



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

## Cover Page

**Order ID :** P4710

**Project ID :** CTO WE13

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

### Lab Sample Number

P4710-01  
P4710-02  
P4710-03  
P4710-04

### Client Sample Number

BP-TB-20241030  
BP-BPOW6-7-GW-20241030  
BP-BPOW6-11-GW-20241031  
BP-BPOW6-8-GW-20241101

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: 11/14/2024

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

## CASE NARRATIVE

**Tetra Tech NUS, Inc.**

**Project Name:** CTO WE13

**Project Manager :** Ernie Wu

**Chemtech Project #** P4710

**Test Name:** SVOC-SIMGroup1

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

4 Water samples were received on 11/04/2024.

### **B. Parameters**

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

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

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

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

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria.

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 % RSD is greater than 20% in the Initial Calibration (8270Sim-BN110724.M) for 2,4,6-Tribromophenol is passing on Quadratic regression.

The Continuous Calibration met the requirements .

The Tuning criteria met requirements.

### **E. Additional Comments:**

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

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



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

**F. Manual Integration Comments:**

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

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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: P4710

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 % RSD is greater than 20% in the Initial Calibration (8270Sim-BN110724.M) for 2,4,6-Tribromophenol is passing on Quadratic regression.			
The Continuous Calibration met the requirements .			
6. Blank Contamination - If yes, list compounds and concentrations in each blank:			✓
7. Surrogate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
8. Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
If not met, list those compounds and their recoveries which fall outside the acceptable range.			
The Blank Spike met requirements for all samples . The Blank Spike Duplicate met requirements for all samples .			
9. Internal Standard Area/Retention Time Shift Meet Criteria			✓
Comments:			
10. Extraction Holding Time Met			✓
If not met, list number of days exceeded for each sample:			

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

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

**(CONTINUED)**

NA      NO      YES

11. Analysis Holding Time Met ✓

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

**ADDITIONAL COMMENTS:**

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

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

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

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QA REVIEW

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Date

## APPENDIX A

### QA REVIEW GENERAL DOCUMENTATION

**Project #:** P4710

**Completed**

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**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>	P4710	<b>OrderDate:</b>	11/4/2024 3:44:00 PM					
<b>Client:</b>	Tetra Tech NUS, Inc.	<b>Project:</b>	CTO WE13					
<b>Contact:</b>	Ernie Wu	<b>Location:</b>	L31, VOA Ref. #3 Water					
<hr/>								
LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
P4710-02	<b>BP-BPOW6-7-GW-202 41030</b>	Water			<b>10/30/24</b>			<b>11/04/24</b>
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	
P4710-03	<b>BP-BPOW6-11-GW-20 241031</b>	Water			<b>10/31/24</b>			<b>11/04/24</b>
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	
P4710-04	<b>BP-BPOW6-8-GW-202 41101</b>	Water			<b>11/01/24</b>			<b>11/04/24</b>
			SVOC-SIMGroup1	8270-Modified		11/06/24	11/08/24	



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**Hit Summary Sheet**  
**SW-846**

**SDG No.:** P4710

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

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



QC

SUMMARY

### Surrogate Summary

**SW-846**

**SDG No.:** P4710

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

**Analytical Method:** 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
P4710-02	BP-BPOW6-7-GW-20241030	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.38	96		30	150
		Nitrobenzene-d5	0.4	0.34	85		55	111
		2-Fluorobiphenyl	0.4	0.39	98		53	106
		Terphenyl-d14	0.4	0.46	114		58	132
P4710-03	BP-BPOW6-11-GW-20241031	2-Methylnaphthalene-d10	0.4	0.32	79		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.42	104		58	132
P4710-04	BP-BPOW6-8-GW-20241101	2-Methylnaphthalene-d10	0.4	0.32	81		30	150
		Fluoranthene-d10	0.4	0.39	96		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.44	111		58	132
PB164705BL	PB164705BL	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.36	90		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.38	95		53	106
		Terphenyl-d14	0.4	0.47	117		58	132
PB164705BS	PB164705BS	2-Methylnaphthalene-d10	0.4	0.40	100		30	150
		Fluoranthene-d10	0.4	0.33	81		30	150
		Nitrobenzene-d5	0.4	0.33	83		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.38	95		58	132
PB164705BSD	PB164705BSD	2-Methylnaphthalene-d10	0.4	0.39	98		30	150
		Fluoranthene-d10	0.4	0.33	82		30	150
		Nitrobenzene-d5	0.4	0.33	82		55	111
		2-Fluorobiphenyl	0.4	0.34	85		53	106
		Terphenyl-d14	0.4	0.38	95		58	132



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

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN034908.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		
									Low	High	
PB164705BS	1,4-Dioxane	0.4	0.29	ug/L	73				70	130	



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

SW-846

SDG No.: P4710

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified DataFile: BN034909.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	Qual	Limits		
									RPD	Low	High
PB164705BSD	1,4-Dioxane	0.4	0.28	ug/L	70	4			70	130	20



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4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB164705BL

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

Case No.: P4710

SAS No.: P4710 SDG No.: P4710

Lab File ID: BN034910.D

Lab Sample ID: PB164705BL

Instrument ID: BNA\_N

Date Extracted: 11/06/2024

Matrix: (soil/water) Water

Date Analyzed: 11/08/2024

Level: (low/med) LOW

Time Analyzed: 16:05

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
BP-BPOW6-7-GW-20241030	P4710-02	BN034905.D	11/08/2024
BP-BPOW6-11-GW-20241031	P4710-03	BN034906.D	11/08/2024
BP-BPOW6-8-GW-20241101	P4710-04	BN034907.D	11/08/2024
PB164705BS	PB164705BS	BN034908.D	11/08/2024
PB164705BSD	PB164705BSD	BN034909.D	11/08/2024

COMMENTS:



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5B

SEMICVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034883.D

DFTPP Injection Date: 11/07/2024

Instrument ID: BNA\_N

DFTPP Injection Time: 08:39

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	64.6
68	Less than 2.0% of mass 69	0.9 ( 1.6 ) 1
69	Mass 69 relative abundance	57.5
70	Less than 2.0% of mass 69	0.3 ( 0.6 ) 1
127	10.0 - 80.0% of mass 198	64.5
197	Less than 2.0% of mass 198	0.3
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7
275	10.0 - 60.0% of mass 198	19.4
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	6.6
442	Greater than 50% of mass 198	37.1
443	15.0 - 24.0% of mass 442	8.9 ( 24 ) 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	BN034885.D	11/07/2024	10:02
SSTDICC0.2	SSTDICC0.2	BN034886.D	11/07/2024	10:48
SSTDICCC0.4	SSTDICCC0.4	BN034887.D	11/07/2024	11:24
SSTDICC0.8	SSTDICC0.8	BN034888.D	11/07/2024	12:00
SSTDICC1.6	SSTDICC1.6	BN034889.D	11/07/2024	12:36
SSTDICC3.2	SSTDICC3.2	BN034890.D	11/07/2024	13:13
SSTDICC5.0	SSTDICC5.0	BN034891.D	11/07/2024	13:49



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5B

SEMICVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: CHEMTECH

Contract: TETR06

Lab Code: CHEM

SAS No.: P4710 SDG NO.: P4710

Lab File ID: BN034897.D

DFTPP Injection Date: 11/08/2024

Instrument ID: BNA\_N

DFTPP Injection Time: 07:50

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	65.5
68	Less than 2.0% of mass 69	0.9 ( 1.6 ) 1
69	Mass 69 relative abundance	56.3
70	Less than 2.0% of mass 69	0.3 ( 0.5 ) 1
127	10.0 - 80.0% of mass 198	63.8
197	Less than 2.0% of mass 198	0.5
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	20.3
365	Greater than 1% of mass 198	2.3
441	Present, but less than mass 443	7
442	Greater than 50% of mass 198	43.5
443	15.0 - 24.0% of mass 442	8.1 ( 18.6 ) 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
SSTDCCC0.4	SSTDCCC0.4	BN034898.D	11/08/2024	08:29
BP-BPOW6-7-GW-20241030	P4710-02	BN034905.D	11/08/2024	13:05
BP-BPOW6-11-GW-20241031	P4710-03	BN034906.D	11/08/2024	13:41
BP-BPOW6-8-GW-20241101	P4710-04	BN034907.D	11/08/2024	14:17
PB164705BS	PB164705BS	BN034908.D	11/08/2024	14:53
PB164705BSD	PB164705BSD	BN034909.D	11/08/2024	15:29
PB164705BL	PB164705BL	BN034910.D	11/08/2024	16:05
SSTDCCC0.4EC	SSTDCCC0.4	BN034911.D	11/08/2024	16:41



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8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH  
Lab Code: CHEM Case No.: P4710 SAS No.: P4710 SDG No.: P4710  
EPA Sample No.: SSTDCCC0.4 Date Analyzed: 11/08/2024  
Lab File ID: BN034898.D Time Analyzed: 08:29  
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	6102	7.575	18171	10.34	8711	14.20
UPPER LIMIT	12204	8.075	36342	10.84	17422	14.701
LOWER LIMIT	3051	7.075	9085.5	9.84	4355.5	13.701
EPA SAMPLE NO.						
01 BP-BPOW6-8-GW-20241101	5705	7.58	16698	10.34	7609	14.21
02 PB164705BL	6271	7.58	17552	10.34	7420	14.20
03 PB164705BS	6394	7.58	18264	10.34	8109	14.21
04 PB164705BSD	6255	7.58	17867	10.34	7947	14.21
05 BP-BPOW6-7-GW-20241030	5186	7.58	15083	10.34	6739	14.20
06 BP-BPOW6-11-GW-20241031	5457	7.58	15845	10.34	7293	14.21

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.:	P4710		
		SAS No.:	P4710		
EPA Sample No.:	SSTDCCCC0.4		Date Analyzed:	11/08/2024	
Lab File ID:	BN034898.D		Time Analyzed:	08:29	
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	17291	16.957	11255	21.143	9481	23.315
	34582	17.457	22510	21.643	18962	23.815
	8645.5	16.457	5627.5	20.643	4740.5	22.815
EPA SAMPLE NO.						
01	BP-BPOW6-8-GW-20241101	15639	16.95	9493	21.15	7807
02	PB164705BL	15255	16.96	8049	21.15	6373
03	PB164705BS	16416	16.95	9189	21.15	6982
04	PB164705BSD	15963	16.95	9019	21.15	6770
05	BP-BPOW6-7-GW-20241030	13647	16.96	8571	21.15	6880
06	BP-BPOW6-11-GW-20241031	14785	16.95	9375	21.15	7760

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.



# SAMPLE

# DATA



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## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	10/30/24	
Project:	CTO WE13			Date Received:	11/04/24	
Client Sample ID:	BP-BPOW6-7-GW-20241030			SDG No.:	P4710	
Lab Sample ID:	P4710-02			Matrix:	Water	
Analytical Method:	SW8270SIM			% 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 :	SW3510C					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034905.D	1	11/06/24 08:45	11/08/24 13:05	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		85%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		98%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		58 - 132		114%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	5190	7.575				
1146-65-2	Naphthalene-d8	15100	10.34				
15067-26-2	Acenaphthene-d10	6740	14.201				
1517-22-2	Phenanthrene-d10	13600	16.957				
1719-03-5	Chrysene-d12	8570	21.152				
1520-96-3	Perylene-d12	6880	23.321				

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\BN110824\  
 Data File : BN034905.D  
 Acq On : 08 Nov 2024 13:05  
 Operator : RC/JU  
 Sample : P4710-02  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-BPOW6-7-GW-20241030**

Quant Time: Nov 08 13:55:02 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

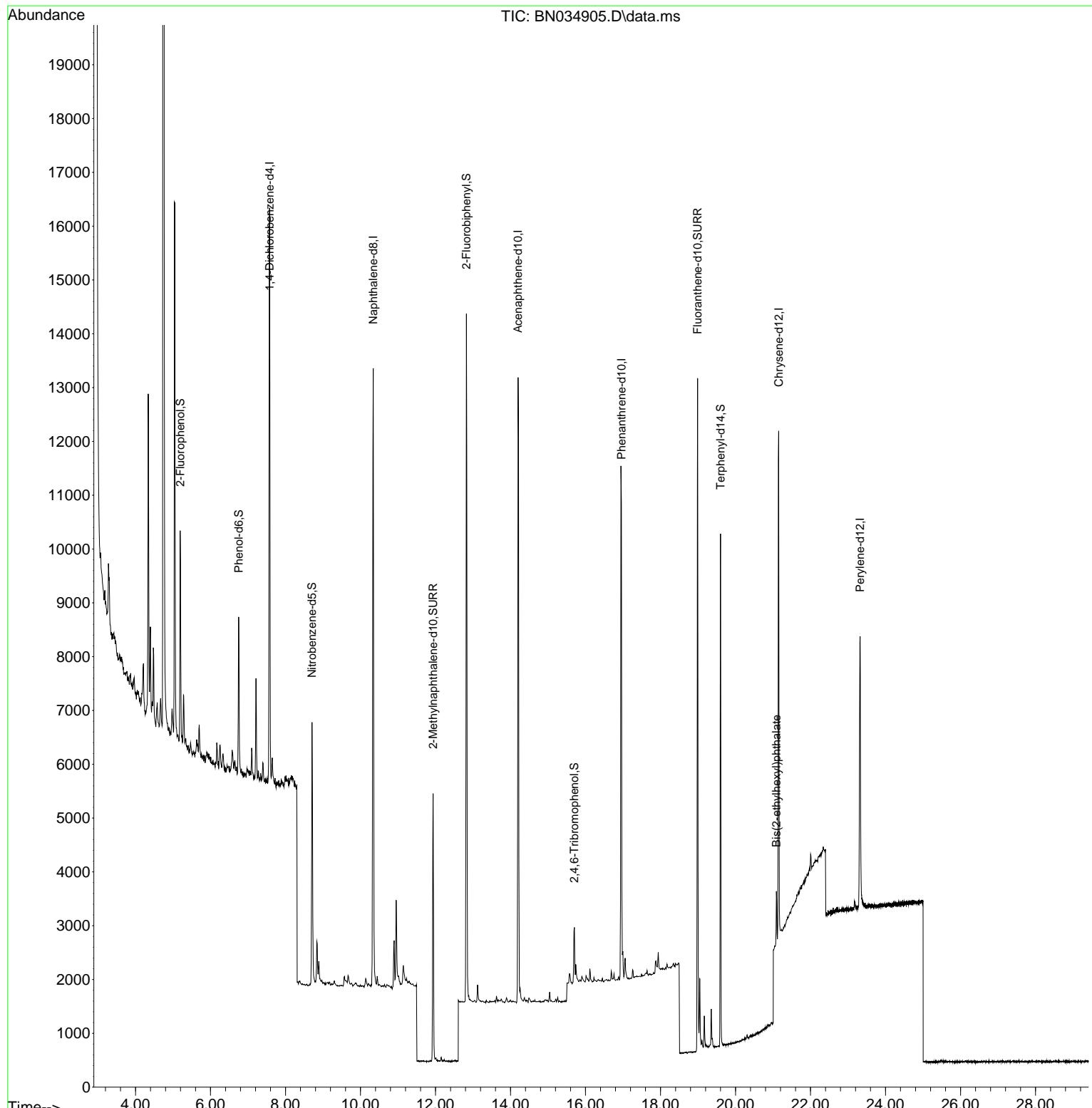
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5186	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	15083	0.400	ng	0.00
13) Acenaphthene-d10	14.201	164	6739	0.400	ng	-0.01
19) Phenanthrene-d10	16.957	188	13647	0.400	ng	0.00
29) Chrysene-d12	21.152	240	8571	0.400	ng	0.00
35) Perylene-d12	23.321	264	6880	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.192	112	2949	0.204	ng	0.00
5) Phenol-d6	6.752	99	2560	0.133	ng	0.00
8) Nitrobenzene-d5	8.707	82	3987	0.339	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	6649	0.323	ng	0.00
14) 2,4,6-Tribromophenol	15.704	330	596	0.342	ng	0.00
15) 2-Fluorobiphenyl	12.822	172	11127	0.391	ng	-0.01
27) Fluoranthene-d10	18.987	212	11799	0.383	ng	0.00
31) Terphenyl-d14	19.601	244	7348	0.458	ng	0.00
<b>Target Compounds</b>						
34) Bis(2-ethylhexyl)phtha...	21.089	149	1125	0.059	ng	# 96

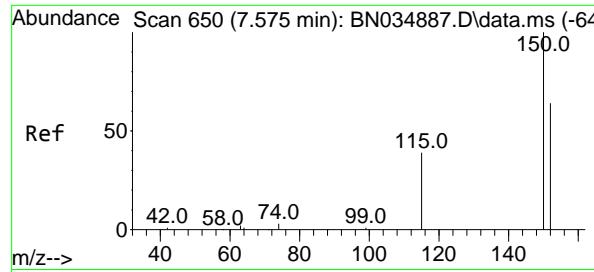
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034905.D  
 Acq On : 08 Nov 2024 13:05  
 Operator : RC/JU  
 Sample : P4710-02  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-BPOW6-7-GW-20241030

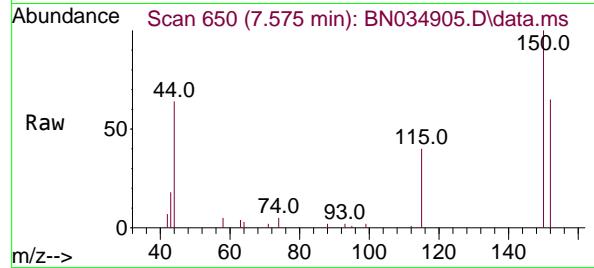
Quant Time: Nov 08 13:55:02 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration



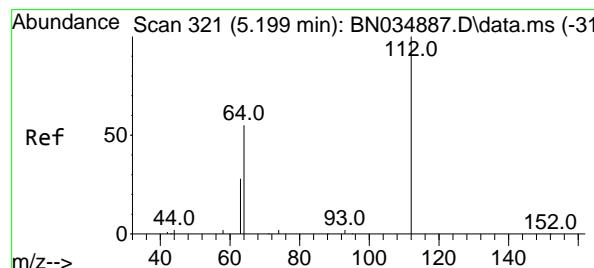
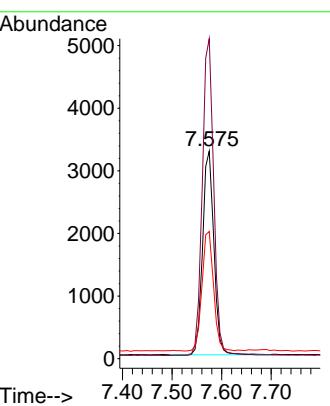
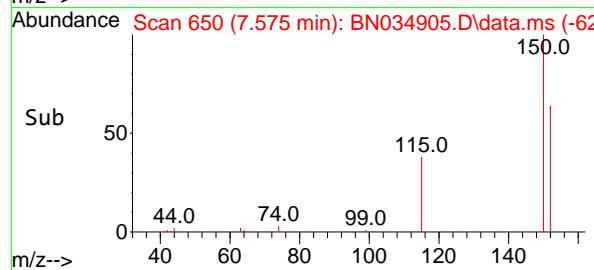


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Delta R.T. 0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

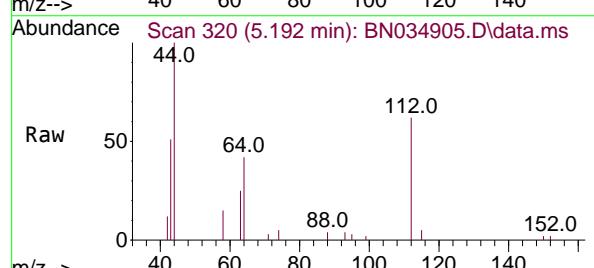
Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-7-GW-20241030



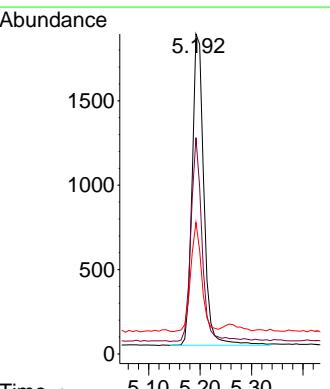
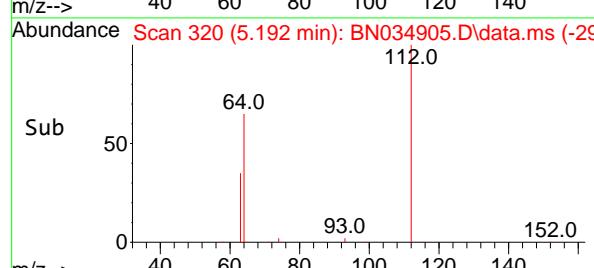
Tgt Ion:152 Resp: 5186  
Ion Ratio Lower Upper  
152 100  
150 154.2 124.4 186.6  
115 61.3 50.5 75.7

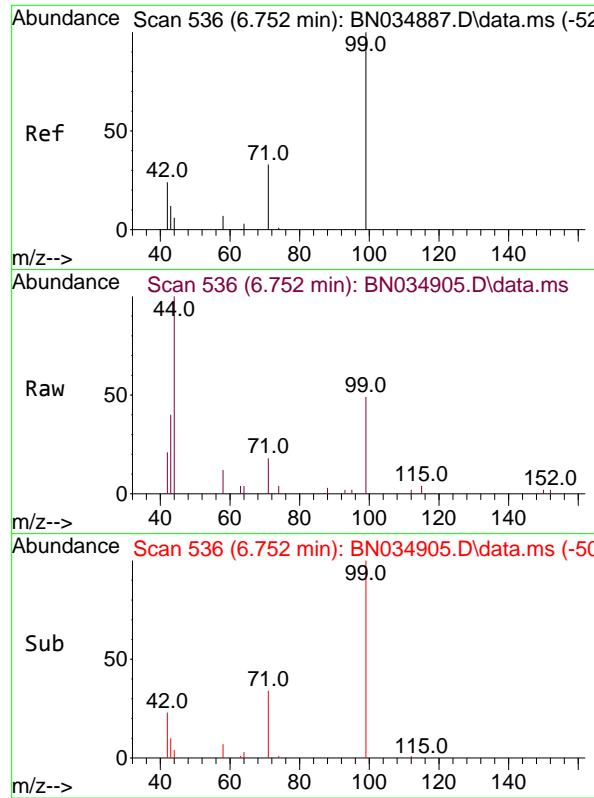


#4  
2-Fluorophenol  
Concen: 0.204 ng  
RT: 5.192 min Scan# 320  
Delta R.T. -0.007 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05



Tgt Ion:112 Resp: 2949  
Ion Ratio Lower Upper  
112 100  
64 62.2 49.6 74.4  
63 32.2 26.3 39.5

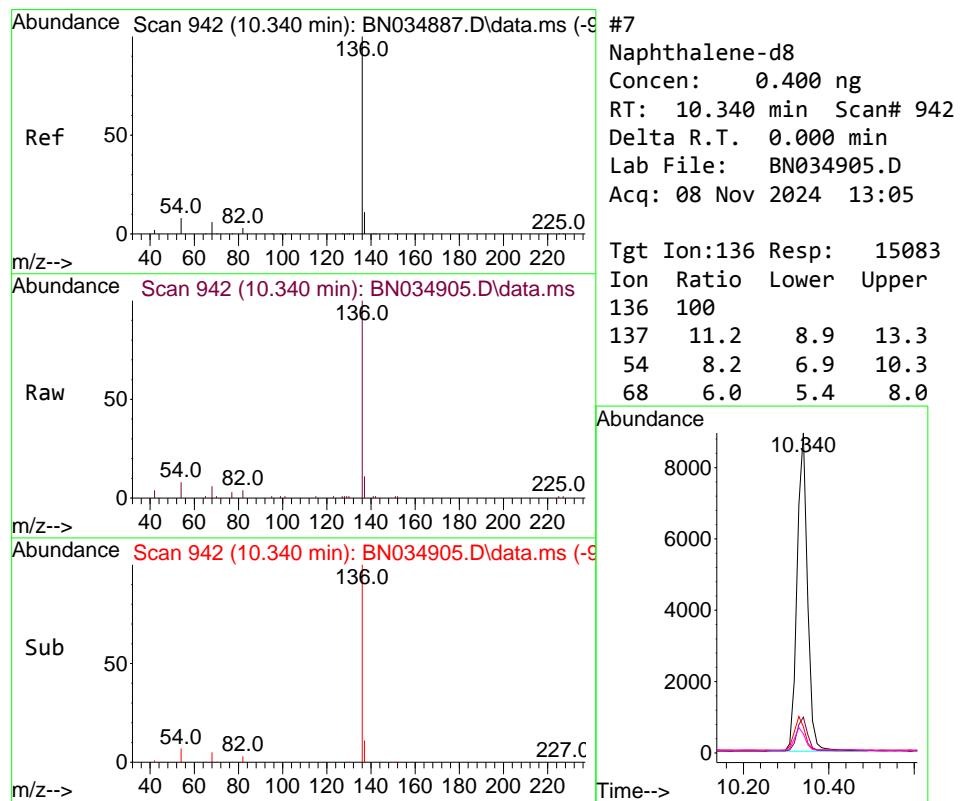
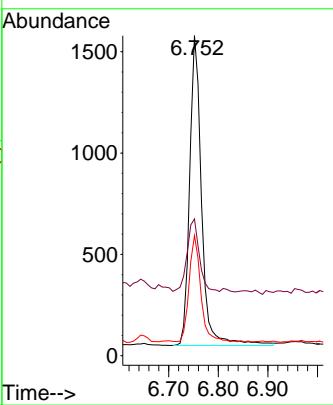




#5  
 Phenol-d6  
 Concen: 0.133 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034905.D  
 Acq: 08 Nov 2024 13:05

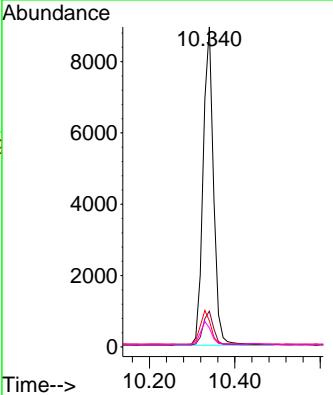
Instrument : BNA\_N  
 ClientSampleId : BP-BPOW6-7-GW-20241030

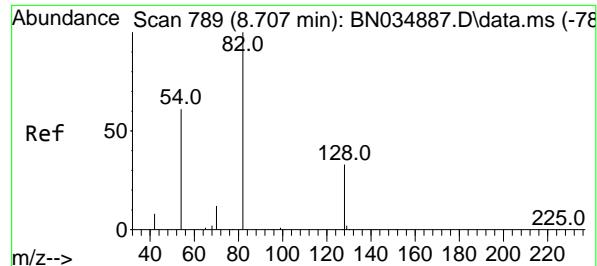
Tgt Ion: 99 Resp: 2560  
 Ion Ratio Lower Upper  
 99 100  
 42 23.5 20.2 30.2  
 71 33.5 25.4 38.0



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 942  
 Delta R.T. 0.000 min  
 Lab File: BN034905.D  
 Acq: 08 Nov 2024 13:05

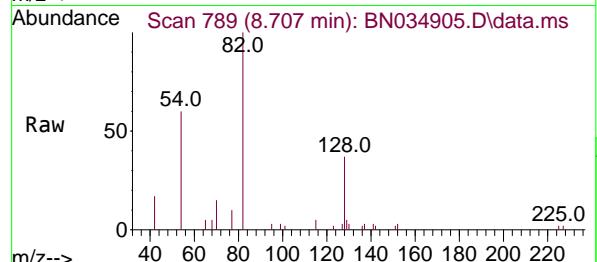
Tgt Ion:136 Resp: 15083  
 Ion Ratio Lower Upper  
 136 100  
 137 11.2 8.9 13.3  
 54 8.2 6.9 10.3  
 68 6.0 5.4 8.0



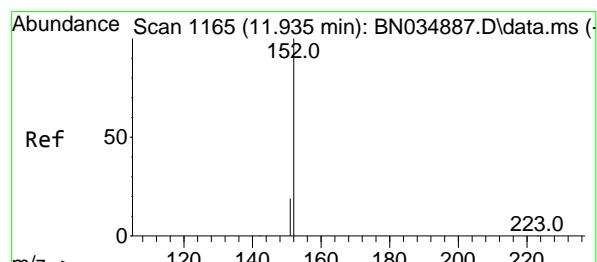
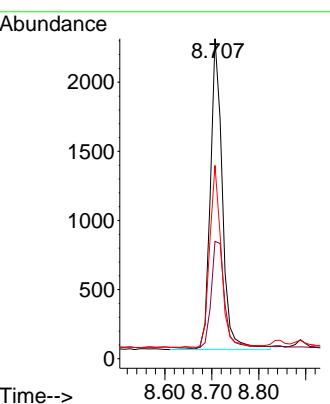
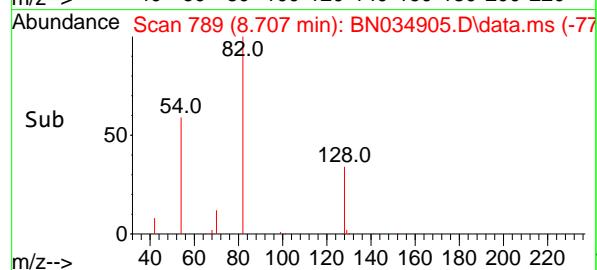


#8  
Nitrobenzene-d5  
Concen: 0.339 ng  
RT: 8.707 min Scan# 7  
Delta R.T. 0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

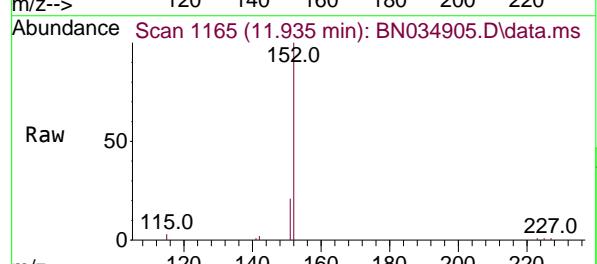
Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-7-GW-20241030



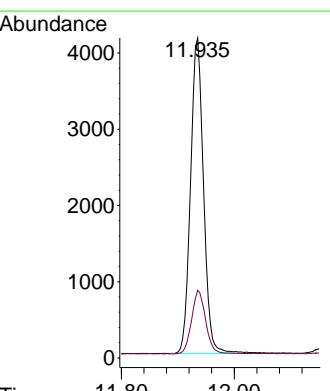
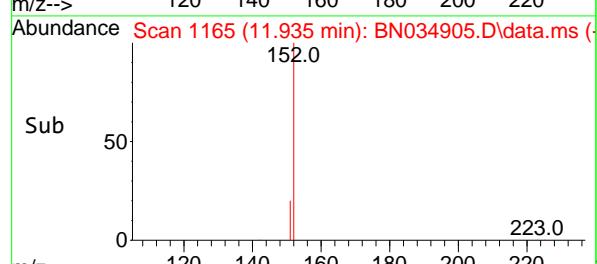
Tgt Ion: 82 Resp: 3987  
Ion Ratio Lower Upper  
82 100  
128 36.7 28.1 42.1  
54 60.4 49.8 74.6

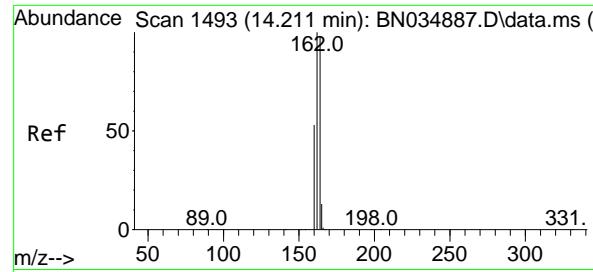


#11  
2-Methylnaphthalene-d10  
Concen: 0.323 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

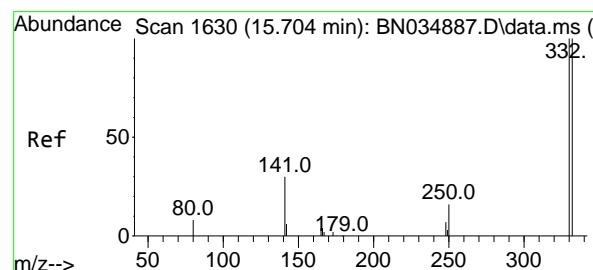
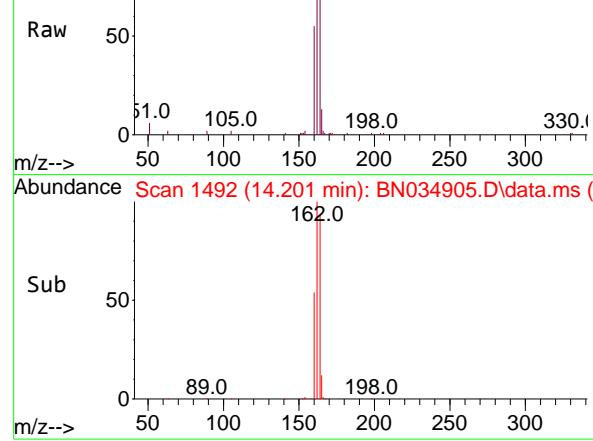


Tgt Ion:152 Resp: 6649  
Ion Ratio Lower Upper  
152 100  
151 21.8 17.1 25.7

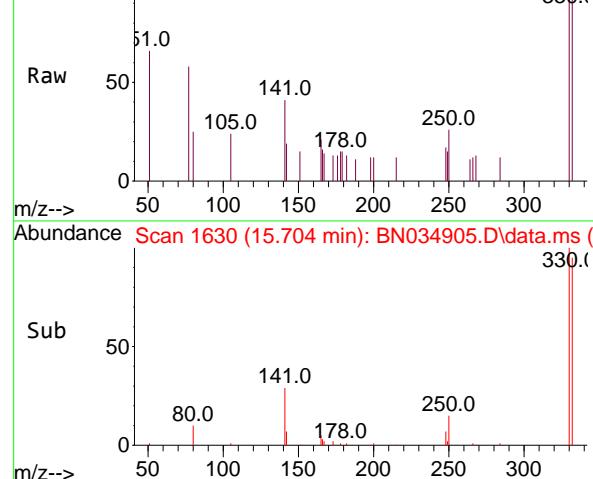




Ref Abundance Scan 1492 (14.201 min): BN034905.D\data.ms (-)

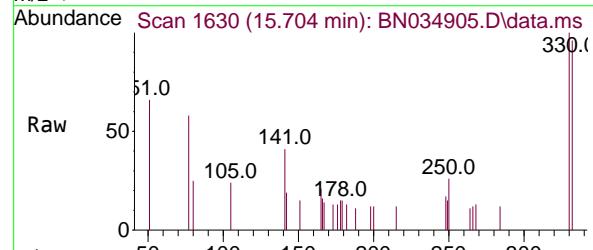
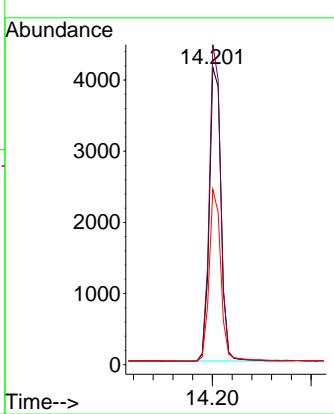


Abundance Scan 1630 (15.704 min): BN034887.D\data.ms (-)

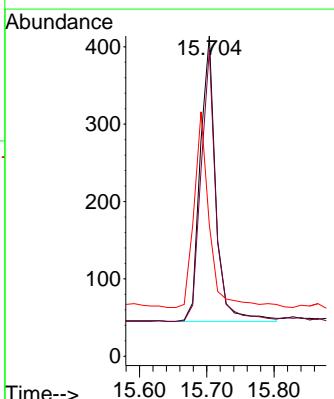
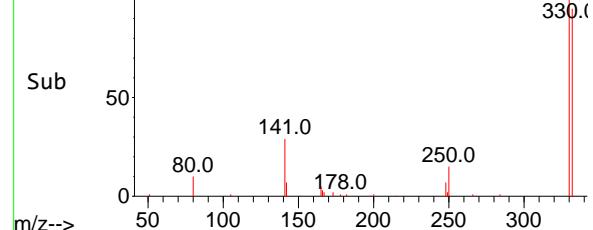


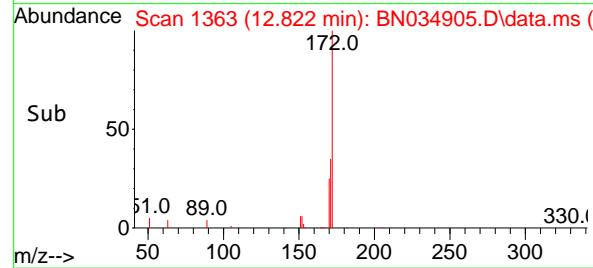
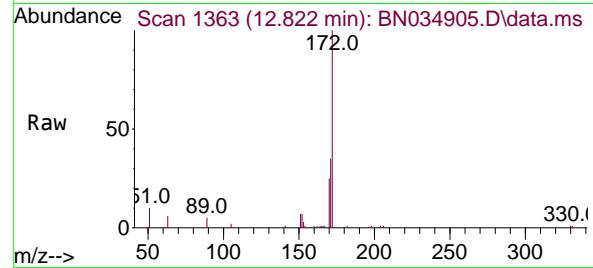
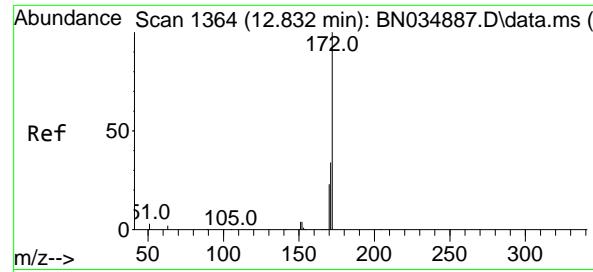
#14  
2,4,6-Tribromophenol  
Concen: 0.342 ng  
RT: 15.704 min Scan# 1630  
Delta R.T. -0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

Tgt Ion:330 Resp: 596  
Ion Ratio Lower Upper  
330 100  
332 91.6 77.1 115.7  
141 67.3 54.1 81.1



Abundance Scan 1630 (15.704 min): BN034905.D\data.ms (-)

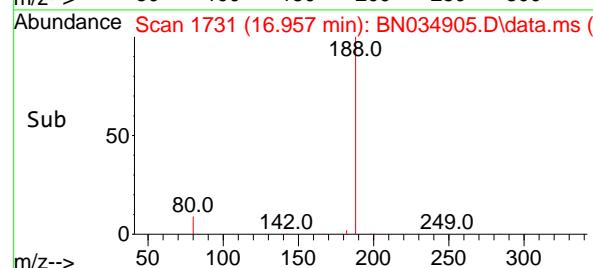
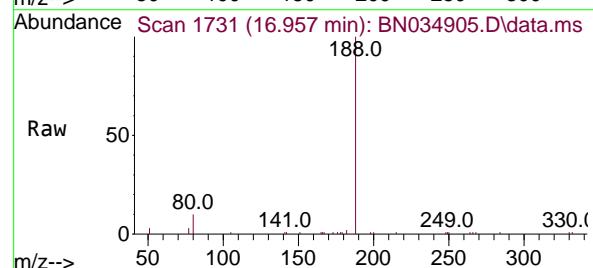
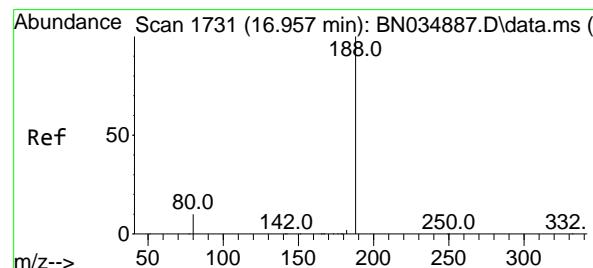
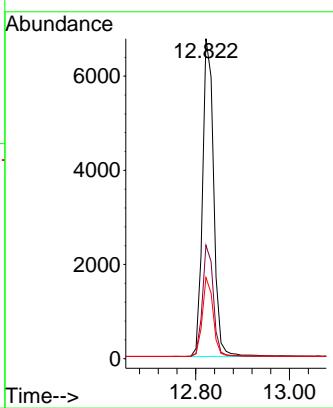




#15  
2-Fluorobiphenyl  
Concen: 0.391 ng  
RT: 12.822 min Scan# 1  
Delta R.T. -0.010 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

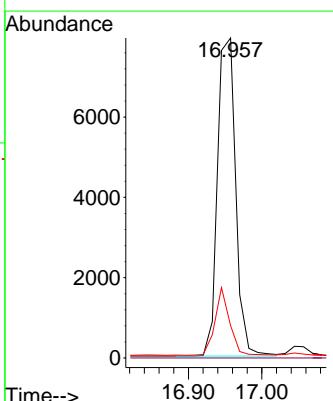
Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-7-GW-20241030

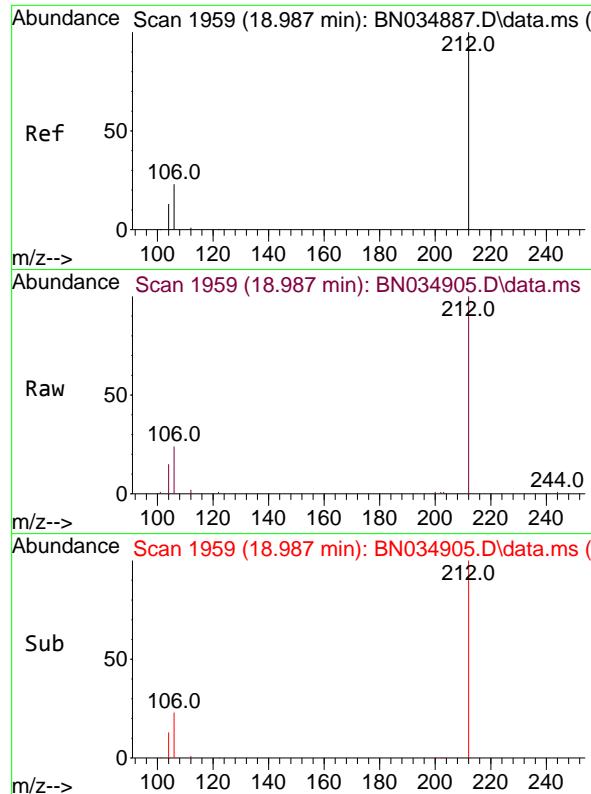
Tgt Ion:172 Resp: 11127  
Ion Ratio Lower Upper  
172 100  
171 35.5 27.9 41.9  
170 25.3 19.0 28.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.957 min Scan# 1731  
Delta R.T. 0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

Tgt Ion:188 Resp: 13647  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 10.1 8.6 12.8

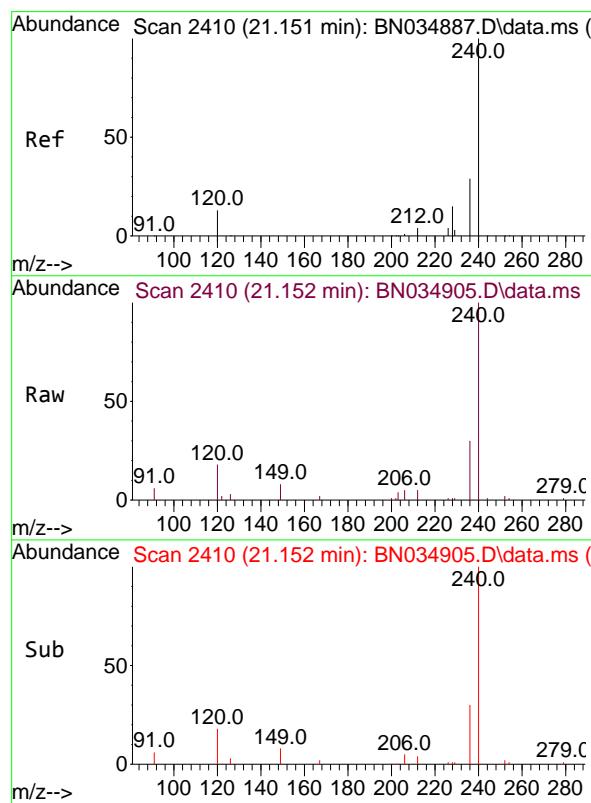
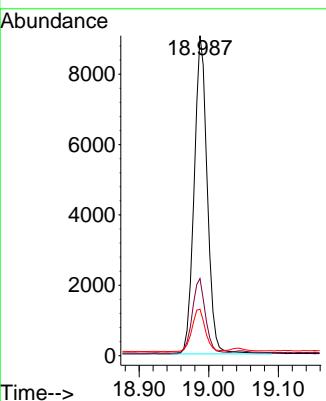




#27  
 Fluoranthene-d10  
 Concen: 0.383 ng  
 RT: 18.987 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034905.D  
 Acq: 08 Nov 2024 13:05

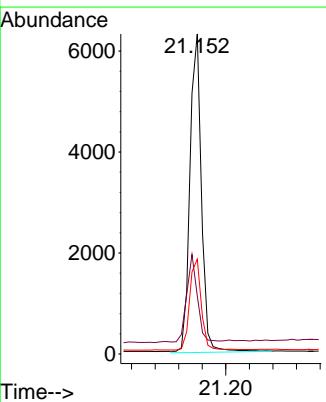
Instrument : BNA\_N  
 ClientSampleId : BP-BPOW6-7-GW-20241030

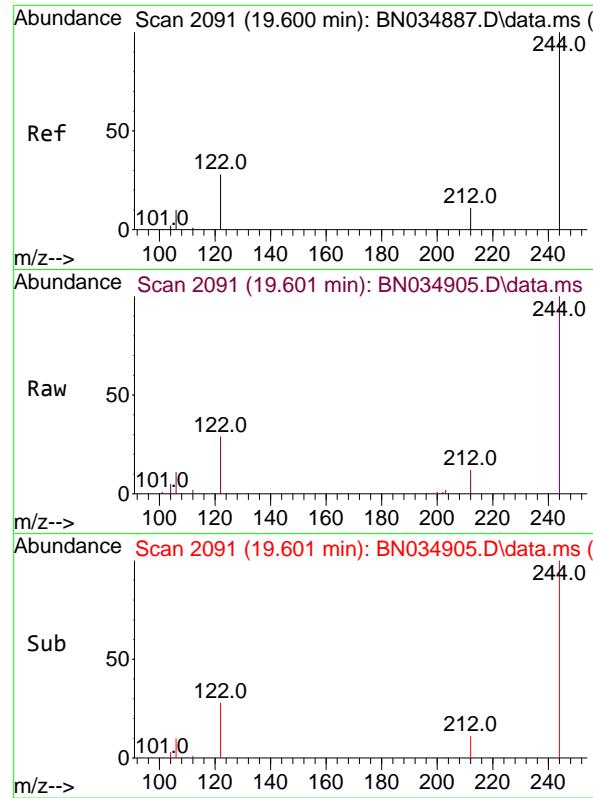
Tgt Ion:212 Resp: 11799  
 Ion Ratio Lower Upper  
 212 100  
 106 23.4 18.2 27.4  
 104 13.5 10.6 15.8



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.152 min Scan# 2410  
 Delta R.T. 0.000 min  
 Lab File: BN034905.D  
 Acq: 08 Nov 2024 13:05

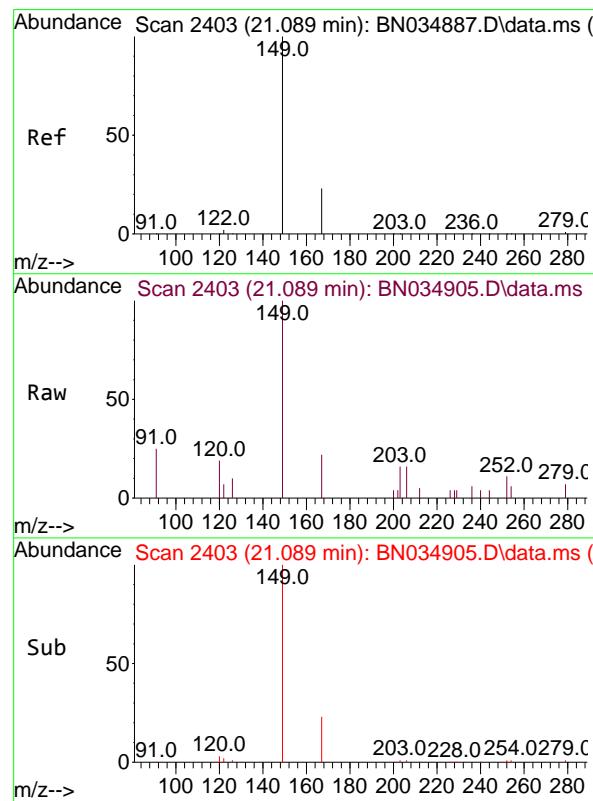
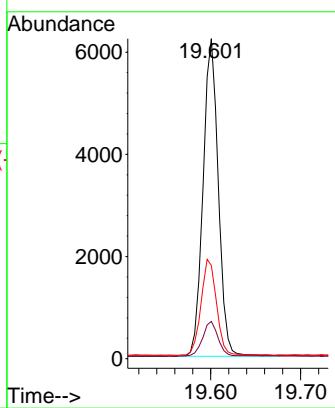
Tgt Ion:240 Resp: 8571  
 Ion Ratio Lower Upper  
 240 100  
 120 18.2 13.8 20.8  
 236 29.6 23.8 35.6





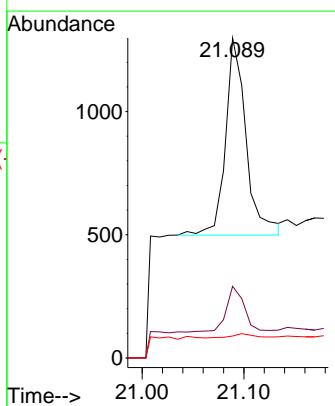
#31  
Terphenyl-d14  
Concen: 0.458 ng  
RT: 19.601 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05  
ClientSampleId : BP-BPOW6-7-GW-20241030

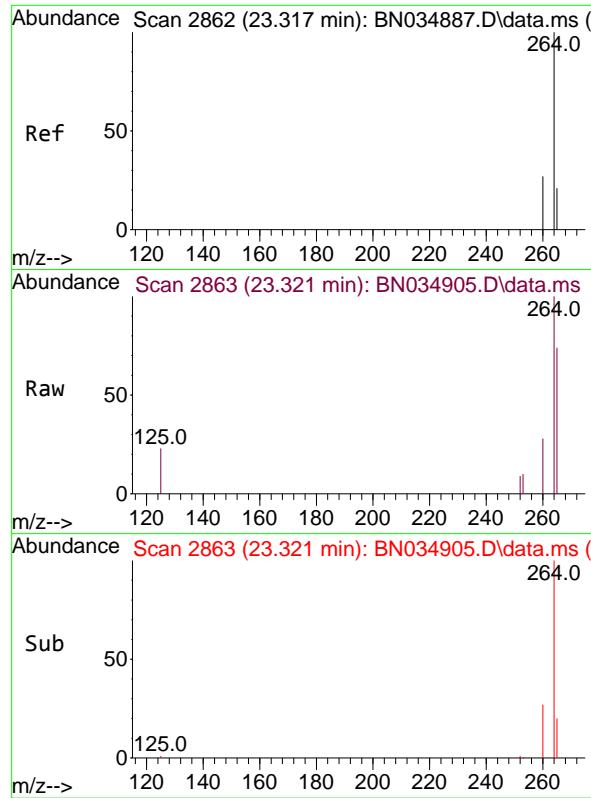
Tgt Ion:244 Resp: 7348  
Ion Ratio Lower Upper  
244 100  
212 11.7 9.4 14.0  
122 29.1 23.0 34.4



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.059 ng  
RT: 21.089 min Scan# 2403  
Delta R.T. -0.000 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

Tgt Ion:149 Resp: 1125  
Ion Ratio Lower Upper  
149 100  
167 20.5 18.1 27.1  
279 2.8 1.2 1.8#

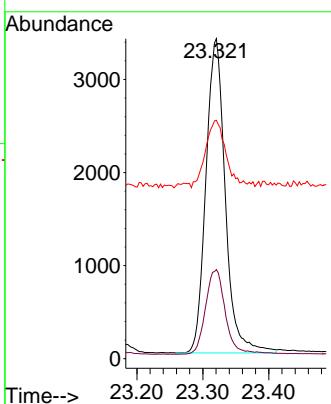




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.321 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN034905.D  
Acq: 08 Nov 2024 13:05

Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-7-GW-20241030

Tgt	Ion:264	Resp:	6880
Ion	Ratio	Lower	Upper
264	100		
260	27.8	22.2	33.2
265	74.5	60.9	91.3





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	10/31/24	
Project:	CTO WE13			Date Received:	11/04/24	
Client Sample ID:	BP-BPOW6-11-GW-20241031			SDG No.:	P4710	
Lab Sample ID:	P4710-03			Matrix:	Water	
Analytical Method:	SW8270SIM			% 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 :	SW3510C					

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034906.D	1	11/06/24 08:45	11/08/24 13:41	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		58 - 132		104%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	5460	7.575				
1146-65-2	Naphthalene-d8	15800	10.34				
15067-26-2	Acenaphthene-d10	7290	14.208				
1517-22-2	Phenanthrene-d10	14800	16.952				
1719-03-5	Chrysene-d12	9380	21.149				
1520-96-3	Perylene-d12	7760	23.318				

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\BN110824\  
 Data File : BN034906.D  
 Acq On : 08 Nov 2024 13:41  
 Operator : RC/JU  
 Sample : P4710-03  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument:**  
 BNA\_N  
**ClientSampleId :**  
 BP-BPOW6-11-GW-20241031

Quant Time: Nov 08 14:18:42 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

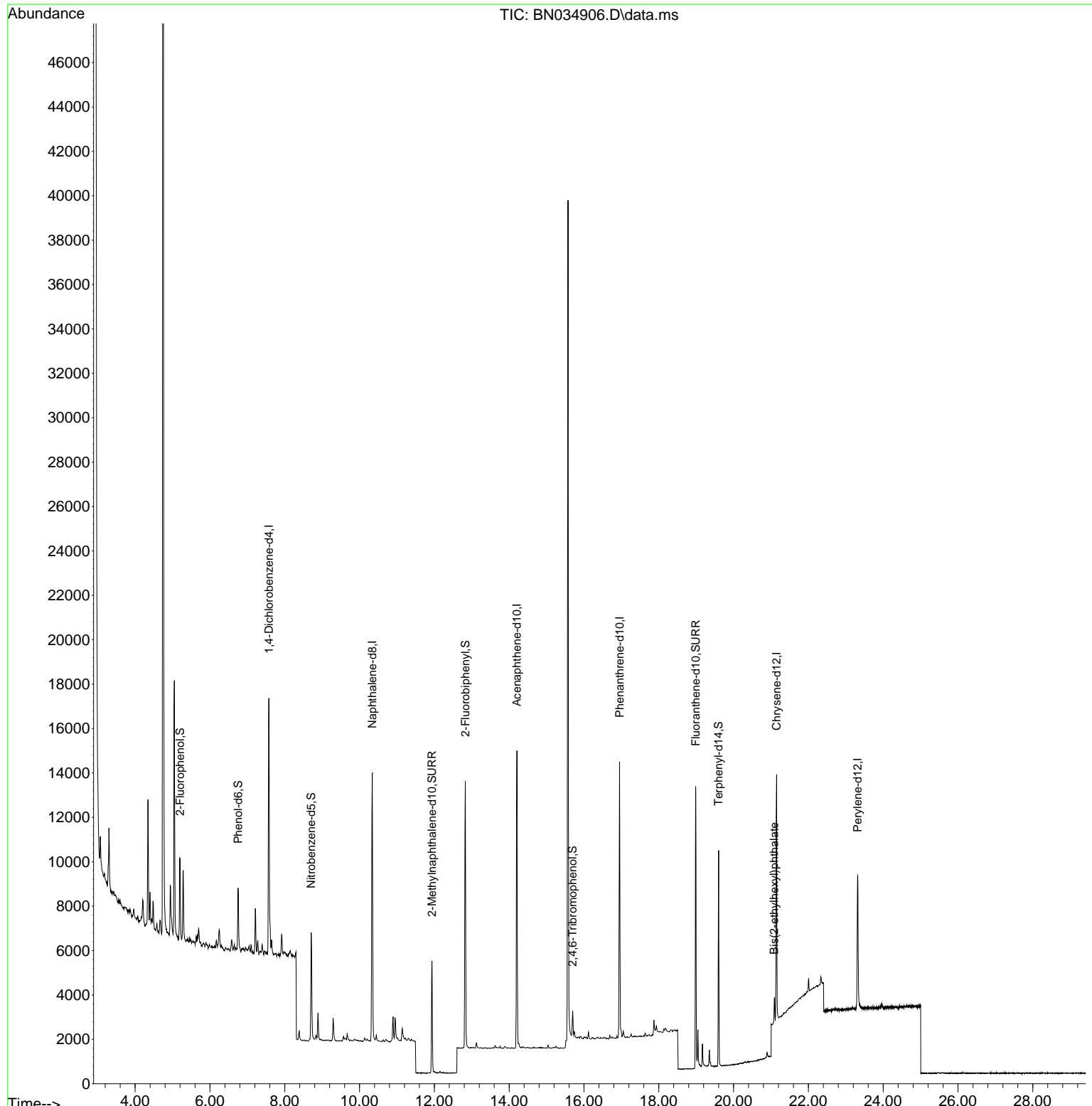
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5457	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	15845	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	7293	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	14785	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	9375	0.400	ng	0.00
35) Perylene-d12	23.318	264	7760	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	2842	0.187	ng	0.00
5) Phenol-d6	6.752	99	2449	0.121	ng	0.00
8) Nitrobenzene-d5	8.707	82	4039	0.327	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	6806	0.315	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	583	0.312	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	10634	0.345	ng	0.00
27) Fluoranthene-d10	18.990	212	12450	0.373	ng	0.00
31) Terphenyl-d14	19.598	244	7337	0.418	ng	0.00
<b>Target Compounds</b>						
34) Bis(2-ethylhexyl)phtha...	21.086	149	1357	0.065	ng	# 95

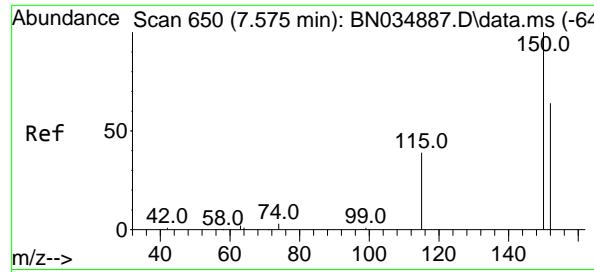
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034906.D  
 Acq On : 08 Nov 2024 13:41  
 Operator : RC/JU  
 Sample : P4710-03  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

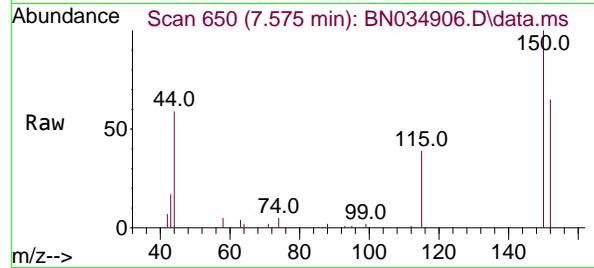
Instrument :  
 BNA\_N  
 ClientSampleId :  
 BP-BPOW6-11-GW-20241031

Quant Time: Nov 08 14:18:42 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

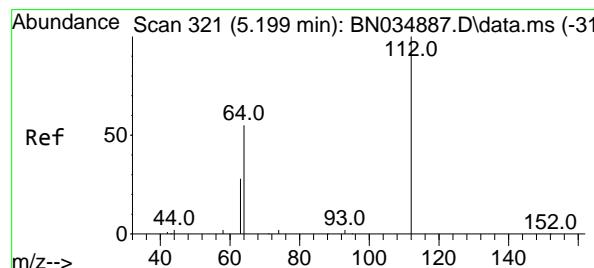
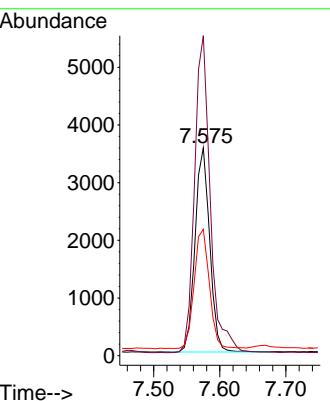
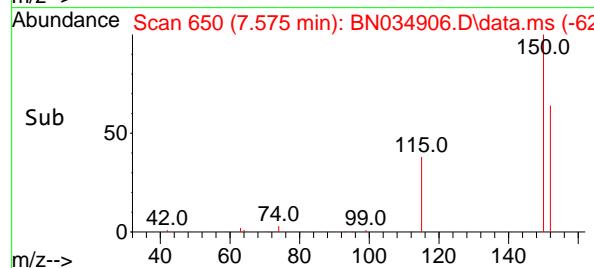




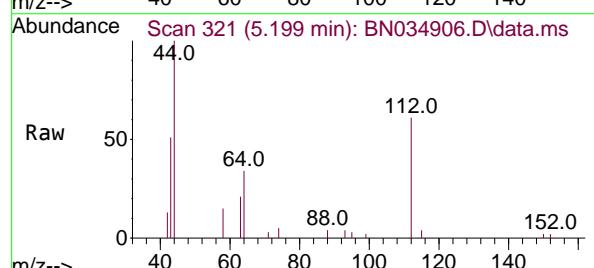
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034906.D  
ClientSampleId : BP-BPOW6-11-GW-20241031  
Acq: 08 Nov 2024 13:41



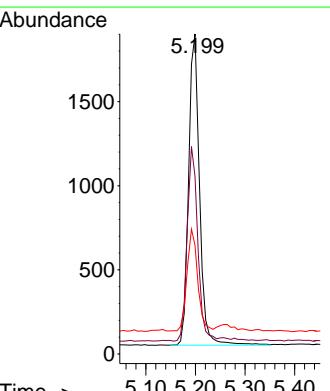
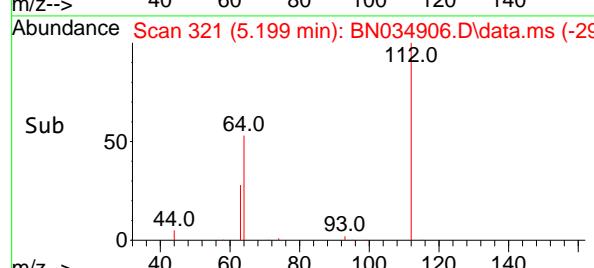
Tgt Ion:152 Resp: 5457  
Ion Ratio Lower Upper  
152 100  
150 154.0 124.4 186.6  
115 60.8 50.5 75.7

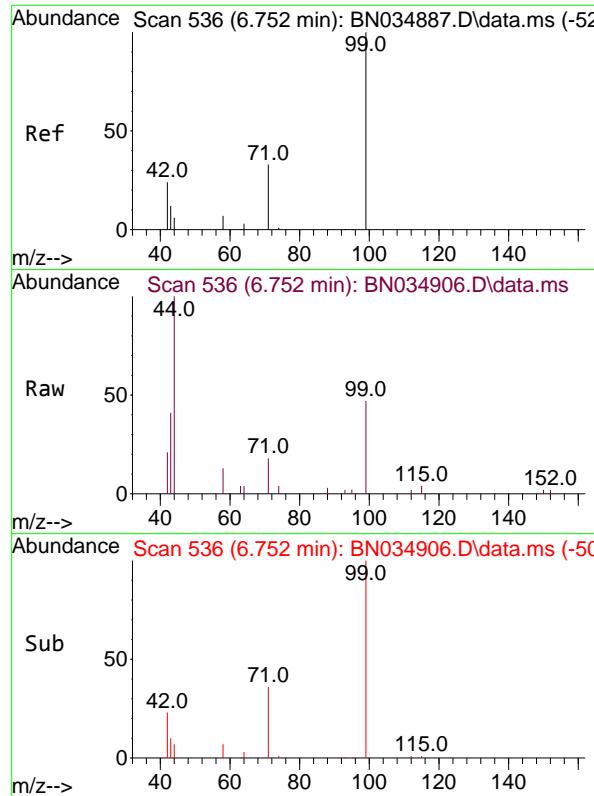


#4  
2-Fluorophenol  
Concen: 0.187 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034906.D  
Acq: 08 Nov 2024 13:41



Tgt Ion:112 Resp: 2842  
Ion Ratio Lower Upper  
112 100  
64 61.4 49.6 74.4  
63 31.9 26.3 39.5

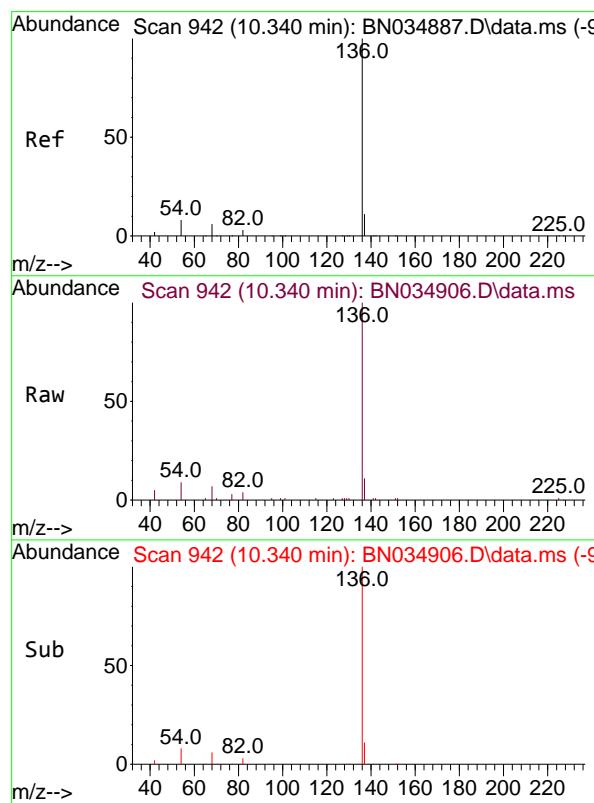
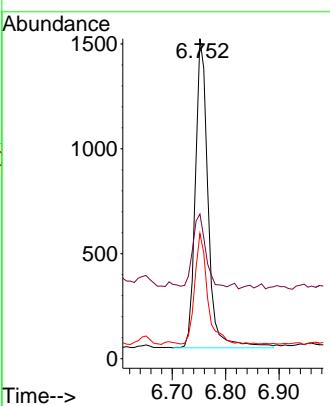




#5  
 Phenol-d6  
 Concen: 0.121 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034906.D  
 Acq: 08 Nov 2024 13:41

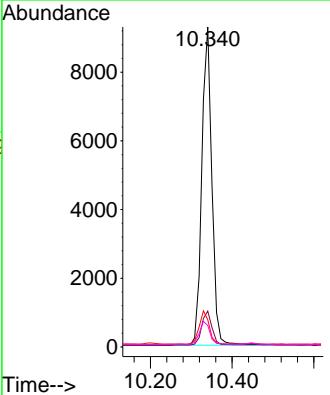
Instrument: BNA\_N  
 ClientSampleId : BP-BPOW6-11-GW-20241031

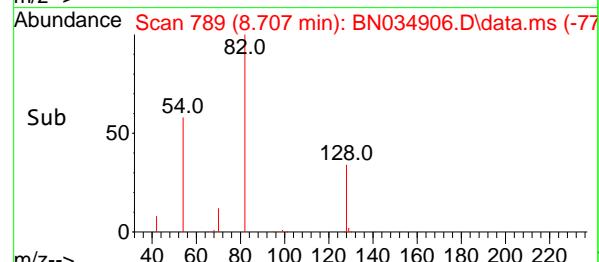
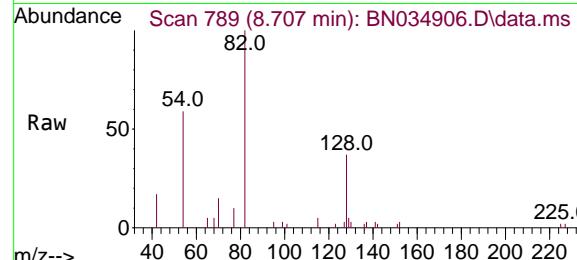
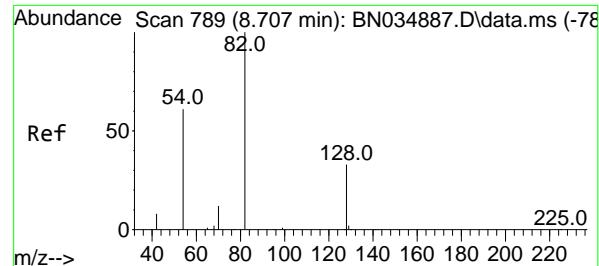
Tgt Ion: 99 Resp: 2449  
 Ion Ratio Lower Upper  
 99 100  
 42 23.3 20.2 30.2  
 71 36.1 25.4 38.0



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 942  
 Delta R.T. 0.000 min  
 Lab File: BN034906.D  
 Acq: 08 Nov 2024 13:41

Tgt Ion:136 Resp: 15845  
 Ion Ratio Lower Upper  
 136 100  
 137 11.2 8.9 13.3  
 54 8.5 6.9 10.3  
 68 6.7 5.4 8.0





#8

Nitrobenzene-d5

Concen: 0.327 ng

RT: 8.707 min Scan# 7

Delta R.T. 0.000 min

Lab File: BN034906.D

Acq: 08 Nov 2024 13:41

Instrument:

BNA\_N

ClientSampleId :

BP-BPOW6-11-GW-20241031

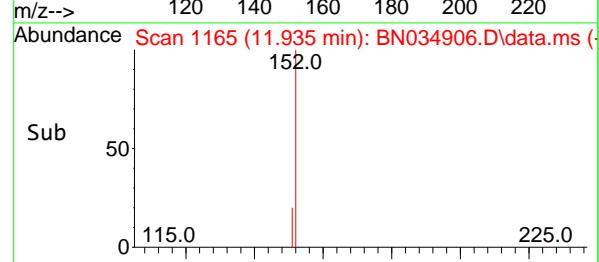
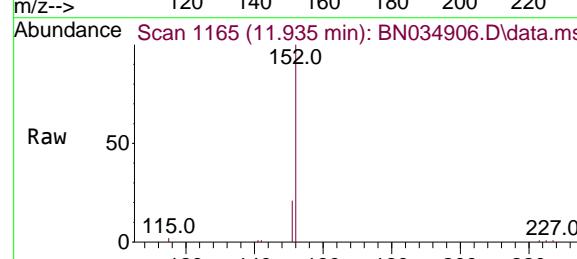
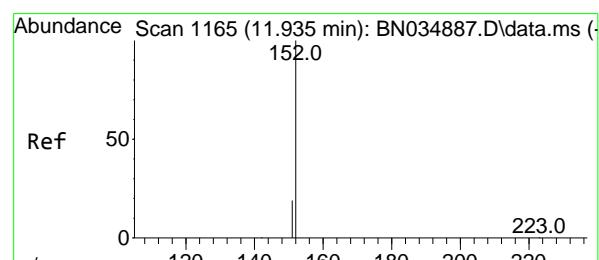
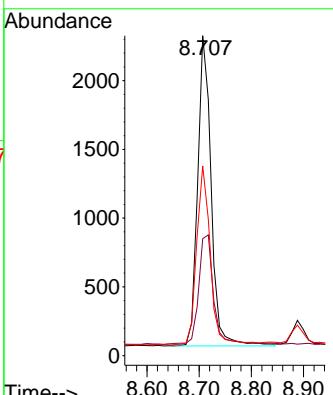
Tgt Ion: 82 Resp: 4039

Ion Ratio Lower Upper

82 100

128 36.6 28.1 42.1

54 59.3 49.8 74.6



#11

2-Methylnaphthalene-d10

Concen: 0.315 ng

RT: 11.935 min Scan# 1165

Delta R.T. 0.000 min

Lab File: BN034906.D

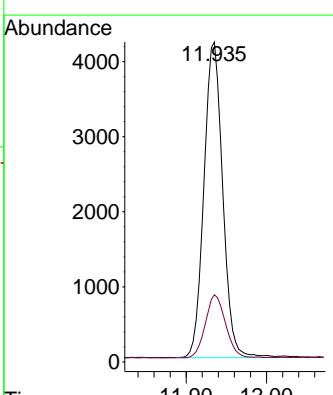
Acq: 08 Nov 2024 13:41

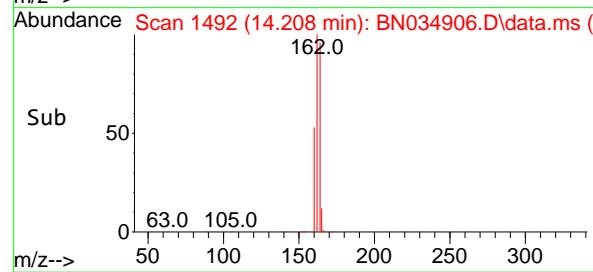
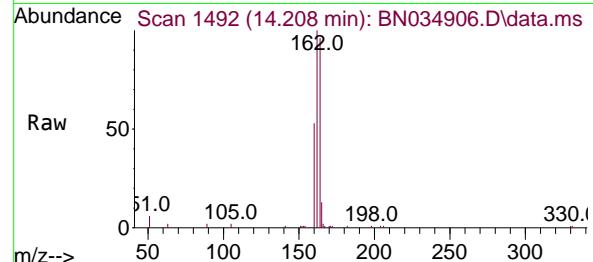
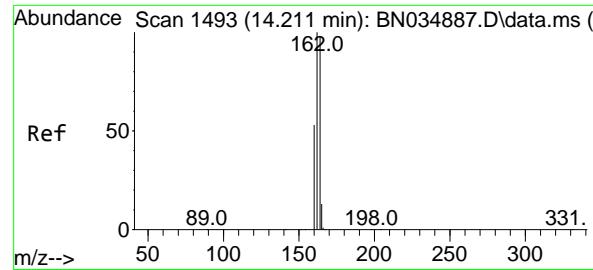
Tgt Ion: 152 Resp: 6806

Ion Ratio Lower Upper

152 100

151 21.5 17.1 25.7





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.208 min Scan# 1

Delta R.T. -0.003 min

Lab File: BN034906.D

Acq: 08 Nov 2024 13:41

Instrument:

BNA\_N

ClientSampleId :

BP-BPOW6-11-GW-20241031

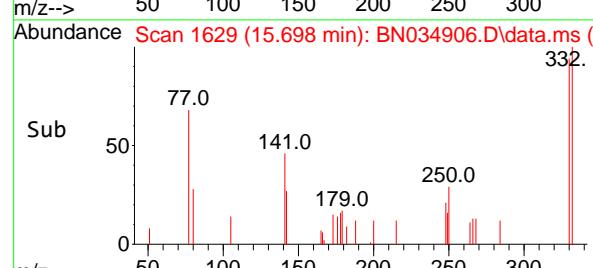
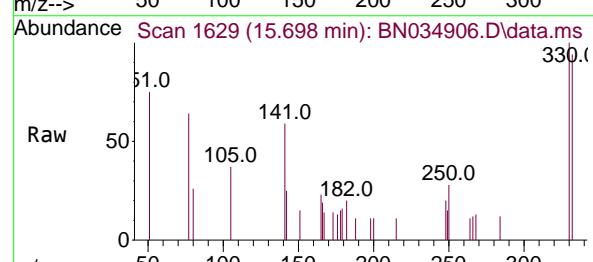
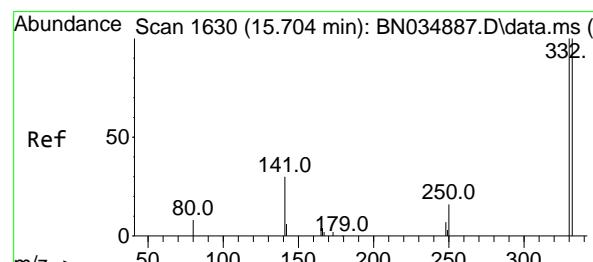
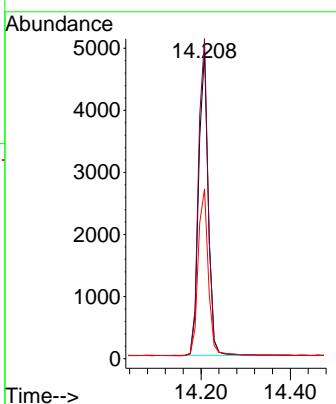
Tgt Ion:164 Resp: 7293

Ion Ratio Lower Upper

164 100

162 104.3 81.9 122.9

160 55.3 43.5 65.3



#14

2,4,6-Tribromophenol

Concen: 0.312 ng

RT: 15.698 min Scan# 1629

Delta R.T. -0.006 min

Lab File: BN034906.D

Acq: 08 Nov 2024 13:41

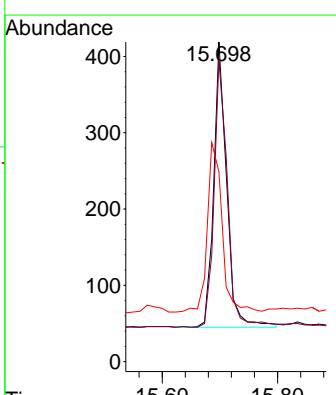
Tgt Ion:330 Resp: 583

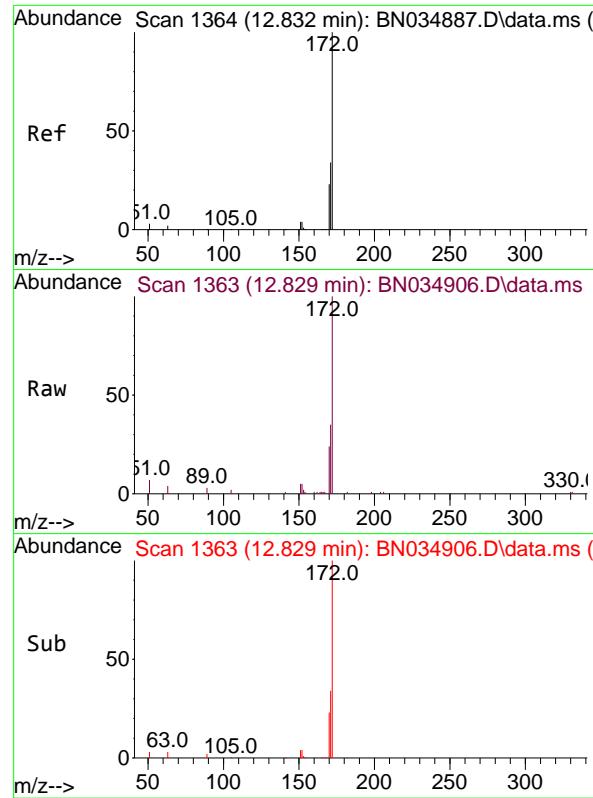
Ion Ratio Lower Upper

330 100

332 96.4 77.1 115.7

141 66.9 54.1 81.1

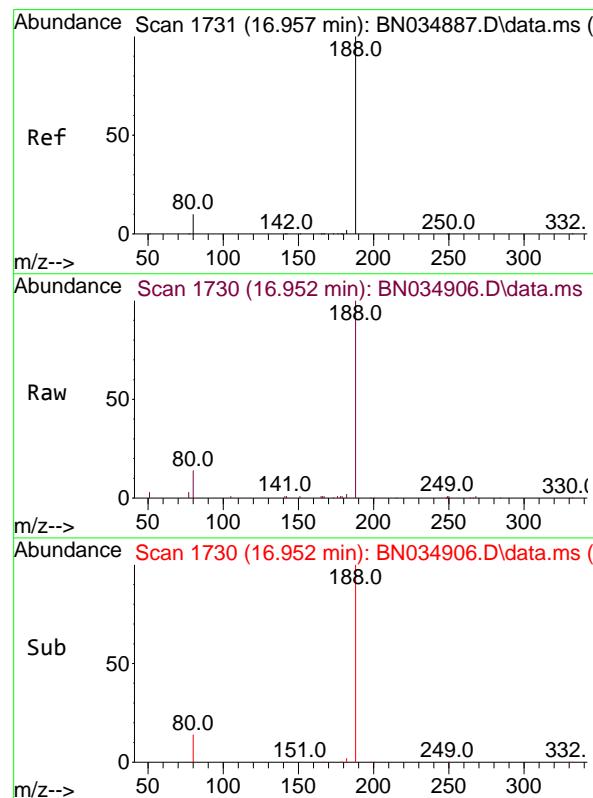
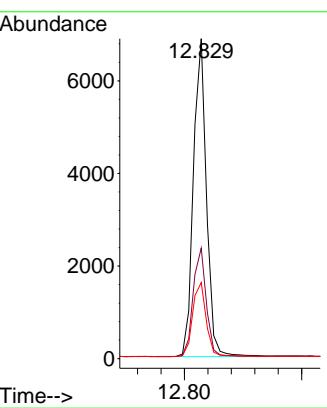




#15  
2-Fluorobiphenyl  
Concen: 0.345 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034906.D  
Acq: 08 Nov 2024 13:41

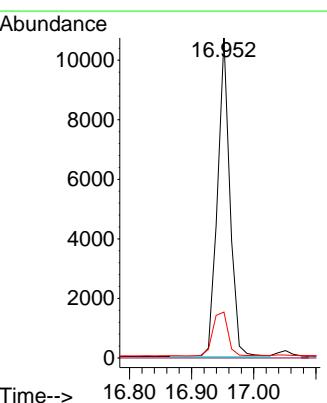
Instrument: BNA\_N  
ClientSampleId : BP-BPOW6-11-GW-20241031

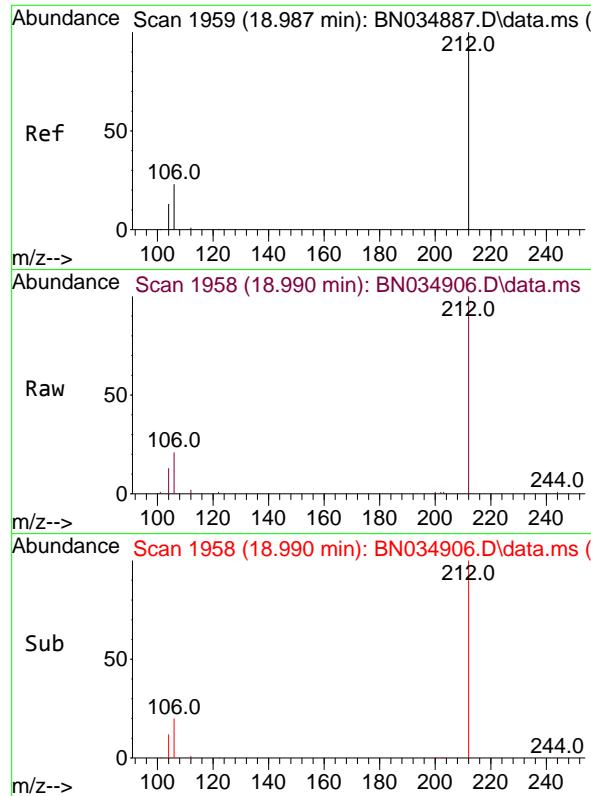
Tgt Ion:172 Resp: 10634  
Ion Ratio Lower Upper  
172 100  
171 34.6 27.9 41.9  
170 23.8 19.0 28.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.952 min Scan# 1730  
Delta R.T. -0.005 min  
Lab File: BN034906.D  
Acq: 08 Nov 2024 13:41

Tgt Ion:188 Resp: 14785  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 14.3 8.6 12.8#

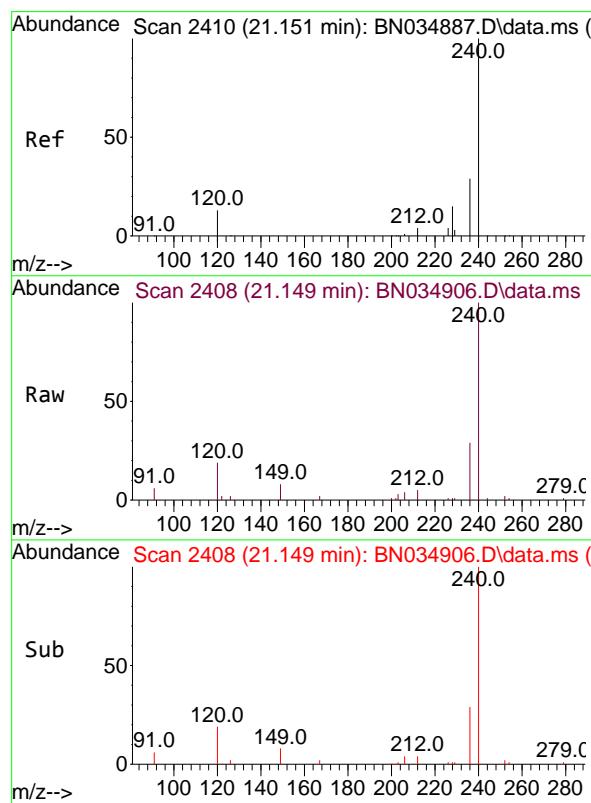
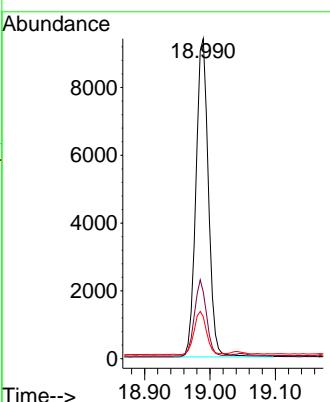




#27  
 Fluoranthene-d10  
 Concen: 0.373 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034906.D  
 Acq: 08 Nov 2024 13:41

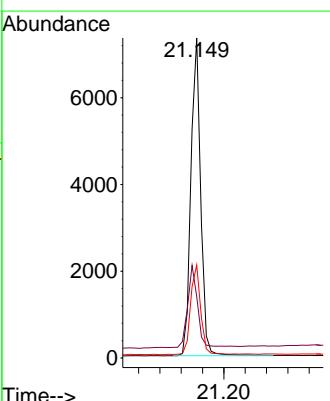
Instrument: BNA\_N  
 ClientSampleId : BP-BPOW6-11-GW-20241031

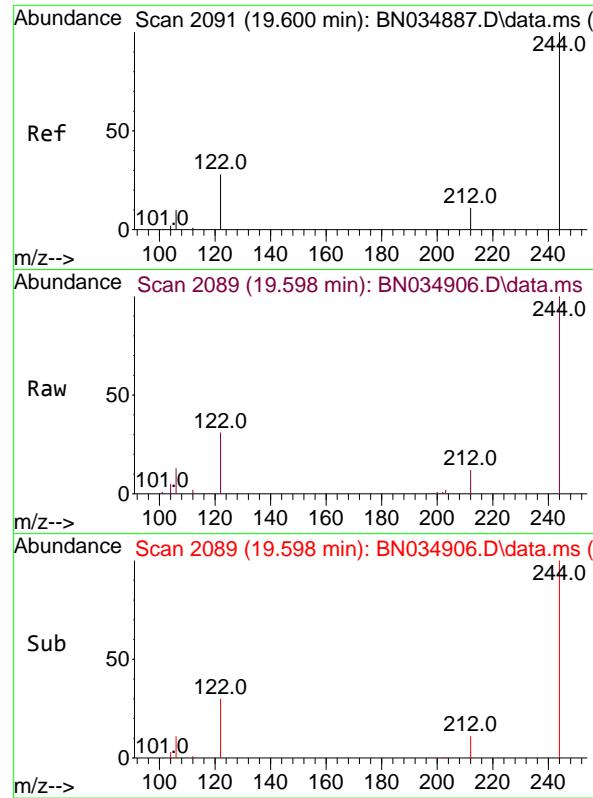
Tgt Ion:212 Resp: 12450  
 Ion Ratio Lower Upper  
 212 100  
 106 22.9 18.2 27.4  
 104 13.5 10.6 15.8



#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.149 min Scan# 2408  
 Delta R.T. -0.002 min  
 Lab File: BN034906.D  
 Acq: 08 Nov 2024 13:41

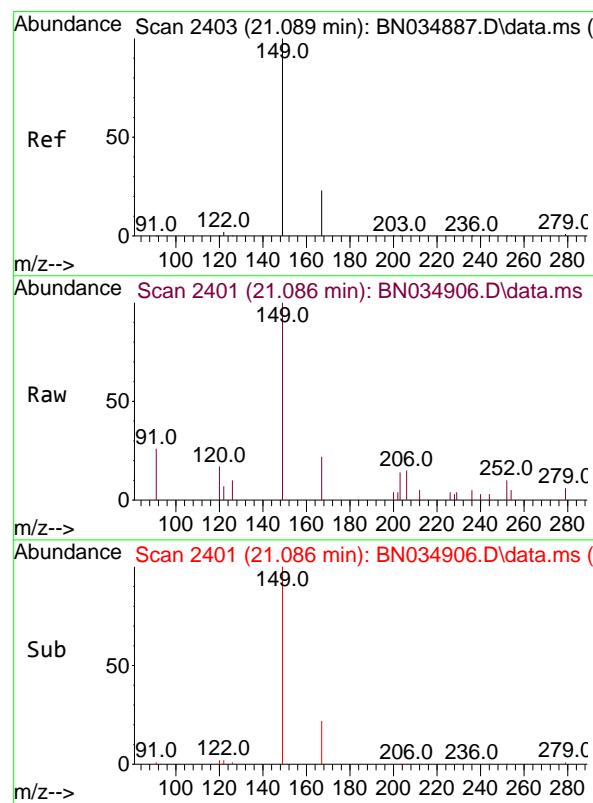
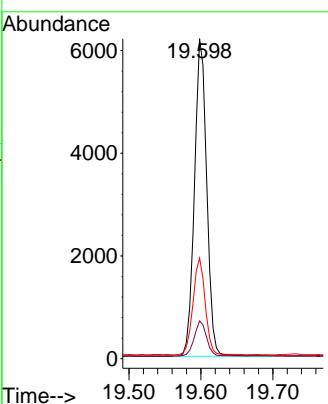
Tgt Ion:240 Resp: 9375  
 Ion Ratio Lower Upper  
 240 100  
 120 19.2 13.8 20.8  
 236 29.0 23.8 35.6





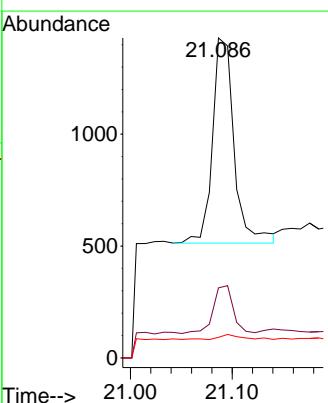
#31  
Terphenyl-d14  
Concen: 0.418 ng  
RT: 19.598 min Scan# 2  
Instrument: BNA\_N  
Delta R.T. -0.002 min  
Lab File: BN034906.D  
Acq: 08 Nov 2024 13:41  
ClientSampleId : BP-BPOW6-11-GW-20241031

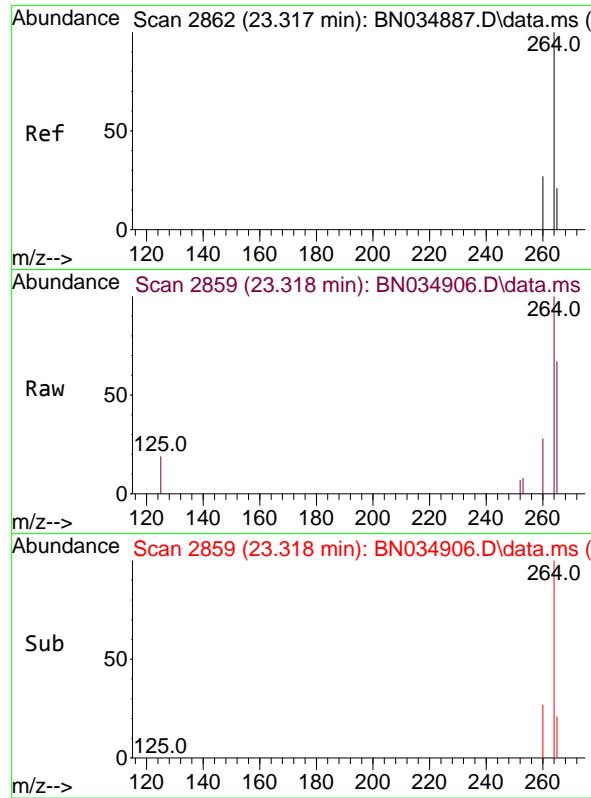
Tgt Ion:244 Resp: 7337  
Ion Ratio Lower Upper  
244 100  
212 11.8 9.4 14.0  
122 31.5 23.0 34.4



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.065 ng  
RT: 21.086 min Scan# 2401  
Delta R.T. -0.003 min  
Lab File: BN034906.D  
Acq: 08 Nov 2024 13:41

Tgt Ion:149 Resp: 1357  
Ion Ratio Lower Upper  
149 100  
167 20.2 18.1 27.1  
279 2.9 1.2 1.8#

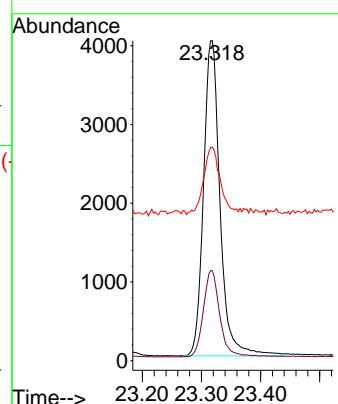




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.318 min Scan# 2  
Delta R.T. 0.001 min  
Lab File: BN034906.D  
Acq: 08 Nov 2024 13:41

Instrument: BNA\_N  
ClientSampleId : BP-BPOW6-11-GW-20241031

Tgt Ion:264 Resp: 7760  
Ion Ratio Lower Upper  
264 100  
260 28.1 22.2 33.2  
265 66.7 60.9 91.3





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	11/01/24
Project:	CTO WE13	Date Received:	11/04/24
Client Sample ID:	BP-BPOW6-8-GW-20241101	SDG No.:	P4710
Lab Sample ID:	P4710-04	Matrix:	Water
Analytical Method:	SW8270SIM	% 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 :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034907.D	1	11/06/24 08:45	11/08/24 14:17	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		81%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.39		30 - 150		96%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		111%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	5710	7.575				
1146-65-2	Naphthalene-d8	16700	10.34				
15067-26-2	Acenaphthene-d10	7610	14.208				
1517-22-2	Phenanthrene-d10	15600	16.952				
1719-03-5	Chrysene-d12	9490	21.149				
1520-96-3	Perylene-d12	7810	23.318				

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\BN110824\  
 Data File : BN034907.D  
 Acq On : 08 Nov 2024 14:17  
 Operator : RC/JU  
 Sample : P4710-04  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**BP-BPOW6-8-GW-20241101**

Quant Time: Nov 08 15:00:52 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

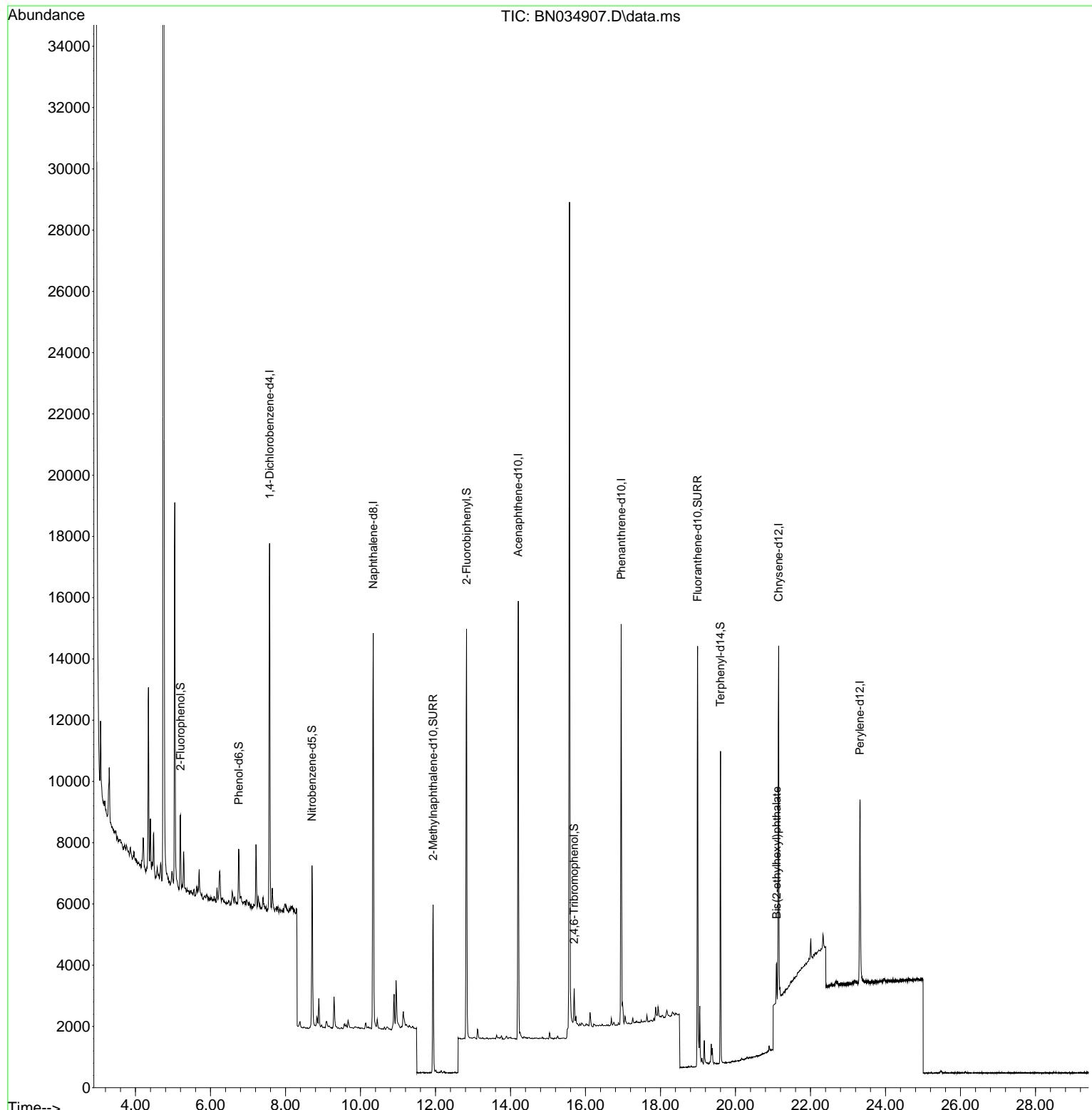
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5705	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	16698	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	7609	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	15639	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	9493	0.400	ng	0.00
35) Perylene-d12	23.318	264	7807	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	1923	0.121	ng	0.00
5) Phenol-d6	6.752	99	1560	0.074	ng	0.00
8) Nitrobenzene-d5	8.707	82	4324	0.332	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	7352	0.323	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	576	0.297	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	11404	0.355	ng	0.00
27) Fluoranthene-d10	18.990	212	13593	0.385	ng	0.00
31) Terphenyl-d14	19.598	244	7875	0.443	ng	0.00
<b>Target Compounds</b>						
34) Bis(2-ethylhexyl)phtha...	21.095	149	1521	0.072	ng	# 96

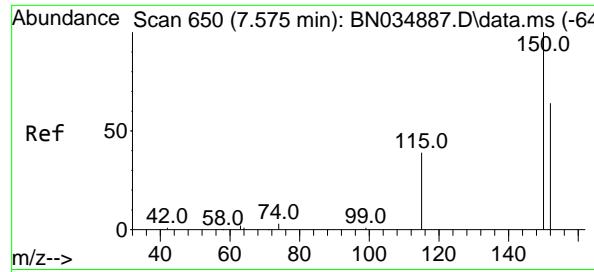
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034907.D  
 Acq On : 08 Nov 2024 14:17  
 Operator : RC/JU  
 Sample : P4710-04  
 Misc :  
 ALS Vial : 11 Sample Multiplier: 1

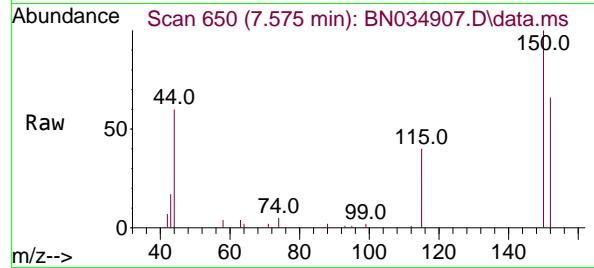
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 BNA\_N  
 ClientSampleId :  
 BP-BPOW6-8-GW-20241101

Quant Time: Nov 08 15:00:52 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

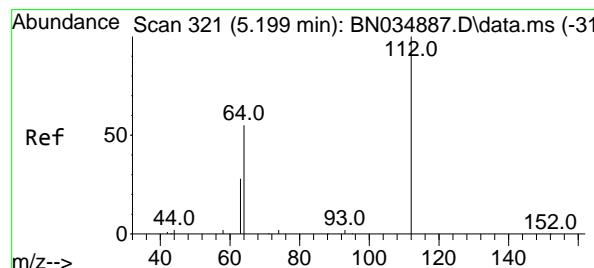
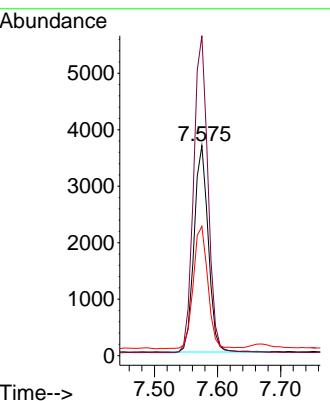
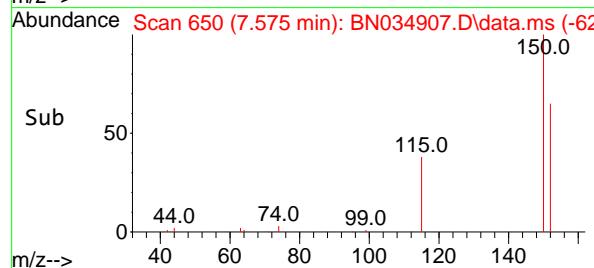




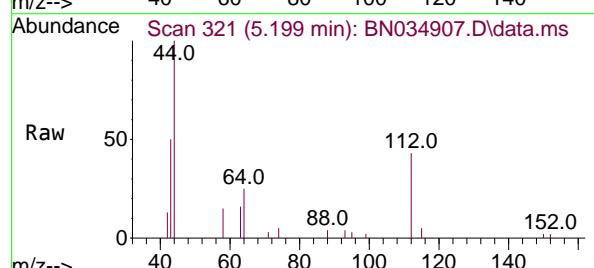
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN034907.D  
ClientSampleId : BP-BPOW6-8-GW-20241101  
Acq: 08 Nov 2024 14:17



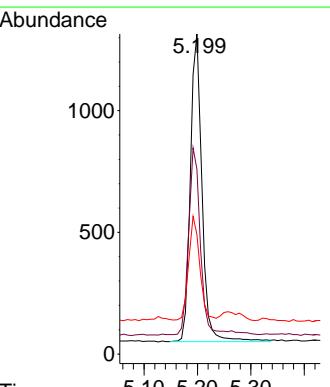
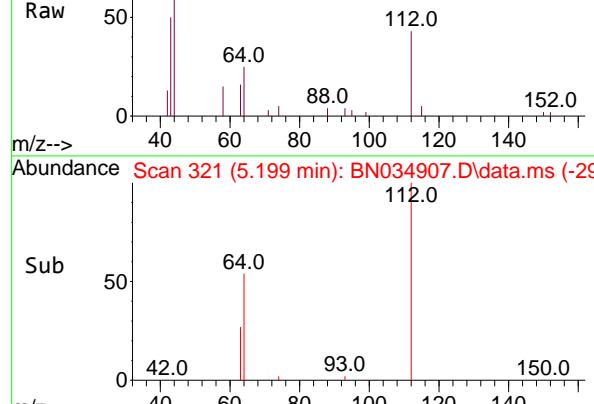
Tgt Ion:152 Resp: 5705  
Ion Ratio Lower Upper  
152 100  
150 152.4 124.4 186.6  
115 61.6 50.5 75.7

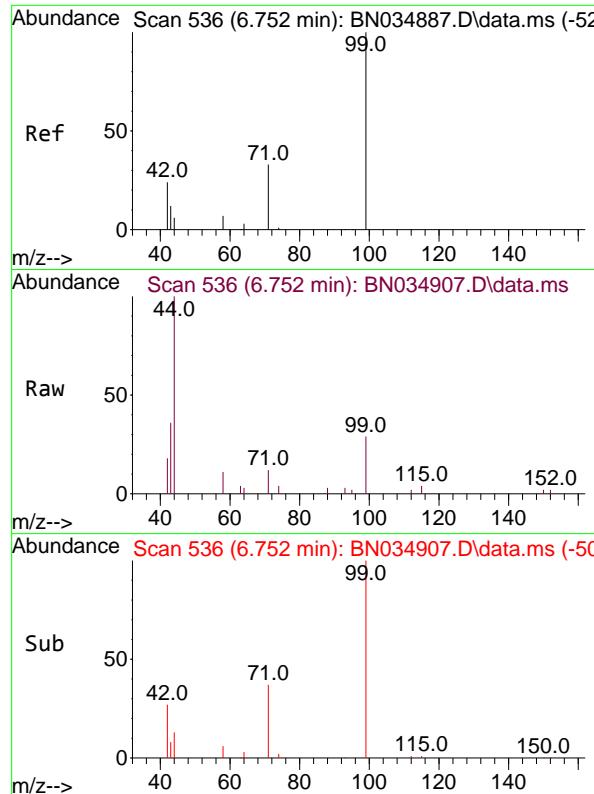


#4  
2-Fluorophenol  
Concen: 0.121 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17



Tgt Ion:112 Resp: 1923  
Ion Ratio Lower Upper  
112 100  
64 61.6 49.6 74.4  
63 33.0 26.3 39.5

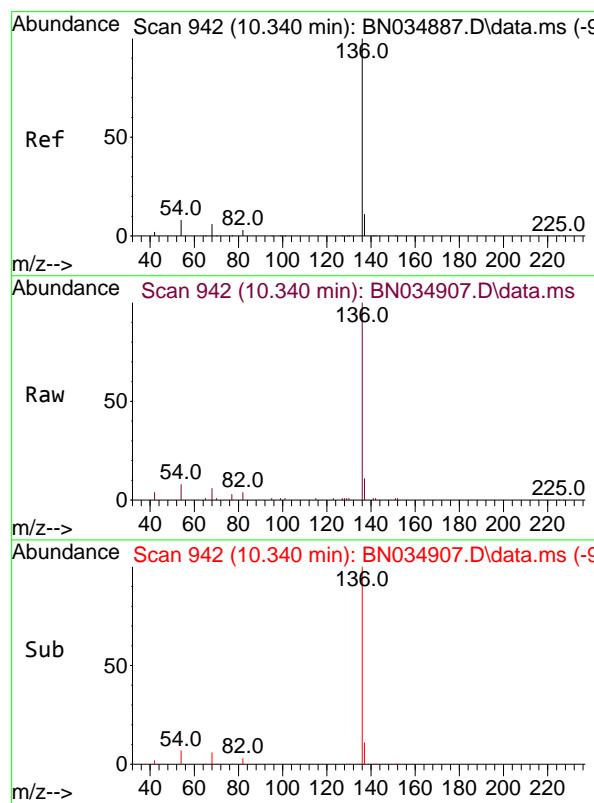
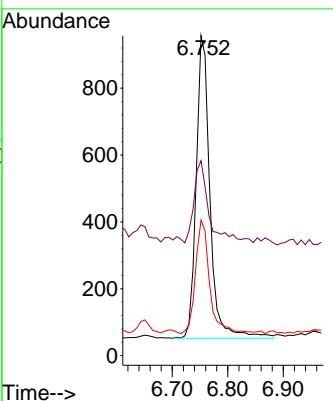




#5  
 Phenol-d6  
 Concen: 0.074 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034907.D  
 Acq: 08 Nov 2024 14:17

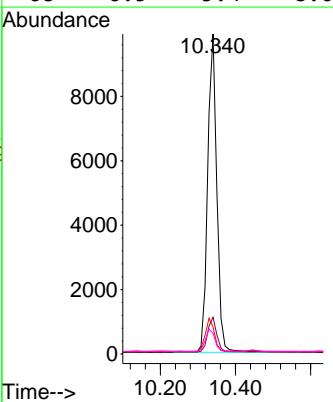
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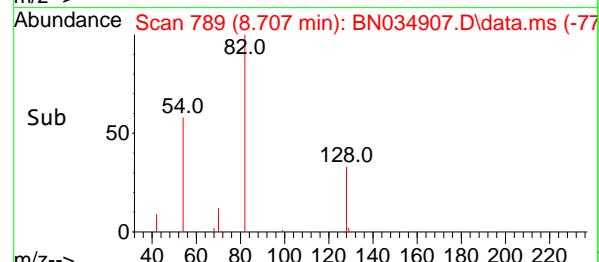
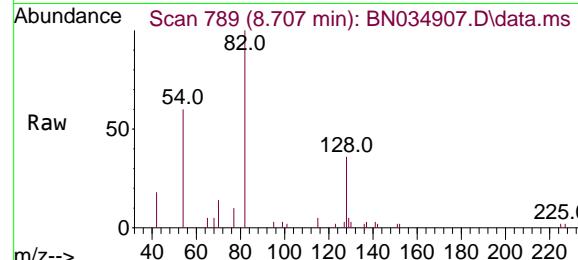
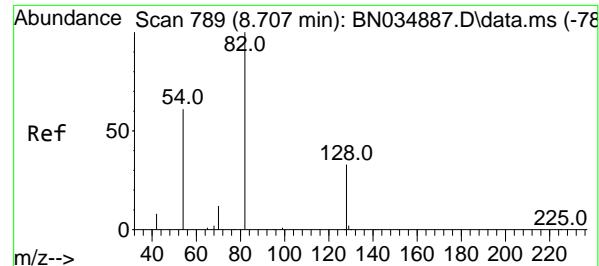
Tgt Ion: 99 Resp: 1560  
 Ion Ratio Lower Upper  
 99 100  
 42 29.5 20.2 30.2  
 71 38.5 25.4 38.0#



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 942  
 Delta R.T. 0.000 min  
 Lab File: BN034907.D  
 Acq: 08 Nov 2024 14:17

Tgt Ion:136 Resp: 16698  
 Ion Ratio Lower Upper  
 136 100  
 137 11.5 8.9 13.3  
 54 8.4 6.9 10.3  
 68 6.5 5.4 8.0





#8

Nitrobenzene-d5

Concen: 0.332 ng

RT: 8.707 min Scan# 7

Delta R.T. 0.000 min

Lab File: BN034907.D

Acq: 08 Nov 2024 14:17

Instrument :

BNA\_N

ClientSampleId :

BP-BPOW6-8-GW-20241101

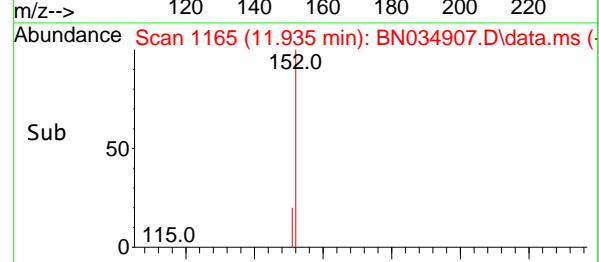
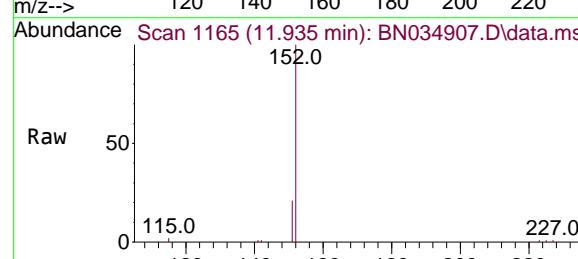
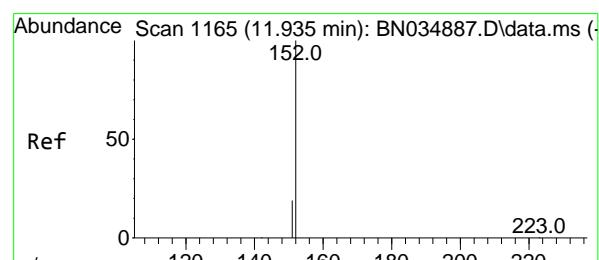
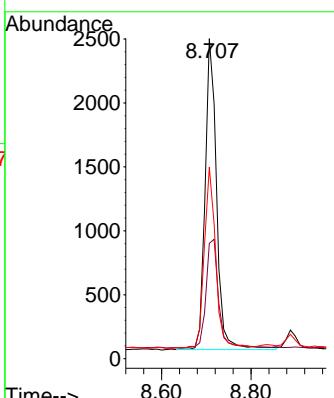
Tgt Ion: 82 Resp: 4324

Ion Ratio Lower Upper

82 100

128 36.0 28.1 42.1

54 59.8 49.8 74.6



#11

2-Methylnaphthalene-d10

Concen: 0.323 ng

RT: 11.935 min Scan# 1165

Delta R.T. 0.000 min

Lab File: BN034907.D

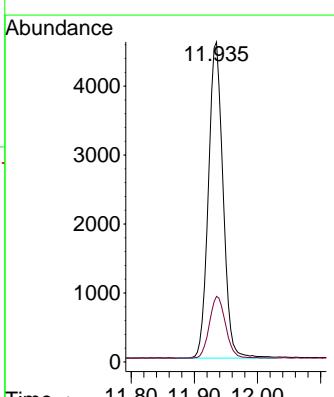
Acq: 08 Nov 2024 14:17

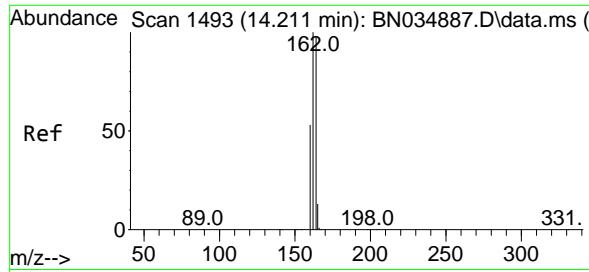
Tgt Ion: 152 Resp: 7352

Ion Ratio Lower Upper

152 100

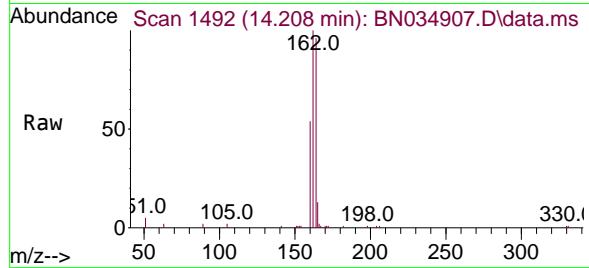
151 21.7 17.1 25.7



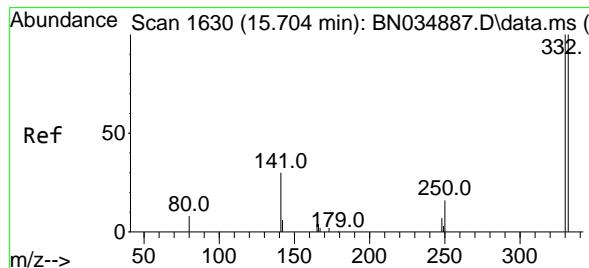
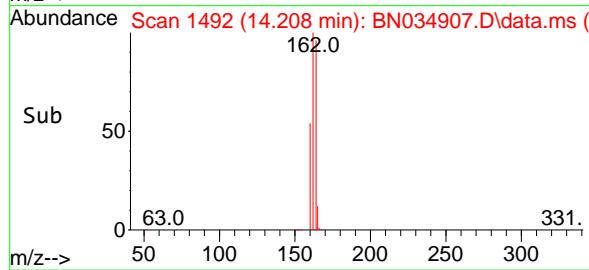
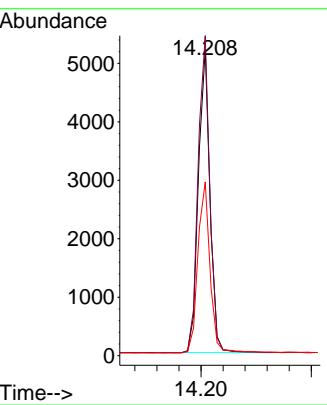


#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.208 min Scan# 1492  
Delta R.T. -0.003 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

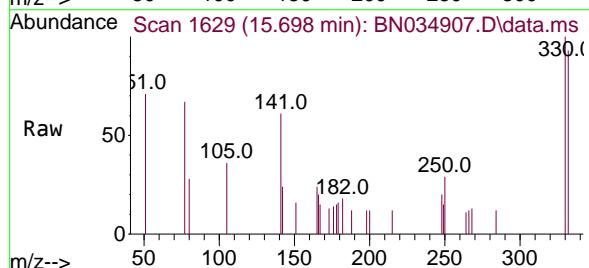
Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-8-GW-20241101



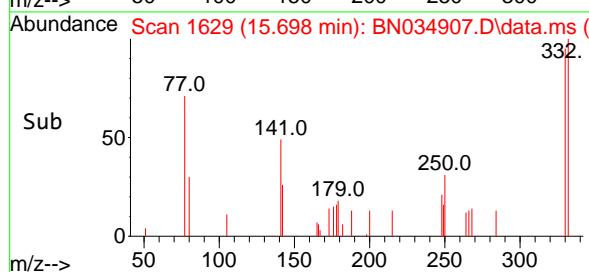
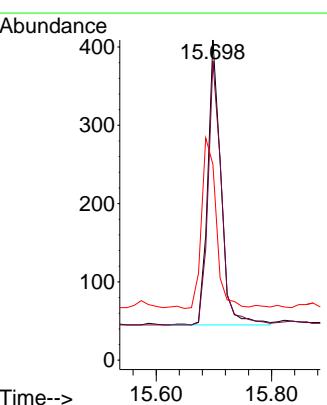
Tgt Ion:164 Resp: 7609  
Ion Ratio Lower Upper  
164 100  
162 104.4 81.9 122.9  
160 56.7 43.5 65.3

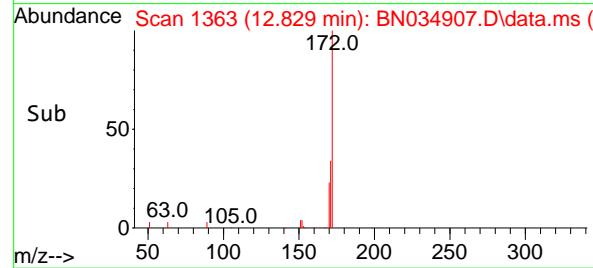
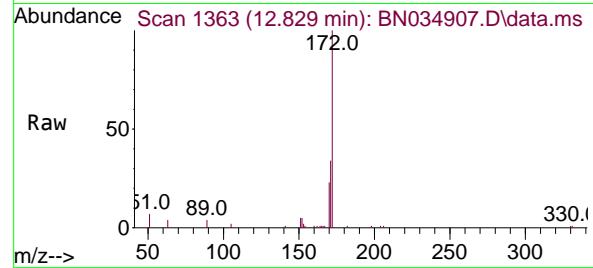
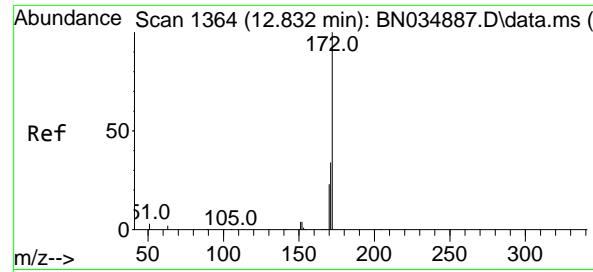


#14  
2,4,6-Tribromophenol  
Concen: 0.297 ng  
RT: 15.698 min Scan# 1629  
Delta R.T. -0.006 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17



Tgt Ion:330 Resp: 576  
Ion Ratio Lower Upper  
330 100  
332 94.3 77.1 115.7  
141 66.1 54.1 81.1

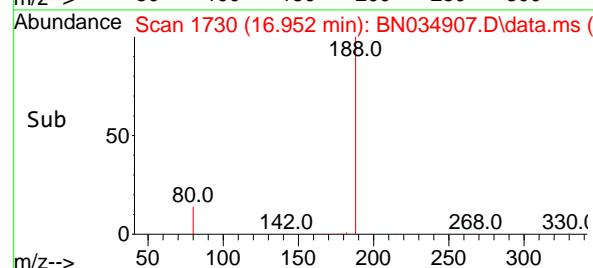
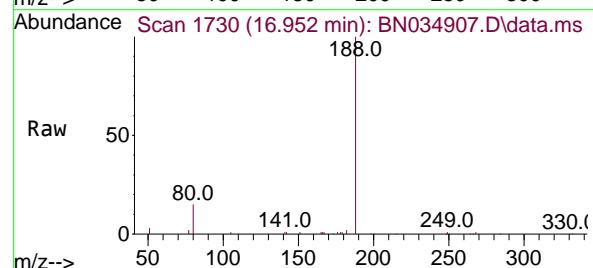
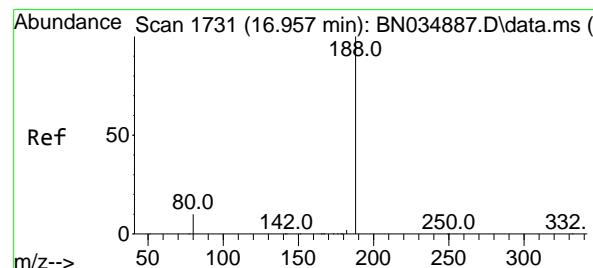
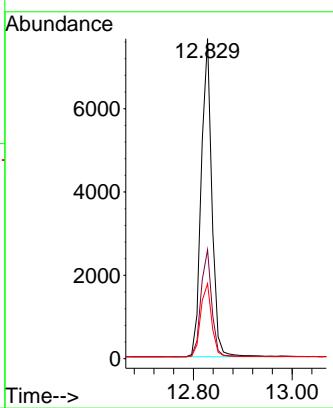




#15  
2-Fluorobiphenyl  
Concen: 0.355 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

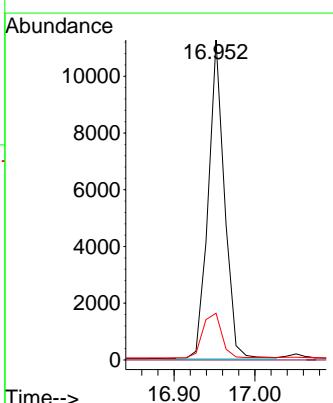
Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-8-GW-20241101

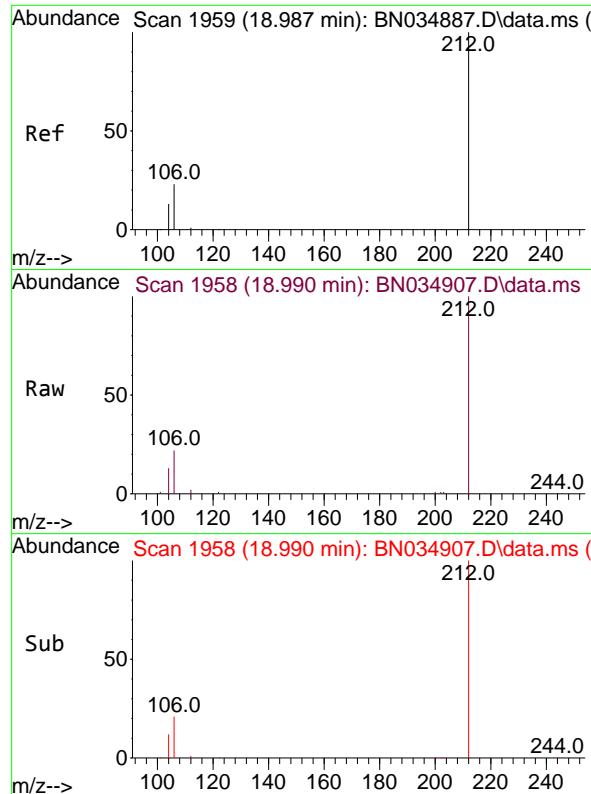
Tgt Ion:172 Resp: 11404  
Ion Ratio Lower Upper  
172 100  
171 34.1 27.9 41.9  
170 23.5 19.0 28.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.952 min Scan# 1730  
Delta R.T. -0.005 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

Tgt Ion:188 Resp: 15639  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 14.6 8.6 12.8#

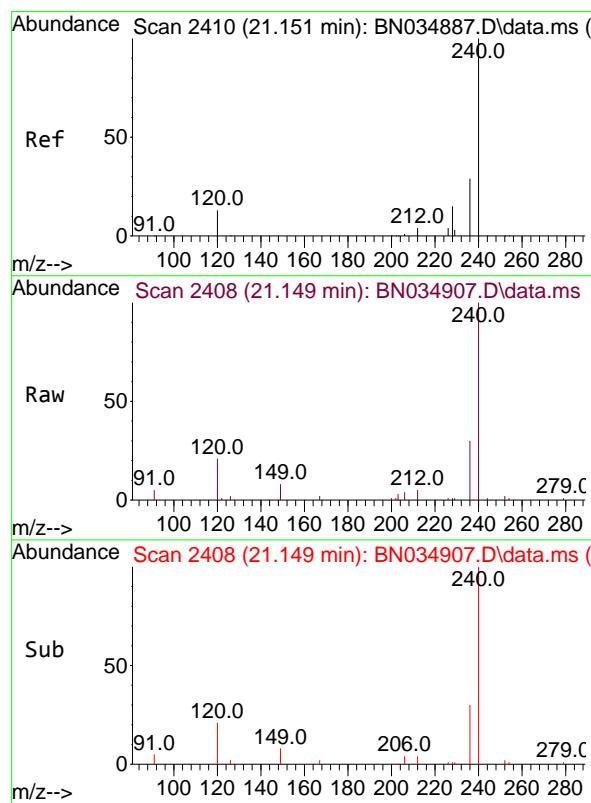
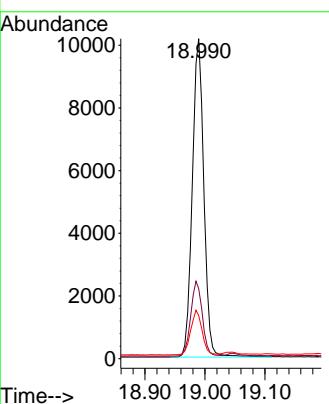




#27  
Fluoranthene-d10  
Concen: 0.385 ng  
RT: 18.990 min Scan# 1  
Delta R.T. 0.002 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

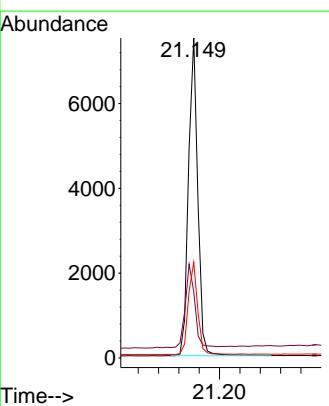
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ClientSampleId : BP-BPOW6-8-GW-20241101

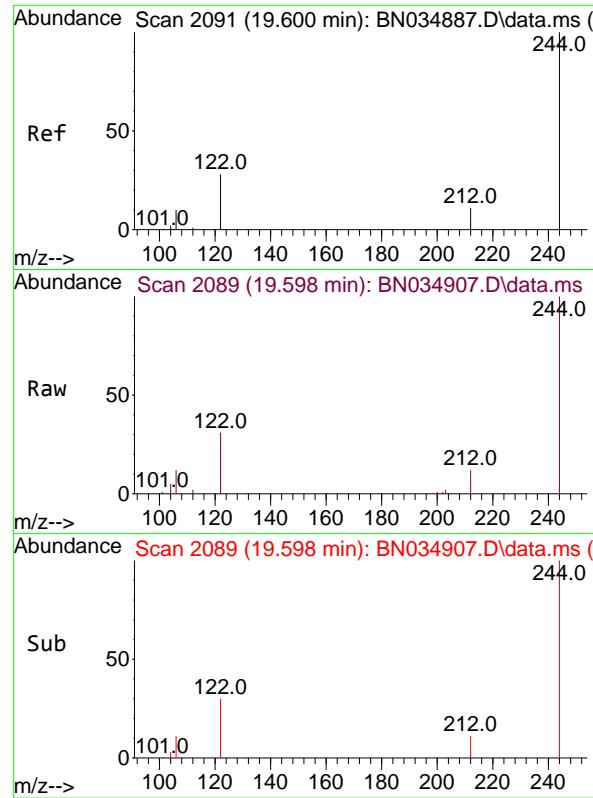
Tgt Ion:212 Resp: 13593  
Ion Ratio Lower Upper  
212 100  
106 23.4 18.2 27.4  
104 13.7 10.6 15.8



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2408  
Delta R.T. -0.002 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

Tgt Ion:240 Resp: 9493  
Ion Ratio Lower Upper  
240 100  
120 20.7 13.8 20.8  
236 29.9 23.8 35.6

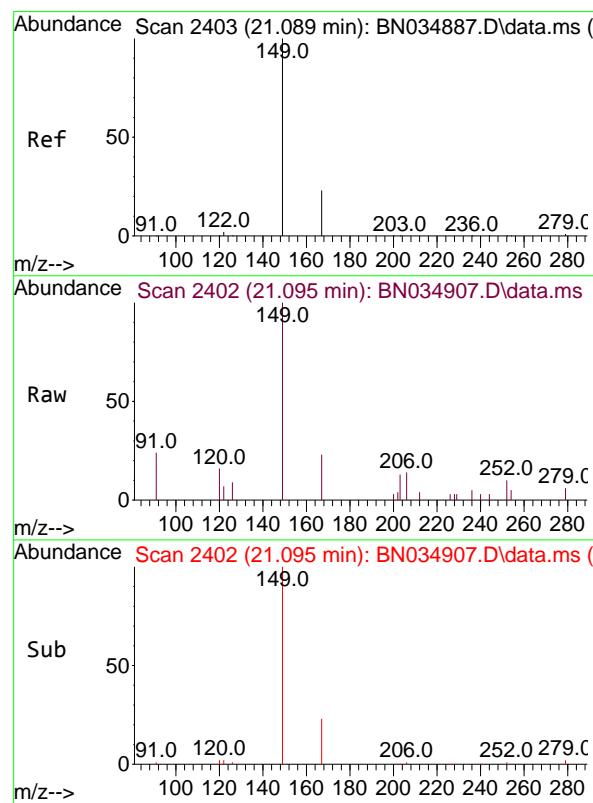
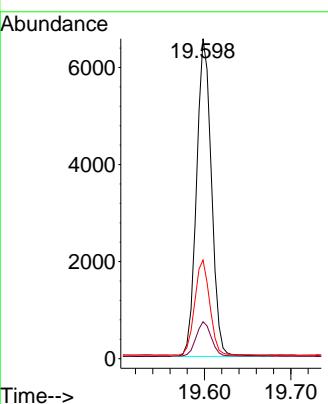




#31  
Terphenyl-d14  
Concen: 0.443 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

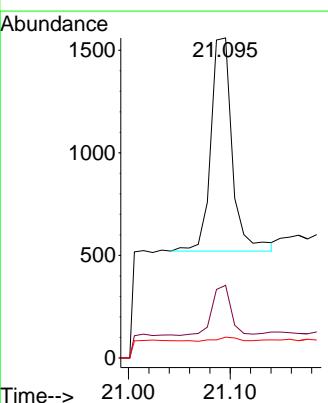
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ClientSampleId : BP-BPOW6-8-GW-20241101

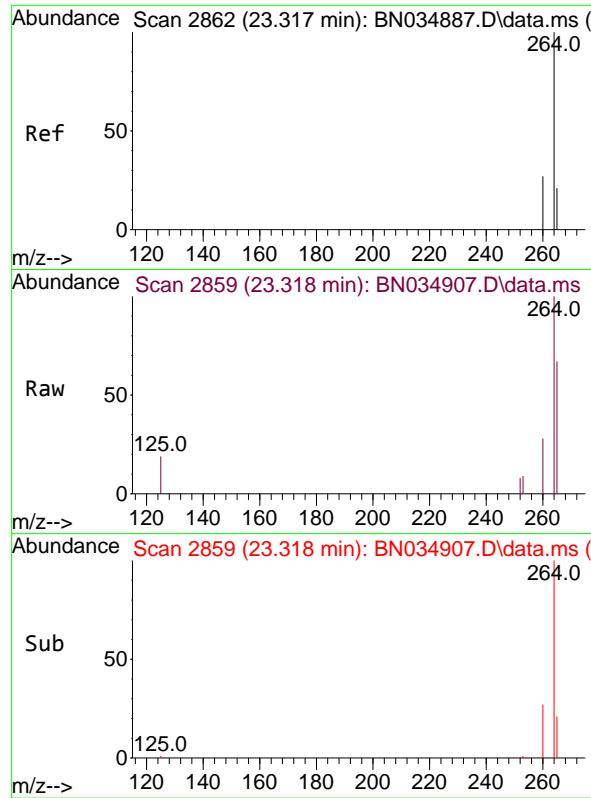
Tgt Ion:244 Resp: 7875  
Ion Ratio Lower Upper  
244 100  
212 11.5 9.4 14.0  
122 30.8 23.0 34.4



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.072 ng  
RT: 21.095 min Scan# 2402  
Delta R.T. 0.006 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

Tgt Ion:149 Resp: 1521  
Ion Ratio Lower Upper  
149 100  
167 20.4 18.1 27.1  
279 2.0 1.2 1.8#

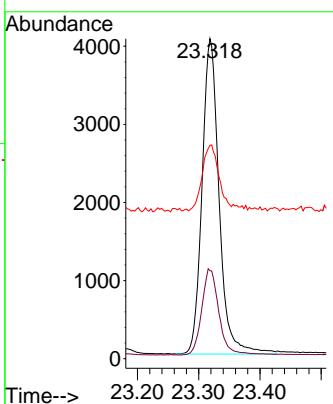




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.318 min Scan# 2  
Delta R.T. 0.001 min  
Lab File: BN034907.D  
Acq: 08 Nov 2024 14:17

Instrument : BNA\_N  
ClientSampleId : BP-BPOW6-8-GW-20241101

Tgt	Ion:264	Resp:	7807
Ion	Ratio	Lower	Upper
264	100		
260	27.5	22.2	33.2
265	66.7	60.9	91.3





# CALIBRATION

# SUMMARY



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

6C

## SEMICVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: CHEMTECHContract: TETR06Lab Code: CHEM Case No.: P4710SAS No.: P4710 SDG No.: P4710Instrument ID: BNA\_NCalibration Date(s): 11/07/2024 11/07/2024Calibration Time(s): 10:02 13:49

LAB FILE ID:		RRF0.1 = BN034885.D		RRF0.2 = BN034886.D		RRF0.4 = BN034887.D		RRF0.8 = BN034888.D		RRF1.6 = BN034889.D		RRF3.2 = BN034890.D	
COMPOUND		RRF0.1	RRF0.2	RRF0.4	RRF0.8	RRF1.6	RRF3.2	RRF	% RSD	RRF	RRF		
2-Methylnaphthalene-d10		0.527	0.519	0.491	0.579	0.577	0.548	0.545	6.3				
Fluoranthene-d10		0.801	0.845	0.801	0.971	0.976	0.947	0.902	9.2				
2-Fluorophenol		1.137	1.131	1.007	1.180	1.146	1.082	1.115	5.0				
Phenol-d6		1.438	1.439	1.299	1.582	1.550	1.495	1.480	6.6				
Nitrobenzene-d5		0.314	0.301	0.280	0.327	0.324	0.313	0.312	5.4				
2-Fluorobiphenyl		1.753	1.737	1.540	1.788	1.747	1.620	1.690	5.3				
2,4,6-Tribromophenol		0.083	0.094	0.087	0.121	0.129	0.142	0.118	26.5				
Terphenyl-d14		0.788	0.750	0.743	0.777	0.750	0.715	0.749	3.5				
1,4-Dioxane		0.563	0.562	0.474	0.530	0.498	0.470	0.505	9.4				

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
 Method File : 8270-SIM-BN110724.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Nov 07 15:02:36 2024  
 Response Via : Initial Calibration

## Calibration Files

0.1 =BN034885.D 0.2 =BN034886.D 0.4 =BN034887.D 0.8 =BN034888.D 1.6 =BN034889.D 3.2 =BN034890.D 5.0 =BN034891.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	0.563	0.562	0.474	0.530	0.498	0.470	0.441	0.505
3)	n-Nitrosodimethylamine	0.697	0.715	0.621	0.753	0.712	0.643	0.632	0.682
4) S	2-Fluorophenol	1.137	1.131	1.007	1.180	1.146	1.082	1.120	1.115
5) S	Phenol-d6	1.438	1.439	1.299	1.582	1.550	1.495	1.557	1.480
6)	bis(2-Chloroethyl)ether	1.316	1.267	1.170	1.389	1.336	1.230	1.230	1.277
7) I	Naphthalene-d8	-----	ISTD-----						
8) S	Nitrobenzene-d5	0.314	0.301	0.280	0.327	0.324	0.313	0.324	0.312
9)	Naphthalene	1.110	1.086	1.028	1.181	1.166	1.089	1.111	1.110
10)	Hexachlorobutane	0.183	0.180	0.167	0.189	0.182	0.168	0.169	0.177
11)	SURR2-Methylnaphthalene	0.527	0.519	0.491	0.579	0.577	0.548	0.575	0.545
12)	2-Methylnaphthalene	0.647	0.641	0.612	0.725	0.723	0.691	0.717	0.679
13) I	Acenaphthene-d10	-----	ISTD-----						
14) S	2,4,6-Tribromoethane	0.083	0.094	0.087	0.121	0.129	0.142	0.167	0.118
15) S	2-Fluorobiphenyl	1.753	1.737	1.540	1.788	1.747	1.620	1.642	1.690
16)	Acenaphthylene	1.833	1.826	1.672	2.034	2.040	2.003	2.097	1.929
17)	Acenaphthene	1.292	1.281	1.176	1.430	1.412	1.352	1.403	1.335
18)	Fluorene	1.614	1.600	1.463	1.774	1.779	1.680	1.727	1.662
19) I	Phenanthrene-d10	-----	ISTD-----						
20)	4,6-Dinitro-2-phenol	0.033	0.032	0.040	0.044	0.052	0.062	0.044	26.24
21)	4-Bromophenylmethanol	0.212	0.201	0.202	0.220	0.219	0.216	0.222	0.213
22)	Hexachlorobenzene	0.262	0.255	0.252	0.268	0.260	0.252	0.248	0.257
23)	Atrazine	0.128	0.136	0.133	0.162	0.169	0.173	0.180	0.154
24)	Pentachlorophenol	0.055	0.055	0.074	0.079	0.092	0.107	0.077	26.61
25)	Phenanthrene	1.218	1.168	1.162	1.303	1.276	1.239	1.221	1.227
26)	Anthracene	0.965	0.963	0.963	1.121	1.116	1.119	1.156	1.058
27)	SURRFluoranthene-d10	0.801	0.845	0.801	0.971	0.976	0.947	0.972	0.902
28)	Fluoranthene	1.112	1.183	1.135	1.414	1.418	1.385	1.391	1.291
29) I	Chrysene-d12	-----	ISTD-----						
30)	Pyrene	2.180	2.005	1.990	2.107	2.033	1.945	1.916	2.025
31) S	Terphenyl-d14	0.788	0.750	0.743	0.777	0.750	0.715	0.722	0.749
32)	Benzo(a)anthracene	1.450	1.472	1.423	1.663	1.663	1.622	1.622	1.559
33)	Chrysene	1.632	1.632	1.583	1.768	1.709	1.625	1.601	1.650
34)	Bis(2-ethylhexylphthalate)	0.984	0.873	0.720	0.881	0.838	0.922	1.048	0.895
35) I	Perylene-d12	-----	ISTD-----						

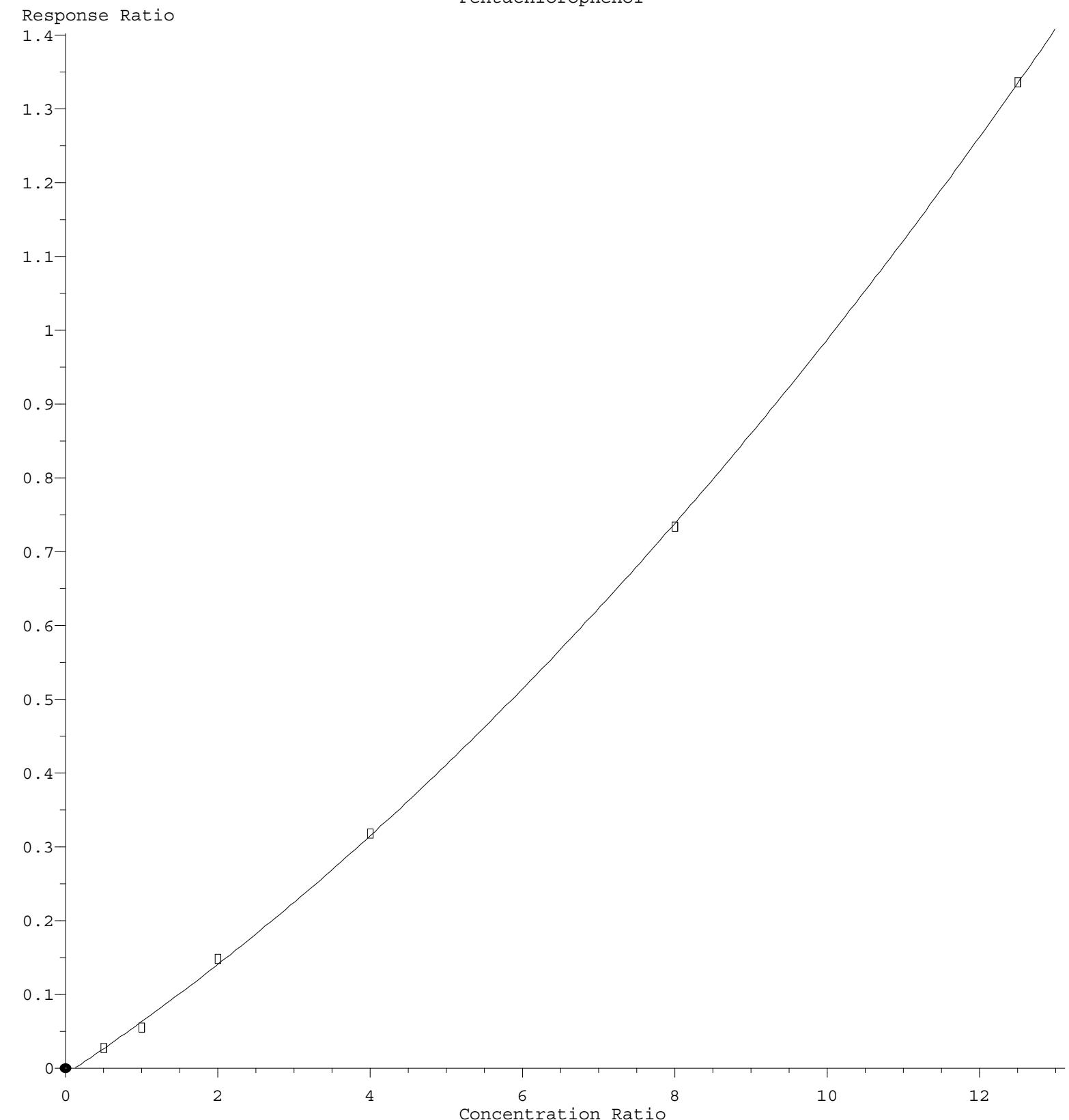
Response Factor Report BNA\_N

Method Path : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\  
Method File : 8270-SIM-BN110724.M

36)	Indeno(1,2,3-c...)	1.810	1.753	1.680	1.845	1.868	1.733	1.785	1.782	3.68
37)	Benzo(b)fluora...	1.685	1.601	1.752	1.900	1.814	1.765	1.784	1.757	5.40
38)	Benzo(k)fluora...	1.763	1.746	1.724	1.982	1.931	1.812	1.835	1.828	5.30
39) C	Benzo(a)pyrene	1.308	1.249	1.339	1.475	1.469	1.438	1.492	1.396	6.85
40)	Dibenzo(a,h)an...	1.389	1.356	1.304	1.423	1.447	1.347	1.386	1.379	3.48
41)	Benzo(g,h,i)pe...	1.482	1.434	1.483	1.485	1.509	1.407	1.445	1.464	2.44

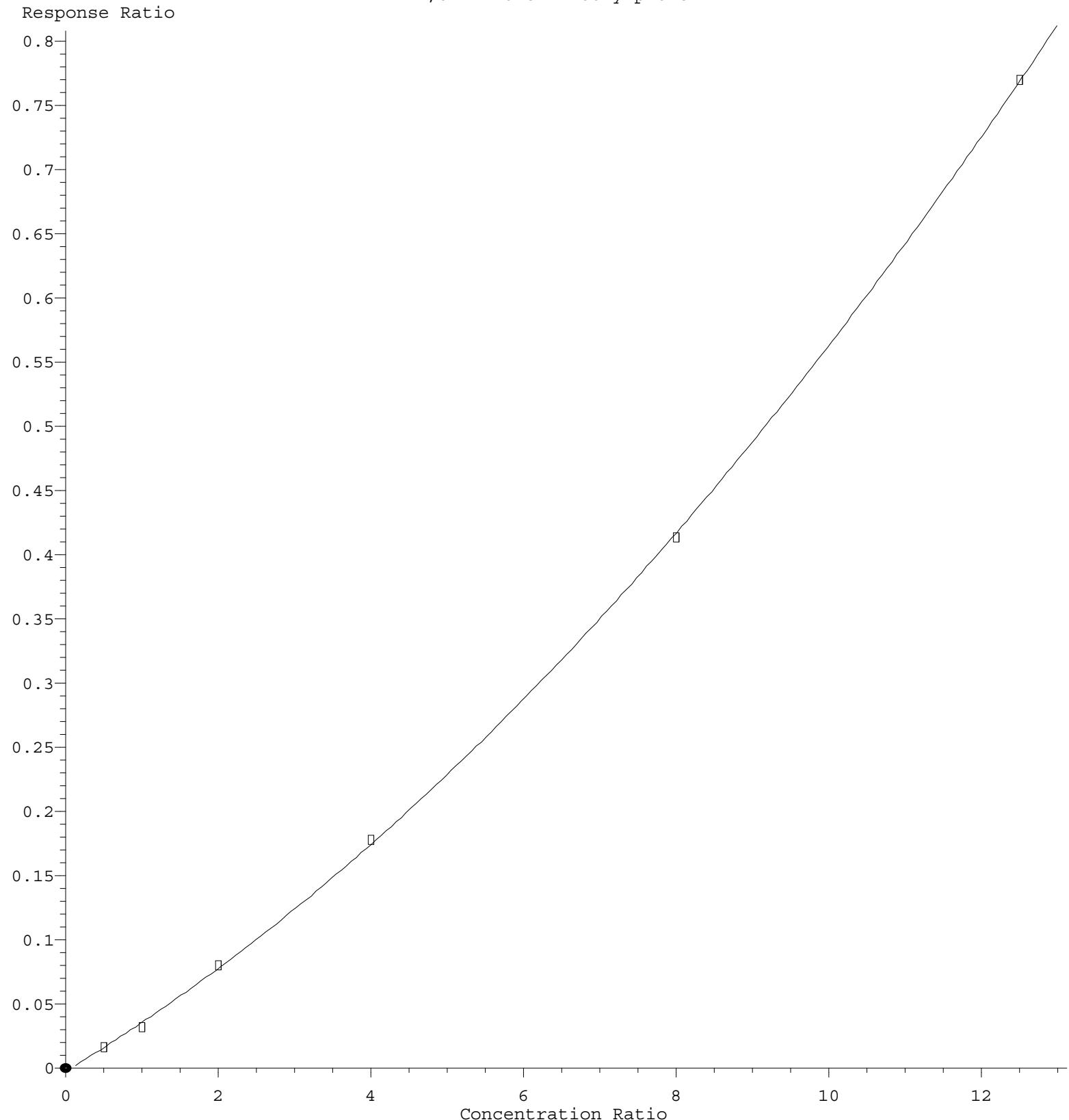
(#) = Out of Range

## Pentachlorophenol



R = 3.129e-003 A\*A + 6.832e-002 A - 8.406e-003  
Coef of Det ( $r^2$ ) = 0.999884 Curve Fit: Quadratic  
Method Name: Z:\svoasrv\HPCHEM1\BNA N\Methods\8270-SIM-BN110724.M  
Calibration Table Last Updated: Thu Nov 07 15:02:36 2024

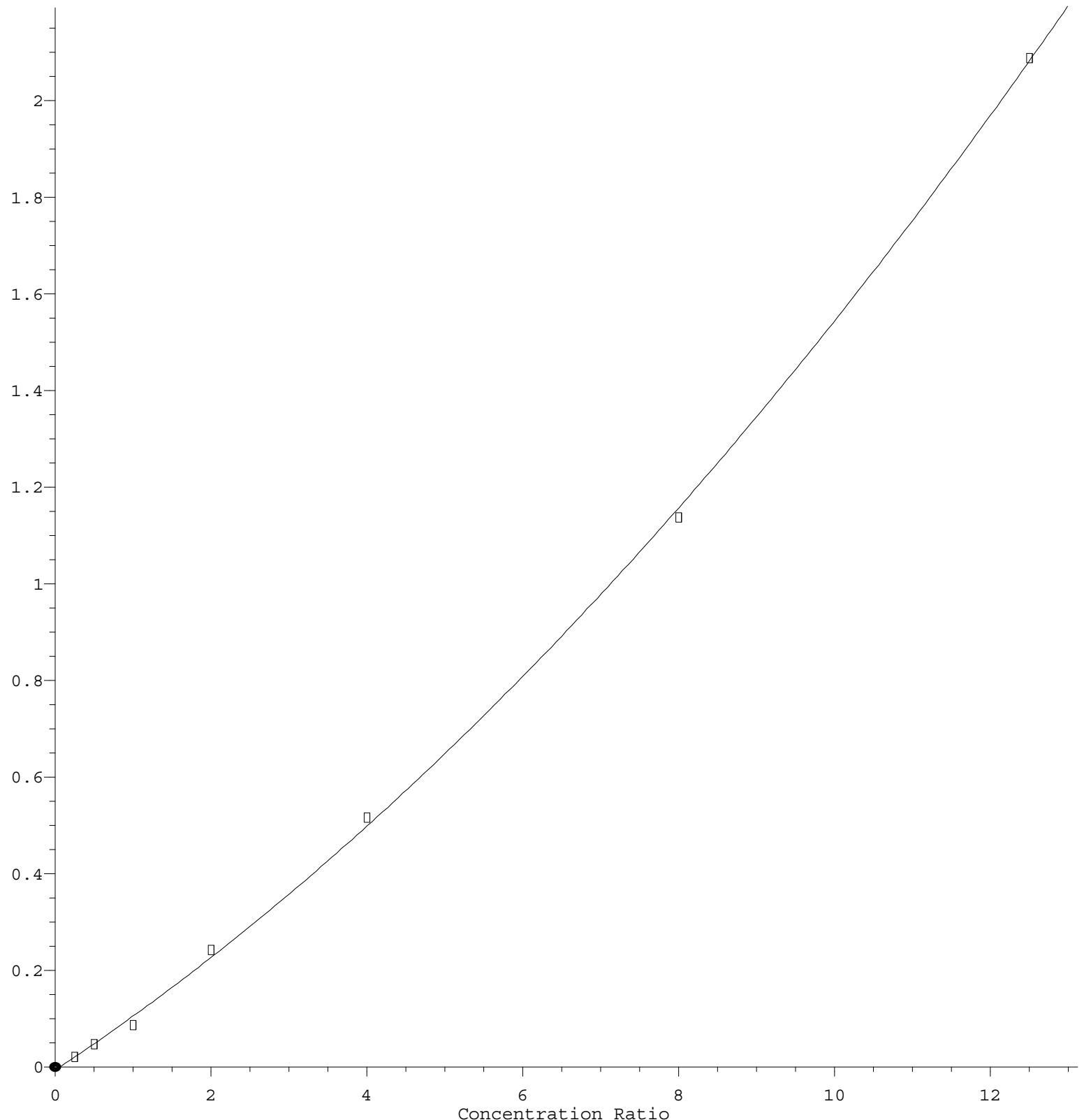
## 4,6-Dinitro-2-methylphenol



R = 2.059e-003 A\*A + 3.595e-002 A - 2.452e-003  
Coef of Det ( $r^2$ ) = 0.999897 Curve Fit: Quadratic  
Method Name: Z:\svoasrv\HPCHEM1\BNA N\Methods\8270-SIM-BN110724.M  
Calibration Table Last Updated: Thu Nov 07 15:02:36 2024

## 2,4,6-Tribromophenol

Response Ratio



R = 4.810e-003 A\*A + 1.069e-001 A - 6.391e-003  
Coef of Det ( $r^2$ ) = 0.999627 Curve Fit: Quadratic  
Method Name: Z:\svoasrv\HPCHEM1\BNA N\Methods\8270-SIM-BN110724.M  
Calibration Table Last Updated: Thu Nov 07 15:02:36 2024

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034885.D  
 Acq On : 07 Nov 2024 10:02  
 Operator : RC/JU  
 Sample : SSTDICCO.1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.1

Quant Time: Nov 07 14:39:35 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

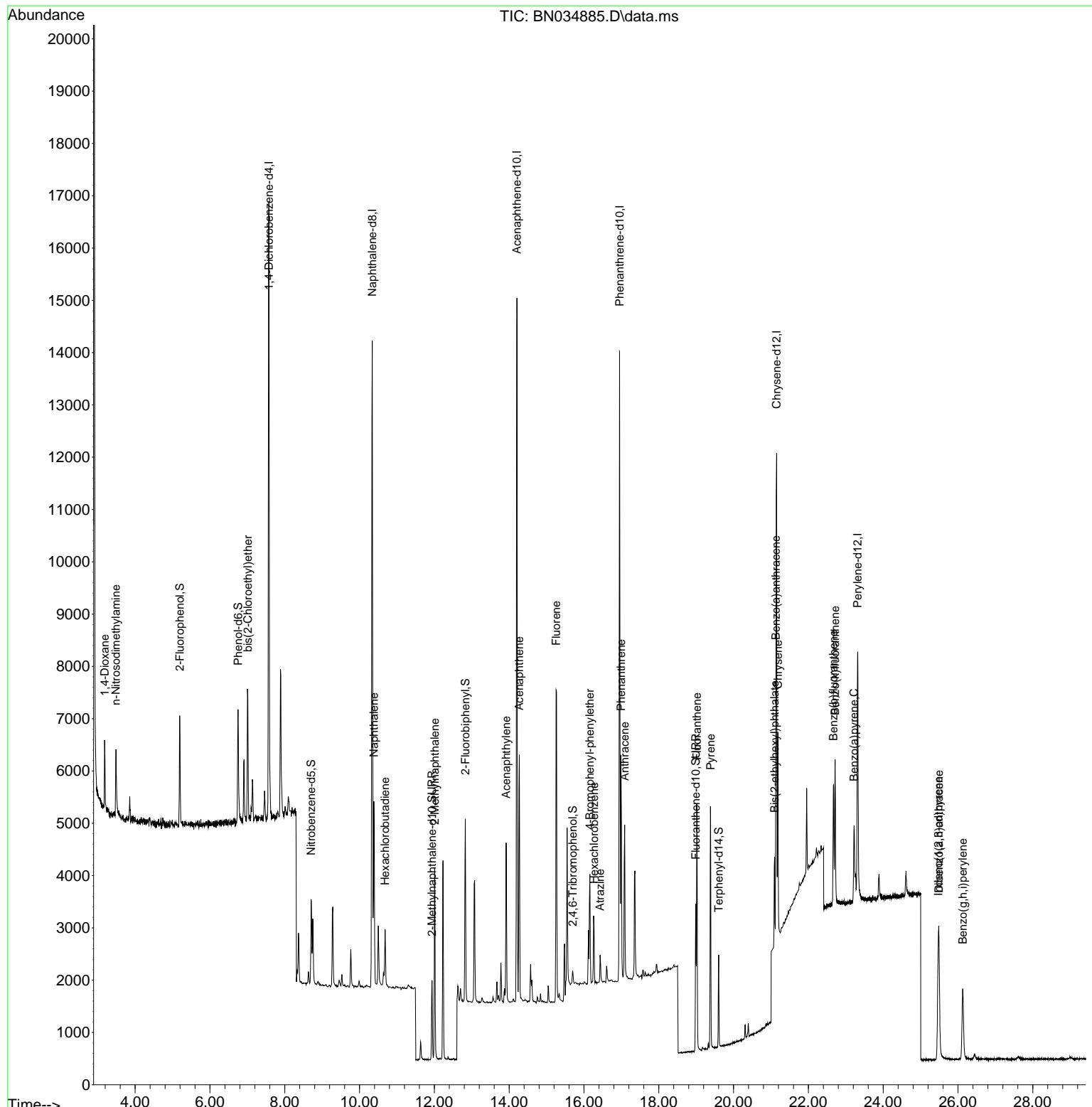
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5582	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	16157	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	7091	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	14302	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	7364	0.400	ng	0.00
35) Perylene-d12	23.318	264	6365	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.192	112	1587	0.102	ng	0.00
5) Phenol-d6	6.752	99	2007	0.097	ng	0.00
8) Nitrobenzene-d5	8.707	82	1268	0.101	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	2127	0.097	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	148	0.101	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	3107	0.104	ng	0.00
27) Fluoranthene-d10	18.990	212	2865	0.089	ng	0.00
31) Terphenyl-d14	19.603	244	1450	0.105	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	786	0.111	ng	96
3) n-Nitrosodimethylamine	3.487	42	973	0.102	ng	96
6) bis(2-Chloroethyl)ether	7.012	93	1836	0.103	ng	99
9) Naphthalene	10.383	128	4482	0.100	ng	97
10) Hexachlorobutadiene	10.682	225	738	0.103	ng	# 100
12) 2-Methylnaphthalene	12.011	142	2614	0.095	ng	98
16) Acenaphthylene	13.919	152	3250	0.095	ng	99
17) Acenaphthene	14.272	154	2291	0.097	ng	98
18) Fluorene	15.255	166	2861	0.097	ng	99
21) 4-Bromophenyl-phenylether	16.158	248	759	0.100	ng	# 84
22) Hexachlorobenzene	16.269	284	936	0.102	ng	98
23) Atrazine	16.431	200	457	0.083	ng	# 85
25) Phenanthrene	16.989	178	4356	0.099	ng	99
26) Anthracene	17.088	178	3451	0.091	ng	99
28) Fluoranthene	19.018	202	3977	0.086	ng	100
30) Pyrene	19.385	202	4013	0.108	ng	99
32) Benzo(a)anthracene	21.131	228	2670	0.093	ng	97
33) Chrysene	21.185	228	3005	0.099	ng	96
34) Bis(2-ethylhexyl)phtha...	21.095	149	1811	0.110	ng	# 99
36) Indeno(1,2,3-cd)pyrene	25.473	276	2880	0.102	ng	98
37) Benzo(b)fluoranthene	22.672	252	2681	0.096	ng	# 62
38) Benzo(k)fluoranthene	22.713	252	2806	0.096	ng	# 56
39) Benzo(a)pyrene	23.222	252	2082	0.094	ng	# 50
40) Dibenzo(a,h)anthracene	25.491	278	2210	0.101	ng	# 84
41) Benzo(g,h,i)perylene	26.128	276	2359	0.101	ng	91

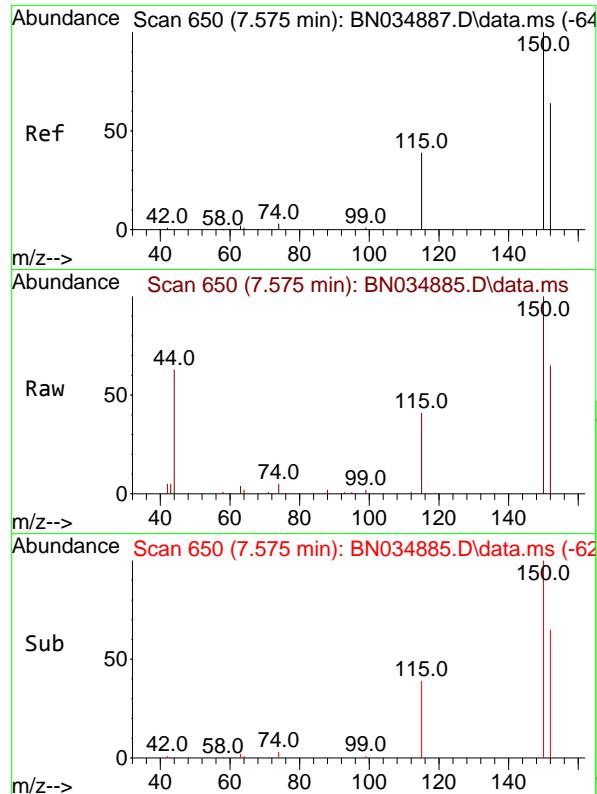
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034885.D  
 Acq On : 07 Nov 2024 10:02  
 Operator : RC/JU  
 Sample : SSTDICCO.1  
 Misc :  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.1

Quant Time: Nov 07 14:39:35 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

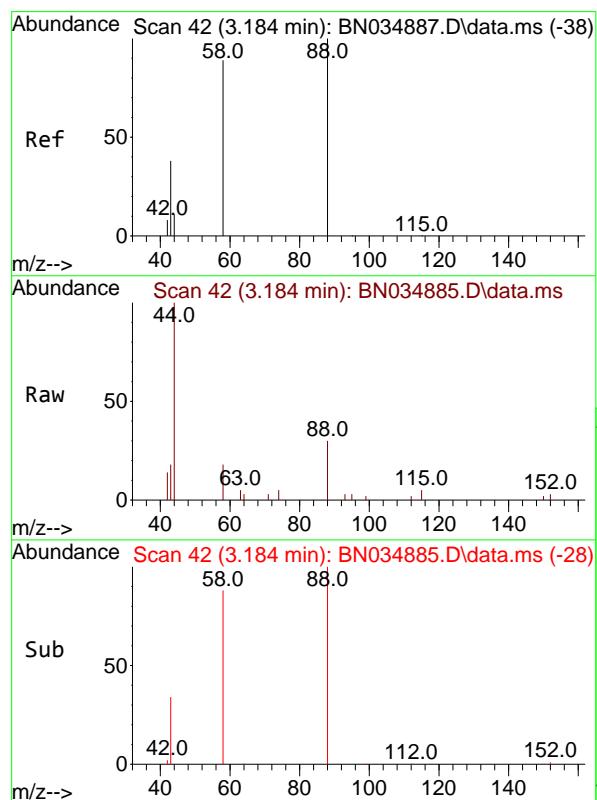
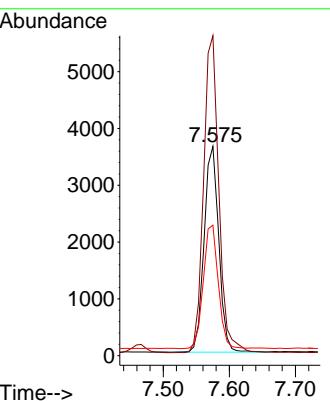




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

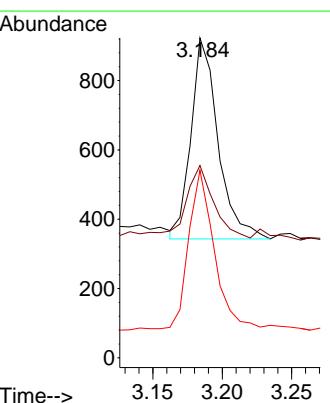
Instrument : BNA\_N  
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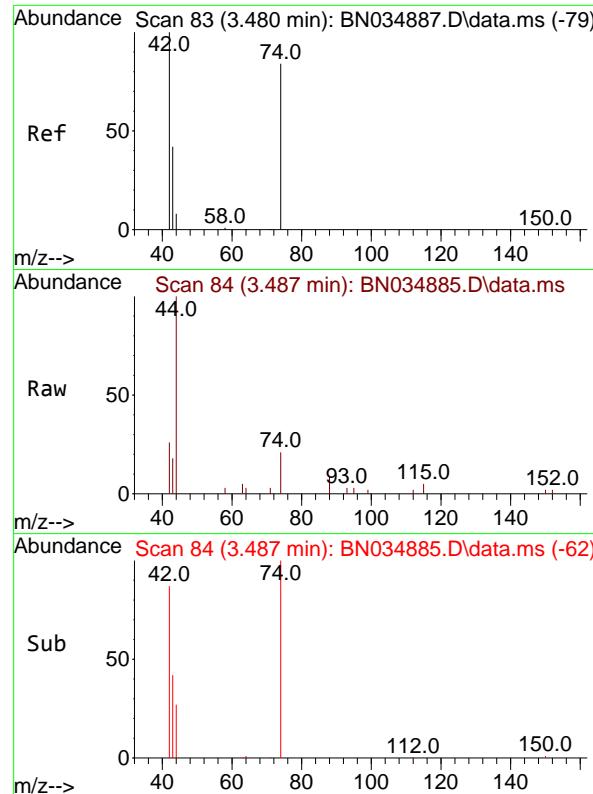
Tgt Ion:152 Resp: 5582  
 Ion Ratio Lower Upper  
 152 100  
 150 152.9 124.4 186.6  
 115 62.4 50.5 75.7



#2  
 1,4-Dioxane  
 Concen: 0.111 ng  
 RT: 3.184 min Scan# 42  
 Delta R.T. 0.000 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

Tgt Ion: 88 Resp: 786  
 Ion Ratio Lower Upper  
 88 100  
 43 35.5 28.2 42.2  
 58 78.8 67.1 100.7

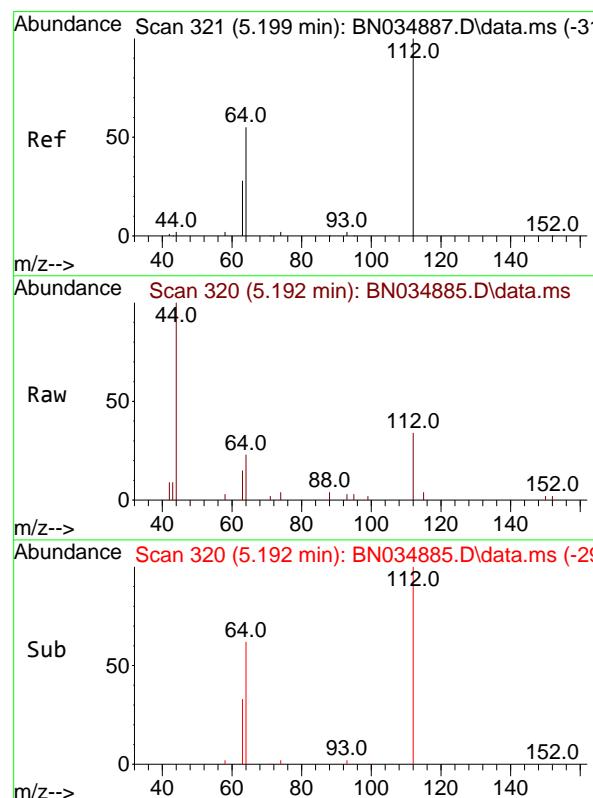
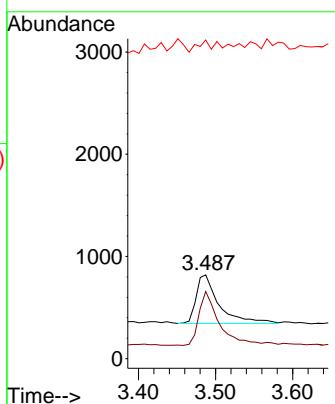




#3  
n-Nitrosodimethylamine  
Concen: 0.102 ng  
RT: 3.487 min Scan# 8  
Delta R.T. 0.007 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

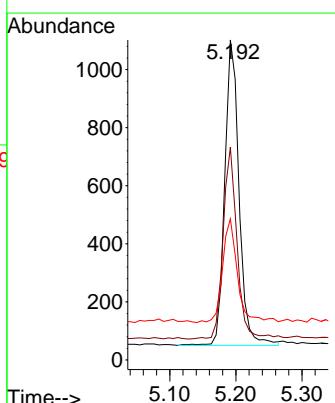
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

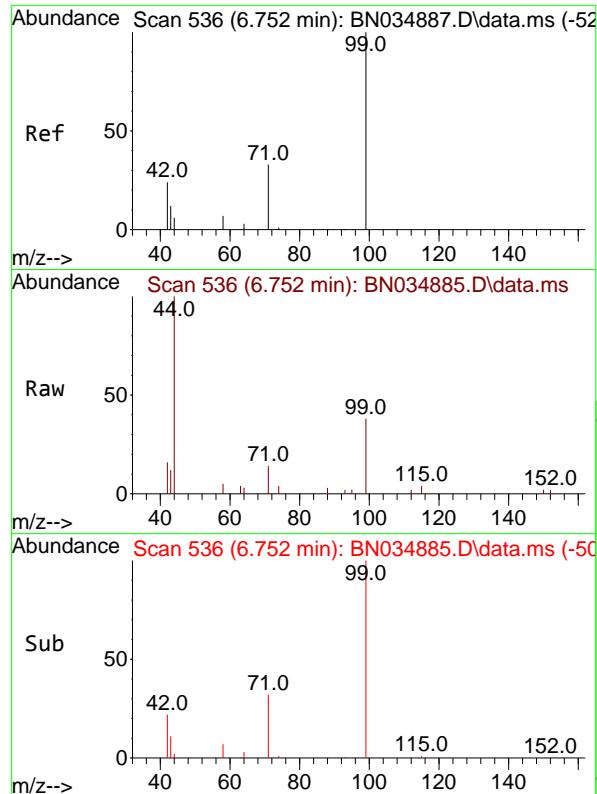
Tgt Ion: 42 Resp: 973  
Ion Ratio Lower Upper  
42 100  
74 100.3 83.4 125.2  
44 12.5 8.6 12.8



#4  
2-Fluorophenol  
Concen: 0.102 ng  
RT: 5.192 min Scan# 320  
Delta R.T. -0.007 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:112 Resp: 1587  
Ion Ratio Lower Upper  
112 100  
64 61.9 49.6 74.4  
63 35.4 26.3 39.5

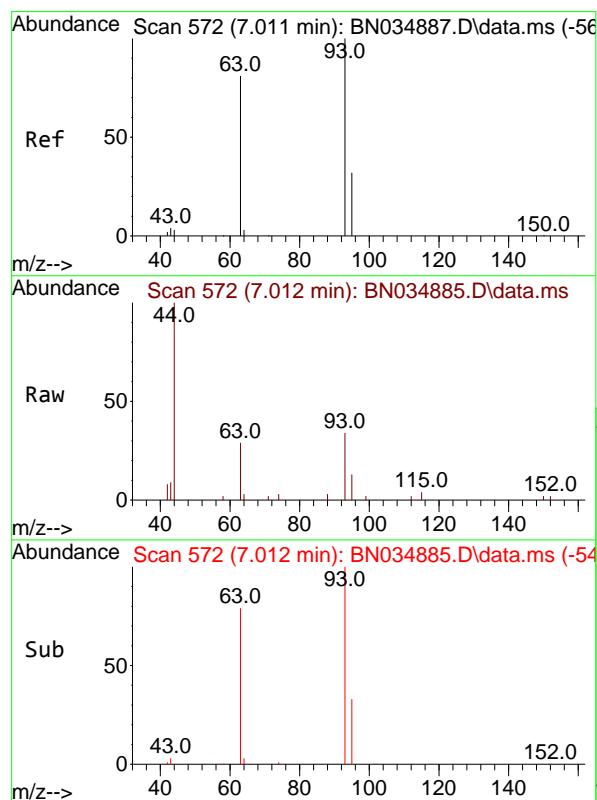
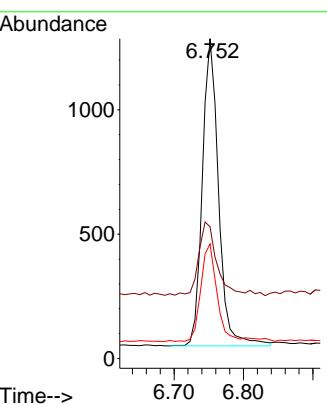




#5  
Phenol-d6  
Concen: 0.097 ng  
RT: 6.752 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

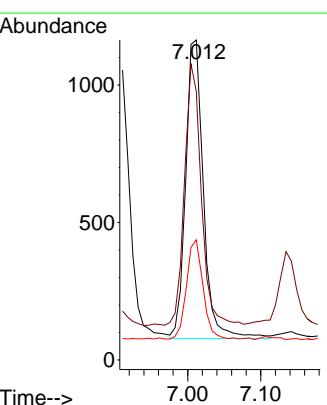
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

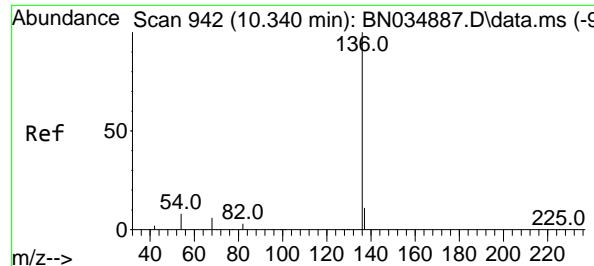
Tgt Ion: 99 Resp: 2007  
Ion Ratio Lower Upper  
99 100  
42 26.3 20.2 30.2  
71 31.2 25.4 38.0



#6  
bis(2-Chloroethyl)ether  
Concen: 0.103 ng  
RT: 7.012 min Scan# 572  
Delta R.T. 0.000 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

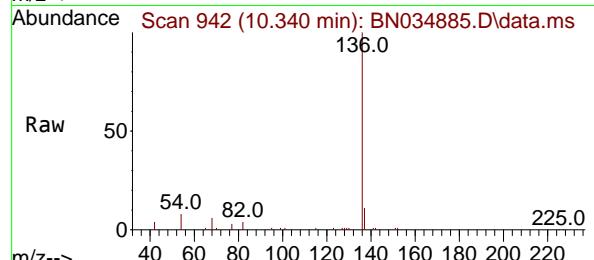
Tgt Ion: 93 Resp: 1836  
Ion Ratio Lower Upper  
93 100  
63 83.0 67.5 101.3  
95 31.6 25.7 38.5



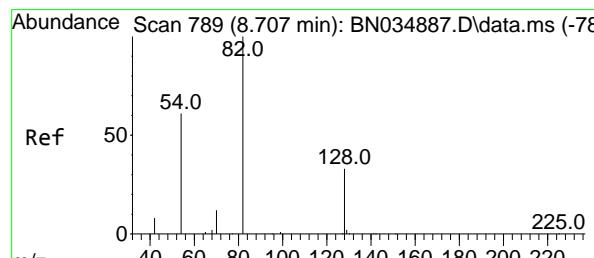
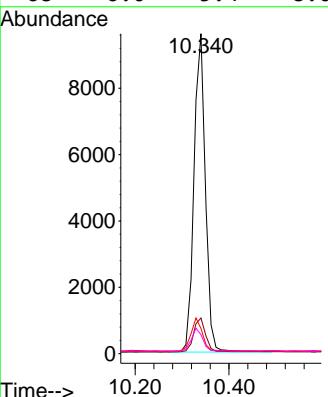
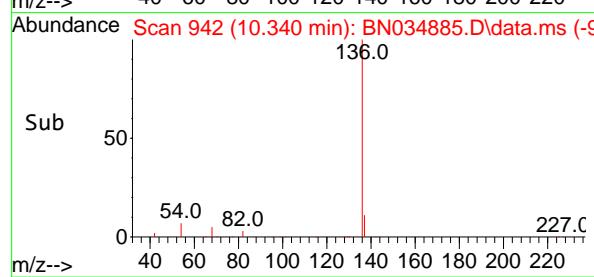


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

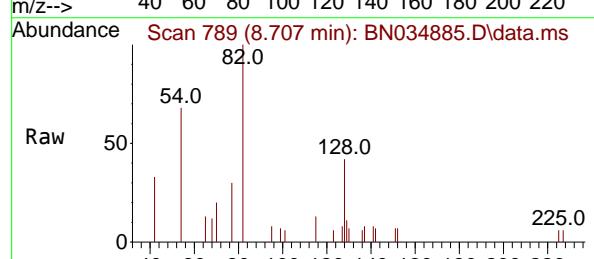
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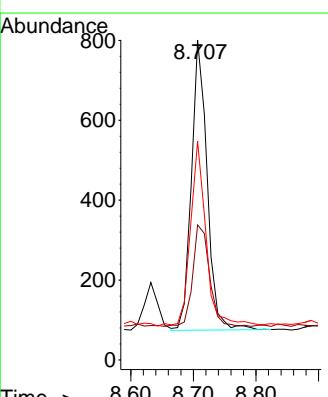
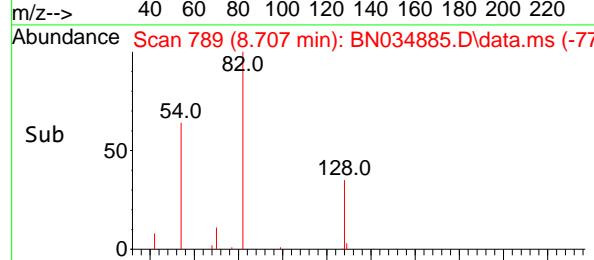
Tgt Ion:136 Resp: 16157  
 Ion Ratio Lower Upper  
 136 100  
 137 11.2 8.9 13.3  
 54 7.8 6.9 10.3  
 68 6.0 5.4 8.0

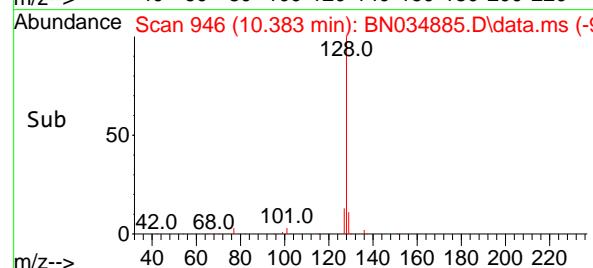
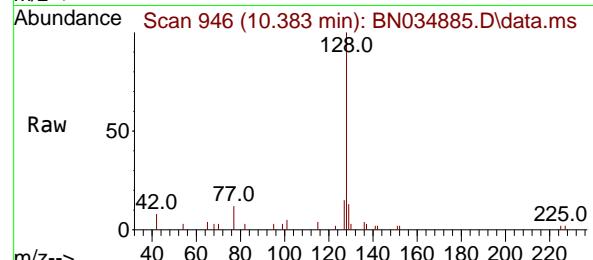
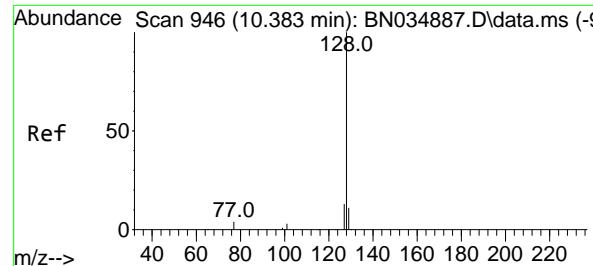


#8  
 Nitrobenzene-d5  
 Concen: 0.101 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02



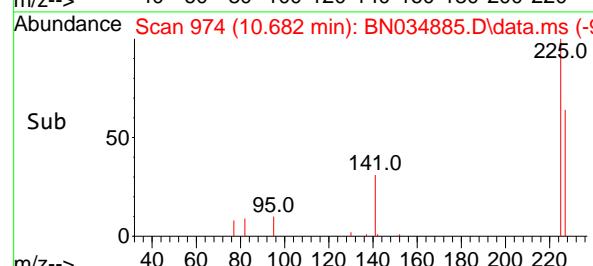
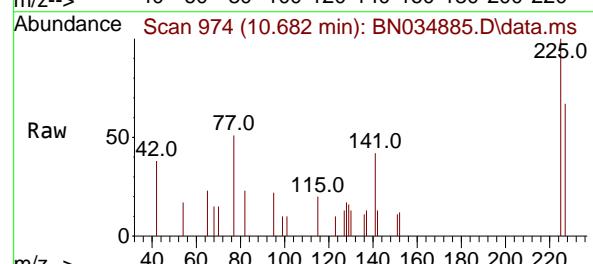
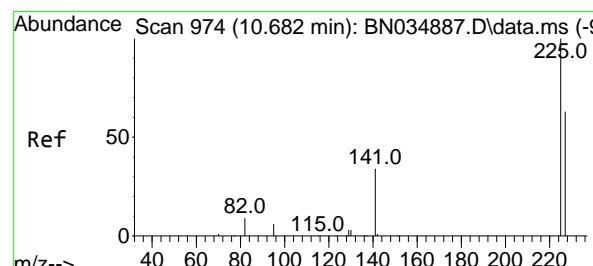
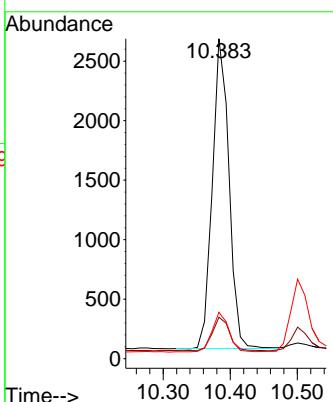
Tgt Ion: 82 Resp: 1268  
 Ion Ratio Lower Upper  
 82 100  
 128 42.2 28.1 42.1#  
 54 68.4 49.8 74.6





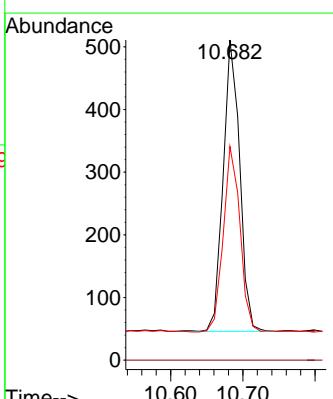
#9  
Naphthalene  
Concen: 0.100 ng  
RT: 10.383 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034885.D  
ClientSampleId : SSTDICCO.1  
Acq: 07 Nov 2024 10:02

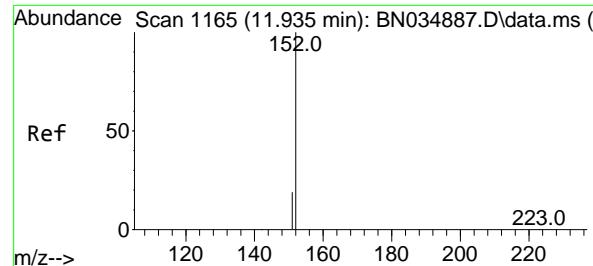
Tgt Ion:128 Resp: 4482  
Ion Ratio Lower Upper  
128 100  
129 12.9 9.0 13.4  
127 14.5 10.8 16.2



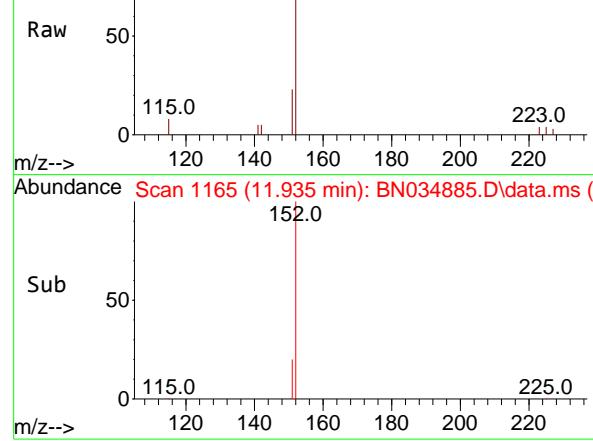
#10  
Hexachlorobutadiene  
Concen: 0.103 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:225 Resp: 738  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.0 52.0 78.0





Abundance Scan 1165 (11.935 min): BN034885.D\data.ms (-)



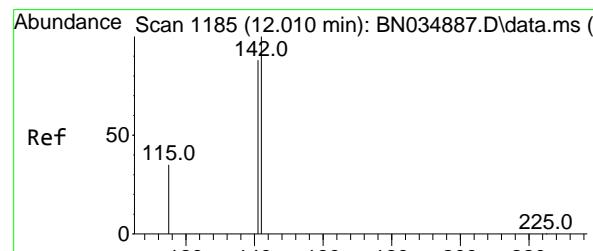
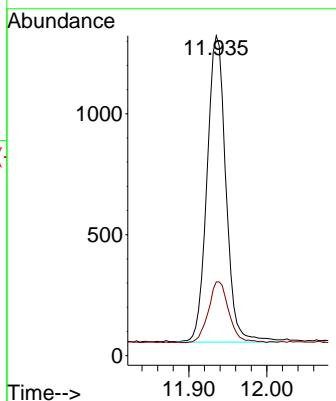
#11  
2-Methylnaphthalene-d10

Concen: 0.097 ng  
RT: 11.935 min Scan# 1  
Instrument :  
Delta R.T. 0.000 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

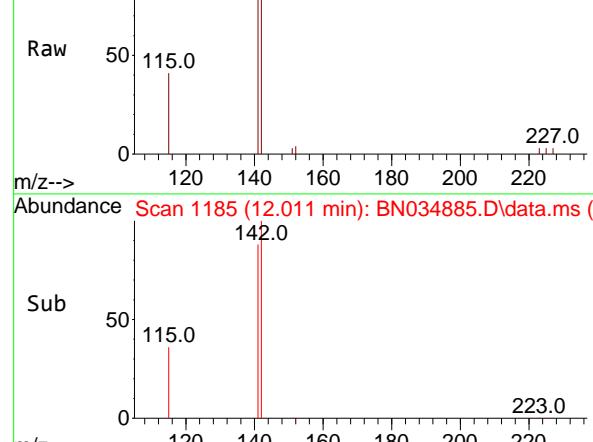
BNA\_N  
ClientSampleId :  
SSTDICCO.1

Tgt Ion:152 Resp: 2127

Ion	Ratio	Lower	Upper
152	100		
151	21.5	17.1	25.7



Abundance Scan 1185 (12.011 min): BN034885.D\data.ms (-)

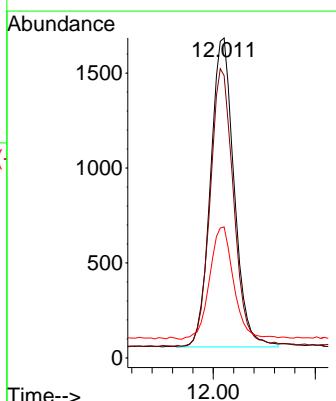


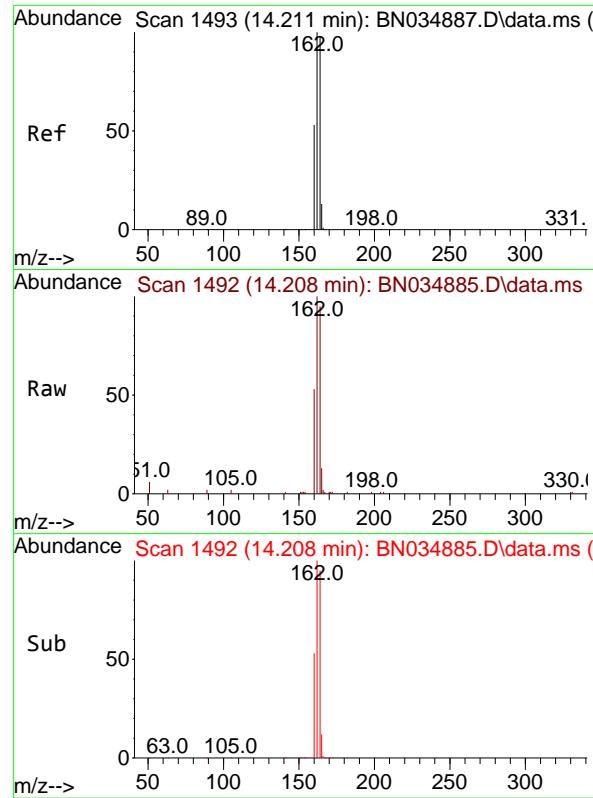
#12

2-Methylnaphthalene  
Concen: 0.095 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:142 Resp: 2614

Ion	Ratio	Lower	Upper
142	100		
141	88.2	70.5	105.7
115	40.9	29.4	44.2

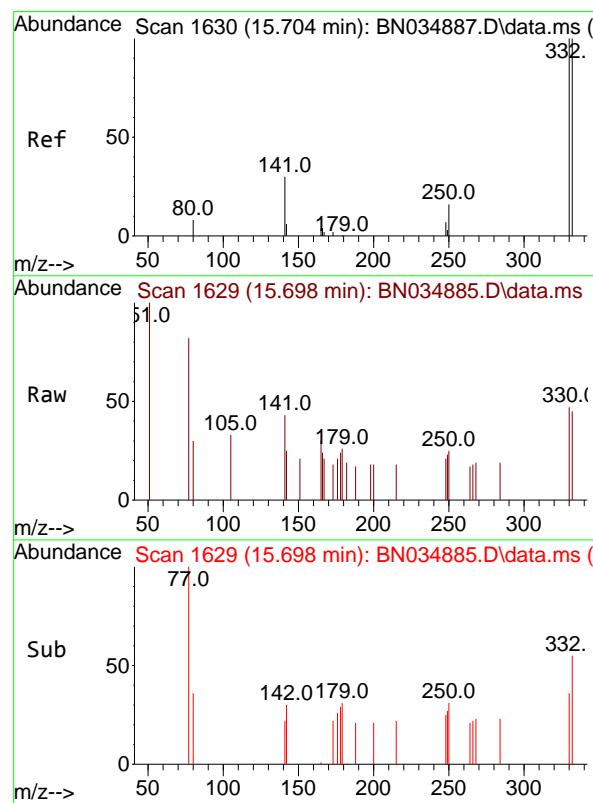
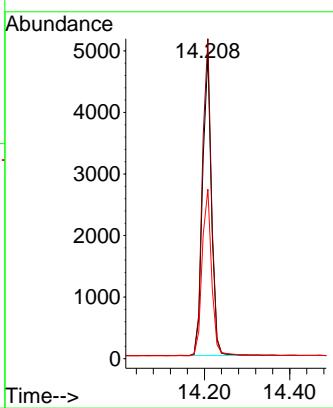




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.208 min Scan# 1  
Delta R.T. -0.003 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

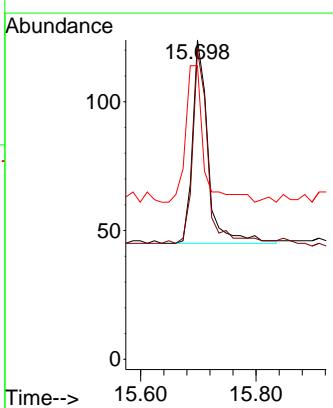
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

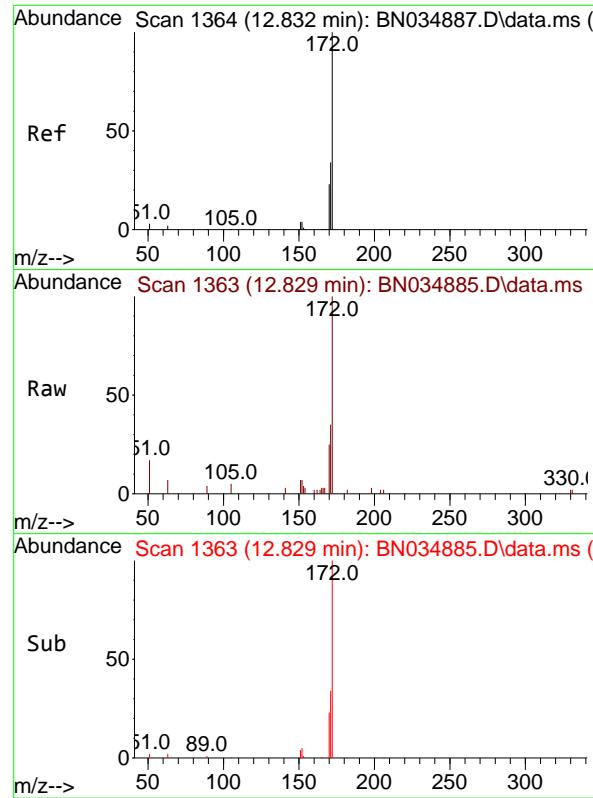
Tgt Ion:164 Resp: 7091  
Ion Ratio Lower Upper  
164 100  
162 105.3 81.9 122.9  
160 55.7 43.5 65.3



#14  
2,4,6-Tribromophenol  
Concen: 0.101 ng  
RT: 15.698 min Scan# 1629  
Delta R.T. -0.006 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:330 Resp: 148  
Ion Ratio Lower Upper  
330 100  
332 91.9 77.1 115.7  
141 77.7 54.1 81.1

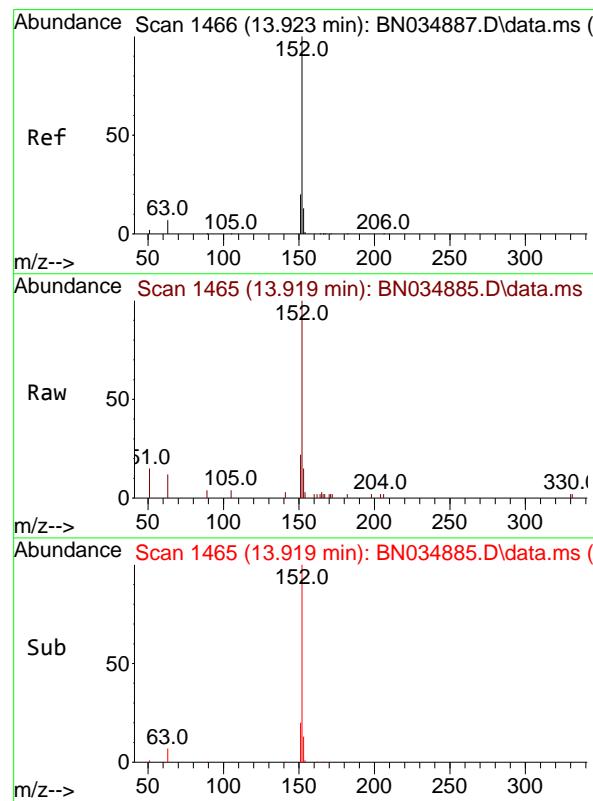
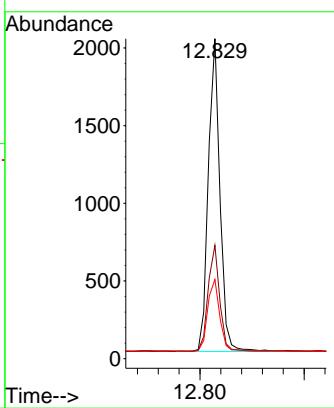




#15  
2-Fluorobiphenyl  
Concen: 0.104 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

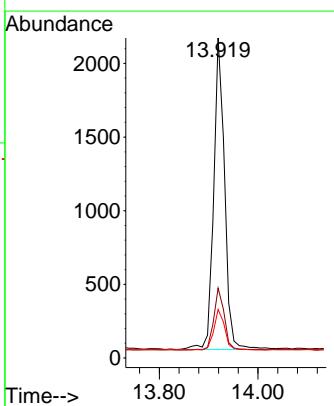
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

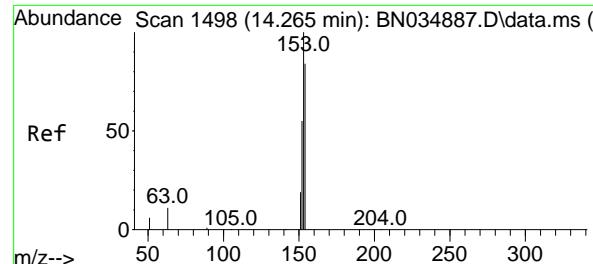
Tgt Ion:172 Resp: 3107  
Ion Ratio Lower Upper  
172 100  
171 35.4 27.9 41.9  
170 24.8 19.0 28.4



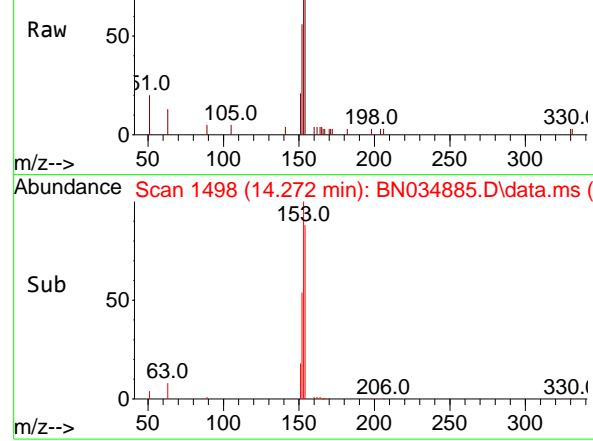
#16  
Acenaphthylene  
Concen: 0.095 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:152 Resp: 3250  
Ion Ratio Lower Upper  
152 100  
151 19.6 15.2 22.8  
153 13.2 10.4 15.6

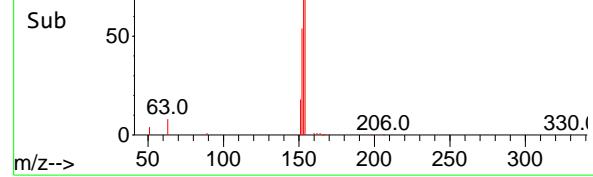




Abundance Scan 1498 (14.272 min): BN034885.D\data.ms (-)



Abundance Scan 1498 (14.272 min): BN034885.D\data.ms (-)



#17

Acenaphthene

Concen: 0.097 ng

RT: 14.272 min Scan# 1498

Delta R.T. 0.007 min

Lab File: BN034885.D

Acq: 07 Nov 2024 10:02

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

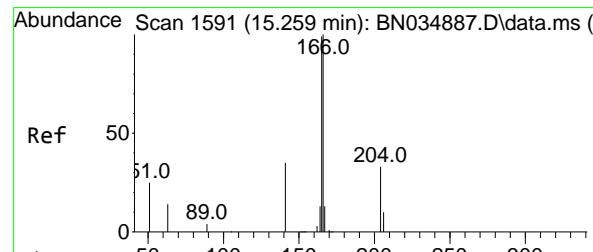
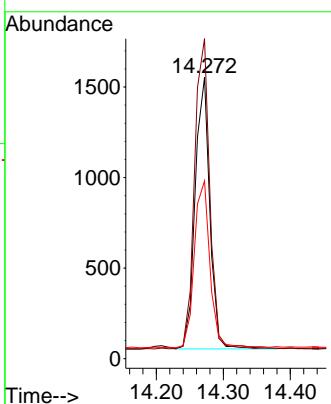
Tgt Ion:154 Resp: 2291

Ion Ratio Lower Upper

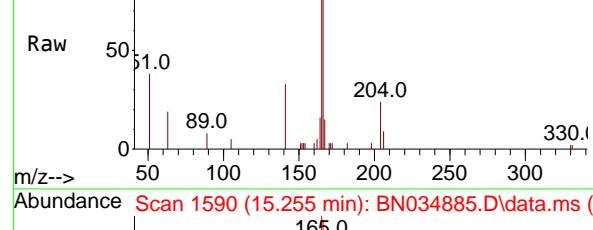
154 100

153 117.2 92.2 138.2

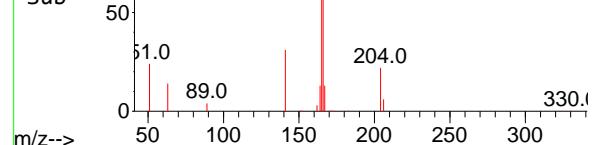
152 64.7 51.1 76.7



Abundance Scan 1590 (15.255 min): BN034885.D\data.ms (-)



Abundance Scan 1590 (15.255 min): BN034885.D\data.ms (-)



#18

Fluorene

Concen: 0.097 ng

RT: 15.255 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034885.D

Acq: 07 Nov 2024 10:02

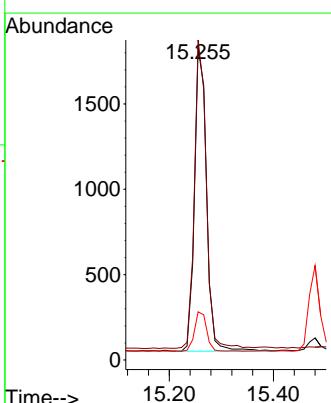
Tgt Ion:166 Resp: 2861

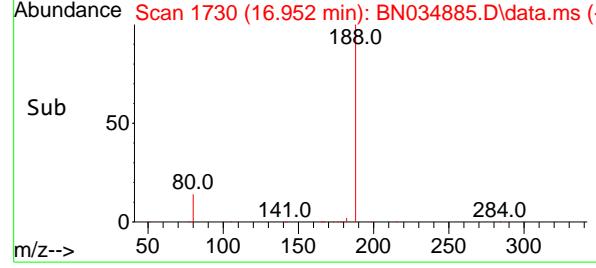
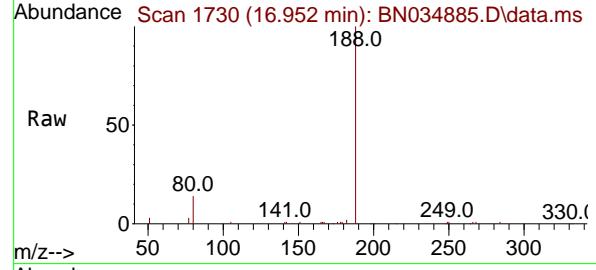
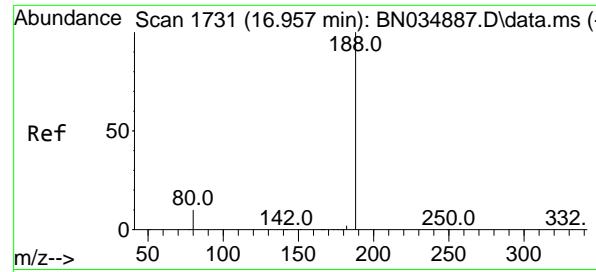
Ion Ratio Lower Upper

166 100

165 99.0 79.5 119.3

167 12.8 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.952 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034885.D

Acq: 07 Nov 2024 10:02

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.1

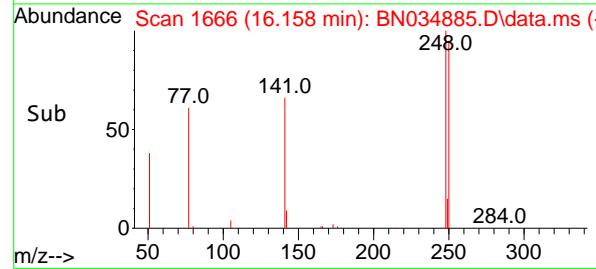
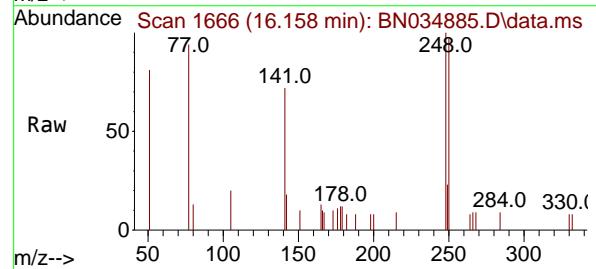
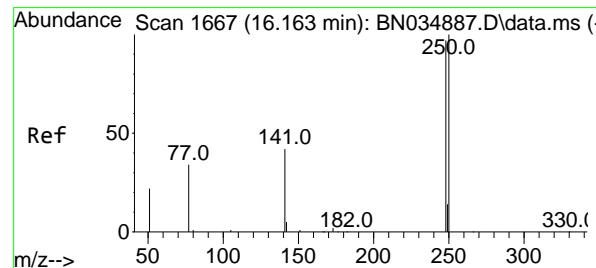
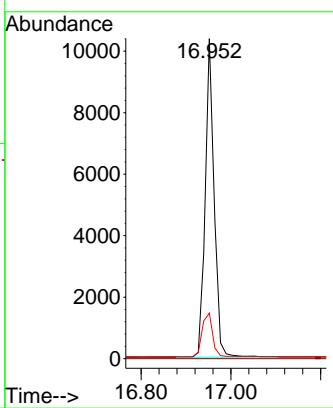
Tgt Ion:188 Resp: 14302

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 14.2 8.6 12.8#



#21

4-Bromophenyl-phenylether

Concen: 0.100 ng

RT: 16.158 min Scan# 1666

Delta R.T. -0.005 min

Lab File: BN034885.D

Acq: 07 Nov 2024 10:02

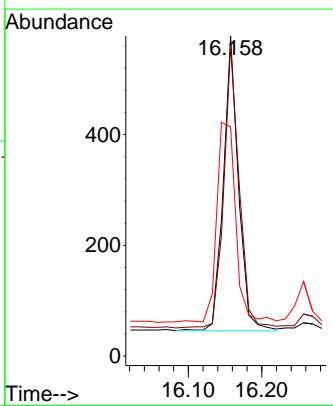
Tgt Ion:248 Resp: 759

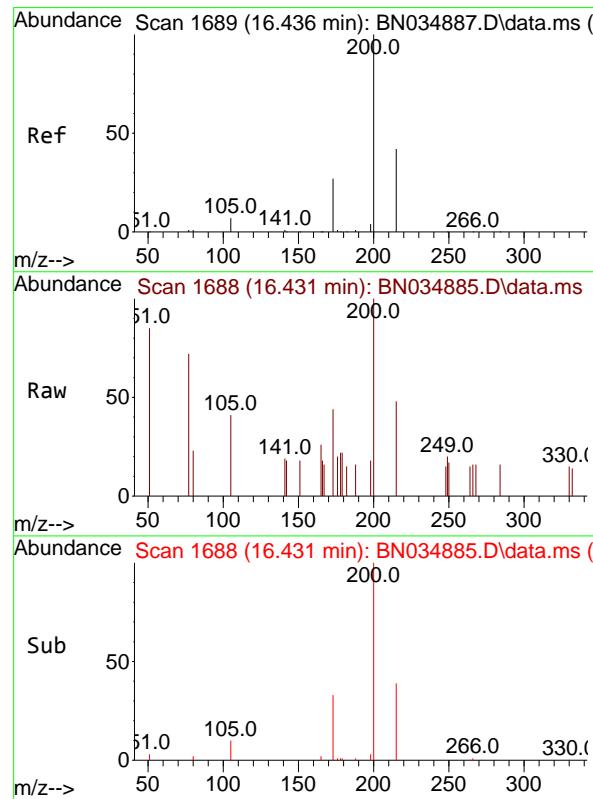
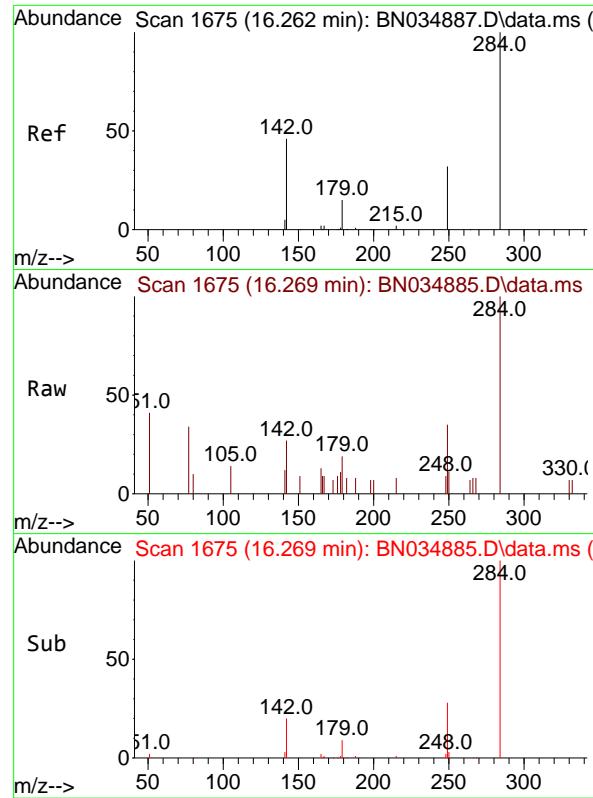
Ion Ratio Lower Upper

248 100

250 96.9 82.2 123.4

141 71.6 36.2 54.2#





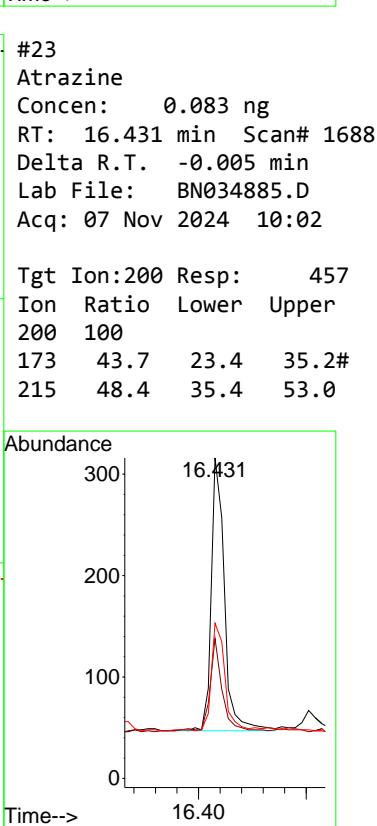
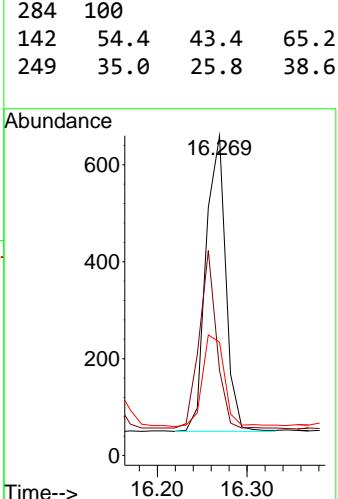
Tgt Ion:284 Resp: 936

Ion	Ratio	Lower	Upper
284	100		
142	54.4	43.4	65.2
249	35.0	25.8	38.6

Instrument : BNA\_N

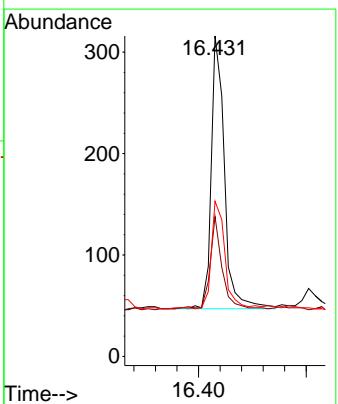
ClientSampleId : SSTDICCO.1

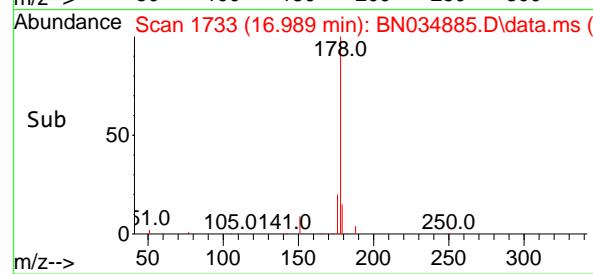
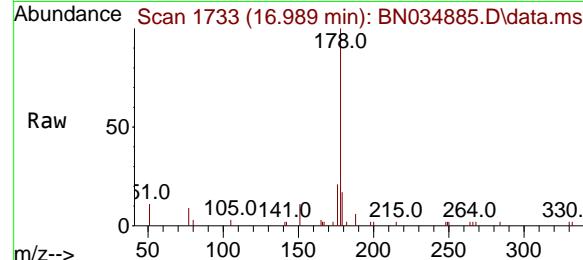
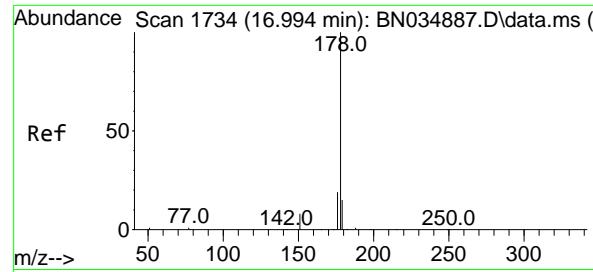
Abundance



Tgt Ion:200 Resp: 457

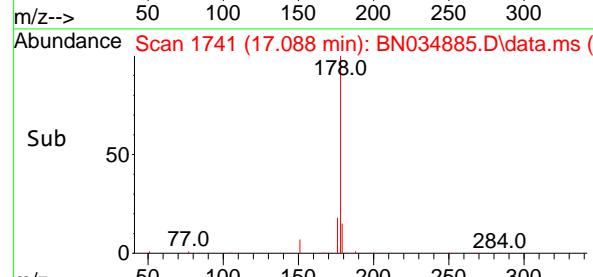
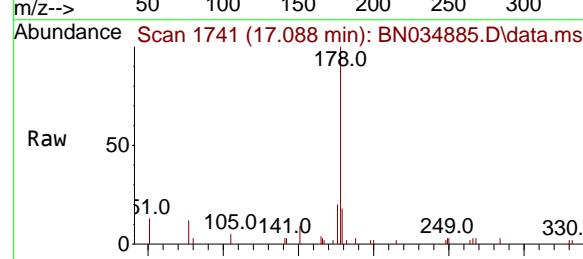
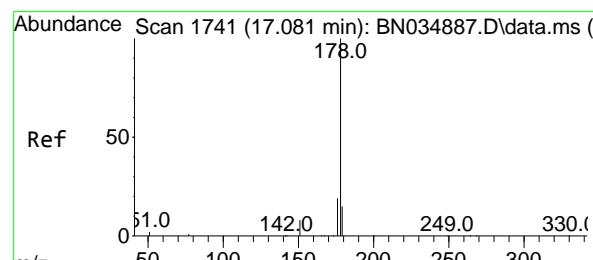
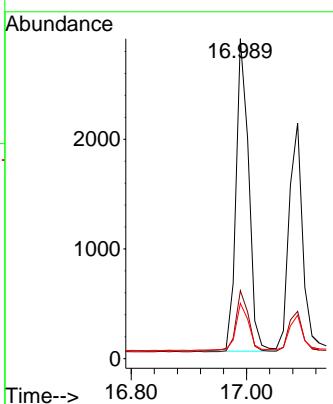
Ion	Ratio	Lower	Upper
200	100		
173	43.7	23.4	35.2
215	48.4	35.4	53.0





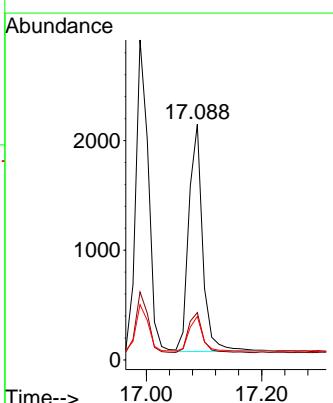
#25  
Phenanthrene  
Concen: 0.099 ng  
RT: 16.989 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. -0.005 min  
Lab File: BN034885.D  
ClientSampleId : SSTDICCO.1  
Acq: 07 Nov 2024 10:02

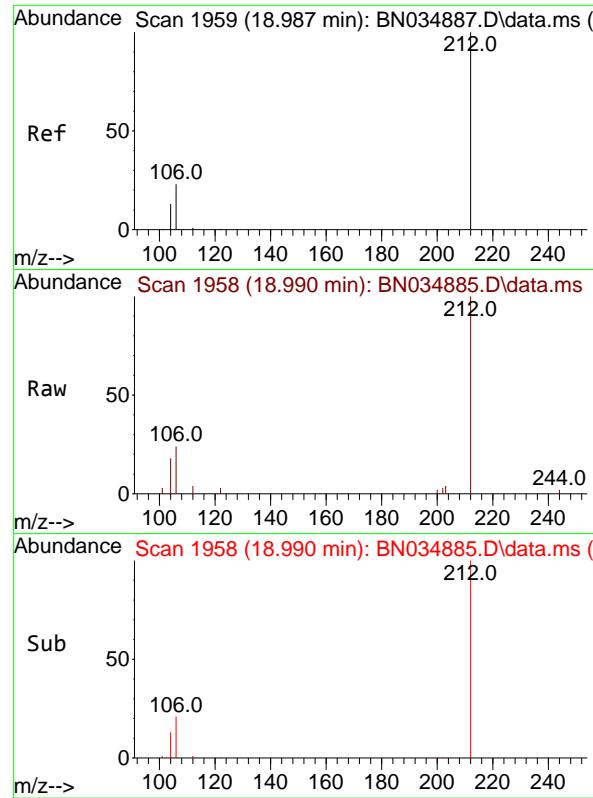
Tgt Ion:178 Resp: 4356  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.5 23.3  
179 15.8 12.2 18.2



#26  
Anthracene  
Concen: 0.091 ng  
RT: 17.088 min Scan# 1741  
Delta R.T. 0.007 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:178 Resp: 3451  
Ion Ratio Lower Upper  
178 100  
176 18.3 15.0 22.6  
179 14.8 12.1 18.1

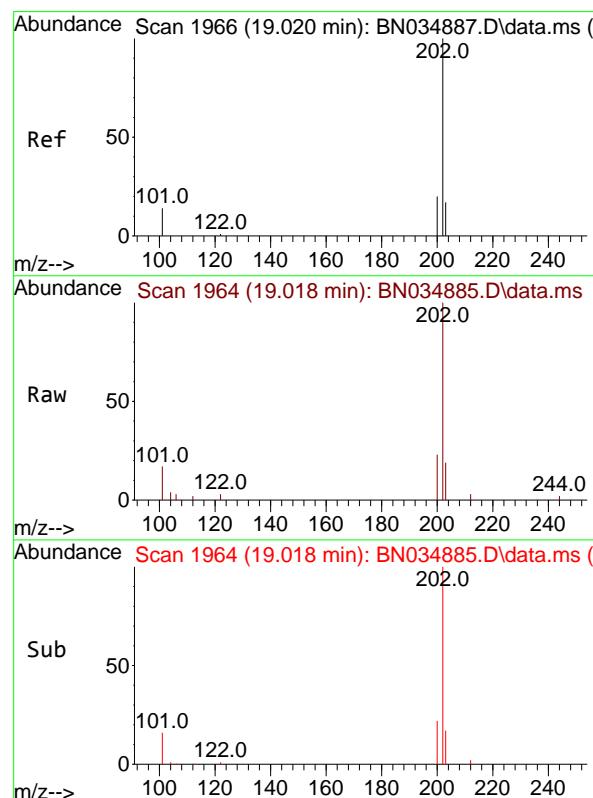
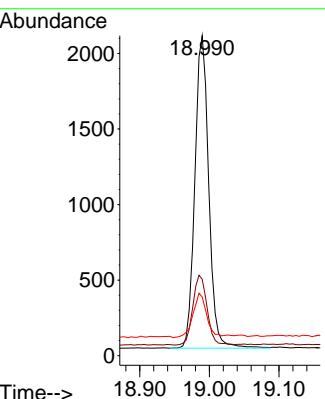




#27  
 Fluoranthene-d10  
 Concen: 0.089 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

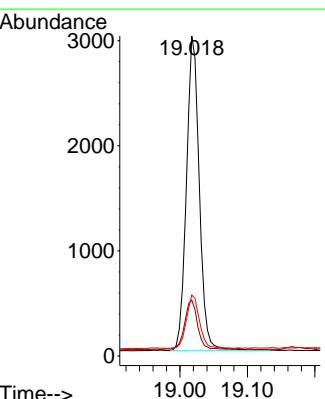
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

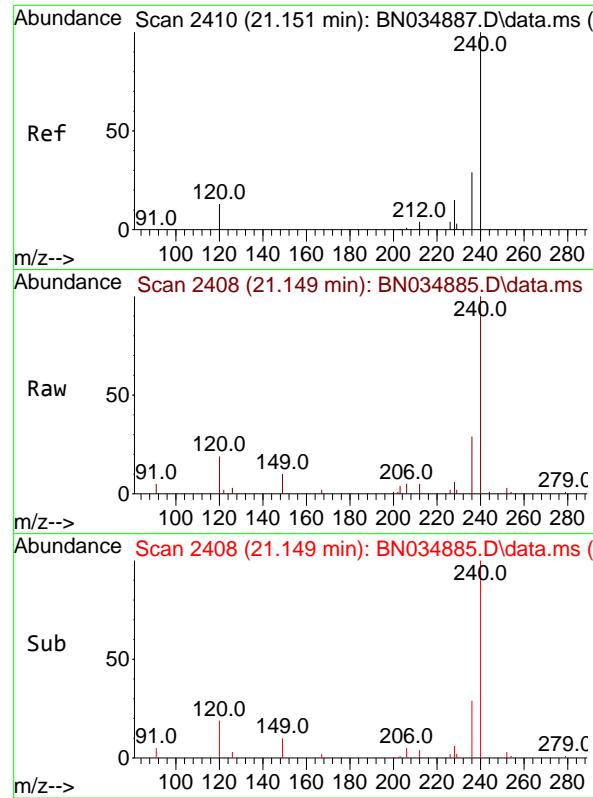
Tgt Ion:212 Resp: 2865  
 Ion Ratio Lower Upper  
 212 100  
 106 22.5 18.2 27.4  
 104 14.1 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.086 ng  
 RT: 19.018 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

Tgt Ion:202 Resp: 3977  
 Ion Ratio Lower Upper  
 202 100  
 101 15.7 12.7 19.1  
 203 17.2 13.7 20.5

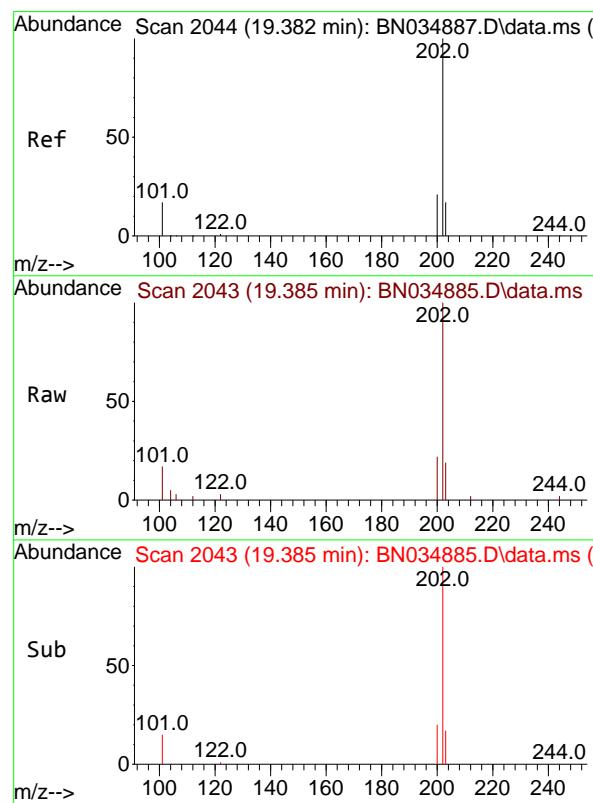
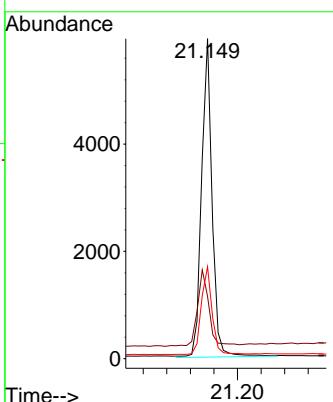




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

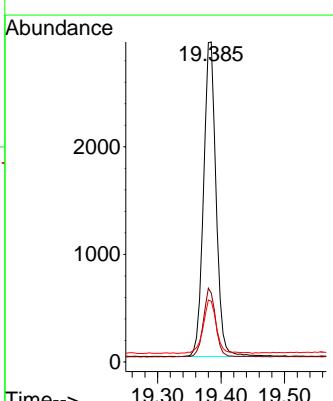
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

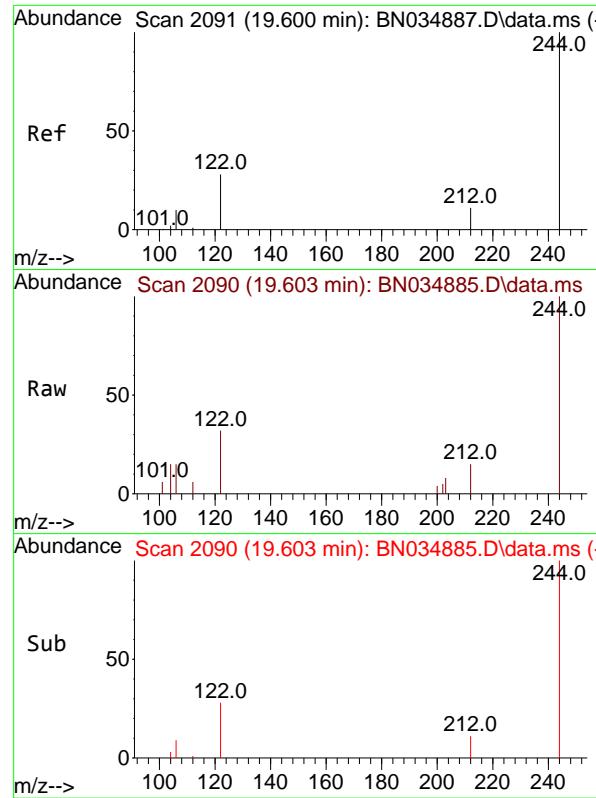
Tgt Ion:240 Resp: 7364  
Ion Ratio Lower Upper  
240 100  
120 19.4 13.8 20.8  
236 28.7 23.8 35.6



#30  
Pyrene  
Concen: 0.108 ng  
RT: 19.385 min Scan# 2043  
Delta R.T. 0.002 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:202 Resp: 4013  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.8 25.2  
203 18.0 14.1 21.1

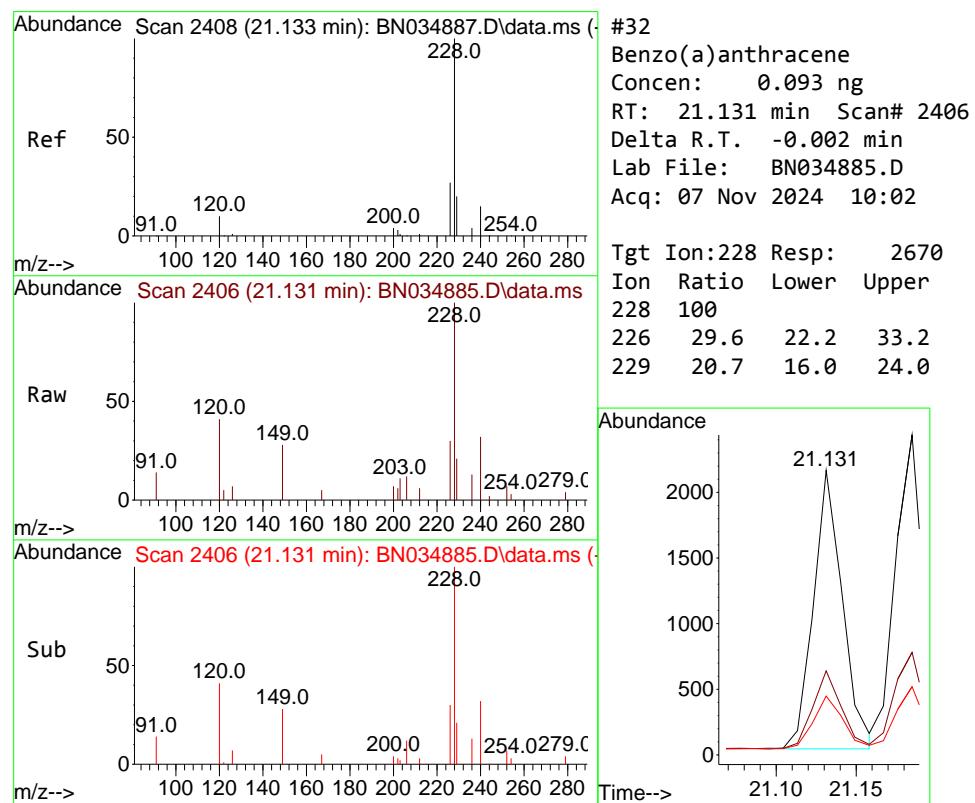
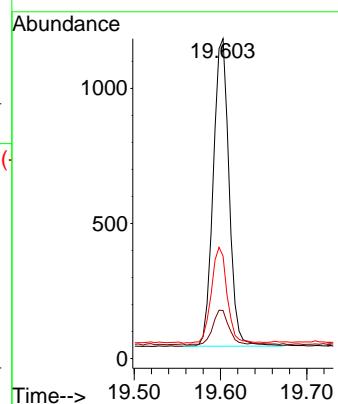




#31  
**Terphenyl-d14**  
Concen: 0.105 ng  
RT: 19.603 min Scan# 2  
Delta R.T. 0.002 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

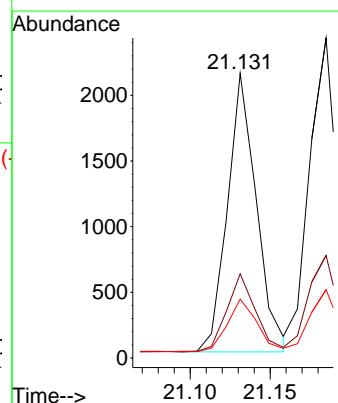
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

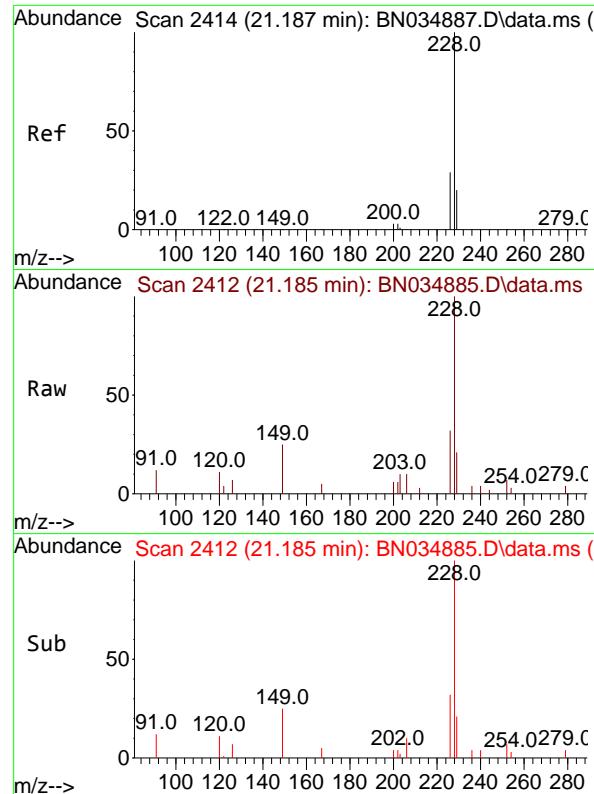
Tgt Ion:244 Resp: 1450  
Ion Ratio Lower Upper  
244 100  
212 15.0 9.4 14.0#  
122 32.1 23.0 34.4



#32  
**Benzo(a)anthracene**  
Concen: 0.093 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

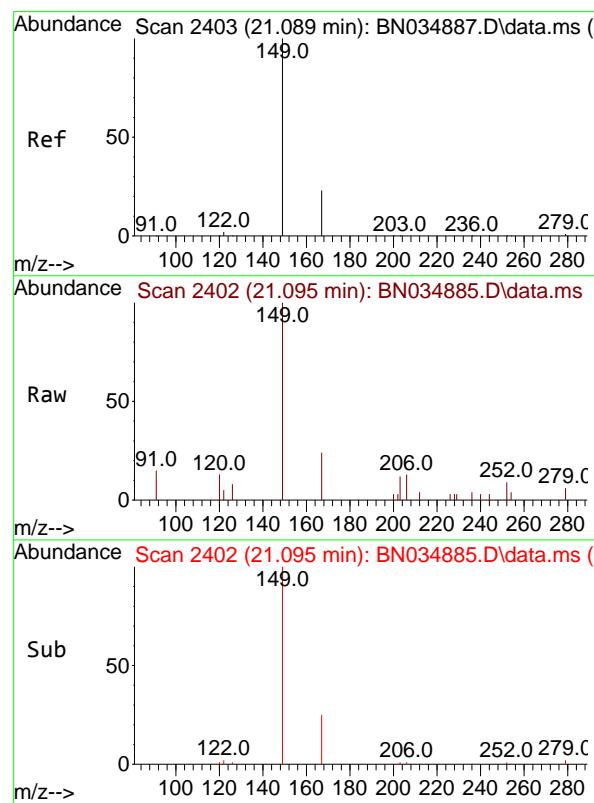
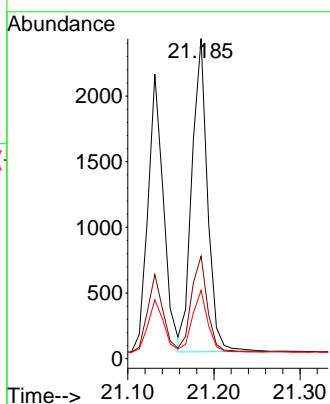
Tgt Ion:228 Resp: 2670  
Ion Ratio Lower Upper  
228 100  
226 29.6 22.2 33.2  
229 20.7 16.0 24.0





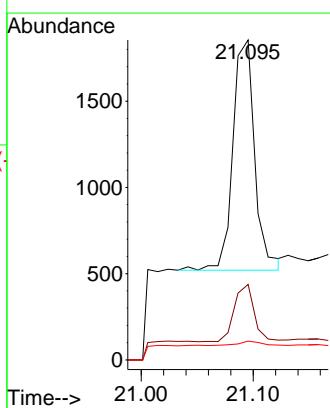
#33  
Chrysene  
Concen: 0.099 ng  
RT: 21.185 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.002 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02  
ClientSampleId : SSTDICCO.1

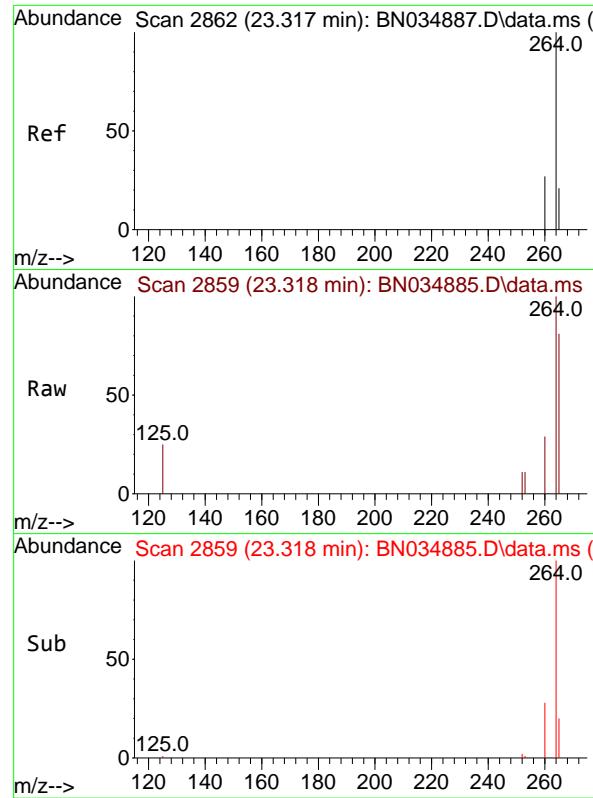
Tgt Ion:228 Resp: 3005  
Ion Ratio Lower Upper  
228 100  
226 32.0 23.7 35.5  
229 21.3 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.110 ng  
RT: 21.095 min Scan# 2402  
Delta R.T. 0.006 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:149 Resp: 1811  
Ion Ratio Lower Upper  
149 100  
167 22.9 18.1 27.1  
279 2.8 1.2 1.8#

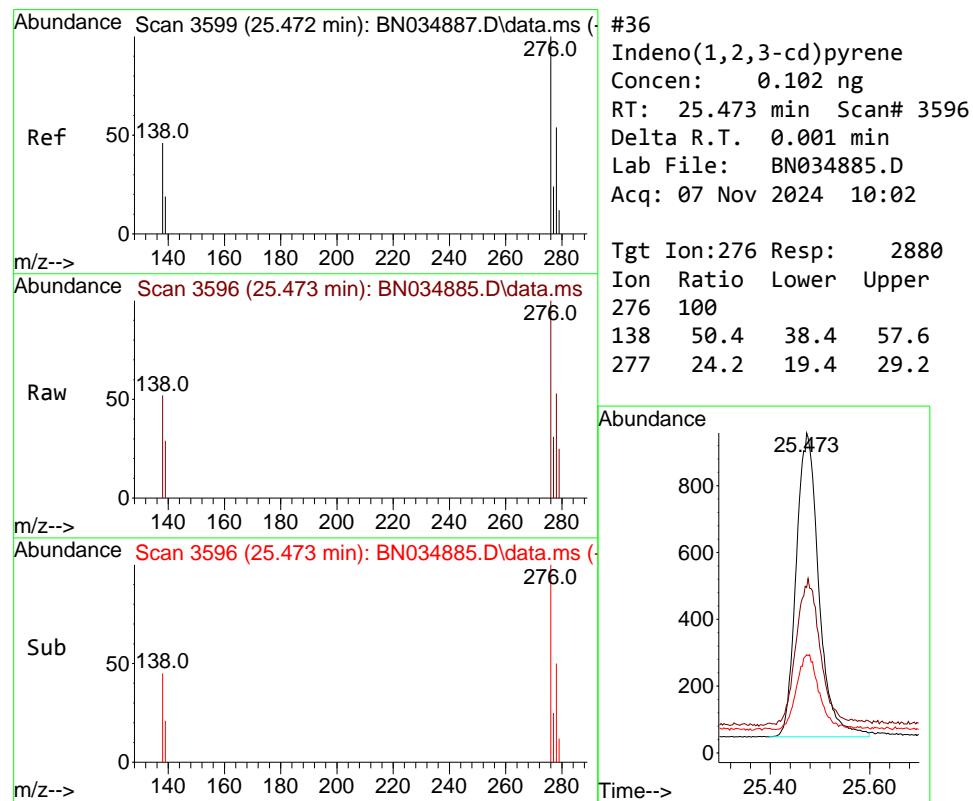
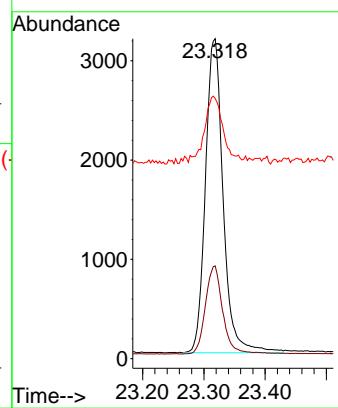




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.318 min Scan# 2  
Delta R.T. 0.001 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

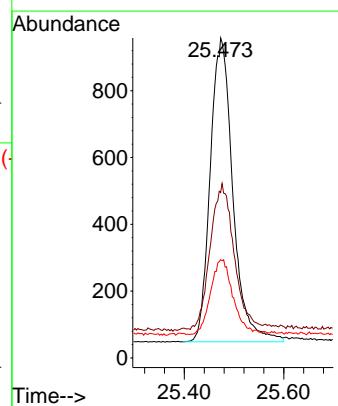
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.1

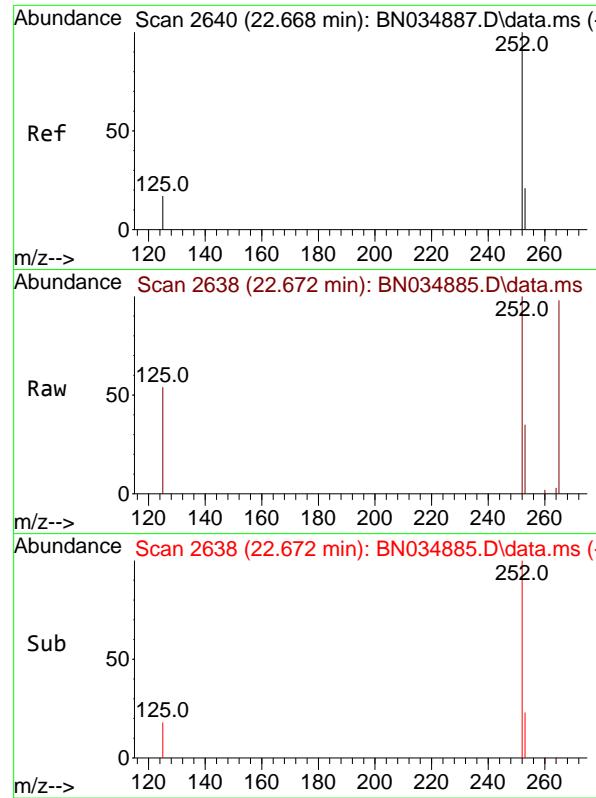
Tgt Ion:264 Resp: 6365  
Ion Ratio Lower Upper  
264 100  
260 29.0 22.2 33.2  
265 81.3 60.9 91.3



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.102 ng  
RT: 25.473 min Scan# 3596  
Delta R.T. 0.001 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

Tgt Ion:276 Resp: 2880  
Ion Ratio Lower Upper  
276 100  
138 50.4 38.4 57.6  
277 24.2 19.4 29.2

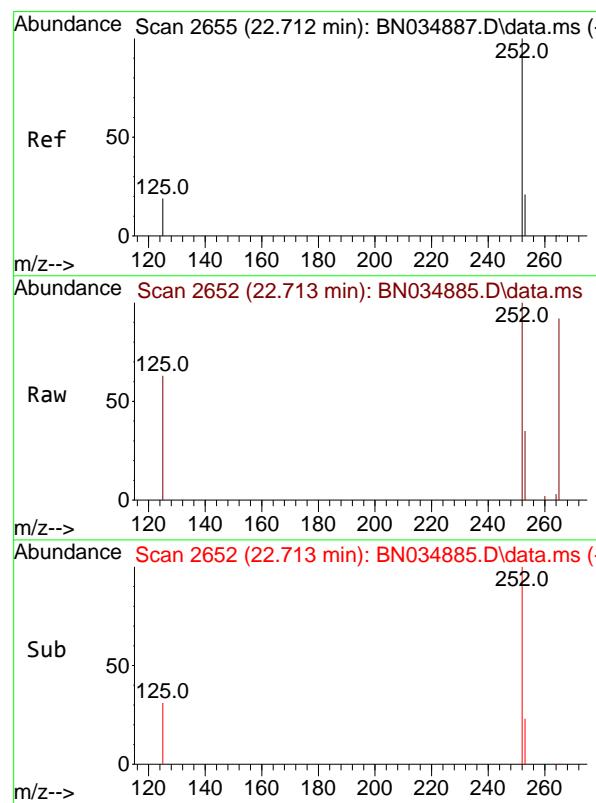
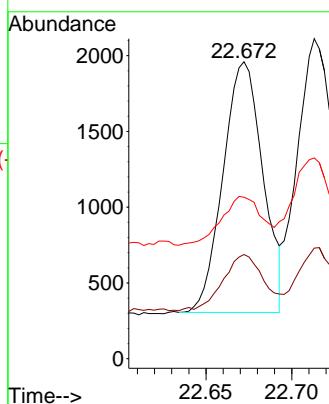




#37  
 Benzo(b)fluoranthene  
 Concen: 0.096 ng  
 RT: 22.672 min Scan# 2  
 Delta R.T. 0.004 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

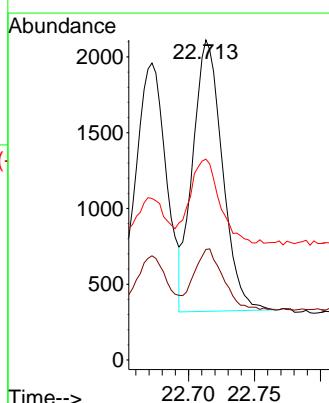
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.1

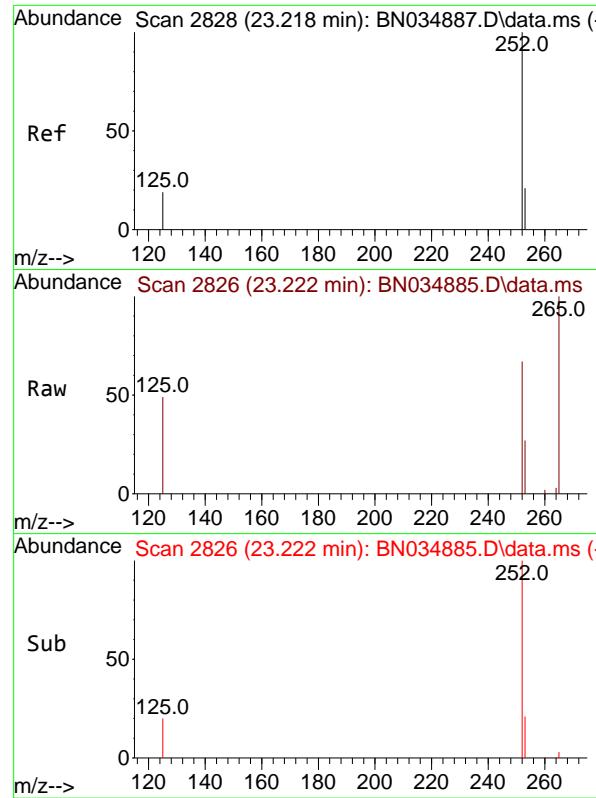
Tgt Ion:252 Resp: 2681  
 Ion Ratio Lower Upper  
 252 100  
 253 35.1 19.4 29.2#  
 125 54.4 21.4 32.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 0.096 ng  
 RT: 22.713 min Scan# 2652  
 Delta R.T. 0.001 min  
 Lab File: BN034885.D  
 Acq: 07 Nov 2024 10:02

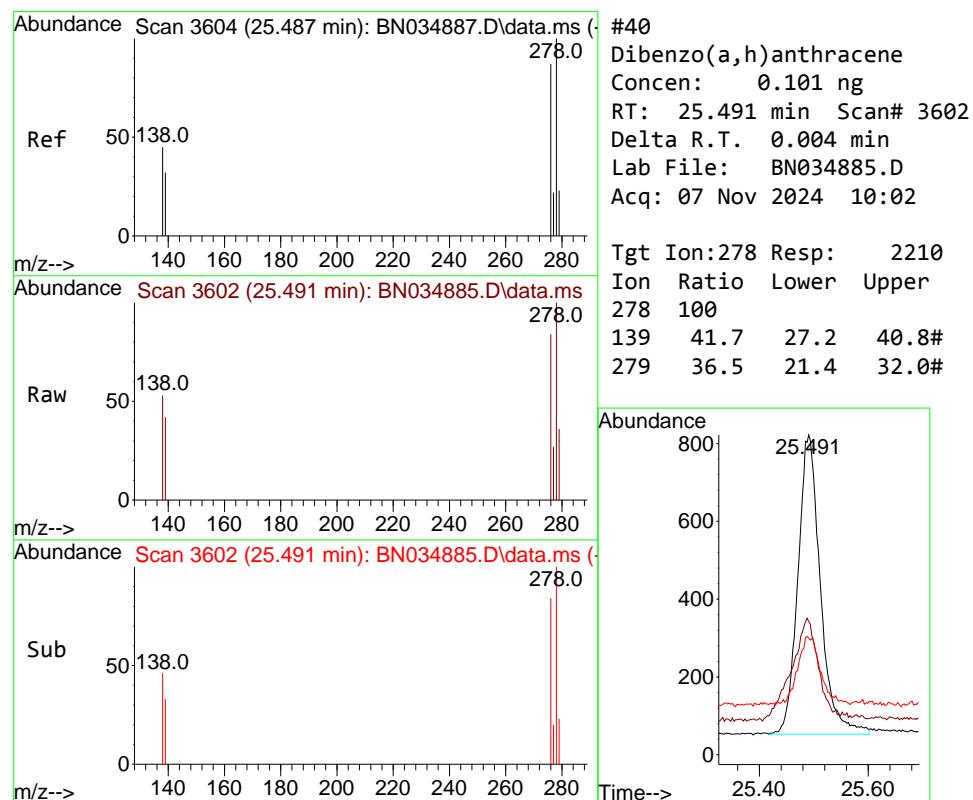
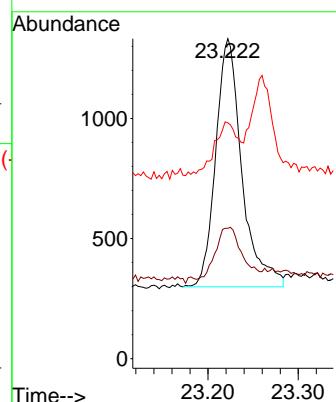
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 Ion Ratio Lower Upper  
 252 100  
 253 34.6 19.8 29.8#  
 125 62.7 22.6 33.8#





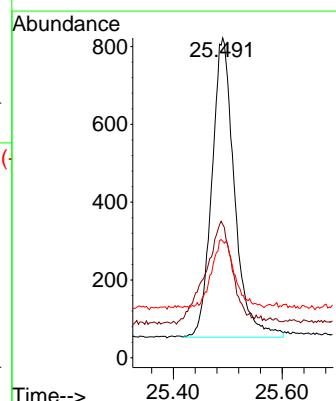
#39  
Benzo(a)pyrene  
Concen: 0.094 ng  
RT: 23.222 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.004 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02  
ClientSampleId : SSTDICCO.1

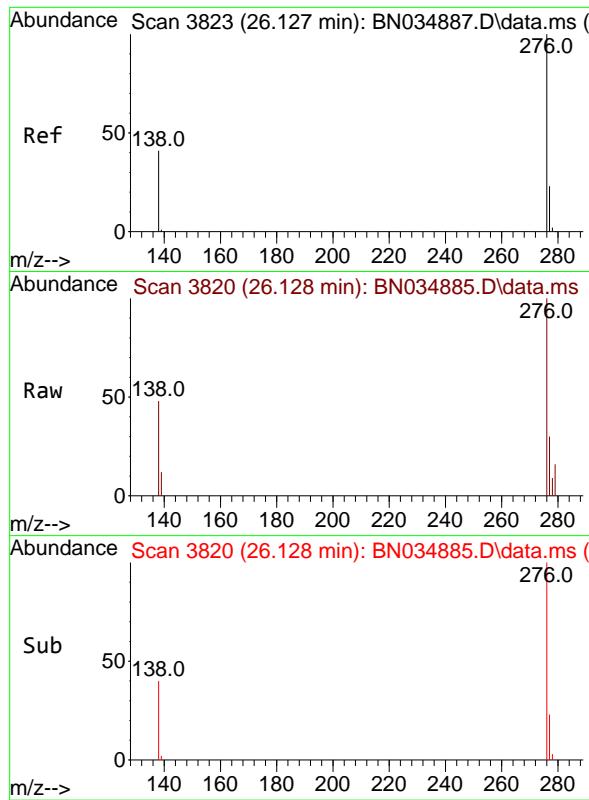
Tgt Ion:252 Resp: 2082  
Ion Ratio Lower Upper  
252 100  
253 40.8 21.4 32.2#  
125 73.7 27.8 41.6#



#40  
Dibenzo(a,h)anthracene  
Concen: 0.101 ng  
RT: 25.491 min Scan# 3602  
Delta R.T. 0.004 min  
Lab File: BN034885.D  
Acq: 07 Nov 2024 10:02

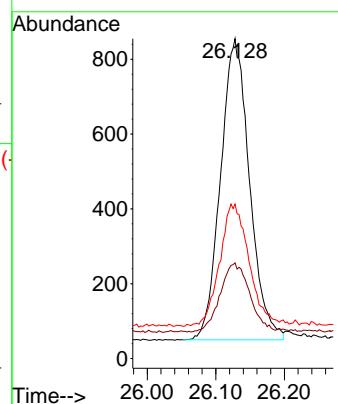
Tgt Ion:278 Resp: 2210  
Ion Ratio Lower Upper  
278 100  
139 41.7 27.2 40.8#  
279 36.5 21.4 32.0#





#41  
Benzo(g,h,i)perylene  
Concen: 0.101 ng  
RT: 26.128 min Scan# 3  
Instrument :  
Delta R.T. 0.001 min  
Lab File: BN034885.D  
ClientSampleId :  
Acq: 07 Nov 2024 10:02

Tgt Ion:276 Resp: 2359  
Ion Ratio Lower Upper  
276 100  
277 29.9 20.2 30.2  
138 48.3 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034886.D  
 Acq On : 07 Nov 2024 10:48  
 Operator : RC/JU  
 Sample : SSTDICCO.2  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

Quant Time: Nov 07 14:40:16 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5400	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	15723	0.400	ng	0.00
13) Acenaphthene-d10	14.201	164	6785	0.400	ng	-0.01
19) Phenanthrene-d10	16.957	188	14024	0.400	ng	0.00
29) Chrysene-d12	21.151	240	8450	0.400	ng	0.00
35) Perylene-d12	23.317	264	7815	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.192	112	3053	0.203	ng	0.00
5) Phenol-d6	6.752	99	3885	0.194	ng	0.00
8) Nitrobenzene-d5	8.707	82	2366	0.193	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	4079	0.190	ng	0.00
14) 2,4,6-Tribromophenol	15.704	330	320	0.196	ng	0.00
15) 2-Fluorobiphenyl	12.822	172	5892	0.206	ng	-0.01
27) Fluoranthene-d10	18.987	212	5926	0.187	ng	0.00
31) Terphenyl-d14	19.601	244	3169	0.200	ng	0.00
<b>Target Compounds</b>						
					Qvalue	
2) 1,4-Dioxane	3.184	88	1518	0.222	ng	95
3) n-Nitrosodimethylamine	3.480	42	1930	0.210	ng	98
6) bis(2-Chloroethyl)ether	7.004	93	3421	0.198	ng	99
9) Naphthalene	10.383	128	8538	0.196	ng	99
10) Hexachlorobutadiene	10.682	225	1413	0.203	ng	# 100
12) 2-Methylnaphthalene	12.007	142	5037	0.189	ng	98
16) Acenaphthylene	13.923	152	6195	0.189	ng	100
17) Acenaphthene	14.265	154	4347	0.192	ng	99
18) Fluorene	15.259	166	5429	0.193	ng	100
20) 4,6-Dinitro-2-methylph...	15.334	198	229	0.203	ng	# 73
21) 4-Bromophenyl-phenylether	16.163	248	1410	0.189	ng	99
22) Hexachlorobenzene	16.262	284	1785	0.198	ng	99
23) Atrazine	16.436	200	957	0.177	ng	96
24) Pentachlorophenol	16.610	266	384	0.205	ng	98
25) Phenanthrene	16.995	178	8193	0.190	ng	100
26) Anthracene	17.081	178	6756	0.182	ng	100
28) Fluoranthene	19.020	202	8296	0.183	ng	99
30) Pyrene	19.382	202	8470	0.198	ng	100
32) Benzo(a)anthracene	21.134	228	6220	0.189	ng	99
33) Chrysene	21.178	228	6897	0.198	ng	97
34) Bis(2-ethylhexyl)phtha...	21.089	149	3687	0.195	ng	98
36) Indeno(1,2,3-cd)pyrene	25.472	276	6848	0.197	ng	99
37) Benzo(b)fluoranthene	22.671	252	6257	0.182	ng	# 90
38) Benzo(k)fluoranthene	22.715	252	6824m	0.191	ng	
39) Benzo(a)pyrene	23.221	252	4882	0.179	ng	# 88
40) Dibenzo(a,h)anthracene	25.487	278	5297	0.197	ng	96
41) Benzo(g,h,i)perylene	26.124	276	5602	0.196	ng	97

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

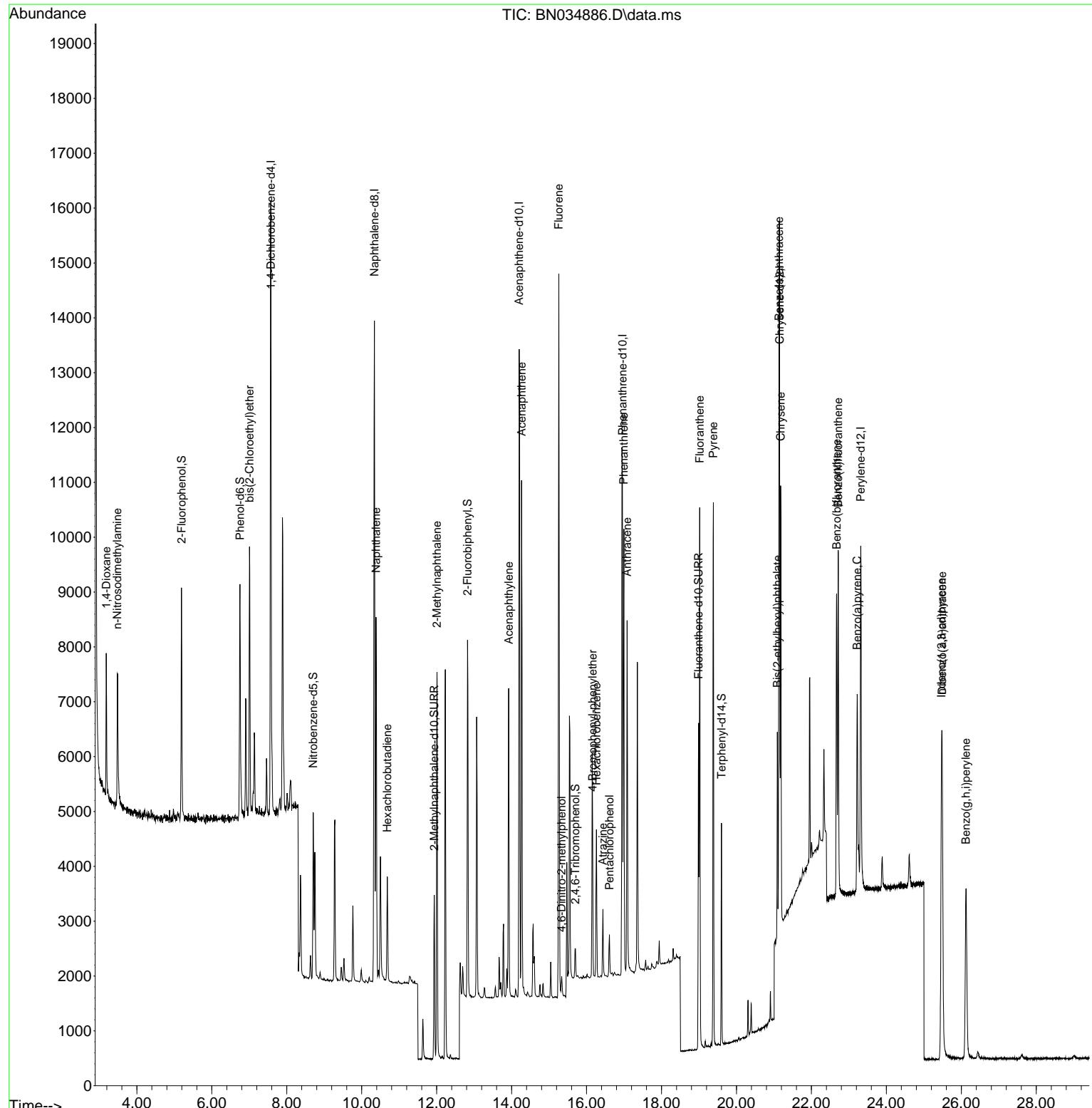
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 Data File : BN034886.D  
 Acq On : 07 Nov 2024 10:48  
 Operator : RC/JU  
 Sample : SSTDICC0.2  
 Misc :  
 ALS Vial : 4 Sample Multiplier: 1

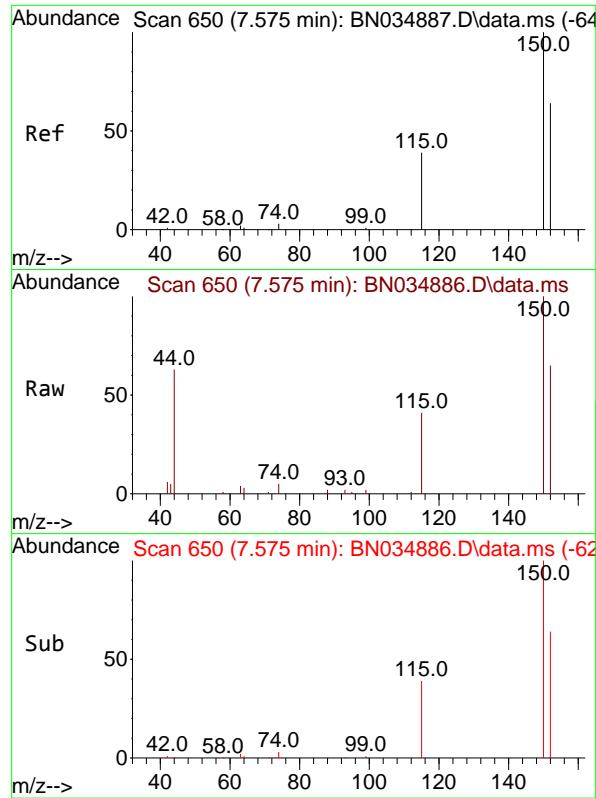
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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.2

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



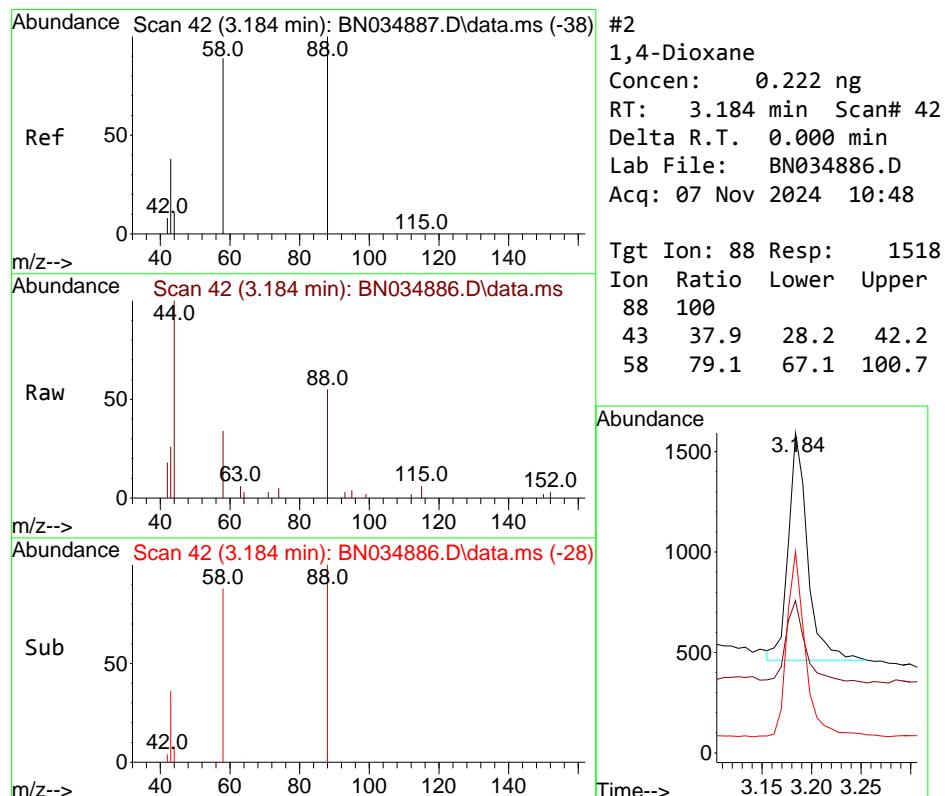
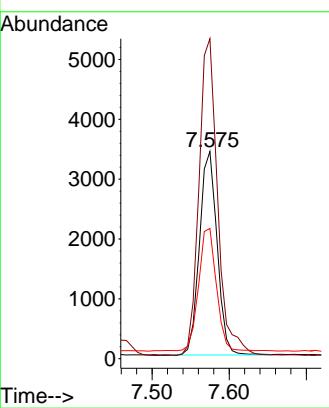


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

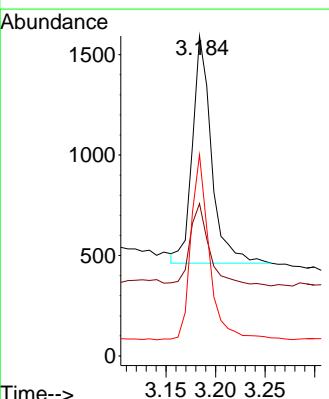
**Manual Integrations**  
**APPROVED**

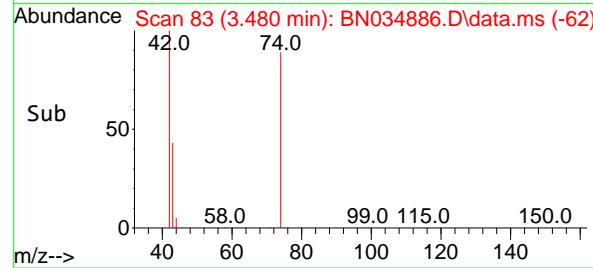
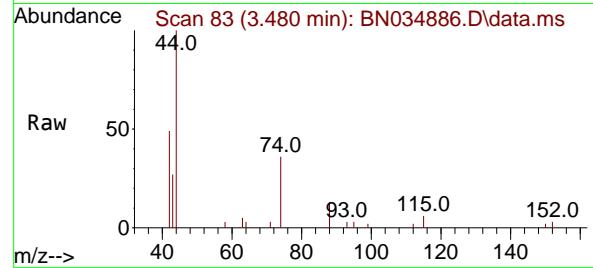
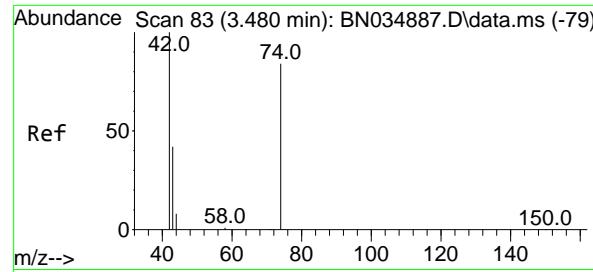
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#2  
1,4-Dioxane  
Concen: 0.222 ng  
RT: 3.184 min Scan# 42  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion: 88 Resp: 1518  
Ion Ratio Lower Upper  
88 100  
43 37.9 28.2 42.2  
58 79.1 67.1 100.7





#3

n-Nitrosodimethylamine

Concen: 0.210 ng

RT: 3.480 min Scan# 8

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Instrument :

BNA\_N

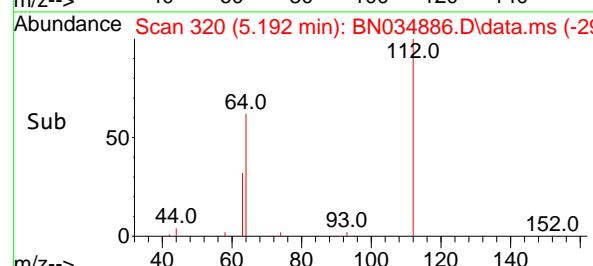
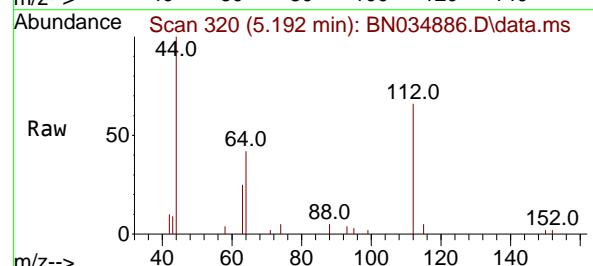
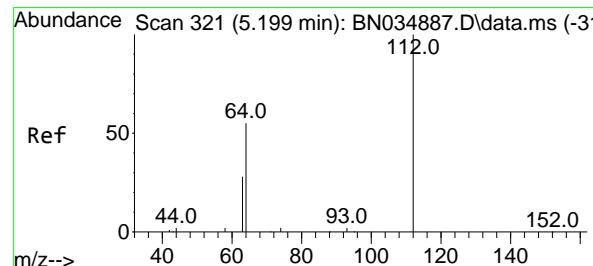
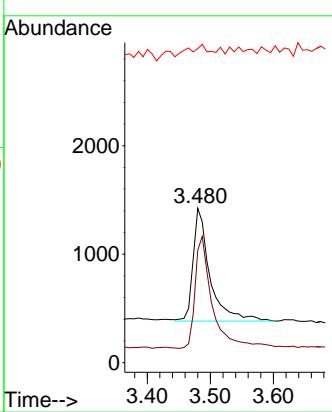
ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#4

2-Fluorophenol

Concen: 0.203 ng

RT: 5.192 min Scan# 320

Delta R.T. -0.007 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

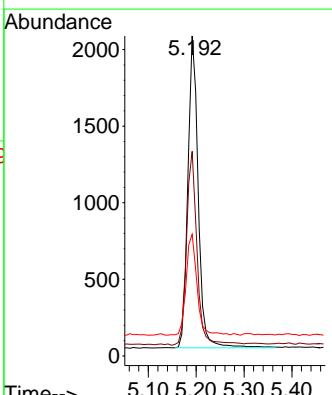
Tgt Ion:112 Resp: 3053

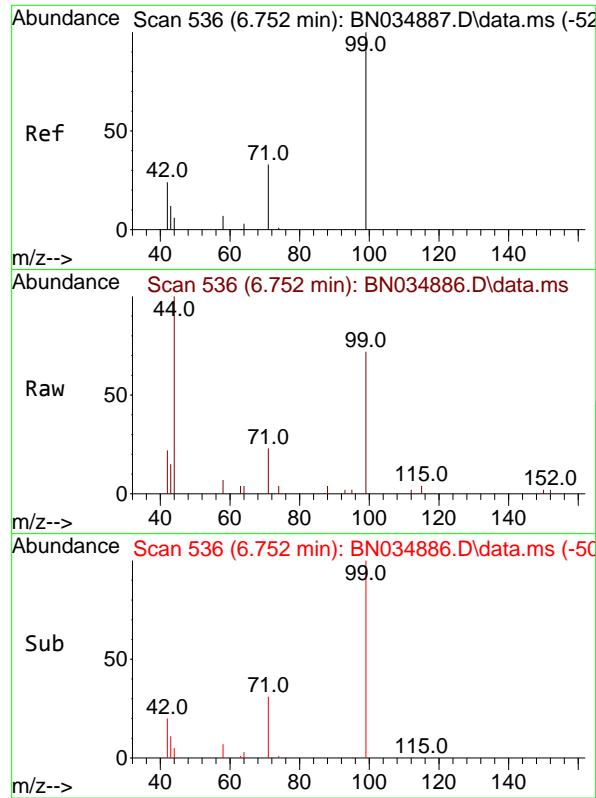
Ion Ratio Lower Upper

112 100

64 63.4 49.6 74.4

63 34.2 26.3 39.5



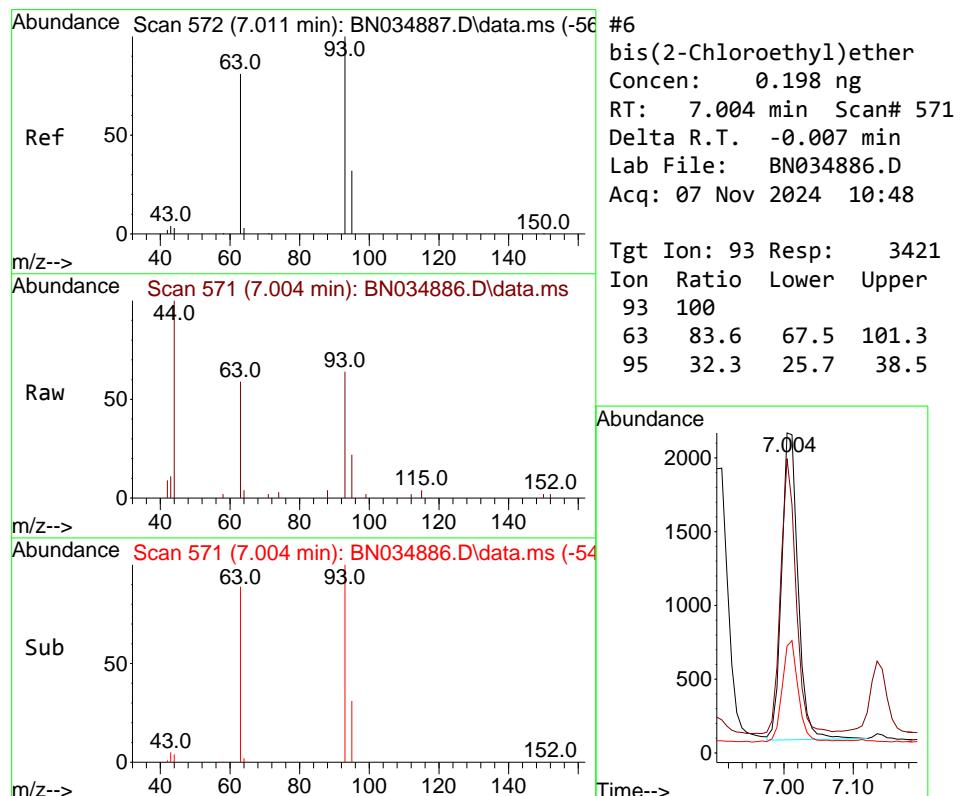
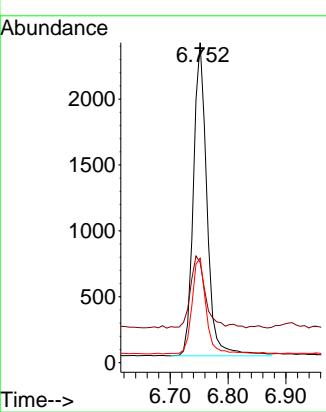


#5  
 Phenol-d6  
 Concen: 0.194 ng  
 RT: 6.752 min Scan# 51  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

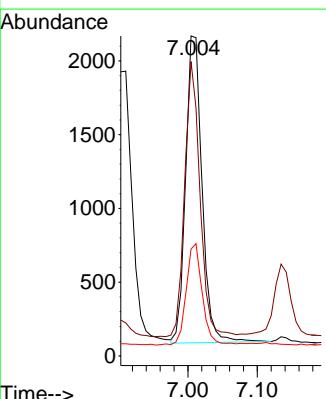
**Manual Integrations**  
**APPROVED**

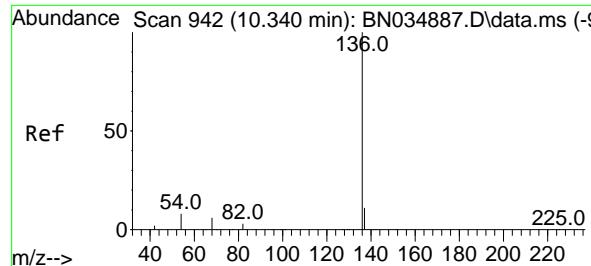
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.198 ng  
 RT: 7.004 min Scan# 571  
 Delta R.T. -0.007 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

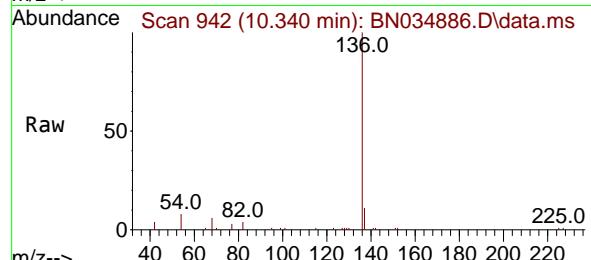
Tgt Ion: 93 Resp: 3421  
 Ion Ratio Lower Upper  
 93 100  
 63 83.6 67.5 101.3  
 95 32.3 25.7 38.5





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

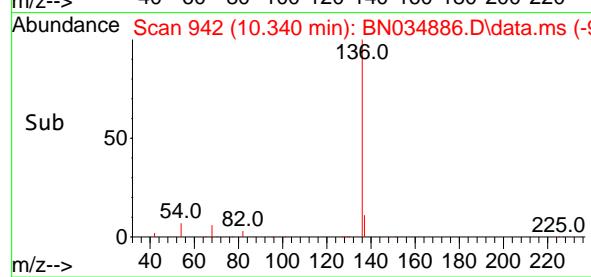
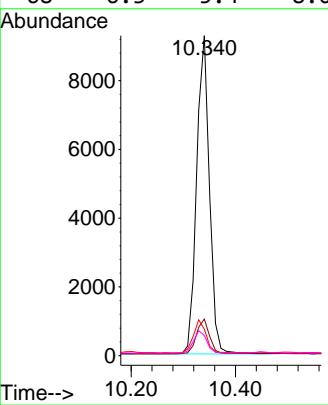
Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2



Tgt Ion:136 Resp: 1572  
 Ion Ratio Lower Upper  
 136 100  
 137 11.4 8.9 13.3  
 54 8.3 6.9 10.3  
 68 6.3 5.4 8.0

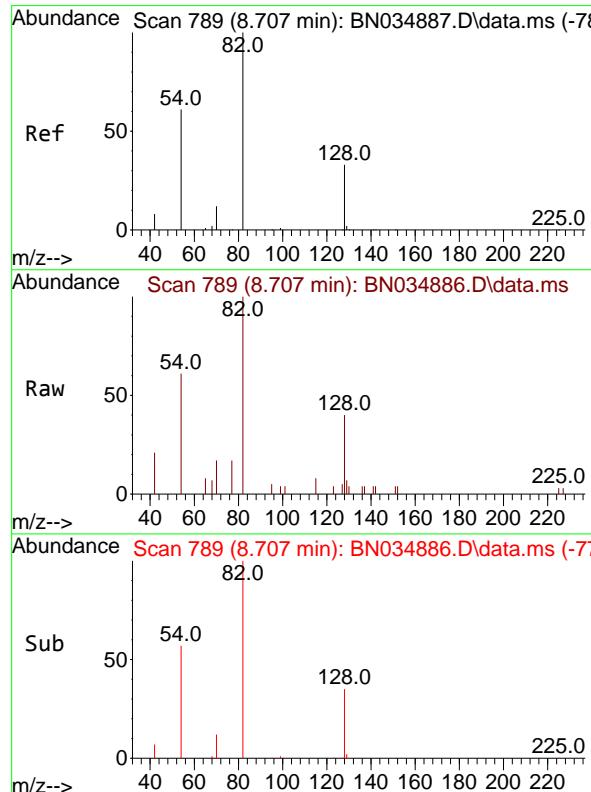
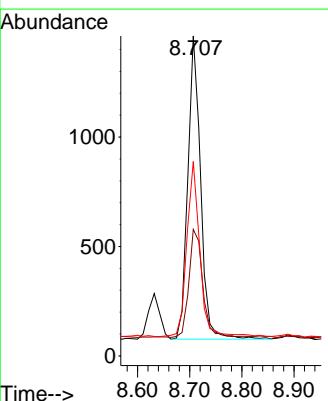
**Manual Integrations**  
**APPROVED**

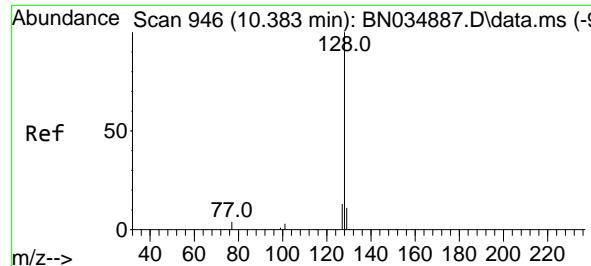
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



#8  
 Nitrobenzene-d5  
 Concen: 0.193 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

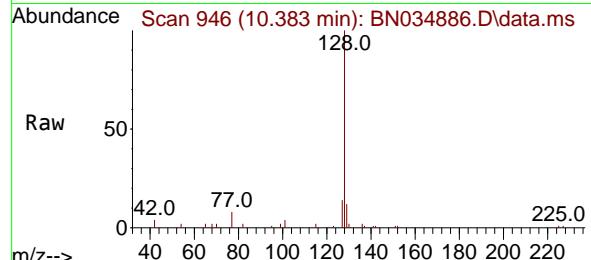
Tgt Ion: 82 Resp: 2366  
 Ion Ratio Lower Upper  
 82 100  
 128 39.5 28.1 42.1  
 54 60.7 49.8 74.6





#9  
Naphthalene  
Concen: 0.196 ng  
RT: 10.383 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

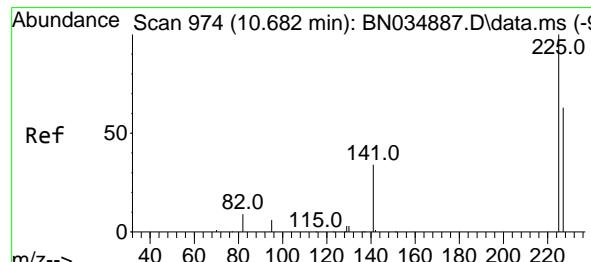
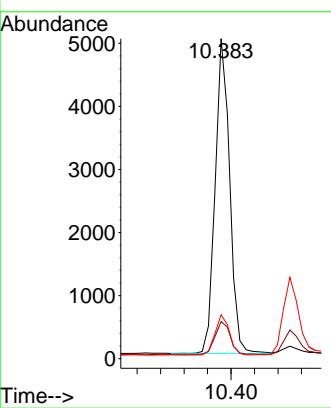
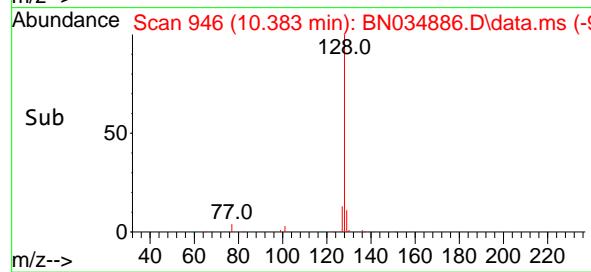
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ClientSampleId : SSTDICCO.2



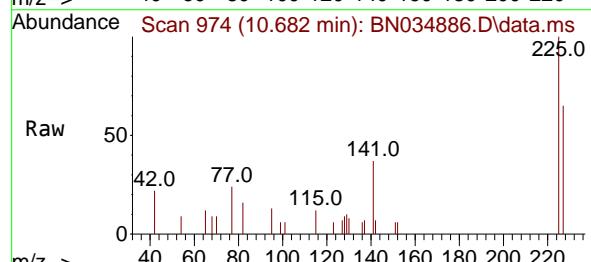
Tgt Ion:128 Resp: 853  
Ion Ratio Lower Upper  
128 100  
129 11.6 9.0 13.4  
127 13.8 10.8 16.2

### Manual Integrations APPROVED

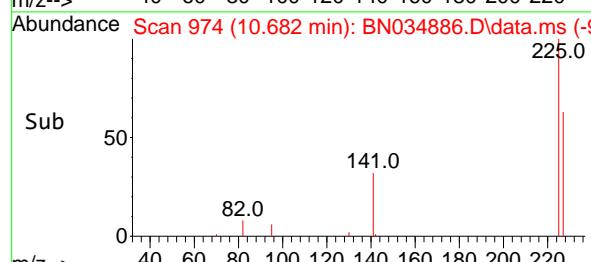
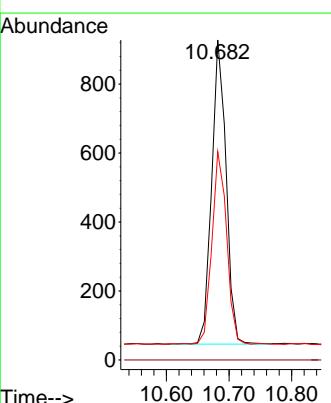
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024

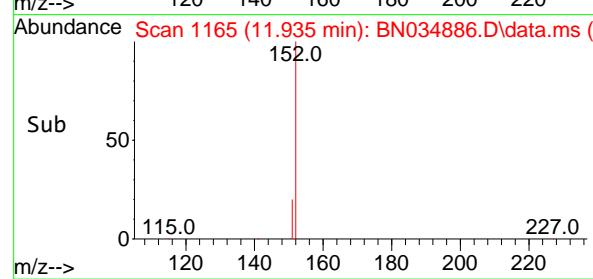
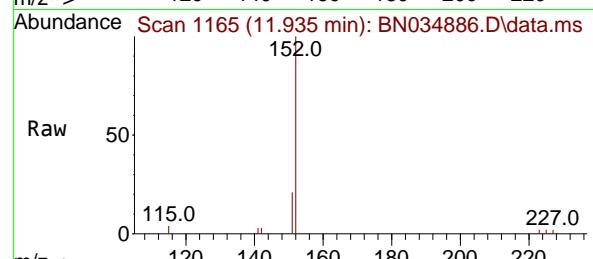
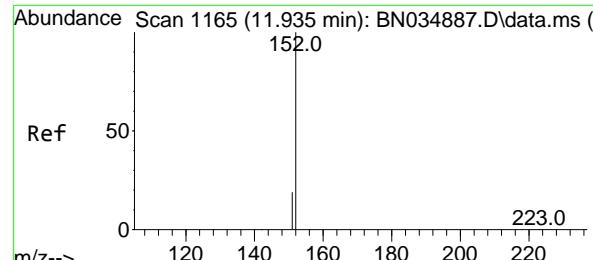


#10  
Hexachlorobutadiene  
Concen: 0.203 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48



Tgt Ion:225 Resp: 1413  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.1 52.0 78.0



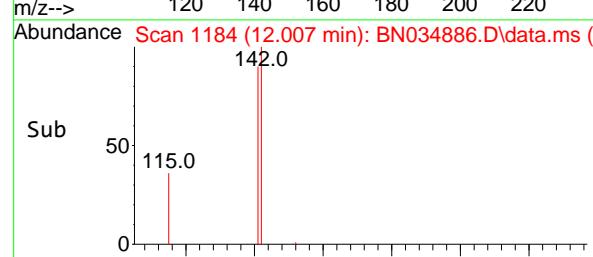
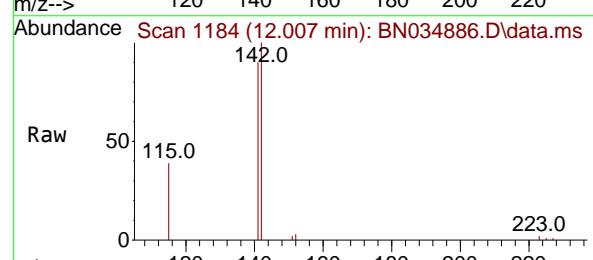
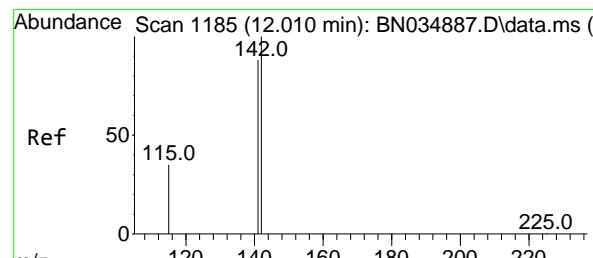
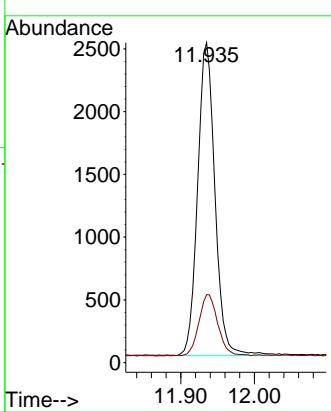


#11  
2-Methylnaphthalene-d10  
Concen: 0.190 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

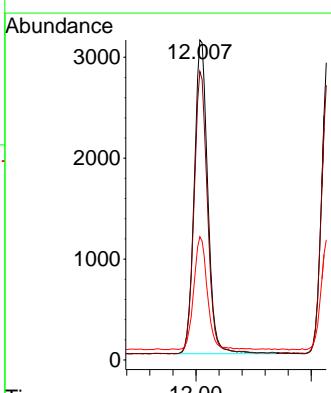
### Manual Integrations APPROVED

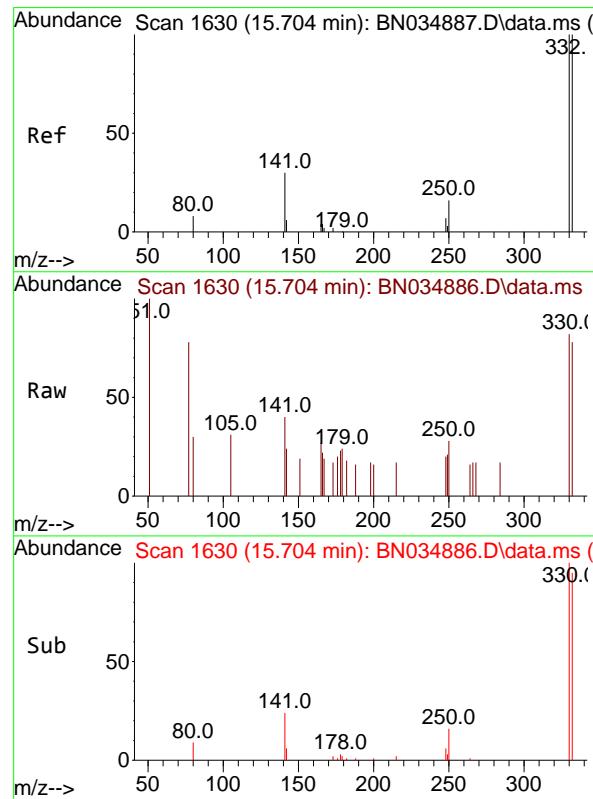
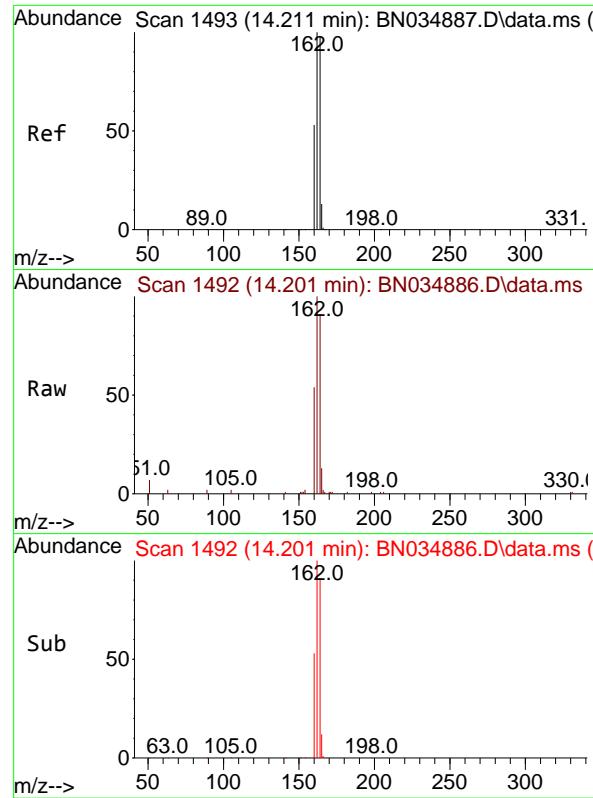
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#12  
2-Methylnaphthalene  
Concen: 0.189 ng  
RT: 12.007 min Scan# 1184  
Delta R.T. -0.004 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:142 Resp: 5037  
Ion Ratio Lower Upper  
142 100  
141 90.2 70.5 105.7  
115 38.5 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.201 min Scan# 1493

Delta R.T. -0.010 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Instrument :

BNA\_N

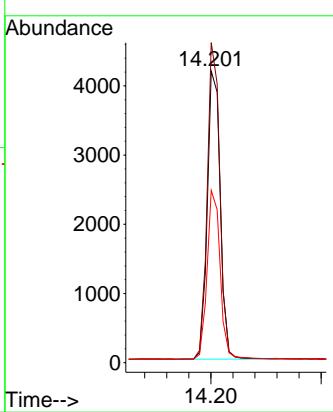
ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#14

2,4,6-Tribromophenol

Concen: 0.196 ng

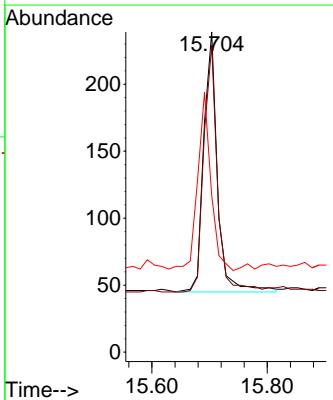
RT: 15.704 min Scan# 1630

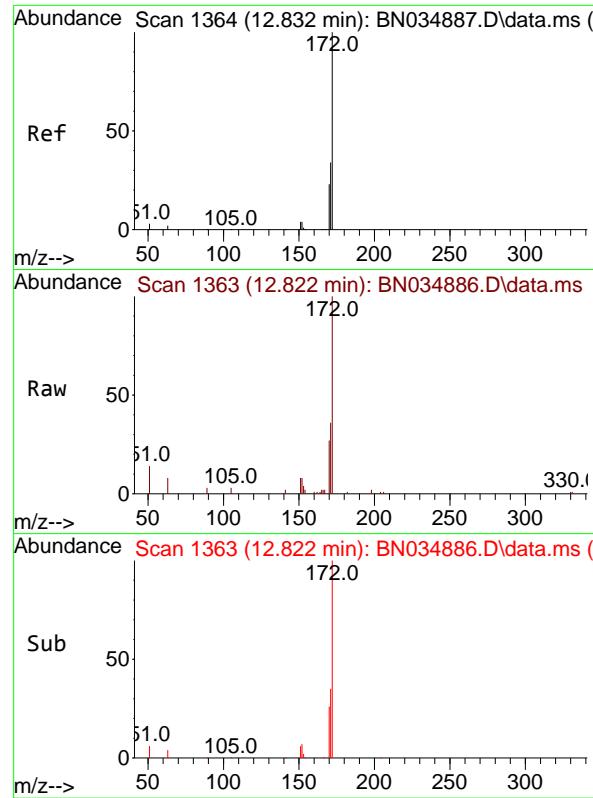
Delta R.T. -0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Tgt	Ion:330	Resp:	320
Ion	Ratio	Lower	Upper
330	100		
332	93.4	77.1	115.7
141	66.3	54.1	81.1



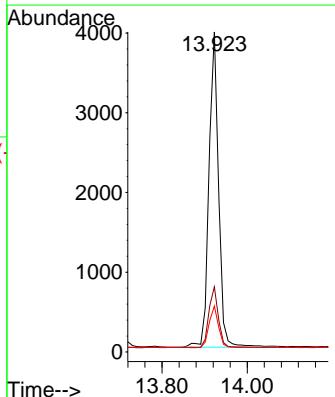
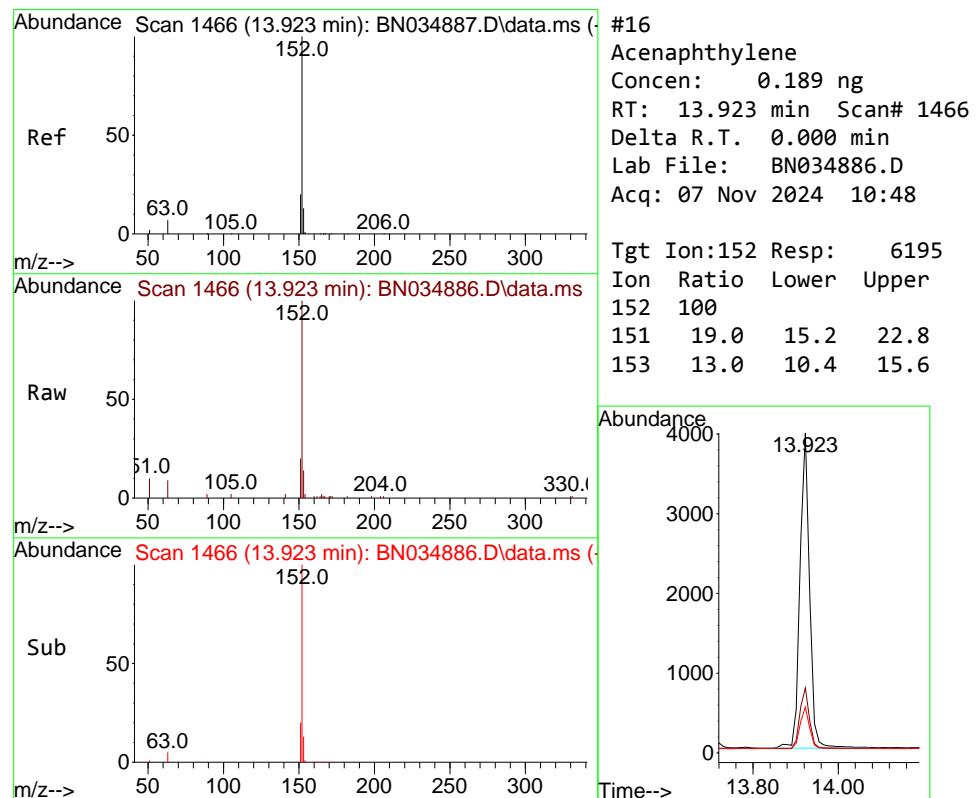
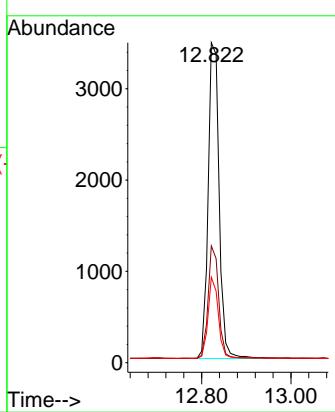


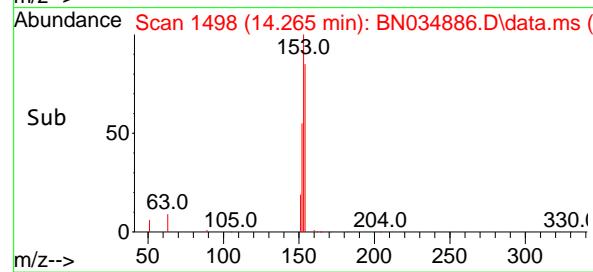
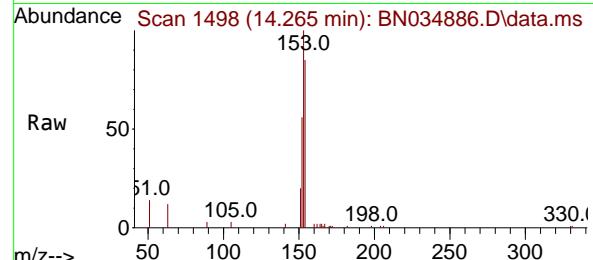
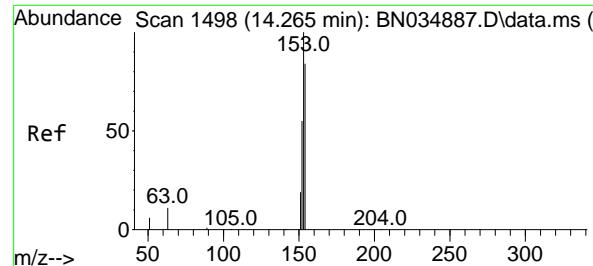
#15  
2-Fluorobiphenyl  
Concen: 0.206 ng  
RT: 12.822 min Scan# 1  
Delta R.T. -0.011 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024





#17

Acenaphthene

Concen: 0.192 ng

RT: 14.265 min Scan# 1498

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Instrument :

BNA\_N

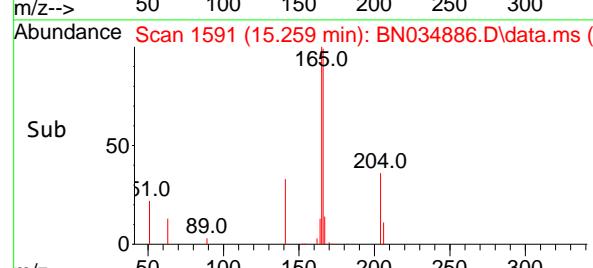
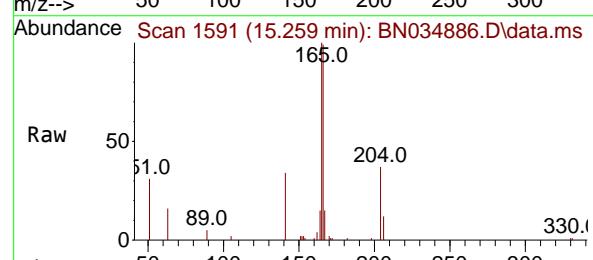
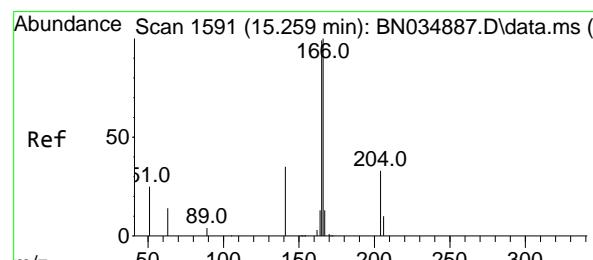
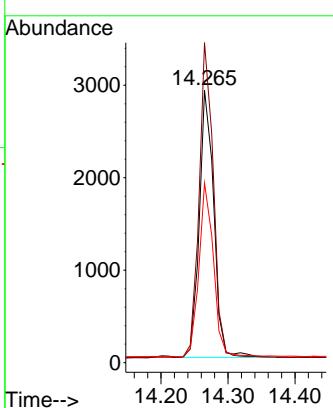
ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#18

Fluorene

Concen: 0.193 ng

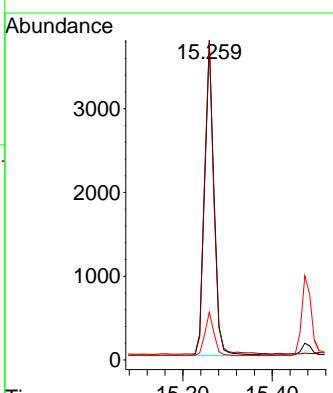
RT: 15.259 min Scan# 1591

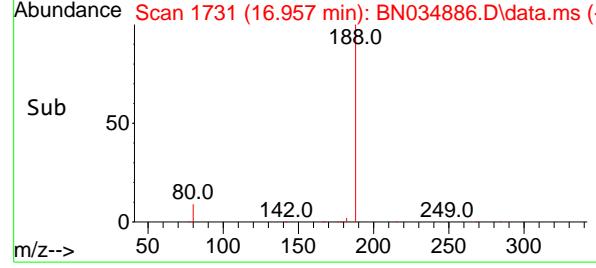
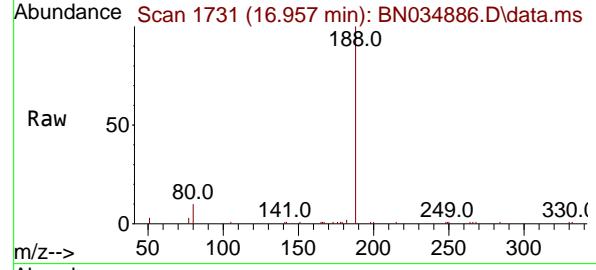
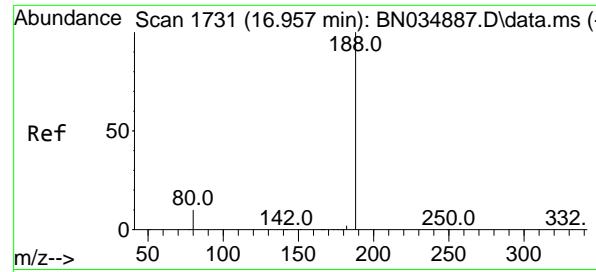
Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Tgt	Ion:166	Resp:	5429
Ion	Ratio	Lower	Upper
166	100		
165	99.6	79.5	119.3
167	13.6	10.6	16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.957 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

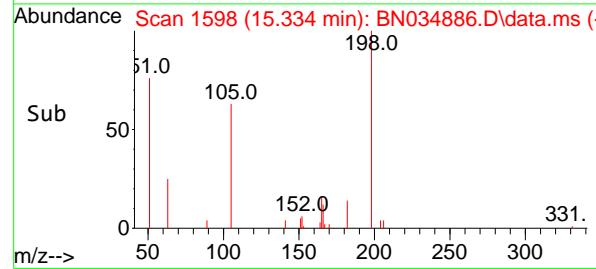
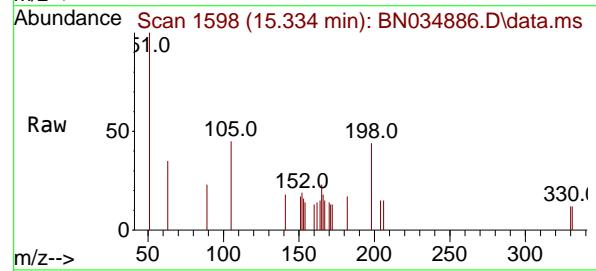
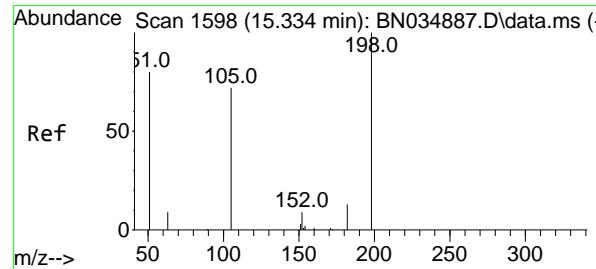
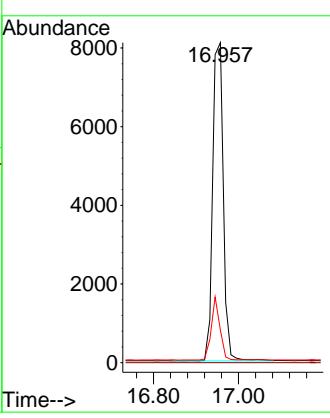
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#20

4,6-Dinitro-2-methylphenol

Concen: 0.203 ng

RT: 15.334 min Scan# 1598

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

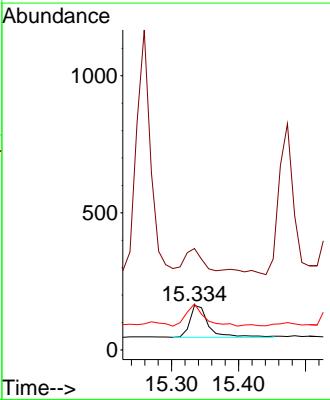
Tgt Ion:198 Resp: 229

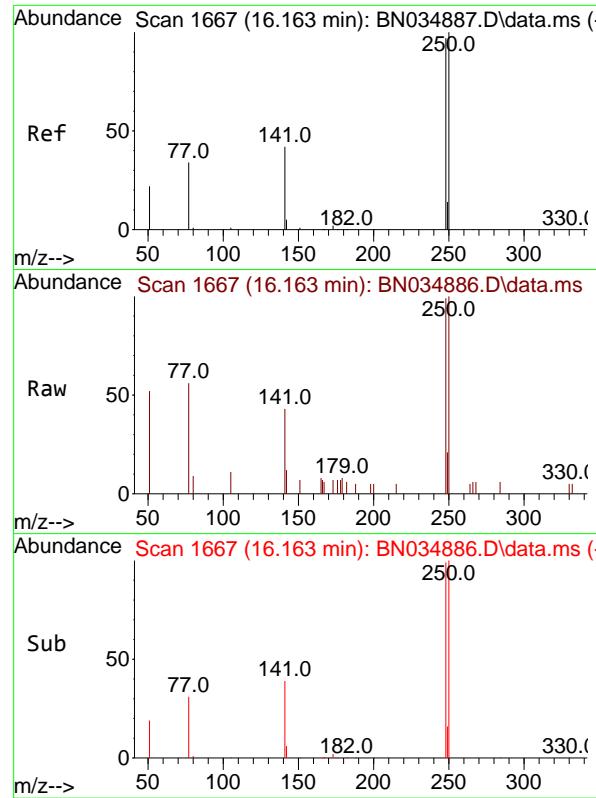
Ion Ratio Lower Upper

198 100

51 228.4 141.8 212.8#

105 103.7 75.6 113.4



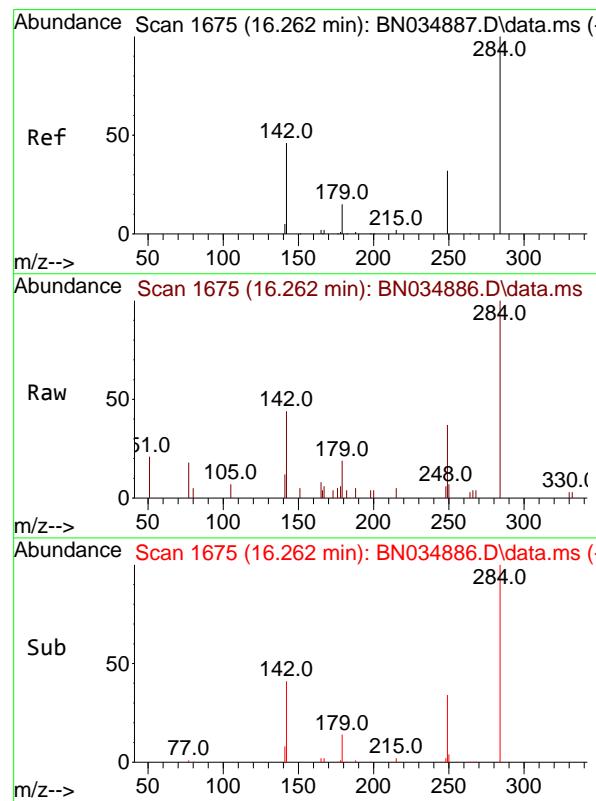
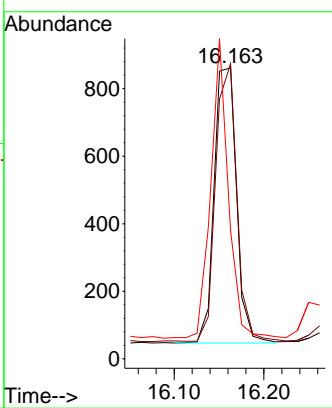


#21  
4-Bromophenyl-phenylether  
Concen: 0.189 ng  
RT: 16.163 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCO.2

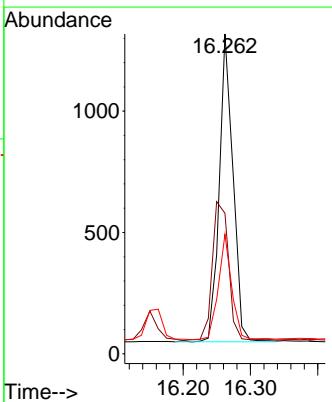
**Manual Integrations**  
**APPROVED**

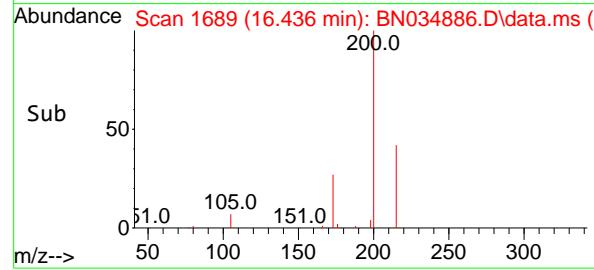
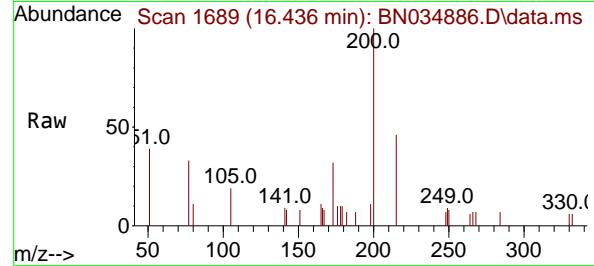
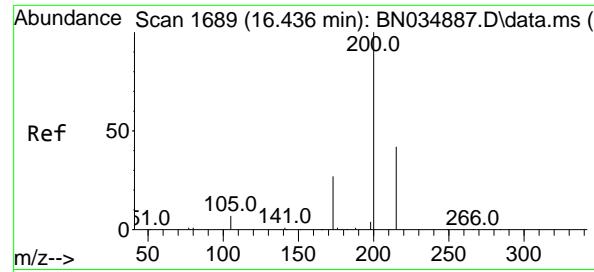
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#22  
Hexachlorobenzene  
Concen: 0.198 ng  
RT: 16.262 min Scan# 1675  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:284 Resp: 1785  
Ion Ratio Lower Upper  
284 100  
142 54.0 43.4 65.2  
249 33.5 25.8 38.6





#23

Atrazine

Concen: 0.177 ng

RT: 16.436 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

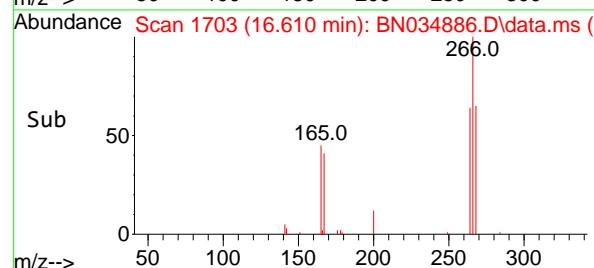
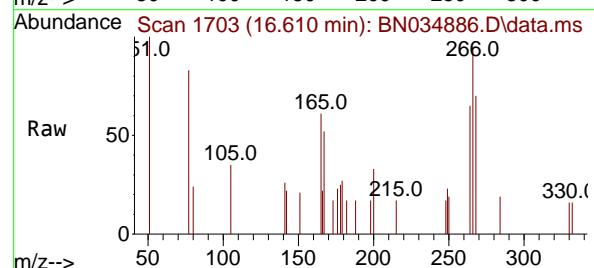
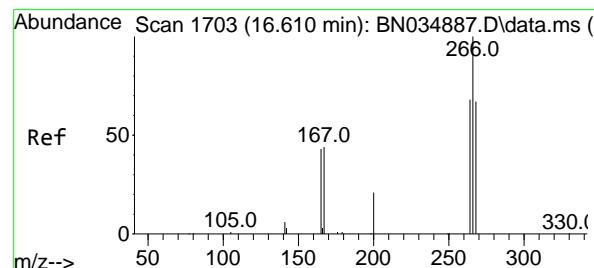
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#24

Pentachlorophenol

Concen: 0.205 ng

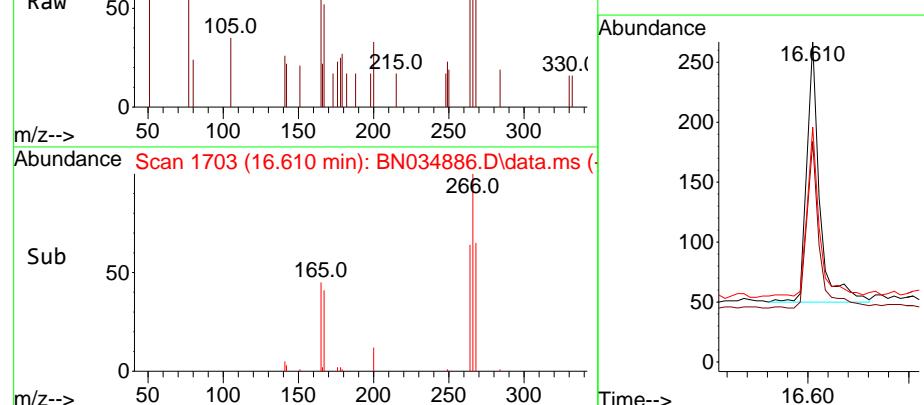
RT: 16.610 min Scan# 1703

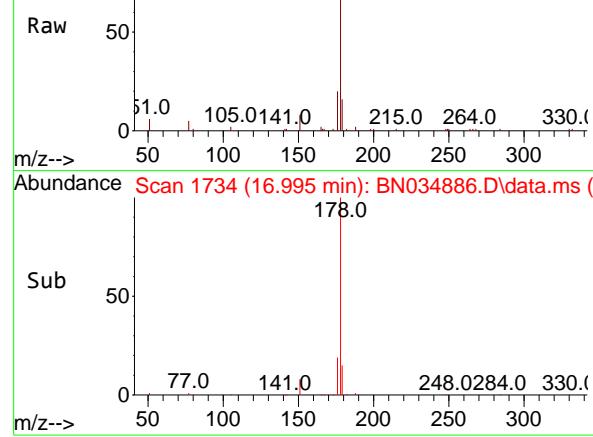
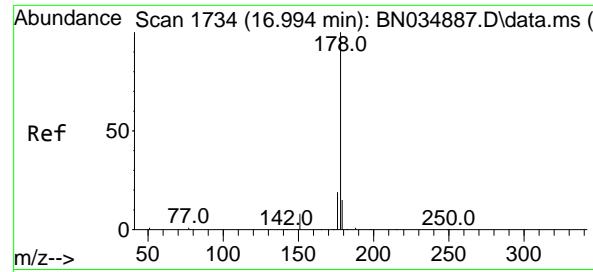
Delta R.T. -0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Tgt	Ion:266	Resp:	384
Ion	Ratio	Lower	Upper
266	100		
264	62.2	51.3	76.9
268	64.6	53.0	79.6





#25

Phenanthrene

Concen: 0.190 ng

RT: 16.995 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

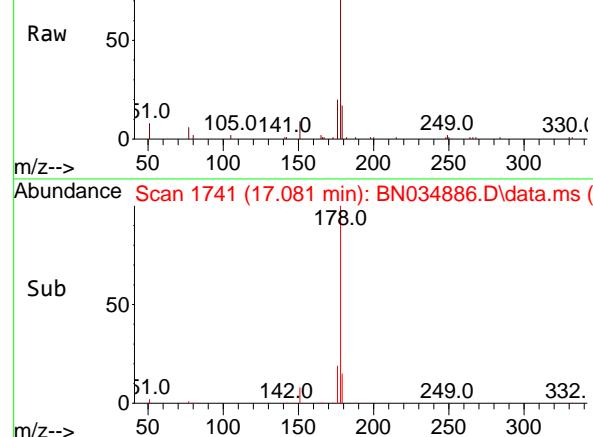
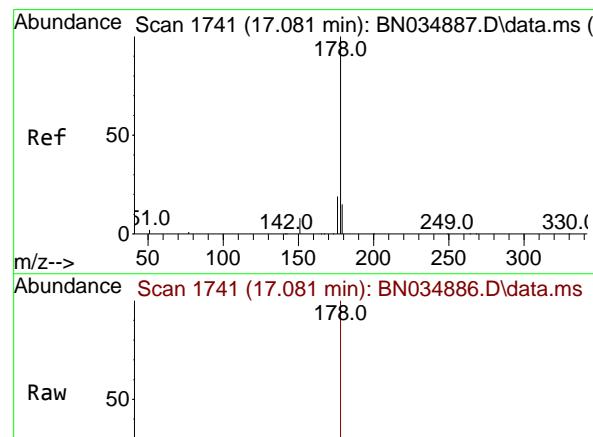
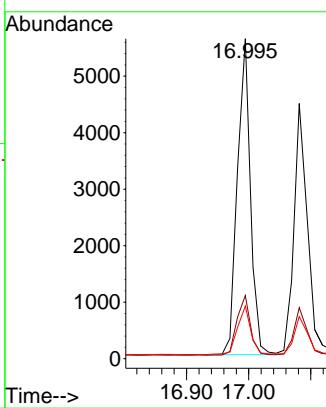
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#26

Anthracene

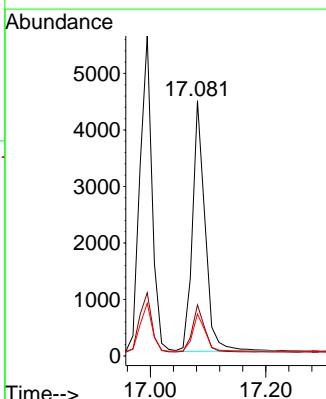
Concen: 0.182 ng

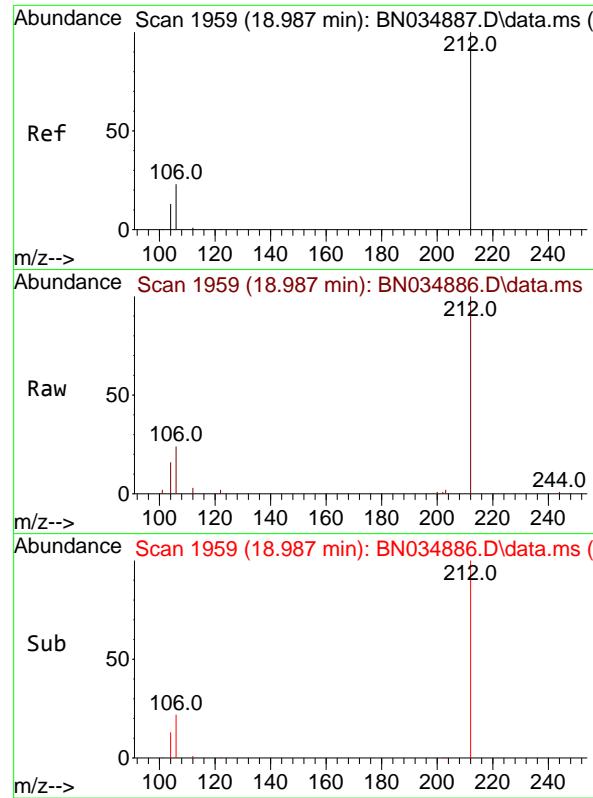
RT: 17.081 min Scan# 1741

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

 Tgt Ion:178 Resp: 6756  
 Ion Ratio Lower Upper  
 178 100  
 176 18.7 15.0 22.6  
 179 15.2 12.1 18.1




#27

Fluoranthene-d10

Concen: 0.187 ng

RT: 18.987 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

Tgt Ion:212 Resp: 5920

Ion Ratio Lower Upper

212 100

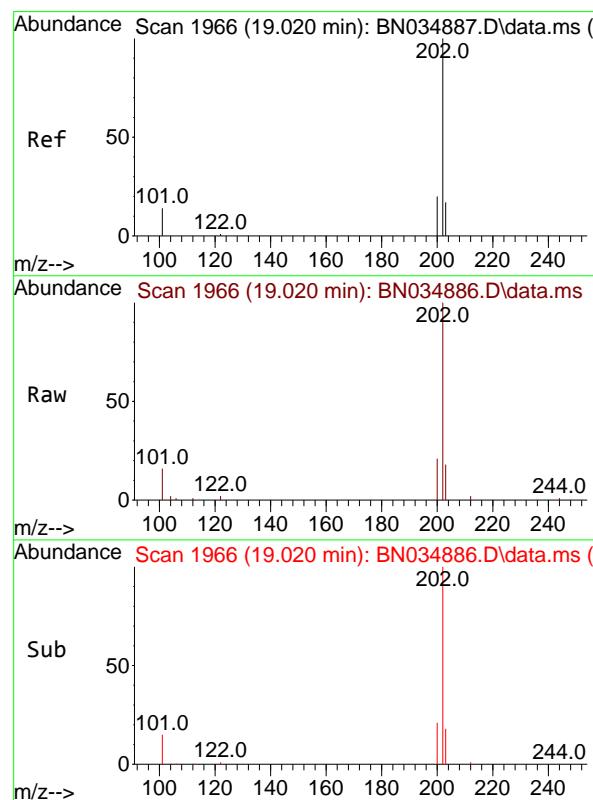
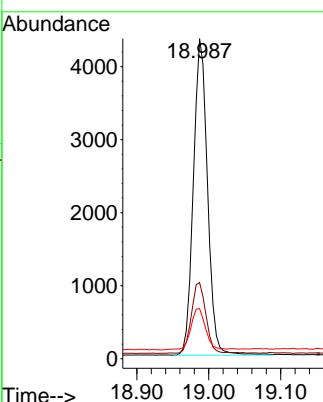
106 22.6 18.2 27.4

104 13.8 10.6 15.8

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#28

Fluoranthene

Concen: 0.183 ng

RT: 19.020 min Scan# 1966

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

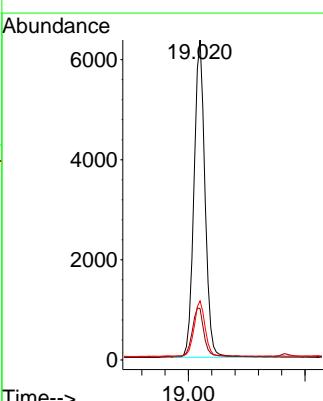
Tgt Ion:202 Resp: 8296

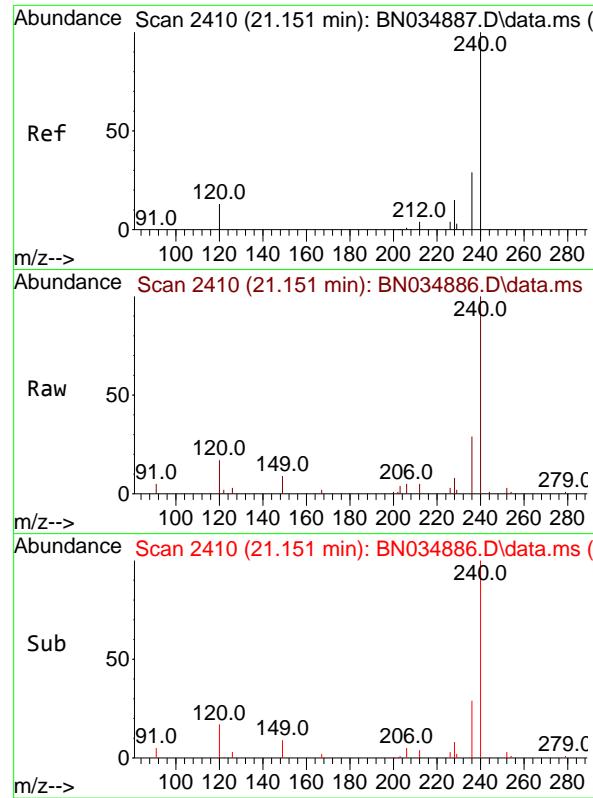
Ion Ratio Lower Upper

202 100

101 16.7 12.7 19.1

203 17.1 13.7 20.5





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.151 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Instrument :

BNA\_N

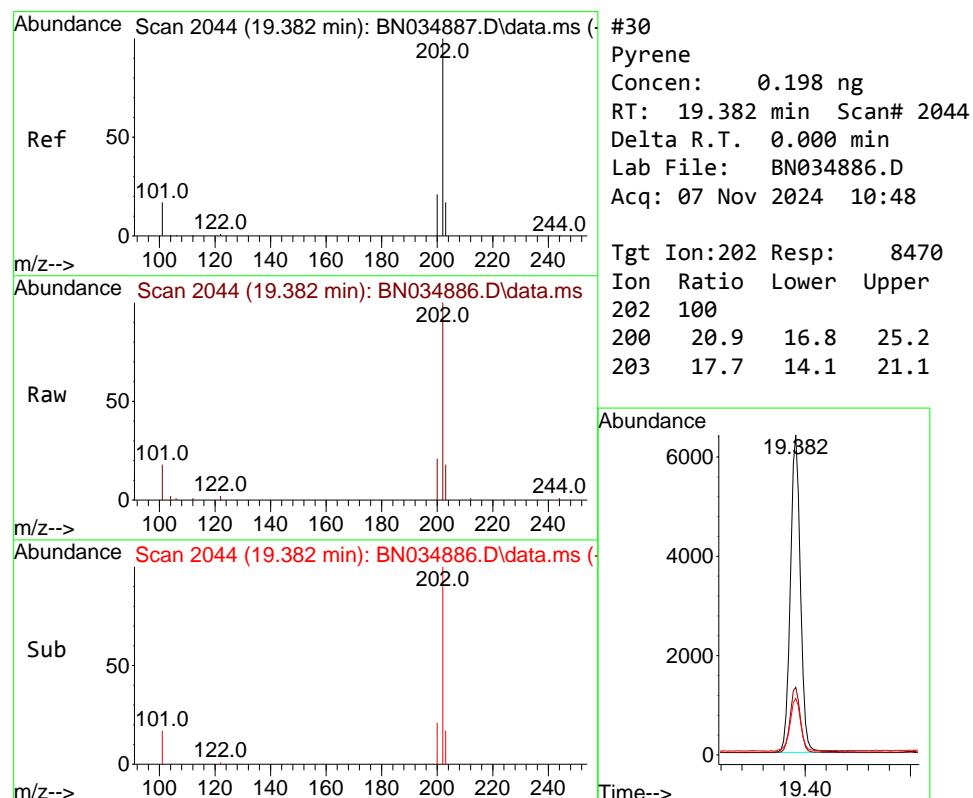
ClientSampleId :

SSTDICCO.2

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#30

Pyrene

Concen: 0.198 ng

RT: 19.382 min Scan# 2044

Delta R.T. 0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

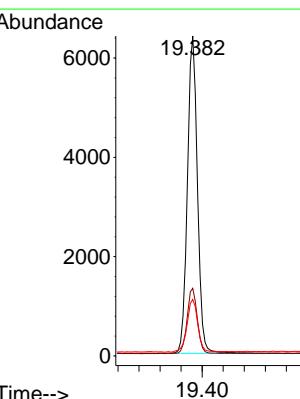
Tgt Ion:202 Resp: 8470

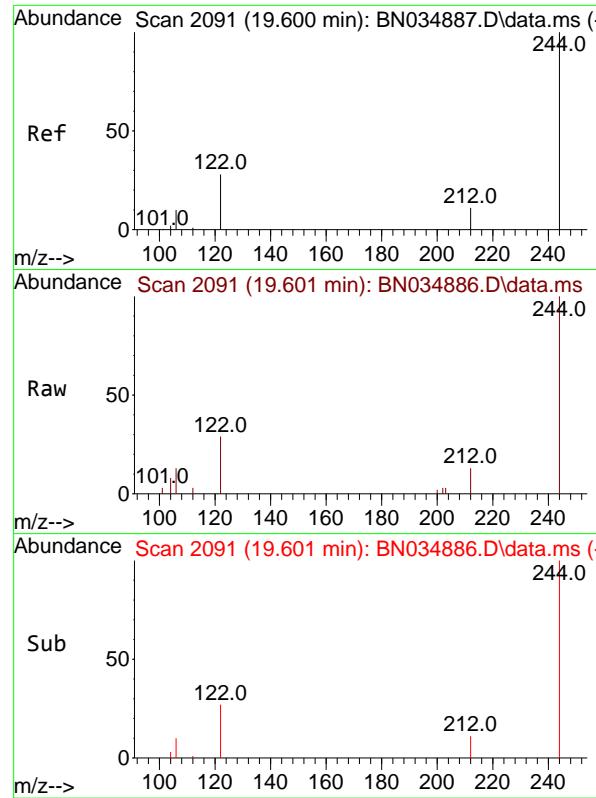
Ion Ratio Lower Upper

202 100

200 20.9 16.8 25.2

203 17.7 14.1 21.1



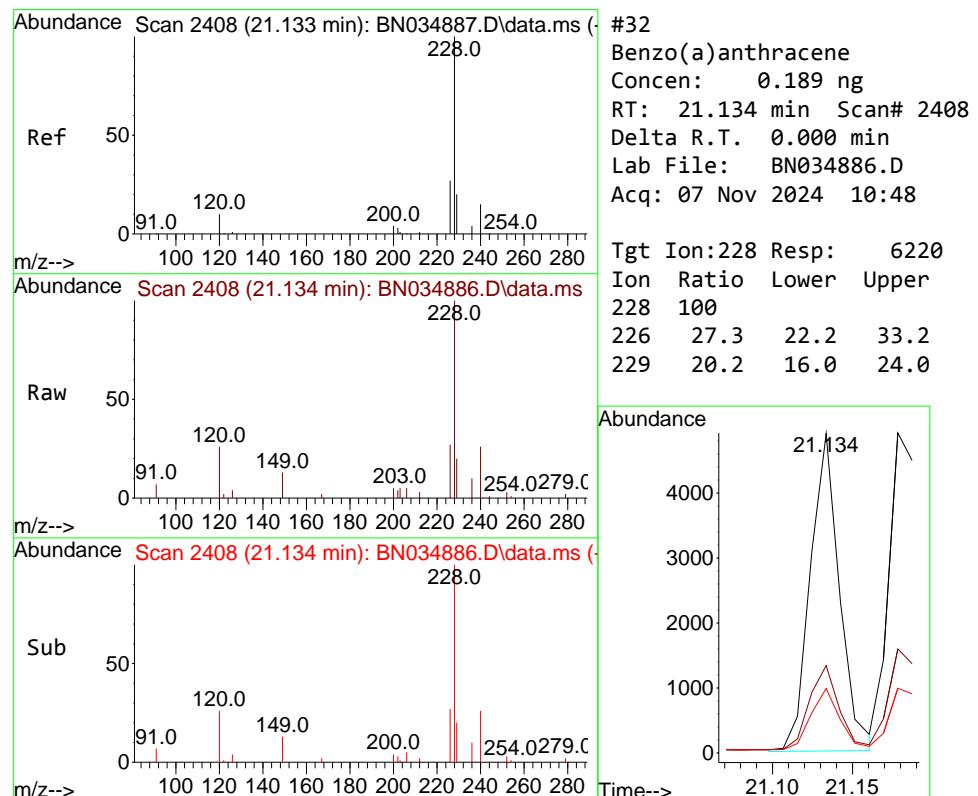
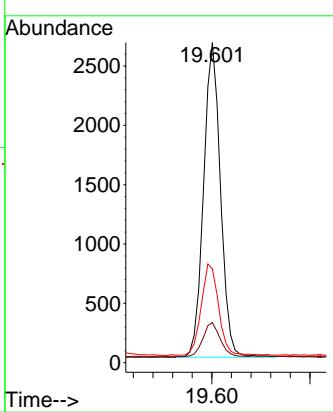


#31  
Terphenyl-d14  
Concen: 0.200 ng  
RT: 19.601 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

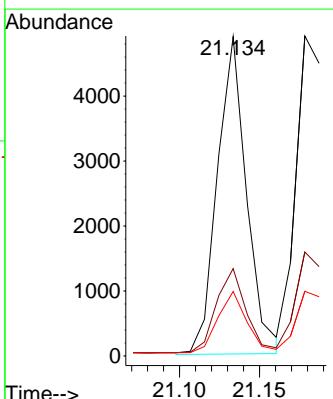
**Manual Integrations**  
**APPROVED**

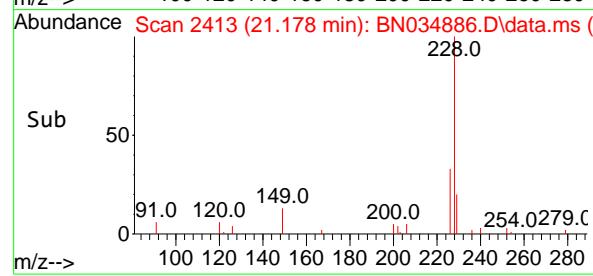
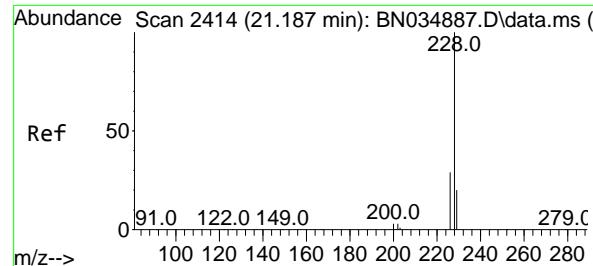
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#32  
Benzo(a)anthracene  
Concen: 0.189 ng  
RT: 21.134 min Scan# 2408  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:228 Resp: 6220  
Ion Ratio Lower Upper  
228 100  
226 27.3 22.2 33.2  
229 20.2 16.0 24.0





#33

Chrysene

Concen: 0.198 ng

RT: 21.178 min Scan# 2413

Delta R.T. -0.009 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

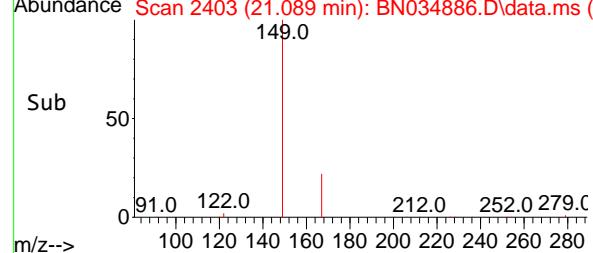
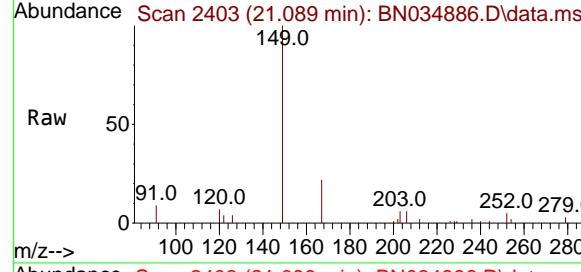
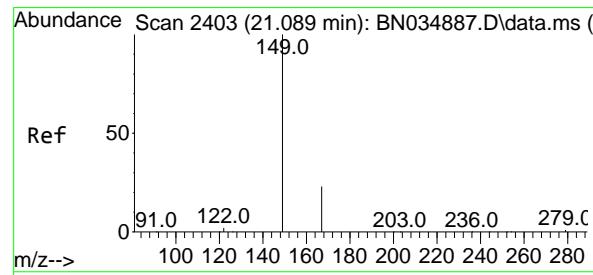
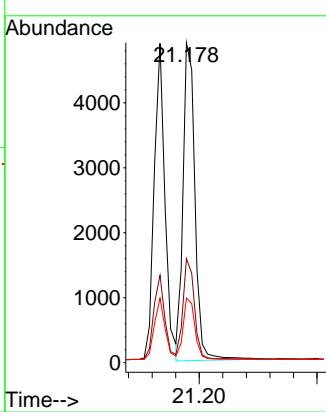
Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#34

Bis(2-ethylhexyl)phthalate

Concen: 0.195 ng

RT: 21.089 min Scan# 2403

Delta R.T. -0.000 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

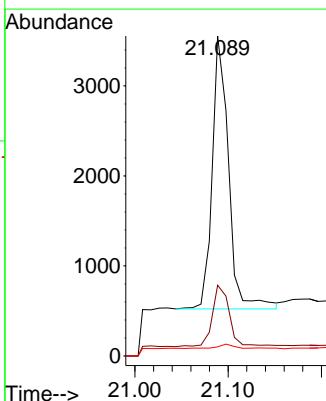
Tgt Ion:149 Resp: 3687

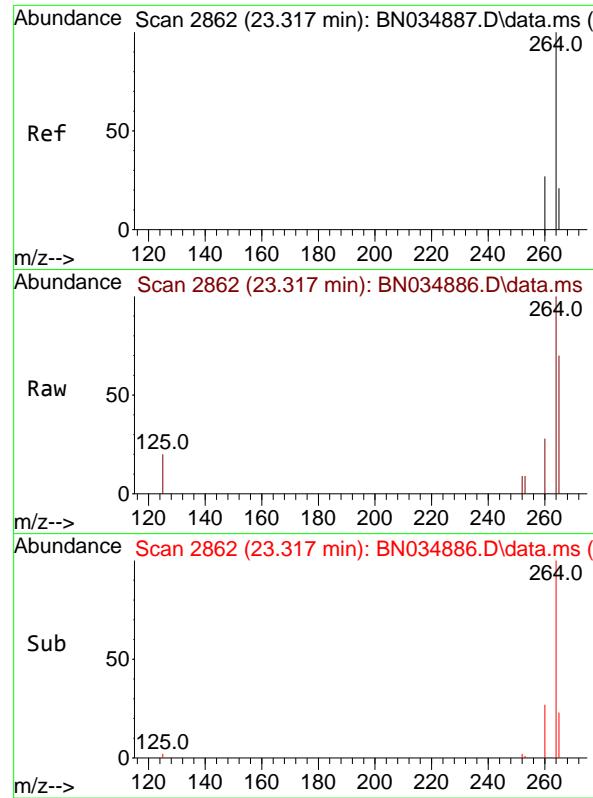
Ion Ratio Lower Upper

149 100

167 23.8 18.1 27.1

279 1.2 1.2 1.8



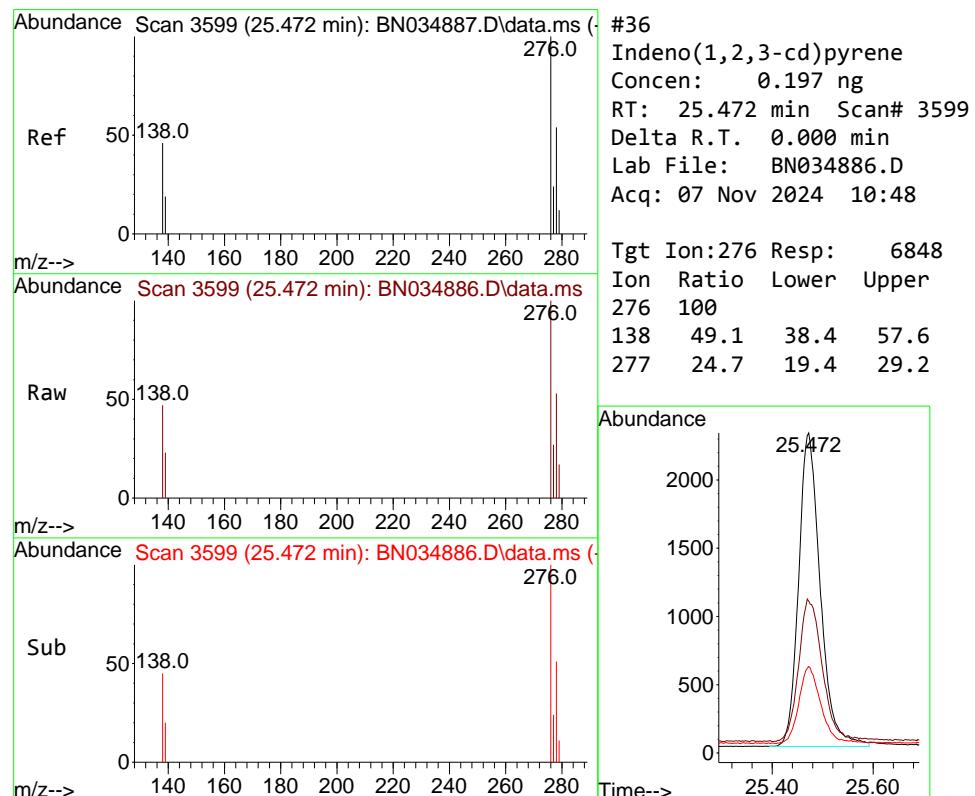
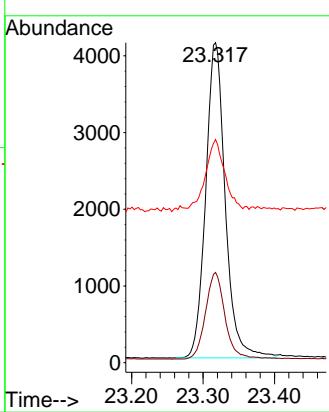


#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.317 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

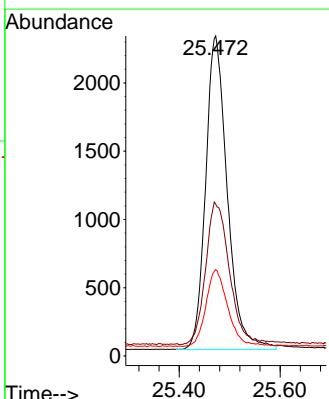
**Manual Integrations**  
**APPROVED**

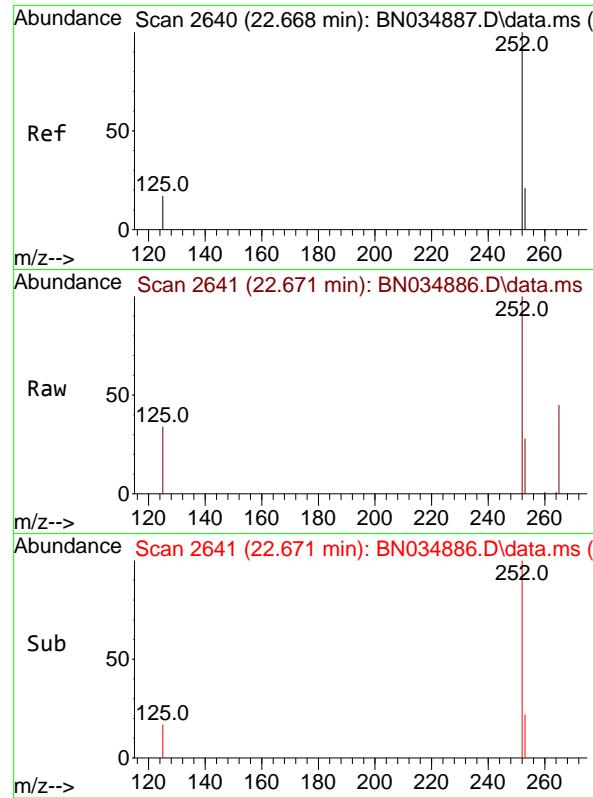
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.197 ng  
RT: 25.472 min Scan# 3599  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:276 Resp: 6848  
Ion Ratio Lower Upper  
276 100  
138 49.1 38.4 57.6  
277 24.7 19.4 29.2



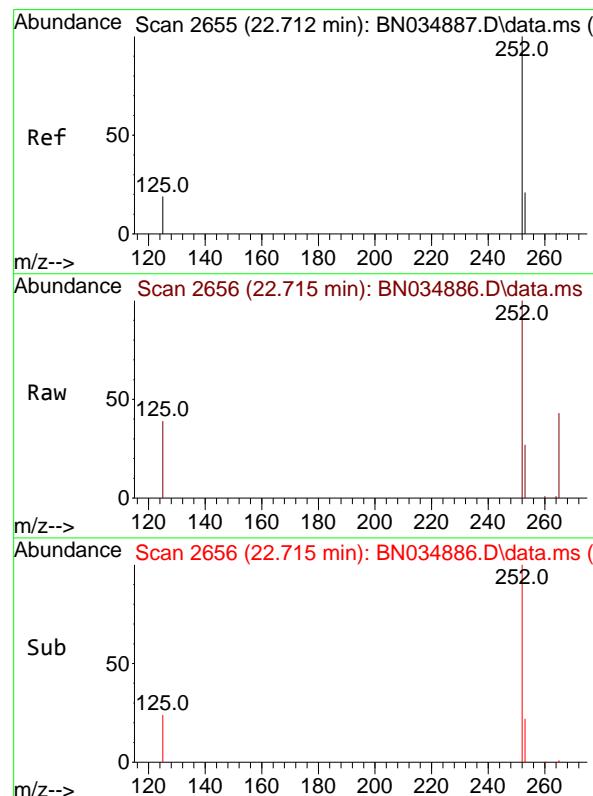
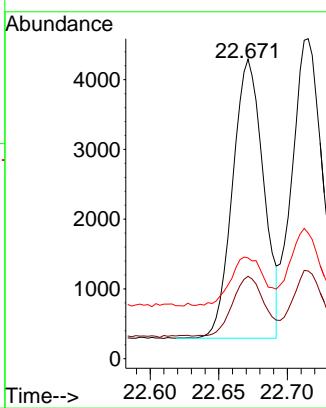


#37  
Benzo(b)fluoranthene  
Concen: 0.182 ng  
RT: 22.671 min Scan# 2641  
Delta R.T. 0.003 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

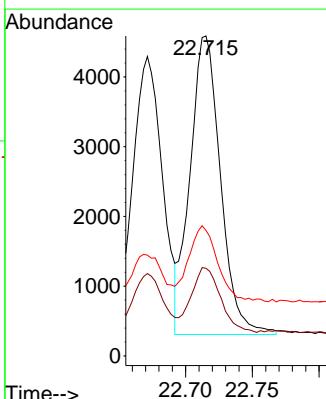
### Manual Integrations APPROVED

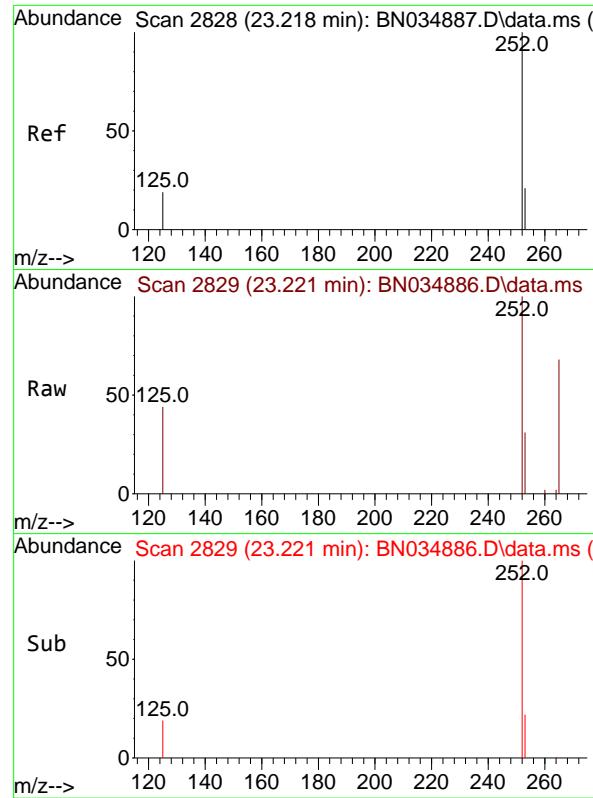
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#38  
Benzo(k)fluoranthene  
Concen: 0.191 ng  
RT: 22.715 min Scan# 2656  
Delta R.T. 0.003 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:252 Resp: 6824  
Ion Ratio Lower Upper  
252 100  
253 27.4 19.8 29.8  
125 39.2 22.6 33.8#



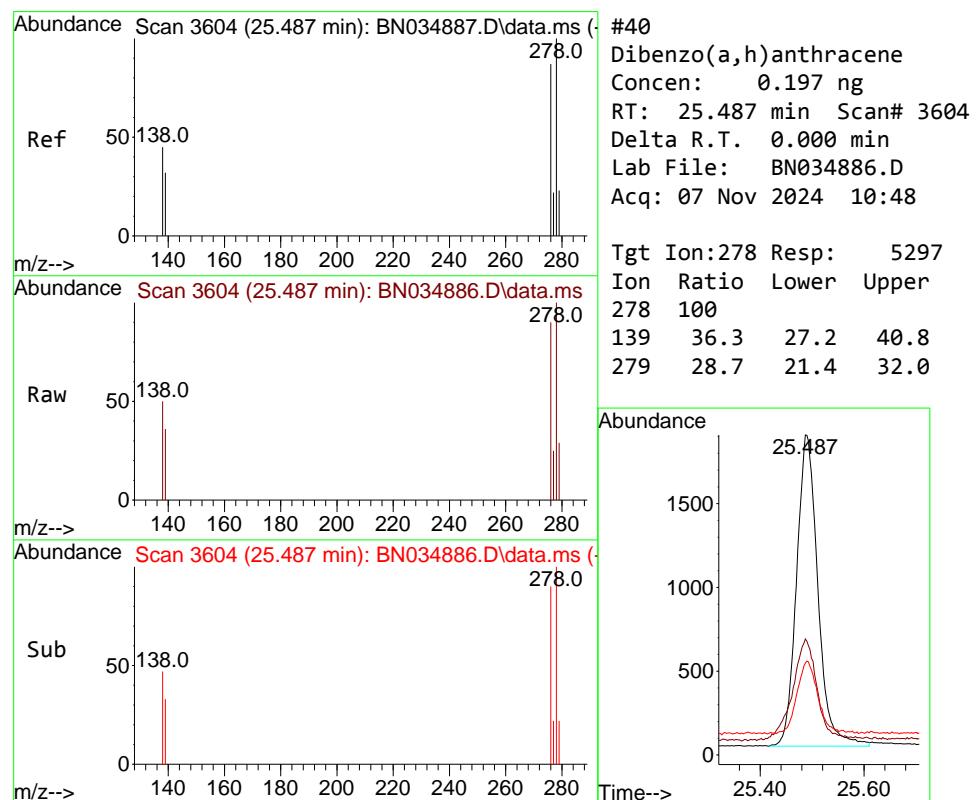
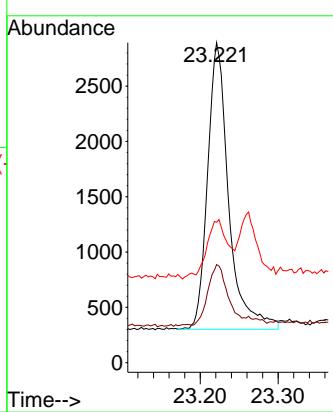


#39  
Benzo(a)pyrene  
Concen: 0.179 ng  
RT: 23.221 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

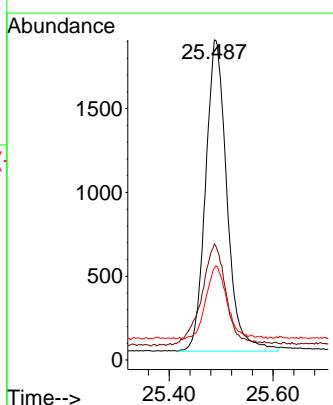
**Manual Integrations**  
**APPROVED**

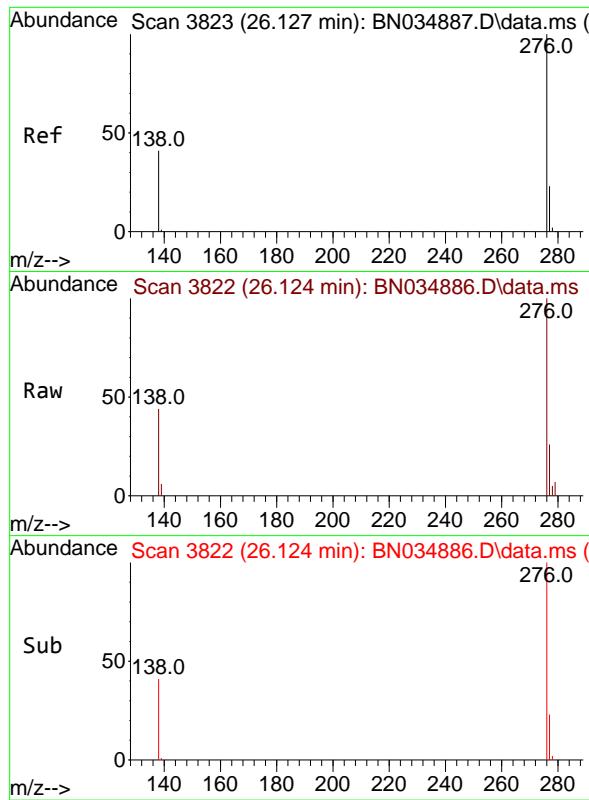
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#40  
Dibenzo(a,h)anthracene  
Concen: 0.197 ng  
RT: 25.487 min Scan# 3604  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:278 Resp: 5297  
Ion Ratio Lower Upper  
278 100  
139 36.3 27.2 40.8  
279 28.7 21.4 32.0





#41

Benzo(g,h,i)perylene

Concen: 0.196 ng

RT: 26.124 min Scan# 3

Delta R.T. -0.003 min

Lab File: BN034886.D

Acq: 07 Nov 2024 10:48

Instrument :

BNA\_N

ClientSampleId :

SSTDICCO.2

Tgt Ion:276 Resp: 560:

Ion Ratio Lower Upper

276 100

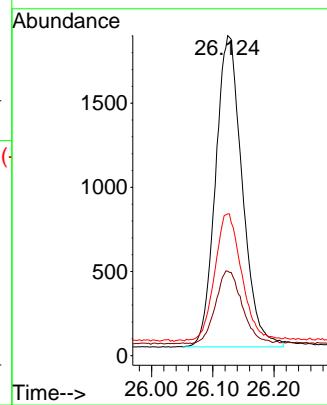
277 26.4 20.2 30.2

138 44.3 33.9 50.9

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034887.D  
 Acq On : 07 Nov 2024 11:24  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

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

Quant Time: Nov 07 14:40:55 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

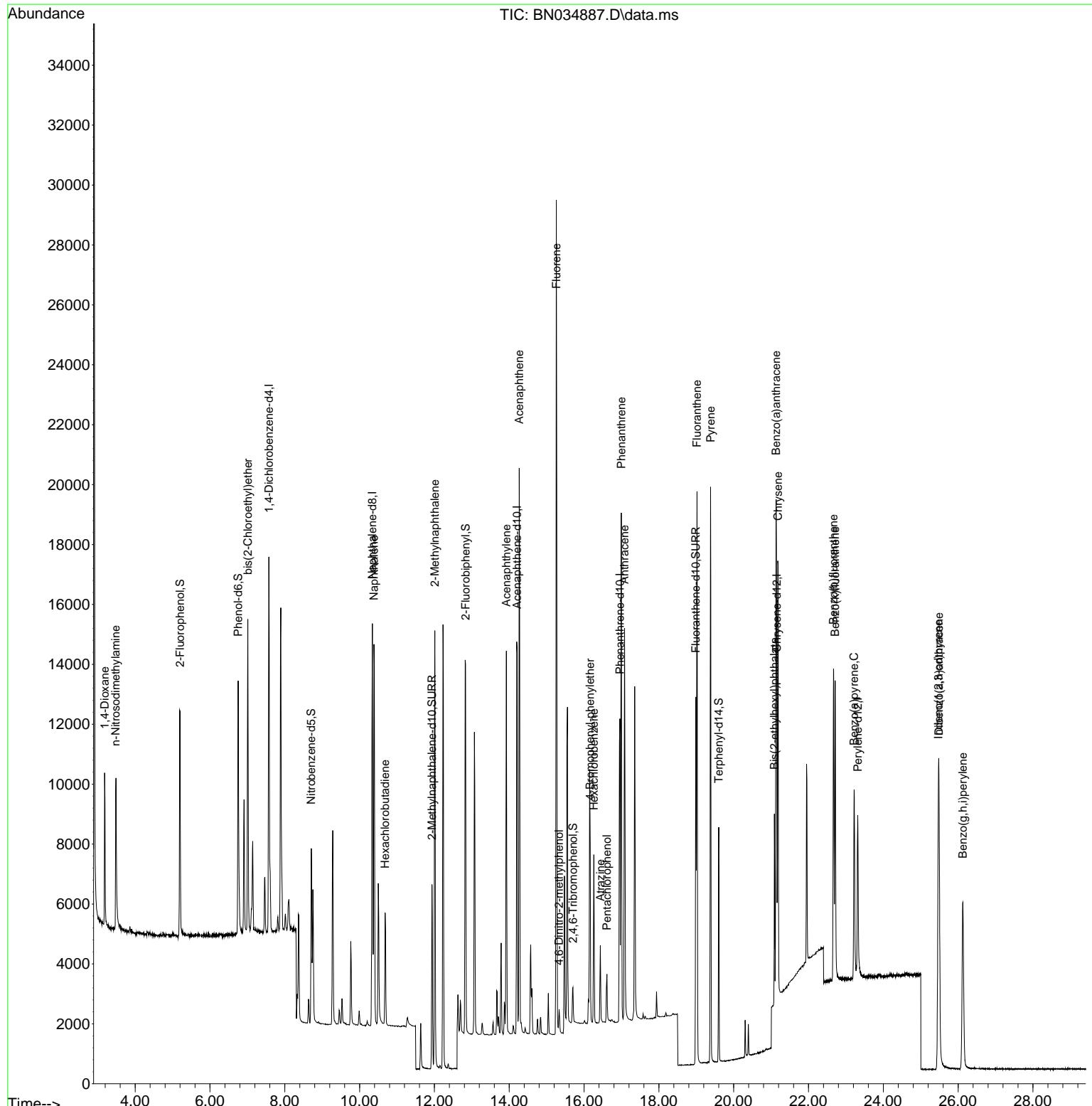
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5878	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	16847	0.400	ng	0.00
13) Acenaphthene-d10	14.211	164	7757	0.400	ng	0.00
19) Phenanthrene-d10	16.957	188	14504	0.400	ng	0.00
29) Chrysene-d12	21.151	240	8221	0.400	ng	0.00
35) Perylene-d12	23.317	264	6835	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	5922	0.361	ng	0.00
5) Phenol-d6	6.752	99	7635	0.351	ng	0.00
8) Nitrobenzene-d5	8.707	82	4711	0.359	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	8271	0.360	ng	0.00
14) 2,4,6-Tribromophenol	15.704	330	673	0.336	ng	0.00
15) 2-Fluorobiphenyl	12.832	172	11948	0.365	ng	0.00
27) Fluoranthene-d10	18.987	212	11613	0.355	ng	0.00
31) Terphenyl-d14	19.600	244	6110	0.397	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	2785	0.375	ng	100
3) n-Nitrosodimethylamine	3.480	42	3650	0.364	ng	100
6) bis(2-Chloroethyl)ether	7.011	93	6876	0.367	ng	100
9) Naphthalene	10.383	128	17316	0.370	ng	100
10) Hexachlorobutadiene	10.682	225	2815	0.378	ng	# 100
12) 2-Methylnaphthalene	12.010	142	10308	0.360	ng	100
16) Acenaphthylene	13.923	152	12972	0.347	ng	100
17) Acenaphthene	14.265	154	9121	0.352	ng	100
18) Fluorene	15.259	166	11352	0.352	ng	100
20) 4,6-Dinitro-2-methylph...	15.334	198	463	0.364	ng	100
21) 4-Bromophenyl-phenylether	16.163	248	2927	0.379	ng	100
22) Hexachlorobenzene	16.262	284	3657	0.393	ng	100
23) Atrazine	16.436	200	1932	0.345	ng	100
24) Pentachlorophenol	16.610	266	799	0.357	ng	100
25) Phenanthrene	16.994	178	16853	0.379	ng	100
26) Anthracene	17.081	178	13974	0.364	ng	100
28) Fluoranthene	19.020	202	16466	0.352	ng	100
30) Pyrene	19.382	202	16361	0.393	ng	100
32) Benzo(a)anthracene	21.133	228	11696	0.365	ng	100
33) Chrysene	21.187	228	13017	0.384	ng	100
34) Bis(2-ethylhexyl)phtha...	21.089	149	5918	0.322	ng	100
36) Indeno(1,2,3-cd)pyrene	25.472	276	11482	0.377	ng	100
37) Benzo(b)fluoranthene	22.668	252	11973	0.398	ng	100
38) Benzo(k)fluoranthene	22.712	252	11786	0.376	ng	100
39) Benzo(a)pyrene	23.218	252	9153	0.384	ng	100
40) Dibenzo(a,h)anthracene	25.487	278	8916	0.378	ng	100
41) Benzo(g,h,i)perylene	26.127	276	10138	0.405	ng	100

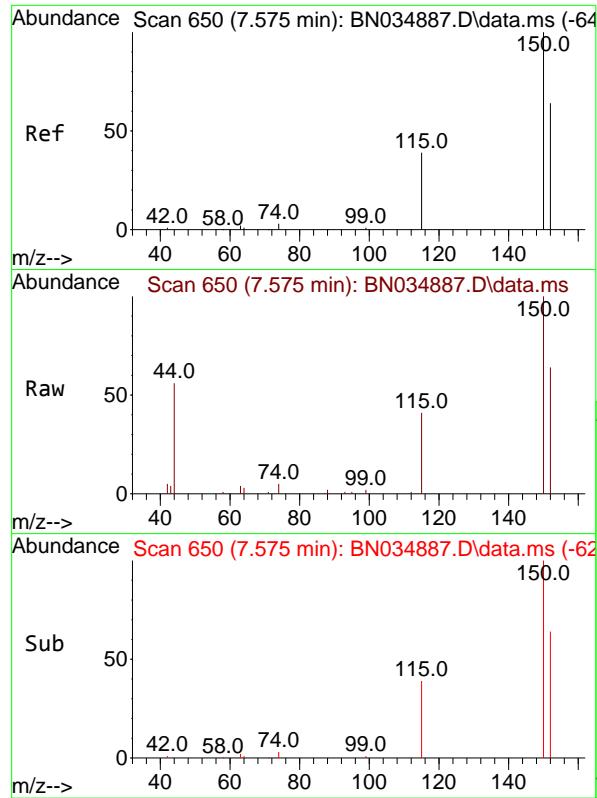
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034887.D  
 Acq On : 07 Nov 2024 11:24  
 Operator : RC/JU  
 Sample : SSTDICCC0.4  
 Misc :  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCC0.4

Quant Time: Nov 07 14:40:55 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

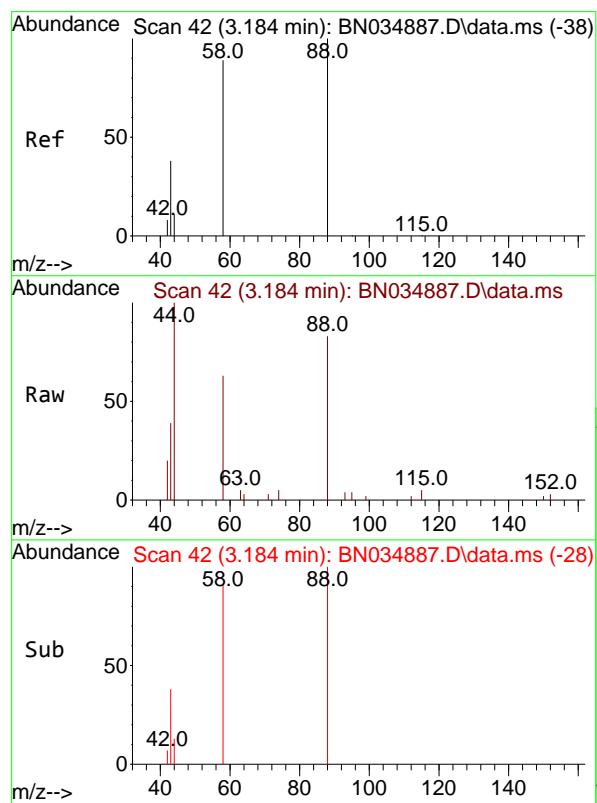
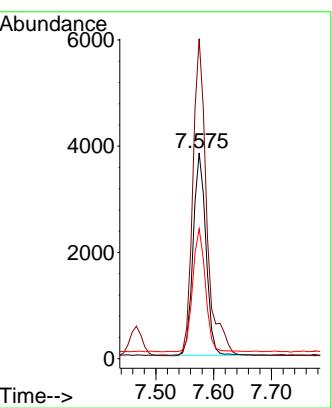




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R.T. -0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

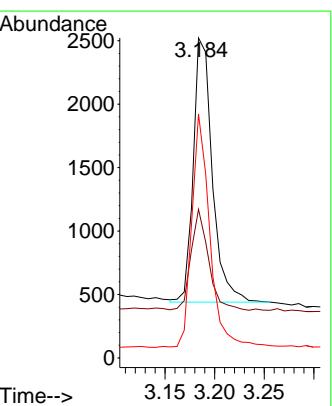
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

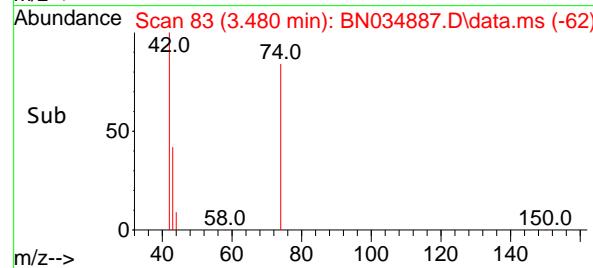
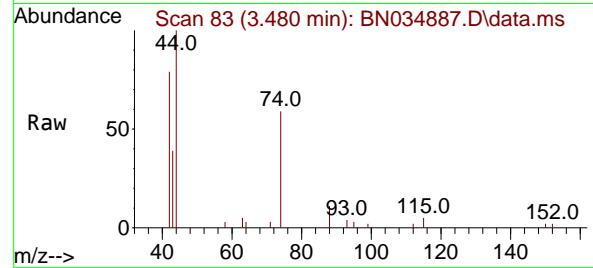
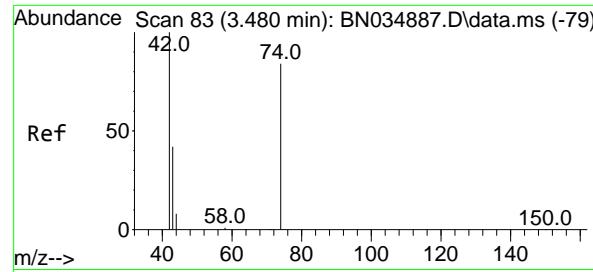
Tgt Ion:152 Resp: 5878  
 Ion Ratio Lower Upper  
 152 100  
 150 155.5 124.4 186.6  
 115 63.1 50.5 75.7



#2  
 1,4-Dioxane  
 Concen: 0.375 ng  
 RT: 3.184 min Scan# 42  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

Tgt Ion: 88 Resp: 2785  
 Ion Ratio Lower Upper  
 88 100  
 43 35.2 28.2 42.2  
 58 83.9 67.1 100.7





#3

n-Nitrosodimethylamine

Concen: 0.364 ng

RT: 3.480 min Scan# 8

Delta R.T. 0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

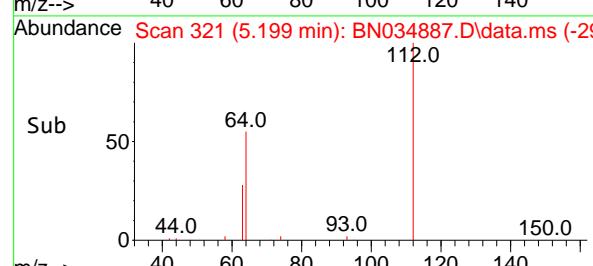
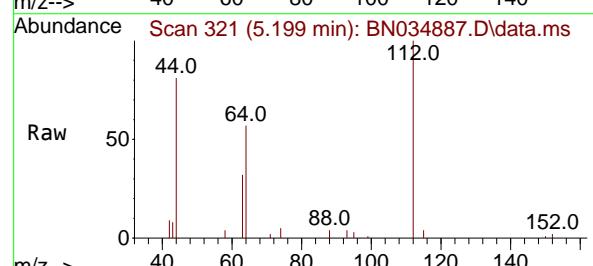
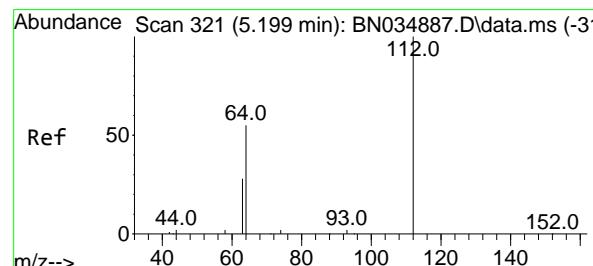
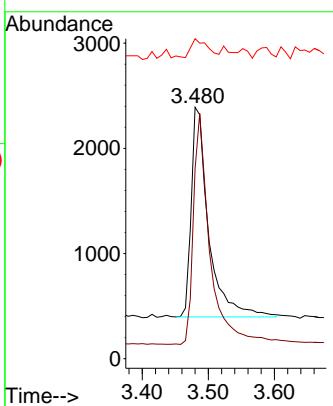
Tgt Ion: 42 Resp: 3650

Ion Ratio Lower Upper

42 100

74 104.3 83.4 125.2

44 10.7 8.6 12.8



#4

2-Fluorophenol

Concen: 0.361 ng

RT: 5.199 min Scan# 321

Delta R.T. 0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

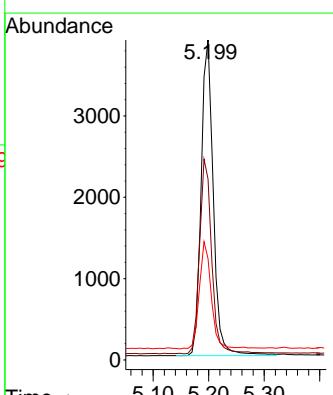
Tgt Ion: 112 Resp: 5922

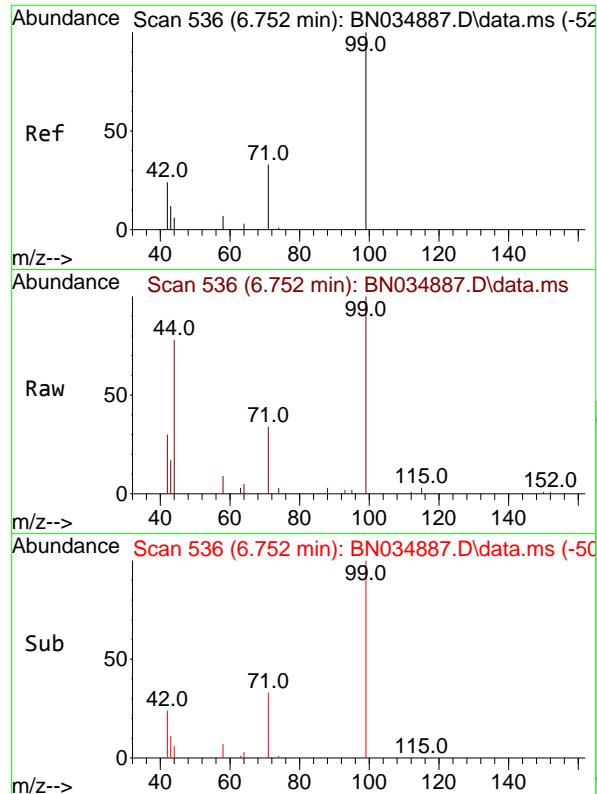
Ion Ratio Lower Upper

112 100

64 62.0 49.6 74.4

63 32.9 26.3 39.5

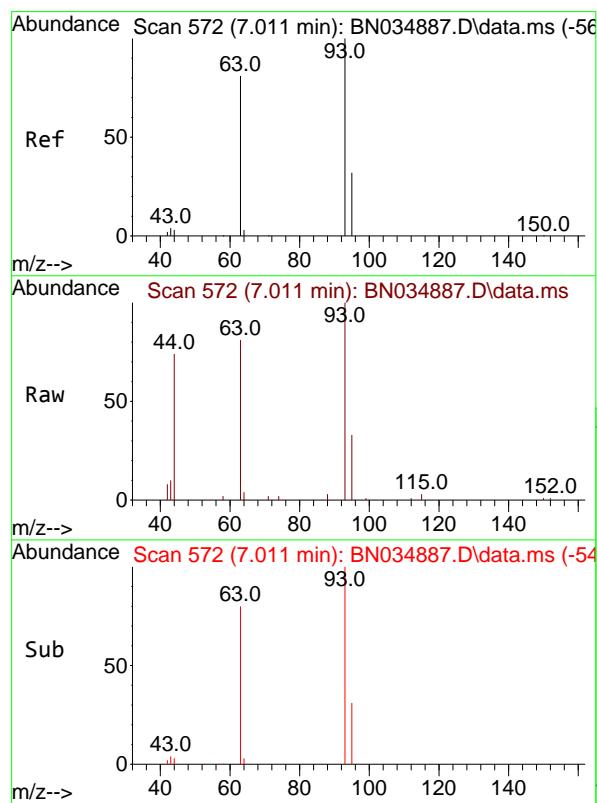
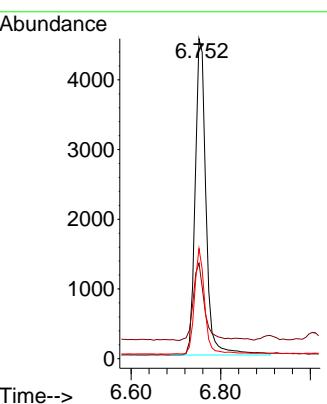




#5  
 Phenol-d6  
 Concen: 0.351 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

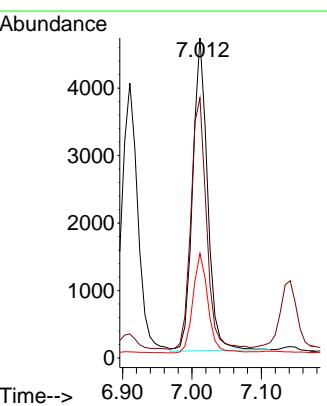
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

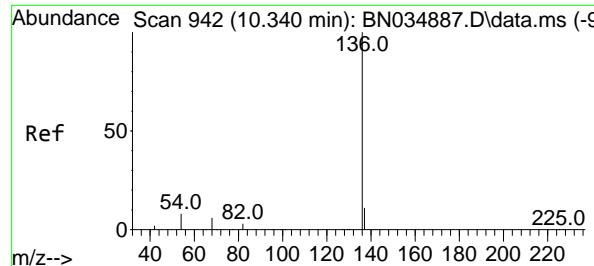
Tgt Ion: 99 Resp: 7635  
 Ion Ratio Lower Upper  
 99 100  
 42 25.2 20.2 30.2  
 71 31.7 25.4 38.0



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.367 ng  
 RT: 7.011 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

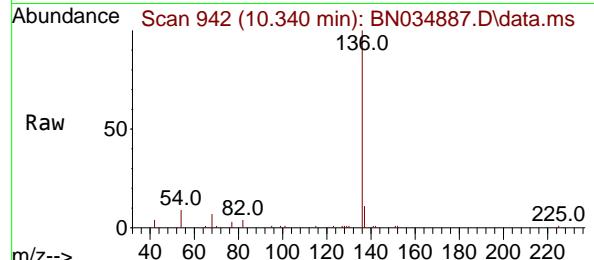
Tgt Ion: 93 Resp: 6876  
 Ion Ratio Lower Upper  
 93 100  
 63 84.4 67.5 101.3  
 95 32.1 25.7 38.5





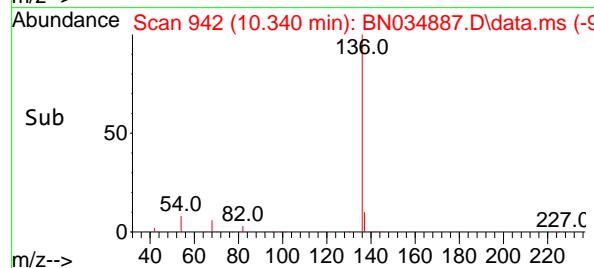
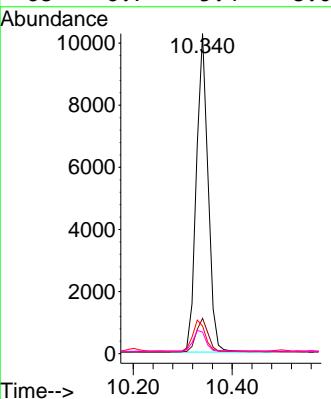
#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

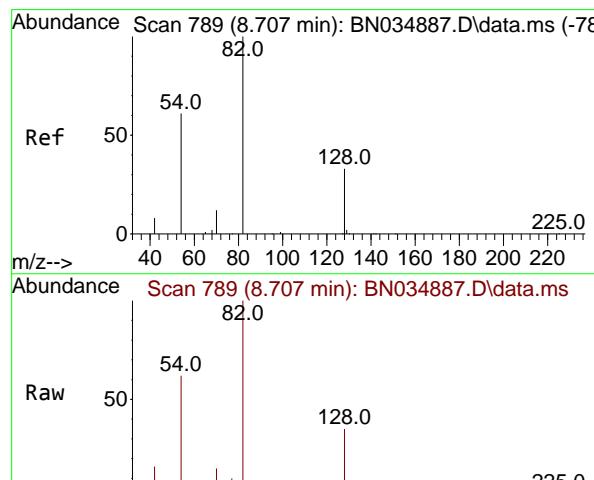


Tgt Ion:136 Resp: 16847

Ion	Ratio	Lower	Upper
136	100		
137	11.1	8.9	13.3
54	8.6	6.9	10.3
68	6.7	5.4	8.0

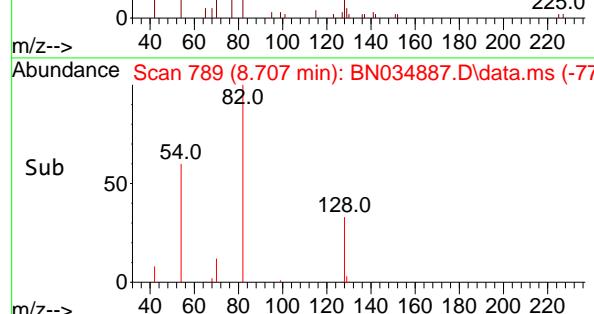
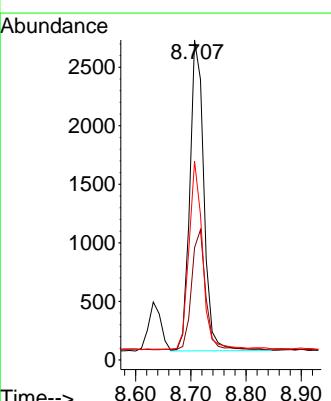


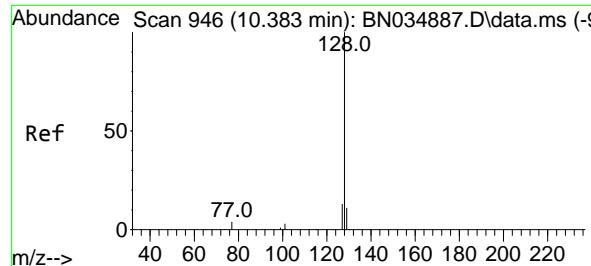
#8  
 Nitrobenzene-d5  
 Concen: 0.359 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24



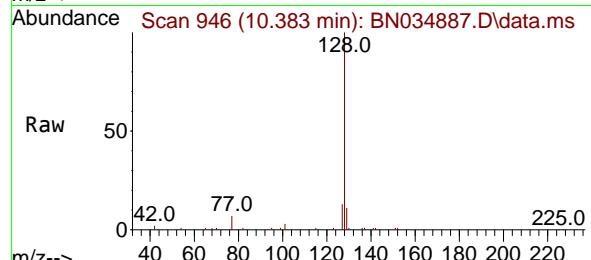
Tgt Ion: 82 Resp: 4711

Ion	Ratio	Lower	Upper
82	100		
128	35.1	28.1	42.1
54	62.2	49.8	74.6

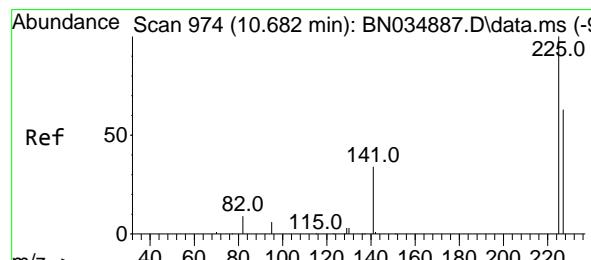
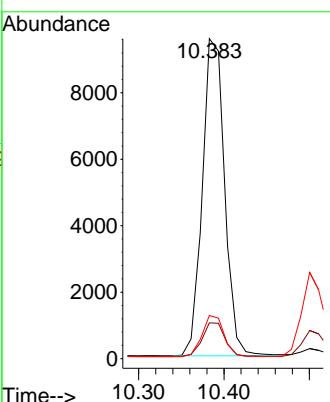
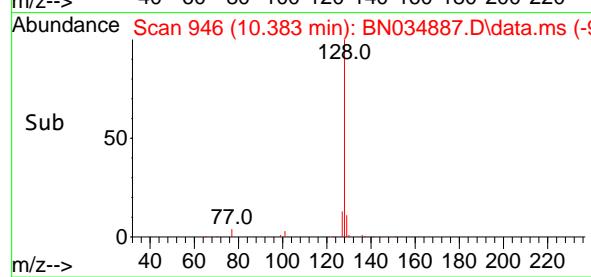




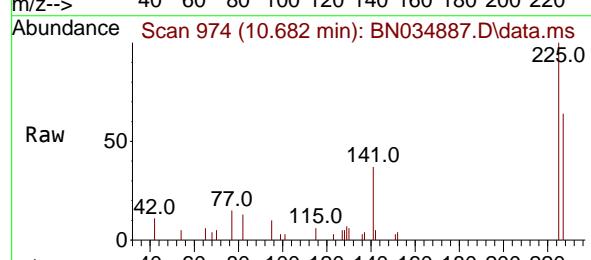
#9  
Naphthalene  
Concen: 0.370 ng  
RT: 10.383 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
ClientSampleId : SSTDICCC0.4  
Acq: 07 Nov 2024 11:24



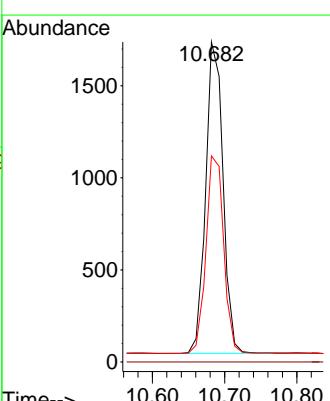
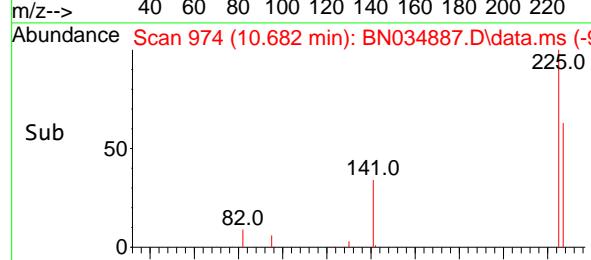
Tgt Ion:128 Resp: 17316  
Ion Ratio Lower Upper  
128 100  
129 11.2 9.0 13.4  
127 13.5 10.8 16.2

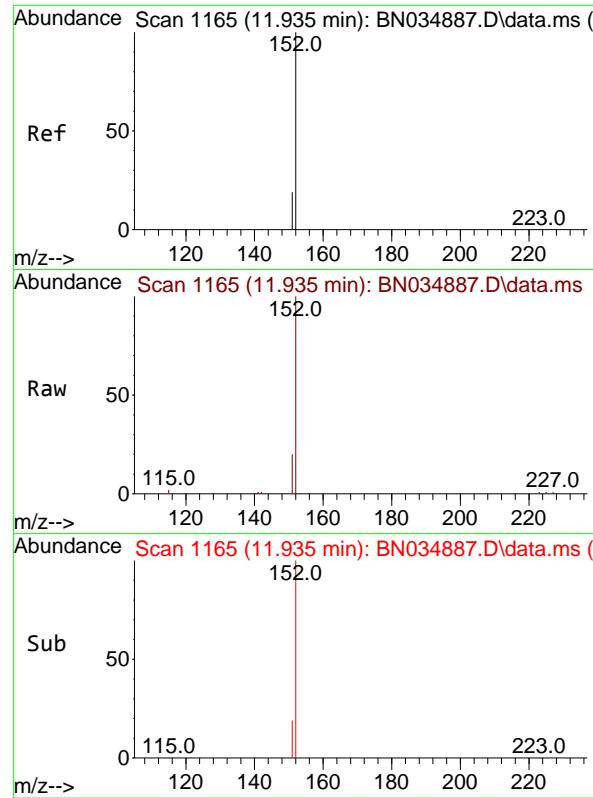


#10  
Hexachlorobutadiene  
Concen: 0.378 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24



Tgt Ion:225 Resp: 2815  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.0 52.0 78.0

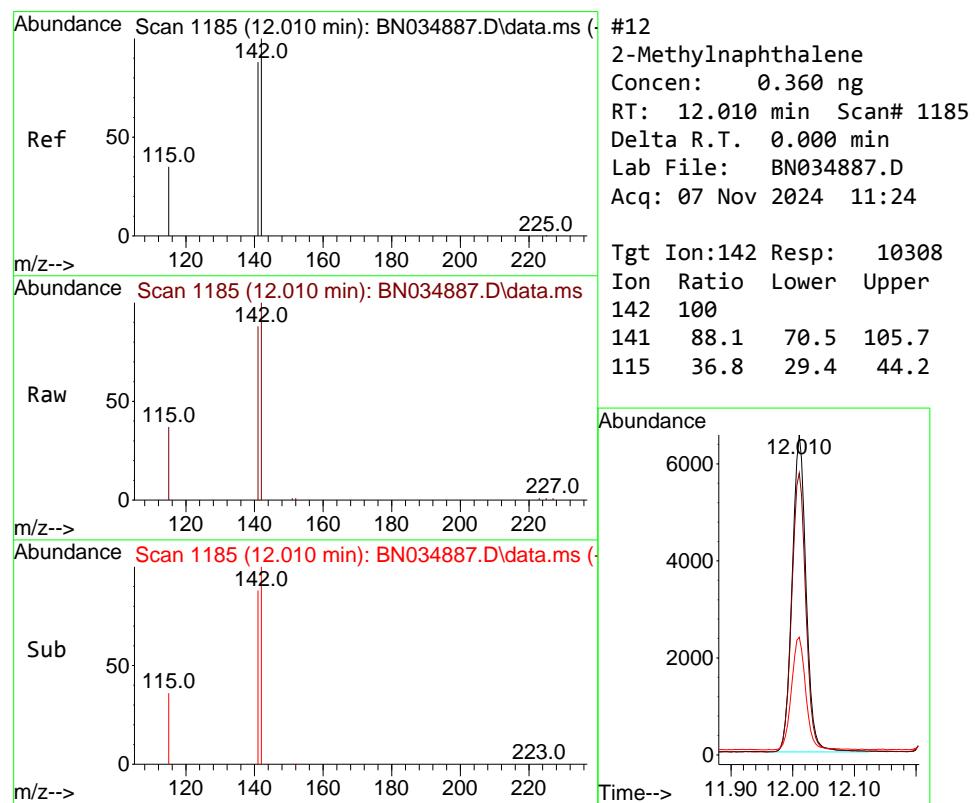
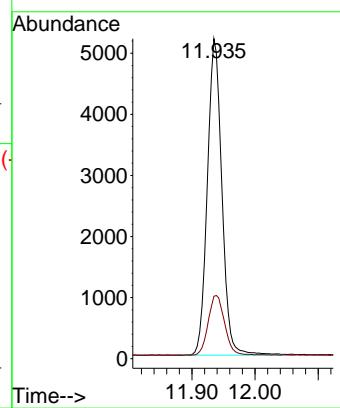




#11  
2-Methylnaphthalene-d10  
Concen: 0.360 ng  
RT: 11.935 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

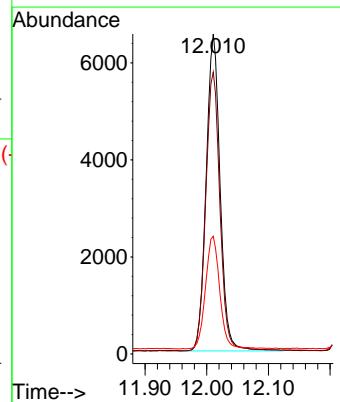
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

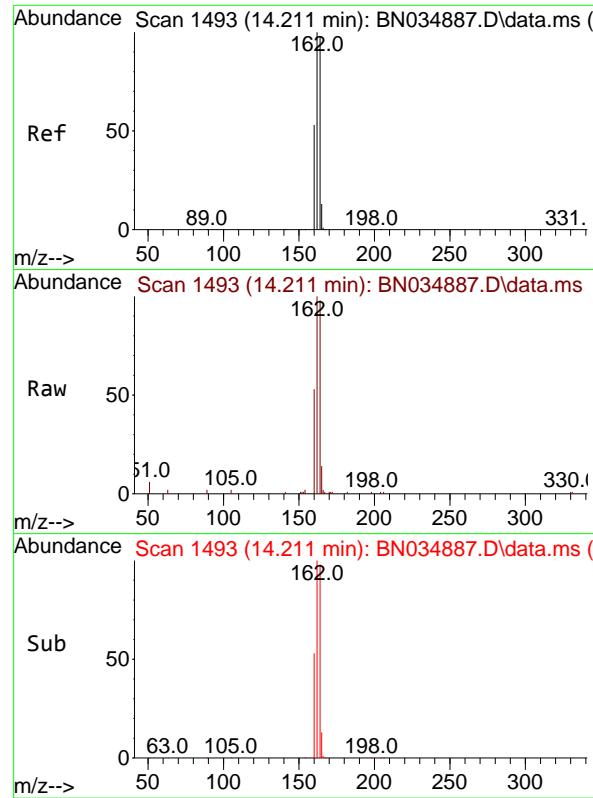
Tgt Ion:152 Resp: 8271  
Ion Ratio Lower Upper  
152 100  
151 21.4 17.1 25.7



#12  
2-Methylnaphthalene  
Concen: 0.360 ng  
RT: 12.010 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:142 Resp: 10308  
Ion Ratio Lower Upper  
142 100  
141 88.1 70.5 105.7  
115 36.8 29.4 44.2

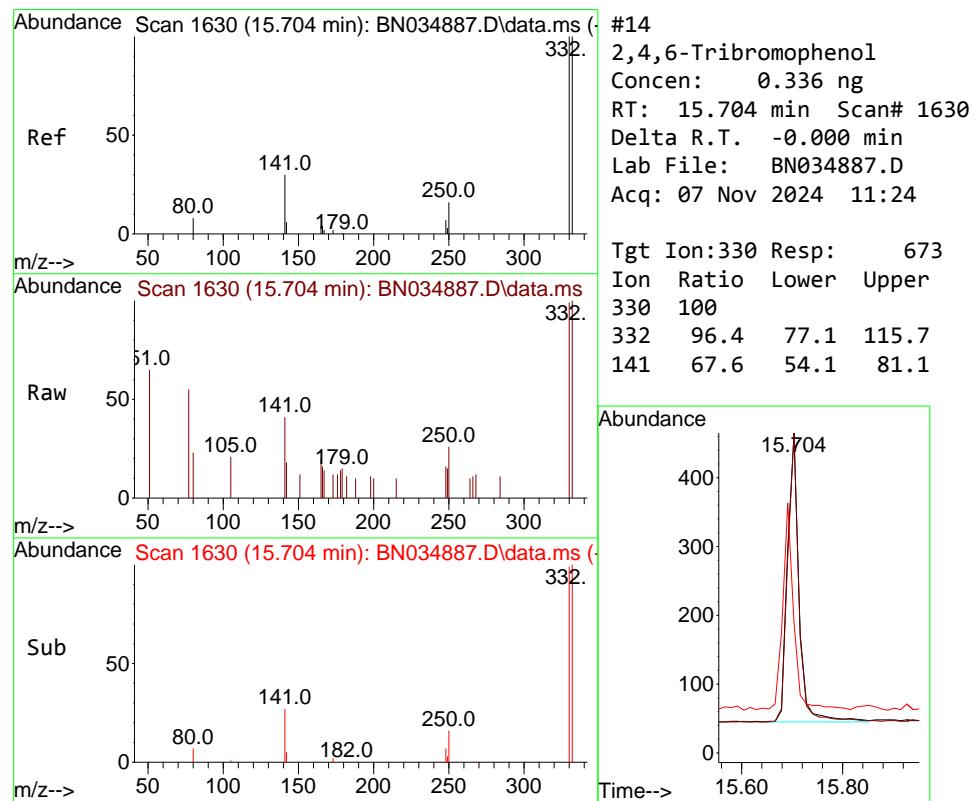
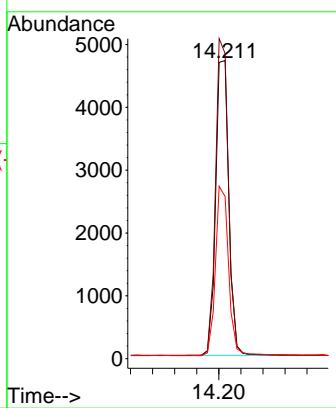




#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.211 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

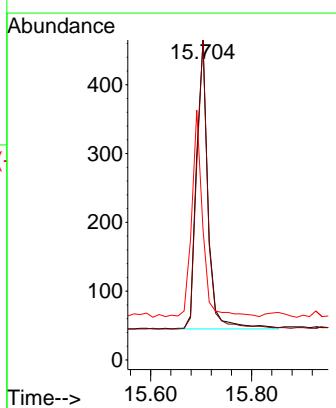
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

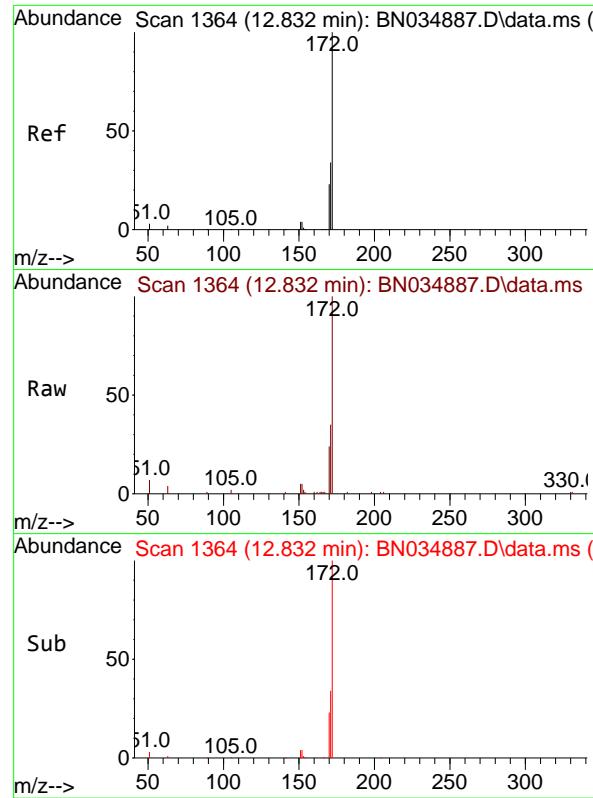
Tgt Ion:164 Resp: 7757  
Ion Ratio Lower Upper  
164 100  
162 102.4 81.9 122.9  
160 54.4 43.5 65.3



#14  
2,4,6-Tribromophenol  
Concen: 0.336 ng  
RT: 15.704 min Scan# 1630  
Delta R.T. -0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:330 Resp: 673  
Ion Ratio Lower Upper  
330 100  
332 96.4 77.1 115.7  
141 67.6 54.1 81.1

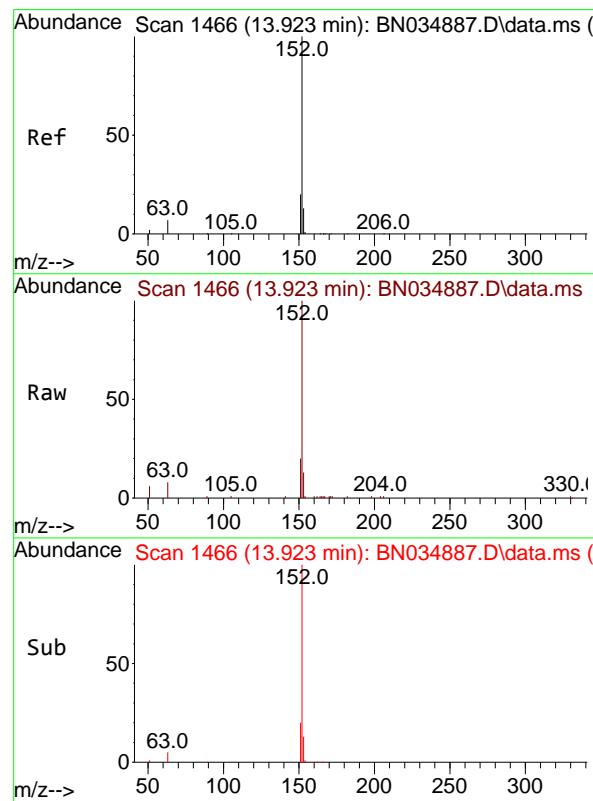
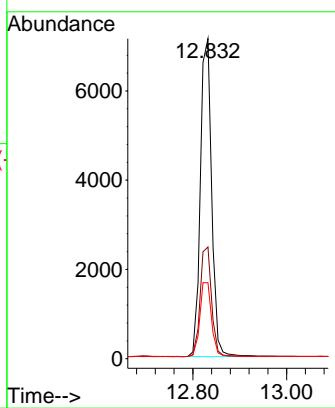




#15  
2-Fluorobiphenyl  
Concen: 0.365 ng  
RT: 12.832 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

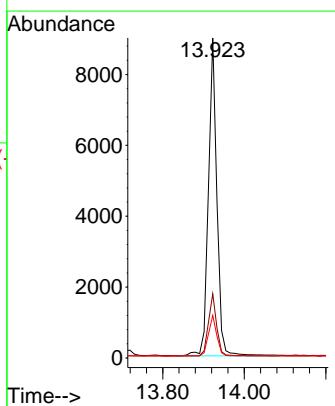
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

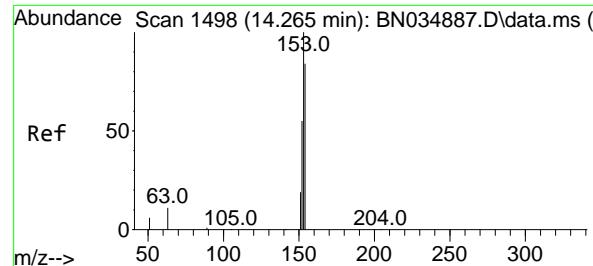
Tgt Ion:172 Resp: 11948  
Ion Ratio Lower Upper  
172 100  
171 34.9 27.9 41.9  
170 23.7 19.0 28.4



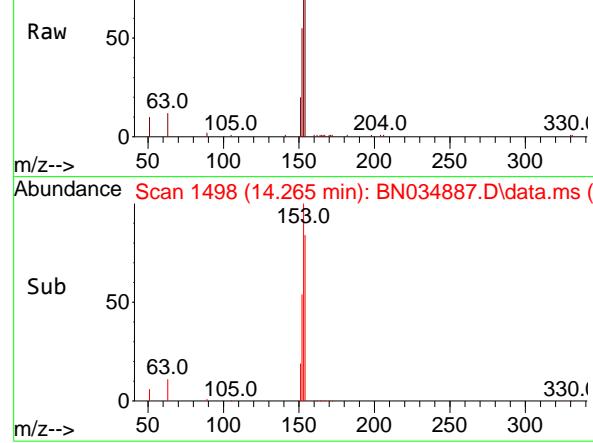
#16  
Acenaphthylene  
Concen: 0.347 ng  
RT: 13.923 min Scan# 1466  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:152 Resp: 12972  
Ion Ratio Lower Upper  
152 100  
151 19.0 15.2 22.8  
153 13.0 10.4 15.6

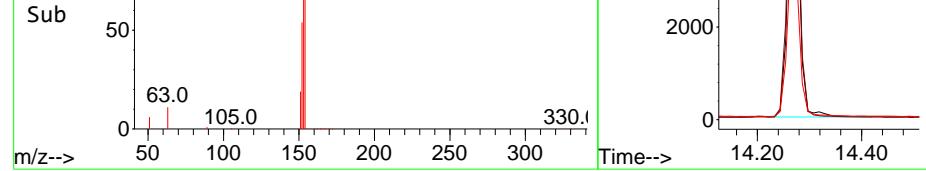




Abundance Scan 1498 (14.265 min): BN034887.D\data.ms



Abundance Scan 1498 (14.265 min): BN034887.D\data.ms (-)



#17

Acenaphthene

Concen: 0.352 ng

RT: 14.265 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

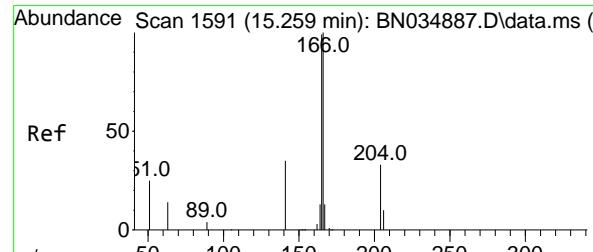
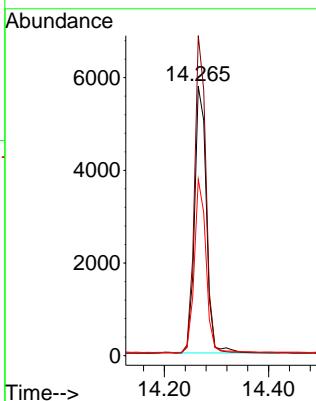
Tgt Ion:154 Resp: 9121

Ion Ratio Lower Upper

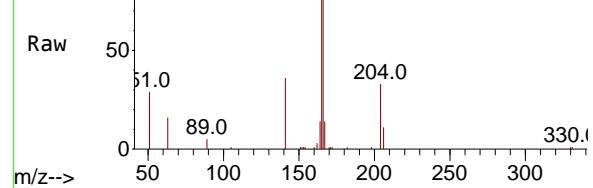
154 100

153 115.2 92.2 138.2

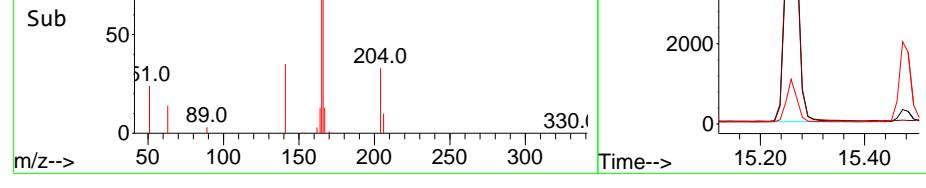
152 63.9 51.1 76.7



Abundance Scan 1591 (15.259 min): BN034887.D\data.ms



Abundance Scan 1591 (15.259 min): BN034887.D\data.ms (-)



#18

Fluorene

Concen: 0.352 ng

RT: 15.259 min Scan# 1591

Delta R.T. 0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

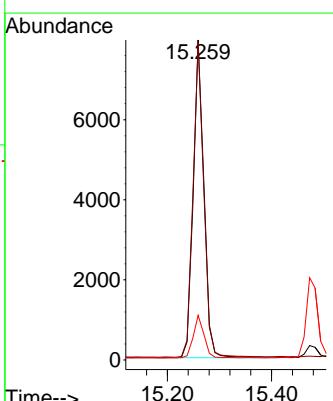
Tgt Ion:166 Resp: 11352

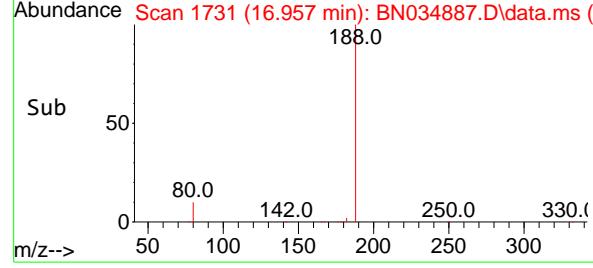
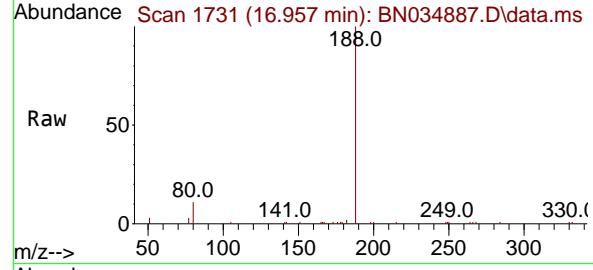
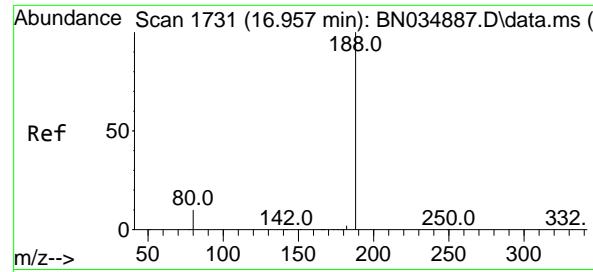
Ion Ratio Lower Upper

166 100

165 99.4 79.5 119.3

167 13.3 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.957 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

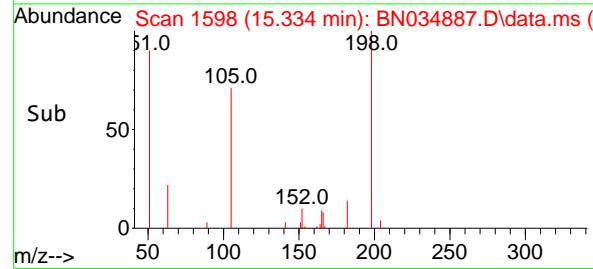
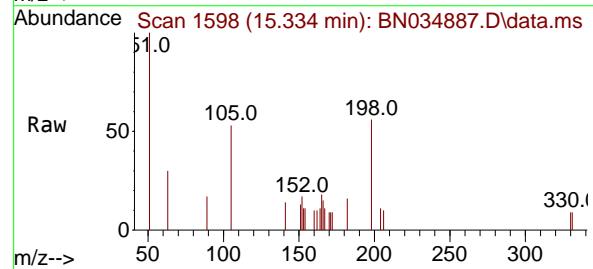
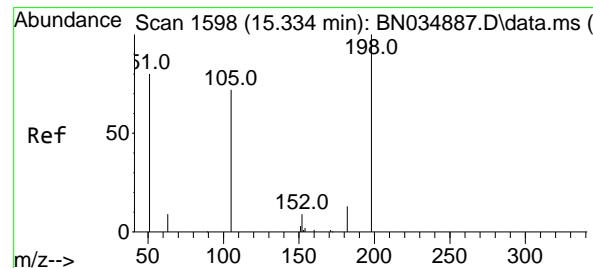
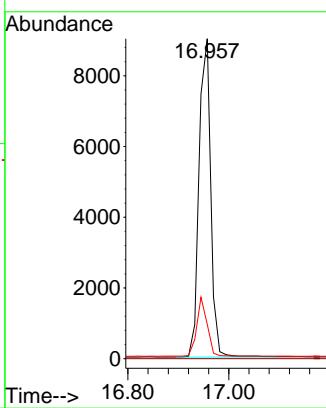
Tgt Ion:188 Resp: 14504

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 10.7 8.6 12.8



#20

4,6-Dinitro-2-methylphenol

Concen: 0.364 ng

RT: 15.334 min Scan# 1598

Delta R.T. -0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

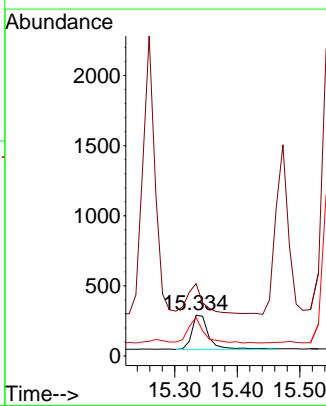
Tgt Ion:198 Resp: 463

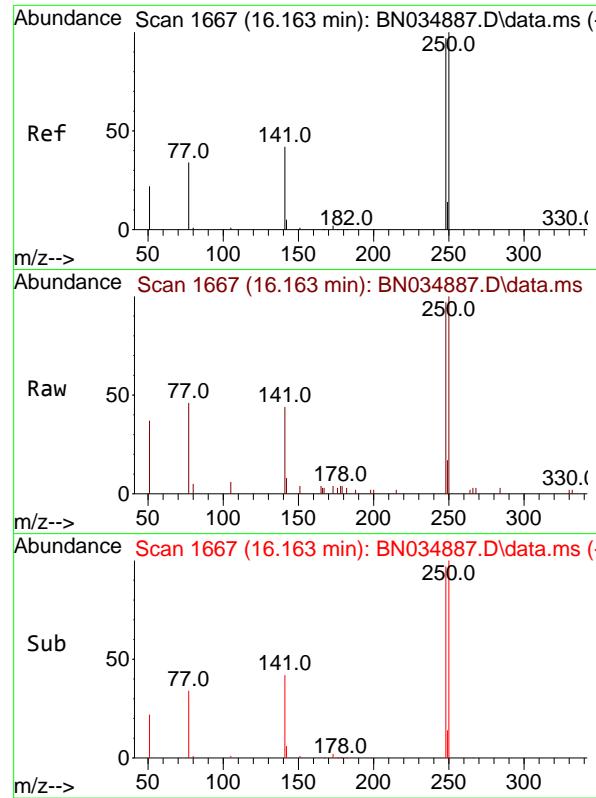
Ion Ratio Lower Upper

198 100

51 177.3 141.8 212.8

105 94.5 75.6 113.4

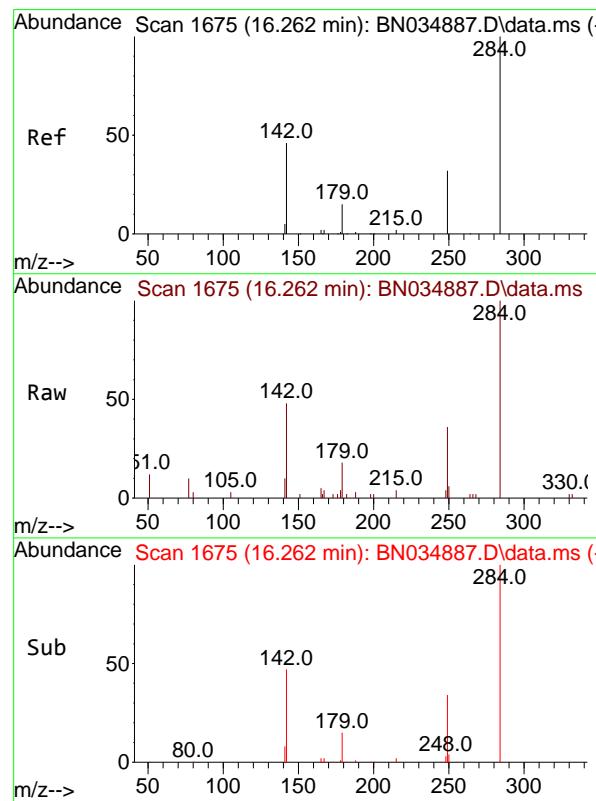
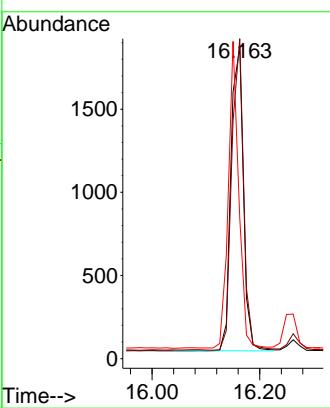




#21  
4-Bromophenyl-phenylether  
Concen: 0.379 ng  
RT: 16.163 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

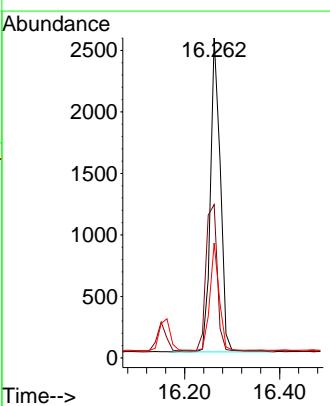
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

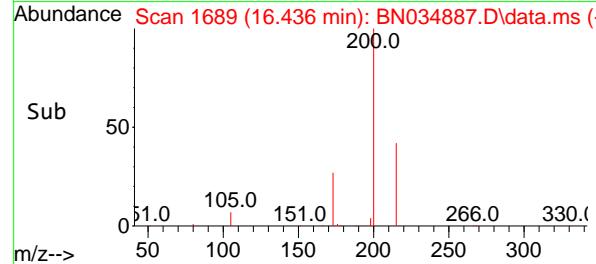
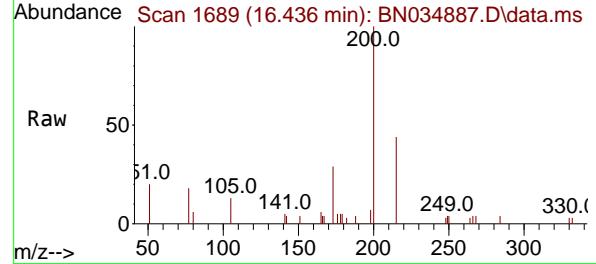
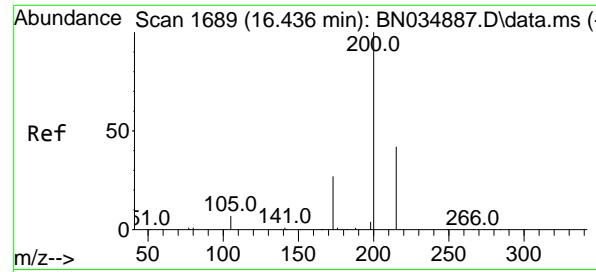
Tgt Ion:248 Resp: 2927  
Ion Ratio Lower Upper  
248 100  
250 102.8 82.2 123.4  
141 45.2 36.2 54.2



#22  
Hexachlorobenzene  
Concen: 0.393 ng  
RT: 16.262 min Scan# 1675  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:284 Resp: 3657  
Ion Ratio Lower Upper  
284 100  
142 54.3 43.4 65.2  
249 32.2 25.8 38.6





#23

Atrazine

Concen: 0.345 ng

RT: 16.436 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

Instrument :

BNA\_N

ClientSampleId :

SSTDICCC0.4

Tgt Ion:200 Resp: 1932

Ion Ratio Lower Upper

200 100

173 29.3 23.4 35.2

215 44.2 35.4 53.0

Abundance

16.436

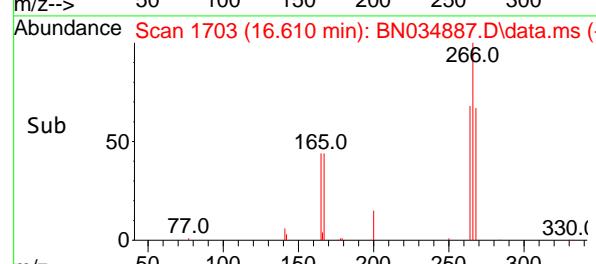
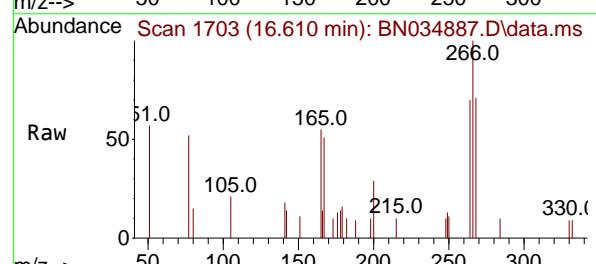
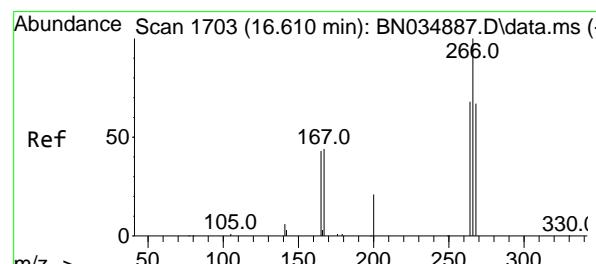
1000

500

0

Time--&gt;

16.40 16.42 16.44 16.46 16.48 16.50 16.52 16.54 16.56 16.58 16.60



#24

Pentachlorophenol

Concen: 0.357 ng

RT: 16.610 min Scan# 1703

Delta R.T. -0.000 min

Lab File: BN034887.D

Acq: 07 Nov 2024 11:24

Tgt Ion:266 Resp: 799

Ion Ratio Lower Upper

266 100

264 64.1 51.3 76.9

268 66.3 53.0 79.6

Abundance

16.610

400

300

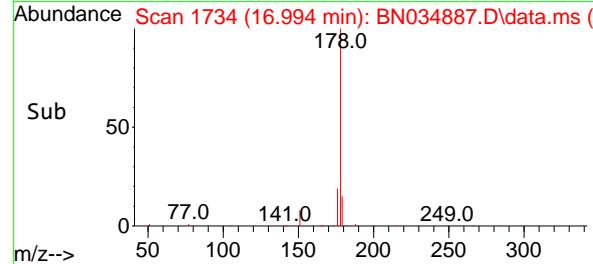
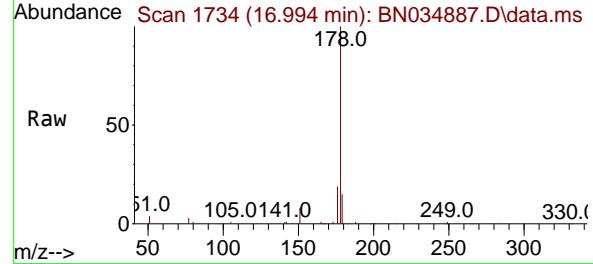
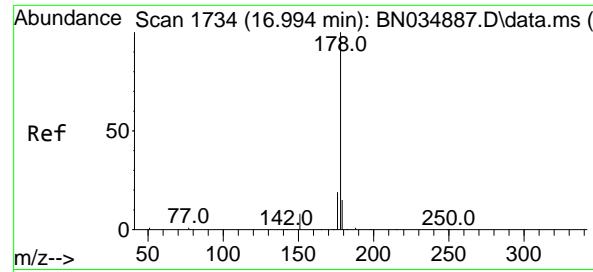
200

100

0

Time--&gt;

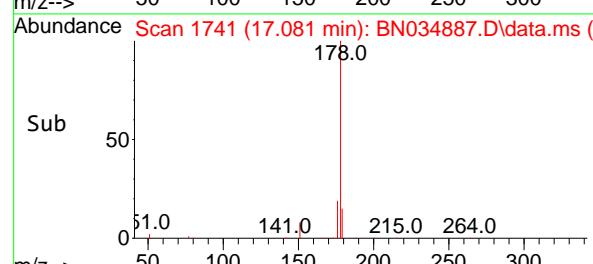
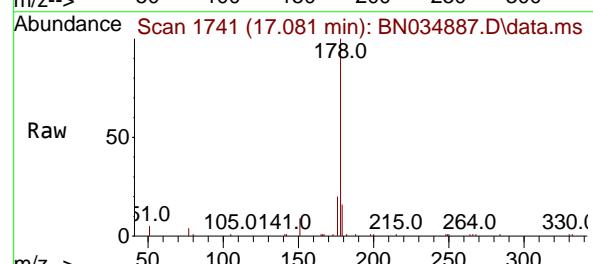
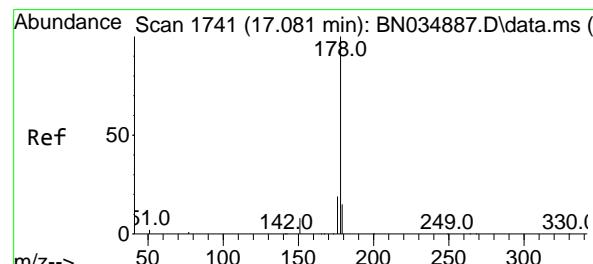
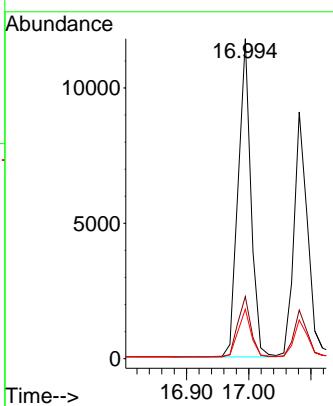
16.60 16.62 16.64 16.66 16.68 16.70 16.72 16.74 16.76 16.78 16.80



#25  
 Phenanthrene  
 Concen: 0.379 ng  
 RT: 16.994 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

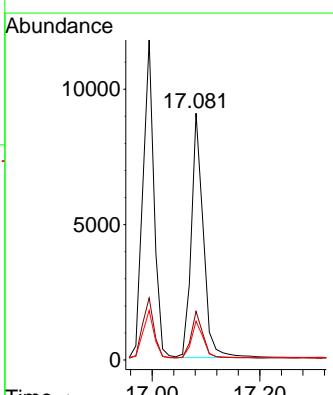
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

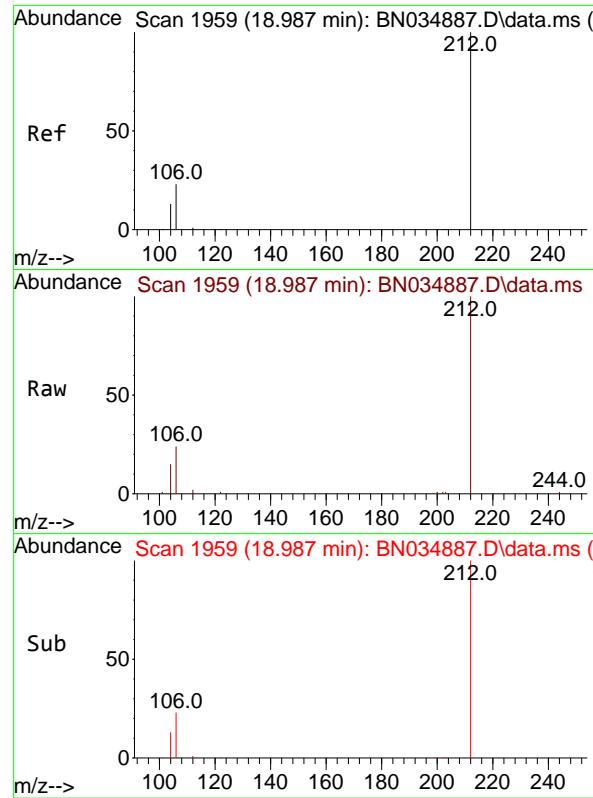
Tgt Ion:178 Resp: 16853  
 Ion Ratio Lower Upper  
 178 100  
 176 19.4 15.5 23.3  
 179 15.2 12.2 18.2



#26  
 Anthracene  
 Concen: 0.364 ng  
 RT: 17.081 min Scan# 1741  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

Tgt Ion:178 Resp: 13974  
 Ion Ratio Lower Upper  
 178 100  
 176 18.8 15.0 22.6  
 179 15.1 12.1 18.1

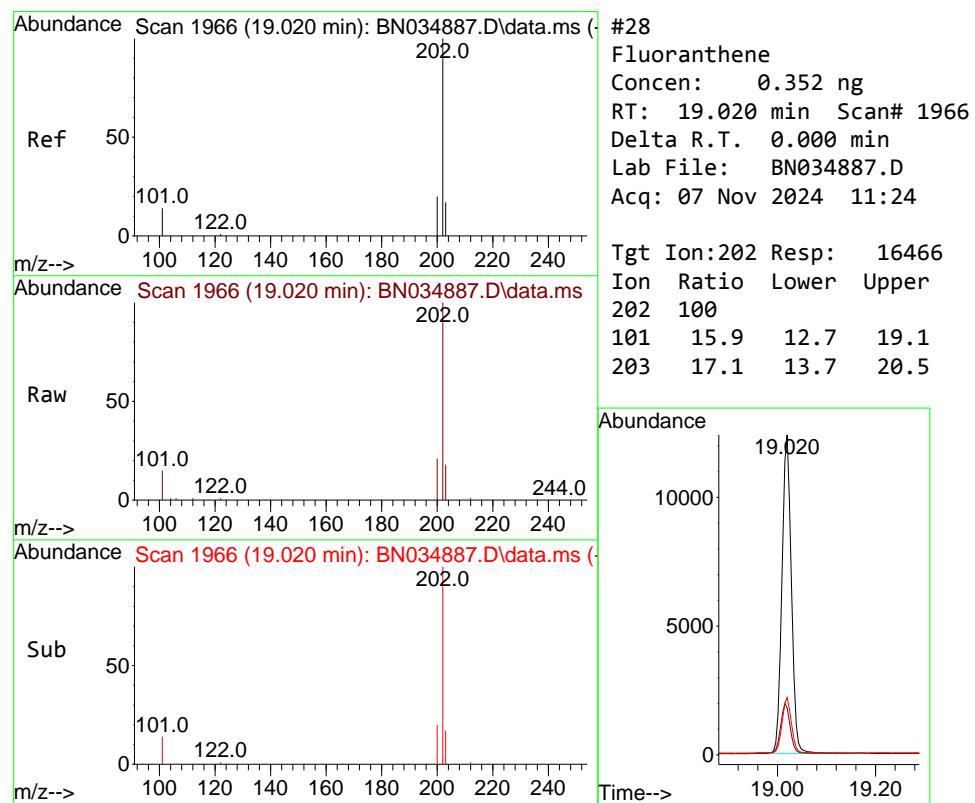
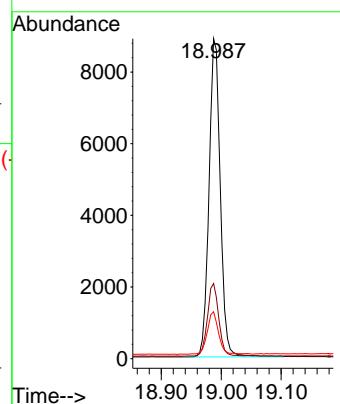




#27  
 Fluoranthene-d10  
 Concen: 0.355 ng  
 RT: 18.987 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

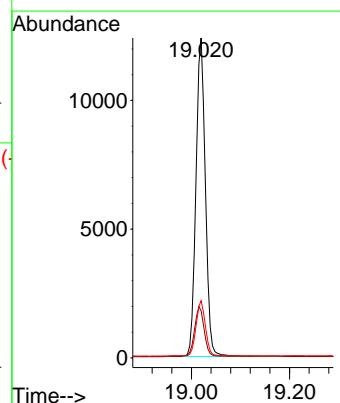
Instrument : BNA\_N  
 ClientSampleId : SSTDICCC0.4

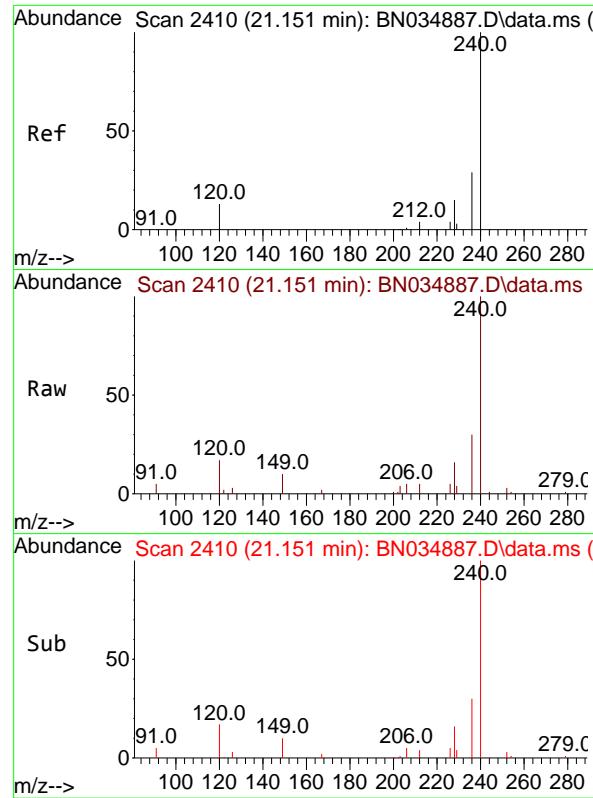
Tgt Ion:212 Resp: 11613  
 Ion Ratio Lower Upper  
 212 100  
 106 22.8 18.2 27.4  
 104 13.2 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.352 ng  
 RT: 19.020 min Scan# 1966  
 Delta R.T. 0.000 min  
 Lab File: BN034887.D  
 Acq: 07 Nov 2024 11:24

Tgt Ion:202 Resp: 16466  
 Ion Ratio Lower Upper  
 202 100  
 101 15.9 12.7 19.1  
 203 17.1 13.7 20.5

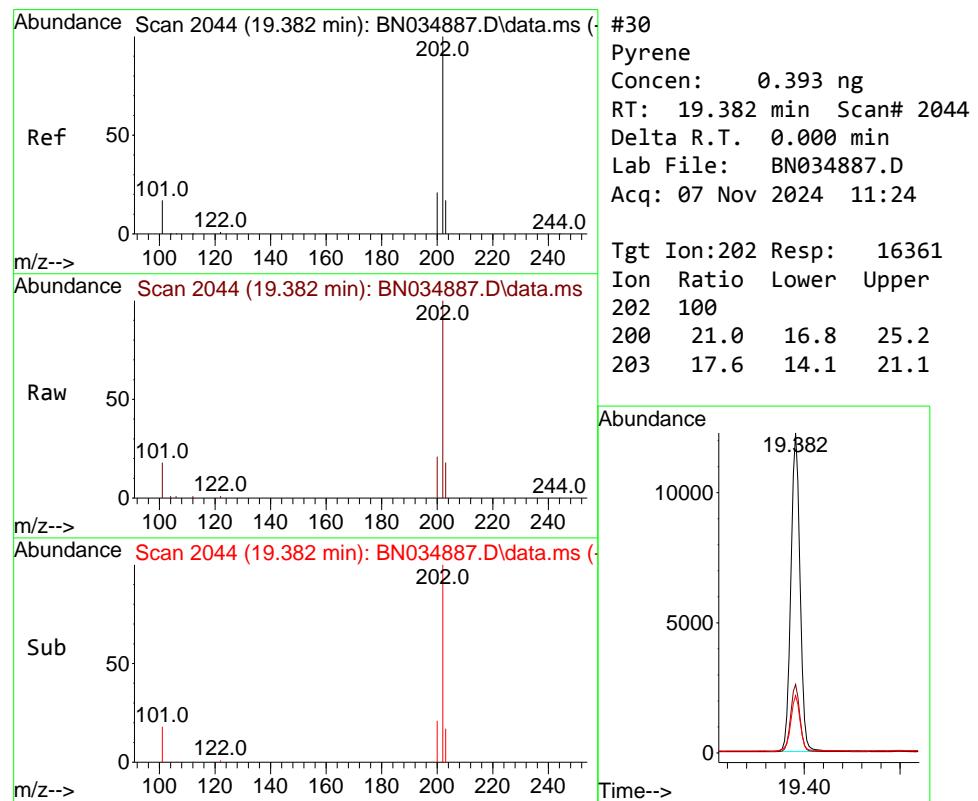
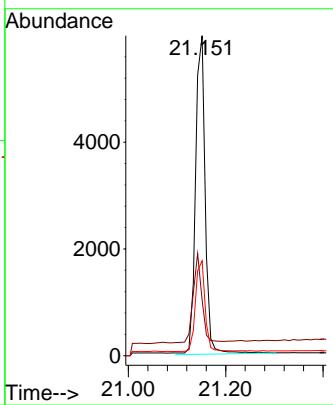




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.151 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

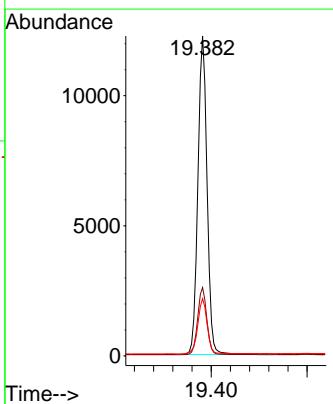
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

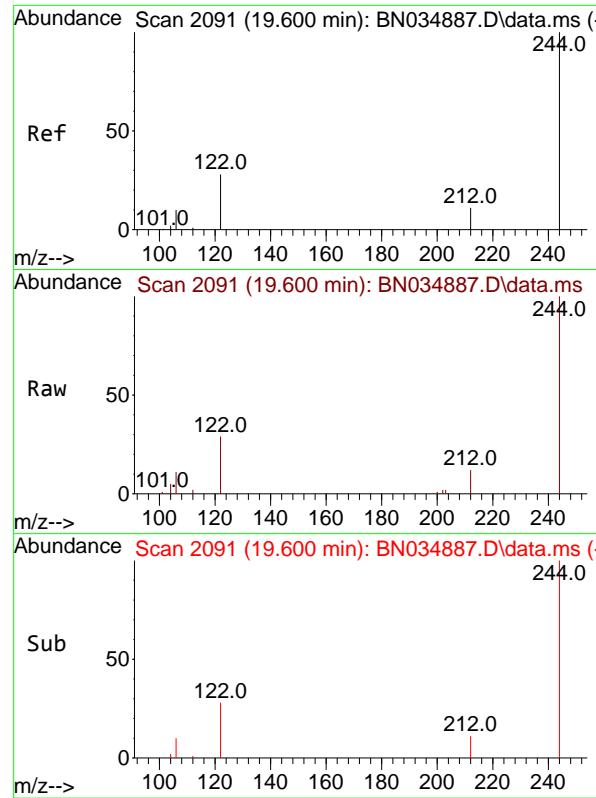
Tgt Ion:240 Resp: 8221  
Ion Ratio Lower Upper  
240 100  
120 17.3 13.8 20.8  
236 29.7 23.8 35.6



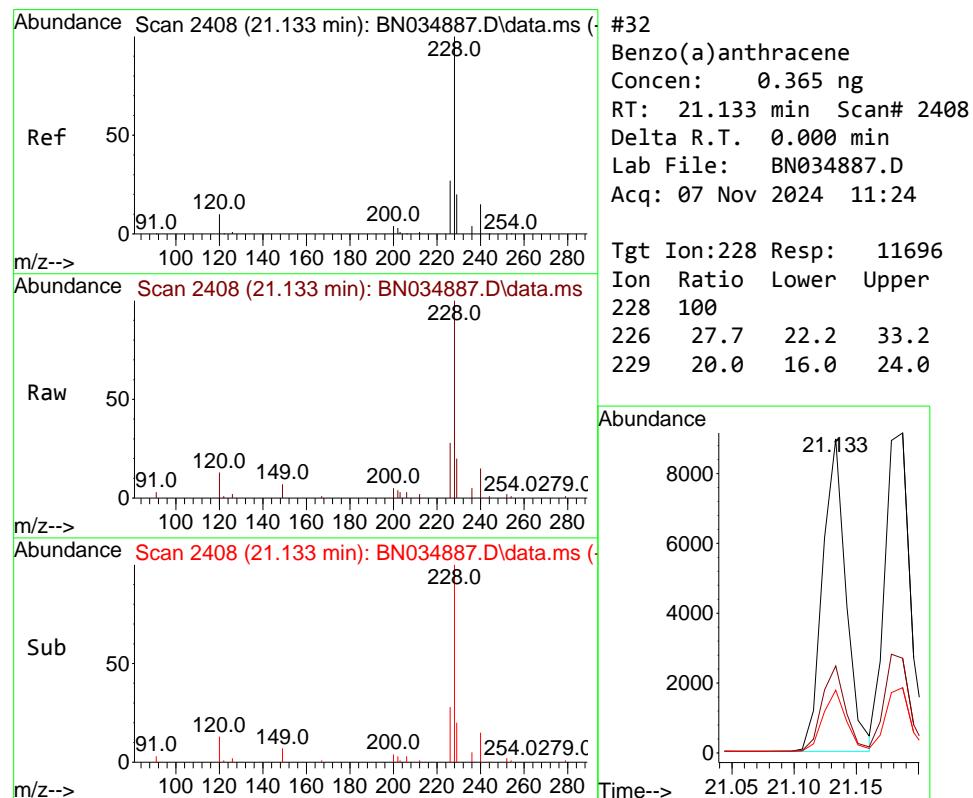
#30  
Pyrene  
Concen: 0.393 ng  
RT: 19.382 min Scan# 2044  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:202 Resp: 16361  
Ion Ratio Lower Upper  
202 100  
200 21.0 16.8 25.2  
203 17.6 14.1 21.1



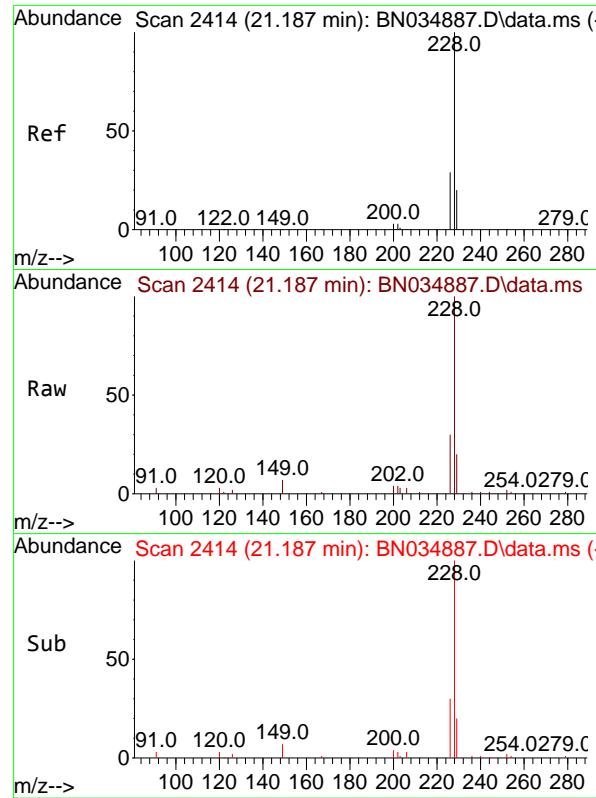


#31  
Terphenyl-d14  
Concen: 0.397 ng  
RT: 19.600 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24  
ClientSampleId : SSTDICCC0.4



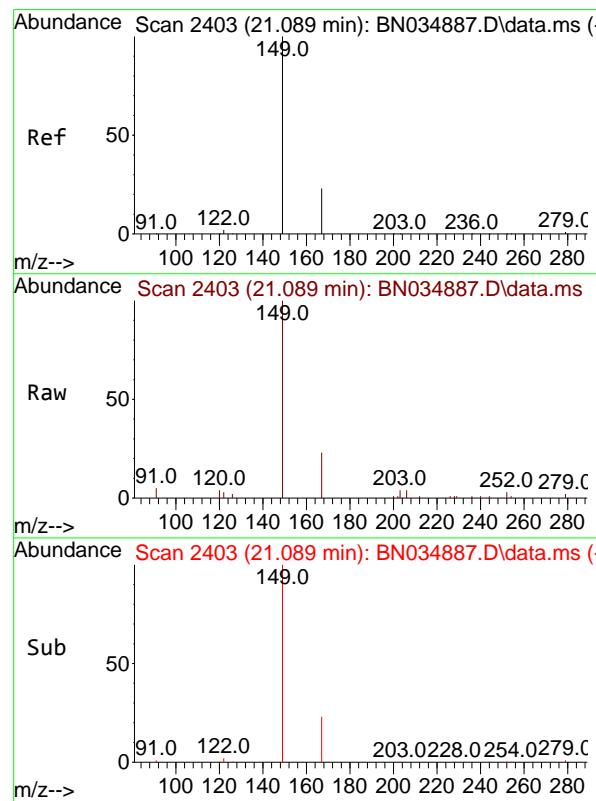
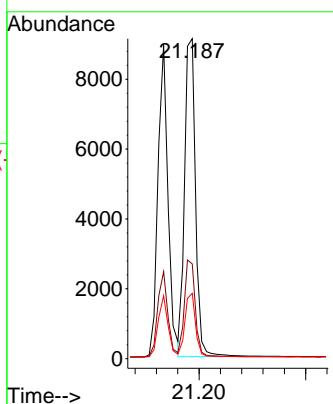
#32  
Benzo(a)anthracene  
Concen: 0.365 ng  
RT: 21.133 min Scan# 2408  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:228 Resp: 11696  
Ion Ratio Lower Upper  
228 100  
226 27.7 22.2 33.2  
229 20.0 16.0 24.0



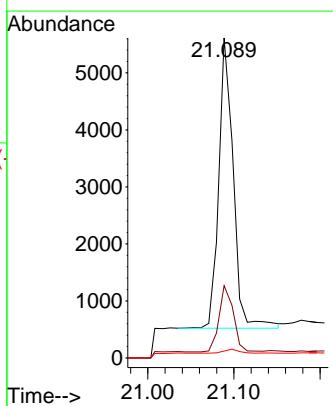
#33  
Chrysene  
Concen: 0.384 ng  
RT: 21.187 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034887.D ClientSampleId : SSTDICCC0.4  
Acq: 07 Nov 2024 11:24

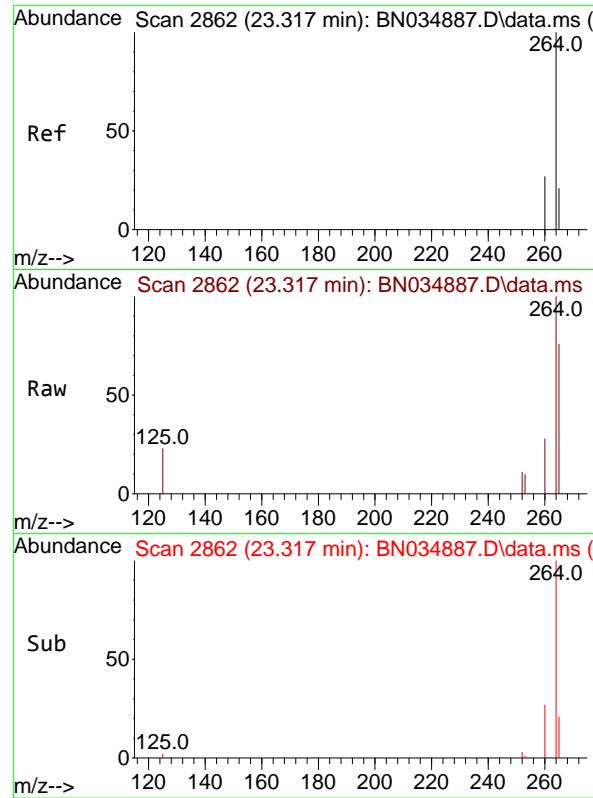
Tgt Ion:228 Resp: 13017  
Ion Ratio Lower Upper  
228 100  
226 29.6 23.7 35.5  
229 20.4 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 0.322 ng  
RT: 21.089 min Scan# 2403  
Delta R.T. -0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:149 Resp: 5918  
Ion Ratio Lower Upper  
149 100  
167 22.6 18.1 27.1  
279 1.5 1.2 1.8

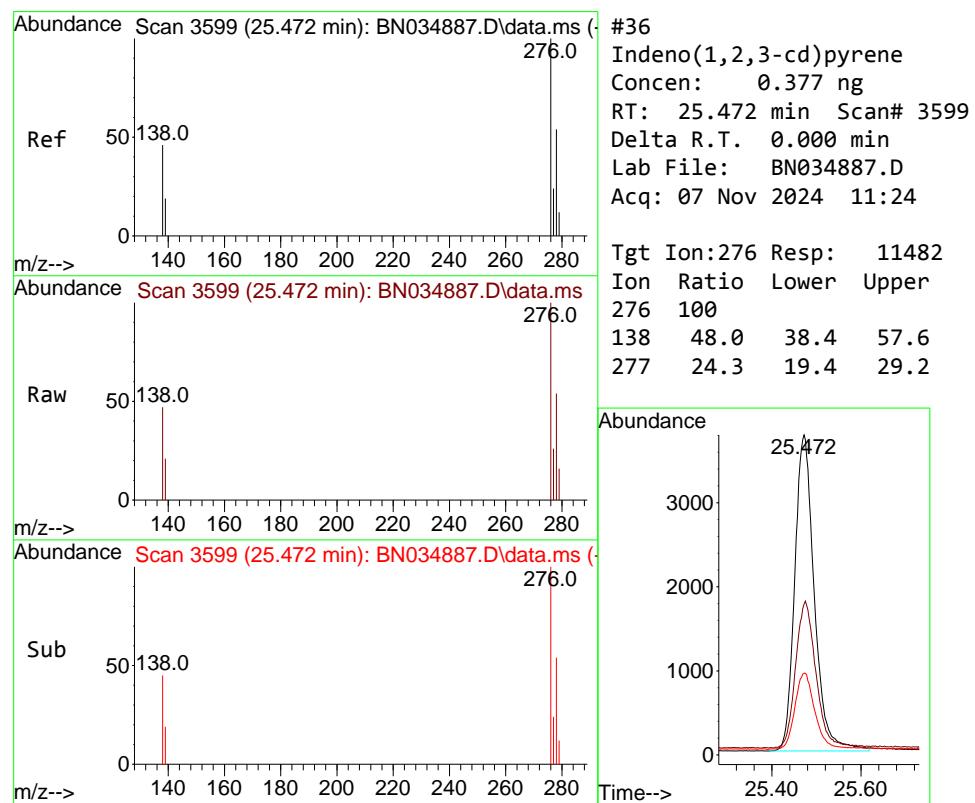
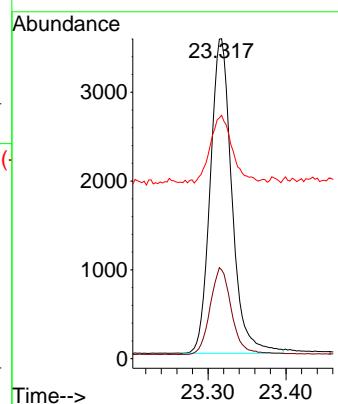




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.317 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

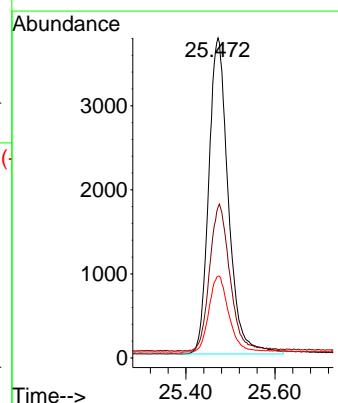
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

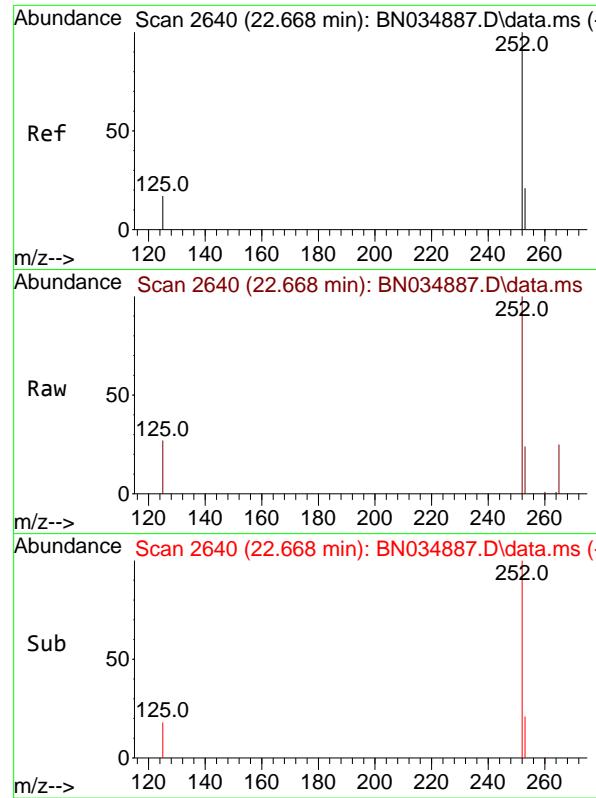
Tgt Ion:264 Resp: 6835  
Ion Ratio Lower Upper  
264 100  
260 27.7 22.2 33.2  
265 76.1 60.9 91.3



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.377 ng  
RT: 25.472 min Scan# 3599  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:276 Resp: 11482  
Ion Ratio Lower Upper  
276 100  
138 48.0 38.4 57.6  
277 24.3 19.4 29.2

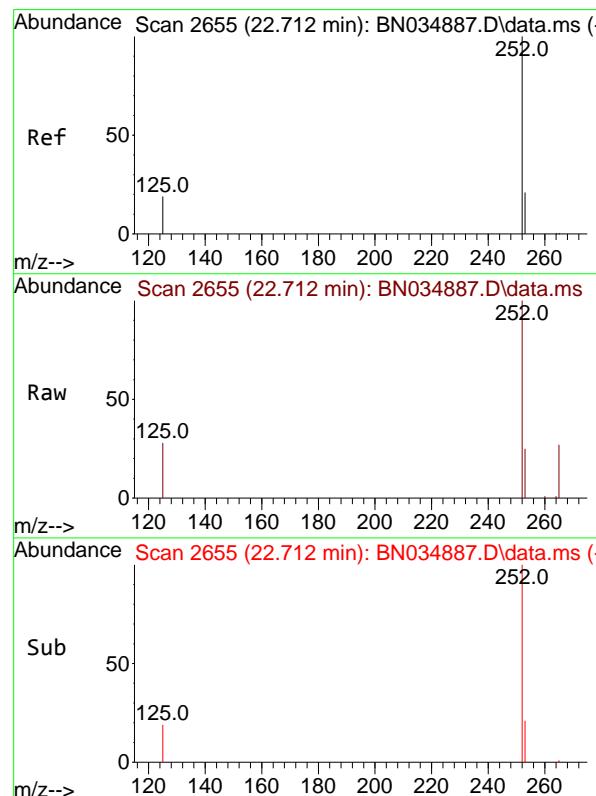
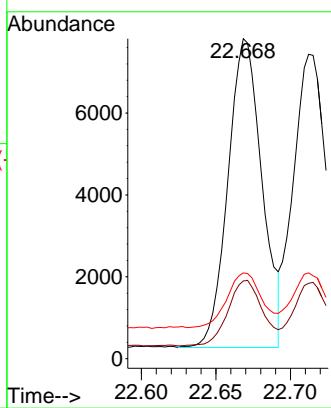




#37  
Benzo(b)fluoranthene  
Concen: 0.398 ng  
RT: 22.668 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

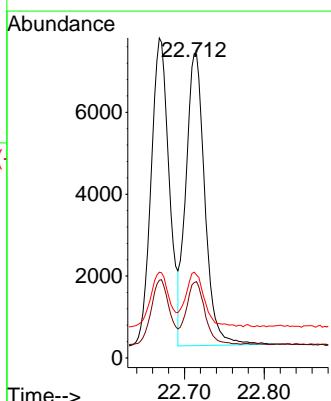
Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

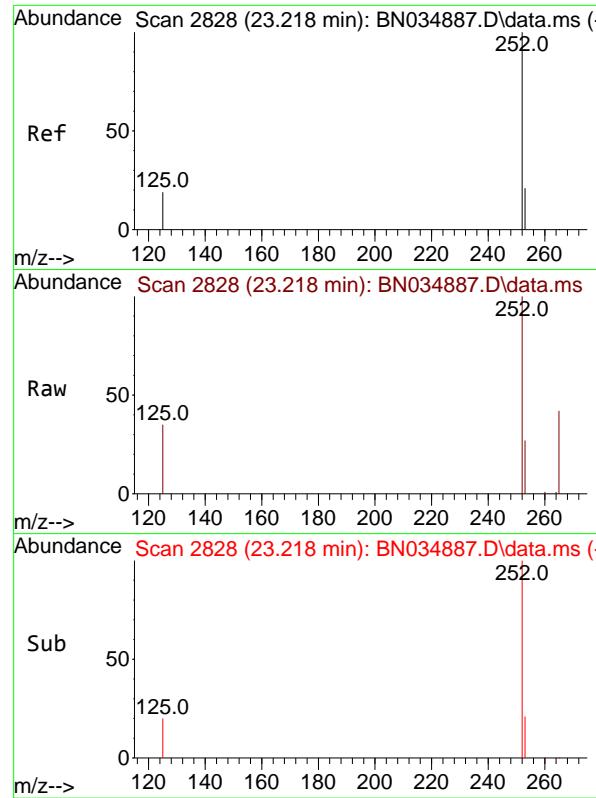
Tgt Ion:252 Resp: 11973  
Ion Ratio Lower Upper  
252 100  
253 24.3 19.4 29.2  
125 26.8 21.4 32.2



#38  
Benzo(k)fluoranthene  
Concen: 0.376 ng  
RT: 22.712 min Scan# 2655  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

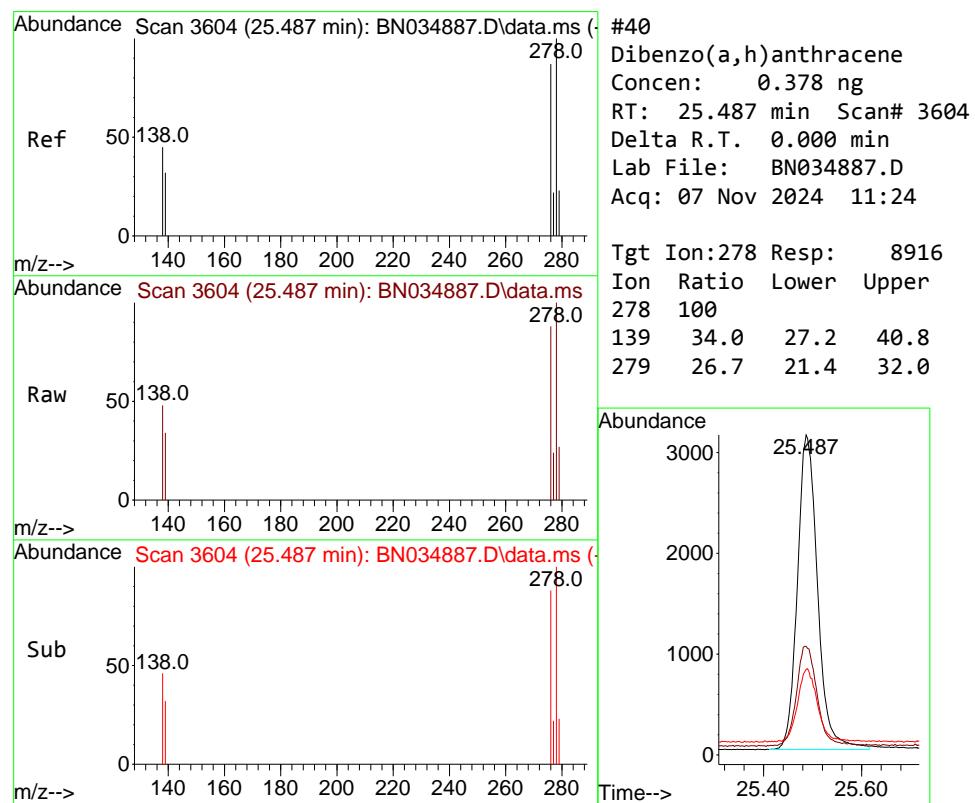
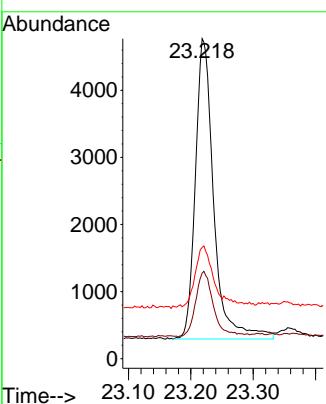
Tgt Ion:252 Resp: 11786  
Ion Ratio Lower Upper  
252 100  
253 24.8 19.8 29.8  
125 28.2 22.6 33.8





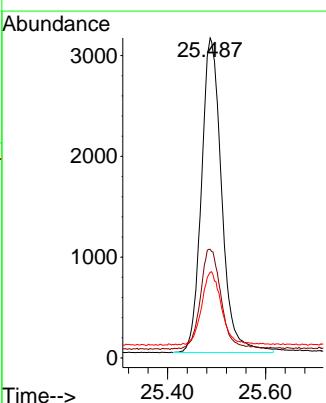
#39  
Benzo(a)pyrene  
Concen: 0.384 ng  
RT: 23.218 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
ClientSampleId : SSTDICCC0.4  
Acq: 07 Nov 2024 11:24

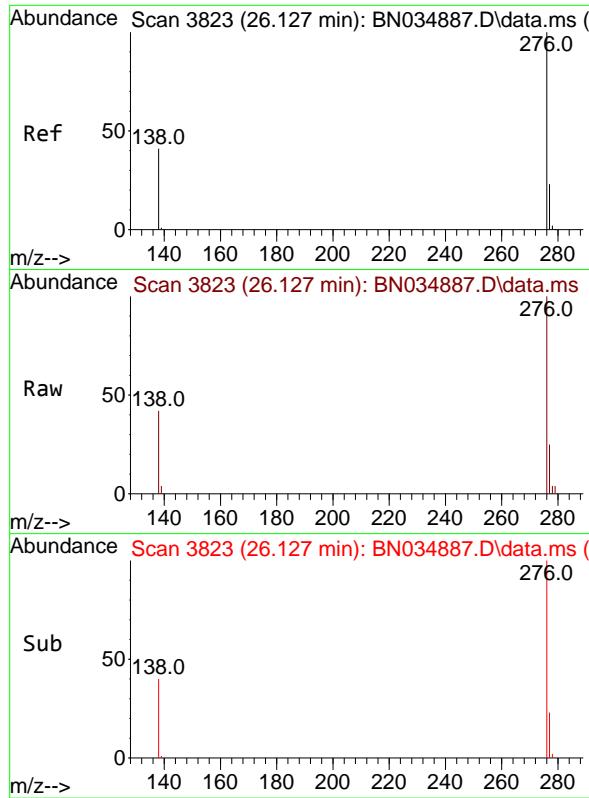
Tgt Ion:252 Resp: 9153  
Ion Ratio Lower Upper  
252 100  
253 26.8 21.4 32.2  
125 34.7 27.8 41.6



#40  
Dibenzo(a,h)anthracene  
Concen: 0.378 ng  
RT: 25.487 min Scan# 3604  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Tgt Ion:278 Resp: 8916  
Ion Ratio Lower Upper  
278 100  
139 34.0 27.2 40.8  
279 26.7 21.4 32.0

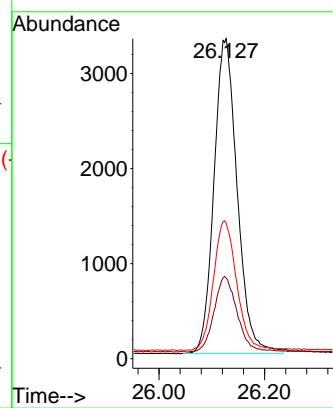




#41  
Benzo(g,h,i)perylene  
Concen: 0.405 ng  
RT: 26.127 min Scan# 3  
Delta R.T. 0.000 min  
Lab File: BN034887.D  
Acq: 07 Nov 2024 11:24

Instrument : BNA\_N  
ClientSampleId : SSTDICCC0.4

Tgt Ion:276 Resp: 10138  
Ion Ratio Lower Upper  
276 100  
277 25.2 20.2 30.2  
138 42.4 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034888.D  
 Acq On : 07 Nov 2024 12:00  
 Operator : RC/JU  
 Sample : SSTDICCO.8  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.8

Quant Time: Nov 07 14:41:27 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	6371	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	19428	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	9092	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	18851	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	12731	0.400	ng	0.00
35) Perylene-d12	23.315	264	10897	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	15040	0.847	ng	0.00
5) Phenol-d6	6.752	99	20160	0.855	ng	0.00
8) Nitrobenzene-d5	8.707	82	12697	0.838	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	22498	0.850	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	2202	0.849	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	32517	0.847	ng	0.00
27) Fluoranthene-d10	18.990	212	36597	0.861	ng	0.00
31) Terphenyl-d14	19.598	244	19795	0.830	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	6753	0.839	ng	99
3) n-Nitrosodimethylamine	3.480	42	9597	0.884	ng	98
6) bis(2-Chloroethyl)ether	7.012	93	17693	0.870	ng	100
9) Naphthalene	10.383	128	45870	0.851	ng	100
10) Hexachlorobutadiene	10.682	225	7343	0.855	ng	# 97
12) 2-Methylnaphthalene	12.011	142	28153	0.853	ng	99
16) Acenaphthylene	13.919	152	36993	0.844	ng	100
17) Acenaphthene	14.272	154	26000	0.857	ng	97
18) Fluorene	15.255	166	32251	0.853	ng	100
20) 4,6-Dinitro-2-methylph...	15.341	198	1509	0.821	ng	# 36
21) 4-Bromophenyl-phenylether	16.157	248	8294	0.825	ng	# 86
22) Hexachlorobenzene	16.269	284	10091	0.834	ng	98
23) Atrazine	16.430	200	6114	0.840	ng	# 93
24) Pentachlorophenol	16.604	266	2792	0.836	ng	98
25) Phenanthrene	16.989	178	49126	0.850	ng	100
26) Anthracene	17.088	178	42271	0.848	ng	100
28) Fluoranthene	19.017	202	53297	0.876	ng	100
30) Pyrene	19.380	202	53636	0.832	ng	100
32) Benzo(a)anthracene	21.131	228	42348	0.853	ng	99
33) Chrysene	21.185	228	45020	0.857	ng	99
34) Bis(2-ethylhexyl)phtha...	21.095	149	22429	0.787	ng	98
36) Indeno(1,2,3-cd)pyrene	25.473	276	40211	0.828	ng	100
37) Benzo(b)fluoranthene	22.669	252	41412m	0.864	ng	
38) Benzo(k)fluoranthene	22.713	252	43204	0.865	ng	# 92
39) Benzo(a)pyrene	23.222	252	32141	0.845	ng	# 86
40) Dibenzo(a,h)anthracene	25.488	278	31006	0.825	ng	96
41) Benzo(g,h,i)perylene	26.128	276	32362	0.812	ng	99

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

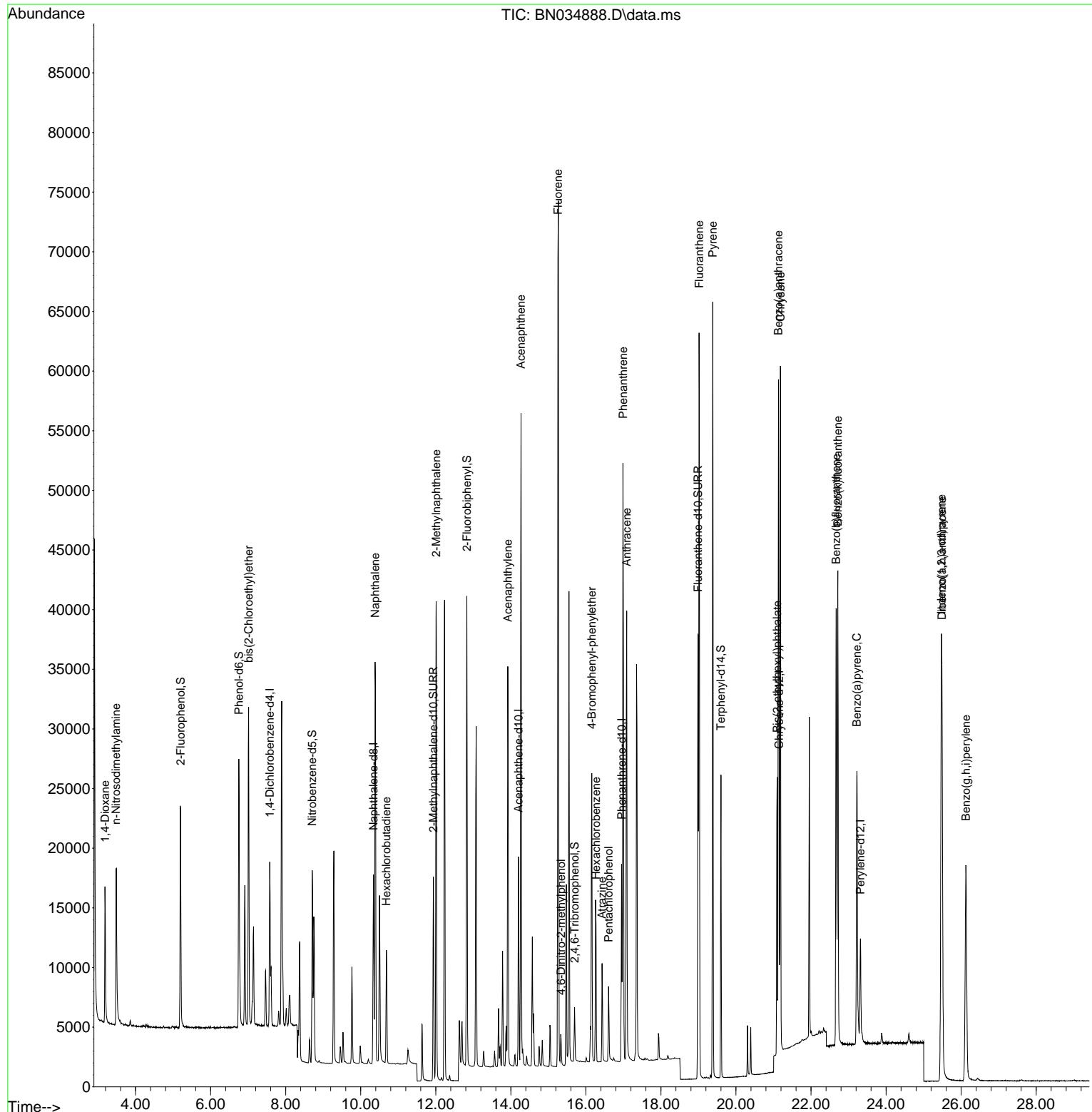
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 Data File : BN034888.D  
 Acq On : 07 Nov 2024 12:00  
 Operator : RC/JU  
 Sample : SSTDICC0.8  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

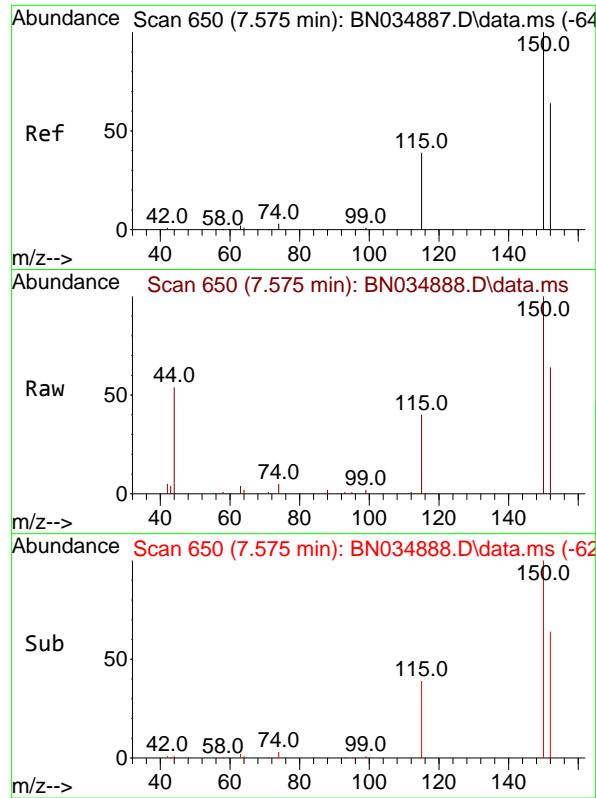
Quant Time: Nov 07 14:41:27 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC0.8

**Manual Integrations**  
**APPROVED**

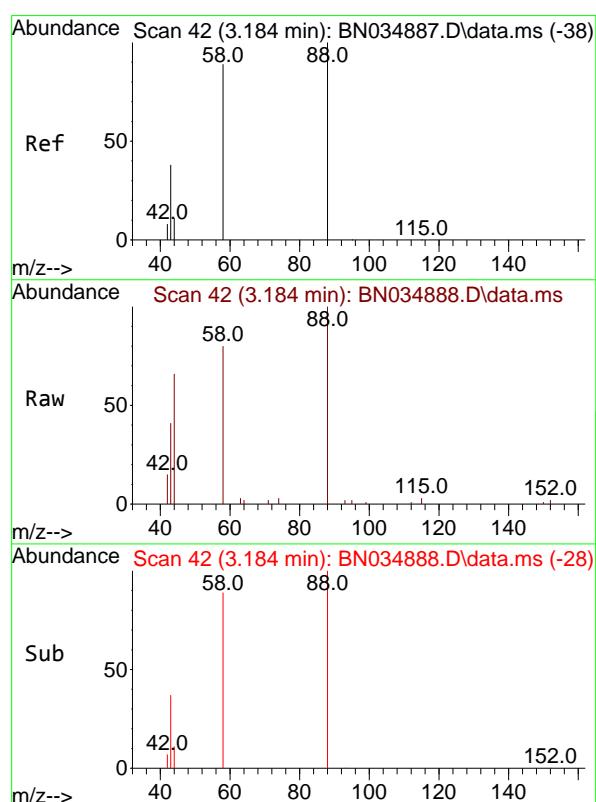
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

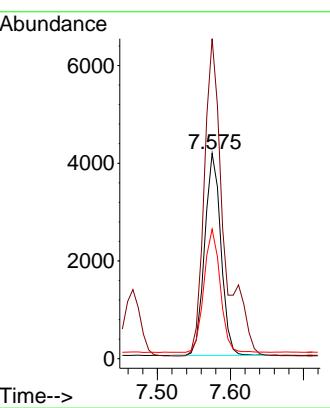
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8



Tgt Ion:152 Resp: 637:  
Ion Ratio Lower Upper  
152 100  
150 155.9 124.4 186.6  
115 63.1 50.5 75.7

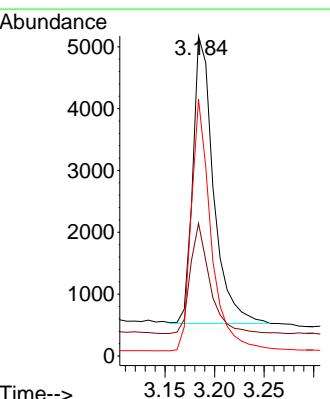
### Manual Integrations APPROVED

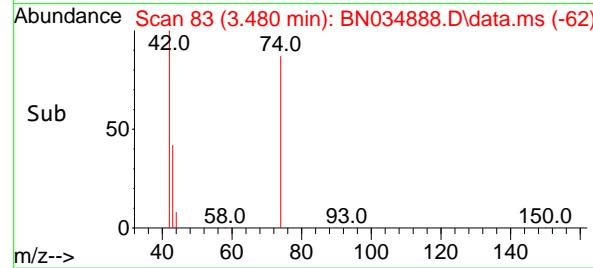
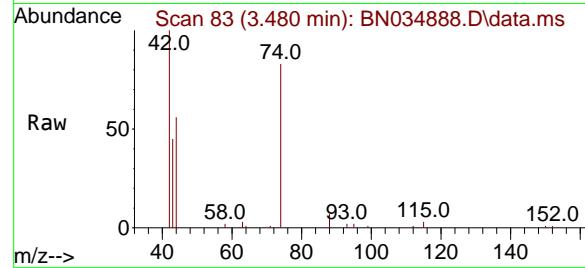
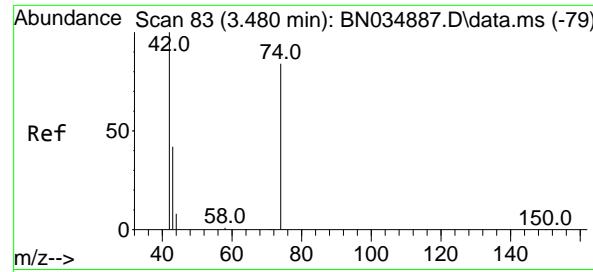
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#2  
1,4-Dioxane  
Concen: 0.839 ng  
RT: 3.184 min Scan# 42  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion: 88 Resp: 6753  
Ion Ratio Lower Upper  
88 100  
43 36.6 28.2 42.2  
58 83.7 67.1 100.7





#3

n-Nitrosodimethylamine

Concen: 0.884 ng

RT: 3.480 min Scan# 8

Delta R.T. 0.000 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

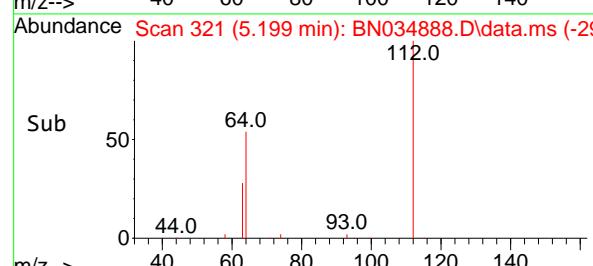
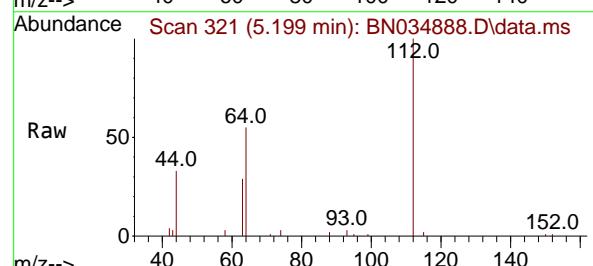
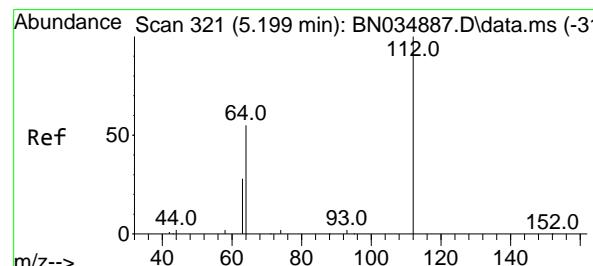
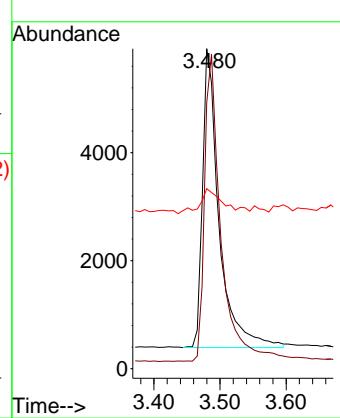
Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#4

2-Fluorophenol

Concen: 0.847 ng

RT: 5.199 min Scan# 321

Delta R.T. 0.000 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

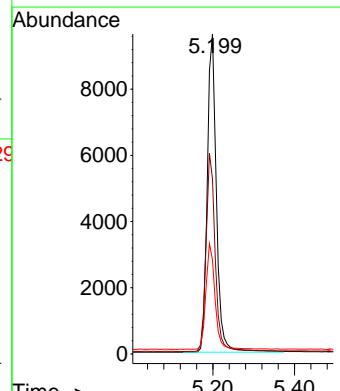
Tgt Ion:112 Resp: 15040

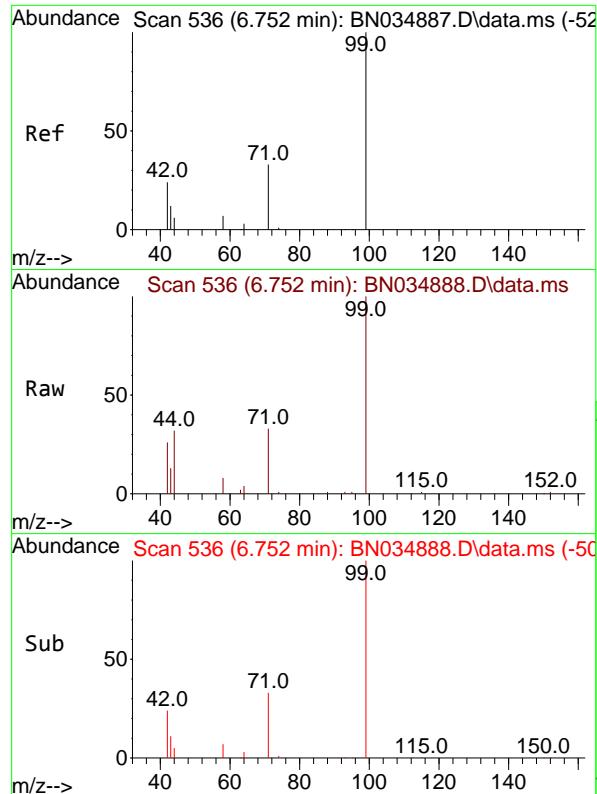
Ion Ratio Lower Upper

112 100

64 62.3 49.6 74.4

63 33.2 26.3 39.5



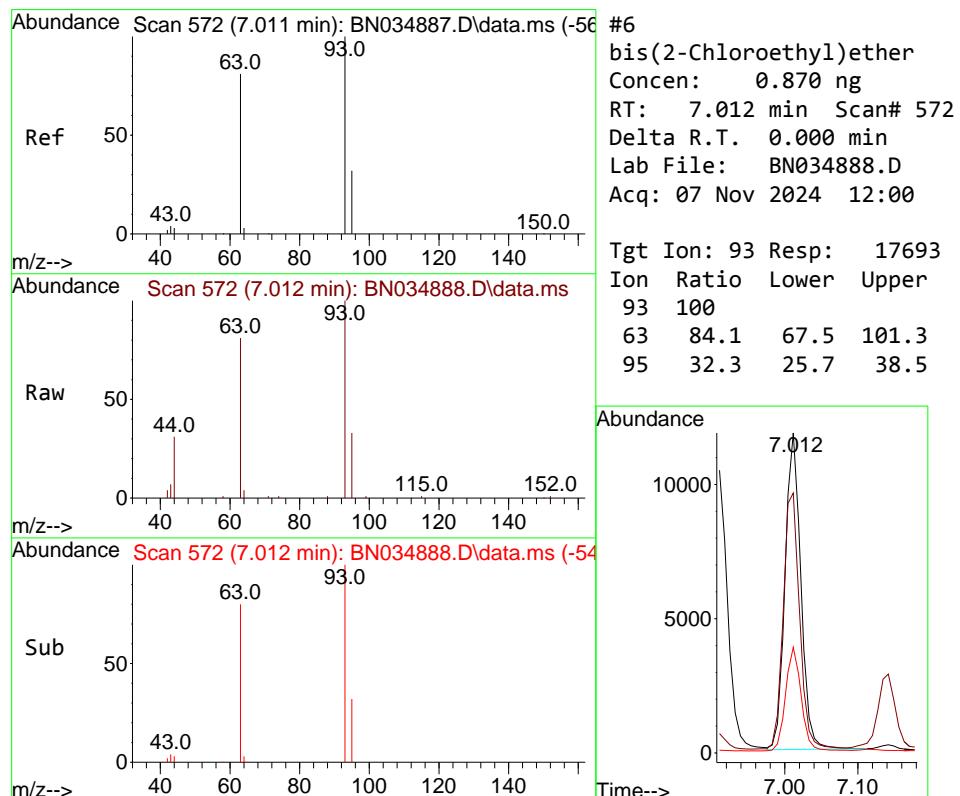
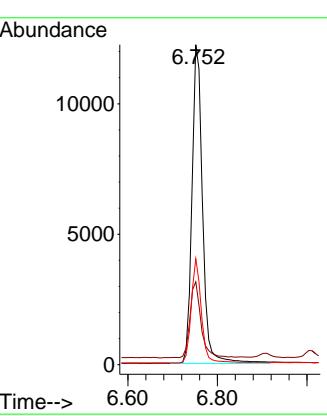


#5  
 Phenol-d6  
 Concen: 0.855 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

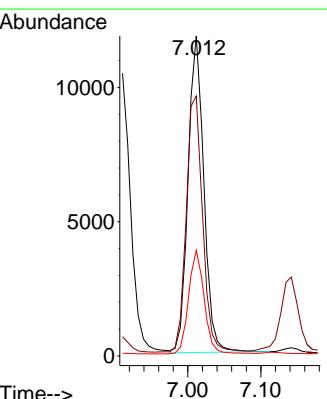
**Manual Integrations**  
**APPROVED**

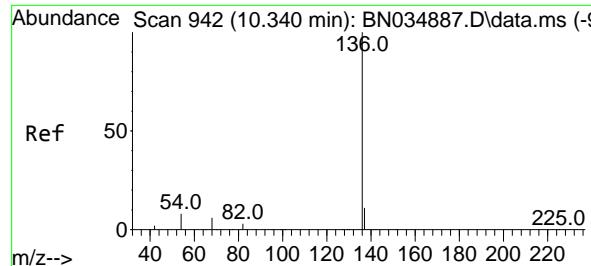
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



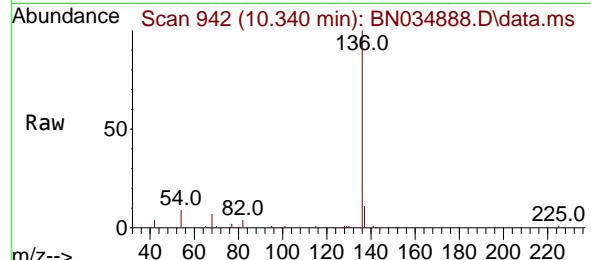
#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.870 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 93 Resp: 17693  
 Ion Ratio Lower Upper  
 93 100  
 63 84.1 67.5 101.3  
 95 32.3 25.7 38.5





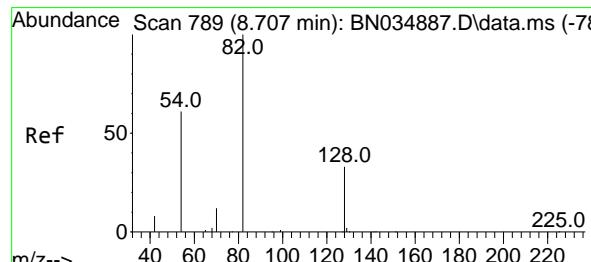
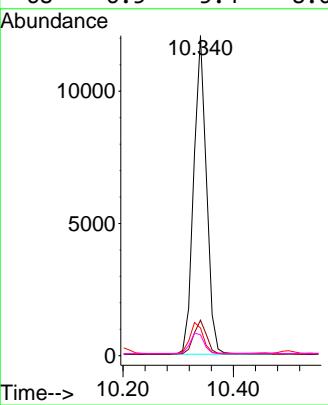
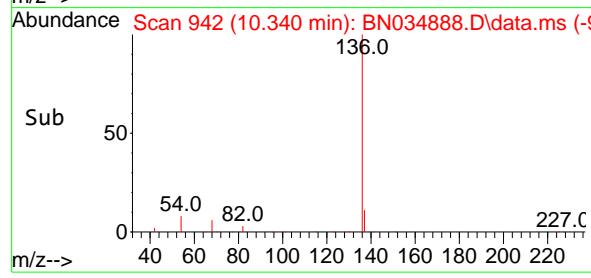
#7  
Naphthalene-d8  
Concen: 0.400 ng  
RT: 10.340 min Scan# 9  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00  
ClientSampleId : SSTDICCO.8



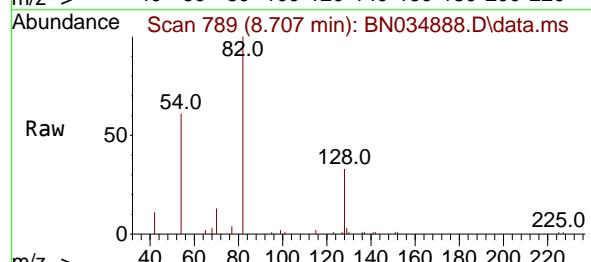
Tgt Ion:136 Resp: 19423  
Ion Ratio Lower Upper  
136 100  
137 11.1 8.9 13.3  
54 8.6 6.9 10.3  
68 6.5 5.4 8.0

### Manual Integrations APPROVED

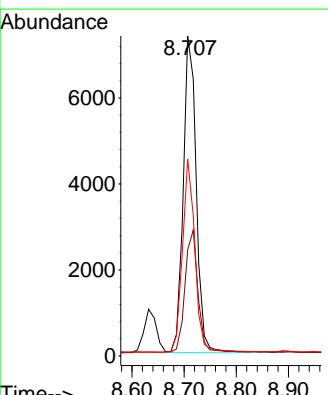
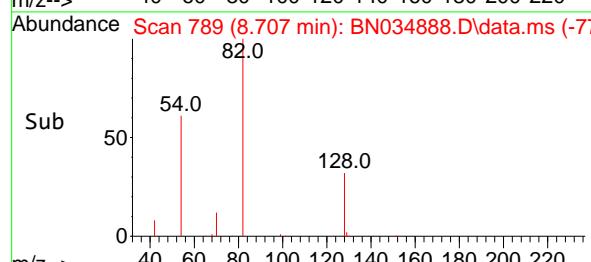
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024

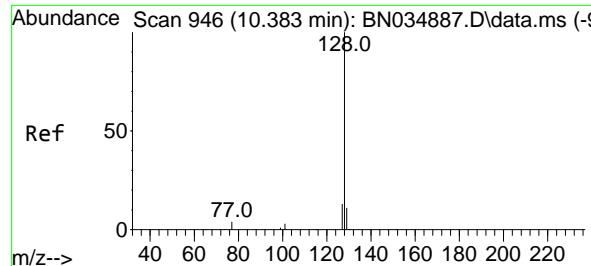


#8  
Nitrobenzene-d5  
Concen: 0.838 ng  
RT: 8.707 min Scan# 789  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00



Tgt Ion: 82 Resp: 12697  
Ion Ratio Lower Upper  
82 100  
128 33.2 28.1 42.1  
54 61.5 49.8 74.6





#9

Naphthalene

Concen: 0.851 ng

RT: 10.383 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034888.D

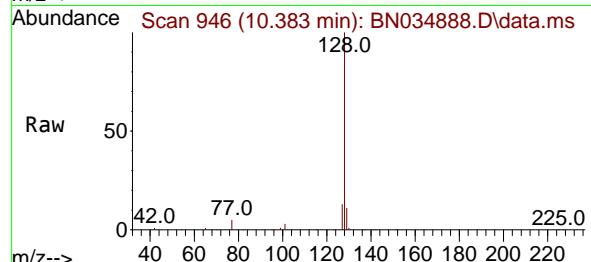
Acq: 07 Nov 2024 12:00

Instrument :

BNA\_N

ClientSampleId :

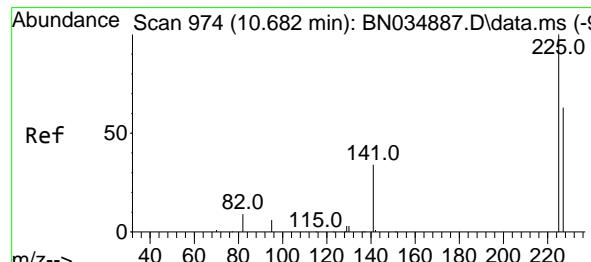
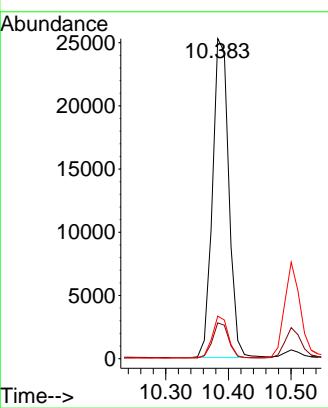
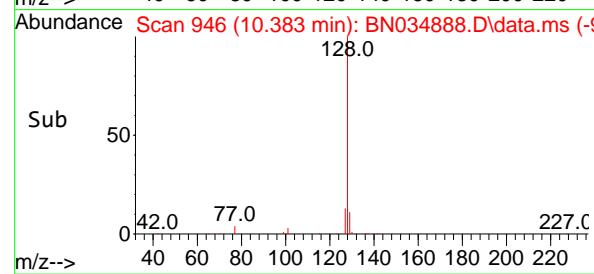
SSTDICC0.8



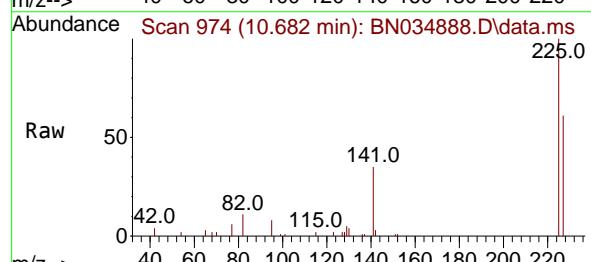
Tgt	Ion:128	Resp:	45870
Ion	Ratio	Lower	Upper
128	100		
129	11.2	9.0	13.4
127	13.3	10.8	16.2

### Manual Integrations APPROVED

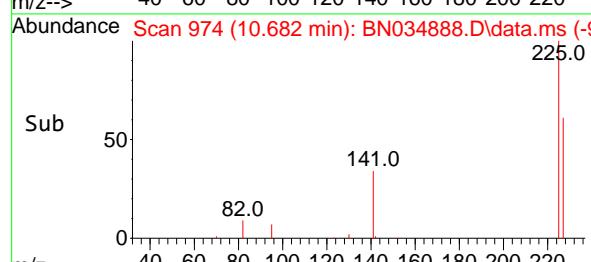
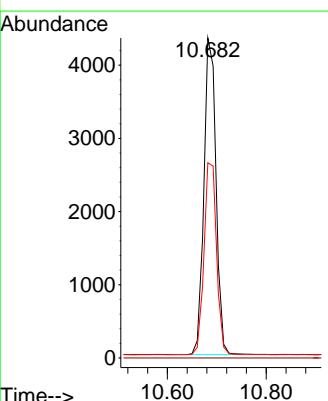
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024

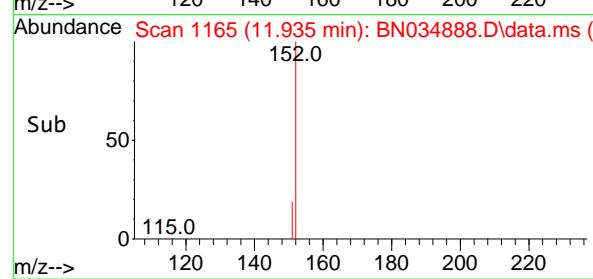
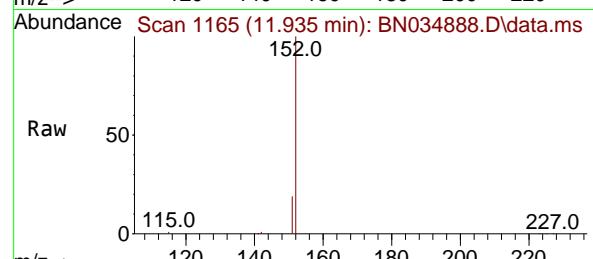
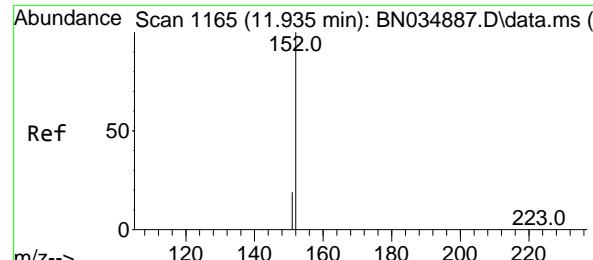


#10  
Hexachlorobutadiene  
Concen: 0.855 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00



Tgt	Ion:225	Resp:	7343
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.0	52.0	78.0



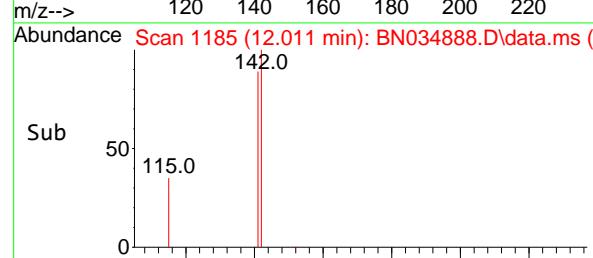
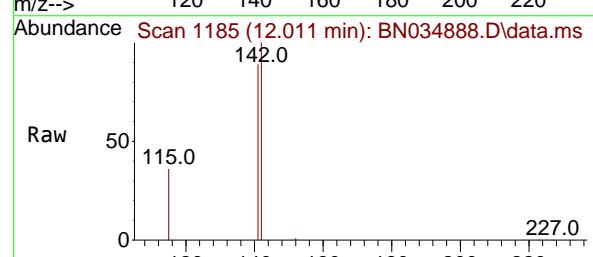
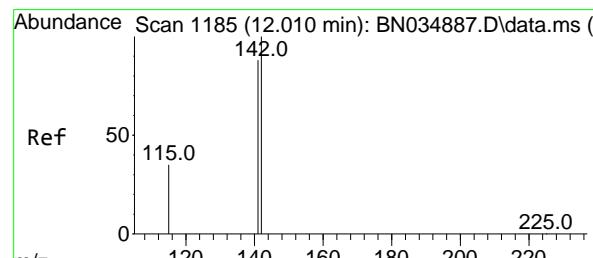
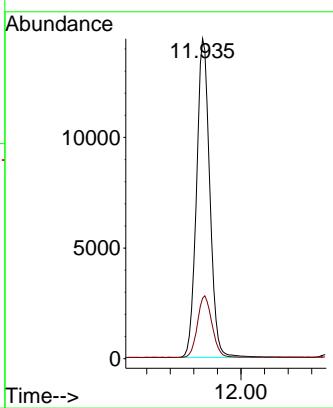


#11  
2-Methylnaphthalene-d10  
Concen: 0.850 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

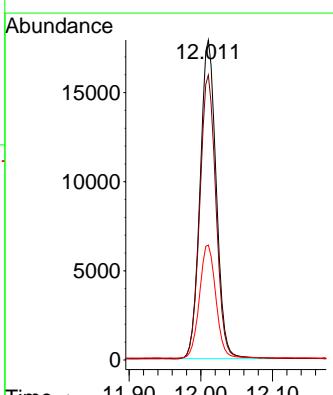
**Manual Integrations**  
**APPROVED**

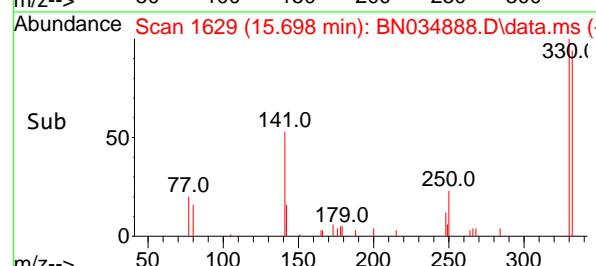
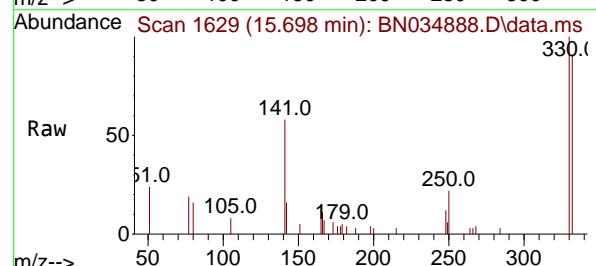
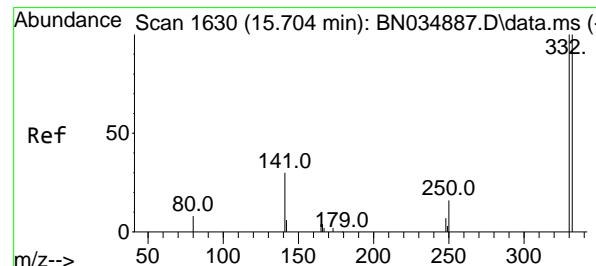
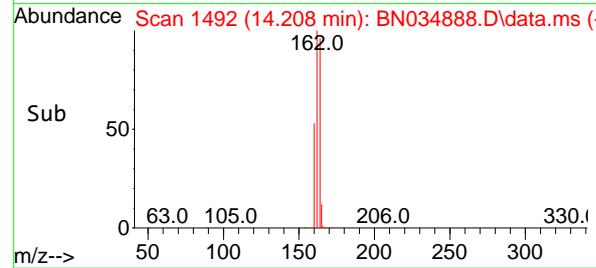
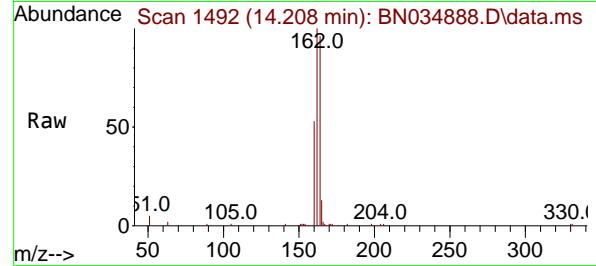
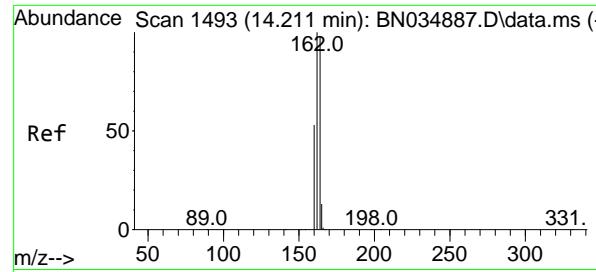
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



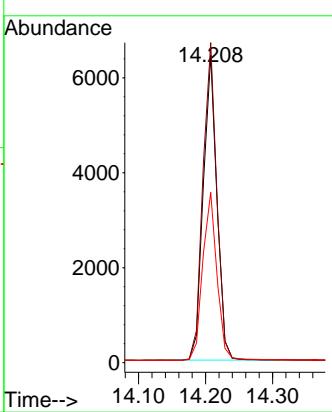
#12  
2-Methylnaphthalene  
Concen: 0.853 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:142 Resp: 28153  
Ion Ratio Lower Upper  
142 100  
141 89.0 70.5 105.7  
115 35.9 29.4 44.2

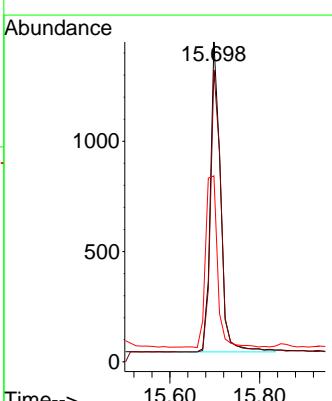


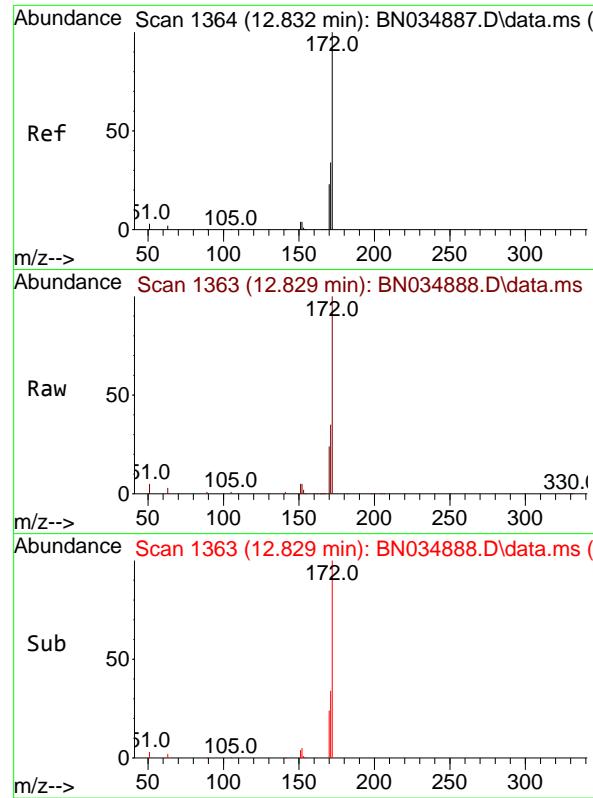


#13

Acenaphthene-d10  
Concen: 0.400 ngRT: 14.208 min Scan# 1493  
Delta R.T. -0.003 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8**Manual Integrations  
APPROVED**Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024

#14

2,4,6-Tribromophenol  
Concen: 0.849 ng  
RT: 15.698 min Scan# 1629  
Delta R.T. -0.006 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00Tgt Ion:330 Resp: 2202  
Ion Ratio Lower Upper  
330 100  
332 94.3 77.1 115.7  
141 64.3 54.1 81.1

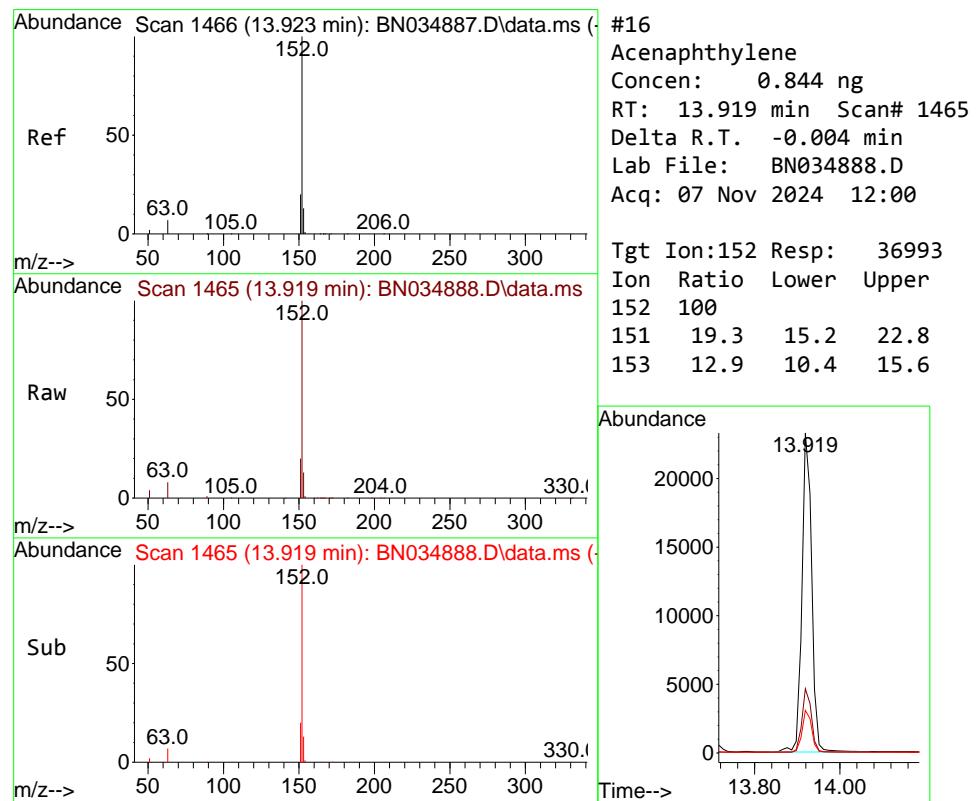
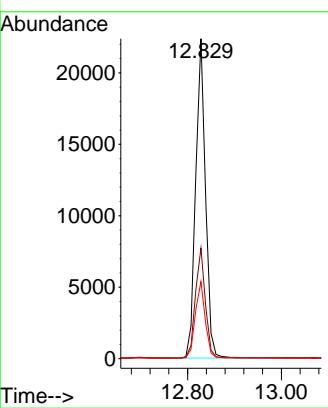


#15  
2-Fluorobiphenyl  
Concen: 0.847 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

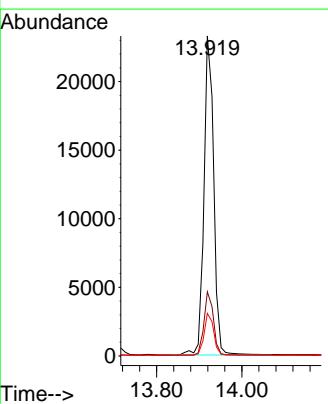
**Manual Integrations**  
**APPROVED**

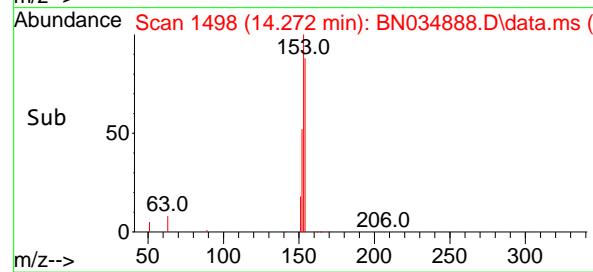
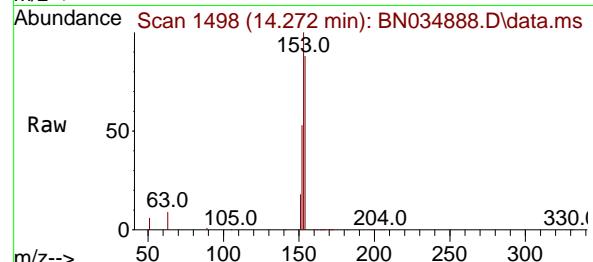
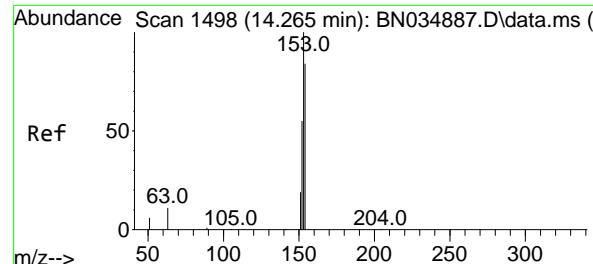
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#16  
Acenaphthylene  
Concen: 0.844 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:152 Resp: 36993  
Ion Ratio Lower Upper  
152 100  
151 19.3 15.2 22.8  
153 12.9 10.4 15.6





#17

Acenaphthene

Concen: 0.857 ng

RT: 14.272 min Scan# 1498

Delta R.T. 0.007 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Instrument :

BNA\_N

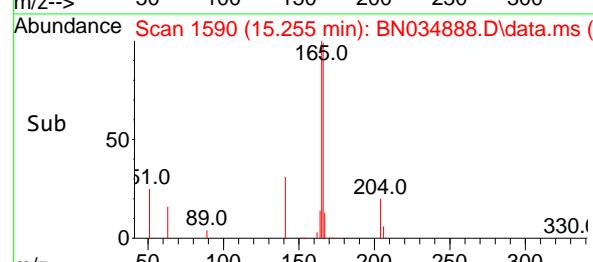
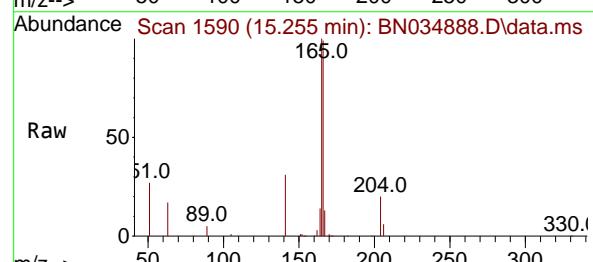
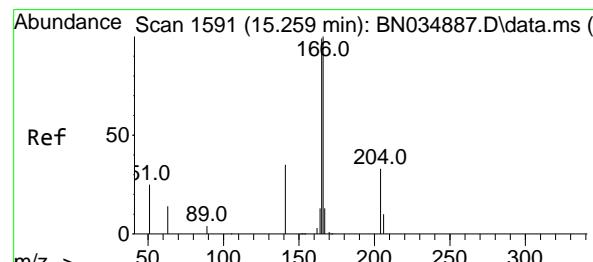
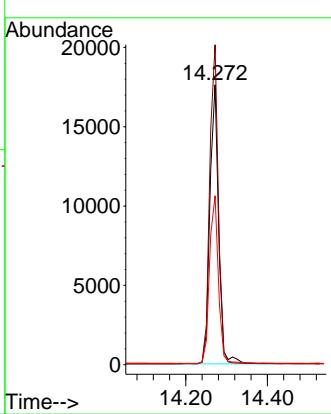
ClientSampleId :

SSTDICC0.8

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#18

Fluorene

Concen: 0.853 ng

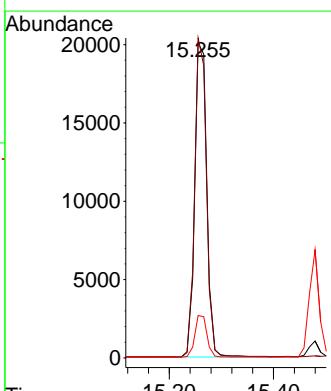
RT: 15.255 min Scan# 1590

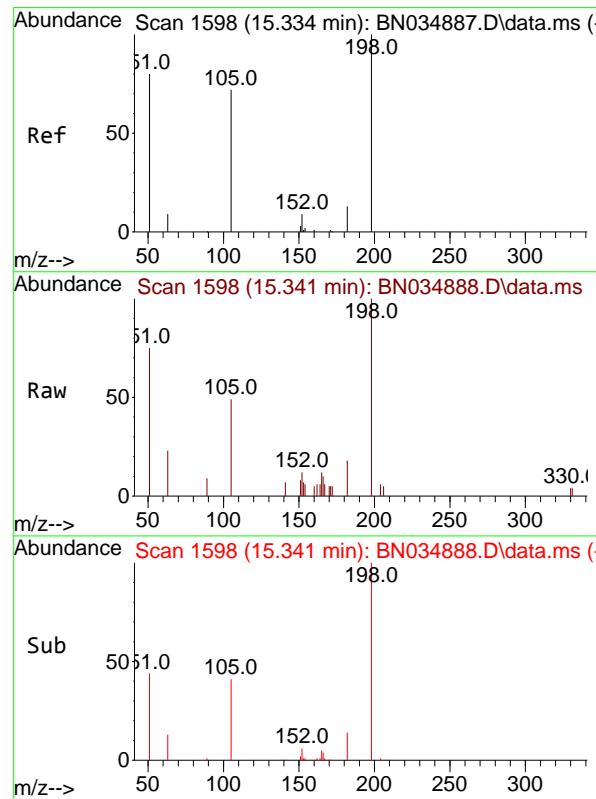
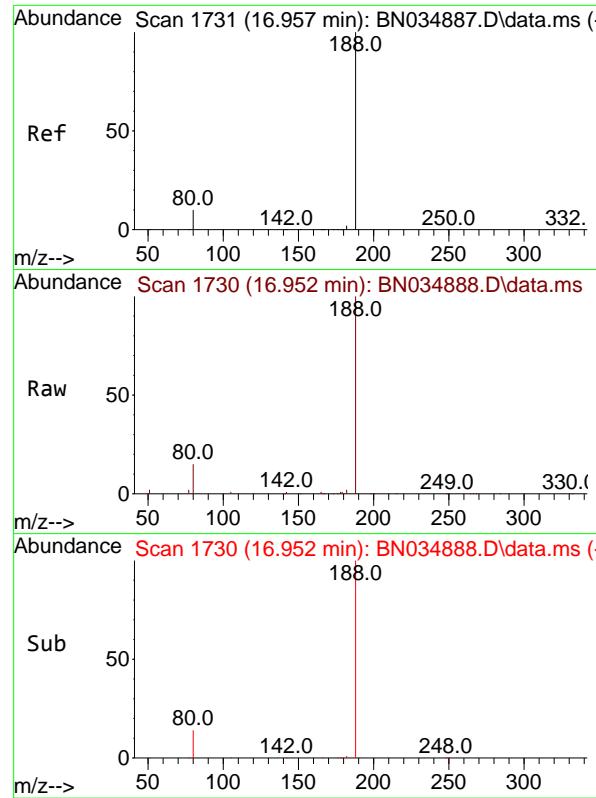
Delta R.T. -0.004 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Tgt	Ion:166	Resp:	32251
Ion	Ratio	Lower	Upper
166	100		
165	99.5	79.5	119.3
167	13.3	10.6	16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.952 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Instrument :

BNA\_N

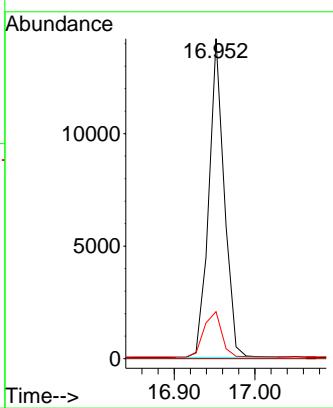
ClientSampleId :

SSTDICCO.8

**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#20

4,6-Dinitro-2-methylphenol

Concen: 0.821 ng

RT: 15.341 min Scan# 1598

Delta R.T. 0.007 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

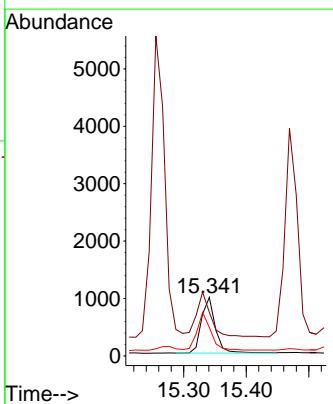
Tgt Ion:198 Resp: 1509

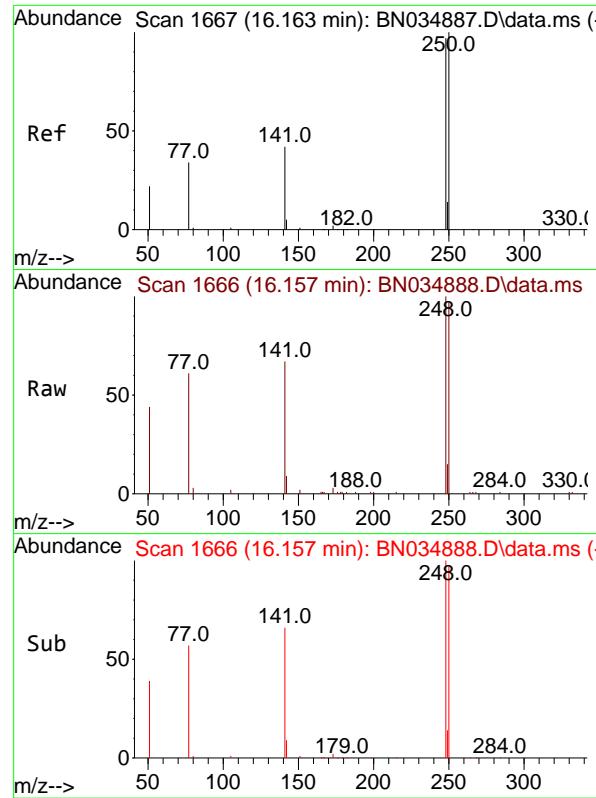
Ion Ratio Lower Upper

198 100

51 74.6 141.8 212.8#

105 48.7 75.6 113.4#



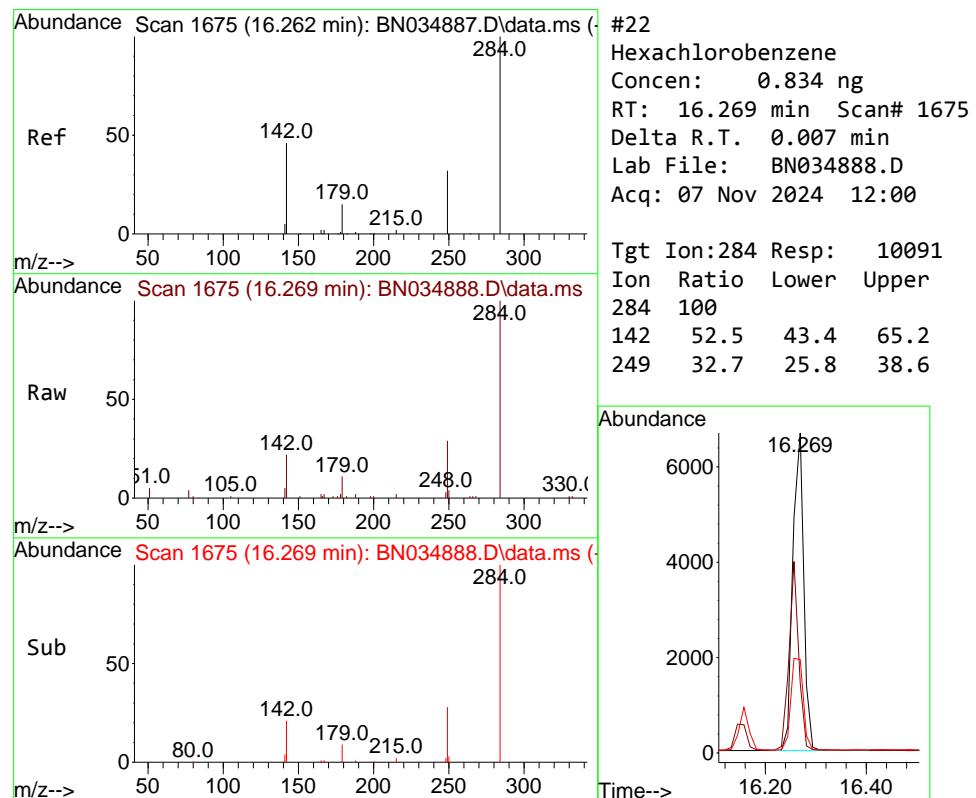
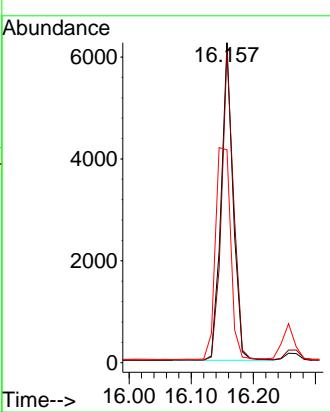


#21  
4-Bromophenyl-phenylether  
Concen: 0.825 ng  
RT: 16.157 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICCO.8

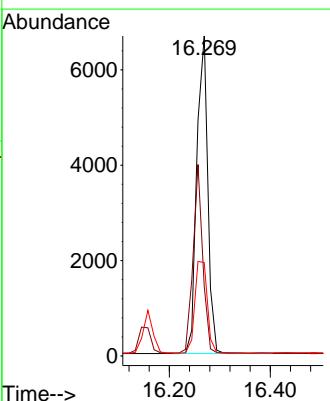
**Manual Integrations**  
**APPROVED**

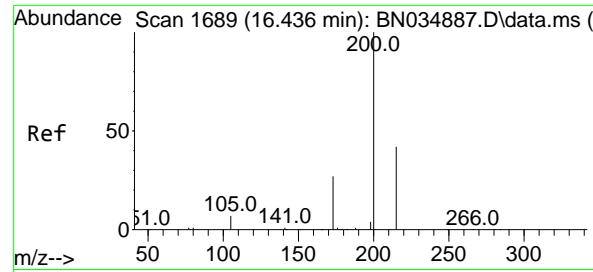
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



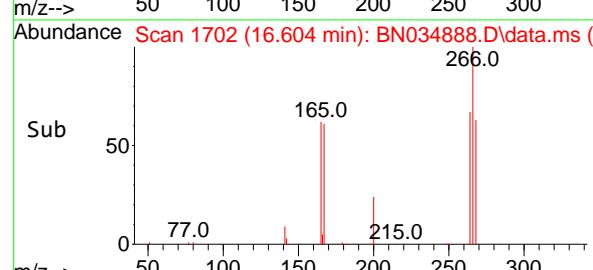
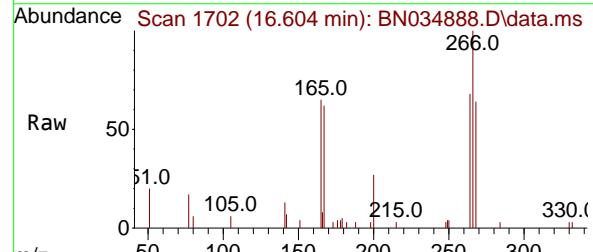
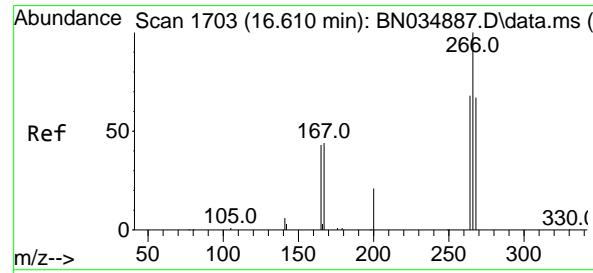
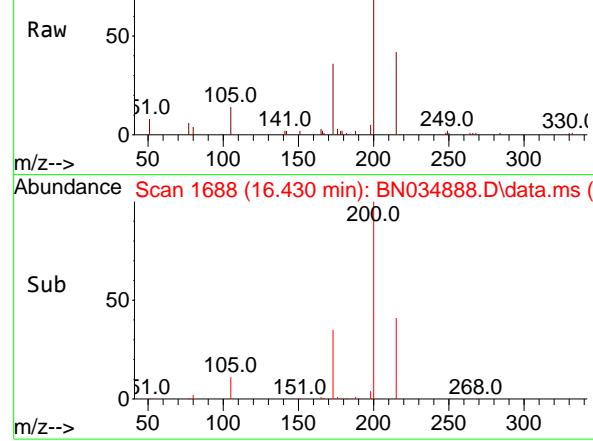
#22  
Hexachlorobenzene  
Concen: 0.834 ng  
RT: 16.269 min Scan# 1675  
Delta R.T. 0.007 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:284 Resp: 10091  
Ion Ratio Lower Upper  
284 100  
142 52.5 43.4 65.2  
249 32.7 25.8 38.6





Abundance Scan 1688 (16.430 min): BN034888.D\data.ms (-)



#23

Atrazine

Concen: 0.840 ng

RT: 16.430 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Instrument :

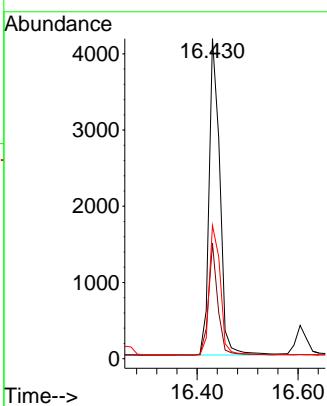
BNA\_N

ClientSampleId :

SSTDICC0.8

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#24

Pentachlorophenol

Concen: 0.836 ng

RT: 16.604 min Scan# 1702

Delta R.T. -0.006 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

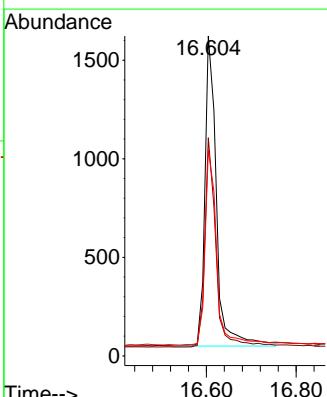
Tgt Ion:266 Resp: 2792

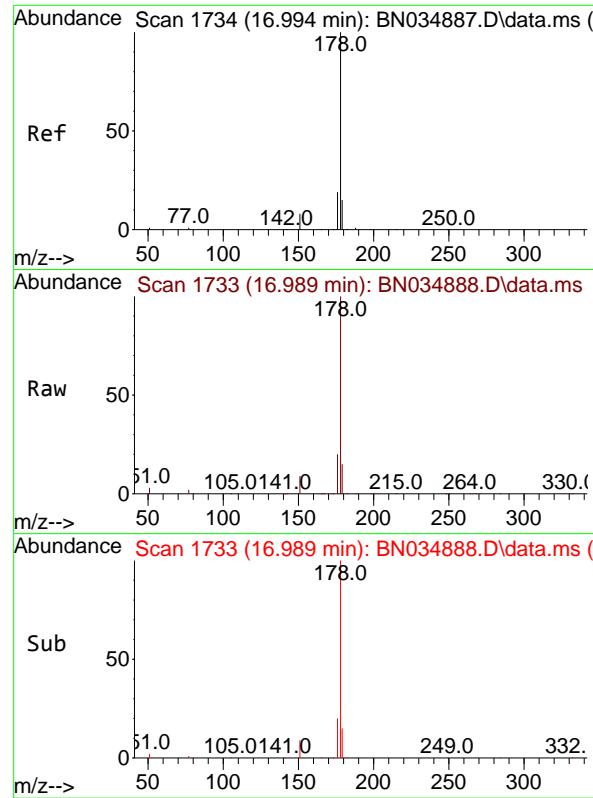
Ion Ratio Lower Upper

266 100

264 64.4 51.3 76.9

268 63.4 53.0 79.6



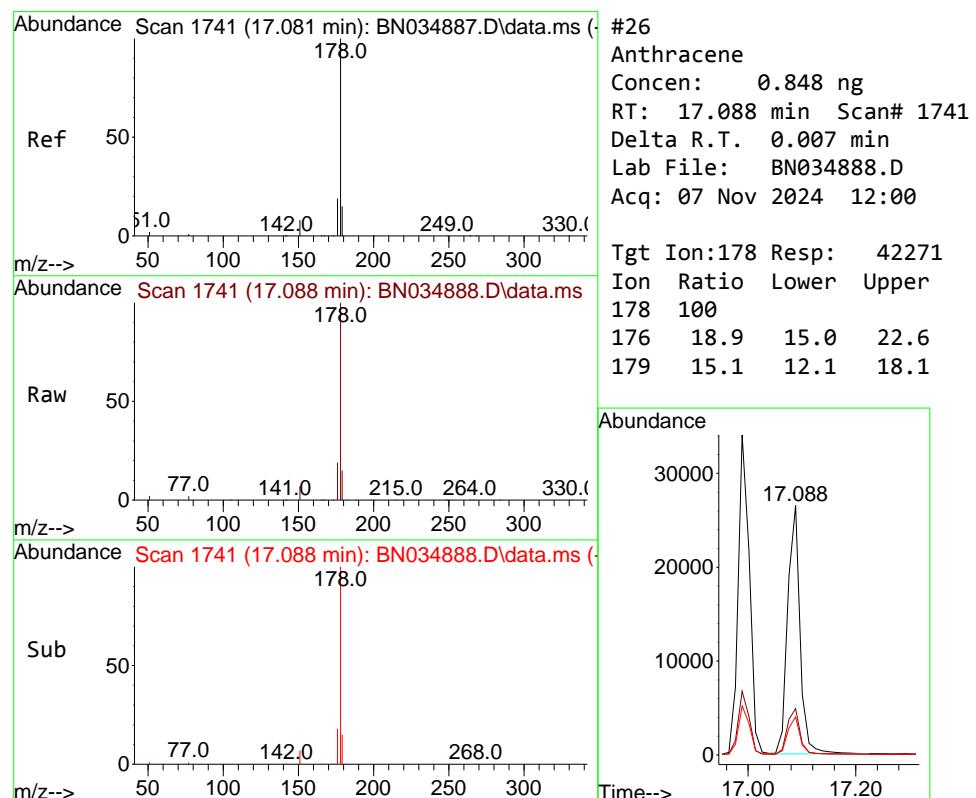
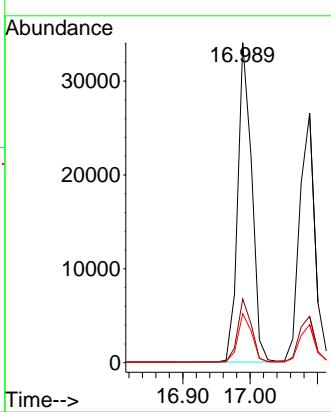


#25  
Phenanthrene  
Concen: 0.850 ng  
RT: 16.989 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

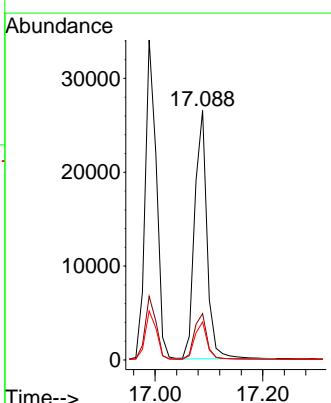
**Manual Integrations**  
**APPROVED**

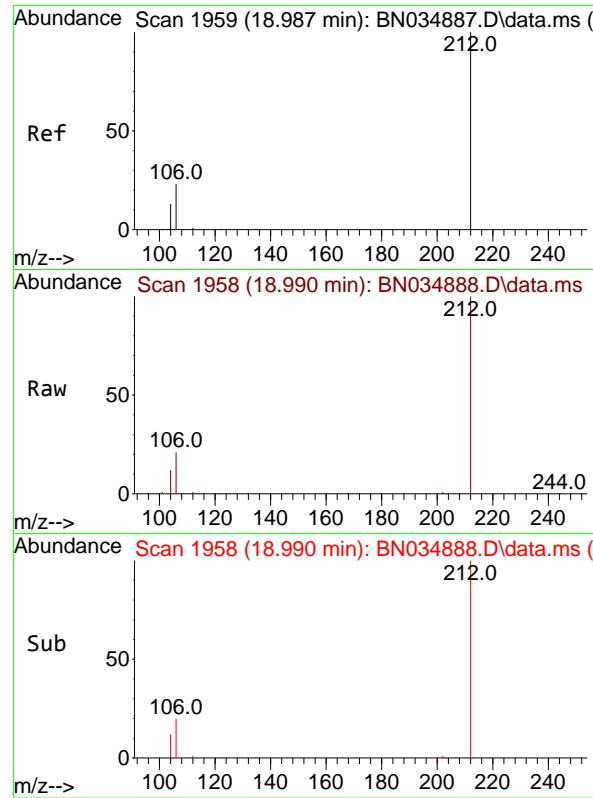
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#26  
Anthracene  
Concen: 0.848 ng  
RT: 17.088 min Scan# 1741  
Delta R.T. 0.007 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:178 Resp: 42271  
Ion Ratio Lower Upper  
178 100  
176 18.9 15.0 22.6  
179 15.1 12.1 18.1



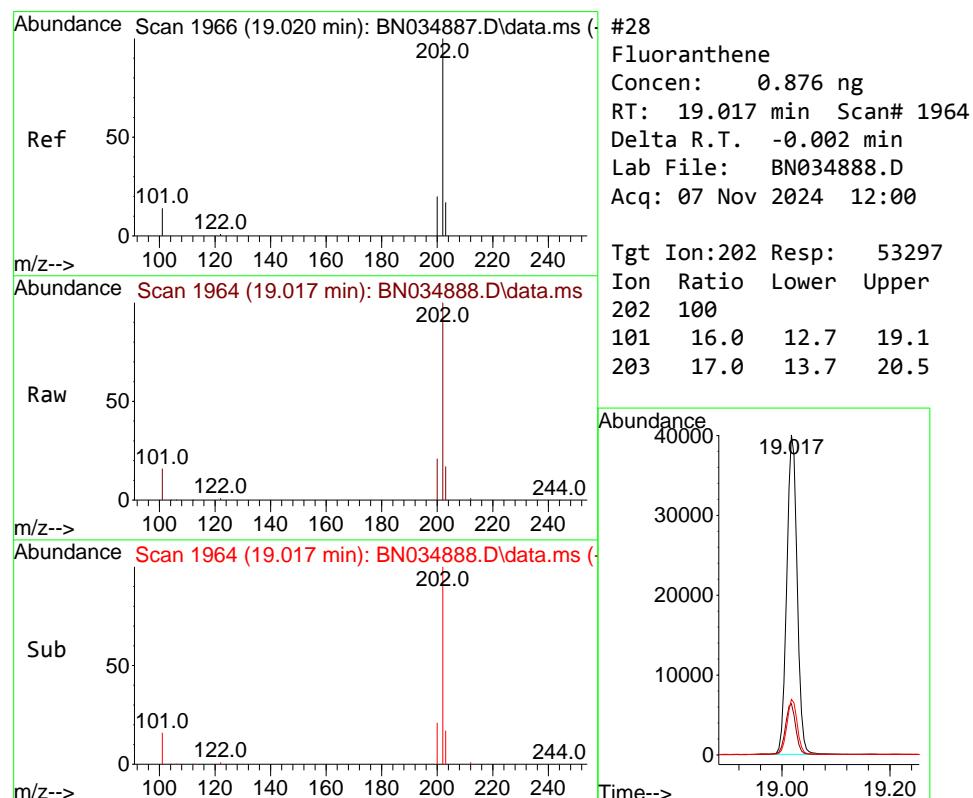
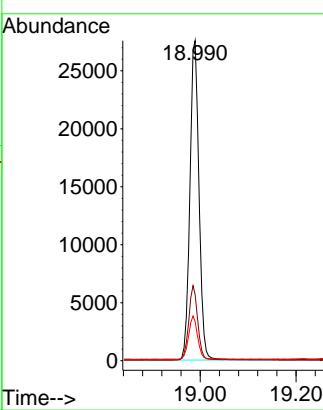


#27  
 Fluoranthene-d10  
 Concen: 0.861 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

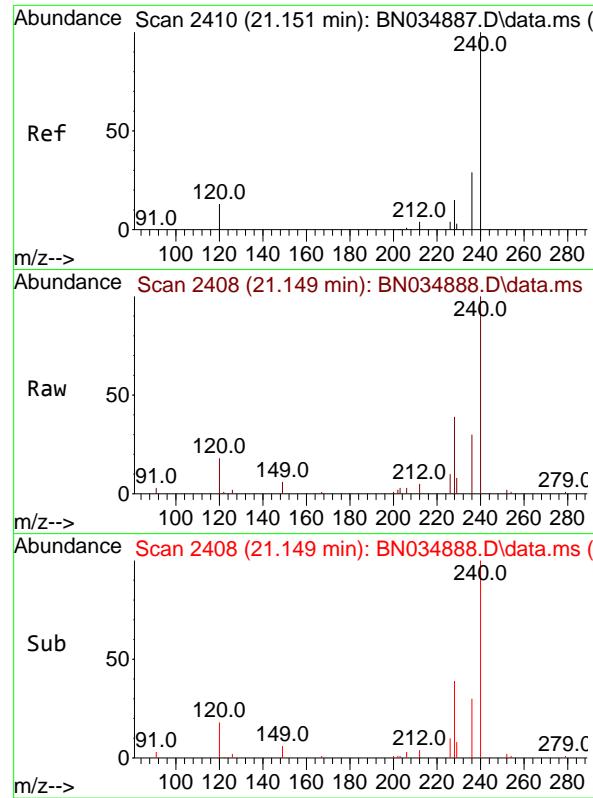
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



#28  
 Fluoranthene  
 Concen: 0.876 ng  
 RT: 19.017 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00



#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.149 min Scan# 2

Delta R.T. -0.002 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Instrument :

BNA\_N

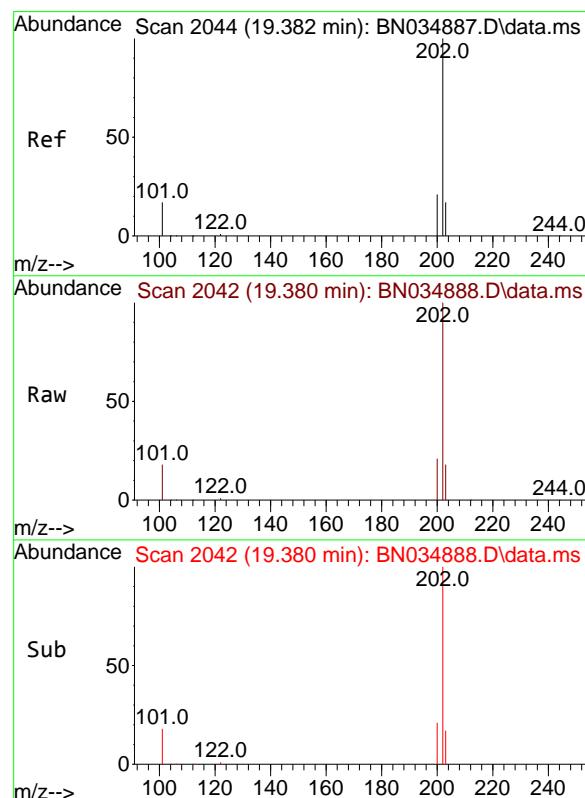
ClientSampleId :

SSTDICC0.8

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#30

Pyrene

Concen: 0.832 ng

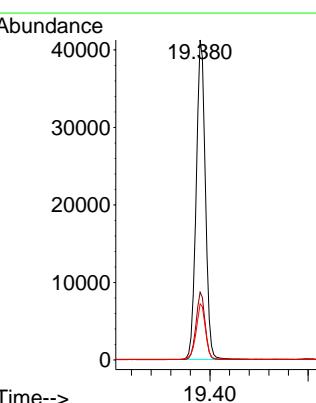
RT: 19.380 min Scan# 2042

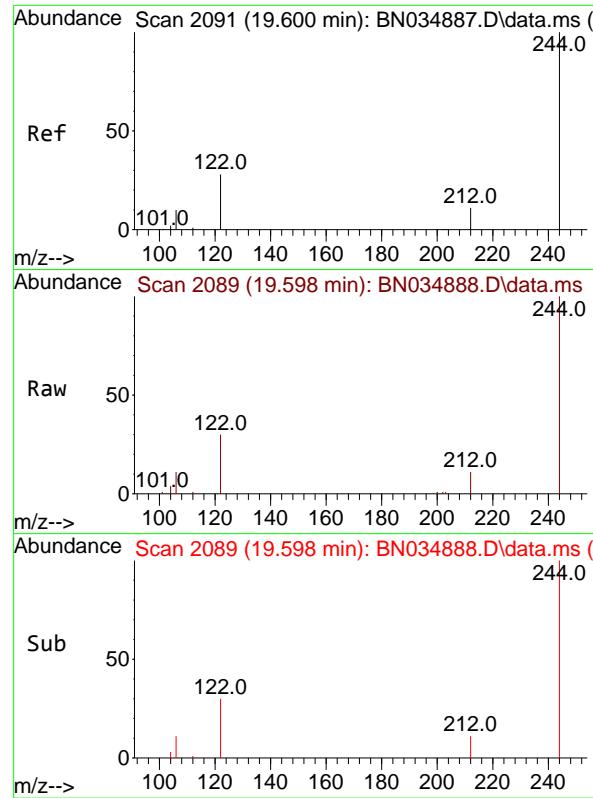
Delta R.T. -0.002 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Tgt	Ion:202	Resp:	53636
Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.8	25.2
203	17.7	14.1	21.1



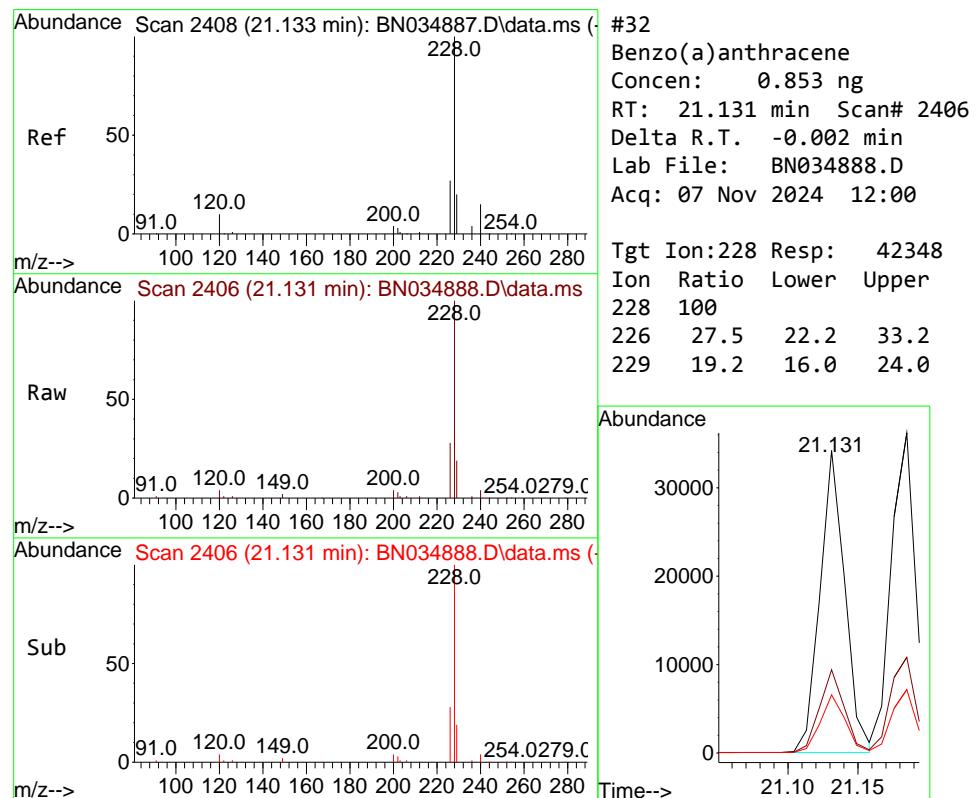
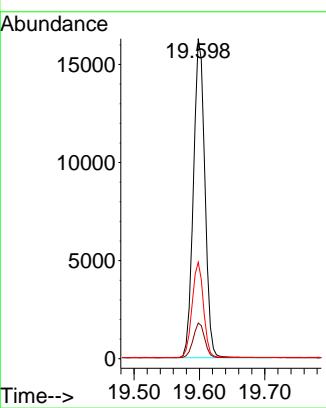


#31  
Terphenyl-d14  
Concen: 0.830 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

**Manual Integrations**  
**APPROVED**

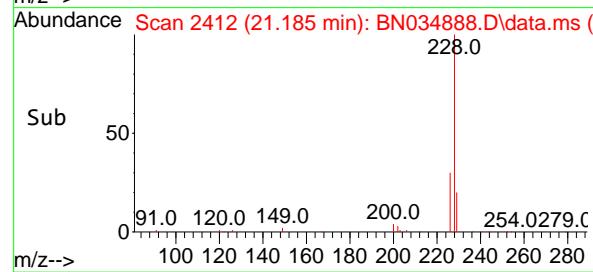
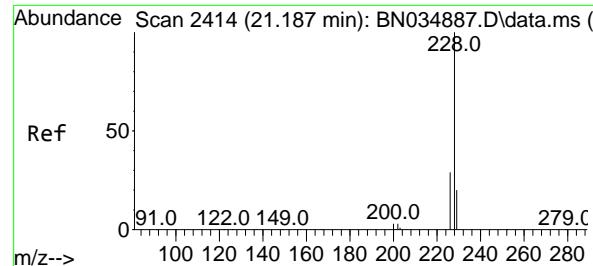
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#32  
Benzo(a)anthracene  
Concen: 0.853 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Abundance

Time-->



#33

Chrysene

Concen: 0.857 ng

RT: 21.185 min Scan# 2412

Delta R.T. -0.002 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

Instrument :

BNA\_N

ClientSampleId :

SSTDICC0.8

Tgt Ion:228 Resp: 45020

Ion Ratio Lower Upper

228 100

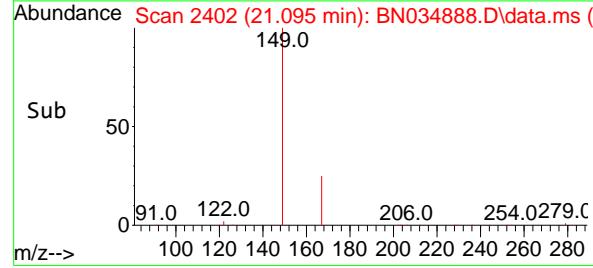
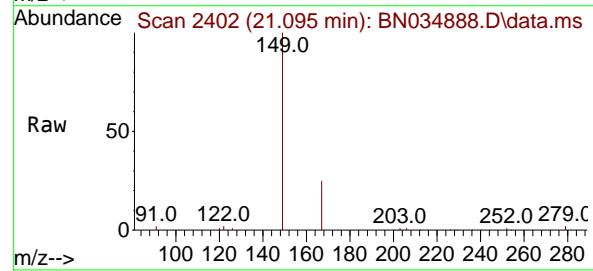
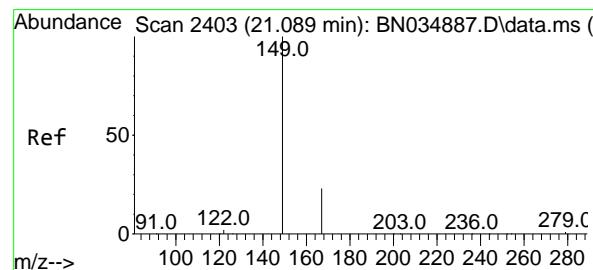
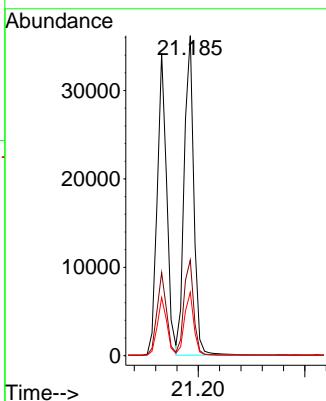
226 29.9 23.7 35.5

229 19.8 16.3 24.5

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.787 ng

RT: 21.095 min Scan# 2402

Delta R.T. 0.006 min

Lab File: BN034888.D

Acq: 07 Nov 2024 12:00

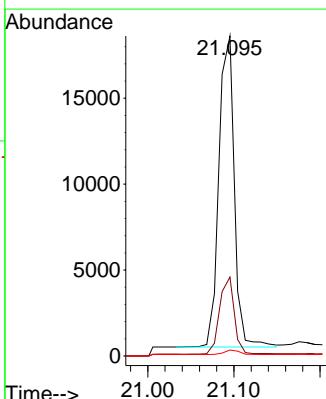
Tgt Ion:149 Resp: 22429

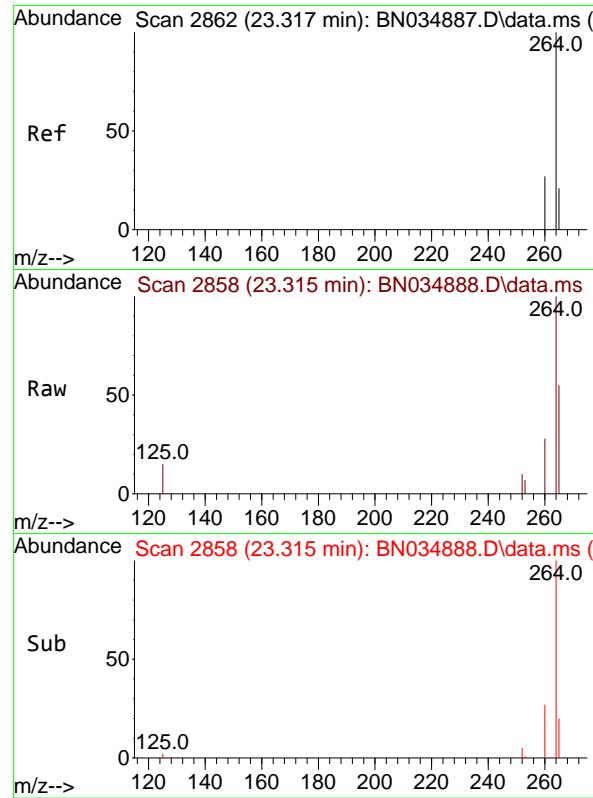
Ion Ratio Lower Upper

149 100

167 23.6 18.1 27.1

279 1.5 1.2 1.8



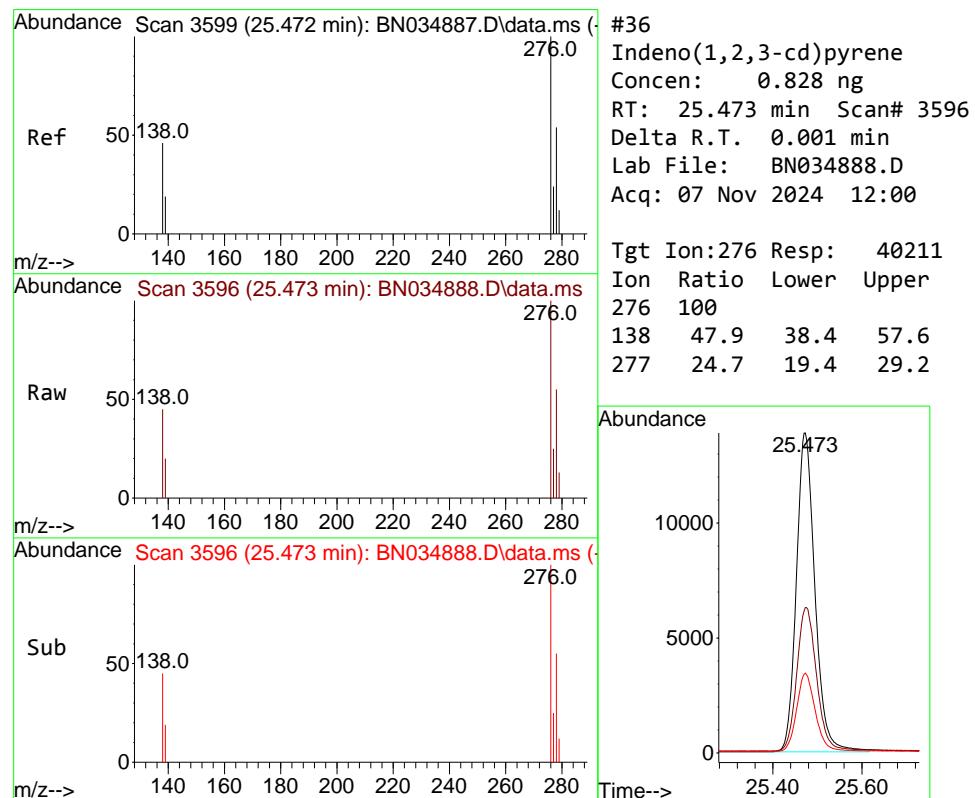
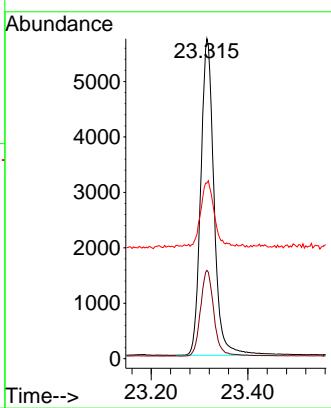


#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

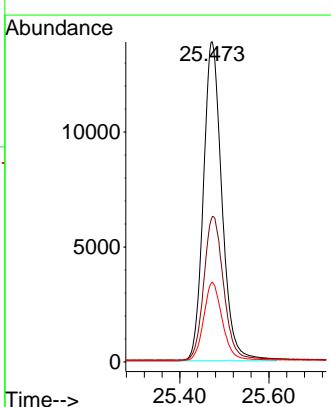
**Manual Integrations**  
**APPROVED**

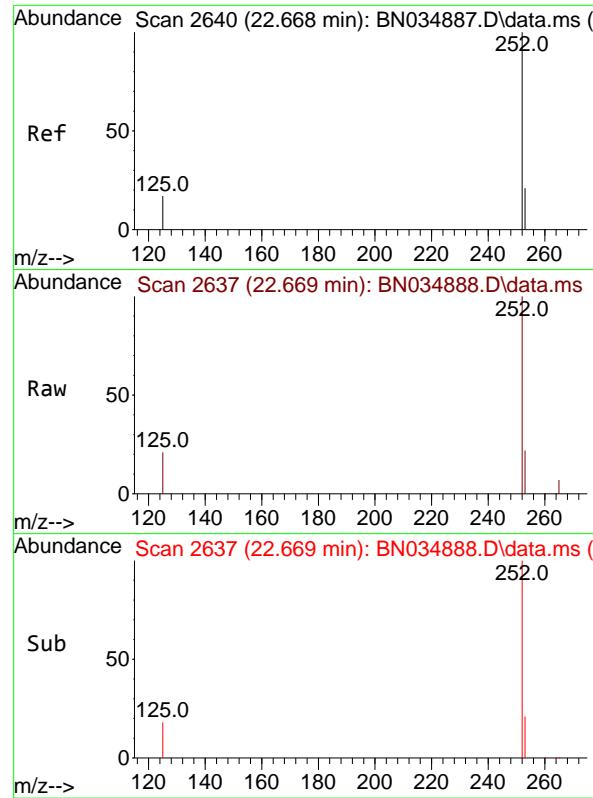
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.828 ng  
RT: 25.473 min Scan# 3596  
Delta R.T. 0.001 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:276 Resp: 40211  
Ion Ratio Lower Upper  
276 100  
138 47.9 38.4 57.6  
277 24.7 19.4 29.2



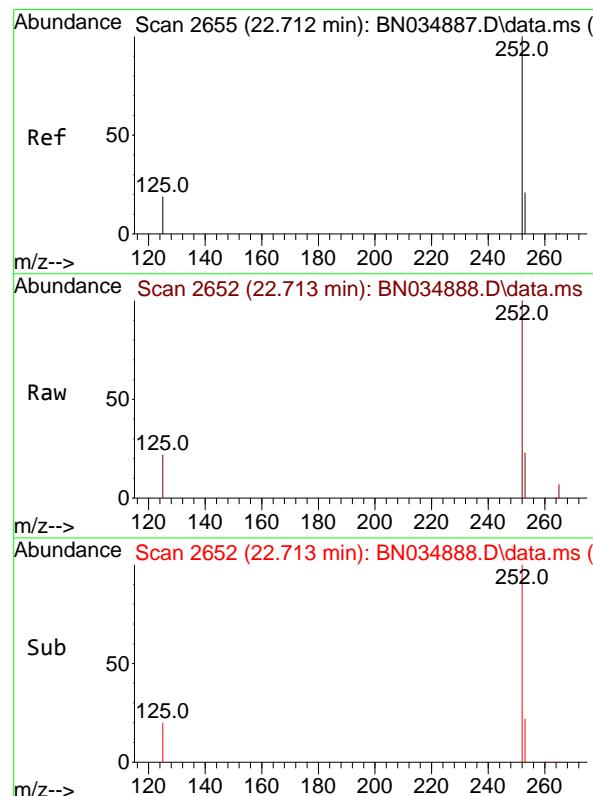
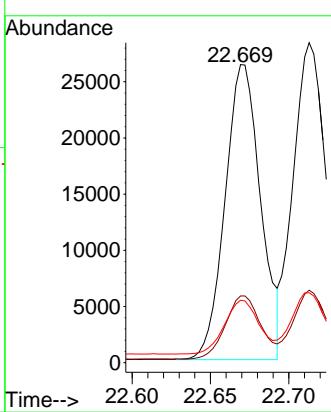


#37  
Benzo(b)fluoranthene  
Concen: 0.864 ng m  
RT: 22.669 min Scan# 2  
Delta R.T. 0.001 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC0.8

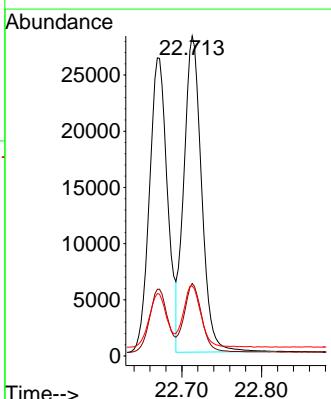
**Manual Integrations**  
**APPROVED**

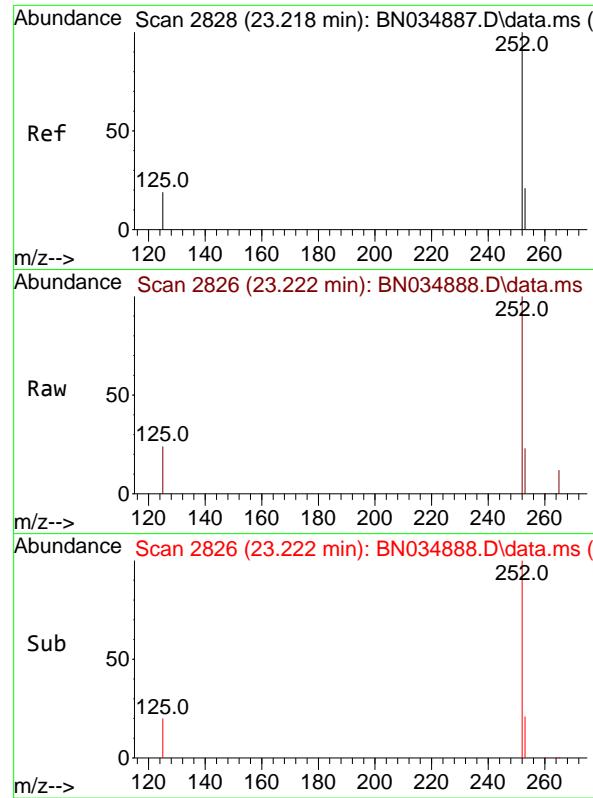
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#38  
Benzo(k)fluoranthene  
Concen: 0.865 ng  
RT: 22.713 min Scan# 2652  
Delta R.T. 0.001 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:252 Resp: 43204  
Ion Ratio Lower Upper  
252 100  
253 22.7 19.8 29.8  
125 21.9 22.6 33.8#



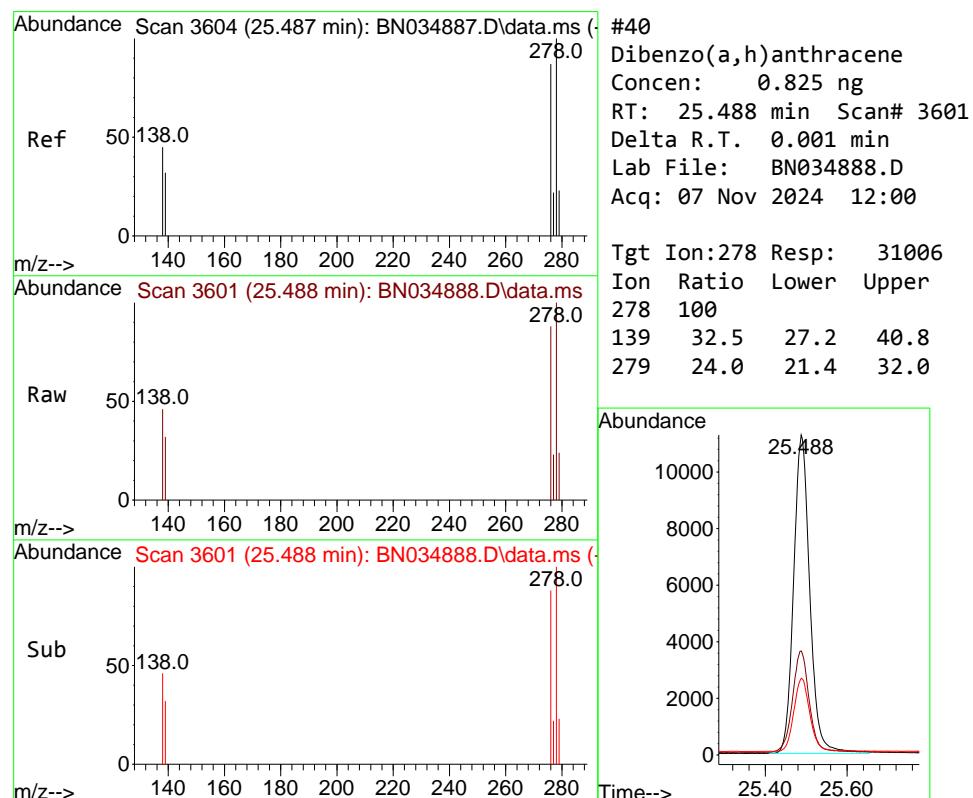
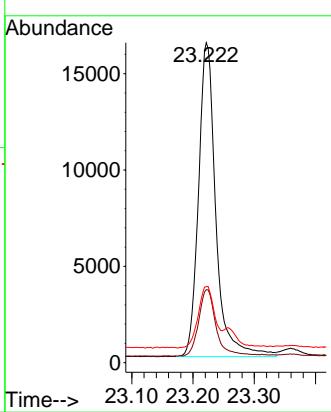


#39  
Benzo(a)pyrene  
Concen: 0.845 ng  
RT: 23.222 min Scan# 21  
Delta R.T. 0.004 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

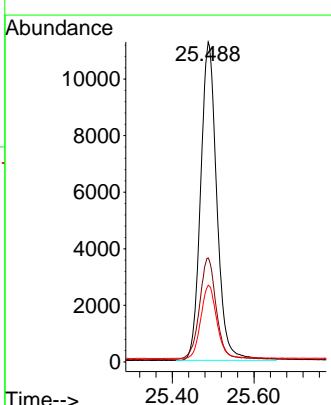
**Manual Integrations**  
**APPROVED**

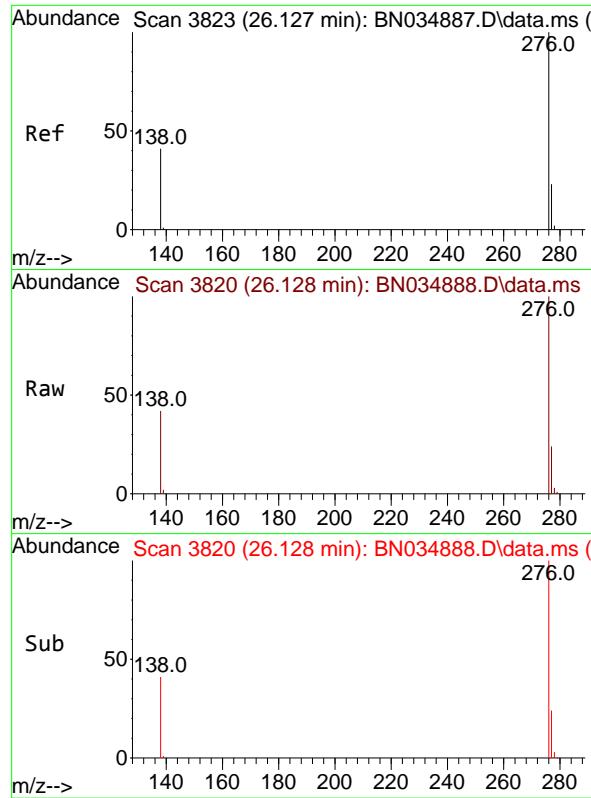
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#40  
Dibenzo(a,h)anthracene  
Concen: 0.825 ng  
RT: 25.488 min Scan# 3601  
Delta R.T. 0.001 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion:278 Resp: 31006  
Ion Ratio Lower Upper  
278 100  
139 32.5 27.2 40.8  
279 24.0 21.4 32.0



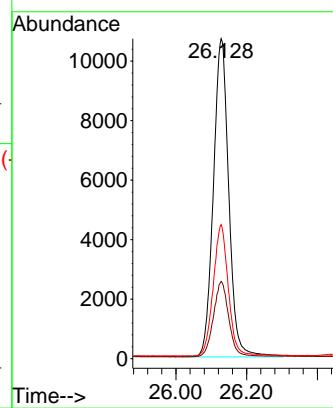


#41  
Benzo(g,h,i)perylene  
Concen: 0.812 ng  
RT: 26.128 min Scan# 3  
Delta R.T. 0.001 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034889.D  
 Acq On : 07 Nov 2024 12:36  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Nov 07 14:41:51 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

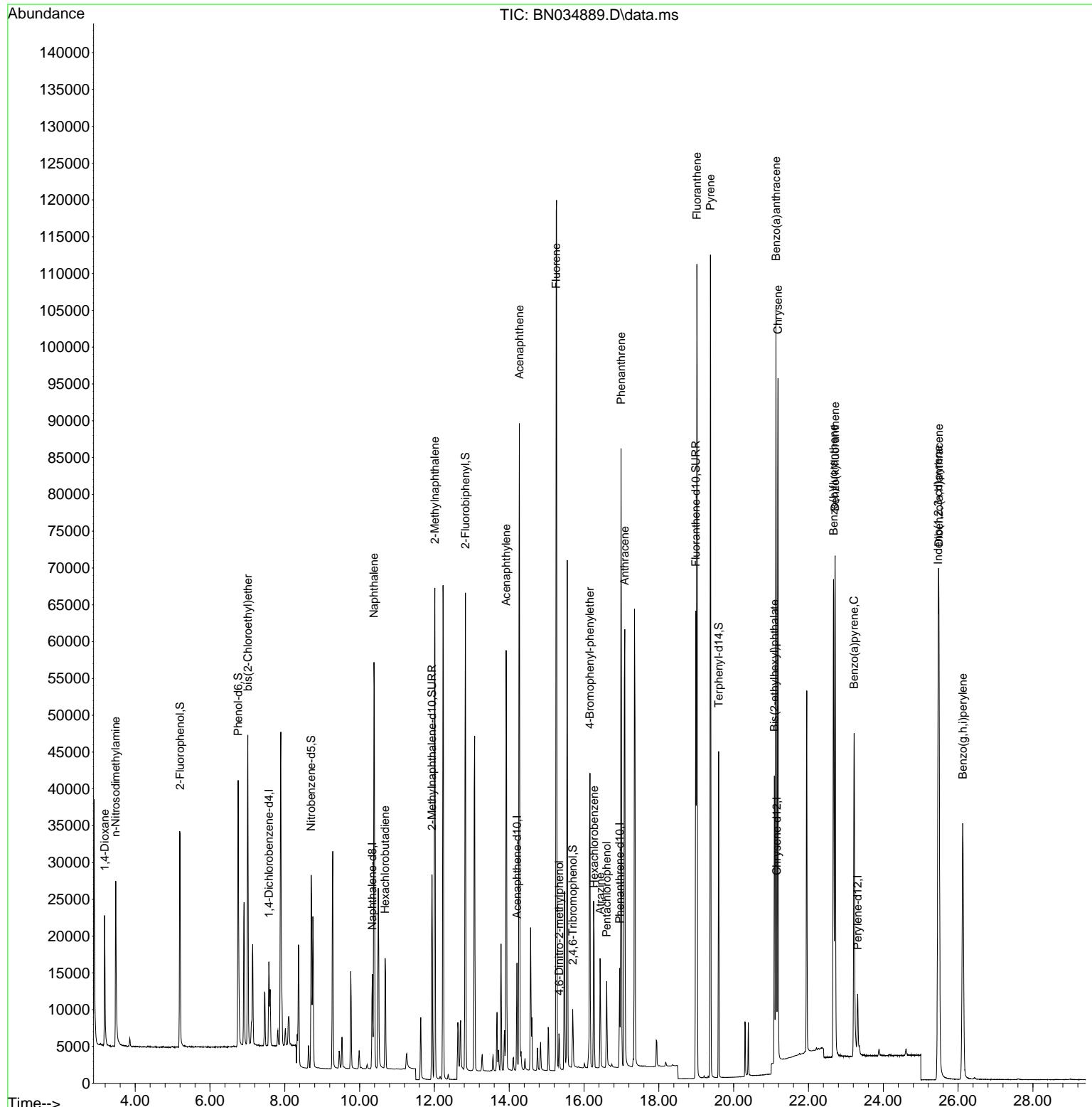
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5204	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	15811	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	7544	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	15793	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	11169	0.400	ng	0.00
35) Perylene-d12	23.315	264	10016	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	23855	1.645	ng	0.00
5) Phenol-d6	6.752	99	32264	1.676	ng	0.00
8) Nitrobenzene-d5	8.707	82	20491	1.663	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	36510	1.694	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	3893	1.649	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	52711	1.654	ng	0.00
27) Fluoranthene-d10	18.990	212	61684	1.732	ng	0.00
31) Terphenyl-d14	19.598	244	33522	1.602	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	10368	1.577	ng	99
3) n-Nitrosodimethylamine	3.480	42	14815	1.670	ng	99
6) bis(2-Chloroethyl)ether	7.012	93	27804	1.674	ng	100
9) Naphthalene	10.383	128	73745	1.681	ng	99
10) Hexachlorobutadiene	10.682	225	11536	1.650	ng	# 98
12) 2-Methylnaphthalene	12.011	142	45738	1.703	ng	99
16) Acenaphthylene	13.919	152	61551	1.691	ng	100
17) Acenaphthene	14.272	154	42622	1.692	ng	96
18) Fluorene	15.256	166	53684	1.712	ng	100
20) 4,6-Dinitro-2-methylph...	15.341	198	2808	1.627	ng	# 24
21) 4-Bromophenyl-phenylether	16.158	248	13834	1.643	ng	# 87
22) Hexachlorobenzene	16.269	284	16414	1.620	ng	98
23) Atrazine	16.431	200	10655	1.747	ng	93
24) Pentachlorophenol	16.604	266	5021	1.613	ng	97
25) Phenanthrene	16.989	178	80617	1.664	ng	100
26) Anthracene	17.088	178	70474	1.687	ng	100
28) Fluoranthene	19.018	202	89552	1.757	ng	100
30) Pyrene	19.380	202	90808	1.606	ng	100
32) Benzo(a)anthracene	21.131	228	74313	1.707	ng	99
33) Chrysene	21.185	228	76360	1.657	ng	99
34) Bis(2-ethylhexyl)phtha...	21.086	149	37441	1.498	ng	98
36) Indeno(1,2,3-cd)pyrene	25.470	276	74827	1.677	ng	99
37) Benzo(b)fluoranthene	22.669	252	72667	1.650	ng	# 90
38) Benzo(k)fluoranthene	22.713	252	77370	1.685	ng	# 89
39) Benzo(a)pyrene	23.219	252	58843	1.684	ng	# 84
40) Dibenzo(a,h)anthracene	25.485	278	57968	1.679	ng	95
41) Benzo(g,h,i)perylene	26.125	276	60450	1.649	ng	96

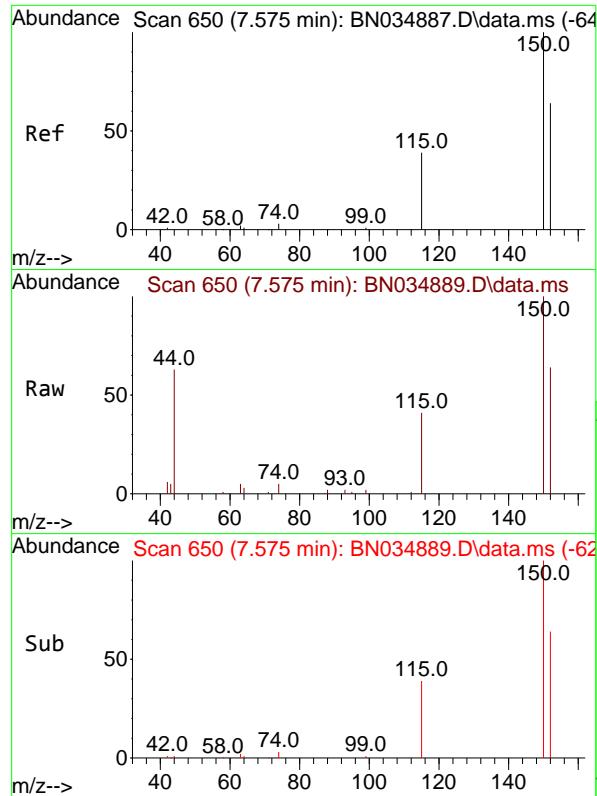
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034889.D  
 Acq On : 07 Nov 2024 12:36  
 Operator : RC/JU  
 Sample : SSTDICC1.6  
 Misc :  
 ALS Vial : 7 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC1.6

Quant Time: Nov 07 14:41:51 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

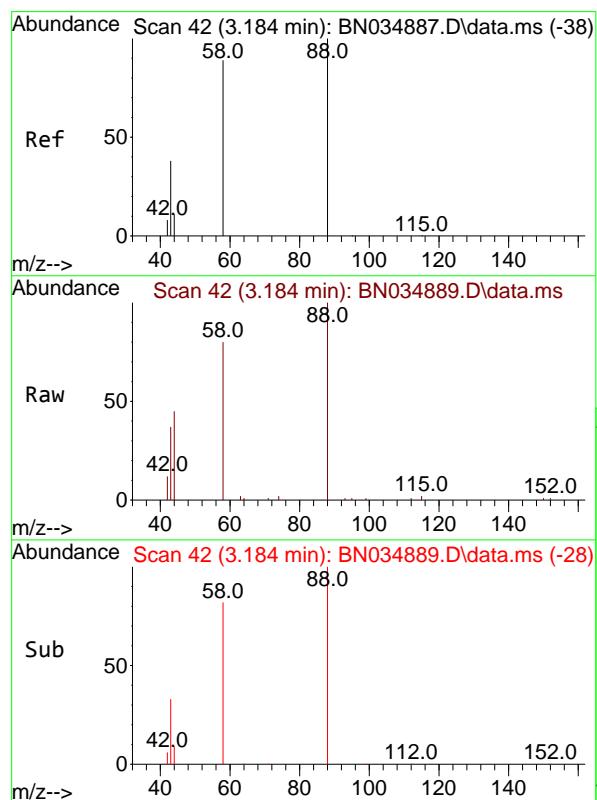
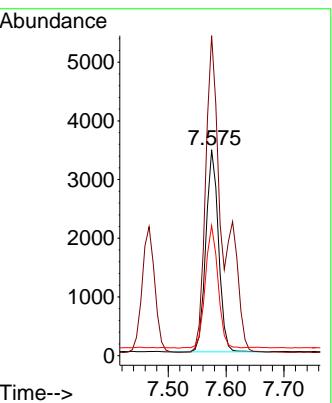




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

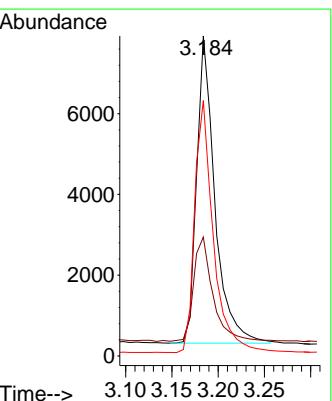
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

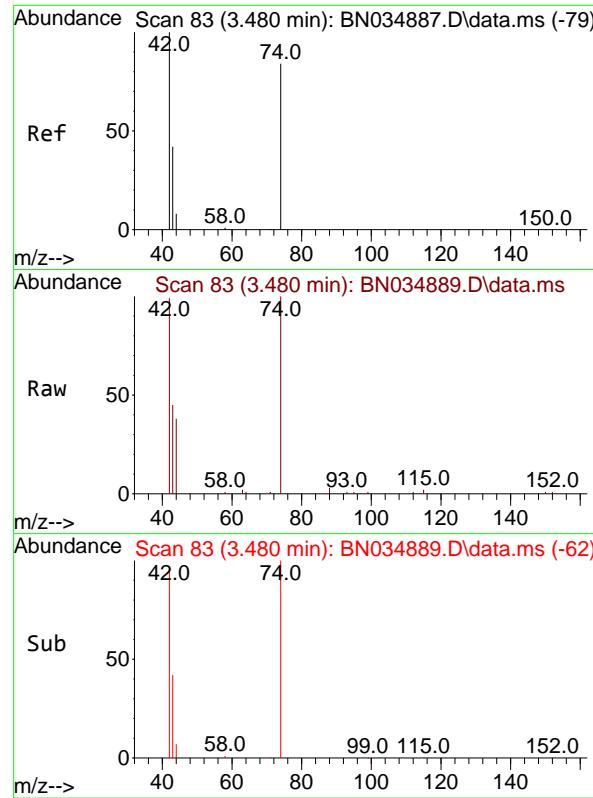
Tgt Ion:152 Resp: 5204  
 Ion Ratio Lower Upper  
 152 100  
 150 155.4 124.4 186.6  
 115 63.2 50.5 75.7



#2  
 1,4-Dioxane  
 Concen: 1.577 ng  
 RT: 3.184 min Scan# 42  
 Delta R.T. 0.000 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

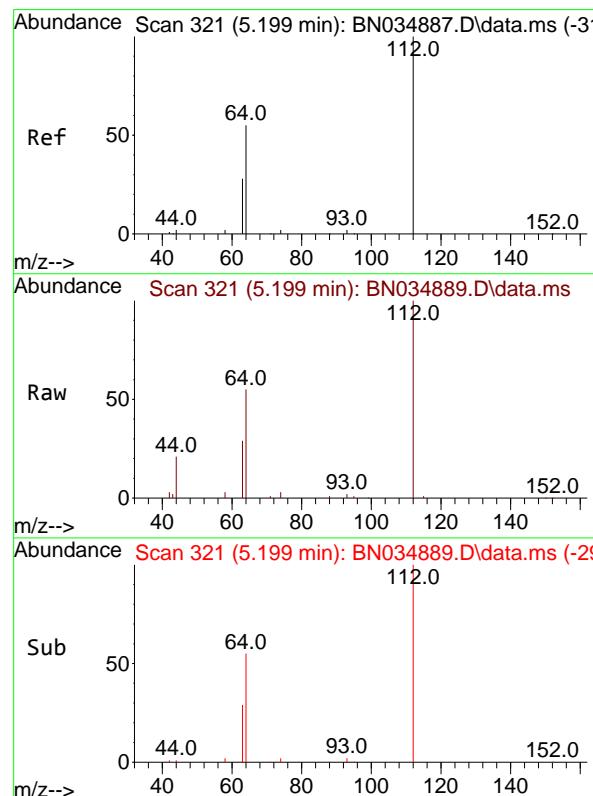
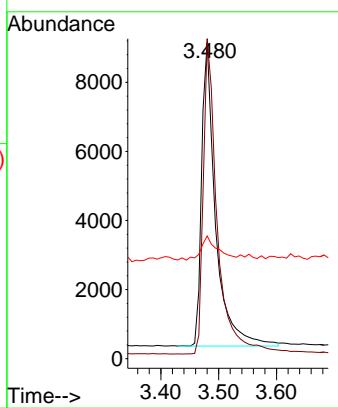
Tgt Ion: 88 Resp: 10368  
 Ion Ratio Lower Upper  
 88 100  
 43 36.0 28.2 42.2  
 58 84.4 67.1 100.7





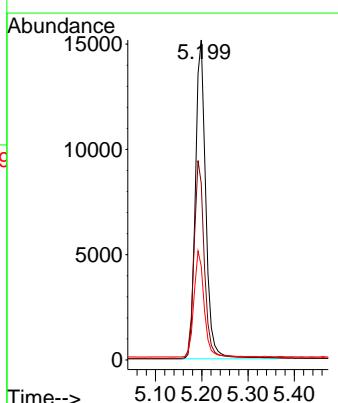
#3  
n-Nitrosodimethylamine  
Concen: 1.670 ng  
RT: 3.480 min Scan# 8  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
ClientSampleId : SSTDICC1.6  
Acq: 07 Nov 2024 12:36

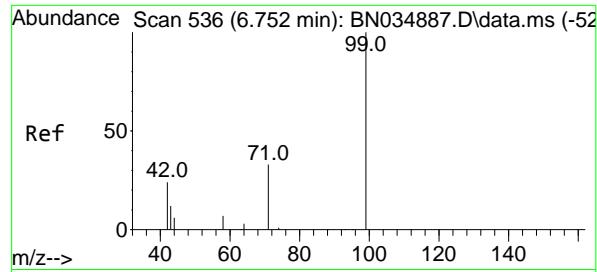
Tgt Ion: 42 Resp: 14815  
Ion Ratio Lower Upper  
42 100  
74 103.9 83.4 125.2  
44 9.3 8.6 12.8



#4  
2-Fluorophenol  
Concen: 1.645 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

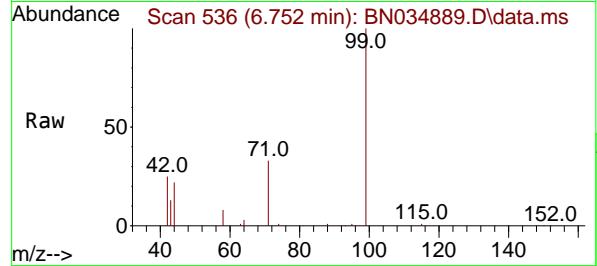
Tgt Ion:112 Resp: 23855  
Ion Ratio Lower Upper  
112 100  
64 61.6 49.6 74.4  
63 32.5 26.3 39.5



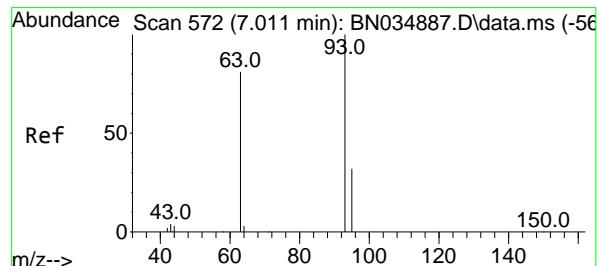
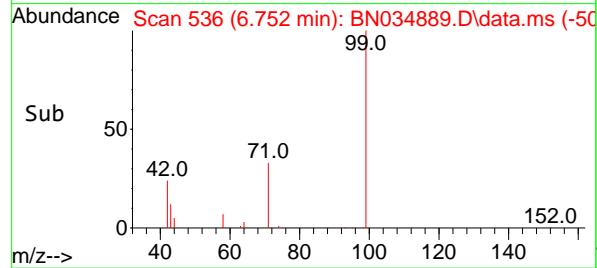
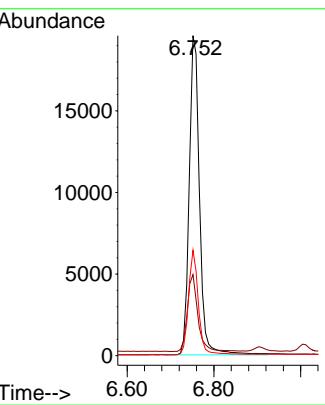


#5  
Phenol-d6  
Concen: 1.676 ng  
RT: 6.752 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

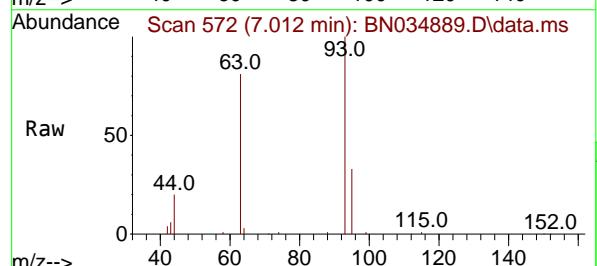
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6



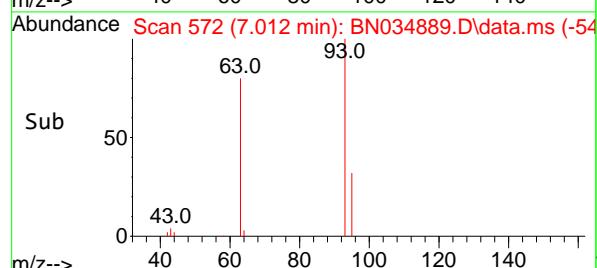
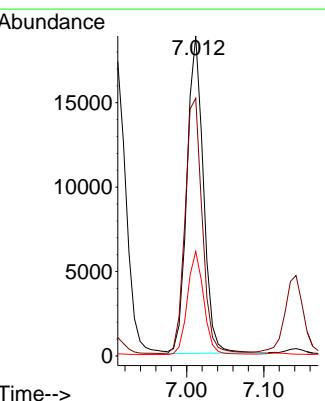
Tgt Ion: 99 Resp: 32264  
Ion Ratio Lower Upper  
99 100  
42 24.8 20.2 30.2  
71 31.4 25.4 38.0

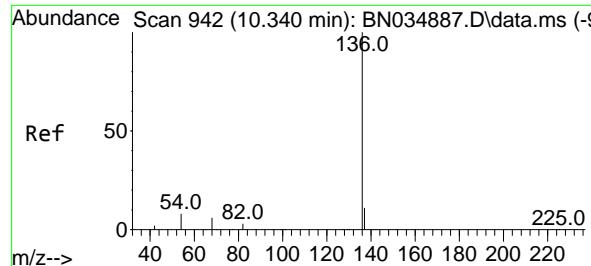


#6  
bis(2-Chloroethyl)ether  
Concen: 1.674 ng  
RT: 7.012 min Scan# 572  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36



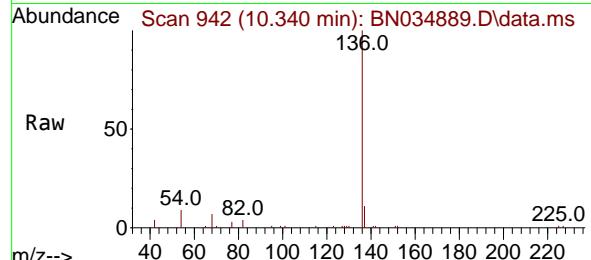
Tgt Ion: 93 Resp: 27804  
Ion Ratio Lower Upper  
93 100  
63 84.2 67.5 101.3  
95 32.4 25.7 38.5



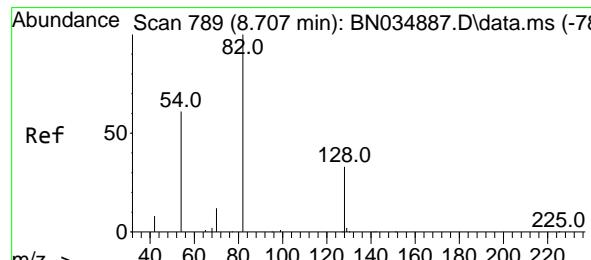
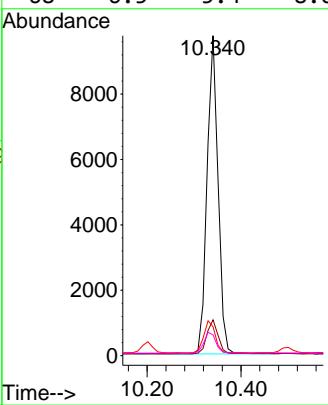
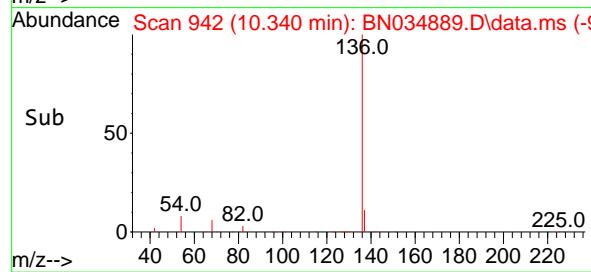


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

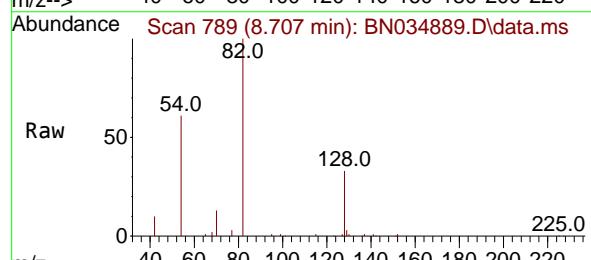
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6



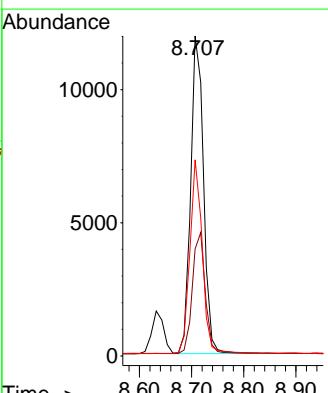
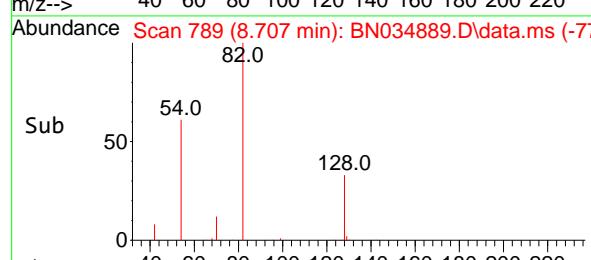
Tgt Ion:136 Resp: 15811  
 Ion Ratio Lower Upper  
 136 100  
 137 11.2 8.9 13.3  
 54 9.1 6.9 10.3  
 68 6.5 5.4 8.0

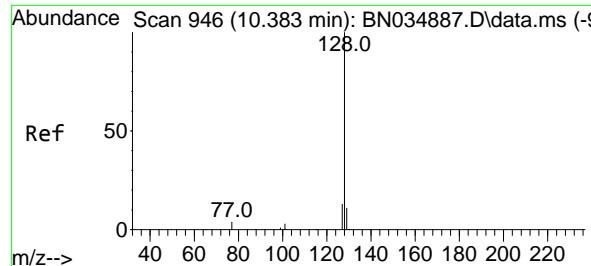


#8  
 Nitrobenzene-d5  
 Concen: 1.663 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

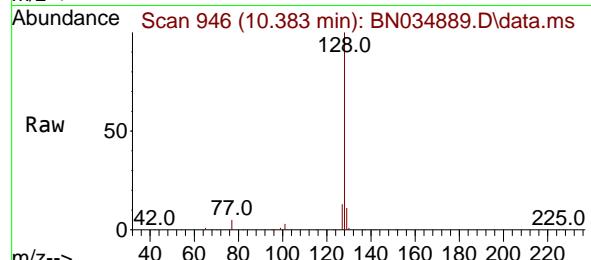


Tgt Ion: 82 Resp: 20491  
 Ion Ratio Lower Upper  
 82 100  
 128 33.4 28.1 42.1  
 54 61.3 49.8 74.6

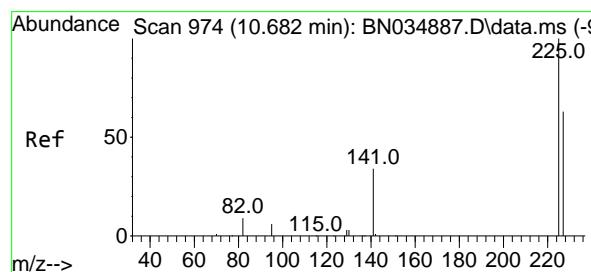
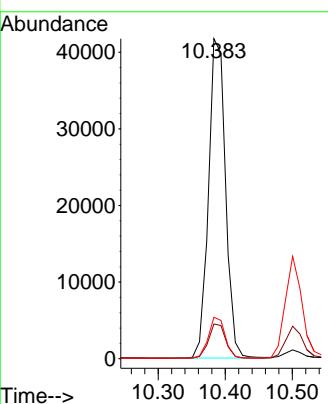
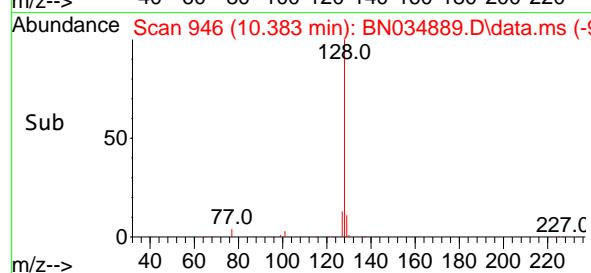




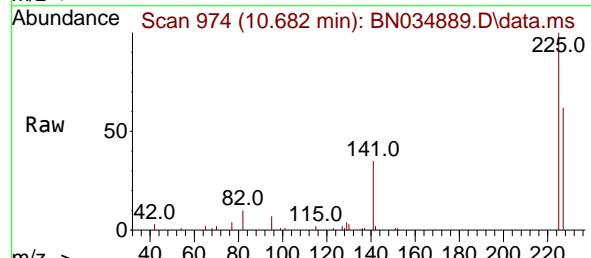
#9  
Naphthalene  
Concen: 1.681 ng  
RT: 10.383 min Scan# 9  
Instrument :  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36



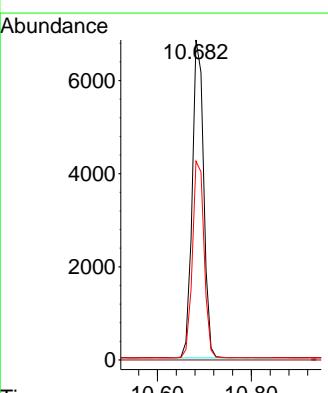
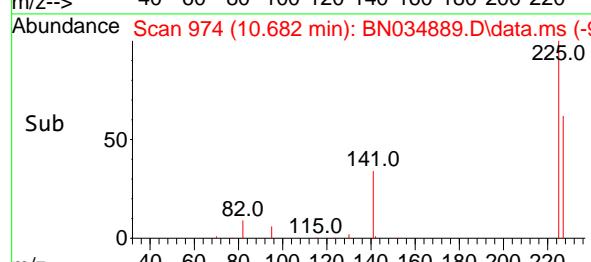
Tgt Ion:128 Resp: 73745  
Ion Ratio Lower Upper  
128 100  
129 10.9 9.0 13.4  
127 12.9 10.8 16.2

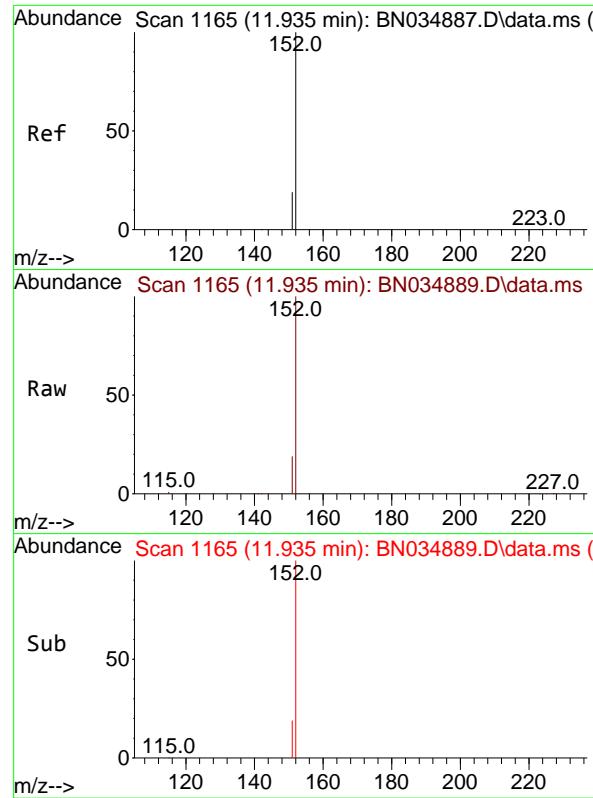


#10  
Hexachlorobutadiene  
Concen: 1.650 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36



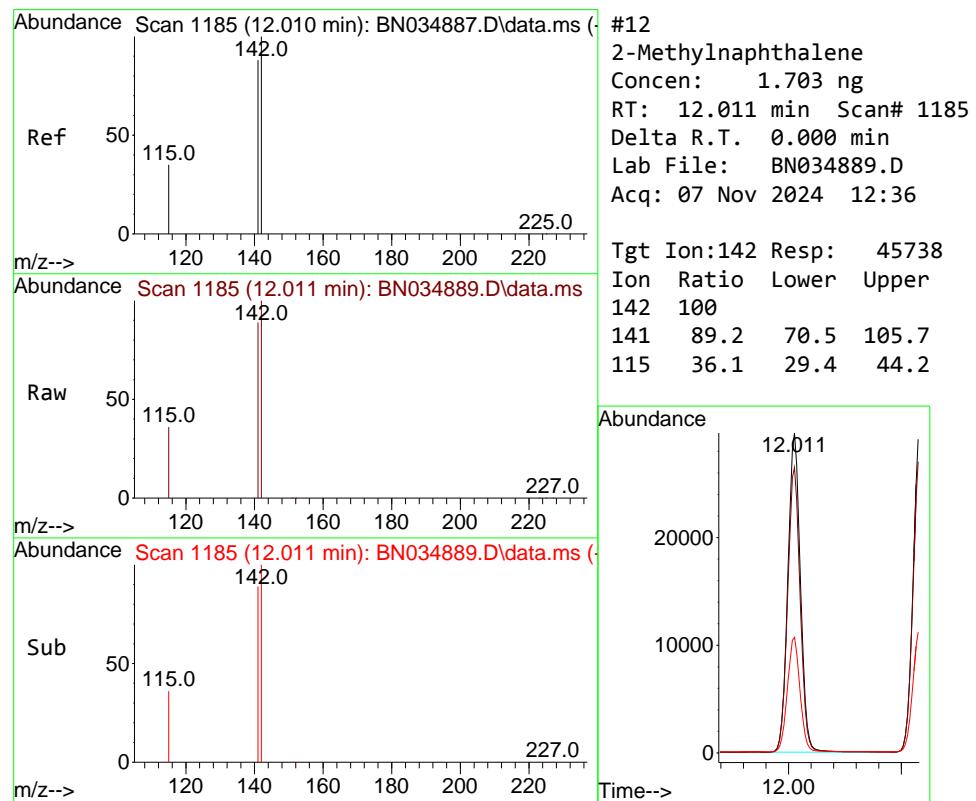
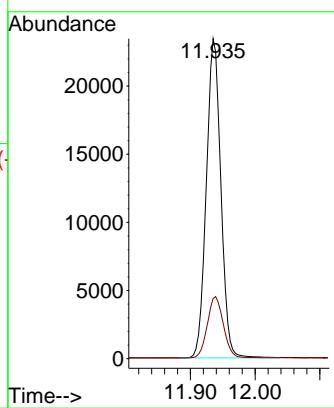
Tgt Ion:225 Resp: 11536  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.2 52.0 78.0





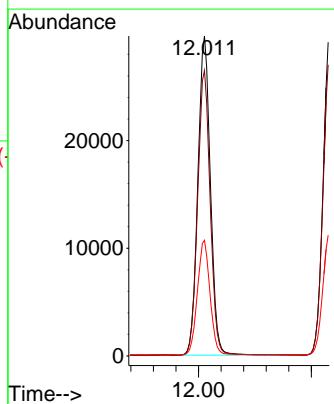
#11  
2-Methylnaphthalene-d10  
Concen: 1.694 ng  
RT: 11.935 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
ClientSampleId : SSTDICC1.6  
Acq: 07 Nov 2024 12:36

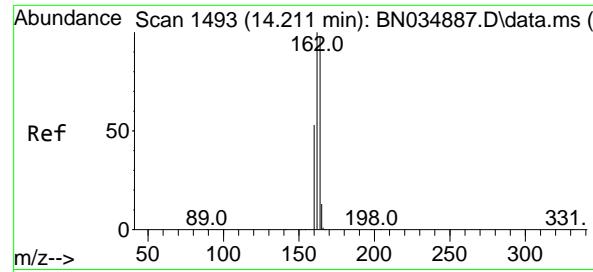
Tgt Ion:152 Resp: 36510  
Ion Ratio Lower Upper  
152 100  
151 21.3 17.1 25.7



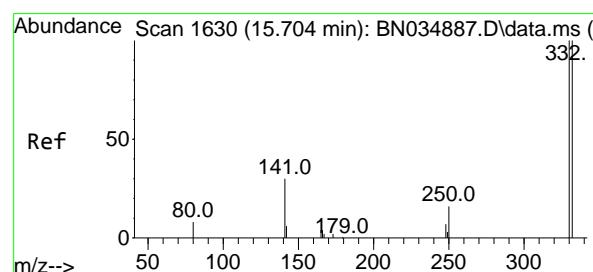
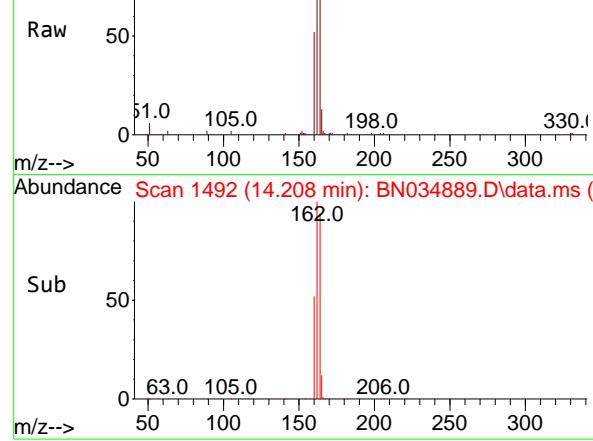
#12  
2-Methylnaphthalene  
Concen: 1.703 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:142 Resp: 45738  
Ion Ratio Lower Upper  
142 100  
141 89.2 70.5 105.7  
115 36.1 29.4 44.2

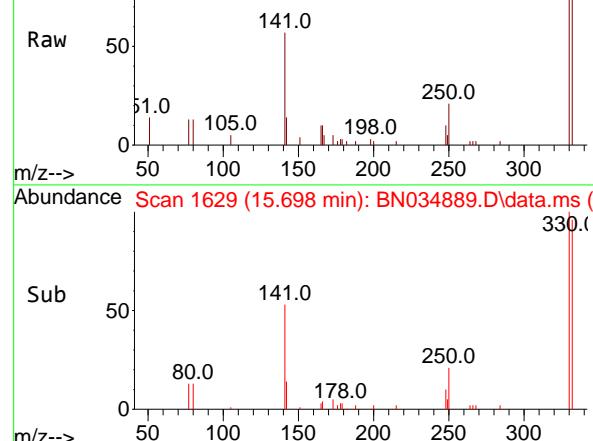




Ref 50  
Scan 1492 (14.208 min): BN034889.D\data.ms



Ref 50  
Scan 1629 (15.698 min): BN034889.D\data.ms



Raw 50  
Scan 1629 (15.698 min): BN034889.D\data.ms

Sub 50  
Scan 1629 (15.698 min): BN034889.D\data.ms

#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.208 min Scan# 1

Delta R.T. -0.003 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

Tgt Ion:164 Resp: 7544

Ion Ratio Lower Upper

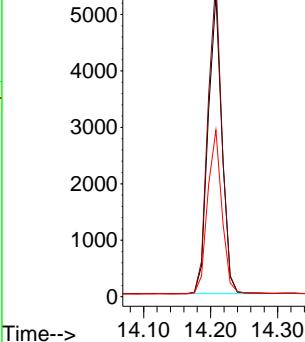
164 100

162 106.0 81.9 122.9

160 55.2 43.5 65.3

Abundance

14.208



#14

2,4,6-Tribromophenol

Concen: 1.649 ng

RT: 15.698 min Scan# 1629

Delta R.T. -0.006 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

Tgt Ion:330 Resp: 3893

Ion Ratio Lower Upper

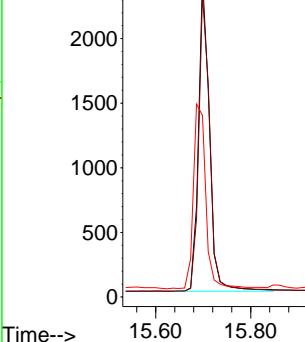
330 100

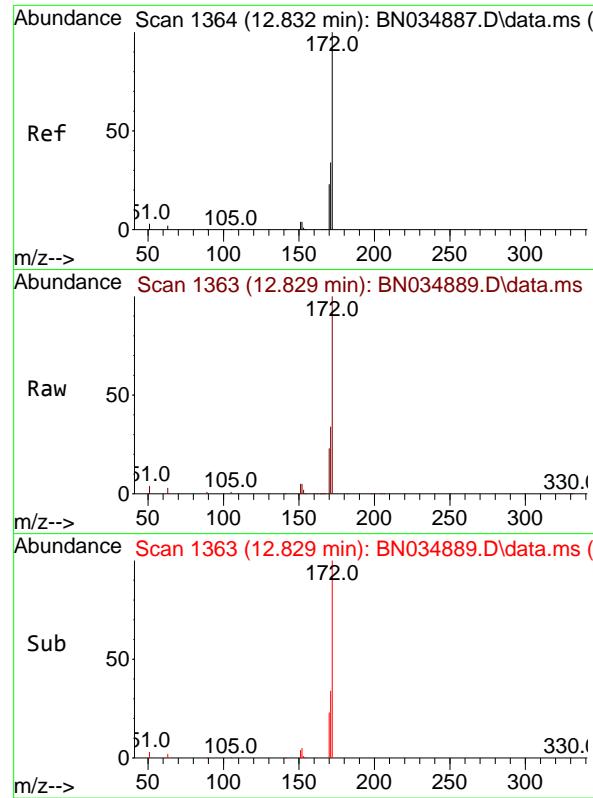
332 96.1 77.1 115.7

141 67.2 54.1 81.1

Abundance

15.698

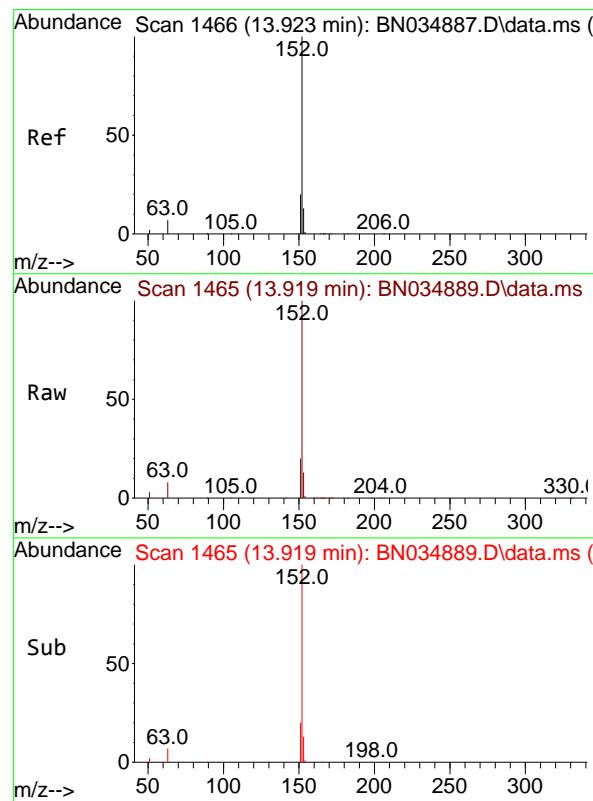
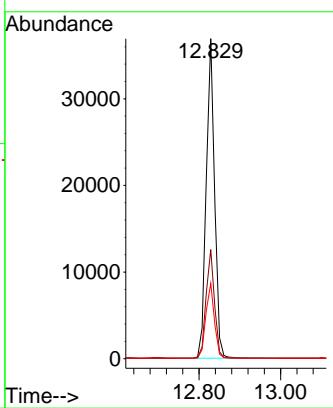




#15  
2-Fluorobiphenyl  
Concen: 1.654 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

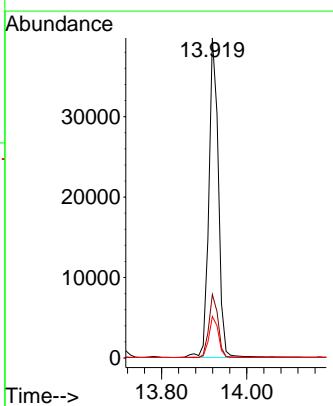
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

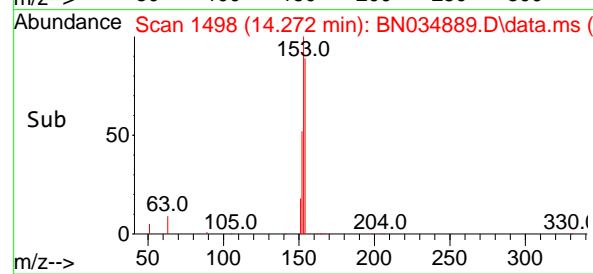
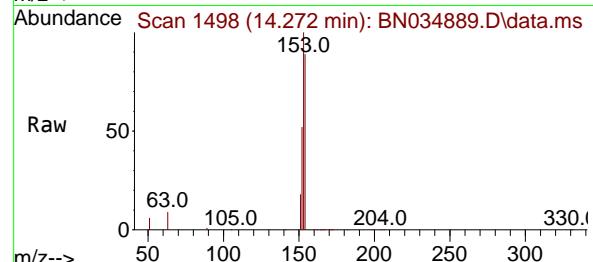
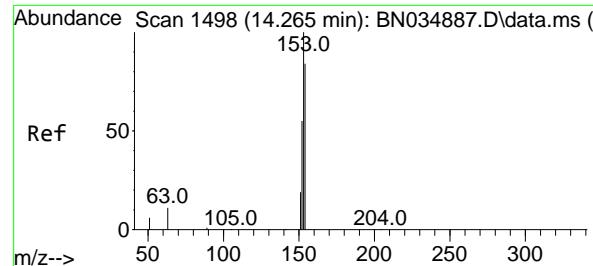
Tgt Ion:172 Resp: 52711  
Ion Ratio Lower Upper  
172 100  
171 34.1 27.9 41.9  
170 23.5 19.0 28.4



#16  
Acenaphthylene  
Concen: 1.691 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:152 Resp: 61551  
Ion Ratio Lower Upper  
152 100  
151 19.3 15.2 22.8  
153 12.9 10.4 15.6





#17

Acenaphthene

Concen: 1.692 ng

RT: 14.272 min Scan# 1

Delta R.T. 0.007 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

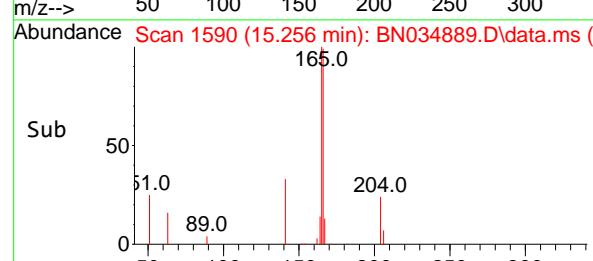
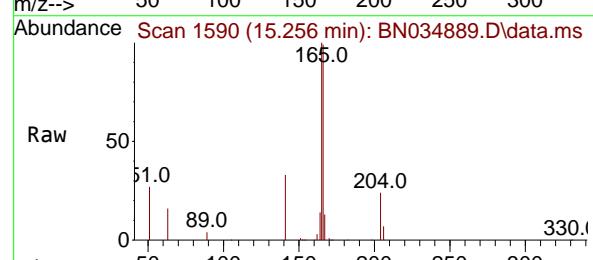
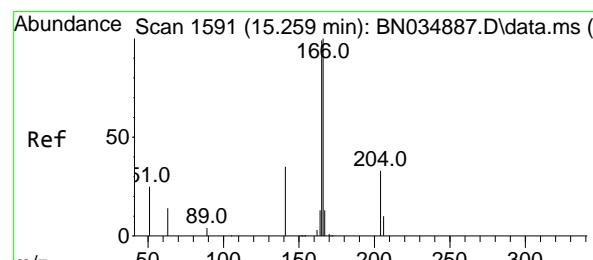
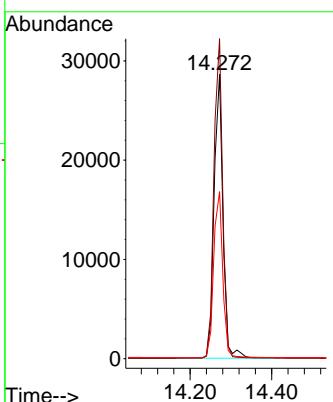
Tgt Ion:154 Resp: 42622

Ion Ratio Lower Upper

154 100

153 111.3 92.2 138.2

152 60.6 51.1 76.7



#18

Fluorene

Concen: 1.712 ng

RT: 15.256 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

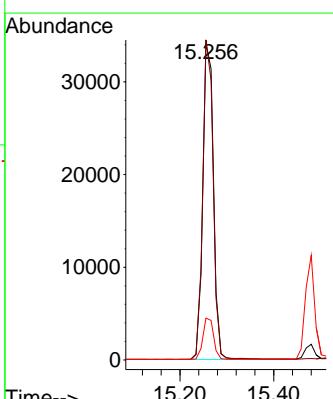
Tgt Ion:166 Resp: 53684

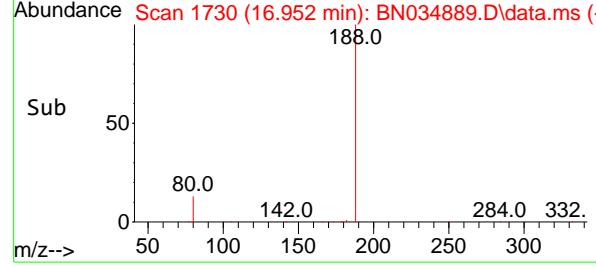
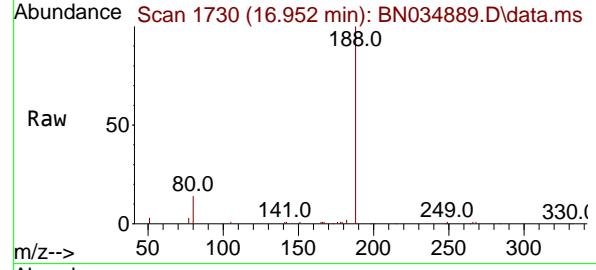
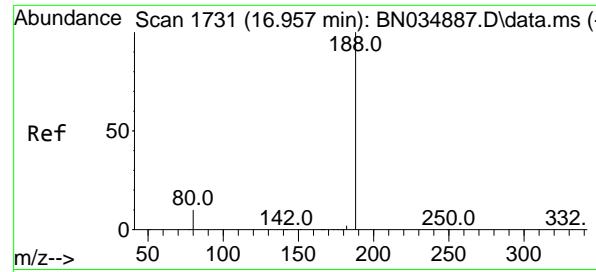
Ion Ratio Lower Upper

166 100

165 99.0 79.5 119.3

167 13.2 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.952 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

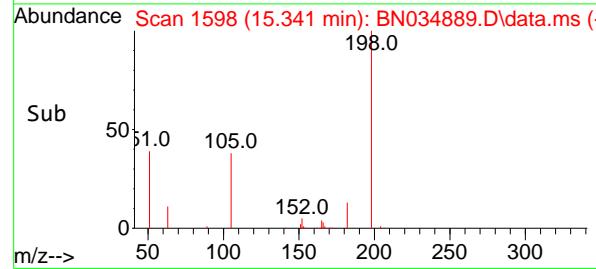
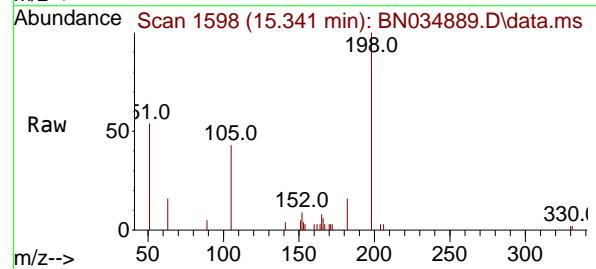
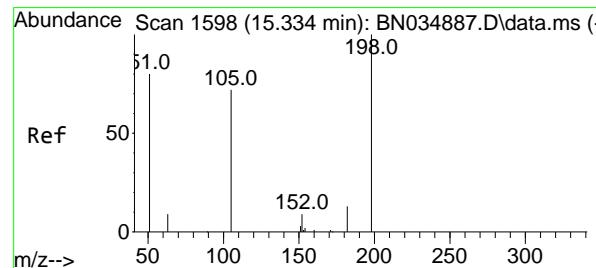
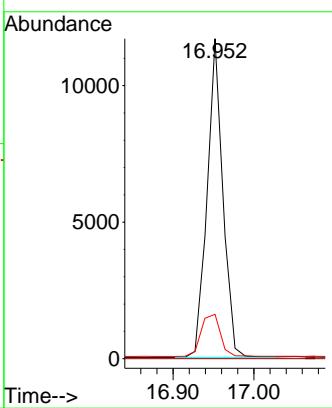
Tgt Ion:188 Resp: 15793

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.8 8.6 12.8#



#20

4,6-Dinitro-2-methylphenol

Concen: 1.627 ng

RT: 15.341 min Scan# 1598

Delta R.T. 0.007 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

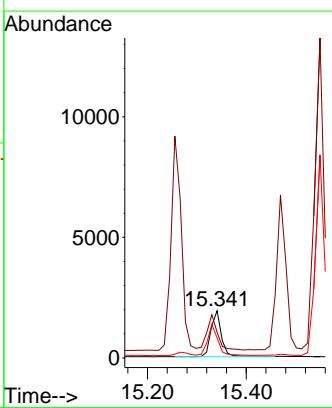
Tgt Ion:198 Resp: 2808

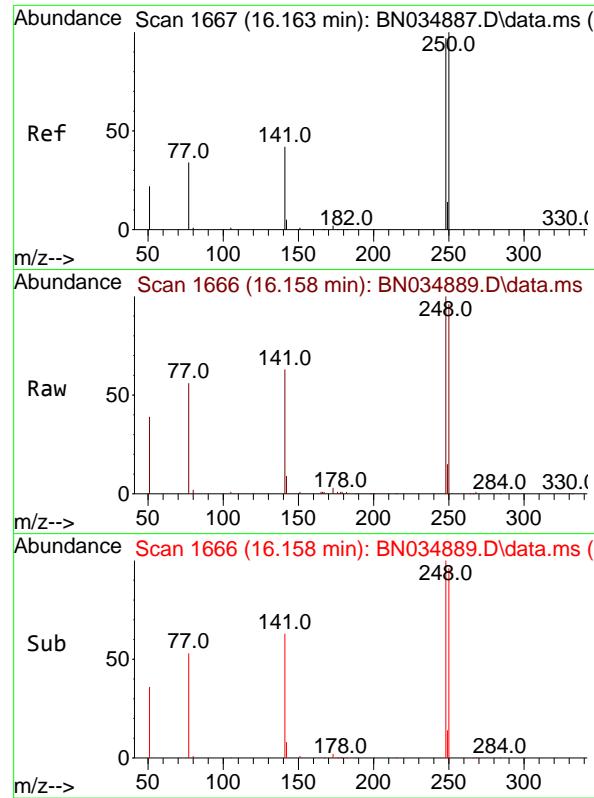
Ion Ratio Lower Upper

198 100

51 54.1 141.8 212.8#

105 42.5 75.6 113.4#

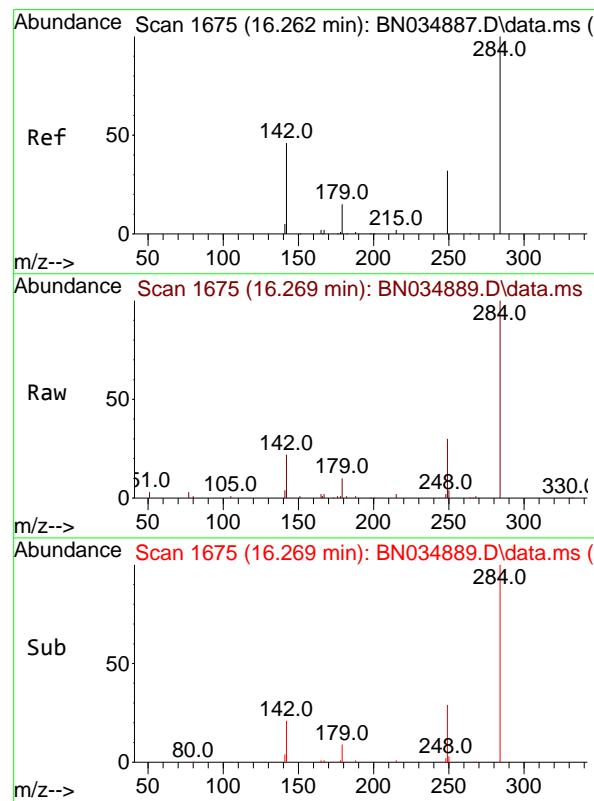
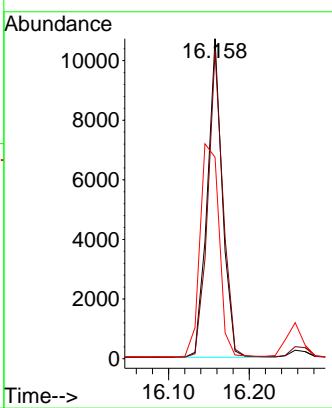




#21  
 4-Bromophenyl-phenylether  
 Concen: 1.643 ng  
 RT: 16.158 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

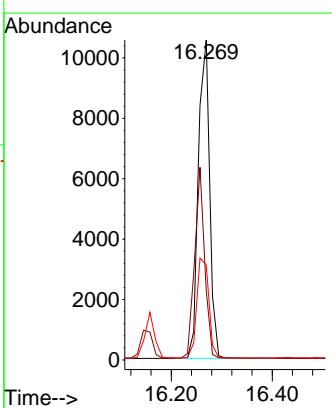
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

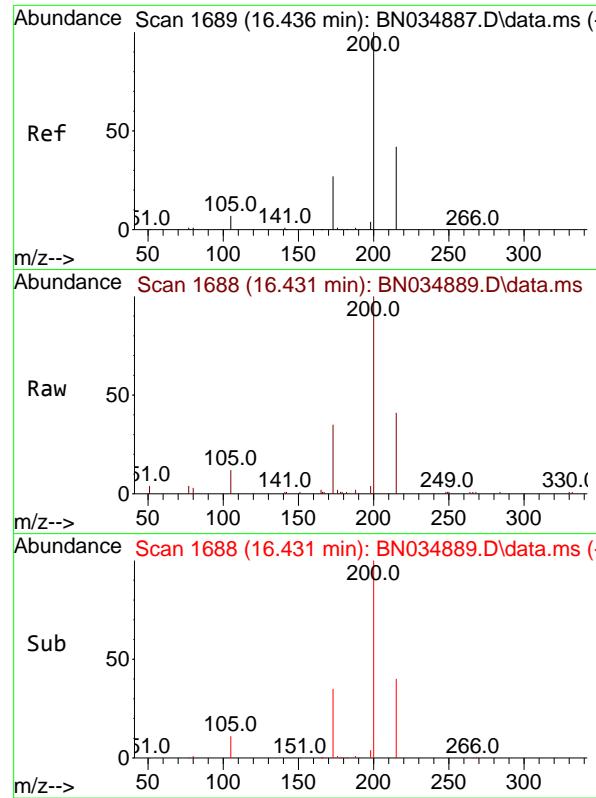
Tgt Ion:248 Resp: 13834  
 Ion Ratio Lower Upper  
 248 100  
 250 96.1 82.2 123.4  
 141 63.0 36.2 54.2#



#22  
 Hexachlorobenzene  
 Concen: 1.620 ng  
 RT: 16.269 min Scan# 1675  
 Delta R.T. 0.007 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

Tgt Ion:284 Resp: 16414  
 Ion Ratio Lower Upper  
 284 100  
 142 53.1 43.4 65.2  
 249 33.4 25.8 38.6

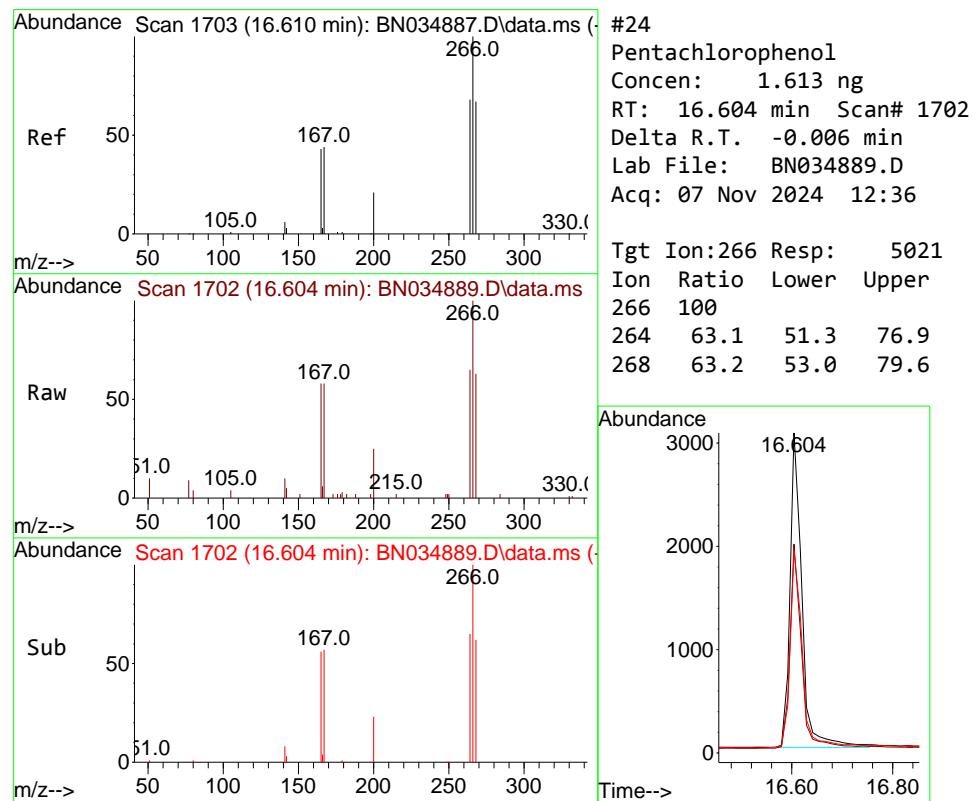
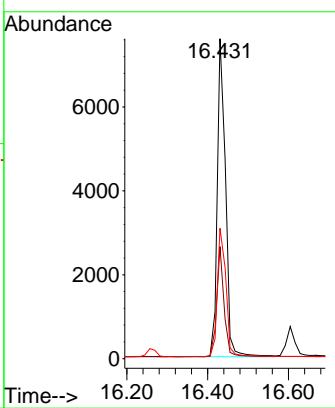




#23  
Atrazine  
Concen: 1.747 ng  
RT: 16.431 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

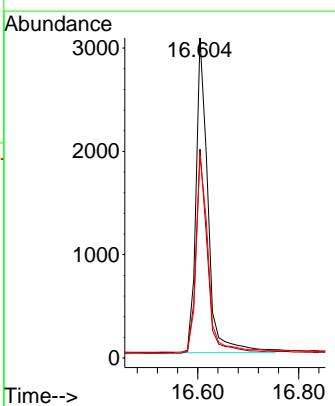
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

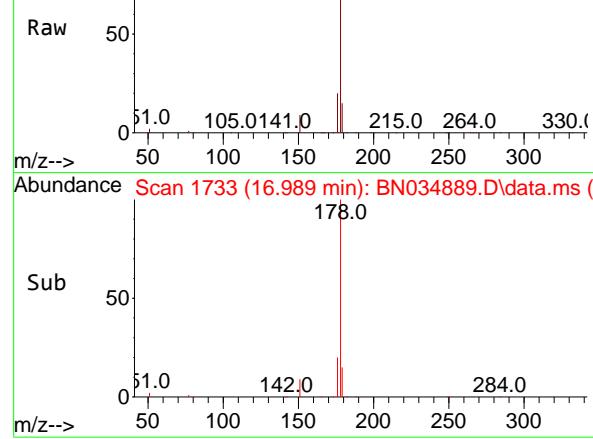
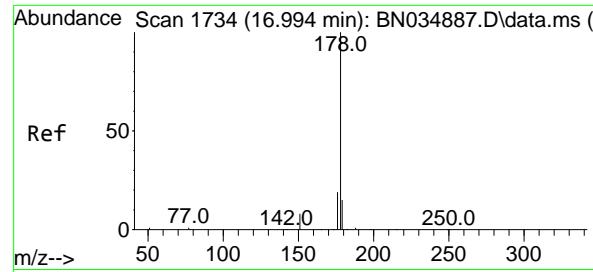
Tgt Ion:200 Resp: 10655  
Ion Ratio Lower Upper  
200 100  
173 35.1 23.4 35.2  
215 40.8 35.4 53.0



#24  
Pentachlorophenol  
Concen: 1.613 ng  
RT: 16.604 min Scan# 1702  
Delta R.T. -0.006 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:266 Resp: 5021  
Ion Ratio Lower Upper  
266 100  
264 63.1 51.3 76.9  
268 63.2 53.0 79.6





#25

Phenanthrene

Concen: 1.664 ng

RT: 16.989 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

Instrument :

BNA\_N

ClientSampleId :

SSTDICC1.6

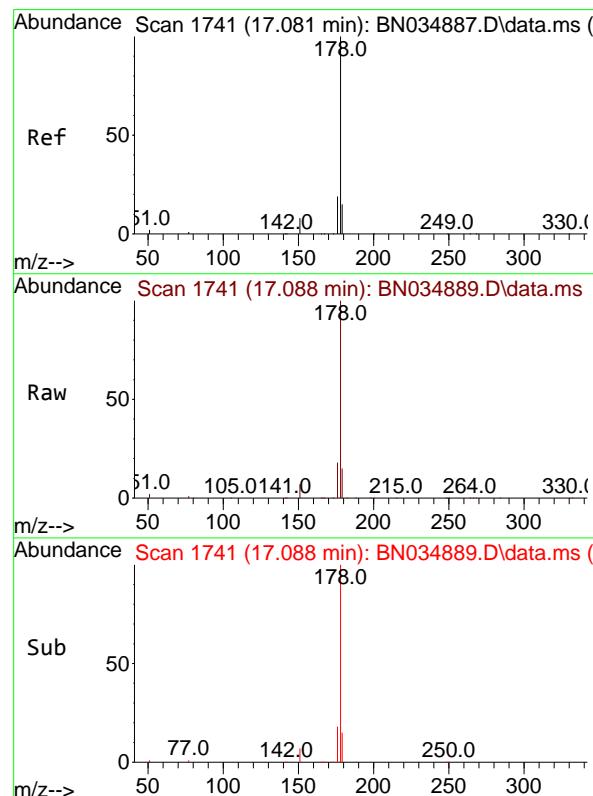
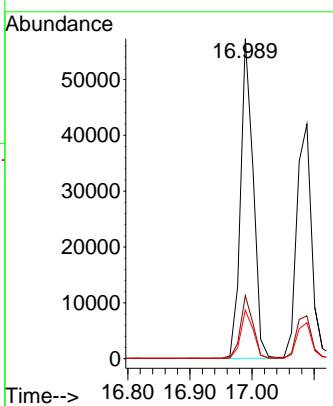
Tgt Ion:178 Resp: 80617

Ion Ratio Lower Upper

178 100

176 19.3 15.5 23.3

179 15.2 12.2 18.2



#26

Anthracene

Concen: 1.687 ng

RT: 17.088 min Scan# 1741

Delta R.T. 0.007 min

Lab File: BN034889.D

Acq: 07 Nov 2024 12:36

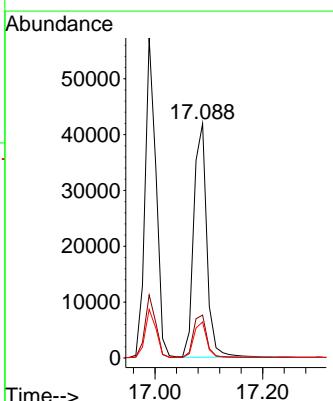
Tgt Ion:178 Resp: 70474

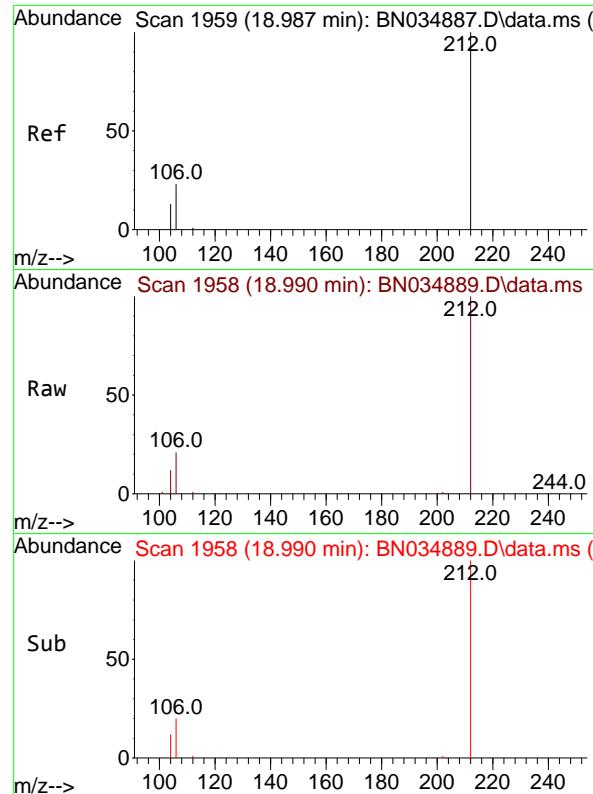
Ion Ratio Lower Upper

178 100

176 18.8 15.0 22.6

179 15.2 12.1 18.1

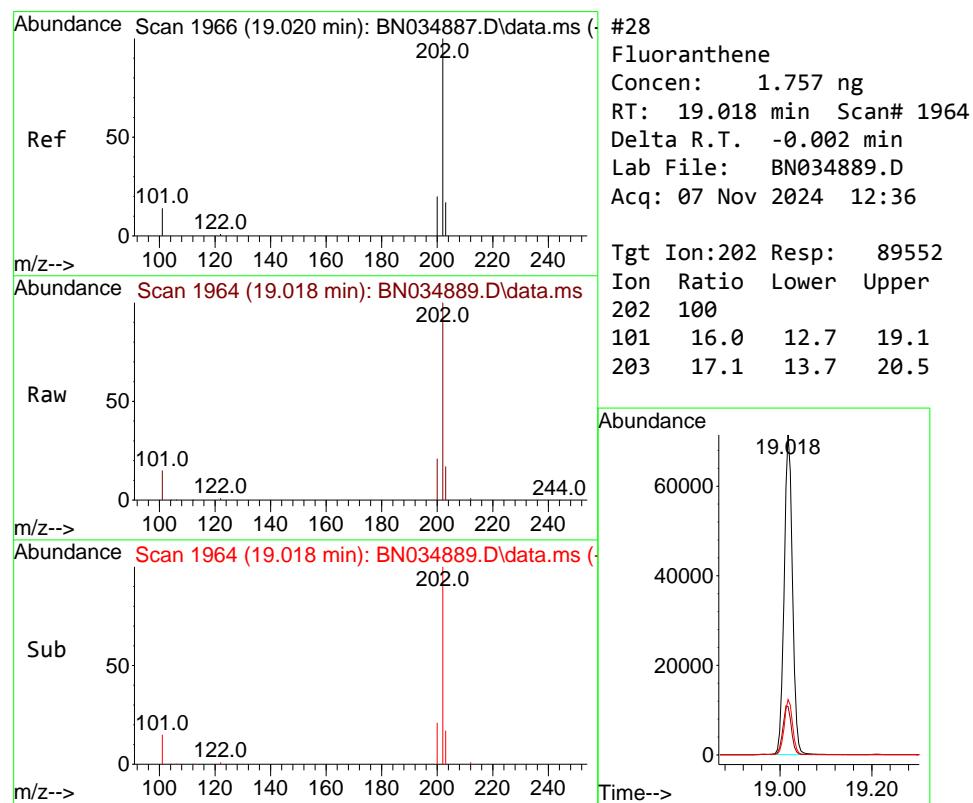
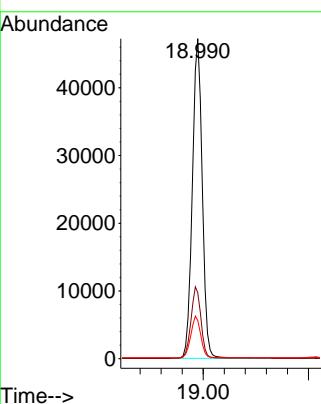




#27  
 Fluoranthene-d10  
 Concen: 1.732 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

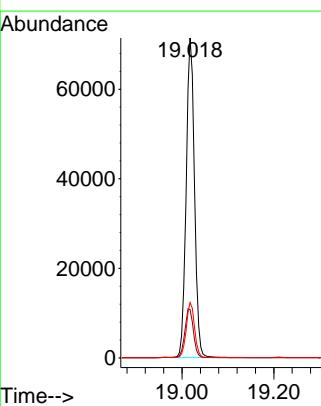
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

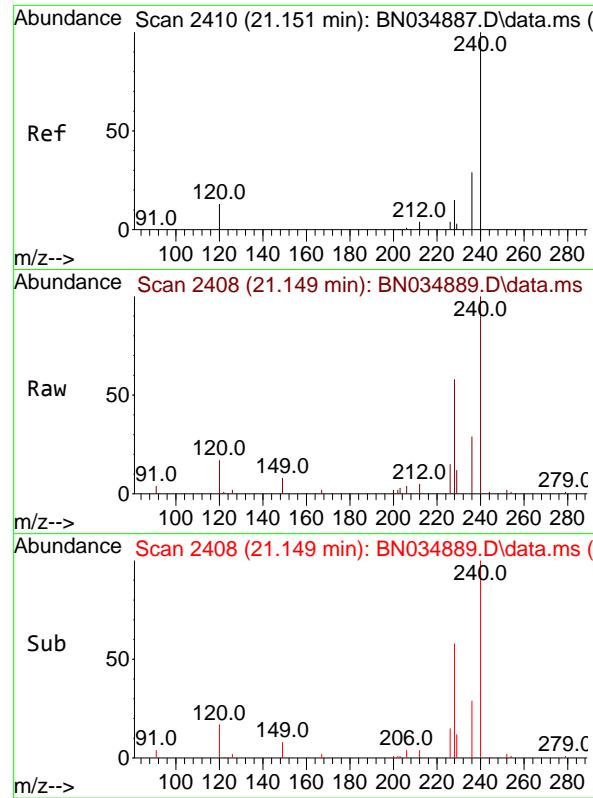
Tgt Ion:212 Resp: 61684  
 Ion Ratio Lower Upper  
 212 100  
 106 22.4 18.2 27.4  
 104 13.0 10.6 15.8



#28  
 Fluoranthene  
 Concen: 1.757 ng  
 RT: 19.018 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

Tgt Ion:202 Resp: 89552  
 Ion Ratio Lower Upper  
 202 100  
 101 16.0 12.7 19.1  
 203 17.1 13.7 20.5

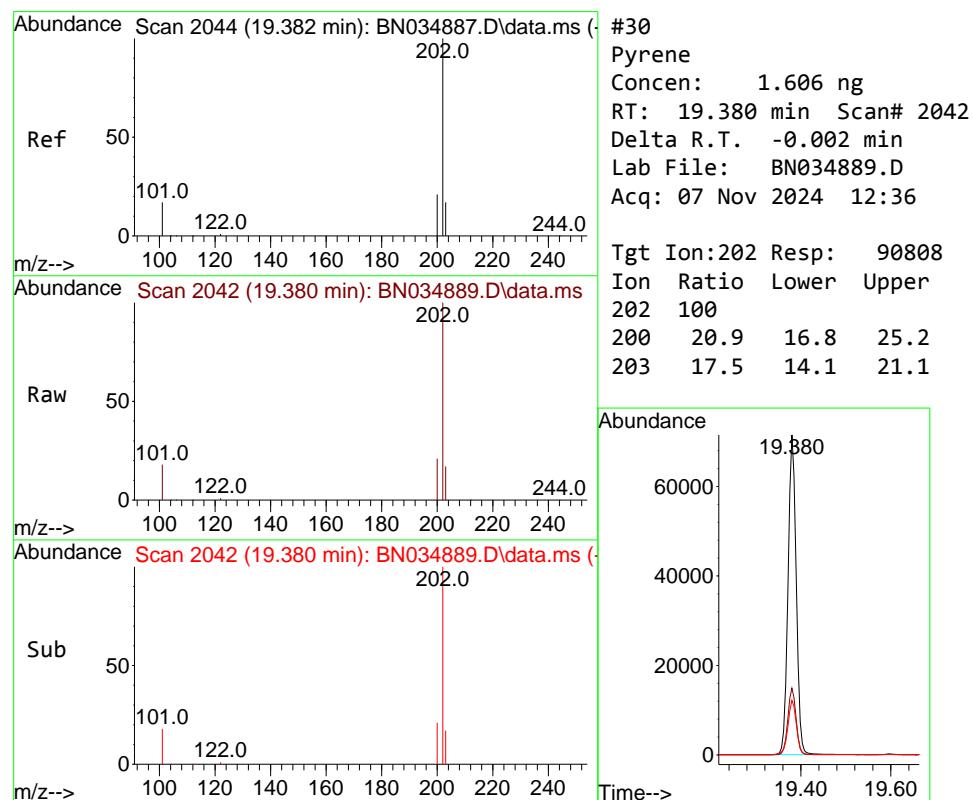
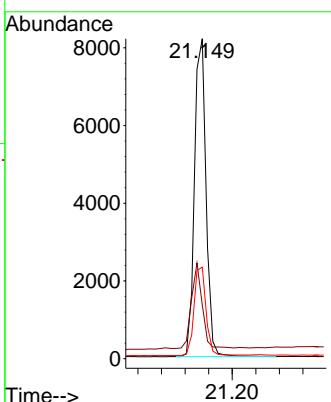




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

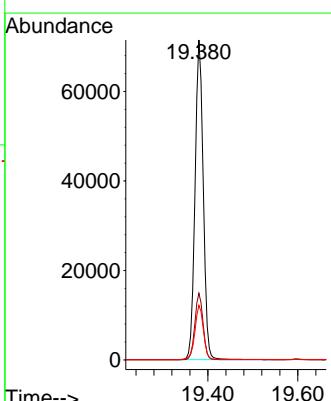
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

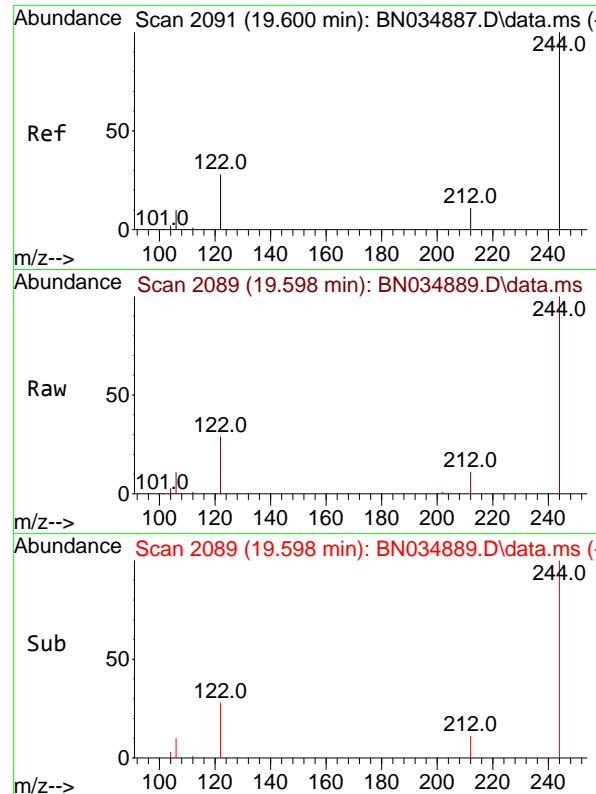
Tgt Ion:240 Resp: 11169  
Ion Ratio Lower Upper  
240 100  
120 16.8 13.8 20.8  
236 28.6 23.8 35.6



#30  
Pyrene  
Concen: 1.606 ng  
RT: 19.380 min Scan# 2042  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:202 Resp: 90808  
Ion Ratio Lower Upper  
202 100  
200 20.9 16.8 25.2  
203 17.5 14.1 21.1

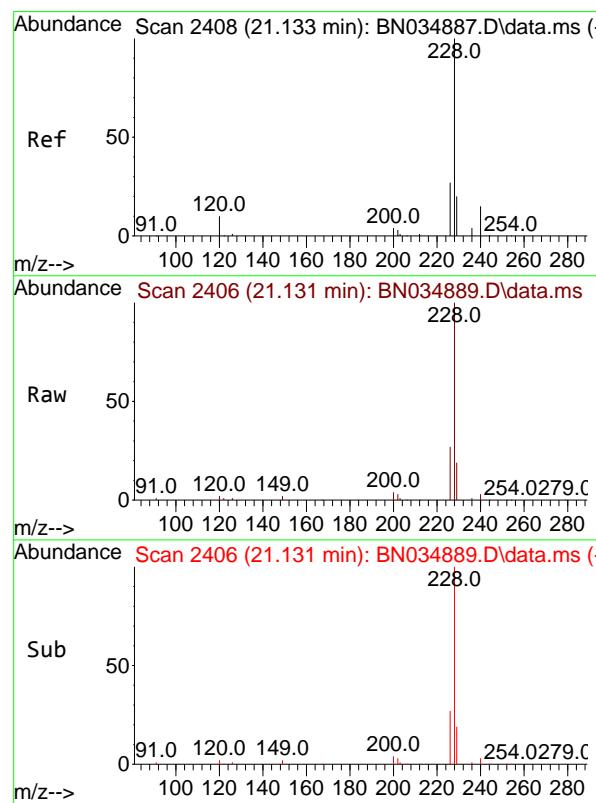
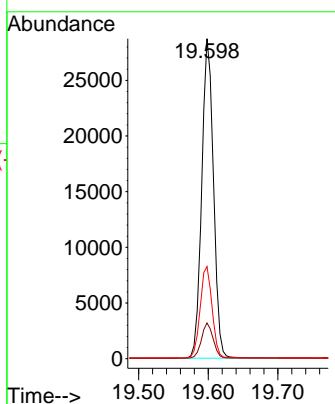




#31  
Terphenyl-d14  
Concen: 1.602 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

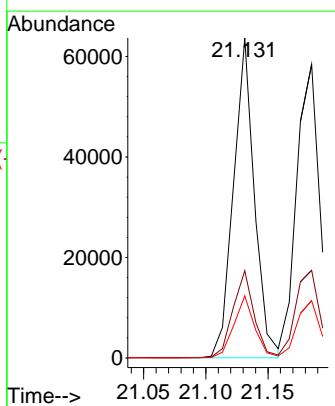
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

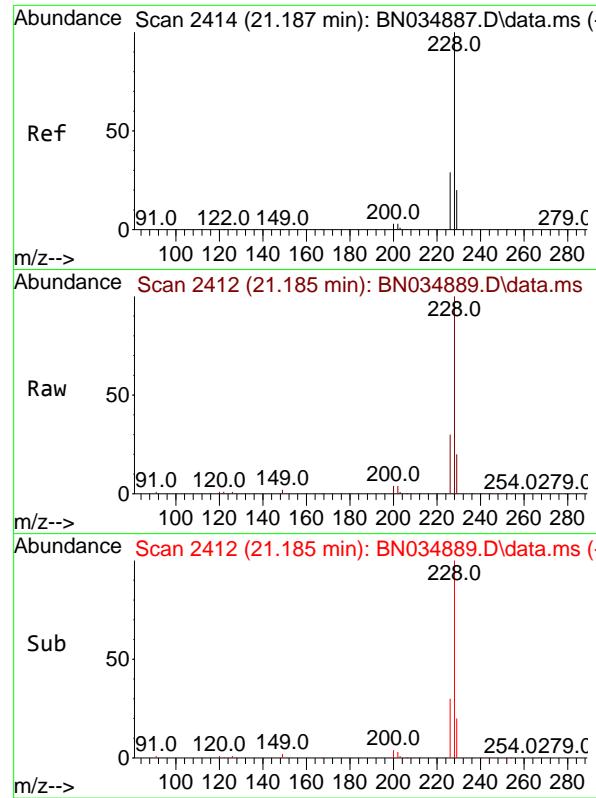
Tgt Ion:244 Resp: 33522  
Ion Ratio Lower Upper  
244 100  
212 11.1 9.4 14.0  
122 28.8 23.0 34.4



#32  
Benzo(a)anthracene  
Concen: 1.707 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:228 Resp: 74313  
Ion Ratio Lower Upper  
228 100  
226 27.3 22.2 33.2  
229 19.4 16.0 24.0

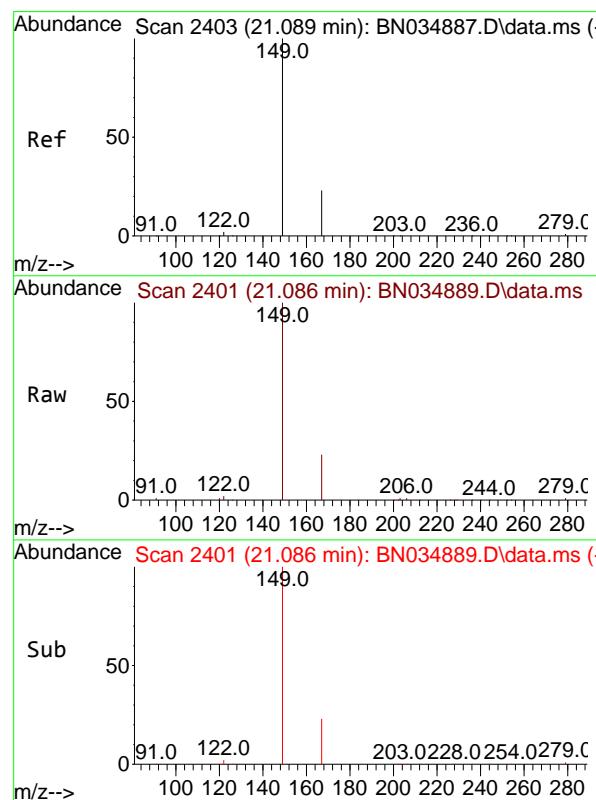
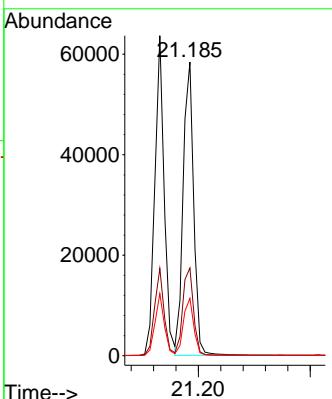




#33  
Chrysene  
Concen: 1.657 ng  
RT: 21.185 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

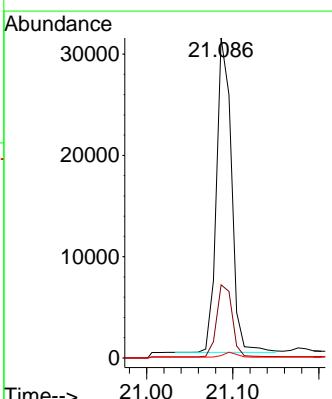
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

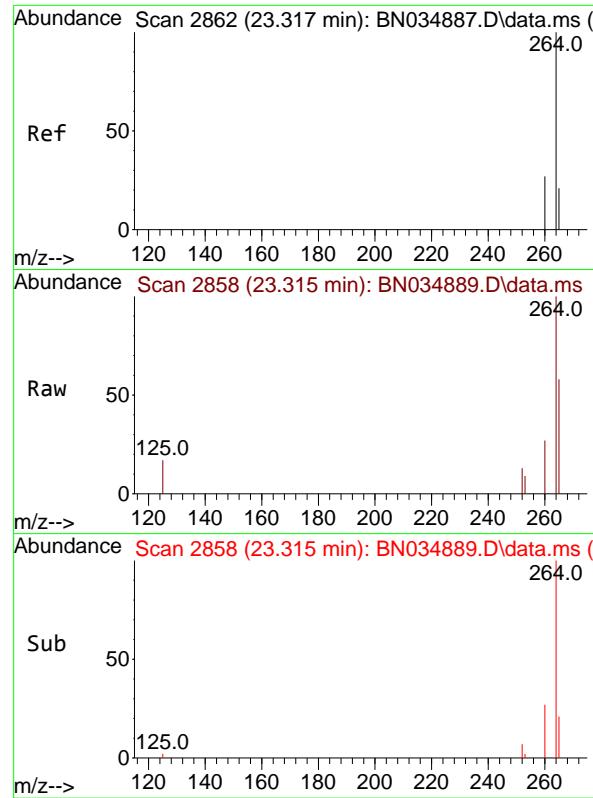
Tgt Ion:228 Resp: 76360  
Ion Ratio Lower Upper  
228 100  
226 29.9 23.7 35.5  
229 19.5 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 1.498 ng  
RT: 21.086 min Scan# 2401  
Delta R.T. -0.003 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:149 Resp: 37441  
Ion Ratio Lower Upper  
149 100  
167 23.7 18.1 27.1  
279 1.4 1.2 1.8

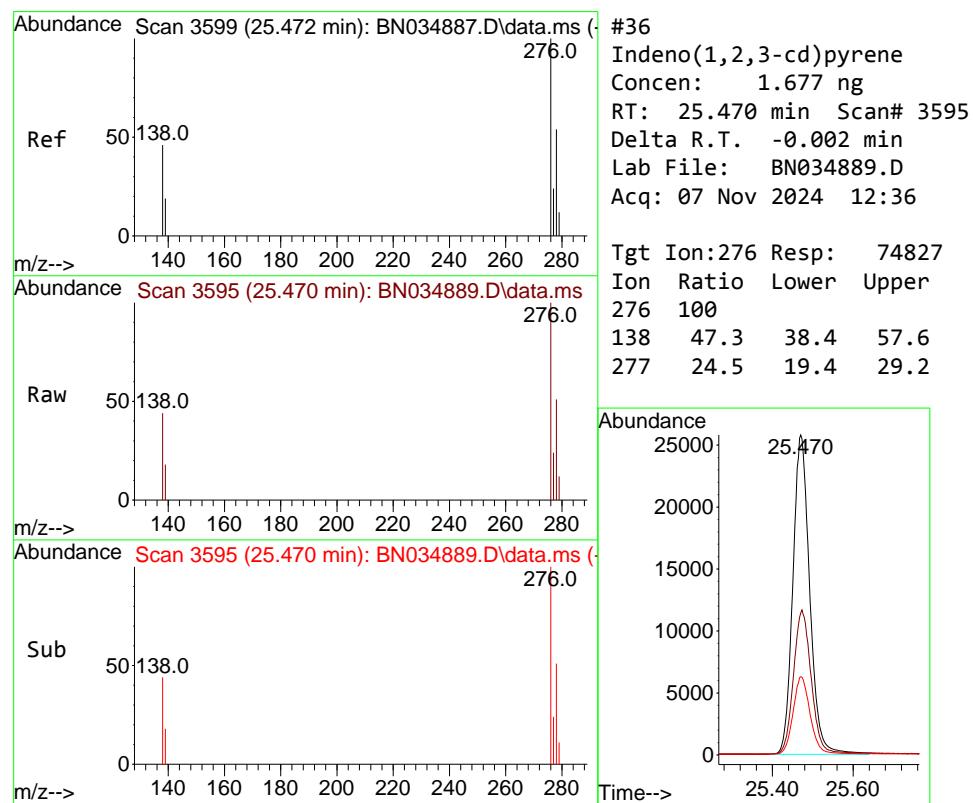
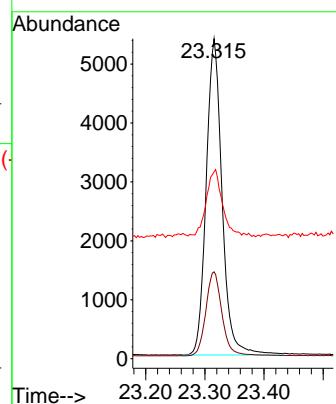




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

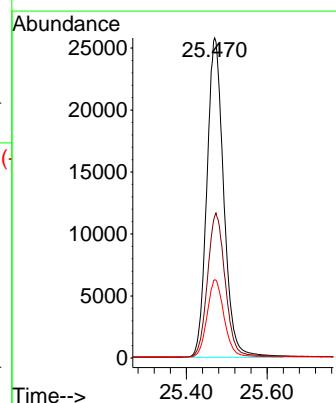
Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

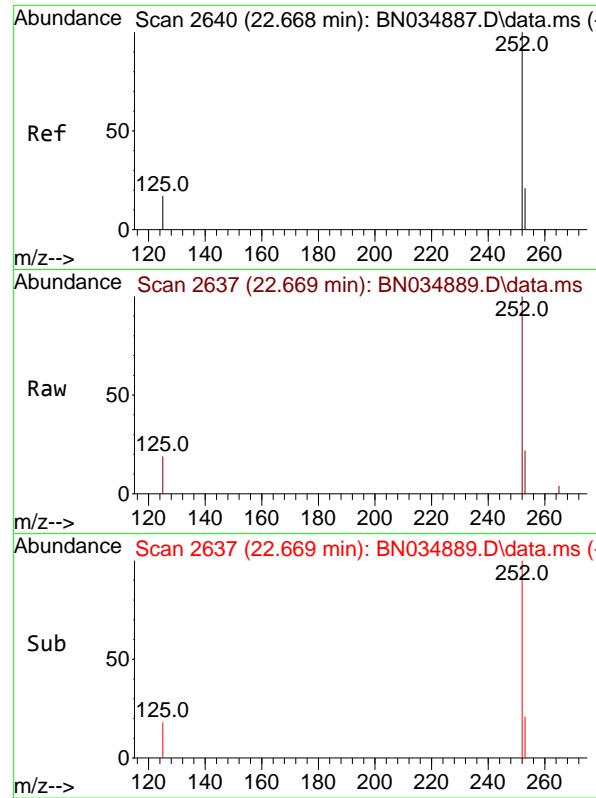
Tgt Ion:264 Resp: 10016  
Ion Ratio Lower Upper  
264 100  
260 27.2 22.2 33.2  
265 58.4 60.9 91.3#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 1.677 ng  
RT: 25.470 min Scan# 3595  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:276 Resp: 74827  
Ion Ratio Lower Upper  
276 100  
138 47.3 38.4 57.6  
277 24.5 19.4 29.2

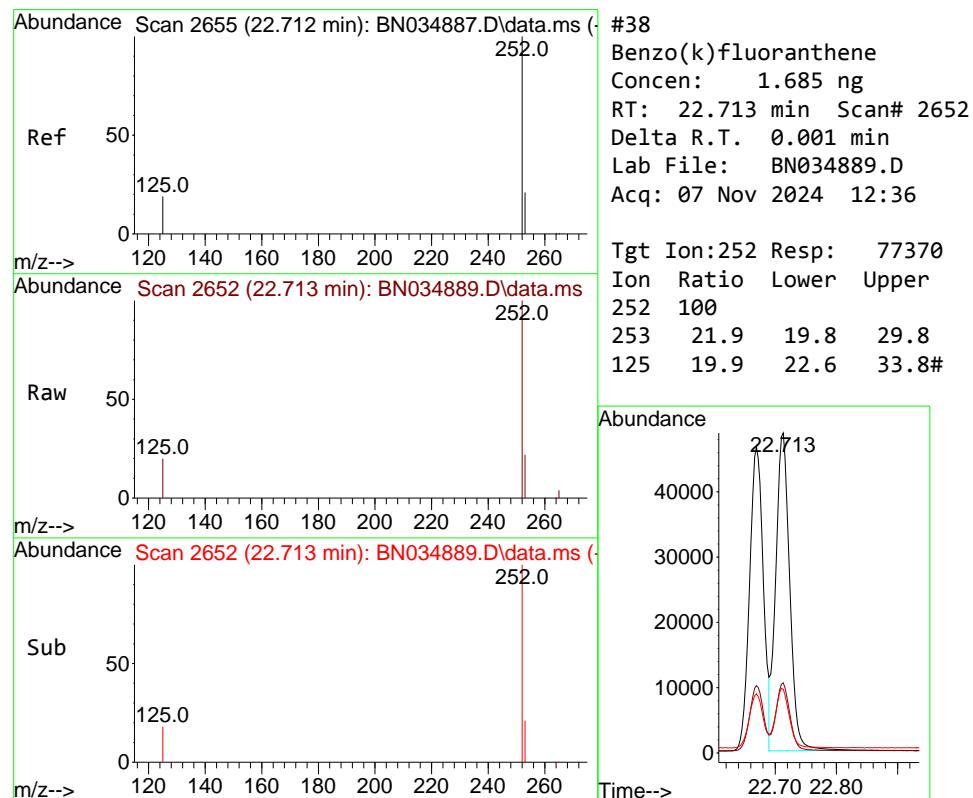
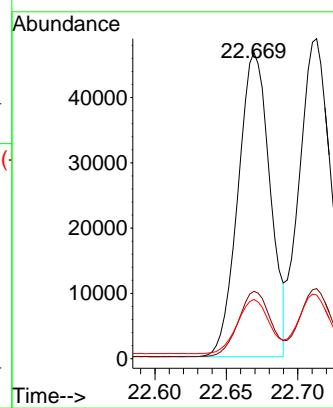




#37  
 Benzo(b)fluoranthene  
 Concen: 1.650 ng  
 RT: 22.669 min Scan# 2  
 Delta R.T. 0.001 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

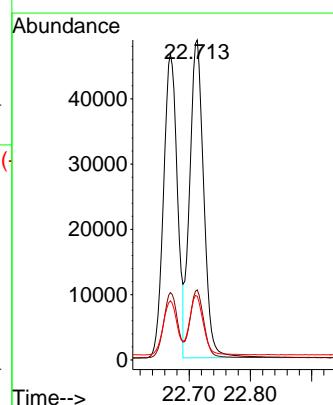
Instrument : BNA\_N  
 ClientSampleId : SSTDICC1.6

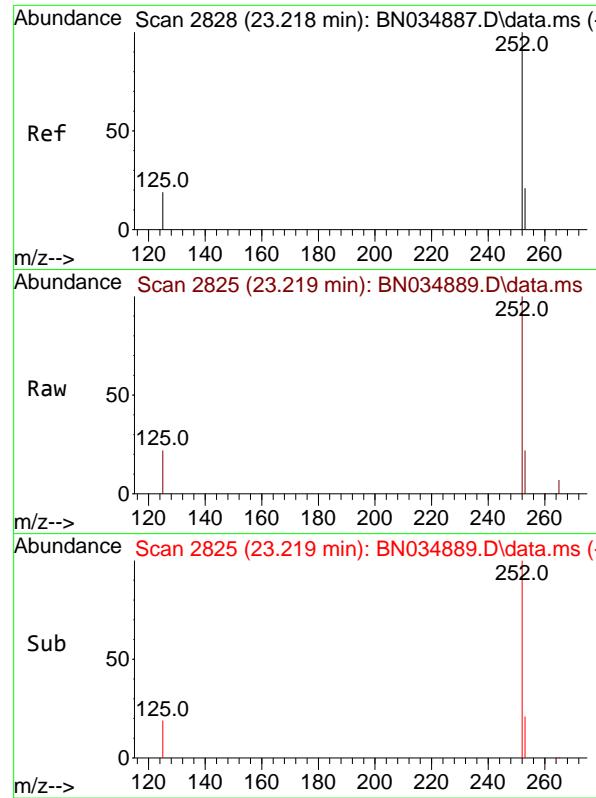
Tgt Ion:252 Resp: 72667  
 Ion Ratio Lower Upper  
 252 100  
 253 22.0 19.4 29.2  
 125 19.3 21.4 32.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 1.685 ng  
 RT: 22.713 min Scan# 2652  
 Delta R.T. 0.001 min  
 Lab File: BN034889.D  
 Acq: 07 Nov 2024 12:36

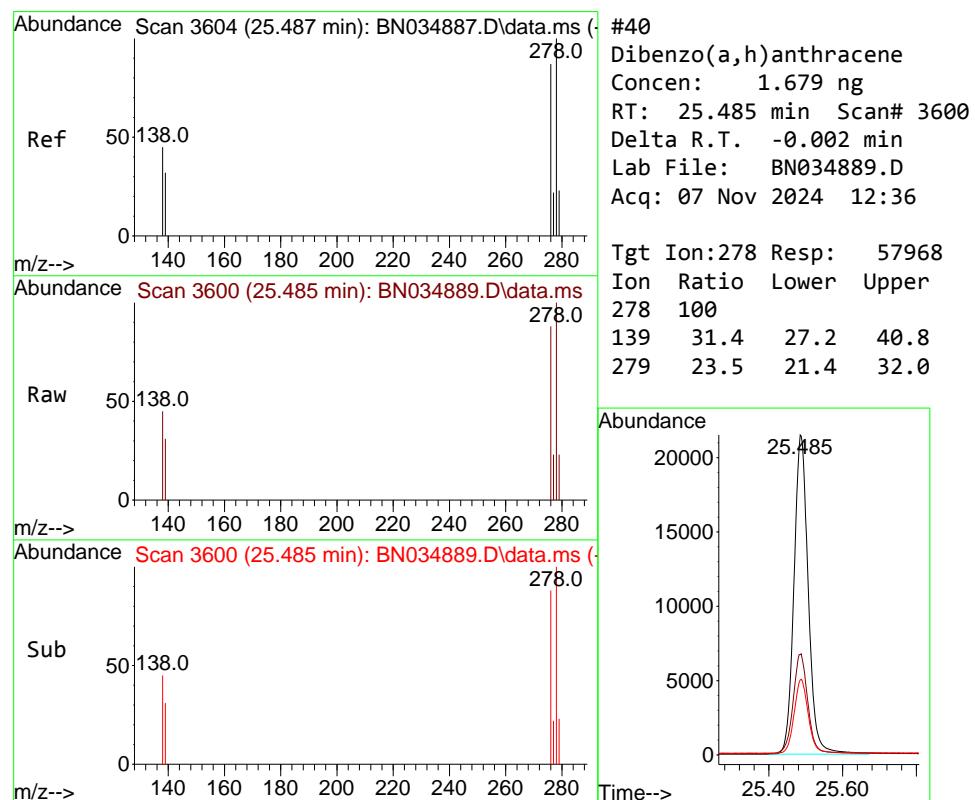
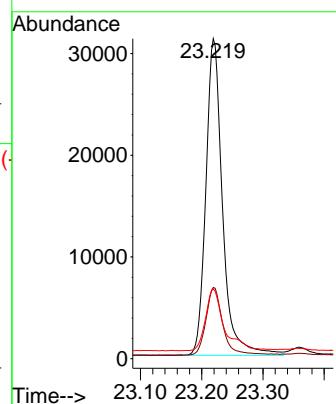
Tgt Ion:252 Resp: 77370  
 Ion Ratio Lower Upper  
 252 100  
 253 21.9 19.8 29.8  
 125 19.9 22.6 33.8#





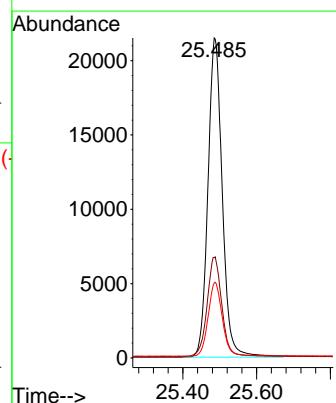
#39  
Benzo(a)pyrene  
Concen: 1.684 ng  
RT: 23.219 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.001 min  
Lab File: BN034889.D  
ClientSampleId : SSTDICC1.6  
Acq: 07 Nov 2024 12:36

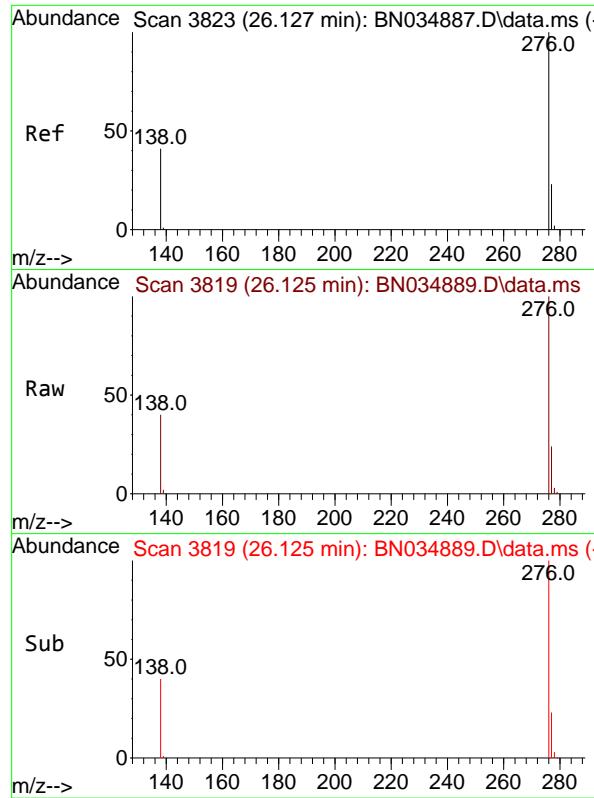
Tgt Ion:252 Resp: 58843  
Ion Ratio Lower Upper  
252 100  
253 22.3 21.4 32.2  
125 21.8 27.8 41.6#



#40  
Dibenzo(a,h)anthracene  
Concen: 1.679 ng  
RT: 25.485 min Scan# 3600  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Tgt Ion:278 Resp: 57968  
Ion Ratio Lower Upper  
278 100  
139 31.4 27.2 40.8  
279 23.5 21.4 32.0

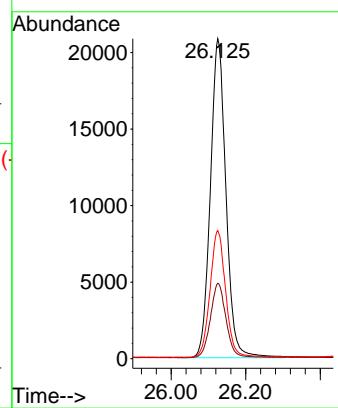




#41  
Benzo(g,h,i)perylene  
Concen: 1.649 ng  
RT: 26.125 min Scan# 3  
Delta R.T. -0.002 min  
Lab File: BN034889.D  
Acq: 07 Nov 2024 12:36

Instrument : BNA\_N  
ClientSampleId : SSTDICC1.6

Tgt Ion:276 Resp: 60450  
Ion Ratio Lower Upper  
276 100  
277 23.5 20.2 30.2  
138 40.1 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034890.D  
 Acq On : 07 Nov 2024 13:13  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

Quant Time: Nov 07 14:42:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

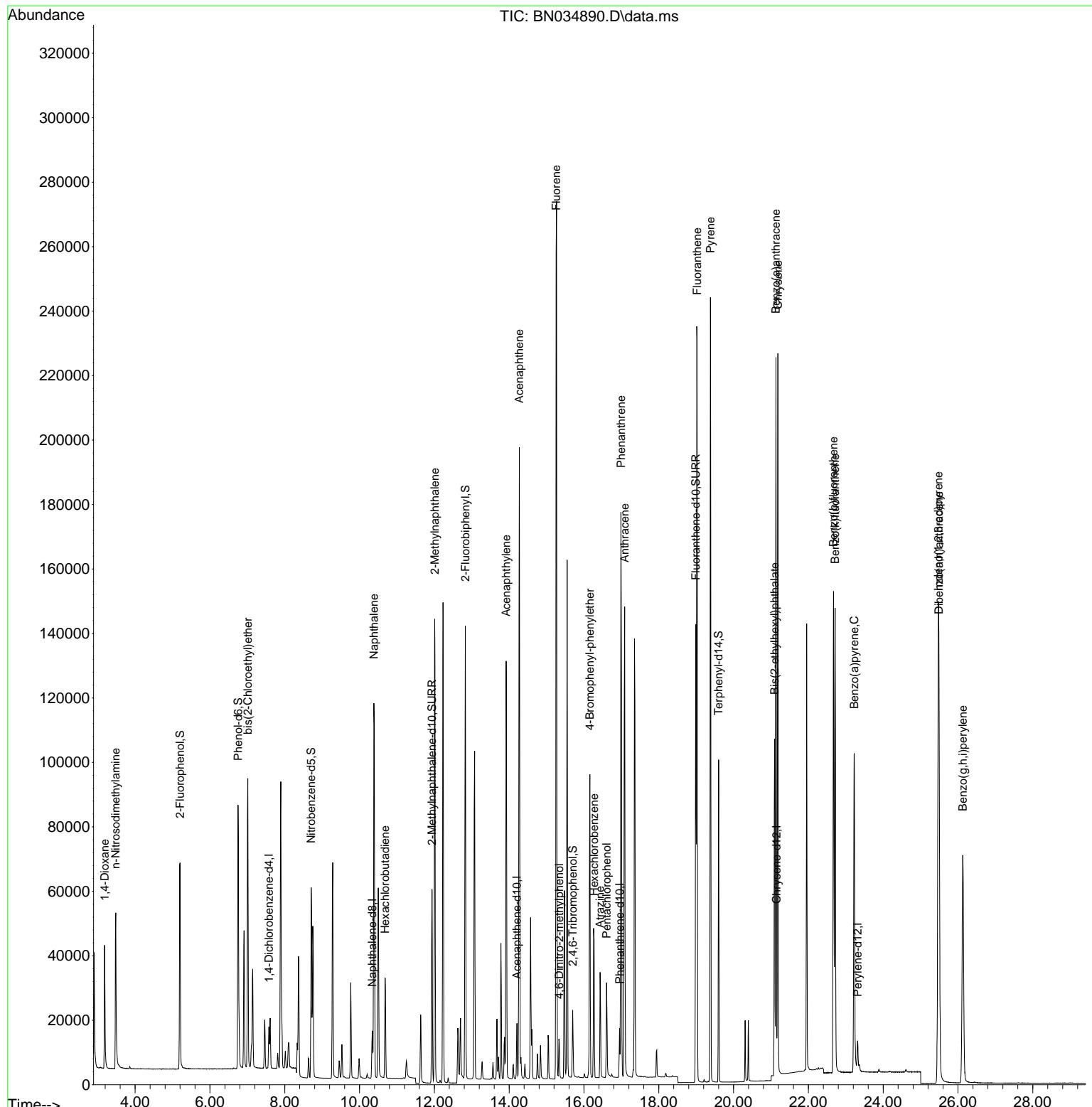
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5939	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	18004	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	8817	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	17873	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	12985	0.400	ng	0.00
35) Perylene-d12	23.315	264	11226	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	51403	3.106	ng	0.00
5) Phenol-d6	6.752	99	71034	3.233	ng	0.00
8) Nitrobenzene-d5	8.707	82	45127	3.216	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	78949	3.217	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	10028	3.157	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	114296	3.069	ng	0.00
27) Fluoranthene-d10	18.990	212	135387	3.359	ng	0.00
31) Terphenyl-d14	19.598	244	74267	3.053	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	22320	2.974	ng	100
3) n-Nitrosodimethylamine	3.480	42	30560	3.018	ng	# 98
6) bis(2-Chloroethyl)ether	7.012	93	58458	3.084	ng	99
9) Naphthalene	10.383	128	156861	3.139	ng	99
10) Hexachlorobutadiene	10.682	225	24210	3.040	ng	# 98
12) 2-Methylnaphthalene	12.011	142	99535	3.255	ng	99
16) Acenaphthylene	13.919	152	141282	3.322	ng	100
17) Acenaphthene	14.272	154	95395	3.241	ng	94
18) Fluorene	15.255	166	118519	3.234	ng	99
20) 4,6-Dinitro-2-methylph...	15.341	198	7389	3.179	ng	# 21
21) 4-Bromophenyl-phenylether	16.157	248	30891	3.243	ng	# 86
22) Hexachlorobenzene	16.269	284	36085	3.146	ng	97
23) Atrazine	16.430	200	24718	3.581	ng	# 93
24) Pentachlorophenol	16.604	266	13114	3.184	ng	97
25) Phenanthrene	16.989	178	177208	3.232	ng	99
26) Anthracene	17.088	178	160060	3.386	ng	100
28) Fluoranthene	19.022	202	198087	3.433	ng	100
30) Pyrene	19.380	202	202057	3.074	ng	100
32) Benzo(a)anthracene	21.131	228	168444	3.328	ng	99
33) Chrysene	21.185	228	168829	3.151	ng	99
34) Bis(2-ethylhexyl)phtha...	21.095	149	95809	3.298	ng	98
36) Indeno(1,2,3-cd)pyrene	25.473	276	155639	3.112	ng	98
37) Benzo(b)fluoranthene	22.672	252	158475	3.210	ng	# 89
38) Benzo(k)fluoranthene	22.713	252	162724	3.162	ng	# 88
39) Benzo(a)pyrene	23.225	252	129107	3.296	ng	# 82
40) Dibenzo(a,h)anthracene	25.490	278	120965	3.126	ng	94
41) Benzo(g,h,i)perylene	26.128	276	126394	3.077	ng	95

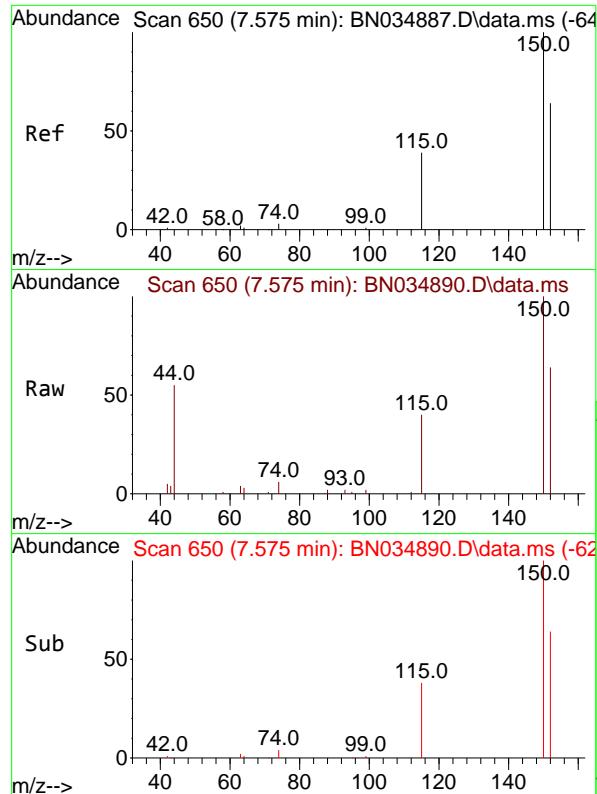
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034890.D  
 Acq On : 07 Nov 2024 13:13  
 Operator : RC/JU  
 Sample : SSTDICC3.2  
 Misc :  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC3.2

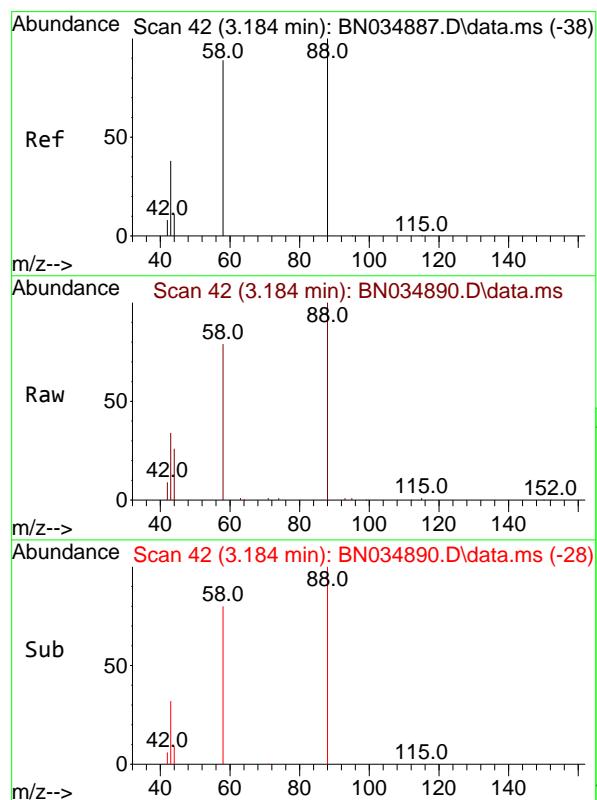
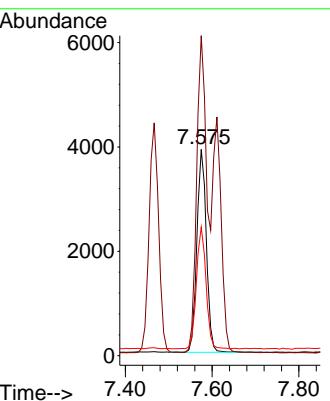
Quant Time: Nov 07 14:42:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration





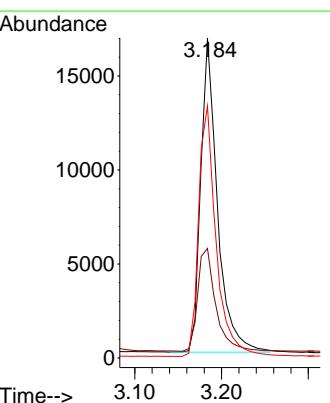
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Instrument : BNA\_N  
Delta R.T. -0.000 min  
Lab File: BN034890.D  
ClientSampleId : SSTDICC3.2  
Acq: 07 Nov 2024 13:13

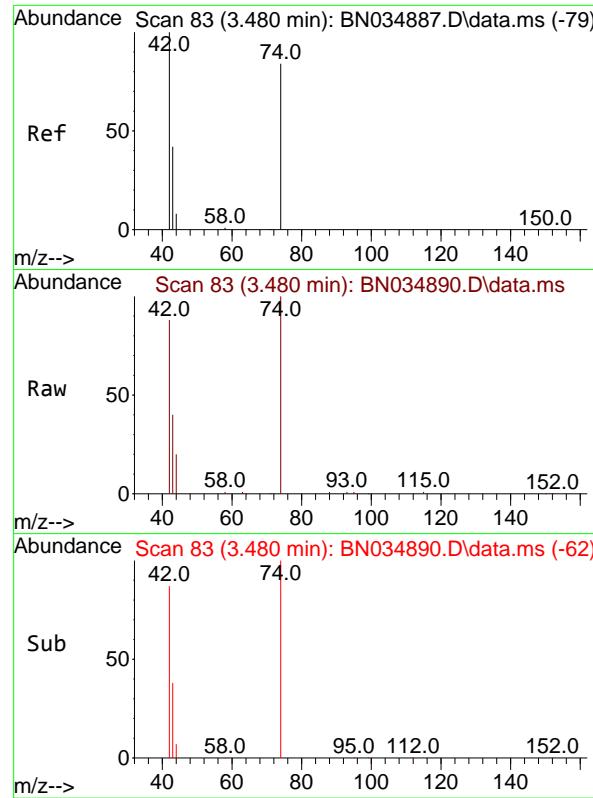
Tgt Ion:152 Resp: 5939  
Ion Ratio Lower Upper  
152 100  
150 155.1 124.4 186.6  
115 62.4 50.5 75.7



#2  
1,4-Dioxane  
Concen: 2.974 ng  
RT: 3.184 min Scan# 42  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

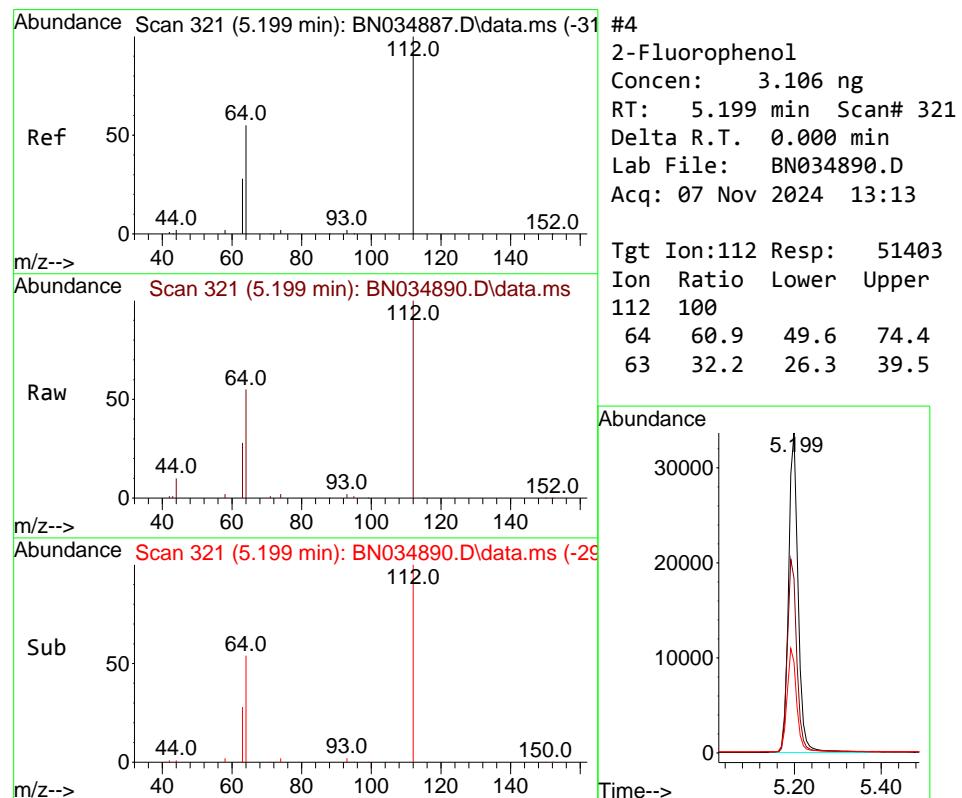
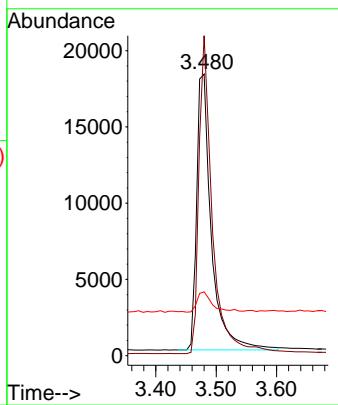
Tgt Ion: 88 Resp: 22320  
Ion Ratio Lower Upper  
88 100  
43 35.3 28.2 42.2  
58 83.8 67.1 100.7





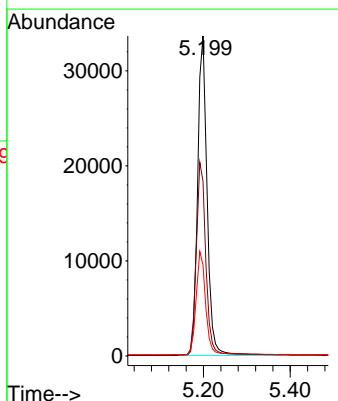
#3  
n-Nitrosodimethylamine  
Concen: 3.018 ng  
RT: 3.480 min Scan# 8  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
ClientSampleId : SSTDICC3.2  
Acq: 07 Nov 2024 13:13

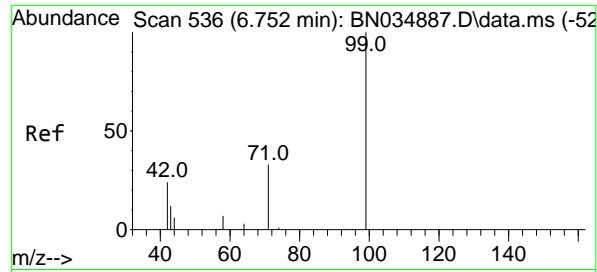
Tgt Ion: 42 Resp: 30560  
Ion Ratio Lower Upper  
42 100  
74 105.5 83.4 125.2  
44 7.7 8.6 12.8#



#4  
2-Fluorophenol  
Concen: 3.106 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

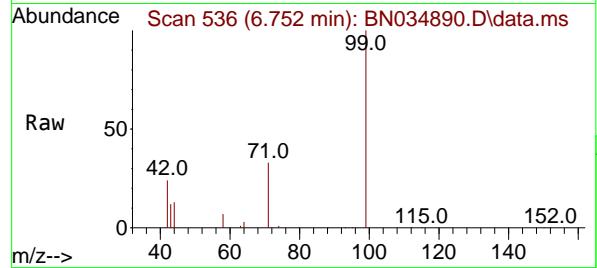
Tgt Ion:112 Resp: 51403  
Ion Ratio Lower Upper  
112 100  
64 60.9 49.6 74.4  
63 32.2 26.3 39.5



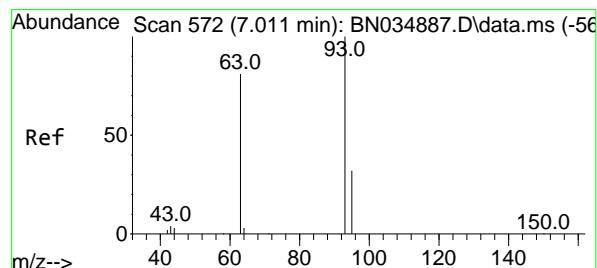
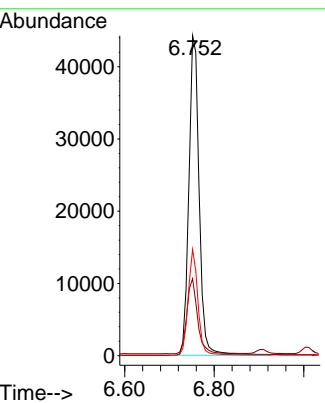
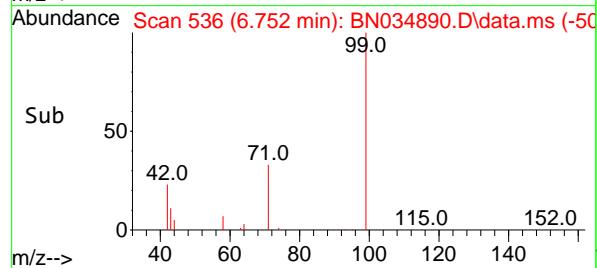


#5  
 Phenol-d6  
 Concen: 3.233 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034890.D  
 Acq: 07 Nov 2024 13:13

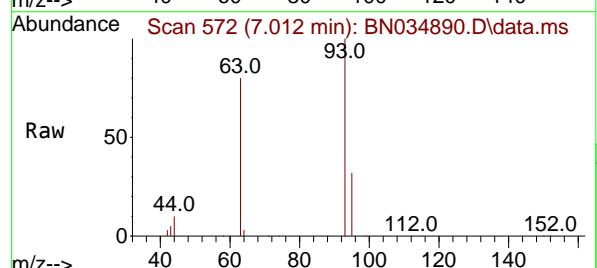
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2



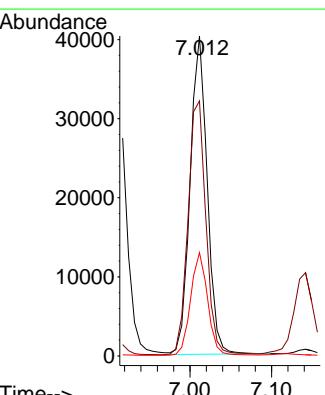
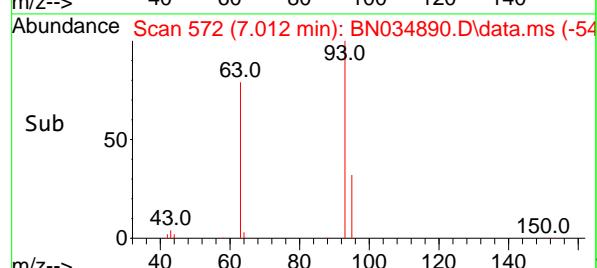
Tgt Ion: 99 Resp: 71034  
 Ion Ratio Lower Upper  
 99 100  
 42 24.2 20.2 30.2  
 71 31.6 25.4 38.0

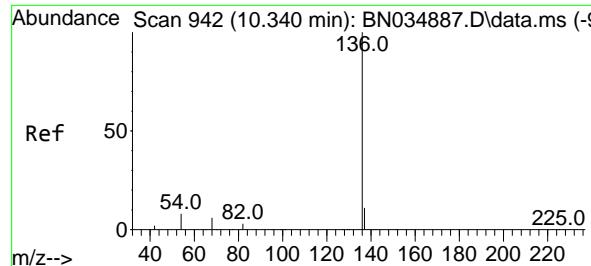


#6  
 bis(2-Chloroethyl)ether  
 Concen: 3.084 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034890.D  
 Acq: 07 Nov 2024 13:13



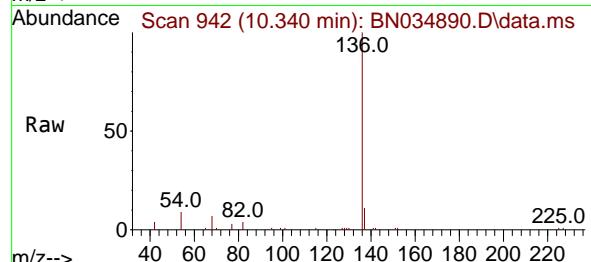
Tgt Ion: 93 Resp: 58458  
 Ion Ratio Lower Upper  
 93 100  
 63 83.7 67.5 101.3  
 95 32.2 25.7 38.5



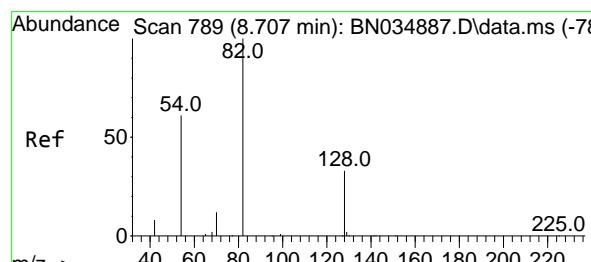
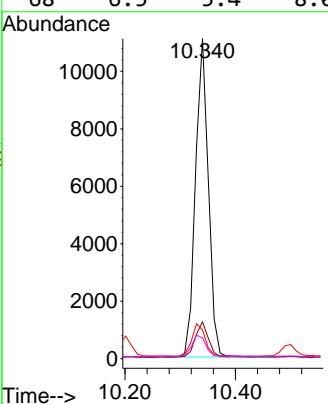
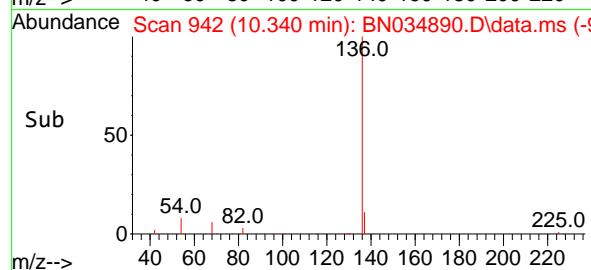


#7  
**Naphthalene-d8**  
Concen: 0.400 ng  
RT: 10.340 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

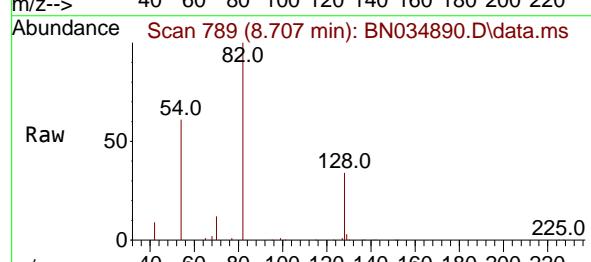
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2



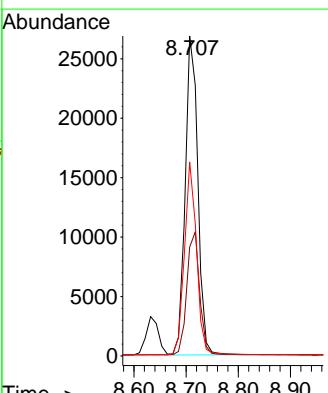
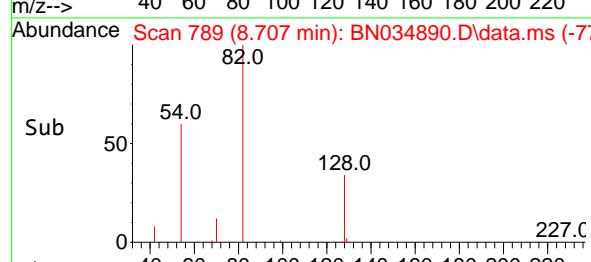
Tgt Ion:136 Resp: 18004  
Ion Ratio Lower Upper  
136 100  
137 11.5 8.9 13.3  
54 9.0 6.9 10.3  
68 6.5 5.4 8.0

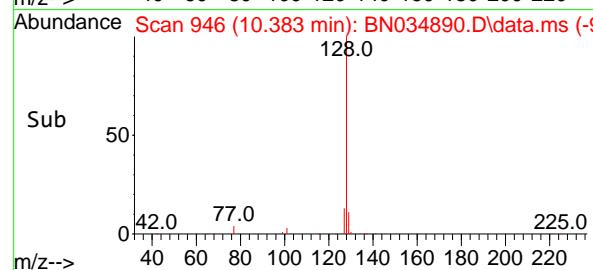
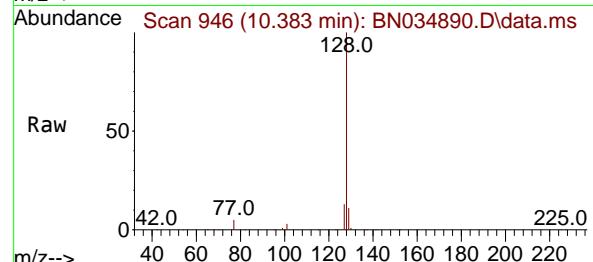
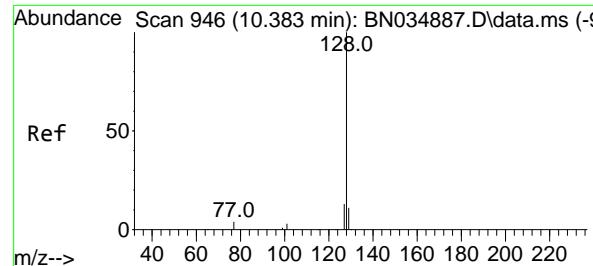


#8  
**Nitrobenzene-d5**  
Concen: 3.216 ng  
RT: 8.707 min Scan# 789  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13



Tgt Ion: 82 Resp: 45127  
Ion Ratio Lower Upper  
82 100  
128 34.0 28.1 42.1  
54 60.7 49.8 74.6





#9

Naphthalene

Concen: 3.139 ng

RT: 10.383 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

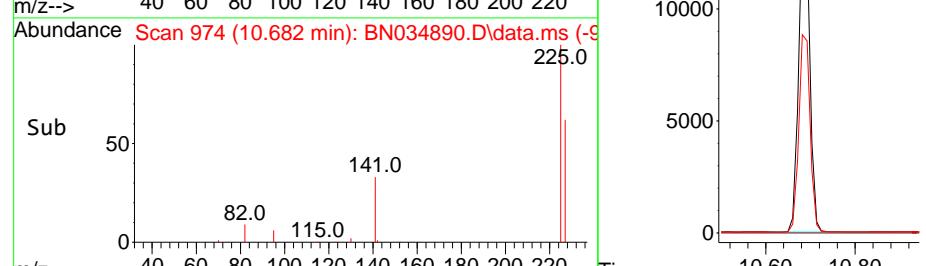
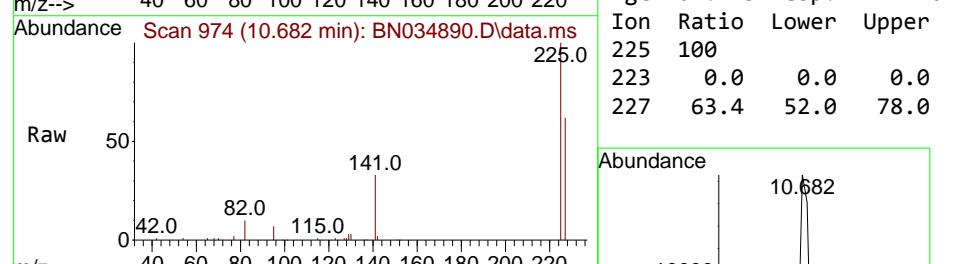
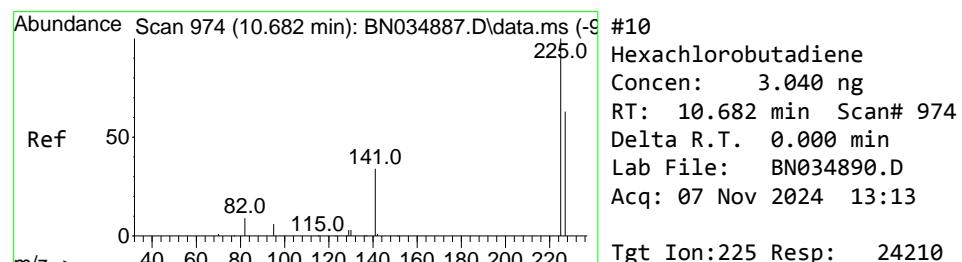
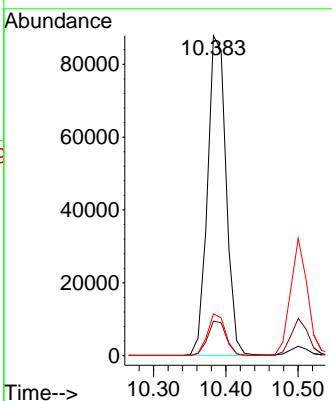
Tgt Ion:128 Resp: 156861

Ion Ratio Lower Upper

128 100

129 10.8 9.0 13.4

127 13.1 10.8 16.2



#10

Hexachlorobutadiene

Concen: 3.040 ng

RT: 10.682 min Scan# 974

Delta R.T. 0.000 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

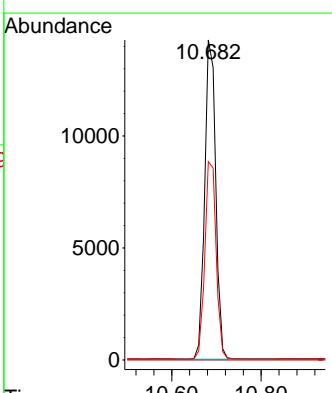
Tgt Ion:225 Resp: 24210

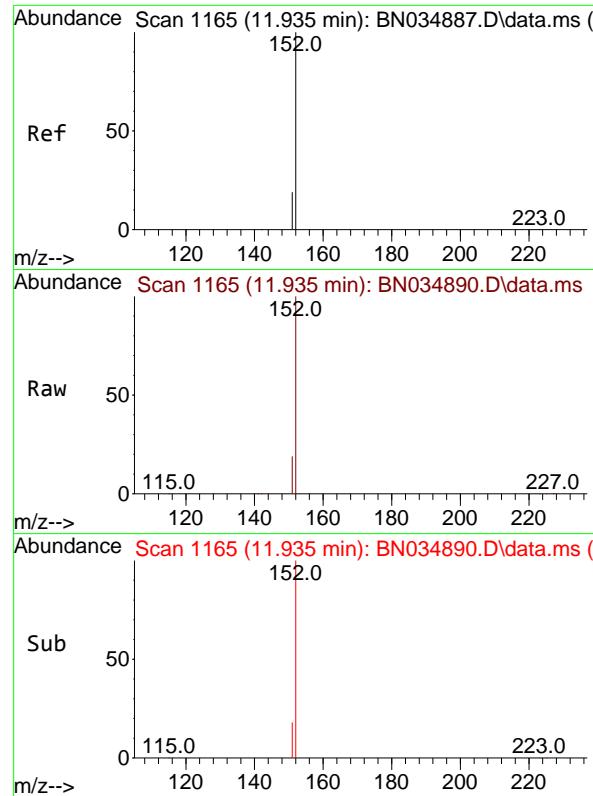
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

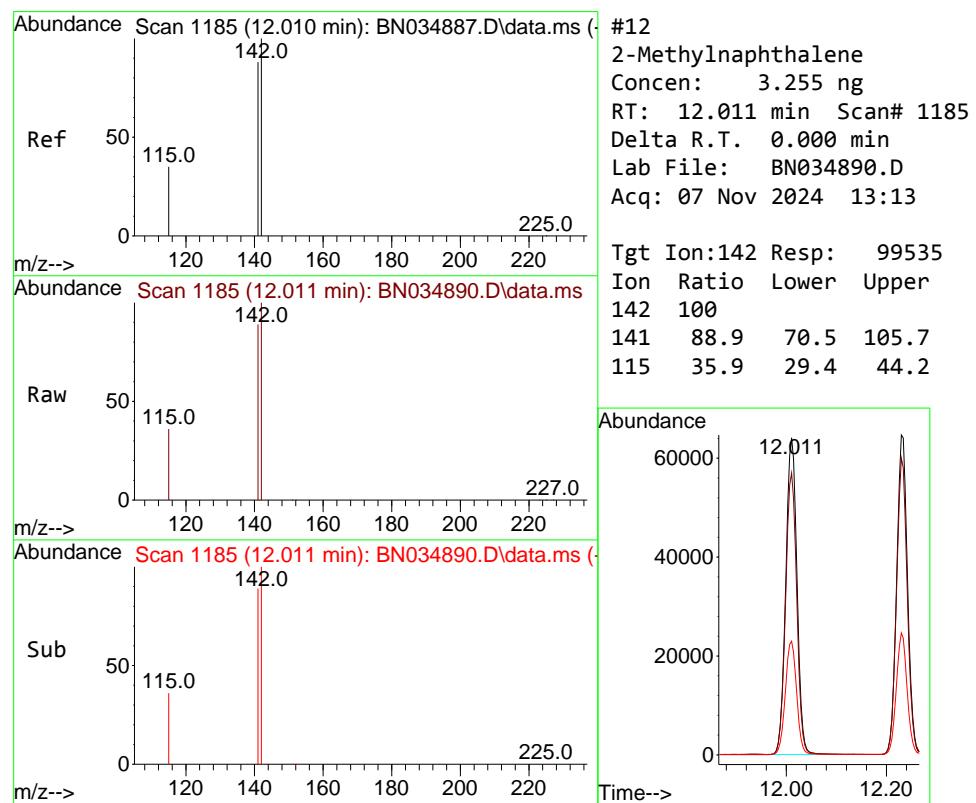
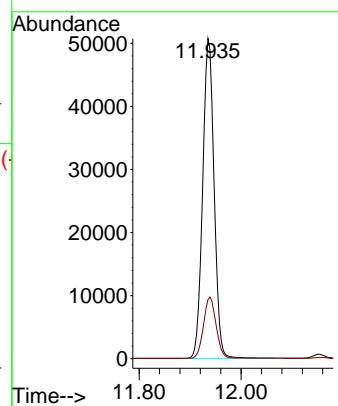
227 63.4 52.0 78.0





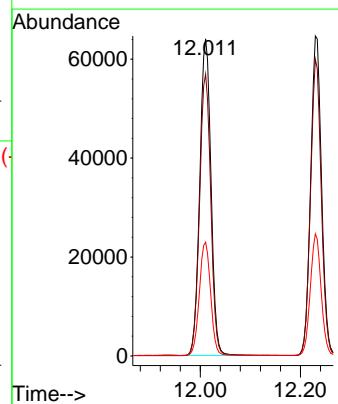
#11  
2-Methylnaphthalene-d10  
Concen: 3.217 ng  
RT: 11.935 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
ClientSampleId : SSTDICC3.2  
Acq: 07 Nov 2024 13:13

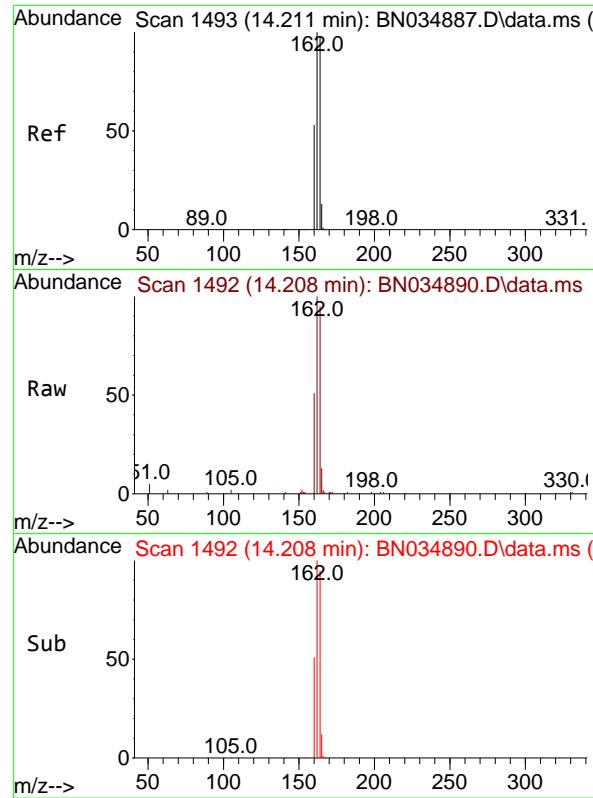
Tgt Ion:152 Resp: 78949  
Ion Ratio Lower Upper  
152 100  
151 21.2 17.1 25.7



#12  
2-Methylnaphthalene  
Concen: 3.255 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:142 Resp: 99535  
Ion Ratio Lower Upper  
142 100  
141 88.9 70.5 105.7  
115 35.9 29.4 44.2

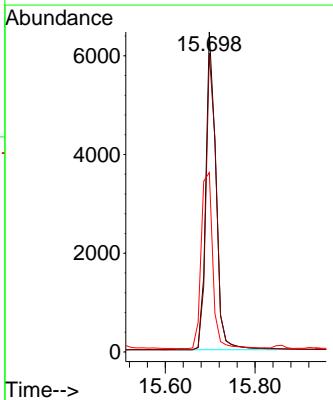
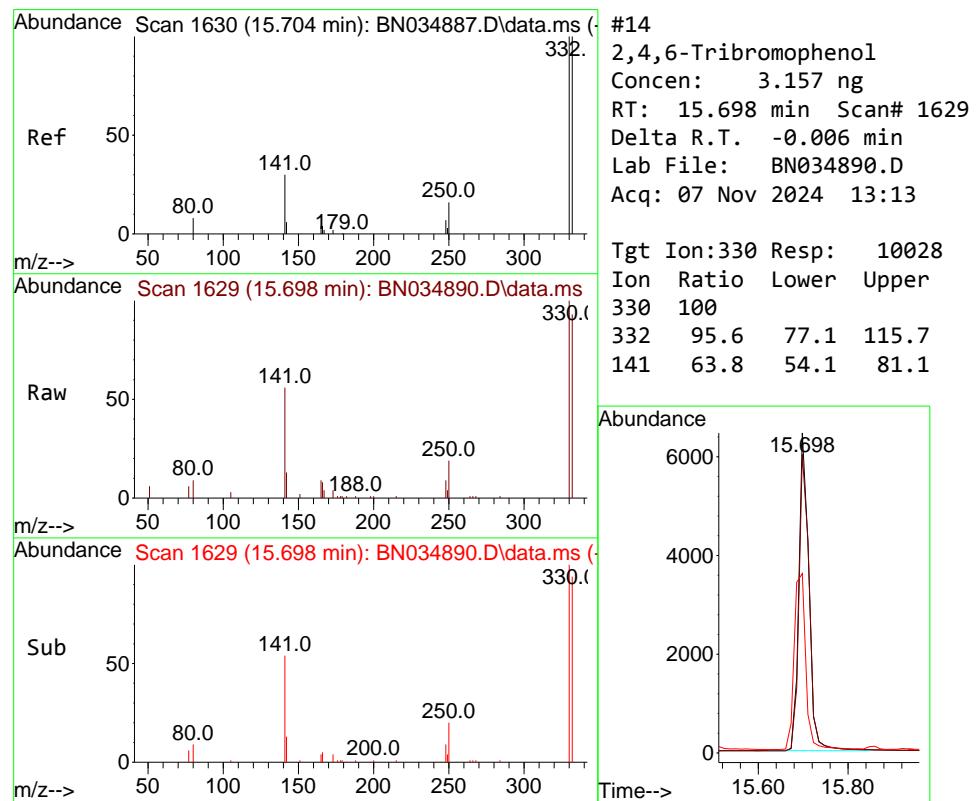
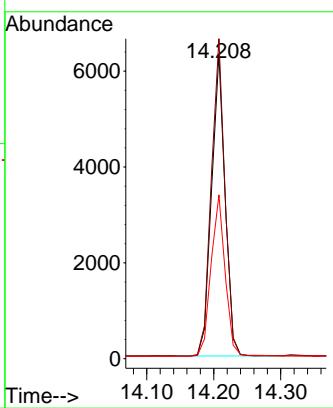


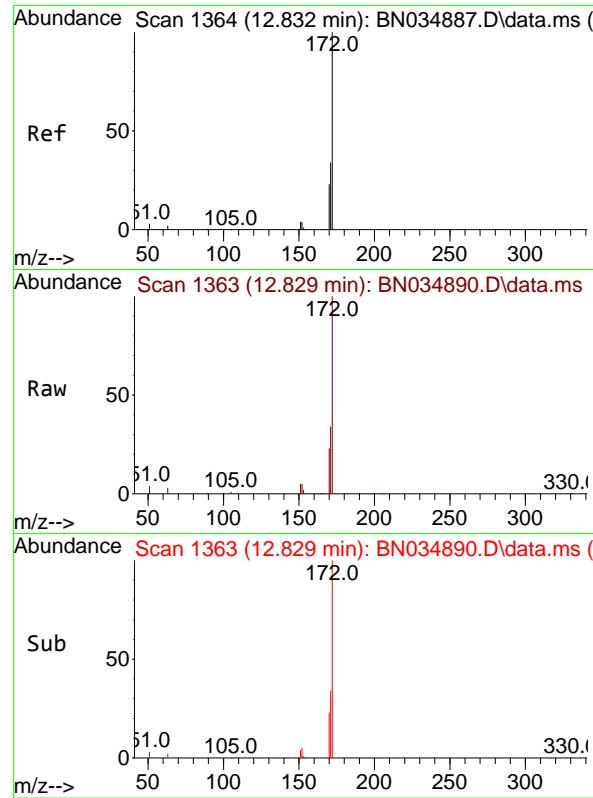


#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.208 min Scan# 1492  
Delta R.T. -0.003 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

Tgt Ion:164 Resp: 8817  
Ion Ratio Lower Upper  
164 100  
162 105.0 81.9 122.9  
160 53.8 43.5 65.3

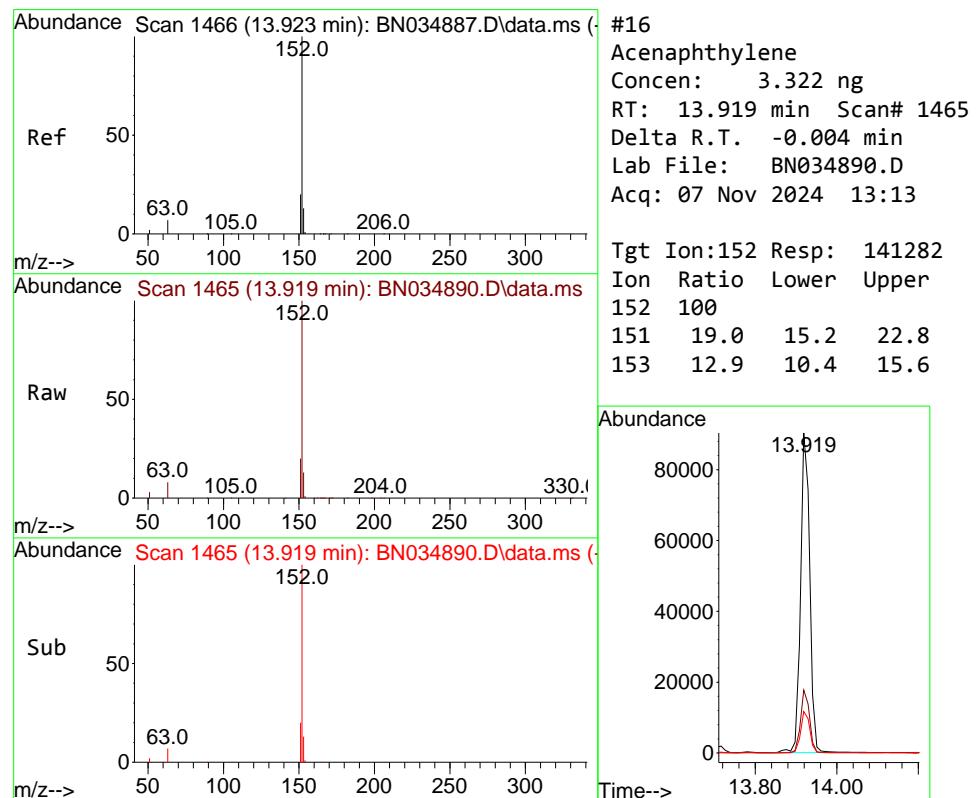
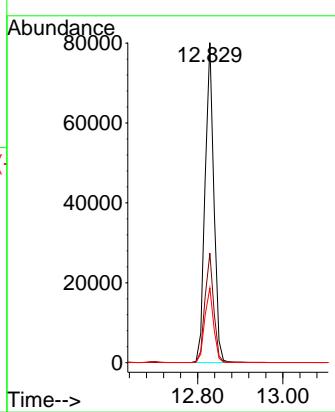




#15  
2-Fluorobiphenyl  
Concen: 3.069 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

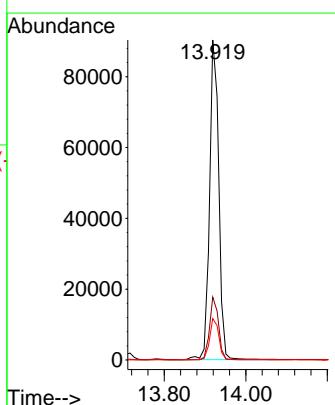
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

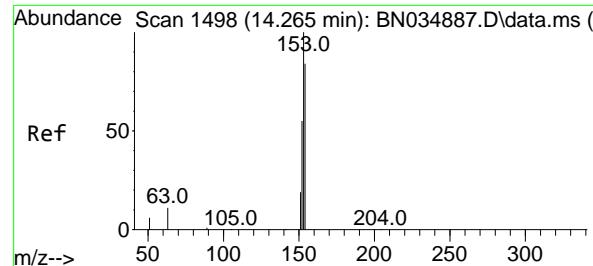
Tgt Ion:172 Resp: 114296  
Ion Ratio Lower Upper  
172 100  
171 34.2 27.9 41.9  
170 23.3 19.0 28.4



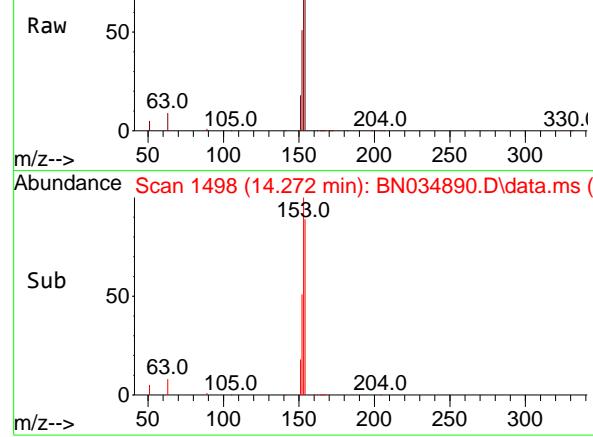
#16  
Acenaphthylene  
Concen: 3.322 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:152 Resp: 141282  
Ion Ratio Lower Upper  
152 100  
151 19.0 15.2 22.8  
153 12.9 10.4 15.6





Abundance Scan 1498 (14.272 min): BN034890.D\data.ms



Abundance Scan 1498 (14.272 min): BN034890.D\data.ms (-)

#17

Acenaphthene

Concen: 3.241 ng

RT: 14.272 min Scan# 1

Delta R.T. 0.007 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

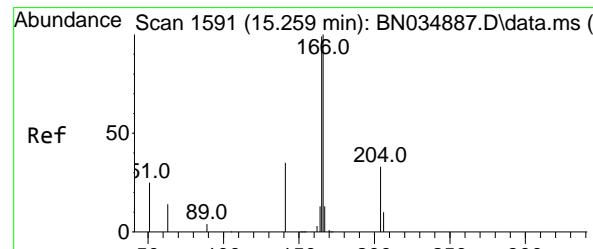
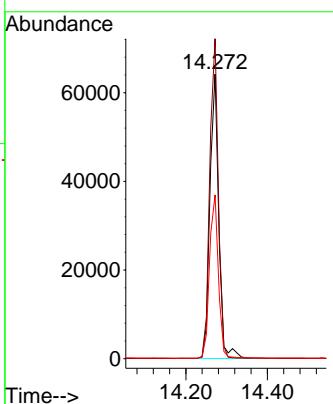
Tgt Ion:154 Resp: 95395

Ion Ratio Lower Upper

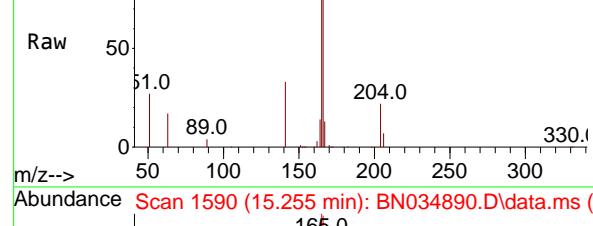
154 100

153 110.0 92.2 138.2

152 58.3 51.1 76.7



Abundance Scan 1590 (15.255 min): BN034890.D\data.ms



Abundance Scan 1590 (15.255 min): BN034890.D\data.ms (-)

#18

Fluorene

Concen: 3.234 ng

RT: 15.255 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

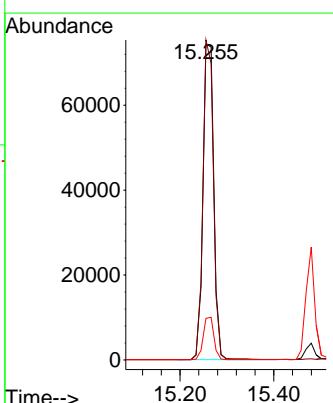
Tgt Ion:166 Resp: 118519

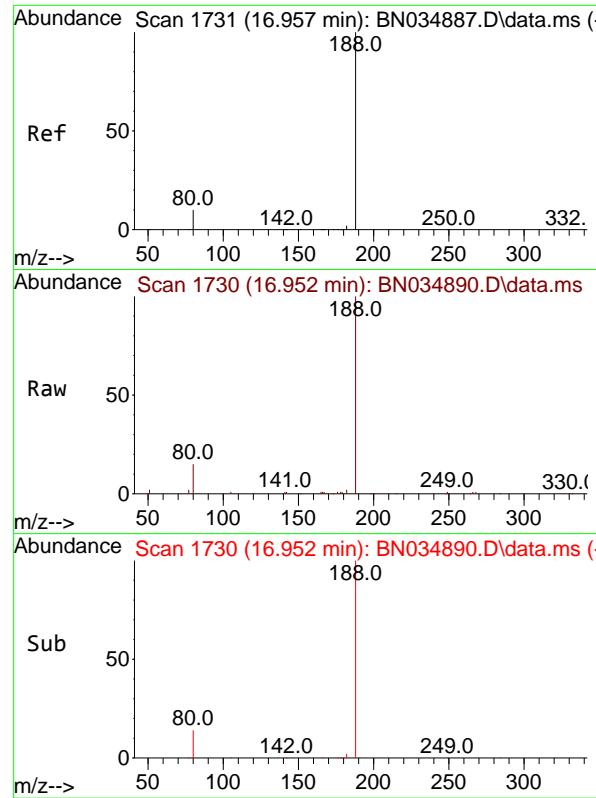
Ion Ratio Lower Upper

166 100

165 98.5 79.5 119.3

167 13.3 10.6 16.0

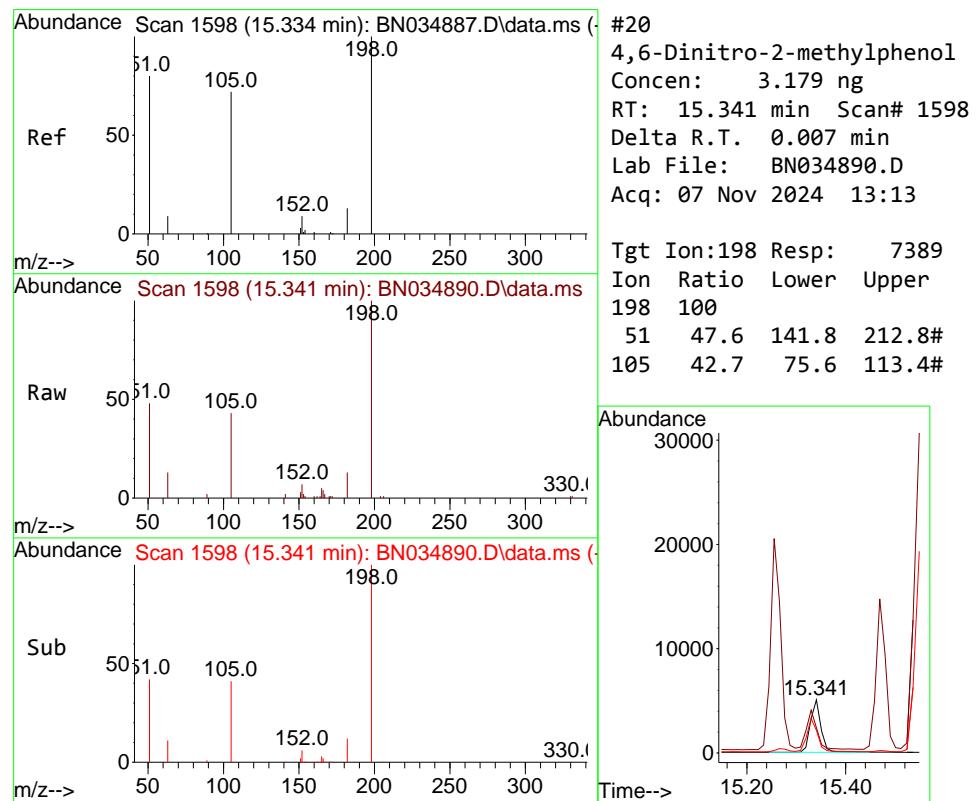
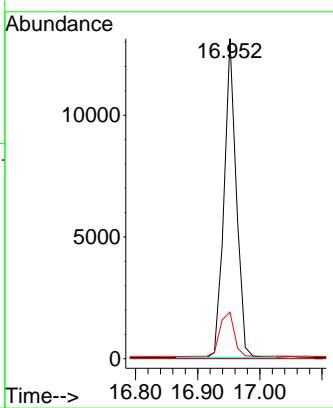




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.952 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034890.D  
 Acq: 07 Nov 2024 13:13

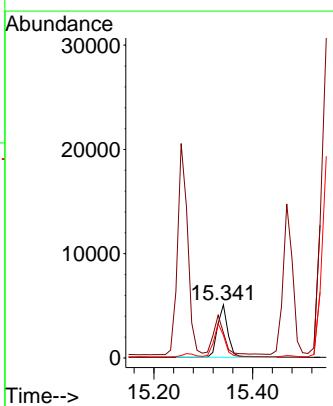
Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

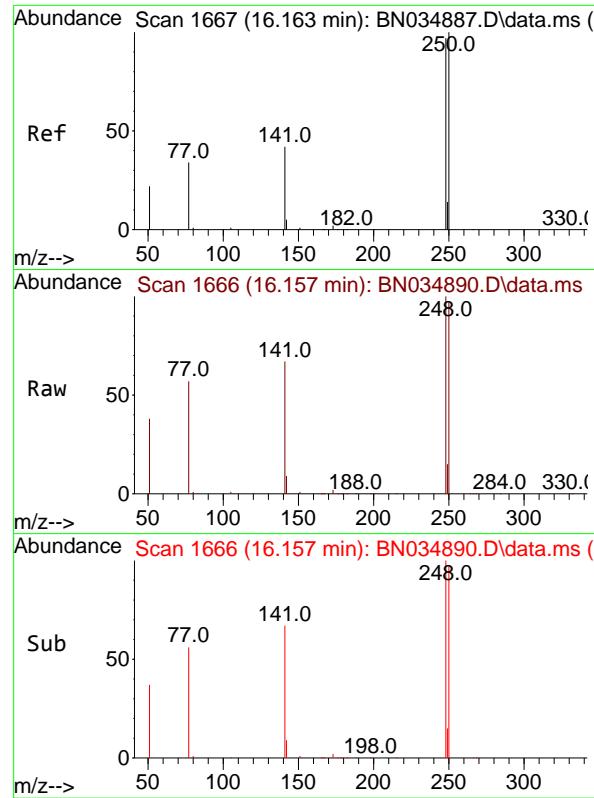
Tgt Ion:188 Resp: 17873  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 14.6 8.6 12.8#



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 3.179 ng  
 RT: 15.341 min Scan# 1598  
 Delta R.T. 0.007 min  
 Lab File: BN034890.D  
 Acq: 07 Nov 2024 13:13

Tgt Ion:198 Resp: 7389  
 Ion Ratio Lower Upper  
 198 100  
 51 47.6 141.8 212.8#  
 105 42.7 75.6 113.4#





#21

4-Bromophenyl-phenylether

Concen: 3.243 ng

RT: 16.157 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

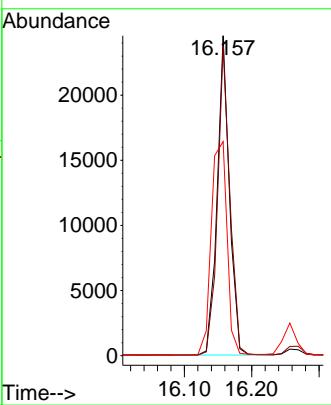
Tgt Ion:248 Resp: 30891

Ion Ratio Lower Upper

248 100

250 96.6 82.2 123.4

141 66.9 36.2 54.2#



#22

Hexachlorobenzene

Concen: 3.146 ng

RT: 16.269 min Scan# 1675

Delta R.T. 0.007 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

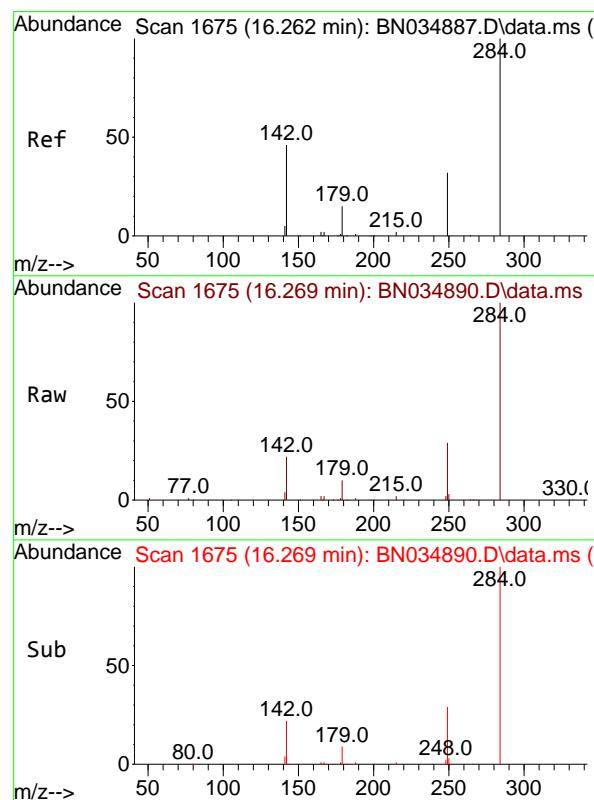
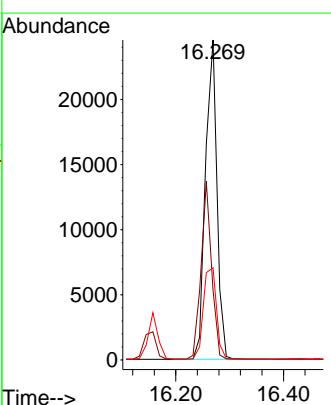
Tgt Ion:284 Resp: 36085

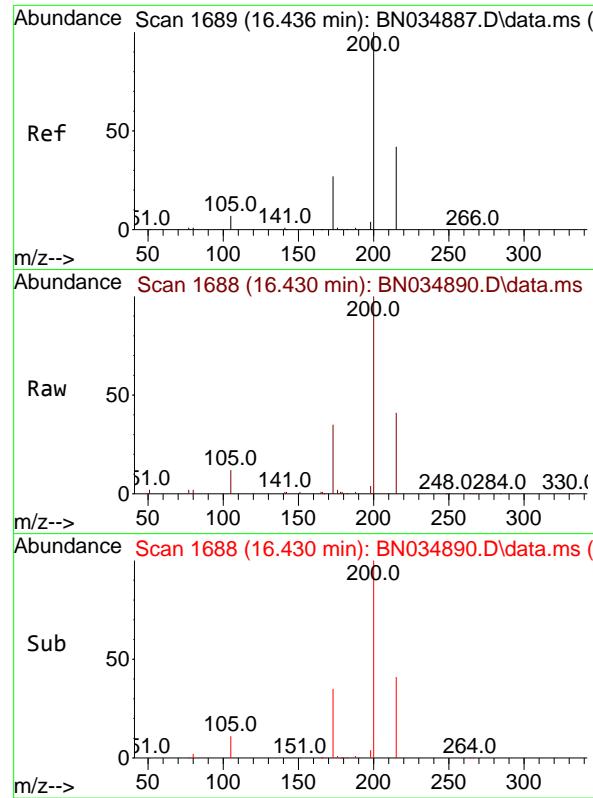
Ion Ratio Lower Upper

284 100

142 51.3 43.4 65.2

249 32.7 25.8 38.6

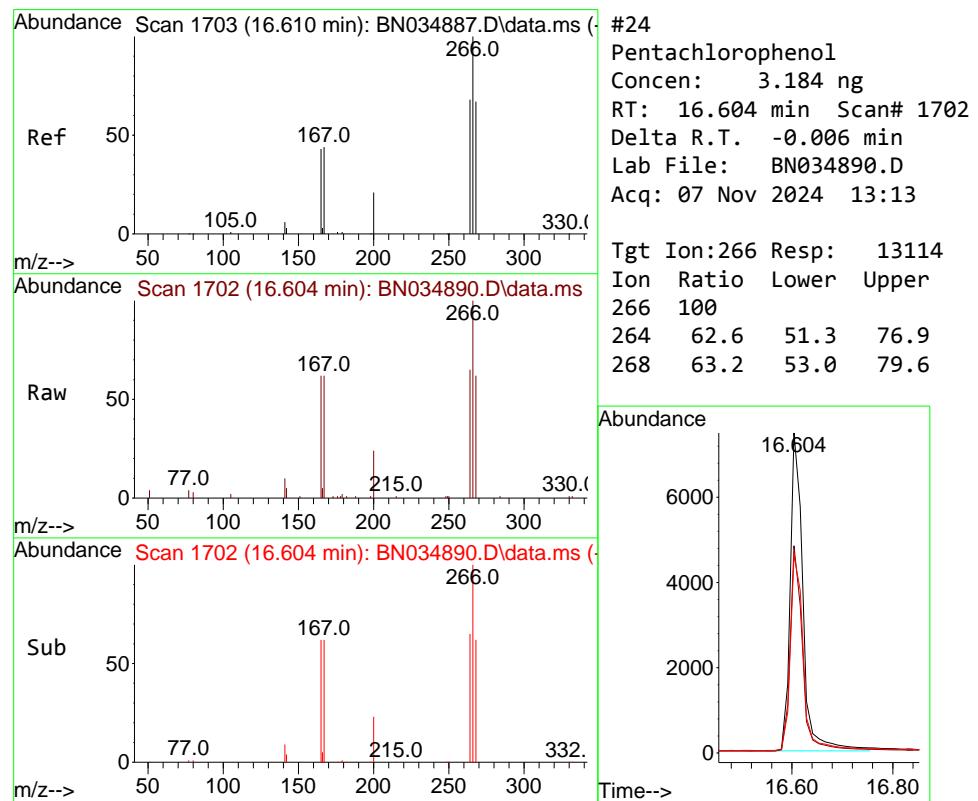
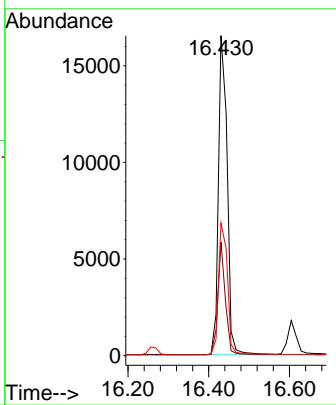




#23  
Atrazine  
Concen: 3.581 ng  
RT: 16.430 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

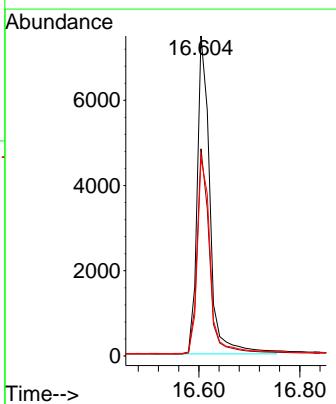
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

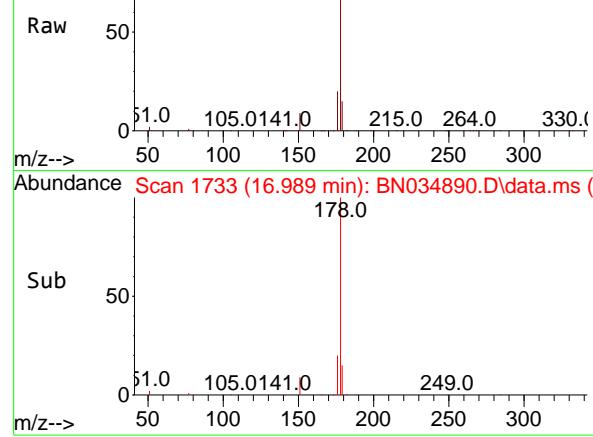
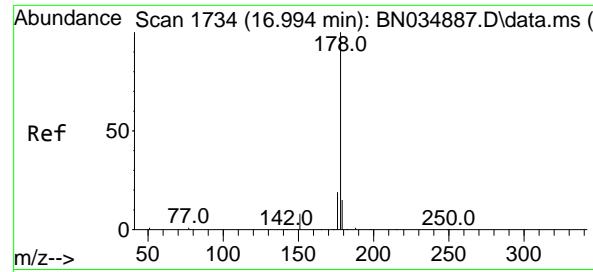
Tgt Ion:200 Resp: 24718  
Ion Ratio Lower Upper  
200 100  
173 35.5 23.4 35.2#  
215 41.4 35.4 53.0



#24  
Pentachlorophenol  
Concen: 3.184 ng  
RT: 16.604 min Scan# 1702  
Delta R.T. -0.006 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:266 Resp: 13114  
Ion Ratio Lower Upper  
266 100  
264 62.6 51.3 76.9  
268 63.2 53.0 79.6





#25

Phenanthrene

Concen: 3.232 ng

RT: 16.989 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

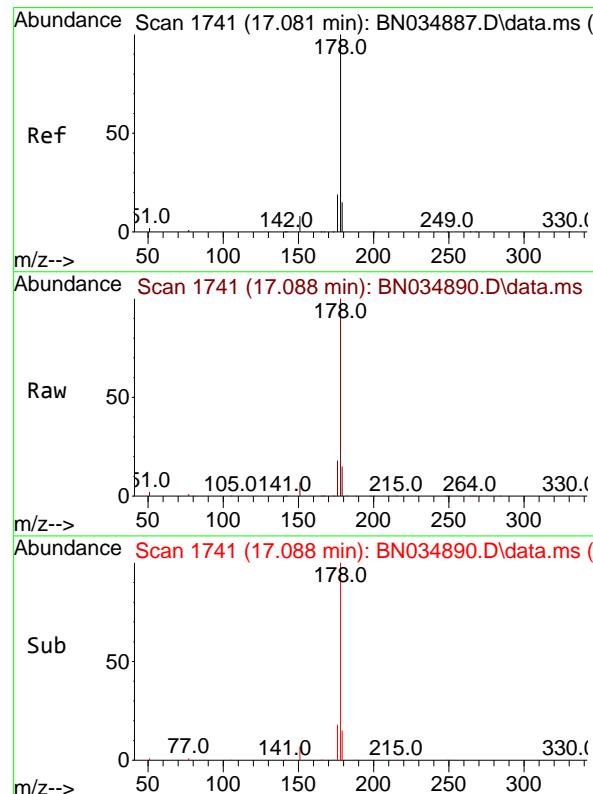
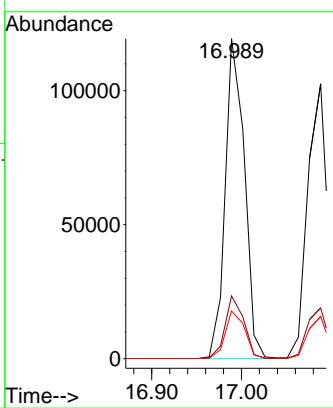
Tgt Ion:178 Resp: 177208

Ion Ratio Lower Upper

178 100

176 19.1 15.5 23.3

179 15.0 12.2 18.2



#26

Anthracene

Concen: 3.386 ng

RT: 17.088 min Scan# 1741

Delta R.T. 0.007 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

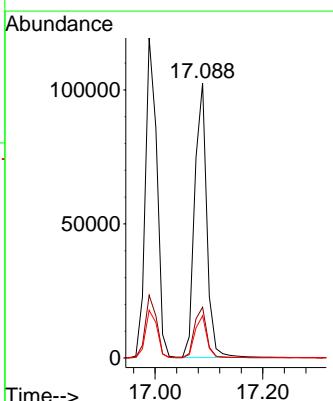
Tgt Ion:178 Resp: 160060

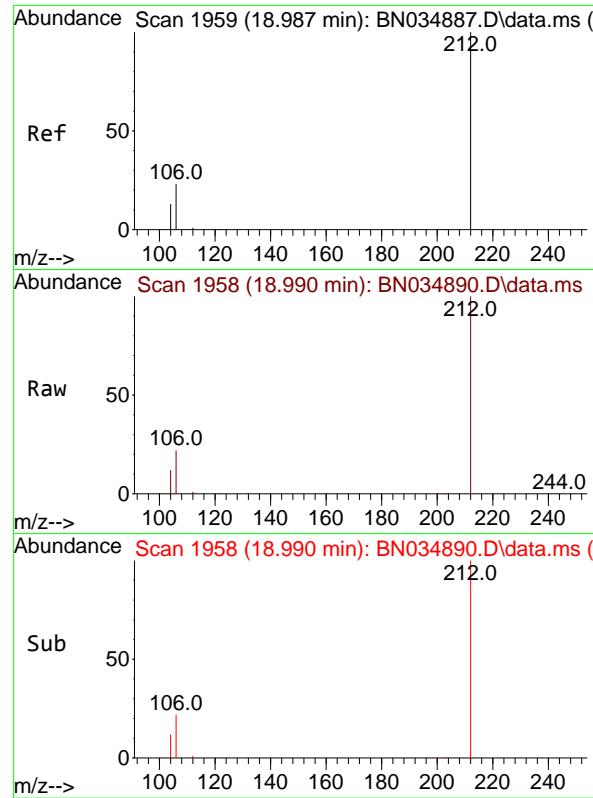
Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.2 12.1 18.1

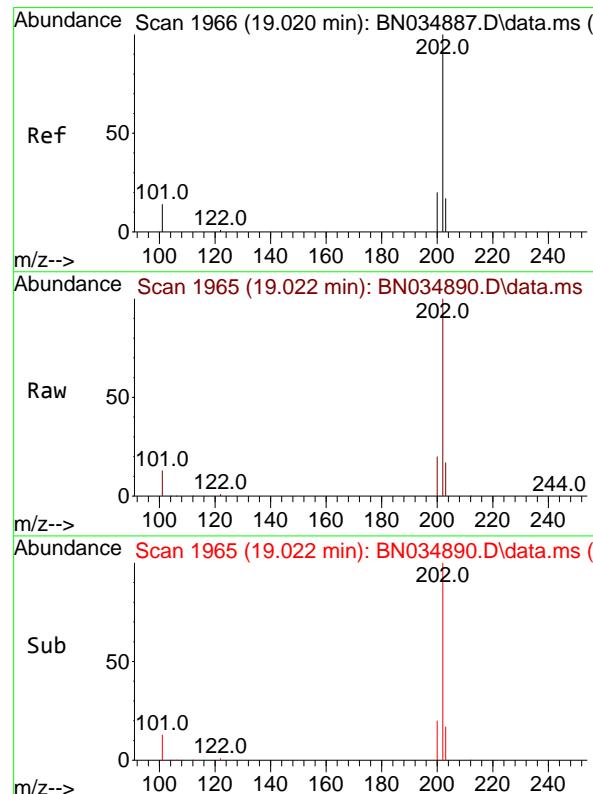
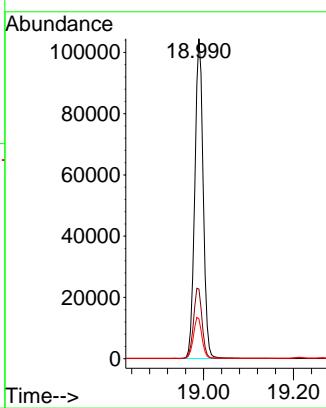




#27  
Fluoranthene-d10  
Concen: 3.359 ng  
RT: 18.990 min Scan# 1  
Delta R.T. 0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

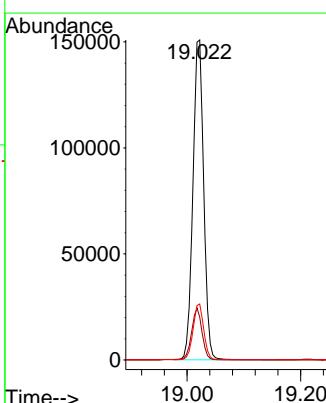
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

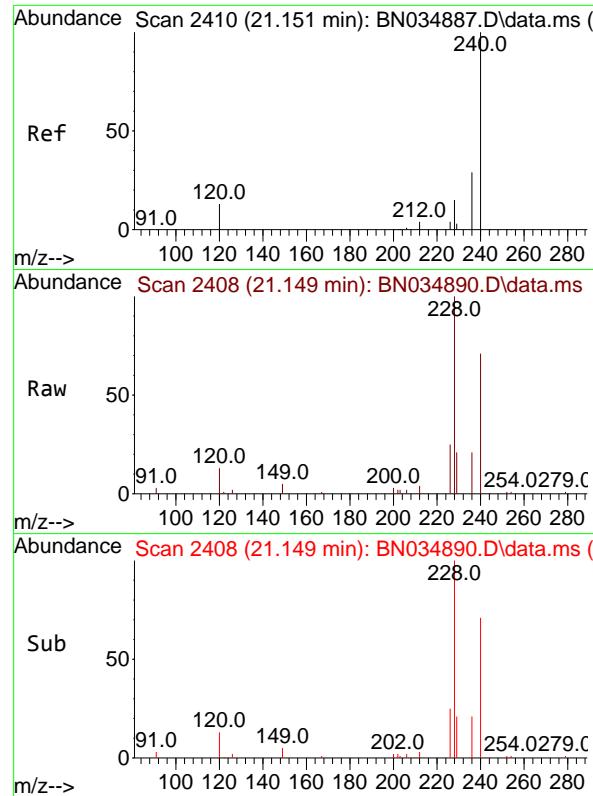
Tgt Ion:212 Resp: 135387  
Ion Ratio Lower Upper  
212 100  
106 22.4 18.2 27.4  
104 12.9 10.6 15.8



#28  
Fluoranthene  
Concen: 3.433 ng  
RT: 19.022 min Scan# 1965  
Delta R.T. 0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:202 Resp: 198087  
Ion Ratio Lower Upper  
202 100  
101 15.8 12.7 19.1  
203 17.2 13.7 20.5

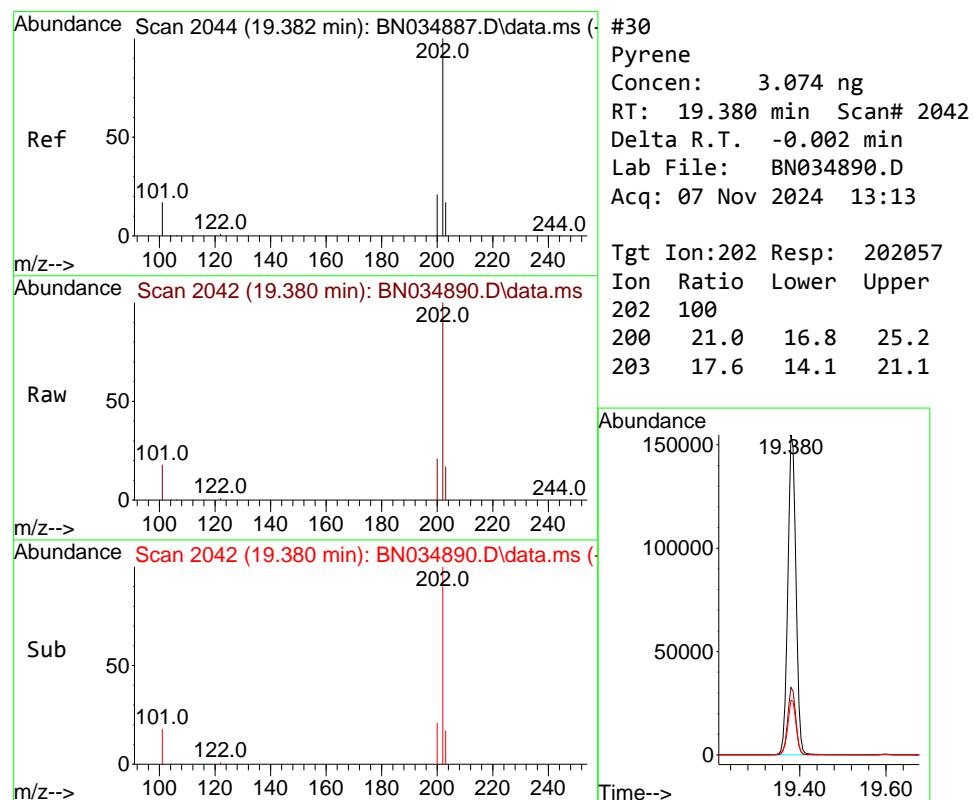
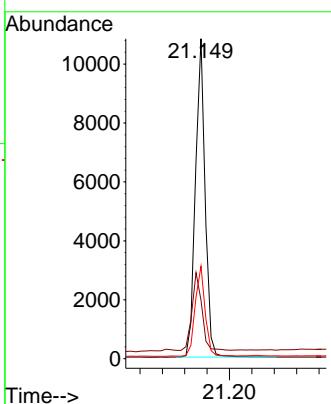




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

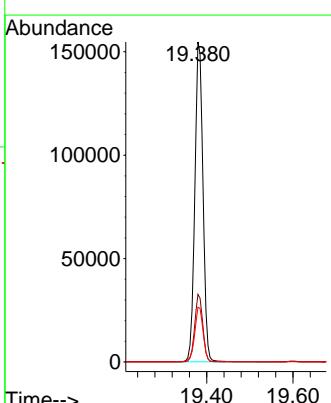
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

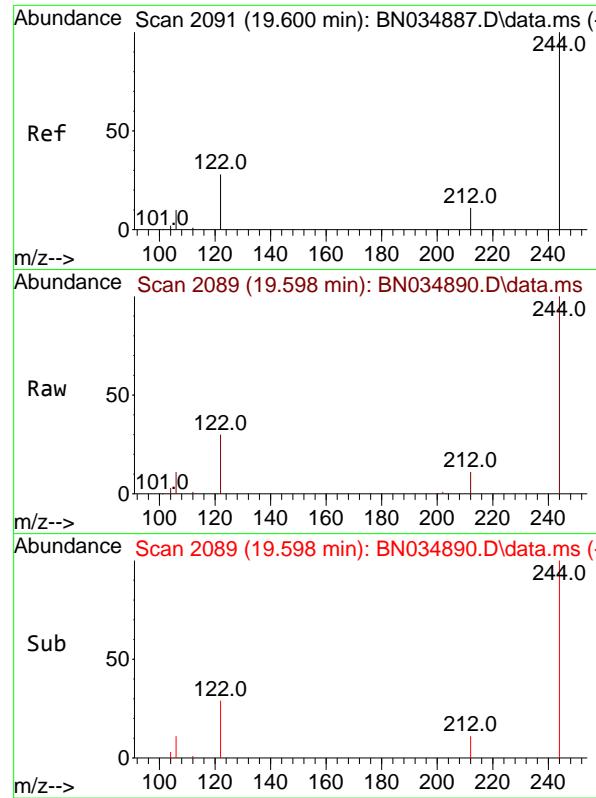
Tgt Ion:240 Resp: 12985  
Ion Ratio Lower Upper  
240 100  
120 18.2 13.8 20.8  
236 28.9 23.8 35.6



#30  
Pyrene  
Concen: 3.074 ng  
RT: 19.380 min Scan# 2042  
Delta R.T. -0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:202 Resp: 202057  
Ion Ratio Lower Upper  
202 100  
200 21.0 16.8 25.2  
203 17.6 14.1 21.1

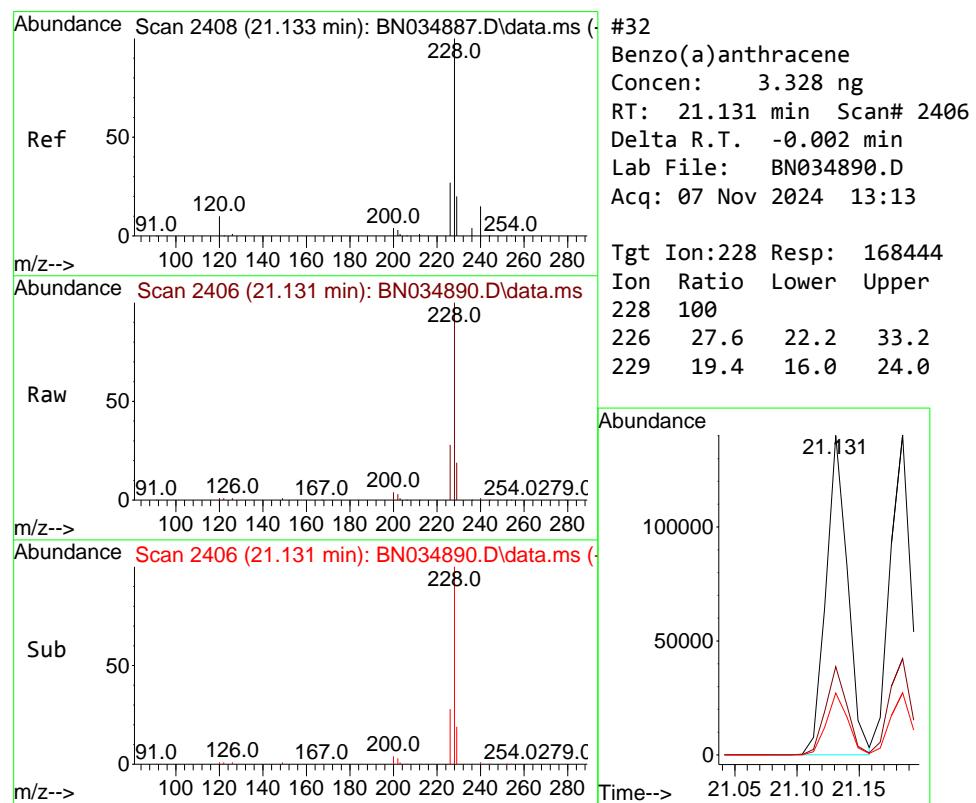
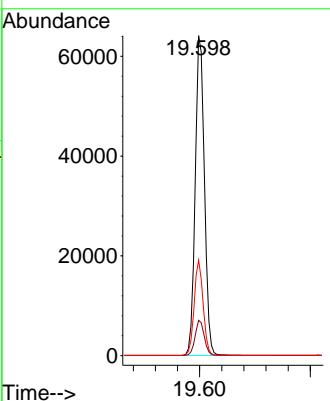




#31  
Terphenyl-d14  
Concen: 3.053 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

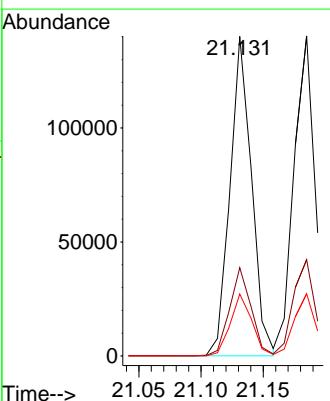
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

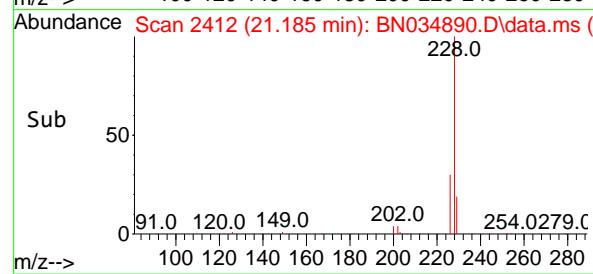
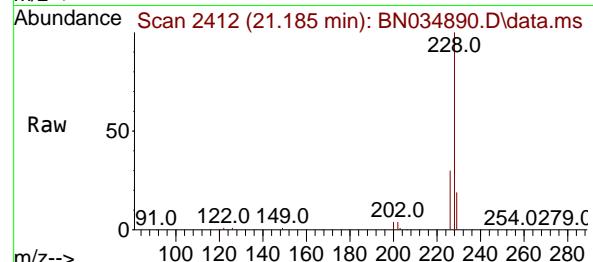
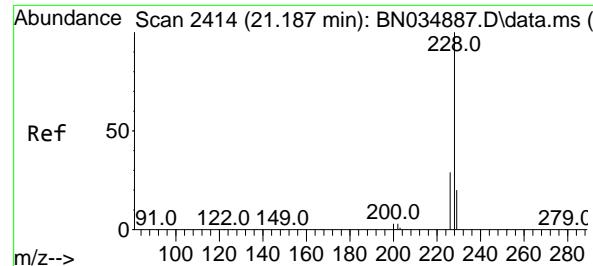
Tgt Ion:244 Resp: 74267  
Ion Ratio Lower Upper  
244 100  
212 11.0 9.4 14.0  
122 29.8 23.0 34.4



#32  
Benzo(a)anthracene  
Concen: 3.328 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:228 Resp: 168444  
Ion Ratio Lower Upper  
228 100  
226 27.6 22.2 33.2  
229 19.4 16.0 24.0

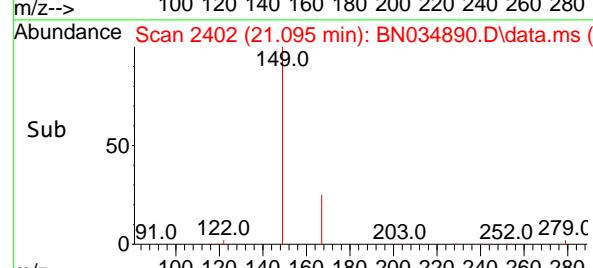
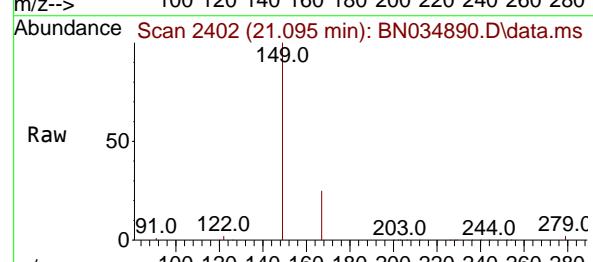
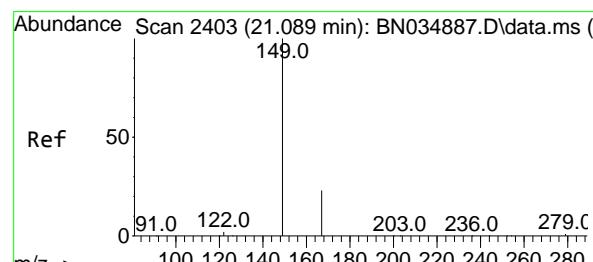
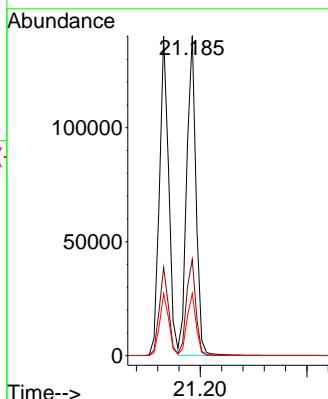




#33  
Chrysene  
Concen: 3.151 ng  
RT: 21.185 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

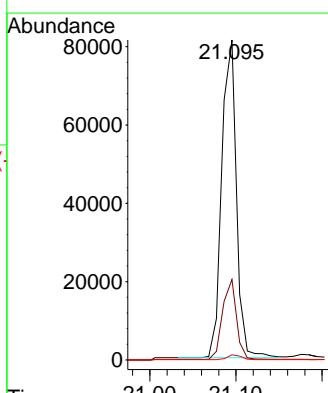
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

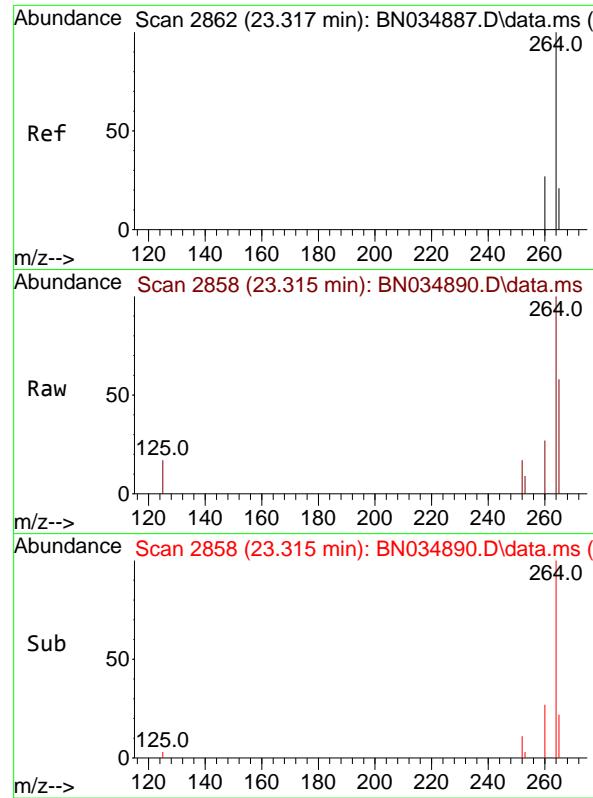
Tgt Ion:228 Resp: 168829  
Ion Ratio Lower Upper  
228 100  
226 30.1 23.7 35.5  
229 19.5 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 3.298 ng  
RT: 21.095 min Scan# 2402  
Delta R.T. 0.006 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:149 Resp: 95809  
Ion Ratio Lower Upper  
149 100  
167 23.9 18.1 27.1  
279 1.5 1.2 1.8

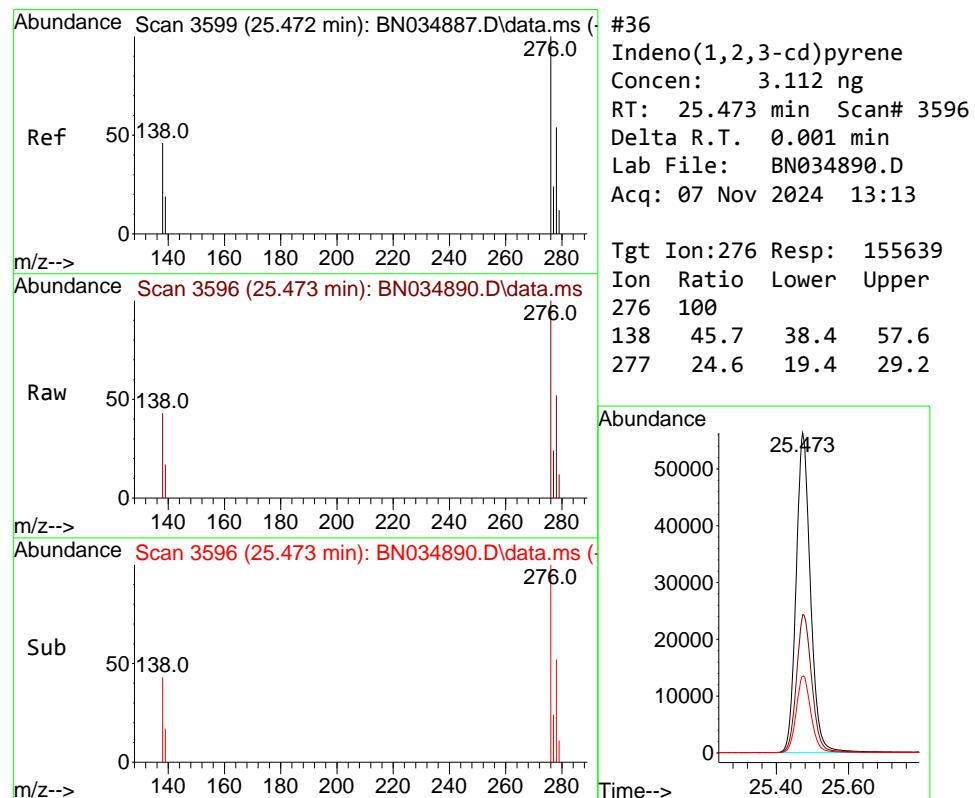
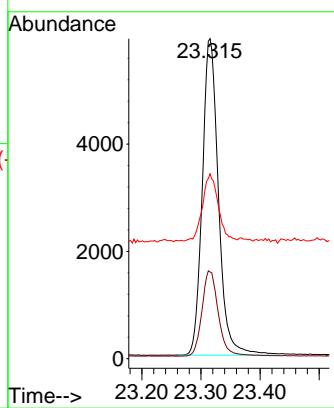




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

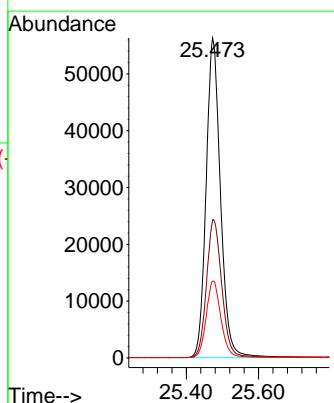
Instrument : BNA\_N  
ClientSampleId : SSTDICC3.2

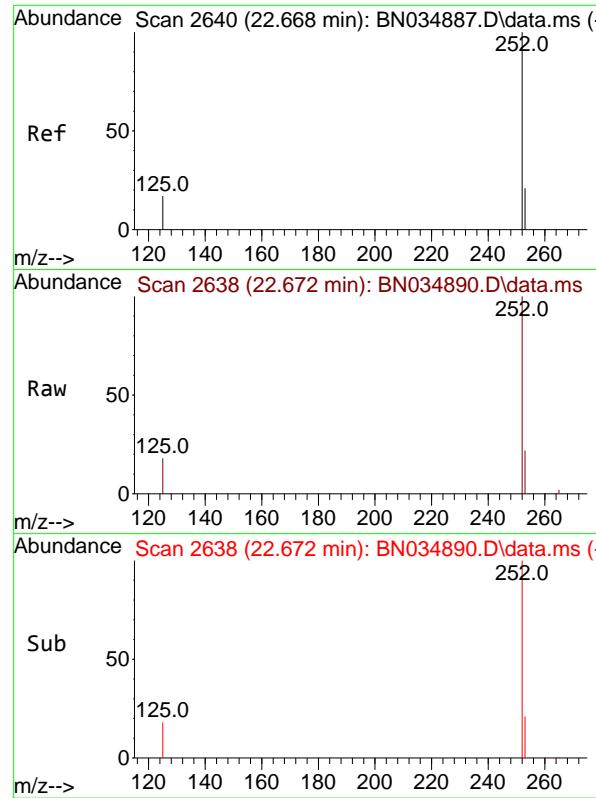
Tgt Ion:264 Resp: 11226  
Ion Ratio Lower Upper  
264 100  
260 27.1 22.2 33.2  
265 57.8 60.9 91.3#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 3.112 ng  
RT: 25.473 min Scan# 3596  
Delta R.T. 0.001 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:276 Resp: 155639  
Ion Ratio Lower Upper  
276 100  
138 45.7 38.4 57.6  
277 24.6 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 3.210 ng

RT: 22.672 min Scan# 2

Delta R.T. 0.004 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

Instrument :

BNA\_N

ClientSampleId :

SSTDICC3.2

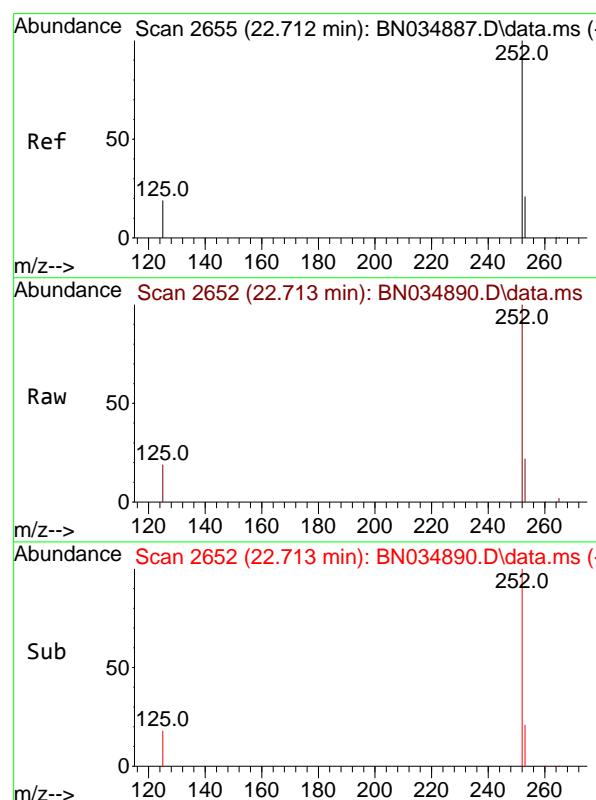
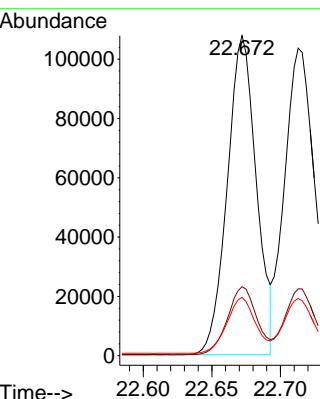
Tgt Ion:252 Resp: 158475

Ion Ratio Lower Upper

252 100

253 21.5 19.4 29.2

125 18.2 21.4 32.2#



#38

Benzo(k)fluoranthene

Concen: 3.162 ng

RT: 22.713 min Scan# 2652

Delta R.T. 0.001 min

Lab File: BN034890.D

Acq: 07 Nov 2024 13:13

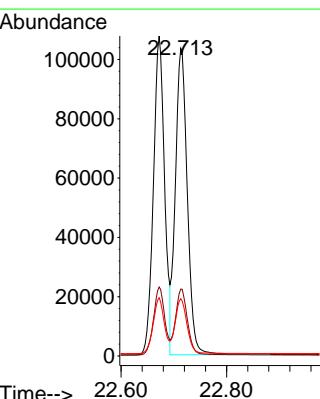
Tgt Ion:252 Resp: 162724

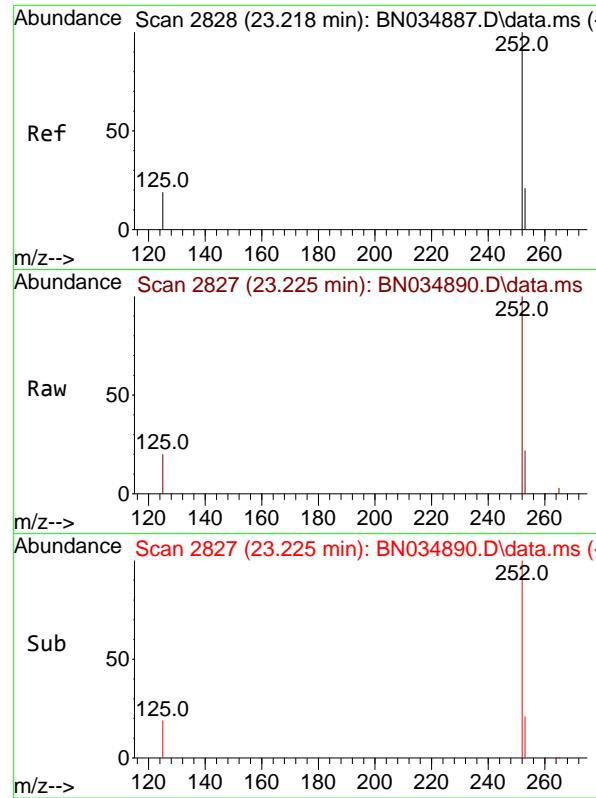
Ion Ratio Lower Upper

252 100

253 21.8 19.8 29.8

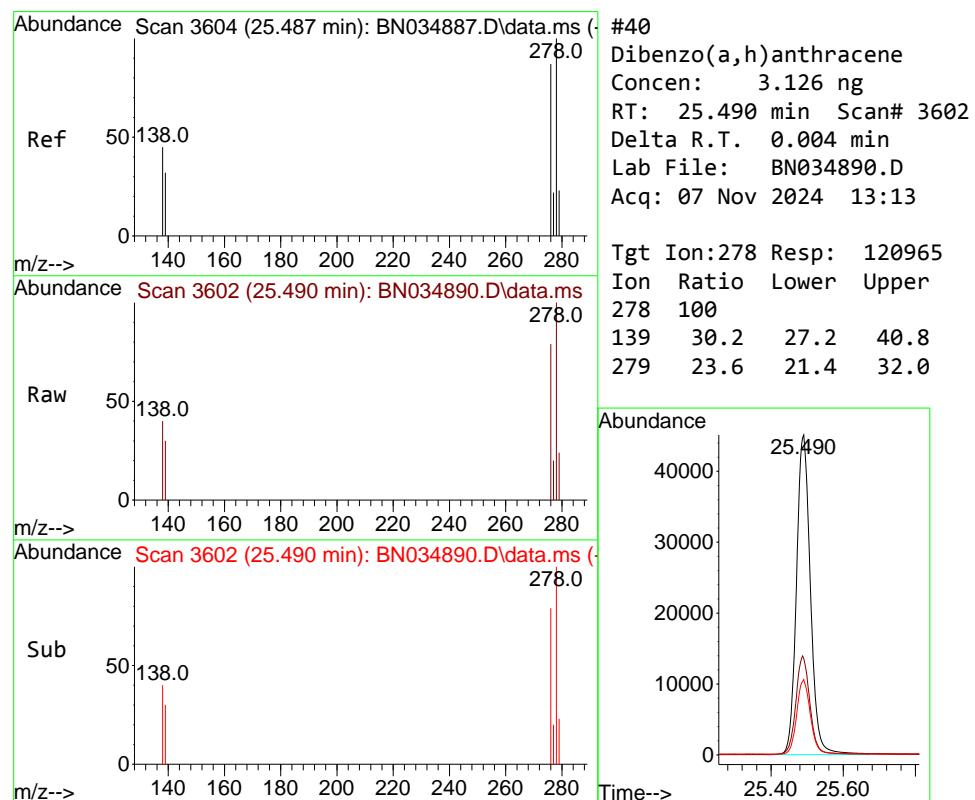
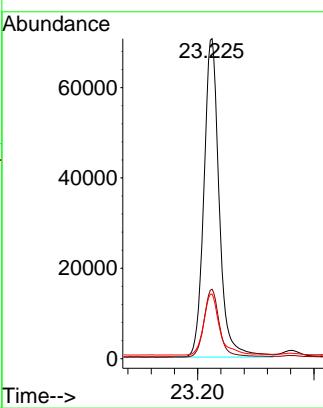
125 18.6 22.6 33.8#





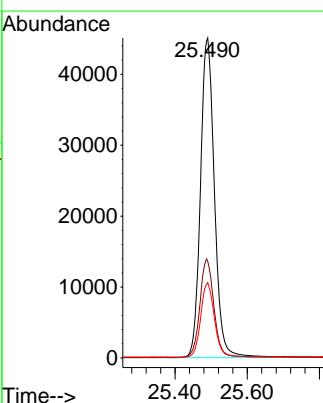
#39  
Benzo(a)pyrene  
Concen: 3.296 ng  
RT: 23.225 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.007 min  
Lab File: BN034890.D  
ClientSampleId : SSTDICC3.2  
Acq: 07 Nov 2024 13:13

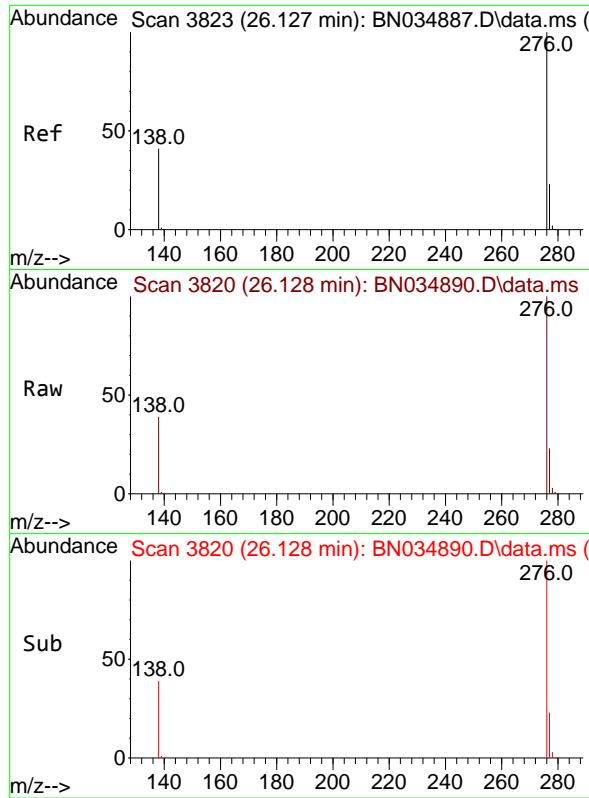
Tgt Ion:252 Resp: 129107  
Ion Ratio Lower Upper  
252 100  
253 21.7 21.4 32.2  
125 20.2 27.8 41.6#



#40  
Dibenzo(a,h)anthracene  
Concen: 3.126 ng  
RT: 25.490 min Scan# 3602  
Delta R.T. 0.004 min  
Lab File: BN034890.D  
Acq: 07 Nov 2024 13:13

Tgt Ion:278 Resp: 120965  
Ion Ratio Lower Upper  
278 100  
139 30.2 27.2 40.8  
279 23.6 21.4 32.0

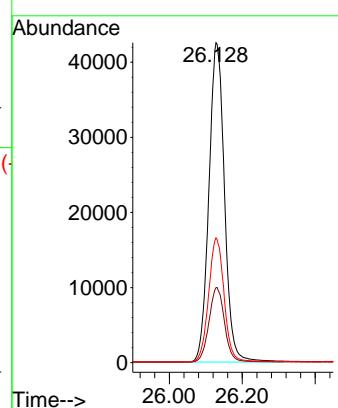




#41  
 Benzo(g,h,i)perylene  
 Concen: 3.077 ng  
 RT: 26.128 min Scan# 3  
 Delta R.T. 0.001 min  
 Lab File: BN034890.D  
 Acq: 07 Nov 2024 13:13

Instrument : BNA\_N  
 ClientSampleId : SSTDICC3.2

Tgt Ion:276 Resp: 126394  
 Ion Ratio Lower Upper  
 276 100  
 277 23.5 20.2 30.2  
 138 39.0 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034891.D  
 Acq On : 07 Nov 2024 13:49  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Nov 07 14:42:43 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

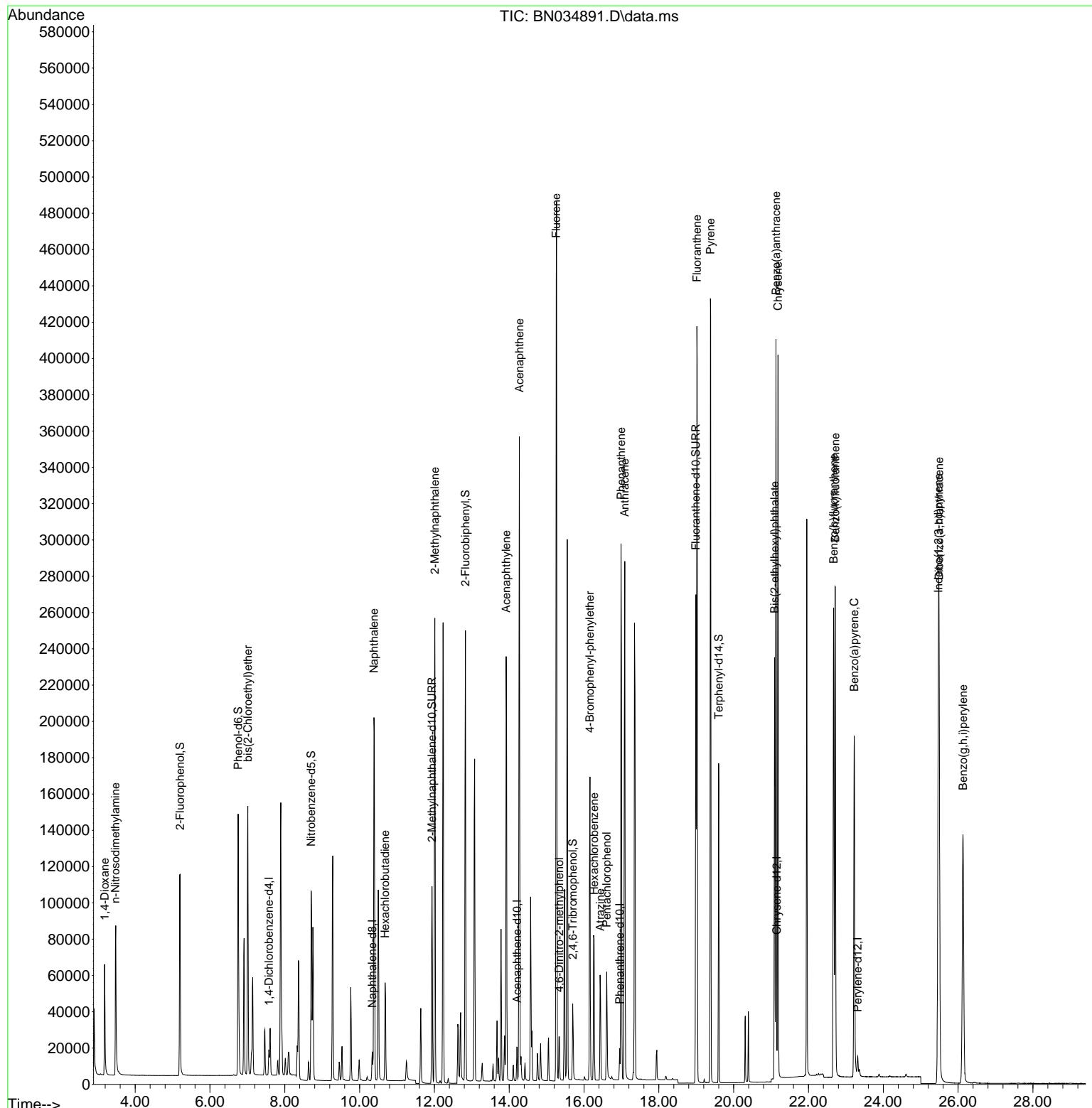
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	6427	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	19461	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	9747	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	20311	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	15131	0.400	ng	0.00
35) Perylene-d12	23.315	264	13025	0.400	ng	# 0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	89979	5.023	ng	0.00
5) Phenol-d6	6.752	99	125057	5.259	ng	0.00
8) Nitrobenzene-d5	8.707	82	78775	5.193	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	139970	5.277	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	20351	5.010	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	200084	4.860	ng	0.00
27) Fluoranthene-d10	18.990	212	246903	5.391	ng	0.00
31) Terphenyl-d14	19.598	244	136572	4.818	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	35433	4.363	ng	99
3) n-Nitrosodimethylamine	3.473	42	50806	4.637	ng	# 97
6) bis(2-Chloroethyl)ether	7.012	93	98796	4.816	ng	99
9) Naphthalene	10.383	128	270344	5.006	ng	99
10) Hexachlorobutadiene	10.682	225	41206	4.787	ng	# 98
12) 2-Methylnaphthalene	12.011	142	174529	5.280	ng	99
16) Acenaphthylene	13.919	152	255528	5.435	ng	100
17) Acenaphthene	14.272	154	170892	5.252	ng	93
18) Fluorene	15.255	166	210362	5.193	ng	98
20) 4,6-Dinitro-2-methylph...	15.341	198	15635	5.005	ng	# 20
21) 4-Bromophenyl-phenylether	16.157	248	56439	5.213	ng	# 86
22) Hexachlorobenzene	16.269	284	63070	4.839	ng	97
23) Atrazine	16.431	200	45719	5.829	ng	# 91
24) Pentachlorophenol	16.604	266	27136	5.004	ng	98
25) Phenanthrene	16.989	178	310025	4.976	ng	100
26) Anthracene	17.088	178	293574	5.466	ng	100
28) Fluoranthene	19.017	202	353254	5.388	ng	99
30) Pyrene	19.380	202	362438	4.731	ng	100
32) Benzo(a)anthracene	21.131	228	306722	5.200	ng	99
33) Chrysene	21.185	228	302895	4.852	ng	98
34) Bis(2-ethylhexyl)phtha...	21.095	149	198170	5.853	ng	97
36) Indeno(1,2,3-cd)pyrene	25.473	276	290582	5.008	ng	96
37) Benzo(b)fluoranthene	22.672	252	290476	5.071	ng	# 88
38) Benzo(k)fluoranthene	22.716	252	298841	5.006	ng	# 86
39) Benzo(a)pyrene	23.222	252	242944	5.345	ng	# 80
40) Dibenzo(a,h)anthracene	25.491	278	225693	5.027	ng	92
41) Benzo(g,h,i)perylene	26.131	276	235238	4.936	ng	94

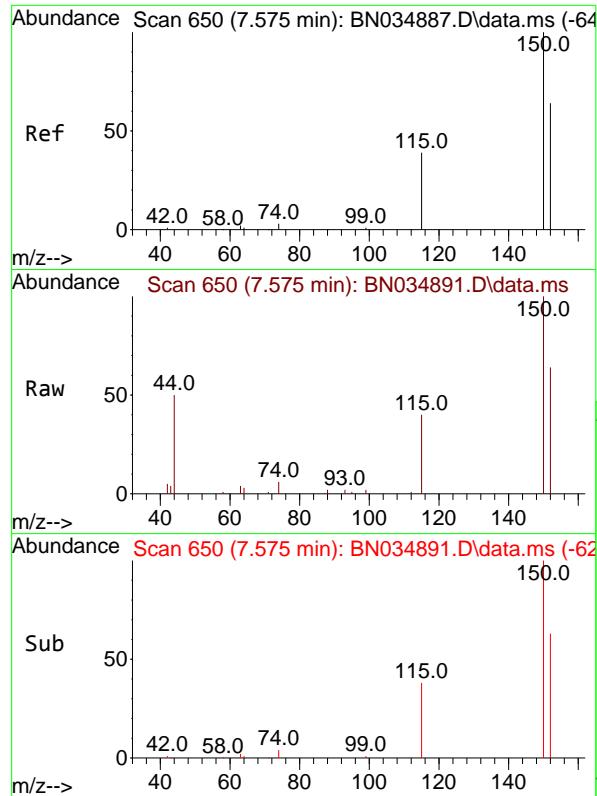
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034891.D  
 Acq On : 07 Nov 2024 13:49  
 Operator : RC/JU  
 Sample : SSTDICC5.0  
 Misc :  
 ALS Vial : 9 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICC5.0

Quant Time: Nov 07 14:42:43 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

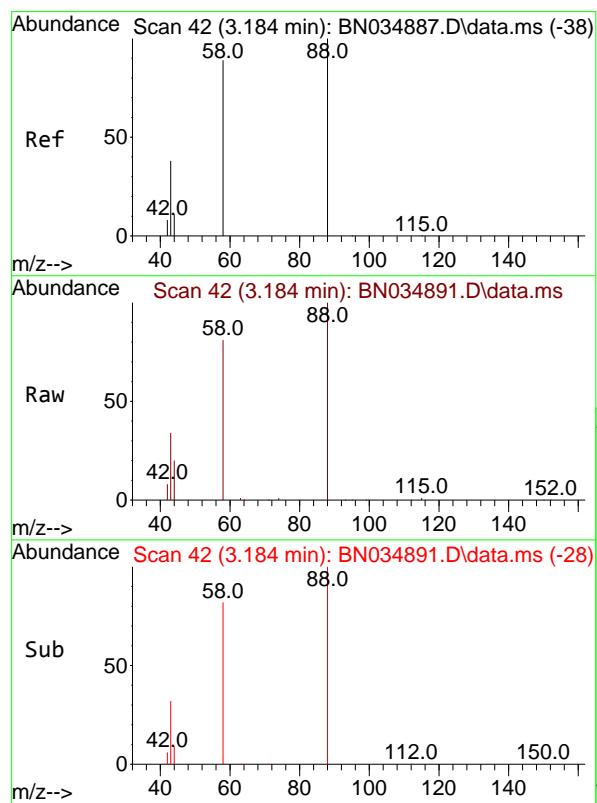
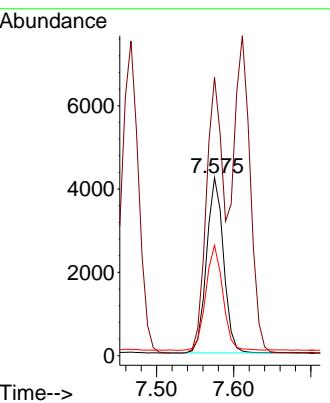




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R.T. -0.000 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

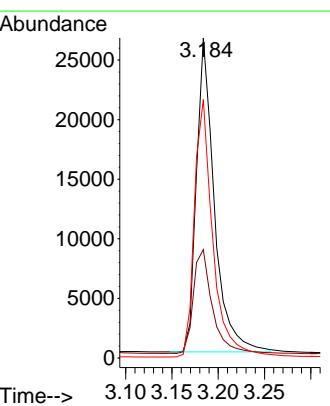
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

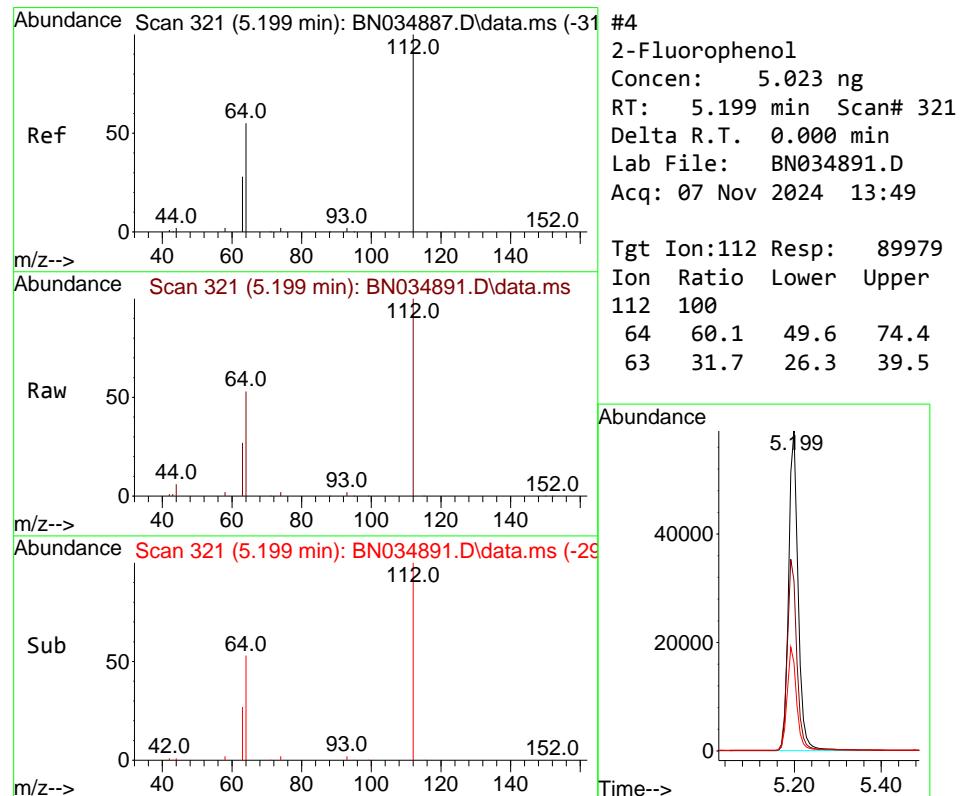
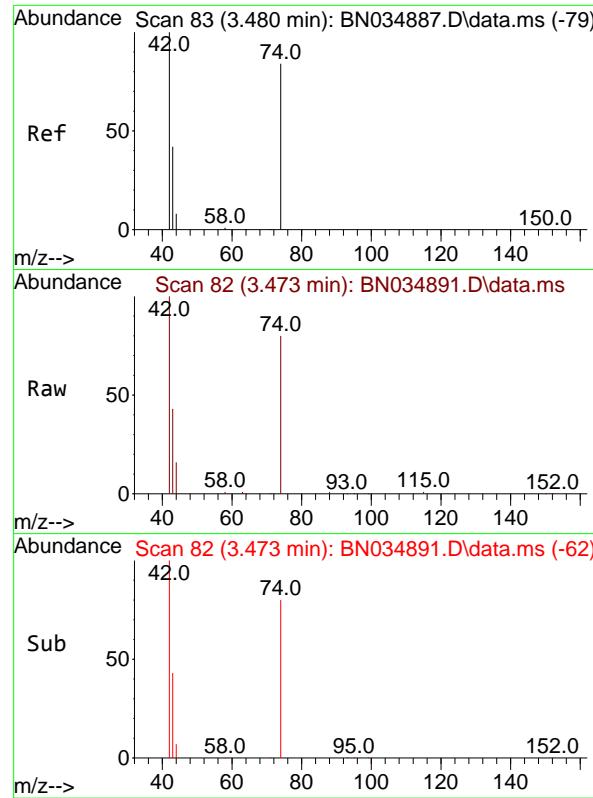
Tgt Ion:152 Resp: 6427  
 Ion Ratio Lower Upper  
 152 100  
 150 156.3 124.4 186.6  
 115 62.0 50.5 75.7

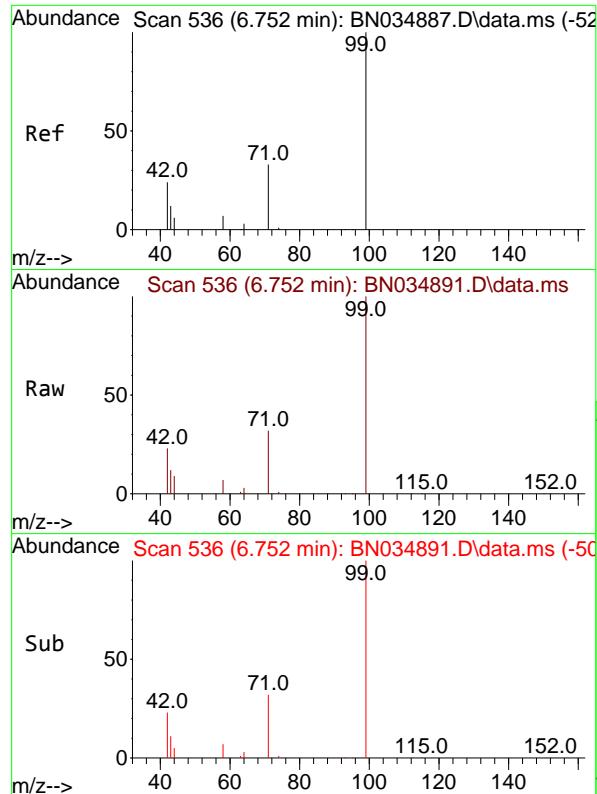


#2  
 1,4-Dioxane  
 Concen: 4.363 ng  
 RT: 3.184 min Scan# 42  
 Delta R.T. 0.000 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

Tgt Ion: 88 Resp: 35433  
 Ion Ratio Lower Upper  
 88 100  
 43 35.2 28.2 42.2  
 58 84.6 67.1 100.7



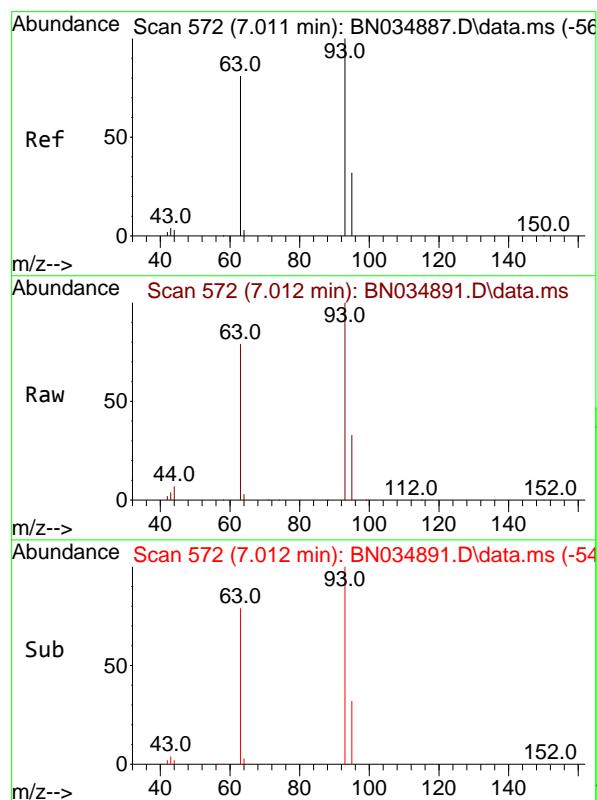
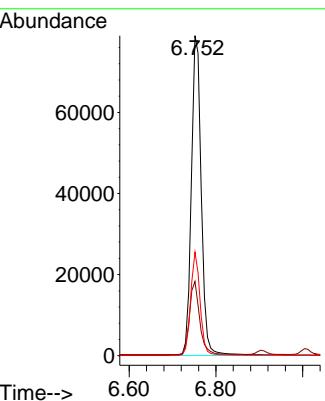




#5  
 Phenol-d6  
 Concen: 5.259 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

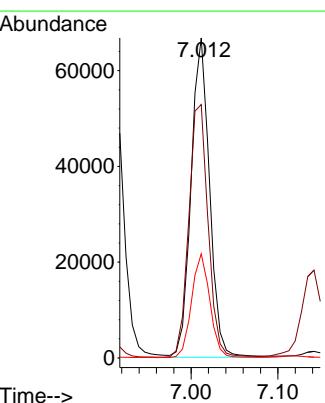
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 ClientSampleId : SSTDICC5.0

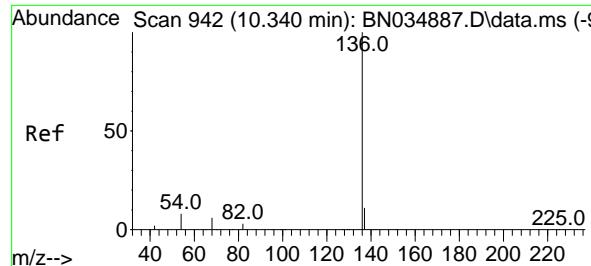
Tgt Ion: 99 Resp: 125057  
 Ion Ratio Lower Upper  
 99 100  
 42 23.6 20.2 30.2  
 71 31.1 25.4 38.0



#6  
 bis(2-Chloroethyl)ether  
 Concen: 4.816 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

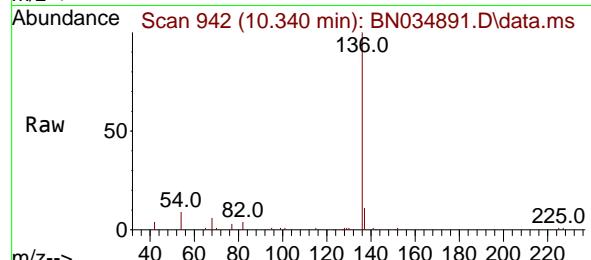
Tgt Ion: 93 Resp: 98796  
 Ion Ratio Lower Upper  
 93 100  
 63 82.6 67.5 101.3  
 95 32.1 25.7 38.5



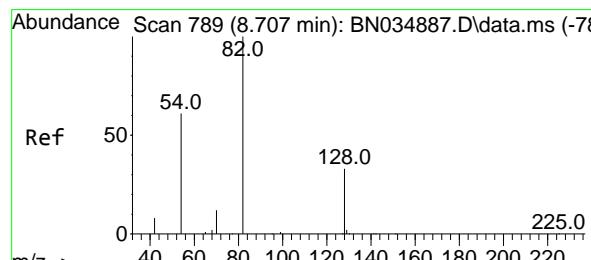
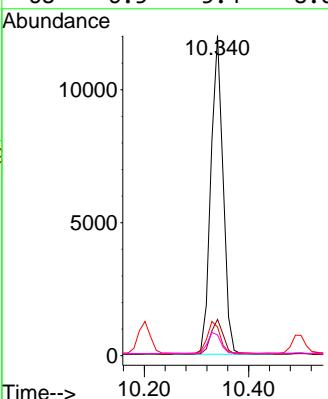
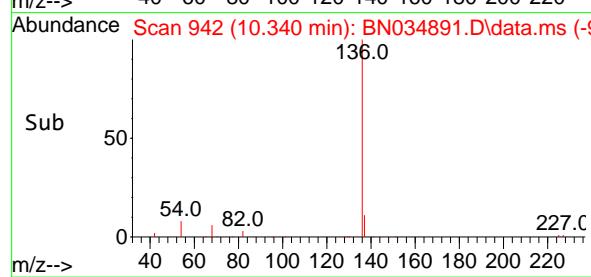


#7  
**Naphthalene-d8**  
Concen: 0.400 ng  
RT: 10.340 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

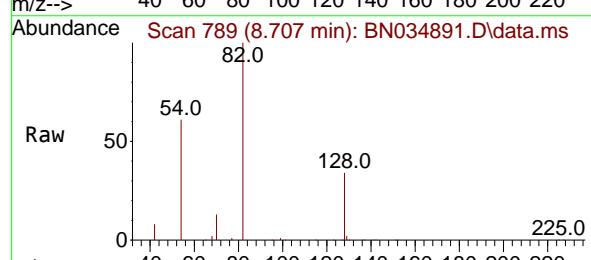
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0



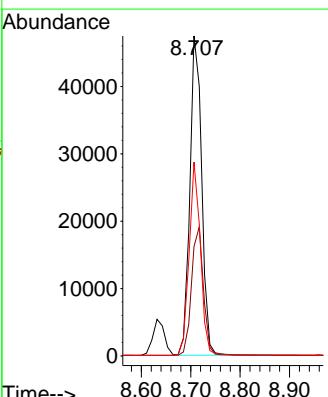
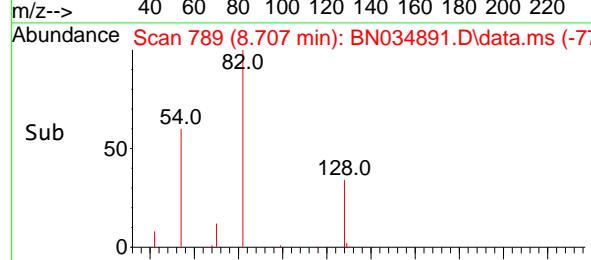
Tgt Ion:136 Resp: 19461  
Ion Ratio Lower Upper  
136 100  
137 11.4 8.9 13.3  
54 9.0 6.9 10.3  
68 6.5 5.4 8.0

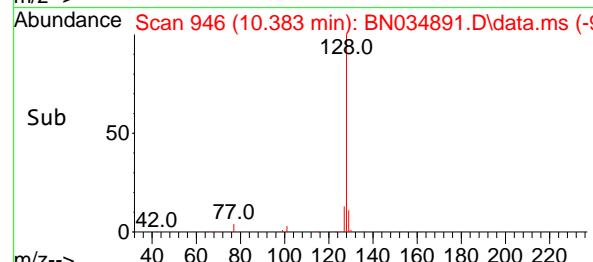
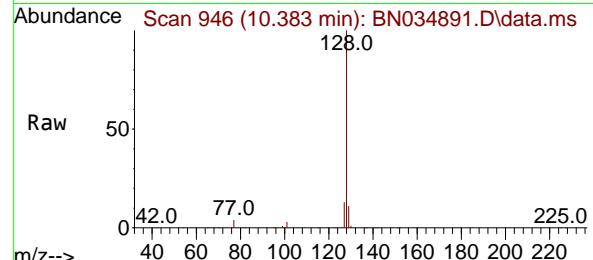
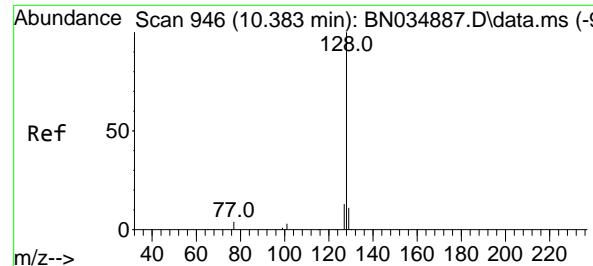


#8  
**Nitrobenzene-d5**  
Concen: 5.193 ng  
RT: 8.707 min Scan# 789  
Delta R.T. 0.000 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49



Tgt Ion: 82 Resp: 78775  
Ion Ratio Lower Upper  
82 100  
128 34.2 28.1 42.1  
54 60.6 49.8 74.6





#9

Naphthalene

Concen: 5.006 ng

RT: 10.383 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

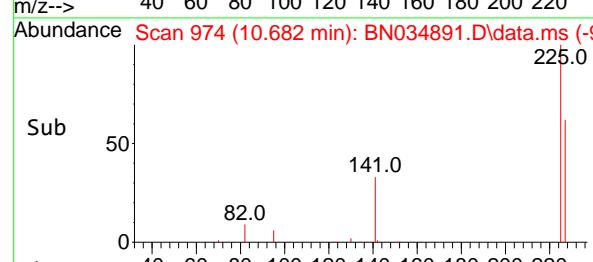
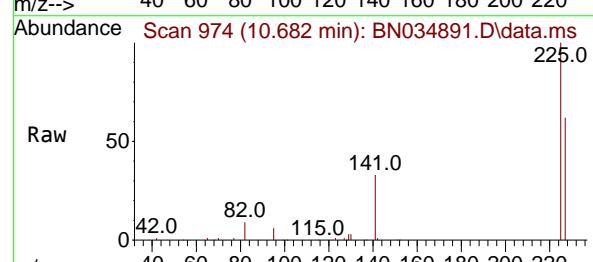
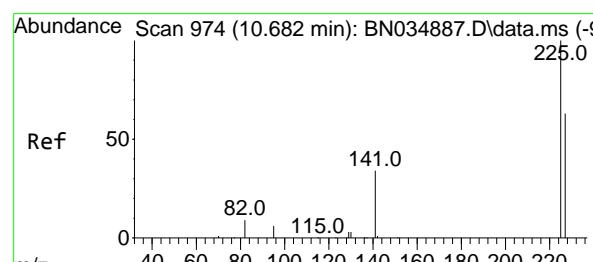
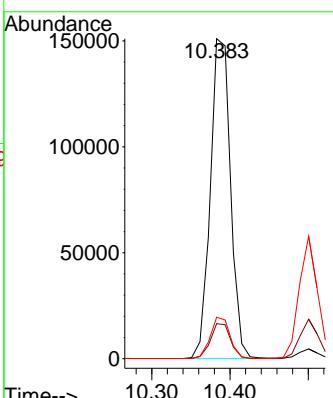
Tgt Ion:128 Resp: 270344

Ion Ratio Lower Upper

128 100

129 10.9 9.0 13.4

127 12.9 10.8 16.2



#10

Hexachlorobutadiene

Concen: 4.787 ng

RT: 10.682 min Scan# 974

Delta R.T. 0.000 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

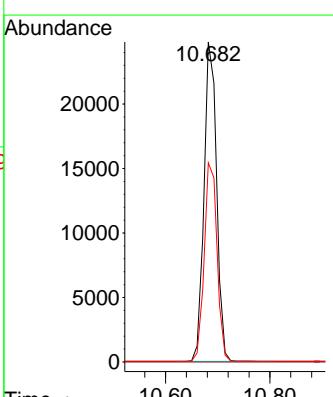
Tgt Ion:225 Resp: 41206

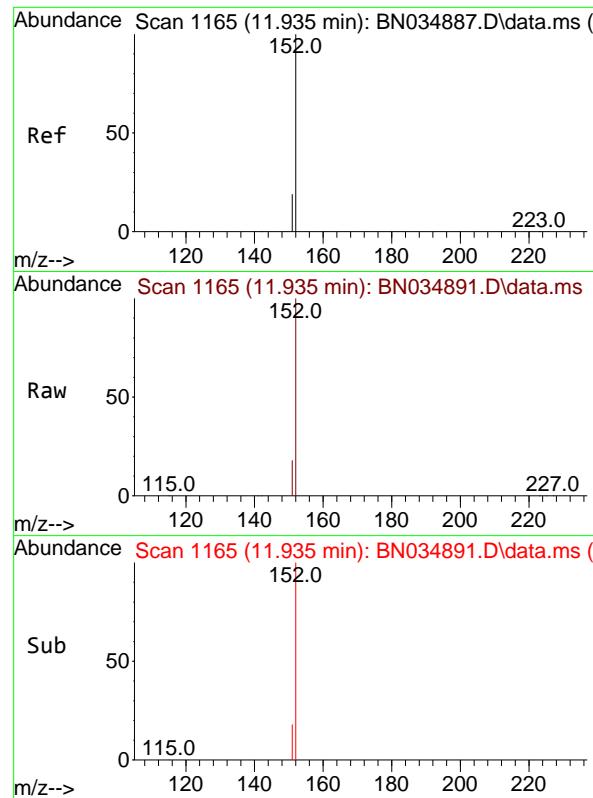
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

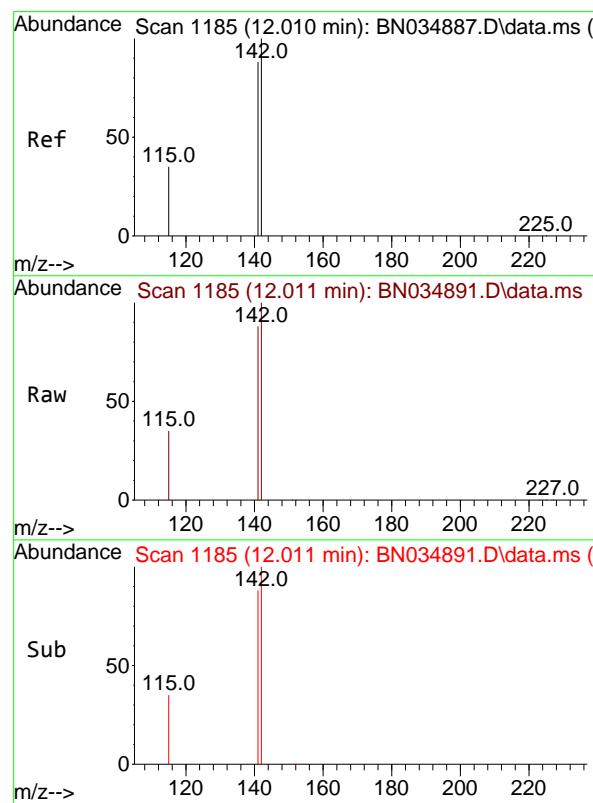
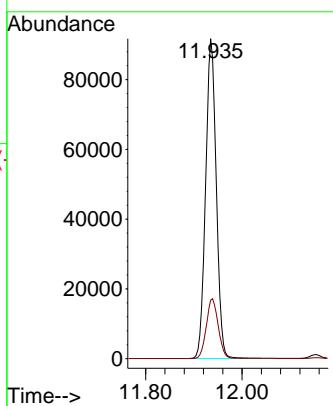
227 63.5 52.0 78.0





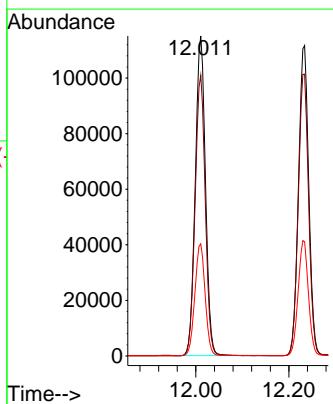
#11  
2-Methylnaphthalene-d10  
Concen: 5.277 ng  
RT: 11.935 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034891.D  
ClientSampleId : SSTDICC5.0  
Acq: 07 Nov 2024 13:49

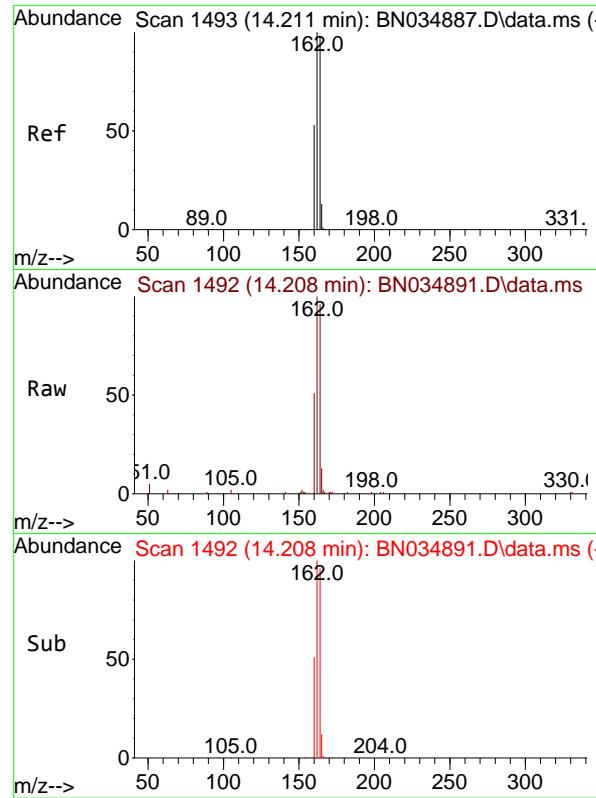
Tgt Ion:152 Resp: 139970  
Ion Ratio Lower Upper  
152 100  
151 20.9 17.1 25.7



#12  
2-Methylnaphthalene  
Concen: 5.280 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:142 Resp: 174529  
Ion Ratio Lower Upper  
142 100  
141 87.7 70.5 105.7  
115 35.0 29.4 44.2

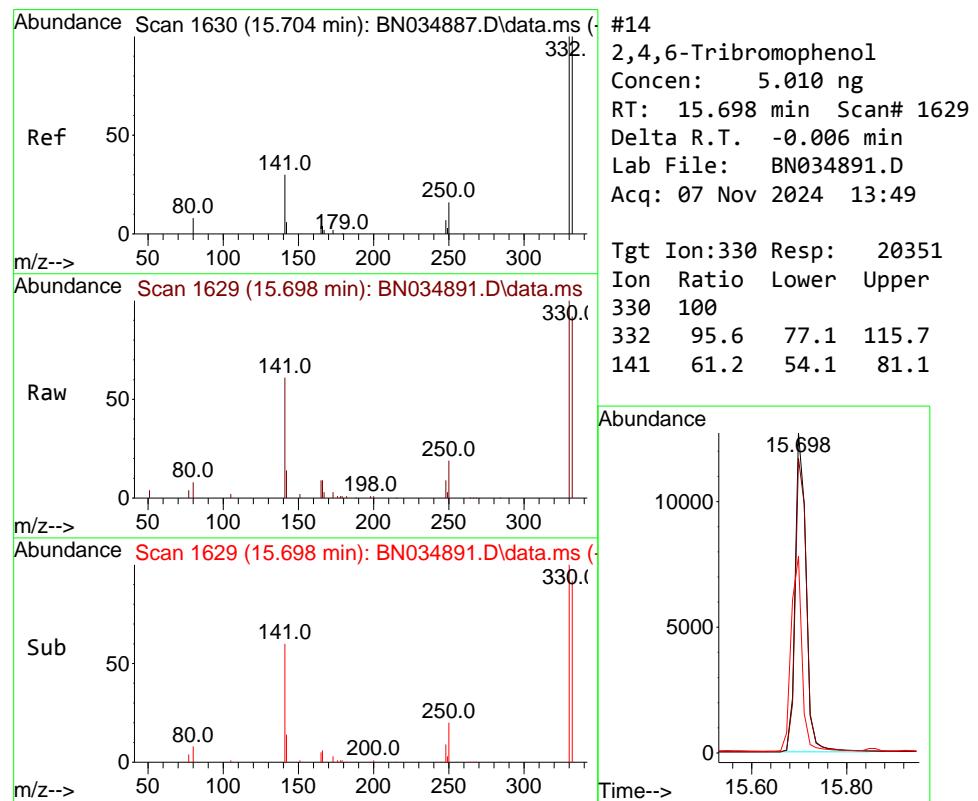
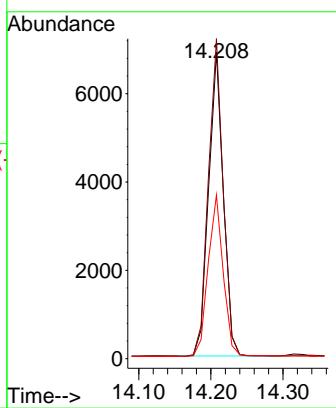




#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.208 min Scan# 1492  
 Delta R.T. -0.003 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

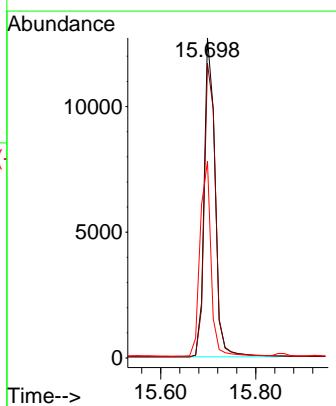
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

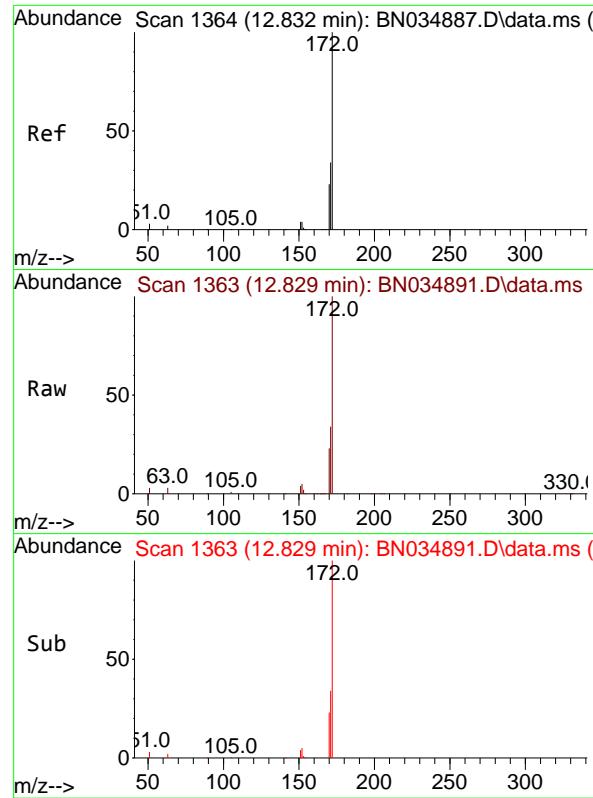
Tgt Ion:164 Resp: 9747  
 Ion Ratio Lower Upper  
 164 100  
 162 104.3 81.9 122.9  
 160 53.4 43.5 65.3



#14  
 2,4,6-Tribromophenol  
 Concen: 5.010 ng  
 RT: 15.698 min Scan# 1629  
 Delta R.T. -0.006 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

Tgt Ion:330 Resp: 20351  
 Ion Ratio Lower Upper  
 330 100  
 332 95.6 77.1 115.7  
 141 61.2 54.1 81.1

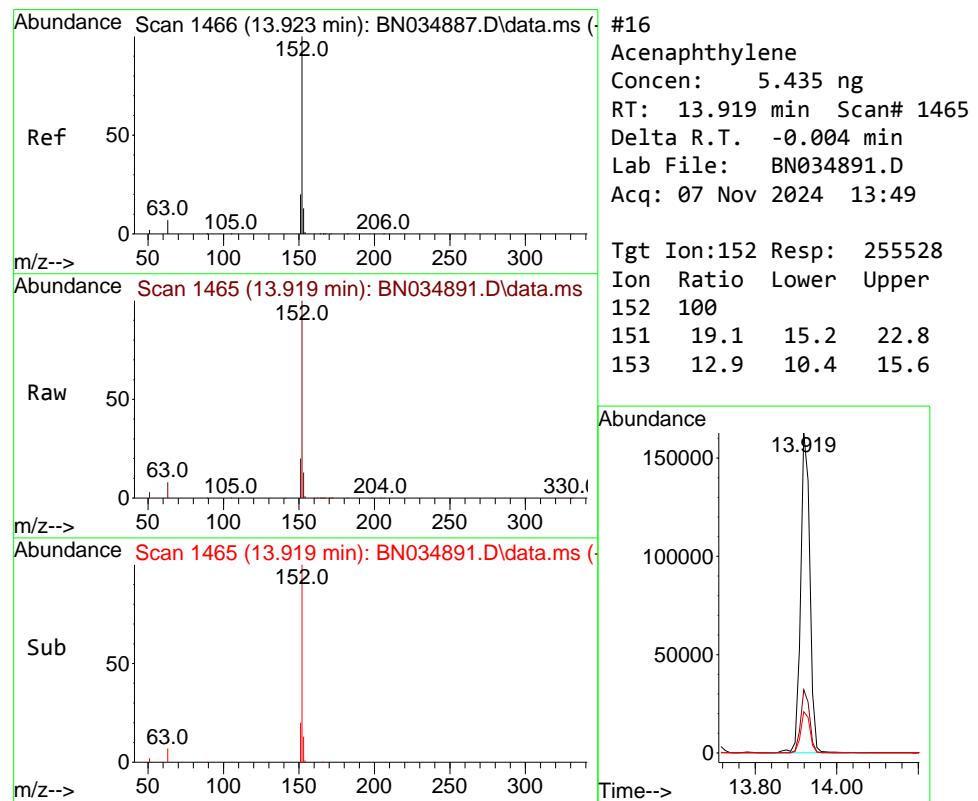
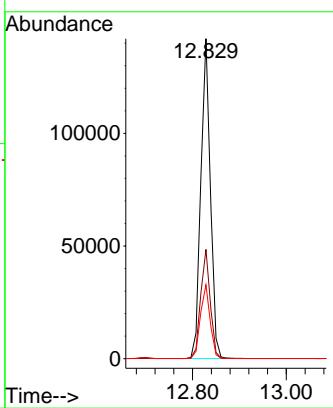




#15  
2-Fluorobiphenyl  
Concen: 4.860 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

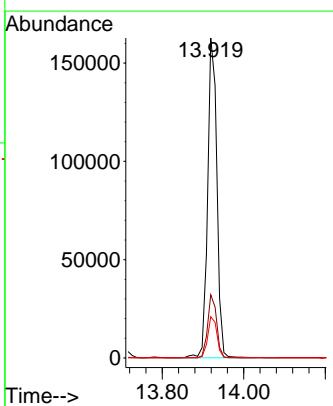
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ClientSampleId : SSTDICC5.0

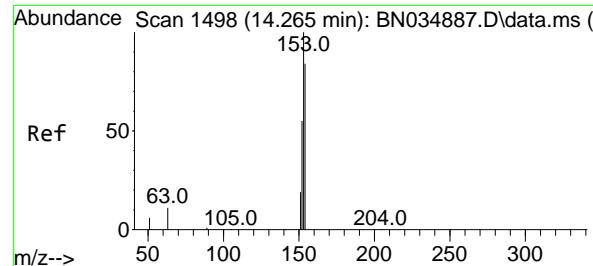
Tgt Ion:172 Resp: 200084  
Ion Ratio Lower Upper  
172 100  
171 34.1 27.9 41.9  
170 23.1 19.0 28.4



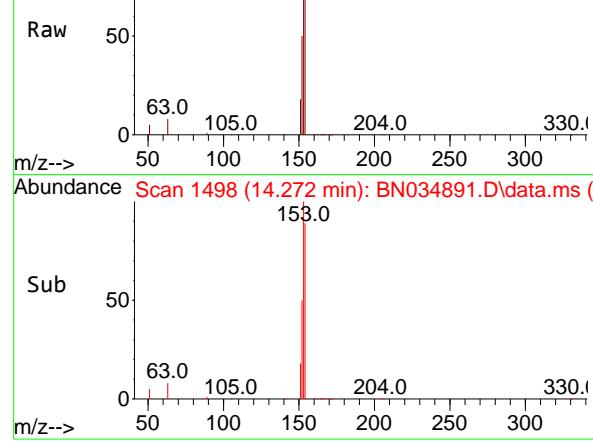
#16  
Acenaphthylene  
Concen: 5.435 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:152 Resp: 255528  
Ion Ratio Lower Upper  
152 100  
151 19.1 15.2 22.8  
153 12.9 10.4 15.6





Abundance Scan 1498 (14.272 min): BN034891.D\data.ms (-)



#17

Acenaphthene

Concen: 5.252 ng

RT: 14.272 min Scan# 1

Delta R.T. 0.007 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

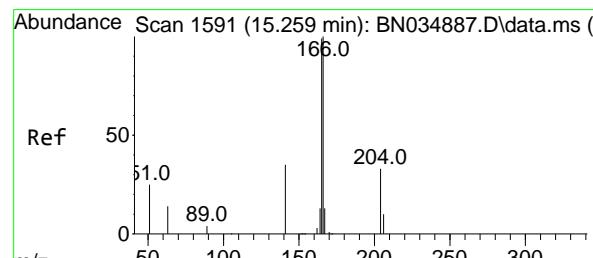
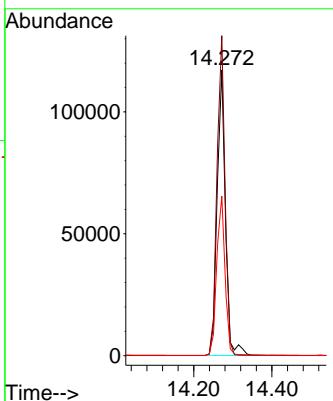
Tgt Ion:154 Resp: 170892

Ion Ratio Lower Upper

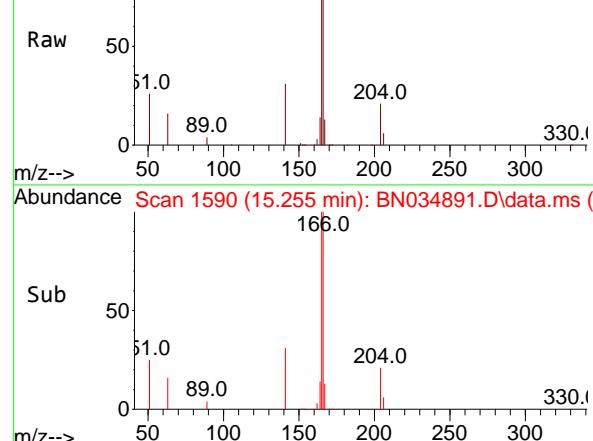
154 100

153 108.9 92.2 138.2

152 55.9 51.1 76.7



Abundance Scan 1590 (15.255 min): BN034891.D\data.ms (-)



#18

Fluorene

Concen: 5.193 ng

RT: 15.255 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

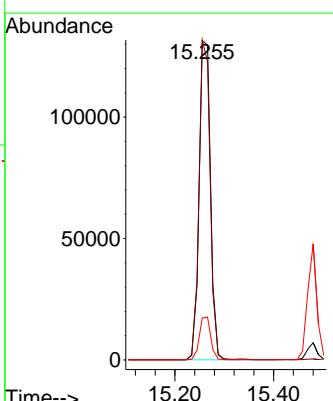
Tgt Ion:166 Resp: 210362

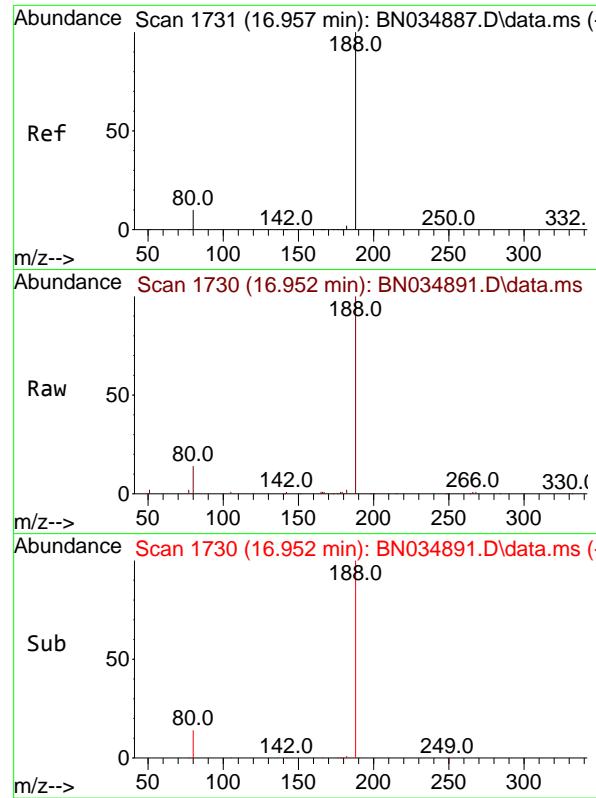
Ion Ratio Lower Upper

166 100

165 97.6 79.5 119.3

167 13.4 10.6 16.0

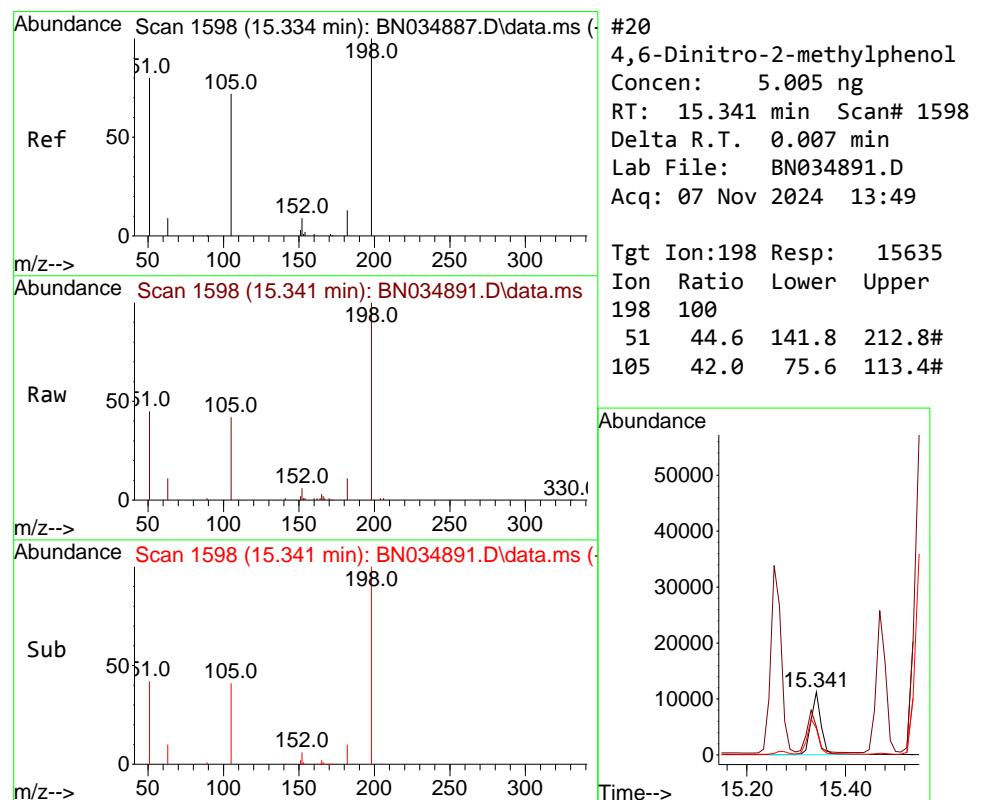
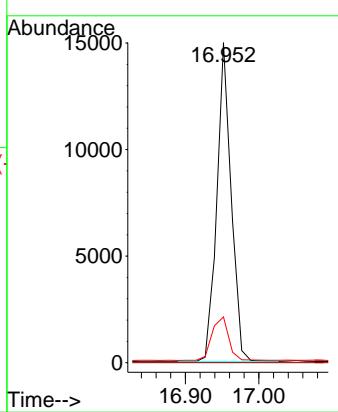




#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.952 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

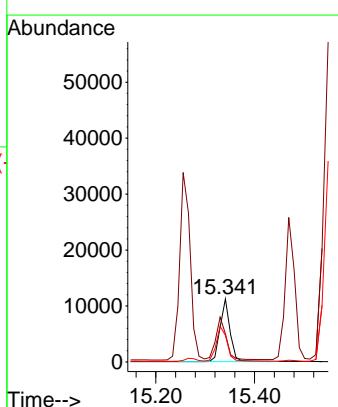
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

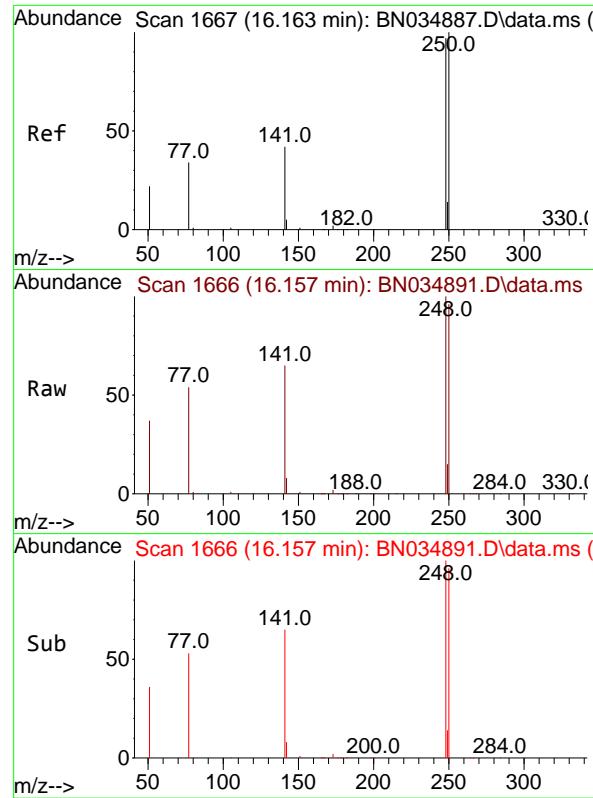
Tgt Ion:188 Resp: 20311  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 14.3 8.6 12.8#



#20  
 4,6-Dinitro-2-methylphenol  
 Concen: 5.005 ng  
 RT: 15.341 min Scan# 1598  
 Delta R.T. 0.007 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

Tgt Ion:198 Resp: 15635  
 Ion Ratio Lower Upper  
 198 100  
 51 44.6 141.8 212.8#  
 105 42.0 75.6 113.4#





#21

4-Bromophenyl-phenylether

Concen: 5.213 ng

RT: 16.157 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

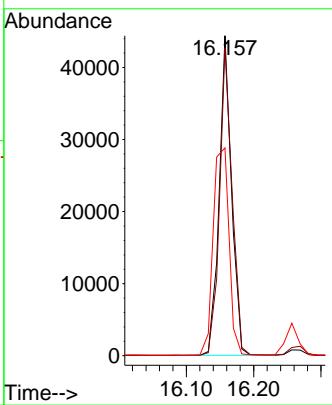
Tgt Ion:248 Resp: 56439

Ion Ratio Lower Upper

248 100

250 96.3 82.2 123.4

141 65.0 36.2 54.2#



#22

Hexachlorobenzene

Concen: 4.839 ng

RT: 16.269 min Scan# 1675

Delta R.T. 0.007 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

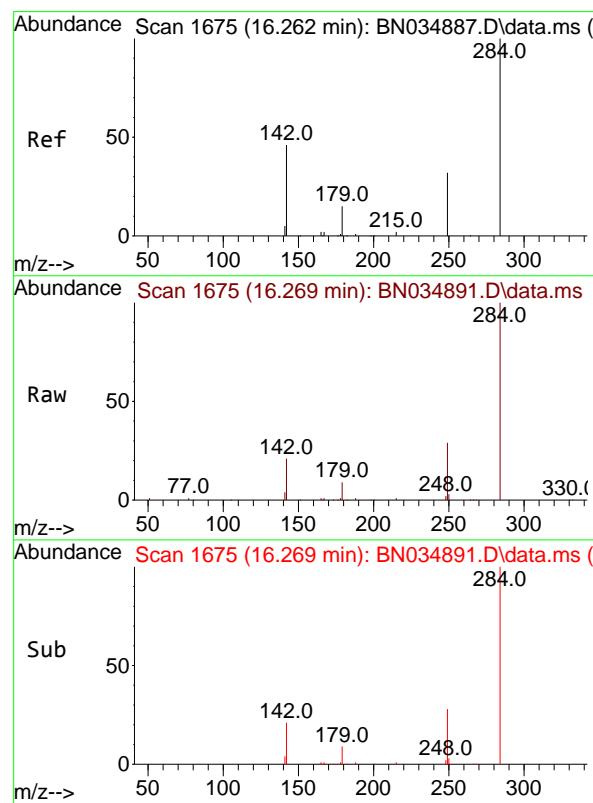
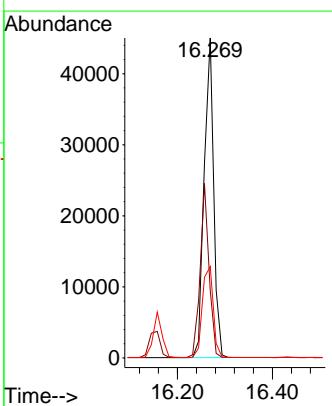
Tgt Ion:284 Resp: 63070

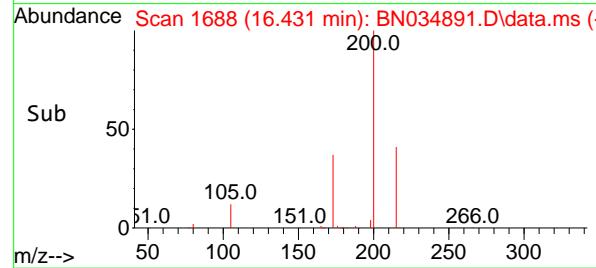
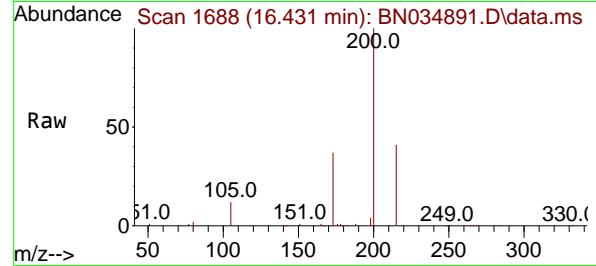
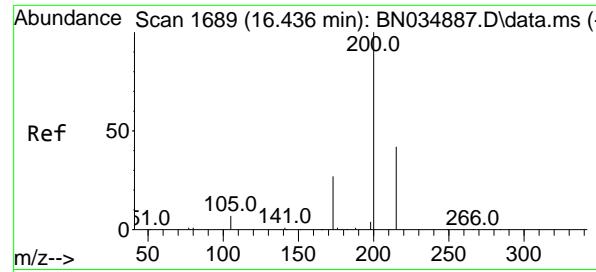
Ion Ratio Lower Upper

284 100

142 50.7 43.4 65.2

249 32.5 25.8 38.6

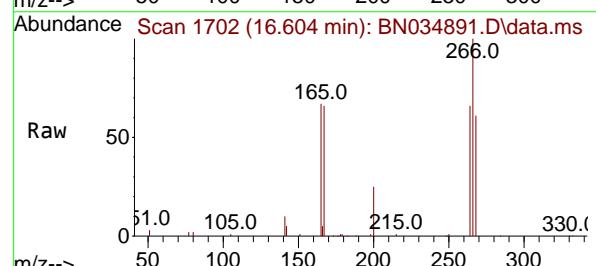
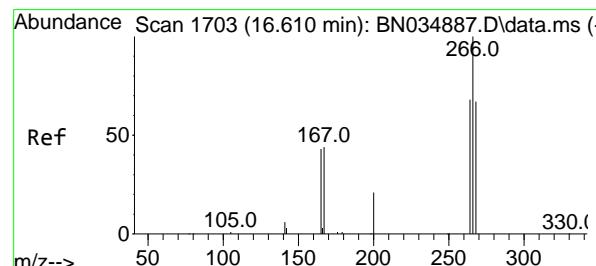
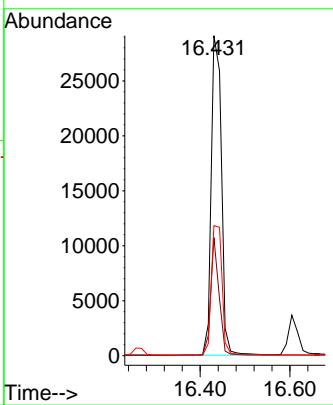




#23  
Atrazine  
Concen: 5.829 ng  
RT: 16.431 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

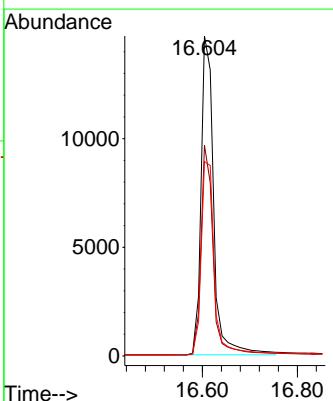
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDICC5.0

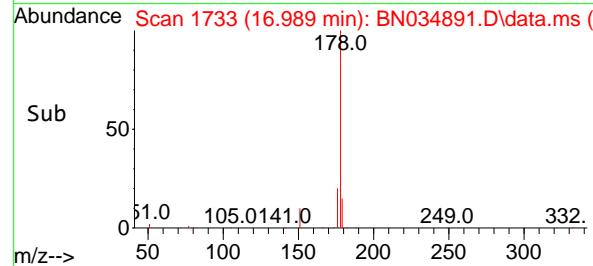
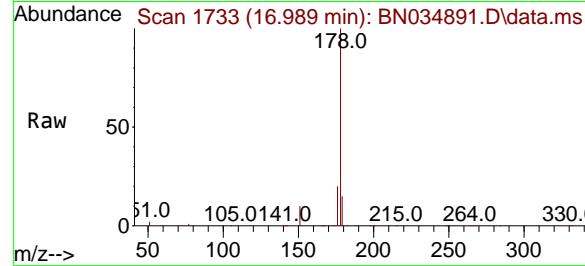
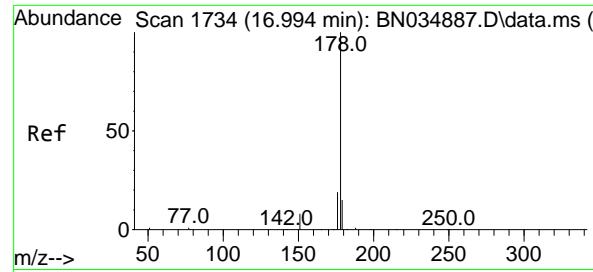
Tgt Ion:200 Resp: 45719  
Ion Ratio Lower Upper  
200 100  
173 36.9 23.4 35.2#  
215 40.7 35.4 53.0



#24  
Pentachlorophenol  
Concen: 5.004 ng  
RT: 16.604 min Scan# 1702  
Delta R.T. -0.006 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:266 Resp: 27136  
Ion Ratio Lower Upper  
266 100  
264 63.4 51.3 76.9  
268 63.4 53.0 79.6





#25

Phenanthrene

Concen: 4.976 ng

RT: 16.989 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

Instrument :

BNA\_N

ClientSampleId :

SSTDICC5.0

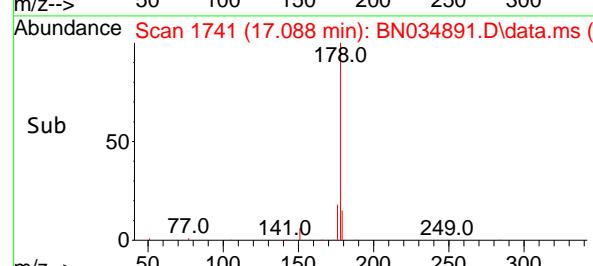
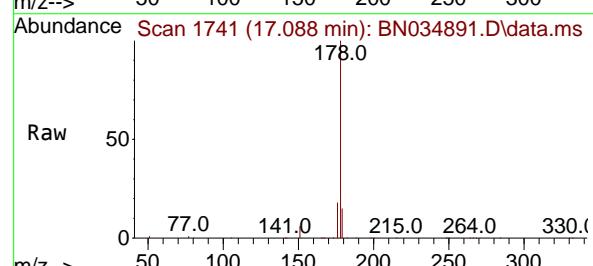
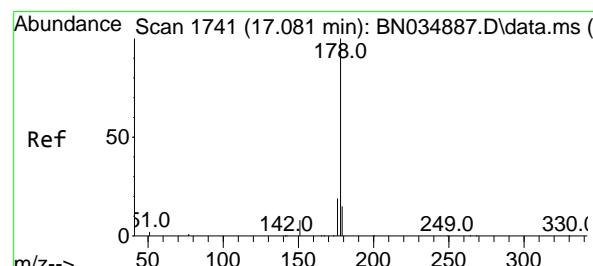
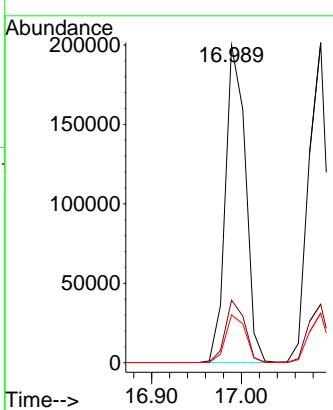
Tgt Ion:178 Resp: 310025

Ion Ratio Lower Upper

178 100

176 19.2 15.5 23.3

179 15.1 12.2 18.2



#26

Anthracene

Concen: 5.466 ng

RT: 17.088 min Scan# 1741

Delta R.T. 0.007 min

Lab File: BN034891.D

Acq: 07 Nov 2024 13:49

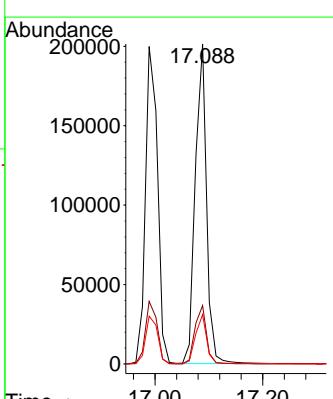
Tgt Ion:178 Resp: 293574

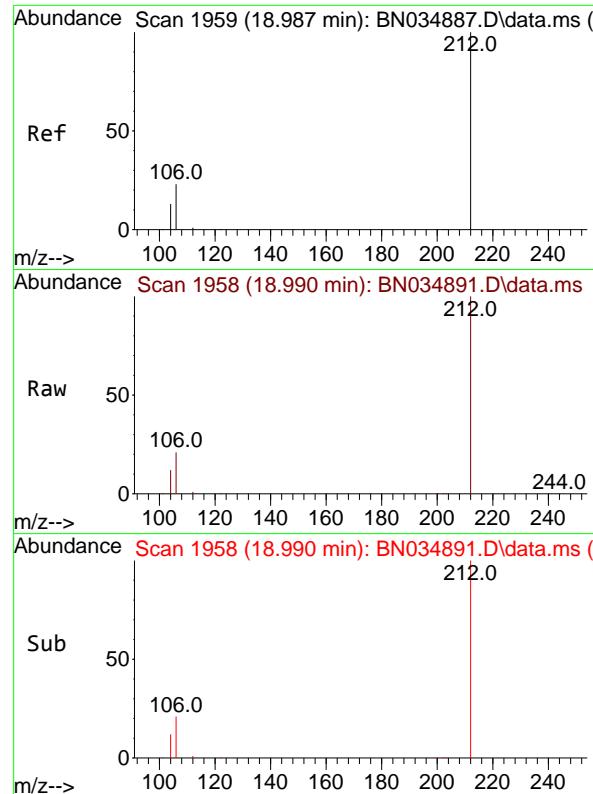
Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.2 12.1 18.1

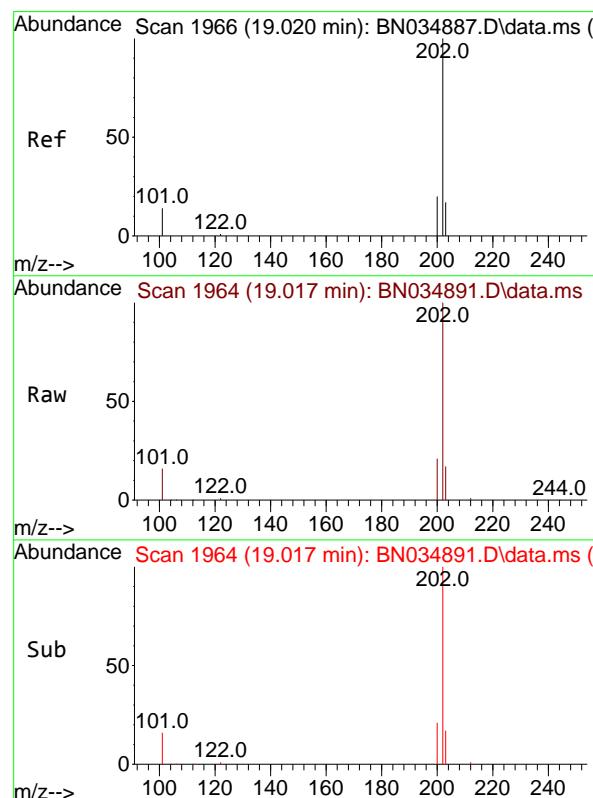
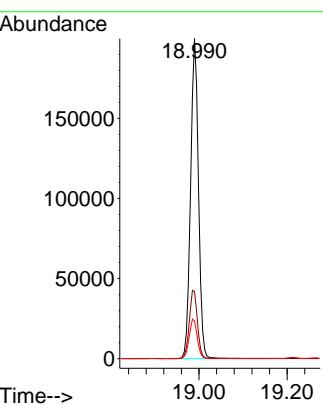




#27  
 Fluoranthene-d10  
 Concen: 5.391 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

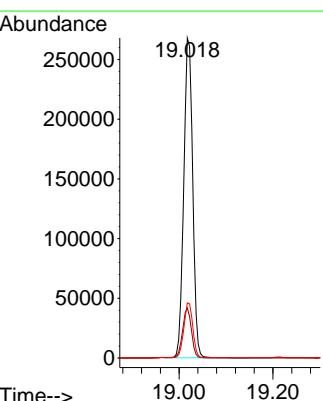
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

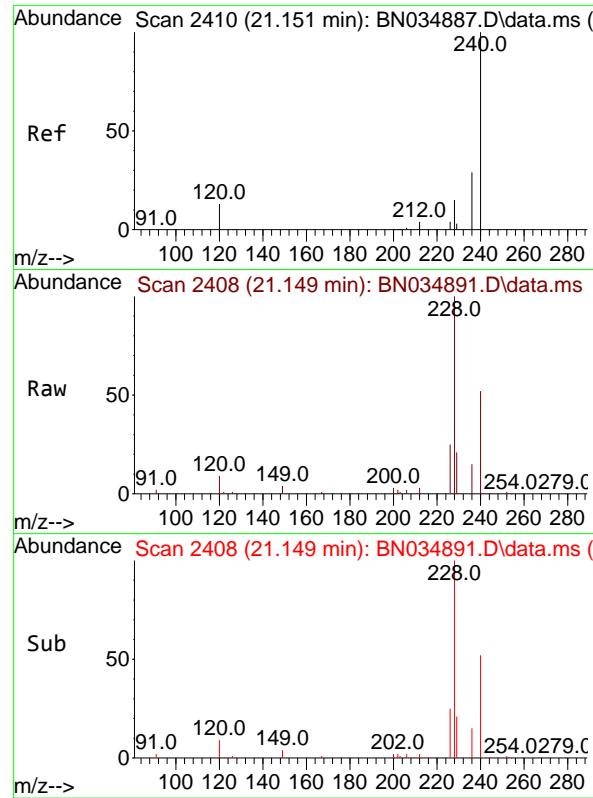
Tgt Ion:212 Resp: 246903  
 Ion Ratio Lower Upper  
 212 100  
 106 22.0 18.2 27.4  
 104 12.6 10.6 15.8



#28  
 Fluoranthene  
 Concen: 5.388 ng  
 RT: 19.017 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

Tgt Ion:202 Resp: 353254  
 Ion Ratio Lower Upper  
 202 100  
 101 15.5 12.7 19.1  
 203 17.2 13.7 20.5

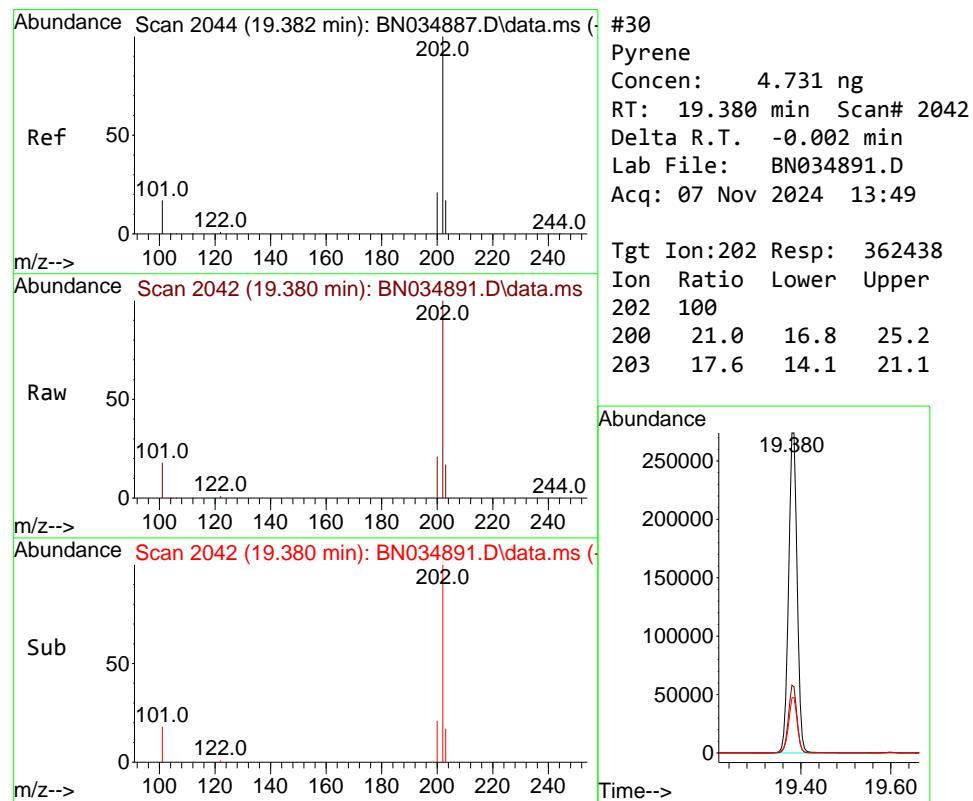
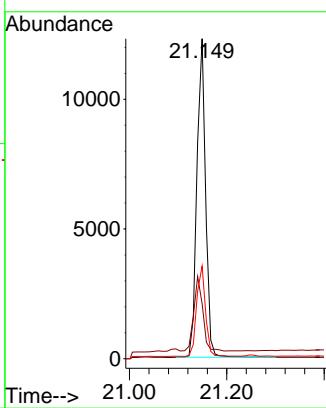




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

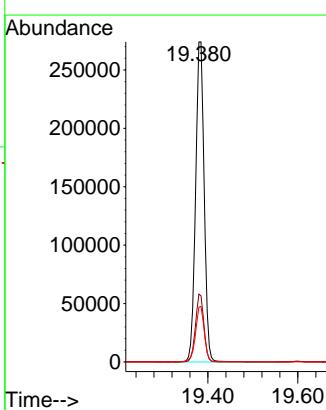
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

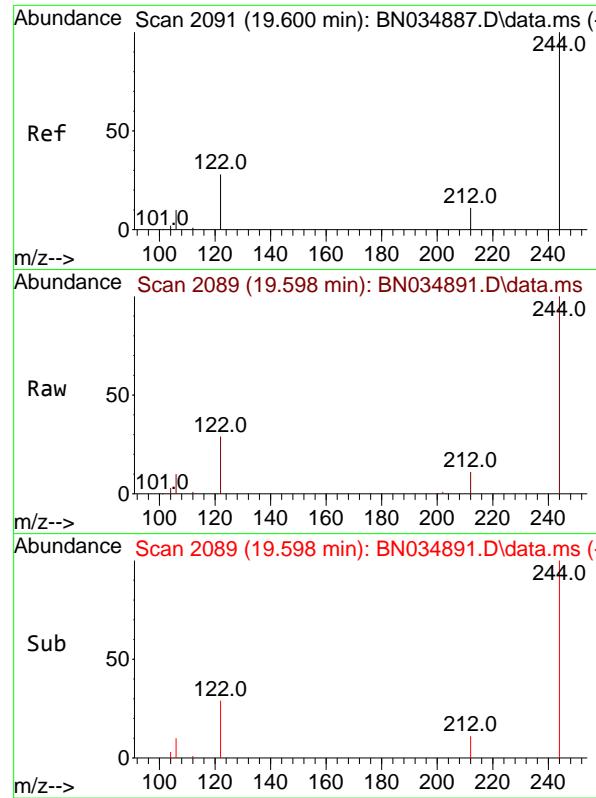
Tgt Ion:240 Resp: 15131  
Ion Ratio Lower Upper  
240 100  
120 17.2 13.8 20.8  
236 28.9 23.8 35.6



#30  
Pyrene  
Concen: 4.731 ng  
RT: 19.380 min Scan# 2042  
Delta R.T. -0.002 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:202 Resp: 362438  
Ion Ratio Lower Upper  
202 100  
200 21.0 16.8 25.2  
203 17.6 14.1 21.1

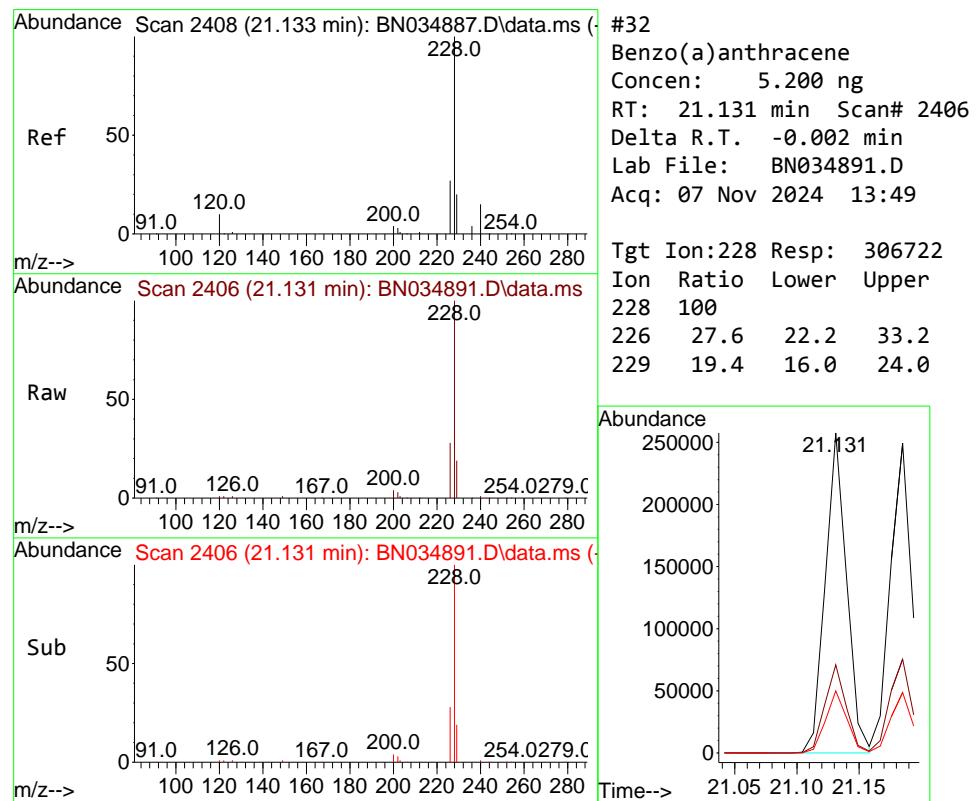
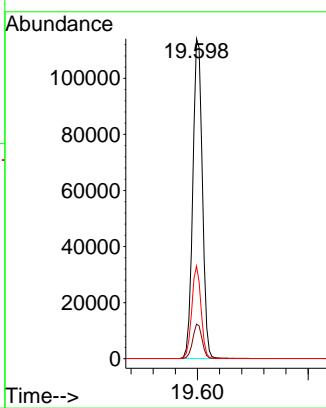




#31  
Terphenyl-d14  
Concen: 4.818 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

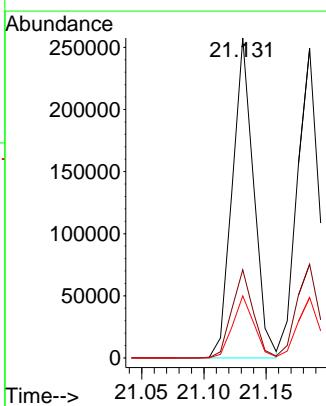
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

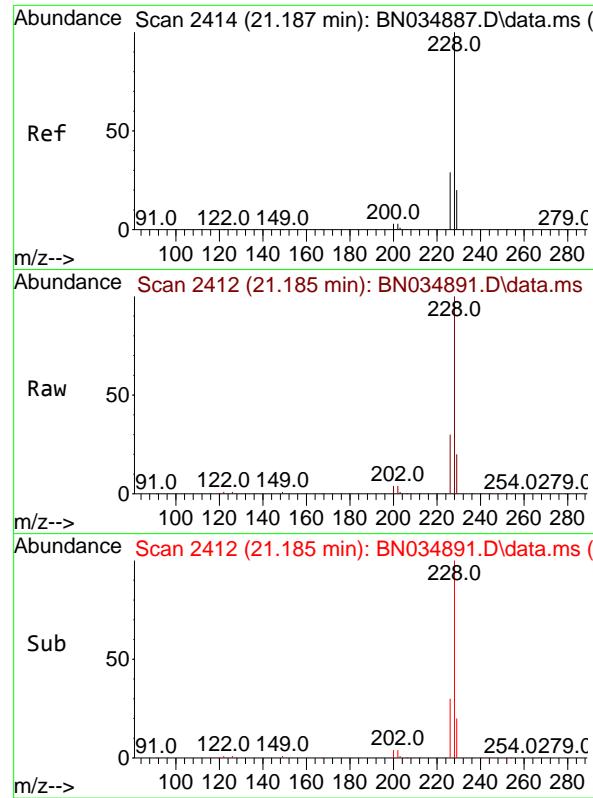
Tgt Ion:244 Resp: 136572  
Ion Ratio Lower Upper  
244 100  
212 10.8 9.4 14.0  
122 29.0 23.0 34.4



#32  
Benzo(a)anthracene  
Concen: 5.200 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

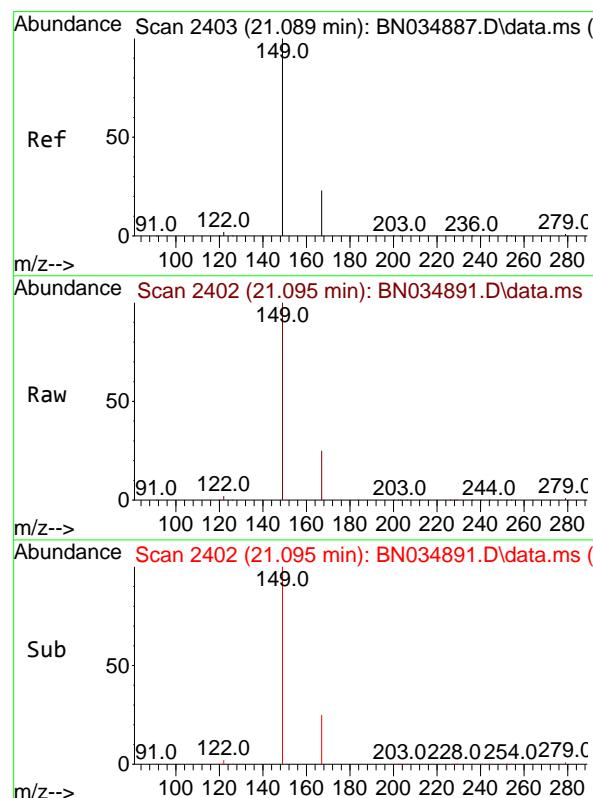
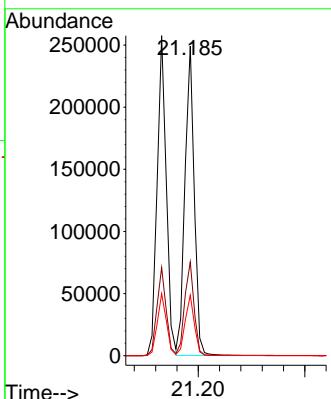
Tgt Ion:228 Resp: 306722  
Ion Ratio Lower Upper  
228 100  
226 27.6 22.2 33.2  
229 19.4 16.0 24.0





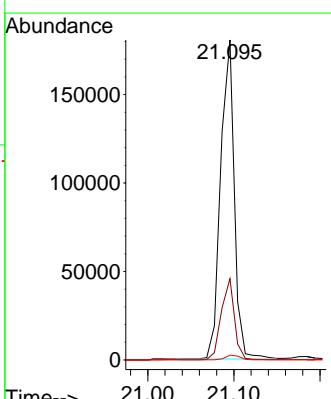
#33  
Chrysene  
Concen: 4.852 ng  
RT: 21.185 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. -0.002 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49  
ClientSampleId : SSTDICC5.0

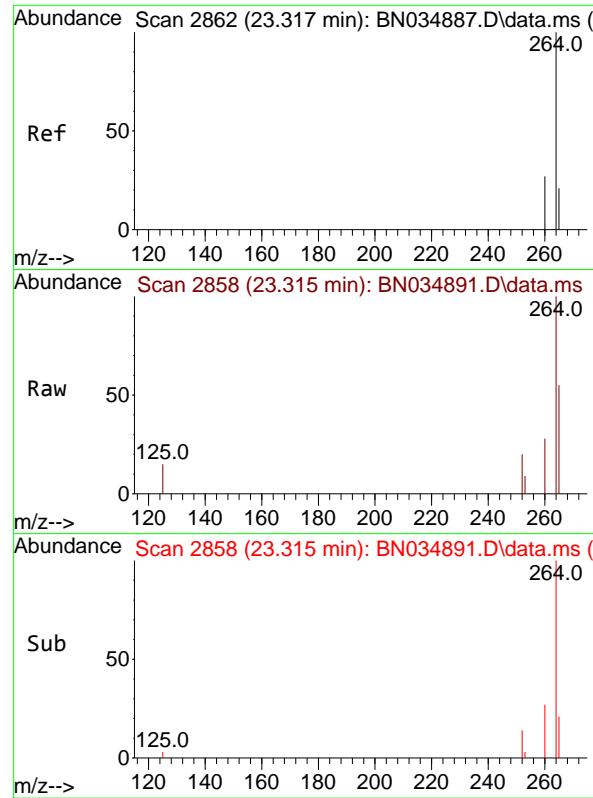
Tgt Ion:228 Resp: 302895  
Ion Ratio Lower Upper  
228 100  
226 30.3 23.7 35.5  
229 19.5 16.3 24.5



#34  
Bis(2-ethylhexyl)phthalate  
Concen: 5.853 ng  
RT: 21.095 min Scan# 2402  
Delta R.T. 0.006 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:149 Resp: 198170  
Ion Ratio Lower Upper  
149 100  
167 24.3 18.1 27.1  
279 1.5 1.2 1.8

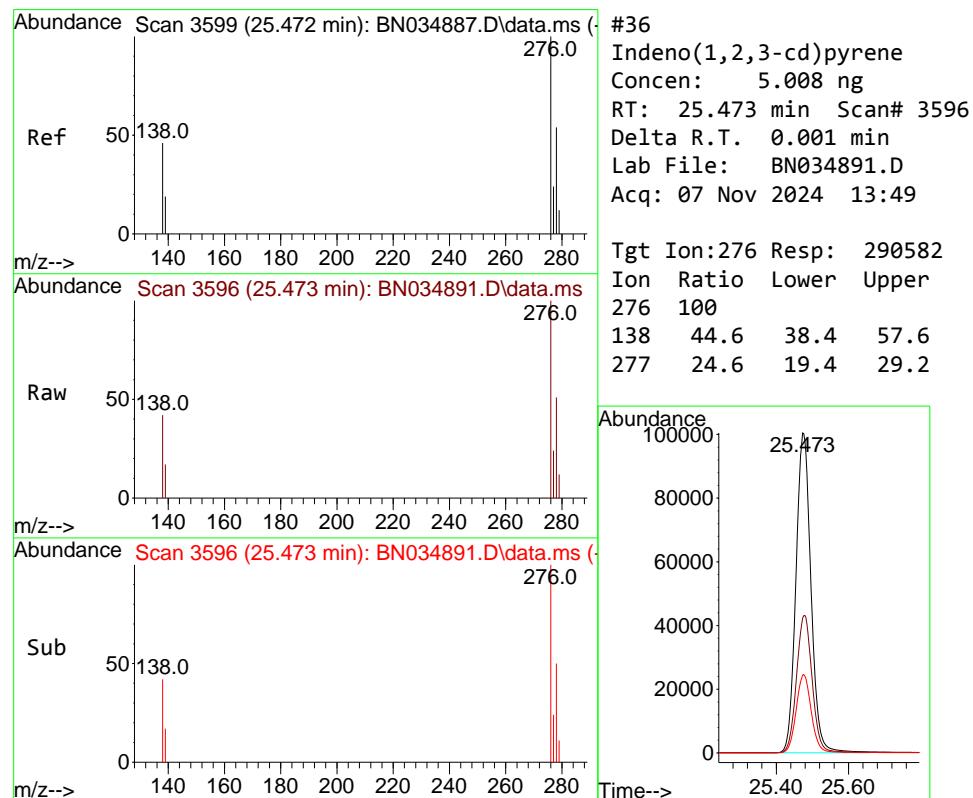
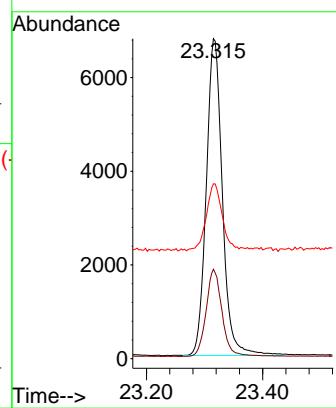




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

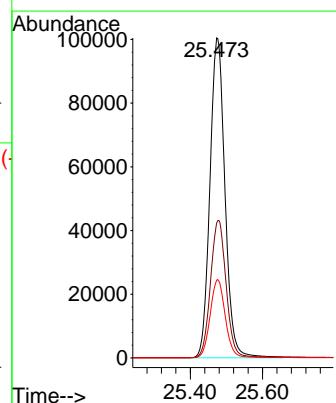
Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

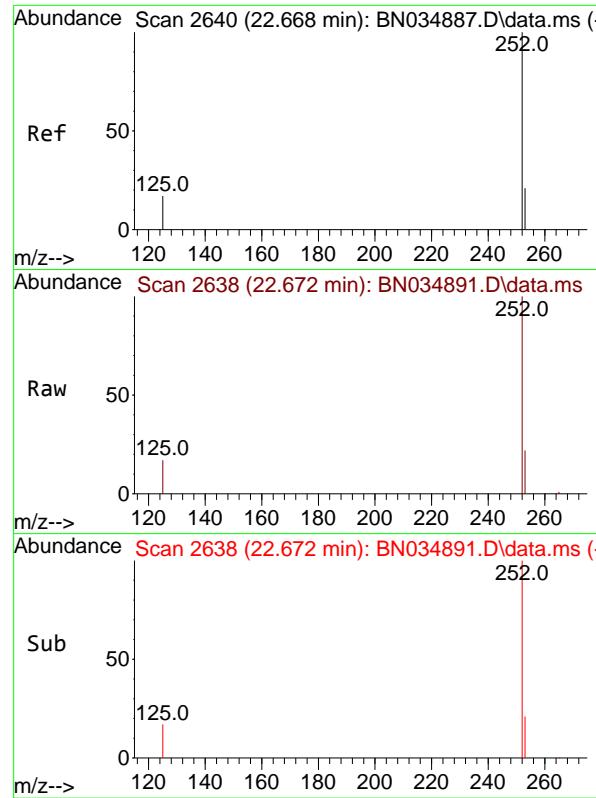
Tgt Ion:264 Resp: 13025  
Ion Ratio Lower Upper  
264 100  
260 27.9 22.2 33.2  
265 54.6 60.9 91.3#



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 5.008 ng  
RT: 25.473 min Scan# 3596  
Delta R.T. 0.001 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:276 Resp: 290582  
Ion Ratio Lower Upper  
276 100  
138 44.6 38.4 57.6  
277 24.6 19.4 29.2

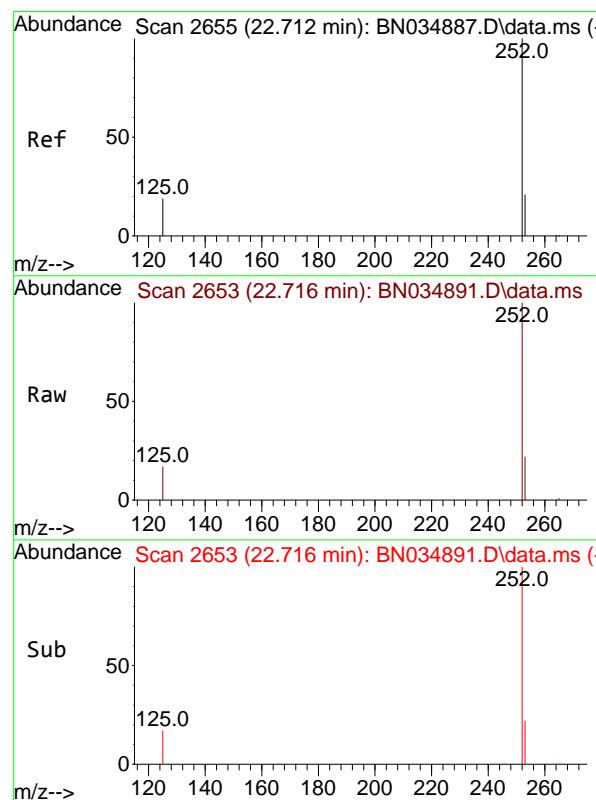
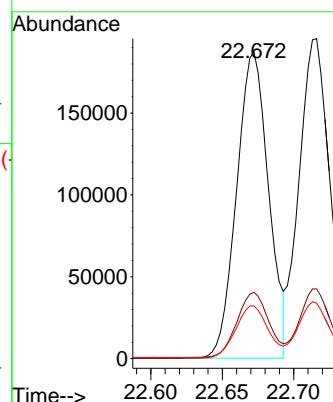




#37  
 Benzo(b)fluoranthene  
 Concen: 5.071 ng  
 RT: 22.672 min Scan# 2  
 Delta R.T. 0.004 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

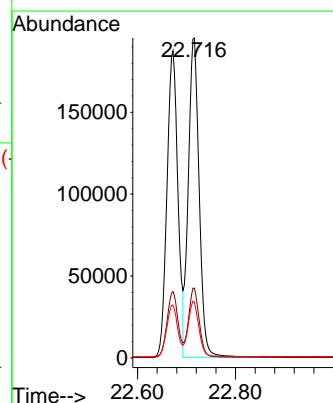
Instrument : BNA\_N  
 ClientSampleId : SSTDICC5.0

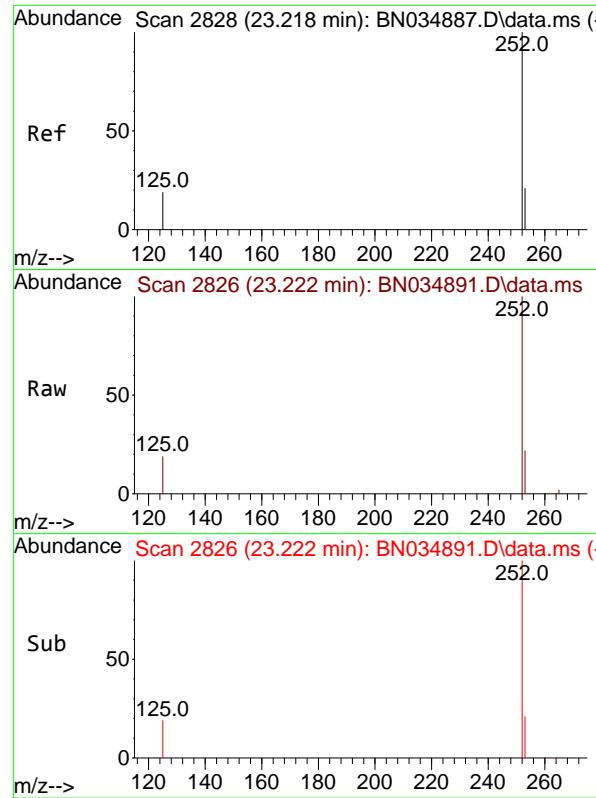
Tgt Ion:252 Resp: 290476  
 Ion Ratio Lower Upper  
 252 100  
 253 21.6 19.4 29.2  
 125 17.2 21.4 32.2#



#38  
 Benzo(k)fluoranthene  
 Concen: 5.006 ng  
 RT: 22.716 min Scan# 2653  
 Delta R.T. 0.004 min  
 Lab File: BN034891.D  
 Acq: 07 Nov 2024 13:49

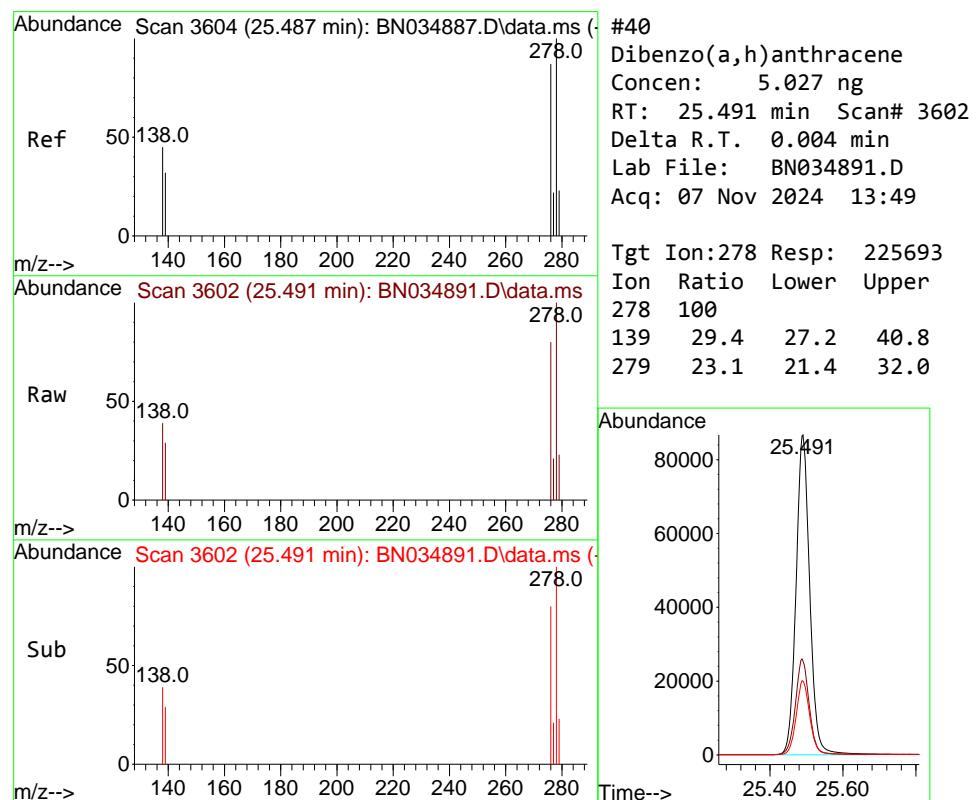
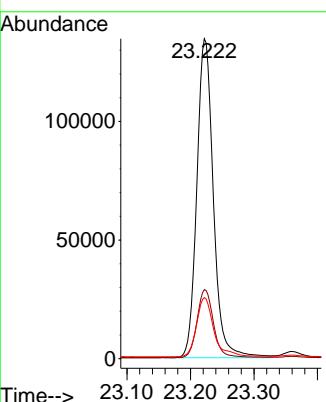
Tgt Ion:252 Resp: 298841  
 Ion Ratio Lower Upper  
 252 100  
 253 21.8 19.8 29.8  
 125 17.4 22.6 33.8#





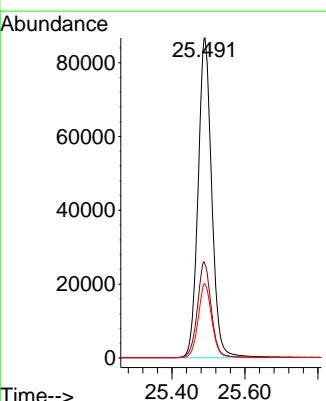
#39  
Benzo(a)pyrene  
Concen: 5.345 ng  
RT: 23.222 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.004 min  
Lab File: BN034891.D  
ClientSampleId : SSTDICC5.0  
Acq: 07 Nov 2024 13:49

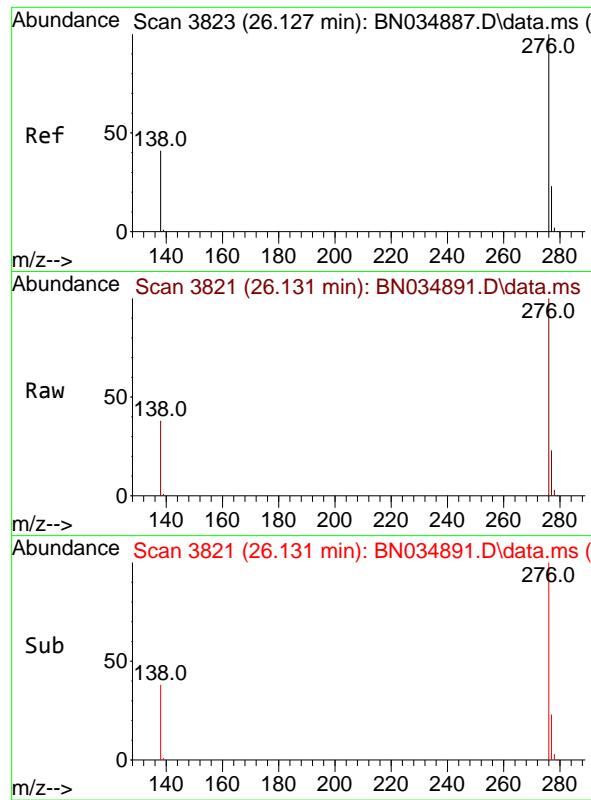
Tgt Ion:252 Resp: 242944  
Ion Ratio Lower Upper  
252 100  
253 21.6 21.4 32.2  
125 19.1 27.8 41.6#



#40  
Dibenzo(a,h)anthracene  
Concen: 5.027 ng  
RT: 25.491 min Scan# 3602  
Delta R.T. 0.004 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Tgt Ion:278 Resp: 225693  
Ion Ratio Lower Upper  
278 100  
139 29.4 27.2 40.8  
279 23.1 21.4 32.0

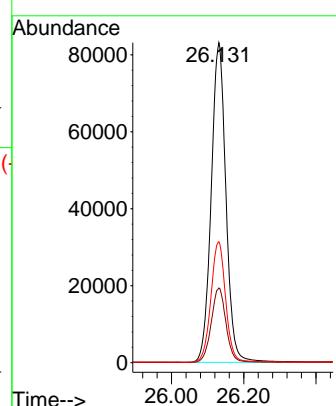




#41  
Benzo(g,h,i)perylene  
Concen: 4.936 ng  
RT: 26.131 min Scan# 3  
Delta R.T. 0.004 min  
Lab File: BN034891.D  
Acq: 07 Nov 2024 13:49

Instrument : BNA\_N  
ClientSampleId : SSTDICC5.0

Tgt Ion:276 Resp: 235238  
Ion Ratio Lower Upper  
276 100  
277 23.3 20.2 30.2  
138 37.8 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034892.D  
 Acq On : 07 Nov 2024 14:24  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN110724**

Quant Time: Nov 07 15:03:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	5596	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	16947	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	8617	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	17630	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	11730	0.400	ng	0.00
35) Perylene-d12	23.315	264	10292	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	5527	0.354	ng	0.00
5) Phenol-d6	6.752	99	7207	0.348	ng	0.00
8) Nitrobenzene-d5	8.707	82	4552	0.345	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	8763	0.379	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	865	0.383	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	13055	0.359	ng	0.00
27) Fluoranthene-d10	18.990	212	15225	0.383	ng	0.00
31) Terphenyl-d14	19.598	244	8465	0.385	ng	0.00
<b>Target Compounds</b>						
				<b>Qvalue</b>		
2) 1,4-Dioxane	3.184	88	2461	0.348	ng	99
3) n-Nitrosodimethylamine	3.487	42	3231	0.339	ng	# 96
6) bis(2-Chloroethyl)ether	7.012	93	6507	0.364	ng	97
9) Naphthalene	10.394	128	17745	0.377	ng	99
10) Hexachlorobutadiene	10.682	225	2830	0.378	ng	# 98
12) 2-Methylnaphthalene	12.011	142	10990	0.382	ng	100
16) Acenaphthylene	13.919	152	14368	0.346	ng	100
17) Acenaphthene	14.272	154	10248	0.356	ng	97
18) Fluorene	15.255	166	12934	0.361	ng	99
20) 4,6-Dinitro-2-methylph...	15.341	198	537	0.349	ng	# 66
21) 4-Bromophenyl-phenylether	16.157	248	3565	0.379	ng	# 88
22) Hexachlorobenzene	16.269	284	4413	0.390	ng	95
23) Atrazine	16.430	200	2461	0.361	ng	# 93
24) Pentachlorophenol	16.604	266	1024	0.373	ng	99
25) Phenanthrene	16.989	178	20264	0.375	ng	100
26) Anthracene	17.088	178	17075	0.366	ng	99
28) Fluoranthene	19.017	202	21837	0.384	ng	99
30) Pyrene	19.380	202	21794	0.367	ng	100
32) Benzo(a)anthracene	21.131	228	16875	0.369	ng	99
33) Chrysene	21.185	228	18729	0.387	ng	99
34) Bis(2-ethylhexyl)phtha...	21.086	149	8553m	0.326	ng	
36) Indeno(1,2,3-cd)pyrene	25.470	276	15123	0.330	ng	98
37) Benzo(b)fluoranthene	22.669	252	17108	0.378	ng	97
38) Benzo(k)fluoranthene	22.713	252	16927	0.360	ng	95
39) Benzo(a)pyrene	23.219	252	12517	0.349	ng	94
40) Dibenzo(a,h)anthracene	25.491	278	11726	0.331	ng	97
41) Benzo(g,h,i)perylene	26.125	276	13002	0.345	ng	97

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

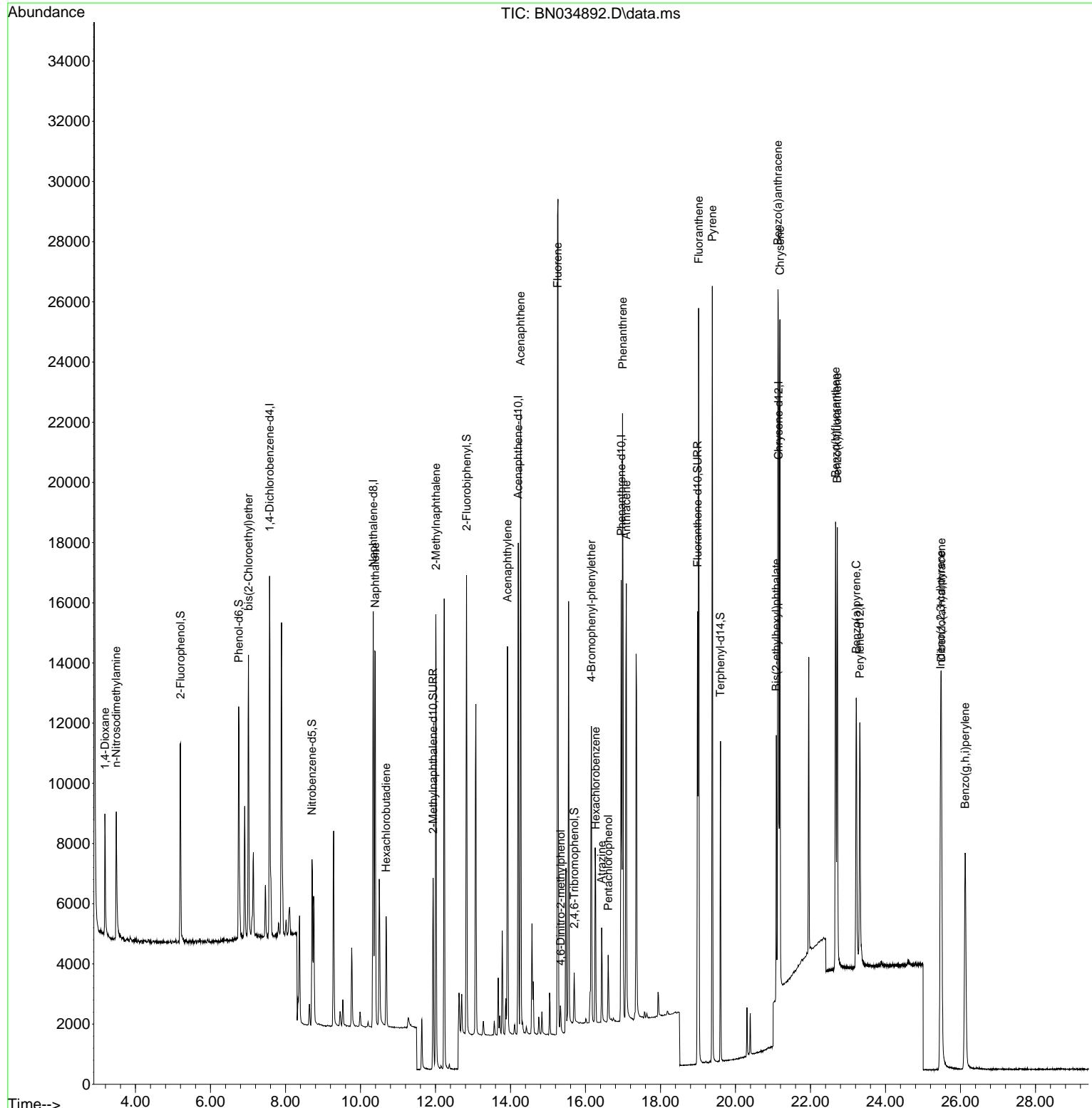
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034892.D  
 Acq On : 07 Nov 2024 14:24  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

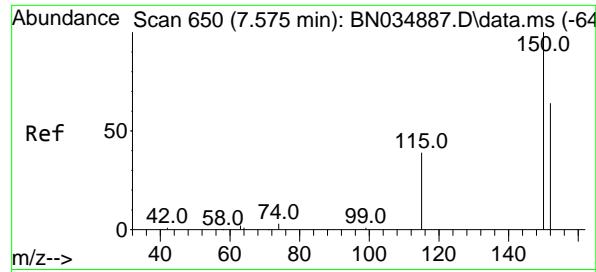
Quant Time: Nov 07 15:03:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN110724

**Manual Integrations  
APPROVED**

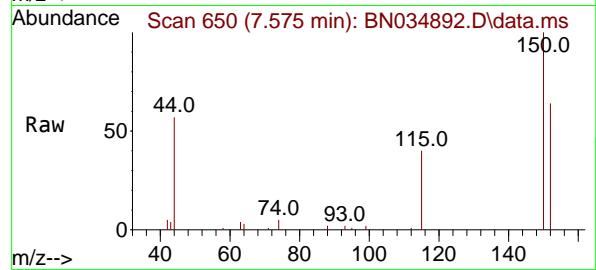
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

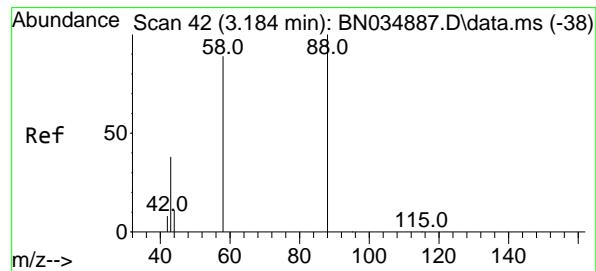
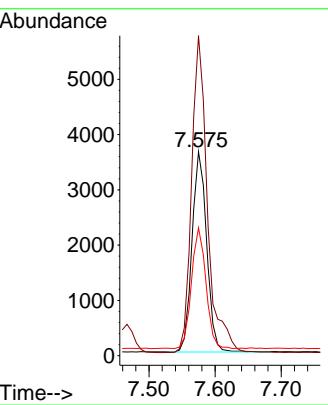
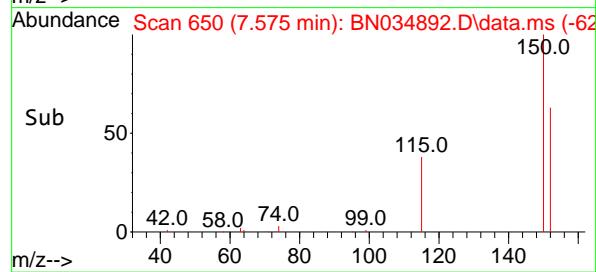
Instrument : BNA\_N  
ClientSampleId : ICVBN110724



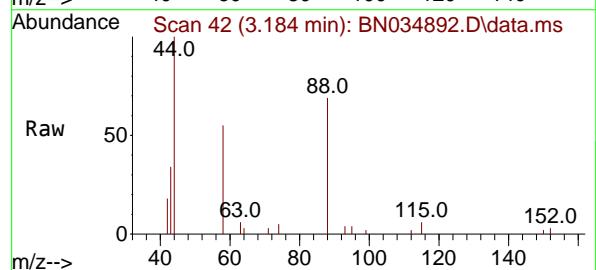
Tgt Ion:152 Resp: 5596  
Ion Ratio Lower Upper  
152 100  
150 156.8 124.4 186.6  
115 62.6 50.5 75.7

### Manual Integrations APPROVED

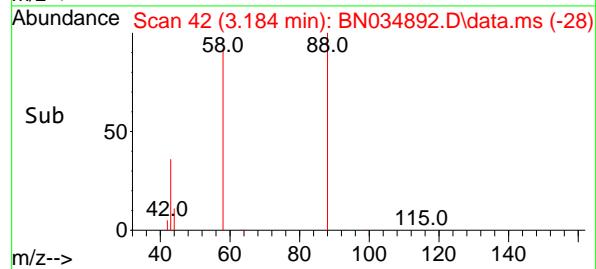
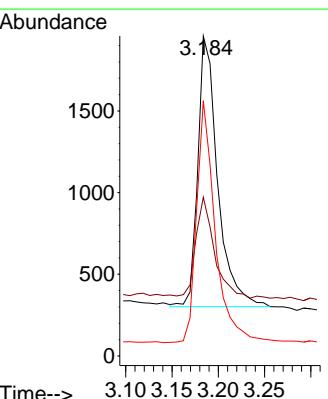
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024

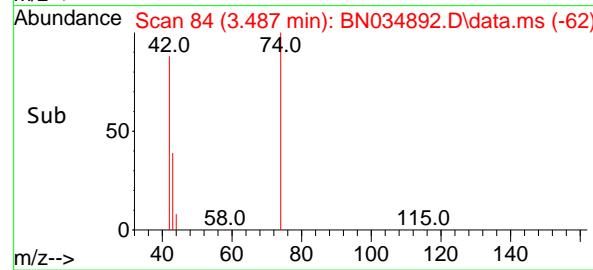
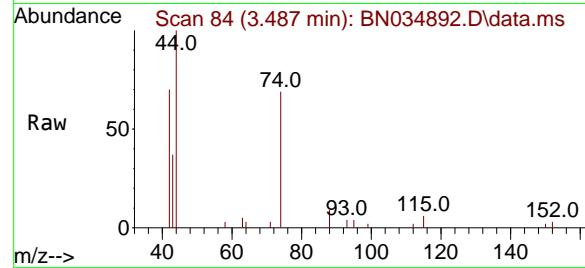
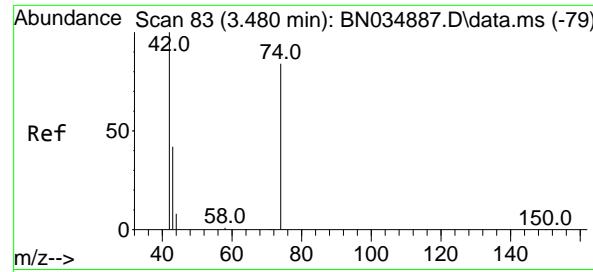


#2  
1,4-Dioxane  
Concen: 0.348 ng  
RT: 3.184 min Scan# 42  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24



Tgt Ion: 88 Resp: 2461  
Ion Ratio Lower Upper  
88 100  
43 35.6 28.2 42.2  
58 84.3 67.1 100.7





#3

n-Nitrosodimethylamine

Concen: 0.339 ng

RT: 3.487 min Scan# 8

Delta R.T. 0.007 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

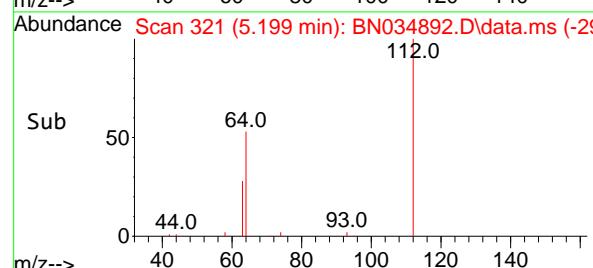
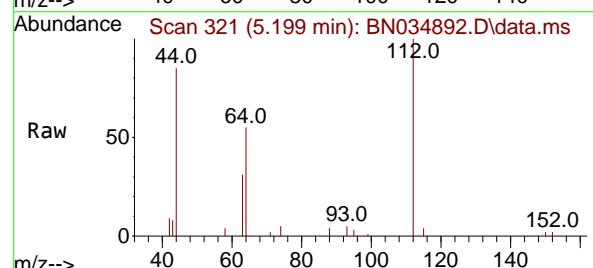
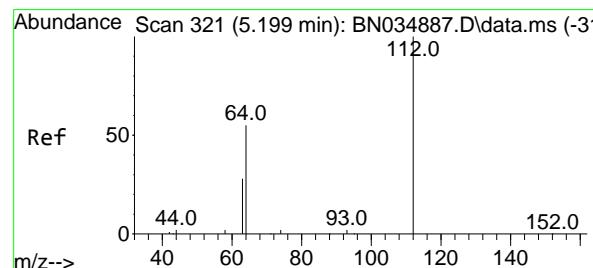
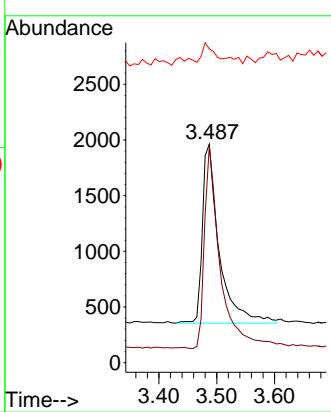
ClientSampleId :

ICVBN110724

**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#4

2-Fluorophenol

Concen: 0.354 ng

RT: 5.199 min Scan# 321

Delta R.T. 0.000 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

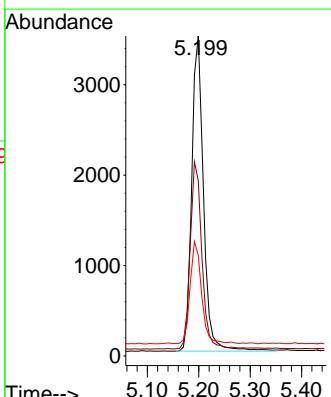
Tgt Ion:112 Resp: 5527

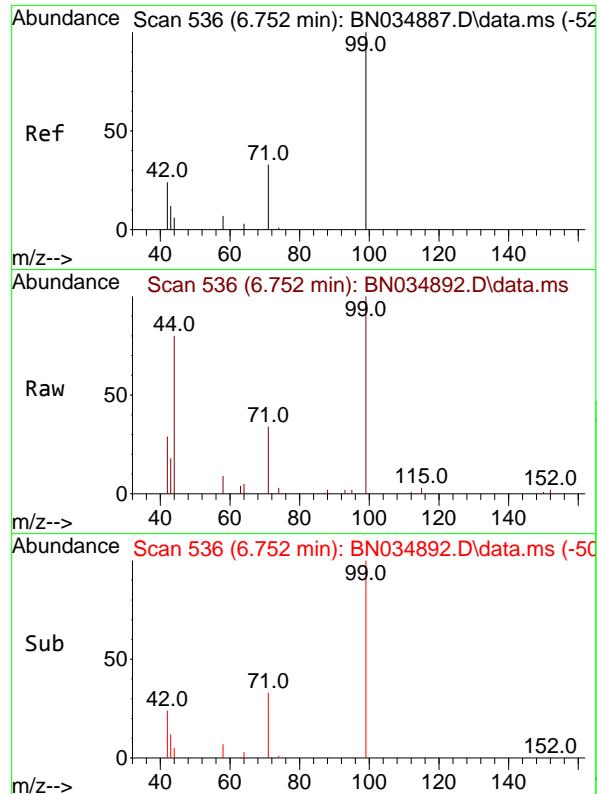
Ion Ratio Lower Upper

112 100

64 59.0 49.6 74.4

63 31.2 26.3 39.5



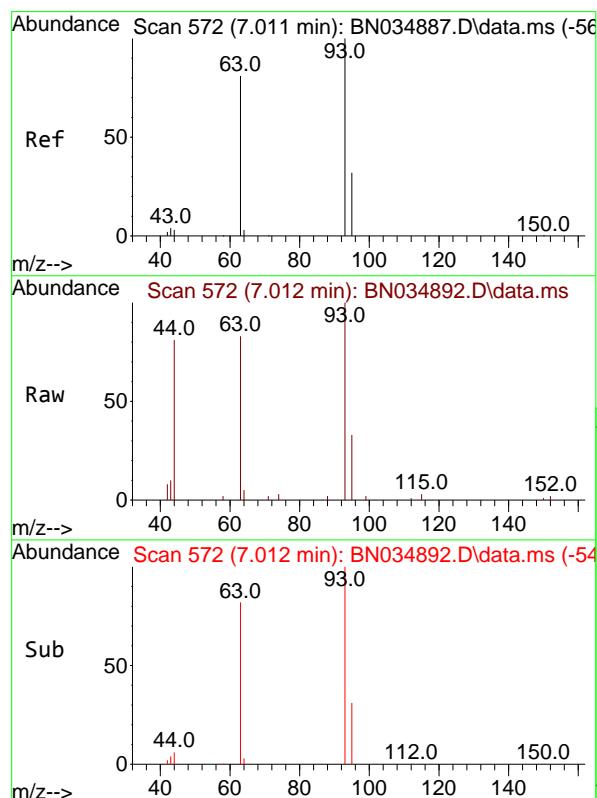
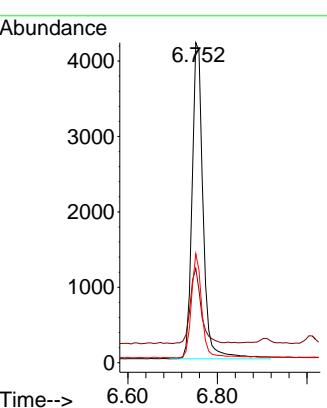


#5  
 Phenol-d6  
 Concen: 0.348 ng  
 RT: 6.752 min Scan# 51  
 Delta R.T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
 ClientSampleId : ICVBN110724

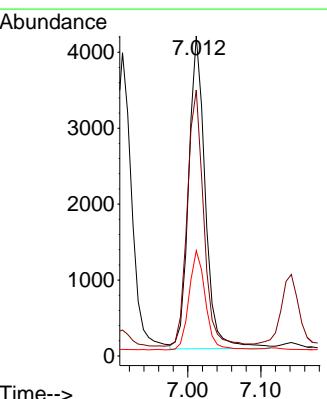
**Manual Integrations**  
**APPROVED**

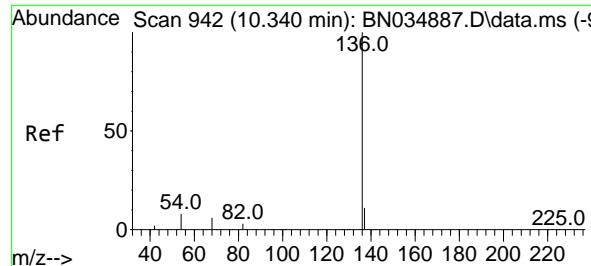
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.364 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

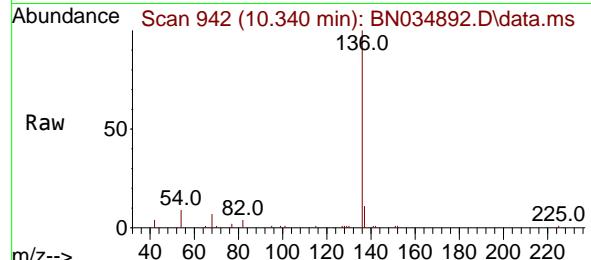
Tgt Ion: 93 Resp: 6507  
 Ion Ratio Lower Upper  
 93 100  
 63 80.8 67.5 101.3  
 95 31.2 25.7 38.5





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

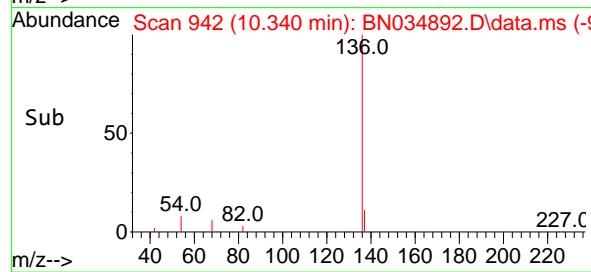
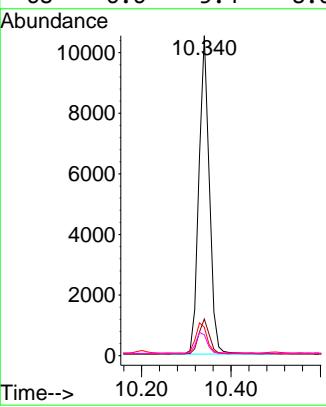
Instrument : BNA\_N  
 ClientSampleId : ICBN110724



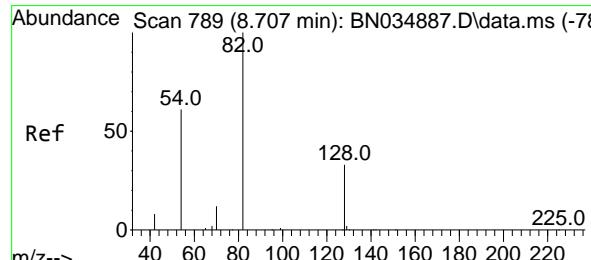
Tgt Ion:136 Resp: 16941  
 Ion Ratio Lower Upper  
 136 100  
 137 11.5 8.9 13.3  
 54 8.9 6.9 10.3  
 68 6.6 5.4 8.0

**Manual Integrations**  
**APPROVED**

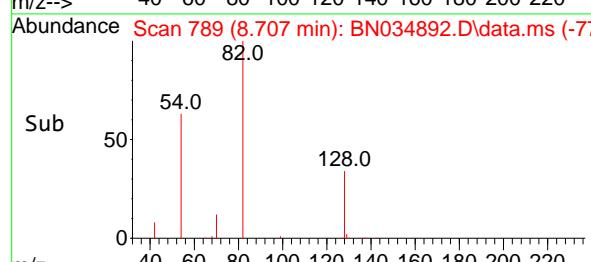
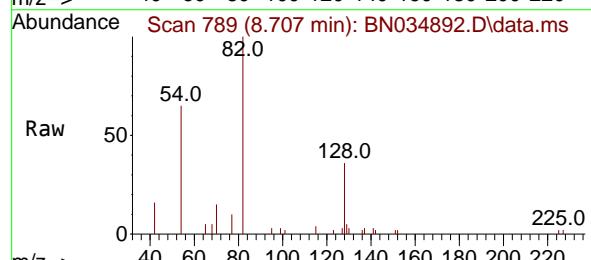
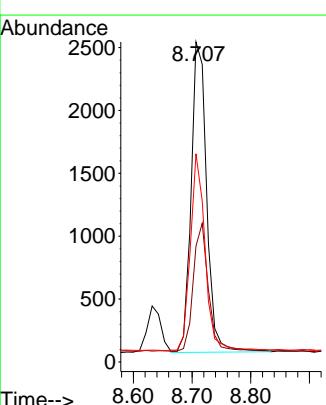
Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024

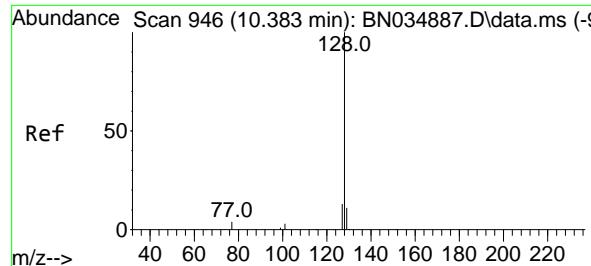


#8  
 Nitrobenzene-d5  
 Concen: 0.345 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24



Tgt Ion: 82 Resp: 4552  
 Ion Ratio Lower Upper  
 82 100  
 128 36.3 28.1 42.1  
 54 65.1 49.8 74.6





#9

Naphthalene

Concen: 0.377 ng

RT: 10.394 min Scan# 9

Delta R.T. 0.011 min

Lab File: BN034892.D

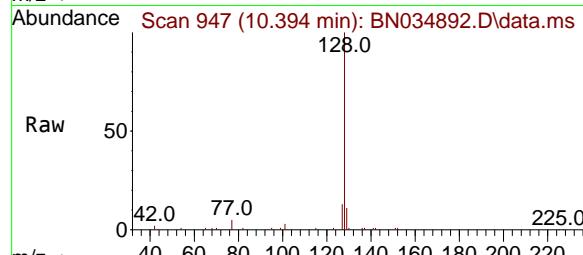
Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

ClientSampleId :

ICVBN110724



Tgt Ion:128 Resp: 1774

Ion Ratio Lower Upper

128 100

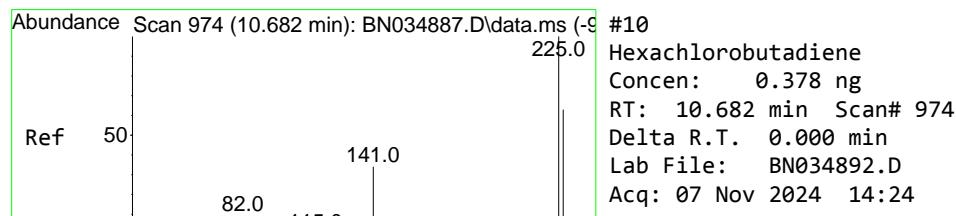
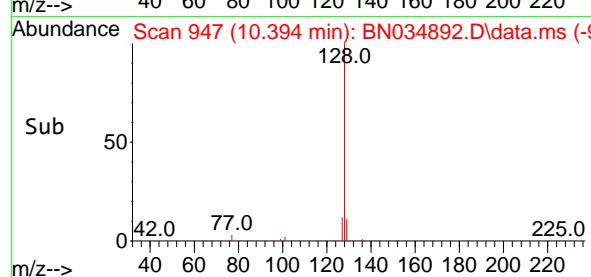
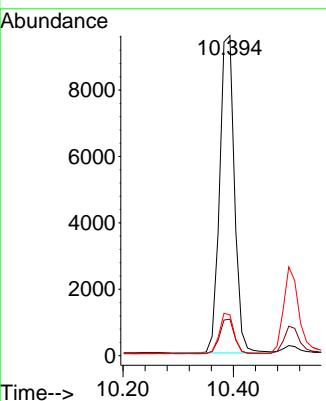
129 11.4 9.0 13.4

127 12.8 10.8 16.2

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#10

Hexachlorobutadiene

Concen: 0.378 ng

RT: 10.682 min Scan# 974

Delta R.T. 0.000 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

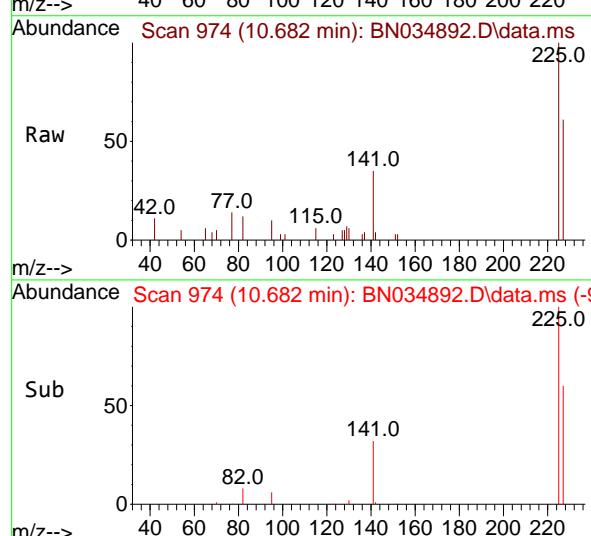
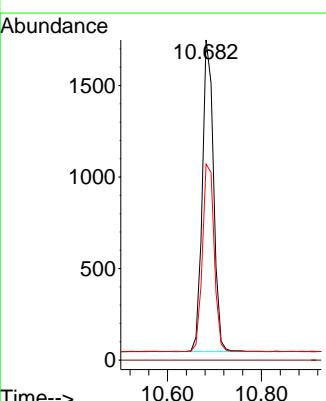
Tgt Ion:225 Resp: 2830

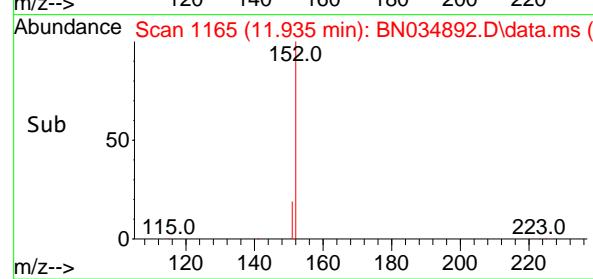
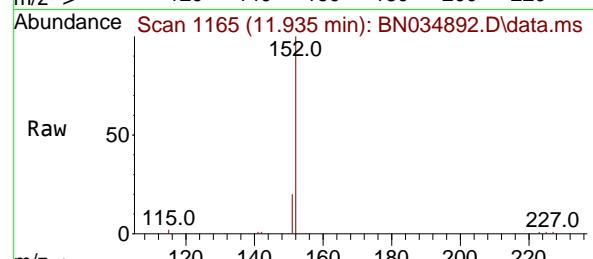
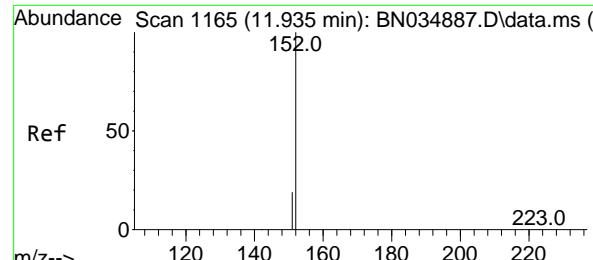
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.2 52.0 78.0



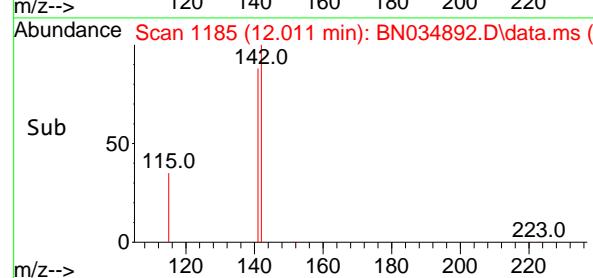
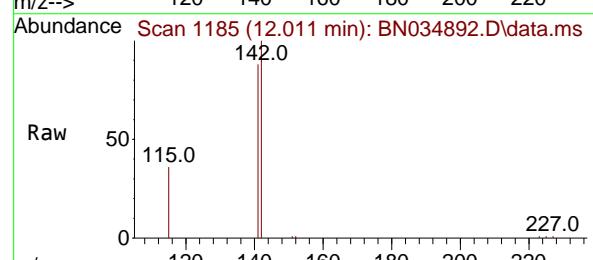
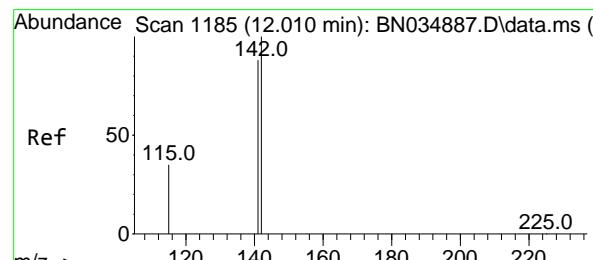
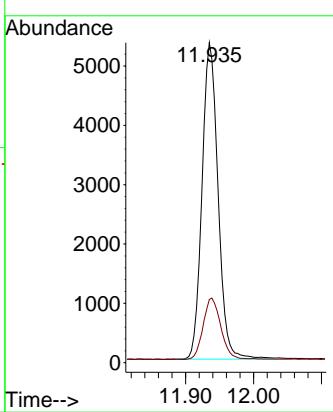


#11  
2-Methylnaphthalene-d10  
Concen: 0.379 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
ClientSampleId : ICVBN110724

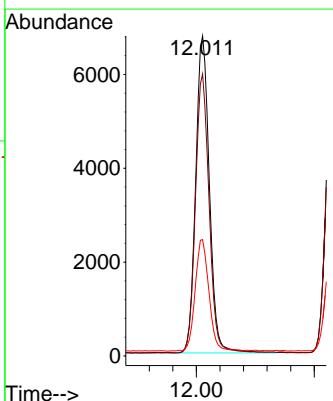
### Manual Integrations APPROVED

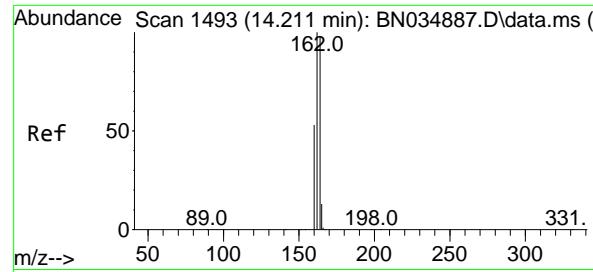
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



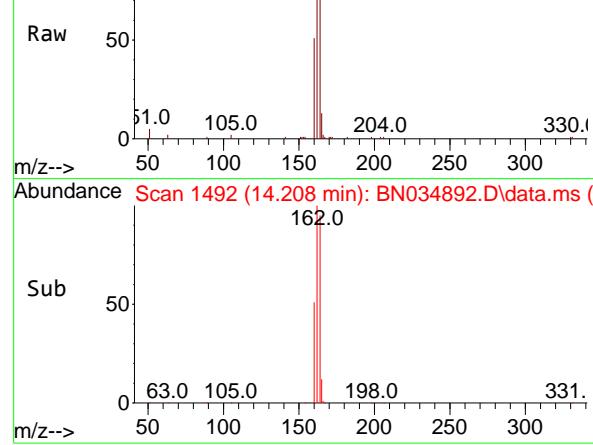
#12  
2-Methylnaphthalene  
Concen: 0.382 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:142 Resp: 10990  
Ion Ratio Lower Upper  
142 100  
141 88.1 70.5 105.7  
115 36.3 29.4 44.2





Abundance Scan 1492 (14.208 min): BN034892.D\data.ms (-)



#13

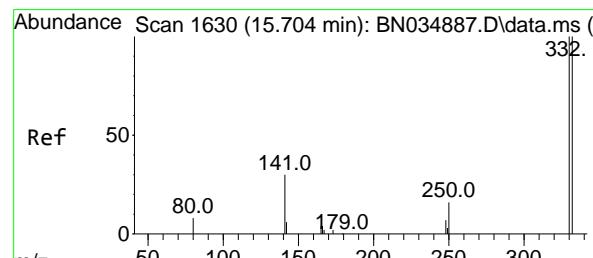
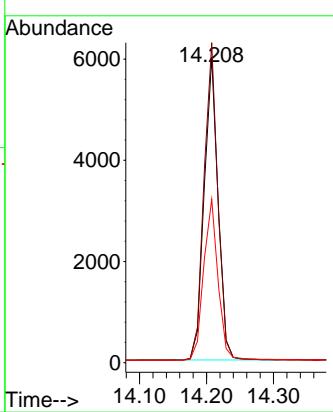
Acenaphthene-d10  
Concen: 0.400 ng

RT: 14.208 min Scan# 1493  
Delta R.T. -0.003 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

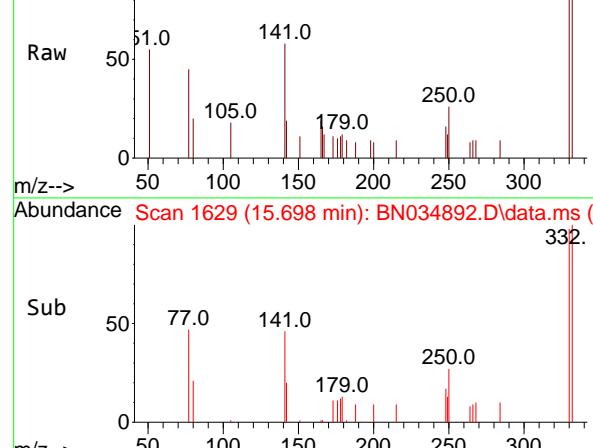
Instrument : BNA\_N  
ClientSampleId : ICBVN110724

### Manual Integrations APPROVED

Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



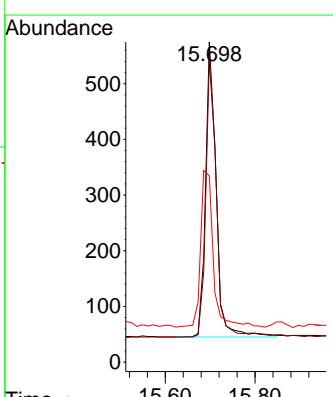
Abundance Scan 1629 (15.698 min): BN034892.D\data.ms (-)

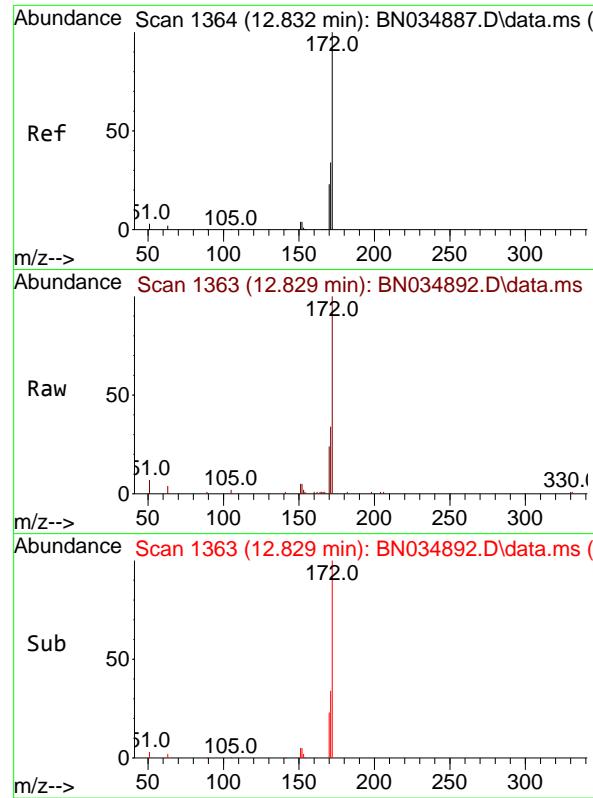


#14

2,4,6-Tribromophenol  
Concen: 0.383 ng  
RT: 15.698 min Scan# 1629  
Delta R.T. -0.006 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:330 Resp: 865  
Ion Ratio Lower Upper  
330 100  
332 91.7 77.1 115.7  
141 62.7 54.1 81.1



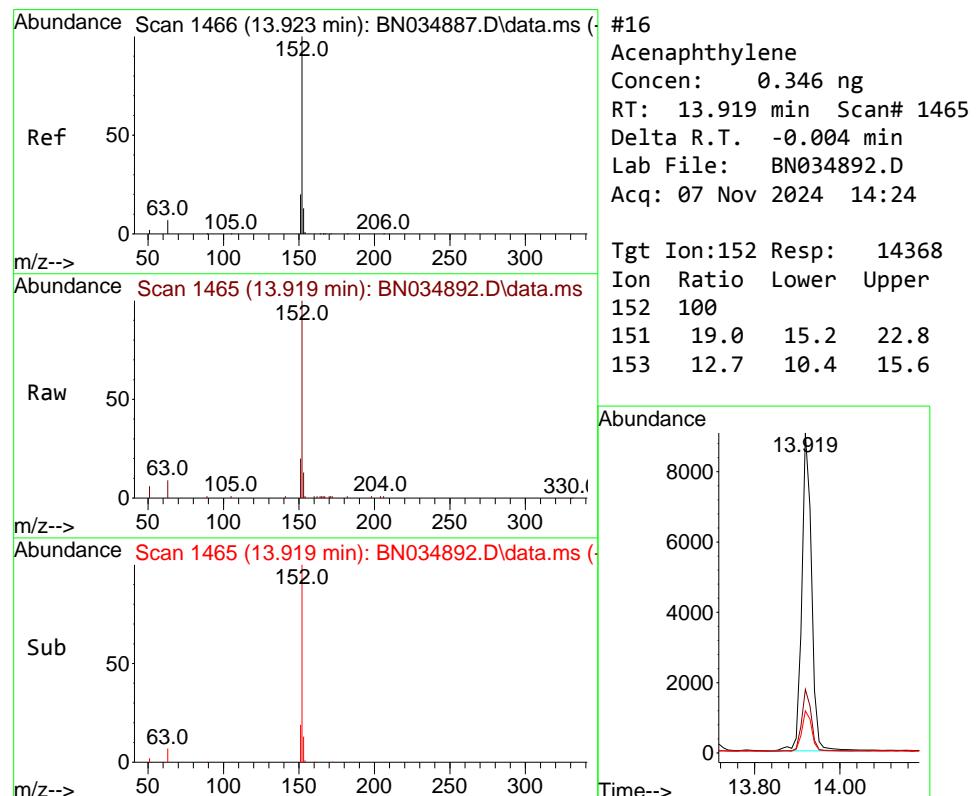
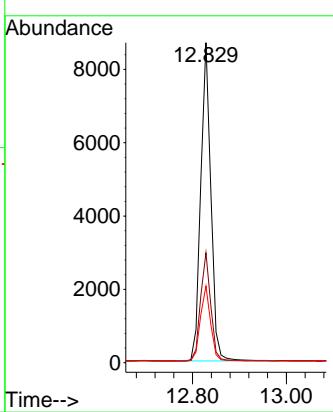


#15  
2-Fluorobiphenyl  
Concen: 0.359 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
ClientSampleId : ICVBN110724

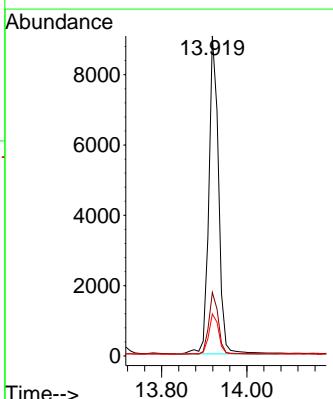
**Manual Integrations**  
**APPROVED**

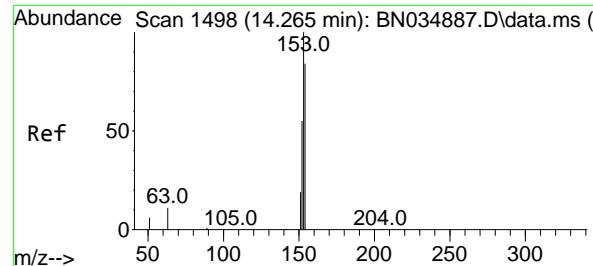
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



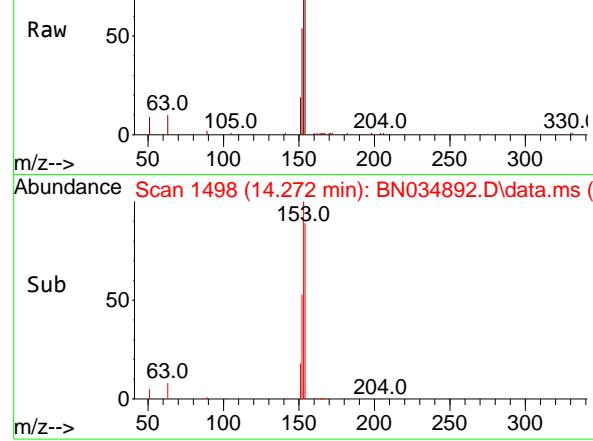
#16  
Acenaphthylene  
Concen: 0.346 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:152 Resp: 14368  
Ion Ratio Lower Upper  
152 100  
151 19.0 15.2 22.8  
153 12.7 10.4 15.6

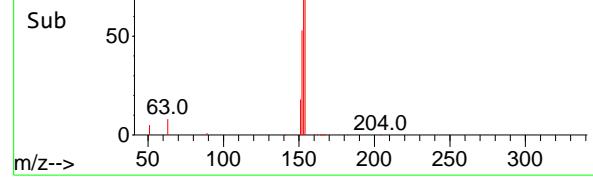




Abundance Scan 1498 (14.272 min): BN034892.D\data.ms (-)



Abundance Scan 1498 (14.272 min): BN034892.D\data.ms (-)



#17

Acenaphthene

Concen: 0.356 ng

RT: 14.272 min Scan# 1498

Delta R.T. 0.007 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

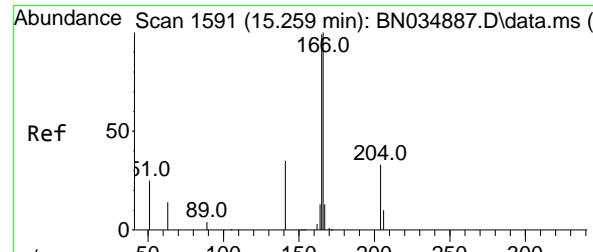
ClientSampleId :

ICVBN110724

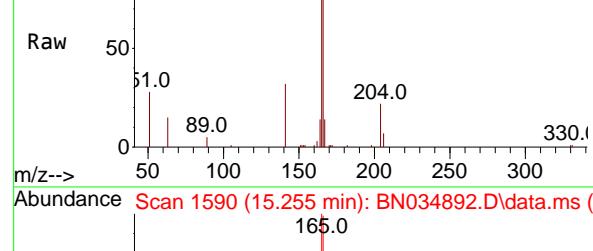
**Manual Integrations  
APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

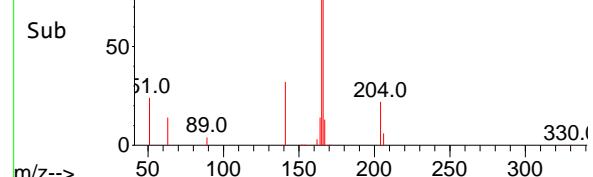
Supervised By :mohammad ahmed 11/08/2024



Abundance Scan 1590 (15.255 min): BN034892.D\data.ms (-)



Abundance Scan 1590 (15.255 min): BN034892.D\data.ms (-)



#18

Fluorene

Concen: 0.361 ng

RT: 15.255 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

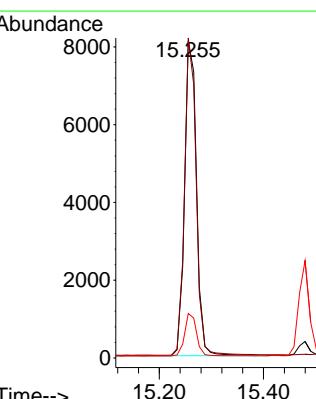
Tgt Ion:166 Resp: 12934

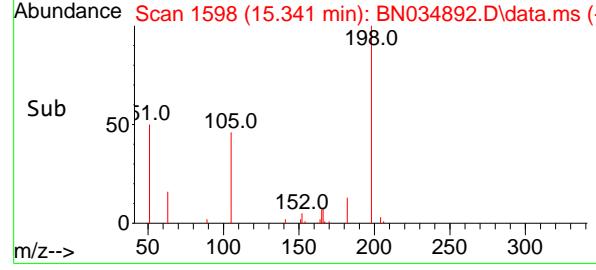
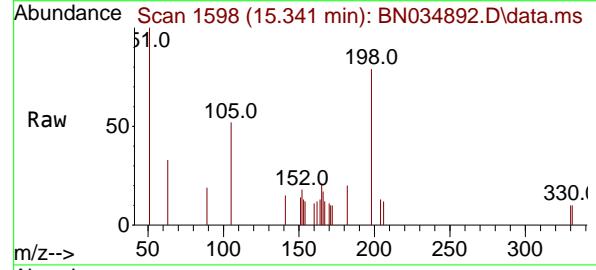
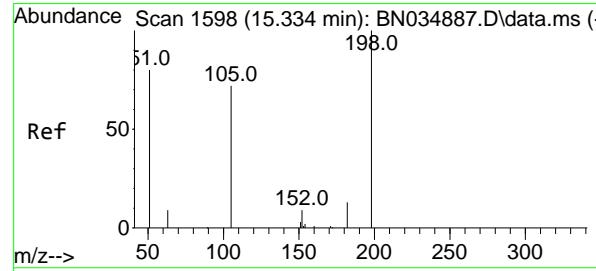
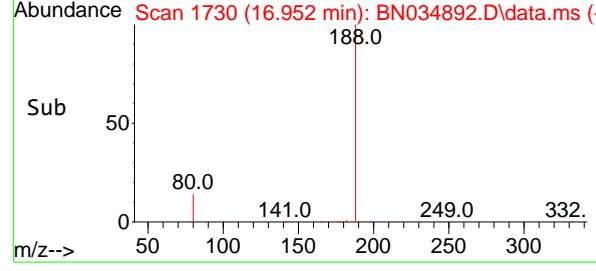
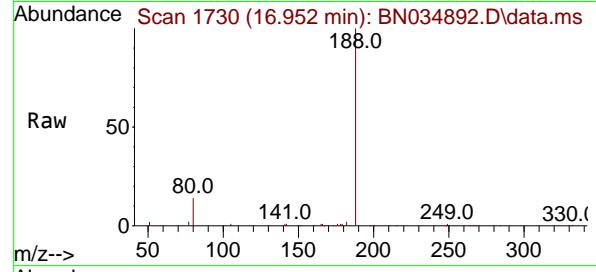
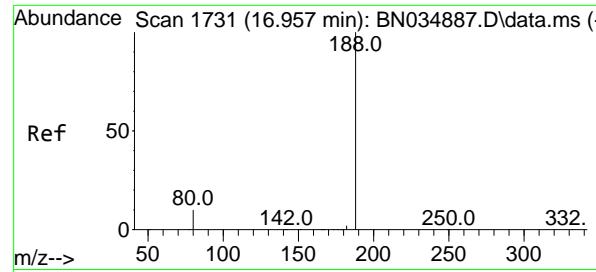
Ion Ratio Lower Upper

166 100

165 98.5 79.5 119.3

167 13.5 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.952 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

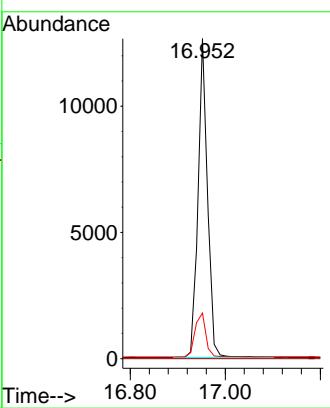
Instrument :

BNA\_N

ClientSampleId :

ICVBN110724

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#20

4,6-Dinitro-2-methylphenol

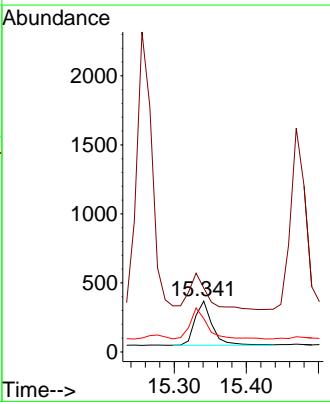
Concen: 0.349 ng

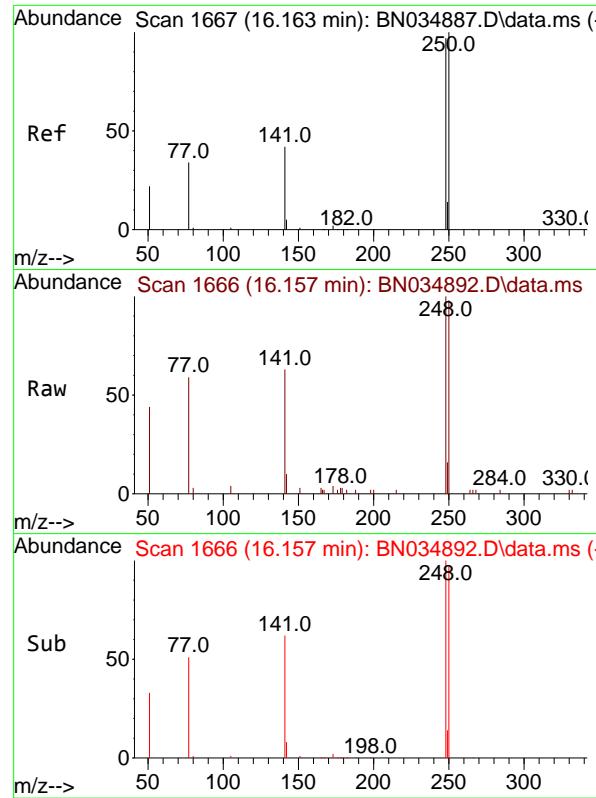
RT: 15.341 min Scan# 1598

Delta R.T. 0.007 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

 Tgt Ion:198 Resp: 537  
 Ion Ratio Lower Upper  
 198 100  
 51 125.8 141.8 212.8#  
 105 65.8 75.6 113.4#


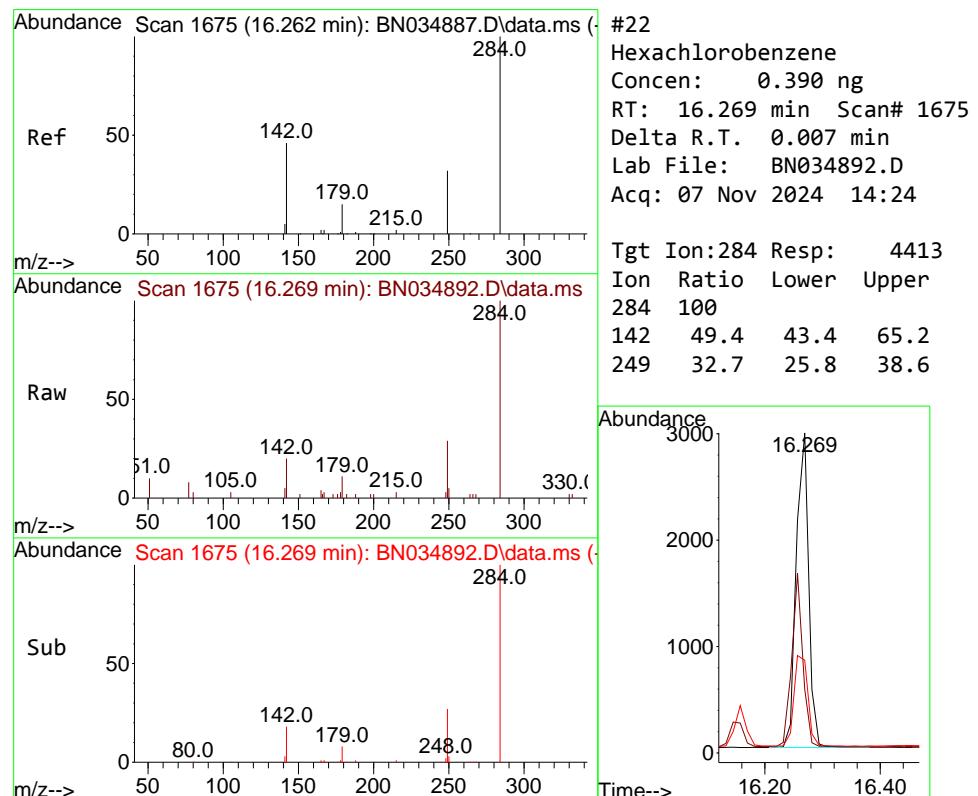
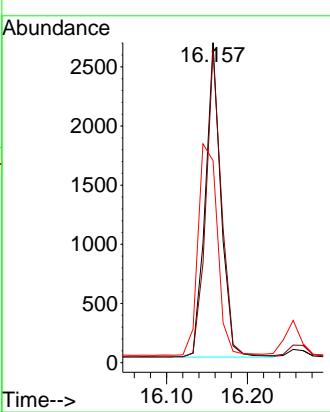


#21  
4-Bromophenyl-phenylether  
Concen: 0.379 ng  
RT: 16.157 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Instrument :  
BNA\_N  
ClientSampleId :  
ICVBN110724

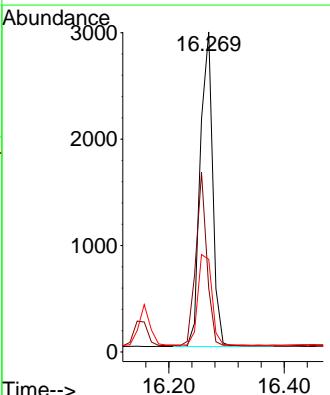
**Manual Integrations**  
**APPROVED**

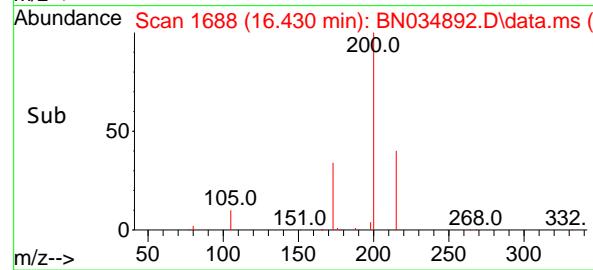
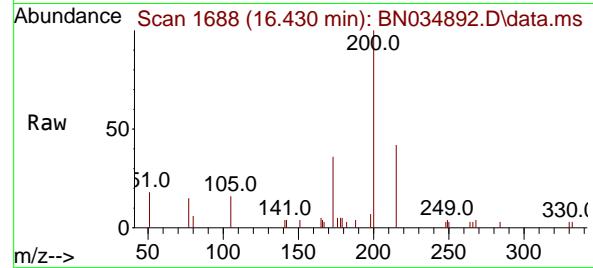
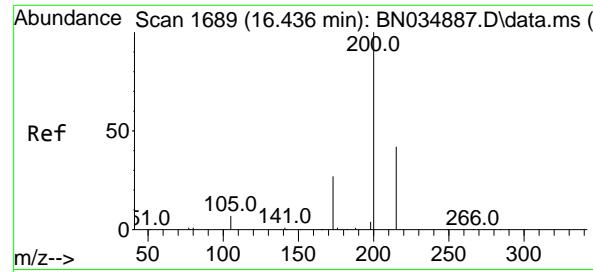
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#22  
Hexachlorobenzene  
Concen: 0.390 ng  
RT: 16.269 min Scan# 1675  
Delta R.T. 0.007 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:284 Resp: 4413  
Ion Ratio Lower Upper  
284 100  
142 49.4 43.4 65.2  
249 32.7 25.8 38.6





#23

Atrazine

Concen: 0.361 ng

RT: 16.430 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

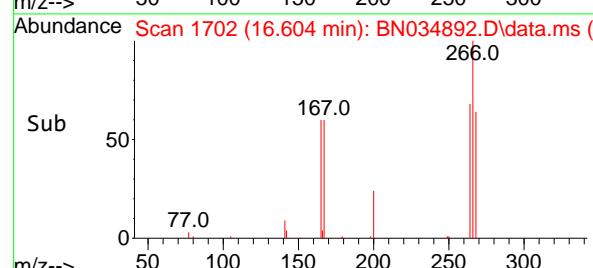
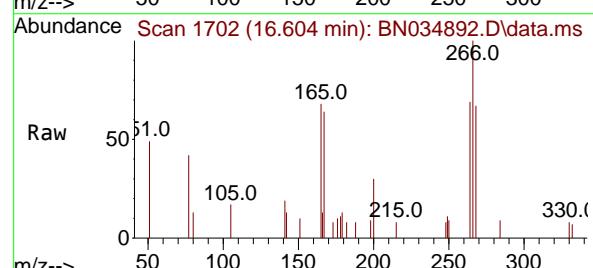
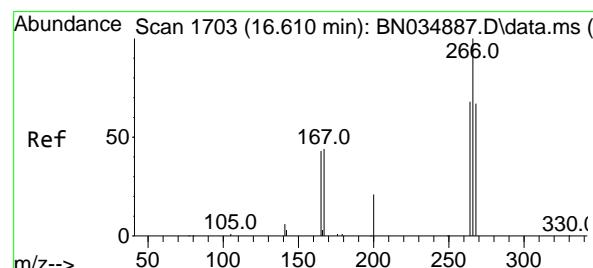
Instrument :

BNA\_N

ClientSampleId :

ICVBN110724

**Manual Integrations  
APPROVED**

 Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024


#24

Pentachlorophenol

Concen: 0.373 ng

RT: 16.604 min Scan# 1702

Delta R.T. -0.006 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

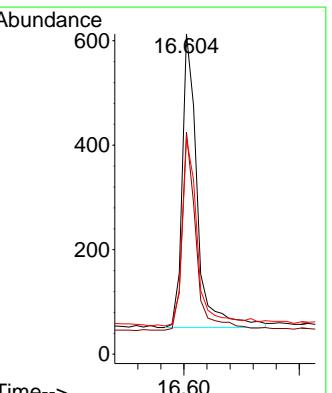
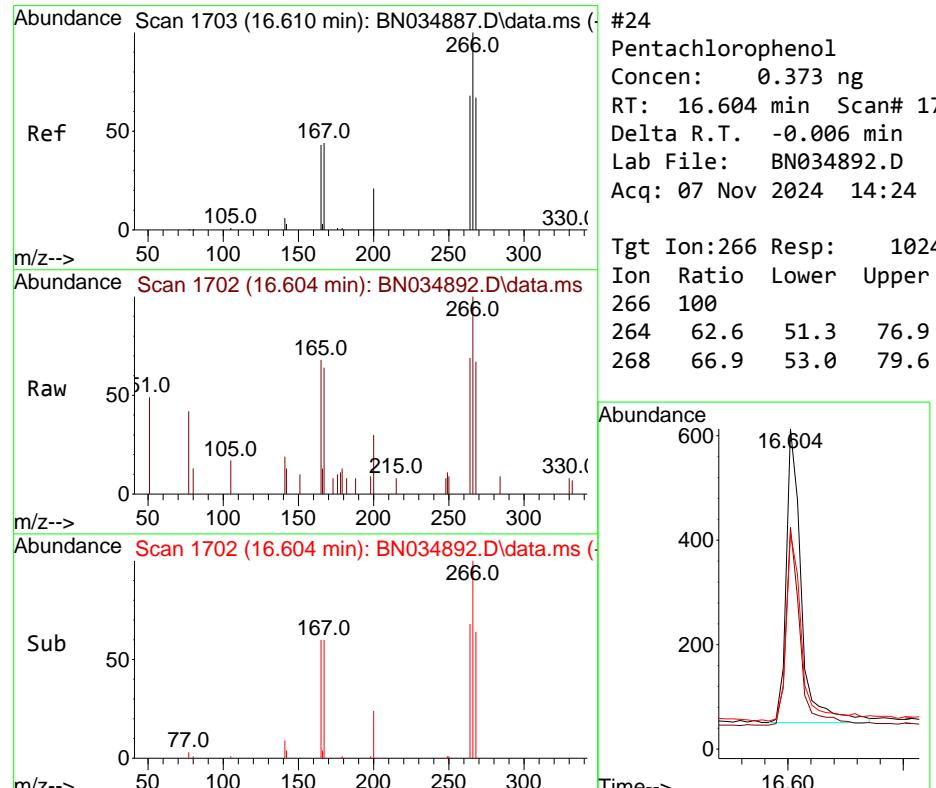
Tgt Ion:266 Resp: 1024

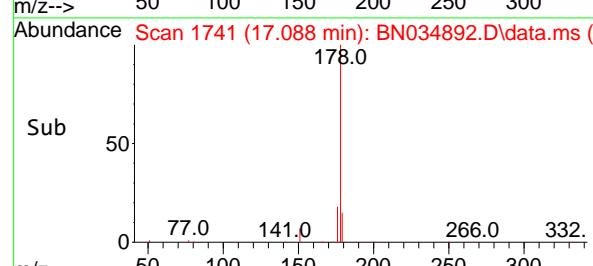
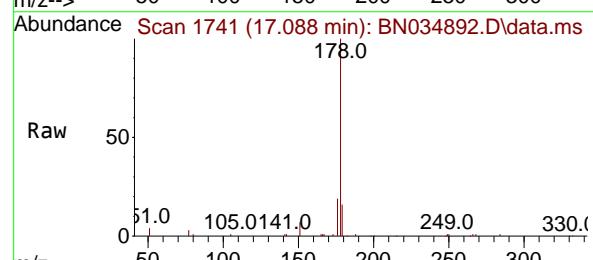
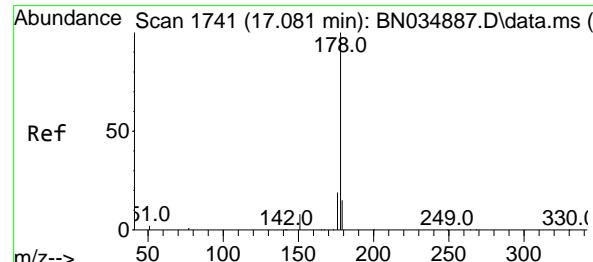
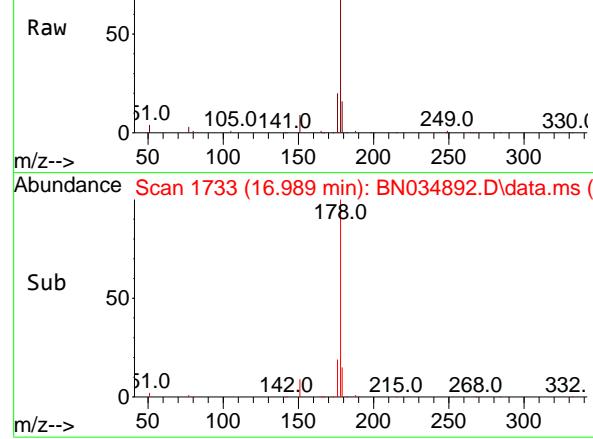
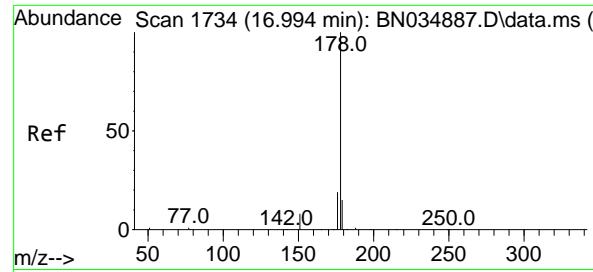
Ion Ratio Lower Upper

266 100

264 62.6 51.3 76.9

268 66.9 53.0 79.6





#25

Phenanthrene

Concen: 0.375 ng

RT: 16.989 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

ClientSampleId :

ICVBN110724

Tgt Ion:178 Resp: 20264

Ion Ratio Lower Upper

178 100

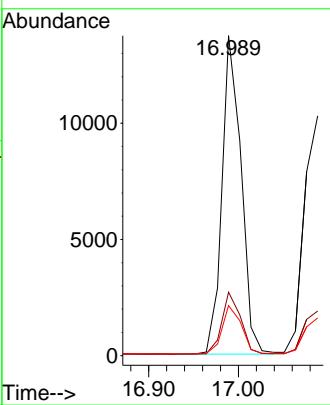
176 19.4 15.5 23.3

179 15.4 12.2 18.2

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#26

Anthracene

Concen: 0.366 ng

RT: 17.088 min Scan# 1741

Delta R.T. 0.007 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

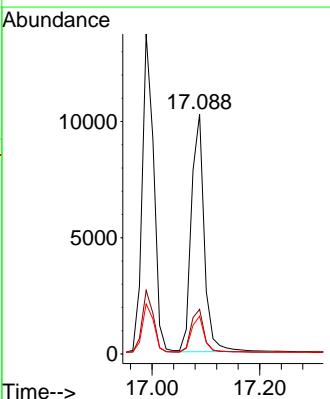
Tgt Ion:178 Resp: 17075

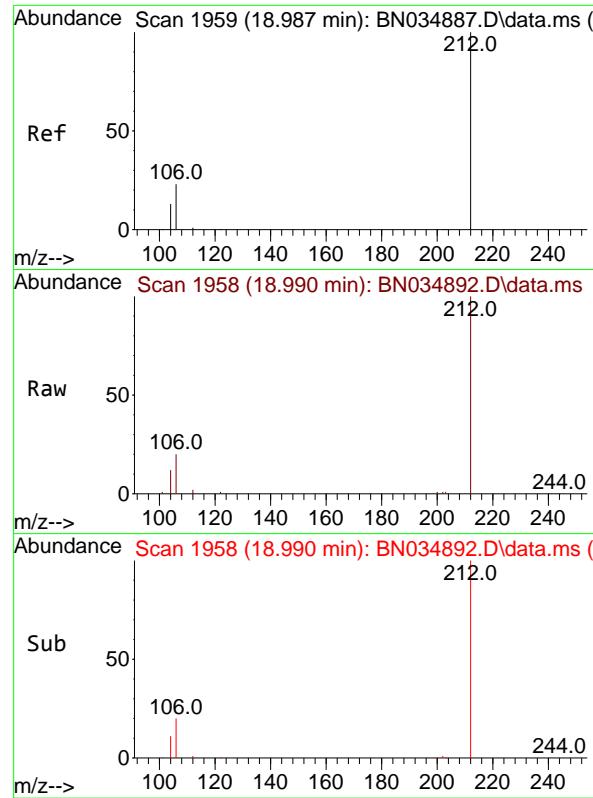
Ion Ratio Lower Upper

178 100

176 18.3 15.0 22.6

179 15.0 12.1 18.1



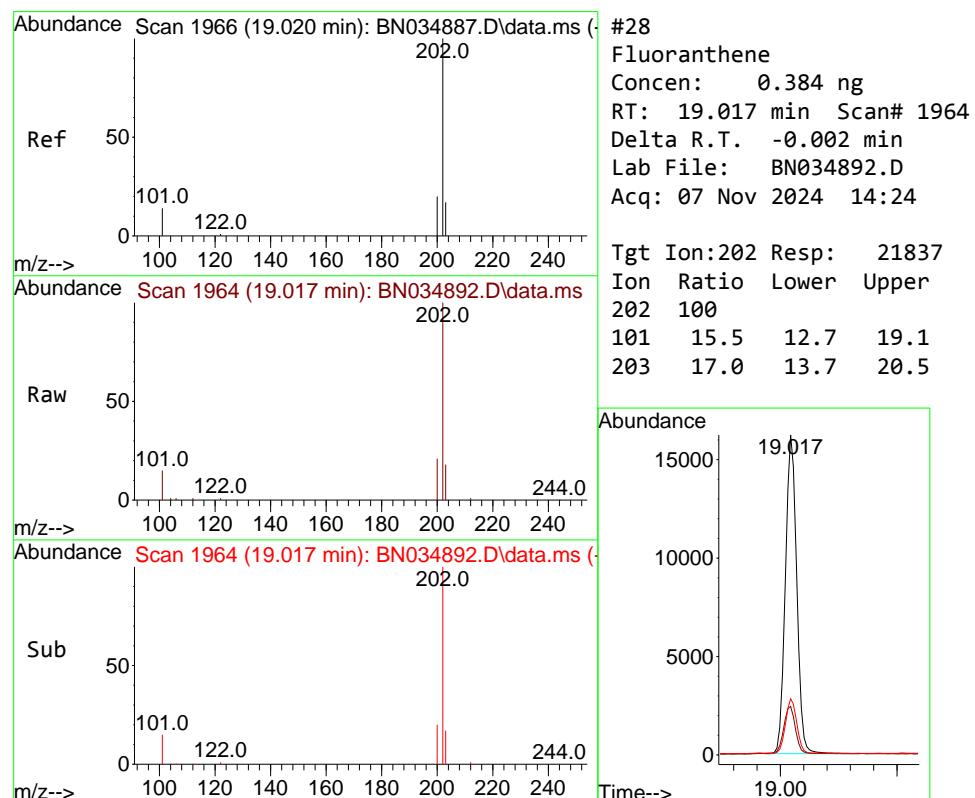
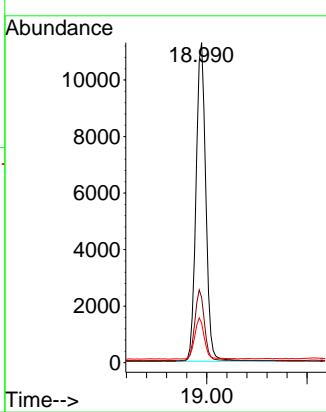


#27  
 Fluoranthene-d10  
 Concen: 0.383 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
 ClientSampleId : ICBN110724

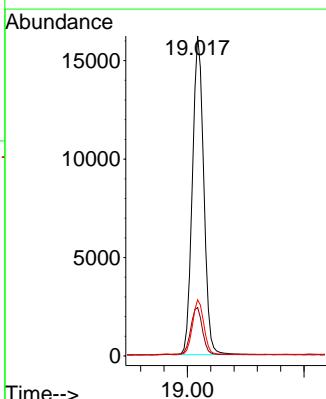
**Manual Integrations**  
**APPROVED**

Reviewed By :Yogesh Patel 11/08/2024  
 Supervised By :mohammad ahmed 11/08/2024



#28  
 Fluoranthene  
 Concen: 0.384 ng  
 RT: 19.017 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt Ion:202 Resp: 21837  
 Ion Ratio Lower Upper  
 202 100  
 101 15.5 12.7 19.1  
 203 17.0 13.7 20.5



#29

Chrysene-d<sub>12</sub>

Concen: 0.400 ng

RT: 21.149 min Scan# 2

Delta R.T. -0.002 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

ClientSampleId :

ICVBN110724

Tgt Ion:240 Resp: 11730

Ion Ratio Lower Upper

240 100

120 16.3 13.8 20.8

236 28.8 23.8 35.6

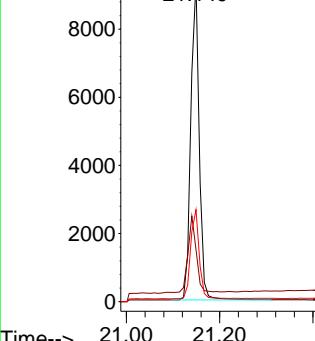
**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024

Abundance

21.149



Time--&gt;

#30

Pyrene

Concen: 0.367 ng

RT: 19.380 min Scan# 2042

Delta R.T. -0.002 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Tgt Ion:202 Resp: 21794

Ion Ratio Lower Upper

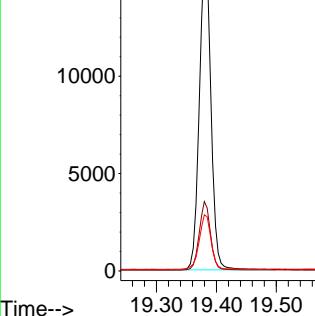
202 100

200 21.0 16.8 25.2

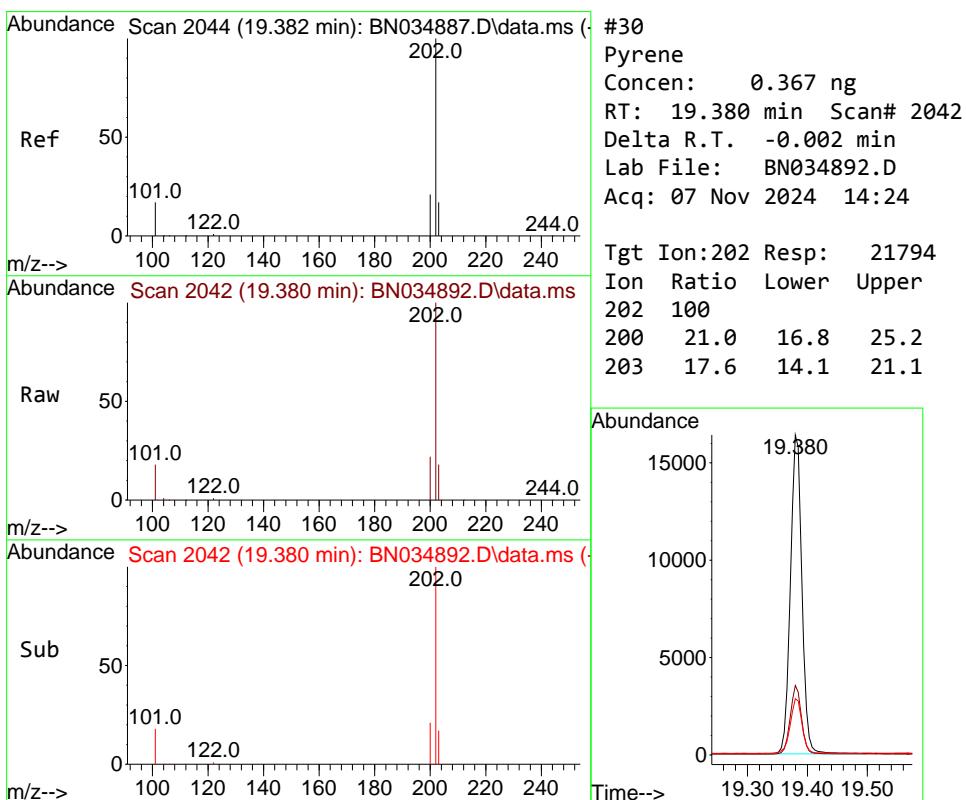
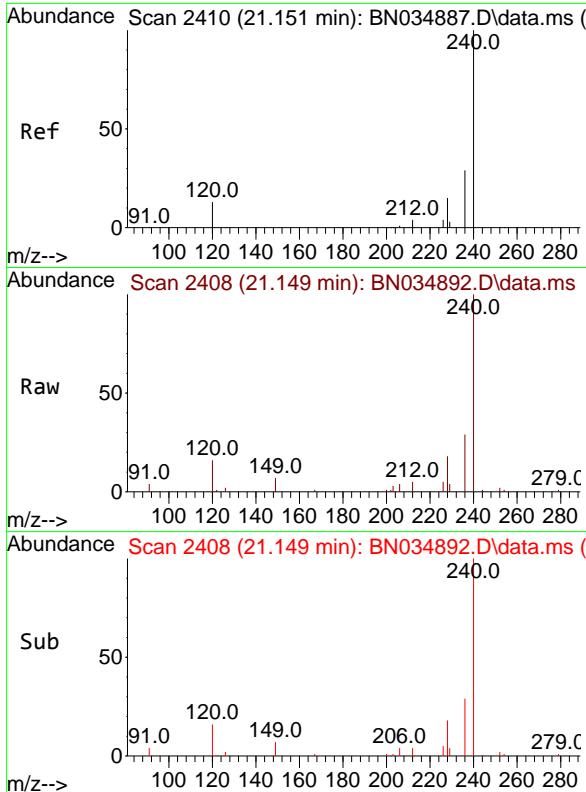
203 17.6 14.1 21.1

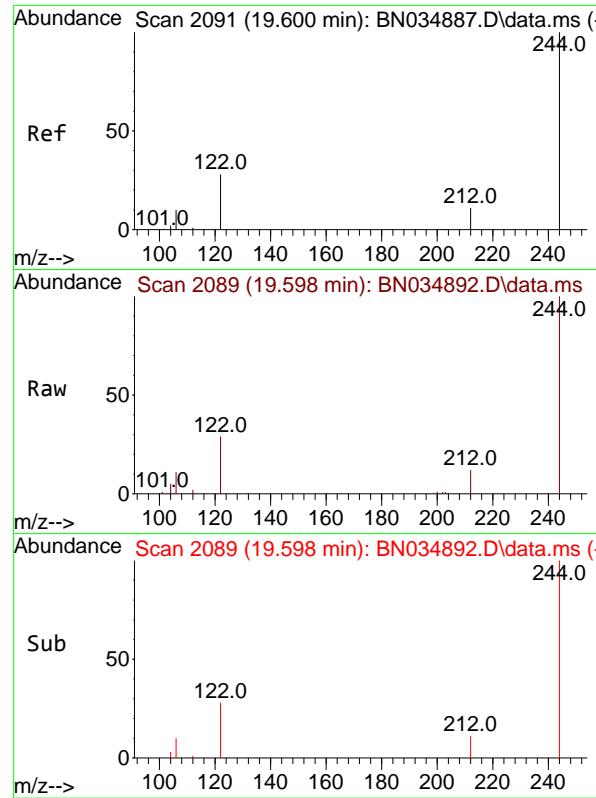
Abundance

19.380



Time--&gt;



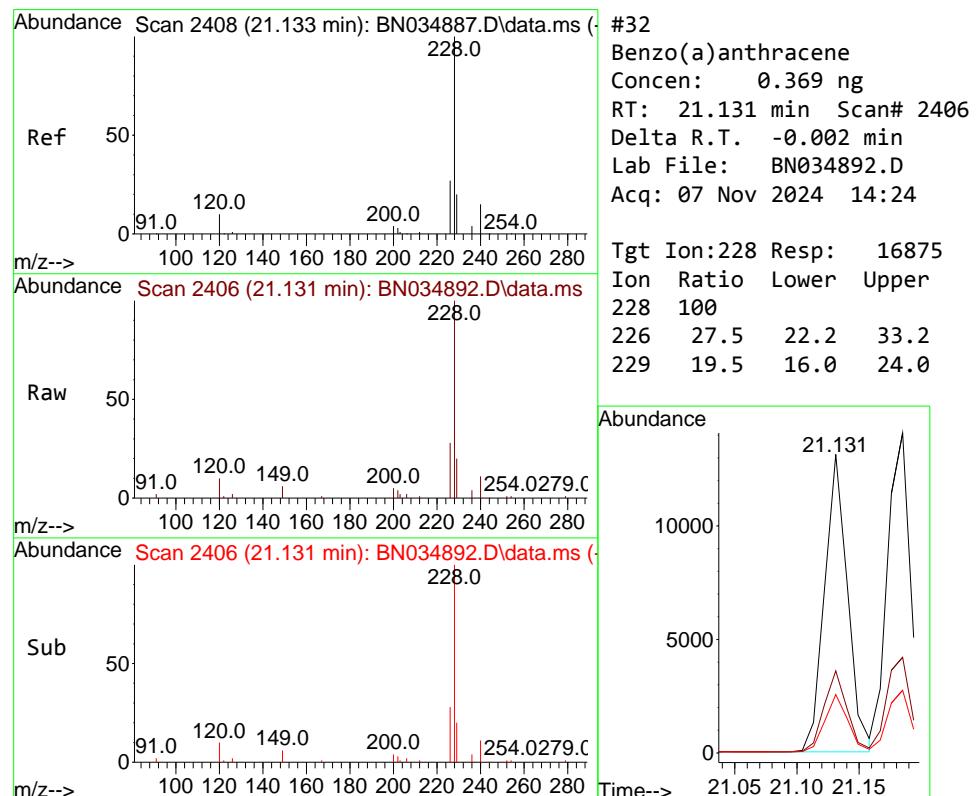
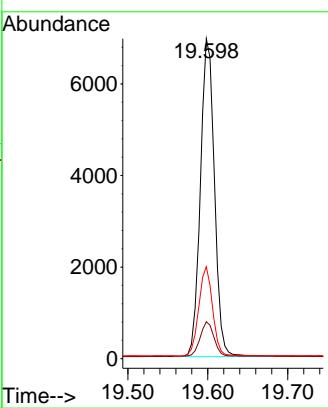


#31  
Terphenyl-d14  
Concen: 0.385 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
ClientSampleId : ICVBN110724

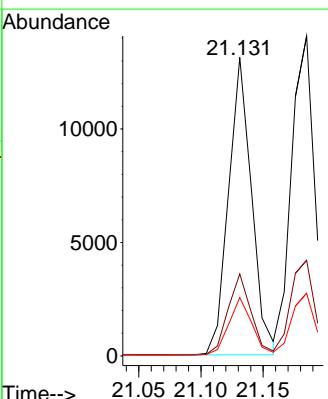
**Manual Integrations**  
**APPROVED**

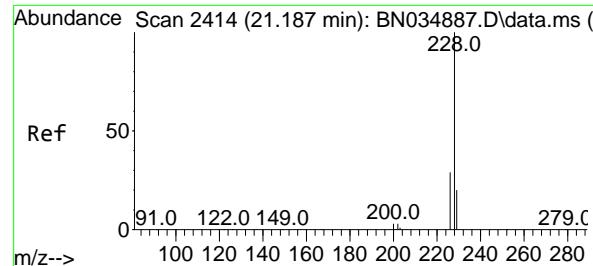
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



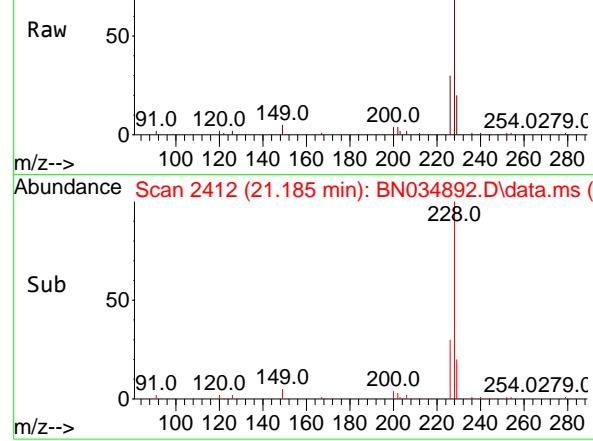
#32  
Benzo(a)anthracene  
Concen: 0.369 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:228 Resp: 16875  
Ion Ratio Lower Upper  
228 100  
226 27.5 22.2 33.2  
229 19.5 16.0 24.0





Abundance Scan 2412 (21.185 min): BN034892.D\data.ms (-)



#33

Chrysene

Concen: 0.387 ng

RT: 21.185 min Scan# 2

Delta R.T. -0.002 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

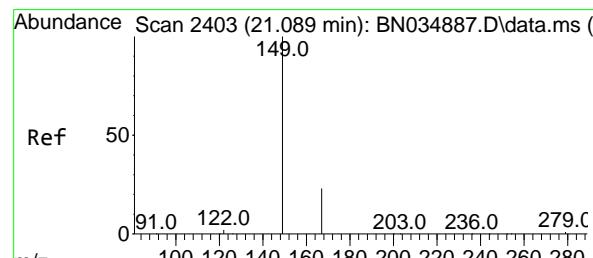
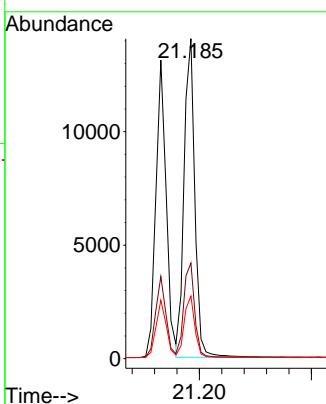
ClientSampleId :

ICVBN110724

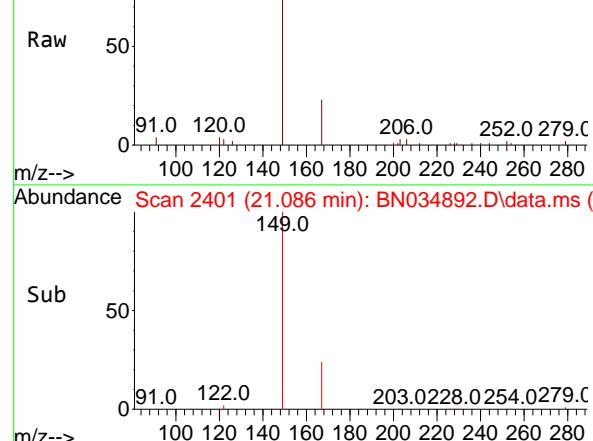
**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



Abundance Scan 2401 (21.086 min): BN034892.D\data.ms (-)



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.326 ng m

RT: 21.086 min Scan# 2401

Delta R.T. -0.003 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

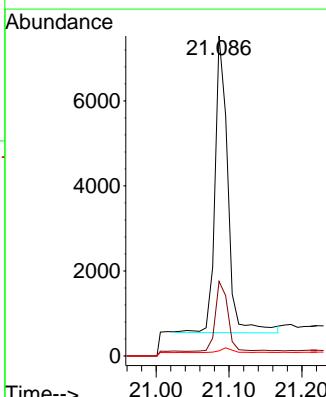
Tgt Ion:149 Resp: 8553

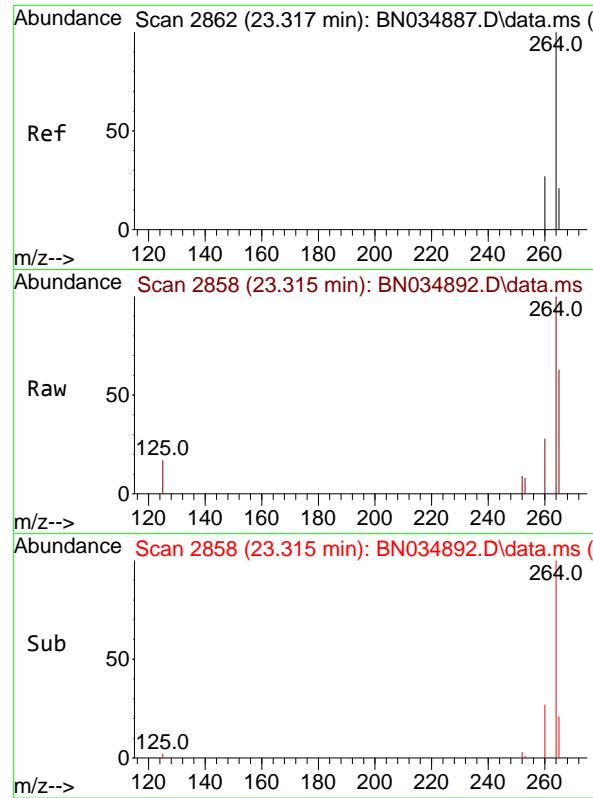
Ion Ratio Lower Upper

149 100

167 22.8 18.1 27.1

279 1.6 1.2 1.8



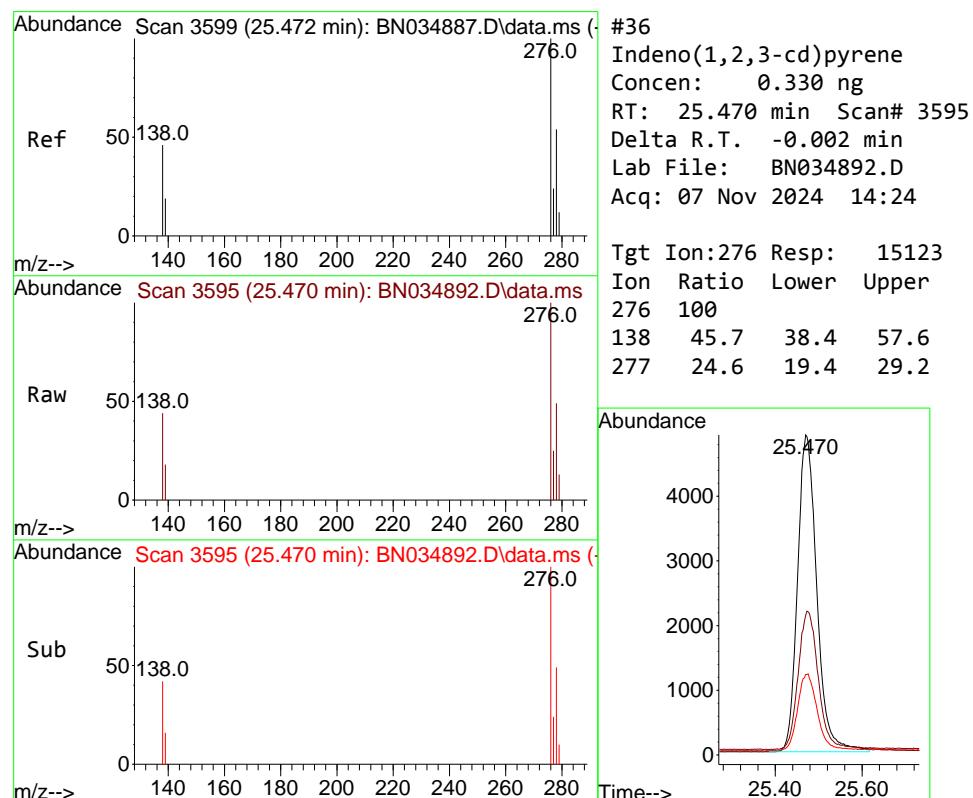
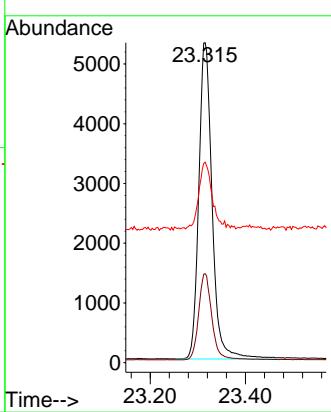


#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
ClientSampleId : ICVBN110724

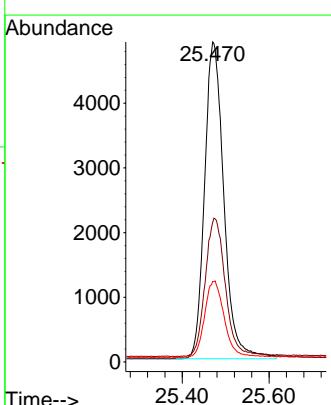
**Manual Integrations**  
**APPROVED**

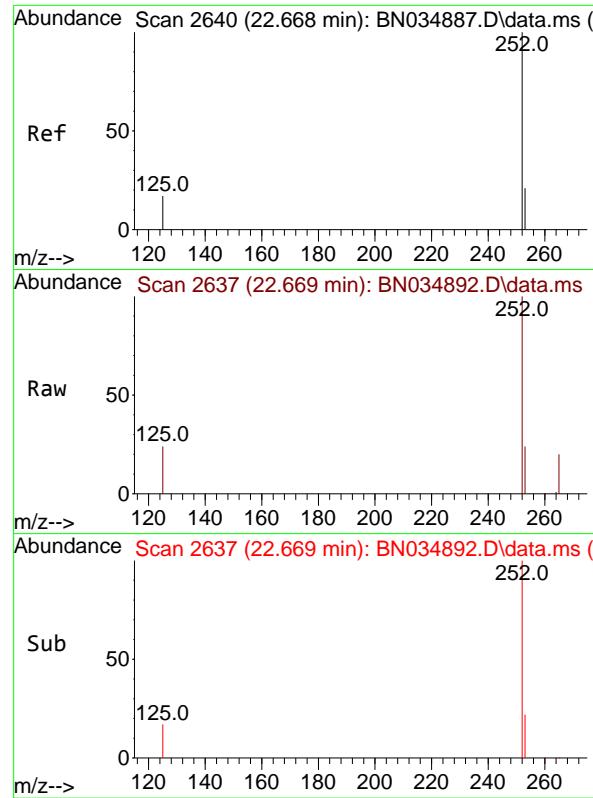
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.330 ng  
RT: 25.470 min Scan# 3595  
Delta R.T. -0.002 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:276 Resp: 15123  
Ion Ratio Lower Upper  
276 100  
138 45.7 38.4 57.6  
277 24.6 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.378 ng

RT: 22.669 min Scan# 2

Delta R.T. 0.001 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

ClientSampleId :

ICVBN110724

Tgt Ion:252 Resp: 17103

Ion Ratio Lower Upper

252 100

253 24.1 19.4 29.2

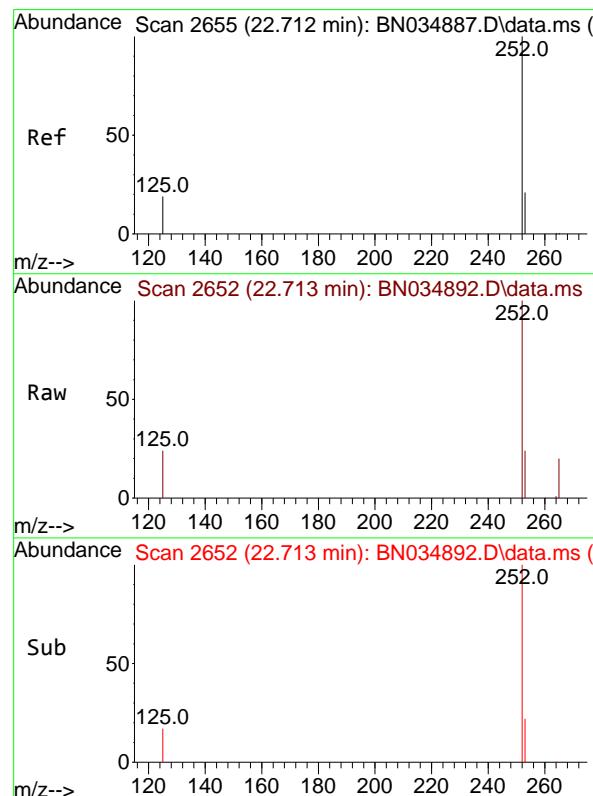
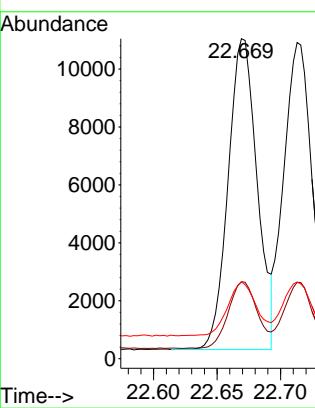
125 24.0 21.4 32.2

Manual Integrations

APPROVED

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



#38

Benzo(k)fluoranthene

Concen: 0.360 ng

RT: 22.713 min Scan# 2652

Delta R.T. 0.001 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

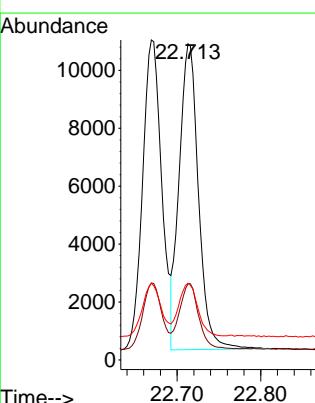
Tgt Ion:252 Resp: 16927

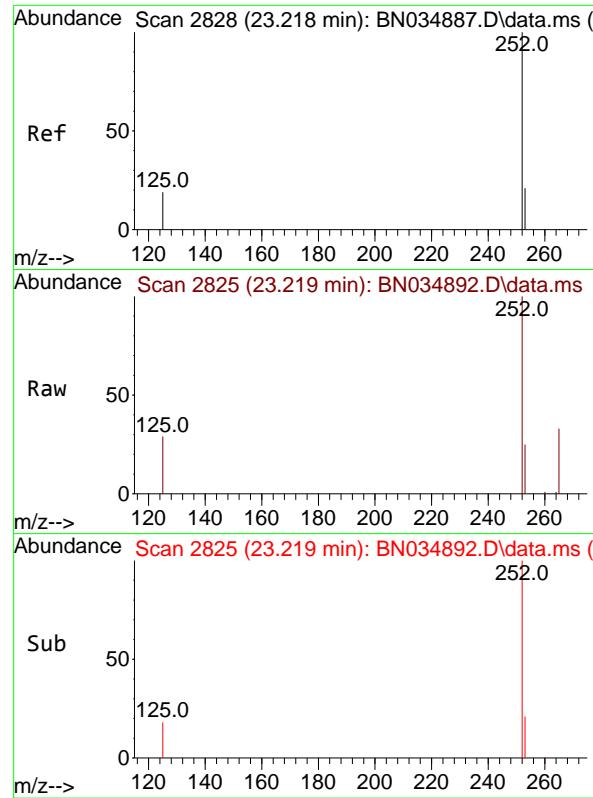
Ion Ratio Lower Upper

252 100

253 24.1 19.8 29.8

125 24.3 22.6 33.8



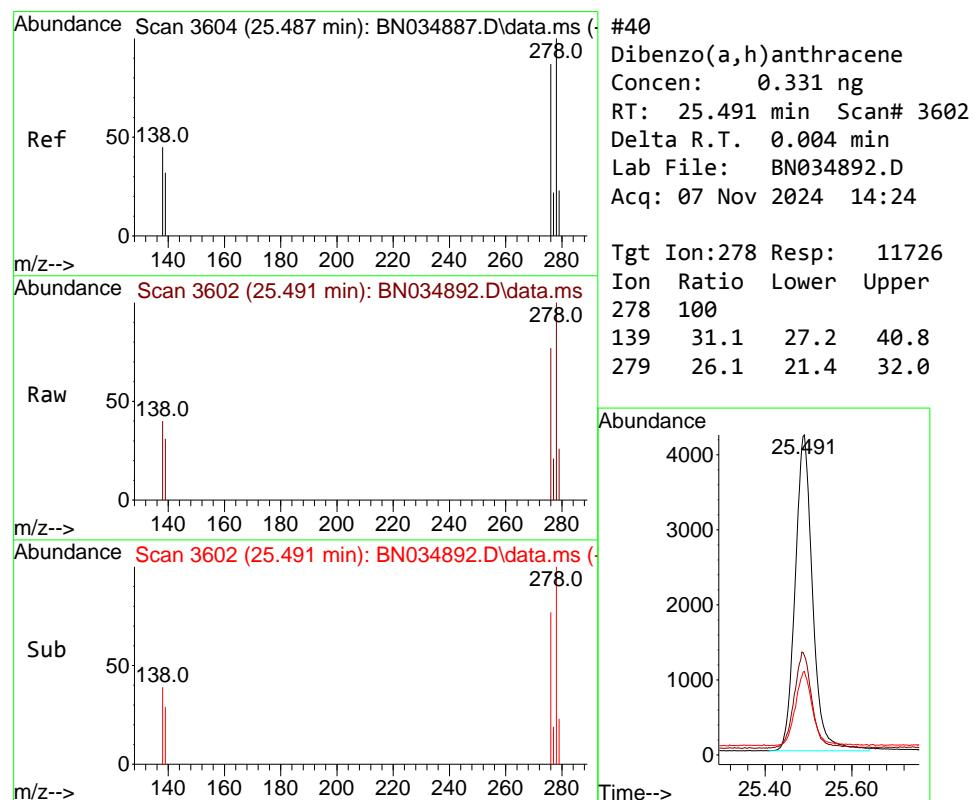
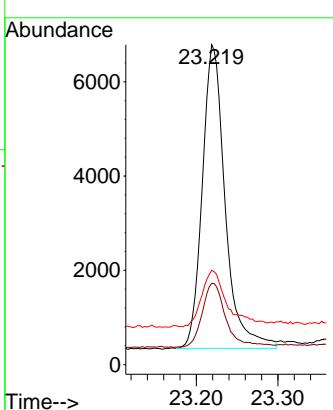


#39  
Benzo(a)pyrene  
Concen: 0.349 ng  
RT: 23.219 min Scan# 21  
Delta R.T. 0.001 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Instrument : BNA\_N  
ClientSampleId : ICVBN110724

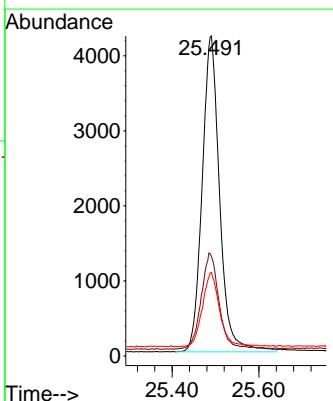
**Manual Integrations**  
**APPROVED**

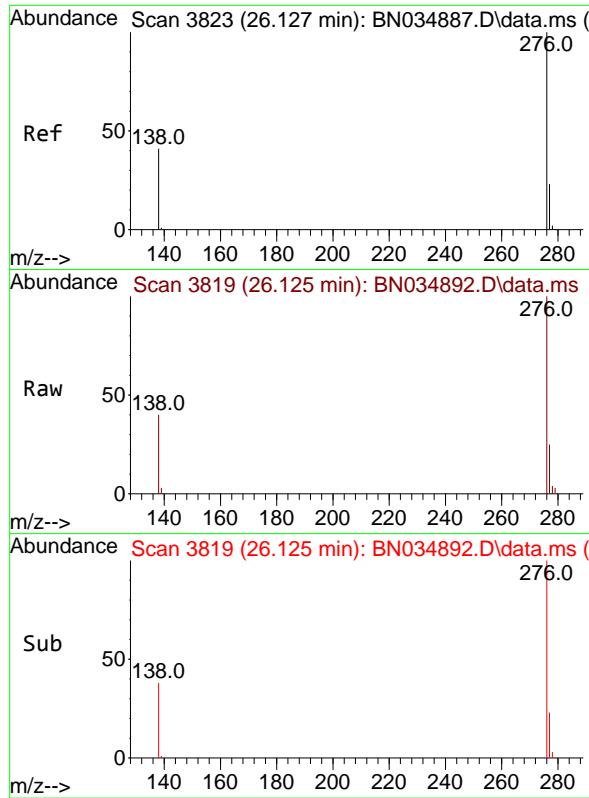
Reviewed By :Yogesh Patel 11/08/2024  
Supervised By :mohammad ahmed 11/08/2024



#40  
Dibenzo(a,h)anthracene  
Concen: 0.331 ng  
RT: 25.491 min Scan# 3602  
Delta R.T. 0.004 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion:278 Resp: 11726  
Ion Ratio Lower Upper  
278 100  
139 31.1 27.2 40.8  
279 26.1 21.4 32.0





#41

Benzo(g,h,i)perylene

Concen: 0.345 ng

RT: 26.125 min Scan# 3

Delta R.T. -0.002 min

Lab File: BN034892.D

Acq: 07 Nov 2024 14:24

Instrument :

BNA\_N

ClientSampleId :

ICVBN110724

Tgt Ion:276 Resp: 1300:

Ion Ratio Lower Upper

276 100

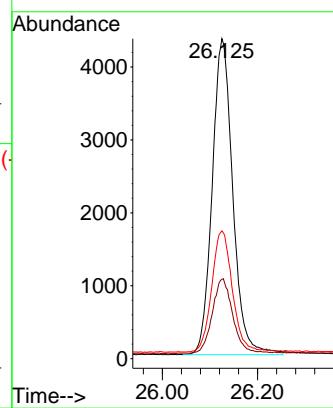
277 24.8 20.2 30.2

138 40.0 33.9 50.9

**Manual Integrations****APPROVED**

Reviewed By :Yogesh Patel 11/08/2024

Supervised By :mohammad ahmed 11/08/2024



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034892.D  
 Acq On : 07 Nov 2024 14:24  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN110724**

Quant Time: Nov 07 15:03:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 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	95	0.00
2	1,4-Dioxane	0.505	0.440	12.9	88	0.00
3	n-Nitrosodimethylamine	0.682	0.577	15.4	89	0.00
4 S	2-Fluorophenol	1.115	0.988	11.4	93	0.00
5 S	Phenol-d6	1.480	1.288	13.0	94	0.00
6	bis(2-Chloroethyl)ether	1.277	1.163	8.9	95	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	101	0.00
8 S	Nitrobenzene-d5	0.312	0.269	13.8	97	0.00
9	Naphthalene	1.110	1.047	5.7	102	0.01
10	Hexachlorobutadiene	0.177	0.167	5.6	101	0.00
11 SURR	2-Methylnaphthalene-d10	0.545	0.517	5.1	106	0.00
12	2-Methylnaphthalene	0.679	0.648	4.6	107	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00
14 S	2,4,6-Tribromophenol	0.118	0.100	15.3	129	0.00
15 S	2-Fluorobiphenyl	1.690	1.515	10.4	109	0.00
16	Acenaphthylene	1.929	1.667	13.6	111	0.00
17	Acenaphthene	1.335	1.189	10.9	112	0.00
18	Fluorene	1.662	1.501	9.7	114	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	122	0.00
20	4,6-Dinitro-2-methylphenol	0.044	0.030	31.8#	116	0.00
21	4-Bromophenyl-phenylether	0.213	0.202	5.2	122	0.00
22	Hexachlorobenzene	0.257	0.250	2.7	121	0.00
23	Atrazine	0.154	0.140	9.1	127	0.00
24	Pentachlorophenol	0.077	0.058	24.7	128	0.00
25	Phenanthrene	1.227	1.149	6.4	120	0.00
26	Anthracene	1.058	0.969	8.4	122	0.00
27 SURR	Fluoranthene-d10	0.902	0.864	4.2	131	0.00
28	Fluoranthene	1.291	1.239	4.0	133	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	143	0.00
30	Pyrene	2.025	1.858	8.2	133	0.00
31 S	Terphenyl-d14	0.749	0.722	3.6	139	0.00
32	Benzo(a)anthracene	1.559	1.439	7.7	144	0.00
33	Chrysene	1.650	1.597	3.2	144	0.00
34	Bis(2-ethylhexyl)phthalate	0.895	0.729	18.5	145	0.00
35 I	Perylene-d12	1.000	1.000	0.0	151#	0.00
36	Indeno(1,2,3-cd)pyrene	1.782	1.469	17.6	132	0.00
37	Benzo(b)fluoranthene	1.757	1.662	5.4	143	0.00
38	Benzo(k)fluoranthene	1.828	1.645	10.0	144	0.00
39 C	Benzo(a)pyrene	1.396	1.216	12.9	137	0.00
40	Dibenzo(a,h)anthracene	1.379	1.139	17.4	132	0.00
41	Benzo(g,h,i)perylene	1.464	1.263	13.7	128	0.00

(#) = Out of Range

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

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
ICVBN110724

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034892.D  
 Acq On : 07 Nov 2024 14:24  
 Operator : RC/JU  
 Sample : SSTDICV0.4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 ICVBN110724

Quant Time: Nov 07 15:03:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 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	95	0.00
2	1,4-Dioxane	0.400	0.348	13.0	88	0.00
3	n-Nitrosodimethylamine	0.400	0.339	15.3	89	0.00
4 S	2-Fluorophenol	0.400	0.354	11.5	93	0.00
5 S	Phenol-d6	0.400	0.348	13.0	94	0.00
6	bis(2-Chloroethyl)ether	0.400	0.364	9.0	95	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	101	0.00
8 S	Nitrobenzene-d5	0.400	0.345	13.8	97	0.00
9	Naphthalene	0.400	0.377	5.8	102	0.01
10	Hexachlorobutadiene	0.400	0.378	5.5	101	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.379	5.3	106	0.00
12	2-Methylnaphthalene	0.400	0.382	4.5	107	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	111	0.00
14 S	2,4,6-Tribromophenol	0.400	0.383	4.3	129	0.00
15 S	2-Fluorobiphenyl	0.400	0.359	10.3	109	0.00
16	Acenaphthylene	0.400	0.346	13.5	111	0.00
17	Acenaphthene	0.400	0.356	11.0	112	0.00
18	Fluorene	0.400	0.361	9.8	114	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	122	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.349	12.8	116	0.00
21	4-Bromophenyl-phenylether	0.400	0.379	5.3	122	0.00
22	Hexachlorobenzene	0.400	0.390	2.5	121	0.00
23	Atrazine	0.400	0.361	9.8	127	0.00
24	Pentachlorophenol	0.400	0.373	6.8	128	0.00
25	Phenanthrene	0.400	0.375	6.3	120	0.00
26	Anthracene	0.400	0.366	8.5	122	0.00
27 SURR	Fluoranthene-d10	0.400	0.383	4.3	131	0.00
28	Fluoranthene	0.400	0.384	4.0	133	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	143	0.00
30	Pyrene	0.400	0.367	8.3	133	0.00
31 S	Terphenyl-d14	0.400	0.385	3.8	139	0.00
32	Benzo(a)anthracene	0.400	0.369	7.8	144	0.00
33	Chrysene	0.400	0.387	3.3	144	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.326	18.5	145	0.00
35 I	Perylene-d12	0.400	0.400	0.0	151	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.330	17.5	132	0.00
37	Benzo(b)fluoranthene	0.400	0.378	5.5	143	0.00
38	Benzo(k)fluoranthene	0.400	0.360	10.0	144	0.00
39 C	Benzo(a)pyrene	0.400	0.349	12.8	137	0.00
40	Dibenzo(a,h)anthracene	0.400	0.331	17.3	132	0.00
41	Benzo(g,h,i)perylene	0.400	0.345	13.8	128	0.00

(#) = Out of Range

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

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
ICVBN110724



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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>CHEMTECH</u>		Contract:	<u>TETR06</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>P4710</u>	SAS No.:	<u>P4710</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>11/08/2024</u>	<u>08:29</u>
Lab File ID:	<u>BN034898.D</u>		Init. Calib. Date(s):	<u>11/07/2024</u>	<u>11/07/2024</u>
EPA Sample No.:	<u>SSTDCCC0.4</u>		Init. Calib. Time(s):	<u>10:02</u>	<u>13:49</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	0.545	0.496		-9.0	20.0
Fluoranthene-d10	0.902	0.852		-5.5	20.0
2-Fluorophenol	1.115	0.972		-12.8	20.0
Phenol-d6	1.480	1.313		-11.3	20.0
Nitrobenzene-d5	0.312	0.279		-10.6	20.0
2-Fluorobiphenyl	1.690	1.536		-9.1	20.0
2,4,6-Tribromophenol	0.118	0.098		-16.9	20.0
Terphenyl-d14	0.749	0.697		-6.9	20.0
1,4-Dioxane	0.505	0.457		-9.5	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034898.D  
 Acq On : 08 Nov 2024 08:29  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

Quant Time: Nov 08 09:57:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

**Manual Integrations APPROVED**

Reviewed By :Jagrut Upadhyay

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)	Date
Internal Standards							11/08/2024
1) 1,4-Dichlorobenzene-d4	7.575	152	6102	0.400	ng	0.00	Supervised By :mohammad Ahmed
7) Naphthalene-d8	10.340	136	18171	0.400	ng	0.00	
13) Acenaphthene-d10	14.201	164	8711	0.400	ng	-0.01	
19) Phenanthrene-d10	16.957	188	17291	0.400	ng	0.00	
29) Chrysene-d12	21.143	240	11255	0.400	ng	# 0.00	
35) Perylene-d12	23.315	264	9481	0.400	ng	# 0.00	11/11/2024

System Monitoring Compounds

4) 2-Fluorophenol	5.199	112	5933	0.349	ng	0.00
5) Phenol-d6	6.752	99	8011	0.355	ng	0.00
8) Nitrobenzene-d5	8.707	82	5062	0.357	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	9015	0.364	ng	0.00
14) 2,4,6-Tribromophenol	15.704	330	854	0.375	ng	0.00
15) 2-Fluorobiphenyl	12.822	172	13376	0.364	ng	-0.01
27) Fluoranthene-d10	18.987	212	14727	0.378	ng	0.00
31) Terphenyl-d14	19.601	244	7841	0.372	ng	0.00

Target Compounds

				Qvalue
2) 1,4-Dioxane	3.184	88	2791	0.362 ng 100
3) n-Nitrosodimethylamine	3.487	42	3715	0.357 ng # 96
6) bis(2-Chloroethyl)ether	7.012	93	7371	0.378 ng 98
9) Naphthalene	10.383	128	18988	0.377 ng 100
10) Hexachlorobutadiene	10.682	225	3080	0.383 ng # 98
12) 2-Methylnaphthalene	12.011	142	11374	0.369 ng 99
16) Acenaphthylene	13.923	152	14701	0.350 ng 99
17) Acenaphthene	14.265	154	10362	0.356 ng 99
18) Fluorene	15.259	166	13094	0.362 ng 99
20) 4,6-Dinitro-2-methylph...	15.334	198	538	0.355 ng 94
21) 4-Bromophenyl-phenylether	16.151	248	3355	0.364 ng # 63
22) Hexachlorobenzene	16.262	284	4416	0.398 ng 98
23) Atrazine	16.436	200	2322	0.348 ng 99
24) Pentachlorophenol	16.610	266	1123	0.410 ng 97
25) Phenanthrene	16.995	178	20416	0.385 ng 100
26) Anthracene	17.082	178	16914	0.370 ng 100
28) Fluoranthene	19.020	202	21528	0.386 ng 100
30) Pyrene	19.382	202	21506	0.377 ng 100
32) Benzo(a)anthracene	21.134	228	16690	0.380 ng 98
33) Chrysene	21.178	228	18283	0.394 ng 96
34) Bis(2-ethylhexyl)phtha...	21.089	149	8187m	0.325 ng
36) Indeno(1,2,3-cd)pyrene	25.472	276	15511	0.367 ng 99
37) Benzo(b)fluoranthene	22.669	252	17145	0.412 ng 97
38) Benzo(k)fluoranthene	22.712	252	17383	0.401 ng 96
39) Benzo(a)pyrene	23.221	252	12460	0.377 ng 94
40) Dibenzo(a,h)anthracene	25.484	278	11910	0.364 ng 99
41) Benzo(g,h,i)perylene	26.127	276	13103	0.378 ng 100

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

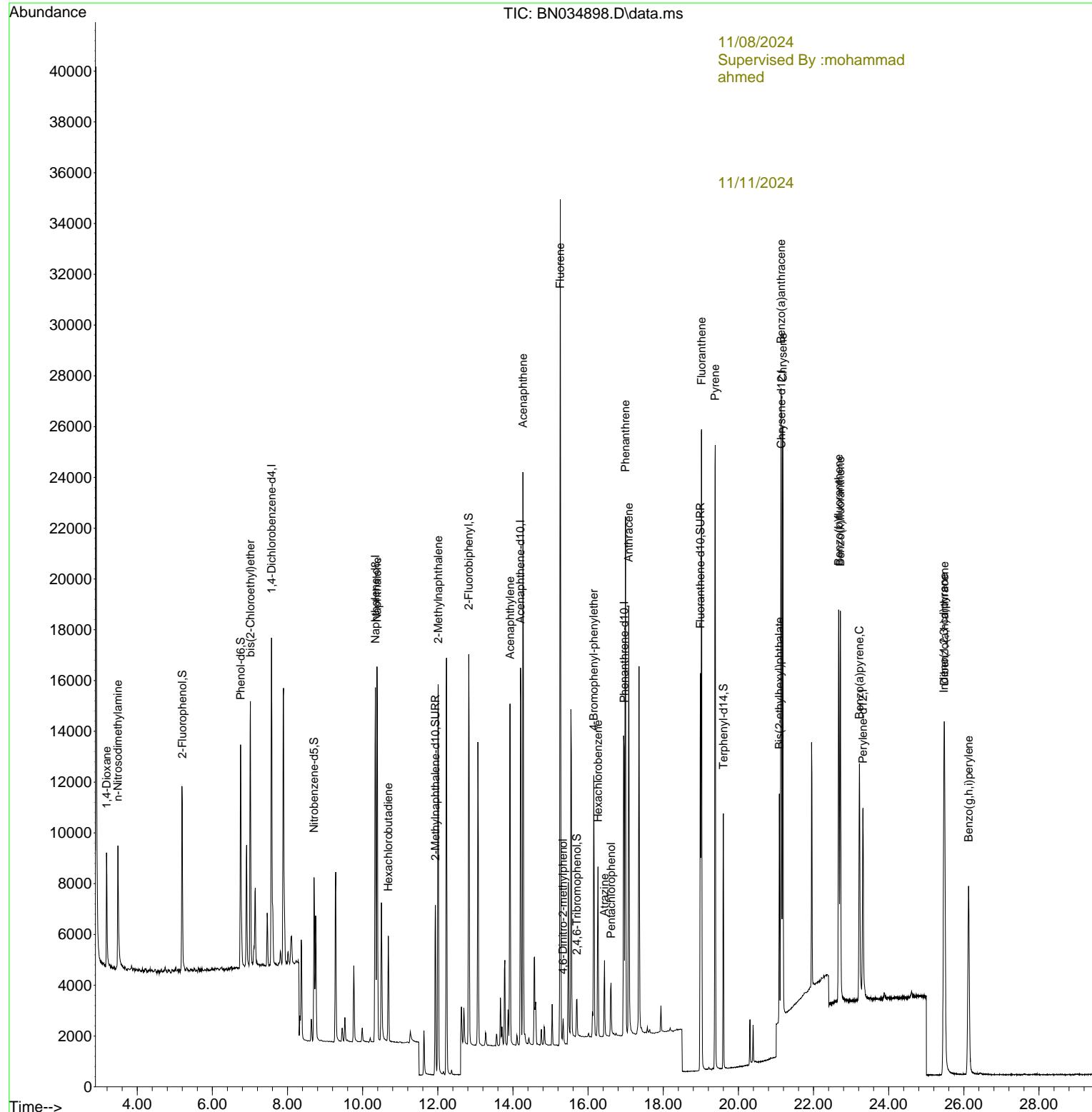
Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034898.D  
 Acq On : 08 Nov 2024 08:29  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

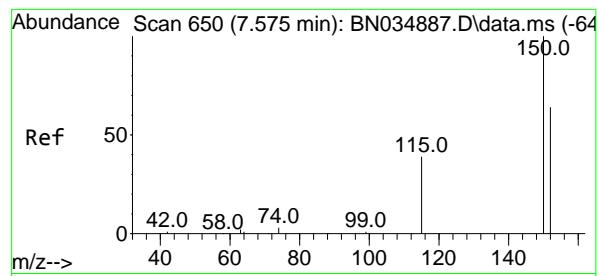
Quant Time: Nov 08 09:57:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4

**Manual Integrations  
APPROVED**

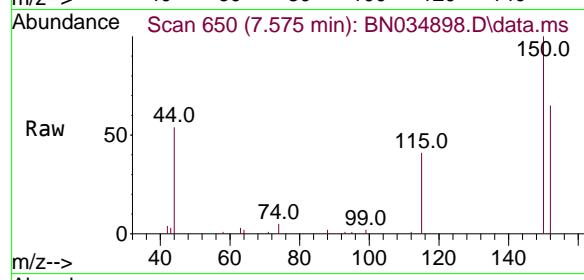
Reviewed By :Jagrut  
Upadhyay





#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6100  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

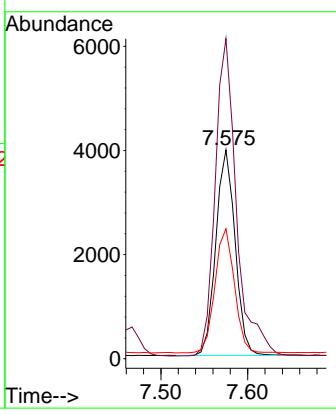
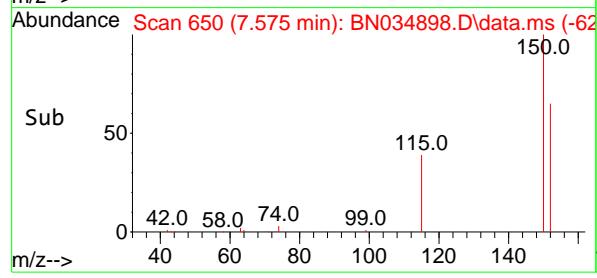
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4



Tgt Ion:152 Resp: 6100  
Ion Ratio Lower Upper  
152 100  
150 153.3 124.4 186.6  
115 62.3 50.5 75.7

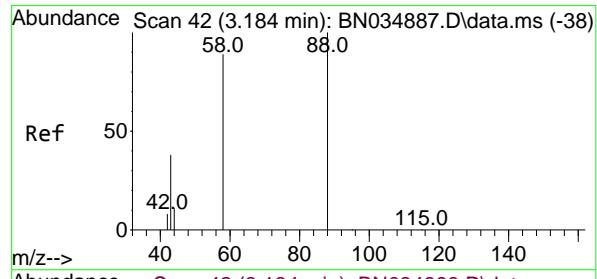
### Manual Integrations APPROVED

Reviewed By :Jagrut Upadhyay

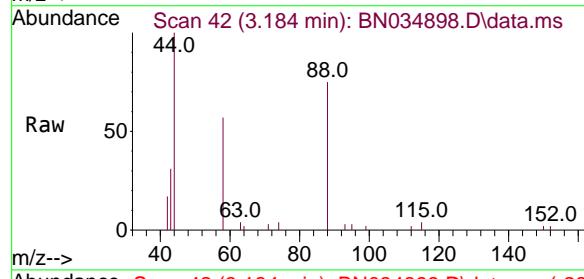


11/08/2024  
Supervised By :mohammad ahmed

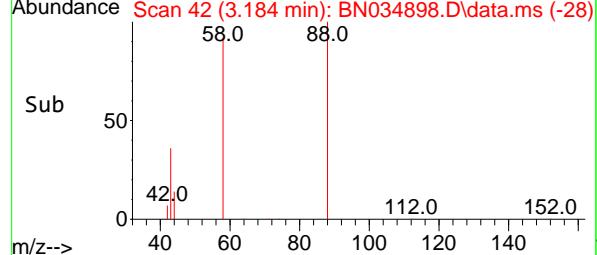
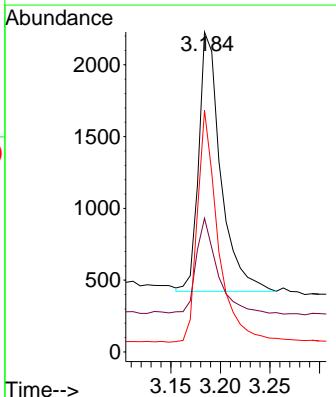
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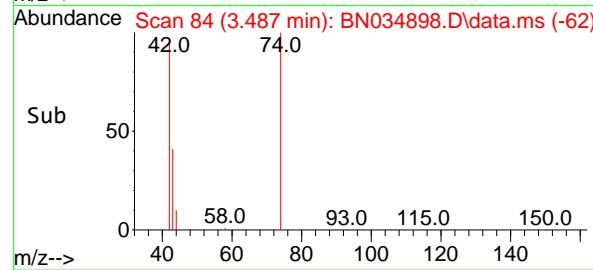
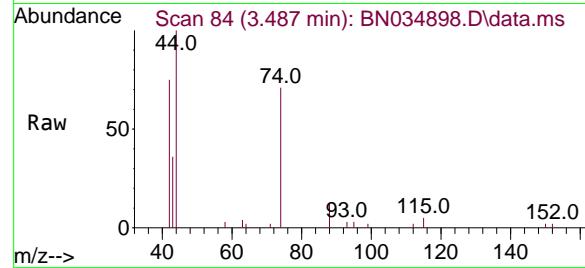
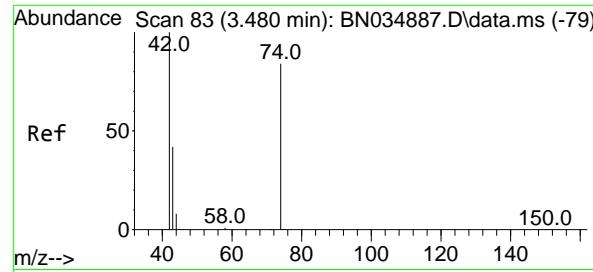


#2  
1,4-Dioxane  
Concen: 0.362 ng  
RT: 3.184 min Scan# 42  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29



Tgt Ion: 88 Resp: 2791  
Ion Ratio Lower Upper  
88 100  
43 34.8 28.2 42.2  
58 84.1 67.1 100.7





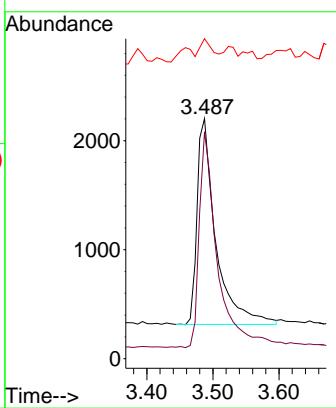
#3

n-Nitrosodimethylamine  
Concen: 0.357 ng  
RT: 3.487 min Scan# 8  
Delta R.T. 0.007 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

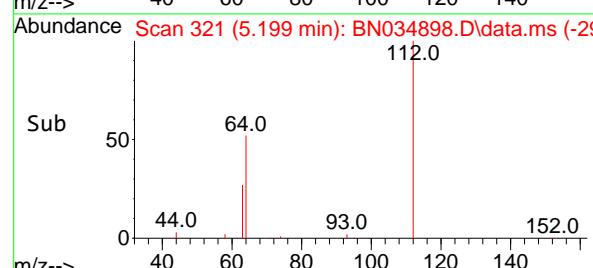
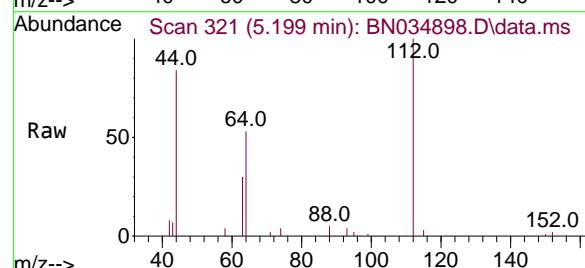
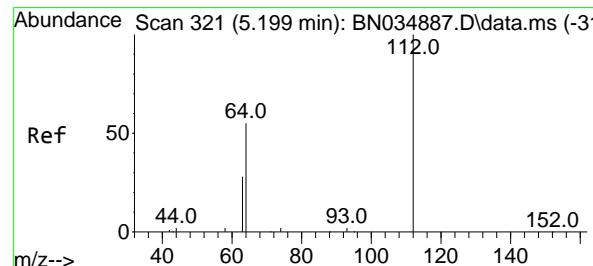
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Upadhyay



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Supervised By :mohammad  
ahmed

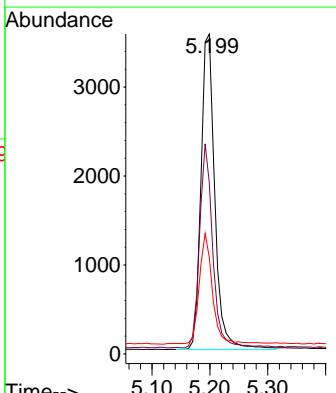
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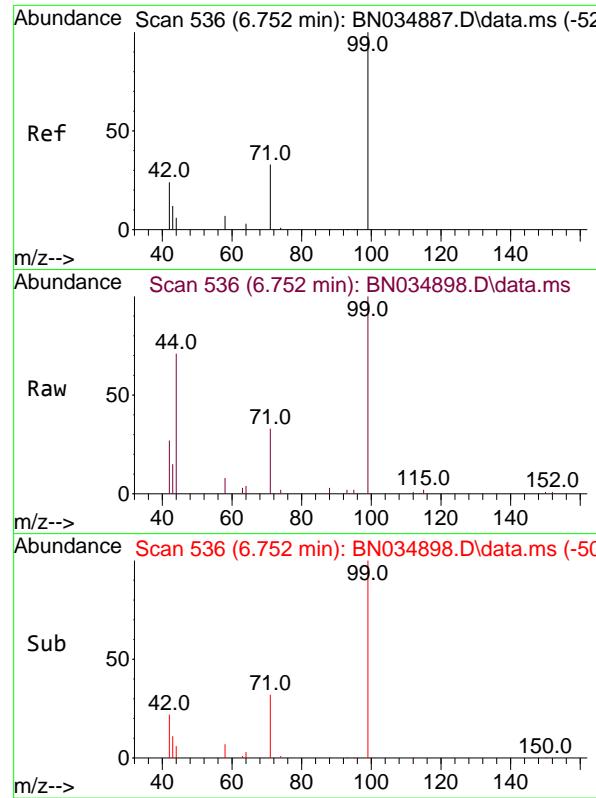


#4

2-Fluorophenol  
Concen: 0.349 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:112 Resp: 5933  
Ion Ratio Lower Upper  
112 100  
64 60.9 49.6 74.4  
63 33.7 26.3 39.5



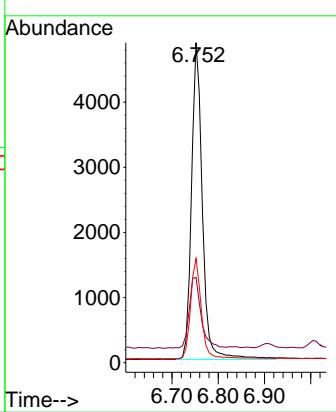


#5  
 Phenol-d6  
 Concen: 0.355 ng  
 RT: 6.752 min Scan# 51  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

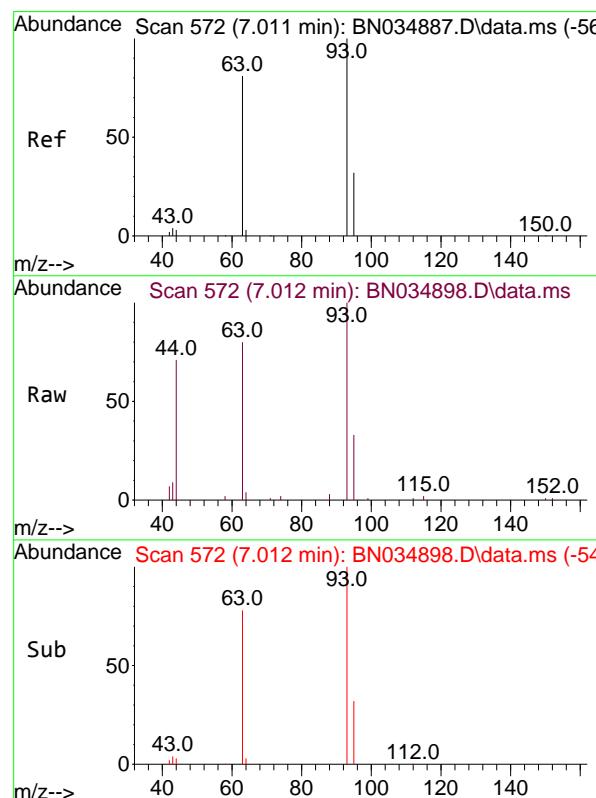
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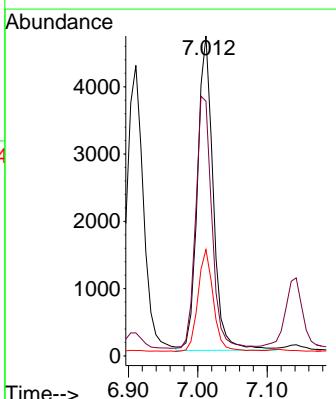
11/08/2024  
 Supervised By :mohammad ahmed

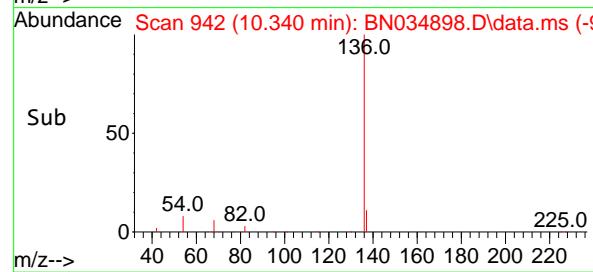
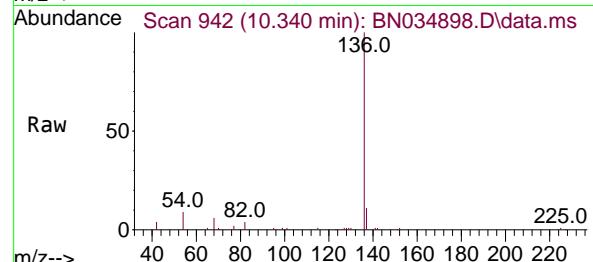
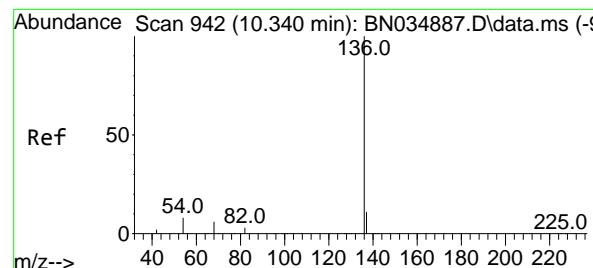
11/11/2024



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.378 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 93 Resp: 7371  
 Ion Ratio Lower Upper  
 93 100  
 63 82.3 67.5 101.3  
 95 31.7 25.7 38.5





#7

Naphthalene-d8

Concen: 0.400 ng

RT: 10.340 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034898.D

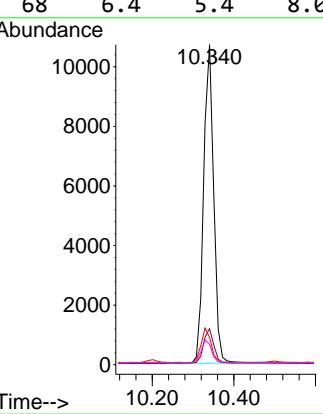
Acq: 08 Nov 2024 08:29

Instrument :

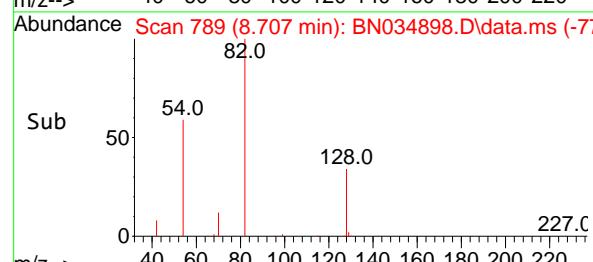
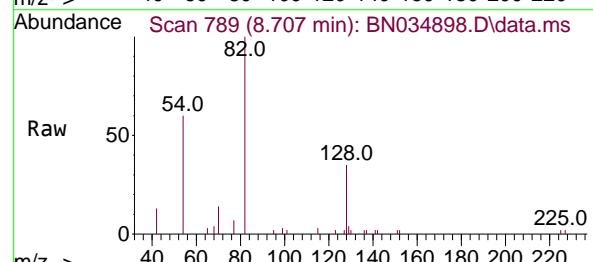
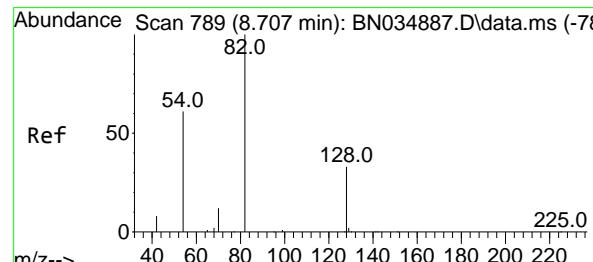
BNA\_N

ClientSampleId :

SSTDCCC0.4

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Supervised By :mohammad  
ahmed

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#8

Nitrobenzene-d5

Concen: 0.357 ng

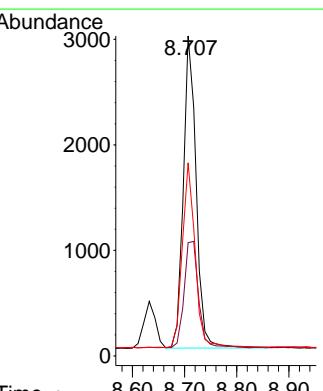
RT: 8.707 min Scan# 789

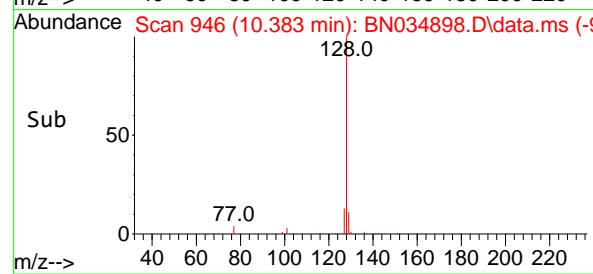
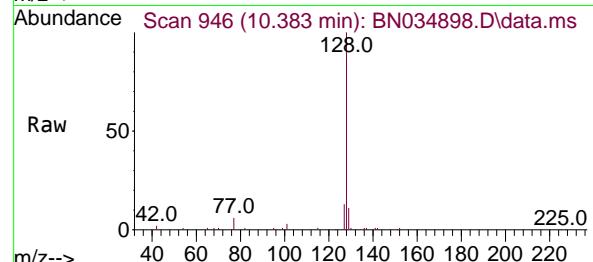
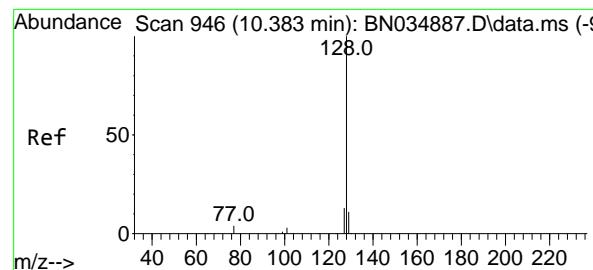
Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Tgt	Ion:	82	Resp:	5062
Ion	Ratio	Lower	Upper	
82	100			
128	35.4	28.1	42.1	
54	60.4	49.8	74.6	





#9

Naphthalene

Concen: 0.377 ng

RT: 10.383 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034898.D

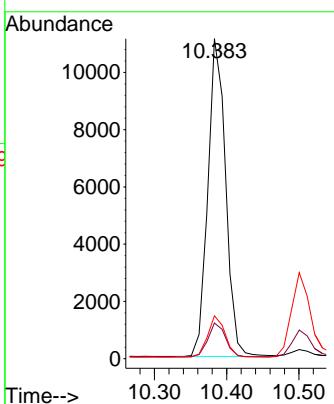
Acq: 08 Nov 2024 08:29

Instrument :

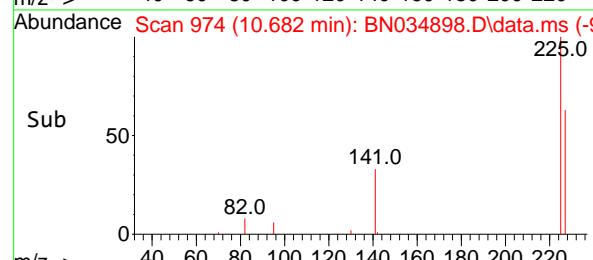
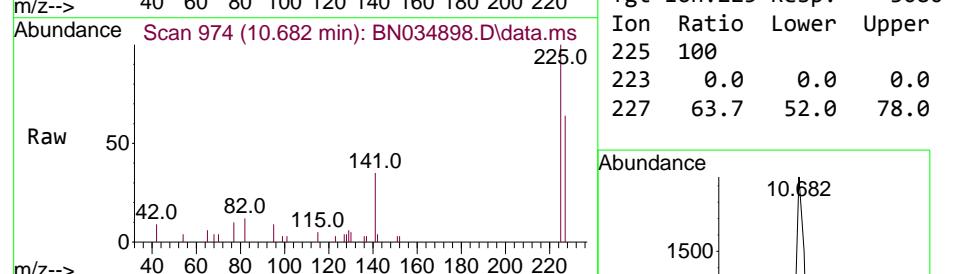
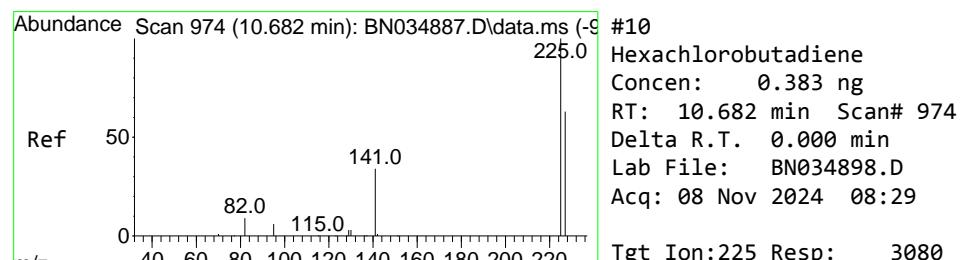
BNA\_N

ClientSampleId :

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Supervised By :mohammad  
ahmed

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#10

Hexachlorobutadiene

Concen: 0.383 ng

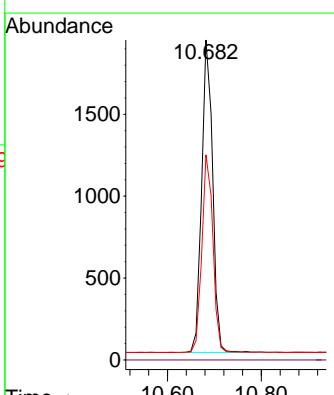
RT: 10.682 min Scan# 974

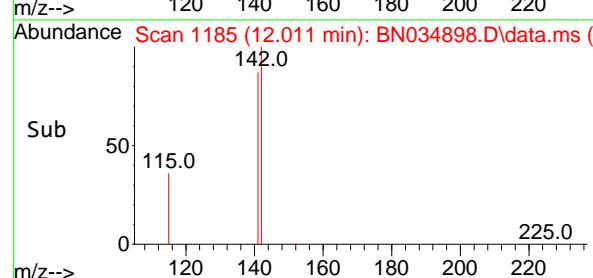
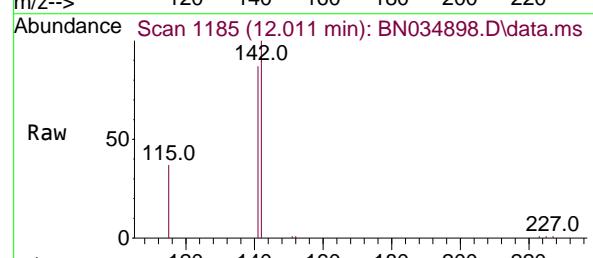
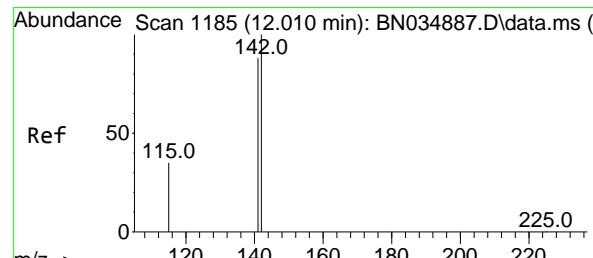
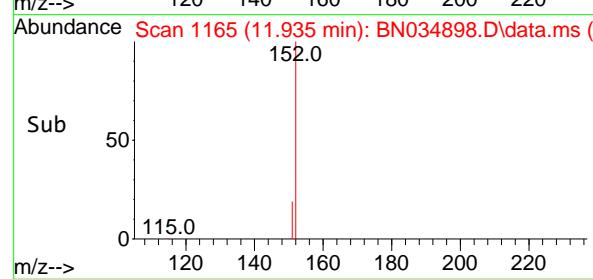
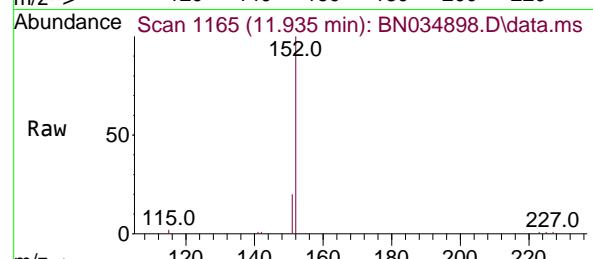
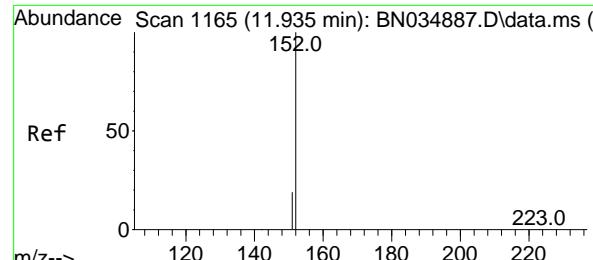
Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Tgt	Ion:225	Resp:	3080
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	52.0	78.0



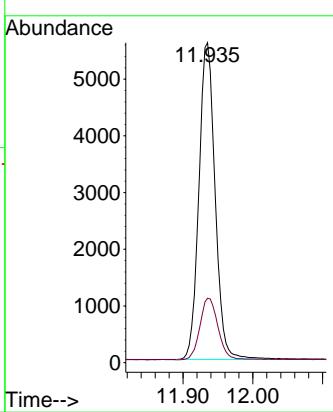


#11  
2-Methylnaphthalene-d10  
Concen: 0.364 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

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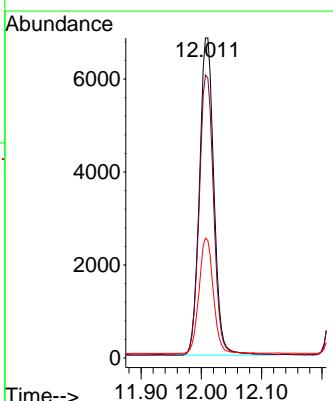


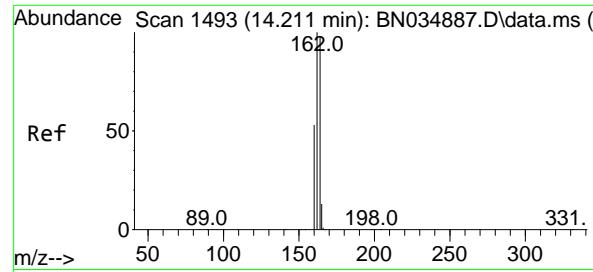
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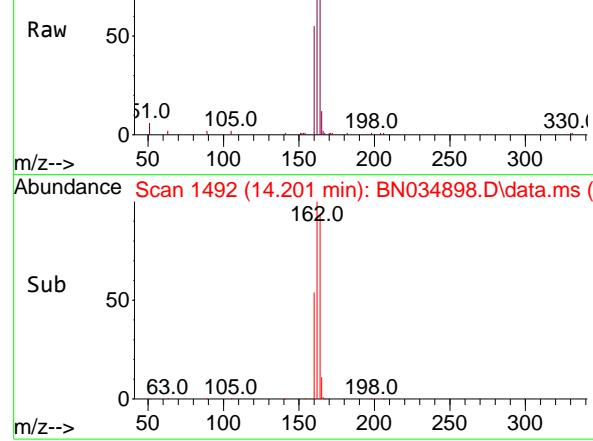
#12  
2-Methylnaphthalene  
Concen: 0.369 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:142 Resp: 11374  
Ion Ratio Lower Upper  
142 100  
141 87.5 70.5 105.7  
115 36.7 29.4 44.2

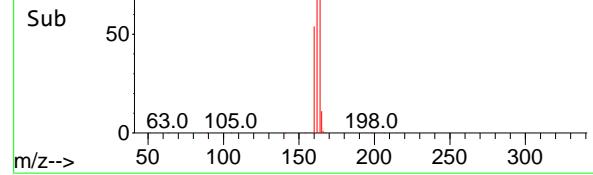




Abundance Scan 1492 (14.201 min): BN034898.D\data.ms



Abundance Scan 1492 (14.201 min): BN034898.D\data.ms (-)



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.201 min Scan# 1

Delta R.T. -0.010 min

Lab File: BN034898.D

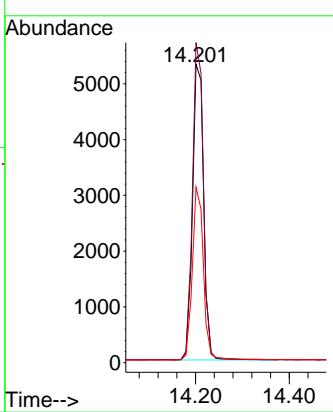
Acq: 08 Nov 2024 08:29

Instrument :

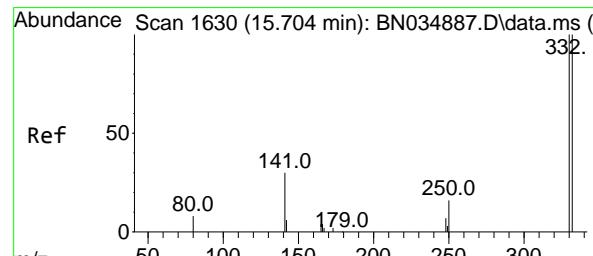
BNA\_N

ClientSampleId :

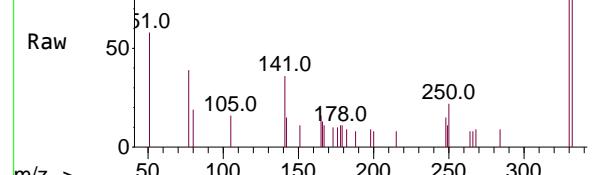
SSTDCCC0.4

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Supervised By :mohammad  
ahmed

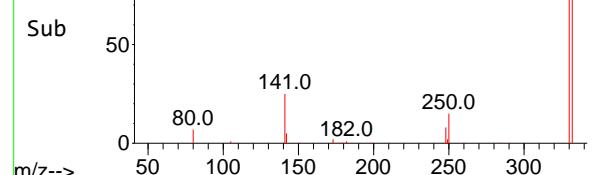
11/11/2024



Abundance Scan 1630 (15.704 min): BN034898.D\data.ms



Abundance Scan 1630 (15.704 min): BN034898.D\data.ms (-)



#14

2,4,6-Tribromophenol

Concen: 0.375 ng

RT: 15.704 min Scan# 1630

Delta R.T. -0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

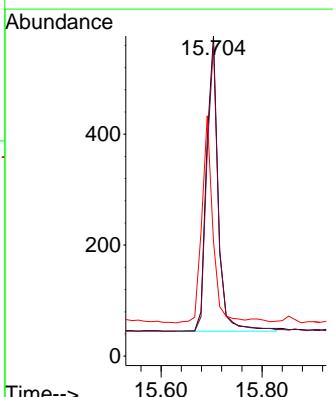
Tgt Ion:330 Resp: 854

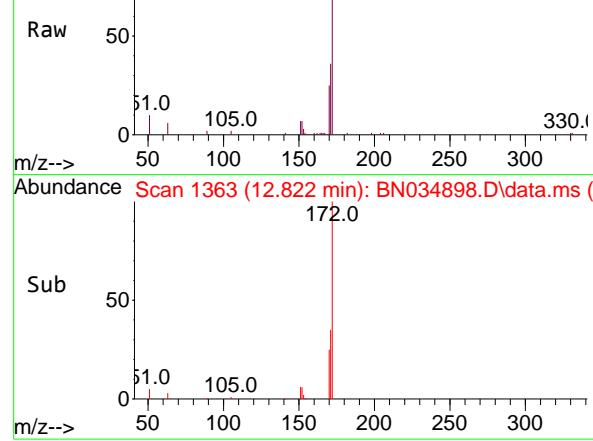
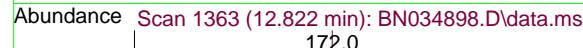
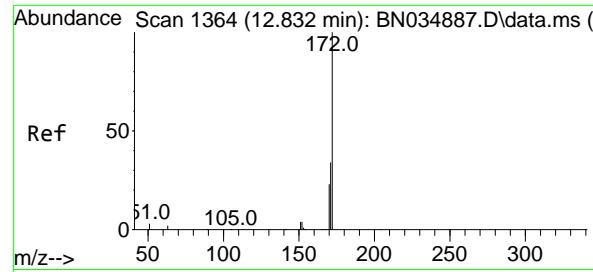
Ion Ratio Lower Upper

330 100

332 95.6 77.1 115.7

141 66.2 54.1 81.1



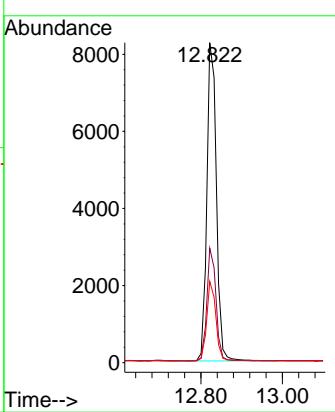


#15  
2-Fluorobiphenyl  
Concen: 0.364 ng  
RT: 12.822 min Scan# 1  
Delta R.T. -0.010 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

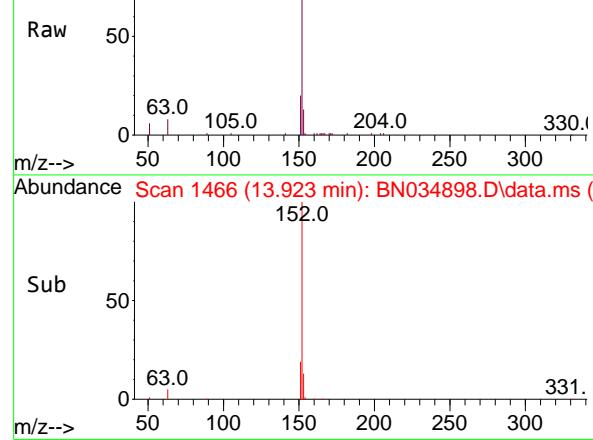
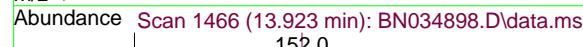
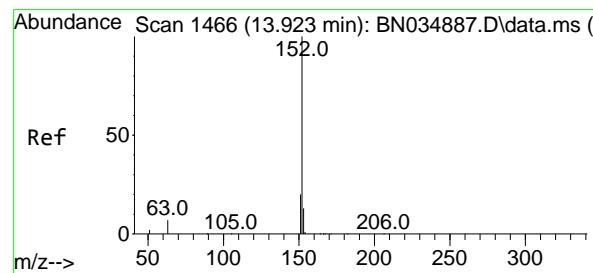
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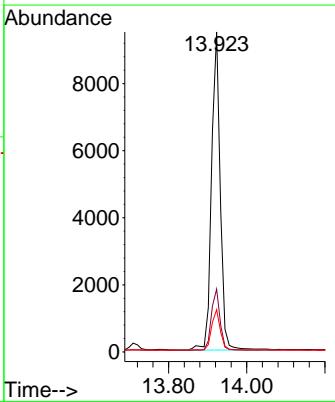
11/08/2024  
Supervised By :mohammad ahmed

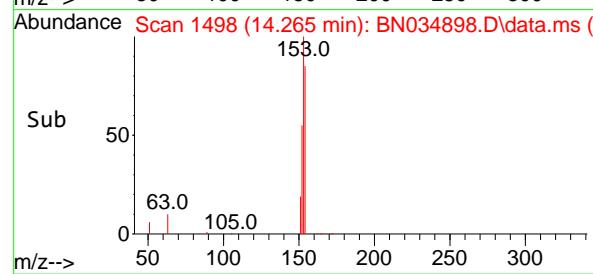
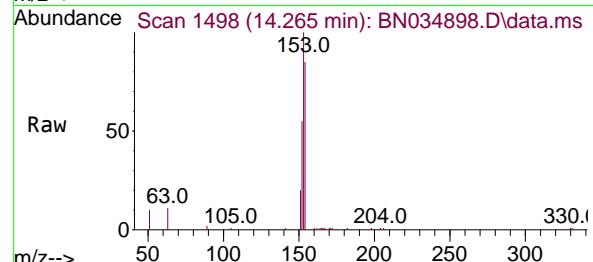
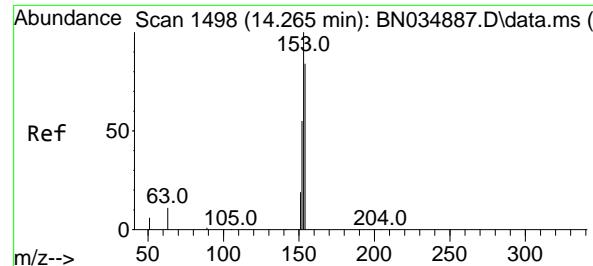
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#16  
Acenaphthylene  
Concen: 0.350 ng  
RT: 13.923 min Scan# 1466  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:152 Resp: 14701  
Ion Ratio Lower Upper  
152 100  
151 19.1 15.2 22.8  
153 12.7 10.4 15.6





#17

Acenaphthene

Concen: 0.356 ng

RT: 14.265 min Scan# 1498

Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Instrument :

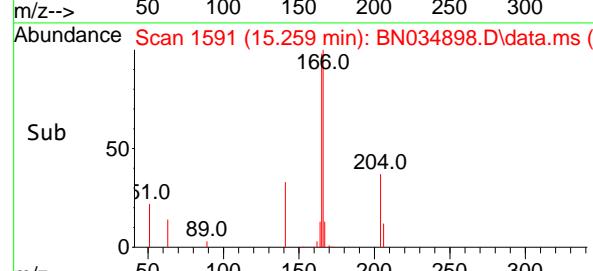
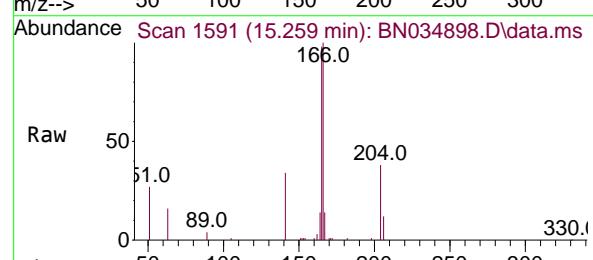
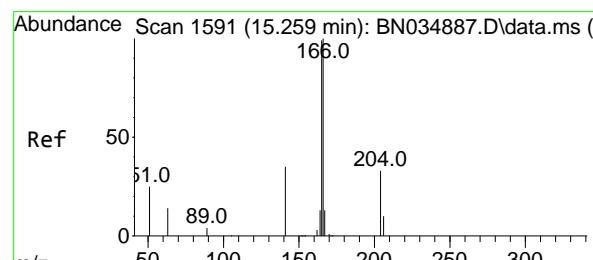
BNA\_N

ClientSampleId :

SSTDCCC0.4

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Supervised By :mohammad  
ahmed

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#18

Fluorene

Concen: 0.362 ng

RT: 15.259 min Scan# 1591

Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

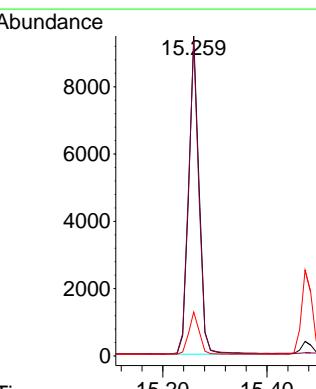
Tgt Ion:166 Resp: 13094

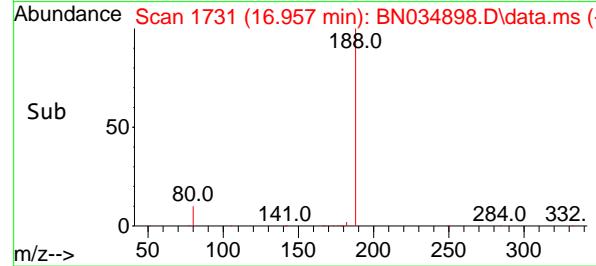
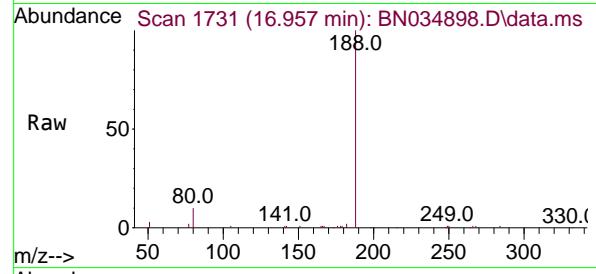
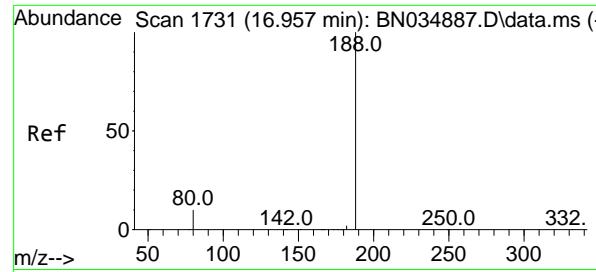
Ion Ratio Lower Upper

166 100

165 98.8 79.5 119.3

167 13.3 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.957 min Scan# 1729

Delta R.T. 0.000 min

Lab File: BN034898.D

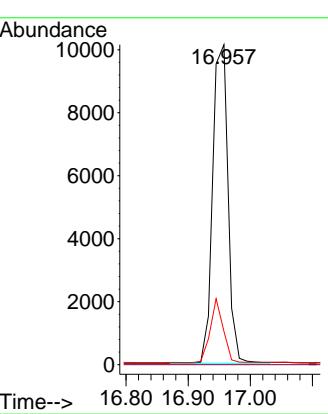
Acq: 08 Nov 2024 08:29

Instrument :

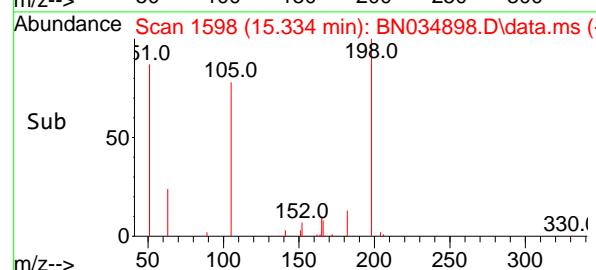
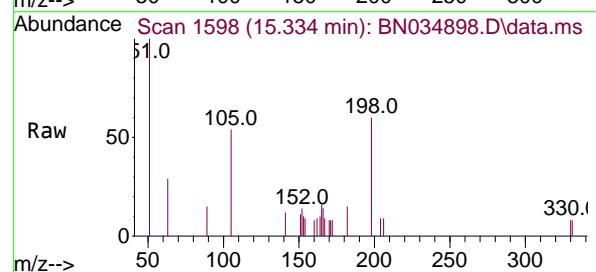
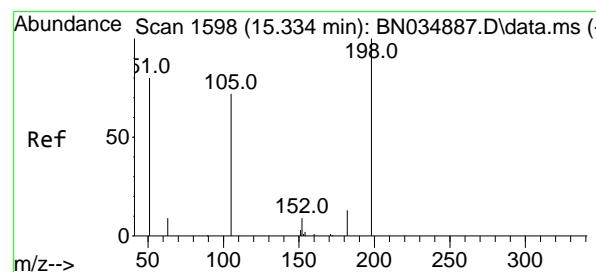
BNA\_N

ClientSampleId :

SSTDCCC0.4

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Upadhyay11/08/2024  
Supervised By :mohammad  
ahmed

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#20

4,6-Dinitro-2-methylphenol

Concen: 0.355 ng

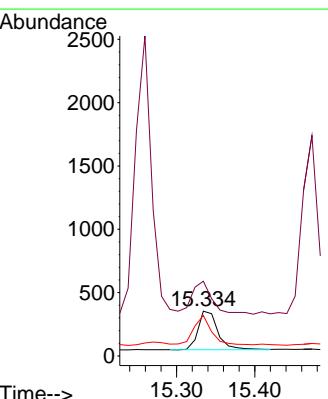
RT: 15.334 min Scan# 1598

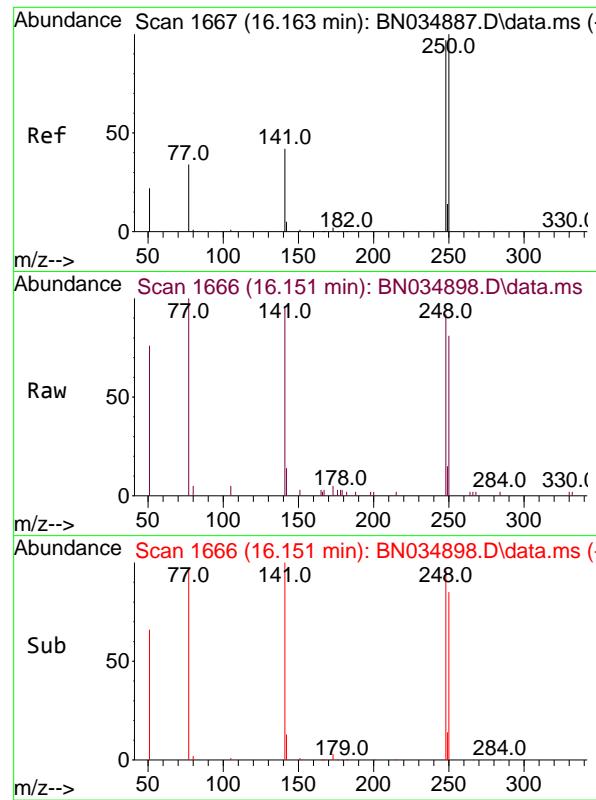
Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Tgt	Ion:198	Resp:	538
Ion	Ratio	Lower	Upper
198	100		
51	166.7	141.8	212.8
105	90.4	75.6	113.4



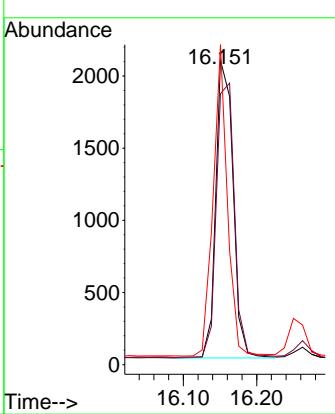


#21  
4-Bromophenyl-phenylether  
Concen: 0.364 ng  
RT: 16.151 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

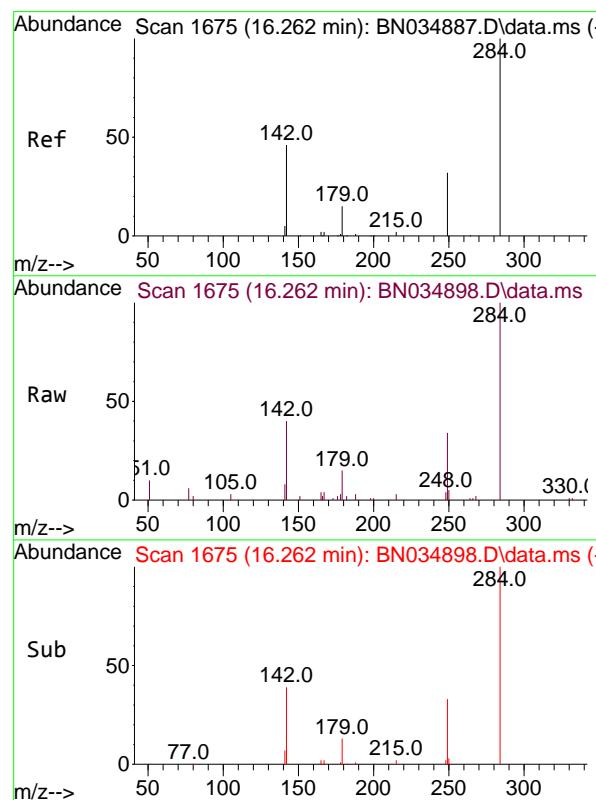
**Manual Integrations**  
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Upadhyay



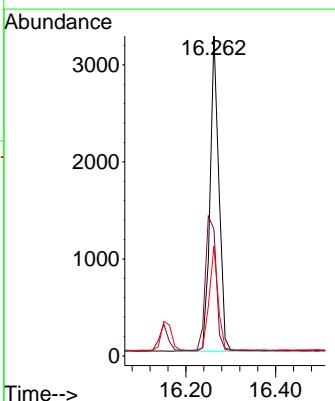
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Supervised By :mohammad  
ahmed

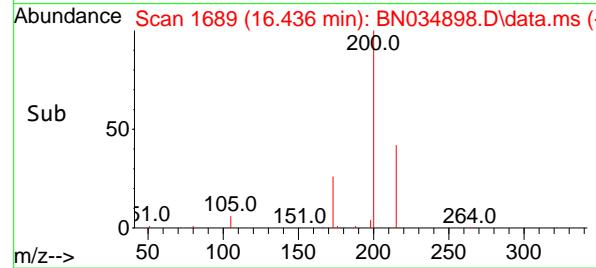
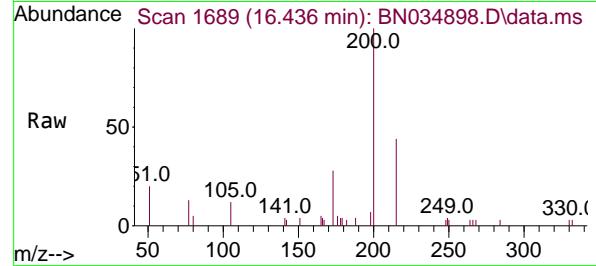
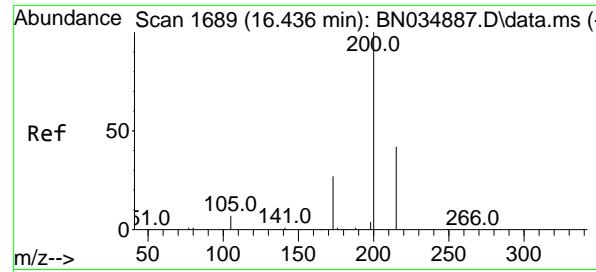
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#22  
Hexachlorobenzene  
Concen: 0.398 ng  
RT: 16.262 min Scan# 1675  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:284 Resp: 4416  
Ion Ratio Lower Upper  
284 100  
142 51.9 43.4 65.2  
249 32.6 25.8 38.6





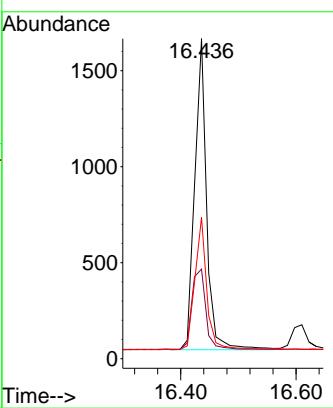
#23

Atrazine  
Concen: 0.348 ng  
RT: 16.436 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

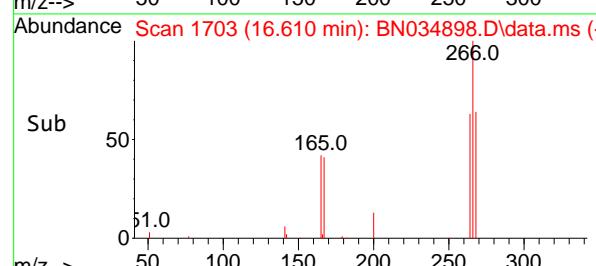
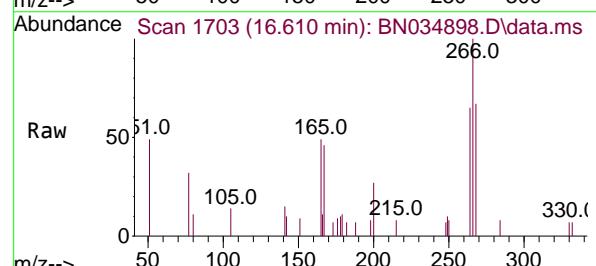
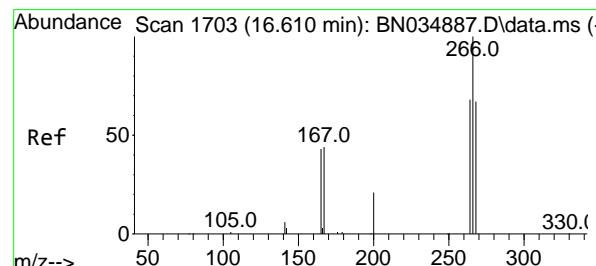
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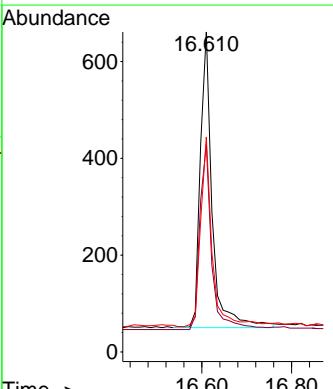
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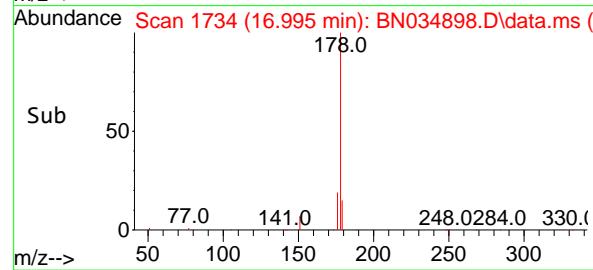
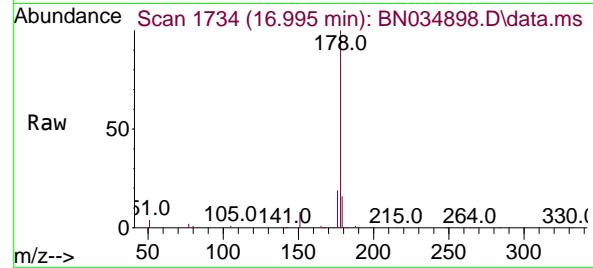
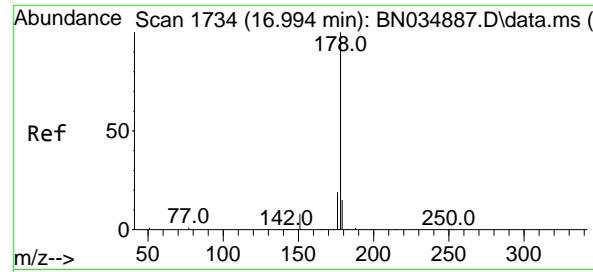


#24

Pentachlorophenol  
Concen: 0.410 ng  
RT: 16.610 min Scan# 1703  
Delta R.T. -0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:266 Resp: 1123  
Ion Ratio Lower Upper  
266 100  
264 62.5 51.3 76.9  
268 62.5 53.0 79.6





#25

Phenanthrene

Concen: 0.385 ng

RT: 16.995 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Instrument :

BNA\_N

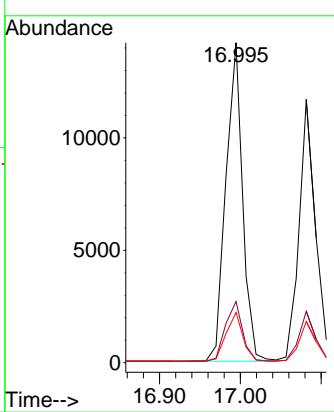
ClientSampleId :

SSTDCCC0.4

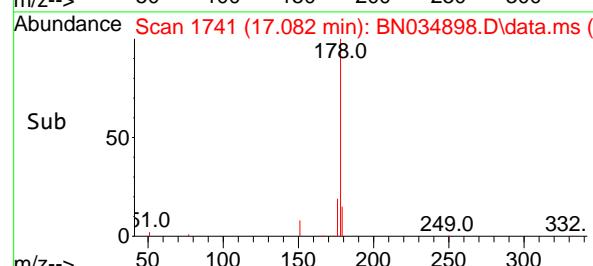
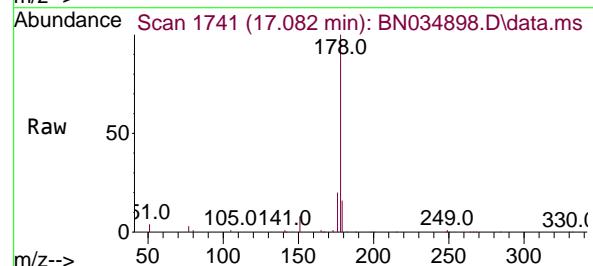
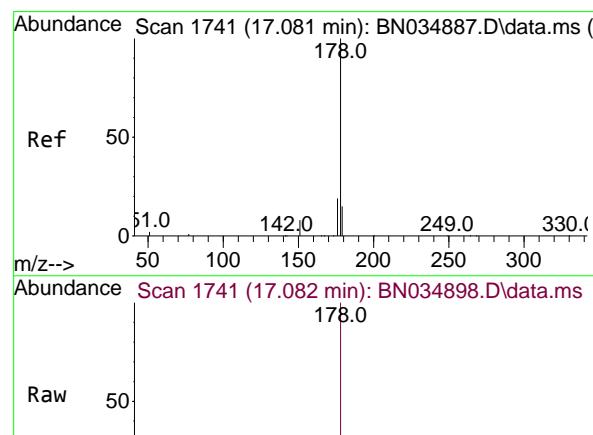
Tgt	Ion:178	Resp:	20410
Ion	Ratio	Lower	Upper
178	100		
176	19.3	15.5	23.3
179	15.5	12.2	18.2

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#26

Anthracene

Concen: 0.370 ng

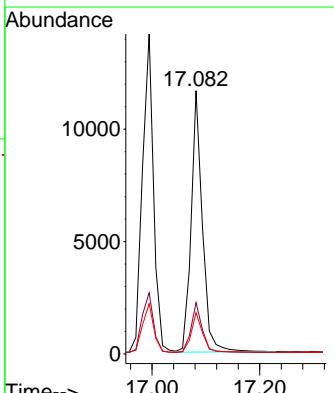
RT: 17.082 min Scan# 1741

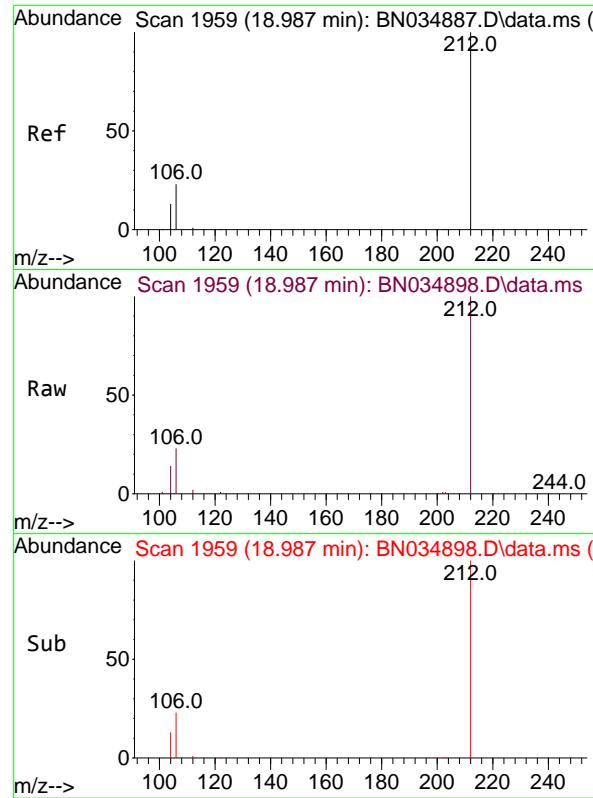
Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Tgt	Ion:178	Resp:	16914
Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.6
179	15.3	12.1	18.1





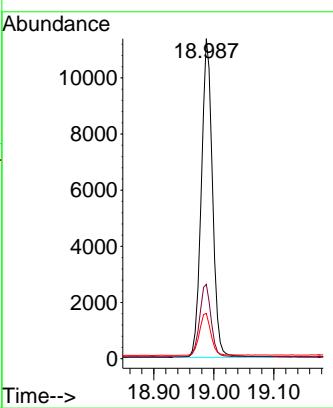
#27  
 Fluoranthene-d10  
 Concen: 0.378 ng  
 RT: 18.987 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

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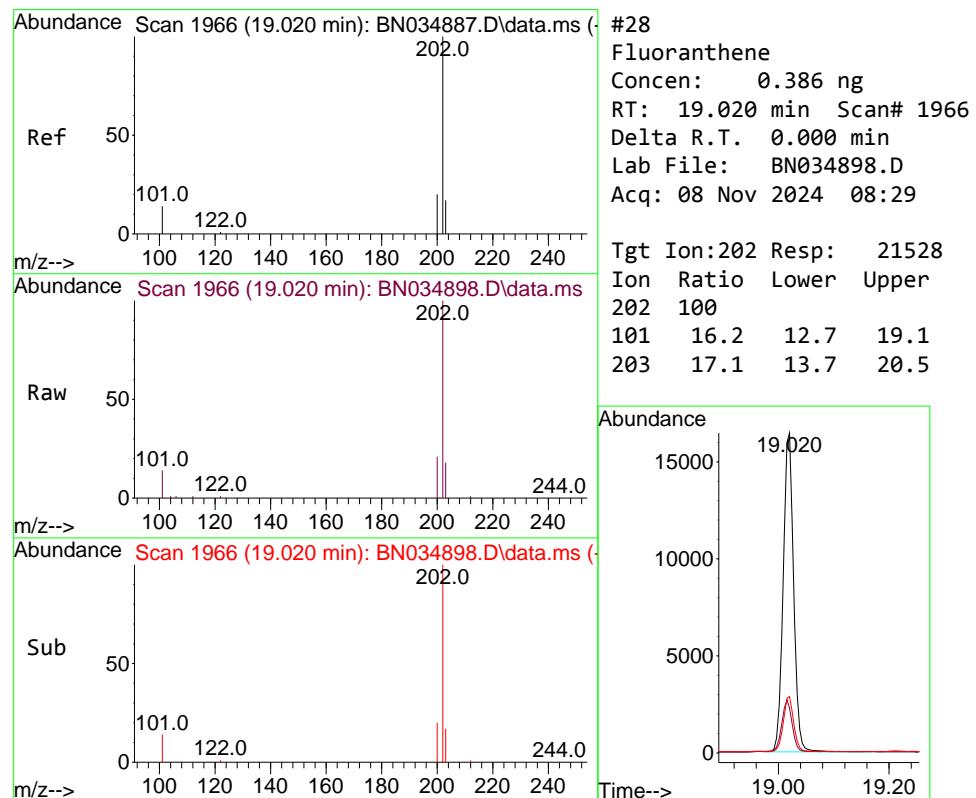
Reviewed By :Jagrut Upadhyay

Tgt	Ion:212	Resp:	1472
Ion	Ratio	Lower	Upper
212	100		
106	23.1	18.2	27.4
104	13.5	10.6	15.8



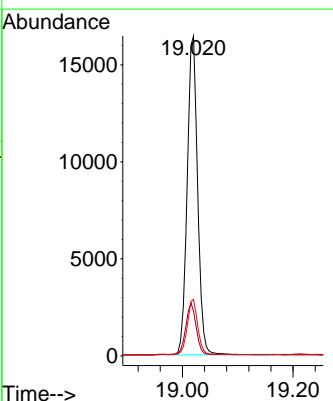
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 Supervised By :mohammad ahmed

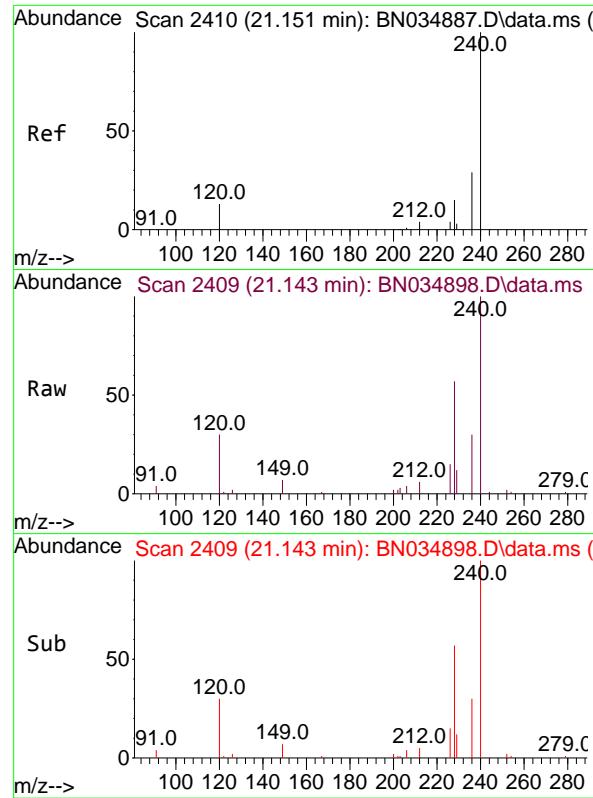
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#28  
 Fluoranthene  
 Concen: 0.386 ng  
 RT: 19.020 min Scan# 1966  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt	Ion:202	Resp:	21528
Ion	Ratio	Lower	Upper
202	100		
101	16.2	12.7	19.1
203	17.1	13.7	20.5





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.143 min Scan# 2

Delta R.T. -0.009 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Instrument :

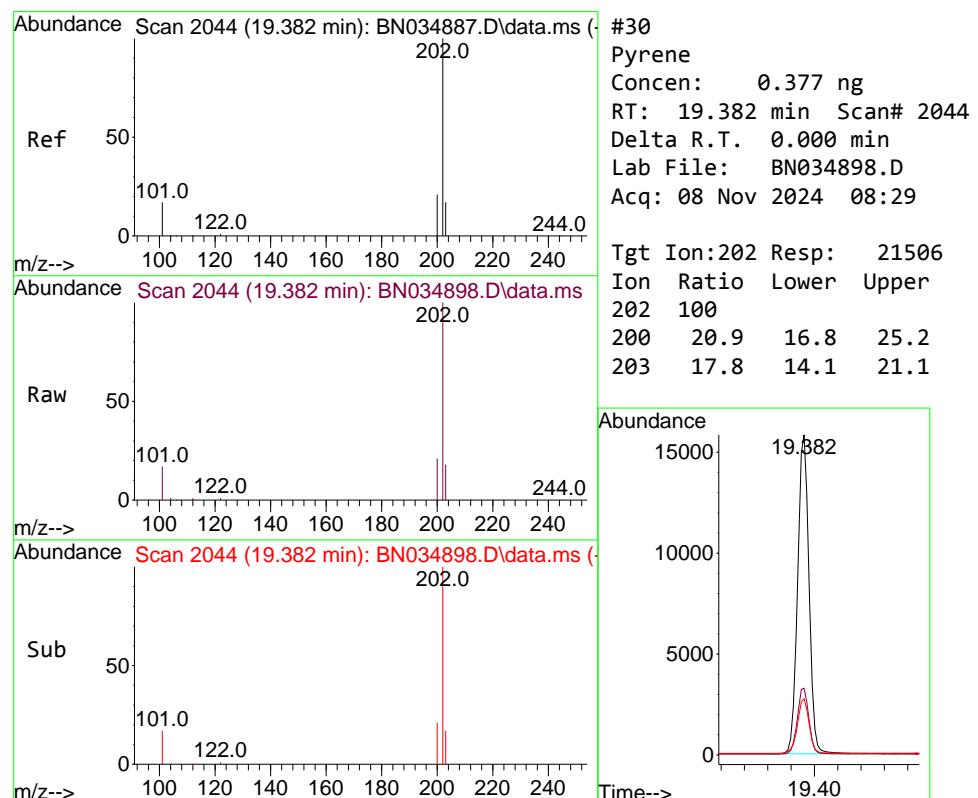
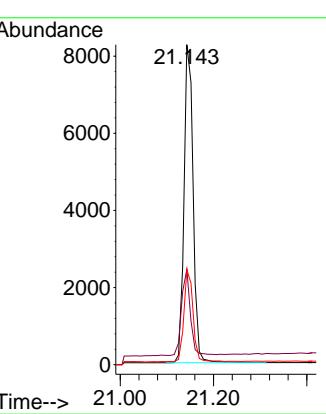
BNA\_N

ClientSampleId :

SSTDCCC0.4

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#30

Pyrene

Concen: 0.377 ng

RT: 19.382 min Scan# 2044

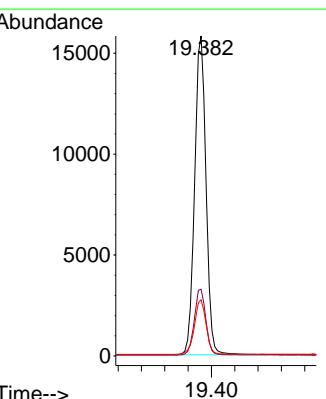
Delta R.T. 0.000 min

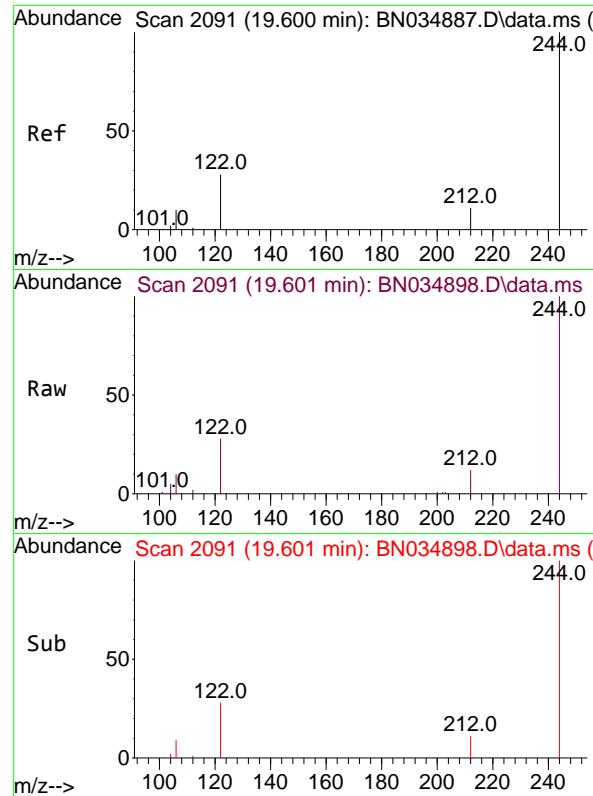
Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Tgt Ion:202 Resp: 21506

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.8	25.2
203	17.8	14.1	21.1





#31  
Terphenyl-d14  
Concen: 0.372 ng  
RT: 19.601 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

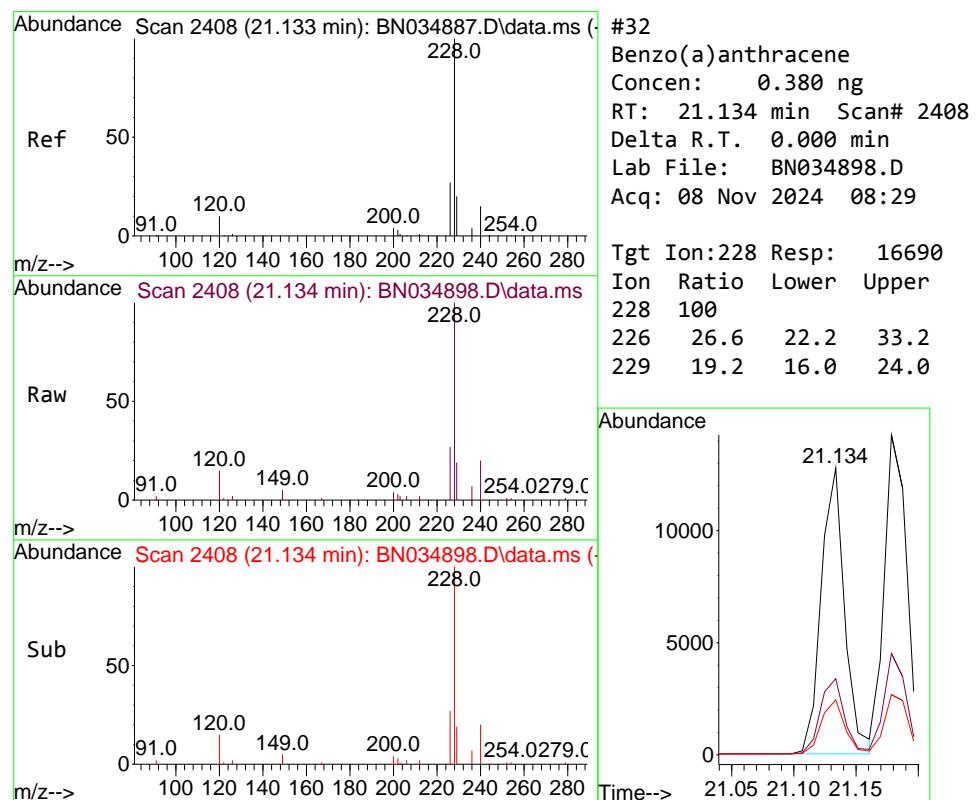
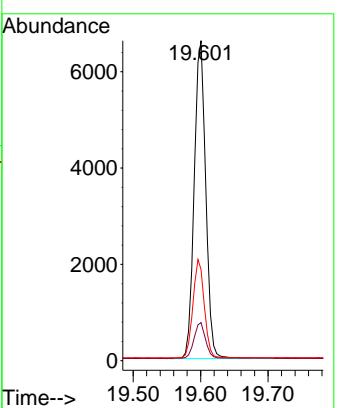
Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4

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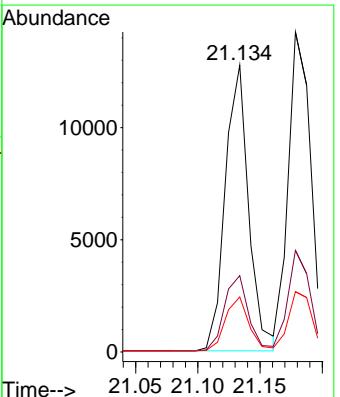
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ahmed

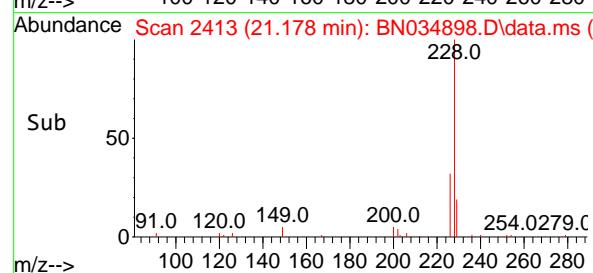
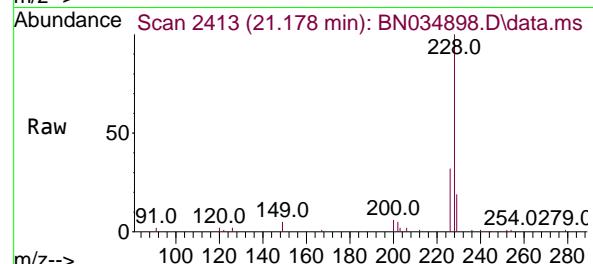
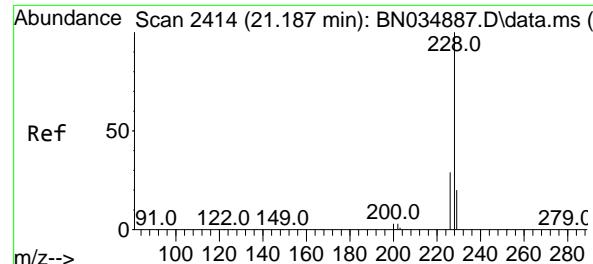
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#32  
Benzo(a)anthracene  
Concen: 0.380 ng  
RT: 21.134 min Scan# 2408  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:228 Resp: 16690  
Ion Ratio Lower Upper  
228 100  
226 26.6 22.2 33.2  
229 19.2 16.0 24.0





#33

Chrysene

Concen: 0.394 ng

RT: 21.178 min Scan# 2413

Delta R.T. -0.009 min

Lab File: BN034898.D

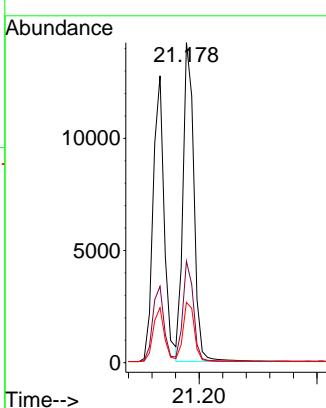
Acq: 08 Nov 2024 08:29

Instrument :

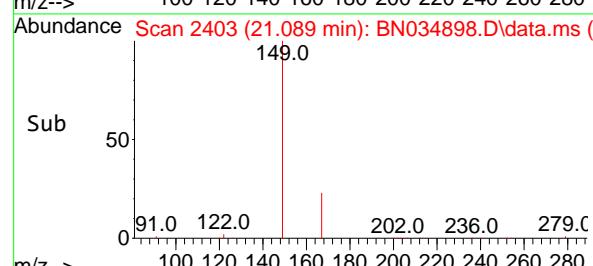
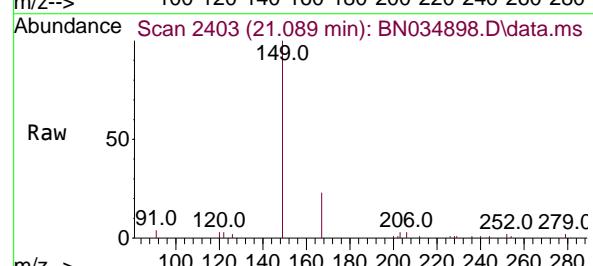
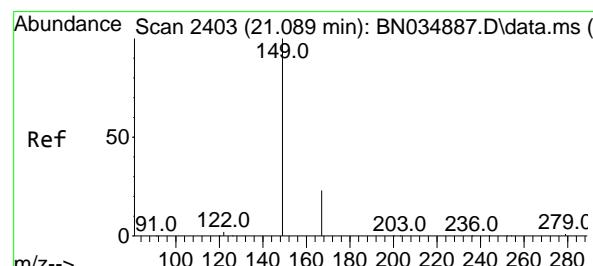
BNA\_N

ClientSampleId :

SSTDCCC0.4

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Supervised By :mohammad  
ahmed

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#34

Bis(2-ethylhexyl)phthalate

Concen: 0.325 ng m

RT: 21.089 min Scan# 2403

Delta R.T. -0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

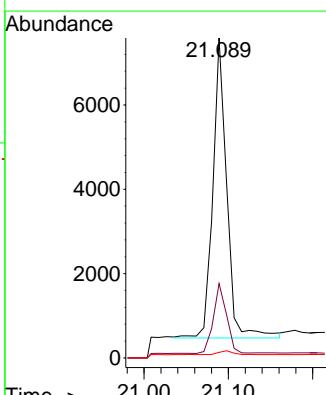
Tgt Ion:149 Resp: 8187

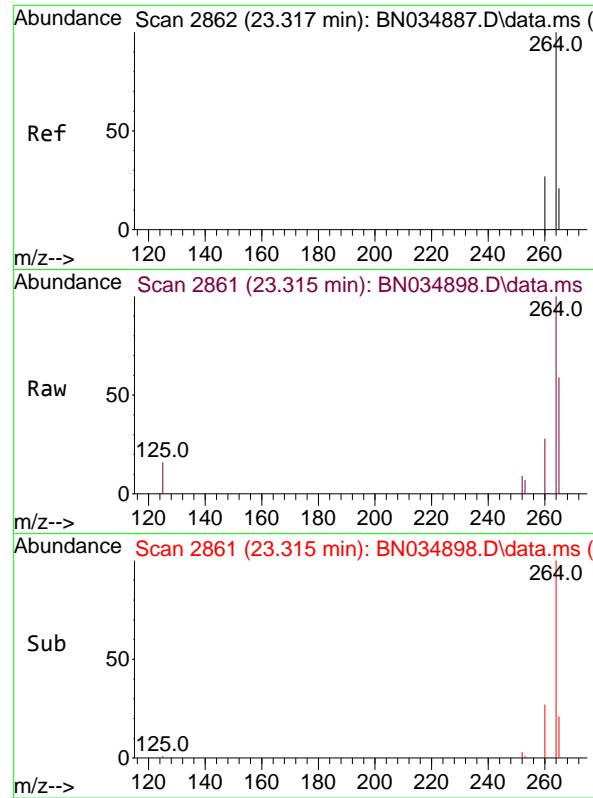
Ion Ratio Lower Upper

149 100

167 22.0 18.1 27.1

279 1.5 1.2 1.8





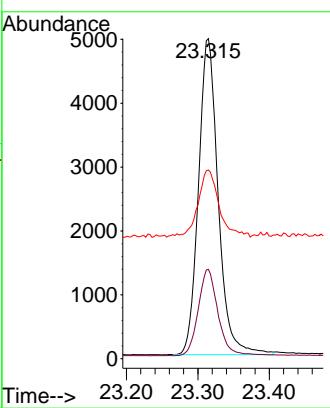
#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.003 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

Tgt Ion:264 Resp: 9481  
Ion Ratio Lower Upper  
264 100  
260 27.9 22.2 33.2  
265 58.9 60.9 91.3

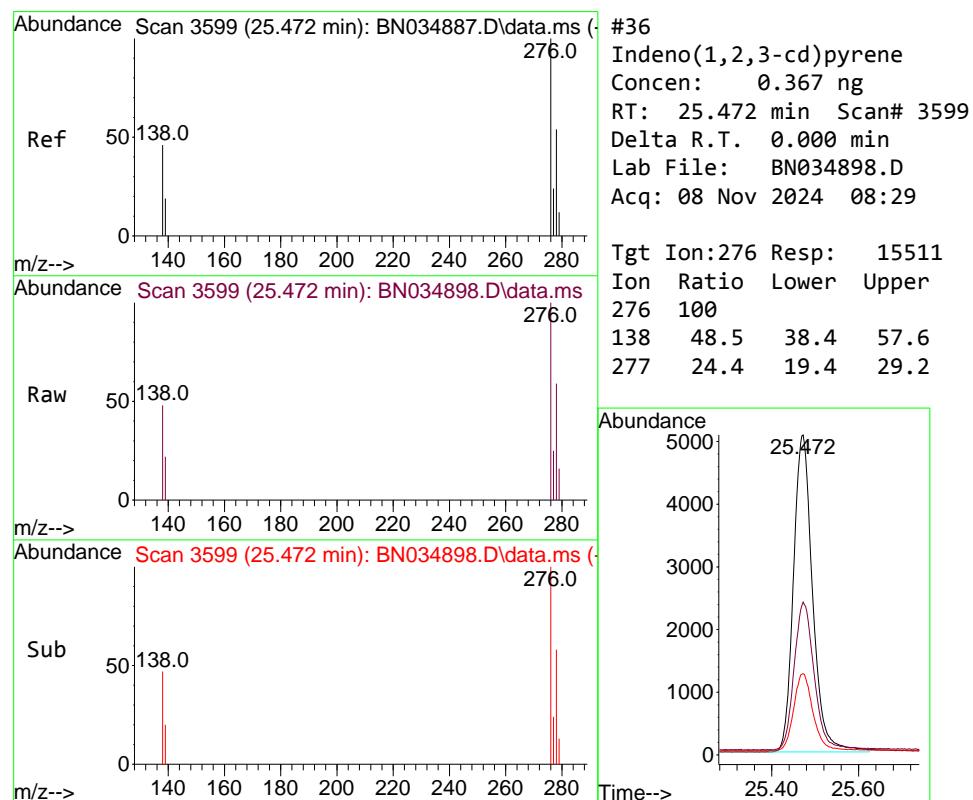
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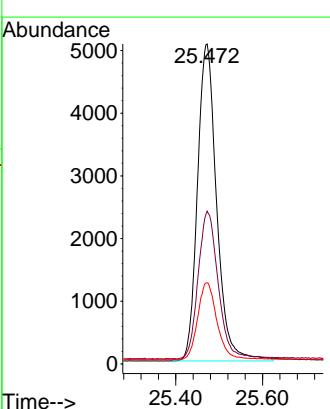
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Supervised By :mohammad ahmed

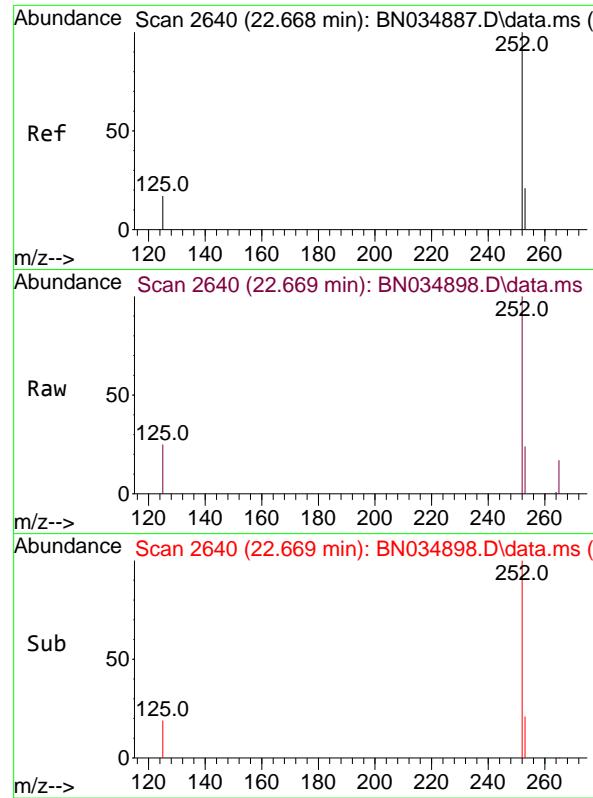
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#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.367 ng  
RT: 25.472 min Scan# 3599  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion:276 Resp: 15511  
Ion Ratio Lower Upper  
276 100  
138 48.5 38.4 57.6  
277 24.4 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.412 ng

RT: 22.669 min Scan# 2

Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:252 Resp: 17143

Ion Ratio Lower Upper

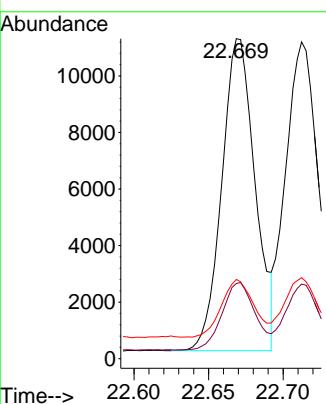
252 100

253 23.5 19.4 29.2

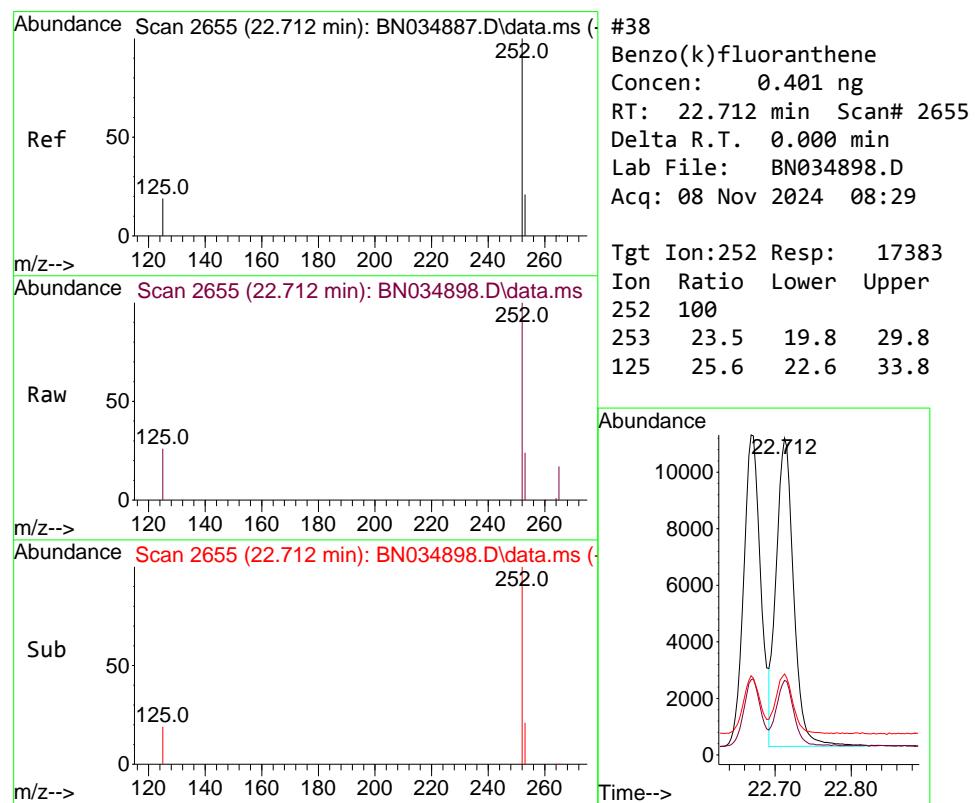
125 24.7 21.4 32.2

Manual Integrations

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Upadhyay11/08/2024  
Supervised By :mohammad  
ahmed

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#38

Benzo(k)fluoranthene

Concen: 0.401 ng

RT: 22.712 min Scan# 2655

Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

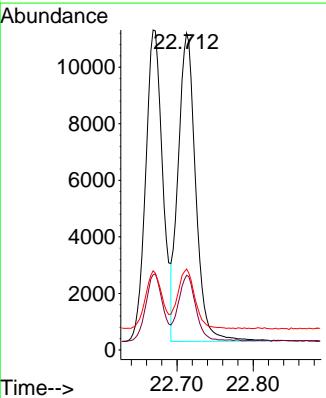
Tgt Ion:252 Resp: 17383

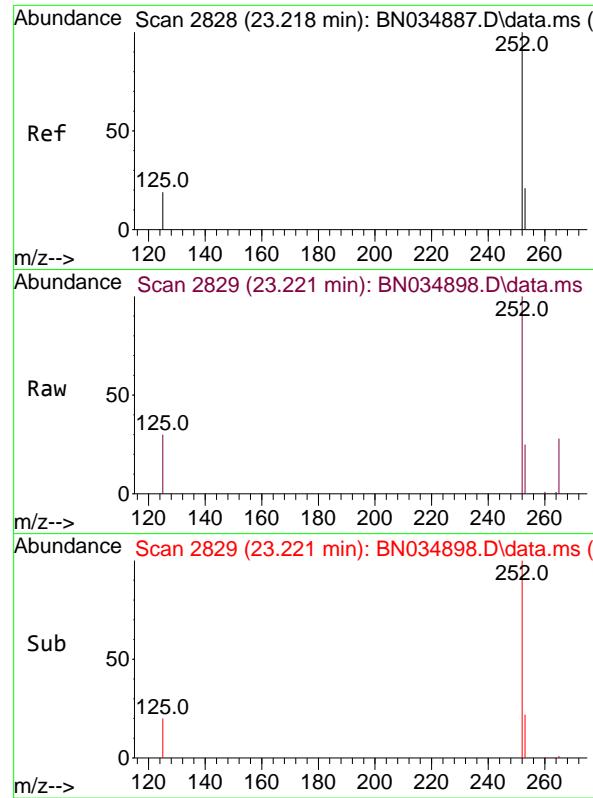
Ion Ratio Lower Upper

252 100

253 23.5 19.8 29.8

125 25.6 22.6 33.8





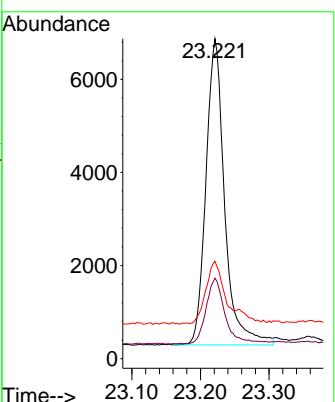
#39  
Benzo(a)pyrene  
Concen: 0.377 ng  
RT: 23.221 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

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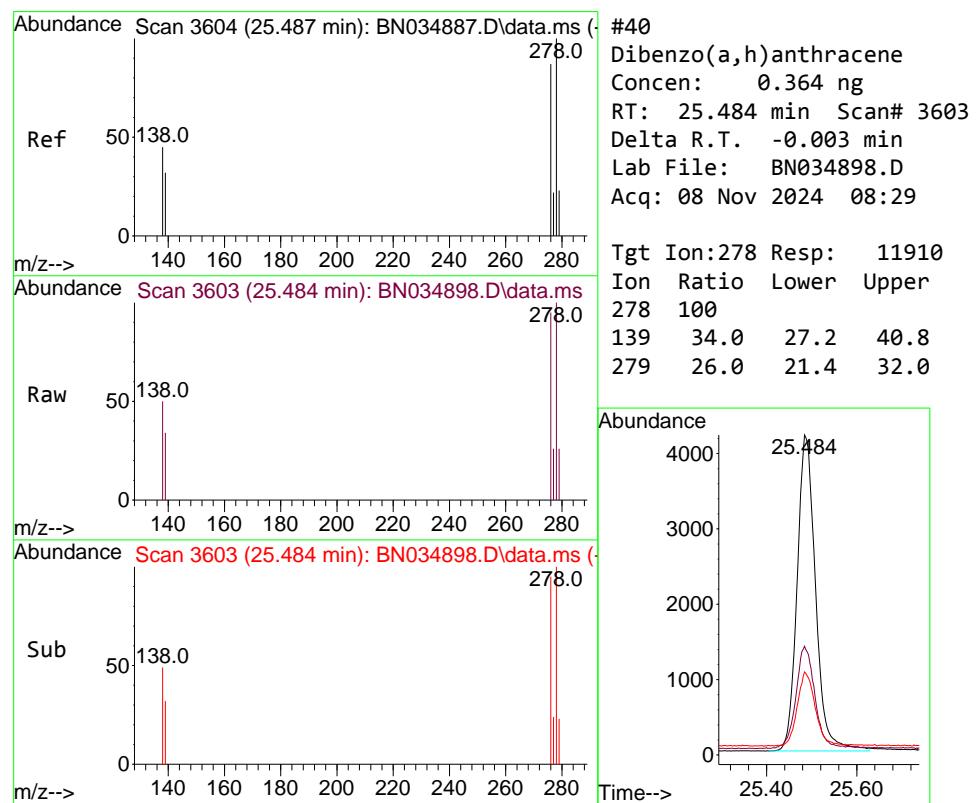
Reviewed By :Jagrut  
Upadhyay

Tgt	Ion:252	Resp:	12460
Ion Ratio	Lower	Upper	
252	100		
253	25.1	21.4	32.2
125	30.4	27.8	41.6



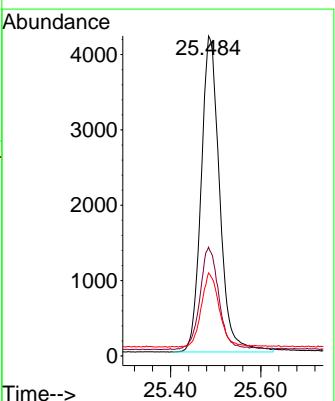
11/08/2024  
Supervised By :mohammad  
ahmed

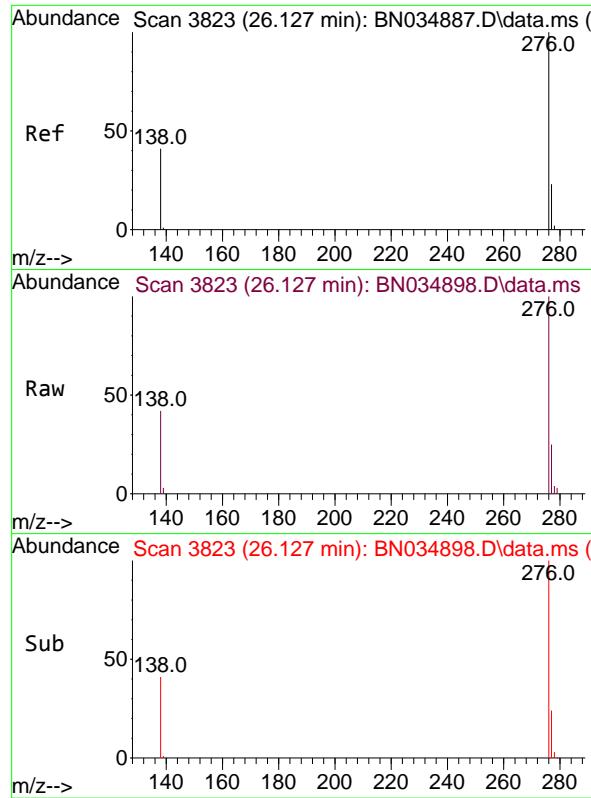
11/11/2024



#40  
Dibenzo(a,h)anthracene  
Concen: 0.364 ng  
RT: 25.484 min Scan# 3603  
Delta R.T. -0.003 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt	Ion:278	Resp:	11910
Ion Ratio	Lower	Upper	
278	100		
139	34.0	27.2	40.8
279	26.0	21.4	32.0





#41

Benzo(g,h,i)perylene

Concen: 0.378 ng

RT: 26.127 min Scan# 3

Delta R.T. 0.000 min

Lab File: BN034898.D

Acq: 08 Nov 2024 08:29

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4

Tgt Ion:276 Resp: 1310

Ion Ratio Lower Upper

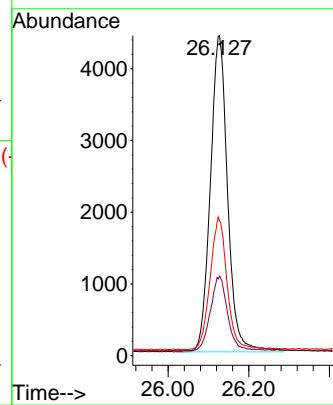
276 100

277 24.9 20.2 30.2

138 42.1 33.9 50.9

Manual Integrations

APPROVED

Reviewed By :Jagrut  
Upadhyay11/08/2024  
Supervised By :mohammad  
ahmed

11/11/2024

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034898.D  
 Acq On : 08 Nov 2024 08:29  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Nov 08 09:57:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 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	104	0.00
2	1,4-Dioxane	0.505	0.457	9.5	100	0.00
3	n-Nitrosodimethylamine	0.682	0.609	10.7	102	0.00
4 S	2-Fluorophenol	1.115	0.972	12.8	100	0.00
5 S	Phenol-d6	1.480	1.313	11.3	105	0.00
6	bis(2-Chloroethyl)ether	1.277	1.208	5.4	107	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	108	0.00
8 S	Nitrobenzene-d5	0.312	0.279	10.6	107	0.00
9	Naphthalene	1.110	1.045	5.9	110	0.00
10	Hexachlorobutadiene	0.177	0.170	4.0	109	0.00
11 SURR	2-Methylnaphthalene-d10	0.545	0.496	9.0	109	0.00
12	2-Methylnaphthalene	0.679	0.626	7.8	110	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	112	-0.01
14 S	2,4,6-Tribromophenol	0.118	0.098	16.9	127	0.00
15 S	2-Fluorobiphenyl	1.690	1.536	9.1	112	-0.01
16	Acenaphthylene	1.929	1.688	12.5	113	0.00
17	Acenaphthene	1.335	1.190	10.9	114	0.00
18	Fluorene	1.662	1.503	9.6	115	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	119	0.00
20	4,6-Dinitro-2-methylphenol	0.044	0.031	29.5#	116	0.00
21	4-Bromophenyl-phenylether	0.213	0.194	8.9	115	-0.01
22	Hexachlorobenzene	0.257	0.255	0.8	121	0.00
23	Atrazine	0.154	0.134	13.0	120	0.00
24	Pentachlorophenol	0.077	0.065	15.6	141	0.00
25	Phenanthrene	1.227	1.181	3.7	121	0.00
26	Anthracene	1.058	0.978	7.6	121	0.00
27 SURR	Fluoranthene-d10	0.902	0.852	5.5	127	0.00
28	Fluoranthene	1.291	1.245	3.6	131	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	137	0.00
30	Pyrene	2.025	1.911	5.6	131	0.00
31 S	Terphenyl-d14	0.749	0.697	6.9	128	0.00
32	Benzo(a)anthracene	1.559	1.483	4.9	143	0.00
33	Chrysene	1.650	1.624	1.6	140	0.00
34	Bis(2-ethylhexyl)phthalate	0.895	0.727	18.8	138	0.00
35 I	Perylene-d12	1.000	1.000	0.0	139	0.00
36	Indeno(1,2,3-cd)pyrene	1.782	1.636	8.2	135	0.00
37	Benzo(b)fluoranthene	1.757	1.808	-2.9	143	0.00
38	Benzo(k)fluoranthene	1.828	1.833	-0.3	147	0.00
39 C	Benzo(a)pyrene	1.396	1.314	5.9	136	0.00
40	Dibenzo(a,h)anthracene	1.379	1.256	8.9	134	0.00
41	Benzo(g,h,i)perylene	1.464	1.382	5.6	129	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034898.D  
 Acq On : 08 Nov 2024 08:29  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Nov 08 09:57:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 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	104	0.00
2	1,4-Dioxane	0.400	0.362	9.5	100	0.00
3	n-Nitrosodimethylamine	0.400	0.357	10.8	102	0.00
4 S	2-Fluorophenol	0.400	0.349	12.8	100	0.00
5 S	Phenol-d6	0.400	0.355	11.3	105	0.00
6	bis(2-Chloroethyl)ether	0.400	0.378	5.5	107	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	108	0.00
8 S	Nitrobenzene-d5	0.400	0.357	10.8	107	0.00
9	Naphthalene	0.400	0.377	5.8	110	0.00
10	Hexachlorobutadiene	0.400	0.383	4.3	109	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.364	9.0	109	0.00
12	2-Methylnaphthalene	0.400	0.369	7.8	110	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	112	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.375	6.3	127	0.00
15 S	2-Fluorobiphenyl	0.400	0.364	9.0	112	-0.01
16	Acenaphthylene	0.400	0.350	12.5	113	0.00
17	Acenaphthene	0.400	0.356	11.0	114	0.00
18	Fluorene	0.400	0.362	9.5	115	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	119	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.355	11.3	116	0.00
21	4-Bromophenyl-phenylether	0.400	0.364	9.0	115	-0.01
22	Hexachlorobenzene	0.400	0.398	0.5	121	0.00
23	Atrazine	0.400	0.348	13.0	120	0.00
24	Pentachlorophenol	0.400	0.410	-2.5	141	0.00
25	Phenanthrene	0.400	0.385	3.8	121	0.00
26	Anthracene	0.400	0.370	7.5	121	0.00
27 SURR	Fluoranthene-d10	0.400	0.378	5.5	127	0.00
28	Fluoranthene	0.400	0.386	3.5	131	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	137	0.00
30	Pyrene	0.400	0.377	5.8	131	0.00
31 S	Terphenyl-d14	0.400	0.372	7.0	128	0.00
32	Benzo(a)anthracene	0.400	0.380	5.0	143	0.00
33	Chrysene	0.400	0.394	1.5	140	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.325	18.8	138	0.00
35 I	Perylene-d12	0.400	0.400	0.0	139	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.367	8.3	135	0.00
37	Benzo(b)fluoranthene	0.400	0.412	-3.0	143	0.00
38	Benzo(k)fluoranthene	0.400	0.401	-0.3	147	0.00
39 C	Benzo(a)pyrene	0.400	0.377	5.8	136	0.00
40	Dibenzo(a,h)anthracene	0.400	0.364	9.0	134	0.00
41	Benzo(g,h,i)perylene	0.400	0.378	5.5	129	0.00

(#) = Out of Range

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



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

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	<u>CHEMTECH</u>		Contract:	<u>TETR06</u>	
Lab Code:	<u>CHEM</u>	Case No.:	<u>P4710</u>	SAS No.:	<u>P4710</u>
Instrument ID:	<u>BNA_N</u>		Calibration Date/Time:	<u>11/08/2024</u>	<u>16:41</u>
Lab File ID:	<u>BN034911.D</u>		Init. Calib. Date(s):	<u>11/07/2024</u>	<u>11/07/2024</u>
EPA Sample No.:	<u>SSTDCCC0.4EC</u>		Init. Calib. Time(s):	<u>10:02</u>	<u>13:49</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	0.545	0.486		-10.8	50.0
Fluoranthene-d10	0.902	0.830		-8.0	50.0
2-Fluorophenol	1.115	0.993		-10.9	50.0
Phenol-d6	1.480	1.324		-10.5	50.0
Nitrobenzene-d5	0.312	0.275		-11.9	50.0
2-Fluorobiphenyl	1.690	1.539		-8.9	50.0
2,4,6-Tribromophenol	0.118	0.094		-20.3	50.0
Terphenyl-d14	0.749	0.739		-1.3	50.0
1,4-Dioxane	0.505	0.476		-5.7	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034911.D  
 Acq On : 08 Nov 2024 16:41  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

Quant Time: Nov 08 17:33:55 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

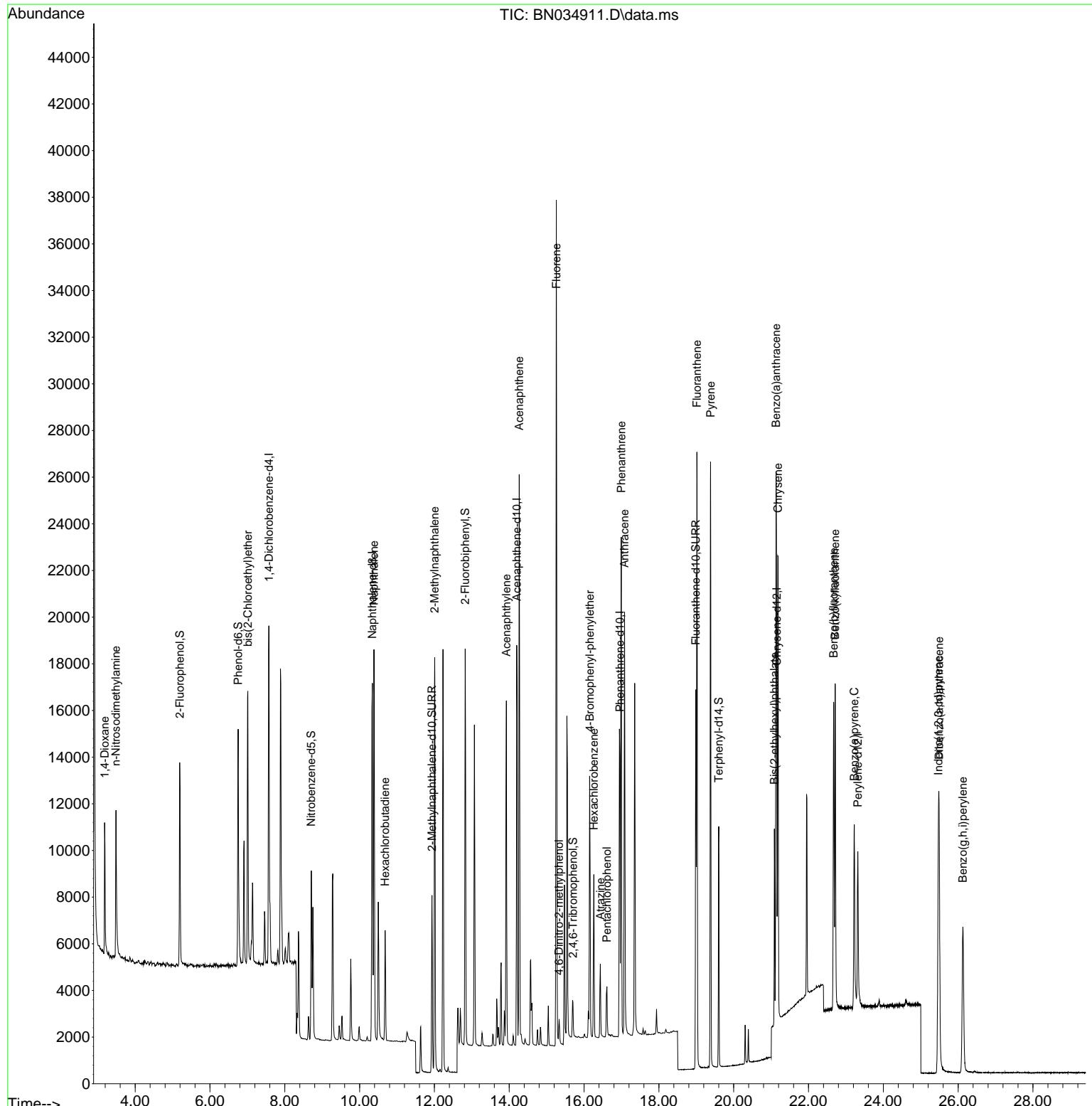
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	6918	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	20568	0.400	ng	0.00
13) Acenaphthene-d10	14.201	164	9535	0.400	ng	-0.01
19) Phenanthrene-d10	16.957	188	18628	0.400	ng	0.00
29) Chrysene-d12	21.152	240	10911	0.400	ng	0.00
35) Perylene-d12	23.320	264	8319	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.192	112	6870	0.356	ng	0.00
5) Phenol-d6	6.752	99	9156	0.358	ng	0.00
8) Nitrobenzene-d5	8.707	82	5665	0.353	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	9996	0.357	ng	0.00
14) 2,4,6-Tribromophenol	15.704	330	892	0.359	ng	0.00
15) 2-Fluorobiphenyl	12.822	172	14670	0.364	ng	-0.01
27) Fluoranthene-d10	18.987	212	15468	0.368	ng	0.00
31) Terphenyl-d14	19.601	244	8064	0.394	ng	0.00
<b>Target Compounds</b>						
2) 1,4-Dioxane	3.184	88	3296	0.377	ng	100
3) n-Nitrosodimethylamine	3.487	42	4559	0.387	ng	97
6) bis(2-Chloroethyl)ether	7.012	93	8180	0.370	ng	99
9) Naphthalene	10.383	128	21256	0.372	ng	100
10) Hexachlorobutadiene	10.682	225	3390	0.373	ng	# 98
12) 2-Methylnaphthalene	12.007	142	12653	0.362	ng	99
16) Acenaphthylene	13.923	152	16120	0.350	ng	100
17) Acenaphthene	14.265	154	11228	0.353	ng	99
18) Fluorene	15.259	166	14194	0.358	ng	99
20) 4,6-Dinitro-2-methylph...	15.334	198	627	0.381	ng	84
21) 4-Bromophenyl-phenylether	16.151	248	3581	0.361	ng	# 62
22) Hexachlorobenzene	16.262	284	4618	0.386	ng	99
23) Atrazine	16.436	200	2478	0.344	ng	96
24) Pentachlorophenol	16.610	266	1114	0.383	ng	96
25) Phenanthrene	16.995	178	22035	0.386	ng	100
26) Anthracene	17.082	178	18053	0.366	ng	99
28) Fluoranthene	19.015	202	22600	0.376	ng	99
30) Pyrene	19.382	202	22300	0.404	ng	100
32) Benzo(a)anthracene	21.134	228	16071	0.378	ng	99
33) Chrysene	21.187	228	17822	0.396	ng	99
34) Bis(2-ethylhexyl)phtha...	21.089	149	7872	0.322	ng	99
36) Indeno(1,2,3-cd)pyrene	25.472	276	13373	0.361	ng	98
37) Benzo(b)fluoranthene	22.671	252	15226	0.417	ng	99
38) Benzo(k)fluoranthene	22.712	252	15351	0.404	ng	97
39) Benzo(a)pyrene	23.224	252	11078	0.382	ng	95
40) Dibenzo(a,h)anthracene	25.490	278	10297	0.359	ng	98
41) Benzo(g,h,i)perylene	26.127	276	11290	0.371	ng	98

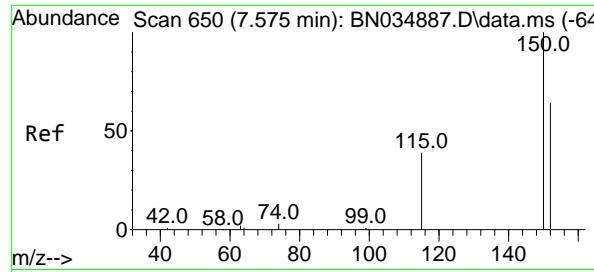
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034911.D  
 Acq On : 08 Nov 2024 16:41  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDCCC0.4EC

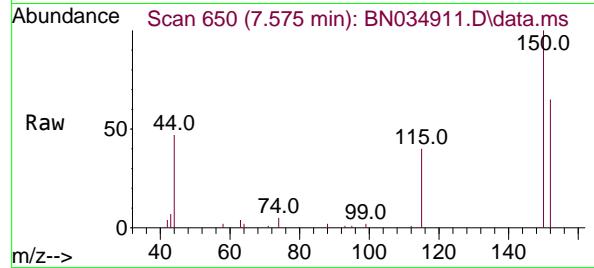
Quant Time: Nov 08 17:33:55 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration



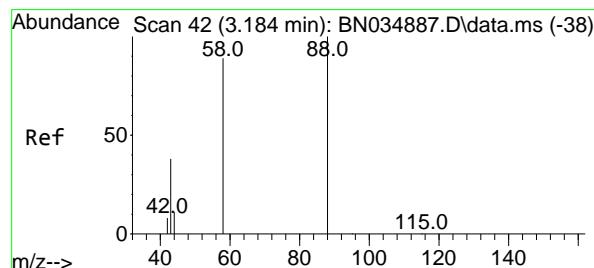
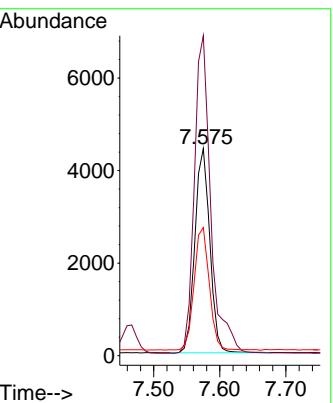
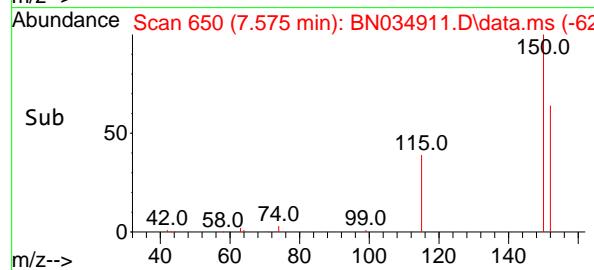


#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

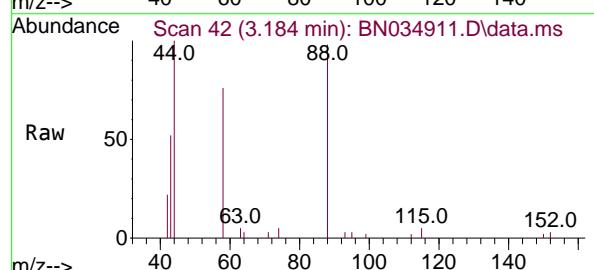
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 ClientSampleId : SSTDCCC0.4EC



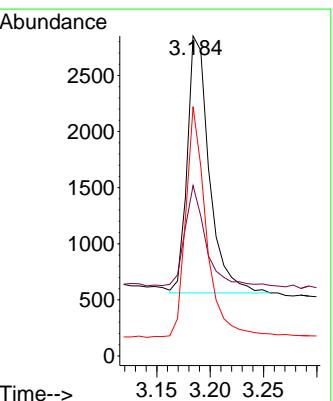
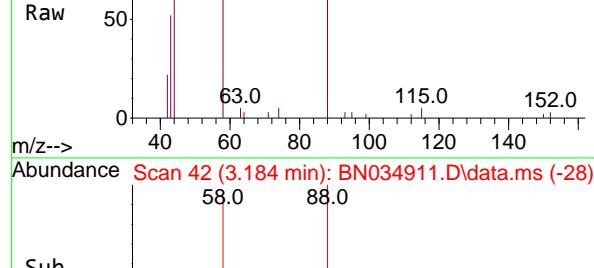
Tgt Ion:152 Resp: 6918  
 Ion Ratio Lower Upper  
 152 100  
 150 154.4 124.4 186.6  
 115 61.8 50.5 75.7

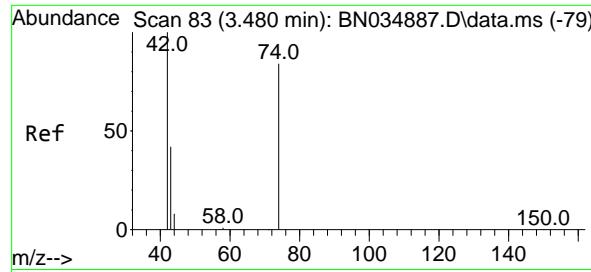


#2  
 1,4-Dioxane  
 Concen: 0.377 ng  
 RT: 3.184 min Scan# 42  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

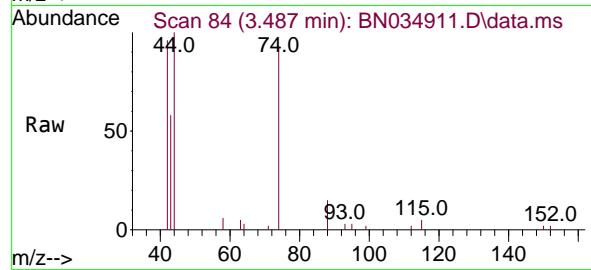


Tgt Ion: 88 Resp: 3296  
 Ion Ratio Lower Upper  
 88 100  
 43 35.7 28.2 42.2  
 58 84.1 67.1 100.7

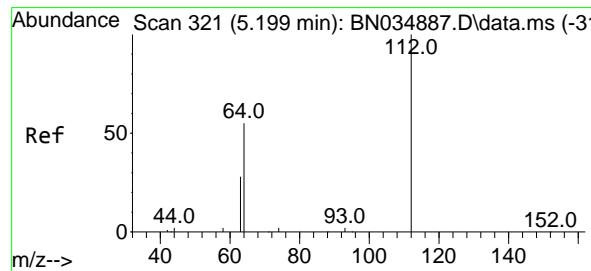
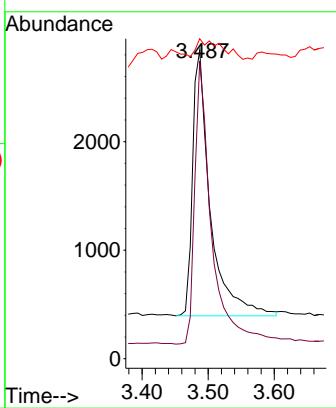
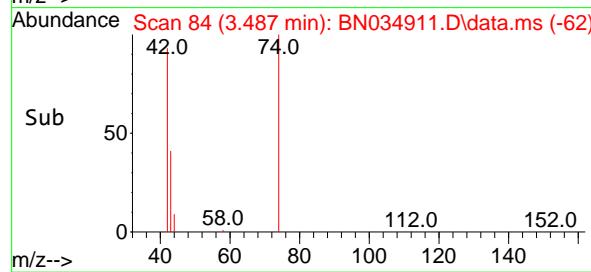




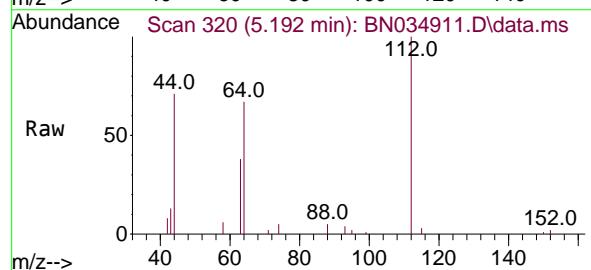
#3  
n-Nitrosodimethylamine  
Concen: 0.387 ng  
RT: 3.487 min Scan# 8  
Instrument : BNA\_N  
Delta R.T. 0.007 min  
Lab File: BN034911.D  
ClientSampleId : SSTDCCC0.4EC  
Acq: 08 Nov 2024 16:41



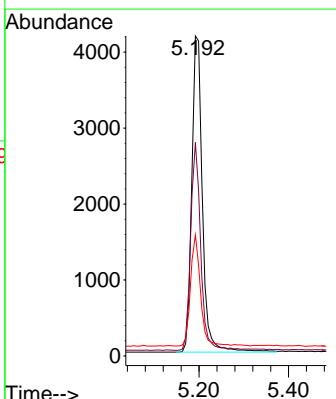
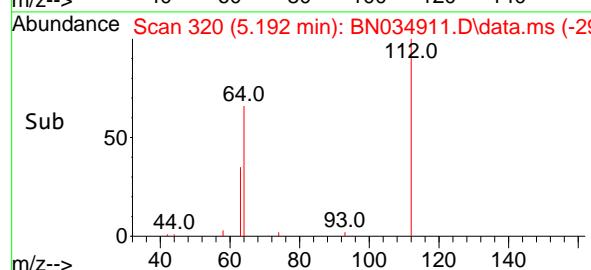
Tgt Ion: 42 Resp: 4559  
Ion Ratio Lower Upper  
42 100  
74 101.1 83.4 125.2  
44 11.8 8.6 12.8

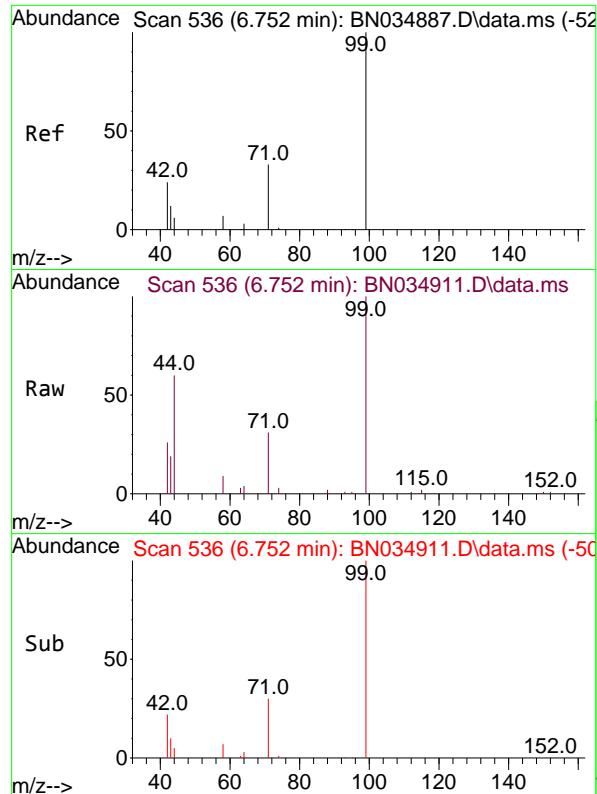


#4  
2-Fluorophenol  
Concen: 0.356 ng  
RT: 5.192 min Scan# 320  
Delta R.T. -0.007 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41



Tgt Ion:112 Resp: 6870  
Ion Ratio Lower Upper  
112 100  
64 61.9 49.6 74.4  
63 32.5 26.3 39.5

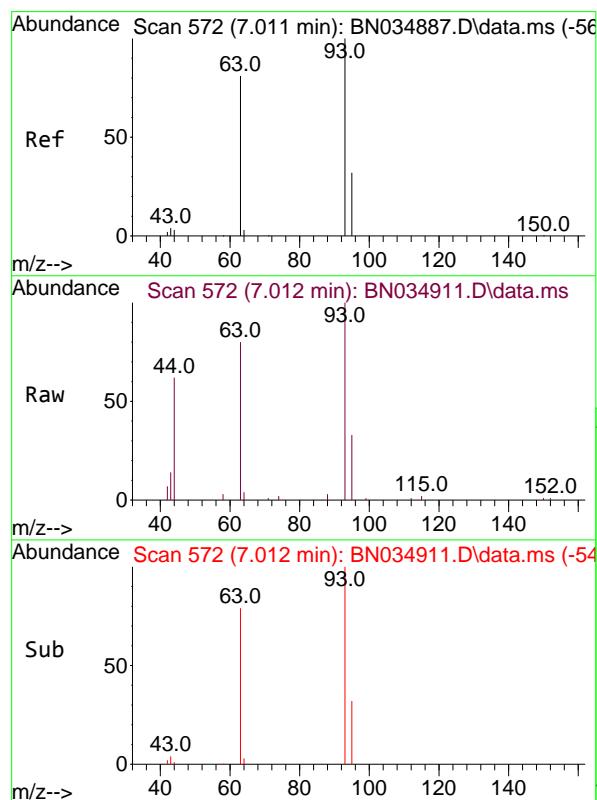
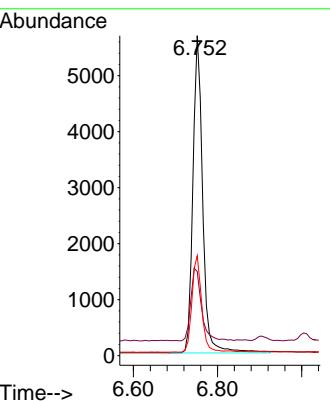




#5  
 Phenol-d6  
 Concen: 0.358 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

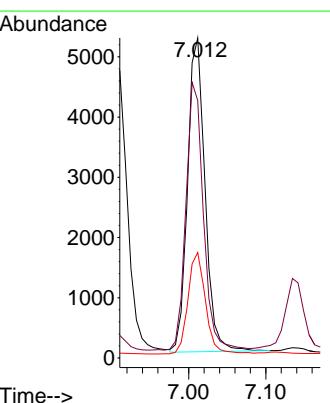
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

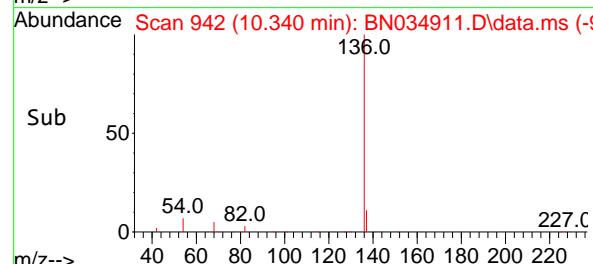
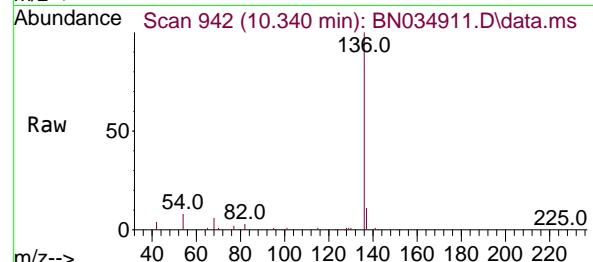
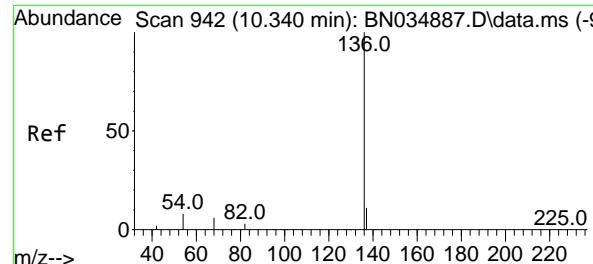
Tgt Ion: 99 Resp: 9156  
 Ion Ratio Lower Upper  
 99 100  
 42 25.0 20.2 30.2  
 71 30.0 25.4 38.0



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.370 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

Tgt Ion: 93 Resp: 8180  
 Ion Ratio Lower Upper  
 93 100  
 63 85.3 67.5 101.3  
 95 32.5 25.7 38.5



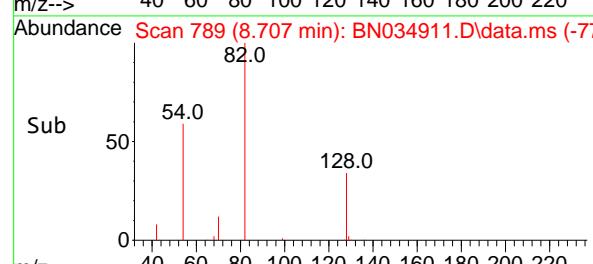
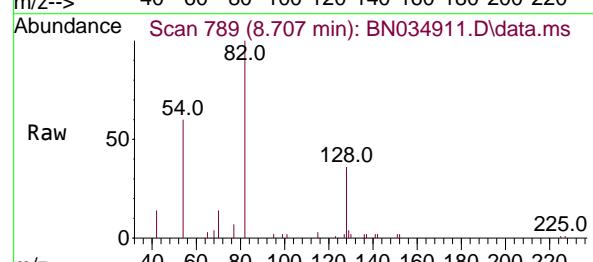
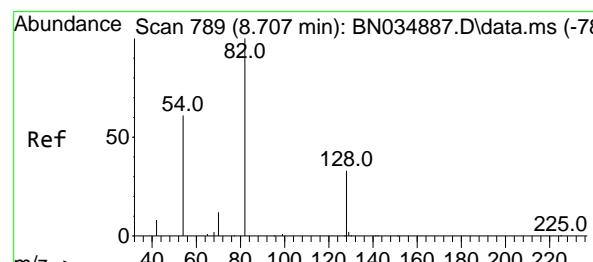
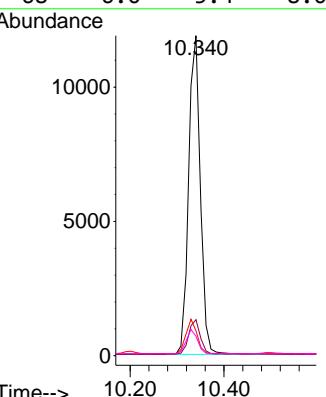


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

Tgt Ion:136 Resp: 20568

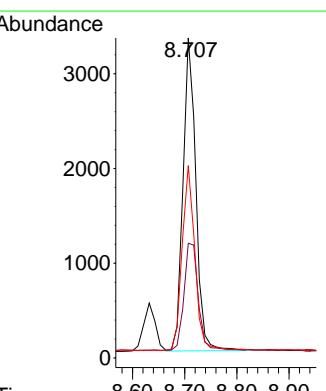
Ion	Ratio	Lower	Upper
136	100		
137	11.3	8.9	13.3
54	7.8	6.9	10.3
68	6.0	5.4	8.0

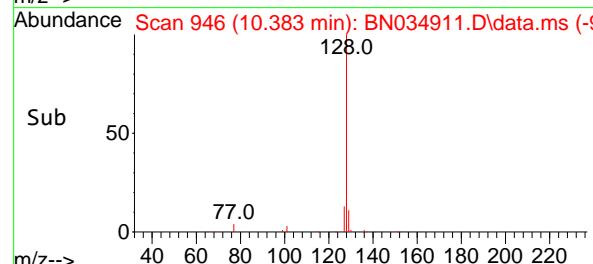
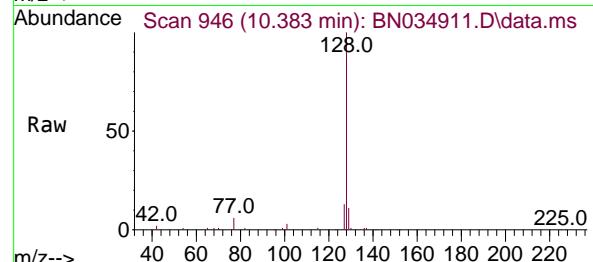
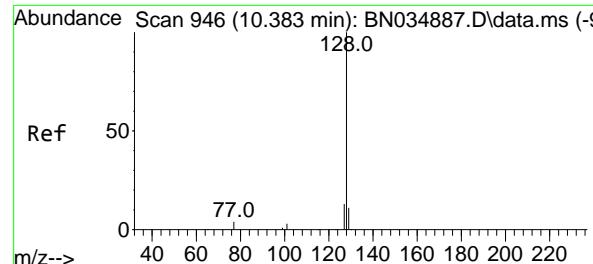


#8  
 Nitrobenzene-d5  
 Concen: 0.353 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

Tgt Ion: 82 Resp: 5665

Ion	Ratio	Lower	Upper
82	100		
128	35.9	28.1	42.1
54	60.1	49.8	74.6





#9

Naphthalene

Concen: 0.372 ng

RT: 10.383 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion:128 Resp: 21256

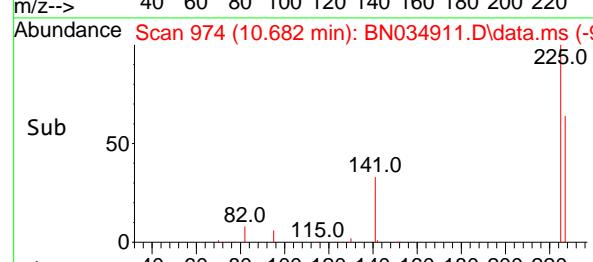
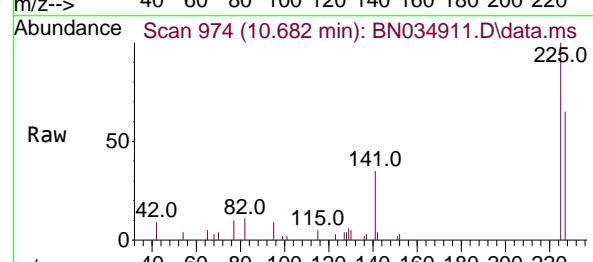
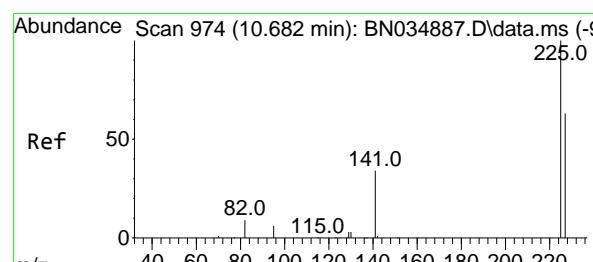
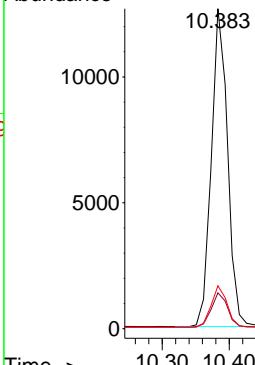
Ion Ratio Lower Upper

128 100

129 11.2 9.0 13.4

127 13.4 10.8 16.2

Abundance



#10

Hexachlorobutadiene

Concen: 0.373 ng

RT: 10.682 min Scan# 974

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Tgt Ion:225 Resp: 3390

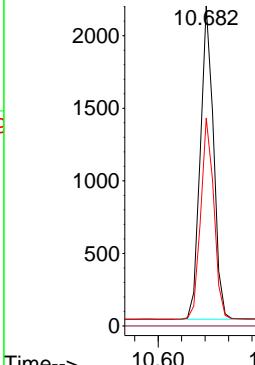
Ion Ratio Lower Upper

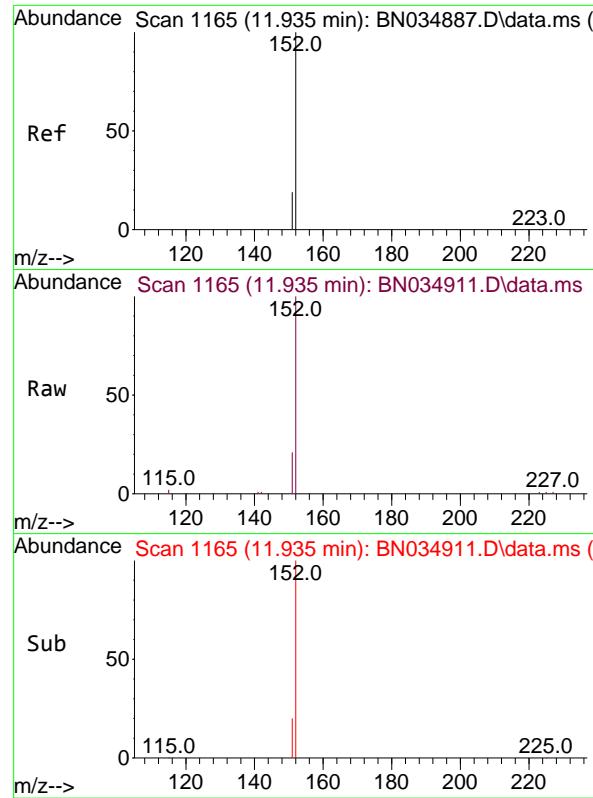
225 100

223 0.0 0.0 0.0

227 63.7 52.0 78.0

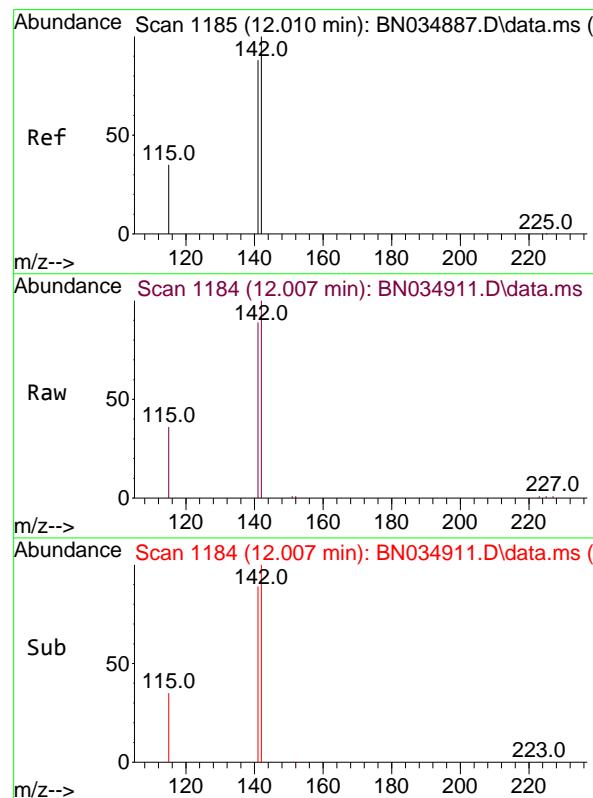
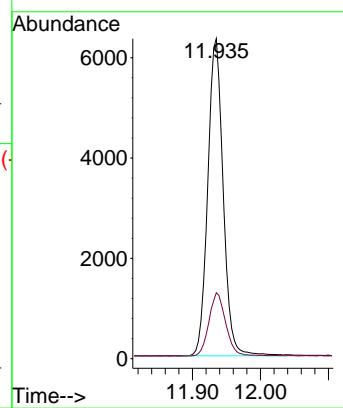
Abundance





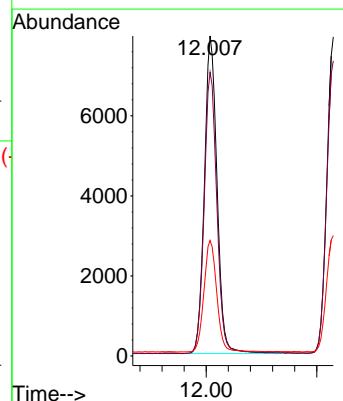
#11  
2-Methylnaphthalene-d10  
Concen: 0.357 ng  
RT: 11.935 min Scan# 1  
Instrument: BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
ClientSampleId : SSTDCCC0.4EC  
Acq: 08 Nov 2024 16:41

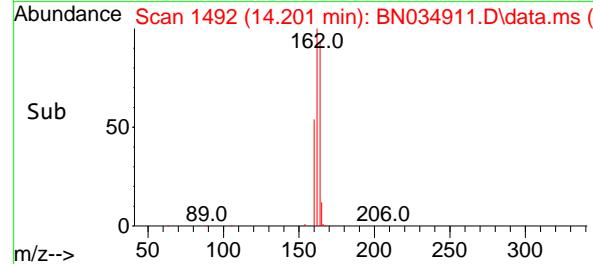
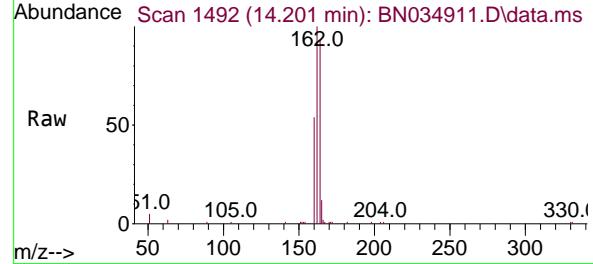
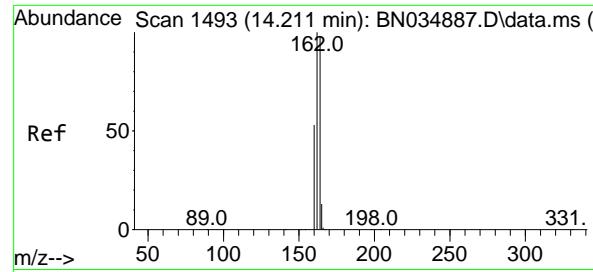
Tgt Ion:152 Resp: 9996  
Ion Ratio Lower Upper  
152 100  
151 21.7 17.1 25.7



#12  
2-Methylnaphthalene  
Concen: 0.362 ng  
RT: 12.007 min Scan# 1184  
Delta R.T. -0.004 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:142 Resp: 12653  
Ion Ratio Lower Upper  
142 100  
141 88.6 70.5 105.7  
115 36.1 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.201 min Scan# 1

Delta R.T. -0.010 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

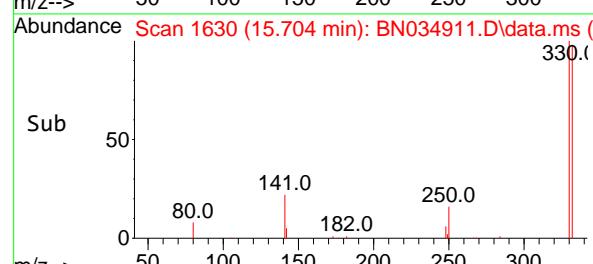
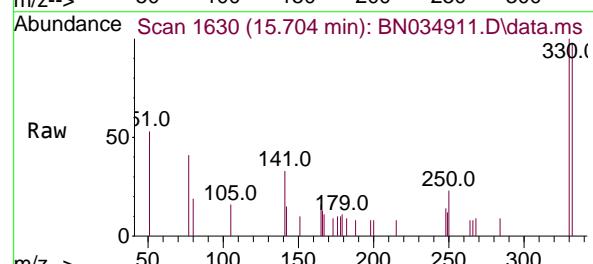
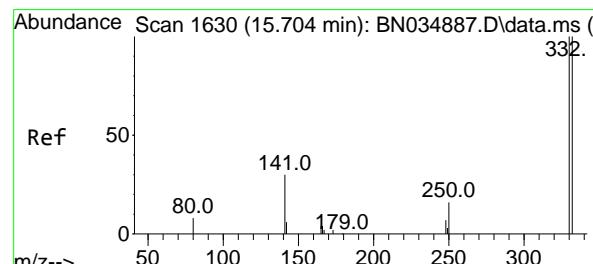
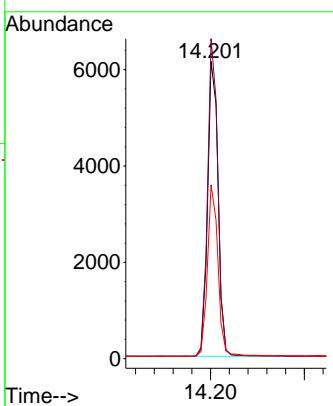
Tgt Ion:164 Resp: 9535

Ion Ratio Lower Upper

164 100

162 107.7 81.9 122.9

160 58.5 43.5 65.3



#14

2,4,6-Tribromophenol

Concen: 0.359 ng

RT: 15.704 min Scan# 1630

Delta R.T. -0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

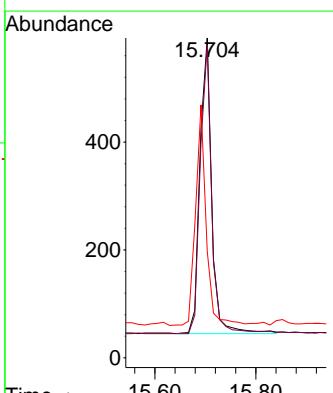
Tgt Ion:330 Resp: 892

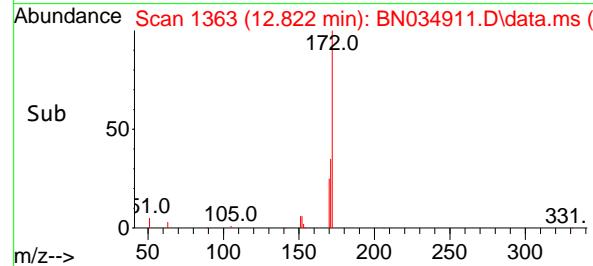
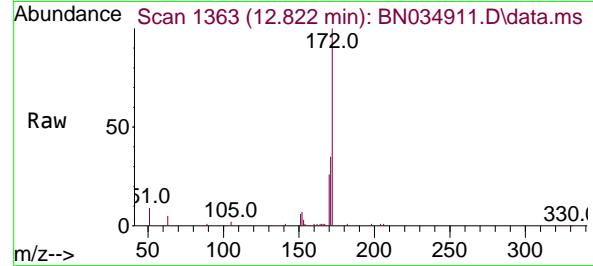
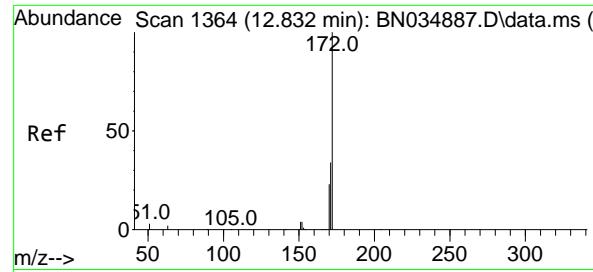
Ion Ratio Lower Upper

330 100

332 94.4 77.1 115.7

141 65.9 54.1 81.1

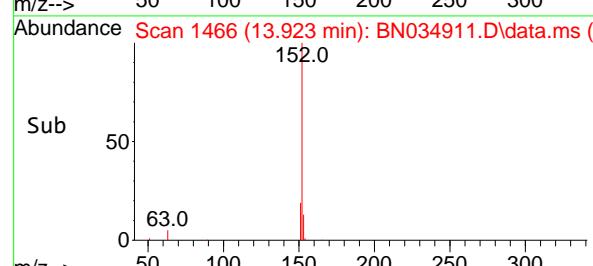
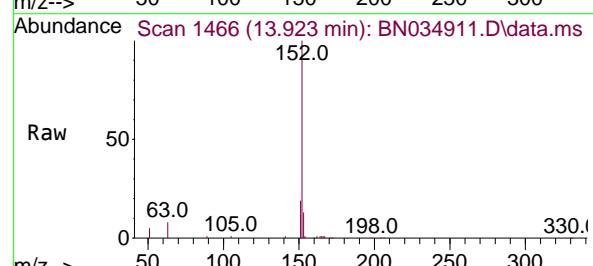
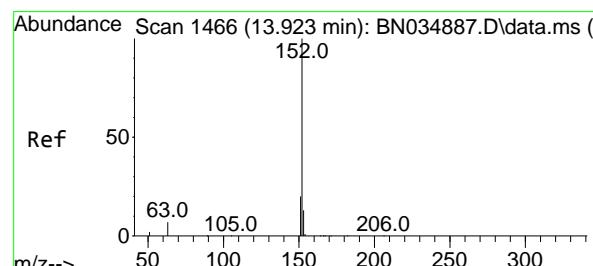
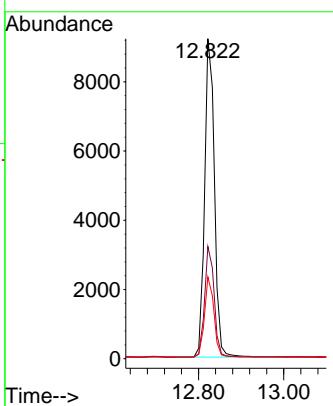




#15  
2-Fluorobiphenyl  
Concen: 0.364 ng  
RT: 12.822 min Scan# 1  
Delta R.T. -0.011 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

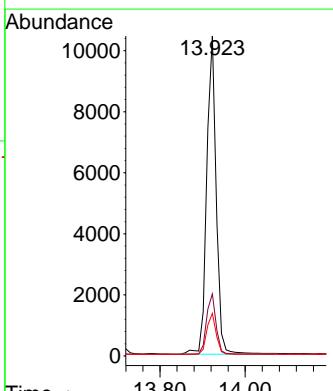
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

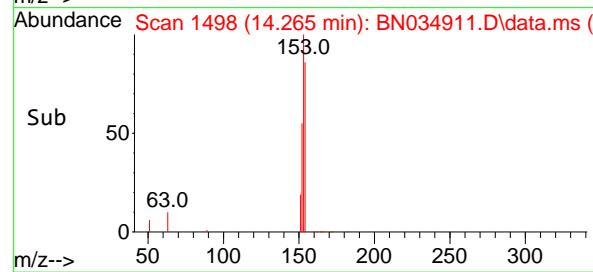
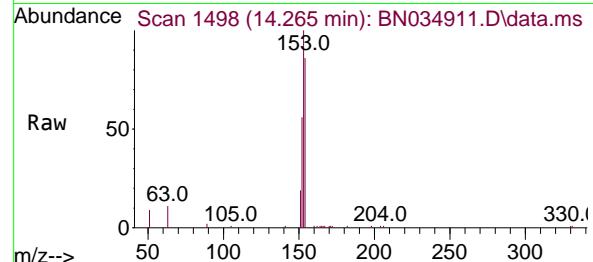
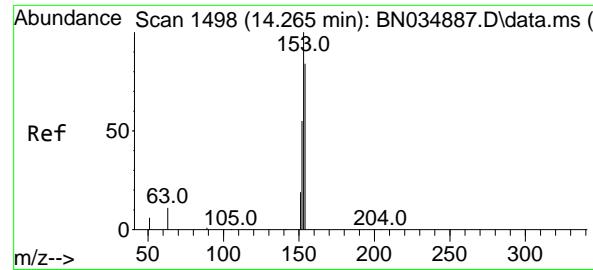
Tgt Ion:172 Resp: 14670  
Ion Ratio Lower Upper  
172 100  
171 35.0 27.9 41.9  
170 25.5 19.0 28.4



#16  
Acenaphthylene  
Concen: 0.350 ng  
RT: 13.923 min Scan# 1466  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:152 Resp: 16120  
Ion Ratio Lower Upper  
152 100  
151 18.9 15.2 22.8  
153 12.8 10.4 15.6





#17

Acenaphthene

Concen: 0.353 ng

RT: 14.265 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

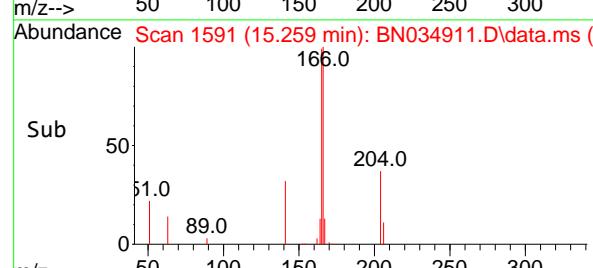
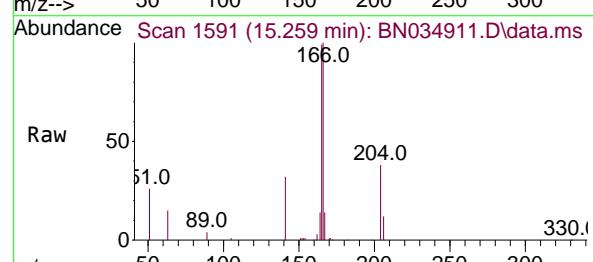
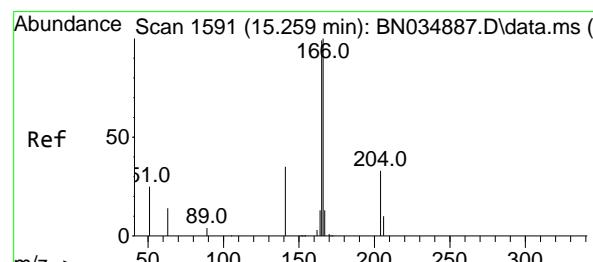
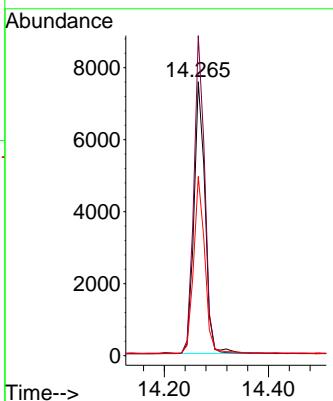
Tgt Ion:154 Resp: 11228

Ion Ratio Lower Upper

154 100

153 114.8 92.2 138.2

152 65.5 51.1 76.7



#18

Fluorene

Concen: 0.358 ng

RT: 15.259 min Scan# 1591

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

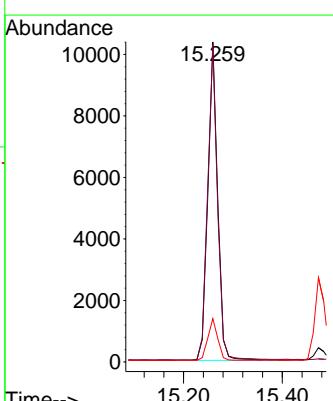
Tgt Ion:166 Resp: 14194

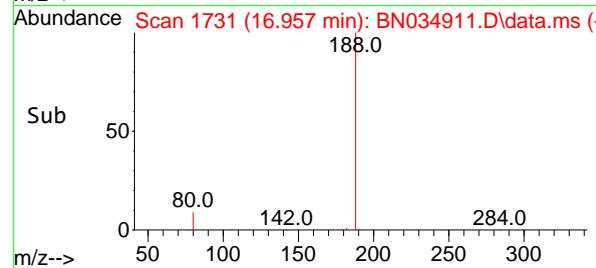
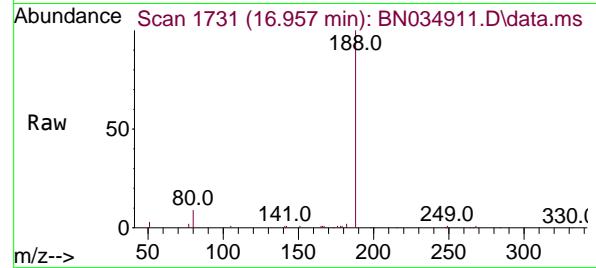
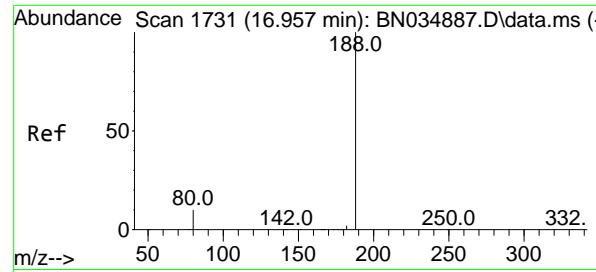
Ion Ratio Lower Upper

166 100

165 99.9 79.5 119.3

167 13.4 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.957 min Scan# 1

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

Tgt Ion:188 Resp: 18628

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 9.2 8.6 12.8

Abundance

10000

8000

6000

4000

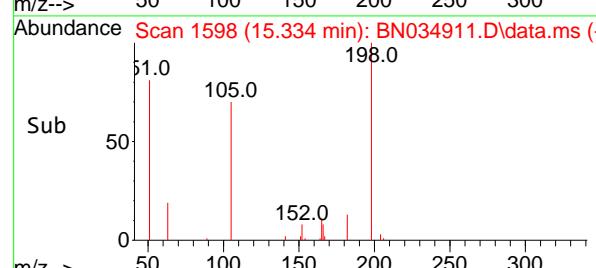
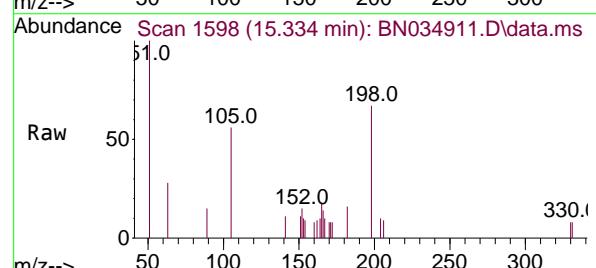
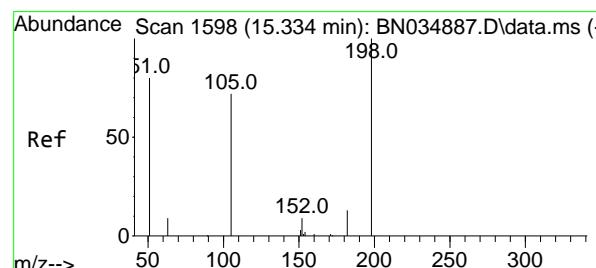
2000

0

16.957

Time--&gt;

16.80 17.00



#20

4,6-Dinitro-2-methylphenol

Concen: 0.381 ng

RT: 15.334 min Scan# 1598

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Tgt Ion:198 Resp: 627

Ion Ratio Lower Upper

198 100

51 149.9 141.8 212.8

105 84.2 75.6 113.4

Abundance

3000

2000

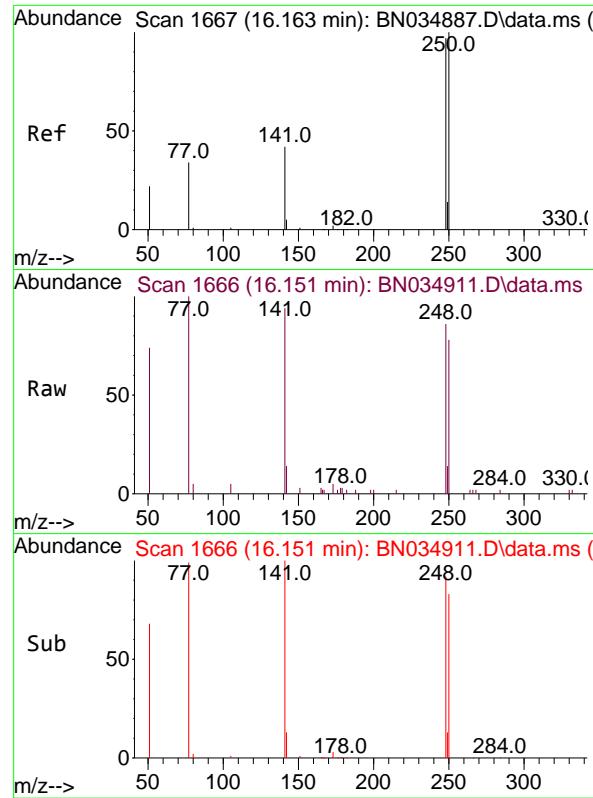
1000

0

15.334

Time--&gt;

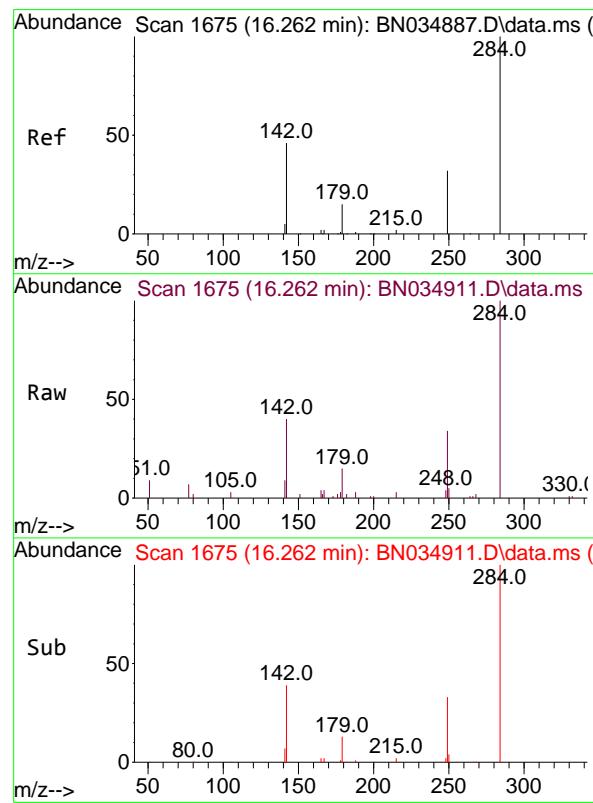
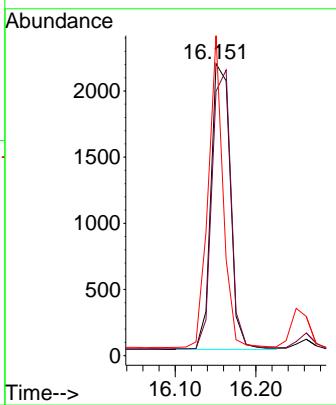
15.40



#21  
4-Bromophenyl-phenylether  
Concen: 0.361 ng  
RT: 16.151 min Scan# 1  
Delta R.T. -0.012 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

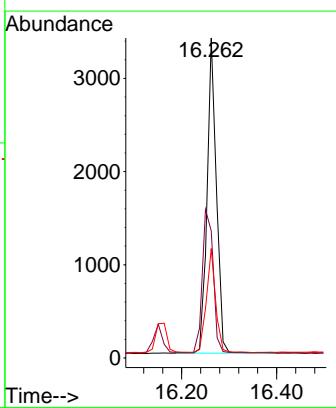
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

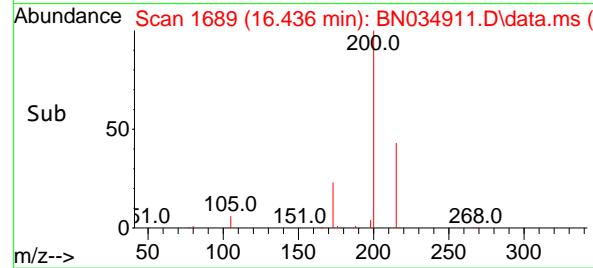
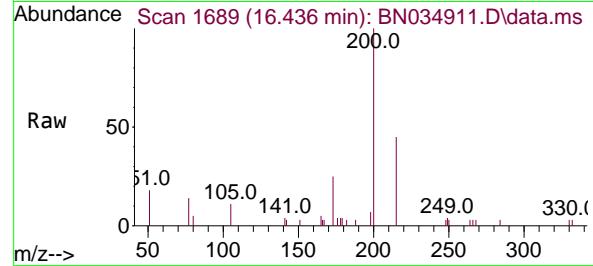
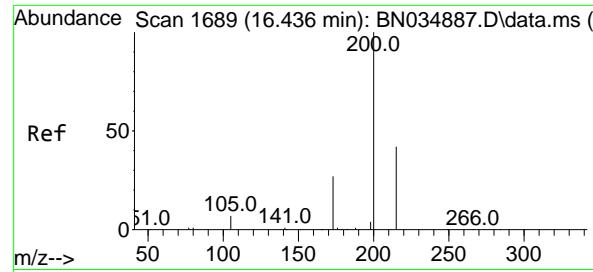
Tgt Ion:248 Resp: 3581  
Ion Ratio Lower Upper  
248 100  
250 90.5 82.2 123.4  
141 109.6 36.2 54.2#



#22  
Hexachlorobenzene  
Concen: 0.386 ng  
RT: 16.262 min Scan# 1675  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:284 Resp: 4618  
Ion Ratio Lower Upper  
284 100  
142 53.3 43.4 65.2  
249 32.8 25.8 38.6





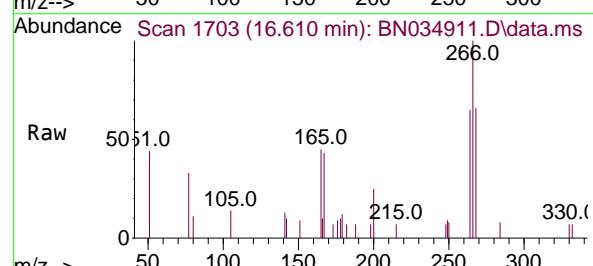
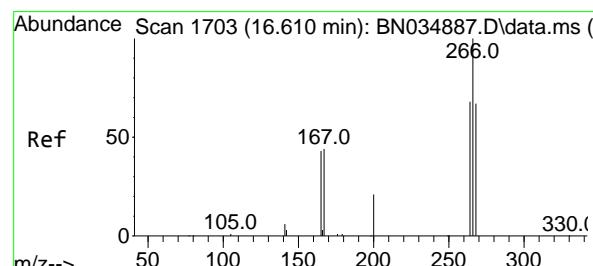
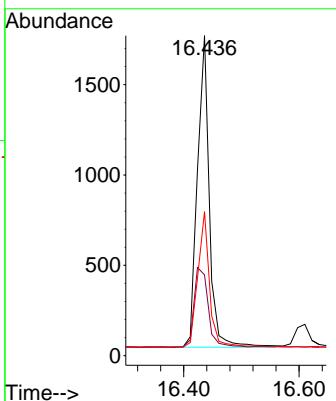
#23

Atrazine  
Concen: 0.344 ng  
RT: 16.436 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Instrument :  
BNA\_N  
ClientSampleId :  
SSTDCCC0.4EC

Tgt Ion:200 Resp: 2478

Ion	Ratio	Lower	Upper
200	100		
173	25.2	23.4	35.2
215	45.0	35.4	53.0

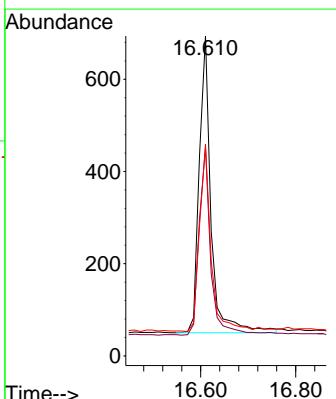


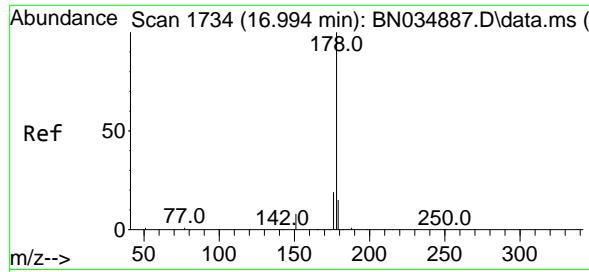
#24

Pentachlorophenol  
Concen: 0.383 ng  
RT: 16.610 min Scan# 1703  
Delta R.T. -0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:266 Resp: 1114

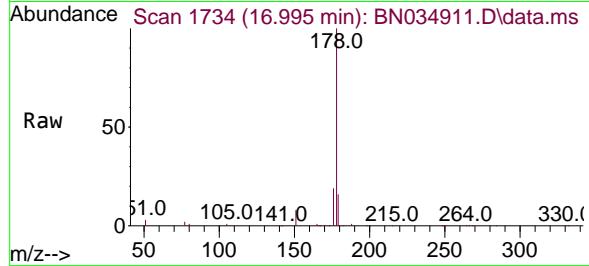
Ion	Ratio	Lower	Upper
266	100		
264	63.2	51.3	76.9
268	60.9	53.0	79.6



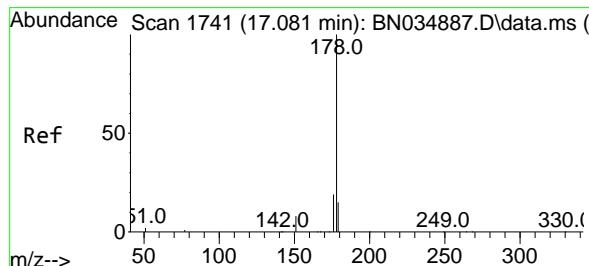
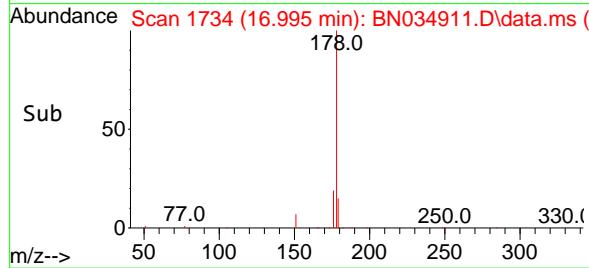
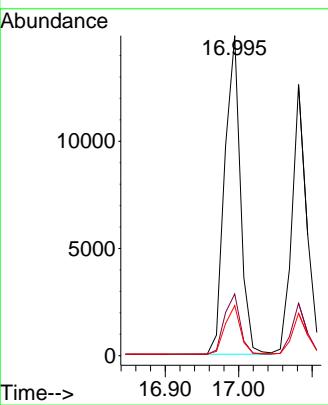


#25  
Phenanthrene  
Concen: 0.386 ng  
RT: 16.995 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

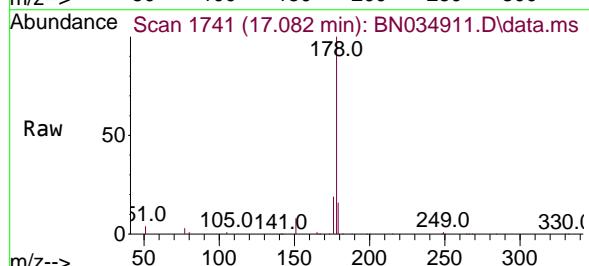
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC



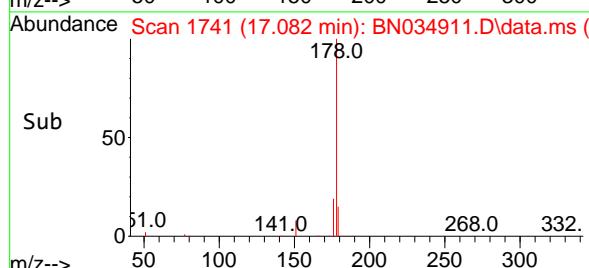
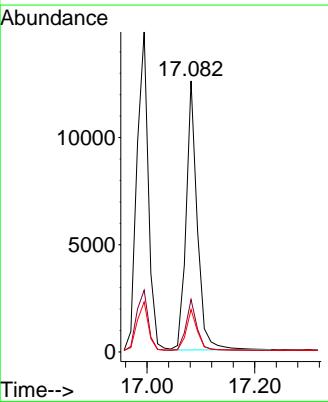
Tgt Ion:178 Resp: 22035  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.5 23.3  
179 15.0 12.2 18.2

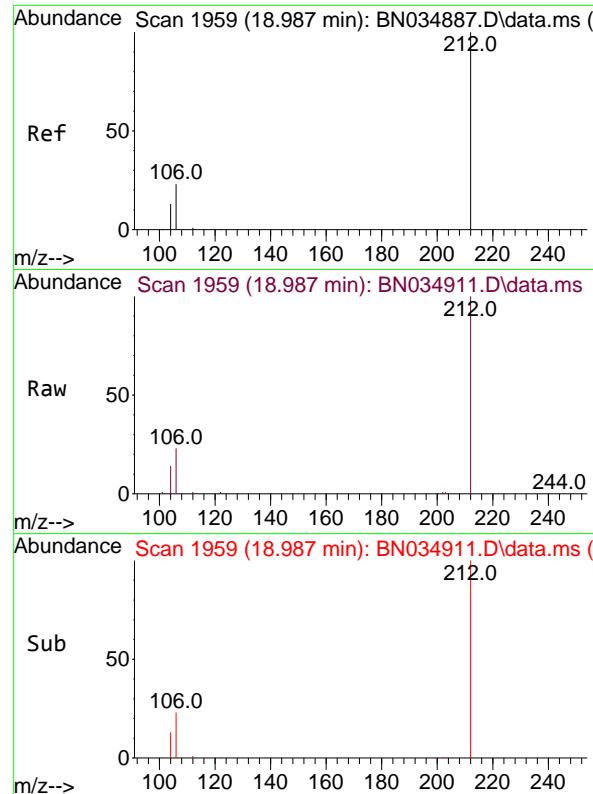


#26  
Anthracene  
Concen: 0.366 ng  
RT: 17.082 min Scan# 1741  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41



Tgt Ion:178 Resp: 18053  
Ion Ratio Lower Upper  
178 100  
176 19.0 15.0 22.6  
179 15.3 12.1 18.1

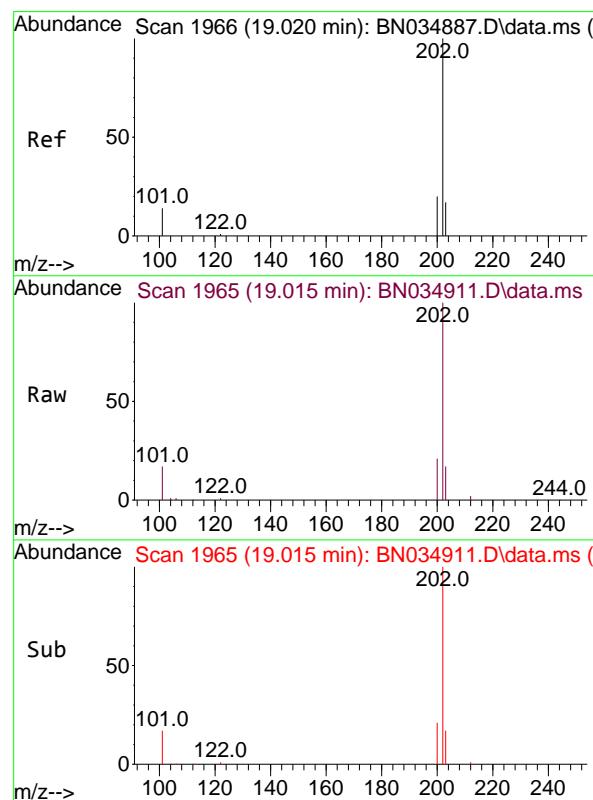
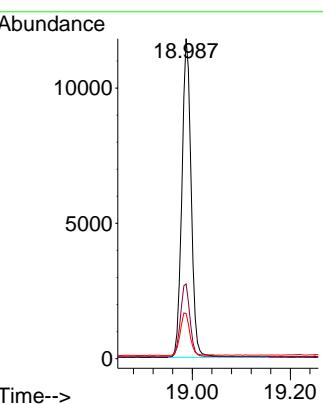




#27  
 Fluoranthene-d10  
 Concen: 0.368 ng  
 RT: 18.987 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

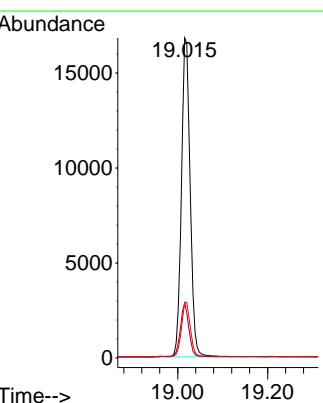
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

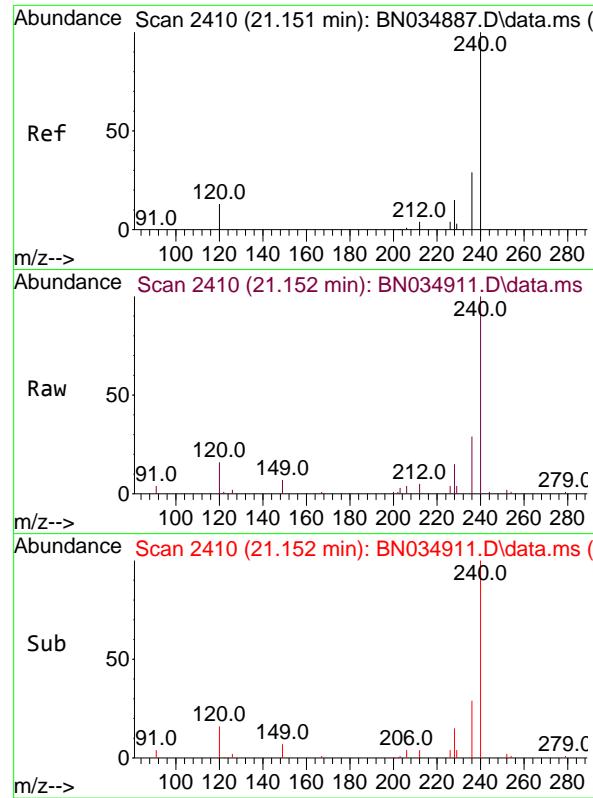
Tgt Ion:212 Resp: 15468  
 Ion Ratio Lower Upper  
 212 100  
 106 23.5 18.2 27.4  
 104 13.7 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.376 ng  
 RT: 19.015 min Scan# 1965  
 Delta R.T. -0.004 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

Tgt Ion:202 Resp: 22600  
 Ion Ratio Lower Upper  
 202 100  
 101 16.4 12.7 19.1  
 203 17.0 13.7 20.5

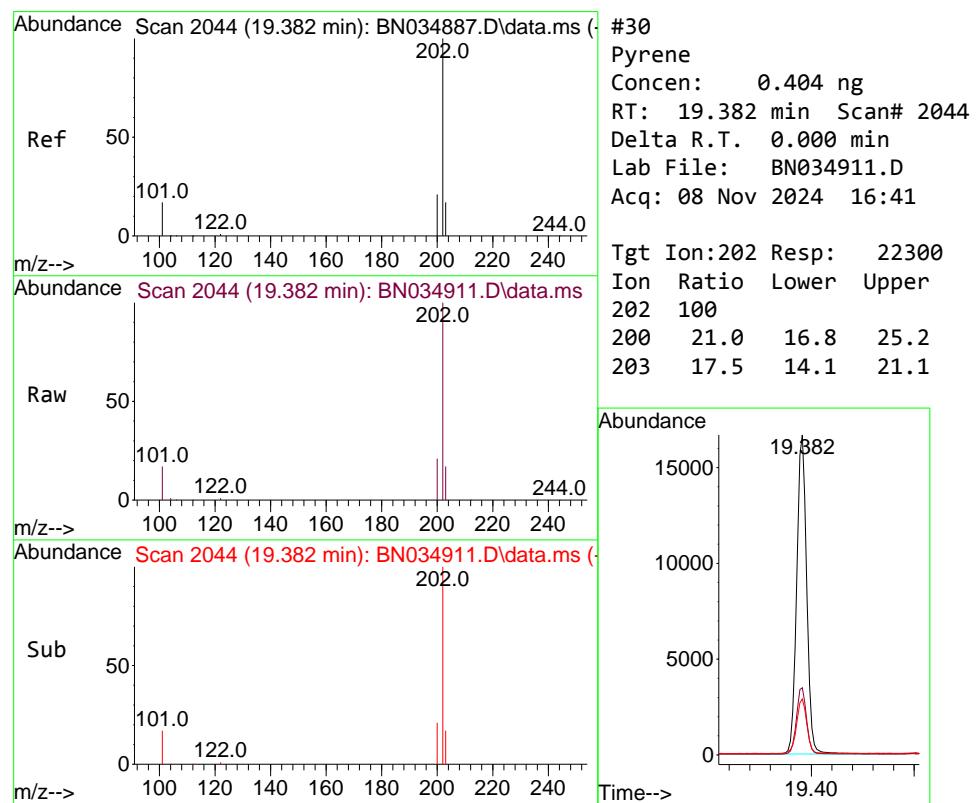
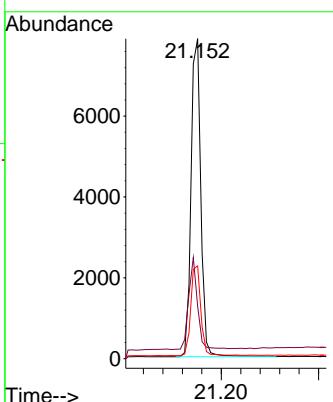




#29  
Chrysene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 21.152 min Scan# 2  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

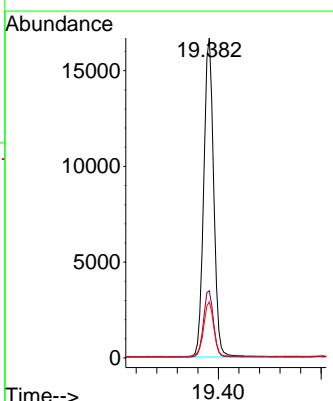
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

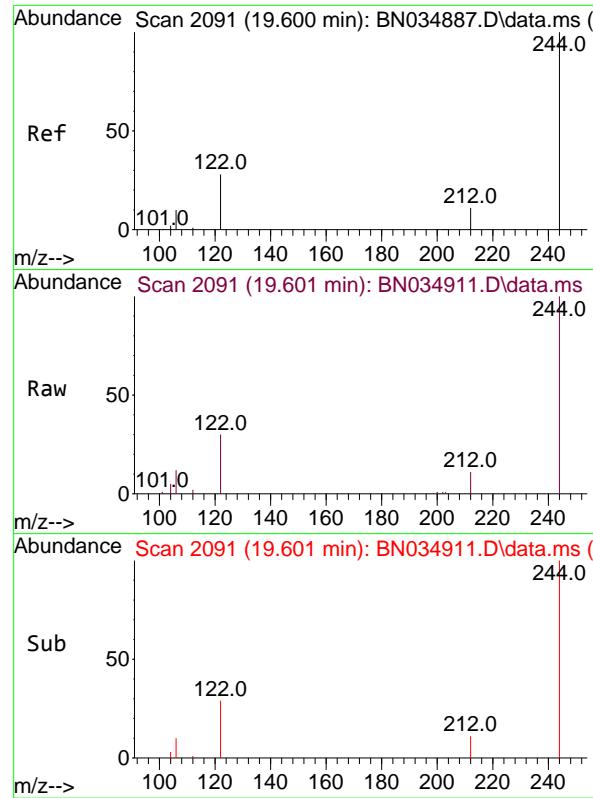
Tgt Ion:240 Resp: 10911  
Ion Ratio Lower Upper  
240 100  
120 16.4 13.8 20.8  
236 29.0 23.8 35.6



#30  
Pyrene  
Concen: 0.404 ng  
RT: 19.382 min Scan# 2044  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:202 Resp: 22300  
Ion Ratio Lower Upper  
202 100  
200 21.0 16.8 25.2  
203 17.5 14.1 21.1

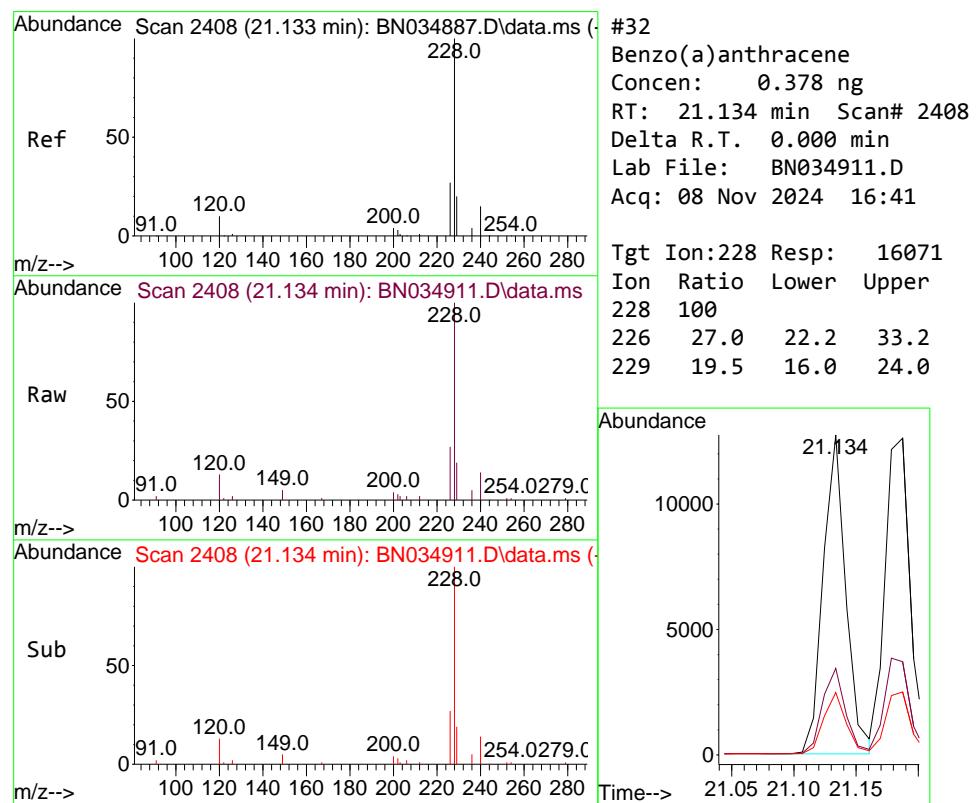
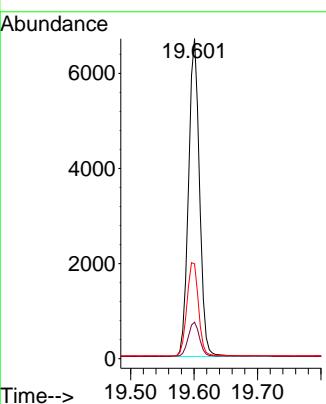




#31  
 Terphenyl-d14  
 Concen: 0.394 ng  
 RT: 19.601 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

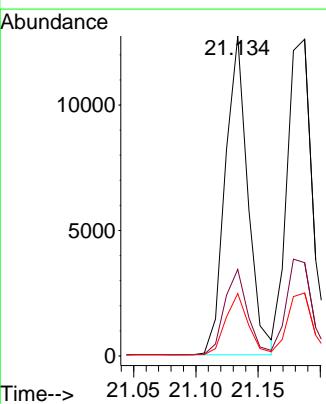
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4EC

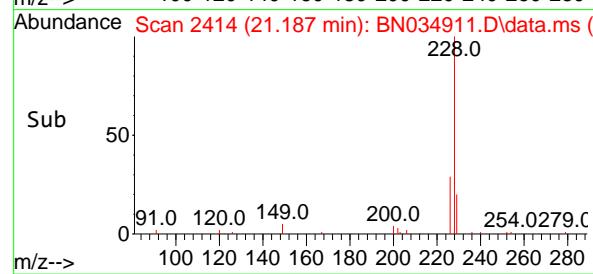
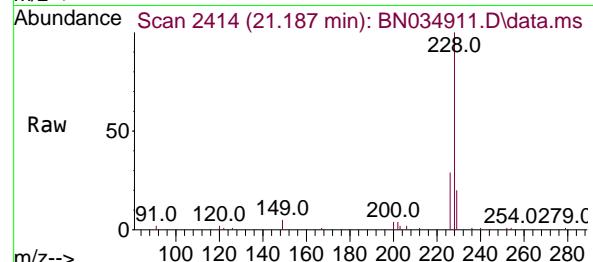
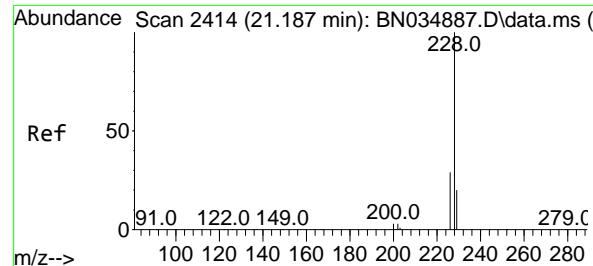
Tgt Ion:244 Resp: 8064  
 Ion Ratio Lower Upper  
 244 100  
 212 11.4 9.4 14.0  
 122 29.6 23.0 34.4



#32  
 Benzo(a)anthracene  
 Concen: 0.378 ng  
 RT: 21.134 min Scan# 2408  
 Delta R.T. 0.000 min  
 Lab File: BN034911.D  
 Acq: 08 Nov 2024 16:41

Tgt Ion:228 Resp: 16071  
 Ion Ratio Lower Upper  
 228 100  
 226 27.0 22.2 33.2  
 229 19.5 16.0 24.0





#33

Chrysene

Concen: 0.396 ng

RT: 21.187 min Scan# 2

Instrument :

Delta R.T. 0.000 min

BNA\_N

Lab File: BN034911.D

ClientSampleId :

Acq: 08 Nov 2024 16:41

SSTDCCC0.4EC

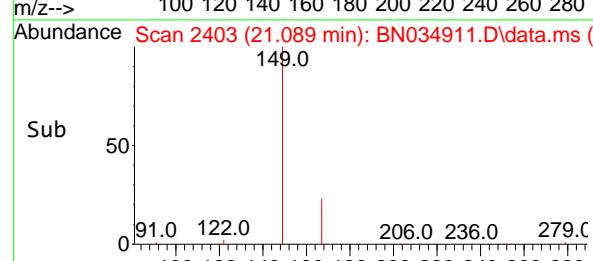
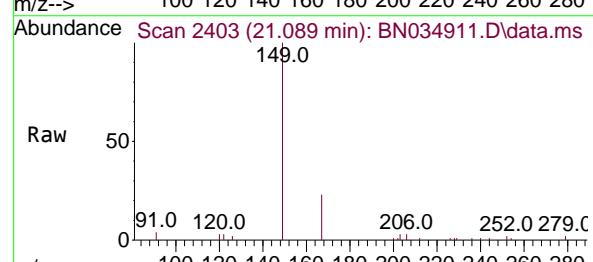
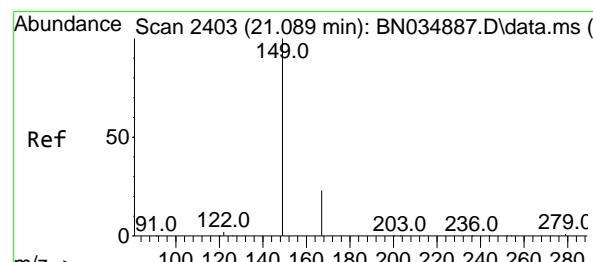
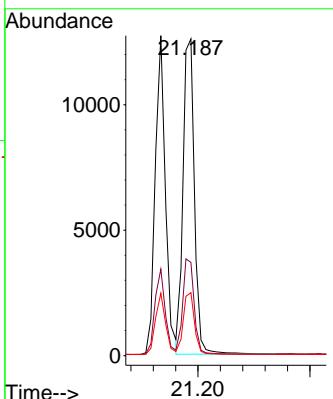
Tgt Ion:228 Resp: 17822

Ion Ratio Lower Upper

228 100

226 29.4 23.7 35.5

229 19.9 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.322 ng

RT: 21.089 min Scan# 2403

Delta R.T. -0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

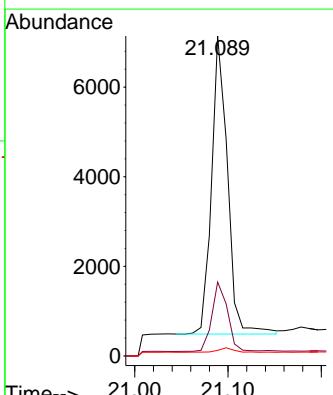
Tgt Ion:149 Resp: 7872

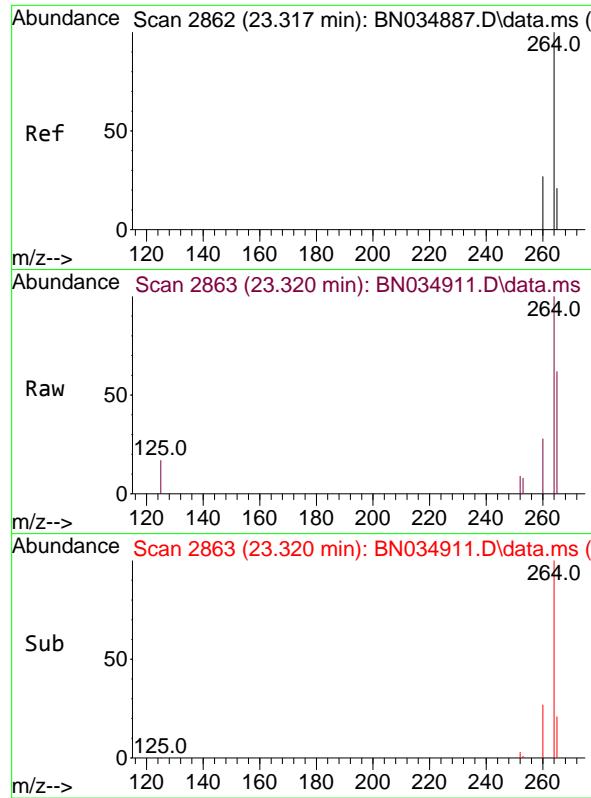
Ion Ratio Lower Upper

149 100

167 23.1 18.1 27.1

279 1.6 1.2 1.8

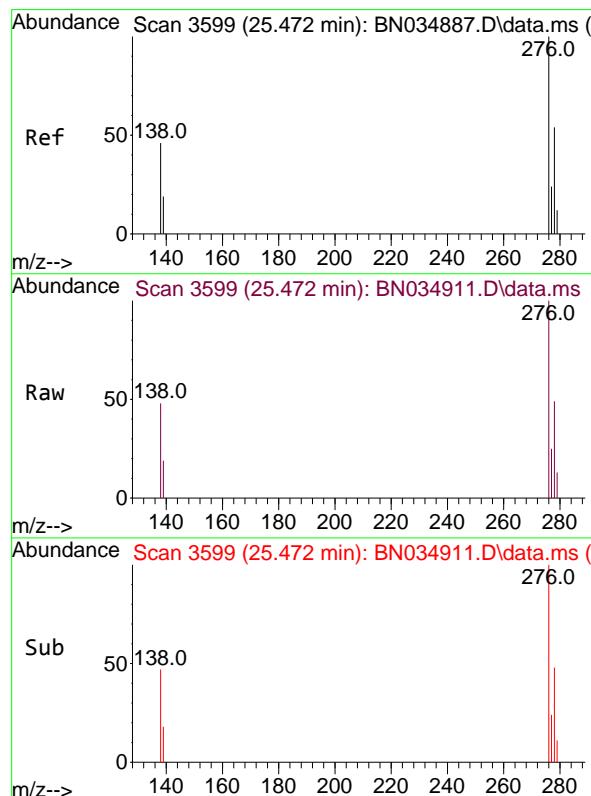
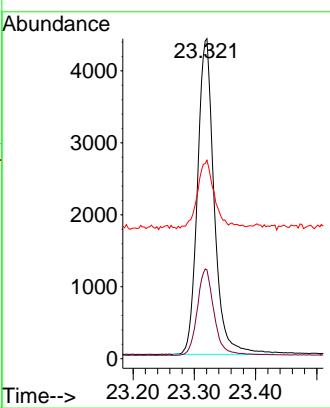




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.320 min Scan# 2  
Delta R.T. 0.003 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

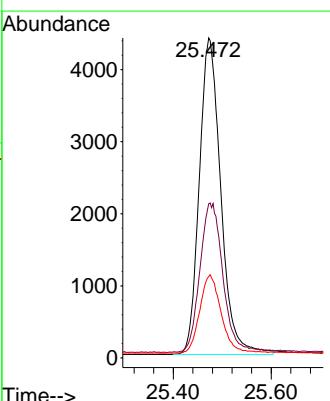
Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4EC

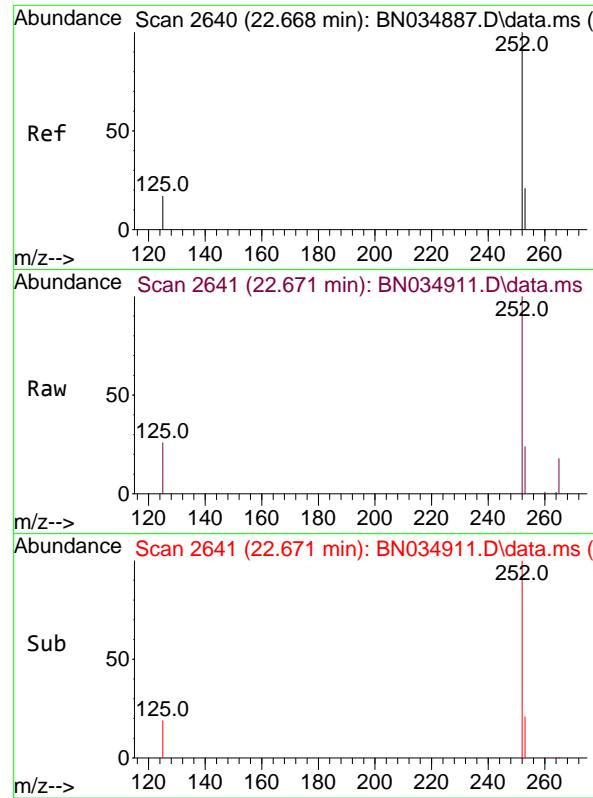
Tgt Ion:264 Resp: 8319  
Ion Ratio Lower Upper  
264 100  
260 27.7 22.2 33.2  
265 62.0 60.9 91.3



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.361 ng  
RT: 25.472 min Scan# 3599  
Delta R.T. 0.000 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:276 Resp: 13373  
Ion Ratio Lower Upper  
276 100  
138 49.9 38.4 57.6  
277 24.5 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.417 ng

RT: 22.671 min Scan# 2

Delta R.T. 0.003 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

Instrument :

BNA\_N

ClientSampleId :

SSTDCCC0.4EC

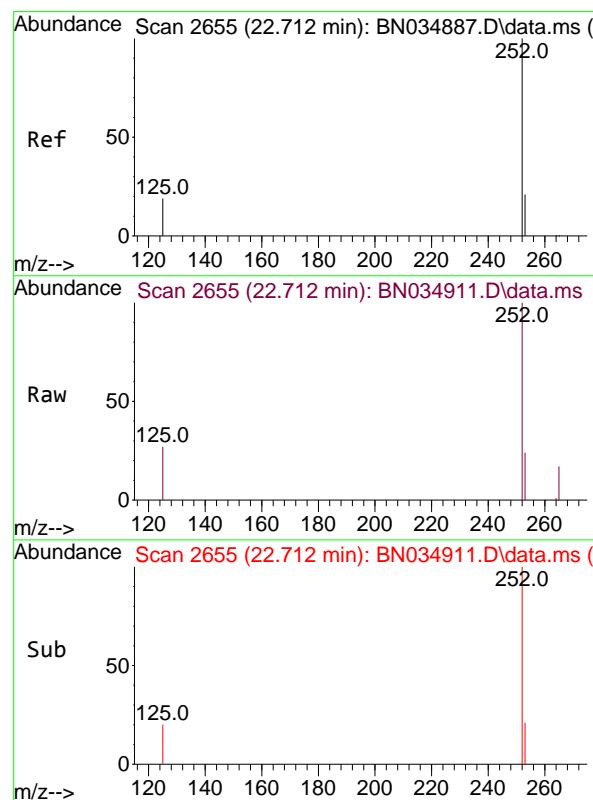
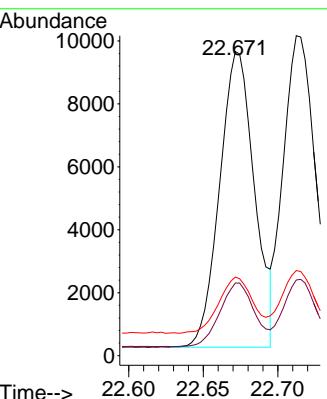
Tgt Ion:252 Resp: 15226

Ion Ratio Lower Upper

252 100

253 23.9 19.4 29.2

125 25.8 21.4 32.2



#38

Benzo(k)fluoranthene

Concen: 0.404 ng

RT: 22.712 min Scan# 2655

Delta R.T. 0.000 min

Lab File: BN034911.D

Acq: 08 Nov 2024 16:41

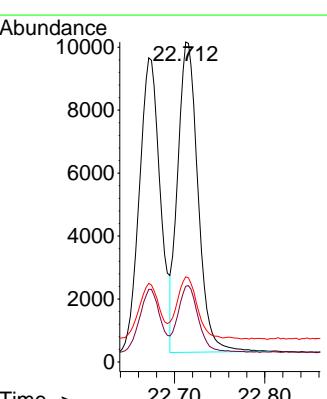
Tgt Ion:252 Resp: 15351

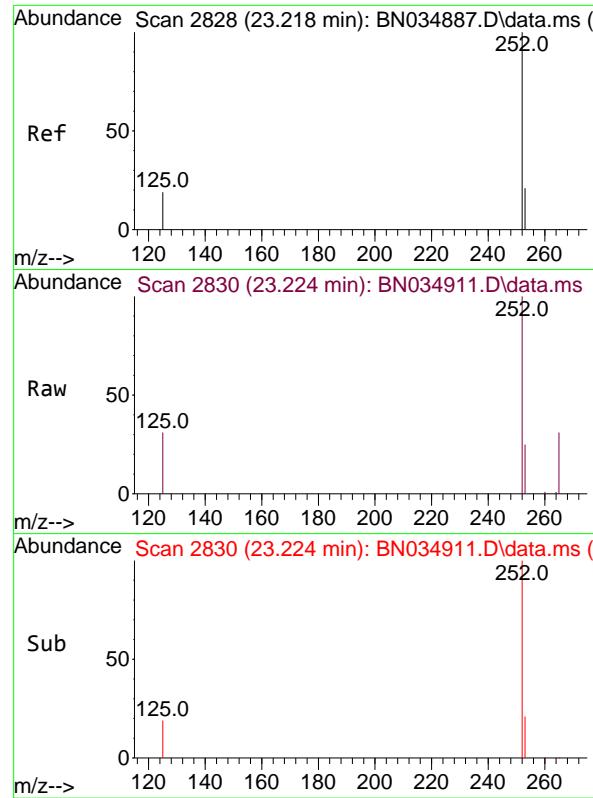
Ion Ratio Lower Upper

252 100

253 23.6 19.8 29.8

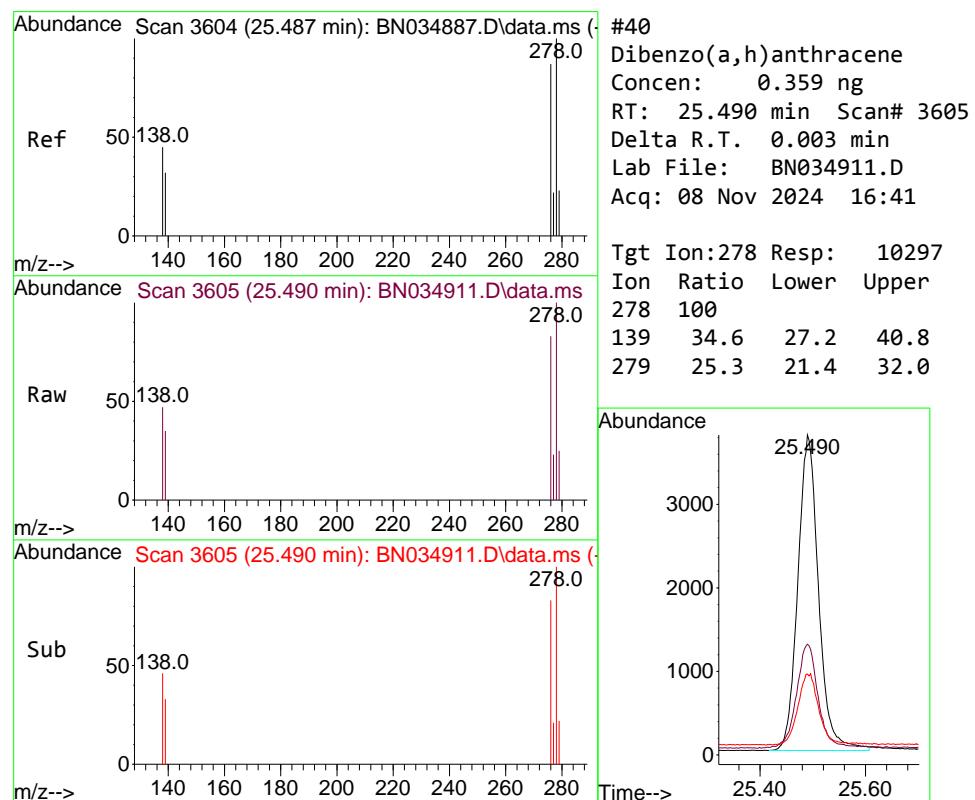
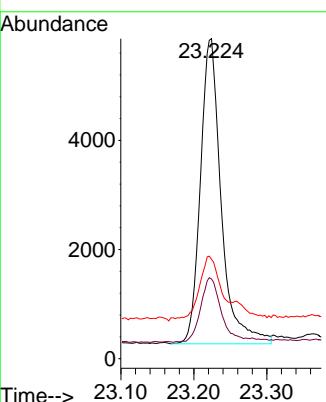
125 26.6 22.6 33.8





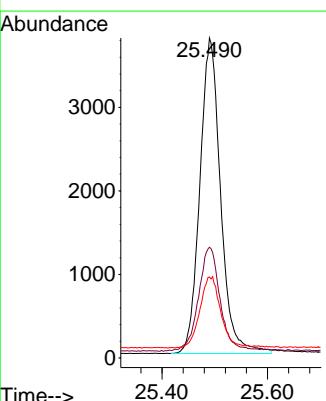
#39  
Benzo(a)pyrene  
Concen: 0.382 ng  
RT: 23.224 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.006 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41  
ClientSampleId : SSTDCCC0.4EC

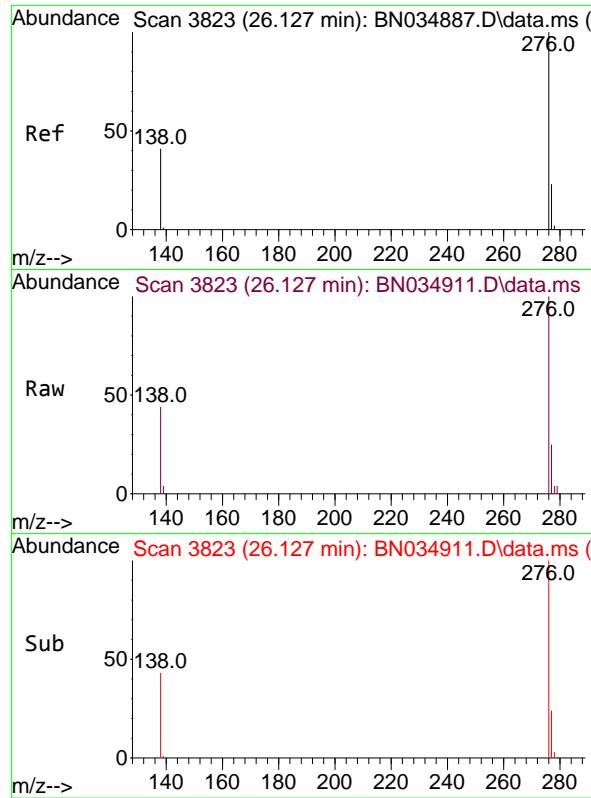
Tgt Ion:252 Resp: 11078  
Ion Ratio Lower Upper  
252 100  
253 24.9 21.4 32.2  
125 31.1 27.8 41.6



#40  
Dibenzo(a,h)anthracene  
Concen: 0.359 ng  
RT: 25.490 min Scan# 3605  
Delta R.T. 0.003 min  
Lab File: BN034911.D  
Acq: 08 Nov 2024 16:41

Tgt Ion:278 Resp: 10297  
Ion Ratio Lower Upper  
278 100  
139 34.6 27.2 40.8  
279 25.3 21.4 32.0





#41

Benzo(g,h,i)perylene

Concen: 0.371 ng

RT: 26.127 min Scan# 3

Instrument : BNA\_N

Delta R.T. 0.000 min

Lab File: BN034911.D ClientSampleId :

Acq: 08 Nov 2024 16:41 SSTDCCC0.4EC

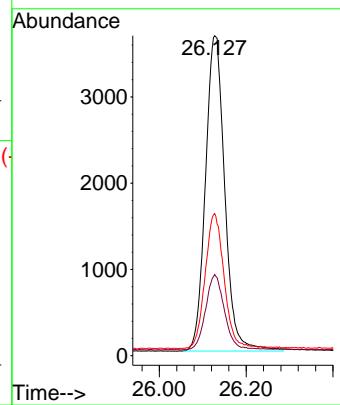
Tgt Ion:276 Resp: 11290

Ion Ratio Lower Upper

276 100

277 25.4 20.2 30.2

138 44.4 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034911.D  
 Acq On : 08 Nov 2024 16:41  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Nov 08 17:33:55 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 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	118	0.00
2	1,4-Dioxane	0.505	0.476	5.7	118	0.00
3	n-Nitrosodimethylamine	0.682	0.659	3.4	125	0.00
4 S	2-Fluorophenol	1.115	0.993	10.9	116	0.00
5 S	Phenol-d6	1.480	1.324	10.5	120	0.00
6	bis(2-Chloroethyl)ether	1.277	1.182	7.4	119	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	122	0.00
8 S	Nitrobenzene-d5	0.312	0.275	11.9	120	0.00
9	Naphthalene	1.110	1.033	6.9	123	0.00
10	Hexachlorobutadiene	0.177	0.165	6.8	120	0.00
11 SURR	2-Methylnaphthalene-d10	0.545	0.486	10.8	121	0.00
12	2-Methylnaphthalene	0.679	0.615	9.4	123	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	123	-0.01
14 S	2,4,6-Tribromophenol	0.118	0.094	20.3	133	0.00
15 S	2-Fluorobiphenyl	1.690	1.539	8.9	123	-0.01
16	Acenaphthylene	1.929	1.691	12.3	124	0.00
17	Acenaphthene	1.335	1.178	11.8	123	0.00
18	Fluorene	1.662	1.489	10.4	125	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	128	0.00
20	4,6-Dinitro-2-methylphenol	0.044	0.034	22.7	135	0.00
21	4-Bromophenyl-phenylether	0.213	0.192	9.9	122	-0.01
22	Hexachlorobenzene	0.257	0.248	3.5	126	0.00
23	Atrazine	0.154	0.133	13.6	128	0.00
24	Pentachlorophenol	0.077	0.060	22.1	139	0.00
25	Phenanthrene	1.227	1.183	3.6	131	0.00
26	Anthracene	1.058	0.969	8.4	129	0.00
27 SURR	Fluoranthene-d10	0.902	0.830	8.0	133	0.00
28	Fluoranthene	1.291	1.213	6.0	137	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	133	0.00
30	Pyrene	2.025	2.044	-0.9	136	0.00
31 S	Terphenyl-d14	0.749	0.739	1.3	132	0.00
32	Benzo(a)anthracene	1.559	1.473	5.5	137	0.00
33	Chrysene	1.650	1.633	1.0	137	0.00
34	Bis(2-ethylhexyl)phthalate	0.895	0.721	19.4	133	0.00
35 I	Perylene-d12	1.000	1.000	0.0	122	0.00
36	Indeno(1,2,3-cd)pyrene	1.782	1.608	9.8	116	0.00
37	Benzo(b)fluoranthene	1.757	1.830	-4.2	127	0.00
38	Benzo(k)fluoranthene	1.828	1.845	-0.9	130	0.00
39 C	Benzo(a)pyrene	1.396	1.332	4.6	121	0.00
40	Dibenzo(a,h)anthracene	1.379	1.238	10.2	115	0.00
41	Benzo(g,h,i)perylene	1.464	1.357	7.3	111	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034911.D  
 Acq On : 08 Nov 2024 16:41  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 LabSampleId :  
 SSTDCCC0.4

Quant Time: Nov 08 17:33:55 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 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	118	0.00
2	1,4-Dioxane	0.400	0.377	5.8	118	0.00
3	n-Nitrosodimethylamine	0.400	0.387	3.3	125	0.00
4 S	2-Fluorophenol	0.400	0.356	11.0	116	0.00
5 S	Phenol-d6	0.400	0.358	10.5	120	0.00
6	bis(2-Chloroethyl)ether	0.400	0.370	7.5	119	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	122	0.00
8 S	Nitrobenzene-d5	0.400	0.353	11.8	120	0.00
9	Naphthalene	0.400	0.372	7.0	123	0.00
10	Hexachlorobutadiene	0.400	0.373	6.8	120	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.357	10.8	121	0.00
12	2-Methylnaphthalene	0.400	0.362	9.5	123	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	123	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.359	10.3	133	0.00
15 S	2-Fluorobiphenyl	0.400	0.364	9.0	123	-0.01
16	Acenaphthylene	0.400	0.350	12.5	124	0.00
17	Acenaphthene	0.400	0.353	11.8	123	0.00
18	Fluorene	0.400	0.358	10.5	125	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	128	0.00
20	4,6-Dinitro-2-methylphenol	0.400	0.381	4.8	135	0.00
21	4-Bromophenyl-phenylether	0.400	0.361	9.8	122	-0.01
22	Hexachlorobenzene	0.400	0.386	3.5	126	0.00
23	Atrazine	0.400	0.344	14.0	128	0.00
24	Pentachlorophenol	0.400	0.383	4.3	139	0.00
25	Phenanthrene	0.400	0.386	3.5	131	0.00
26	Anthracene	0.400	0.366	8.5	129	0.00
27 SURR	Fluoranthene-d10	0.400	0.368	8.0	133	0.00
28	Fluoranthene	0.400	0.376	6.0	137	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	133	0.00
30	Pyrene	0.400	0.404	-1.0	136	0.00
31 S	Terphenyl-d14	0.400	0.394	1.5	132	0.00
32	Benzo(a)anthracene	0.400	0.378	5.5	137	0.00
33	Chrysene	0.400	0.396	1.0	137	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.322	19.5	133	0.00
35 I	Perylene-d12	0.400	0.400	0.0	122	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.361	9.8	116	0.00
37	Benzo(b)fluoranthene	0.400	0.417	-4.2	127	0.00
38	Benzo(k)fluoranthene	0.400	0.404	-1.0	130	0.00
39 C	Benzo(a)pyrene	0.400	0.382	4.5	121	0.00
40	Dibenzo(a,h)anthracene	0.400	0.359	10.3	115	0.00
41	Benzo(g,h,i)perylene	0.400	0.371	7.3	111	0.00

(#) = Out of Range

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



# QC SAMPLE

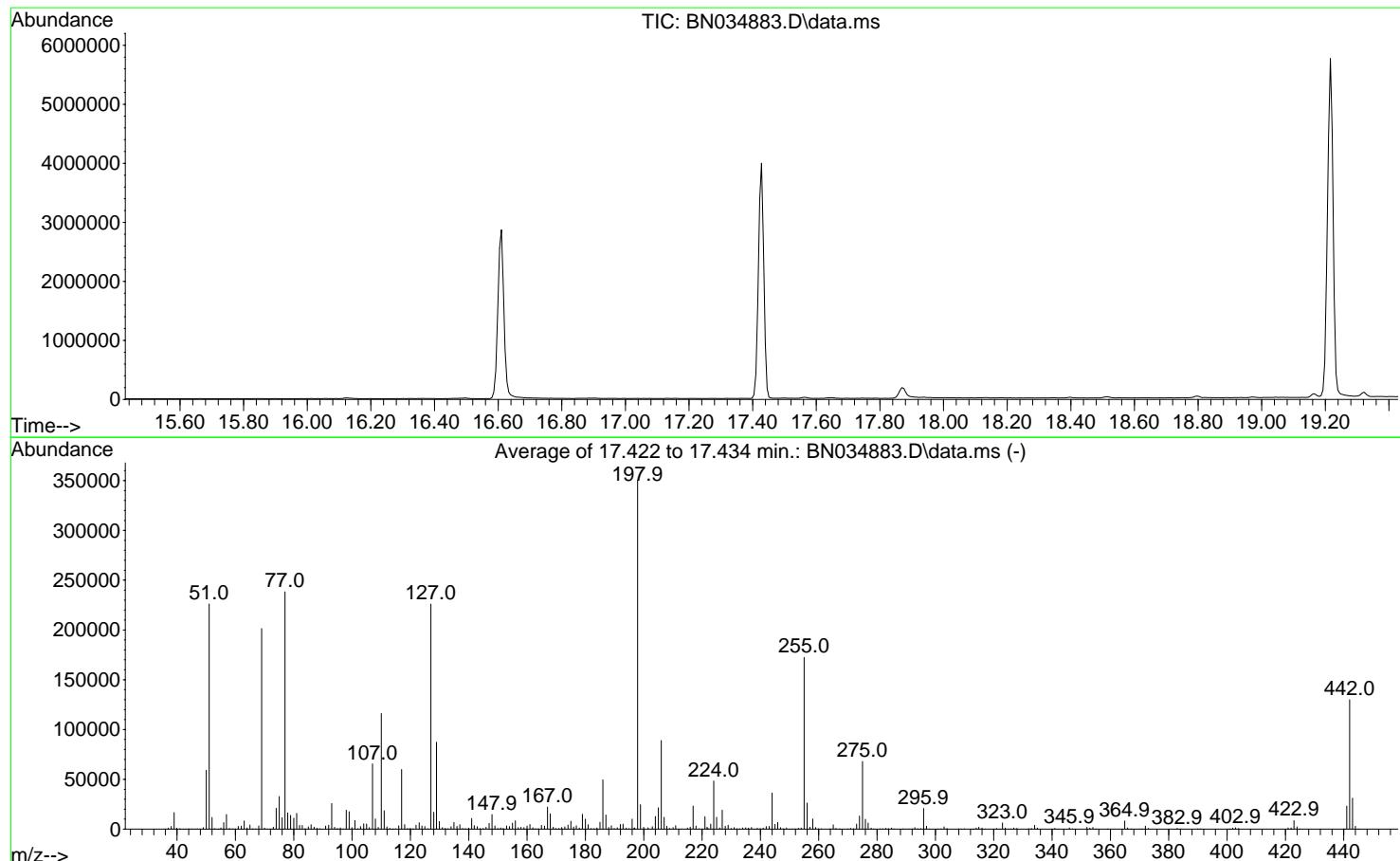
# DATA

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034883.D  
 Acq On : 07 Nov 2024 08:39  
 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-BN110724.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Nov 07 15:02:36 2024



AutoFind: Scans 2471, 2472, 2473; Background Corrected with Scan 2464

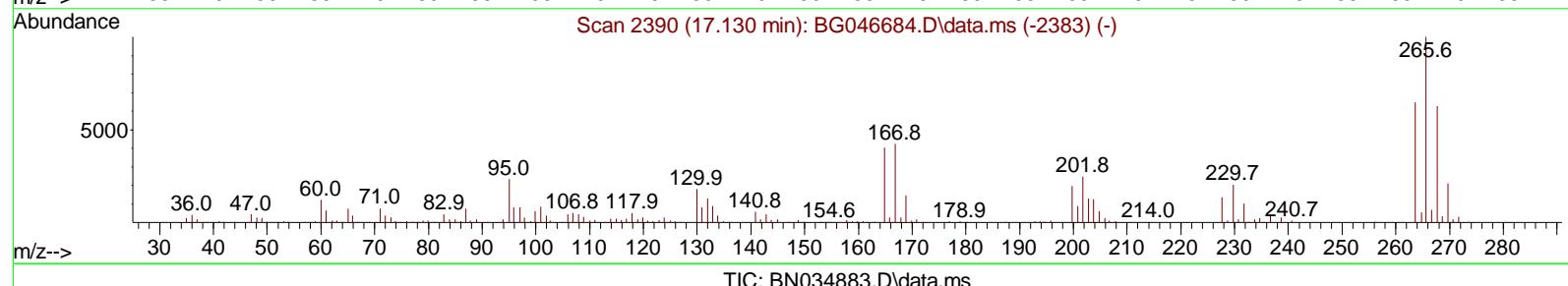
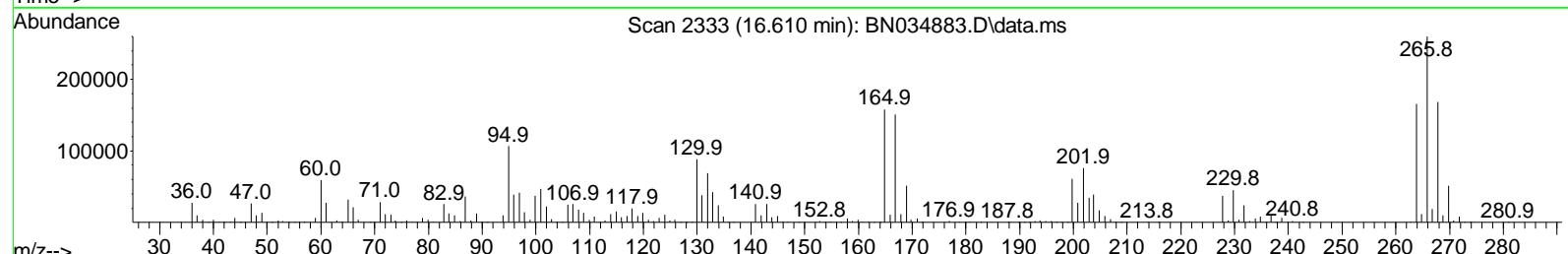
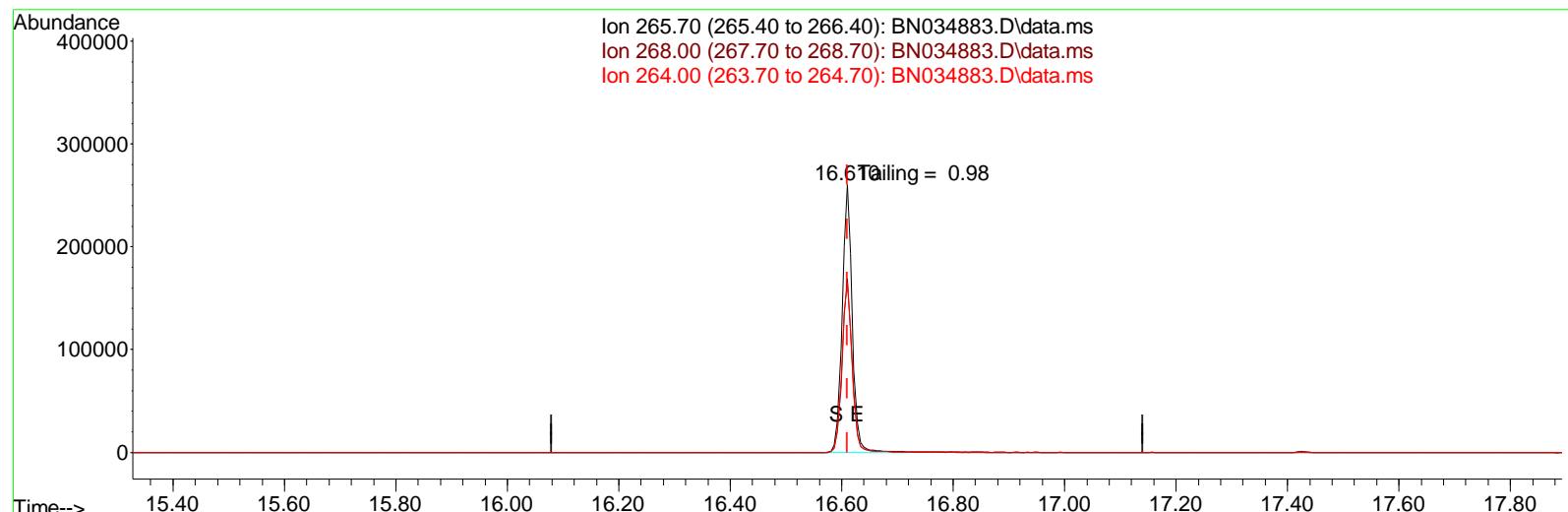
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	64.6	226187	PASS
68	69	0.00	2	1.6	3175	PASS
69	198	0.00	100	57.5	201387	PASS
70	69	0.00	2	0.6	1113	PASS
127	198	10	80	64.5	225920	PASS
197	198	0.00	2	0.3	1194	PASS
198	198	100	100	100.0	350336	PASS
199	198	5	9	7.0	24557	PASS
275	198	10	60	19.4	67965	PASS
365	198	1	100	2.3	8198	PASS
441	198	0.01	100	6.6	23149	PASS
442	442	50	100	100.0	130005	PASS
443	442	15	24	24.0	31165	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034883.D  
 Acq On : 07 Nov 2024 08:39  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Nov 08 05:30:38 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Nov 08 05:30:33 2024  
 Response via : Initial Calibration

Ion 265.70 (265.40 to 266.40): BN034883.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN034883.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN034883.D\data.ms



TIC: BN034883.D\data.ms

(70) Pentachlorophenol (C)

16.610min ( 0.000) 18769.66 ng

response 330393

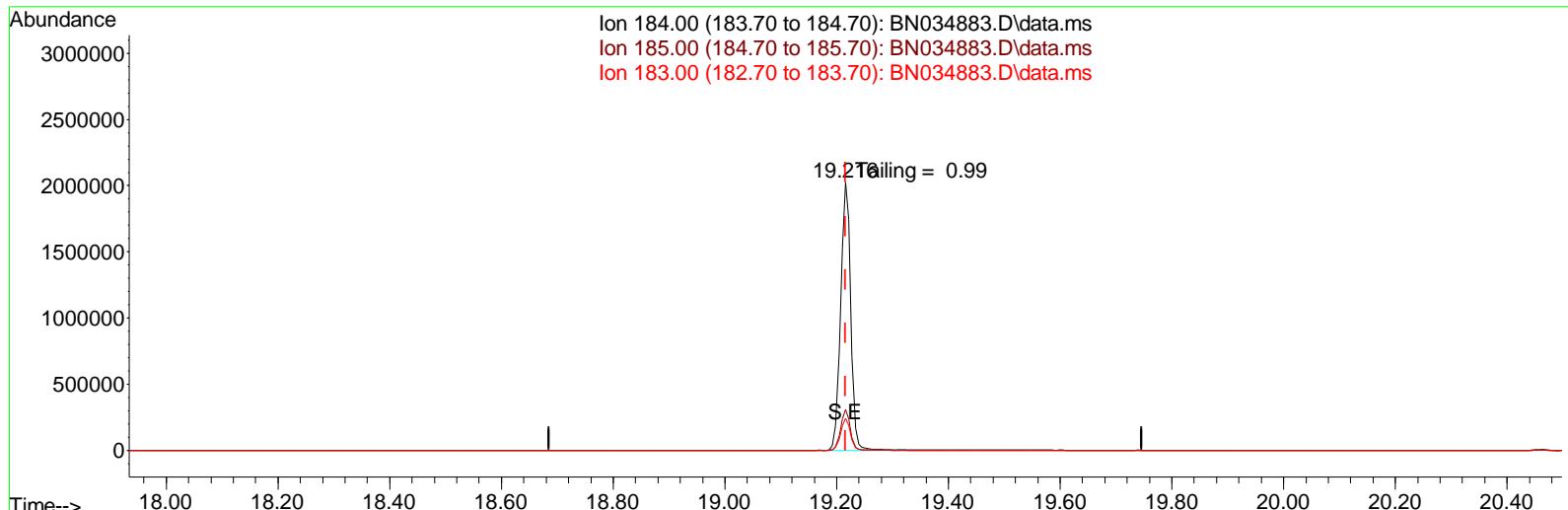
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.93
264.00	61.60	63.65
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034883.D  
 Acq On : 07 Nov 2024 08:39  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

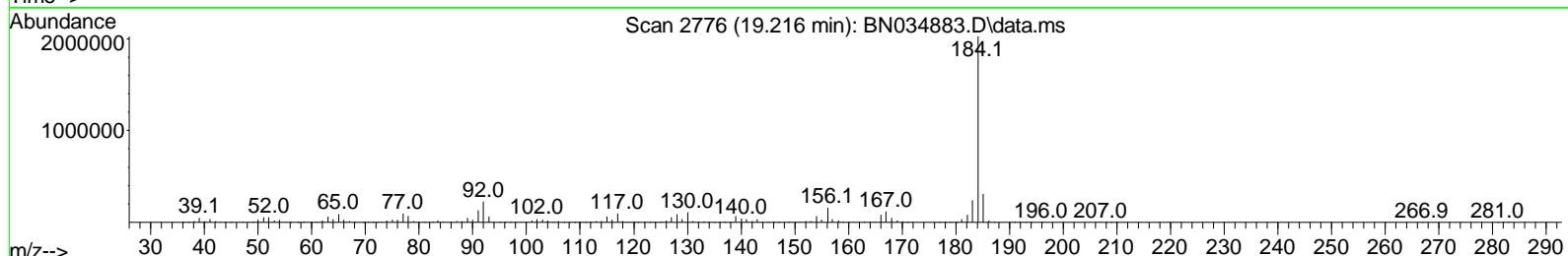
Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Nov 08 05:30:38 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Fri Nov 08 05:30:33 2024  
 Response via : Initial Calibration

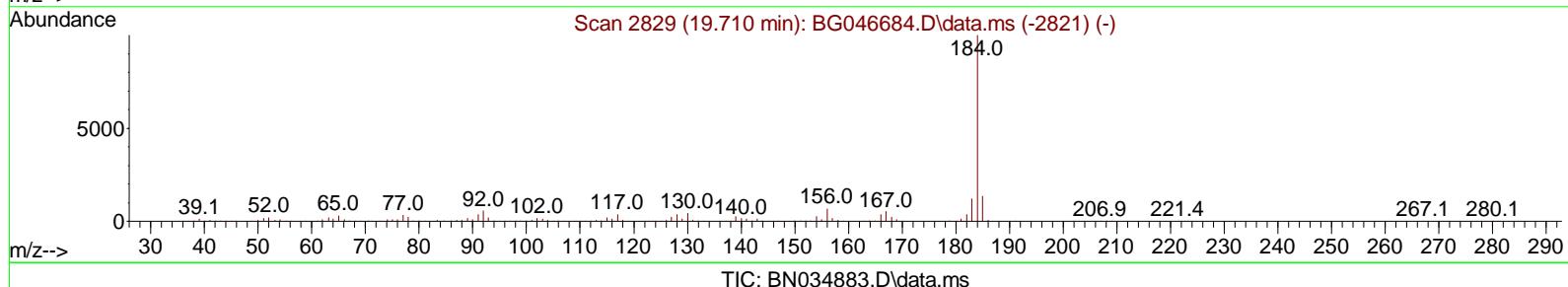
Ion 184.00 (183.70 to 184.70): BN034883.D\data.ms  
 Ion 185.00 (184.70 to 185.70): BN034883.D\data.ms  
 Ion 183.00 (182.70 to 183.70): BN034883.D\data.ms



Scan 2776 (19.216 min): BN034883.D\data.ms



Scan 2829 (19.710 min): BG046684.D\data.ms (-2821) (-)



TIC: BN034883.D\data.ms

#### (77) Benzidine

19.216min ( 0.000) 0.00 ng

response 2581167

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	15.29
183.00	13.20	12.03
0.00	0.00	0.00

Instrument :  
BNA\_N  
ClientSampleId :  
DFTPP

DDT Breakdown

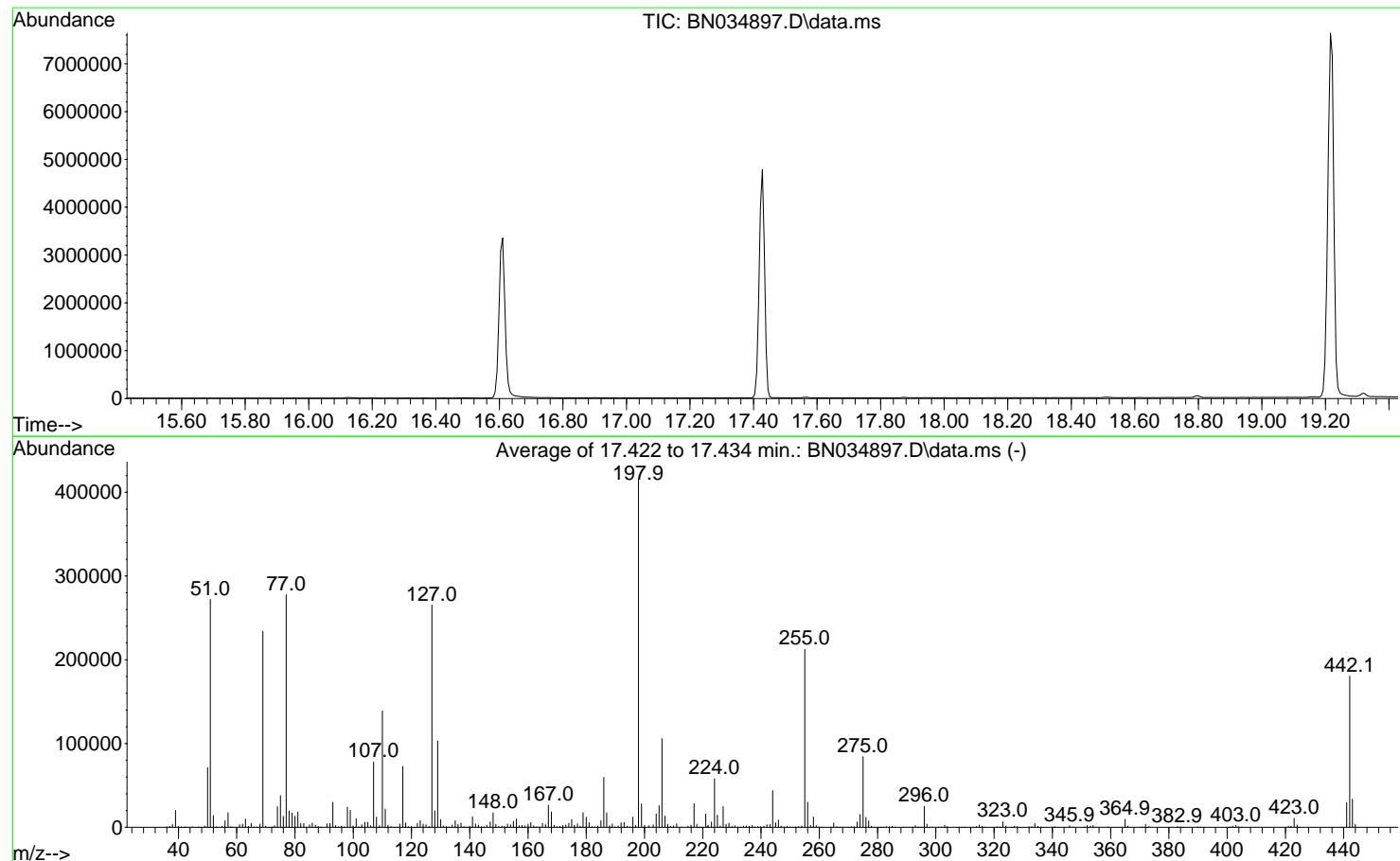
Date	Instrument Name	DFTPP Data File
11/7/2024	BNA_N	<u>BN034883.D</u>
Compound Name	Response	Retention Time
DDT	1134074	20.463
DDD	9937	20.069
DDE	132	19.504
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
10069	1144143	0.88

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034897.D  
 Acq On : 08 Nov 2024 07:50  
 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-BN110724.M  
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 Last Update : Thu Nov 07 15:02:36 2024



AutoFind: Scans 2471, 2472, 2473; Background Corrected with Scan 2464

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	65.5	272195	PASS
68	69	0.00	2	1.6	3690	PASS
69	198	0.00	100	56.3	234112	PASS
70	69	0.00	2	0.5	1192	PASS
127	198	10	80	63.8	265344	PASS
197	198	0.00	2	0.5	2163	PASS
198	198	100	100	100.0	415616	PASS
199	198	5	9	6.7	28043	PASS
275	198	10	60	20.3	84464	PASS
365	198	1	100	2.3	9568	PASS
441	198	0.01	100	7.0	29224	PASS
442	442	50	100	100.0	180587	PASS
443	442	15	24	18.6	33651	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034897.D  
 Acq On : 08 Nov 2024 07:50  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Nov 09 04:05:38 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Nov 09 04:05:27 2024  
 Response via : Initial Calibration

Abundance

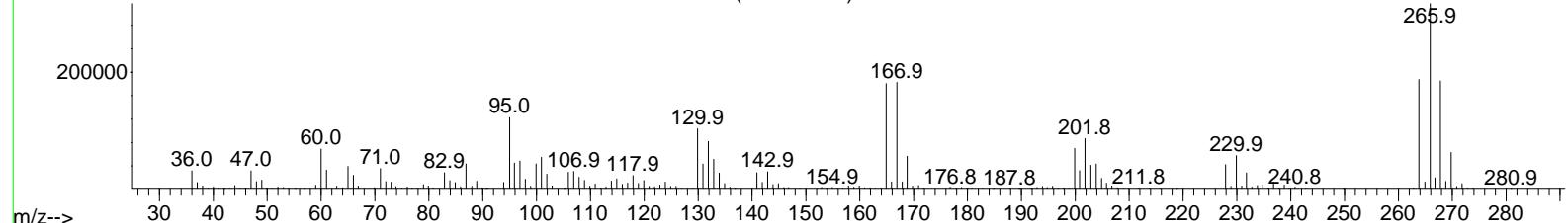
Ion 265.70 (265.40 to 266.40): BN034897.D\data.ms  
 Ion 268.00 (267.70 to 268.70): BN034897.D\data.ms  
 Ion 264.00 (263.70 to 264.70): BN034897.D\data.ms

16.6 Tailing = 0.94

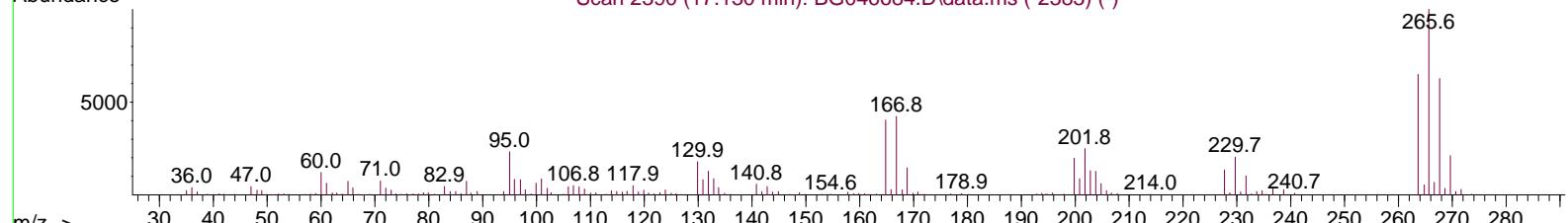
S E

Time--> 15.40 15.60 15.80 16.00 16.20 16.40 16.60 16.80 17.00 17.20 17.40 17.60 17.80

Scan 2333 (16.610 min): BN034897.D\data.ms



Scan 2390 (17.130 min): BG046684.D\data.ms (-2383) (-)



TIC: BN034897.D\data.ms

(70) Pentachlorophenol (C)

16.610min ( 0.000) 20617.49 ng

response 407091

Ion	Exp%	Act%
-----	------	------

265.70	100.00	100.00
--------	--------	--------

268.00	62.20	58.38
--------	-------	-------

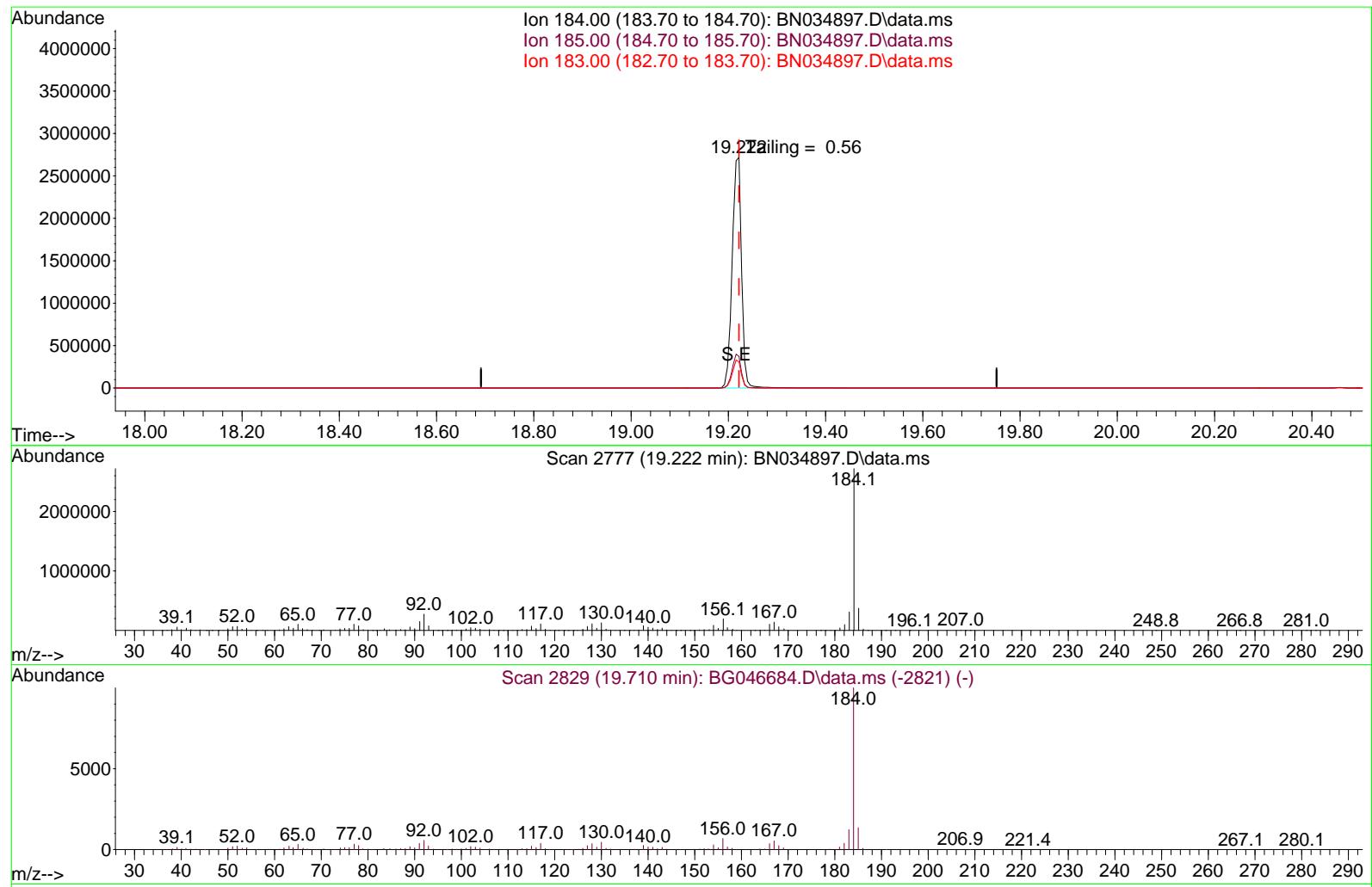
264.00	61.60	59.14
--------	-------	-------

0.00	0.00	0.00
------	------	------

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034897.D  
 Acq On : 08 Nov 2024 07:50  
 Operator : RC/JU  
 Sample : DFTPP  
 Misc :  
 ALS Vial : 1 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 DFTPP

Quant Time: Nov 09 04:05:38 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270E-Tune.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Sat Nov 09 04:05:27 2024  
 Response via : Initial Calibration



## (77) Benzidine

19.222min ( 0.000) 0.00 ng

response 3642384

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	13.73
183.00	13.20	11.43
0.00	0.00	0.00

**Instrument :**  
BNA\_N  
**ClientSampleId :**  
DFTPP

**DDT Breakdown**

Date	Instrument Name	DFTPP Data File
11/8/2024	BNA_N	<u>BN034897.D</u>
Compound Name	Response	Retention Time
DDT	1384783	20.457
DDD	13389	20.069
DDE	195	19.51
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
13584	1398367	0.97



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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB164705BL			SDG No.:	P4710
Lab Sample ID:	PB164705BL			Matrix:	Water
Analytical Method:	SW8270SIM			% 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 :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034910.D	1	11/06/24 08:45	11/08/24 16:05	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.36		30 - 150		90%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.38		53 - 106		95%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.47		58 - 132		117%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	6270	7.575				
1146-65-2	Naphthalene-d8	17600	10.34				
15067-26-2	Acenaphthene-d10	7420	14.201				
1517-22-2	Phenanthrene-d10	15300	16.957				
1719-03-5	Chrysene-d12	8050	21.151				
1520-96-3	Perylene-d12	6370	23.317				

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\BN110824\  
 Data File : BN034910.D  
 Acq On : 08 Nov 2024 16:05  
 Operator : RC/JU  
 Sample : PB164705BL  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**PB164705BL**

Quant Time: Nov 08 16:32:52 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

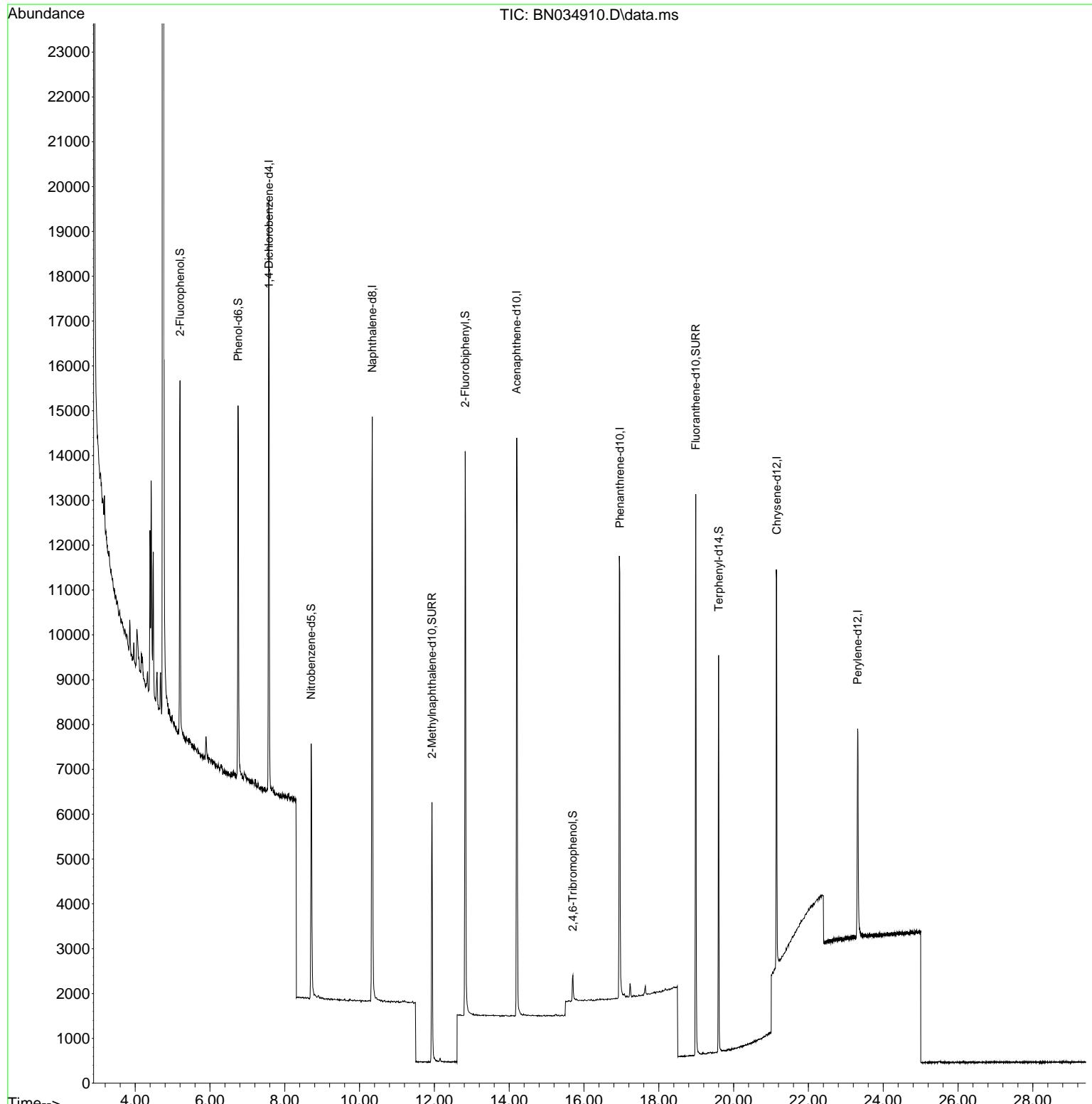
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	6271	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	17552	0.400	ng	0.00
13) Acenaphthene-d10	14.201	164	7420	0.400	ng	-0.01
19) Phenanthrene-d10	16.957	188	15255	0.400	ng	0.00
29) Chrysene-d12	21.151	240	8049	0.400	ng	0.00
35) Perylene-d12	23.317	264	6373	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	5784	0.331	ng	0.00
5) Phenol-d6	6.751	99	7662	0.330	ng	0.00
8) Nitrobenzene-d5	8.707	82	4819	0.352	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	8067	0.337	ng	0.00
14) 2,4,6-Tribromophenol	15.704	330	363	0.202	ng	0.00
15) 2-Fluorobiphenyl	12.822	172	11928	0.381	ng	-0.01
27) Fluoranthene-d10	18.987	212	12346	0.359	ng	0.00
31) Terphenyl-d14	19.600	244	7087	0.470	ng	0.00

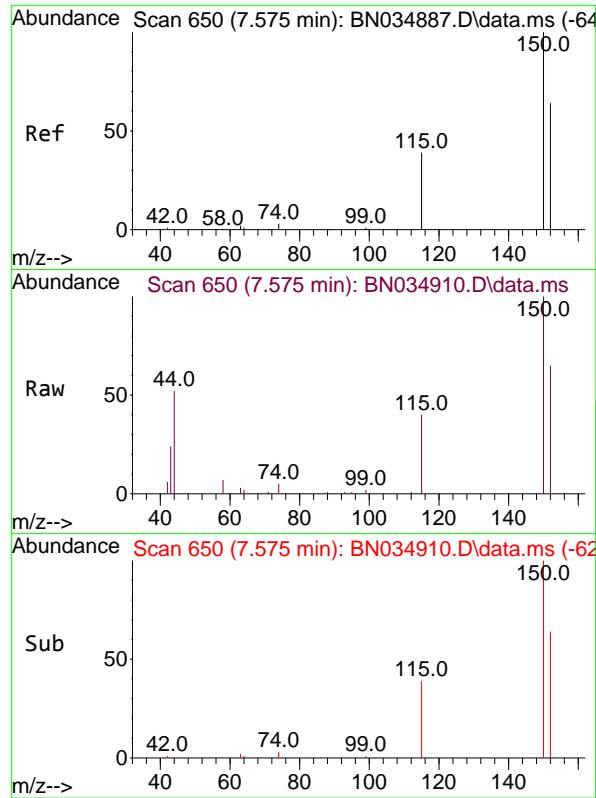
Target Compounds	Qvalue
(#= qualifier out of range (m)= manual integration (+)= signals summed	

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034910.D  
 Acq On : 08 Nov 2024 16:05  
 Operator : RC/JU  
 Sample : PB164705BL  
 Misc :  
 ALS Vial : 14 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BL

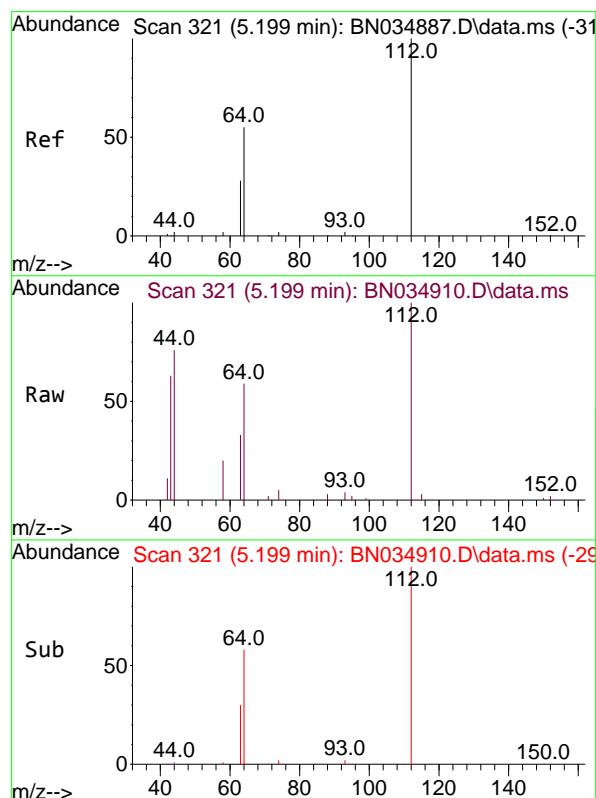
Quant Time: Nov 08 16:32:52 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration



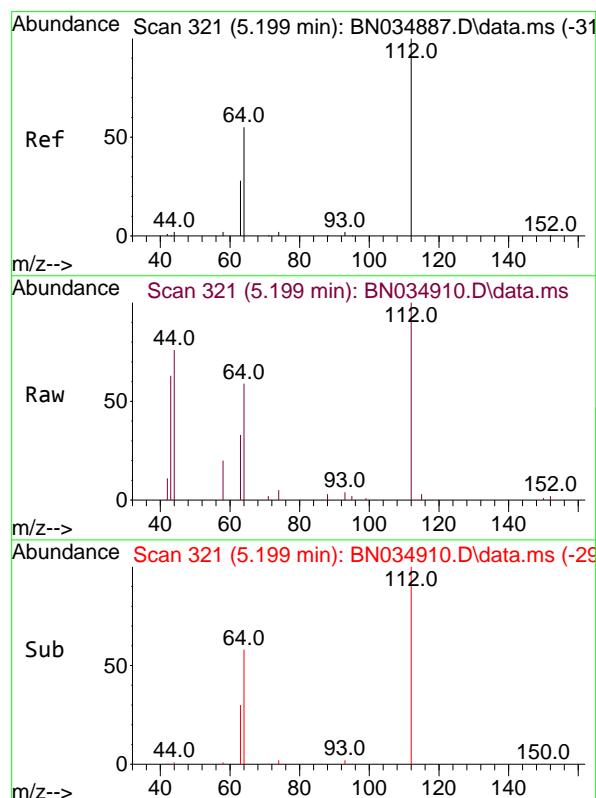
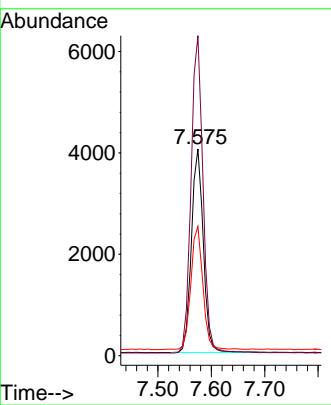


#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Delta R.T. -0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

Instrument : BNA\_N  
ClientSampleId : PB164705BL

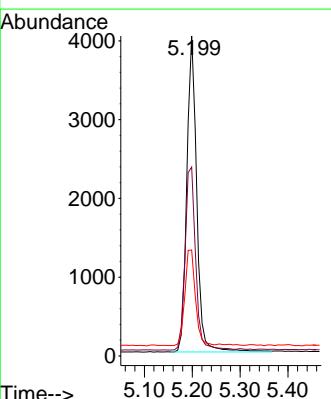


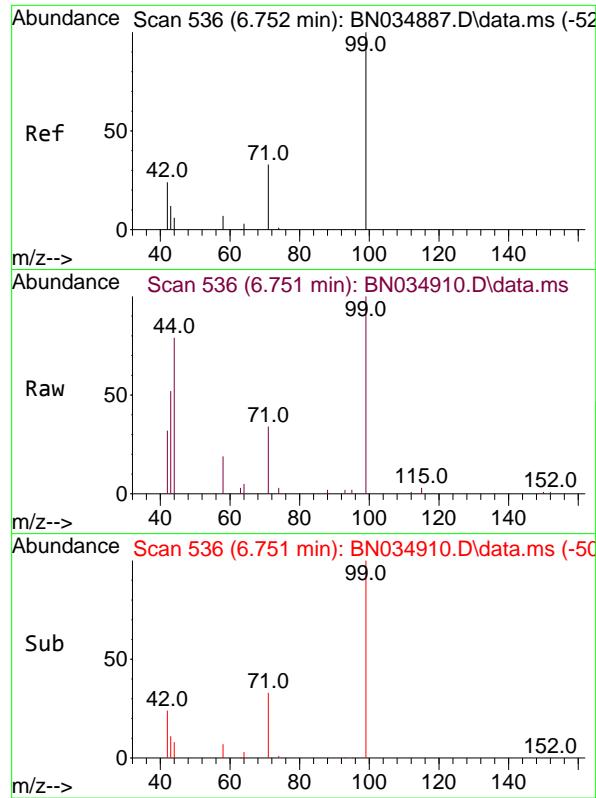
Tgt Ion:152 Resp: 6271  
Ion Ratio Lower Upper  
152 100  
150 154.8 124.4 186.6  
115 62.6 50.5 75.7



#4  
2-Fluorophenol  
Concen: 0.331 ng  
RT: 5.199 min Scan# 321  
Delta R.T. -0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

Tgt Ion:112 Resp: 5784  
Ion Ratio Lower Upper  
112 100  
64 61.5 49.6 74.4  
63 32.0 26.3 39.5

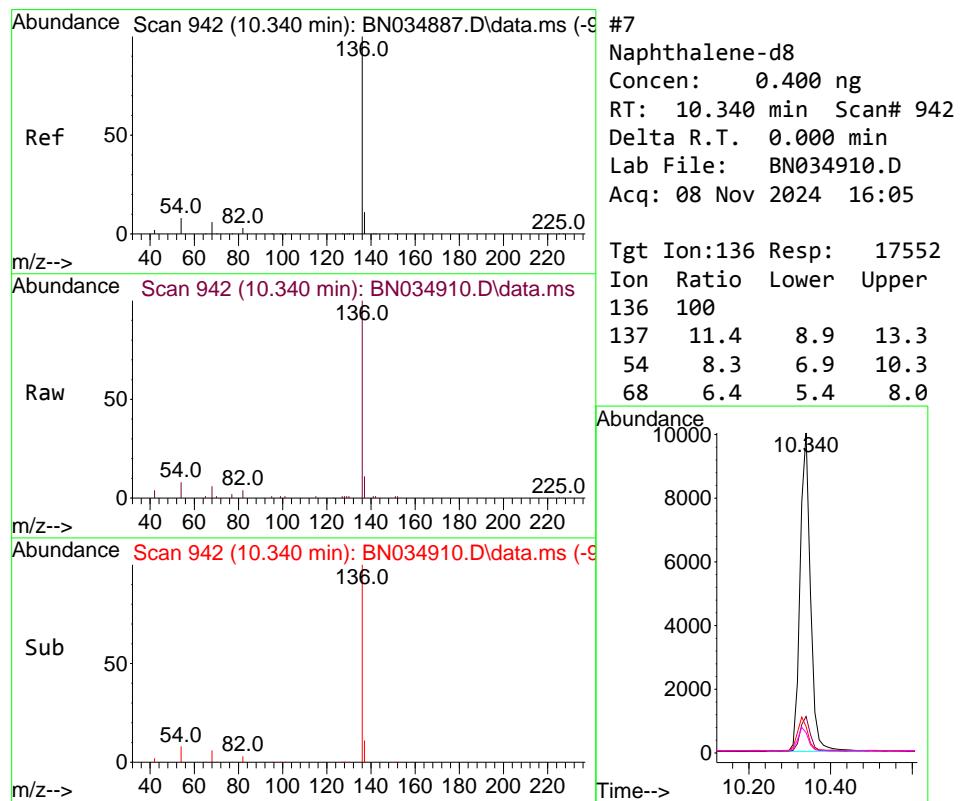
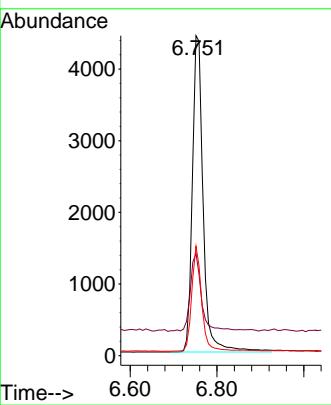




#5  
 Phenol-d6  
 Concen: 0.330 ng  
 RT: 6.751 min Scan# 5  
 Delta R.T. -0.000 min  
 Lab File: BN034910.D  
 Acq: 08 Nov 2024 16:05

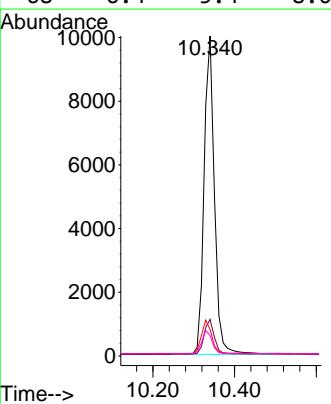
Instrument : BNA\_N  
 ClientSampleId : PB164705BL

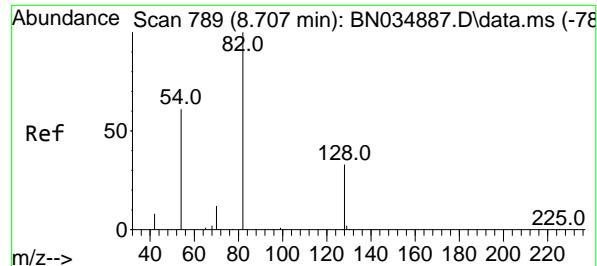
Tgt Ion: 99 Resp: 7662  
 Ion Ratio Lower Upper  
 99 100  
 42 24.2 20.2 30.2  
 71 31.0 25.4 38.0



#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 942  
 Delta R.T. 0.000 min  
 Lab File: BN034910.D  
 Acq: 08 Nov 2024 16:05

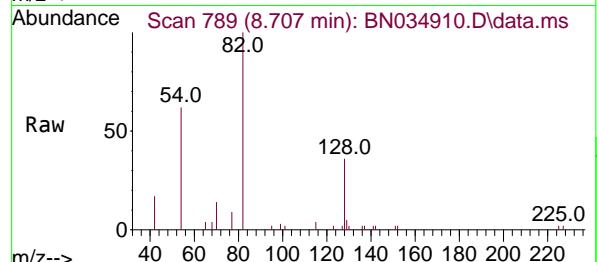
Tgt Ion:136 Resp: 17552  
 Ion Ratio Lower Upper  
 136 100  
 137 11.4 8.9 13.3  
 54 8.3 6.9 10.3  
 68 6.4 5.4 8.0



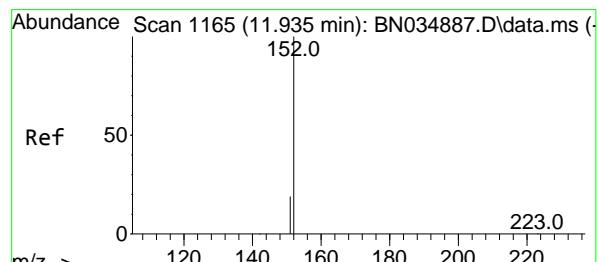
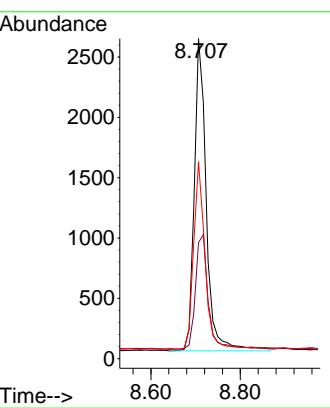
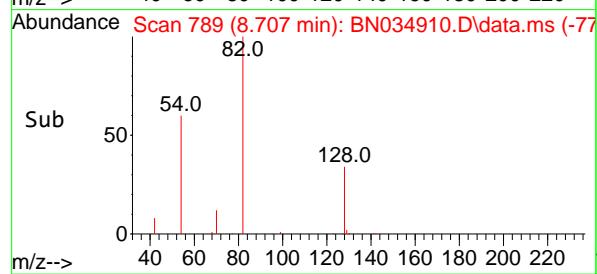


#8  
Nitrobenzene-d5  
Concen: 0.352 ng  
RT: 8.707 min Scan# 7  
Delta R.T. 0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

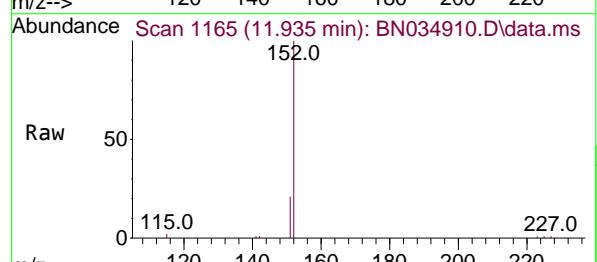
Instrument : BNA\_N  
ClientSampleId : PB164705BL



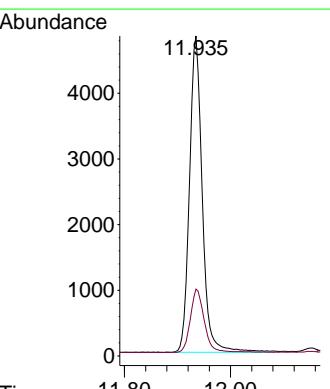
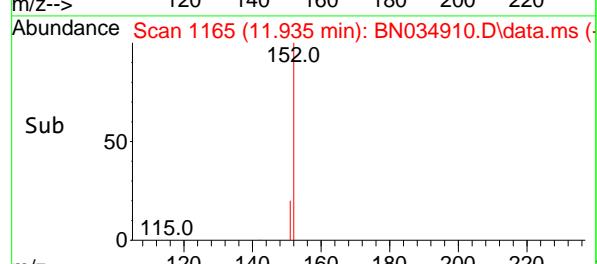
Tgt Ion: 82 Resp: 4819  
Ion Ratio Lower Upper  
82 100  
128 36.3 28.1 42.1  
54 61.5 49.8 74.6

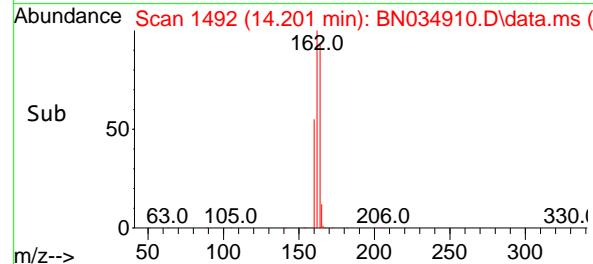
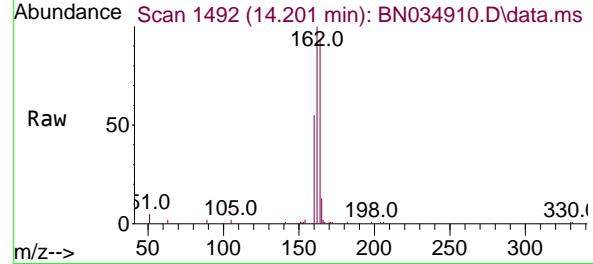
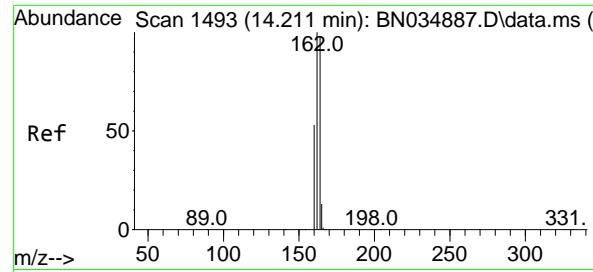


#11  
2-Methylnaphthalene-d10  
Concen: 0.337 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. -0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05



Tgt Ion:152 Resp: 8067  
Ion Ratio Lower Upper  
152 100  
151 22.0 17.1 25.7





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.201 min Scan# 1493

Delta R.T. -0.010 min

Lab File: BN034910.D

Acq: 08 Nov 2024 16:05

Instrument :

BNA\_N

ClientSampleId :

PB164705BL

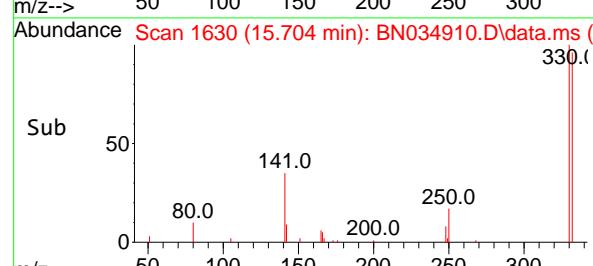
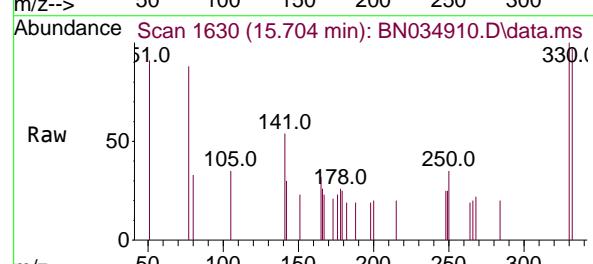
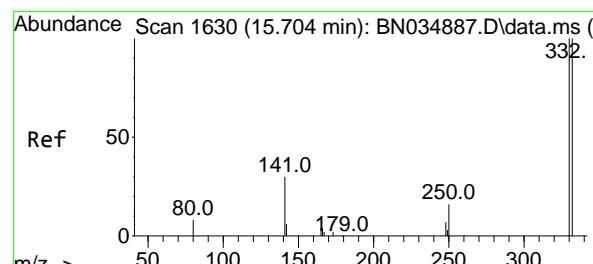
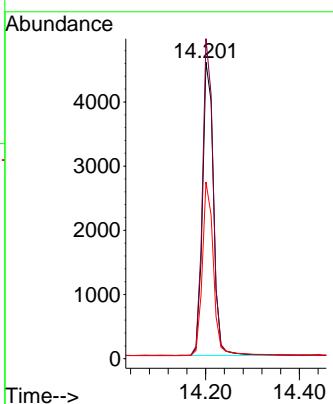
Tgt Ion:164 Resp: 7420

Ion Ratio Lower Upper

164 100

162 107.9 81.9 122.9

160 59.6 43.5 65.3



#14

2,4,6-Tribromophenol

Concen: 0.202 ng

RT: 15.704 min Scan# 1630

Delta R.T. -0.000 min

Lab File: BN034910.D

Acq: 08 Nov 2024 16:05

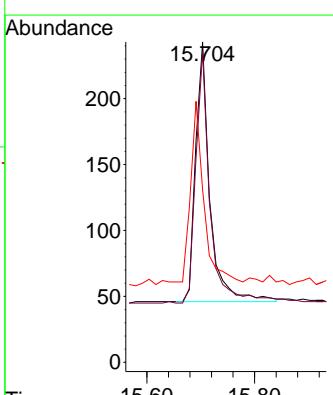
Tgt Ion:330 Resp: 363

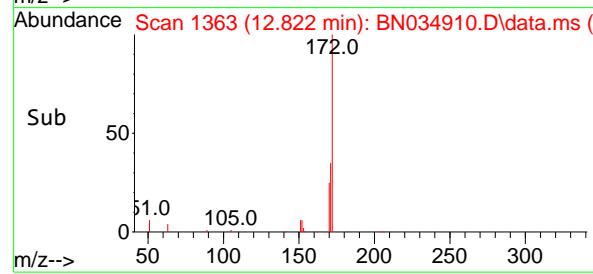
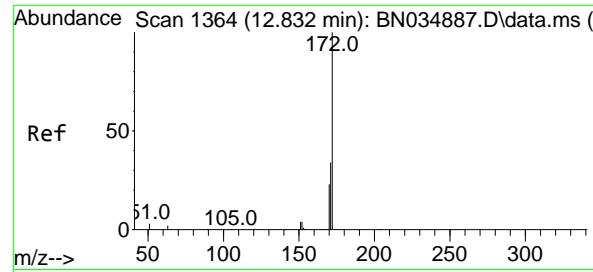
Ion Ratio Lower Upper

330 100

332 97.0 77.1 115.7

141 65.3 54.1 81.1

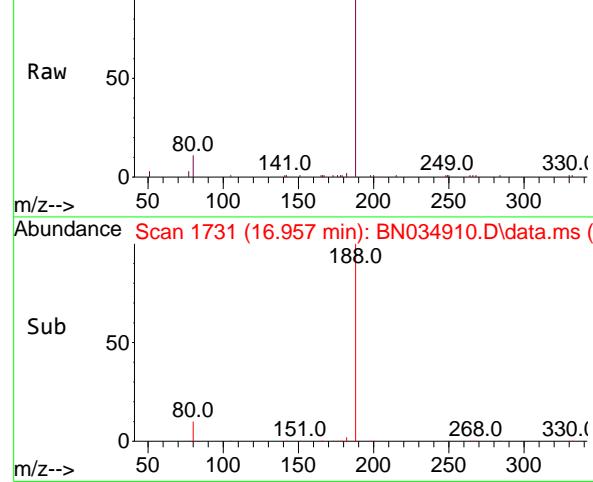
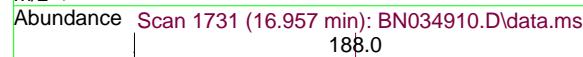
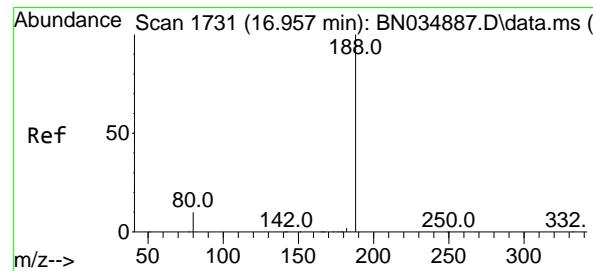
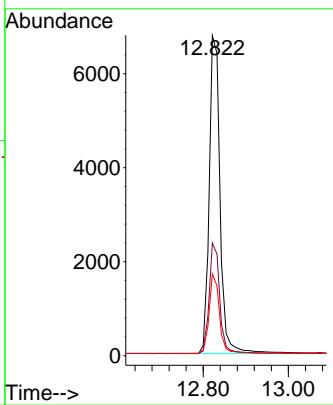




#15  
2-Fluorobiphenyl  
Concen: 0.381 ng  
RT: 12.822 min Scan# 1  
Delta R.T. -0.011 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

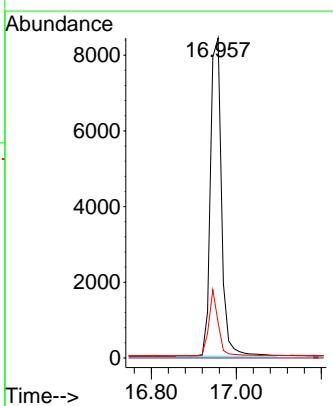
Instrument : BNA\_N  
ClientSampleId : PB164705BL

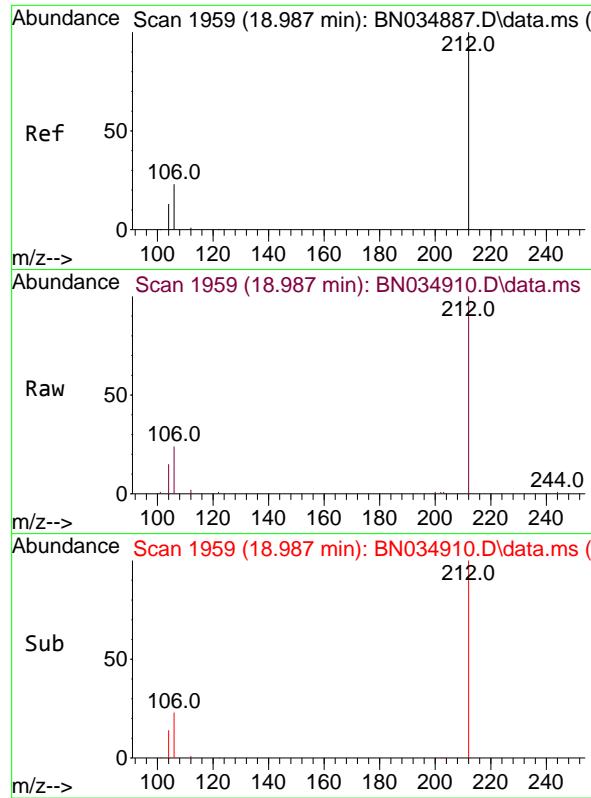
Tgt Ion:172 Resp: 11928  
Ion Ratio Lower Upper  
172 100  
171 35.2 27.9 41.9  
170 25.5 19.0 28.4



#19  
Phenanthrene-d10  
Concen: 0.400 ng  
RT: 16.957 min Scan# 1731  
Delta R.T. -0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

Tgt Ion:188 Resp: 15255  
Ion Ratio Lower Upper  
188 100  
94 0.0 0.0 0.0  
80 11.0 8.6 12.8

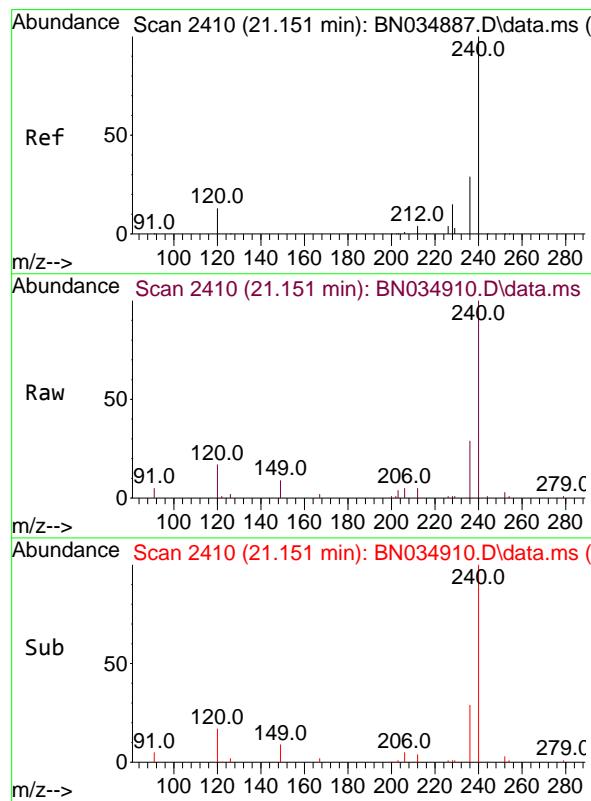
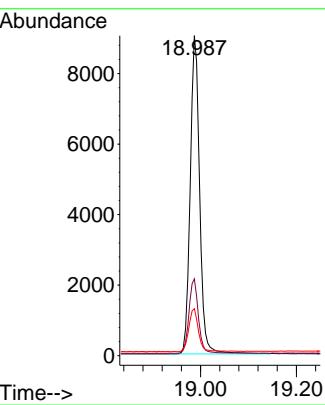




#27  
Fluoranthene-d10  
Concen: 0.359 ng  
RT: 18.987 min Scan# 1  
Delta R.T. -0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

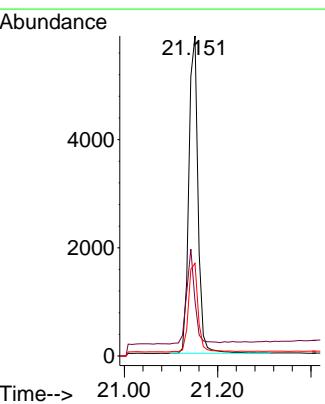
Instrument : BNA\_N  
ClientSampleId : PB164705BL

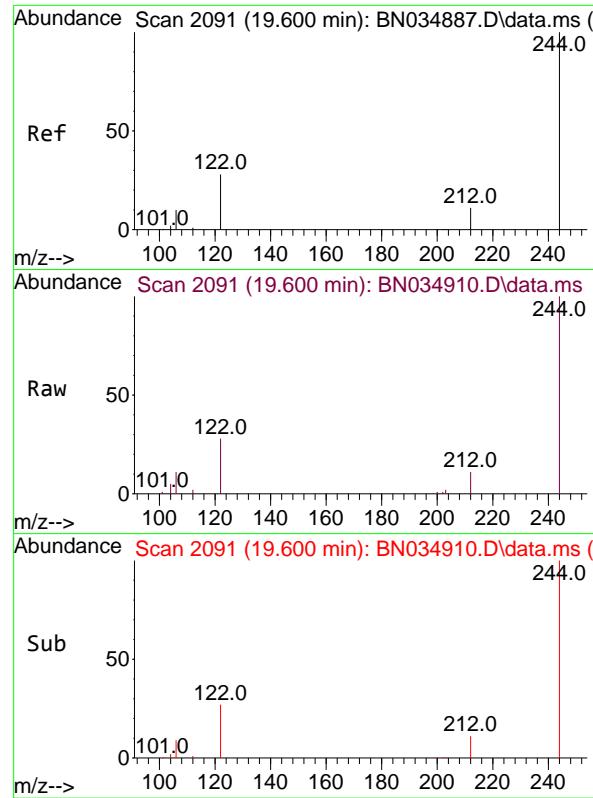
Tgt Ion:212 Resp: 12346  
Ion Ratio Lower Upper  
212 100  
106 23.4 18.2 27.4  
104 13.8 10.6 15.8



#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.151 min Scan# 2410  
Delta R.T. 0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

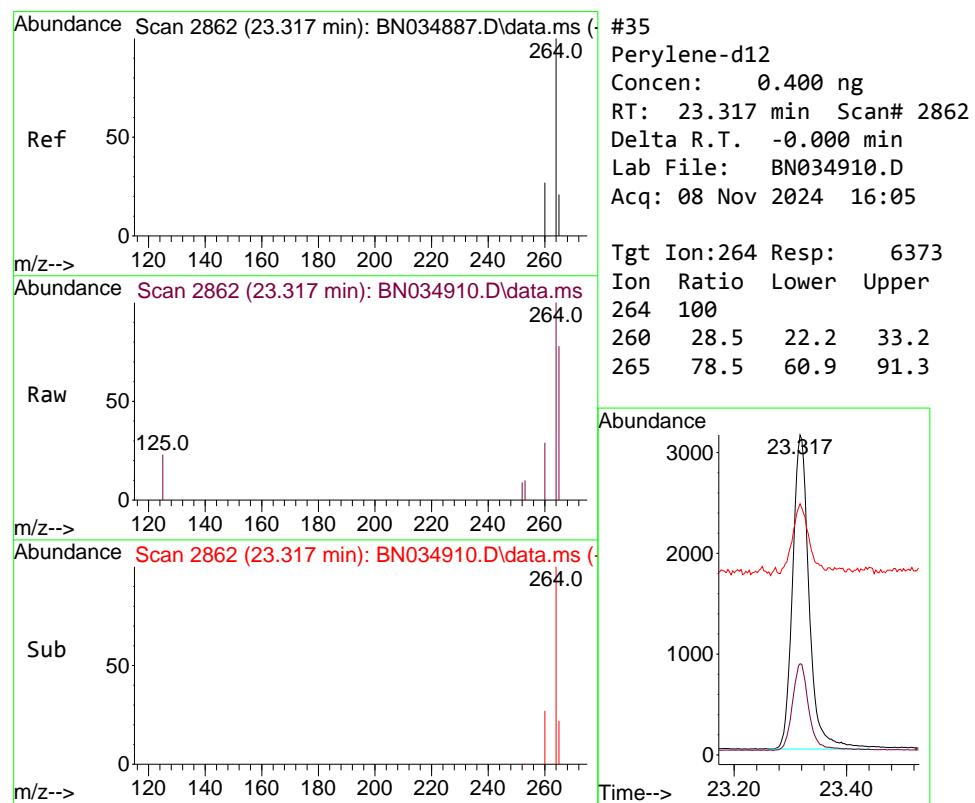
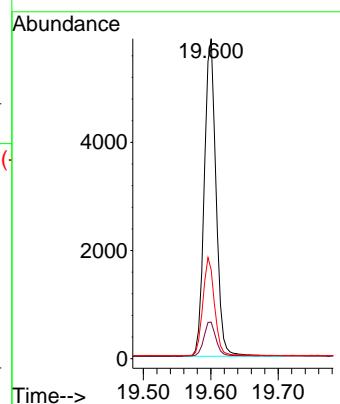
Tgt Ion:240 Resp: 8049  
Ion Ratio Lower Upper  
240 100  
120 17.1 13.8 20.8  
236 29.0 23.8 35.6





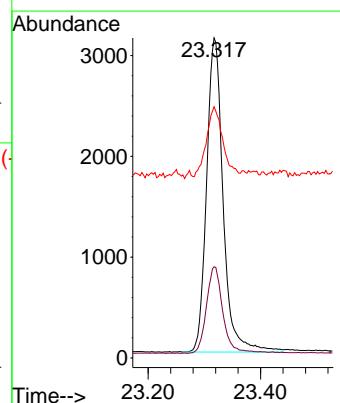
#31  
Terphenyl-d14  
Concen: 0.470 ng  
RT: 19.600 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05  
ClientSampleId : PB164705BL

Tgt Ion:244 Resp: 7087  
Ion Ratio Lower Upper  
244 100  
212 11.4 9.4 14.0  
122 27.8 23.0 34.4



#35  
Perylene-d12  
Concen: 0.400 ng  
RT: 23.317 min Scan# 2862  
Delta R.T. -0.000 min  
Lab File: BN034910.D  
Acq: 08 Nov 2024 16:05

Tgt Ion:264 Resp: 6373  
Ion Ratio Lower Upper  
264 100  
260 28.5 22.2 33.2  
265 78.5 60.9 91.3





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB164705BS			SDG No.:	P4710
Lab Sample ID:	PB164705BS			Matrix:	Water
Analytical Method:	SW8270SIM			% 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 :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034908.D	1	11/06/24 08:45	11/08/24 14:53	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.40		30 - 150		100%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		83%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	6390	7.575				
1146-65-2	Naphthalene-d8	18300	10.34				
15067-26-2	Acenaphthene-d10	8110	14.208				
1517-22-2	Phenanthrene-d10	16400	16.952				
1719-03-5	Chrysene-d12	9190	21.149				
1520-96-3	Perylene-d12	6980	23.318				

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\BN110824\  
 Data File : BN034908.D  
 Acq On : 08 Nov 2024 14:53  
 Operator : RC/JU  
 Sample : PB164705BS  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BS

Quant Time: Nov 08 15:44:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

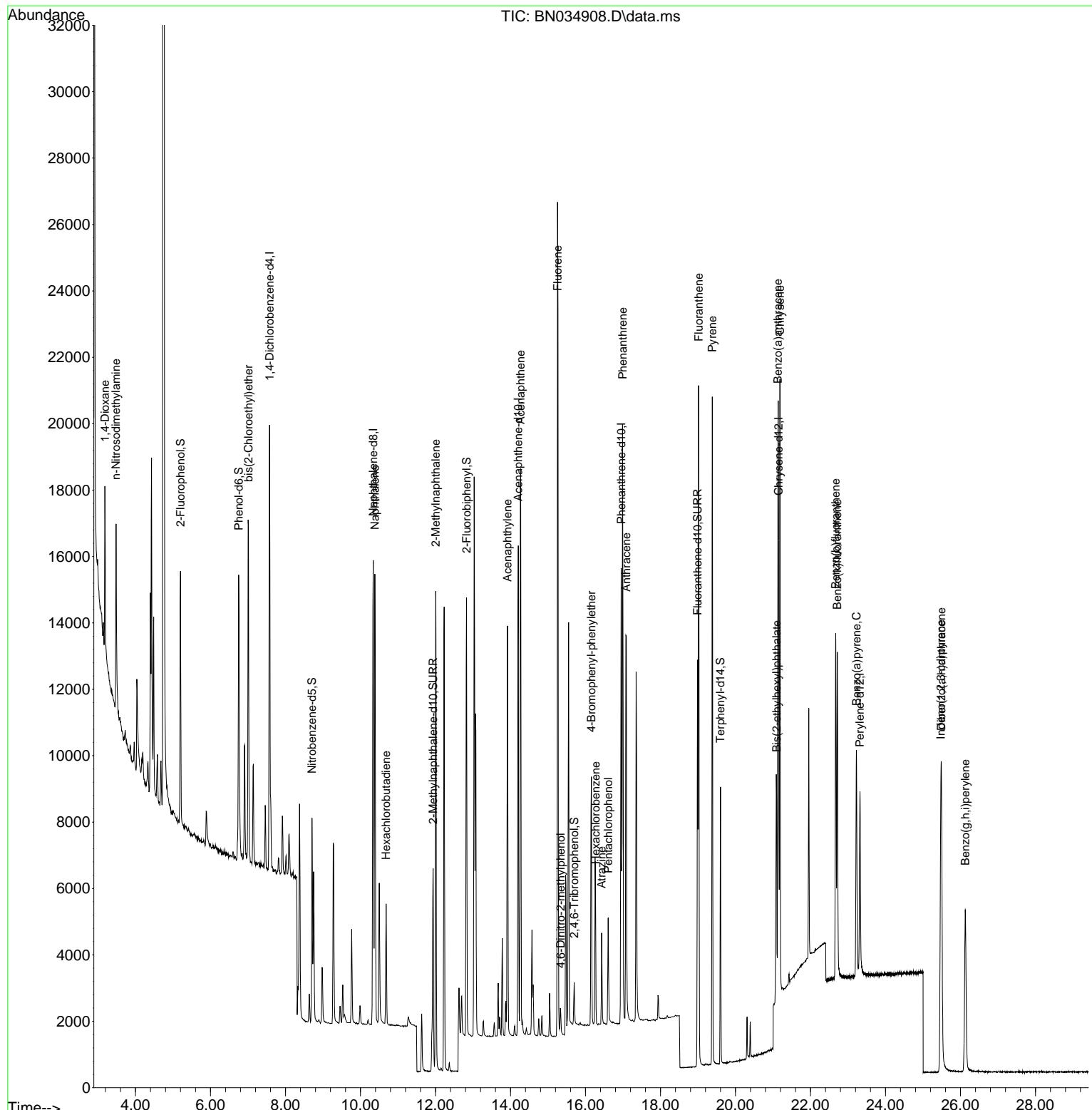
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	6394	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	18264	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	8109	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	16416	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	9189	0.400	ng	0.00
35) Perylene-d12	23.318	264	6982	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	5648	0.317	ng	0.00
5) Phenol-d6	6.752	99	7497	0.317	ng	0.00
8) Nitrobenzene-d5	8.707	82	4716	0.331	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	9978	0.401	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	604	0.293	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	11656	0.340	ng	0.00
27) Fluoranthene-d10	18.990	212	12060	0.326	ng	0.00
31) Terphenyl-d14	19.598	244	6553	0.381	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	2332	0.289	ng	# 51
3) n-Nitrosodimethylamine	3.480	42	3760	0.345	ng	# 96
6) bis(2-Chloroethyl)ether	7.012	93	7060	0.346	ng	99
9) Naphthalene	10.383	128	17084	0.337	ng	99
10) Hexachlorobutadiene	10.682	225	2652	0.328	ng	# 98
12) 2-Methylnaphthalene	12.007	142	10178	0.328	ng	98
16) Acenaphthylene	13.919	152	13375	0.342	ng	99
17) Acenaphthene	14.272	154	9069	0.335	ng	98
18) Fluorene	15.255	166	10991	0.326	ng	100
20) 4,6-Dinitro-2-methylph...	15.341	198	483	0.338	ng	# 57
21) 4-Bromophenyl-phenylether	16.157	248	2752	0.315	ng	# 90
22) Hexachlorobenzene	16.269	284	3487	0.331	ng	98
23) Atrazine	16.431	200	2010	0.317	ng	96
24) Pentachlorophenol	16.604	266	1431	0.528	ng	98
25) Phenanthrene	16.989	178	17543	0.348	ng	100
26) Anthracene	17.088	178	14979	0.345	ng	100
28) Fluoranthene	19.018	202	16938	0.320	ng	99
30) Pyrene	19.380	202	16822	0.362	ng	100
32) Benzo(a)anthracene	21.131	228	12522	0.350	ng	99
33) Chrysene	21.185	228	14069	0.371	ng	98
34) Bis(2-ethylhexyl)phtha...	21.095	149	6022	0.293	ng	99
36) Indeno(1,2,3-cd)pyrene	25.476	276	10522	0.338	ng	100
37) Benzo(b)fluoranthene	22.672	252	11571	0.377	ng	98
38) Benzo(k)fluoranthene	22.716	252	11522	0.361	ng	99
39) Benzo(a)pyrene	23.225	252	9466	0.389	ng	98
40) Dibenzo(a,h)anthracene	25.491	278	8077	0.336	ng	99
41) Benzo(g,h,i)perylene	26.128	276	8607	0.337	ng	98

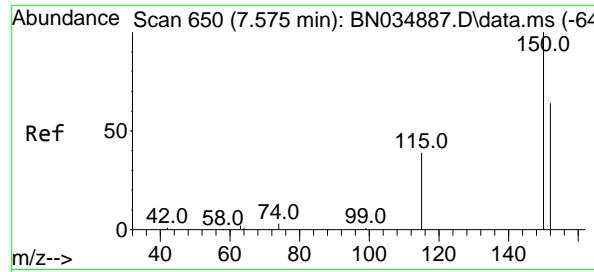
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034908.D  
 Acq On : 08 Nov 2024 14:53  
 Operator : RC/JU  
 Sample : PB164705BS  
 Misc :  
 ALS Vial : 12 Sample Multiplier: 1

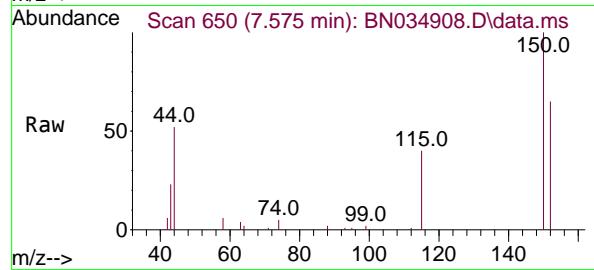
Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BS

Quant Time: Nov 08 15:44:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

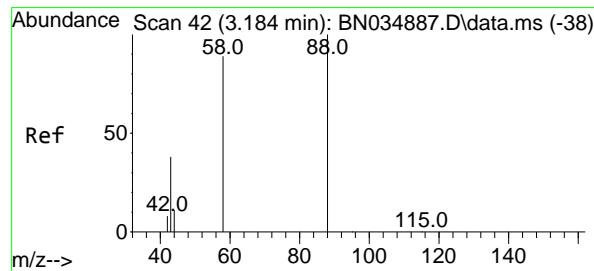
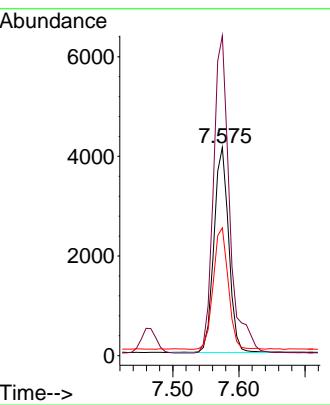
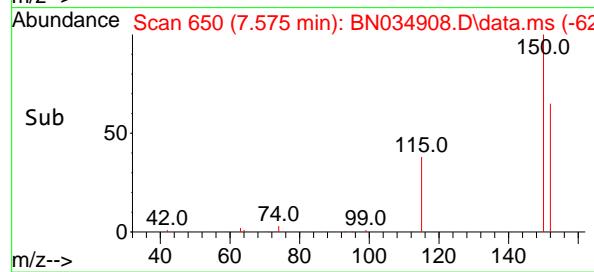




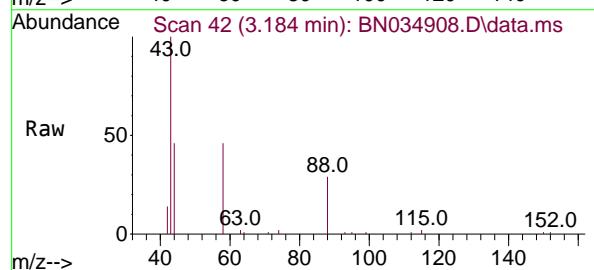
#1  
1,4-Dichlorobenzene-d4  
Concen: 0.400 ng  
RT: 7.575 min Scan# 6  
Instrument :  
Delta R.T. -0.000 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53



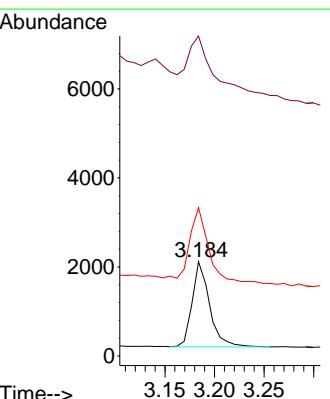
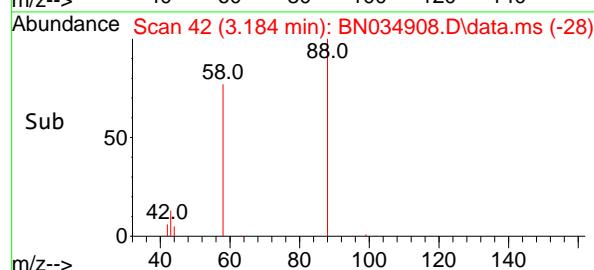
Tgt Ion:152 Resp: 6394  
Ion Ratio Lower Upper  
152 100  
150 153.6 124.4 186.6  
115 61.4 50.5 75.7

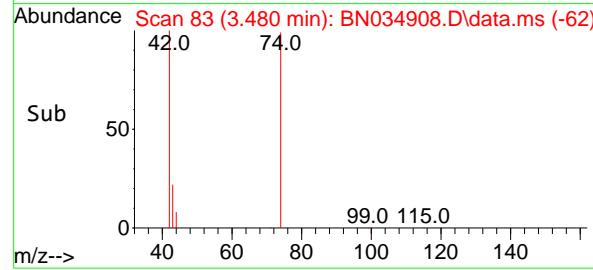
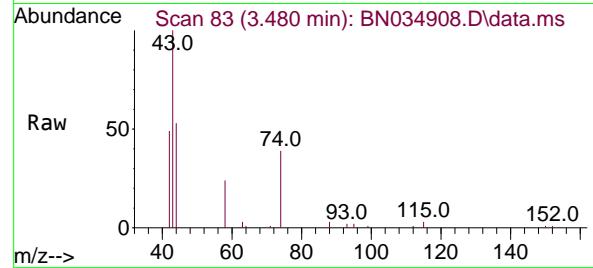
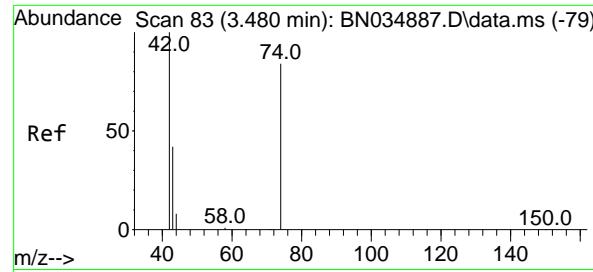


#2  
1,4-Dioxane  
Concen: 0.289 ng  
RT: 3.184 min Scan# 42  
Delta R.T. 0.000 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53



Tgt Ion: 88 Resp: 2332  
Ion Ratio Lower Upper  
88 100  
43 102.7 28.2 42.2#  
58 102.9 67.1 100.7#





#3

n-Nitrosodimethylamine

Concen: 0.345 ng

RT: 3.480 min Scan# 8

Instrument :

BNA\_N

Delta R.T. 0.000 min

ClientSampleId :

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

PB164705BS

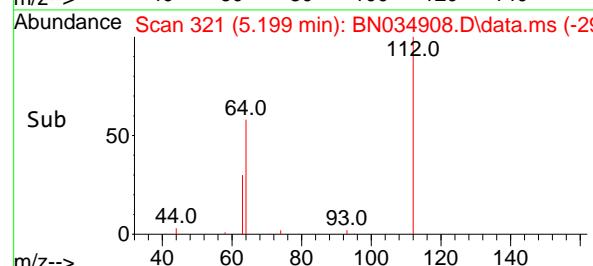
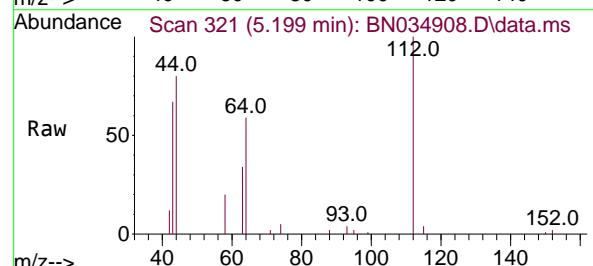
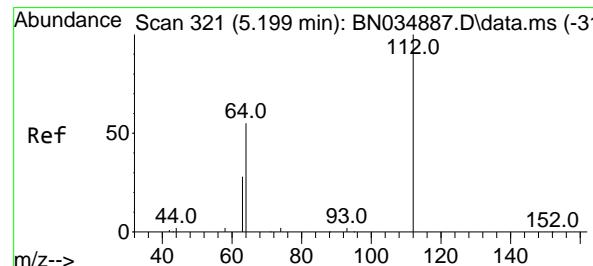
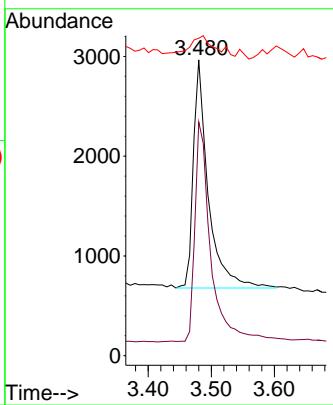
Tgt Ion: 42 Resp: 3760

Ion Ratio Lower Upper

42 100

74 101.3 83.4 125.2

44 15.7 8.6 12.8#



#4

2-Fluorophenol

Concen: 0.317 ng

RT: 5.199 min Scan# 321

Delta R.T. 0.000 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

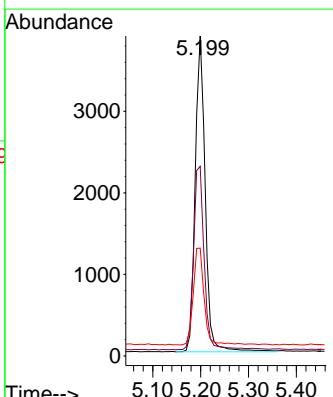
Tgt Ion: 112 Resp: 5648

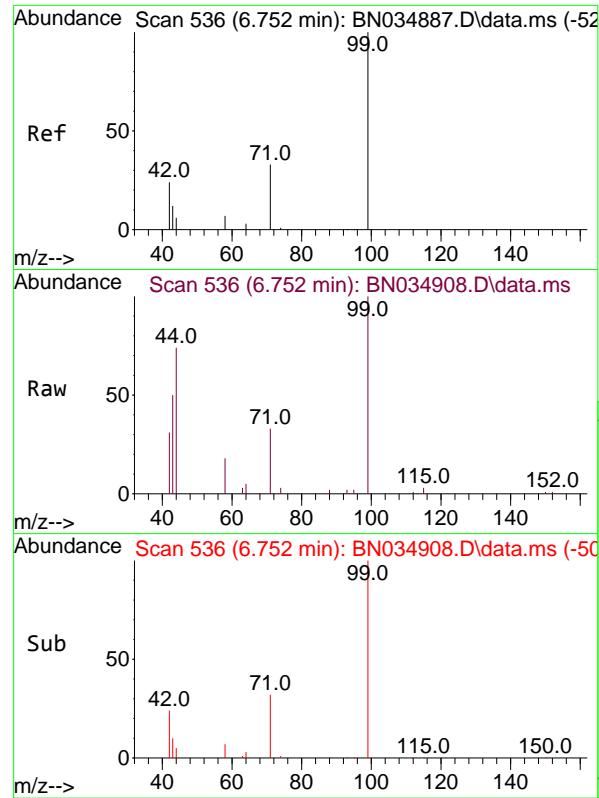
Ion Ratio Lower Upper

112 100

64 61.0 49.6 74.4

63 32.6 26.3 39.5

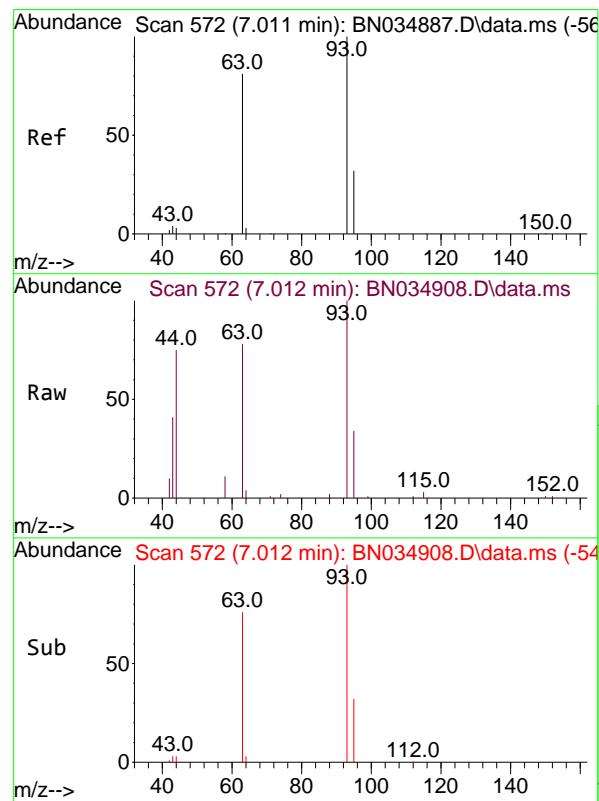
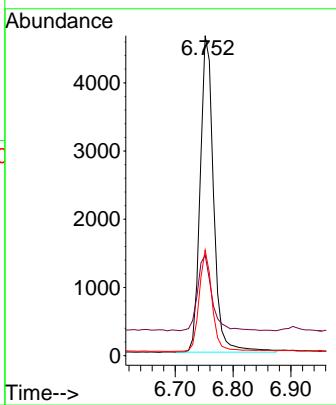




#5  
 Phenol-d6  
 Concen: 0.317 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

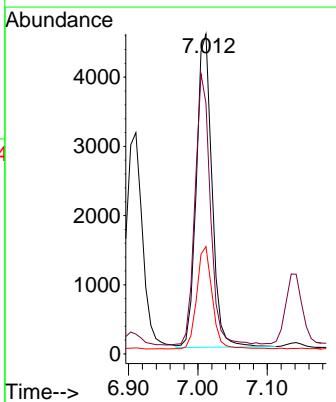
Instrument : BNA\_N  
 ClientSampleId : PB164705BS

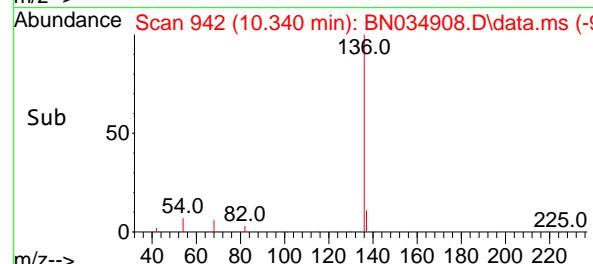
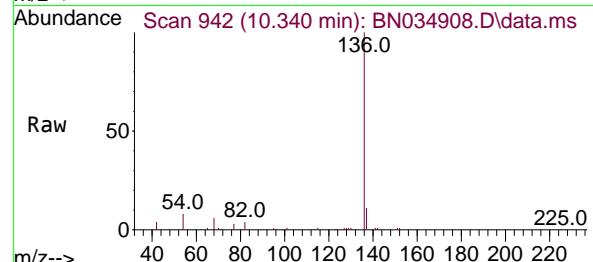
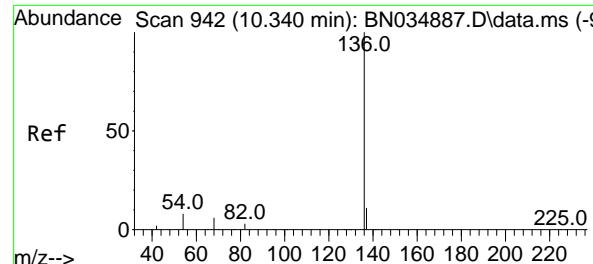
Tgt Ion: 99 Resp: 7497  
 Ion Ratio Lower Upper  
 99 100  
 42 26.2 20.2 30.2  
 71 31.2 25.4 38.0



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.346 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

Tgt Ion: 93 Resp: 7060  
 Ion Ratio Lower Upper  
 93 100  
 63 85.2 67.5 101.3  
 95 32.5 25.7 38.5



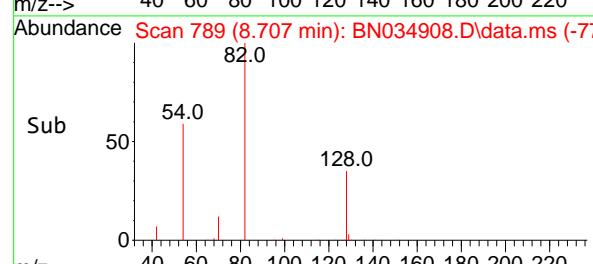
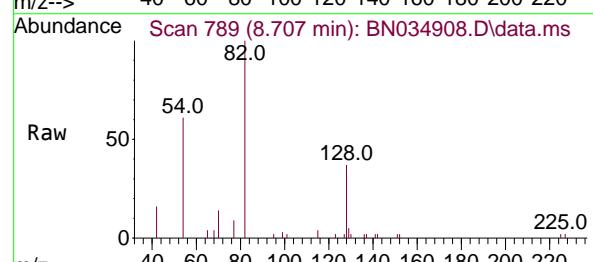
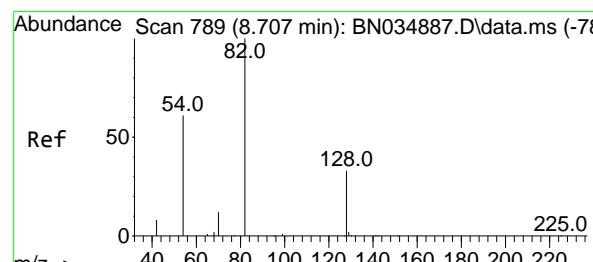
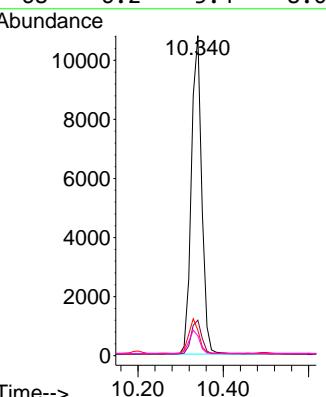


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BS

Tgt Ion:136 Resp: 18264

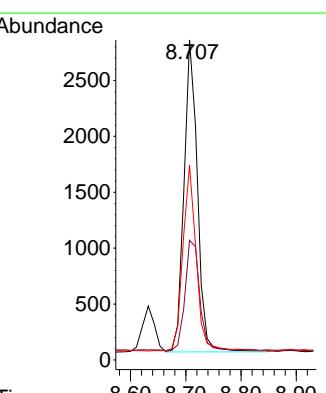
Ion	Ratio	Lower	Upper
136	100		
137	11.1	8.9	13.3
54	8.0	6.9	10.3
68	6.2	5.4	8.0

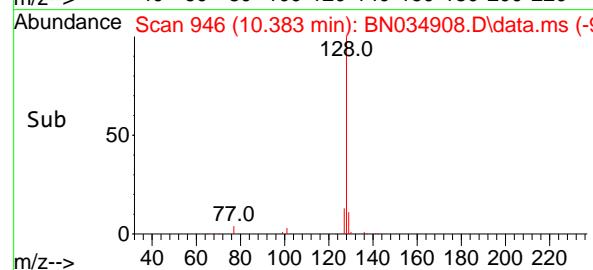
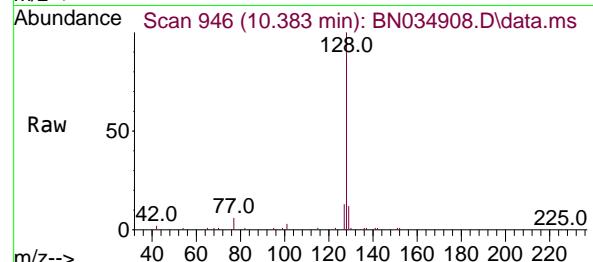
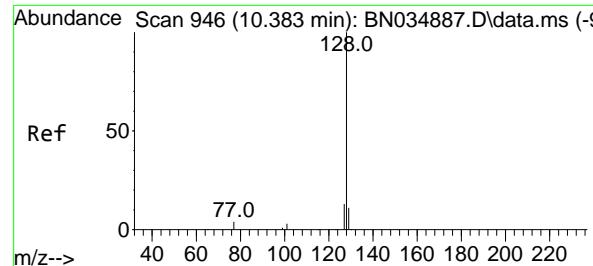


#8  
 Nitrobenzene-d5  
 Concen: 0.331 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

Tgt Ion: 82 Resp: 4716

Ion	Ratio	Lower	Upper
82	100		
128	37.4	28.1	42.1
54	60.9	49.8	74.6





#9

Naphthalene

Concen: 0.337 ng

RT: 10.383 min Scan# 9

Delta R.T. 0.000 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

Instrument :

BNA\_N

ClientSampleId :

PB164705BS

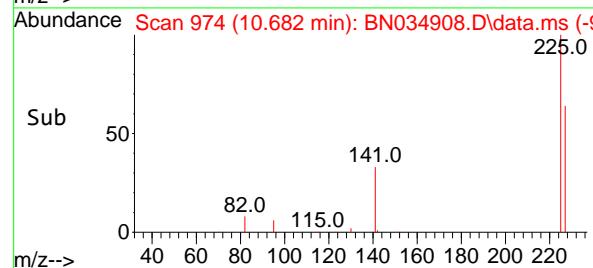
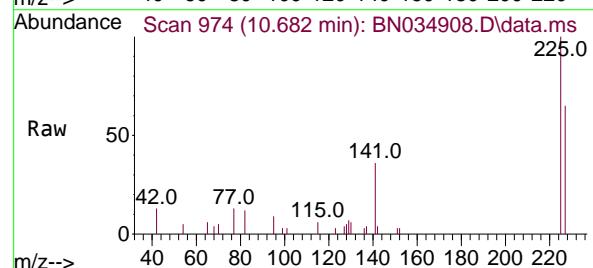
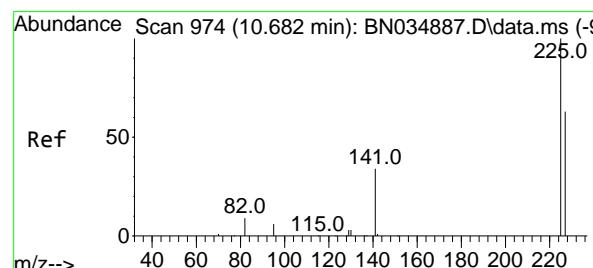
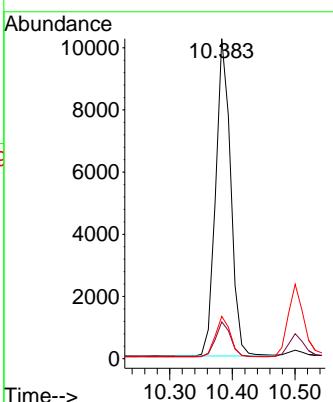
Tgt Ion:128 Resp: 17084

Ion Ratio Lower Upper

128 100

129 11.5 9.0 13.4

127 13.2 10.8 16.2



#10

Hexachlorobutadiene

Concen: 0.328 ng

RT: 10.682 min Scan# 974

Delta R.T. 0.000 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

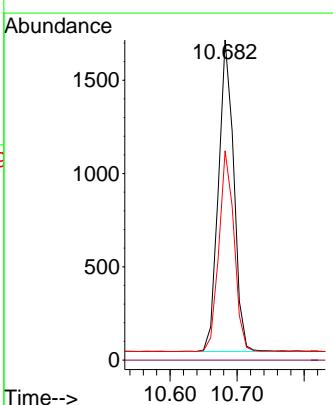
Tgt Ion:225 Resp: 2652

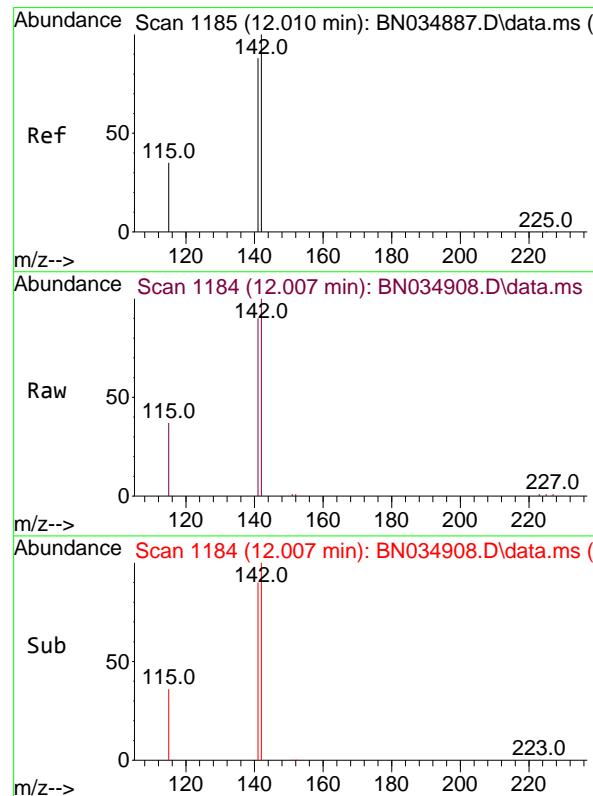
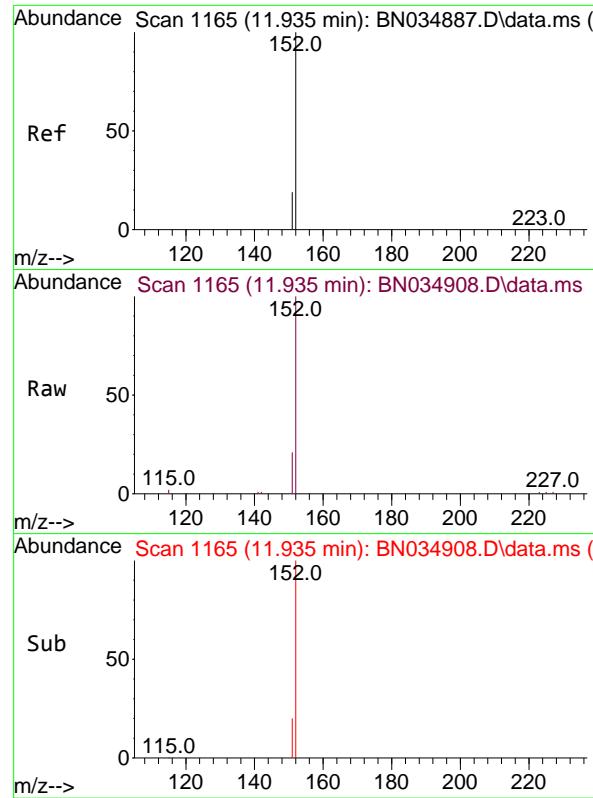
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 63.8 52.0 78.0

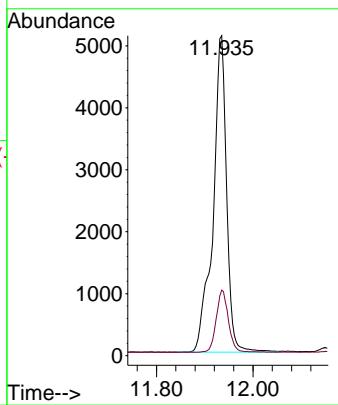




#11  
2-Methylnaphthalene-d10  
Concen: 0.401 ng  
RT: 11.935 min Scan# 1165  
Delta R.T. 0.000 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

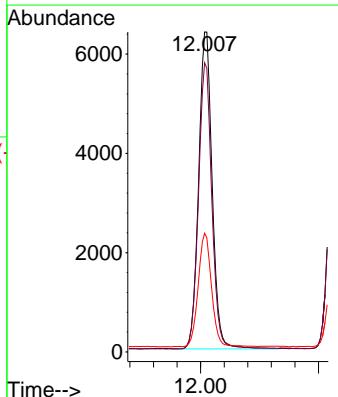
Instrument :  
BNA\_N  
ClientSampleId :  
PB164705BS

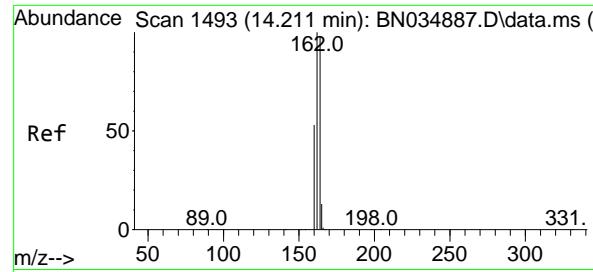
Tgt Ion:152 Resp: 9978  
Ion Ratio Lower Upper  
152 100  
151 17.6 17.1 25.7



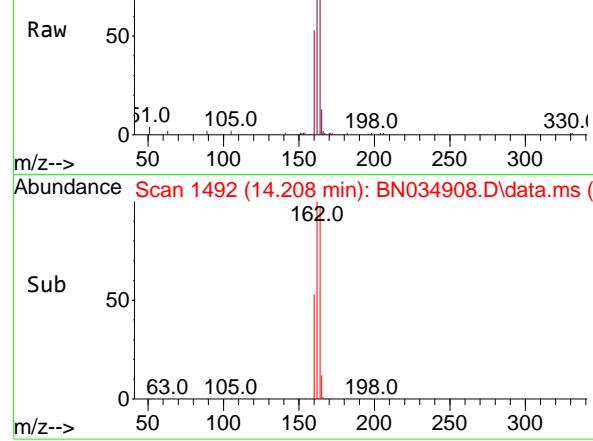
#12  
2-Methylnaphthalene  
Concen: 0.328 ng  
RT: 12.007 min Scan# 1184  
Delta R.T. -0.004 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:142 Resp: 10178  
Ion Ratio Lower Upper  
142 100  
141 90.3 70.5 105.7  
115 37.1 29.4 44.2

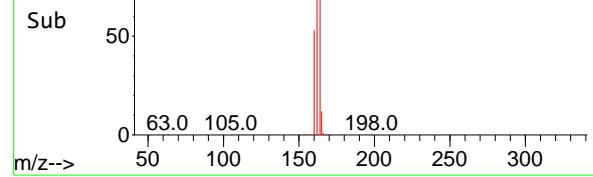




Abundance Scan 1492 (14.208 min): BN034908.D\data.ms (-)



Abundance Scan 1492 (14.208 min): BN034908.D\data.ms (-)



#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.208 min Scan# 1

Delta R.T. -0.003 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

Instrument :

BNA\_N

ClientSampleId :

PB164705BS

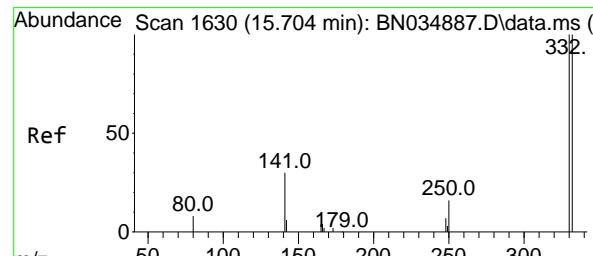
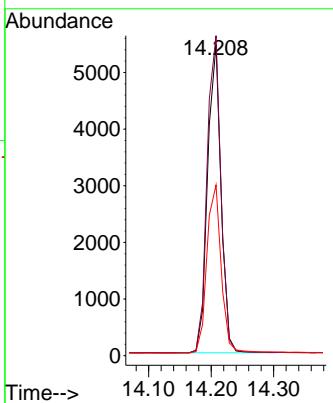
Tgt Ion:164 Resp: 8109

Ion Ratio Lower Upper

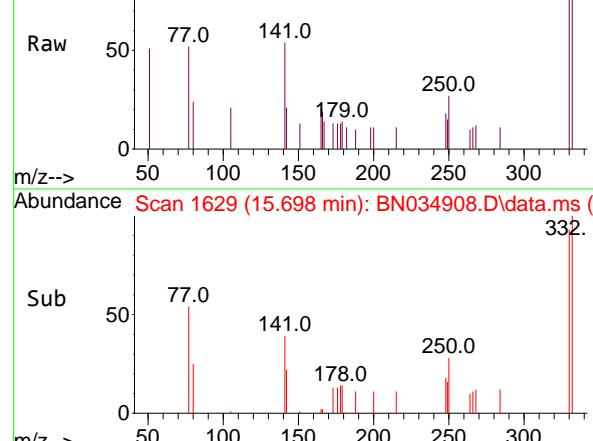
164 100

162 102.8 81.9 122.9

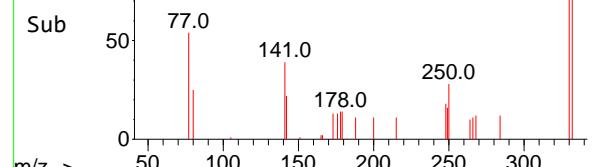
160 54.8 43.5 65.3



Abundance Scan 1629 (15.698 min): BN034908.D\data.ms (-)



Abundance Scan 1629 (15.698 min): BN034908.D\data.ms (-)



#14

2,4,6-Tribromophenol

Concen: 0.293 ng

RT: 15.698 min Scan# 1629

Delta R.T. -0.006 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

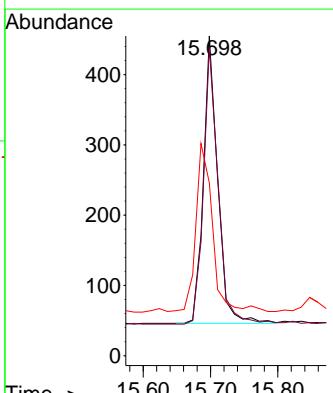
Tgt Ion:330 Resp: 604

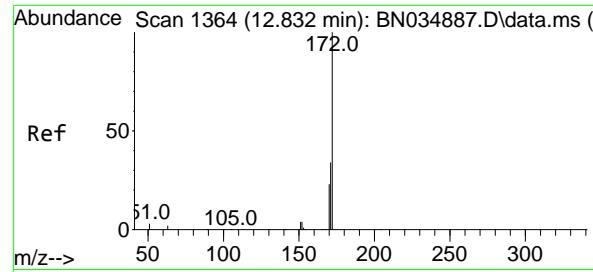
Ion Ratio Lower Upper

330 100

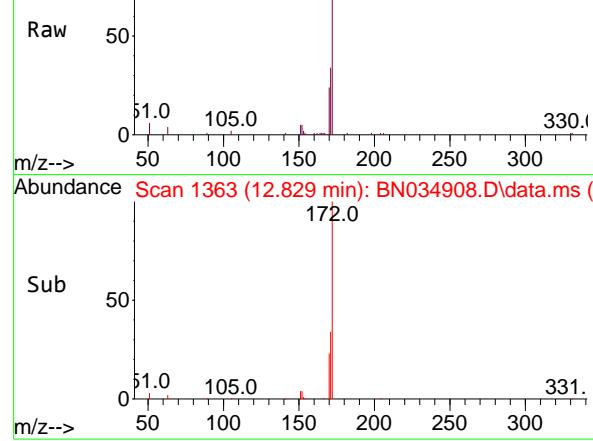
332 99.3 77.1 115.7

141 67.1 54.1 81.1





Abundance Scan 1363 (12.829 min): BN034908.D\data.ms (-)



#15

2-Fluorobiphenyl

Concen: 0.340 ng

RT: 12.829 min Scan# 1

Delta R.T. -0.004 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

Instrument :

BNA\_N

ClientSampleId :

PB164705BS

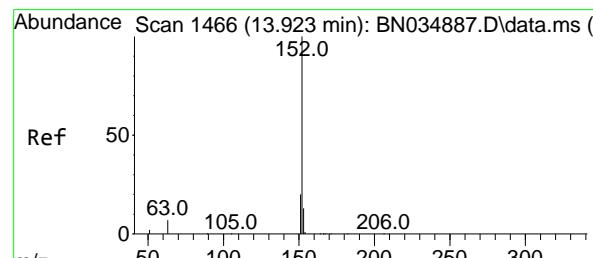
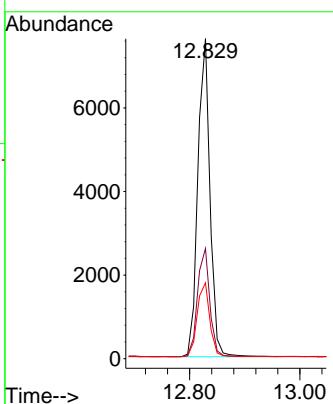
Tgt Ion:172 Resp: 11656

Ion Ratio Lower Upper

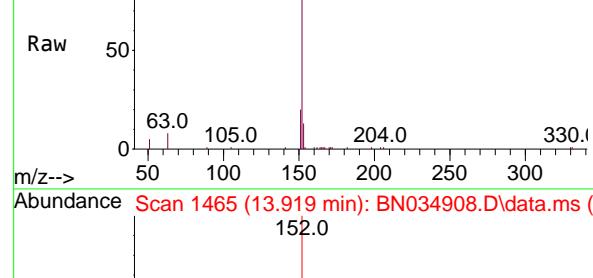
172 100

171 34.5 27.9 41.9

170 23.7 19.0 28.4



Abundance Scan 1465 (13.919 min): BN034908.D\data.ms (-)



#16

Acenaphthylene

Concen: 0.342 ng

RT: 13.919 min Scan# 1465

Delta R.T. -0.004 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

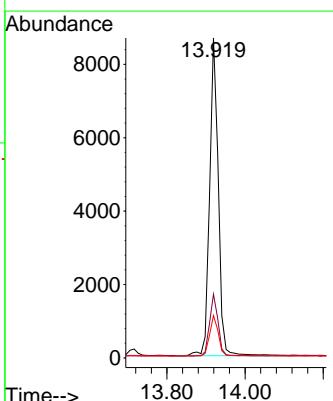
Tgt Ion:152 Resp: 13375

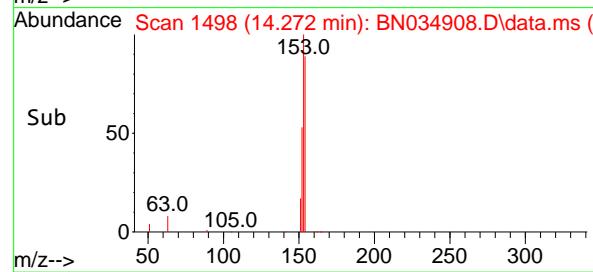
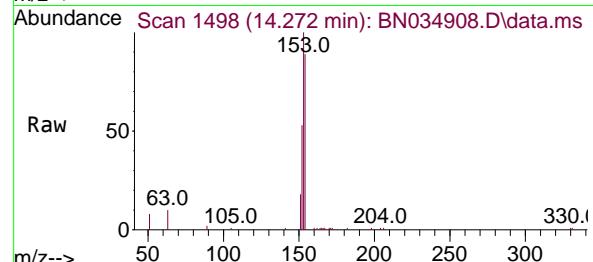
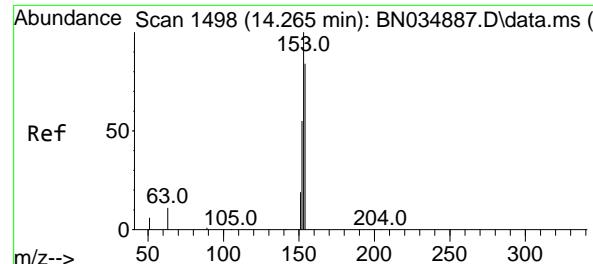
Ion Ratio Lower Upper

152 100

151 19.4 15.2 22.8

153 12.9 10.4 15.6





#17

Acenaphthene

Concen: 0.335 ng

RT: 14.272 min Scan# 1

Delta R.T. 0.007 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

Instrument :

BNA\_N

ClientSampleId :

PB164705BS

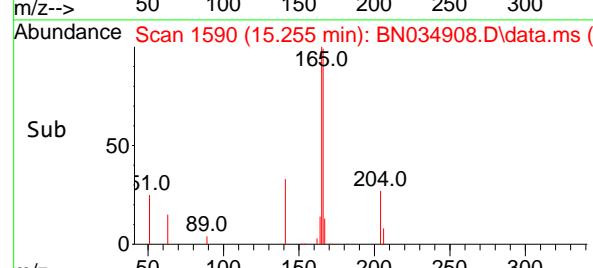
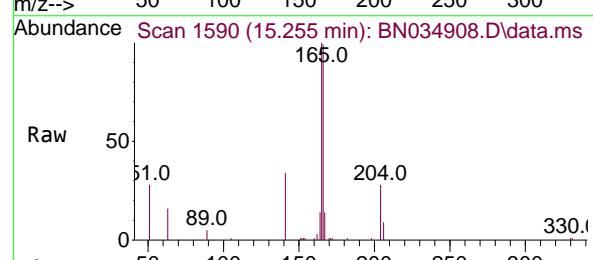
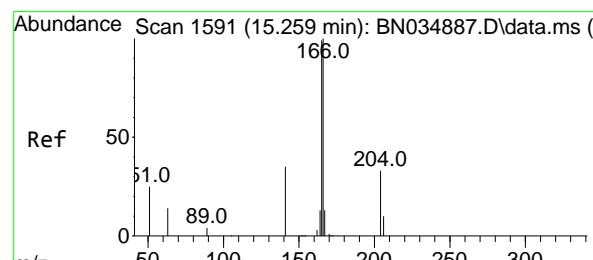
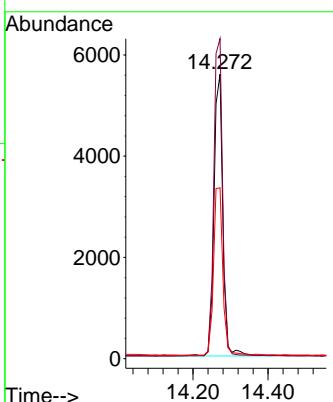
Tgt Ion:154 Resp: 9069

Ion Ratio Lower Upper

154 100

153 112.7 92.2 138.2

152 63.1 51.1 76.7



#18

Fluorene

Concen: 0.326 ng

RT: 15.255 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

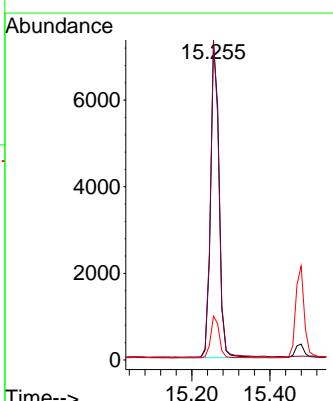
Tgt Ion:166 Resp: 10991

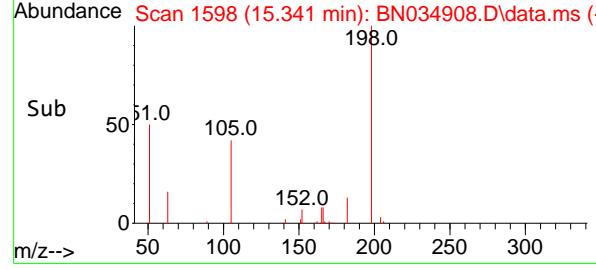
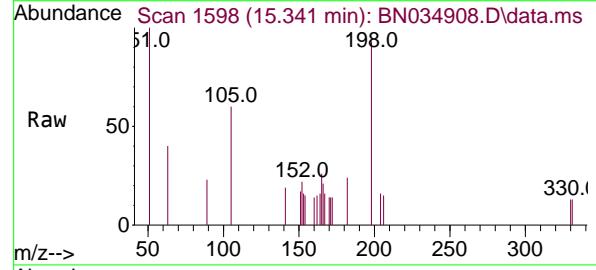
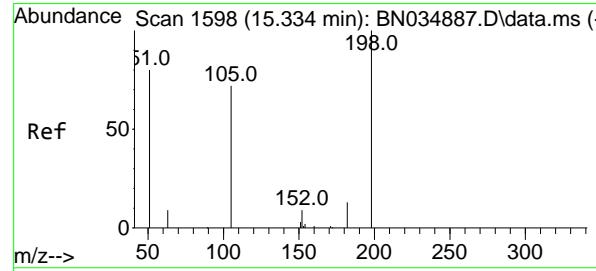
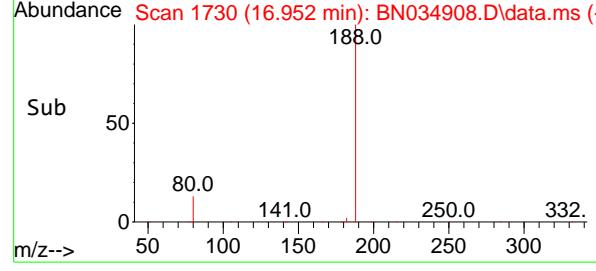
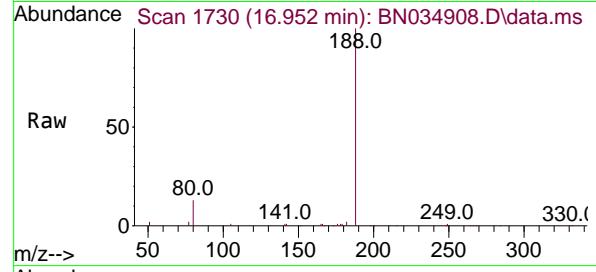
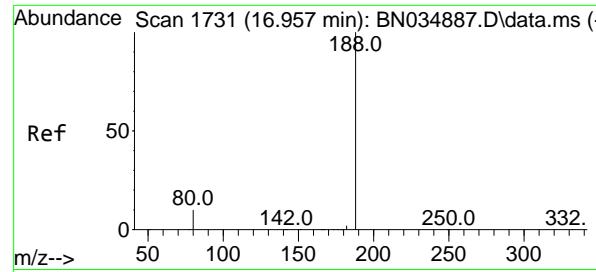
Ion Ratio Lower Upper

166 100

165 99.2 79.5 119.3

167 13.4 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.952 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

Instrument :

BNA\_N

ClientSampleId :

PB164705BS

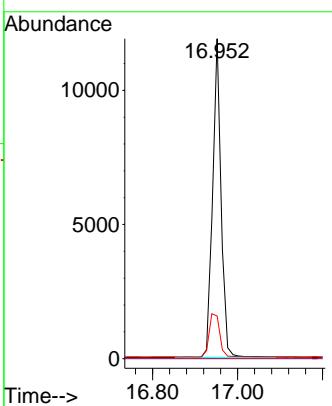
Tgt Ion:188 Resp: 16416

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.4 8.6 12.8#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.338 ng

RT: 15.341 min Scan# 1598

Delta R.T. 0.007 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

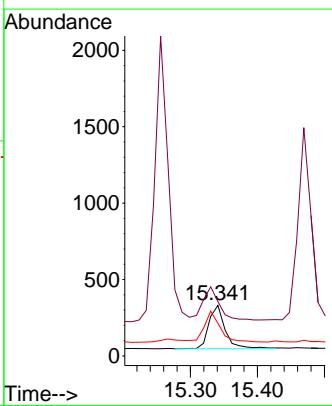
Tgt Ion:198 Resp: 483

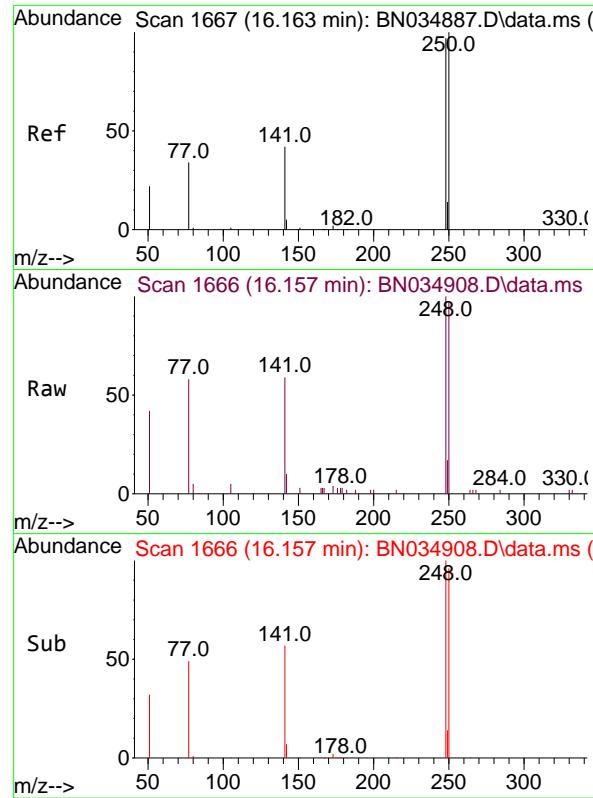
Ion Ratio Lower Upper

198 100

51 107.6 141.8 212.8#

105 64.4 75.6 113.4#

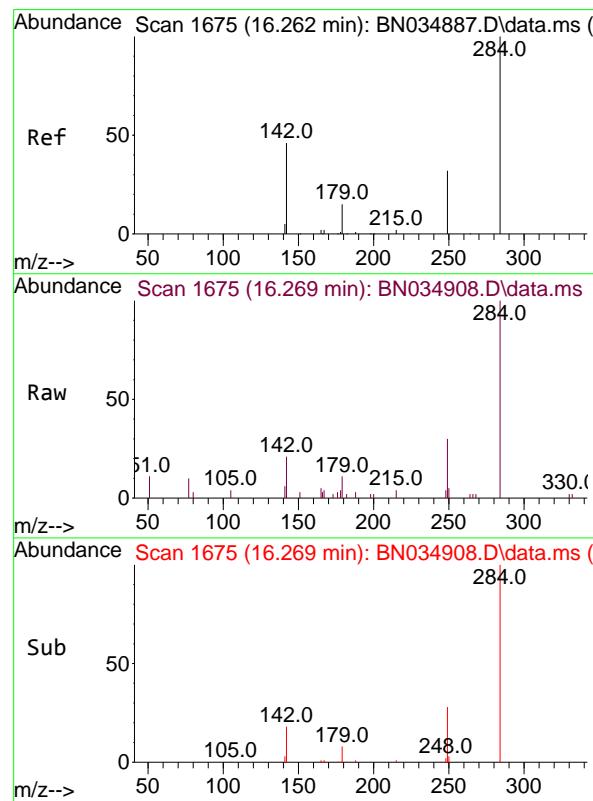
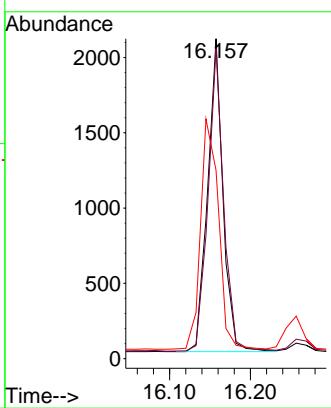




#21  
4-Bromophenyl-phenylether  
Concen: 0.315 ng  
RT: 16.157 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

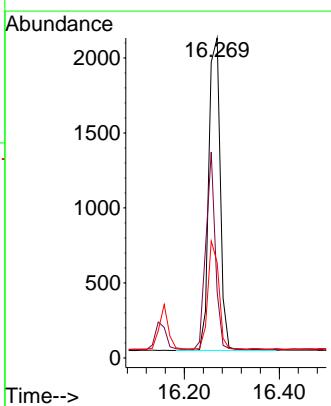
Instrument : BNA\_N  
ClientSampleId : PB164705BS

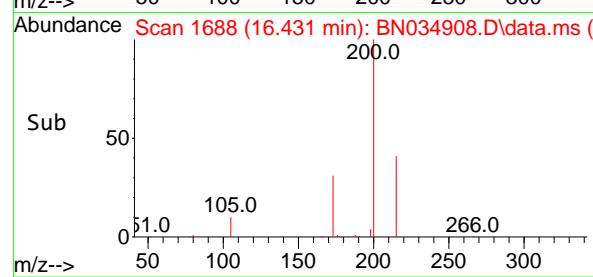
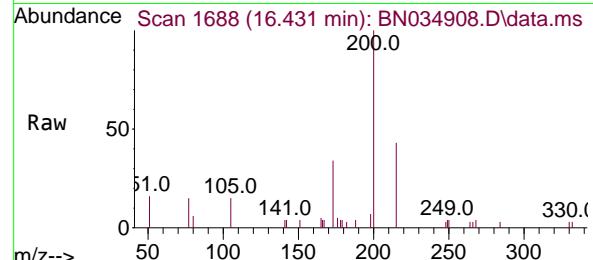
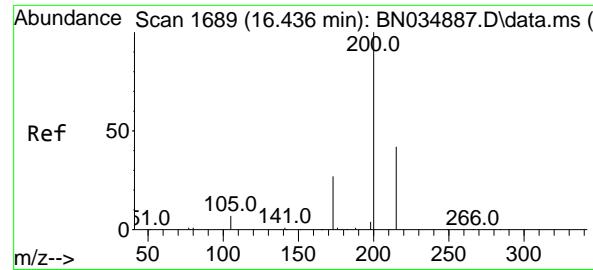
Tgt Ion:248 Resp: 2752  
Ion Ratio Lower Upper  
248 100  
250 96.8 82.2 123.4  
141 58.8 36.2 54.2#



#22  
Hexachlorobenzene  
Concen: 0.331 ng  
RT: 16.269 min Scan# 1675  
Delta R.T. 0.007 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:284 Resp: 3487  
Ion Ratio Lower Upper  
284 100  
142 52.5 43.4 65.2  
249 33.0 25.8 38.6





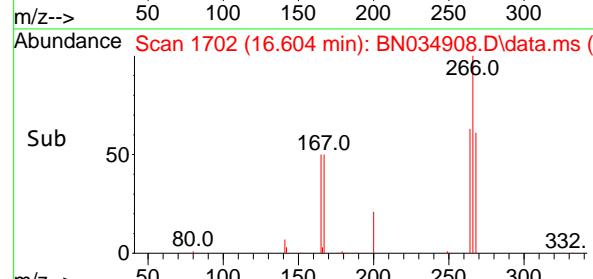
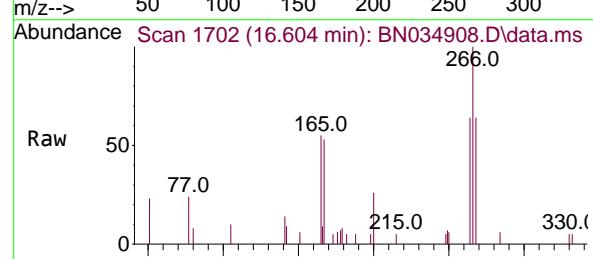
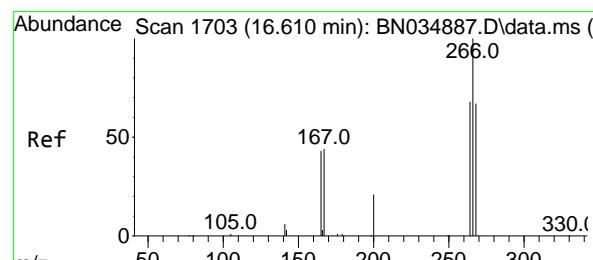
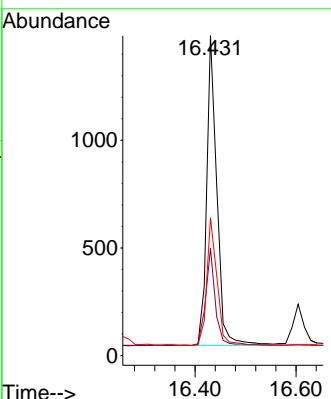
#23

Atrazine  
Concen: 0.317 ng  
RT: 16.431 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Instrument :  
BNA\_N  
ClientSampleId :  
PB164705BS

Tgt Ion:200 Resp: 2010

Ion	Ratio	Lower	Upper
200	100		
173	33.5	23.4	35.2
215	43.1	35.4	53.0

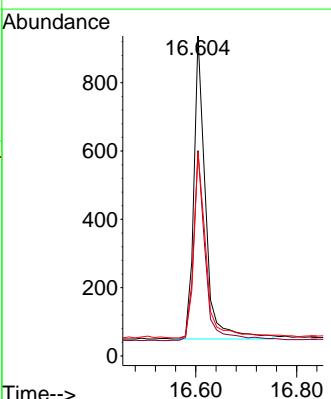


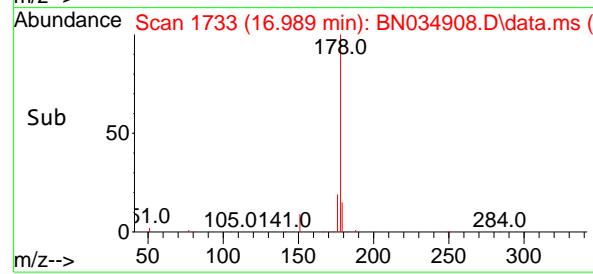
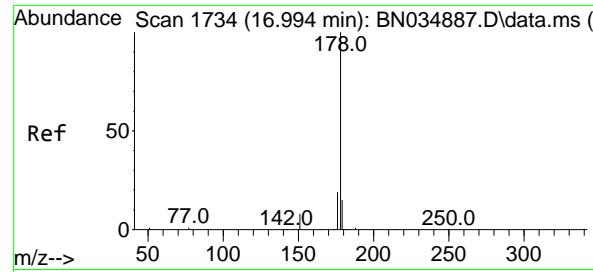
#24

Pentachlorophenol  
Concen: 0.528 ng  
RT: 16.604 min Scan# 1702  
Delta R.T. -0.006 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:266 Resp: 1431

Ion	Ratio	Lower	Upper
266	100		
264	63.2	51.3	76.9
268	63.9	53.0	79.6

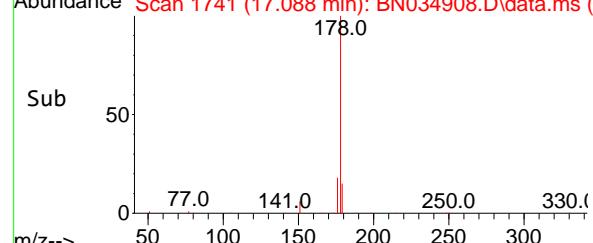
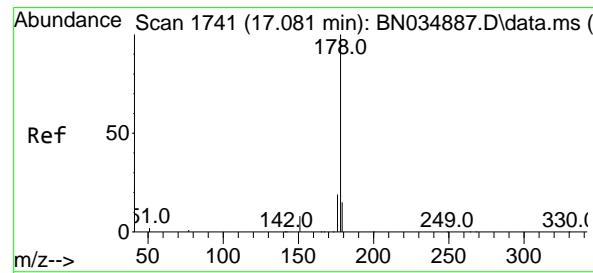
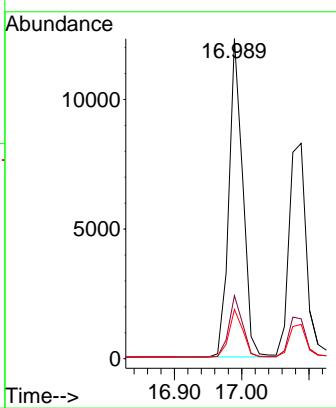




#25  
Phenanthrene  
Concen: 0.348 ng  
RT: 16.989 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

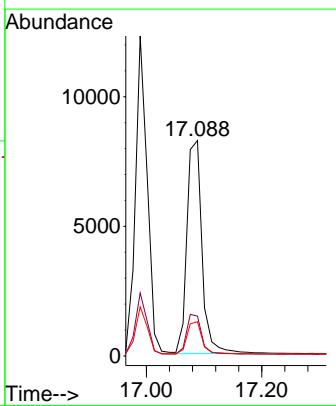
Instrument : BNA\_N  
ClientSampleId : PB164705BS

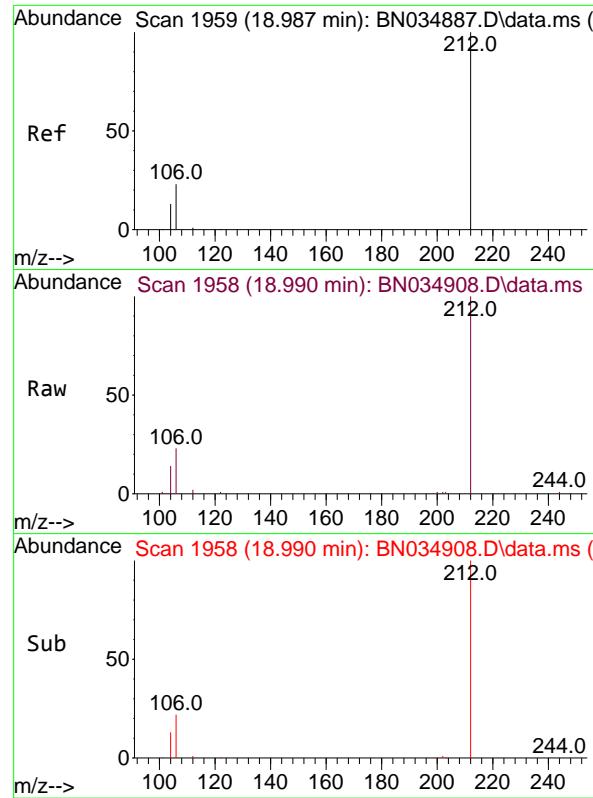
Tgt Ion:178 Resp: 17543  
Ion Ratio Lower Upper  
178 100  
176 19.3 15.5 23.3  
179 15.1 12.2 18.2



#26  
Anthracene  
Concen: 0.345 ng  
RT: 17.088 min Scan# 1741  
Delta R.T. 0.007 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:178 Resp: 14979  
Ion Ratio Lower Upper  
178 100  
176 18.8 15.0 22.6  
179 15.2 12.1 18.1

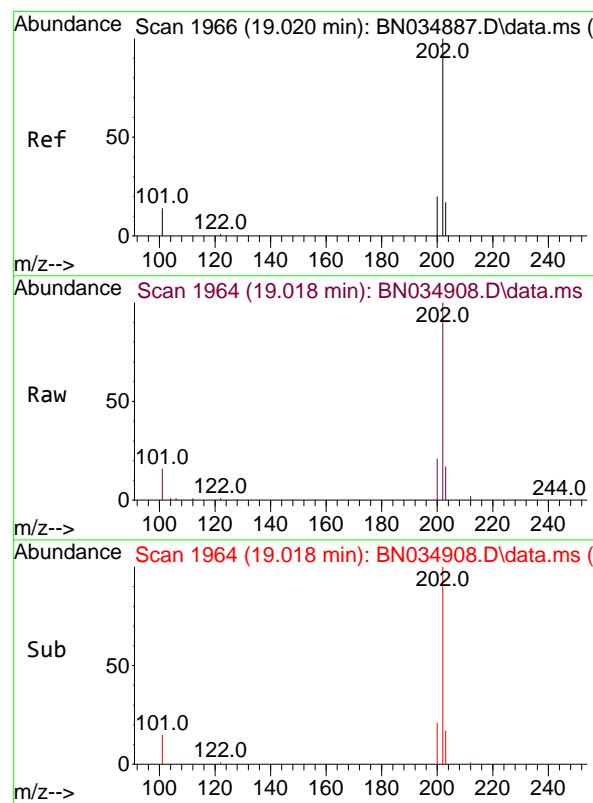
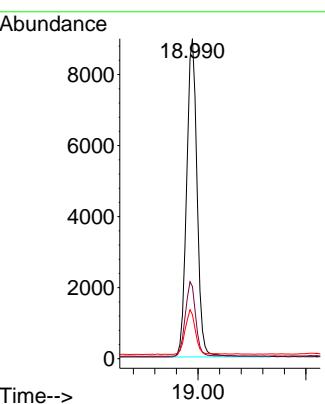




#27  
 Fluoranthene-d10  
 Concen: 0.326 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

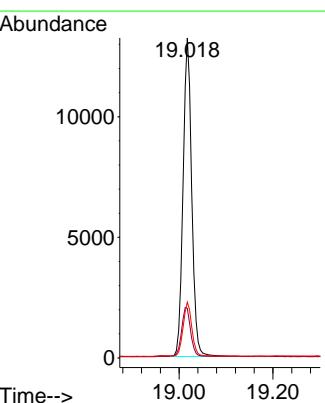
Instrument : BNA\_N  
 ClientSampleId : PB164705BS

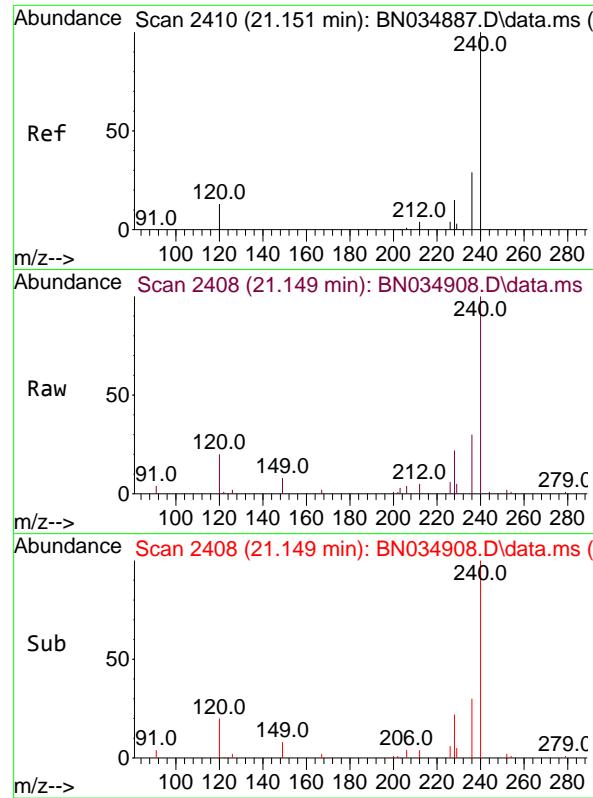
Tgt Ion:212 Resp: 12060  
 Ion Ratio Lower Upper  
 212 100  
 106 23.3 18.2 27.4  
 104 13.7 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.320 ng  
 RT: 19.018 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

Tgt Ion:202 Resp: 16938  
 Ion Ratio Lower Upper  
 202 100  
 101 16.3 12.7 19.1  
 203 16.9 13.7 20.5

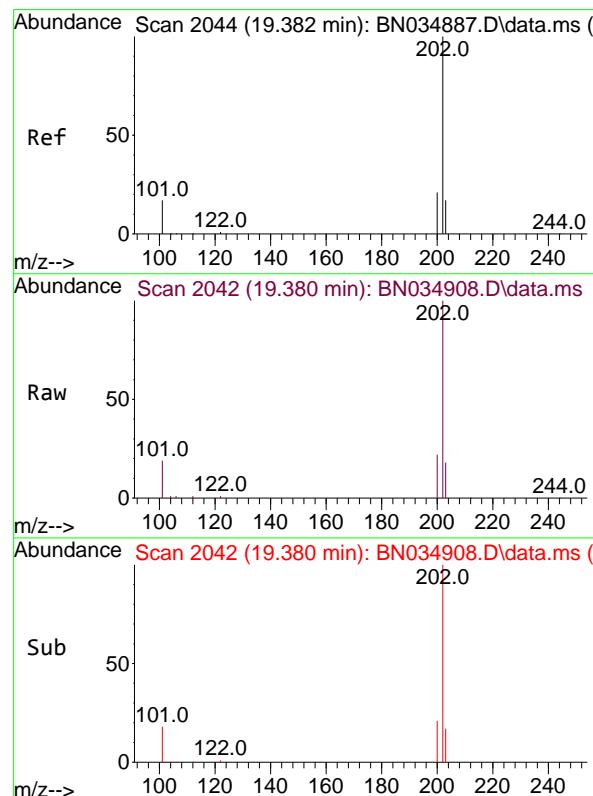
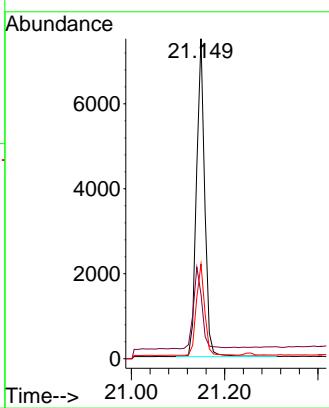




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

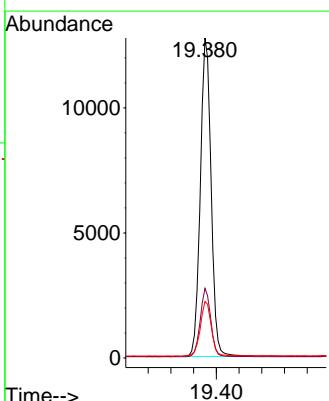
Instrument : BNA\_N  
ClientSampleId : PB164705BS

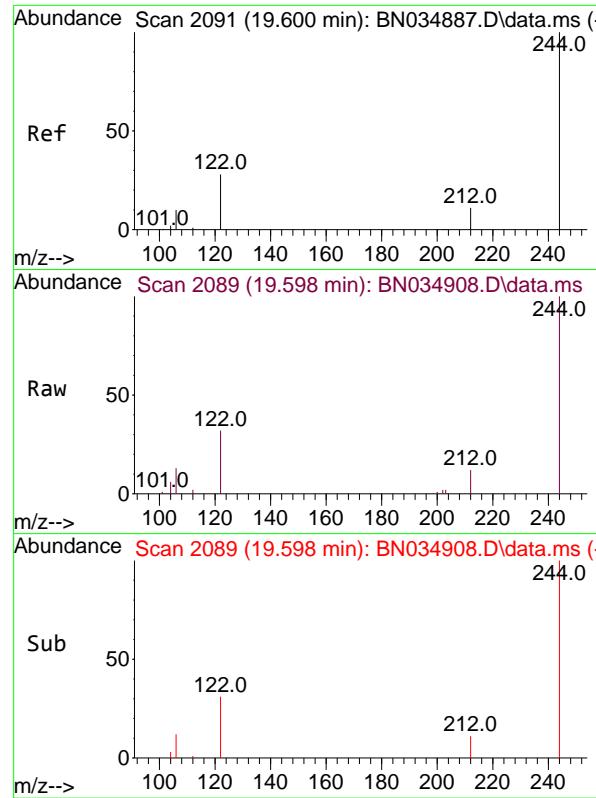
Tgt Ion:240 Resp: 9189  
Ion Ratio Lower Upper  
240 100  
120 20.1 13.8 20.8  
236 29.5 23.8 35.6



#30  
Pyrene  
Concen: 0.362 ng  
RT: 19.380 min Scan# 2042  
Delta R.T. -0.002 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:202 Resp: 16822  
Ion Ratio Lower Upper  
202 100  
200 20.9 16.8 25.2  
203 17.6 14.1 21.1

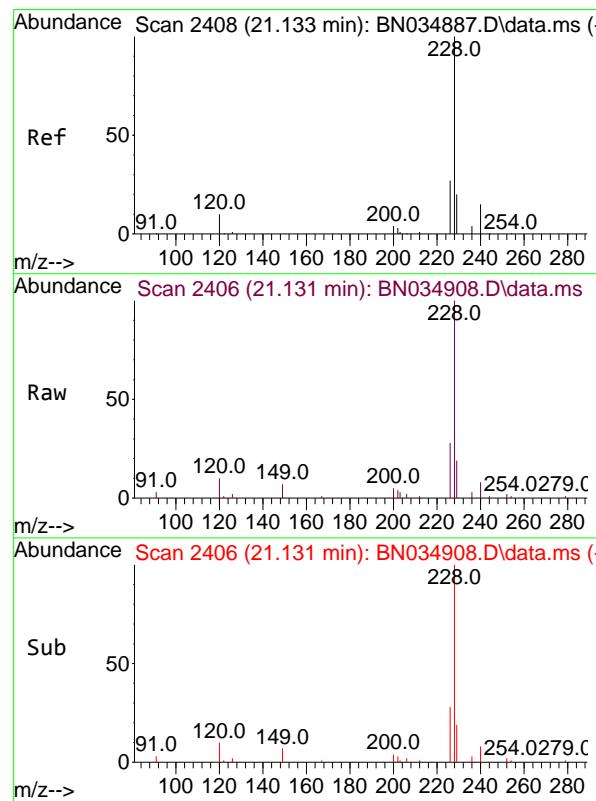
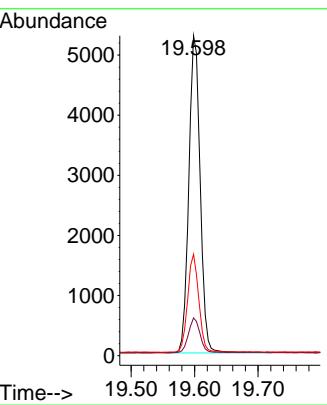




#31  
Terphenyl-d14  
Concen: 0.381 ng  
RT: 19.598 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

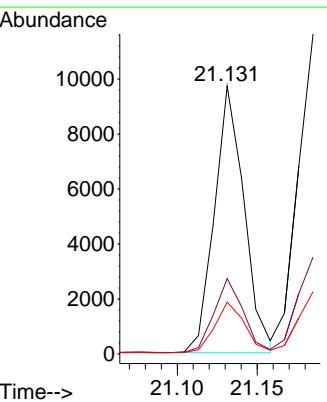
Instrument : BNA\_N  
ClientSampleId : PB164705BS

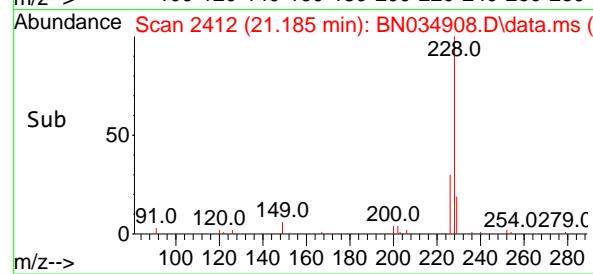
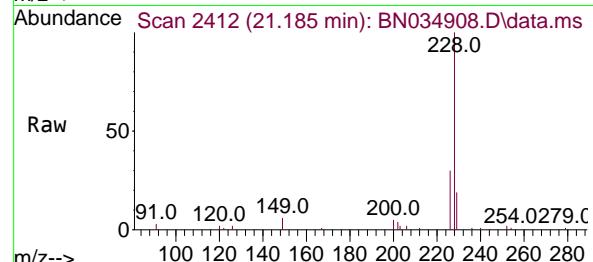
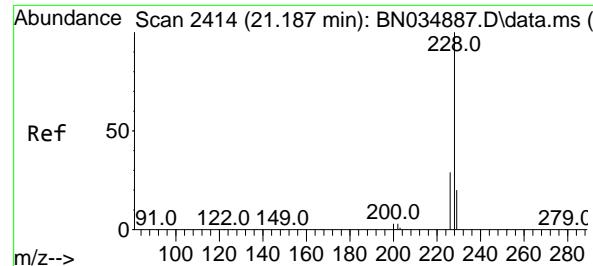
Tgt Ion:244 Resp: 6553  
Ion Ratio Lower Upper  
244 100  
212 11.8 9.4 14.0  
122 31.7 23.0 34.4



#32  
Benzo(a)anthracene  
Concen: 0.350 ng  
RT: 21.131 min Scan# 2406  
Delta R.T. -0.002 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:228 Resp: 12522  
Ion Ratio Lower Upper  
228 100  
226 28.2 22.2 33.2  
229 19.3 16.0 24.0





#33

Chrysene

Concen: 0.371 ng

RT: 21.185 min Scan# 2

Delta R.T. -0.002 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

Instrument :

BNA\_N

ClientSampleId :

PB164705BS

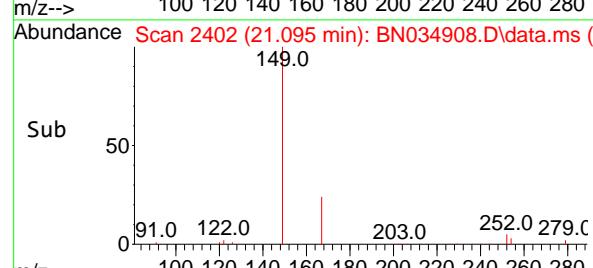
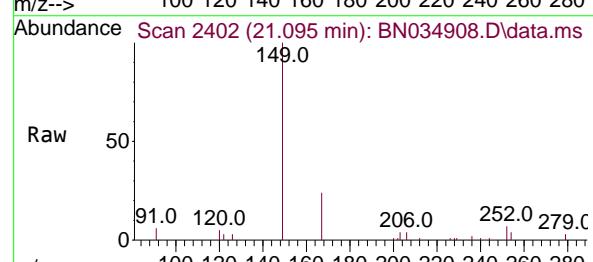
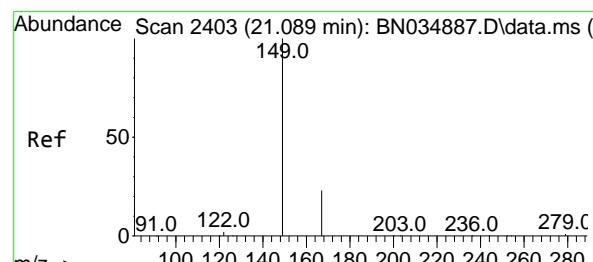
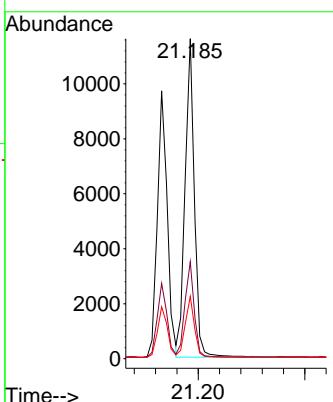
Tgt Ion:228 Resp: 14069

Ion Ratio Lower Upper

228 100

226 30.3 23.7 35.5

229 19.5 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.293 ng

RT: 21.095 min Scan# 2402

Delta R.T. 0.006 min

Lab File: BN034908.D

Acq: 08 Nov 2024 14:53

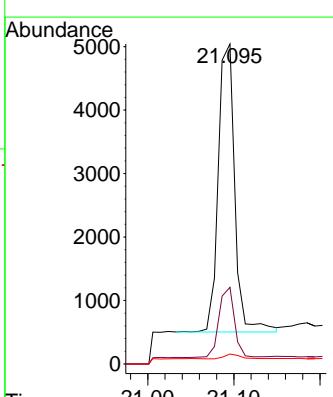
Tgt Ion:149 Resp: 6022

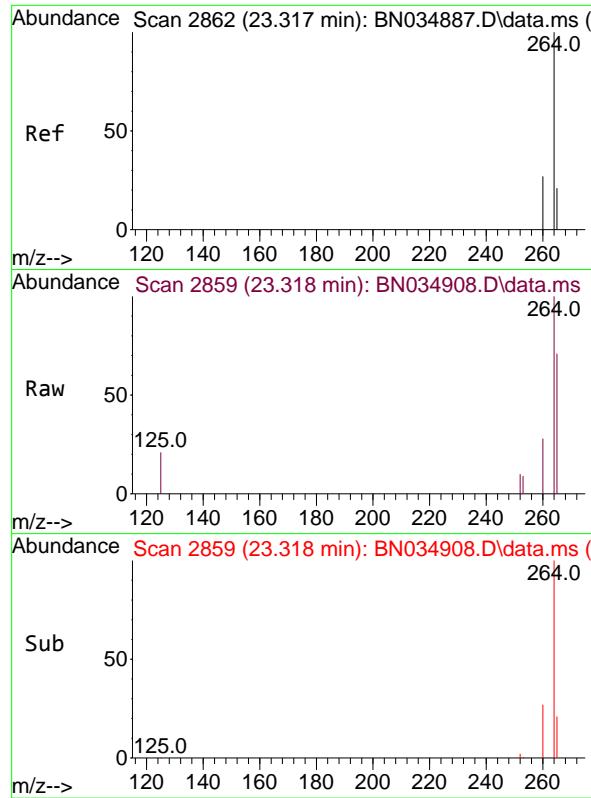
Ion Ratio Lower Upper

149 100

167 22.9 18.1 27.1

279 1.6 1.2 1.8

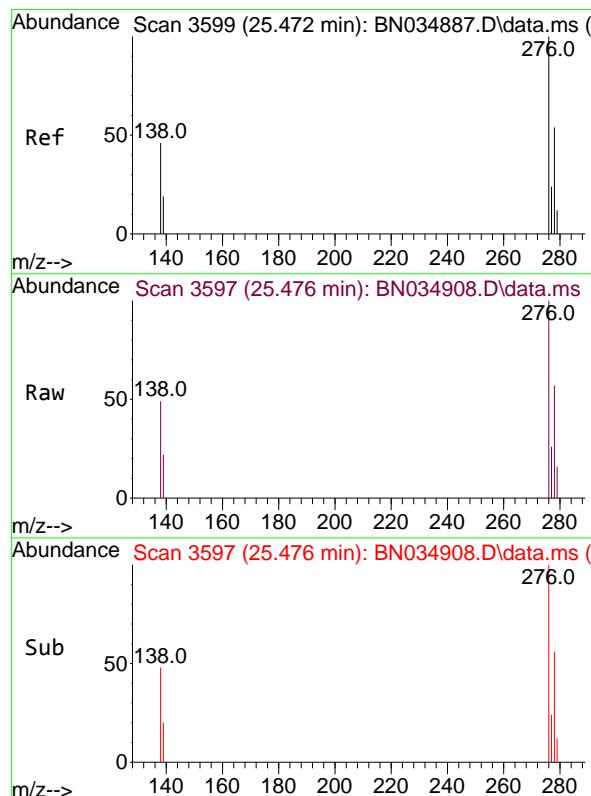
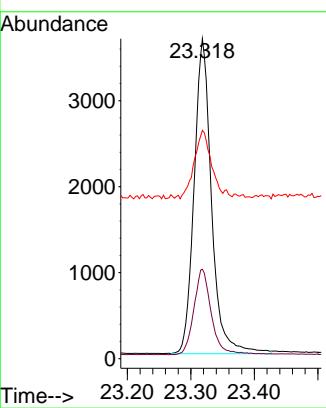




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.318 min Scan# 2  
Delta R.T. 0.001 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

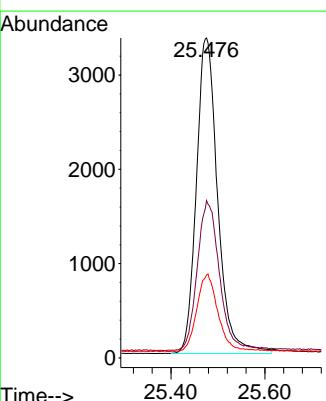
Instrument : BNA\_N  
ClientSampleId : PB164705BS

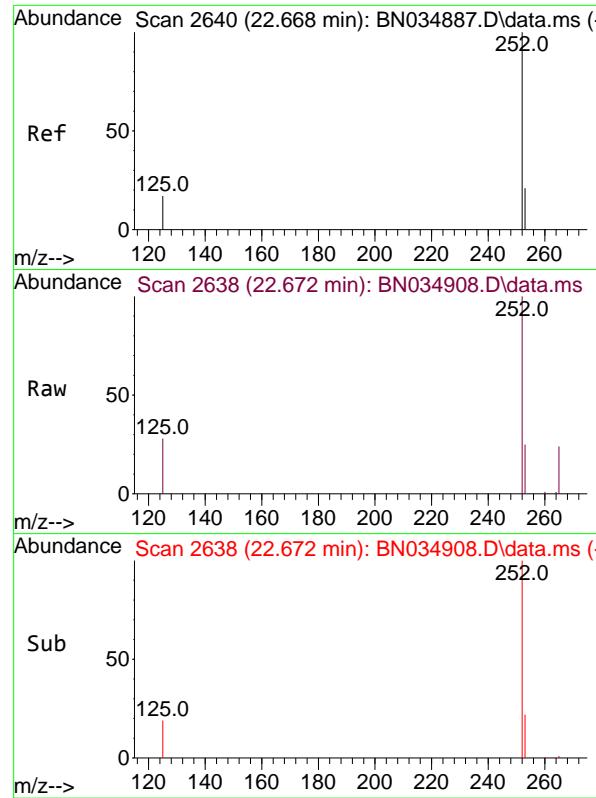
Tgt Ion:264 Resp: 6982  
Ion Ratio Lower Upper  
264 100  
260 27.9 22.2 33.2  
265 71.4 60.9 91.3



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.338 ng  
RT: 25.476 min Scan# 3597  
Delta R.T. 0.004 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

Tgt Ion:276 Resp: 10522  
Ion Ratio Lower Upper  
276 100  
138 48.4 38.4 57.6  
277 24.3 19.4 29.2

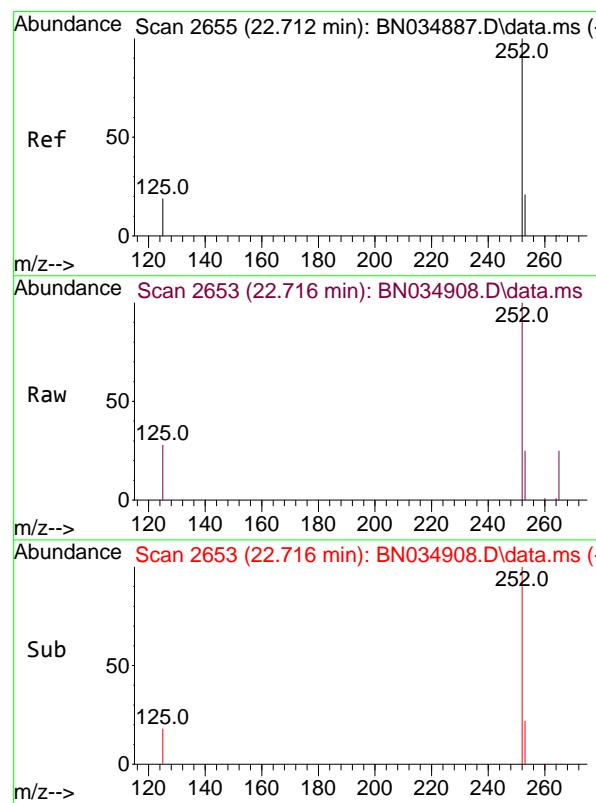
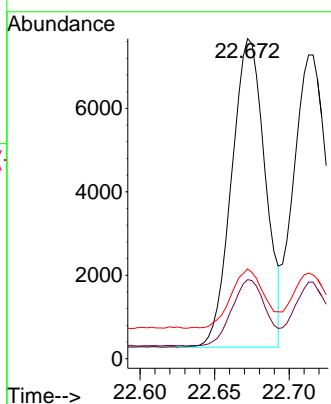




#37  
 Benzo(b)fluoranthene  
 Concen: 0.377 ng  
 RT: 22.672 min Scan# 2  
 Delta R.T. 0.004 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

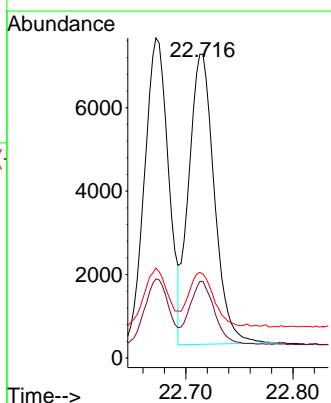
Instrument : BNA\_N  
 ClientSampleId : PB164705BS

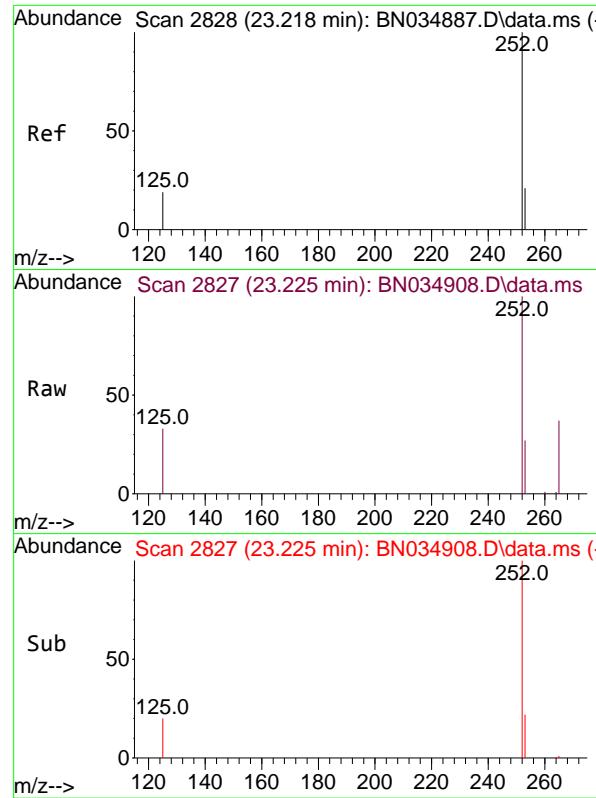
Tgt Ion:252 Resp: 11571  
 Ion Ratio Lower Upper  
 252 100  
 253 24.7 19.4 29.2  
 125 28.0 21.4 32.2



#38  
 Benzo(k)fluoranthene  
 Concen: 0.361 ng  
 RT: 22.716 min Scan# 2653  
 Delta R.T. 0.004 min  
 Lab File: BN034908.D  
 Acq: 08 Nov 2024 14:53

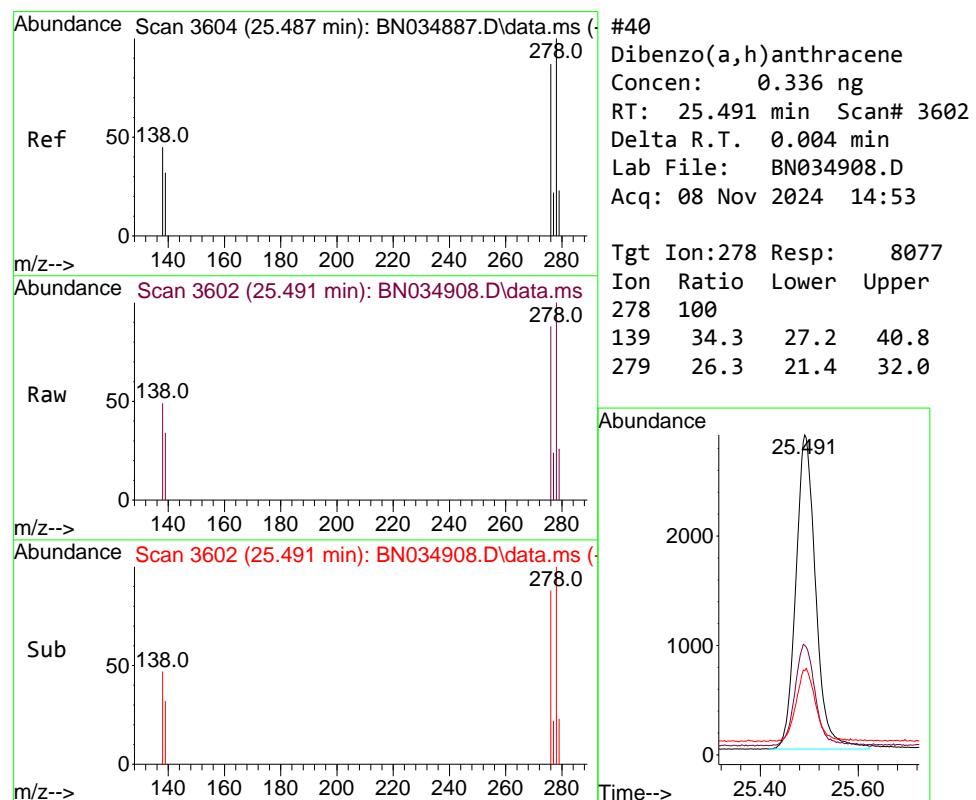
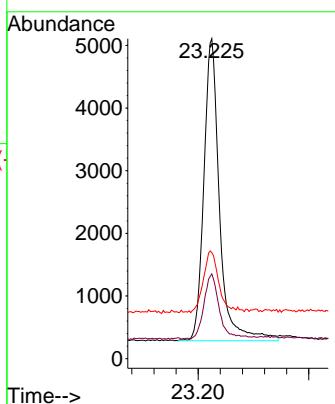
Tgt Ion:252 Resp: 11522  
 Ion Ratio Lower Upper  
 252 100  
 253 25.3 19.8 29.8  
 125 27.6 22.6 33.8





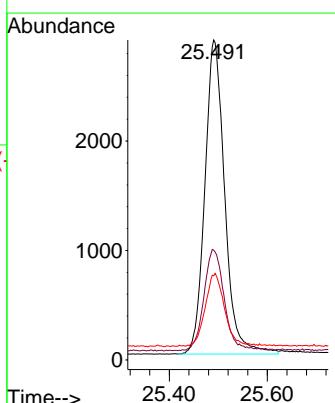
#39  
Benzo(a)pyrene  
Concen: 0.389 ng  
RT: 23.225 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.007 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53  
ClientSampleId : PB164705BS

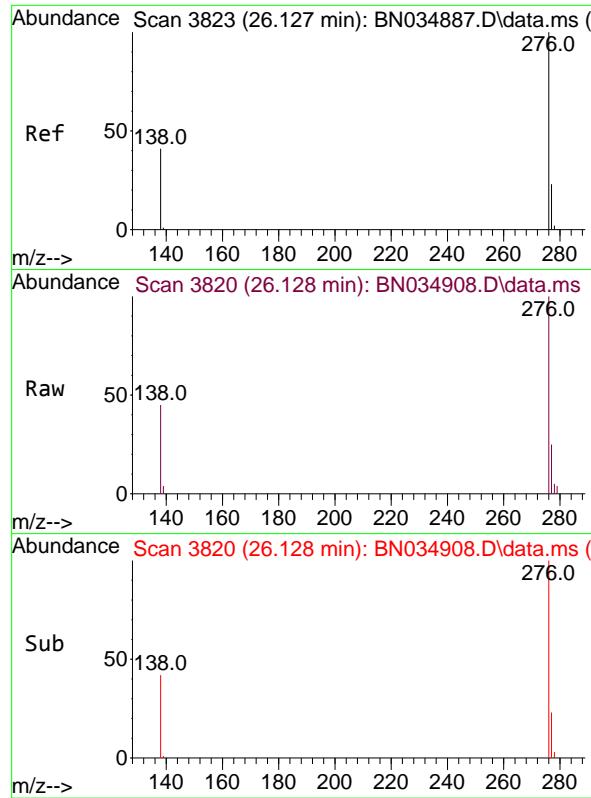
Tgt Ion:252 Resp: 9466  
Ion Ratio Lower Upper  
252 100  
253 26.5 21.4 32.2  
125 33.2 27.8 41.6



#40  
Dibenzo(a,h)anthracene  
Concen: 0.336 ng  
RT: 25.491 min Scan# 3602  
Delta R.T. 0.004 min  
Lab File: BN034908.D  
Acq: 08 Nov 2024 14:53

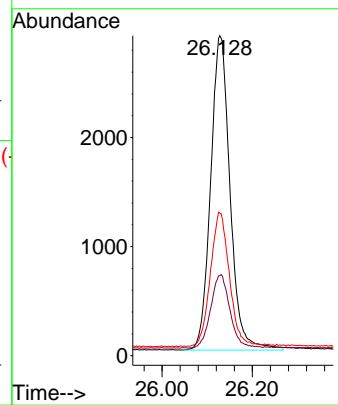
Tgt Ion:278 Resp: 8077  
Ion Ratio Lower Upper  
278 100  
139 34.3 27.2 40.8  
279 26.3 21.4 32.0





#41  
Benzo(g,h,i)perylene  
Concen: 0.337 ng  
RT: 26.128 min Scan# 3  
Instrument :  
Delta R.T. 0.001 min  
Lab File: BN034908.D  
ClientSampleId :  
Acq: 08 Nov 2024 14:53 PB164705BS

Tgt Ion:276 Resp: 8607  
Ion Ratio Lower Upper  
276 100  
277 25.0 20.2 30.2  
138 44.5 33.9 50.9





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

## Report of Analysis

Client:	Tetra Tech NUS, Inc.			Date Collected:	
Project:	CTO WE13			Date Received:	
Client Sample ID:	PB164705BSD			SDG No.:	P4710
Lab Sample ID:	PB164705BSD			Matrix:	Water
Analytical Method:	SW8270SIM			% 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 :	SW3510C				

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN034909.D	1	11/06/24 08:45	11/08/24 15:29	PB164705

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
<b>TARGETS</b>							
123-91-1	1,4-Dioxane	0.28		0.070	0.20	0.20	ug/L
<b>SURROGATES</b>							
7297-45-2	2-Methylnaphthalene-d10	0.39		30 - 150		98%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.33		30 - 150		82%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		55 - 111		82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		53 - 106		85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		95%	SPK: 0.4
<b>INTERNAL STANDARDS</b>							
3855-82-1	1,4-Dichlorobenzene-d4	6260	7.575				
1146-65-2	Naphthalene-d8	17900	10.34				
15067-26-2	Acenaphthene-d10	7950	14.208				
1517-22-2	Phenanthrene-d10	16000	16.952				
1719-03-5	Chrysene-d12	9020	21.149				
1520-96-3	Perylene-d12	6770	23.315				

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\BN110824\  
 Data File : BN034909.D  
 Acq On : 08 Nov 2024 15:29  
 Operator : RC/JU  
 Sample : PB164705BSD  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BSD

Quant Time: Nov 08 16:32:24 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

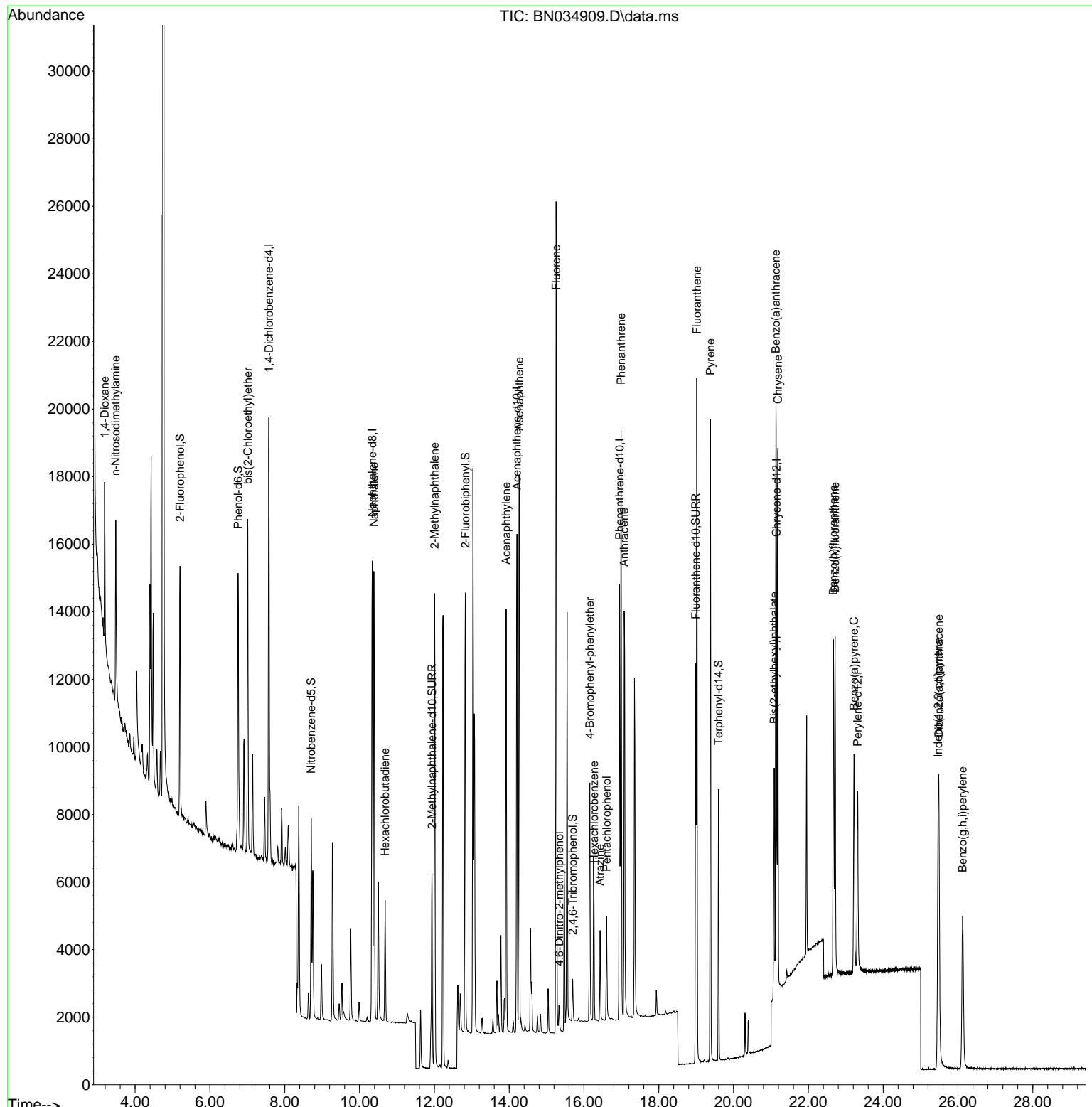
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1,4-Dichlorobenzene-d4	7.575	152	6255	0.400	ng	0.00
7) Naphthalene-d8	10.340	136	17867	0.400	ng	0.00
13) Acenaphthene-d10	14.208	164	7947	0.400	ng	0.00
19) Phenanthrene-d10	16.952	188	15963	0.400	ng	# 0.00
29) Chrysene-d12	21.149	240	9019	0.400	ng	0.00
35) Perylene-d12	23.315	264	6770	0.400	ng	0.00
<b>System Monitoring Compounds</b>						
4) 2-Fluorophenol	5.199	112	5431	0.312	ng	0.00
5) Phenol-d6	6.752	99	7335	0.317	ng	0.00
8) Nitrobenzene-d5	8.707	82	4586	0.329	ng	0.00
11) 2-Methylnaphthalene-d10	11.935	152	9605	0.394	ng	0.00
14) 2,4,6-Tribromophenol	15.698	330	611	0.301	ng	0.00
15) 2-Fluorobiphenyl	12.829	172	11409	0.340	ng	0.00
27) Fluoranthene-d10	18.990	212	11847	0.329	ng	0.00
31) Terphenyl-d14	19.598	244	6403	0.379	ng	0.00
<b>Target Compounds</b>						
				Qvalue		
2) 1,4-Dioxane	3.184	88	2247	0.284	ng	# 51
3) n-Nitrosodimethylamine	3.480	42	3623	0.340	ng	# 99
6) bis(2-Chloroethyl)ether	7.012	93	6846	0.343	ng	99
9) Naphthalene	10.383	128	16732	0.337	ng	99
10) Hexachlorobutadiene	10.682	225	2580	0.326	ng	# 98
12) 2-Methylnaphthalene	12.007	142	9903	0.326	ng	100
16) Acenaphthylene	13.919	152	12955	0.338	ng	100
17) Acenaphthene	14.272	154	8662	0.327	ng	100
18) Fluorene	15.255	166	10701	0.324	ng	100
20) 4,6-Dinitro-2-methylph...	15.341	198	457	0.330	ng	# 56
21) 4-Bromophenyl-phenylether	16.157	248	2716	0.319	ng	# 92
22) Hexachlorobenzene	16.269	284	3428	0.335	ng	99
23) Atrazine	16.431	200	1938	0.314	ng	95
24) Pentachlorophenol	16.604	266	1379	0.524	ng	96
25) Phenanthrene	16.989	178	17079	0.349	ng	99
26) Anthracene	17.076	178	14866	0.352	ng	100
28) Fluoranthene	19.018	202	16670	0.324	ng	99
30) Pyrene	19.380	202	16547	0.362	ng	100
32) Benzo(a)anthracene	21.131	228	12354	0.351	ng	100
33) Chrysene	21.185	228	13618	0.366	ng	98
34) Bis(2-ethylhexyl)phtha...	21.086	149	5786	0.287	ng	99
36) Indeno(1,2,3-cd)pyrene	25.470	276	10193	0.338	ng	98
37) Benzo(b)fluoranthene	22.669	252	11423	0.384	ng	98
38) Benzo(k)fluoranthene	22.713	252	11176	0.361	ng	99
39) Benzo(a)pyrene	23.219	252	8976	0.380	ng	99
40) Dibenzo(a,h)anthracene	25.488	278	7869	0.337	ng	98
41) Benzo(g,h,i)perylene	26.125	276	8331	0.336	ng	98

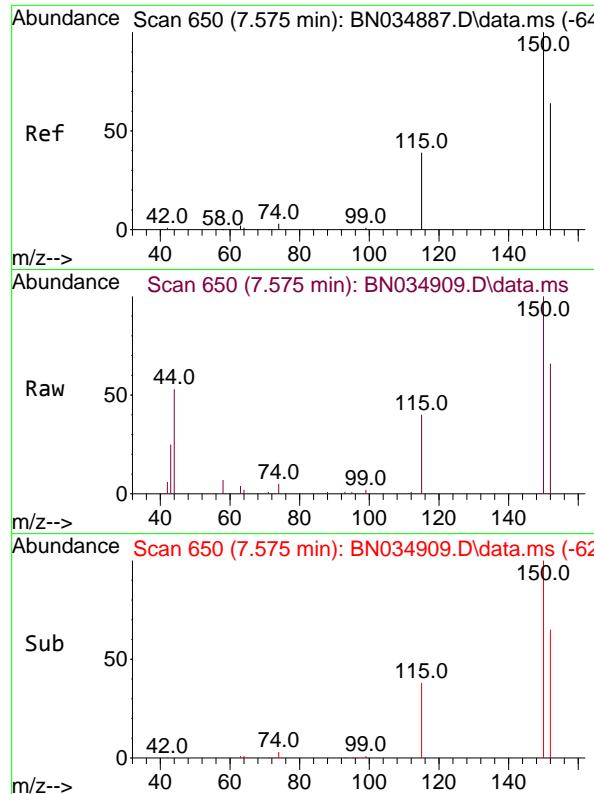
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034909.D  
 Acq On : 08 Nov 2024 15:29  
 Operator : RC/JU  
 Sample : PB164705BSD  
 Misc :  
 ALS Vial : 13 Sample Multiplier: 1

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BSD

Quant Time: Nov 08 16:32:24 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

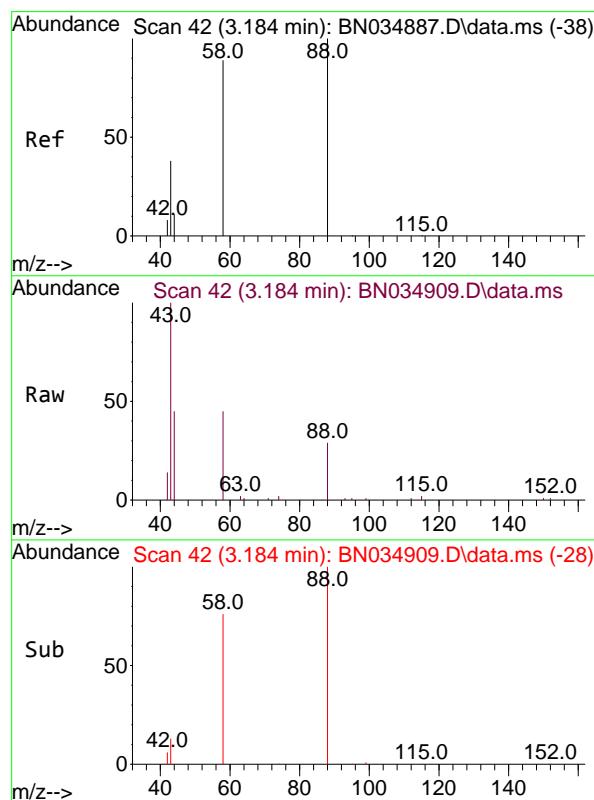
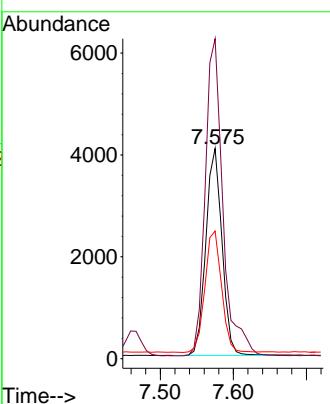




#1  
 1,4-Dichlorobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R.T. 0.000 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

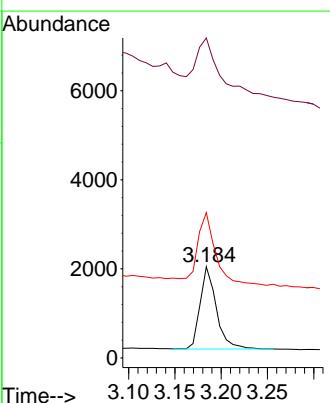
Instrument : BNA\_N  
 ClientSampleId : PB164705BSD

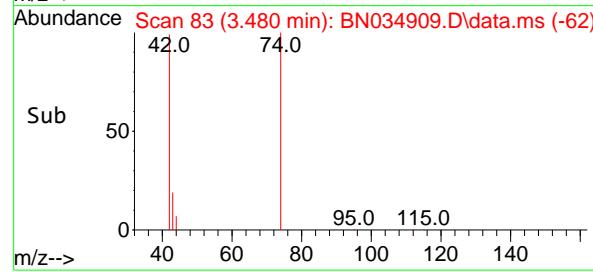
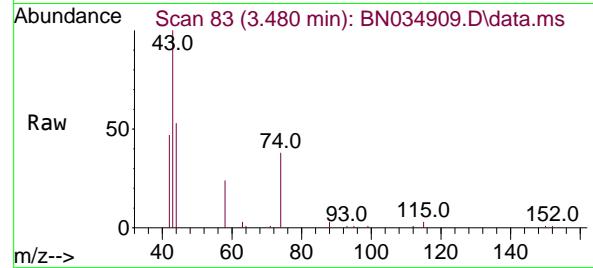
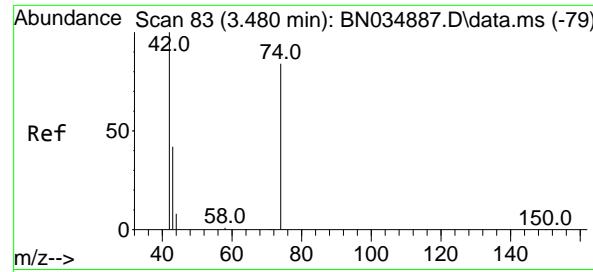
Tgt Ion:152 Resp: 6255  
 Ion Ratio Lower Upper  
 152 100  
 150 152.3 124.4 186.6  
 115 60.8 50.5 75.7



#2  
 1,4-Dioxane  
 Concen: 0.284 ng  
 RT: 3.184 min Scan# 42  
 Delta R.T. 0.000 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

Tgt Ion: 88 Resp: 2247  
 Ion Ratio Lower Upper  
 88 100  
 43 106.9 28.2 42.2#  
 58 99.5 67.1 100.7





#3

n-Nitrosodimethylamine

Concen: 0.340 ng

RT: 3.480 min Scan# 8

Instrument :

BNA\_N

Delta R.T. 0.000 min

Lab File: BN034909.D

ClientSampleId :

Acq: 08 Nov 2024 15:29

PB164705BSD

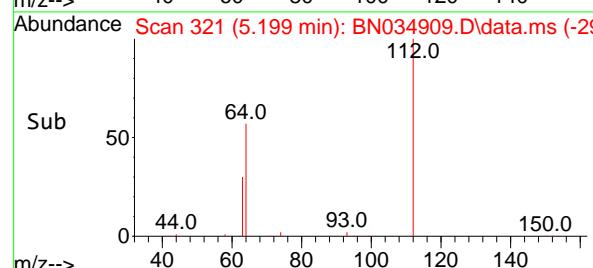
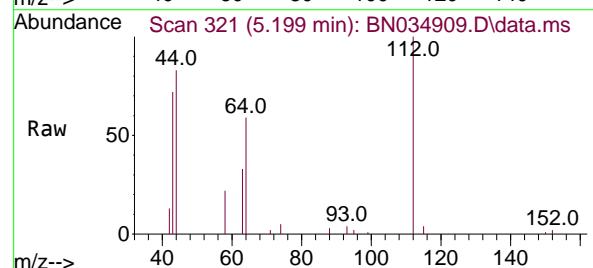
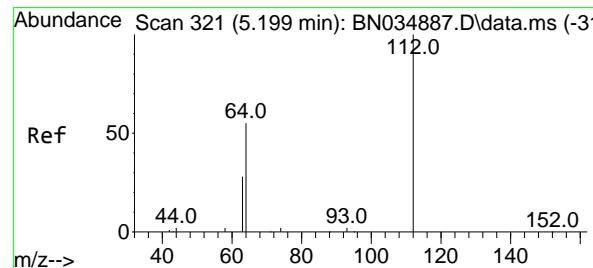
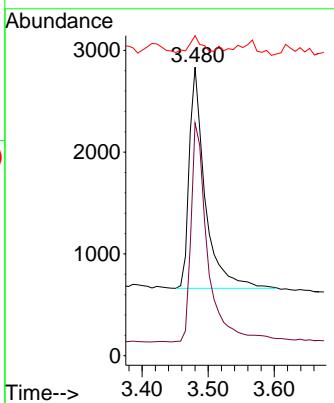
Tgt Ion: 42 Resp: 3623

Ion Ratio Lower Upper

42 100

74 104.3 83.4 125.2

44 7.2 8.6 12.8#



#4

2-Fluorophenol

Concen: 0.312 ng

RT: 5.199 min Scan# 321

Delta R.T. 0.000 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

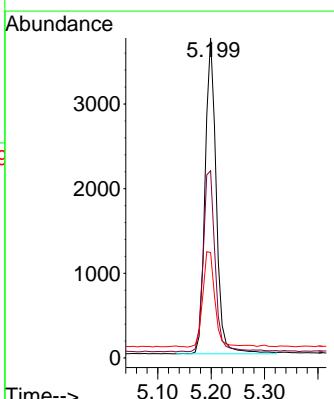
Tgt Ion: 112 Resp: 5431

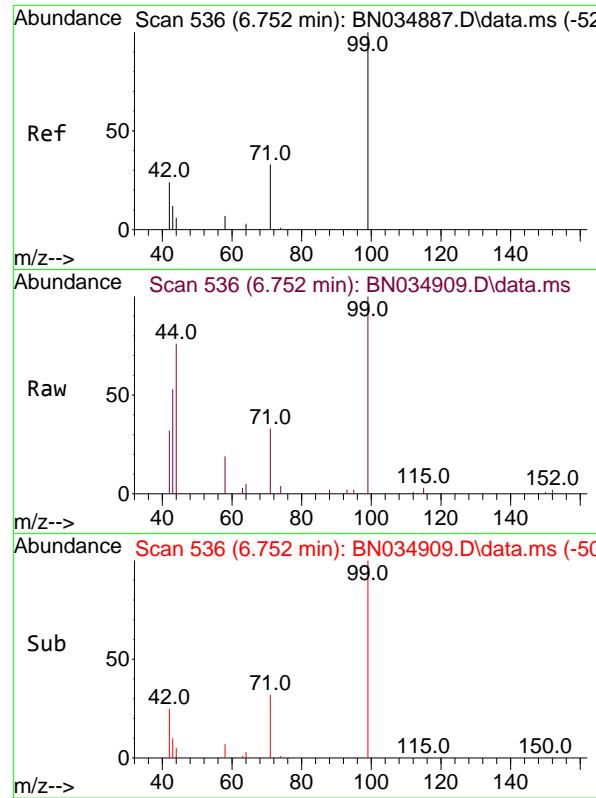
Ion Ratio Lower Upper

112 100

64 61.1 49.6 74.4

63 32.6 26.3 39.5

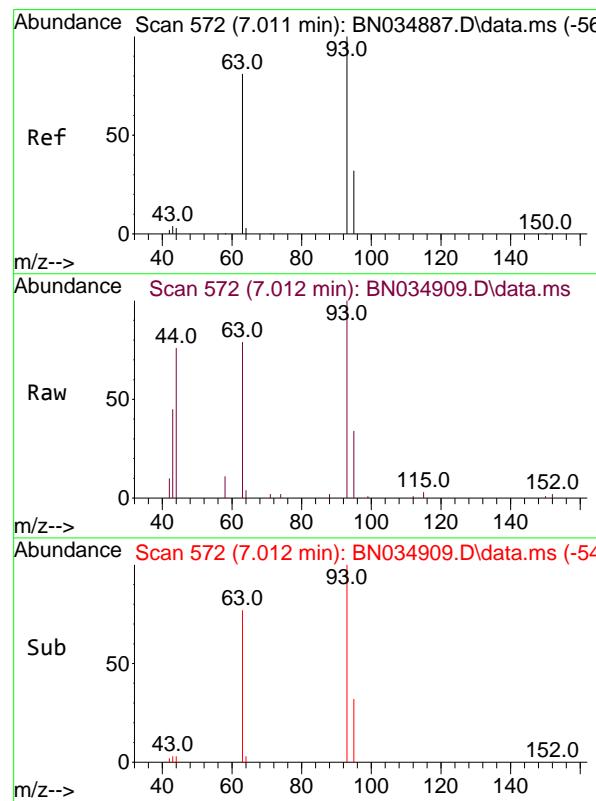
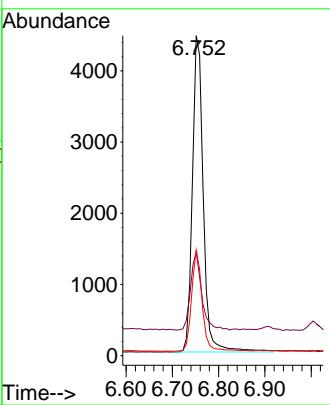




#5  
Phenol-d6  
Concen: 0.317 ng  
RT: 6.752 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

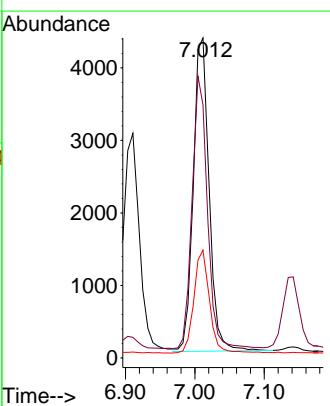
Instrument : BNA\_N  
ClientSampleId : PB164705BSD

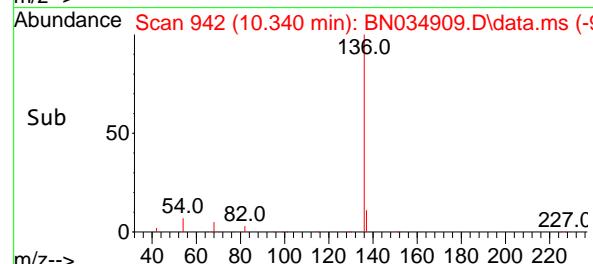
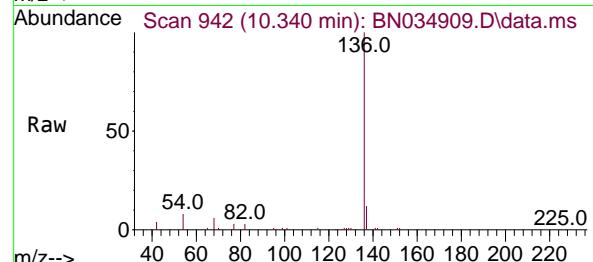
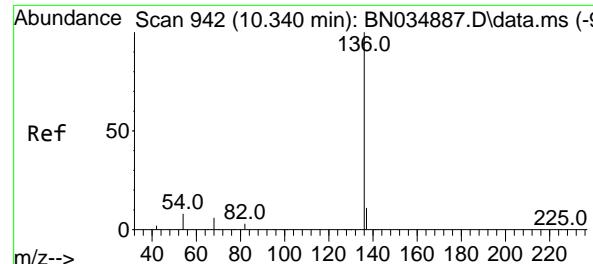
Tgt Ion: 99 Resp: 7335  
Ion Ratio Lower Upper  
99 100  
42 24.9 20.2 30.2  
71 31.0 25.4 38.0



#6  
bis(2-Chloroethyl)ether  
Concen: 0.343 ng  
RT: 7.012 min Scan# 572  
Delta R.T. 0.000 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion: 93 Resp: 6846  
Ion Ratio Lower Upper  
93 100  
63 83.9 67.5 101.3  
95 32.4 25.7 38.5



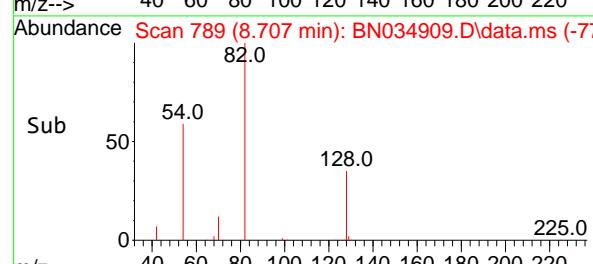
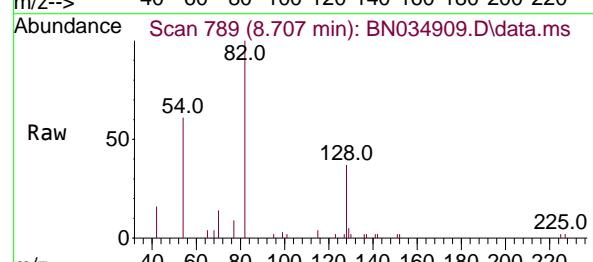
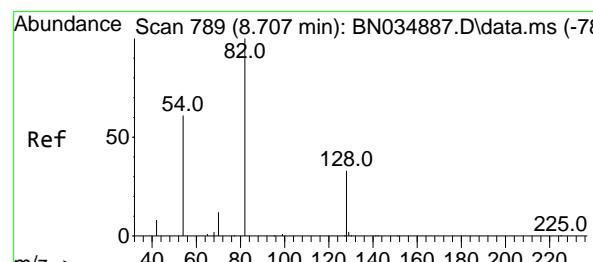
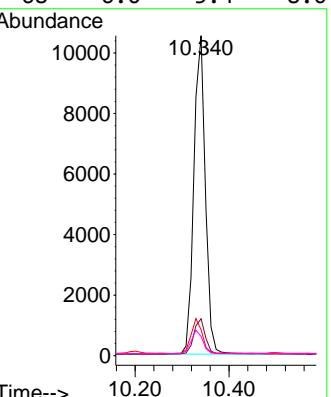


#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R.T. 0.000 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

Instrument :  
 BNA\_N  
 ClientSampleId :  
 PB164705BSD

Tgt Ion:136 Resp: 17867

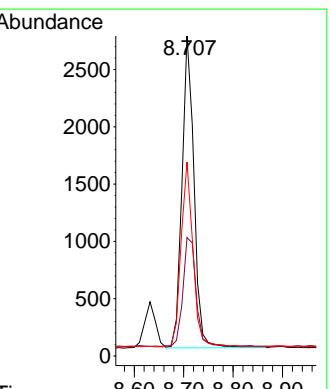
Ion	Ratio	Lower	Upper
136	100		
137	11.5	8.9	13.3
54	8.1	6.9	10.3
68	6.0	5.4	8.0

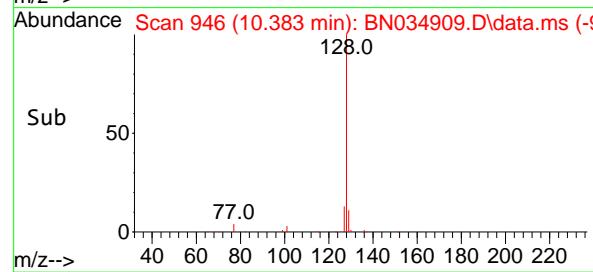
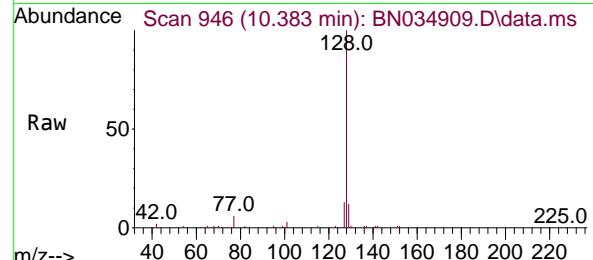
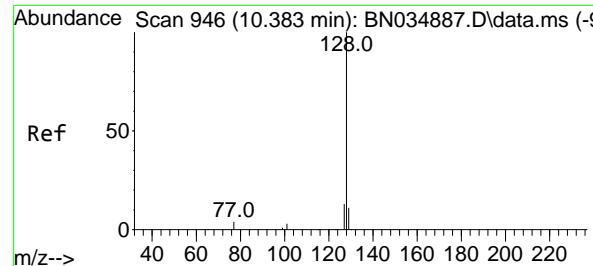


#8  
 Nitrobenzene-d5  
 Concen: 0.329 ng  
 RT: 8.707 min Scan# 789  
 Delta R.T. 0.000 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

Tgt Ion: 82 Resp: 4586

Ion	Ratio	Lower	Upper
82	100		
128	37.0	28.1	42.1
54	60.6	49.8	74.6

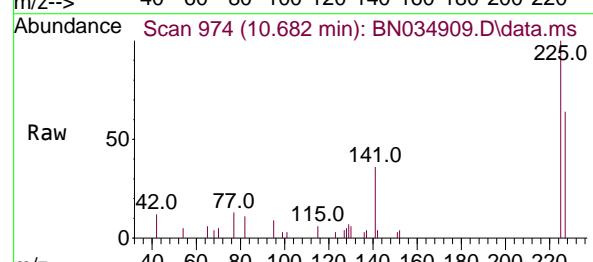
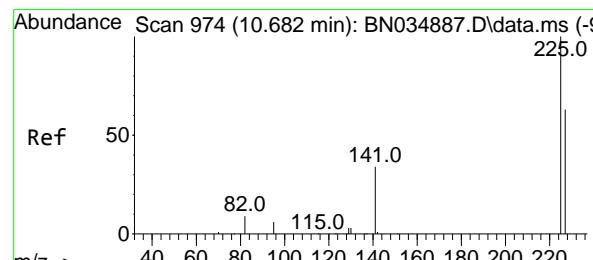
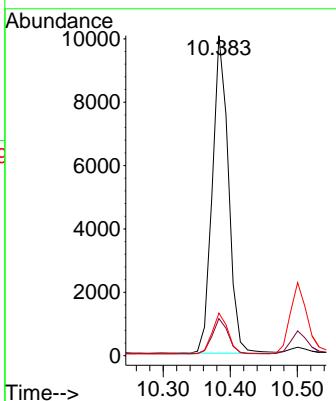




#9  
Naphthalene  
Concen: 0.337 ng  
RT: 10.383 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

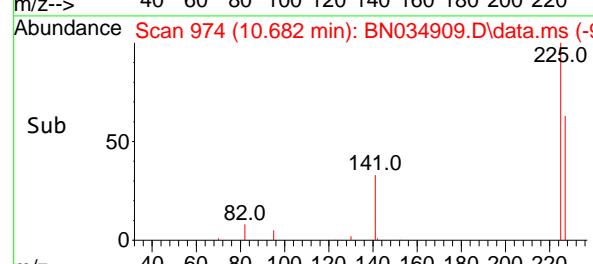
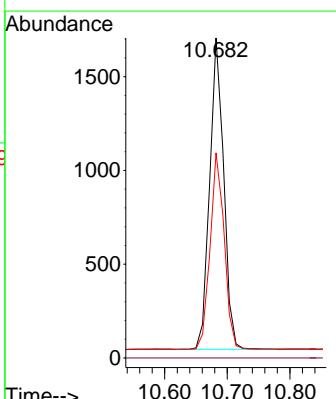
Instrument :  
BNA\_N  
ClientSampleId :  
PB164705BSD

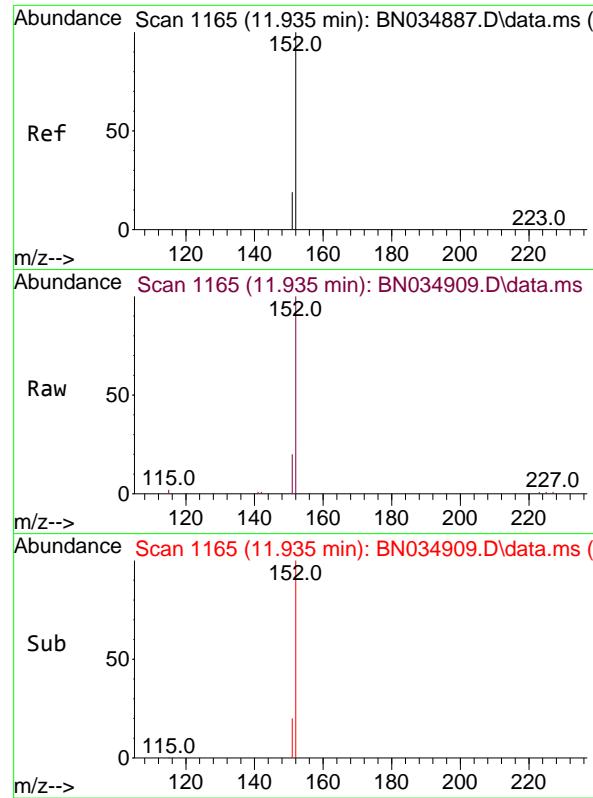
Tgt Ion:128 Resp: 16732  
Ion Ratio Lower Upper  
128 100  
129 11.6 9.0 13.4  
127 13.3 10.8 16.2



#10  
Hexachlorobutadiene  
Concen: 0.326 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

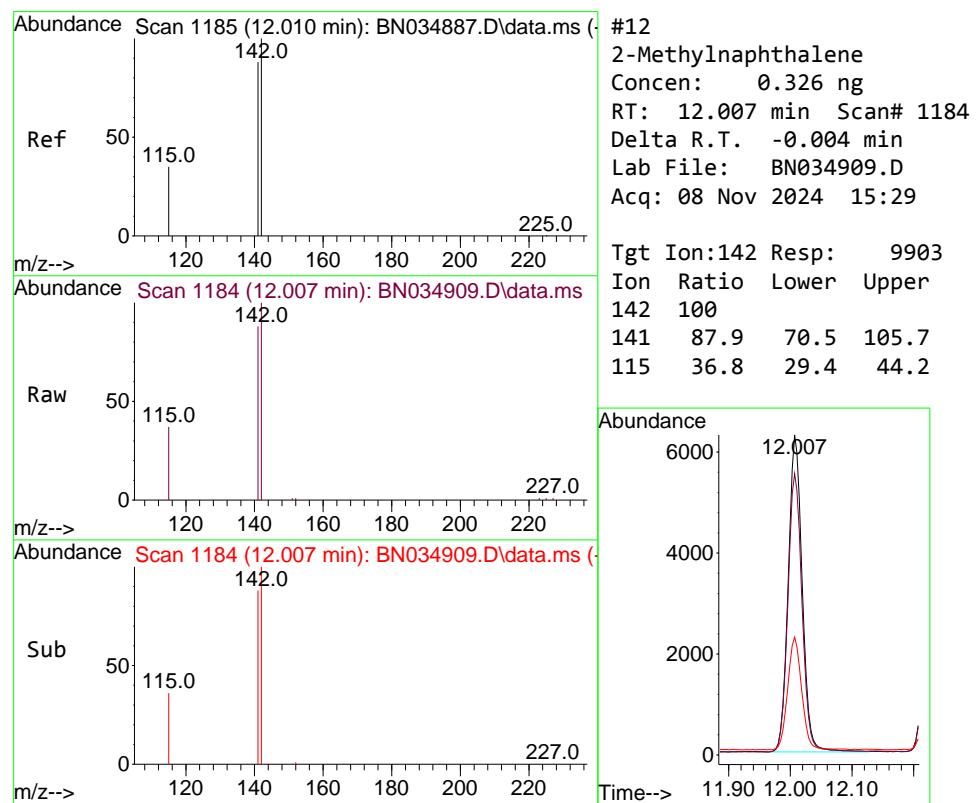
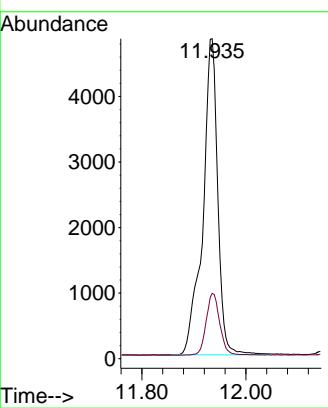
Tgt Ion:225 Resp: 2580  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.4 52.0 78.0





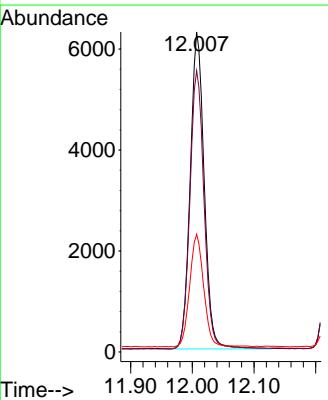
#11  
2-Methylnaphthalene-d10  
Concen: 0.394 ng  
RT: 11.935 min Scan# 1  
Instrument : BNA\_N  
Delta R.T. 0.000 min  
Lab File: BN034909.D  
ClientSampleId : PB164705BSD  
Acq: 08 Nov 2024 15:29

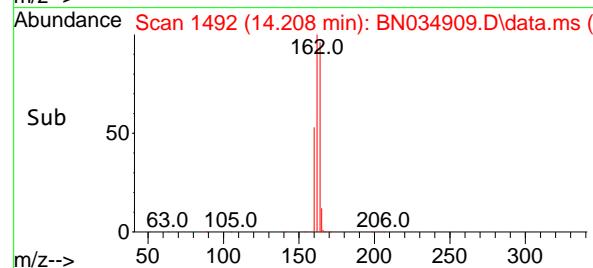
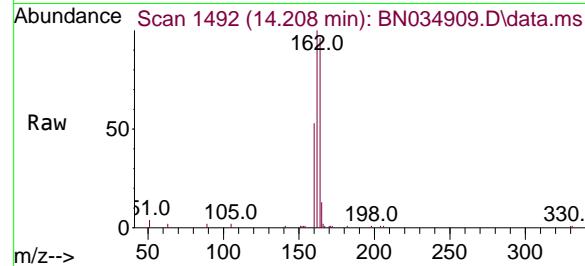
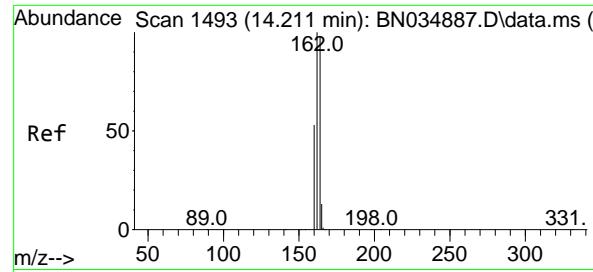
Tgt Ion:152 Resp: 9605  
Ion Ratio Lower Upper  
152 100  
151 17.8 17.1 25.7



#12  
2-Methylnaphthalene  
Concen: 0.326 ng  
RT: 12.007 min Scan# 1184  
Delta R.T. -0.004 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion:142 Resp: 9903  
Ion Ratio Lower Upper  
142 100  
141 87.9 70.5 105.7  
115 36.8 29.4 44.2





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.208 min Scan# 1493

Delta R.T. -0.003 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument :

BNA\_N

ClientSampleId :

PB164705BSD

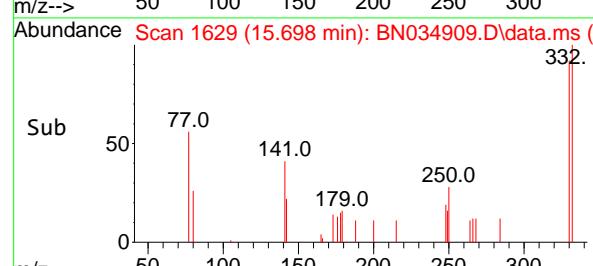
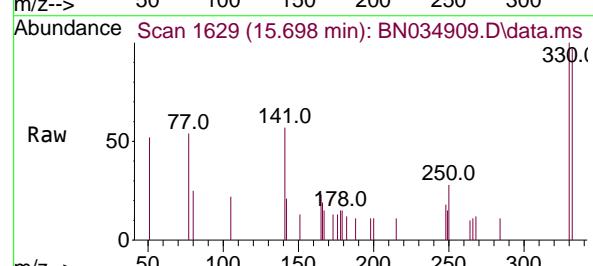
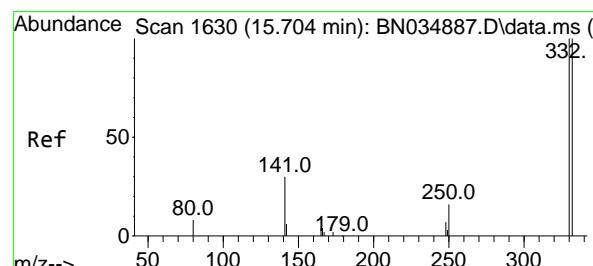
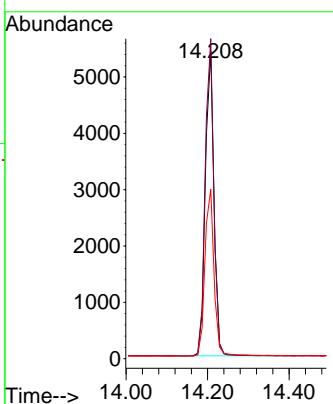
Tgt Ion:164 Resp: 7947

Ion Ratio Lower Upper

164 100

162 104.1 81.9 122.9

160 55.1 43.5 65.3



#14

2,4,6-Tribromophenol

Concen: 0.301 ng

RT: 15.698 min Scan# 1629

Delta R.T. -0.006 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

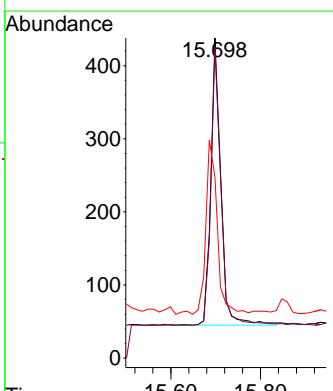
Tgt Ion:330 Resp: 611

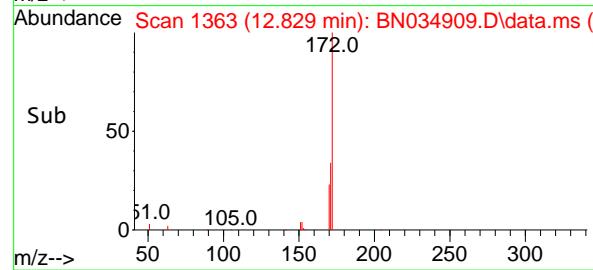
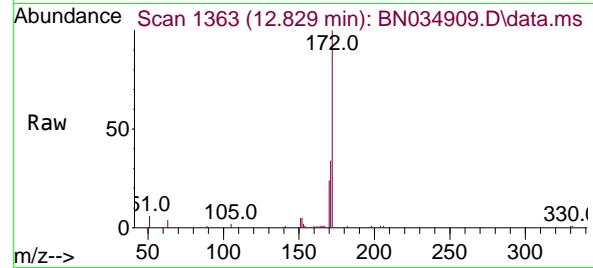
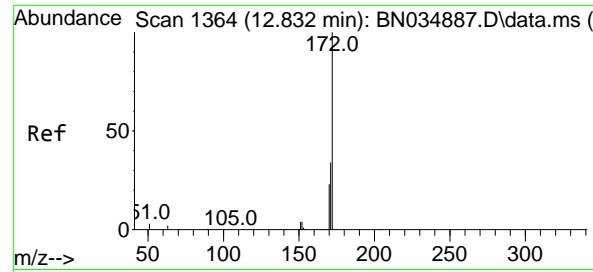
Ion Ratio Lower Upper

330 100

332 95.3 77.1 115.7

141 65.1 54.1 81.1

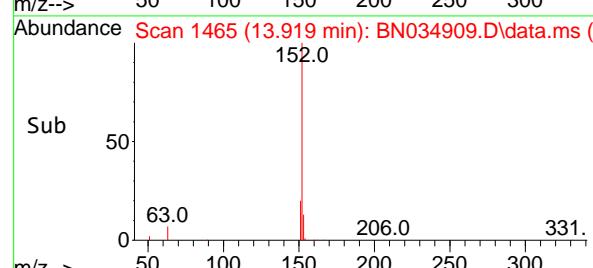
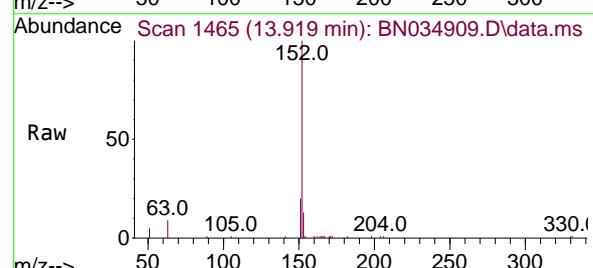
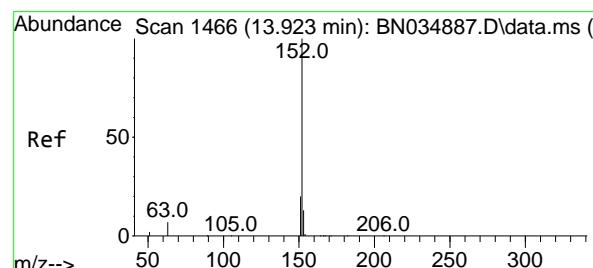
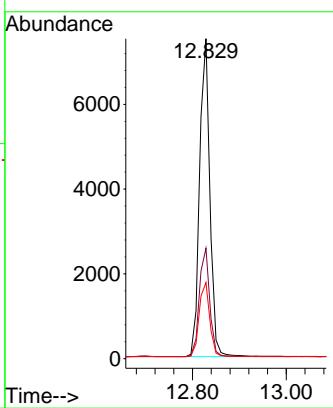




#15  
2-Fluorobiphenyl  
Concen: 0.340 ng  
RT: 12.829 min Scan# 1  
Delta R.T. -0.004 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

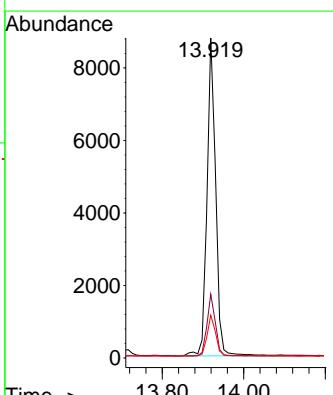
Instrument :  
BNA\_N  
ClientSampleId :  
PB164705BSD

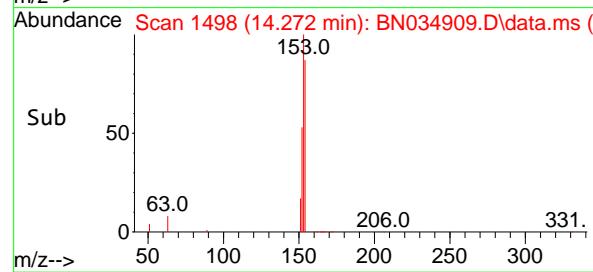
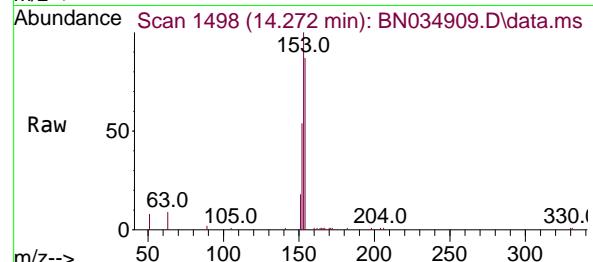
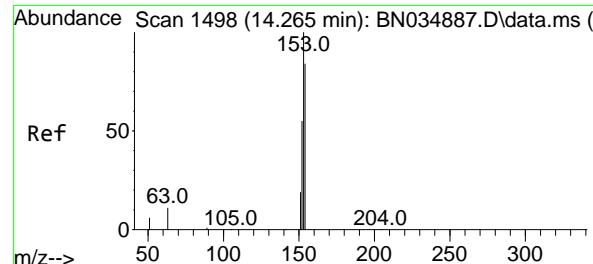
Tgt Ion:172 Resp: 11409  
Ion Ratio Lower Upper  
172 100  
171 34.5 27.9 41.9  
170 23.8 19.0 28.4



#16  
Acenaphthylene  
Concen: 0.338 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion:152 Resp: 12955  
Ion Ratio Lower Upper  
152 100  
151 19.0 15.2 22.8  
153 13.2 10.4 15.6





#17

Acenaphthene

Concen: 0.327 ng

RT: 14.272 min Scan# 1498

Delta R.T. 0.007 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument :

BNA\_N

ClientSampleId :

PB164705BSD

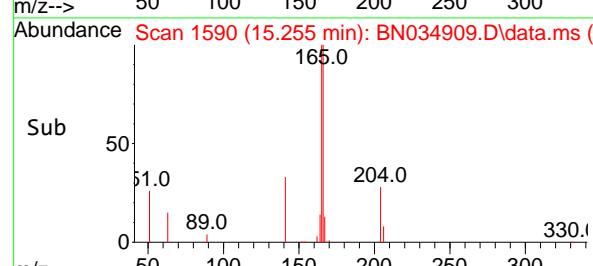
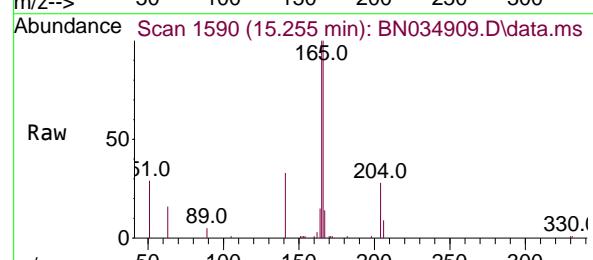
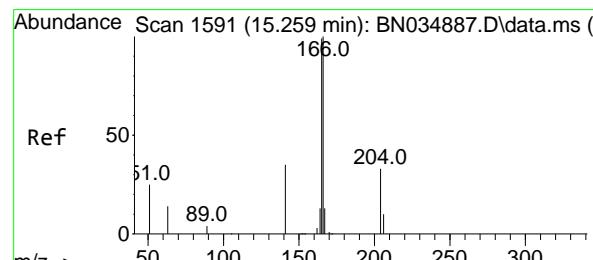
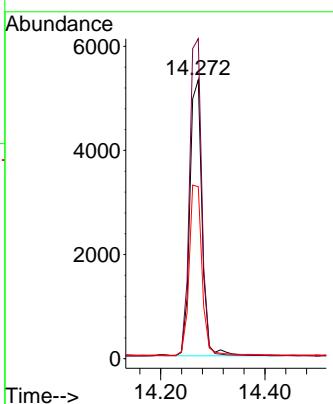
Tgt Ion:154 Resp: 8662

Ion Ratio Lower Upper

154 100

153 115.3 92.2 138.2

152 64.5 51.1 76.7



#18

Fluorene

Concen: 0.324 ng

RT: 15.255 min Scan# 1590

Delta R.T. -0.004 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

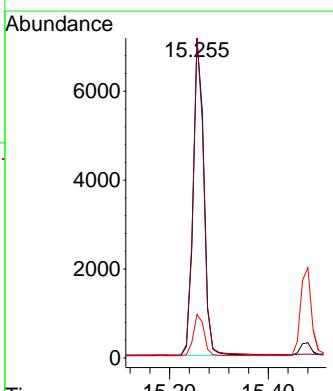
Tgt Ion:166 Resp: 10701

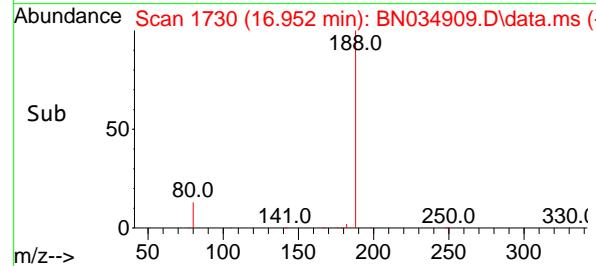
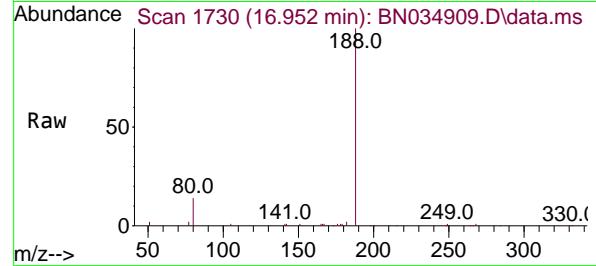
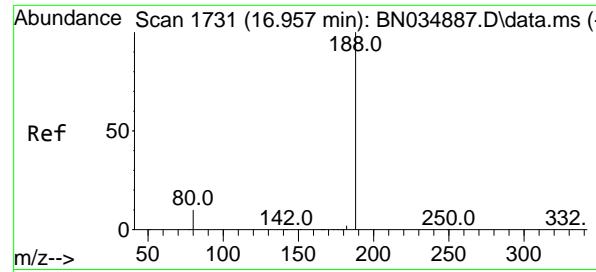
Ion Ratio Lower Upper

166 100

165 99.4 79.5 119.3

167 13.0 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 16.952 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument:

BNA\_N

ClientSampleId :

PB164705BSD

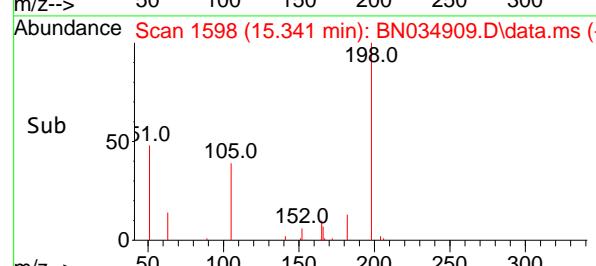
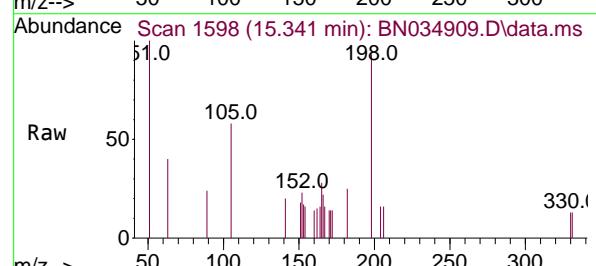
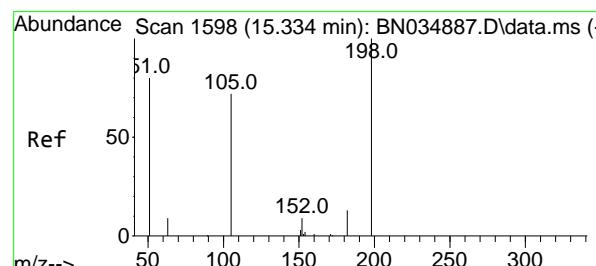
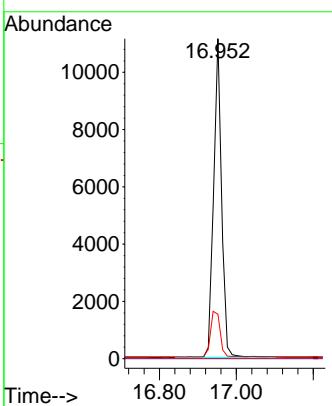
Tgt Ion:188 Resp: 15963

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 13.9 8.6 12.8#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.330 ng

RT: 15.341 min Scan# 1598

Delta R.T. 0.007 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

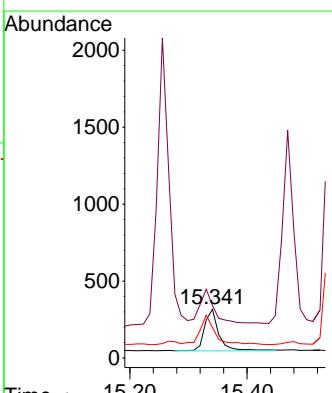
Tgt Ion:198 Resp: 457

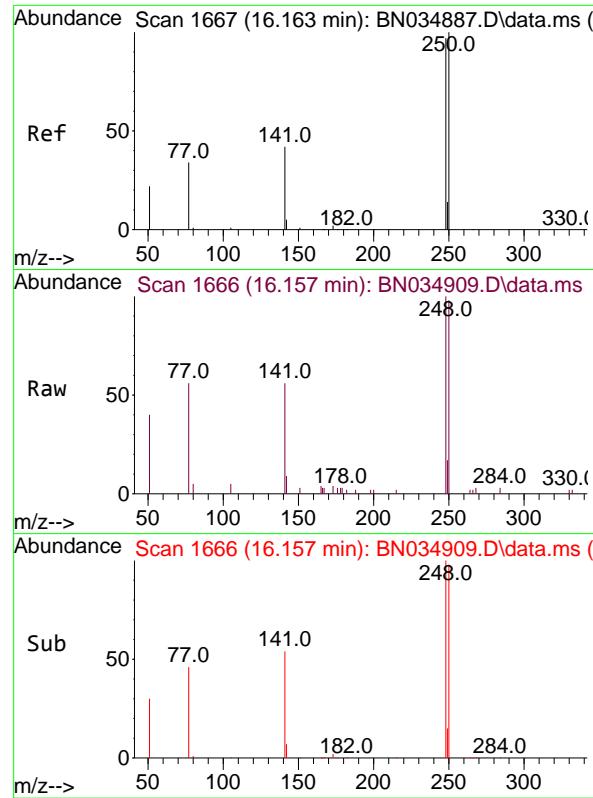
Ion Ratio Lower Upper

198 100

51 107.6 141.8 212.8#

105 62.5 75.6 113.4#

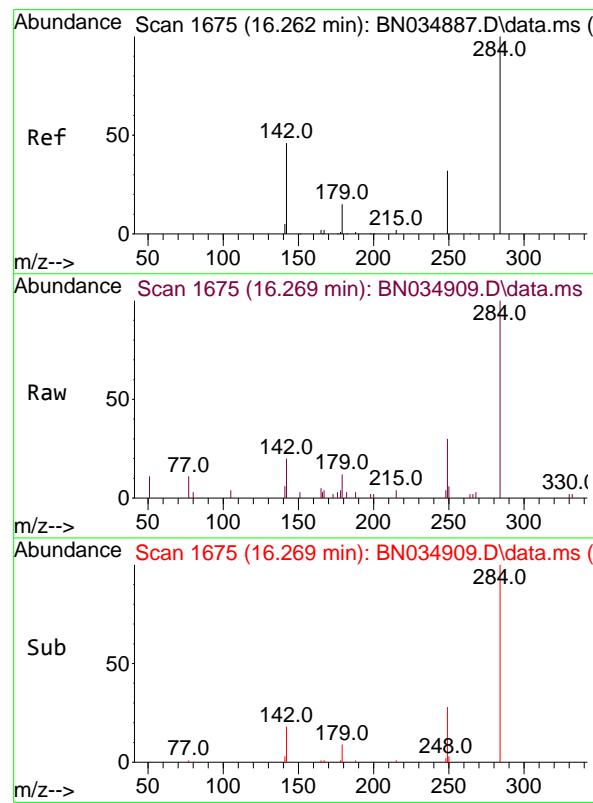
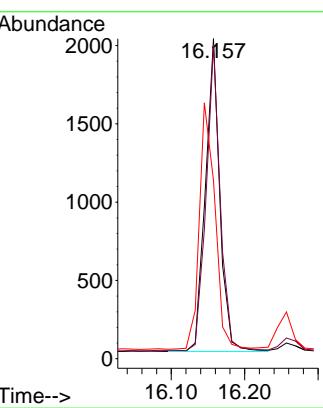




#21  
4-Bromophenyl-phenylether  
Concen: 0.319 ng  
RT: 16.157 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

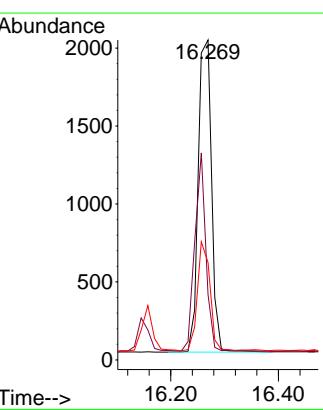
Instrument : BNA\_N  
ClientSampleId : PB164705BSD

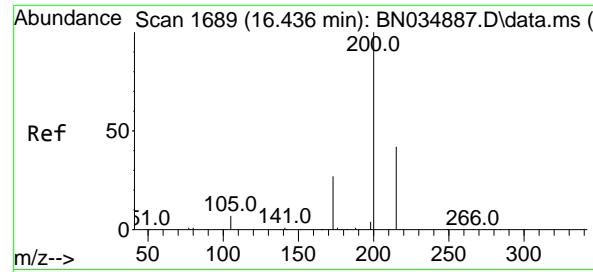
Tgt Ion:248 Resp: 2716  
Ion Ratio Lower Upper  
248 100  
250 98.1 82.2 123.4  
141 55.7 36.2 54.2#



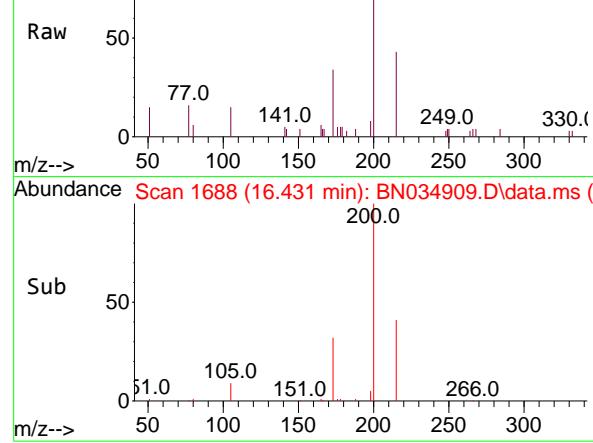
#22  
Hexachlorobenzene  
Concen: 0.335 ng  
RT: 16.269 min Scan# 1675  
Delta R.T. 0.007 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion:284 Resp: 3428  
Ion Ratio Lower Upper  
284 100  
142 53.3 43.4 65.2  
249 32.8 25.8 38.6





Abundance Scan 1688 (16.431 min): BN034909.D\data.ms (-)



#23

Atrazine

Concen: 0.314 ng

RT: 16.431 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument:

BNA\_N

ClientSampleId :

PB164705BSD

Tgt Ion:200 Resp: 1938

Ion Ratio Lower Upper

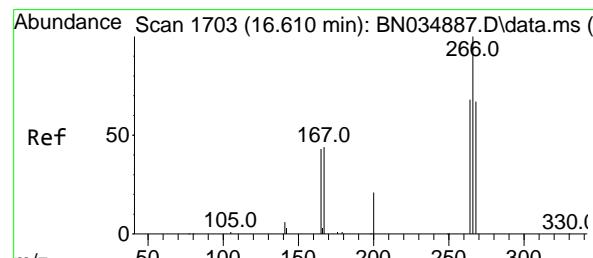
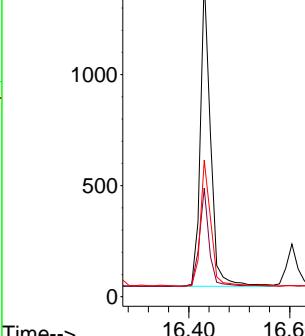
200 100

173 33.9 23.4 35.2

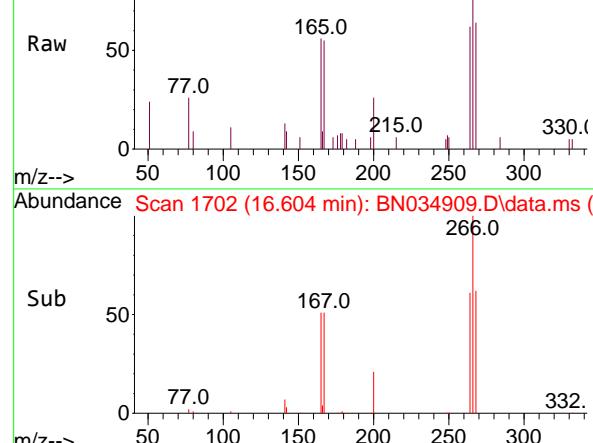
215 42.7 35.4 53.0

Abundance

16.431



Abundance Scan 1702 (16.604 min): BN034909.D\data.ms (-)



#24

Pentachlorophenol

Concen: 0.524 ng

RT: 16.604 min Scan# 1702

Delta R.T. -0.006 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Tgt Ion:266 Resp: 1379

Ion Ratio Lower Upper

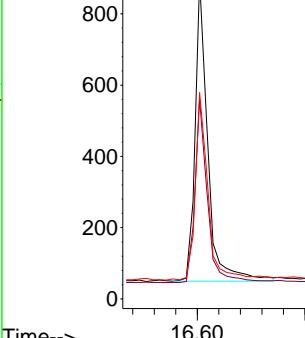
266 100

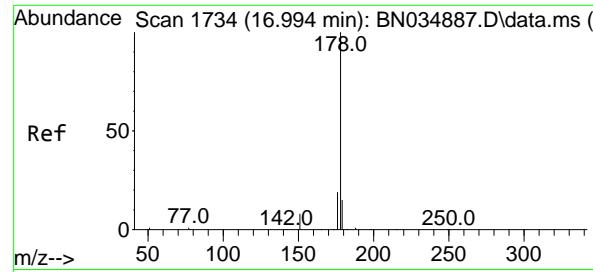
264 59.9 51.3 76.9

268 63.5 53.0 79.6

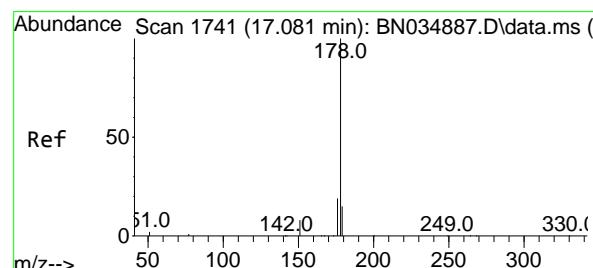
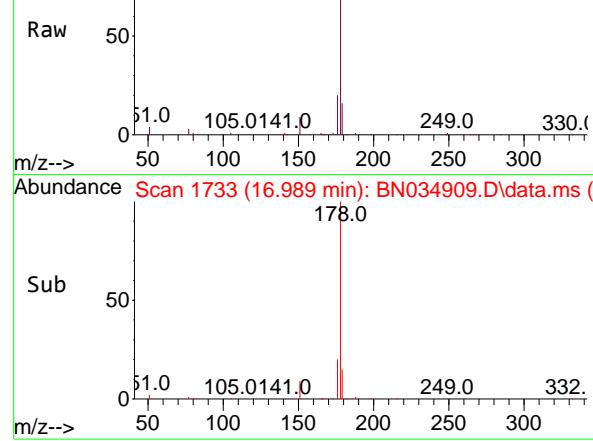
Abundance

16.604

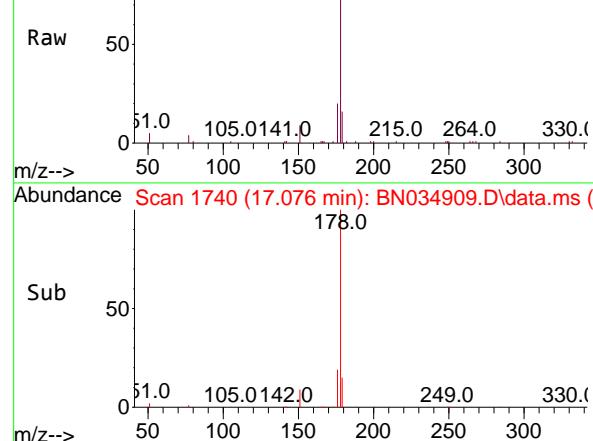




Abundance Scan 1733 (16.989 min): BN034909.D\data.ms (-)



Abundance Scan 1740 (17.076 min): BN034909.D\data.ms (-)



Abundance Scan 1740 (17.076 min): BN034909.D\data.ms (-)

#25

Phenanthrene

Concen: 0.349 ng

RT: 16.989 min Scan# 1

Delta R.T. -0.005 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument:

BNA\_N

ClientSampleId :

PB164705BSD

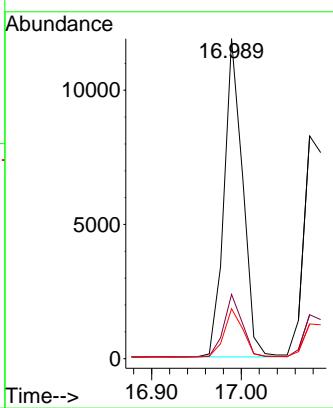
Tgt Ion:178 Resp: 17079

Ion Ratio Lower Upper

178 100

176 19.7 15.5 23.3

179 15.4 12.2 18.2



#26

Anthracene

Concen: 0.352 ng

RT: 17.076 min Scan# 1740

Delta R.T. -0.005 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

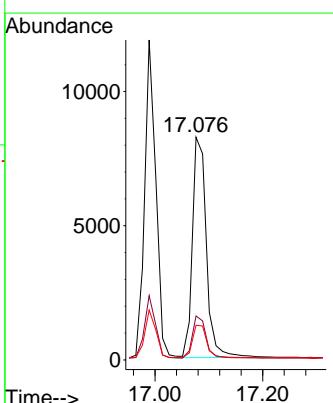
Tgt Ion:178 Resp: 14866

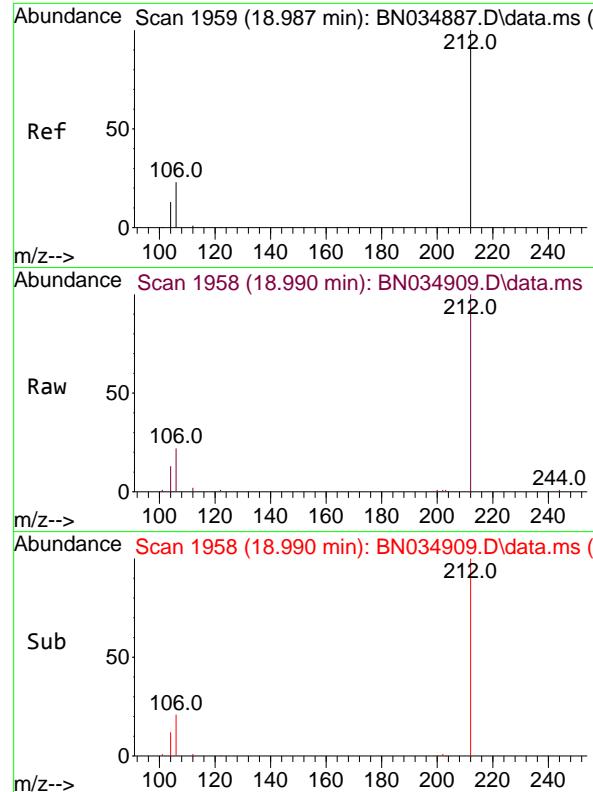
Ion Ratio Lower Upper

178 100

176 18.7 15.0 22.6

179 15.1 12.1 18.1

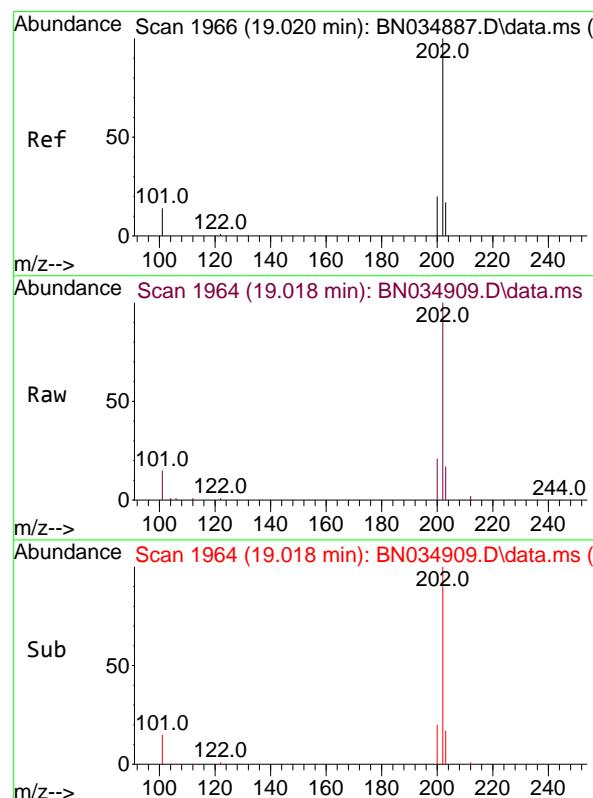
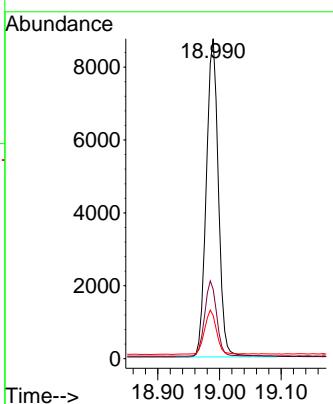




#27  
 Fluoranthene-d10  
 Concen: 0.329 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

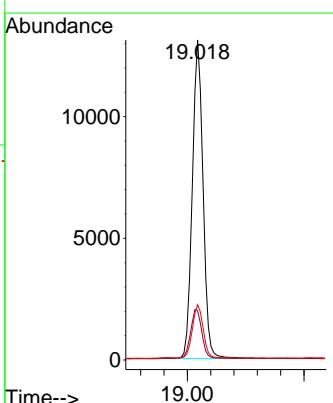
Instrument : BNA\_N  
 ClientSampleId : PB164705BSD

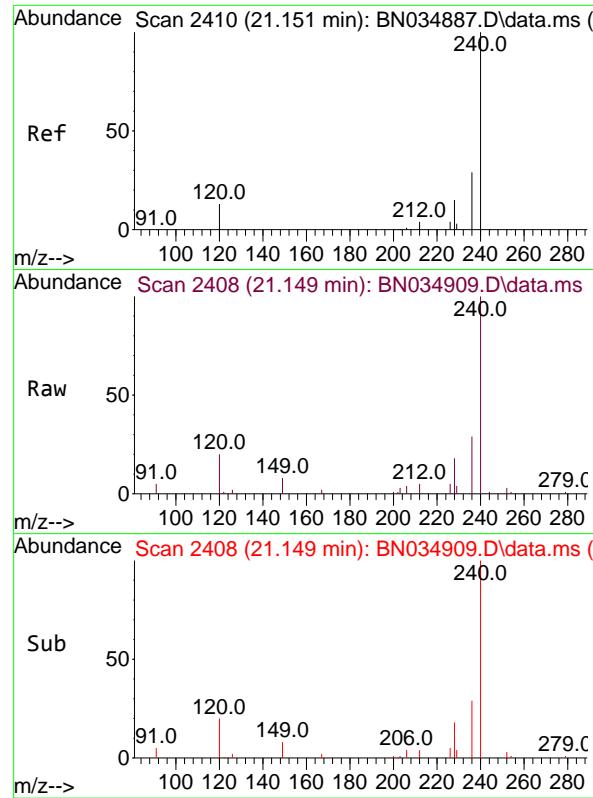
Tgt Ion:212 Resp: 11847  
 Ion Ratio Lower Upper  
 212 100  
 106 23.6 18.2 27.4  
 104 14.0 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.324 ng  
 RT: 19.018 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

Tgt Ion:202 Resp: 16670  
 Ion Ratio Lower Upper  
 202 100  
 101 16.4 12.7 19.1  
 203 16.9 13.7 20.5

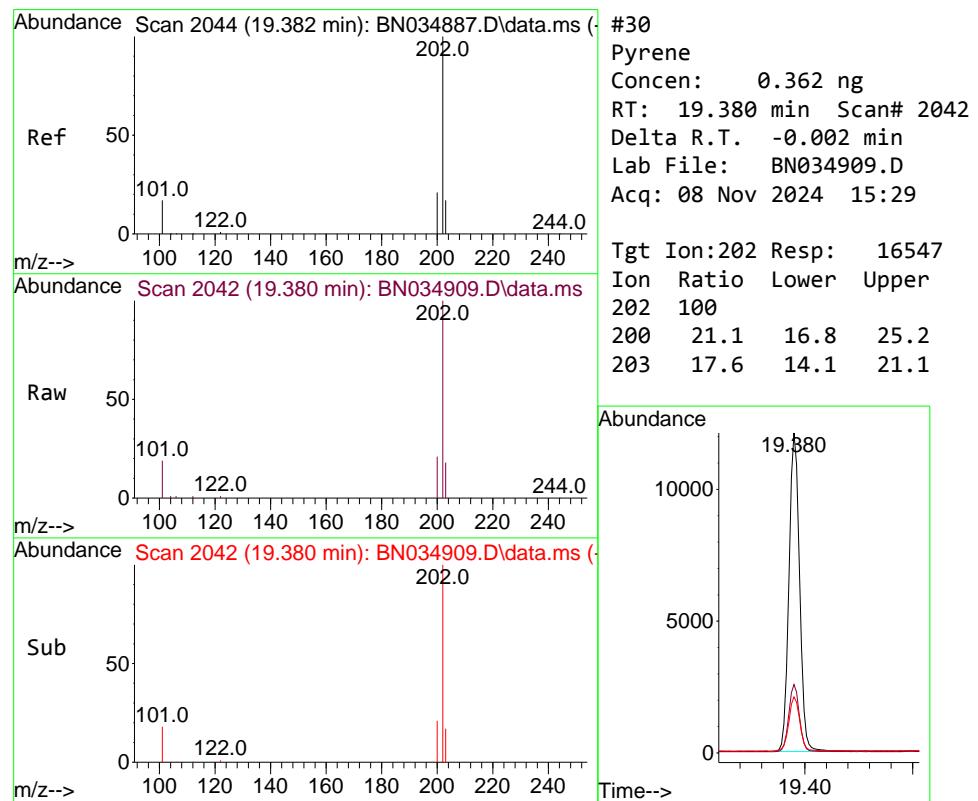
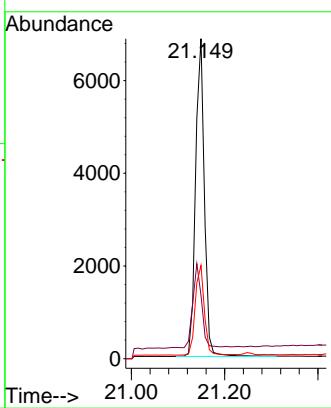




#29  
Chrysene-d12  
Concen: 0.400 ng  
RT: 21.149 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

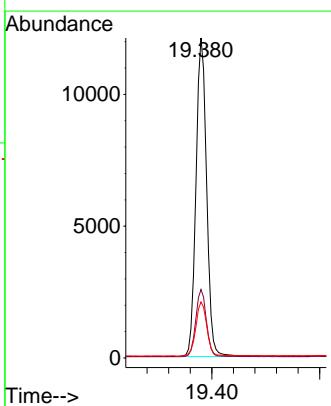
Instrument : BNA\_N  
ClientSampleId : PB164705BSD

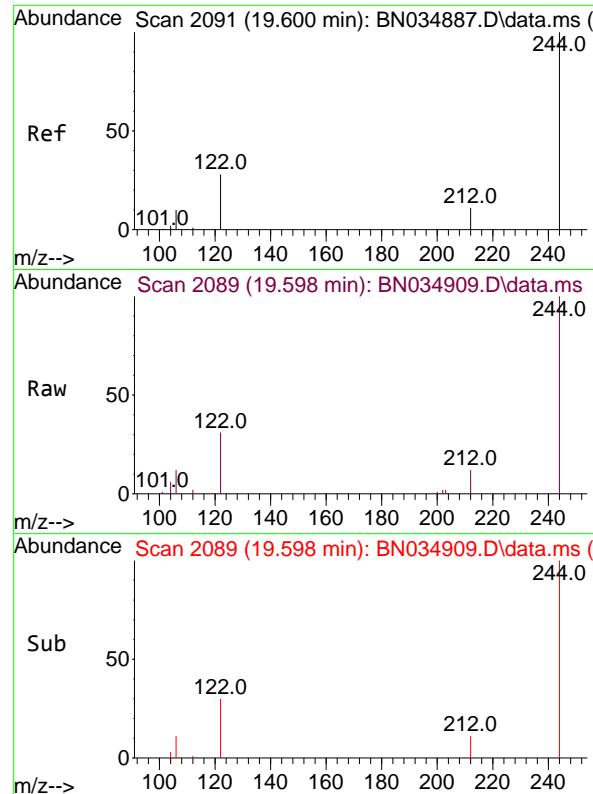
Tgt Ion:240 Resp: 9019  
Ion Ratio Lower Upper  
240 100  
120 19.8 13.8 20.8  
236 29.1 23.8 35.6



#30  
Pyrene  
Concen: 0.362 ng  
RT: 19.380 min Scan# 2042  
Delta R.T. -0.002 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion:202 Resp: 16547  
Ion Ratio Lower Upper  
202 100  
200 21.1 16.8 25.2  
203 17.6 14.1 21.1

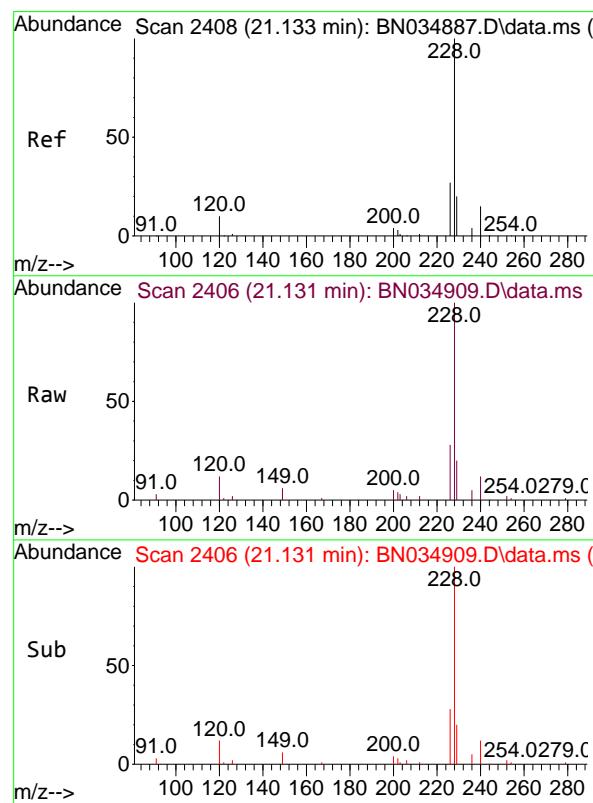
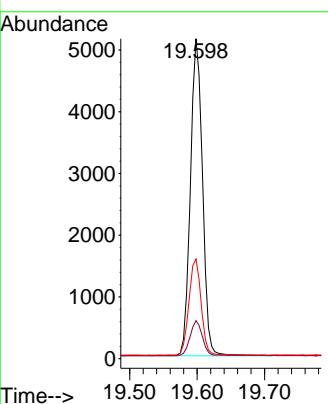




#31  
 Terphenyl-d14  
 Concen: 0.379 ng  
 RT: 19.598 min Scan# 2  
 Delta R.T. -0.002 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

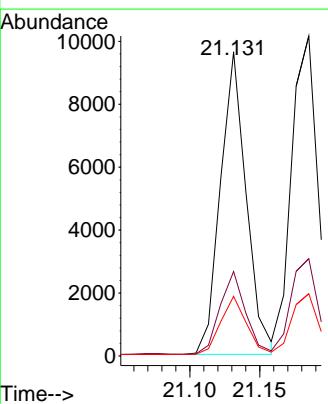
Instrument : BNA\_N  
 ClientSampleId : PB164705BSD

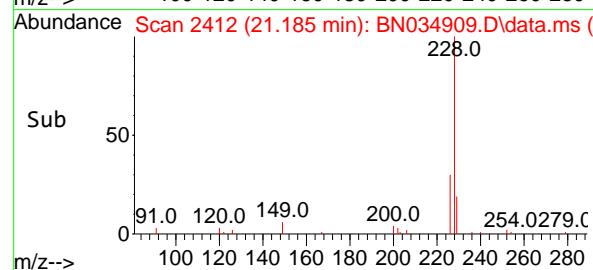
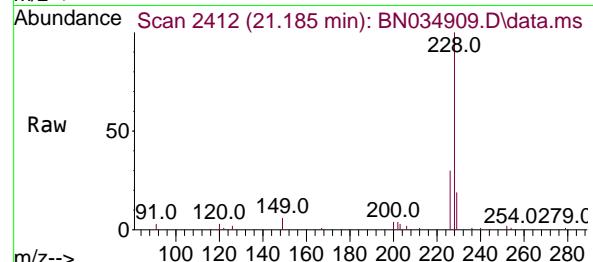
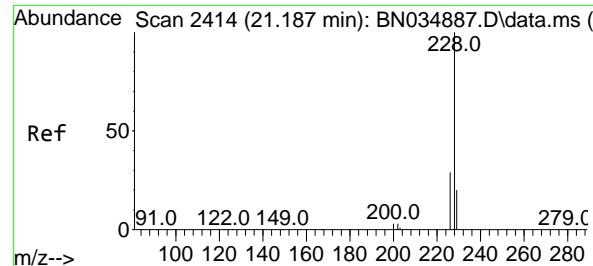
Tgt Ion:244 Resp: 6403  
 Ion Ratio Lower Upper  
 244 100  
 212 11.9 9.4 14.0  
 122 31.2 23.0 34.4



#32  
 Benzo(a)anthracene  
 Concen: 0.351 ng  
 RT: 21.131 min Scan# 2406  
 Delta R.T. -0.002 min  
 Lab File: BN034909.D  
 Acq: 08 Nov 2024 15:29

Tgt Ion:228 Resp: 12354  
 Ion Ratio Lower Upper  
 228 100  
 226 27.8 22.2 33.2  
 229 19.6 16.0 24.0





#33

Chrysene

Concen: 0.366 ng

RT: 21.185 min Scan# 2

Delta R.T. -0.002 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument :

BNA\_N

ClientSampleId :

PB164705BSD

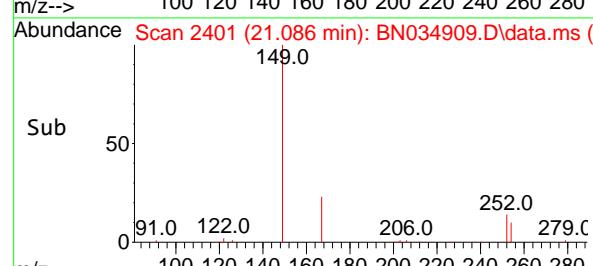
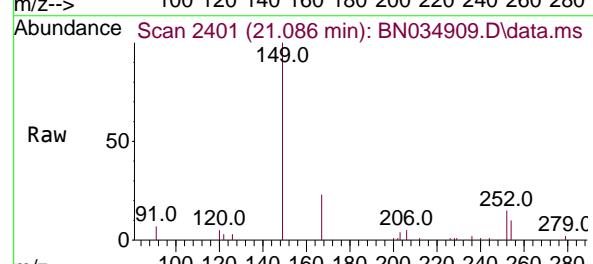
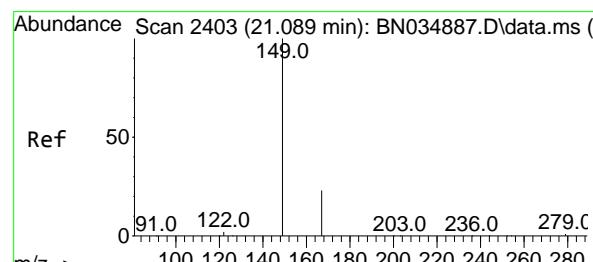
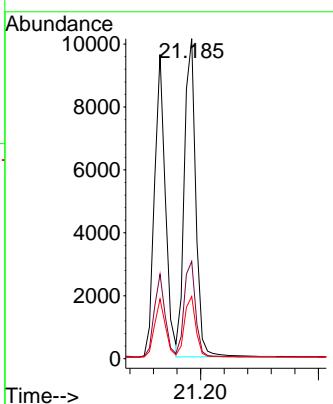
Tgt Ion:228 Resp: 13618

Ion Ratio Lower Upper

228 100

226 30.4 23.7 35.5

229 19.4 16.3 24.5



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.287 ng

RT: 21.086 min Scan# 2401

Delta R.T. -0.003 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

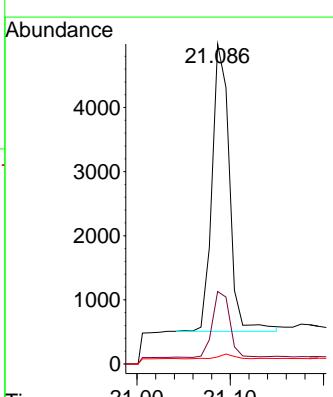
Tgt Ion:149 Resp: 5786

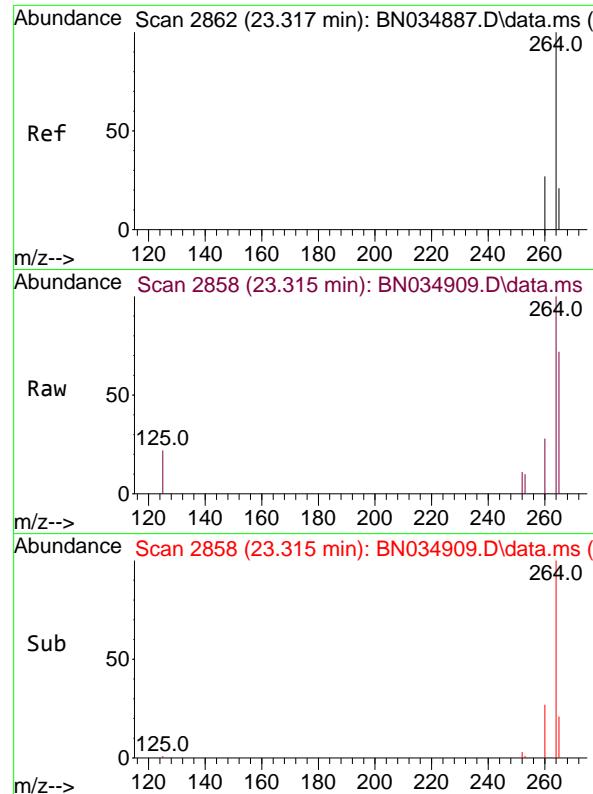
Ion Ratio Lower Upper

149 100

167 23.2 18.1 27.1

279 1.5 1.2 1.8

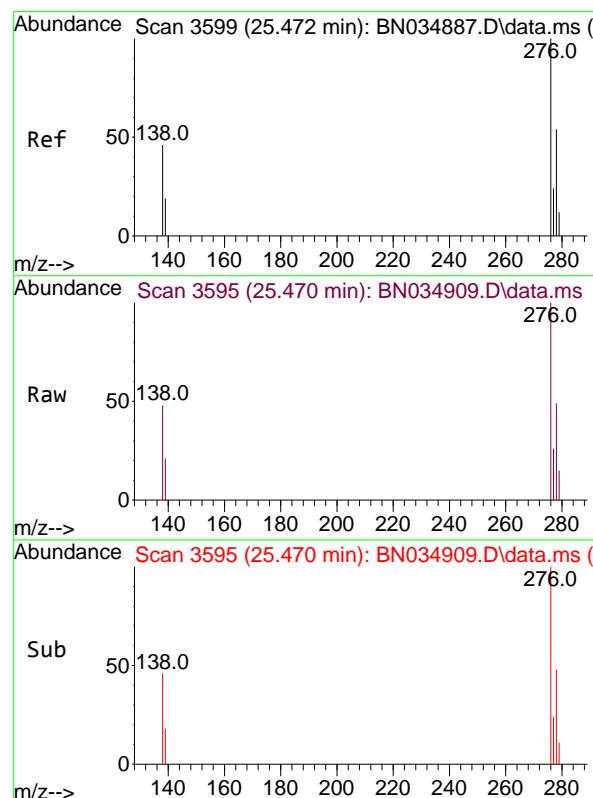
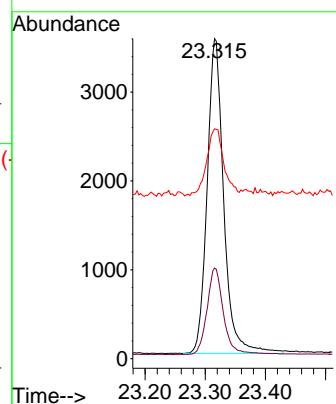




#35  
Perylene-d<sub>12</sub>  
Concen: 0.400 ng  
RT: 23.315 min Scan# 2  
Delta R.T. -0.002 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

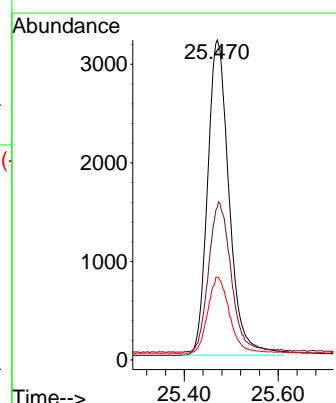
Instrument : BNA\_N  
ClientSampleId : PB164705BSD

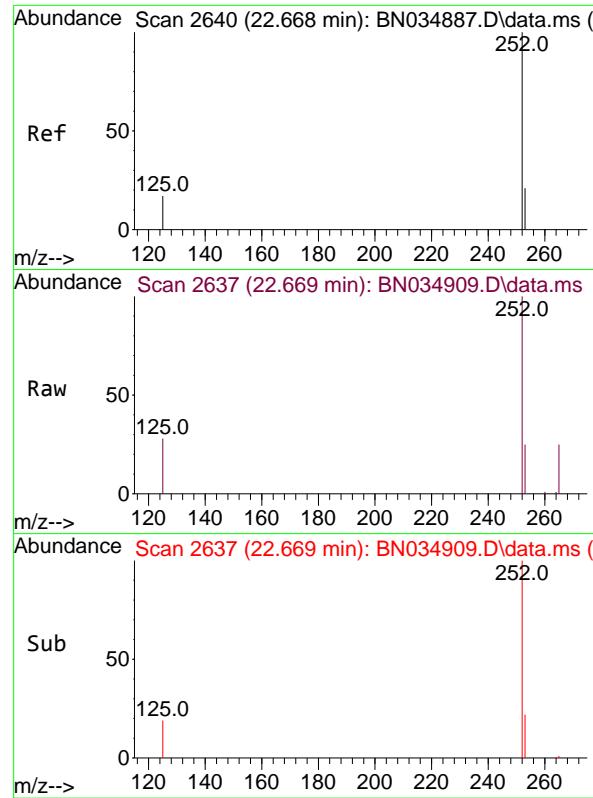
Tgt Ion:264 Resp: 6770  
Ion Ratio Lower Upper  
264 100  
260 28.3 22.2 33.2  
265 71.8 60.9 91.3



#36  
Indeno(1,2,3-cd)pyrene  
Concen: 0.338 ng  
RT: 25.470 min Scan# 3595  
Delta R.T. -0.002 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion:276 Resp: 10193  
Ion Ratio Lower Upper  
276 100  
138 49.8 38.4 57.6  
277 24.2 19.4 29.2





#37

Benzo(b)fluoranthene

Concen: 0.384 ng

RT: 22.669 min Scan# 2

Delta R.T. 0.001 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

Instrument :

BNA\_N

ClientSampleId :

PB164705BSD

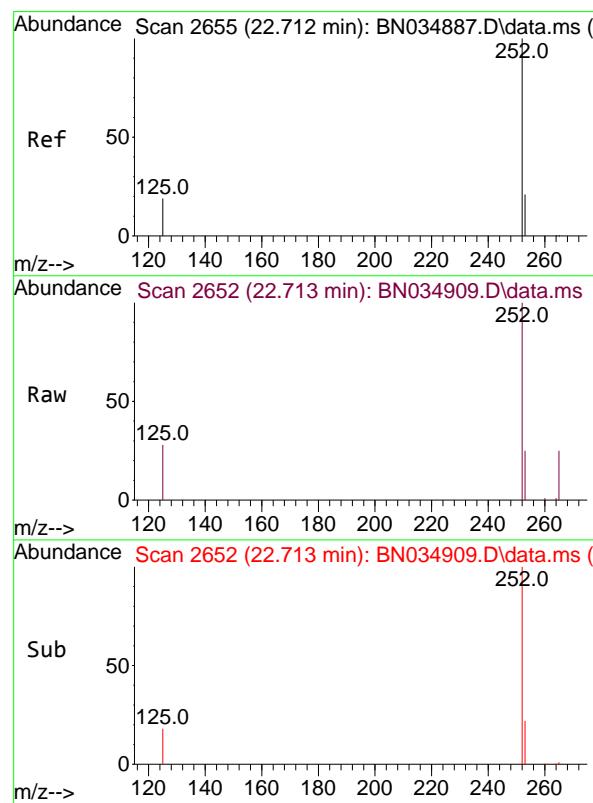
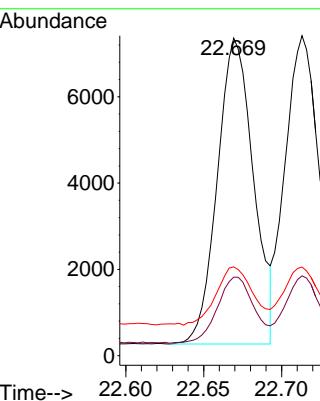
Tgt Ion:252 Resp: 11423

Ion Ratio Lower Upper

252 100

253 24.7 19.4 29.2

125 27.9 21.4 32.2



#38

Benzo(k)fluoranthene

Concen: 0.361 ng

RT: 22.713 min Scan# 2652

Delta R.T. 0.001 min

Lab File: BN034909.D

Acq: 08 Nov 2024 15:29

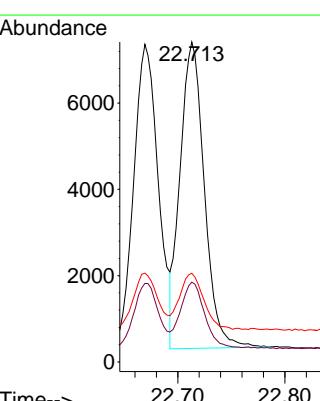
Tgt Ion:252 Resp: 11176

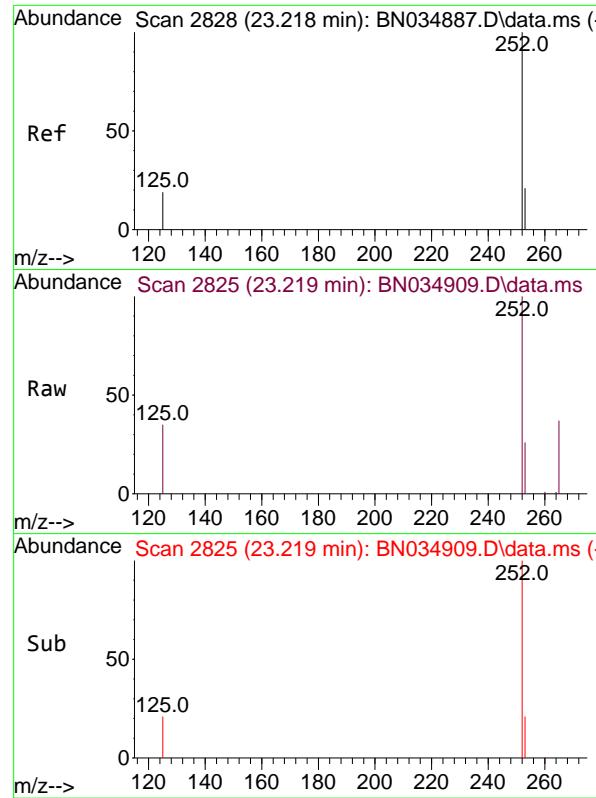
Ion Ratio Lower Upper

252 100

253 24.9 19.8 29.8

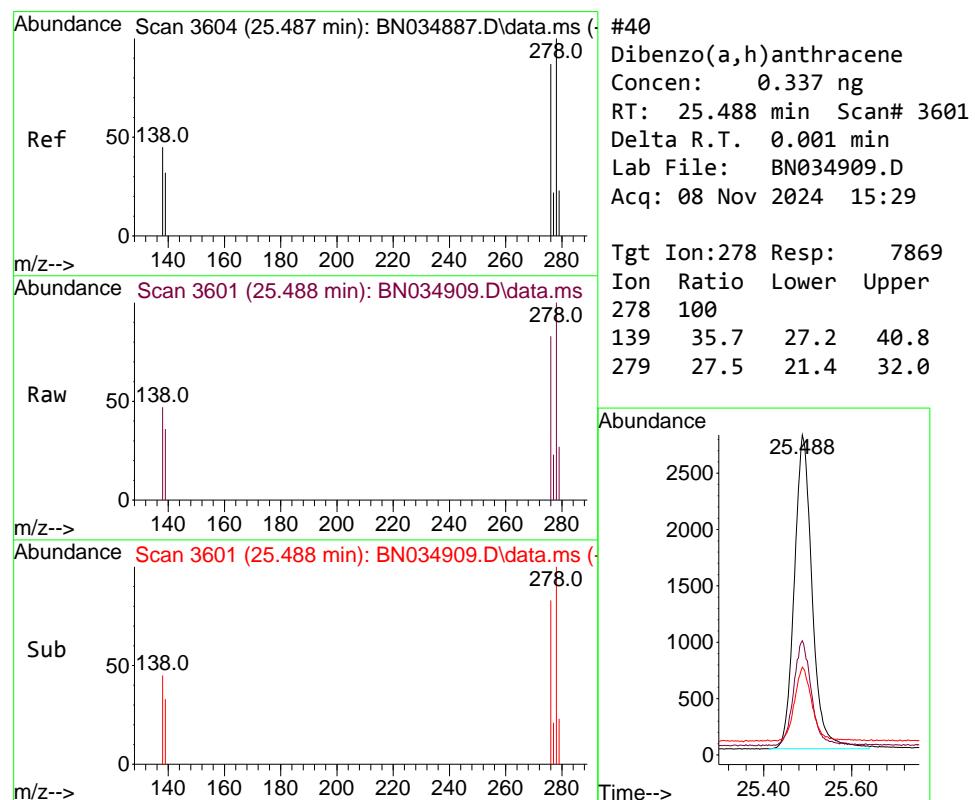
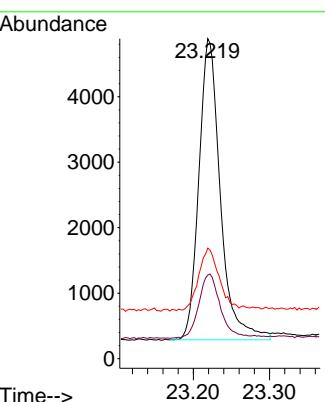
125 27.7 22.6 33.8





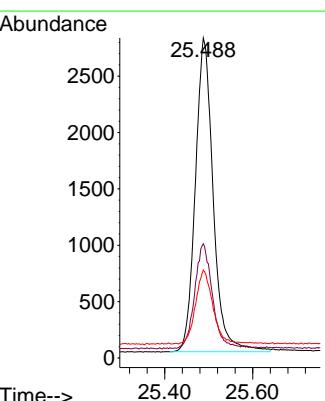
#39  
Benzo(a)pyrene  
Concen: 0.380 ng  
RT: 23.219 min Scan# 2  
Instrument : BNA\_N  
Delta R.T. 0.001 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29  
ClientSampleId : PB164705BSD

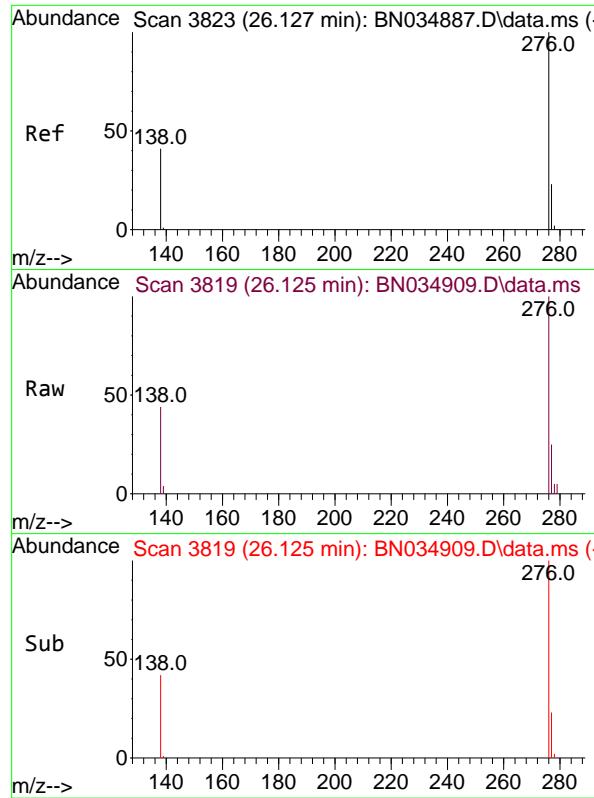
Tgt Ion:252 Resp: 8976  
Ion Ratio Lower Upper  
252 100  
253 26.1 21.4 32.2  
125 34.5 27.8 41.6



#40  
Dibenzo(a,h)anthracene  
Concen: 0.337 ng  
RT: 25.488 min Scan# 3601  
Delta R.T. 0.001 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Tgt Ion:278 Resp: 7869  
Ion Ratio Lower Upper  
278 100  
139 35.7 27.2 40.8  
279 27.5 21.4 32.0

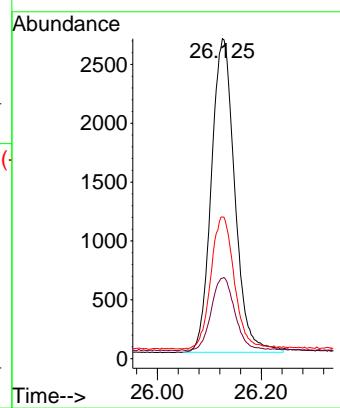




#41  
Benzo(g,h,i)perylene  
Concen: 0.336 ng  
RT: 26.125 min Scan# 3  
Delta R.T. -0.002 min  
Lab File: BN034909.D  
Acq: 08 Nov 2024 15:29

Instrument : BNA\_N  
ClientSampleId : PB164705BSD

Tgt Ion:276 Resp: 8331  
Ion Ratio Lower Upper  
276 100  
277 25.1 20.2 30.2  
138 44.3 33.9 50.9





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

## Manual Integration Report

Sequence:	BN110724	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC0.2	BN034886.D	Benzo(k)fluoranthene	yogesh	11/8/2024 3:36:45 AM	mohammad	11/8/2024 3:55:23 AM	Peak Integrated by Software
SSTDICC0.8	BN034888.D	Benzo(b)fluoranthene	yogesh	11/8/2024 3:36:47 AM	mohammad	11/8/2024 3:55:23 AM	Peak Integrated by Software
SSTDICV0.4	BN034892.D	Bis(2-ethylhexyl)phthalate	yogesh	11/8/2024 3:36:48 AM	mohammad	11/8/2024 3:55:23 AM	Peak Integrated by Software



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

## Manual Integration Report

Sequence:	BN110824	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDCCC0.4	BN034898.D	Bis(2-ethylhexyl)phthalate	Jagrut	11/8/2024 5:39:40 PM	mohammad	11/11/2024 12:24:23 AM	Peak Integrated by Software

**Instrument ID: BNA\_N**

**Daily Analysis Runlog For Sequence/QCBatch ID # BN110724**

Review By	yogesh	Review On	11/8/2024 3:37:02 AM		
Supervise By	mohammad	Supervise On	11/8/2024 3:55:23 AM		
SubDirectory	BN110724	HP Acquire Method	BNA_N		
<b>STD. NAME</b>		<b>STD REF.#</b>			
Tune/Reschk Initial Calibration Stds	SP6573 SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597				
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6601 SP6527 SP6548				

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN034883.D	07 Nov 2024 08:39	RC/JU	Ok
2	SSTDCCC0.4	BN034884.D	07 Nov 2024 09:18	RC/JU	Not Ok
3	SSTDICC0.1	BN034885.D	07 Nov 2024 10:02	RC/JU	Ok
4	SSTDICC0.2	BN034886.D	07 Nov 2024 10:48	RC/JU	Ok,M
5	SSTDICCC0.4	BN034887.D	07 Nov 2024 11:24	RC/JU	Ok
6	SSTDICC0.8	BN034888.D	07 Nov 2024 12:00	RC/JU	Ok,M
7	SSTDICC1.6	BN034889.D	07 Nov 2024 12:36	RC/JU	Ok
8	SSTDICC3.2	BN034890.D	07 Nov 2024 13:13	RC/JU	Ok
9	SSTDICC5.0	BN034891.D	07 Nov 2024 13:49	RC/JU	Ok
10	SSTDICV0.4	BN034892.D	07 Nov 2024 14:24	RC/JU	Ok,M
11	PB164229BL	BN034893.D	07 Nov 2024 15:04	RC/JU	Ok
12	P4368-02	BN034894.D	07 Nov 2024 15:41	RC/JU	Ok,M
13	P4368-08	BN034895.D	07 Nov 2024 16:17	RC/JU	Ok,M
14	SSTDCCC0.4	BN034896.D	07 Nov 2024 16:58	RC/JU	Ok

M : Manual Integration

**Instrument ID: BNA\_N**

**Daily Analysis Runlog For Sequence/QCBatch ID # BN110824**

Review By	Jagrut	Review On	11/8/2024 5:40:11 PM
Supervise By	mohammad	Supervise On	11/11/2024 12:24:23 AM
SubDirectory	BN110824	HP Acquire Method	BNA_N
HP Processing Method	bn110724		
STD. NAME	<b>STD REF.#</b>		
Tune/Reschk Initial Calibration Stds	SP6573 SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597		
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6601 SP6527 SP6548		

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN034897.D	08 Nov 2024 07:50	RC/JU	Ok
2	SSTDCCC0.4	BN034898.D	08 Nov 2024 08:29	RC/JU	Ok,M
3	PB164234BL	BN034899.D	08 Nov 2024 09:05	RC/JU	Ok
4	P4368-03	BN034900.D	08 Nov 2024 09:41	RC/JU	Ok
5	P4368-03	BN034901.D	08 Nov 2024 10:17	RC/JU	Ok
6	P4368-09	BN034902.D	08 Nov 2024 11:12	RC/JU	Ok
7	P4368-09	BN034903.D	08 Nov 2024 11:48	RC/JU	Ok,M
8	PB164235BL	BN034904.D	08 Nov 2024 12:24	RC/JU	Ok
9	P4710-02	BN034905.D	08 Nov 2024 13:05	RC/JU	Ok
10	P4710-03	BN034906.D	08 Nov 2024 13:41	RC/JU	Ok
11	P4710-04	BN034907.D	08 Nov 2024 14:17	RC/JU	Ok
12	PB164705BS	BN034908.D	08 Nov 2024 14:53	RC/JU	Ok
13	PB164705BSD	BN034909.D	08 Nov 2024 15:29	RC/JU	Ok
14	PB164705BL	BN034910.D	08 Nov 2024 16:05	RC/JU	Ok
15	SSTDCCC0.4	BN034911.D	08 Nov 2024 16:41	RC/JU	Ok

M : Manual Integration

Instrument ID: BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN110724**

Review By	yogesh	Review On	11/8/2024 3:37:02 AM		
Supervise By	mohammad	Supervise On	11/8/2024 3:55:23 AM		
SubDirectory	BN110724	HP Acquire Method	BNA_N	HP Processing Method	bn110724
STD. NAME	<b>STD REF.#</b>				
Tune/Reschk Initial Calibration Stds	SP6573 SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597				
CCC Internal Standard/PEM ICV/I.BLK Surrogate Standard MS/MSD Standard LCS Standard	SP6601 SP6527 SP6548				

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN034883.D	07 Nov 2024 08:39		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN034884.D	07 Nov 2024 09:18	A Fresh Calibration is required.	RC/JU	Not Ok
3	SSTDICC0.1	SSTDICC0.1	BN034885.D	07 Nov 2024 10:02	Compound#20,24 removed from 0.1 ppm	RC/JU	Ok
4	SSTDICC0.2	SSTDICC0.2	BN034886.D	07 Nov 2024 10:48	Compound#14,20,24 Kept on QR	RC/JU	Ok,M
5	SSTDICC0.4	SSTDICC0.4	BN034887.D	07 Nov 2024 11:24	Calibration Good for DOD	RC/JU	Ok
6	SSTDICC0.8	SSTDICC0.8	BN034888.D	07 Nov 2024 12:00		RC/JU	Ok,M
7	SSTDICC1.6	SSTDICC1.6	BN034889.D	07 Nov 2024 12:36		RC/JU	Ok
8	SSTDICC3.2	SSTDICC3.2	BN034890.D	07 Nov 2024 13:13		RC/JU	Ok
9	SSTDICC5.0	SSTDICC5.0	BN034891.D	07 Nov 2024 13:49		RC/JU	Ok
10	SSTDICV0.4	ICVBN110724	BN034892.D	07 Nov 2024 14:24		RC/JU	Ok,M
11	PB164229BL	PB164229BL	BN034893.D	07 Nov 2024 15:04		RC/JU	Ok
12	P4368-02	LOQ-SOIL-02-QT4-202	BN034894.D	07 Nov 2024 15:41	LOQ-SOIL-0.2 ppm	RC/JU	Ok,M
13	P4368-08	LOQ-WATER-02-QT4-2	BN034895.D	07 Nov 2024 16:17	LOQ-WATER-0.2 ppm	RC/JU	Ok,M
14	SSTDCCC0.4	SSTDCCC0.4EC	BN034896.D	07 Nov 2024 16:58		RC/JU	Ok

M : Manual Integration

**Instrument ID:** BNA\_N

**Daily Analysis Runlog For Sequence/QCBatch ID # BN110824**

Review By	Jagrut	Review On	11/8/2024 5:40:11 PM		
Supervise By	mohammad	Supervise On	11/11/2024 12:24:23 AM		
SubDirectory	BN110824	HP Acquire Method	BNA_N	HP Processing Method	bn110724
STD. NAME	<b>STD REF.#</b>				
Tune/Reschk	SP6573				
Initial Calibration Stds	SP6603,SP6602,SP6601,SP6600,SP6599,SP6598,SP6597				
CCC	SP6601				
Internal Standard/PEM	SP6527				
ICV/I.BLK	SP6548				
Surrogate Standard					
MS/MSD Standard					
LCS Standard					

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN034897.D	08 Nov 2024 07:50		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN034898.D	08 Nov 2024 08:29		RC/JU	Ok,M
3	PB164234BL	PB164234BL	BN034899.D	08 Nov 2024 09:05		RC/JU	Ok
4	P4368-03	MDL-SOIL-03-QT4-202	BN034900.D	08 Nov 2024 09:41	MDL-SOIL 0.1 ppm	RC/JU	Ok
5	P4368-03	MDL-SOIL-03-QT4-202	BN034901.D	08 Nov 2024 10:17	MDL-SOIL 0.2 ppm	RC/JU	Ok
6	P4368-09	MDL-WATER-03-QT4-2	BN034902.D	08 Nov 2024 11:12	MDL-WATER 0.1 ppm	RC/JU	Ok
7	P4368-09	MDL-WATER-03-QT4-2	BN034903.D	08 Nov 2024 11:48	MDL-WATER 0.2 ppm	RC/JU	Ok,M
8	PB164235BL	PB164235BL	BN034904.D	08 Nov 2024 12:24		RC/JU	Ok
9	P4710-02	BP-BPOW6-7-GW-202	BN034905.D	08 Nov 2024 13:05		RC/JU	Ok
10	P4710-03	BP-BPOW6-11-GW-202	BN034906.D	08 Nov 2024 13:41		RC/JU	Ok
11	P4710-04	BP-BPOW6-8-GW-202	BN034907.D	08 Nov 2024 14:17		RC/JU	Ok
12	PB164705BS	PB164705BS	BN034908.D	08 Nov 2024 14:53		RC/JU	Ok
13	PB164705BSD	PB164705BSD	BN034909.D	08 Nov 2024 15:29		RC/JU	Ok
14	PB164705BL	PB164705BL	BN034910.D	08 Nov 2024 16:05		RC/JU	Ok
15	SSTDCCC0.4	SSTDCCC0.4EC	BN034911.D	08 Nov 2024 16:41		RC/JU	Ok

M : Manual Integration

SOP ID:	M3510C,3580A-Extraction SVOC-20		
Clean Up SOP #:	N/A	Extraction Start Date :	11/06/2024
Matrix :	Water	Extraction Start Time :	08:45
Weigh By:	N/A	Extraction End Date :	11/06/2024
Balance check:	N/A	Extraction End Time :	13:30
Balance ID:	N/A	pH Meter ID:	N/A
pH Strip Lot#:	E3574	Hood ID:	4,6,7
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	SP6606
Surrogate	1.0ML	0.4 PPM	SP6636
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	E3823
Baked Na2SO4	N/A	EP2556
10N NaOH	N/A	EP2550
H2SO4 1:1	N/A	EP2548
N/A	N/A	N/A

**Extraction Conformance/Non-Conformance Comments:**

1.5 ML Vial lot# 2210673. pH Adjusted <2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID: Water bath -01 Envap ID: NEVAP-02  
 KD Bath Temperature: 60 °C Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
11/06/24 13:35	RP (Set 1ug)	AE/SVOC
	Preparation Group	Analysis Group

**Analytical Method:** M3510C,3580A-Extraction SVOC-20

**Concentration Date:** 11/06/2024

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB164705BL	SBLK705	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1			SEP-01
PB164705BS	SLCS705	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1			2
PB164705BD	SLCSD705	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1			3
P4710-02	BP-BPOW6-7-GW-20241030	SVOC-SIMGrou p1	980	6	RUPESH	rajesh	1	C		4
P4710-03	BP-BPOW6-11-GW-202411031	SVOC-SIMGrou p1	1000	6	RUPESH	rajesh	1	C		5
P4710-04	BP-BPOW6-8-GW-20241101	SVOC-SIMGrou p1	980	6	RUPESH	rajesh	1	C		6


  
 11/06/24

169105  
8:45

## WORKLIST(Hardcopy Internal Chain)

WorkList Name : P4710

WorkList ID : 185158

Department : Extraction

Date : 11-06-2024 08:22:17

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
P4710-02	BP-BPOW6-7-GW-20241030	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	L31	10/30/2024	8270-Modified
P4710-03	BP-BPOW6-11-GW-20241031	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	L31	10/31/2024	8270-Modified
P4710-04	BP-BPOW6-8-GW-20241101	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	L31	11/01/2024	8270-Modified

Date/Time 11/6/24 8:40  
 Raw Sample Received by: RJ (Cef lug)  
 Raw Sample Relinquished by: CD (Cef lug)

Page 1 of 1

Date/Time 11/6/24 8:05  
 Raw Sample Received by: JP S  
 Raw Sample Relinquished by: RJ (Cef lug)



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## Prep Standard - Chemical Standard Summary

**Order ID :** P4710

**Test :** SVOC-SIMGroup1

**Prepbatch ID :** PB164705,

**Sequence ID/Qc Batch ID:** BN110824,

**Standard ID :**

EP2548,EP2550,EP2556,SP6527,SP6547,SP6548,SP6573,SP6596,SP6597,SP6598,SP6599,SP6600,SP6601,SP6602,SP6603,SP6606,SP6636,

**Chemical ID :**

E3551,E3657,E3746,E3759,E3768,E3786,E3788,E3823,M5178,S10103,S10247,S10782,S10977,S11003,S11011,S11097,S11494,S11566,S11766,S11771,S12029,S12077,S12096,S12105,S12112,S12113,S12117,S12126,S12453,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>
314	1.1 H2SO4 SOLN	<a href="#">EP2548</a>	10/16/2024	04/16/2025	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 10/16/2024

FROM 1000.00000ml of W3112 + 4000.00000ml of M5178 = Final Quantity: 2000.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
1874	10 N SODIUM HYDROXIDE SOLN	<a href="#">EP2550</a>	10/16/2024	04/16/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 10/16/2024

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 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="#">EP2556</a>	11/03/2024	01/03/2025	Rajesh Parikh	Extraction_SC ALE_2 (EX-SC-2)	None	RUPESHKUMAR SHAH 11/03/2024

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="#">SP6527</a>	06/10/2024	12/05/2024	Jagrut Upadhyay	None	None	mohammad ahmed 07/05/2024

FROM 0.10000ml of S12029 + 4.90000ml of E3759 = Final Quantity: 5.000 ml



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# **SVOC STANDARD PREPARATION LOG**

## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3895	50 ug/ml DFTPP 8270E	<a href="#">SP6573</a>	07/15/2024	01/08/2025	Rahul Chavli	None	None	Yogesh Patel 07/17/2024

FROM 1.00000ml of S10247 + 19.00000ml of E3768 = Final Quantity: 20.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3339	8270 sim calibration stock 10ppm (CPI)	<a href="#">SP6596</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.02500ml of S12113 + 0.03350ml of S10103 + 0.05000ml of S11494 + 0.10000ml of S12112 + 0.12500ml of S10782 + 0.25000ml of S11097 + 0.25000ml of S12077 + 24.16650ml of E3786 = Final Quantity: 25.000 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	<a href="#">SP6597</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.50000ml of E3786 + 0.01000ml of SP6527 + 0.50000ml of SP6596 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	<a href="#">SP6598</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.68000ml of E3786 + 0.01000ml of SP6527 + 0.32000ml of SP6596 = Final Quantity: 1.010 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	<a href="#">SP6599</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.84000ml of E3786 + 0.01000ml of SP6527 + 0.16000ml of SP6596 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	<a href="#">SP6600</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.92000ml of E3786 + 0.01000ml of SP6527 + 0.08000ml of SP6596 = Final Quantity: 1.010 ml



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## SVOC STANDARD PREPARATION LOG

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	<a href="#">SP6601</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.96000ml of E3786 + 0.01000ml of SP6527 + 0.04000ml of SP6596 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	<a href="#">SP6602</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

FROM 0.50000ml of E3786 + 0.01000ml of SP6527 + 0.50000ml of SP6601 = Final Quantity: 1.010 ml



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## **SVOC STANDARD PREPARATION LOG**

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	<a href="#">SP6603</a>	08/09/2024	11/21/2024	Jagrut Upadhyay	None	None	Yogesh Patel 08/21/2024

**FROM** 0.75000ml of E3786 + 0.01000ml of SP6527 + 0.25000ml of SP6601 = 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>
3492	8270-SIM-Spike 0.4 PPM	<a href="#">SP6606</a>	08/20/2024	02/12/2025	Rahul Chavli	None	None	mohammad ahmed 08/21/2024

**FROM** 0.00160ml of S11011 + 0.02000ml of S11771 + 0.04000ml of S12105 + 0.04000ml of S12126 + 0.04000ml of S12453 + 99.85840ml of E3788 = Final Quantity: 100.000 ml



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# **SVOC STANDARD PREPARATION LOG**



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### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19631-100 / SODIUM SULFATE, ANHYDROUS, PEST GRADE, 1	313201	01/03/2025	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)	24C0162011	11/25/2024	05/25/2024 / Rajesh	05/08/2024 / Rajesh	E3746
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24D1962005	12/08/2024	06/08/2024 / Rajesh	05/31/2024 / Rajesh	E3759
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24E2462004	01/08/2025	07/08/2024 / Rajesh	06/21/2024 / Rajesh	E3768
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24F1062004	02/01/2025	08/01/2024 / Rajesh	07/16/2024 / Rajesh	E3786



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 #
Seidler Chemical	BA-9254-03 / Acetone, Ultra Resi (cs/4x4L)	23H1462005	04/23/2025	08/13/2024 / Rajesh	08/13/2024 / Rajesh	E3788
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24I2662006	05/03/2025	11/03/2024 / Rajesh	10/24/2024 / Rajesh	E3823
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000281827	03/29/2026	05/25/2022 / william	04/05/2022 / william	M5178
CPI International	Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml	440246	02/08/2025	08/08/2024 / Jagrut	12/09/2021 / Christian	S10103
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH <sub>2</sub> Cl <sub>2</sub> , 1mL,	A0182667	01/15/2025	07/15/2024 / Rahul	03/18/2022 / Christian	S10247
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0186160	11/21/2024	05/21/2024 / Jagrut	09/07/2022 / Christian	S10782

### 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	A0188108	11/30/2024	05/31/2024 / Jagrut	12/28/2022 / Christian	S10977
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0189418	11/30/2024	05/31/2024 / Jagrut	12/28/2022 / Christian	S11003
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0193449	02/20/2025	08/20/2024 / yogesh	01/13/2023 / Christian	S11011
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-110381-01 / 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1ml	495831	02/08/2025	08/08/2024 / Jagrut	02/07/2023 / Christian	S11097
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	02/08/2025	08/08/2024 / Jagrut	08/11/2023 / Yogesh	S11494
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0201940	12/05/2024	06/05/2024 / Rahul	09/18/2023 / Kiran	S11566

[CS 4978-1]



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

### CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	12/14/2024	06/14/2024 / Rahul	11/21/2023 / Rahul	S11766

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31853 / 1,4-Dioxane, 2000 ug/ml , Solvent: Methylene Chloride	A0196453	02/20/2025	08/20/2024 / Rahul	11/21/2023 / Rahul	S11771

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	A0201320	12/05/2024	06/05/2024 / Rahul	12/21/2023 / Rahul	S12029

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110816-01 / Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL, (Maximum Expiration: 180 Days)	414127	02/08/2025	08/08/2024 / Jagrut	01/31/2024 / Rahul	S12077

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555224 / Custom 8270 Plus Std #2 [2nd lot at \$85 per ampul if requested - contact ARM with Request]	A0207706	12/05/2024	06/05/2024 / Rahul	02/05/2024 / Rahul	S12096

[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]	A0207706	02/12/2025	08/12/2024 / Rahul	02/05/2024 / Rahul	S12105

[CS 4978-2]

### CHEMICAL RECEIPT LOG BOOK

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	01/09/2025	07/09/2024 / Jagrut	03/08/2024 / Rahul	S12112
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	02/09/2025	08/09/2024 / Jagrut	03/08/2024 / Rahul	S12113
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0203726	12/05/2024	06/05/2024 / Rahul	03/15/2024 / Rahul	S12117
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, CH2Cl2 [New Solvent 100% CH2Cl2]	A0203726	02/12/2025	08/12/2024 / Rahul	03/15/2024 / Rahul	S12126
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555223 / Custom 8270 Plus Std #1 [2nd lot at \$100 per ampul if requested - contact ARM with Request]	A0214021	02/12/2025	08/12/2024 / Rahul	07/23/2024 / RAHUL	S12453
[CS 4978-1]						
Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112



5580 Skylane Blvd  
Santa Rosa, CA 95403

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:  
Z-112090 440246  $\leq -10^{\circ}\text{C}$  Methylene Chloride 2/16/2026 CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL  
-04

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
2-chlorophenol-d <sub>4</sub>	93951-73-6	99.3	248.12.7P	7487 $\pm$ 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 $\pm$ 17.26
phenol-d <sub>6</sub>	13127-88-3	99.9	949.120.8P	7481 $\pm$ 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 $\pm$ 17.17

Received on

02/25/21

by  
CG

S9236  
+0

S9240

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

  
All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certified By:

Erica Castiglione  
Chemist



5580 Skylane Blvd  
Santa Rosa, CA 95403

(707)525-5788  
(800)878-7654 Toll Free  
(707)545-7901 Fax

Received on  
02/07/23 by C6

SH067 S11096  
to  
S11099

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 4

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:  
Z-110381-01 495831 ≤ -10 °C Methylene Chloride 10/30/2027 Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1003 ± 17.27
acenaphthylene	208-96-8	97.6	14.290.1P	999.8 ± 17.22
aniline	62-53-3	99.9	64.7.1P	995 ± 17.13
anthracene	120-12-7	99.5	15.7.1P	1001 ± 17.24
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 17.21
benzo[a]anthracene	56-55-3	100	16.7.3P	1001 ± 17.24
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1001 ± 19.91
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 17.92
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 19.88
benzo[a]pyrene	50-32-8	97	20.286.2P	999.1 ± 26.35
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 17.24
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	999.7 ± 17.89
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1001 ± 17.23
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.13P	999.5 ± 17.89
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 17.21
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 19.86
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1P	999.1 ± 17.2
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 19.58
carbazole	86-74-8	99.4	239.7.2P	1000 ± 17.22

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:

Briana Smith  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

# Certificate of Analysis

Page 4 of 4

Catalog No.: Z-110381-01

Lot No.: 495831

Expiration Date: 10/30/2027

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	1000 ± 17.22
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	1000 ± 17.22
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1002 ± 17.25

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By:

Briana Smith  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

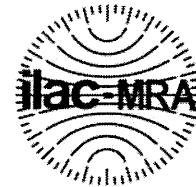
# RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
 Bellefonte, PA 16823-8812  
 Tel: (800)356-1688  
 Fax: (814)353-1309

[www.restek.com](http://www.restek.com)



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on  
 03/11/2022

b7  
 CG

S10242  
 to

S10247

Catalog No. : 31615

Lot No.: A0182667

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000 $\mu$ g/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL

Pkg Amt: > 1 mL

Expiration Date : March 31, 2025

Storage: 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

Ship: Ambient

### C E R T I F I E D   V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachlorophenol <b>CAS #</b> 87-86-5 <b>Purity</b> 99%	1,003.6 $\mu$ g/mL	+/- 5.8897 $\mu$ g/mL	+/- 45.7132 $\mu$ g/mL	+/- 66.0037 $\mu$ g/mL
2	DFTPP (Decafluorotriphenylphosphine) <b>CAS #</b> 5074-71-5 <b>Purity</b> 95%	1,006.6 $\mu$ g/mL	+/- 5.9074 $\mu$ g/mL	+/- 45.8508 $\mu$ g/mL	+/- 66.2023 $\mu$ g/mL
3	Benzidine <b>CAS #</b> 92-87-5 <b>Purity</b> 99%	1,008.4 $\mu$ g/mL	+/- 5.9179 $\mu$ g/mL	+/- 45.9318 $\mu$ g/mL	+/- 66.3193 $\mu$ g/mL
4	4,4'-DDT <b>CAS #</b> 50-29-3 <b>Purity</b> 99%	1,007.6 $\mu$ g/mL	+/- 5.9132 $\mu$ g/mL	+/- 45.8954 $\mu$ g/mL	+/- 66.2667 $\mu$ g/mL

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**

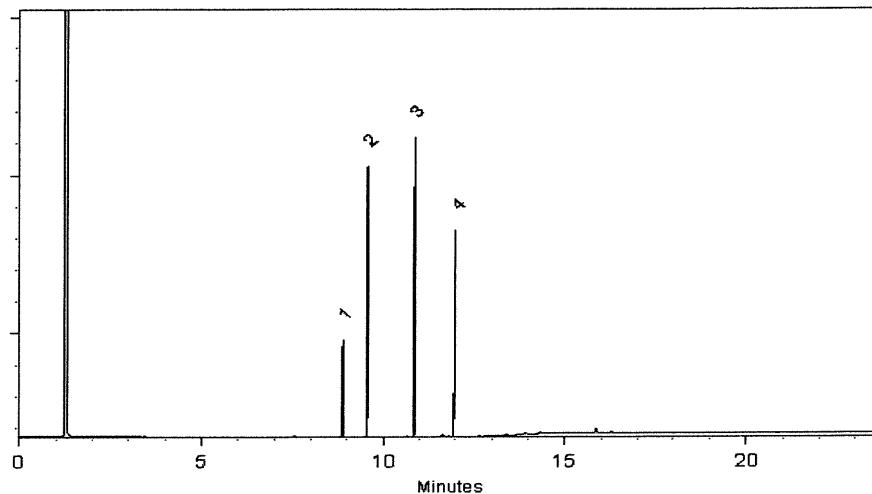
250°C

**Det. Temp:**

330°C

**Det. Type:**

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 08-Mar-2022 Balance: B345965662

Marilina Cowan - Operations Tech I

Date Passed: 10-Mar-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



# CERTIFIED REFERENCE MATERIAL

110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: (800)356-1688  
Fax: (814)353-1309

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## 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.

**Catalog No. :** 33913

**Lot No.:** A0186160

**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 :** May 31, 2028

**Storage:** 10°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

Received on  
09/07/22  
by  
CG

810778  
to  
810782

### 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	2-Methylnaphthalene-d10 <b>CAS #</b> 7297-45-2 <b>Purity</b> 96%	2,015.0 $\mu$ g/mL	+/- 11.8254	$\mu$ g/mL	Gravimetric
	(Lot EF-135)		+/- 90.7728	$\mu$ g/mL	Unstressed
			+/- 100.7207	$\mu$ g/mL	Stressed
2	Fluoranthene-d10 <b>CAS #</b> 93951-69-0 <b>Purity</b> 99%	2,007.0 $\mu$ g/mL	+/- 11.7782	$\mu$ g/mL	Gravimetric
	(Lot PR-20668)		+/- 90.4107	$\mu$ g/mL	Unstressed
			+/- 100.3188	$\mu$ g/mL	Stressed

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

75°C (hold 1 min.) to 330°C  
@ 20°C/min. (hold 10 min.)

**Inj. Temp:**

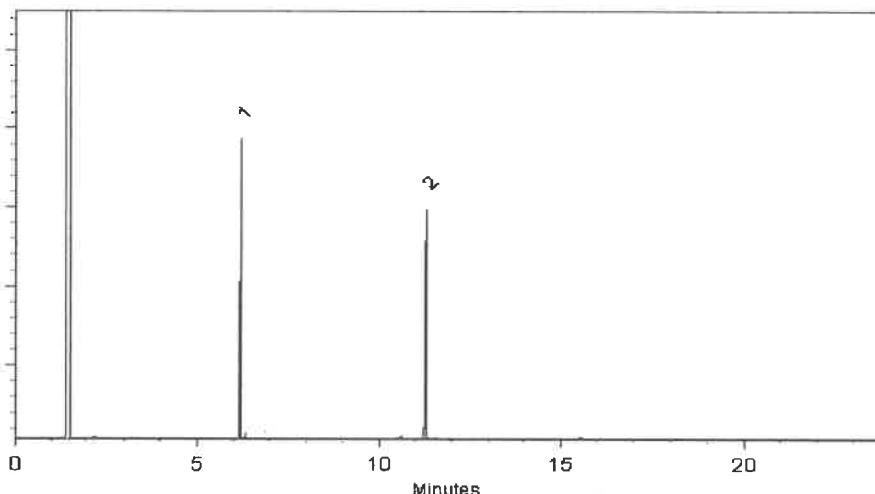
250°C

**Det. Temp:**

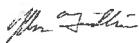
330°C

**Det. Type:**

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

  
John Friedline - Operations Technician I

Date Mixed: 09-Jun-2022      Balance: B442140311

  
Marina Cowan - Operations Tech II ARM QC

Date Passed: 13-Jun-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

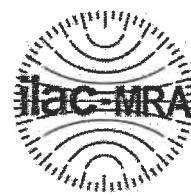
# RESTEK® CERTIFIED REFERENCE MATERIAL

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## 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.

Catalog No. : 31087

Lot No.: A0188108

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 : August 31, 2030

Storage: 10°C or colder

Ship: Ambient

Received by  
CG on  
12/28/22  
S10951  
to  
S10980

### 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	2-Fluorophenol <b>CAS #</b> 367-12-4 <b>Purity</b> 99%	10,088.5 $\mu$ g/mL	+/- 58.6554	$\mu$ g/mL	Gravimetric
	(Lot STBF3761V)		+/- 294.4162	$\mu$ g/mL	Unstressed
			+/- 357.2628	$\mu$ g/mL	Stressed
2	Phenol-d6 <b>CAS #</b> 13127-88-3 <b>Purity</b> 99%	10,043.3 $\mu$ g/mL	+/- 58.3923	$\mu$ g/mL	Gravimetric
	(Lot PR-31262)		+/- 293.0957	$\mu$ g/mL	Unstressed
			+/- 355.6603	$\mu$ g/mL	Stressed
3	2,4,6-Tribromophenol <b>CAS #</b> 118-79-6 <b>Purity</b> 99%	10,010.0 $\mu$ g/mL	+/- 58.1990	$\mu$ g/mL	Gravimetric
	(Lot MKCJ7664)		+/- 292.1253	$\mu$ g/mL	Unstressed
			+/- 354.4829	$\mu$ g/mL	Stressed

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant pressure 10 psi.

**Temp. Program:**

40°C (hold 2 min.) to 330°C  
@ 10°C/min. (hold 10 min.)

**Inj. Temp:**

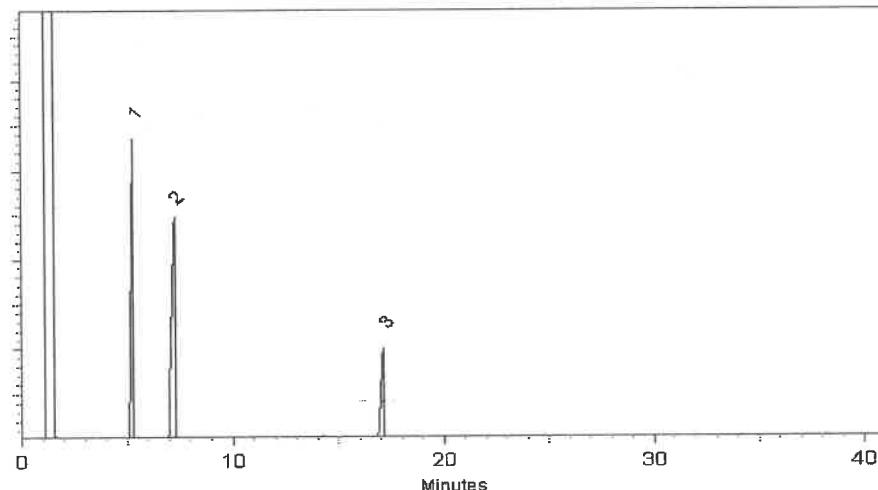
250°C

**Det. Temp:**

330°C

**Det. Type:**

FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.



Morgan Craighead - Mix Technician

Date Mixed: 02-Aug-2022 Balance: 1127510105

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 05-Aug-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
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# CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31086      Lot No.: A0189418  
 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 : August 31, 2028      Storage: 10°C or colder  
 Handling: Sonicate prior to use.      Ship: Ambient

Received by  
CG on  
12/28/22  
Storage  
to  
Silo 10

### 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	Nitrobenzene-d5 <b>CAS #</b> 4165-60-0 <b>Purity</b> 99%	5,009.8 $\mu$ g/mL	+/- 29.1271 $\mu$ g/mL	+/- 225.6421 $\mu$ g/mL	+/- 250.3778 $\mu$ g/mL
2	2-Fluorobiphenyl <b>CAS #</b> 321-60-8 <b>Purity</b> 99%	5,026.6 $\mu$ g/mL	+/- 29.2250 $\mu$ g/mL	+/- 226.4003 $\mu$ g/mL	+/- 251.2191 $\mu$ g/mL
3	p-Terphenyl-d14 <b>CAS #</b> 1718-51-0 <b>Purity</b> 99%	5,027.3 $\mu$ g/mL	+/- 29.2289 $\mu$ g/mL	+/- 226.4304 $\mu$ g/mL	+/- 251.2524 $\mu$ g/mL

**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.

**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:**

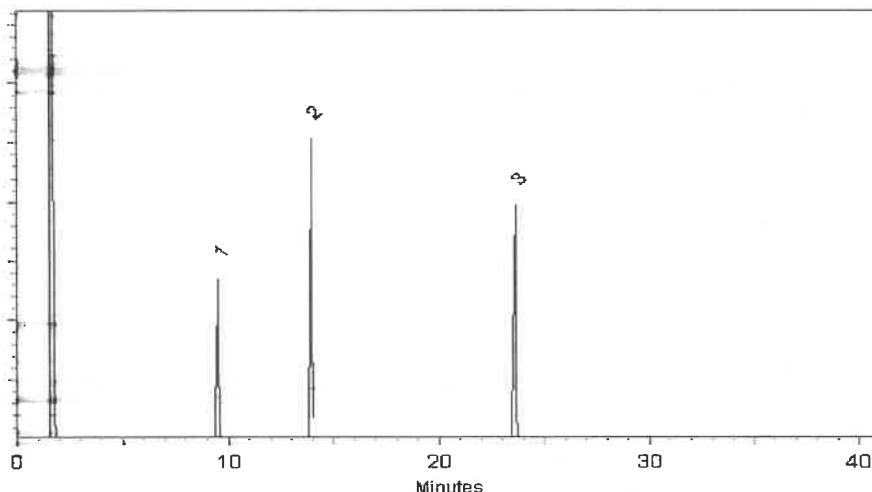
250°C

**Det. Temp:**

330°C

**Det. Type:**

FID



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.

*[Signature]*  
John Friedline - Operations Technician I

Date Mixed: 09-Sep-2022      Balance: 1128353505

*[Signature]*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 13-Sep-2022

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

www.restek.com

## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*gravimetric*



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555872

**Lot No.:** A0193449

**Description :** Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000 $\mu$ g/mL, Methanol,  
1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** January 31, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

*Received on*

*01/3/23*

*by*

*C6*

*S11011*

*to*

*S11015*

### C E R T I F I E D V A L U E S

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP221012	99%	25,050.0 $\mu$ g/mL	+/- 778.6378

**Solvent:** Methanol  
**CAS #** 67-56-1  
**Purity** 99%

*Russ T. Bookhamer*

Russ Bookhamer - Operations Technician I

Date Mixed: 11-Jan-2023

Balance: B442140311

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/ $\mu$ ECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

$k$  is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



PRODUCTOS  
QUÍMICOS  
MONTERREY, S.A. DE C.V.

MIRADOR 201, COL. MIRADOR  
MONTERREY, N.L. MEXICO  
CP 64070  
TEL +52 81 13 52 57 57  
www.pqm.com.mx

## CERTIFICATE OF ANALYSIS

PRODUCT :	SODIUM SULFATE CRYSTALS ANHYDROUS		
QUALITY :	ACS (CODE RMB3375)	FORMULA :	Na <sub>2</sub> SO <sub>4</sub>
SPECIFICATION NUMBER :	6399	RELEASE DATE:	ABR/21/2023
LOT NUMBER :	313201		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na <sub>2</sub> SO <sub>4</sub> )	Min. 99.0%	99.7 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.1
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO <sub>4</sub> )	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.003 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.1 %
Retained on US Standard No. 60 sieve	Min. 94%	97.3 %
Through US Standard No. 60 sieve	Max. 5%	2.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

### COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

Recd. by R3 on 7/29/23 [E 3551]

RC-02-01, Ed. 3



# Certificate of Analysis

## Sodium Hydroxide (Pellets)

**Material:** 0583  
**Grade:** ACS GRADE  
**Batch Number:** 23B1556310

Chemical Formula: NaOH  
Molecular Weight: 40  
CAS #: 1310-73-2  
Appearance:  
Pellets

Manufacture Date: 12/14/2022  
Expiration Date: 12/31/2025  
Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

Additional Information

We certify that this batch conforms to the specifications listed.

Analysis may have been rounded to significant digits in specification limits.

This document has been electronically produced and is valid without a signature.

Product meets analytical specifications of the grades listed.

Leona Edwardson, Quality Control Sr. Manager - Solon  
VWR Chemicals, LLC.  
28600 Fountain Parkway, Solon OH 44139 USA

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)

avantor™



Material No.: 9266-A4  
Batch No.: 24C0162011  
Manufactured Date: 2024-01-04  
Expiration Date: 2025-04-04  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	100.0 %
Color (APHA)	≤ 10	10
Residue after Evaporation	≤ 1.0 ppm	0.2 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: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24A04224

E 3746

A handwritten signature in black ink, appearing to read "Ken Koehlein".

Ken Koehlein  
Sr. Manager, Quality Assurance

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)

avantor™



Material No.: 9266-A4  
Batch No.: 24D1962005  
Manufactured Date: 2024-03-16  
Expiration Date: 2025-06-15  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	8
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	≥ 99.8 %	99.9 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 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: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24C16563

E 3759

A handwritten signature of the name "Jamie Croak".

Jamie Croak  
Director Quality Operations, Bioscience Production

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24E2462004  
Manufactured Date: 2024-04-10  
Expiration Date: 2025-07-10  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	3
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	3
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	0.1 ppm
Titrable Acid ( $\mu\text{eq/g}$ )	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24D10725

E 3768

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC  
100 Matsonford Rd, Suite 200, Radnor, PA 19087, U.S.A. Phone 610.386.1700  
Page 1 of 1

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24F1062004  
Manufactured Date: 2024-04-15  
Expiration Date: 2025-07-15  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	7
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	0.1 ppm
Titrable Acid ( $\mu\text{eq/g}$ )	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	< 5 ppm
Water (by KF, coulometric)	≤ 0.02 %	< 0.01 %

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC  
Manufacturer source batch: MG24D15750

E 3786

*J. Croak*  
Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Avantor Performance Materials, LLC

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Page 1 of 1

Acetone

BAKER RESI-ANALYZED® Reagent  
For Organic Residue Analysis

avantor™



Material No.: 9254-03  
Batch No.: 23H1462005  
Manufactured Date: 2023-07-26  
Expiration Date: 2026-07-25  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
Assay ((CH <sub>3</sub> ) <sub>2</sub> CO) (by GC, corrected for water)	≥ 99.4 %	99.7 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.3 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (μeq/g)	≤ 0.3	0.1
Titrable Base (μeq/g)	≤ 0.6	< 0.1
Water (H <sub>2</sub> O)	≤ 0.5 %	0.3 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use  
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA  
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 8/13/24

E 3788

*Ken Koehlein*  
Ken Koehlein  
Sr. Manager, Quality Assurance

Methylene Chloride  
ULTRA RESI-ANALYZED  
For Organic Residue Analysis  
(dichloromethane)



Material No.: 9266-A4  
Batch No.: 24I2662006  
Manufactured Date: 2024-08-29  
Expiration Date: 2025-11-28  
Revision No.: 0

## Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	<= 5	2
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	3
Assay ( $\text{CH}_2\text{Cl}_2$ ) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 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 3823

A handwritten signature in black ink that reads "Jamie Croak".

Jamie Croak  
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

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

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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  
Date 08/11/2028  
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.



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

[www.restek.com](http://www.restek.com)

## CERTIFIED REFERENCE MATERIAL

### Certificate of Analysis *gravimetric*



#### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555223

**Description :** Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000 $\mu$ g/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL

**Expiration Date :** September 30, 2025

**Handling:** This product is photosensitive.

**Lot No.:** A0201940

**Pkg Amt:** > 1 mL

**Storage:** 10°C or colder

**Ship:** Ambient

511539

↓  
511568

Y.P.

{ 09/19/

#### 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	S230321RSR	99%	1,001.0 $\mu$ g/mL	+/- 22.9799
2	Atrazine	1912-24-9	5FYWL	99%	1,010.0 $\mu$ g/mL	+/- 23.1865
3	Benzidine	92-87-5	S221205RSR	99%	1,008.0 $\mu$ g/mL	+/- 23.1406
4	epsilon-Caprolactam	105-60-2	I16X016	99%	1,008.0 $\mu$ g/mL	+/- 23.1406
<b>Solvent:</b>	Methylene chloride					
	CAS #	75-09-2				
	Purity	99%				

Jennifer Pollino  
Sam Moodler - Operations Tech I

Date Mixed: 13-Sep-2023 Balance: B345965662

REVIEWED  
By Jennifer Pollino at 7:10 am, Sep 13, 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/pECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31853

**Lot No.:** A0196453

**Description :** 1,4-dioxane

1,4-Dioxane 2,000 $\mu$ g/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** March 31, 2028

**Storage:** 0°C or colder

**Ship:** Ambient

511749  
↓ { RC /  
511794 } 11/30/23

### C E R T I F I E D   V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBN3770	99%	2,013.0 $\mu$ g/mL	+/- 25.0521

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride  
**CAS #** 75-09-2  
**Purity** 99%

## Quality Confirmation Test

**Column:**

30m x 0.25mm x 0.25 $\mu$ m  
Rtx-5 (cat.#10223)

**Carrier Gas:**

hydrogen-constant flow 1.8 mL/min.

**Temp. Program:**

80°C (hold 0.1 min.) to 330°C  
@ 9.6°C/min. (hold 2.86 min.)

**Inj. Temp:**

250°C

**Det. Temp:**

340°C

**Det. Type:**

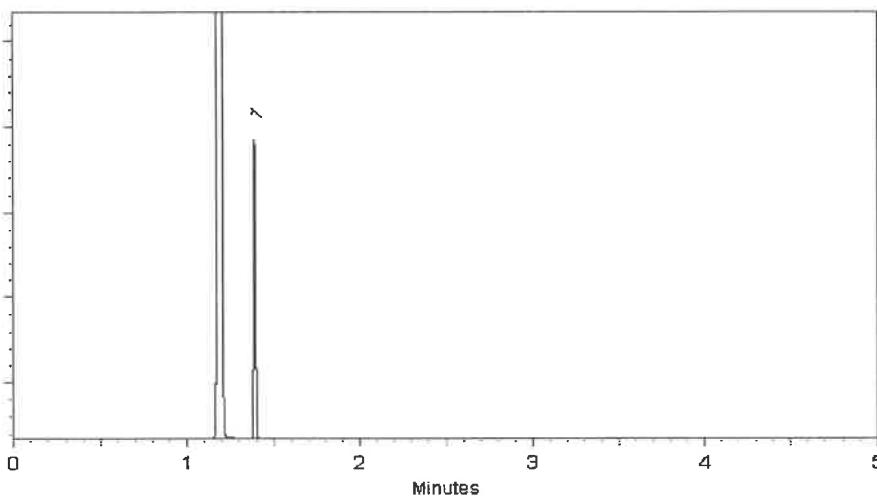
FID

**Split Vent:**

100 mL/min.

**Inj. Vol**

1 $\mu$ L



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

*Samuel Moodier*  
Sam Moodier - Operations Tech I

Date Mixed: 30-Mar-2023 Balance Serial #: B707717271

*Jennifer Pollino*  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 31-Mar-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397

## General Certified Reference Material Notes

### Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

### Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/µECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

### Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{\text{combined uncertainty}} = k \sqrt{u_{\text{gravimetric}}^2 + u_{\text{homogeneity}}^2 + u_{\text{storage stability}}^2 + u_{\text{shipping stability}}^2}$$

*k* is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

### Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

### Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.



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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

*chromatographic plus*



### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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:**

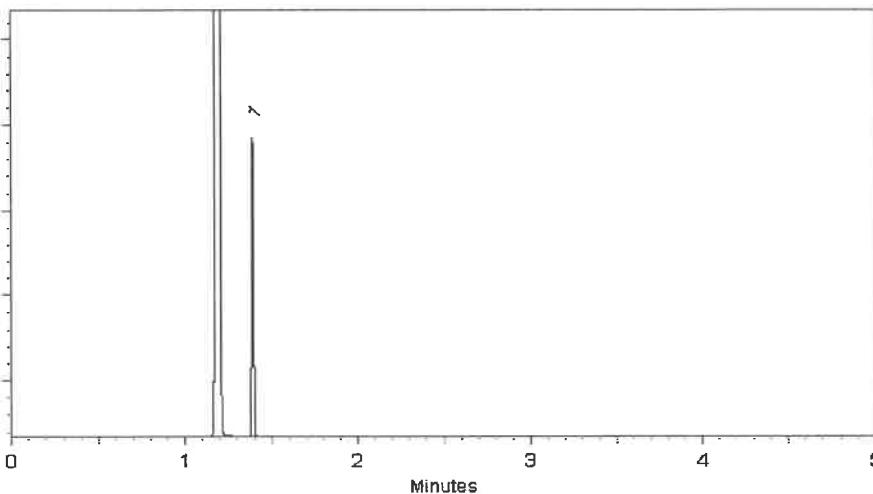
FID

**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.
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## 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.:** A0201320

**Description :** SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride,  
1mL/ampul

S12013 }  
↓ } RC  
S12042 } 12/26/23

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** July 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%	2,017.0 µg/mL	+/- 90.8469
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,011.3 µg/mL	+/- 90.5917
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,008.6 µg/mL	+/- 90.4685
4	Phenanthrene-d10	1517-22-2	PR-32303	99%	2,019.4 µg/mL	+/- 90.9550
5	Chrysene-d12	1719-03-5	PR-32210	99%	2,013.7 µg/mL	+/- 90.6968
6	Perylene-d12	1520-96-3	PR-33205	99%	2,012.7 µg/mL	+/- 90.6517

\* 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:**

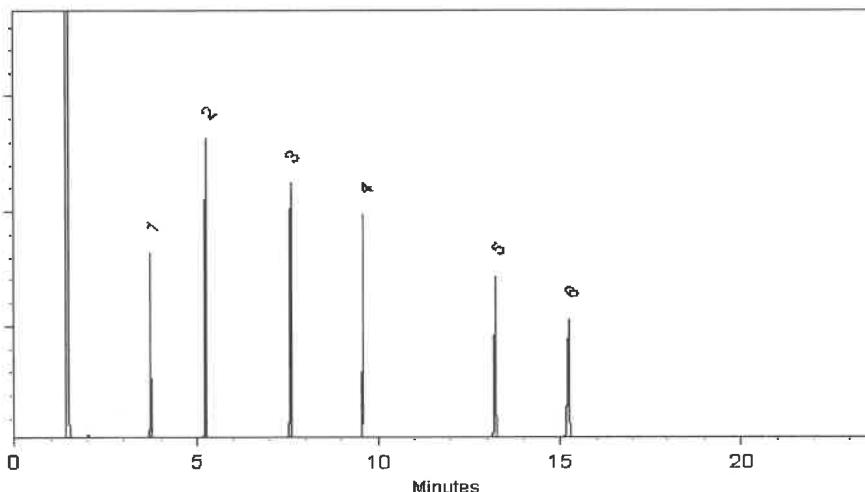
FID

**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.

  
Peter Robbins - Operations Technician I

Date Mixed: 23-Aug-2023      Balance Serial #: B345965662

  
Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 25-Aug-2023

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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Santa Rosa, CA 95403

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(800)878-7654 Toll Free  
(707)545-7901 Fax

Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-110816-01	414127	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine		1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine		92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam		105-60-2	99.9	271.1.6P	999 ± 5.82

512075 }  
↓ } RC  
512079 } 02/01/24

\*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certified By:

Shane Overcash  
Chemist



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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



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Reference Material Producer  
Certificate #3222.01



ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224

**Lot No.:** A0207706

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000 $\mu$ g/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** February 28, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

S12082  
↓  
S12111 } RC /  
02/22/24

### C E R T I F I E D V A L U E S

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,001.0 $\mu$ g/mL	+/- 29.424320
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 $\mu$ g/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,005.0 $\mu$ g/mL	+/- 29.541899
4	Benzoic acid	65-85-0	MKCR2694	99%	1,003.0 $\mu$ g/mL	+/- 29.483110
5	Biphenyl	92-52-4	MKCL6515	99%	1,006.0 $\mu$ g/mL	+/- 29.571294

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024

Balance: B345965662

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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## CERTIFIED REFERENCE MATERIAL

# Certificate of Analysis

gravimetric



ISO 17034 Accredited  
Reference Material Producer  
Certificate #3222.01



ISO/IEC 17025 Accredited  
Testing Laboratory  
Certificate #3222.02

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 555224

**Lot No.:** A0207706

**Description :** Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000 $\mu$ g/mL, Methylene Chloride,  
1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** February 28, 2026

**Storage:** 10°C or colder

**Ship:** Ambient

S12082  
↓  
S12111 } RC /  
02/22/24

### C E R T I F I E D V A L U E S

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,001.0 $\mu$ g/mL	+/- 29.424320
2	Acetophenone	98-86-2	STBH8205	99%	1,004.0 $\mu$ g/mL	+/- 29.512504
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,005.0 $\mu$ g/mL	+/- 29.541899
4	Benzoic acid	65-85-0	MKCR2694	99%	1,003.0 $\mu$ g/mL	+/- 29.483110
5	Biphenyl	92-52-4	MKCL6515	99%	1,006.0 $\mu$ g/mL	+/- 29.571294

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%

John Friedline - Operations Technician I

Date Mixed: 12-Feb-2024

Balance: B345965662

Manufactured under Restek's ISO 9001:2015  
Registered Quality System  
Certificate #FM 80397



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Manufacturer's Quality System  
Audited & Registered  
by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026 1,4-Dioxane Solution, 2000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane		123-91-1	100	223.1.3P	1997 ± 57.08

512112 } RC /  
↓  
512116 } 03/08/24

\*Not a certified value

Certified By:

Melissa Workoff  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



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Manufacturer's Quality System  
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by TUV USA to ISO 9001:2015

Date Received: \_\_\_\_\_

## Certificate of Analysis

Rev 0

Page 1 of 1

Catalog No.: Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026 1,4-Dioxane Solution, 2000 mg/L, 1 mL	
Compound		CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane		123-91-1	100	223.1.3P	1997 ± 57.08

512112 } RC /  
↓  
512116 } 03/08/24

\*Not a certified value

Certified By:

Melissa Workoff  
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.  
Concentration (correct for purity) and uncertainty (95% confidence) values  
listed are determined gravimetrically.



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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850

**Lot No.:** A0203726

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025

**Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

512117 } RC/  
↓            } 03/18/24  
512146

### C E R T I F I E D   V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/-	36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/-	36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/-	36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/-	36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/-	36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/-	36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/-	36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/-	36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/-	36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/-	36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/-	36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/-	36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/-	36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/-	36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/-	36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/-	36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/-	36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/-	36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/-	36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/-	36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/-	36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/-	36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/-	36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/-	36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/-	36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/-	36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/-	36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/-	36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/-	36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/-	36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/-	36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/-	36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/-	36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/-	36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/-	36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/-	36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%



110 Benner Circle  
Bellefonte, PA 16823-8812  
Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL



# Certificate of Analysis

*chromatographic plus*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 31850

**Lot No.:** A0203726

**Description :** 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

**Container Size :** 2 mL

**Pkg Amt:** > 1 mL

**Expiration Date :** April 30, 2025

**Storage:** 0°C or colder

**Handling:** Sonication required. Mix is photosensitive.

**Ship:** Ambient

512117 } RC/  
↓            } 03/18/24  
512146

### C E R T I F I E D   V A L U E S

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,001.6 µg/mL	+/- 36.4412
2	N-Nitrosodimethylamine	62-75-9	230209JLM	99%	1,005.9 µg/mL	+/- 36.5968
3	Phenol	108-95-2	MKCK1120	99%	1,003.3 µg/mL	+/- 36.5038
4	Aniline	62-53-3	X22F726	99%	1,005.8 µg/mL	+/- 36.5928
5	Bis(2-chloroethyl)ether	111-44-4	SHBL6942	99%	1,008.1 µg/mL	+/- 36.6776
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,001.8 µg/mL	+/- 36.4492
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,002.3 µg/mL	+/- 36.4654
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,003.7 µg/mL	+/- 36.5159
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,008.7 µg/mL	+/- 36.6979
10	1,2-Dichlorobenzene	95-50-1	SHBN3835	99%	1,000.3 µg/mL	+/- 36.3926
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,003.5 µg/mL	+/- 36.5099
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,007.3 µg/mL	+/- 36.6493
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	504.3 µg/mL	+/- 18.3500
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.6 µg/mL	+/- 18.3237
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,008.3 µg/mL	+/- 36.6857
16	Hexachloroethane	67-72-1	QTORH	99%	1,007.5 µg/mL	+/- 36.6554
17	Nitrobenzene	98-95-3	10224044	99%	1,008.6 µg/mL	+/- 36.6938

18	Isophorone	78-59-1	MKCC9506	99%	1,005.9	µg/mL	+/-	36.5988
19	2-Nitrophenol	88-75-5	RP230710	99%	1,003.2	µg/mL	+/-	36.4998
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,003.8	µg/mL	+/-	36.5200
21	Bis(2-chloroethoxy)methane	111-91-1	13670200	99%	1,002.1	µg/mL	+/-	36.4573
22	2,4-Dichlorophenol	120-83-2	BCBZ6787	99%	1,003.7	µg/mL	+/-	36.5180
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,007.6	µg/mL	+/-	36.6574
24	Naphthalene	91-20-3	STBL1057	99%	1,008.3	µg/mL	+/-	36.6837
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,001.3	µg/mL	+/-	36.4290
26	Hexachlorobutadiene	87-68-3	RP230823RSR	98%	1,008.3	µg/mL	+/-	36.6829
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,003.1	µg/mL	+/-	36.4937
28	2-Methylnaphthalene	91-57-6	STBK0259	96%	1,001.9	µg/mL	+/-	36.4505
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	1,000.0	µg/mL	+/-	36.3838
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,008.5	µg/mL	+/-	36.6909
31	2,4,6-Trichlorophenol	88-06-2	STBJ5914	99%	1,004.4	µg/mL	+/-	36.5442
32	2,4,5-Trichlorophenol	95-95-4	FHN01	98%	1,001.9	µg/mL	+/-	36.4512
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,001.1	µg/mL	+/-	36.4230
34	2-Nitroaniline	88-74-4	RP230531	99%	1,002.9	µg/mL	+/-	36.4876
35	1,4-Dinitrobenzene	100-25-4	RP230816	99%	1,005.7	µg/mL	+/-	36.5887
36	Acenaphthylene	208-96-8	p06V	98%	1,009.5	µg/mL	+/-	36.7265
37	1,3-Dinitrobenzene	99-65-0	1-DXX-24-1	99%	1,004.4	µg/mL	+/-	36.5422
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,005.9	µg/mL	+/-	36.5968
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,003.2	µg/mL	+/-	36.4998
40	1,2-Dinitrobenzene	528-29-0	RP230428	99%	1,002.2	µg/mL	+/-	36.4634
41	Acenaphthene	83-32-9	MKCR7169	99%	1,009.3	µg/mL	+/-	36.7221
42	3-Nitroaniline	99-09-2	RP230822RSR	99%	1,003.9	µg/mL	+/-	36.5240
43	2,4-Dinitrophenol	51-28-5	DR230417RSR	99%	1,002.0	µg/mL	+/-	36.4553
44	Dibenzofuran	132-64-9	MKCD9952	99%	1,006.7	µg/mL	+/-	36.6251
45	2,4-Dinitrotoluene	121-14-2	MKAA0690V	99%	1,003.8	µg/mL	+/-	36.5220
46	4-Nitrophenol	100-02-7	RP230627	99%	1,002.3	µg/mL	+/-	36.4674
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-30126	99%	1,008.7	µg/mL	+/-	36.6979
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP230919	99%	1,006.3	µg/mL	+/-	36.6130
49	Fluorene	86-73-7	10241100	99%	1,008.3	µg/mL	+/-	36.6857
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,003.8	µg/mL	+/-	36.5220
51	Diethylphthalate	84-66-2	MKCD2547	99%	1,008.6	µg/mL	+/-	36.6958
52	4-Nitroaniline	100-01-6	RP230111	99%	1,001.1	µg/mL	+/-	36.4230
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	230718JLM	99%	1,002.0	µg/mL	+/-	36.4553

54	Diphenylamine	122-39-4	MKCH1042	99%	1,002.3	µg/mL	+/- 36.4674
55	Azobenzene	103-33-3	BCCK0887	99%	1,005.8	µg/mL	+/- 36.5928
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,003.0	µg/mL	+/- 36.4917
57	Hexachlorobenzene	118-74-1	14821700	99%	1,007.5	µg/mL	+/- 36.6554
58	Pentachlorophenol	87-86-5	RP230530RSR	99%	1,008.8	µg/mL	+/- 36.7019
59	Phenanthrene	85-01-8	MKCQ8876	99%	1,008.4	µg/mL	+/- 36.6877
60	Anthracene	120-12-7	MKCR0570	99%	1,009.0	µg/mL	+/- 36.7100
61	Carbazole	86-74-8	14351100	99%	1,000.9	µg/mL	+/- 36.4149
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,007.6	µg/mL	+/- 36.6595
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,009.6	µg/mL	+/- 36.7302
64	Pyrene	129-00-0	BCCG8479	98%	1,007.2	µg/mL	+/- 36.6453
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,002.1	µg/mL	+/- 36.4573
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.2	µg/mL	+/- 36.5705
67	Benz(a)anthracene	56-55-3	I220012022BAA	99%	1,002.2	µg/mL	+/- 36.4614
68	Chrysene	218-01-9	RP230601	99%	1,008.3	µg/mL	+/- 36.6837
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCQ3468	99%	1,001.8	µg/mL	+/- 36.4472
70	Di-n-octyl phthalate	117-84-0	14382700	99%	1,006.0	µg/mL	+/- 36.6008
71	Benzo(b)fluoranthene	205-99-2	012013B	99%	1,002.8	µg/mL	+/- 36.4836
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,003.0	µg/mL	+/- 36.4917
73	Benzo(a)pyrene	50-32-8	P54915-0703	99%	1,002.3	µg/mL	+/- 36.4674
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,009.4	µg/mL	+/- 36.7243
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,007.6	µg/mL	+/- 36.6595
76	Benzo(g,h,i)perylene	191-24-2	RP231003RSR	99%	1,002.9	µg/mL	+/- 36.4876

\* Expanded Uncertainty displayed in same units as Grav. Conc.

**Solvent:** Methylene chloride

**CAS #** 75-09-2

**Purity** 99%



110 Benner Circle  
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Tel: 1-814-353-1300  
Fax: 1-814-353-1309

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## CERTIFIED REFERENCE MATERIAL



## Certificate of Analysis

*gravimetric*

### FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

*This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.*

**Catalog No. :** 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.



# SHIPPING DOCUMENTS

**CHEMTECH**  
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092  
(908) 789-8900 Fax: (908) 78-8922  
www.chemtech.net

Chemtech Project Number: P4710  
COC Number:

CLIENT INFORMATION		PROJECT INFORMATION				BILLING INFORMATION												
COMPANY: Tetra Tech		PROJECT NAME: NWIRP Bethpage				BILL TO: SEE CONTRACT PO#												
ADDRESS: 4433 Corporation Lane Suite 300		PROJECT #: 112G08005-WE13 LOCATION: VPB-196				ADDRESS:												
CITY: Virginia Beach	STATE: VA	ZIP: 23462	PROJECT MANAGER: Ernie Wu				CITY: STATE: ZIP:											
ATTENTION: Ernie Wu		E-MAIL: ernie.wu@tetrtech.com				ATTENTION: PHONE:												
PHONE: 757-466-4901	FAX: 757-461-4148	PHONE: 757-466-4901 FAX: 757-461-4148				ANALYSIS												
DATA TURNAROUND INFORMATION		DATA DELIVERABLE INFORMATION																
FAX: 2 & 10 DAYS*		<input type="checkbox"/> RESULTS ONLY <input type="checkbox"/> USEPA CLP <input type="checkbox"/> RESULTS + QC <input type="checkbox"/> New York State ASP "B" <input type="checkbox"/> New Jersey REDUCED <input type="checkbox"/> New York State ASP "A" <input type="checkbox"/> New Jersey CLP <input type="checkbox"/> Other _____ <input type="checkbox"/> EDD Format _____																
HARD COPY: 2 & 10 DAYS*																		
EDD 2 & 10 DAYS*																		
* TO BE APPROVED BY CHEMTECH																		
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS																		
CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# of Bottles	PRESERVATIVES									COMMENTS	
			COMP	GRAB	DATE	TIME		A	1	2	3	4	5	6	7	8		9
1.	BP-TB-20241030	QA	X	10/30/24	8:00	2	2									Trip Blank		
2.	BP-BPOW6-7-GW-20241030	AQ	X	10/30/24	13:20	3	2	1										
3.	BP-BPOW6-11-GW-20241031	AQ	X	10/31/24	13:40	3	2	1										
4.	BP-BPOW6-8-GW-20241101	AQ	X	11/1/24	13:10	3	2	1										
5.																		
6.																		
7.																		
8.																		
9.																		
10.																		
SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY																		
RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY	Conditions of bottles or coolers at receipt: <input type="checkbox"/> Compliant <input type="checkbox"/> Non Compliant <input type="checkbox"/> Cooler Temp <u>3.1</u> °C MeOH extraction requires an additional 4oz. Jar for percent solid Comments: Standard TAT															
1.	11/4/24 1530																	
RELINQUISHED BY	DATE/TIME	RECEIVED BY																
2.																		
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY	Page <u>1</u> of <u>1</u>				SHIPPED VIA: CLIENT: <input type="checkbox"/> Hand Delivered <input type="checkbox"/> Overnight CHEMTECH: <input type="checkbox"/> Picked Up <input type="checkbox"/> Overnight									<b>Shipment Complete</b>		
3.	11/4/24 1800	3.														<input type="checkbox"/> YES <input type="checkbox"/> NO		
WHITE - CHEMTECH COPY FOR RETURN TO CLIENT    YELLOW - CHEMTECH COPY    PINK - SAMPLER COPY																		

**Laboratory Certification**

<b>Certified By</b>	<b>License No.</b>
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

## LOGIN REPORT/SAMPLE TRANSFER

Order ID : P4710	TETR06	Order Date : 11/4/2024 3:44:00 PM	Project Mgr : Yazmeen
Client Name : Tetra Tech NUS, Inc.		Project Name : CTO WE13	Report Type : Level 4
Client Contact : Ernie Wu		Receive DateTime : 11/4/2024 6:00:00 PM	EDD Type : ADAPT
Invoice Name : Tetra Tech NUS, Inc.		Purchase Order :	Hard Copy Date :
Invoice Contact : Ernie Wu			Date Signoff : 11/5/2024 11:07:08 AM

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUUE DATES
P4710-02	BP-BPOW6-7-GW-20241030	Water	10/30/2024	13:20	VOCMS Group1		8260-Low	10 Bus. Days	
P4710-03	BP-BPOW6-11-GW-20241031	Water	10/31/2024	13:40	VOCMS Group1		8260-Low	10 Bus. Days	
P4710-04	BP-BPOW6-8-GW-20241101	Water	11/01/2024	13:10	VOCMS Group1		8260-Low	10 Bus. Days	
24710-01	BP-TB - 20241030	water	10/30	8:00	VOCMS Group1 vocms group 1		8260-Low	10 Bus. Days	

Relinquished By : Ernie Wu

Date / Time : 11/5/24 11:45

RECEIVED ON 11/4/24 11/4/24  
 PLACED IN SM-REF

Received By : Suresh

Date / Time : 11/5/24 12:30

Storage Area : VOA Refrigerator Room

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034886.D  
 Acq On : 07 Nov 2024 10:48  
 Operator : RC/JU  
 Sample : SSTDI CCO. 2  
 Misc :  
 ALS Vial : 4 Sample Multi plier: 1

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

Quant Time: Nov 07 14:40:16 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

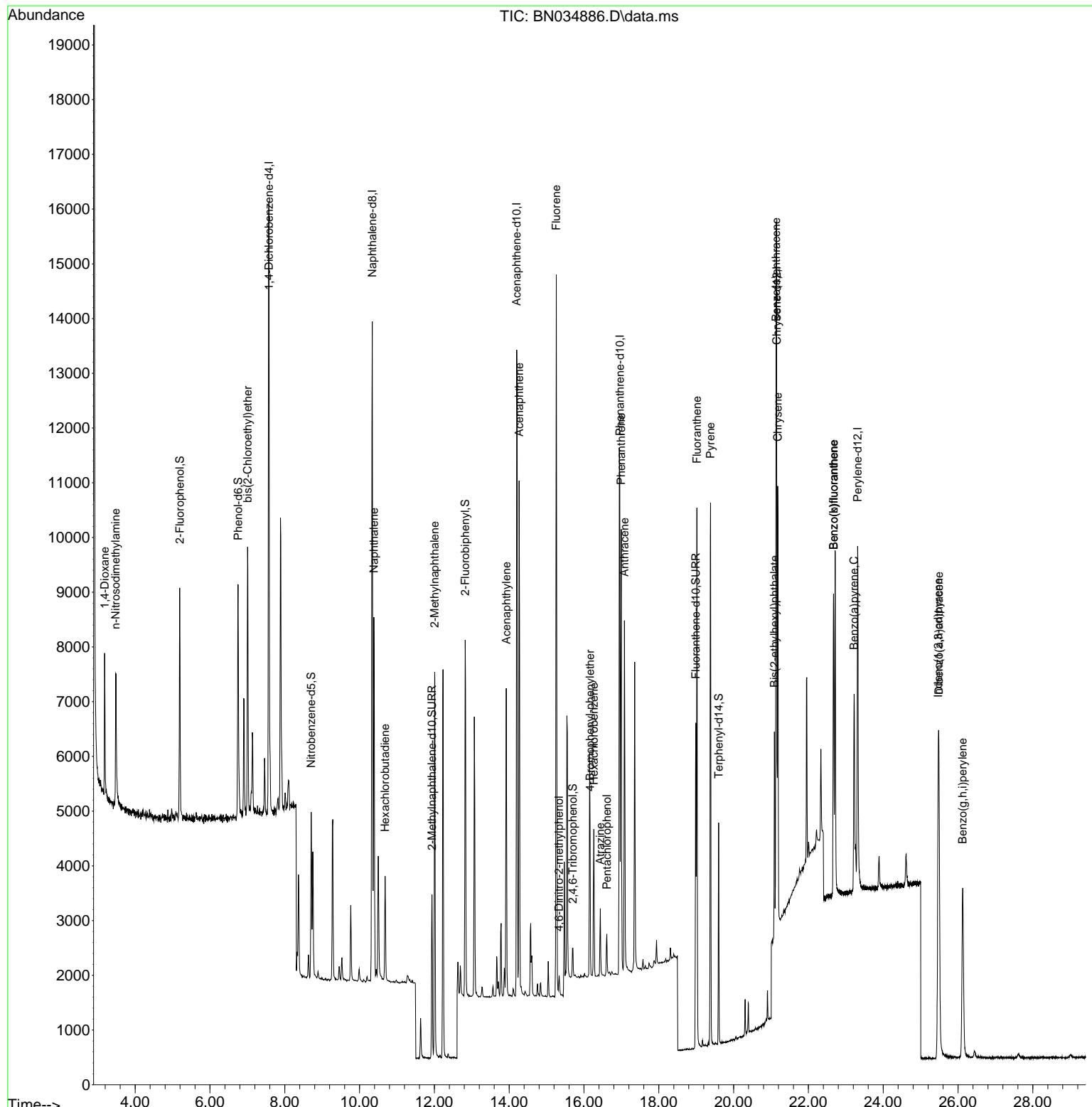
Compound	R. T.	Ql on	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1, 4-Di chlorobenzene-d4	7. 575	152	5400	0. 400	ng	0. 00
7) Naphthalene-d8	10. 340	136	15723	0. 400	ng	0. 00
13) Acenaphthene-d10	14. 201	164	6785	0. 400	ng	-0. 01
19) Phenanthrene-d10	16. 957	188	14024	0. 400	ng	0. 00
29) Chrysene-d12	21. 151	240	8450	0. 400	ng	0. 00
35) Perylene-d12	23. 317	264	7815	0. 400	ng	0. 00
<b>System Monotoring Compounds</b>						
4) 2-Fluorophenol	5. 192	112	3053	0. 203	ng	0. 00
5) Phenol -d6	6. 752	99	3885	0. 194	ng	0. 00
8) Nitrobenzene-d5	8. 707	82	2366	0. 193	ng	0. 00
11) 2-Methyl naphthalene-d10	11. 935	152	4079	0. 190	ng	0. 00
14) 2, 4, 6-Tribromophenol	15. 704	330	320	0. 196	ng	0. 00
15) 2-Fluorobi phenyl	12. 822	172	5892	0. 206	ng	-0. 01
27) Fluoranthene-d10	18. 987	212	5926	0. 187	ng	0. 00
31) Terphenyl -d14	19. 601	244	3169	0. 200	ng	0. 00
<b>Target Compounds</b>						
2) 1, 4-Dioxane	3. 184	88	1518	0. 222	ng	95
3) n-Nitrosodi methyl amine	3. 480	42	1930	0. 210	ng	98
6) bis(2-Chloroethyl)ether	7. 004	93	3421	0. 198	ng	99
9) Naphthalene	10. 383	128	8538	0. 196	ng	99
10) Hexachlorobutadiene	10. 682	225	1413	0. 203	ng	# 100
12) 2-Methyl naphthalene	12. 007	142	5037	0. 189	ng	98
16) Acenaphthylene	13. 923	152	6195	0. 189	ng	100
17) Acenaphthene	14. 265	154	4347	0. 192	ng	99
18) Fluorene	15. 259	166	5429	0. 193	ng	100
20) 4, 6-Dinitro-2-methyl ph...	15. 334	198	229	0. 203	ng	# 73
21) 4-Bromophenyl -phenyl ether	16. 163	248	1410	0. 189	ng	99
22) Hexachlorobenzene	16. 262	284	1785	0. 198	ng	99
23) Atrazine	16. 436	200	957	0. 177	ng	96
24) Pentachlorophenol	16. 610	266	384	0. 205	ng	98
25) Phenanthrene	16. 995	178	8193	0. 190	ng	100
26) Anthracene	17. 081	178	6756	0. 182	ng	100
28) Fluoranthene	19. 020	202	8296	0. 183	ng	99
30) Pyrene	19. 382	202	8470	0. 198	ng	100
32) Benzo(a)anthracene	21. 134	228	6220	0. 189	ng	99
33) Chrysene	21. 178	228	6897	0. 198	ng	97
34) Bis(2-ethyl hexyl)phtha...	21. 089	149	3687	0. 195	ng	98
36) Indeno(1, 2, 3-cd)pyrene	25. 472	276	6848	0. 197	ng	99
37) Benzo(b)fluoranthene	22. 671	252	6257	0. 182	ng	# 90
38) Benzo(k)fluoranthene	22. 671	252	6257	0. 175	ng	92
39) Benzo(a)pyrene	23. 221	252	4882	0. 179	ng	# 88
40) Dibenz(a, h)anthracene	25. 487	278	5297	0. 197	ng	96
41) Benzo(g, h, i)perylene	26. 124	276	5602	0. 196	ng	97

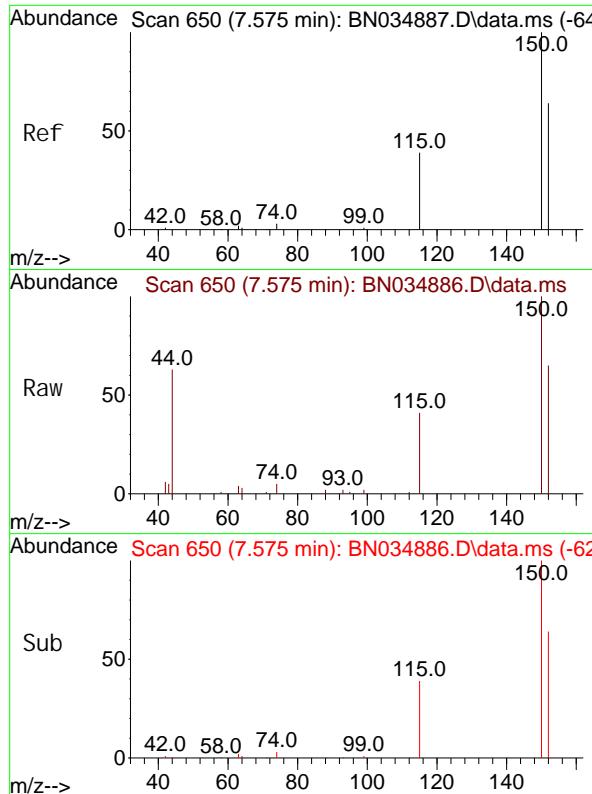
(#) = qual ifier out of range (m) = manual integration (+) = si gnals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034886.D  
 Acq On : 07 Nov 2024 10: 48  
 Operator : RC/JU  
 Sample : SSTDI CCO. 2  
 Mi sc :  
 ALS Vial : 4 Sample Multiplier: 1

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

Quant Time: Nov 07 14: 40: 16 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14: 34: 20 2024  
 Response via : Initial Calibration

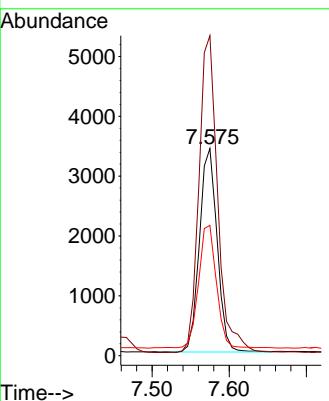




#1  
 1, 4-Di chl orobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R. T. -0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

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

Tgt Ion: 152 Resp: 5400  
 Ion Ratio Lower Upper  
 152 100  
 150 154.4 124.4 186.6  
 115 62.8 50.5 75.7



Sub

50

0

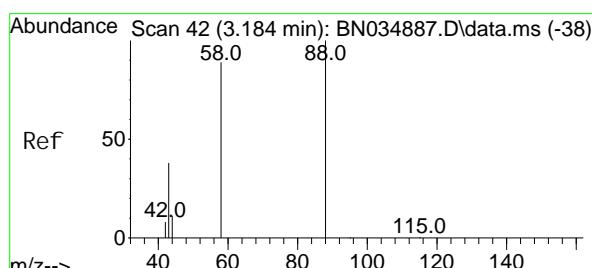
150.0  
115.0  
99.0  
74.0  
58.0  
42.0

Time-->

7.50 7.60

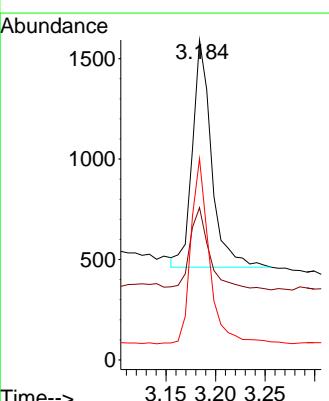
5000  
4000  
3000  
2000  
1000  
0

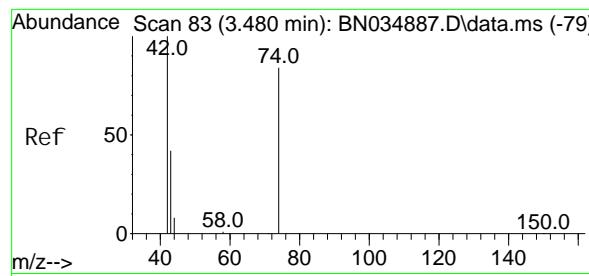
7.575



#2  
 1, 4-Di oxane  
 Concen: 0.222 ng  
 RT: 3.184 min Scan# 42  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

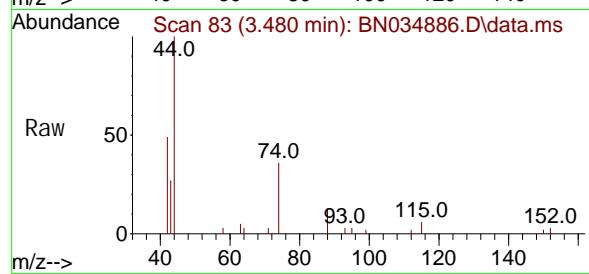
Tgt Ion: 88 Resp: 1518  
 Ion Ratio Lower Upper  
 88 100  
 43 37.9 28.2 42.2  
 58 79.1 67.1 100.7



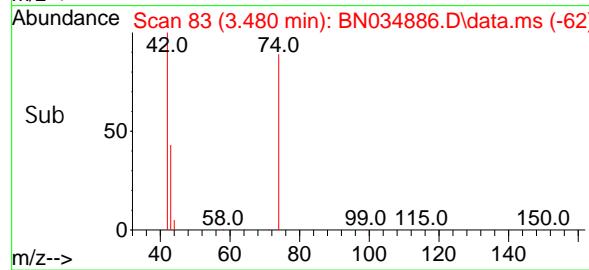
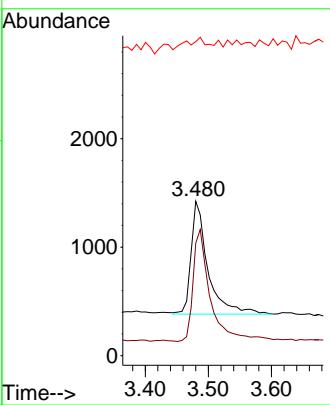


#3  
n-Ni trosodi methyl amine  
Concen: 0.210 ng  
RT: 3.480 min Scan# 8  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

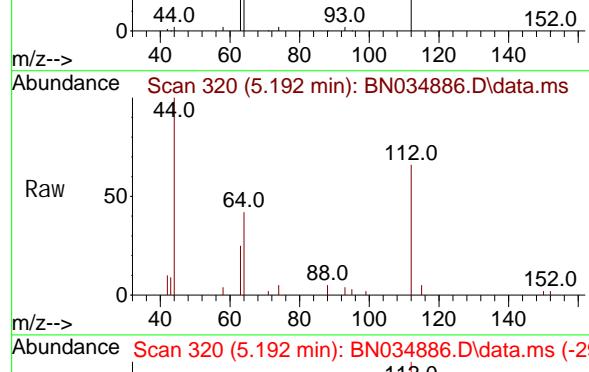
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2



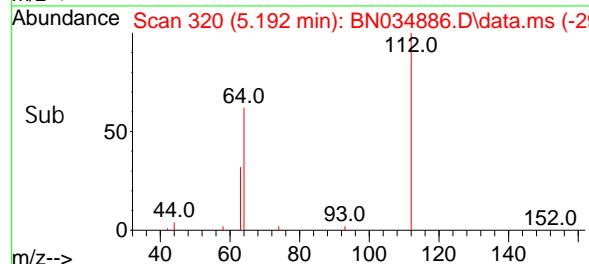
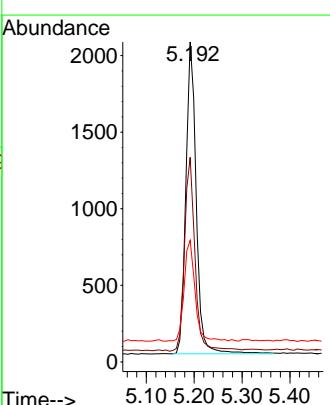
Tgt Ion: 42 Resp: 1930  
Ion Ratio Lower Upper  
42 100  
74 102.0 83.4 125.2  
44 12.3 8.6 12.8

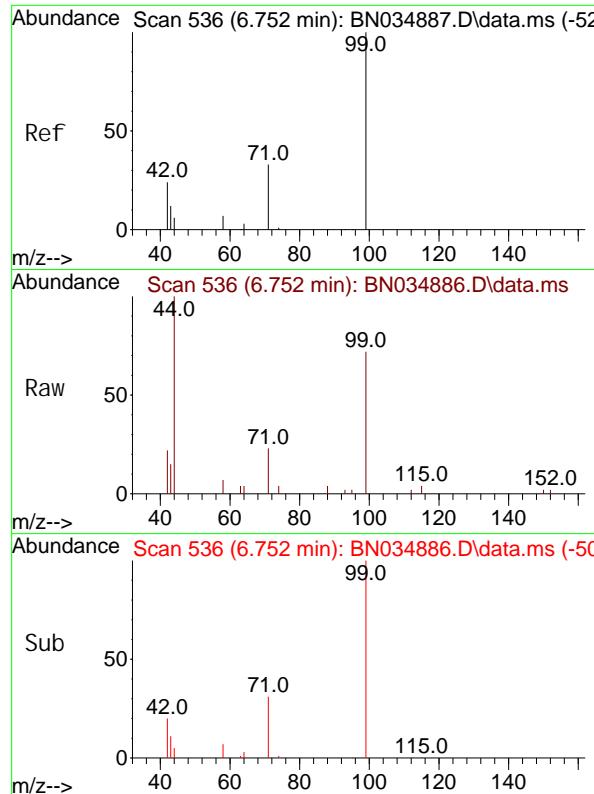


#4  
2-Fluorophenol  
Concen: 0.203 ng  
RT: 5.192 min Scan# 320  
Delta R.T. -0.007 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48



Tgt Ion: 112 Resp: 3053  
Ion Ratio Lower Upper  
112 100  
64 63.4 49.6 74.4  
63 34.2 26.3 39.5

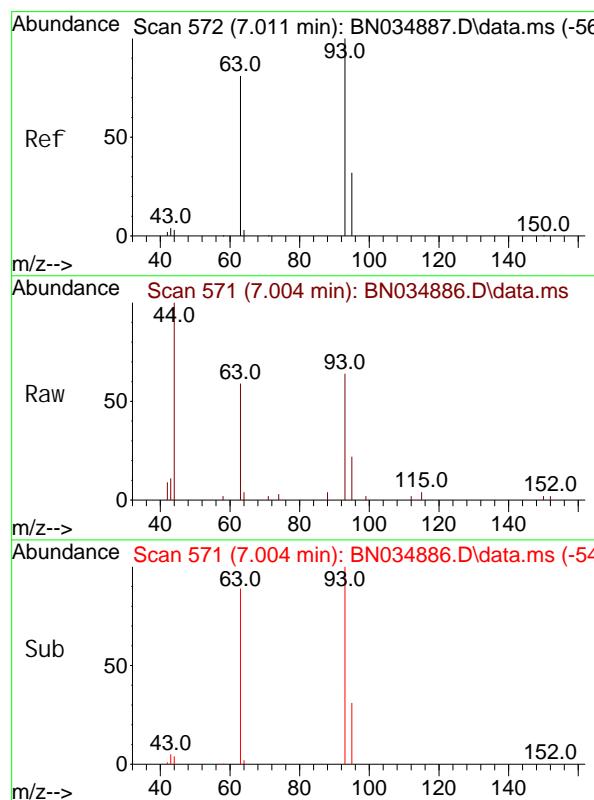
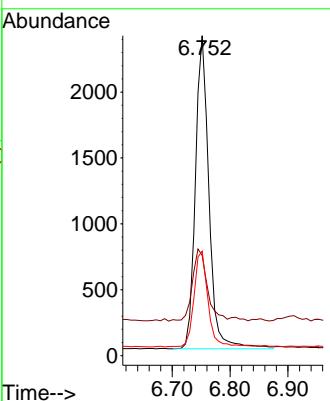




#5  
 Phenol -d6  
 Concen: 0.194 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

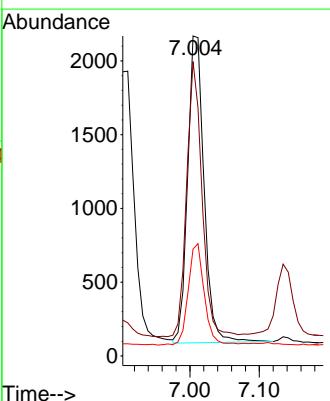
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICC0.2

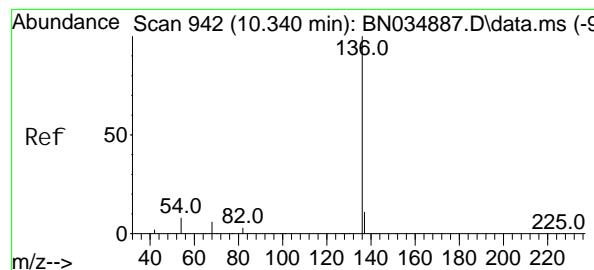
Tgt Ion: 99 Resp: 3885  
 Ion Ratio Lower Upper  
 99 100  
 42 25.3 20.2 30.2  
 71 31.0 25.4 38.0



#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.198 ng  
 RT: 7.004 min Scan# 571  
 Delta R.T. -0.007 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

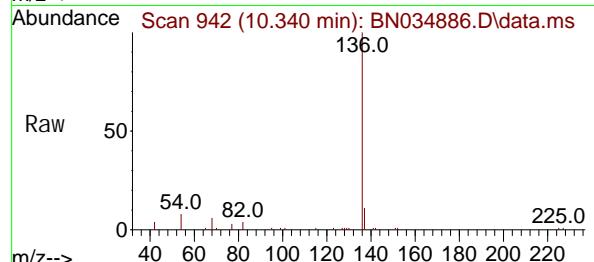
Tgt Ion: 93 Resp: 3421  
 Ion Ratio Lower Upper  
 93 100  
 63 83.6 67.5 101.3  
 95 32.3 25.7 38.5





#7  
 Naphthalene-d8  
 Concen: 0.400 ng  
 RT: 10.340 min Scan# 9  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

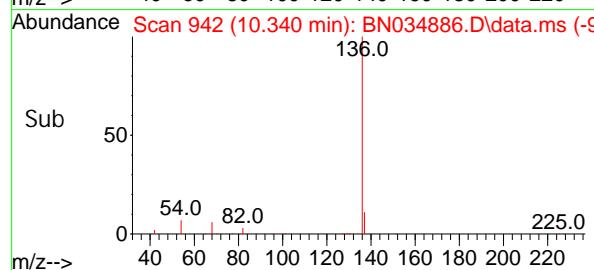
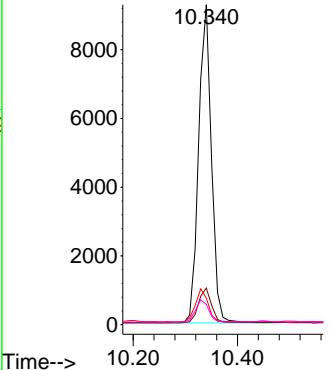
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2



Tgt Ion: 136 Resp: 15723  
 Ion Ratio Lower Upper

136	100
137	11.4
54	8.3
68	6.3
82	8.9
	13.3
106	6.9
	10.3
122	5.4
	8.0

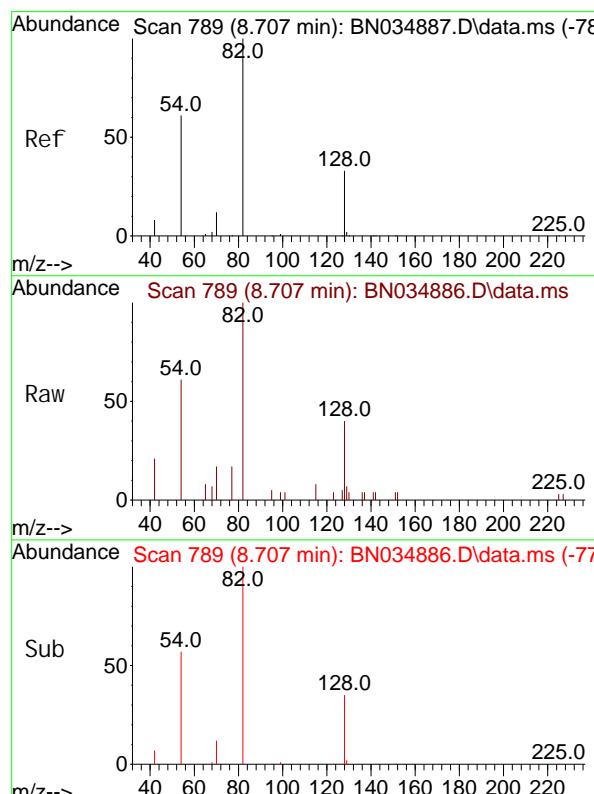
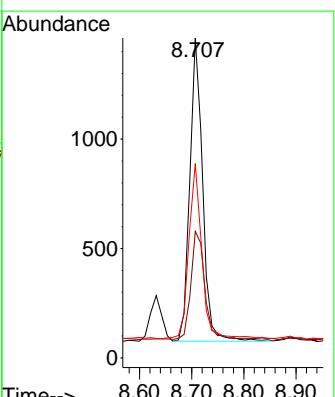
Abundance



#8  
 Ni trobenzene-d5  
 Concen: 0.193 ng  
 RT: 8.707 min Scan# 789  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

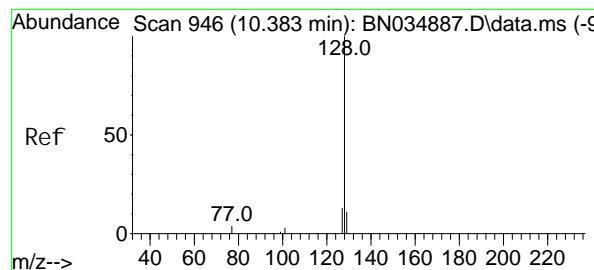
Tgt Ion: 82 Resp: 2366  
 Ion Ratio Lower Upper

82	100
128	39.5
54	60.7
	28.1
	42.1
106	49.8
	74.6



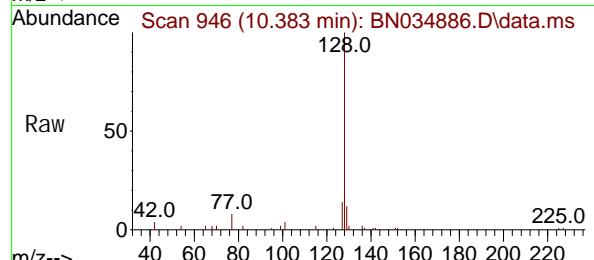
Abundance Scan 789 (8.707 min): BN034886.D\data.ms (-77)

m/z-->

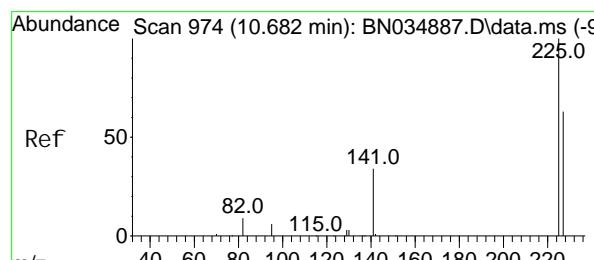
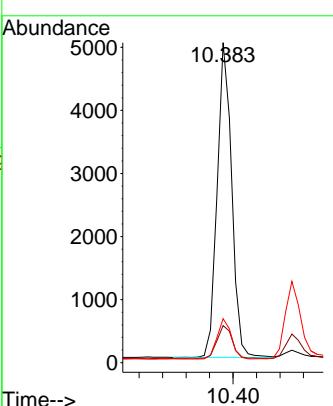
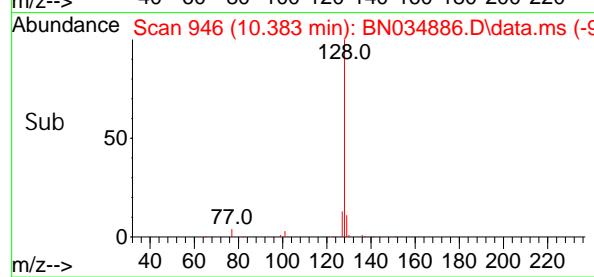


#9  
Naphthalene  
Concen: 0.196 ng  
RT: 10.383 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

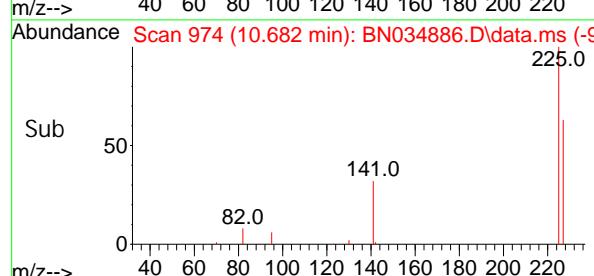
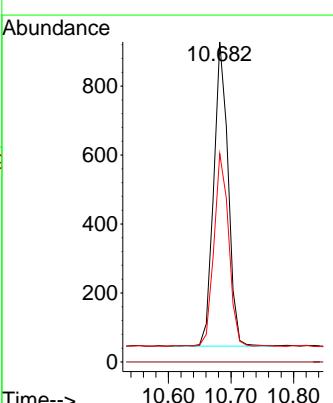


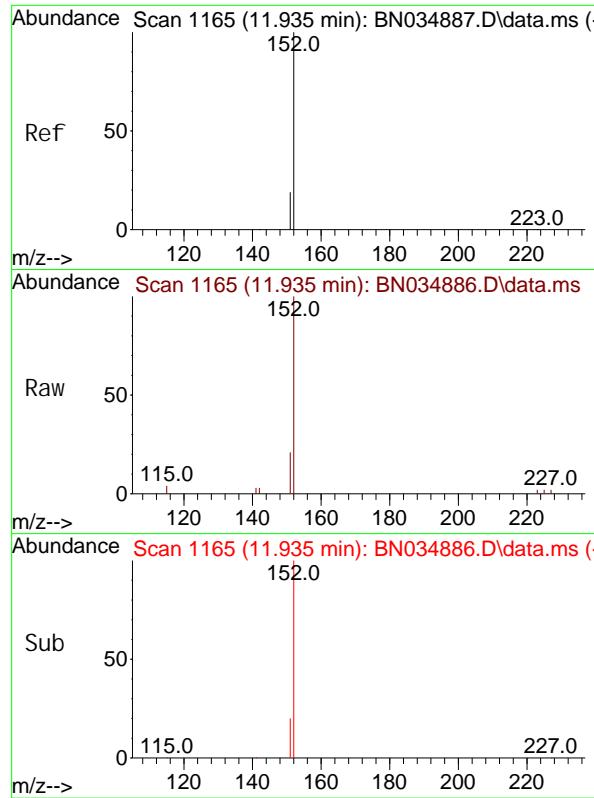
Tgt Ion: 128 Resp: 8538  
Ion Ratio Lower Upper  
128 100  
129 11.6 9.0 13.4  
127 13.8 10.8 16.2



#10  
Hexachlorobutadiene  
Concen: 0.203 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion: 225 Resp: 1413  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 65.1 52.0 78.0

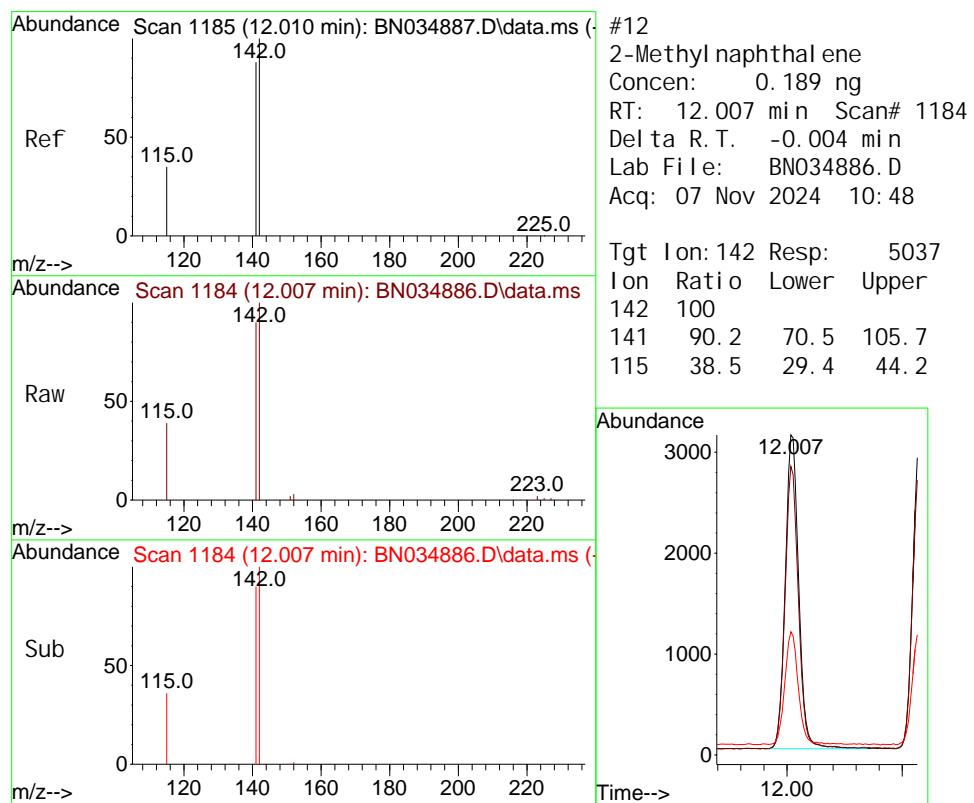
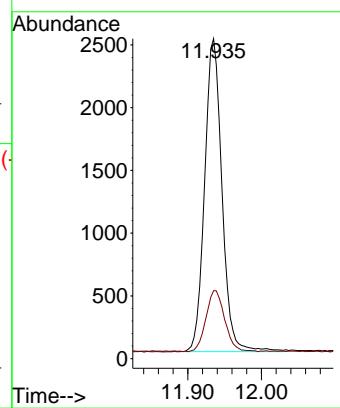




#11  
2-Methyl naphthalene-d10  
Concen: 0.190 ng  
RT: 11.935 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

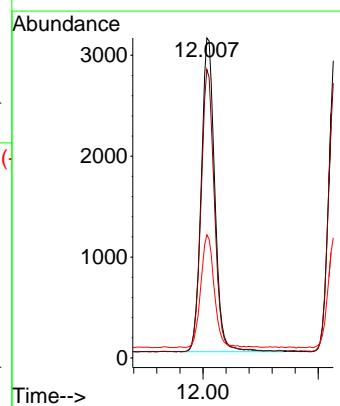
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2

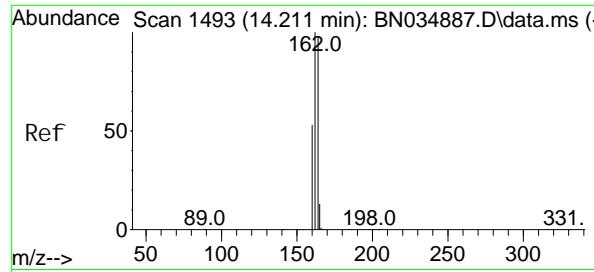
Tgt Ion: 152 Resp: 4079  
Ion Ratio Lower Upper  
152 100  
151 21.4 17.1 25.7



#12  
2-Methyl naphthalene  
Concen: 0.189 ng  
RT: 12.007 min Scan# 1184  
Delta R.T. -0.004 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

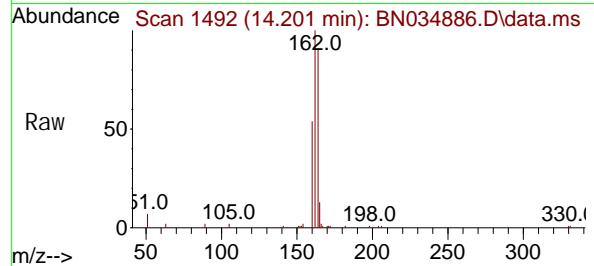
Tgt Ion: 142 Resp: 5037  
Ion Ratio Lower Upper  
142 100  
141 90.2 70.5 105.7  
115 38.5 29.4 44.2



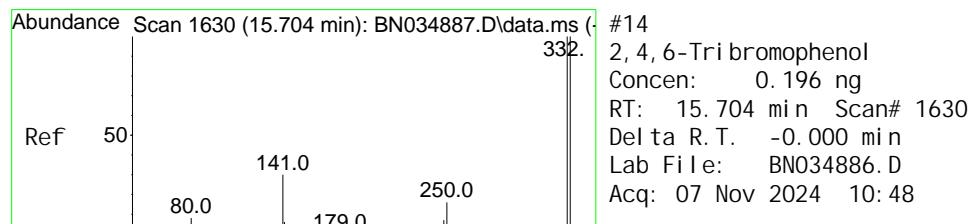
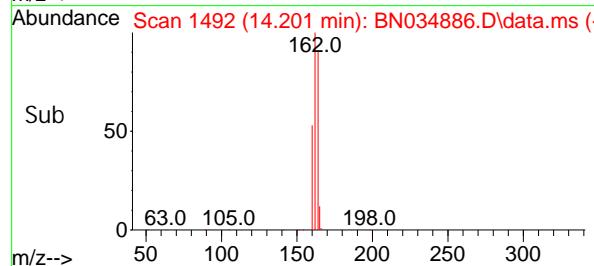
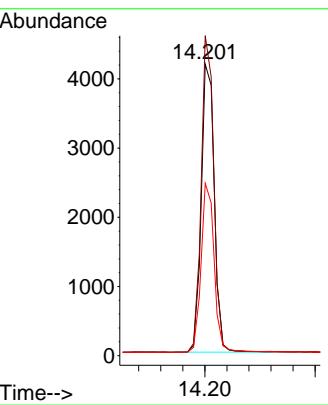


#13  
Acenaphthene-d10  
Concen: 0.400 ng  
RT: 14.201 min Scan# 1  
Delta R. T. -0.010 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

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

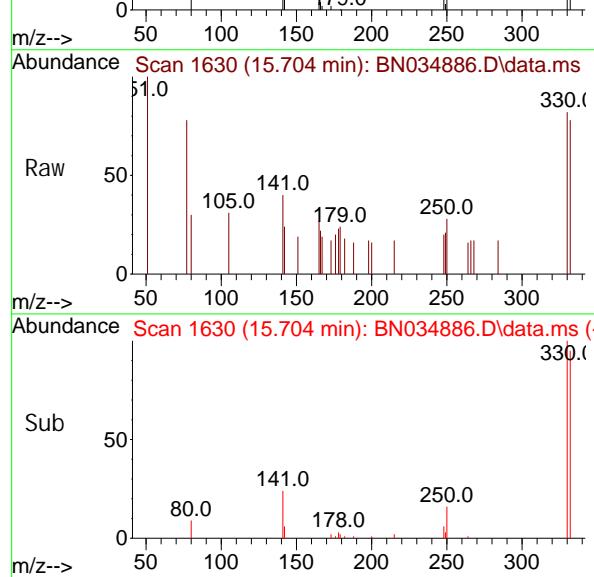
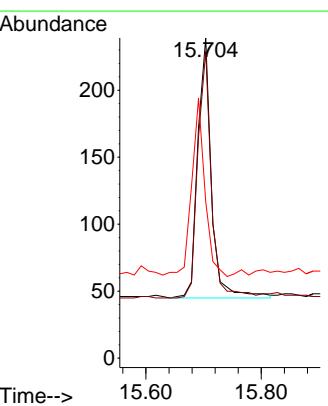


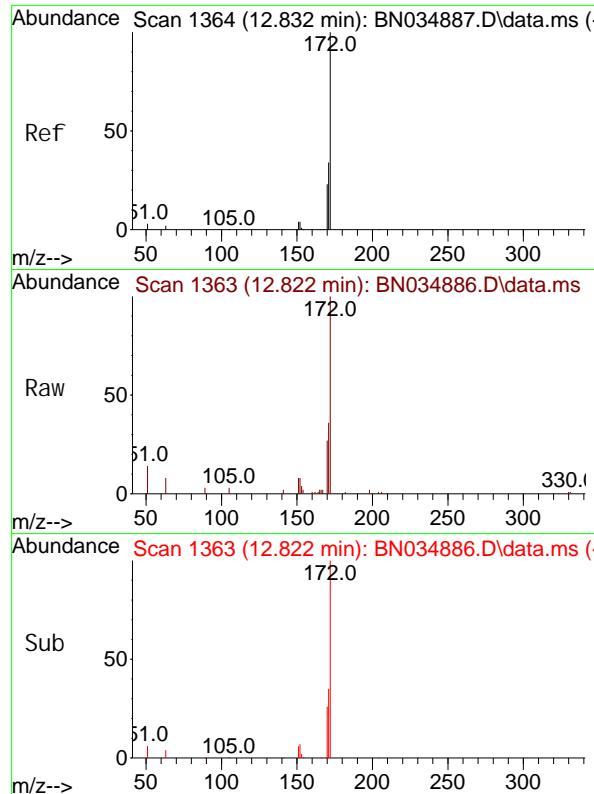
Tgt Ion: 164 Resp: 6785  
Ion Ratio Lower Upper  
164 100  
162 109.8 81.9 122.9  
160 59.1 43.5 65.3



#14  
2, 4, 6-Tri bromophenol  
Concen: 0.196 ng  
RT: 15.704 min Scan# 1630  
Delta R. T. -0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion: 330 Resp: 320  
Ion Ratio Lower Upper  
330 100  
332 93.4 77.1 115.7  
141 66.3 54.1 81.1

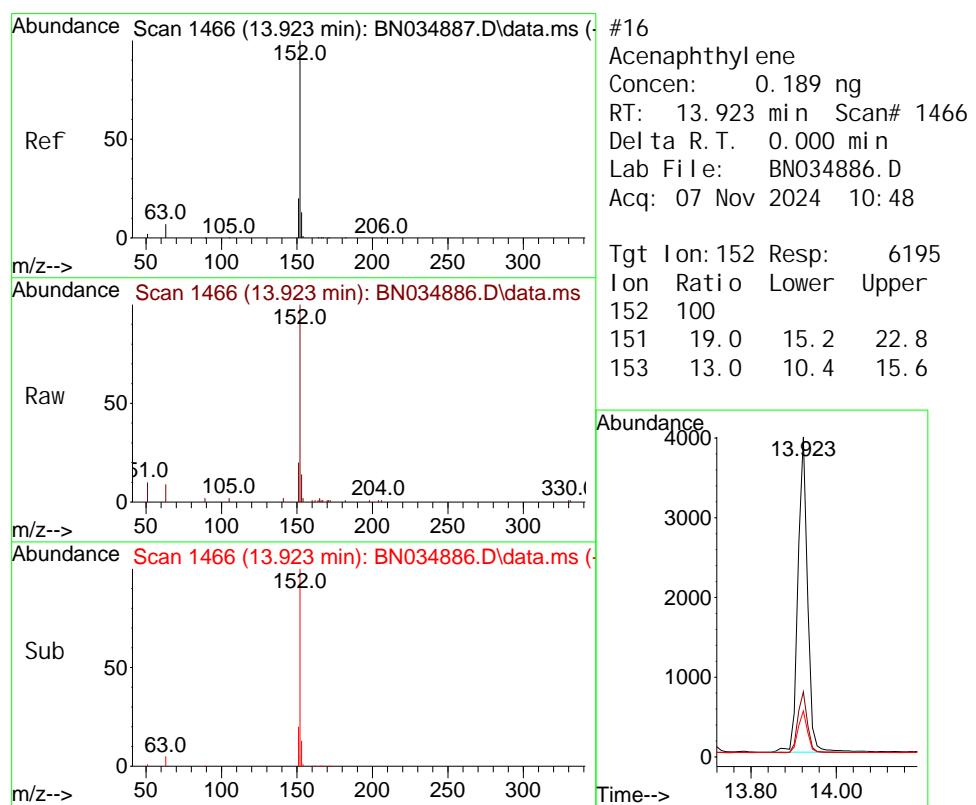
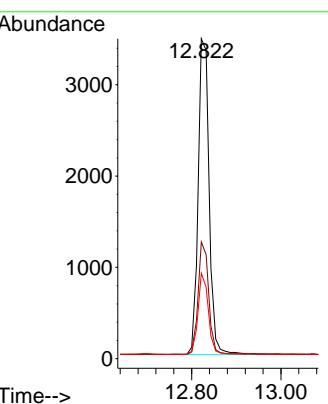




#15  
2-Fluorobiphenyl  
Concen: 0.206 ng  
RT: 12.822 min Scan# 1364  
Delta R.T. -0.011 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

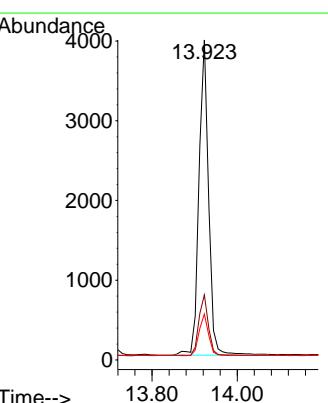
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.2

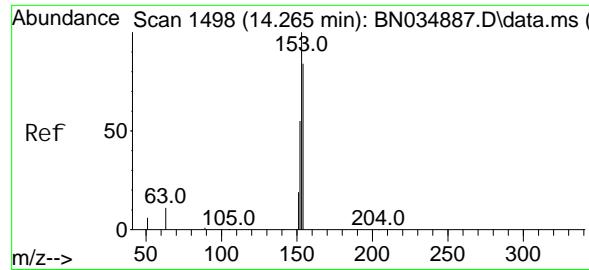
Tgt Ion: 172 Resp: 5892  
Ion Ratio Lower Upper  
172 100  
171 36.5 27.9 41.9  
170 26.7 19.0 28.4



#16  
Acenaphthylene  
Concen: 0.189 ng  
RT: 13.923 min Scan# 1466  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

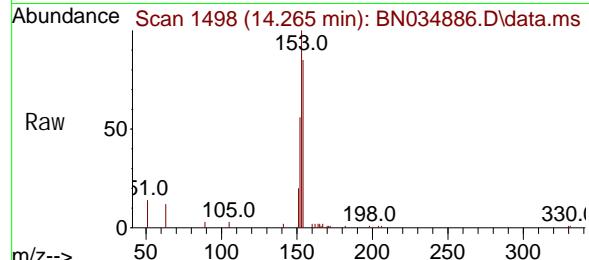
Tgt Ion: 152 Resp: 6195  
Ion Ratio Lower Upper  
152 100  
151 19.0 15.2 22.8  
153 13.0 10.4 15.6



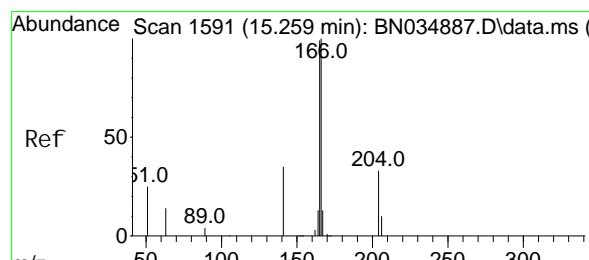
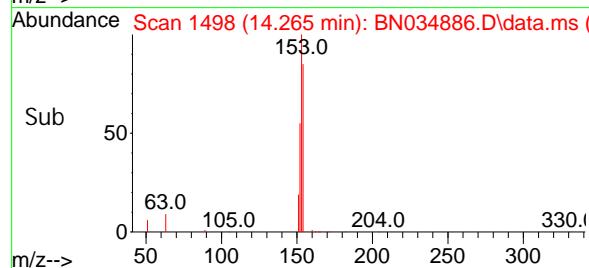
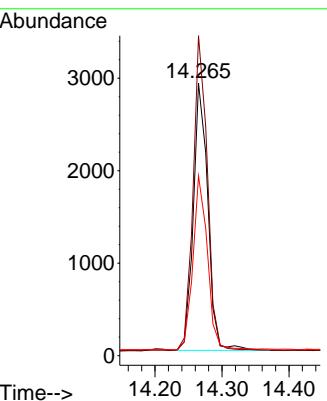


#17  
 Acenaphthene  
 Concen: 0.192 ng  
 RT: 14.265 min Scan# 1  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

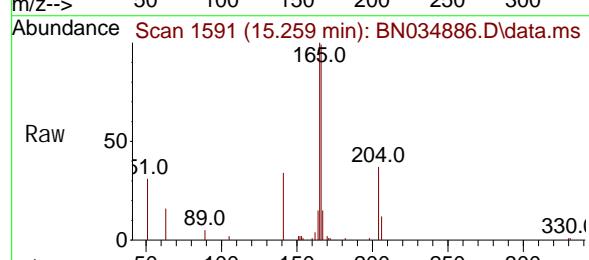
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2



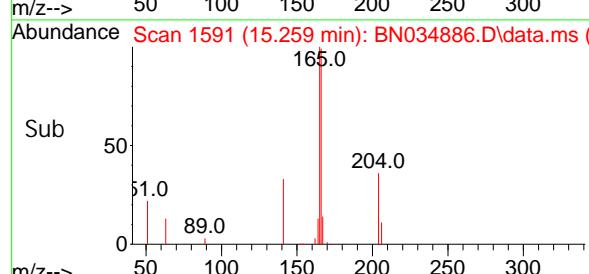
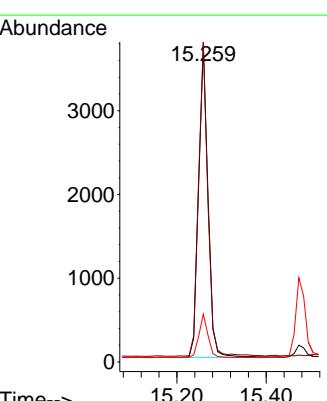
Tgt Ion: 154 Resp: 4347  
 Ion Ratio Lower Upper  
 154 100  
 153 115.9 92.2 138.2  
 152 65.2 51.1 76.7

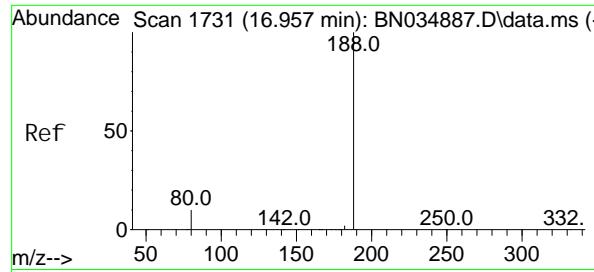


#18  
 Fluorene  
 Concen: 0.193 ng  
 RT: 15.259 min Scan# 1591  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48



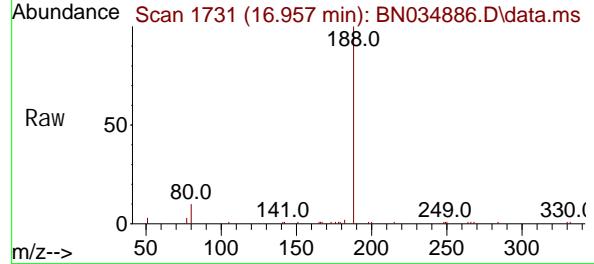
Tgt Ion: 166 Resp: 5429  
 Ion Ratio Lower Upper  
 166 100  
 165 99.6 79.5 119.3  
 167 13.6 10.6 16.0



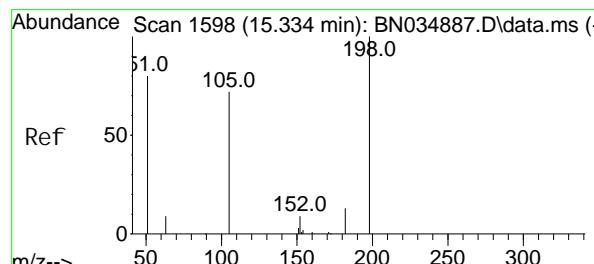
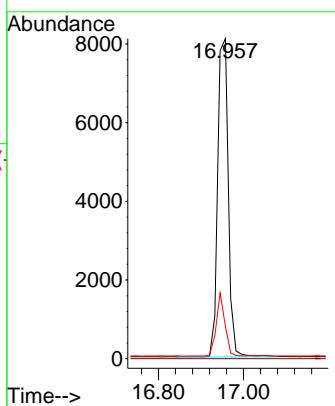
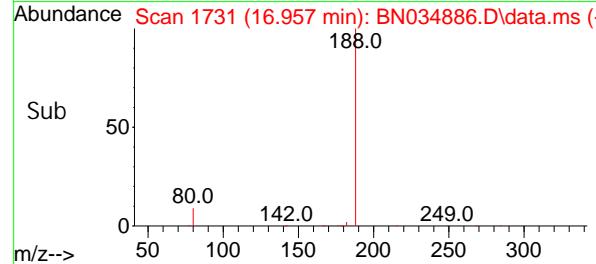


#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.957 min Scan# 1  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

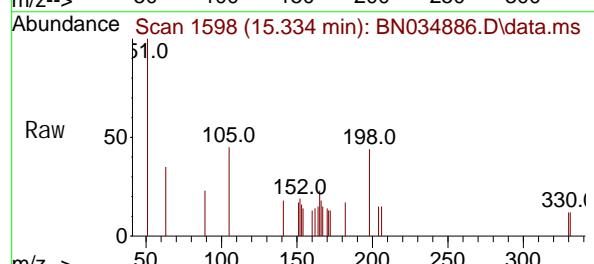
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2



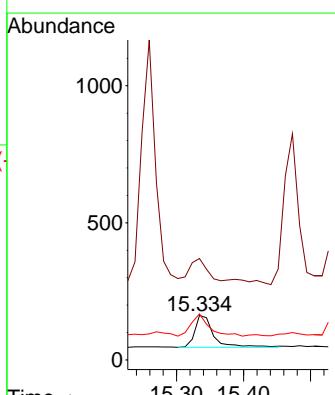
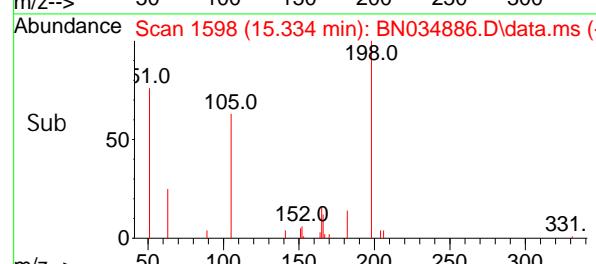
Tgt Ion: 188 Resp: 14024  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 10.2 8.6 12.8

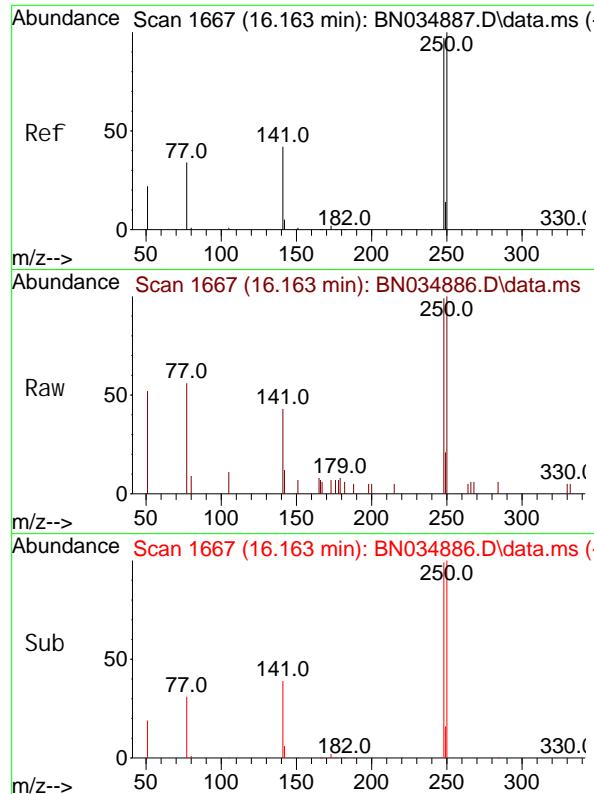


#20  
 4, 6-Di nitro-2-methyl phenol  
 Concen: 0.203 ng  
 RT: 15.334 min Scan# 1598  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48



Tgt Ion: 198 Resp: 229  
 Ion Ratio Lower Upper  
 198 100  
 51 228.4 141.8 212.8#  
 105 103.7 75.6 113.4

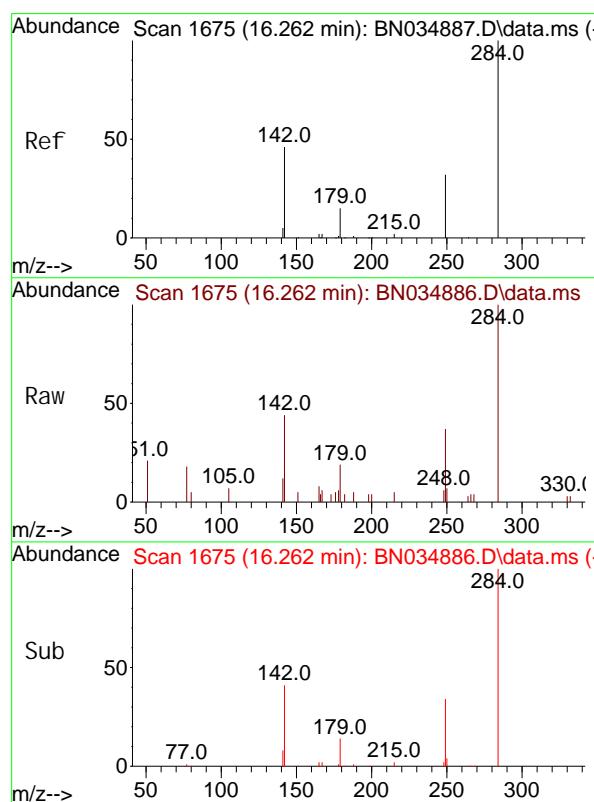
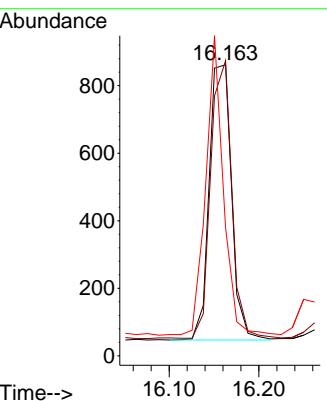




#21  
4-Bromophenyl -phenyl ether  
Concen: 0.189 ng  
RT: 16.163 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

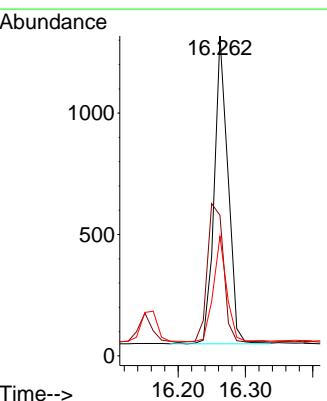
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2

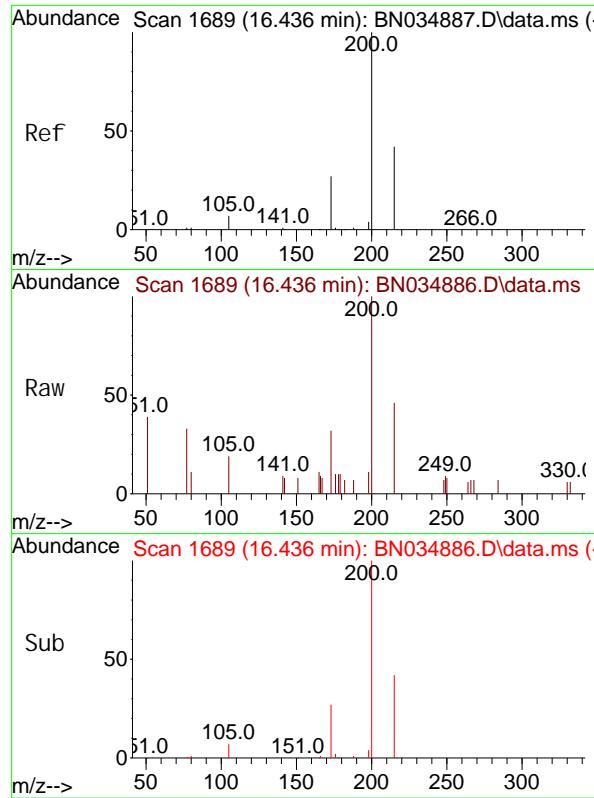
Tgt Ion: 248 Resp: 1410  
Ion Ratio Lower Upper  
248 100  
250 101.4 82.2 123.4  
141 44.1 36.2 54.2



#22  
Hexachlorobenzene  
Concen: 0.198 ng  
RT: 16.262 min Scan# 1675  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion: 284 Resp: 1785  
Ion Ratio Lower Upper  
284 100  
142 54.0 43.4 65.2  
249 33.5 25.8 38.6

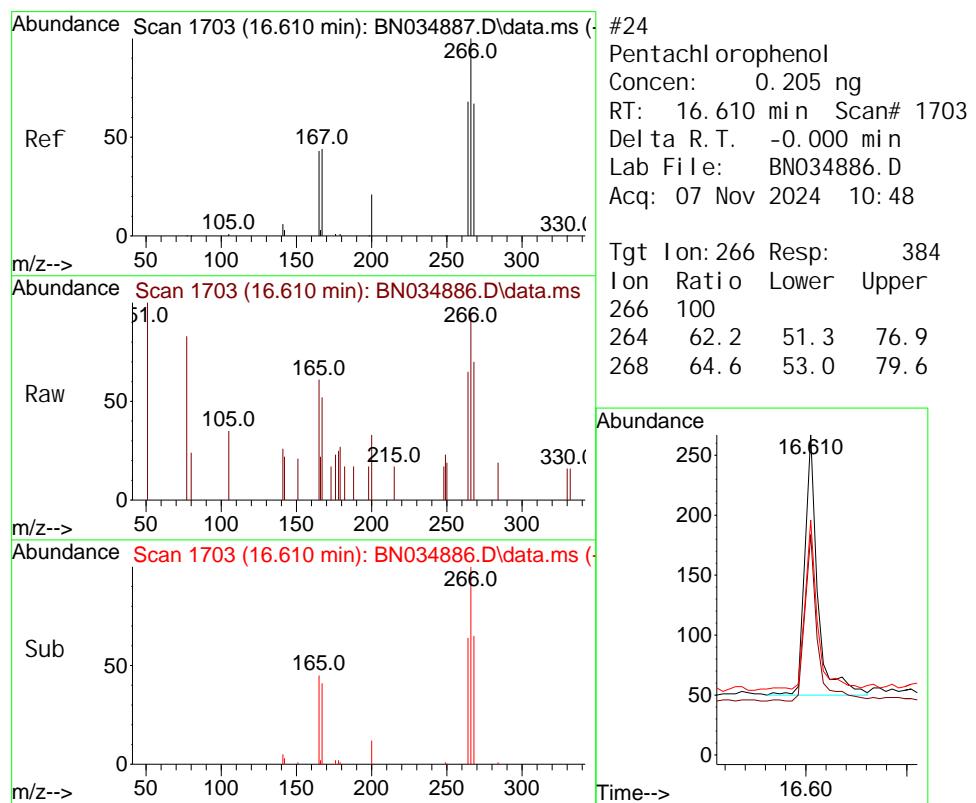
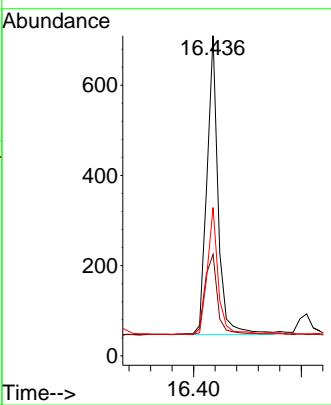




#23  
 Atrazine  
 Concen: 0.177 ng  
 RT: 16.436 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

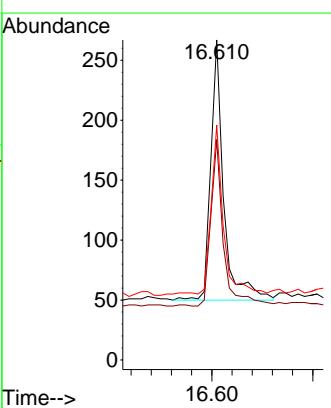
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2

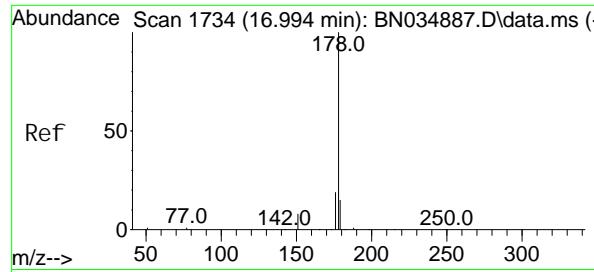
Tgt Ion: 200 Resp: 957  
 Ion Ratio Lower Upper  
 200 100  
 173 31.7 23.4 35.2  
 215 46.3 35.4 53.0



#24  
 Pentachlorophenol  
 Concen: 0.205 ng  
 RT: 16.610 min Scan# 1703  
 Delta R.T. -0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

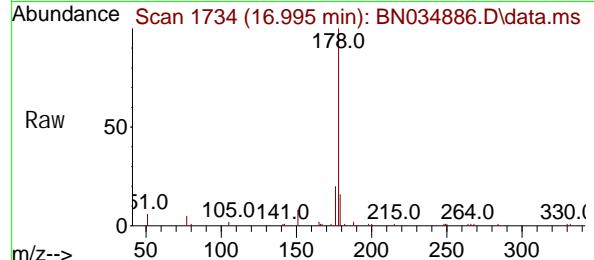
Tgt Ion: 266 Resp: 384  
 Ion Ratio Lower Upper  
 266 100  
 264 62.2 51.3 76.9  
 268 64.6 53.0 79.6



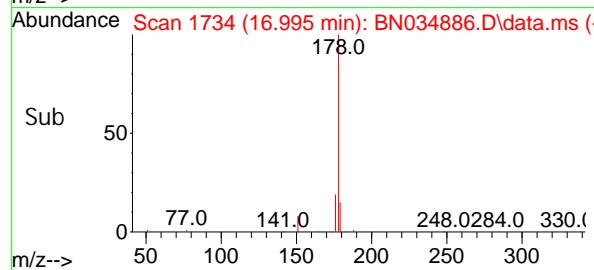
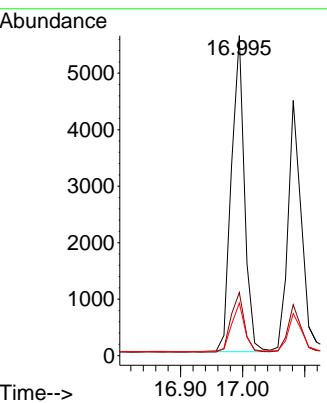


#25  
Phenanthrene  
Concen: 0.190 ng  
RT: 16.995 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

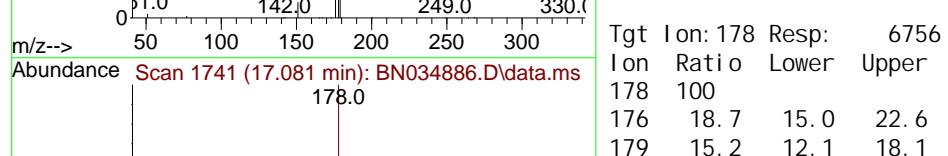
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2



Tgt Ion: 178 Resp: 8193  
Ion Ratio Lower Upper  
178 100  
176 19.5 15.5 23.3  
179 15.5 12.2 18.2

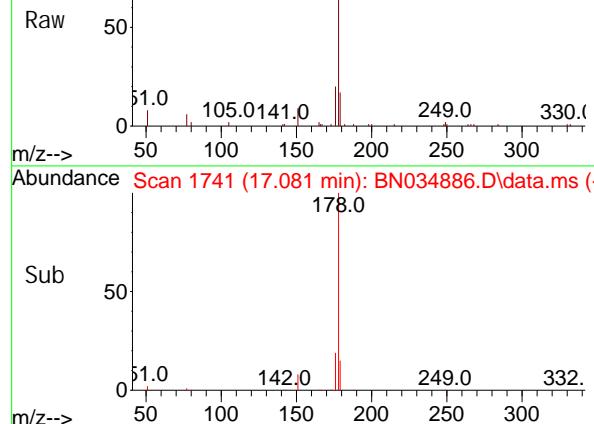
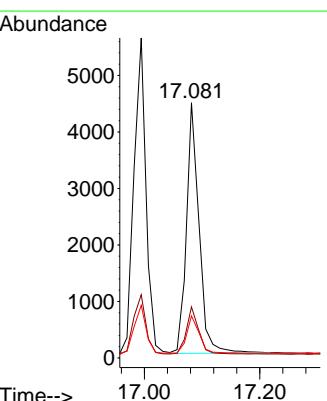


#26  
Anthracene  
Concen: 0.182 ng  
RT: 17.081 min Scan# 1741  
Delta R.T. 0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48



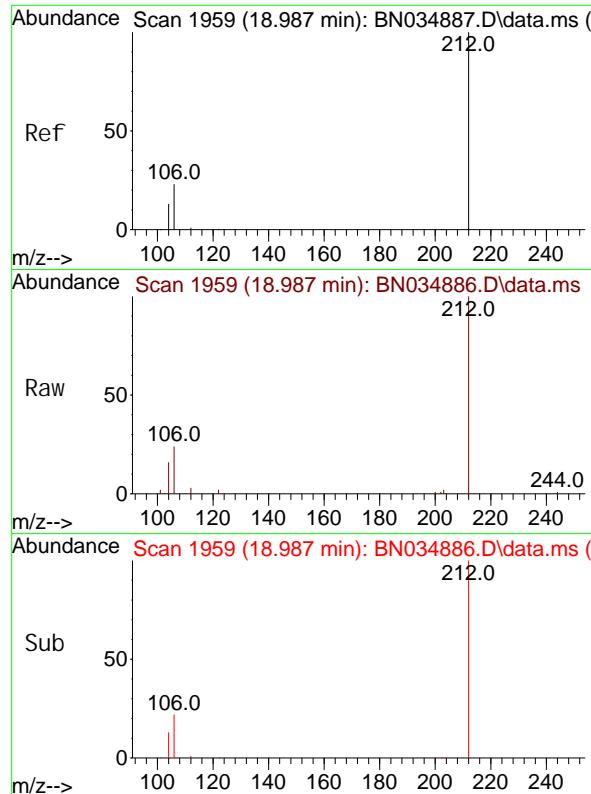
Tgt Ion: 178 Resp: 6756

Ion Ratio Lower Upper  
178 100  
176 18.7 15.0 22.6  
179 15.2 12.1 18.1



Sub 50  
0 50 100 150 200 250 300

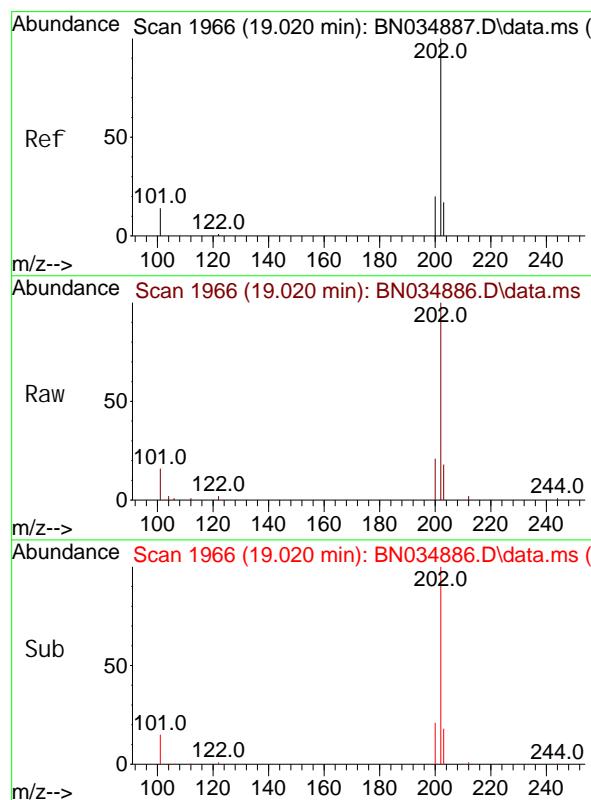
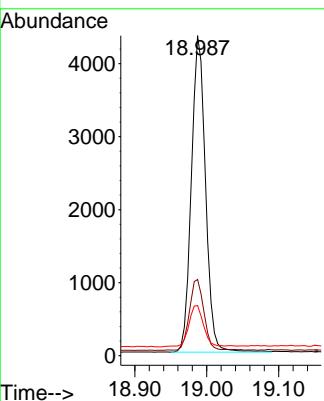
m/z-->



#27  
 Fluoranthene-d10  
 Concen: 0.187 ng  
 RT: 18.987 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

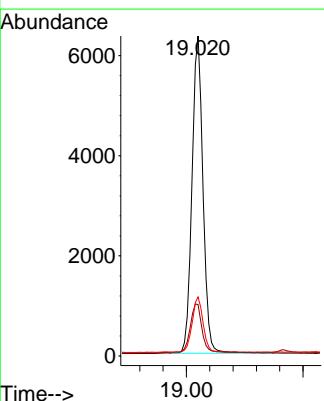
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.2

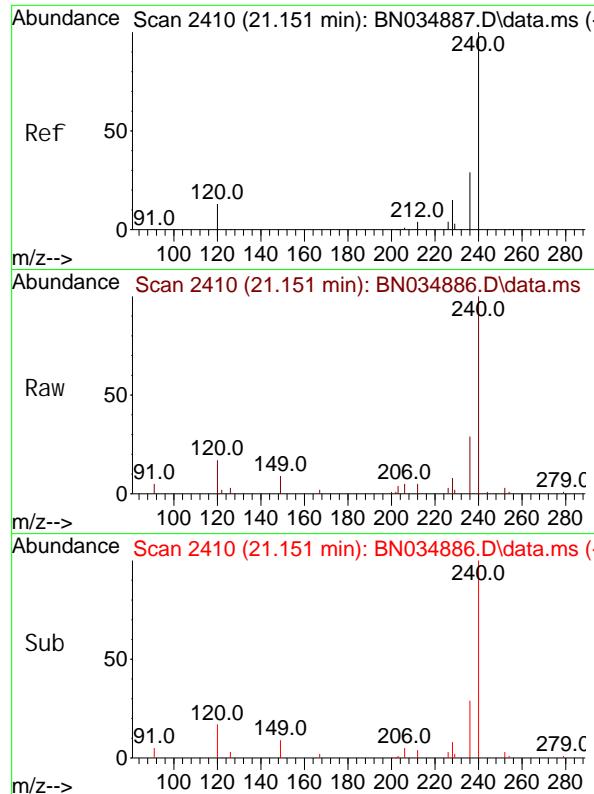
Tgt	Ion: 212	Resp:	5926
Ion	Ratio	Lower	Upper
212	100		
106	22.6	18.2	27.4
104	13.8	10.6	15.8



#28  
 Fluoranthene  
 Concen: 0.183 ng  
 RT: 19.020 min Scan# 1966  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Tgt	Ion: 202	Resp:	8296
Ion	Ratio	Lower	Upper
202	100		
101	16.7	12.7	19.1
203	17.1	13.7	20.5

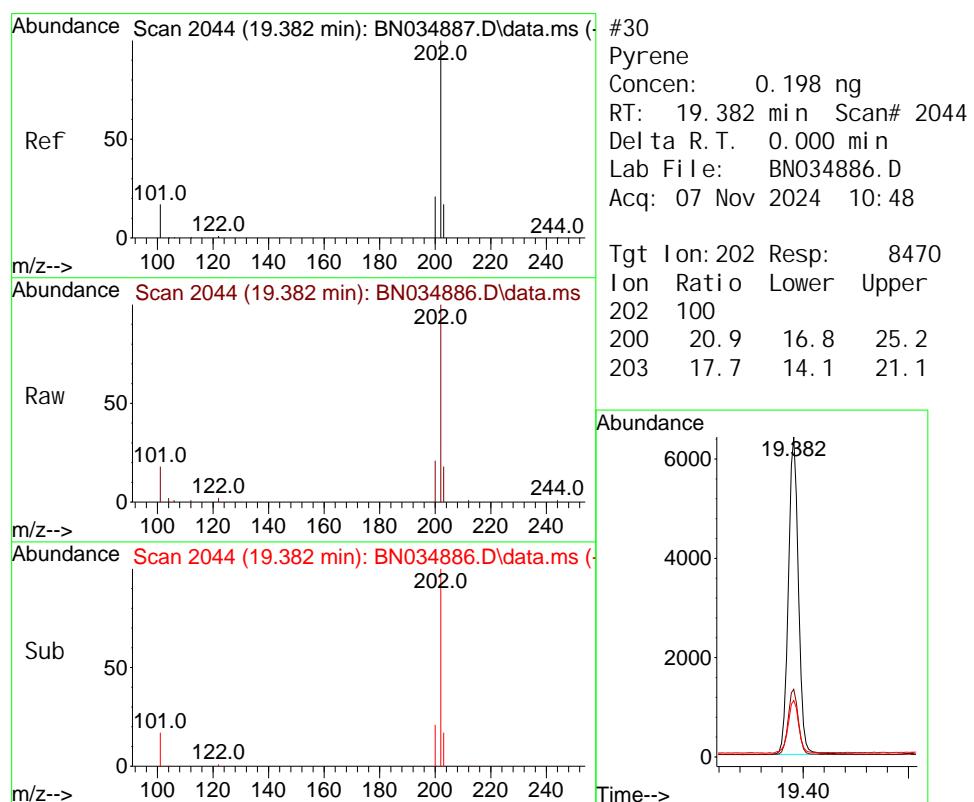
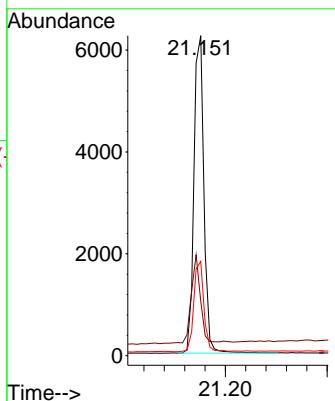




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.151 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

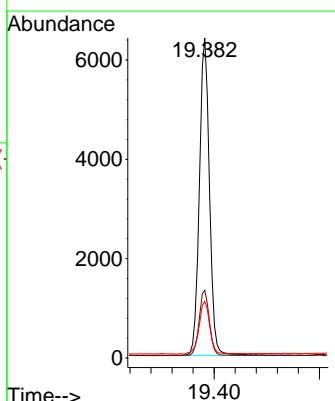
**Instrument :**  
 BNA\_N  
**ClientSampleId :**  
 SSTDICCO.2

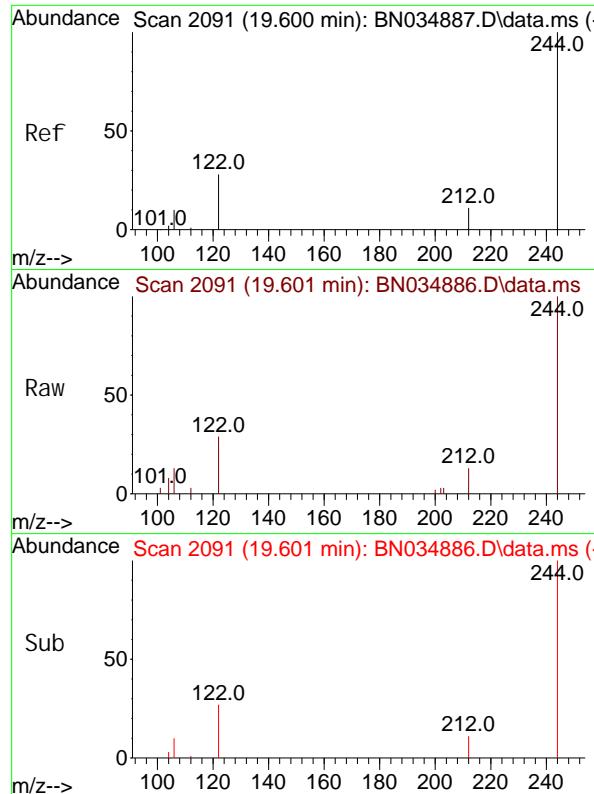
Tgt Ion: 240 Resp: 8450  
 Ion Ratio Lower Upper  
 240 100  
 120 17.0 13.8 20.8  
 236 29.5 23.8 35.6



#30  
 Pyrene  
 Concen: 0.198 ng  
 RT: 19.382 min Scan# 2044  
 Delta R.T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Tgt Ion: 202 Resp: 8470  
 Ion Ratio Lower Upper  
 202 100  
 200 20.9 16.8 25.2  
 203 17.7 14.1 21.1

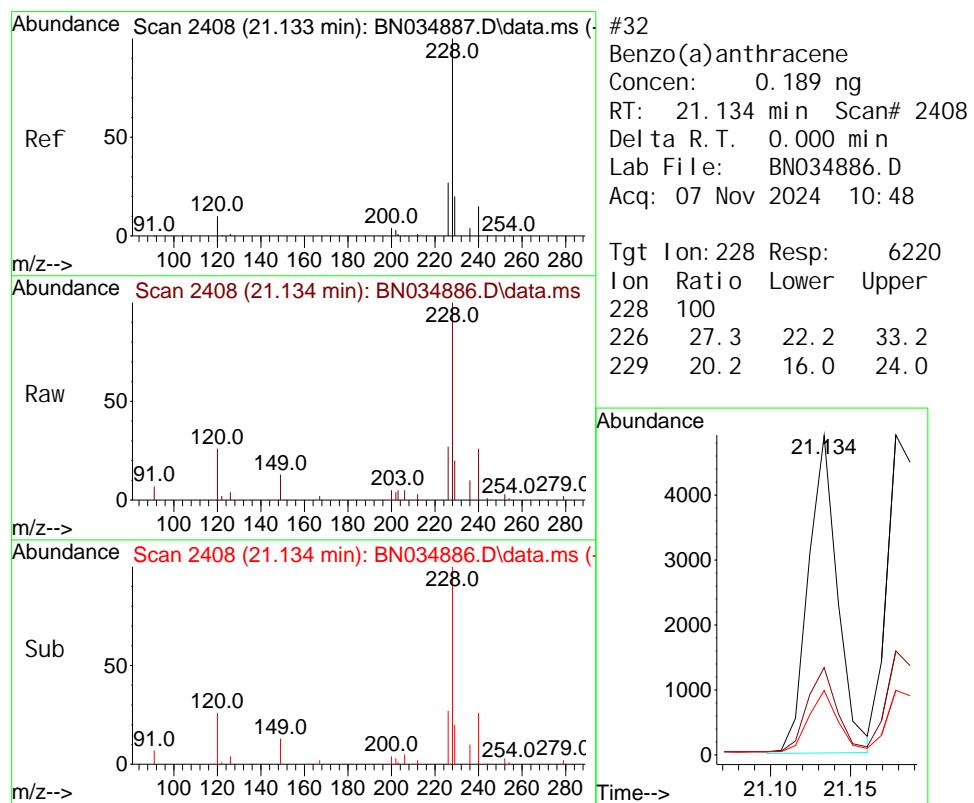
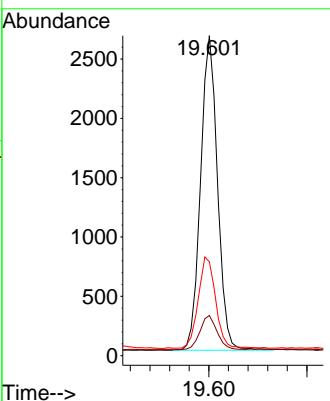




#31  
 Terphenyl -d14  
 Concen: 0.200 ng  
 RT: 19.601 min Scan# 2  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

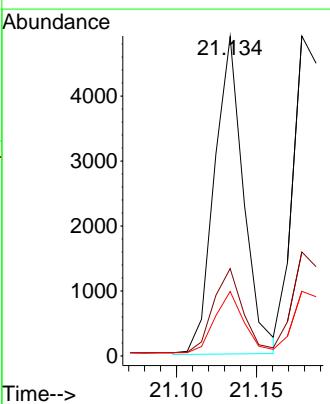
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

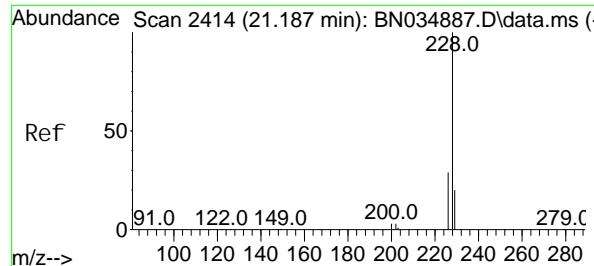
Tgt Ion: 244 Resp: 3169  
 Ion Ratio Lower Upper  
 244 100  
 212 12.5 9.4 14.0  
 122 29.3 23.0 34.4



#32  
 Benzo(a)anthracene  
 Concen: 0.189 ng  
 RT: 21.134 min Scan# 2408  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

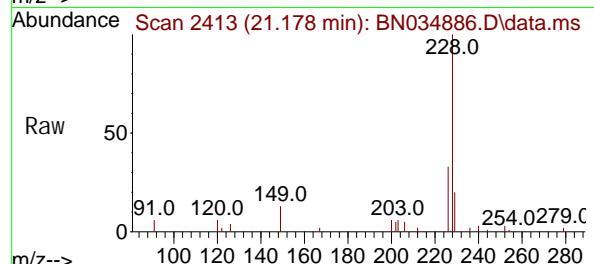
Tgt Ion: 228 Resp: 6220  
 Ion Ratio Lower Upper  
 228 100  
 226 27.3 22.2 33.2  
 229 20.2 16.0 24.0



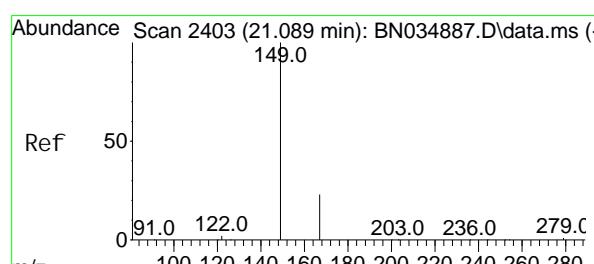
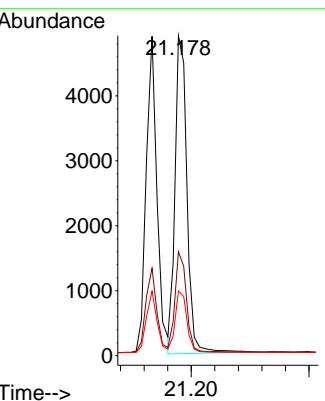


#33  
Chrysene  
Concen: 0.198 ng  
RT: 21.178 min Scan# 2  
Delta R. T. -0.009 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

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

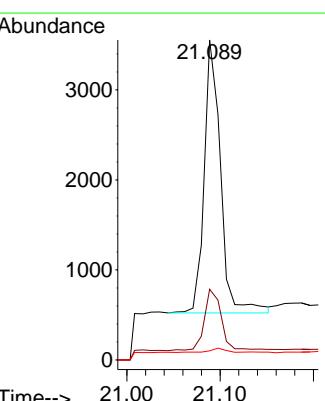


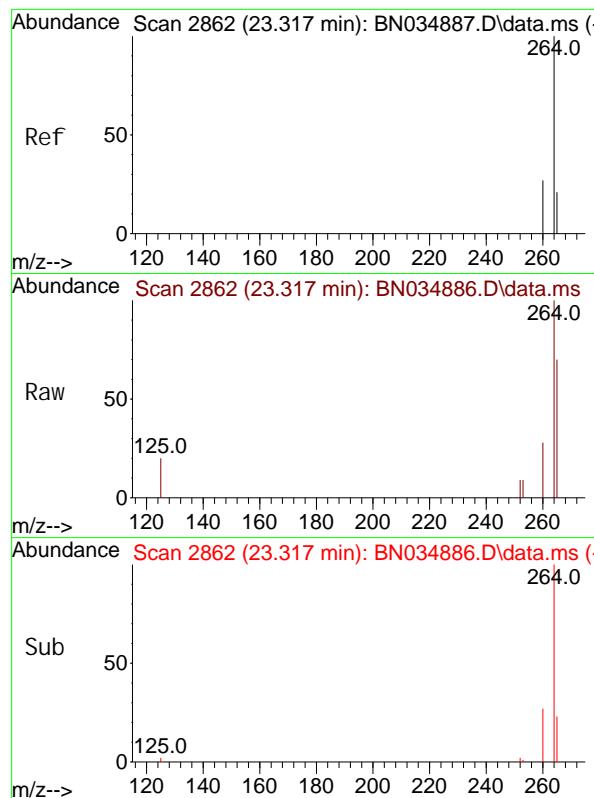
Tgt Ion:	Ion Ratio	Resp:	Lower	Upper
228	100			
226	32.5	23.7	35.5	
229	20.2	16.3	24.5	



#34  
Bi s(2-ethyl hexyl )phthal ate  
Concen: 0.195 ng  
RT: 21.089 min Scan# 2403  
Delta R. T. -0.000 min  
Lab File: BN034886.D  
Acq: 07 Nov 2024 10:48

Tgt Ion:	Ion Ratio	Resp:	Lower	Upper
149	100			
167	23.8	18.1	27.1	
279	1.2	1.2	1.8	

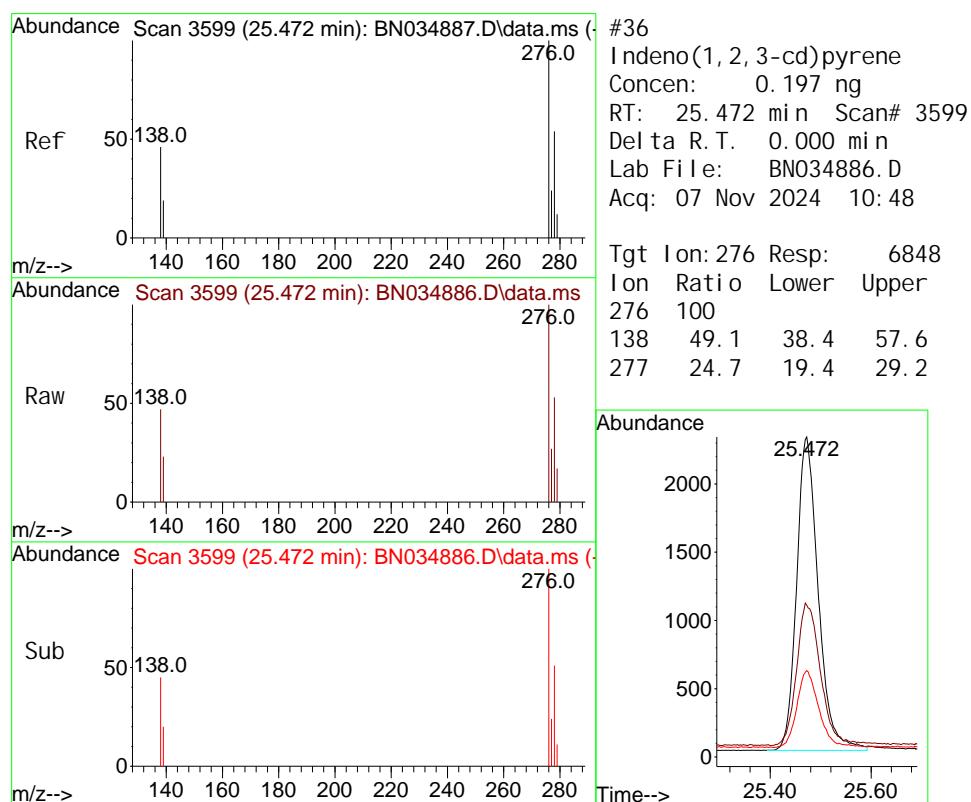
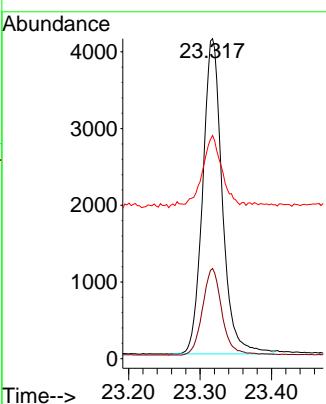




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.317 min Scan# 2  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

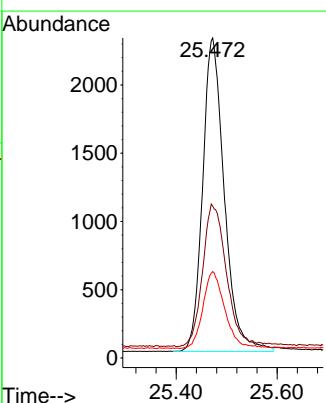
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.2

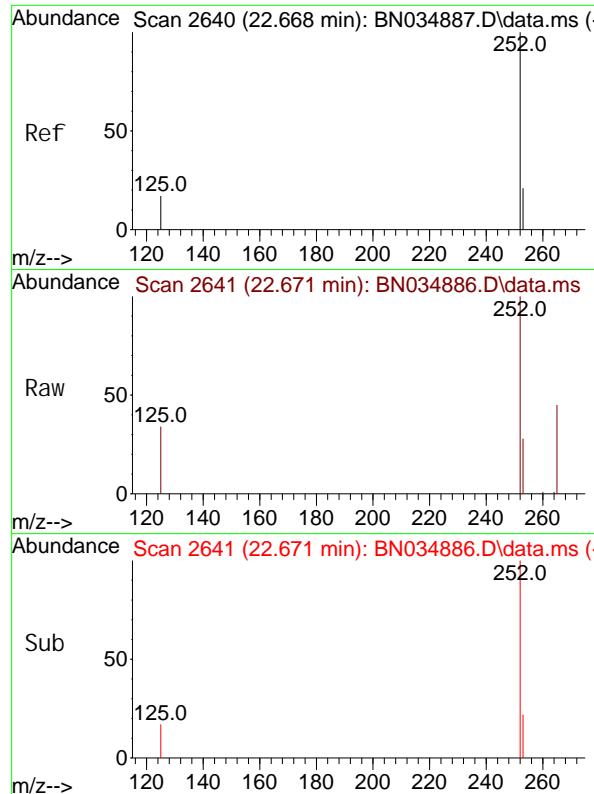
Tgt Ion: 264 Resp: 7815  
 Ion Ratio Lower Upper  
 264 100  
 260 28.2 22.2 33.2  
 265 69.8 60.9 91.3



#36  
 Indeno(1, 2, 3-cd)pyrene  
 Concen: 0.197 ng  
 RT: 25.472 min Scan# 3599  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Tgt Ion: 276 Resp: 6848  
 Ion Ratio Lower Upper  
 276 100  
 138 49.1 38.4 57.6  
 277 24.7 19.4 29.2

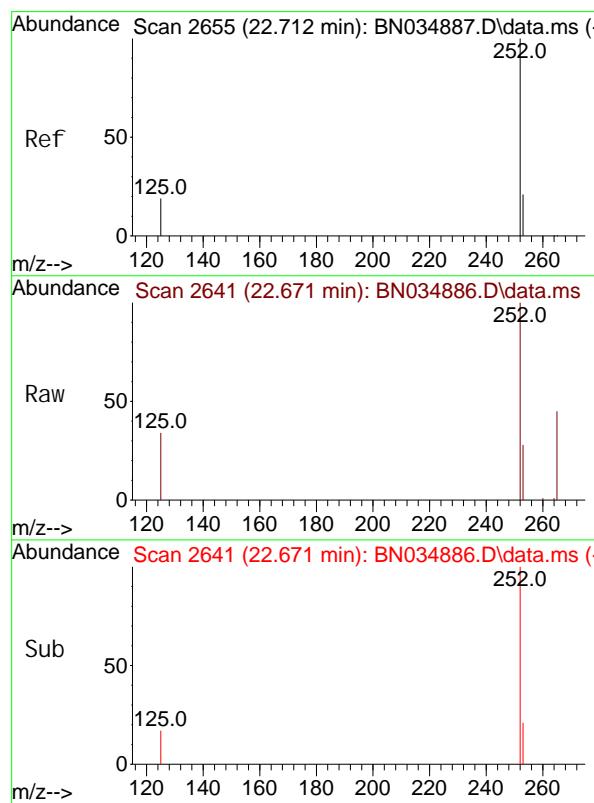
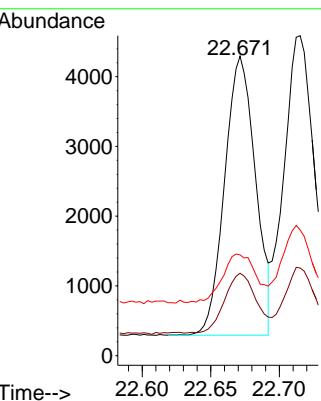




#37  
 Benzo(b)fluoranthene  
 Concen: 0.182 ng  
 RT: 22.671 min Scan# 2  
 Delta R.T. 0.003 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

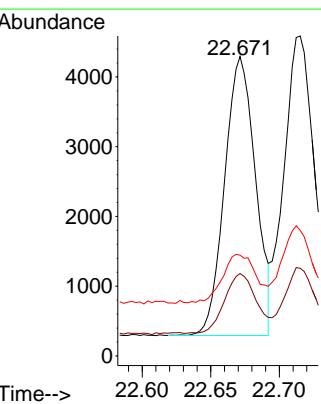
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**ClientSampleId :** SSTDICCO.2

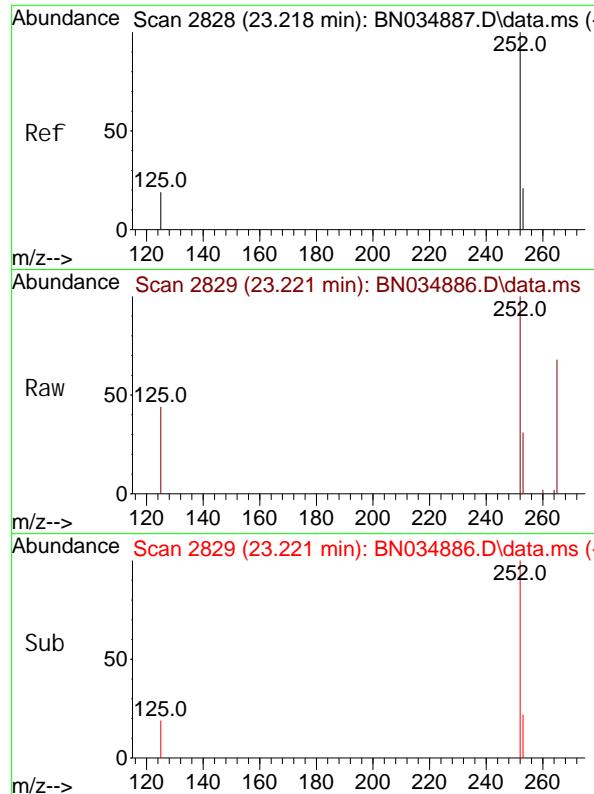
Tgt	Ion: 252	Resp:	6257
Ion Ratio	Lower	Upper	
252	100		
253	27.5	19.4	29.2
125	33.6	21.4	32.2



#38  
 Benzo(k)fluoranthene  
 Concen: 0.175 ng  
 RT: 22.671 min Scan# 2641  
 Delta R.T. -0.041 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Tgt	Ion: 252	Resp:	6257
Ion Ratio	Lower	Upper	
252	100		
253	27.5	19.8	29.8
125	33.6	22.6	33.8

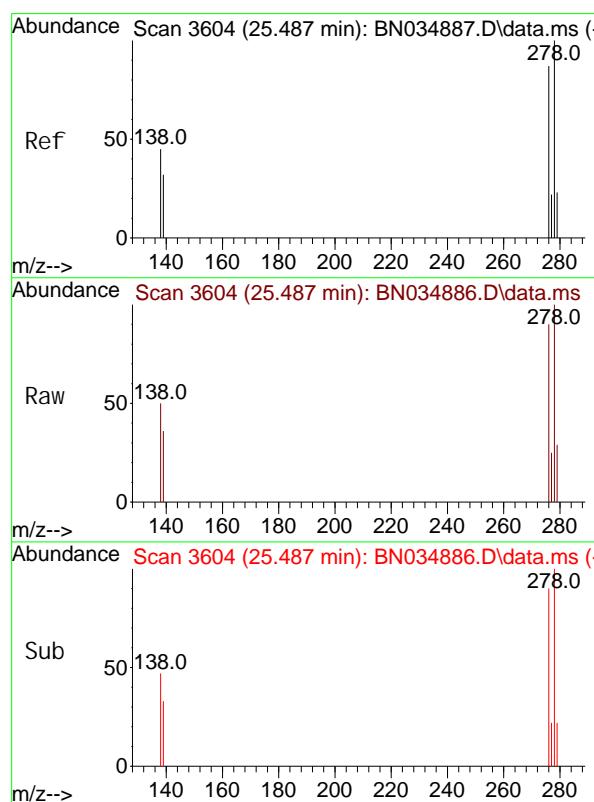
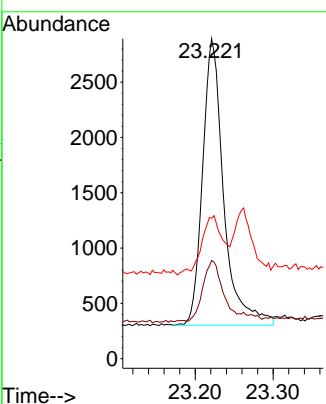




#39  
 Benzo(a)pyrene  
 Concen: 0.179 ng  
 RT: 23.221 min Scan# 2  
 Delta R. T. 0.003 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

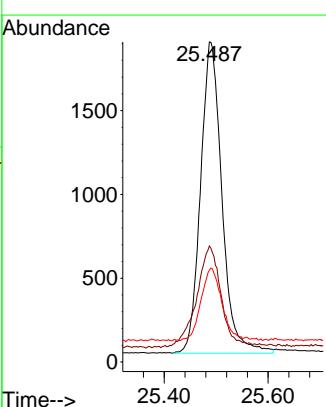
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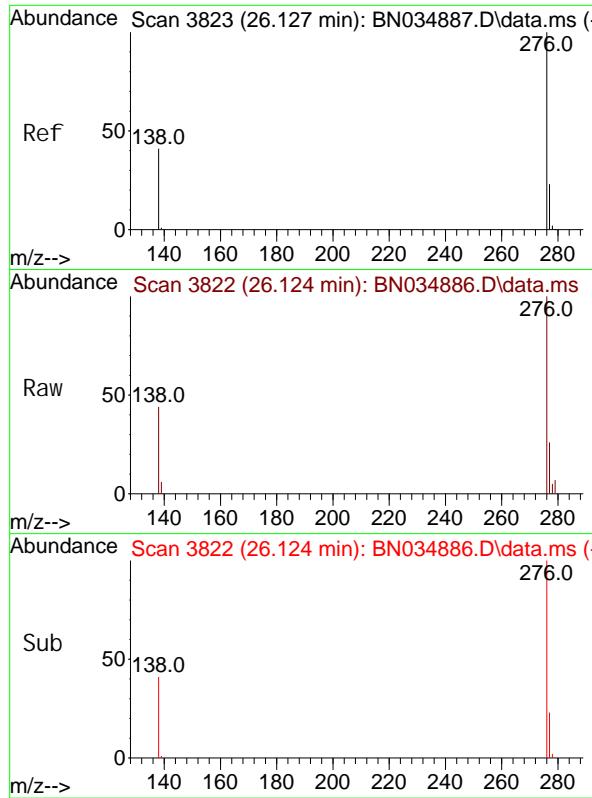
Tgt Ion: 252 Resp: 4882  
 Ion Ratio Lower Upper  
 252 100  
 253 30.7 21.4 32.2  
 125 43.9 27.8 41.6#



#40  
 Di benzo(a, h)anthracene  
 Concen: 0.197 ng  
 RT: 25.487 min Scan# 3604  
 Delta R. T. 0.000 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Tgt Ion: 278 Resp: 5297  
 Ion Ratio Lower Upper  
 278 100  
 139 36.3 27.2 40.8  
 279 28.7 21.4 32.0

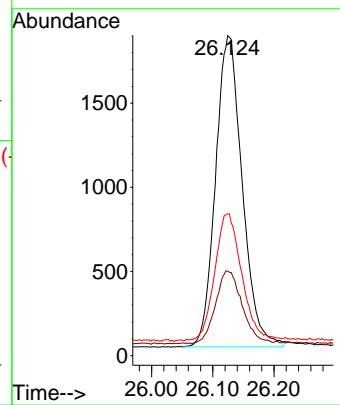




#41  
 Benzo(g, h, i )perylene  
 Concen: 0.196 ng  
 RT: 26.124 min Scan# 3  
 Delta R. T. -0.003 min  
 Lab File: BN034886.D  
 Acq: 07 Nov 2024 10:48

Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.2

Tgt	Ion: 276	Resp:	5602
Ion	Ratio	Lower	Upper
276	100		
277	26.4	20.2	30.2
138	44.3	33.9	50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034888.D  
 Acq On : 07 Nov 2024 12:00  
 Operator : RC/JU  
 Sample : SSTDI CCO. 8  
 Misc :  
 ALS Vial : 6 Sample Multi plier: 1

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

Quant Time: Nov 07 14:41:27 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14:34:20 2024  
 Response via : Initial Calibration

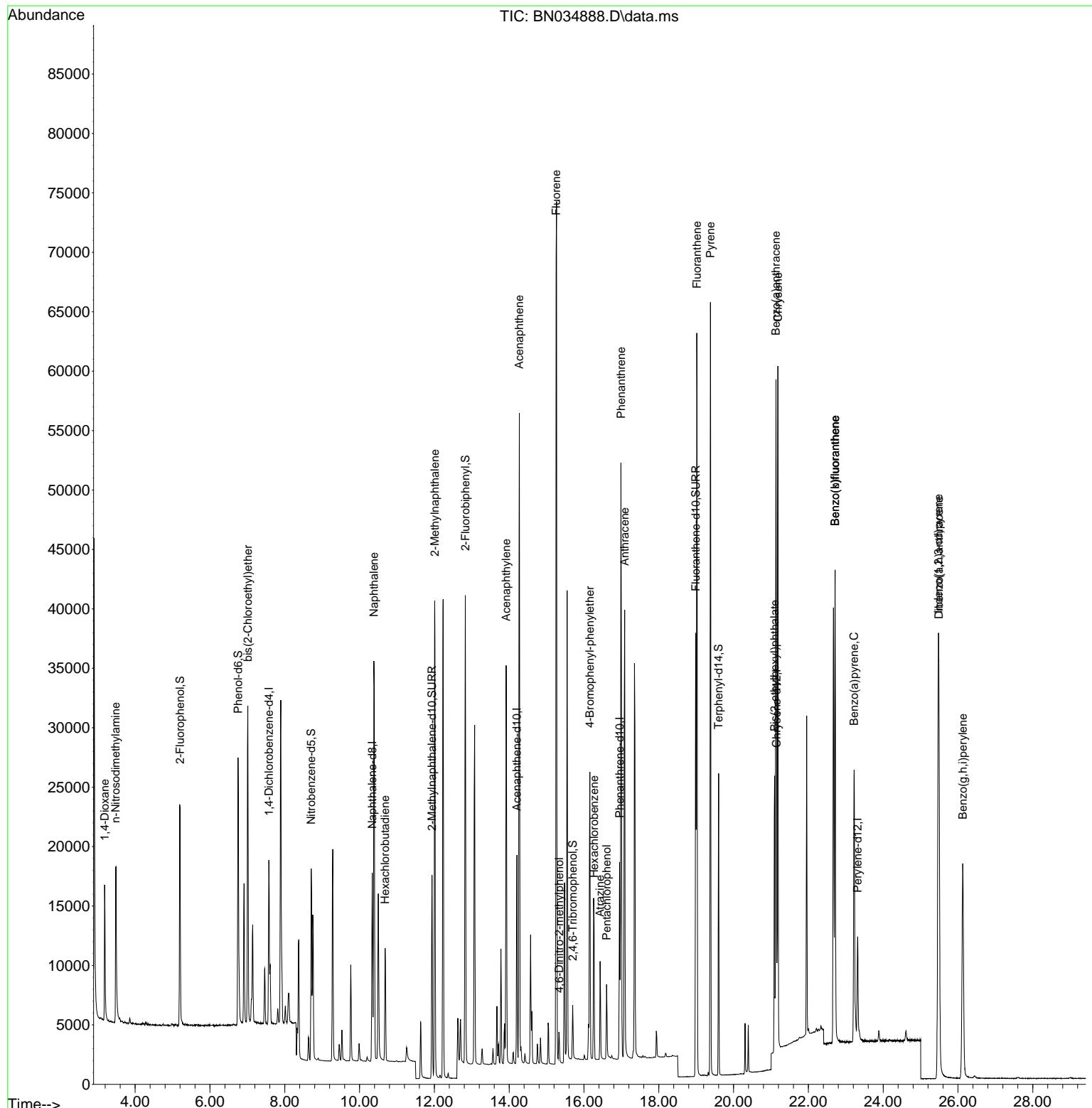
Compound	R. T.	Ql on	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1, 4-Di chlorobenzene-d4	7. 575	152	6371	0. 400	ng	0. 00
7) Naphthalene-d8	10. 340	136	19428	0. 400	ng	0. 00
13) Acenaphthene-d10	14. 208	164	9092	0. 400	ng	0. 00
19) Phenanthrene-d10	16. 952	188	18851	0. 400	ng	# 0. 00
29) Chrysene-d12	21. 149	240	12731	0. 400	ng	0. 00
35) Perylene-d12	23. 315	264	10897	0. 400	ng	# 0. 00
<b>System Monotoring Compounds</b>						
4) 2-Fluorophenol	5. 199	112	15040	0. 847	ng	0. 00
5) Phenol -d6	6. 752	99	20160	0. 855	ng	0. 00
8) Nitrobenzene-d5	8. 707	82	12697	0. 838	ng	0. 00
11) 2-Methyl naphthalene-d10	11. 935	152	22498	0. 850	ng	0. 00
14) 2, 4, 6-Tribromophenol	15. 698	330	2202	0. 849	ng	0. 00
15) 2-Fluorobi phenyl	12. 829	172	32517	0. 847	ng	0. 00
27) Fluoranthene-d10	18. 990	212	36597	0. 861	ng	0. 00
31) Terphenyl -d14	19. 598	244	19795	0. 830	ng	0. 00
<b>Target Compounds</b>						
2) 1, 4-Dioxane	3. 184	88	6753	0. 839	ng	99
3) n-Nitrosodi methyl amine	3. 480	42	9597	0. 884	ng	98
6) bis(2-Chloroethyl)ether	7. 012	93	17693	0. 870	ng	100
9) Naphthalene	10. 383	128	45870	0. 851	ng	100
10) Hexachlorobutadiene	10. 682	225	7343	0. 855	ng	# 97
12) 2-Methyl naphthalene	12. 011	142	28153	0. 853	ng	99
16) Acenaphthylene	13. 919	152	36993	0. 844	ng	100
17) Acenaphthene	14. 272	154	26000	0. 857	ng	97
18) Fluorene	15. 255	166	32251	0. 853	ng	100
20) 4, 6-Dinitro-2-methyl ph...	15. 341	198	1509	0. 821	ng	# 36
21) 4-Bromophenyl -phenyl ether	16. 157	248	8294	0. 825	ng	# 86
22) Hexachlorobenzene	16. 269	284	10091	0. 834	ng	98
23) Atrazine	16. 430	200	6114	0. 840	ng	# 93
24) Pentachlorophenol	16. 604	266	2792	0. 836	ng	98
25) Phenanthrene	16. 989	178	49126	0. 850	ng	100
26) Anthracene	17. 088	178	42271	0. 848	ng	100
28) Fluoranthene	19. 017	202	53297	0. 876	ng	100
30) Pyrene	19. 380	202	53636	0. 832	ng	100
32) Benzo(a)anthracene	21. 131	228	42348	0. 853	ng	99
33) Chrysene	21. 185	228	45020	0. 857	ng	99
34) Bis(2-ethyl hexyl)phtha...	21. 095	149	22429	0. 787	ng	98
36) Indeno(1, 2, 3-cd)pyrene	25. 473	276	40211	0. 828	ng	100
37) Benzo(b)fluoranthene	22. 713	252	43204	0. 902	ng	93
38) Benzo(k)fluoranthene	22. 713	252	43204	0. 865	ng	# 92
39) Benzo(a)pyrene	23. 222	252	32141	0. 845	ng	# 86
40) Dibenz(a, h)anthracene	25. 488	278	31006	0. 825	ng	96
41) Benzo(g, h, i)perylene	26. 128	276	32362	0. 812	ng	99

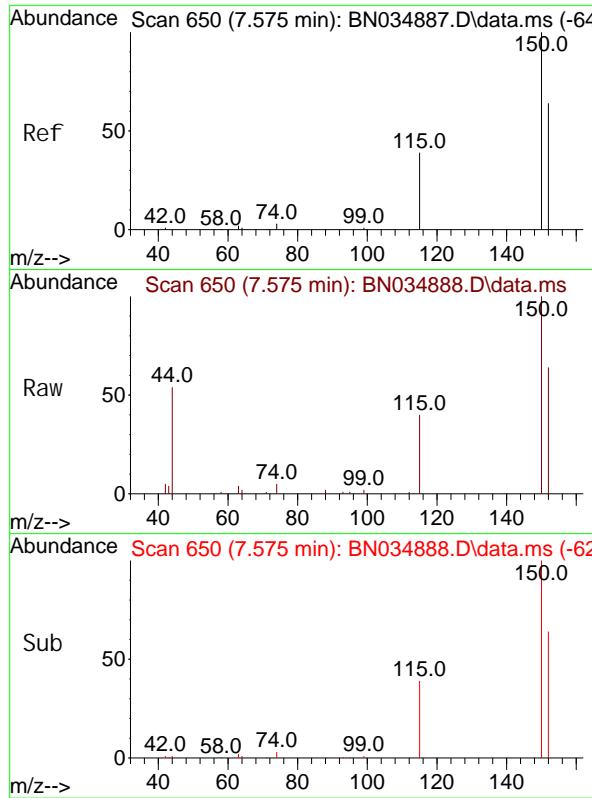
(#) = qual ifier out of range (m) = manual integration (+) = si gnals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034888.D  
 Acq On : 07 Nov 2024 12: 00  
 Operator : RC/JU  
 Sample : SSTDICCO.8  
 Misc :  
 ALS Vial : 6 Sample Multiplier: 1

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

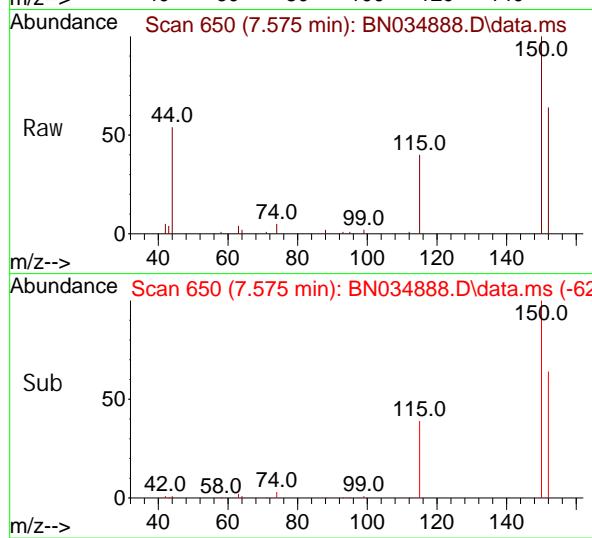
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 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 14: 34: 20 2024  
 Response via : Initial Calibration



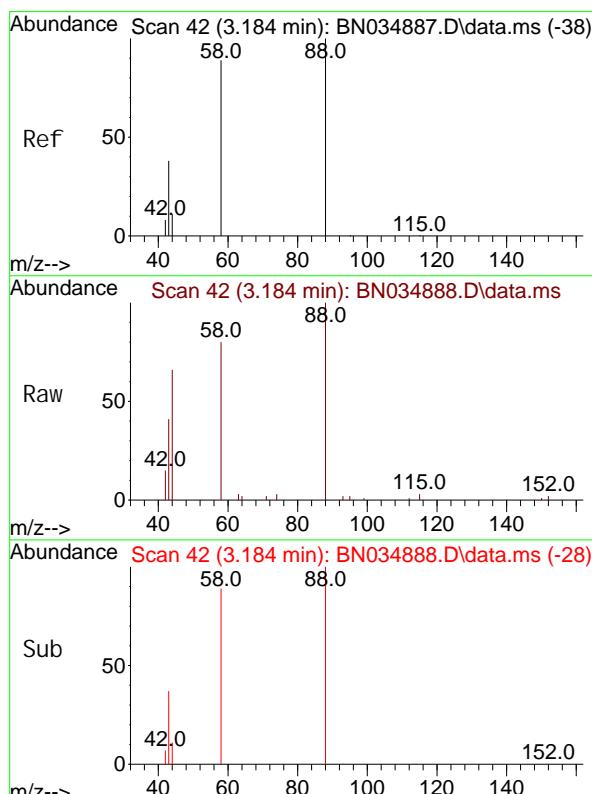
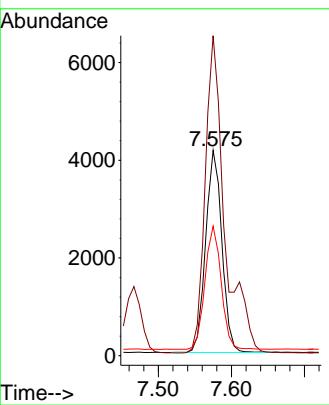


#1  
 1, 4-Di chl orobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R. T. -0.000 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

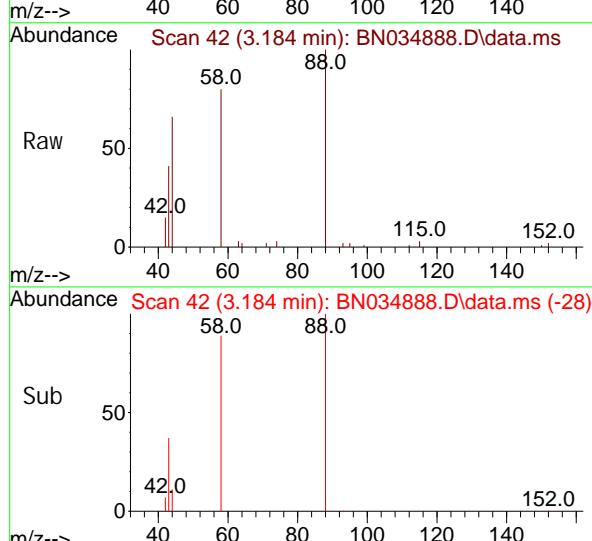
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8



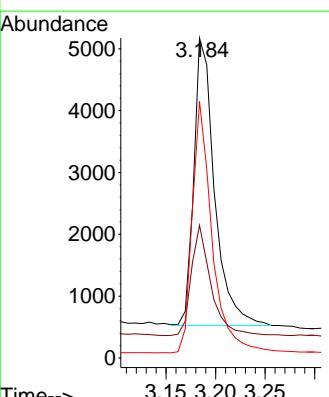
Tgt Ion: 152 Resp: 6371  
 Ion Ratio Lower Upper  
 152 100  
 150 155.9 124.4 186.6  
 115 63.1 50.5 75.7

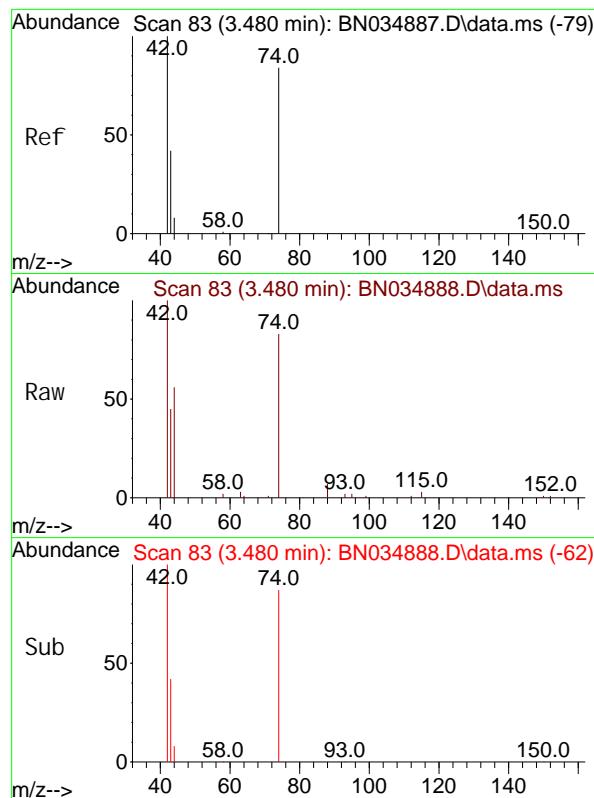


#2  
 1, 4-Di oxane  
 Concen: 0.839 ng  
 RT: 3.184 min Scan# 42  
 Delta R. T. 0.000 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00



Tgt Ion: 88 Resp: 6753  
 Ion Ratio Lower Upper  
 88 100  
 43 36.6 28.2 42.2  
 58 83.7 67.1 100.7

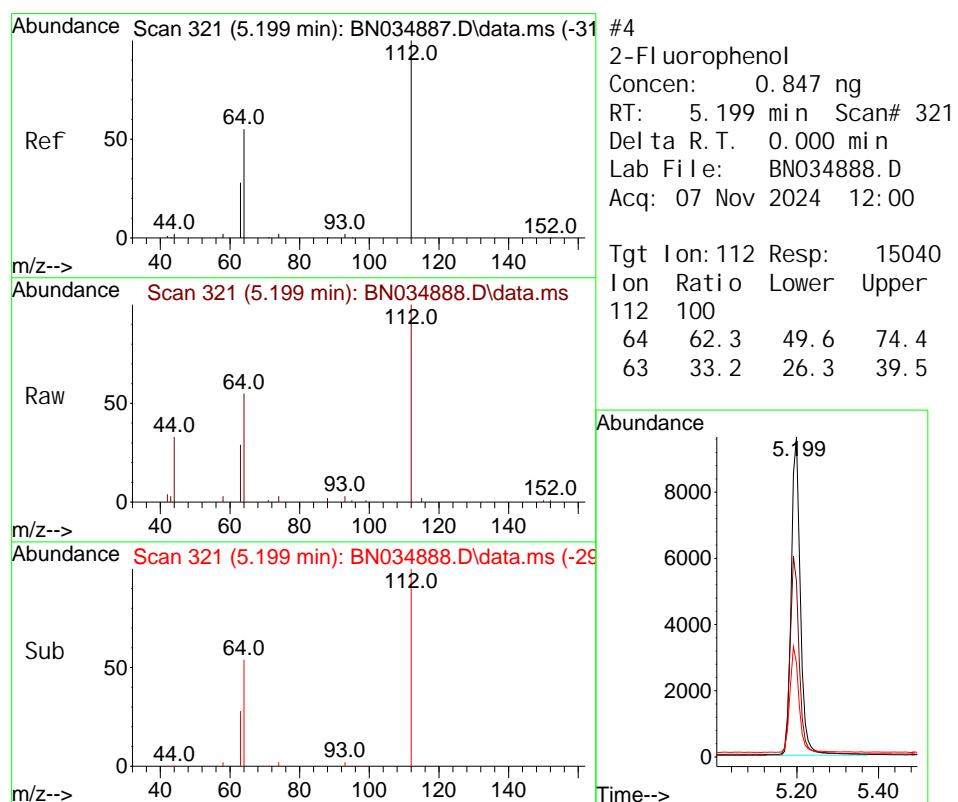
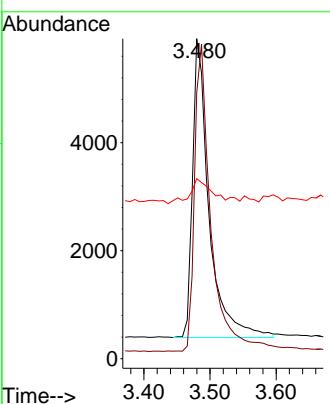




#3  
n-Ni trosodi methyl amine  
Concen: 0.884 ng  
RT: 3.480 min Scan# 8  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

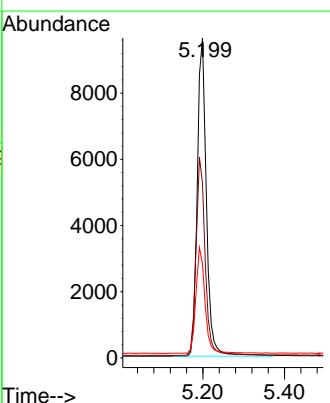
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ClientSampleId :  
SSTDICC0.8

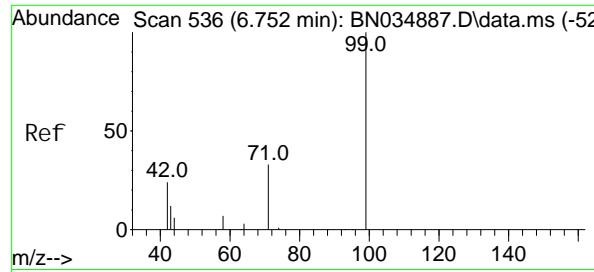
Tgt Ion: 42 Resp: 9597  
Ion Ratio Lower Upper  
42 100  
74 102.7 83.4 125.2  
44 11.5 8.6 12.8



#4  
2-Fluorophenol  
Concen: 0.847 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

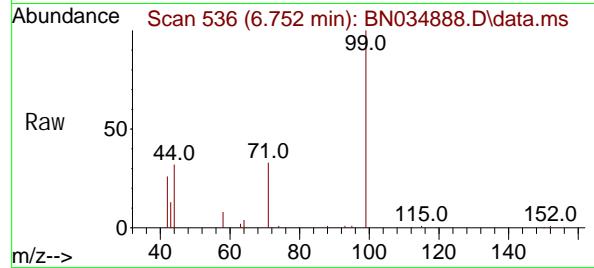
Tgt Ion: 112 Resp: 15040  
Ion Ratio Lower Upper  
112 100  
64 62.3 49.6 74.4  
63 33.2 26.3 39.5



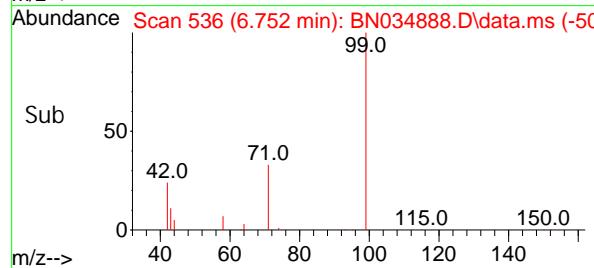
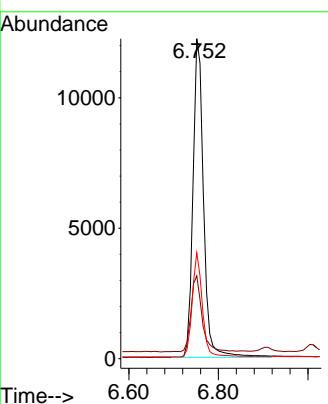


#5  
Phenol -d6  
Concen: 0.855 ng  
RT: 6.752 min Scan# 5  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

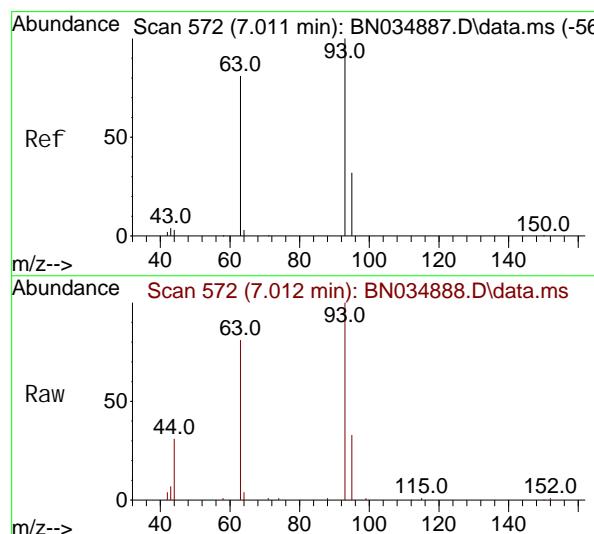
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**ClientSampleId :** SSTDICC0.8



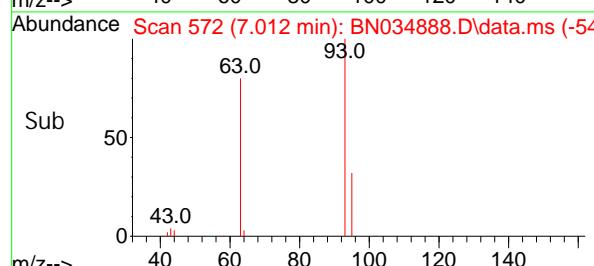
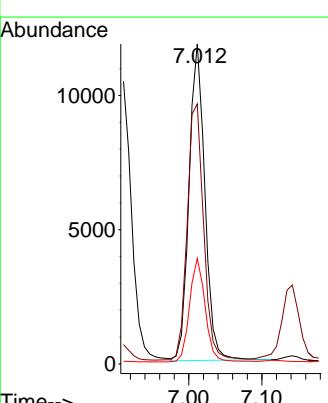
Tgt Ion: 99 Resp: 20160  
Ion Ratio Lower Upper  
99 100  
42 25.2 20.2 30.2  
71 31.4 25.4 38.0

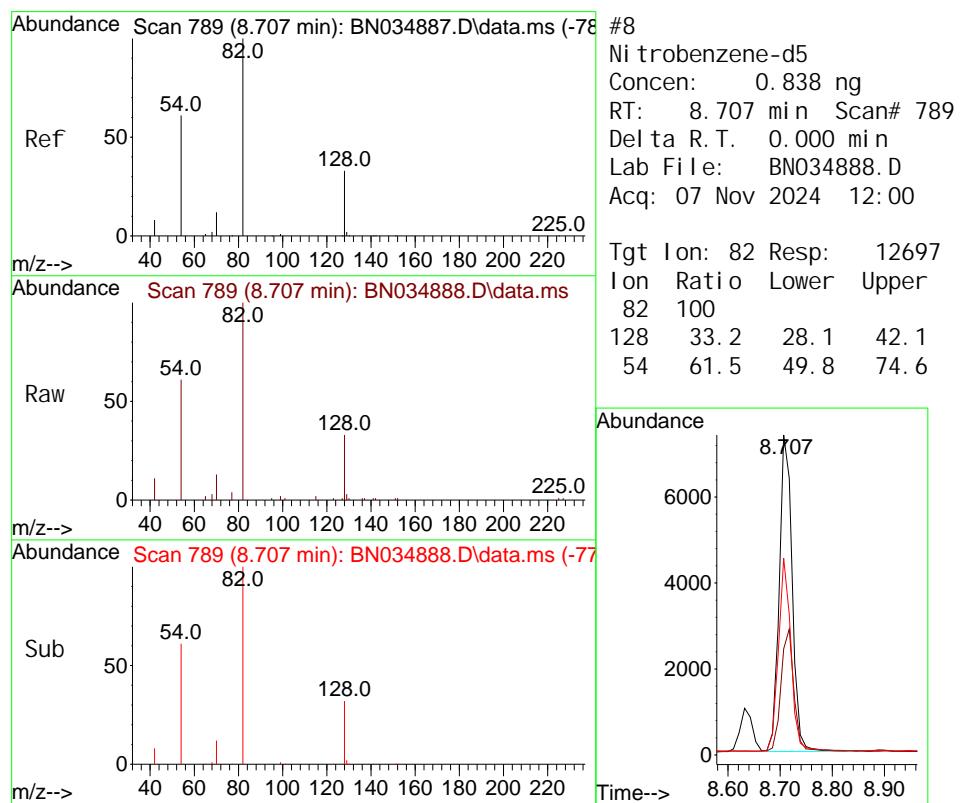
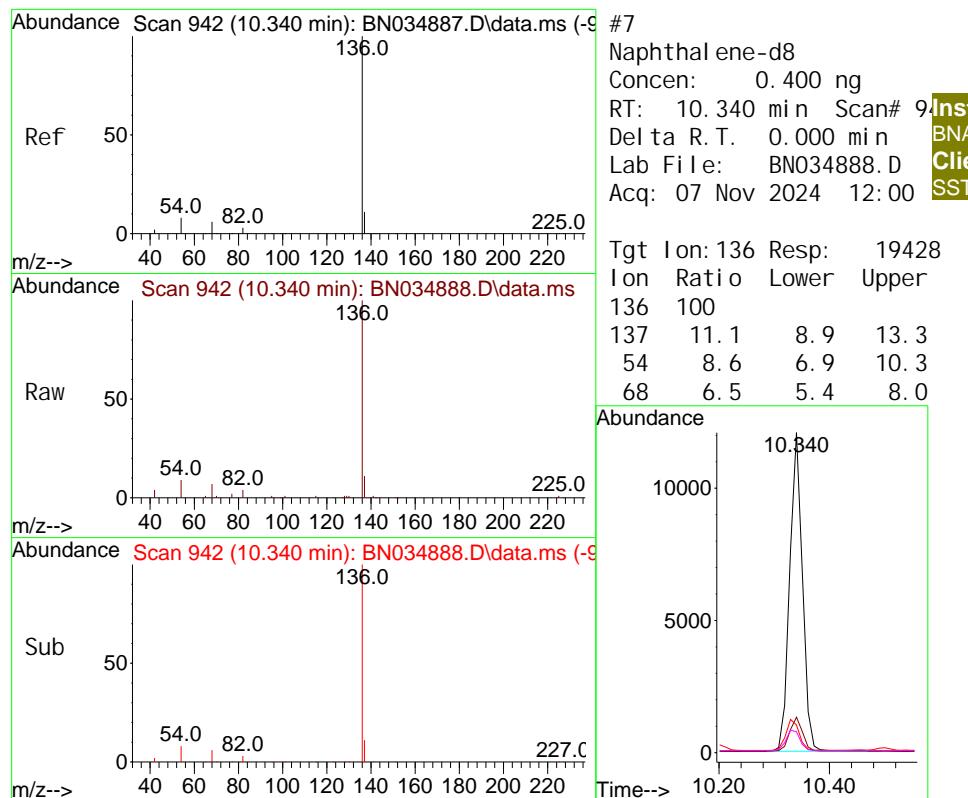


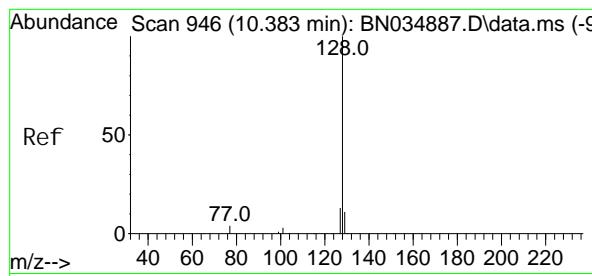
#6  
bis(2-Chloroethyl)ether  
Concen: 0.870 ng  
RT: 7.012 min Scan# 572  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00



Tgt Ion: 93 Resp: 17693  
Ion Ratio Lower Upper  
93 100  
63 84.1 67.5 101.3  
95 32.3 25.7 38.5

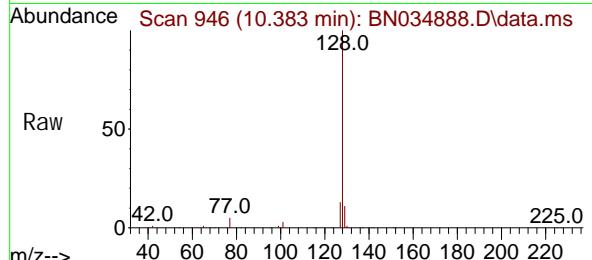




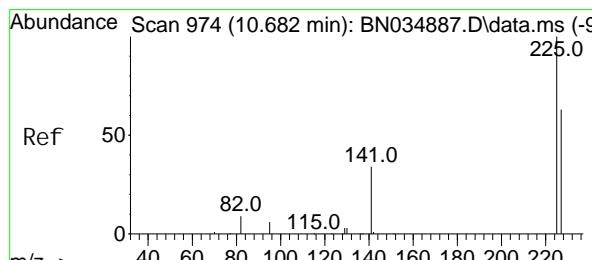
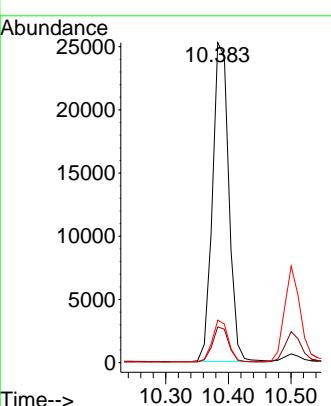
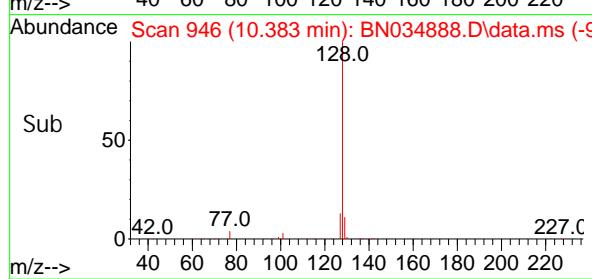


#9  
Naphthalene  
Concen: 0.851 ng  
RT: 10.383 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8

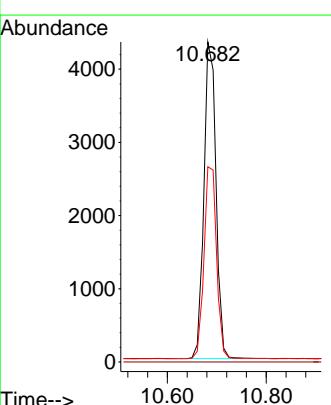
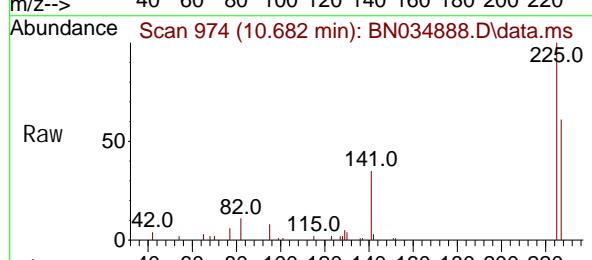


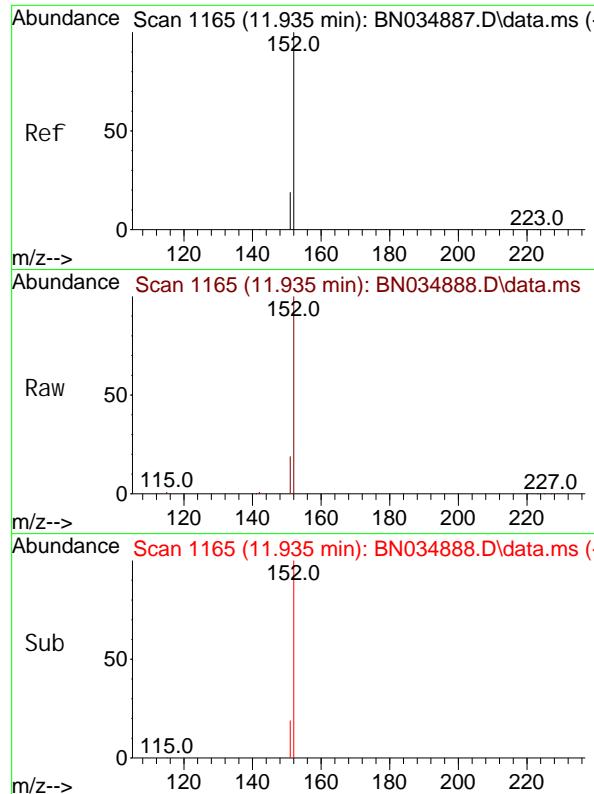
Tgt Ion: 128 Resp: 45870  
Ion Ratio Lower Upper  
128 100  
129 11.2 9.0 13.4  
127 13.3 10.8 16.2



#10  
Hexachlorobutadiene  
Concen: 0.855 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

Tgt Ion: 225 Resp: 7343  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.0 52.0 78.0

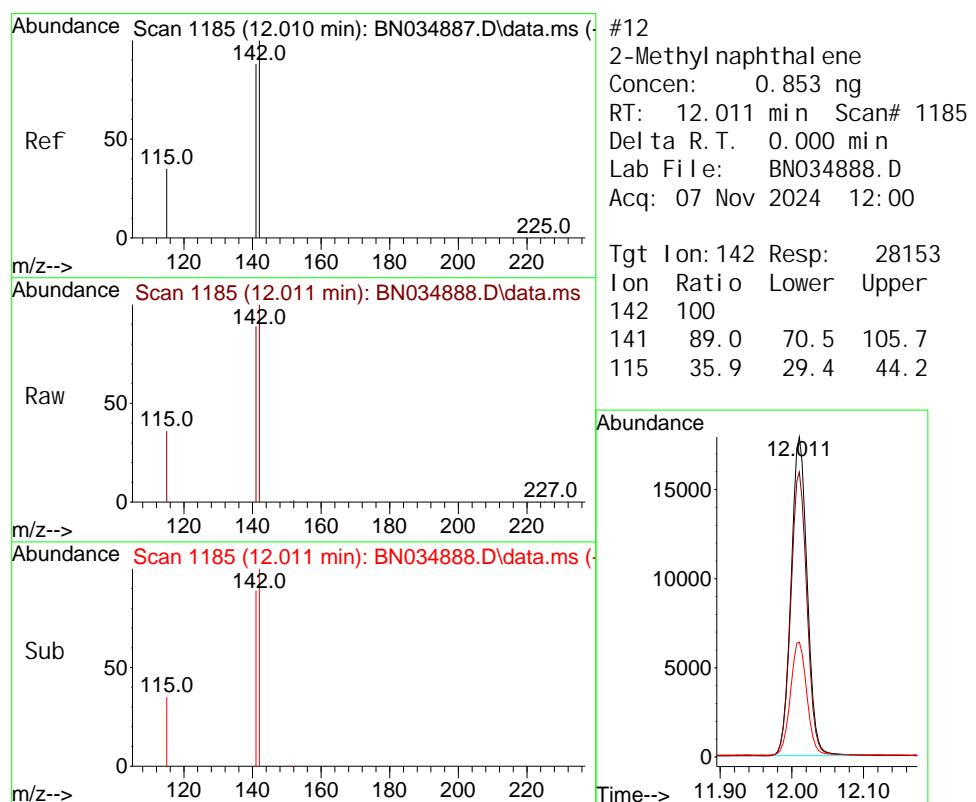
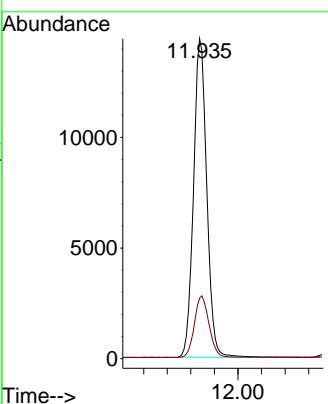




#11  
2-Methyl naphthalene-d10  
Concen: 0.850 ng  
RT: 11.935 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

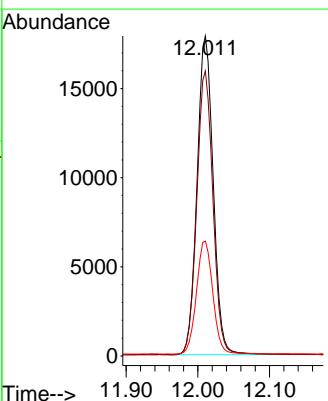
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**ClientSampleId :** SSTDICCO.8

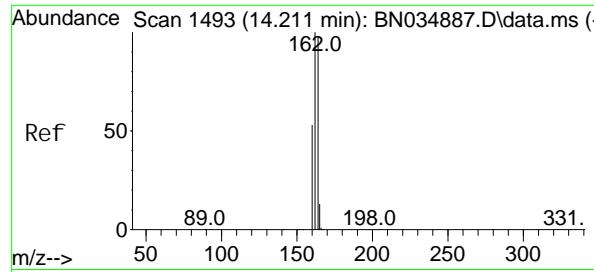
Tgt Ion: 152 Resp: 22498  
Ion Ratio Lower Upper  
152 100  
151 21.4 17.1 25.7



#12  
2-Methyl naphthalene  
Concen: 0.853 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

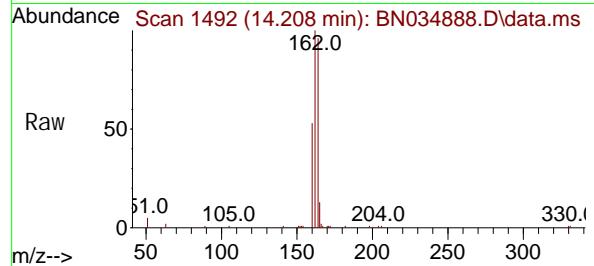
Tgt Ion: 142 Resp: 28153  
Ion Ratio Lower Upper  
142 100  
141 89.0 70.5 105.7  
115 35.9 29.4 44.2



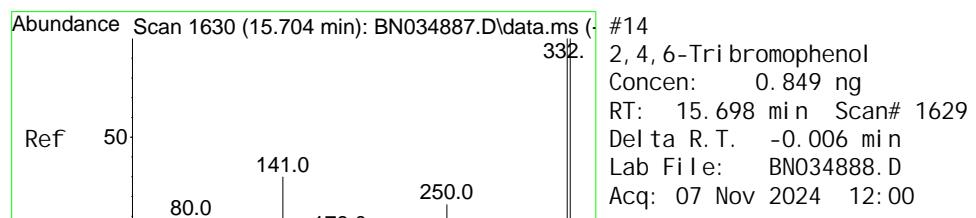
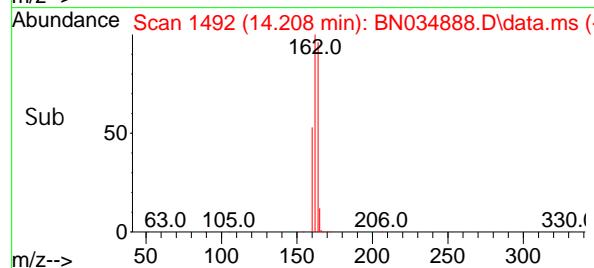
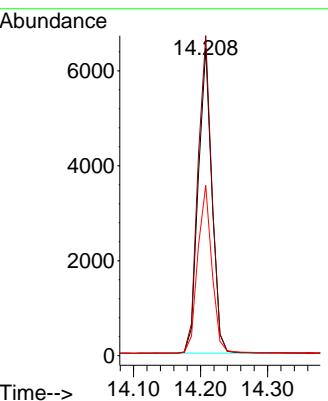


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.208 min Scan# 1  
 Delta R. T. -0.003 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

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

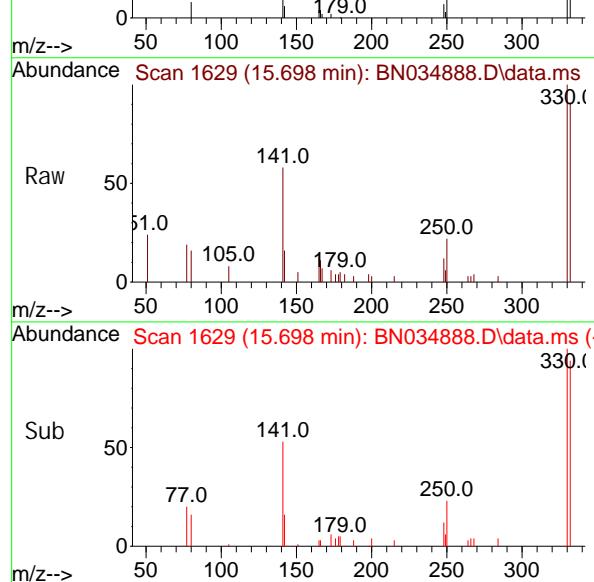
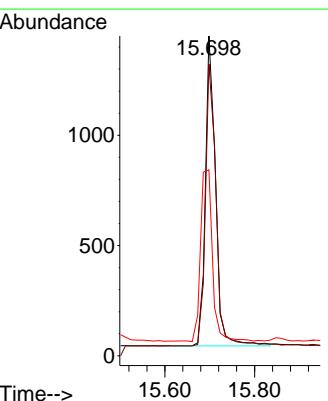


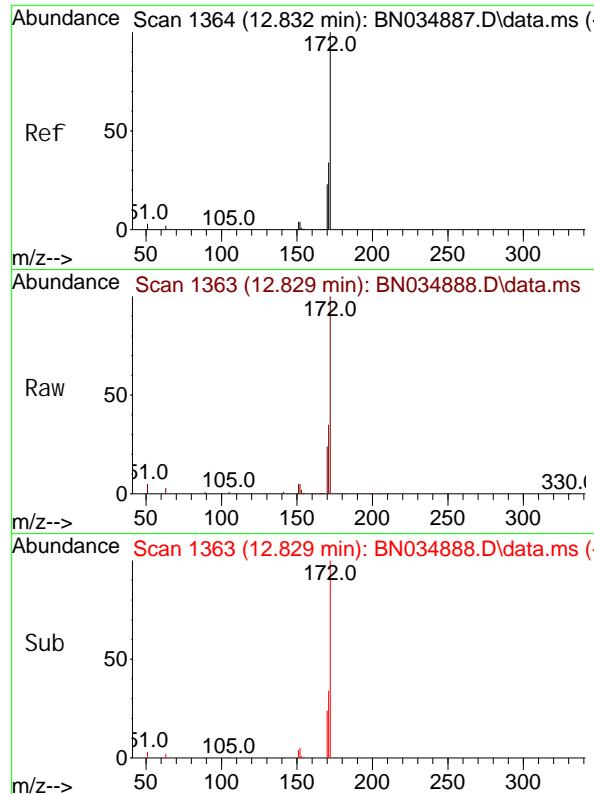
Tgt Ion: 164 Resp: 9092  
 Ion Ratio Lower Upper  
 164 100  
 162 104.1 81.9 122.9  
 160 55.4 43.5 65.3



#14  
 2, 4, 6-Tri bromophenol  
 Concen: 0.849 ng  
 RT: 15.698 min Scan# 1629  
 Delta R. T. -0.006 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 330 Resp: 2202  
 Ion Ratio Lower Upper  
 330 100  
 332 94.3 77.1 115.7  
 141 64.3 54.1 81.1

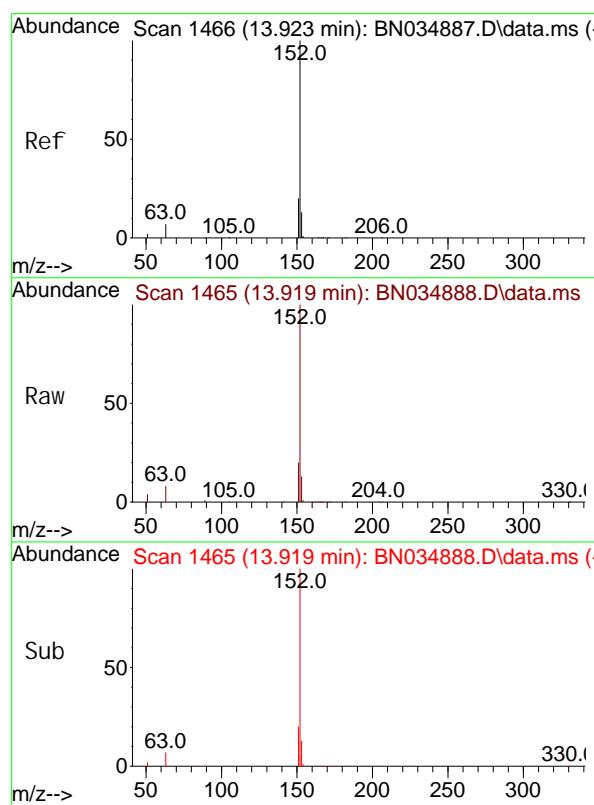
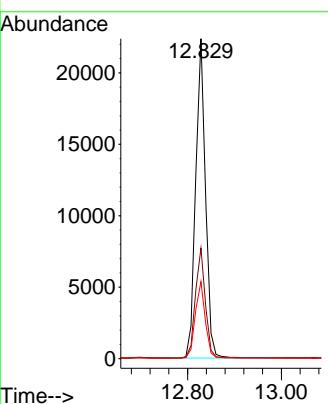




#15  
2-Fluorobiphenyl  
Concen: 0.847 ng  
RT: 12.829 min Scan# 11  
Delta R.T. -0.004 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

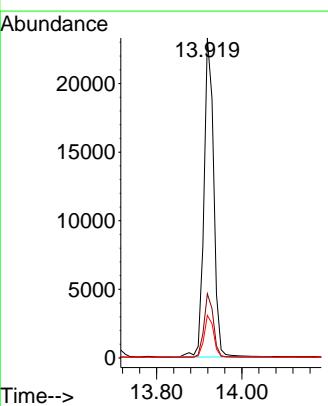
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

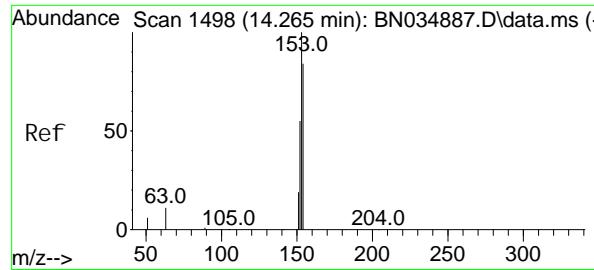
Tgt Ion: 172 Resp: 32517  
Ion Ratio Lower Upper  
172 100  
171 34.5 27.9 41.9  
170 24.1 19.0 28.4



#16  
Acenaphthylene  
Concen: 0.844 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

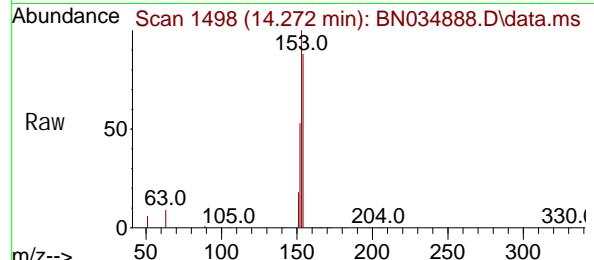
Tgt Ion: 152 Resp: 36993  
Ion Ratio Lower Upper  
152 100  
151 19.3 15.2 22.8  
153 12.9 10.4 15.6



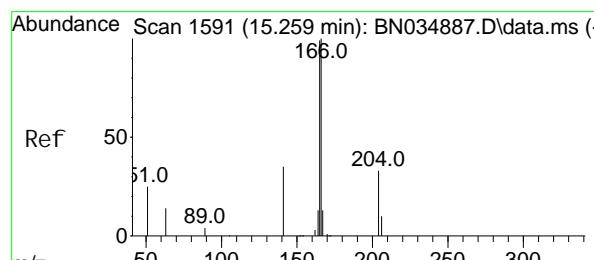
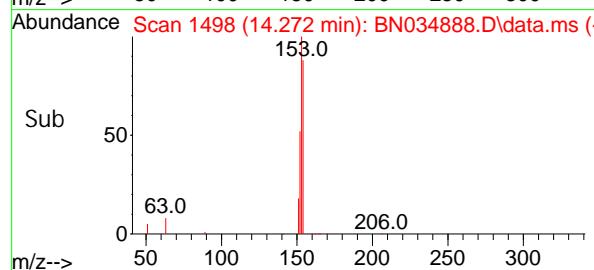
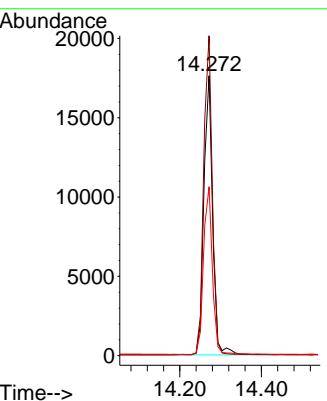


#17  
Acenaphthene  
Concen: 0.857 ng  
RT: 14.272 min Scan# 1  
Delta R.T. 0.007 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00

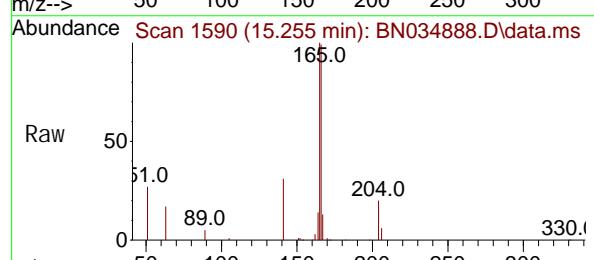
Instrument : BNA\_N  
ClientSampleId : SSTDICCO.8



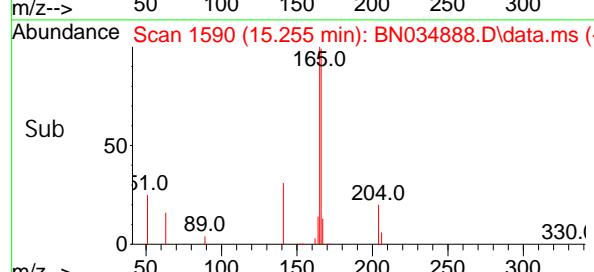
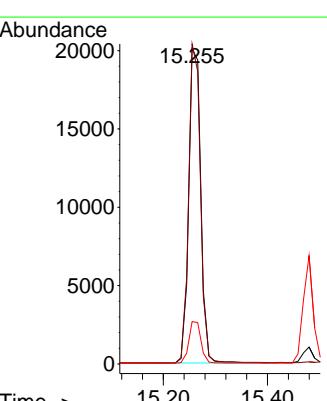
Tgt Ion: 154 Resp: 26000  
Ion Ratio Lower Upper  
154 100  
153 112.8 92.2 138.2  
152 61.4 51.1 76.7

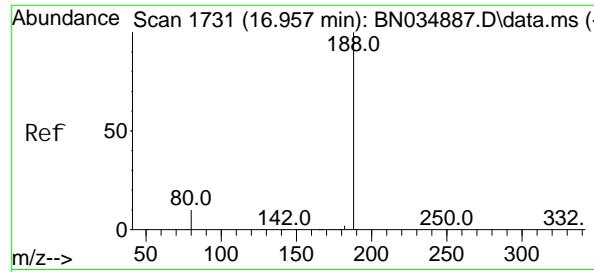


#18  
Fluorene  
Concen: 0.853 ng  
RT: 15.255 min Scan# 1590  
Delta R.T. -0.004 min  
Lab File: BN034888.D  
Acq: 07 Nov 2024 12:00



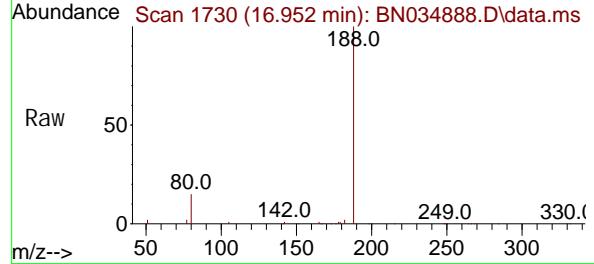
Tgt Ion: 166 Resp: 32251  
Ion Ratio Lower Upper  
166 100  
165 99.5 79.5 119.3  
167 13.3 10.6 16.0



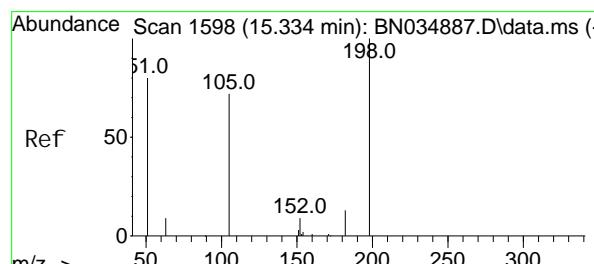
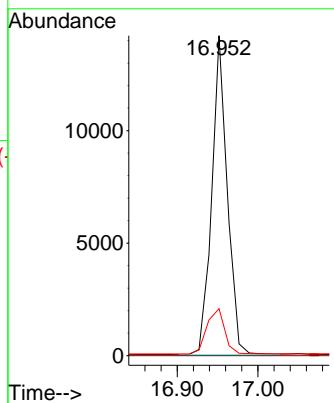
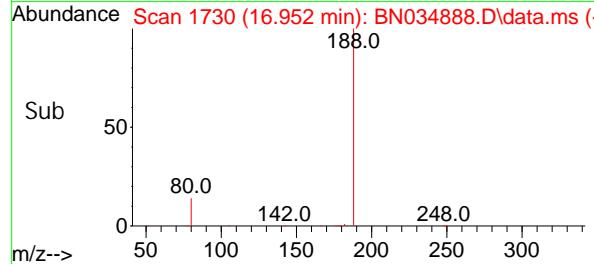


#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.952 min Scan# 1  
 Delta R. T. -0.005 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

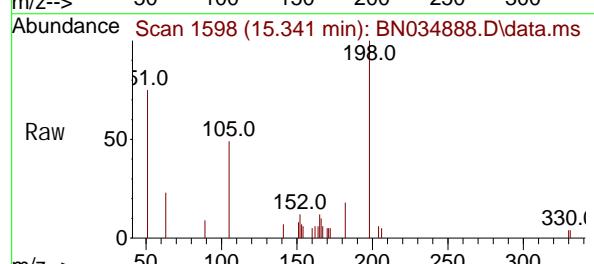
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8



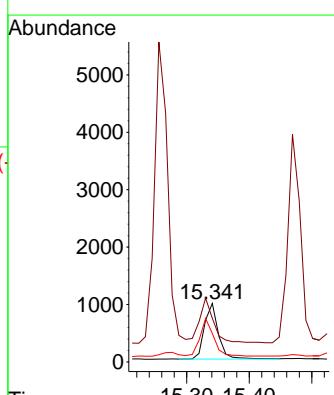
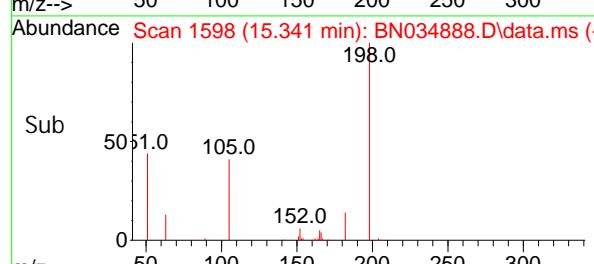
Tgt Ion: 188 Resp: 18851  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 14.7 8.6 12.8#

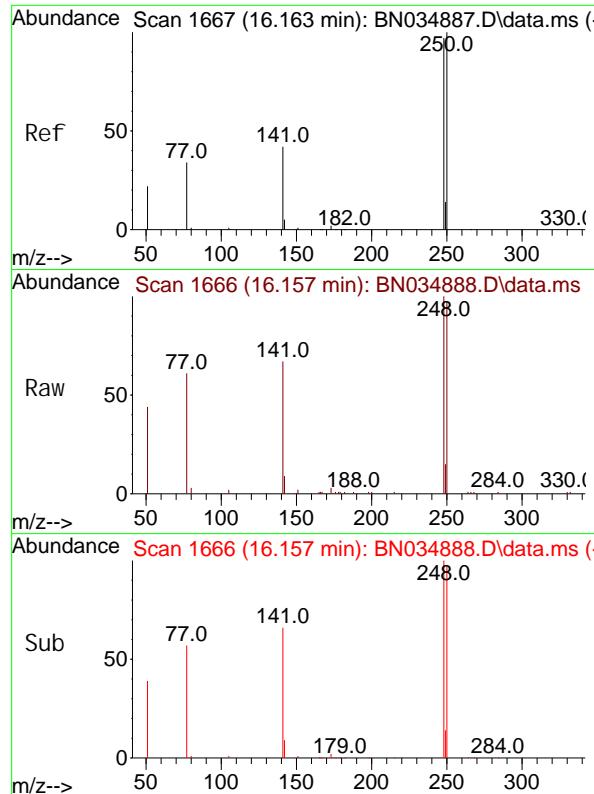


#20  
 4, 6-Di nitro-2-methyl phenol  
 Concen: 0.821 ng  
 RT: 15.341 min Scan# 1598  
 Delta R. T. 0.007 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00



Tgt Ion: 198 Resp: 1509  
 Ion Ratio Lower Upper  
 198 100  
 51 74.6 141.8 212.8#  
 105 48.7 75.6 113.4#

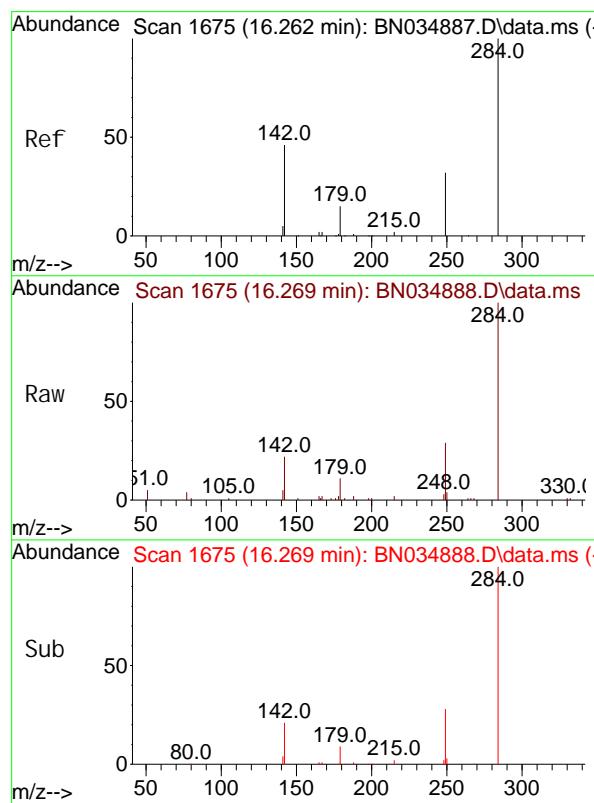
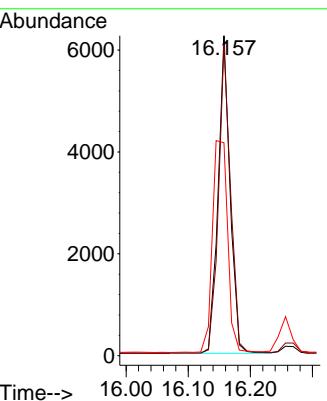




#21  
 4-Bromophenyl -phenyl ether  
 Concen: 0.825 ng  
 RT: 16.157 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

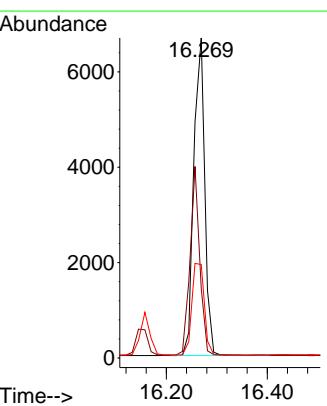
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

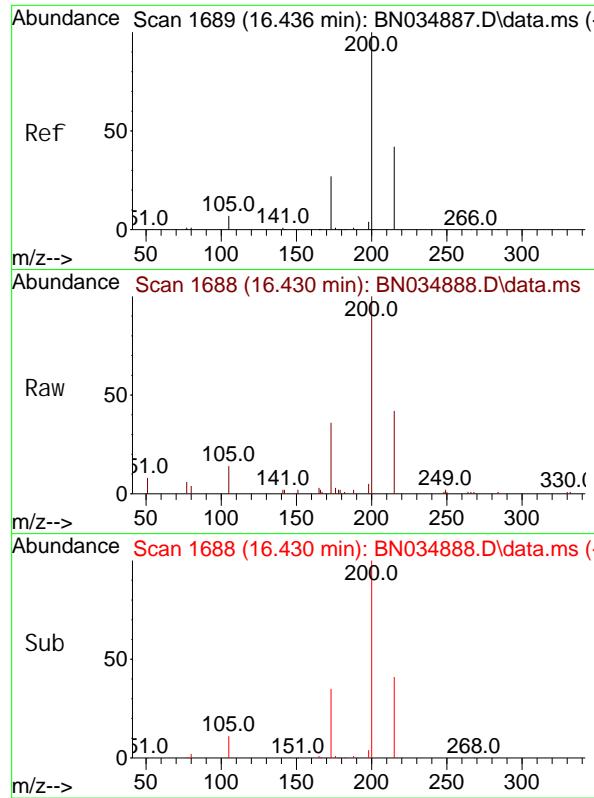
Tgt Ion: 248 Resp: 8294  
 Ion Ratio Lower Upper  
 248 100  
 250 97.2 82.2 123.4  
 141 66.6 36.2 54.2#



#22  
 Hexachlorobenzene  
 Concen: 0.834 ng  
 RT: 16.269 min Scan# 1675  
 Delta R.T. 0.007 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 284 Resp: 10091  
 Ion Ratio Lower Upper  
 284 100  
 142 52.5 43.4 65.2  
 249 32.7 25.8 38.6

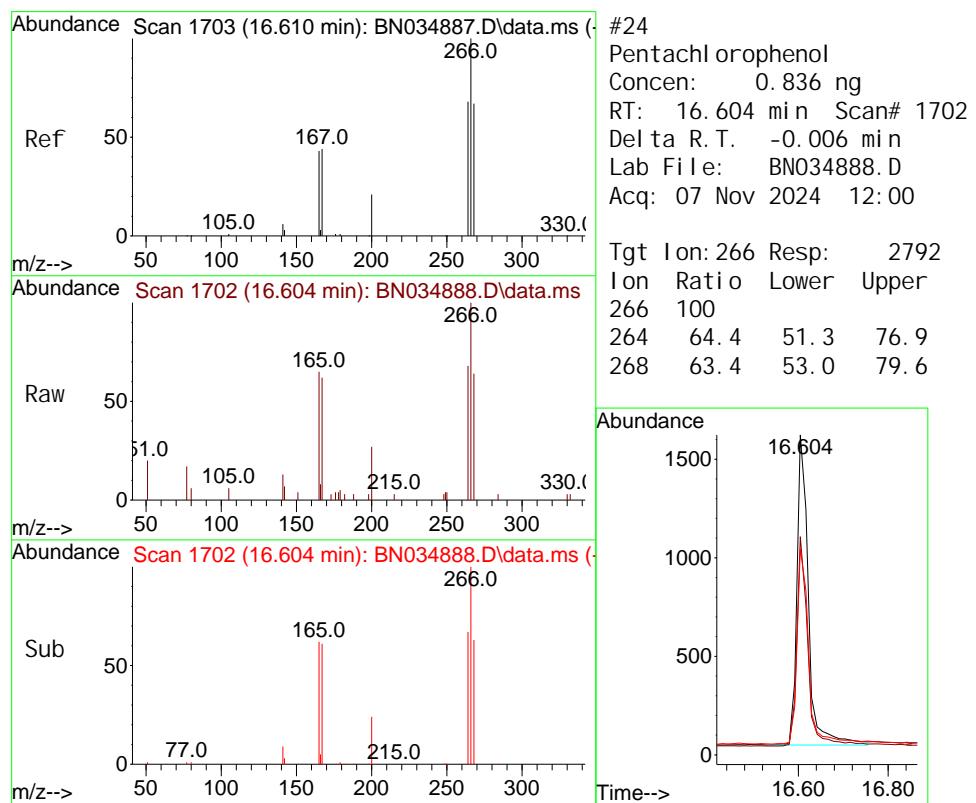
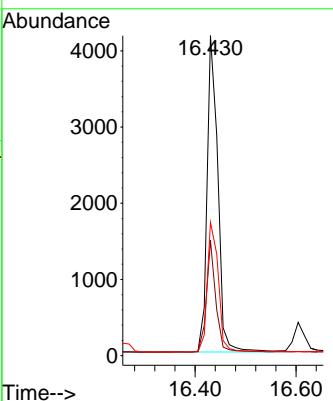




#23  
 Atrazine  
 Concen: 0.840 ng  
 RT: 16.430 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

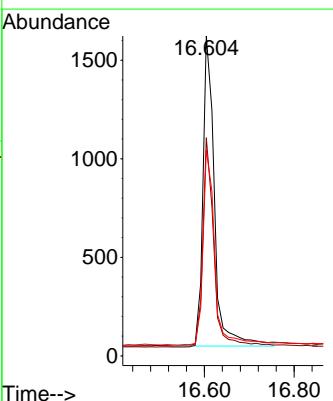
Instrument :  
 BNA\_N  
 ClientSampleId :  
 SSTDICCO.8

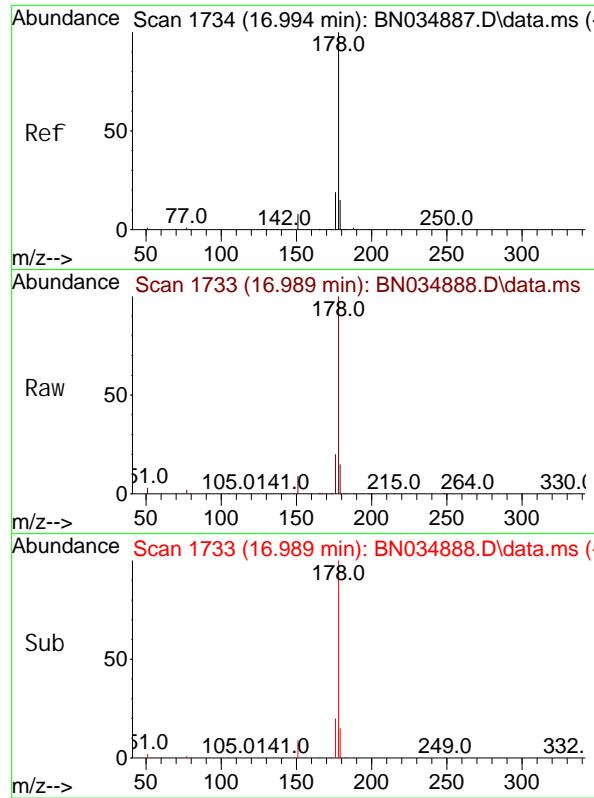
Tgt Ion: 200 Resp: 6114  
 Ion Ratio Lower Upper  
 200 100  
 173 36.0 23.4 35.2#  
 215 41.7 35.4 53.0



#24  
 Pentachlorophenol  
 Concen: 0.836 ng  
 RT: 16.604 min Scan# 1702  
 Delta R.T. -0.006 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 266 Resp: 2792  
 Ion Ratio Lower Upper  
 266 100  
 264 64.4 51.3 76.9  
 268 63.4 53.0 79.6

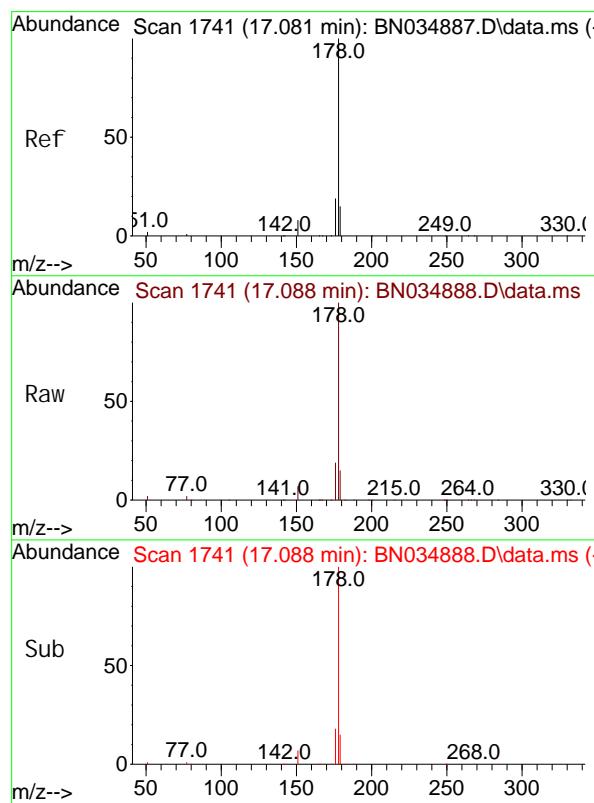
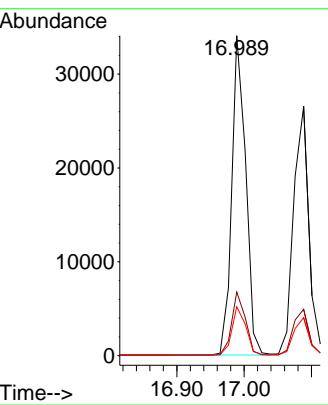




#25  
 Phenanthrene  
 Concen: 0.850 ng  
 RT: 16.989 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

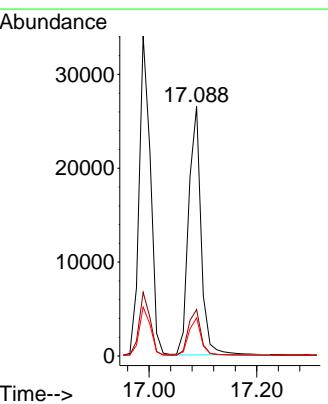
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

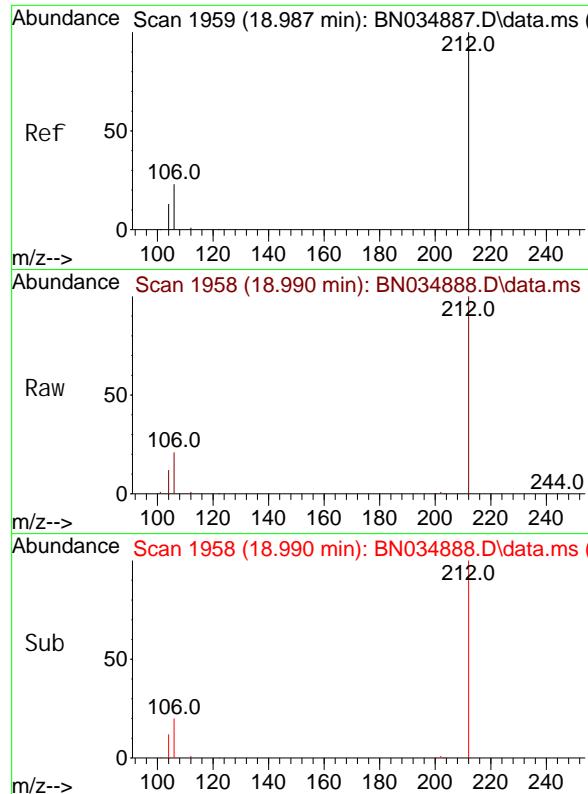
Tgt Ion: 178 Resp: 49126  
 Ion Ratio Lower Upper  
 178 100  
 176 19.5 15.5 23.3  
 179 15.2 12.2 18.2



#26  
 Anthracene  
 Concen: 0.848 ng  
 RT: 17.088 min Scan# 1741  
 Delta R.T. 0.007 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 178 Resp: 42271  
 Ion Ratio Lower Upper  
 178 100  
 176 18.9 15.0 22.6  
 179 15.1 12.1 18.1

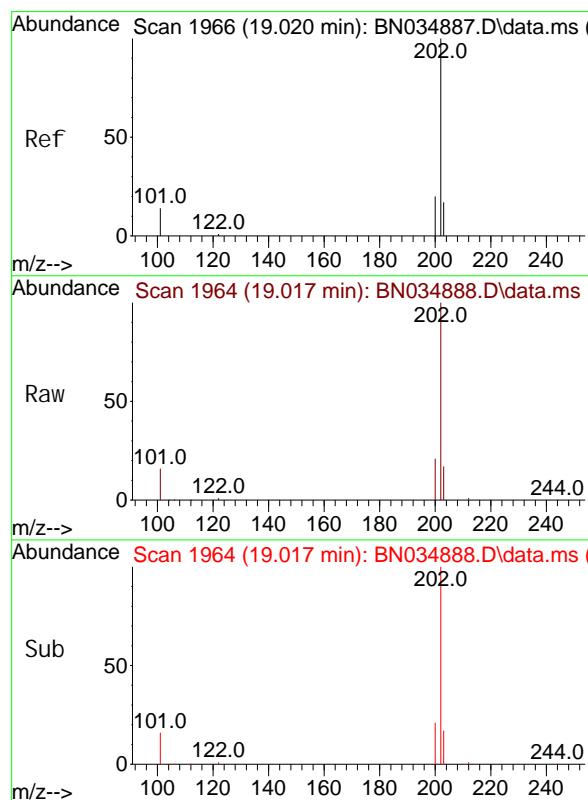
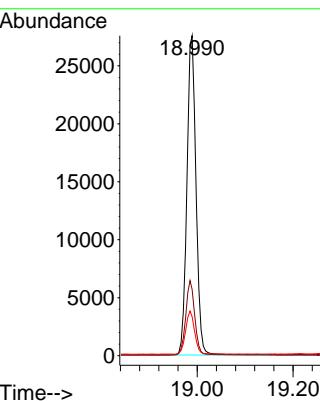




#27  
 Fluoranthene-d10  
 Concen: 0.861 ng  
 RT: 18.990 min Scan# 1  
 Delta R. T. 0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

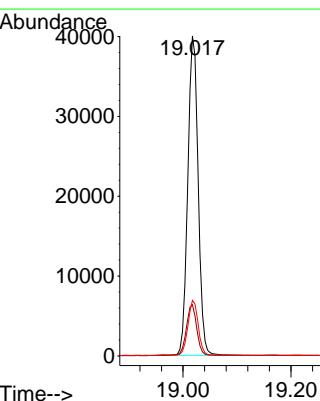
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

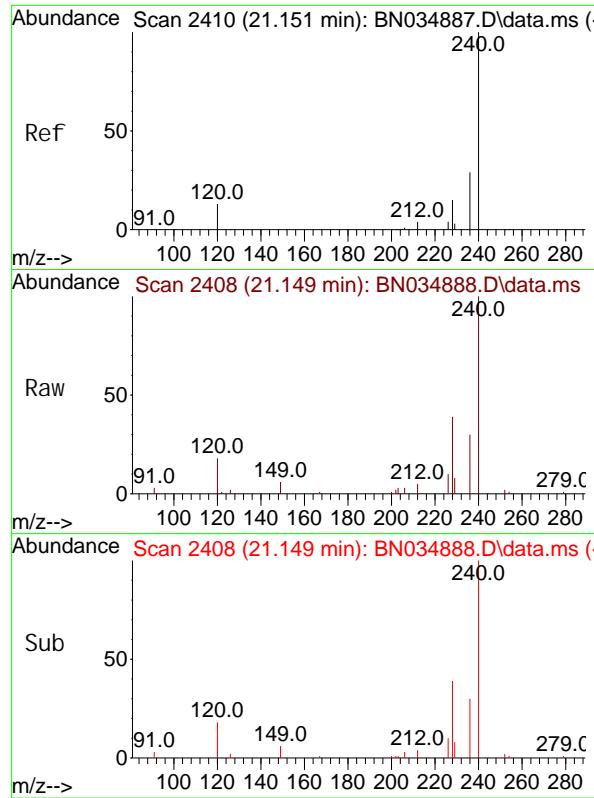
Tgt Ion: 212 Resp: 36597  
 Ion Ratio Lower Upper  
 212 100  
 106 22.7 18.2 27.4  
 104 13.2 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.876 ng  
 RT: 19.017 min Scan# 1964  
 Delta R. T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 202 Resp: 53297  
 Ion Ratio Lower Upper  
 202 100  
 101 16.0 12.7 19.1  
 203 17.0 13.7 20.5

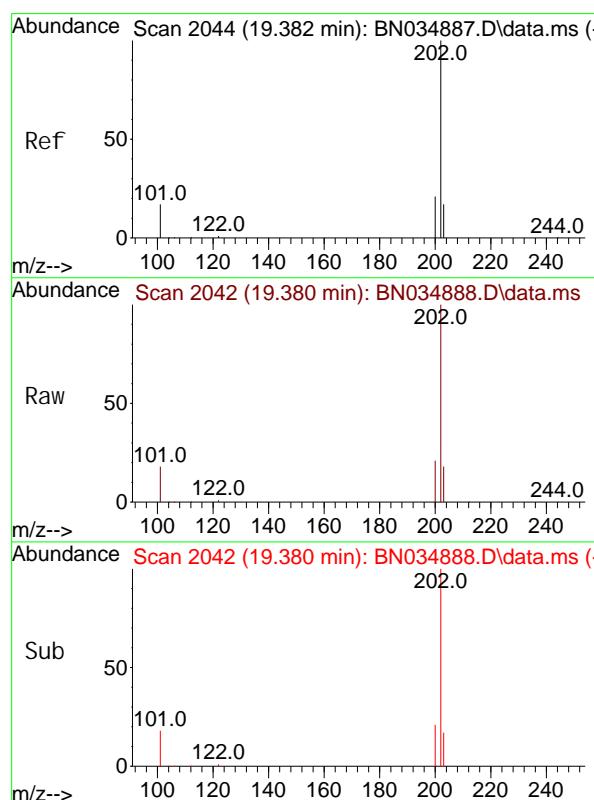
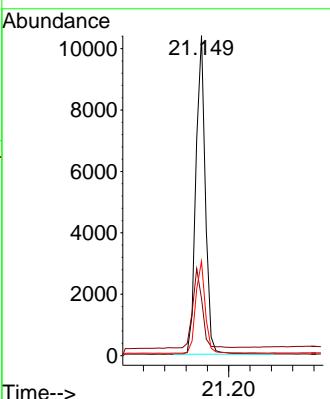




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.149 min Scan# 2  
 Delta R.T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

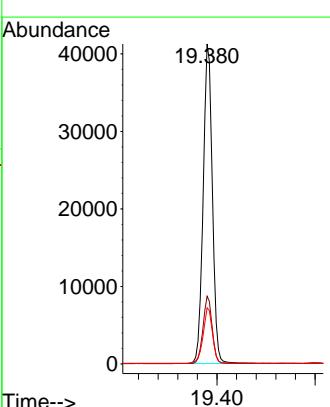
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

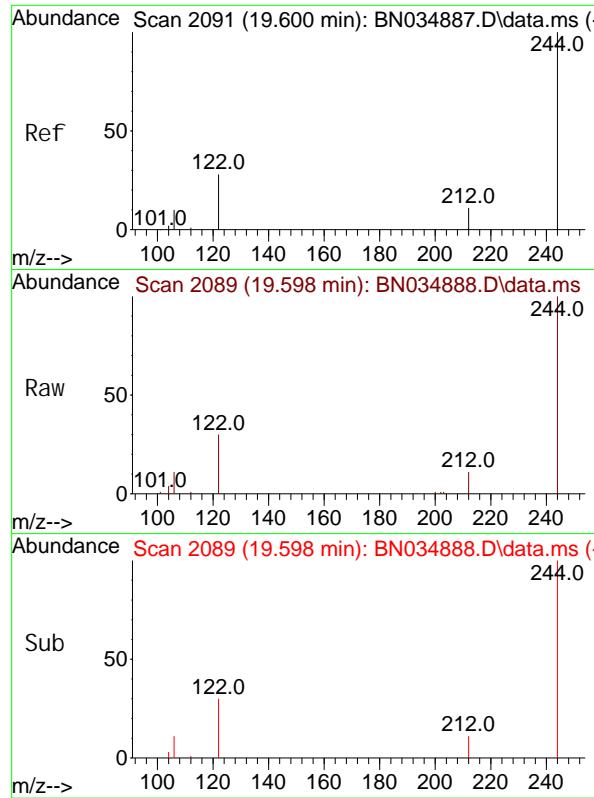
Tgt Ion: 240 Resp: 12731  
 Ion Ratio Lower Upper  
 240 100  
 120 17.8 13.8 20.8  
 236 29.5 23.8 35.6



#30  
 Pyrene  
 Concen: 0.832 ng  
 RT: 19.380 min Scan# 2042  
 Delta R.T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 202 Resp: 53636  
 Ion Ratio Lower Upper  
 202 100  
 200 20.9 16.8 25.2  
 203 17.7 14.1 21.1

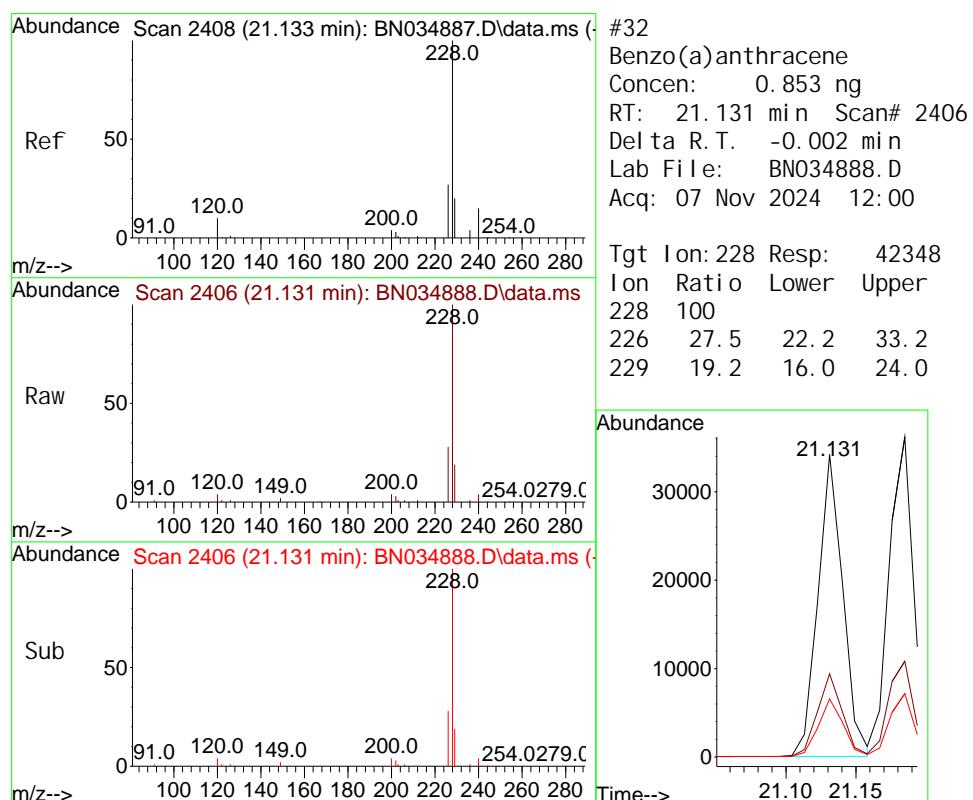
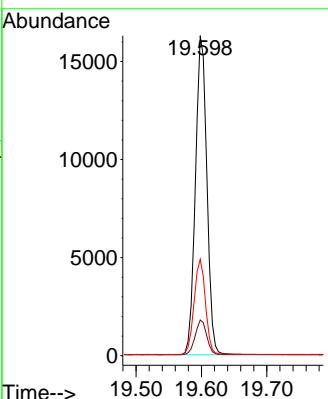




#31  
 Terphenyl -d14  
 Concen: 0.830 ng  
 RT: 19.598 min Scan# 2  
 Delta R. T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

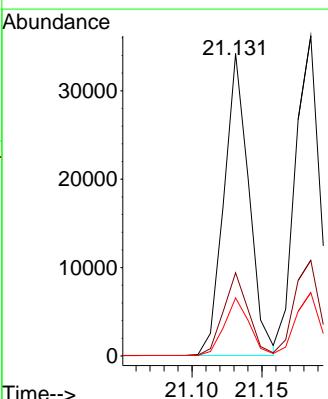
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

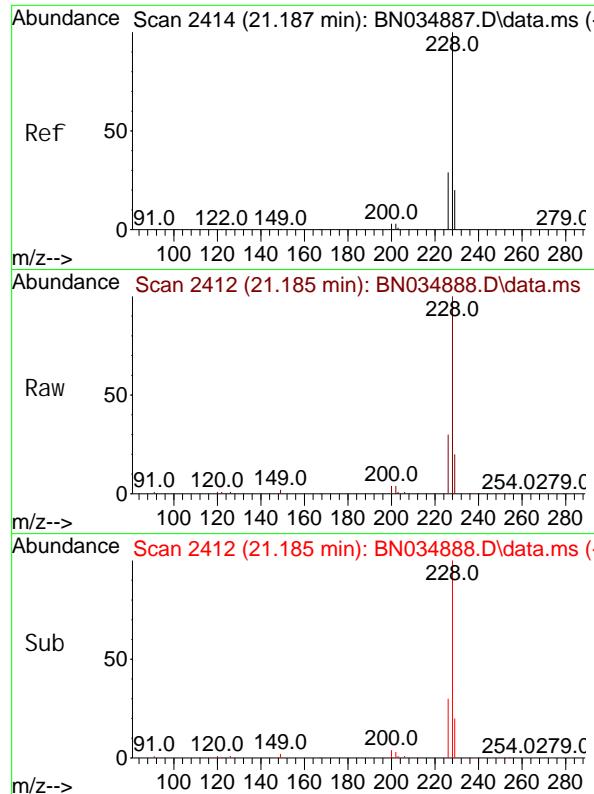
Tgt Ion: 244 Resp: 19795  
 Ion Ratio Lower Upper  
 244 100  
 212 11.2 9.4 14.0  
 122 30.1 23.0 34.4



#32  
 Benzo(a)anthracene  
 Concen: 0.853 ng  
 RT: 21.131 min Scan# 2406  
 Delta R. T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 228 Resp: 42348  
 Ion Ratio Lower Upper  
 228 100  
 226 27.5 22.2 33.2  
 229 19.2 16.0 24.0

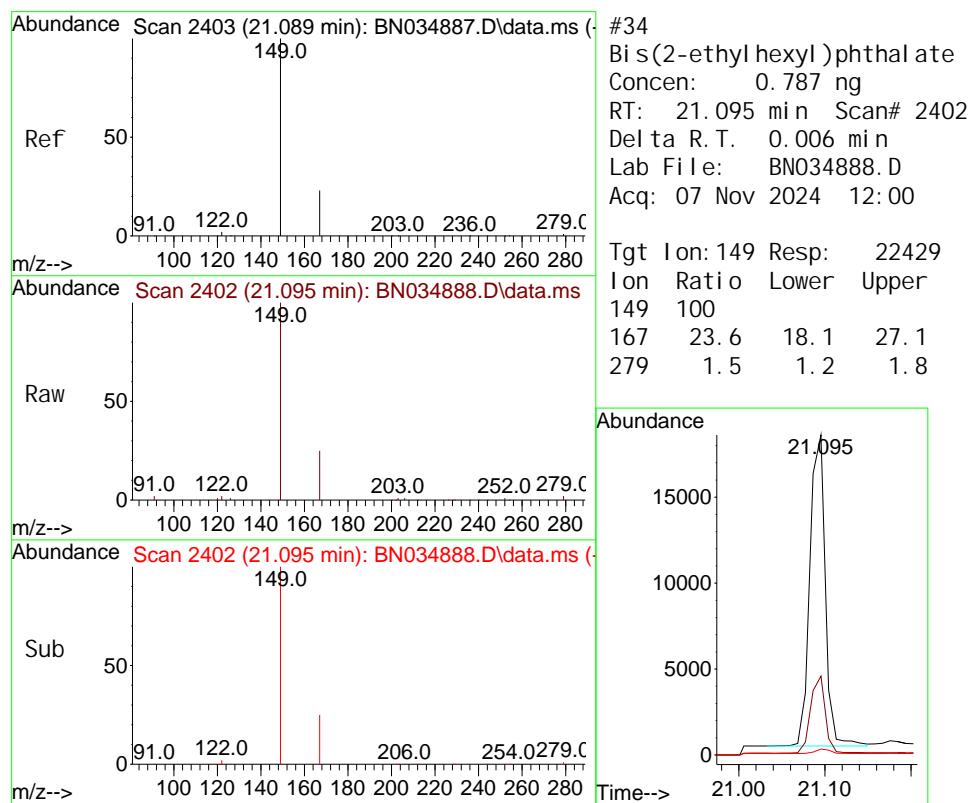
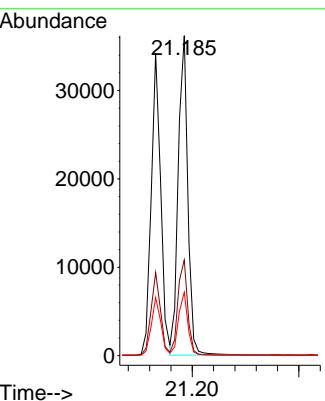




#33  
 Chrysene  
 Concen: 0.857 ng  
 RT: 21.185 min Scan# 2  
 Delta R. T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

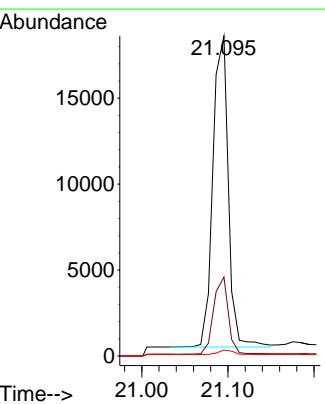
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

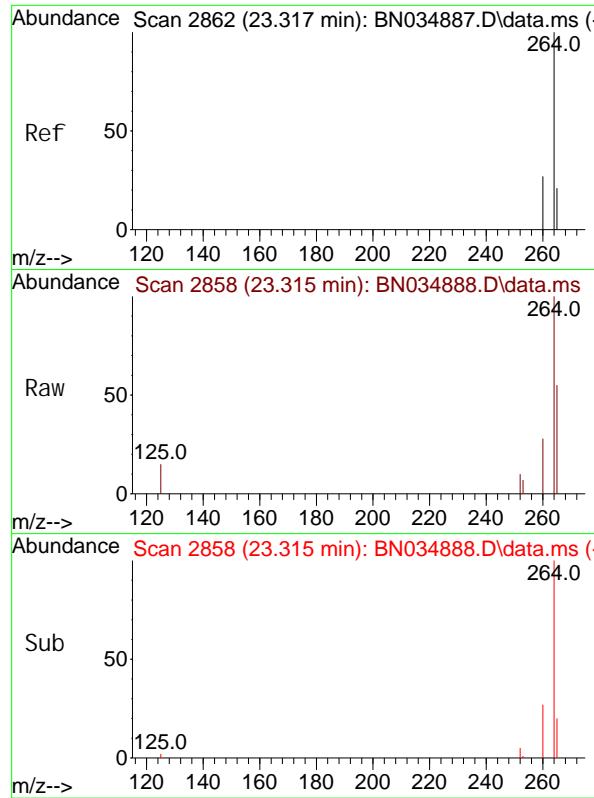
Tgt Ion:	228	Resp:	45020
Ion Ratio		Lower	Upper
228	100		
226	29.9	23.7	35.5
229	19.8	16.3	24.5



#34  
 Bis(2-ethyl hexyl)phthalate  
 Concen: 0.787 ng  
 RT: 21.095 min Scan# 2402  
 Delta R. T. 0.006 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion:	149	Resp:	22429
Ion Ratio		Lower	Upper
149	100		
167	23.6	18.1	27.1
279	1.5	1.2	1.8

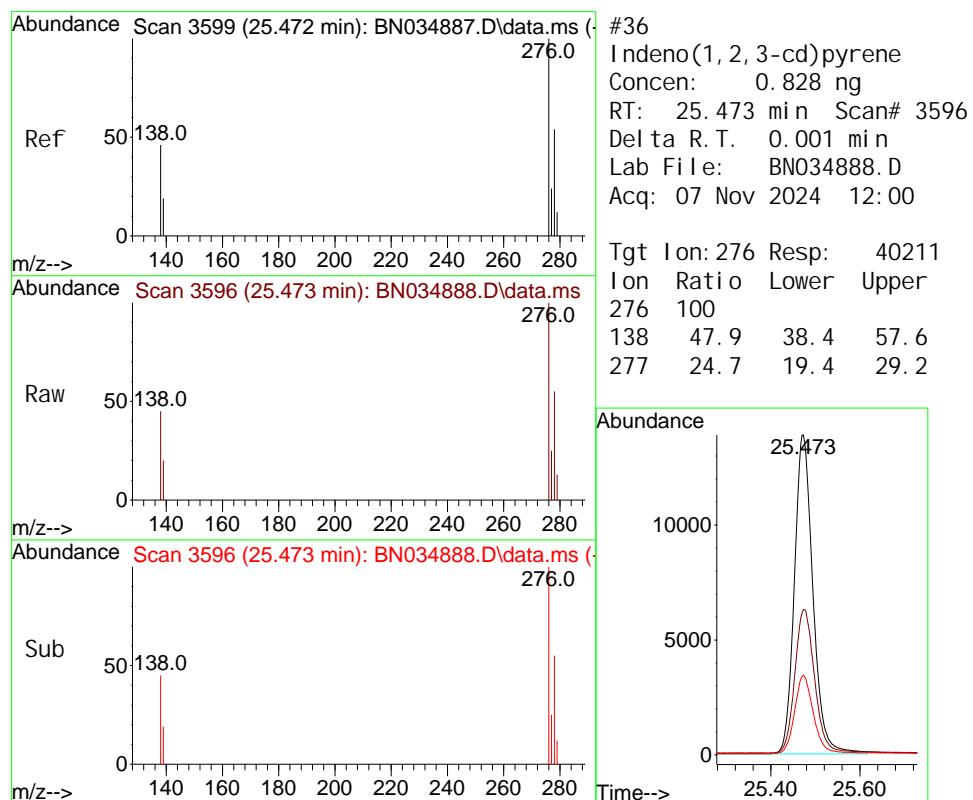
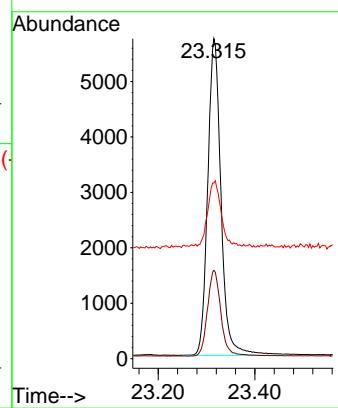




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.315 min Scan# 2  
 Delta R. T. -0.002 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

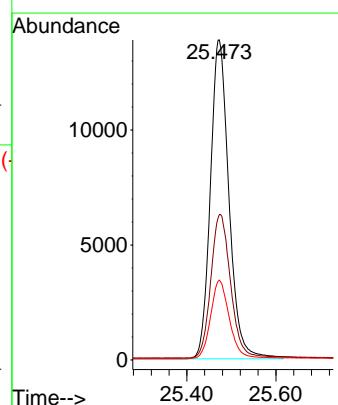
Instrument : BNA\_N  
 ClientSampleId : SSTDICCO.8

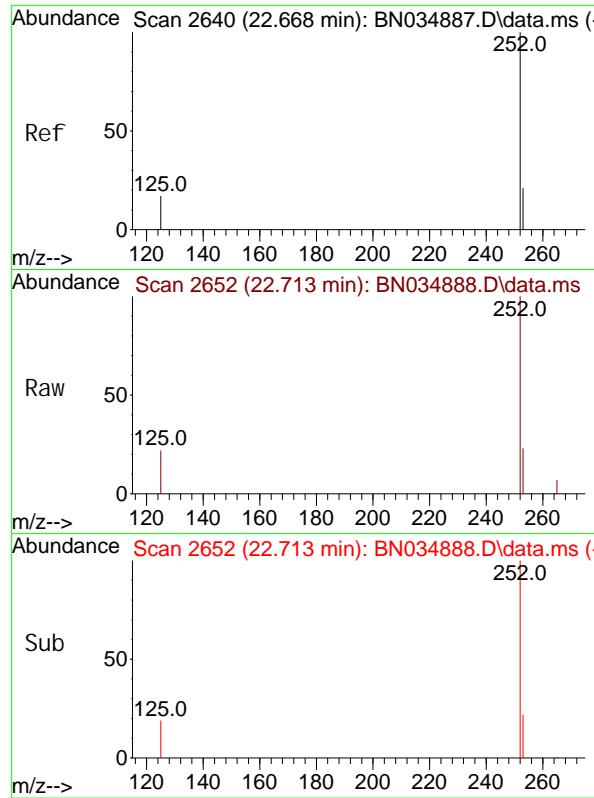
Tgt Ion: 264 Resp: 10897  
 Ion Ratio Lower Upper  
 264 100  
 260 27.6 22.2 33.2  
 265 54.9 60.9 91.3#



#36  
 Indeno(1, 2, 3-cd)pyrene  
 Concen: 0.828 ng  
 RT: 25.473 min Scan# 3596  
 Delta R. T. 0.001 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 276 Resp: 40211  
 Ion Ratio Lower Upper  
 276 100  
 138 47.9 38.4 57.6  
 277 24.7 19.4 29.2

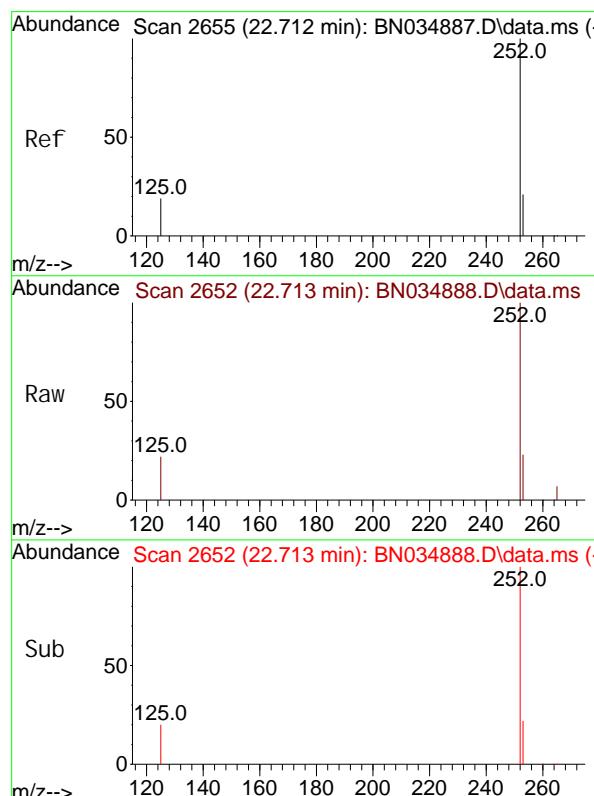
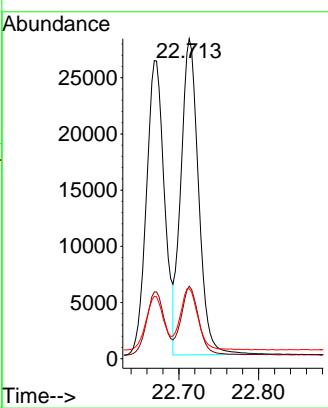




#37  
 Benzo(b)fluoranthene  
 Concen: 0.902 ng  
 RT: 22.713 min Scan# 2  
 Delta R.T. 0.045 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

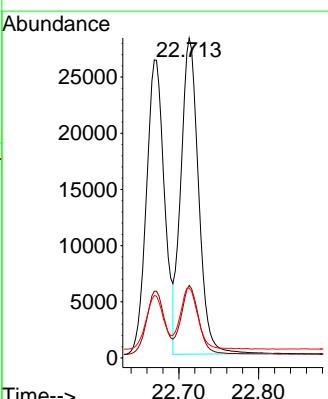
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

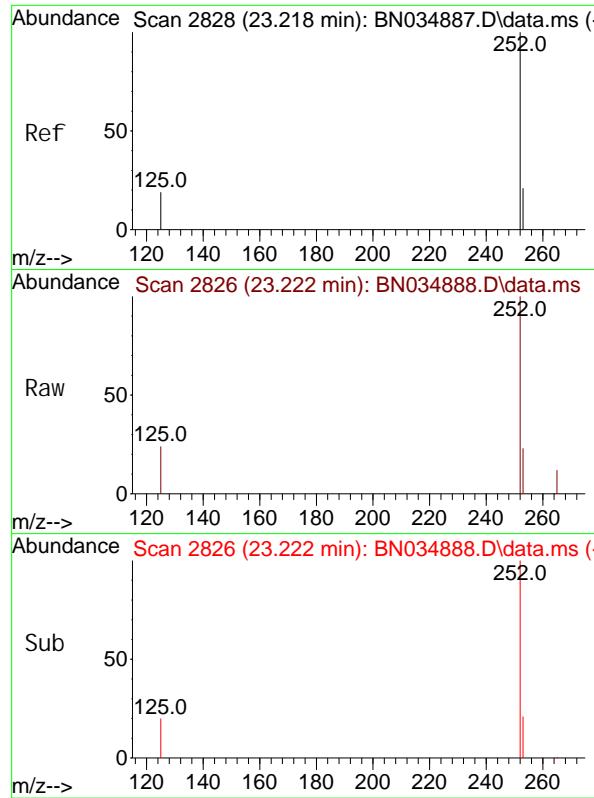
Tgt Ion: 252 Resp: 43204  
 Ion Ratio Lower Upper  
 252 100  
 253 22.7 19.4 29.2  
 125 21.9 21.4 32.2



#38  
 Benzo(k)fluoranthene  
 Concen: 0.865 ng  
 RT: 22.713 min Scan# 2652  
 Delta R.T. 0.001 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 252 Resp: 43204  
 Ion Ratio Lower Upper  
 252 100  
 253 22.7 19.8 29.8  
 125 21.9 22.6 33.8#

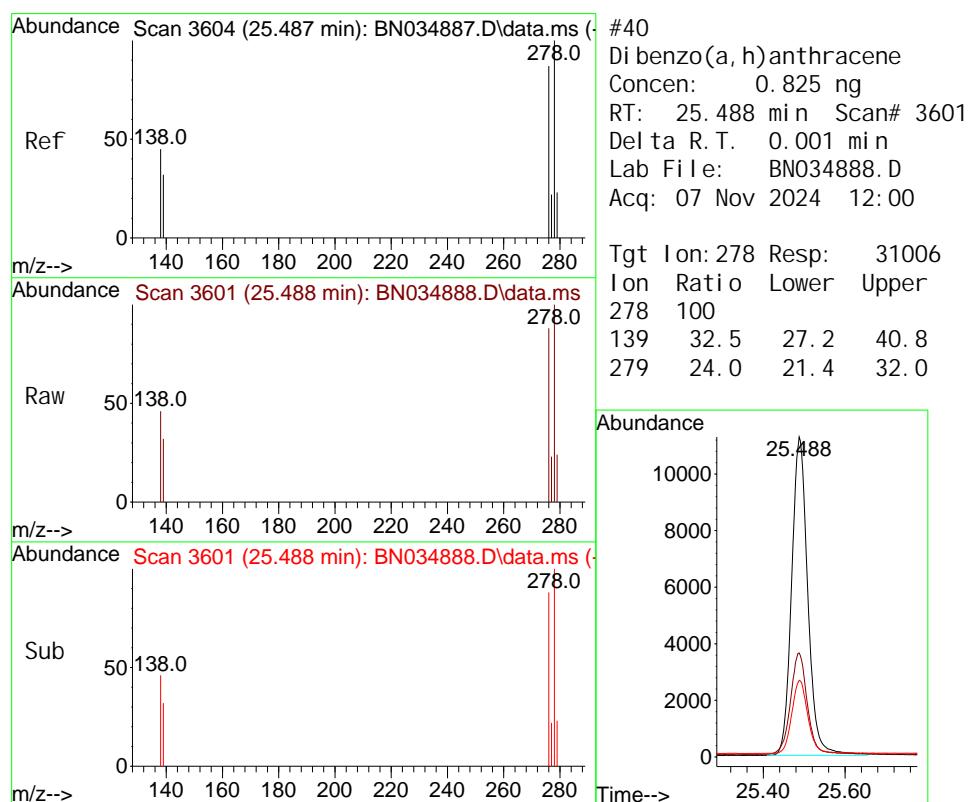
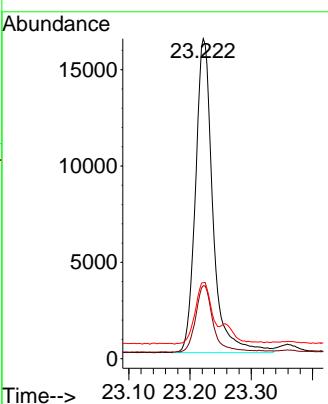




#39  
 Benzo(a)pyrene  
 Concen: 0.845 ng  
 RT: 23.222 min Scan# 2  
 Delta R. T. 0.004 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

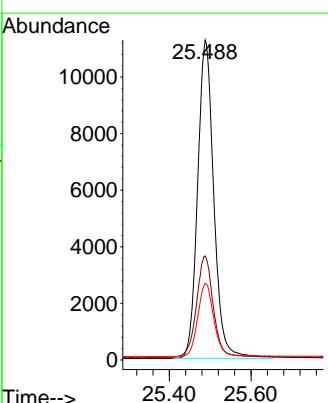
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDICCO.8

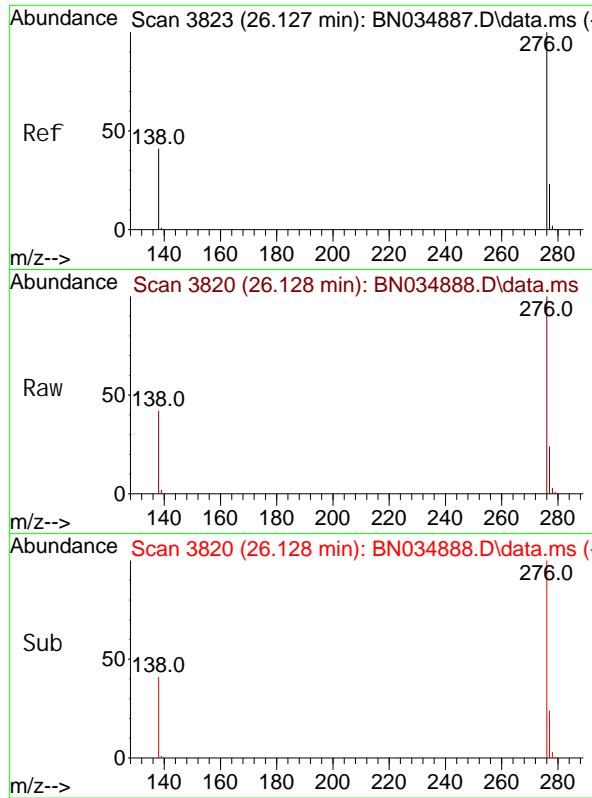
Tgt Ion: 252 Resp: 32141  
 Ion Ratio Lower Upper  
 252 100  
 253 22.8 21.4 32.2  
 125 23.8 27.8 41.6#



#40  
 Di benzo(a, h)anthracene  
 Concen: 0.825 ng  
 RT: 25.488 min Scan# 3601  
 Delta R. T. 0.001 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

Tgt Ion: 278 Resp: 31006  
 Ion Ratio Lower Upper  
 278 100  
 139 32.5 27.2 40.8  
 279 24.0 21.4 32.0

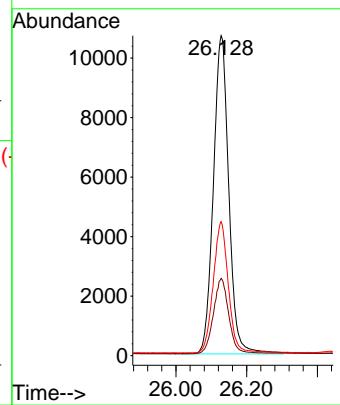




#41  
 Benzo(g, h, i )peryl ene  
 Concen: 0.812 ng  
 RT: 26.128 min Scan# 3  
 Delta R. T. 0.001 min  
 Lab File: BN034888.D  
 Acq: 07 Nov 2024 12:00

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

Tgt Ion:	276	Ion Ratio	32362
276	100		
277	24.2	Lower	20.2
138	41.9	Upper	30.2
			50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034892.D  
 Acq On : 07 Nov 2024 14:24  
 Operator : RC/JU  
 Sample : SSTDI CVO. 4  
 Misc :  
 ALS Vial : 10 Sample Multiplier: 1

**Instrument :**  
**BNA\_N**  
**ClientSampleId :**  
**ICVBN110724**

Quant Time: Nov 07 15:03:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

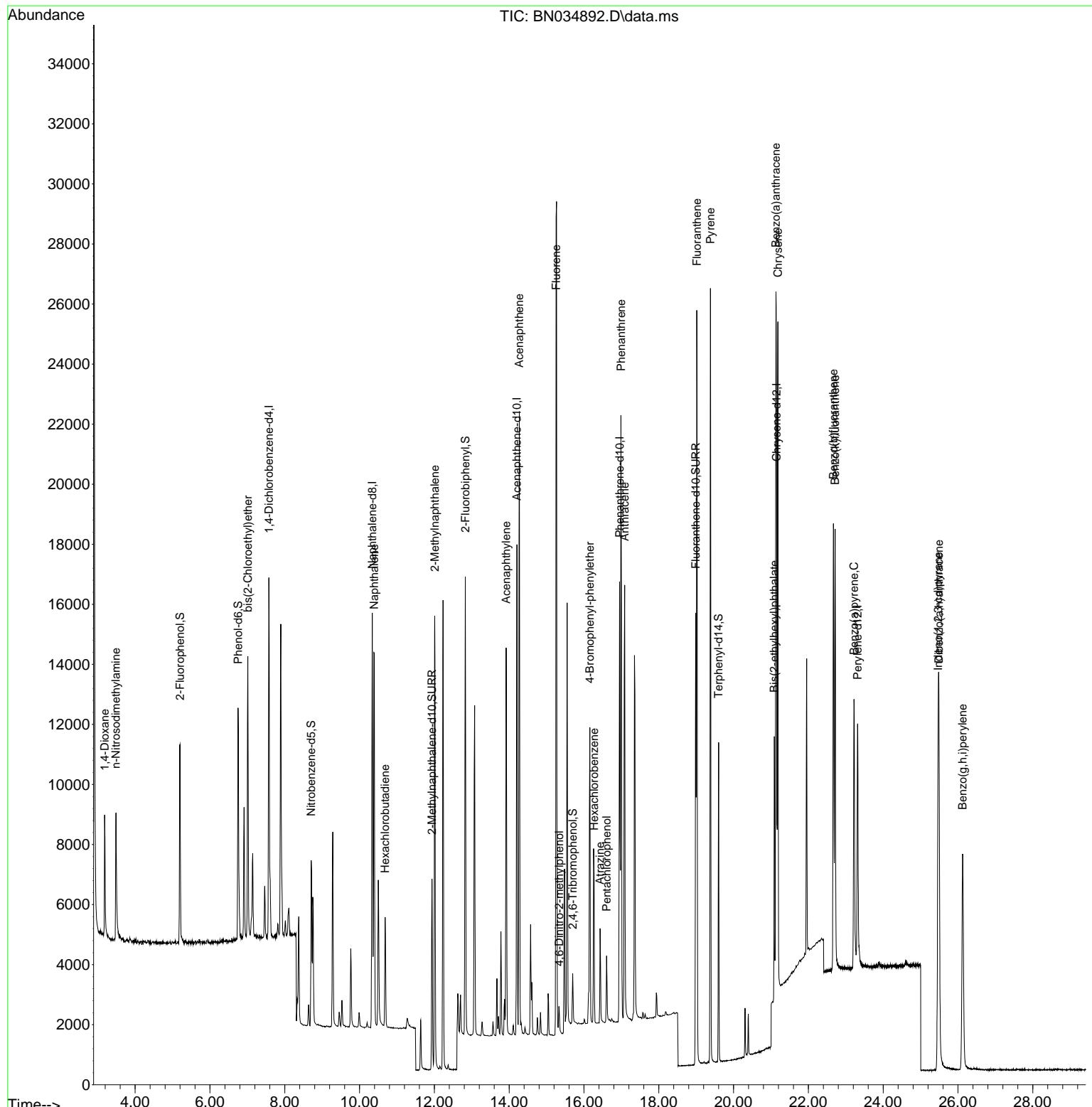
Compound	R. T.	Ql on	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1, 4-Di chlorobenzene-d4	7. 575	152	5596	0. 400	ng	0. 00
7) Naphthalene-d8	10. 340	136	16947	0. 400	ng	0. 00
13) Acenaphthene-d10	14. 208	164	8617	0. 400	ng	0. 00
19) Phenanthrene-d10	16. 952	188	17630	0. 400	ng	# 0. 00
29) Chrysene-d12	21. 149	240	11730	0. 400	ng	0. 00
35) Perylene-d12	23. 315	264	10292	0. 400	ng	0. 00
<b>System Monotoring Compounds</b>						
4) 2-Fluorophenol	5. 199	112	5527	0. 354	ng	0. 00
5) Phenol-d6	6. 752	99	7207	0. 348	ng	0. 00
8) Nitrobenzene-d5	8. 707	82	4552	0. 345	ng	0. 00
11) 2-Methyl naphthalene-d10	11. 935	152	8763	0. 379	ng	0. 00
14) 2, 4, 6-Tribromophenol	15. 698	330	865	0. 383	ng	0. 00
15) 2-Fluorobi phenyl	12. 829	172	13055	0. 359	ng	0. 00
27) Fluoranthene-d10	18. 990	212	15225	0. 383	ng	0. 00
31) Terphenyl-d14	19. 598	244	8465	0. 385	ng	0. 00
<b>Target Compounds</b>						
2) 1, 4-Dioxane	3. 184	88	2461	0. 348	ng	99
3) n-Nitrosodimethylamine	3. 487	42	3231	0. 339	ng	# 96
6) bis(2-Chloroethyl)ether	7. 012	93	6507	0. 364	ng	97
9) Naphthalene	10. 394	128	17745	0. 377	ng	99
10) Hexachlorobutadiene	10. 682	225	2830	0. 378	ng	# 98
12) 2-Methyl naphthalene	12. 011	142	10990	0. 382	ng	100
16) Acenaphthylene	13. 919	152	14368	0. 346	ng	100
17) Acenaphthene	14. 272	154	10248	0. 356	ng	97
18) Fluorene	15. 255	166	12934	0. 361	ng	99
20) 4, 6-Dinitro-2-methylph...	15. 341	198	537	0. 349	ng	# 66
21) 4-Bromophenyl-phenyl ether	16. 157	248	3565	0. 379	ng	# 88
22) Hexachlorobenzene	16. 269	284	4413	0. 390	ng	95
23) Atrazine	16. 430	200	2461	0. 361	ng	# 93
24) Pentachlorophenol	16. 604	266	1024	0. 373	ng	99
25) Phenanthrene	16. 989	178	20264	0. 375	ng	100
26) Anthracene	17. 088	178	17075	0. 366	ng	99
28) Fluoranthene	19. 017	202	21837	0. 384	ng	99
30) Pyrene	19. 380	202	21794	0. 367	ng	100
32) Benzo(a)anthracene	21. 131	228	16875	0. 369	ng	99
33) Chrysene	21. 185	228	18729	0. 387	ng	99
34) Bis(2-ethyl hexyl)phtha...	21. 086	149	8178	0. 312	ng	98
36) Indeno(1, 2, 3-cd)pyrene	25. 470	276	15123	0. 330	ng	98
37) Benzo(b)fluoranthene	22. 669	252	17108	0. 378	ng	97
38) Benzo(k)fluoranthene	22. 713	252	16927	0. 360	ng	95
39) Benzo(a)pyrene	23. 219	252	12517	0. 349	ng	94
40) Dibenz(a, h)anthracene	25. 491	278	11726	0. 331	ng	97
41) Benzo(g, h, i)perylene	26. 125	276	13002	0. 345	ng	97

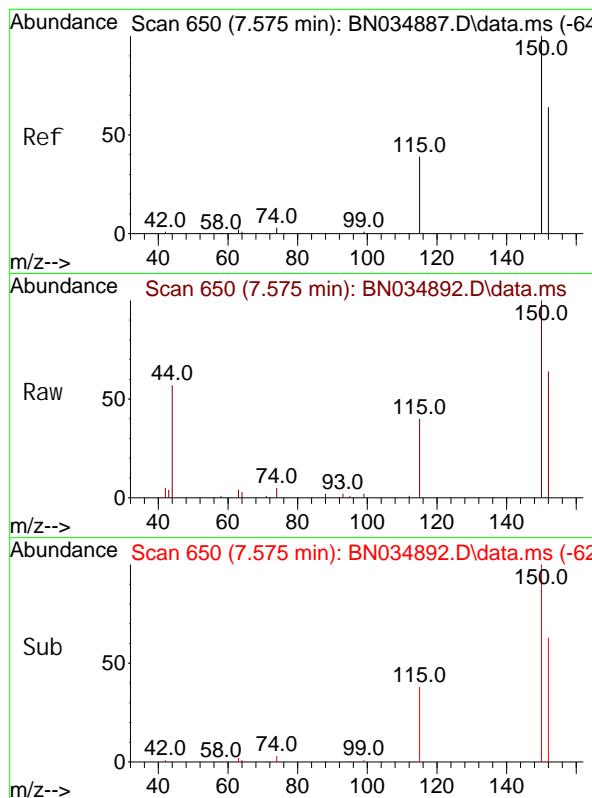
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110724\  
 Data File : BN034892.D  
 Acq On : 07 Nov 2024 14:24  
 Operator : RC/JU  
 Sample : SSTDI CVO. 4  
 Misc :  
 ALS Vial : 10 Sample Multi plier: 1

**Instrument :**  
 BNA\_N  
**ClientSampleId :**  
 ICVBN110724

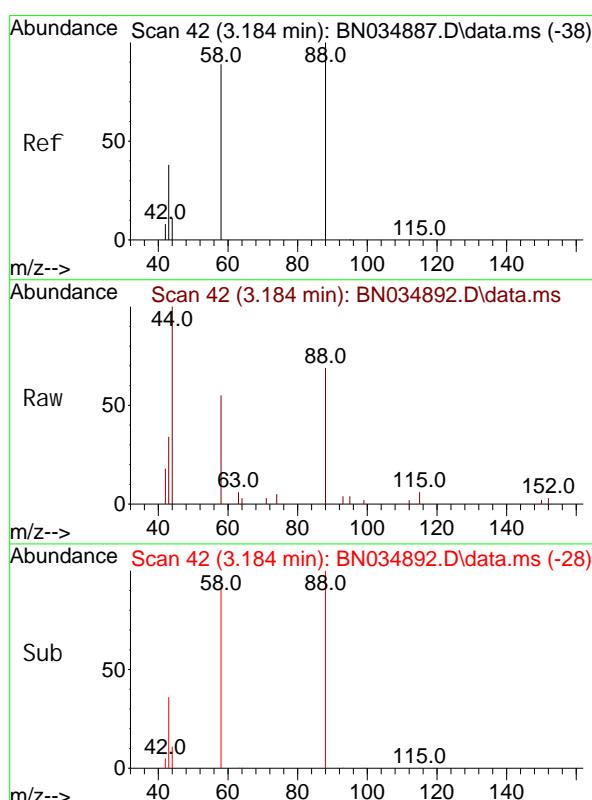
Quant Time: Nov 07 15:03:15 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration



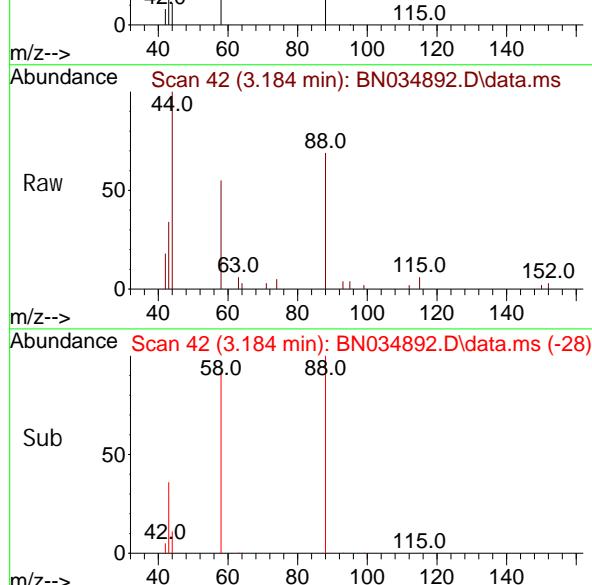


#1  
 1, 4-Di chl orobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R. T. -0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

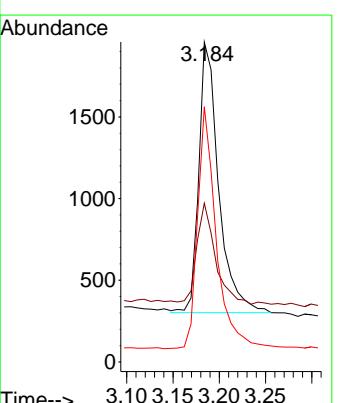
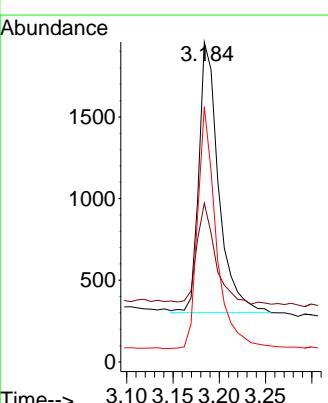
**Instrument :** BNA\_N  
**ClientSampleId :** ICBBN110724

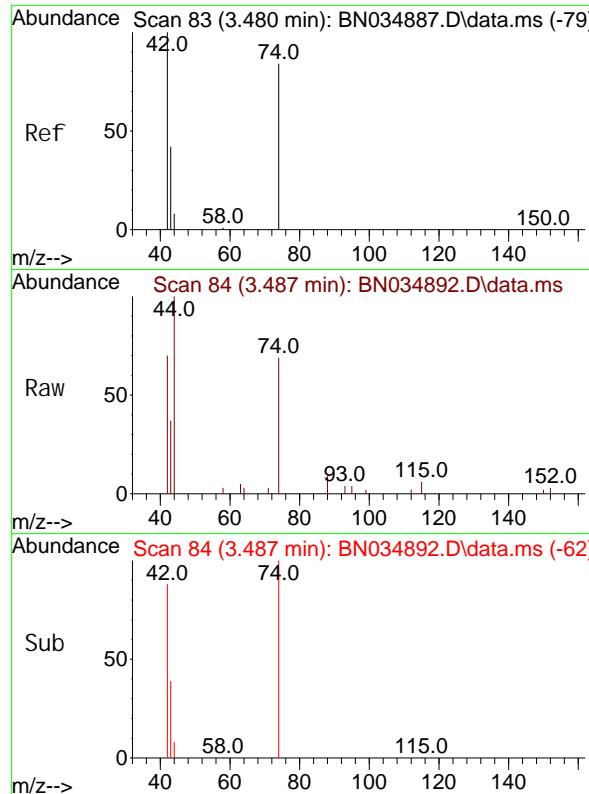


#2  
 1, 4-Di oxane  
 Concen: 0.348 ng  
 RT: 3.184 min Scan# 42  
 Delta R. T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24



Tgt Ion: 88 Resp: 2461  
 Ion Ratio Lower Upper  
 88 100  
 43 35.6 28.2 42.2  
 58 84.3 67.1 100.7

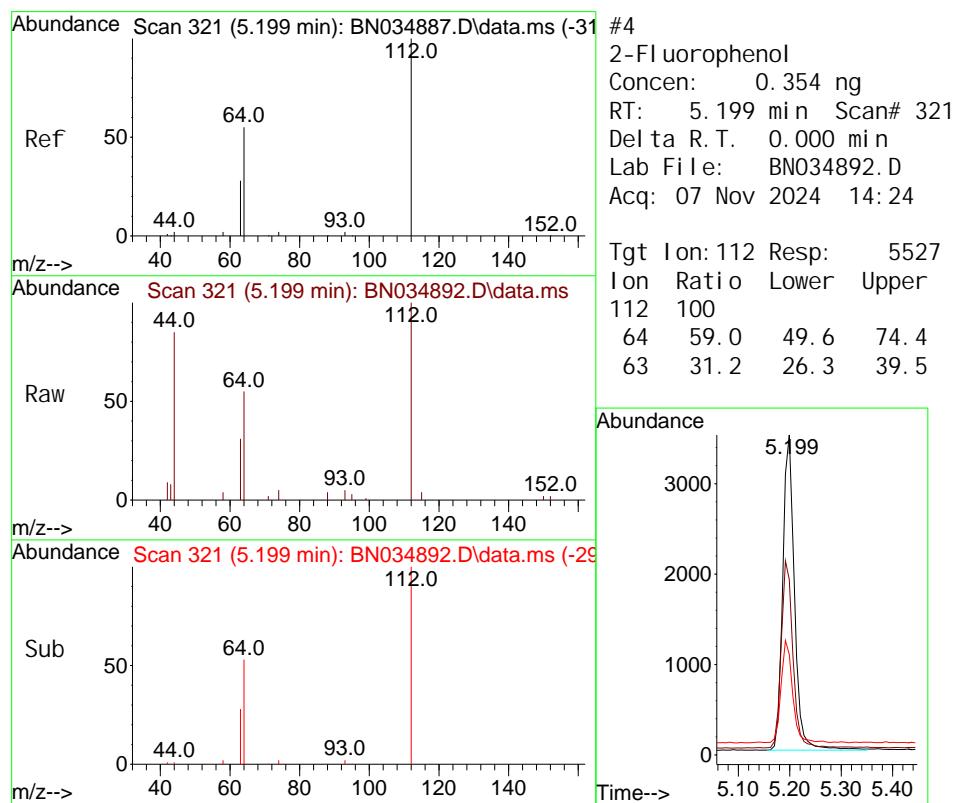
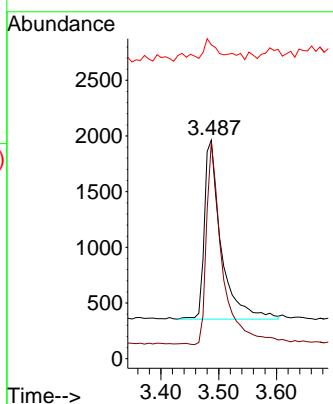




#3  
n-Ni trosodi methyl amine  
Concen: 0.339 ng  
RT: 3.487 min Scan# 8  
Delta R.T. 0.007 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

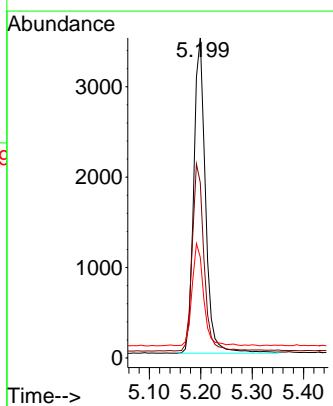
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

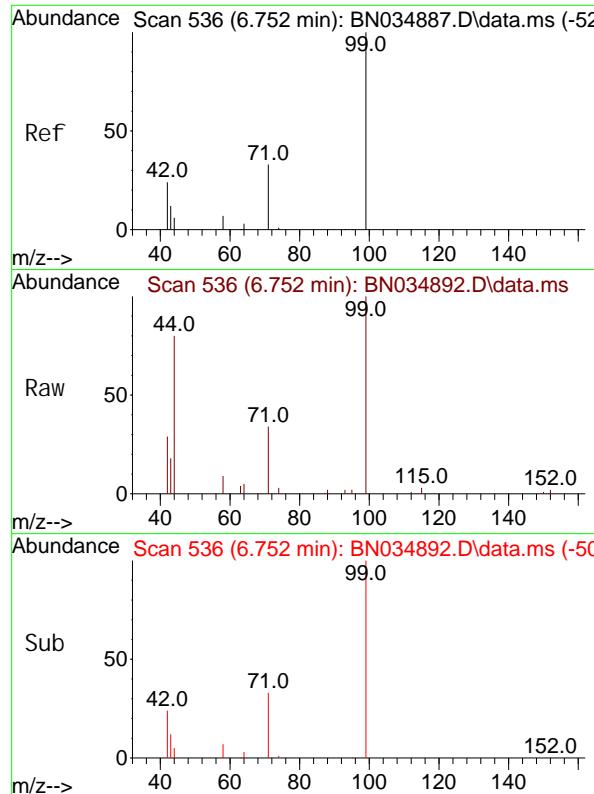
Tgt Ion: 42 Resp: 3231  
Ion Ratio Lower Upper  
42 100  
74 107.3 83.4 125.2  
44 6.9 8.6 12.8#



#4  
2-Fluorophenol  
Concen: 0.354 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

Tgt Ion: 112 Resp: 5527  
Ion Ratio Lower Upper  
112 100  
64 59.0 49.6 74.4  
63 31.2 26.3 39.5

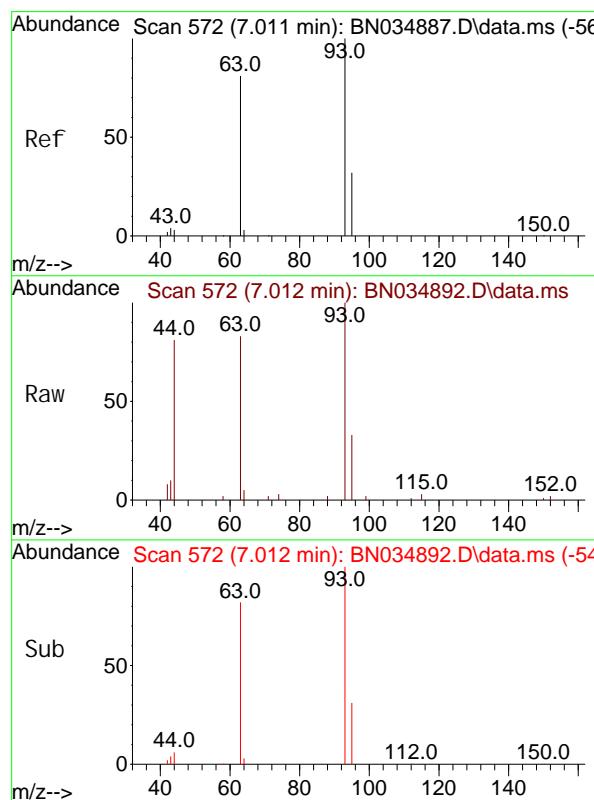
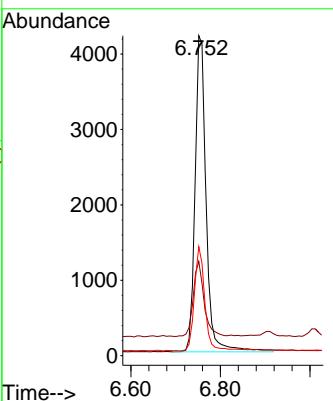




#5  
 Phenol -d6  
 Concen: 0.348 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

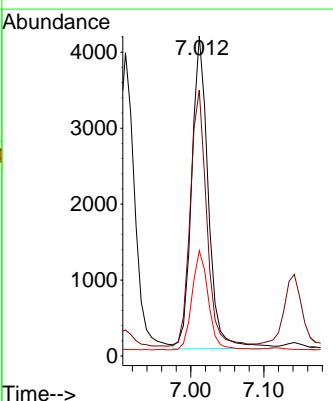
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**ClientSampleId :** ICVBN110724

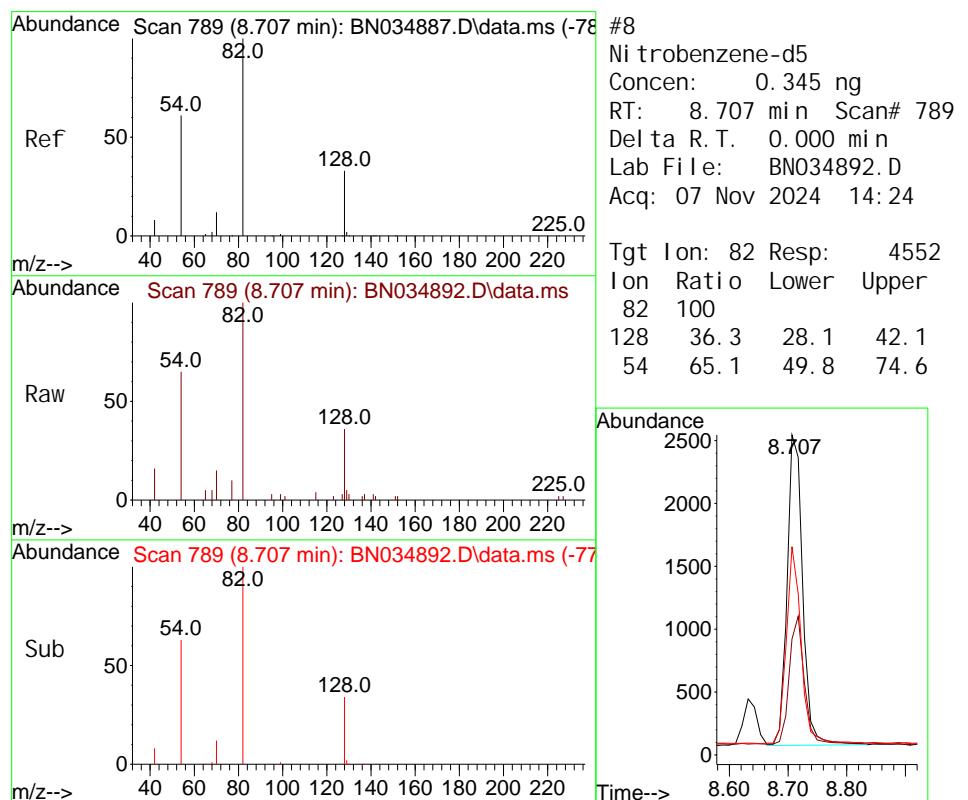
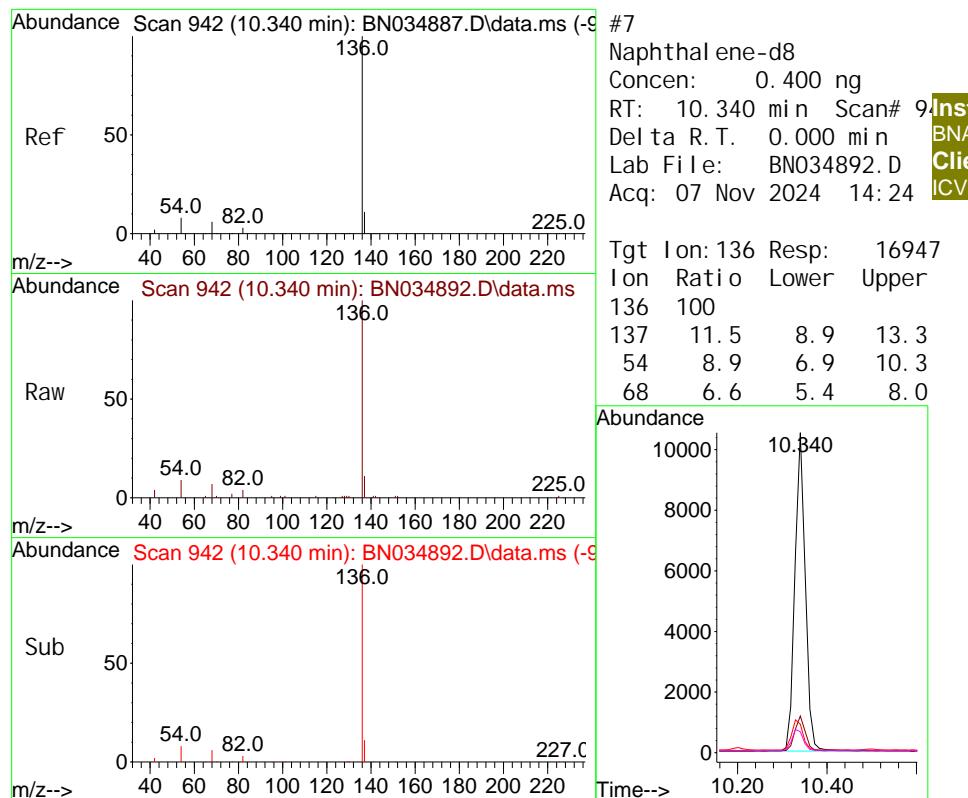
Tgt Ion: 99 Resp: 7207  
 Ion Ratio Lower Upper  
 99 100  
 42 23.3 20.2 30.2  
 71 31.6 25.4 38.0

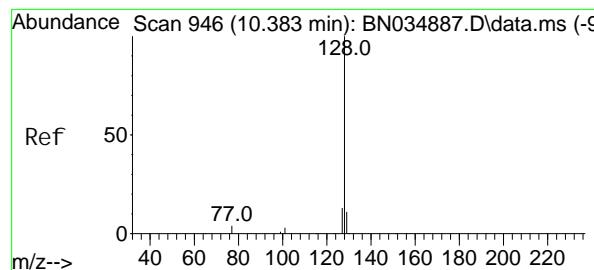


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.364 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

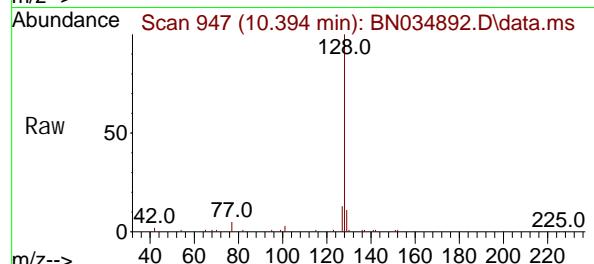
Tgt Ion: 93 Resp: 6507  
 Ion Ratio Lower Upper  
 93 100  
 63 80.8 67.5 101.3  
 95 31.2 25.7 38.5



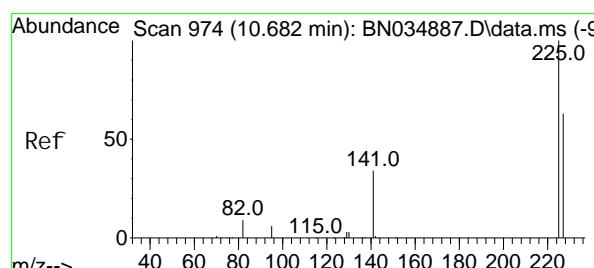
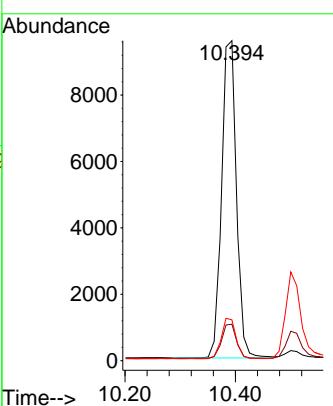
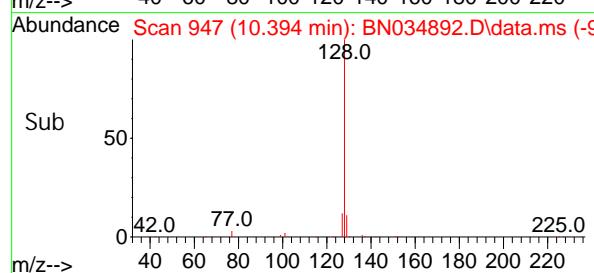




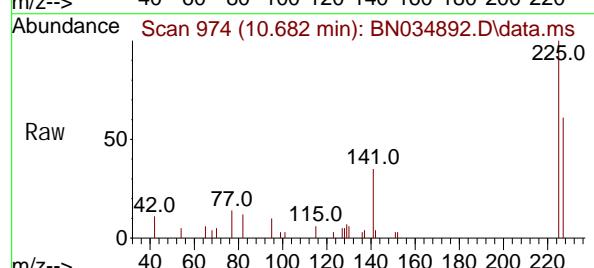
#9  
Naphthalene  
Concen: 0.377 ng  
RT: 10.394 min Scan# 9  
Delta R.T. 0.011 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24  
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724



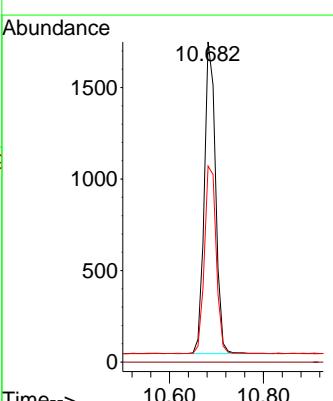
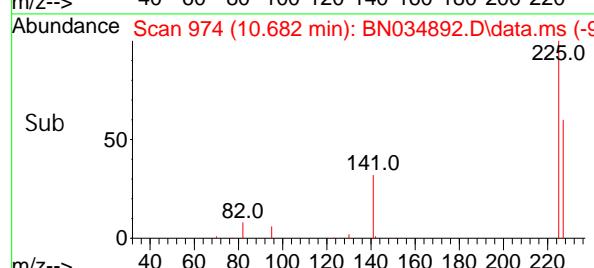
Tgt Ion: 128 Resp: 17745  
Ion Ratio Lower Upper  
128 100  
129 11.4 9.0 13.4  
127 12.8 10.8 16.2

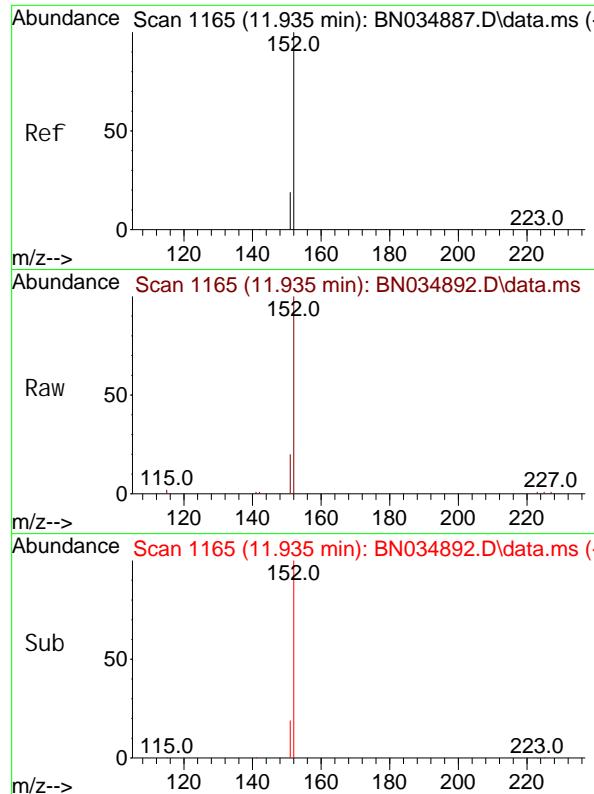


#10  
Hexachlorobutadiene  
Concen: 0.378 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24



Tgt Ion: 225 Resp: 2830  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.2 52.0 78.0

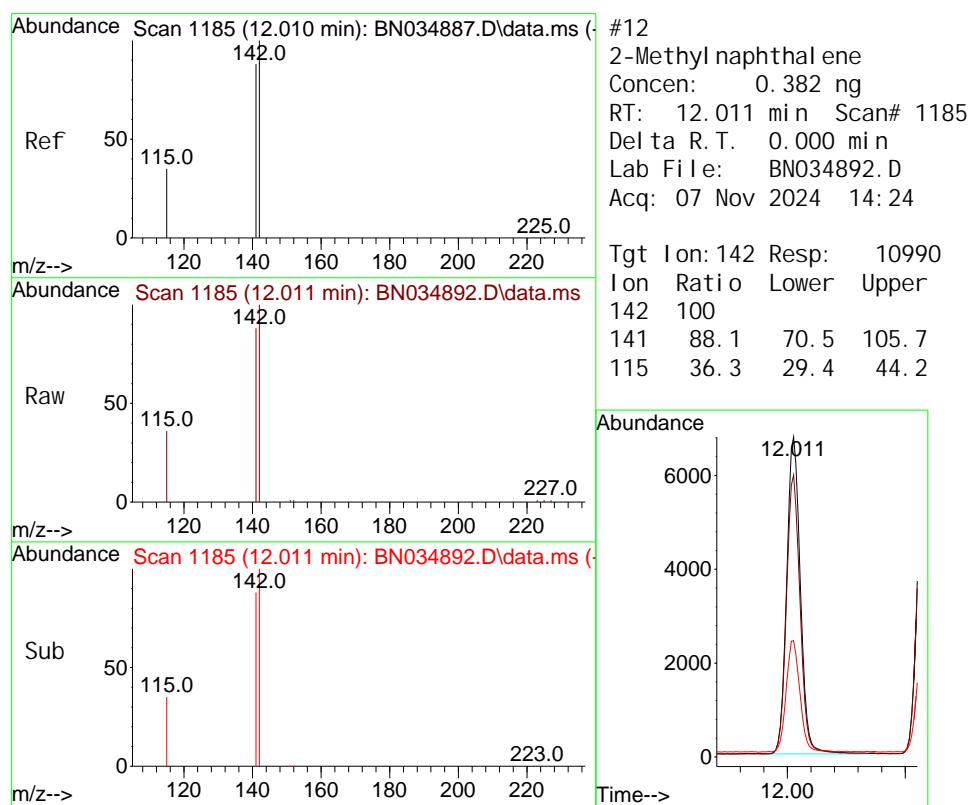
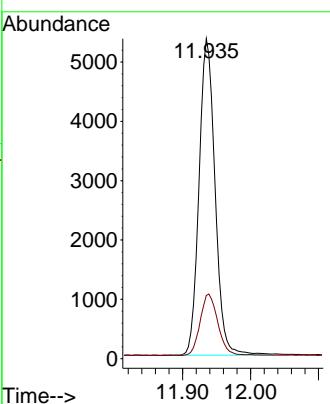




#11  
2-Methyl naphthalene-d10  
Concen: 0.379 ng  
RT: 11.935 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

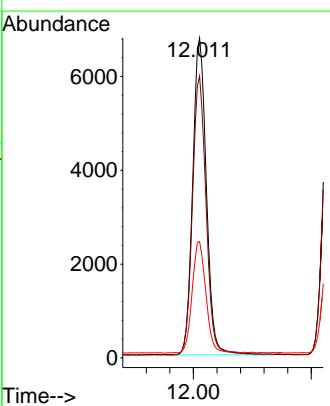
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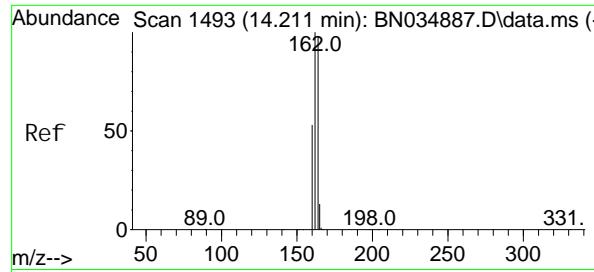
Tgt Ion: 152 Resp: 8763  
Ion Ratio Lower Upper  
152 100  
151 21.4 17.1 25.7



#12  
2-Methyl naphthalene  
Concen: 0.382 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

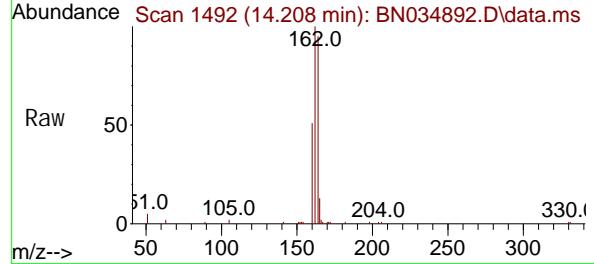
Tgt Ion: 142 Resp: 10990  
Ion Ratio Lower Upper  
142 100  
141 88.1 70.5 105.7  
115 36.3 29.4 44.2



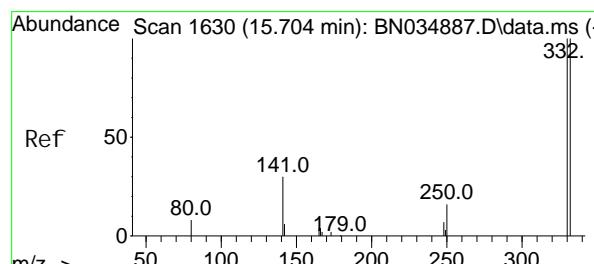
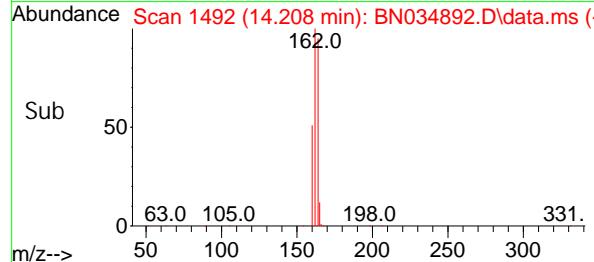
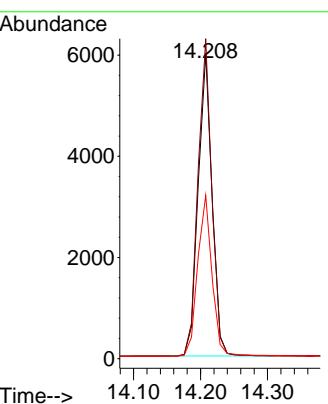


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.208 min Scan# 14  
 Delta R. T. -0.003 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

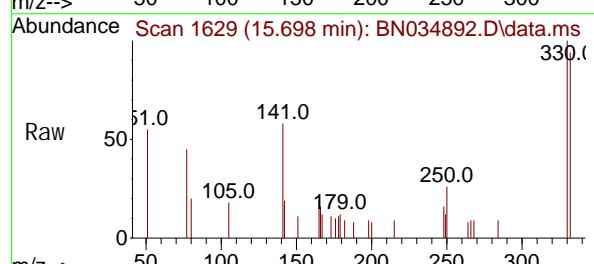
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**ClientSampleId :** ICVBN110724



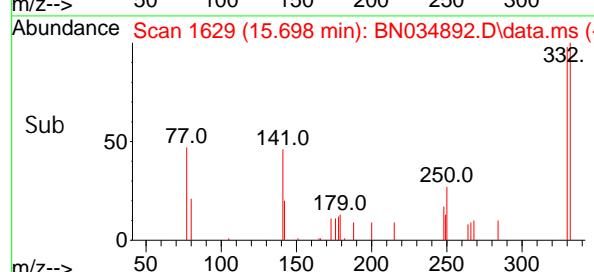
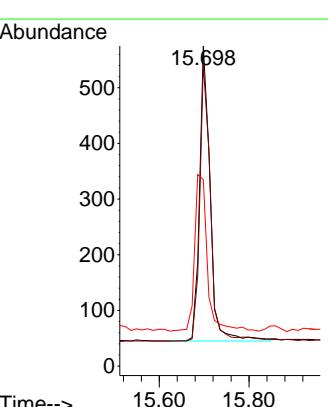
Tgt Ion: 164 Resp: 8617  
 Ion Ratio Lower Upper  
 164 100  
 162 104.8 81.9 122.9  
 160 53.5 43.5 65.3

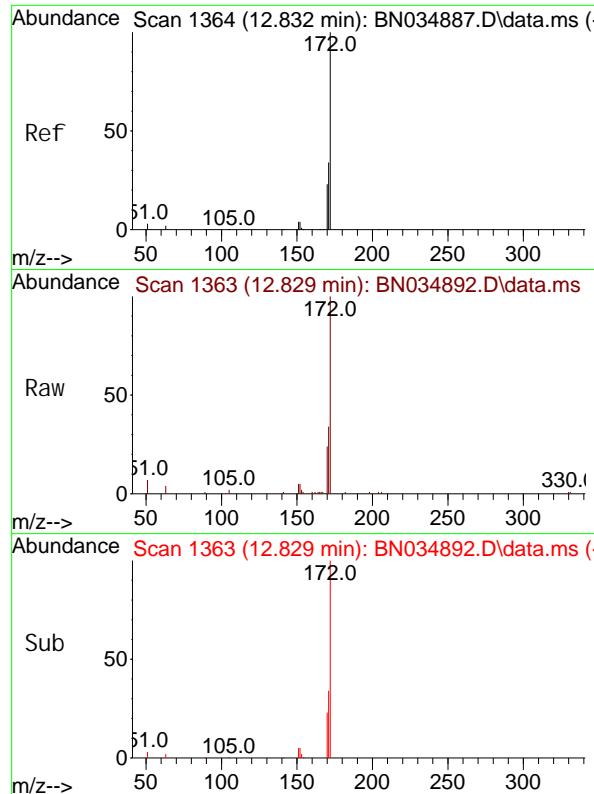


#14  
 2, 4, 6-Tri bromophenol  
 Concen: 0.383 ng  
 RT: 15.698 min Scan# 1629  
 Delta R. T. -0.006 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24



Tgt Ion: 330 Resp: 865  
 Ion Ratio Lower Upper  
 330 100  
 332 91.7 77.1 115.7  
 141 62.7 54.1 81.1

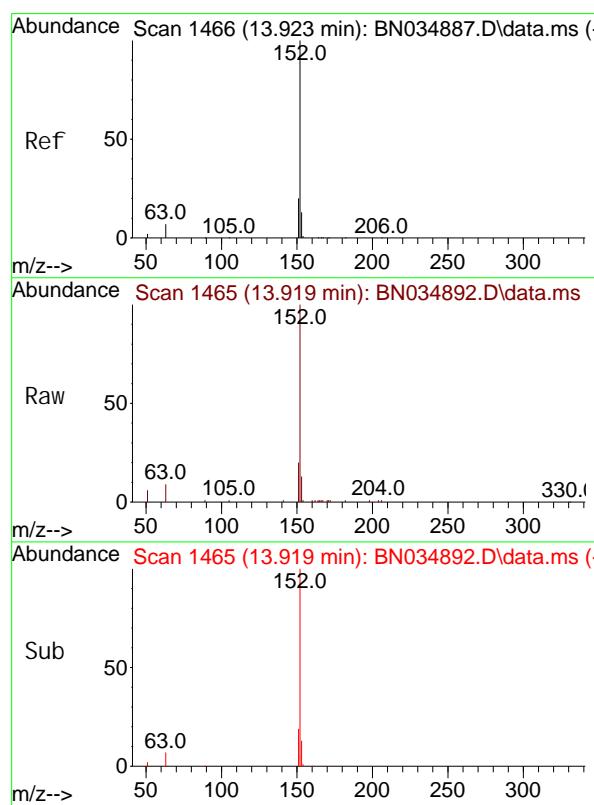
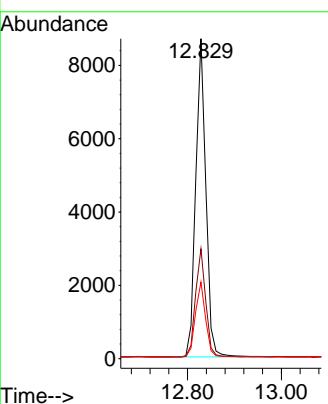




#15  
2-Fluorobiphenyl  
Concen: 0.359 ng  
RT: 12.829 min Scan# 1364  
Delta R.T. -0.004 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

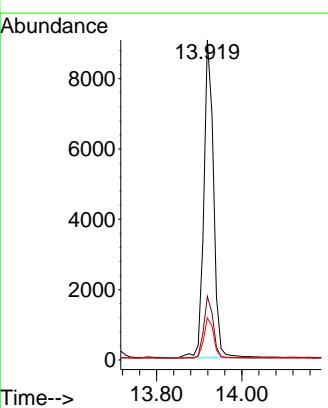
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

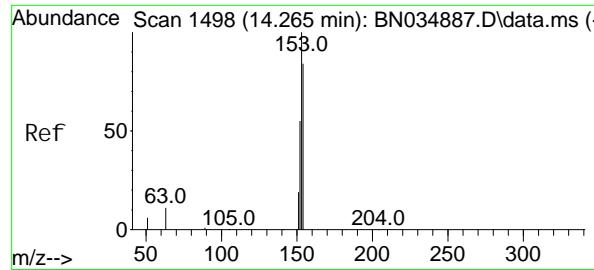
Tgt Ion: 172 Resp: 13055  
Ion Ratio Lower Upper  
172 100  
171 34.3 27.9 41.9  
170 23.9 19.0 28.4



#16  
Acenaphthylene  
Concen: 0.346 ng  
RT: 13.919 min Scan# 1465  
Delta R.T. -0.004 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

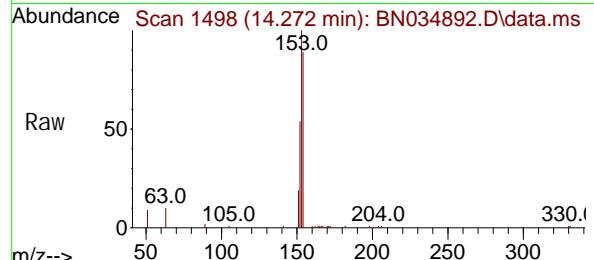
Tgt Ion: 152 Resp: 14368  
Ion Ratio Lower Upper  
152 100  
151 19.0 15.2 22.8  
153 12.7 10.4 15.6



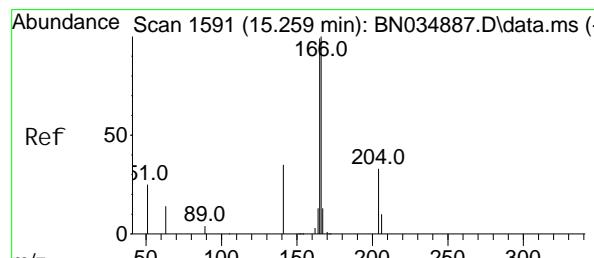
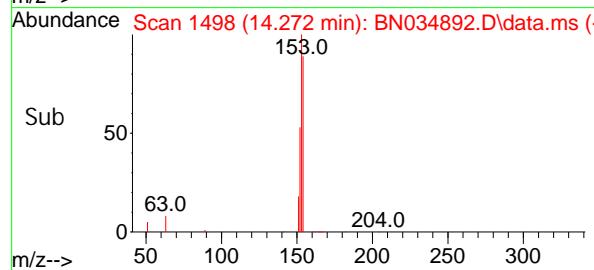
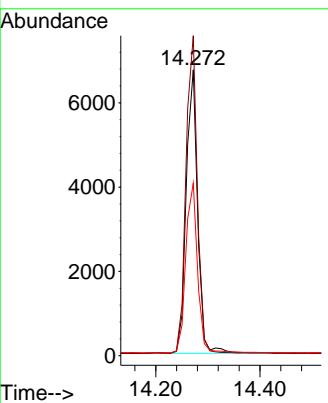


#17  
 Acenaphthene  
 Concen: 0.356 ng  
 RT: 14.272 min Scan# 1  
 Delta R.T. 0.007 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

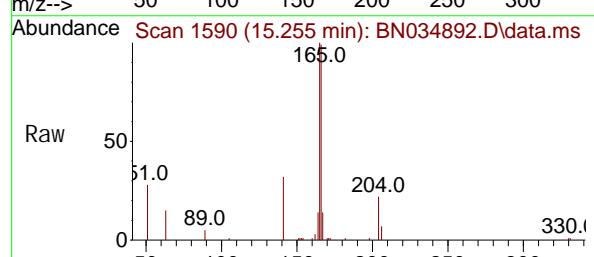
Instrument : BNA\_N  
 ClientSampleId : ICBN110724



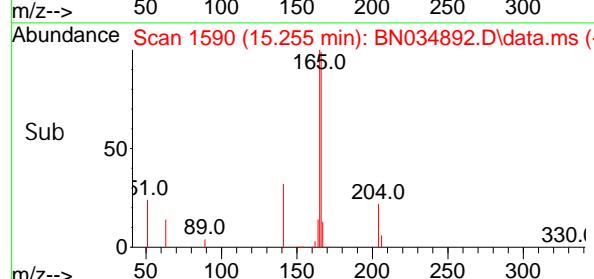
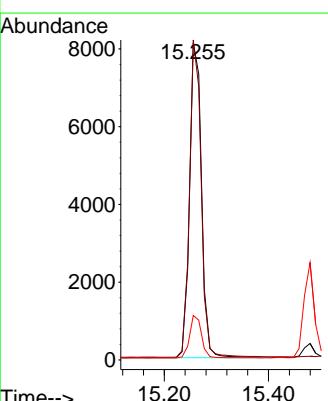
Tgt Ion: 154 Resp: 10248  
 Ion Ratio Lower Upper  
 154 100  
 153 111.7 92.2 138.2  
 152 61.6 51.1 76.7

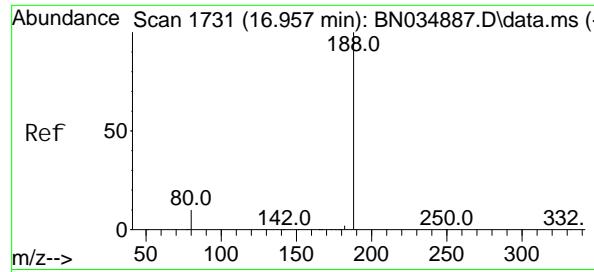


#18  
 Fluorene  
 Concen: 0.361 ng  
 RT: 15.255 min Scan# 1590  
 Delta R.T. -0.004 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24



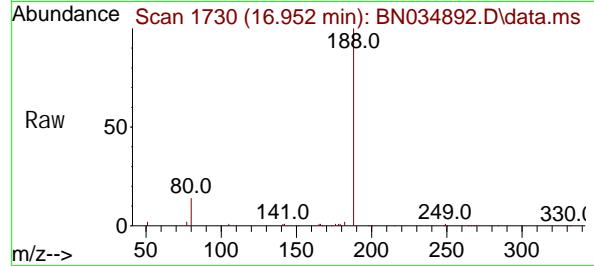
Tgt Ion: 166 Resp: 12934  
 Ion Ratio Lower Upper  
 166 100  
 165 98.5 79.5 119.3  
 167 13.5 10.6 16.0



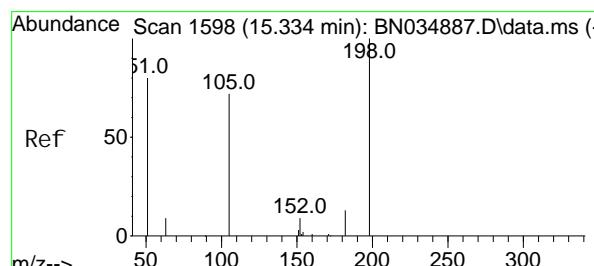
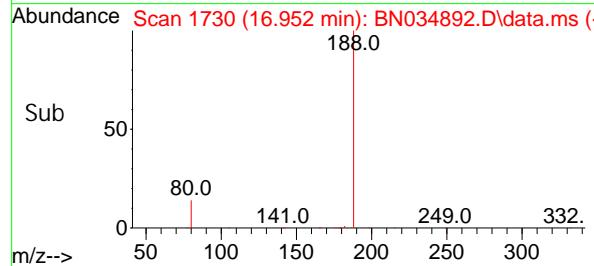
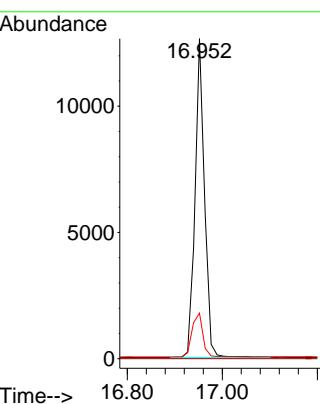


#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.952 min Scan# 1  
 Delta R.T. -0.005 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

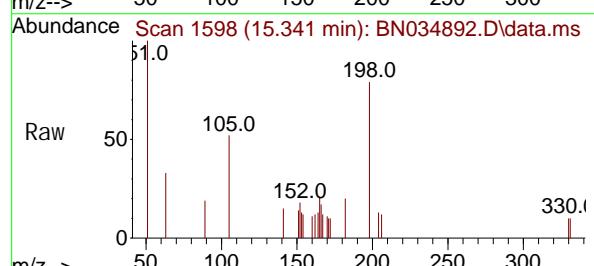
**Instrument :** BNA\_N  
**ClientSampleId :** ICBBN110724



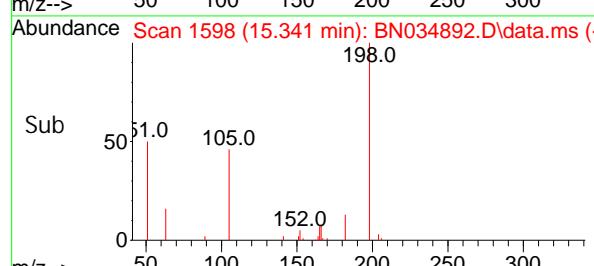
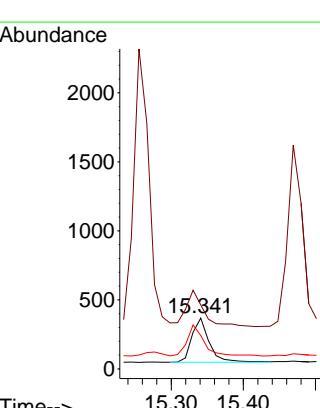
Tgt Ion: 188 Resp: 17630  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 14.2 8.6 12.8#

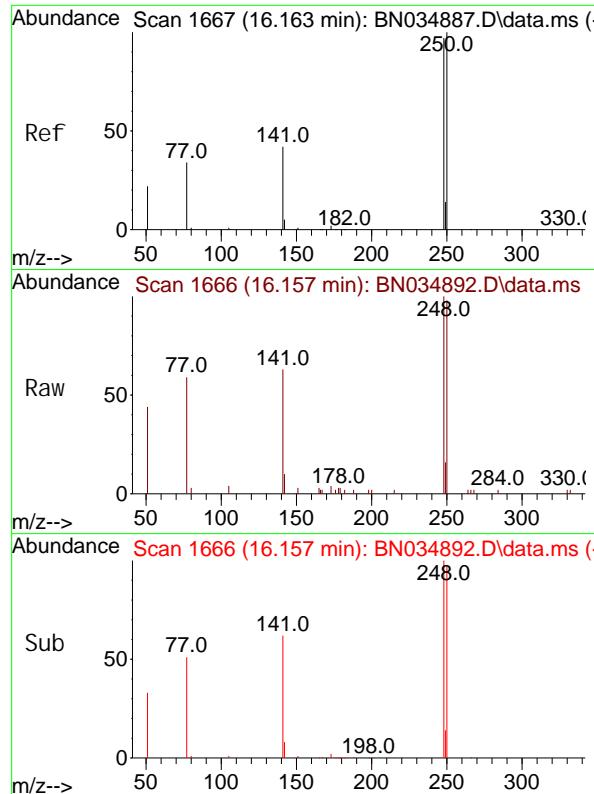


#20  
 4, 6-Di nitro-2-methyl phenol  
 Concen: 0.349 ng  
 RT: 15.341 min Scan# 1598  
 Delta R.T. 0.007 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24



Tgt Ion: 198 Resp: 537  
 Ion Ratio Lower Upper  
 198 100  
 51 125.8 141.8 212.8#  
 105 65.8 75.6 113.4#

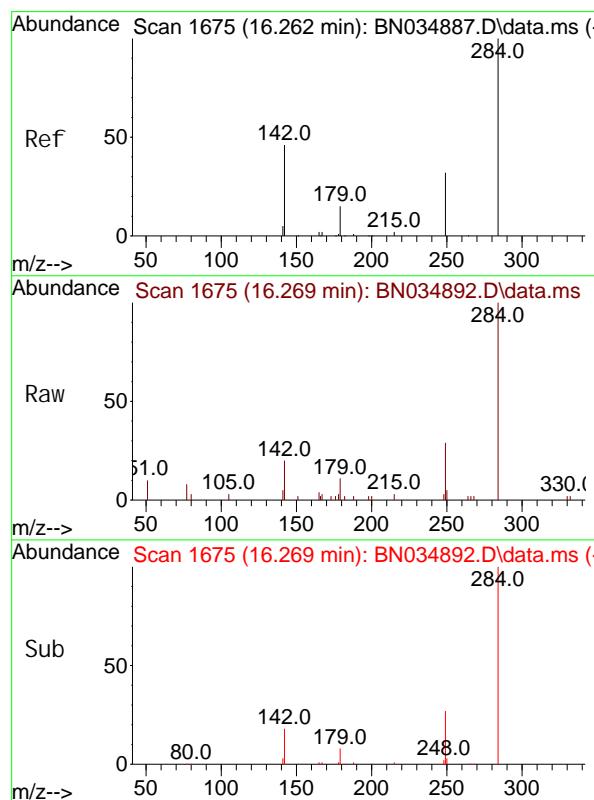
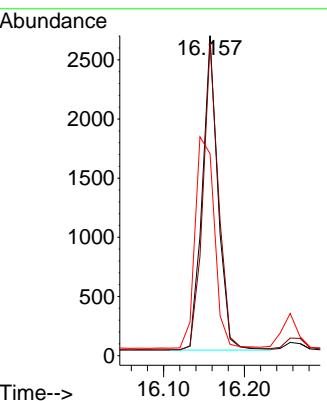




#21  
 4-Bromophenyl -phenyl ether  
 Concen: 0.379 ng  
 RT: 16.157 min Scan# 1  
 Delta R. T. -0.005 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

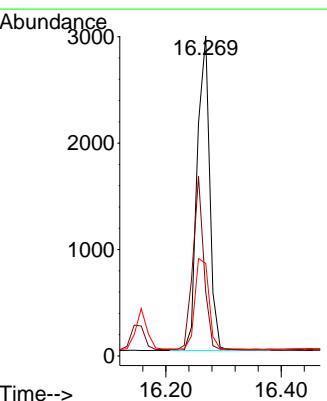
**Instrument :** BNA\_N  
**ClientSampleId :** ICBBN110724

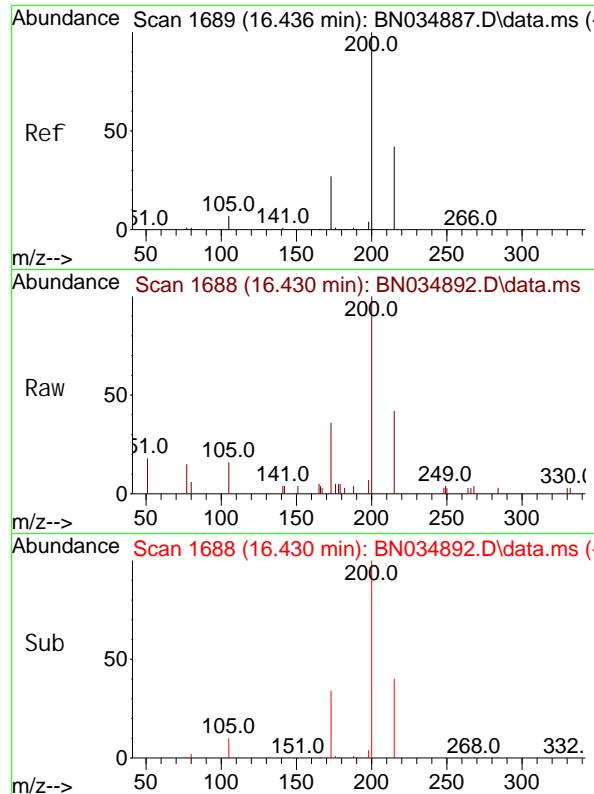
Tgt Ion: 248 Resp: 3565  
 Ion Ratio Lower Upper  
 248 100  
 250 97.6 82.2 123.4  
 141 63.2 36.2 54.2#



#22  
 Hexachlorobenzene  
 Concen: 0.390 ng  
 RT: 16.269 min Scan# 1675  
 Delta R. T. 0.007 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt Ion: 284 Resp: 4413  
 Ion Ratio Lower Upper  
 284 100  
 142 49.4 43.4 65.2  
 249 32.7 25.8 38.6

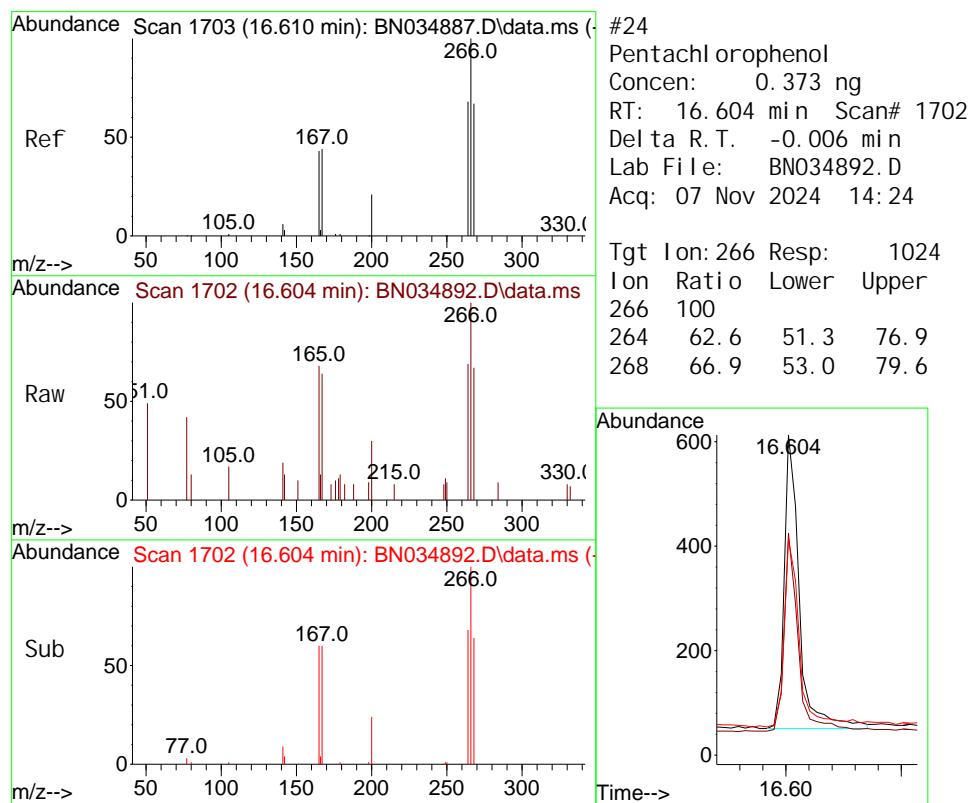
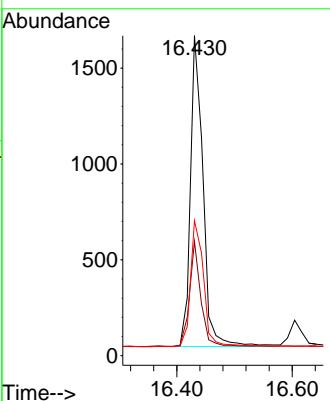




#23  
Atrazine  
Concen: 0.361 ng  
RT: 16.430 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

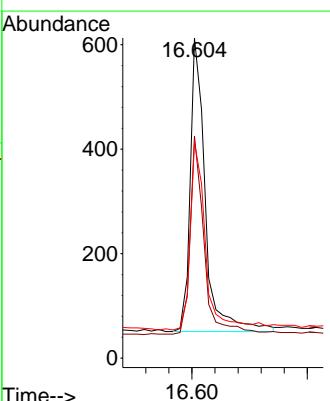
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

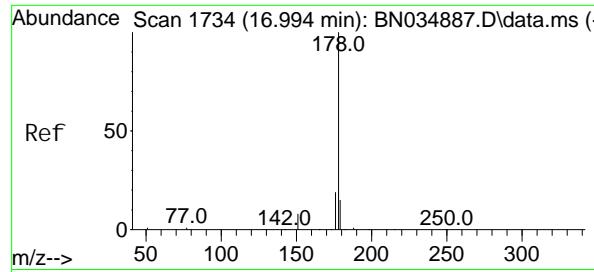
Tgt Ion: 200 Resp: 2461  
Ion Ratio Lower Upper  
200 100  
173 35.8 23.4 35.2#  
215 42.2 35.4 53.0



#24  
Pentachlorophenol  
Concen: 0.373 ng  
RT: 16.604 min Scan# 1702  
Delta R.T. -0.006 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

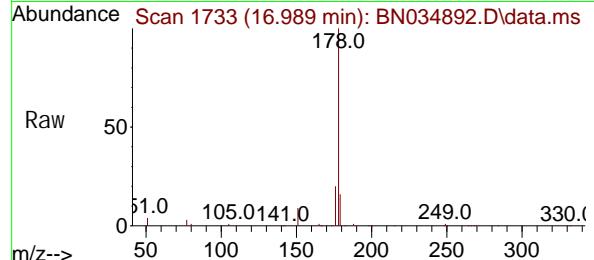
Tgt Ion: 266 Resp: 1024  
Ion Ratio Lower Upper  
266 100  
264 62.6 51.3 76.9  
268 66.9 53.0 79.6



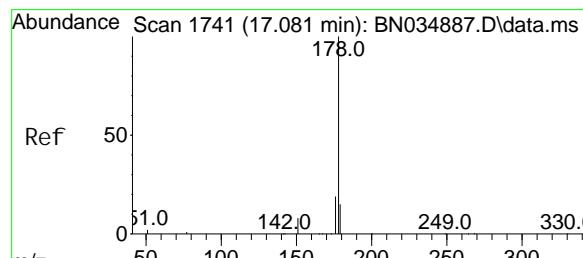
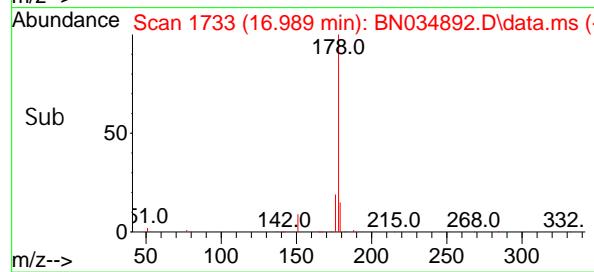
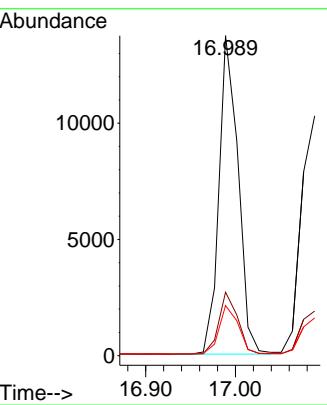


#25  
Phenanthrene  
Concen: 0.375 ng  
RT: 16.989 min Scan# 1  
Delta R.T. -0.005 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24

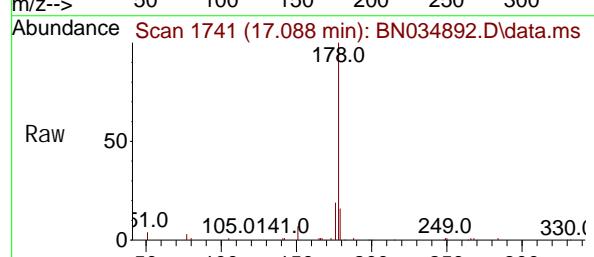
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724



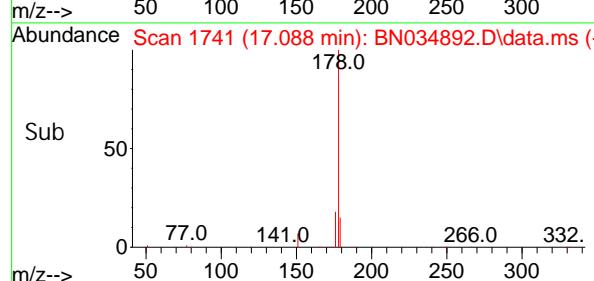
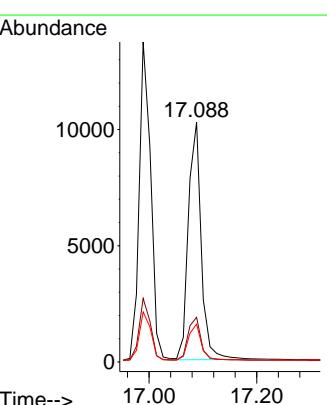
Tgt Ion: 178 Resp: 20264  
Ion Ratio Lower Upper  
178 100  
176 19.4 15.5 23.3  
179 15.4 12.2 18.2

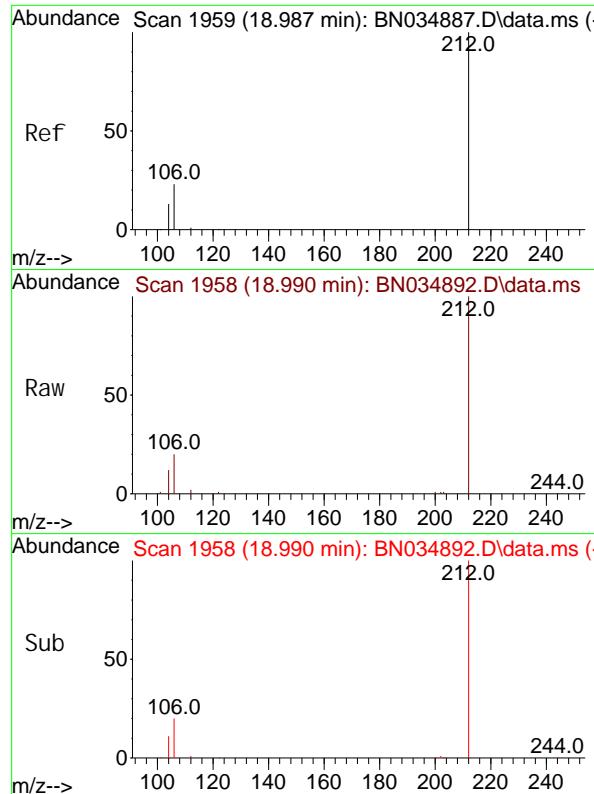


#26  
Anthracene  
Concen: 0.366 ng  
RT: 17.088 min Scan# 1741  
Delta R.T. 0.007 min  
Lab File: BN034892.D  
Acq: 07 Nov 2024 14:24



Tgt Ion: 178 Resp: 17075  
Ion Ratio Lower Upper  
178 100  
176 18.3 15.0 22.6  
179 15.0 12.1 18.1

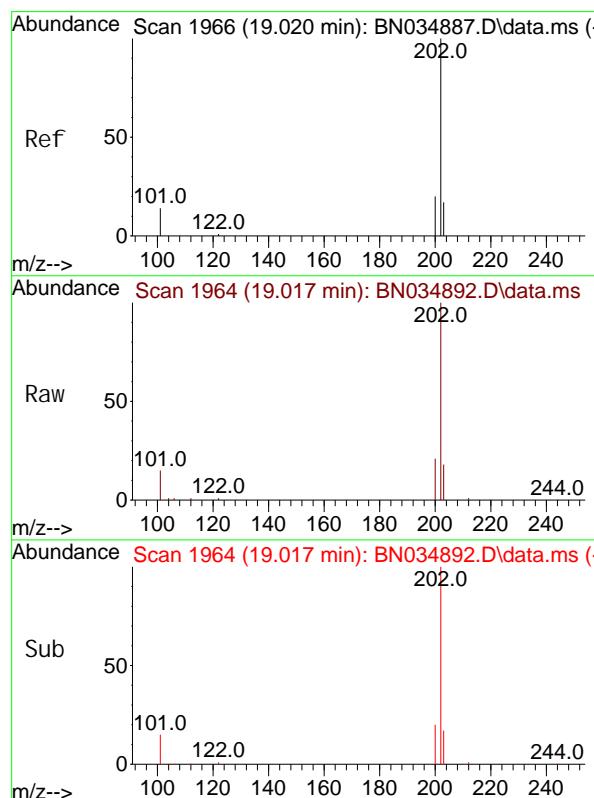
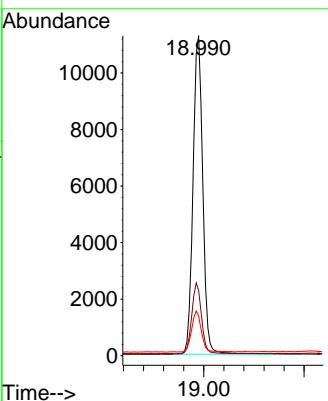




#27  
 Fluoranthene-d10  
 Concen: 0.383 ng  
 RT: 18.990 min Scan# 1  
 Delta R.T. 0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

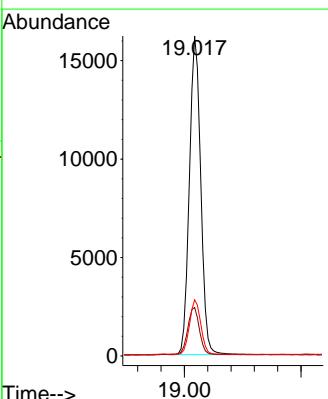
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

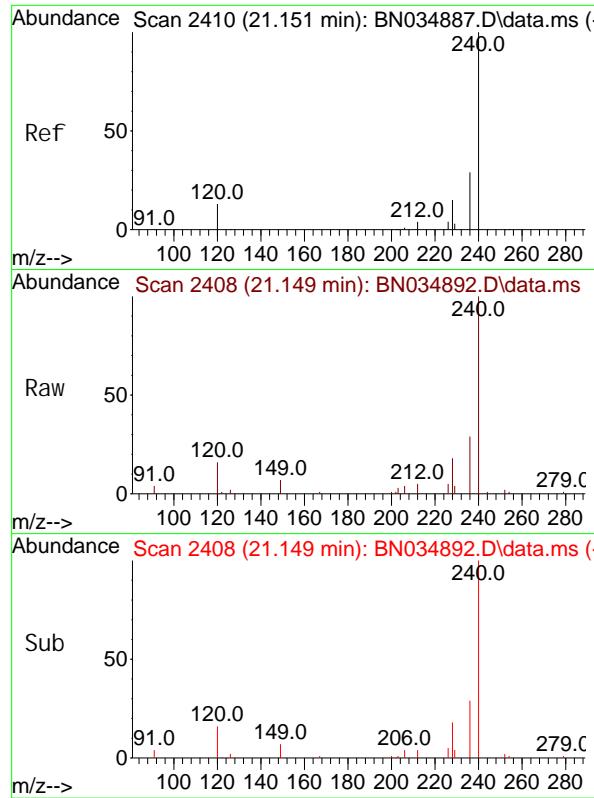
Tgt	Ion: 212	Resp:	15225
Ion	Ratio	Lower	Upper
212	100		
106	22.0	18.2	27.4
104	12.8	10.6	15.8



#28  
 Fluoranthene  
 Concen: 0.384 ng  
 RT: 19.017 min Scan# 1964  
 Delta R.T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt	Ion: 202	Resp:	21837
Ion	Ratio	Lower	Upper
202	100		
101	15.5	12.7	19.1
203	17.0	13.7	20.5

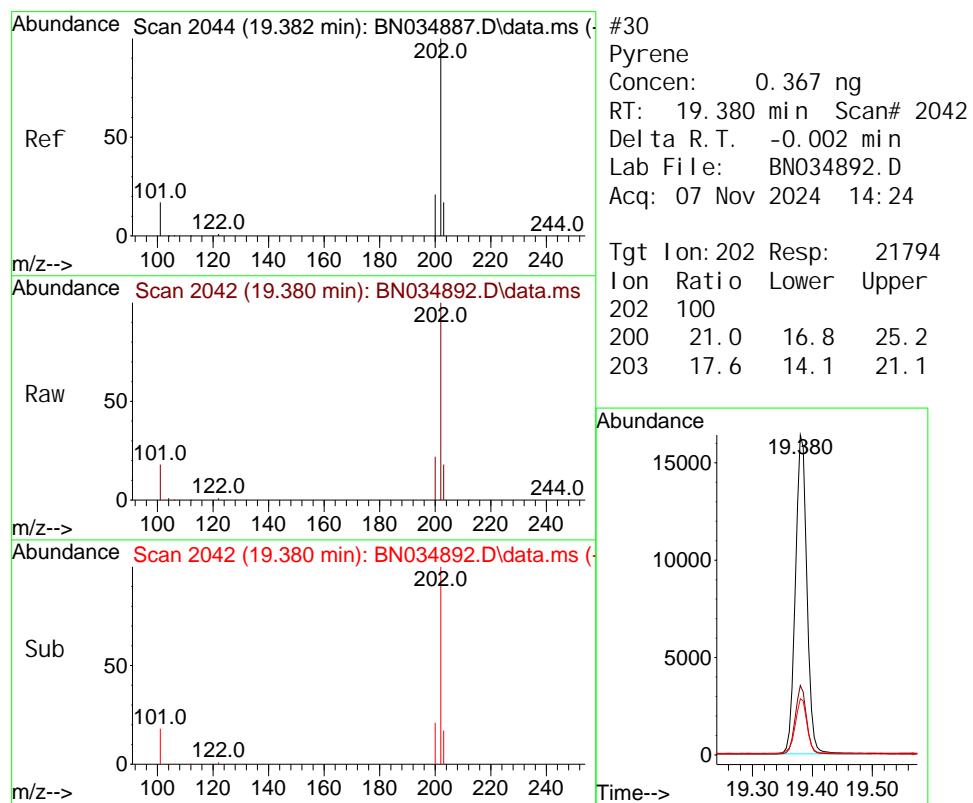
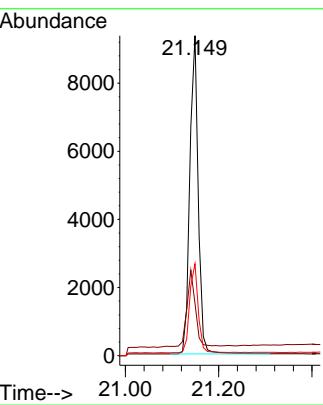




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.149 min Scan# 2  
 Delta R.T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

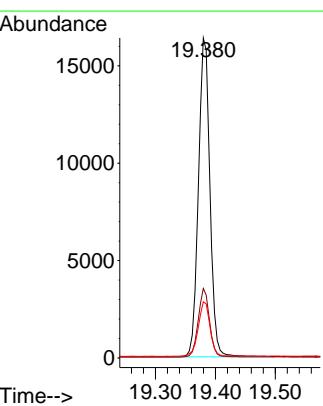
**Instrument :** BNA\_N  
**ClientSampleId :** ICBBN110724

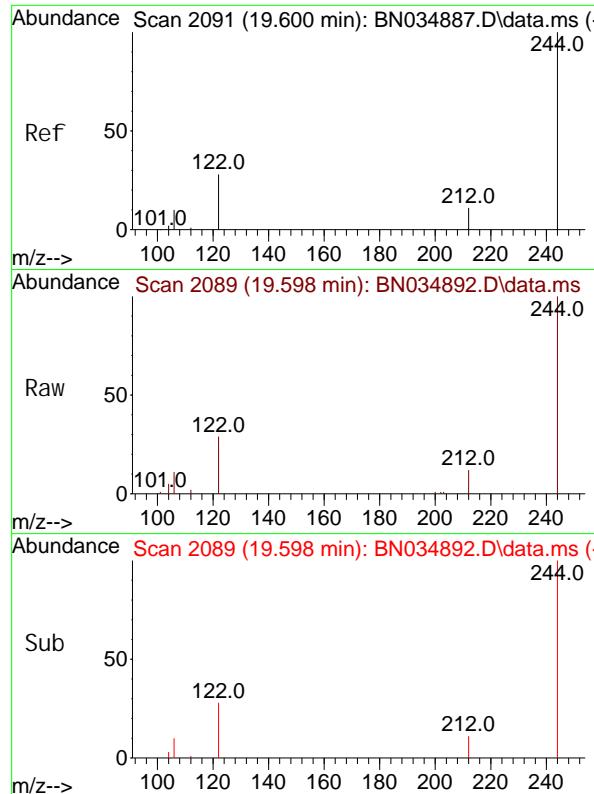
Tgt	Ion: 240	Resp:	11730
	Ion Ratio	Lower	Upper
240	100		
120	16.3	13.8	20.8
236	28.8	23.8	35.6



#30  
 Pyrene  
 Concen: 0.367 ng  
 RT: 19.380 min Scan# 2042  
 Delta R.T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt	Ion: 202	Resp:	21794
	Ion Ratio	Lower	Upper
202	100		
200	21.0	16.8	25.2
203	17.6	14.1	21.1

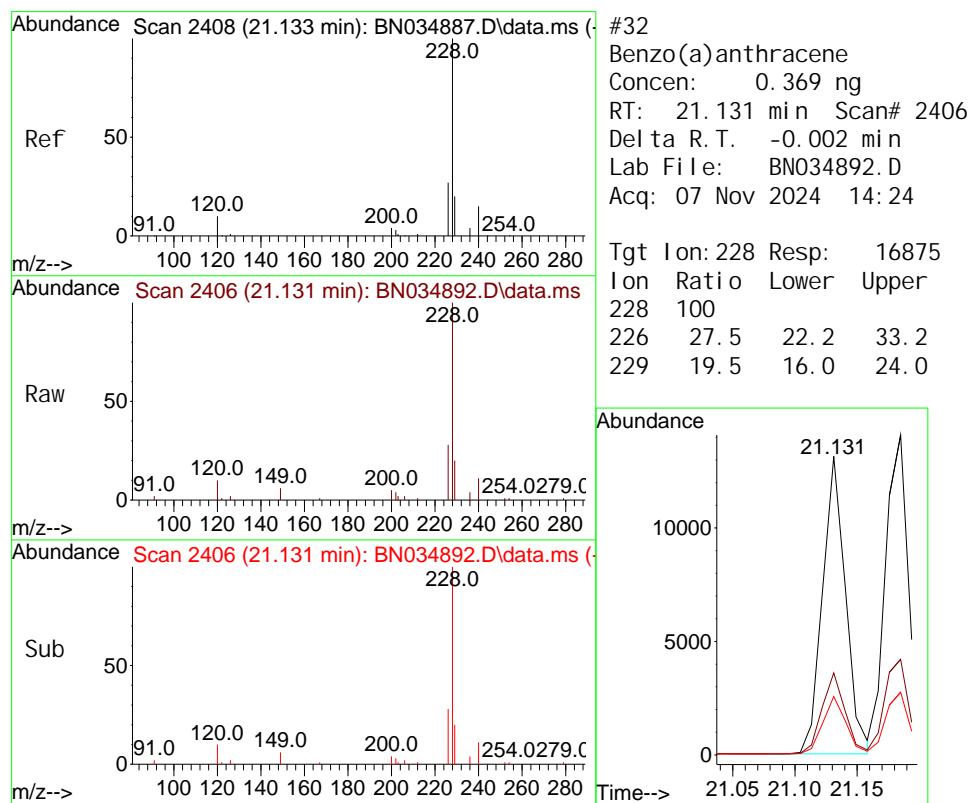
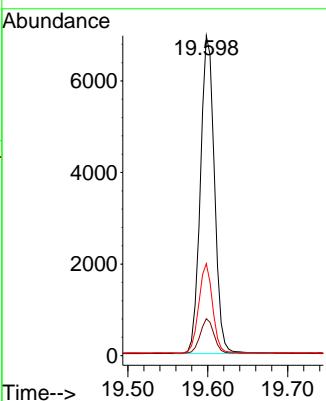




#31  
 Terphenyl -d14  
 Concen: 0.385 ng  
 RT: 19.598 min Scan# 2  
 Delta R.T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

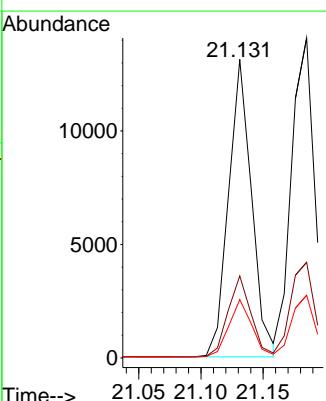
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

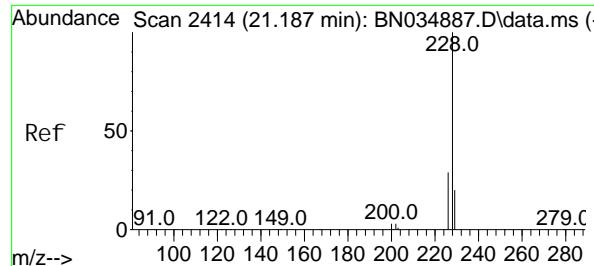
Tgt Ion: 244 Resp: 8465  
 Ion Ratio Lower Upper  
 244 100  
 212 11.5 9.4 14.0  
 122 28.7 23.0 34.4



#32  
 Benzo(a)anthracene  
 Concen: 0.369 ng  
 RT: 21.131 min Scan# 2406  
 Delta R.T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

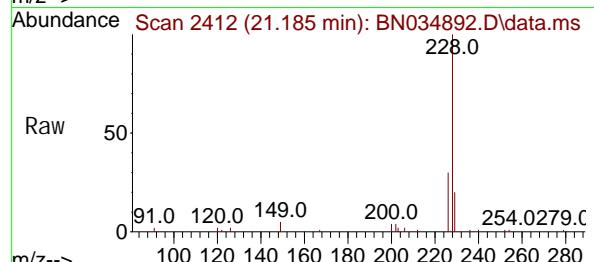
Tgt Ion: 228 Resp: 16875  
 Ion Ratio Lower Upper  
 228 100  
 226 27.5 22.2 33.2  
 229 19.5 16.0 24.0



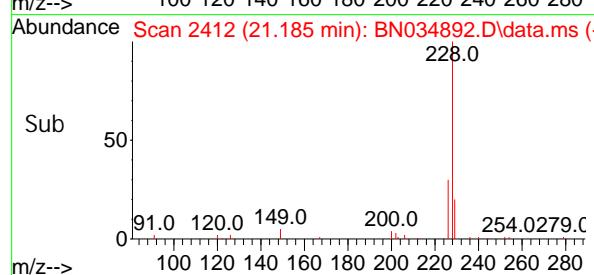
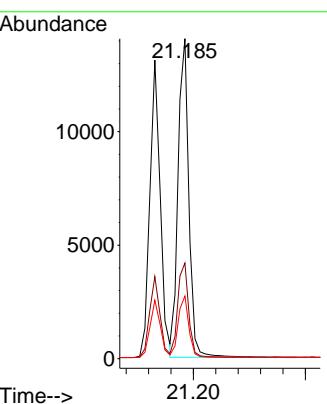


#33  
 Chrysene  
 Concen: 0.387 ng  
 RT: 21.185 min Scan# 2  
 Delta R. T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

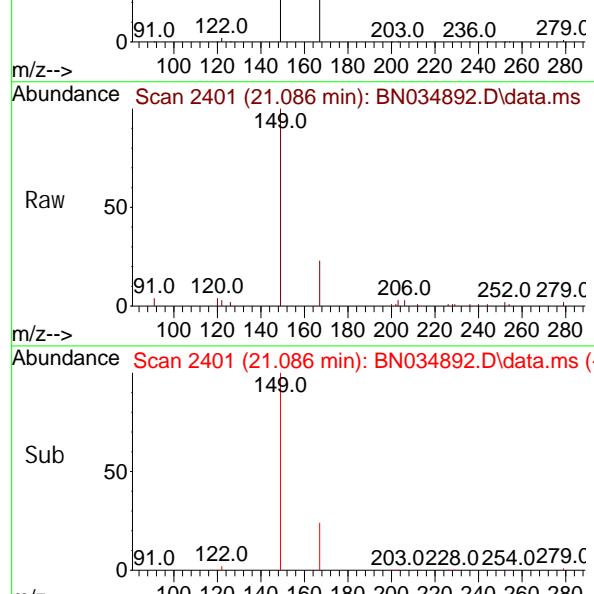
**Instrument :** BNA\_N  
**ClientSampleId :** ICBVN110724



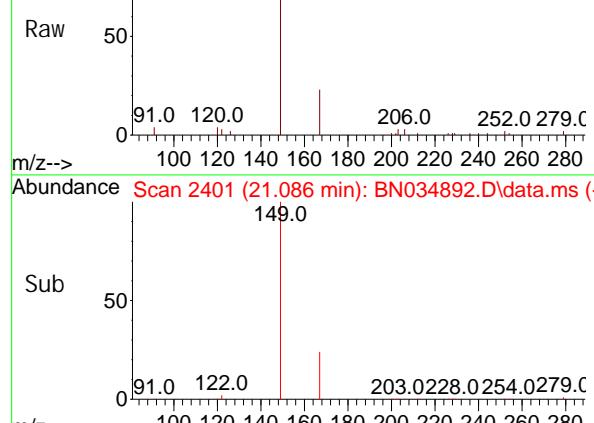
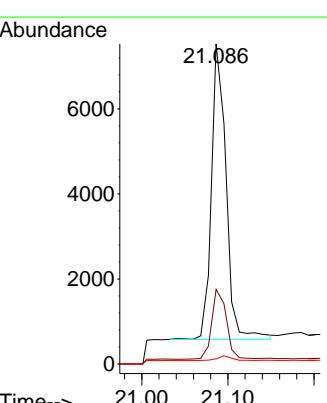
Tgt Ion: 228 Resp: 18729  
 Ion Ratio Lower Upper  
 228 100  
 226 29.9 23.7 35.5  
 229 19.6 16.3 24.5



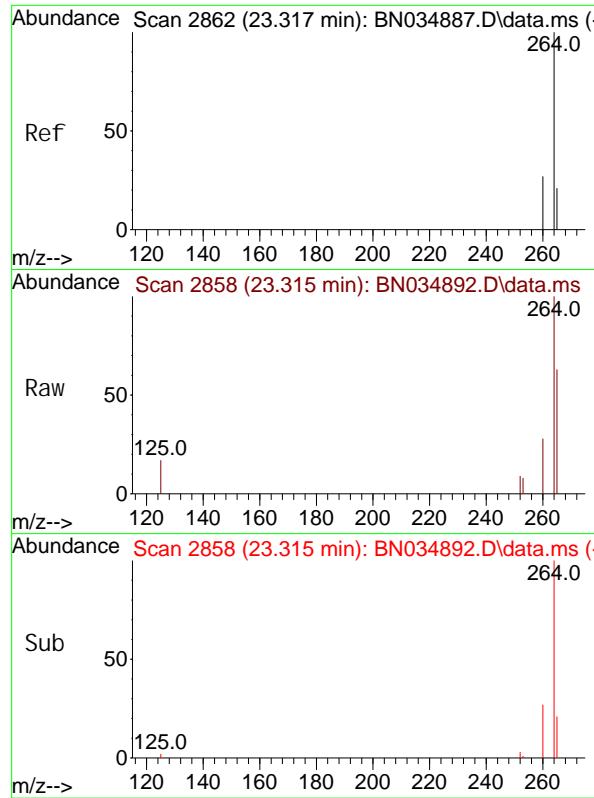
#34  
 Bis(2-ethyl hexyl)phthalate  
 Concen: 0.312 ng  
 RT: 21.086 min Scan# 2401  
 Delta R. T. -0.003 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24



Tgt Ion: 149 Resp: 8178  
 Ion Ratio Lower Upper  
 149 100  
 167 23.8 18.1 27.1  
 279 1.7 1.2 1.8



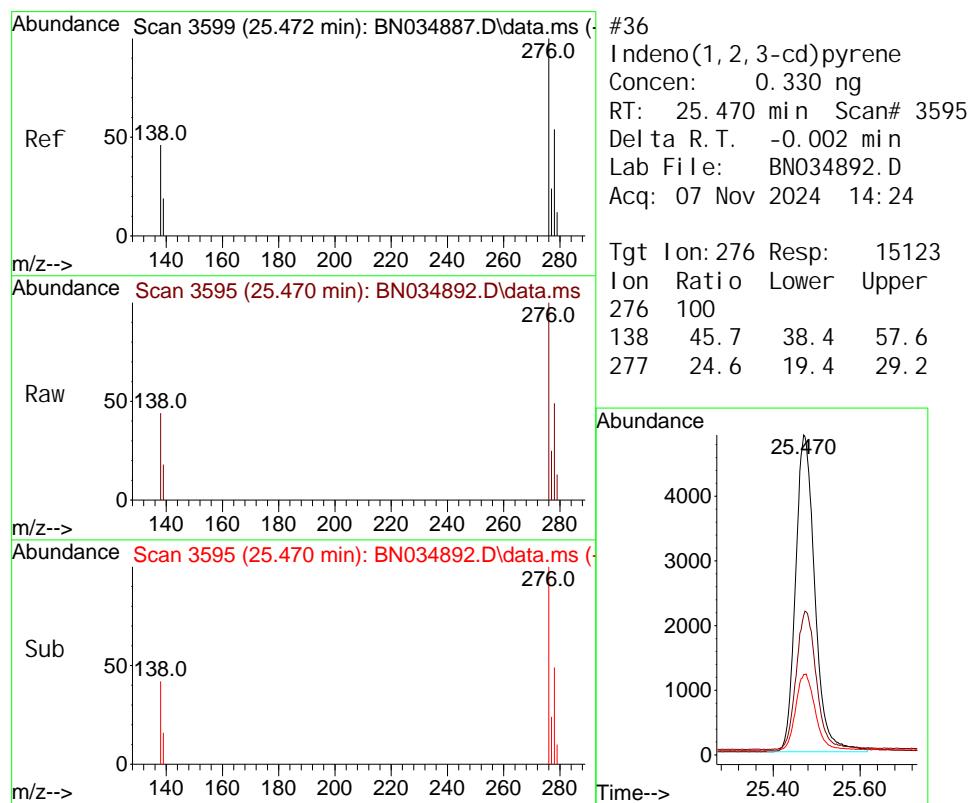
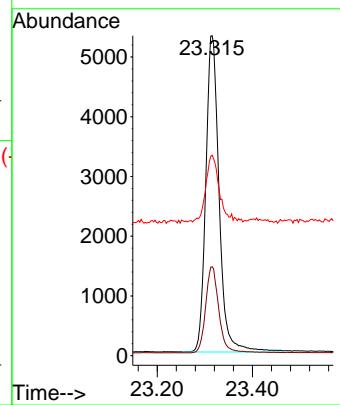
Sub 50



#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.315 min Scan# 2  
 Delta R. T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

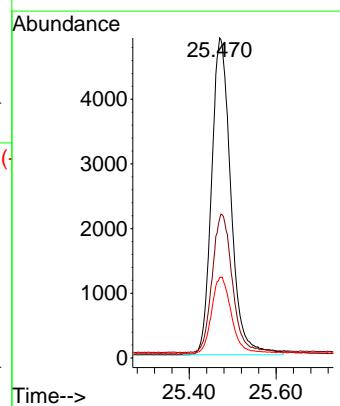
Instrument : BNA\_N  
 ClientSampleId : ICVBN110724

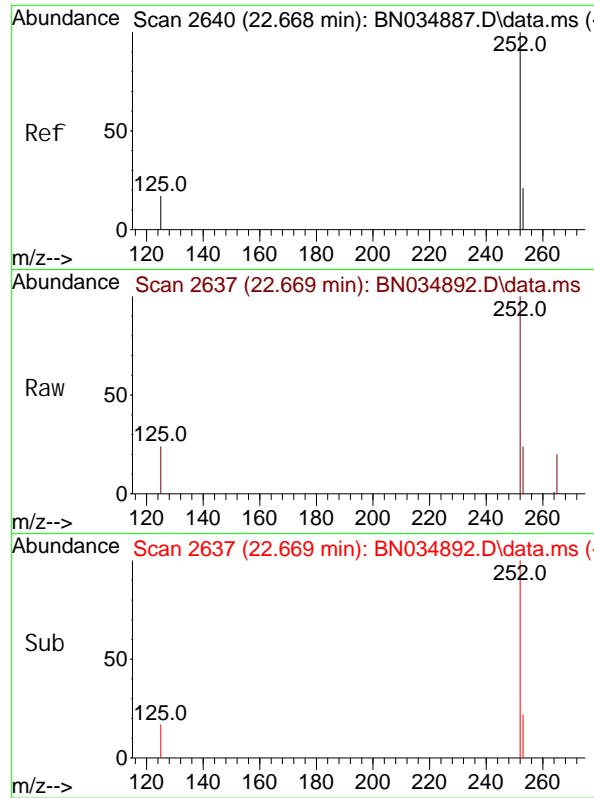
Tgt Ion: 264 Resp: 10292  
 Ion Ratio Lower Upper  
 264 100  
 260 27.8 22.2 33.2  
 265 62.6 60.9 91.3



#36  
 Indeno(1, 2, 3-cd)pyrene  
 Concen: 0.330 ng  
 RT: 25.470 min Scan# 3595  
 Delta R. T. -0.002 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt Ion: 276 Resp: 15123  
 Ion Ratio Lower Upper  
 276 100  
 138 45.7 38.4 57.6  
 277 24.6 19.4 29.2

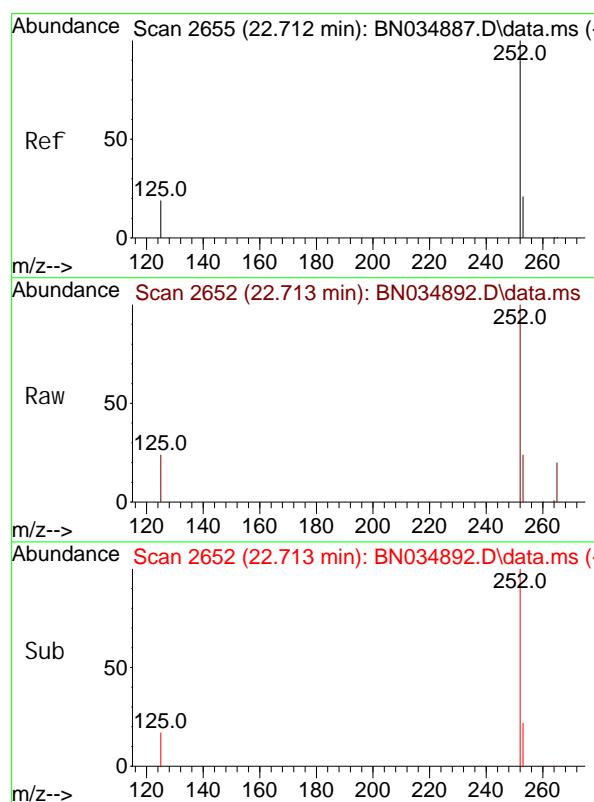
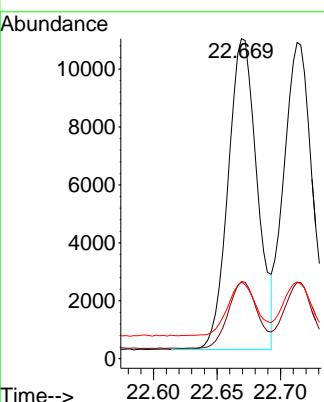




#37  
 Benzo(b)fluoranthene  
 Concen: 0.378 ng  
 RT: 22.669 min Scan# 2  
 Delta R.T. 0.001 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

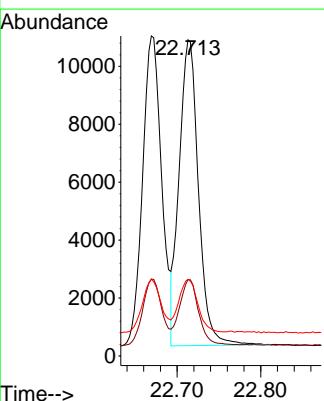
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

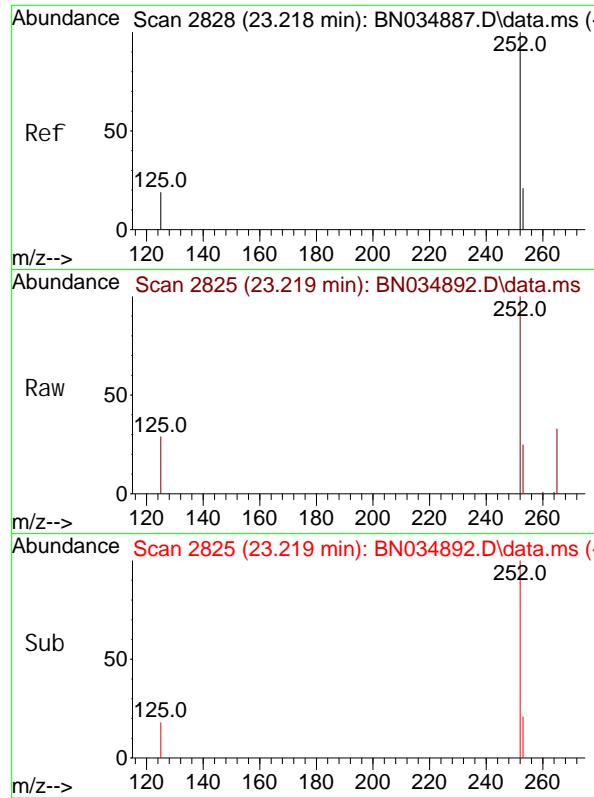
Tgt Ion: 252 Resp: 17108  
 Ion Ratio Lower Upper  
 252 100  
 253 24.1 19.4 29.2  
 125 24.0 21.4 32.2



#38  
 Benzo(k)fluoranthene  
 Concen: 0.360 ng  
 RT: 22.713 min Scan# 2652  
 Delta R.T. 0.001 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt Ion: 252 Resp: 16927  
 Ion Ratio Lower Upper  
 252 100  
 253 24.1 19.8 29.8  
 125 24.3 22.6 33.8

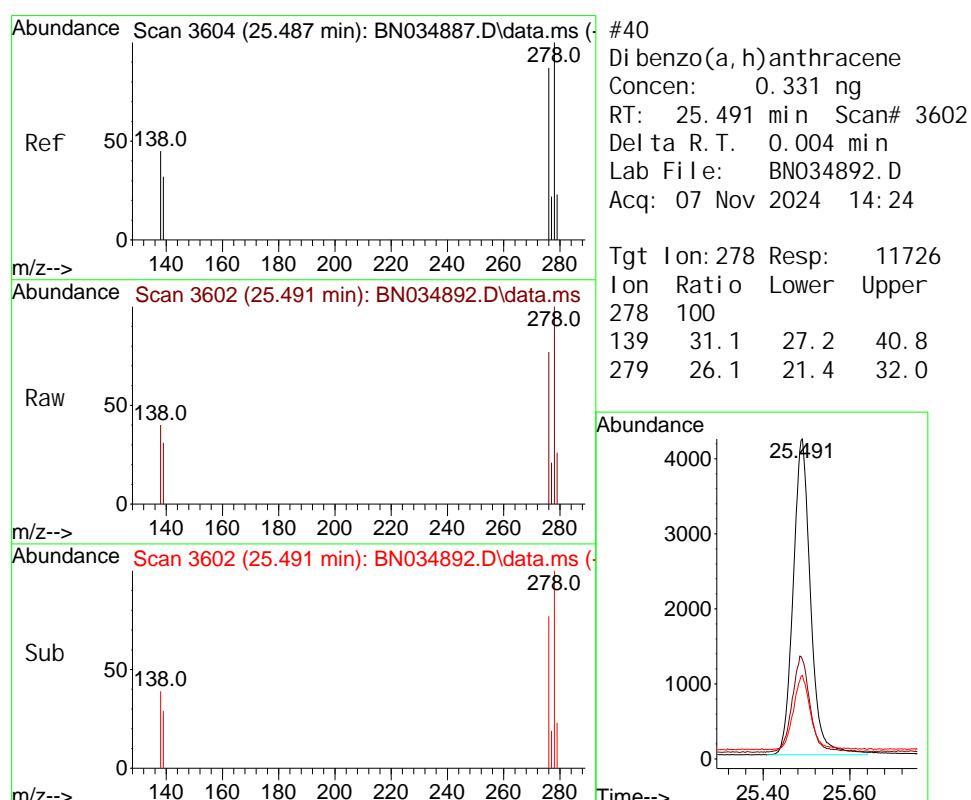
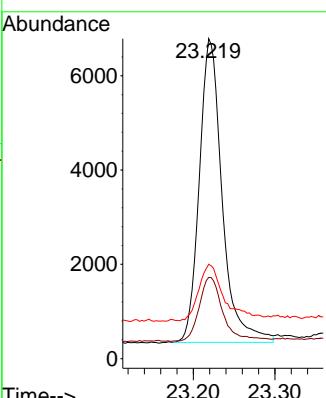




#39  
 Benzo(a)pyrene  
 Concen: 0.349 ng  
 RT: 23.219 min Scan# 2  
 Delta R. T. 0.001 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

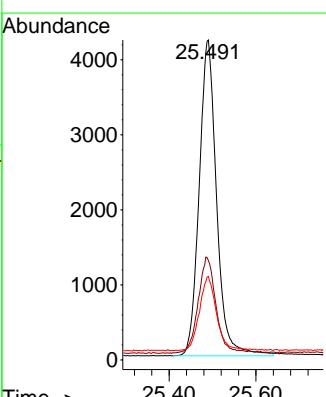
**Instrument :** BNA\_N  
**ClientSampleId :** ICVBN110724

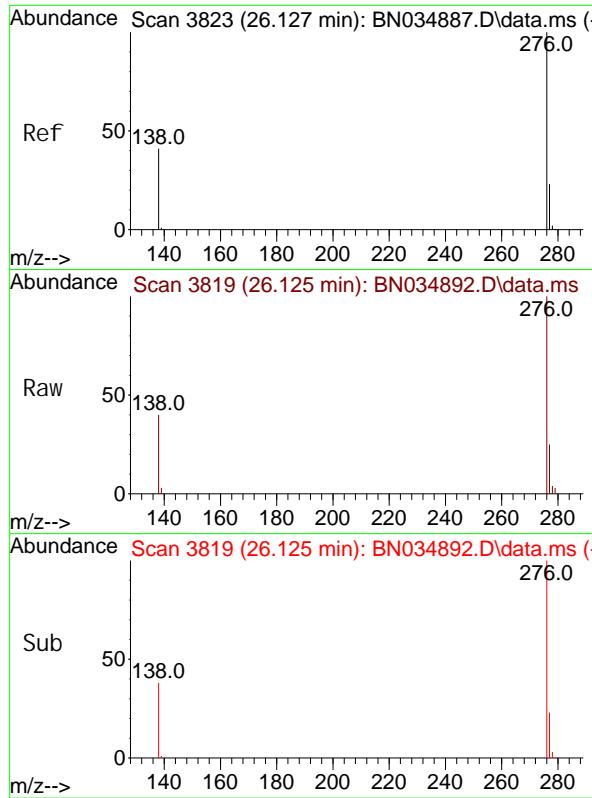
Tgt Ion: 252 Resp: 12517  
 Ion Ratio Lower Upper  
 252 100  
 253 25.4 21.4 32.2  
 125 29.5 27.8 41.6



#40  
 Di benzo(a, h)anthracene  
 Concen: 0.331 ng  
 RT: 25.491 min Scan# 3602  
 Delta R. T. 0.004 min  
 Lab File: BN034892.D  
 Acq: 07 Nov 2024 14:24

Tgt Ion: 278 Resp: 11726  
 Ion Ratio Lower Upper  
 278 100  
 139 31.1 27.2 40.8  
 279 26.1 21.4 32.0





#41

Benzo(g, h, i )perylene

Concen: 0.345 ng

RT: 26.125 min Scan# 3

Instrument :

BNA\_N

Delta R. T. -0.002 min

Lab File: BN034892.D

ClientSampleId :

Acq: 07 Nov 2024 14:24

ICVBN110724

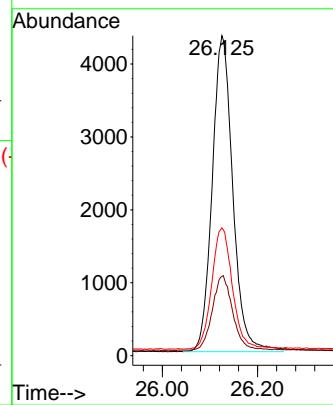
Tgt Ion: 276 Resp: 13002

Ion Ratio Lower Upper

276 100

277 24.8 20.2 30.2

138 40.0 33.9 50.9



Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034898.D  
 Acq On : 08 Nov 2024 08:29  
 Operator : RC/JU  
 Sample : SSTDCCCO.4  
 Misc :  
 ALS Vial : 2 Sample Multi plier: 1

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

Quant Time: Nov 08 09:57:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

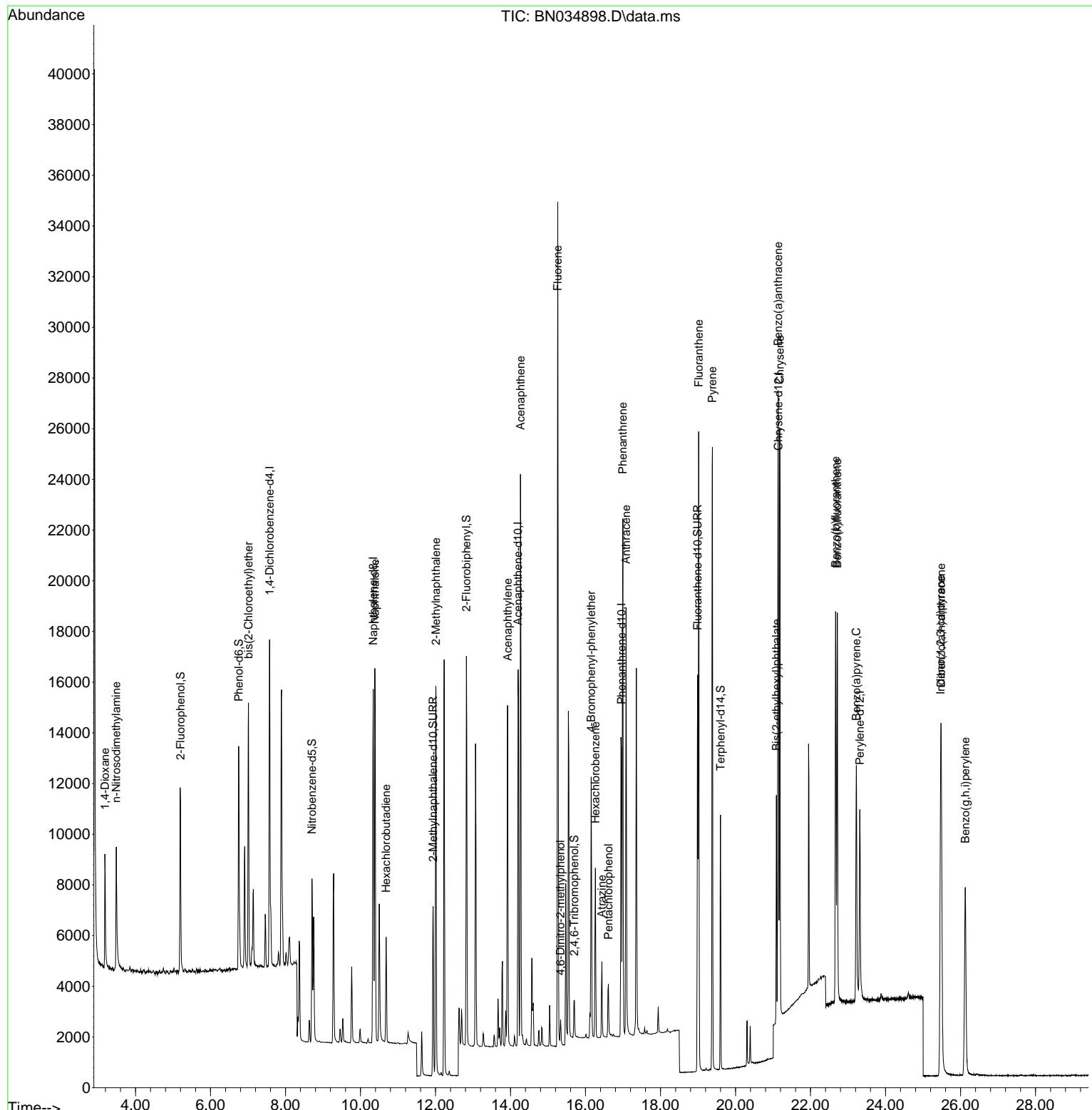
Compound	R. T.	Ql on	Response	Conc	Units	Dev(Min)
<b>Internal Standards</b>						
1) 1, 4-Di chlorobenzene-d4	7. 575	152	6102	0. 400	ng	0. 00
7) Naphthalene-d8	10. 340	136	18171	0. 400	ng	0. 00
13) Acenaphthene-d10	14. 201	164	8711	0. 400	ng	-0. 01
19) Phenanthrene-d10	16. 957	188	17291	0. 400	ng	0. 00
29) Chrysene-d12	21. 143	240	11255	0. 400	ng	# 0. 00
35) Perylene-d12	23. 315	264	9481	0. 400	ng	# 0. 00
<b>System Monotoring Compounds</b>						
4) 2-Fluorophenol	5. 199	112	5933	0. 349	ng	0. 00
5) Phenol-d6	6. 752	99	8011	0. 355	ng	0. 00
8) Nitrobenzene-d5	8. 707	82	5062	0. 357	ng	0. 00
11) 2-Methyl naphthalene-d10	11. 935	152	9015	0. 364	ng	0. 00
14) 2, 4, 6-Tribromophenol	15. 704	330	854	0. 375	ng	0. 00
15) 2-Fluorobi phenyl	12. 822	172	13376	0. 364	ng	-0. 01
27) Fluoranthene-d10	18. 987	212	14727	0. 378	ng	0. 00
31) Terphenyl-d14	19. 601	244	7841	0. 372	ng	0. 00
<b>Target Compounds</b>						
2) 1, 4-Dioxane	3. 184	88	2791	0. 362	ng	100
3) n-Nitrosodi methyl amine	3. 487	42	3715	0. 357	ng	# 96
6) bis(2-Chloroethyl)ether	7. 012	93	7371	0. 378	ng	98
9) Naphthalene	10. 383	128	18988	0. 377	ng	100
10) Hexachlorobutadiene	10. 682	225	3080	0. 383	ng	# 98
12) 2-Methyl naphthalene	12. 011	142	11374	0. 369	ng	99
16) Acenaphthylene	13. 923	152	14701	0. 350	ng	99
17) Acenaphthene	14. 265	154	10362	0. 356	ng	99
18) Fluorene	15. 259	166	13094	0. 362	ng	99
20) 4, 6-Dinitro-2-methyl ph...	15. 334	198	538	0. 355	ng	94
21) 4-Bromophenyl-phenyl ether	16. 151	248	3355	0. 364	ng	# 63
22) Hexachlorobenzene	16. 262	284	4416	0. 398	ng	98
23) Atrazine	16. 436	200	2322	0. 348	ng	99
24) Pentachlorophenol	16. 610	266	1123	0. 410	ng	97
25) Phenanthrene	16. 995	178	20416	0. 385	ng	100
26) Anthracene	17. 082	178	16914	0. 370	ng	100
28) Fluoranthene	19. 020	202	21528	0. 386	ng	100
30) Pyrene	19. 382	202	21506	0. 377	ng	100
32) Benzo(a)anthracene	21. 134	228	16690	0. 380	ng	98
33) Chrysene	21. 178	228	18283	0. 394	ng	96
34) Bis(2-ethyl hexyl)phtha...	21. 089	149	7924	0. 315	ng	100
36) Indeno(1, 2, 3-cd)pyrene	25. 472	276	15511	0. 367	ng	99
37) Benzo(b)fluoranthene	22. 669	252	17145	0. 412	ng	97
38) Benzo(k)fluoranthene	22. 712	252	17383	0. 401	ng	96
39) Benzo(a)pyrene	23. 221	252	12460	0. 377	ng	94
40) Dibenz(a, h)anthracene	25. 484	278	11910	0. 364	ng	99
41) Benzo(g, h, i)perylene	26. 127	276	13103	0. 378	ng	100

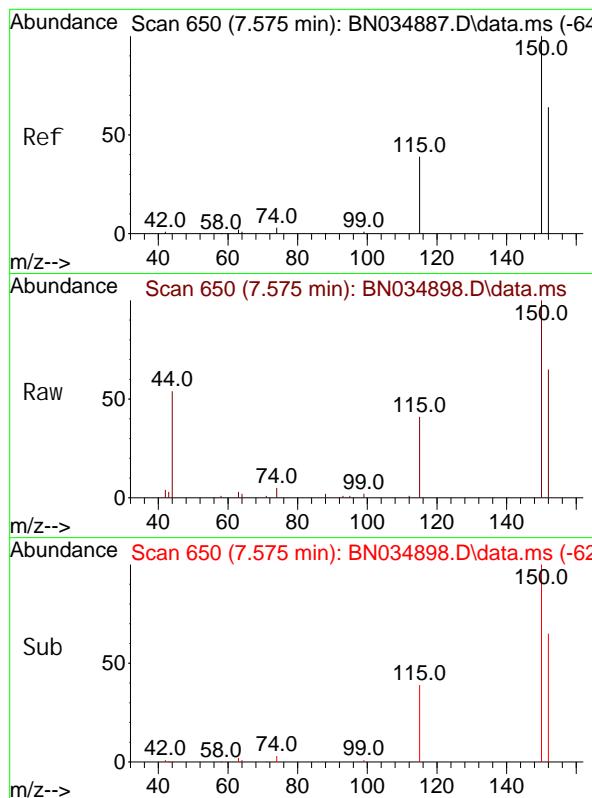
(#) = qual ifier out of range (m) = manual integration (+) = si gnals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA\_N\Data\BN110824\  
 Data File : BN034898.D  
 Acq On : 08 Nov 2024 08:29  
 Operator : RC/JU  
 Sample : SSTDCCC0.4  
 Misc :  
 ALS Vial : 2 Sample Multiplier: 1

**Instrument :**  
 BNA\_N  
**ClientSampleId :**  
 SSTDCCC0.4

Quant Time: Nov 08 09:57:12 2024  
 Quant Method : Z:\svoasrv\HPCHEM1\BNA\_N\Methods\8270-SIM-BN110724.M  
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION  
 QLast Update : Thu Nov 07 15:02:36 2024  
 Response via : Initial Calibration

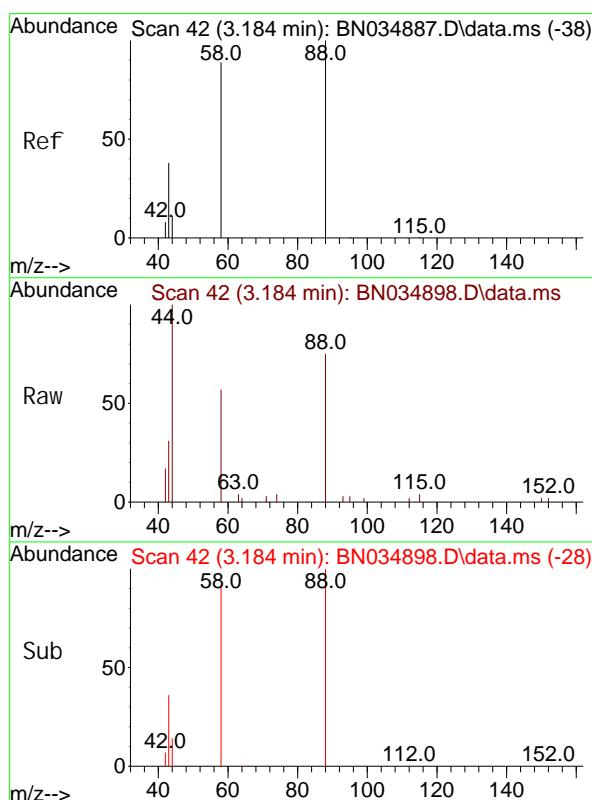
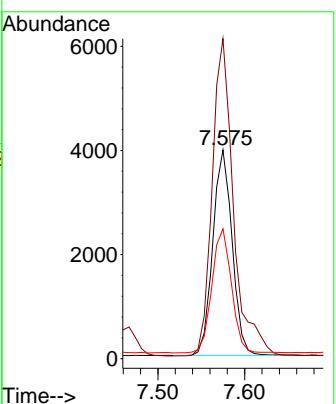




#1  
 1, 4-Di chl orobenzene-d4  
 Concen: 0.400 ng  
 RT: 7.575 min Scan# 6  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

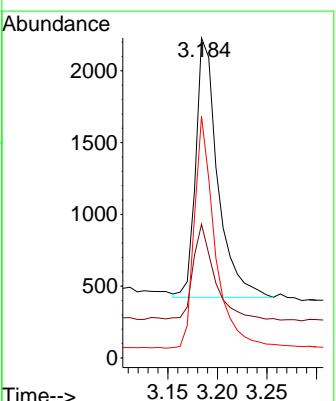
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

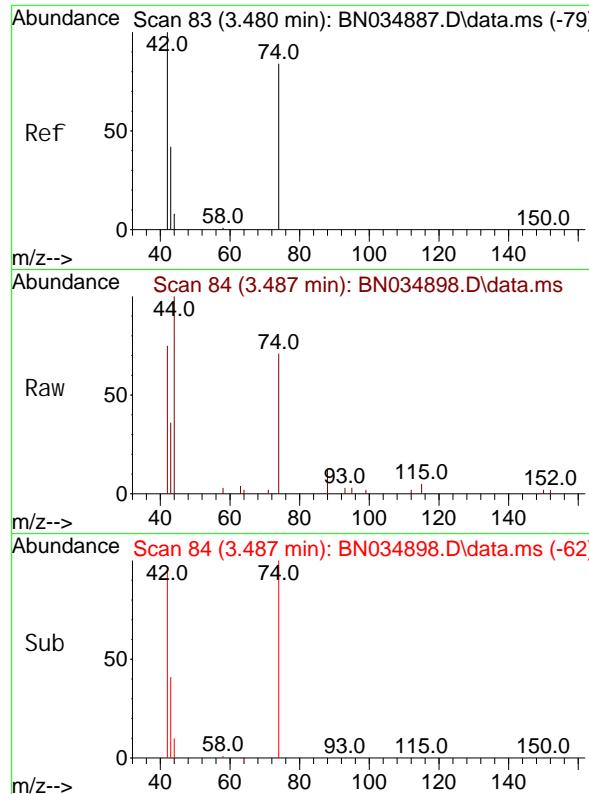
Tgt Ion: 152 Resp: 6102  
 Ion Ratio Lower Upper  
 152 100  
 150 153.3 124.4 186.6  
 115 62.3 50.5 75.7



#2  
 1, 4-Di oxane  
 Concen: 0.362 ng  
 RT: 3.184 min Scan# 42  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 88 Resp: 2791  
 Ion Ratio Lower Upper  
 88 100  
 43 34.8 28.2 42.2  
 58 84.1 67.1 100.7

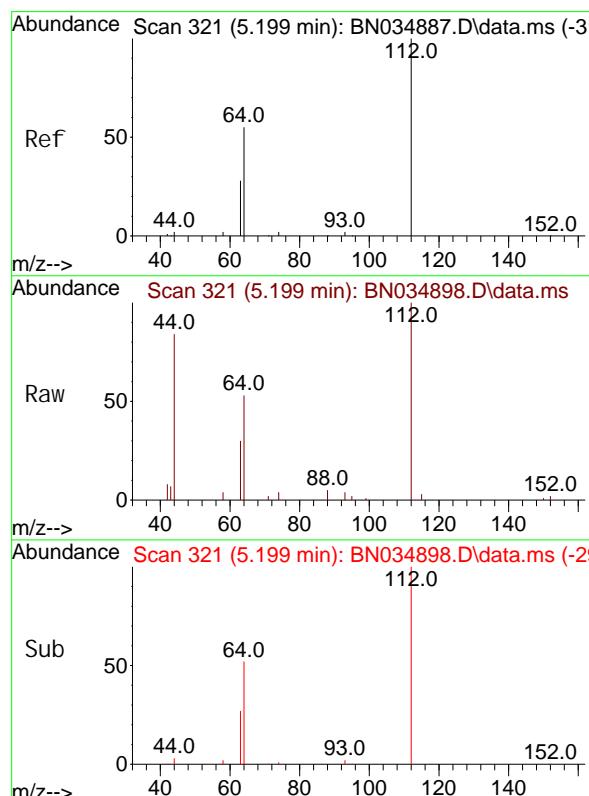
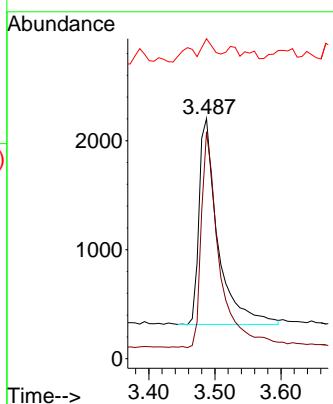




#3  
n-Ni trosodi methyl ami ne  
Concen: 0.357 ng  
RT: 3.487 min Scan# 8  
Delta R.T. 0.007 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

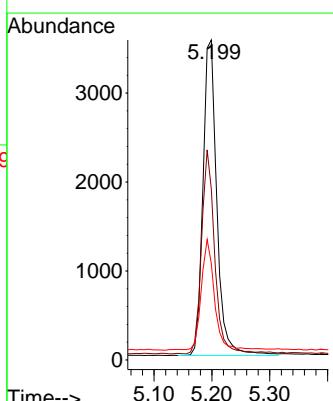
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**ClientSampleId :** SSTDCCC0.4

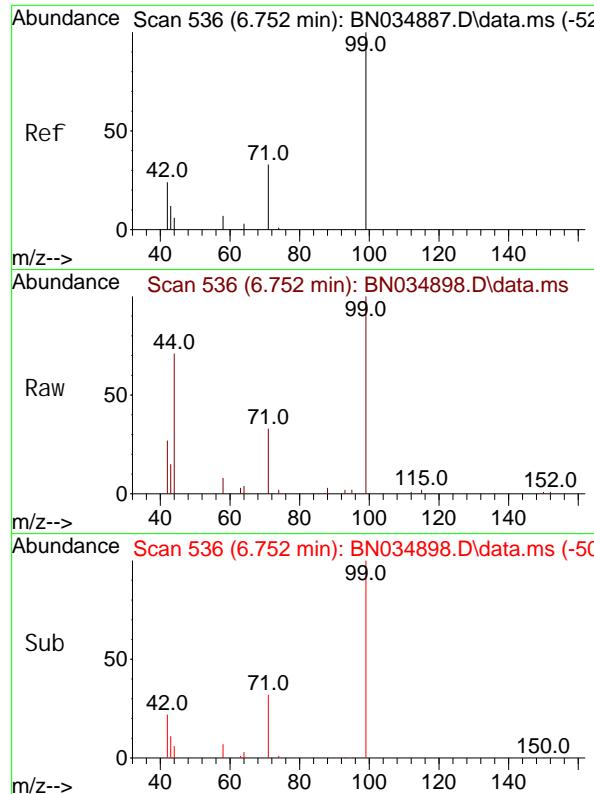
Tgt Ion: 42 Resp: 3715  
Ion Ratio Lower Upper  
42 100  
74 101.2 83.4 125.2  
44 5.6 8.6 12.8#



#4  
2-Fluorophenol  
Concen: 0.349 ng  
RT: 5.199 min Scan# 321  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion: 112 Resp: 5933  
Ion Ratio Lower Upper  
112 100  
64 60.9 49.6 74.4  
63 33.7 26.3 39.5

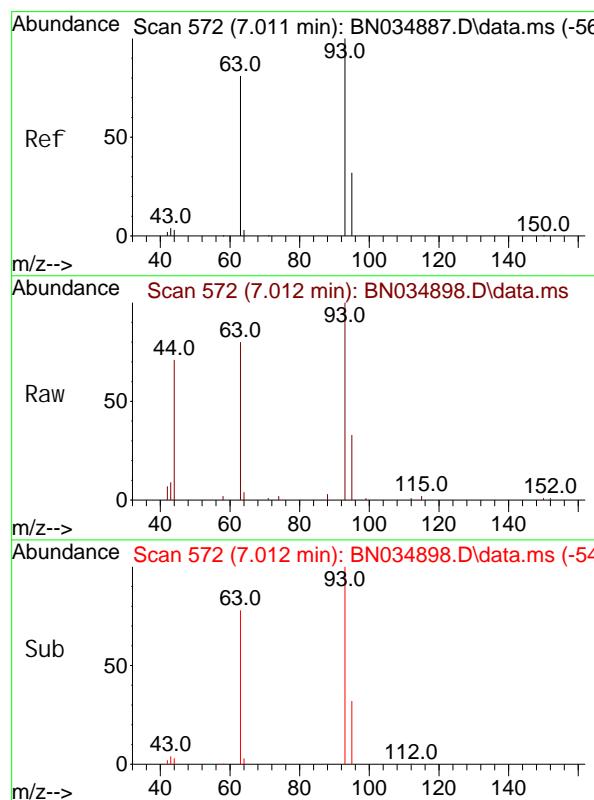
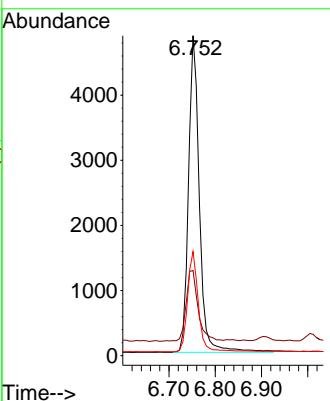




#5  
 Phenol -d6  
 Concen: 0.355 ng  
 RT: 6.752 min Scan# 5  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

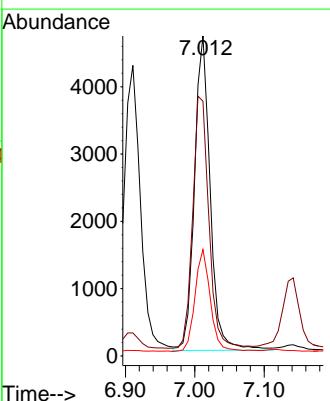
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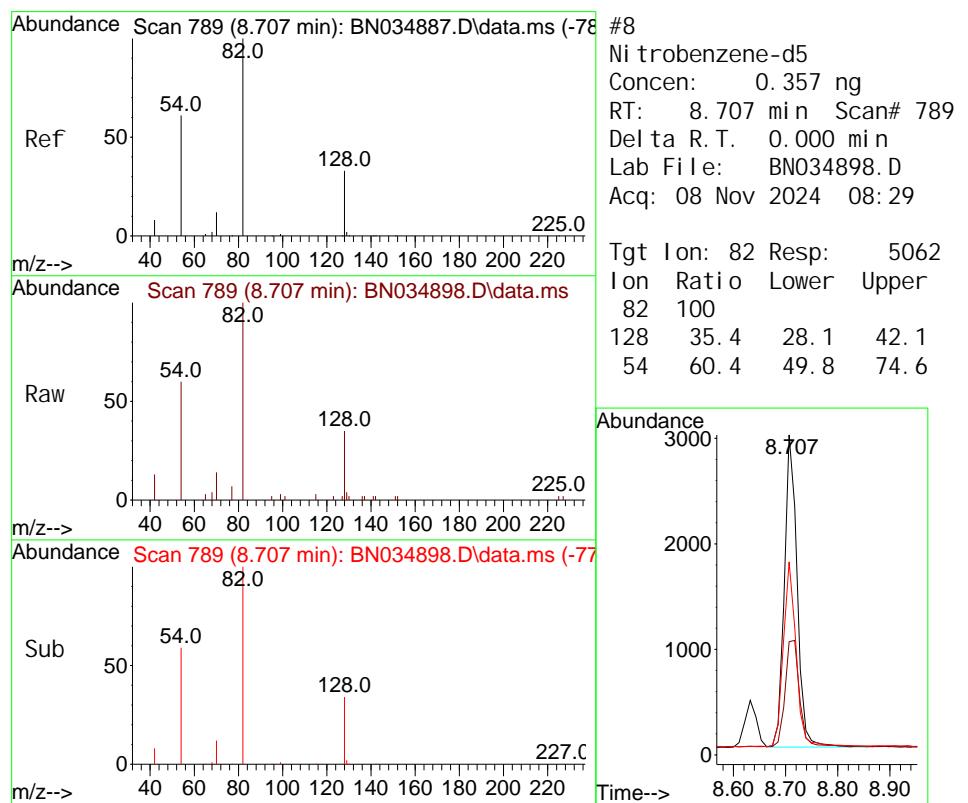
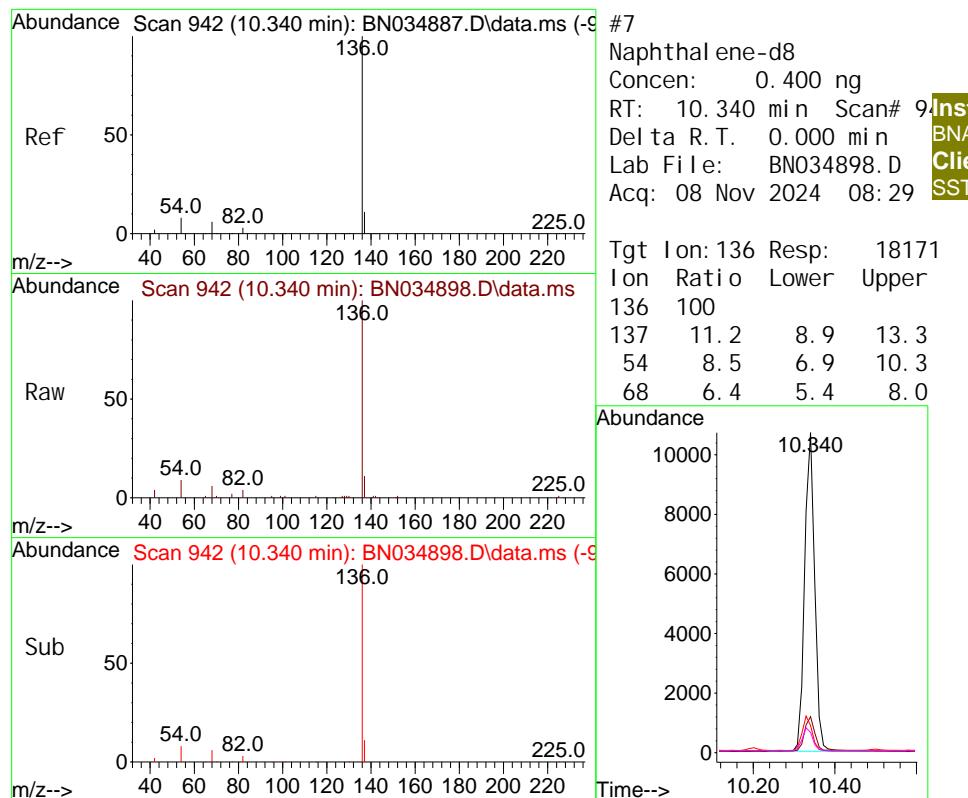
Tgt Ion: 99 Resp: 8011  
 Ion Ratio Lower Upper  
 99 100  
 42 24.7 20.2 30.2  
 71 31.4 25.4 38.0

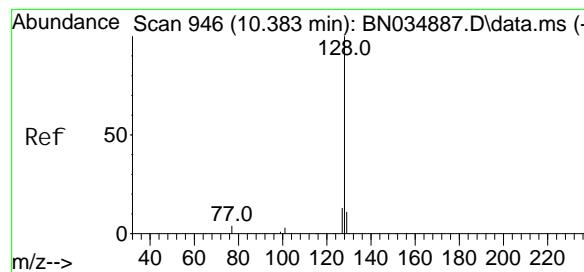


#6  
 bis(2-Chloroethyl)ether  
 Concen: 0.378 ng  
 RT: 7.012 min Scan# 572  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 93 Resp: 7371  
 Ion Ratio Lower Upper  
 93 100  
 63 82.3 67.5 101.3  
 95 31.7 25.7 38.5

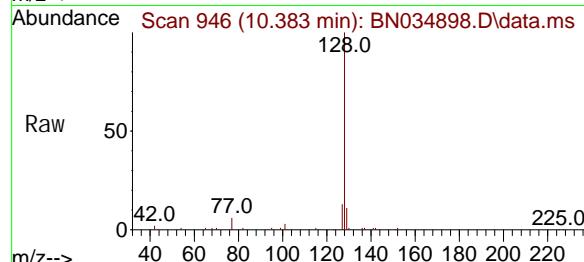




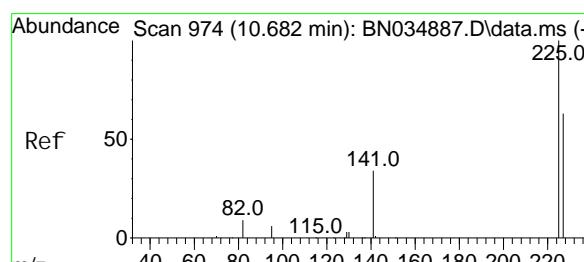
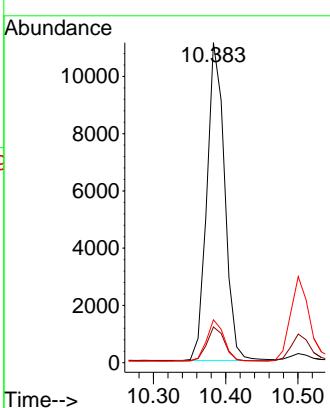
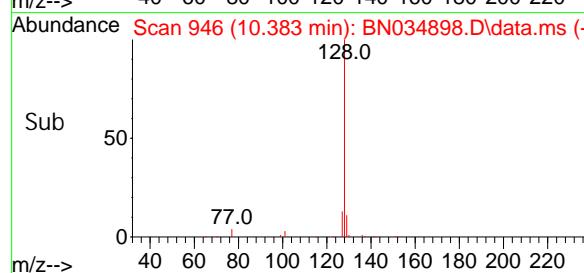


#9  
Naphthalene  
Concen: 0.377 ng  
RT: 10.383 min Scan# 9  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Instrument : BNA\_N  
ClientSampleId : SSTDCCC0.4

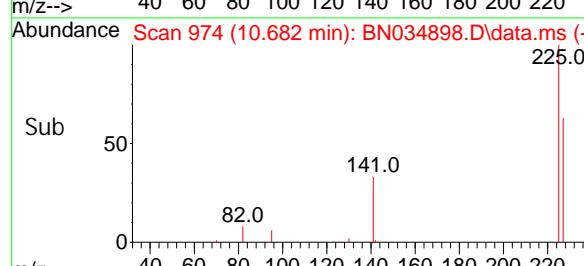
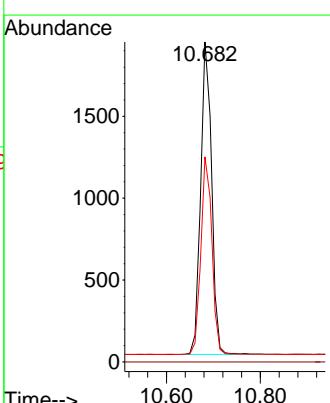
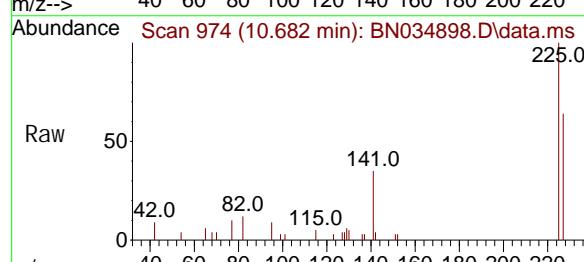


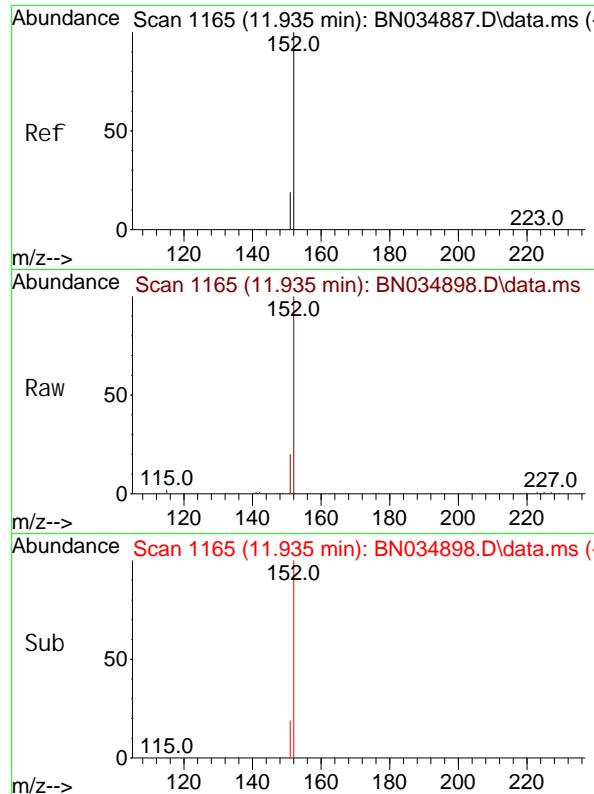
Tgt Ion: 128 Resp: 18988  
Ion Ratio Lower Upper  
128 100  
129 11.2 9.0 13.4  
127 13.4 10.8 16.2



#10  
Hexachlorobutadiene  
Concen: 0.383 ng  
RT: 10.682 min Scan# 974  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

Tgt Ion: 225 Resp: 3080  
Ion Ratio Lower Upper  
225 100  
223 0.0 0.0 0.0  
227 63.7 52.0 78.0

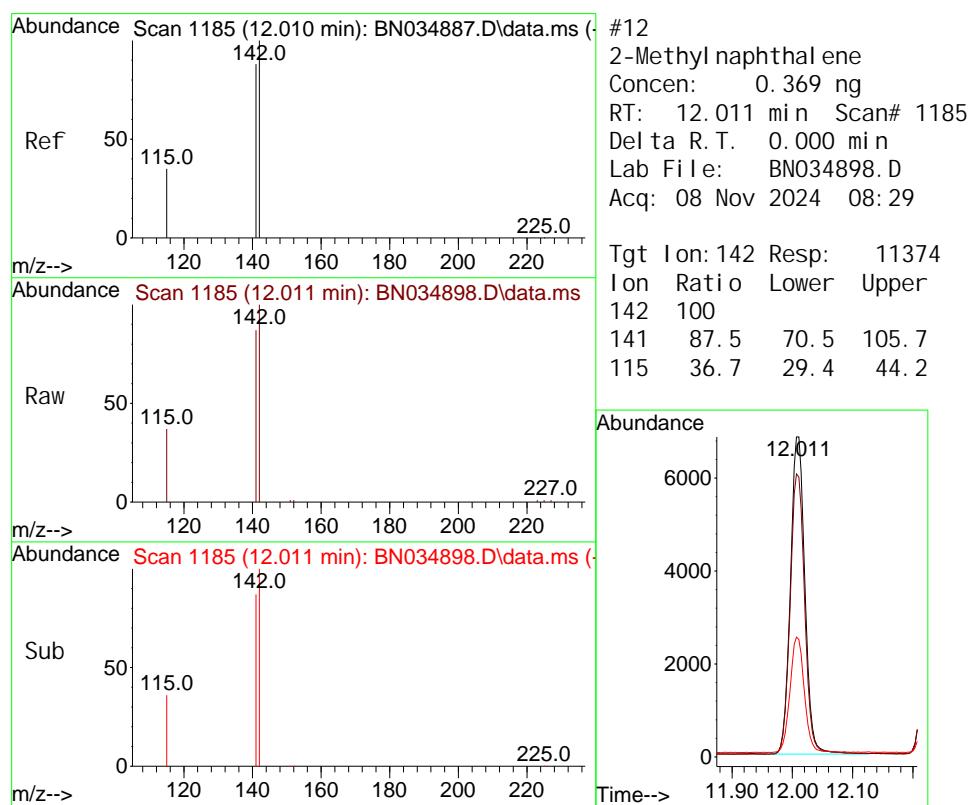
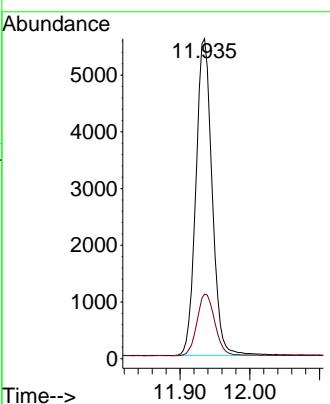




#11  
2-Methyl naphthalene-d10  
Concen: 0.364 ng  
RT: 11.935 min Scan# 1  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

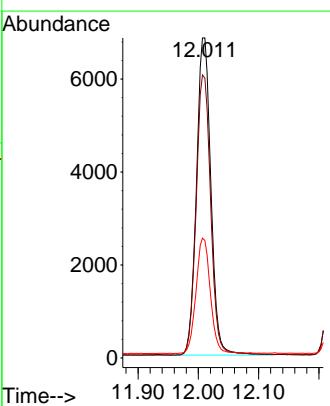
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**ClientSampleId :** SSTDCCC0.4

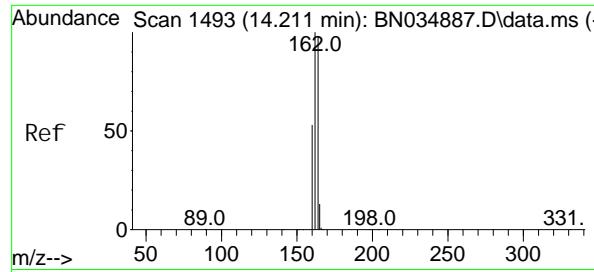
Tgt Ion: 152 Resp: 9015  
Ion Ratio Lower Upper  
152 100  
151 21.6 17.1 25.7



#12  
2-Methyl naphthalene  
Concen: 0.369 ng  
RT: 12.011 min Scan# 1185  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

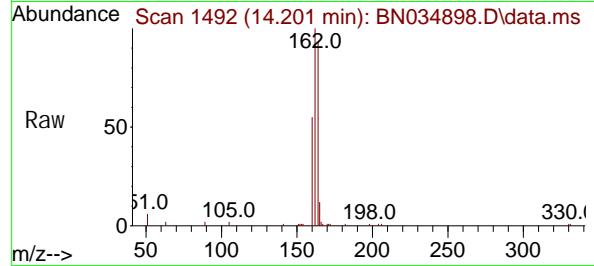
Tgt Ion: 142 Resp: 11374  
Ion Ratio Lower Upper  
142 100  
141 87.5 70.5 105.7  
115 36.7 29.4 44.2



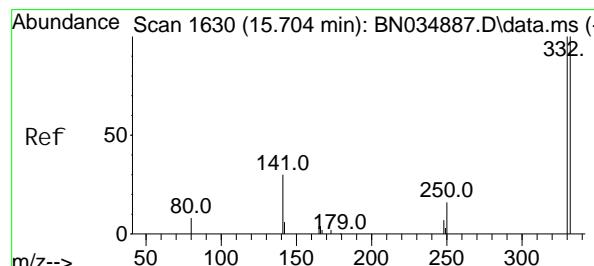
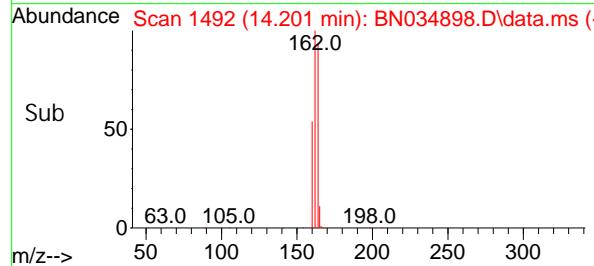
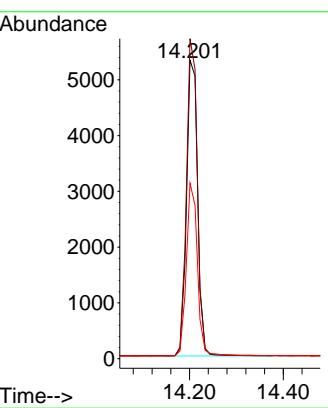


#13  
 Acenaphthene-d10  
 Concen: 0.400 ng  
 RT: 14.201 min Scan# 1  
 Delta R. T. -0.010 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

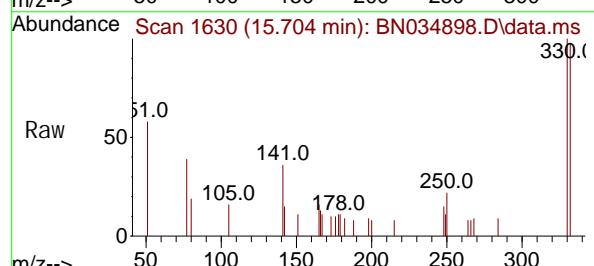
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**ClientSampleId :** SSTDCCC0.4



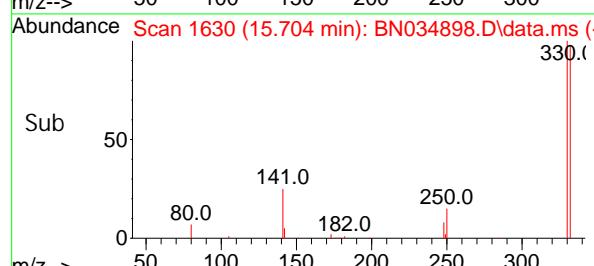
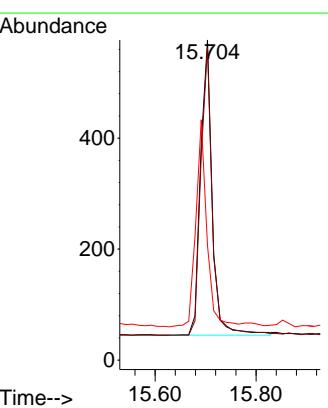
Tgt Ion: 164 Resp: 8711  
 Ion Ratio Lower Upper  
 164 100  
 162 107.2 81.9 122.9  
 160 58.8 43.5 65.3

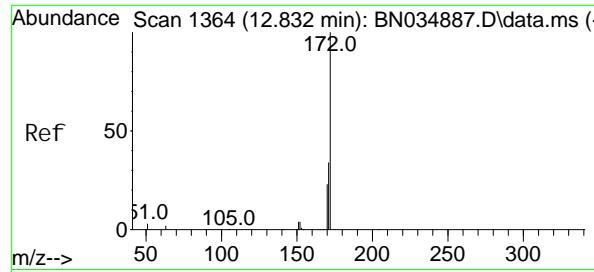


#14  
 2, 4, 6-Tri bromophenol  
 Concen: 0.375 ng  
 RT: 15.704 min Scan# 1630  
 Delta R. T. -0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29



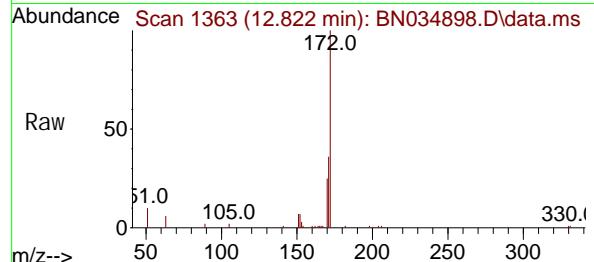
Tgt Ion: 330 Resp: 854  
 Ion Ratio Lower Upper  
 330 100  
 332 95.6 77.1 115.7  
 141 66.2 54.1 81.1



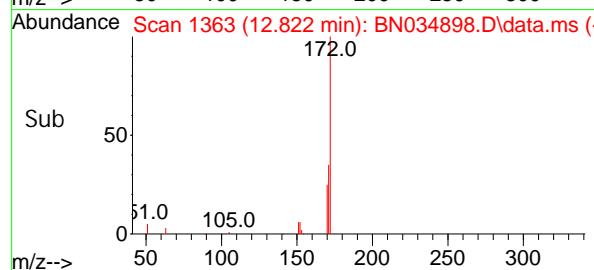
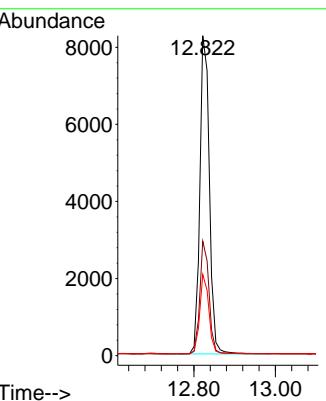


#15  
2-Fluorobiphenyl  
Concen: 0.364 ng  
RT: 12.822 min Scan# 1364  
Delta R.T. -0.010 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

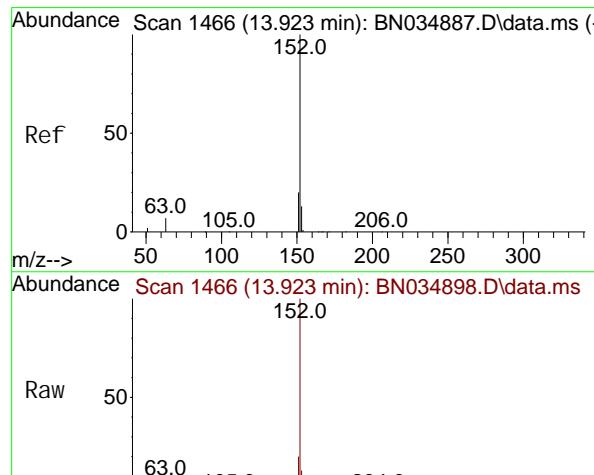
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**ClientSampleId :** SSTDCCC0.4



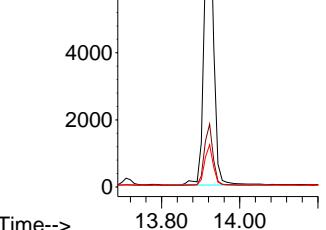
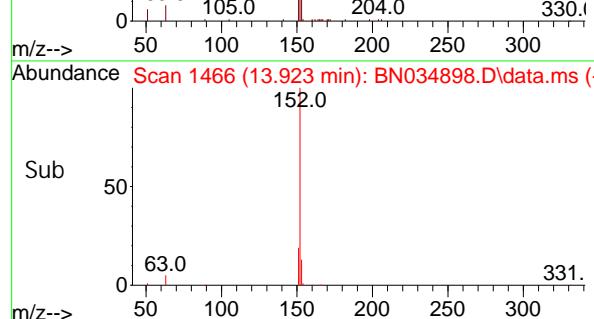
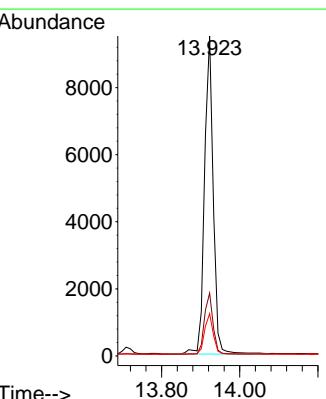
Tgt Ion: 172 Resp: 13376  
Ion Ratio Lower Upper  
172 100  
171 35.8 27.9 41.9  
170 25.4 19.0 28.4

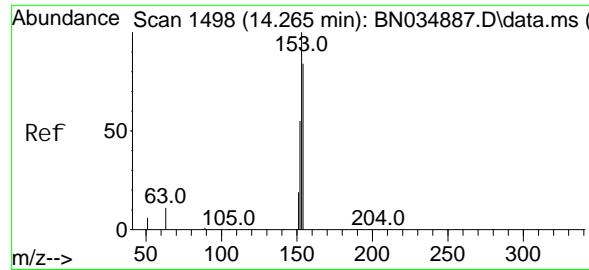


#16  
Acenaphthylene  
Concen: 0.350 ng  
RT: 13.923 min Scan# 1466  
Delta R.T. 0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29



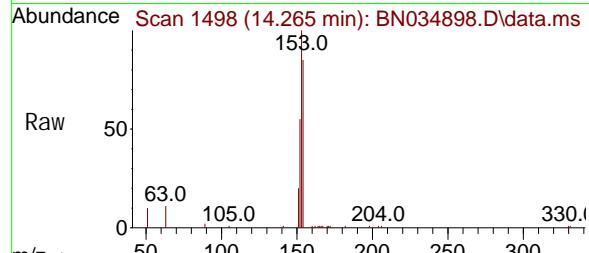
Tgt Ion: 152 Resp: 14701  
Ion Ratio Lower Upper  
152 100  
151 19.1 15.2 22.8  
153 12.7 10.4 15.6



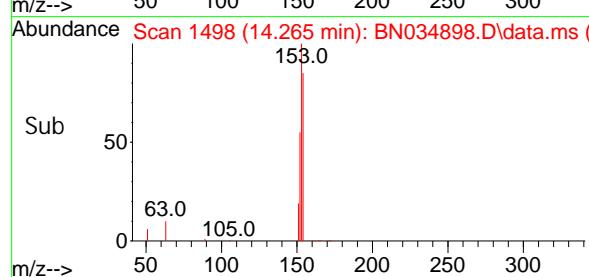
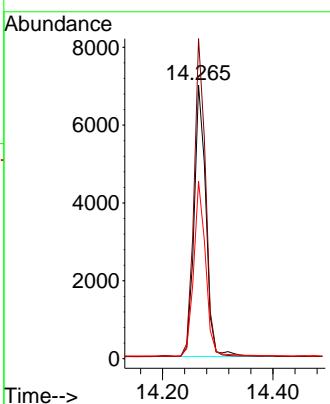


#17  
 Acenaphthene  
 Concen: 0.356 ng  
 RT: 14.265 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

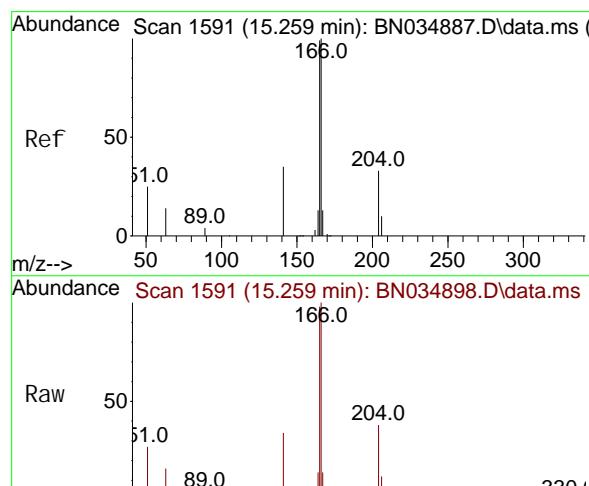
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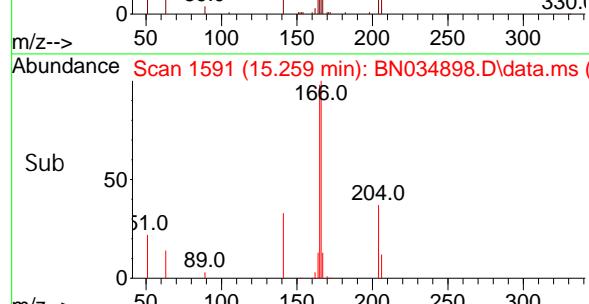
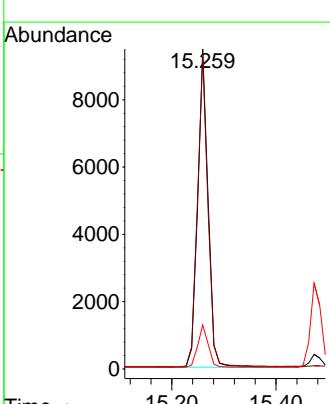
Tgt Ion: 154 Resp: 10362  
 Ion Ratio Lower Upper  
 154 100  
 153 115.3 92.2 138.2  
 152 64.9 51.1 76.7

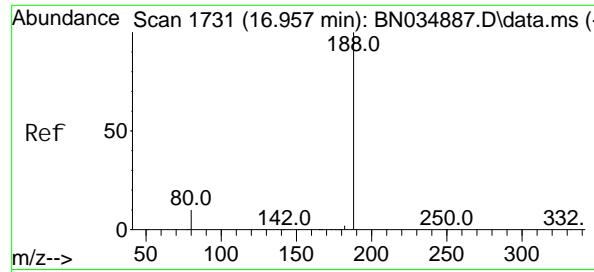


#18  
 Fluorene  
 Concen: 0.362 ng  
 RT: 15.259 min Scan# 1591  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29



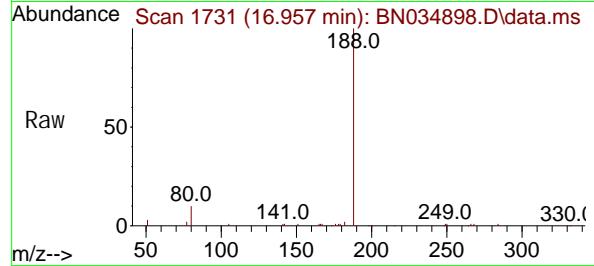
Tgt Ion: 166 Resp: 13094  
 Ion Ratio Lower Upper  
 166 100  
 165 98.8 79.5 119.3  
 167 13.3 10.6 16.0



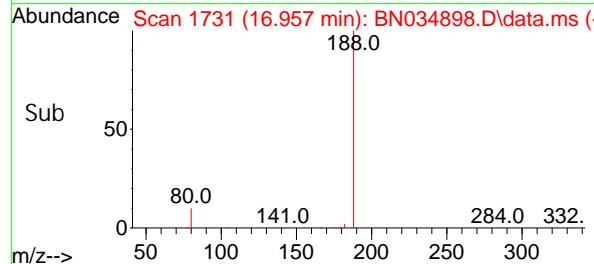
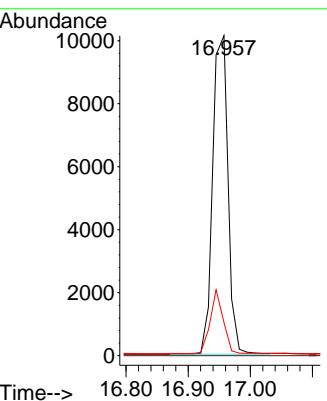


#19  
 Phenanthrene-d10  
 Concen: 0.400 ng  
 RT: 16.957 min Scan# 1  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

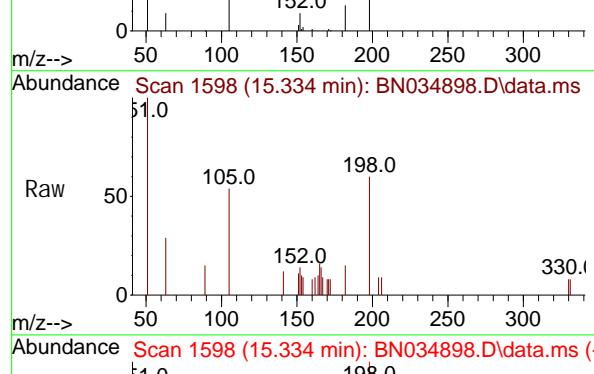
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4



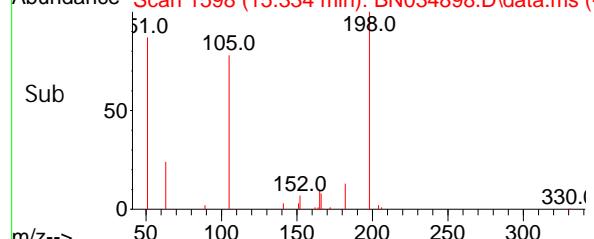
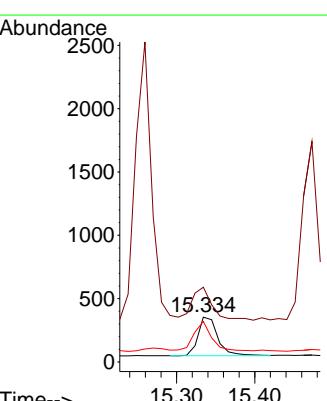
Tgt Ion: 188 Resp: 17291  
 Ion Ratio Lower Upper  
 188 100  
 94 0.0 0.0 0.0  
 80 10.4 8.6 12.8

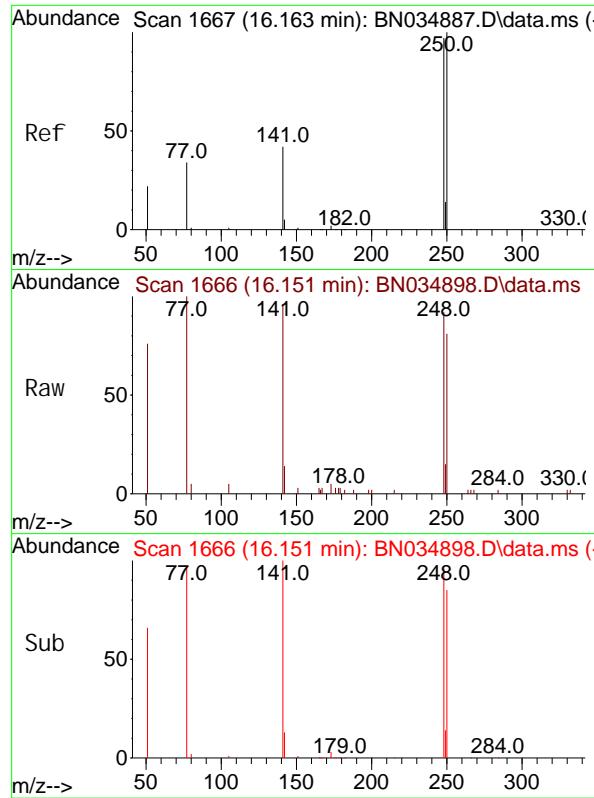


#20  
 4, 6-Di nitro-2-methyl phenol  
 Concen: 0.355 ng  
 RT: 15.334 min Scan# 1598  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29



Tgt Ion: 198 Resp: 538  
 Ion Ratio Lower Upper  
 198 100  
 51 166.7 141.8 212.8  
 105 90.4 75.6 113.4

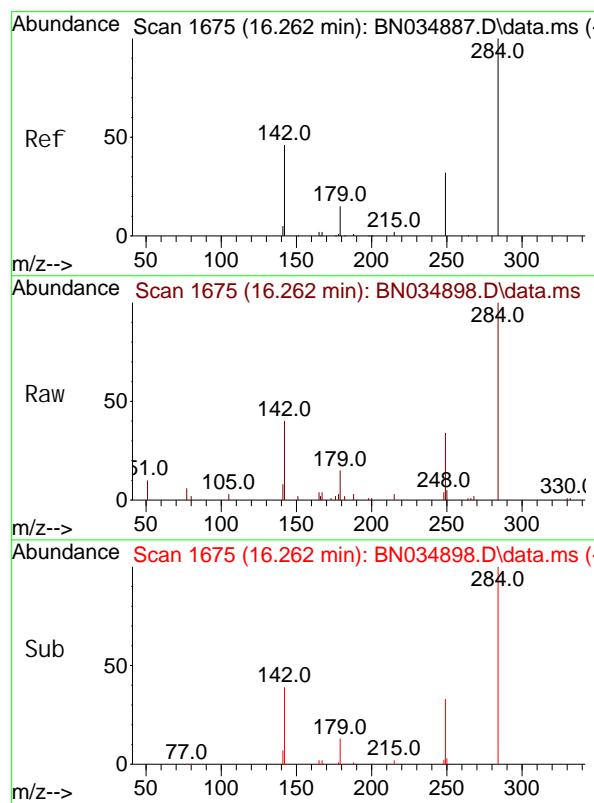
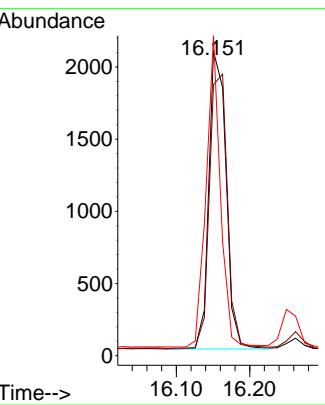




#21  
 4-Bromophenyl -phenyl ether  
 Concen: 0.364 ng  
 RT: 16.151 min Scan# 1  
 Delta R.T. -0.012 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

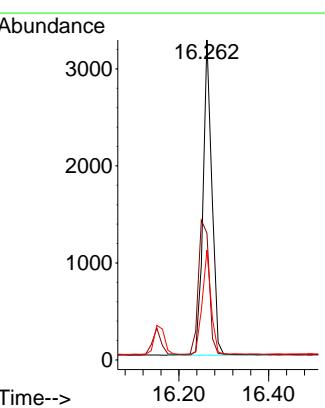
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

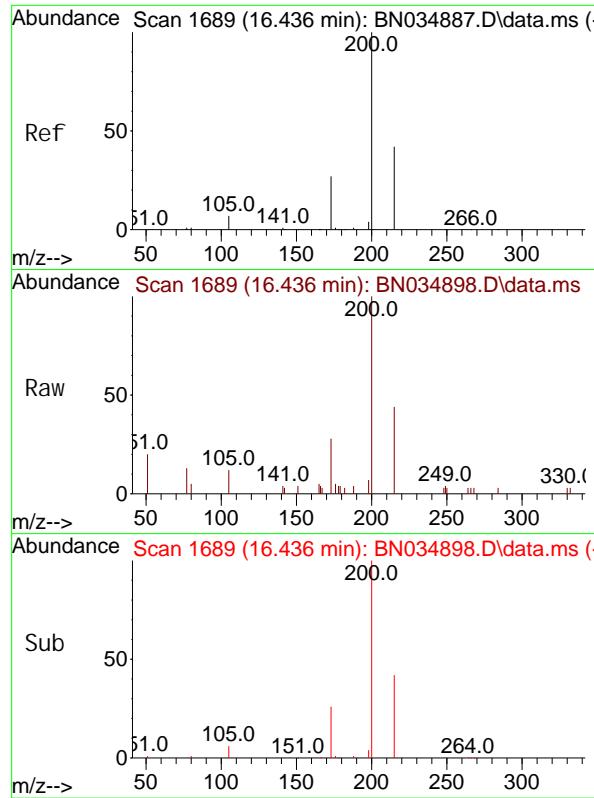
Tgt Ion: 248 Resp: 3355  
 Ion Ratio Lower Upper  
 248 100  
 250 89.0 82.2 123.4  
 141 105.1 36.2 54.2#



#22  
 Hexachlorobenzene  
 Concen: 0.398 ng  
 RT: 16.262 min Scan# 1675  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 284 Resp: 4416  
 Ion Ratio Lower Upper  
 284 100  
 142 51.9 43.4 65.2  
 249 32.6 25.8 38.6

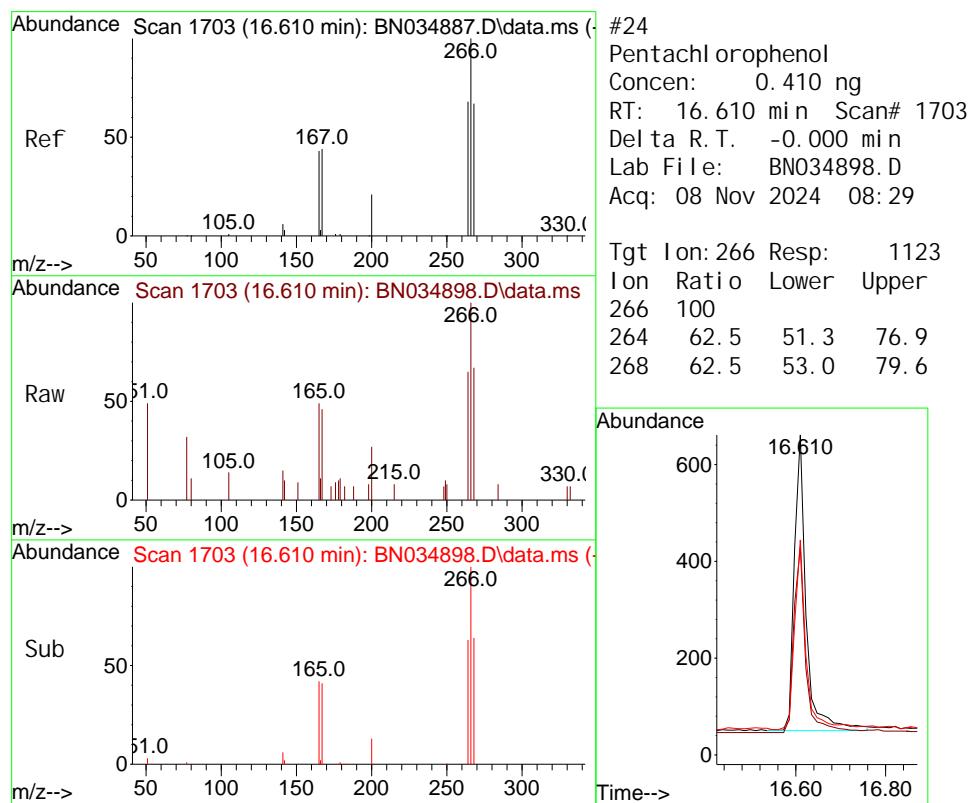
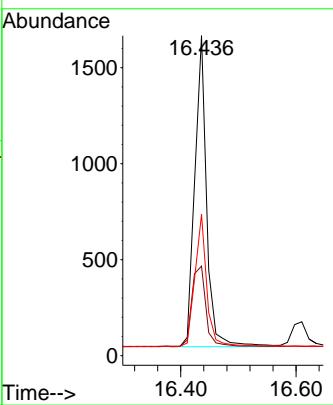




#23  
 Atrazine  
 Concen: 0.348 ng  
 RT: 16.436 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

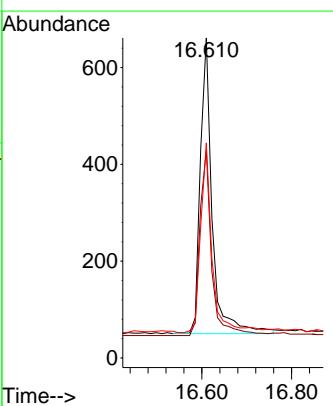
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

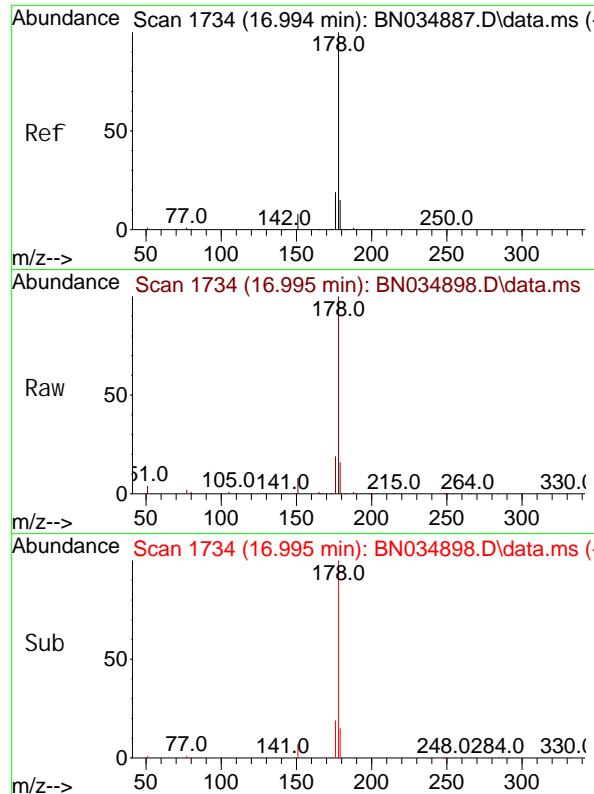
Tgt	Ion: 200	Resp:	2322
Ion Ratio	Lower	Upper	
200	100		
173	23.4	35.2	
215	35.4	53.0	



#24  
 Pentachlorophenol  
 Concen: 0.410 ng  
 RT: 16.610 min Scan# 1703  
 Delta R.T. -0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt	Ion: 266	Resp:	1123
Ion Ratio	Lower	Upper	
266	100		
264	51.3	76.9	
268	53.0	79.6	

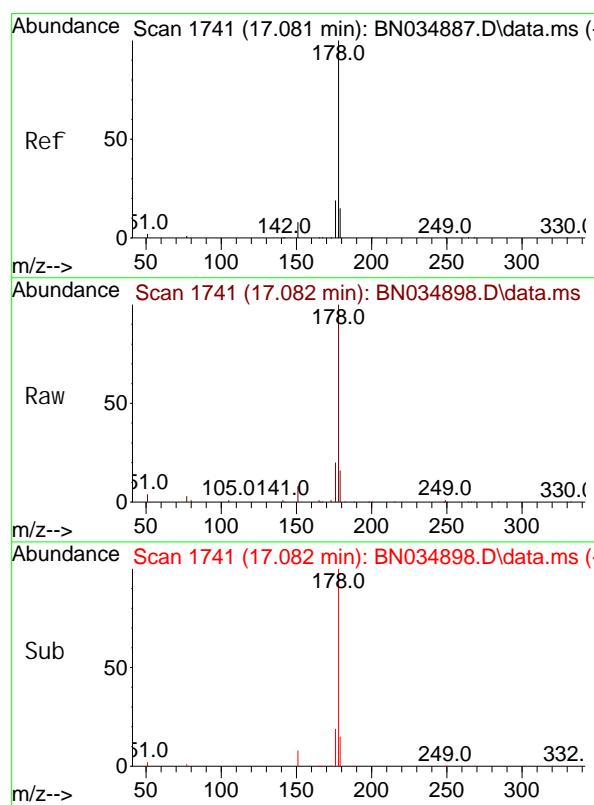
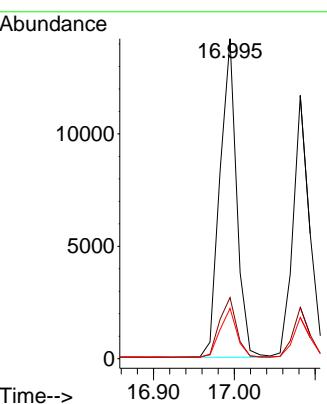




#25  
 Phenanthrene  
 Concen: 0.385 ng  
 RT: 16.995 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

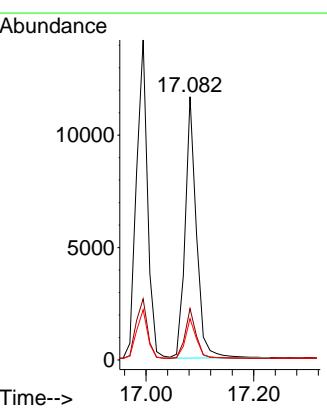
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

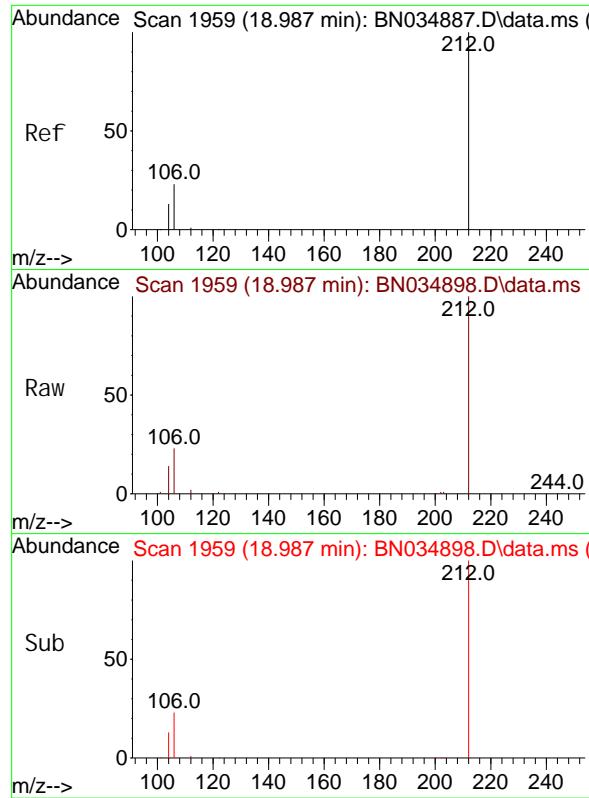
Tgt Ion: 178 Resp: 20416  
 Ion Ratio Lower Upper  
 178 100  
 176 19.3 15.5 23.3  
 179 15.5 12.2 18.2



#26  
 Anthracene  
 Concen: 0.370 ng  
 RT: 17.082 min Scan# 1741  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 178 Resp: 16914  
 Ion Ratio Lower Upper  
 178 100  
 176 18.8 15.0 22.6  
 179 15.3 12.1 18.1

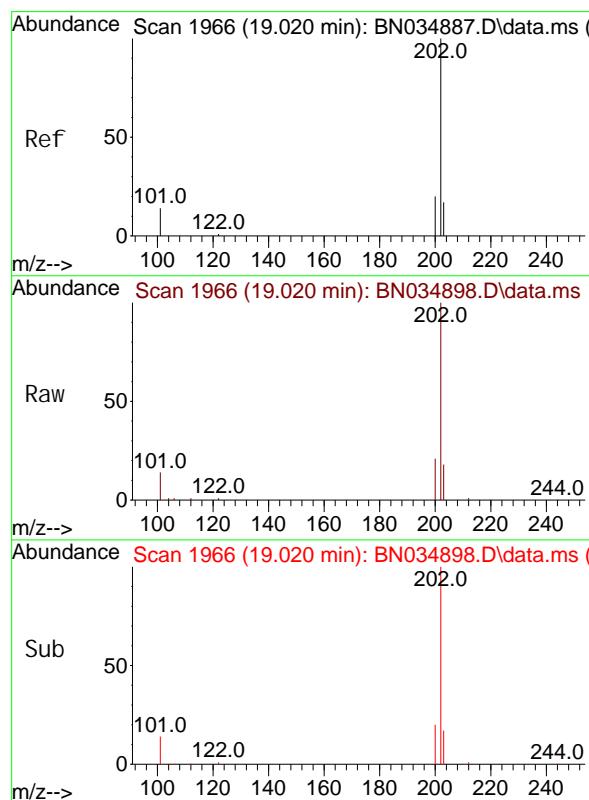
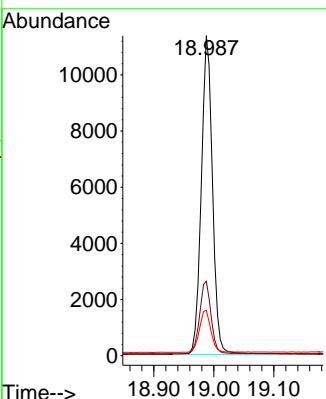




#27  
 Fluoranthene-d10  
 Concen: 0.378 ng  
 RT: 18.987 min Scan# 1  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

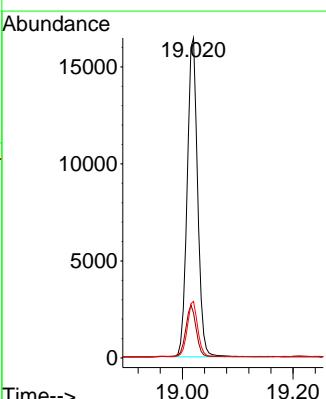
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

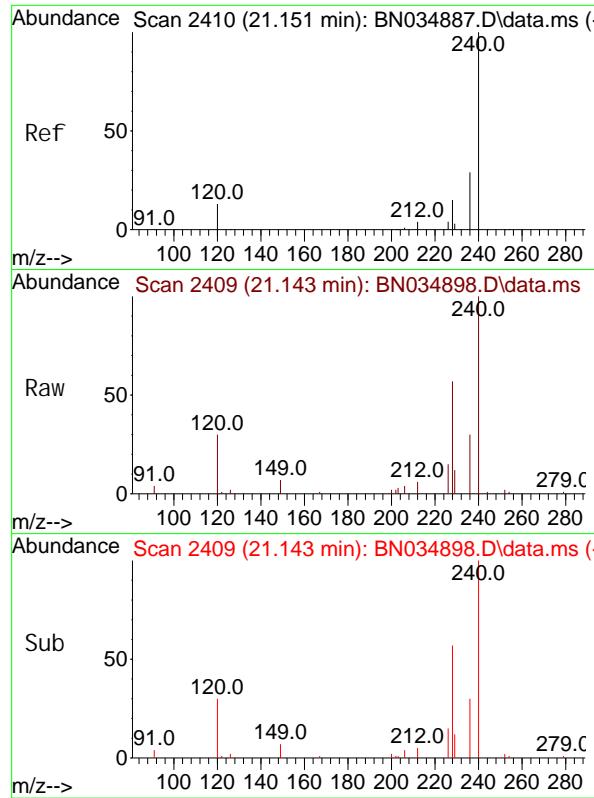
Tgt Ion: 212 Resp: 14727  
 Ion Ratio Lower Upper  
 212 100  
 106 23.1 18.2 27.4  
 104 13.5 10.6 15.8



#28  
 Fluoranthene  
 Concen: 0.386 ng  
 RT: 19.020 min Scan# 1966  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 202 Resp: 21528  
 Ion Ratio Lower Upper  
 202 100  
 101 16.2 12.7 19.1  
 203 17.1 13.7 20.5

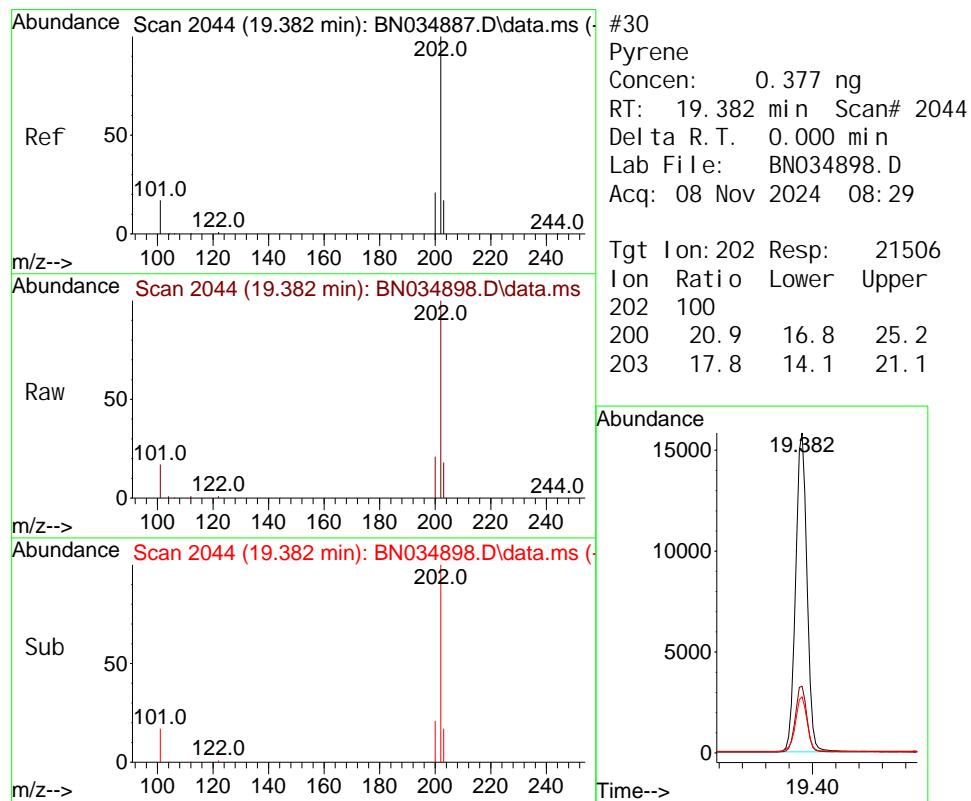
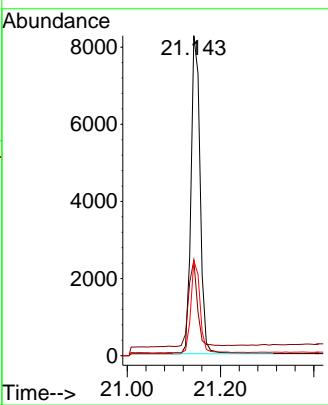




#29  
 Chrysene-d12  
 Concen: 0.400 ng  
 RT: 21.143 min Scan# 2  
 Delta R.T. -0.009 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

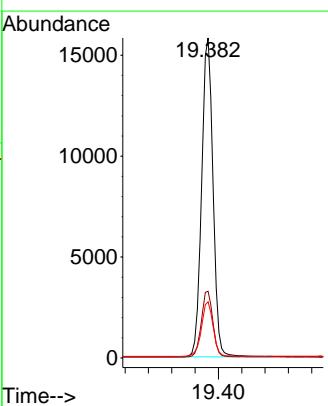
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

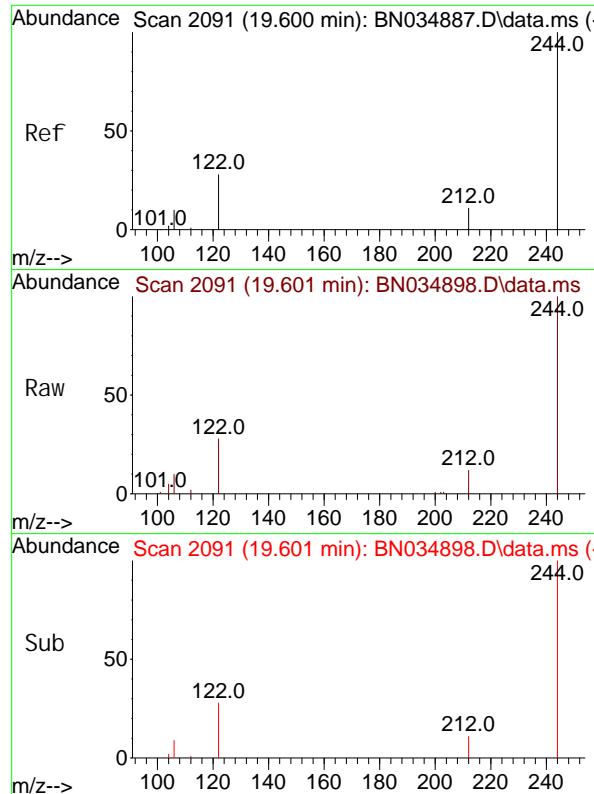
Tgt	Ion: 240	Resp:	11255
Ion	Ratio	Lower	Upper
240	100		
120	29.8	13.8	20.8#
236	29.7	23.8	35.6



#30  
 Pyrene  
 Concen: 0.377 ng  
 RT: 19.382 min Scan# 2044  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt	Ion: 202	Resp:	21506
Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.8	25.2
203	17.8	14.1	21.1

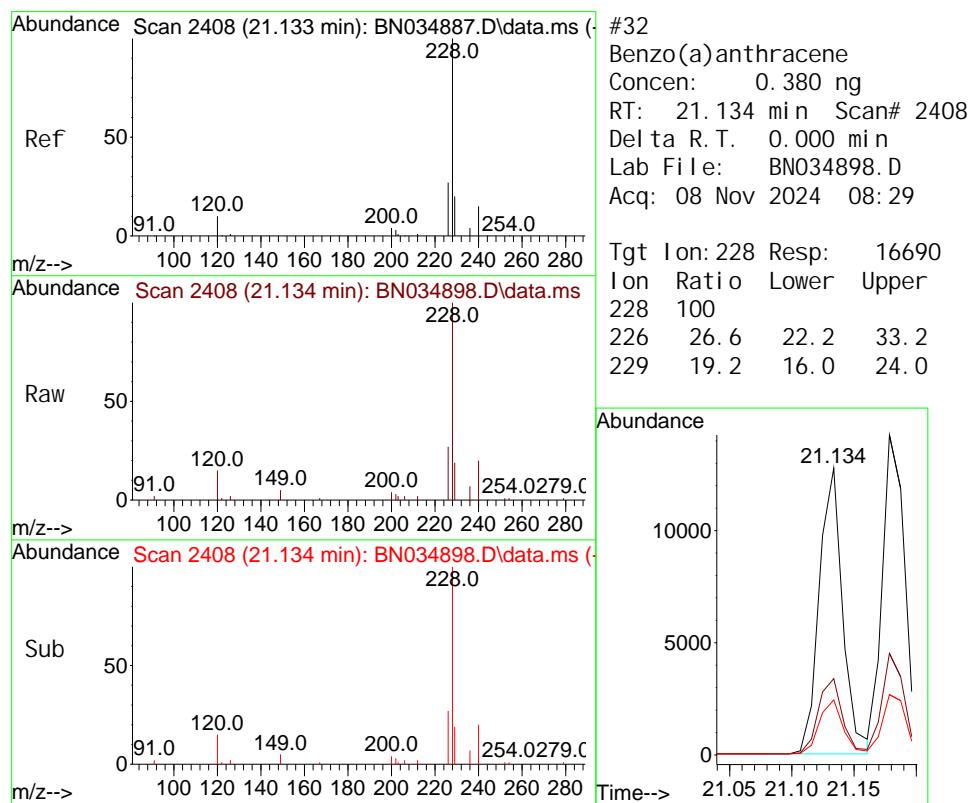
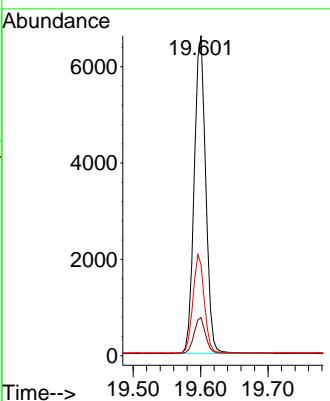




#31  
 Terphenyl -d14  
 Concen: 0.372 ng  
 RT: 19.601 min Scan# 2  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

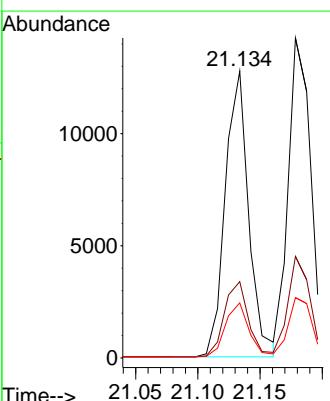
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

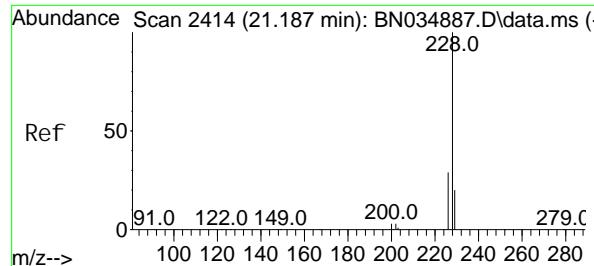
Tgt Ion: 244 Resp: 7841  
 Ion Ratio Lower Upper  
 244 100  
 212 11.9 9.4 14.0  
 122 28.5 23.0 34.4



#32  
 Benzo(a)anthracene  
 Concen: 0.380 ng  
 RT: 21.134 min Scan# 2408  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

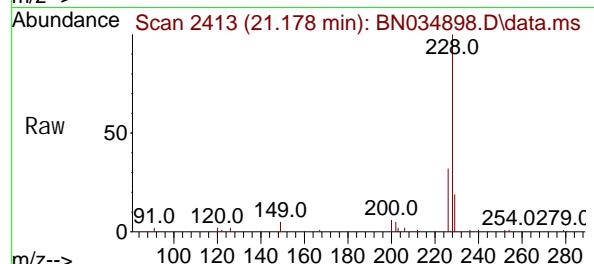
Tgt Ion: 228 Resp: 16690  
 Ion Ratio Lower Upper  
 228 100  
 226 26.6 22.2 33.2  
 229 19.2 16.0 24.0



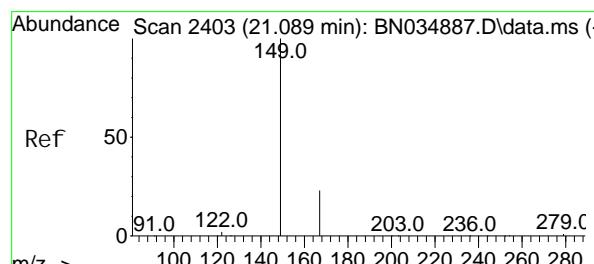
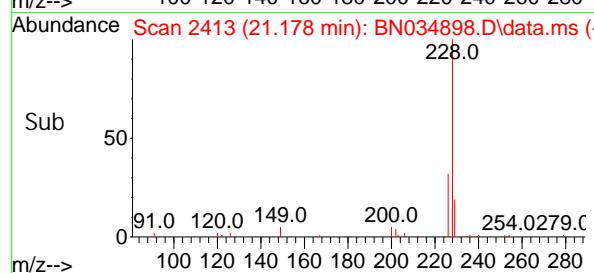
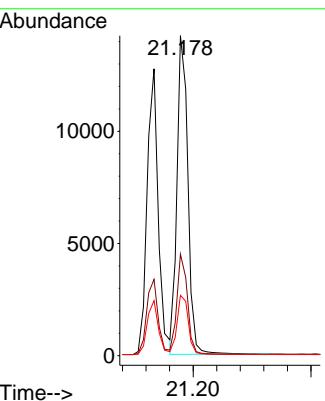


#33  
Chrysene  
Concen: 0.394 ng  
RT: 21.178 min Scan# 2  
Delta R. T. -0.009 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29

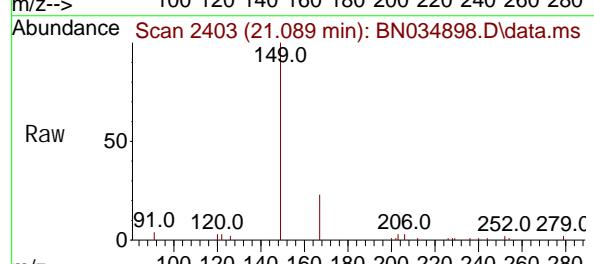
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4



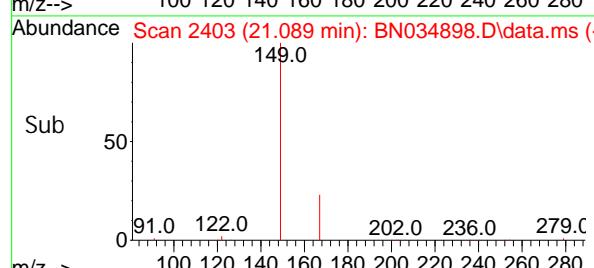
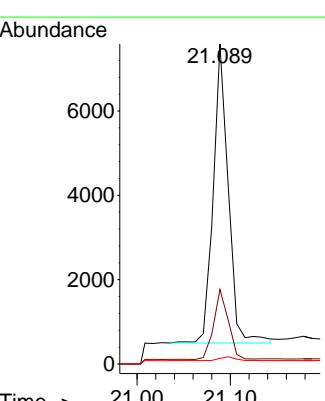
Tgt Ion: 228 Resp: 18283  
Ion Ratio Lower Upper  
228 100  
226 31.8 23.7 35.5  
229 18.8 16.3 24.5

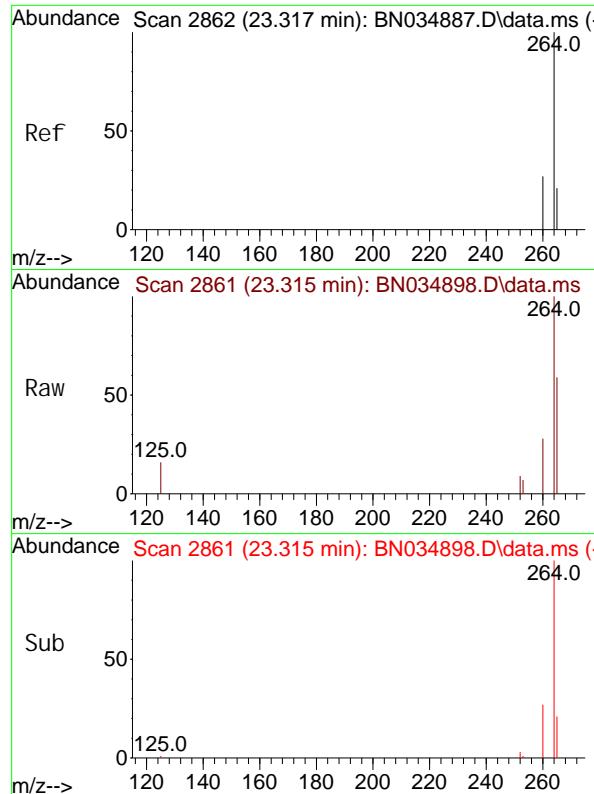


#34  
Bi s(2-ethyl hexyl )phthal ate  
Concen: 0.315 ng  
RT: 21.089 min Scan# 2403  
Delta R. T. -0.000 min  
Lab File: BN034898.D  
Acq: 08 Nov 2024 08:29



Tgt Ion: 149 Resp: 7924  
Ion Ratio Lower Upper  
149 100  
167 22.7 18.1 27.1  
279 1.6 1.2 1.8

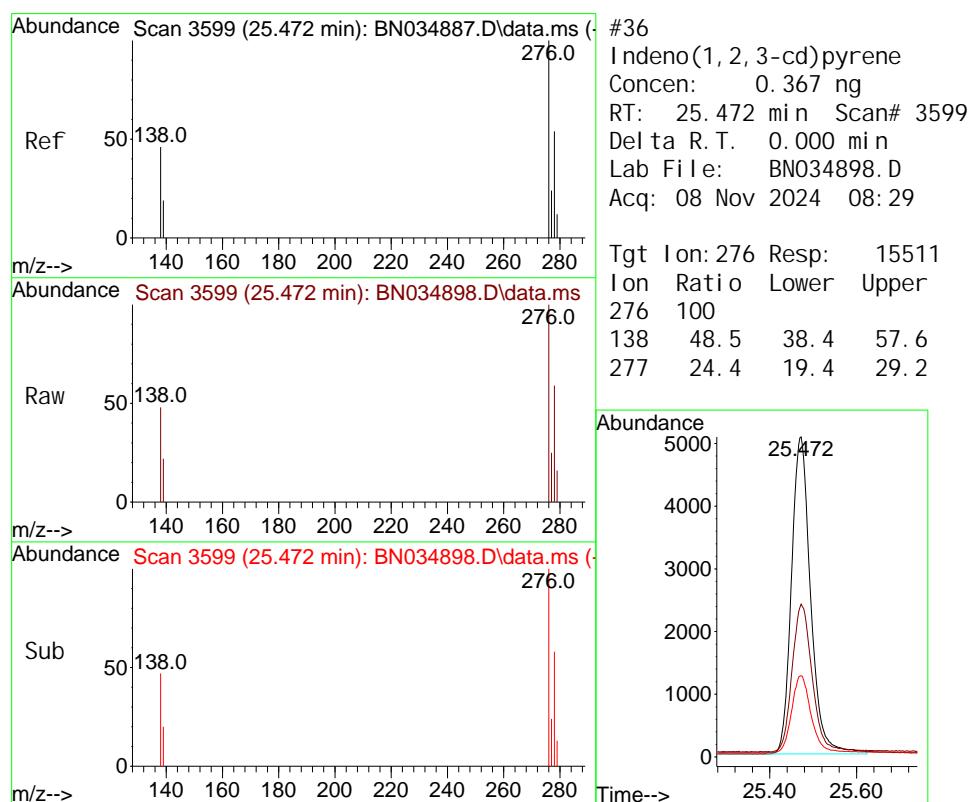
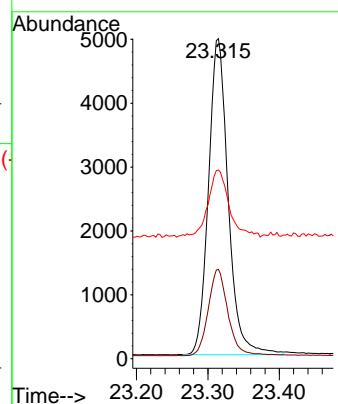




#35  
 Perylene-d<sub>12</sub>  
 Concen: 0.400 ng  
 RT: 23.315 min Scan# 2  
 Delta R. T. -0.003 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

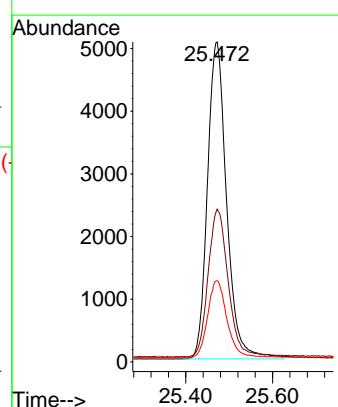
Instrument : BNA\_N  
 ClientSampleId : SSTDCCC0.4

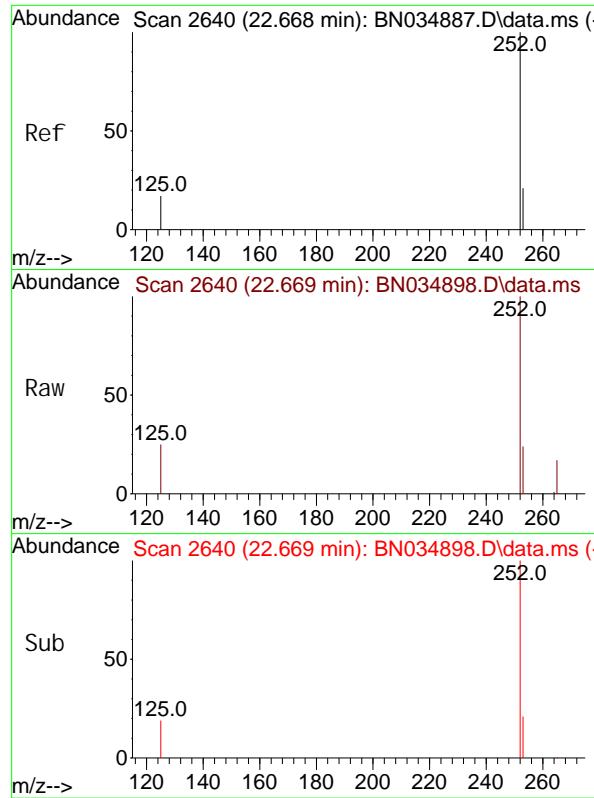
Tgt Ion: 264 Resp: 9481  
 Ion Ratio Lower Upper  
 264 100  
 260 27.9 22.2 33.2  
 265 58.9 60.9 91.3#



#36  
 Indeno(1, 2, 3-cd)pyrene  
 Concen: 0.367 ng  
 RT: 25.472 min Scan# 3599  
 Delta R. T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 276 Resp: 15511  
 Ion Ratio Lower Upper  
 276 100  
 138 48.5 38.4 57.6  
 277 24.4 19.4 29.2

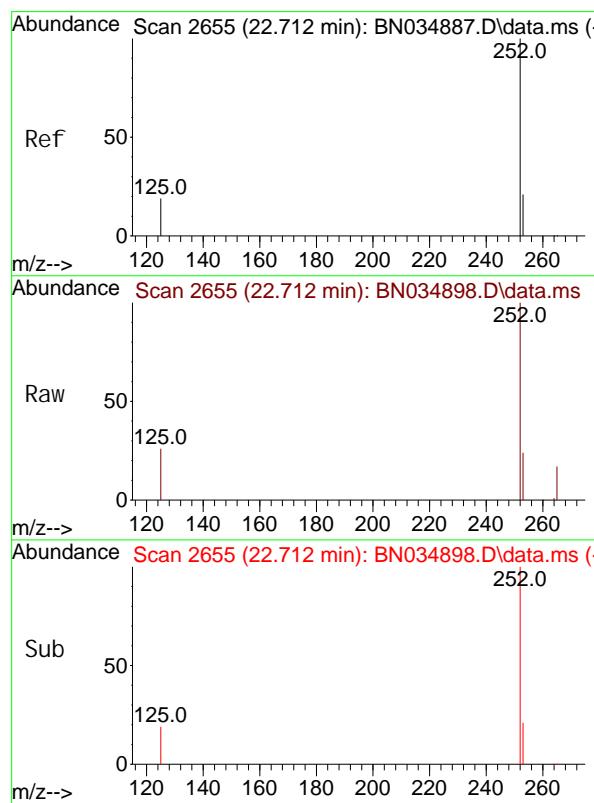
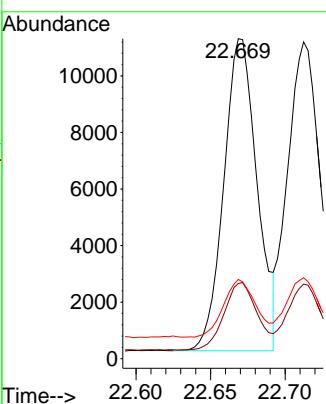




#37  
 Benzo(b)fluoranthene  
 Concen: 0.412 ng  
 RT: 22.669 min Scan# 2  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

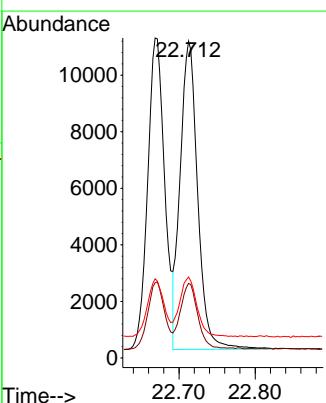
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

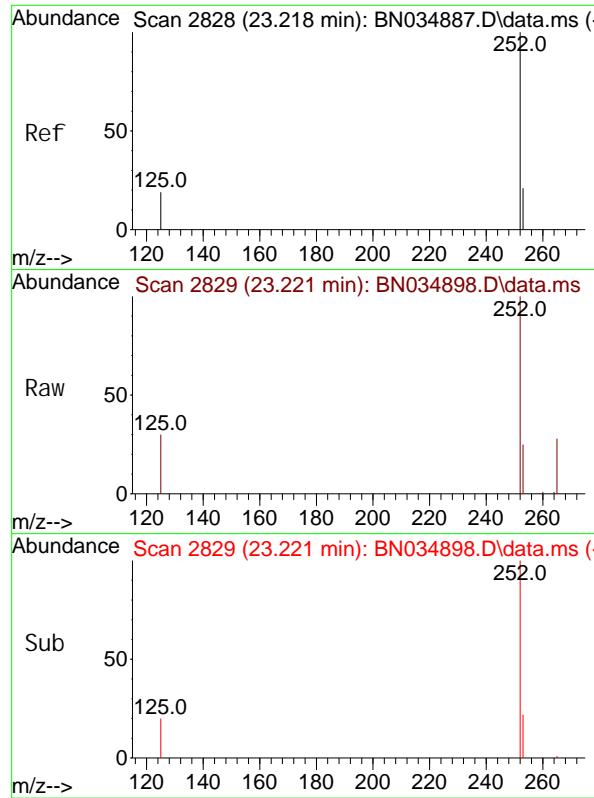
Tgt Ion: 252 Resp: 17145  
 Ion Ratio Lower Upper  
 252 100  
 253 23.5 19.4 29.2  
 125 24.7 21.4 32.2



#38  
 Benzo(k)fluoranthene  
 Concen: 0.401 ng  
 RT: 22.712 min Scan# 2655  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 252 Resp: 17383  
 Ion Ratio Lower Upper  
 252 100  
 253 23.5 19.8 29.8  
 125 25.6 22.6 33.8

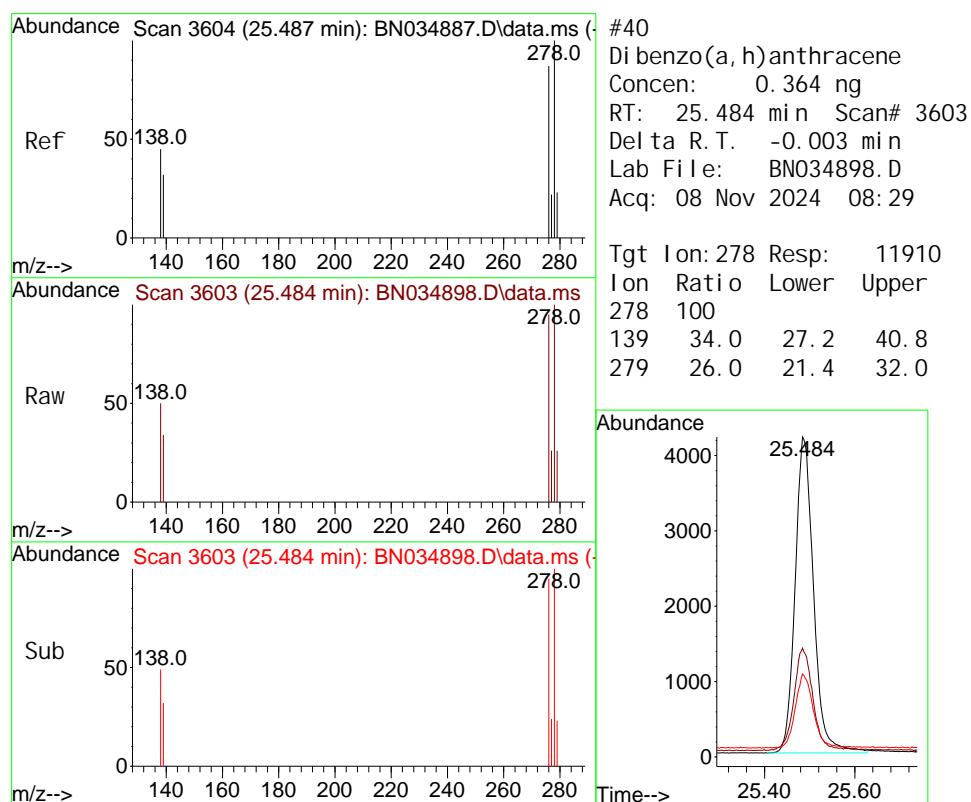
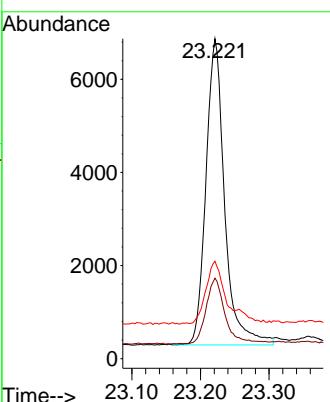




#39  
 Benzo(a)pyrene  
 Concen: 0.377 ng  
 RT: 23.221 min Scan# 2  
 Delta R. T. 0.003 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

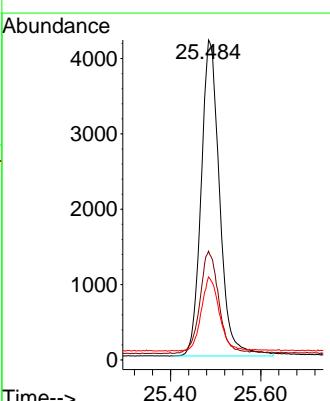
**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCC0.4

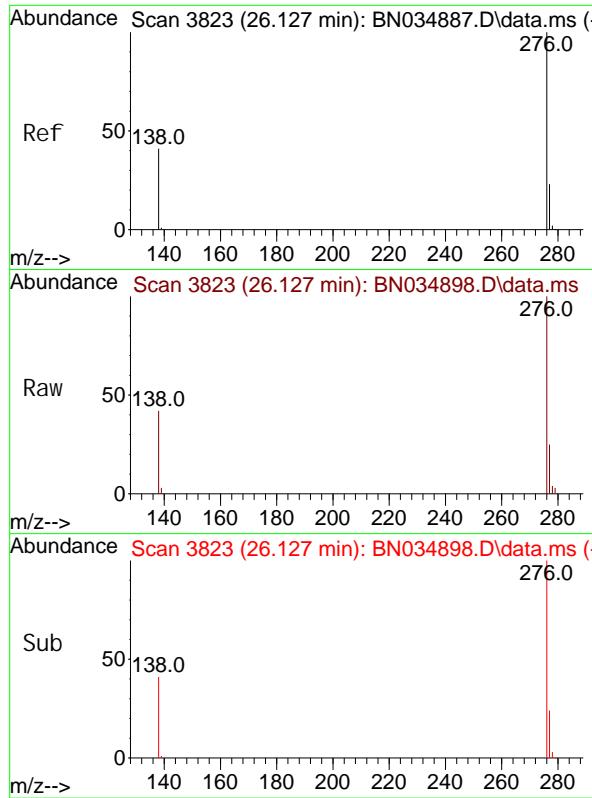
Tgt Ion: 252 Resp: 12460  
 Ion Ratio Lower Upper  
 252 100  
 253 25.1 21.4 32.2  
 125 30.4 27.8 41.6



#40  
 Di benzo(a, h)anthracene  
 Concen: 0.364 ng  
 RT: 25.484 min Scan# 3603  
 Delta R. T. -0.003 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

Tgt Ion: 278 Resp: 11910  
 Ion Ratio Lower Upper  
 278 100  
 139 34.0 27.2 40.8  
 279 26.0 21.4 32.0





#41  
 Benzo(g, h, i )peryl ene  
 Concen: 0.378 ng  
 RT: 26.127 min Scan# 3  
 Delta R.T. 0.000 min  
 Lab File: BN034898.D  
 Acq: 08 Nov 2024 08:29

**Instrument :** BNA\_N  
**ClientSampleId :** SSTDCCCC0.4

Tgt	Ion: 276	Resp:	13103
Ion	Ratio	Lower	Upper
276	100		
277	24.9	20.2	30.2
138	42.1	33.9	50.9

