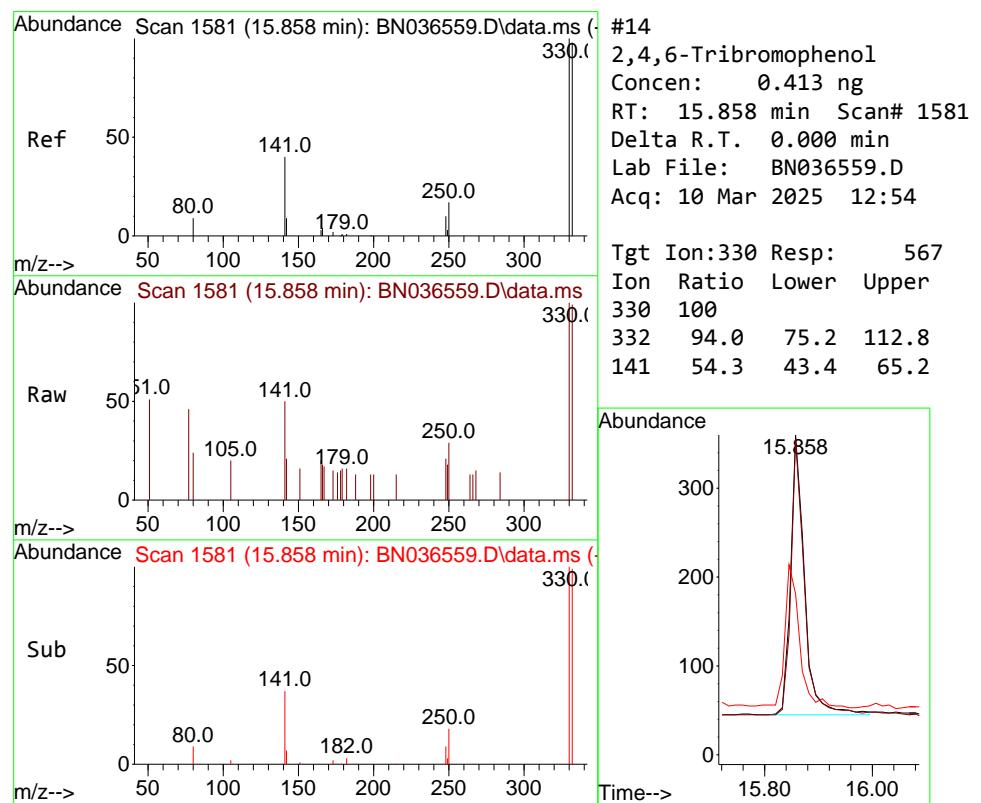
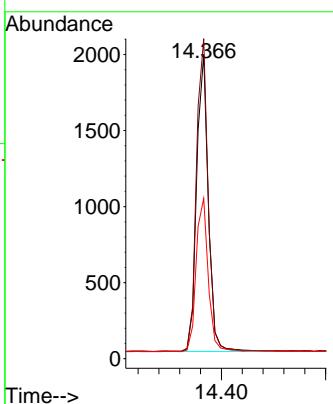
Tgt Ion:164 Resp: 3026

Ion Ratio Lower Upper

164 100

162 105.2 84.2 126.2

160 52.7 42.2 63.2



#14

2,4,6-Tribromophenol

Concen: 0.413 ng

RT: 15.858 min Scan# 1581

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

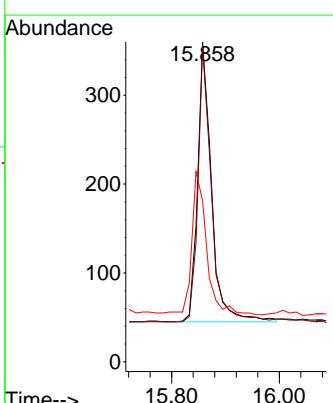
Tgt Ion:330 Resp: 567

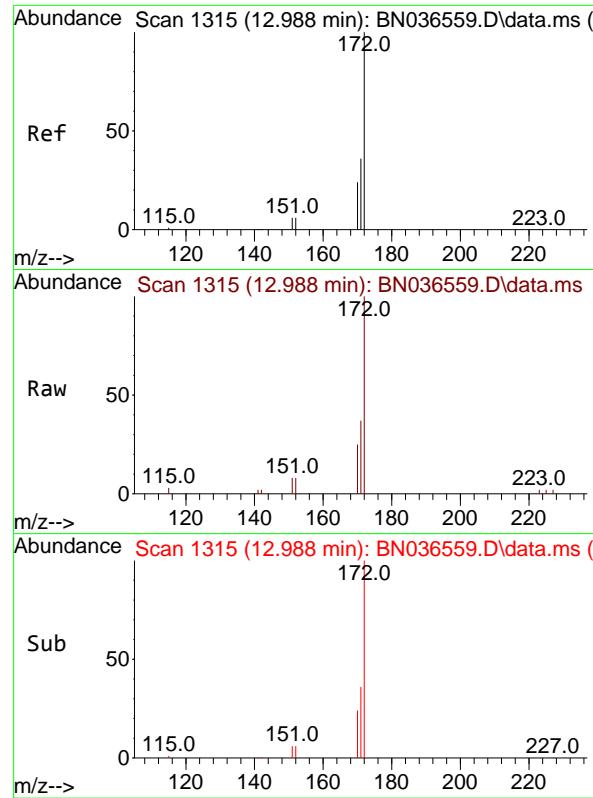
Ion Ratio Lower Upper

330 100

332 94.0 75.2 112.8

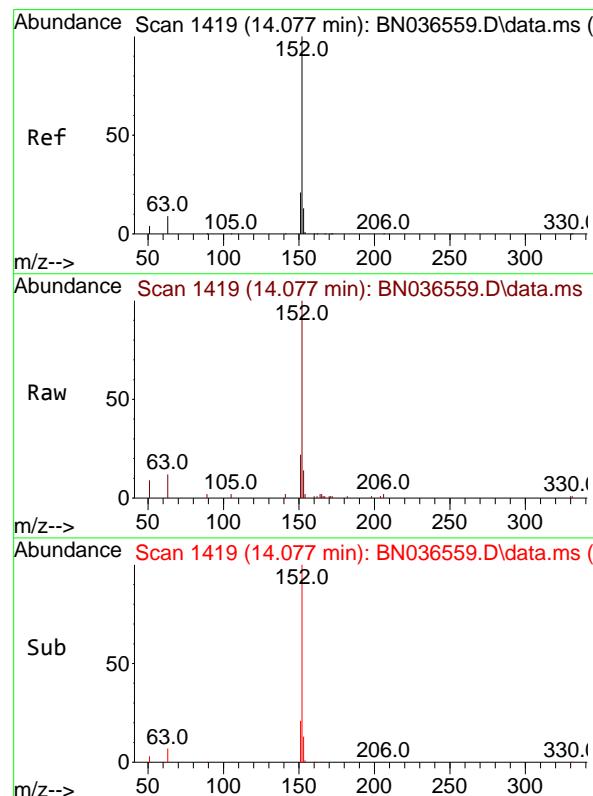
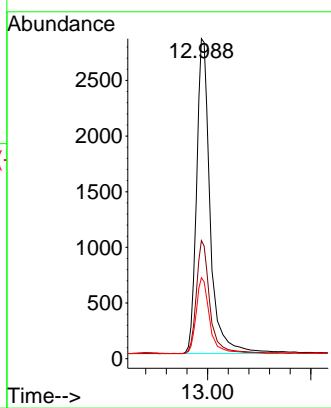
141 54.3 43.4 65.2





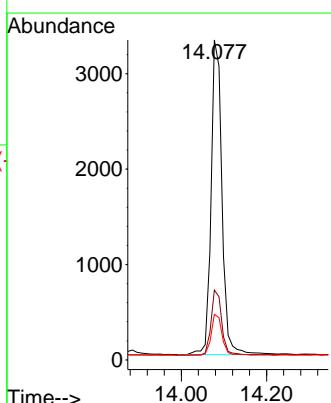
#15  
2-Fluorobiphenyl  
Concen: 0.412 ng  
RT: 12.988 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
ClientSampleId : SSTDICCC0.4  
Acq: 10 Mar 2025 12:54

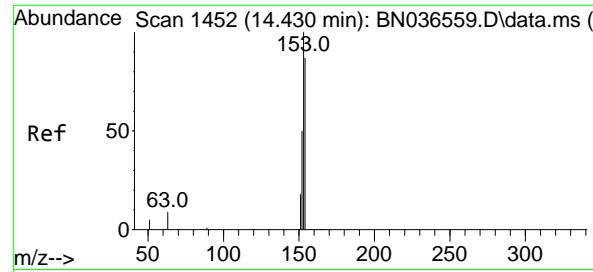
Tgt Ion:172 Resp: 7257  
Ion Ratio Lower Upper  
172 100  
171 36.9 29.5 44.3  
170 25.3 20.2 30.4



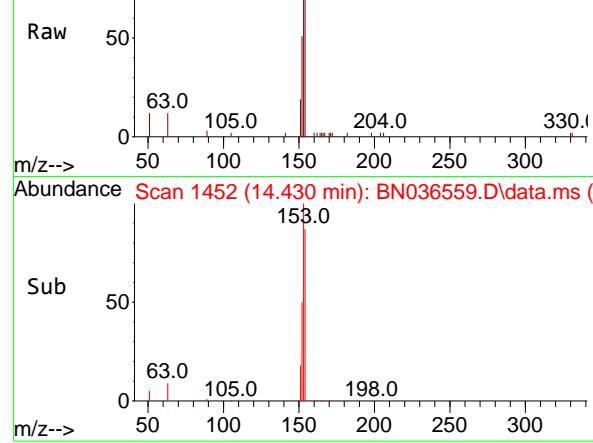
#16  
Acenaphthylene  
Concen: 0.411 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:152 Resp: 5865  
Ion Ratio Lower Upper  
152 100  
151 20.3 16.2 24.4  
153 13.2 10.6 15.8

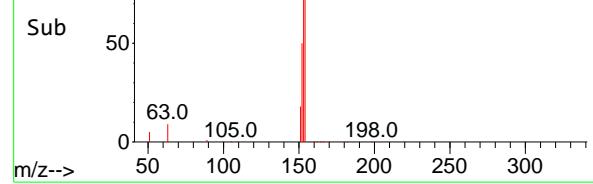




Abundance Scan 1452 (14.430 min): BN036559.D\data.ms



Abundance Scan 1452 (14.430 min): BN036559.D\data.ms (-)



#17

Acenaphthene

Concen: 0.415 ng

RT: 14.430 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

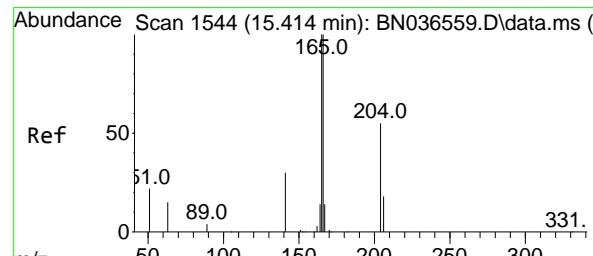
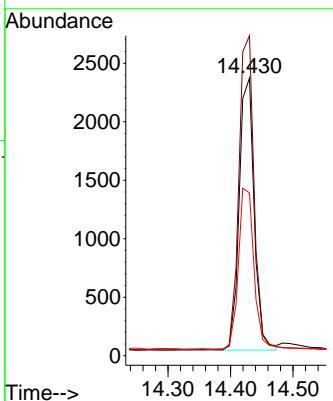
Tgt Ion:154 Resp: 3877

Ion Ratio Lower Upper

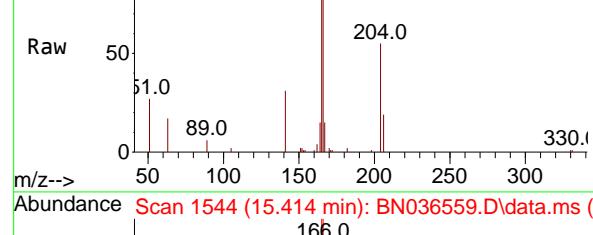
154 100

153 117.6 94.1 141.1

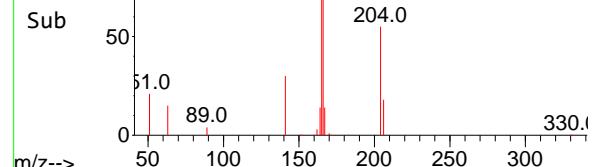
152 62.2 49.8 74.6



Abundance Scan 1544 (15.414 min): BN036559.D\data.ms



Abundance Scan 1544 (15.414 min): BN036559.D\data.ms (-)



#18

Fluorene

Concen: 0.422 ng

RT: 15.414 min Scan# 1544

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

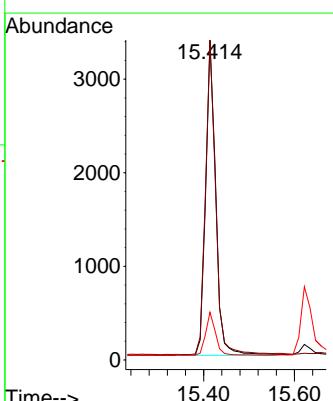
Tgt Ion:166 Resp: 5338

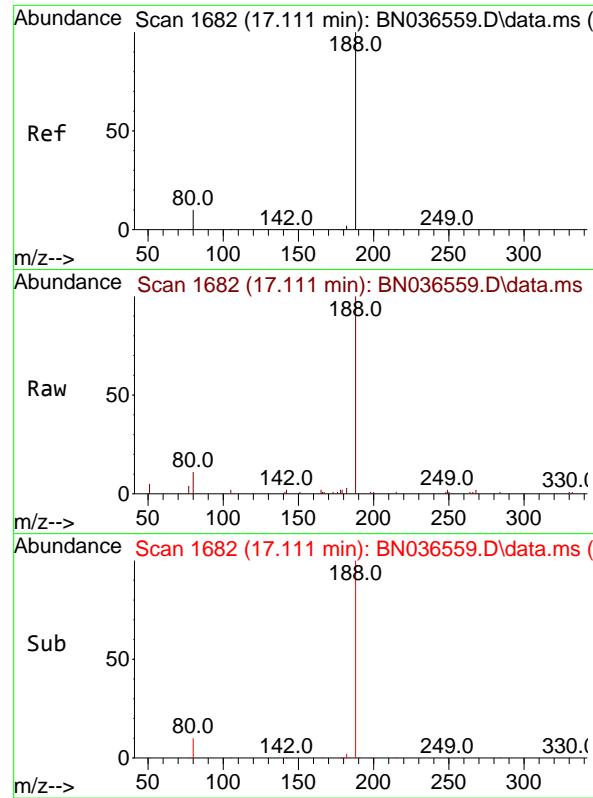
Ion Ratio Lower Upper

166 100

165 99.8 79.8 119.8

167 13.2 10.6 15.8

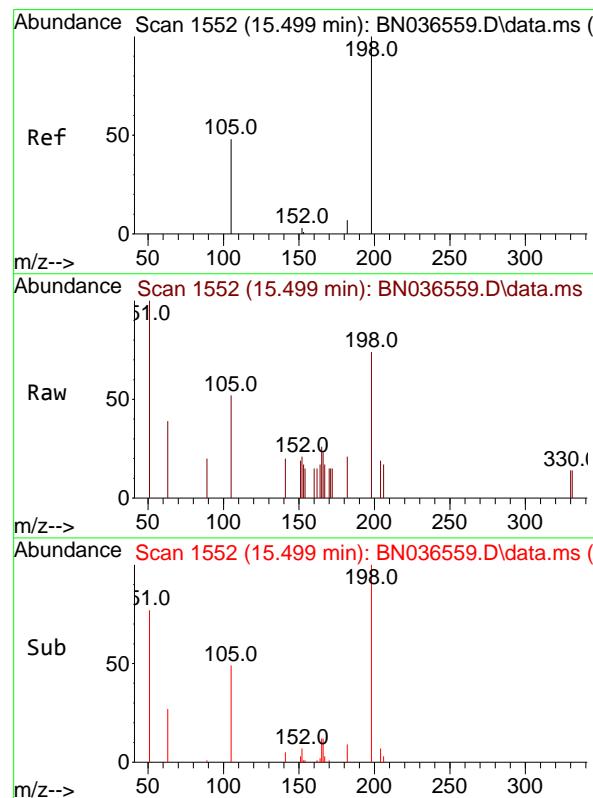
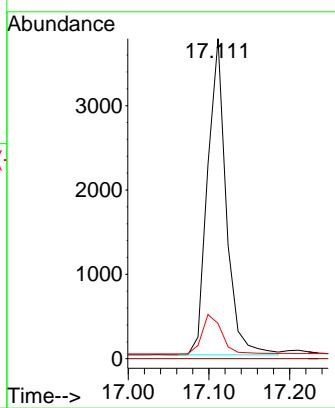




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.111 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

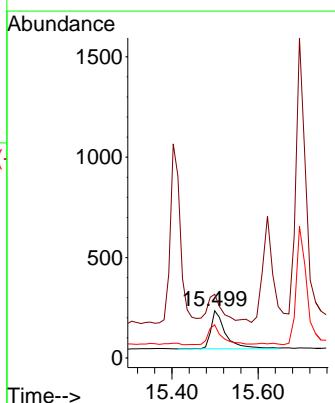
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

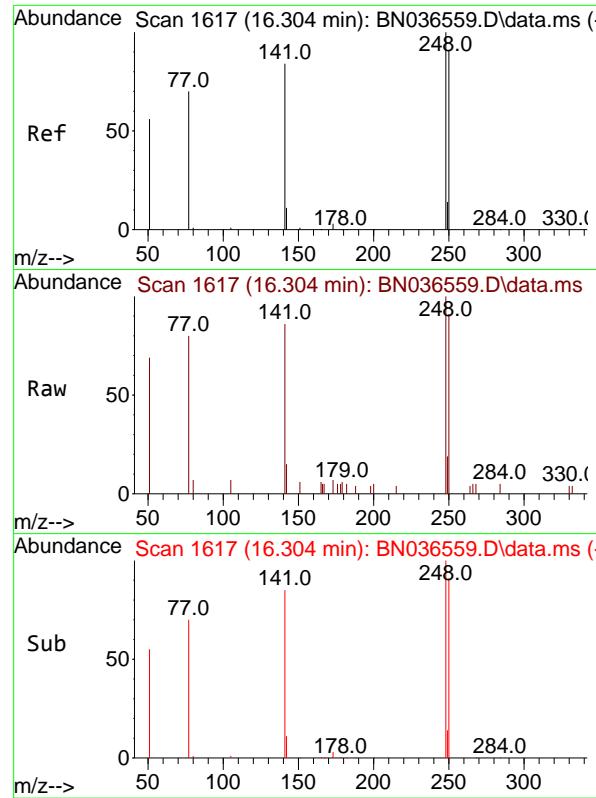
Tgt Ion:188 Resp: 6005  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 11.0 8.8 13.2



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.447 ng  
 RT: 15.499 min Scan# 1552  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

Tgt Ion:198 Resp: 462  
 Ion Ratio Lower Upper  
 198 100  
 51 134.9 107.9 161.9  
 105 70.2 56.2 84.2

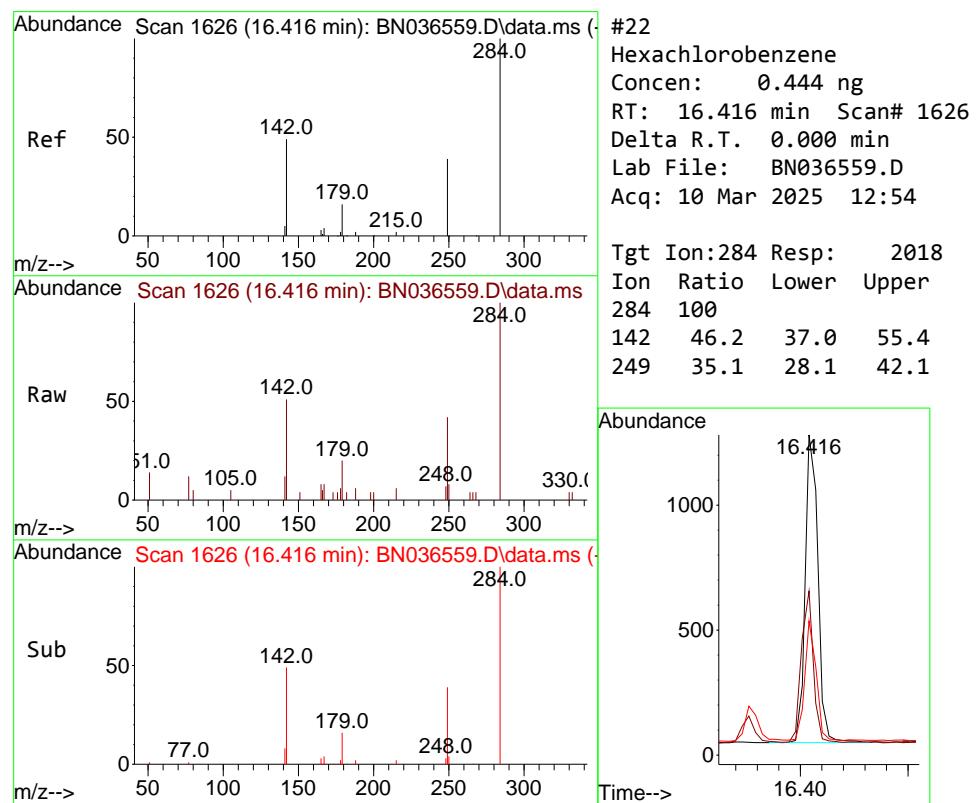
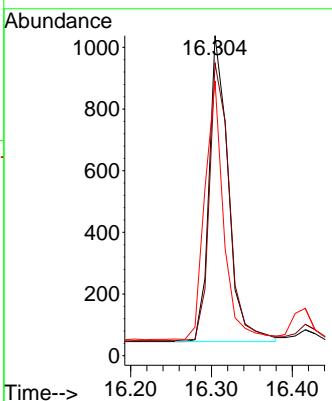




#21  
 4-Bromophenyl-phenylether  
 Concen: 0.437 ng  
 RT: 16.304 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

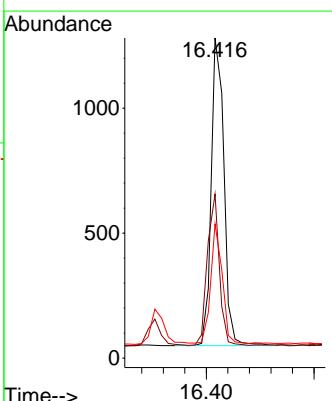
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

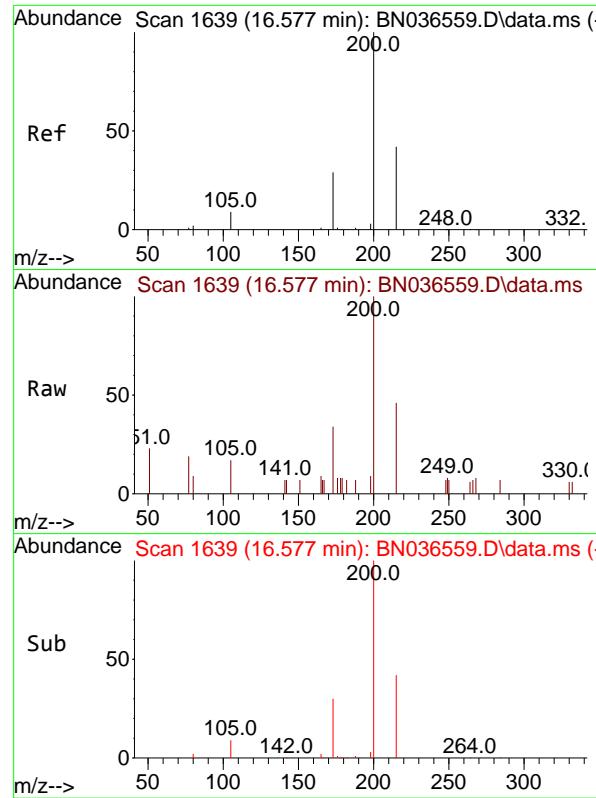
Tgt Ion:248 Resp: 1644  
 Ion Ratio Lower Upper  
 248 100  
 250 91.3 73.0 109.6  
 141 85.8 68.6 103.0



#22  
 Hexachlorobenzene  
 Concen: 0.444 ng  
 RT: 16.416 min Scan# 1626  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

Tgt Ion:284 Resp: 2018  
 Ion Ratio Lower Upper  
 284 100  
 142 46.2 37.0 55.4  
 249 35.1 28.1 42.1

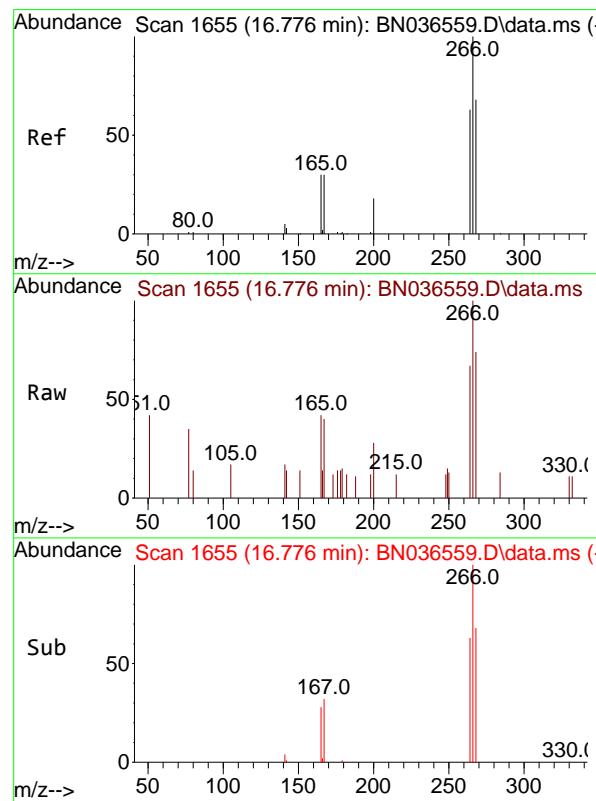
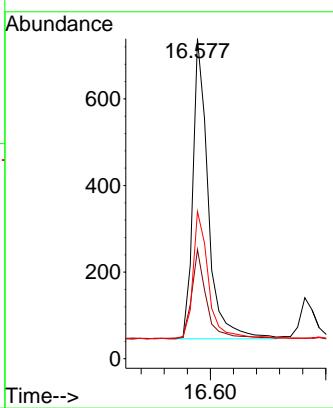




#23  
Atrazine  
Concen: 0.424 ng  
RT: 16.577 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

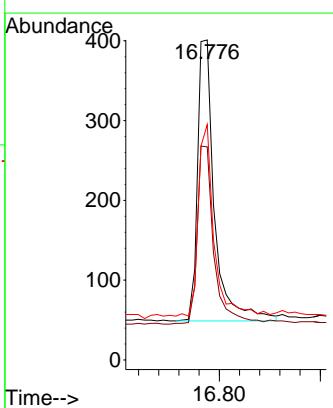
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

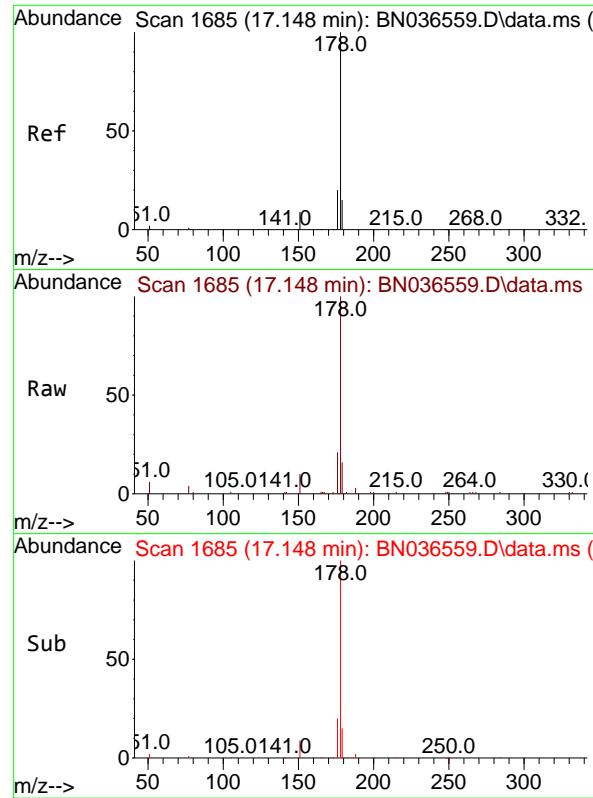
Tgt Ion:200 Resp: 1279  
Ion Ratio Lower Upper  
200 100  
173 34.1 27.3 40.9  
215 46.0 36.8 55.2



#24  
Pentachlorophenol  
Concen: 0.396 ng  
RT: 16.776 min Scan# 1655  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:266 Resp: 821  
Ion Ratio Lower Upper  
266 100  
264 62.0 49.6 74.4  
268 63.6 50.9 76.3

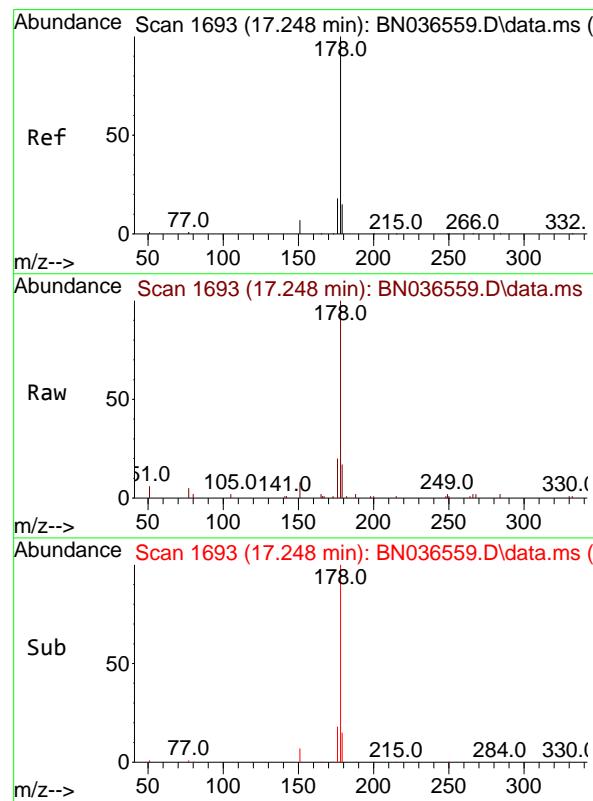
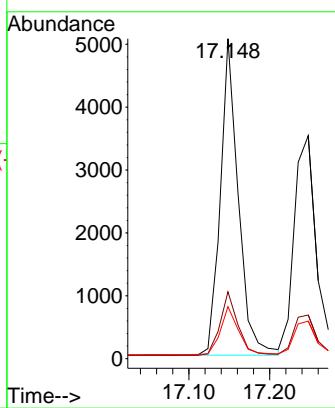




#25  
Phenanthrene  
Concen: 0.432 ng  
RT: 17.148 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

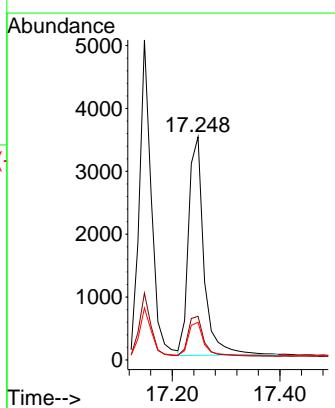
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

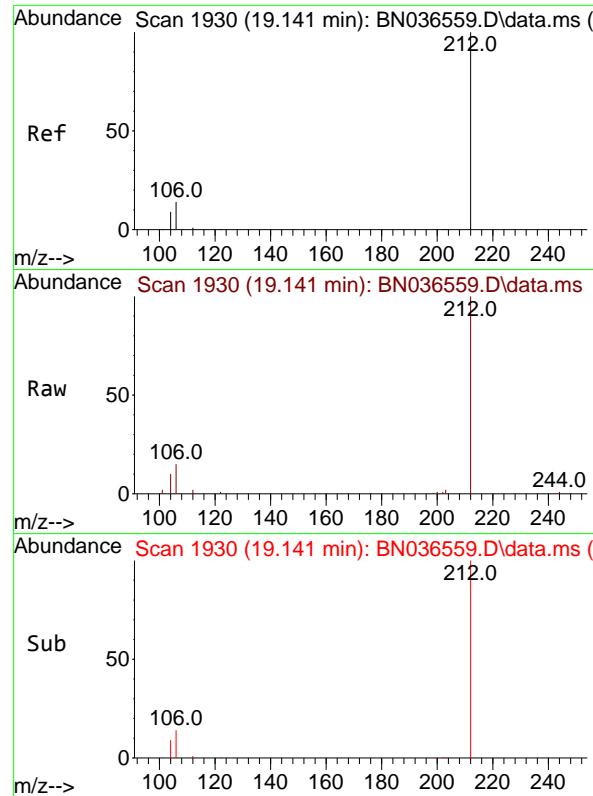
Tgt Ion:178 Resp: 7786  
Ion Ratio Lower Upper  
178 100  
176 19.9 15.9 23.9  
179 15.3 12.2 18.4



#26  
Anthracene  
Concen: 0.424 ng  
RT: 17.248 min Scan# 1693  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:178 Resp: 6886  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.4 23.2  
179 15.7 12.6 18.8

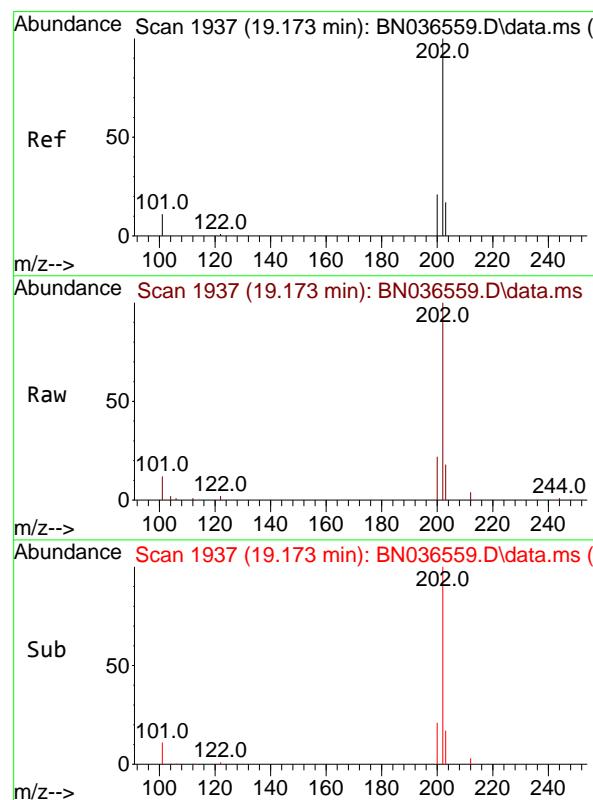
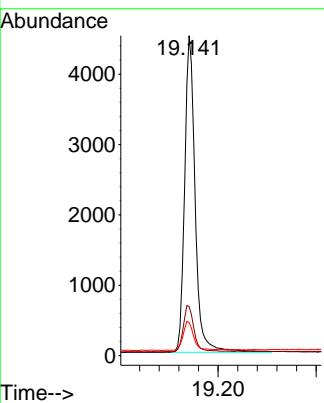




#27  
 Fluoranthene-d10  
 Concen: 0.435 ng  
 RT: 19.141 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

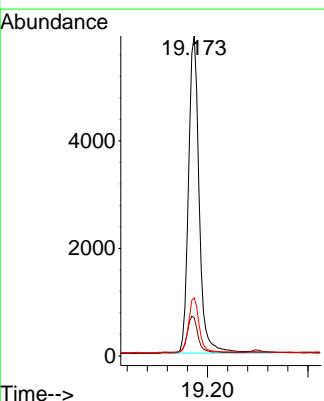
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

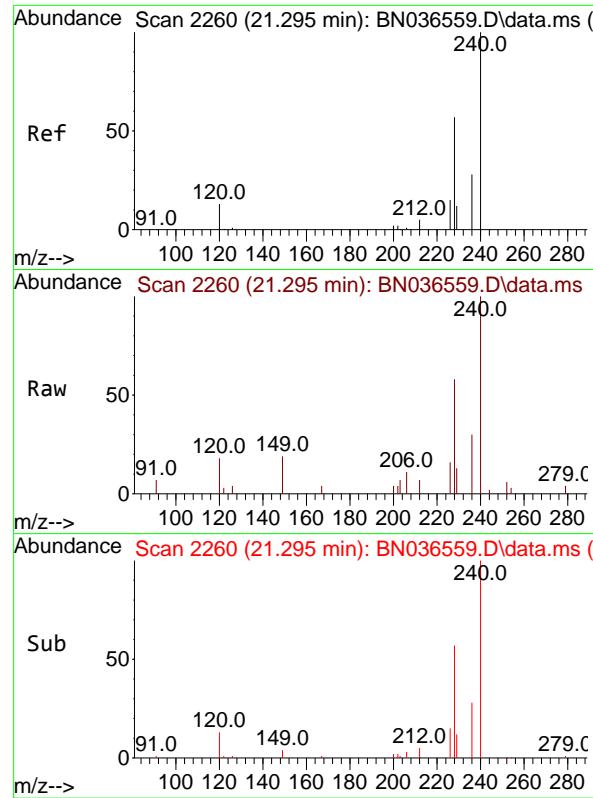
Tgt Ion:212 Resp: 6699  
 Ion Ratio Lower Upper  
 212 100  
 106 14.7 11.8 17.6  
 104 9.1 7.3 10.9



#28  
 Fluoranthene  
 Concen: 0.431 ng  
 RT: 19.173 min Scan# 1937  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

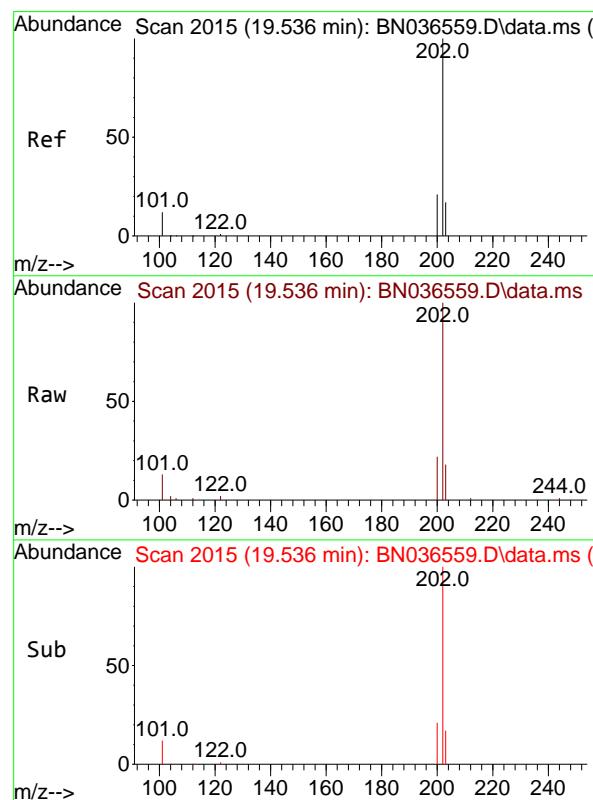
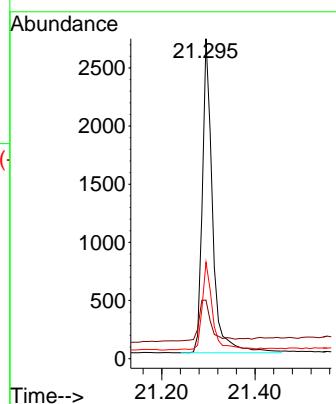
Tgt Ion:202 Resp: 8717  
 Ion Ratio Lower Upper  
 202 100  
 101 11.7 9.4 14.0  
 203 16.9 13.5 20.3





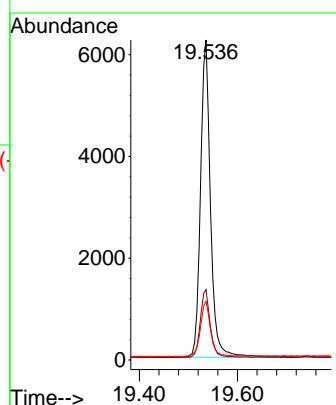
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.295 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
ClientSampleId : SSTDICCC0.4  
Acq: 10 Mar 2025 12:54

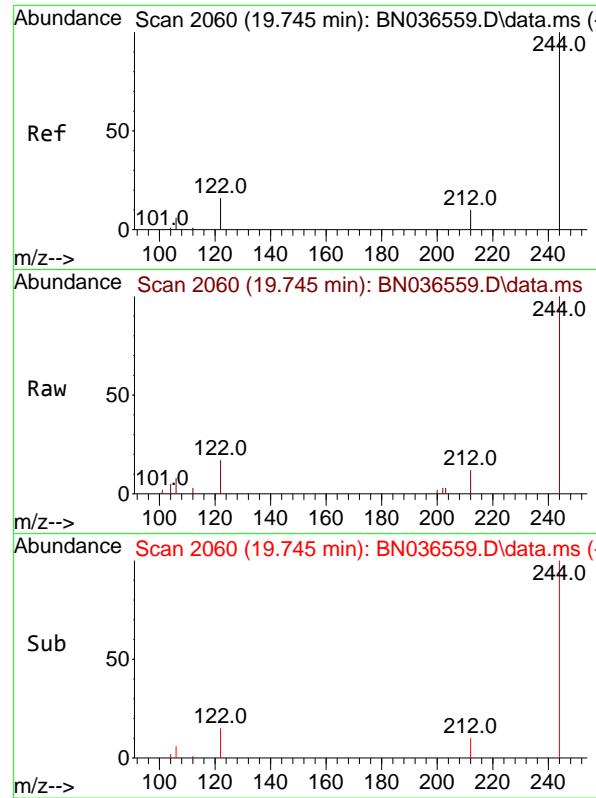
Tgt Ion:240 Resp: 4110  
Ion Ratio Lower Upper  
240 100  
120 18.3 14.6 22.0  
236 30.1 24.1 36.1



#30  
Pyrene  
Concen: 0.436 ng  
RT: 19.536 min Scan# 2015  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:202 Resp: 8759  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.6 14.1 21.1

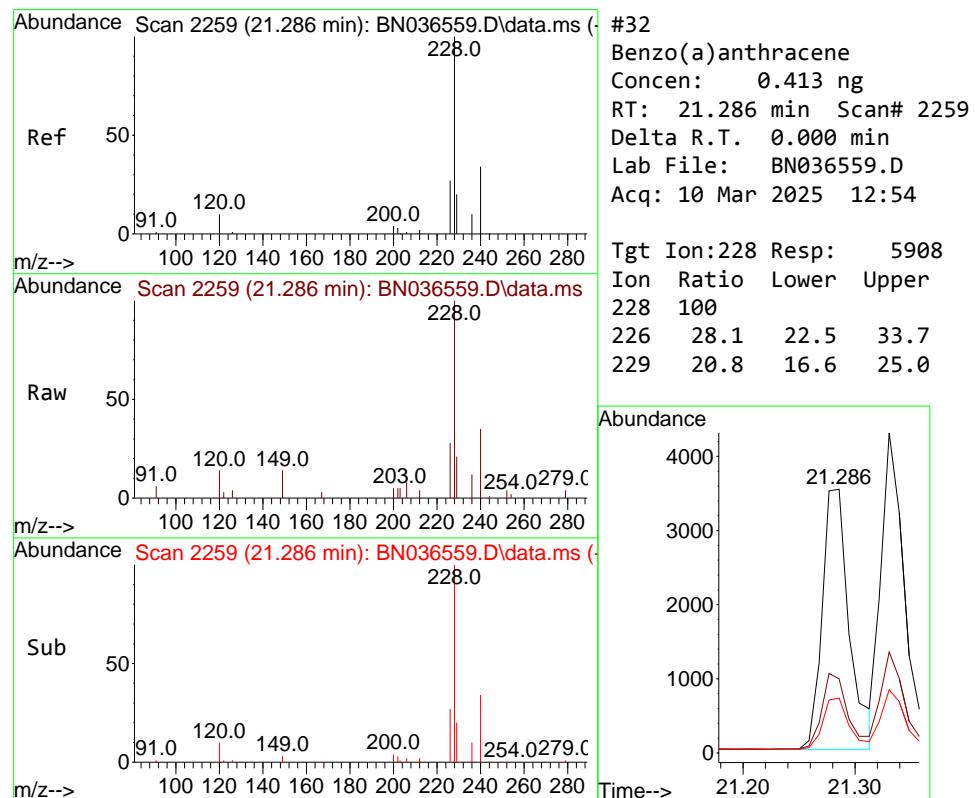
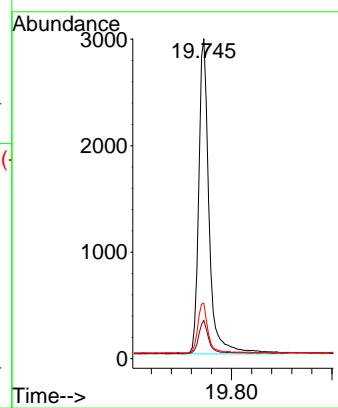




#31  
 Terphenyl-d14  
 Concen: 0.429 ng  
 RT: 19.745 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

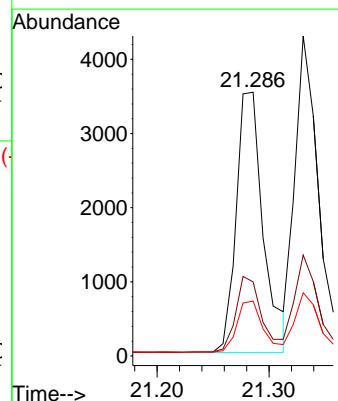
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

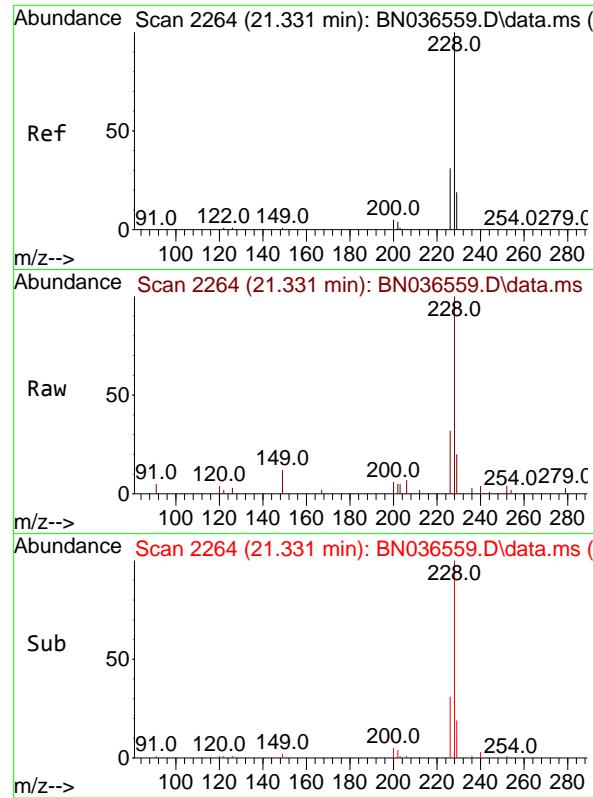
Tgt Ion:244 Resp: 4226  
 Ion Ratio Lower Upper  
 244 100  
 212 12.0 9.6 14.4  
 122 17.4 13.9 20.9



#32  
 Benzo(a)anthracene  
 Concen: 0.413 ng  
 RT: 21.286 min Scan# 2259  
 Delta R.T. 0.000 min  
 Lab File: BN036559.D  
 Acq: 10 Mar 2025 12:54

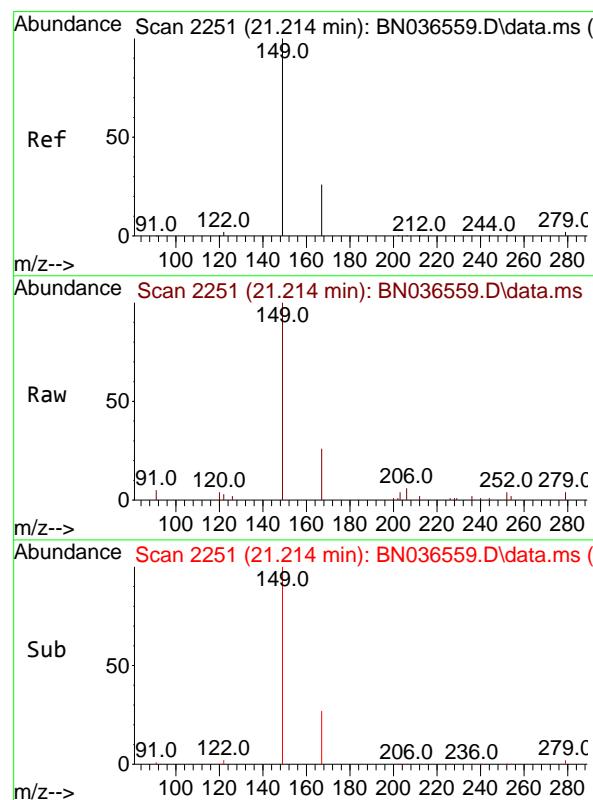
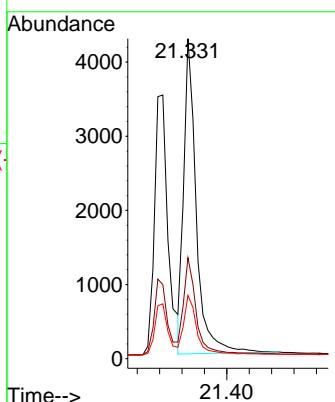
Tgt Ion:228 Resp: 5908  
 Ion Ratio Lower Upper  
 228 100  
 226 28.1 22.5 33.7  
 229 20.8 16.6 25.0





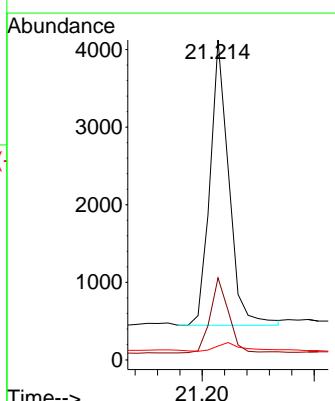
#33  
Chrysene  
Concen: 0.424 ng  
RT: 21.331 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54  
ClientSampleId : SSTDICCC0.4

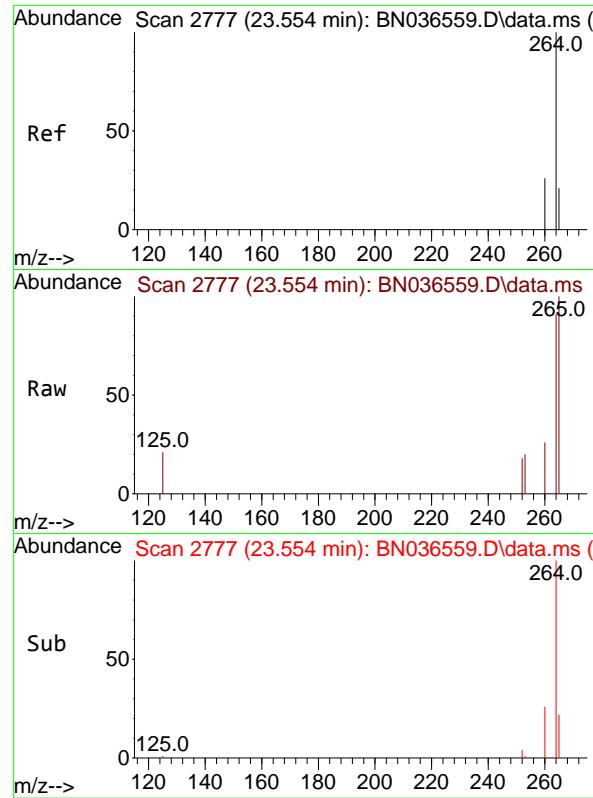
Tgt Ion:228 Resp: 6617  
Ion Ratio Lower Upper  
228 100  
226 31.6 25.3 37.9  
229 19.8 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.422 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

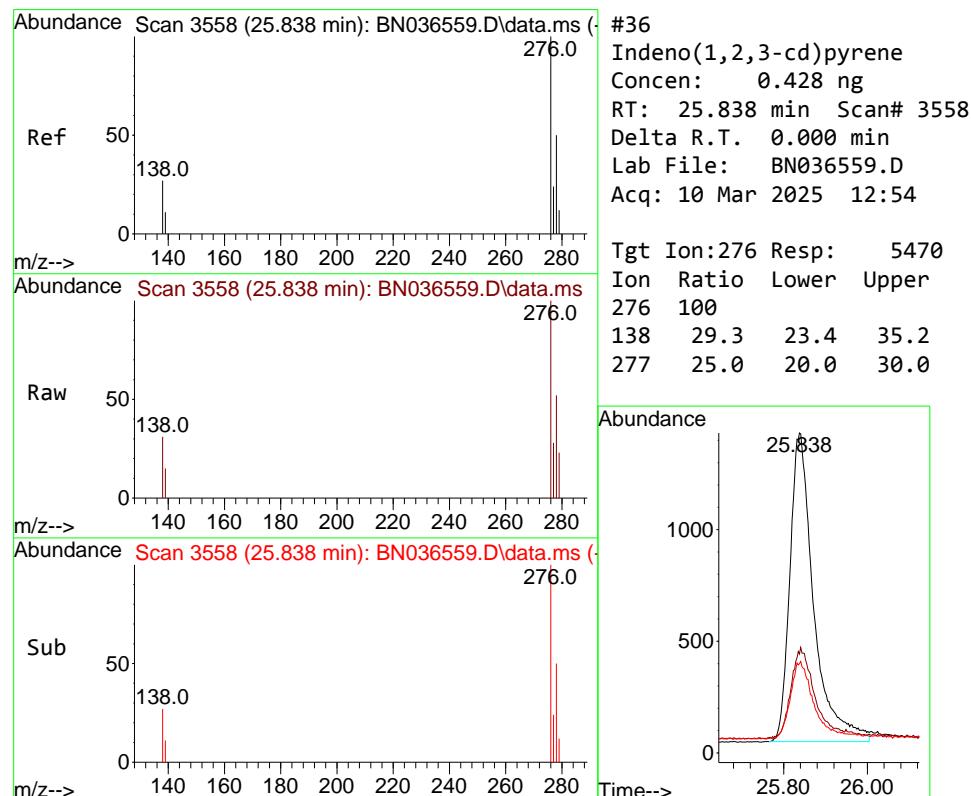
Tgt Ion:149 Resp: 4291  
Ion Ratio Lower Upper  
149 100  
167 25.9 20.7 31.1  
279 4.5 3.6 5.4





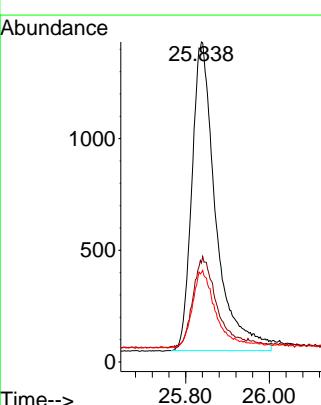
#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.554 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

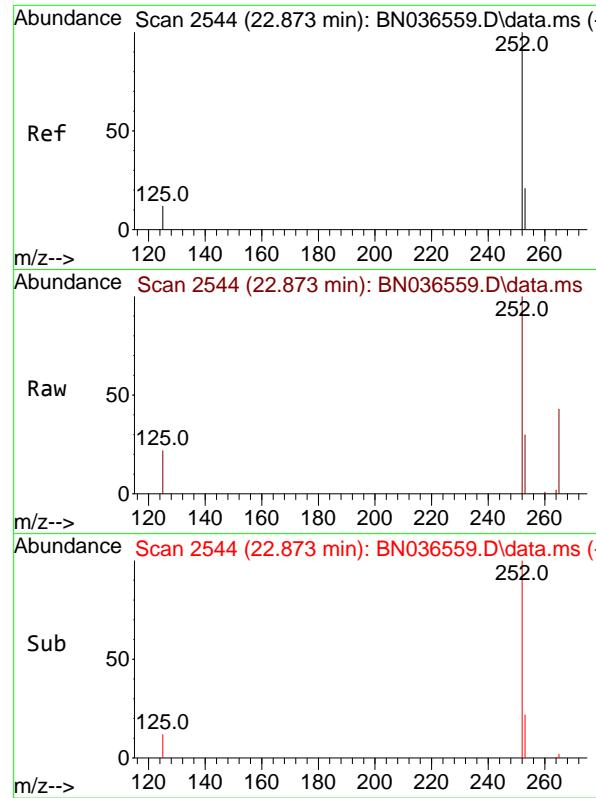
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.428 ng  
RT: 25.838 min Scan# 3558  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:276 Resp: 5470  
Ion Ratio Lower Upper  
276 100  
138 29.3 23.4 35.2  
277 25.0 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.425 ng

RT: 22.873 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

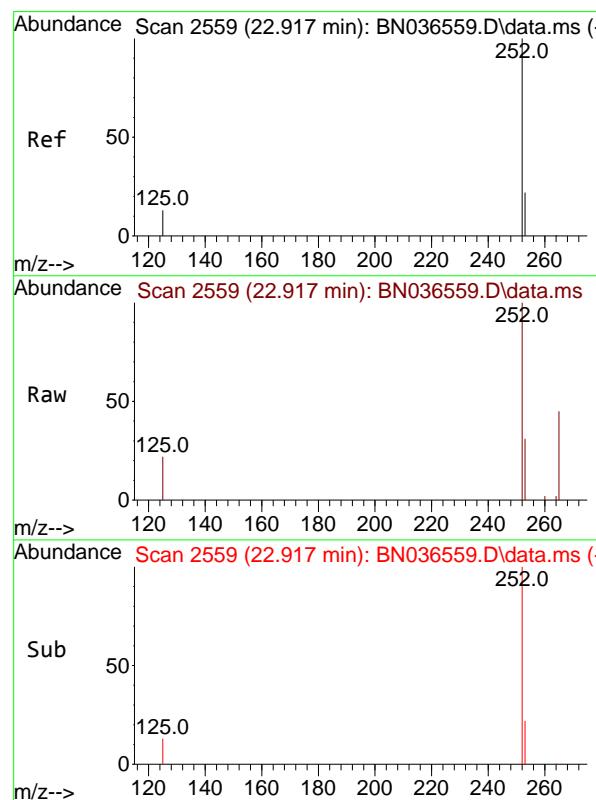
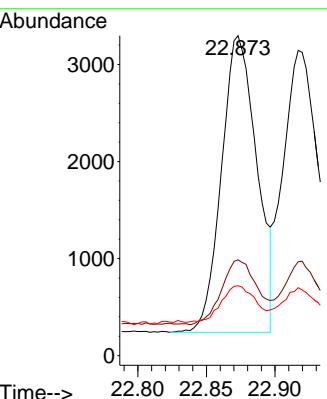
Tgt Ion:252 Resp: 5475

Ion Ratio Lower Upper

252 100

253 29.9 23.9 35.9

125 21.8 17.4 26.2



#38

Benzo(k)fluoranthene

Concen: 0.424 ng

RT: 22.917 min Scan# 2559

Delta R.T. 0.000 min

Lab File: BN036559.D

Acq: 10 Mar 2025 12:54

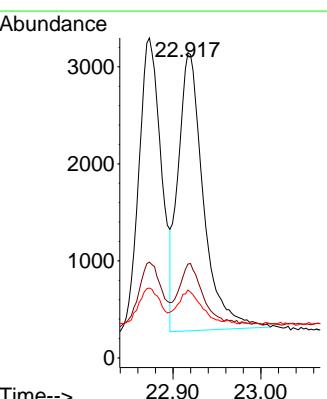
Tgt Ion:252 Resp: 5732

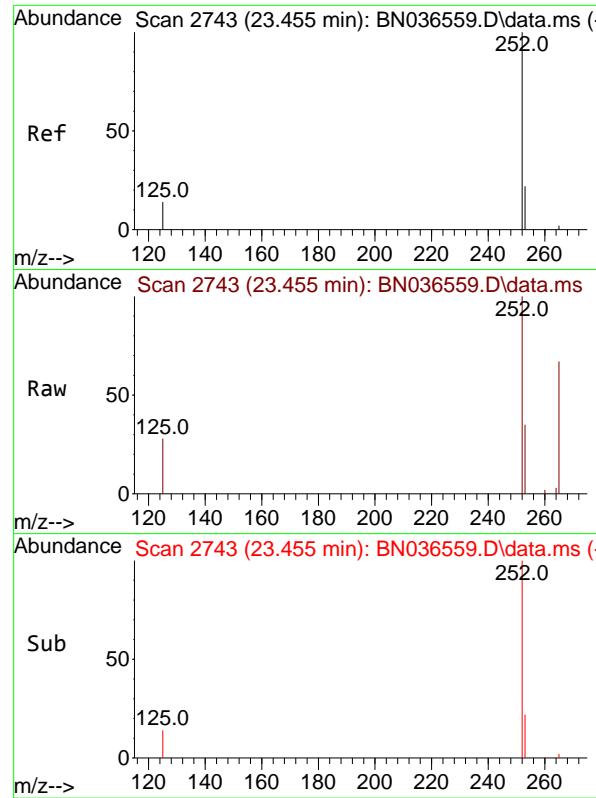
Ion Ratio Lower Upper

252 100

253 30.7 24.6 36.8

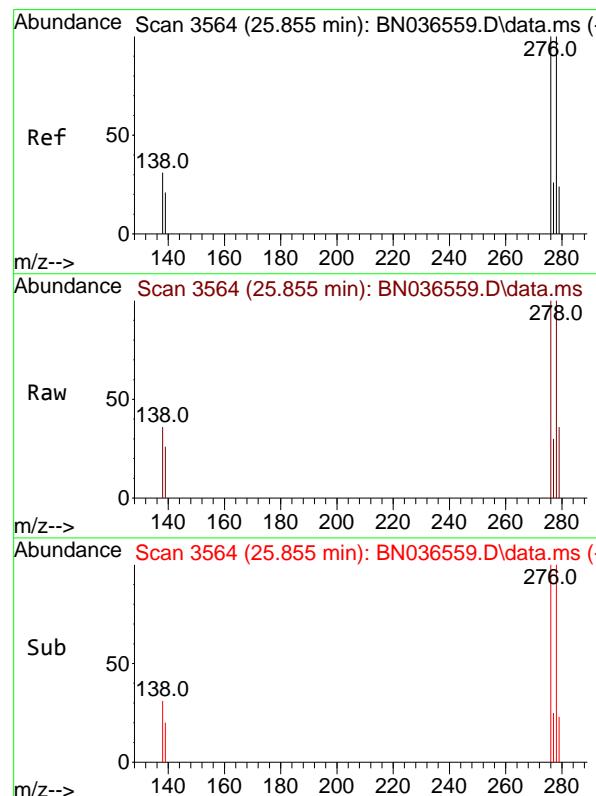
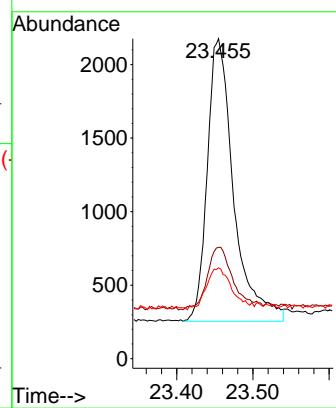
125 22.3 17.8 26.8





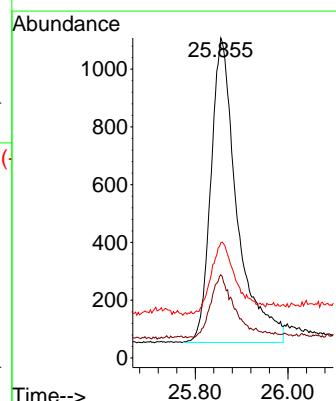
#39  
Benzo(a)pyrene  
Concen: 0.425 ng  
RT: 23.455 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54 ClientSampleId : SSTDICCC0.4

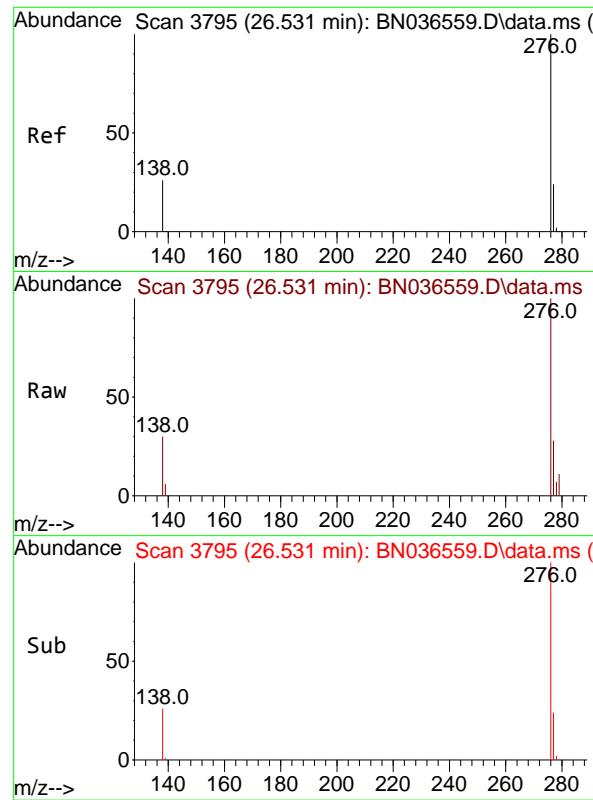
Tgt Ion:252 Resp: 4612  
Ion Ratio Lower Upper  
252 100  
253 34.8 27.8 41.8  
125 28.4 22.7 34.1



#40  
Dibenzo(a,h)anthracene  
Concen: 0.414 ng  
RT: 25.855 min Scan# 3564  
Delta R.T. 0.000 min  
Lab File: BN036559.D  
Acq: 10 Mar 2025 12:54

Tgt Ion:278 Resp: 4117  
Ion Ratio Lower Upper  
278 100  
139 26.0 20.8 31.2  
279 36.0 28.8 43.2





#41

Benzo(g,h,i)perylene

Concen: 0.430 ng

RT: 26.531 min Scan# 3

Instrument :

BNA\_N

Delta R.T. 0.000 min

Lab File: BN036559.D

ClientSampleId :

Acq: 10 Mar 2025 12:54

SSTDICCC0.4

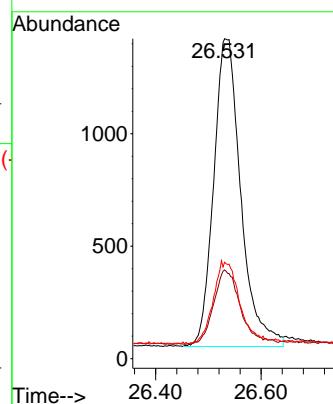
Tgt Ion:276 Resp: 4891

Ion Ratio Lower Upper

276 100

277 27.8 22.2 33.4

138 30.1 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036560.D  
 Acq On : 10 Mar 2025 13:31  
 Operator : RC/JU  
 Sample : SSTDICCO.8  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**SSTDICCO.8**

Quant Time: Mar 10 16:01:54 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

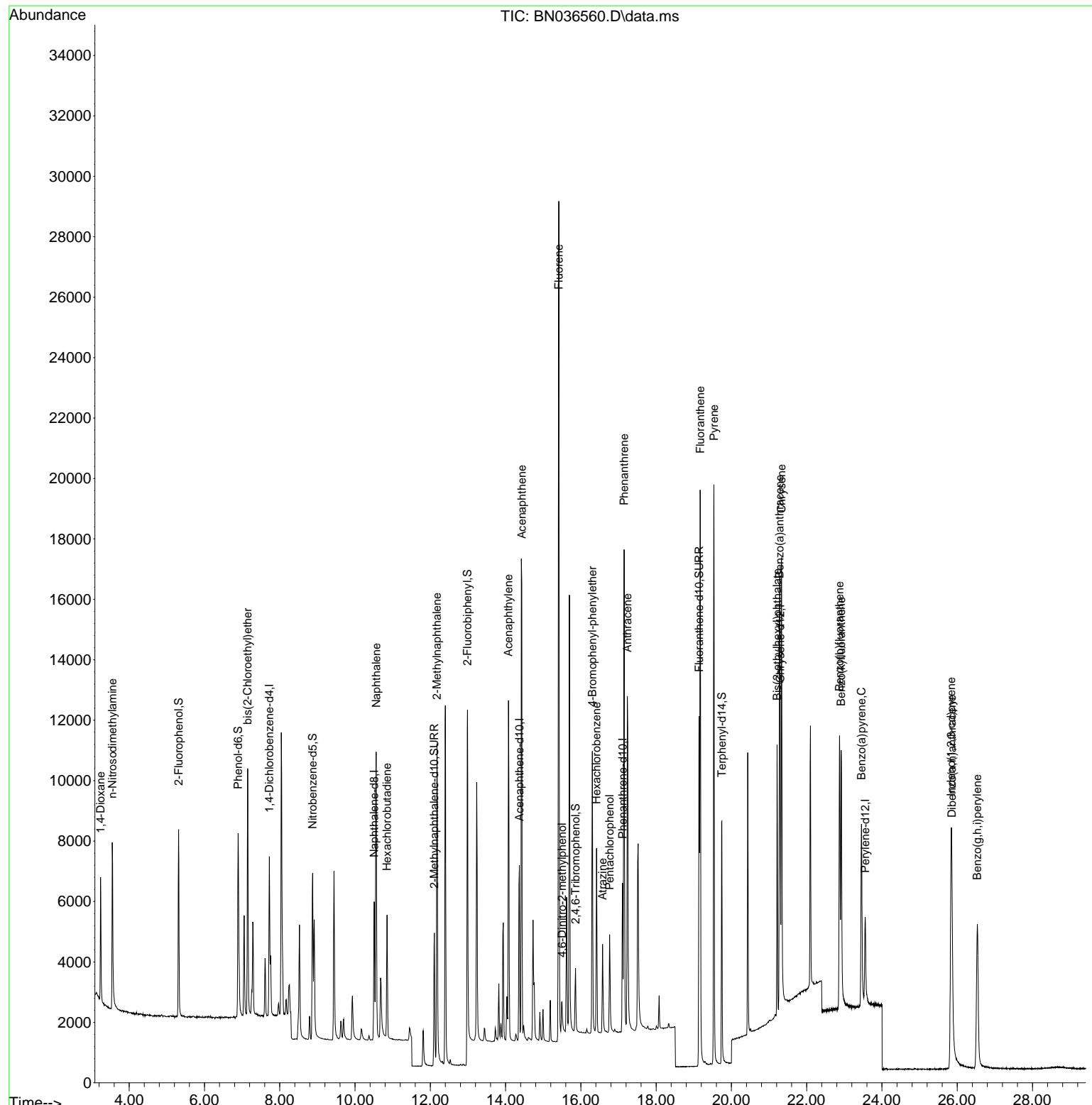
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2495	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5884	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	3456	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	6971	0.400	ng	0.00
29) Chrysene-d12	21.295	240	4636	0.400	ng	0.00
35) Perylene-d12	23.554	264	4198	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	4381	0.753	ng	0.00
5) Phenol-d6	6.894	99	5324	0.741	ng	0.00
8) Nitrobenzene-d5	8.875	82	4717	0.737	ng	0.00
11) 2-Methylnaphthalene-d10	12.106	152	6616	0.756	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	1166	0.744	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	16243	0.808	ng	0.00
27) Fluoranthene-d10	19.141	212	13330	0.746	ng	0.00
31) Terphenyl-d14	19.745	244	8571	0.772	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	2251	0.813	ng	99
3) n-Nitrosodimethylamine	3.550	42	4197	0.750	ng	96
6) bis(2-Chloroethyl)ether	7.147	93	5632	0.759	ng	99
9) Naphthalene	10.562	128	13078	0.756	ng	98
10) Hexachlorobutadiene	10.851	225	3147	0.772	ng	# 99
12) 2-Methylnaphthalene	12.177	142	8272	0.751	ng	98
16) Acenaphthylene	14.078	152	12403	0.760	ng	100
17) Acenaphthene	14.430	154	8096	0.758	ng	99
18) Fluorene	15.414	166	11120	0.770	ng	100
20) 4,6-Dinitro-2-methylph...	15.499	198	1039	0.724	ng	# 59
21) 4-Bromophenyl-phenylether	16.305	248	3324	0.761	ng	93
22) Hexachlorobenzene	16.416	284	4115	0.780	ng	99
23) Atrazine	16.578	200	2677	0.764	ng	94
24) Pentachlorophenol	16.764	266	1701	0.707	ng	98
25) Phenanthrene	17.149	178	15910	0.761	ng	99
26) Anthracene	17.236	178	14403	0.763	ng	99
28) Fluoranthene	19.174	202	17738	0.755	ng	99
30) Pyrene	19.536	202	17714	0.781	ng	100
32) Benzo(a)anthracene	21.277	228	12089	0.750	ng	98
33) Chrysene	21.331	228	13974	0.793	ng	100
34) Bis(2-ethylhexyl)phtha...	21.214	149	8021	0.699	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.838	276	11785	0.778	ng	99
37) Benzo(b)fluoranthene	22.873	252	11771	0.770	ng	# 91
38) Benzo(k)fluoranthene	22.917	252	12432	0.776	ng	# 90
39) Benzo(a)pyrene	23.455	252	10036	0.780	ng	# 87
40) Dibenzo(a,h)anthracene	25.858	278	9450	0.801	ng	91
41) Benzo(g,h,i)perylene	26.534	276	10494	0.778	ng	96

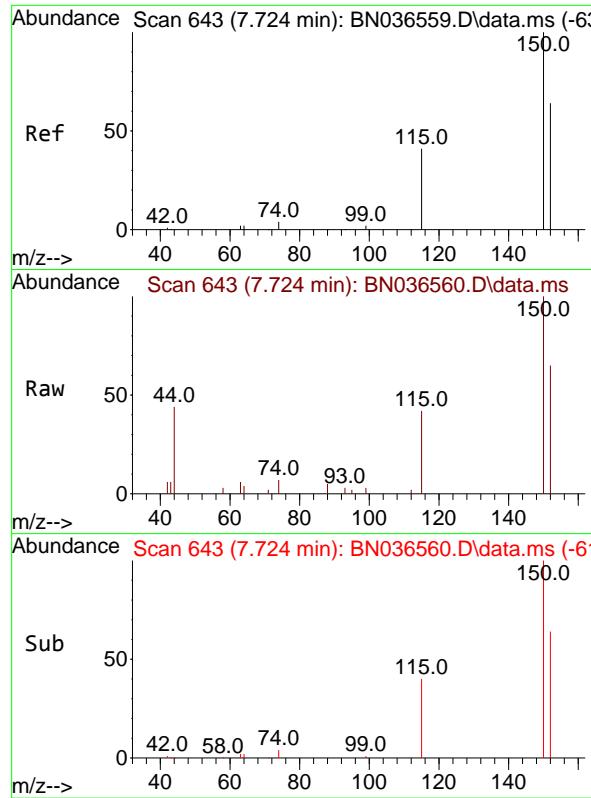
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
Data File : BN036560.D  
Acq On : 10 Mar 2025 13:31  
Operator : RC/JU  
Sample : SSTDICC0.8  
Misc :  
ALS Vial : 5 Sample Multiplier: 1

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
SSTDICC0.8

Quant Time: Mar 10 16:01:54 2025  
Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
QLast Update : Mon Mar 10 15:54:23 2025  
Response via : Initial Calibration

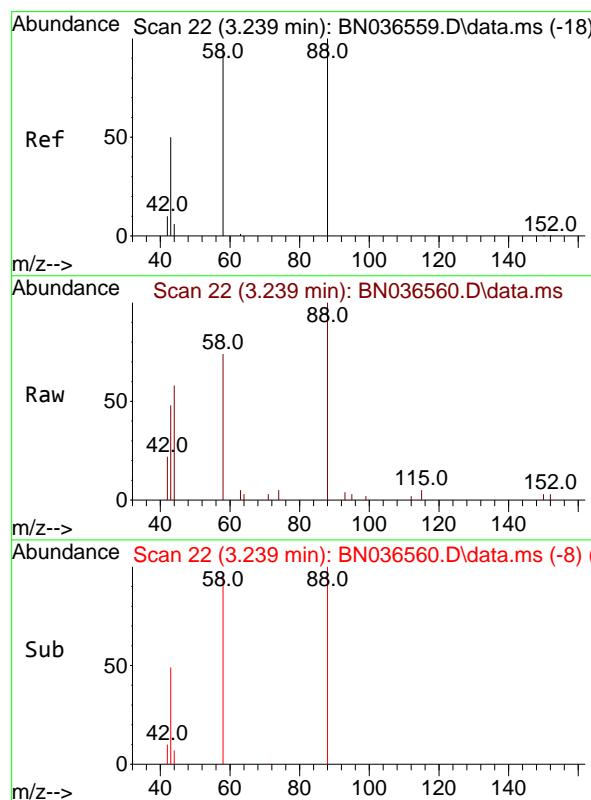
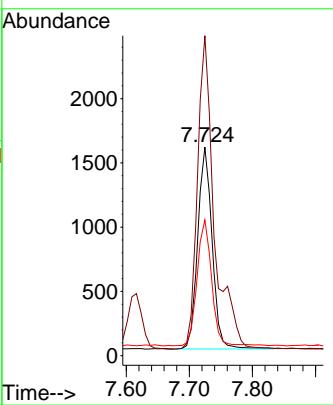




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

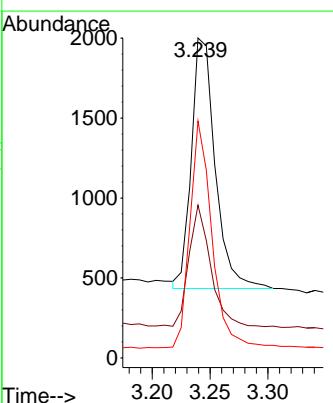
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

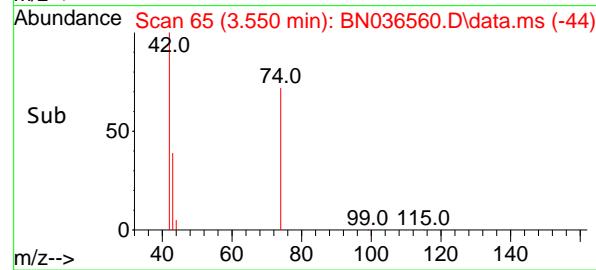
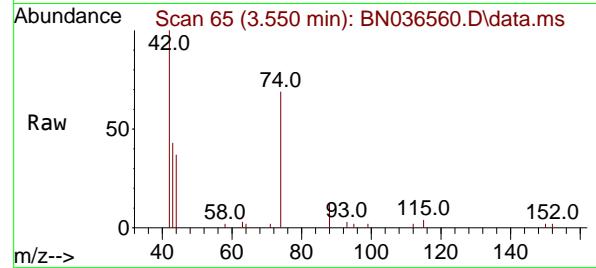
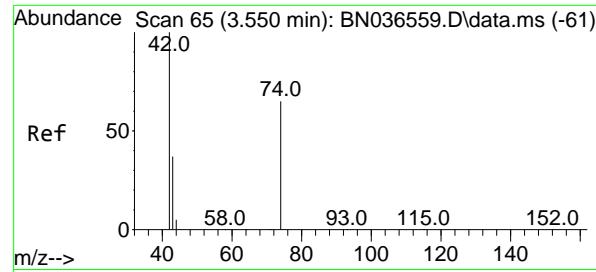
Tgt Ion:152 Resp: 2495  
Ion Ratio Lower Upper  
152 100  
150 153.3 123.7 185.5  
115 65.1 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.813 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion: 88 Resp: 2251  
Ion Ratio Lower Upper  
88 100  
43 45.6 37.8 56.8  
58 84.5 67.4 101.2





#3

n-Nitrosodimethylamine  
Concen: 0.750 ng  
RT: 3.550 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Instrument :

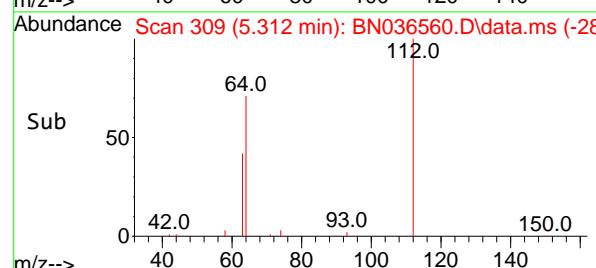
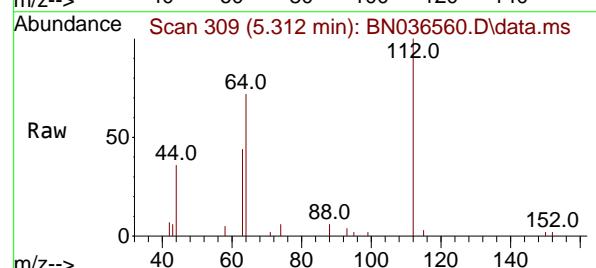
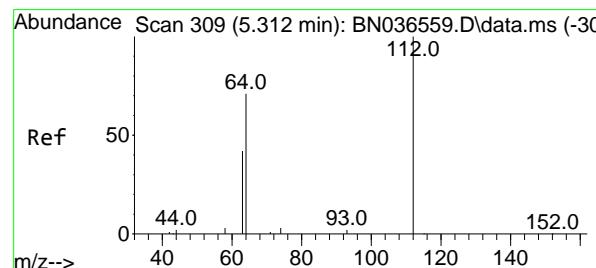
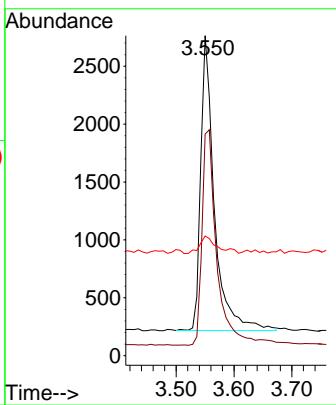
BNA\_N

ClientSampleId :

SSTDICCO.8

Tgt Ion: 42 Resp: 4197

Ion Ratio	Lower	Upper
42	100	
74	79.3	60.6
44	7.4	6.3
		90.8
		9.5

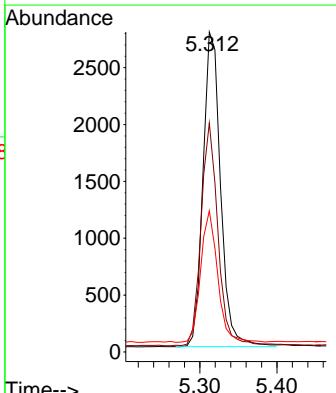


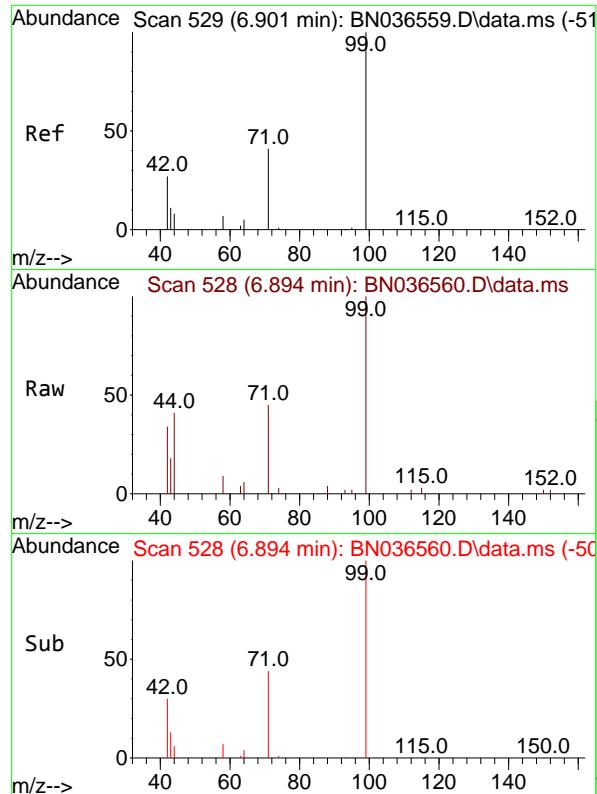
#4

2-Fluorophenol  
Concen: 0.753 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion: 112 Resp: 4381

Ion Ratio	Lower	Upper
112	100	
64	68.8	53.1
63	40.4	31.8
		79.7
		47.8

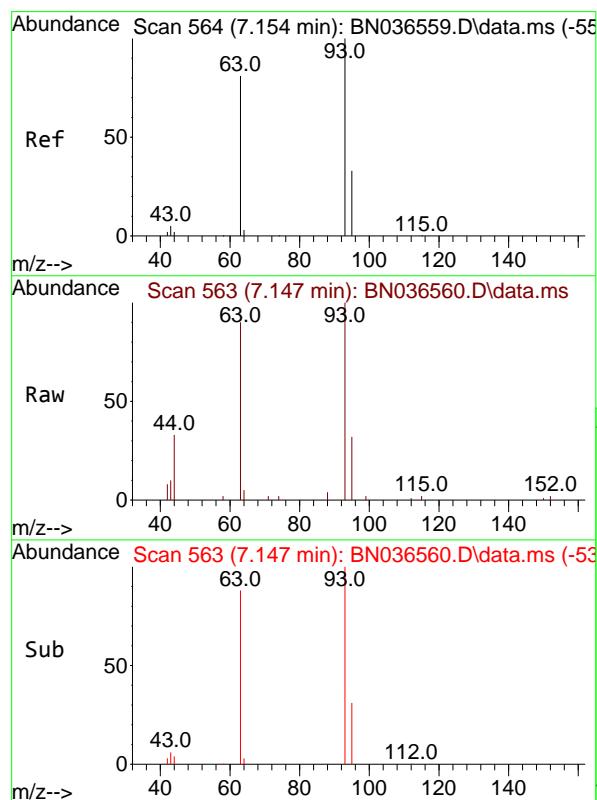
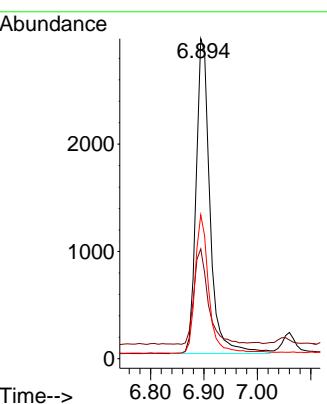




#5  
 Phenol-d6  
 Concen: 0.741 ng  
 RT: 6.894 min Scan# 5  
 Delta R.T. -0.007 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

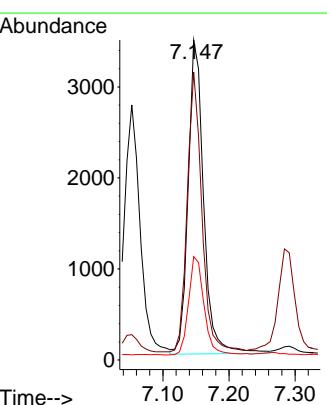
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

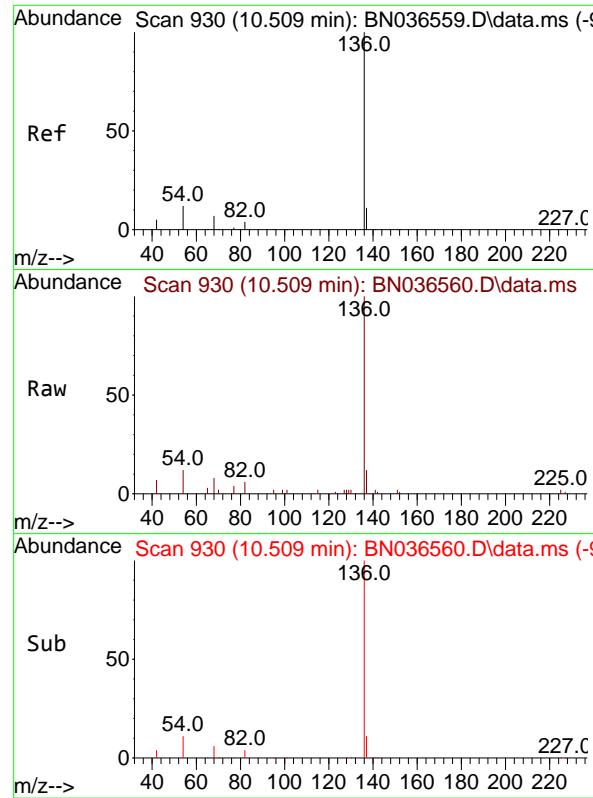
Tgt Ion: 99 Resp: 5324  
 Ion Ratio Lower Upper  
 99 100  
 42 31.3 26.5 39.7  
 71 42.6 34.1 51.1



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.759 ng  
 RT: 7.147 min Scan# 563  
 Delta R.T. -0.007 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion: 93 Resp: 5632  
 Ion Ratio Lower Upper  
 93 100  
 63 84.0 67.7 101.5  
 95 31.6 25.6 38.4



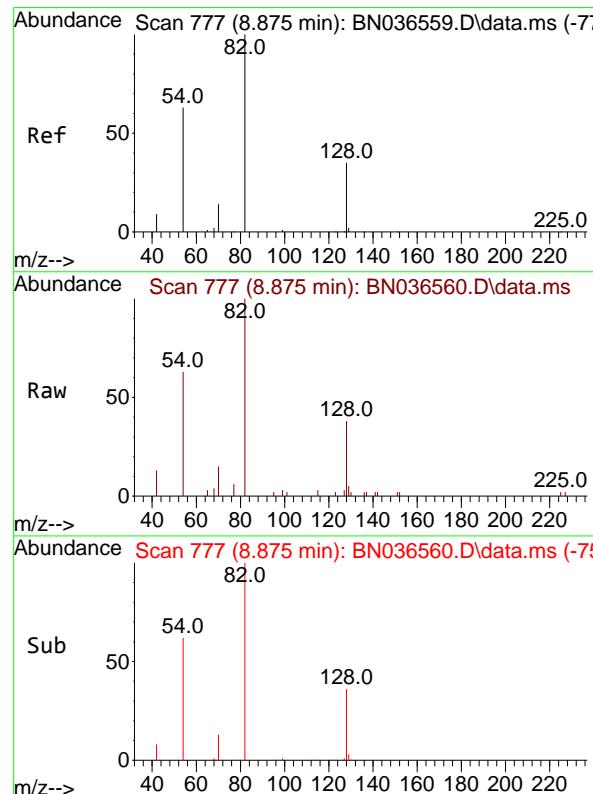
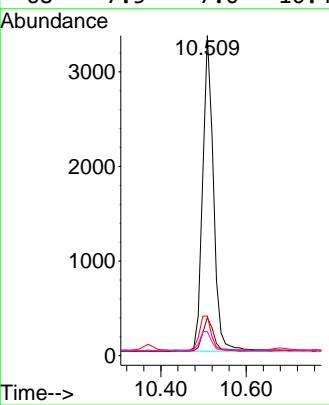


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

Tgt Ion:136 Resp: 5884

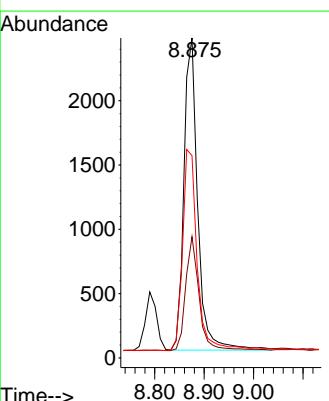
Ion	Ratio	Lower	Upper
136	100		
137	11.9	10.3	15.5
54	12.4	11.5	17.3
68	7.5	7.0	10.4

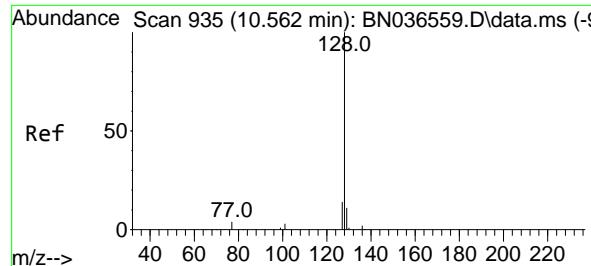


#8  
 Nitrobenzene-d5  
 Concen: 0.737 ng  
 RT: 8.875 min Scan# 777  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion: 82 Resp: 4717

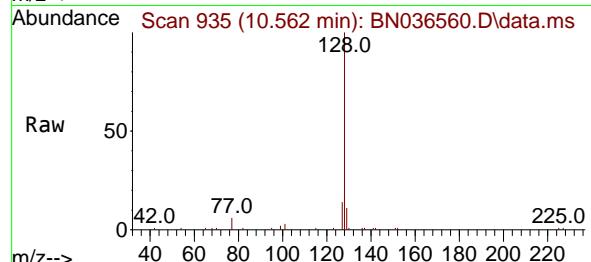
Ion	Ratio	Lower	Upper
82	100		
128	37.9	30.6	45.8
54	63.2	52.2	78.4



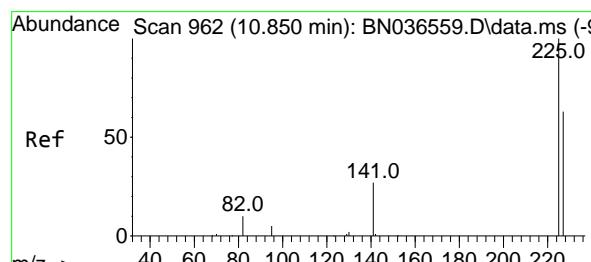
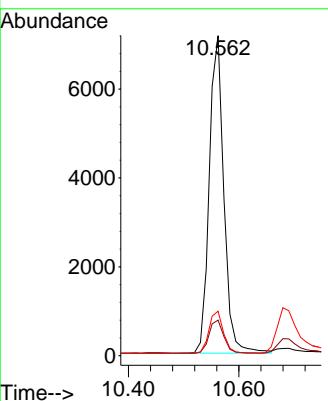
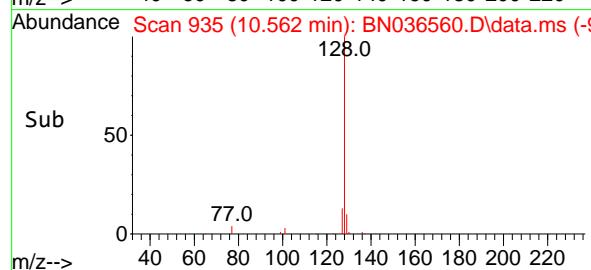


#9  
Naphthalene  
Concen: 0.756 ng  
RT: 10.562 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

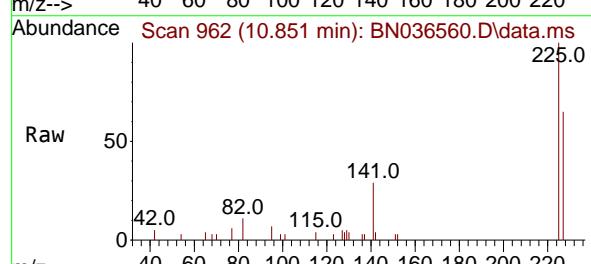
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8



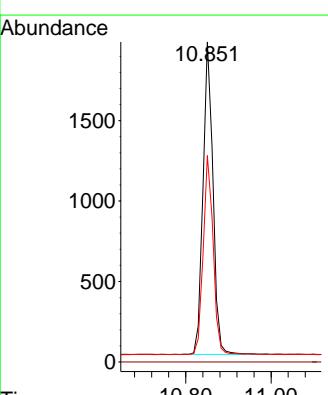
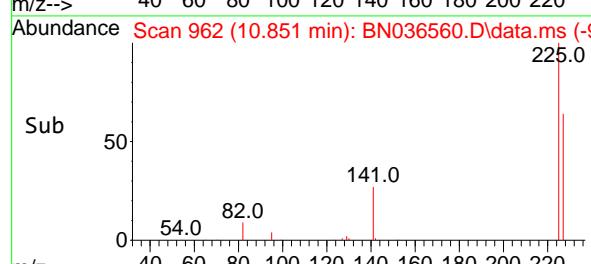
Tgt Ion:128 Resp: 13078  
Ion Ratio Lower Upper  
128 100  
129 11.1 9.8 14.6  
127 13.9 11.8 17.8

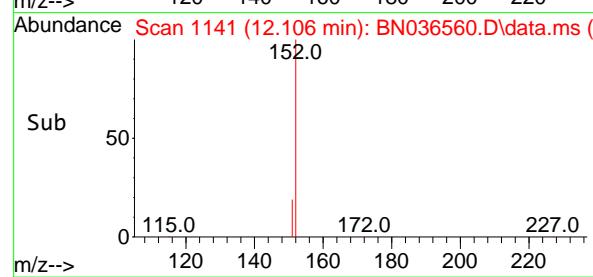
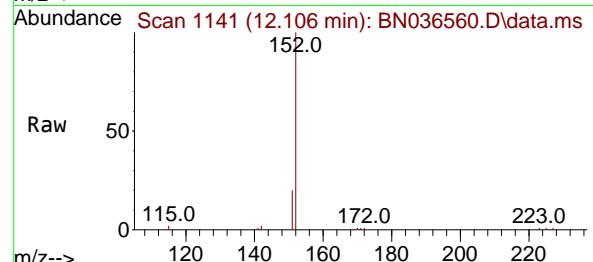
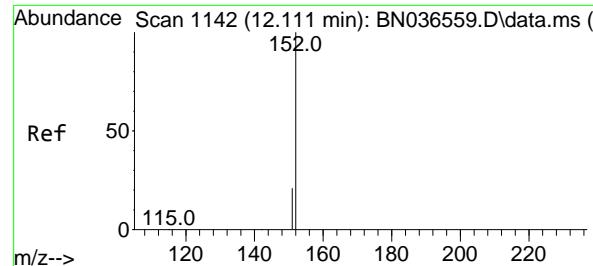


#10  
Hexachlorobutadiene  
Concen: 0.772 ng  
RT: 10.851 min Scan# 962  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31



Tgt Ion:225 Resp: 3147  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.8 77.8

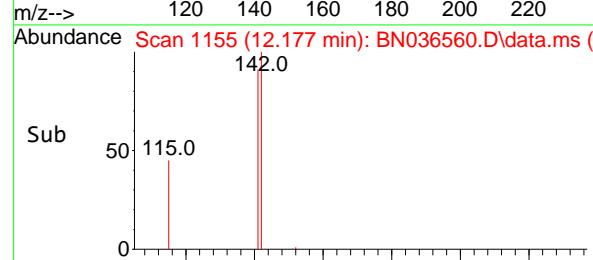
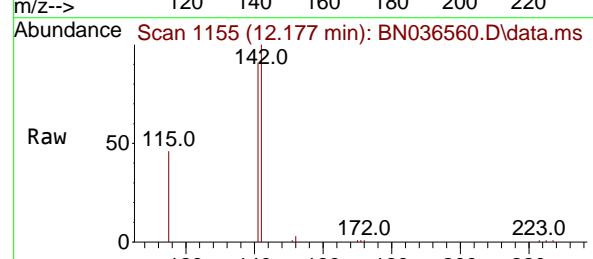
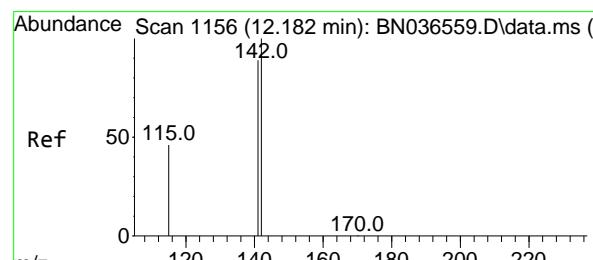
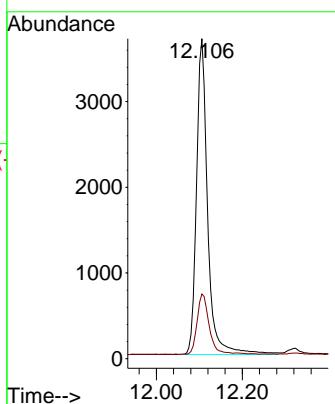




#11  
2-Methylnaphthalene-d10  
Concen: 0.756 ng  
RT: 12.106 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

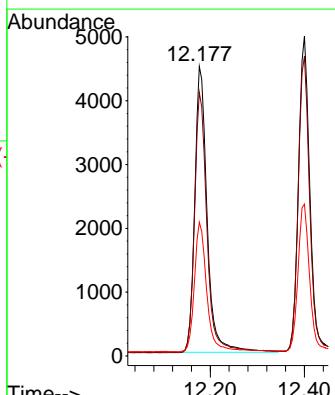
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

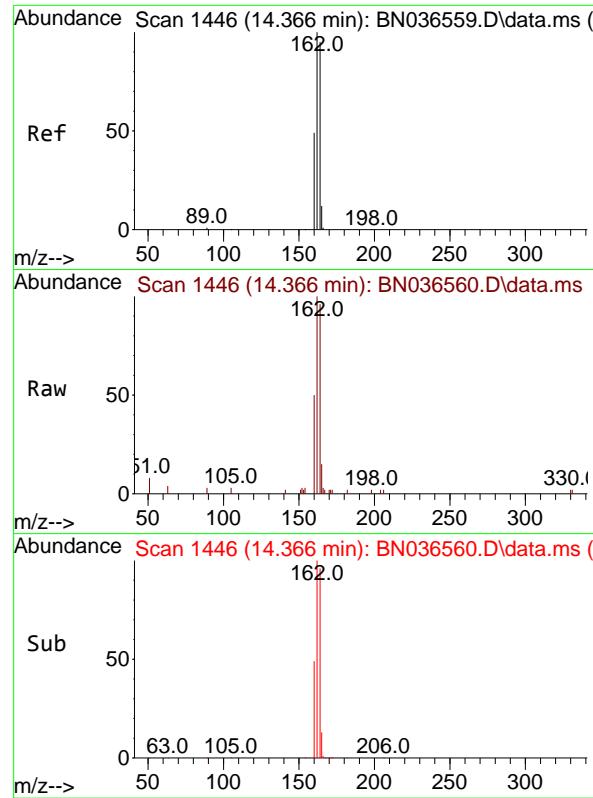
Tgt Ion:152 Resp: 6616  
Ion Ratio Lower Upper  
152 100  
151 20.8 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.751 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:142 Resp: 8272  
Ion Ratio Lower Upper  
142 100  
141 91.0 71.7 107.5  
115 46.2 38.3 57.5

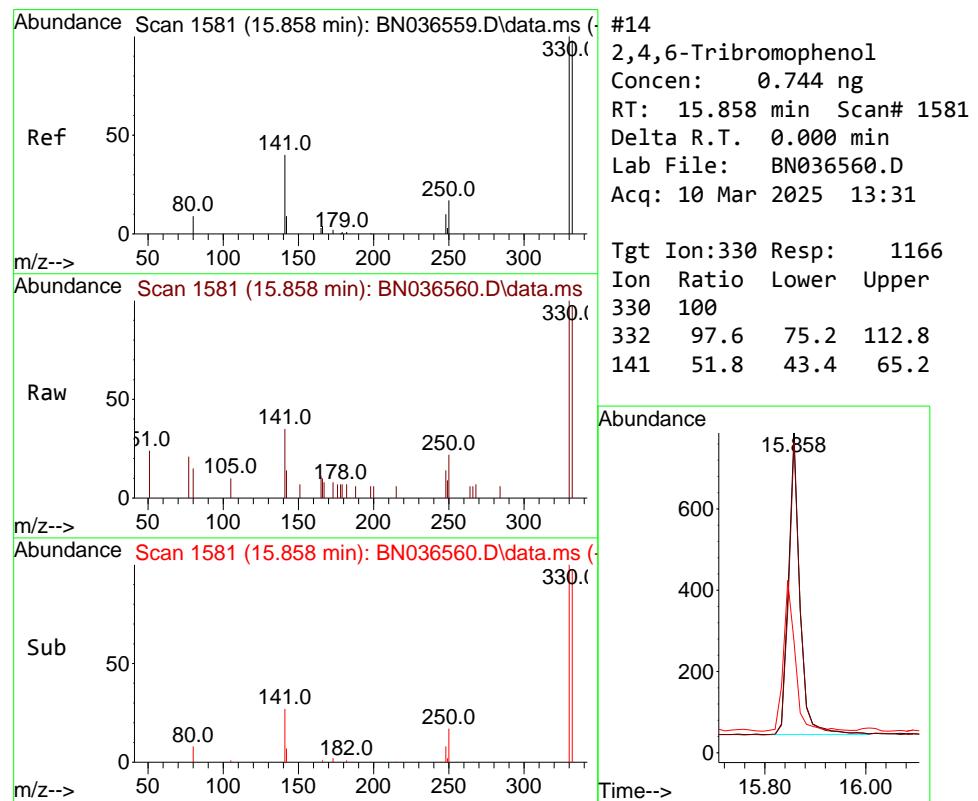
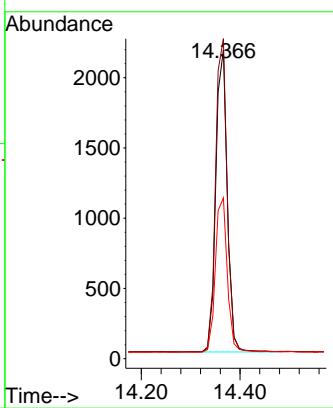




#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.366 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

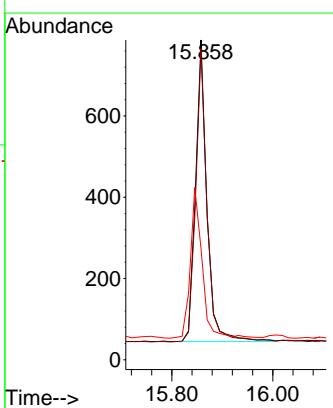
Tgt Ion:164 Resp: 3456

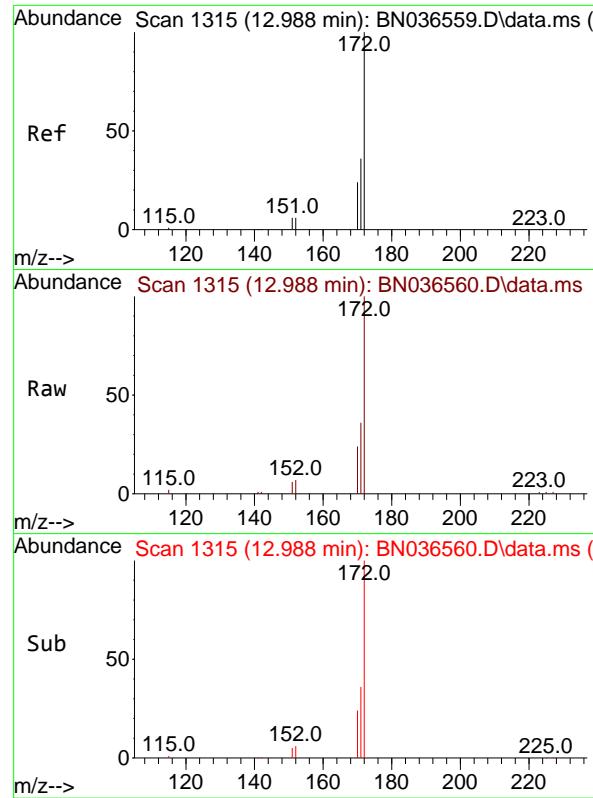
Ion Ratio Lower Upper  
164 100  
162 103.6 84.2 126.2  
160 52.1 42.2 63.2

#14

2,4,6-Tribromophenol  
Concen: 0.744 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

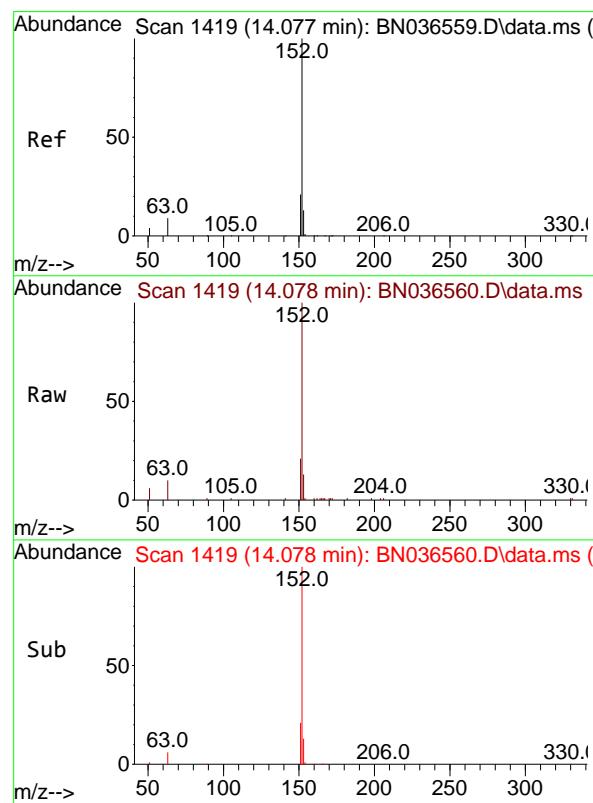
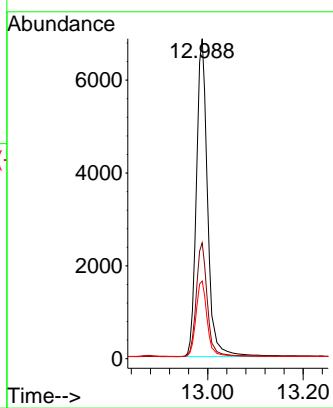
Tgt Ion:330 Resp: 1166

Ion Ratio Lower Upper  
330 100  
332 97.6 75.2 112.8  
141 51.8 43.4 65.2



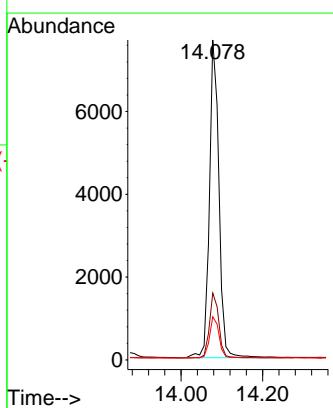
#15  
2-Fluorobiphenyl  
Concen: 0.808 ng  
RT: 12.988 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31  
ClientSampleId : SSTDICCO.8

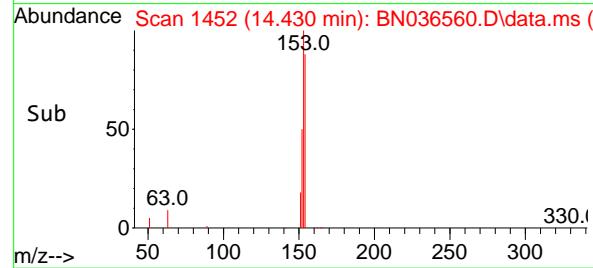
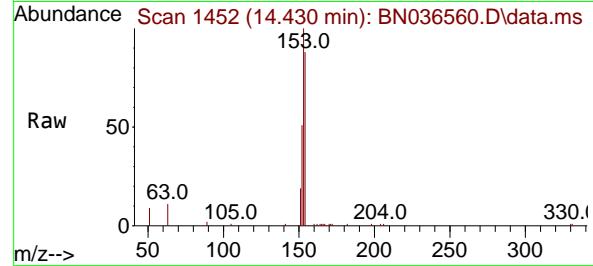
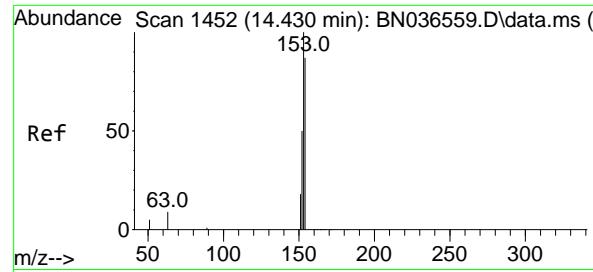
Tgt Ion:172 Resp: 16243  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.5 44.3  
170 24.3 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.760 ng  
RT: 14.078 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:152 Resp: 12403  
Ion Ratio Lower Upper  
152 100  
151 20.1 16.2 24.4  
153 13.1 10.6 15.8





#17

Acenaphthene

Concen: 0.758 ng

RT: 14.430 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument : BNA\_N

ClientSampleId : SSTDICCO.8

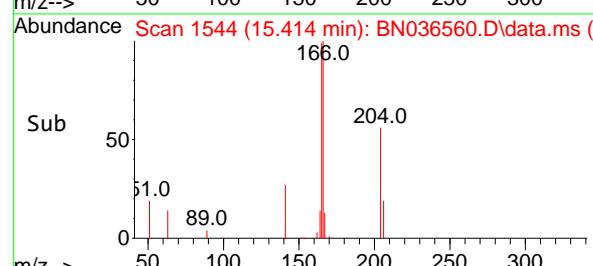
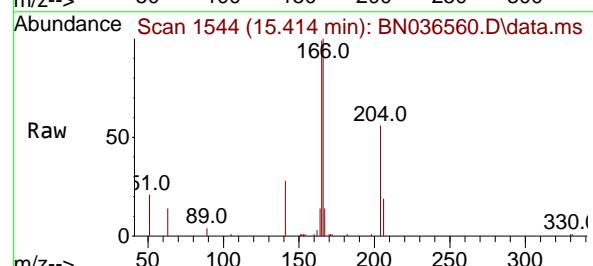
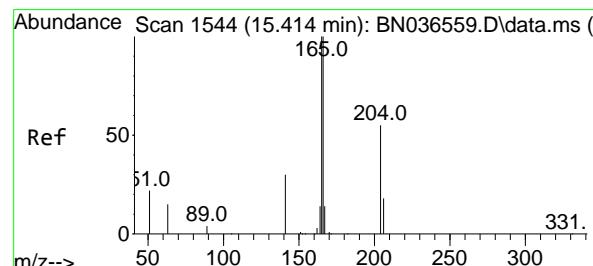
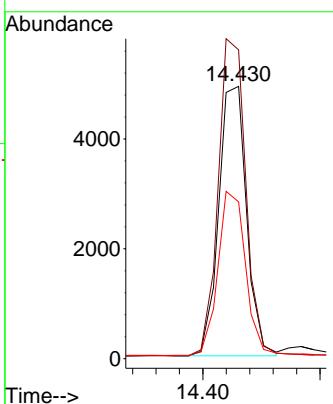
Tgt Ion:154 Resp: 8096

Ion Ratio Lower Upper

154 100

153 117.8 94.1 141.1

152 60.9 49.8 74.6



#18

Fluorene

Concen: 0.770 ng

RT: 15.414 min Scan# 1544

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

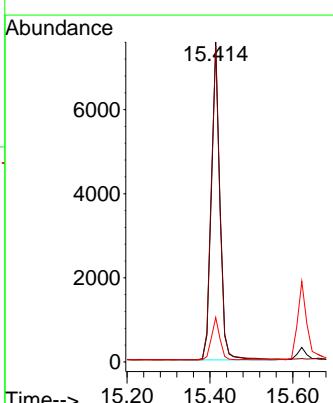
Tgt Ion:166 Resp: 11120

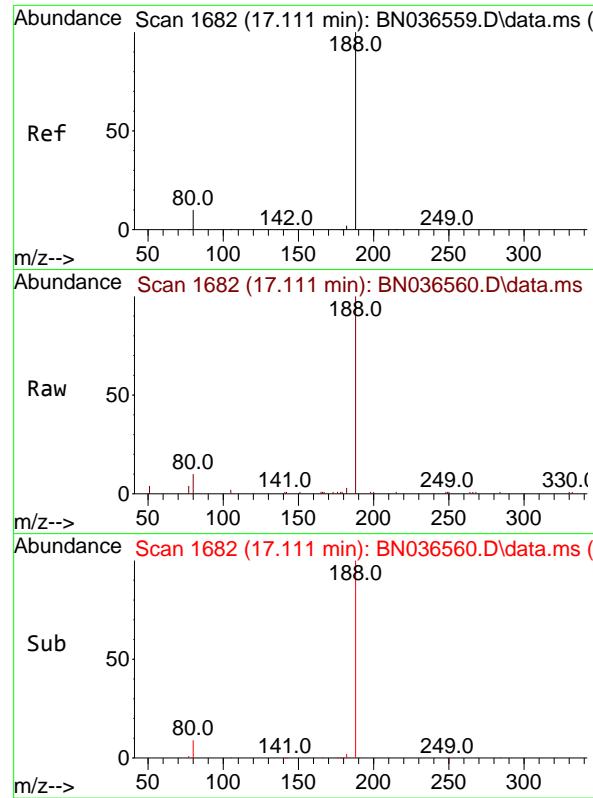
Ion Ratio Lower Upper

166 100

165 99.8 79.8 119.8

167 13.3 10.6 15.8

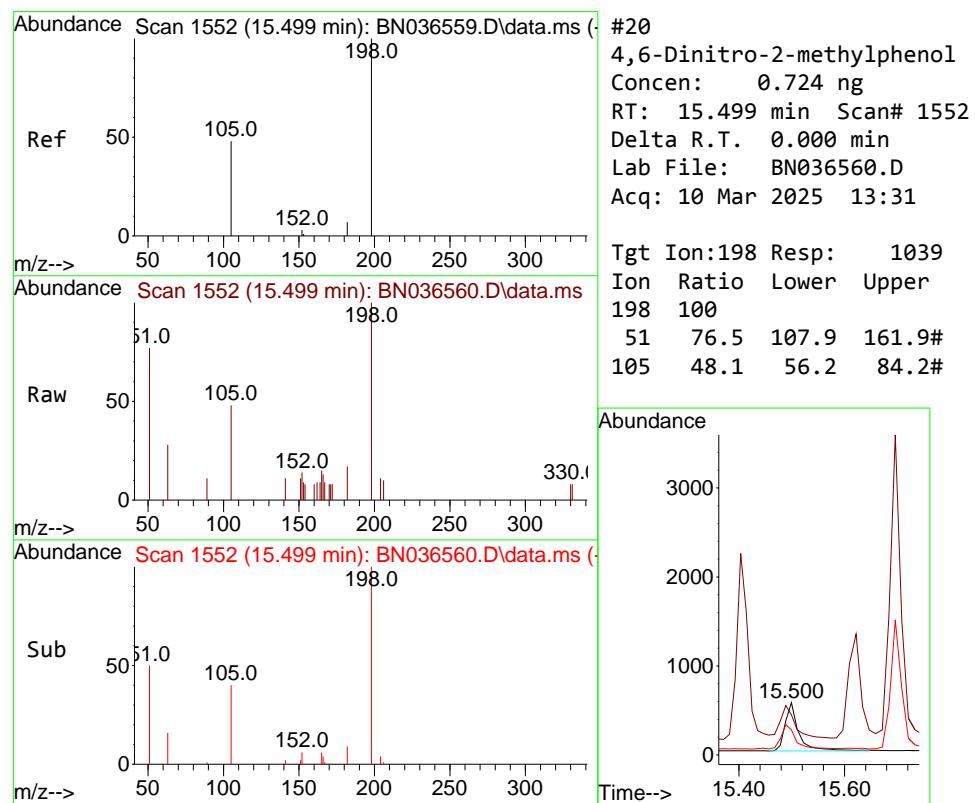
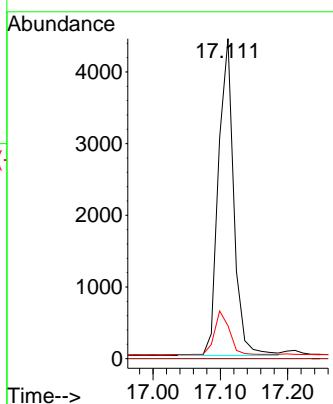




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.111 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

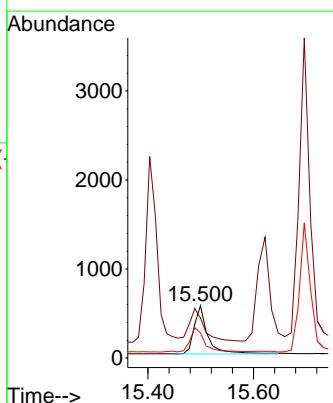
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

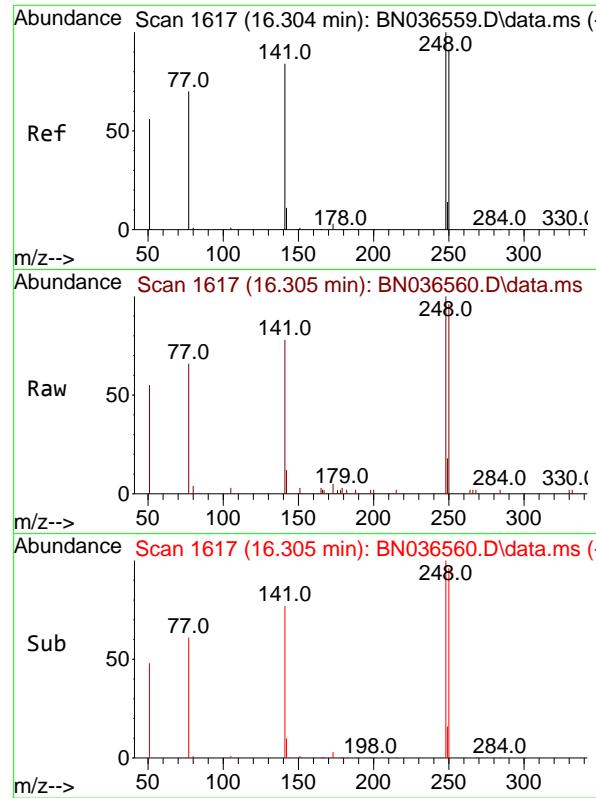
Tgt Ion:188 Resp: 6971  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 10.3 8.8 13.2



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.724 ng  
 RT: 15.499 min Scan# 1552  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion:198 Resp: 1039  
 Ion Ratio Lower Upper  
 198 100  
 51 76.5 107.9 161.9#  
 105 48.1 56.2 84.2#





#21

4-Bromophenyl-phenylether

Concen: 0.761 ng

RT: 16.305 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

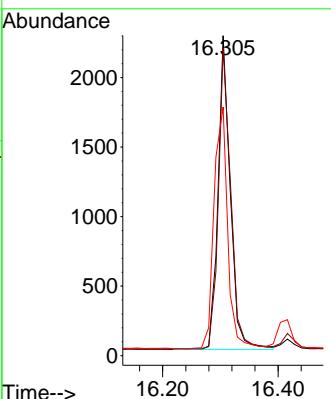
Tgt Ion:248 Resp: 3324

Ion Ratio Lower Upper

248 100

250 96.2 73.0 109.6

141 77.7 68.6 103.0



#22

Hexachlorobenzene

Concen: 0.780 ng

RT: 16.416 min Scan# 1626

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

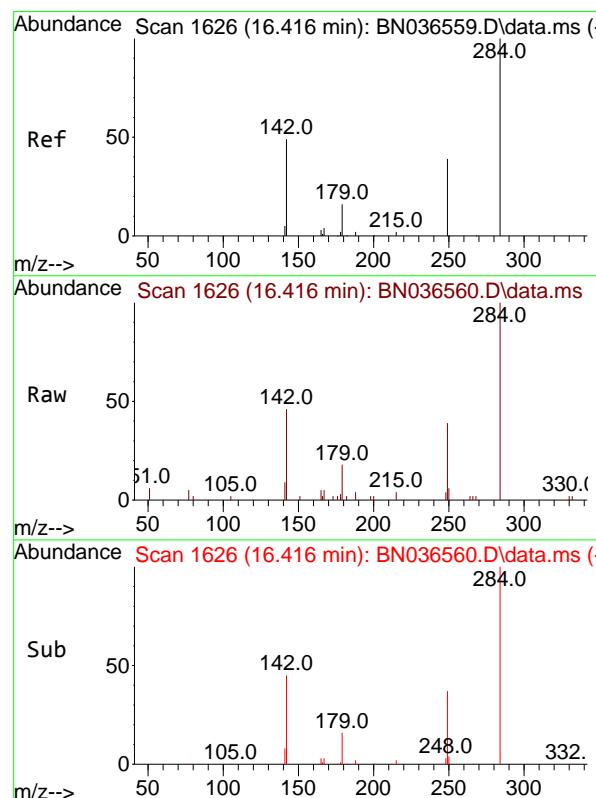
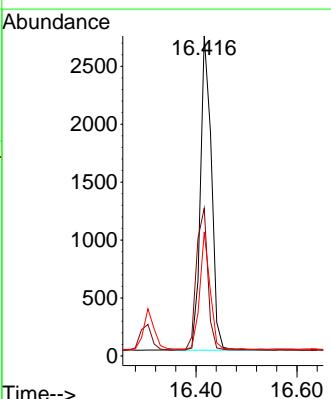
Tgt Ion:284 Resp: 4115

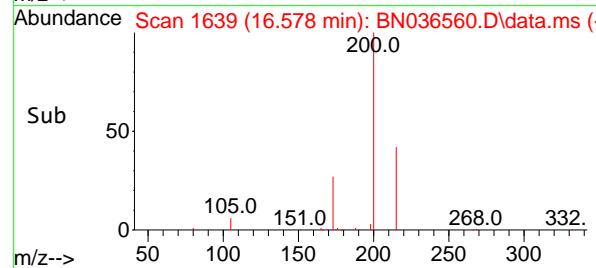
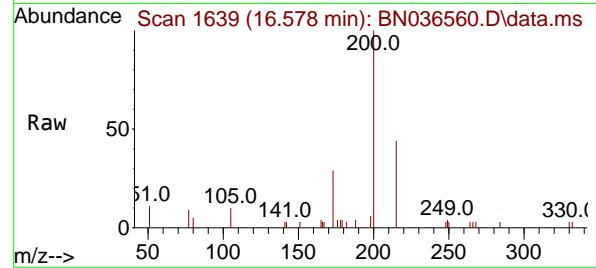
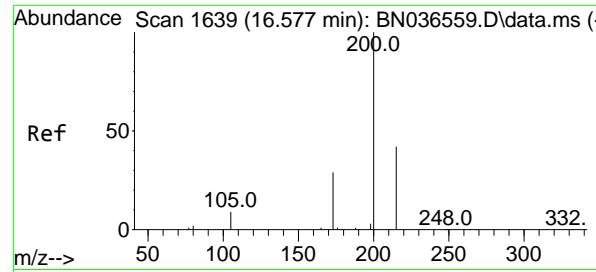
Ion Ratio Lower Upper

284 100

142 47.2 37.0 55.4

249 34.7 28.1 42.1

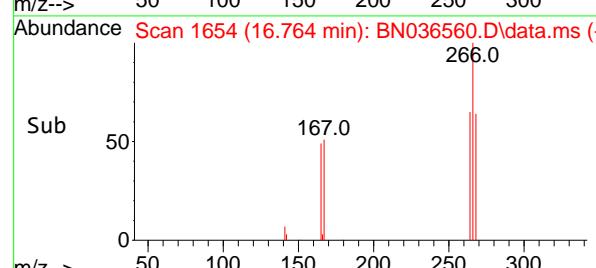
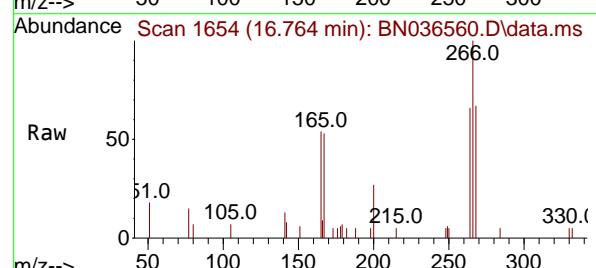
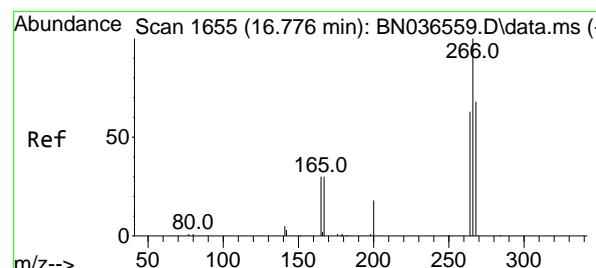
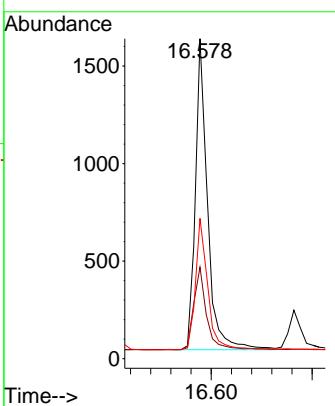




#23  
Atrazine  
Concen: 0.764 ng  
RT: 16.578 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

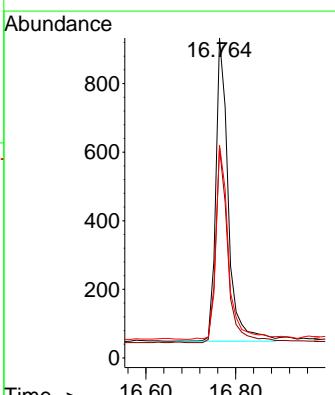
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

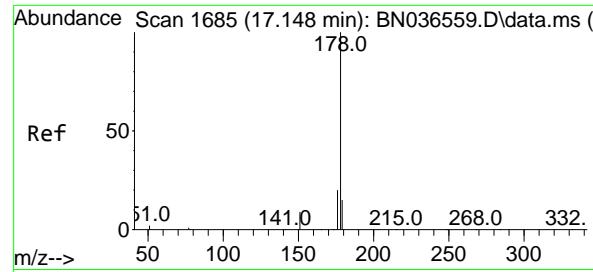
Tgt Ion:200 Resp: 2677  
Ion Ratio Lower Upper  
200 100  
173 28.6 27.3 40.9  
215 43.8 36.8 55.2



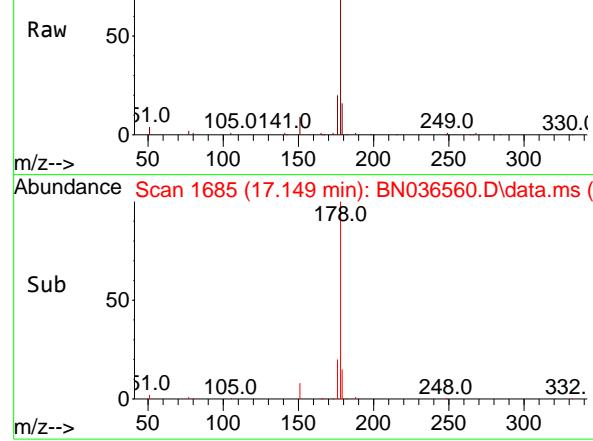
#24  
Pentachlorophenol  
Concen: 0.707 ng  
RT: 16.764 min Scan# 1654  
Delta R.T. -0.012 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:266 Resp: 1701  
Ion Ratio Lower Upper  
266 100  
264 63.5 49.6 74.4  
268 65.1 50.9 76.3





Abundance Scan 1685 (17.149 min): BN036560.D\data.ms (-)



#25

Phenanthrene

Concen: 0.761 ng

RT: 17.149 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

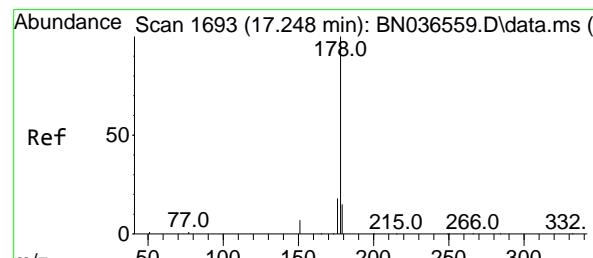
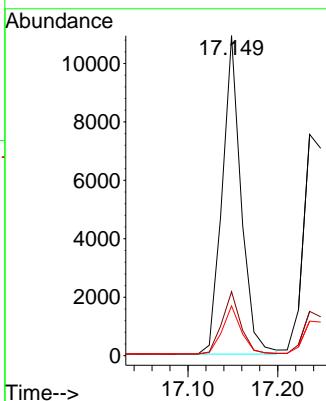
Tgt Ion:178 Resp: 15910

Ion Ratio Lower Upper

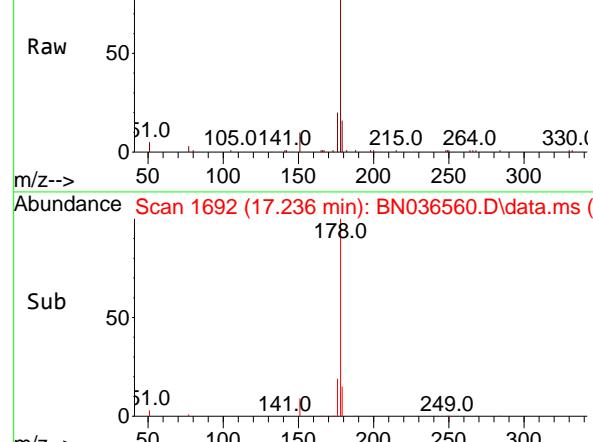
178 100

176 19.6 15.9 23.9

179 15.1 12.2 18.4



Abundance Scan 1692 (17.236 min): BN036560.D\data.ms (-)



#26

Anthracene

Concen: 0.763 ng

RT: 17.236 min Scan# 1692

Delta R.T. -0.012 min

Lab File: BN036560.D

Acq: 10 Mar 2025 13:31

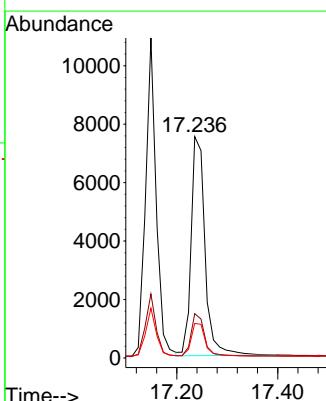
Tgt Ion:178 Resp: 14403

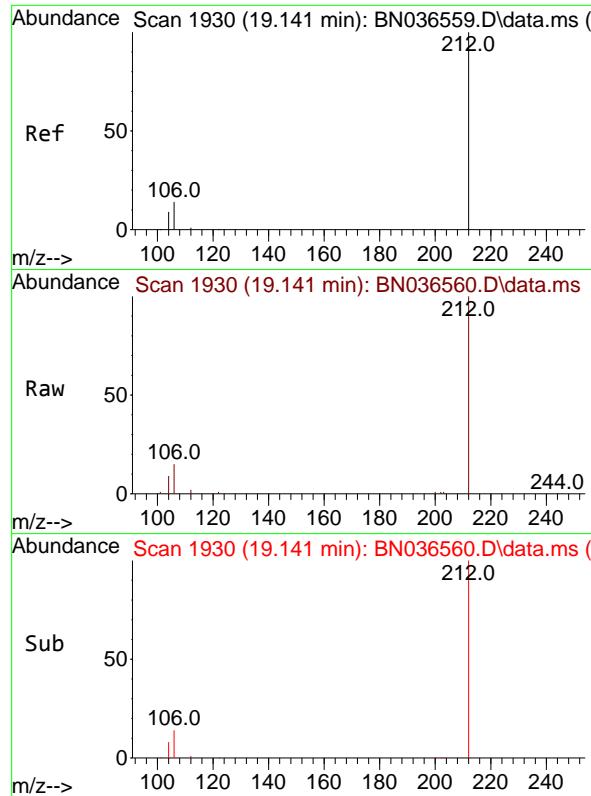
Ion Ratio Lower Upper

178 100

176 18.8 15.4 23.2

179 15.1 12.6 18.8

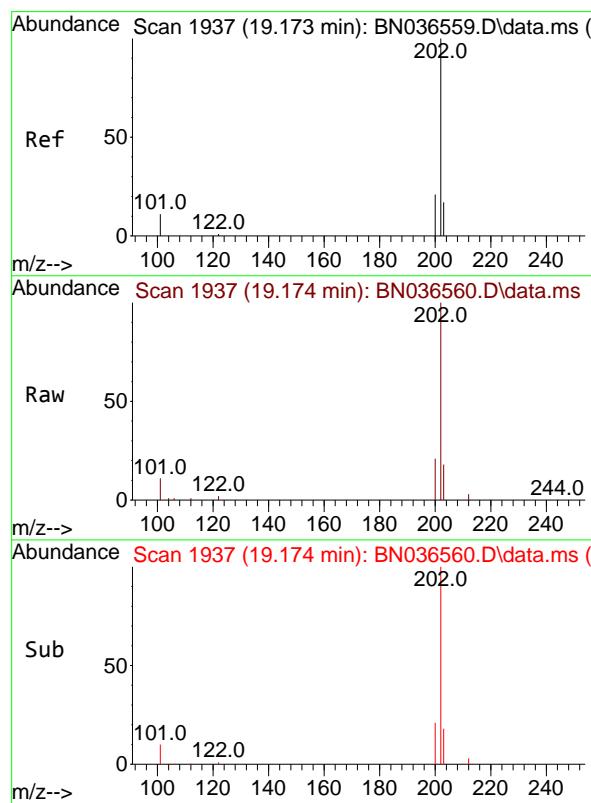
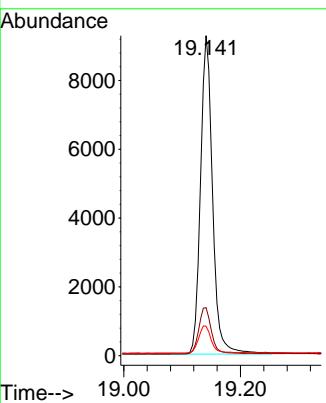




#27  
 Fluoranthene-d10  
 Concen: 0.746 ng  
 RT: 19.141 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

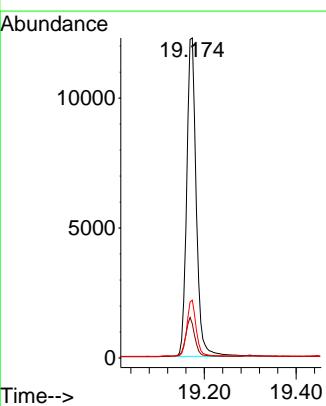
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

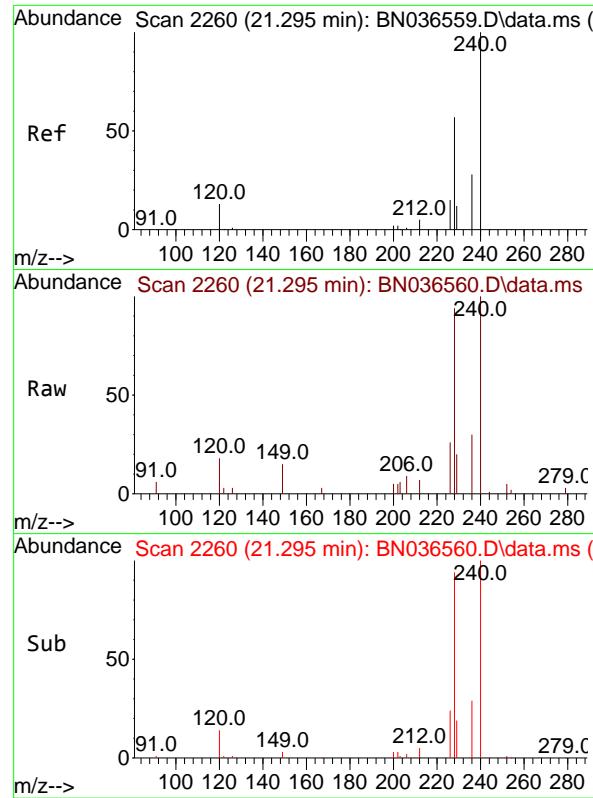
Tgt Ion:212 Resp: 13330  
 Ion Ratio Lower Upper  
 212 100  
 106 15.2 11.8 17.6  
 104 8.9 7.3 10.9



#28  
 Fluoranthene  
 Concen: 0.755 ng  
 RT: 19.174 min Scan# 1937  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion:202 Resp: 17738  
 Ion Ratio Lower Upper  
 202 100  
 101 12.1 9.4 14.0  
 203 17.0 13.5 20.3

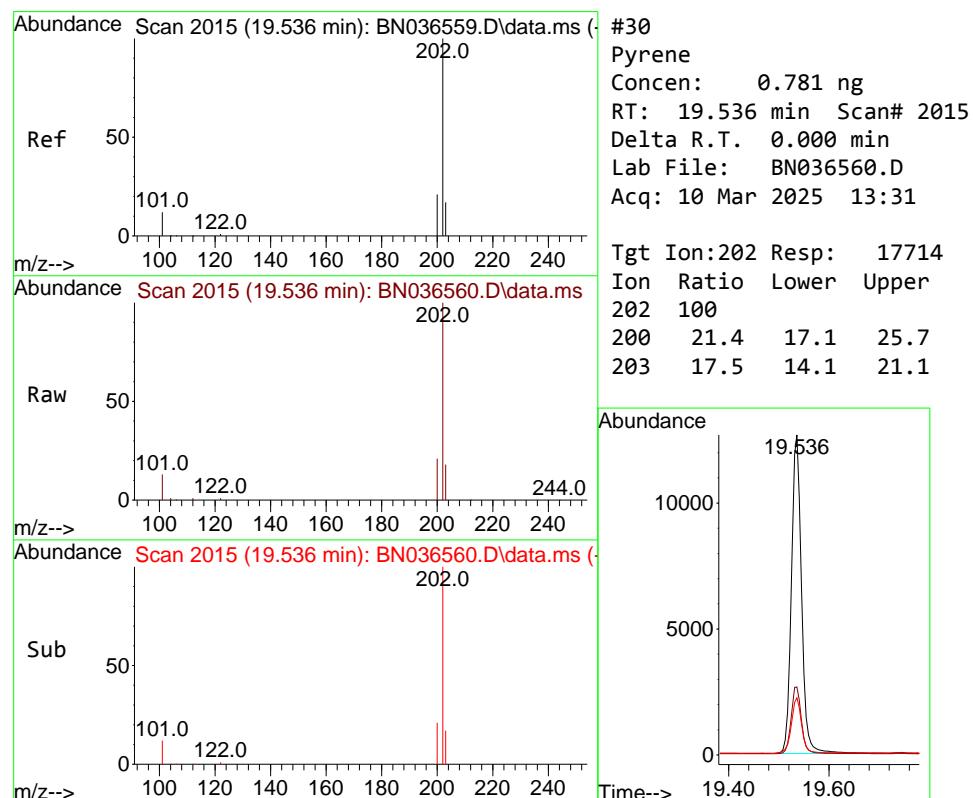
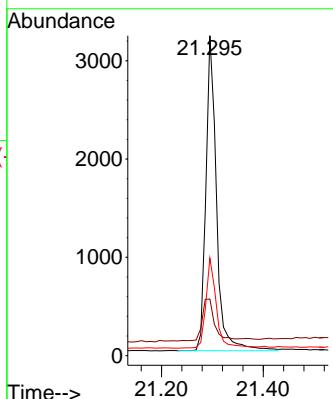




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.295 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

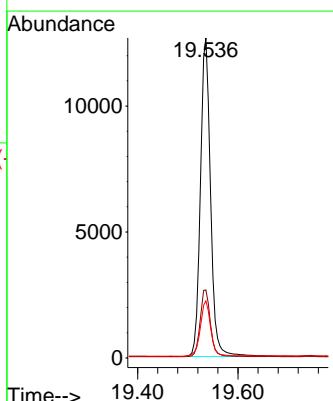
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

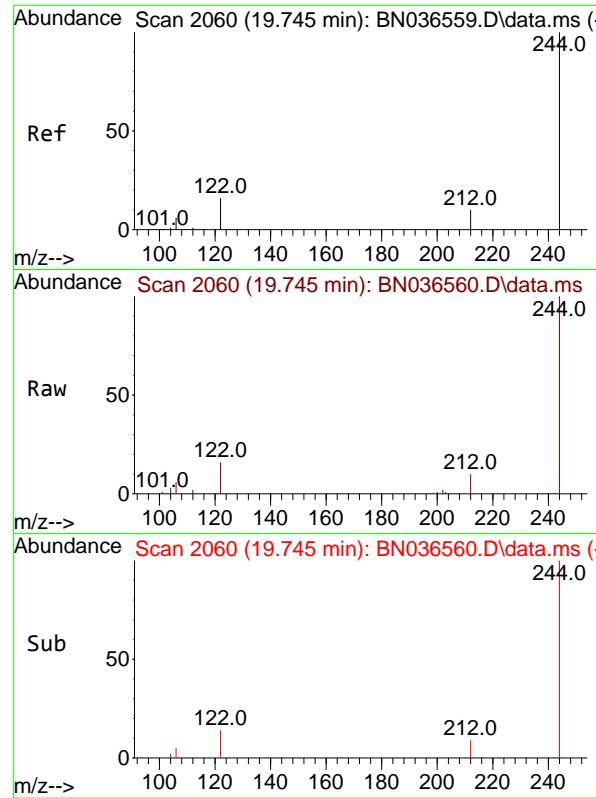
Tgt Ion:240 Resp: 4636  
Ion Ratio Lower Upper  
240 100  
120 17.7 14.6 22.0  
236 30.5 24.1 36.1



#30  
Pyrene  
Concen: 0.781 ng  
RT: 19.536 min Scan# 2015  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:202 Resp: 17714  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.5 14.1 21.1

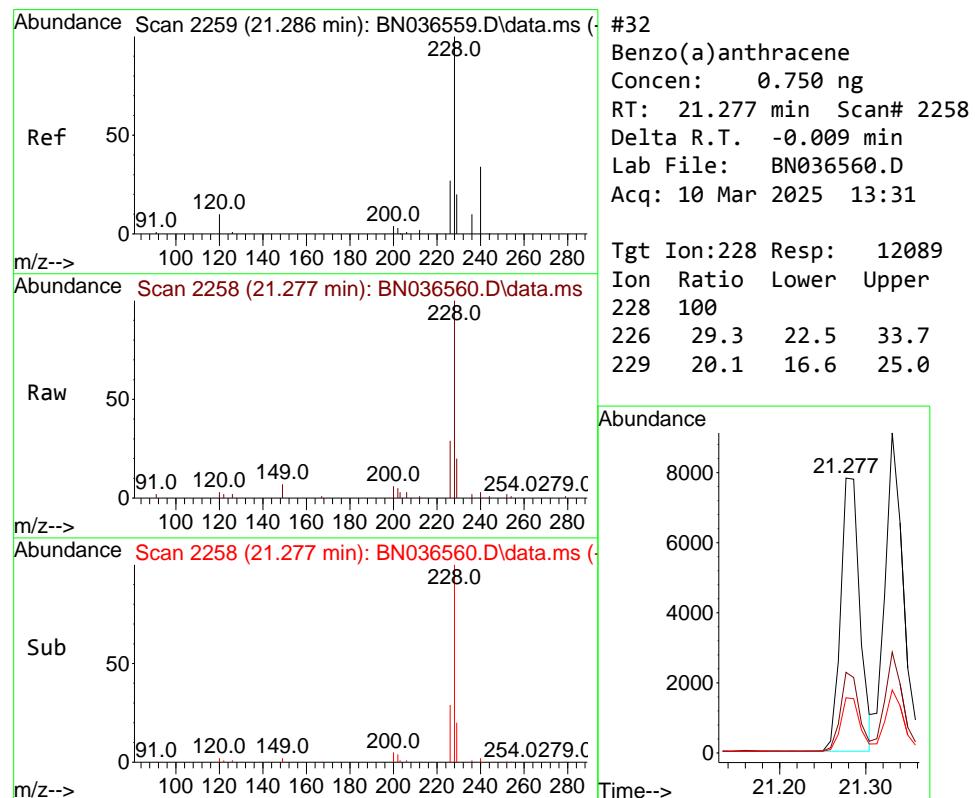
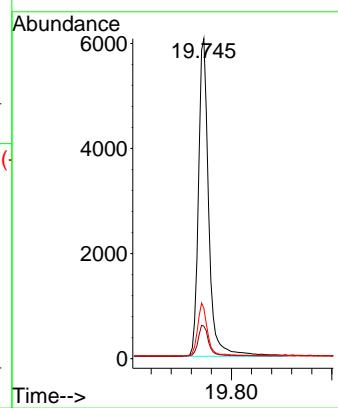




#31  
**Terphenyl-d14**  
Concen: 0.772 ng  
RT: 19.745 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

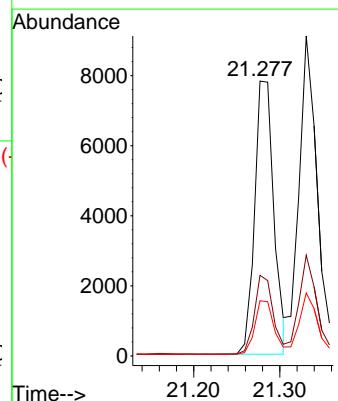
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

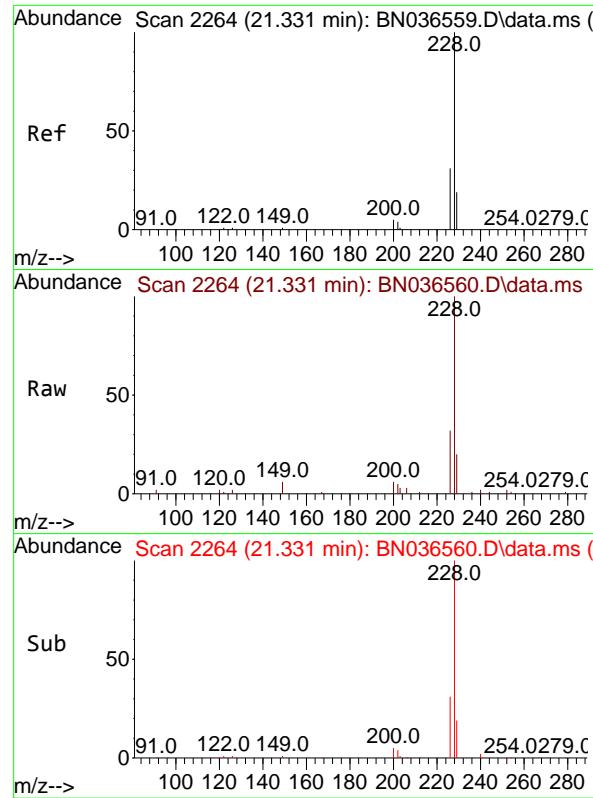
Tgt Ion:244 Resp: 8571  
Ion Ratio Lower Upper  
244 100  
212 10.1 9.6 14.4  
122 15.8 13.9 20.9



#32  
**Benzo(a)anthracene**  
Concen: 0.750 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

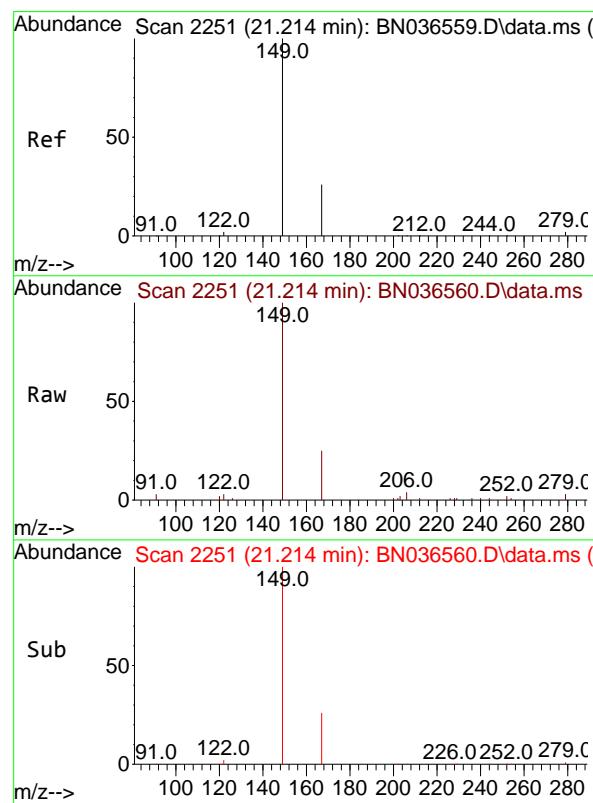
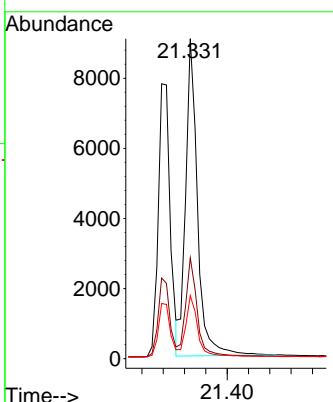
Tgt Ion:228 Resp: 12089  
Ion Ratio Lower Upper  
228 100  
226 29.3 22.5 33.7  
229 20.1 16.6 25.0





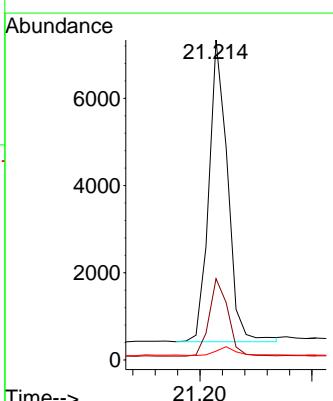
#33  
Chrysene  
Concen: 0.793 ng  
RT: 21.331 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036560.D ClientSampleId : SSTDICCO.8  
Acq: 10 Mar 2025 13:31

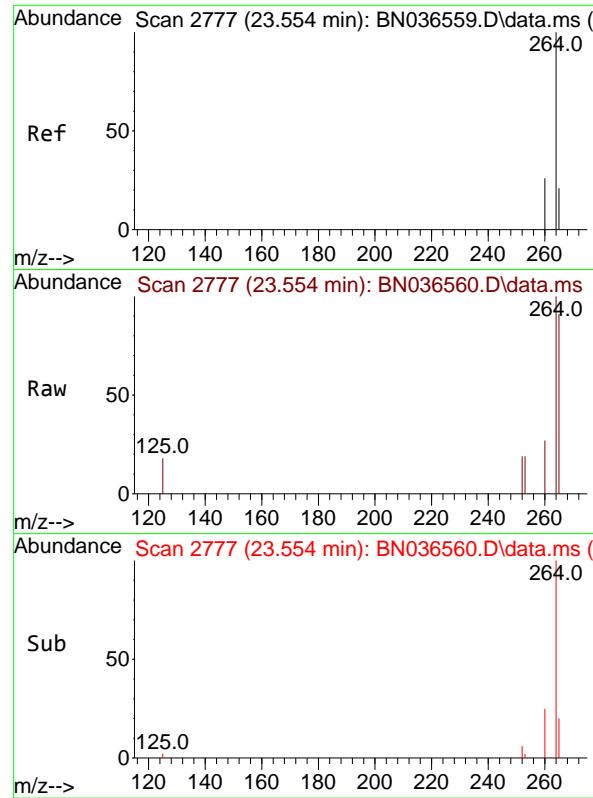
Tgt Ion:228 Resp: 13974  
Ion Ratio Lower Upper  
228 100  
226 31.5 25.3 37.9  
229 19.7 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.699 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN036560.D  
Acq: 10 Mar 2025 13:31

Tgt Ion:149 Resp: 8021  
Ion Ratio Lower Upper  
149 100  
167 25.9 20.7 31.1  
279 3.2 3.6 5.4#

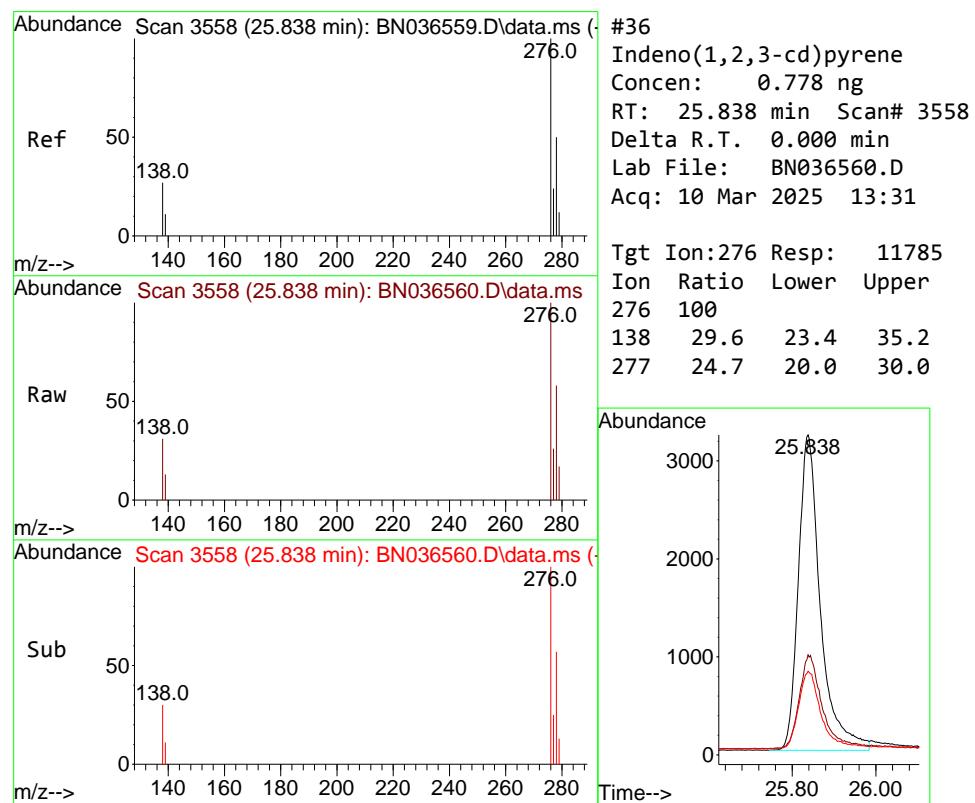
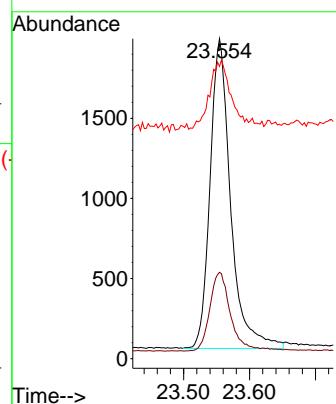




#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.554 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

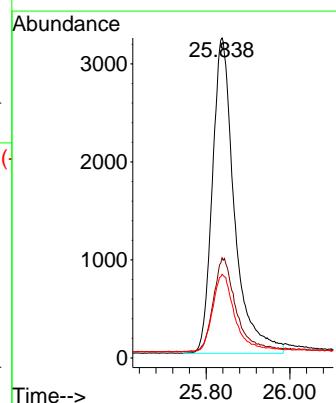
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

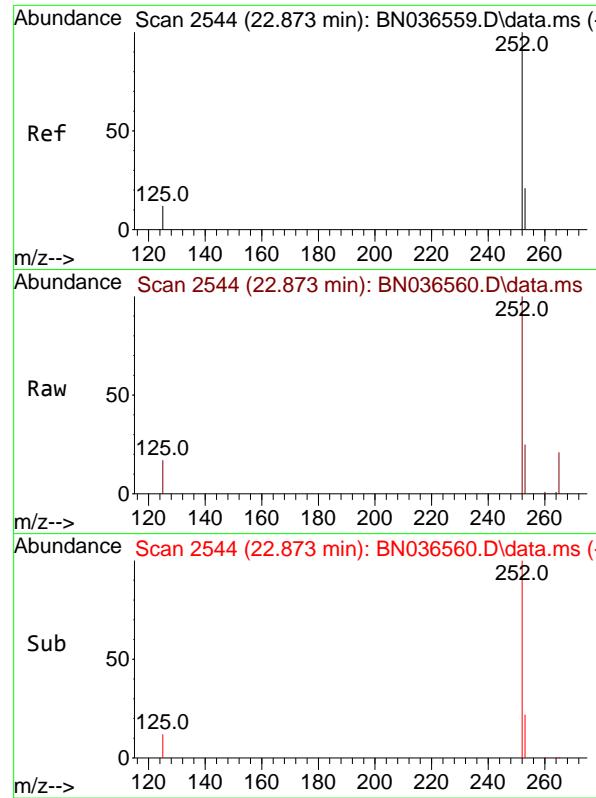
Tgt Ion:264 Resp: 4198  
 Ion Ratio Lower Upper  
 264 100  
 260 27.0 22.6 33.8  
 265 91.3 88.1 132.1



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.778 ng  
 RT: 25.838 min Scan# 3558  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion:276 Resp: 11785  
 Ion Ratio Lower Upper  
 276 100  
 138 29.6 23.4 35.2  
 277 24.7 20.0 30.0

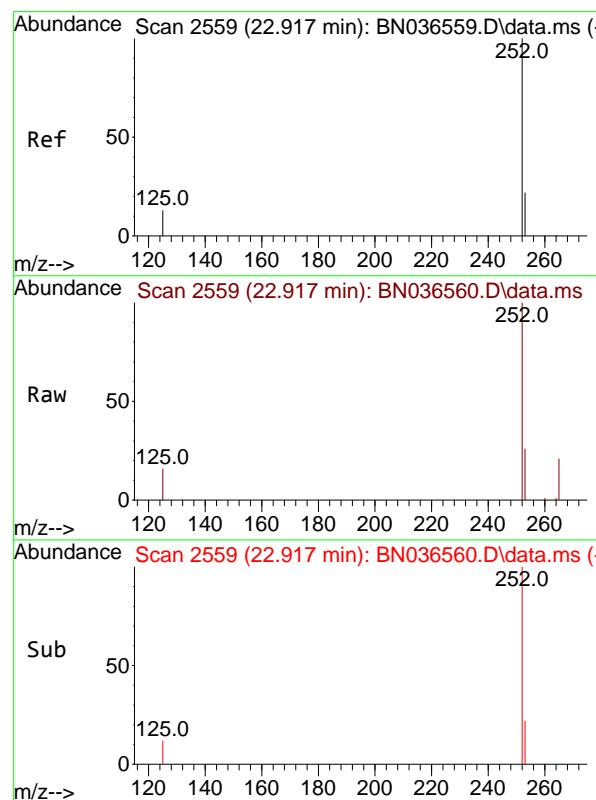
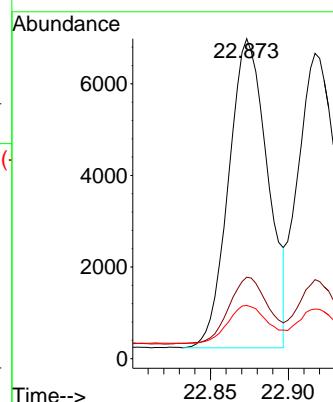




#37  
 Benzo(b)fluoranthene  
 Concen: 0.770 ng  
 RT: 22.873 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

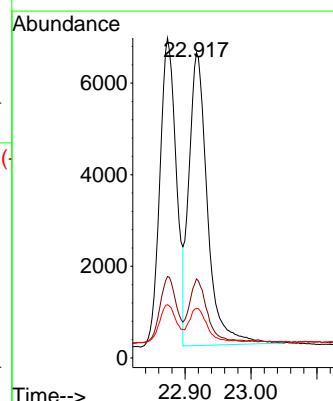
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

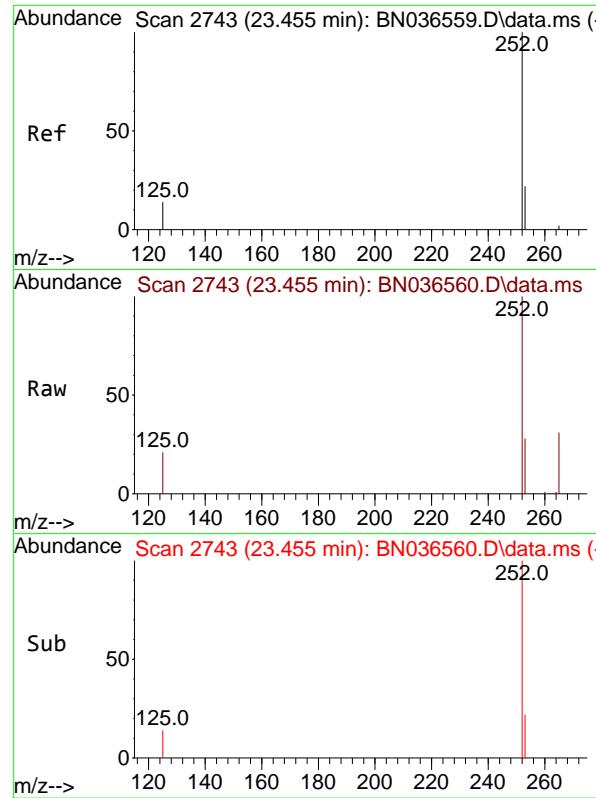
Tgt Ion:252 Resp: 11771  
 Ion Ratio Lower Upper  
 252 100  
 253 25.5 23.9 35.9  
 125 16.7 17.4 26.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 0.776 ng  
 RT: 22.917 min Scan# 2559  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion:252 Resp: 12432  
 Ion Ratio Lower Upper  
 252 100  
 253 25.9 24.6 36.8  
 125 16.2 17.8 26.8#

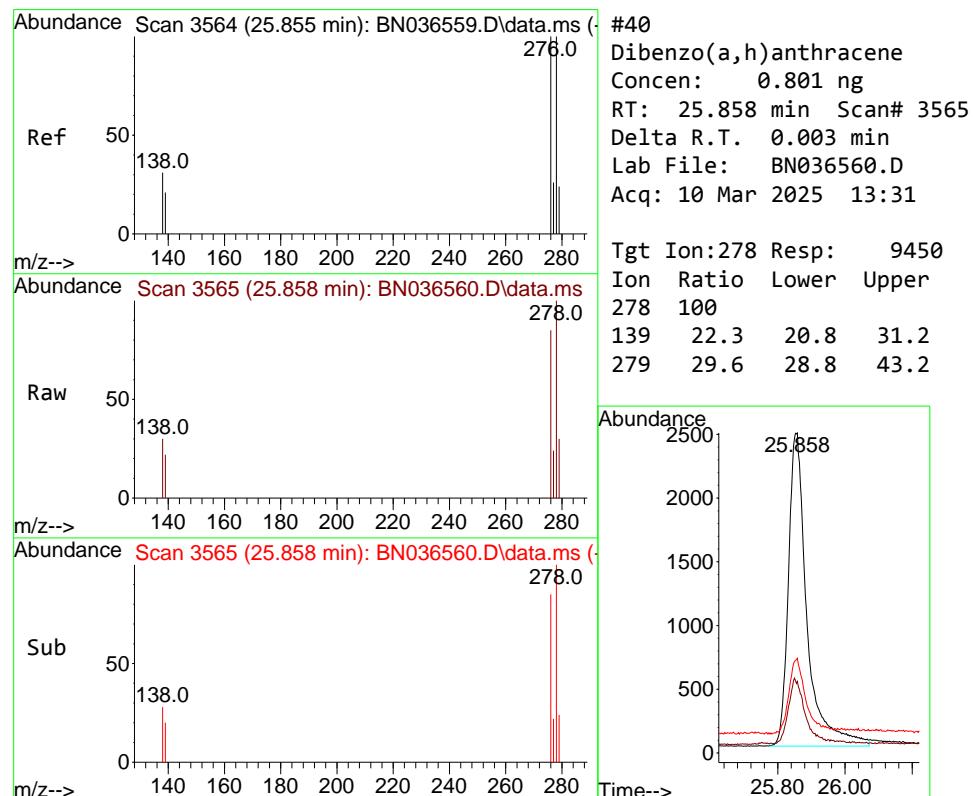
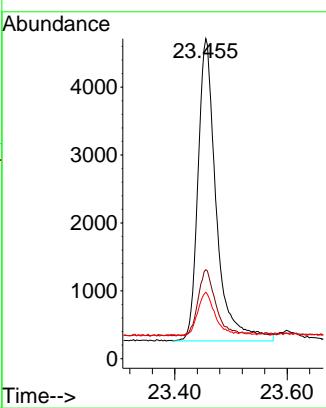




#39  
 Benzo(a)pyrene  
 Concen: 0.780 ng  
 RT: 23.455 min Scan# 21  
 Delta R.T. 0.000 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

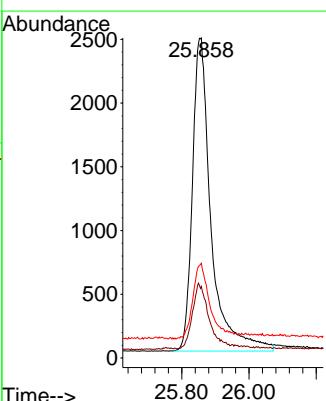
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

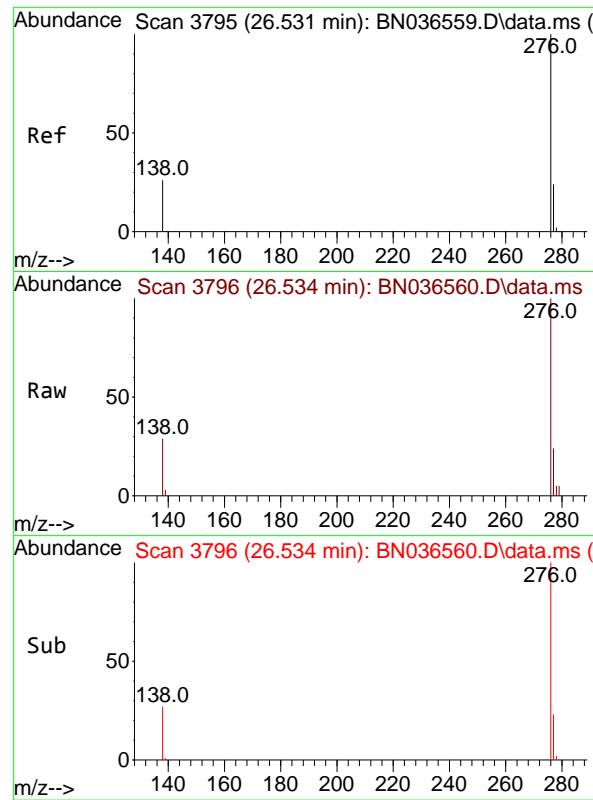
Tgt Ion:252 Resp: 10036  
 Ion Ratio Lower Upper  
 252 100  
 253 27.8 27.8 41.8#  
 125 20.7 22.7 34.1#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.801 ng  
 RT: 25.858 min Scan# 3565  
 Delta R.T. 0.003 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Tgt Ion:278 Resp: 9450  
 Ion Ratio Lower Upper  
 278 100  
 139 22.3 20.8 31.2  
 279 29.6 28.8 43.2

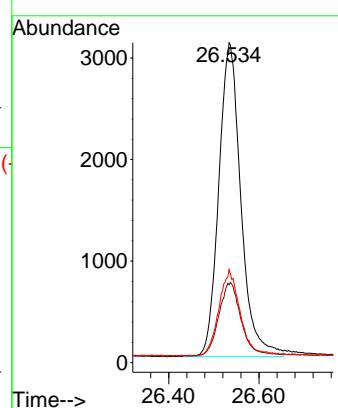




#41  
 Benzo(g,h,i)perylene  
 Concen: 0.778 ng  
 RT: 26.534 min Scan# 3  
 Delta R.T. 0.003 min  
 Lab File: BN036560.D  
 Acq: 10 Mar 2025 13:31

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

Tgt Ion:276 Resp: 10494  
 Ion Ratio Lower Upper  
 276 100  
 277 24.4 22.2 33.4  
 138 29.1 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036561.D  
 Acq On : 10 Mar 2025 14:07  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Mar 10 16:02:21 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

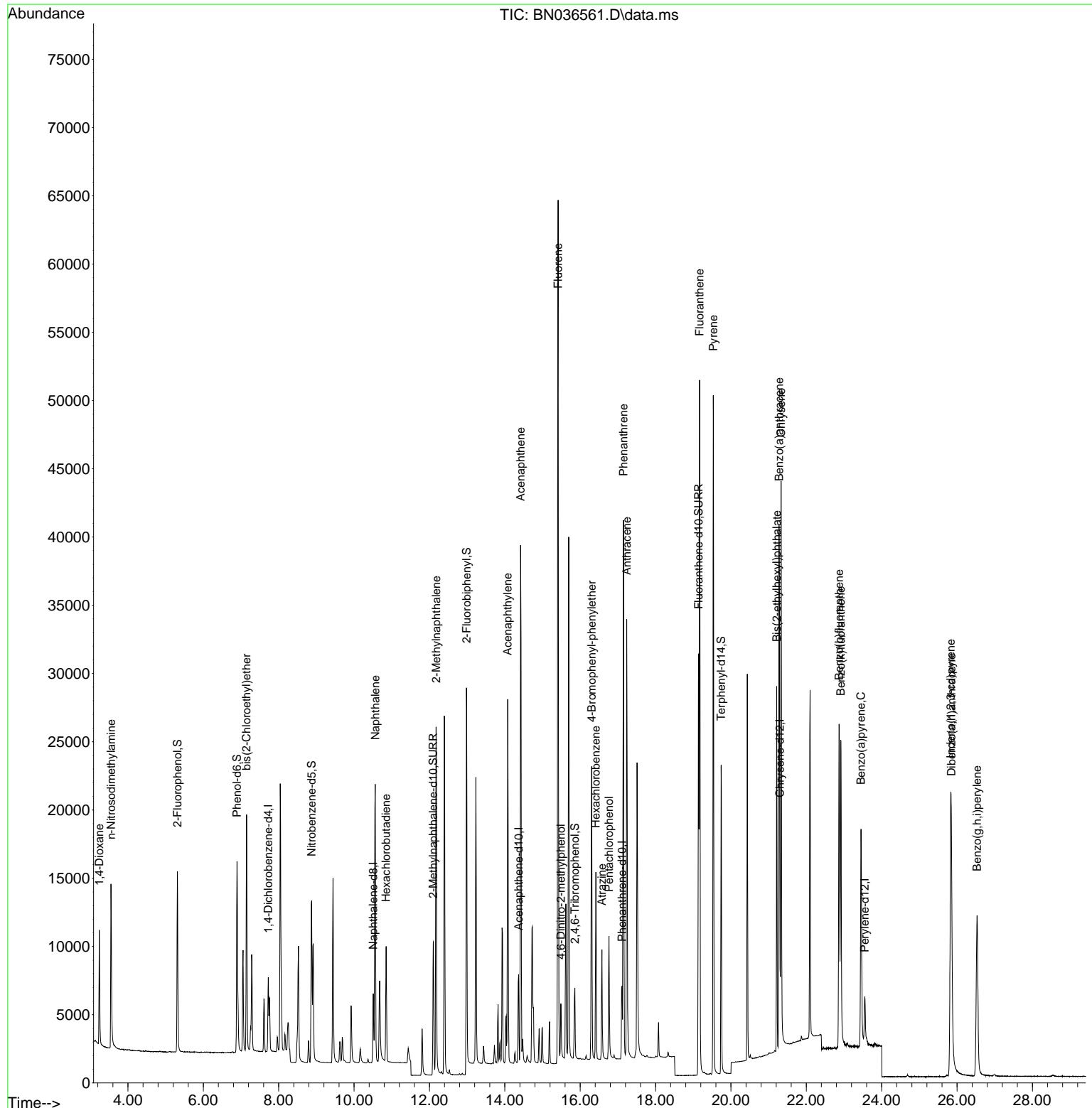
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2537	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	6200	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	3827	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	8149	0.400	ng	0.00
29) Chrysene-d12	21.295	240	5977	0.400	ng	# 0.00
35) Perylene-d12	23.552	264	5048	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	9276	1.569	ng	0.00
5) Phenol-d6	6.894	99	11493	1.574	ng	0.00
8) Nitrobenzene-d5	8.875	82	9959	1.477	ng	0.00
11) 2-Methylnaphthalene-d10	12.101	152	14319	1.553	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	2872	1.654	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	36192	1.626	ng	0.00
27) Fluoranthene-d10	19.141	212	33414	1.600	ng	0.00
31) Terphenyl-d14	19.740	244	21872	1.527	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	4464	1.586	ng	98
3) n-Nitrosodimethylamine	3.550	42	8625	1.515	ng	# 96
6) bis(2-Chloroethyl)ether	7.147	93	11485	1.521	ng	99
9) Naphthalene	10.562	128	27473	1.506	ng	97
10) Hexachlorobutadiene	10.851	225	6466	1.506	ng	# 99
12) 2-Methylnaphthalene	12.177	142	18206	1.569	ng	98
16) Acenaphthylene	14.078	152	28080	1.555	ng	100
17) Acenaphthene	14.420	154	18355	1.553	ng	98
18) Fluorene	15.414	166	25565	1.599	ng	99
20) 4,6-Dinitro-2-methylph...	15.489	198	2879	1.488	ng	# 64
21) 4-Bromophenyl-phenylether	16.305	248	7859	1.539	ng	# 85
22) Hexachlorobenzene	16.416	284	9216	1.495	ng	100
23) Atrazine	16.578	200	6530	1.595	ng	# 91
24) Pentachlorophenol	16.764	266	4395	1.563	ng	99
25) Phenanthrene	17.149	178	37989	1.554	ng	99
26) Anthracene	17.235	178	35054	1.589	ng	99
28) Fluoranthene	19.169	202	44451	1.619	ng	99
30) Pyrene	19.531	202	44705	1.530	ng	100
32) Benzo(a)anthracene	21.277	228	32205	1.550	ng	98
33) Chrysene	21.331	228	34953	1.539	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	22621	1.529	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.832	276	28605	1.570	ng	99
37) Benzo(b)fluoranthene	22.870	252	29819	1.623	ng	# 86
38) Benzo(k)fluoranthene	22.917	252	30710	1.593	ng	# 85
39) Benzo(a)pyrene	23.452	252	24696	1.596	ng	# 79
40) Dibenzo(a,h)anthracene	25.850	278	22248	1.569	ng	# 85
41) Benzo(g,h,i)perylene	26.531	276	24906	1.535	ng	93

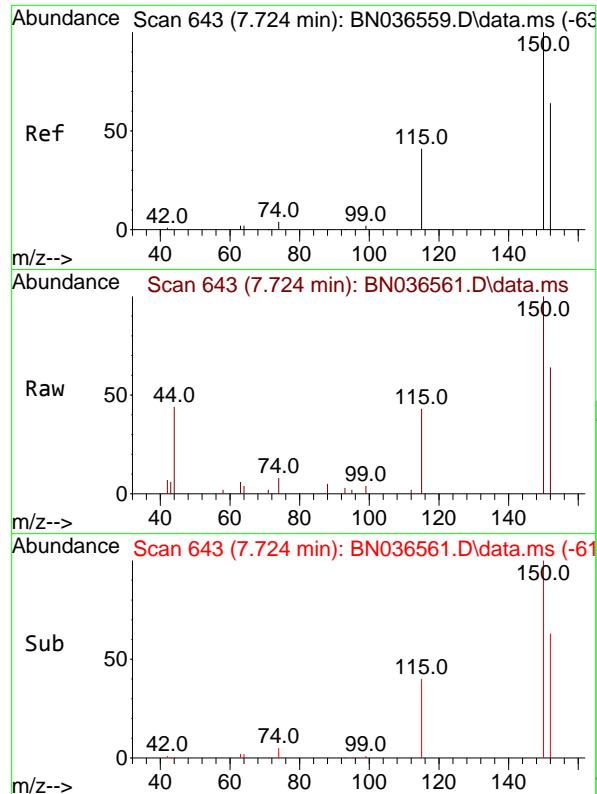
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036561.D  
 Acq On : 10 Mar 2025 14:07  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Mar 10 16:02:21 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

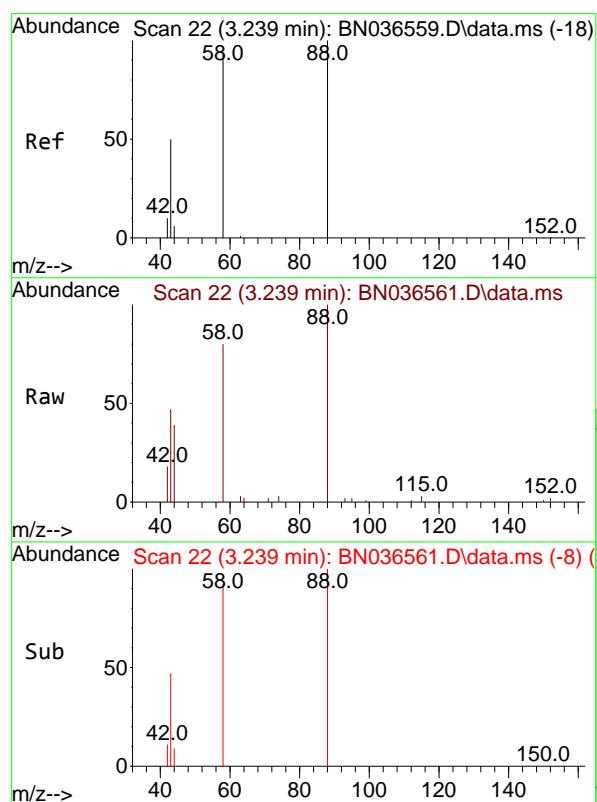
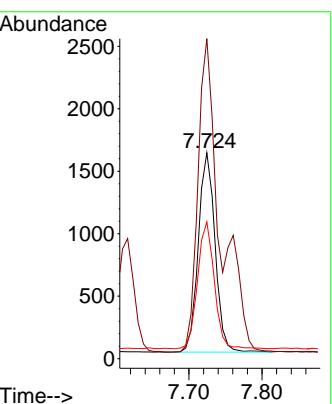




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.724 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

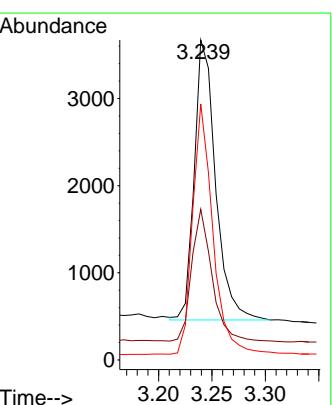
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

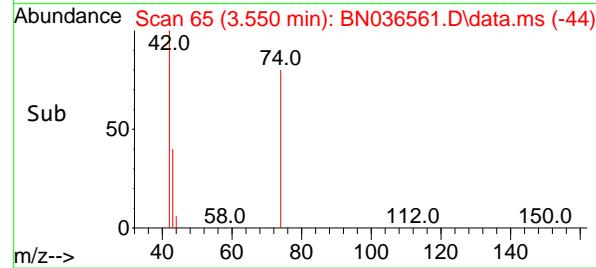
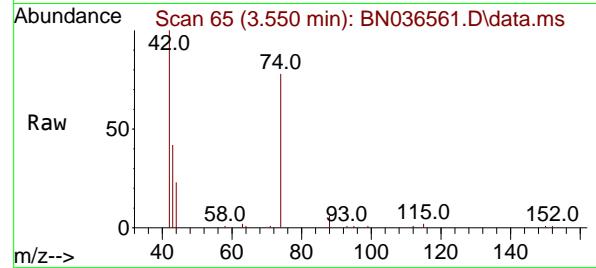
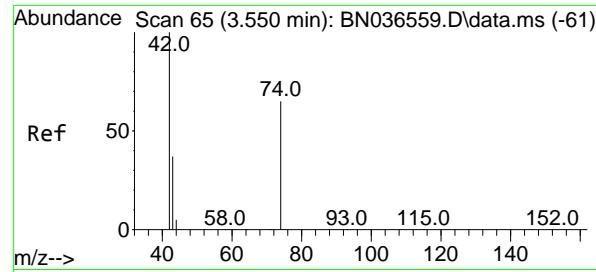
Tgt Ion:152 Resp: 2537  
 Ion Ratio Lower Upper  
 152 100  
 150 155.4 123.7 185.5  
 115 66.4 54.3 81.5



#2  
 1,4-Dioxane  
 Concen: 1.586 ng  
 RT: 3.239 min Scan# 22  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

Tgt Ion: 88 Resp: 4464  
 Ion Ratio Lower Upper  
 88 100  
 43 45.1 37.8 56.8  
 58 85.6 67.4 101.2

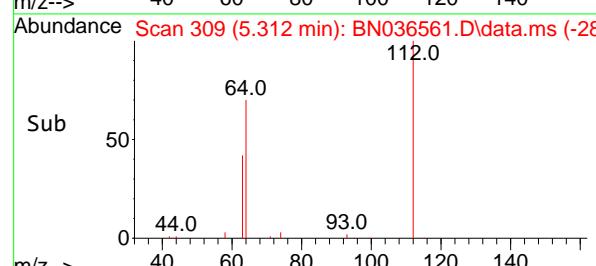
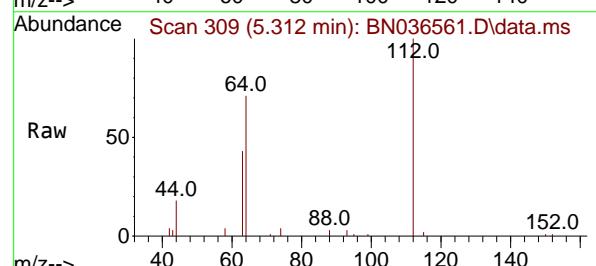
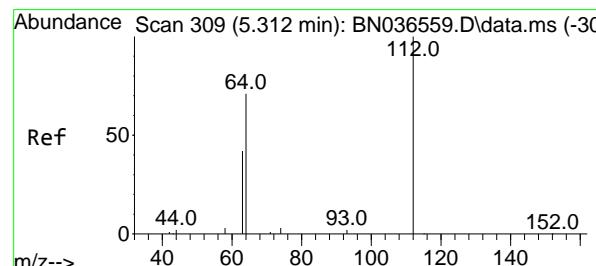
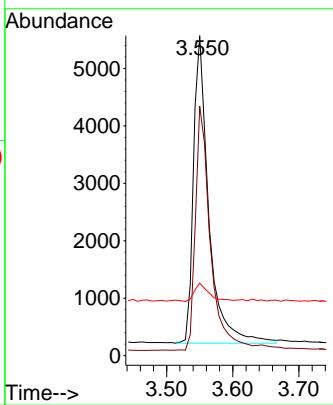




#3  
n-Nitrosodimethylamine  
Concen: 1.515 ng  
RT: 3.550 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

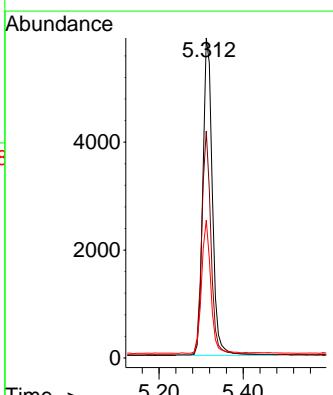
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

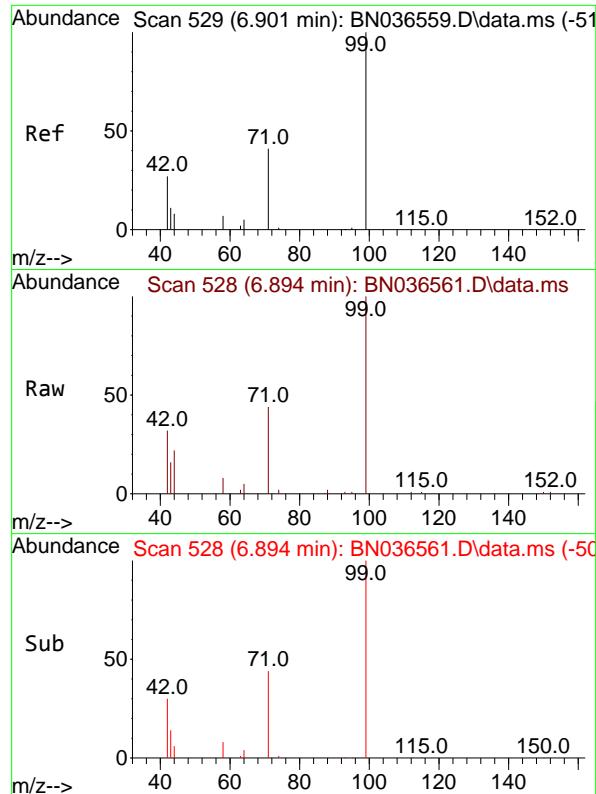
Tgt Ion: 42 Resp: 8625  
Ion Ratio Lower Upper  
42 100  
74 79.2 60.6 90.8  
44 5.8 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 1.569 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion: 112 Resp: 9276  
Ion Ratio Lower Upper  
112 100  
64 68.3 53.1 79.7  
63 40.1 31.8 47.8

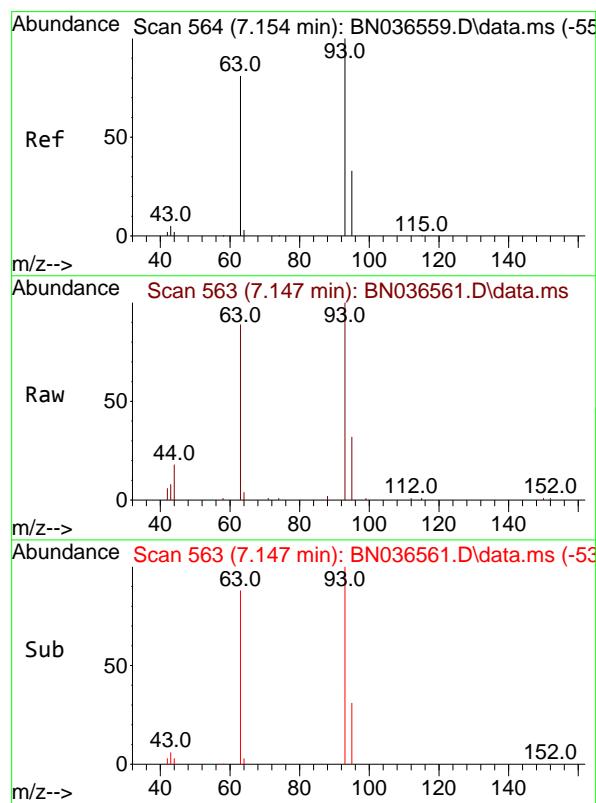
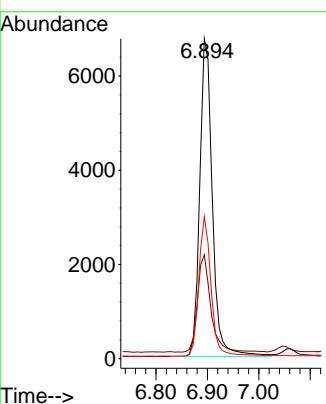




#5  
Phenol-d6  
Concen: 1.574 ng  
RT: 6.894 min Scan# 5  
Delta R.T. -0.007 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

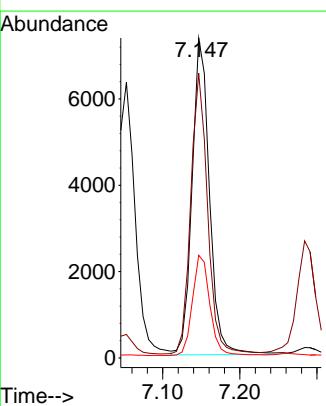
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

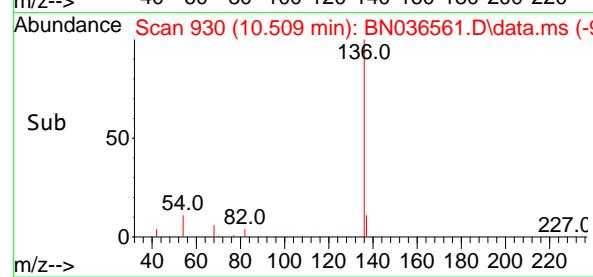
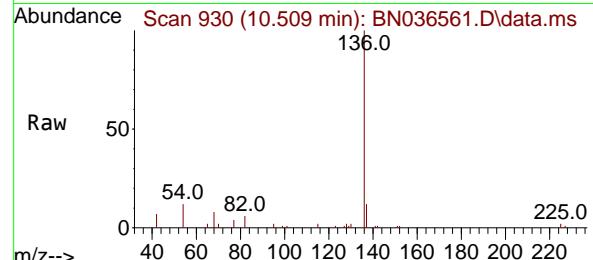
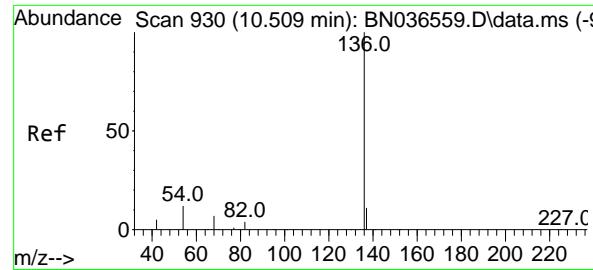
Tgt Ion: 99 Resp: 11493  
Ion Ratio Lower Upper  
99 100  
42 32.6 26.5 39.7  
71 43.3 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 1.521 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion: 93 Resp: 11485  
Ion Ratio Lower Upper  
93 100  
63 85.8 67.7 101.5  
95 31.8 25.6 38.4





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.509 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

Tgt Ion:136 Resp: 6200

Ion Ratio Lower Upper

136 100

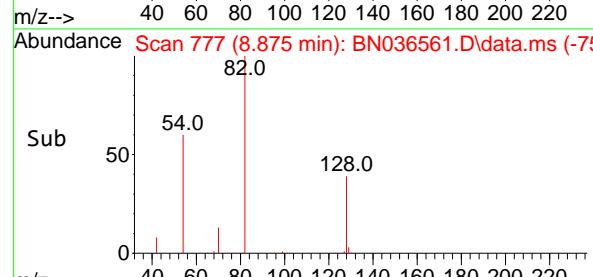
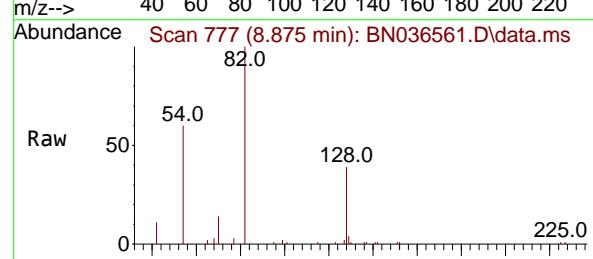
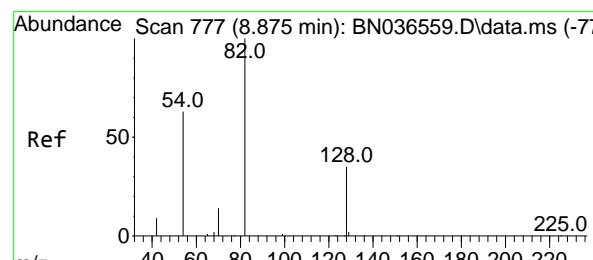
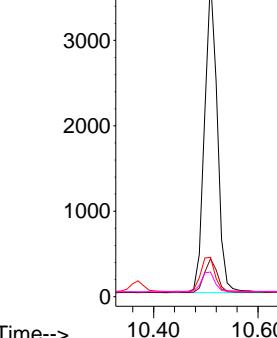
137 11.9 10.3 15.5

54 12.3 11.5 17.3

68 7.7 7.0 10.4

Abundance

10.509



#8

Nitrobenzene-d5

Concen: 1.477 ng

RT: 8.875 min Scan# 777

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Tgt Ion: 82 Resp: 9959

Ion Ratio Lower Upper

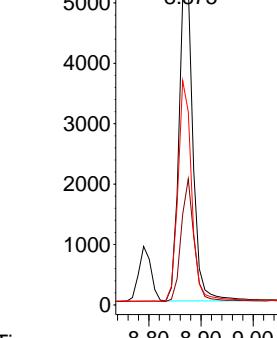
82 100

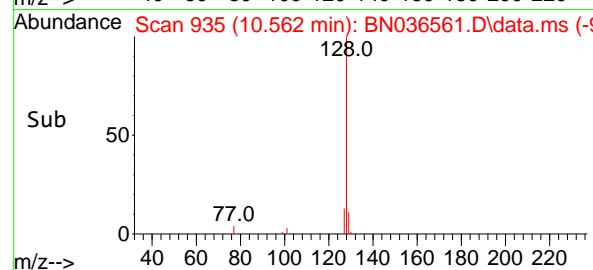
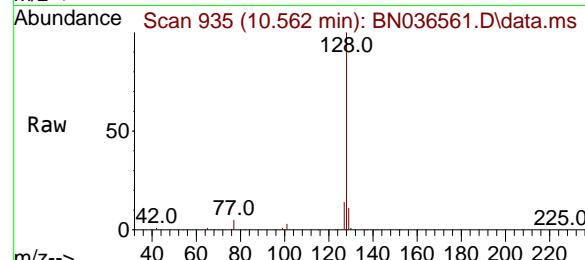
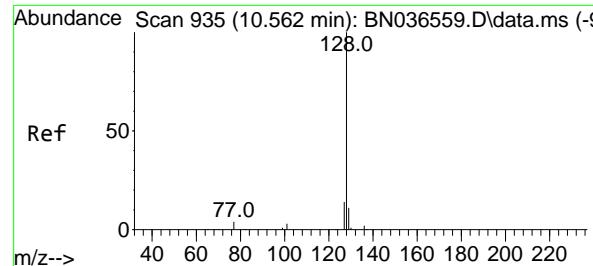
128 39.4 30.6 45.8

54 60.4 52.2 78.4

Abundance

8.875





#9

Naphthalene

Concen: 1.506 ng

RT: 10.562 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

Tgt Ion:128 Resp: 27473

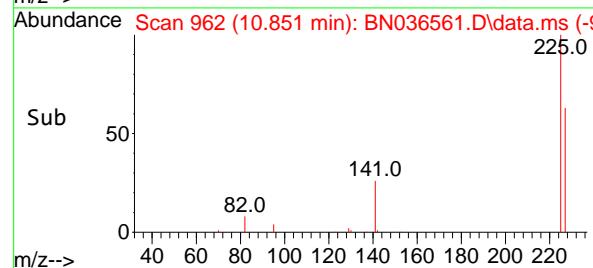
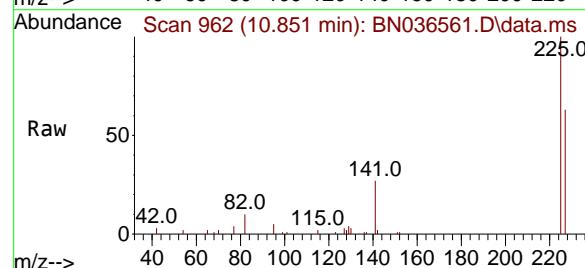
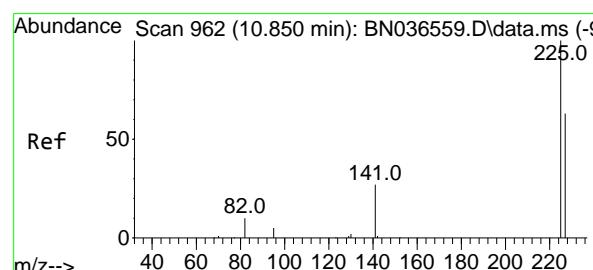
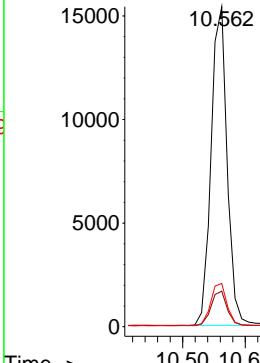
Ion Ratio Lower Upper

128 100

129 11.1 9.8 14.6

127 13.5 11.8 17.8

Abundance



#10

Hexachlorobutadiene

Concen: 1.506 ng

RT: 10.851 min Scan# 962

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

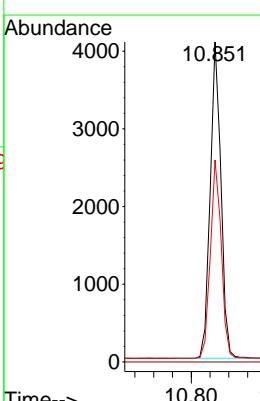
Tgt Ion:225 Resp: 6466

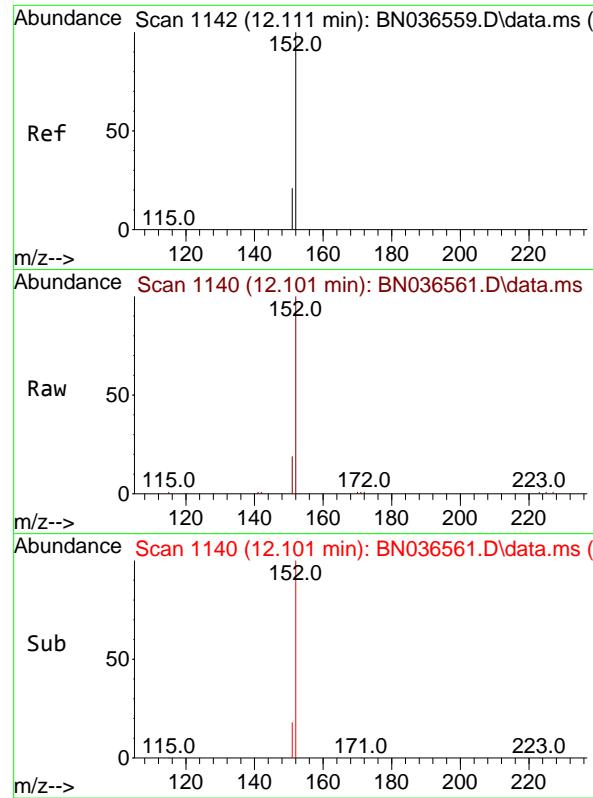
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

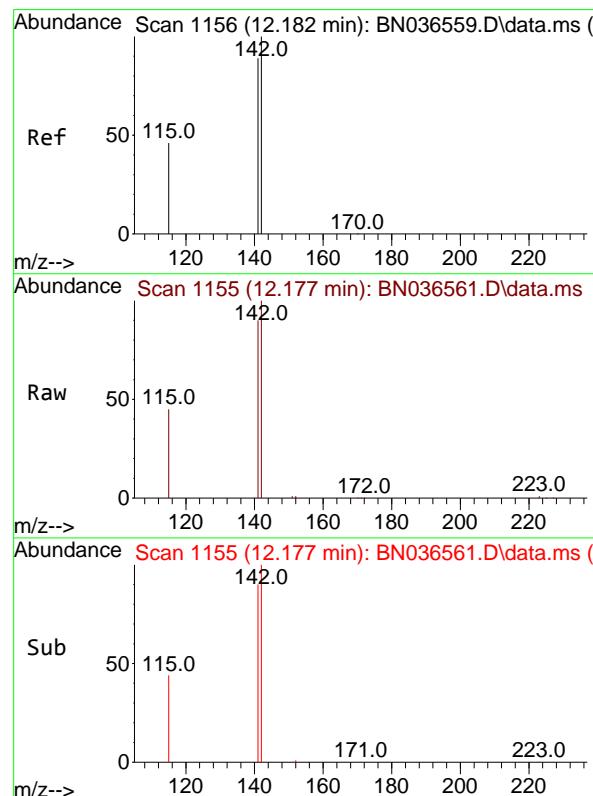
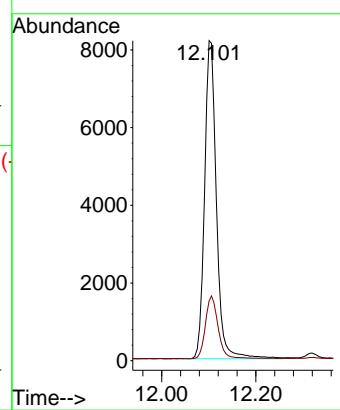
227 63.8 51.8 77.8





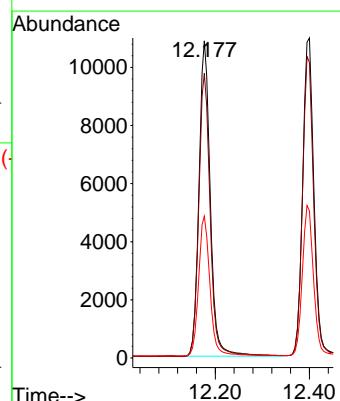
#11  
2-Methylnaphthalene-d10  
Concen: 1.553 ng  
RT: 12.101 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.010 min  
Lab File: BN036561.D  
ClientSampleId : SSTDICC1.6  
Acq: 10 Mar 2025 14:07

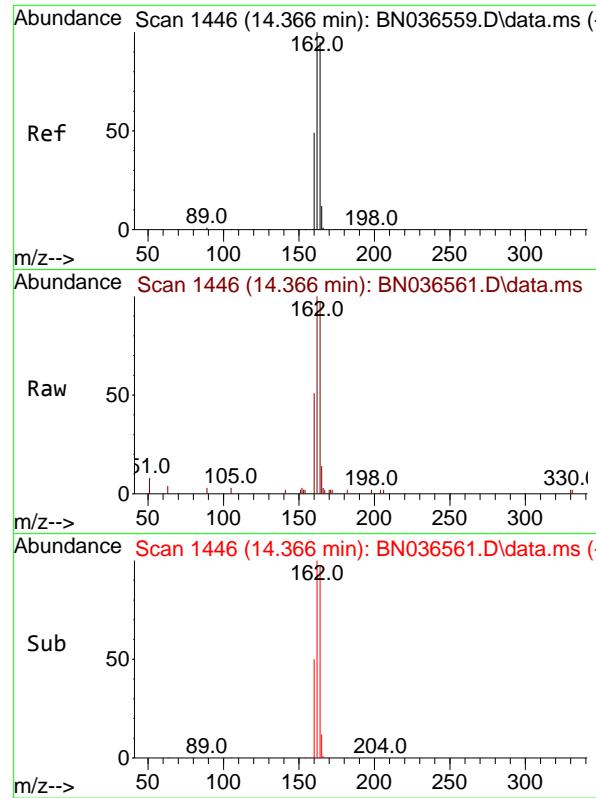
Tgt Ion:152 Resp: 14319  
Ion Ratio Lower Upper  
152 100  
151 21.3 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 1.569 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:142 Resp: 18206  
Ion Ratio Lower Upper  
142 100  
141 89.7 71.7 107.5  
115 44.7 38.3 57.5

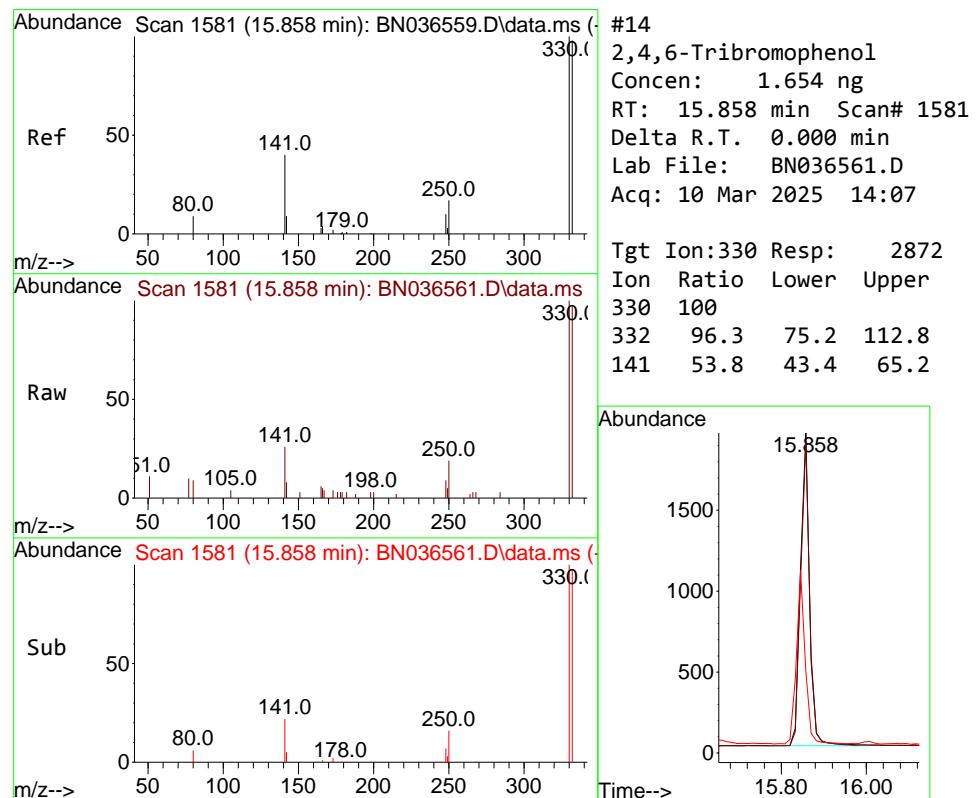
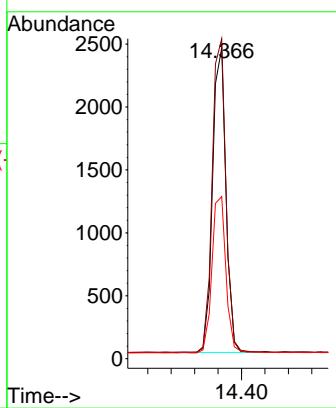




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.366 min Scan# 1446  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

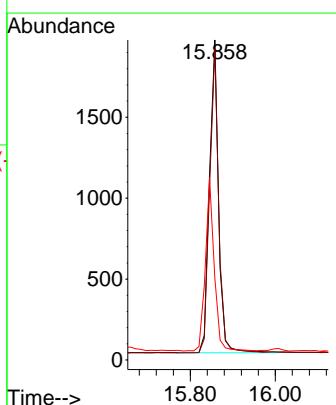
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

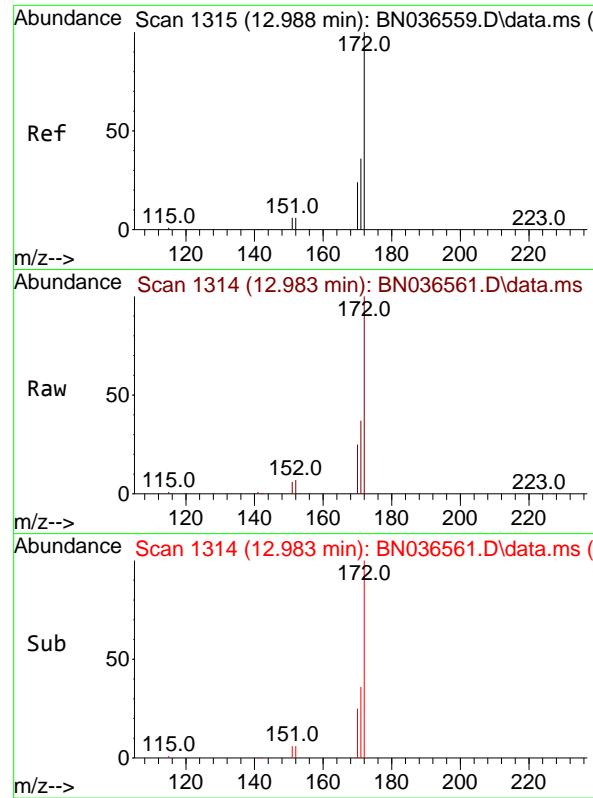
Tgt Ion:164 Resp: 3827  
 Ion Ratio Lower Upper  
 164 100  
 162 102.9 84.2 126.2  
 160 52.1 42.2 63.2



#14  
 2,4,6-Tribromophenol  
 Concen: 1.654 ng  
 RT: 15.858 min Scan# 1581  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

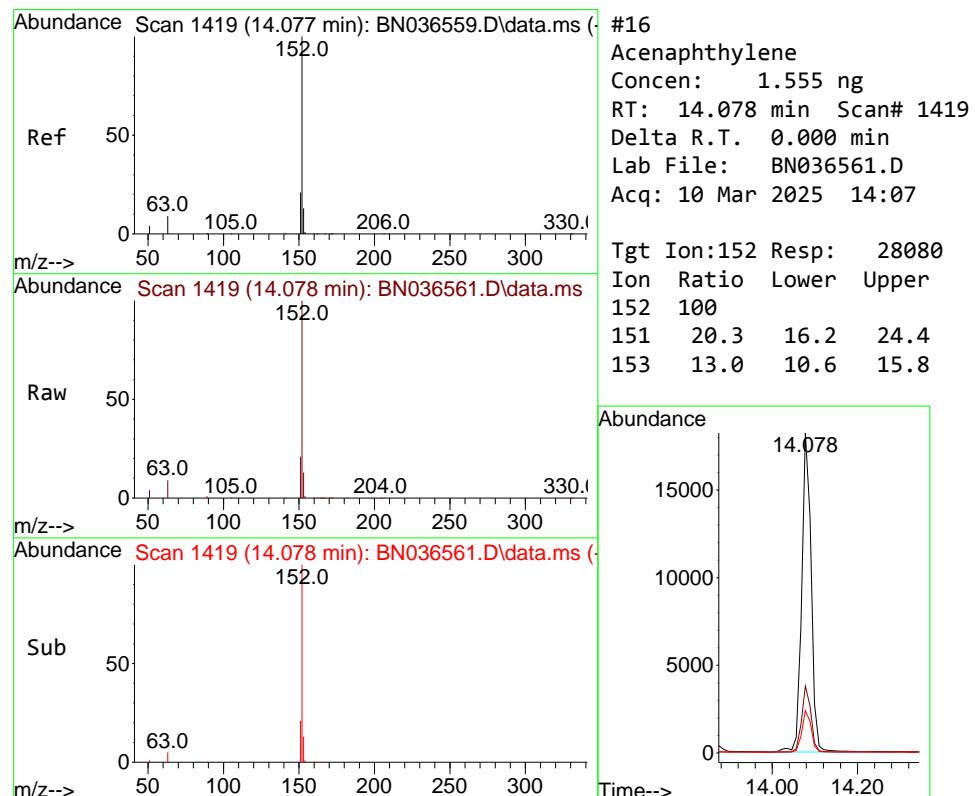
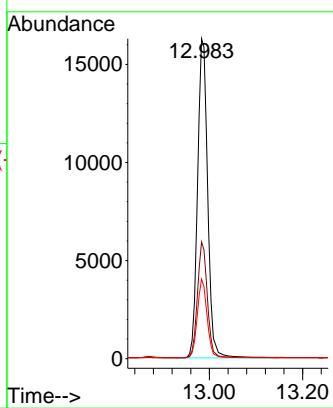
Tgt Ion:330 Resp: 2872  
 Ion Ratio Lower Upper  
 330 100  
 332 96.3 75.2 112.8  
 141 53.8 43.4 65.2





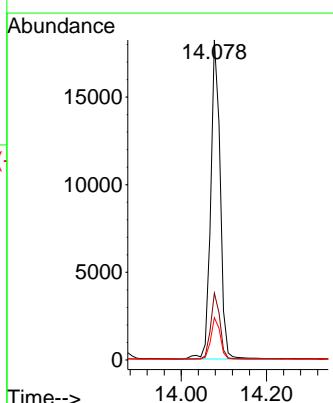
#15  
2-Fluorobiphenyl  
Concen: 1.626 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07  
ClientSampleId : SSTDICC1.6

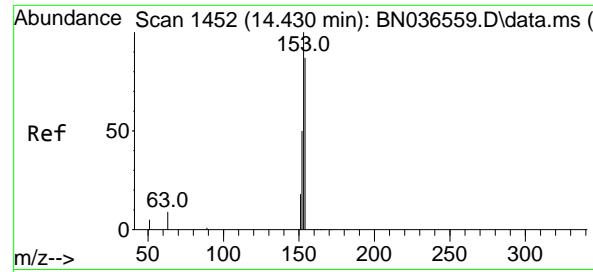
Tgt Ion:172 Resp: 36192  
Ion Ratio Lower Upper  
172 100  
171 36.5 29.5 44.3  
170 24.9 20.2 30.4



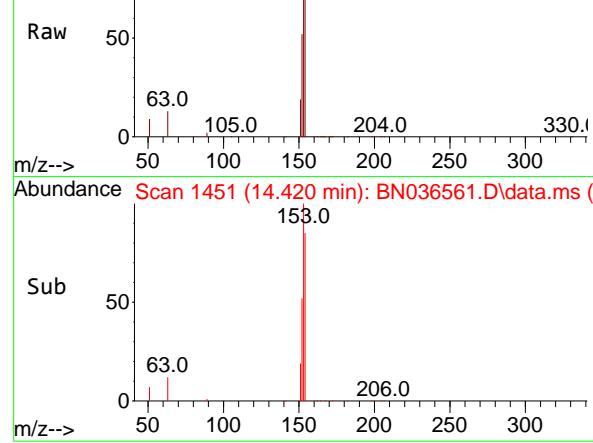
#16  
Acenaphthylene  
Concen: 1.555 ng  
RT: 14.078 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:152 Resp: 28080  
Ion Ratio Lower Upper  
152 100  
151 20.3 16.2 24.4  
153 13.0 10.6 15.8





Abundance Scan 1451 (14.420 min): BN036561.D\data.ms



#17

Acenaphthene

Concen: 1.553 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

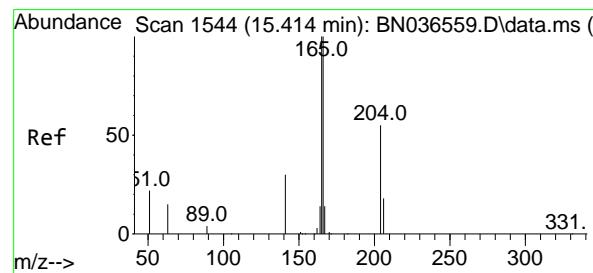
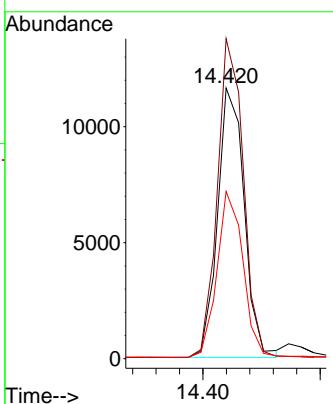
Tgt Ion:154 Resp: 18355

Ion Ratio Lower Upper

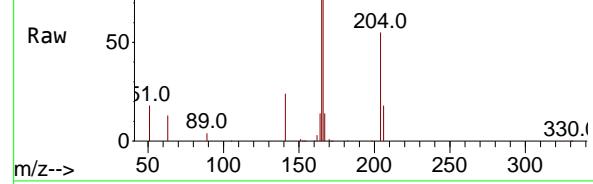
154 100

153 115.7 94.1 141.1

152 60.3 49.8 74.6



Abundance Scan 1544 (15.414 min): BN036561.D\data.ms



#18

Fluorene

Concen: 1.599 ng

RT: 15.414 min Scan# 1544

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

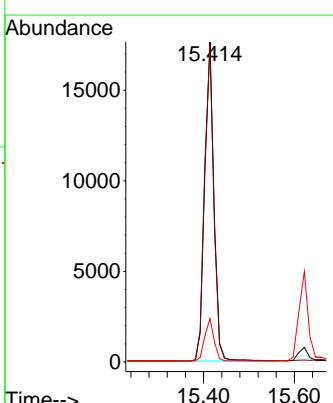
Tgt Ion:166 Resp: 25565

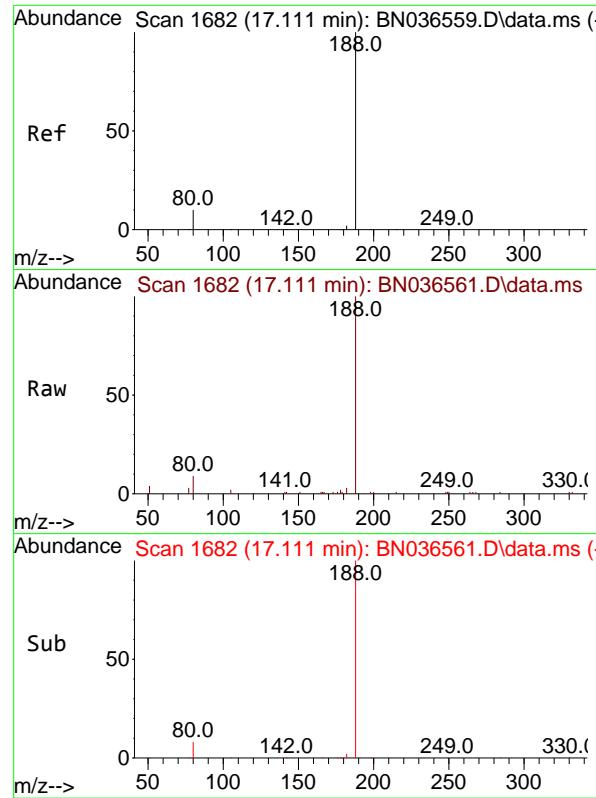
Ion Ratio Lower Upper

166 100

165 100.5 79.8 119.8

167 13.1 10.6 15.8

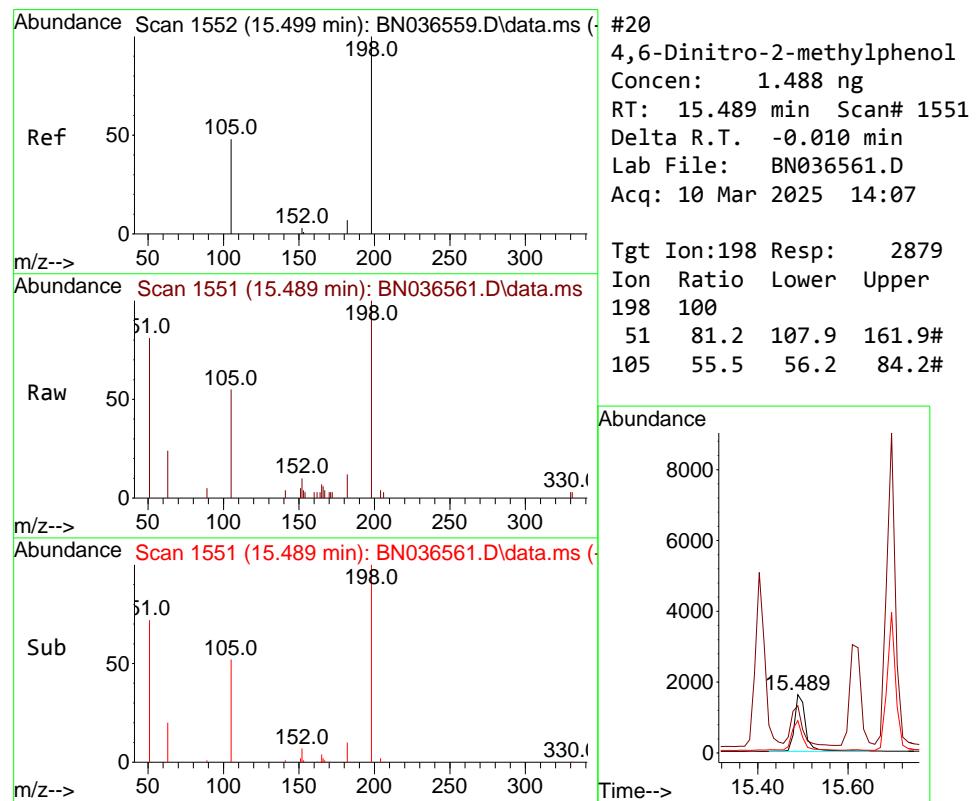
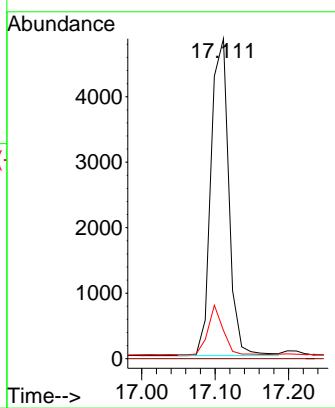




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.111 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

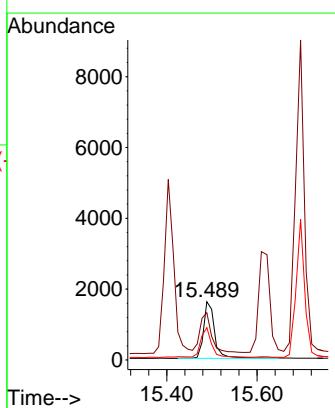
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

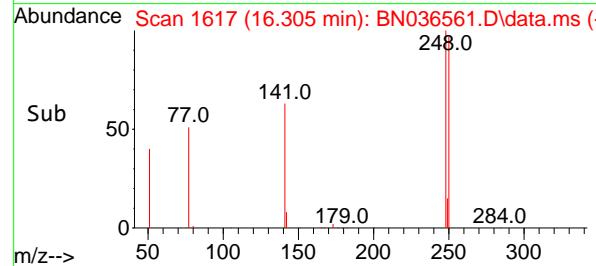
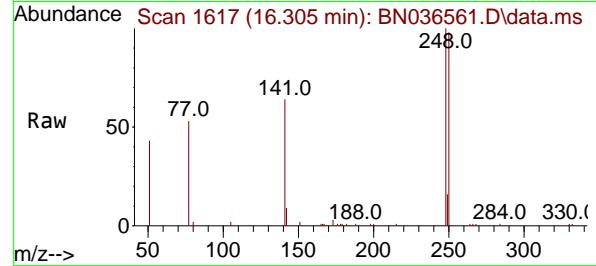
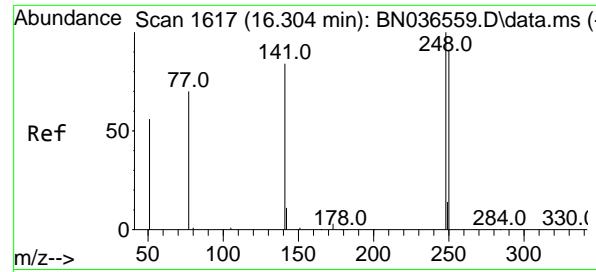
Tgt Ion:188 Resp: 8149  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 8.8 8.8 13.2



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 1.488 ng  
 RT: 15.489 min Scan# 1551  
 Delta R.T. -0.010 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

Tgt Ion:198 Resp: 2879  
 Ion Ratio Lower Upper  
 198 100  
 51 81.2 107.9 161.9#  
 105 55.5 56.2 84.2#





#21

4-Bromophenyl-phenylether

Concen: 1.539 ng

RT: 16.305 min Scan# 1

Instrument:

Delta R.T. 0.000 min

BNA\_N

Lab File: BN036561.D

ClientSampleId :

Acq: 10 Mar 2025 14:07

SSTDICC1.6

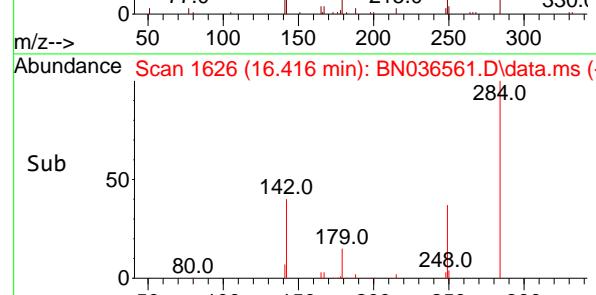
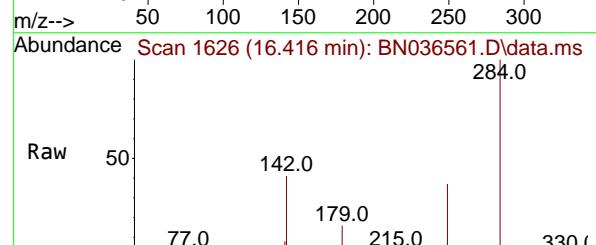
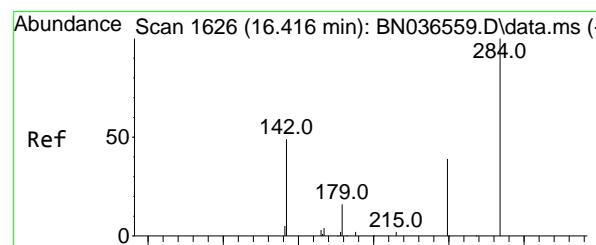
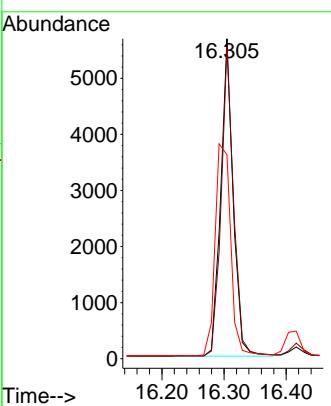
Tgt Ion:248 Resp: 7859

Ion Ratio Lower Upper

248 100

250 97.5 73.0 109.6

141 63.7 68.6 103.0#



#22

Hexachlorobenzene

Concen: 1.495 ng

RT: 16.416 min Scan# 1626

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

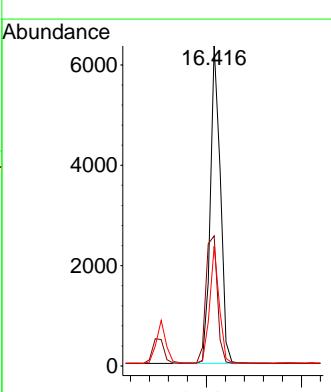
Tgt Ion:284 Resp: 9216

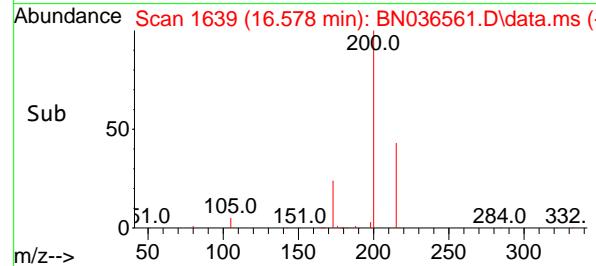
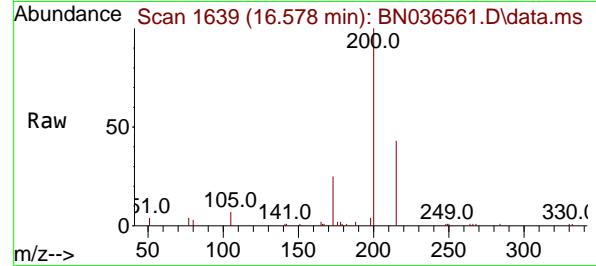
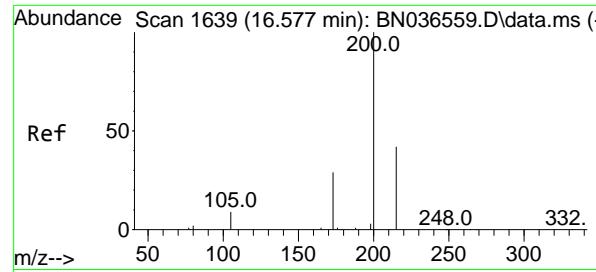
Ion Ratio Lower Upper

284 100

142 46.6 37.0 55.4

249 35.1 28.1 42.1





#23

Atrazine

Concen: 1.595 ng

RT: 16.578 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036561.D

Acq: 10 Mar 2025 14:07

Instrument :

BNA\_N

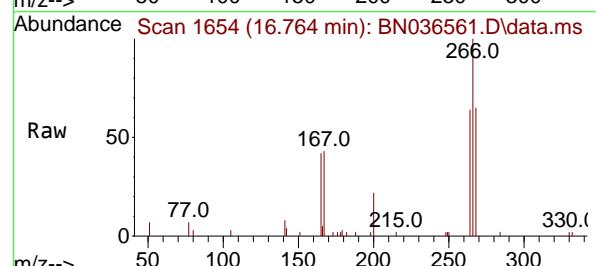
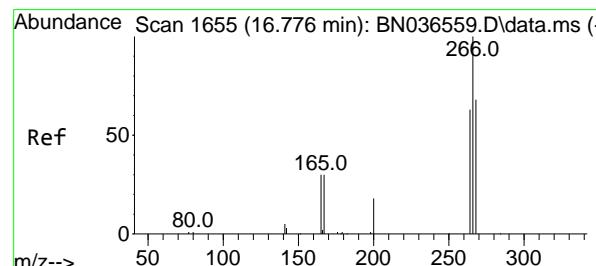
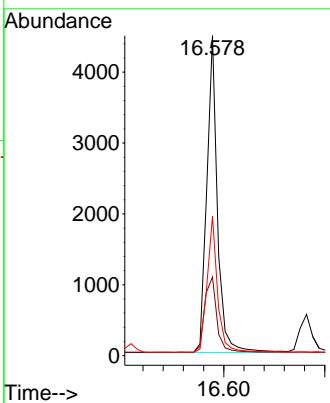
ClientSampleId :

SSTDICC1.6

Tgt Ion:200 Resp: 6530

Ion Ratio Lower Upper

200	100	27.3	40.9#
173	24.6	27.3	40.9#
215	43.5	36.8	55.2



#24

Pentachlorophenol

Concen: 1.563 ng

RT: 16.764 min Scan# 1654

Delta R.T. -0.012 min

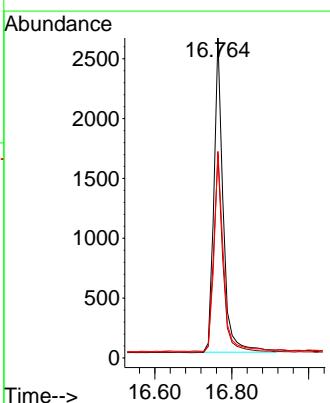
Lab File: BN036561.D

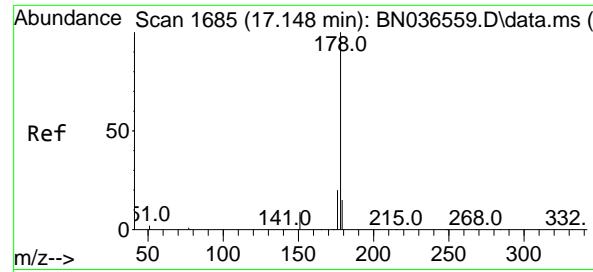
Acq: 10 Mar 2025 14:07

Tgt Ion:266 Resp: 4395

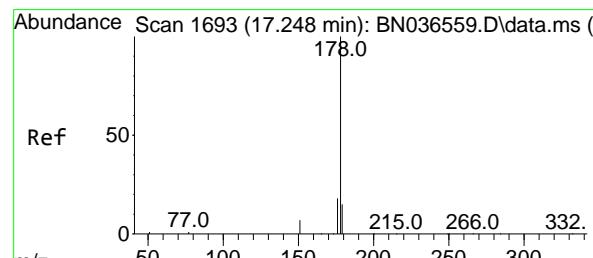
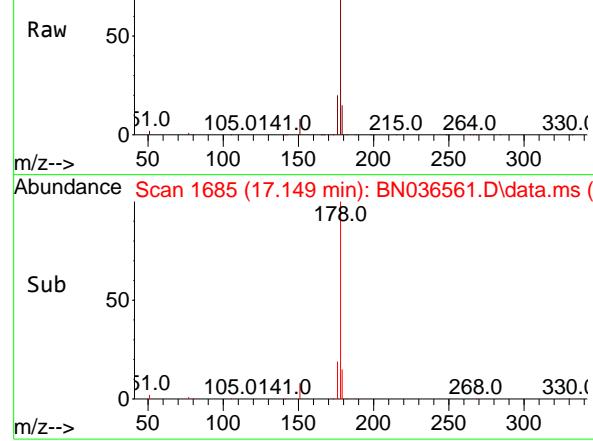
Ion Ratio Lower Upper

266	100	49.6	74.4
264	63.5	49.6	74.4
268	64.4	50.9	76.3





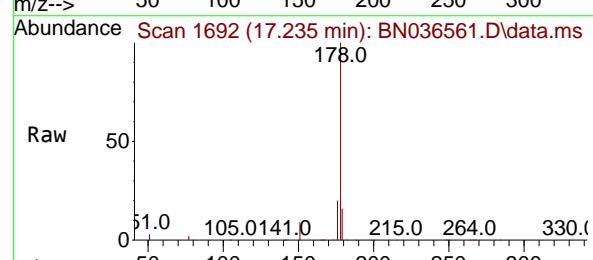
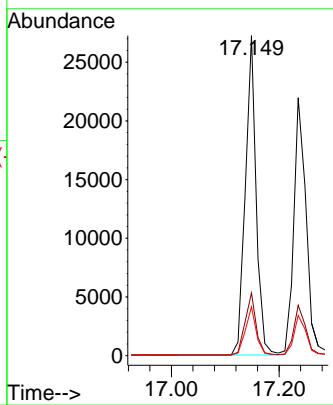
Ref Abundance Scan 1685 (17.149 min): BN036561.D\data.ms (-)



#25  
Phenanthrene  
Concen: 1.554 ng  
RT: 17.149 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

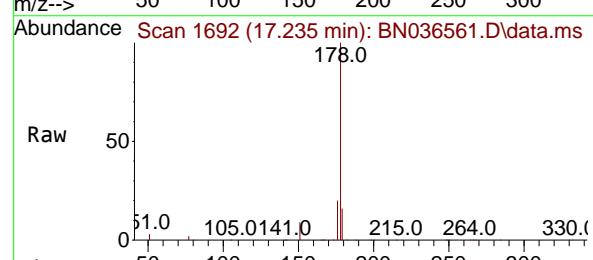
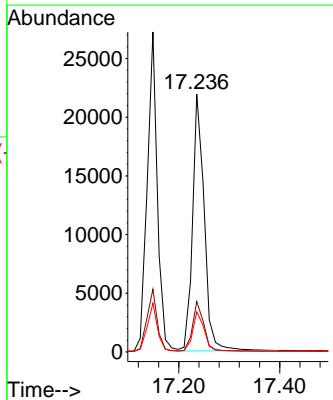
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC1.6

Tgt Ion:178 Resp: 37989  
Ion Ratio Lower Upper  
178 100  
176 19.7 15.9 23.9  
179 15.1 12.2 18.4



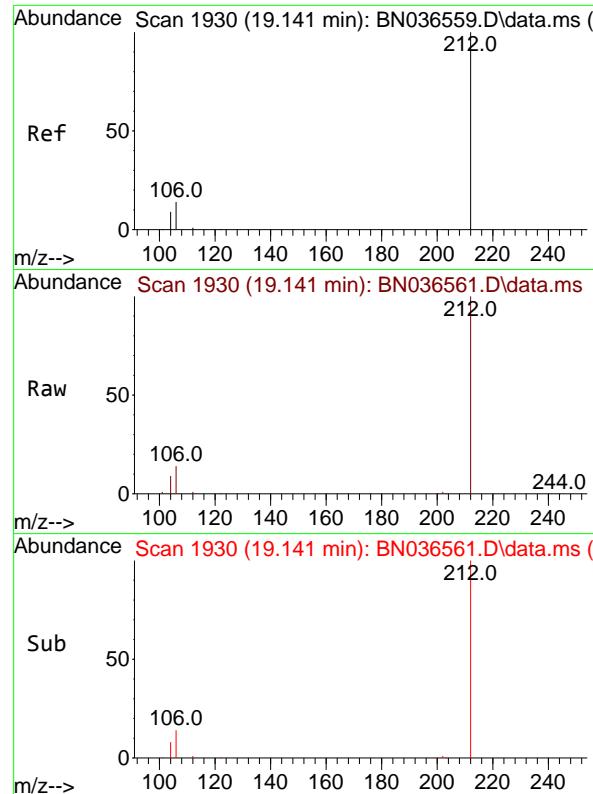
#26  
Anthracene  
Concen: 1.589 ng  
RT: 17.235 min Scan# 1692  
Delta R.T. -0.012 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:178 Resp: 35054  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.4 23.2  
179 15.3 12.6 18.8



Sub Abundance Scan 1692 (17.235 min): BN036561.D\data.ms (-)

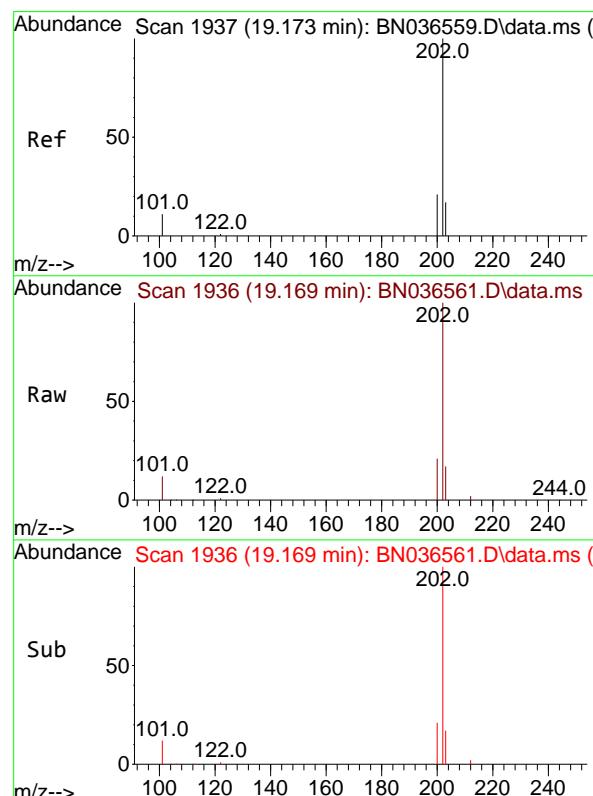
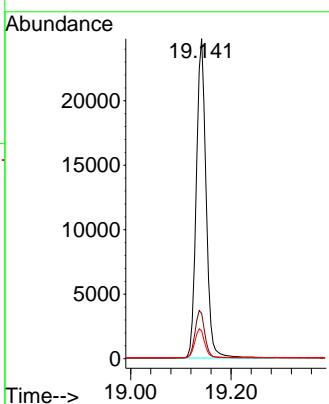
m/z-->



#27  
 Fluoranthene-d10  
 Concen: 1.600 ng  
 RT: 19.141 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

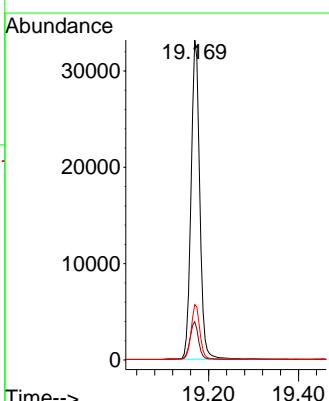
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

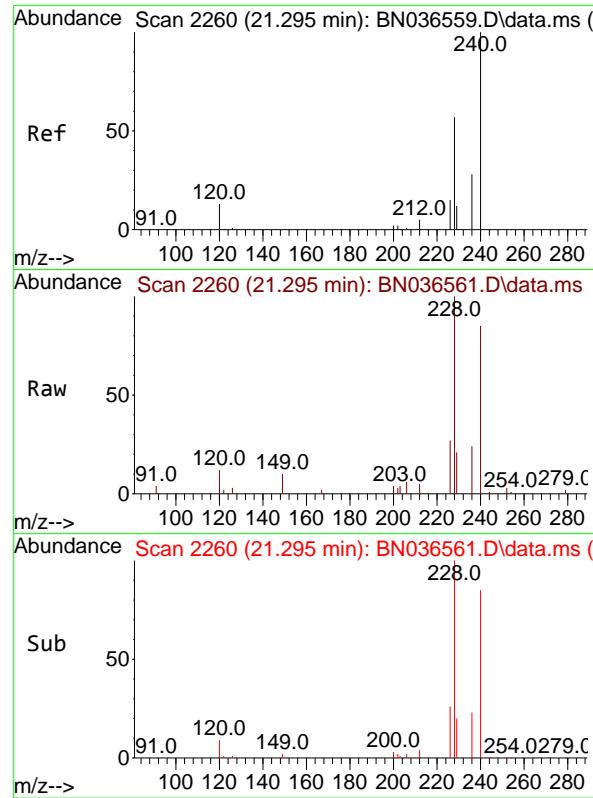
Tgt Ion:212 Resp: 33414  
 Ion Ratio Lower Upper  
 212 100  
 106 15.0 11.8 17.6  
 104 9.1 7.3 10.9



#28  
 Fluoranthene  
 Concen: 1.619 ng  
 RT: 19.169 min Scan# 1936  
 Delta R.T. -0.004 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

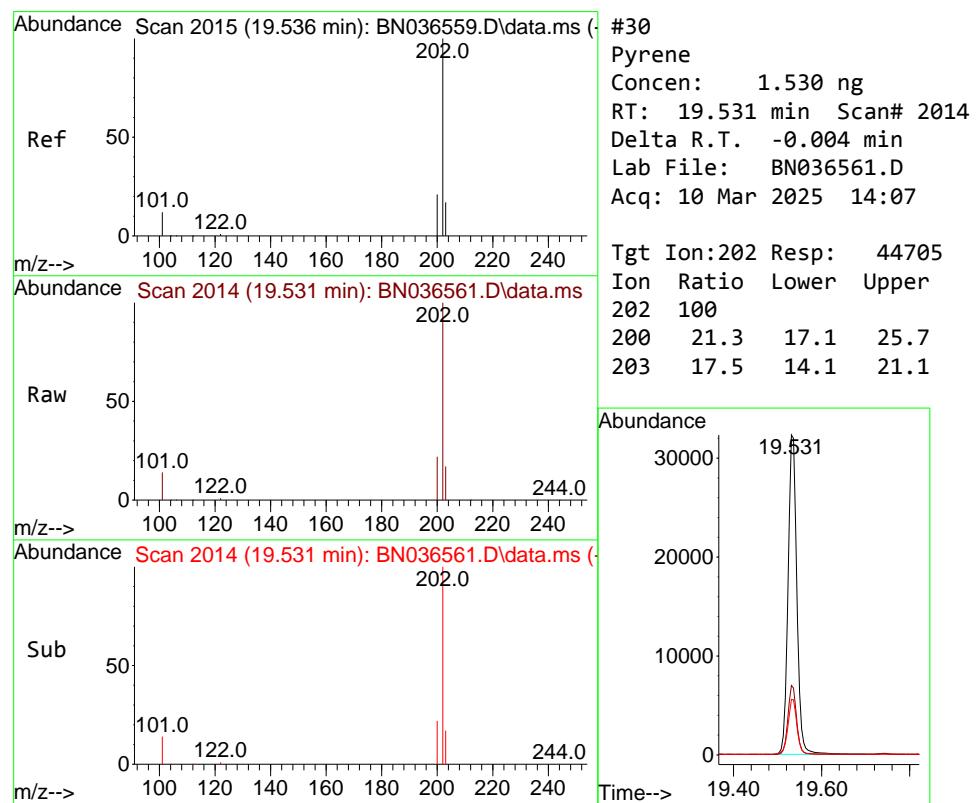
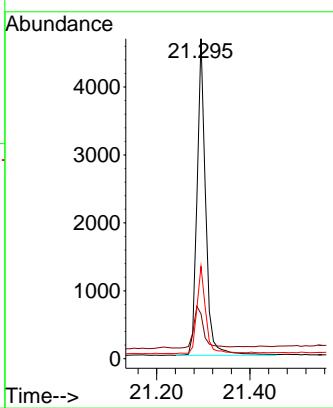
Tgt Ion:202 Resp: 44451  
 Ion Ratio Lower Upper  
 202 100  
 101 12.0 9.4 14.0  
 203 17.2 13.5 20.3





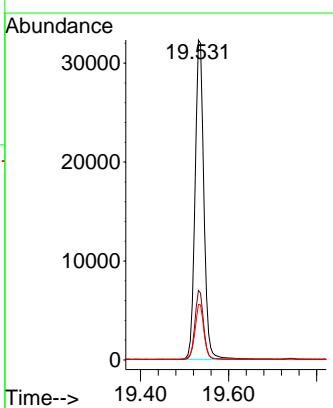
#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.295 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
ClientSampleId : SSTDICC1.6  
Acq: 10 Mar 2025 14:07

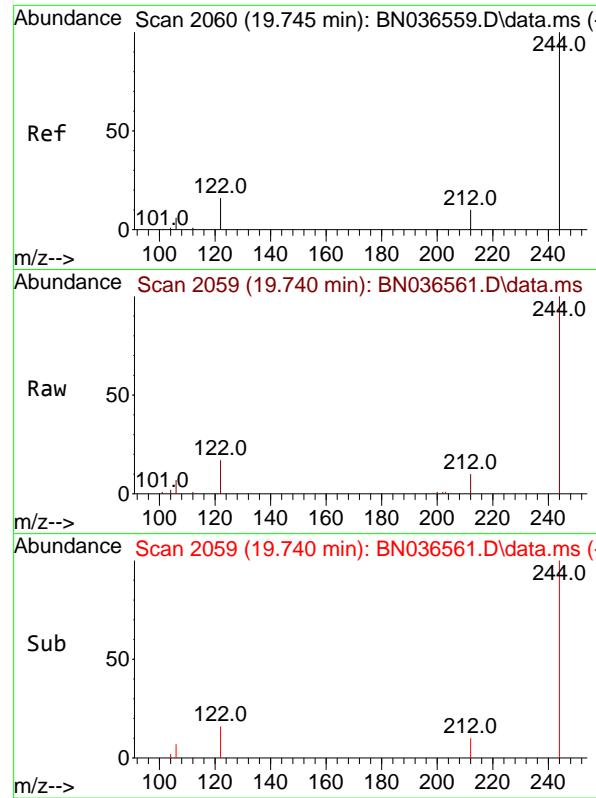
Tgt Ion:240 Resp: 5977  
Ion Ratio Lower Upper  
240 100  
120 14.0 14.6 22.0#  
236 28.9 24.1 36.1



#30  
Pyrene  
Concen: 1.530 ng  
RT: 19.531 min Scan# 2014  
Delta R.T. -0.004 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:202 Resp: 44705  
Ion Ratio Lower Upper  
202 100  
200 21.3 17.1 25.7  
203 17.5 14.1 21.1

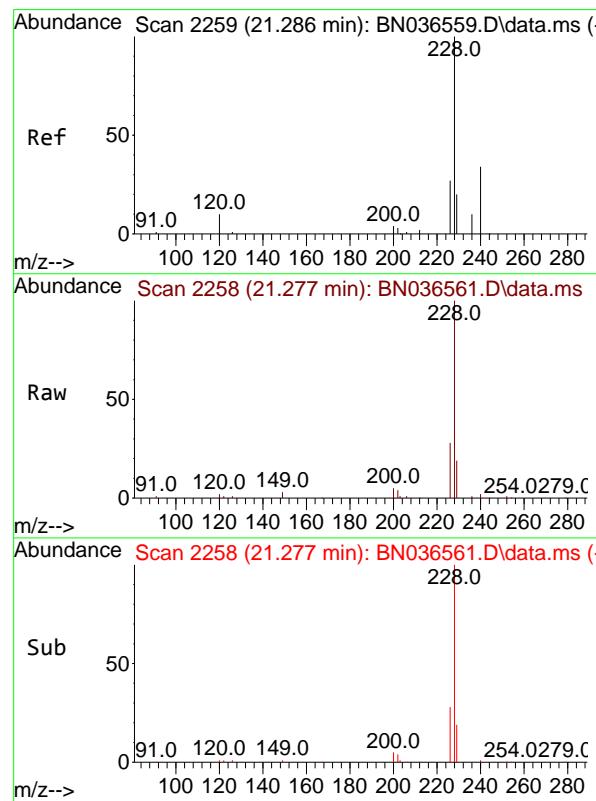
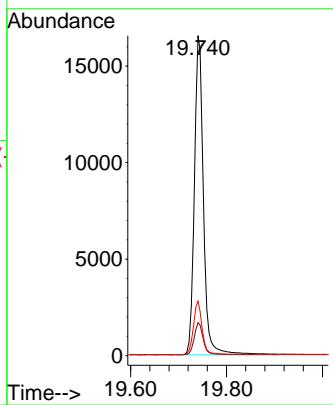




#31  
**Terphenyl-d14**  
Concen: 1.527 ng  
RT: 19.740 min Scan# 2  
Delta R.T. -0.004 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

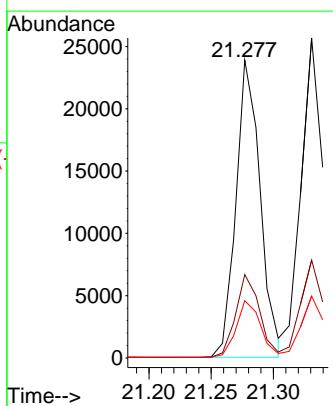
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

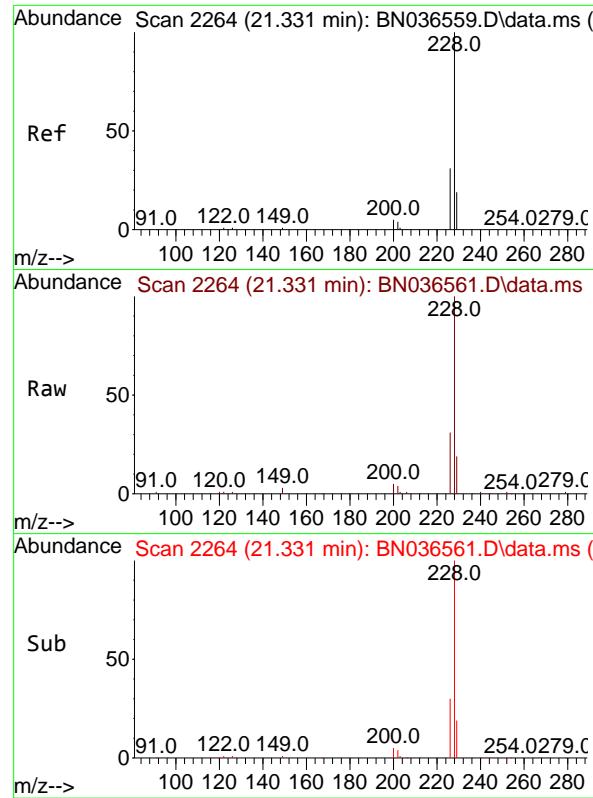
Tgt Ion:244 Resp: 21872  
Ion Ratio Lower Upper  
244 100  
212 10.3 9.6 14.4  
122 17.0 13.9 20.9



#32  
**Benzo(a)anthracene**  
Concen: 1.550 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

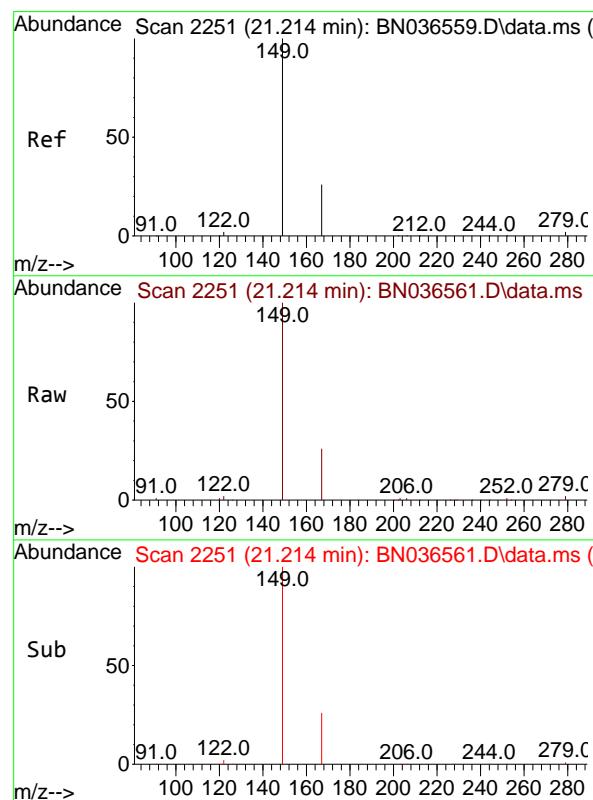
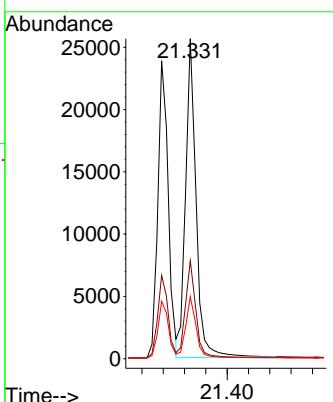
Tgt Ion:228 Resp: 32205  
Ion Ratio Lower Upper  
228 100  
226 28.0 22.5 33.7  
229 19.2 16.6 25.0





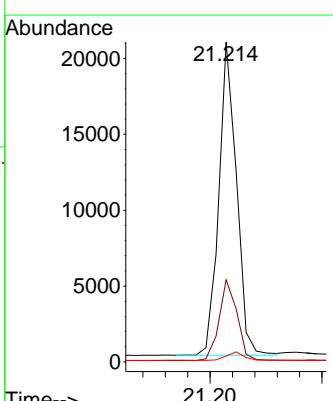
#33  
Chrysene  
Concen: 1.539 ng  
RT: 21.331 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07  
ClientSampleId : SSTDICC1.6

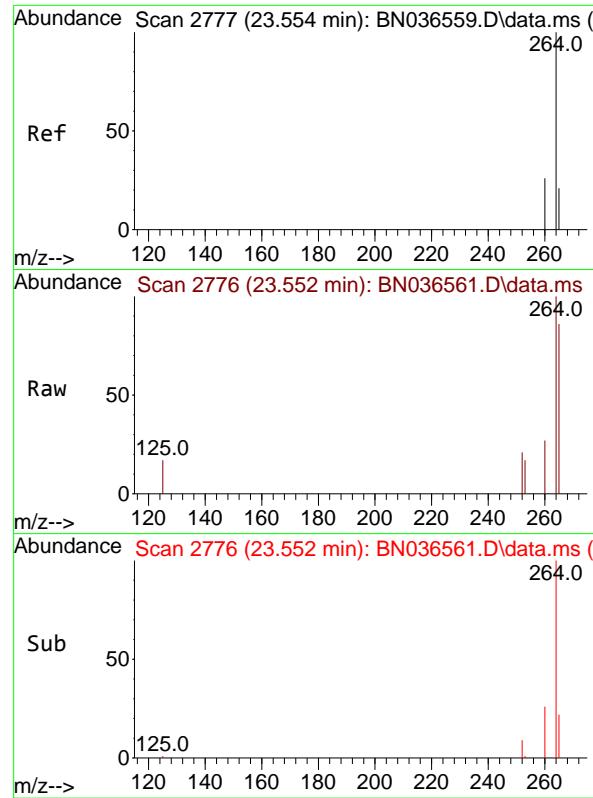
Tgt Ion:228 Resp: 34953  
Ion Ratio Lower Upper  
228 100  
226 30.6 25.3 37.9  
229 19.3 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 1.529 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:149 Resp: 22621  
Ion Ratio Lower Upper  
149 100  
167 26.3 20.7 31.1  
279 2.7 3.6 5.4#

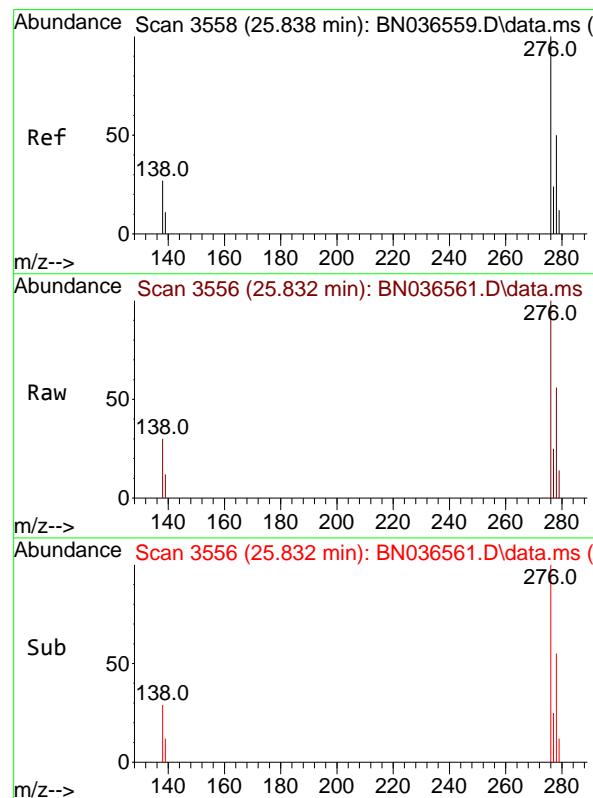
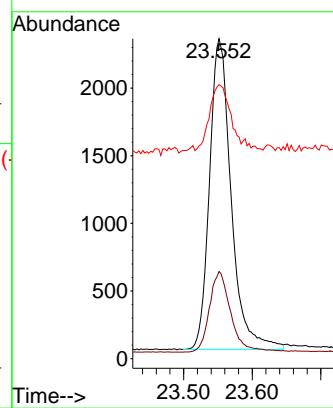




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.552 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

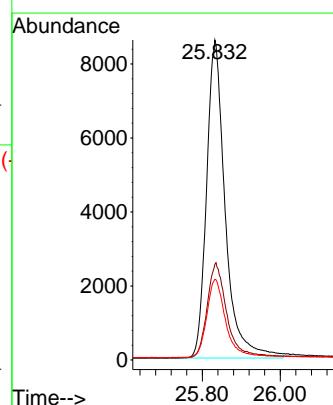
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

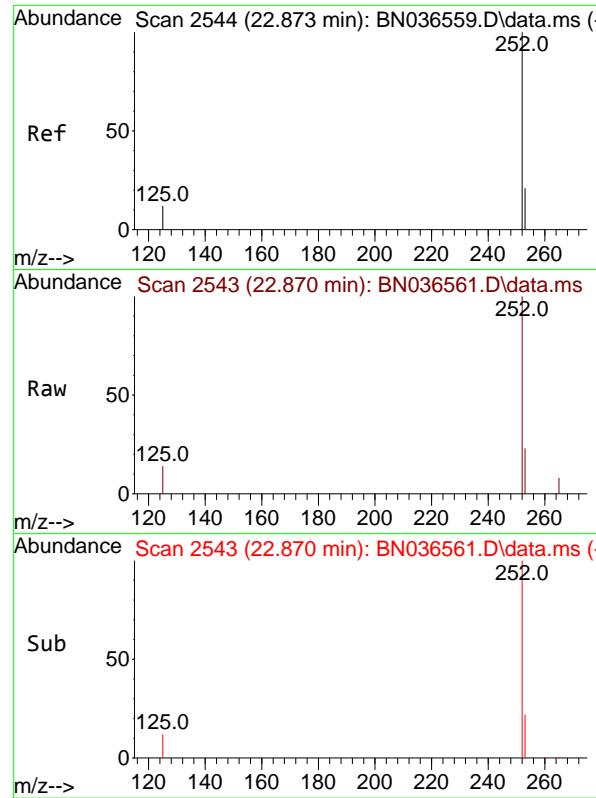
Tgt Ion:264 Resp: 5048  
Ion Ratio Lower Upper  
264 100  
260 27.2 22.6 33.8  
265 85.7 88.1 132.1#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 1.570 ng  
RT: 25.832 min Scan# 3556  
Delta R.T. -0.006 min  
Lab File: BN036561.D  
Acq: 10 Mar 2025 14:07

Tgt Ion:276 Resp: 28605  
Ion Ratio Lower Upper  
276 100  
138 30.4 23.4 35.2  
277 24.9 20.0 30.0

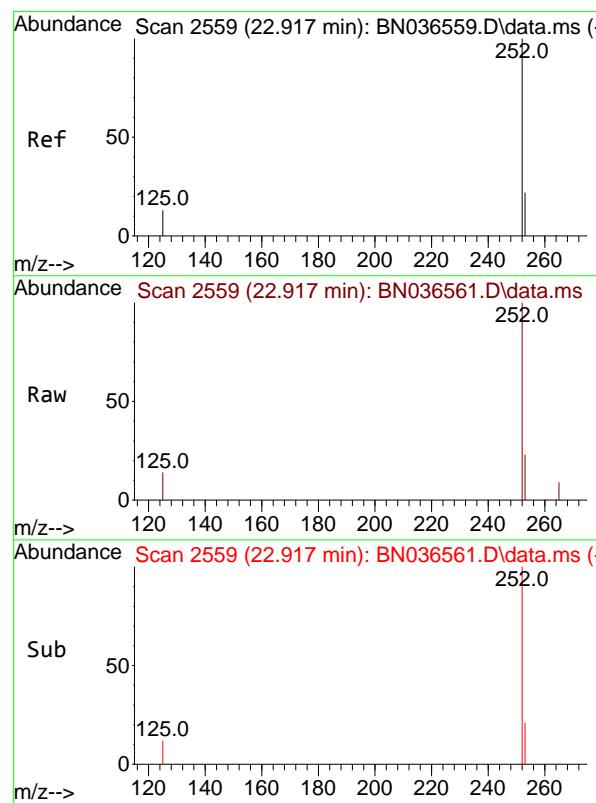
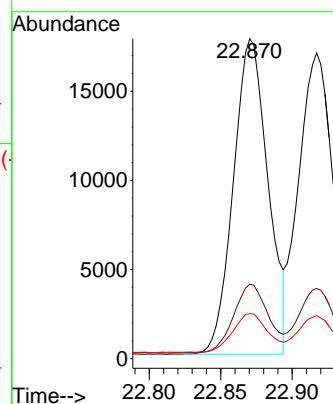




#37  
 Benzo(b)fluoranthene  
 Concen: 1.623 ng  
 RT: 22.870 min Scan# 2  
 Delta R.T. -0.003 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

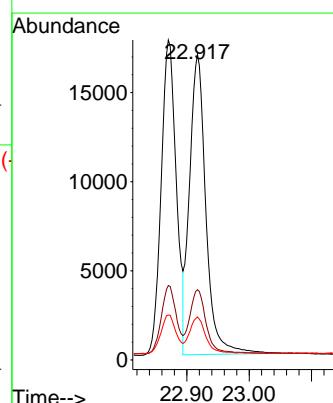
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

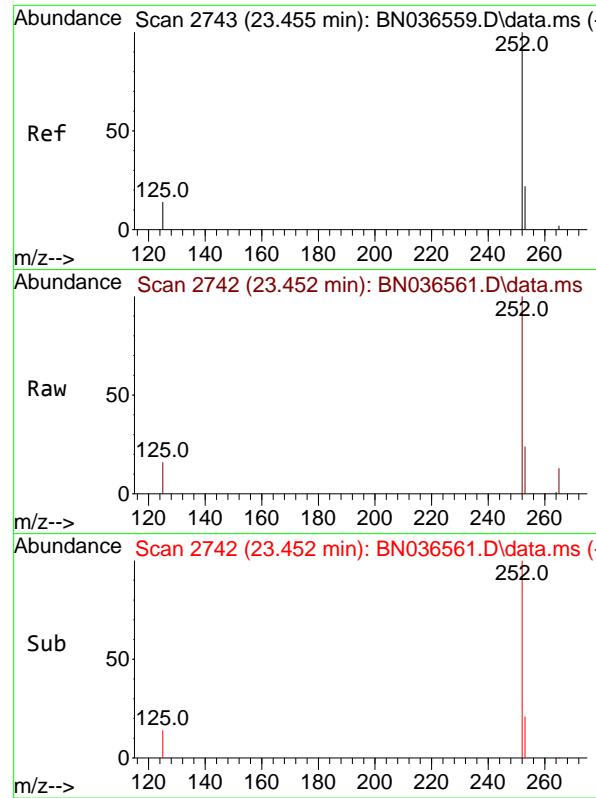
Tgt Ion:252 Resp: 29819  
 Ion Ratio Lower Upper  
 252 100  
 253 23.3 23.9 35.9#  
 125 14.0 17.4 26.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 1.593 ng  
 RT: 22.917 min Scan# 2559  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

Tgt Ion:252 Resp: 30710  
 Ion Ratio Lower Upper  
 252 100  
 253 23.0 24.6 36.8#  
 125 14.1 17.8 26.8#

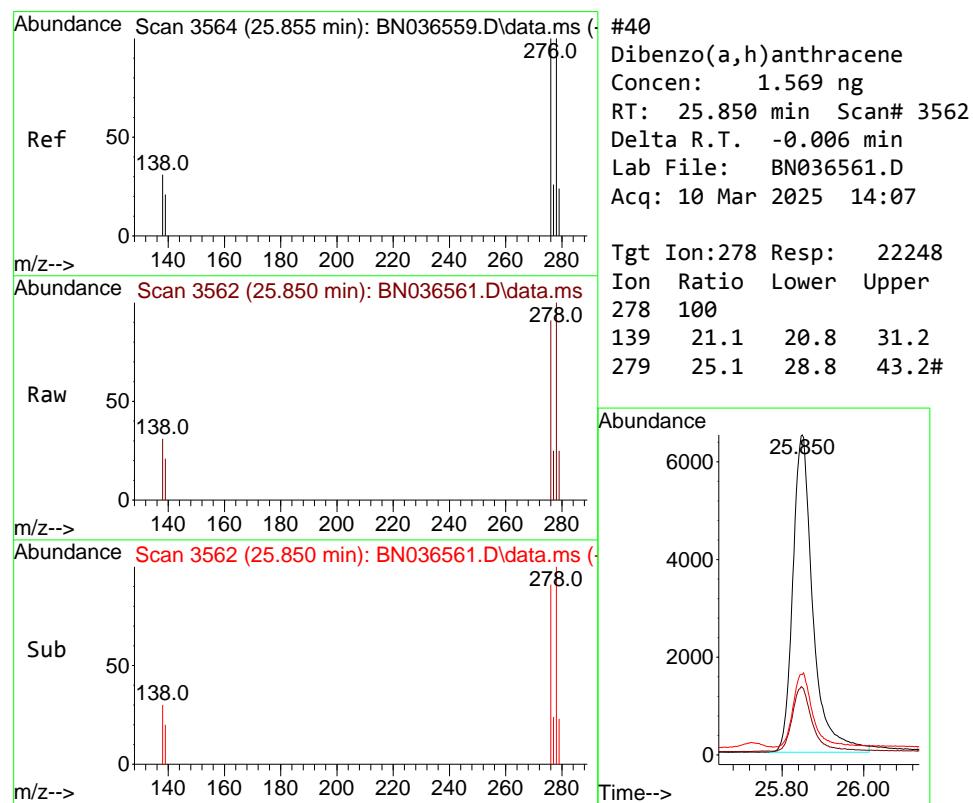
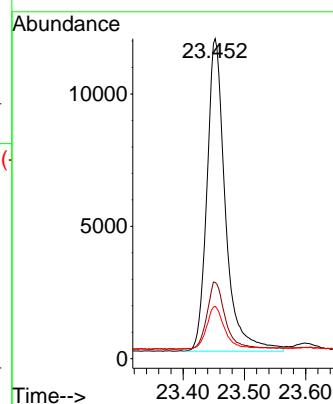




#39  
 Benzo(a)pyrene  
 Concen: 1.596 ng  
 RT: 23.452 min Scan# 2  
 Delta R.T. -0.003 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

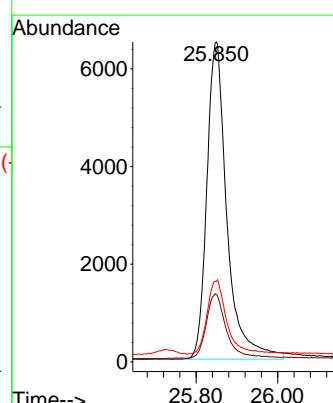
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

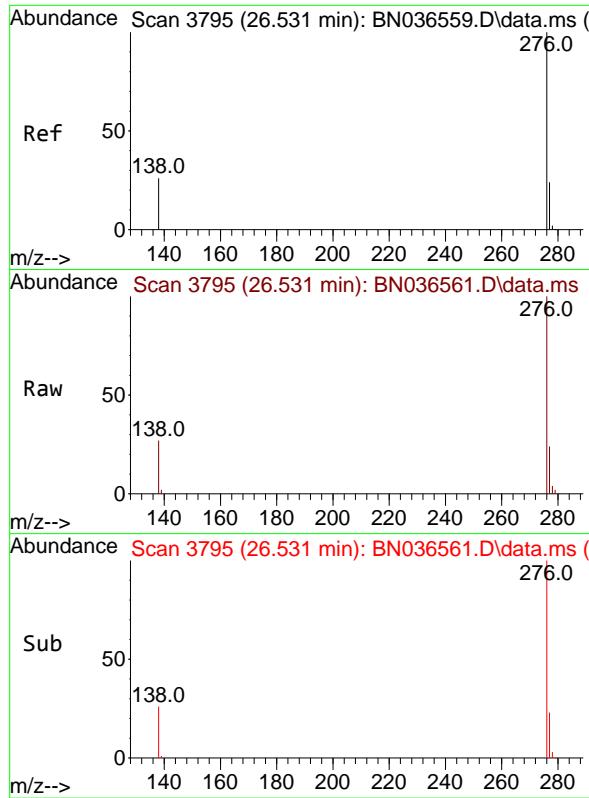
Tgt Ion:252 Resp: 24696  
 Ion Ratio Lower Upper  
 252 100  
 253 23.9 27.8 41.8#  
 125 16.3 22.7 34.1#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 1.569 ng  
 RT: 25.850 min Scan# 3562  
 Delta R.T. -0.006 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

Tgt Ion:278 Resp: 22248  
 Ion Ratio Lower Upper  
 278 100  
 139 21.1 20.8 31.2  
 279 25.1 28.8 43.2#

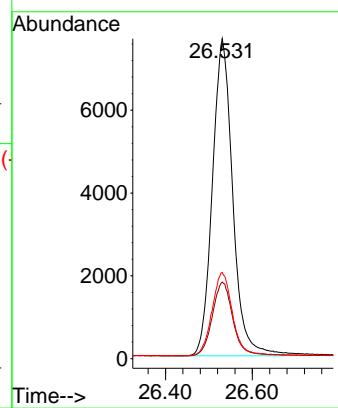




#41  
 Benzo(g,h,i)perylene  
 Concen: 1.535 ng  
 RT: 26.531 min Scan# 3  
 Delta R.T. 0.000 min  
 Lab File: BN036561.D  
 Acq: 10 Mar 2025 14:07

Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

Tgt Ion:276 Resp: 24906  
 Ion Ratio Lower Upper  
 276 100  
 277 23.9 22.2 33.4  
 138 26.9 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036562.D  
 Acq On : 10 Mar 2025 14:43  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

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

Quant Time: Mar 10 16:02:50 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

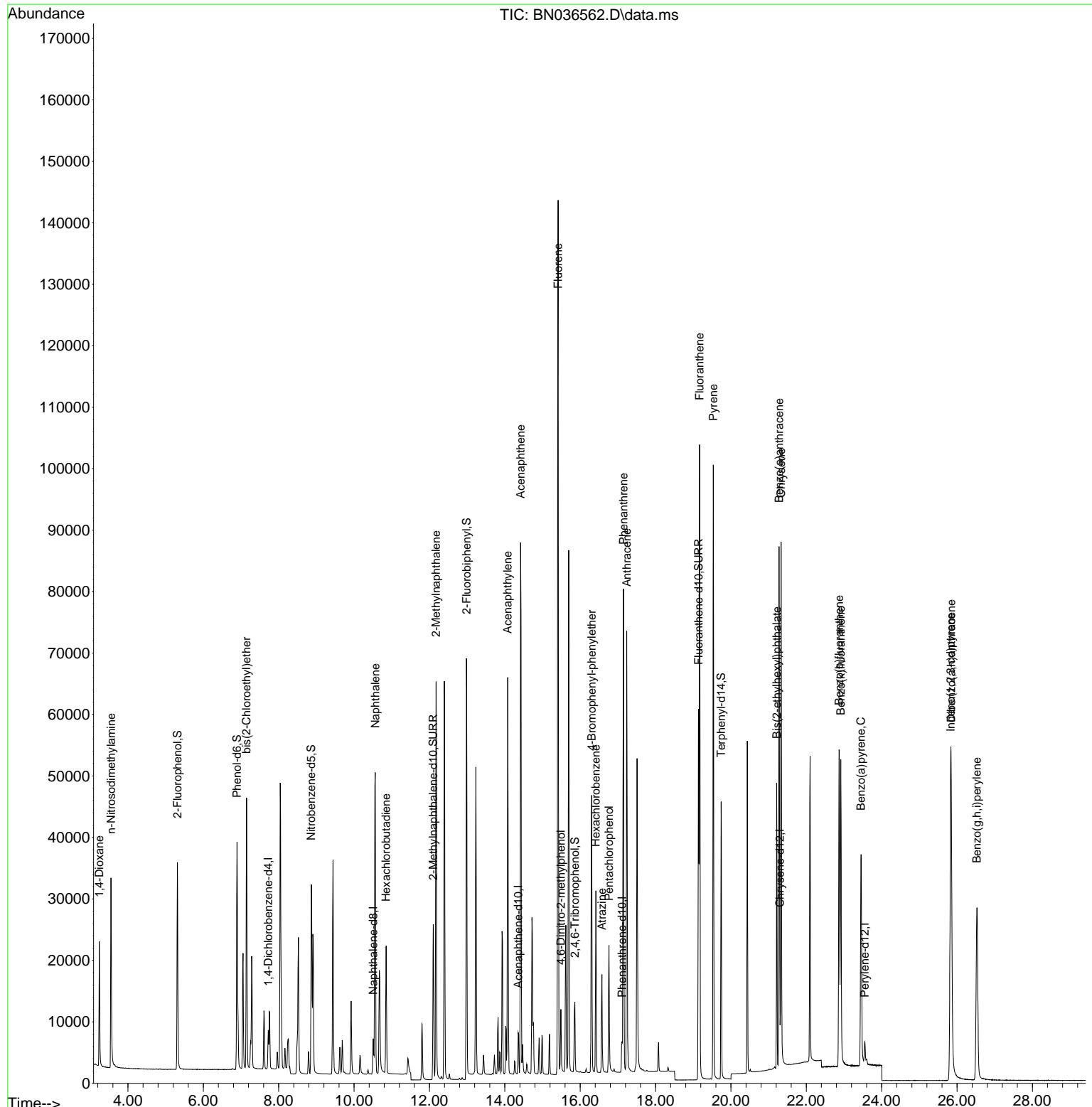
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2890	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	6824	0.400	ng	0.00
13) Acenaphthene-d10	14.355	164	3957	0.400	ng	-0.01
19) Phenanthrene-d10	17.111	188	7488	0.400	ng	0.00
29) Chrysene-d12	21.295	240	5439	0.400	ng	0.00
35) Perylene-d12	23.551	264	5002	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	23032	3.420	ng	0.00
5) Phenol-d6	6.894	99	28996	3.485	ng	0.00
8) Nitrobenzene-d5	8.864	82	24586	3.312	ng	-0.01
11) 2-Methylnaphthalene-d10	12.101	152	34578	3.407	ng	-0.01
14) 2,4,6-Tribromophenol	15.858	330	6252	3.482	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	81236	3.529	ng	0.00
27) Fluoranthene-d10	19.141	212	65134	3.394	ng	0.00
31) Terphenyl-d14	19.740	244	42959	3.297	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
2) 1,4-Dioxane	3.239	88	10288	3.209	ng	97
3) n-Nitrosodimethylamine	3.550	42	20412	3.147	ng	# 96
6) bis(2-Chloroethyl)ether	7.146	93	27978	3.253	ng	99
9) Naphthalene	10.562	128	66694	3.323	ng	96
10) Hexachlorobutadiene	10.850	225	15618	3.305	ng	# 99
12) 2-Methylnaphthalene	12.177	142	43768	3.427	ng	97
16) Acenaphthylene	14.077	152	65654	3.516	ng	99
17) Acenaphthene	14.420	154	42378	3.467	ng	97
18) Fluorene	15.414	166	56295	3.404	ng	100
20) 4,6-Dinitro-2-methylph...	15.489	198	6567	3.315	ng	# 58
21) 4-Bromophenyl-phenylether	16.304	248	16652	3.549	ng	# 82
22) Hexachlorobenzene	16.416	284	19287	3.406	ng	100
23) Atrazine	16.577	200	12969	3.448	ng	# 90
24) Pentachlorophenol	16.764	266	9625	3.726	ng	99
25) Phenanthrene	17.148	178	77903	3.468	ng	99
26) Anthracene	17.235	178	72775	3.590	ng	99
28) Fluoranthene	19.169	202	86688	3.436	ng	99
30) Pyrene	19.531	202	86694	3.260	ng	100
32) Benzo(a)anthracene	21.277	228	66496	3.516	ng	99
33) Chrysene	21.331	228	70334	3.403	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	39682	2.947	ng	# 98
36) Indeno(1,2,3-cd)pyrene	25.829	276	67767	3.754	ng	98
37) Benzo(b)fluoranthene	22.870	252	63823	3.506	ng	# 84
38) Benzo(k)fluoranthene	22.914	252	65410	3.425	ng	# 83
39) Benzo(a)pyrene	23.452	252	54009	3.523	ng	# 77
40) Dibenzo(a,h)anthracene	25.843	278	54058	3.846	ng	# 84
41) Benzo(g,h,i)perylene	26.528	276	57986	3.606	ng	94

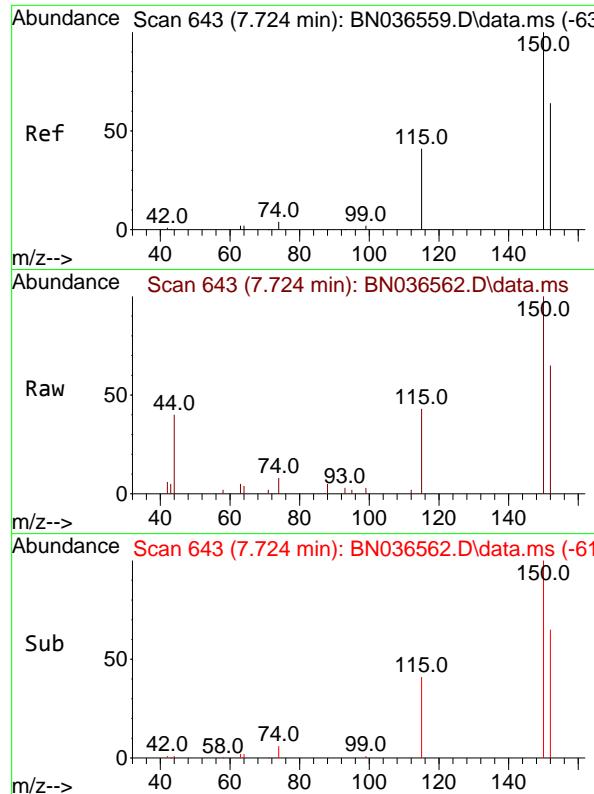
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036562.D  
 Acq On : 10 Mar 2025 14:43  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Mar 10 16:02:50 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

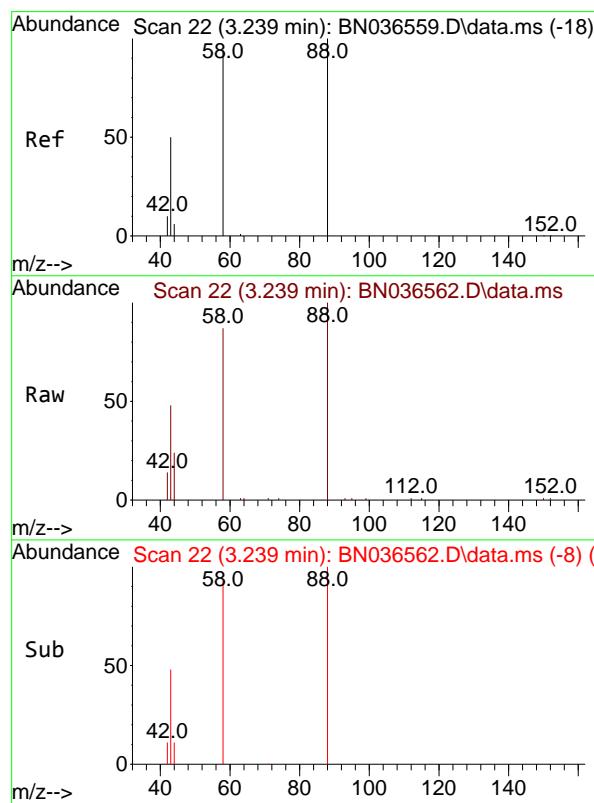
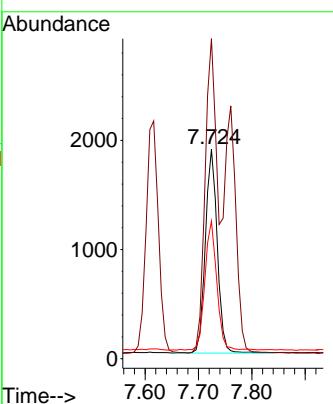




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

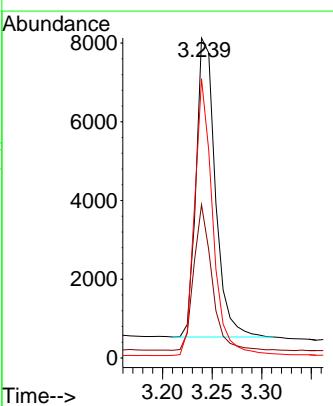
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

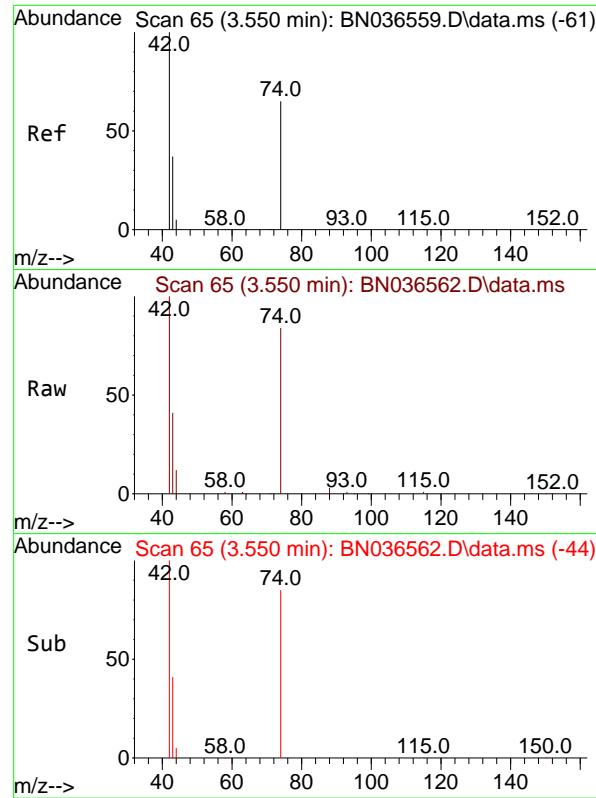
Tgt Ion:152 Resp: 2890  
Ion Ratio Lower Upper  
152 100  
150 152.9 123.7 185.5  
115 65.7 54.3 81.5



#2  
1,4-Dioxane  
Concen: 3.209 ng  
RT: 3.239 min Scan# 22  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion: 88 Resp: 10288  
Ion Ratio Lower Upper  
88 100  
43 45.2 37.8 56.8  
58 87.2 67.4 101.2

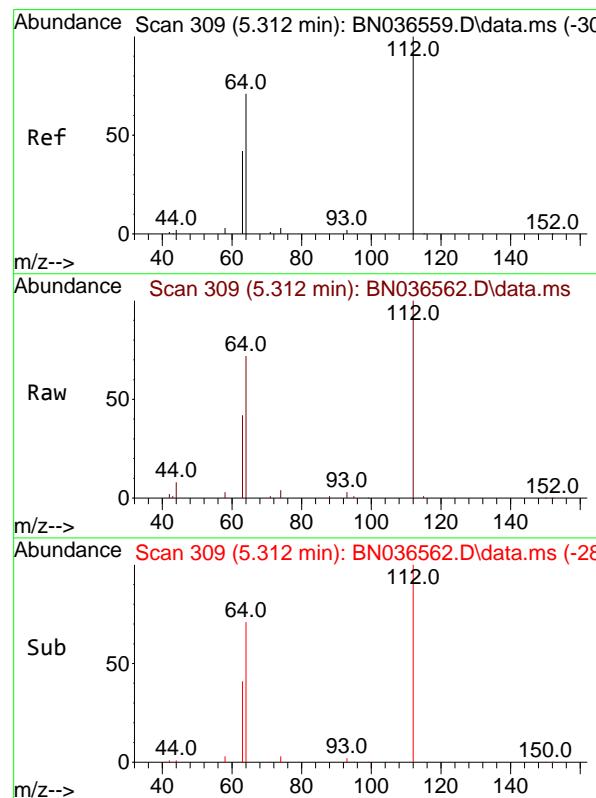
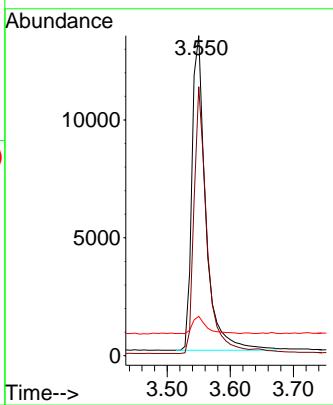




#3  
n-Nitrosodimethylamine  
Concen: 3.147 ng  
RT: 3.550 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

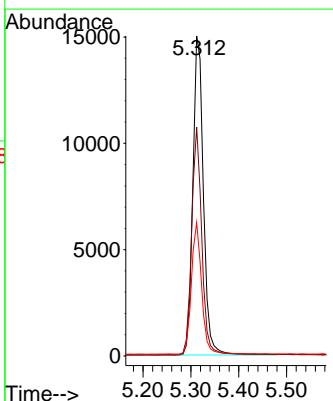
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

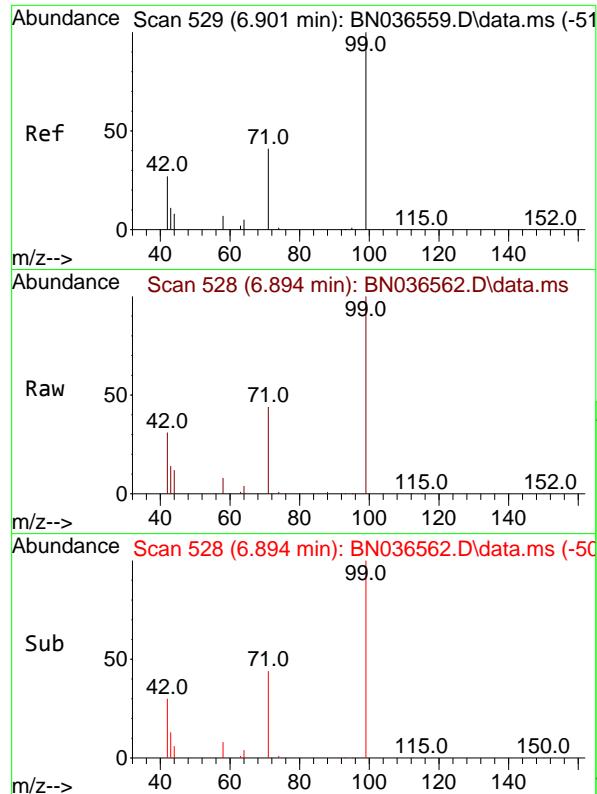
Tgt Ion: 42 Resp: 20412  
Ion Ratio Lower Upper  
42 100  
74 78.8 60.6 90.8  
44 5.5 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 3.420 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:112 Resp: 23032  
Ion Ratio Lower Upper  
112 100  
64 68.4 53.1 79.7  
63 39.8 31.8 47.8

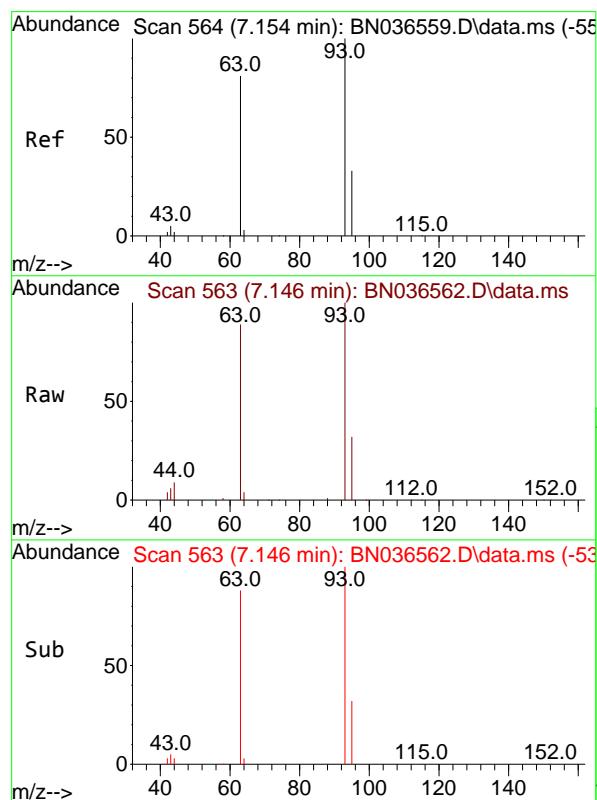
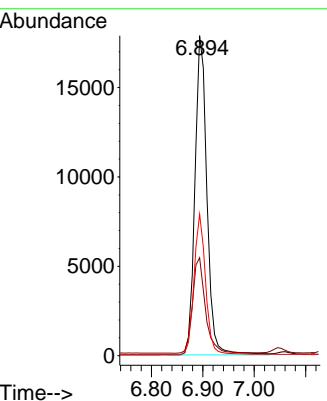




#5  
 Phenol-d6  
 Concen: 3.485 ng  
 RT: 6.894 min Scan# 5  
 Delta R.T. -0.007 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

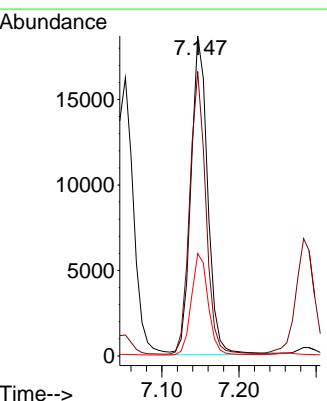
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

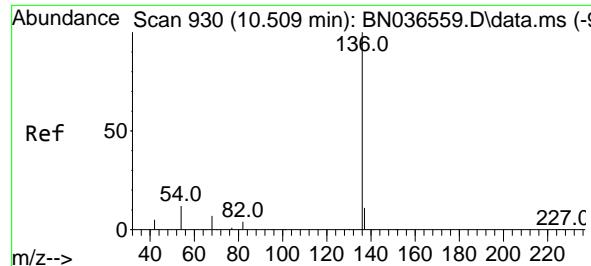
Tgt Ion: 99 Resp: 28996  
 Ion Ratio Lower Upper  
 99 100  
 42 32.3 26.5 39.7  
 71 43.2 34.1 51.1



#6  
 bis(2-Chloroethyl)ether  
 Concen: 3.253 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.007 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

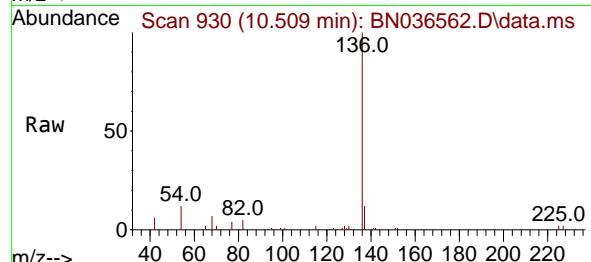
Tgt Ion: 93 Resp: 27978  
 Ion Ratio Lower Upper  
 93 100  
 63 85.7 67.7 101.5  
 95 32.0 25.6 38.4





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

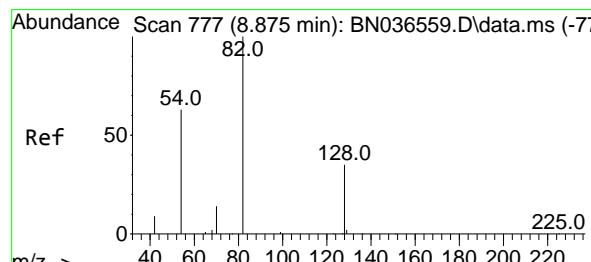
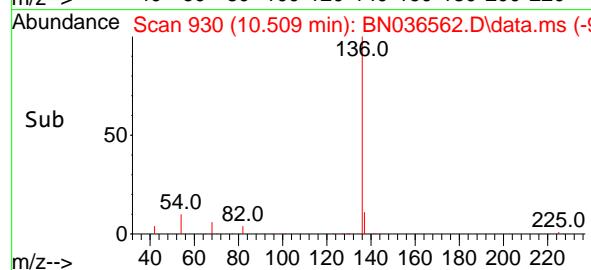
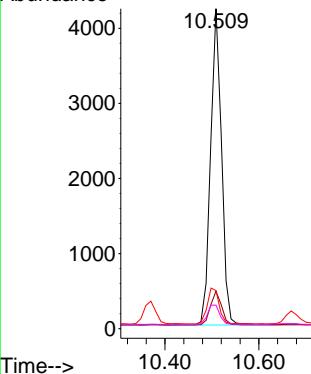


Tgt Ion:136 Resp: 6824

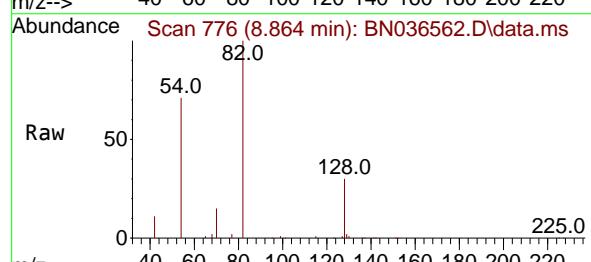
Ion Ratio Lower Upper

136	100
137	11.7
54	11.9
68	7.4
	10.3
	11.5
	7.0
	15.5
	17.3
	10.4

Abundance

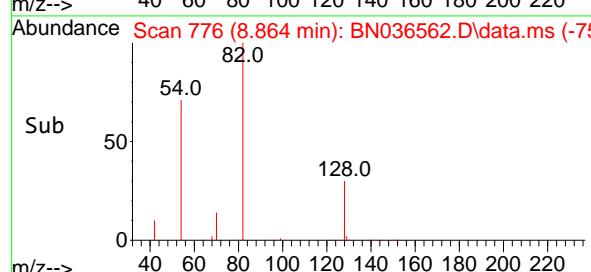
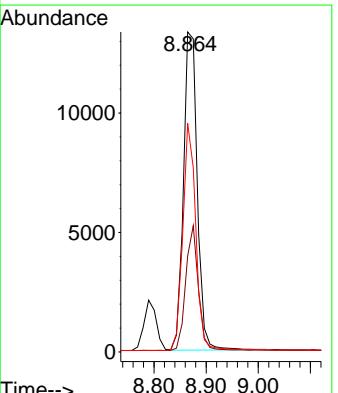


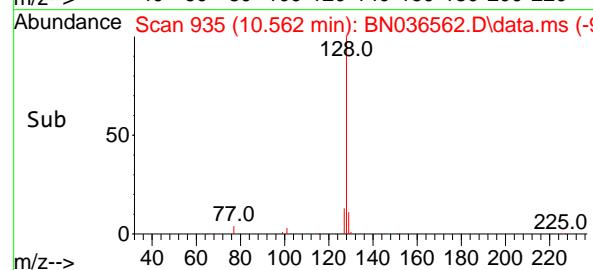
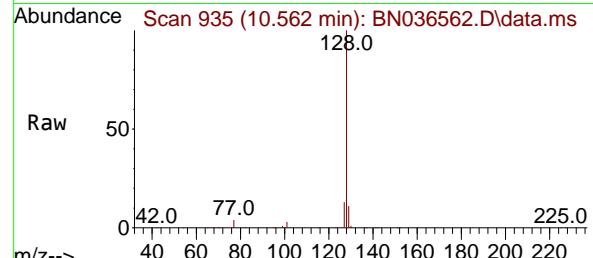
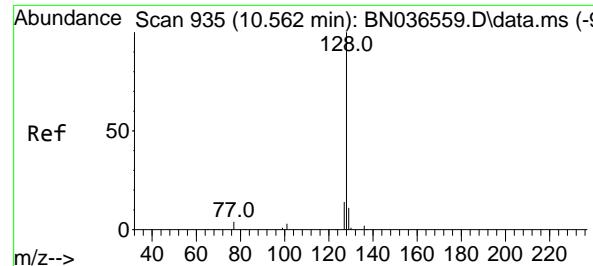
#8  
 Nitrobenzene-d5  
 Concen: 3.312 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.011 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43



Tgt Ion: 82 Resp: 24586  
 Ion Ratio Lower Upper

82	100
128	30.0
54	71.4
	30.6
	52.2
	45.8#
	78.4





#9

Naphthalene

Concen: 3.323 ng

RT: 10.562 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

Tgt Ion:128 Resp: 66694

Ion Ratio Lower Upper

128 100

129 10.8 9.8 14.6

127 13.4 11.8 17.8

Abundance

10.562

30000

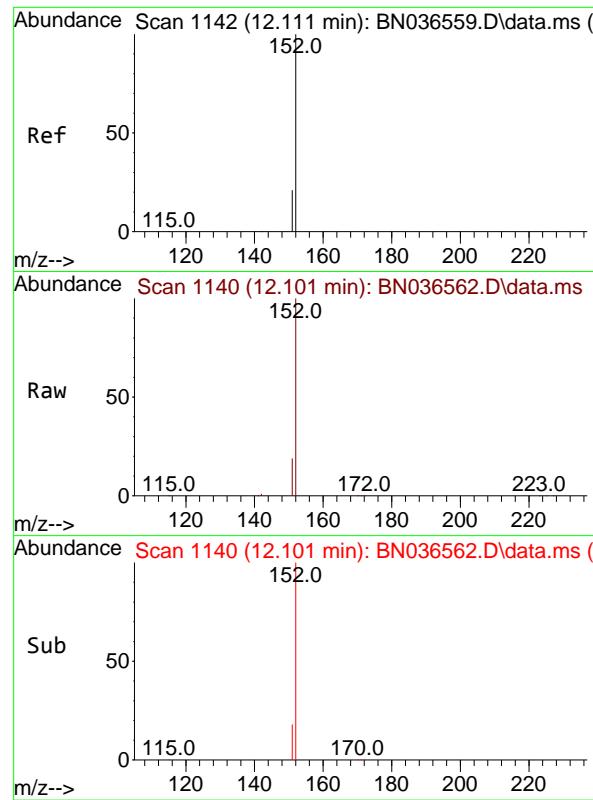
20000

10000

0

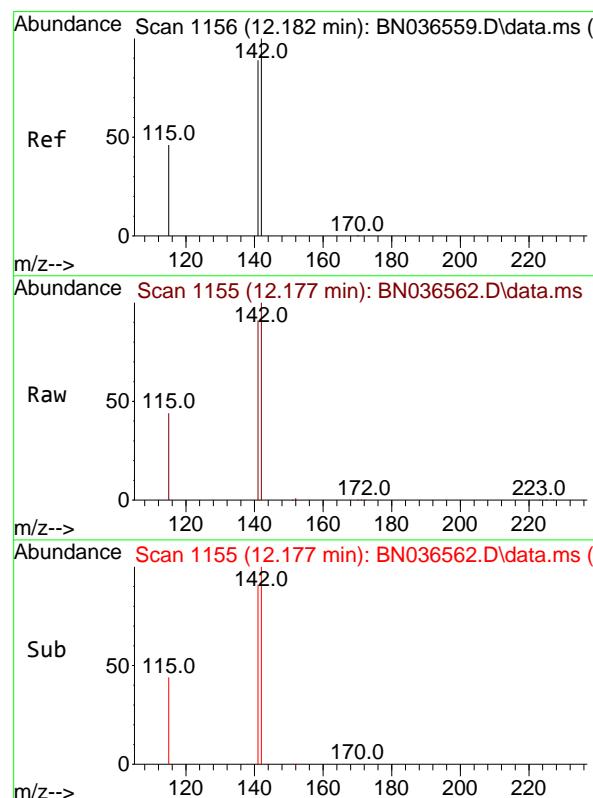
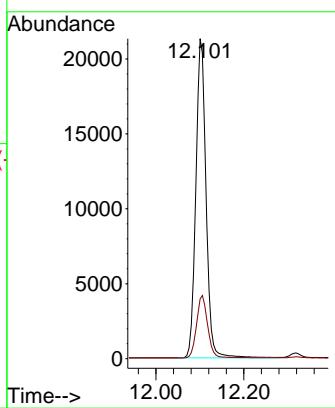
Time--&gt;

10.50 10.55 10.60



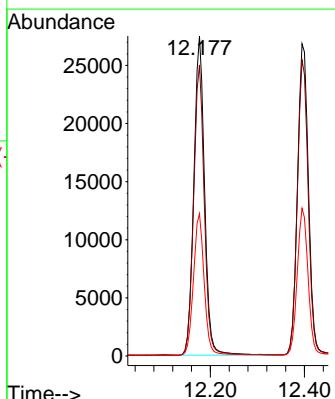
#11  
2-Methylnaphthalene-d10  
Concen: 3.407 ng  
RT: 12.101 min Scan# 1:Instrument :  
Delta R.T. -0.010 min BNA\_N  
Lab File: BN036562.D ClientSampleId :  
Acq: 10 Mar 2025 14:43 SSTDICC3.2

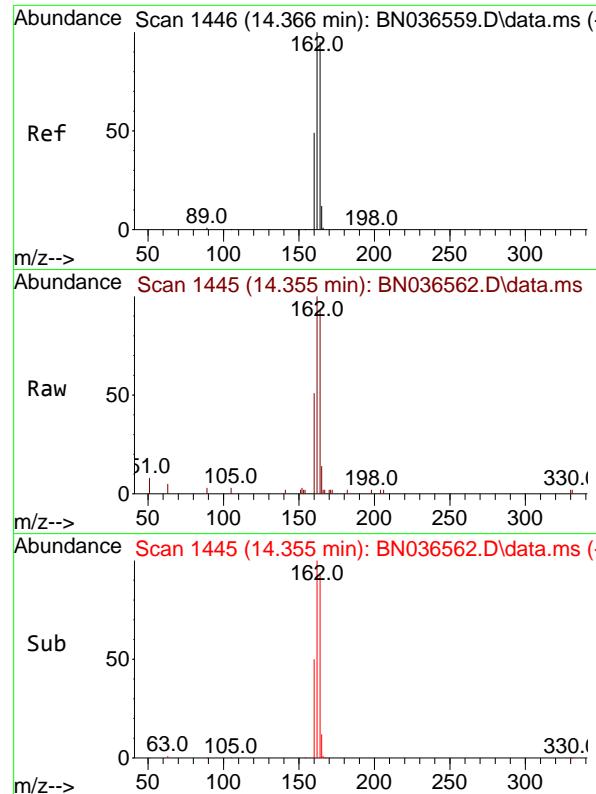
Tgt Ion:152 Resp: 34578  
Ion Ratio Lower Upper  
152 100  
151 21.2 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 3.427 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:142 Resp: 43768  
Ion Ratio Lower Upper  
142 100  
141 90.9 71.7 107.5  
115 44.5 38.3 57.5

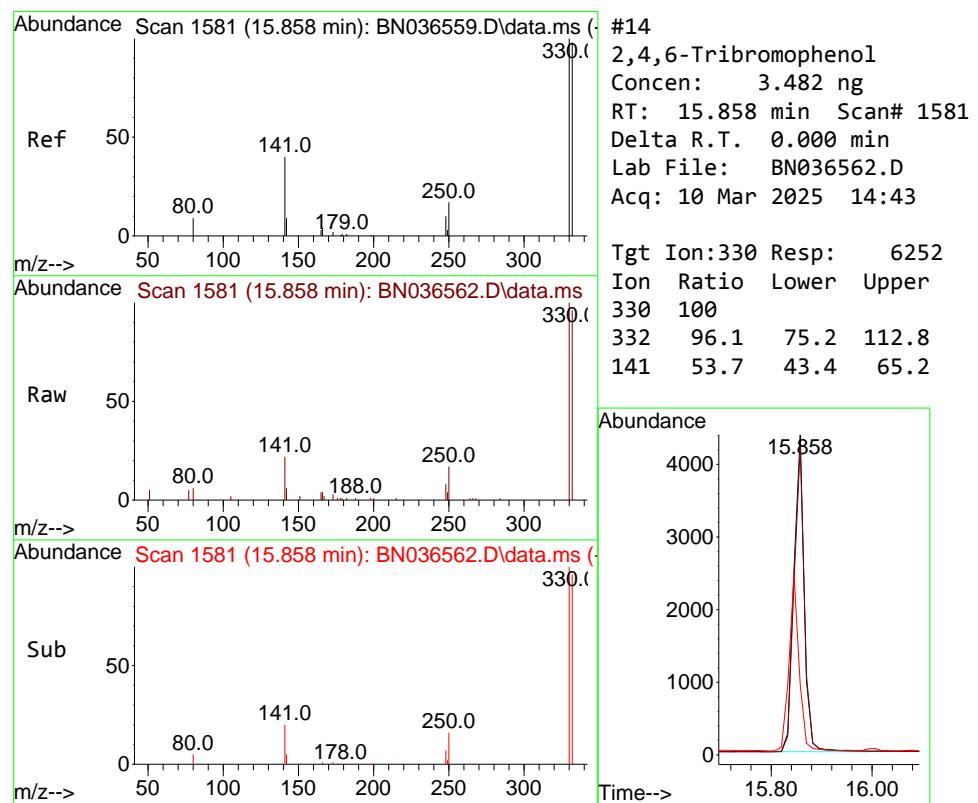
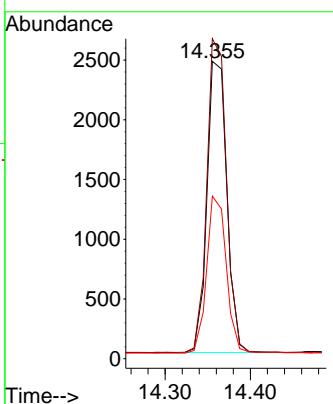




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.355 min Scan# 1445  
 Delta R.T. -0.011 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

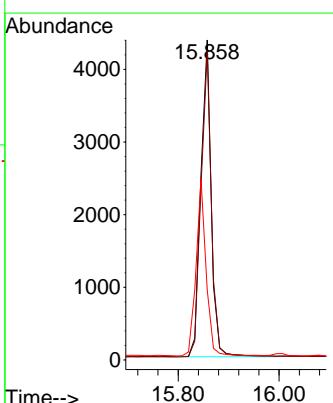
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

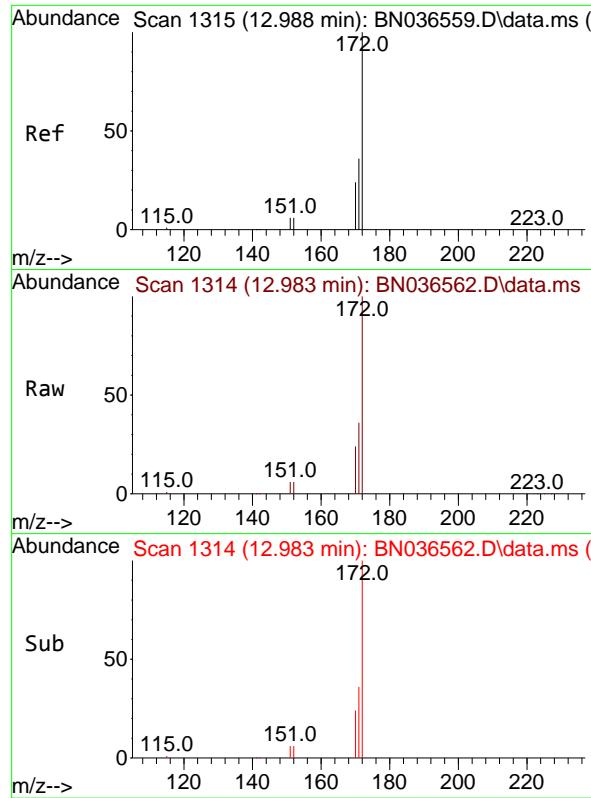
Tgt Ion:164 Resp: 3957  
 Ion Ratio Lower Upper  
 164 100  
 162 107.6 84.2 126.2  
 160 54.7 42.2 63.2



#14  
 2,4,6-Tribromophenol  
 Concen: 3.482 ng  
 RT: 15.858 min Scan# 1581  
 Delta R.T. 0.000 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

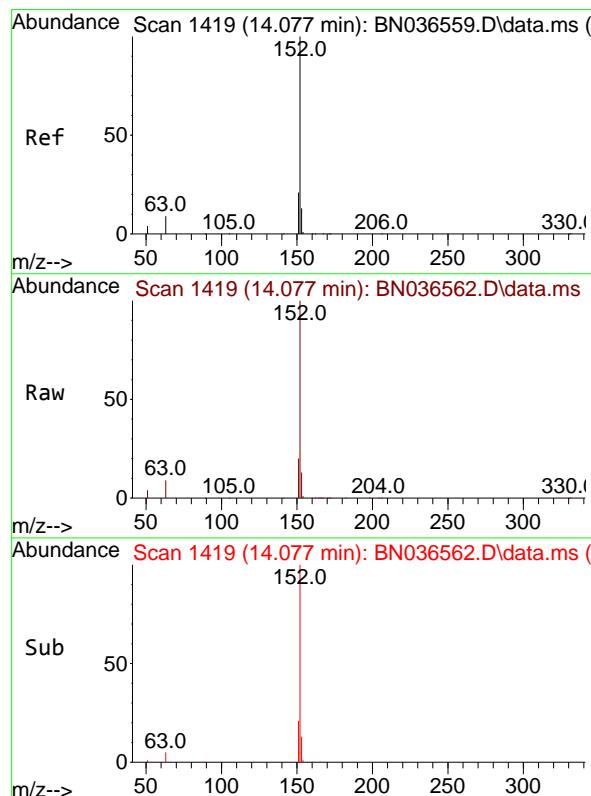
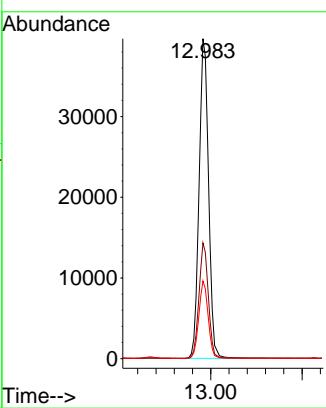
Tgt Ion:330 Resp: 6252  
 Ion Ratio Lower Upper  
 330 100  
 332 96.1 75.2 112.8  
 141 53.7 43.4 65.2





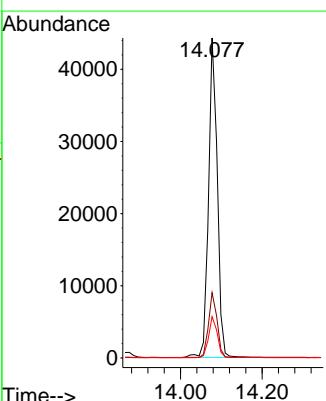
#15  
2-Fluorobiphenyl  
Concen: 3.529 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43  
ClientSampleId : SSTDICC3.2

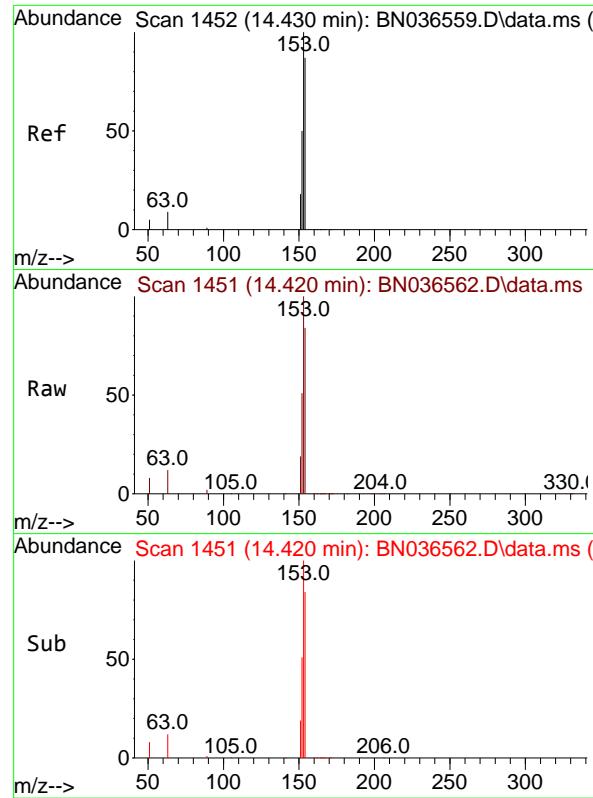
Tgt Ion:172 Resp: 81236  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.5 44.3  
170 24.3 20.2 30.4



#16  
Acenaphthylene  
Concen: 3.516 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:152 Resp: 65654  
Ion Ratio Lower Upper  
152 100  
151 20.0 16.2 24.4  
153 12.8 10.6 15.8

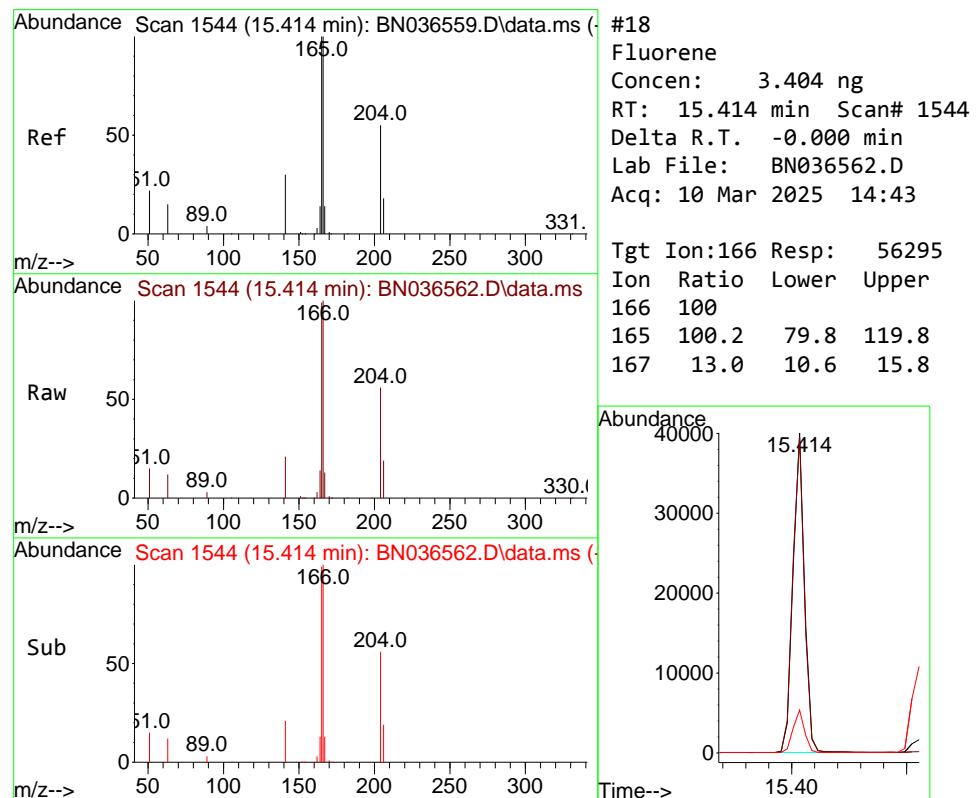
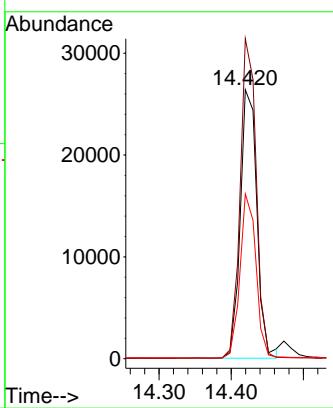




#17  
Acenaphthene  
Concen: 3.467 ng  
RT: 14.420 min Scan# 1  
Delta R.T. -0.011 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

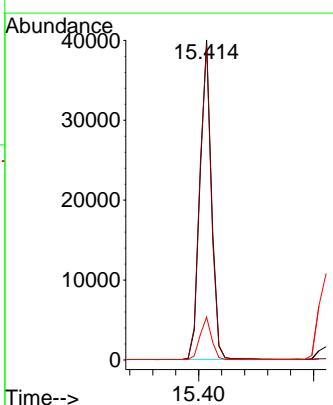
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

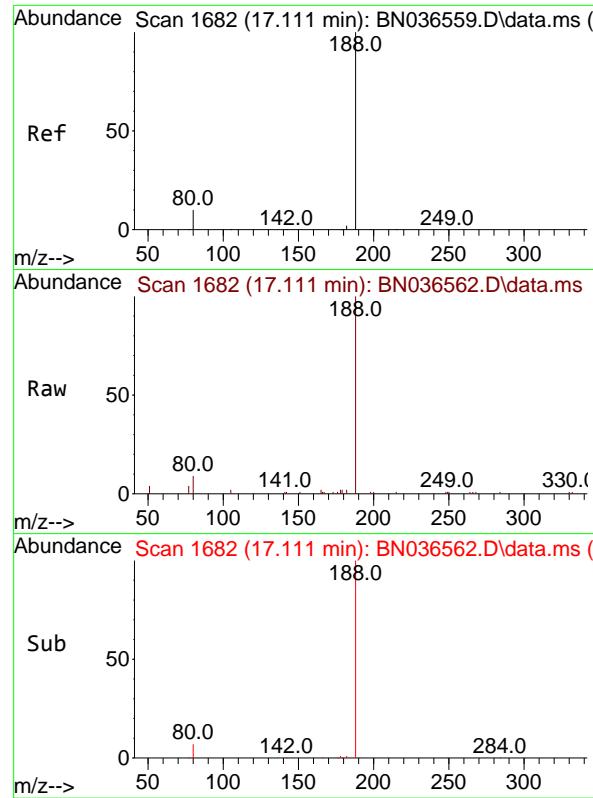
Tgt Ion:154 Resp: 42378  
Ion Ratio Lower Upper  
154 100  
153 114.6 94.1 141.1  
152 58.9 49.8 74.6



#18  
Fluorene  
Concen: 3.404 ng  
RT: 15.414 min Scan# 1544  
Delta R.T. -0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:166 Resp: 56295  
Ion Ratio Lower Upper  
166 100  
165 100.2 79.8 119.8  
167 13.0 10.6 15.8

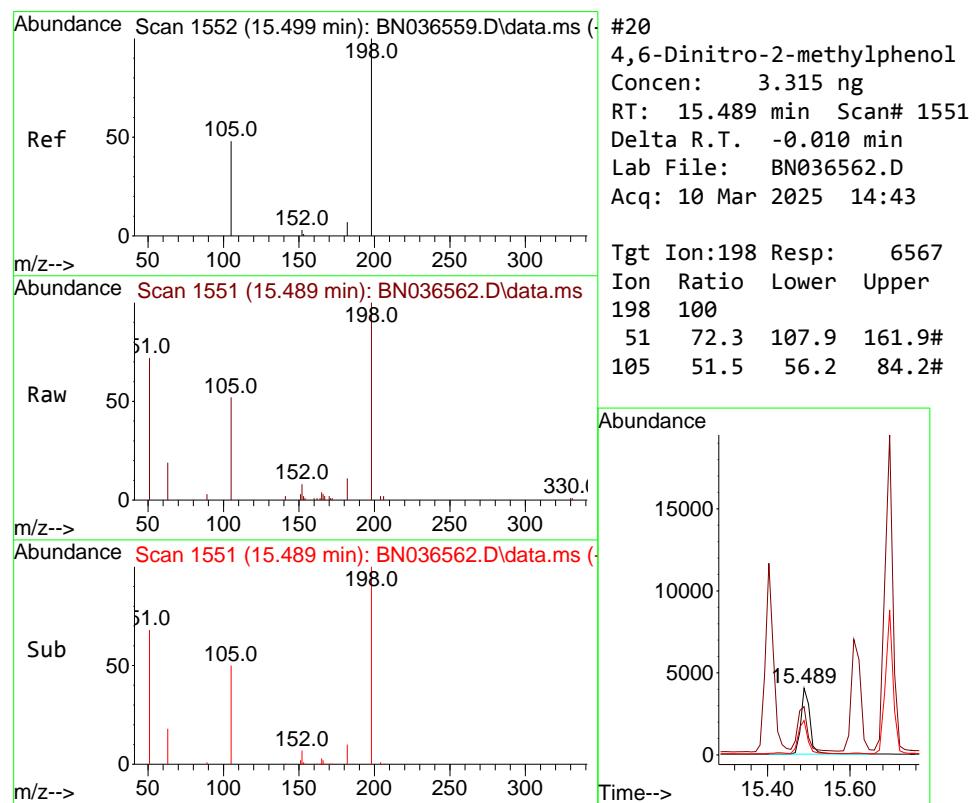
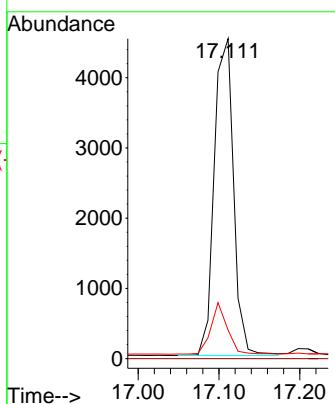




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.111 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

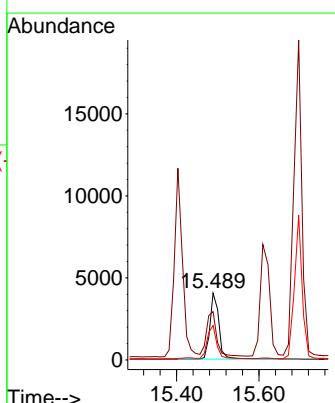
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

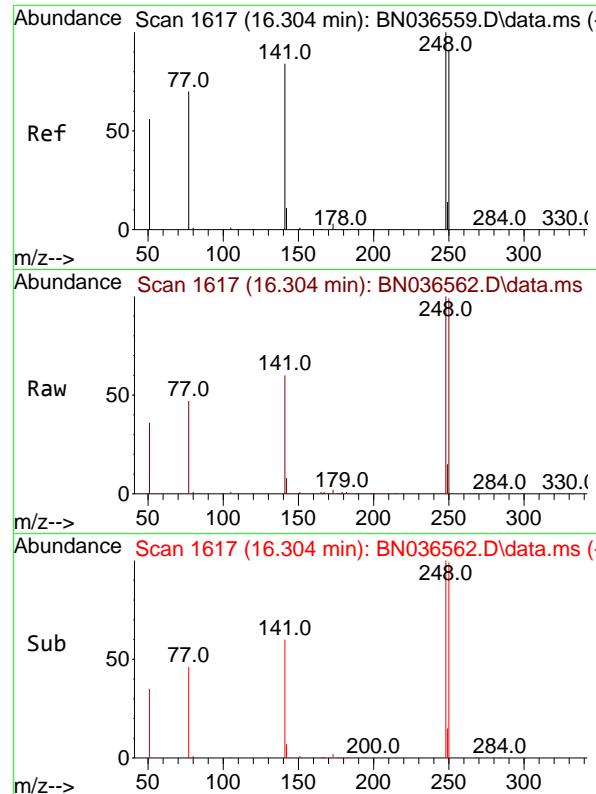
Tgt Ion:188 Resp: 7488  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 8.9 8.8 13.2



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 3.315 ng  
 RT: 15.489 min Scan# 1551  
 Delta R.T. -0.010 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

Tgt Ion:198 Resp: 6567  
 Ion Ratio Lower Upper  
 198 100  
 51 72.3 107.9 161.9#  
 105 51.5 56.2 84.2#





#21

4-Bromophenyl-phenylether

Concen: 3.549 ng

RT: 16.304 min Scan# 1 Instrument :

Delta R.T. 0.000 min BNA\_N

Lab File: BN036562.D ClientSampleId :

Acq: 10 Mar 2025 14:43 SSTDICC3.2

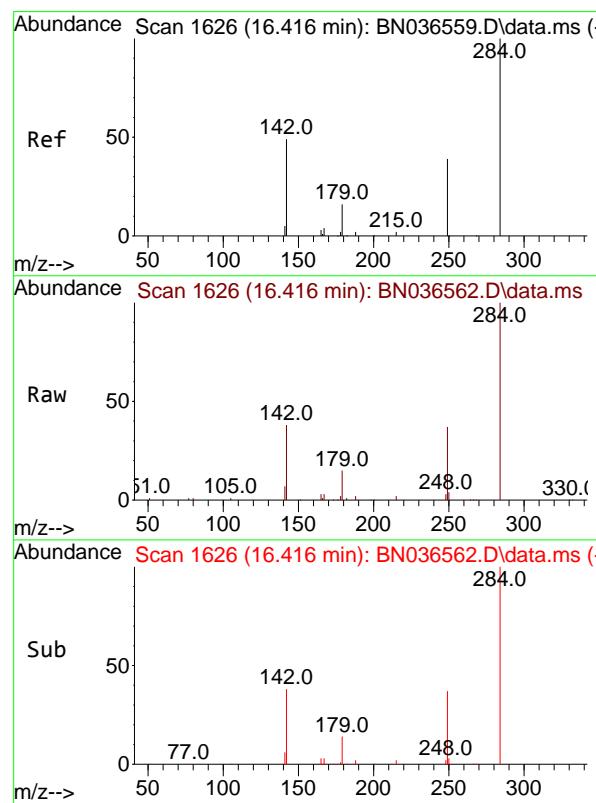
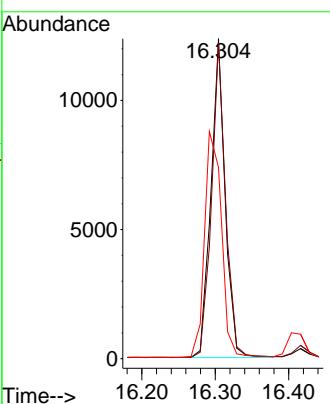
Tgt Ion:248 Resp: 16652

Ion Ratio Lower Upper

248 100

250 98.6 73.0 109.6

141 59.8 68.6 103.0#



#22

Hexachlorobenzene

Concen: 3.406 ng

RT: 16.416 min Scan# 1626

Delta R.T. 0.000 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

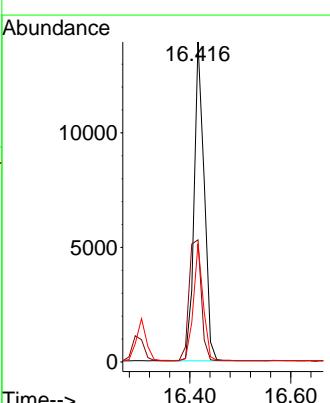
Tgt Ion:284 Resp: 19287

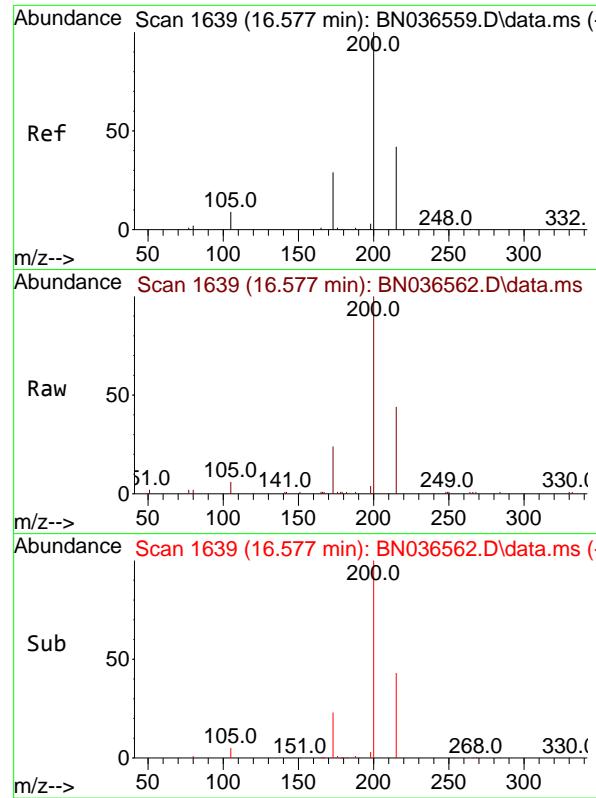
Ion Ratio Lower Upper

284 100

142 46.2 37.0 55.4

249 35.5 28.1 42.1

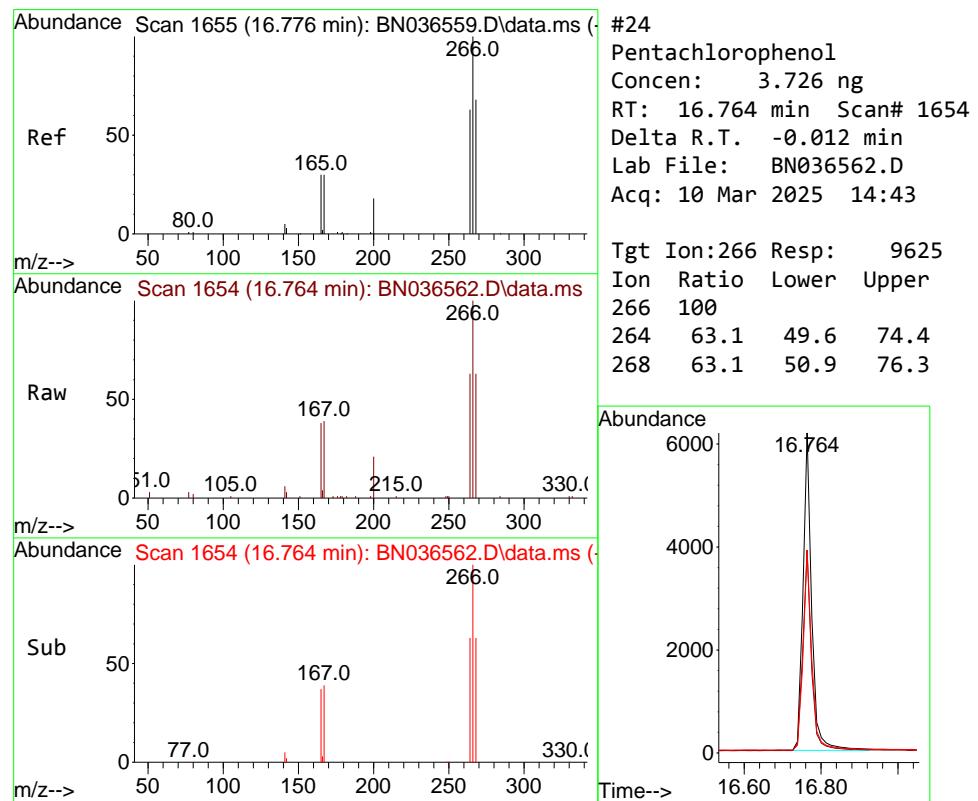
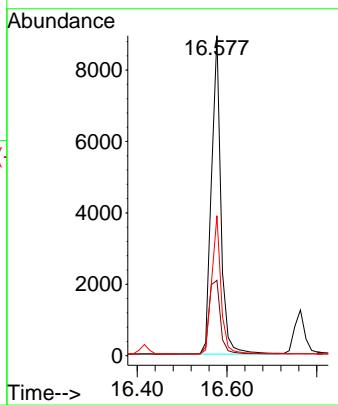




#23  
Atrazine  
Concen: 3.448 ng  
RT: 16.577 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

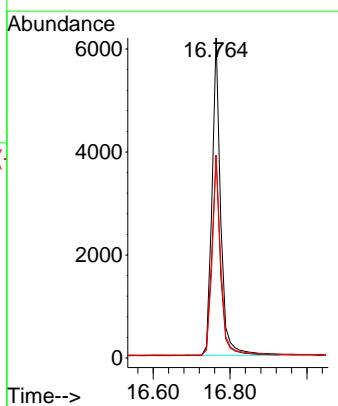
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

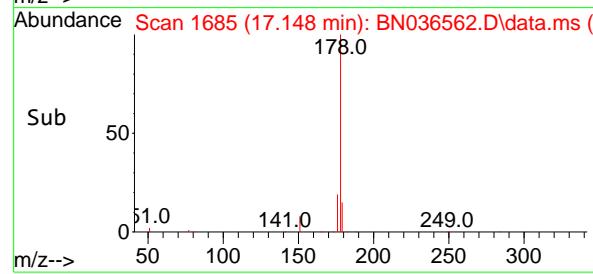
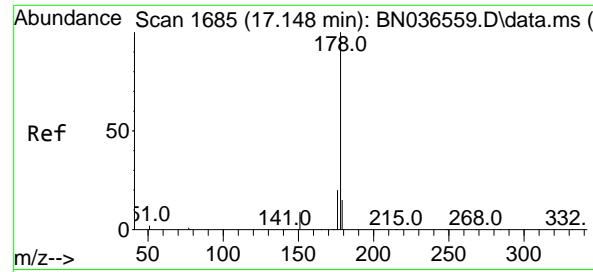
Tgt Ion:200 Resp: 12969  
Ion Ratio Lower Upper  
200 100  
173 23.6 27.3 40.9#  
215 43.7 36.8 55.2



#24  
Pentachlorophenol  
Concen: 3.726 ng  
RT: 16.764 min Scan# 1654  
Delta R.T. -0.012 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:266 Resp: 9625  
Ion Ratio Lower Upper  
266 100  
264 63.1 49.6 74.4  
268 63.1 50.9 76.3





#25

Phenanthrene

Concen: 3.468 ng

RT: 17.148 min Scan# 1

Instrument:

Delta R.T. 0.000 min

BNA\_N

Lab File: BN036562.D

ClientSampleId :

Acq: 10 Mar 2025 14:43

SSTDICC3.2

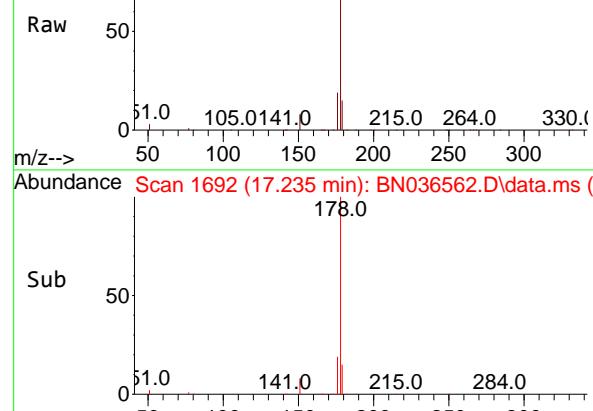
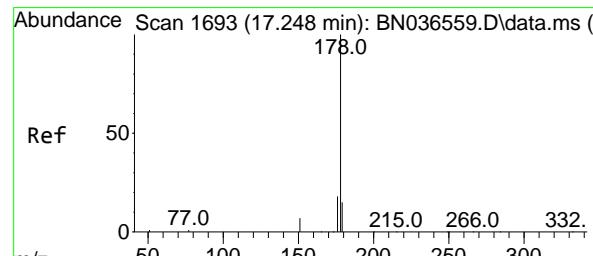
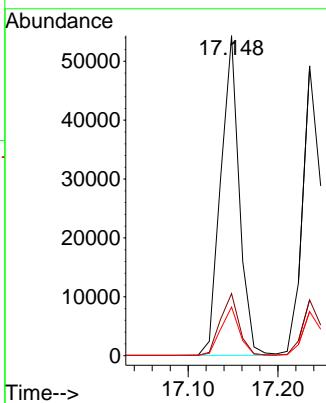
Tgt Ion:178 Resp: 77903

Ion Ratio Lower Upper

178 100

176 19.5 15.9 23.9

179 15.1 12.2 18.4



#26

Anthracene

Concen: 3.590 ng

RT: 17.235 min Scan# 1692

Delta R.T. -0.012 min

Lab File: BN036562.D

Acq: 10 Mar 2025 14:43

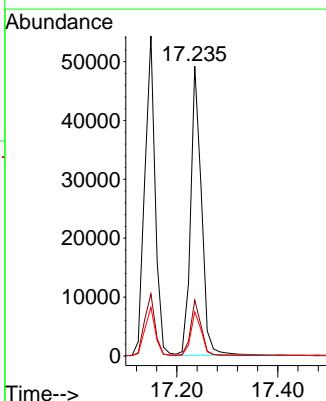
Tgt Ion:178 Resp: 72775

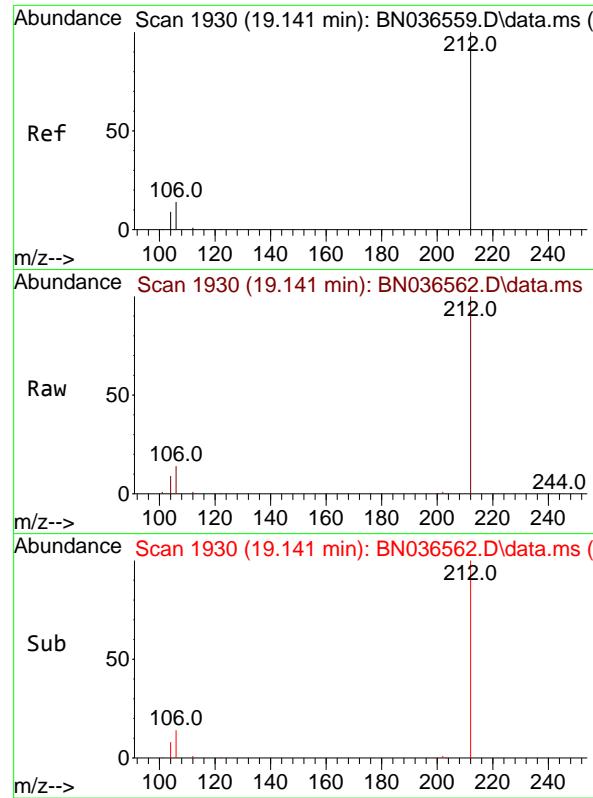
Ion Ratio Lower Upper

178 100

176 18.9 15.4 23.2

179 15.2 12.6 18.8

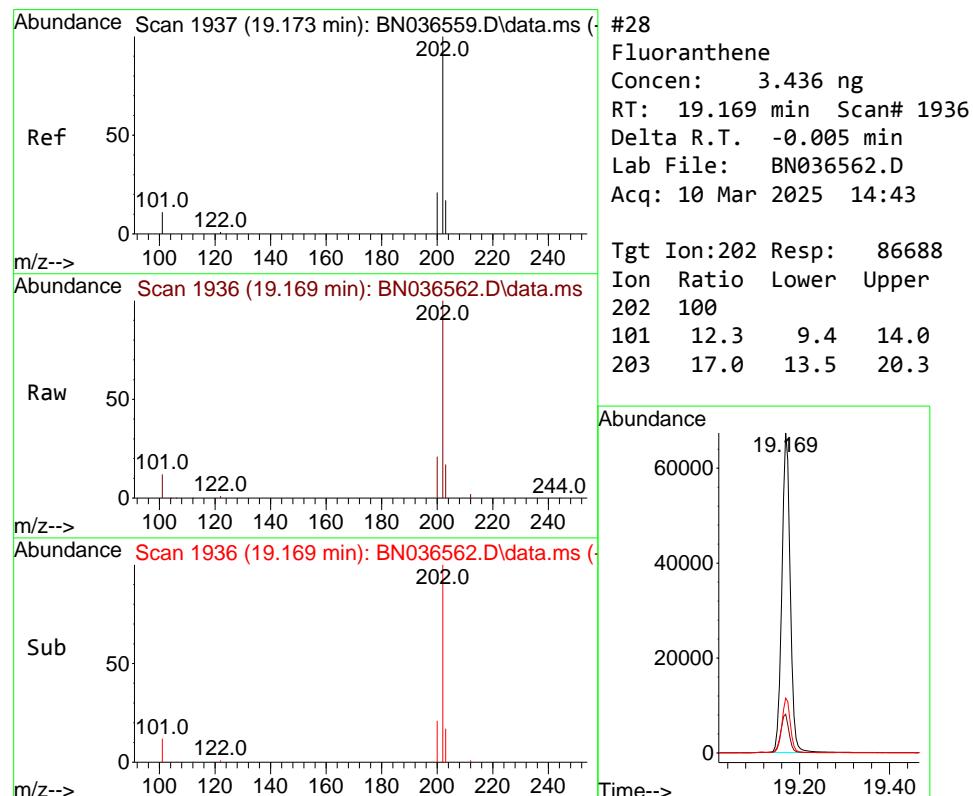
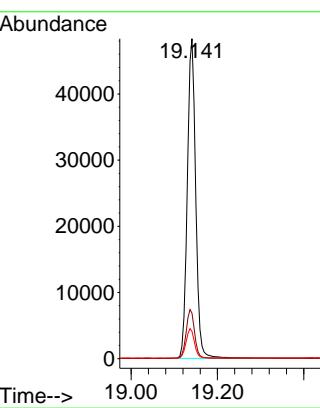




#27  
 Fluoranthene-d10  
 Concen: 3.394 ng  
 RT: 19.141 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

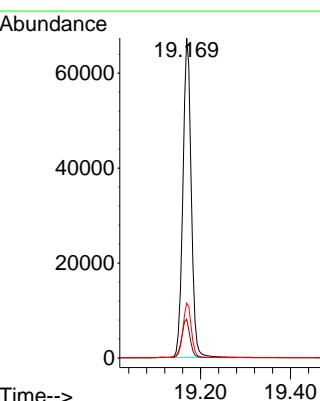
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

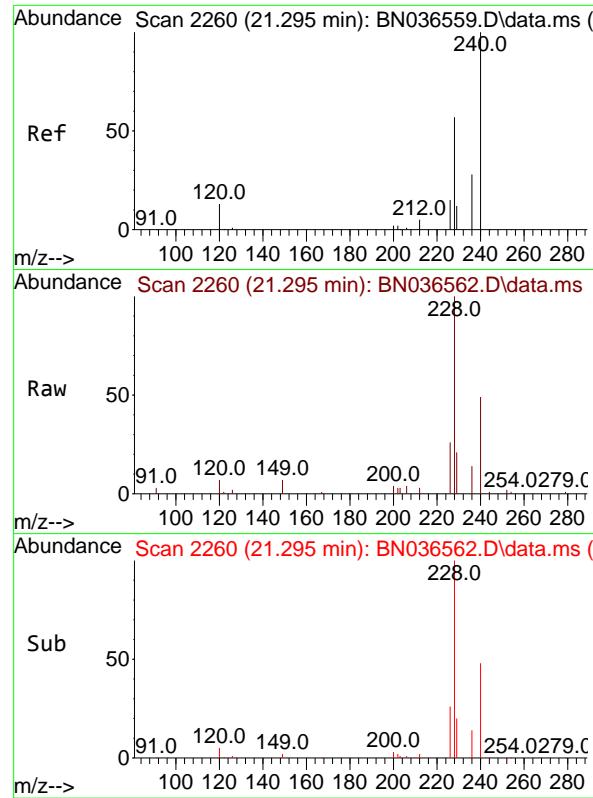
Tgt Ion:212 Resp: 65134  
 Ion Ratio Lower Upper  
 212 100  
 106 15.4 11.8 17.6  
 104 9.2 7.3 10.9



#28  
 Fluoranthene  
 Concen: 3.436 ng  
 RT: 19.169 min Scan# 1936  
 Delta R.T. -0.005 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

Tgt Ion:202 Resp: 86688  
 Ion Ratio Lower Upper  
 202 100  
 101 12.3 9.4 14.0  
 203 17.0 13.5 20.3

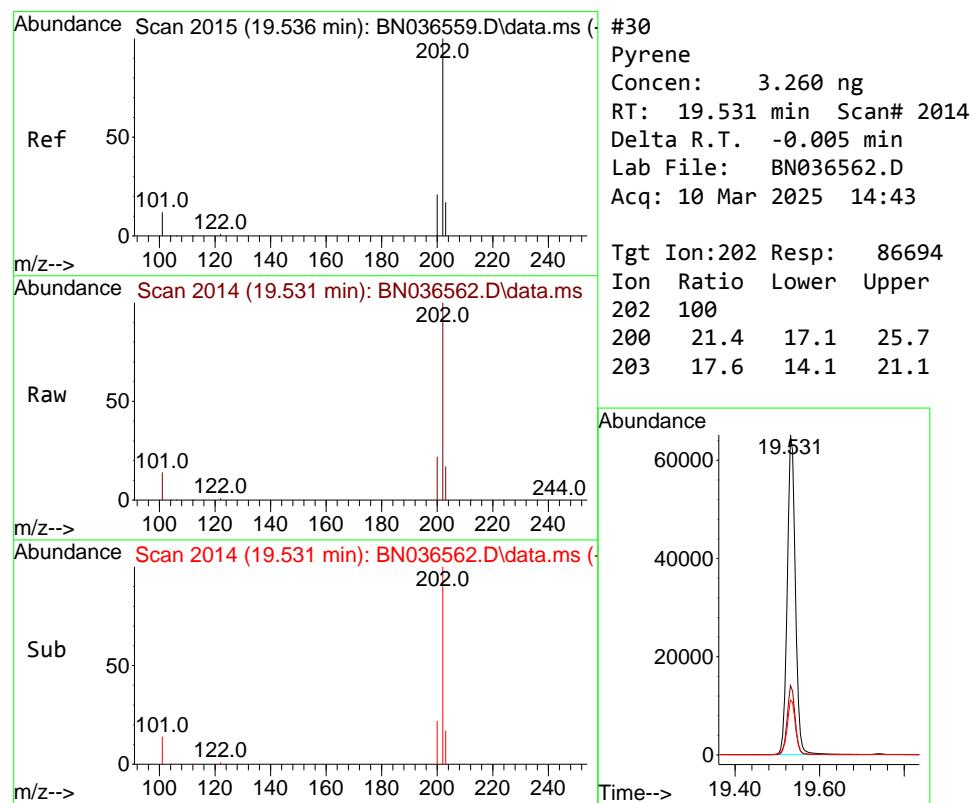
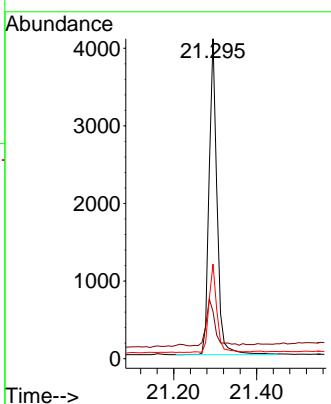




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.295 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

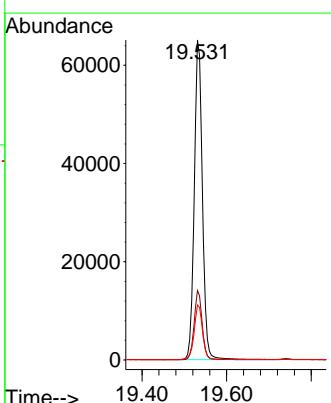
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

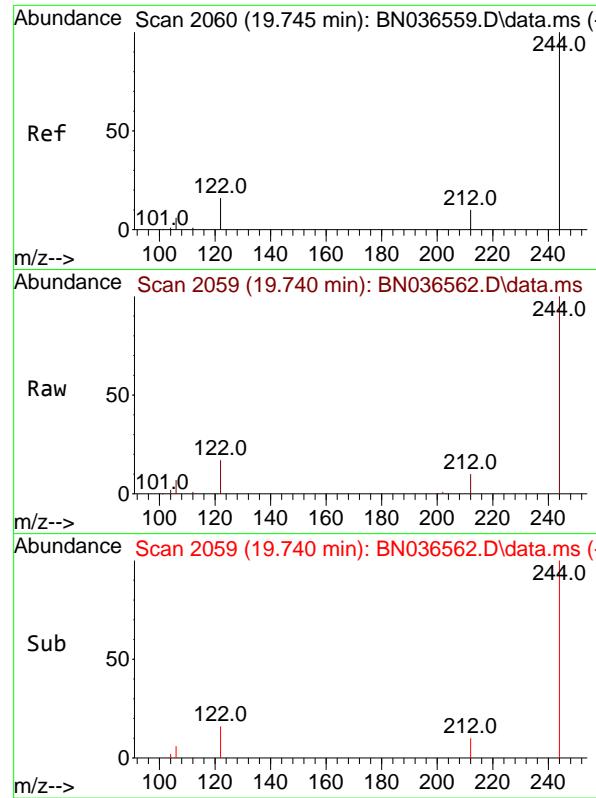
Tgt Ion:240 Resp: 5439  
Ion Ratio Lower Upper  
240 100  
120 14.8 14.6 22.0  
236 29.5 24.1 36.1



#30  
Pyrene  
Concen: 3.260 ng  
RT: 19.531 min Scan# 2014  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:202 Resp: 86694  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.6 14.1 21.1

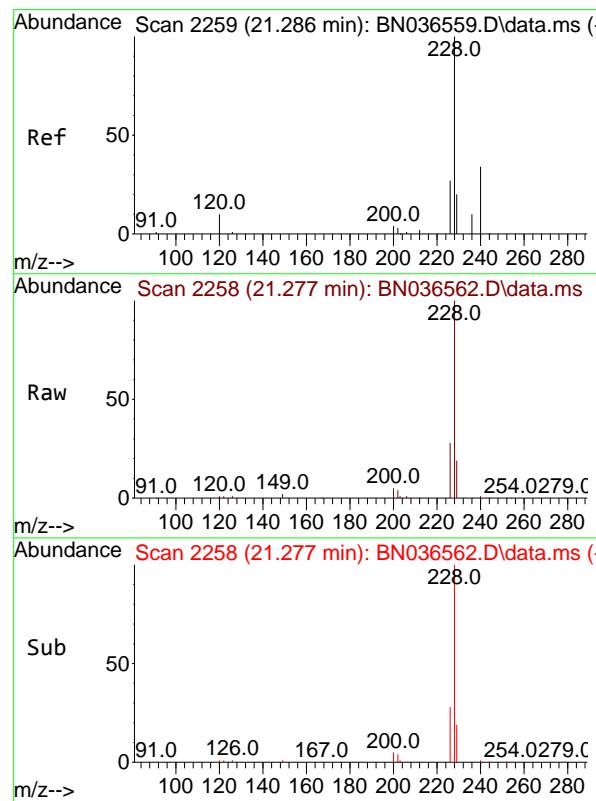
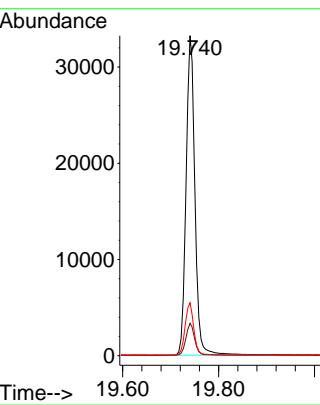




#31  
Terphenyl-d14  
Concen: 3.297 ng  
RT: 19.740 min Scan# 2  
Delta R.T. -0.005 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

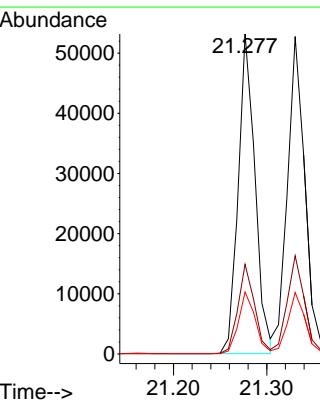
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

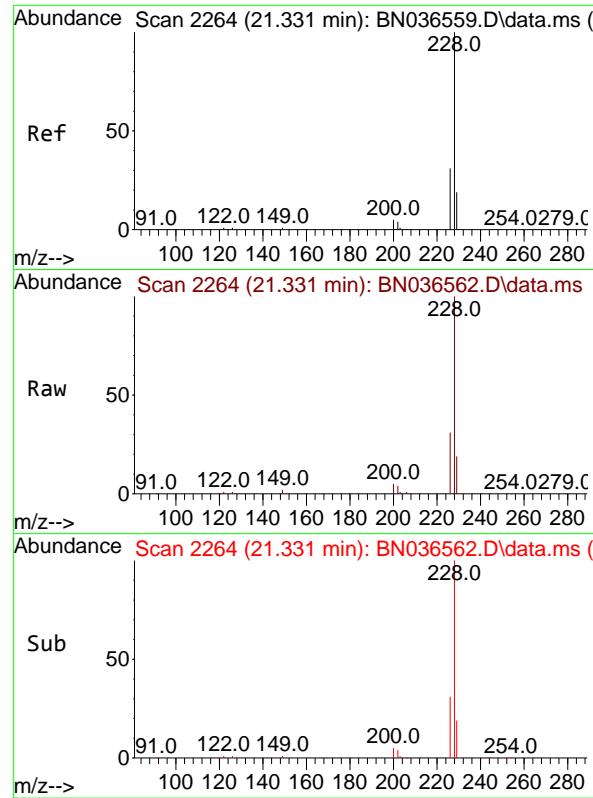
Tgt Ion:244 Resp: 42959  
Ion Ratio Lower Upper  
244 100  
212 10.1 9.6 14.4  
122 16.6 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 3.516 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

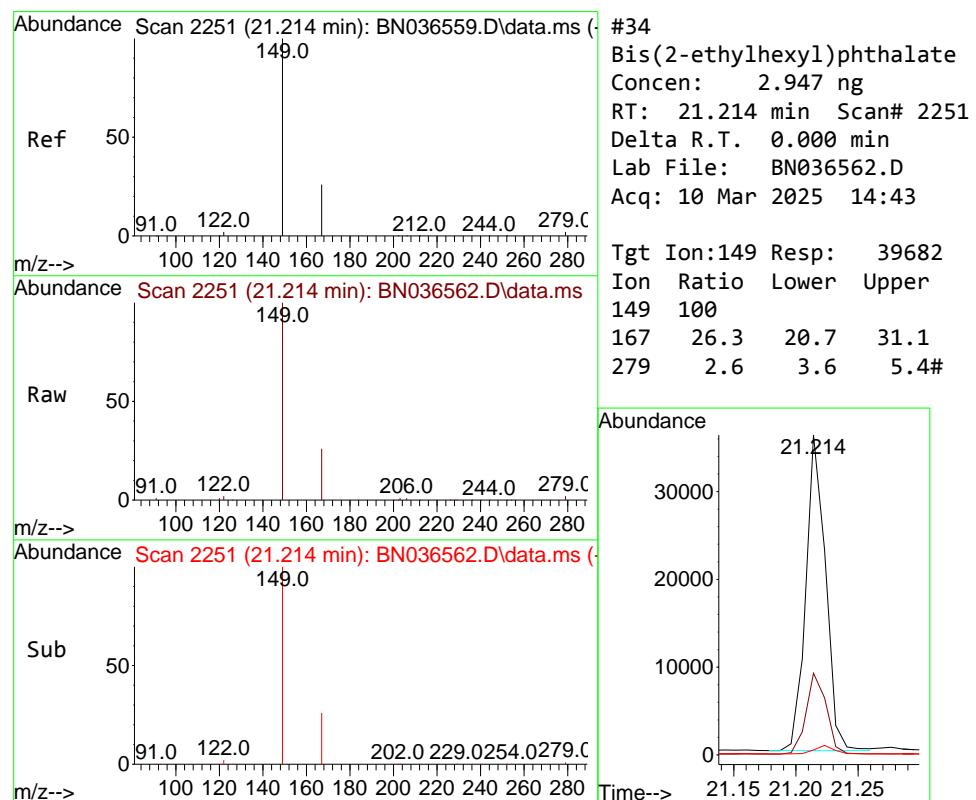
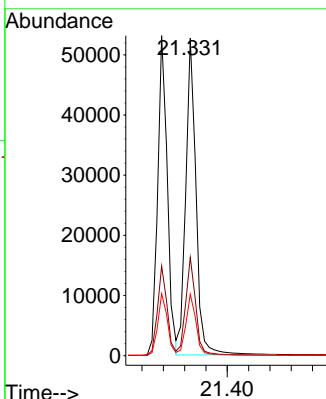
Tgt Ion:228 Resp: 66496  
Ion Ratio Lower Upper  
228 100  
226 28.0 22.5 33.7  
229 19.4 16.6 25.0





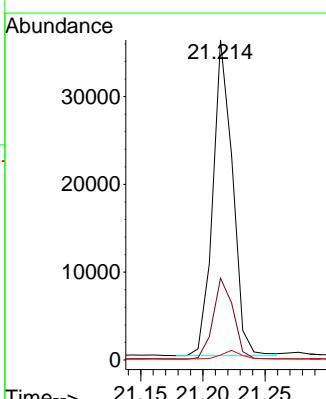
#33  
Chrysene  
Concen: 3.403 ng  
RT: 21.331 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43  
ClientSampleId : SSTDICC3.2

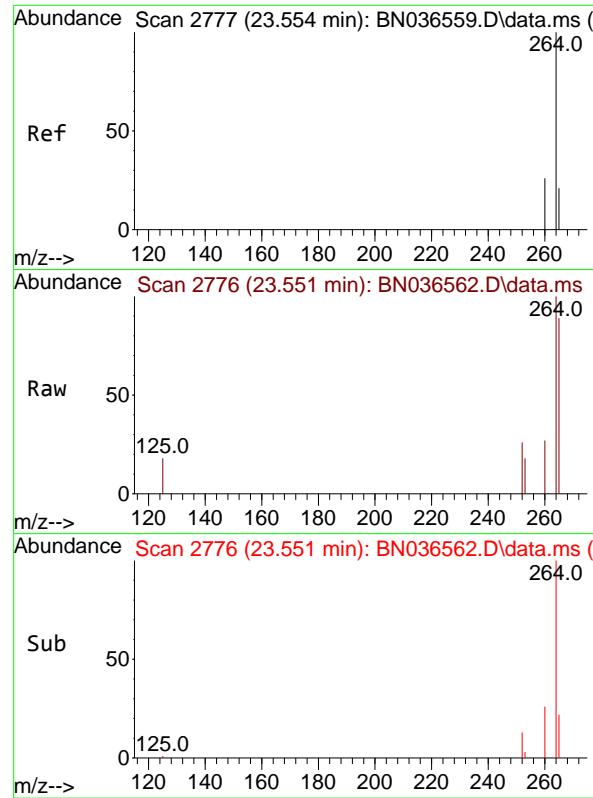
Tgt Ion:228 Resp: 70334  
Ion Ratio Lower Upper  
228 100  
226 31.0 25.3 37.9  
229 19.4 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 2.947 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:149 Resp: 39682  
Ion Ratio Lower Upper  
149 100  
167 26.3 20.7 31.1  
279 2.6 3.6 5.4#

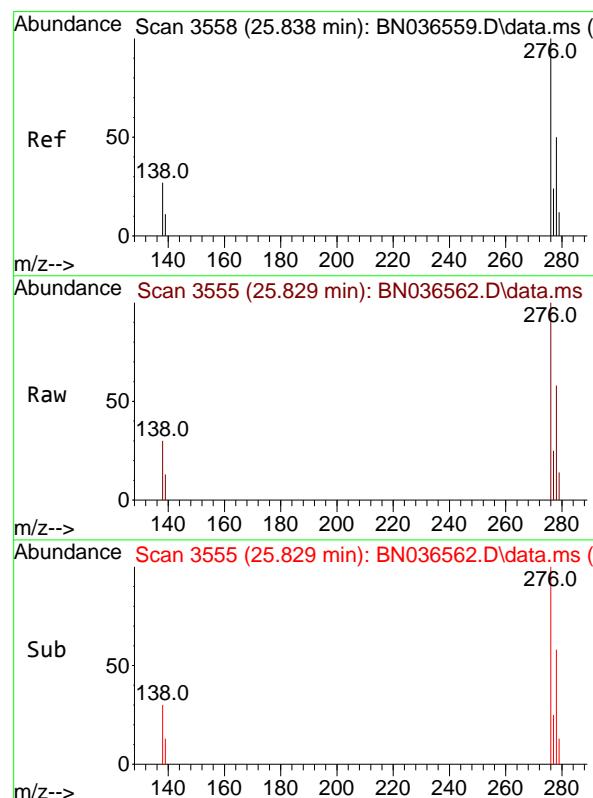
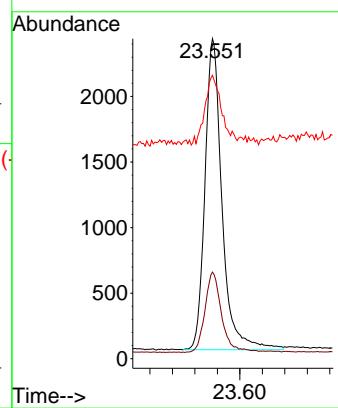




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.551 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

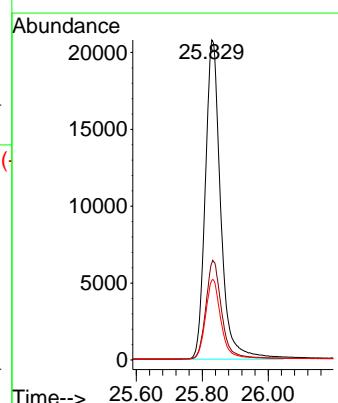
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC3.2

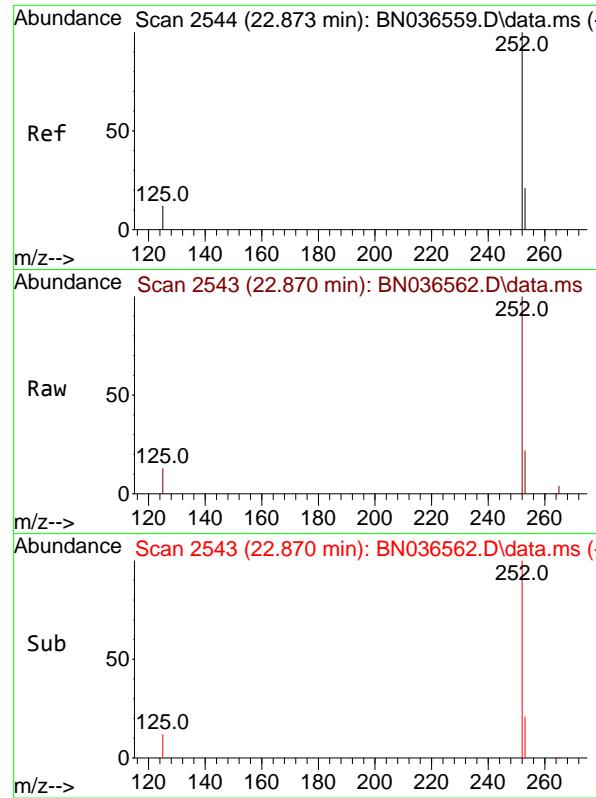
Tgt Ion:264 Resp: 5002  
Ion Ratio Lower Upper  
264 100  
260 27.0 22.6 33.8  
265 88.6 88.1 132.1



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 3.754 ng  
RT: 25.829 min Scan# 3555  
Delta R.T. -0.009 min  
Lab File: BN036562.D  
Acq: 10 Mar 2025 14:43

Tgt Ion:276 Resp: 67767  
Ion Ratio Lower Upper  
276 100  
138 31.3 23.4 35.2  
277 24.8 20.0 30.0

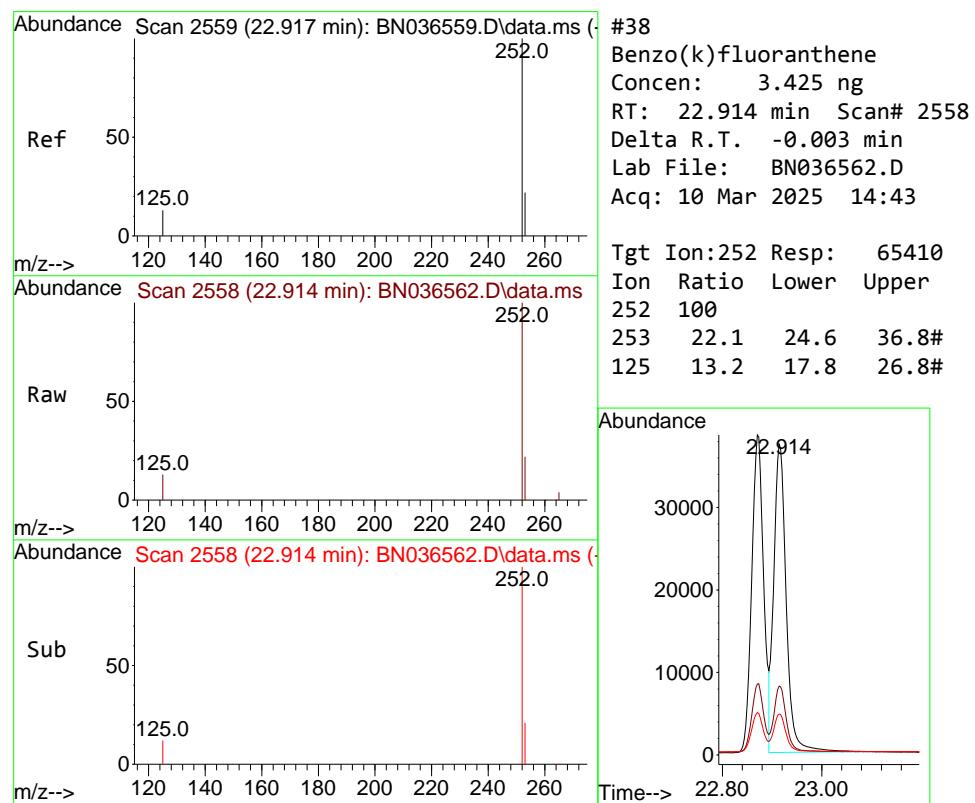
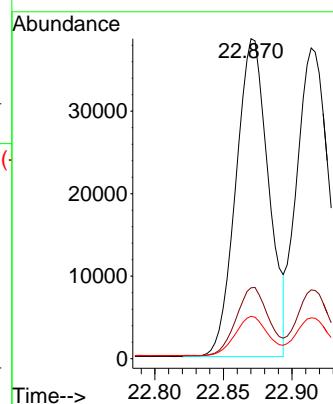




#37  
 Benzo(b)fluoranthene  
 Concen: 3.506 ng  
 RT: 22.870 min Scan# 2  
 Delta R.T. -0.003 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

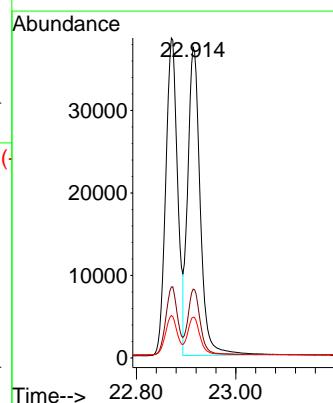
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

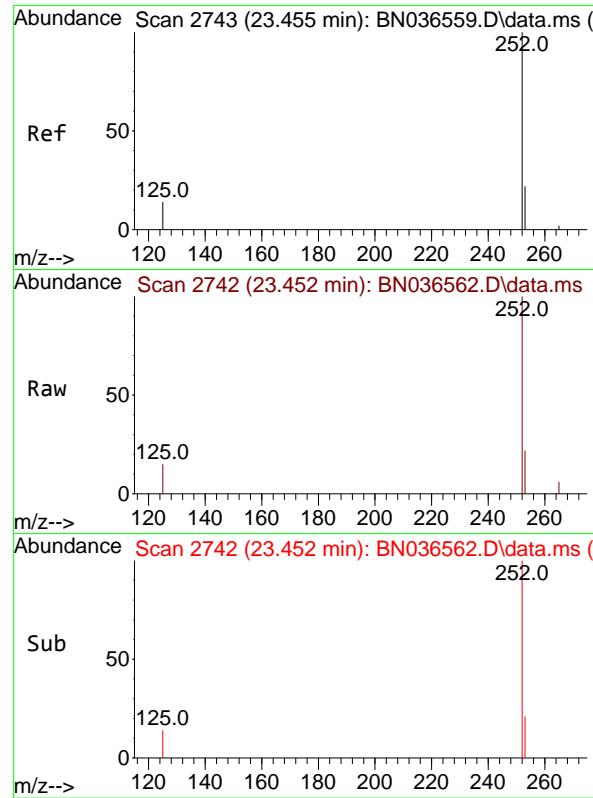
Tgt Ion:252 Resp: 63823  
 Ion Ratio Lower Upper  
 252 100  
 253 22.2 23.9 35.9#  
 125 13.3 17.4 26.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 3.425 ng  
 RT: 22.914 min Scan# 2558  
 Delta R.T. -0.003 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

Tgt Ion:252 Resp: 65410  
 Ion Ratio Lower Upper  
 252 100  
 253 22.1 24.6 36.8#  
 125 13.2 17.8 26.8#

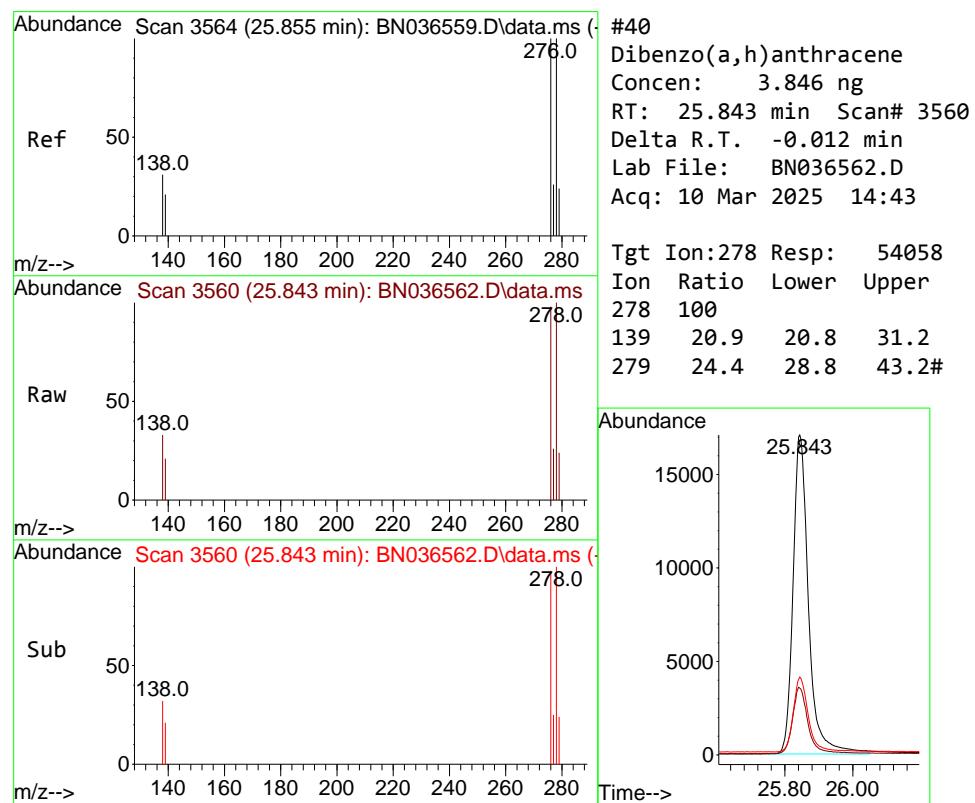
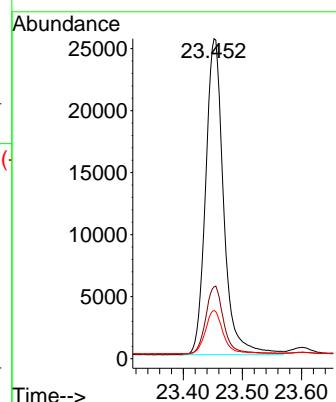




#39  
 Benzo(a)pyrene  
 Concen: 3.523 ng  
 RT: 23.452 min Scan# 2  
 Delta R.T. -0.003 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

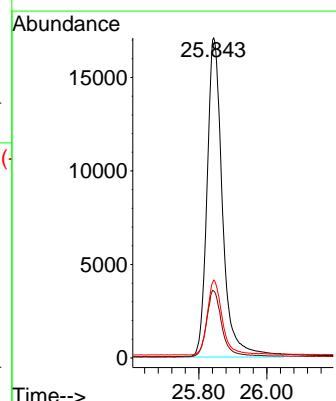
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

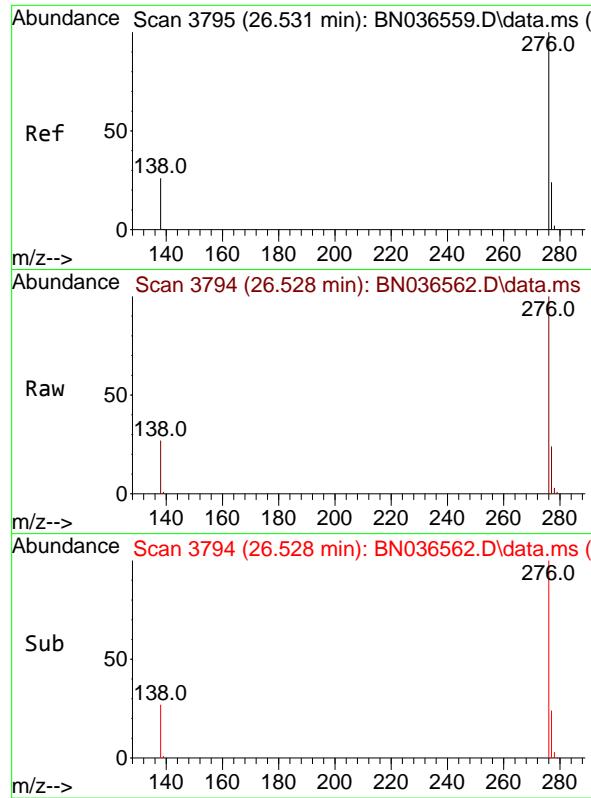
Tgt Ion:252 Resp: 54009  
 Ion Ratio Lower Upper  
 252 100  
 253 22.4 27.8 41.8#  
 125 15.1 22.7 34.1#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 3.846 ng  
 RT: 25.843 min Scan# 3560  
 Delta R.T. -0.012 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

Tgt Ion:278 Resp: 54058  
 Ion Ratio Lower Upper  
 278 100  
 139 20.9 20.8 31.2  
 279 24.4 28.8 43.2#

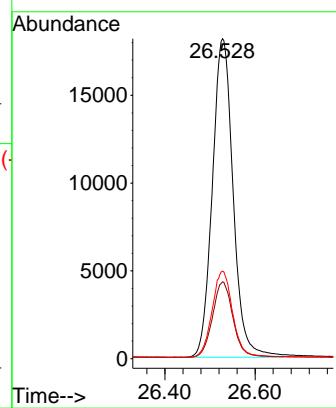




#41  
 Benzo(g,h,i)perylene  
 Concen: 3.606 ng  
 RT: 26.528 min Scan# 3  
 Delta R.T. -0.003 min  
 Lab File: BN036562.D  
 Acq: 10 Mar 2025 14:43

Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

Tgt Ion:276 Resp: 57986  
 Ion Ratio Lower Upper  
 276 100  
 277 24.0 22.2 33.4  
 138 27.4 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036563.D  
 Acq On : 10 Mar 2025 15:19  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Mar 10 16:03:20 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

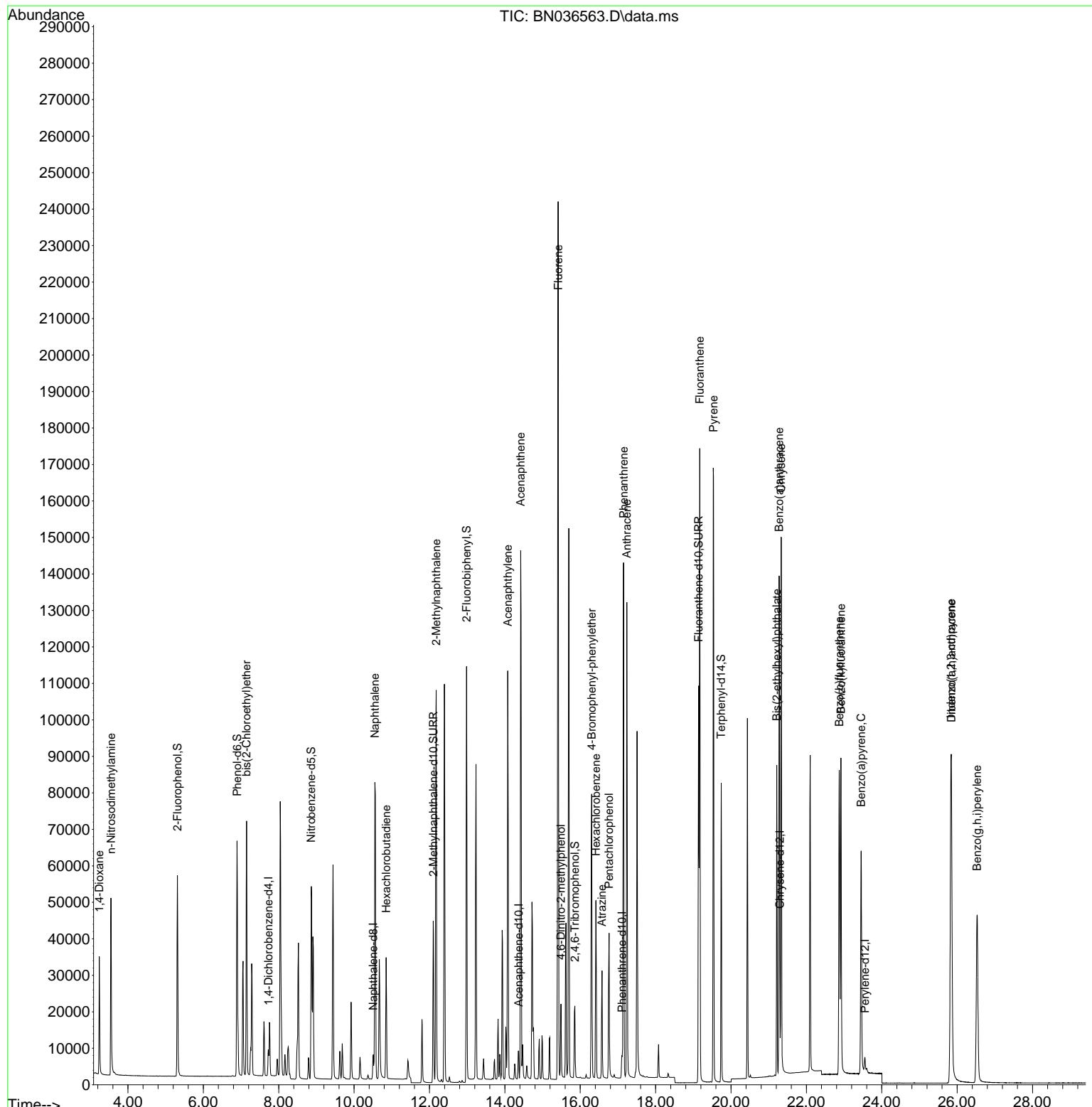
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	3261	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	7995	0.400	ng	# 0.00
13) Acenaphthene-d10	14.366	164	4664	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	9061	0.400	ng	0.00
29) Chrysene-d12	21.295	240	6472	0.400	ng	0.00
35) Perylene-d12	23.551	264	5580	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	37154	4.889	ng	0.00
5) Phenol-d6	6.894	99	48085	5.122	ng	0.00
8) Nitrobenzene-d5	8.864	82	41042	4.719	ng	-0.01
11) 2-Methylnaphthalene-d10	12.101	152	58048	4.881	ng	-0.01
14) 2,4,6-Tribromophenol	15.858	330	10964	5.181	ng	0.00
15) 2-Fluorobiphenyl	12.983	172	141052	5.199	ng	0.00
27) Fluoranthene-d10	19.141	212	113317	4.879	ng	0.00
31) Terphenyl-d14	19.740	244	74923	4.832	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.239	88	16253	4.492	ng	97
3) n-Nitrosodimethylamine	3.550	42	32163	4.395	ng	# 95
6) bis(2-Chloroethyl)ether	7.146	93	44986	4.636	ng	99
9) Naphthalene	10.551	128	109289	4.647	ng	97
10) Hexachlorobutadiene	10.850	225	25105	4.535	ng	# 99
12) 2-Methylnaphthalene	12.177	142	73010	4.879	ng	98
16) Acenaphthylene	14.077	152	112792	5.125	ng	99
17) Acenaphthene	14.420	154	72446	5.028	ng	96
18) Fluorene	15.414	166	96215	4.937	ng	97
20) 4,6-Dinitro-2-methylph...	15.489	198	12627	4.968	ng	# 56
21) 4-Bromophenyl-phenylether	16.304	248	28657	5.048	ng	# 81
22) Hexachlorobenzene	16.416	284	32686	4.770	ng	99
23) Atrazine	16.577	200	22705	4.988	ng	# 90
24) Pentachlorophenol	16.764	266	17612	5.634	ng	99
25) Phenanthrene	17.148	178	135347	4.979	ng	100
26) Anthracene	17.235	178	125954	5.135	ng	99
28) Fluoranthene	19.169	202	149107	4.883	ng	99
30) Pyrene	19.536	202	148584	4.695	ng	100
32) Benzo(a)anthracene	21.277	228	114481	5.087	ng	98
33) Chrysene	21.331	228	117149	4.764	ng	99
34) Bis(2-ethylhexyl)phtha...	21.214	149	70345	4.390	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.835	276	109561	5.440	ng	98
37) Benzo(b)fluoranthene	22.873	252	104498	5.146	ng	# 84
38) Benzo(k)fluoranthene	22.917	252	106995	5.022	ng	# 82
39) Benzo(a)pyrene	23.452	252	88413	5.170	ng	# 76
40) Dibenzo(a,h)anthracene	25.846	278	87308	5.568	ng	# 84
41) Benzo(g,h,i)perylene	26.531	276	93067	5.189	ng	93

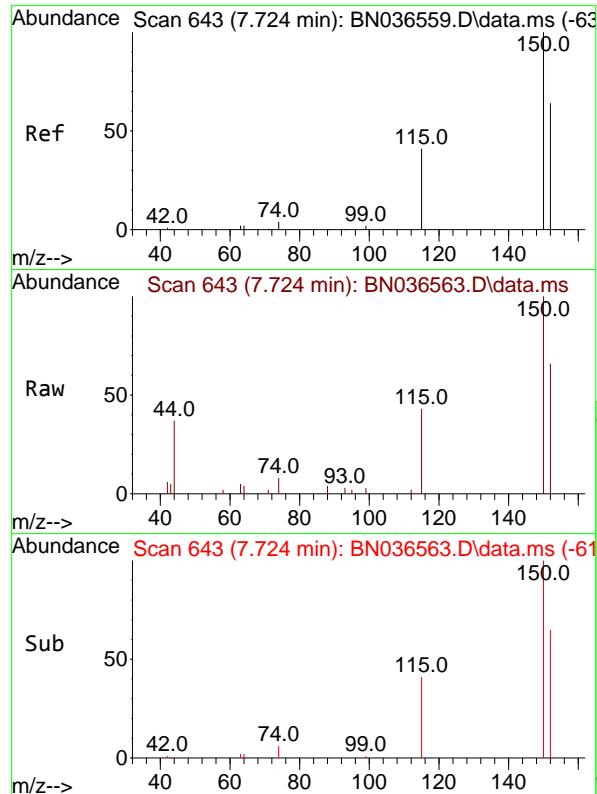
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036563.D  
 Acq On : 10 Mar 2025 15:19  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Mar 10 16:03:20 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 15:54:23 2025  
 Response via : Initial Calibration

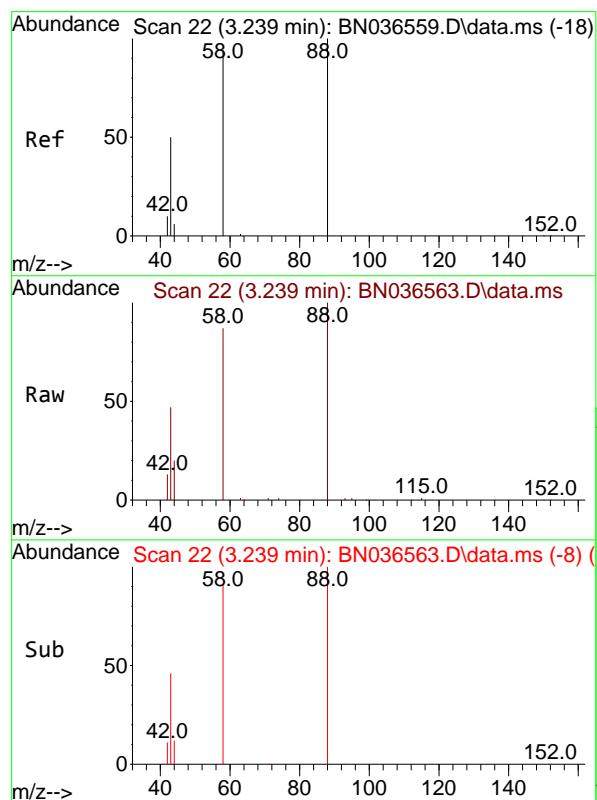
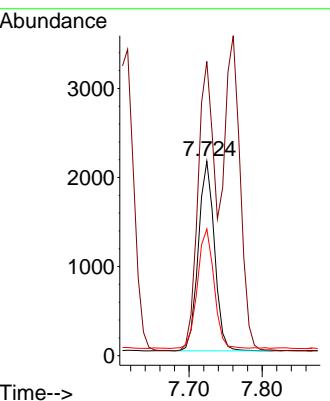




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

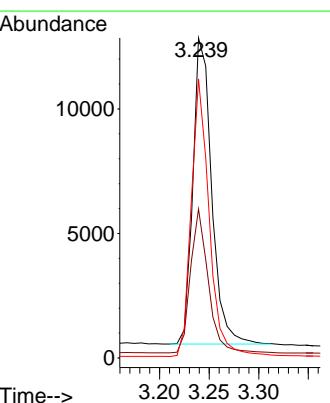
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

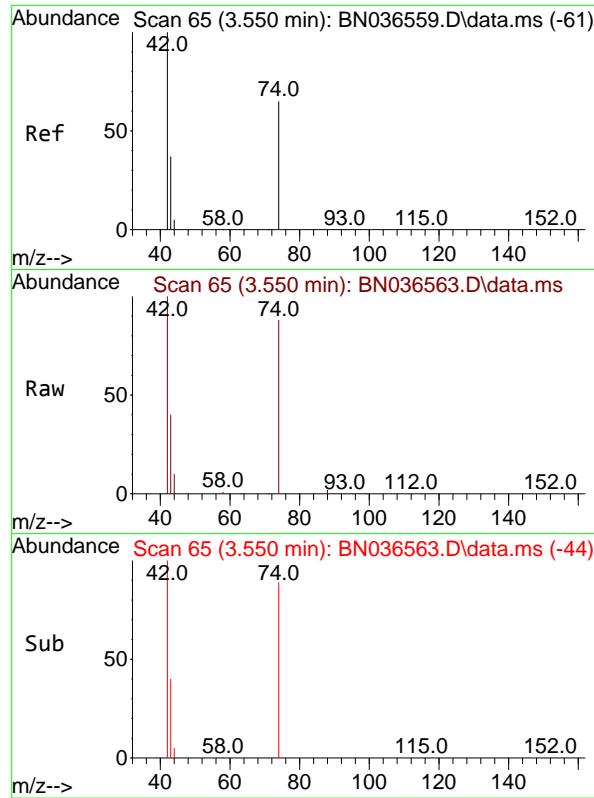
Tgt Ion:152 Resp: 3261  
Ion Ratio Lower Upper  
152 100  
150 151.3 123.7 185.5  
115 65.2 54.3 81.5



#2  
1,4-Dioxane  
Concen: 4.492 ng  
RT: 3.239 min Scan# 22  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion: 88 Resp: 16253  
Ion Ratio Lower Upper  
88 100  
43 44.3 37.8 56.8  
58 86.4 67.4 101.2

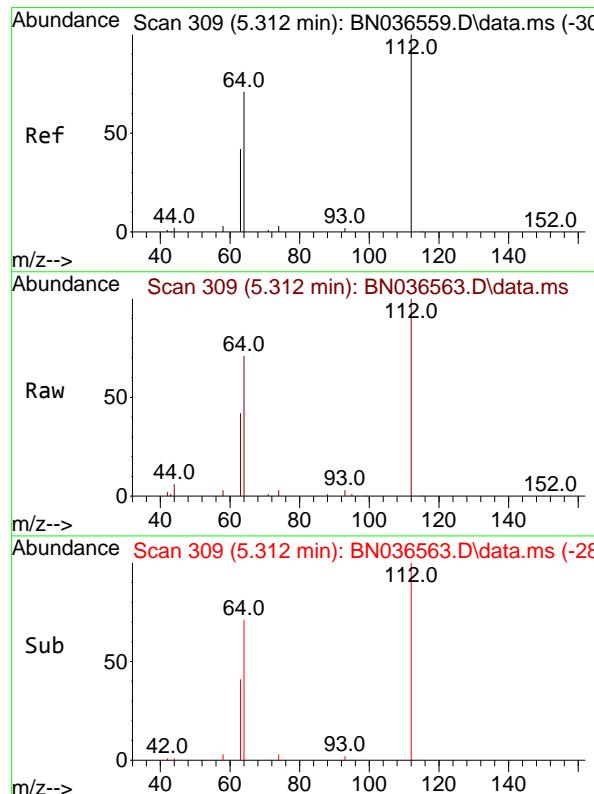
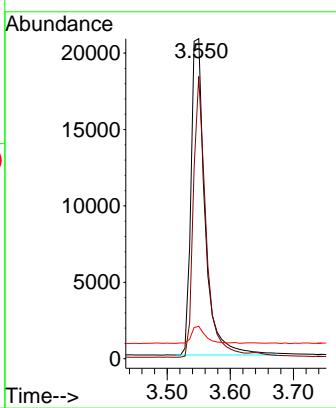




#3  
n-Nitrosodimethylamine  
Concen: 4.395 ng  
RT: 3.550 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

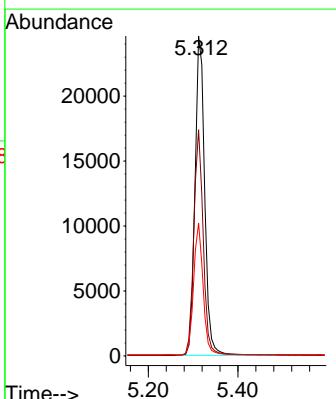
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

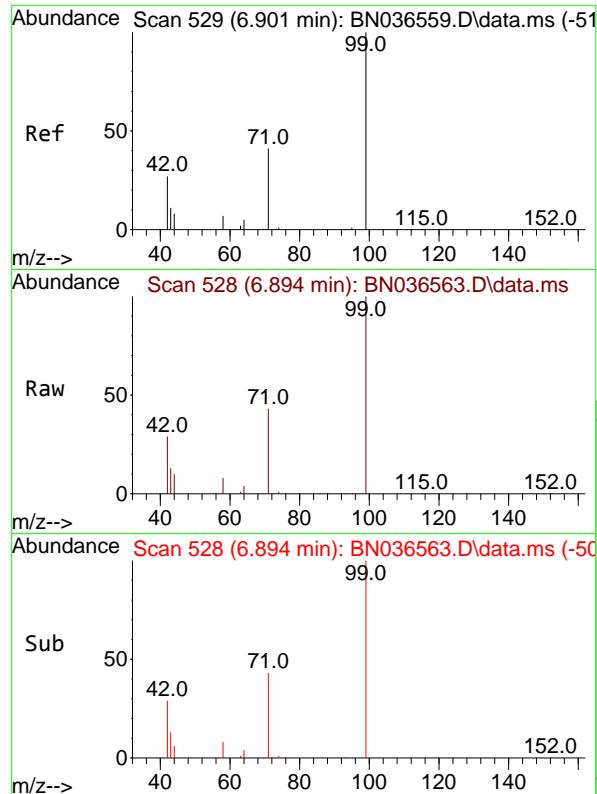
Tgt Ion: 42 Resp: 32163  
Ion Ratio Lower Upper  
42 100  
74 79.9 60.6 90.8  
44 5.3 6.3 9.5#



#4  
2-Fluorophenol  
Concen: 4.889 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion: 112 Resp: 37154  
Ion Ratio Lower Upper  
112 100  
64 68.5 53.1 79.7  
63 40.1 31.8 47.8

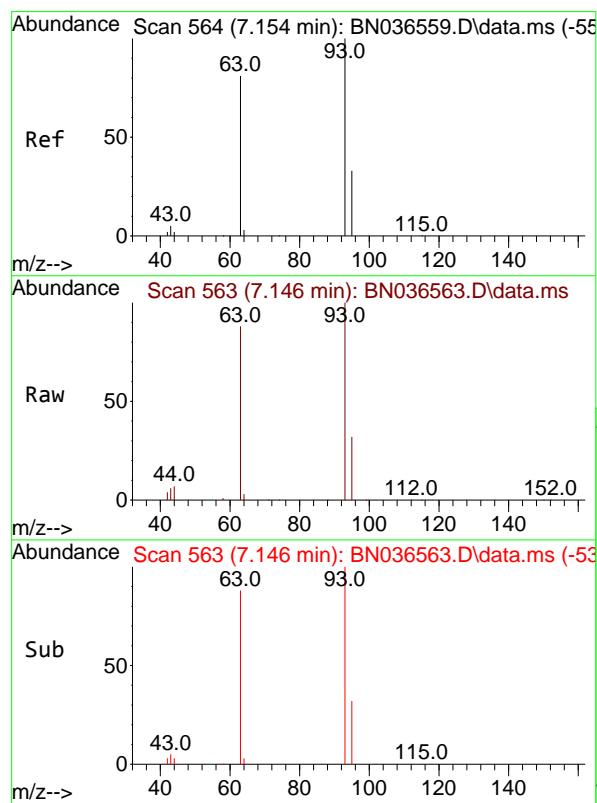
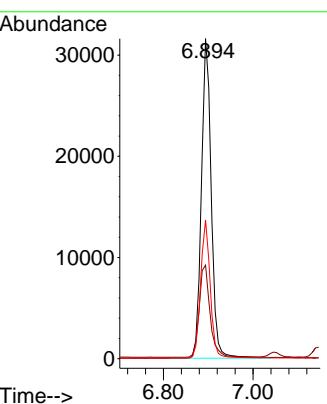




#5  
 Phenol-d6  
 Concen: 5.122 ng  
 RT: 6.894 min Scan# 5  
 Delta R.T. -0.007 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

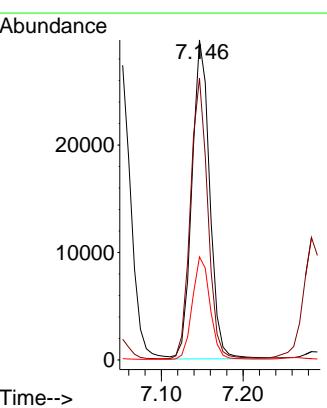
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

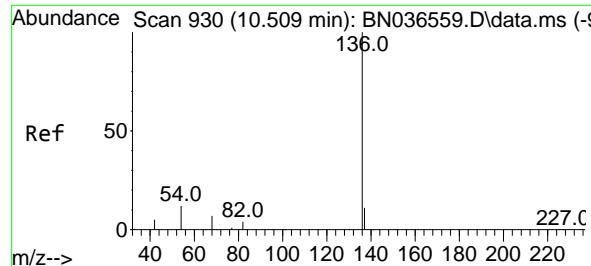
Tgt Ion: 99 Resp: 48085  
 Ion Ratio Lower Upper  
 99 100  
 42 31.8 26.5 39.7  
 71 42.6 34.1 51.1



#6  
 bis(2-Chloroethyl)ether  
 Concen: 4.636 ng  
 RT: 7.146 min Scan# 563  
 Delta R.T. -0.007 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

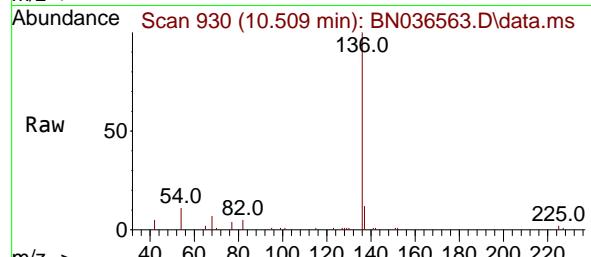
Tgt Ion: 93 Resp: 44986  
 Ion Ratio Lower Upper  
 93 100  
 63 85.8 67.7 101.5  
 95 32.0 25.6 38.4



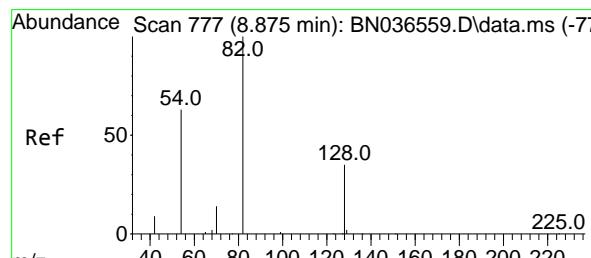
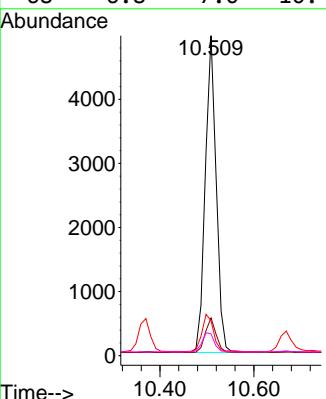
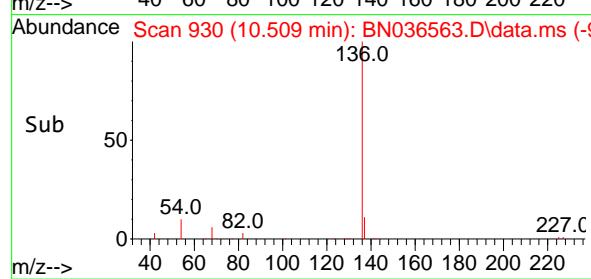


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.509 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

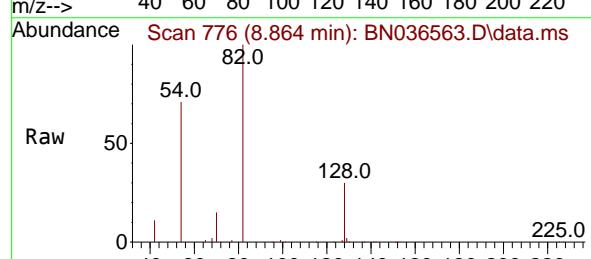
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0



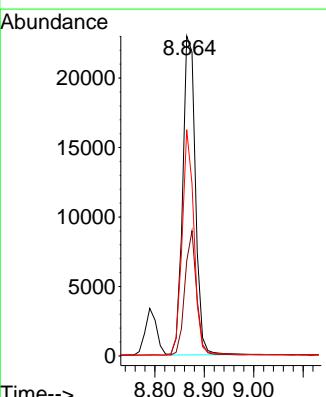
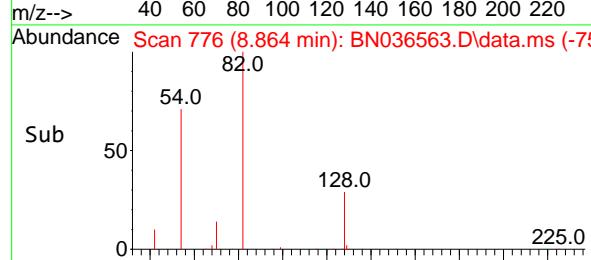
Tgt Ion:136 Resp: 7995  
 Ion Ratio Lower Upper  
 136 100  
 137 11.8 10.3 15.5  
 54 10.9 11.5 17.3#  
 68 6.8 7.0 10.4#

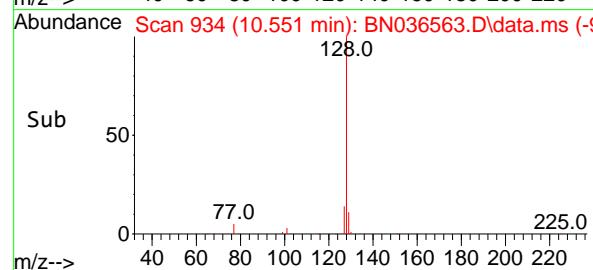
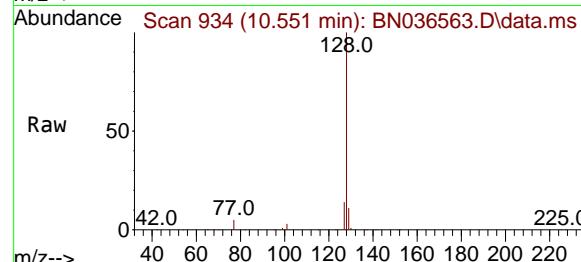
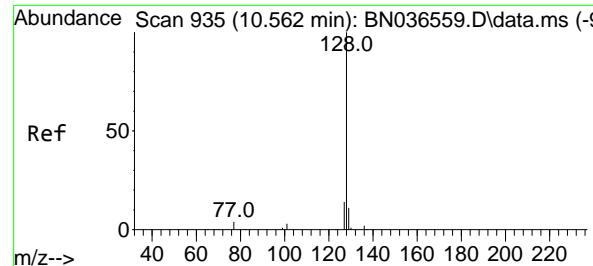


#8  
 Nitrobenzene-d5  
 Concen: 4.719 ng  
 RT: 8.864 min Scan# 776  
 Delta R.T. -0.011 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19



Tgt Ion: 82 Resp: 41042  
 Ion Ratio Lower Upper  
 82 100  
 128 29.7 30.6 45.8#  
 54 70.7 52.2 78.4

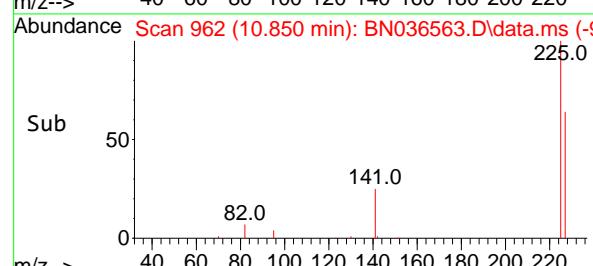
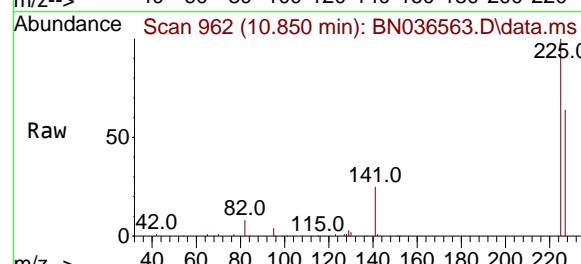
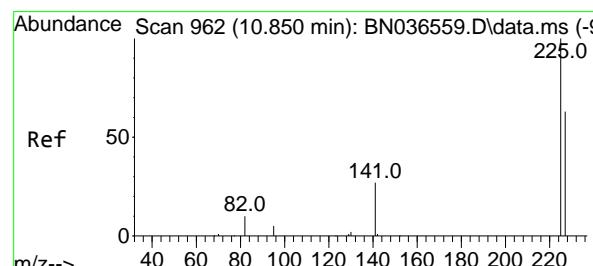
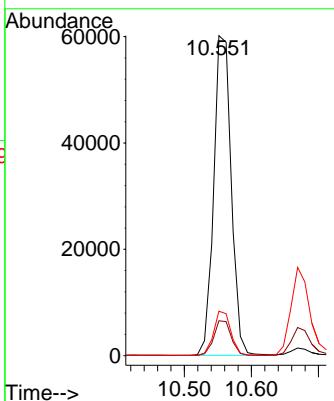




#9  
Naphthalene  
Concen: 4.647 ng  
RT: 10.551 min Scan# 9  
Delta R.T. -0.011 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

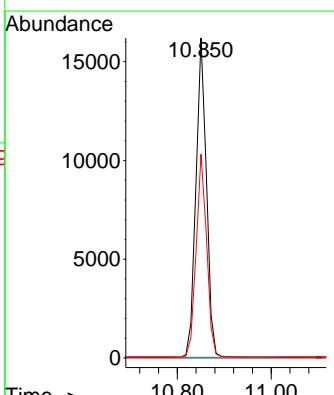
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

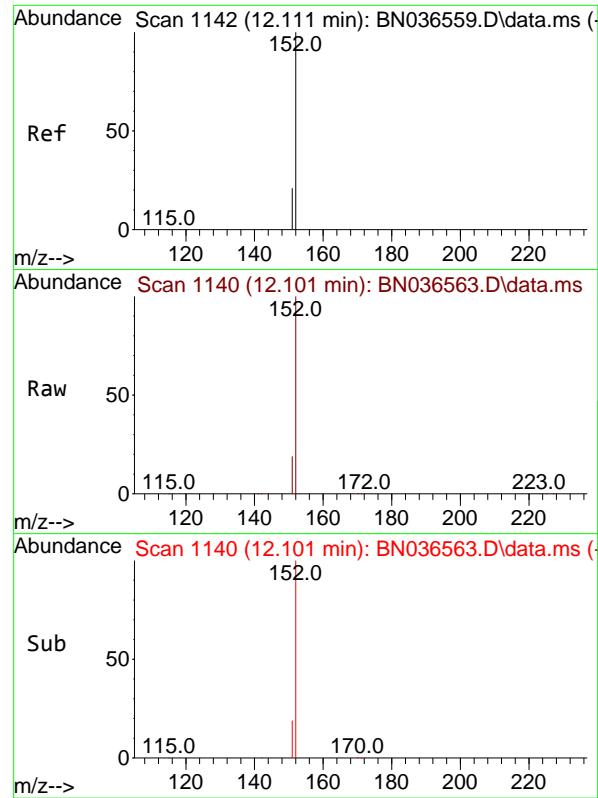
Tgt Ion:128 Resp: 109289  
Ion Ratio Lower Upper  
128 100  
129 10.9 9.8 14.6  
127 13.9 11.8 17.8



#10  
Hexachlorobutadiene  
Concen: 4.535 ng  
RT: 10.850 min Scan# 962  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

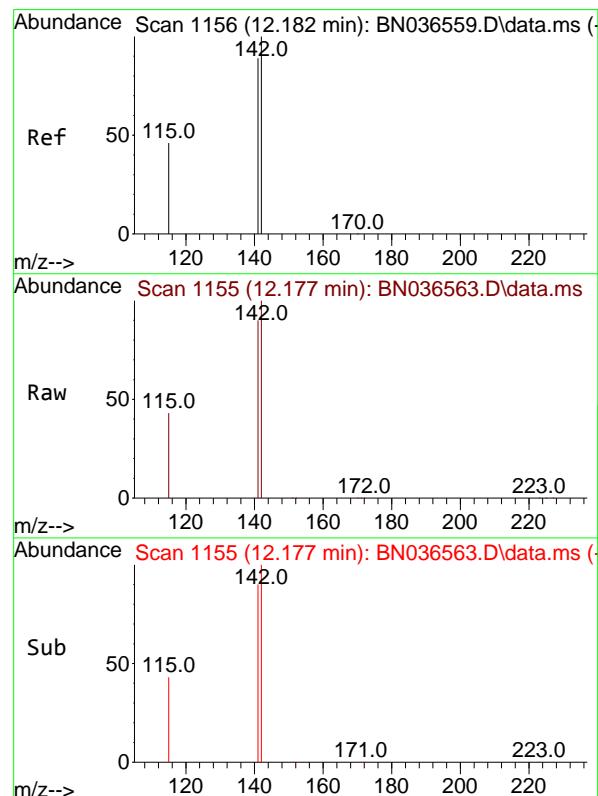
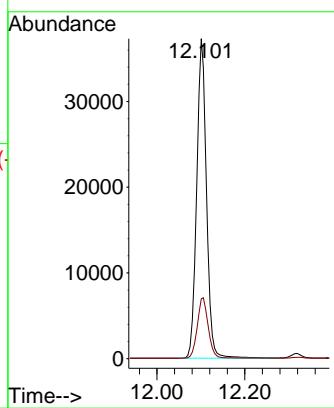
Tgt Ion:225 Resp: 25105  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.8 77.8





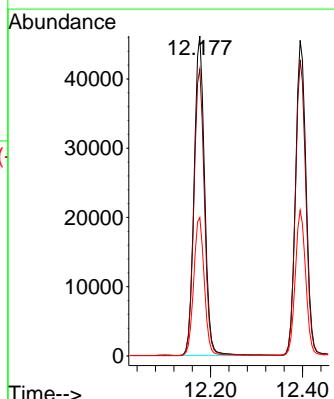
#11  
2-Methylnaphthalene-d10  
Concen: 4.881 ng  
RT: 12.101 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.010 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19  
ClientSampleId : SSTDICC5.0

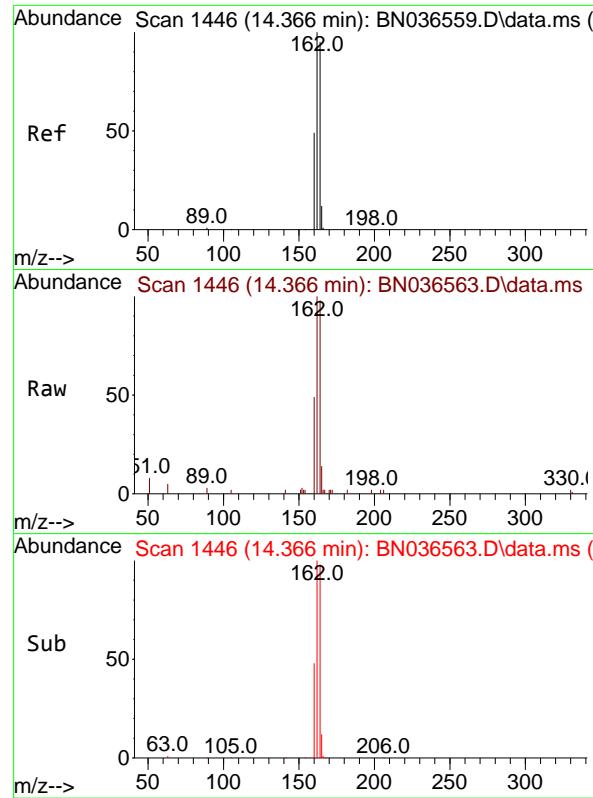
Tgt Ion:152 Resp: 58048  
Ion Ratio Lower Upper  
152 100  
151 21.2 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 4.879 ng  
RT: 12.177 min Scan# 1155  
Delta R.T. -0.005 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:142 Resp: 73010  
Ion Ratio Lower Upper  
142 100  
141 89.6 71.7 107.5  
115 43.2 38.3 57.5

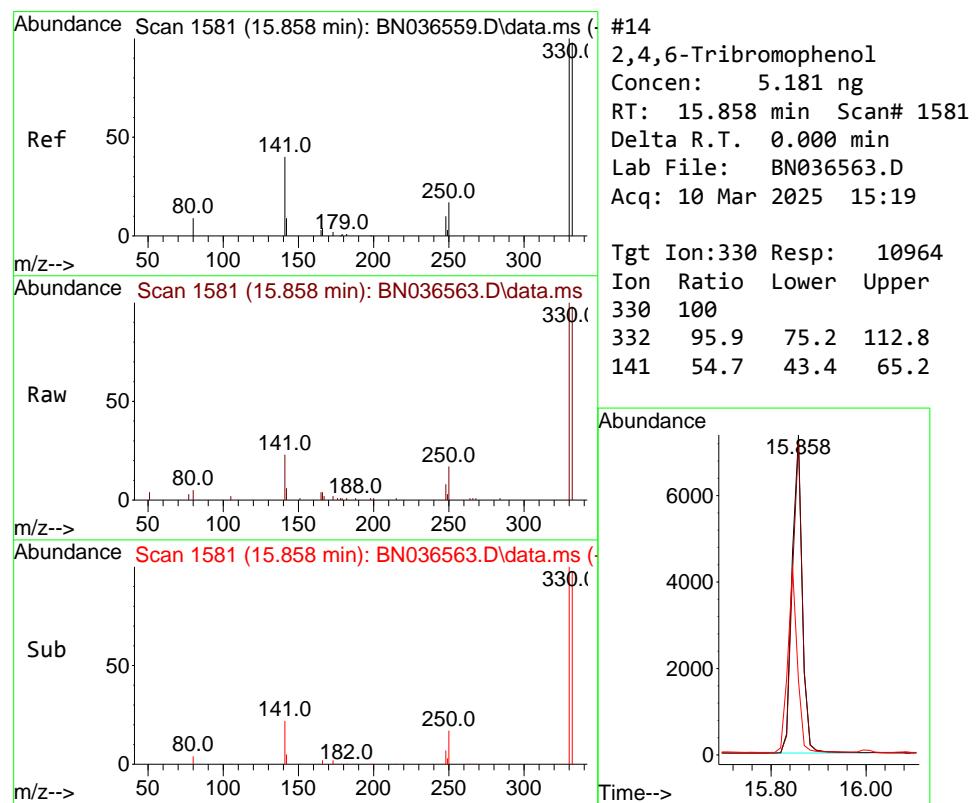
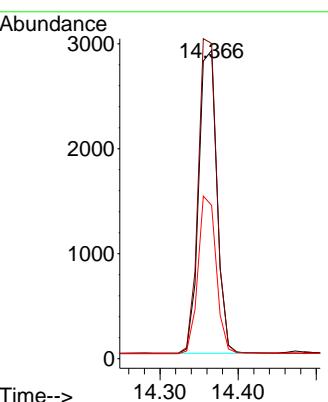




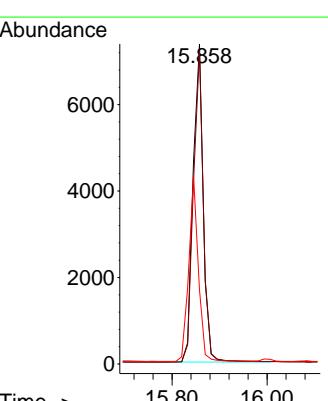
#13

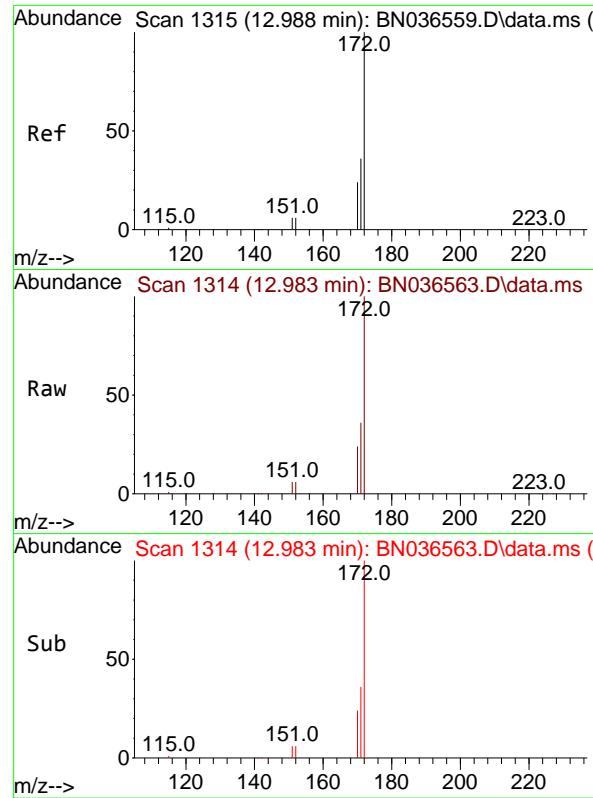
Acenaphthene-d10  
Concen: 0.400 ngRT: 14.366 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

Tgt Ion:164 Resp: 4664

Ion Ratio Lower Upper  
164 100  
162 102.2 84.2 126.2  
160 49.7 42.2 63.2

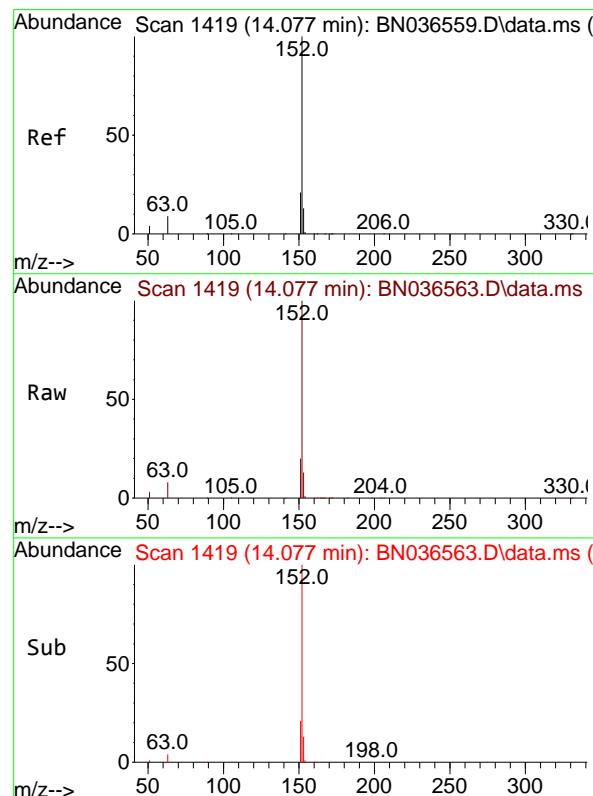
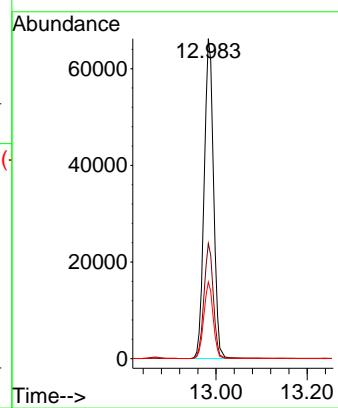
#14

2,4,6-Tribromophenol  
Concen: 5.181 ng  
RT: 15.858 min Scan# 1581  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19Tgt Ion:330 Resp: 10964  
Ion Ratio Lower Upper  
330 100  
332 95.9 75.2 112.8  
141 54.7 43.4 65.2



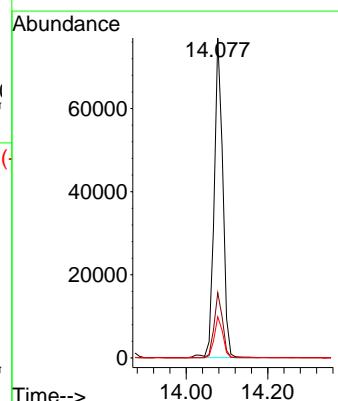
#15  
2-Fluorobiphenyl  
Concen: 5.199 ng  
RT: 12.983 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19  
ClientSampleId : SSTDICC5.0

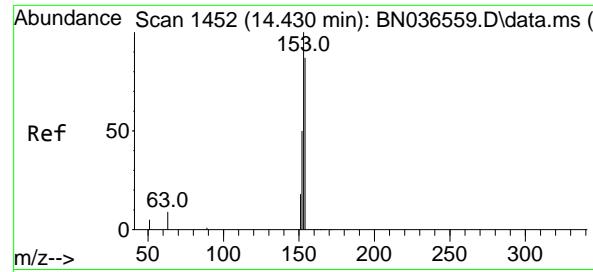
Tgt Ion:172 Resp: 141052  
Ion Ratio Lower Upper  
172 100  
171 36.0 29.5 44.3  
170 24.0 20.2 30.4



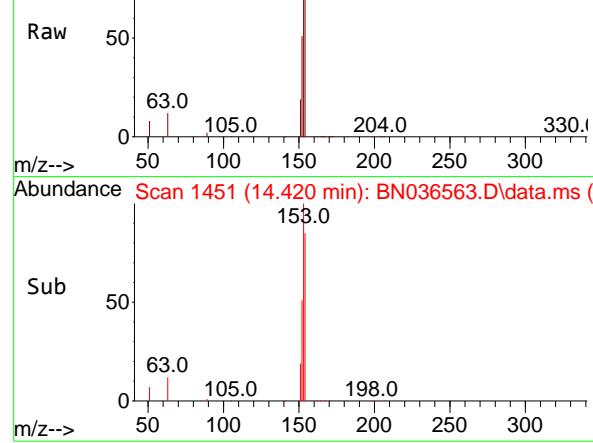
#16  
Acenaphthylene  
Concen: 5.125 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:152 Resp: 112792  
Ion Ratio Lower Upper  
152 100  
151 20.0 16.2 24.4  
153 12.8 10.6 15.8





Abundance Scan 1451 (14.420 min): BN036563.D\data.ms (-)



#17

Acenaphthene

Concen: 5.028 ng

RT: 14.420 min Scan# 1

Delta R.T. -0.011 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

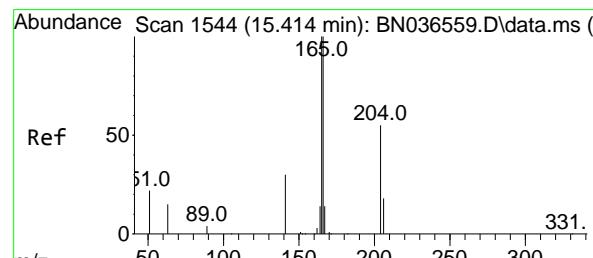
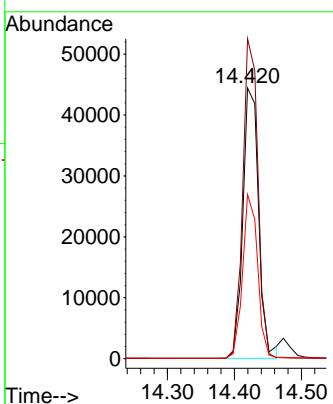
Tgt Ion:154 Resp: 72446

Ion Ratio Lower Upper

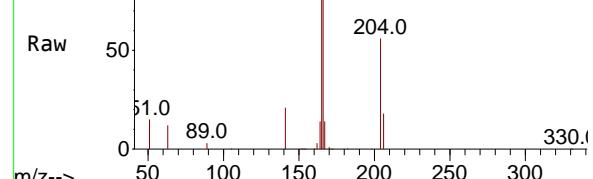
154 100

153 114.1 94.1 141.1

152 57.7 49.8 74.6



Abundance Scan 1544 (15.414 min): BN036563.D\data.ms (-)



#18

Fluorene

Concen: 4.937 ng

RT: 15.414 min Scan# 1544

Delta R.T. -0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

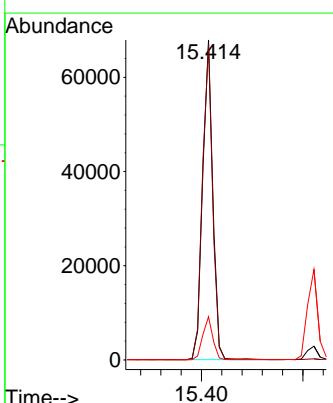
Tgt Ion:166 Resp: 96215

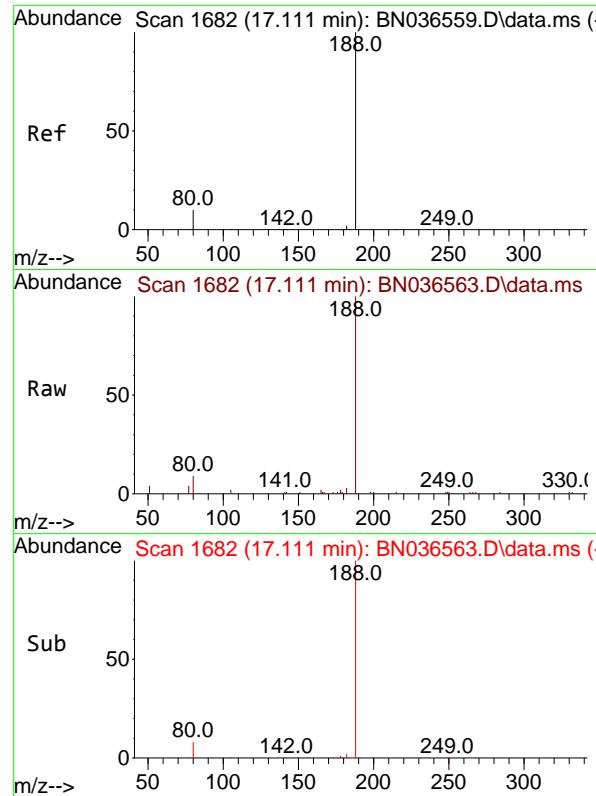
Ion Ratio Lower Upper

166 100

165 96.5 79.8 119.8

167 13.0 10.6 15.8

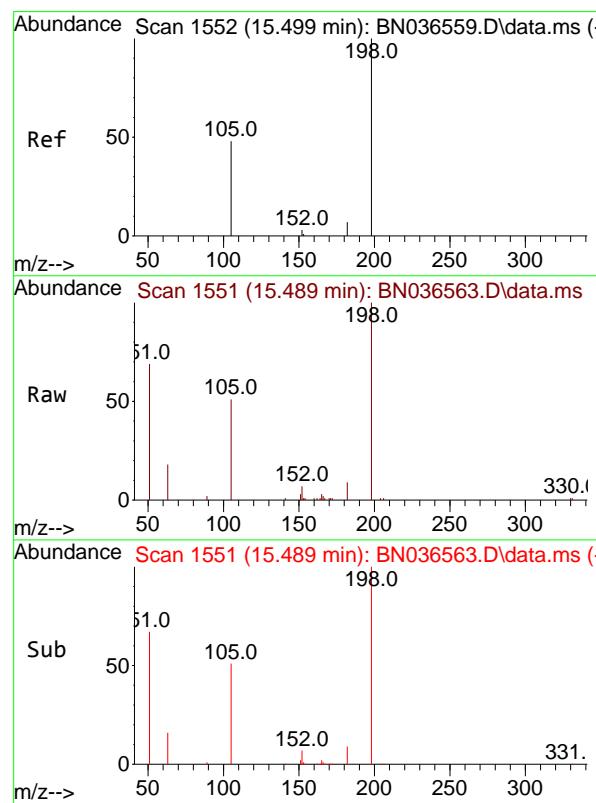
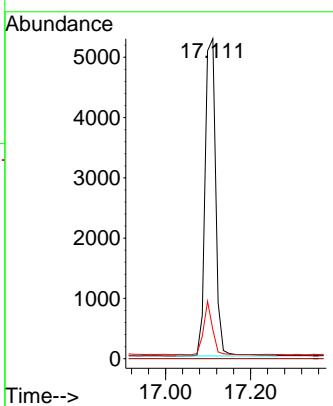




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.111 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

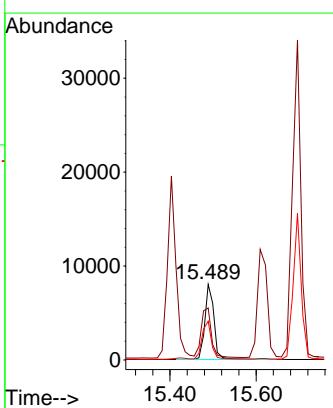
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

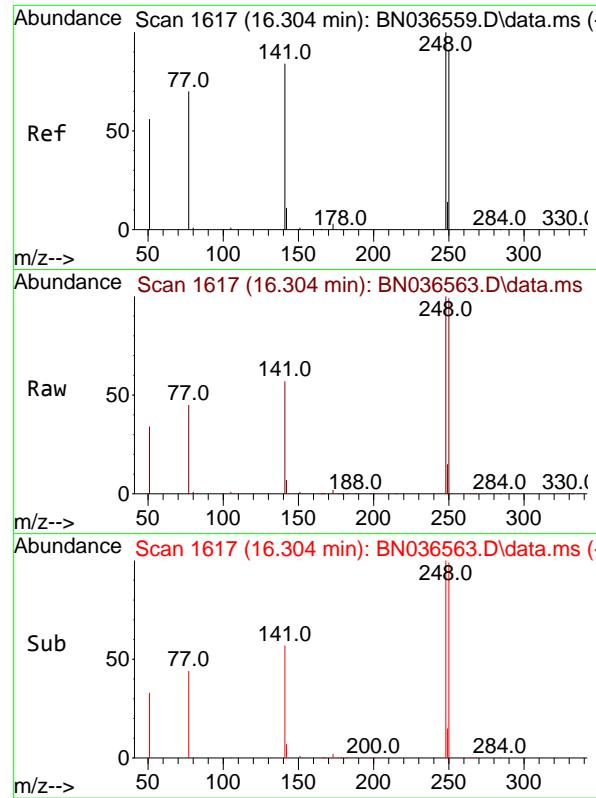
Tgt Ion:188 Resp: 9061  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 9.1 8.8 13.2



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 4.968 ng  
 RT: 15.489 min Scan# 1551  
 Delta R.T. -0.010 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

Tgt Ion:198 Resp: 12627  
 Ion Ratio Lower Upper  
 198 100  
 51 68.9 107.9 161.9#  
 105 51.3 56.2 84.2#





#21

4-Bromophenyl-phenylether

Concen: 5.048 ng

RT: 16.304 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

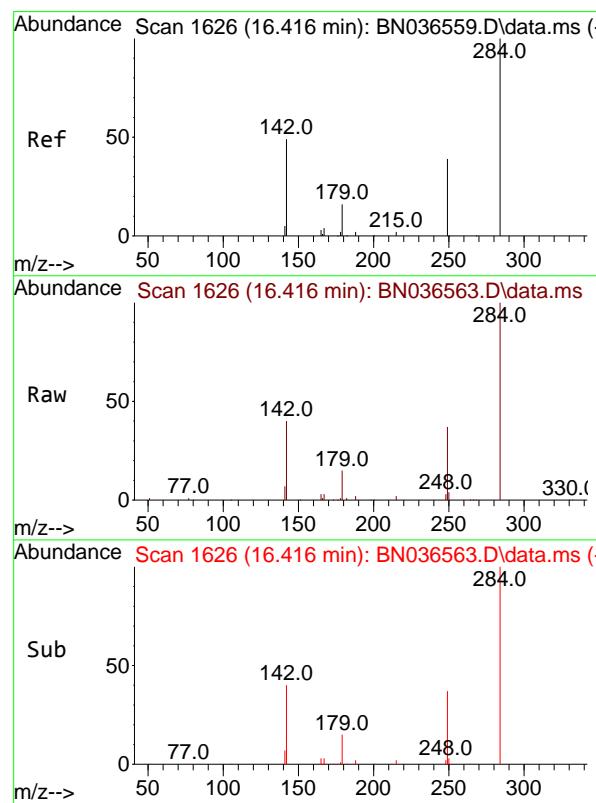
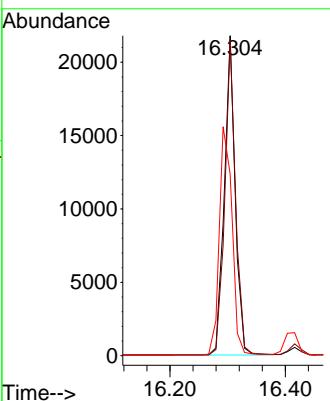
Tgt Ion:248 Resp: 28657

Ion Ratio Lower Upper

248 100

250 98.6 73.0 109.6

141 56.7 68.6 103.0#



#22

Hexachlorobenzene

Concen: 4.770 ng

RT: 16.416 min Scan# 1626

Delta R.T. -0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

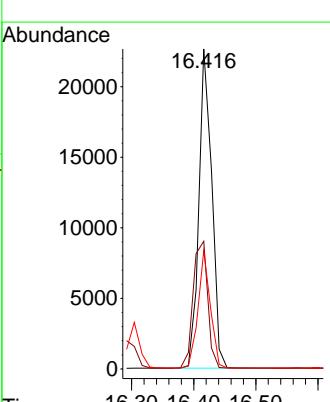
Tgt Ion:284 Resp: 32686

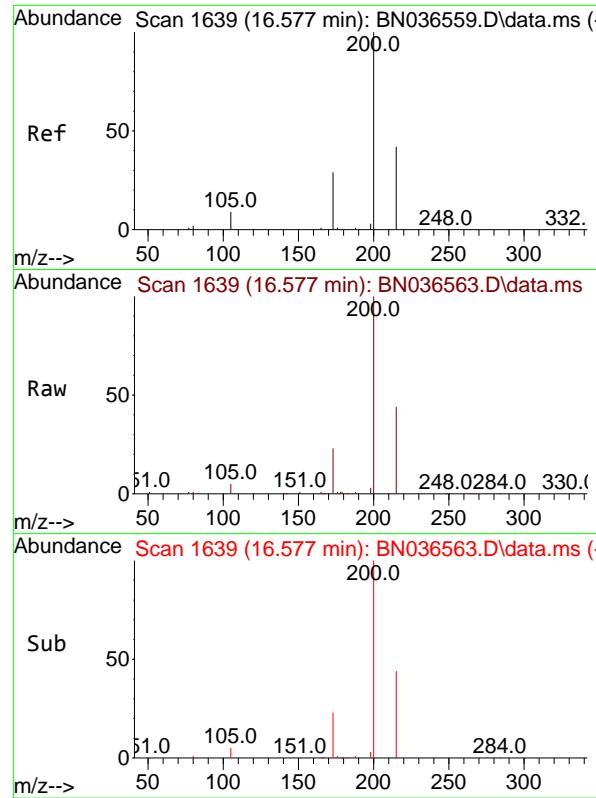
Ion Ratio Lower Upper

284 100

142 45.1 37.0 55.4

249 35.1 28.1 42.1

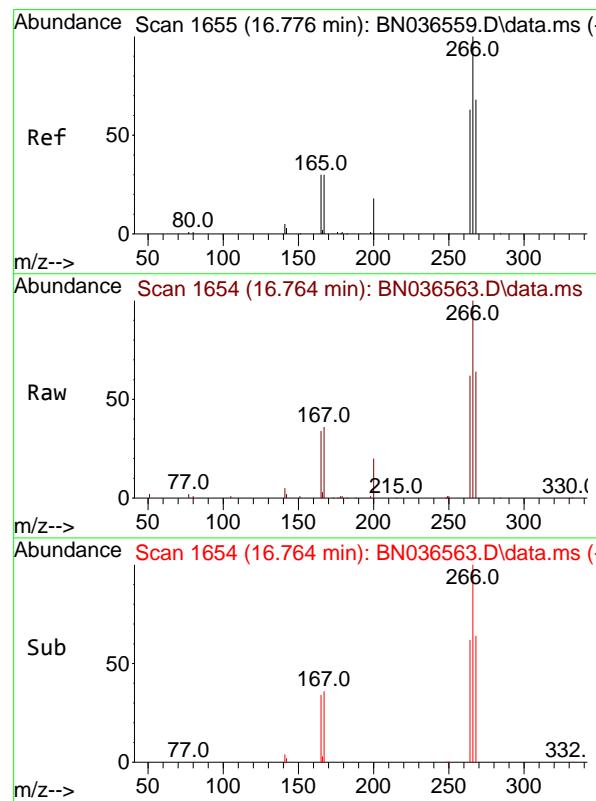
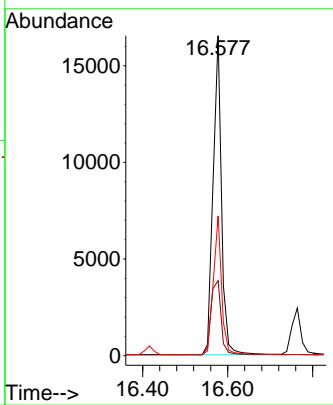




#23  
Atrazine  
Concen: 4.988 ng  
RT: 16.577 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

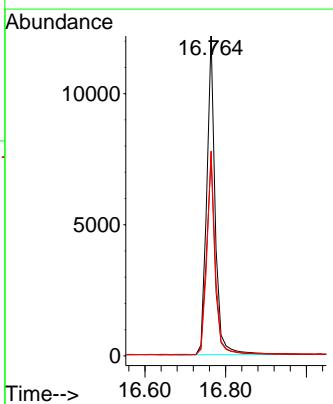
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

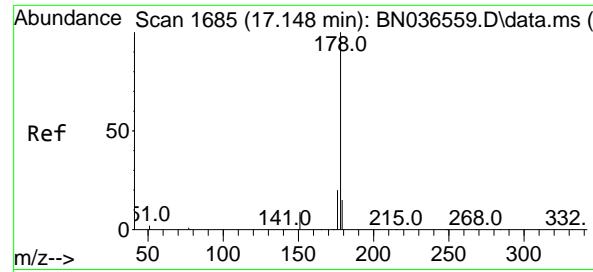
Tgt Ion:200 Resp: 22705  
Ion Ratio Lower Upper  
200 100  
173 23.4 27.3 40.9#  
215 43.7 36.8 55.2



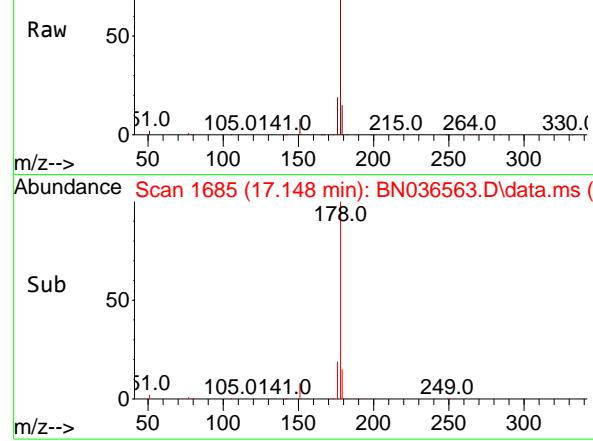
#24  
Pentachlorophenol  
Concen: 5.634 ng  
RT: 16.764 min Scan# 1654  
Delta R.T. -0.012 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:266 Resp: 17612  
Ion Ratio Lower Upper  
266 100  
264 63.1 49.6 74.4  
268 63.7 50.9 76.3

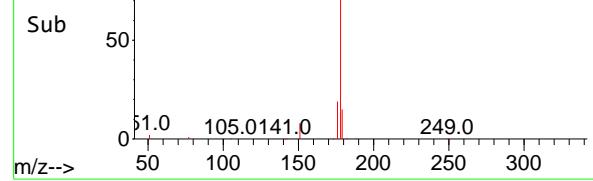




Abundance Scan 1685 (17.148 min): BN036563.D\data.ms (-)



Abundance Scan 1685 (17.148 min): BN036563.D\data.ms (-)



#25

Phenanthrene

Concen: 4.979 ng

RT: 17.148 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

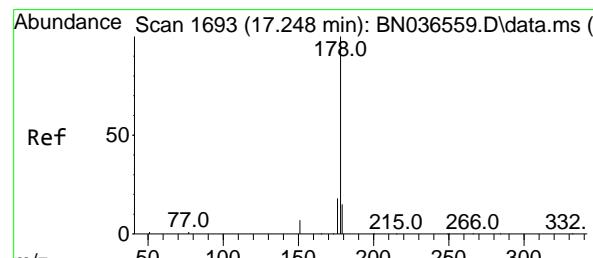
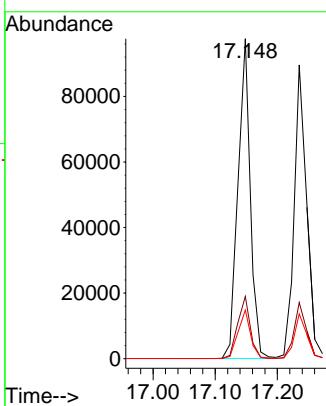
Tgt Ion:178 Resp: 135347

Ion Ratio Lower Upper

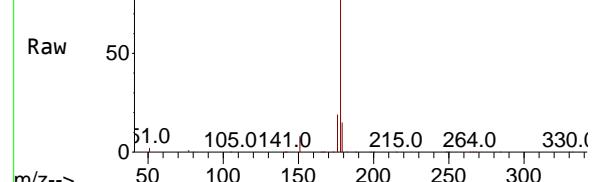
178 100

176 19.7 15.9 23.9

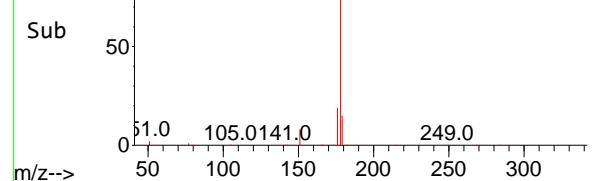
179 15.2 12.2 18.4



Abundance Scan 1692 (17.235 min): BN036563.D\data.ms (-)



Abundance Scan 1692 (17.235 min): BN036563.D\data.ms (-)



#26

Anthracene

Concen: 5.135 ng

RT: 17.235 min Scan# 1692

Delta R.T. -0.012 min

Lab File: BN036563.D

Acq: 10 Mar 2025 15:19

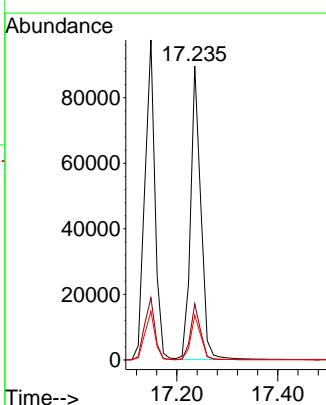
Tgt Ion:178 Resp: 125954

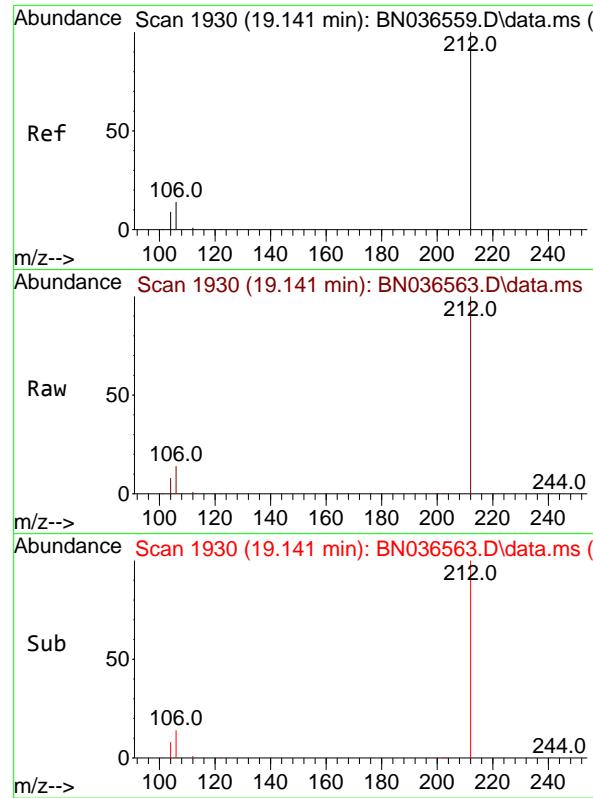
Ion Ratio Lower Upper

178 100

176 19.0 15.4 23.2

179 15.2 12.6 18.8

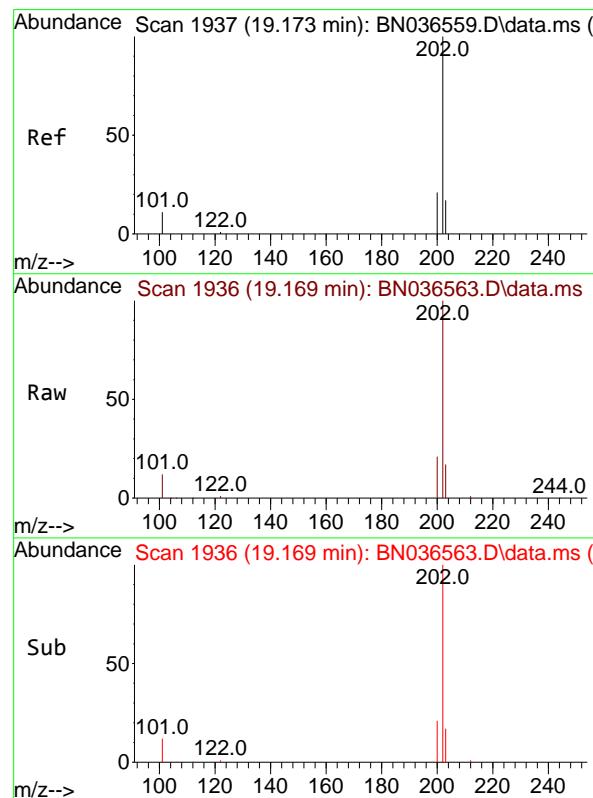
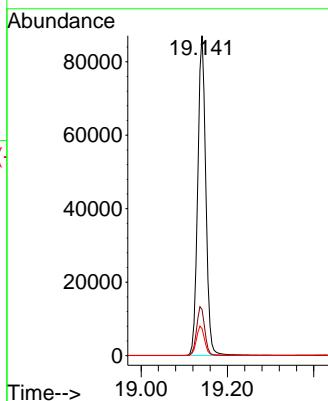




#27  
 Fluoranthene-d10  
 Concen: 4.879 ng  
 RT: 19.141 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

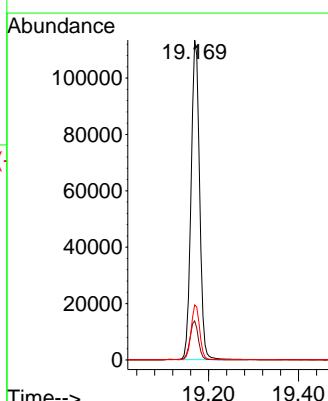
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

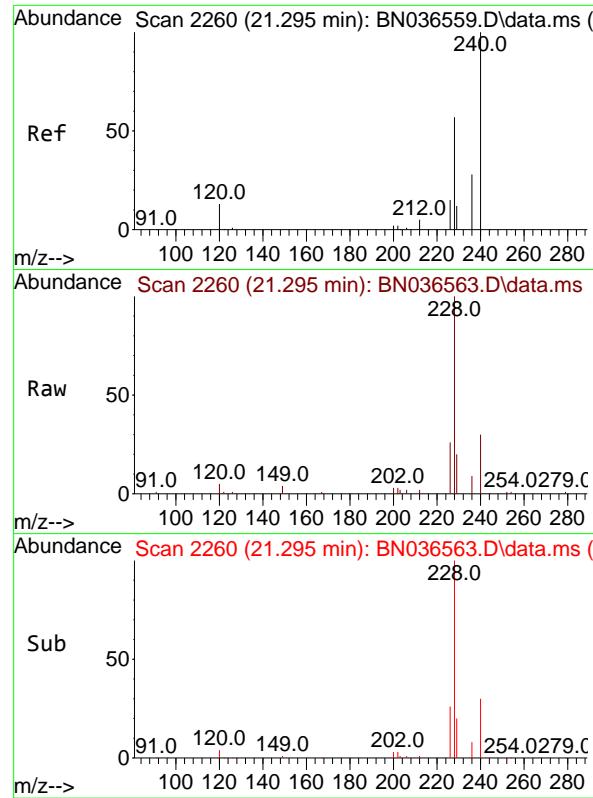
Tgt Ion:212 Resp: 113317  
 Ion Ratio Lower Upper  
 212 100  
 106 15.5 11.8 17.6  
 104 9.2 7.3 10.9



#28  
 Fluoranthene  
 Concen: 4.883 ng  
 RT: 19.169 min Scan# 1936  
 Delta R.T. -0.005 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

Tgt Ion:202 Resp: 149107  
 Ion Ratio Lower Upper  
 202 100  
 101 12.3 9.4 14.0  
 203 17.3 13.5 20.3

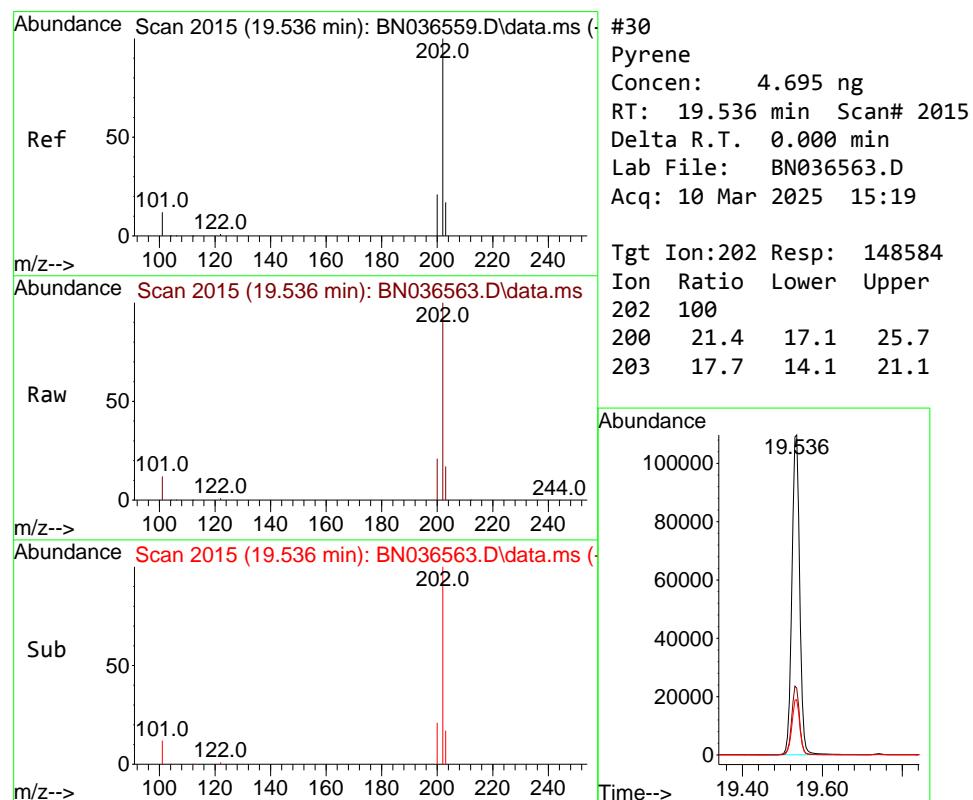
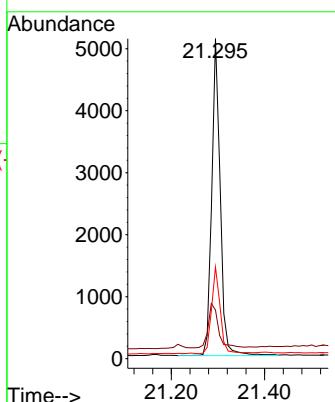




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.295 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

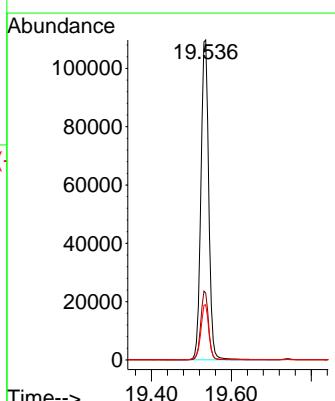
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

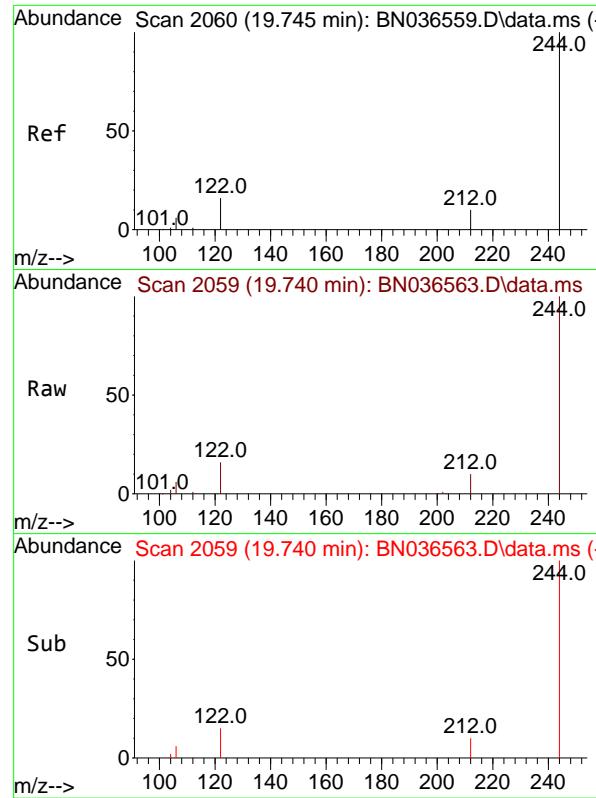
Tgt Ion:240 Resp: 6472  
Ion Ratio Lower Upper  
240 100  
120 15.2 14.6 22.0  
236 28.7 24.1 36.1



#30  
Pyrene  
Concen: 4.695 ng  
RT: 19.536 min Scan# 2015  
Delta R.T. 0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:202 Resp: 148584  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.7 14.1 21.1

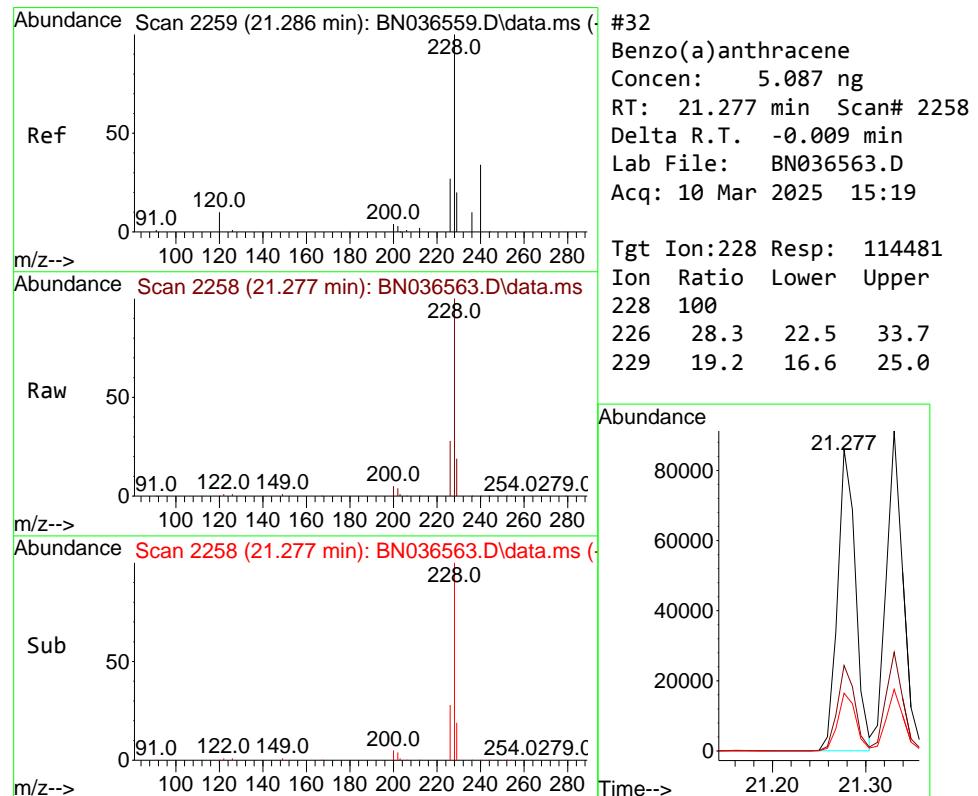
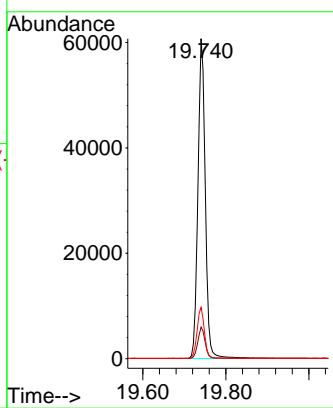




#31  
**Terphenyl-d14**  
Concen: 4.832 ng  
RT: 19.740 min Scan# 2  
Delta R.T. -0.005 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

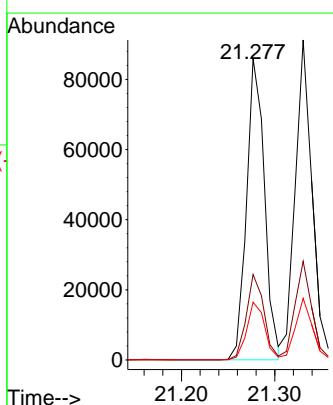
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

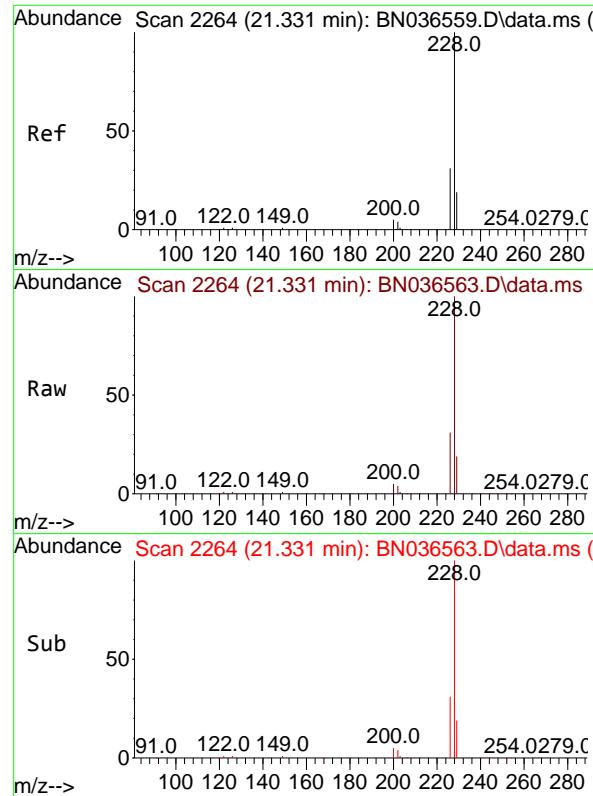
Tgt Ion:244 Resp: 74923  
Ion Ratio Lower Upper  
244 100  
212 9.9 9.6 14.4  
122 16.1 13.9 20.9



#32  
**Benzo(a)anthracene**  
Concen: 5.087 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. -0.009 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

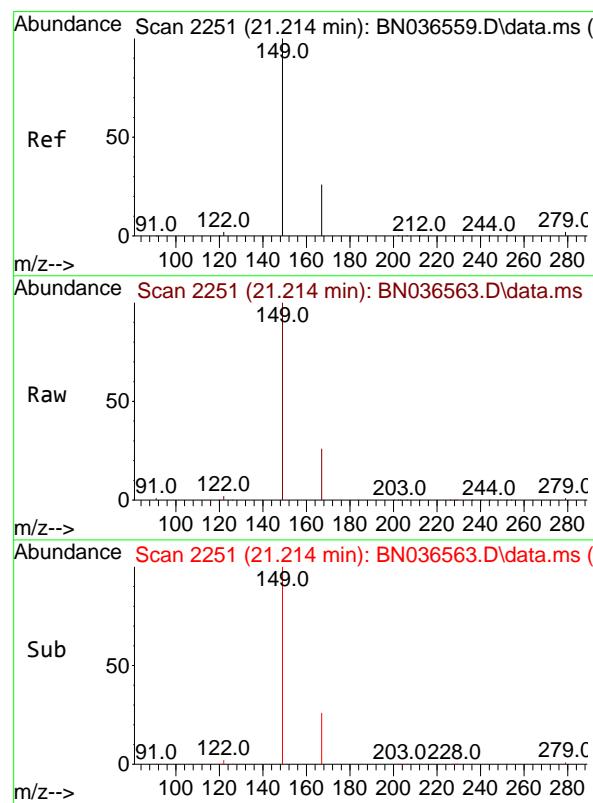
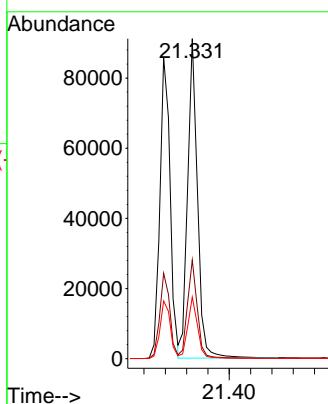
Tgt Ion:228 Resp: 114481  
Ion Ratio Lower Upper  
228 100  
226 28.3 22.5 33.7  
229 19.2 16.6 25.0





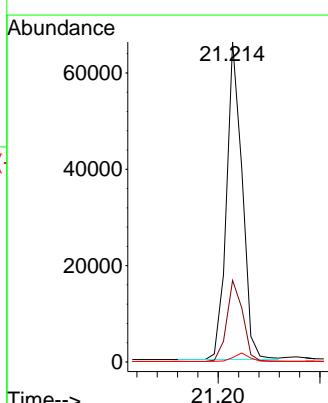
#33  
Chrysene  
Concen: 4.764 ng  
RT: 21.331 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19  
ClientSampleId : SSTDICC5.0

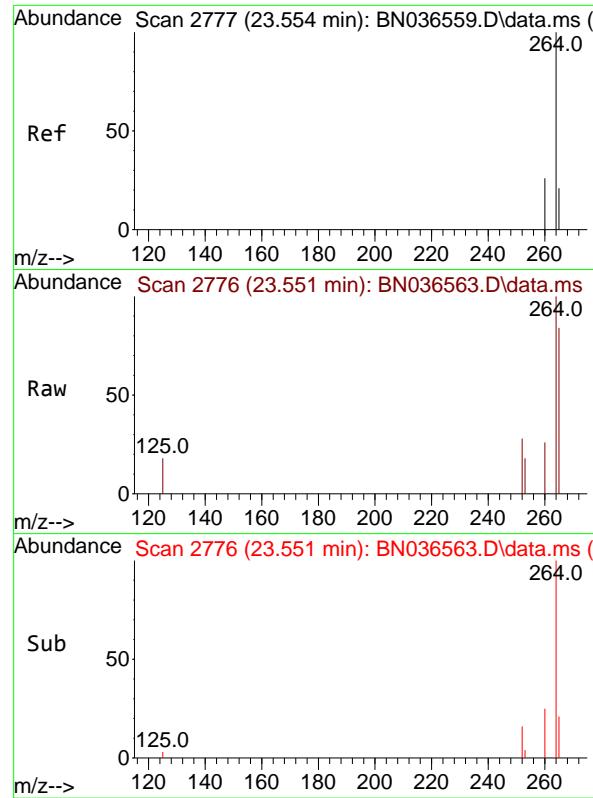
Tgt Ion:228 Resp: 117149  
Ion Ratio Lower Upper  
228 100  
226 30.9 25.3 37.9  
229 19.3 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 4.390 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:149 Resp: 70345  
Ion Ratio Lower Upper  
149 100  
167 26.2 20.7 31.1  
279 2.6 3.6 5.4#

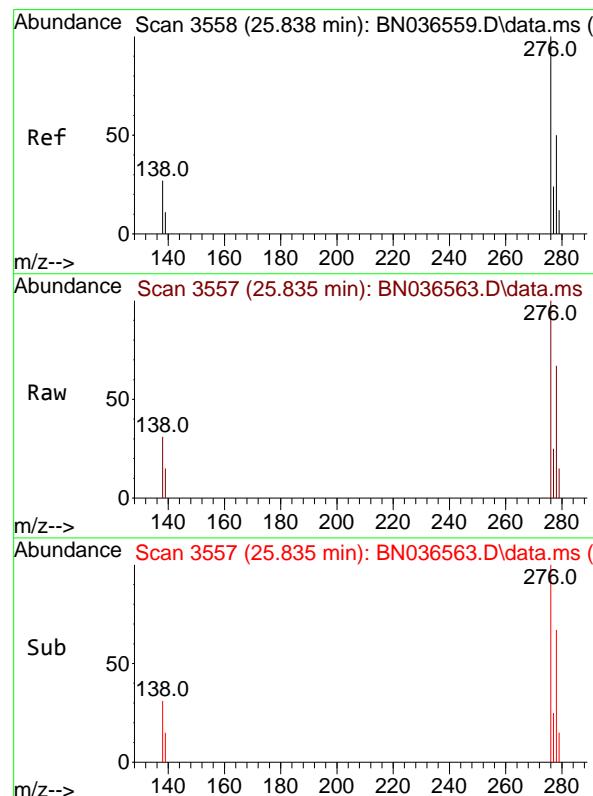
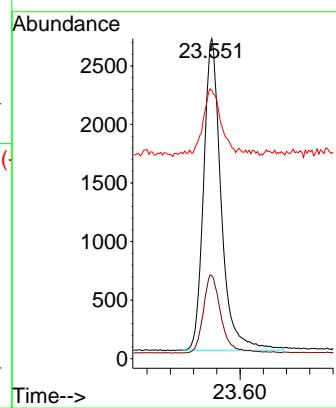




#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.551 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

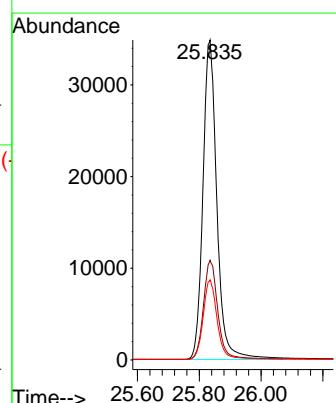
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

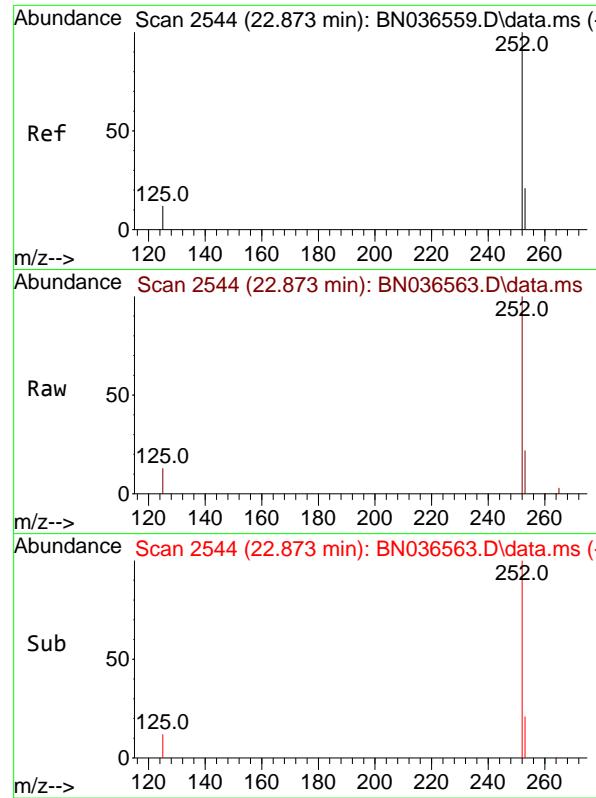
Tgt Ion:264 Resp: 5580  
Ion Ratio Lower Upper  
264 100  
260 25.9 22.6 33.8  
265 83.8 88.1 132.1#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 5.440 ng  
RT: 25.835 min Scan# 3557  
Delta R.T. -0.003 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:276 Resp: 109561  
Ion Ratio Lower Upper  
276 100  
138 31.6 23.4 35.2  
277 24.9 20.0 30.0

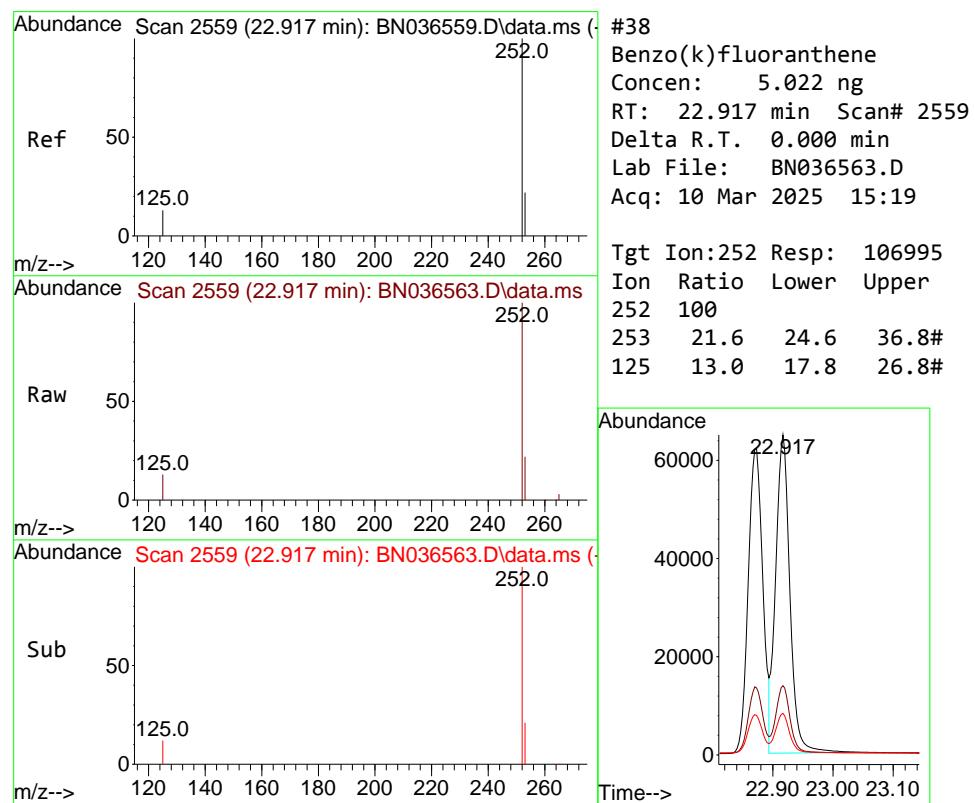
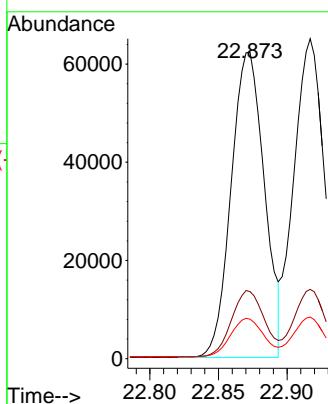




#37  
 Benzo(b)fluoranthene  
 Concen: 5.146 ng  
 RT: 22.873 min Scan# 2  
 Delta R.T. -0.000 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

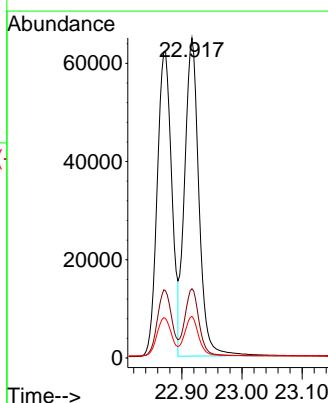
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

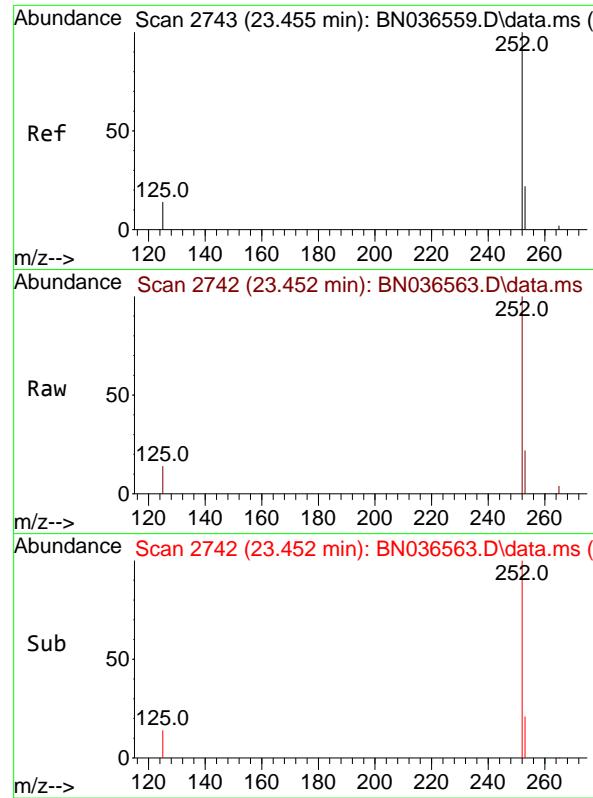
Tgt Ion:252 Resp: 104498  
 Ion Ratio Lower Upper  
 252 100  
 253 21.9 23.9 35.9#  
 125 12.9 17.4 26.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 5.022 ng  
 RT: 22.917 min Scan# 2559  
 Delta R.T. 0.000 min  
 Lab File: BN036563.D  
 Acq: 10 Mar 2025 15:19

Tgt Ion:252 Resp: 106995  
 Ion Ratio Lower Upper  
 252 100  
 253 21.6 24.6 36.8#  
 125 13.0 17.8 26.8#

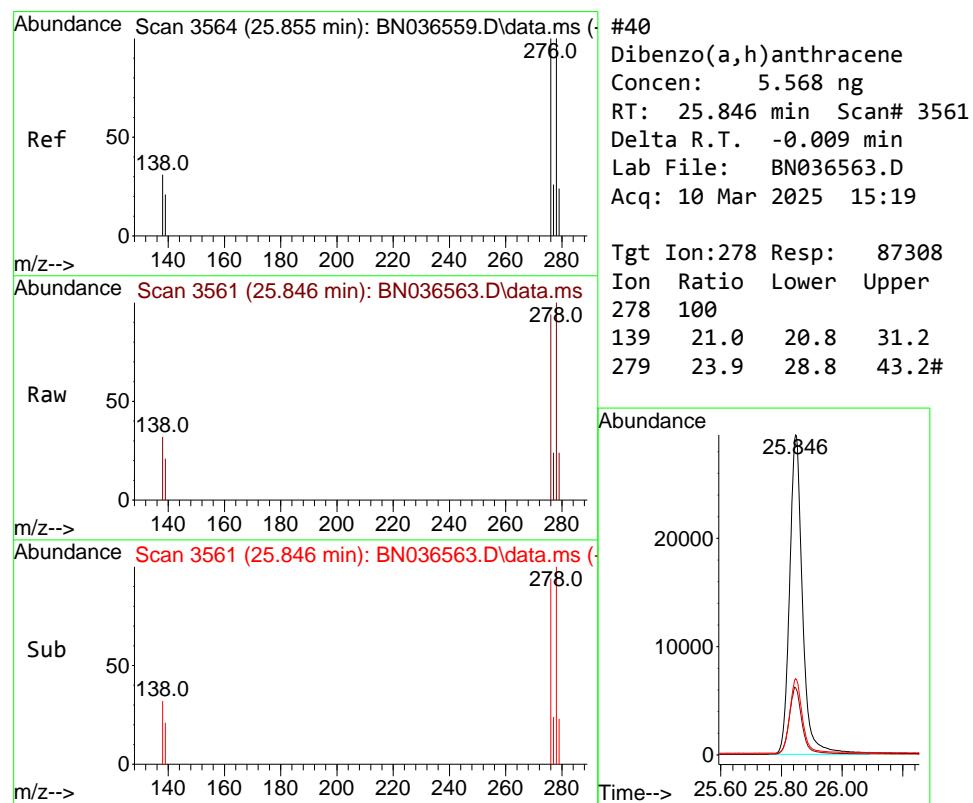
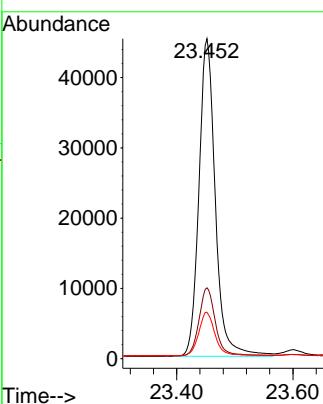




#39  
Benzo(a)pyrene  
Concen: 5.170 ng  
RT: 23.452 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

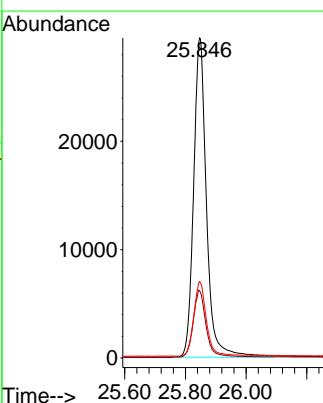
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

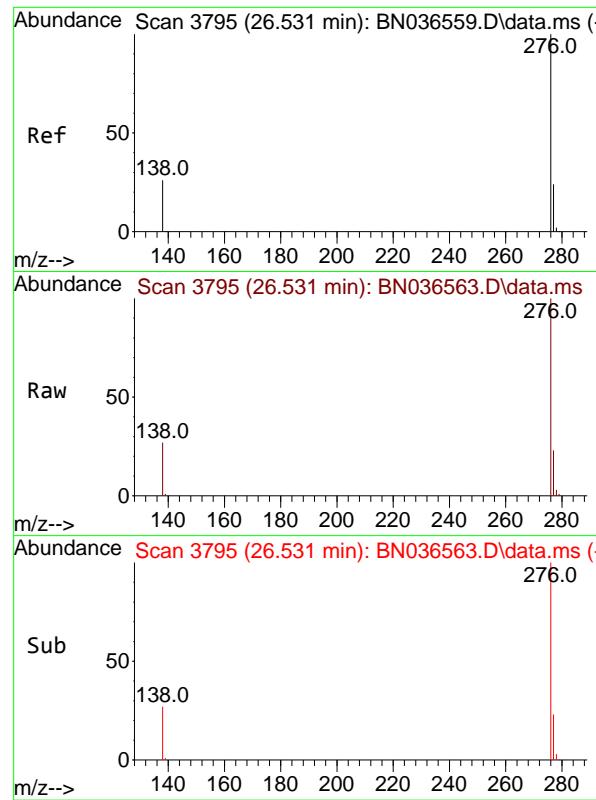
Tgt Ion:252 Resp: 88413  
Ion Ratio Lower Upper  
252 100  
253 22.2 27.8 41.8#  
125 14.5 22.7 34.1#



#40  
Dibenzo(a,h)anthracene  
Concen: 5.568 ng  
RT: 25.846 min Scan# 3561  
Delta R.T. -0.009 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Tgt Ion:278 Resp: 87308  
Ion Ratio Lower Upper  
278 100  
139 21.0 20.8 31.2  
279 23.9 28.8 43.2#

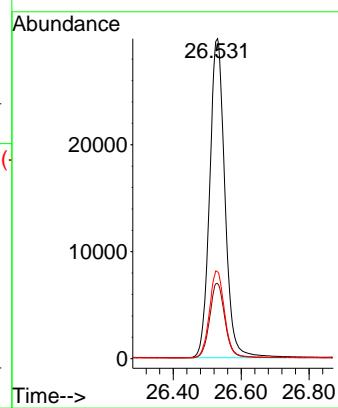




#41  
Benzo(g,h,i)perylene  
Concen: 5.189 ng  
RT: 26.531 min Scan# 3  
Delta R.T. -0.000 min  
Lab File: BN036563.D  
Acq: 10 Mar 2025 15:19

Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

Tgt Ion:276 Resp: 93067  
Ion Ratio Lower Upper  
276 100  
277 23.4 22.2 33.4  
138 27.1 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN031025**

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

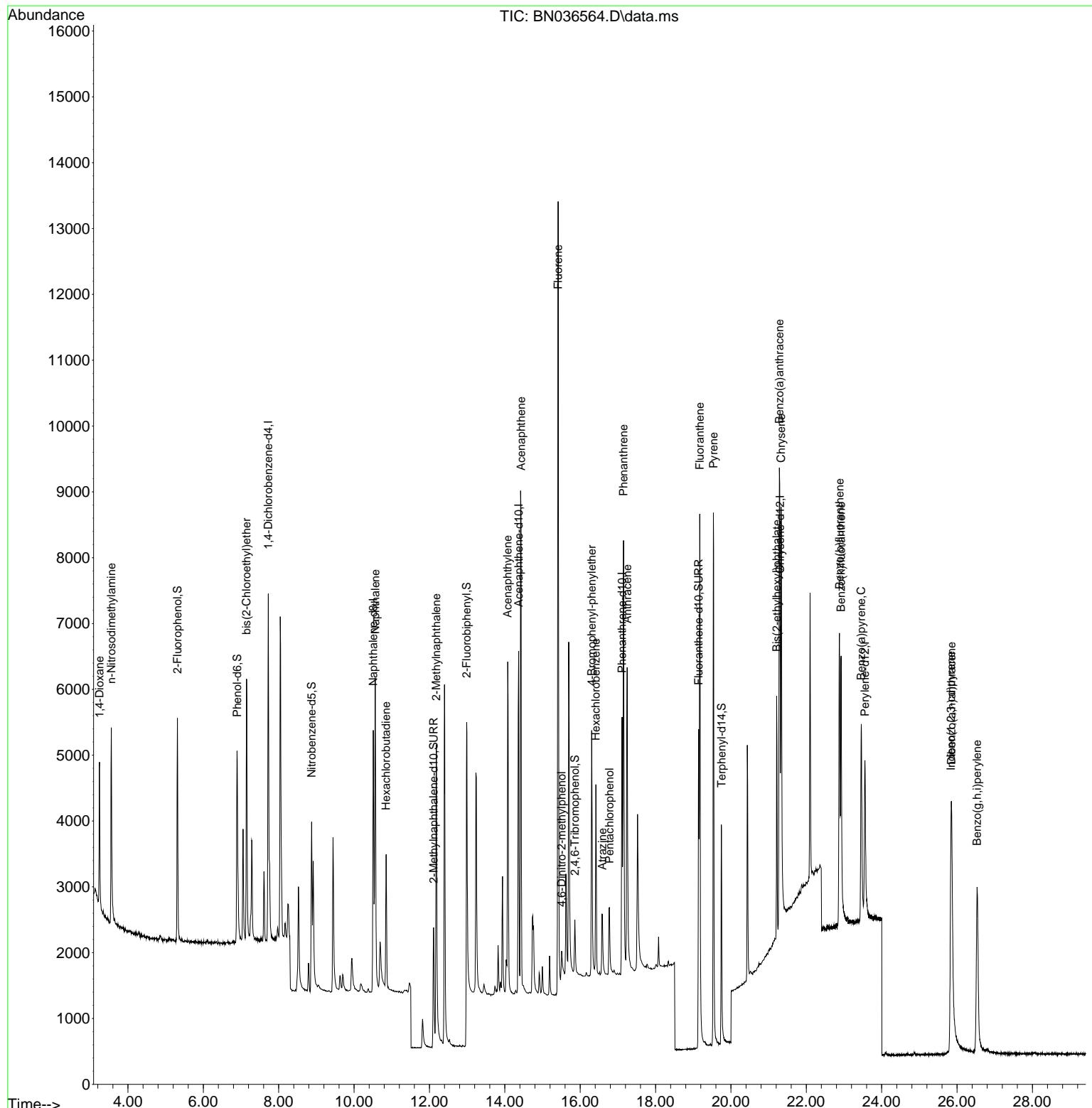
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.724	152	2488	0.400	ng	0.00
7) Naphthalene-d8	10.509	136	5634	0.400	ng	0.00
13) Acenaphthene-d10	14.366	164	3085	0.400	ng	0.00
19) Phenanthrene-d10	17.111	188	5778	0.400	ng	0.00
29) Chrysene-d12	21.304	240	4219	0.400	ng	0.00
35) Perylene-d12	23.554	264	3835	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.312	112	2418	0.417	ng	0.00
5) Phenol-d6	6.901	99	2744	0.383	ng	0.00
8) Nitrobenzene-d5	8.875	82	2356	0.384	ng	0.00
11) 2-Methylnaphthalene-d10	12.111	152	3345	0.399	ng	0.00
14) 2,4,6-Tribromophenol	15.858	330	511	0.365	ng	0.00
15) 2-Fluorobiphenyl	12.988	172	7753	0.432	ng	0.00
27) Fluoranthene-d10	19.141	212	6152	0.415	ng	0.00
31) Terphenyl-d14	19.750	244	3880	0.384	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
2) 1,4-Dioxane	3.247	88	1297	0.470	ng	97
3) n-Nitrosodimethylamine	3.557	42	2284	0.409	ng	96
6) bis(2-Chloroethyl)ether	7.147	93	2945	0.398	ng	100
9) Naphthalene	10.562	128	6710	0.405	ng	99
10) Hexachlorobutadiene	10.850	225	1694	0.434	ng	# 98
12) 2-Methylnaphthalene	12.182	142	4064	0.385	ng	99
16) Acenaphthylene	14.077	152	6059	0.416	ng	99
17) Acenaphthene	14.430	154	4035	0.423	ng	99
18) Fluorene	15.414	166	5226	0.405	ng	99
20) 4,6-Dinitro-2-methylph...	15.510	198	404	0.420	ng	94
21) 4-Bromophenyl-phenylether	16.304	248	1524	0.421	ng	96
22) Hexachlorobenzene	16.416	284	1987	0.455	ng	99
23) Atrazine	16.590	200	1165	0.401	ng	95
24) Pentachlorophenol	16.776	266	699	0.351	ng	95
25) Phenanthrene	17.148	178	7229	0.417	ng	99
26) Anthracene	17.248	178	6358	0.407	ng	99
28) Fluoranthene	19.174	202	8068	0.414	ng	100
30) Pyrene	19.536	202	8156	0.395	ng	100
32) Benzo(a)anthracene	21.286	228	5814	0.396	ng	100
33) Chrysene	21.331	228	6940	0.433	ng	98
34) Bis(2-ethylhexyl)phtha...	21.214	149	3594	0.344	ng	98
36) Indeno(1,2,3-cd)pyrene	25.841	276	6410	0.463	ng	98
37) Benzo(b)fluoranthene	22.879	252	5902	0.423	ng	99
38) Benzo(k)fluoranthene	22.923	252	6286	0.429	ng	98
39) Benzo(a)pyrene	23.458	252	5147	0.438	ng	99
40) Dibenzo(a,h)anthracene	25.855	278	4740	0.440	ng	97
41) Benzo(g,h,i)perylene	26.534	276	5877	0.477	ng	97

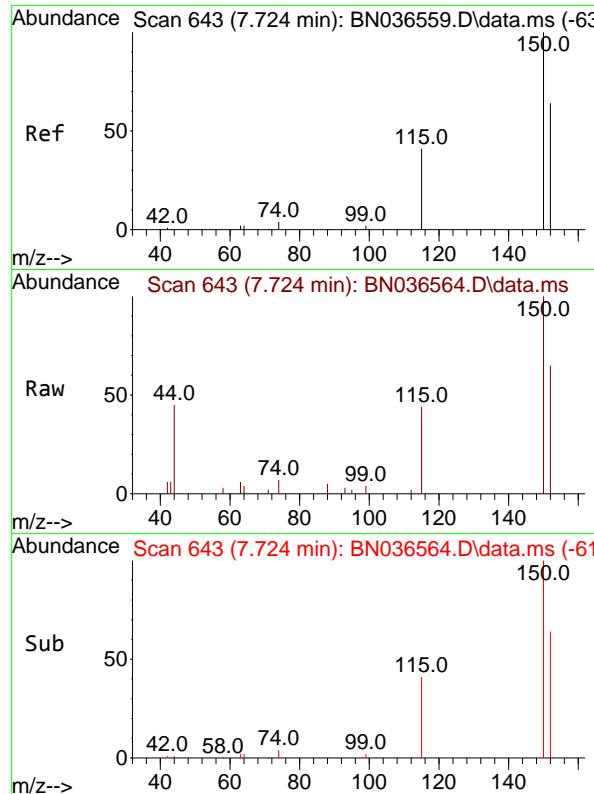
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN031025

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 2025  
 Response via : Initial Calibration

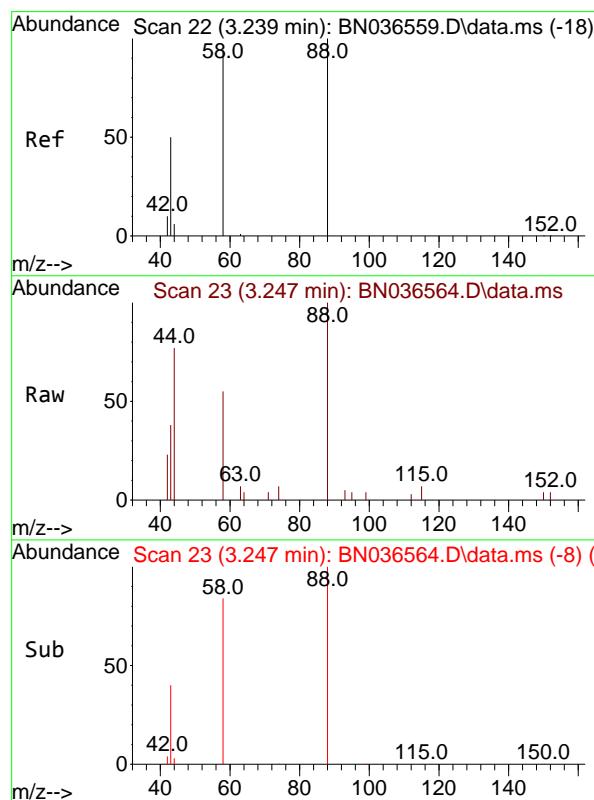
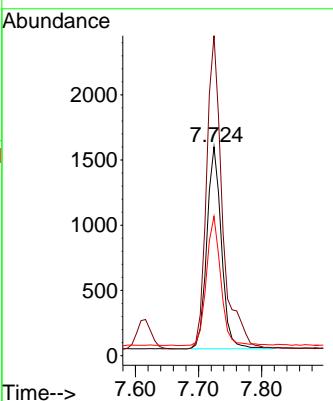




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.724 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

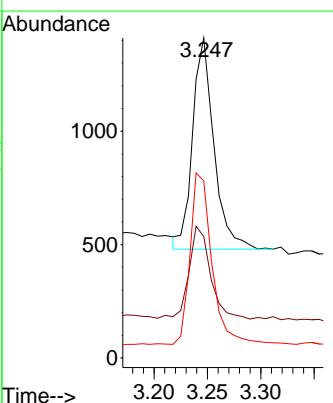
Instrument : BNA\_N  
ClientSampleId : ICVBN031025

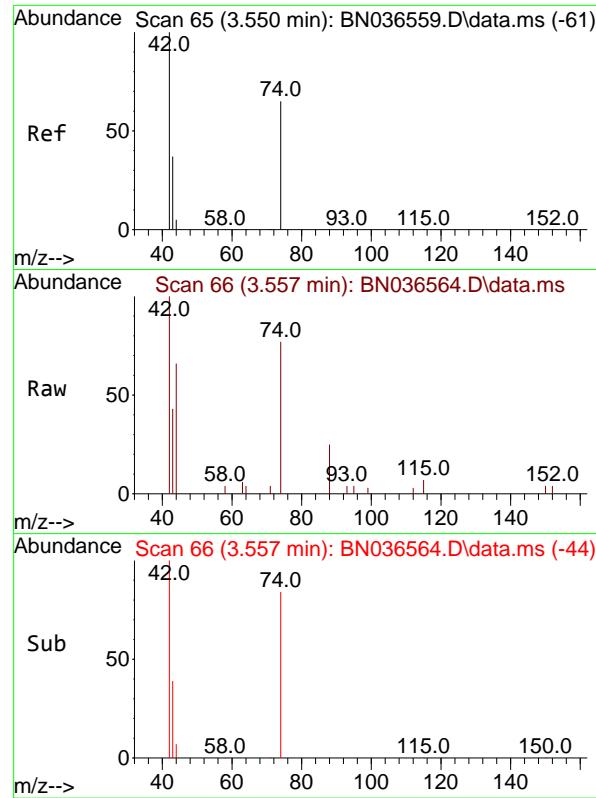
Tgt Ion:152 Resp: 2488  
Ion Ratio Lower Upper  
152 100  
150 153.3 123.7 185.5  
115 66.7 54.3 81.5



#2  
1,4-Dioxane  
Concen: 0.470 ng  
RT: 3.247 min Scan# 23  
Delta R.T. 0.008 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion: 88 Resp: 1297  
Ion Ratio Lower Upper  
88 100  
43 44.1 37.8 56.8  
58 82.4 67.4 101.2

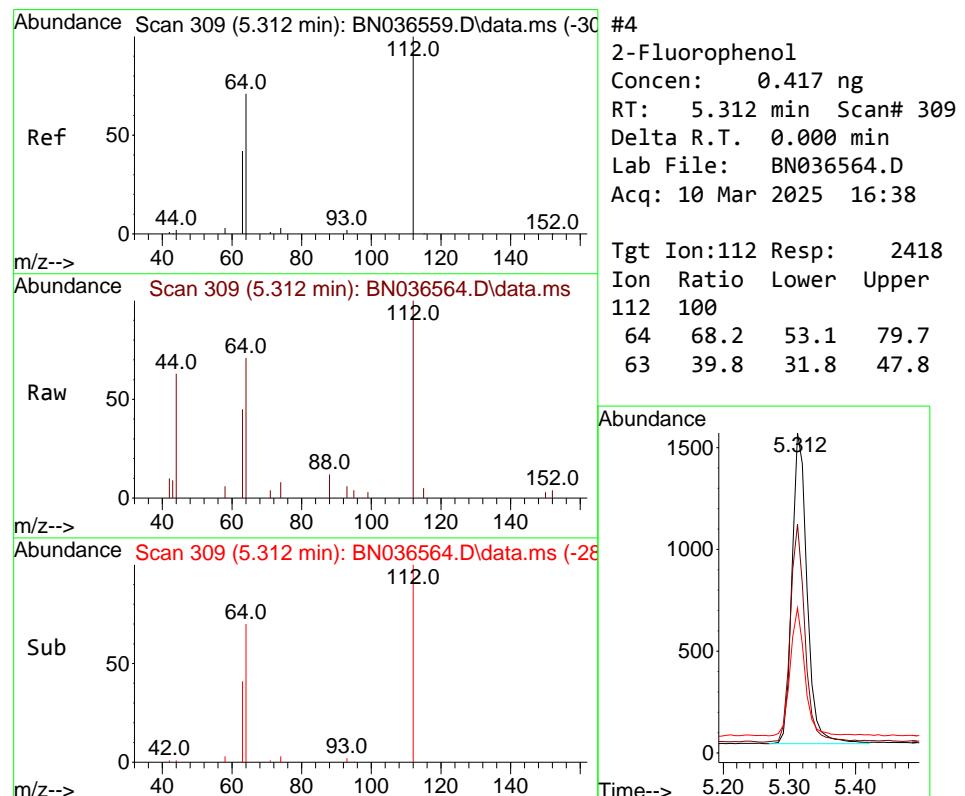
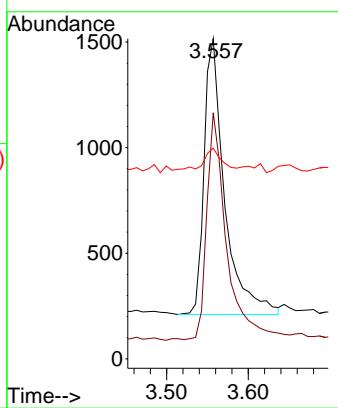




#3  
n-Nitrosodimethylamine  
Concen: 0.409 ng  
RT: 3.557 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

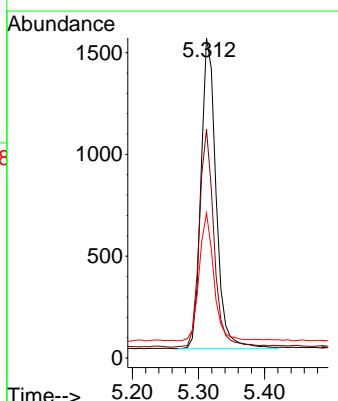
Instrument : BNA\_N  
ClientSampleId : ICVBN031025

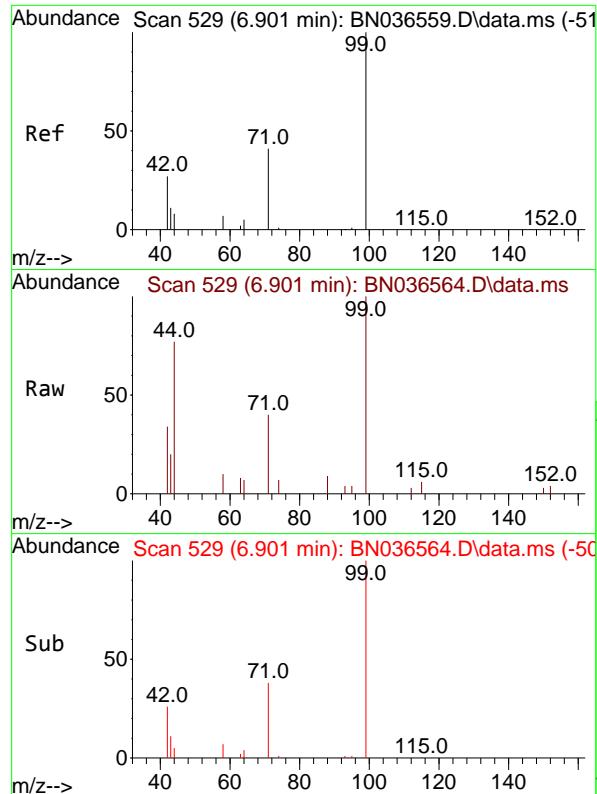
Tgt Ion: 42 Resp: 2284  
Ion Ratio Lower Upper  
42 100  
74 79.2 60.6 90.8  
44 8.2 6.3 9.5



#4  
2-Fluorophenol  
Concen: 0.417 ng  
RT: 5.312 min Scan# 309  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion: 112 Resp: 2418  
Ion Ratio Lower Upper  
112 100  
64 68.2 53.1 79.7  
63 39.8 31.8 47.8

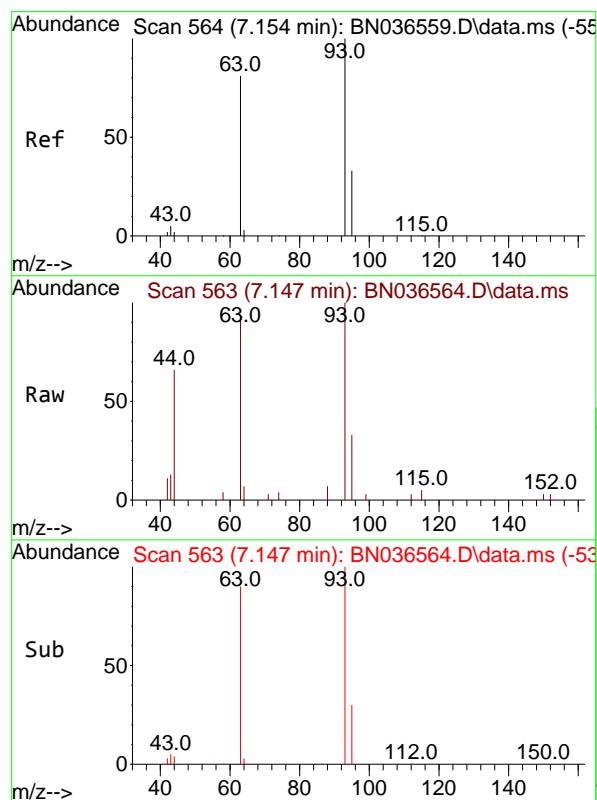
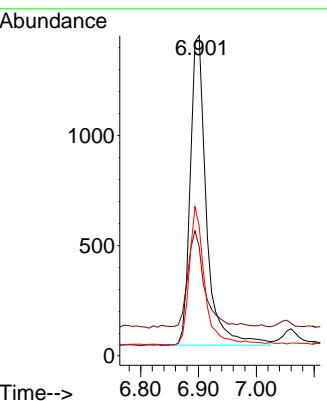




#5  
Phenol-d6  
Concen: 0.383 ng  
RT: 6.901 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

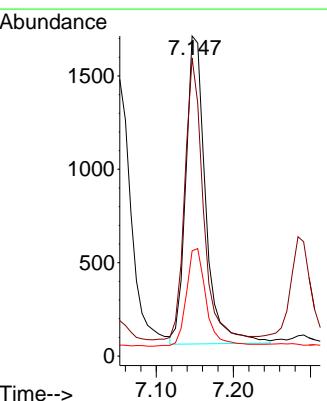
Instrument : BNA\_N  
ClientSampleId : ICVBN031025

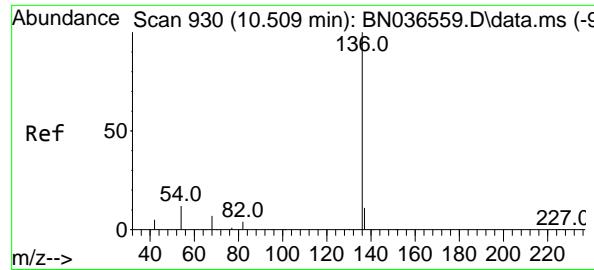
Tgt Ion: 99 Resp: 2744  
Ion Ratio Lower Upper  
99 100  
42 32.1 26.5 39.7  
71 42.9 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.398 ng  
RT: 7.147 min Scan# 563  
Delta R.T. -0.007 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

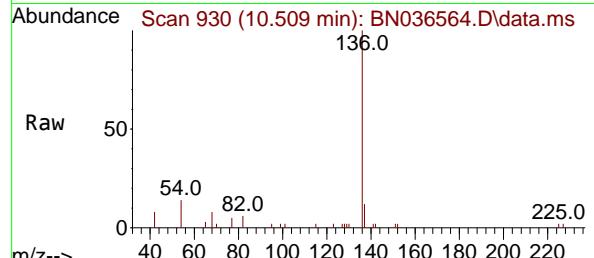
Tgt Ion: 93 Resp: 2945  
Ion Ratio Lower Upper  
93 100  
63 85.1 67.7 101.5  
95 31.7 25.6 38.4





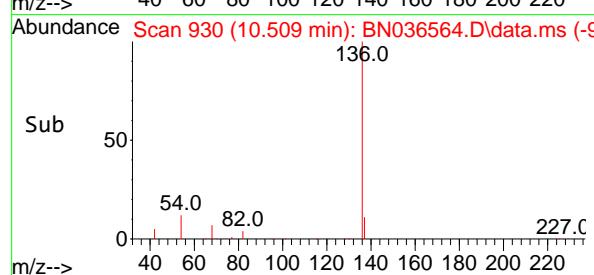
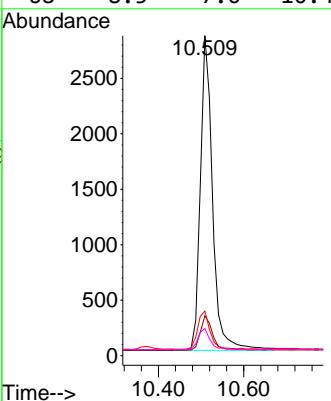
#7  
**Naphthalene-d8**  
Concen: 0.400 ng  
RT: 10.509 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Instrument : BNA\_N  
ClientSampleId : ICVBN031025



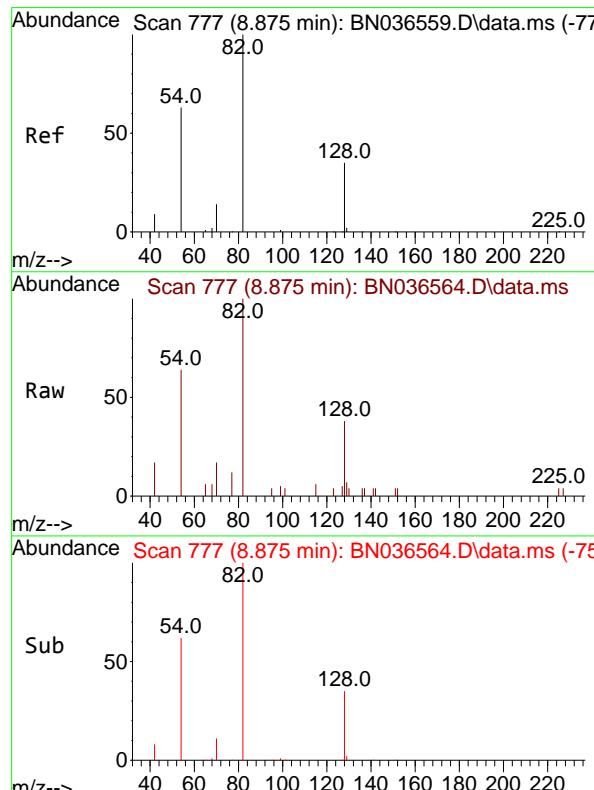
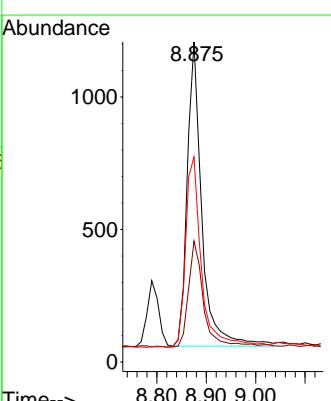
Tgt Ion:136 Resp: 5634

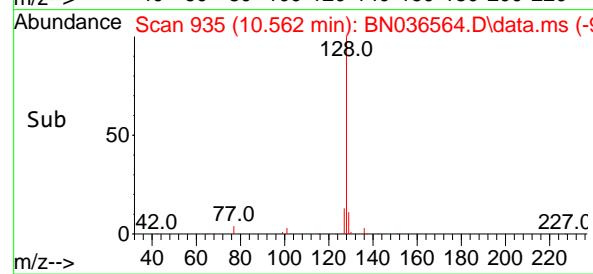
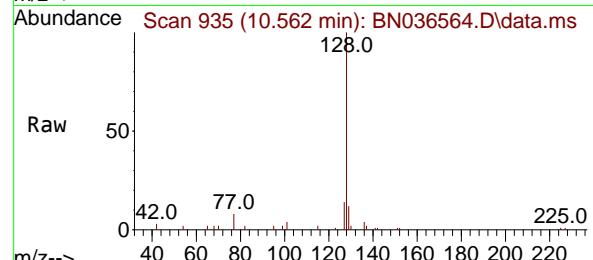
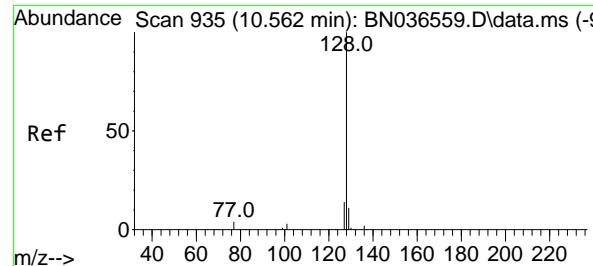
Ion	Ratio	Lower	Upper
136	100		
137	12.4	10.3	15.5
54	13.9	11.5	17.3
68	8.5	7.0	10.4



#8  
**Nitrobenzene-d5**  
Concen: 0.384 ng  
RT: 8.875 min Scan# 777  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion: 82 Resp: 2356  
Ion Ratio Lower Upper  
82 100  
128 37.7 30.6 45.8  
54 64.1 52.2 78.4





#9

Naphthalene

Concen: 0.405 ng

RT: 10.562 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

Tgt Ion:128 Resp: 6710

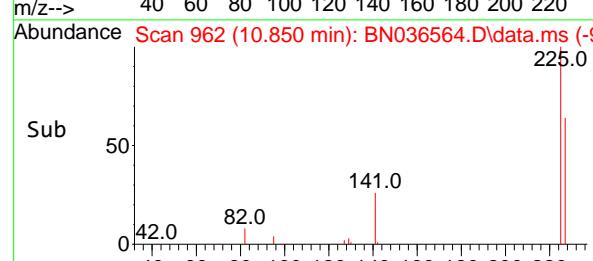
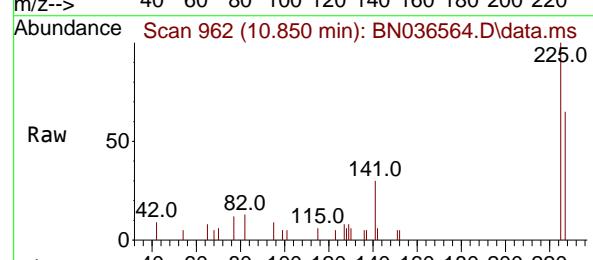
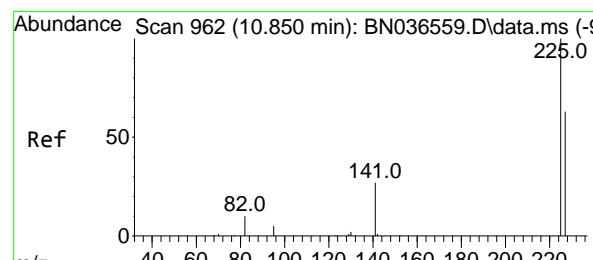
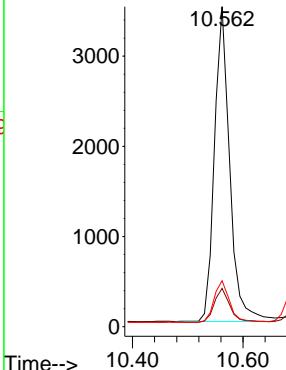
Ion Ratio Lower Upper

128 100

129 11.9 9.8 14.6

127 14.3 11.8 17.8

Abundance



#10

Hexachlorobutadiene

Concen: 0.434 ng

RT: 10.850 min Scan# 962

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Tgt Ion:225 Resp: 1694

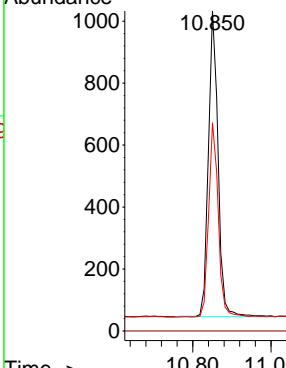
Ion Ratio Lower Upper

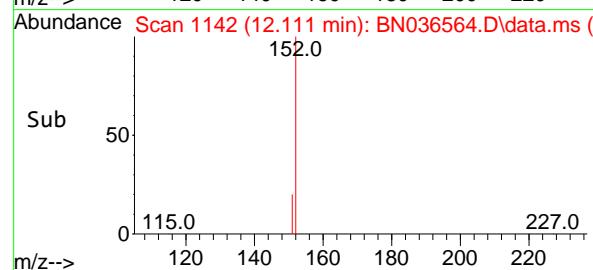
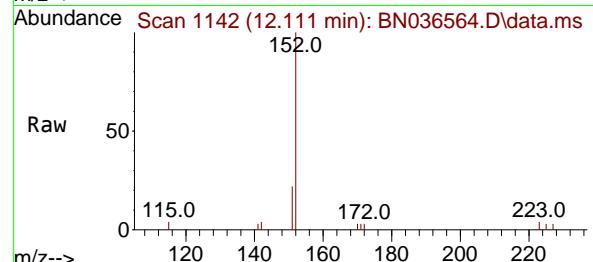
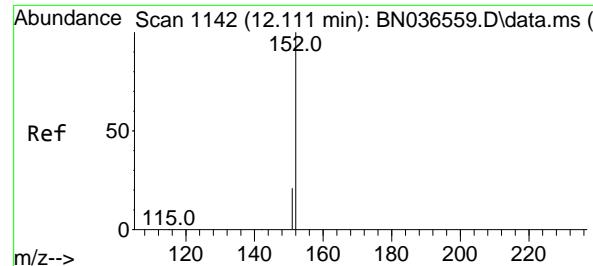
225 100

223 0.0 0.0 0.0

227 63.5 51.8 77.8

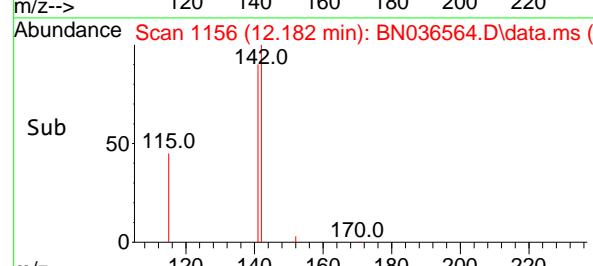
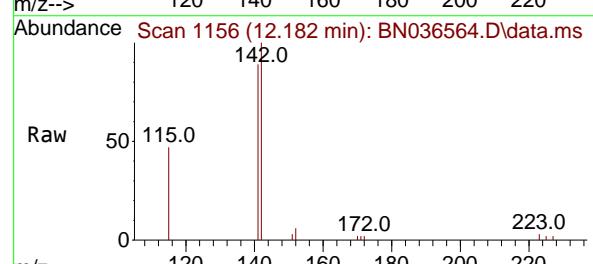
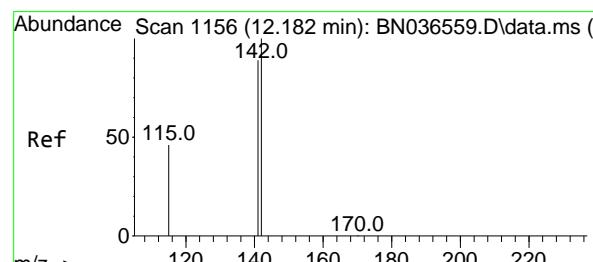
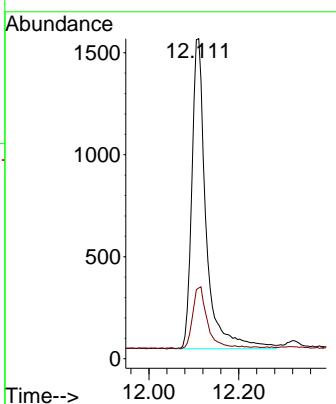
Abundance





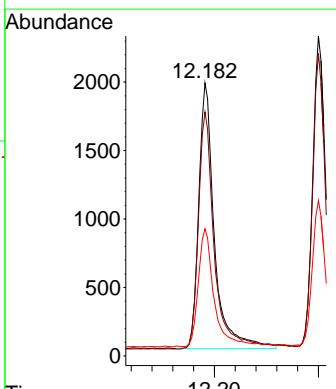
#11  
2-Methylnaphthalene-d10  
Concen: 0.399 ng  
RT: 12.111 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
ClientSampleId : ICVBN031025  
Acq: 10 Mar 2025 16:38

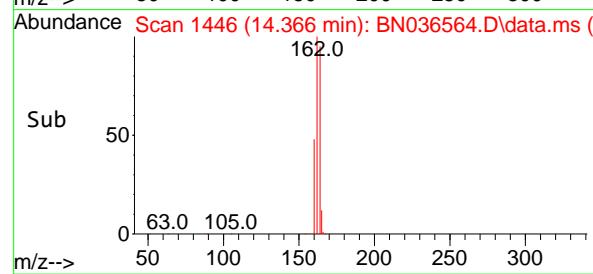
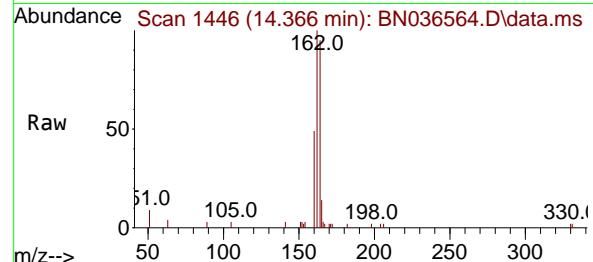
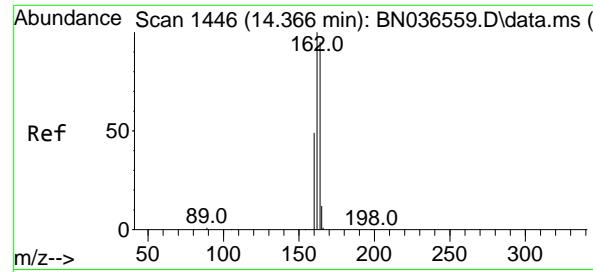
Tgt Ion:152 Resp: 3345  
Ion Ratio Lower Upper  
152 100  
151 20.2 17.0 25.6



#12  
2-Methylnaphthalene  
Concen: 0.385 ng  
RT: 12.182 min Scan# 1156  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:142 Resp: 4064  
Ion Ratio Lower Upper  
142 100  
141 89.4 71.7 107.5  
115 46.6 38.3 57.5





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.366 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

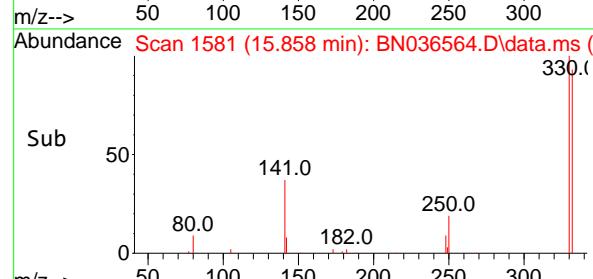
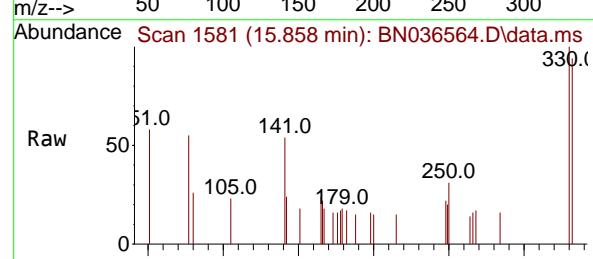
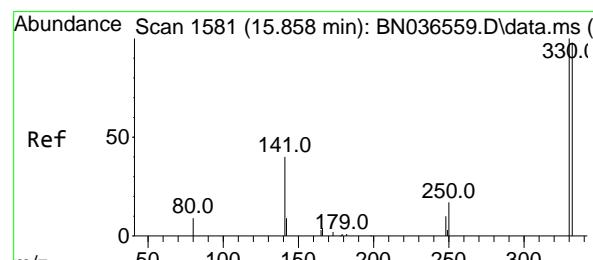
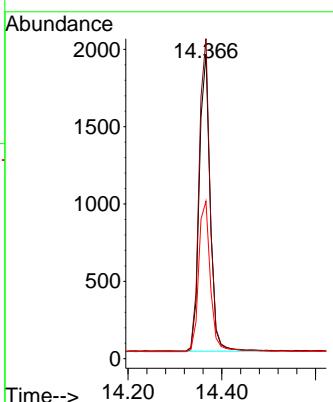
Tgt Ion:164 Resp: 3085

Ion Ratio Lower Upper

164 100

162 105.0 84.2 126.2

160 51.7 42.2 63.2



#14

2,4,6-Tribromophenol

Concen: 0.365 ng

RT: 15.858 min Scan# 1581

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

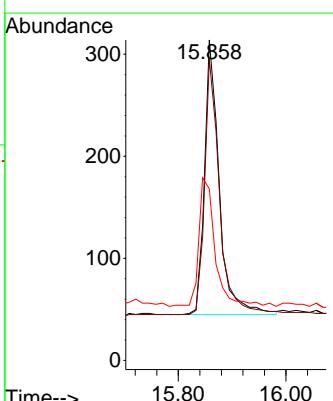
Tgt Ion:330 Resp: 511

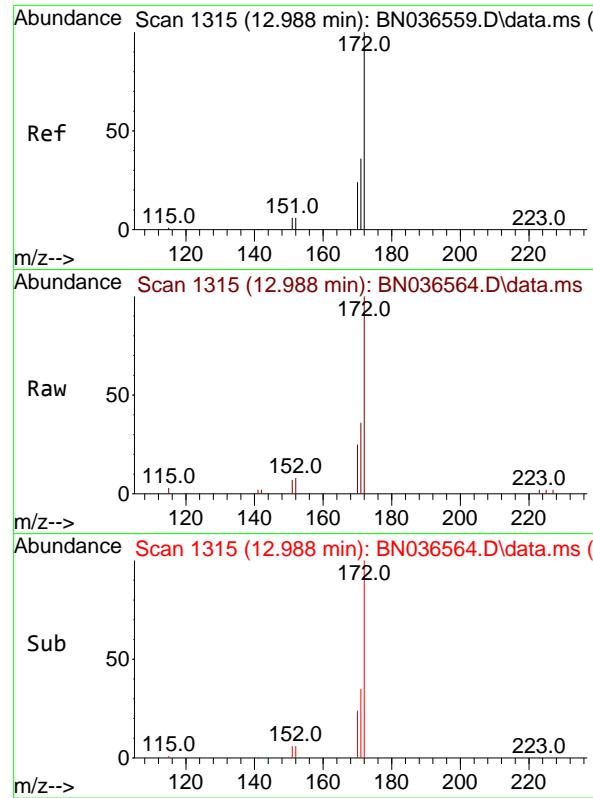
Ion Ratio Lower Upper

330 100

332 93.9 75.2 112.8

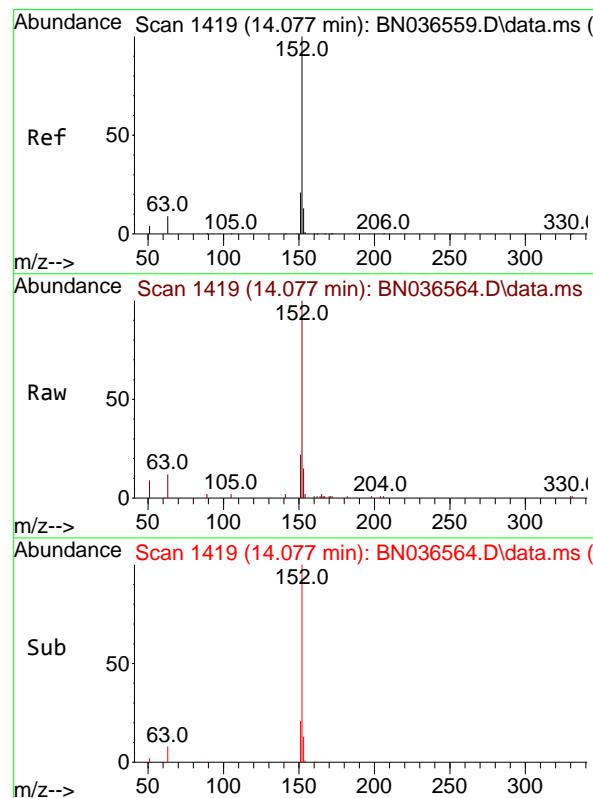
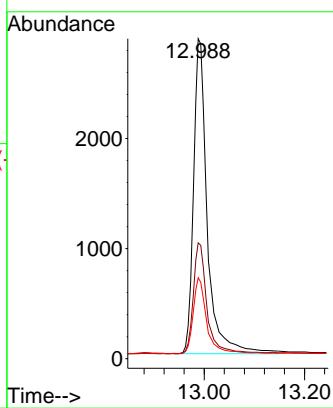
141 51.5 43.4 65.2





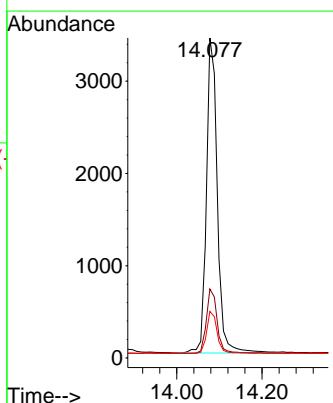
#15  
2-Fluorobiphenyl  
Concen: 0.432 ng  
RT: 12.988 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
ClientSampleId : ICVBN031025  
Acq: 10 Mar 2025 16:38

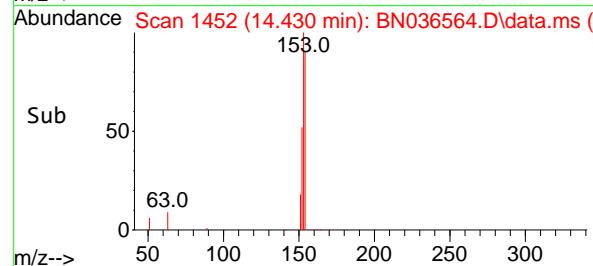
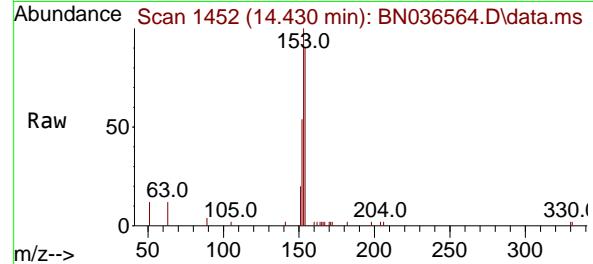
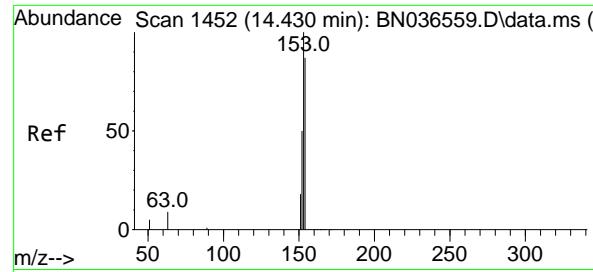
Tgt Ion:172 Resp: 7753  
Ion Ratio Lower Upper  
172 100  
171 36.2 29.5 44.3  
170 25.3 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.416 ng  
RT: 14.077 min Scan# 1419  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:152 Resp: 6059  
Ion Ratio Lower Upper  
152 100  
151 20.1 16.2 24.4  
153 12.9 10.6 15.8





#17

Acenaphthene

Concen: 0.423 ng

RT: 14.430 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

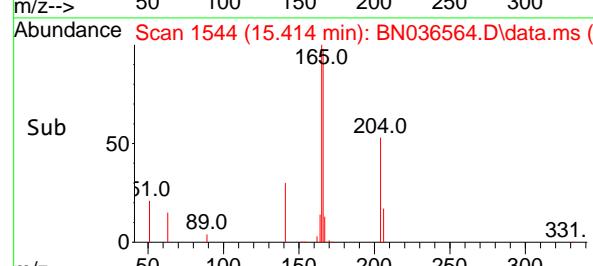
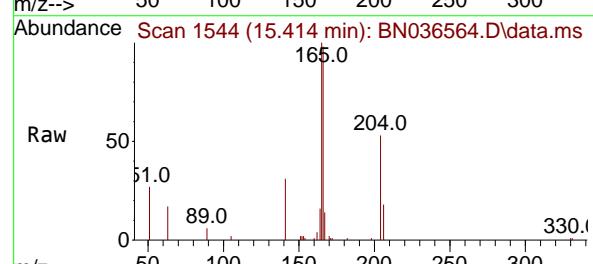
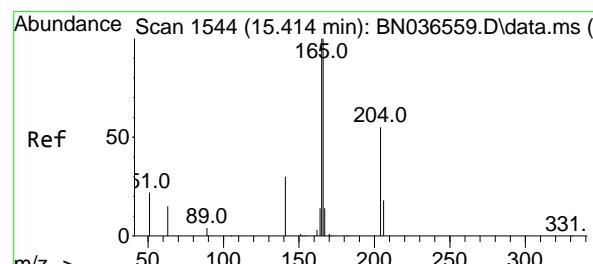
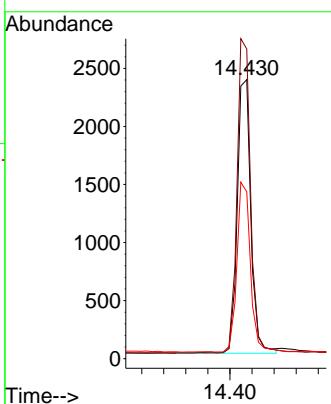
Tgt Ion:154 Resp: 4035

Ion Ratio Lower Upper

154 100

153 115.5 94.1 141.1

152 61.9 49.8 74.6



#18

Fluorene

Concen: 0.405 ng

RT: 15.414 min Scan# 1544

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

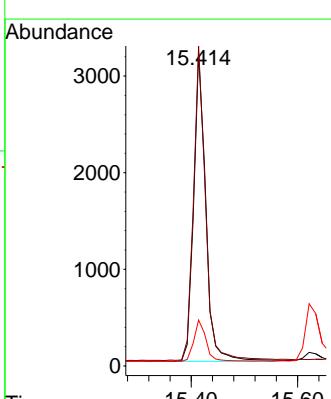
Tgt Ion:166 Resp: 5226

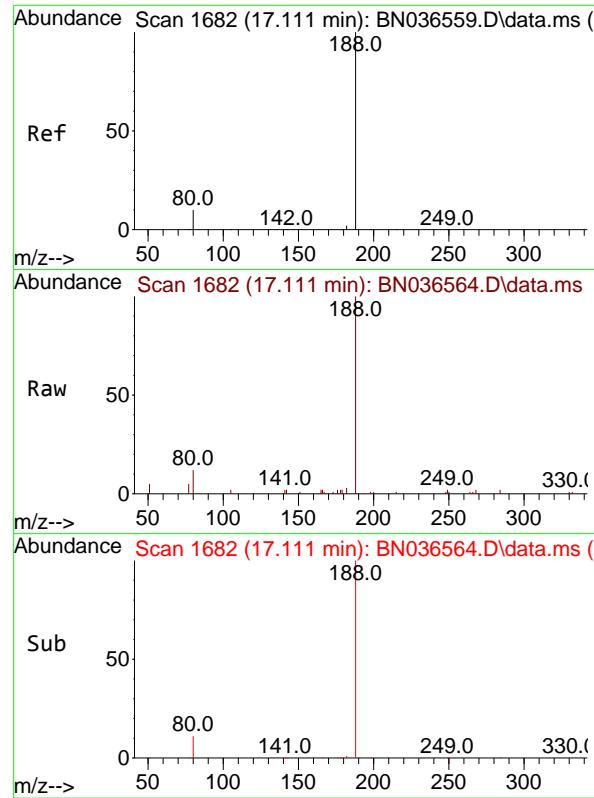
Ion Ratio Lower Upper

166 100

165 101.1 79.8 119.8

167 13.1 10.6 15.8

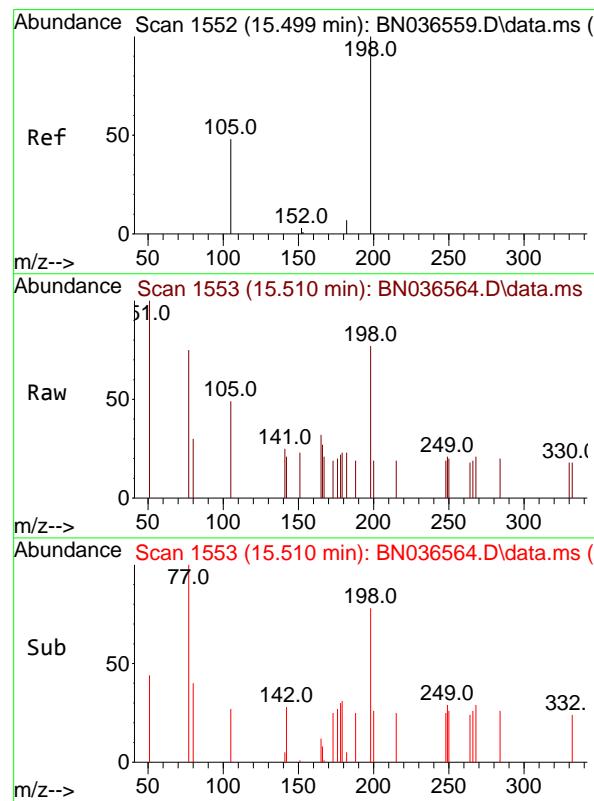
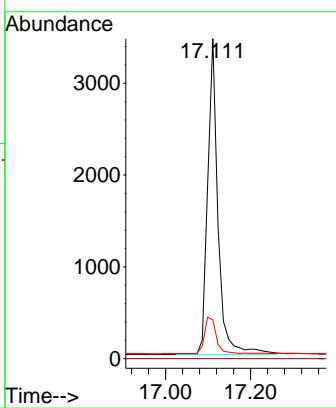




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 17.111 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036564.D  
 Acq: 10 Mar 2025 16:38

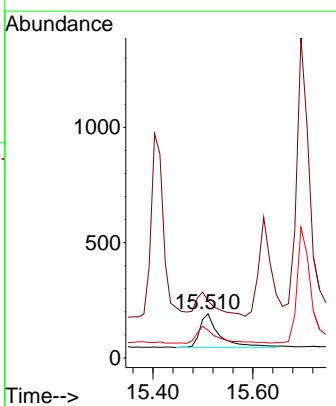
Instrument : BNA\_N  
 ClientSampleId : ICVBN031025

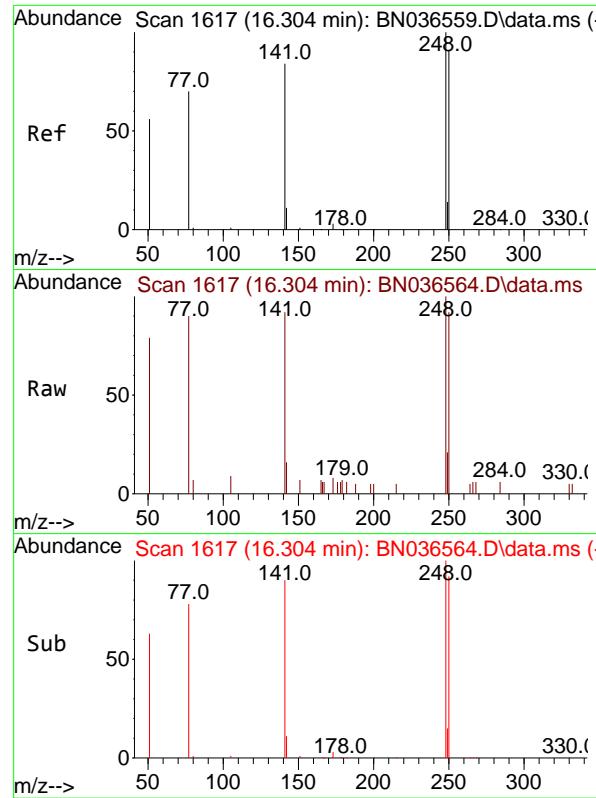
Tgt Ion:188 Resp: 5778  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 12.2 8.8 13.2



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 0.420 ng  
 RT: 15.510 min Scan# 1553  
 Delta R.T. 0.011 min  
 Lab File: BN036564.D  
 Acq: 10 Mar 2025 16:38

Tgt Ion:198 Resp: 404  
 Ion Ratio Lower Upper  
 198 100  
 51 129.3 107.9 161.9  
 105 62.8 56.2 84.2

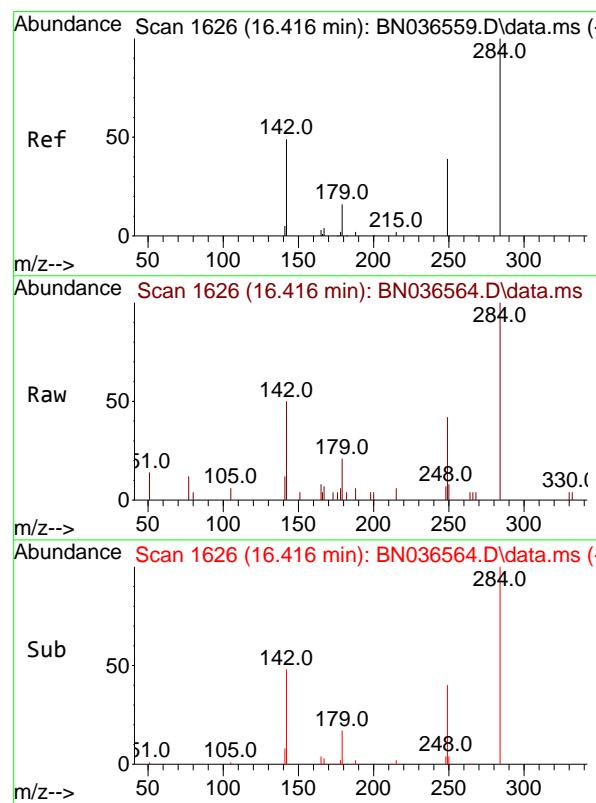
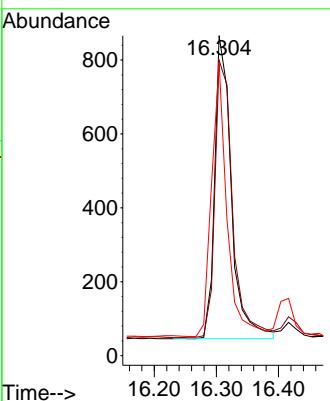




#21  
4-Bromophenyl-phenylether  
Concen: 0.421 ng  
RT: 16.304 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

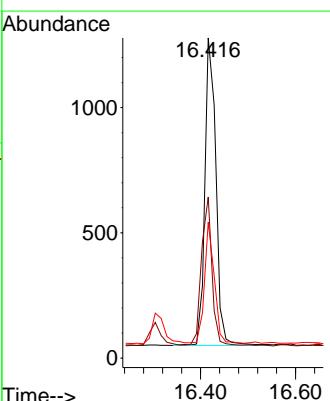
Instrument : BNA\_N  
ClientSampleId : ICVBN031025

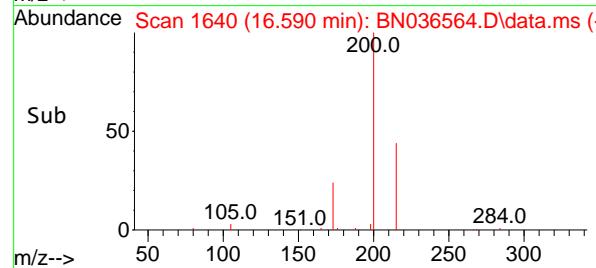
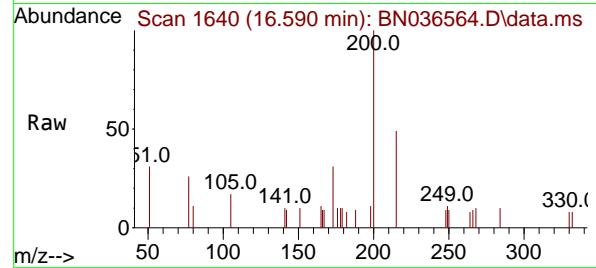
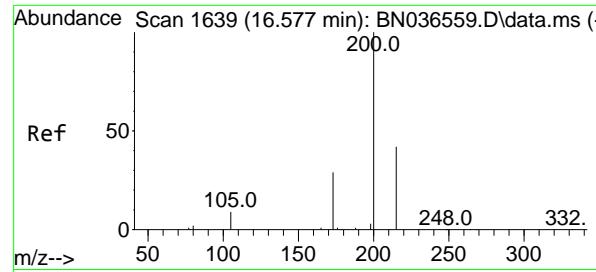
Tgt Ion:248 Resp: 1524  
Ion Ratio Lower Upper  
248 100  
250 92.3 73.0 109.6  
141 91.6 68.6 103.0



#22  
Hexachlorobenzene  
Concen: 0.455 ng  
RT: 16.416 min Scan# 1626  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:284 Resp: 1987  
Ion Ratio Lower Upper  
284 100  
142 47.5 37.0 55.4  
249 34.9 28.1 42.1

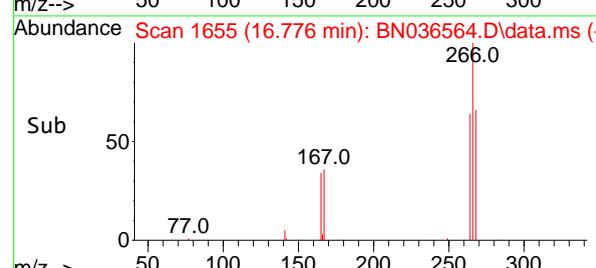
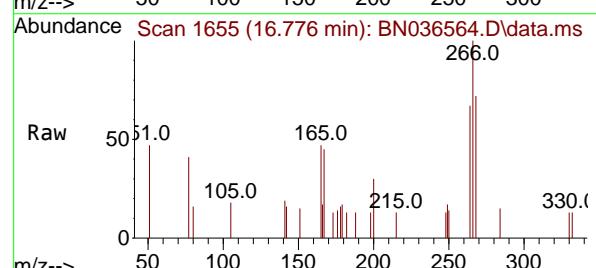
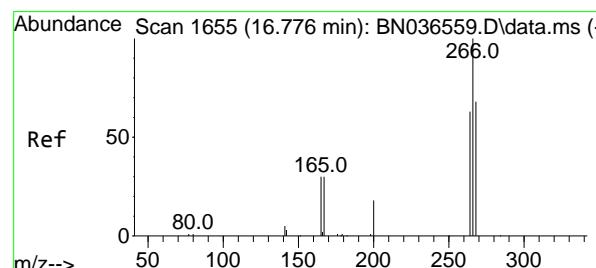
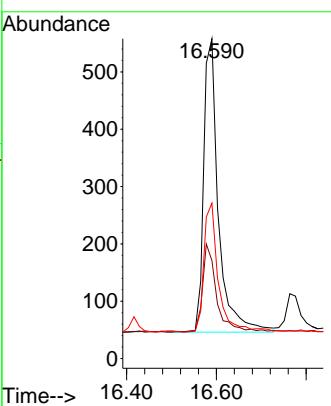




#23  
Atrazine  
Concen: 0.401 ng  
RT: 16.590 min Scan# 1  
Delta R.T. 0.012 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

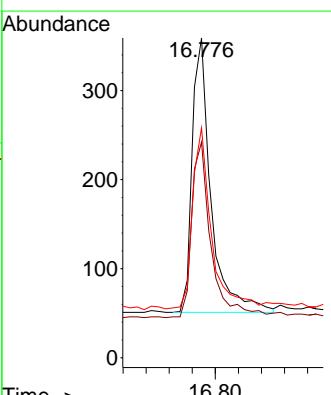
Instrument : BNA\_N  
ClientSampleId : ICVBN031025

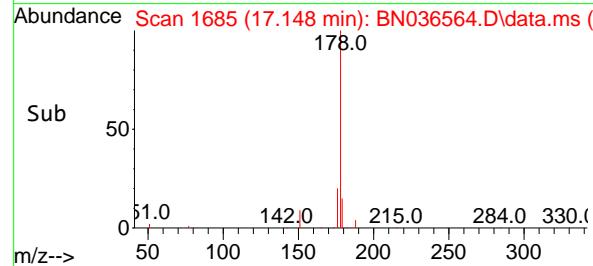
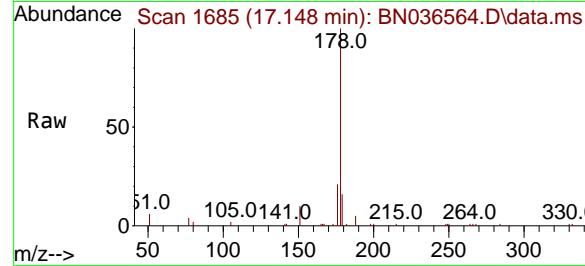
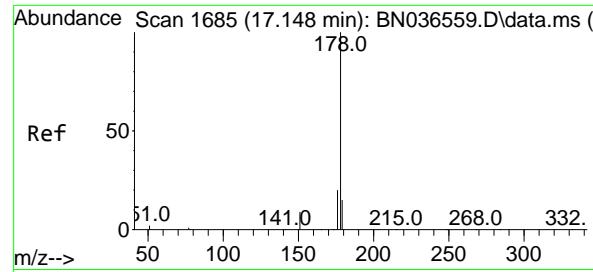
Tgt Ion:200 Resp: 1165  
Ion Ratio Lower Upper  
200 100  
173 30.6 27.3 40.9  
215 48.6 36.8 55.2



#24  
Pentachlorophenol  
Concen: 0.351 ng  
RT: 16.776 min Scan# 1655  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:266 Resp: 699  
Ion Ratio Lower Upper  
266 100  
264 67.1 49.6 74.4  
268 66.7 50.9 76.3





#25

Phenanthrene

Concen: 0.417 ng

RT: 17.148 min Scan# 1

Instrument:

BNA\_N

Delta R.T. 0.000 min

Lab File: BN036564.D

ClientSampleId :

Acq: 10 Mar 2025 16:38

ICVBN031025

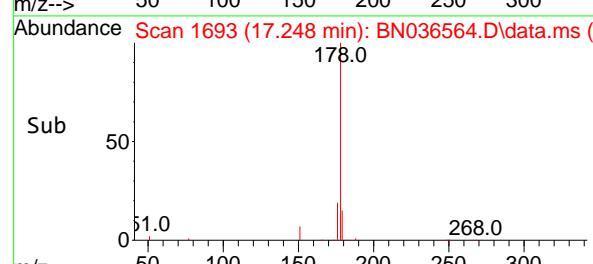
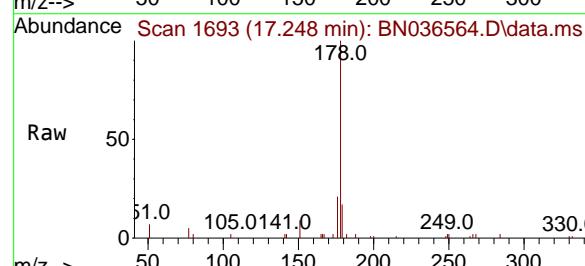
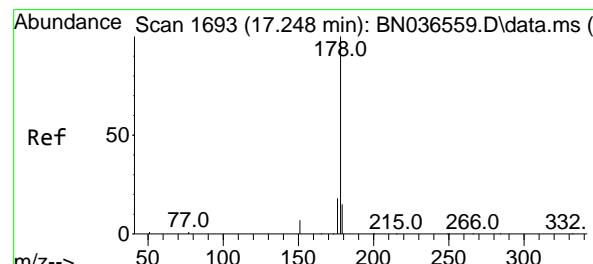
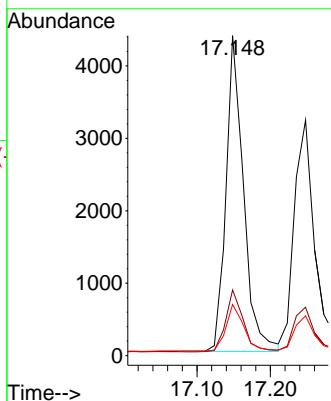
Tgt Ion:178 Resp: 7229

Ion Ratio Lower Upper

178 100

176 19.8 15.9 23.9

179 15.0 12.2 18.4



#26

Anthracene

Concen: 0.407 ng

RT: 17.248 min Scan# 1693

Delta R.T. 0.000 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

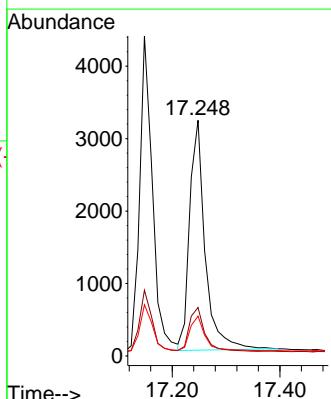
Tgt Ion:178 Resp: 6358

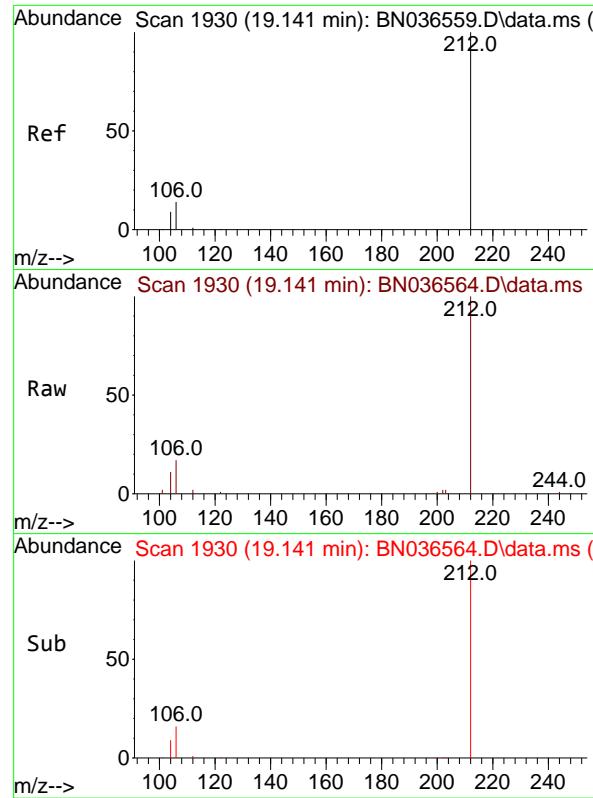
Ion Ratio Lower Upper

178 100

176 19.2 15.4 23.2

179 14.8 12.6 18.8

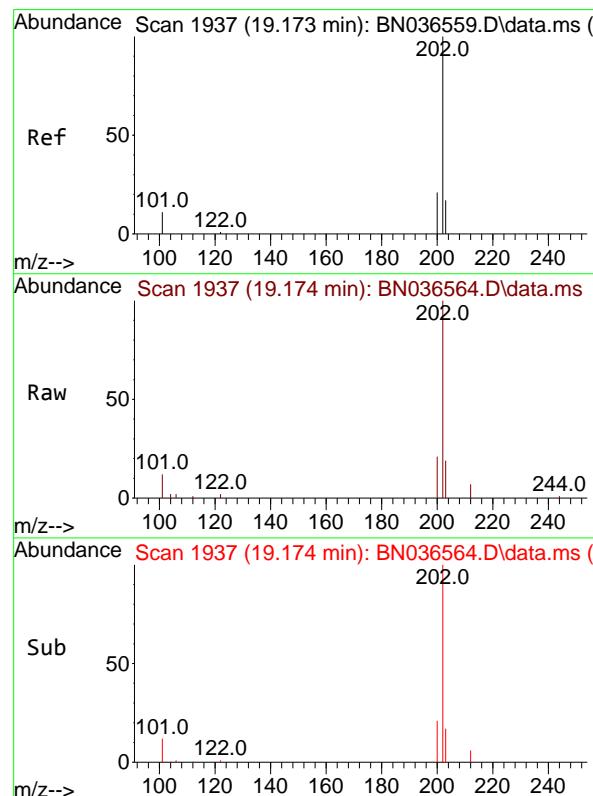
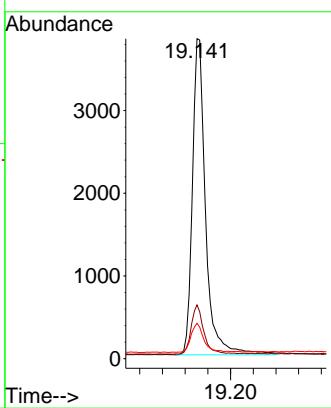




#27  
 Fluoranthene-d10  
 Concen: 0.415 ng  
 RT: 19.141 min Scan# 1  
 Delta R.T. 0.000 min Lab File: BN036564.D  
 Acq: 10 Mar 2025 16:38

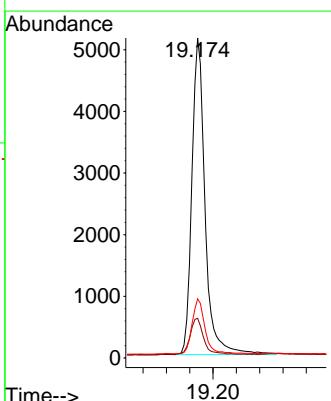
Instrument : BNA\_N  
 ClientSampleId : ICVBN031025

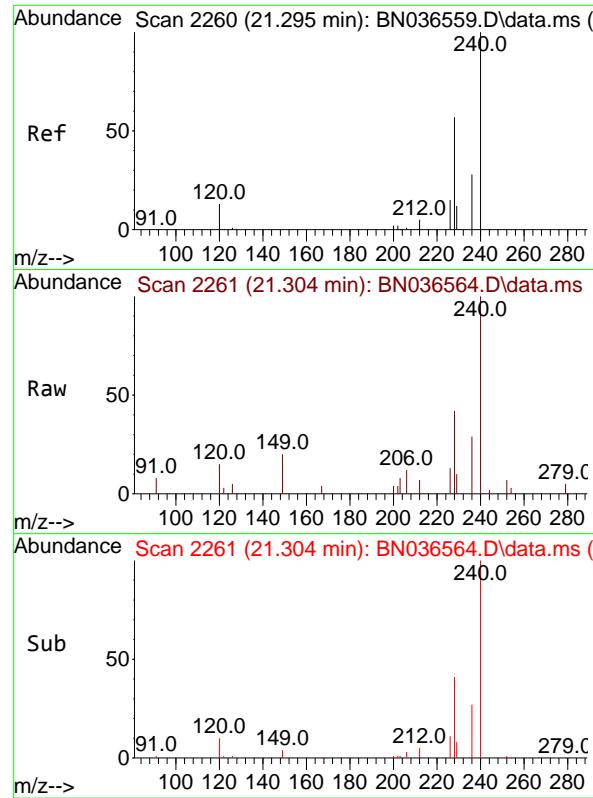
Tgt Ion:212 Resp: 6152  
 Ion Ratio Lower Upper  
 212 100  
 106 14.8 11.8 17.6  
 104 8.8 7.3 10.9



#28  
 Fluoranthene  
 Concen: 0.414 ng  
 RT: 19.174 min Scan# 1937  
 Delta R.T. 0.000 min Lab File: BN036564.D  
 Acq: 10 Mar 2025 16:38

Tgt Ion:202 Resp: 8068  
 Ion Ratio Lower Upper  
 202 100  
 101 11.6 9.4 14.0  
 203 16.8 13.5 20.3

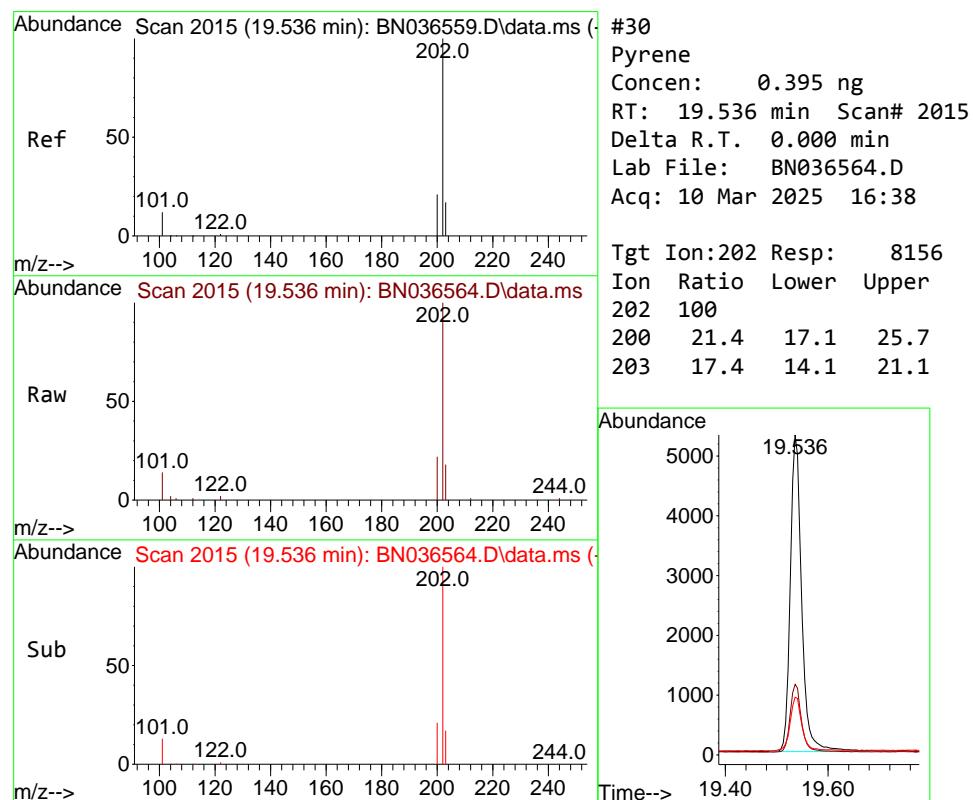
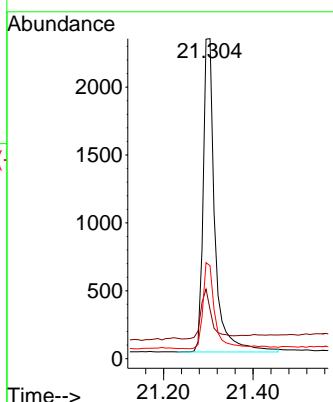




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.304 min Scan# 2  
Delta R.T. 0.009 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

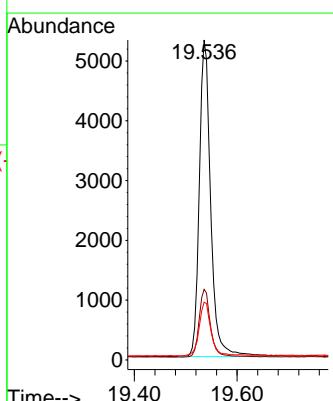
Instrument : BNA\_N  
ClientSampleId : ICVBN031025

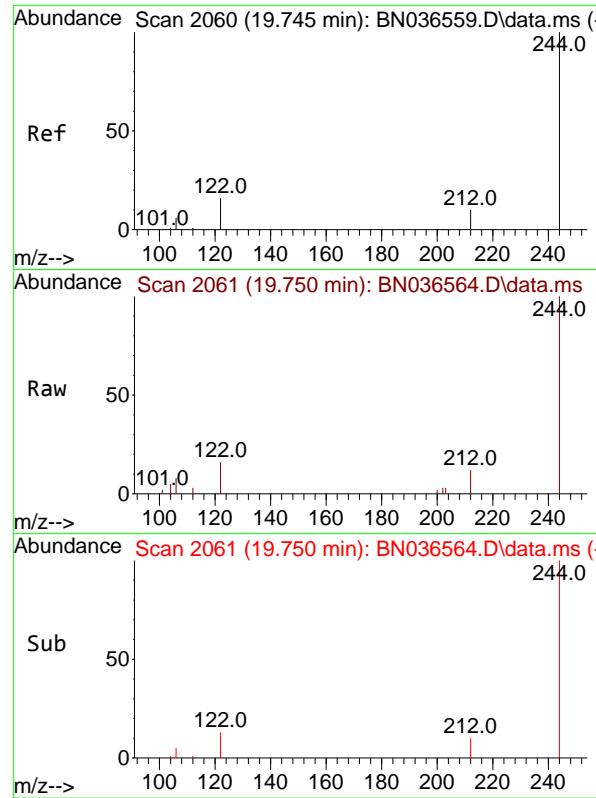
Tgt Ion:240 Resp: 4219  
Ion Ratio Lower Upper  
240 100  
120 15.4 14.6 22.0  
236 29.1 24.1 36.1



#30  
Pyrene  
Concen: 0.395 ng  
RT: 19.536 min Scan# 2015  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

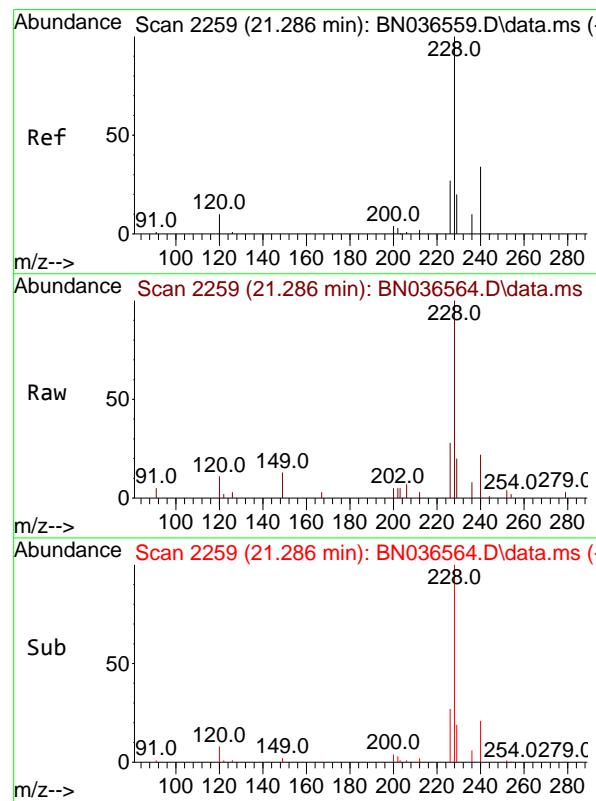
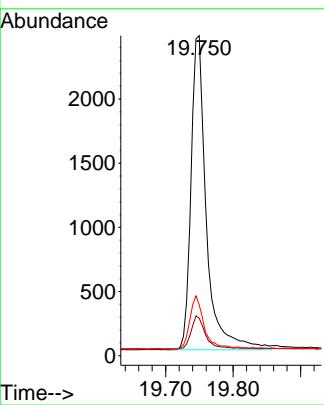
Tgt Ion:202 Resp: 8156  
Ion Ratio Lower Upper  
202 100  
200 21.4 17.1 25.7  
203 17.4 14.1 21.1





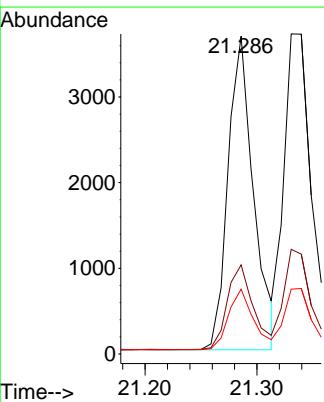
#31  
Terphenyl-d14  
Concen: 0.384 ng  
RT: 19.750 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38  
ClientSampleId : ICVBN031025

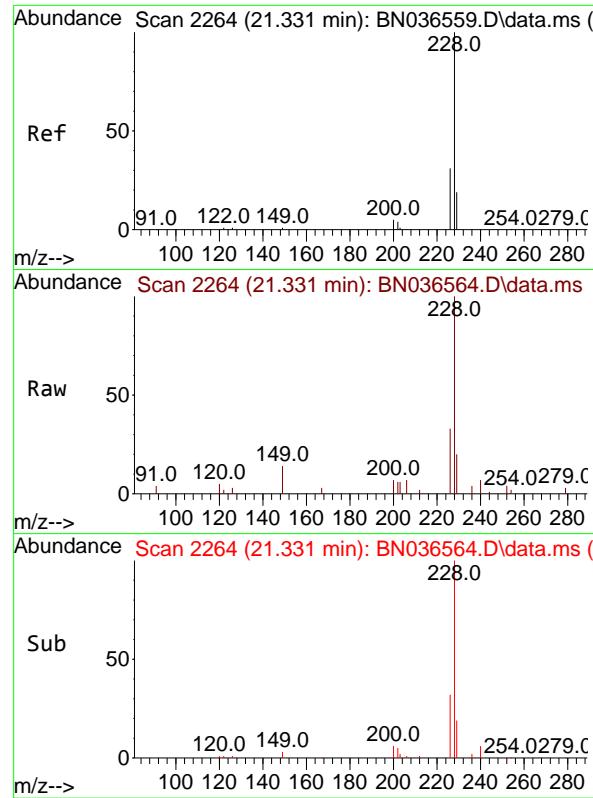
Tgt Ion:244 Resp: 3880  
Ion Ratio Lower Upper  
244 100  
212 11.7 9.6 14.4  
122 15.8 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 0.396 ng  
RT: 21.286 min Scan# 2259  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

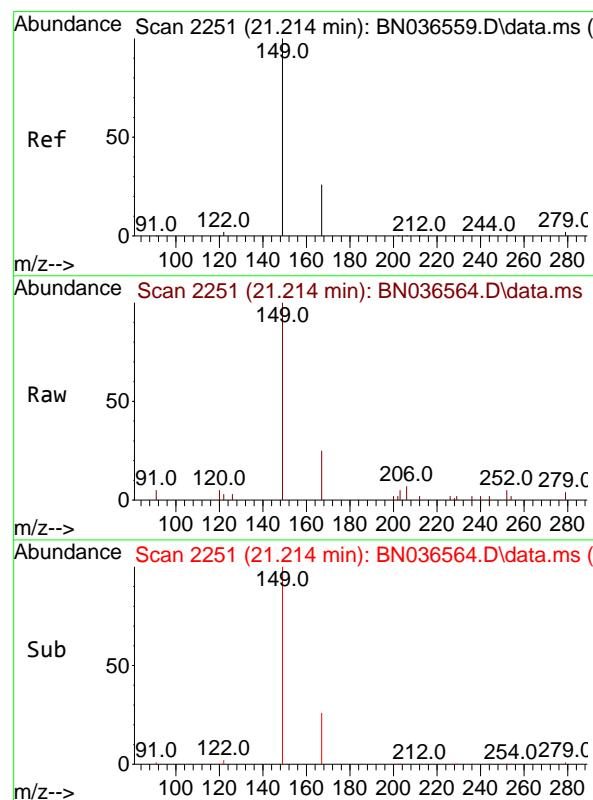
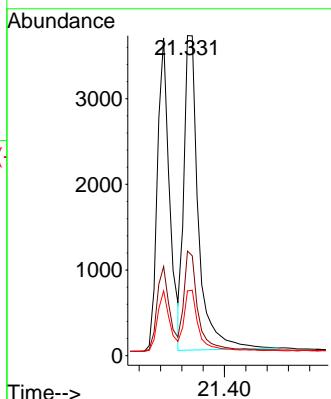
Tgt Ion:228 Resp: 5814  
Ion Ratio Lower Upper  
228 100  
226 28.1 22.5 33.7  
229 20.4 16.6 25.0





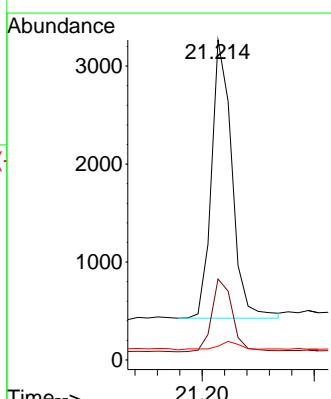
#33  
Chrysene  
Concen: 0.433 ng  
RT: 21.331 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38  
ClientSampleId : ICVBN031025

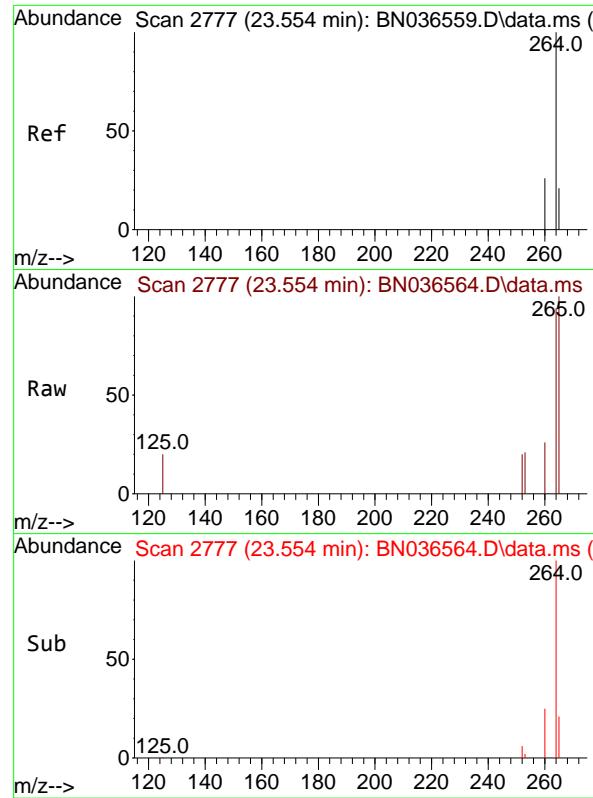
Tgt Ion:228 Resp: 6940  
Ion Ratio Lower Upper  
228 100  
226 32.7 25.3 37.9  
229 20.3 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.344 ng  
RT: 21.214 min Scan# 2251  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:149 Resp: 3594  
Ion Ratio Lower Upper  
149 100  
167 26.6 20.7 31.1  
279 3.7 3.6 5.4

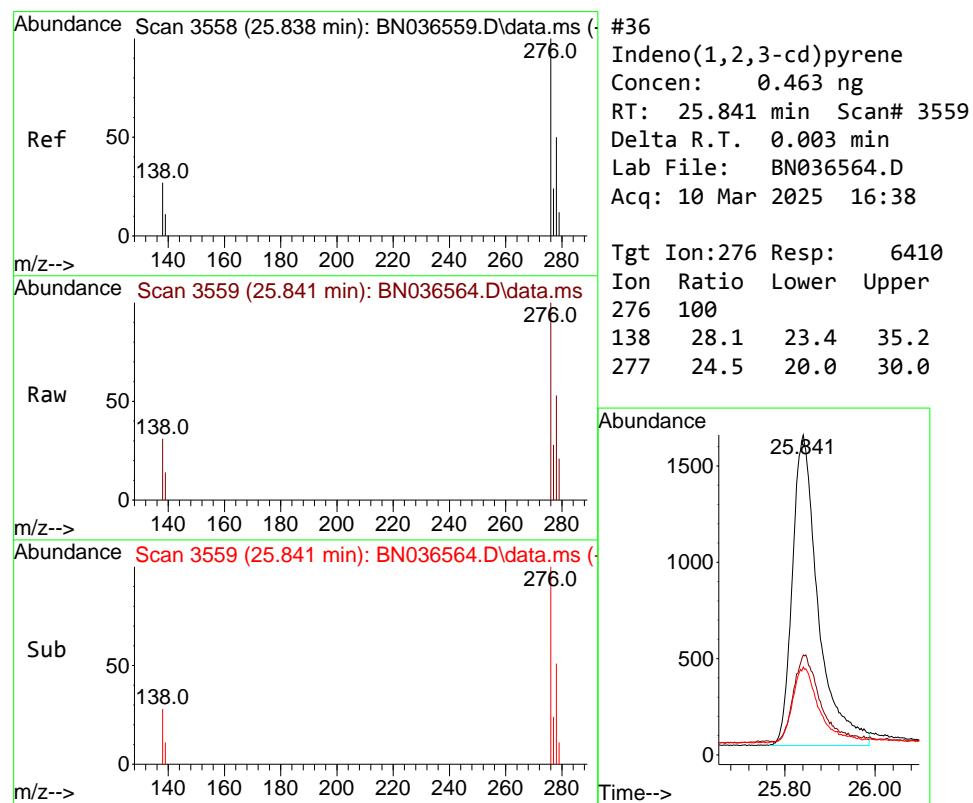
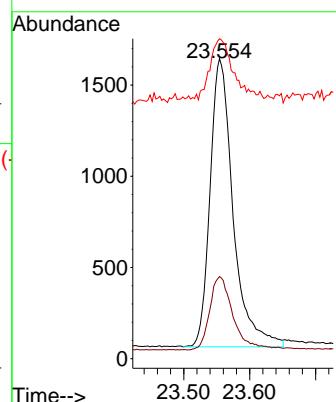




#35  
 Perylene-d12  
 Concen: 0.400 ng  
 RT: 23.554 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036564.D  
 Acq: 10 Mar 2025 16:38

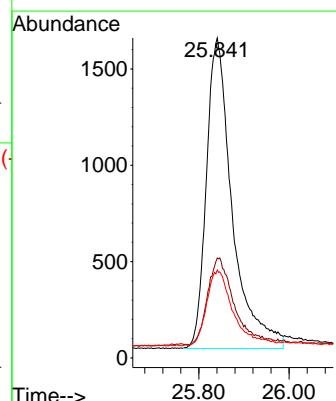
Instrument : BNA\_N  
 ClientSampleId : ICVBN031025

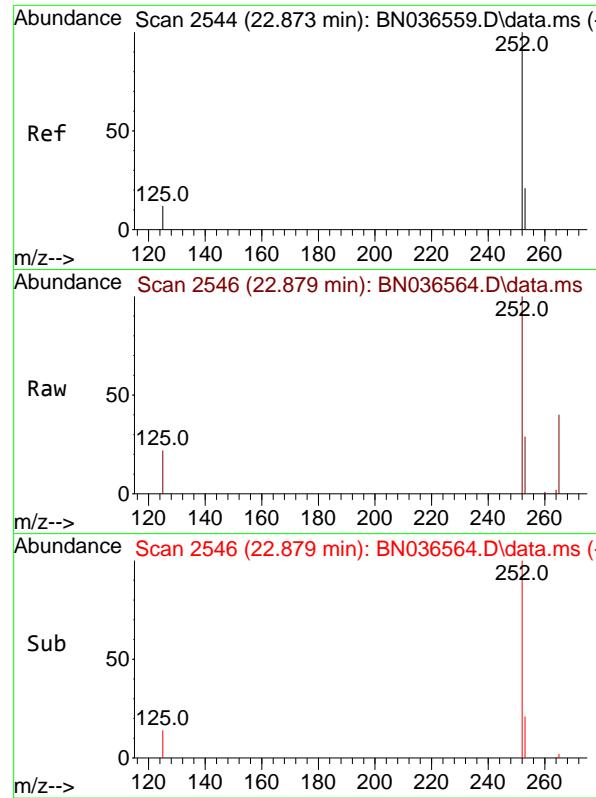
Tgt Ion:264 Resp: 3835  
 Ion Ratio Lower Upper  
 264 100  
 260 27.4 22.6 33.8  
 265 106.6 88.1 132.1



#36  
 Indeno(1,2,3-cd)pyrene  
 Concen: 0.463 ng  
 RT: 25.841 min Scan# 3559  
 Delta R.T. 0.003 min  
 Lab File: BN036564.D  
 Acq: 10 Mar 2025 16:38

Tgt Ion:276 Resp: 6410  
 Ion Ratio Lower Upper  
 276 100  
 138 28.1 23.4 35.2  
 277 24.5 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.423 ng

RT: 22.879 min Scan# 2

Delta R.T. 0.006 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

Instrument :

BNA\_N

ClientSampleId :

ICVBN031025

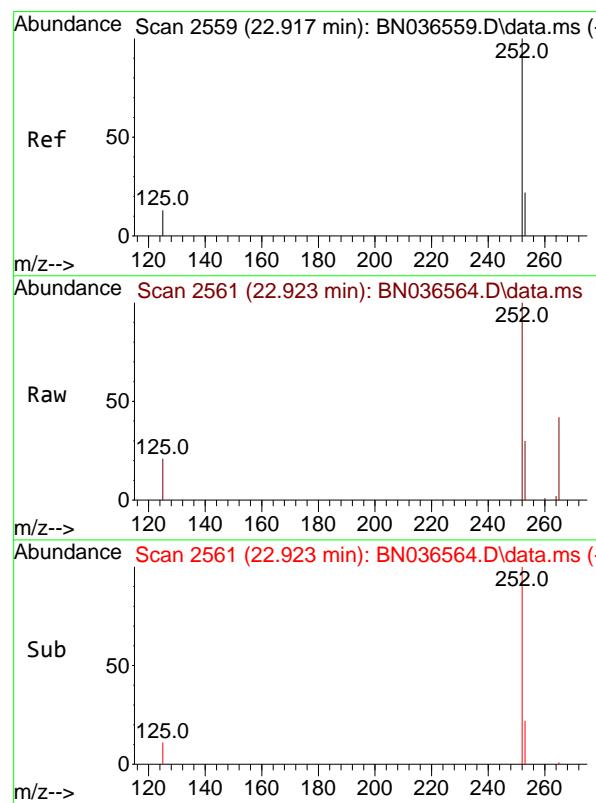
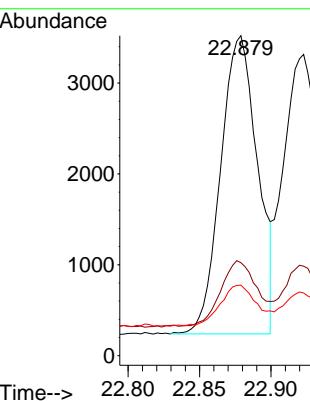
Tgt Ion:252 Resp: 5902

Ion Ratio Lower Upper

252 100

253 29.0 23.9 35.9

125 22.1 17.4 26.2



#38

Benzo(k)fluoranthene

Concen: 0.429 ng

RT: 22.923 min Scan# 2561

Delta R.T. 0.006 min

Lab File: BN036564.D

Acq: 10 Mar 2025 16:38

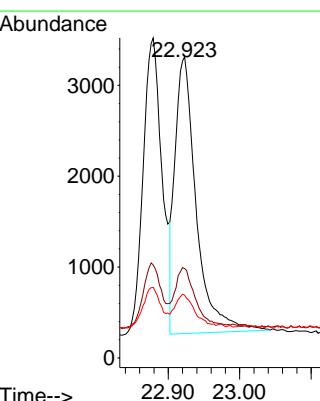
Tgt Ion:252 Resp: 6286

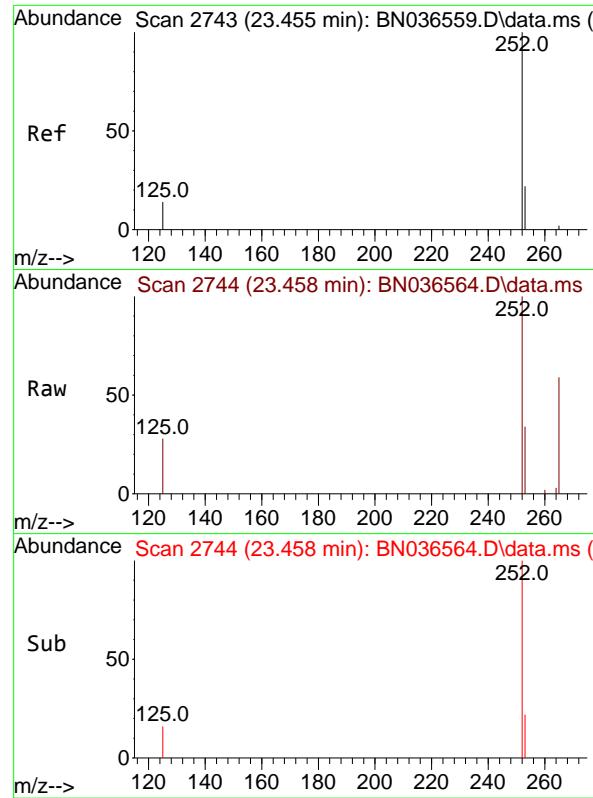
Ion Ratio Lower Upper

252 100

253 29.7 24.6 36.8

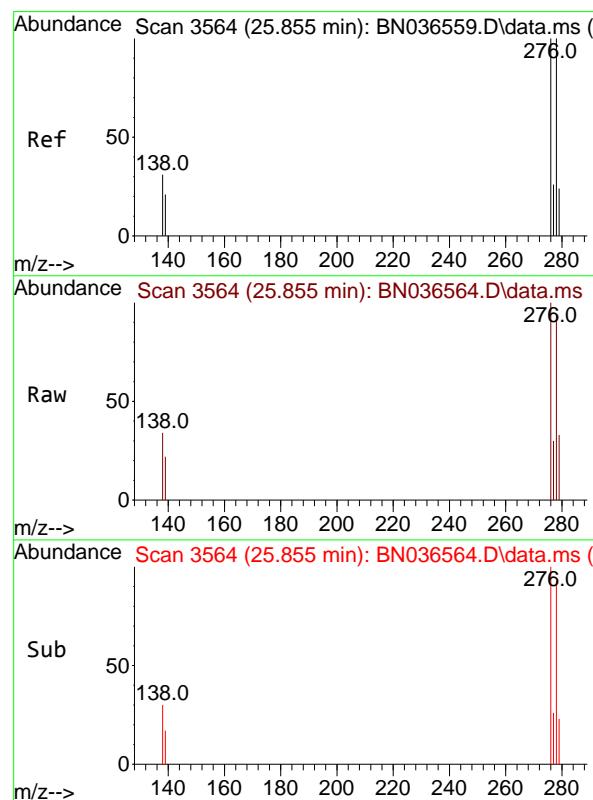
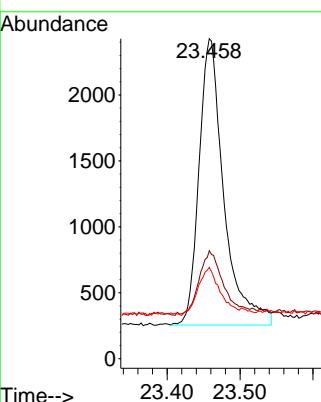
125 20.8 17.8 26.8





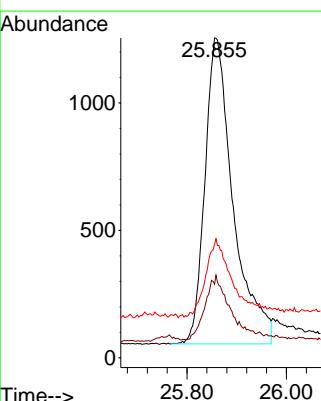
#39  
Benzo(a)pyrene  
Concen: 0.438 ng  
RT: 23.458 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.003 min  
Lab File: BN036564.D  
ClientSampleId : ICVBN031025  
Acq: 10 Mar 2025 16:38

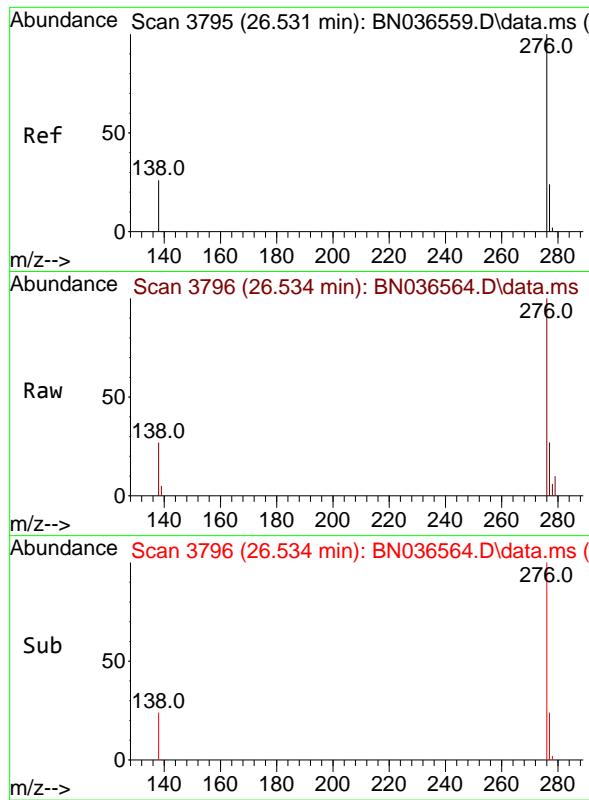
Tgt Ion:252 Resp: 5147  
Ion Ratio Lower Upper  
252 100  
253 33.7 27.8 41.8  
125 28.5 22.7 34.1



#40  
Dibenzo(a,h)anthracene  
Concen: 0.440 ng  
RT: 25.855 min Scan# 3564  
Delta R.T. 0.000 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Tgt Ion:278 Resp: 4740  
Ion Ratio Lower Upper  
278 100  
139 23.0 20.8 31.2  
279 35.5 28.8 43.2

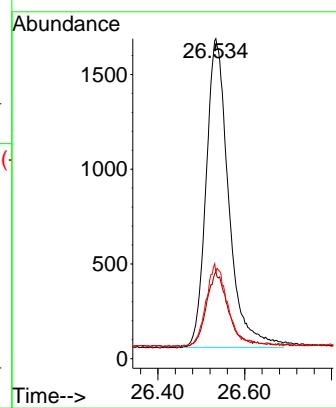




#41  
Benzo(g,h,i)perylene  
Concen: 0.477 ng  
RT: 26.534 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN036564.D  
Acq: 10 Mar 2025 16:38

Instrument : BNA\_N  
ClientSampleId : ICVBN031025

Tgt Ion:276 Resp: 5877  
Ion Ratio Lower Upper  
276 100  
277 27.2 22.2 33.4  
138 27.2 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN031025**

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 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	0.444	0.521	-17.3	118	0.00
3	n-Nitrosodimethylamine	0.898	0.918	-2.2	111	0.00
4 S	2-Fluorophenol	0.932	0.972	-4.3	111	0.00
5 S	Phenol-d6	1.152	1.103	4.3	110	0.00
6	bis(2-Chloroethyl)ether	1.190	1.184	0.5	113	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	111	0.00
8 S	Nitrobenzene-d5	0.435	0.418	3.9	112	0.00
9	Naphthalene	1.177	1.191	-1.2	109	0.00
10	Hexachlorobutadiene	0.277	0.301	-8.7	113	0.00
11 SURR	2-Methylnaphthalene-d10	0.595	0.594	0.2	108	0.00
12	2-Methylnaphthalene	0.749	0.721	3.7	104	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	102	0.00
14 S	2,4,6-Tribromophenol	0.182	0.166	8.8	90	0.00
15 S	2-Fluorobiphenyl	2.327	2.513	-8.0	107	0.00
16	Acenaphthylene	1.888	1.964	-4.0	103	0.00
17	Acenaphthene	1.236	1.308	-5.8	104	0.00
18	Fluorene	1.672	1.694	-1.3	98	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	96	0.00
20	4,6-Dinitro-2-methylphenol	0.086	0.070	18.6	87	0.01
21	4-Bromophenyl-phenylether	0.251	0.264	-5.2	93	0.00
22	Hexachlorobenzene	0.303	0.344	-13.5	98	0.00
23	Atrazine	0.201	0.202	-0.5	91	0.01
24	Pentachlorophenol	0.138	0.121	12.3	85	0.00
25	Phenanthrene	1.200	1.251	-4.2	93	0.00
26	Anthracene	1.083	1.100	-1.6	92	0.00
27 SURR	Fluoranthene-d10	1.025	1.065	-3.9	92	0.00
28	Fluoranthene	1.348	1.396	-3.6	93	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	103	0.00
30	Pyrene	1.956	1.933	1.2	93	0.00
31 S	Terphenyl-d14	0.958	0.920	4.0	92	0.00
32	Benzo(a)anthracene	1.391	1.378	0.9	98	0.00
33	Chrysene	1.520	1.645	-8.2	105	0.00
34	Bis(2-ethylhexyl)phthalate	0.990	0.852	13.9	84	0.00
35 I	Perylene-d12	1.000	1.000	0.0	108	0.00
36	Indeno(1,2,3-cd)pyrene	1.444	1.671	-15.7	117	0.00
37	Benzo(b)fluoranthene	1.456	1.539	-5.7	108	0.00
38	Benzo(k)fluoranthene	1.527	1.639	-7.3	110	0.00
39 C	Benzo(a)pyrene	1.226	1.342	-9.5	112	0.00
40	Dibenzo(a,h)anthracene	1.124	1.236	-10.0	115	0.00
41	Benzo(g,h,i)perylene	1.286	1.532	-19.1	120	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036564.D  
 Acq On : 10 Mar 2025 16:38  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN031025**

Quant Time: Mar 10 17:10:04 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Mon Mar 10 16:06:28 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	0.470	-17.5	118	0.00
3	n-Nitrosodimethylamine	0.400	0.409	-2.2	111	0.00
4 S	2-Fluorophenol	0.400	0.417	-4.2	111	0.00
5 S	Phenol-d6	0.400	0.383	4.3	110	0.00
6	bis(2-Chloroethyl)ether	0.400	0.398	0.5	113	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	111	0.00
8 S	Nitrobenzene-d5	0.400	0.384	4.0	112	0.00
9	Naphthalene	0.400	0.405	-1.3	109	0.00
10	Hexachlorobutadiene	0.400	0.434	-8.5	113	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.399	0.3	108	0.00
12	2-Methylnaphthalene	0.400	0.385	3.8	104	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	102	0.00
14 S	2,4,6-Tribromophenol	0.400	0.365	8.8	90	0.00
15 S	2-Fluorobiphenyl	0.400	0.432	-8.0	107	0.00
16	Acenaphthylene	0.400	0.416	-4.0	103	0.00
17	Acenaphthene	0.400	0.423	-5.7	104	0.00
18	Fluorene	0.400	0.405	-1.3	98	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	96	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.420	-5.0	87	0.01
21	4-Bromophenyl-phenylether	0.400	0.421	-5.2	93	0.00
22	Hexachlorobenzene	0.400	0.455	-13.7	98	0.00
23	Atrazine	0.400	0.401	-0.3	91	0.01
24	Pentachlorophenol	0.400	0.351	12.3	85	0.00
25	Phenanthrene	0.400	0.417	-4.2	93	0.00
26	Anthracene	0.400	0.407	-1.7	92	0.00
27 SURR	Fluoranthene-d10	0.400	0.415	-3.7	92	0.00
28	Fluoranthene	0.400	0.414	-3.5	93	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	103	0.00
30	Pyrene	0.400	0.395	1.3	93	0.00
31 S	Terphenyl-d14	0.400	0.384	4.0	92	0.00
32	Benzo(a)anthracene	0.400	0.396	1.0	98	0.00
33	Chrysene	0.400	0.433	-8.2	105	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.344	14.0	84	0.00
35 I	Perylene-d12	0.400	0.400	0.0	108	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.463	-15.8	117	0.00
37	Benzo(b)fluoranthene	0.400	0.423	-5.7	108	0.00
38	Benzo(k)fluoranthene	0.400	0.429	-7.2	110	0.00
39 C	Benzo(a)pyrene	0.400	0.438	-9.5	112	0.00
40	Dibenzo(a,h)anthracene	0.400	0.440	-10.0	115	0.00
41	Benzo(g,h,i)perylene	0.400	0.477	-19.2	120	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>JAC005</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1731</u>	SAS No.:	<u>Q1731</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>04/04/2025</u>	<u>13:42</u>
Lab File ID:	<u>BN036837.D</u>		Init. Calib. Date(s):	<u>03/10/2025</u>	<u>03/10/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4</u>		Init. Calib. Time(s):	<u>11:42</u>	<u>15:19</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	0.595	0.592		-0.5	20.0
Fluoranthene-d10	1.025	1.140		11.2	20.0
2-Fluorophenol	0.932	0.953		2.3	20.0
Phenol-d6	1.152	1.161		0.8	20.0
Nitrobenzene-d5	0.435	0.409		-6.0	20.0
2-Fluorobiphenyl	2.327	2.149		-7.6	20.0
2,4,6-Tribromophenol	0.182	0.169		-7.1	20.0
Terphenyl-d14	0.958	0.876		-8.6	20.0
1,4-Dioxane	0.444	0.498		12.2	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036837.D  
 Acq On : 04 Apr 2025 13:42  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 17:31:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

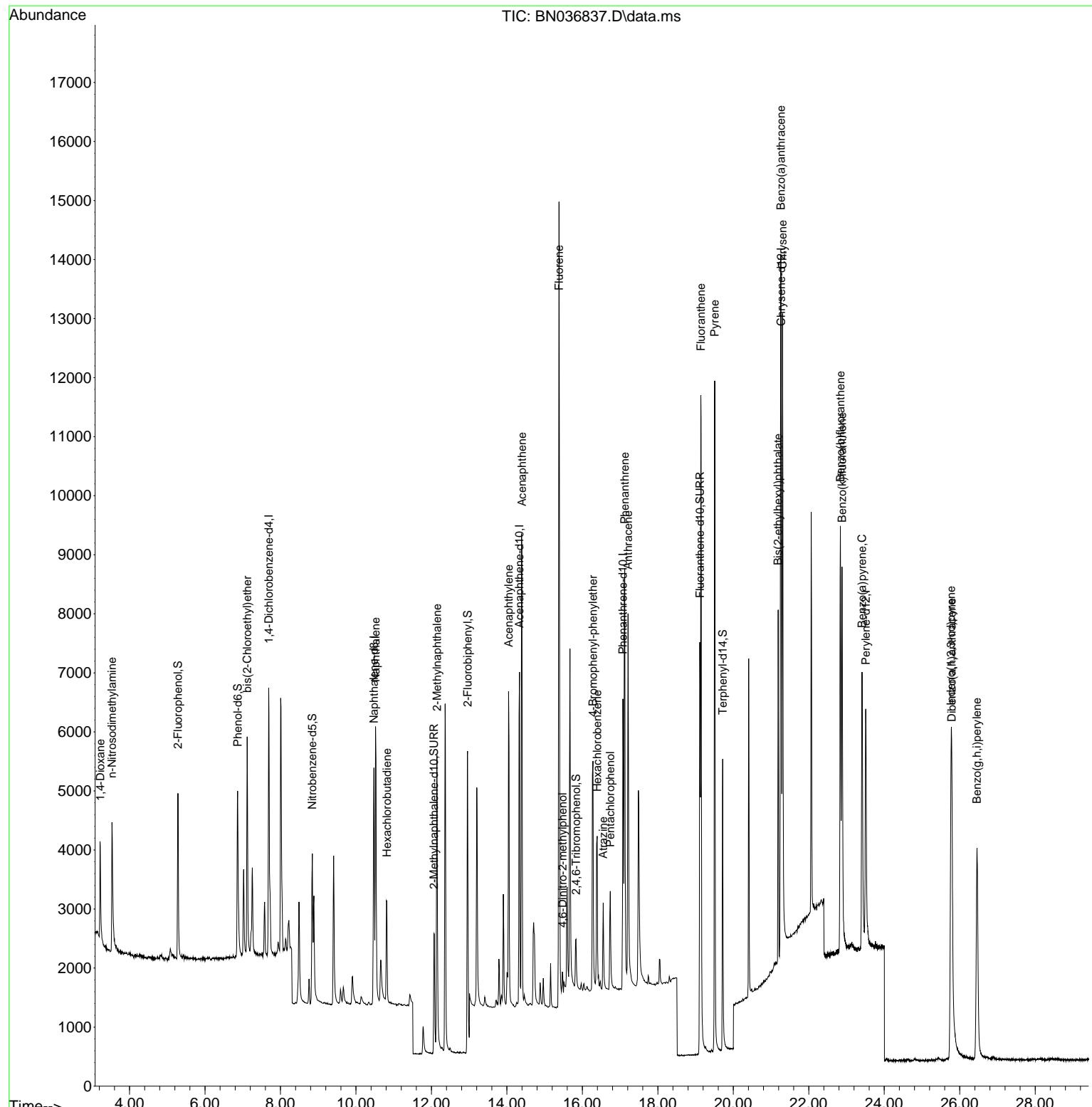
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.688	152	2261	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	5761	0.400	ng	# 0.00
13) Acenaphthene-d10	14.334	164	3391	0.400	ng	0.00
19) Phenanthrene-d10	17.074	188	7218	0.400	ng	# 0.00
29) Chrysene-d12	21.268	240	6202	0.400	ng	0.00
35) Perylene-d12	23.511	264	5846	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.283	112	2154	0.409	ng	0.00
5) Phenol-d6	6.865	99	2624	0.403	ng	0.00
8) Nitrobenzene-d5	8.843	82	2357	0.376	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	3408	0.398	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	572	0.372	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	7286	0.369	ng	0.00
27) Fluoranthene-d10	19.113	212	8227	0.445	ng	0.00
31) Terphenyl-d14	19.717	244	5434	0.366	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.225	88	1125	0.449	ng	99
3) n-Nitrosodimethylamine	3.536	42	2154	0.425	ng	# 98
6) bis(2-Chloroethyl)ether	7.118	93	2771	0.412	ng	99
9) Naphthalene	10.520	128	6735	0.397	ng	99
10) Hexachlorobutadiene	10.819	225	1531	0.384	ng	# 99
12) 2-Methylnaphthalene	12.146	142	4180	0.388	ng	98
16) Acenaphthylene	14.046	152	6192	0.387	ng	99
17) Acenaphthene	14.398	154	4201	0.401	ng	98
18) Fluorene	15.382	166	5768	0.407	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	509	0.422	ng	# 81
21) 4-Bromophenyl-phenylether	16.280	248	1746	0.386	ng	# 83
22) Hexachlorobenzene	16.391	284	2067	0.379	ng	96
23) Atrazine	16.553	200	1430	0.394	ng	97
24) Pentachlorophenol	16.739	266	1008	0.405	ng	98
25) Phenanthrene	17.124	178	8982	0.415	ng	99
26) Anthracene	17.211	178	7861	0.402	ng	98
28) Fluoranthene	19.141	202	10677	0.439	ng	100
30) Pyrene	19.508	202	10985	0.362	ng	100
32) Benzo(a)anthracene	21.259	228	8968	0.416	ng	99
33) Chrysene	21.304	228	10083	0.428	ng	99
34) Bis(2-ethylhexyl)phtha...	21.187	149	5324	0.347	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.771	276	8691	0.412	ng	98
37) Benzo(b)fluoranthene	22.838	252	9008	0.423	ng	92
38) Benzo(k)fluoranthene	22.879	252	9694	0.434	ng	# 91
39) Benzo(a)pyrene	23.411	252	7658	0.427	ng	# 90
40) Dibenzo(a,h)anthracene	25.791	278	6556	0.399	ng	91
41) Benzo(g,h,i)perylene	26.458	276	7891	0.420	ng	96

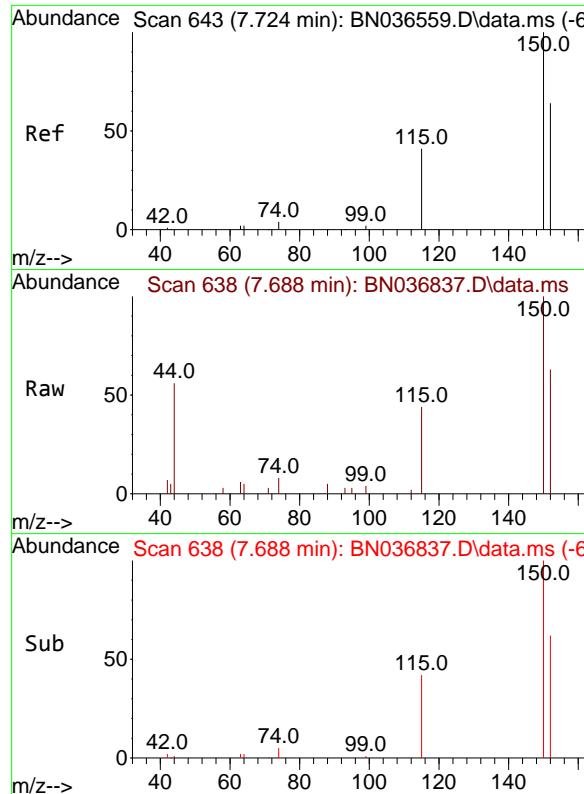
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036837.D  
 Acq On : 04 Apr 2025 13:42  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 17:31:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

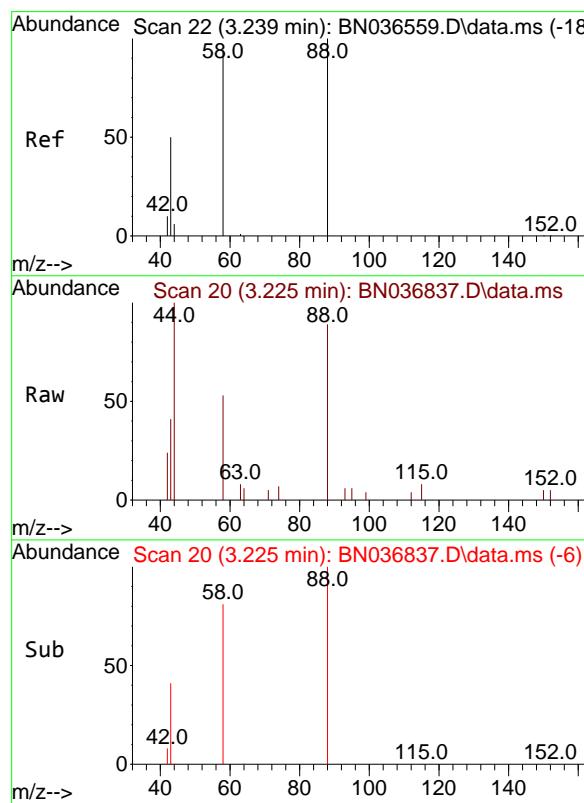
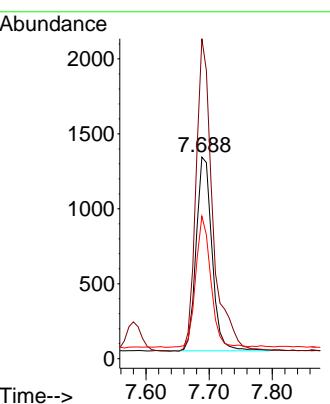




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.688 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

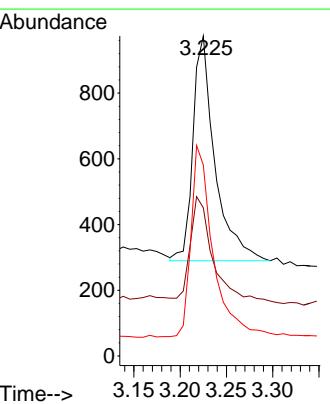
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

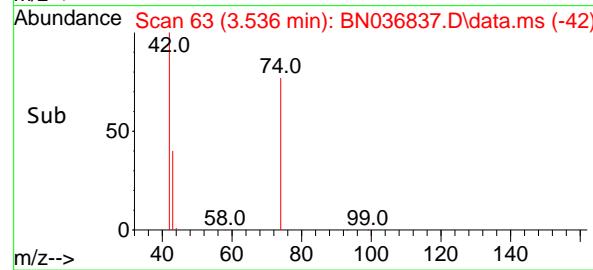
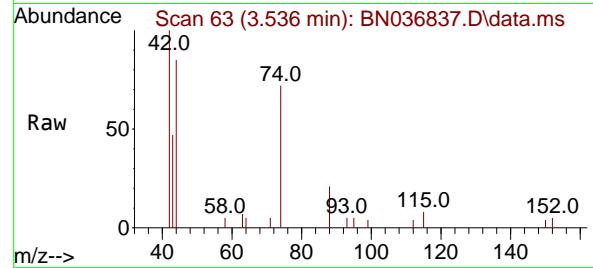
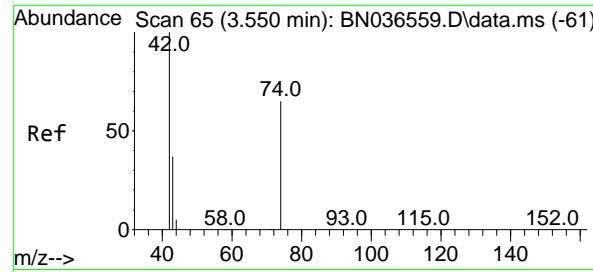
Tgt Ion:152 Resp: 2261  
 Ion Ratio Lower Upper  
 152 100  
 150 158.7 123.7 185.5  
 115 70.6 54.3 81.5



#2  
 1,4-Dioxane  
 Concen: 0.449 ng  
 RT: 3.225 min Scan# 20  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion: 88 Resp: 1125  
 Ion Ratio Lower Upper  
 88 100  
 43 47.0 37.8 56.8  
 58 85.5 67.4 101.2

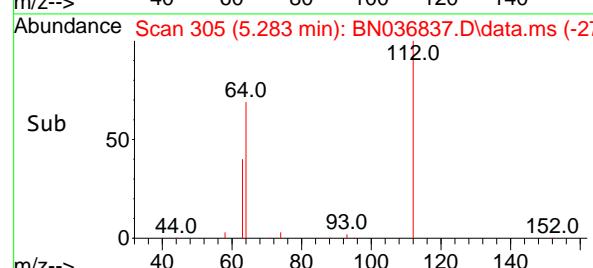
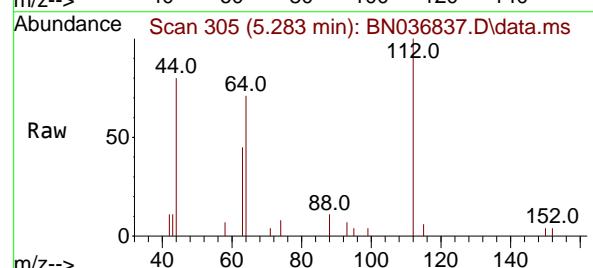
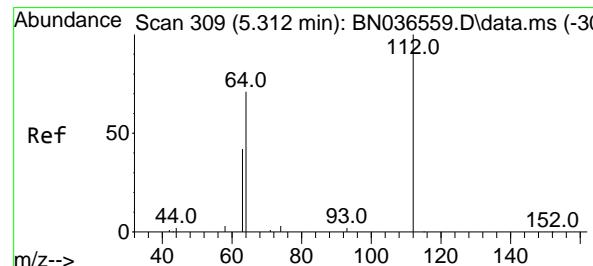
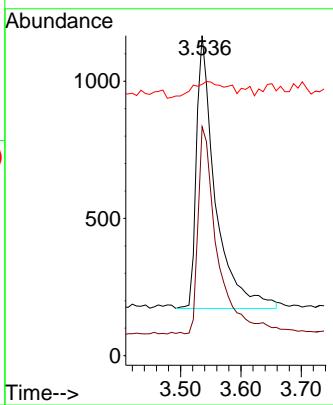




#3  
 n-Nitrosodimethylamine  
 Concen: 0.425 ng  
 RT: 3.536 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

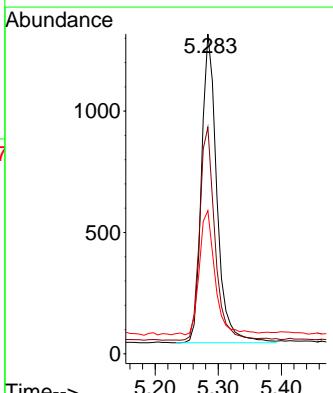
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

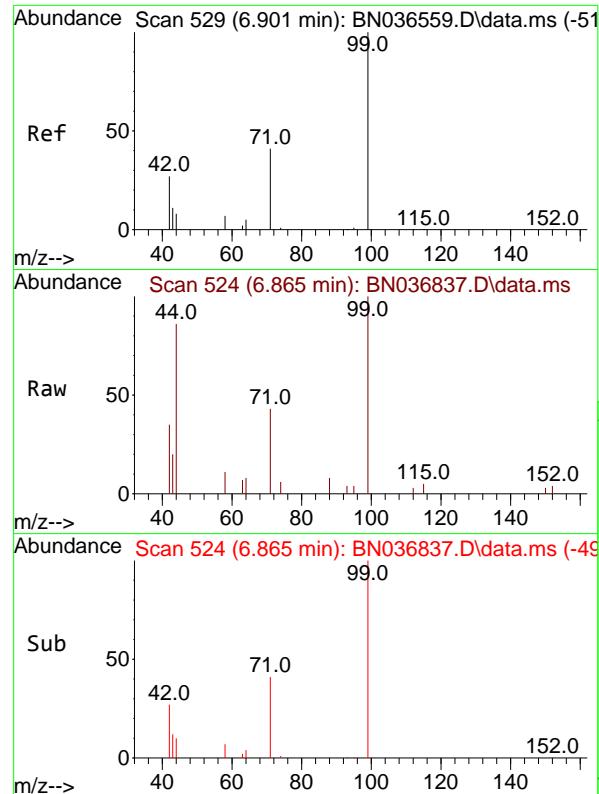
Tgt Ion: 42 Resp: 2154  
 Ion Ratio Lower Upper  
 42 100  
 74 76.7 60.6 90.8  
 44 10.5 6.3 9.5#



#4  
 2-Fluorophenol  
 Concen: 0.409 ng  
 RT: 5.283 min Scan# 305  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion: 112 Resp: 2154  
 Ion Ratio Lower Upper  
 112 100  
 64 69.0 53.1 79.7  
 63 41.0 31.8 47.8

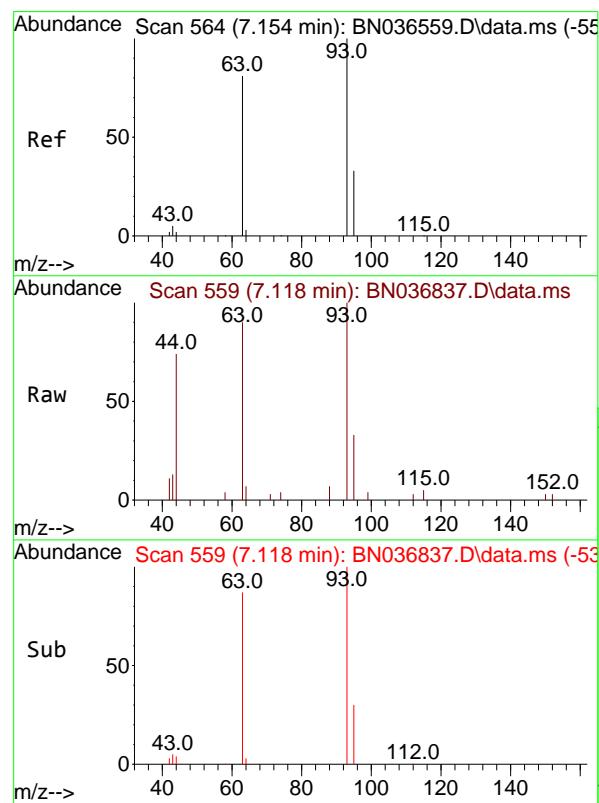
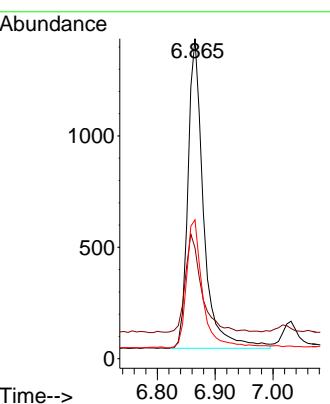




#5  
Phenol-d6  
Concen: 0.403 ng  
RT: 6.865 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

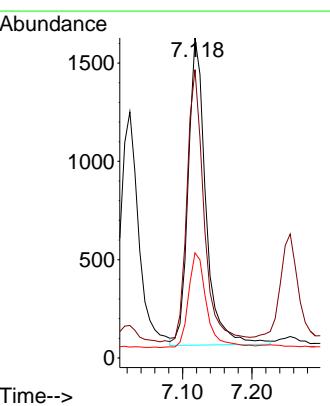
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

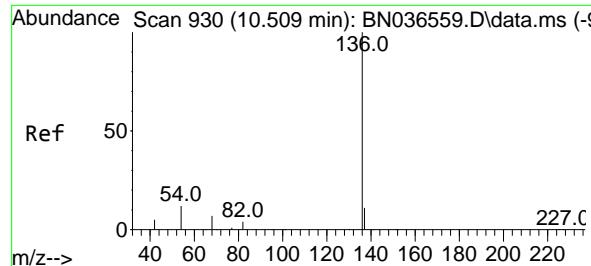
Tgt Ion: 99 Resp: 2624  
Ion Ratio Lower Upper  
99 100  
42 33.0 26.5 39.7  
71 43.3 34.1 51.1



#6  
bis(2-Chloroethyl)ether  
Concen: 0.412 ng  
RT: 7.118 min Scan# 559  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

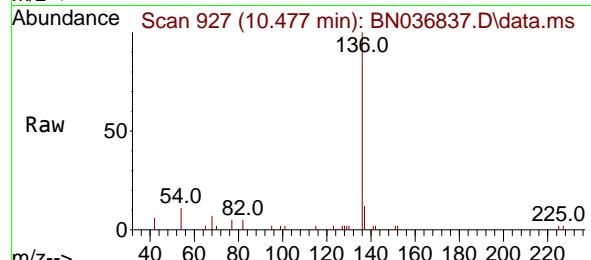
Tgt Ion: 93 Resp: 2771  
Ion Ratio Lower Upper  
93 100  
63 85.7 67.7 101.5  
95 31.5 25.6 38.4





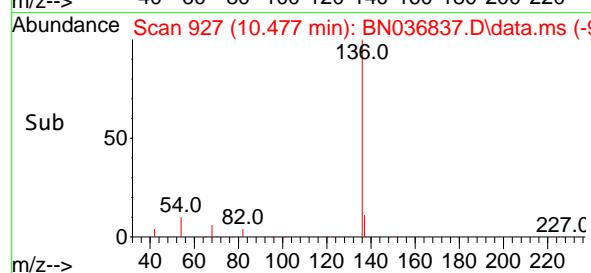
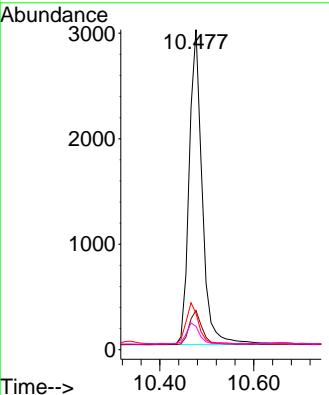
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.477 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4



Tgt Ion:136 Resp: 5761

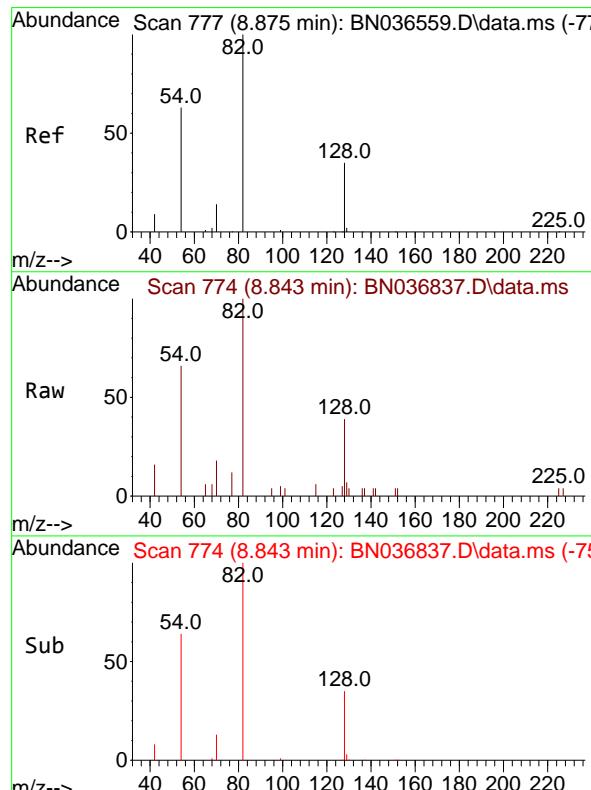
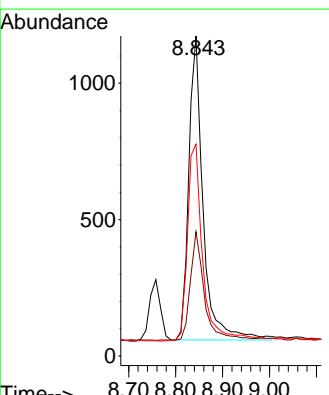
Ion	Ratio	Lower	Upper
136	100		
137	12.2	10.3	15.5
54	11.3	11.5	17.3
68	7.3	7.0	10.4

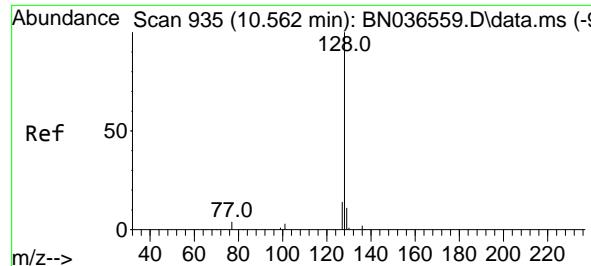


#8  
 Nitrobenzene-d5  
 Concen: 0.376 ng  
 RT: 8.843 min Scan# 774  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion: 82 Resp: 2357

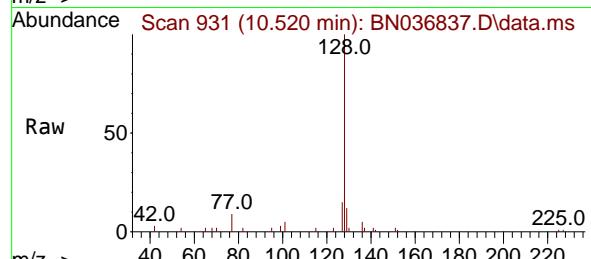
Ion	Ratio	Lower	Upper
82	100		
128	38.8	30.6	45.8
54	66.2	52.2	78.4



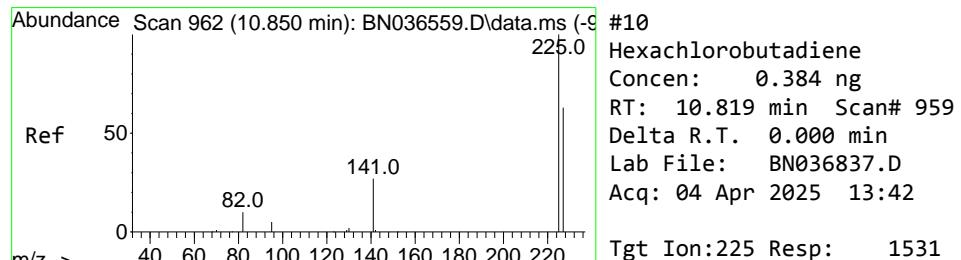
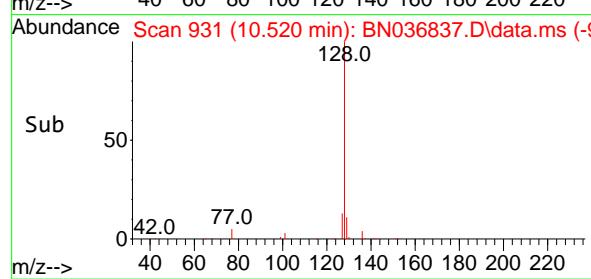
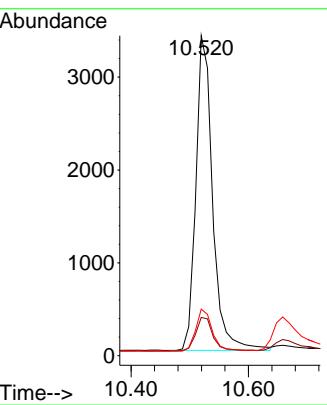


#9  
Naphthalene  
Concen: 0.397 ng  
RT: 10.520 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

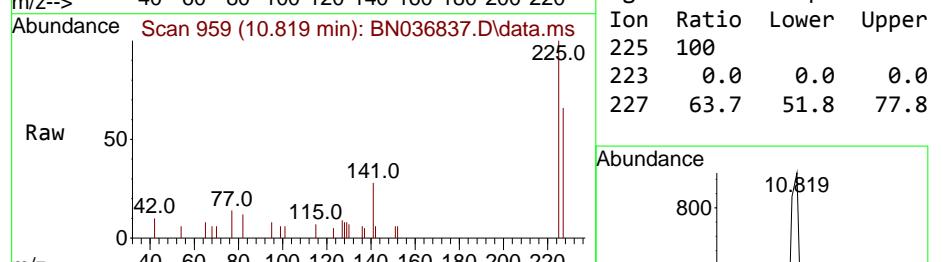
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



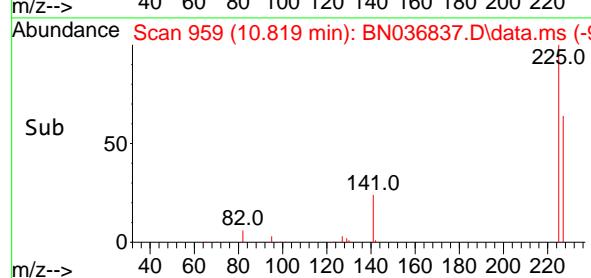
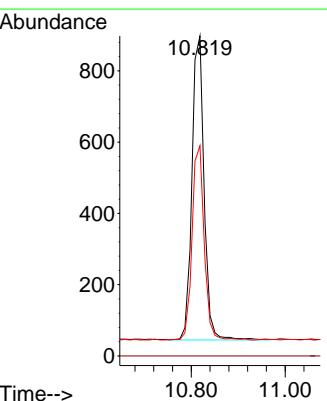
Tgt Ion:128 Resp: 6735  
Ion Ratio Lower Upper  
128 100  
129 12.0 9.8 14.6  
127 14.6 11.8 17.8

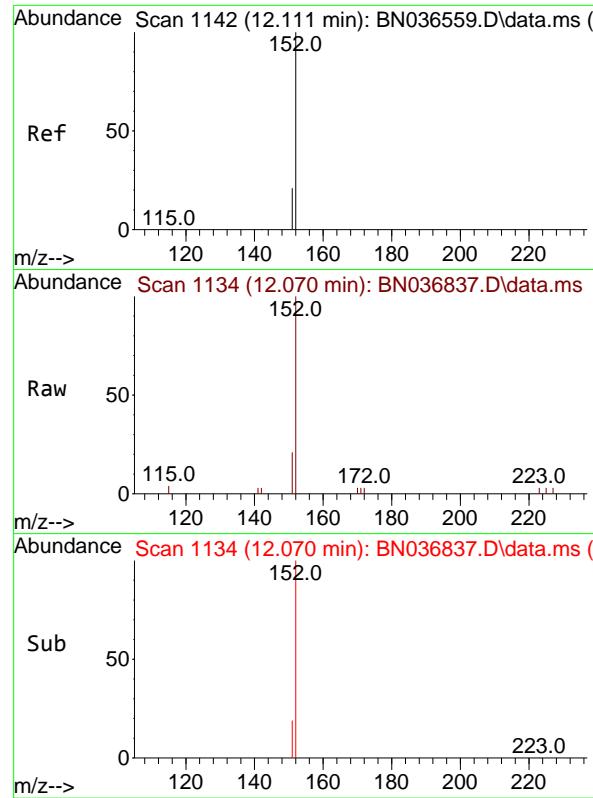


#10  
Hexachlorobutadiene  
Concen: 0.384 ng  
RT: 10.819 min Scan# 959  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

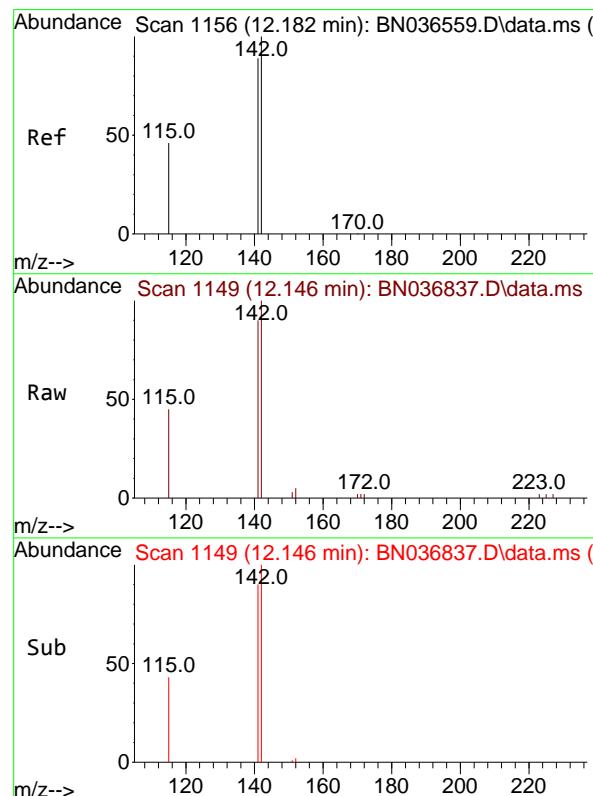


Tgt Ion:225 Resp: 1531  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 51.8 77.8



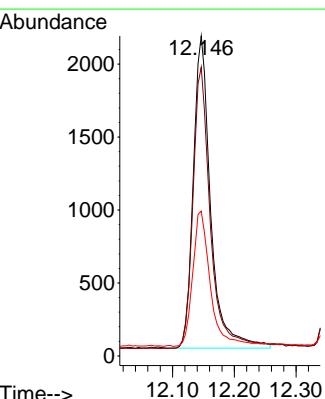


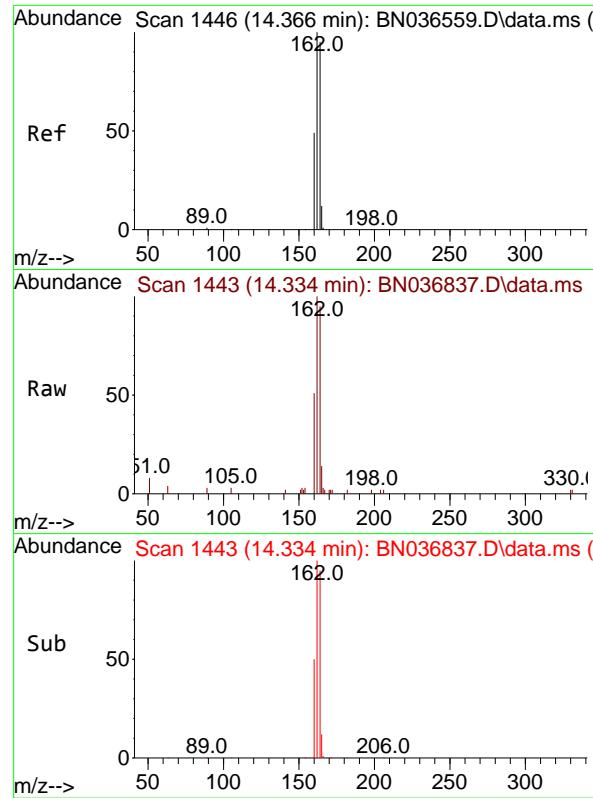
#11  
2-Methylnaphthalene-d10  
Concen: 0.398 ng  
RT: 12.070 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036837.D ClientSampleId : SSTDCCC0.4  
Acq: 04 Apr 2025 13:42



#12  
2-Methylnaphthalene  
Concen: 0.388 ng  
RT: 12.146 min Scan# 1149  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

Tgt Ion:142 Resp: 4180  
Ion Ratio Lower Upper  
142 100  
141 90.2 71.7 107.5  
115 45.2 38.3 57.5

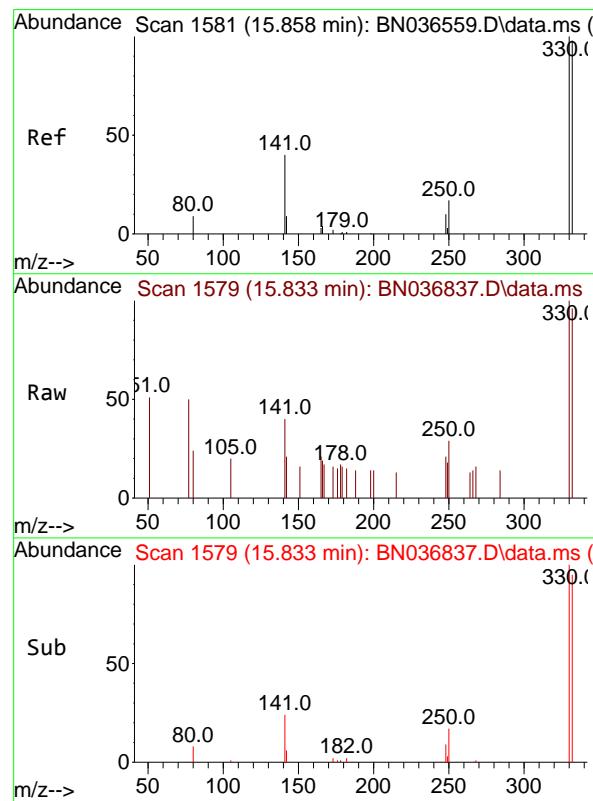
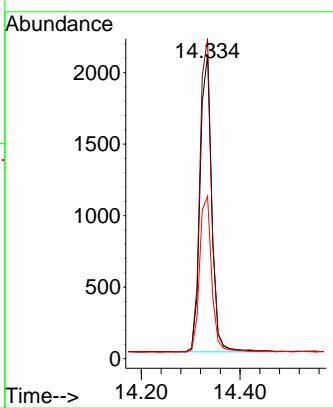




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.334 min Scan# 1443  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

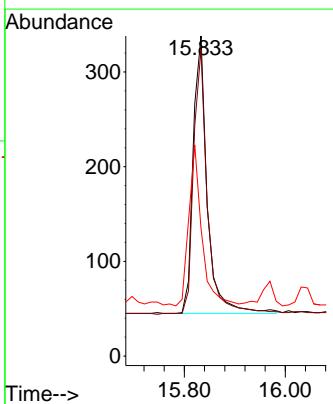
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

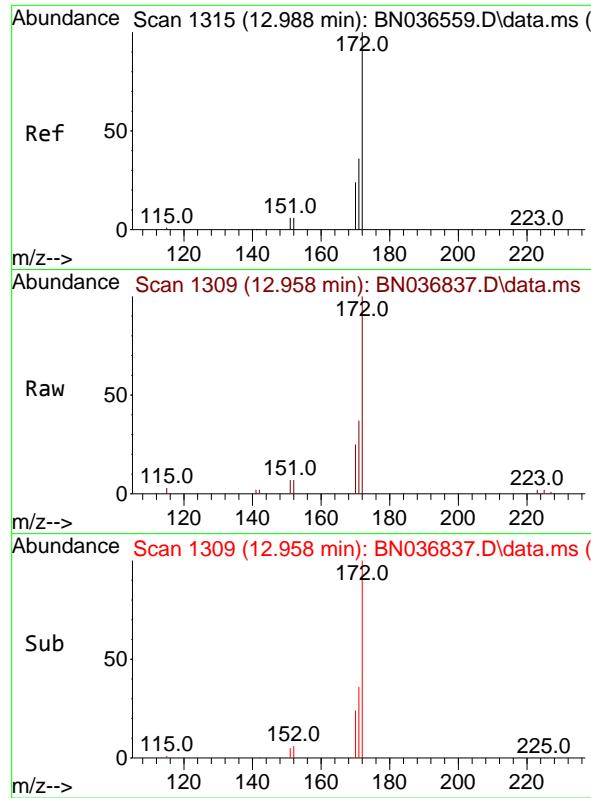
Tgt Ion:164 Resp: 3391  
 Ion Ratio Lower Upper  
 164 100  
 162 105.3 84.2 126.2  
 160 53.4 42.2 63.2



#14  
 2,4,6-Tribromophenol  
 Concen: 0.372 ng  
 RT: 15.833 min Scan# 1579  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

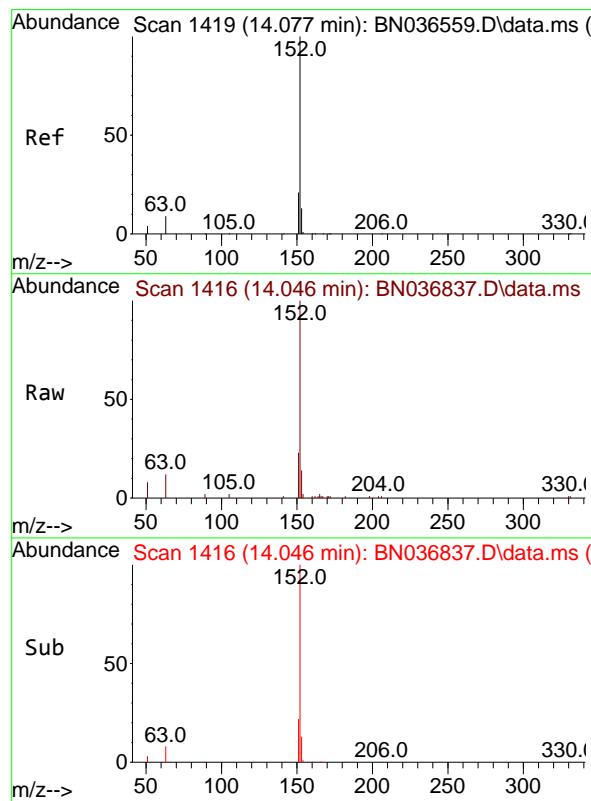
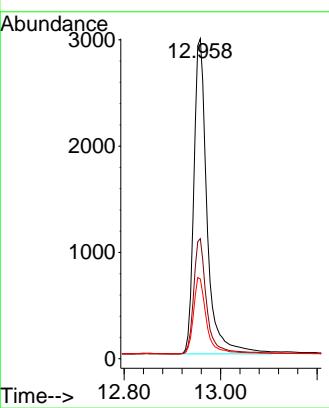
Tgt Ion:330 Resp: 572  
 Ion Ratio Lower Upper  
 330 100  
 332 94.9 75.2 112.8  
 141 53.5 43.4 65.2





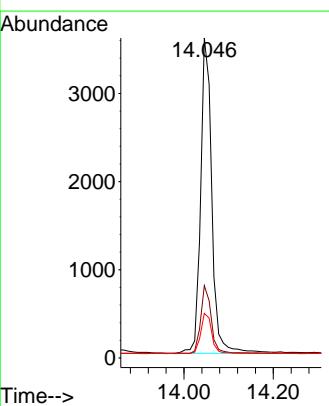
#15  
2-Fluorobiphenyl  
Concen: 0.369 ng  
RT: 12.958 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42 ClientSampleId : SSTDCCC0.4

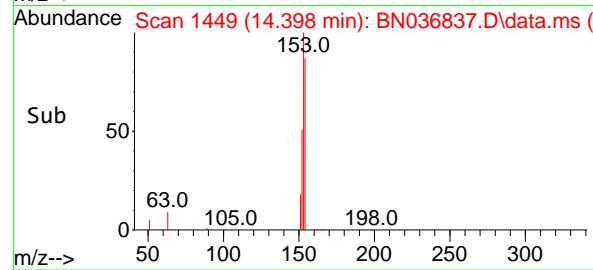
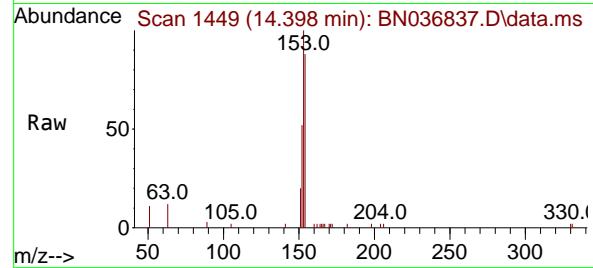
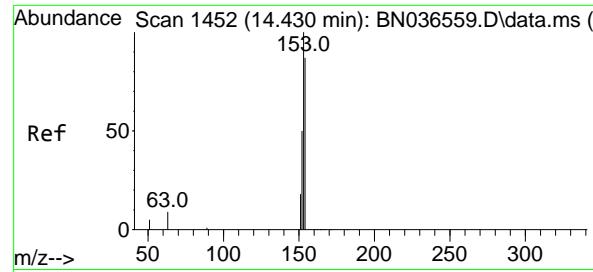
Tgt Ion:172 Resp: 7286  
Ion Ratio Lower Upper  
172 100  
171 37.5 29.5 44.3  
170 24.9 20.2 30.4



#16  
Acenaphthylene  
Concen: 0.387 ng  
RT: 14.046 min Scan# 1416  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

Tgt Ion:152 Resp: 6192  
Ion Ratio Lower Upper  
152 100  
151 20.3 16.2 24.4  
153 12.7 10.6 15.8





#17

Acenaphthene

Concen: 0.401 ng

RT: 14.398 min Scan# 1449

Delta R.T. 0.000 min

Lab File: BN036837.D

Acq: 04 Apr 2025 13:42

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

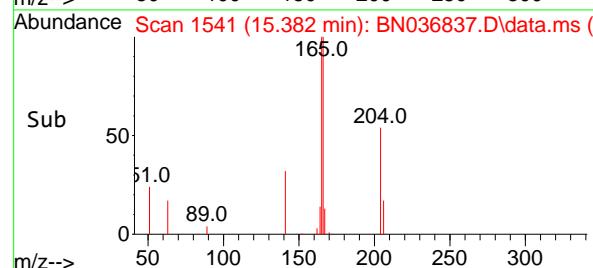
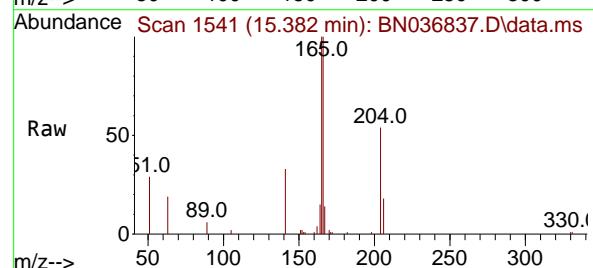
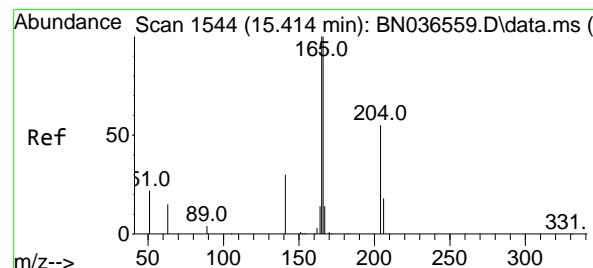
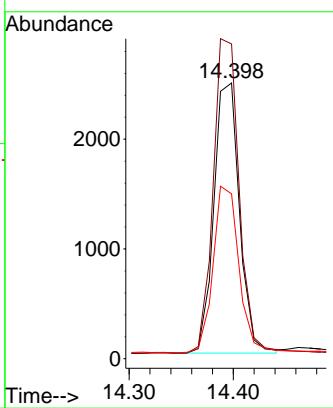
Tgt Ion:154 Resp: 4201

Ion Ratio Lower Upper

154 100

153 119.4 94.1 141.1

152 63.8 49.8 74.6



#18

Fluorene

Concen: 0.407 ng

RT: 15.382 min Scan# 1541

Delta R.T. 0.000 min

Lab File: BN036837.D

Acq: 04 Apr 2025 13:42

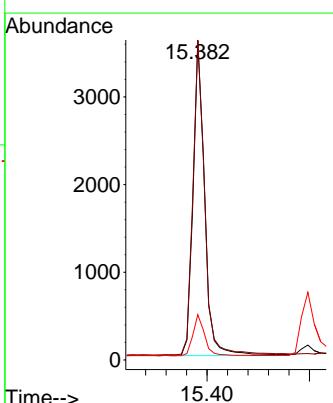
Tgt Ion:166 Resp: 5768

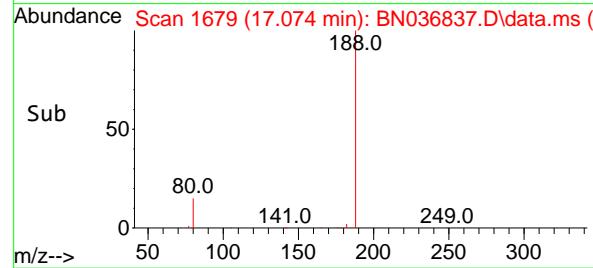
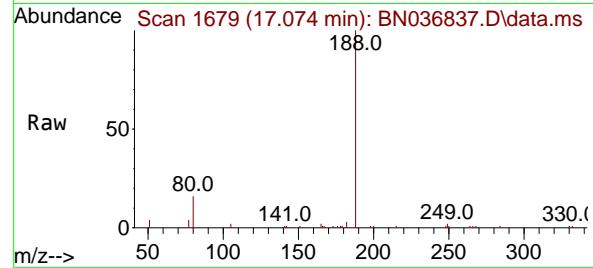
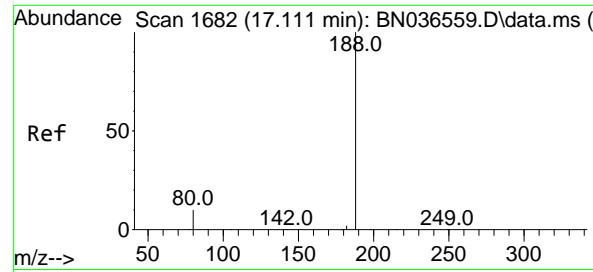
Ion Ratio Lower Upper

166 100

165 100.3 79.8 119.8

167 13.0 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036837.D

Acq: 04 Apr 2025 13:42

**Instrument:** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

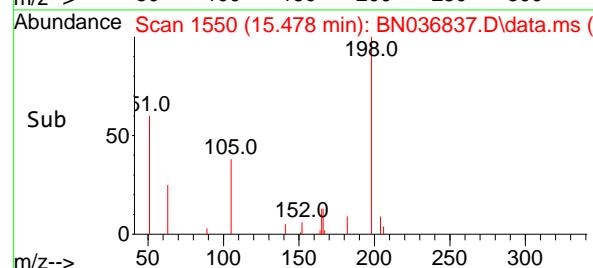
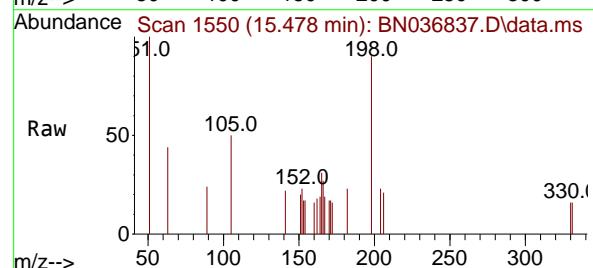
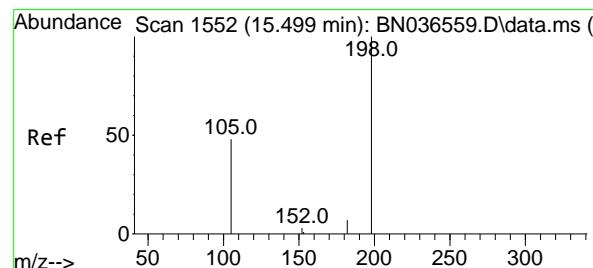
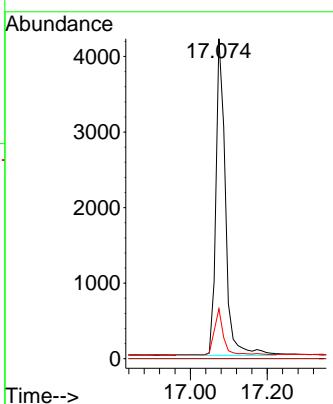
Tgt Ion:188 Resp: 7218

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 15.6 8.8 13.2#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.422 ng

RT: 15.478 min Scan# 1550

Delta R.T. 0.000 min

Lab File: BN036837.D

Acq: 04 Apr 2025 13:42

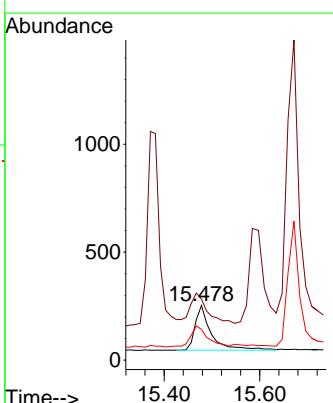
Tgt Ion:198 Resp: 509

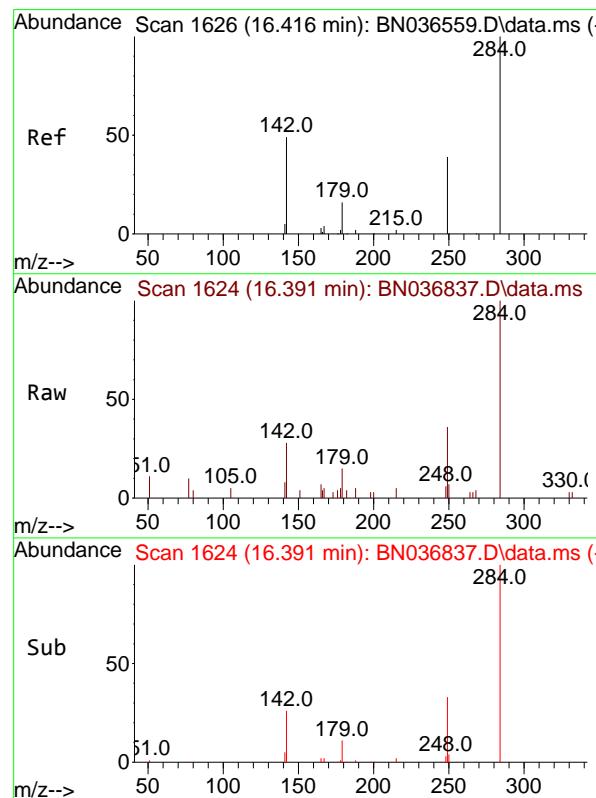
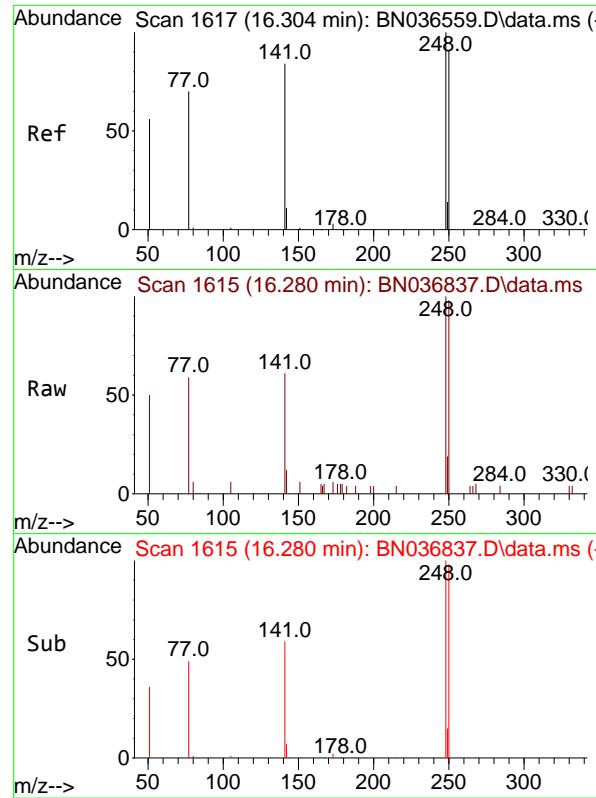
Ion Ratio Lower Upper

198 100

51 111.5 107.9 161.9

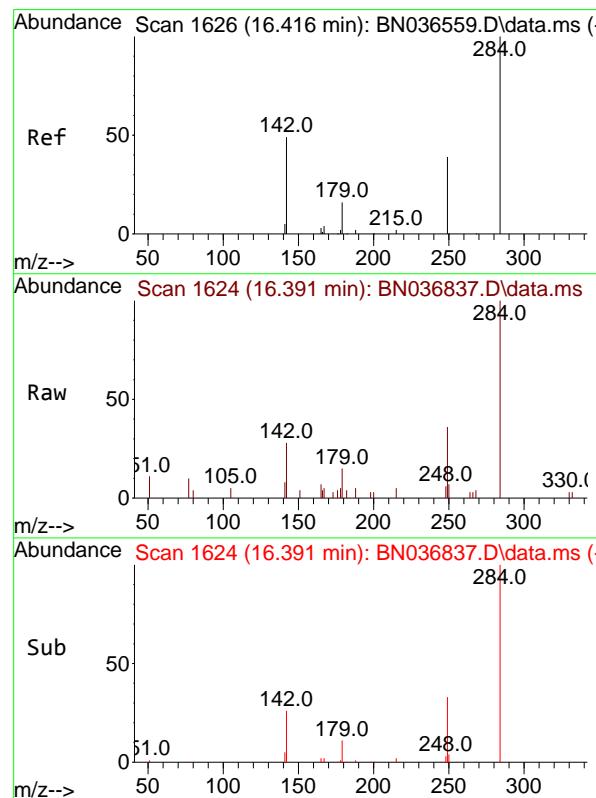
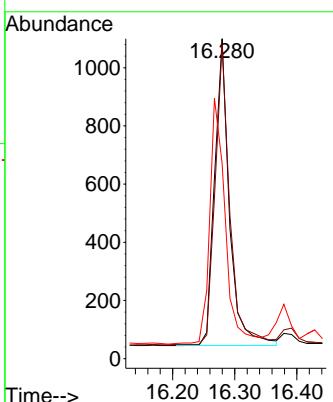
105 56.1 56.2 84.2#





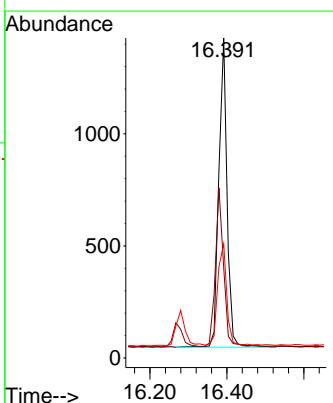
#21  
4-Bromophenyl-phenylether  
Concen: 0.386 ng  
RT: 16.280 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
ClientSampleId : SSTDCCC0.4  
Acq: 04 Apr 2025 13:42

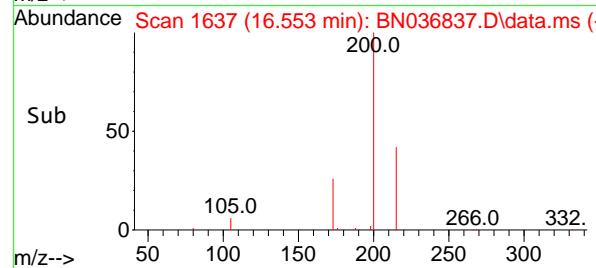
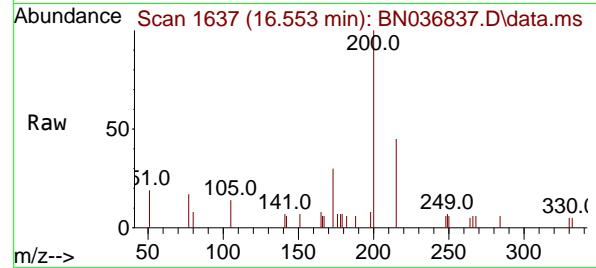
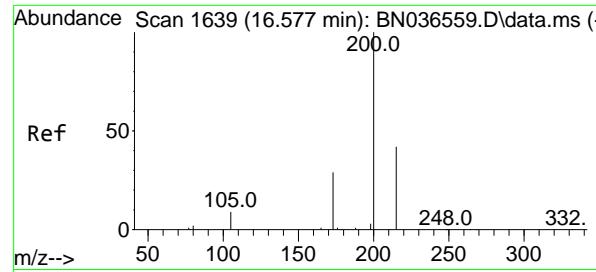
Tgt Ion:248 Resp: 1746  
Ion Ratio Lower Upper  
248 100  
250 98.2 73.0 109.6  
141 61.0 68.6 103.0#



#22  
Hexachlorobenzene  
Concen: 0.379 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

Tgt Ion:284 Resp: 2067  
Ion Ratio Lower Upper  
284 100  
142 49.9 37.0 55.4  
249 36.1 28.1 42.1

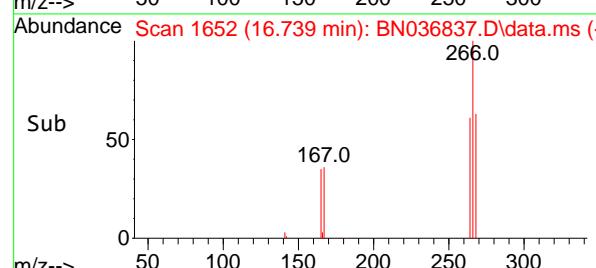
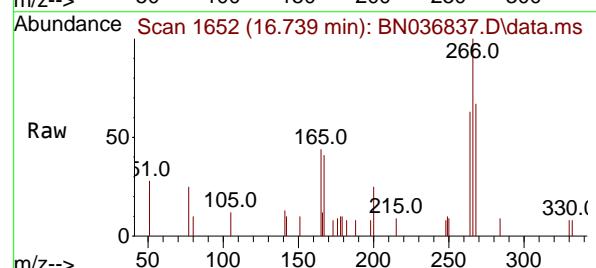
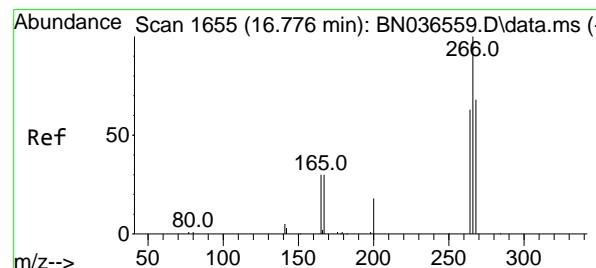
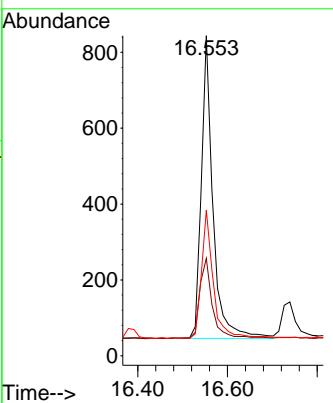




#23  
Atrazine  
Concen: 0.394 ng  
RT: 16.553 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

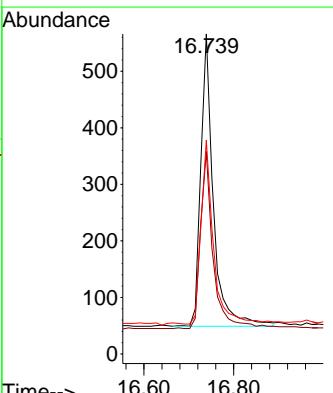
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

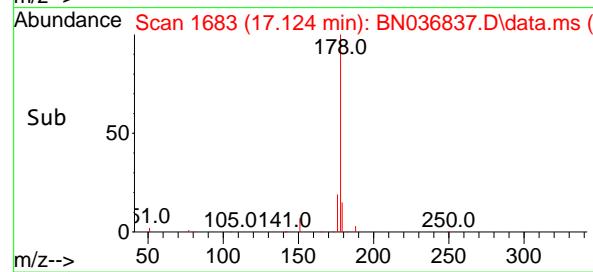
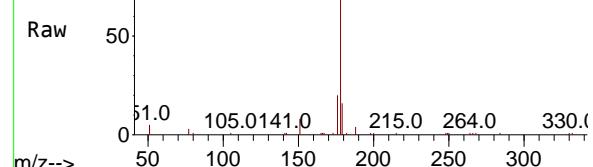
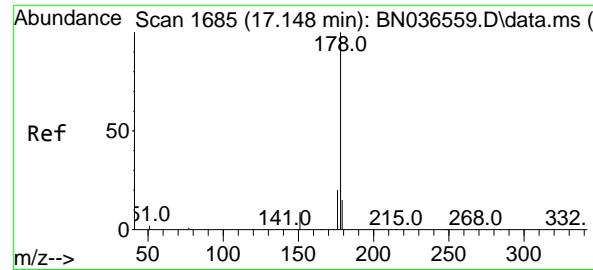
Tgt Ion:200 Resp: 1430  
Ion Ratio Lower Upper  
200 100  
173 30.5 27.3 40.9  
215 45.5 36.8 55.2



#24  
Pentachlorophenol  
Concen: 0.405 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

Tgt Ion:266 Resp: 1008  
Ion Ratio Lower Upper  
266 100  
264 60.3 49.6 74.4  
268 62.3 50.9 76.3





#25

Phenanthrene

Concen: 0.415 ng

RT: 17.124 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN036837.D

Acq: 04 Apr 2025 13:42

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

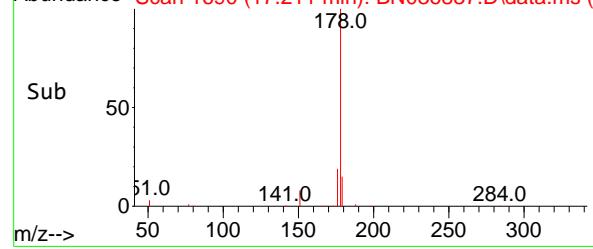
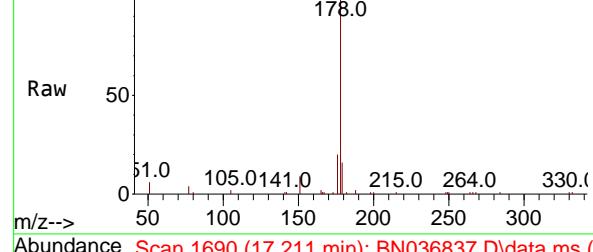
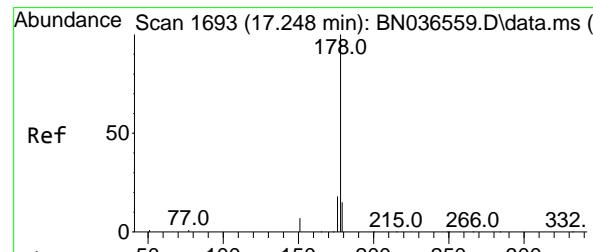
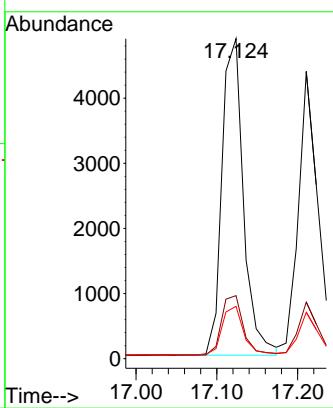
Tgt Ion:178 Resp: 8982

Ion Ratio Lower Upper

178 100

176 19.2 15.9 23.9

179 15.3 12.2 18.4



#26

Anthracene

Concen: 0.402 ng

RT: 17.211 min Scan# 1690

Delta R.T. 0.000 min

Lab File: BN036837.D

Acq: 04 Apr 2025 13:42

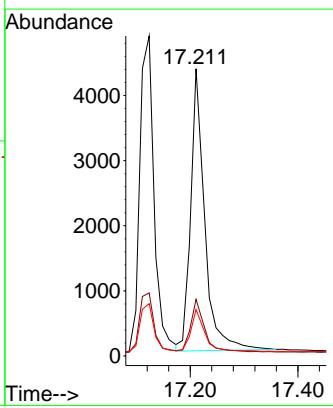
Tgt Ion:178 Resp: 7861

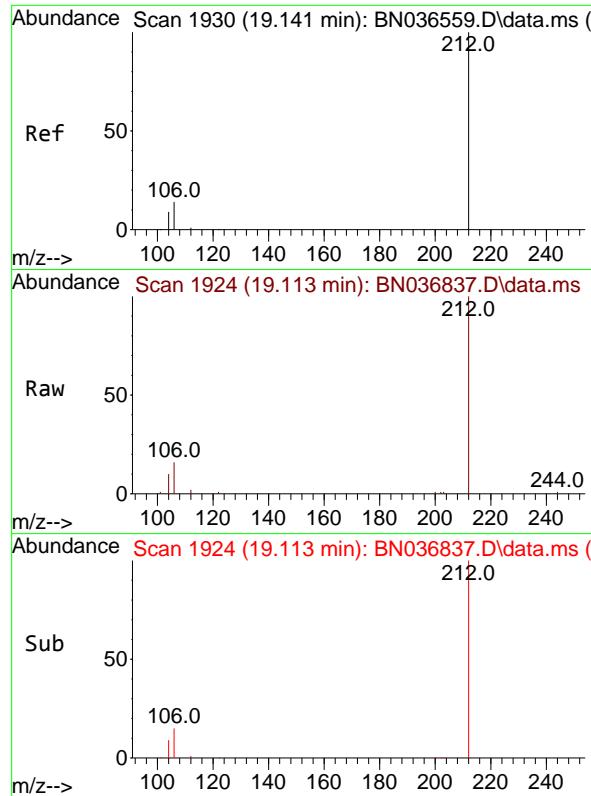
Ion Ratio Lower Upper

178 100

176 18.6 15.4 23.2

179 14.9 12.6 18.8

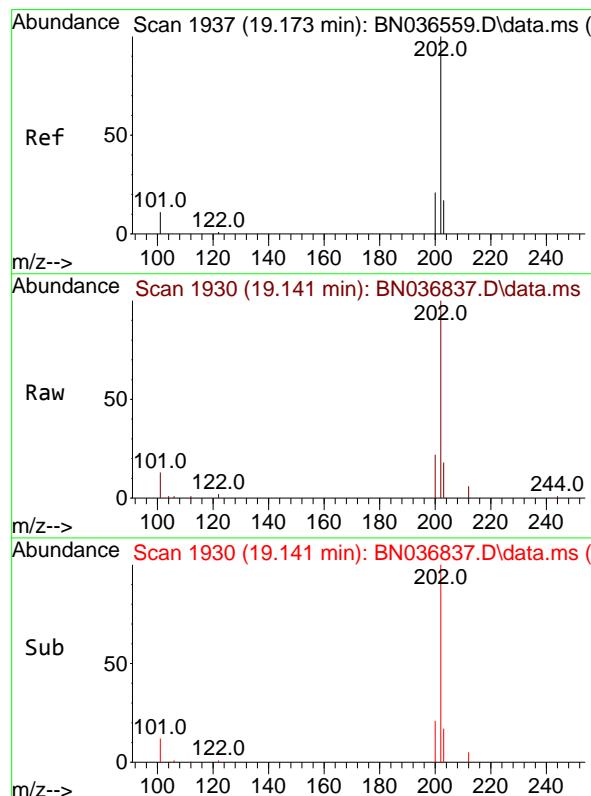
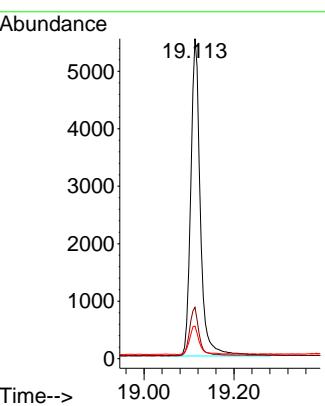




#27  
 Fluoranthene-d10  
 Concen: 0.445 ng  
 RT: 19.113 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

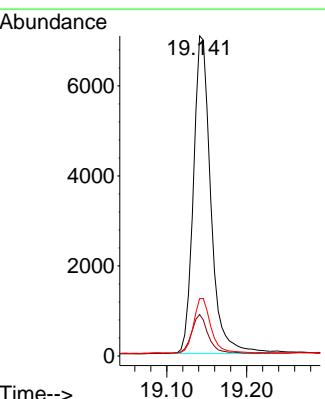
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

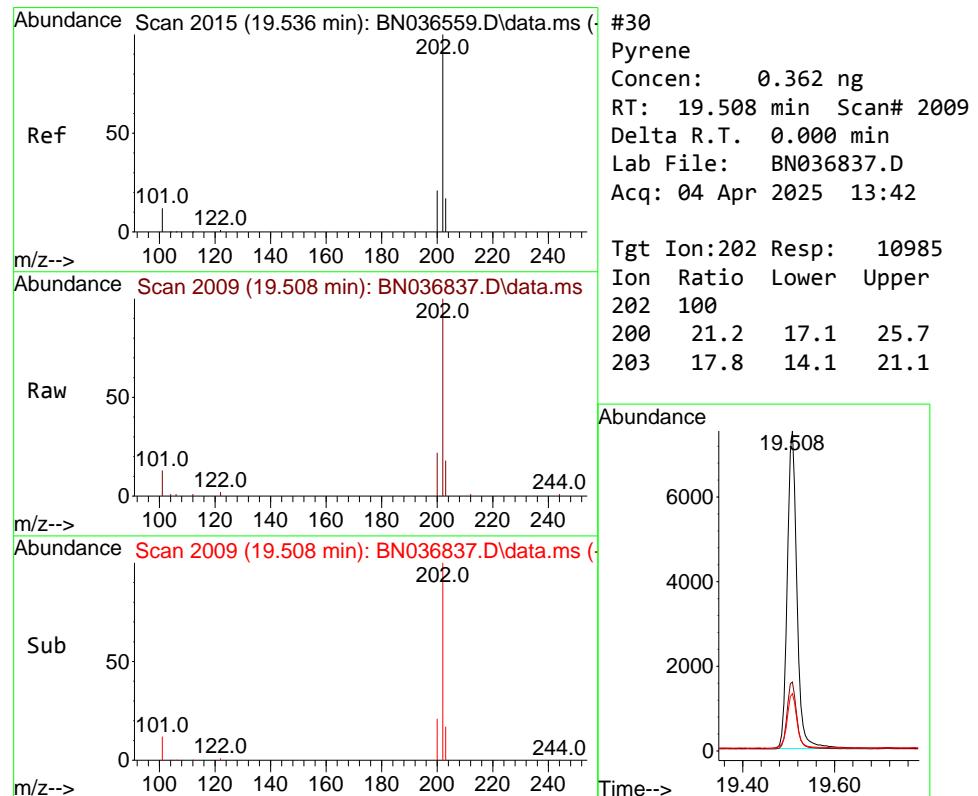
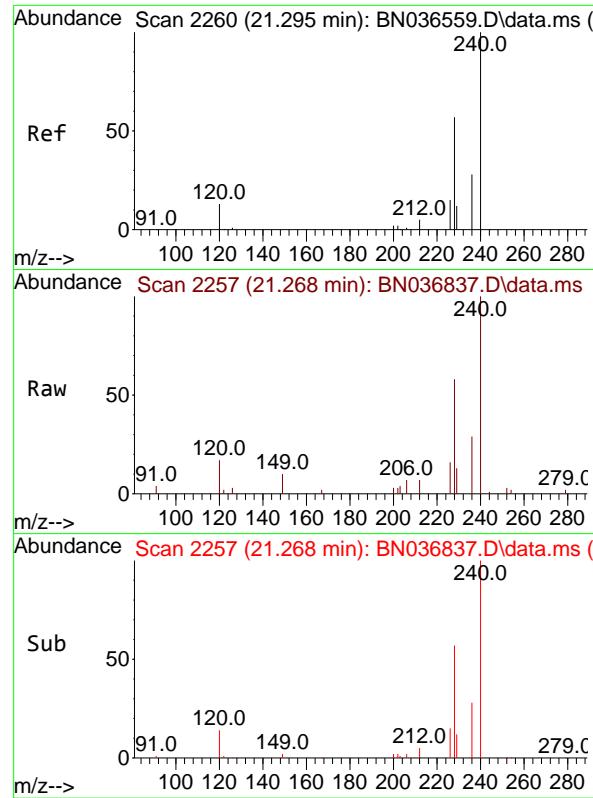
Tgt Ion:212 Resp: 8227  
 Ion Ratio Lower Upper  
 212 100  
 106 14.9 11.8 17.6  
 104 9.2 7.3 10.9

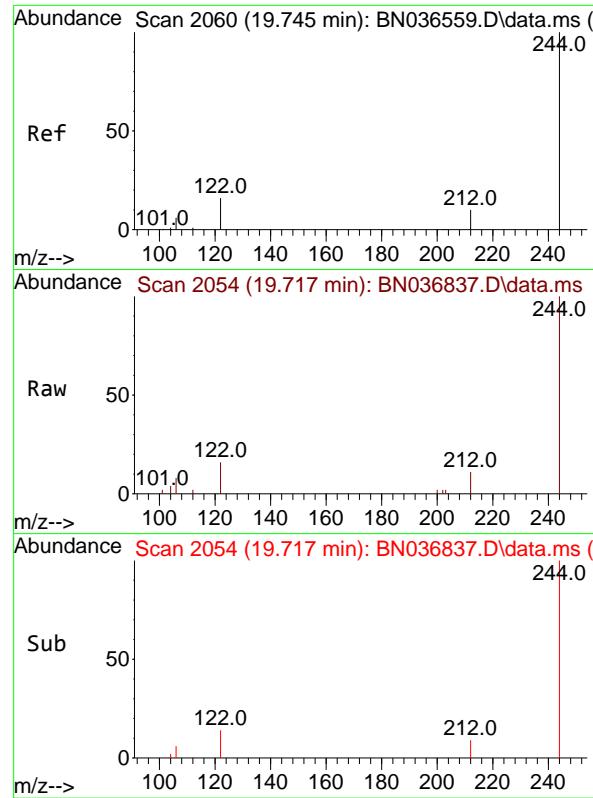


#28  
 Fluoranthene  
 Concen: 0.439 ng  
 RT: 19.141 min Scan# 1930  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion:202 Resp: 10677  
 Ion Ratio Lower Upper  
 202 100  
 101 11.8 9.4 14.0  
 203 17.0 13.5 20.3

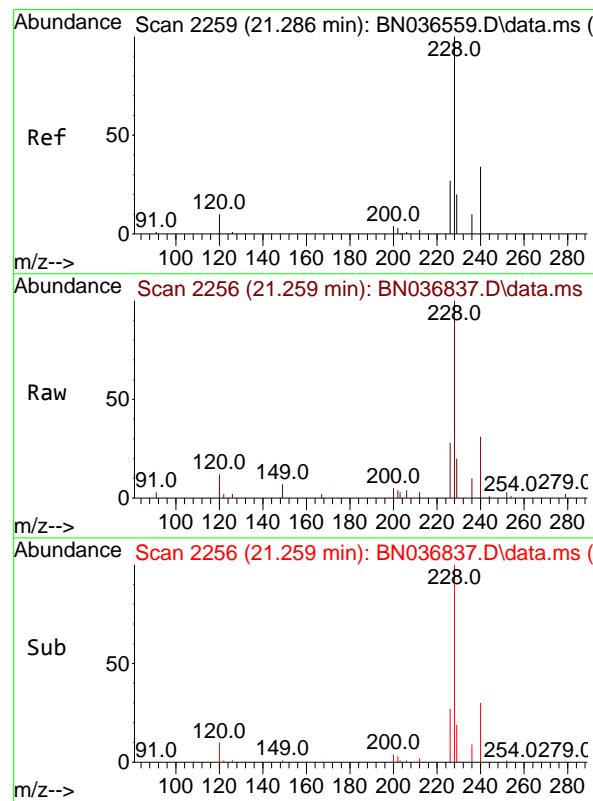
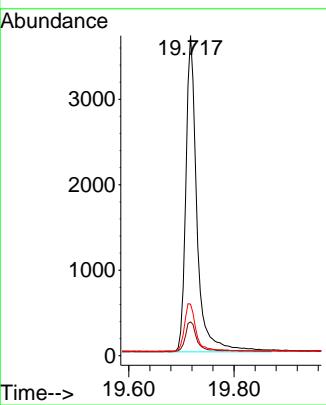






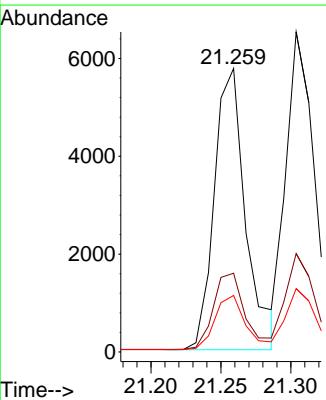
#31  
Terphenyl-d14  
Concen: 0.366 ng  
RT: 19.717 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42  
ClientSampleId : SSTDCCC0.4

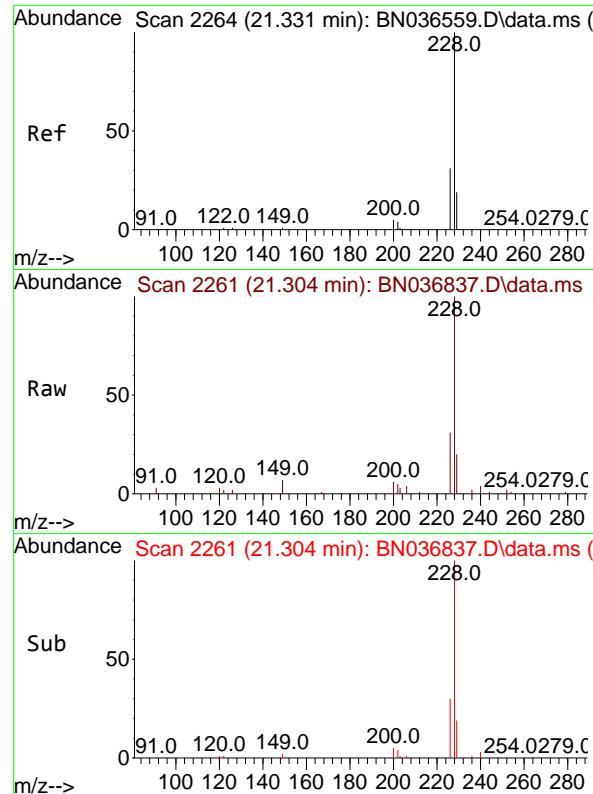
Tgt Ion:244 Resp: 5434  
Ion Ratio Lower Upper  
244 100  
212 10.6 9.6 14.4  
122 16.1 13.9 20.9



#32  
Benzo(a)anthracene  
Concen: 0.416 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

Tgt Ion:228 Resp: 8968  
Ion Ratio Lower Upper  
228 100  
226 27.8 22.5 33.7  
229 19.9 16.6 25.0

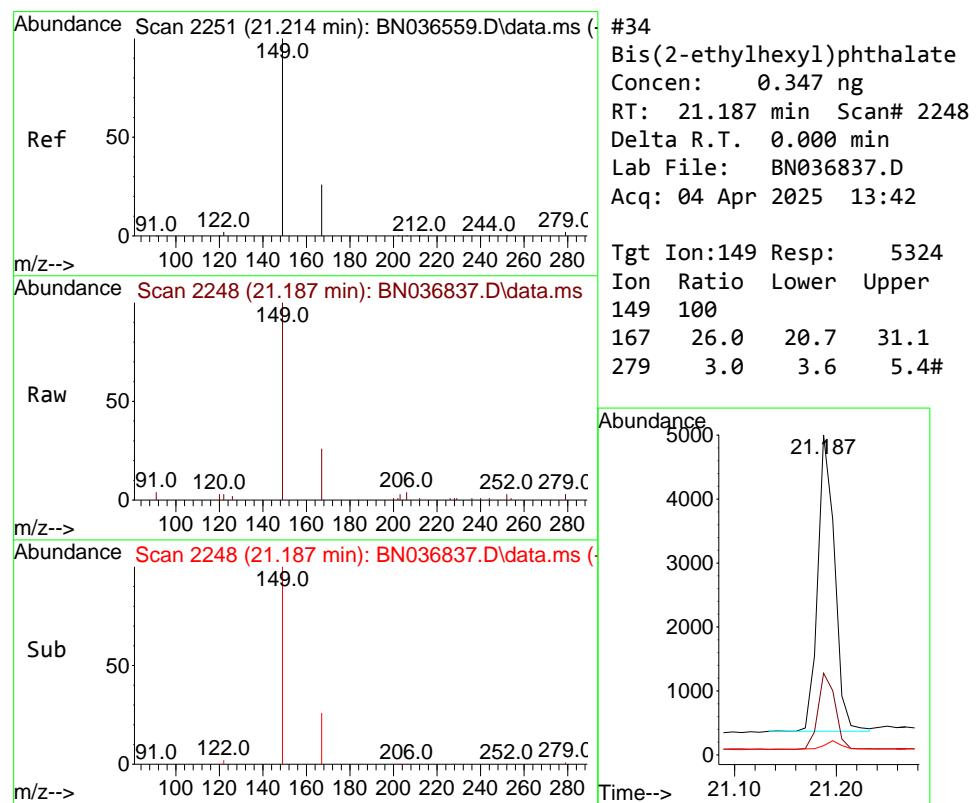
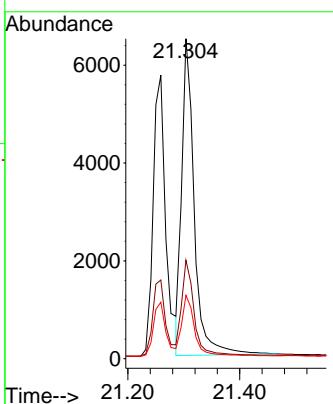




#33  
 Chrysene  
 Concen: 0.428 ng  
 RT: 21.304 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

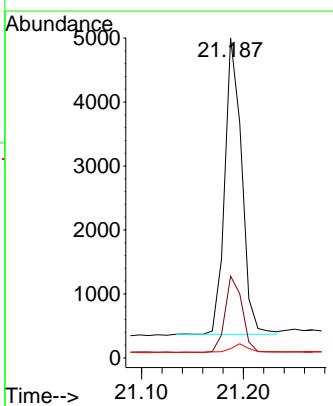
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

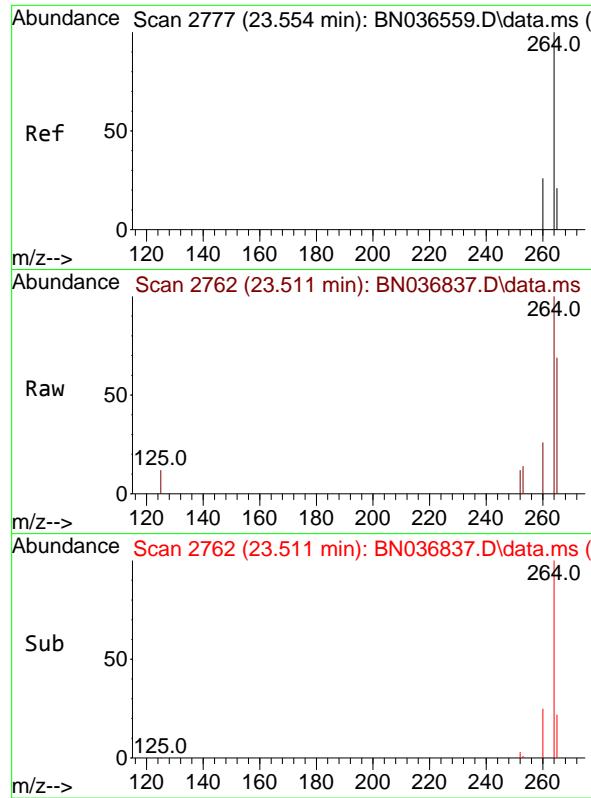
Tgt Ion:228 Resp: 10083  
 Ion Ratio Lower Upper  
 228 100  
 226 30.7 25.3 37.9  
 229 19.8 15.8 23.8



#34  
 Bis(2-ethylhexyl)phthalate  
 Concen: 0.347 ng  
 RT: 21.187 min Scan# 2248  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion:149 Resp: 5324  
 Ion Ratio Lower Upper  
 149 100  
 167 26.0 20.7 31.1  
 279 3.0 3.6 5.4#

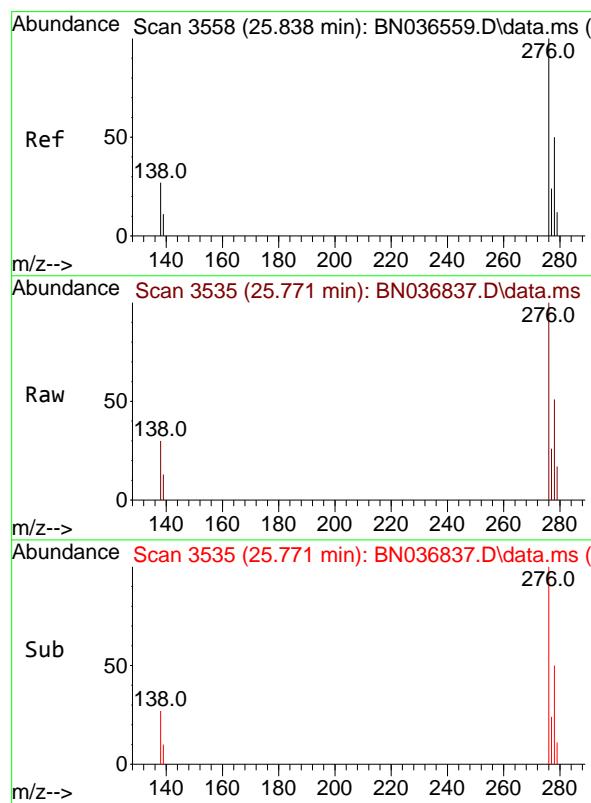
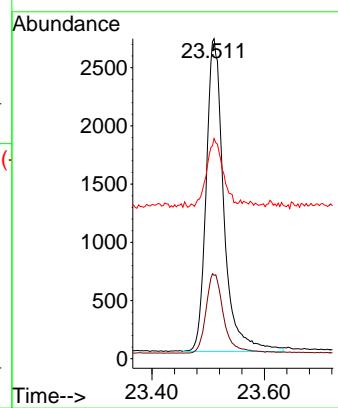




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.511 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

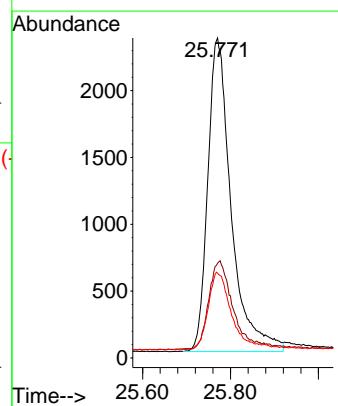
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

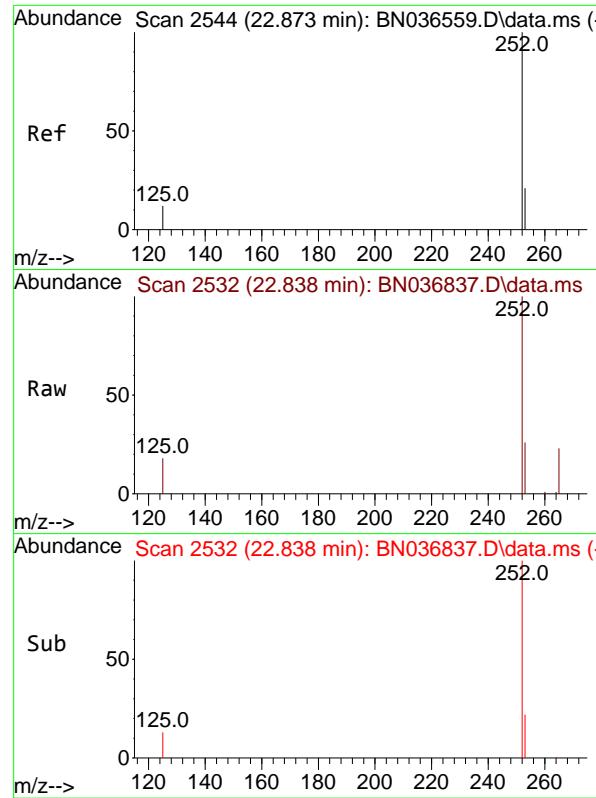
Tgt Ion:264 Resp: 5846  
Ion Ratio Lower Upper  
264 100  
260 26.0 22.6 33.8  
265 68.8 88.1 132.1#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.412 ng  
RT: 25.771 min Scan# 3535  
Delta R.T. 0.000 min  
Lab File: BN036837.D  
Acq: 04 Apr 2025 13:42

Tgt Ion:276 Resp: 8691  
Ion Ratio Lower Upper  
276 100  
138 27.6 23.4 35.2  
277 24.5 20.0 30.0

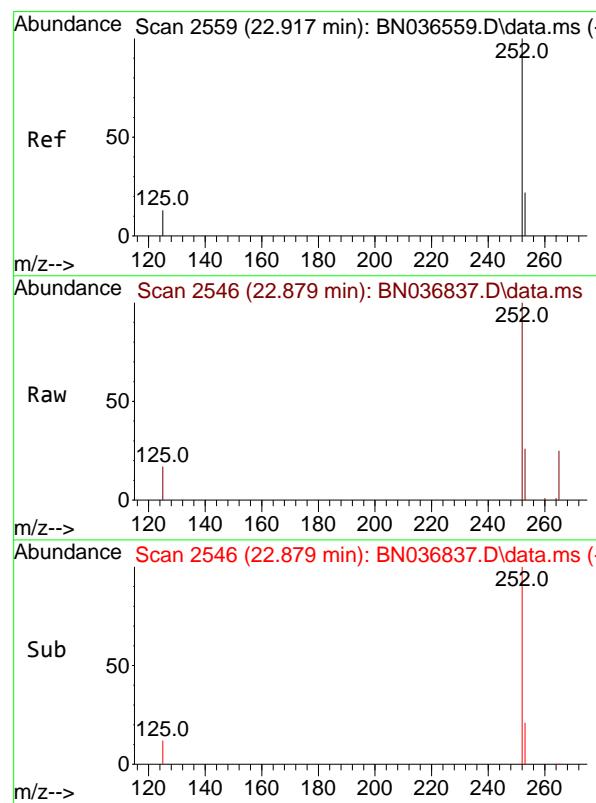
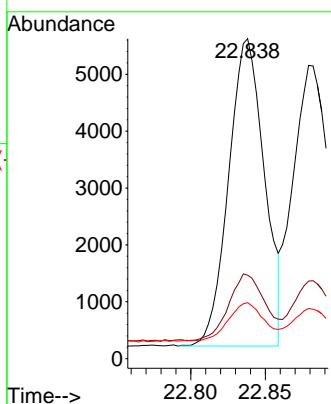




#37  
 Benzo(b)fluoranthene  
 Concen: 0.423 ng  
 RT: 22.838 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

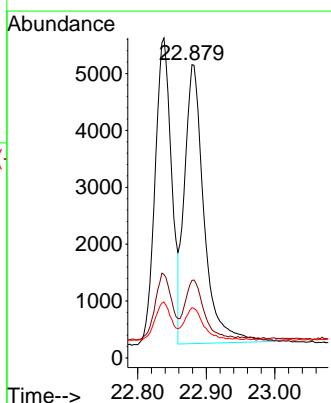
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

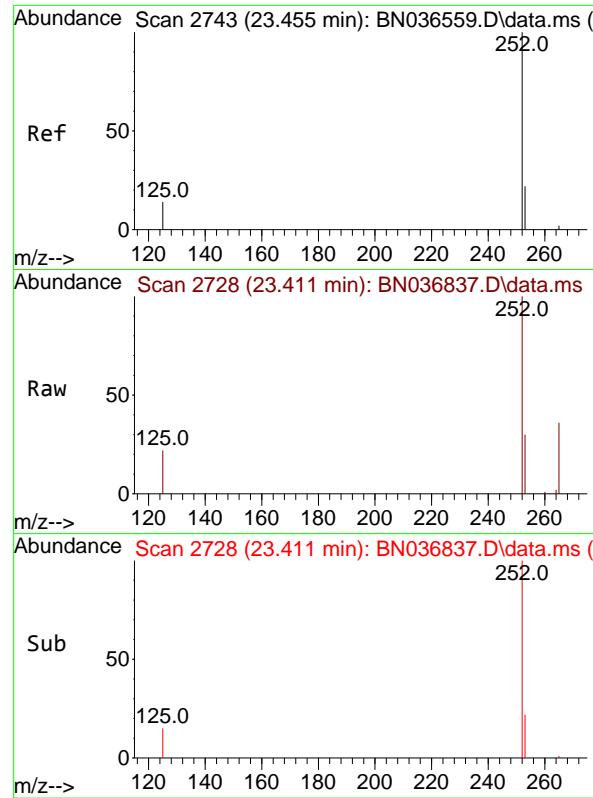
Tgt Ion:252 Resp: 9008  
 Ion Ratio Lower Upper  
 252 100  
 253 26.1 23.9 35.9  
 125 17.5 17.4 26.2



#38  
 Benzo(k)fluoranthene  
 Concen: 0.434 ng  
 RT: 22.879 min Scan# 2546  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion:252 Resp: 9694  
 Ion Ratio Lower Upper  
 252 100  
 253 26.5 24.6 36.8  
 125 17.1 17.8 26.8#

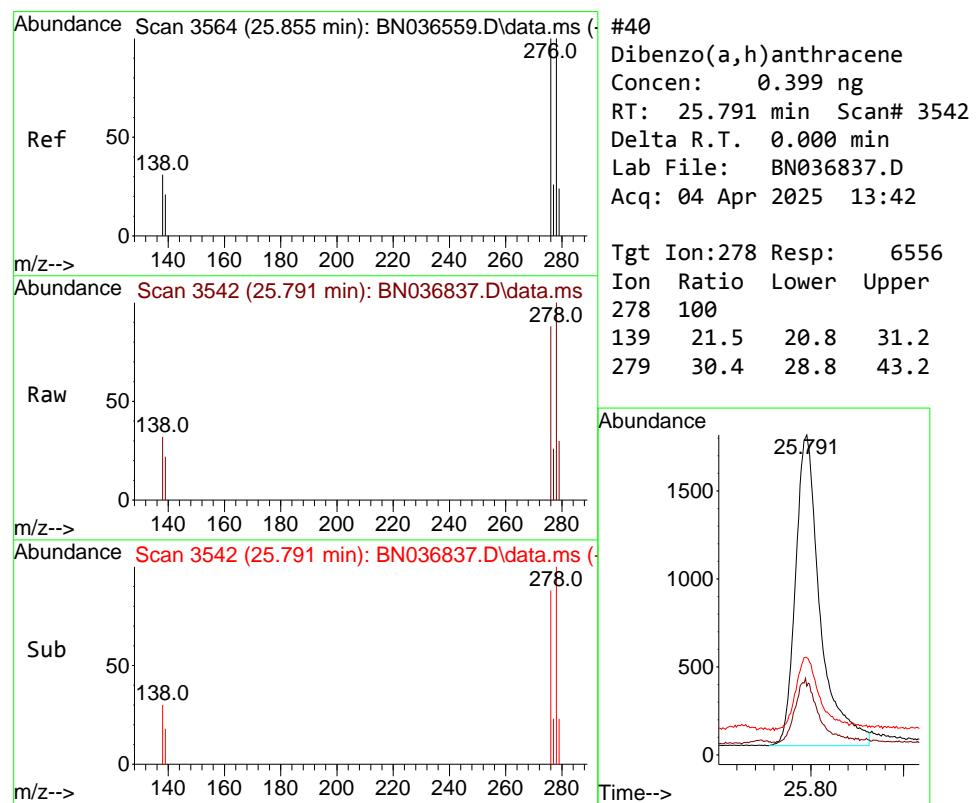
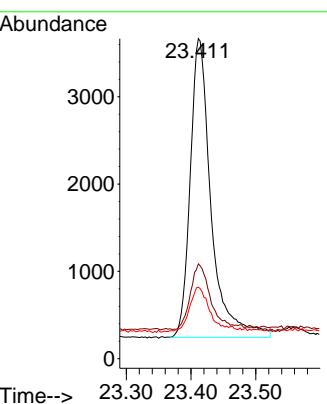




#39  
 Benzo(a)pyrene  
 Concen: 0.427 ng  
 RT: 23.411 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

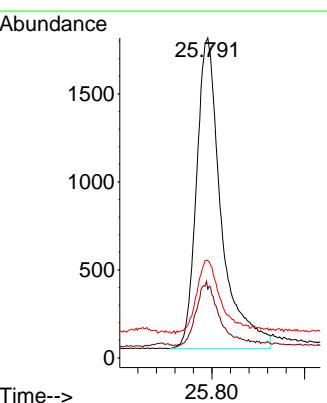
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

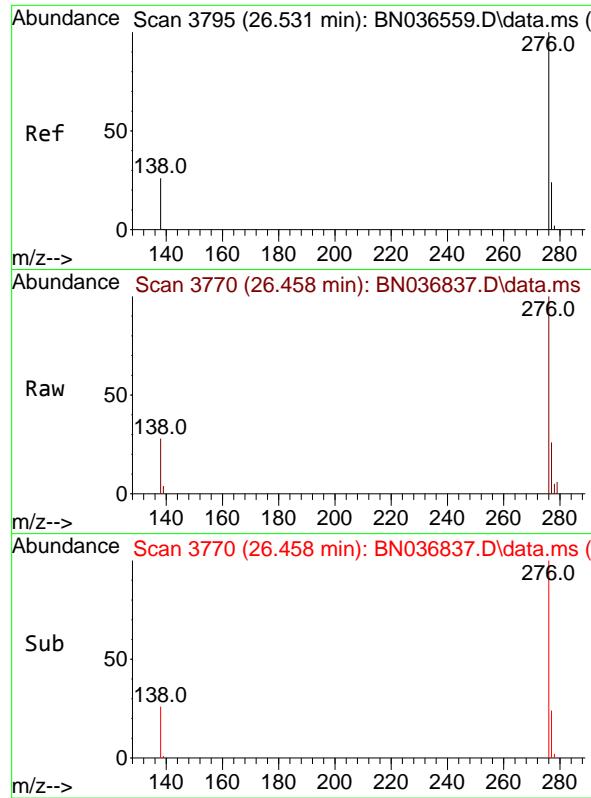
Tgt Ion:252 Resp: 7658  
 Ion Ratio Lower Upper  
 252 100  
 253 29.6 27.8 41.8  
 125 22.3 22.7 34.1#



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.399 ng  
 RT: 25.791 min Scan# 3542  
 Delta R.T. 0.000 min  
 Lab File: BN036837.D  
 Acq: 04 Apr 2025 13:42

Tgt Ion:278 Resp: 6556  
 Ion Ratio Lower Upper  
 278 100  
 139 21.5 20.8 31.2  
 279 30.4 28.8 43.2





#41

Benzo(g,h,i)perylene

Concen: 0.420 ng

RT: 26.458 min Scan# 3

Instrument :

BNA\_N

Delta R.T. 0.000 min

Lab File: BN036837.D

ClientSampleId :

Acq: 04 Apr 2025 13:42

STDCCC0.4

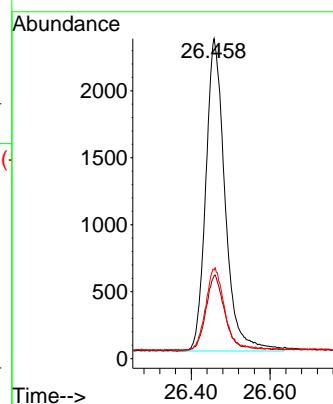
Tgt Ion:276 Resp: 7891

Ion Ratio Lower Upper

276 100

277 25.9 22.2 33.4

138 27.7 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036837.D  
 Acq On : 04 Apr 2025 13:42  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 17:31:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
2	1,4-Dioxane	0.444	0.498	-12.2	102	0.00
3	n-Nitrosodimethylamine	0.898	0.953	-6.1	104	0.00
4 S	2-Fluorophenol	0.932	0.953	-2.3	99	0.00
5 S	Phenol-d6	1.152	1.161	-0.8	105	0.00
6	bis(2-Chloroethyl)ether	1.190	1.226	-3.0	106	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	113	0.00
8 S	Nitrobenzene-d5	0.435	0.409	6.0	112	0.00
9	Naphthalene	1.177	1.169	0.7	110	0.00
10	Hexachlorobutadiene	0.277	0.266	4.0	102	0.00
11 SURR	2-Methylnaphthalene-d10	0.595	0.592	0.5	110	0.00
12	2-Methylnaphthalene	0.749	0.726	3.1	107	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	112	0.00
14 S	2,4,6-Tribromophenol	0.182	0.169	7.1	101	0.00
15 S	2-Fluorobiphenyl	2.327	2.149	7.6	100	0.00
16	Acenaphthylene	1.888	1.826	3.3	106	0.00
17	Acenaphthene	1.236	1.239	-0.2	108	0.00
18	Fluorene	1.672	1.701	-1.7	108	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	120	0.00
20	4,6-Dinitro-2-methylphenol	0.086	0.071	17.4	110	0.00
21	4-Bromophenyl-phenylether	0.251	0.242	3.6	106	0.00
22	Hexachlorobenzene	0.303	0.286	5.6	102	0.00
23	Atrazine	0.201	0.198	1.5	112	0.00
24	Pentachlorophenol	0.138	0.140	-1.4	123	0.00
25	Phenanthrene	1.200	1.244	-3.7	115	0.00
26	Anthracene	1.083	1.089	-0.6	114	0.00
27 SURR	Fluoranthene-d10	1.025	1.140	-11.2	123	0.00
28	Fluoranthene	1.348	1.479	-9.7	122	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	151#	0.00
30	Pyrene	1.956	1.771	9.5	125	0.00
31 S	Terphenyl-d14	0.958	0.876	8.6	129	0.00
32	Benzo(a)anthracene	1.391	1.446	-4.0	152#	0.00
33	Chrysene	1.520	1.626	-7.0	152#	0.00
34	Bis(2-ethylhexyl)phthalate	0.990	0.858	13.3	124	0.00
35 I	Perylene-d12	1.000	1.000	0.0	165#	0.00
36	Indeno(1,2,3-cd)pyrene	1.444	1.487	-3.0	159#	0.00
37	Benzo(b)fluoranthene	1.456	1.541	-5.8	165#	0.00
38	Benzo(k)fluoranthene	1.527	1.658	-8.6	169#	0.00
39 C	Benzo(a)pyrene	1.226	1.310	-6.9	166#	0.00
40	Dibenzo(a,h)anthracene	1.124	1.121	0.3	159#	0.00
41	Benzo(g,h,i)perylene	1.286	1.350	-5.0	161#	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036837.D  
 Acq On : 04 Apr 2025 13:42  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Apr 04 17:31:11 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	102	0.00
2	1,4-Dioxane	0.400	0.449	-12.2	102	0.00
3	n-Nitrosodimethylamine	0.400	0.425	-6.2	104	0.00
4 S	2-Fluorophenol	0.400	0.409	-2.2	99	0.00
5 S	Phenol-d6	0.400	0.403	-0.8	105	0.00
6	bis(2-Chloroethyl)ether	0.400	0.412	-3.0	106	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	113	0.00
8 S	Nitrobenzene-d5	0.400	0.376	6.0	112	0.00
9	Naphthalene	0.400	0.397	0.8	110	0.00
10	Hexachlorobutadiene	0.400	0.384	4.0	102	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.398	0.5	110	0.00
12	2-Methylnaphthalene	0.400	0.388	3.0	107	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	112	0.00
14 S	2,4,6-Tribromophenol	0.400	0.372	7.0	101	0.00
15 S	2-Fluorobiphenyl	0.400	0.369	7.8	100	0.00
16	Acenaphthylene	0.400	0.387	3.3	106	0.00
17	Acenaphthene	0.400	0.401	-0.3	108	0.00
18	Fluorene	0.400	0.407	-1.7	108	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	120	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.422	-5.5	110	0.00
21	4-Bromophenyl-phenylether	0.400	0.386	3.5	106	0.00
22	Hexachlorobenzene	0.400	0.379	5.3	102	0.00
23	Atrazine	0.400	0.394	1.5	112	0.00
24	Pentachlorophenol	0.400	0.405	-1.3	123	0.00
25	Phenanthrene	0.400	0.415	-3.7	115	0.00
26	Anthracene	0.400	0.402	-0.5	114	0.00
27 SURR	Fluoranthene-d10	0.400	0.445	-11.2	123	0.00
28	Fluoranthene	0.400	0.439	-9.7	122	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	151	0.00
30	Pyrene	0.400	0.362	9.5	125	0.00
31 S	Terphenyl-d14	0.400	0.366	8.5	129	0.00
32	Benzo(a)anthracene	0.400	0.416	-4.0	152	0.00
33	Chrysene	0.400	0.428	-7.0	152	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.347	13.3	124	0.00
35 I	Perylene-d12	0.400	0.400	0.0	165	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.412	-3.0	159	0.00
37	Benzo(b)fluoranthene	0.400	0.423	-5.7	165	0.00
38	Benzo(k)fluoranthene	0.400	0.434	-8.5	169	0.00
39 C	Benzo(a)pyrene	0.400	0.427	-6.7	166	0.00
40	Dibenzo(a,h)anthracene	0.400	0.399	0.3	159	0.00
41	Benzo(g,h,i)perylene	0.400	0.420	-5.0	161	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>JAC005</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>Q1731</u>	SAS No.:	<u>Q1731</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>04/07/2025</u>	<u>09:10</u>
Lab File ID:	<u>BN036847.D</u>		Init. Calib. Date(s):	<u>03/10/2025</u>	<u>03/10/2025</u>
EPA Sample No.:	<u>SSTDCCC0.4</u>		Init. Calib. Time(s):	<u>11:42</u>	<u>15:19</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	0.595	0.593		-0.3	20.0
Fluoranthene-d10	1.025	1.128		10.0	20.0
2-Fluorophenol	0.932	0.910		-2.4	20.0
Phenol-d6	1.152	1.108		-3.8	20.0
Nitrobenzene-d5	0.435	0.406		-6.7	20.0
2-Fluorobiphenyl	2.327	2.119		-8.9	20.0
2,4,6-Tribromophenol	0.182	0.174		-4.4	20.0
Terphenyl-d14	0.958	0.887		-7.4	20.0
1,4-Dioxane	0.444	0.474		6.8	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036847.D  
 Acq On : 07 Apr 2025 09:10  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Apr 07 10:42:23 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

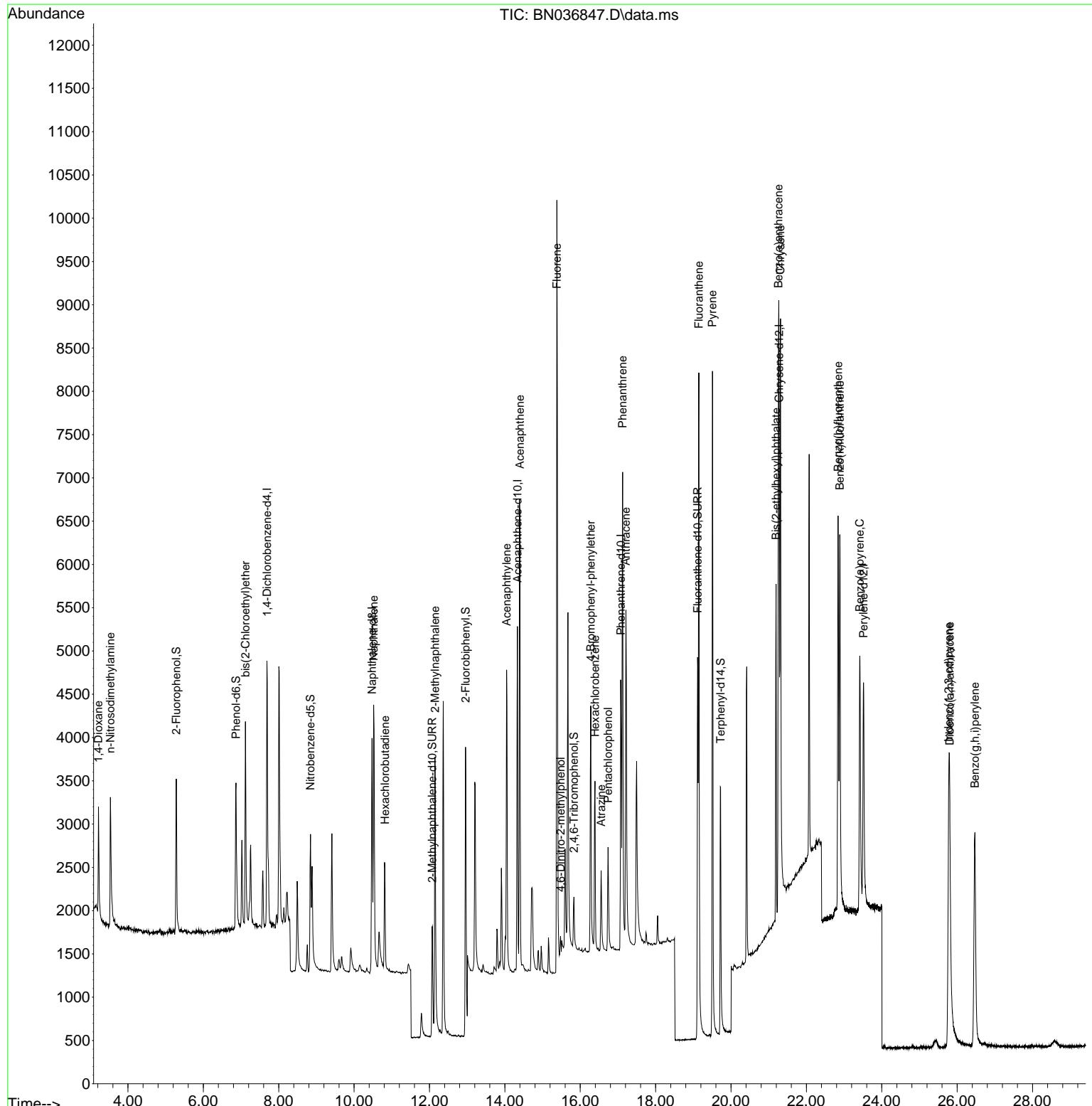
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.688	152	1549	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	3923	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2335	0.400	ng	0.00
19) Phenanthrene-d10	17.074	188	5079	0.400	ng	# 0.00
29) Chrysene-d12	21.277	240	4233	0.400	ng	# 0.00
35) Perylene-d12	23.516	264	3968	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.283	112	1410	0.391	ng	0.00
5) Phenol-d6	6.865	99	1716	0.385	ng	0.00
8) Nitrobenzene-d5	8.843	82	1593	0.373	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	2328	0.399	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	407	0.384	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	4949	0.364	ng	0.00
27) Fluoranthene-d10	19.113	212	5730	0.440	ng	0.00
31) Terphenyl-d14	19.722	244	3755	0.370	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.218	88	734	0.427	ng	92
3) n-Nitrosodimethylamine	3.535	42	1544	0.444	ng	# 98
6) bis(2-Chloroethyl)ether	7.118	93	1860	0.403	ng	100
9) Naphthalene	10.519	128	4595	0.398	ng	100
10) Hexachlorobutadiene	10.818	225	1067	0.393	ng	# 99
12) 2-Methylnaphthalene	12.146	142	2892	0.394	ng	99
16) Acenaphthylene	14.045	152	4321	0.392	ng	99
17) Acenaphthene	14.398	154	2923	0.405	ng	99
18) Fluorene	15.382	166	4059	0.416	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	376	0.436	ng	94
21) 4-Bromophenyl-phenylether	16.280	248	1208	0.380	ng	# 87
22) Hexachlorobenzene	16.391	284	1498	0.390	ng	97
23) Atrazine	16.553	200	989	0.388	ng	96
24) Pentachlorophenol	16.739	266	719	0.410	ng	97
25) Phenanthrene	17.124	178	6306	0.414	ng	99
26) Anthracene	17.210	178	5484	0.399	ng	98
28) Fluoranthene	19.146	202	7695	0.450	ng	99
30) Pyrene	19.508	202	7751	0.374	ng	100
32) Benzo(a)anthracene	21.259	228	5720	0.389	ng	99
33) Chrysene	21.313	228	7221	0.449	ng	98
34) Bis(2-ethylhexyl)phtha...	21.196	149	3698	0.353	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.773	276	5962	0.416	ng	96
37) Benzo(b)fluoranthene	22.841	252	6173	0.427	ng	96
38) Benzo(k)fluoranthene	22.885	252	6741	0.445	ng	93
39) Benzo(a)pyrene	23.417	252	5226	0.430	ng	93
40) Dibenzo(a,h)anthracene	25.803	278	4339	0.389	ng	96
41) Benzo(g,h,i)perylene	26.469	276	5619	0.441	ng	98

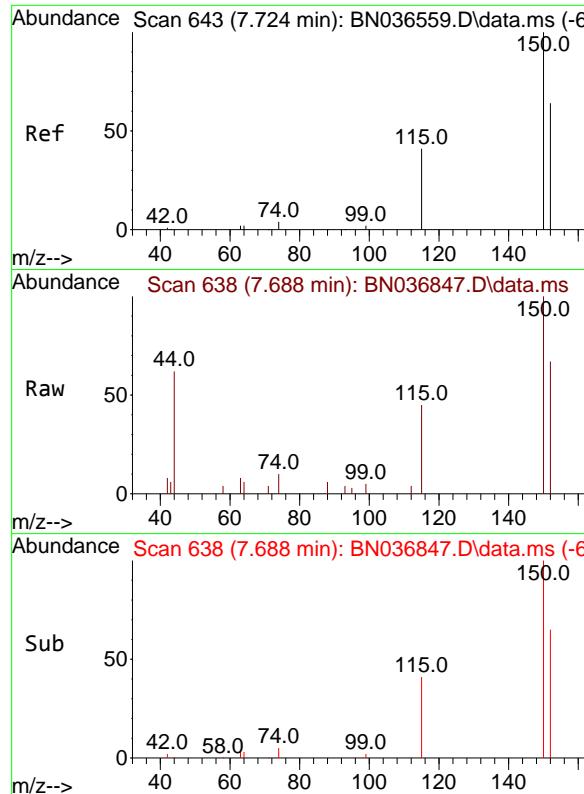
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036847.D  
 Acq On : 07 Apr 2025 09:10  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Apr 07 10:42:23 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

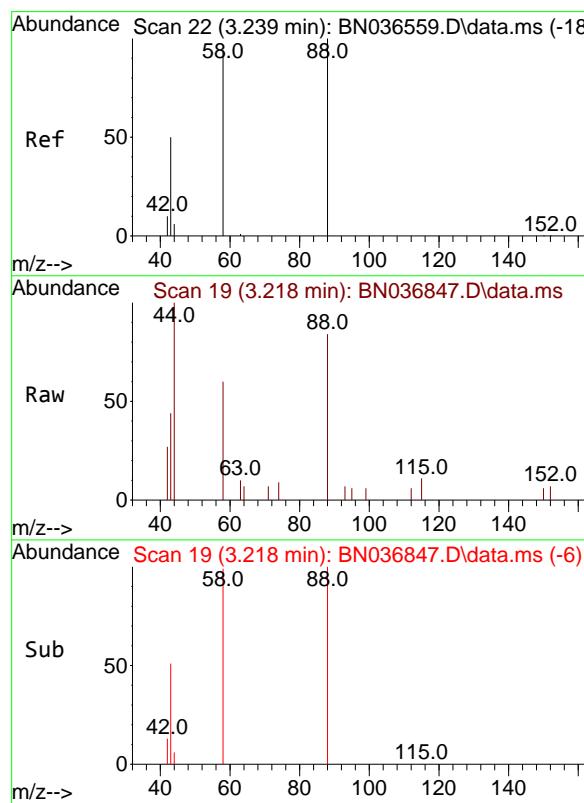
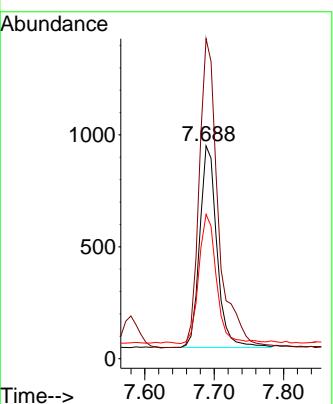




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.688 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

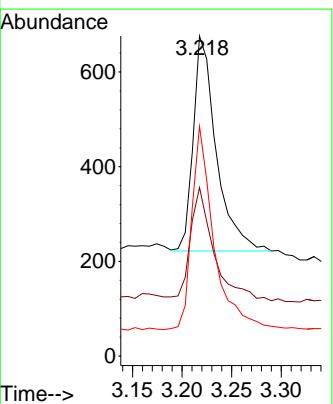
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

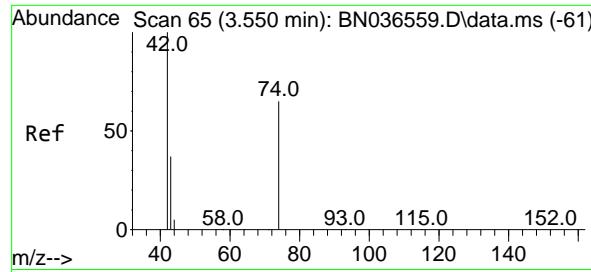
Tgt Ion:152 Resp: 1549  
Ion Ratio Lower Upper  
152 100  
150 150.4 123.7 185.5  
115 67.8 54.3 81.5



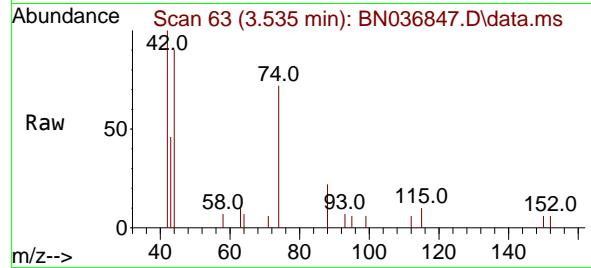
#2  
1,4-Dioxane  
Concen: 0.427 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.007 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

Tgt Ion: 88 Resp: 734  
Ion Ratio Lower Upper  
88 100  
43 53.5 37.8 56.8  
58 90.7 67.4 101.2

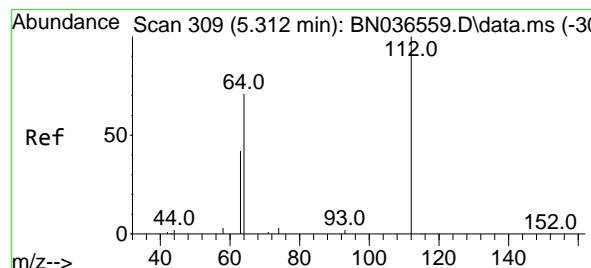
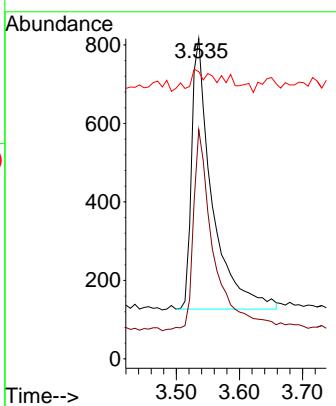
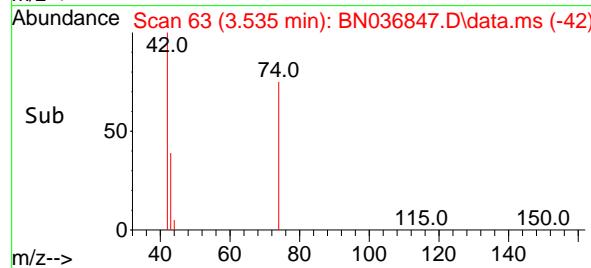




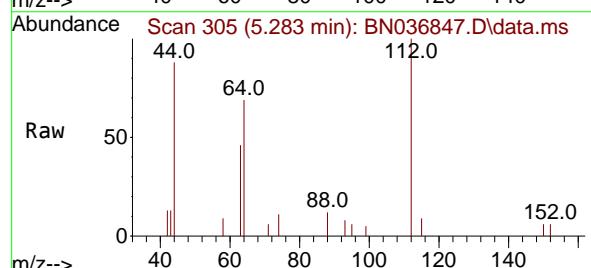
#3  
n-Nitrosodimethylamine  
Concen: 0.444 ng  
RT: 3.535 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10  
ClientSampleId : SSTDCCC0.4



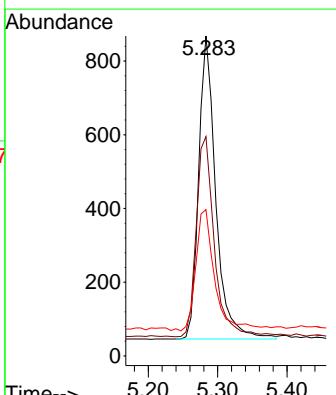
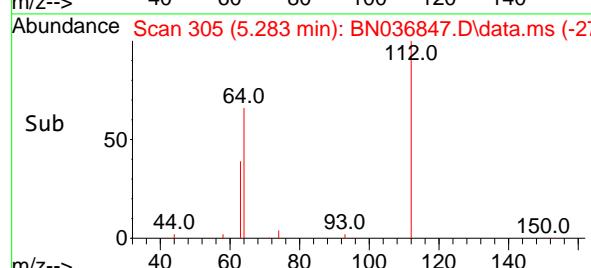
Tgt Ion: 42 Resp: 1544  
Ion Ratio Lower Upper  
42 100  
74 74.7 60.6 90.8  
44 6.1 6.3 9.5#

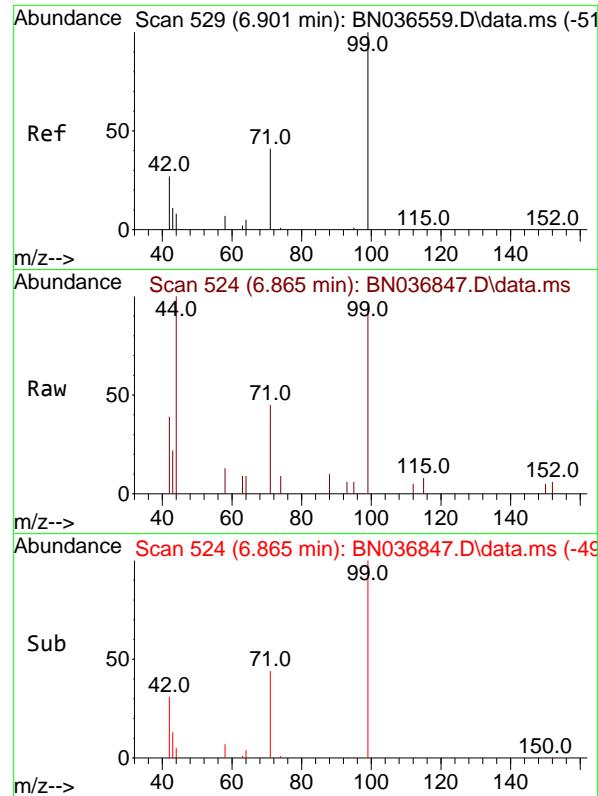


#4  
2-Fluorophenol  
Concen: 0.391 ng  
RT: 5.283 min Scan# 305  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10



Tgt Ion:112 Resp: 1410  
Ion Ratio Lower Upper  
112 100  
64 70.4 53.1 79.7  
63 45.0 31.8 47.8

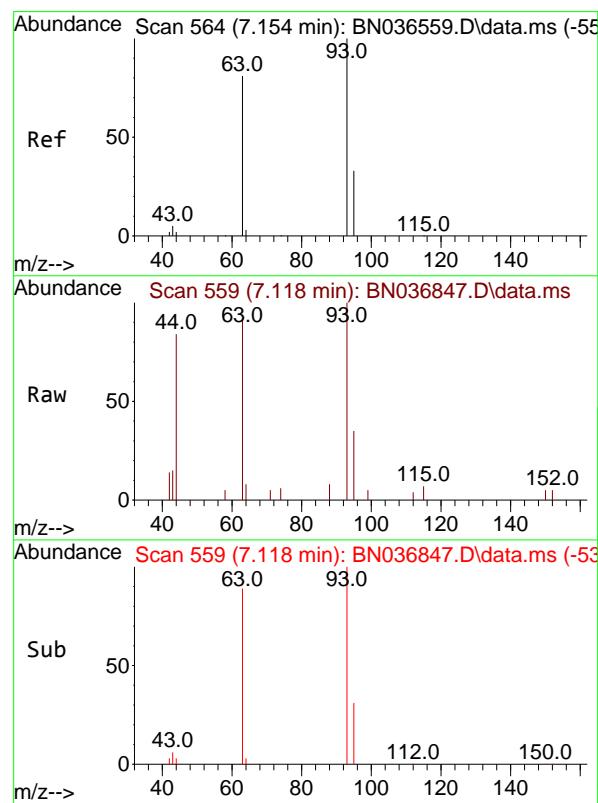
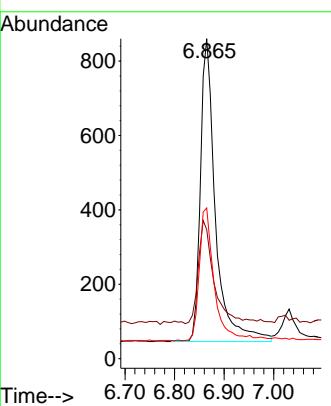




#5  
 Phenol-d6  
 Concen: 0.385 ng  
 RT: 6.865 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

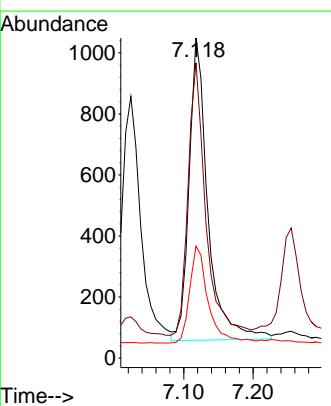
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

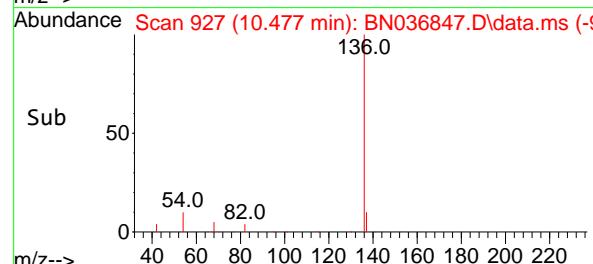
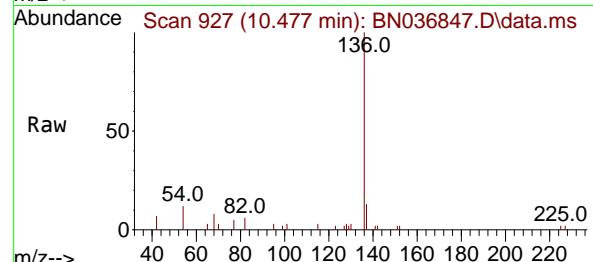
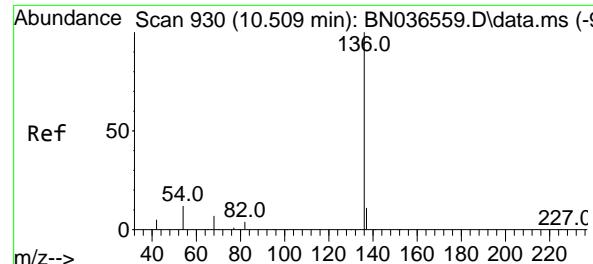
Tgt Ion: 99 Resp: 1716  
 Ion Ratio Lower Upper  
 99 100  
 42 36.0 26.5 39.7  
 71 43.4 34.1 51.1



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.403 ng  
 RT: 7.118 min Scan# 559  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

Tgt Ion: 93 Resp: 1860  
 Ion Ratio Lower Upper  
 93 100  
 63 84.7 67.7 101.5  
 95 31.8 25.6 38.4



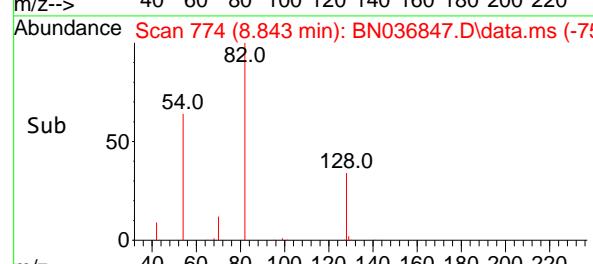
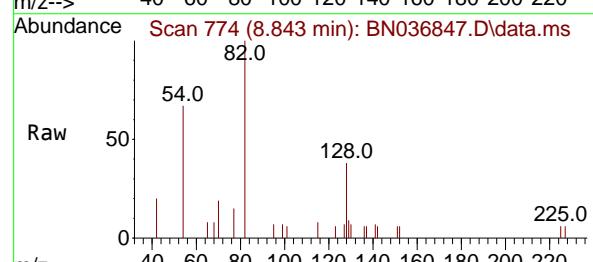
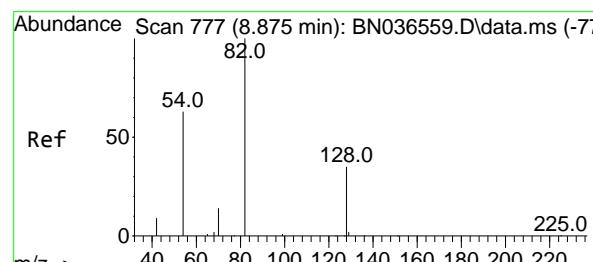
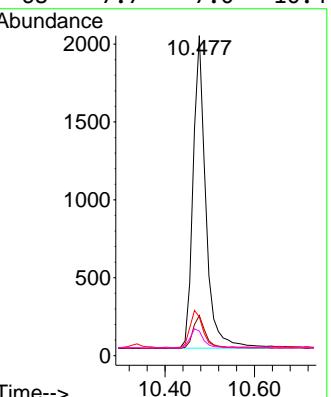


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.477 min Scan# 9  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

Tgt Ion:136 Resp: 3923

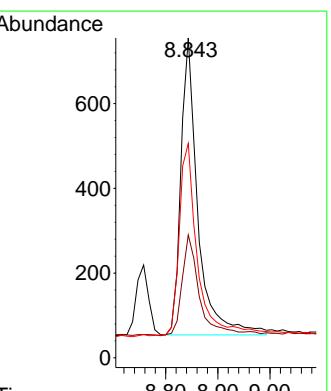
Ion	Ratio	Lower	Upper
136	100		
137	12.5	10.3	15.5
54	12.1	11.5	17.3
68	7.7	7.0	10.4

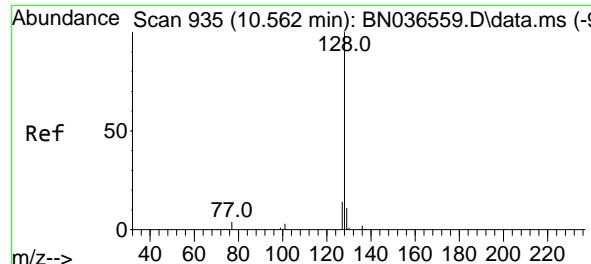


#8  
 Nitrobenzene-d5  
 Concen: 0.373 ng  
 RT: 8.843 min Scan# 774  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

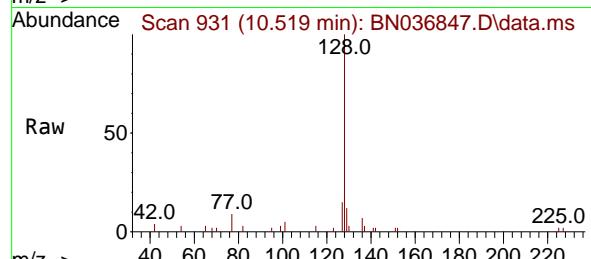
Tgt Ion: 82 Resp: 1593

Ion	Ratio	Lower	Upper
82	100		
128	38.4	30.6	45.8
54	67.0	52.2	78.4

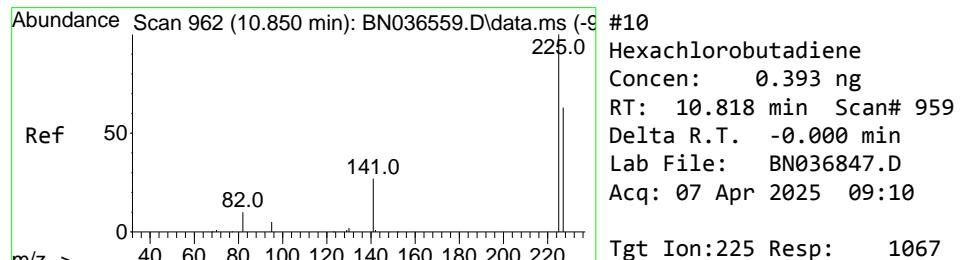
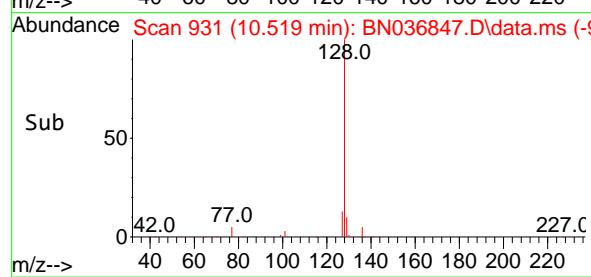
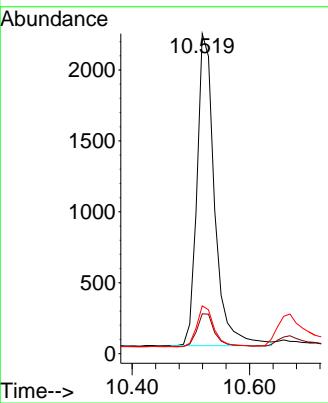




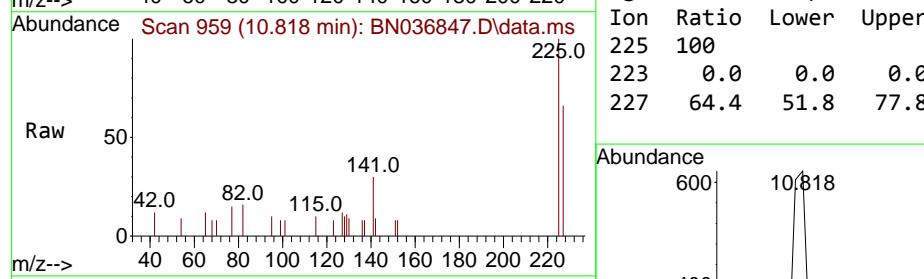
#9  
Naphthalene  
Concen: 0.398 ng  
RT: 10.519 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10  
ClientSampleId : SSTDCCC0.4



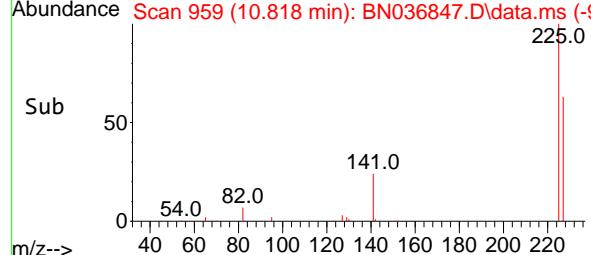
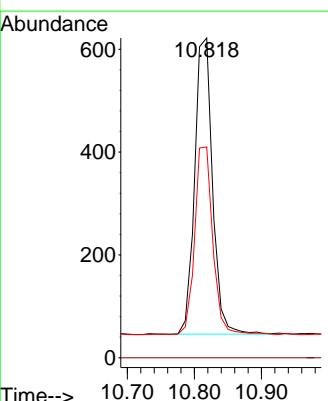
Tgt Ion:128 Resp: 4595  
Ion Ratio Lower Upper  
128 100  
129 12.5 9.8 14.6  
127 14.9 11.8 17.8

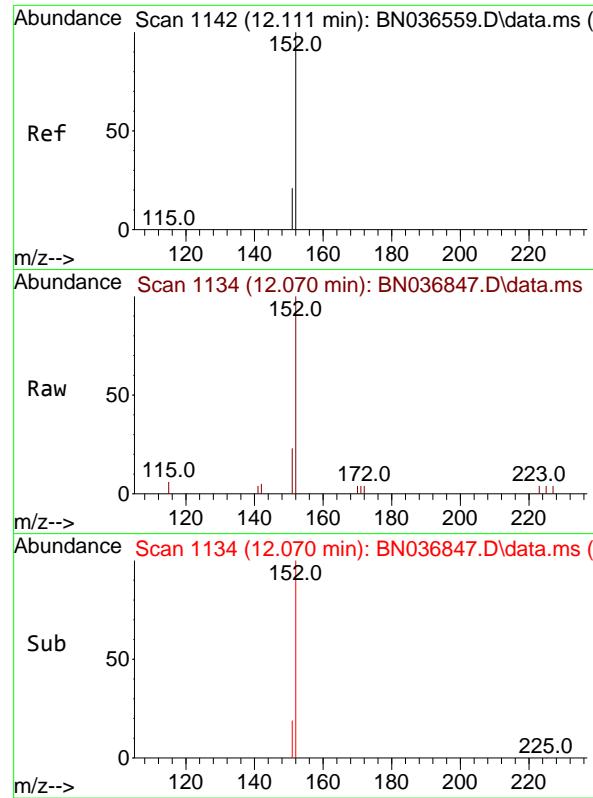


#10  
Hexachlorobutadiene  
Concen: 0.393 ng  
RT: 10.818 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

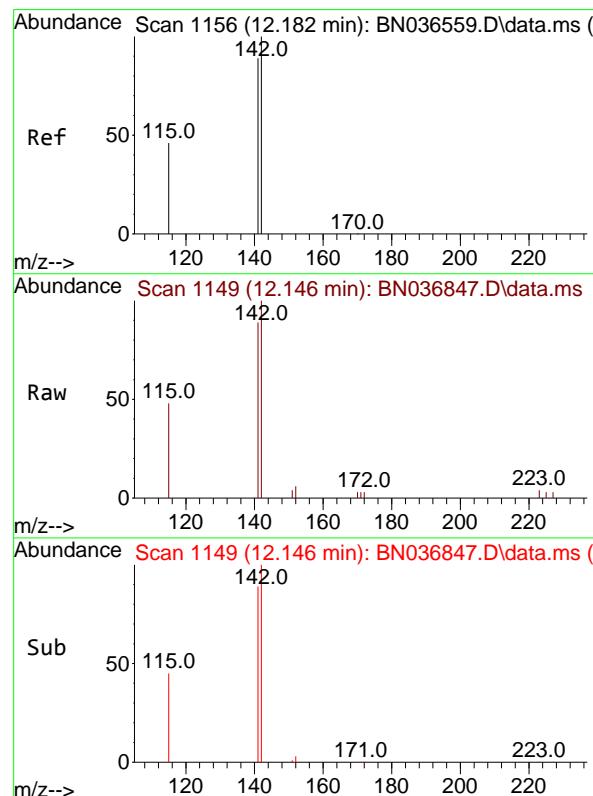


Tgt Ion:225 Resp: 1067  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.4 51.8 77.8



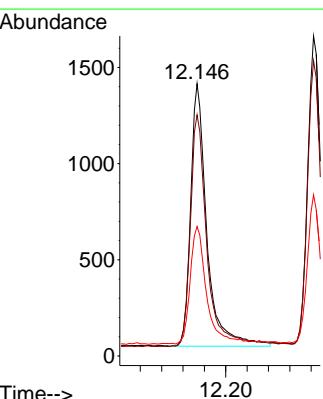


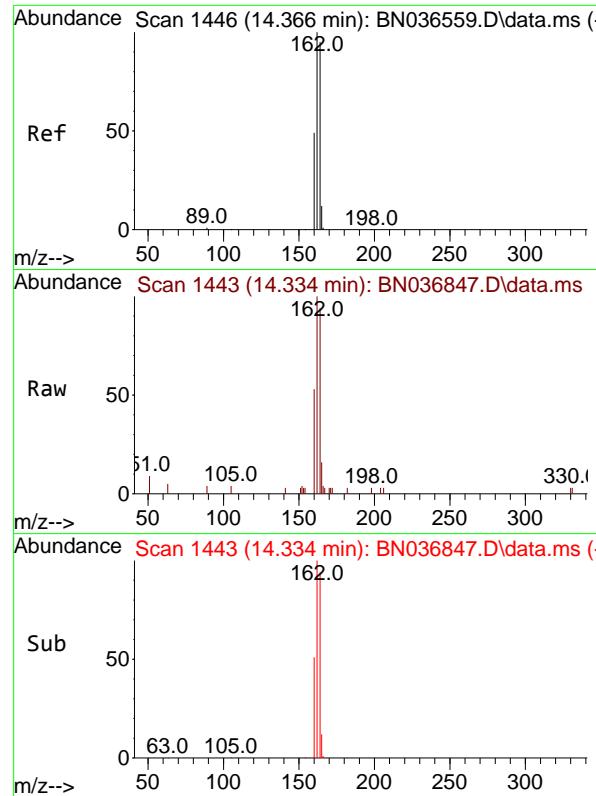
#11  
2-Methylnaphthalene-d10  
Concen: 0.399 ng  
RT: 12.070 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10  
ClientSampleId : SSTDCCC0.4



#12  
2-Methylnaphthalene  
Concen: 0.394 ng  
RT: 12.146 min Scan# 1149  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

Tgt Ion:142 Resp: 2892  
Ion Ratio Lower Upper  
142 100  
141 88.6 71.7 107.5  
115 47.5 38.3 57.5

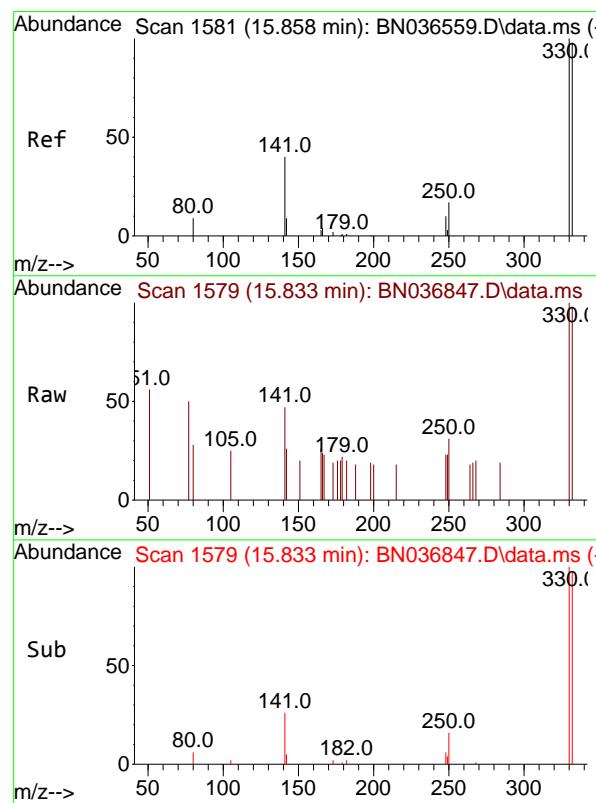
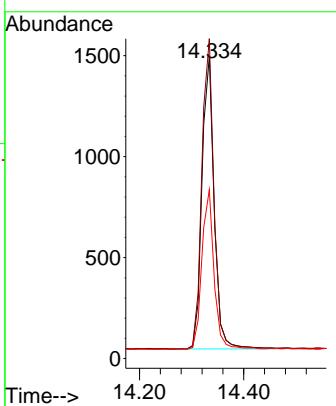




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.334 min Scan# 1443  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

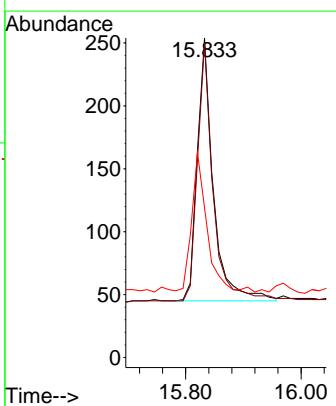
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

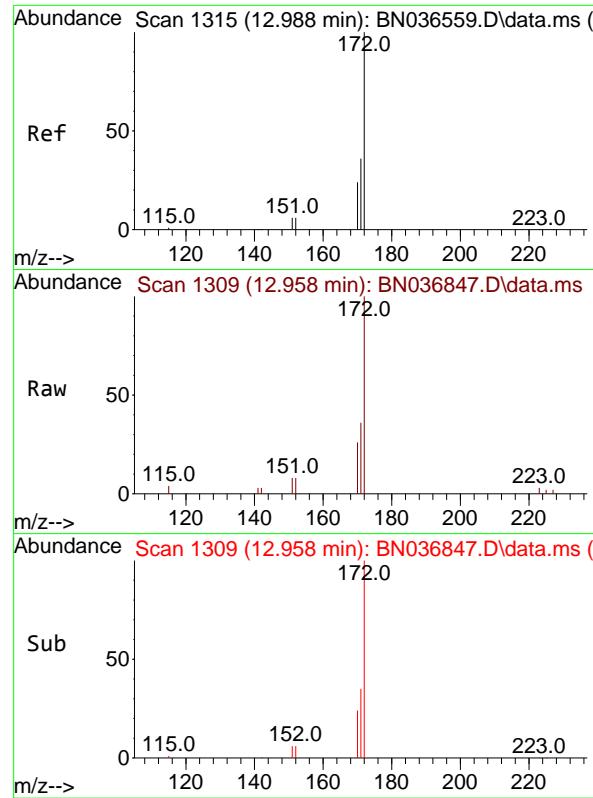
Tgt Ion:164 Resp: 2335  
 Ion Ratio Lower Upper  
 164 100  
 162 105.9 84.2 126.2  
 160 55.9 42.2 63.2



#14  
 2,4,6-Tribromophenol  
 Concen: 0.384 ng  
 RT: 15.833 min Scan# 1579  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

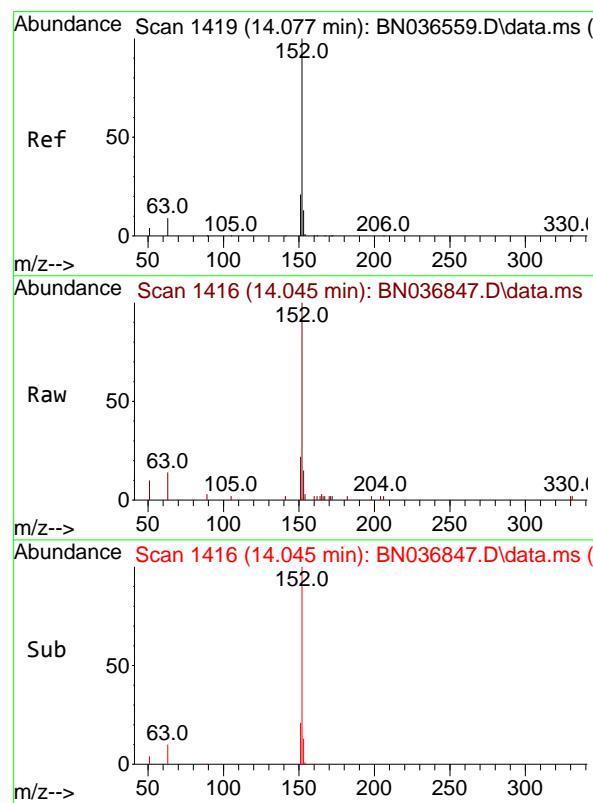
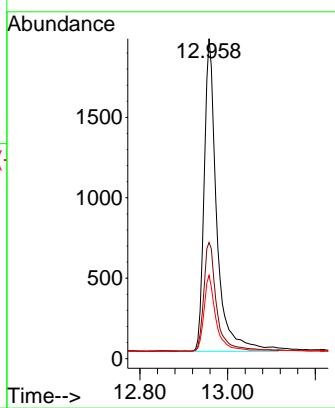
Tgt Ion:330 Resp: 407  
 Ion Ratio Lower Upper  
 330 100  
 332 94.8 75.2 112.8  
 141 48.9 43.4 65.2





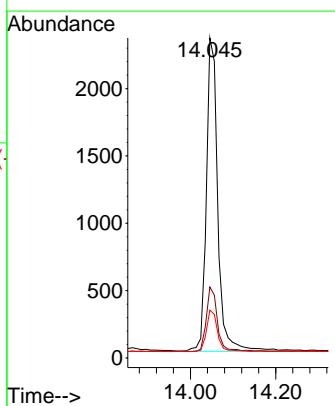
#15  
2-Fluorobiphenyl  
Concen: 0.364 ng  
RT: 12.958 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
ClientSampleId : SSTDCCC0.4  
Acq: 07 Apr 2025 09:10

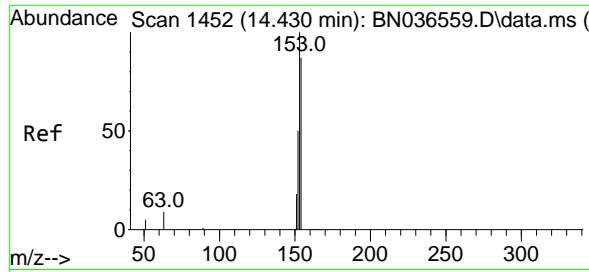
Tgt Ion:172 Resp: 4949  
Ion Ratio Lower Upper  
172 100  
171 36.3 29.5 44.3  
170 26.0 20.2 30.4



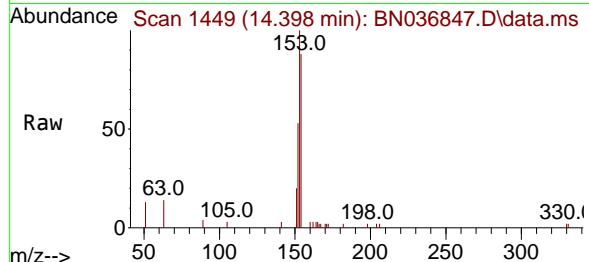
#16  
Acenaphthylene  
Concen: 0.392 ng  
RT: 14.045 min Scan# 1416  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

Tgt Ion:152 Resp: 4321  
Ion Ratio Lower Upper  
152 100  
151 20.2 16.2 24.4  
153 12.7 10.6 15.8

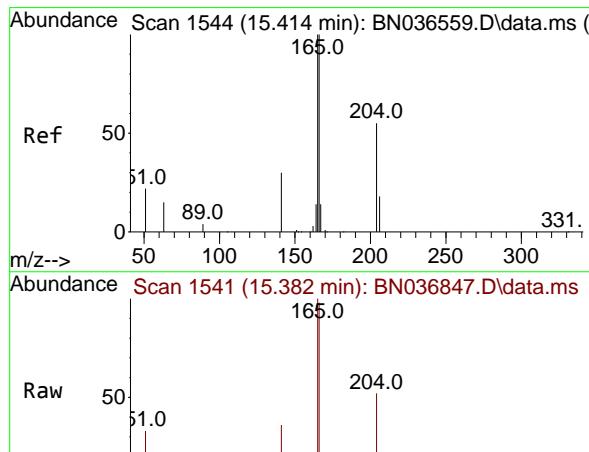
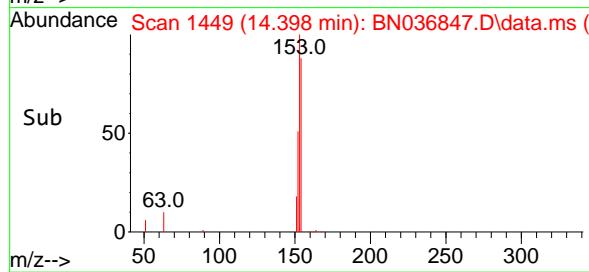
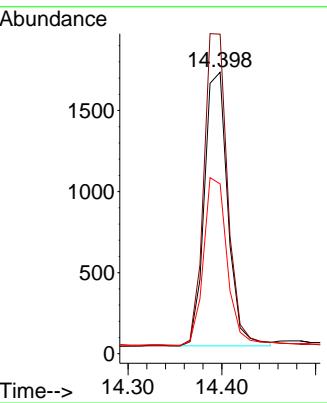




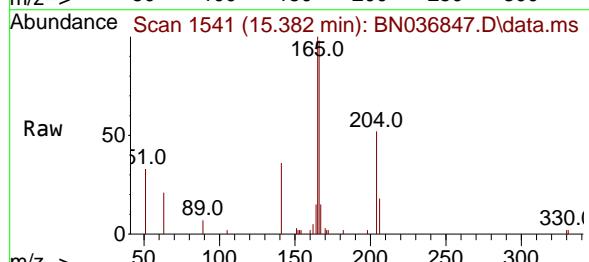
#17  
Acenaphthene  
Concen: 0.405 ng  
RT: 14.398 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
ClientSampleId : SSTDCCC0.4  
Acq: 07 Apr 2025 09:10



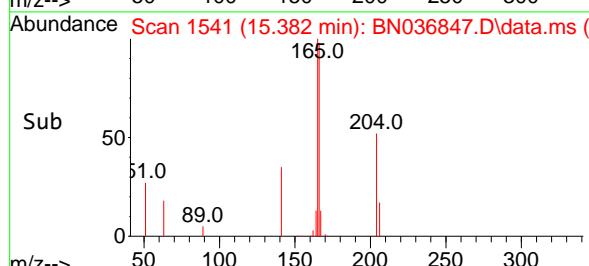
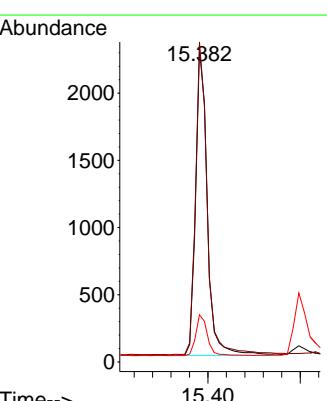
Tgt Ion:154 Resp: 2923  
Ion Ratio Lower Upper  
154 100  
153 118.3 94.1 141.1  
152 62.5 49.8 74.6

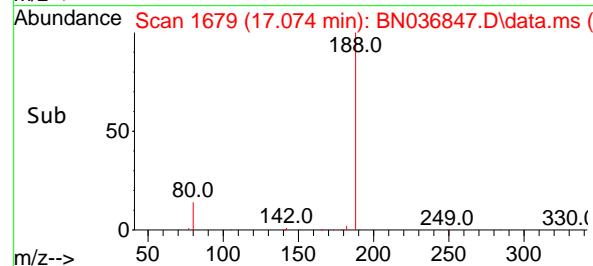
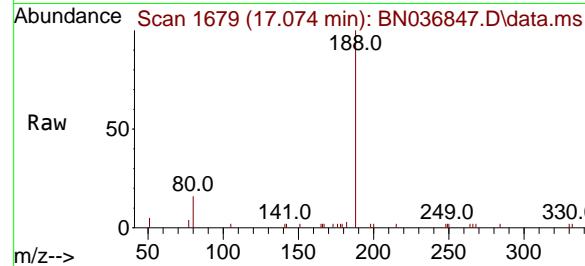
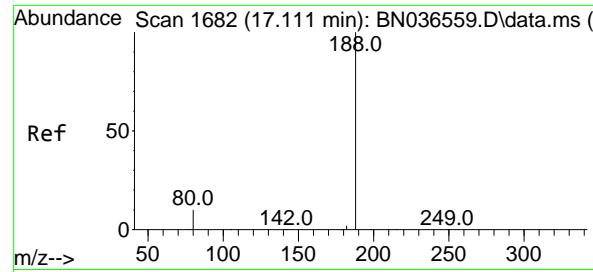


#18  
Fluorene  
Concen: 0.416 ng  
RT: 15.382 min Scan# 1541  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10



Tgt Ion:166 Resp: 4059  
Ion Ratio Lower Upper  
166 100  
165 101.4 79.8 119.8  
167 13.0 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

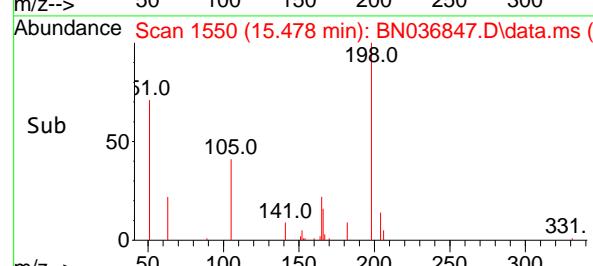
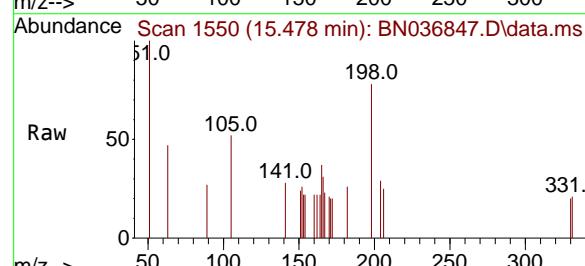
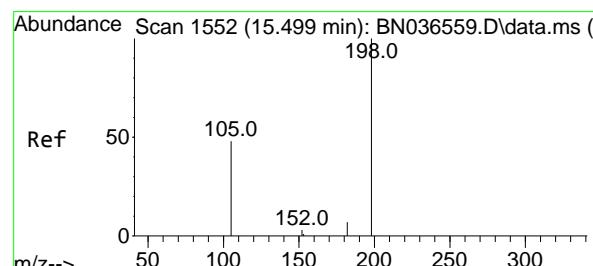
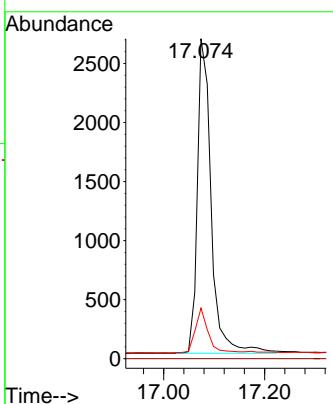
Tgt Ion:188 Resp: 5079

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 15.8 8.8 13.2#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.436 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

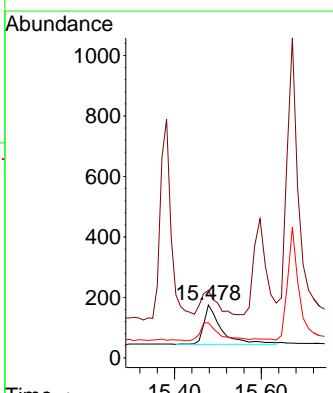
Tgt Ion:198 Resp: 376

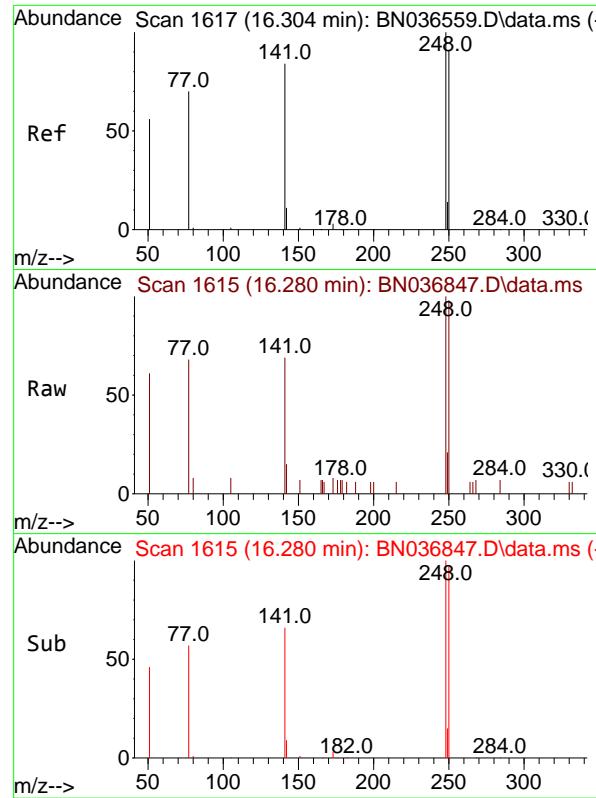
Ion Ratio Lower Upper

198 100

51 127.4 107.9 161.9

105 66.3 56.2 84.2





#21

4-Bromophenyl-phenylether

Concen: 0.380 ng

RT: 16.280 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

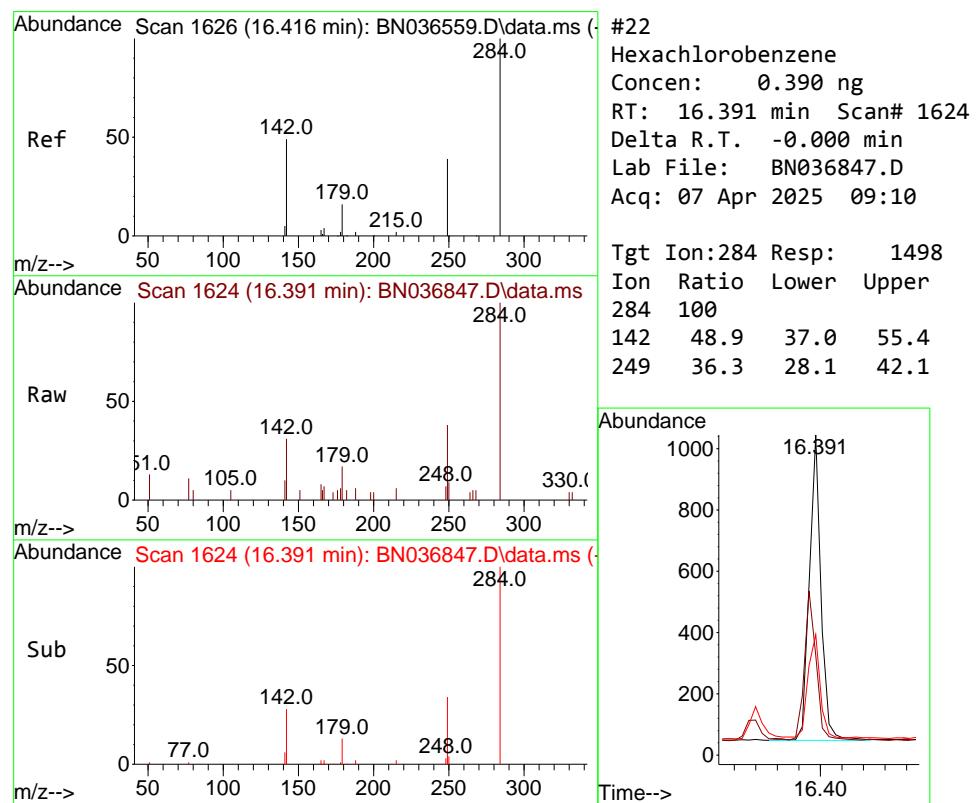
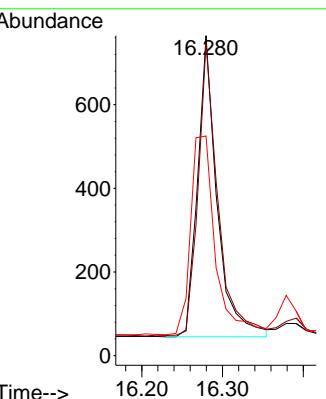
Tgt Ion:248 Resp: 1208

Ion Ratio Lower Upper

248 100

250 97.6 73.0 109.6

141 68.6 68.6 103.0#



#22

Hexachlorobenzene

Concen: 0.390 ng

RT: 16.391 min Scan# 1624

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

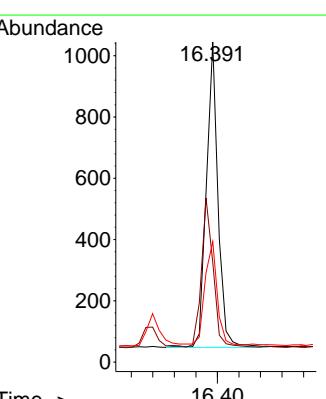
Tgt Ion:284 Resp: 1498

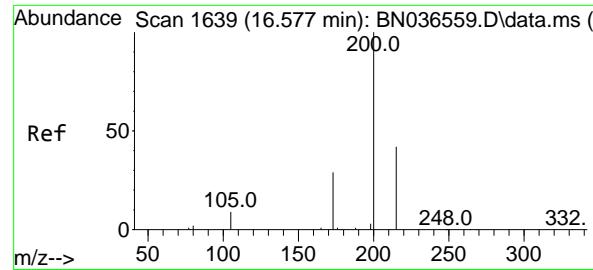
Ion Ratio Lower Upper

284 100

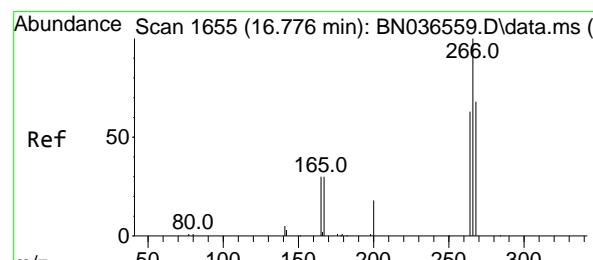
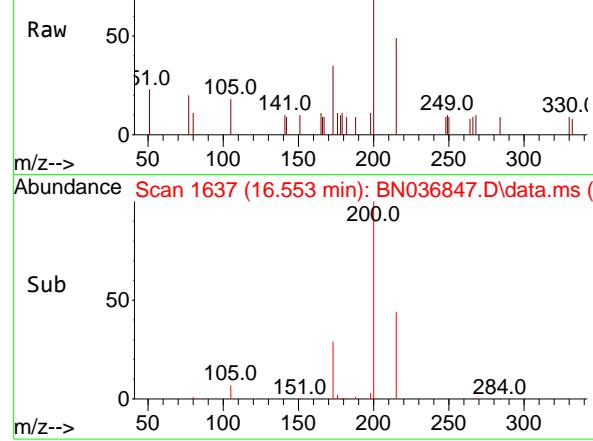
142 48.9 37.0 55.4

249 36.3 28.1 42.1

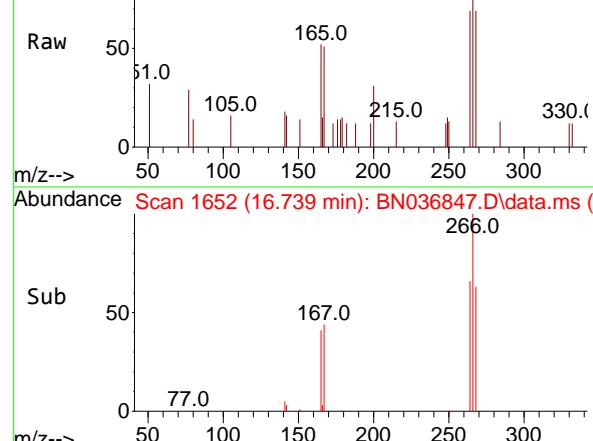




Ref Scan 1637 (16.553 min): BN036847.D\data.ms



Ref Scan 1652 (16.739 min): BN036847.D\data.ms



Raw Scan 1652 (16.739 min): BN036847.D\data.ms

Sub Scan 1652 (16.739 min): BN036847.D\data.ms

#23

Atrazine

Concen: 0.388 ng

RT: 16.553 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:200 Resp: 989

Ion Ratio Lower Upper

200 100

173 35.2 27.3 40.9

215 49.2 36.8 55.2

Abundance

51.0 105.0 141.0 249.0 330.0

200.0 284.0

16.553

16.60

Time--&gt;

#24

Pentachlorophenol

Concen: 0.410 ng

RT: 16.739 min Scan# 1652

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

Tgt Ion:266 Resp: 719

Ion Ratio Lower Upper

266 100

264 62.7 49.6 74.4

268 60.4 50.9 76.3

Abundance

51.0 105.0 165.0 215.0 266.0 330.0

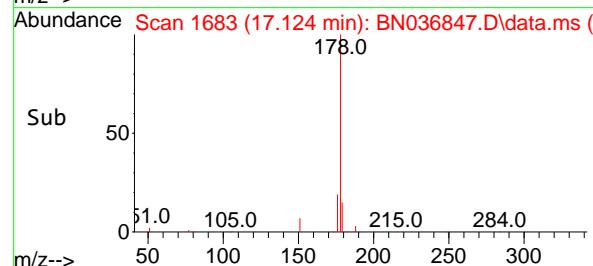
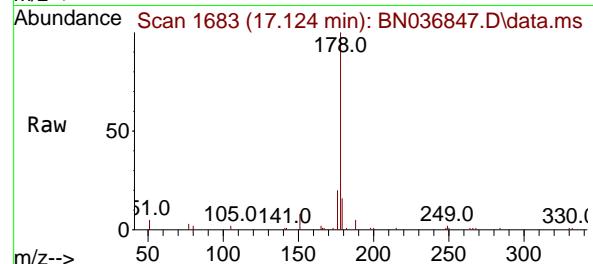
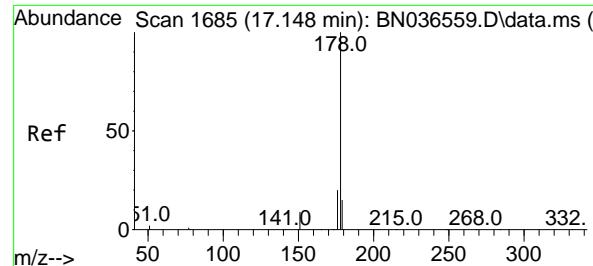
266.0 77.0

16.739

16.60

16.80

Time--&gt;



#25

Phenanthrene

Concen: 0.414 ng

RT: 17.124 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

Instrument:

BNA\_N

ClientSampleId :

SSTDCCC0.4

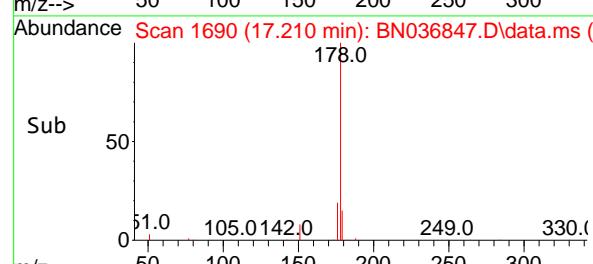
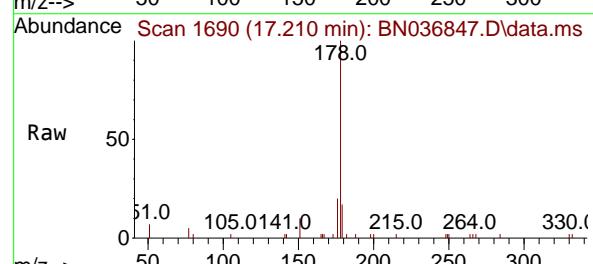
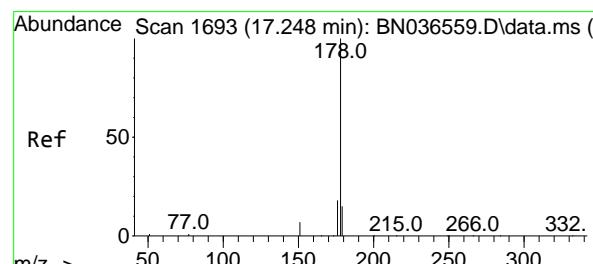
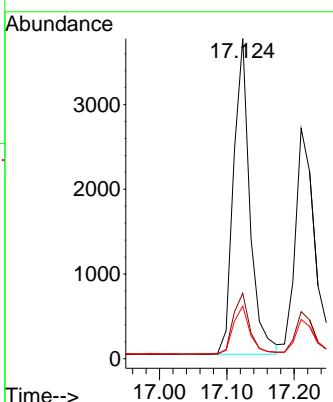
Tgt Ion:178 Resp: 6306

Ion Ratio Lower Upper

178 100

176 19.6 15.9 23.9

179 15.8 12.2 18.4



#26

Anthracene

Concen: 0.399 ng

RT: 17.210 min Scan# 1690

Delta R.T. -0.000 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

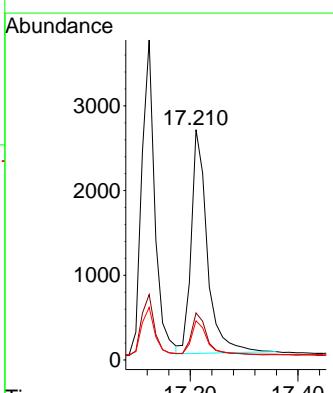
Tgt Ion:178 Resp: 5484

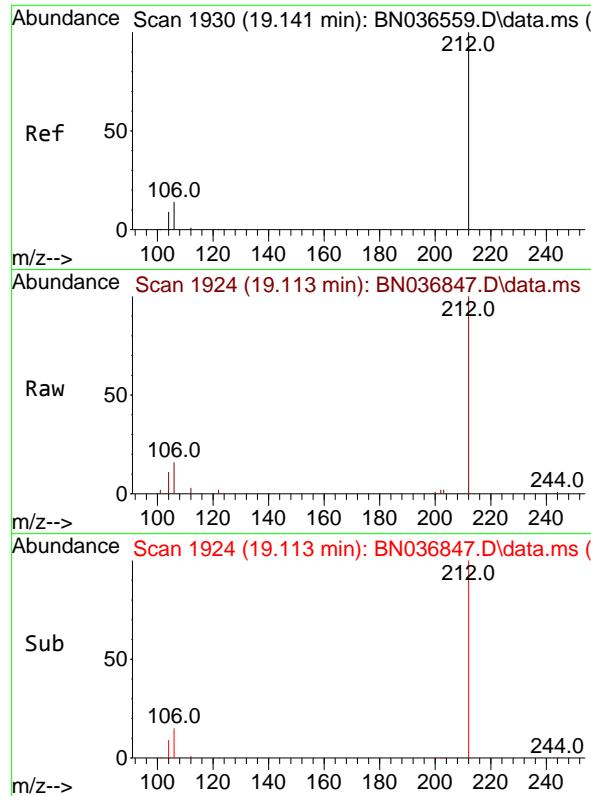
Ion Ratio Lower Upper

178 100

176 18.8 15.4 23.2

179 14.7 12.6 18.8

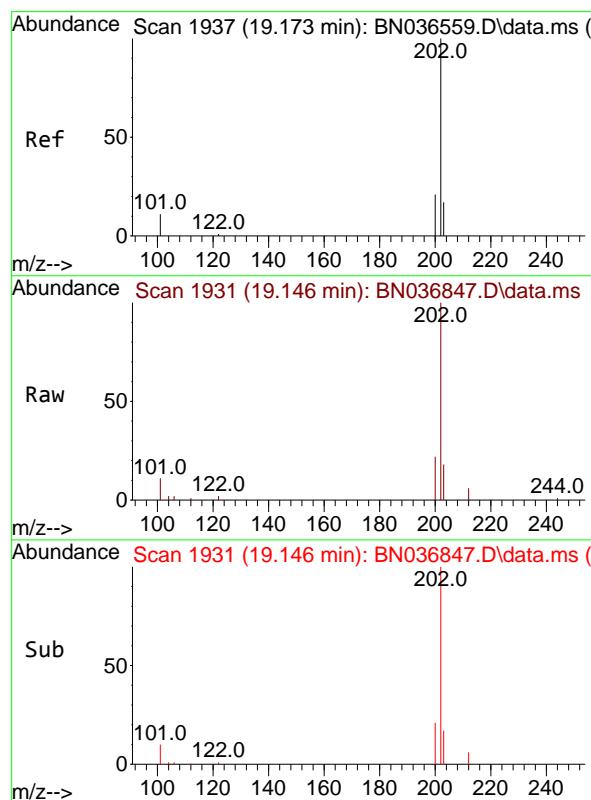
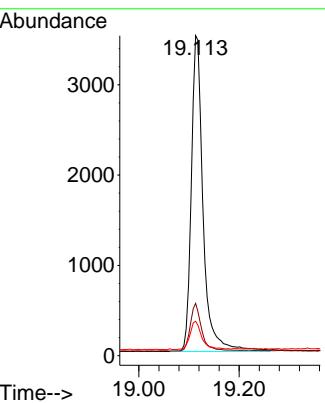




#27  
 Fluoranthene-d10  
 Concen: 0.440 ng  
 RT: 19.113 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

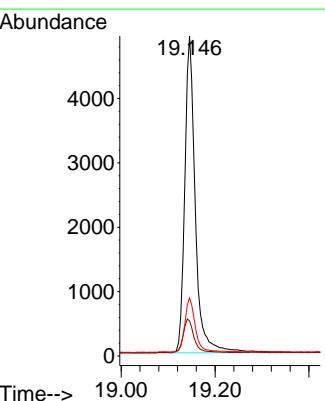
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

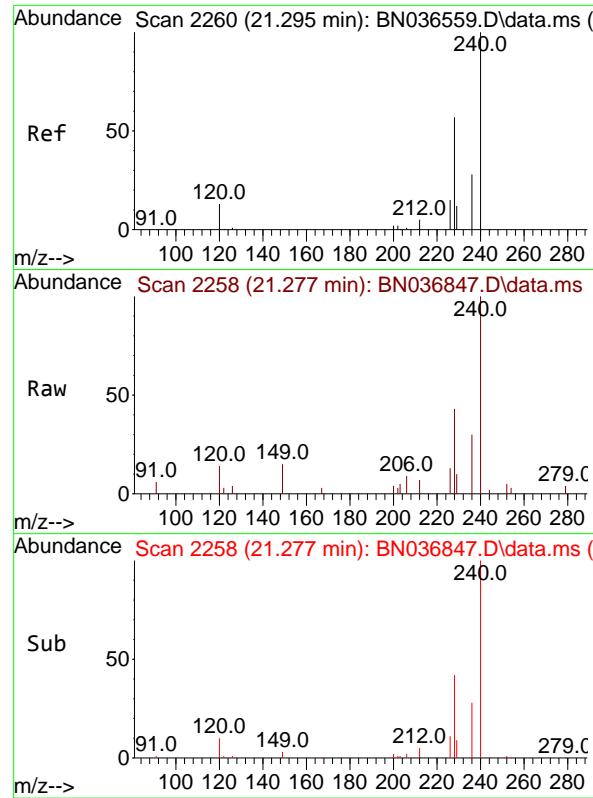
Tgt Ion:212 Resp: 5730  
 Ion Ratio Lower Upper  
 212 100  
 106 14.6 11.8 17.6  
 104 8.8 7.3 10.9



#28  
 Fluoranthene  
 Concen: 0.450 ng  
 RT: 19.146 min Scan# 1931  
 Delta R.T. 0.004 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

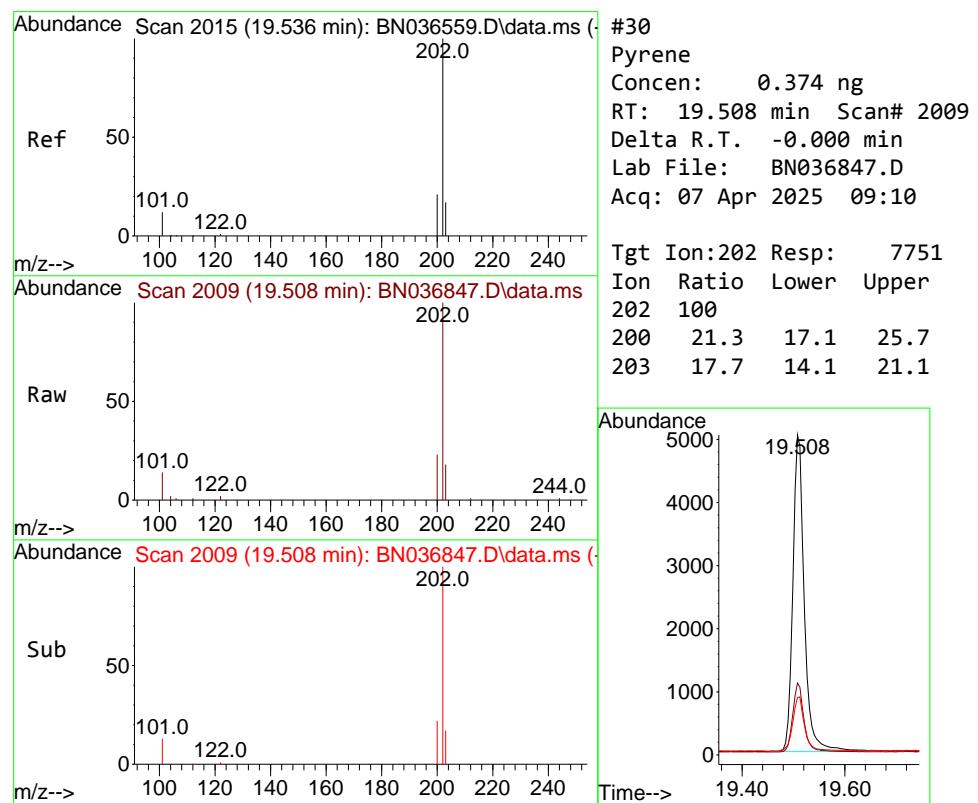
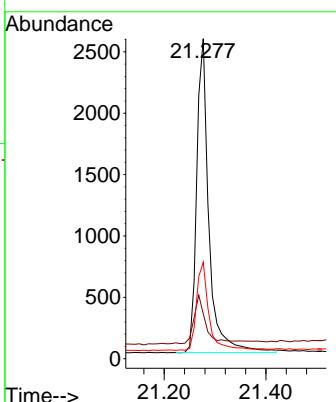
Tgt Ion:202 Resp: 7695  
 Ion Ratio Lower Upper  
 202 100  
 101 10.8 9.4 14.0  
 203 16.9 13.5 20.3





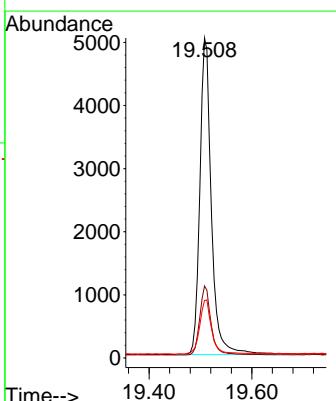
#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. 0.009 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10  
ClientSampleId : SSTDCCC0.4

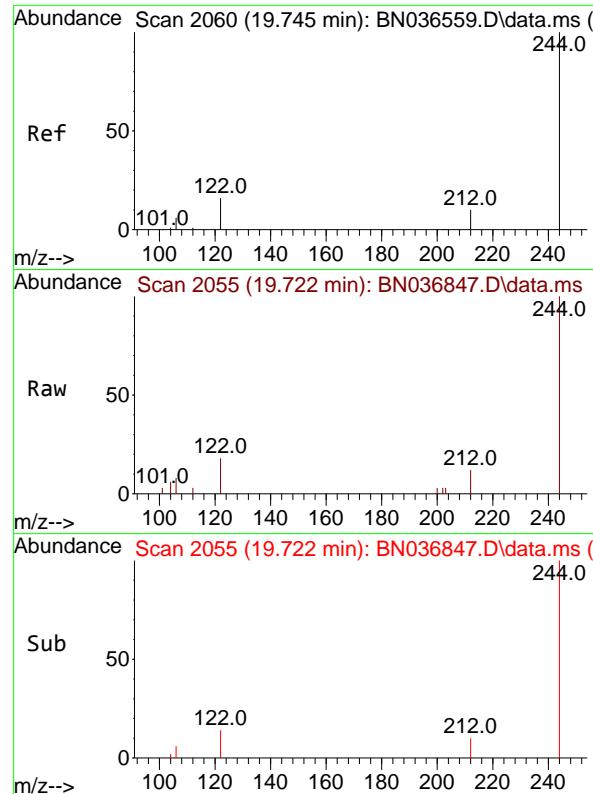
Tgt Ion:240 Resp: 4233  
Ion Ratio Lower Upper  
240 100  
120 14.0 14.6 22.0#  
236 30.1 24.1 36.1



#30  
Pyrene  
Concen: 0.374 ng  
RT: 19.508 min Scan# 2009  
Delta R.T. -0.000 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

Tgt Ion:202 Resp: 7751  
Ion Ratio Lower Upper  
202 100  
200 21.3 17.1 25.7  
203 17.7 14.1 21.1

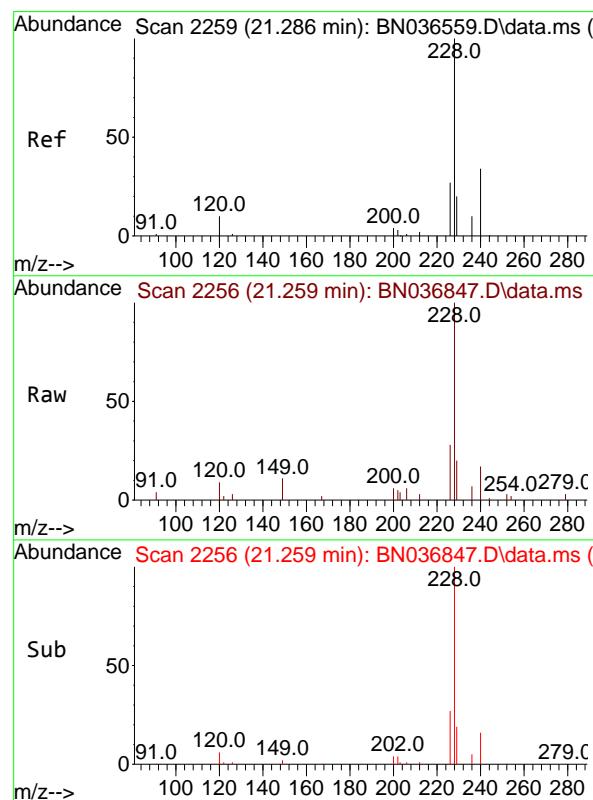
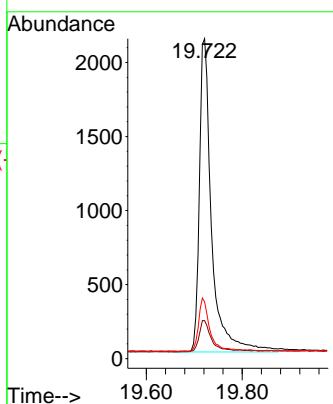




#31  
 Terphenyl-d14  
 Concen: 0.370 ng  
 RT: 19.722 min Scan# 2  
 Delta R.T. 0.004 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

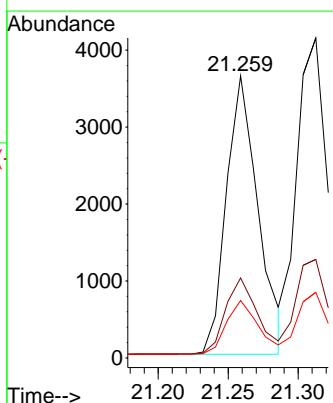
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

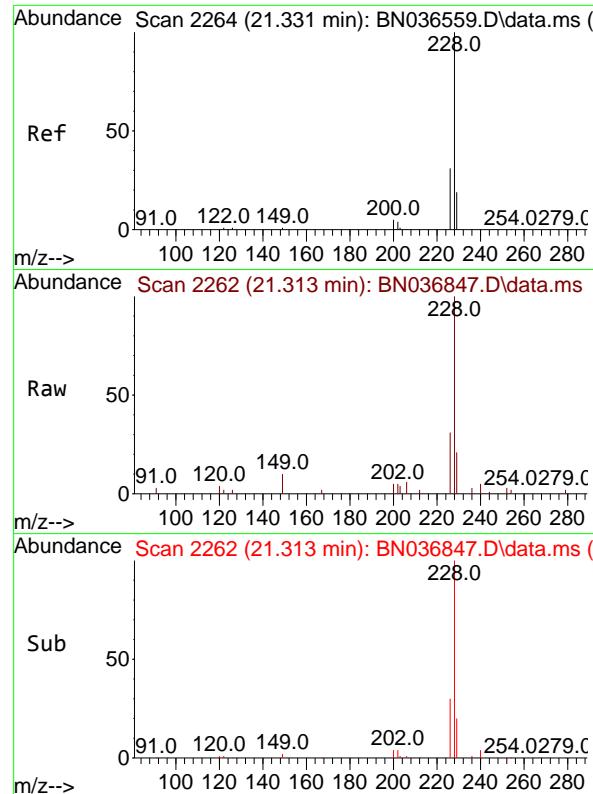
Tgt Ion:244 Resp: 3755  
 Ion Ratio Lower Upper  
 244 100  
 212 11.9 9.6 14.4  
 122 17.7 13.9 20.9



#32  
 Benzo(a)anthracene  
 Concen: 0.389 ng  
 RT: 21.259 min Scan# 2256  
 Delta R.T. -0.000 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

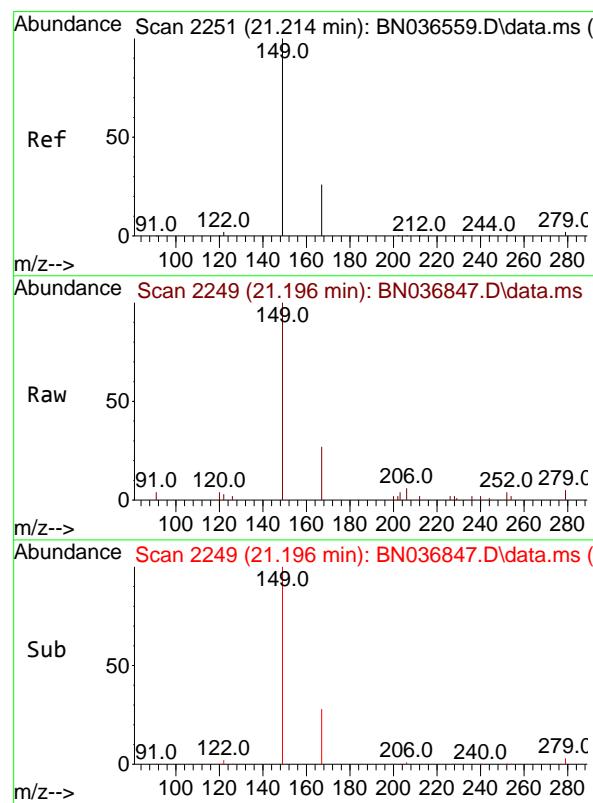
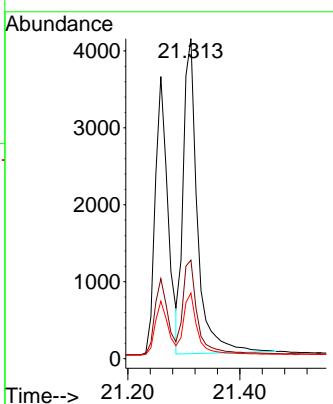
Tgt Ion:228 Resp: 5720  
 Ion Ratio Lower Upper  
 228 100  
 226 28.3 22.5 33.7  
 229 20.4 16.6 25.0





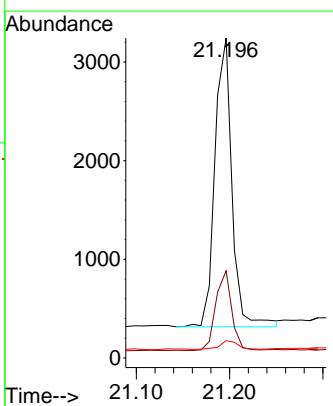
#33  
Chrysene  
Concen: 0.449 ng  
RT: 21.313 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.009 min  
Lab File: BN036847.D ClientSampleId : SSTDCCC0.4  
Acq: 07 Apr 2025 09:10

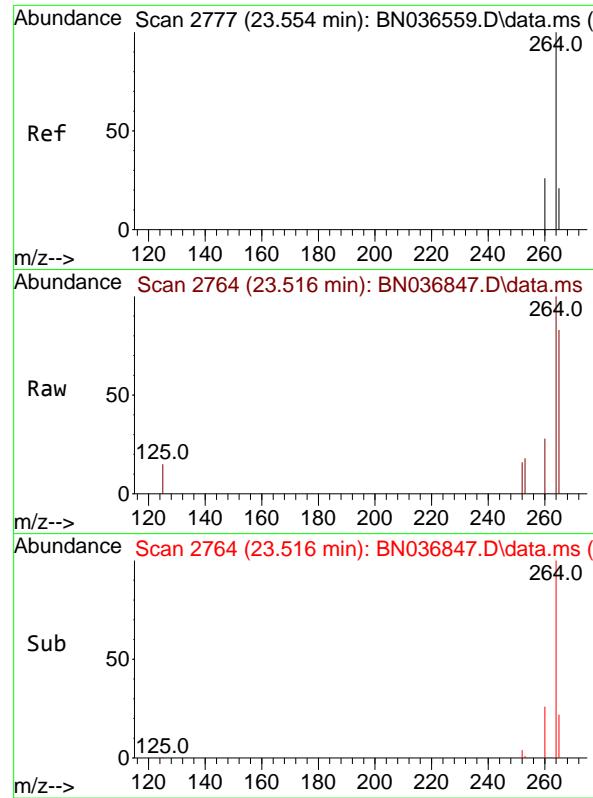
Tgt Ion:228 Resp: 7221  
Ion Ratio Lower Upper  
228 100  
226 30.8 25.3 37.9  
229 20.5 15.8 23.8



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.353 ng  
RT: 21.196 min Scan# 2249  
Delta R.T. 0.009 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

Tgt Ion:149 Resp: 3698  
Ion Ratio Lower Upper  
149 100  
167 25.6 20.7 31.1  
279 3.3 3.6 5.4#

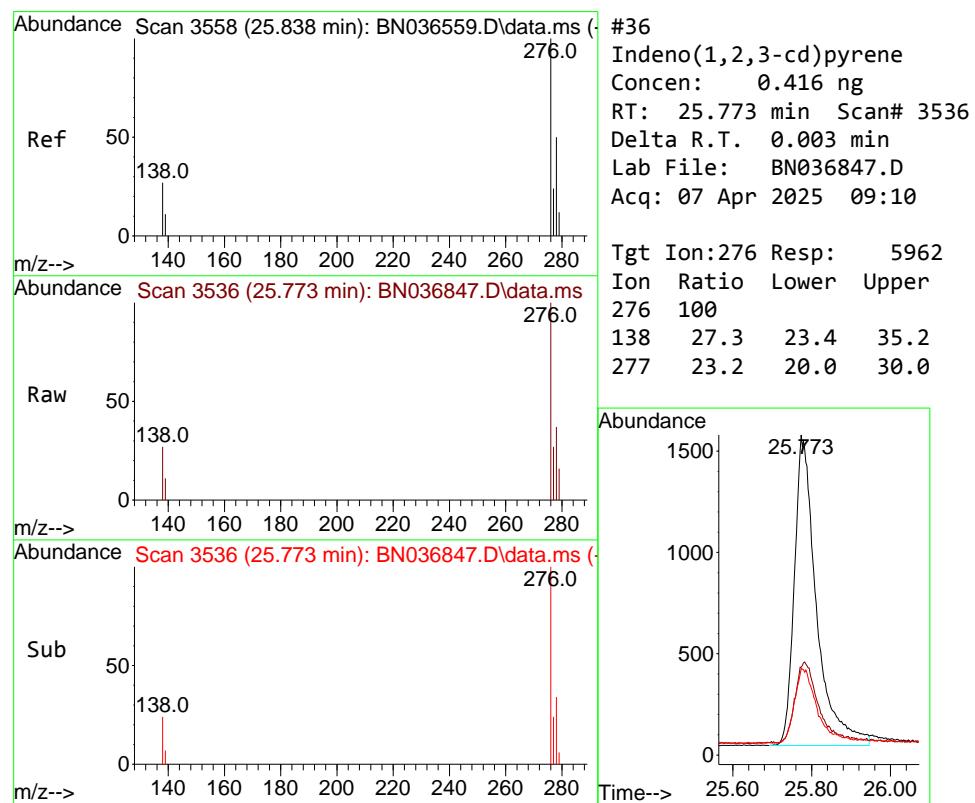
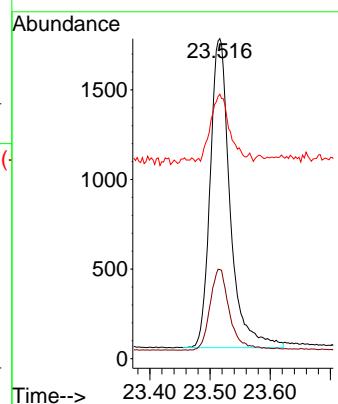




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.516 min Scan# 2  
Delta R.T. 0.006 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

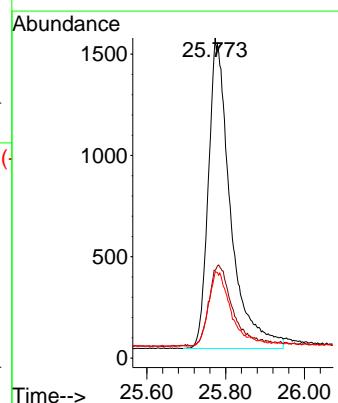
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

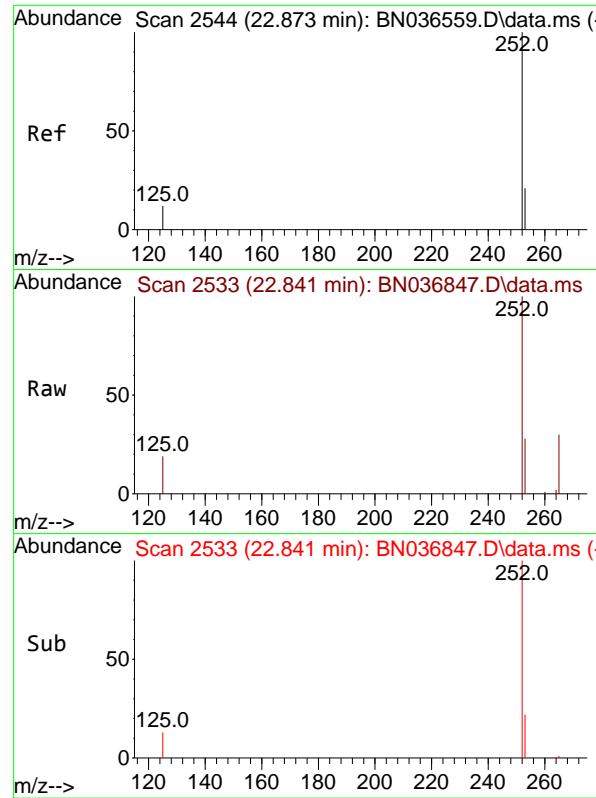
Tgt Ion:264 Resp: 3968  
Ion Ratio Lower Upper  
264 100  
260 27.8 22.6 33.8  
265 82.6 88.1 132.1#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.416 ng  
RT: 25.773 min Scan# 3536  
Delta R.T. 0.003 min  
Lab File: BN036847.D  
Acq: 07 Apr 2025 09:10

Tgt Ion:276 Resp: 5962  
Ion Ratio Lower Upper  
276 100  
138 27.3 23.4 35.2  
277 23.2 20.0 30.0





#37

Benzo(b)fluoranthene

Concen: 0.427 ng

RT: 22.841 min Scan# 2

Delta R.T. 0.003 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

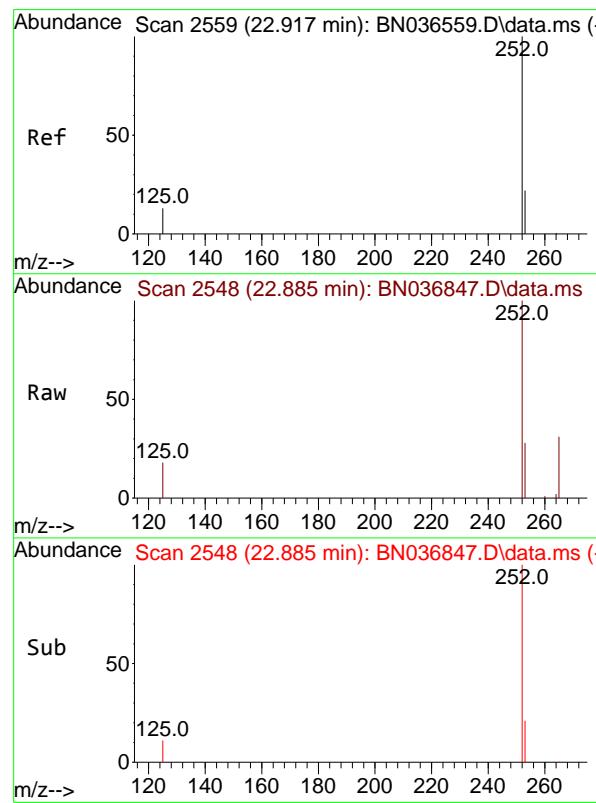
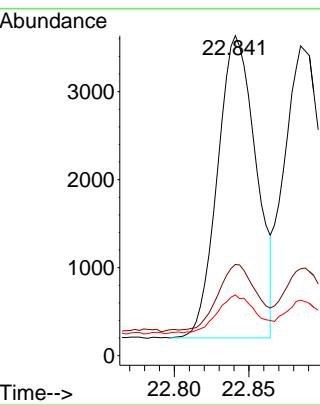
Tgt Ion:252 Resp: 6173

Ion Ratio Lower Upper

252 100

253 28.5 23.9 35.9

125 19.0 17.4 26.2



#38

Benzo(k)fluoranthene

Concen: 0.445 ng

RT: 22.885 min Scan# 2548

Delta R.T. 0.006 min

Lab File: BN036847.D

Acq: 07 Apr 2025 09:10

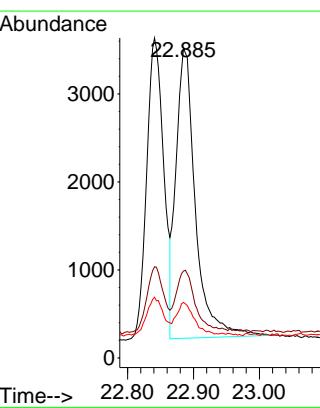
Tgt Ion:252 Resp: 6741

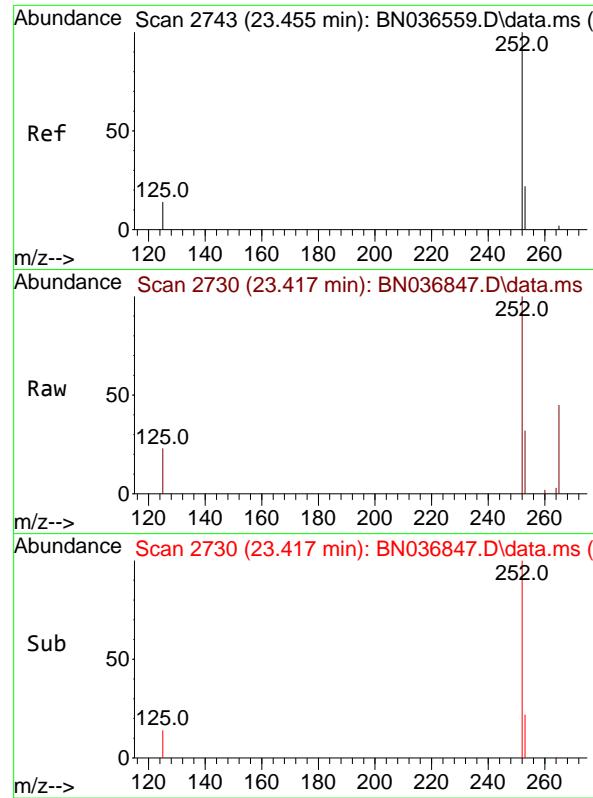
Ion Ratio Lower Upper

252 100

253 28.0 24.6 36.8

125 18.0 17.8 26.8

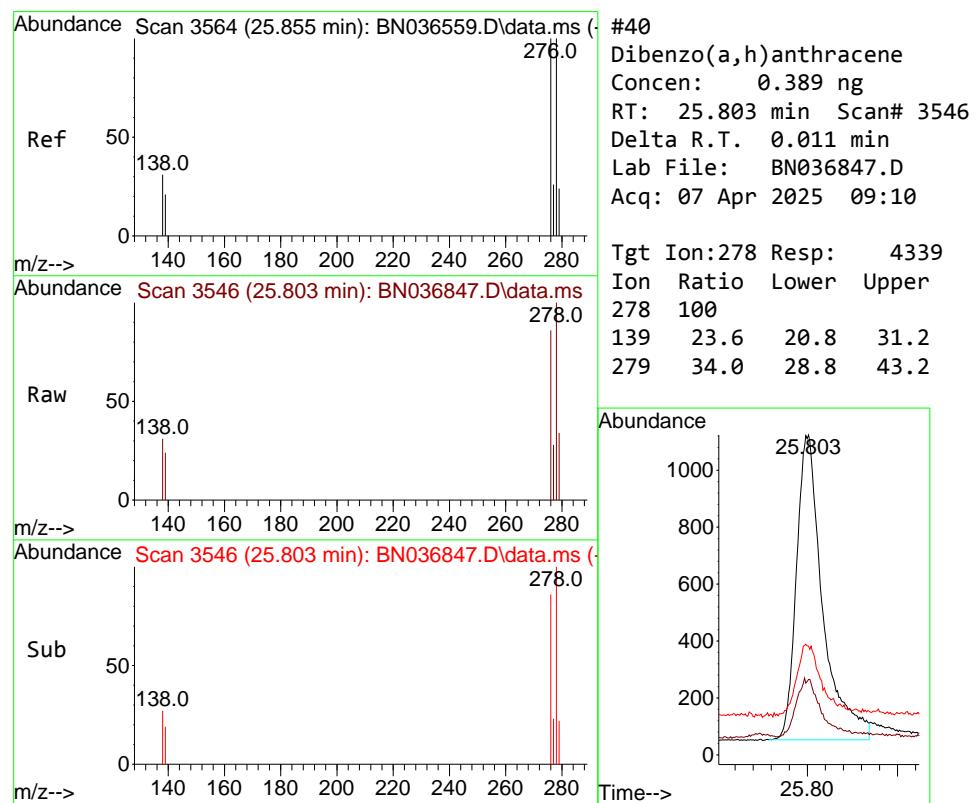
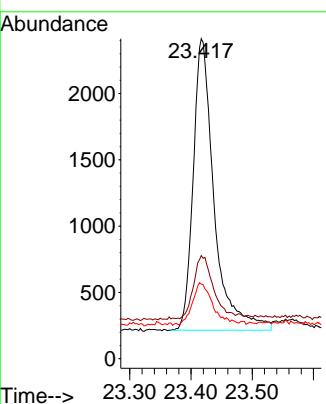




#39  
 Benzo(a)pyrene  
 Concen: 0.430 ng  
 RT: 23.417 min Scan# 2  
 Delta R.T. 0.006 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

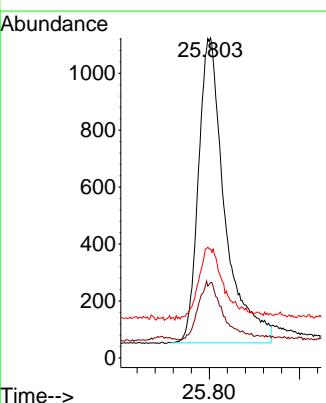
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

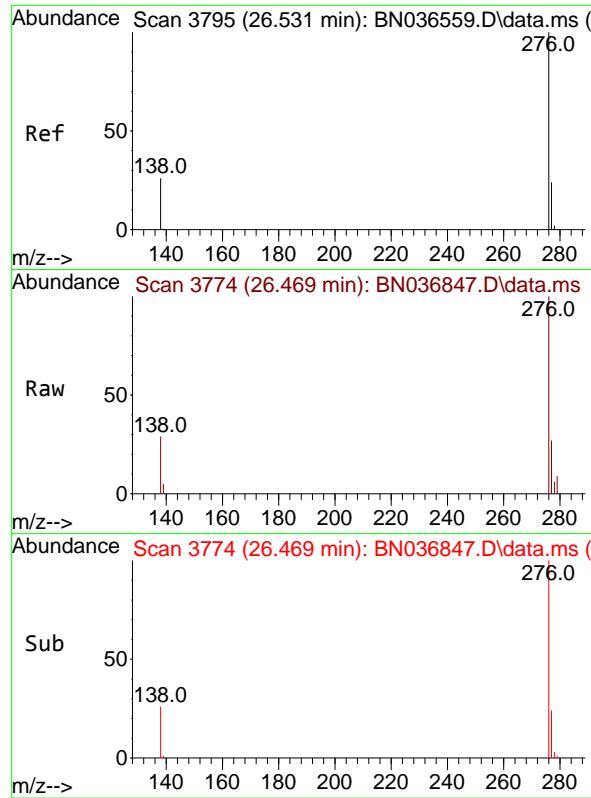
Tgt Ion:252 Resp: 5226  
 Ion Ratio Lower Upper  
 252 100  
 253 32.2 27.8 41.8  
 125 23.3 22.7 34.1



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.389 ng  
 RT: 25.803 min Scan# 3546  
 Delta R.T. 0.011 min  
 Lab File: BN036847.D  
 Acq: 07 Apr 2025 09:10

Tgt Ion:278 Resp: 4339  
 Ion Ratio Lower Upper  
 278 100  
 139 23.6 20.8 31.2  
 279 34.0 28.8 43.2





#41

Benzo(g,h,i)perylene

Concen: 0.441 ng

RT: 26.469 min Scan# 3

Instrument :

BNA\_N

Delta R.T. 0.012 min

Lab File: BN036847.D

ClientSampleId :

Acq: 07 Apr 2025 09:10

STDCCCC0.4

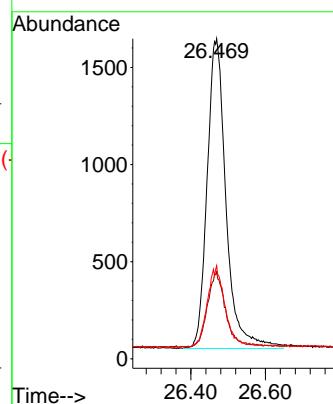
Tgt Ion:276 Resp: 5619

Ion Ratio Lower Upper

276 100

277 27.2 22.2 33.4

138 29.1 24.1 36.1



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036847.D  
 Acq On : 07 Apr 2025 09:10  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Apr 07 10:42:23 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 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	70	0.00
2	1,4-Dioxane	0.444	0.474	-6.8	67	0.00
3	n-Nitrosodimethylamine	0.898	0.997	-11.0	75	0.00
4 S	2-Fluorophenol	0.932	0.910	2.4	65	0.00
5 S	Phenol-d6	1.152	1.108	3.8	69	0.00
6	bis(2-Chloroethyl)ether	1.190	1.201	-0.9	71	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	77	0.00
8 S	Nitrobenzene-d5	0.435	0.406	6.7	75	0.00
9	Naphthalene	1.177	1.171	0.5	75	0.00
10	Hexachlorobutadiene	0.277	0.272	1.8	71	0.00
11 SURR	2-Methylnaphthalene-d10	0.595	0.593	0.3	75	0.00
12	2-Methylnaphthalene	0.749	0.737	1.6	74	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	77	0.00
14 S	2,4,6-Tribromophenol	0.182	0.174	4.4	72	0.00
15 S	2-Fluorobiphenyl	2.327	2.119	8.9	68	0.00
16	Acenaphthylene	1.888	1.851	2.0	74	0.00
17	Acenaphthene	1.236	1.252	-1.3	75	0.00
18	Fluorene	1.672	1.738	-3.9	76	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	85	0.00
20	4,6-Dinitro-2-methylphenol	0.086	0.074	14.0	81	0.00
21	4-Bromophenyl-phenylether	0.251	0.238	5.2	73	0.00
22	Hexachlorobenzene	0.303	0.295	2.6	74	0.00
23	Atrazine	0.201	0.195	3.0	77	0.00
24	Pentachlorophenol	0.138	0.142	-2.9	88	0.00
25	Phenanthrene	1.200	1.242	-3.5	81	0.00
26	Anthracene	1.083	1.080	0.3	80	0.00
27 SURR	Fluoranthene-d10	1.025	1.128	-10.0	86	0.00
28	Fluoranthene	1.348	1.515	-12.4	88	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	103	0.00
30	Pyrene	1.956	1.831	6.4	88	0.00
31 S	Terphenyl-d14	0.958	0.887	7.4	89	0.00
32	Benzo(a)anthracene	1.391	1.351	2.9	97	0.00
33	Chrysene	1.520	1.706	-12.2	109	0.00
34	Bis(2-ethylhexyl)phthalate	0.990	0.874	11.7	86	0.00
35 I	Perylene-d12	1.000	1.000	0.0	112	0.00
36	Indeno(1,2,3-cd)pyrene	1.444	1.503	-4.1	109	0.00
37	Benzo(b)fluoranthene	1.456	1.556	-6.9	113	0.00
38	Benzo(k)fluoranthene	1.527	1.699	-11.3	118	0.00
39 C	Benzo(a)pyrene	1.226	1.317	-7.4	113	0.00
40	Dibenzo(a,h)anthracene	1.124	1.093	2.8	105	0.01
41	Benzo(g,h,i)perylene	1.286	1.416	-10.1	115	0.01

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036847.D  
 Acq On : 07 Apr 2025 09:10  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Apr 07 10:42:23 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 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	70	0.00
2	1,4-Dioxane	0.400	0.427	-6.7	67	0.00
3	n-Nitrosodimethylamine	0.400	0.444	-11.0	75	0.00
4 S	2-Fluorophenol	0.400	0.391	2.3	65	0.00
5 S	Phenol-d6	0.400	0.385	3.8	69	0.00
6	bis(2-Chloroethyl)ether	0.400	0.403	-0.8	71	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	77	0.00
8 S	Nitrobenzene-d5	0.400	0.373	6.8	75	0.00
9	Naphthalene	0.400	0.398	0.5	75	0.00
10	Hexachlorobutadiene	0.400	0.393	1.8	71	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.399	0.3	75	0.00
12	2-Methylnaphthalene	0.400	0.394	1.5	74	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	77	0.00
14 S	2,4,6-Tribromophenol	0.400	0.384	4.0	72	0.00
15 S	2-Fluorobiphenyl	0.400	0.364	9.0	68	0.00
16	Acenaphthylene	0.400	0.392	2.0	74	0.00
17	Acenaphthene	0.400	0.405	-1.3	75	0.00
18	Fluorene	0.400	0.416	-4.0	76	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	85	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.436	-9.0	81	0.00
21	4-Bromophenyl-phenylether	0.400	0.380	5.0	73	0.00
22	Hexachlorobenzene	0.400	0.390	2.5	74	0.00
23	Atrazine	0.400	0.388	3.0	77	0.00
24	Pentachlorophenol	0.400	0.410	-2.5	88	0.00
25	Phenanthrene	0.400	0.414	-3.5	81	0.00
26	Anthracene	0.400	0.399	0.3	80	0.00
27 SURR	Fluoranthene-d10	0.400	0.440	-10.0	86	0.00
28	Fluoranthene	0.400	0.450	-12.5	88	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	103	0.00
30	Pyrene	0.400	0.374	6.5	88	0.00
31 S	Terphenyl-d14	0.400	0.370	7.5	89	0.00
32	Benzo(a)anthracene	0.400	0.389	2.8	97	0.00
33	Chrysene	0.400	0.449	-12.2	109	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.353	11.8	86	0.00
35 I	Perylene-d12	0.400	0.400	0.0	112	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.416	-4.0	109	0.00
37	Benzo(b)fluoranthene	0.400	0.427	-6.7	113	0.00
38	Benzo(k)fluoranthene	0.400	0.445	-11.2	118	0.00
39 C	Benzo(a)pyrene	0.400	0.430	-7.5	113	0.00
40	Dibenzo(a,h)anthracene	0.400	0.389	2.8	105	0.01
41	Benzo(g,h,i)perylene	0.400	0.441	-10.2	115	0.01

(#) = Out of Range

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



# QC SAMPLE

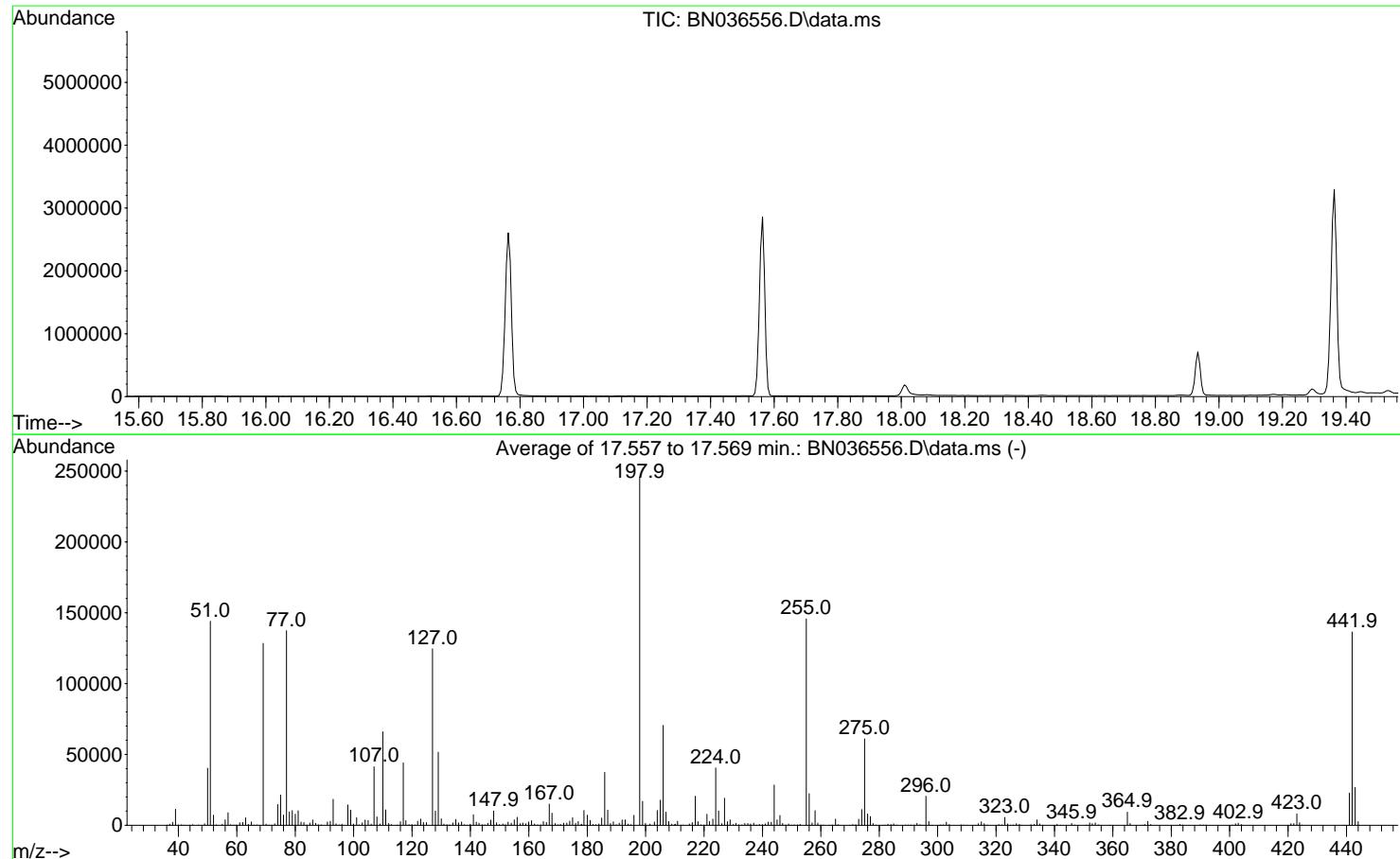
# DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036556.D  
 Acq On : 10 Mar 2025 11:03  
 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-BN031025.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Mon Mar 10 16:06:28 2025



AutoFind: Scans 2460, 2461, 2462; Background Corrected with Scan 2453

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	58.6	144050	PASS
68	69	0.00	2	0.0	0	PASS
69	198	0.00	100	52.3	128410	PASS
70	69	0.00	2	0.7	835	PASS
127	198	10	80	50.7	124576	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	245632	PASS
199	198	5	9	6.9	16887	PASS
275	198	10	60	24.8	60997	PASS
365	198	1	100	3.8	9349	PASS
441	198	0.01	100	9.3	22761	PASS
442	442	50	100	100.0	136488	PASS
443	442	15	24	19.6	26765	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036556.D  
 Acq On : 10 Mar 2025 11:03  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Mar 10 17:07:28 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

Abundance

Ion 265.70 (265.40 to 266.40): BN036556.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN036556.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN036556.D\data.ms

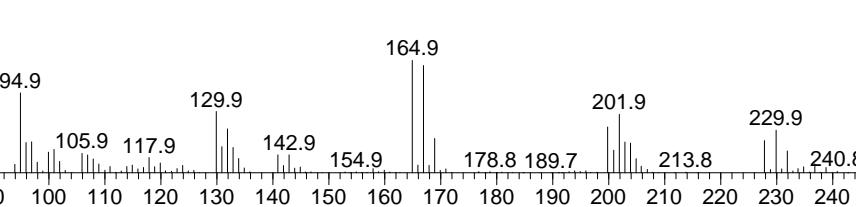
16.76 Tailing = 1.07

S E

Time--> 15.60 15.80 16.00 16.20 16.40 16.60 16.80 17.00 17.20 17.40 17.60 17.80 18.00

Scan 2325 (16.763 min): BN036556.D\data.ms

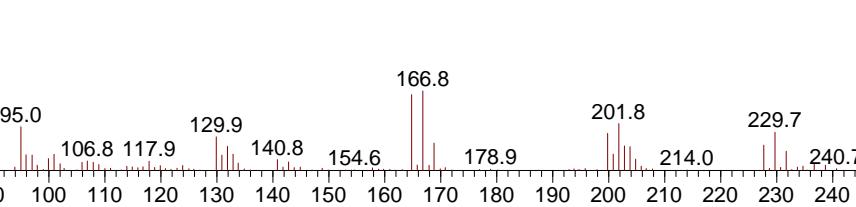
265.8



m/z--> 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280

Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)

265.6



m/z--> 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280

TIC: BN036556.D\data.ms

(70) Pentachlorophenol (C)

16.763min (-0.003) 23577.14 ng

response 323613

Ion	Exp%	Act%
-----	------	------

265.70	100.00	100.00
--------	--------	--------

268.00	62.20	62.52
--------	-------	-------

264.00	61.60	66.01
--------	-------	-------

0.00	0.00	0.00
------	------	------

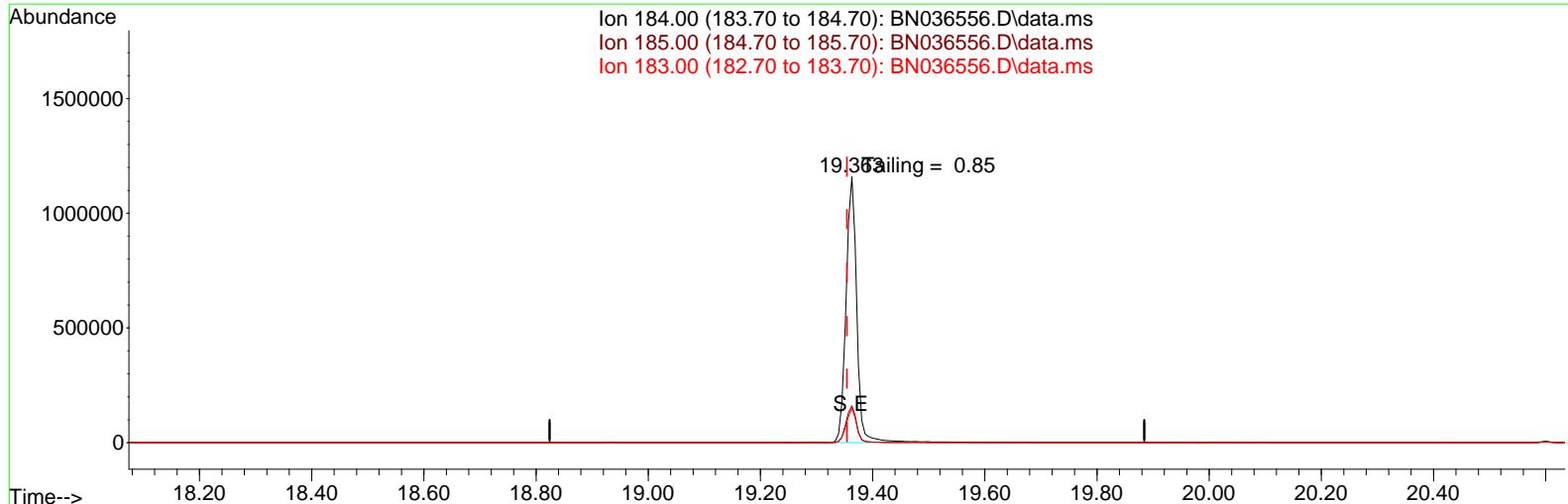
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN031025\  
 Data File : BN036556.D  
 Acq On : 10 Mar 2025 11:03  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

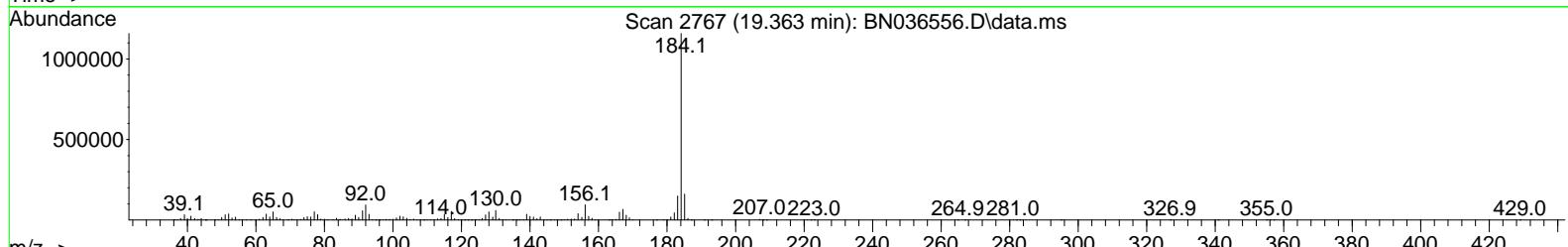
Quant Time: Mar 10 17:07:28 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Wed Dec 25 04:23:53 2024  
 Response via : Initial Calibration

Abundance

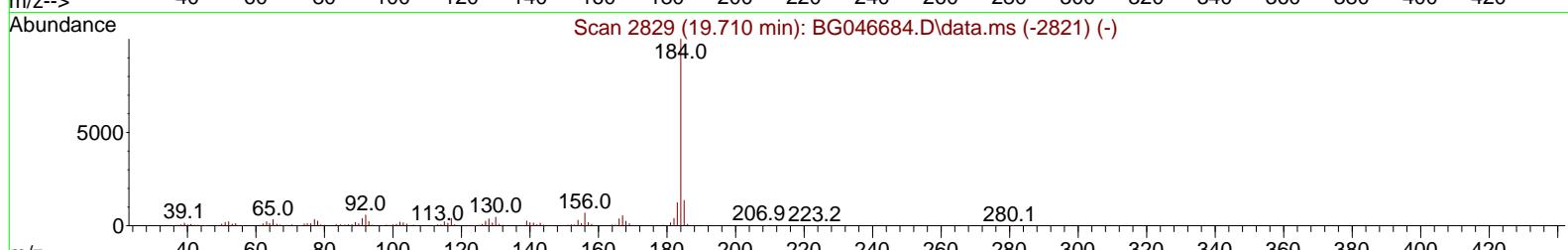
Ion 184.00 (183.70 to 184.70): BN036556.D\data.ms  
 Ion 185.00 (184.70 to 185.70): BN036556.D\data.ms  
 Ion 183.00 (182.70 to 183.70): BN036556.D\data.ms



Scan 2767 (19.363 min): BN036556.D\data.ms



Scan 2829 (19.710 min): BG046684.D\data.ms (-2821) (-)



TIC: BN036556.D\data.ms

#### (77) Benzidine

19.363min (+ 0.009) 0.00 ng

response 1553313

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.86
183.00	13.20	12.85
0.00	0.00	0.00

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**DFTPP**

### DDT Breakdown

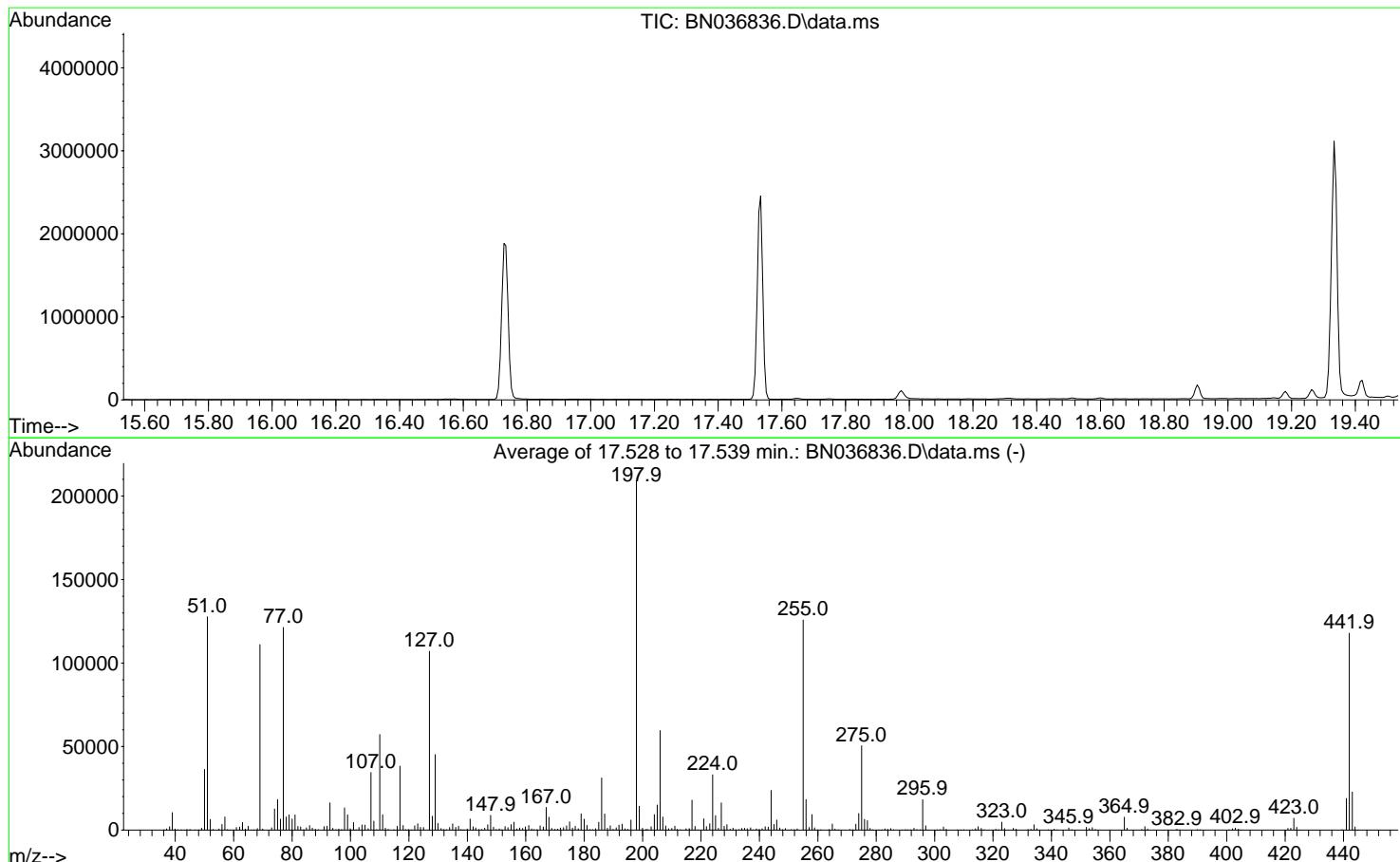
Date	Instrument Name	DFTPP Data File
3/10/2025	BNA_N	<u>BN036556.D</u>
Compound Name	Response	Retention Time
DDT	1110406	20.598
DDD	11596	20.21
DDE	530	19.645
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
12126	1122532	1.08

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036836.D  
 Acq On : 04 Apr 2025 13:03  
 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-BN031025.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Fri Apr 04 17:30:43 2025



AutoFind: Scans 2455, 2456, 2457; Background Corrected with Scan 2448

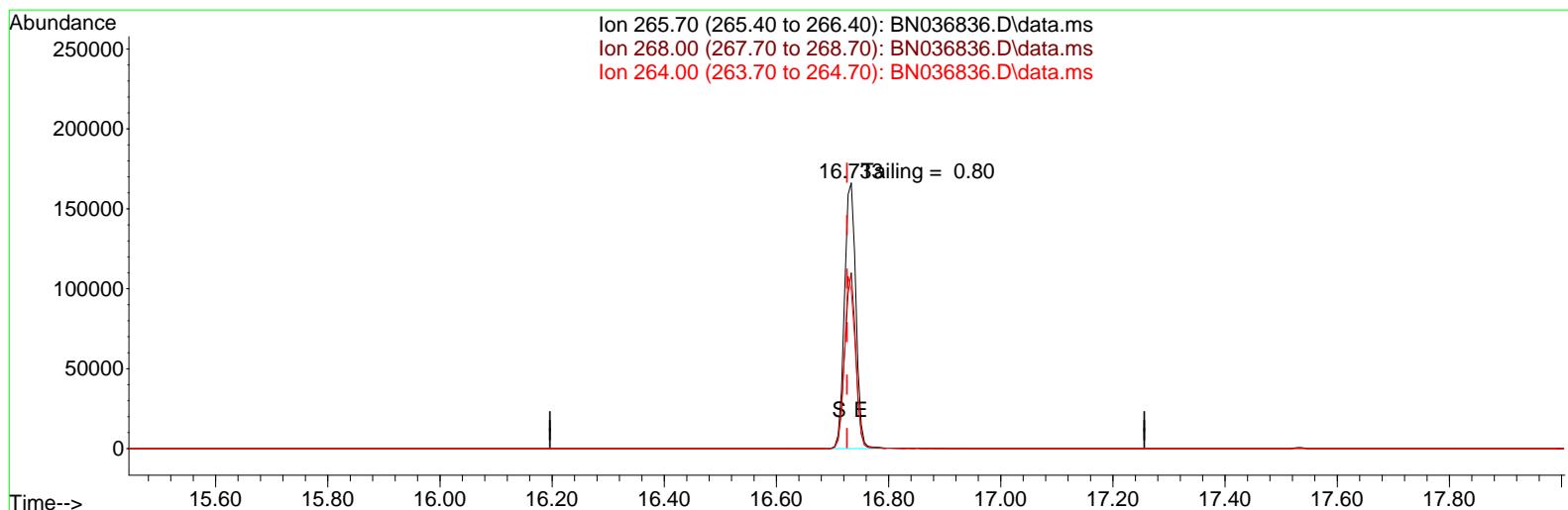
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	61.1	127701	PASS
68	69	0.00	2	0.8	926	PASS
69	198	0.00	100	53.1	111072	PASS
70	69	0.00	2	0.6	654	PASS
127	198	10	80	51.2	107067	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	209109	PASS
199	198	5	9	6.8	14277	PASS
275	198	10	60	24.1	50483	PASS
365	198	1	100	3.7	7782	PASS
441	198	0.01	100	9.1	18954	PASS
442	442	50	100	100.0	117920	PASS
443	442	15	24	19.3	22803	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036836.D  
 Acq On : 04 Apr 2025 13:03  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

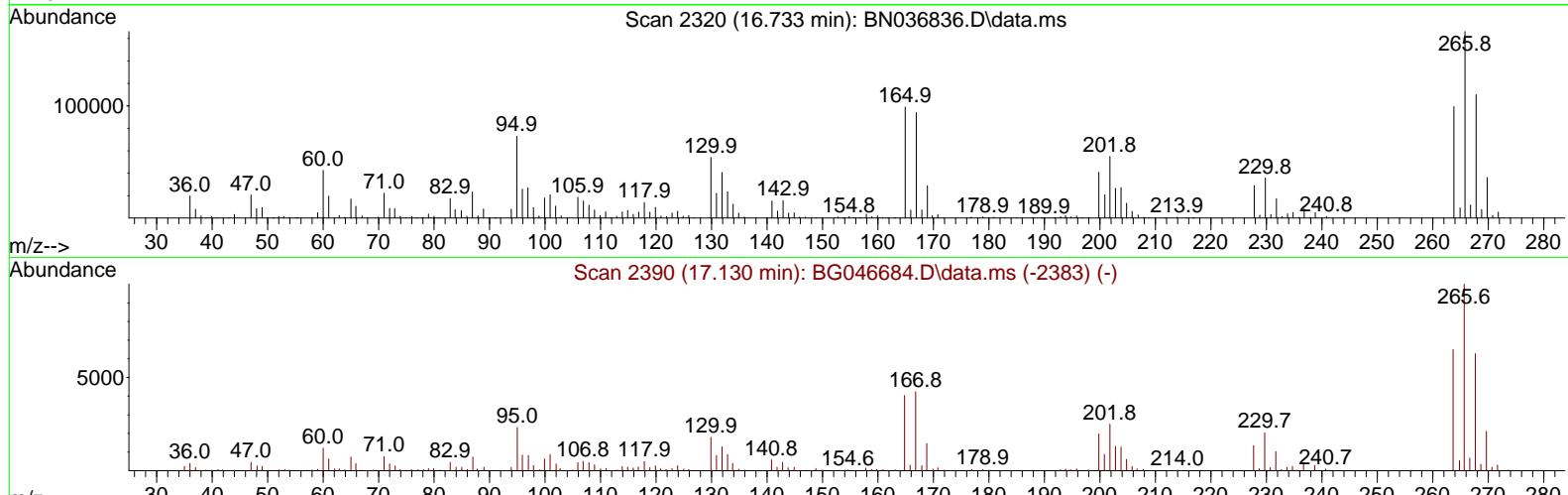
Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Apr 04 17:15:53 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Apr 01 00:16:52 2025  
 Response via : Initial Calibration

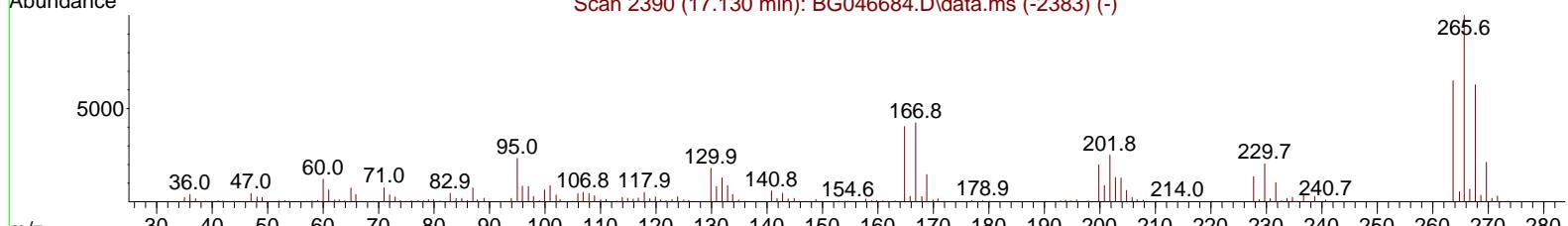
Abundance  
 Ion 265.70 (265.40 to 266.40): BN036836.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN036836.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN036836.D\data.ms



Scan 2320 (16.733 min): BN036836.D\data.ms



Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)



TIC: BN036836.D\data.ms

## (70) Pentachlorophenol (C)

16.733min (+ 0.008) 19292.53 ng

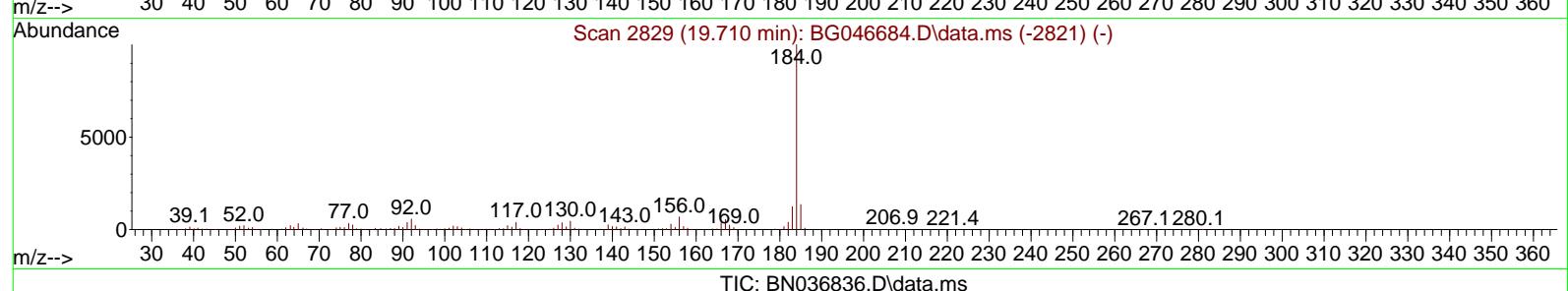
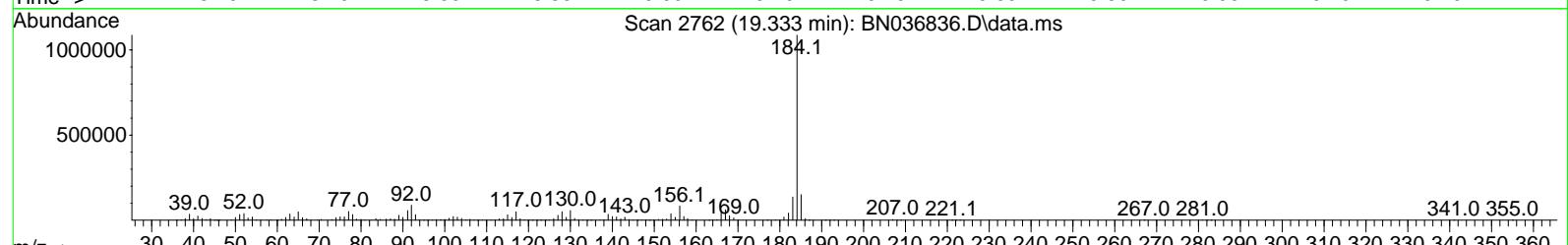
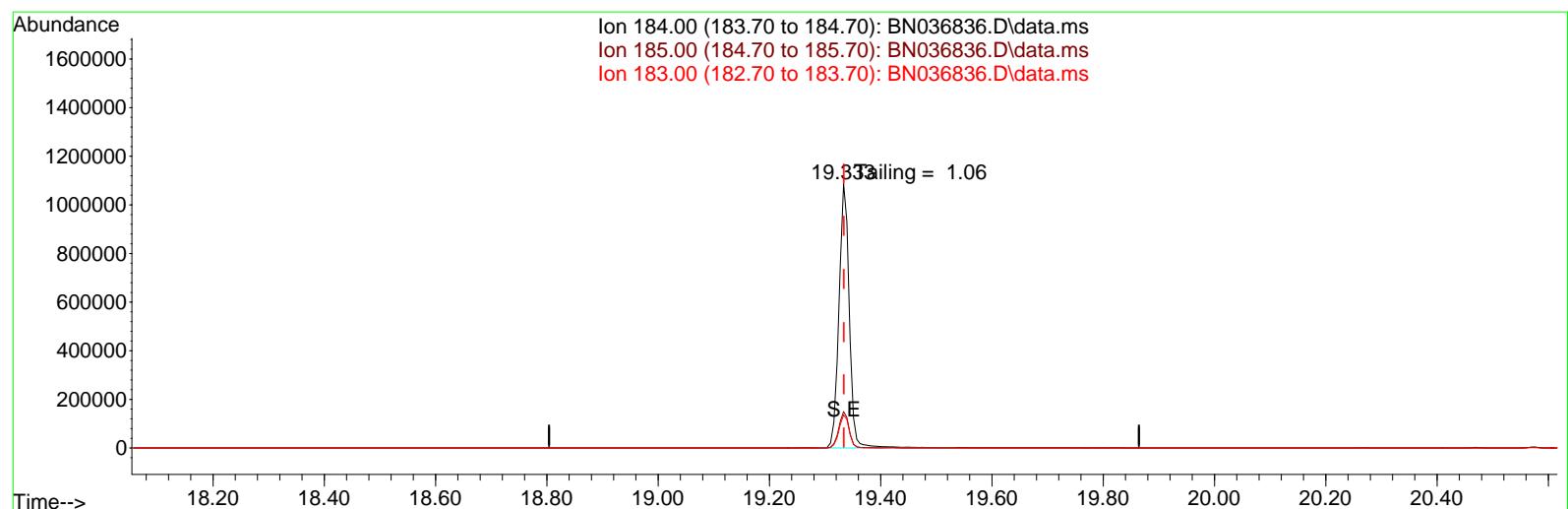
response 236340

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	66.13
264.00	61.60	59.69
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036836.D  
 Acq On : 04 Apr 2025 13:03  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Apr 04 17:18:00 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Apr 01 00:16:52 2025  
 Response via : Initial Calibration



## (77) Benzidine

19.333min (-0.001) 0.00 ng

response 1395649

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.79
183.00	13.20	12.54
0.00	0.00	0.00

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
DFTPP

### DDT Breakdown

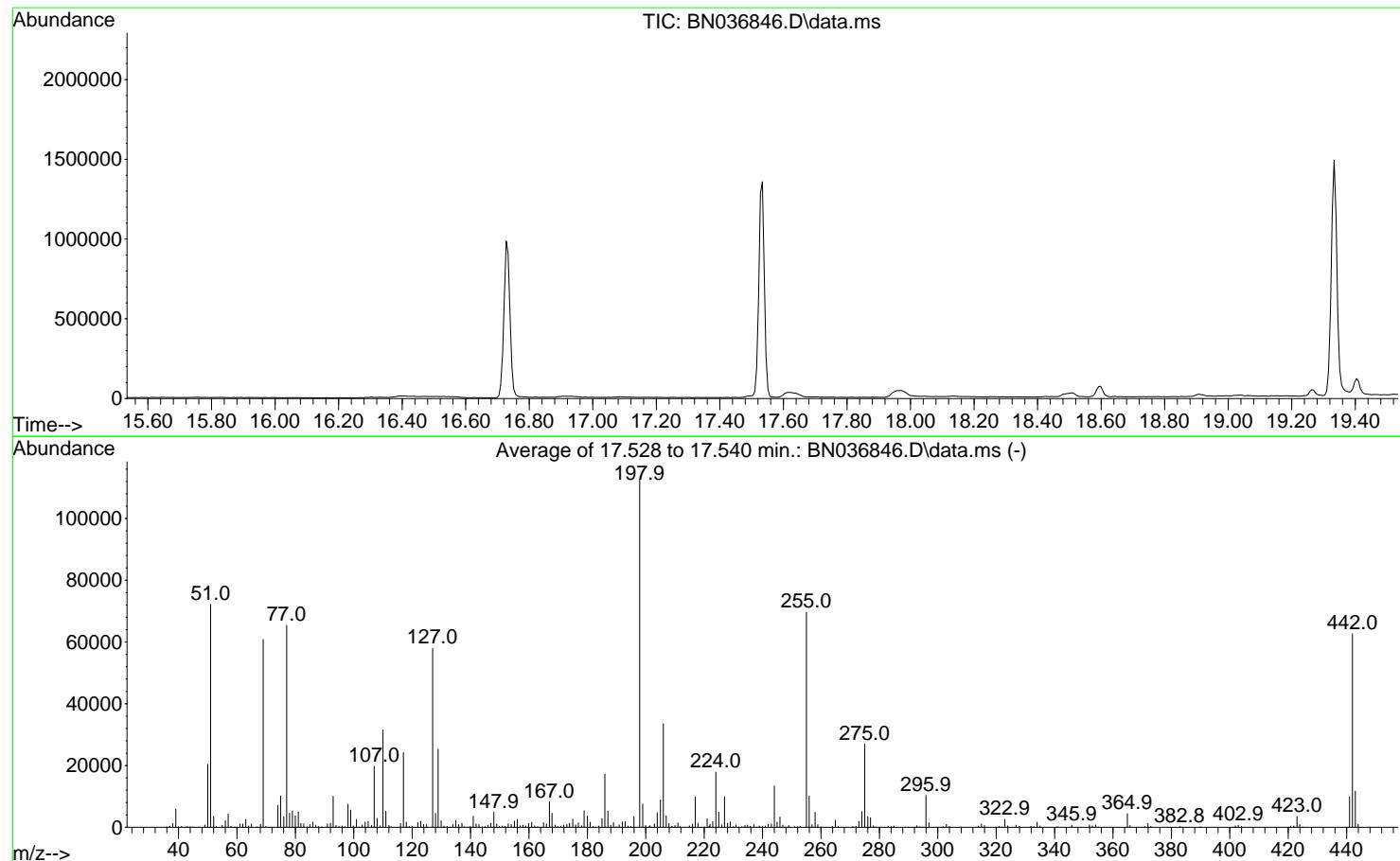
Date	Instrument Name	DFTPP Data File
4/4/2025	BNA_N	<u>BN036836.D</u>
Compound Name	Response	Retention Time
DDT	793119	20.574
DDD	11889	20.133
DDE	312	19.622
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
12201	805320	1.52

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036846.D  
 Acq On : 07 Apr 2025 08:31  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Fri Apr 04 17:30:43 2025



AutoFind: Scans 2455, 2456, 2457; Background Corrected with Scan 2448

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	64.1	72241	PASS
68	69	0.00	2	1.6	1000	PASS
69	198	0.00	100	54.0	60832	PASS
70	69	0.00	2	0.5	313	PASS
127	198	10	80	51.4	57968	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	112723	PASS
199	198	5	9	6.7	7515	PASS
275	198	10	60	23.9	26899	PASS
365	198	1	100	3.9	4404	PASS
441	198	0.01	100	8.8	9864	PASS
442	442	50	100	100.0	62661	PASS
443	442	15	24	18.7	11731	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036846.D  
 Acq On : 07 Apr 2025 08:31  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

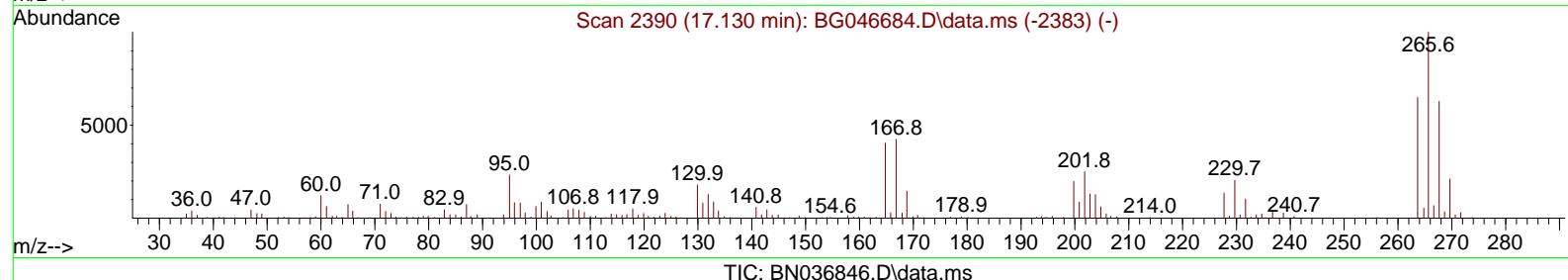
Quant Time: Apr 07 17:29:44 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Apr 01 00:16:52 2025  
 Response via : Initial Calibration

Abundance

Ion 265.70 (265.40 to 266.40): BN036846.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN036846.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN036846.D\data.ms

16.72 Tailing = 1.35

S E



(70) Pentachlorophenol (C)  
 16.728min (-0.018) 17027.90 ng

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	59.94
264.00	61.60	58.97
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036846.D  
 Acq On : 07 Apr 2025 08:31  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Apr 07 17:29:44 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Tue Apr 01 00:16:52 2025  
 Response via : Initial Calibration

Abundance

Ion 184.00 (183.70 to 184.70): BN036846.D\data.ms  
 Ion 185.00 (184.70 to 185.70): BN036846.D\data.ms  
 Ion 183.00 (182.70 to 183.70): BN036846.D\data.ms

19.334 Tailing = 1.08

\$ E

Time--> 18.20 18.40 18.60 18.80 19.00 19.20 19.40 19.60 19.80 20.00 20.20 20.40

Scan 2762 (19.334 min): BN036846.D\data.ms

184.1

39.0 65.0 92.0 113.0 130.0 156.1

207.0223.0 248.9265.0281.0 324.8 354.9 401.0 429.1

m/z-->

Scan 2829 (19.710 min): BG046684.D\data.ms (-2821) (-)

184.0

39.1 65.0 92.0 113.0 130.0 156.0

206.9223.2 280.1

m/z-->

TIC: BN036846.D\data.ms

#### (77) Benzidine

19.334min (-0.001) 0.00 ng

response 661335

Ion	Exp%	Act%
-----	------	------

184.00	100.00	100.00
--------	--------	--------

185.00	15.50	14.02
--------	-------	-------

183.00	13.20	12.73
--------	-------	-------

0.00	0.00	0.00
------	------	------

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**DFTPP**

### DDT Breakdown

Date	Instrument Name	DFTPP Data File
4/7/2025	BNA_N	BN036846.D
Compound Name	Response	Retention Time
DDT	386395	20.575
DDD	7439	20.133
DDE	337	19.628
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
7776	394171	1.97



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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	
Client Sample ID:	PB167468BL			SDG No.:	Q1731
Lab Sample ID:	PB167468BL			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
BN036848.D	1	04/04/25 11:35	04/07/25 09:46	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.070	U	0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.35		30 (20) - 150 (139)	88%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.44		30 (30) - 150 (150)	109%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.32		30 (27) - 130 (154)	80%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.29		30 (25) - 130 (149)	72%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		30 (54) - 130 (175)	91%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1480	7.695			
1146-65-2	Naphthalene-d8	3400	10.487			
15067-26-2	Acenaphthene-d10	2000	14.345			
1517-22-2	Phenanthrene-d10	4120	17.099			
1719-03-5	Chrysene-d12	3560	21.277			
1520-96-3	Perylene-d12	3340	23.519			

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\BN040725\  
 Data File : BN036848.D  
 Acq On : 07 Apr 2025 09:46  
 Operator : RC/JU  
 Sample : PB167468BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BL

Quant Time: Apr 07 10:42:54 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

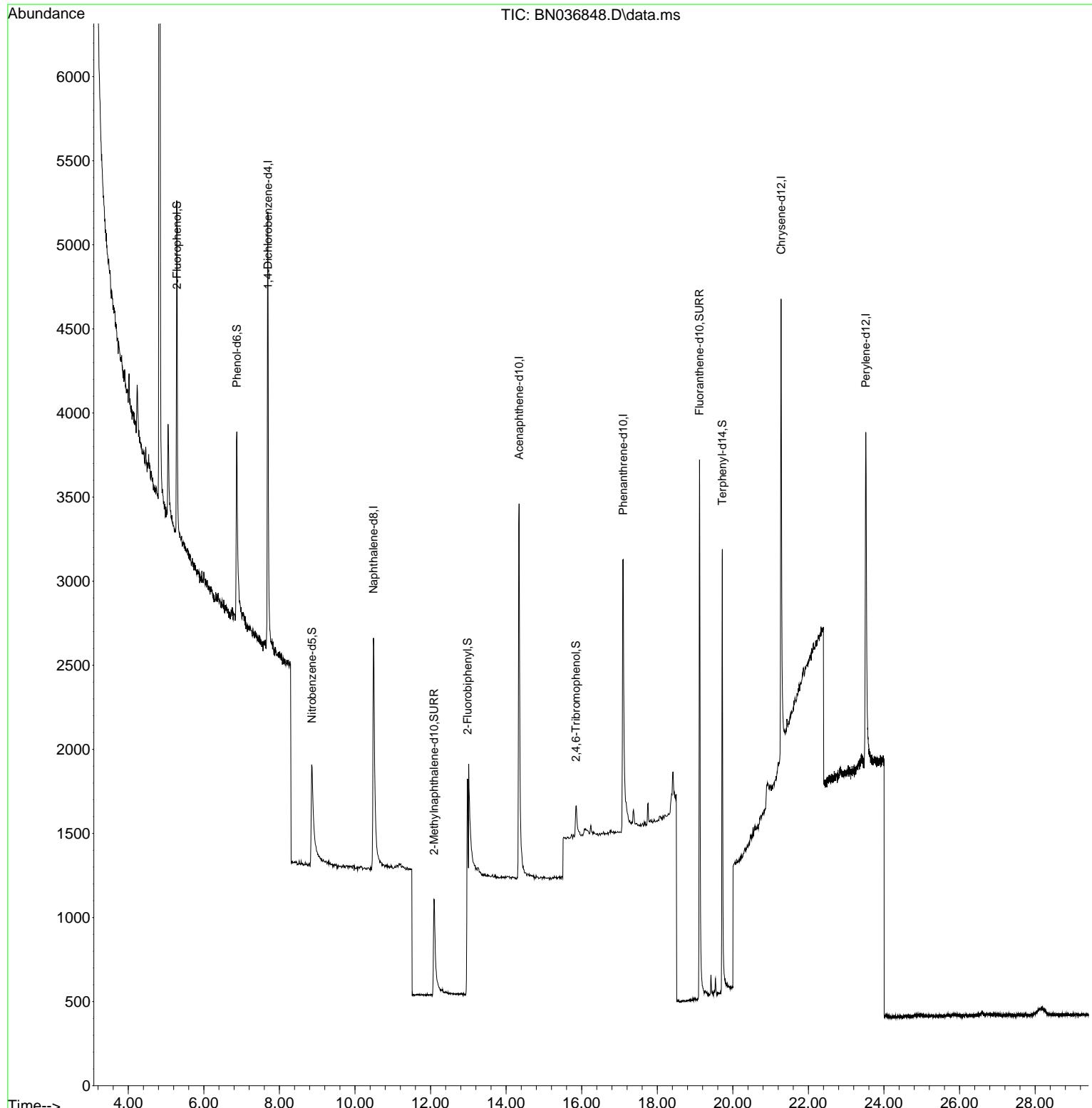
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.695	152	1482	0.400	ng	0.00
7) Naphthalene-d8	10.487	136	3397	0.400	ng	# 0.01
13) Acenaphthene-d10	14.345	164	1996	0.400	ng	0.01
19) Phenanthrene-d10	17.099	188	4124	0.400	ng	0.02
29) Chrysene-d12	21.277	240	3561	0.400	ng	0.00
35) Perylene-d12	23.519	264	3343	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.290	112	1557	0.451	ng	0.00
5) Phenol-d6	6.872	99	1621	0.380	ng	0.00
8) Nitrobenzene-d5	8.865	82	1188	0.321	ng	0.02
11) 2-Methylnaphthalene-d10	12.091	152	1791	0.354	ng	0.02
14) 2,4,6-Tribromophenol	15.845	330	210	0.232	ng	0.01
15) 2-Fluorobiphenyl	12.978	172	3337	0.287	ng	0.02
27) Fluoranthene-d10	19.118	212	4594	0.435	ng	0.00
31) Terphenyl-d14	19.722	244	3114	0.365	ng	0.00

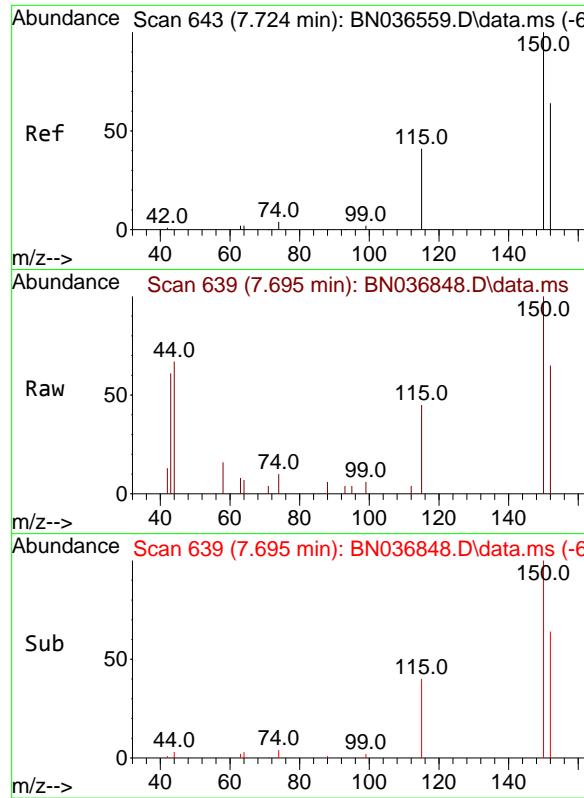
Target Compounds	Qvalue
(#= qualifier out of range (m) = manual integration (+) = signals summed	

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040725\  
 Data File : BN036848.D  
 Acq On : 07 Apr 2025 09:46  
 Operator : RC/JU  
 Sample : PB167468BL  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BL

Quant Time: Apr 07 10:42:54 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

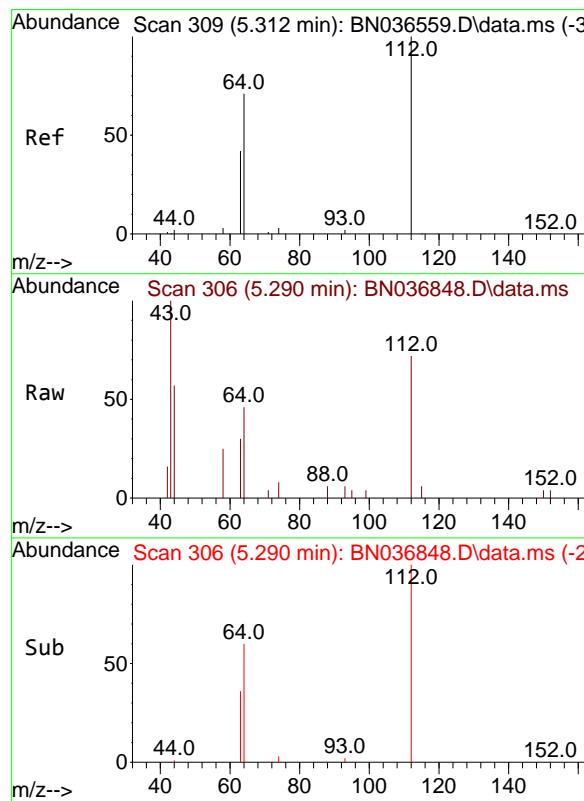
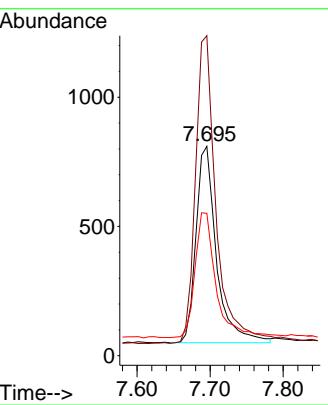




#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

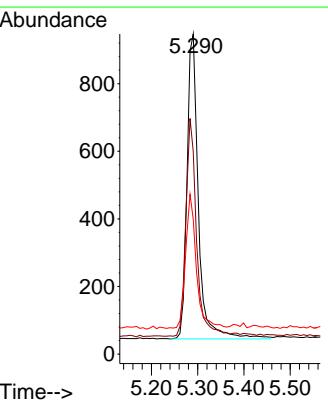
Instrument : BNA\_N  
ClientSampleId : PB167468BL

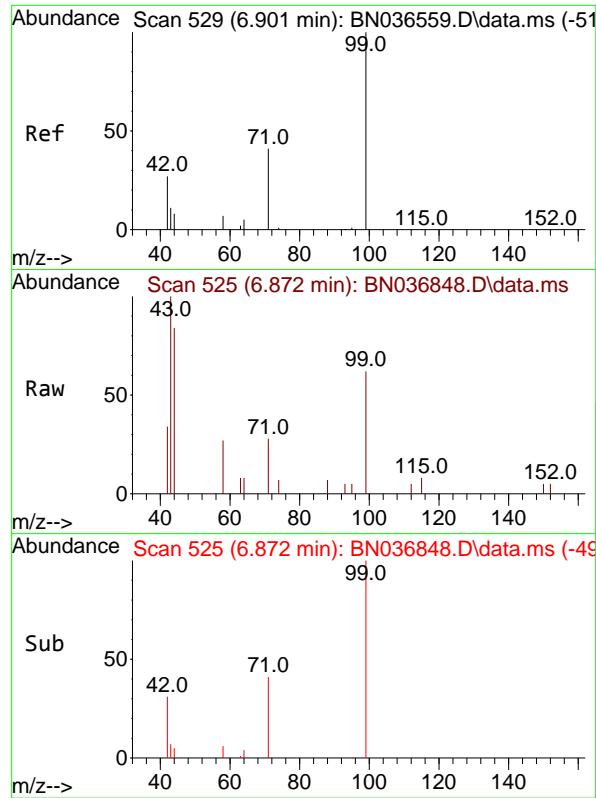
Tgt Ion:152 Resp: 1482  
Ion Ratio Lower Upper  
152 100  
150 152.8 123.7 185.5  
115 68.0 54.3 81.5



#4  
2-Fluorophenol  
Concen: 0.451 ng  
RT: 5.290 min Scan# 306  
Delta R.T. 0.007 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

Tgt Ion:112 Resp: 1557  
Ion Ratio Lower Upper  
112 100  
64 67.6 53.1 79.7  
63 41.5 31.8 47.8

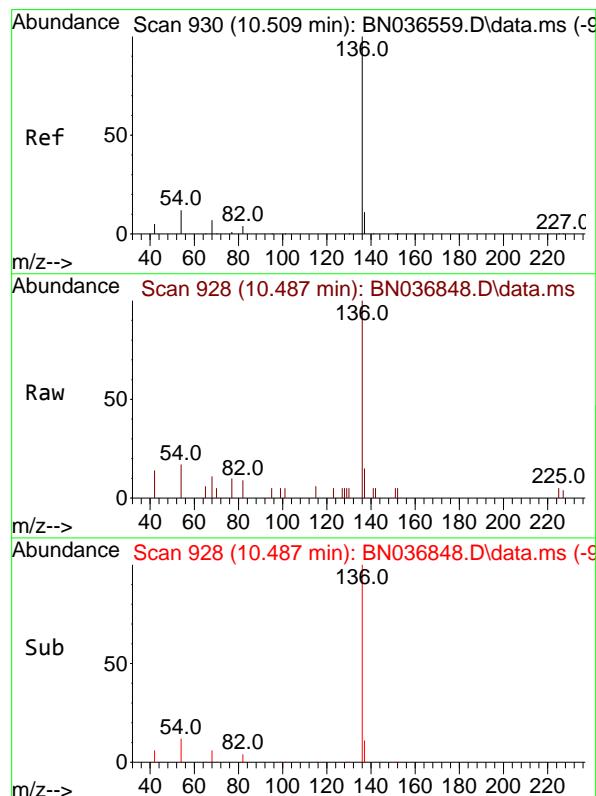
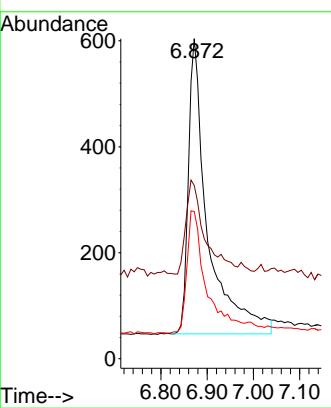




#5  
Phenol-d6  
Concen: 0.380 ng  
RT: 6.872 min Scan# 5  
Delta R.T. 0.007 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

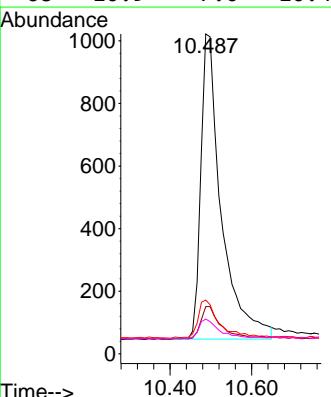
Instrument : BNA\_N  
ClientSampleId : PB167468BL

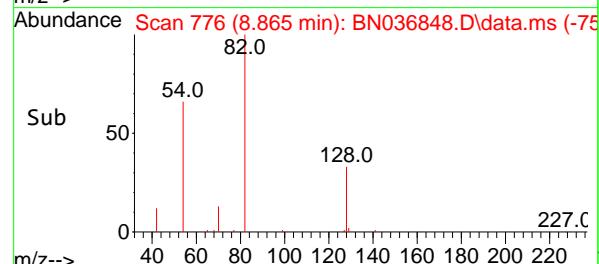
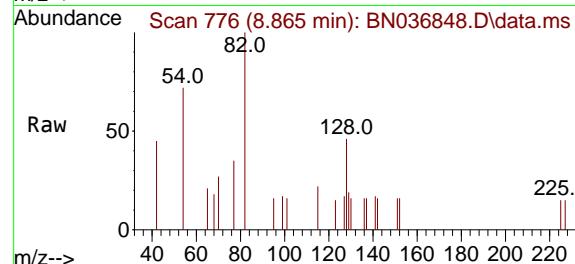
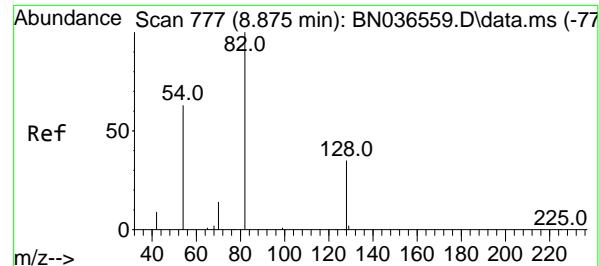
Tgt Ion: 99 Resp: 1621  
Ion Ratio Lower Upper  
99 100  
42 31.3 26.5 39.7  
71 41.7 34.1 51.1



#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.487 min Scan# 928  
Delta R.T. 0.011 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

Tgt Ion:136 Resp: 3397  
Ion Ratio Lower Upper  
136 100  
137 14.8 10.3 15.5  
54 16.8 11.5 17.3  
68 10.9 7.0 10.4#





#8

Nitrobenzene-d5

Concen: 0.321 ng

RT: 8.865 min Scan# 7

Delta R.T. 0.021 min

Lab File: BN036848.D

Acq: 07 Apr 2025 09:46

Instrument:

BNA\_N

ClientSampleId :

PB167468BL

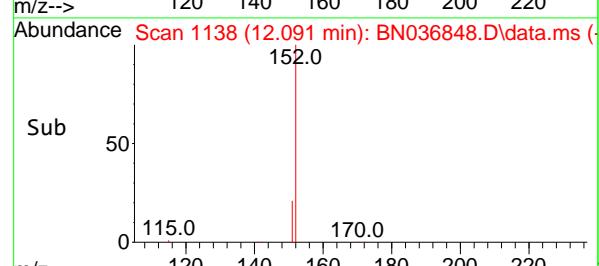
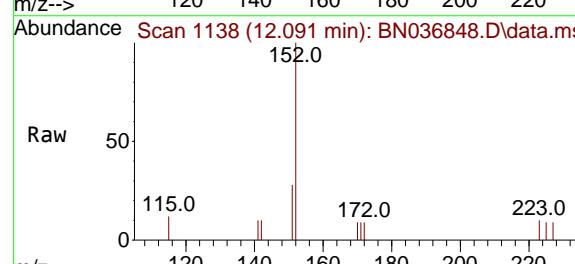
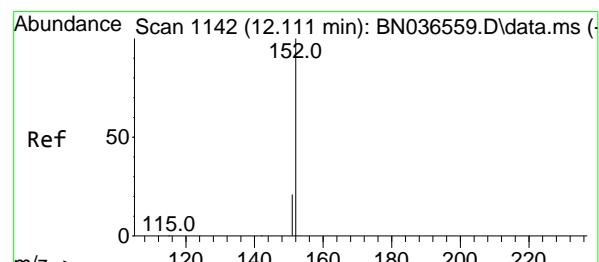
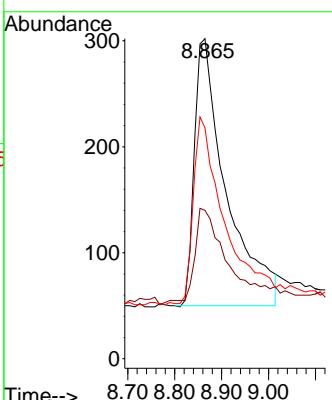
Tgt Ion: 82 Resp: 1188

Ion Ratio Lower Upper

82 100

128 46.4 30.6 45.8#

54 72.2 52.2 78.4



#11

2-Methylnaphthalene-d10

Concen: 0.354 ng

RT: 12.091 min Scan# 1138

Delta R.T. 0.020 min

Lab File: BN036848.D

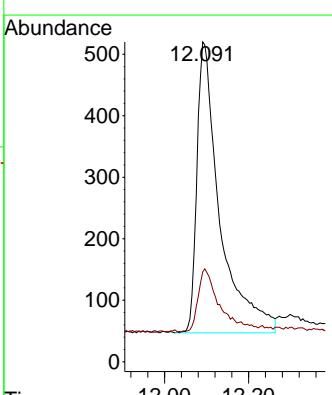
Acq: 07 Apr 2025 09:46

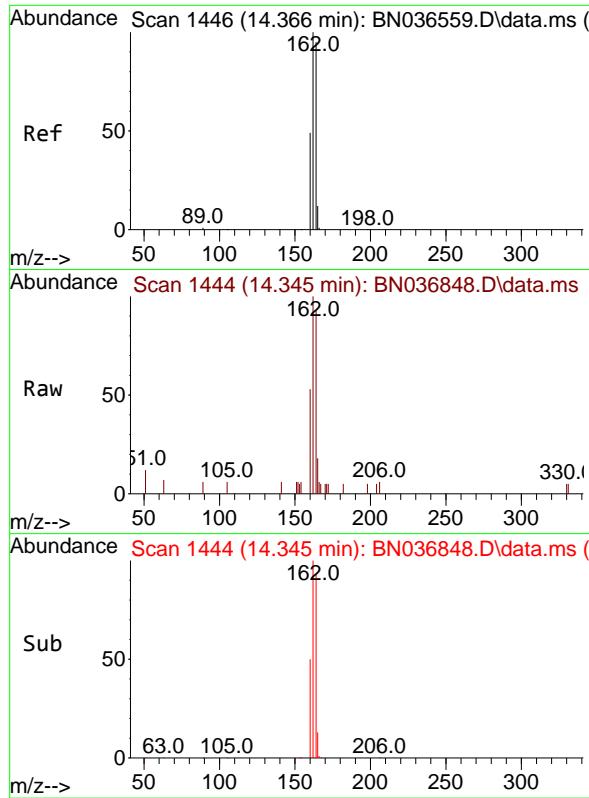
Tgt Ion: 152 Resp: 1791

Ion Ratio Lower Upper

152 100

151 21.5 17.0 25.6





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.345 min Scan# 1444

Delta R.T. 0.011 min

Lab File: BN036848.D

Acq: 07 Apr 2025 09:46

Instrument:

BNA\_N

ClientSampleId :

PB167468BL

Tgt Ion:164 Resp: 1996

Ion Ratio Lower Upper

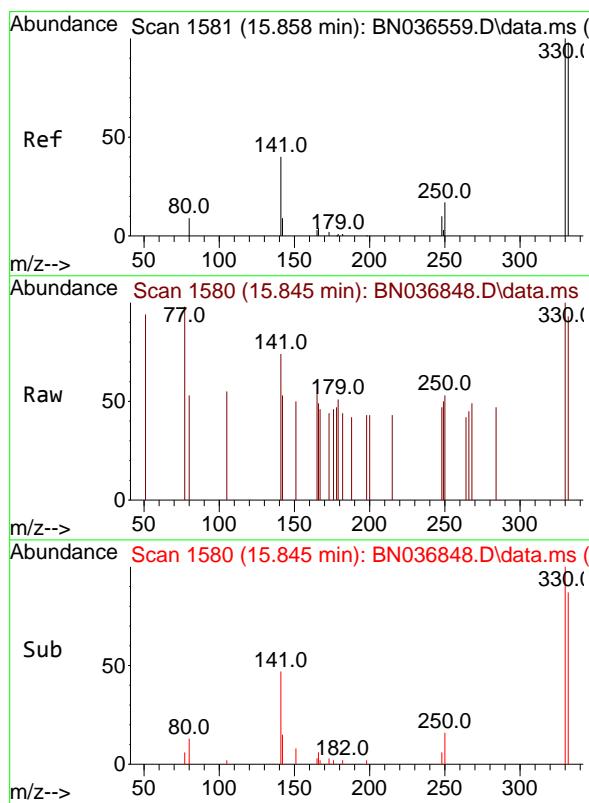
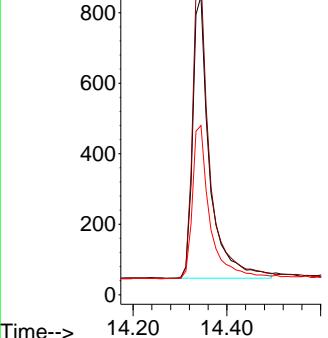
164 100

162 107.2 84.2 126.2

160 56.7 42.2 63.2

Abundance

14.345



#14

2,4,6-Tribromophenol

Concen: 0.232 ng

RT: 15.845 min Scan# 1580

Delta R.T. 0.012 min

Lab File: BN036848.D

Acq: 07 Apr 2025 09:46

Tgt Ion:330 Resp: 210

Ion Ratio Lower Upper

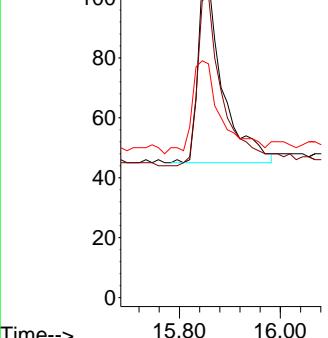
330 100

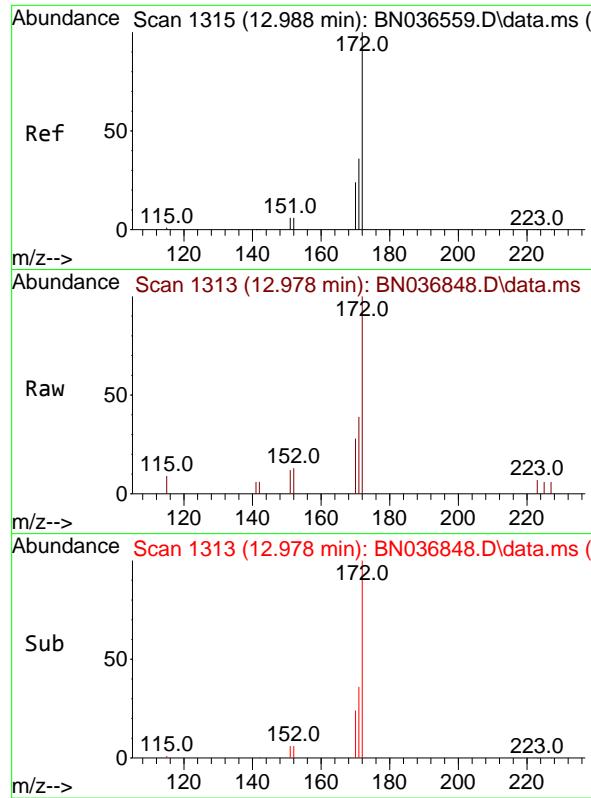
332 93.8 75.2 112.8

141 59.5 43.4 65.2

Abundance

15.845

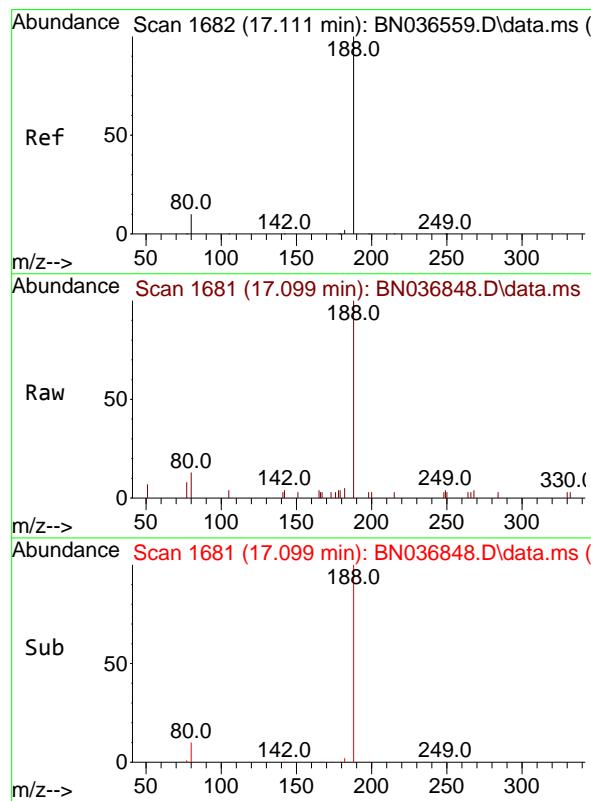
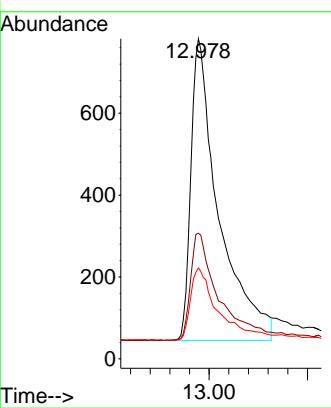




#15  
2-Fluorobiphenyl  
Concen: 0.287 ng  
RT: 12.978 min Scan# 1  
Delta R.T. 0.020 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

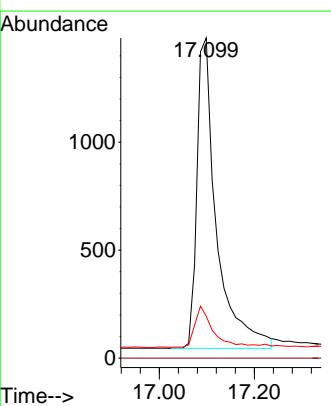
Instrument : BNA\_N  
ClientSampleId : PB167468BL

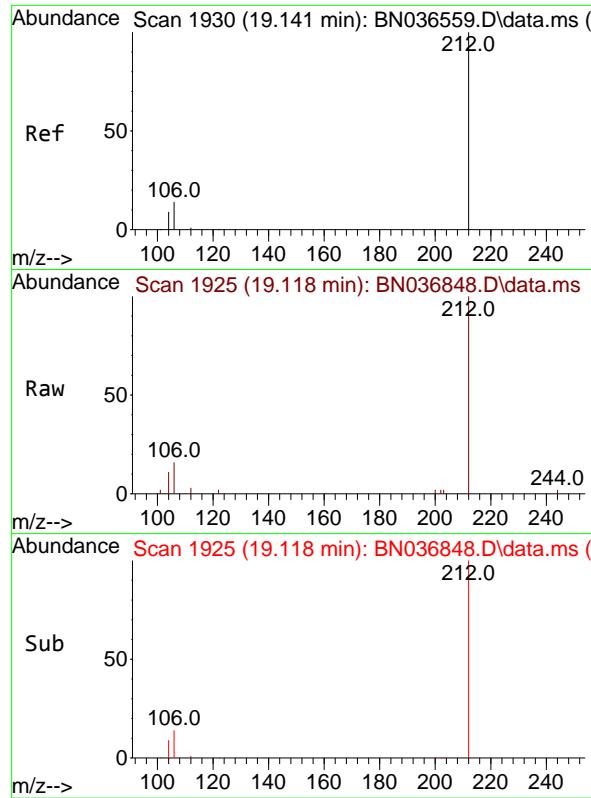
Tgt Ion:172 Resp: 3337  
Ion Ratio Lower Upper  
172 100  
171 39.3 29.5 44.3  
170 28.4 20.2 30.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 17.099 min Scan# 1681  
Delta R.T. 0.025 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

Tgt Ion:188 Resp: 4124  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 13.1 8.8 13.2

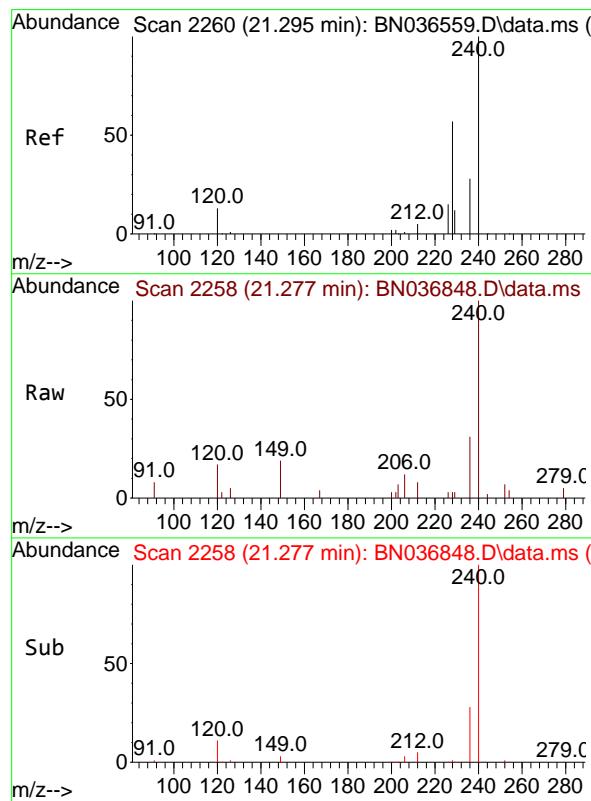
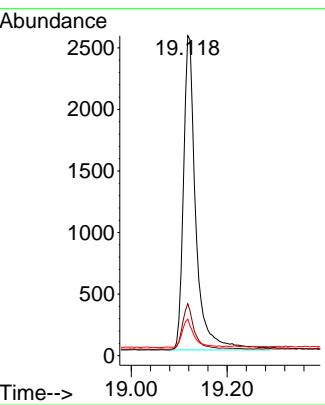




#27  
Fluoranthene-d10  
Concen: 0.435 ng  
RT: 19.118 min Scan# 1  
Delta R.T. 0.005 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

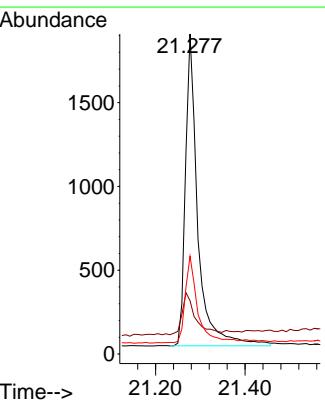
Instrument : BNA\_N  
ClientSampleId : PB167468BL

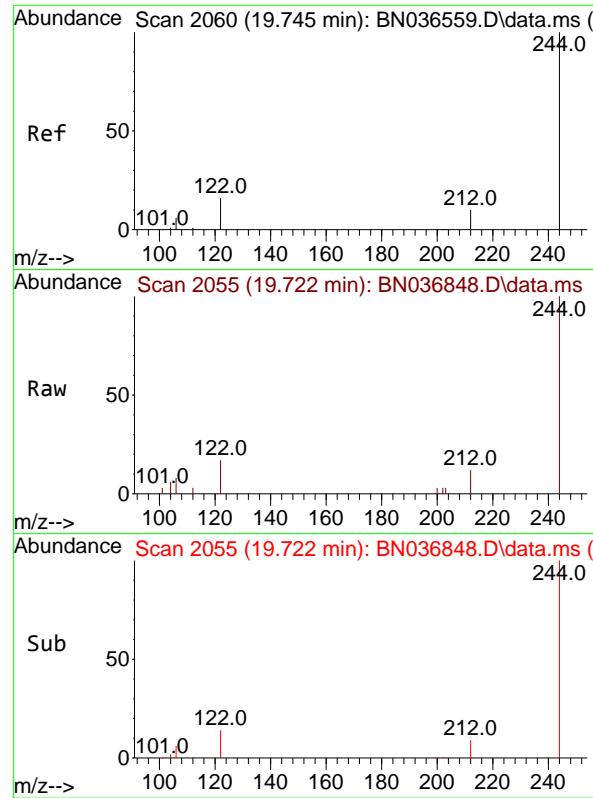
Tgt Ion:212 Resp: 4594  
Ion Ratio Lower Upper  
212 100  
106 13.5 11.8 17.6  
104 8.3 7.3 10.9



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.277 min Scan# 2258  
Delta R.T. 0.009 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

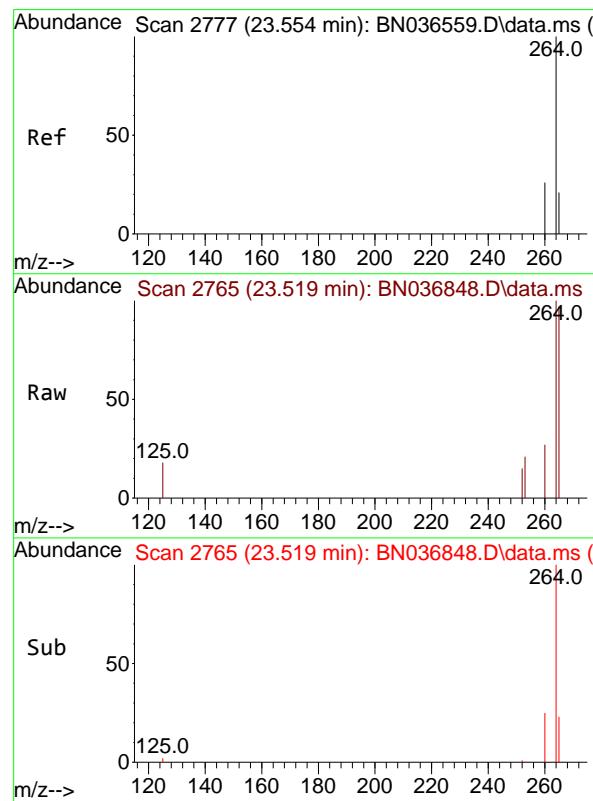
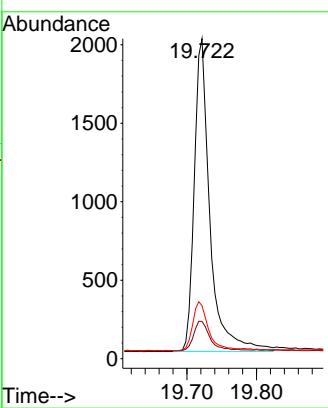
Tgt Ion:240 Resp: 3561  
Ion Ratio Lower Upper  
240 100  
120 16.6 14.6 22.0  
236 30.6 24.1 36.1





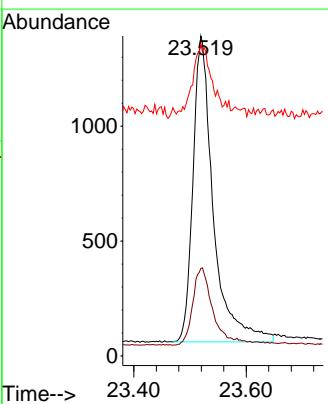
#31  
Terphenyl-d14  
Concen: 0.365 ng  
RT: 19.722 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.005 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46  
ClientSampleId : PB167468BL

Tgt Ion:244 Resp: 3114  
Ion Ratio Lower Upper  
244 100  
212 11.7 9.6 14.4  
122 16.6 13.9 20.9



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.519 min Scan# 2765  
Delta R.T. 0.009 min  
Lab File: BN036848.D  
Acq: 07 Apr 2025 09:46

Tgt Ion:264 Resp: 3343  
Ion Ratio Lower Upper  
264 100  
260 27.4 22.6 33.8  
265 97.4 88.1 132.1





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	
Client Sample ID:	PB167468BS			SDG No.:	Q1731
Lab Sample ID:	PB167468BS			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
BN036844.D	1	04/04/25 11:35	04/04/25 20:22	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.38		0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.40		30 (20) - 150 (139)	99%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 (30) - 150 (150)	99%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		30 (27) - 130 (154)	88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		30 (25) - 130 (149)	95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		30 (54) - 130 (175)	91%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1970		7.695		
1146-65-2	Naphthalene-d8	4830		10.477		
15067-26-2	Acenaphthene-d10	2640		14.334		
1517-22-2	Phenanthrene-d10	5360		17.074		
1719-03-5	Chrysene-d12	4130		21.268		
1520-96-3	Perylene-d12	3660		23.51		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

() = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036844.D  
 Acq On : 04 Apr 2025 20:22  
 Operator : RC/JU  
 Sample : PB167468BS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BS

Quant Time: Apr 04 22:50:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.695	152	1969	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	4826	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2640	0.400	ng	0.00
19) Phenanthrene-d10	17.074	188	5356	0.400	ng	# 0.00
29) Chrysene-d12	21.268	240	4128	0.400	ng	0.00
35) Perylene-d12	23.510	264	3662	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.290	112	1952	0.425	ng	0.00
5) Phenol-d6	6.872	99	2348	0.414	ng	0.00
8) Nitrobenzene-d5	8.843	82	1839	0.350	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	2853m	0.397	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	442	0.369	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	5850	0.381	ng	0.00
27) Fluoranthene-d10	19.113	212	5446	0.397	ng	0.00
31) Terphenyl-d14	19.722	244	3607	0.365	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.218	88	832	0.381	ng	# 56
3) n-Nitrosodimethylamine	3.528	42	1952	0.442	ng	# 97
6) bis(2-Chloroethyl)ether	7.118	93	2349	0.401	ng	100
9) Naphthalene	10.519	128	5669	0.399	ng	99
10) Hexachlorobutadiene	10.818	225	1296	0.388	ng	# 99
12) 2-Methylnaphthalene	12.146	142	3592	0.398	ng	100
16) Acenaphthylene	14.045	152	5250	0.421	ng	100
17) Acenaphthene	14.398	154	3384	0.415	ng	99
18) Fluorene	15.382	166	4527	0.410	ng	100
20) 4,6-Dinitro-2-methylph...	15.478	198	385	0.427	ng	93
21) 4-Bromophenyl-phenylether	16.280	248	1384	0.412	ng	91
22) Hexachlorobenzene	16.391	284	1620	0.400	ng	97
23) Atrazine	16.553	200	1189	0.442	ng	97
24) Pentachlorophenol	16.739	266	1233	0.667	ng	98
25) Phenanthrene	17.124	178	6887	0.429	ng	100
26) Anthracene	17.210	178	6358	0.439	ng	99
28) Fluoranthene	19.146	202	7791	0.432	ng	99
30) Pyrene	19.508	202	8053	0.399	ng	100
32) Benzo(a)anthracene	21.259	228	6120	0.426	ng	99
33) Chrysene	21.304	228	7002	0.446	ng	99
34) Bis(2-ethylhexyl)phtha...	21.187	149	3668	0.359	ng	# 97
36) Indeno(1,2,3-cd)pyrene	25.776	276	5948	0.450	ng	99
37) Benzo(b)fluoranthene	22.838	252	5760	0.432	ng	96
38) Benzo(k)fluoranthene	22.882	252	6336	0.453	ng	95
39) Benzo(a)pyrene	23.414	252	5295	0.472	ng	# 93
40) Dibenzo(a,h)anthracene	25.794	278	4360	0.424	ng	95
41) Benzo(g,h,i)perylene	26.460	276	4917	0.418	ng	97

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

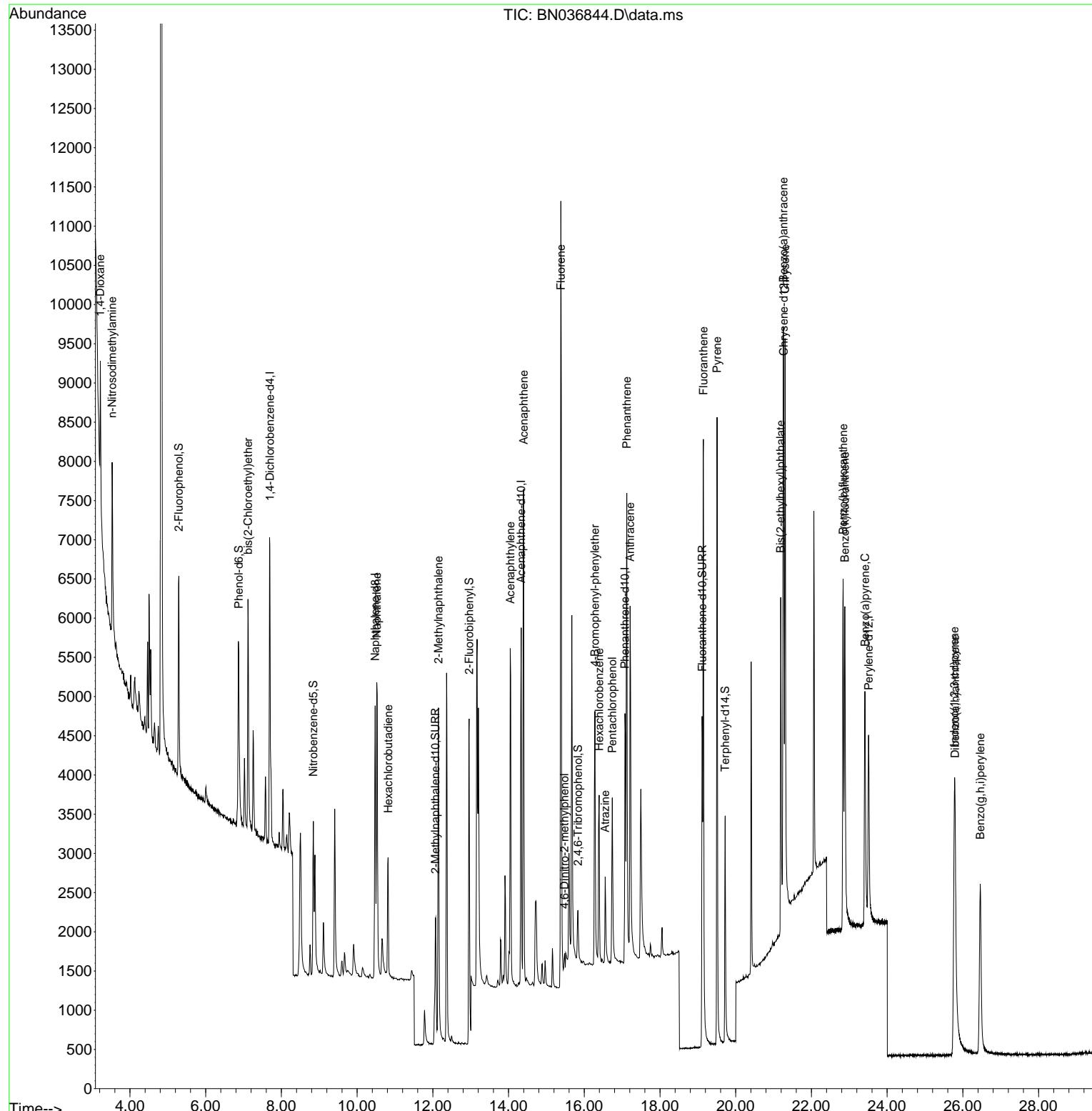
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036844.D  
 Acq On : 04 Apr 2025 20:22  
 Operator : RC/JU  
 Sample : PB167468BS  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

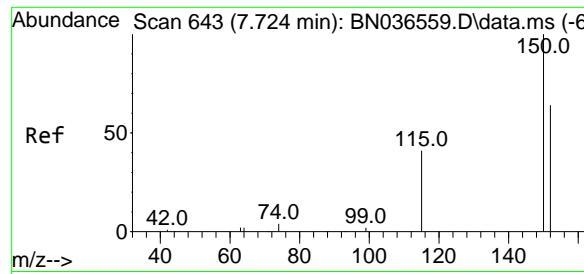
Quant Time: Apr 04 22:50:02 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BS

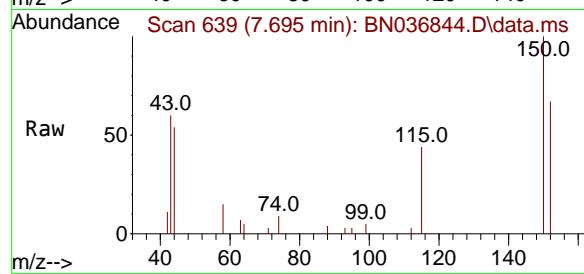
**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025





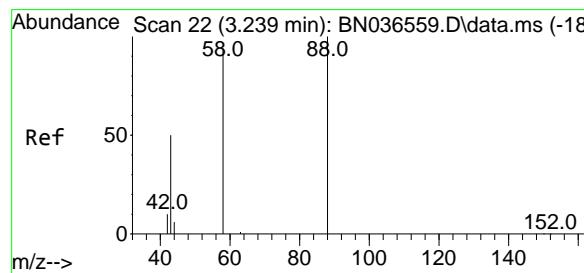
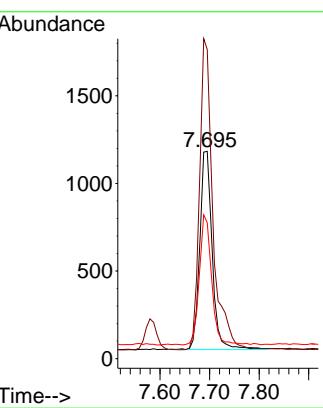
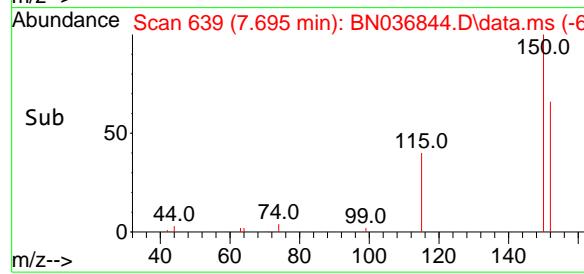
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22



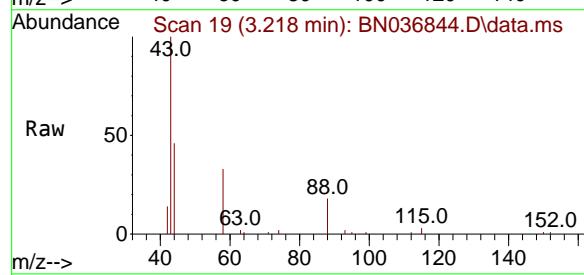
Tgt Ion:152 Resp: 1969  
Ion Ratio Lower Upper  
152 100  
150 149.2 123.7 185.5  
115 65.6 54.3 81.5

### Manual Integrations APPROVED

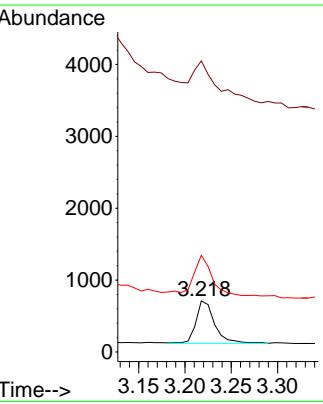
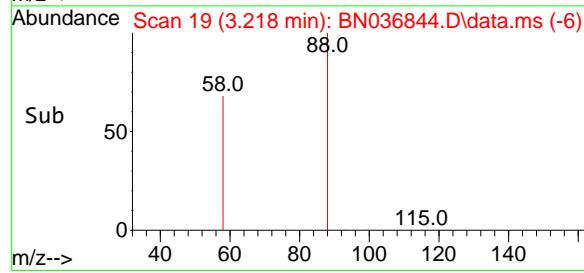
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

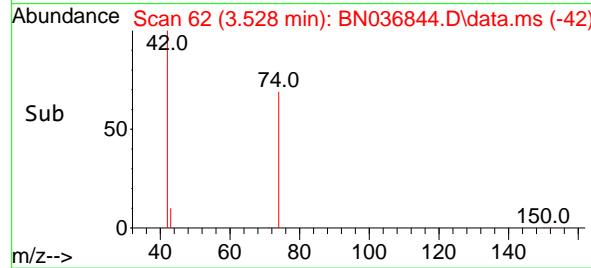
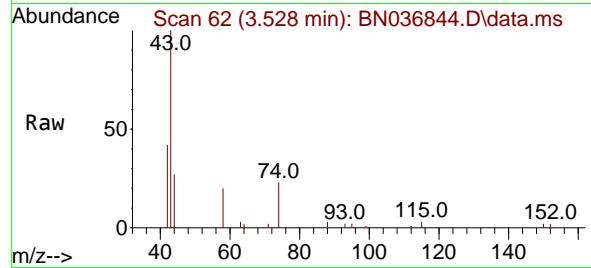
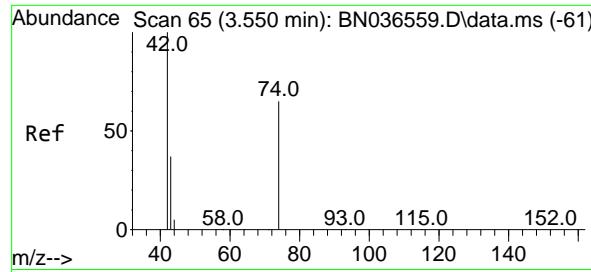


#2  
1,4-Dioxane  
Concen: 0.381 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.007 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22



Tgt Ion: 88 Resp: 832  
Ion Ratio Lower Upper  
88 100  
43 125.2 37.8 56.8#  
58 88.1 67.4 101.2





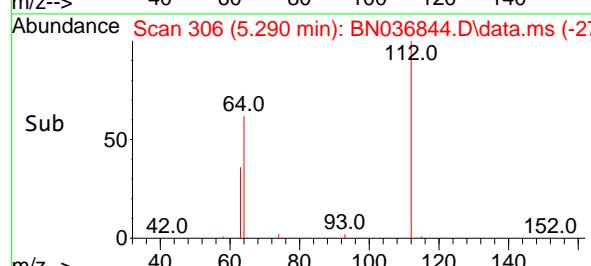
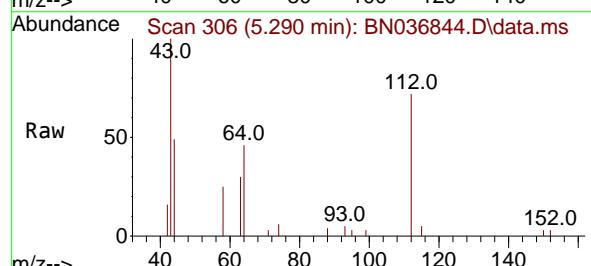
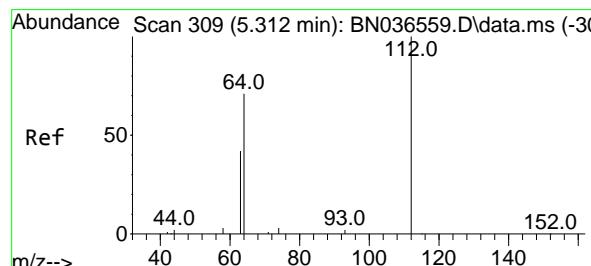
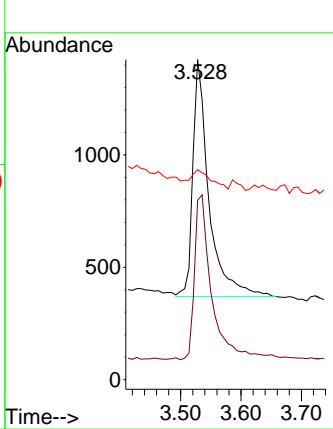
#3

n-Nitrosodimethylamine  
Concen: 0.442 ng  
RT: 3.528 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BS

### Manual Integrations APPROVED

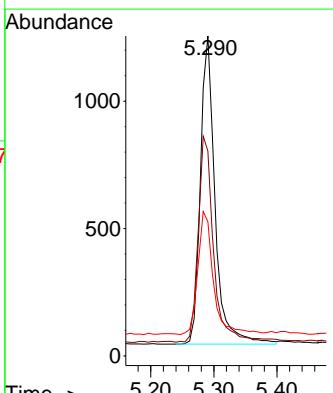
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

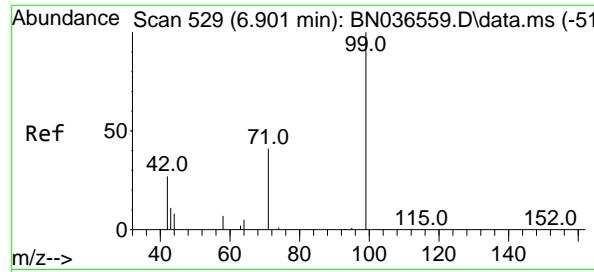


#4

2-Fluorophenol  
Concen: 0.425 ng  
RT: 5.290 min Scan# 306  
Delta R.T. 0.007 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

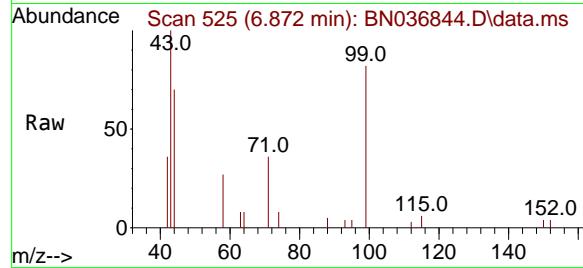
Tgt Ion:112 Resp: 1952  
Ion Ratio Lower Upper  
112 100  
64 71.1 53.1 79.7  
63 42.3 31.8 47.8





#5  
Phenol-d6  
Concen: 0.414 ng  
RT: 6.872 min Scan# 5  
Delta R.T. 0.007 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

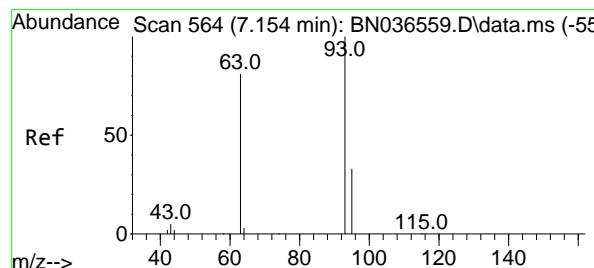
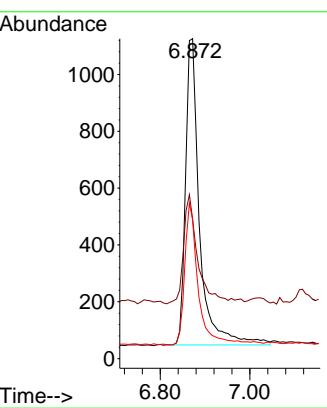
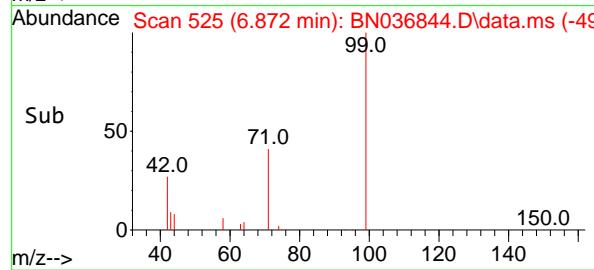
Instrument : BNA\_N  
ClientSampleId : PB167468BS



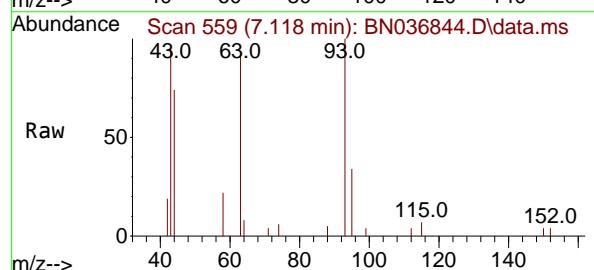
Tgt Ion: 99 Resp: 2348  
Ion Ratio Lower Upper  
99 100  
42 35.3 26.5 39.7  
71 44.4 34.1 51.1

### Manual Integrations APPROVED

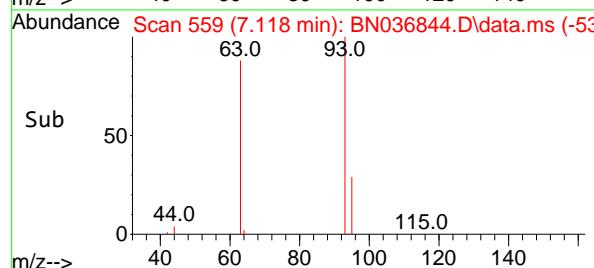
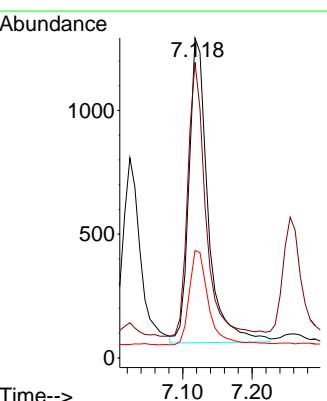
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

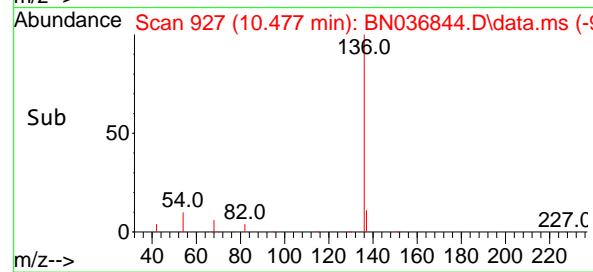
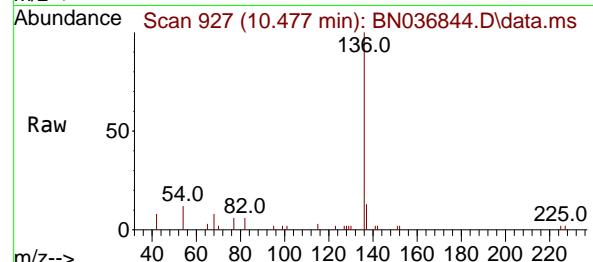
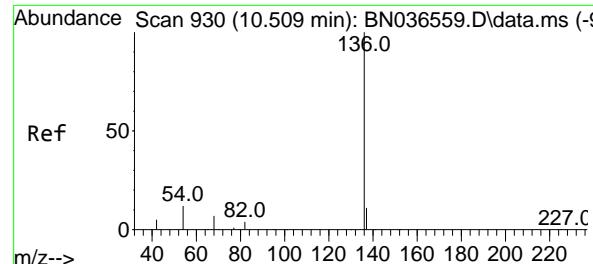


#6  
bis(2-Chloroethyl)ether  
Concen: 0.401 ng  
RT: 7.118 min Scan# 559  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22



Tgt Ion: 93 Resp: 2349  
Ion Ratio Lower Upper  
93 100  
63 84.5 67.7 101.5  
95 31.4 25.6 38.4





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.477 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Instrument :

BNA\_N

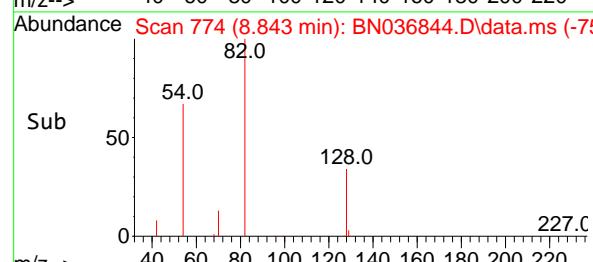
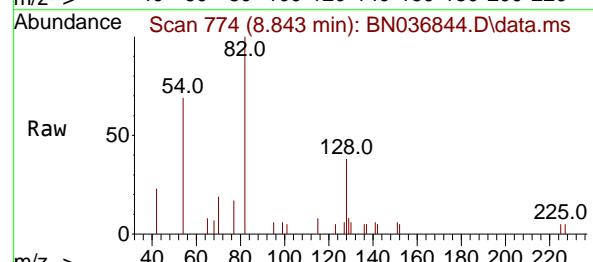
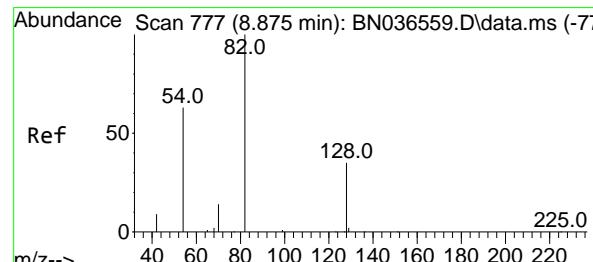
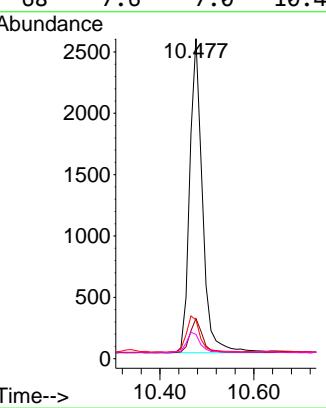
ClientSampleId :

PB167468BS

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025

Tgt	Ion:	136	Resp:	4820
Ion	Ratio		Lower	Upper
136	100			
137	12.6		10.3	15.5
54	12.1		11.5	17.3
68	7.6		7.0	10.4



#8

Nitrobenzene-d5

Concen: 0.350 ng

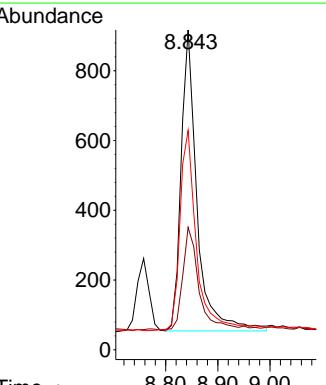
RT: 8.843 min Scan# 774

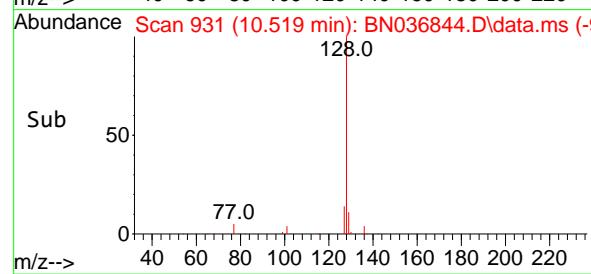
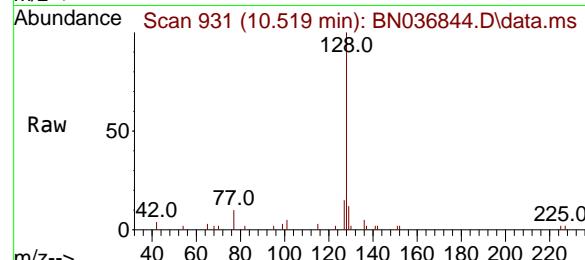
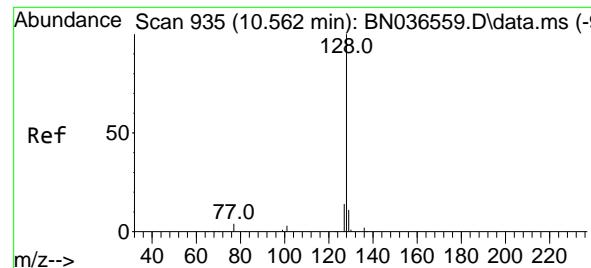
Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Tgt	Ion:	82	Resp:	1839
Ion	Ratio		Lower	Upper
82	100			
128	38.3		30.6	45.8
54	68.6		52.2	78.4





#9

Naphthalene

Concen: 0.399 ng

RT: 10.519 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Instrument :

BNA\_N

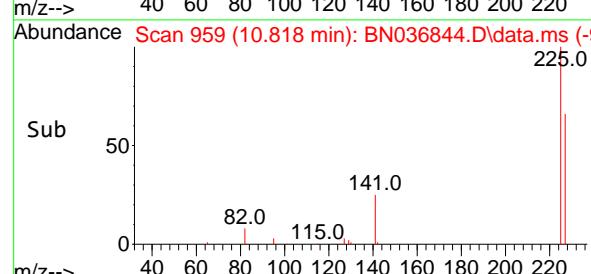
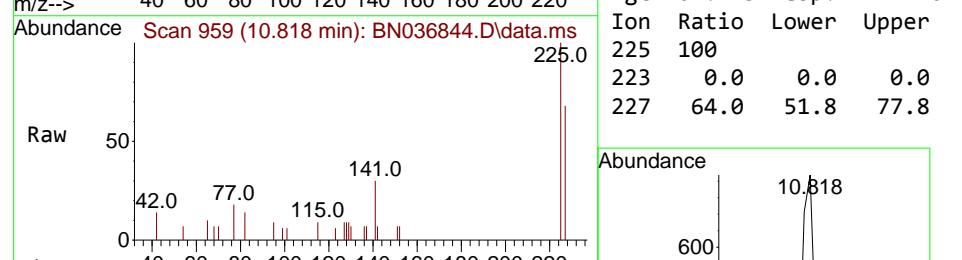
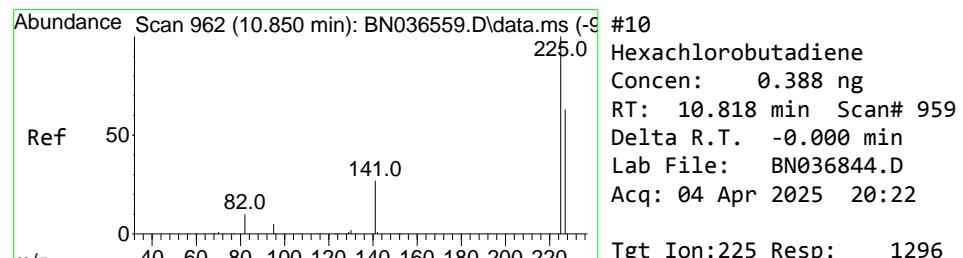
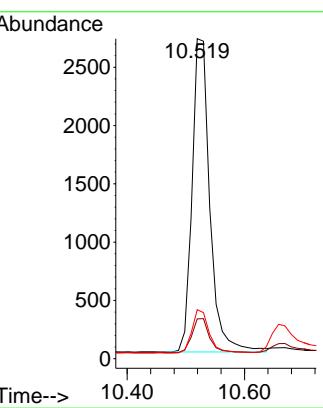
ClientSampleId :

PB167468BS

Tgt	Ion:128	Resp:	5669
Ion	Ratio	Lower	Upper
128	100		
129	12.5	9.8	14.6
127	15.3	11.8	17.8

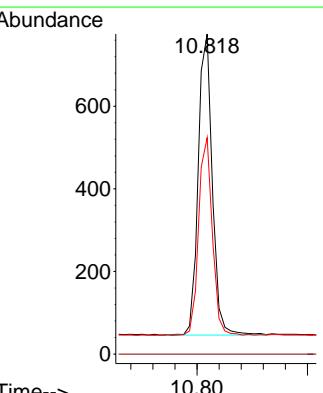
### Manual Integrations APPROVED

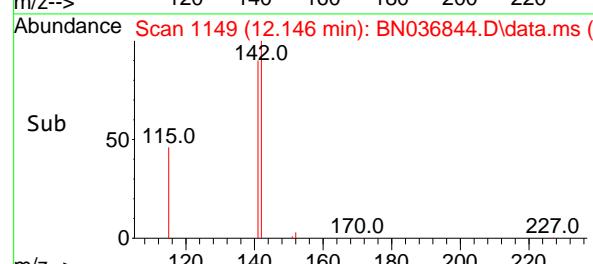
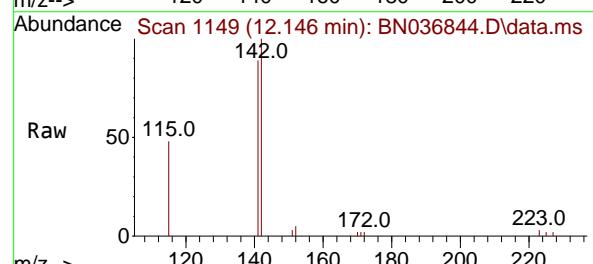
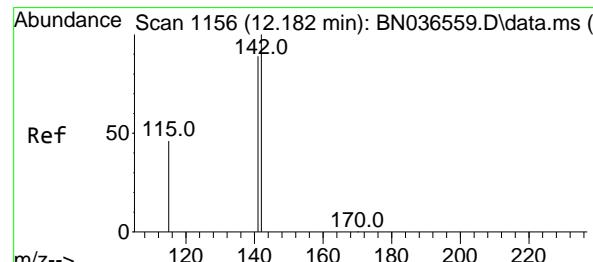
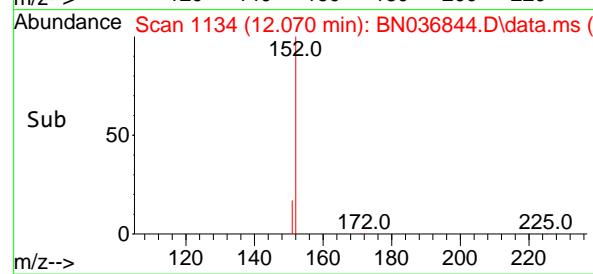
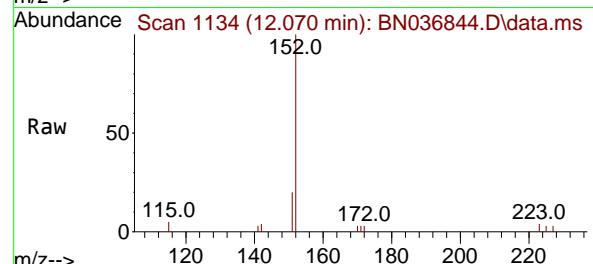
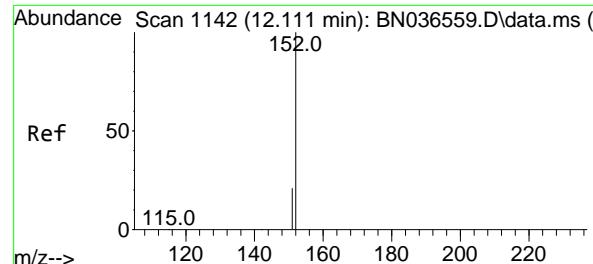
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#10  
Hexachlorobutadiene  
Concen: 0.388 ng  
RT: 10.818 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt	Ion:225	Resp:	1296
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	51.8	77.8





#11

2-Methylnaphthalene-d10

Concen: 0.397 ng m

RT: 12.070 min Scan# 1142

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Instrument :

BNA\_N

ClientSampleId :

PB167468BS

Tgt Ion:152 Resp: 2853

Ion Ratio Lower Upper

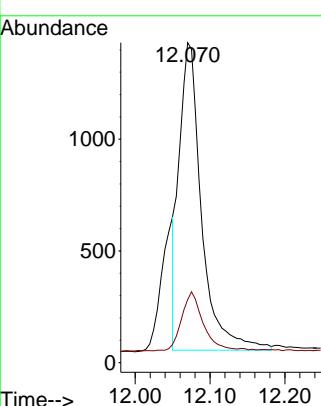
152 100

151 18.4 17.0 25.6

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 04/07/2025

Supervised By :Jagrut Upadhyay 04/07/2025



#12

2-Methylnaphthalene

Concen: 0.398 ng

RT: 12.146 min Scan# 1149

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

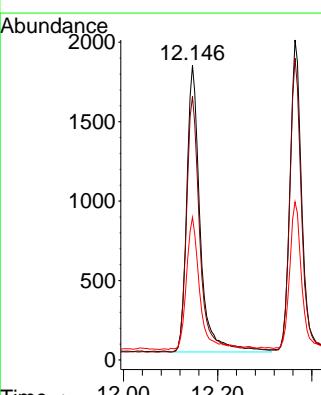
Tgt Ion:142 Resp: 3592

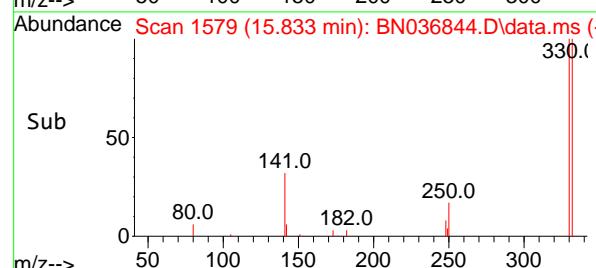
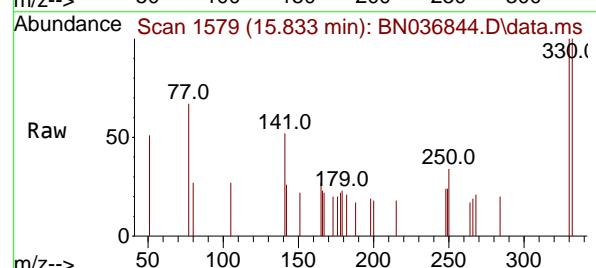
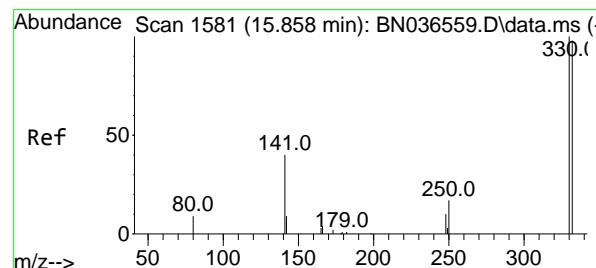
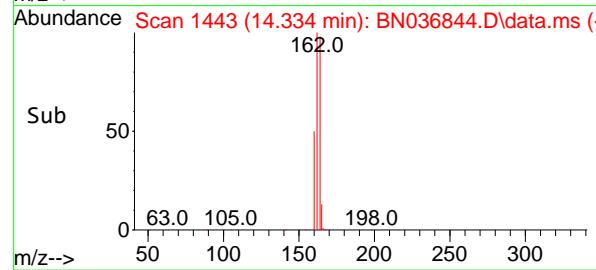
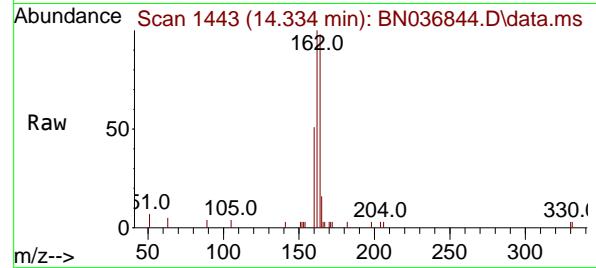
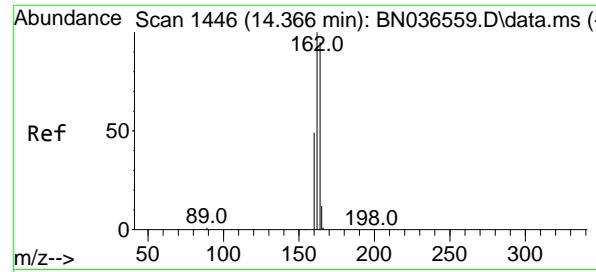
Ion Ratio Lower Upper

142 100

141 89.5 71.7 107.5

115 48.5 38.3 57.5





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.334 min Scan# 1443

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Instrument :

BNA\_N

ClientSampleId :

PB167468BS

Tgt Ion:164 Resp: 2640

Ion Ratio Lower Upper

164 100

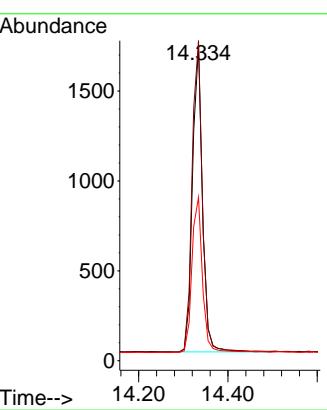
162 101.7 84.2 126.2

160 51.9 42.2 63.2

**Manual Integrations****APPROVED**

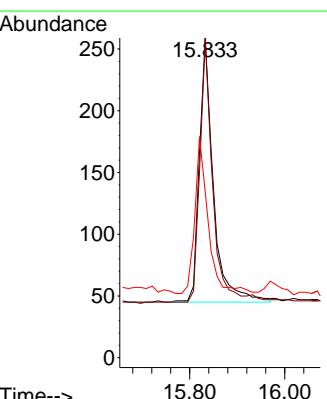
Reviewed By :Anahy Claudio 04/07/2025

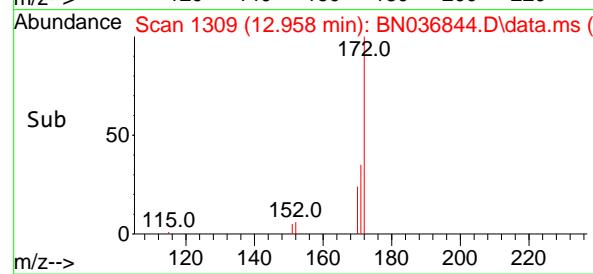
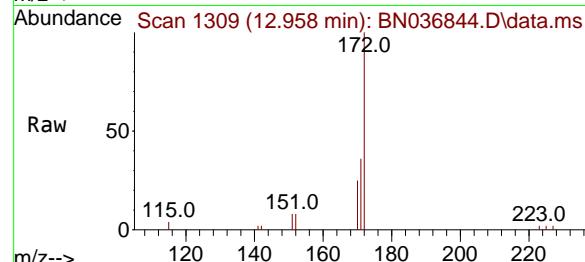
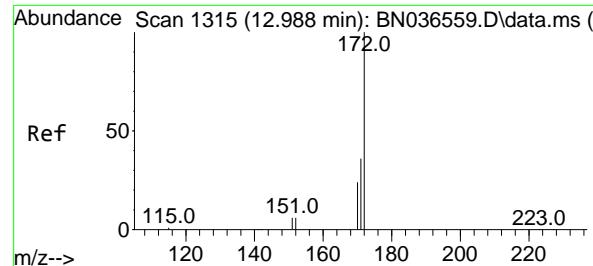
Supervised By :Jagrut Upadhyay 04/07/2025



#14  
2,4,6-Tribromophenol  
Concen: 0.369 ng  
RT: 15.833 min Scan# 1579  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:330 Resp: 442  
Ion Ratio Lower Upper  
330 100  
332 91.2 75.2 112.8  
141 55.9 43.4 65.2

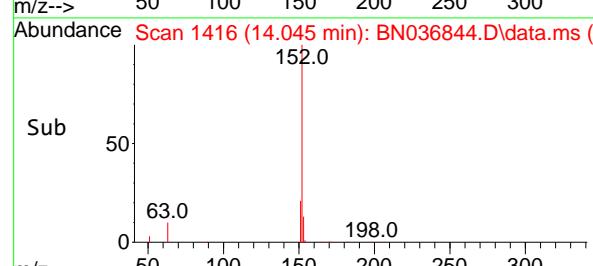
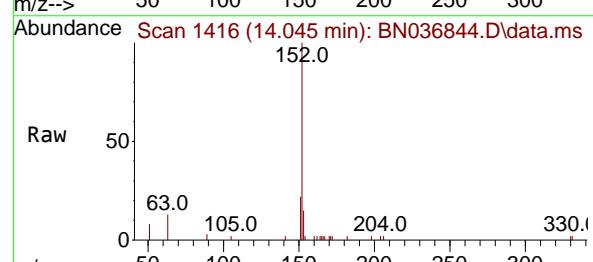
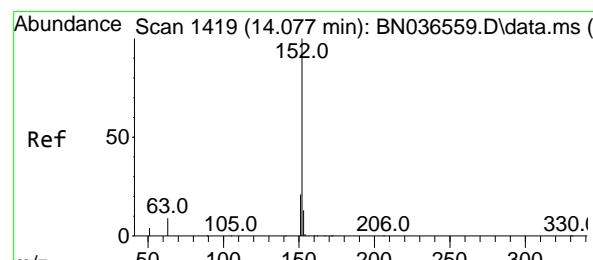
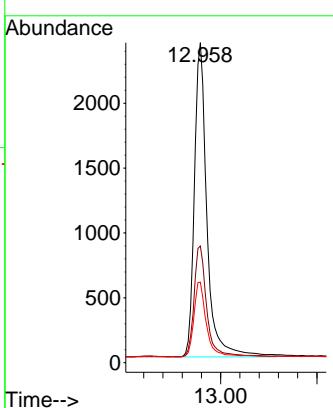




#15  
2-Fluorobiphenyl  
Concen: 0.381 ng  
RT: 12.958 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

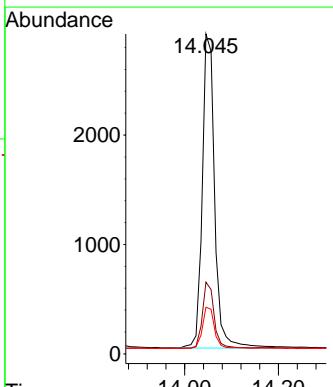
### Manual Integrations APPROVED

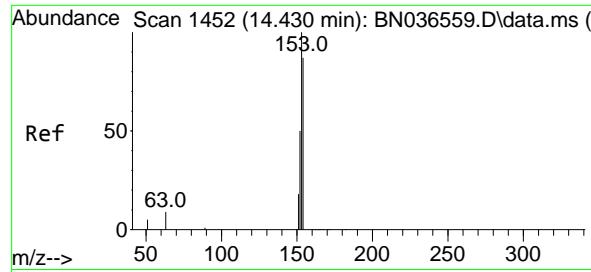
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#16  
Acenaphthylene  
Concen: 0.421 ng  
RT: 14.045 min Scan# 1416  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:152 Resp: 5250  
Ion Ratio Lower Upper  
152 100  
151 20.2 16.2 24.4  
153 13.0 10.6 15.8





#17

Acenaphthene

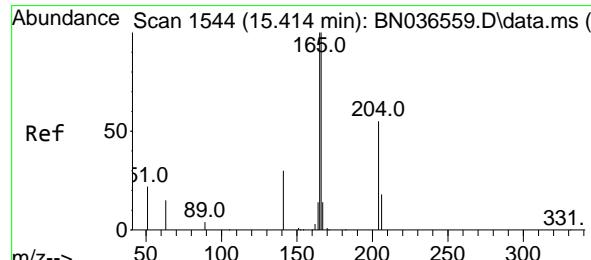
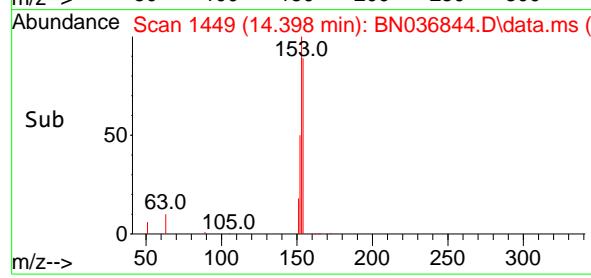
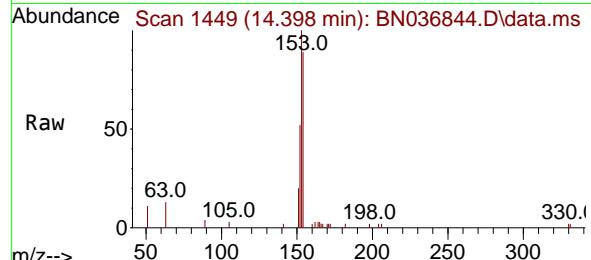
Concen: 0.415 ng

RT: 14.398 min Scan# 1452

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22



#18

Fluorene

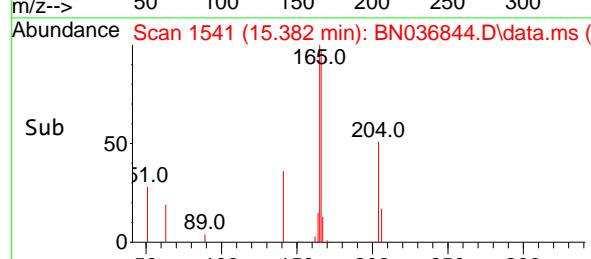
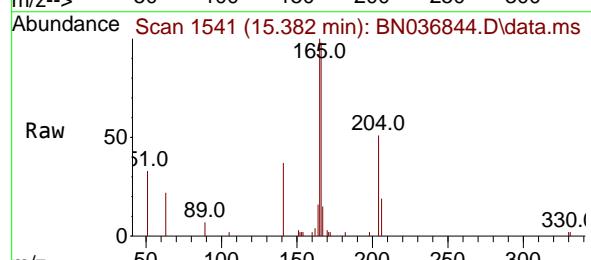
Concen: 0.410 ng

RT: 15.382 min Scan# 1541

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22



Tgt Ion:154 Resp: 3384

Ion Ratio Lower Upper

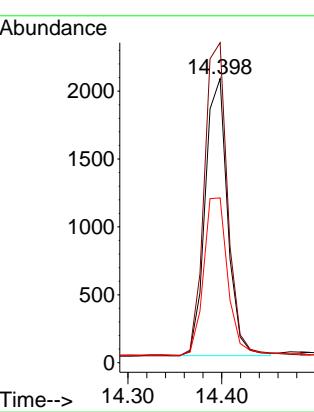
154 100

153 119.0 94.1 141.1

152 61.6 49.8 74.6

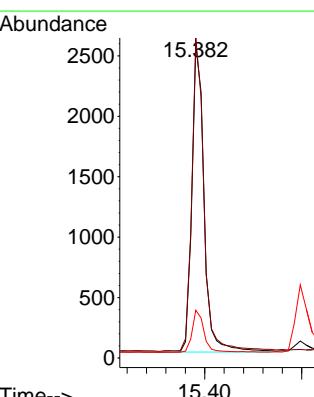
### Manual Integrations APPROVED

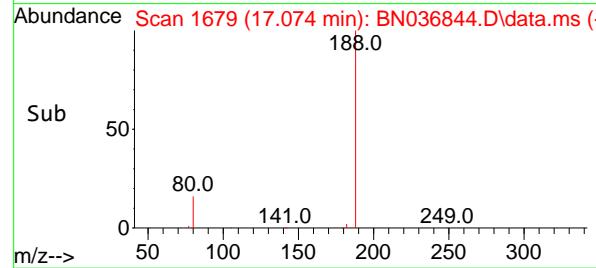
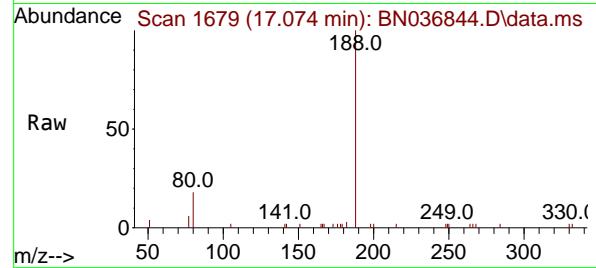
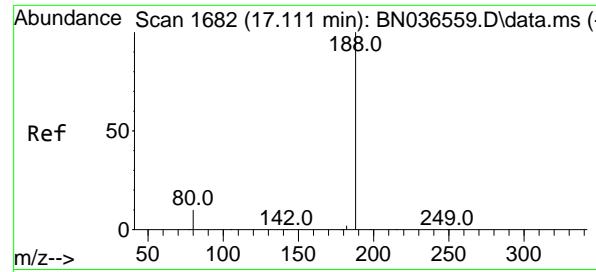
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#18  
Fluorene  
Concen: 0.410 ng  
RT: 15.382 min Scan# 1541  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:166 Resp: 4527  
Ion Ratio Lower Upper  
166 100  
165 100.2 79.8 119.8  
167 13.1 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

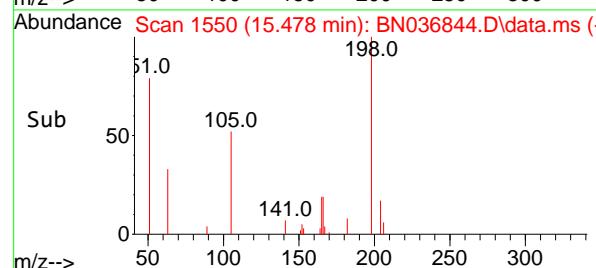
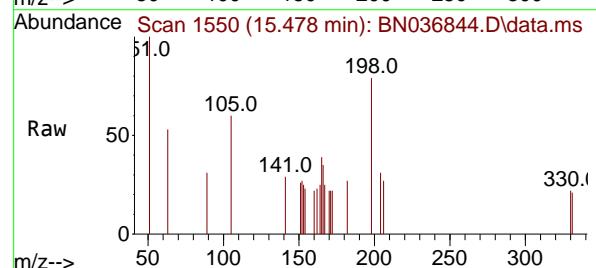
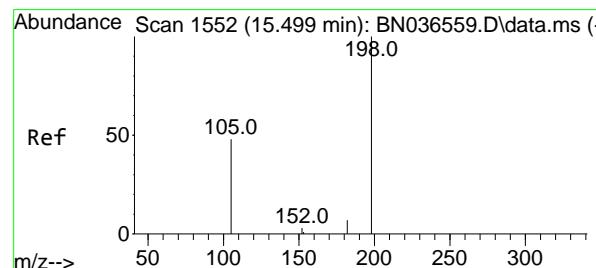
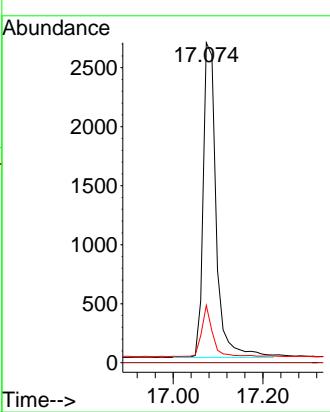
Instrument :

BNA\_N

ClientSampleId :

PB167468BS

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025


#20

4,6-Dinitro-2-methylphenol

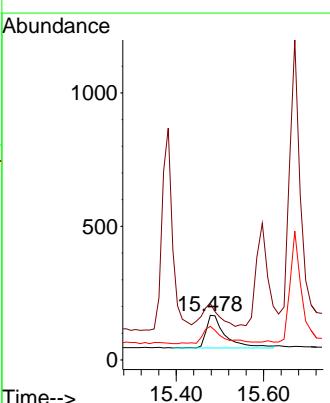
Concen: 0.427 ng

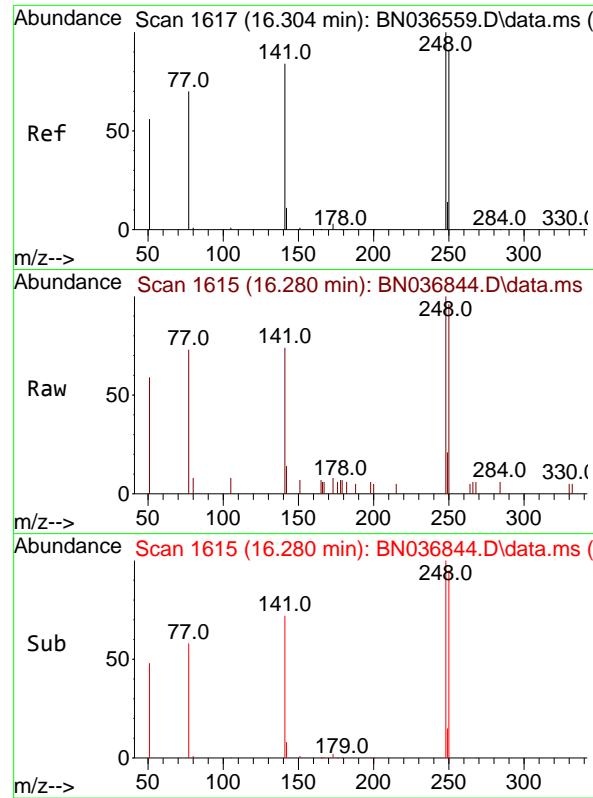
RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

 Tgt Ion:198 Resp: 385  
 Ion Ratio Lower Upper  
 198 100  
 51 126.3 107.9 161.9  
 105 75.4 56.2 84.2


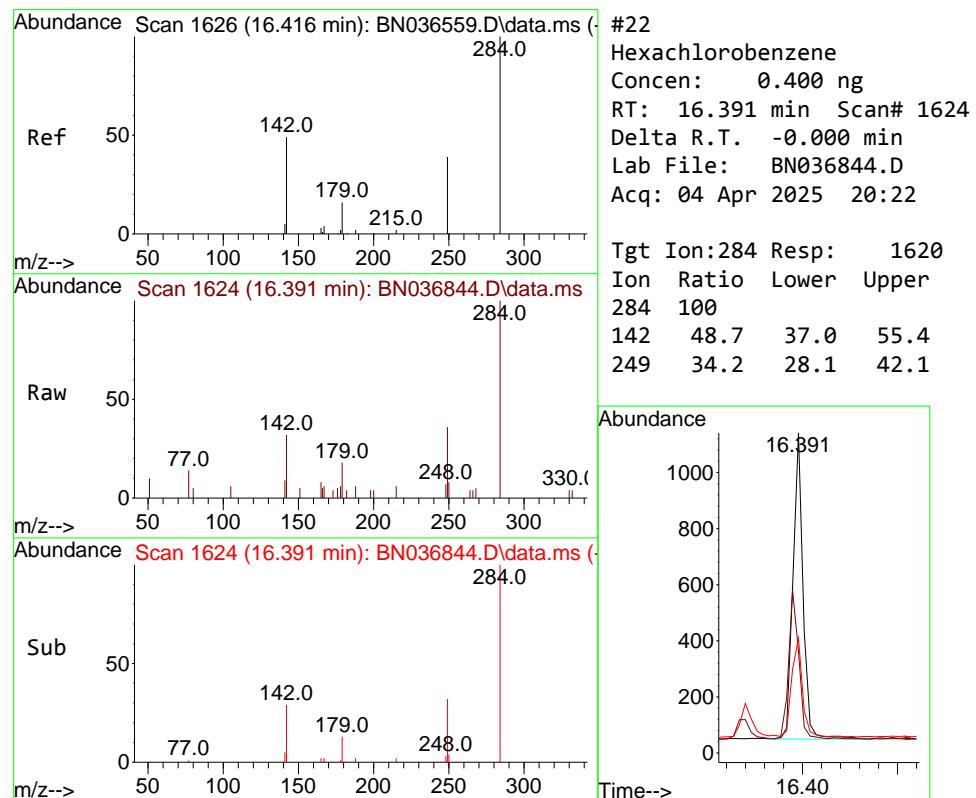
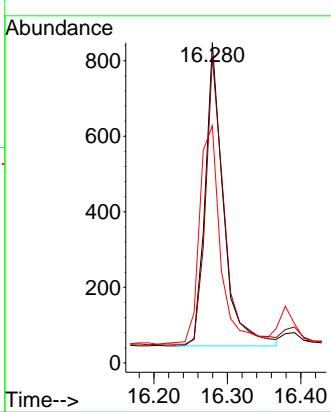


#21  
4-Bromophenyl-phenylether  
Concen: 0.412 ng  
RT: 16.280 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BS

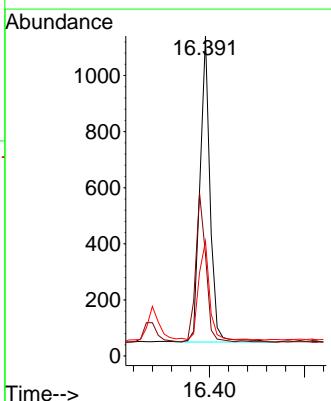
### Manual Integrations APPROVED

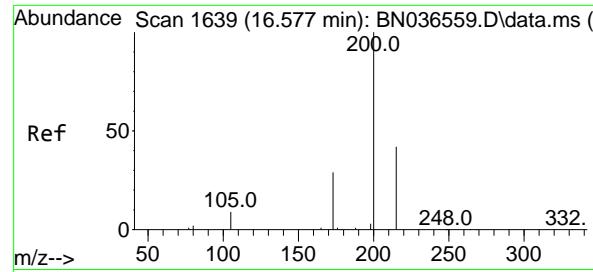
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



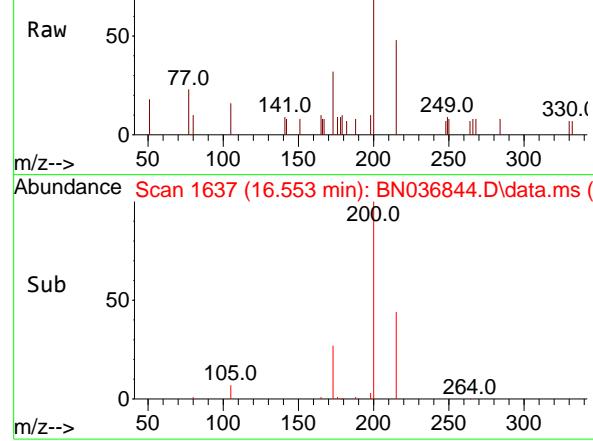
#22  
Hexachlorobenzene  
Concen: 0.400 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:284 Resp: 1620  
Ion Ratio Lower Upper  
284 100  
142 48.7 37.0 55.4  
249 34.2 28.1 42.1

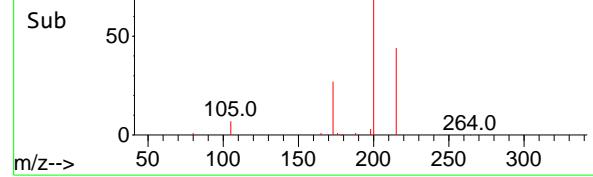




Abundance Scan 1637 (16.553 min): BN036844.D\data.ms (-)



Abundance Scan 1637 (16.553 min): BN036844.D\data.ms (-)



#23

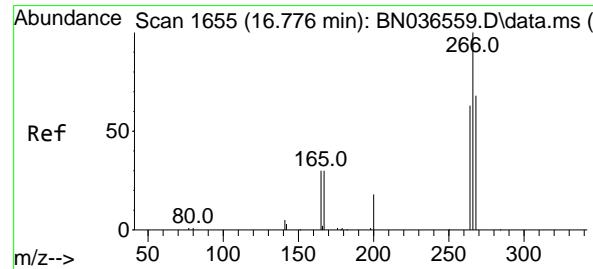
Atrazine  
Concen: 0.442 ng  
RT: 16.553 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BS

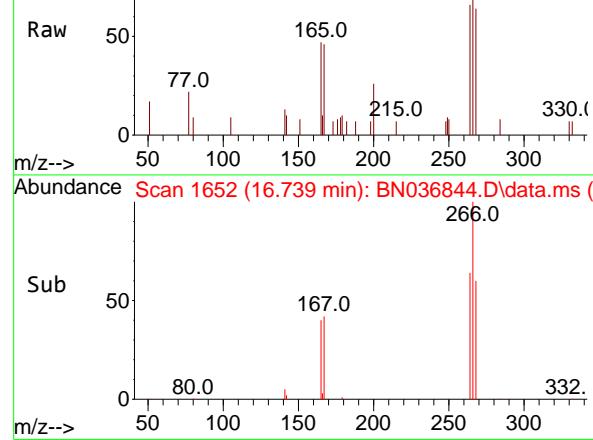
Tgt	Ion:200	Resp:	1189
Ion	Ratio	Lower	Upper
200	100		
173	32.1	27.3	40.9
215	48.0	36.8	55.2

### Manual Integrations APPROVED

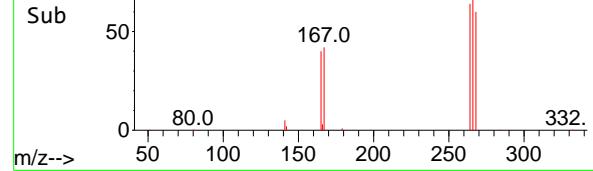
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



Abundance Scan 1652 (16.739 min): BN036844.D\data.ms (-)



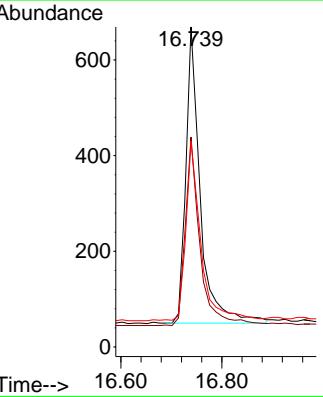
Abundance Scan 1652 (16.739 min): BN036844.D\data.ms (-)

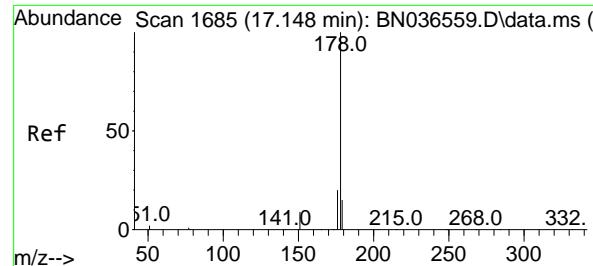


#24

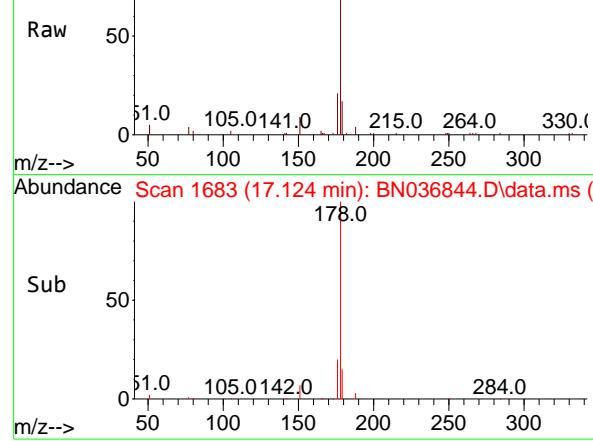
Pentachlorophenol  
Concen: 0.667 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt	Ion:266	Resp:	1233
Ion	Ratio	Lower	Upper
266	100		
264	64.5	49.6	74.4
268	63.0	50.9	76.3

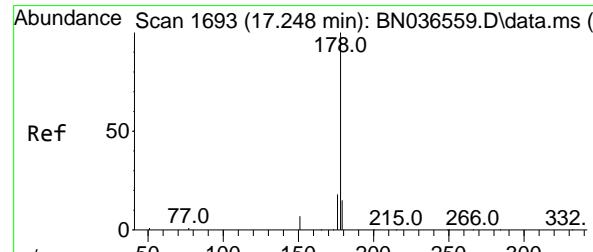
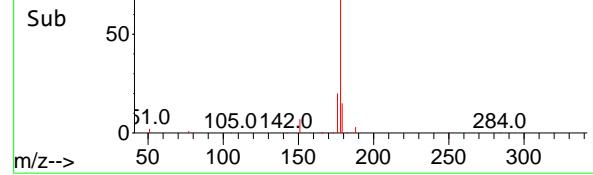




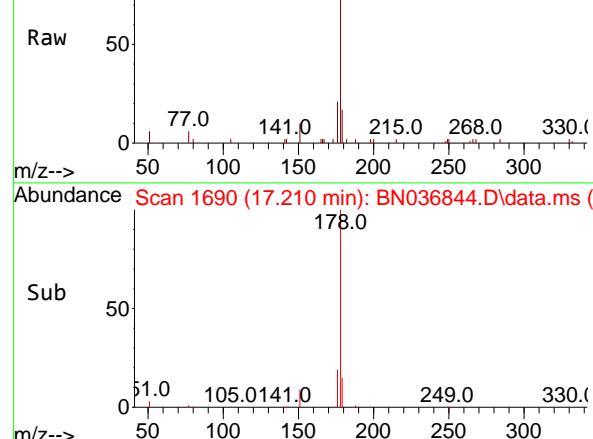
Abundance Scan 1683 (17.124 min): BN036844.D\data.ms (-)



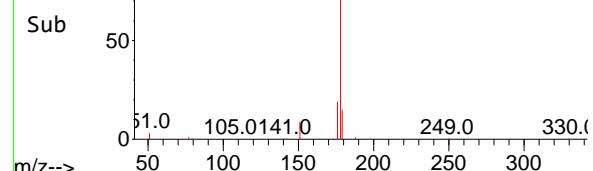
Abundance Scan 1683 (17.124 min): BN036844.D\data.ms (-)



Abundance Scan 1690 (17.210 min): BN036844.D\data.ms (-)



Abundance Scan 1690 (17.210 min): BN036844.D\data.ms (-)



#25

Phenanthrene

Concen: 0.429 ng

RT: 17.124 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Instrument :

BNA\_N

ClientSampleId :

PB167468BS

Tgt Ion:178 Resp: 6881

Ion Ratio Lower Upper

178 100

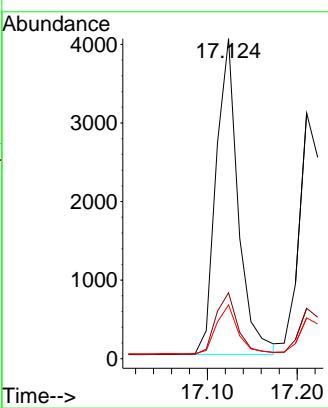
176 20.1 15.9 23.9

179 15.6 12.2 18.4

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 04/07/2025

Supervised By :Jagrut Upadhyay 04/07/2025



#26

Anthracene

Concen: 0.439 ng

RT: 17.210 min Scan# 1690

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

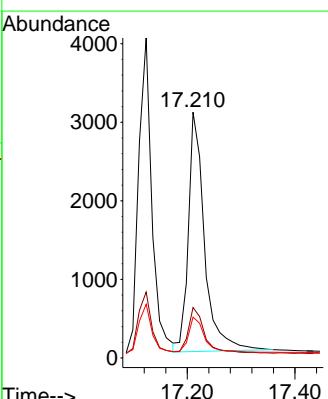
Tgt Ion:178 Resp: 6358

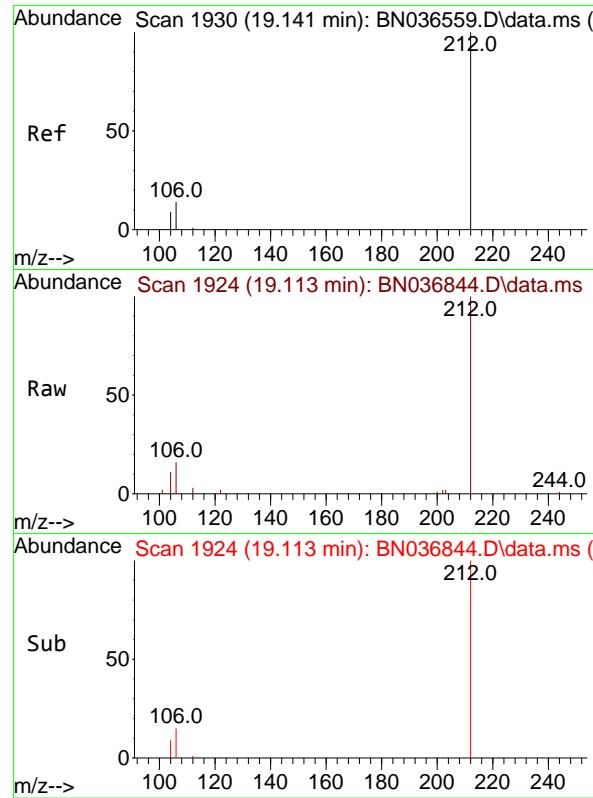
Ion Ratio Lower Upper

178 100

176 19.4 15.4 23.2

179 14.8 12.6 18.8



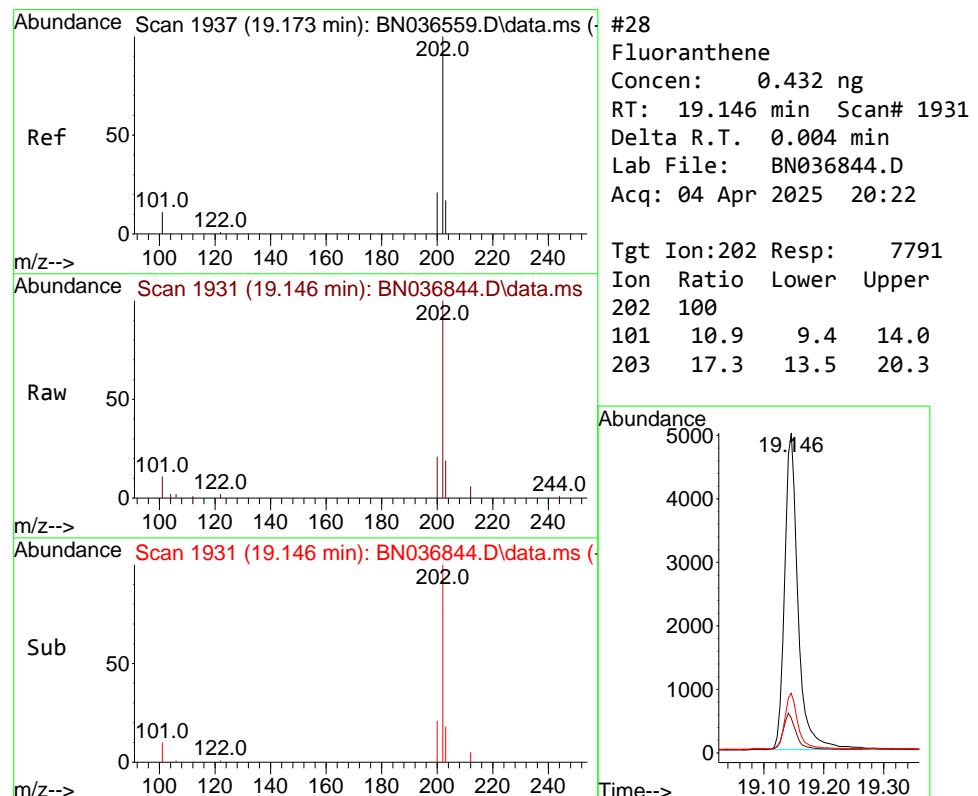
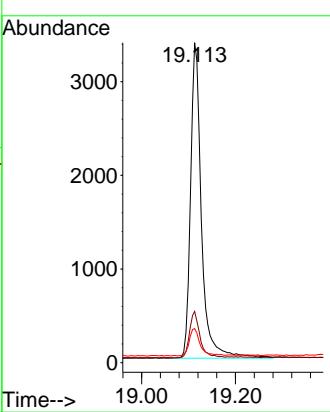


#27  
Fluoranthene-d10  
Concen: 0.397 ng  
RT: 19.113 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument : BNA\_N  
ClientSampleId : PB167468BS

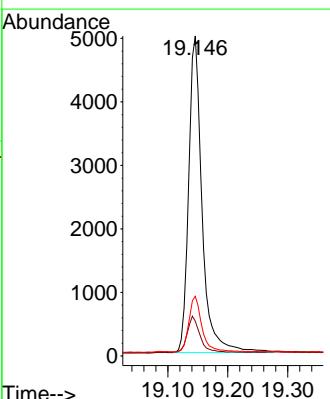
**Manual Integrations**  
**APPROVED**

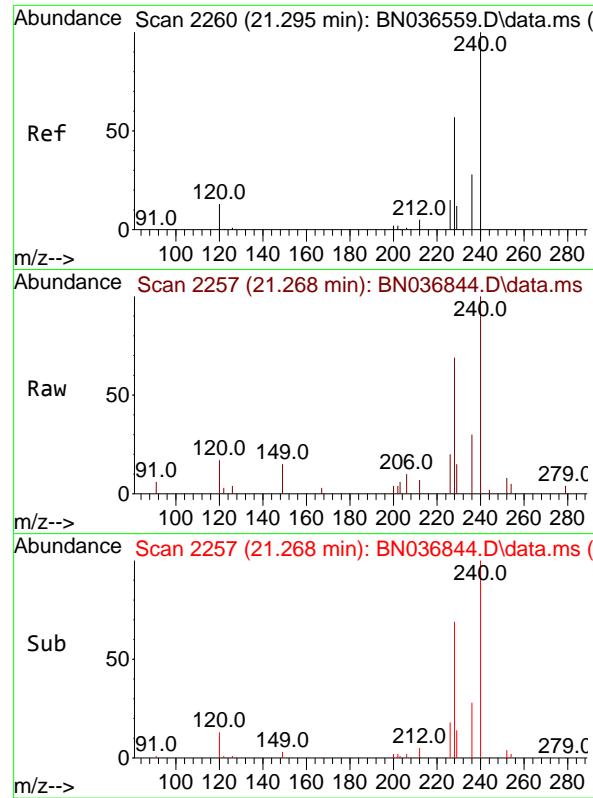
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#28  
Fluoranthene  
Concen: 0.432 ng  
RT: 19.146 min Scan# 1931  
Delta R.T. 0.004 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:202 Resp: 7791  
Ion Ratio Lower Upper  
202 100  
101 10.9 9.4 14.0  
203 17.3 13.5 20.3





#29

Chrysene-d<sub>12</sub>

Concen: 0.400 ng

RT: 21.268 min Scan# 21268

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

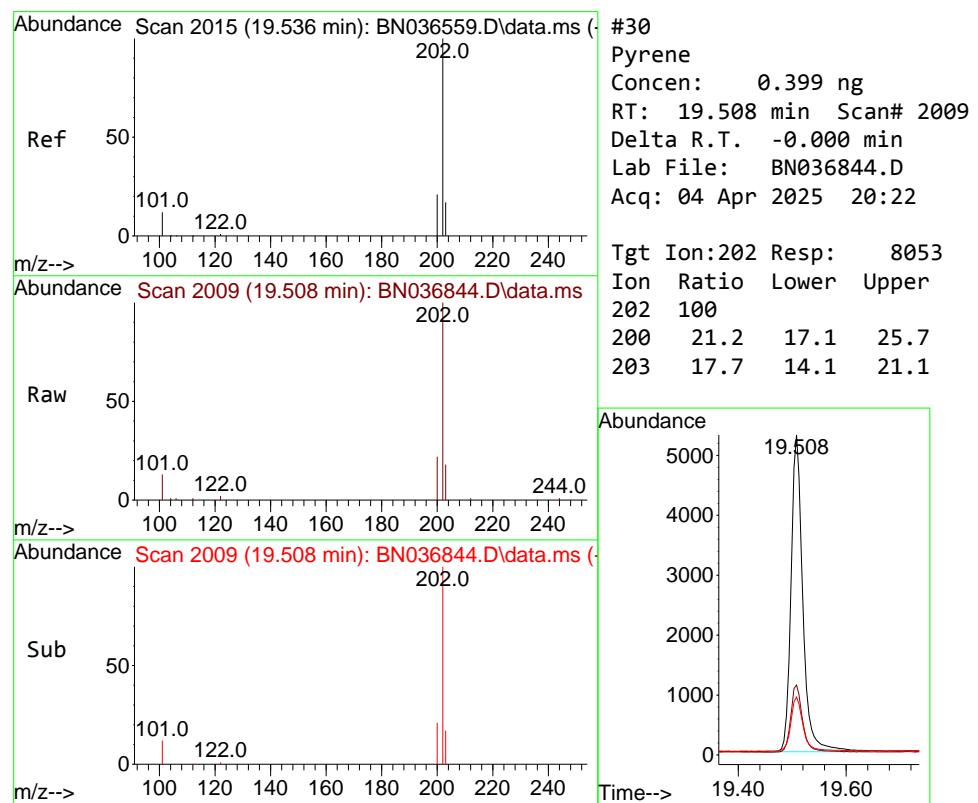
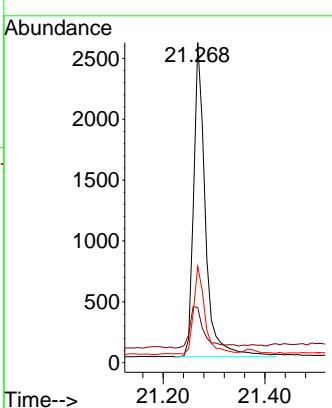
Instrument :

BNA\_N

ClientSampleId :

PB167468BS

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025


#30

Pyrene

Concen: 0.399 ng

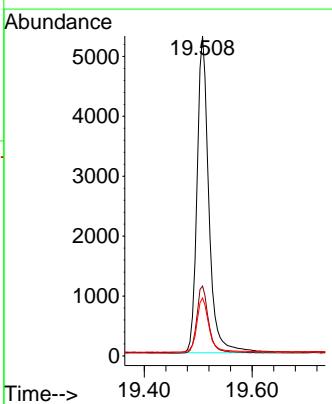
RT: 19.508 min Scan# 2009

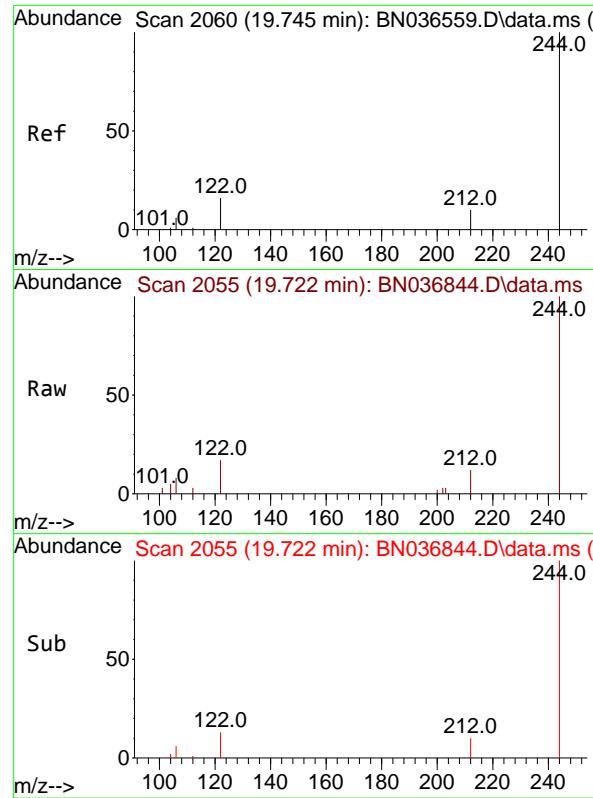
Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

Tgt	Ion:202	Resp:	8053
Ion	Ratio	Lower	Upper
202	100		
200	21.2	17.1	25.7
203	17.7	14.1	21.1



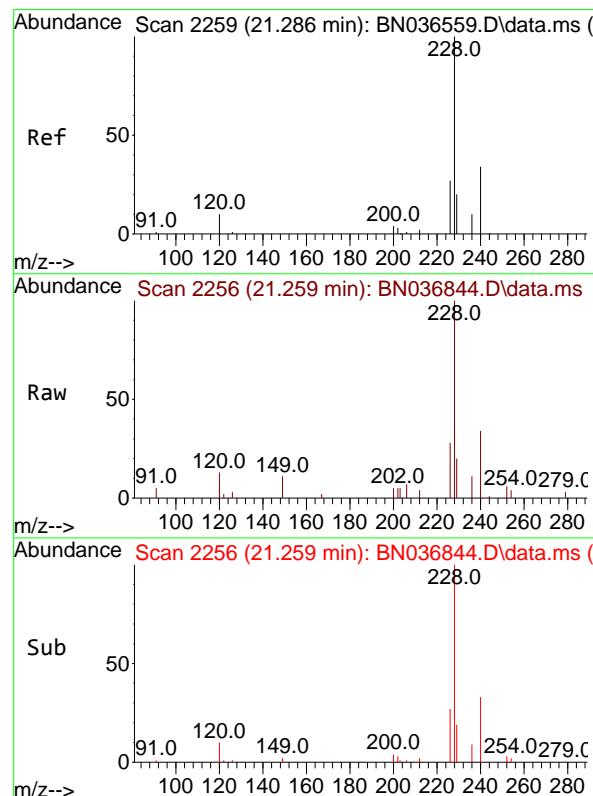
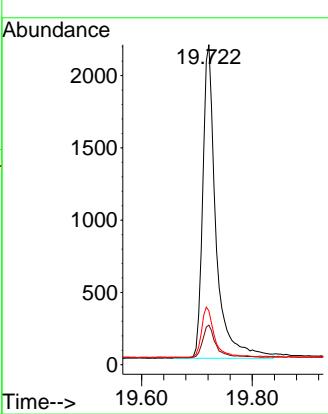


#31  
Terphenyl-d14  
Concen: 0.365 ng  
RT: 19.722 min Scan# 2055  
Delta R.T. 0.004 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument : BNA\_N  
ClientSampleId : PB167468BS

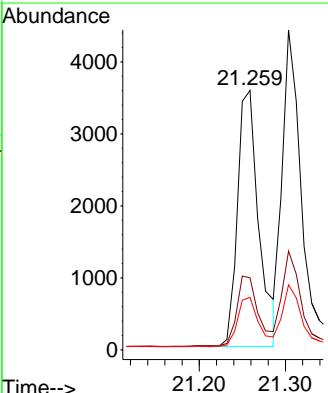
**Manual Integrations**  
**APPROVED**

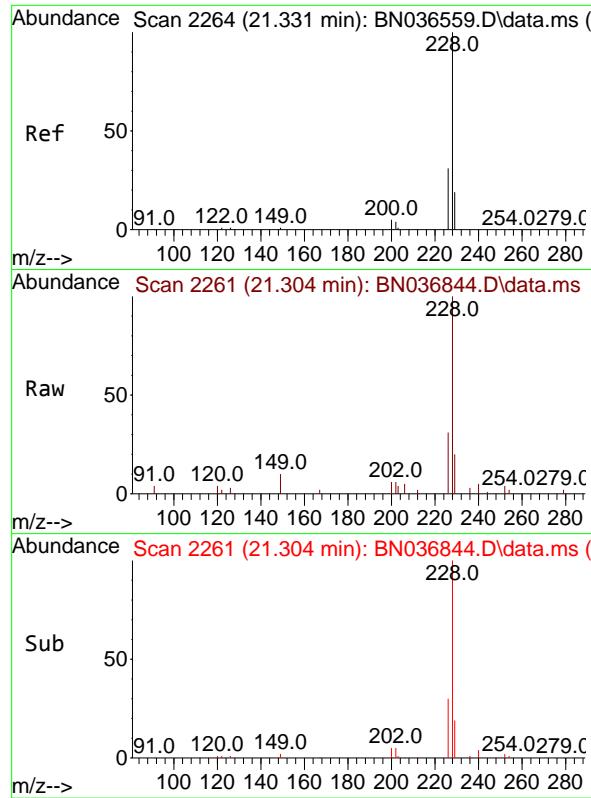
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#32  
Benzo(a)anthracene  
Concen: 0.426 ng  
RT: 21.259 min Scan# 2256  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:228 Resp: 6120  
Ion Ratio Lower Upper  
228 100  
226 27.8 22.5 33.7  
229 20.3 16.6 25.0





#33

Chrysene

Concen: 0.446 ng

RT: 21.304 min Scan# 2

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

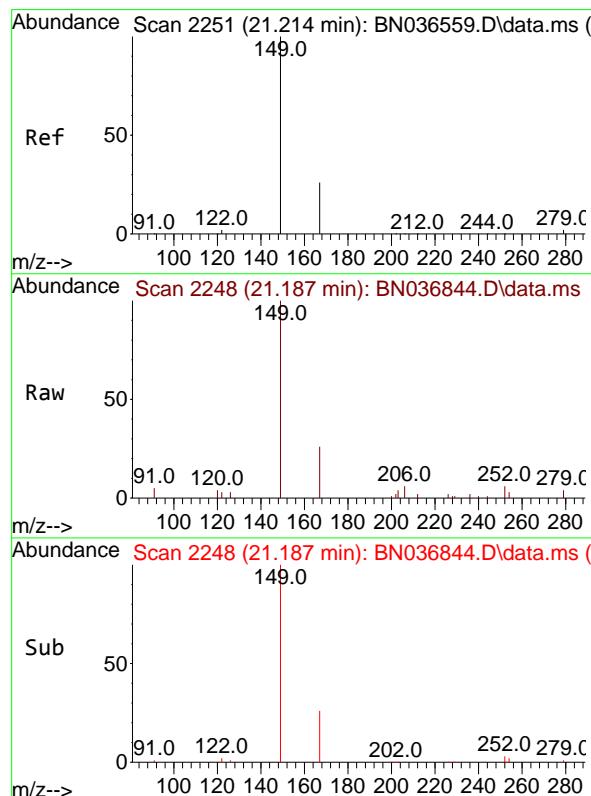
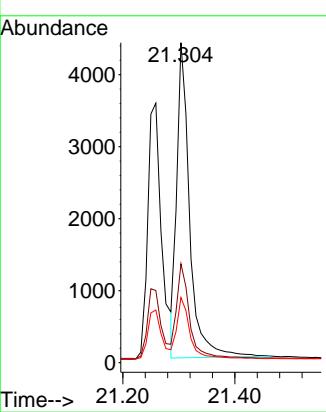
Instrument :

BNA\_N

ClientSampleId :

PB167468BS

**Manual Integrations**  
**APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025


#34

Bis(2-ethylhexyl)phthalate

Concen: 0.359 ng

RT: 21.187 min Scan# 2248

Delta R.T. -0.000 min

Lab File: BN036844.D

Acq: 04 Apr 2025 20:22

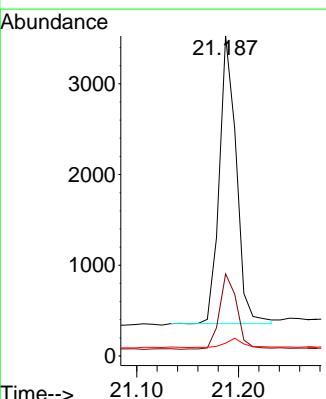
Tgt Ion:149 Resp: 3668

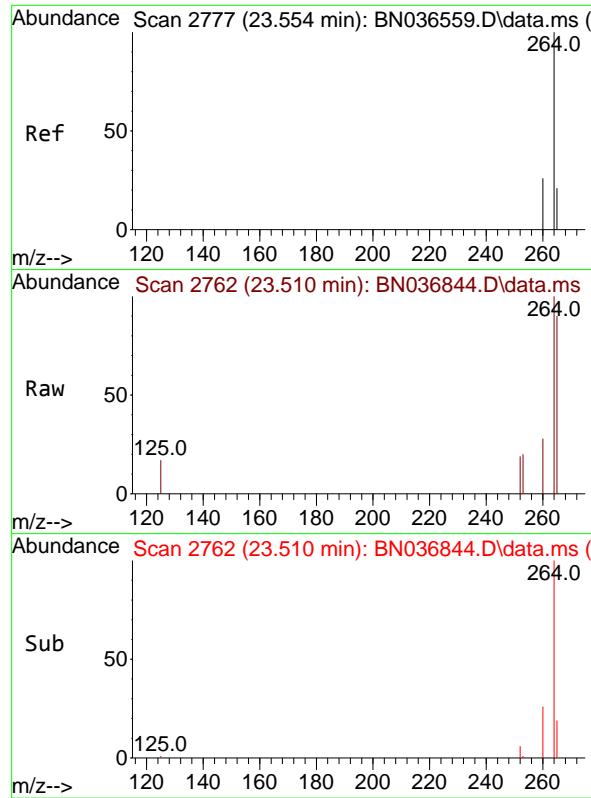
Ion Ratio Lower Upper

149 100

167 27.6 20.7 31.1

279 3.5 3.6 5.4#





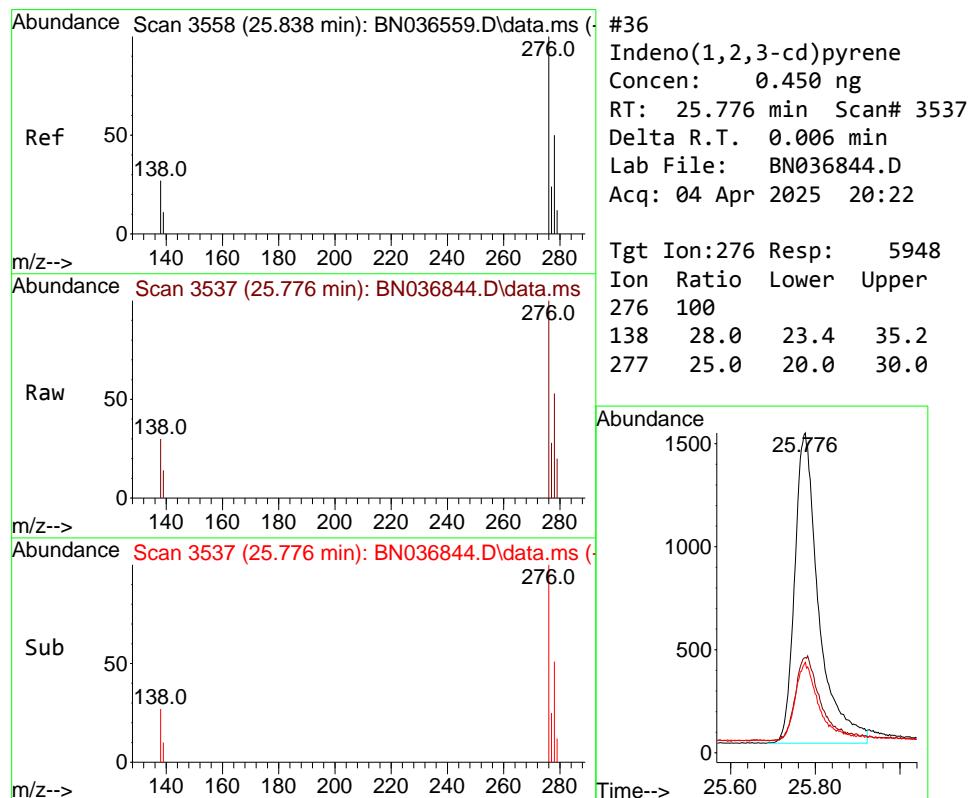
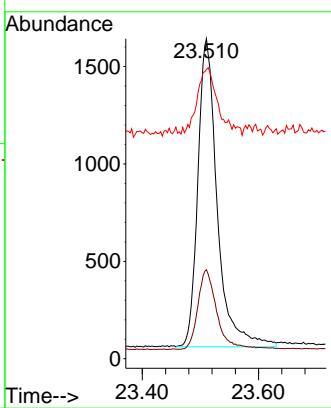
#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.510 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument : BNA\_N  
ClientSampleId : PB167468BS

**Manual Integrations**  
**APPROVED**

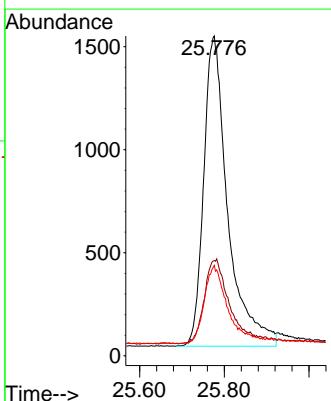
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

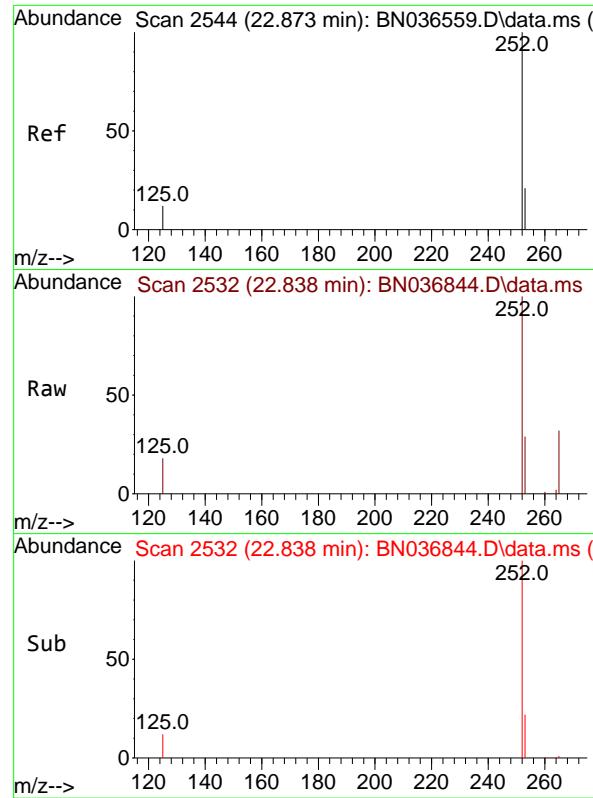
Tgt	Ion:264	Resp:	366.0
Ion	Ratio	Lower	Upper
264	100		
260	27.8	22.6	33.8
265	90.4	88.1	132.1



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.450 ng  
RT: 25.776 min Scan# 3537  
Delta R.T. 0.006 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt	Ion:276	Resp:	5948
Ion	Ratio	Lower	Upper
276	100		
138	28.0	23.4	35.2
277	25.0	20.0	30.0



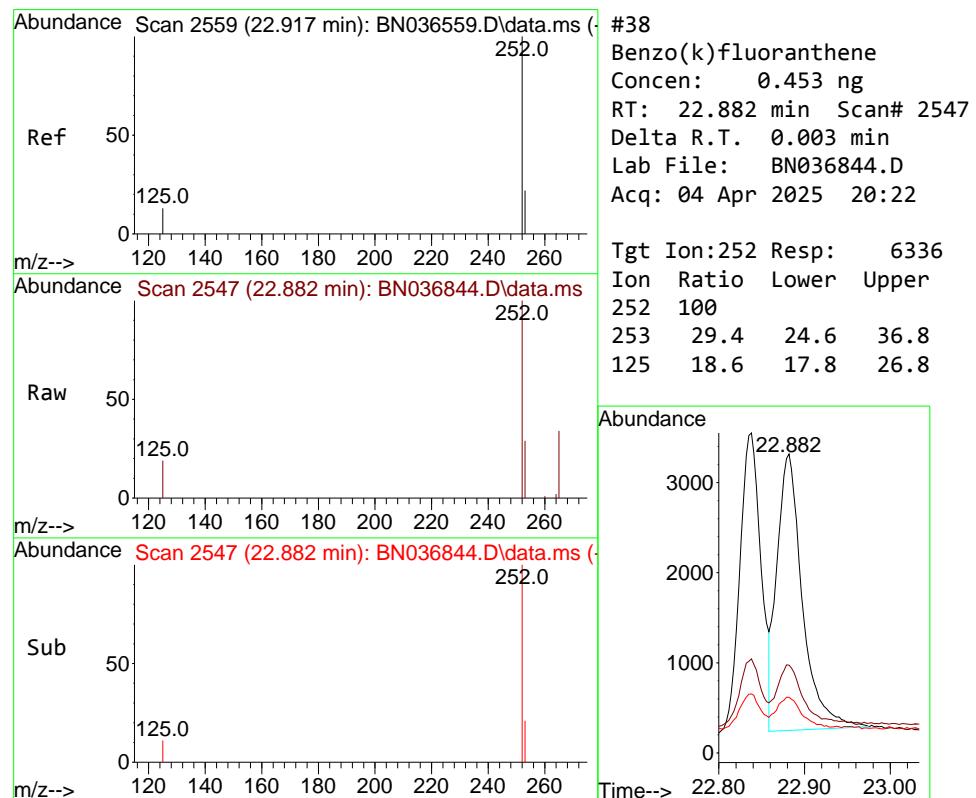
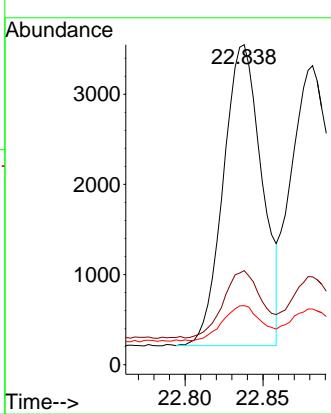


#37  
Benzo(b)fluoranthene  
Concen: 0.432 ng  
RT: 22.838 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BS

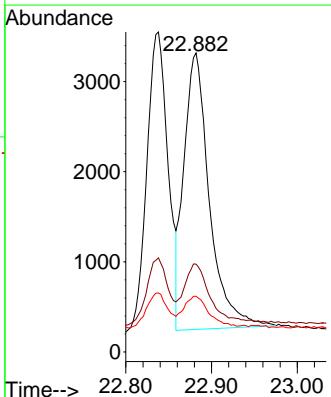
### Manual Integrations APPROVED

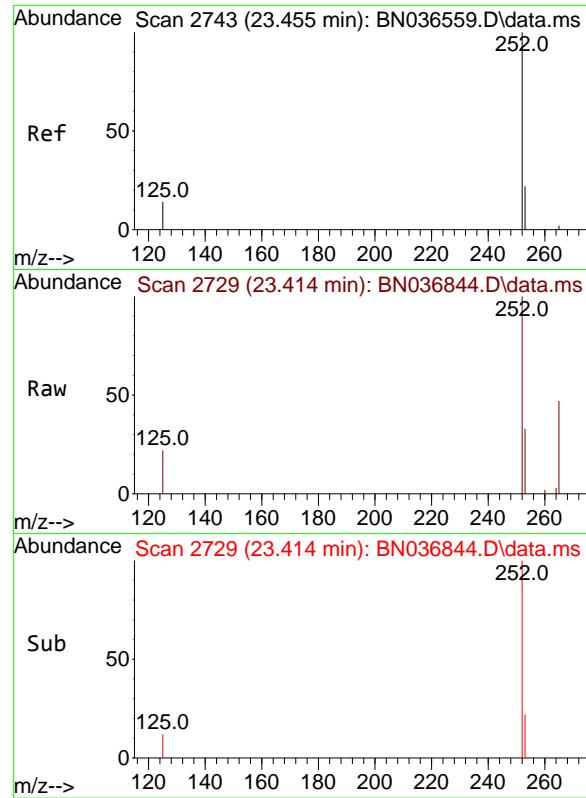
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#38  
Benzo(k)fluoranthene  
Concen: 0.453 ng  
RT: 22.882 min Scan# 2547  
Delta R.T. 0.003 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Tgt Ion:252 Resp: 6336  
Ion Ratio Lower Upper  
252 100  
253 29.4 24.6 36.8  
125 18.6 17.8 26.8



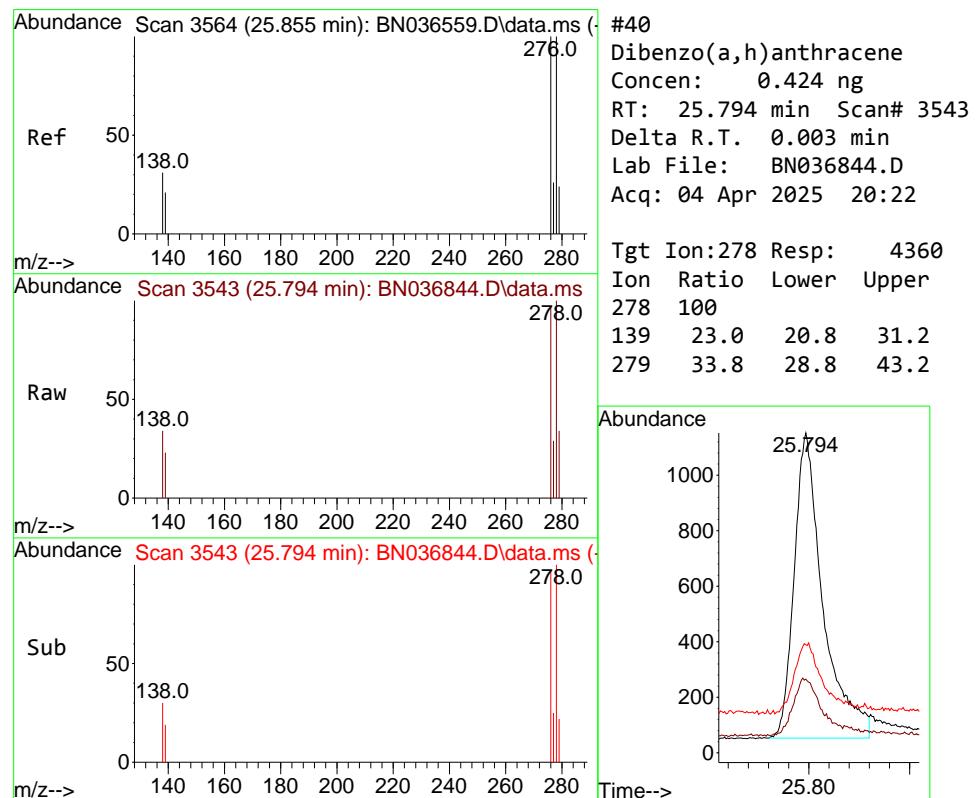
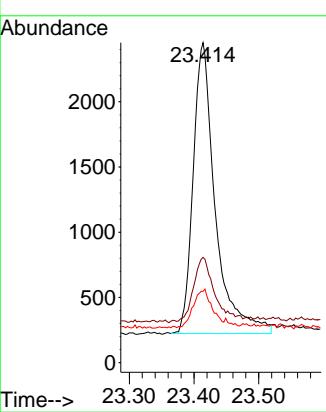


#39  
 Benzo(a)pyrene  
 Concen: 0.472 ng  
 RT: 23.414 min Scan# 21  
 Delta R.T. 0.003 min  
 Lab File: BN036844.D  
 Acq: 04 Apr 2025 20:22

Instrument : BNA\_N  
 ClientSampleId : PB167468BS

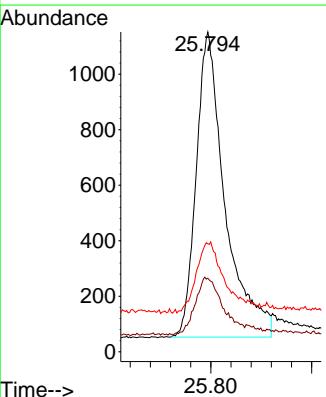
**Manual Integrations**  
**APPROVED**

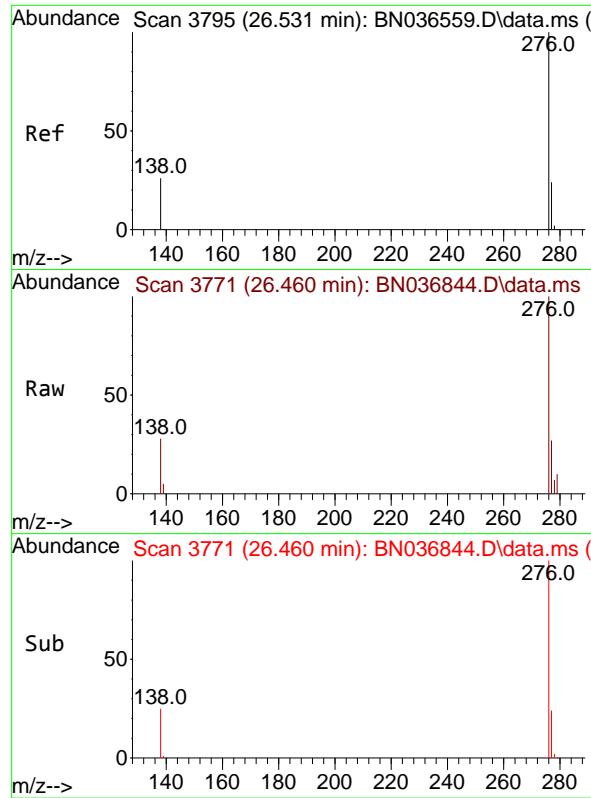
Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.424 ng  
 RT: 25.794 min Scan# 3543  
 Delta R.T. 0.003 min  
 Lab File: BN036844.D  
 Acq: 04 Apr 2025 20:22

Tgt Ion:278 Resp: 4360  
 Ion Ratio Lower Upper  
 278 100  
 139 23.0 20.8 31.2  
 279 33.8 28.8 43.2



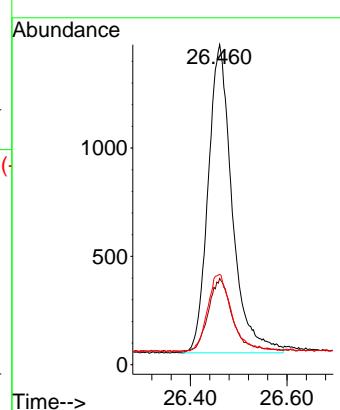


#41  
Benzo(g,h,i)perylene  
Concen: 0.418 ng  
RT: 26.460 min Scan# 3  
Delta R.T. 0.003 min  
Lab File: BN036844.D  
Acq: 04 Apr 2025 20:22

Instrument : BNA\_N  
ClientSampleId : PB167468BS

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025





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

## Report of Analysis

Client:	JACOBS Engineering Group, Inc.			Date Collected:	
Project:	Former Schlumberger STC PTC Site D3868221			Date Received:	
Client Sample ID:	PB167468BSD			SDG No.:	Q1731
Lab Sample ID:	PB167468BSD			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
BN036845.D	1	04/04/25 11:35	04/04/25 20:58	PB167468

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
<b>TARGETS</b>						
123-91-1	1,4-Dioxane	0.37		0.070	0.20	ug/L
<b>SURROGATES</b>						
7297-45-2	2-Methylnaphthalene-d10	0.40		30 (20) - 150 (139)	99%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 (30) - 150 (150)	100%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		30 (27) - 130 (154)	87%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.37		30 (25) - 130 (149)	92%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.36		30 (54) - 130 (175)	90%	SPK: 0.4
<b>INTERNAL STANDARDS</b>						
3855-82-1	1,4-Dichlorobenzene-d4	1820		7.695		
1146-65-2	Naphthalene-d8	4420		10.477		
15067-26-2	Acenaphthene-d10	2440		14.334		
1517-22-2	Phenanthrene-d10	5050		17.074		
1719-03-5	Chrysene-d12	4040		21.268		
1520-96-3	Perylene-d12	3560		23.51		

U = Not Detected

LOQ = Limit of Quantitation

MDL = Method Detection Limit

LOD = Limit of Detection

E = Value Exceeds Calibration Range

Q = indicates LCS control criteria did not meet requirements

M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value

B = Analyte Found in Associated Method Blank

N = Presumptive Evidence of a Compound

\* = Values outside of QC limits

D = Dilution

( ) = Laboratory InHouse Limit

A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036845.D  
 Acq On : 04 Apr 2025 20:58  
 Operator : RC/JU  
 Sample : PB167468BSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BSD

Quant Time: Apr 04 22:50:24 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.695	152	1816	0.400	ng	0.00
7) Naphthalene-d8	10.477	136	4421	0.400	ng	0.00
13) Acenaphthene-d10	14.334	164	2443	0.400	ng	0.00
19) Phenanthrene-d10	17.074	188	5048	0.400	ng	# 0.00
29) Chrysene-d12	21.268	240	4039	0.400	ng	0.00
35) Perylene-d12	23.510	264	3561	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.290	112	1831	0.433	ng	0.00
5) Phenol-d6	6.872	99	2103	0.402	ng	0.00
8) Nitrobenzene-d5	8.843	82	1673	0.348	ng	0.00
11) 2-Methylnaphthalene-d10	12.070	152	2601m	0.396	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	440	0.397	ng	0.00
15) 2-Fluorobiphenyl	12.958	172	5220	0.367	ng	0.00
27) Fluoranthene-d10	19.113	212	5176	0.400	ng	0.00
31) Terphenyl-d14	19.722	244	3479	0.360	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.218	88	749	0.372	ng	# 37
3) n-Nitrosodimethylamine	3.528	42	1743	0.428	ng	# 96
6) bis(2-Chloroethyl)ether	7.118	93	2131	0.394	ng	99
9) Naphthalene	10.530	128	5289	0.407	ng	99
10) Hexachlorobutadiene	10.818	225	1193	0.390	ng	# 100
12) 2-Methylnaphthalene	12.146	142	3319	0.401	ng	99
16) Acenaphthylene	14.045	152	5066	0.439	ng	99
17) Acenaphthene	14.398	154	3235	0.429	ng	99
18) Fluorene	15.382	166	4271	0.418	ng	99
20) 4,6-Dinitro-2-methylph...	15.478	198	358	0.423	ng	87
21) 4-Bromophenyl-phenylether	16.280	248	1246	0.394	ng	86
22) Hexachlorobenzene	16.391	284	1512	0.396	ng	98
23) Atrazine	16.553	200	1148	0.453	ng	97
24) Pentachlorophenol	16.739	266	1207	0.693	ng	98
25) Phenanthrene	17.124	178	6625	0.437	ng	100
26) Anthracene	17.210	178	6076	0.445	ng	99
28) Fluoranthene	19.146	202	7661	0.450	ng	99
30) Pyrene	19.508	202	7929	0.401	ng	99
32) Benzo(a)anthracene	21.250	228	6142	0.437	ng	98
33) Chrysene	21.304	228	6901	0.450	ng	100
34) Bis(2-ethylhexyl)phtha...	21.187	149	3543	0.354	ng	# 98
36) Indeno(1,2,3-cd)pyrene	25.770	276	6102	0.475	ng	98
37) Benzo(b)fluoranthene	22.835	252	5947	0.459	ng	95
38) Benzo(k)fluoranthene	22.879	252	6337	0.466	ng	94
39) Benzo(a)pyrene	23.414	252	5404	0.495	ng	# 92
40) Dibenzo(a,h)anthracene	25.791	278	4630	0.463	ng	95
41) Benzo(g,h,i)perylene	26.457	276	4986	0.436	ng	98

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

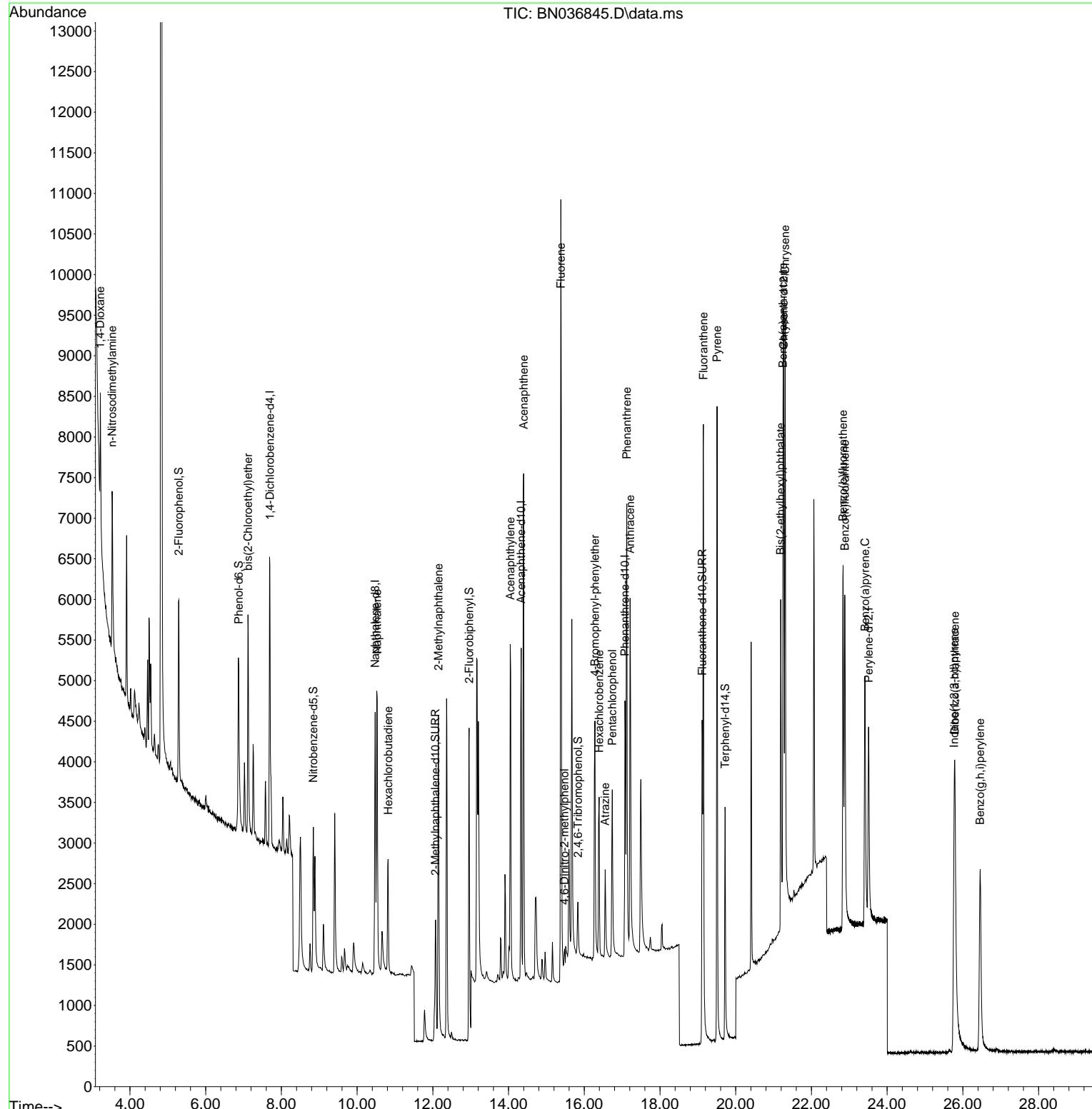
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN040425\  
 Data File : BN036845.D  
 Acq On : 04 Apr 2025 20:58  
 Operator : RC/JU  
 Sample : PB167468BSD  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

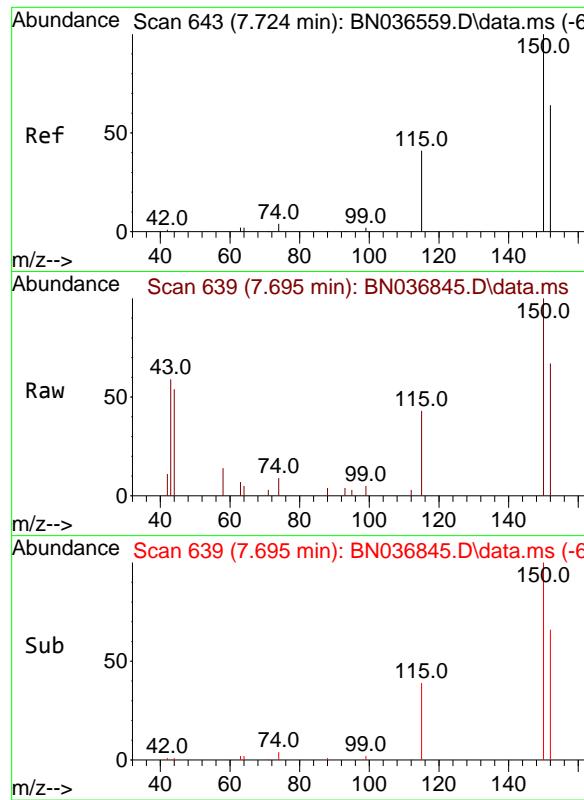
Quant Time: Apr 04 22:50:24 2025  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN031025.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Apr 04 17:30:43 2025  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BSD

**Manual Integrations  
APPROVED**

Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025



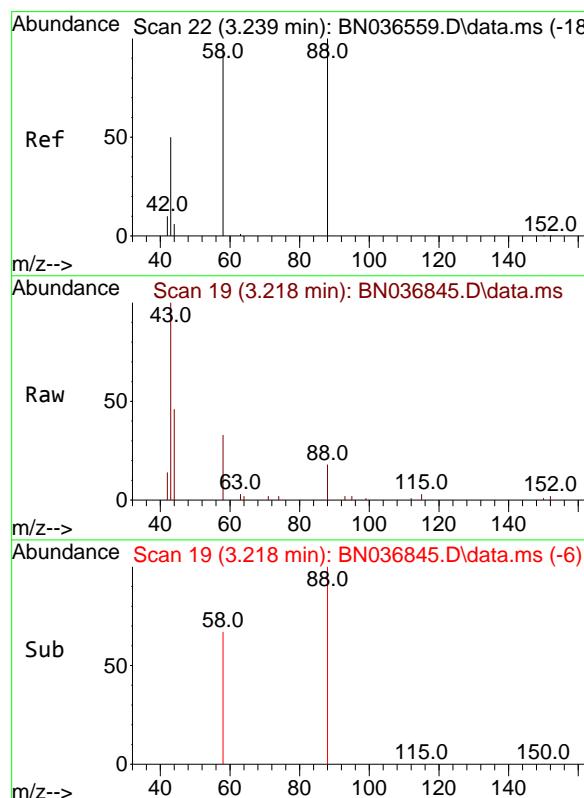
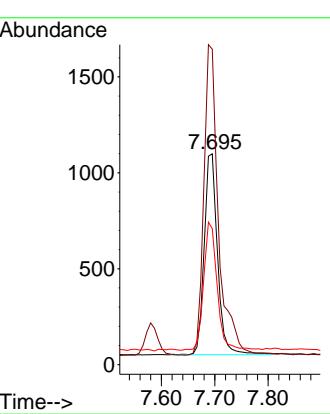


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.695 min Scan# 6  
Delta R.T. 0.007 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Instrument : BNA\_N  
ClientSampleId : PB167468BSD

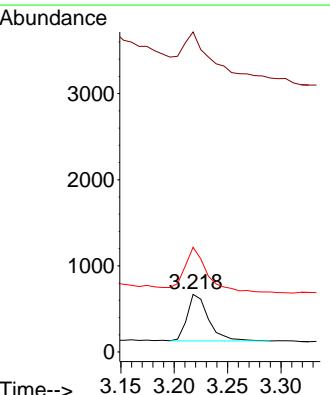
**Manual Integrations**  
**APPROVED**

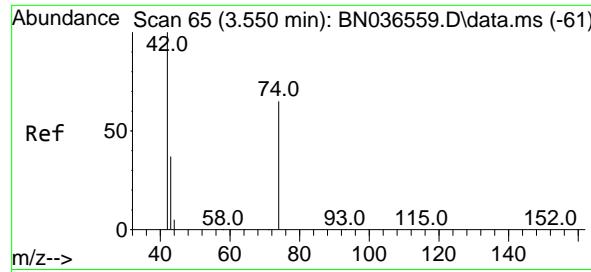
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



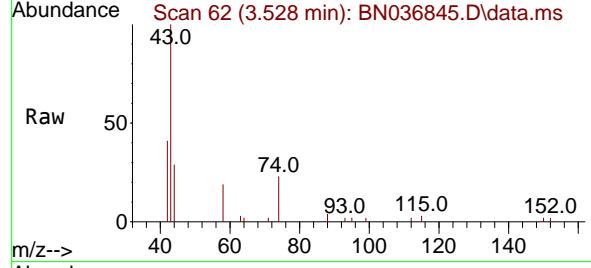
#2  
1,4-Dioxane  
Concen: 0.372 ng  
RT: 3.218 min Scan# 19  
Delta R.T. -0.007 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Tgt Ion: 88 Resp: 749  
Ion Ratio Lower Upper  
88 100  
43 138.7 37.8 56.8#  
58 104.5 67.4 101.2#

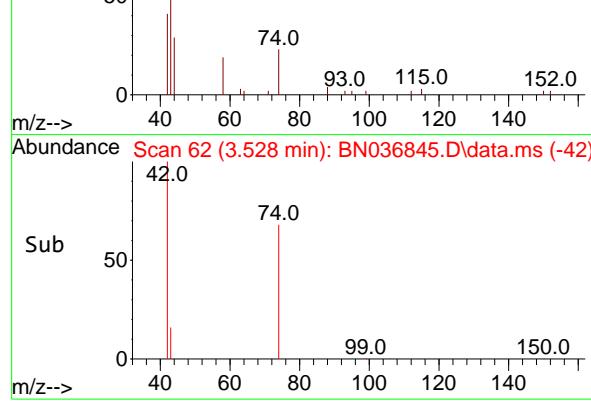




Ref



Raw



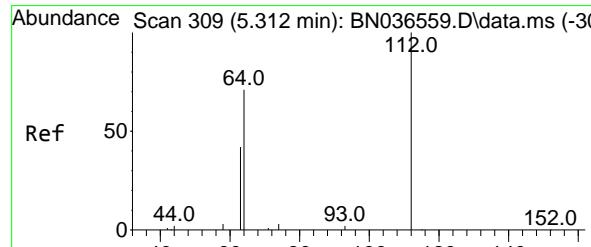
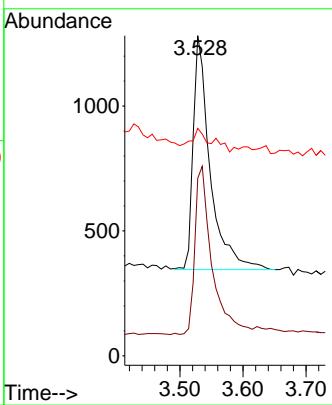
Sub

#3  
n-Nitrosodimethylamine  
Concen: 0.428 ng  
RT: 3.528 min Scan# 6  
Delta R.T. -0.007 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

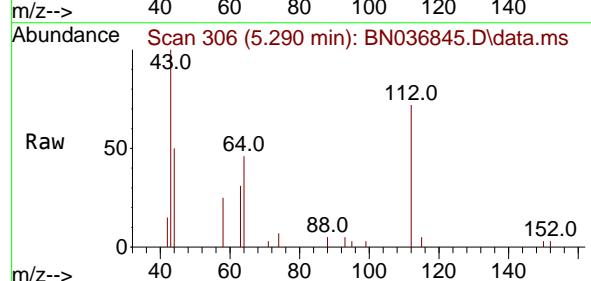
Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BSD

### Manual Integrations APPROVED

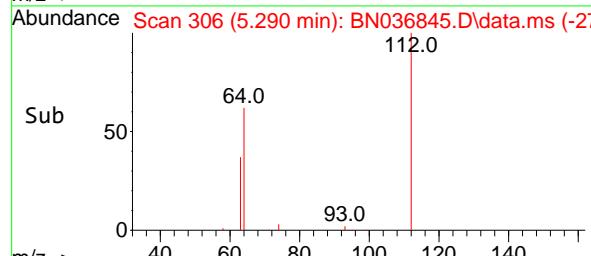
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



Ref

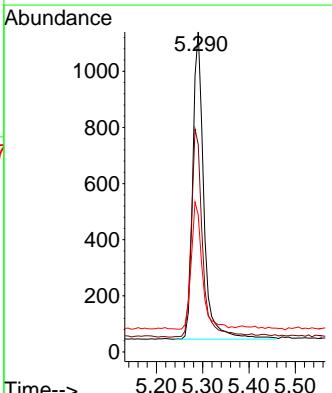


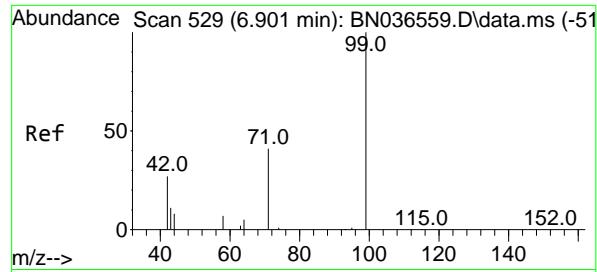
Raw



#4  
2-Fluorophenol  
Concen: 0.433 ng  
RT: 5.290 min Scan# 306  
Delta R.T. 0.007 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

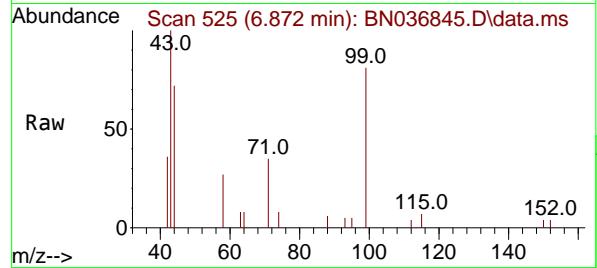
Tgt Ion:112 Resp: 1831  
Ion Ratio Lower Upper  
112 100  
64 69.3 53.1 79.7  
63 41.2 31.8 47.8





#5  
 Phenol-d6  
 Concen: 0.402 ng  
 RT: 6.872 min Scan# 51  
 Delta R.T. 0.007 min  
 Lab File: BN036845.D  
 Acq: 04 Apr 2025 20:58

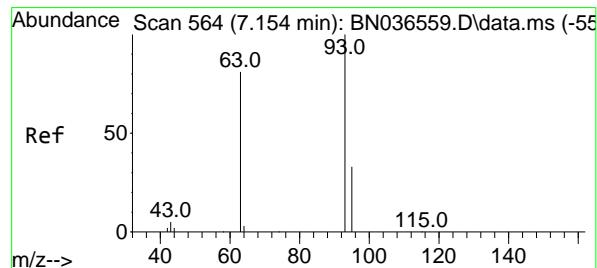
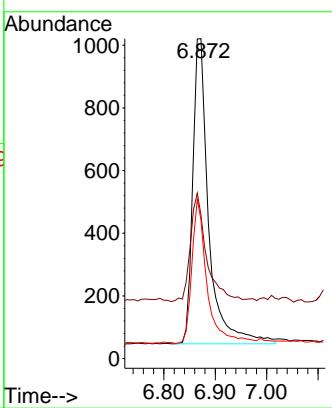
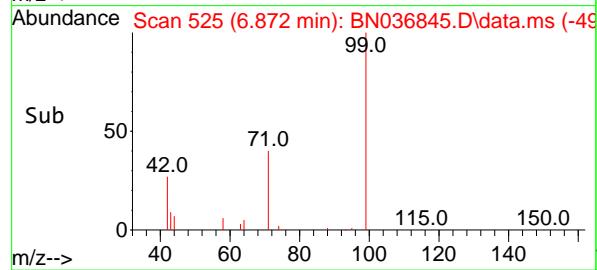
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BSD



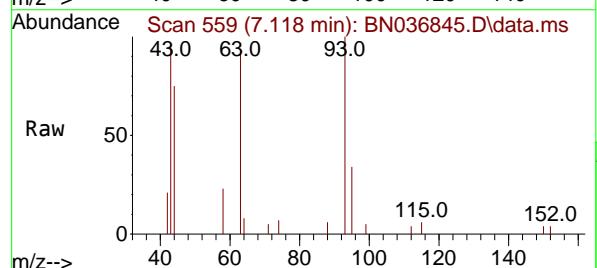
Tgt Ion: 99 Resp: 2101  
 Ion Ratio Lower Upper  
 99 100  
 42 35.9 26.5 39.7  
 71 44.6 34.1 51.1

### Manual Integrations APPROVED

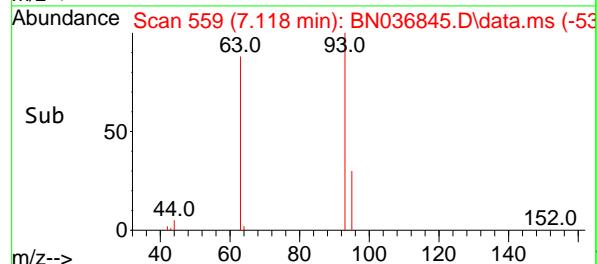
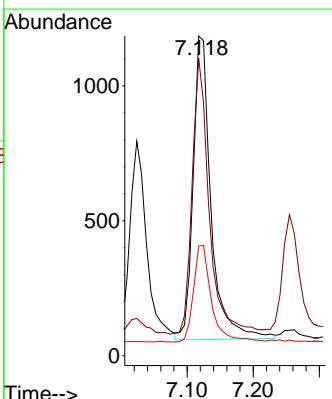
Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025

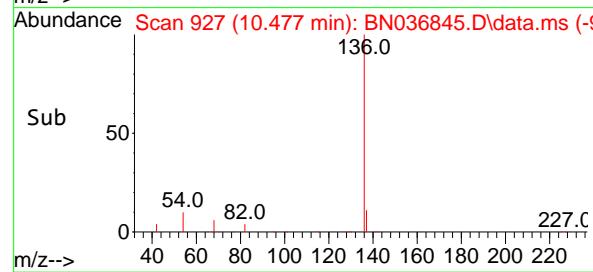
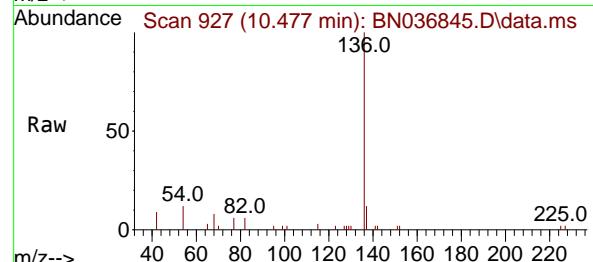
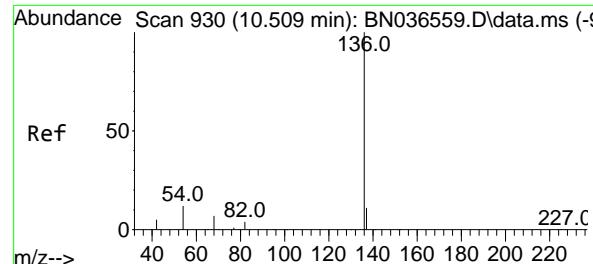


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.394 ng  
 RT: 7.118 min Scan# 559  
 Delta R.T. -0.000 min  
 Lab File: BN036845.D  
 Acq: 04 Apr 2025 20:58



Tgt Ion: 93 Resp: 2131  
 Ion Ratio Lower Upper  
 93 100  
 63 86.3 67.7 101.5  
 95 31.9 25.6 38.4





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.477 min Scan# 9

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

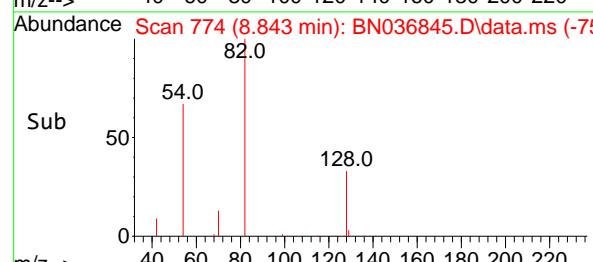
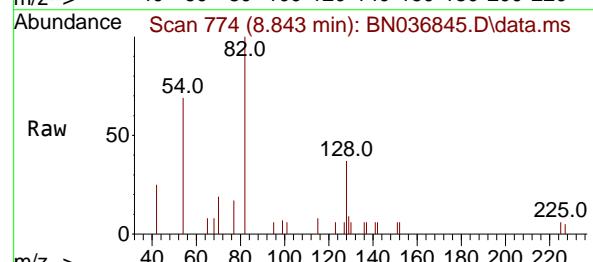
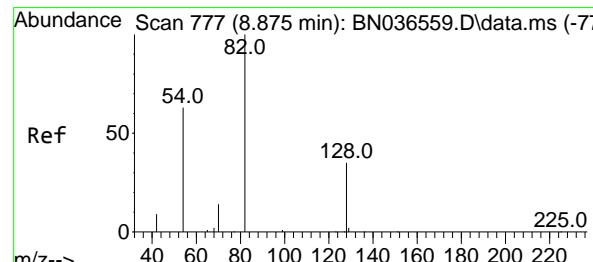
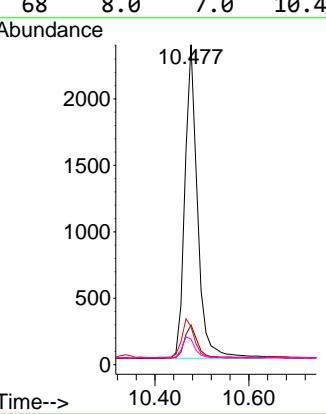
Instrument :

BNA\_N

ClientSampleId :

PB167468BSD

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025


#8

Nitrobenzene-d5

Concen: 0.348 ng

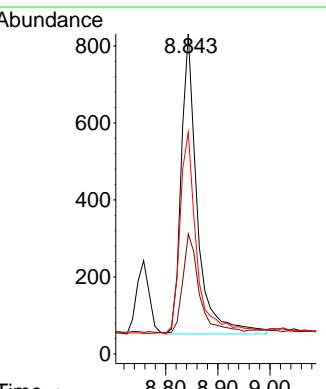
RT: 8.843 min Scan# 774

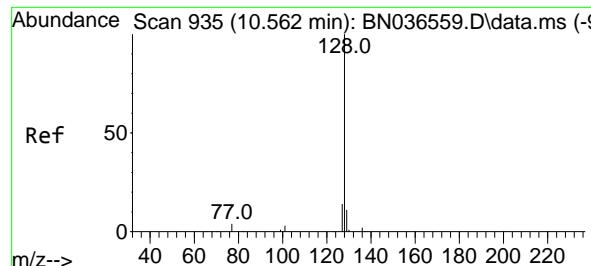
Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

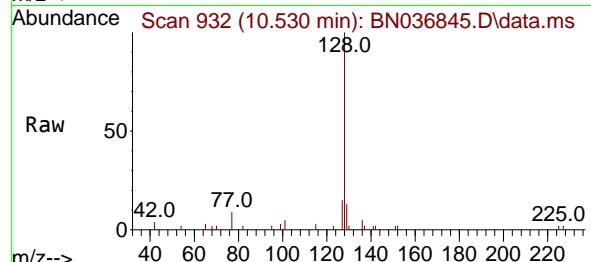
Tgt	Ion:	82	Resp:	1673
Ion	Ratio	Lower	Upper	
82	100			
128	37.4	30.6	45.8	
54	69.3	52.2	78.4	





#9  
Naphthalene  
Concen: 0.407 ng  
RT: 10.530 min Scan# 9  
Delta R.T. 0.010 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

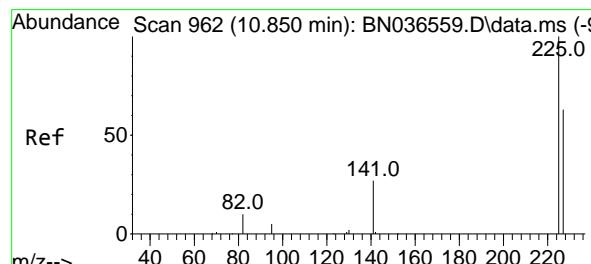
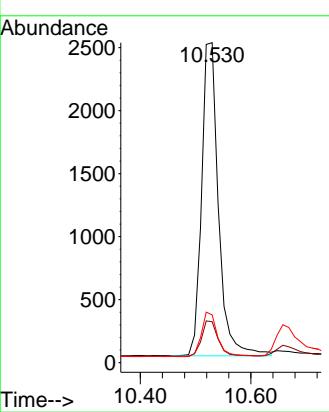
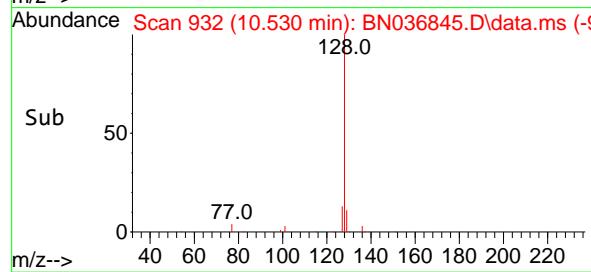
Instrument : BNA\_N  
ClientSampleId : PB167468BSD



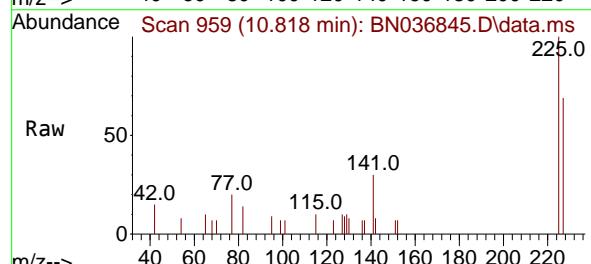
Tgt Ion:128 Resp: 5289  
Ion Ratio Lower Upper  
128 100  
129 12.8 9.8 14.6  
127 15.0 11.8 17.8

### Manual Integrations APPROVED

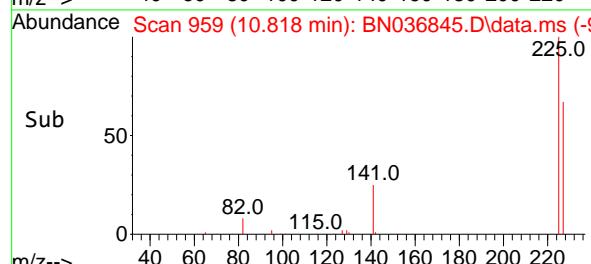
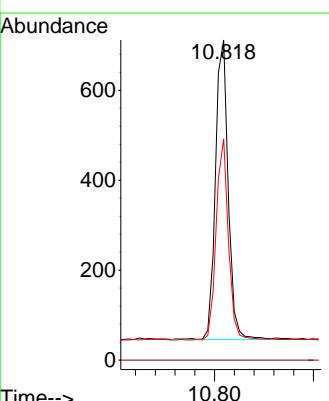
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

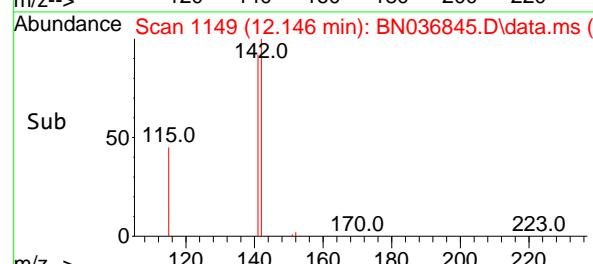
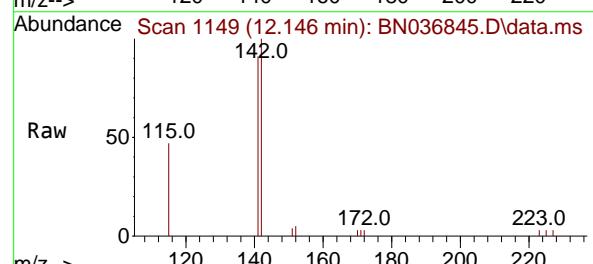
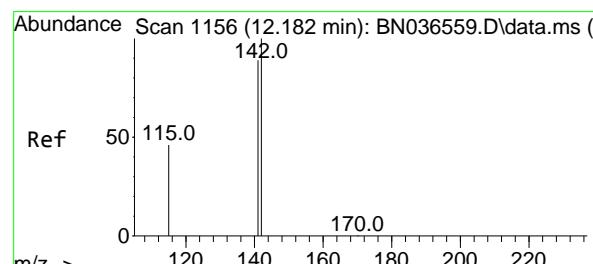
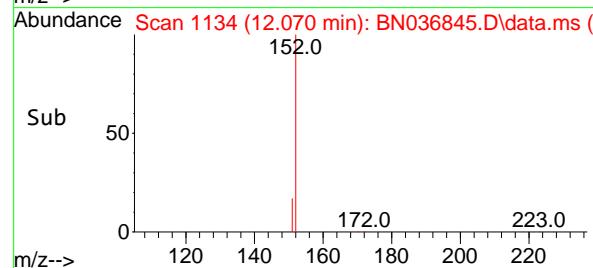
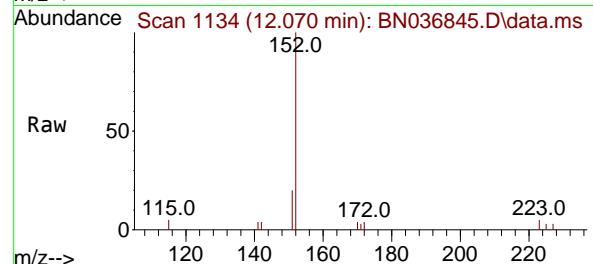
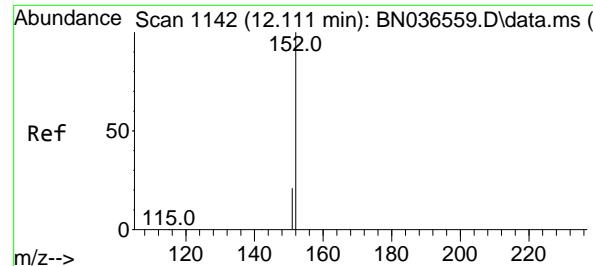


#10  
Hexachlorobutadiene  
Concen: 0.390 ng  
RT: 10.818 min Scan# 959  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58



Tgt Ion:225 Resp: 1193  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 64.6 51.8 77.8





#11

2-Methylnaphthalene-d10

Concen: 0.396 ng m

RT: 12.070 min Scan# 1142

Delta R.T. -0.000 min

Lab File: BN036845.D

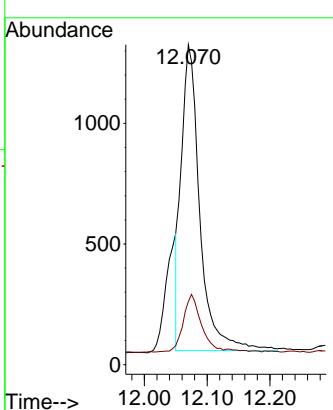
Acq: 04 Apr 2025 20:58

Instrument :

BNA\_N

ClientSampleId :

PB167468BSD

**Manual Integrations  
APPROVED**
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

#12

2-Methylnaphthalene

Concen: 0.401 ng

RT: 12.146 min Scan# 1149

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

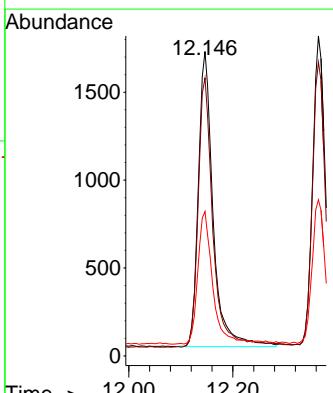
Tgt Ion:142 Resp: 3319

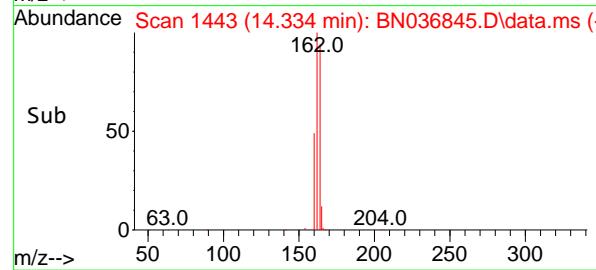
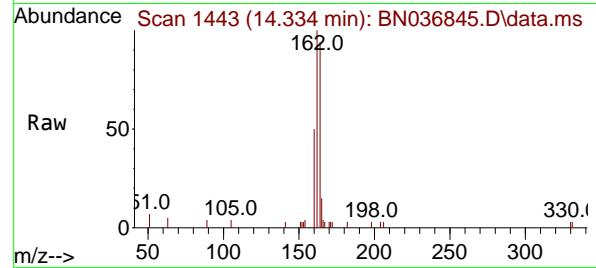
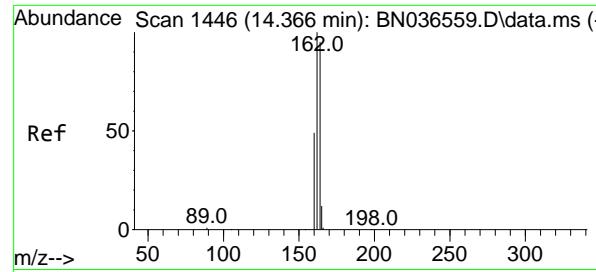
Ion Ratio Lower Upper

142 100

141 91.3 71.7 107.5

115 47.5 38.3 57.5





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.334 min Scan# 1443

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

Instrument :

BNA\_N

ClientSampleId :

PB167468BSD

Tgt Ion:164 Resp: 244.0

Ion Ratio Lower Upper

164 100

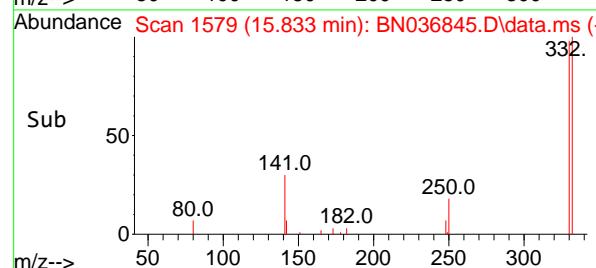
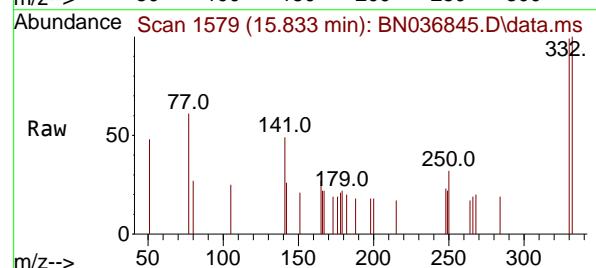
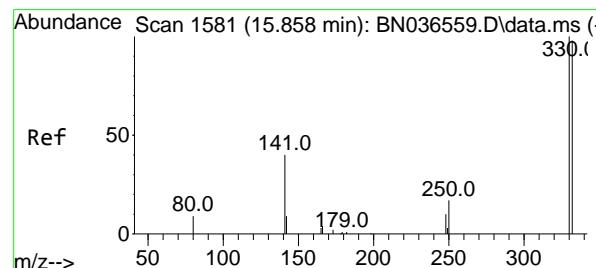
162 106.1 84.2 126.2

160 53.3 42.2 63.2

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 04/07/2025

Supervised By :Jagrut Upadhyay 04/07/2025



#14

2,4,6-Tribromophenol

Concen: 0.397 ng

RT: 15.833 min Scan# 1579

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

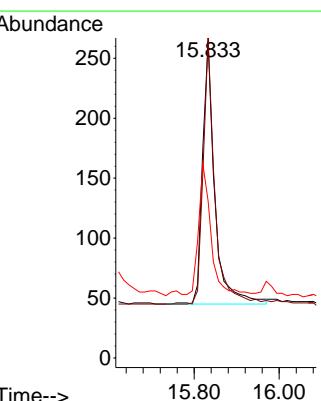
Tgt Ion:330 Resp: 440

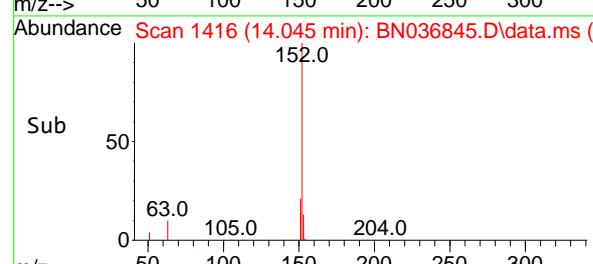
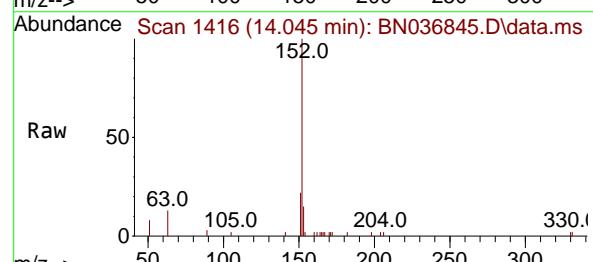
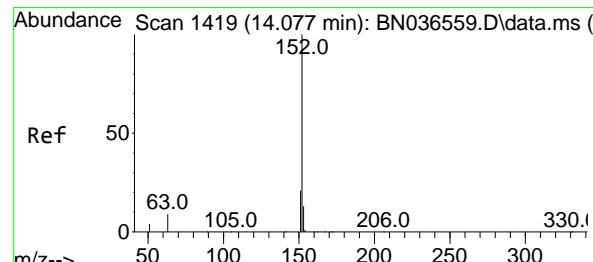
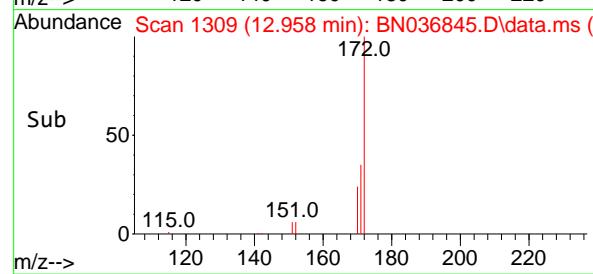
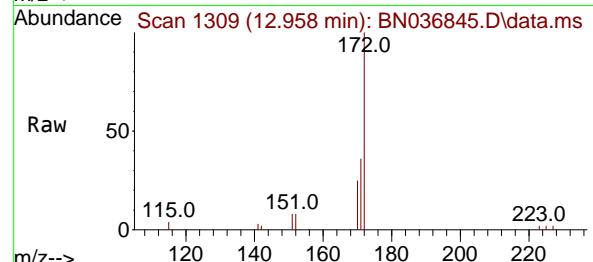
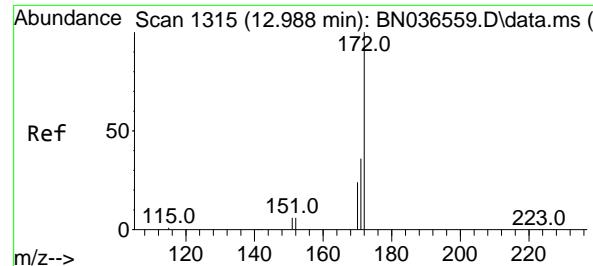
Ion Ratio Lower Upper

330 100

332 95.2 75.2 112.8

141 49.1 43.4 65.2





#15

2-Fluorobiphenyl

Concen: 0.367 ng

RT: 12.958 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

Instrument :

BNA\_N

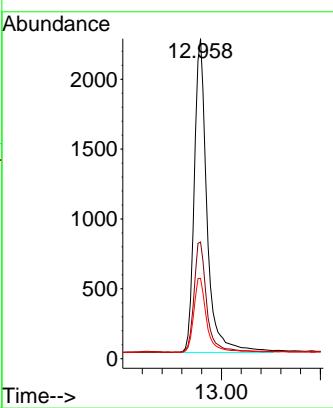
ClientSampleId :

PB167468BSD

Tgt	Ion:172	Resp:	5220
Ion	Ratio	Lower	Upper
172	100		
171	36.4	29.5	44.3
170	25.1	20.2	30.4

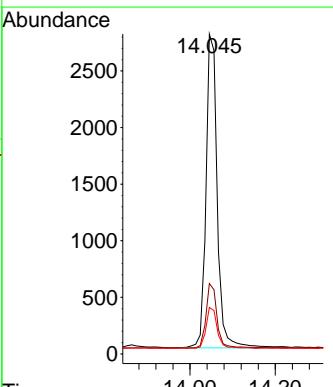
### Manual Integrations APPROVED

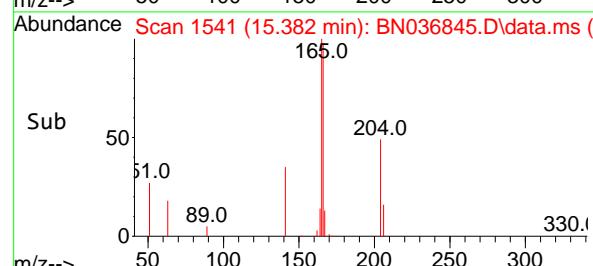
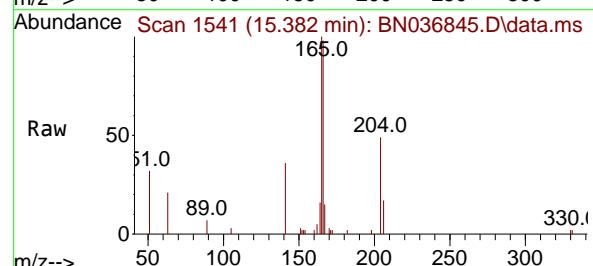
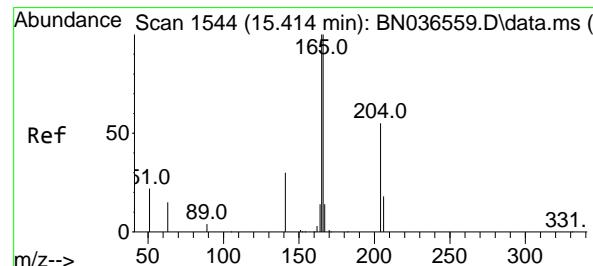
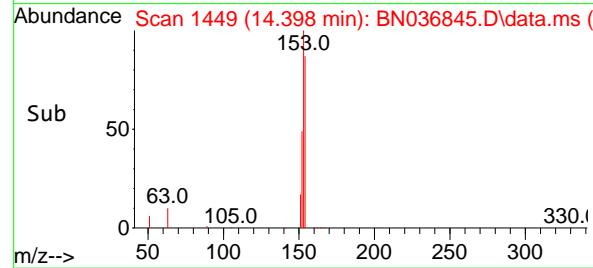
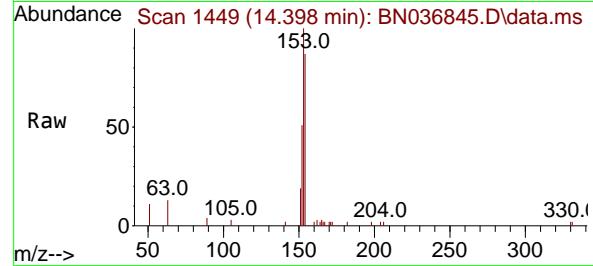
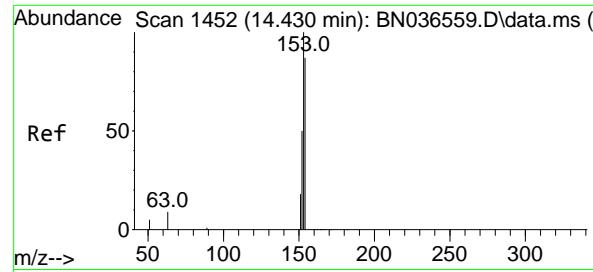
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#16  
Acenaphthylene  
Concen: 0.439 ng  
RT: 14.045 min Scan# 1416  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Tgt	Ion:152	Resp:	5066
Ion	Ratio	Lower	Upper
152	100		
151	19.9	16.2	24.4
153	13.1	10.6	15.8





#17

Acenaphthene

Concen: 0.429 ng

RT: 14.398 min Scan# 1449

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

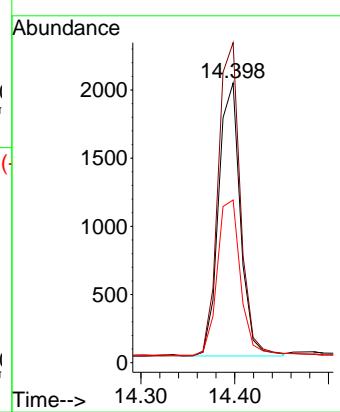
Instrument :

BNA\_N

ClientSampleId :

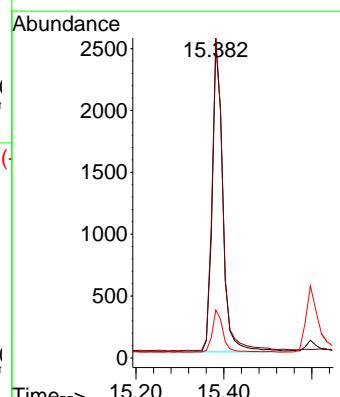
PB167468BSD

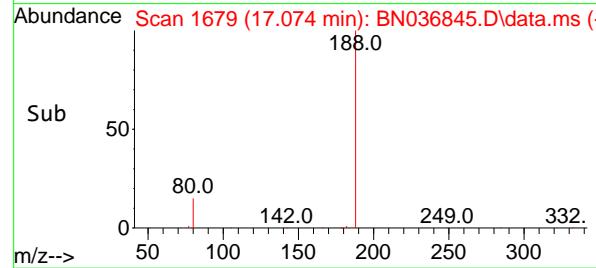
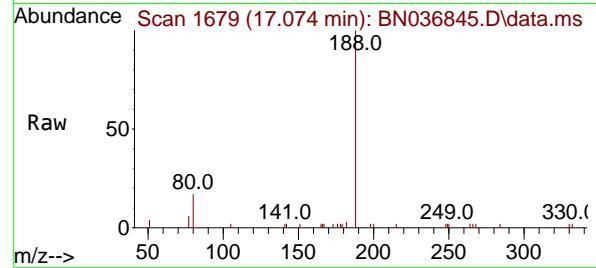
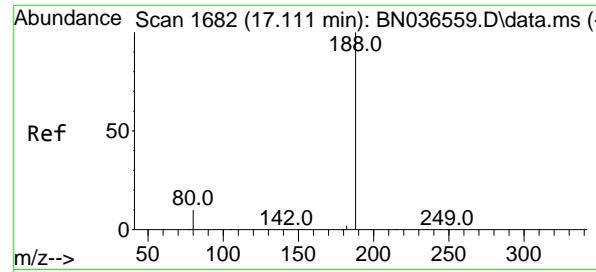
**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025


#18  
Fluorene  
Concen: 0.418 ng  
RT: 15.382 min Scan# 1541  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Tgt Ion:166 Resp: 4271  
Ion Ratio Lower Upper  
166 100  
165 100.6 79.8 119.8  
167 13.7 10.6 15.8





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.074 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

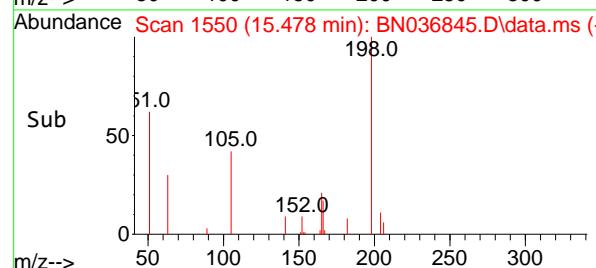
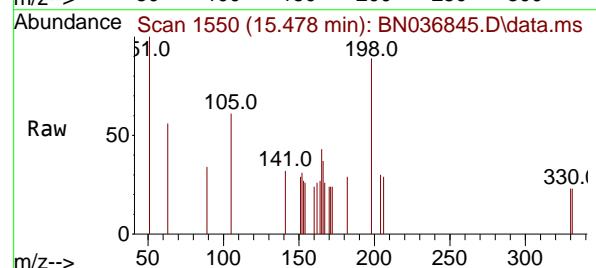
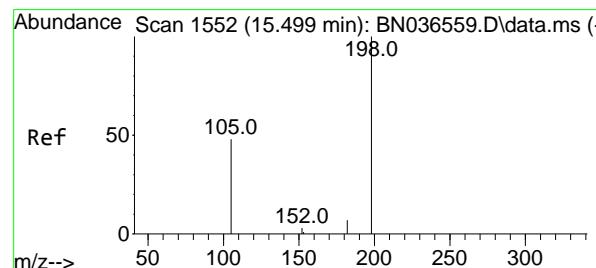
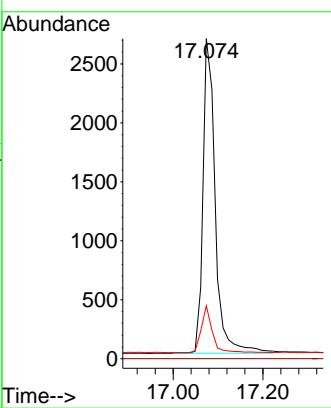
Instrument :

BNA\_N

ClientSampleId :

PB167468BSD

**Manual Integrations  
APPROVED**

 Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025


#20

4,6-Dinitro-2-methylphenol

Concen: 0.423 ng

RT: 15.478 min Scan# 1550

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

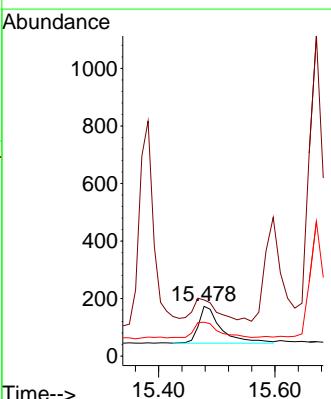
Tgt Ion:198 Resp: 358

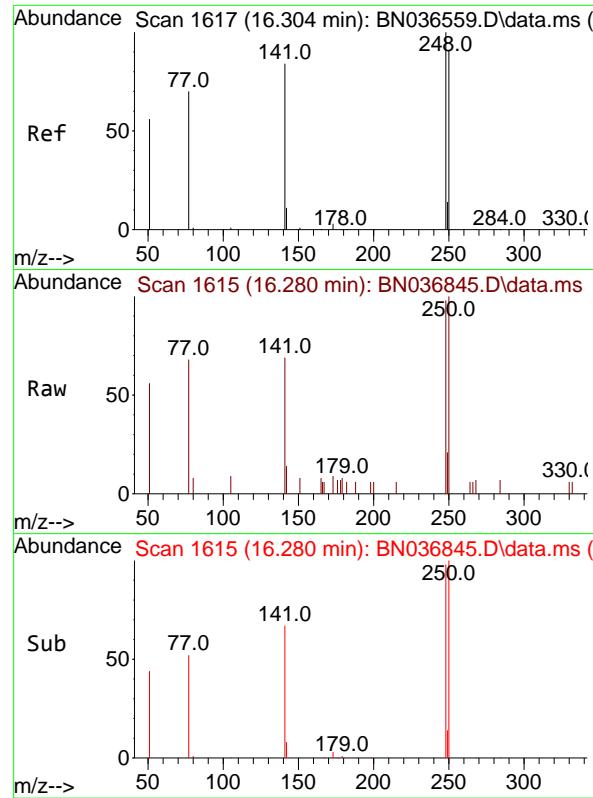
Ion Ratio Lower Upper

198 100

51 112.7 107.9 161.9

105 68.2 56.2 84.2



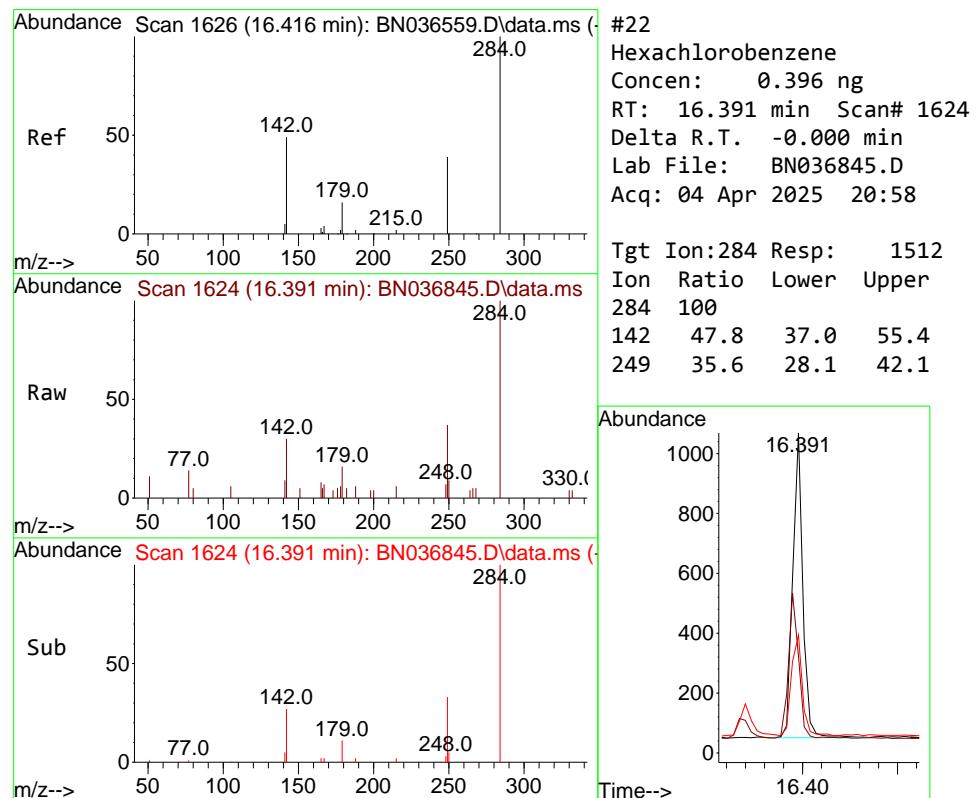
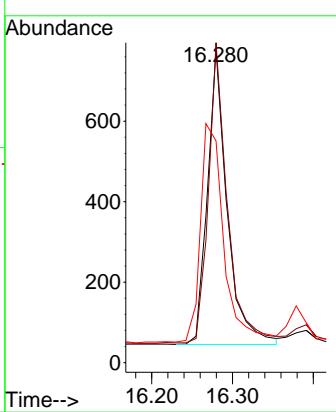


#21  
4-Bromophenyl-phenylether  
Concen: 0.394 ng  
RT: 16.280 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BSD

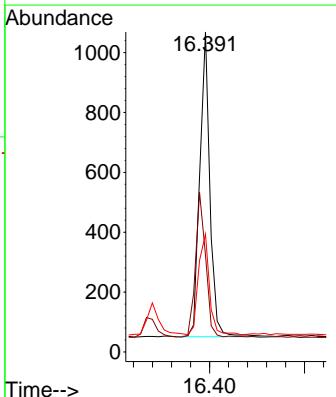
### Manual Integrations APPROVED

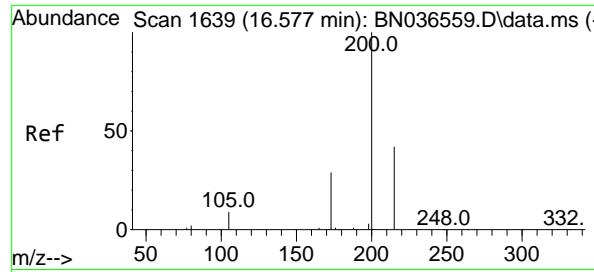
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#22  
Hexachlorobenzene  
Concen: 0.396 ng  
RT: 16.391 min Scan# 1624  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

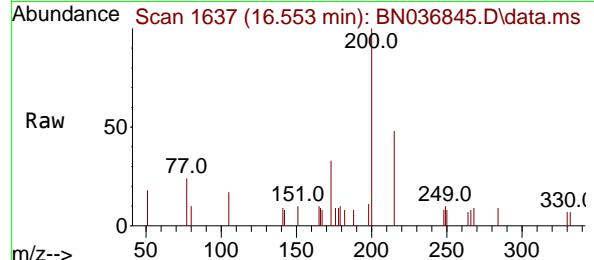
Tgt Ion:284 Resp: 1512  
Ion Ratio Lower Upper  
284 100  
142 47.8 37.0 55.4  
249 35.6 28.1 42.1





#23  
Atrazine  
Concen: 0.453 ng  
RT: 16.553 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

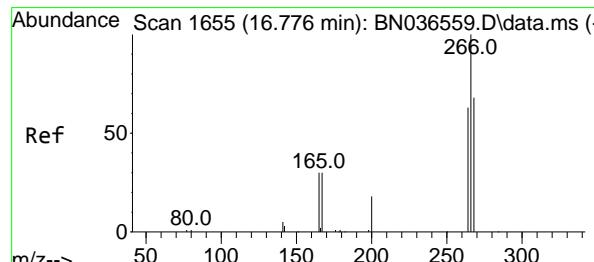
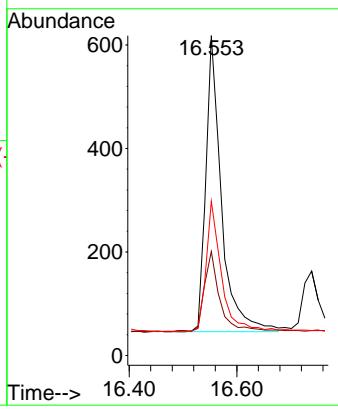
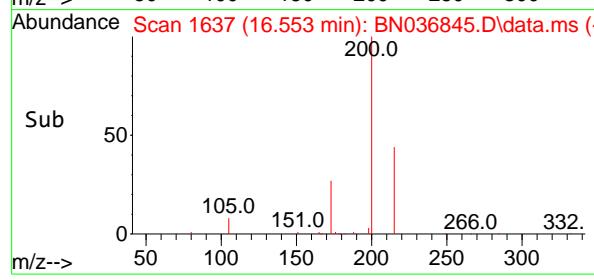
Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BSD



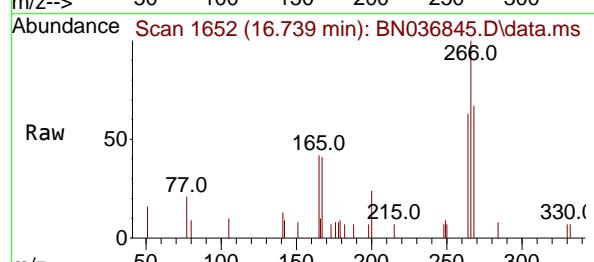
Tgt	Ion:200	Resp:	1143
Ion Ratio	Lower	Upper	
200	100		
173	32.5	27.3	40.9
215	48.2	36.8	55.2

### Manual Integrations APPROVED

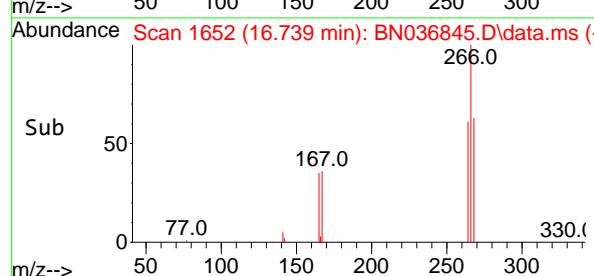
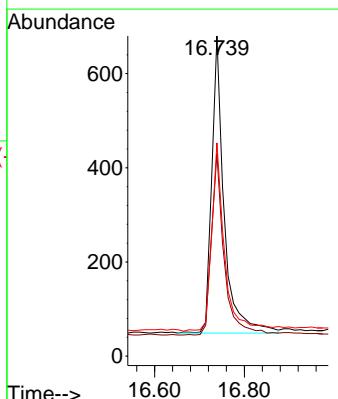
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

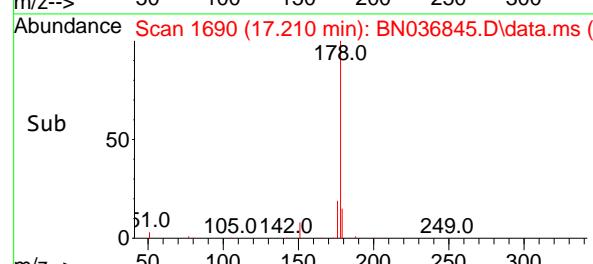
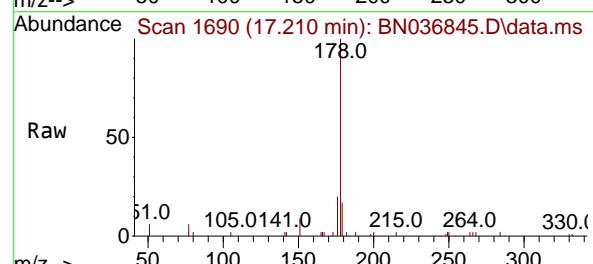
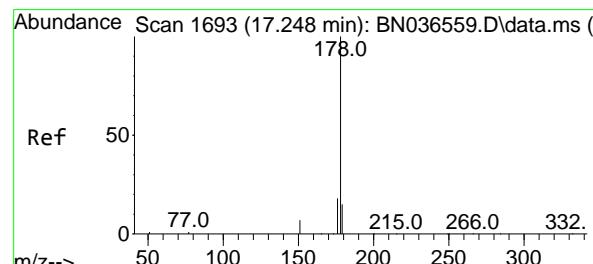
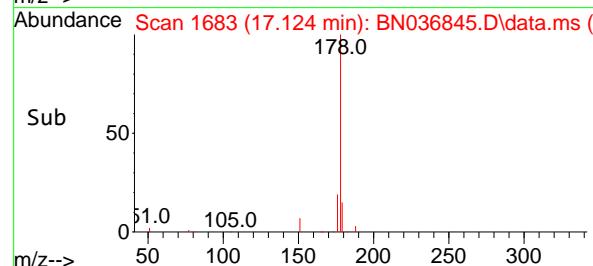
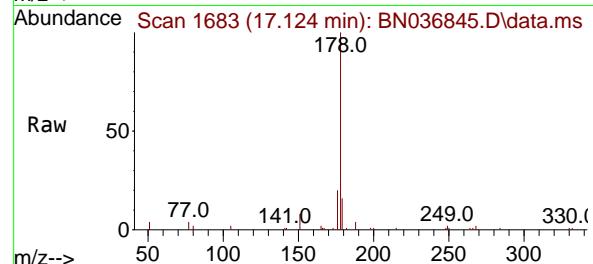
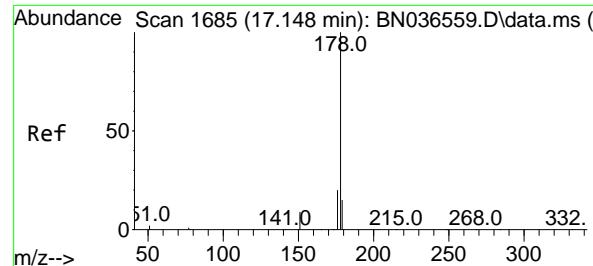


#24  
Pentachlorophenol  
Concen: 0.693 ng  
RT: 16.739 min Scan# 1652  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58



Tgt	Ion:266	Resp:	1207
Ion Ratio	Lower	Upper	
266	100		
264	62.7	49.6	74.4
268	65.5	50.9	76.3





#25

Phenanthrene

Concen: 0.437 ng

RT: 17.124 min Scan# 1

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

Instrument :

BNA\_N

ClientSampleId :

PB167468BSD

Tgt Ion:178 Resp: 6625

Ion Ratio Lower Upper

178 100

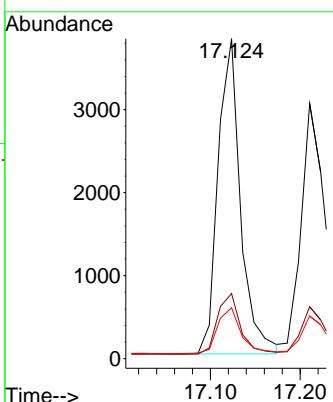
176 19.8 15.9 23.9

179 15.4 12.2 18.4

**Manual Integrations****APPROVED**

Reviewed By :Anahy Claudio 04/07/2025

Supervised By :Jagrut Upadhyay 04/07/2025



#26

Anthracene

Concen: 0.445 ng

RT: 17.210 min Scan# 1690

Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

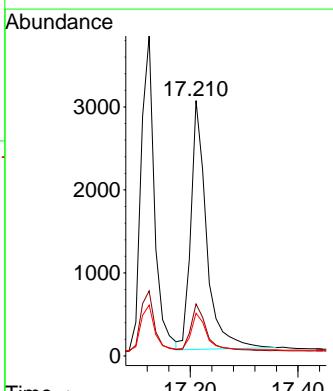
Tgt Ion:178 Resp: 6076

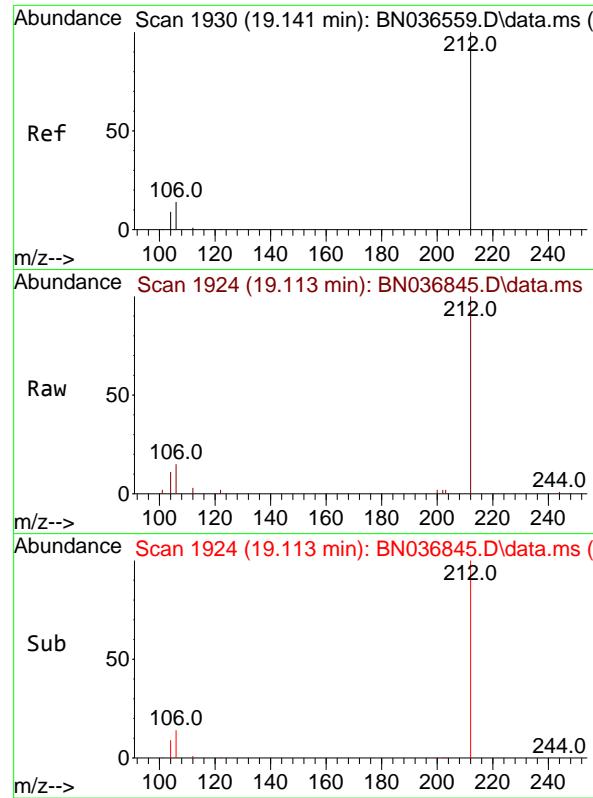
Ion Ratio Lower Upper

178 100

176 19.1 15.4 23.2

179 15.0 12.6 18.8



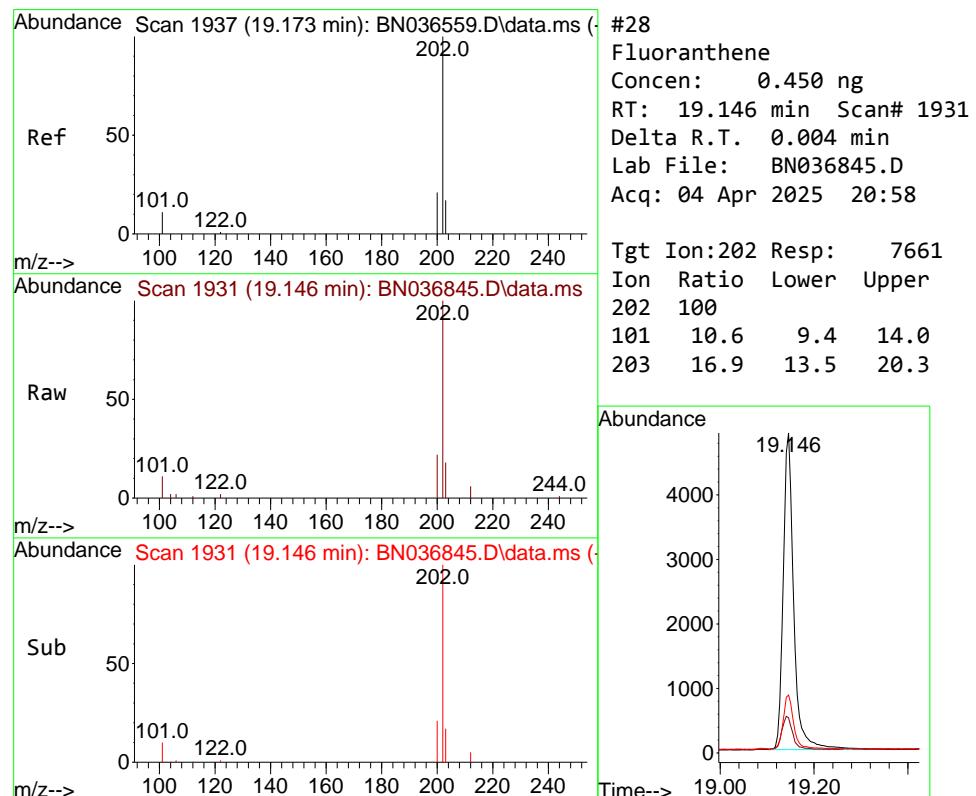
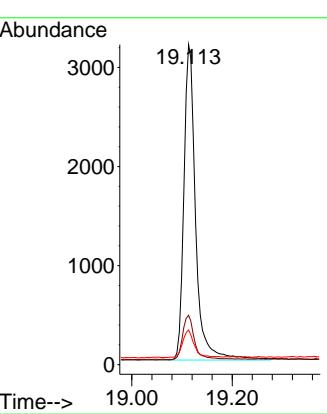


#27  
 Fluoranthene-d10  
 Concen: 0.400 ng  
 RT: 19.113 min Scan# 1  
 Delta R.T. -0.000 min  
 Lab File: BN036845.D  
 Acq: 04 Apr 2025 20:58

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB167468BSD

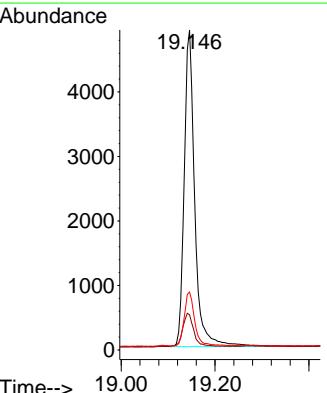
**Manual Integrations**  
**APPROVED**

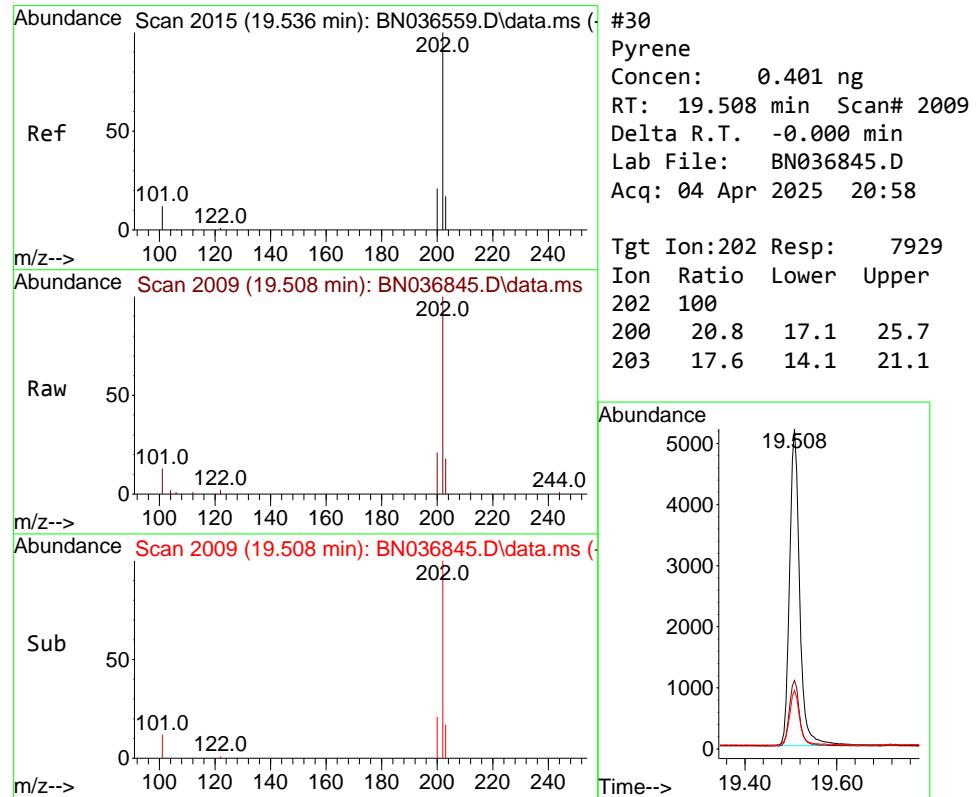
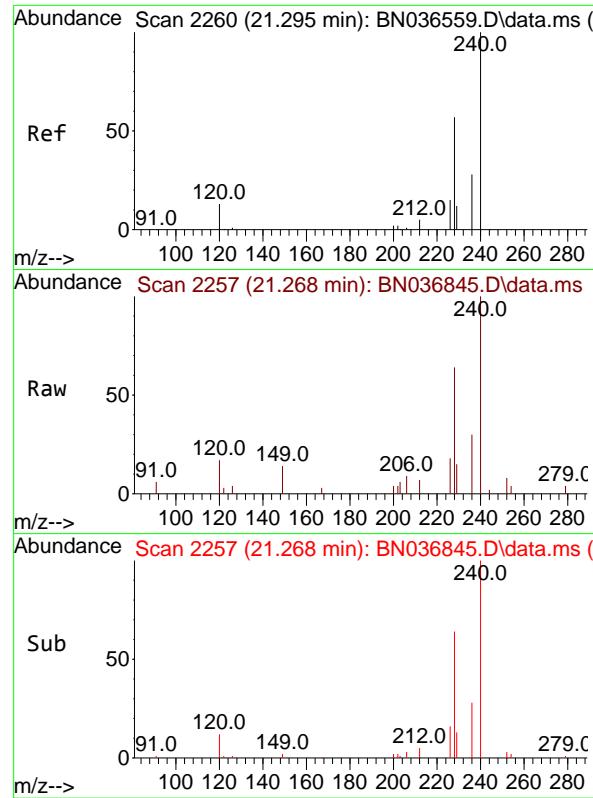
Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025

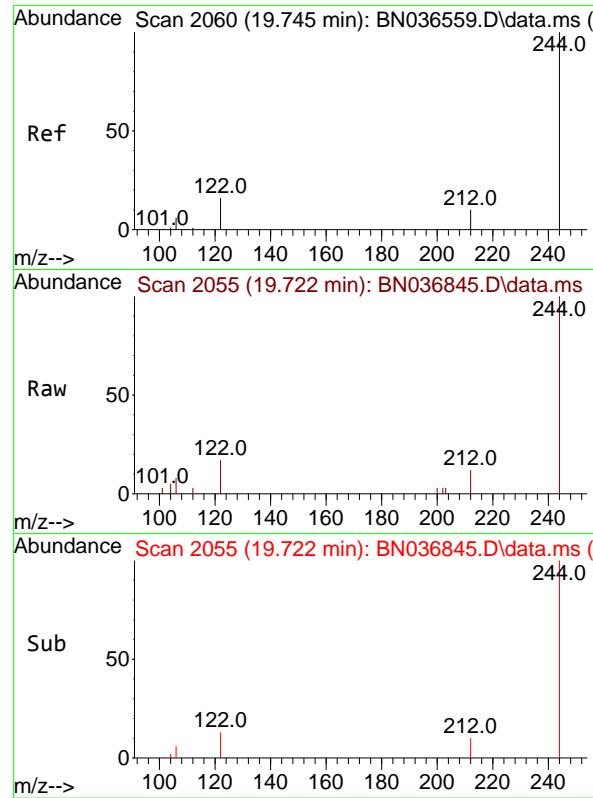


#28  
 Fluoranthene  
 Concen: 0.450 ng  
 RT: 19.146 min Scan# 1931  
 Delta R.T. 0.004 min  
 Lab File: BN036845.D  
 Acq: 04 Apr 2025 20:58

Tgt Ion:202 Resp: 7661  
 Ion Ratio Lower Upper  
 202 100  
 101 10.6 9.4 14.0  
 203 16.9 13.5 20.3





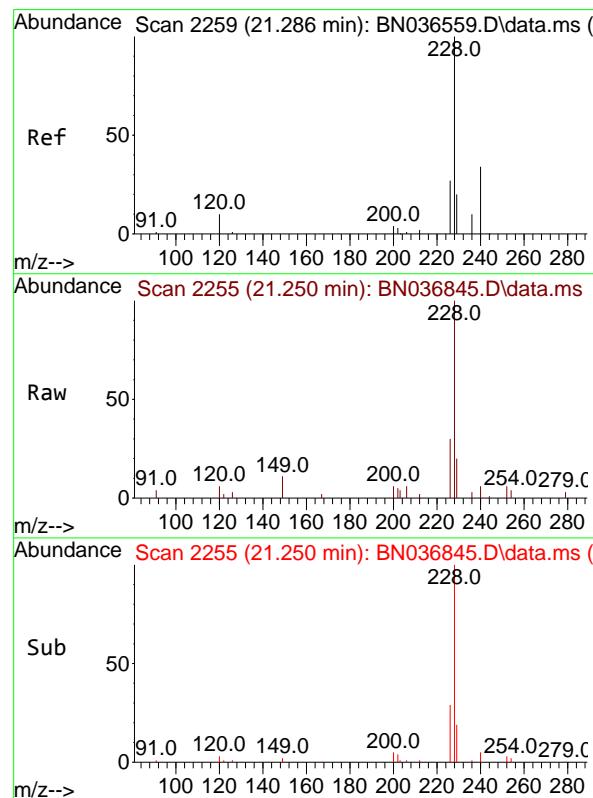
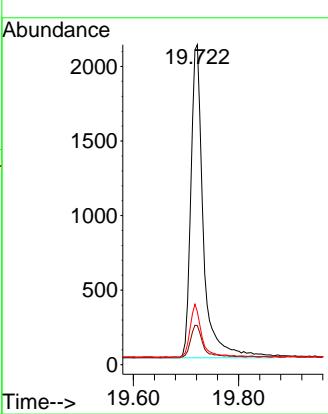


#31  
Terphenyl-d14  
Concen: 0.360 ng  
RT: 19.722 min Scan# 213479  
Delta R.T. 0.004 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Instrument : BNA\_N  
ClientSampleId : PB167468BSD

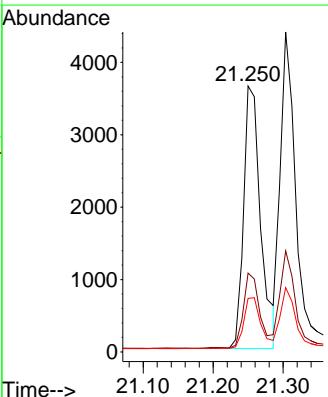
**Manual Integrations**  
**APPROVED**

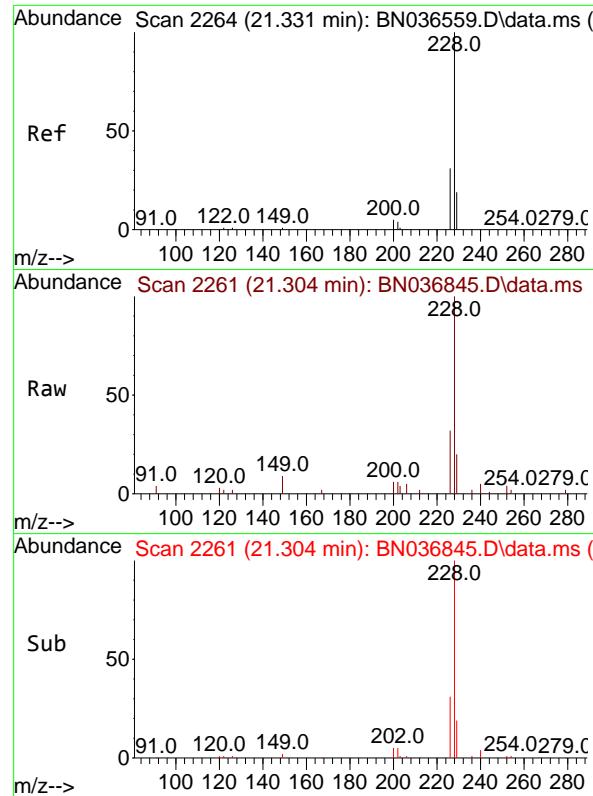
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#32  
Benzo(a)anthracene  
Concen: 0.437 ng  
RT: 21.250 min Scan# 2255  
Delta R.T. -0.009 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Tgt Ion:228 Resp: 6142  
Ion Ratio Lower Upper  
228 100  
226 29.6 22.5 33.7  
229 20.1 16.6 25.0





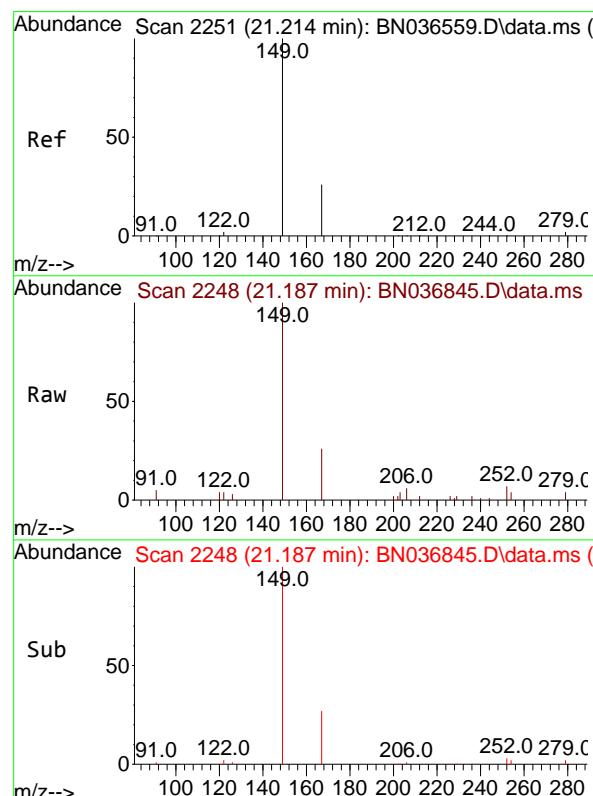
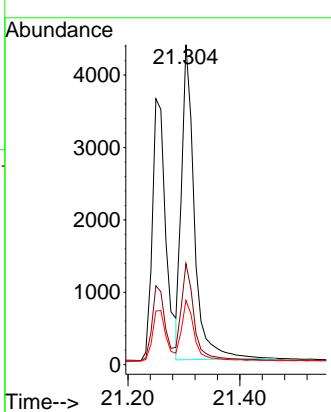
#33

Chrysene  
Concen: 0.450 ng  
RT: 21.304 min Scan# 2261  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BSD

### Manual Integrations APPROVED

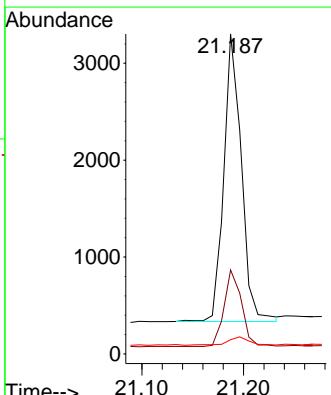
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

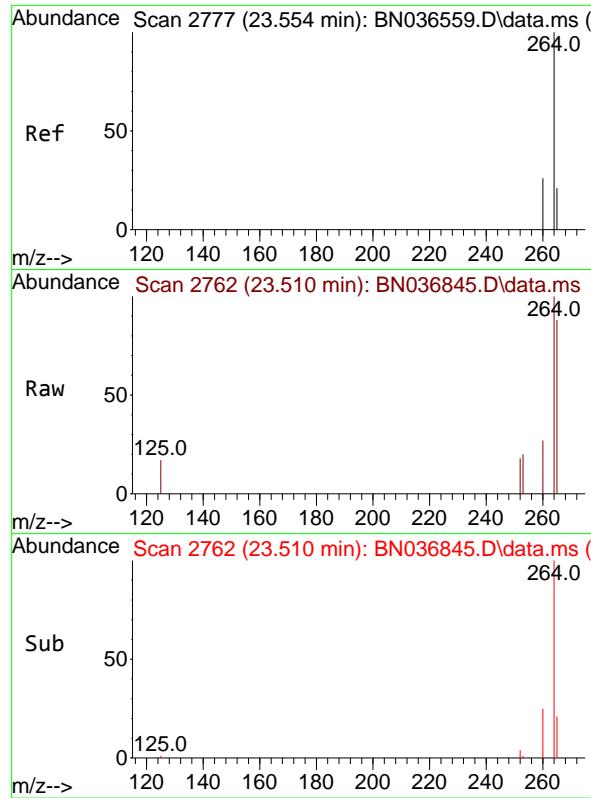


#34

Bis(2-ethylhexyl)phthalate  
Concen: 0.354 ng  
RT: 21.187 min Scan# 2248  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Tgt Ion:149 Resp: 3543  
Ion Ratio Lower Upper  
149 100  
167 26.7 20.7 31.1  
279 3.5 3.6 5.4#





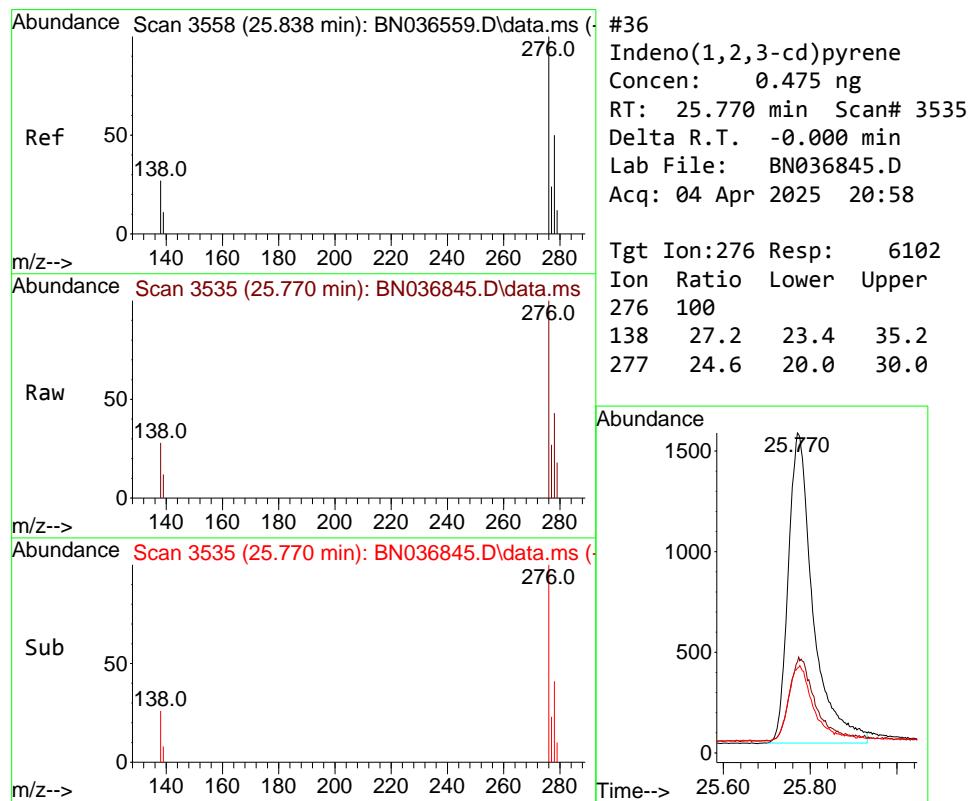
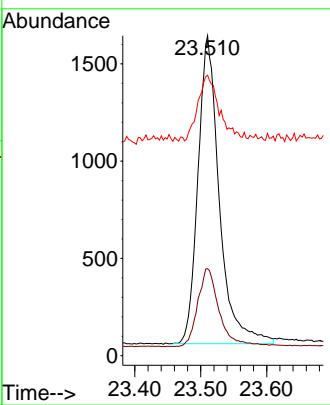
#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.510 min Scan# 2  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Instrument : BNA\_N  
ClientSampleId : PB167468BSD

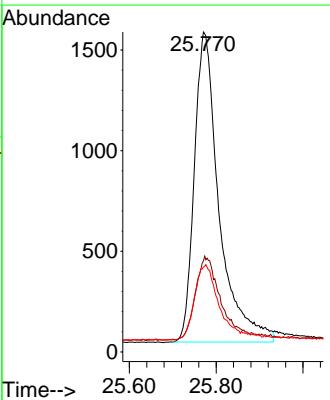
Manual Integrations  
**APPROVED**

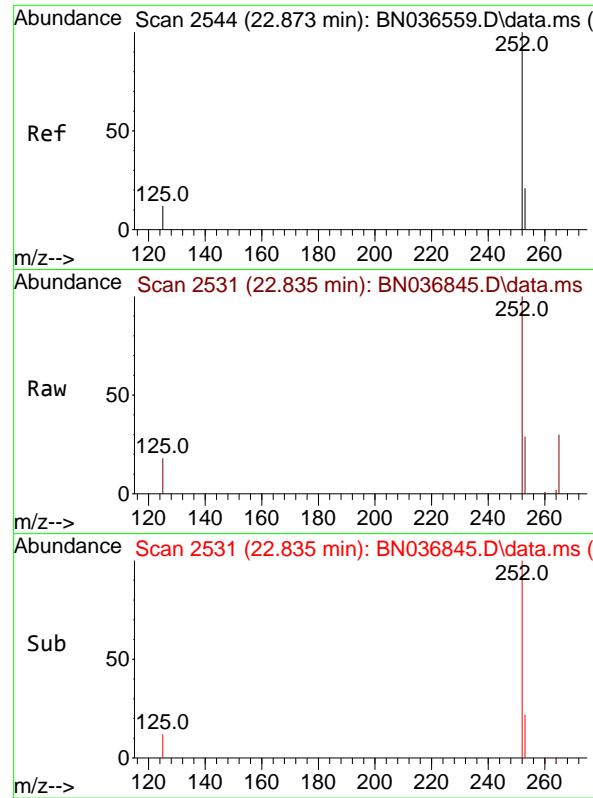
Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025

Tgt	Ion:264	Resp:	356:
Ion	Ratio	Lower	Upper
264	100		
260	27.2	22.6	33.8
265	87.7	88.1	132.1



Tgt	Ion:276	Resp:	6102
Ion	Ratio	Lower	Upper
276	100		
138	27.2	23.4	35.2
277	24.6	20.0	30.0





#37

Benzo(b)fluoranthene

Concen: 0.459 ng

RT: 22.835 min Scan# 2

Delta R.T. -0.003 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

Instrument :

BNA\_N

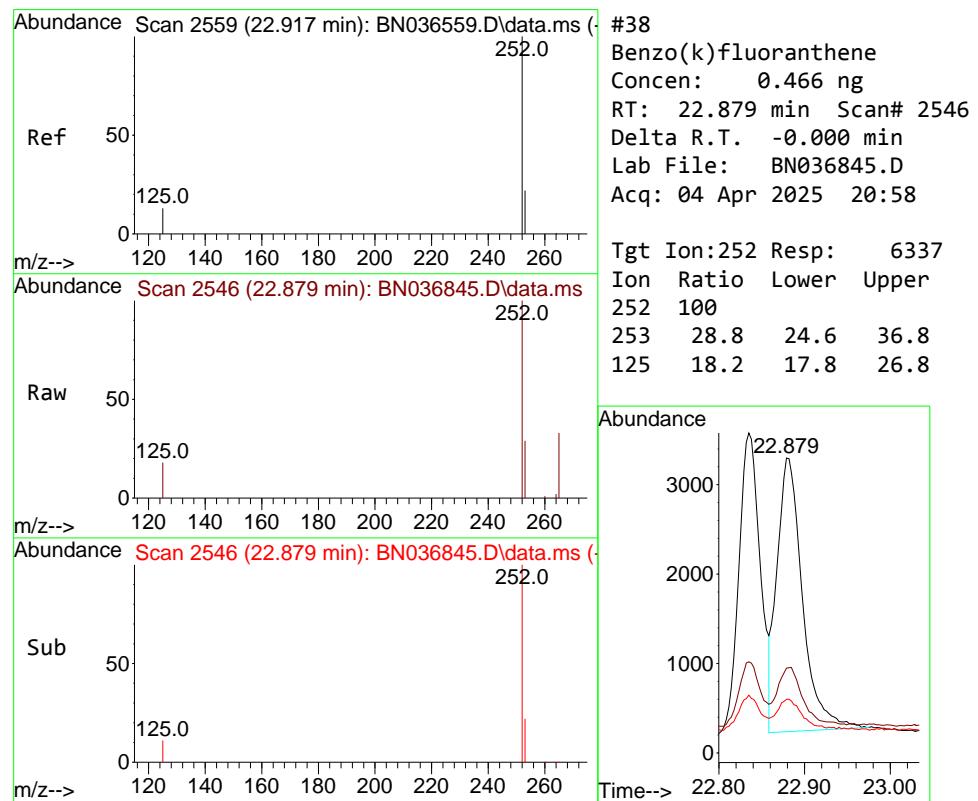
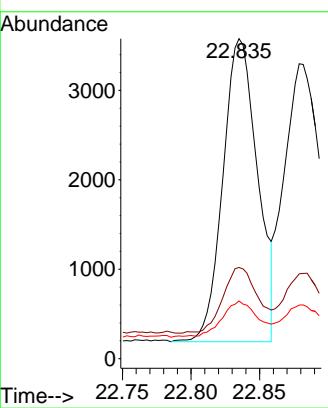
ClientSampleId :

PB167468BSD

Tgt	Ion:252	Resp:	5941
Ion	Ratio	Lower	Upper
252	100		
253	28.5	23.9	35.9
125	18.1	17.4	26.2

### Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025



#38

Benzo(k)fluoranthene

Concen: 0.466 ng

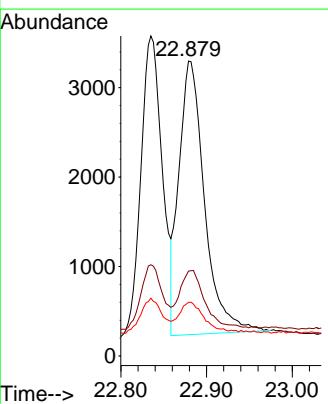
RT: 22.879 min Scan# 2546

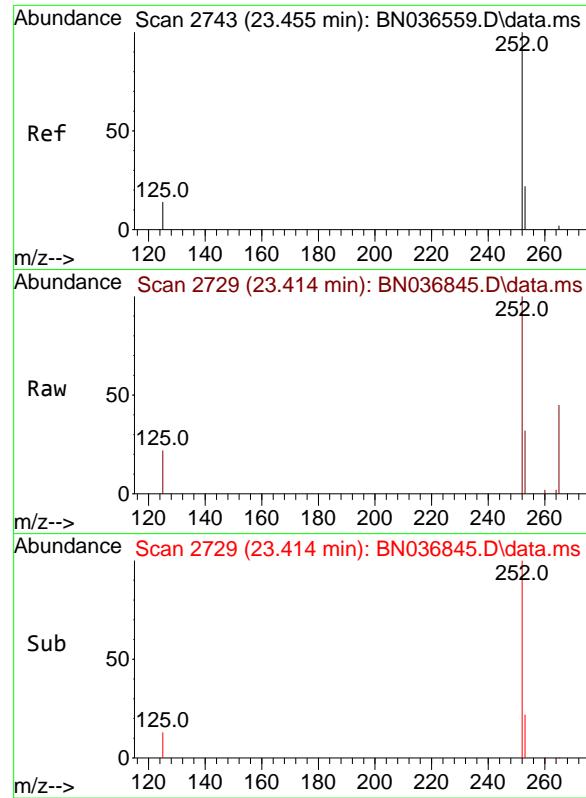
Delta R.T. -0.000 min

Lab File: BN036845.D

Acq: 04 Apr 2025 20:58

Tgt	Ion:252	Resp:	6337
Ion	Ratio	Lower	Upper
252	100		
253	28.8	24.6	36.8
125	18.2	17.8	26.8





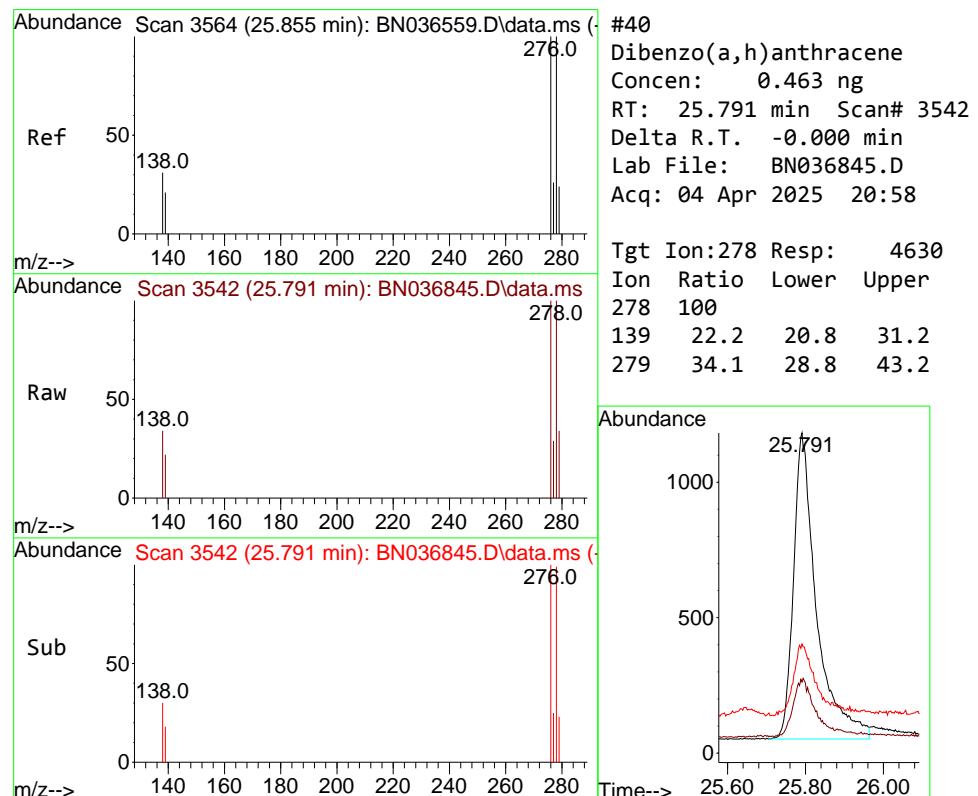
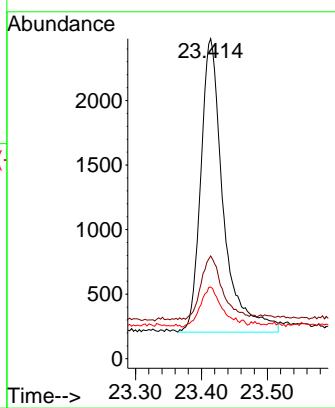
#39  
 Benzo(a)pyrene  
 Concen: 0.495 ng  
 RT: 23.414 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN036845.D  
 Acq: 04 Apr 2025 20:58

Instrument : BNA\_N  
 ClientSampleId : PB167468BSD

Tgt Ion:252 Resp: 5404  
 Ion Ratio Lower Upper  
 252 100  
 253 32.1 27.8 41.8  
 125 22.4 22.7 34.1

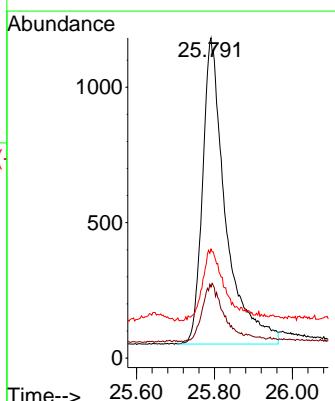
### Manual Integrations APPROVED

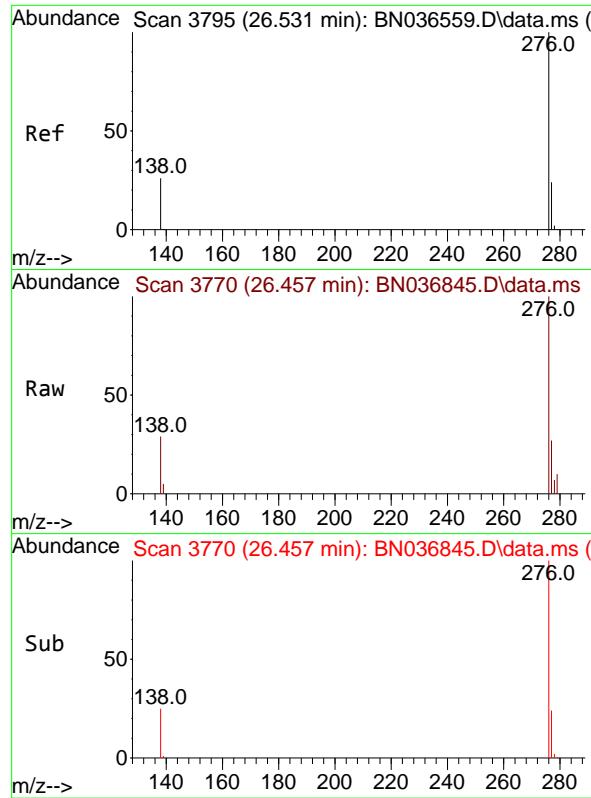
Reviewed By :Anahy Claudio 04/07/2025  
 Supervised By :Jagrut Upadhyay 04/07/2025



#40  
 Dibenzo(a,h)anthracene  
 Concen: 0.463 ng  
 RT: 25.791 min Scan# 3542  
 Delta R.T. -0.000 min  
 Lab File: BN036845.D  
 Acq: 04 Apr 2025 20:58

Tgt Ion:278 Resp: 4630  
 Ion Ratio Lower Upper  
 278 100  
 139 22.2 20.8 31.2  
 279 34.1 28.8 43.2





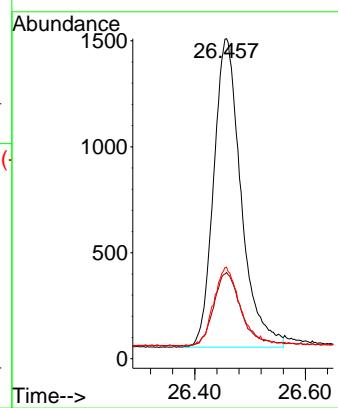
#41  
Benzo(g,h,i)perylene  
Concen: 0.436 ng  
RT: 26.457 min Scan# 3  
Delta R.T. -0.000 min  
Lab File: BN036845.D  
Acq: 04 Apr 2025 20:58

Instrument :  
BNA\_N  
ClientSampleId :  
PB167468BSD

Tgt	Ion:276	Resp:	4980
	Ion Ratio	Lower	Upper
276	100		
277	27.0	22.2	33.4
138	28.6	24.1	36.1

### Manual Integrations APPROVED

Reviewed By :Anahy Claudio 04/07/2025  
Supervised By :Jagrut Upadhyay 04/07/2025





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

## Manual Integration Report

Sequence:	BN031025	Instrument	BNA_n
-----------	----------	------------	-------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC0.1	BN036557.D	1,4-Dioxane	anahy	3/11/2025 9:18:29 AM	Jagrut	3/11/2025 10:27:49 AM	Peak Integrated by Software
SSTDICC0.2	BN036558.D	1,4-Dioxane	anahy	3/11/2025 9:19:12 AM	Jagrut	3/11/2025 10:27:51 AM	Peak Integrated by Software
SSTDCCC0.4	BN036572.D	Benzo(k)fluoranthene	anahy	3/11/2025 9:20:59 AM	Jagrut	3/11/2025 10:27:55 AM	Peak Integrated by Software
SSTDCCC0.4	BN036572.D	Chrysene-d12	anahy	3/11/2025 9:20:59 AM	Jagrut	3/11/2025 10:27:55 AM	Peak Integrated by Software



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

## Manual Integration Report

Sequence:	BN040425	Instrument	BNA_n
-----------	----------	------------	-------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
PB167468BS	BN036844.D	2-Methylnaphthalene-d10	anahy	4/7/2025 11:15:16 AM	Jagrut	4/7/2025 4:09:09 PM	Peak Integrated by Software
PB167468BSD	BN036845.D	2-Methylnaphthalene-d10	anahy	4/7/2025 11:15:47 AM	Jagrut	4/7/2025 4:09:12 PM	Peak Integrated by Software



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

### Manual Integration Report

Sequence:	BN040725	Instrument	BNA_n
-----------	----------	------------	-------

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

**Instrument ID: BNA\_N**

**Daily Analysis Runlog For Sequence/QCBatch ID # BN031025**

Review By	anahy	Review On	3/11/2025 9:36:11 AM
Supervise By	Jagrut	Supervise On	3/11/2025 10:28:11 AM
SubDirectory	BN031025	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method bn031025
STD. NAME	<b>STD REF.#</b>		
Tune/Reschk Initial Calibration Stds	SP6717 SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6735 SP6740,1ul/100ul sample SP6684		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036556.D	10 Mar 2025 11:03	RC/JU	Ok
2	SSTDICC0.1	BN036557.D	10 Mar 2025 11:42	RC/JU	Ok,M
3	SSTDICC0.2	BN036558.D	10 Mar 2025 12:18	RC/JU	Ok,M
4	SSTDICCC0.4	BN036559.D	10 Mar 2025 12:54	RC/JU	Ok
5	SSTDICC0.8	BN036560.D	10 Mar 2025 13:31	RC/JU	Ok
6	SSTDICC1.6	BN036561.D	10 Mar 2025 14:07	RC/JU	Ok
7	SSTDICC3.2	BN036562.D	10 Mar 2025 14:43	RC/JU	Ok
8	SSTDICC5.0	BN036563.D	10 Mar 2025 15:19	RC/JU	Ok
9	SSTDICV0.4	BN036564.D	10 Mar 2025 16:38	RC/JU	Ok
10	PB167057BL	BN036565.D	10 Mar 2025 17:14	RC/JU	Ok
11	Q1531-03	BN036566.D	10 Mar 2025 17:50	RC/JU	Ok
12	Q1531-04	BN036567.D	10 Mar 2025 18:26	RC/JU	Ok
13	Q1531-05	BN036568.D	10 Mar 2025 19:02	RC/JU	Ok
14	Q1531-06	BN036569.D	10 Mar 2025 19:38	RC/JU	Ok,M
15	Q1531-13	BN036570.D	10 Mar 2025 20:14	RC/JU	Ok
16	Q1531-14	BN036571.D	10 Mar 2025 20:50	RC/JU	Ok
17	SSTDCCC0.4	BN036572.D	10 Mar 2025 21:26	RC/JU	Ok,M

M : Manual Integration



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

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN040425**

Review By	anahy	Review On	4/7/2025 11:16:04 AM
Supervise By	Jagrut	Supervise On	4/7/2025 4:09:24 PM
SubDirectory	BN040425	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method bn031025
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6757 SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6735 SP6740,1ul/100ul sample SP6684		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036836.D	04 Apr 2025 13:03	RC/JU	Ok
2	SSTDCCC0.4	BN036837.D	04 Apr 2025 13:42	RC/JU	Ok
3	PB167468BL	BN036838.D	04 Apr 2025 16:46	RC/JU	Not Ok
4	Q1731-01	BN036839.D	04 Apr 2025 17:22	RC/JU	Ok
5	Q1731-02	BN036840.D	04 Apr 2025 17:58	RC/JU	Ok
6	Q1731-03	BN036841.D	04 Apr 2025 18:34	RC/JU	Ok
7	Q1731-04	BN036842.D	04 Apr 2025 19:10	RC/JU	Dilution
8	Q1731-05	BN036843.D	04 Apr 2025 19:46	RC/JU	Ok
9	PB167468BS	BN036844.D	04 Apr 2025 20:22	RC/JU	Ok,M
10	PB167468BSD	BN036845.D	04 Apr 2025 20:58	RC/JU	Ok,M

M : Manual Integration



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

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN040725**

Review By	anahy	Review On	4/8/2025 12:29:57 PM
Supervise By	Jagrut	Supervise On	4/10/2025 3:32:44 PM
SubDirectory	BN040725	HP Acquire Method	BNA_N, 8270_SIM HP Processing Method bn031025
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6757 SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6735 SP6740,1ul/100ul sample SP6684		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN036846.D	07 Apr 2025 08:31	RC/JU	Ok
2	SSTDCCC0.4	BN036847.D	07 Apr 2025 09:10	RC/JU	Ok
3	PB167468BL	BN036848.D	07 Apr 2025 09:46	RC/JU	Ok
4	Q1731-04DL	BN036849.D	07 Apr 2025 10:22	RC/JU	Ok
5	Q1736-02	BN036850.D	07 Apr 2025 13:06	RC/JU	Ok
6	Q1736-02MS	BN036851.D	07 Apr 2025 13:41	RC/JU	Ok
7	Q1736-02MSD	BN036852.D	07 Apr 2025 14:18	RC/JU	Ok
8	PB167475BS	BN036853.D	07 Apr 2025 14:54	RC/JU	Ok,M
9	PB167475BL	BN036854.D	07 Apr 2025 15:30	RC/JU	Ok
10	Q1736-01	BN036855.D	07 Apr 2025 16:06	RC/JU	Ok,M

M : Manual Integration

**Instrument ID:** BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN031025**

Review By	anahy	Review On	3/11/2025 9:36:11 AM
Supervise By	Jagrut	Supervise On	3/11/2025 10:28:11 AM
SubDirectory	BN031025	HP Acquire Method	BNA_N, 8270_HP Processing Method bn031025
STD. NAME	STD REF.#		
Tune/Reschk	SP6717		
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731		
CCC	SP6735		
Internal Standard/PEM	SP6740,1ul/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	BN036556.D	10 Mar 2025 11:03		RC/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN036557.D	10 Mar 2025 11:42	Compound #20 removed.	RC/JU	Ok,M
3	SSTDICC0.2	SSTDICC0.2	BN036558.D	10 Mar 2025 12:18		RC/JU	Ok,M
4	SSTDICCC0.4	SSTDICCC0.4	BN036559.D	10 Mar 2025 12:54		RC/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN036560.D	10 Mar 2025 13:31		RC/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN036561.D	10 Mar 2025 14:07	Compound #20 kept on QR.	RC/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN036562.D	10 Mar 2025 14:43	Method is good for DOD.	RC/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN036563.D	10 Mar 2025 15:19		RC/JU	Ok
9	SSTDICV0.4	ICVBN031025	BN036564.D	10 Mar 2025 16:38		RC/JU	Ok
10	PB167057BL	PB167057BL	BN036565.D	10 Mar 2025 17:14		RC/JU	Ok
11	Q1531-03	RE122D1-20250305	BN036566.D	10 Mar 2025 17:50		RC/JU	Ok
12	Q1531-04	RE126D1-20250306	BN036567.D	10 Mar 2025 18:26		RC/JU	Ok
13	Q1531-05	RE126D2-20250306	BN036568.D	10 Mar 2025 19:02		RC/JU	Ok
14	Q1531-06	DUP01-20250306	BN036569.D	10 Mar 2025 19:38		RC/JU	Ok,M
15	Q1531-13	RE108D1-20250306	BN036570.D	10 Mar 2025 20:14		RC/JU	Ok
16	Q1531-14	RE105D1-20250306	BN036571.D	10 Mar 2025 20:50		RC/JU	Ok
17	SSTDCCC0.4	SSTDCCC0.4EC	BN036572.D	10 Mar 2025 21:26		RC/JU	Ok,M

M : Manual Integration



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

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN040425**

Review By	anahy	Review On	4/7/2025 11:16:04 AM
Supervise By	Jagrut	Supervise On	4/7/2025 4:09:24 PM
SubDirectory	BN040425	HP Acquire Method	BNA_N, 8270_HP Processing Method bn031025
STD. NAME	STD REF.#		
Tune/Reschk Initial Calibration Stds	SP6757 SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6735 SP6740,1ul/100ul sample SP6684		

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN036836.D	04 Apr 2025 13:03		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036837.D	04 Apr 2025 13:42		RC/JU	Ok
3	PB167468BL	PB167468BL	BN036838.D	04 Apr 2025 16:46	Not Used	RC/JU	Not Ok
4	Q1731-01	RMW-01B-82-040325	BN036839.D	04 Apr 2025 17:22		RC/JU	Ok
5	Q1731-02	RMW-04B-91-040325	BN036840.D	04 Apr 2025 17:58		RC/JU	Ok
6	Q1731-03	RMW-01B-82-040325-F	BN036841.D	04 Apr 2025 18:34		RC/JU	Ok
7	Q1731-04	RMW-03B-90-040325	BN036842.D	04 Apr 2025 19:10	Need 5X Dilution	RC/JU	Dilution
8	Q1731-05	EB01-040325	BN036843.D	04 Apr 2025 19:46		RC/JU	Ok
9	PB167468BS	PB167468BS	BN036844.D	04 Apr 2025 20:22		RC/JU	Ok,M
10	PB167468BSD	PB167468BSD	BN036845.D	04 Apr 2025 20:58		RC/JU	Ok,M

M : Manual Integration



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

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN040725**

Review By	anahy	Review On	4/8/2025 12:29:57 PM
Supervise By	Jagrut	Supervise On	4/10/2025 3:32:44 PM
SubDirectory	BN040725	HP Acquire Method	BNA_N, 8270_HP Processing Method bn031025
STD. NAME	STD REF.#		
Tune/Reschk	SP6757		
Initial Calibration Stds	SP6738,SP6736,SP6735,SP6734,SP6733,SP6732,SP6731		
CCC	SP6735		
Internal Standard/PEM	SP6740,1ul/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	BN036846.D	07 Apr 2025 08:31		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN036847.D	07 Apr 2025 09:10		RC/JU	Ok
3	PB167468BL	PB167468BL	BN036848.D	07 Apr 2025 09:46		RC/JU	Ok
4	Q1731-04DL	RMW-03B-90-040325D	BN036849.D	07 Apr 2025 10:22		RC/JU	Ok
5	Q1736-02	GST2	BN036850.D	07 Apr 2025 13:06		RC/JU	Ok
6	Q1736-02MS	GST2MS	BN036851.D	07 Apr 2025 13:41		RC/JU	Ok
7	Q1736-02MSD	GST2MSD	BN036852.D	07 Apr 2025 14:18		RC/JU	Ok
8	PB167475BS	PB167475BS	BN036853.D	07 Apr 2025 14:54		RC/JU	Ok,M
9	PB167475BL	PB167475BL	BN036854.D	07 Apr 2025 15:30		RC/JU	Ok
10	Q1736-01	GST1	BN036855.D	07 Apr 2025 16:06		RC/JU	Ok,M

M : Manual Integration

SOP ID:	M3510C,3580A-Extraction SVOC-20		
Clean Up SOP #:	N/A	Extraction Start Date :	04/04/2025
Matrix :	Water	Extraction Start Time :	11:35
Weigh By:	N/A	Extraction End Date :	04/04/2025
Balance check:	N/A	Extraction End Time :	16:25
Balance ID:	N/A	pH Meter ID:	N/A
pH Strip Lot#:	E3880	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	SP6739
Surrogate	1.0ML	0.4 PPM	SP6755
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3904
Baked Na2SO4	N/A	EP2597
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-1,2 Envap ID: NEVAP-02  
 KD Bath Temperature: 60 °C Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
04/04/25	R.P (SPT-Lab)	Rcl/SVOC
16:30	Preparation Group	Analysis Group

**Analytical Method:** M3510C,3580A-Extraction SVOC-20

**Concentration Date:** 04/04/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB167468BL	SBLK468	SVOC-SIMGrou p1	1000	6	ritesh	rajesh	1			SEP-01
PB167468BS	SLCS468	SVOC-SIMGrou p1	1000	6	ritesh	rajesh	1			2
PB167468BS D	SLCSD468	SVOC-SIMGrou p1	1000	6	ritesh	rajesh	1			3
Q1731-01	RMW-01B-82-040325	SVOC-SIMGrou p1	980	6	ritesh	rajesh	1	C		4
Q1731-02	RMW-04B-91-040325	SVOC-SIMGrou p1	980	6	ritesh	rajesh	1	C		5
Q1731-03	RMW-01B-82-040325-FD	SVOC-SIMGrou p1	980	6	ritesh	rajesh	1	C		6
Q1731-04	RMW-03B-90-040325	SVOC-SIMGrou p1	980	6	ritesh	rajesh	1	C		7
Q1731-05	EB01-040325	SVOC-SIMGrou p1	960	6	ritesh	rajesh	1	G		8

## WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q1731

WorkList ID : 188748

Department : Extraction

Date : 04-04-2025 11:34:23

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q1731-01	RMW-01B-82-040325	Water	SVOC-SIMGroup1	Cool 4 deg C	JAC005	L31	04/03/2025	8270-Modified
Q1731-02	RMW-04B-91-040325	Water	SVOC-SIMGroup1	Cool 4 deg C	JAC005	L31	04/03/2025	8270-Modified
Q1731-03	RMW-01B-82-040325-FD	Water	SVOC-SIMGroup1	Cool 4 deg C	JAC005	L31	04/03/2025	8270-Modified
Q1731-04	RMW-03B-90-040325	Water	SVOC-SIMGroup1	Cool 4 deg C	JAC005	L31	04/03/2025	8270-Modified
Q1731-05	EB01-040325	Water	SVOC-SIMGroup1	Cool 4 deg C	JAC005	L31	04/03/2025	8270-Modified

Date/Time 04/04/25 11:34  
 Raw Sample Received by: PJ (Sot 165)  
 Raw Sample Relinquished by: SD (Sot 59)

Date/Time

Raw Sample Received by:

Raw Sample Relinquished by:



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

## Prep Standard - Chemical Standard Summary

**Order ID :** Q1731

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB167468,

**Sequence ID/Qc Batch ID:** BN040425, BN040725,

**Standard ID :**

EP2559,EP2565,EP2597,SP6682,SP6683,SP6684,SP6730,SP6731,SP6732,SP6733,SP6734,SP6735,SP6736,SP6738,SP6739,SP6740,SP6755,SP6757,

**Chemical ID :**

1ul/100ul  
sample,E3551,E3657,E3828,E3873,E3874,E3902,E3904,M5173,S10104,S11074,S11495,S11650,S11785,S11831,S11832,S12114,S12142,S12189,S12195,S12208,S12216,S12270,S12328,S12469,S12478,S12517,S12525,S12577,S12651,S12791,S12966,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="#">EP2597</a>	03/28/2025	07/01/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	Evelyn Huang 03/28/2025

FROM 4000.00000gram of E3551 = Final Quantity: 4000.000 gram

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	<a href="#">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



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

# **SVOC STANDARD PREPARATION LOG**



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

# **SVOC STANDARD PREPARATION LOG**

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3339	8270 sim calibration stock 10ppm (CPI)	<a href="#">SP6730</a>	02/04/2025	05/12/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

**FROM** 0.03350ml of S10104 + 0.05000ml of S11495 + 0.12500ml of S11832 + 0.12500ml of S12114 + 0.25000ml of S12270 + 0.25000ml of S12791 + 24.16650ml of E3874 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	<a href="#">SP6731</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

**FROM** 0.5000ml of E3874 + 0.0100ml of SP6682 + 0.5000ml of SP6730 = Final Quantity: 1.010 ml



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

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	<a href="#">SP6732</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.68000ml of E3874 + 0.01000ml of SP6682 + 0.32000ml of SP6730 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	<a href="#">SP6733</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.84000ml of E3874 + 0.01000ml of SP6682 + 0.16000ml of SP6730 = Final Quantity: 1.010 ml



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

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	<a href="#">SP6734</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.92000ml of E3874 + 0.01000ml of SP6682 + 0.08000ml of SP6730 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	<a href="#">SP6735</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.96000ml of E3874 + 0.01000ml of SP6682 + 0.04000ml of SP6730 = Final Quantity: 1.010 ml

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	<a href="#">SP6736</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.50000ml of E3874 + 0.01000ml of SP6682 + 0.50000ml of SP6735 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	<a href="#">SP6738</a>	02/04/2025	05/09/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.75000ml of E3874 + 0.01000ml of SP6682 + 0.25000ml of SP6735 = Final Quantity: 1.010 ml

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3492	8270-SIM-Spike 0.4 PPM	<a href="#">SP6739</a>	02/05/2025	07/29/2025	Jagrut Upadhyay	None	None	Yogesh Patel 02/07/2025

FROM 0.00080ml of S11650 + 0.01000ml of S11785 + 0.02000ml of S12478 + 0.02000ml of S12525 + 0.02000ml of S12966 + 49.92920ml of E3873 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	<a href="#">SP6740</a>	02/13/2025	07/30/2025	Rahul Chavli	None	None	Yogesh Patel 02/28/2025

FROM 0.10000ml of S12651 + 4.90000ml of E3874 = Final Quantity: 5.000 ml

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3491	8270-SIM-Surrogate 0.4 PPM	<a href="#">SP6755</a>	03/20/2025	07/24/2025	Jagrut Upadhyay	None	None	Rahul Chavli 04/01/2025

FROM 0.00400ml of S12195 + 0.00800ml of S12216 + 0.02000ml of S11832 + 99.96800ml of E3902 = Final Quantity: 100.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3895	50 ug/ml DFTPP 8270E	<a href="#">SP6757</a>	03/31/2025	09/30/2025	Rahul Chavli	None	None	Jagrut Upadhyay 04/01/2025

FROM 1.00000ml of S12577 + 19.00000ml of E3904 = Final Quantity: 20.000 ml

### CHEMICAL RECEIPT LOG BOOK

<b>Supplier</b>	<b>ItemCode / ItemName</b>	<b>Lot #</b>	<b>Expiration Date</b>	<b>Date Opened / Opened By</b>	<b>Received Date / Received By</b>	<b>Chemtech Lot #</b>
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	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-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24G0862003	05/09/2025	11/09/2024 / Rajesh	11/04/2024 / Rajesh	E3828
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	07/29/2025	01/29/2025 / Rajesh	01/29/2025 / Rajesh	E3873
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A0262002	07/30/2025	01/30/2025 / Rajesh	01/20/2025 / Rajesh	E3874
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	24H2762008	09/18/2025	03/18/2025 / RUPESH	02/12/2025 / RUPESH	E3902

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	01/07/2026	03/13/2025 /	12/27/2024 / RUPESH	E3904
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000281827	06/02/2025	06/01/2022 /	04/05/2022 / william	M5173
CPI International	Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml	440246	07/30/2025	01/30/2025 / anahy	12/09/2021 / Christian	S10104
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-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	05/12/2025	11/12/2024 / Jagrut	08/11/2023 / Yogesh	S11495
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0201728	07/29/2025	01/29/2025 / anahy	11/09/2023 / Yogesh	S11650

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	07/29/2025	01/29/2025 / anahy	11/21/2023 / Rahul	S11785
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0201976	04/11/2025	10/11/2024 / Jagrut	11/21/2023 / rahul	S11831
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0201976	07/24/2025	01/24/2025 / anahy	11/21/2023 / rahul	S11832
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	05/12/2025	11/12/2024 / Jagrut	03/08/2024 / Rahul	S12114
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
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ampul	A0206206	04/10/2025	10/10/2024 / anahy	03/15/2024 / Rahul	S12189

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12195
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	05/15/2025	11/15/2024 / Jagrut	03/15/2024 / Rahul	S12208
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12216
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	520963	07/30/2025	01/30/2025 / anahy	05/24/2024 / Rahul	S12270
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 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	05/14/2025	11/14/2024 / anahy	07/23/2024 / RAHUL	S12469

[CS 4978-1]

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0214021	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12478
[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	07/29/2025	01/29/2025 / anahy	07/23/2024 / RAHUL	S12525
[CS 4978-2]						
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH <sub>2</sub> Cl <sub>2</sub> , 1mL,	A0212955	06/30/2027	03/31/2025 / Rahul	08/01/2024 / Rahul	S12577
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> , 1mL	A0212266	08/07/2025	02/07/2025 / anahy	09/20/2024 / anahy	S12651
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	06/21/2025	01/30/2025 / anahy	05/24/2024 / Rahul	S12791



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	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH <sub>2</sub> Cl <sub>2</sub> [New Solvent 100% CH <sub>2</sub> Cl <sub>2</sub> ]	A0219438	07/29/2025	01/29/2025 / anahy	12/11/2024 / anahy	S12966

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



# 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	Gravimetric Unstressed Stressed

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:**

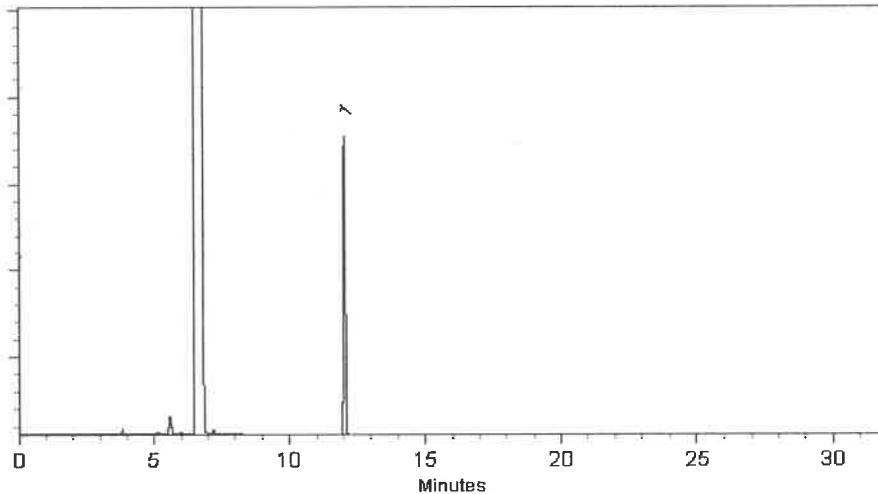
200°C

**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



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

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

Recd. by RP on 1/28/25

E 3873

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.: 25A0262002

Manufactured Date: 2024-11-21

Expiration Date: 2026-02-20

Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) (ng/mL)	Single Impurity Peak <= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide)	Single Peak <= 10 (pg/mL)	4
Assay (CH <sub>2</sub> Cl <sub>2</sub> ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	10
Residue after Evaporation	<= 1.0 ppm	0.8 ppm
Titrable Acid (μeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory, Research, or Manufacturing Use

MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States

Packaging Site: Phillipsburg Mfg Ctr &amp; DC

E 3874

  
 Jamie Croak  
 Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials,LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

Acetone  
BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis



Material No.: 9254-03  
Batch No.: 24H2762008  
Manufactured Date: 2024-04-18  
Expiration Date: 2027-04-18  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water)	>= 99.4 %	100.0 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (μeq/g)	<= 0.3	0.2
Titrable Base (μeq/g)	<= 0.6	<0.1
Water (H <sub>2</sub> O)	<= 0.5 %	<0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States  
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3902

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

100 Matsonford Rd, Suite 200, Radnor, PA, 19087, U.S.A. Phone 610.386.1700

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 Skylene 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

## Certificate of Analysis

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
Z-110094-02 506889	≤ -10 °C	Methylene Chloride	7/25/2028	CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml
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

Sample Y.P.  
S11498 8/11/2028  
S11498

\*Not a certified value

Mario Cadeau  
Certified By:

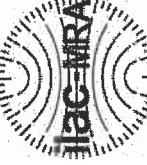
Clint Tipton  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



**RESTEK****CERTIFIED REFERENCE MATERIAL**

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](http://www.restek.com)**Certificate of Analysis****gravimetric**

**ACCREDITED**  
ISO 17025 Accredited  
Reference Materials Production  
Certificate #4322-2.01

**ACCREDITED**  
ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #4322.202

**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.

<b>Catalog No. :</b>	555872	<b>Lot No.:</b>	A0201728
<b>Description :</b>	Custom Pentachlorophenol Standard		
Custom Pentachlorophenol Standard 25,000 $\mu$ g/mL, Methanol, 1mL/ampul			
<b>Container Size :</b>	2 mL	<b>Pkg Amt:</b>	> 1 mL
<b>Expiration Date :</b>	September 30, 2026	<b>Storage:</b>	10°C or colder
		<b>Ship:</b>	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	Pentachlorophenol	87-86-5	RP230530RSR	99%	25,000.0 $\mu$ g/mL	+/- 777.0837
<b>Solvent:</b>	Methanol					
	<b>CAS #</b>	67-56-1				
	<b>Purity</b>	99%				

Josh McCluskey - Operations Technician I

Date Mixed: 05-Sep-2023 Balance: B251644995

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*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:**

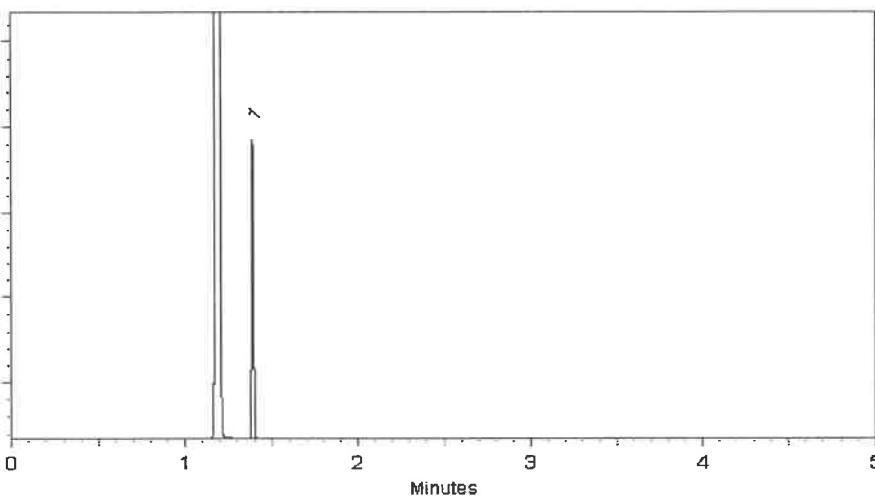
FID

**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

www.restek.com

## 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:**

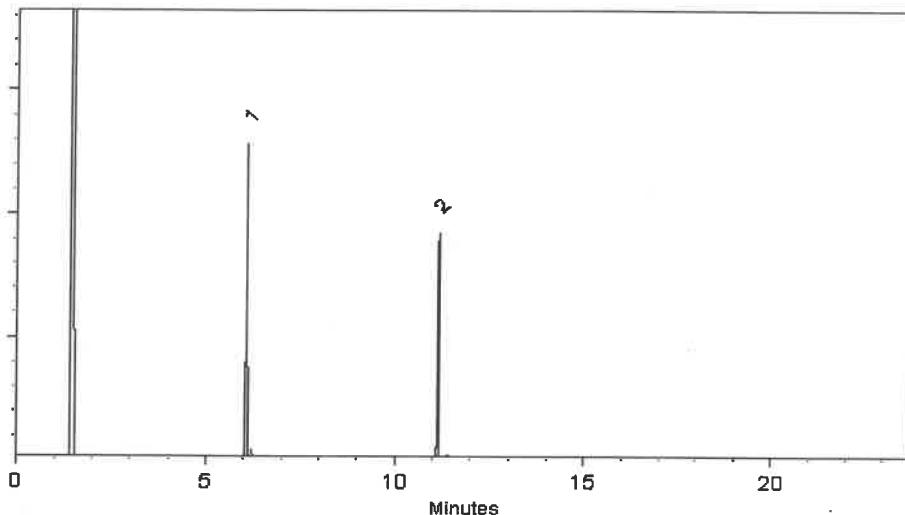
330°C

**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.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## 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:**

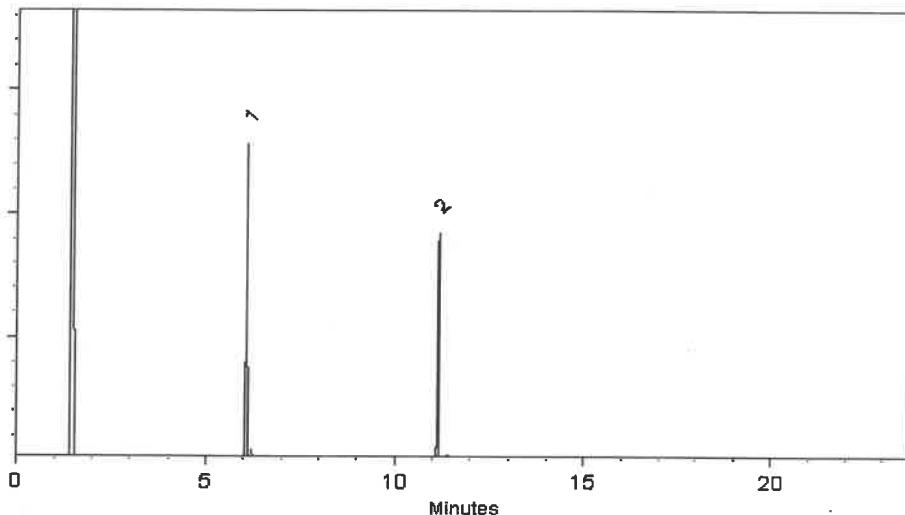
330°C

**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-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026 1,4-Dioxane Solution, 2000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane		123-91-1	100	223.1.3P	1997 ± 57.08

512112 } RC /  
↓  
512116 } 03/08/24

\*Not a certified value

Certified By:

Melissa Workoff  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



110 Benner Circle  
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. :** 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  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## 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. :** 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:**

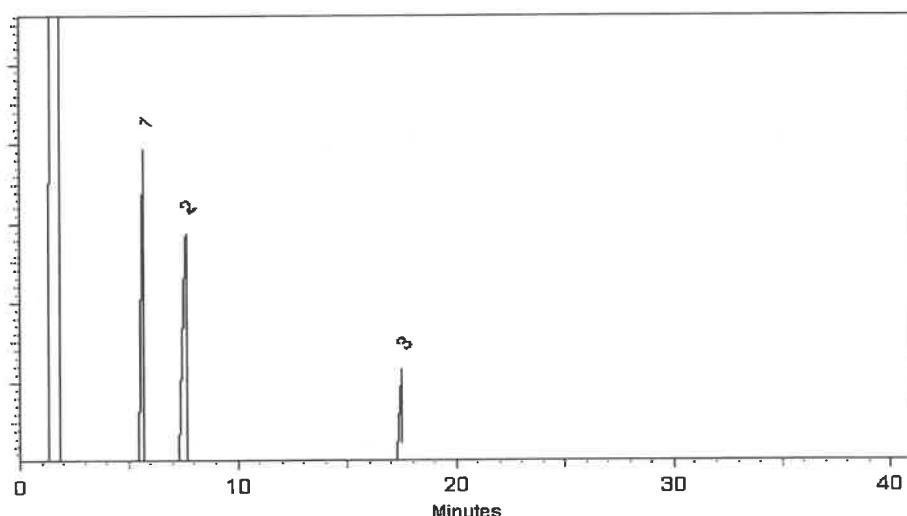
FID

**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  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31087

**Lot No.:** A0206206

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:**

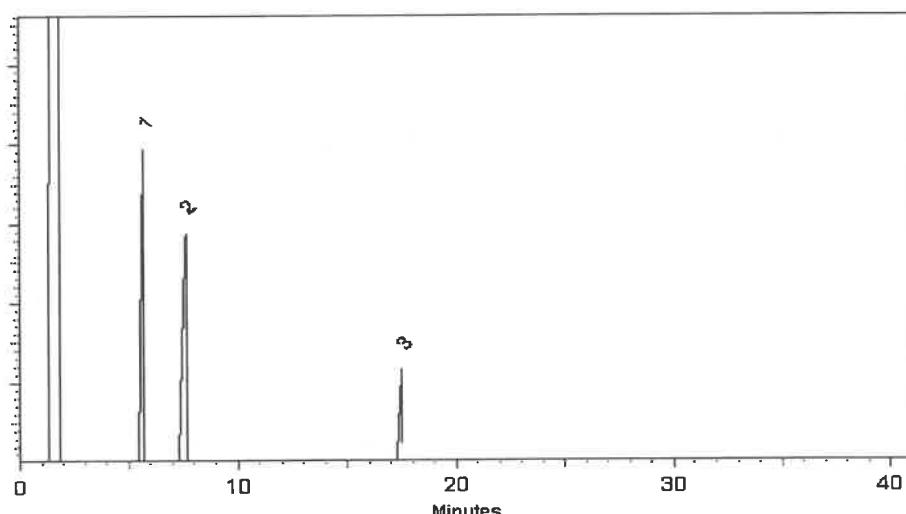
FID

**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  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL



ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



## 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:**

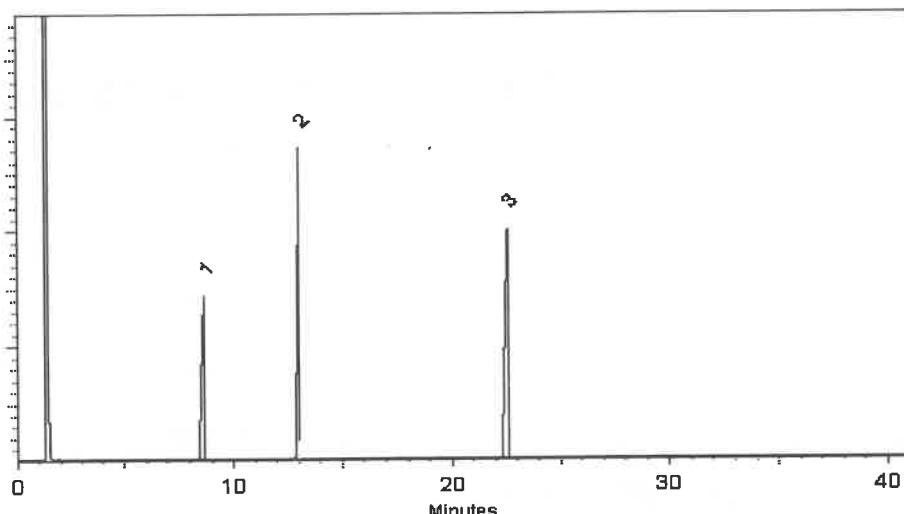
FID

**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  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL



ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



## 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:**

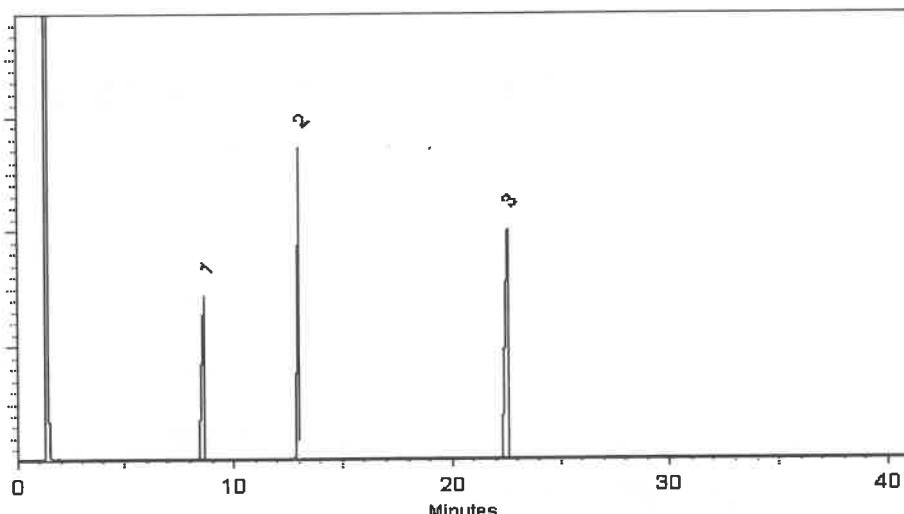
FID

**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  
Registered Quality System  
Certificate #FM 80397



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 4

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110381-01 520963	≤ -10 °C	Methylene Chloride	10/10/2028	Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1010 ± 9.89
acenaphthylene	208-96-8	97.6	14.290.1P	1014 ± 9.93
aniline	62-53-3	99.97	64.1.4P	1001 ± 9.8
anthracene	120-12-7	99.5	15.7.1P	999.6 ± 9.79
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 9.8
benzo[a]anthracene	56-55-3	100	16.7.3P	1007 ± 9.86
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1011 ± 14.11
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 10.96
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 13.95
benzo[a]pyrene	50-32-8	97	20.286.2P	999.9 ± 22.24
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 9.82
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	1000 ± 14.69
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1003 ± 13.89
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.15P	999.4 ± 14.68
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 9.8
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 17.03
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	1000 ± 13.85
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 16.79
carbazole	86-74-8	99.4	239.7.2P	1000 ± 9.8

512270 } Rcf  
↓ 512274 } 05/24/24

\*Not a certified value

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.

Kerry Kane

Certified By:

Kerry Kane  
Chemist

# Certificate of Analysis

Page 2 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	100	66.7.1P	1000 ± 9.79
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	1001 ± 17.07
4-chloro-3-methylphenol	59-50-7	99	102.1.2P	1006 ± 17.16
2-chloronaphthalene	91-58-7	99.9	42.7.6P	1000 ± 9.79
2-chlorophenol	95-57-8	99.8	103.7.1P	1007 ± 13.96
chrysene	218-01-9	96	21.286.2P	998.4 ± 12.85
dibenz[a,h]anthracene	53-70-3	99.44	22.286.3P	1000 ± 9.74
dibenzofuran	132-64-9	100	67.7.2.1P	1002 ± 9.77
di-n-butyl phthalate	84-74-2	99.84	40.286.1P	1007 ± 24.48
1,2-dichlorobenzene	95-50-1	99.8	43.7.1P	1000 ± 9.79
1,3-dichlorobenzene	541-73-1	99.5	44.1.3P	999.4 ± 9.79
1,4-dichlorobenzene	106-46-7	99.9	45.29.2P	1000 ± 9.79
2,4-dichlorophenol	120-83-2	99.6	104.7.1.1P	1005 ± 13.93
diethyl phthalate	84-66-2	99.8	38.7.1P	1011 ± 14
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	1009 ± 13.98
dimethyl phthalate	131-11-3	99.9	39.9.2P	996.5 ± 13.8
1,2-dinitrobenzene	528-29-0	99.86	86.7.3.1P	999.5 ± 9.75
1,3-dinitrobenzene	99-65-0	100	313.7.2P	998 ± 9.79
1,4-dinitrobenzene	100-25-4	100	907.7.1P	999.5 ± 9.8
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1002 ± 13.89
2,4-dinitrotoluene	121-14-2	100	87.7.3P	999.8 ± 13.85
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	999.6 ± 13.85
di-n-octyl phthalate	117-84-0	99.1	41.7.5P	991.6 ± 13.74
diphenylamine	122-39-4	100	78.1.6P	998 ± 13.79
2,3,5,6-tetrachlorophenol	935-95-5	97	1112.286.1P	1004 ± 14.02
fluoranthene	206-44-0	98.6	23.7.4P	999.6 ± 9.79
fluorene	86-73-7	98.4	24.7.1P	999.7 ± 9.79

\*Not a certified value

Certified By:

Kerry Kane  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 3 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	999.9 ± 13.96
hexachlorobutadiene	87-68-3	97.4	47.1.4P	1000 ± 9.79
hexachlorocyclopentadiene	77-47-4	99.2	48.2.2P	1001 ± 9.8
hexachloroethane	67-72-1	99.9	49.1.4P	1003 ± 9.82
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.4P	999.4 ± 22.23
isophorone	78-59-1	98.9	90.1.4P	999.9 ± 13.85
2-methyl-4,6-dinitrophenol	534-52-1	99.6	107.421.2DP	991 ± 24.09
1-methylnaphthalene	90-12-0	97.1	249.7.5P	999.2 ± 13.95
2-methylnaphthalene	91-57-6	97.4	68.7.2P	1006 ± 22.38
2-methylphenol	95-48-7	99.6	114.7.3P	1001 ± 13.87
3-methylphenol	108-39-4	99.1	115.7.4P	499.7 ± 6.92
4-methylphenol	106-44-5	99.5	116.7.1P	501.2 ± 6.94
naphthalene	91-20-3	99.8	26.9.1P	1018 ± 9.97
2-nitroaniline	88-74-4	99.7	69.29.1P	999.6 ± 9.79
3-nitroaniline	99-09-2	100	70.7.3P	1000 ± 9.74
4-nitroaniline	100-01-6	99.7	71.29.1P	1001 ± 9.8
nitrobenzene	98-95-3	100	94.7.1P	1000 ± 13.85
2-nitrophenol	88-75-5	99.1	108.29.1P	996.5 ± 13.81
4-nitrophenol	100-02-7	100	109.7.1P	1000 ± 13.82
N-nitrosodimethylamine	62-75-9	99.5	57.3.19P	998.5 ± 14.67
N-nitrosodi-n-propylamine	621-64-7	99.8	59.286.1P	996.8 ± 17
pentachlorophenol	87-86-5	99	110.1.7P	1004 ± 13.92
phenanthrene	85-01-8	99.7	27.1.5P	999 ± 12.87
phenol	108-95-2	100	112.7.1P	998.5 ± 13.8
pyrene	129-00-0	99.2	28.9.2P	998.9 ± 9.78
pyridine	110-86-1	100	101.24.1P	999 ± 9.73
2,3,4,6-Tetrachlorophenol	58-90-2	91.8	120.421.1P	996.5 ± 13.92

\*Not a certified value

Certified By:

Kerry Kane  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 520963

Expiration Date: 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	999.6 ± 9.79
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	999.5 ± 13.85
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	996 ± 13.8

\*Not a certified value

Certified By:

Kerry Kane  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



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



**ILAC-MRA**  
ACCREDITED  
ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



**ILAC-MRA**  
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. :** 31206

**Lot No.:** A0206540

512312 } RC/  
↓            } 05/30/24  
512331 }

**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

### 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:**

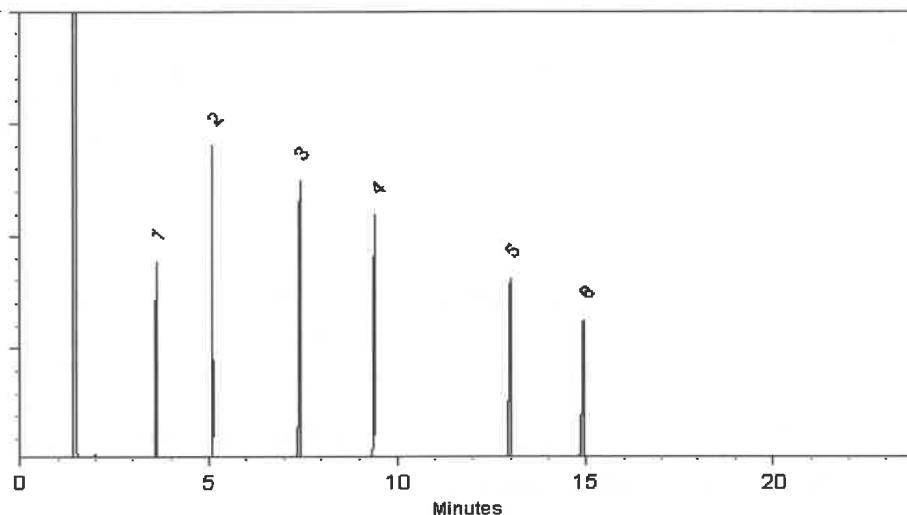
FID

**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  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis

gravimetric

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223

Lot No.: A0214021

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000 $\mu$ 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

Componen t #	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

## 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



**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.
- 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



**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.
- 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



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. :** 31615

**Lot No.:** A0212955

**Description :** GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000 $\mu$ g/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** June 30, 2027

**Storage:** 10°C or colder

**Handling:** Contains carcinogen/reproductive toxin.

**Ship:** Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,004.5 $\mu$ g/mL	+/- 44.8902
2	DFTPP (Decafluorotriphenylphosphine)	5074-71-5	Q117-147	99%	1,004.5 $\mu$ g/mL	+/- 44.8902
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 $\mu$ g/mL	+/- 44.9572
4	4,4'-DDT	50-29-3	S240530RSR	97%	1,000.1 $\mu$ g/mL	+/- 44.6922

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12577  
↓  
S12579 } 8/2/24

# Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

330°C

**Det. Type:**

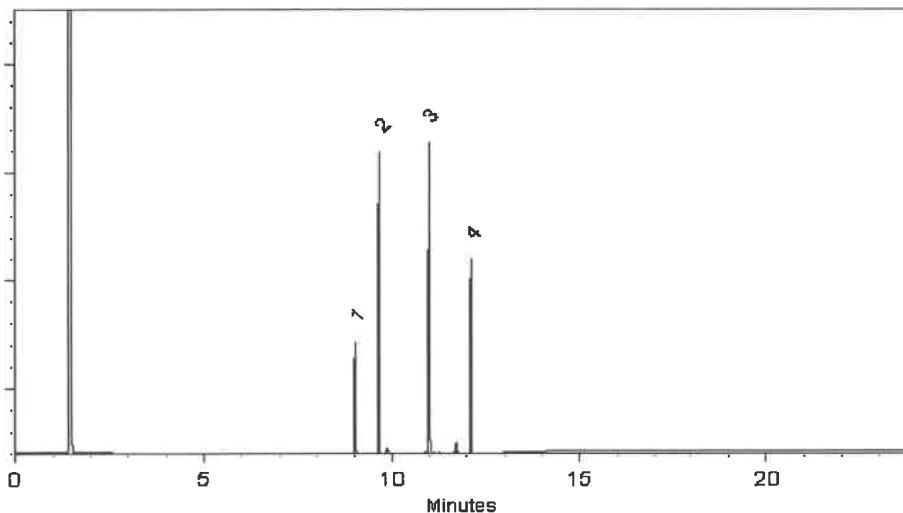
FID

**Split Vent:**

10 ml/min.

**Inj. Vol**

1 $\mu$ l



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Ethan Winiarski*  
Ethan Winiarski - Operations Tech I

Date Mixed: 19-Jun-2024 Balance Serial #: 1128353505

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Jun-2024

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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



ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



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.:** 31206

**Lot No.:** A0212266

**Description:** SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride,  
1mL/ampul

**Container Size:** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date:** April 30, 2030

**Storage:** 10°C or colder

**Handling:** Sonication required. Mix is  
photosensitive.

**Ship:** Ambient

### C E R T I F I E D V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,000.6 µg/mL	+/- 90.1075
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,000.3 µg/mL	+/- 90.0925
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,000.4 µg/mL	+/- 90.1000
4	Phenanthrene-d10	1517-22-2	PR-34099	99%	2,000.5 µg/mL	+/- 90.1037
5	Chrysene-d12	1719-03-5	PR-33506	99%	2,000.7 µg/mL	+/- 90.1112
6	Perylene-d12	1520-96-3	PR-33205	99%	2,000.6 µg/mL	+/- 90.1075

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

S12645 } AC  
↓  
S12674 } ID/1/24



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-110816-01 414127	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine		1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine		92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam		105-60-2	99.9	271.1.6P	999 ± 5.82

~~S12280~~ } RC/  
~~S12284~~ } 05/24/24

New numbers generated.

S12790 } RC/  
↓  
S12794 } 11/12/24

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

\*Not a certified value

Certified By:

Shane Overcash  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](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.:** A0219438

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** September 30, 2025

**Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

S12963 }  
↓ AC  
S12992 } 12/17/24

### C E R T I F I E D V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/-	36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/-	36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/-	36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/-	36.6257
22	2,4-Dichlorophenol	120-83-2	BCCK6969	99%	1,001.5	µg/mL	+/-	36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/-	36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/-	36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/-	36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/-	36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/-	36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/-	36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/-	36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/-	36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/-	36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/-	36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/-	36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/-	36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/-	36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/-	36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/-	36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/-	36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/-	36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/-	36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/-	36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/-	36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/-	36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/-	36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/-	36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/-	36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/-	36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/-	36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/-	36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/-	36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/-	36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/-	36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/-	36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/-	36.4938
55	Azobenzene	103-33-3	BCCK0887	99%	1,002.4	µg/mL	+/-	36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/-	36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/-	36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/-	36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/-	36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/-	36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/-	36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/-	36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/-	36.5120
64	Pyrene	129-00-0	BCCK2592	99%	1,002.0	µg/mL	+/-	36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/-	36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/-	36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/-	36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/-	36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/-	36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/-	36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/-	36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/-	36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/-	36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/-	36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/-	36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/-	36.5217

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

#### Tech Tips:

N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.





# SHIPPING DOCUMENTS



284 Sheffield Street, Mountainside, NJ 07092  
 (908) 789-8900 • Fax (908) 789-8922  
[www.chemtech.net](http://www.chemtech.net)

ALLIANCE PROJECT NO.

QUOTE NO.

Q1731

COC Number

2045982

**CLIENT INFORMATION**

REPORT TO BE SENT TO:

COMPANY: Jacobs

ADDRESS: 412 Mt Kumble Ave Suite 100

CITY Morristown STATE: NJ ZIP: 07960

ATTENTION: John Yufante John.Yufante@Jacobs.com

PHONE: FAX:

**CLIENT PROJECT INFORMATION**

PROJECT NAME: STC PTC

PROJECT NO.: D3868221 LOCATION: Princeton Junction

PROJECT MANAGER: Mary Murphy

e-mail: Mary.Murphy@Jacobs.com

PHONE: FAX:

**CLIENT BILLING INFORMATION**

BILL TO: Mary Murphy

PO#:

ADDRESS:

CITY STATE: ZIP:

ATTENTION: PHONE:

**ANALYSIS**

**DATA TURNAROUND INFORMATION**

FAX (RUSH) Standard TAT DAYS\*

HARDCOPY (DATA PACKAGE): DAYS\*

EDD: DAYS\*

\*TO BE APPROVED BY CHEMTECH

STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS

**DATA DELIVERABLE INFORMATION**

- Level 1 (Results Only)  Level 4 (QC + Full Raw Data)
- Level 2 (Results + QC)  NJ Reduced  US EPA CLP
- Level 3 (Results + QC)  NYS ASP A  NYS ASP B  
+ Raw Data)  Other
- EDD FORMAT

1. 1,4-Dioxane (SL 10E-3)  
 2. Site Specific VOCs (SL 20D-1)  
 3. Total Metals (SL 20B)  
 4. Dissolved (SL 20B)  
 5. Alkalinity (SL 23B)  
 6. DS (SL 13B)  
 7. AVNWS (SL 105B)

8. 9.

**PRESERVATIVES**

**COMMENTS**

← Specify Preservatives

A-HCl D-NaOH

B-HNO3 E-ICE

C-H2SO4 F-OTHER

ALLIANCE SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS								
			COMP	GRAB	DATE	TIME		E	A/E	B/E	E	E	F	F	E	1	2	3	4	5	6	7	8	9	
1.	RMW-01B-82-040325	GW	X		4-3-25	1135	4	/	/																
2.	RMW-01B-91-040325	GW	X		4-3-25	1415	4	/	/																
3.	RMW-01B-82-040325-FD	GW	X		4-3-25	1140	4	/	/																
4.	RMW-03B-90-040325	GW	X		4-3-25	1510	4	/	/																
5.	EB01-040325	DI	X		4-3-25	1545	8	/	/	/	/	/	/	/	/										PH 1.9
6.	TB01-040325	DI	X		4-3-25	1600	2	/																	Lot # 80A0441
7.																									SAMPLES PRESENTED (4/4/25)
8.																									ON 4/4/25 @ 0745
9.																									SAMPLES PLACED IN SM-1 BOTTLE SAMPLES REFRIGERATED 4/4/25 @ 0745
10.																									

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY**

RELINQUISHED BY SAMPLER:

DATE/TIME: 1634

RECEIVED BY:

4/3/25

1634

4-3-25

Conditions of bottles or coolers at receipt:  COMPLIANT  NON COMPLIANT  COOLER TEMP

2.7 °C

Comments: See work order for list of site specific VOCs

Preserve dissolved iron sample upon arrival to the lab

Temp 2.7°C (Adjusted Factor +1) IR Gun #1.

RELINQUISHED BY SAMPLER:

DATE/TIME: 1820

RECEIVED BY:

4-3-25

3.

Page 1 of 1

CLIENT:  Hand Delivered  Other

Shipment Complete

YES  NO

**Laboratory Certification**

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488



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

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : Q1731	JACO05	Order Date : 4/4/2025 10:52:00 AM	Project Mgr :
Client Name : JACOBS Engineering Grou		Project Name : Former Schlumberger STC	Report Type : Level 4
Client Contact : John Ynfante		Receive DateTime : 4/3/2025 6:20:00 PM	EDD Type : CH2MHILL
Invoice Name : JACOBS Engineering Grou		Purchase Order :	Hard Copy Date :
Invoice Contact : John Ynfante			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DU <sup>E</sup> DATES
Q1731-01	RMW-01B-82-040325	Water	04/03/2025	11:35	VOCMS Group3		8260-Low	2 Bus. Days	
Q1731-02	RMW-04B-91-040325	Water	04/03/2025	14:15	VOCMS Group3		8260-Low	2 Bus. Days	
Q1731-03	RMW-01B-82-040325-FD	Water	04/03/2025	11:40	VOCMS Group3		8260-Low	2 Bus. Days	
Q1731-04	RMW-03B-90-040325	Water	04/03/2025	15:10	VOCMS Group3		8260-Low	2 Bus. Days	
Q1731-05	EB01-040325	Water	04/03/2025	15:45	VOCMS Group3		8260-Low	2 Bus. Days	
Q1731-07	TB01-040325	Water	04/03/2025	16:00	VOCMS Group3		8260-Low	2 Bus. Days	

**LOGIN REPORT/SAMPLE TRANSFER**

Order ID : Q1731	JAC005	Order Date : 4/4/2025 10:52:00 AM	Project Mgr :
Client Name : JACOBS Engineering Grou		Project Name : Former Schlumberger STC	Report Type : Level 4
Client Contact : John Ynfante		Receive DateTime : 4/3/2025 6:20:00 PM	EDD Type : CH2MHILL
Invoice Name : JACOBS Engineering Grou		Purchase Order :	Hard Copy Date :
Invoice Contact : John Ynfante			Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
--------	-----------	--------	-------------	-------------	------	------------	--------	----------	-----------

stored in ref #04  
(VOA)

Relinquished By : Date / Time : 4/4/25 1120Received By : Date / Time : 4-4-25 11:20

Storage Area : VOA Refrigerator Room