

DATA PACKAGE

SEMI-VOLATILE ORGANICS

PROJECT NAME : FORMER SCHLUMBERGER SITE PRINCETON NJ

JACOBS ENGINEERING GROUP, INC.

412 Mt. Kemble Ave

Downtown Building

Morristown, NJ - 07960

Phone No: 9732670555

ORDER ID : N6070

ATTENTION : Doug Scott



Laboratory Certification ID # 20012



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Cover Page

Order ID : N6070

Project ID : Former Schlumberger Site Princeton NJ

Client : JACOBS Engineering Group, Inc.

Lab Sample Number

N6070-01
N6070-02
N6070-03
N6070-04
N6070-05

Client Sample Number

GW-BR-04-226-245-121422-H
TB-01-121422
OWBR-01-160-180-121422-H
OWBR-02-160-180-121422-H
OWBR-03-128-148-121422-H

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

Signature : _____

Date: 7/13/2023

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

CASE NARRATIVE

JACOBS Engineering Group, Inc.

Project Name: Former Schlumberger Site Princeton NJ

Project # N/A

Chemtech Project # N6070

Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

4 Water samples were received on 12/14/2022.

B. Parameters

According to the Chain of Custody document, the following analyses were requested: SVOC-SIMGroup1 and VOCMS Group3. This data package contains results for SVOC-SIMGroup1.

C. Analytical Techniques:

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

D. QA/ QC Samples:

The Holding Times were met for all analysis.

The Surrogate recoveries met the acceptable criteria except for OWBR-03-128-148-121422 [Terphenyl-d14 - 142%] this compound did not meet the NJDKQP criteria but met the in-house criteria.

The Internal Standards Areas met the acceptable requirements.

The Retention Times were acceptable for all samples.

The RPD met criteria .

The Blank Spike met requirements for all samples .

The Blank Spike Duplicate met requirements for all samples .

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

The Initial Calibration met the requirements .

The Continuous Calibration File ID BN023280.D met the requirements except for 2-Fluorophenol and Phenol-d6 , failure surrogate is not associated with the client list, as per criteria affected surrogates were passing, therefore no corrective action was taken. The Tuning criteria met requirements.

E. Additional Comments:

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

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

F. Manual Integration Comments:

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

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

Signature_____

DATA REPORTING QUALIFIERS- ORGANIC

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

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

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

CHEMTECH PROJECT NUMBER: N6070

MATRIX: Water

METHOD: 8270-Modified/3510

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

The Initial Calibration met the requirements .

The Continuous Calibration File ID BN023280.D met the requirements except for
2-Fluorophenol and Phenol-d6 , failure surrogate is not associated with the client list,
as per criteria affected surrogates were passing, therefore no corrective action was
taken.

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

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

The Surrogate recoveries met the acceptable criteria except for
OWBR-03-128-148-121422 [Terphenyl-d14 - 142%] this compound did not meet the
NJDKQP criteria but met the in-house criteria.

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

		NA	NO	YES
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria			✓
	If not met, list those compounds and their recoveries which fall outside the acceptable range.			
	The Blank Spike met requirements for all samples .			
	The Blank Spike Duplicate met requirements for all samples .			
	The RPD met criteria .			
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
11.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

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

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

QA REVIEW

Date

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: N6070

Completed

For thorough review, the report must have the following:

GENERAL:

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

✓

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

✓

Is the chain of custody signed and complete

✓

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

✓

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

✓

COVER PAGE:

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

✓

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

✓

CHAIN OF CUSTODY:

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

✓

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

✓

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

✓

Were the samples received within hold time

✓

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

✓

ANALYTICAL:

Was method requirement followed?

✓

Was client requirement followed?

✓

Does the case narrative summarize all QC failure?

✓

All runlogs and manual integration are reviewed for requirements

✓

All manual calculations and /or hand notations verified

✓

1st Level QA Review Signature: SOHIL JODHANI

Date: 07/13/2023

2nd Level QA Review Signature: _____

Date: _____



284 Sheffield Street, Mountainside, New Jersey - 07092

Phone: (908) 789 8900 Fax: (908) 789 8922

LAB CHRONICLE

OrderID:	N6070	OrderDate:	12/14/2022 4:13:00 PM
Client:	JACOBS Engineering Group, Inc.	Project:	Former Schlumberger Site Princeton NJ
Contact:	Doug Scott	Location:	M11,VOA Ref. #3 Water

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
N6070-01	GW-BR-04-226-245-1 21422-H	Water			12/14/22			12/14/22
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	
N6070-03	OWBR-01-160-180-12 1422-H	Water			12/14/22			12/14/22
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	
N6070-04	OWBR-02-160-180-12 1422-H	Water			12/14/22			12/14/22
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	
N6070-05	OWBR-03-128-148-12 1422-H	Water			12/14/22			12/14/22
			SVOC-SIMGroup1	8270-Modified		12/16/22	12/19/22	



Hit Summary Sheet
SW-846

SDG No.: N6070
Client: JACOBS Engineering Group, Inc.

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

QC SUMMARY

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Surrogate Summary

SW-846

SDG No.: N6070

Client: JACOBS Engineering Group, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%)	
							Low	High
N6070-03	OWBR-01-160-180-121422-H	2-Methylnaphthalene-d10	0.4	0.25	63		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.32	80		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.35	88		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.34	85		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.37	91		30 (54)	130 (171)
N6070-04	OWBR-02-160-180-121422-H	2-Methylnaphthalene-d10	0.4	0.25	61		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.25	61		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.33	82		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.33	83		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.23	56		30 (54)	130 (171)
N6070-05	OWBR-03-128-148-121422-H	2-Methylnaphthalene-d10	0.4	0.26	66		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.28	70		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.36	89		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.40	99		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.57	142	*	30 (54)	130 (171)
PB149692BL	PB149692BL	2-Methylnaphthalene-d10	0.4	0.37	94		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.37	93		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.41	102		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.35	87		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.46	114		30 (54)	130 (171)
PB149692BS	PB149692BS	2-Methylnaphthalene-d10	0.4	0.32	80		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.40	101		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.42	104		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.36	90		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.43	108		30 (54)	130 (171)
PB149692BSD	PB149692BSD	2-Methylnaphthalene-d10	0.4	0.37	94		30 (30)	150 (150)
		Fluoranthene-d10	0.4	0.41	103		30 (30)	150 (150)
		Nitrobenzene-d5	0.4	0.42	105		30 (11)	130 (175)
		2-Fluorobiphenyl	0.4	0.36	89		30 (10)	130 (175)
		Terphenyl-d14	0.4	0.42	105		30 (54)	130 (171)

() = LABORATORY INHOUSE LIMIT



Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: N6070
Client: JACOBS Engineering Group, Inc.
Analytical Method: 8270-Modified DataFile: BN023287.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD		Limits		RPD
								Qual	Low	High		
PB149692BS	1,4-Dioxane	0.4	0.40	ug/L	100				20 (60)	160 (132)		

() = LABORATORY INHOUSE LIMIT



Laboratory Control Sample/Laboratory Control Sample Duplicate Summary
SW-846

SDG No.: N6070
Client: JACOBS Engineering Group, Inc.
Analytical Method: 8270-Modified DataFile: BN023288.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD	Limits		RPD
								Qual	Low	High	
PB149692BSD	1,4-Dioxane	0.4	0.39	ug/L	98	3			20 (60)	160 (132)	20 (20)

() = LABORATORY INHOUSE LIMIT



4B

SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PB149692BL

Lab Name: CHEMTECH

Contract: JACO05

Lab Code: CHEM Case No.: N6070

SAS No.: N6070 SDG NO.: N6070

Lab File ID: BN023281.D

Lab Sample ID: PB149692BL

Instrument ID: BNA_N

Date Extracted: 12/16/2022

Matrix: (soil/water) Water

Date Analyzed: 12/19/2022

Level: (low/med) LOW

Time Analyzed: 12:02

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
OWBR-03-128-148-121422-H	N6070-05	BN023285.D	12/19/2022
PB149692BS	PB149692BS	BN023287.D	12/19/2022
PB149692BSD	PB149692BSD	BN023288.D	12/19/2022
OWBR-01-160-180-121422-H	N6070-03	BN023283.D	12/19/2022
OWBR-02-160-180-121422-H	N6070-04	BN023284.D	12/19/2022

COMMENTS: _____



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

5B

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: CHEMTECHContract: JACO05Lab Code: CHEMSAS No.: N6070 SDG NO.: N6070Lab File ID: BN023092.DDFTPP Injection Date: 12/08/2022Instrument ID: BNA_NDFTPP Injection Time: 12:45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	35.5
68	Less than 2.0% of mass 69	0.6 (1.6) 1
69	Mass 69 relative abundance	38.2
70	Less than 2.0% of mass 69	0.2 (0.5) 1
127	10.0 - 80.0% of mass 198	48.4
197	Less than 2.0% of mass 198	0.6
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 60.0% of mass 198	25.9
365	Greater than 1% of mass 198	3.1
441	Present, but less than mass 443	15.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	18.6 (20.8) 2

1-Value is % mass 69

2-Value is % mass 442

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
SSTDICC0.1	SSTDICC0.1	BN023093.D	12/08/2022	14:00
SSTDICC0.2	SSTDICC0.2	BN023094.D	12/08/2022	14:37
SSTDICCC0.4	SSTDICCC0.4	BN023095.D	12/08/2022	15:13
SSTDICC0.8	SSTDICC0.8	BN023096.D	12/08/2022	15:50
SSTDICC1.6	SSTDICC1.6	BN023097.D	12/08/2022	16:26
SSTDICC3.2	SSTDICC3.2	BN023098.D	12/08/2022	17:03
SSTDICC5.0	SSTDICC5.0	BN023099.D	12/08/2022	17:40



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

5B

**SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)**

Lab Name: CHEMTECHContract: JAC005Lab Code: CHEMSAS No.: N6070 SDG NO.: N6070Lab File ID: BN023279.DDFTPP Injection Date: 12/19/2022Instrument ID: BNA_NDFTPP Injection Time: 10:45

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	32.4
68	Less than 2.0% of mass 69	0.5 (1.6) 1
69	Mass 69 relative abundance	36.0
70	Less than 2.0% of mass 69	0.2 (0.6) 1
127	10.0 - 80.0% of mass 198	46.3
197	Less than 2.0% of mass 198	0.8
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	27.9
365	Greater than 1% of mass 198	3.6
441	Present, but less than mass 443	17.5
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.9 (16.9) 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	BN023280.D	12/19/2022	11:22
PB149692BL	PB149692BL	BN023281.D	12/19/2022	12:02
OWBR-01-160-180-121422-H	N6070-03	BN023283.D	12/19/2022	13:16
OWBR-02-160-180-121422-H	N6070-04	BN023284.D	12/19/2022	13:53
OWBR-03-128-148-121422-H	N6070-05	BN023285.D	12/19/2022	14:30
PB149692BS	PB149692BS	BN023287.D	12/19/2022	15:44
PB149692BSD	PB149692BSD	BN023288.D	12/19/2022	16:21

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG NO.: N6070

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/19/2022

Lab File ID: BN023280.D Time Analyzed: 11:22

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	7661	7.999	24904	10.82	15496	14.65
UPPER LIMIT	15322	8.499	49808	11.319	30992	15.145
LOWER LIMIT	3830.5	7.499	12452	10.319	7748	14.145
EPA SAMPLE NO.						
01 PB149692BL	8904	8.00	28123	10.82	17435	14.65
02 OWBR-01-160-180-121422-H	7610	8.01	24602	10.82	15939	14.65
03 OWBR-02-160-180-121422-H	7230	8.00	23777	10.82	14567	14.65
04 OWBR-03-128-148-121422-H	7020	8.00	22963	10.82	14454	14.65
05 PB149692BS	8509	8.01	26860	10.82	16157	14.65
06 PB149692BSD	8380	8.00	26080	10.82	15594	14.65

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

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: CHEMTECH

Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG NO.: N6070

EPA Sample No.: SSTDCCC0.4 Date Analyzed: 12/19/2022

Lab File ID: BN023280.D Time Analyzed: 11:22

Instrument ID: BNA_N GC Column: ZB-GR ID: 0.25 (mm)

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	33722	17.39	25842	21.58	18763	24.027
UPPER LIMIT	67444	17.89	51684	22.08	37526	24.527
LOWER LIMIT	16861	16.89	12921	21.08	9381.5	23.527
EPA SAMPLE NO.						
01 PB149692BL	38498	17.39	26428	21.58	19388	24.03
02 OWBR-01-160-180-121422-H	33981	17.39	27221	21.58	19632	24.03
03 OWBR-02-160-180-121422-H	32593	17.39	25059	21.58	17925	24.03
04 OWBR-03-128-148-121422-H	30794	17.39	23636	21.58	16694	24.03
05 PB149692BS	34289	17.39	26436	21.58	18732	24.03
06 PB149692BSD	33450	17.39	27783	21.58	19326	24.03

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = -50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT UPPER LIMIT = -0.50 minutes of internal standard RT

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

* Values outside of QC limits.

SAMPLE DATA

1
2
3
4
5
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11
12
13
14
15
16
17



Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	OWBR-01-160-180-121422-H	SDG No.:	N6070
Lab Sample ID:	N6070-03	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	970 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
BN023283.D	1	12/16/22 08:59	12/19/22 13:16	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.060	U	0.060	0.21	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.25		30 (30) - 150 (150)	63%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 (30) - 150 (150)	80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		30 (11) - 130 (175)	88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.34		30 (10) - 130 (175)	85%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		30 (54) - 130 (171)	91%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	7610	8.006			
1146-65-2	Naphthalene-d8	24600	10.819			
15067-26-2	Acenaphthene-d10	15900	14.645			
1517-22-2	Phenanthrene-d10	34000	17.39			
1719-03-5	Chrysene-d12	27200	21.58			
1520-96-3	Perylene-d12	19600	24.027			

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\BN121922\
 Data File : BN023283.D
 Acq On : 19 Dec 2022 13:16
 Operator : CG/JU
 Sample : N6070-03
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 OWBR-01-160-180-121422-H

Quant Time: Dec 19 15:45:30 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 Response via : Initial Calibration

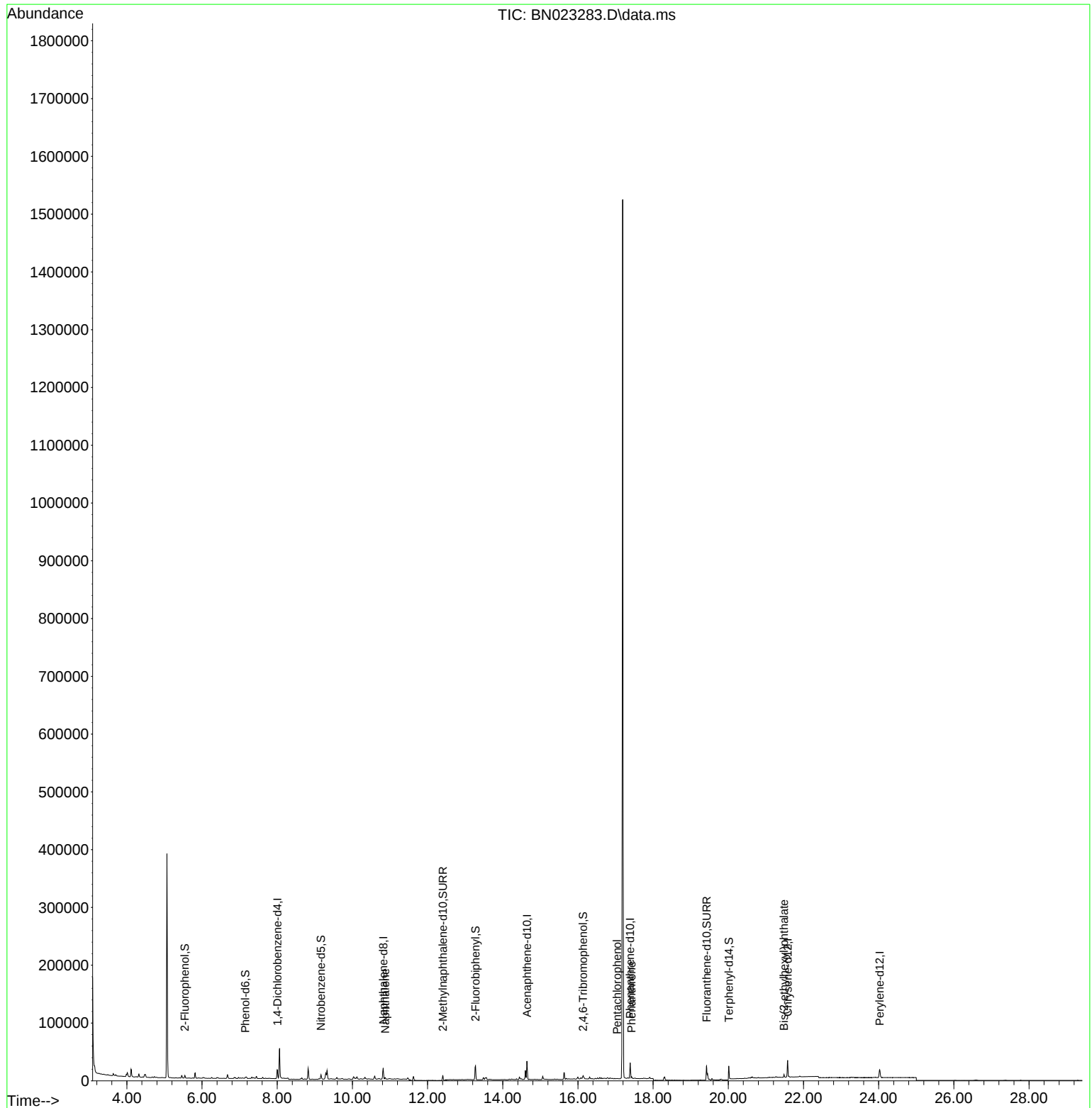
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.006	152	7610	0.400	ng	0.00
7) Naphthalene-d8	10.819	136	24602	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	15939	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	33981	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	27221	0.400	ng	0.00
35) Perylene-d12	24.027	264	19632	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1884	0.133	ng	0.00
5) Phenol-d6	7.154	99	1822	0.101	ng	0.00
8) Nitrobenzene-d5	9.164	82	5671	0.350	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	10482	0.251	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2615	0.452	ng	0.00
15) 2-Fluorobiphenyl	13.277	172	21597	0.339	ng	0.00
27) Fluoranthene-d10	19.422	212	25453	0.320	ng	0.00
31) Terphenyl-d14	20.013	244	16176	0.366	ng	0.00
Target Compounds						
9) Naphthalene	10.872	128	2309	0.037	ng	# 88
24) Pentachlorophenol	17.042	266	239	0.029	ng	89
25) Phenanthrene	17.427	178	3200	0.032	ng	# 94
34) Bis(2-ethylhexyl)phtha...	21.482	149	4555	0.123	ng	99

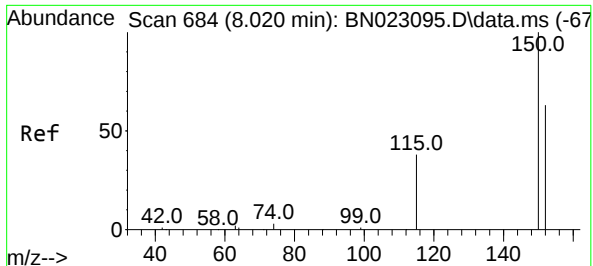
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023283.D
Acq On : 19 Dec 2022 13:16
Operator : CG/JU
Sample : N6070-03
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

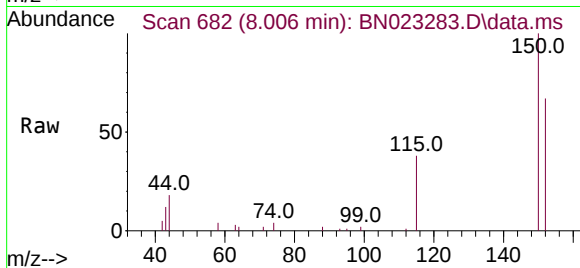
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Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



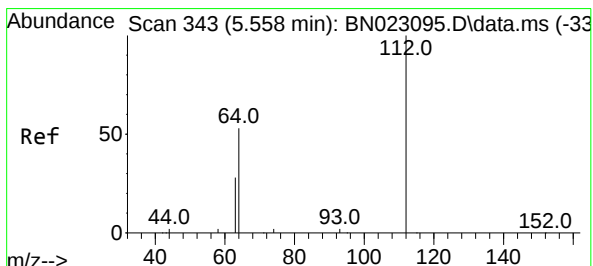
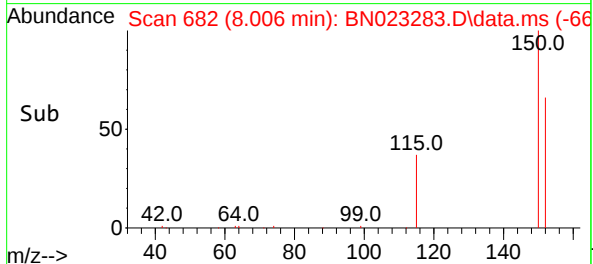
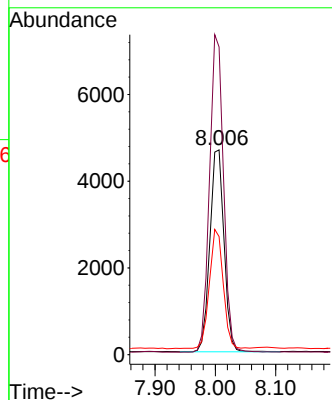


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.006 min Scan# 684
Delta R.T. 0.007 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

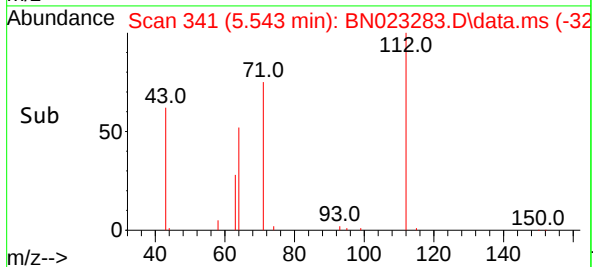
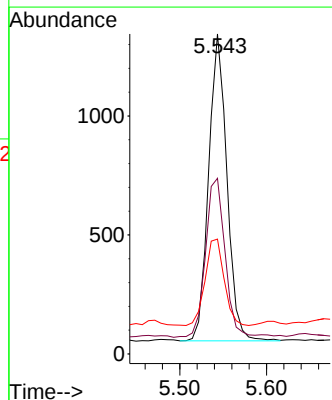
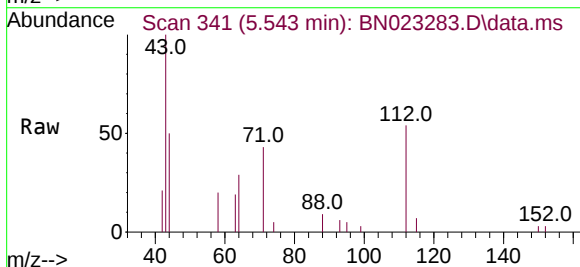


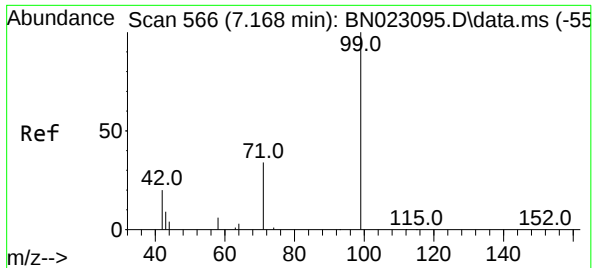
Tgt Ion:152 Resp: 7610
Ion Ratio Lower Upper
152 100
150 150.2 125.6 188.4
115 57.6 49.0 73.4



#4
2-Fluorophenol
Concen: 0.133 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:112 Resp: 1884
Ion Ratio Lower Upper
112 100
64 56.0 44.4 66.6
63 29.1 23.7 35.5

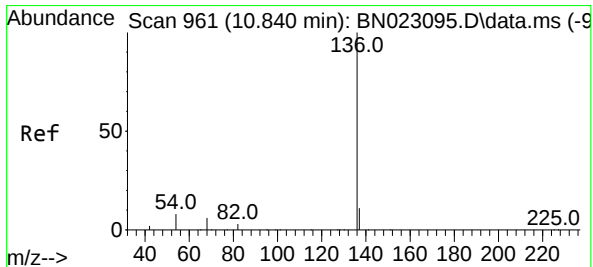
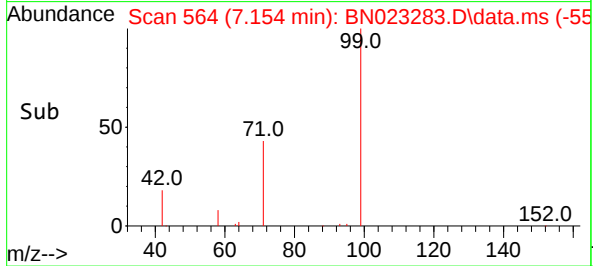
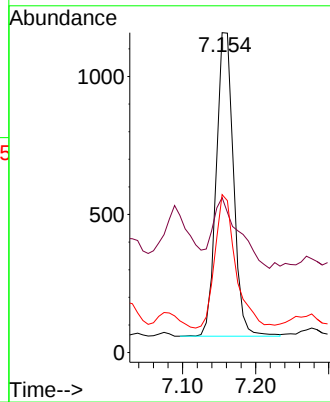
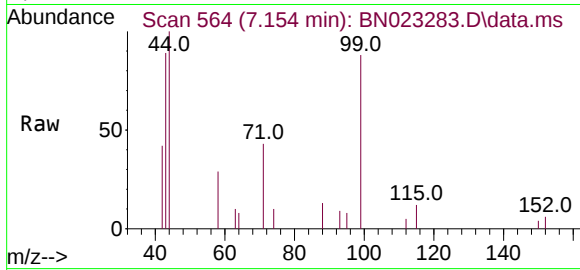




#5
Phenol-d6
Concen: 0.101 ng
RT: 7.154 min Scan# 50
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

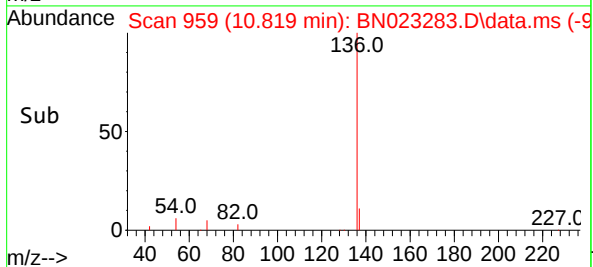
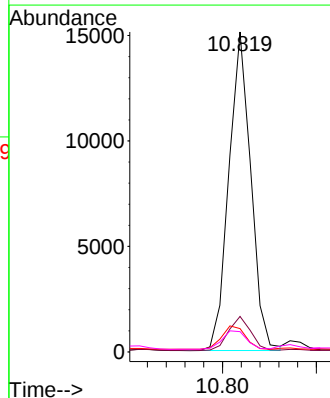
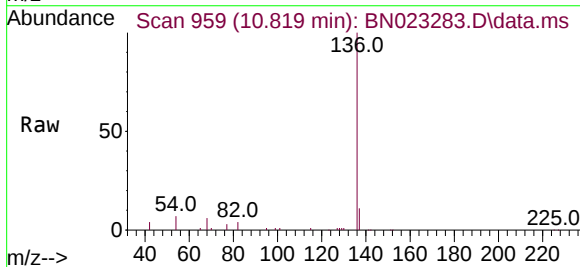
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

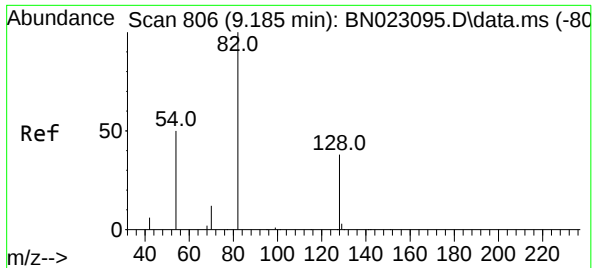
Tgt Ion: 99 Resp: 1822
Ion Ratio Lower Upper
99 100
42 35.6 16.3 24.5#
71 53.2 26.5 39.7#



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 959
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion: 136 Resp: 24602
Ion Ratio Lower Upper
136 100
137 11.1 9.0 13.4
54 7.3 6.5 9.7
68 6.3 5.4 8.2

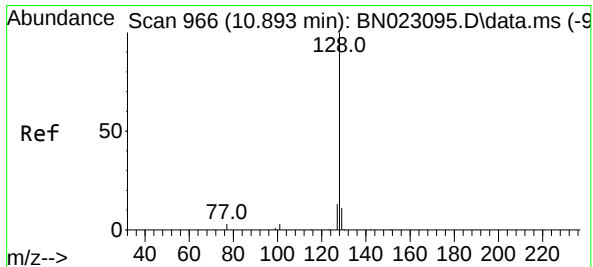
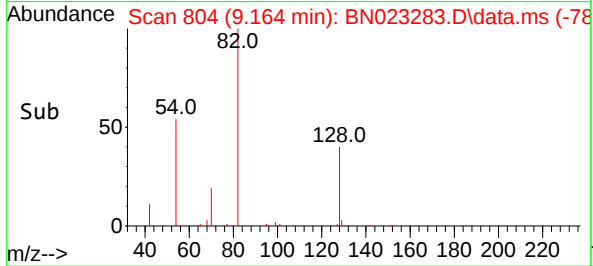
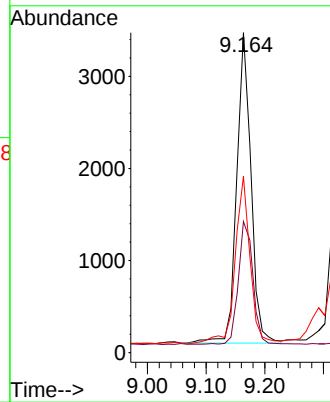
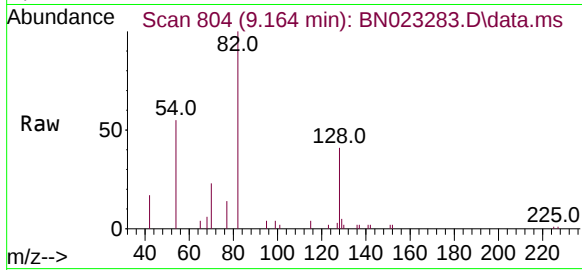




#8
Nitrobenzene-d5
Concen: 0.350 ng
RT: 9.164 min Scan# 804
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

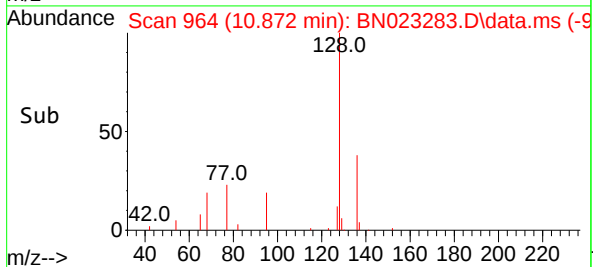
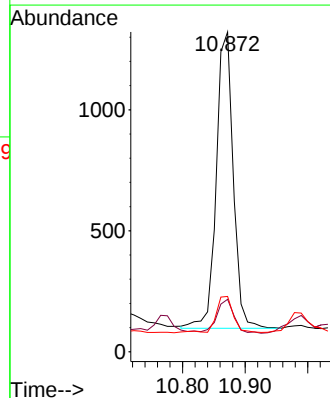
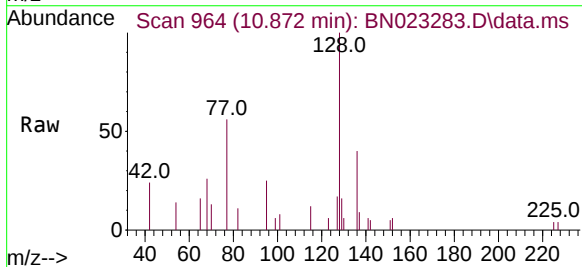
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

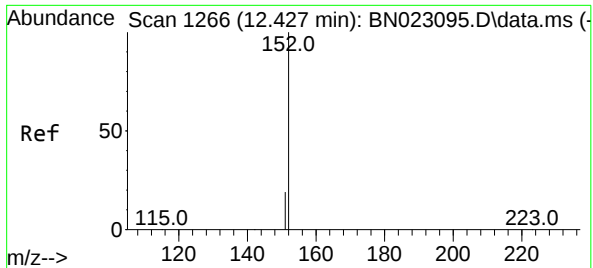
Tgt Ion: 82 Resp: 5671
Ion Ratio Lower Upper
82 100
128 41.0 31.4 47.2
54 55.1 41.0 61.4



#9
Naphthalene
Concen: 0.037 ng
RT: 10.872 min Scan# 964
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion: 128 Resp: 2309
Ion Ratio Lower Upper
128 100
129 16.4 9.0 13.6#
127 17.3 10.5 15.7#

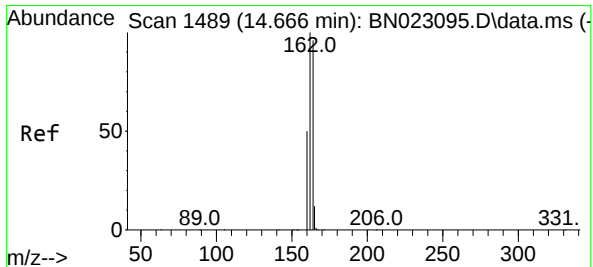
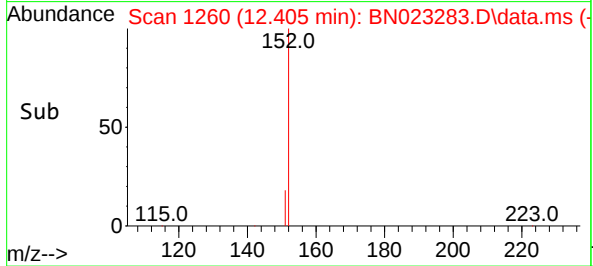
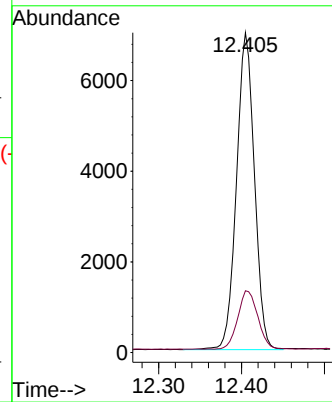
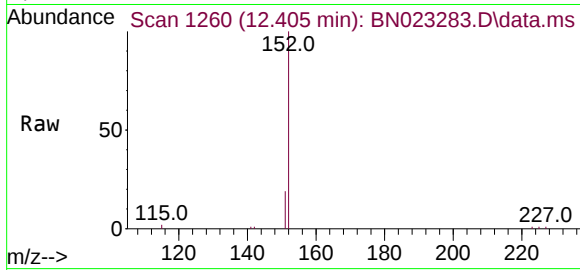




#11
2-Methylnaphthalene-d10
Concen: 0.251 ng
RT: 12.405 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

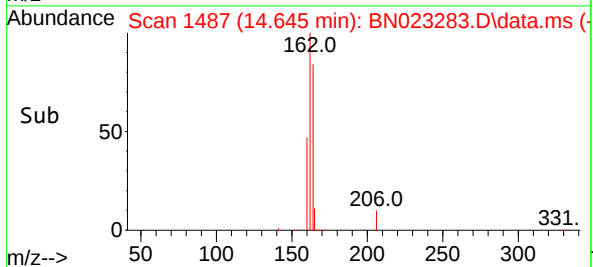
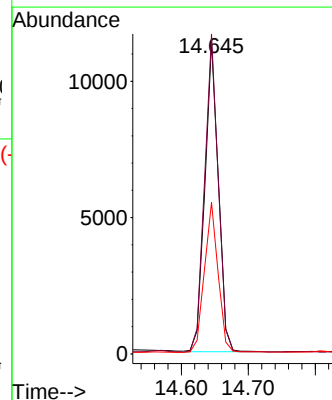
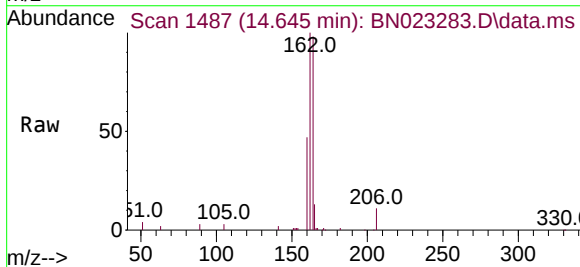
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

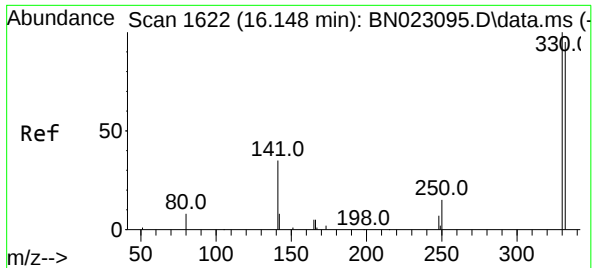
Tgt Ion:152 Resp: 10482
Ion Ratio Lower Upper
152 100
151 20.7 15.1 22.7



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1487
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:164 Resp: 15939
Ion Ratio Lower Upper
164 100
162 102.5 83.4 125.0
160 48.5 41.8 62.8

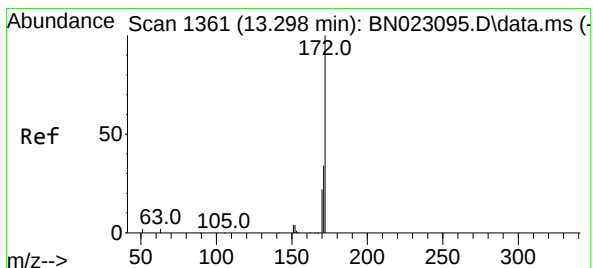
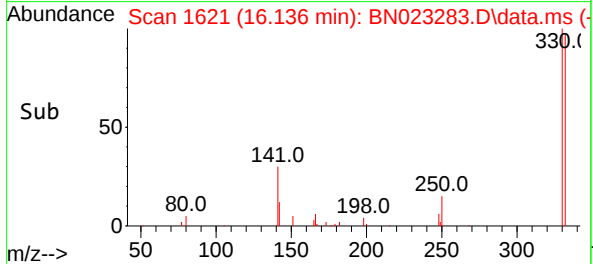
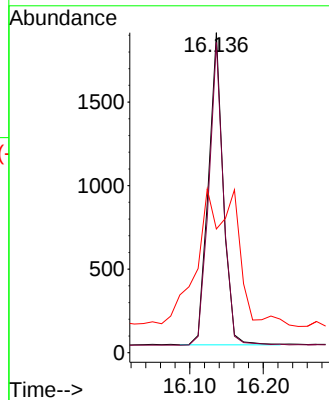
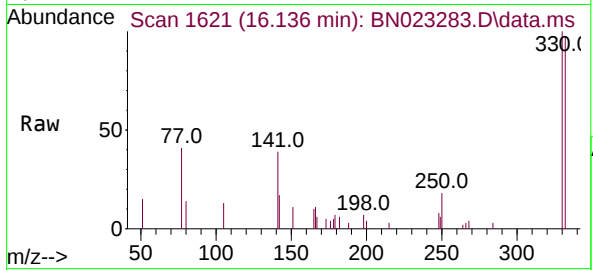




#14
2,4,6-Tribromophenol
Concen: 0.452 ng
RT: 16.136 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

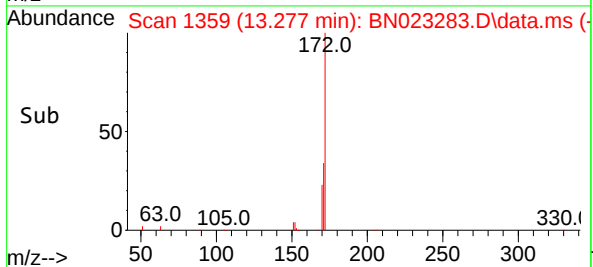
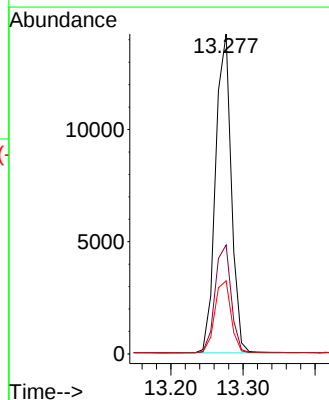
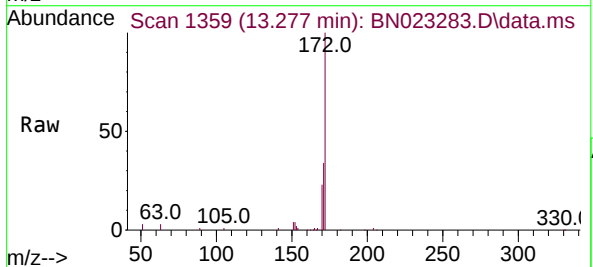
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

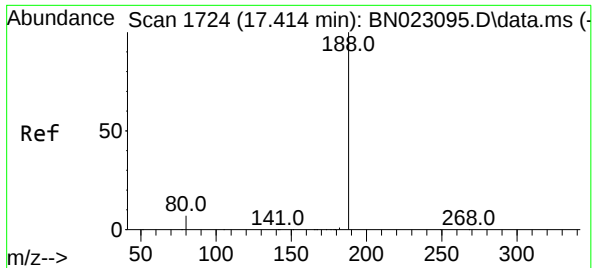
Tgt Ion:330 Resp: 2615
Ion Ratio Lower Upper
330 100
332 96.3 77.3 115.9
141 110.1 33.5 50.3#



#15
2-Fluorobiphenyl
Concen: 0.339 ng
RT: 13.277 min Scan# 1359
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:172 Resp: 21597
Ion Ratio Lower Upper
172 100
171 34.0 27.4 41.0
170 22.8 17.9 26.9





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.390 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN023283.D

Acq: 19 Dec 2022 13:16

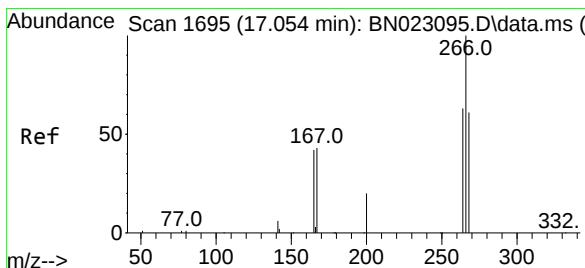
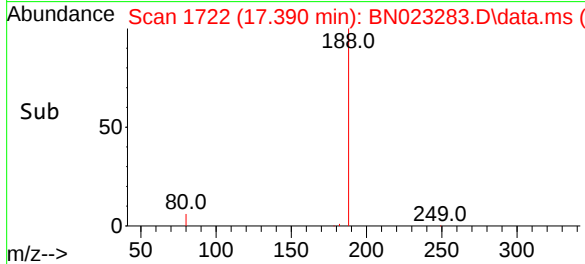
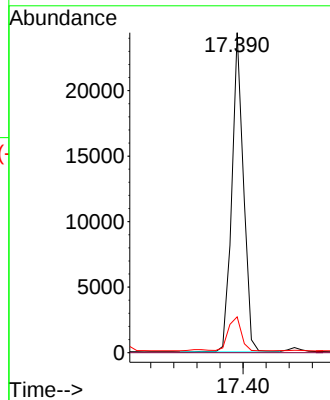
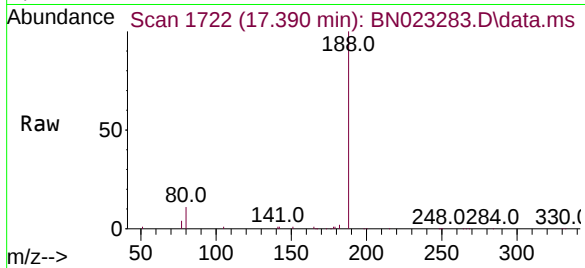
Instrument :

BNA_N

ClientSampleId :

OWBR-01-160-180-121422-H

Tgt Ion:188	Resp:	33981
Ion Ratio	Lower	Upper
188	100	
94	0.0	0.0
80	11.2	6.1



#24

Pentachlorophenol

Concen: 0.029 ng

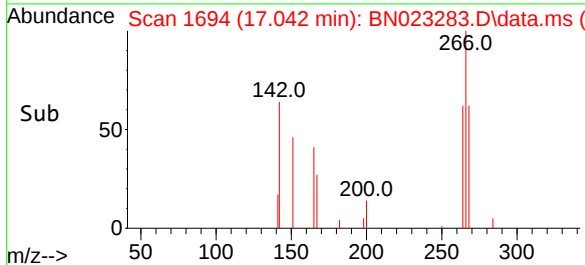
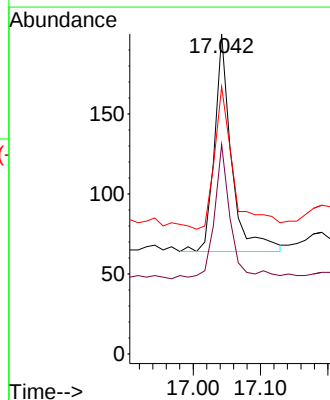
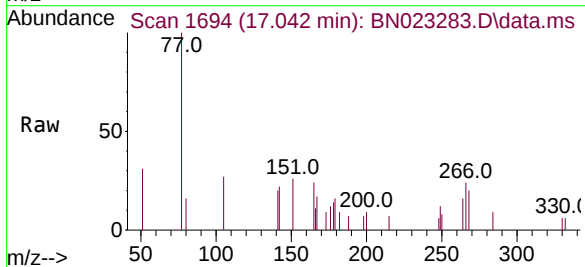
RT: 17.042 min Scan# 1694

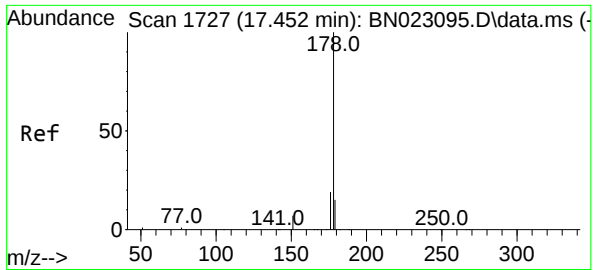
Delta R.T. 0.000 min

Lab File: BN023283.D

Acq: 19 Dec 2022 13:16

Tgt Ion:266	Resp:	239
Ion Ratio	Lower	Upper
266	100	
264	56.9	50.1
268	72.8	49.7

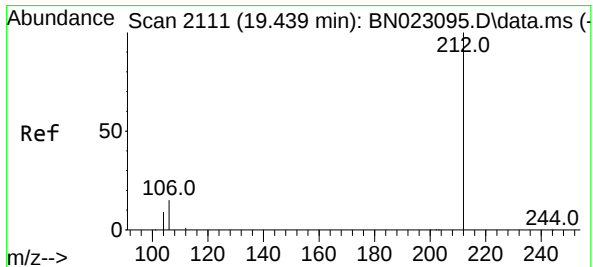
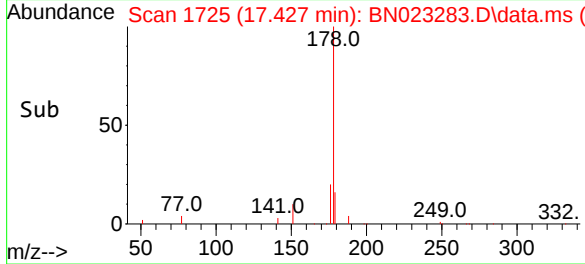
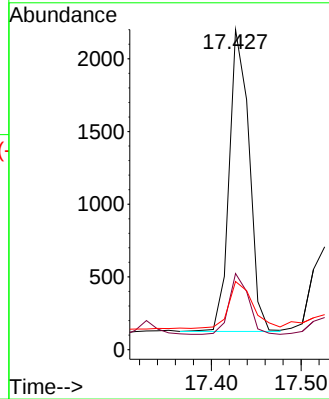
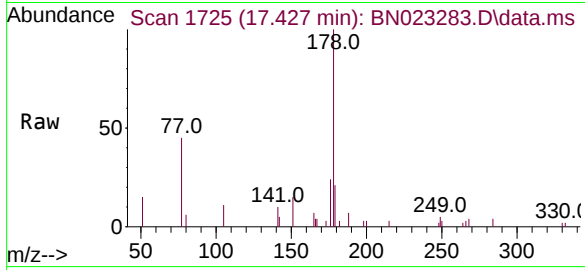




#25
Phenanthrene
Concen: 0.032 ng
RT: 17.427 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

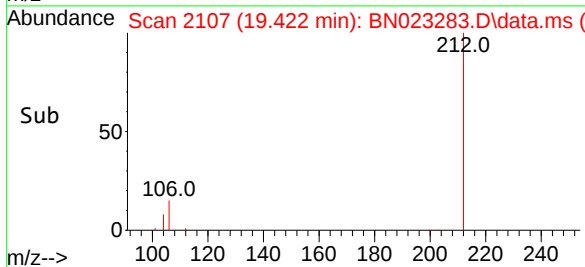
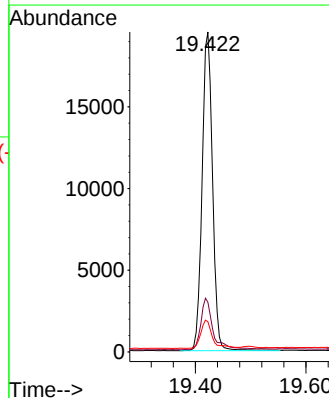
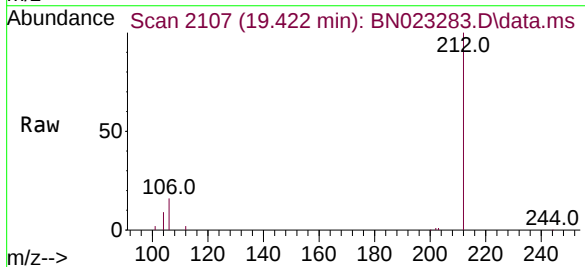
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

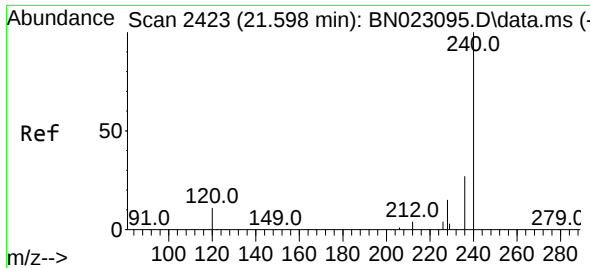
Tgt Ion:178 Resp: 3200
Ion Ratio Lower Upper
178 100
176 19.7 15.4 23.2
179 20.3 12.2 18.2#



#27
Fluoranthene-d10
Concen: 0.320 ng
RT: 19.422 min Scan# 2107
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:212 Resp: 25453
Ion Ratio Lower Upper
212 100
106 18.8 13.0 19.4
104 9.7 7.5 11.3

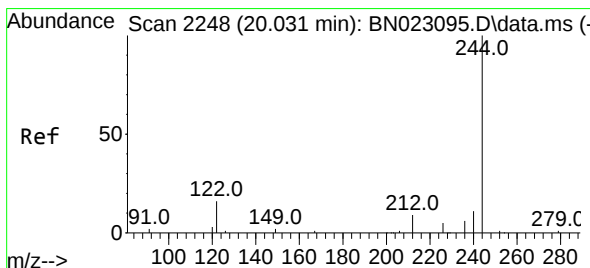
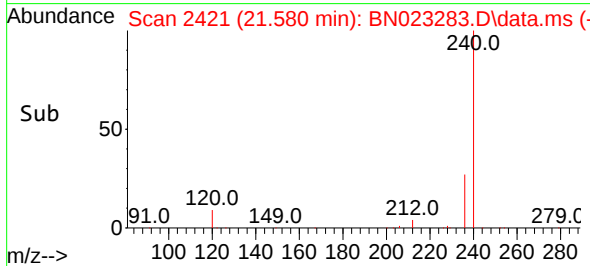
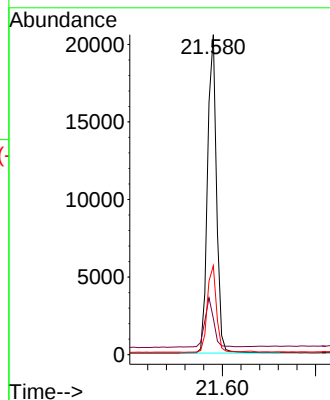
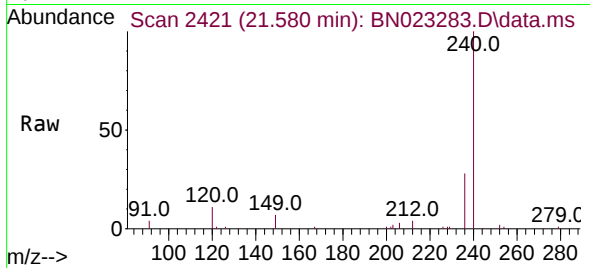




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2421
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

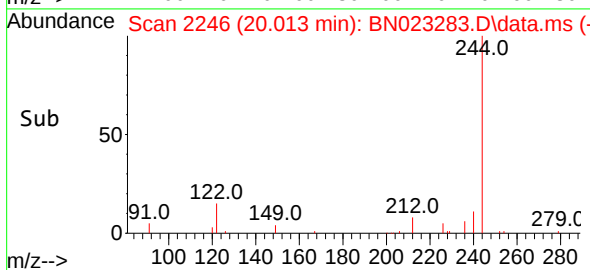
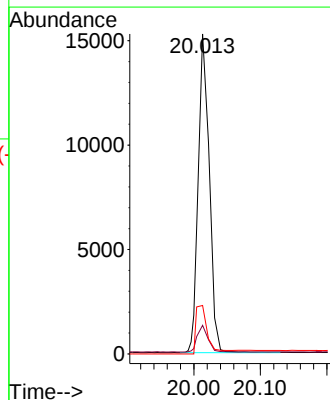
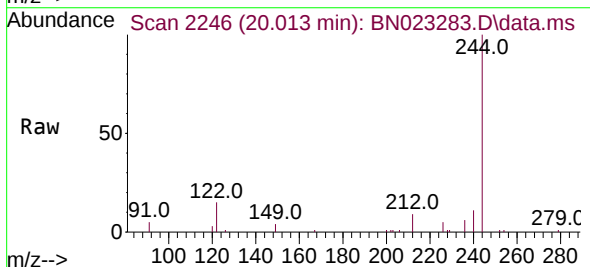
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

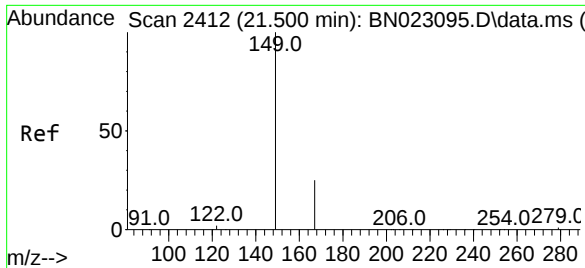
Tgt Ion	Ratio	Lower	Upper
240	100		
120	11.3	10.1	15.1
236	27.8	22.2	33.4



#31
Terphenyl-d14
Concen: 0.366 ng
RT: 20.013 min Scan# 2246
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion	Ratio	Lower	Upper
244	100		
212	8.9	7.6	11.4
122	15.1	12.6	18.8

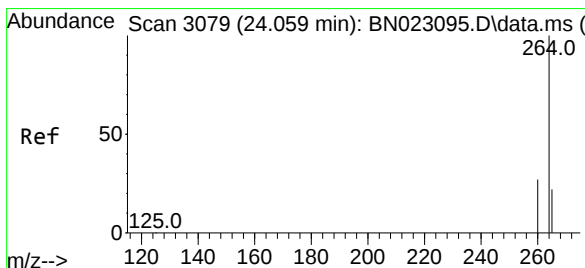
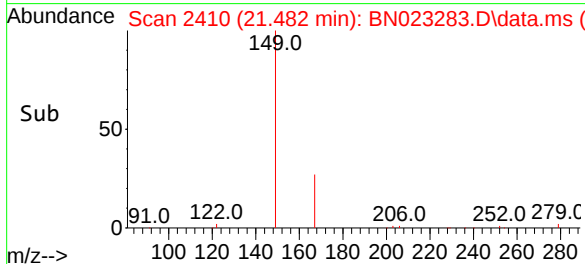
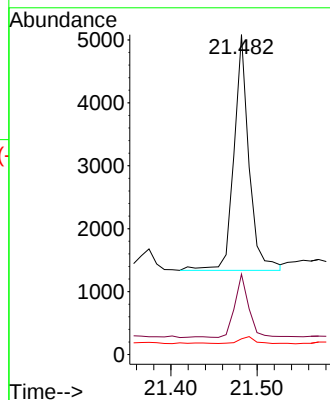
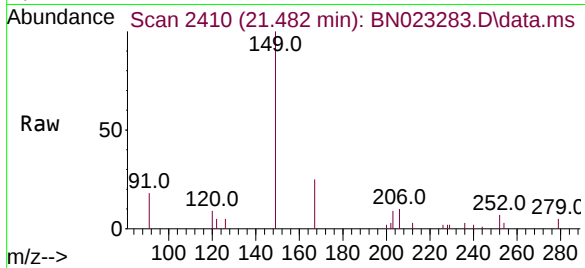




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.123 ng
RT: 21.482 min Scan# 2410
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

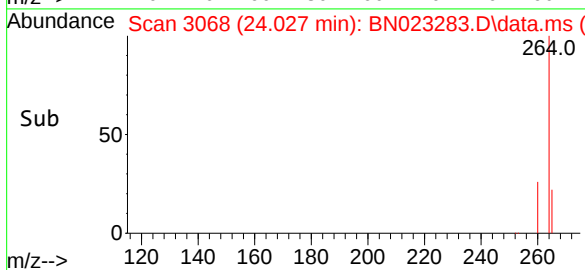
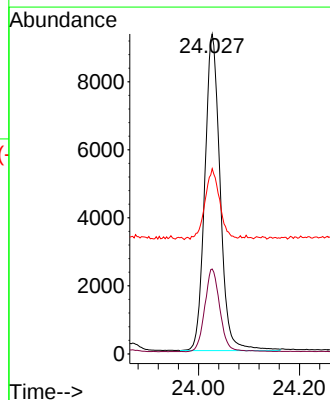
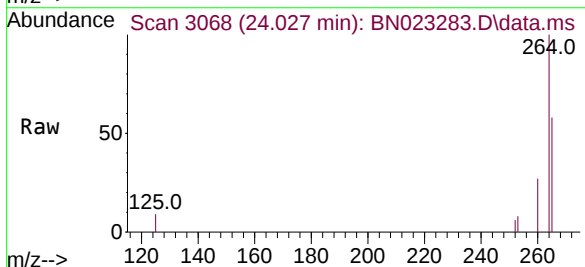
Instrument :
BNA_N
ClientSampleId :
OWBR-01-160-180-121422-H

Tgt Ion:	149	Resp:	4555
Ion Ratio	Lower	Upper	
149	100		
167	24.5	20.2	30.2
279	3.3	2.3	3.5



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. 0.000 min
Lab File: BN023283.D
Acq: 19 Dec 2022 13:16

Tgt Ion:	264	Resp:	19632
Ion Ratio	Lower	Upper	
264	100		
260	26.5	21.7	32.5
265	57.9	43.2	64.8





Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	OWBR-02-160-180-121422-H	SDG No.:	N6070
Lab Sample ID:	N6070-04	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023284.D	1	12/16/22 08:59	12/19/22 13:53	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.060	U	0.060	0.21	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.25		30 (30) - 150 (150)	61%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.25		30 (30) - 150 (150)	61%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.33		30 (11) - 130 (175)	82%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		30 (10) - 130 (175)	83%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.23		30 (54) - 130 (171)	56%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	7230	7.999			
1146-65-2	Naphthalene-d8	23800	10.818			
15067-26-2	Acenaphthene-d10	14600	14.645			
1517-22-2	Phenanthrene-d10	32600	17.39			
1719-03-5	Chrysene-d12	25100	21.58			
1520-96-3	Perylene-d12	17900	24.027			

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\BN121922\
 Data File : BN023284.D
 Acq On : 19 Dec 2022 13:53
 Operator : CG/JU
 Sample : N6070-04
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 OWBR-02-160-180-121422-H

Quant Time: Dec 19 15:45:32 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 Response via : Initial Calibration

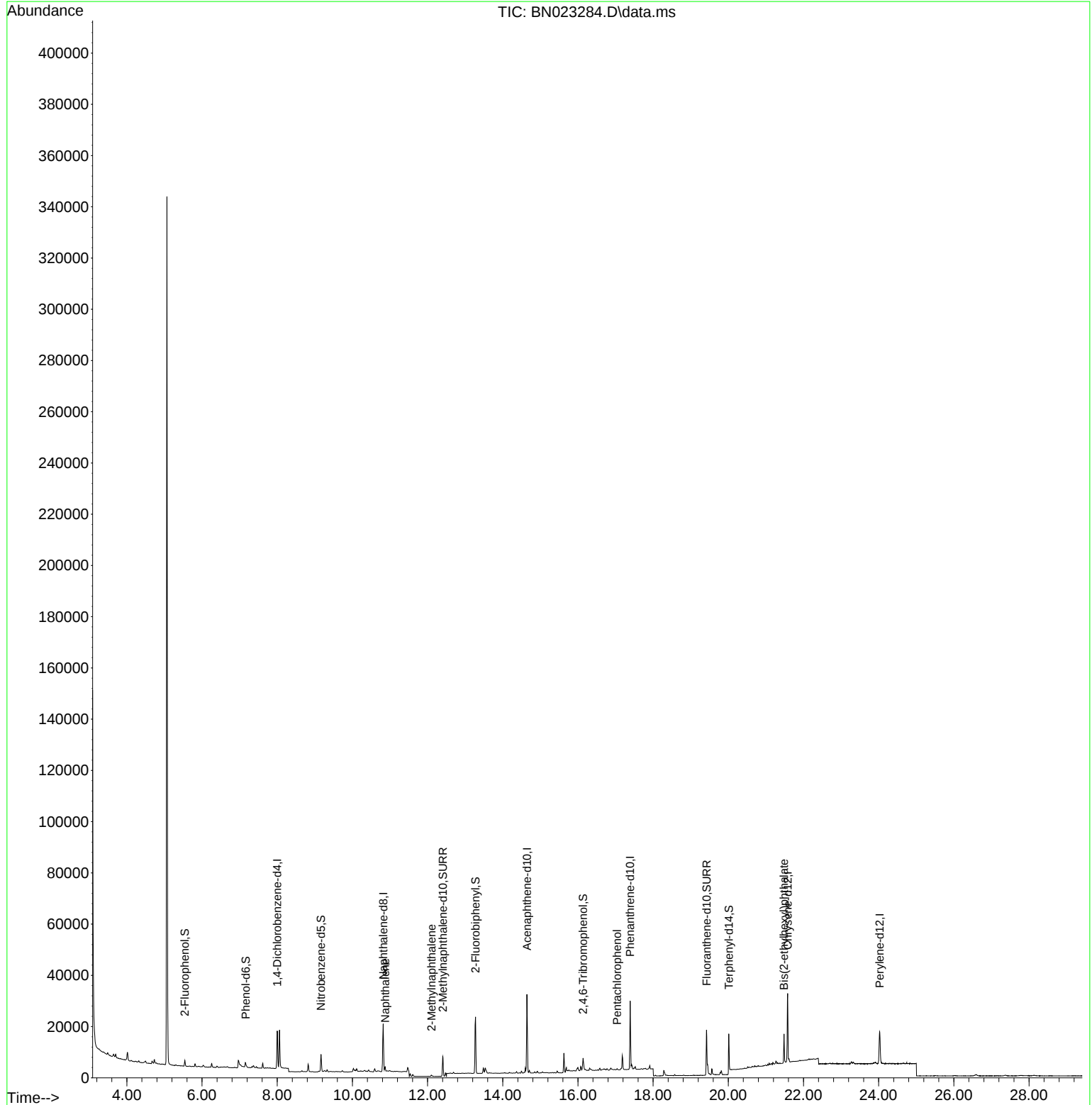
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	7230	0.400	ng	0.00
7) Naphthalene-d8	10.818	136	23777	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	14567	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	32593	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	25059	0.400	ng	0.00
35) Perylene-d12	24.027	264	17925	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1659	0.123	ng	0.00
5) Phenol-d6	7.161	99	1702	0.099	ng	0.00
8) Nitrobenzene-d5	9.163	82	5160	0.329	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	9896	0.245	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2320	0.439	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	19464	0.334	ng	0.00
27) Fluoranthene-d10	19.422	212	18662	0.245	ng	0.00
31) Terphenyl-d14	20.013	244	9141	0.225	ng	0.00
Target Compounds						
9) Naphthalene	10.872	128	2024	0.033	ng	# 89
12) 2-Methylnaphthalene	12.102	142	701	0.078	ng	# 55
24) Pentachlorophenol	17.042	266	226	0.029	ng	91
34) Bis(2-ethylhexyl)phtha...	21.482	149	9694	0.284	ng	97

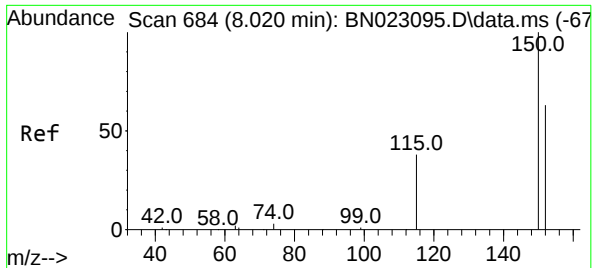
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023284.D
Acq On : 19 Dec 2022 13:53
Operator : CG/JU
Sample : N6070-04
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

Quant Time: Dec 19 15:45:32 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

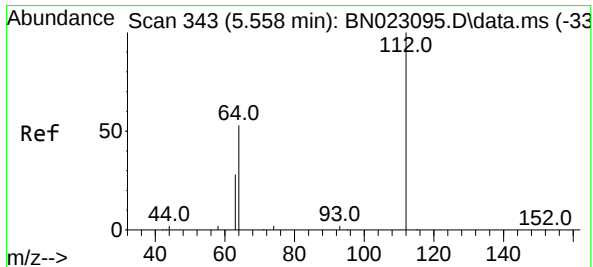
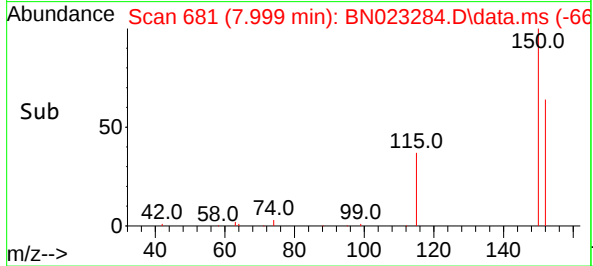
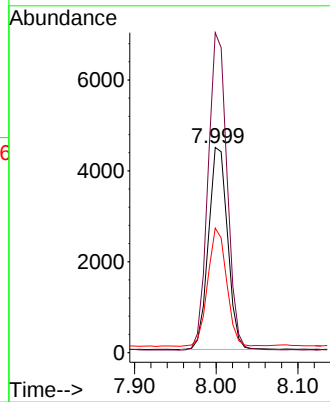
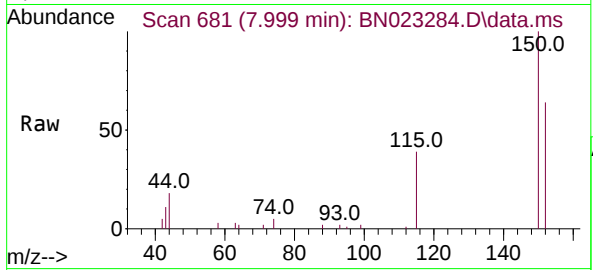




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 681
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

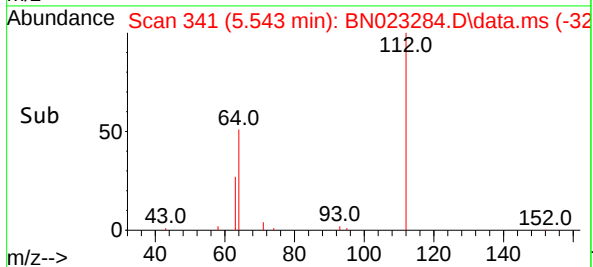
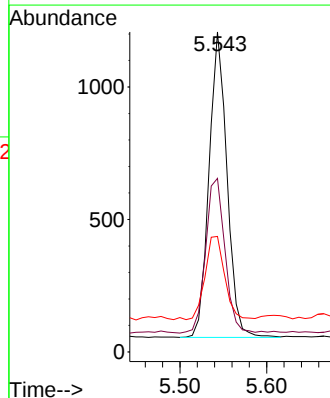
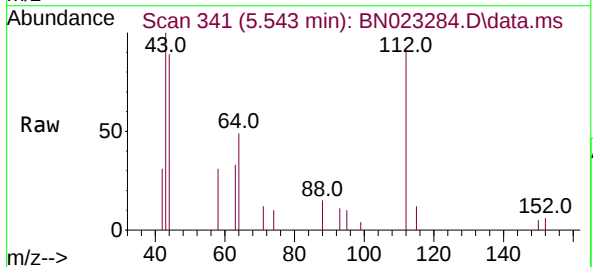
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

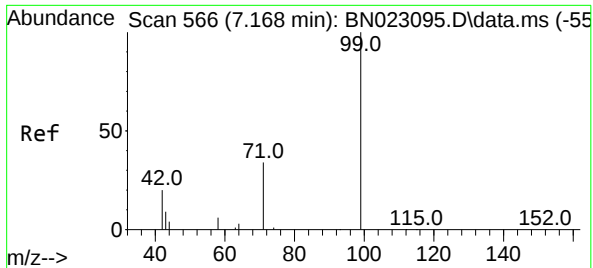
Tgt Ion:152 Resp: 7230
Ion Ratio Lower Upper
152 100
150 156.0 125.6 188.4
115 60.7 49.0 73.4



#4
2-Fluorophenol
Concen: 0.123 ng
RT: 5.543 min Scan# 341
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:112 Resp: 1659
Ion Ratio Lower Upper
112 100
64 54.2 44.4 66.6
63 29.8 23.7 35.5

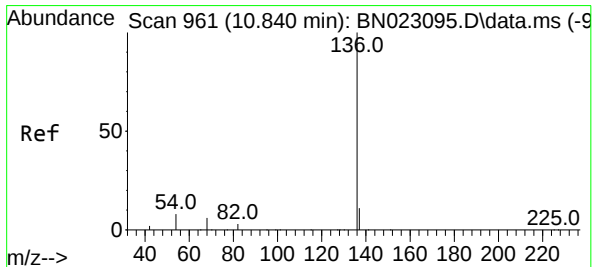
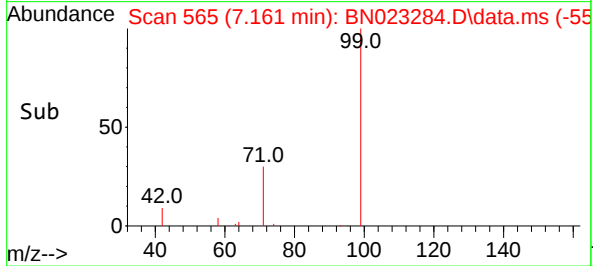
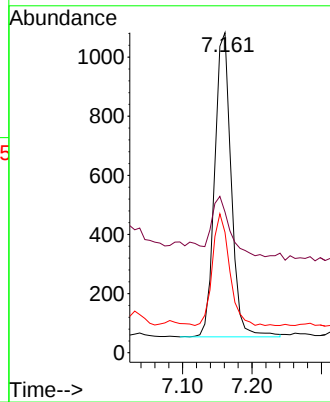
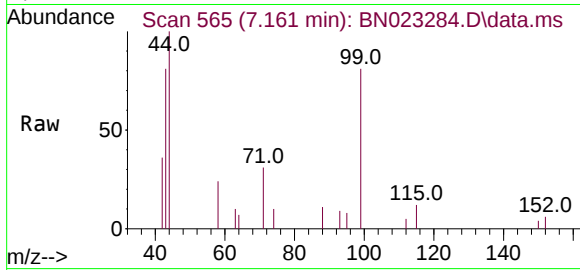




#5
Phenol-d6
Concen: 0.099 ng
RT: 7.161 min Scan# 50
Delta R.T. 0.007 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

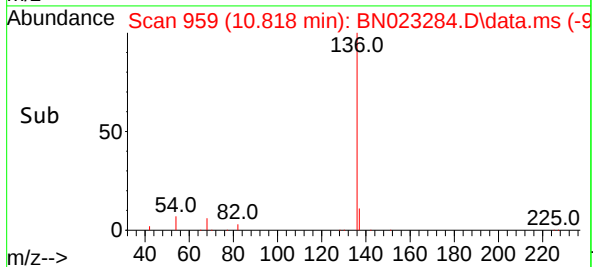
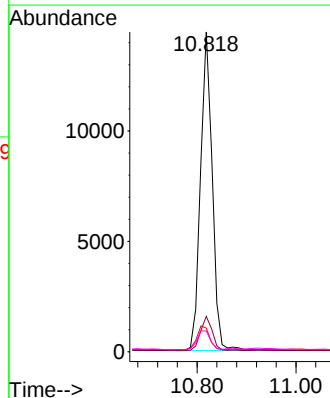
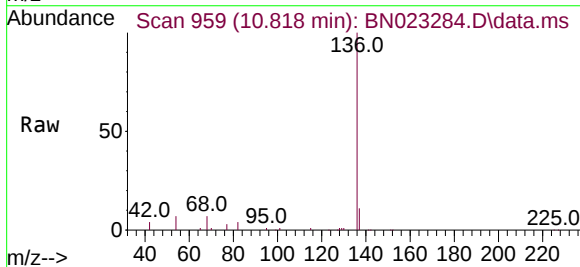
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

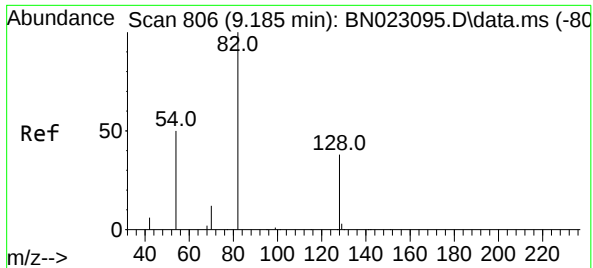
Tgt Ion: 99 Resp: 1702
Ion Ratio Lower Upper
99 100
42 21.2 16.3 24.5
71 38.0 26.5 39.7



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion: 136 Resp: 23777
Ion Ratio Lower Upper
136 100
137 11.1 9.0 13.4
54 7.4 6.5 9.7
68 6.5 5.4 8.2

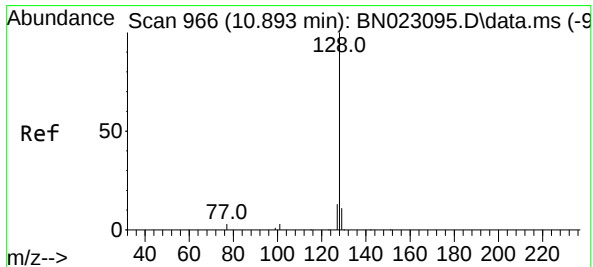
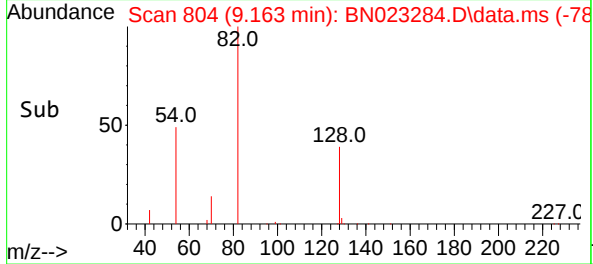
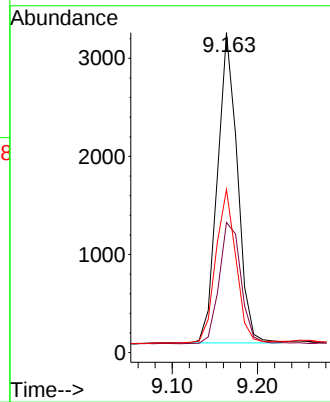
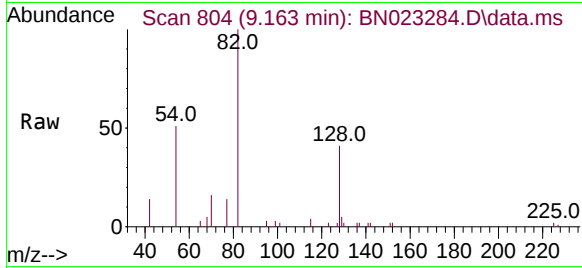




#8
Nitrobenzene-d5
Concen: 0.329 ng
RT: 9.163 min Scan# 804
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

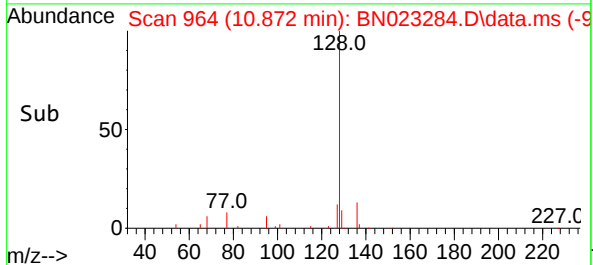
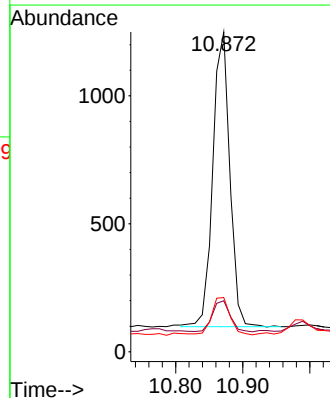
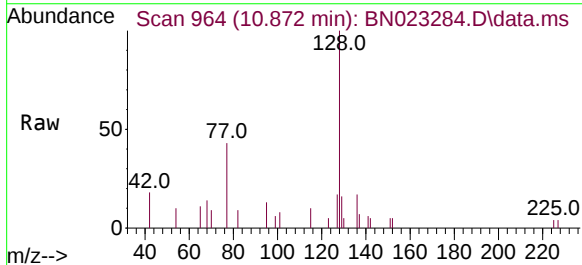
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

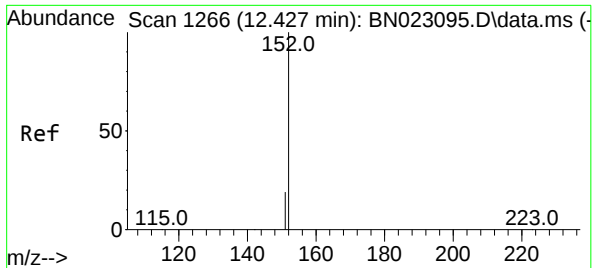
Tgt Ion:	82	Resp:	5160
Ion	Ratio	Lower	Upper
82	100		
128	40.7	31.4	47.2
54	51.0	41.0	61.4



#9
Naphthalene
Concen: 0.033 ng
RT: 10.872 min Scan# 964
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:	128	Resp:	2024
Ion	Ratio	Lower	Upper
128	100		
129	15.9	9.0	13.6#
127	17.0	10.5	15.7#

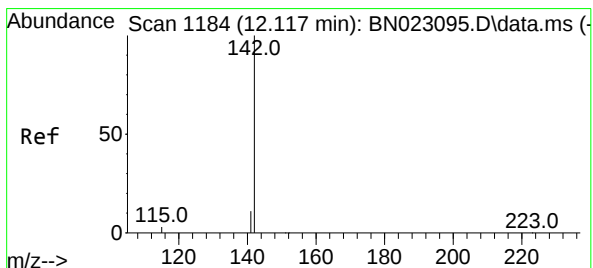
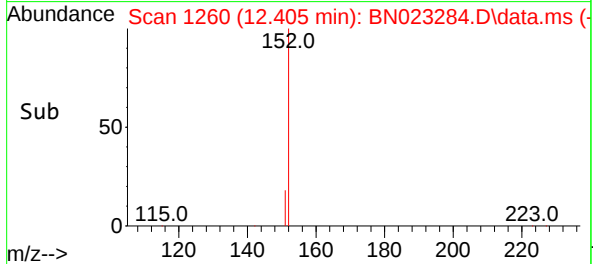
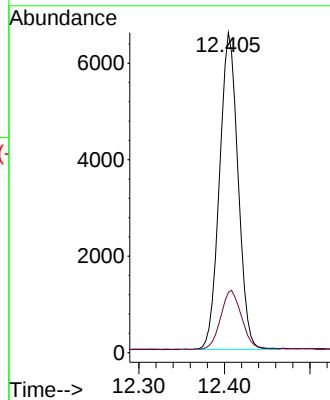
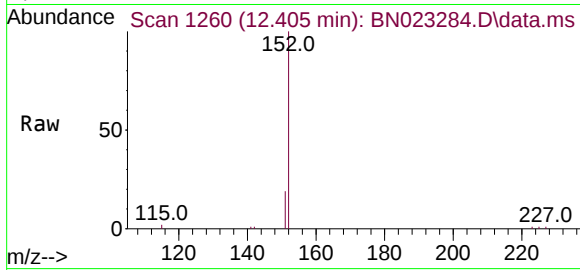




#11
2-Methylnaphthalene-d10
Concen: 0.245 ng
RT: 12.405 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

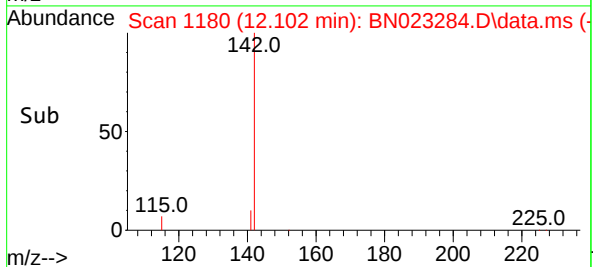
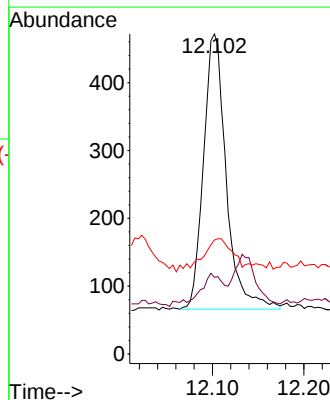
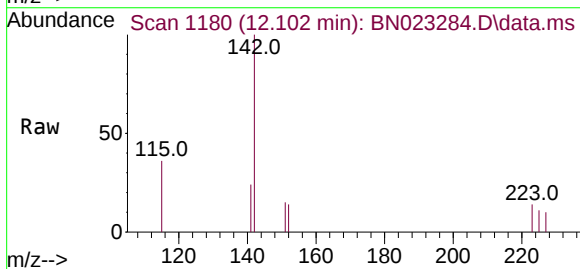
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

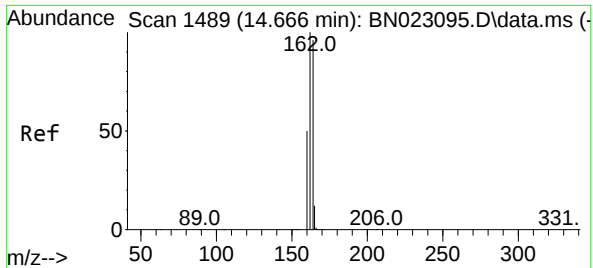
Tgt Ion:152 Resp: 9896
Ion Ratio Lower Upper
152 100
151 21.2 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.078 ng
RT: 12.102 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:142 Resp: 701
Ion Ratio Lower Upper
142 100
141 23.9 10.9 16.3#
115 35.6 5.7 8.5#

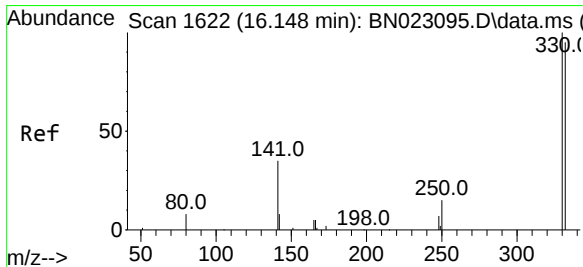
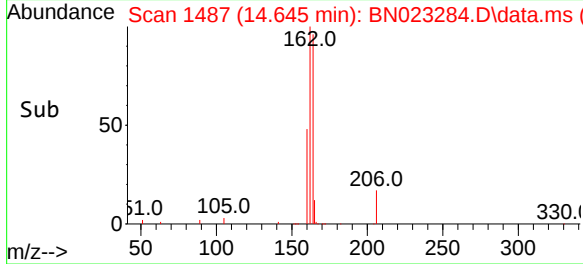
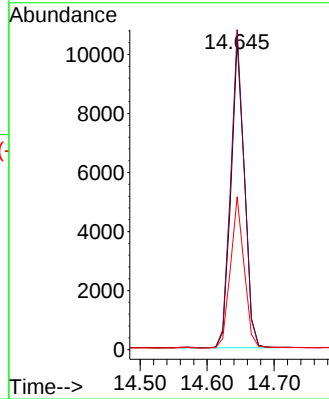
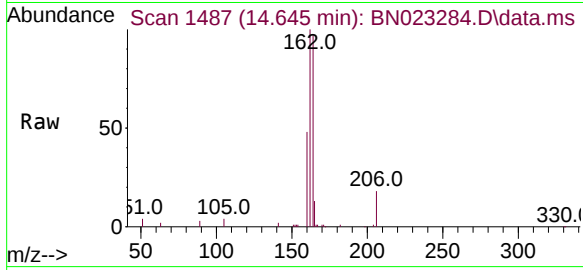




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1489
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

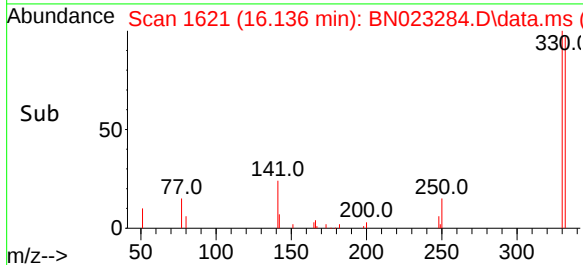
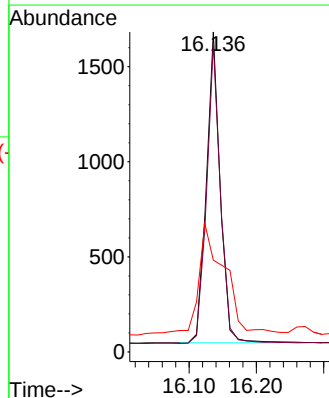
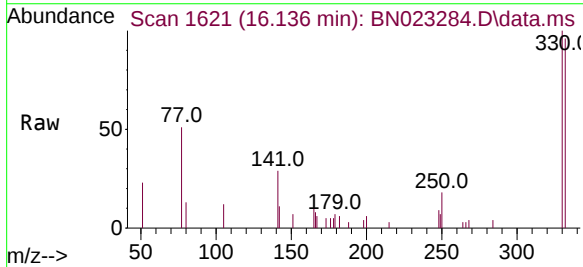
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

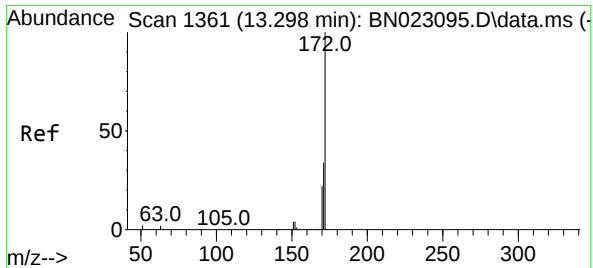
Tgt Ion:164 Resp: 14567
Ion Ratio Lower Upper
164 100
162 103.5 83.4 125.0
160 49.4 41.8 62.8



#14
2,4,6-Tribromophenol
Concen: 0.439 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:330 Resp: 2320
Ion Ratio Lower Upper
330 100
332 97.0 77.3 115.9
141 62.6 33.5 50.3#

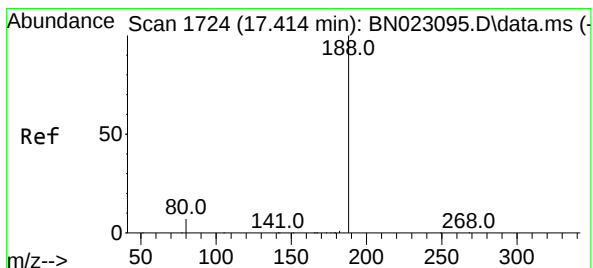
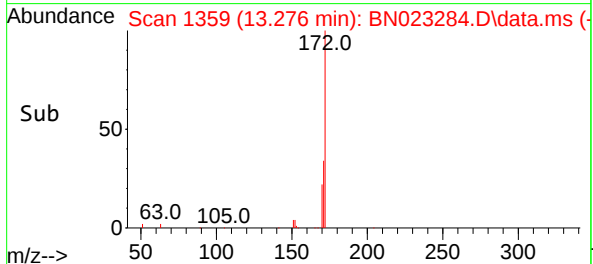
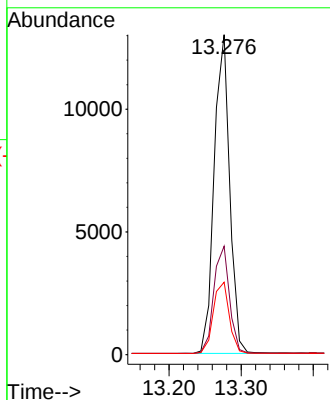
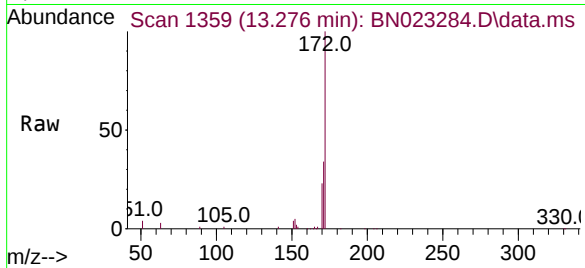




#15
2-Fluorobiphenyl
Concen: 0.334 ng
RT: 13.276 min Scan# 1359
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

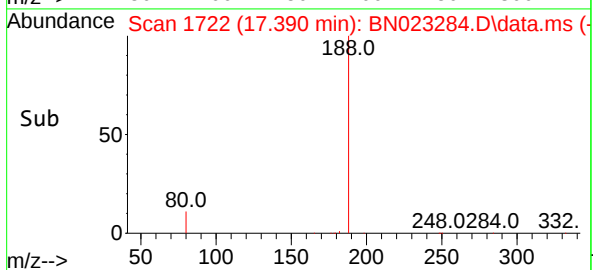
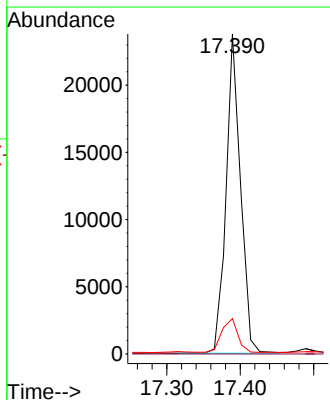
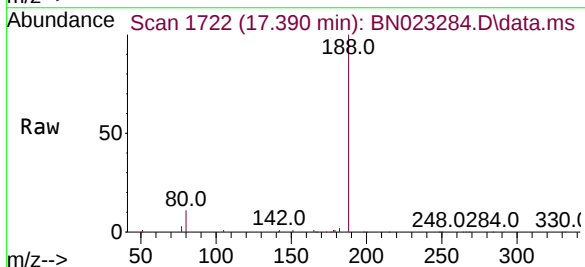
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

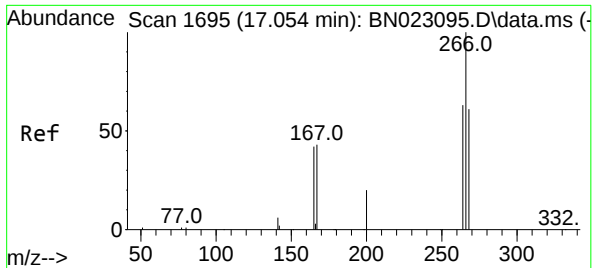
Tgt Ion	Ratio	Lower	Upper
172	100		
171	33.9	27.4	41.0
170	22.6	17.9	26.9



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.0	6.1	9.1

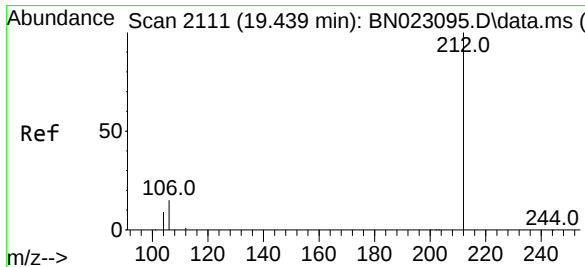
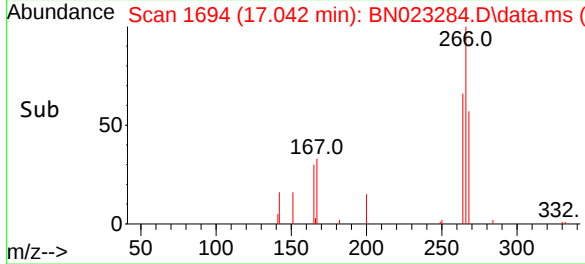
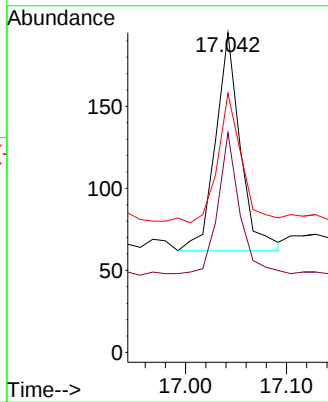
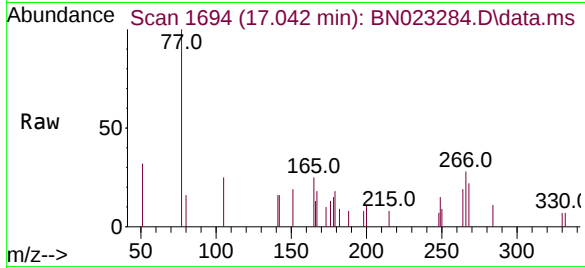




#24
Pentachlorophenol
Concen: 0.029 ng
RT: 17.042 min Scan# 110
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

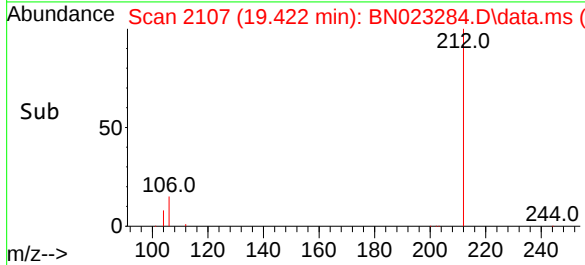
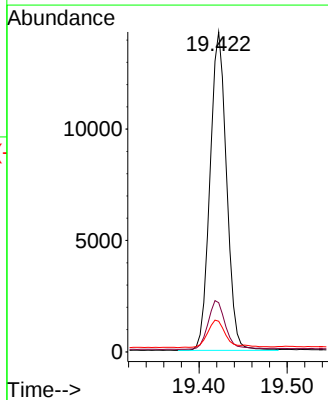
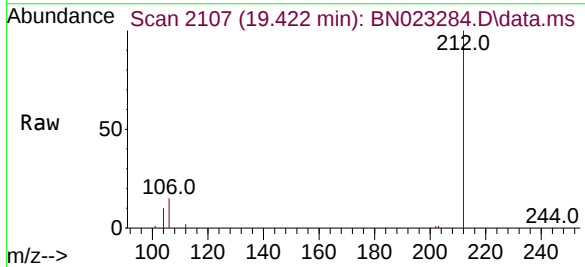
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

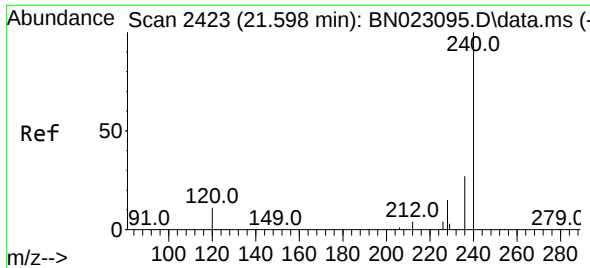
Tgt Ion:	266	Resp:	226
Ion Ratio	Lower	Upper	
266	100		
264	56.2	50.1	75.1
268	54.9	49.7	74.5



#27
Fluoranthene-d10
Concen: 0.245 ng
RT: 19.422 min Scan# 2107
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:	212	Resp:	18662
Ion Ratio	Lower	Upper	
212	100		
106	16.2	13.0	19.4
104	9.8	7.5	11.3

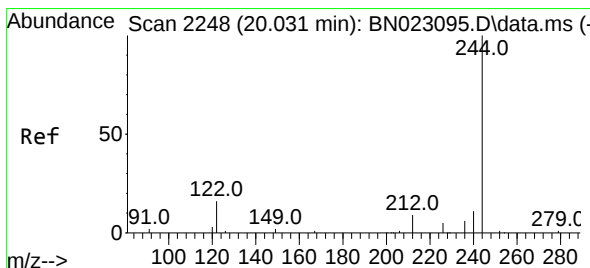
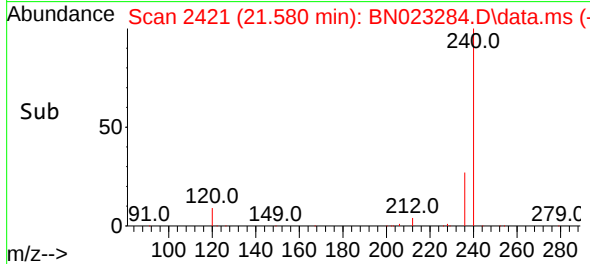
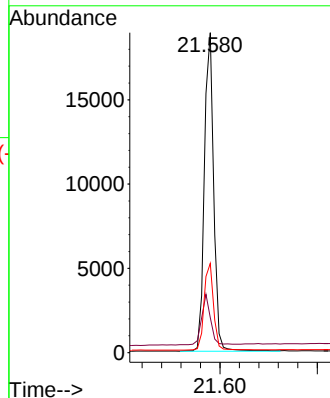
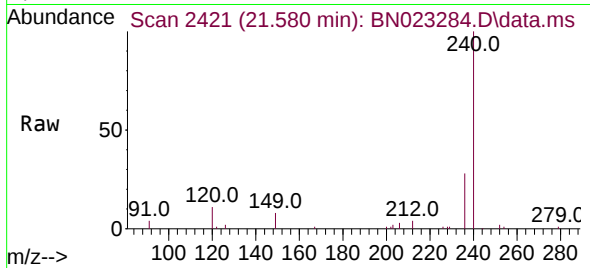




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2423
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

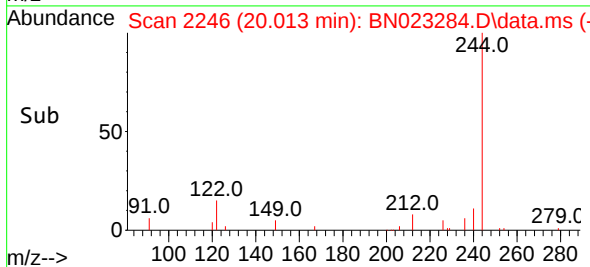
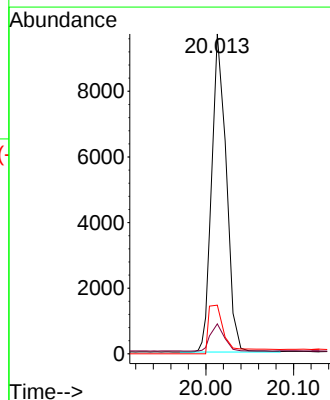
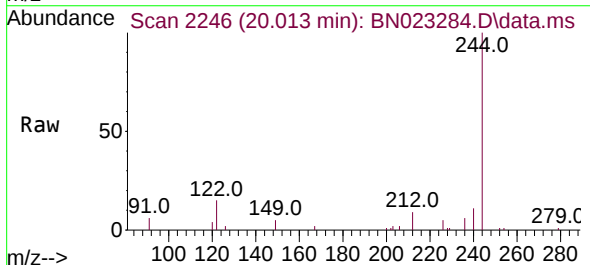
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

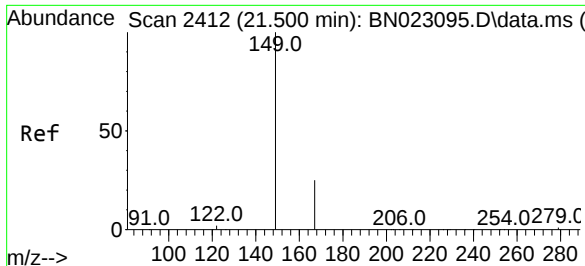
Tgt Ion	Ratio	Lower	Upper
240	100		
120	10.9	10.1	15.1
236	27.9	22.2	33.4



#31
Terphenyl-d14
Concen: 0.225 ng
RT: 20.013 min Scan# 2246
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion	Ratio	Lower	Upper
244	100		
212	9.4	7.6	11.4
122	15.2	12.6	18.8

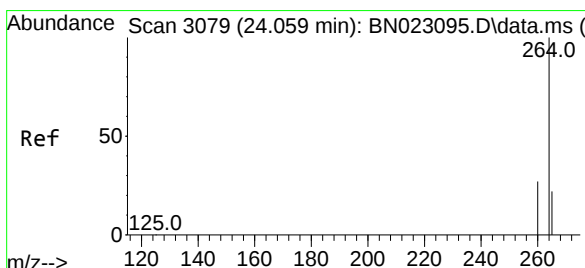
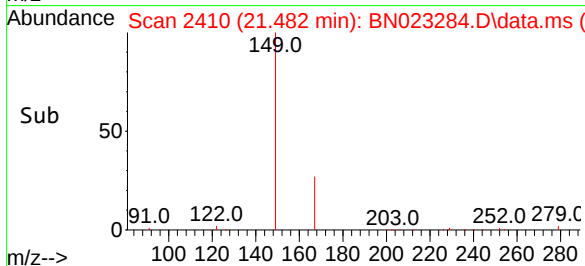
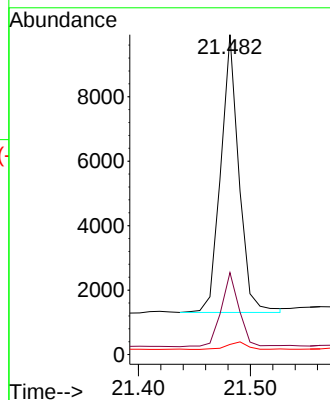
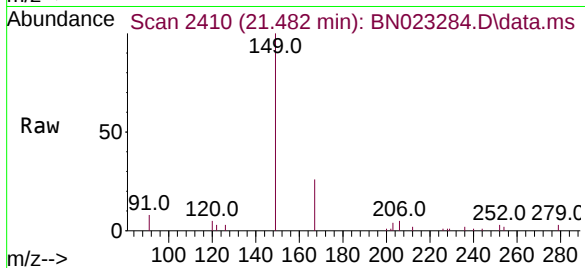




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.284 ng
RT: 21.482 min Scan# 2410
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

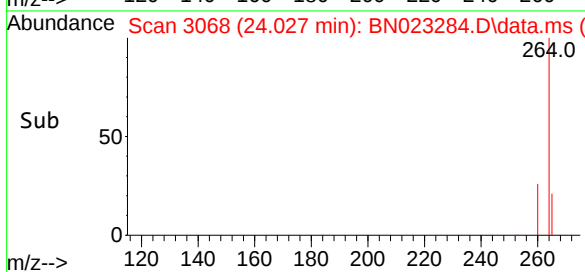
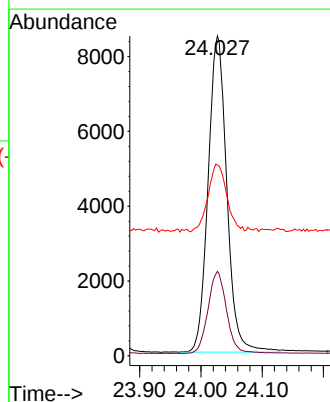
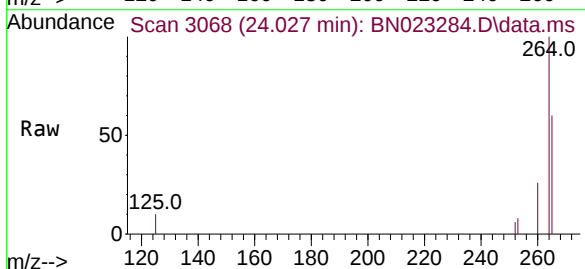
Instrument :
BNA_N
ClientSampleId :
OWBR-02-160-180-121422-H

Tgt Ion:	149	Resp:	9694
Ion Ratio	Lower	Upper	
149	100		
167	26.8	20.2	30.2
279	3.0	2.3	3.5



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. -0.000 min
Lab File: BN023284.D
Acq: 19 Dec 2022 13:53

Tgt Ion:	264	Resp:	17925
Ion Ratio	Lower	Upper	
264	100		
260	26.4	21.7	32.5
265	59.7	43.2	64.8





Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	12/14/22
Project:	Former Schlumberger Site Princeton NJ	Date Received:	12/14/22
Client Sample ID:	OWBR-03-128-148-121422-H	SDG No.:	N6070
Lab Sample ID:	N6070-05	Matrix:	Water
Analytical Method:	SW8270SIM	% Solid:	0
Sample Wt/Vol:	960 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :	SW3510C		

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN023285.D	1	12/16/22 08:59	12/19/22 14:30	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.060	U	0.060	0.21	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.26		30 (30) - 150 (150)	66%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.28		30 (30) - 150 (150)	70%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		30 (11) - 130 (175)	89%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.40		30 (10) - 130 (175)	99%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.57	*	30 (54) - 130 (171)	142%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	7020	7.999			
1146-65-2	Naphthalene-d8	23000	10.819			
15067-26-2	Acenaphthene-d10	14500	14.645			
1517-22-2	Phenanthrene-d10	30800	17.39			
1719-03-5	Chrysene-d12	23600	21.58			
1520-96-3	Perylene-d12	16700	24.027			

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\BN121922\
 Data File : BN023285.D
 Acq On : 19 Dec 2022 14:30
 Operator : CG/JU
 Sample : N6070-05
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 OWBR-03-128-148-121422-H

Quant Time: Dec 19 15:45:34 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 Response via : Initial Calibration

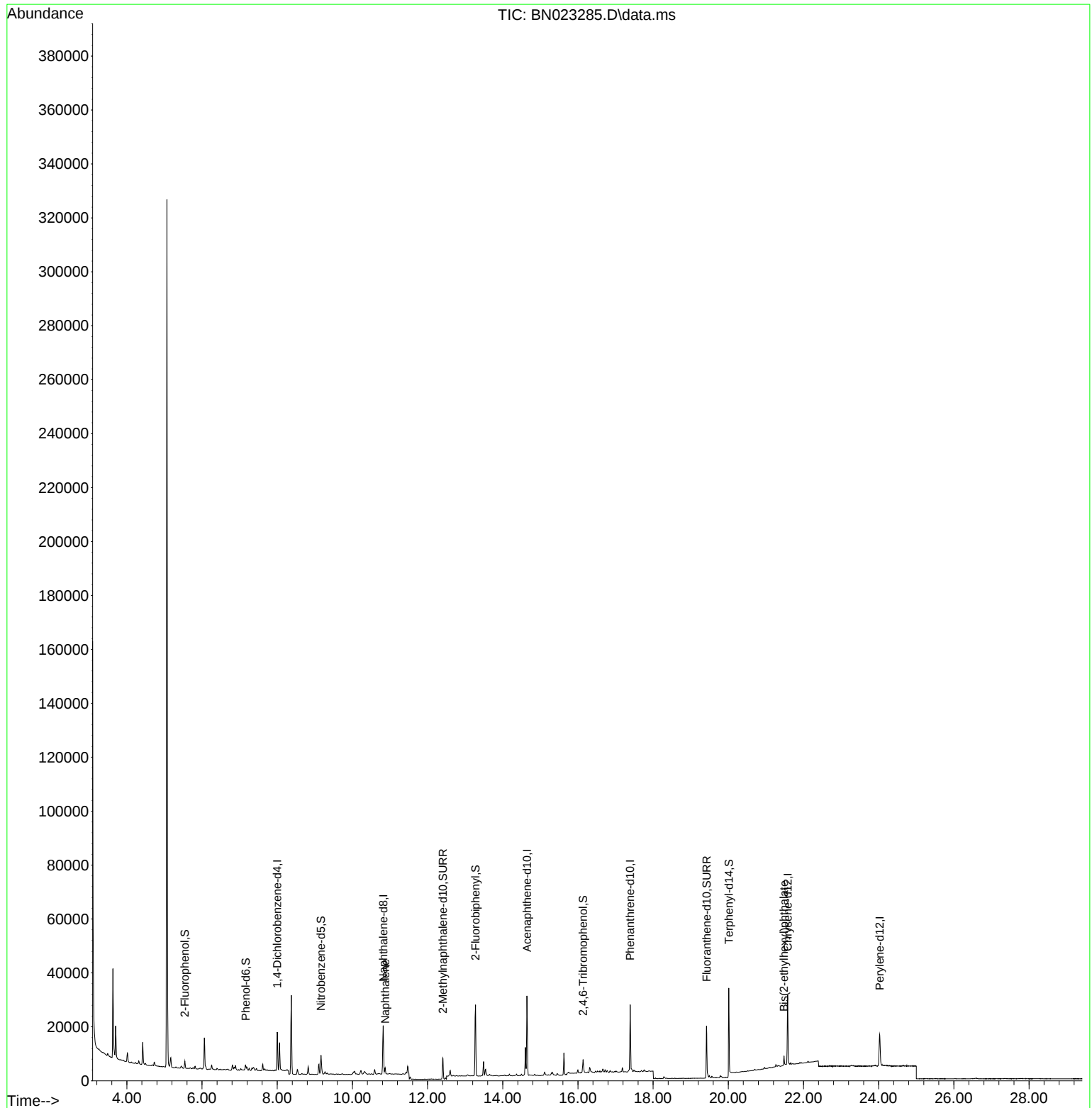
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	7020	0.400	ng	0.00
7) Naphthalene-d8	10.819	136	22963	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	14454	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	30794	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	23636	0.400	ng	0.00
35) Perylene-d12	24.027	264	16694	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	1954	0.149	ng	0.00
5) Phenol-d6	7.161	99	1902	0.114	ng	0.00
8) Nitrobenzene-d5	9.164	82	5386	0.356	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	10278	0.264	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2348	0.448	ng	0.00
15) 2-Fluorobiphenyl	13.277	172	22823	0.395	ng	0.00
27) Fluoranthene-d10	19.422	212	20341	0.282	ng	0.00
31) Terphenyl-d14	20.013	244	21854	0.569	ng	0.00
Target Compounds						
9) Naphthalene	10.872	128	2464	0.042	ng	# 87
34) Bis(2-ethylhexyl)phtha...	21.482	149	3364	0.104	ng	95

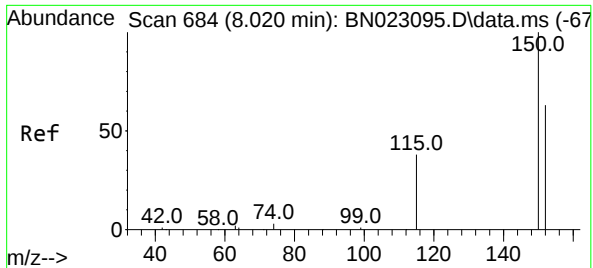
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023285.D
Acq On : 19 Dec 2022 14:30
Operator : CG/JU
Sample : N6070-05
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

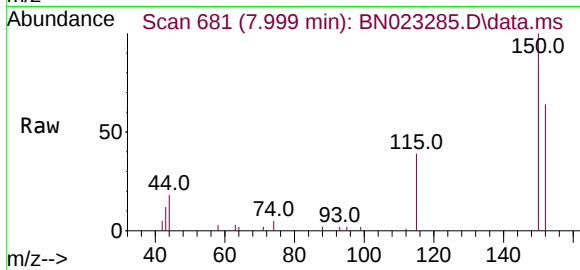
Quant Time: Dec 19 15:45:34 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



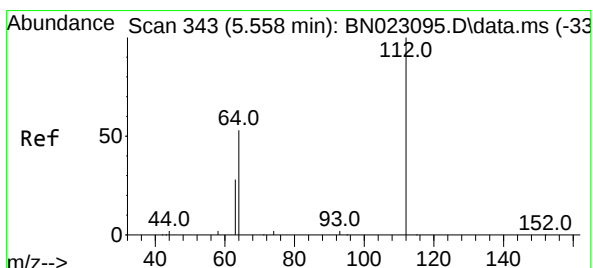
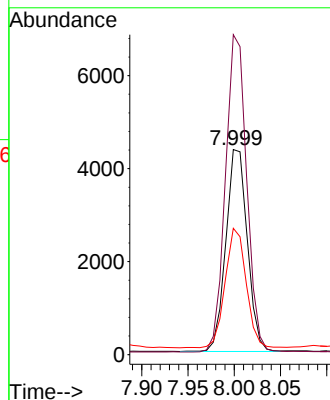
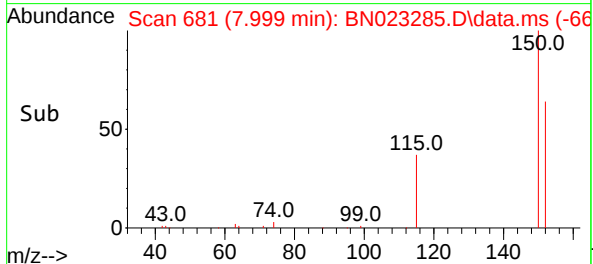


#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 681
Delta R.T. -0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

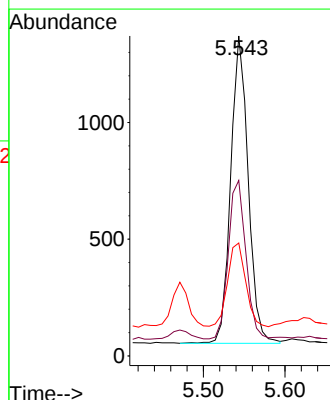
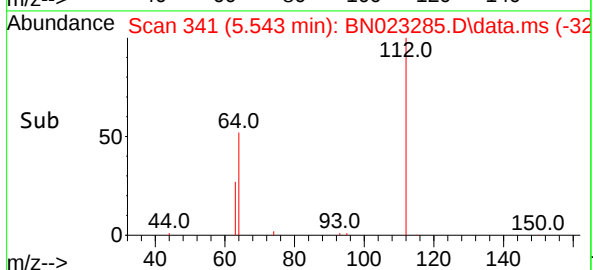
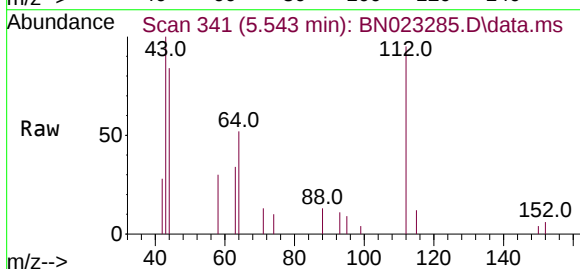


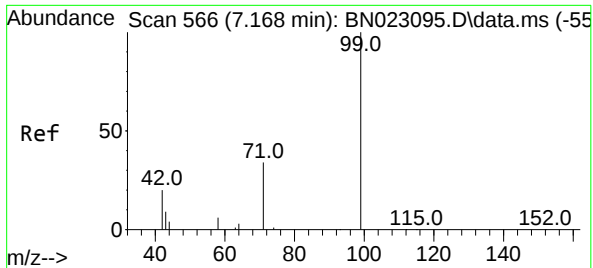
Tgt Ion:152 Resp: 7020
Ion Ratio Lower Upper
152 100
150 156.1 125.6 188.4
115 61.6 49.0 73.4



#4
2-Fluorophenol
Concen: 0.149 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:112 Resp: 1954
Ion Ratio Lower Upper
112 100
64 51.9 44.4 66.6
63 28.1 23.7 35.5

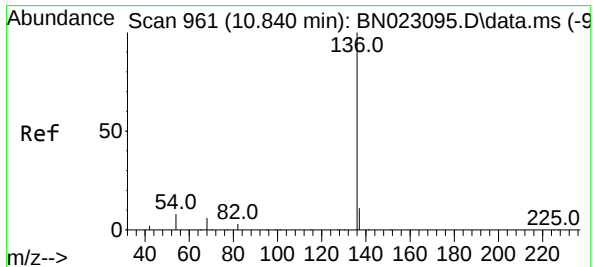
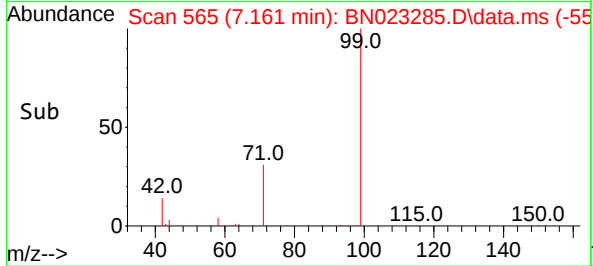
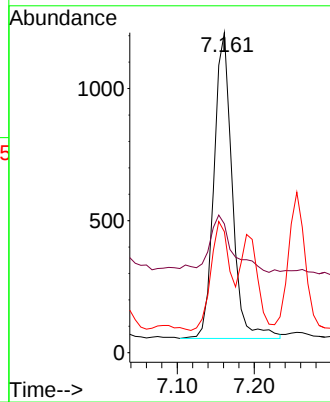
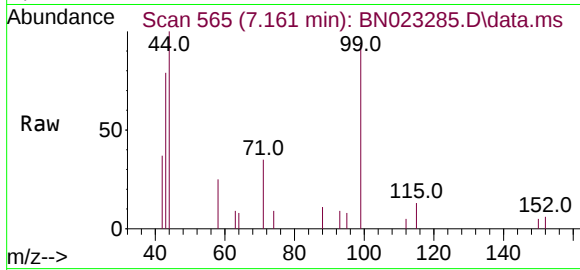




#5
Phenol-d6
Concen: 0.114 ng
RT: 7.161 min Scan# 50
Delta R.T. 0.007 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

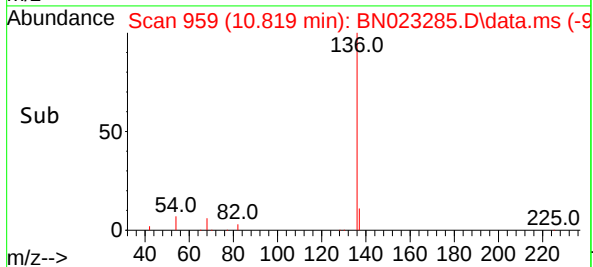
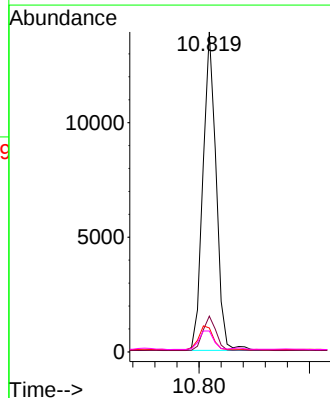
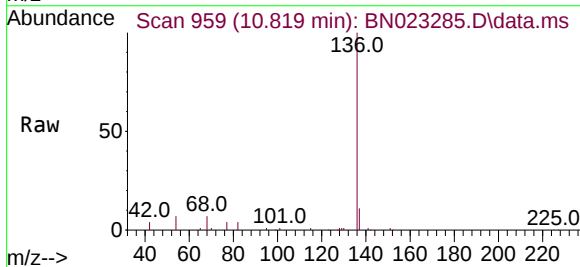
Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

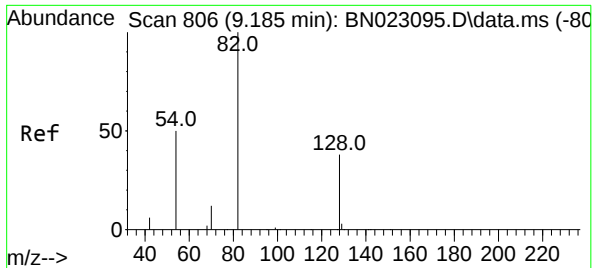
Tgt Ion: 99 Resp: 1902
Ion Ratio Lower Upper
99 100
42 25.8 16.3 24.5#
71 37.9 26.5 39.7



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 959
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion: 136 Resp: 22963
Ion Ratio Lower Upper
136 100
137 11.2 9.0 13.4
54 7.5 6.5 9.7
68 6.5 5.4 8.2

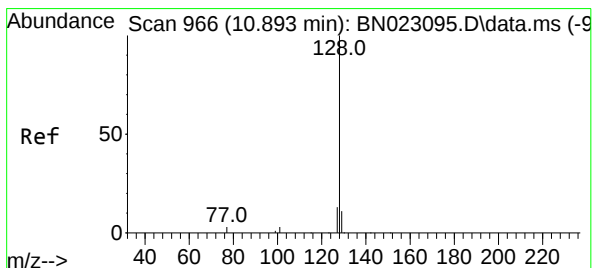
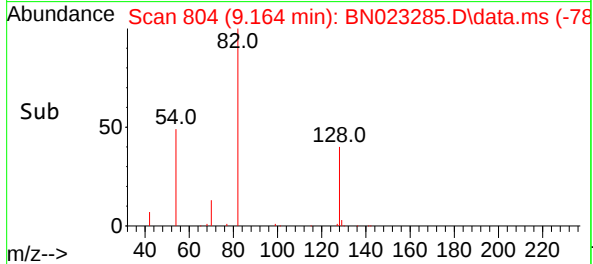
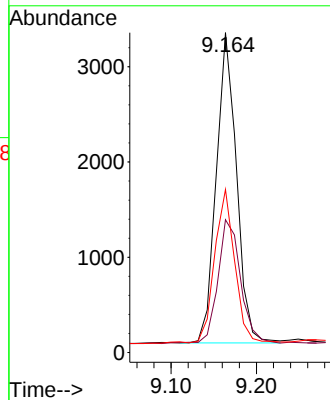
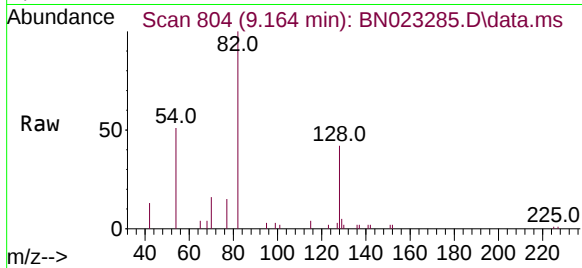




#8
Nitrobenzene-d5
Concen: 0.356 ng
RT: 9.164 min Scan# 804
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

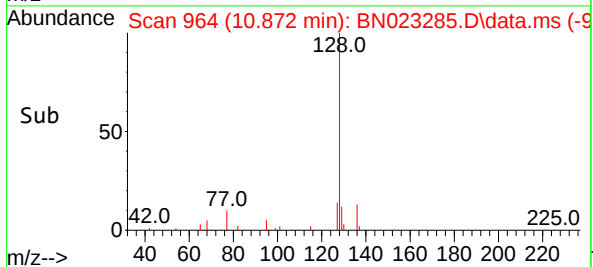
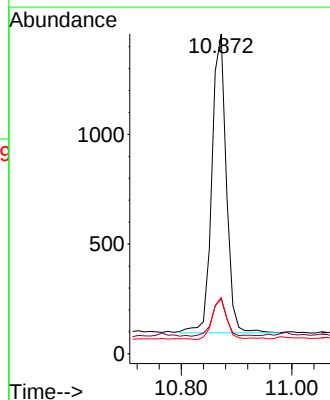
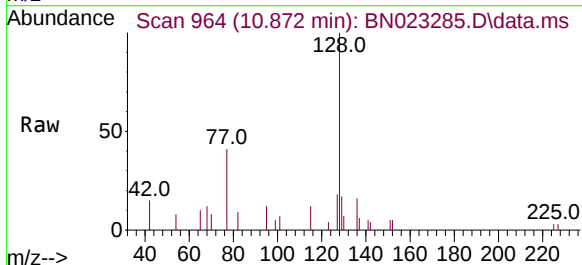
Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

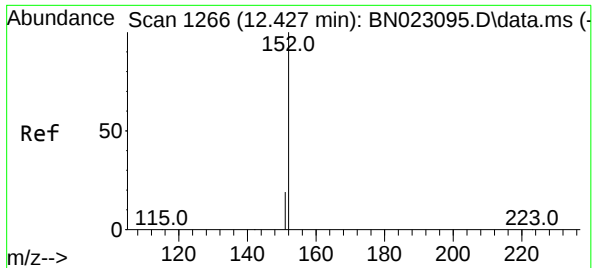
Tgt Ion:	82	Resp:	5386
Ion	Ratio	Lower	Upper
82	100		
128	41.5	31.4	47.2
54	51.0	41.0	61.4



#9
Naphthalene
Concen: 0.042 ng
RT: 10.872 min Scan# 964
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:	128	Resp:	2464
Ion	Ratio	Lower	Upper
128	100		
129	17.2	9.0	13.6#
127	17.6	10.5	15.7#

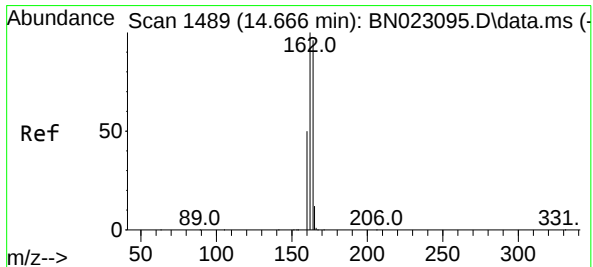
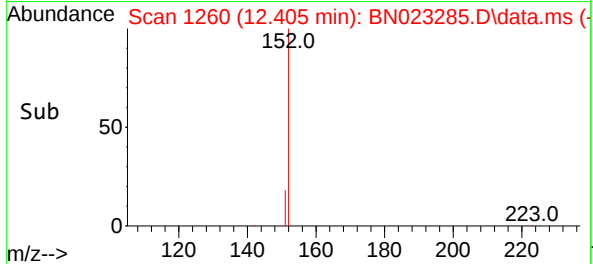
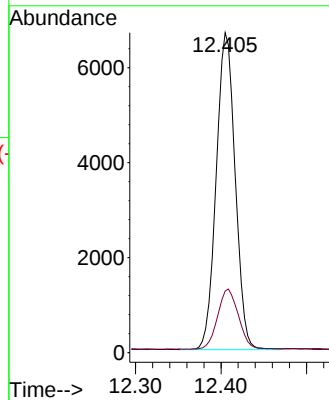
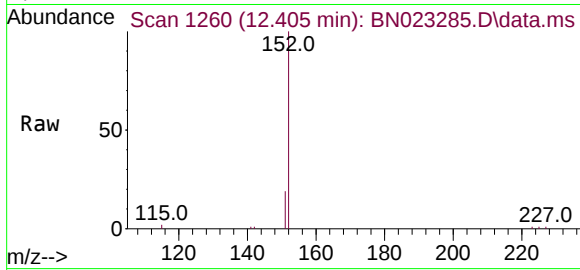




#11
2-Methylnaphthalene-d10
Concen: 0.264 ng
RT: 12.405 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

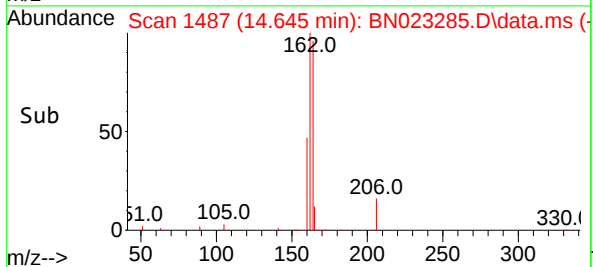
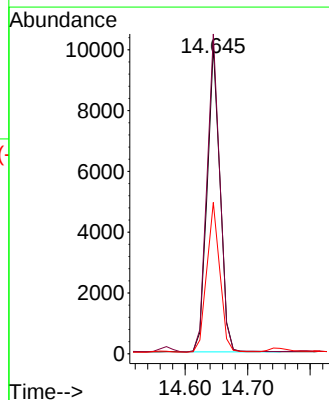
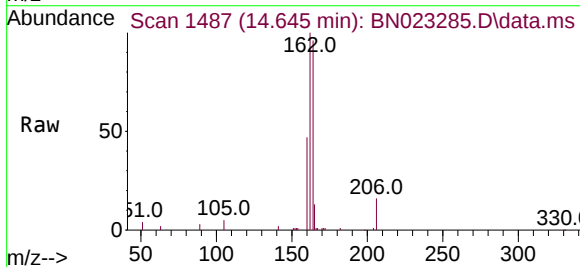
Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

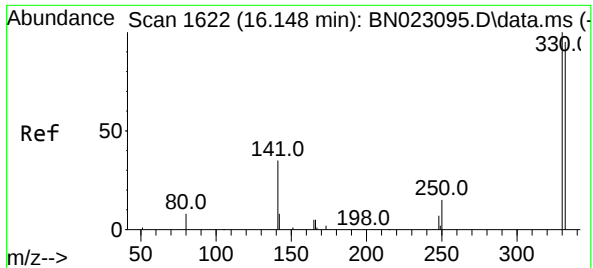
Tgt Ion:152 Resp: 10278
Ion Ratio Lower Upper
152 100
151 20.9 15.1 22.7



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1487
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:164 Resp: 14454
Ion Ratio Lower Upper
164 100
162 104.0 83.4 125.0
160 49.2 41.8 62.8

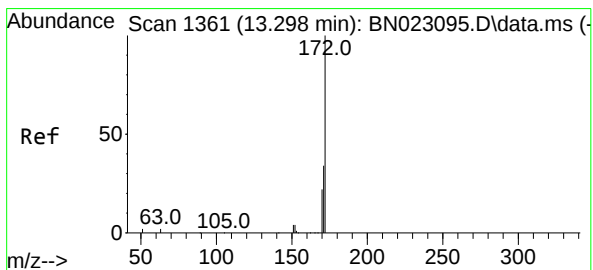
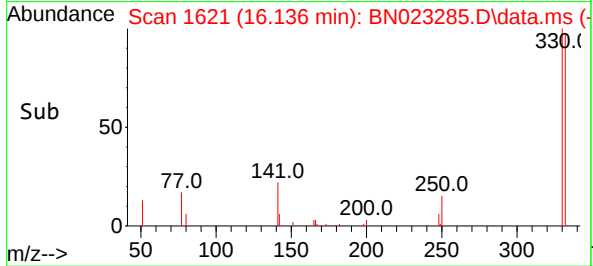
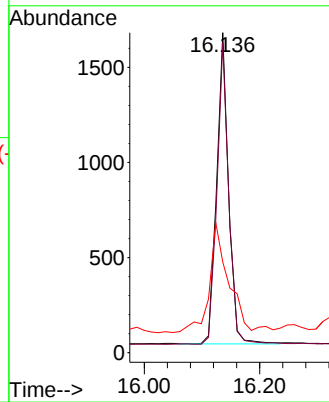
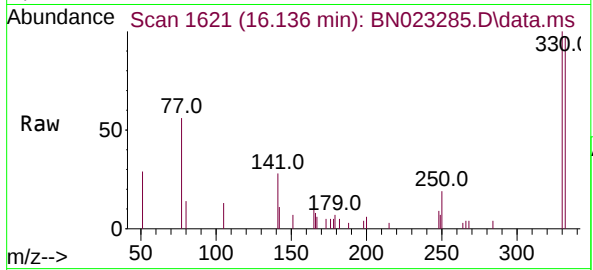




#14
2,4,6-Tribromophenol
Concen: 0.448 ng
RT: 16.136 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

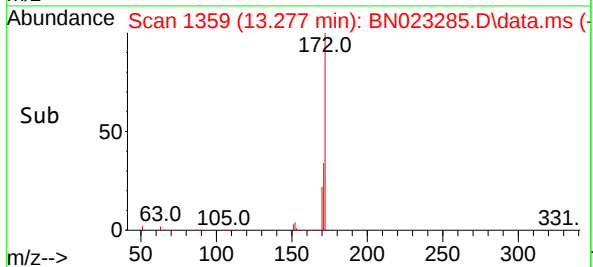
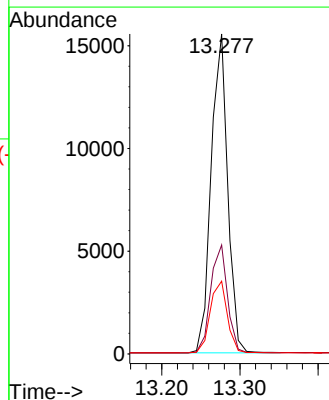
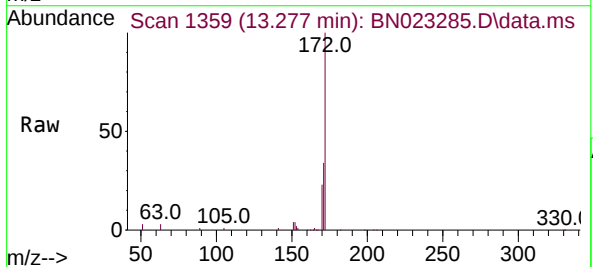
Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

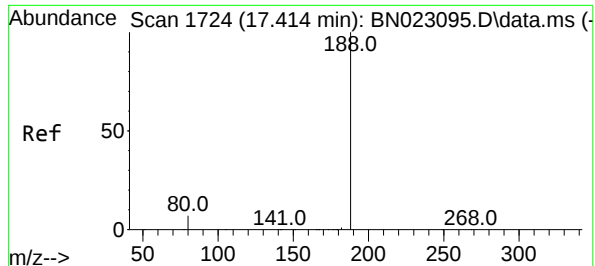
Tgt Ion: 330 Resp: 2348
Ion Ratio Lower Upper
330 100
332 96.0 77.3 115.9
141 55.0 33.5 50.3#



#15
2-Fluorobiphenyl
Concen: 0.395 ng
RT: 13.277 min Scan# 1359
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion: 172 Resp: 22823
Ion Ratio Lower Upper
172 100
171 34.0 27.4 41.0
170 22.7 17.9 26.9





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.390 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN023285.D

Acq: 19 Dec 2022 14:30

Instrument :

BNA_N

ClientSampleId :

OWBR-03-128-148-121422-H

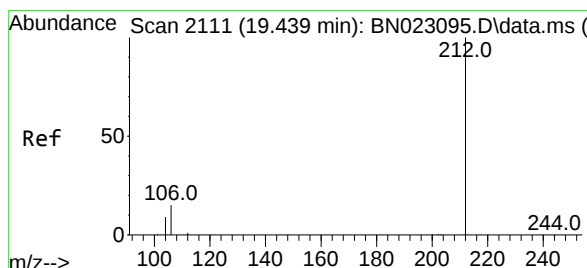
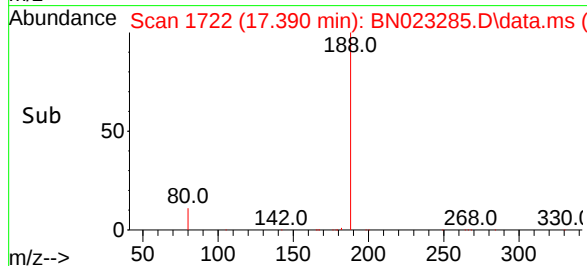
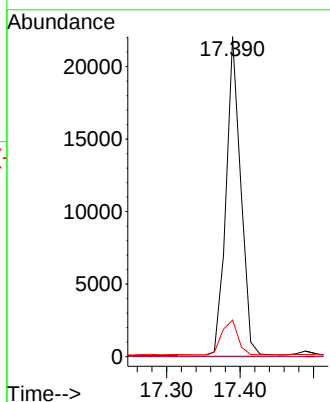
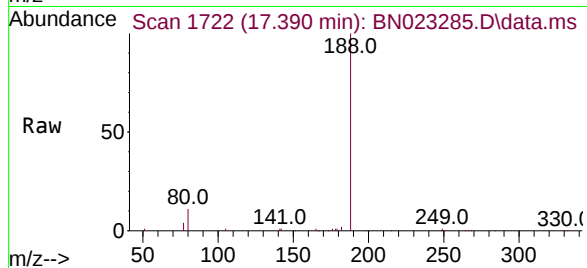
Tgt Ion:188 Resp: 30794

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.4 6.1 9.1#



#27

Fluoranthene-d10

Concen: 0.282 ng

RT: 19.422 min Scan# 2107

Delta R.T. 0.000 min

Lab File: BN023285.D

Acq: 19 Dec 2022 14:30

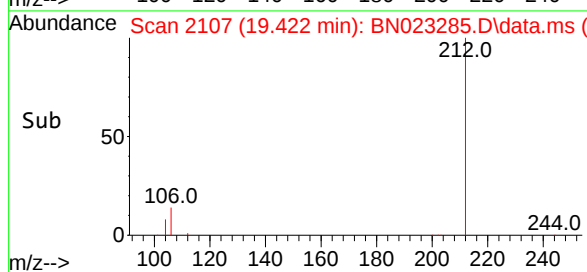
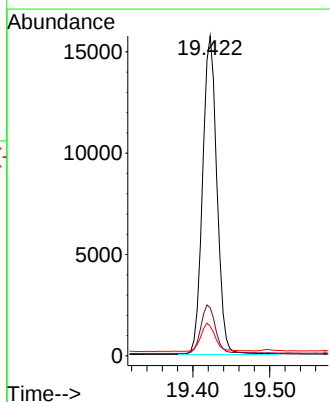
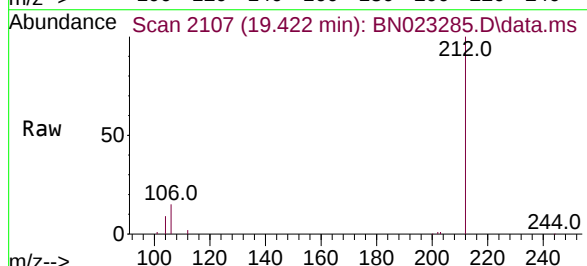
Tgt Ion:212 Resp: 20341

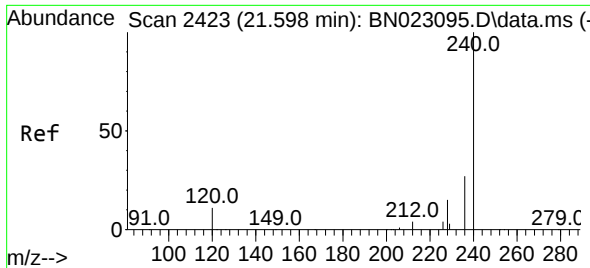
Ion Ratio Lower Upper

212 100

106 16.0 13.0 19.4

104 8.8 7.5 11.3

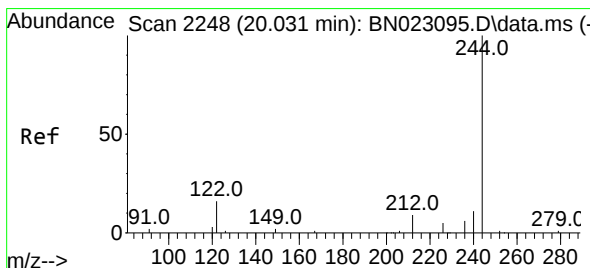
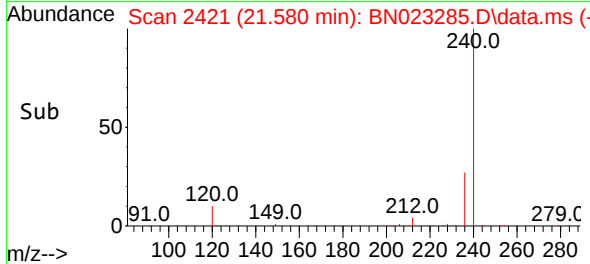
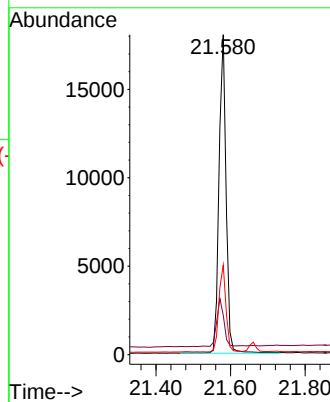
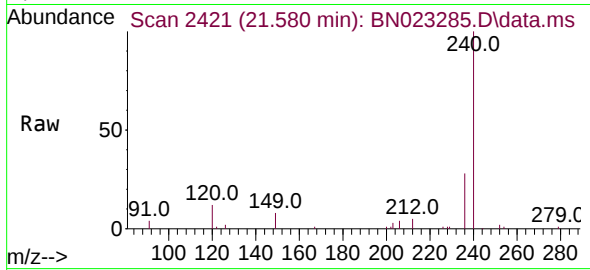




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2423
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

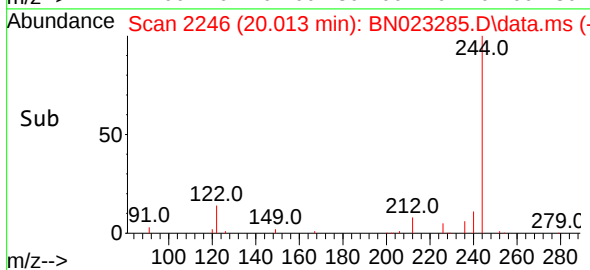
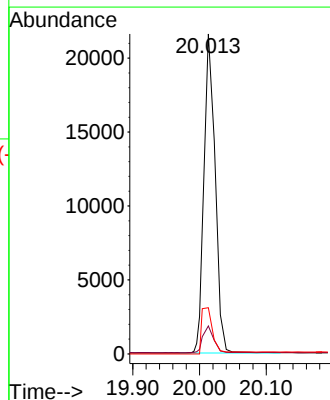
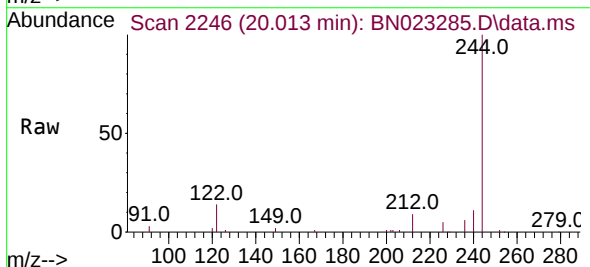
Instrument :
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ClientSampleId :
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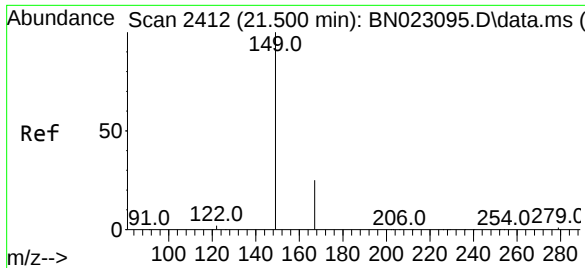
Tgt Ion	Ratio	Lower	Upper
240	100		
120	12.3	10.1	15.1
236	28.0	22.2	33.4



#31
Terphenyl-d14
Concen: 0.569 ng
RT: 20.013 min Scan# 2246
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion	Ratio	Lower	Upper
244	100		
212	8.7	7.6	11.4
122	14.4	12.6	18.8

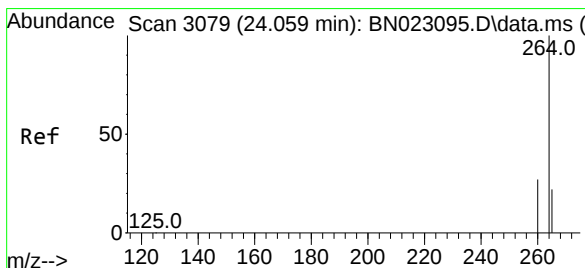
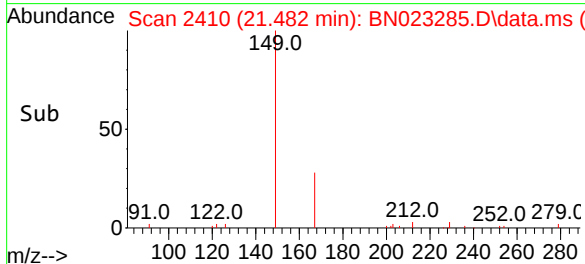
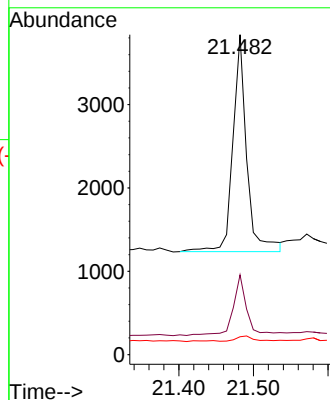
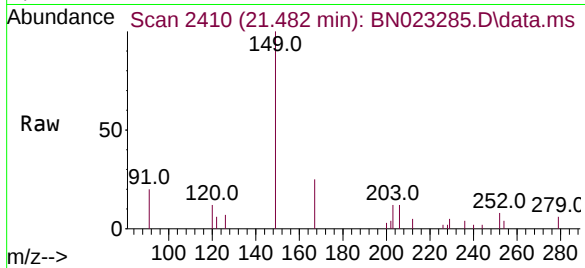




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.104 ng
RT: 21.482 min Scan# 2410
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

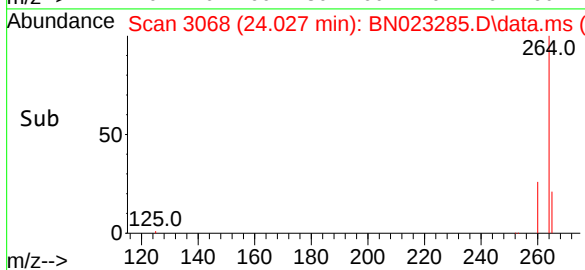
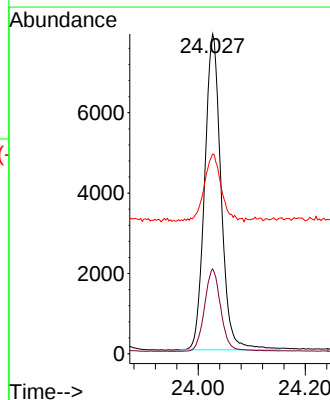
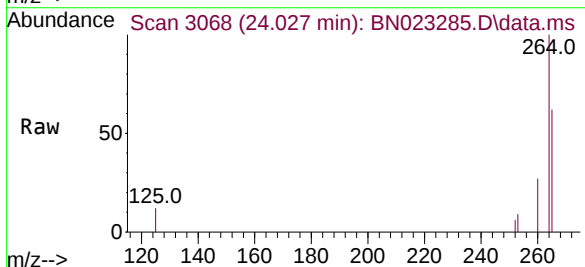
Instrument :
BNA_N
ClientSampleId :
OWBR-03-128-148-121422-H

Tgt Ion:	149	Resp:	3364
Ion Ratio	Lower	Upper	
149	100		
167	28.2	20.2	30.2
279	3.1	2.3	3.5



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. 0.000 min
Lab File: BN023285.D
Acq: 19 Dec 2022 14:30

Tgt Ion:	264	Resp:	16694
Ion Ratio	Lower	Upper	
264	100		
260	26.6	21.7	32.5
265	62.5	43.2	64.8



CALIBRATION SUMMARY

1
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Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
 Method File : 8270-SIM-BN120822.M
 Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 Last Update : Fri Dec 09 07:44:40 2022
 Response Via : Initial Calibration

Calibration Files

0.1 =BN023093.D 0.2 =BN023094.D 0.4 =BN023095.D 0.8 =BN023096.D 1.6 =BN023097.D 3.2 =BN023098.D 5.0 =BN023099.D

	Compound	0.1	0.2	0.4	0.8	1.6	3.2	5.0	Avg	%RSD
1) I	1,4-Dichlorobenzen...	-----ISTD-----								
2)	1,4-Dioxane	0.393	0.400	0.405	0.382	0.418	0.392	0.373	0.395	3.74
3)	n-Nitrosodimet...	0.318	0.315	0.373	0.374	0.456	0.446	0.433	0.388	15.15
4) S	2-Fluorophenol	0.767	0.723	0.748	0.680	0.776	0.767	0.753	0.745	4.51
5) S	Phenol-d6	0.921	0.885	0.915	0.858	1.005	1.020	1.025	0.947	7.25
6)	bis(2-Chloroet...	1.107	1.088	1.102	1.015	1.122	1.071	1.026	1.076	3.82
7) I	Naphthalene-d8	-----ISTD-----								
8) S	Nitrobenzene-d5	0.247	0.244	0.248	0.251	0.278	0.285	0.291	0.264	7.65
9)	Naphthalene	0.987	0.990	0.998	1.000	1.056	1.059	1.041	1.019	3.14
10)	Hexachlorobuta...	0.190	0.192	0.195	0.193	0.201	0.197	0.190	0.194	1.99
11) SURR2	Methylnaphth...	0.585	0.655	0.642	0.662	0.713	0.748	0.743	0.678	8.72
12)	2-Methylnaphth...	0.135	0.135	0.147	0.154	0.187			0.152	14.17
13) I	Acenaphthene-d10	-----ISTD-----								
14) S	2,4,6-Tribromo...	0.120	0.122	0.132	0.133	0.156	0.172	0.182	0.145	17.17
15) S	2-Fluorobiphenyl	1.569	1.574	1.607	1.555	1.668	1.615	1.598	1.598	2.36
16)	Acenaphthylene	1.353	1.379	1.474	1.517	1.773	1.868	1.916	1.611	14.63
17)	Acenaphthene	1.102	1.106	1.151	1.145	1.252	1.263	1.269	1.184	6.31
18)	Fluorene	1.177	1.221	1.293	1.285	1.427	1.434	1.439	1.325	8.19
19) I	Phenanthrene-d10	-----ISTD-----								
20)	4,6-Dinitro-2-...	0.040	0.046	0.048	0.061	0.071	0.077	0.057		25.87
21)	4-Bromophenyl-...	0.196	0.197	0.204	0.204	0.229	0.231	0.233	0.213	7.78
22)	Hexachlorobenzene	0.256	0.267	0.280	0.276	0.296	0.293	0.288	0.280	5.23
23)	Atrazine	0.125	0.127	0.134	0.138	0.163	0.180	0.187	0.150	17.12
24)	Pentachlorophenol	0.093	0.078	0.080	0.084	0.102	0.116	0.126	0.097	19.10
25)	Phenanthrene	1.143	1.111	1.147	1.148	1.255	1.275	1.265	1.192	5.85
26)	Anthracene	0.816	0.824	0.859	0.893	1.037	1.098	1.122	0.950	13.91
27) SURR	Fluoranthene-d10	0.825	0.854	0.882	0.896	1.002	1.039	1.056	0.936	10.03
28)	Fluoranthene	1.088	1.131	1.201	1.251	1.411	1.437	1.415	1.276	11.35
29) I	Chrysene-d12	-----ISTD-----								
30)	Pyrene	1.375	1.424	1.448	1.426	1.527	1.527	1.525	1.464	4.21
31) S	Terphenyl-d14	0.612	0.577	0.684	0.650	0.690	0.663	0.671	0.649	6.32
32)	Benzo(a)anthra...	1.163	1.164	1.199	1.229	1.381	1.422	1.462	1.289	9.99
33)	Chrysene	1.436	1.392	1.442	1.434	1.529	1.463	1.447	1.449	2.87
34)	Bis(2-ethylhex...	0.505	0.506	0.489	0.485	0.539	0.591	0.700	0.545	14.22
35) I	Perylene-d12	-----ISTD-----								

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

Method File : 8270-SIM-BN120822.M

36)	Indeno(1,2,3-c...	1.483	1.452	1.693	1.753	2.038	2.051	2.079	1.793	14.98
37)	Benzo(b)fluora...	1.359	1.402	1.594	1.651	1.849	1.874	1.879	1.658	13.29
38)	Benzo(k)fluora...	1.286	1.378	1.611	1.675	1.933	1.955	1.947	1.684	16.49
39) C	Benzo(a)pyrene	1.135	1.009	1.111	1.151	1.375	1.444	1.482	1.244	14.93
40)	Dibenzo(a,h)an...	1.148	1.144	1.370	1.422	1.663	1.655	1.672	1.439	16.24
41)	Benzo(g,h,i)pe...	1.219	1.295	1.512	1.538	1.731	1.716	1.748	1.537	13.90

(#) = Out of Range

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023093.D
 Acq On : 08 Dec 2022 14:00
 Operator : CG/JU
 Sample : SSTDICC0.1
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.1

Quant Time: Dec 09 07:27:34 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:25:53 2022
 Response via : Initial Calibration

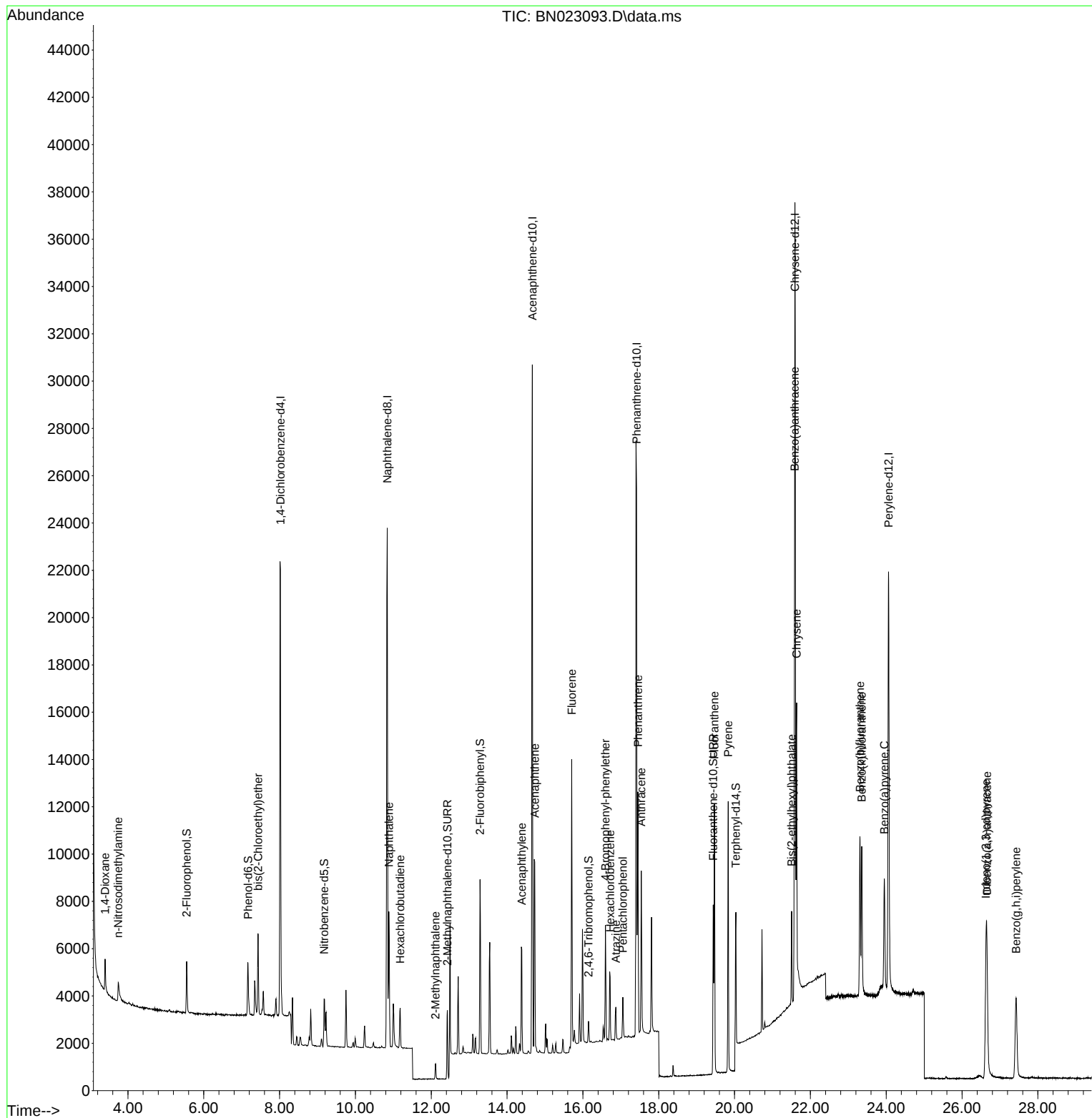
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.020	152	9714	0.400	ng	0.00
7) Naphthalene-d8	10.839	136	29087	0.400	ng	# 0.00
13) Acenaphthene-d10	14.666	164	16291	0.400	ng	0.00
19) Phenanthrene-d10	17.414	188	36859	0.400	ng	0.00
29) Chrysene-d12	21.593	240	29376	0.400	ng	# 0.00
35) Perylene-d12	24.060	264	26107	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.550	112	1863	0.083	ng	0.00
5) Phenol-d6	7.168	99	2237	0.079	ng	0.00
8) Nitrobenzene-d5	9.174	82	1799	0.082	ng	-0.01
11) 2-Methylnaphthalene-d10	12.423	152	4254	0.077	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	489	0.071	ng	0.00
15) 2-Fluorobiphenyl	13.287	172	6390	0.088	ng	-0.01
27) Fluoranthene-d10	19.439	212	7606	0.075	ng	0.00
31) Terphenyl-d14	20.035	244	4494	0.081	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.398	88	955	0.079	ng	98
3) n-Nitrosodimethylamine	3.745	42	772	0.066	ng	96
6) bis(2-Chloroethyl)ether	7.435	93	2688	0.086	ng	98
9) Naphthalene	10.882	128	7179	0.083	ng	97
10) Hexachlorobutadiene	11.181	225	1383	0.085	ng	# 99
12) 2-Methylnaphthalene	12.113	142	983	0.074	ng	# 77
16) Acenaphthylene	14.388	152	5509	0.072	ng	100
17) Acenaphthene	14.730	154	4487	0.080	ng	99
18) Fluorene	15.703	166	4794	0.077	ng	99
21) 4-Bromophenyl-phenylether	16.595	248	1805	0.081	ng	99
22) Hexachlorobenzene	16.719	284	2356	0.082	ng	98
23) Atrazine	16.868	200	1151	0.071	ng	# 96
24) Pentachlorophenol	17.054	266	861	0.102	ng	98
25) Phenanthrene	17.451	178	10530	0.085	ng	99
26) Anthracene	17.538	178	7515	0.075	ng	100
28) Fluoranthene	19.468	202	10024	0.074	ng	100
30) Pyrene	19.831	202	10098	0.082	ng	100
32) Benzo(a)anthracene	21.584	228	8542	0.079	ng	99
33) Chrysene	21.638	228	10544	0.087	ng	99
34) Bis(2-ethylhexyl)phtha...	21.504	149	3706	0.079	ng	98
36) Indeno(1,2,3-cd)pyrene	26.630	276	9677	0.070	ng	# 82
37) Benzo(b)fluoranthene	23.306	252	8869	0.074	ng	# 85
38) Benzo(k)fluoranthene	23.355	252	8393	0.069	ng	# 87
39) Benzo(a)pyrene	23.949	252	7407	0.077	ng	# 77
40) Dibenzo(a,h)anthracene	26.656	278	7491	0.068	ng	94
41) Benzo(g,h,i)perylene	27.425	276	7959	0.071	ng	96

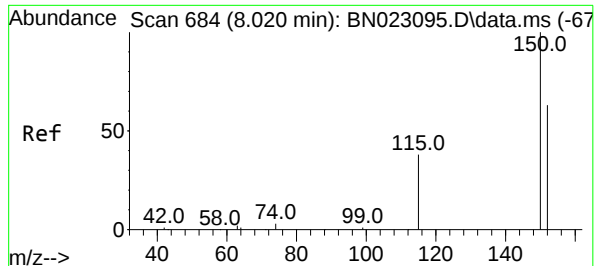
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Data File : BN023093.D
Acq On : 08 Dec 2022 14:00
Operator : CG/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Dec 09 07:27:34 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

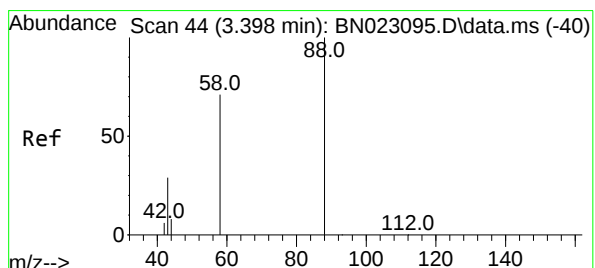
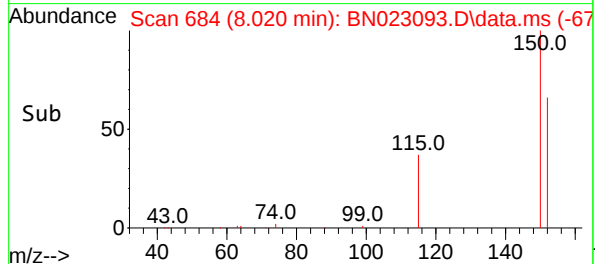
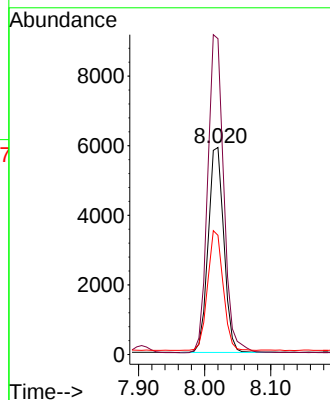
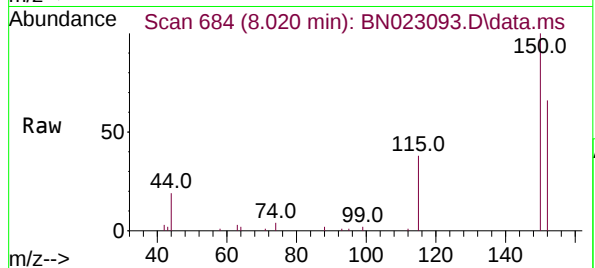




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 684
Delta R.T. 0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

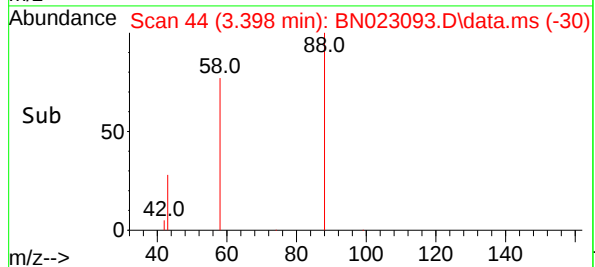
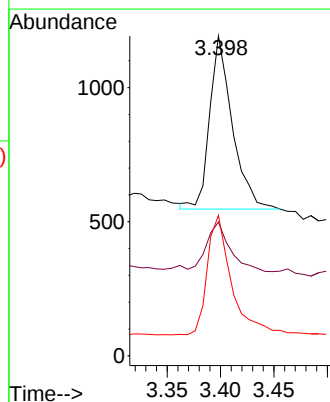
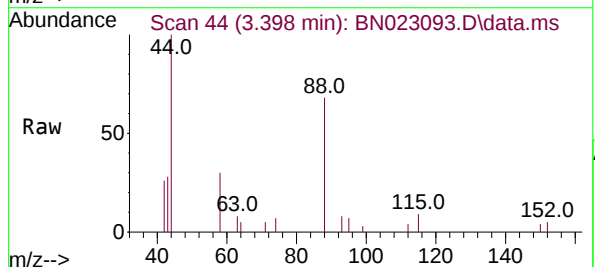
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

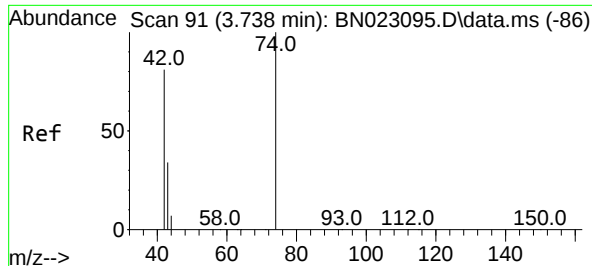
Tgt Ion:152 Resp: 9714
Ion Ratio Lower Upper
152 100
150 152.5 125.6 188.4
115 57.6 49.0 73.4



#2
1,4-Dioxane
Concen: 0.079 ng
RT: 3.398 min Scan# 44
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 88 Resp: 955
Ion Ratio Lower Upper
88 100
43 31.8 23.3 34.9
58 72.9 58.0 87.0

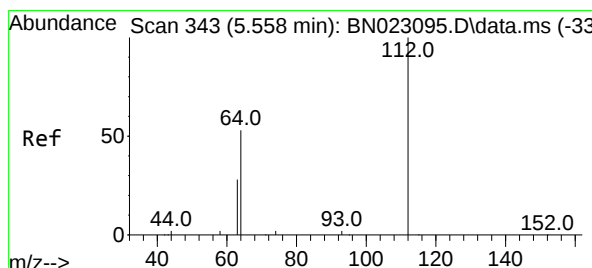
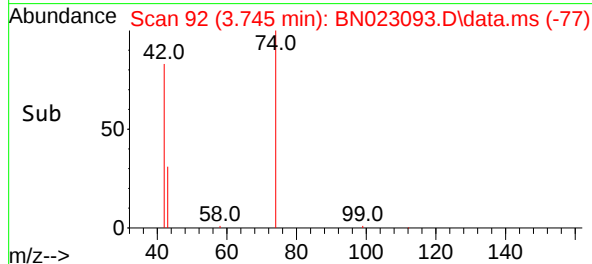
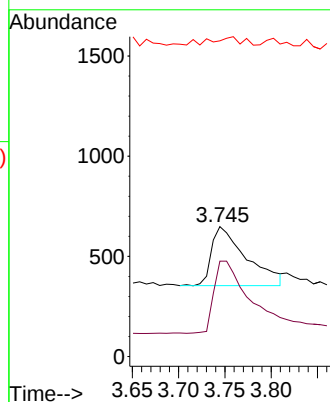
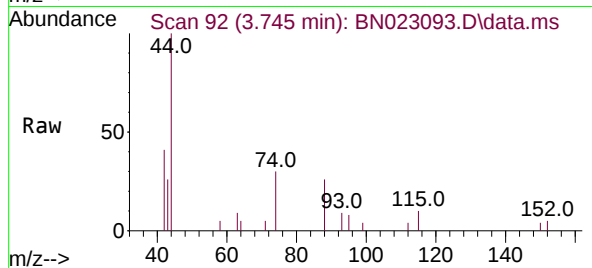




#3
n-Nitrosodimethylamine
Concen: 0.066 ng
RT: 3.745 min Scan# 91
Delta R.T. 0.007 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

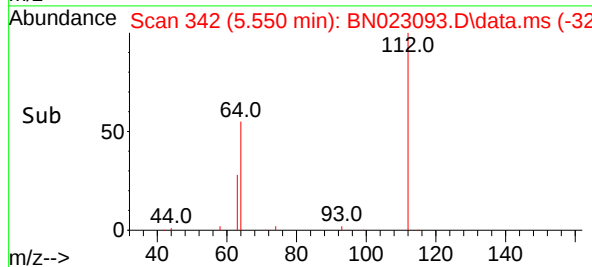
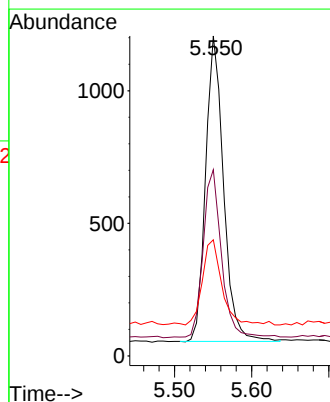
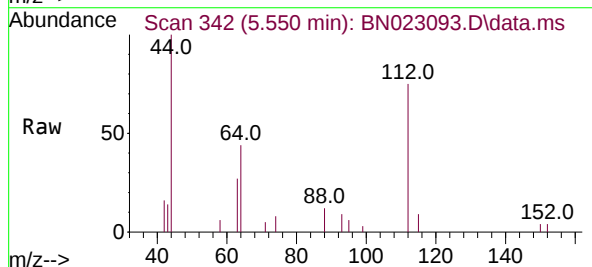
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

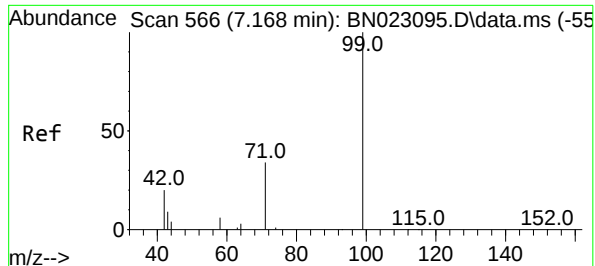
Tgt Ion: 42 Resp: 772
Ion Ratio Lower Upper
42 100
74 124.9 95.8 143.6
44 10.5 8.4 12.6



#4
2-Fluorophenol
Concen: 0.083 ng
RT: 5.550 min Scan# 342
Delta R.T. -0.007 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 112 Resp: 1863
Ion Ratio Lower Upper
112 100
64 56.0 44.4 66.6
63 30.5 23.7 35.5

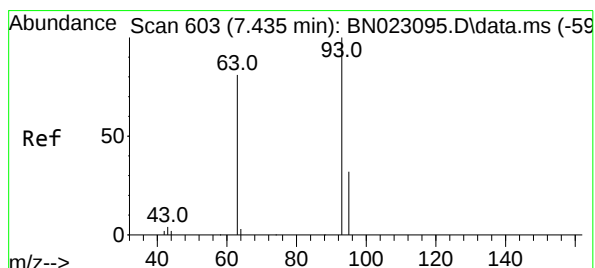
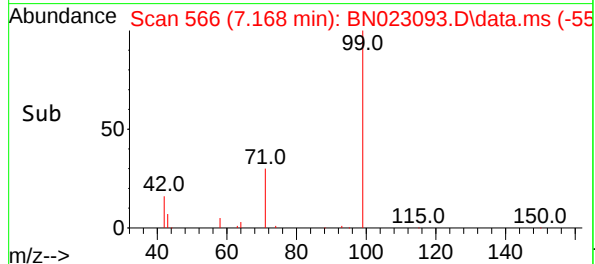
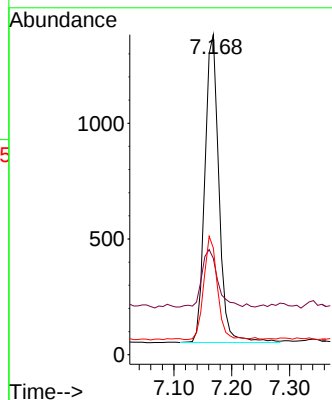
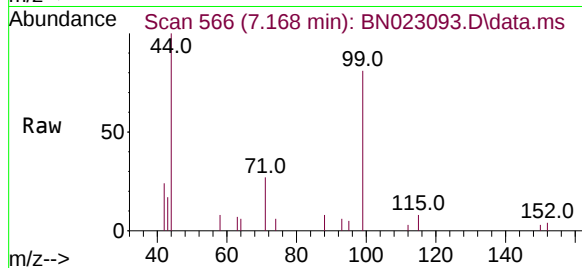




#5
Phenol-d6
Concen: 0.079 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

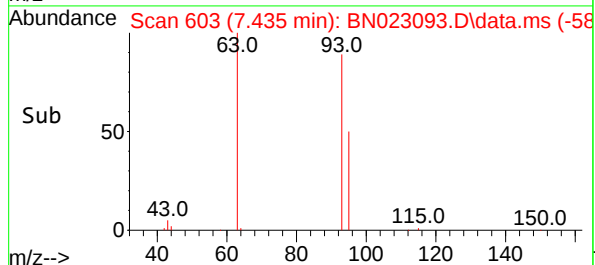
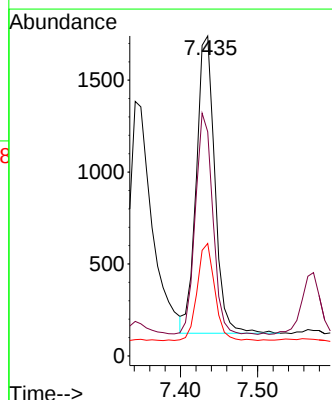
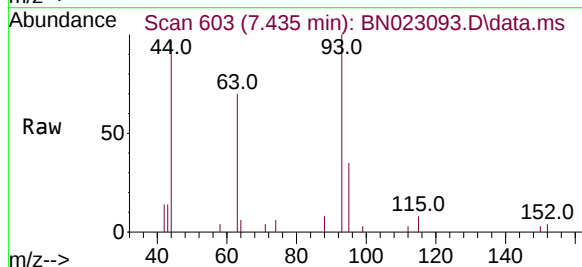
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

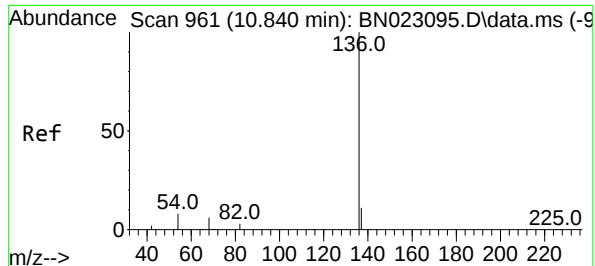
Tgt Ion: 99 Resp: 2237
Ion Ratio Lower Upper
99 100
42 20.8 16.3 24.5
71 32.1 26.5 39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.086 ng
RT: 7.435 min Scan# 603
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 93 Resp: 2688
Ion Ratio Lower Upper
93 100
63 70.5 58.1 87.1
95 31.3 25.2 37.8

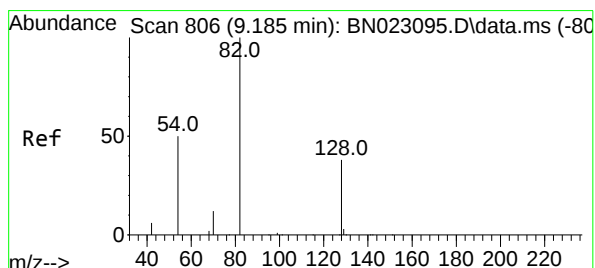
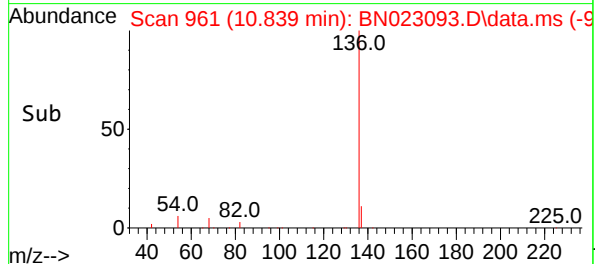
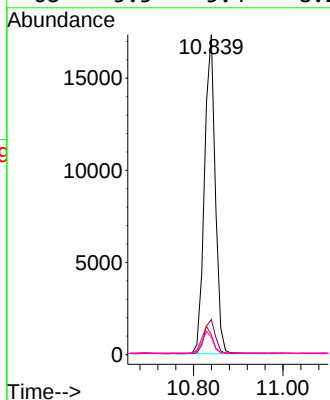
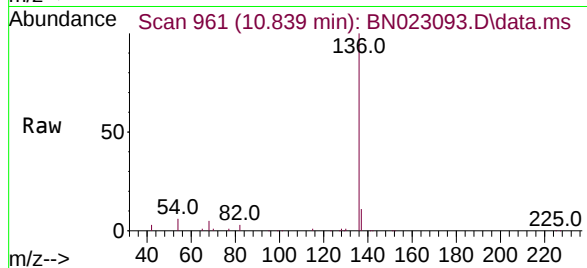




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.839 min Scan# 961
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

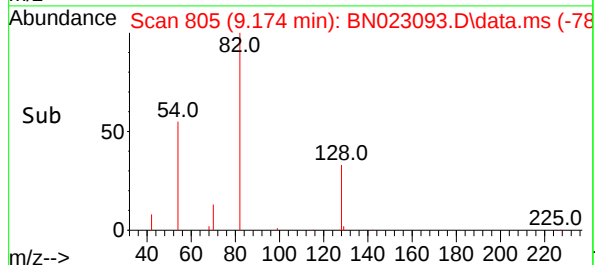
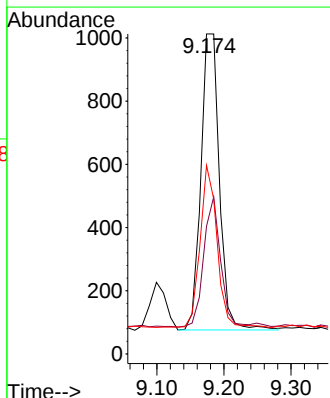
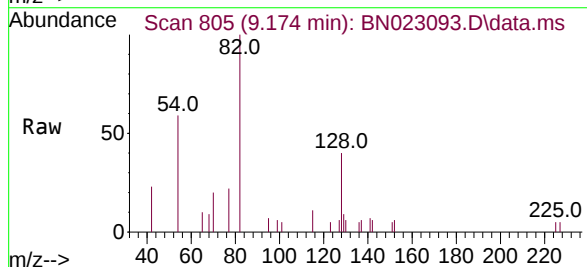
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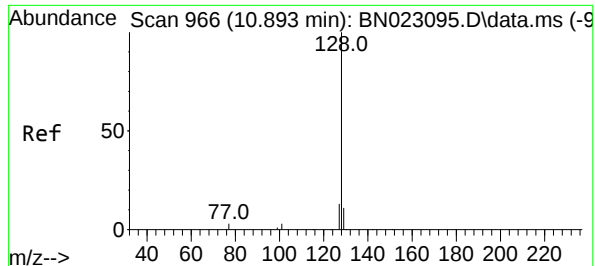
Tgt Ion:136	Resp:	29087
Ion Ratio	Lower	Upper
136	100	
137	10.9	9.0 13.4
54	6.2	6.5 9.7#
68	5.5	5.4 8.2



#8
Nitrobenzene-d5
Concen: 0.082 ng
RT: 9.174 min Scan# 805
Delta R.T. -0.011 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion: 82	Resp:	1799
Ion Ratio	Lower	Upper
82	100	
128	39.9	31.4 47.2
54	58.9	41.0 61.4

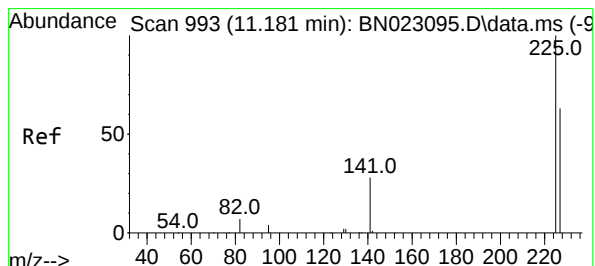
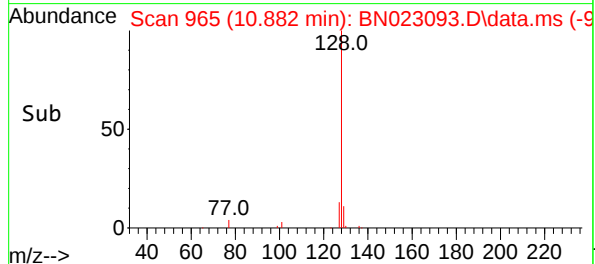
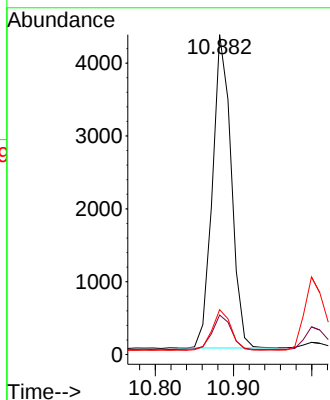
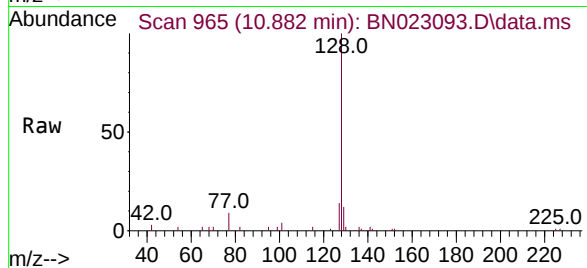




#9
Naphthalene
Concen: 0.083 ng
RT: 10.882 min Scan# 965
Delta R.T. -0.011 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

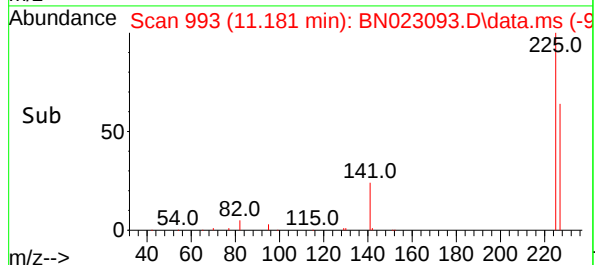
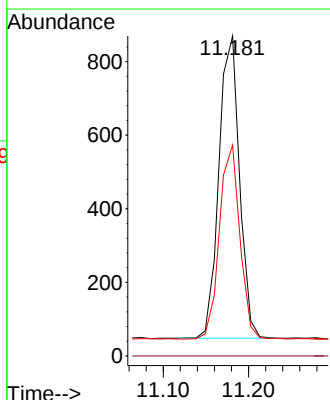
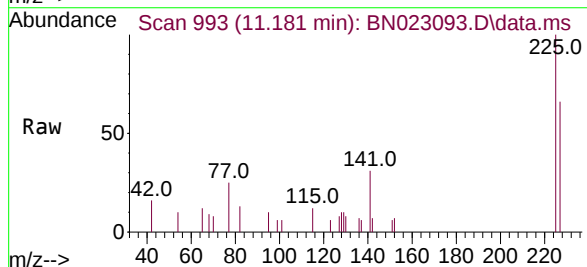
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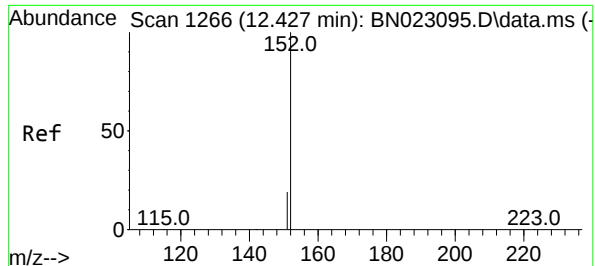
Tgt Ion:	128	Resp:	7179
Ion	Ratio	Lower	Upper
128	100		
129	12.4	9.0	13.6
127	14.0	10.5	15.7



#10
Hexachlorobutadiene
Concen: 0.085 ng
RT: 11.181 min Scan# 993
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:	225	Resp:	1383
Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	51.1	76.7

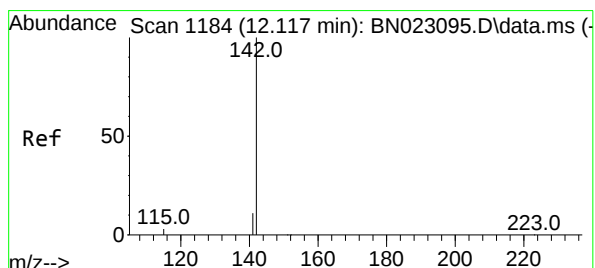
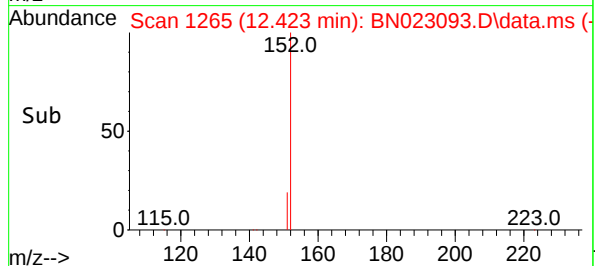
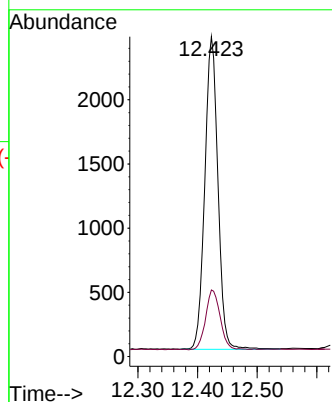
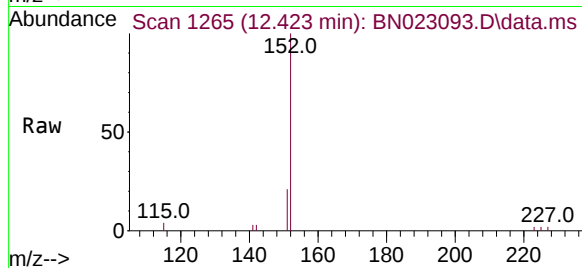




#11
2-Methylnaphthalene-d10
Concen: 0.077 ng
RT: 12.423 min Scan# 11
Delta R.T. -0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

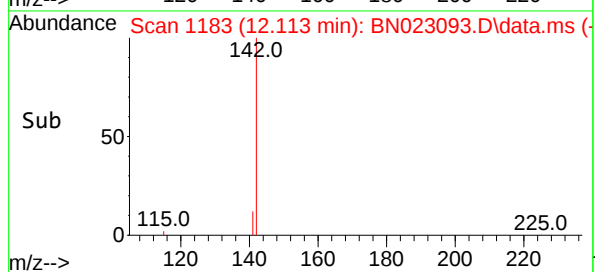
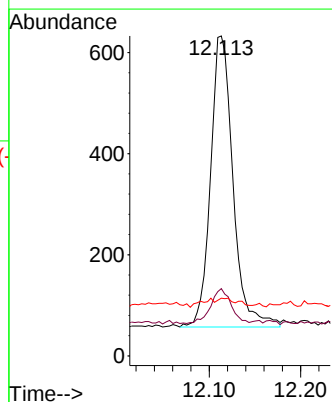
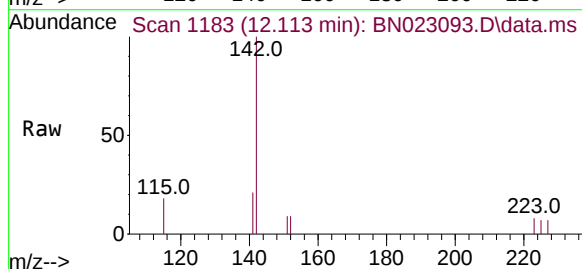
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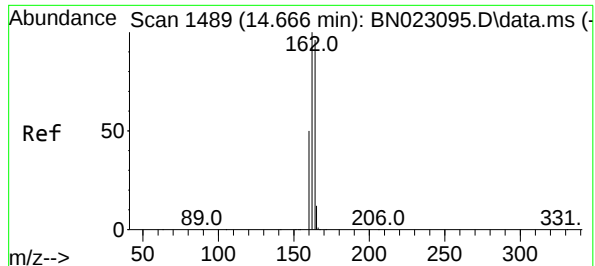
Tgt Ion:152 Resp: 4254
Ion Ratio Lower Upper
152 100
151 18.7 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.074 ng
RT: 12.113 min Scan# 1183
Delta R.T. -0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:142 Resp: 983
Ion Ratio Lower Upper
142 100
141 21.0 10.9 16.3#
115 18.0 5.7 8.5#





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.666 min Scan# 1489

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

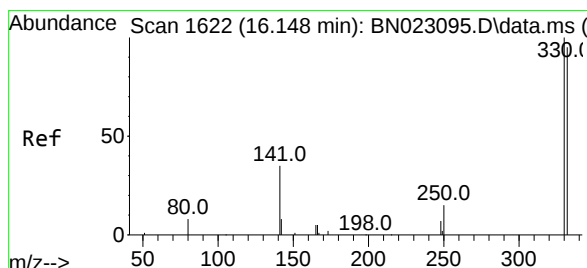
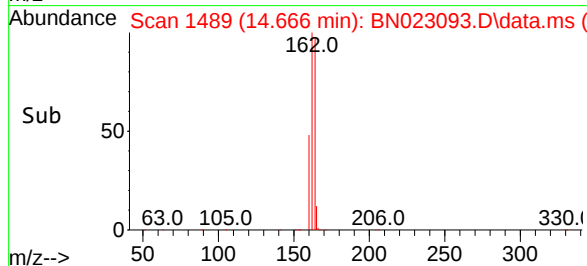
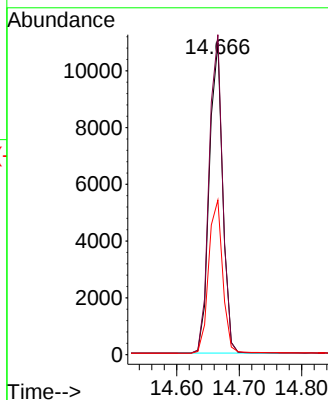
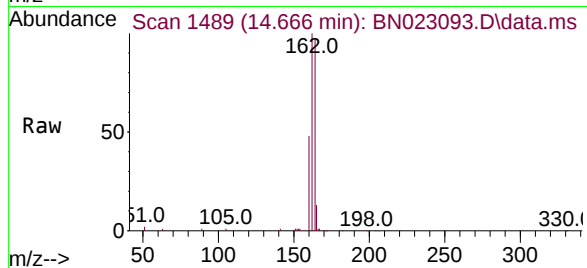
Tgt Ion:164 Resp: 16291

Ion Ratio Lower Upper

164 100

162 102.7 83.4 125.0

160 49.6 41.8 62.8



#14

2,4,6-Tribromophenol

Concen: 0.071 ng

RT: 16.148 min Scan# 1622

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

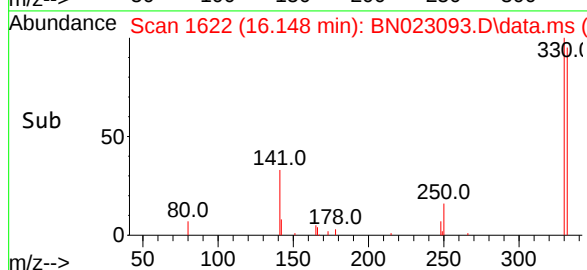
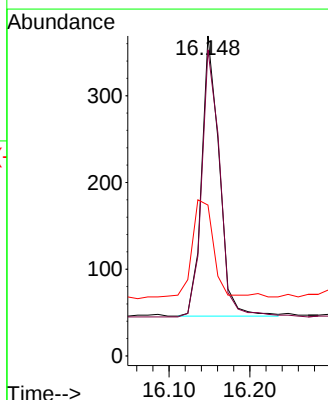
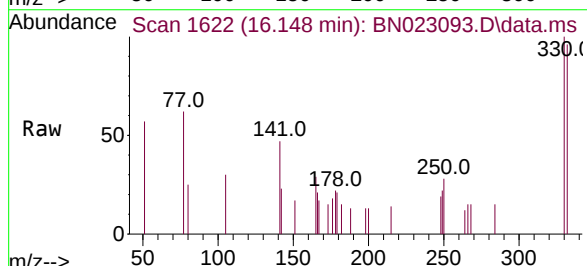
Tgt Ion:330 Resp: 489

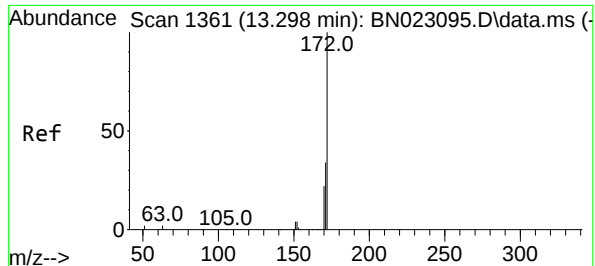
Ion Ratio Lower Upper

330 100

332 98.4 77.3 115.9

141 40.9 33.5 50.3





#15

2-Fluorobiphenyl

Concen: 0.088 ng

RT: 13.287 min Scan# 1360

Delta R.T. -0.011 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

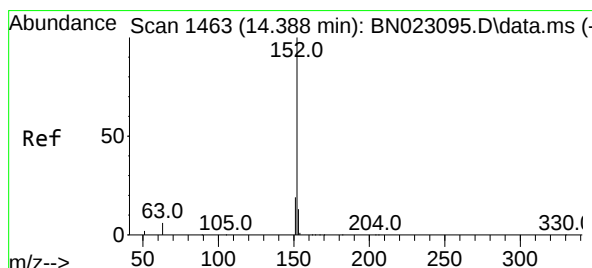
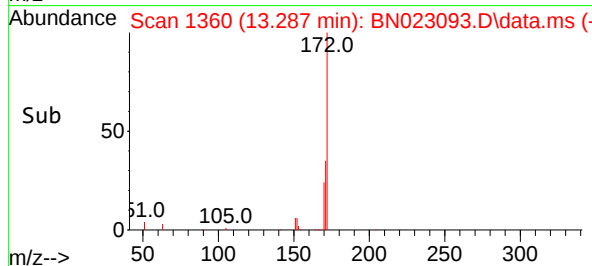
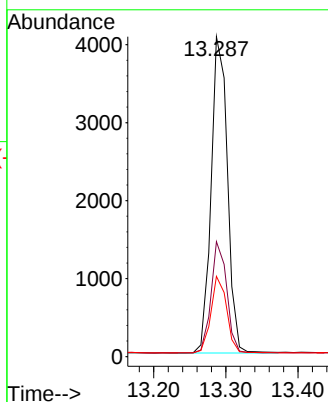
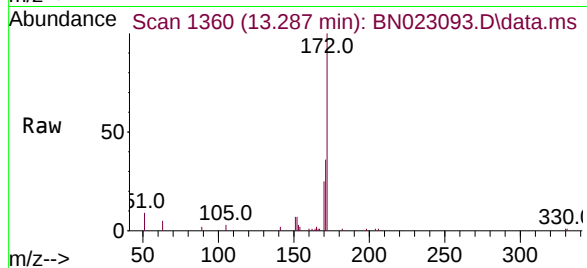
Tgt Ion:172 Resp: 6390

Ion Ratio Lower Upper

172 100

171 35.9 27.4 41.0

170 25.1 17.9 26.9



#16

Acenaphthylene

Concen: 0.072 ng

RT: 14.388 min Scan# 1463

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

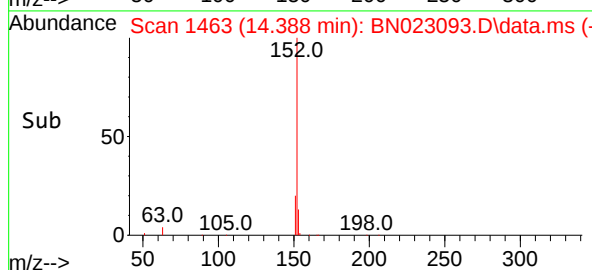
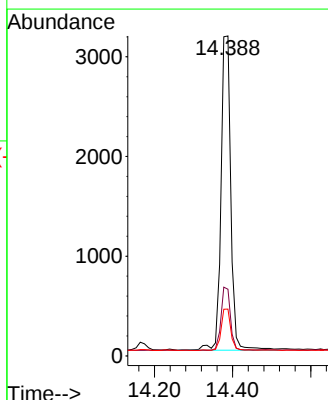
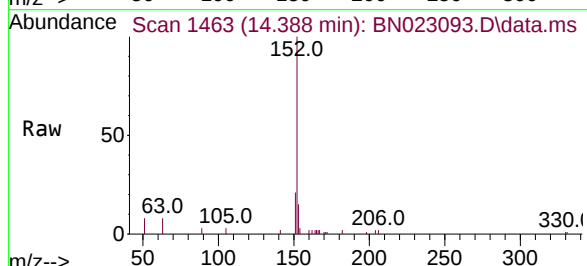
Tgt Ion:152 Resp: 5509

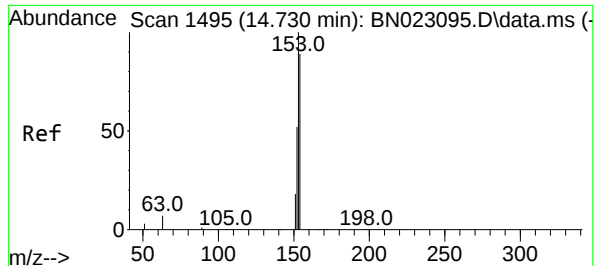
Ion Ratio Lower Upper

152 100

151 19.4 15.4 23.2

153 13.2 10.3 15.5

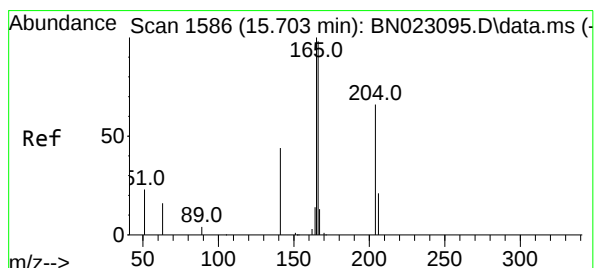
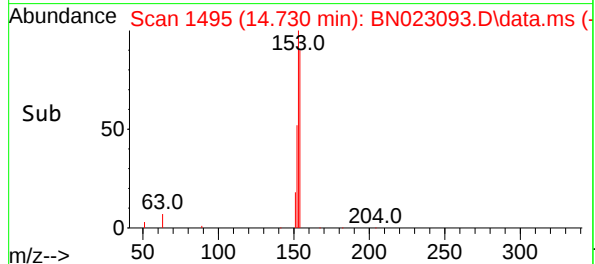
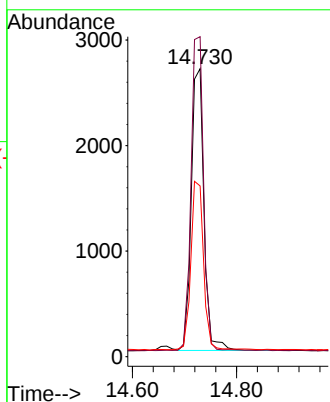
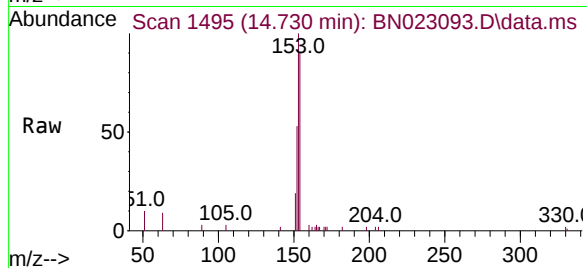




#17
Acenaphthene
Concen: 0.080 ng
RT: 14.730 min Scan# 1495
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

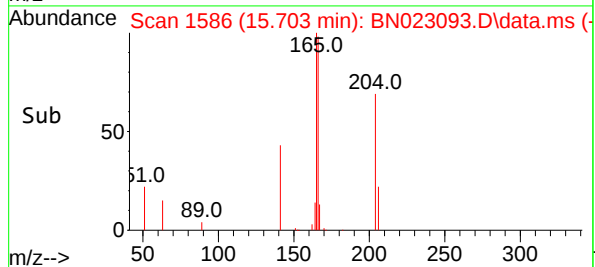
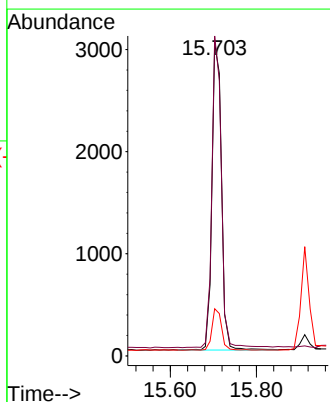
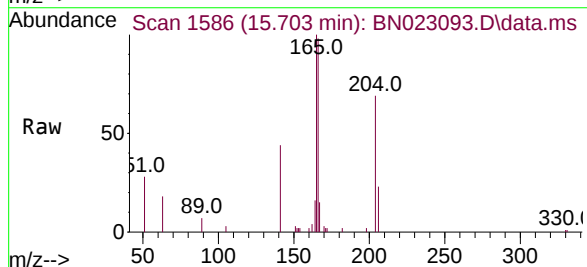
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

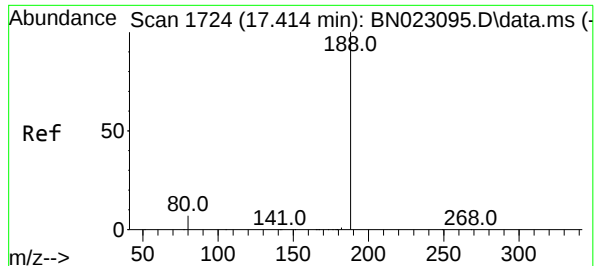
Tgt Ion:154 Resp: 4487
Ion Ratio Lower Upper
154 100
153 109.9 88.6 132.8
152 59.5 48.1 72.1



#18
Fluorene
Concen: 0.077 ng
RT: 15.703 min Scan# 1586
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:166 Resp: 4794
Ion Ratio Lower Upper
166 100
165 100.7 79.8 119.6
167 13.7 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.414 min Scan# 1724

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

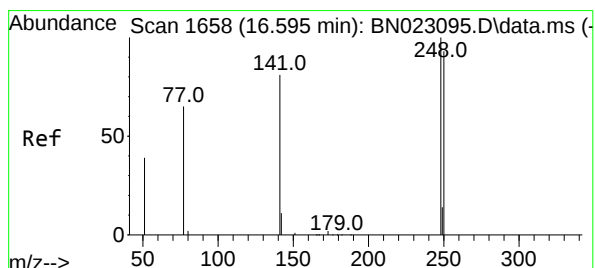
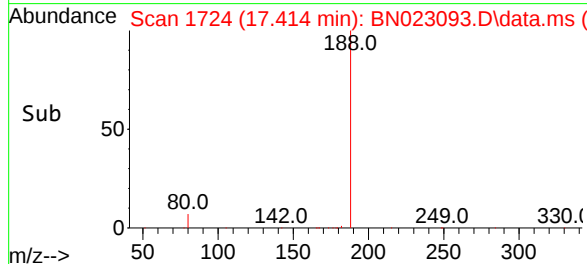
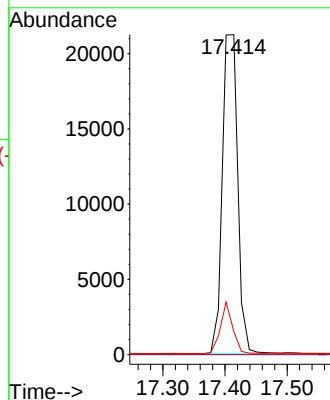
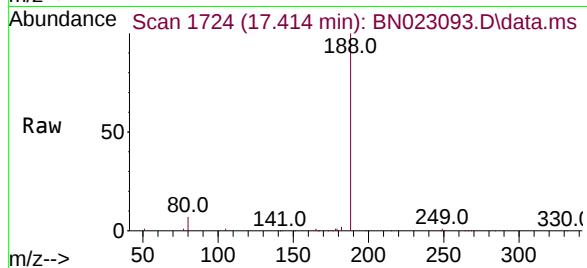
Tgt Ion:188 Resp: 36859

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.3 6.1 9.1



#21

4-Bromophenyl-phenylether

Concen: 0.081 ng

RT: 16.595 min Scan# 1658

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

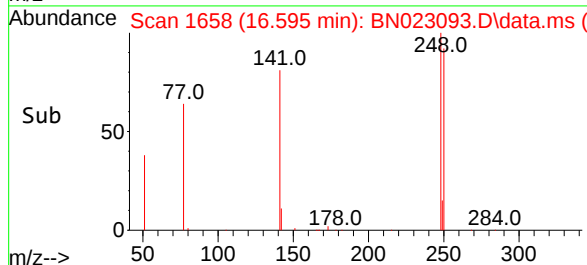
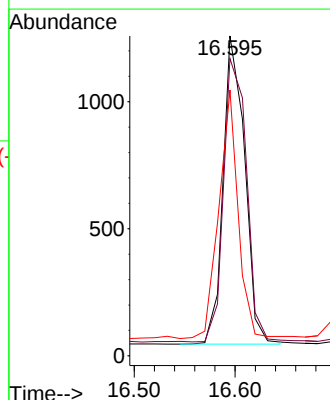
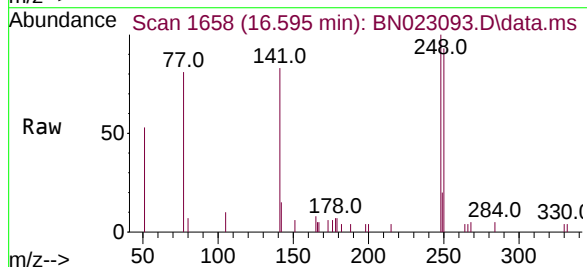
Tgt Ion:248 Resp: 1805

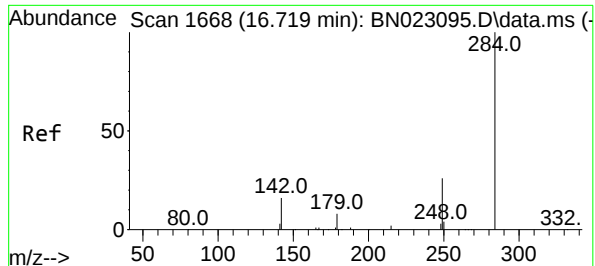
Ion Ratio Lower Upper

248 100

250 92.9 74.3 111.5

141 83.1 65.0 97.6





#22

Hexachlorobenzene

Concen: 0.082 ng

RT: 16.719 min Scan# 1668

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

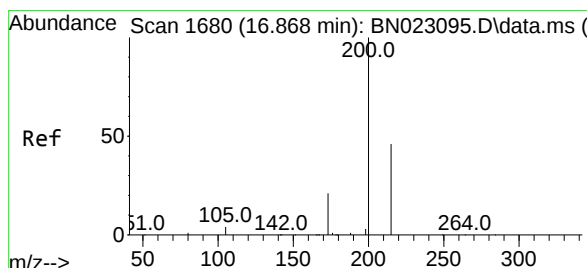
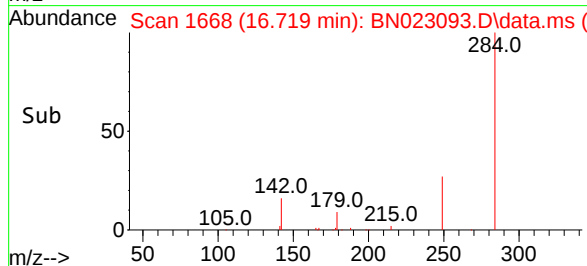
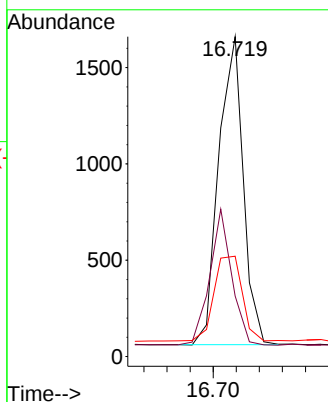
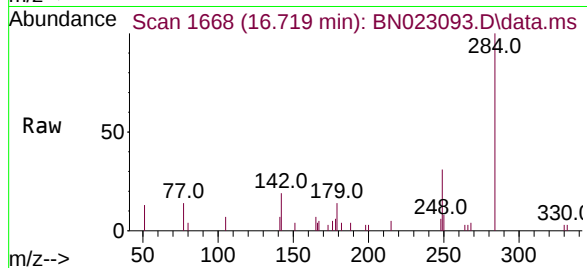
Tgt Ion:284 Resp: 2356

Ion Ratio Lower Upper

284 100

142 39.7 31.0 46.4

249 31.7 24.4 36.6



#23

Atrazine

Concen: 0.071 ng

RT: 16.868 min Scan# 1680

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

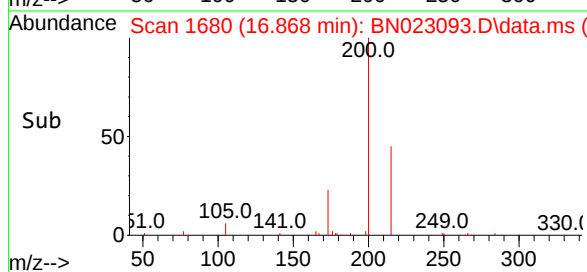
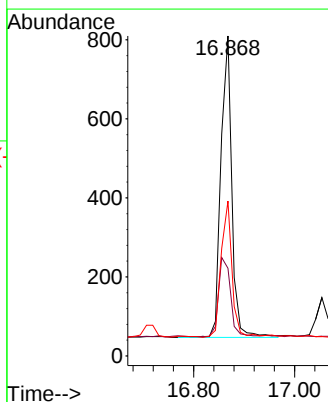
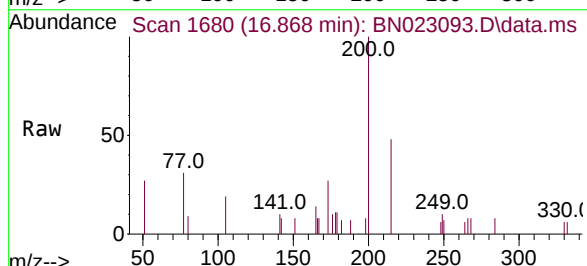
Tgt Ion:200 Resp: 1151

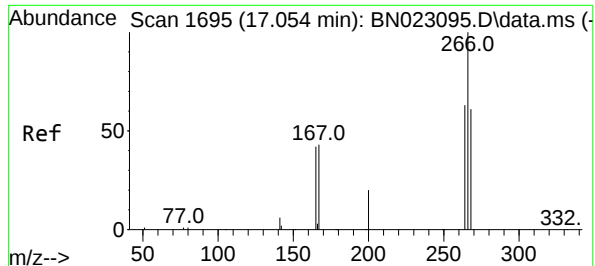
Ion Ratio Lower Upper

200 100

173 27.4 18.2 27.4#

215 48.4 38.0 57.0





#24

Pentachlorophenol

Concen: 0.102 ng

RT: 17.054 min Scan# 1695

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

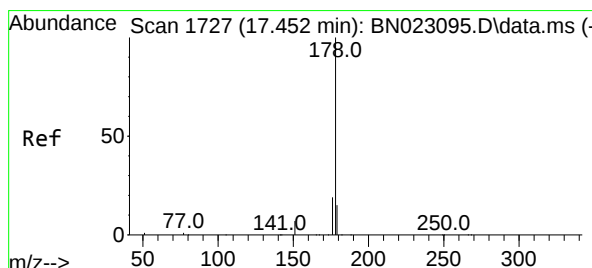
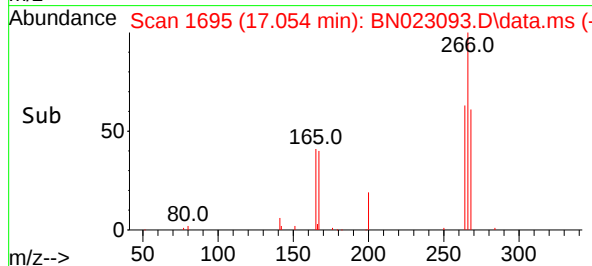
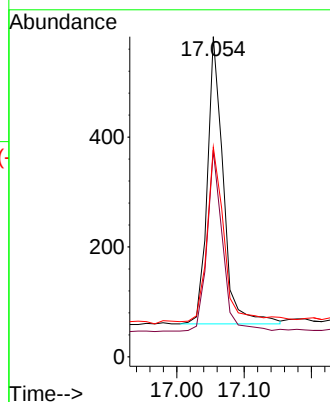
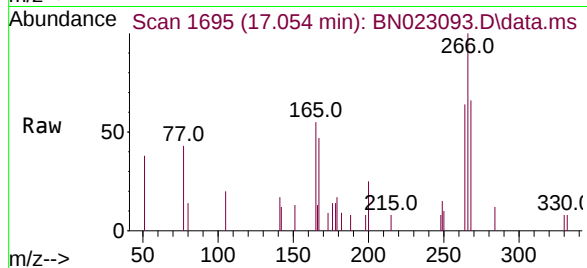
Tgt Ion:266 Resp: 861

Ion Ratio Lower Upper

266 100

264 60.6 50.1 75.1

268 63.9 49.7 74.5



#25

Phenanthrene

Concen: 0.085 ng

RT: 17.451 min Scan# 1727

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

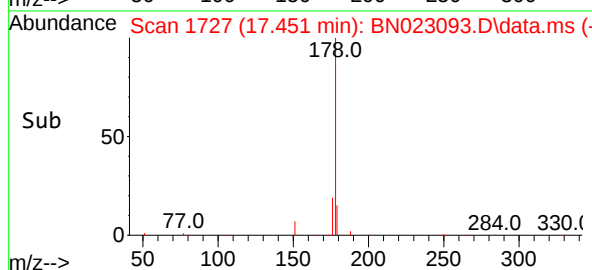
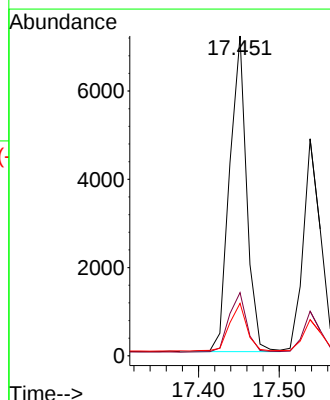
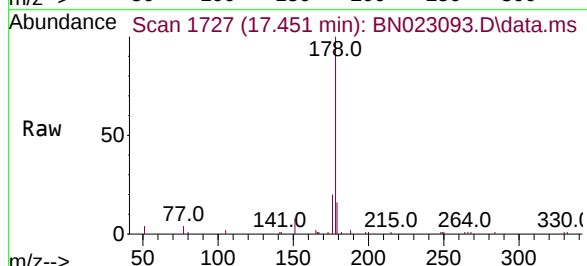
Tgt Ion:178 Resp: 10530

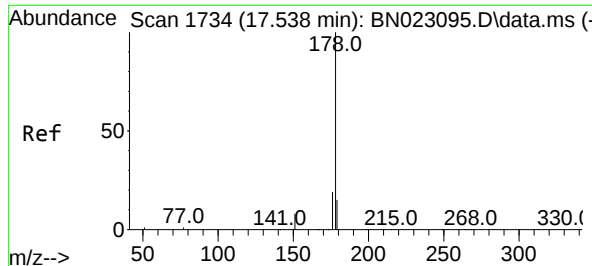
Ion Ratio Lower Upper

178 100

176 19.5 15.4 23.2

179 15.7 12.2 18.2

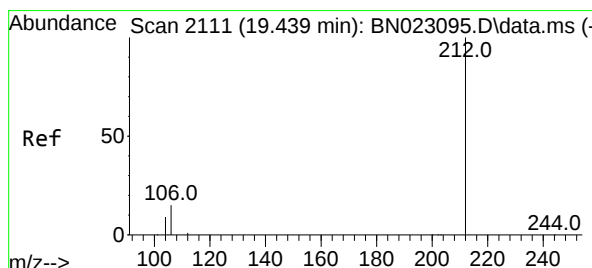
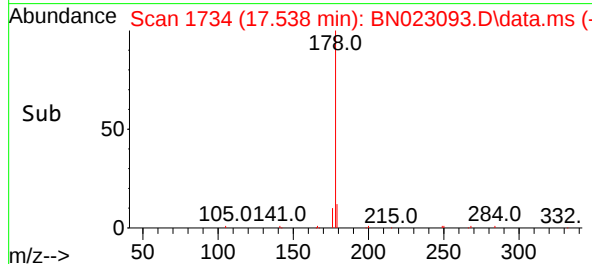
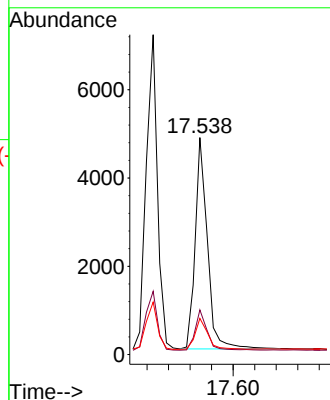
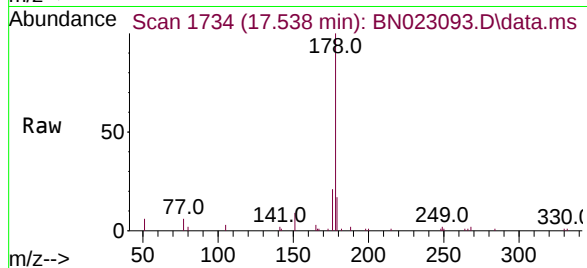




#26
Anthracene
Concen: 0.075 ng
RT: 17.538 min Scan# 1734
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

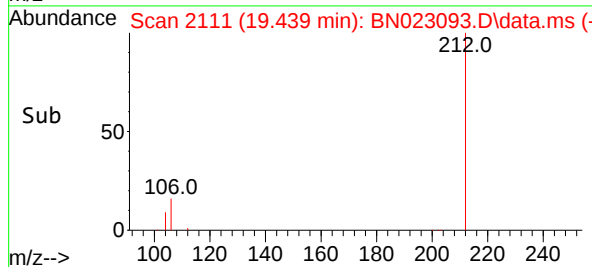
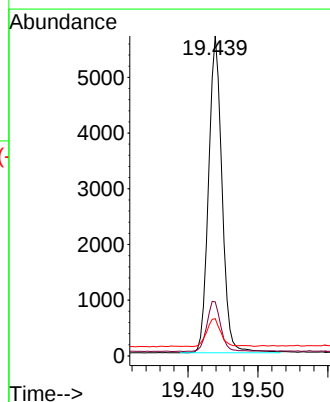
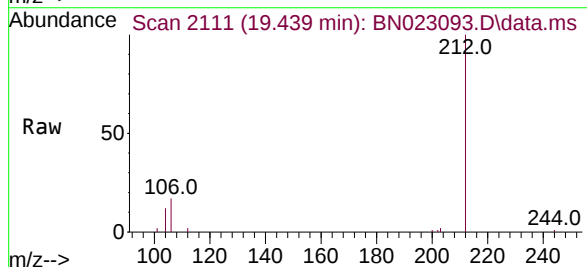
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

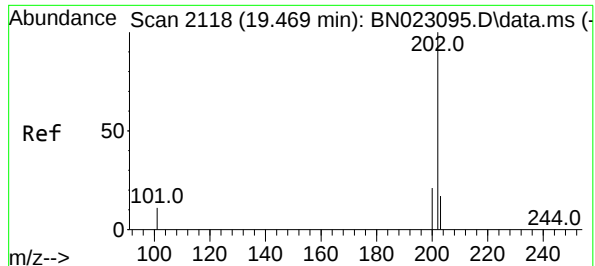
Tgt Ion:	178	Resp:	7515
Ion Ratio	Lower	Upper	
178	100		
176	18.7	15.1	22.7
179	15.2	12.2	18.4



#27
Fluoranthene-d10
Concen: 0.075 ng
RT: 19.439 min Scan# 2111
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:	212	Resp:	7606
Ion Ratio	Lower	Upper	
212	100		
106	16.3	13.0	19.4
104	9.1	7.5	11.3

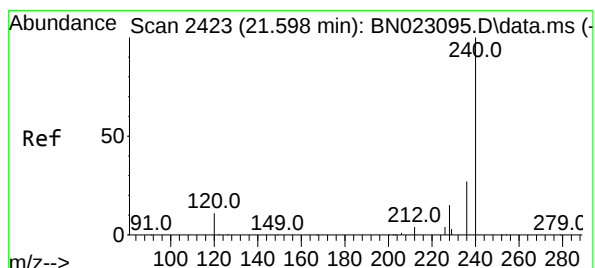
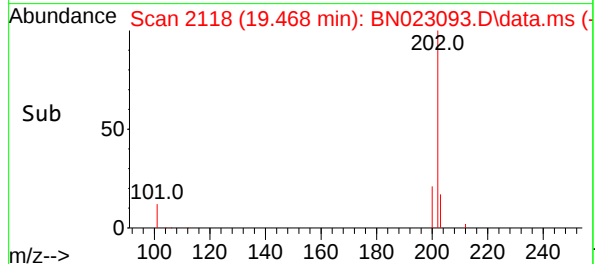
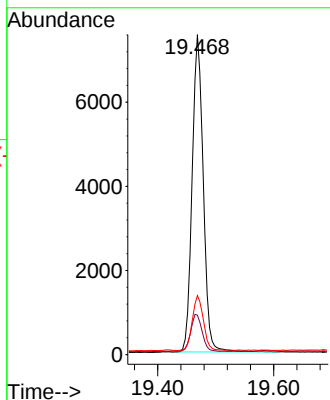
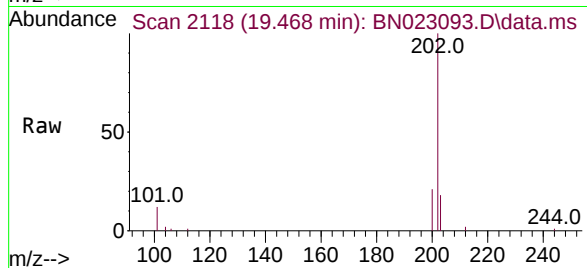




#28
Fluoranthene
Concen: 0.074 ng
RT: 19.468 min Scan# 2118
Delta R.T. -0.000 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

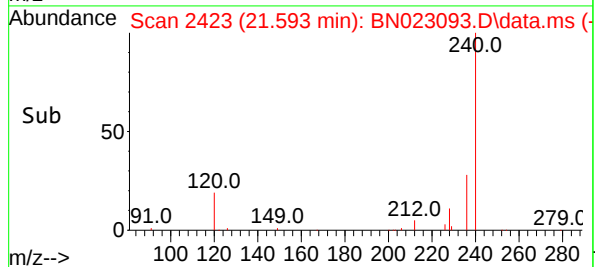
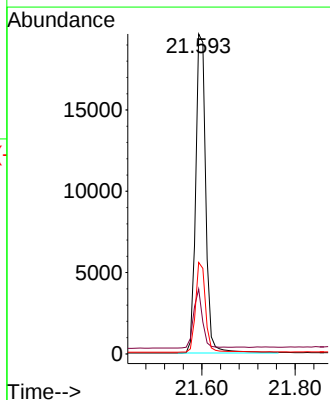
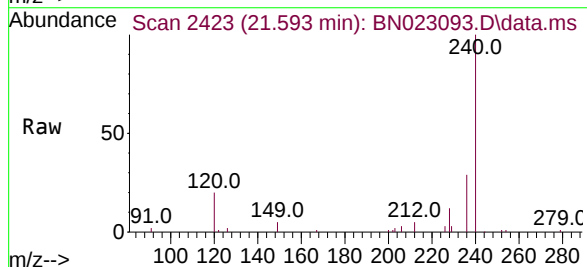
Instrument :
BNA_N
ClientSampleId :
SSTDIC0.1

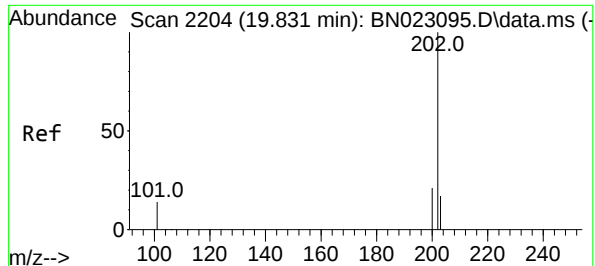
Tgt Ion:202 Resp: 10024
Ion Ratio Lower Upper
202 100
101 11.8 9.7 14.5
203 17.1 13.8 20.6



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.593 min Scan# 2423
Delta R.T. -0.005 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:240 Resp: 29376
Ion Ratio Lower Upper
240 100
120 20.3 10.1 15.1#
236 28.6 22.2 33.4





#30

Pyrene

Concen: 0.082 ng

RT: 19.831 min Scan# 21

Delta R.T. -0.000 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

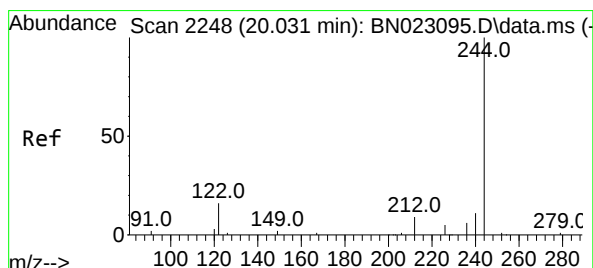
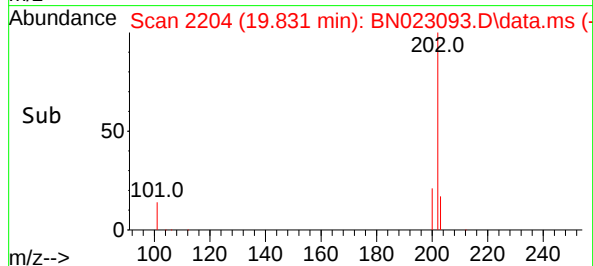
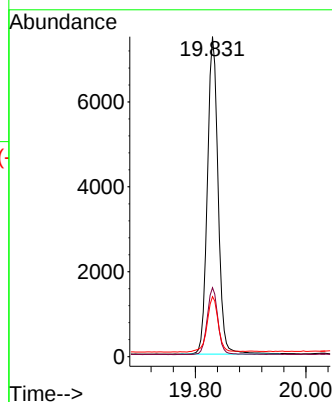
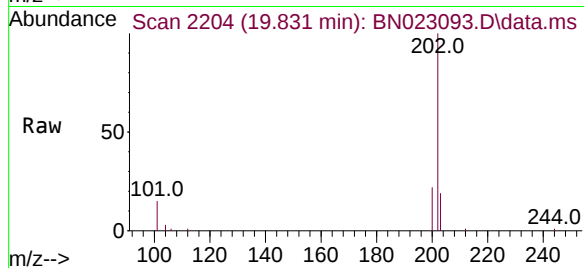
Tgt Ion:202 Resp: 10098

Ion Ratio Lower Upper

202 100

200 20.9 16.9 25.3

203 18.0 14.2 21.4



#31

Terphenyl-d14

Concen: 0.081 ng

RT: 20.035 min Scan# 2249

Delta R.T. 0.004 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

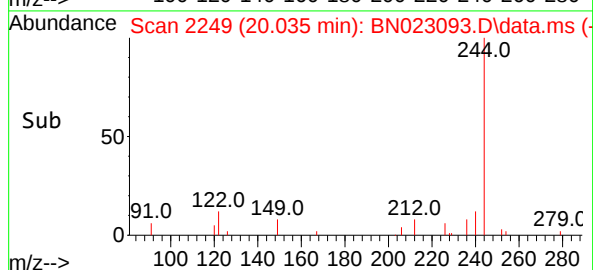
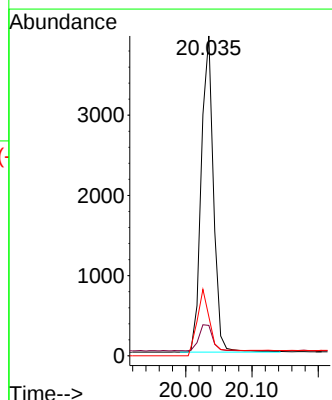
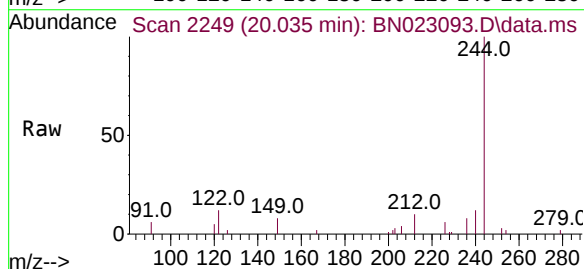
Tgt Ion:244 Resp: 4494

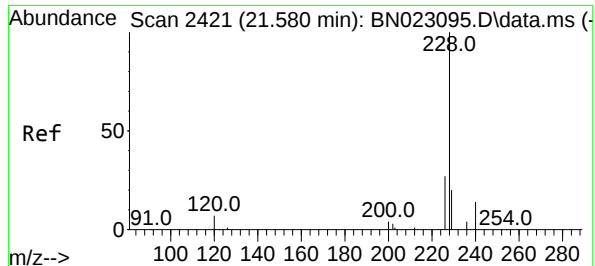
Ion Ratio Lower Upper

244 100

212 9.5 7.6 11.4

122 12.3 12.6 18.8#

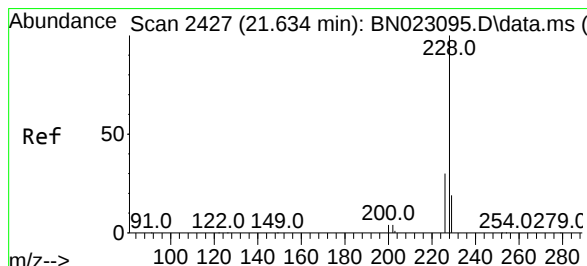
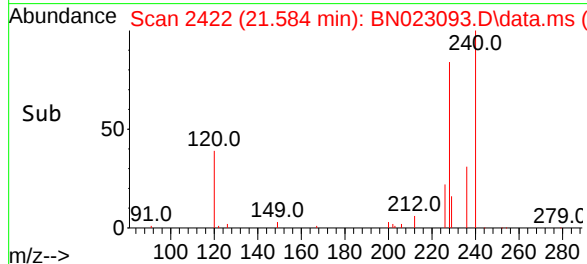
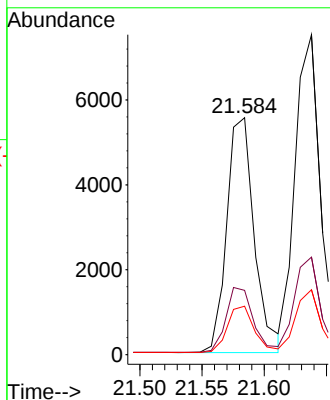
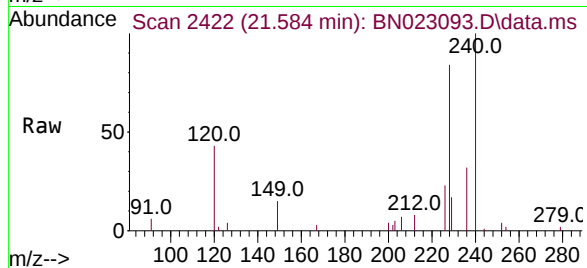




#32
Benzo(a)anthracene
Concen: 0.079 ng
RT: 21.584 min Scan# 2421
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

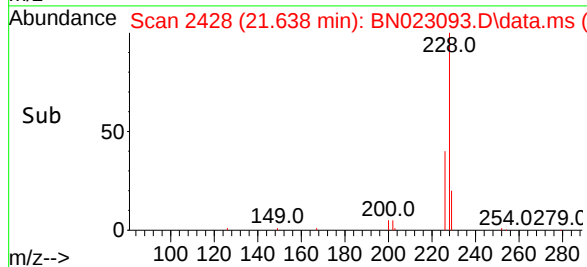
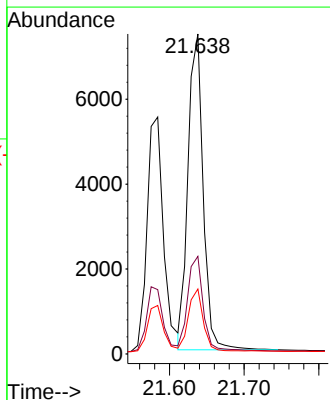
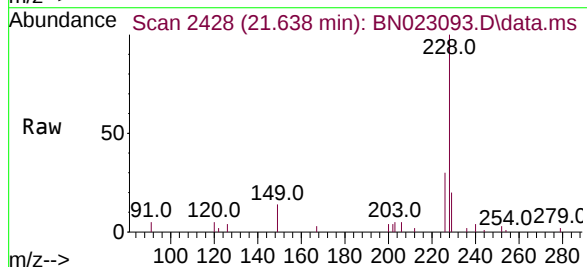
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

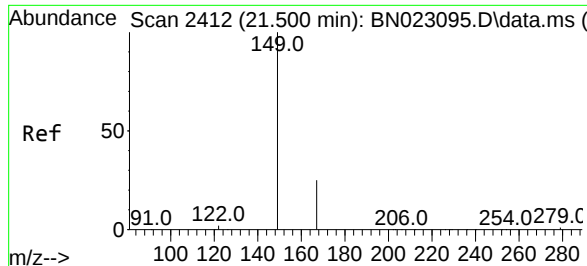
Tgt Ion:228 Resp: 8542
Ion Ratio Lower Upper
228 100
226 27.1 22.0 33.0
229 20.5 15.8 23.8



#33
Chrysene
Concen: 0.087 ng
RT: 21.638 min Scan# 2428
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:228 Resp: 10544
Ion Ratio Lower Upper
228 100
226 30.5 24.4 36.6
229 20.3 15.6 23.4

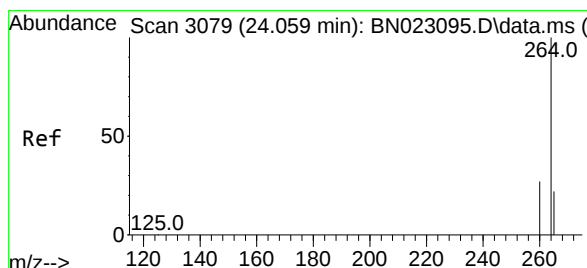
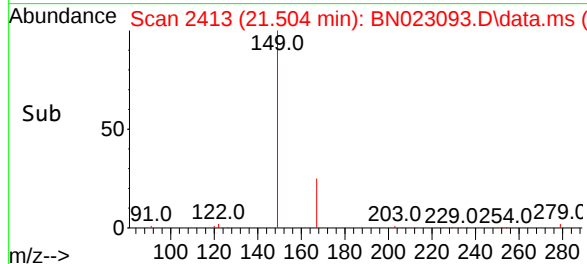
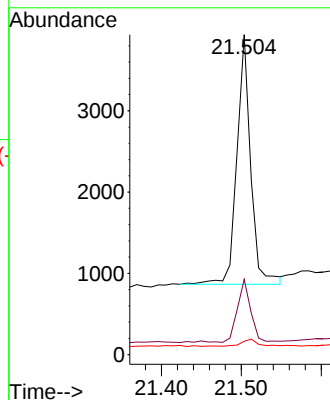
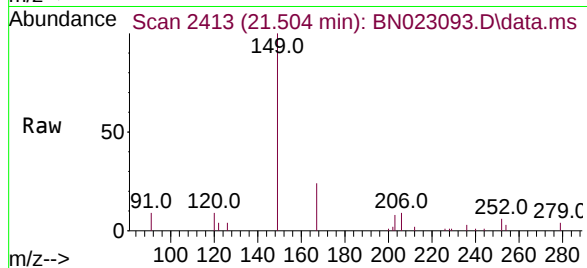




#34
Bis(2-ethylhexyl)phthalate
Concen: 0.079 ng
RT: 21.504 min Scan# 2413
Delta R.T. 0.004 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

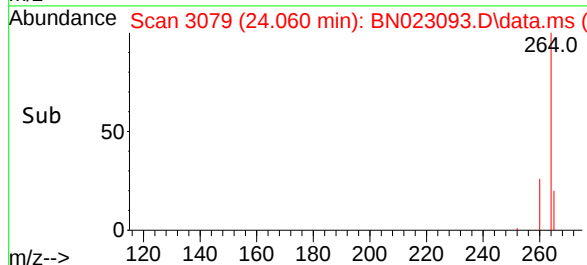
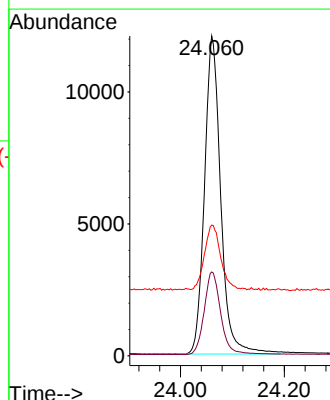
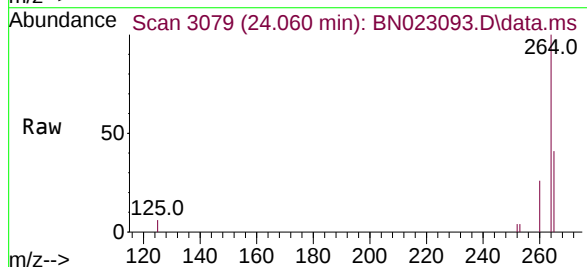
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

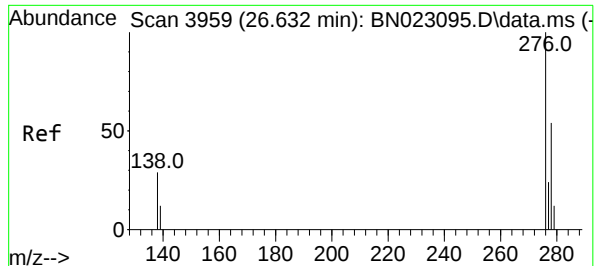
Tgt Ion:149 Resp: 3706
Ion Ratio Lower Upper
149 100
167 24.0 20.2 30.2
279 3.0 2.3 3.5



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.060 min Scan# 3079
Delta R.T. 0.001 min
Lab File: BN023093.D
Acq: 08 Dec 2022 14:00

Tgt Ion:264 Resp: 26107
Ion Ratio Lower Upper
264 100
260 26.2 21.7 32.5
265 40.9 43.2 64.8#





#36

Indeno(1,2,3-cd)pyrene

Concen: 0.070 ng

RT: 26.630 min Scan# 3959

Delta R.T. -0.002 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

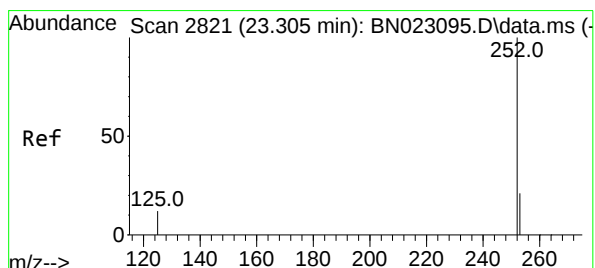
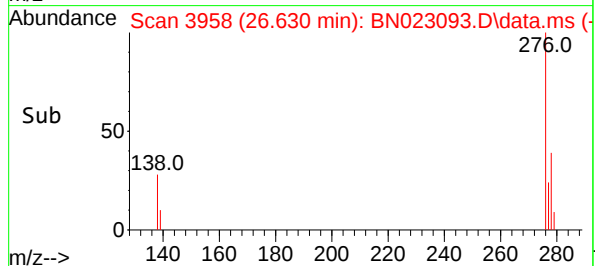
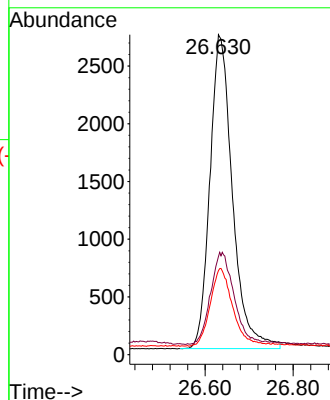
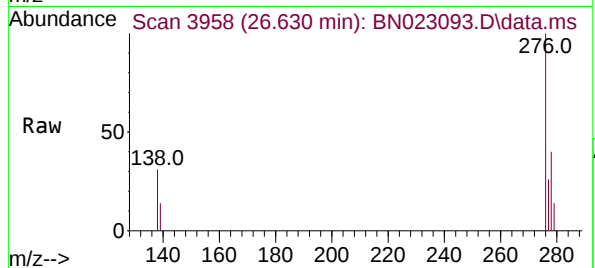
Tgt Ion:276 Resp: 9677

Ion Ratio Lower Upper

276 100

138 13.9 25.0 37.6#

277 24.8 19.8 29.8



#37

Benzo(b)fluoranthene

Concen: 0.074 ng

RT: 23.306 min Scan# 2821

Delta R.T. 0.001 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

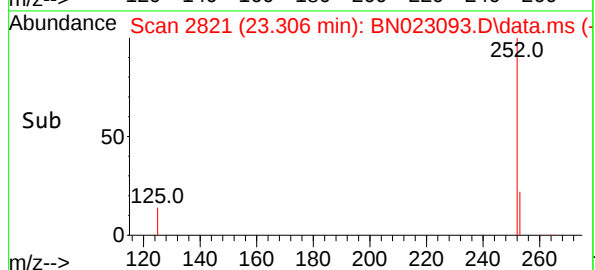
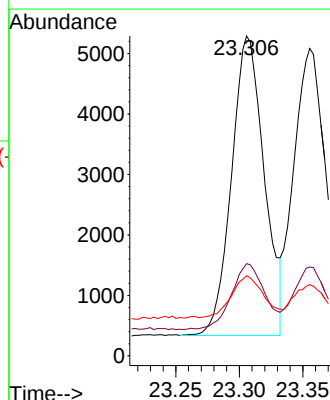
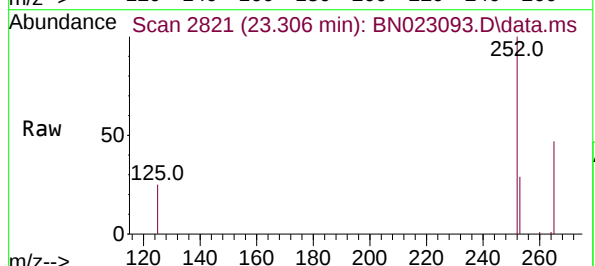
Tgt Ion:252 Resp: 8869

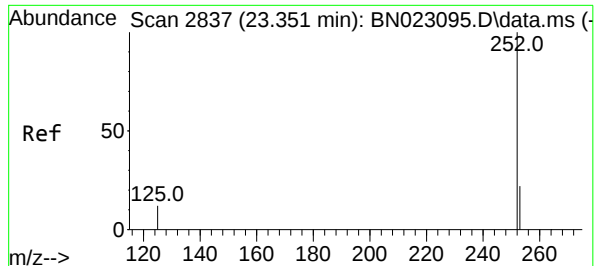
Ion Ratio Lower Upper

252 100

253 28.8 19.0 28.4#

125 25.0 12.8 19.2#





#38

Benzo(k)fluoranthene

Concen: 0.069 ng

RT: 23.355 min Scan# 2837

Delta R.T. 0.004 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.1

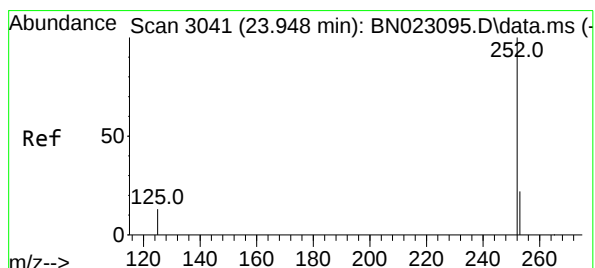
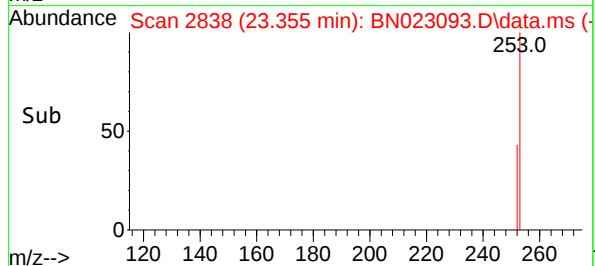
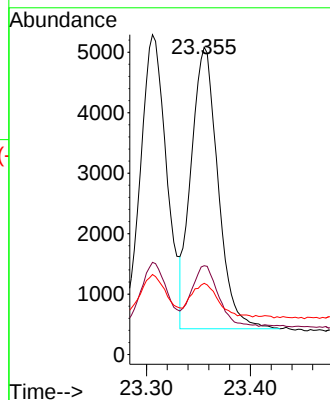
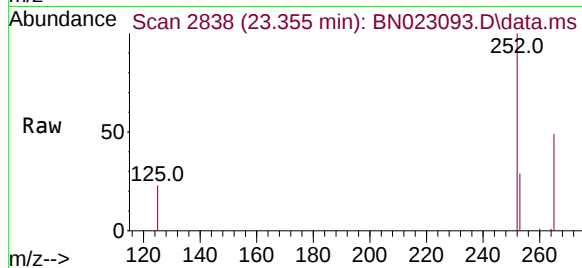
Tgt Ion:252 Resp: 8393

Ion Ratio Lower Upper

252 100

253 28.9 19.1 28.7#

125 23.2 12.5 18.7#



#39

Benzo(a)pyrene

Concen: 0.077 ng

RT: 23.949 min Scan# 3041

Delta R.T. 0.001 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

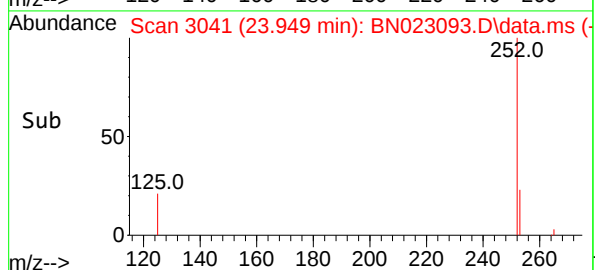
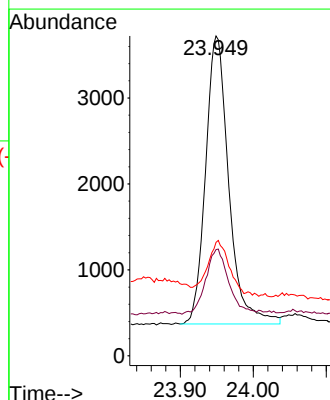
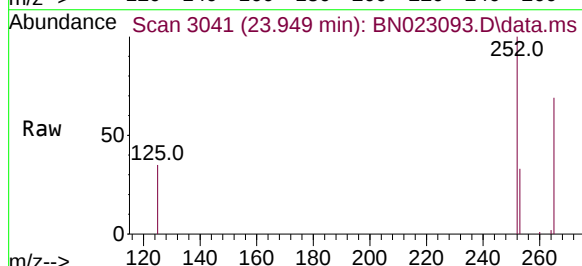
Tgt Ion:252 Resp: 7407

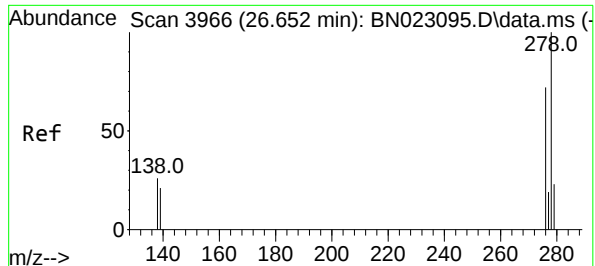
Ion Ratio Lower Upper

252 100

253 33.2 20.6 30.8#

125 35.5 15.8 23.8#





#40

Dibenzo(a,h)anthracene

Concen: 0.068 ng

RT: 26.656 min Scan# 3966

Delta R.T. 0.004 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.1

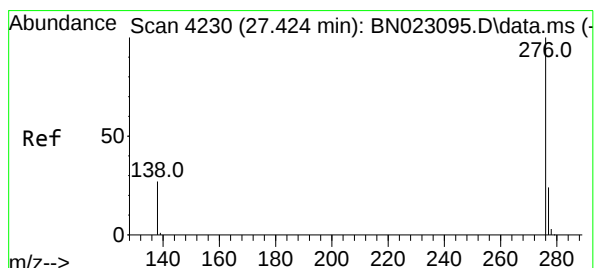
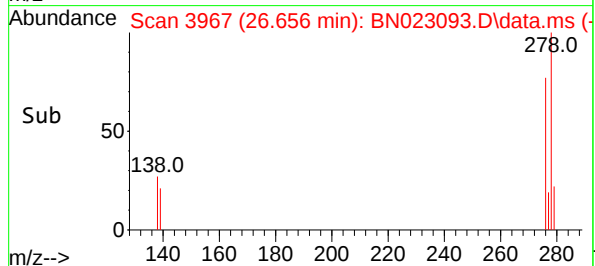
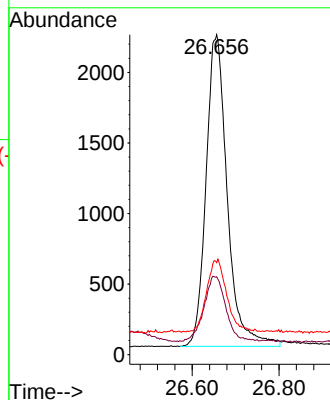
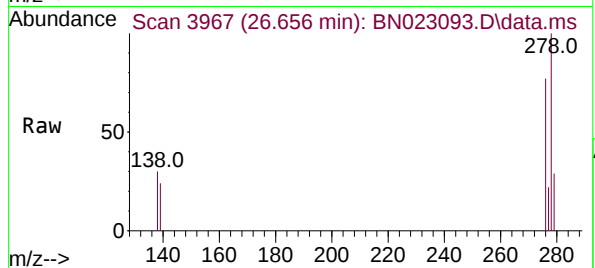
Tgt Ion:278 Resp: 7491

Ion Ratio Lower Upper

278 100

139 24.3 17.5 26.3

279 28.7 20.5 30.7



#41

Benzo(g,h,i)perylene

Concen: 0.071 ng

RT: 27.425 min Scan# 4230

Delta R.T. 0.001 min

Lab File: BN023093.D

Acq: 08 Dec 2022 14:00

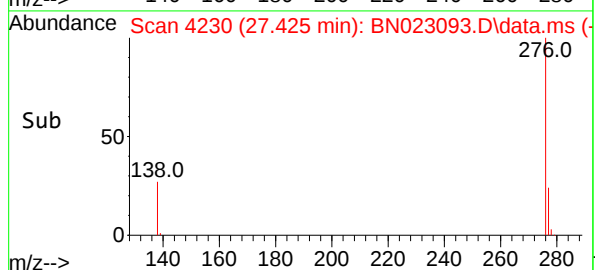
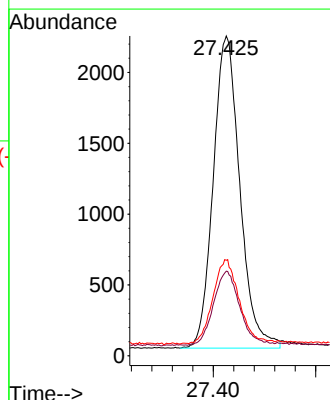
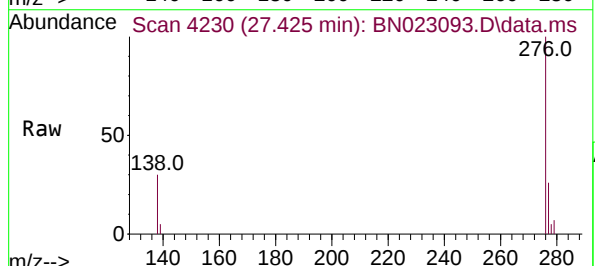
Tgt Ion:276 Resp: 7959

Ion Ratio Lower Upper

276 100

277 26.5 19.9 29.9

138 29.9 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023094.D
 Acq On : 08 Dec 2022 14:37
 Operator : CG/JU
 Sample : SSTDICC0.2
 Misc :
 ALS Vial : 3 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.2

Quant Time: Dec 09 07:27:50 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:25:53 2022
 Response via : Initial Calibration

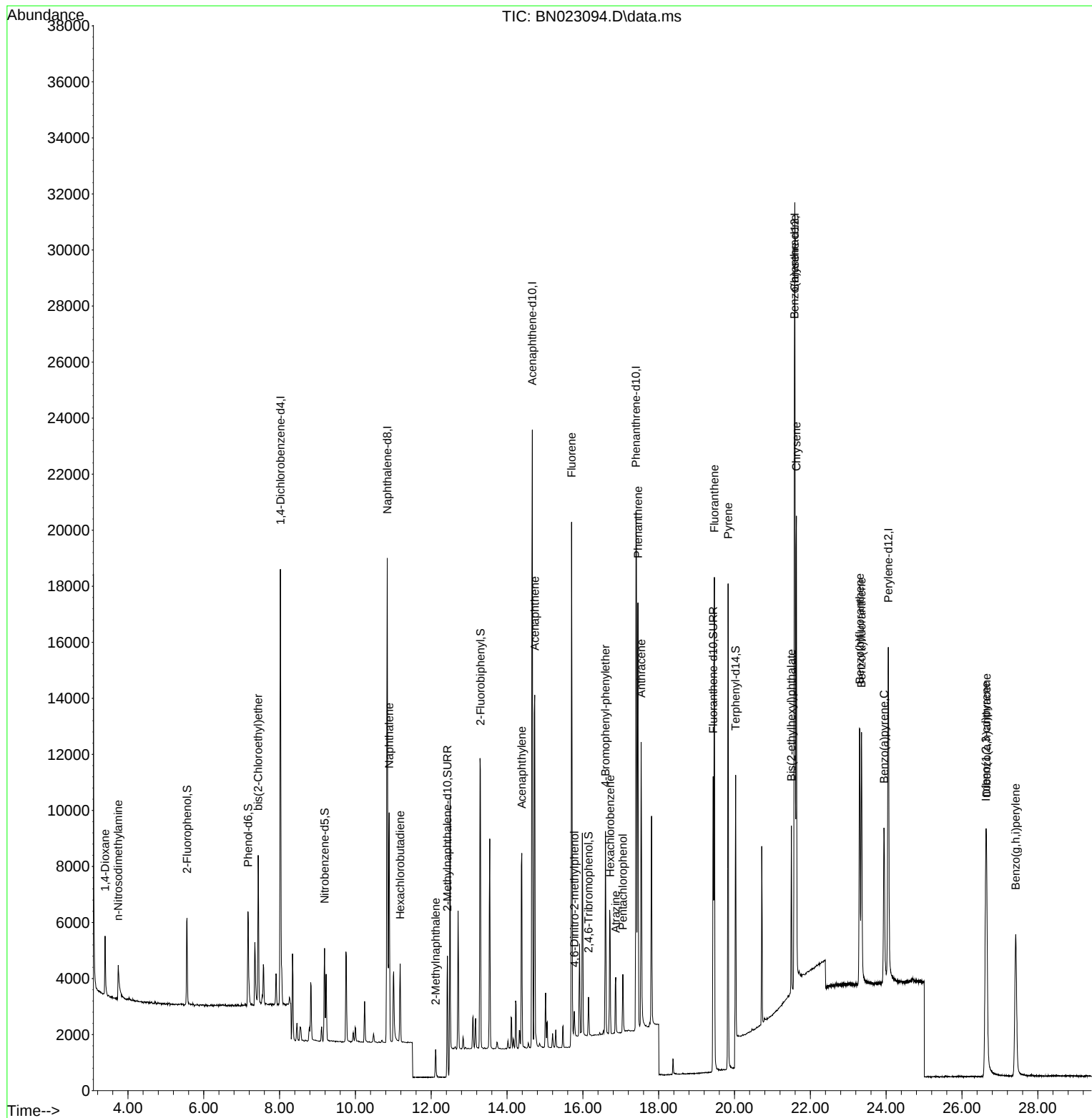
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.020	152	7299	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	21832	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	12180	0.400	ng	0.00
19) Phenanthrene-d10	17.402	188	27325	0.400	ng	#-0.01
29) Chrysene-d12	21.589	240	21585	0.400	ng	# 0.00
35) Perylene-d12	24.056	264	17922	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	2640	0.156	ng	0.00
5) Phenol-d6	7.168	99	3230	0.152	ng	0.00
8) Nitrobenzene-d5	9.185	82	2667	0.163	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	7153	0.174	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	740	0.144	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	9585	0.177	ng	0.00
27) Fluoranthene-d10	19.439	212	11666	0.156	ng	0.00
31) Terphenyl-d14	20.031	244	6228	0.152	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.398	88	1459	0.161	ng	99
3) n-Nitrosodimethylamine	3.745	42	1148	0.130	ng	# 96
6) bis(2-Chloroethyl)ether	7.435	93	3970	0.169	ng	98
9) Naphthalene	10.893	128	10803	0.167	ng	99
10) Hexachlorobutadiene	11.181	225	2100	0.173	ng	# 100
12) 2-Methylnaphthalene	12.117	142	1474	0.149	ng	# 90
16) Acenaphthylene	14.388	152	8400	0.147	ng	99
17) Acenaphthene	14.730	154	6737	0.162	ng	100
18) Fluorene	15.703	166	7437	0.159	ng	99
20) 4,6-Dinitro-2-methylph...	15.776	198	547	0.148	ng	# 84
21) 4-Bromophenyl-phenylether	16.595	248	2698	0.164	ng	98
22) Hexachlorobenzene	16.719	284	3650	0.171	ng	99
23) Atrazine	16.868	200	1729	0.144	ng	95
24) Pentachlorophenol	17.054	266	1064	0.169	ng	96
25) Phenanthrene	17.451	178	15180	0.165	ng	99
26) Anthracene	17.538	178	11253	0.152	ng	99
28) Fluoranthene	19.469	202	15457	0.154	ng	99
30) Pyrene	19.831	202	15365	0.171	ng	99
32) Benzo(a)anthracene	21.580	228	12565	0.158	ng	99
33) Chrysene	21.634	228	15019	0.169	ng	99
34) Bis(2-ethylhexyl)phtha...	21.500	149	5458	0.159	ng	98
36) Indeno(1,2,3-cd)pyrene	26.629	276	13007	0.137	ng	99
37) Benzo(b)fluoranthene	23.302	252	12559	0.153	ng	# 93
38) Benzo(k)fluoranthene	23.351	252	12349	0.147	ng	# 93
39) Benzo(a)pyrene	23.942	252	9043	0.136	ng	# 88
40) Dibenzo(a,h)anthracene	26.646	278	10252	0.136	ng	98
41) Benzo(g,h,i)perylene	27.418	276	11608	0.150	ng	100

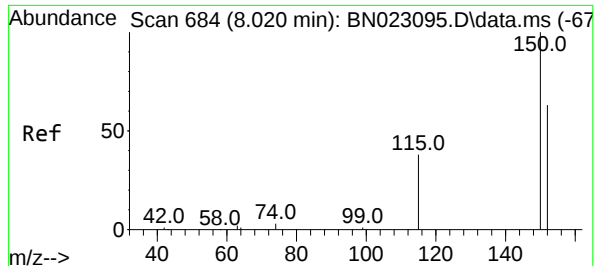
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023094.D
Acq On : 08 Dec 2022 14:37
Operator : CG/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Dec 09 07:27:50 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 8.020 min Scan# 684

Delta R.T. 0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

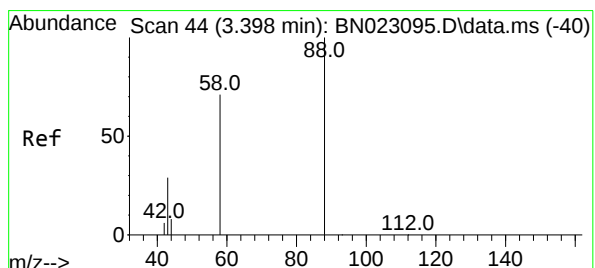
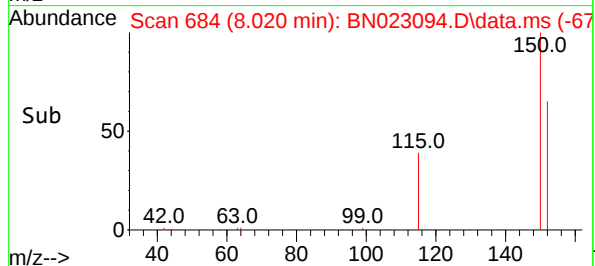
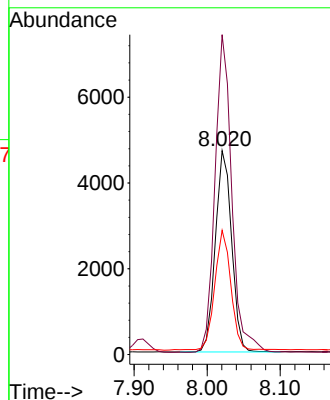
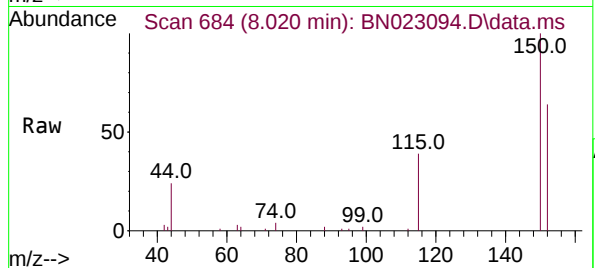
Tgt Ion:152 Resp: 7299

Ion Ratio Lower Upper

152 100

150 156.9 125.6 188.4

115 60.9 49.0 73.4



#2

1,4-Dioxane

Concen: 0.161 ng

RT: 3.398 min Scan# 44

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

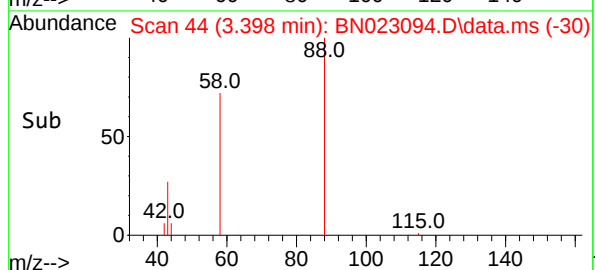
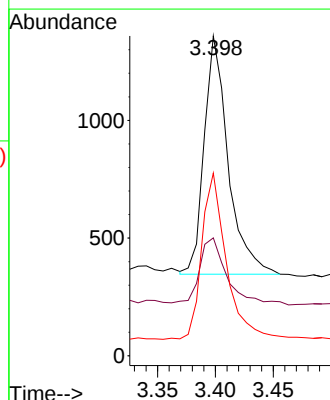
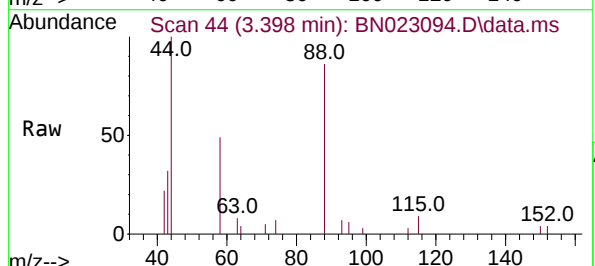
Tgt Ion: 88 Resp: 1459

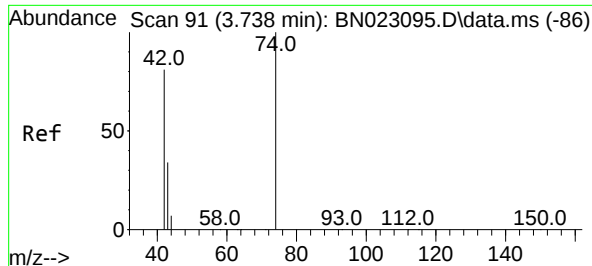
Ion Ratio Lower Upper

88 100

43 29.1 23.3 34.9

58 71.4 58.0 87.0

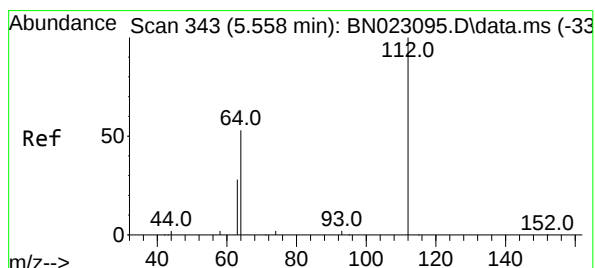
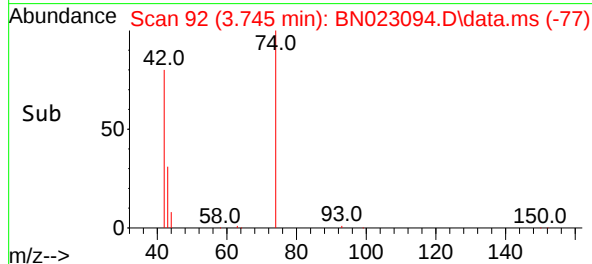
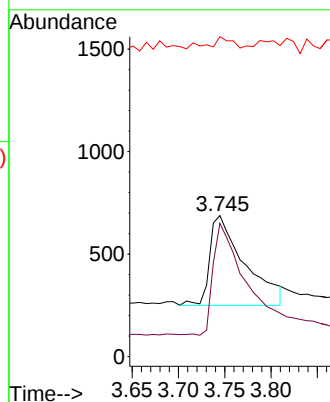
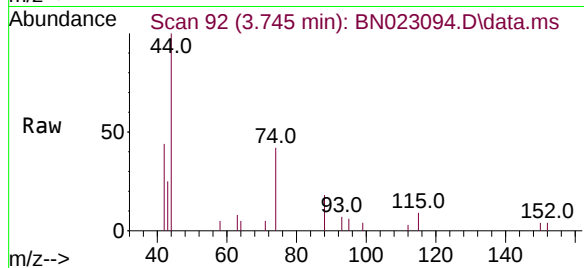




#3
 n-Nitrosodimethylamine
 Concen: 0.130 ng
 RT: 3.745 min Scan# 91
 Delta R.T. 0.007 min
 Lab File: BN023094.D
 Acq: 08 Dec 2022 14:37

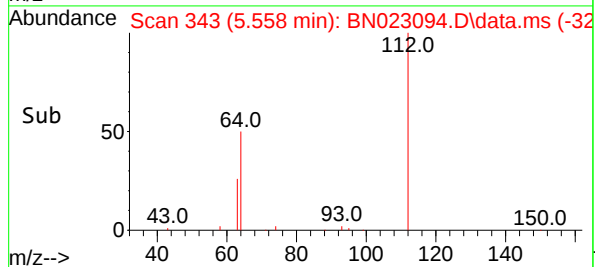
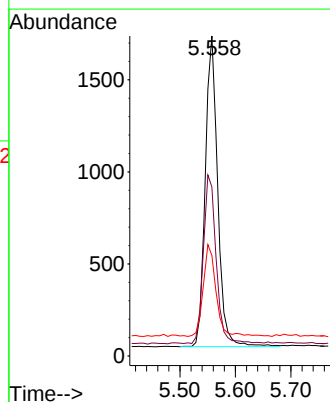
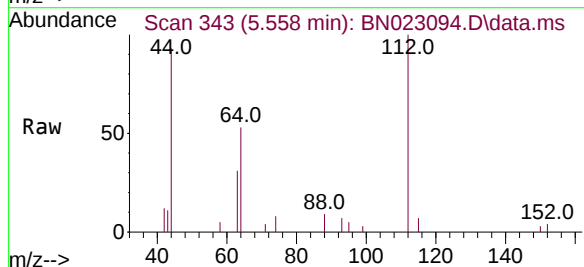
Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.2

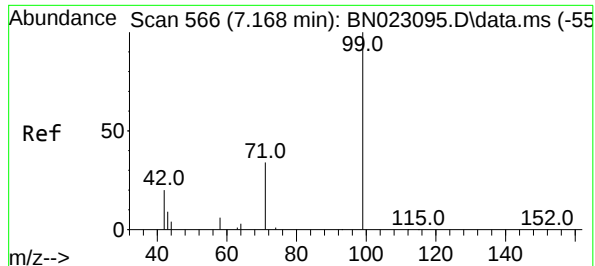
Tgt Ion: 42 Resp: 1148
 Ion Ratio Lower Upper
 42 100
 74 115.8 95.8 143.6
 44 4.8 8.4 12.6#



#4
 2-Fluorophenol
 Concen: 0.156 ng
 RT: 5.558 min Scan# 343
 Delta R.T. -0.000 min
 Lab File: BN023094.D
 Acq: 08 Dec 2022 14:37

Tgt Ion: 112 Resp: 2640
 Ion Ratio Lower Upper
 112 100
 64 55.3 44.4 66.6
 63 30.6 23.7 35.5

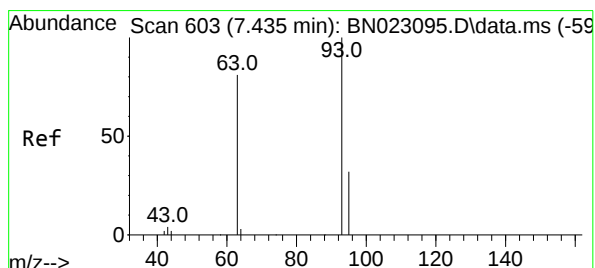
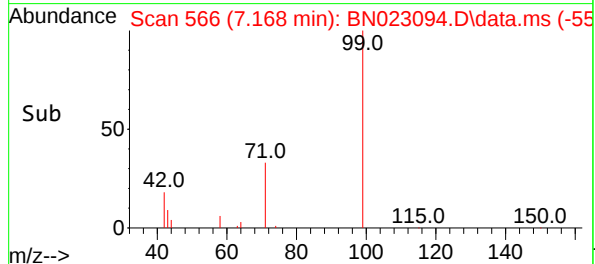
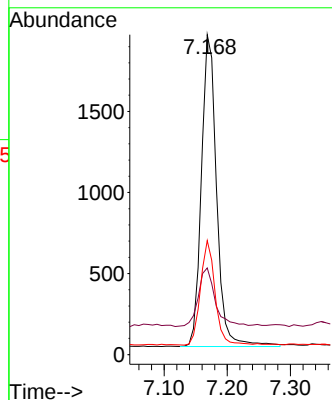
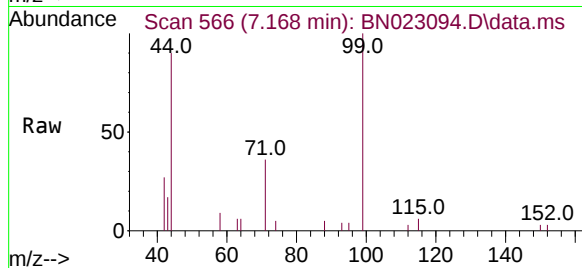




#5
Phenol-d6
Concen: 0.152 ng
RT: 7.168 min Scan# 566
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

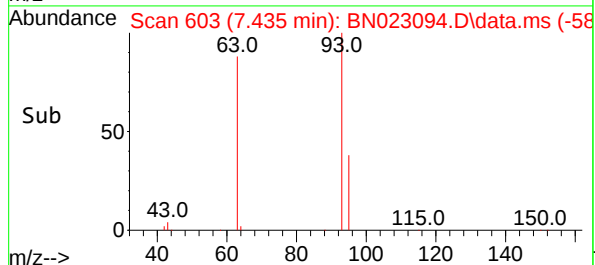
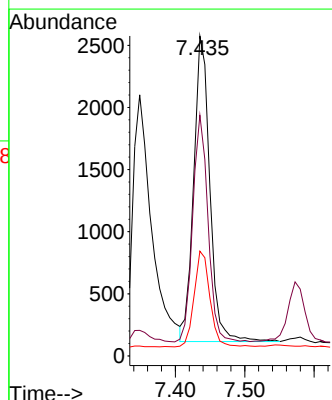
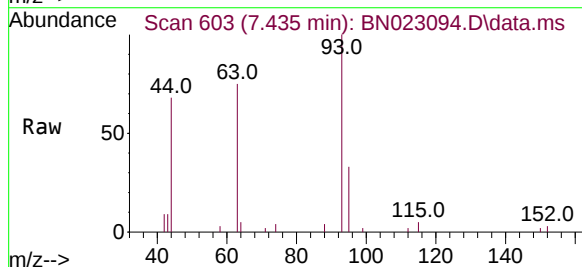
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

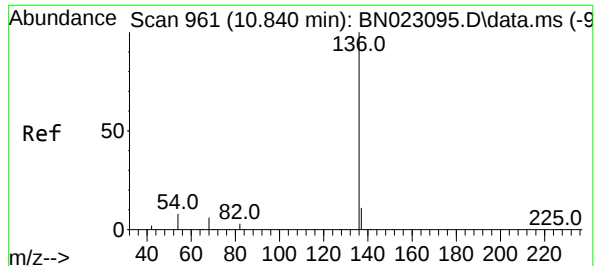
Tgt Ion:	99	Resp:	3230
Ion	Ratio	Lower	Upper
99	100		
42	21.0	16.3	24.5
71	31.9	26.5	39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.169 ng
RT: 7.435 min Scan# 603
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:	93	Resp:	3970
Ion	Ratio	Lower	Upper
93	100		
63	70.7	58.1	87.1
95	30.8	25.2	37.8

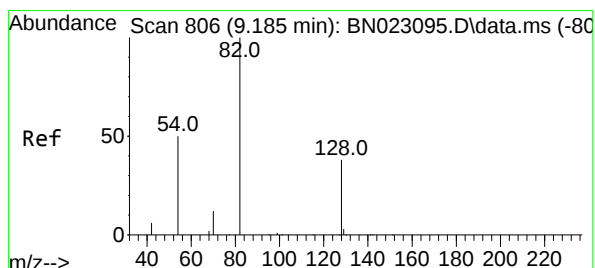
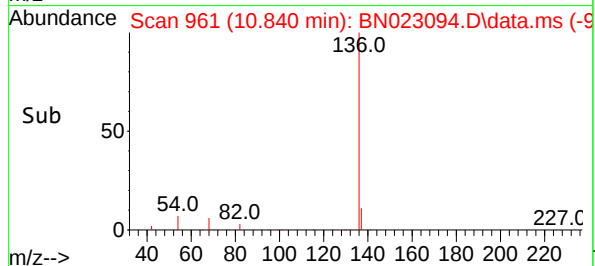
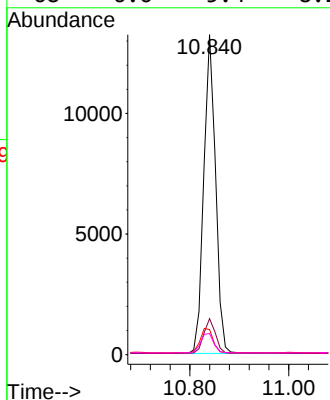
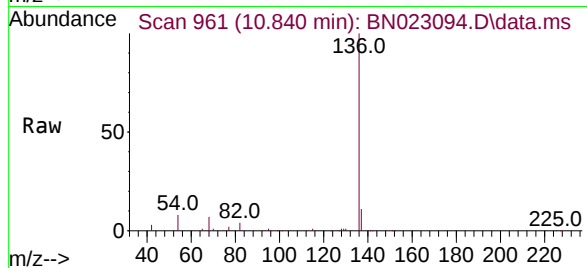




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

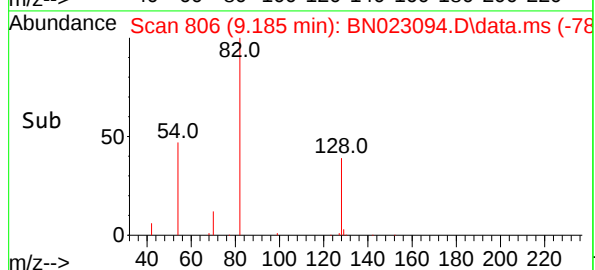
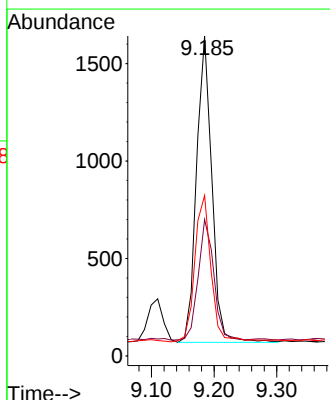
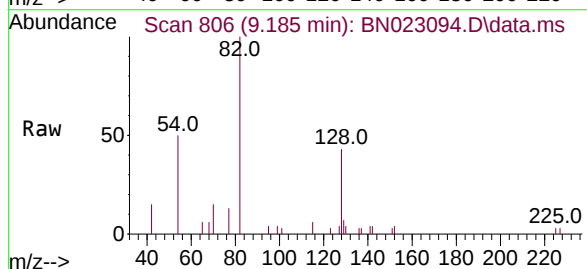
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

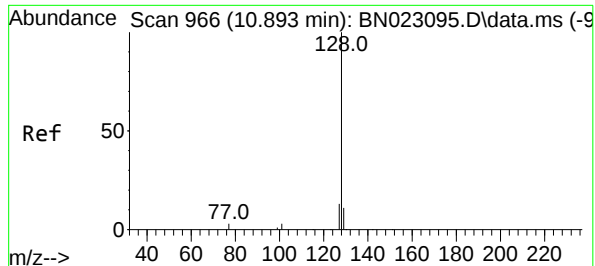
Tgt Ion:	136	Resp:	21832
Ion Ratio	Lower	Upper	
136	100		
137	11.2	9.0	13.4
54	7.8	6.5	9.7
68	6.6	5.4	8.2



#8
Nitrobenzene-d5
Concen: 0.163 ng
RT: 9.185 min Scan# 806
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:	82	Resp:	2667
Ion Ratio	Lower	Upper	
82	100		
128	42.6	31.4	47.2
54	50.1	41.0	61.4

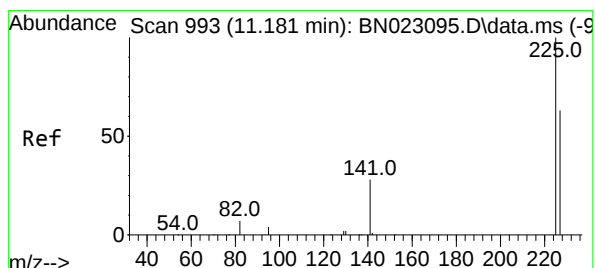
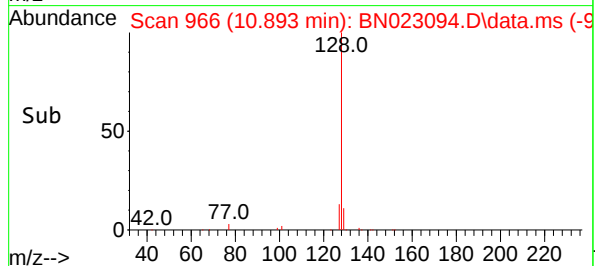
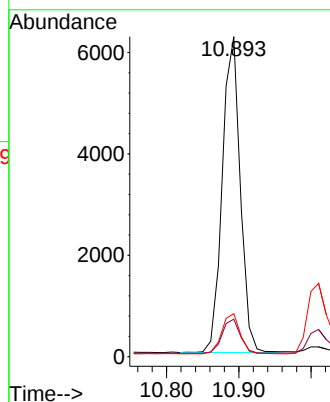
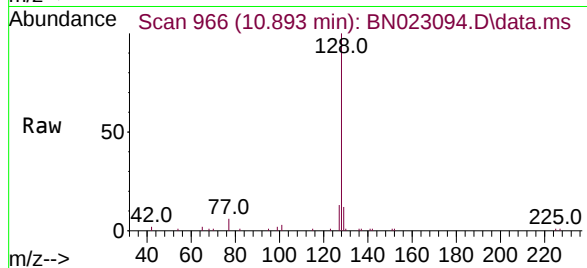




#9
Naphthalene
Concen: 0.167 ng
RT: 10.893 min Scan# 966
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

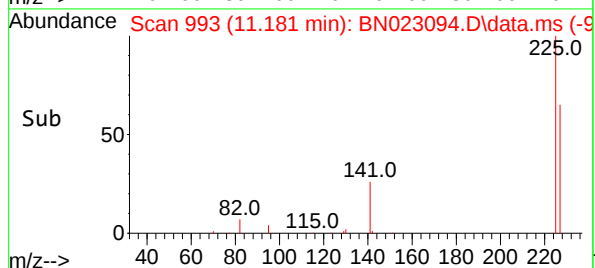
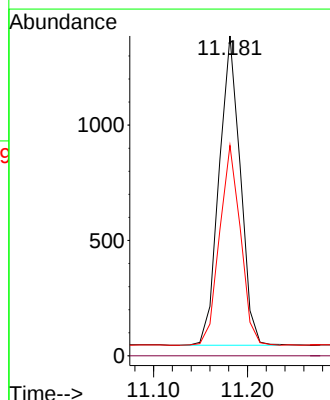
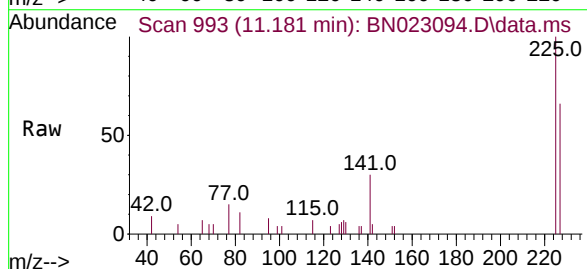
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

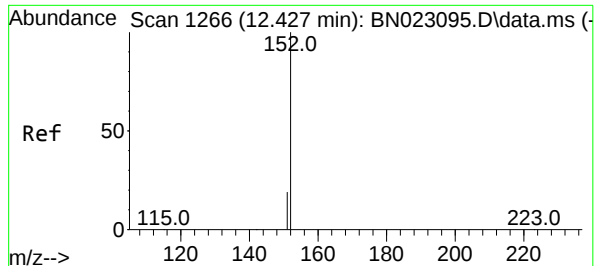
Tgt Ion:128 Resp: 10803
Ion Ratio Lower Upper
128 100
129 11.7 9.0 13.6
127 13.4 10.5 15.7



#10
Hexachlorobutadiene
Concen: 0.173 ng
RT: 11.181 min Scan# 993
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:225 Resp: 2100
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.9 51.1 76.7

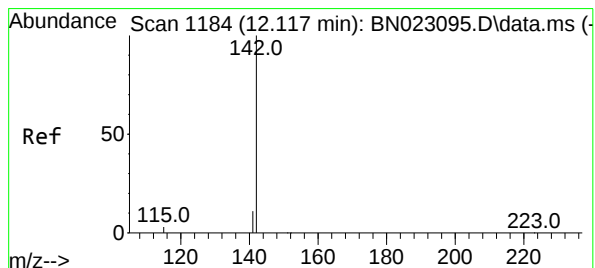
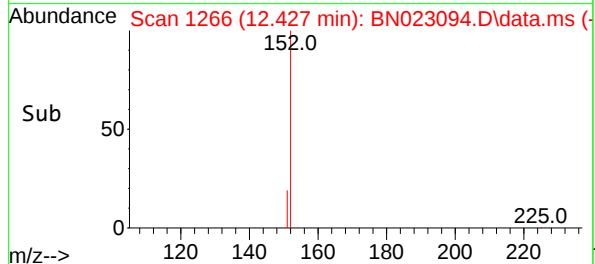
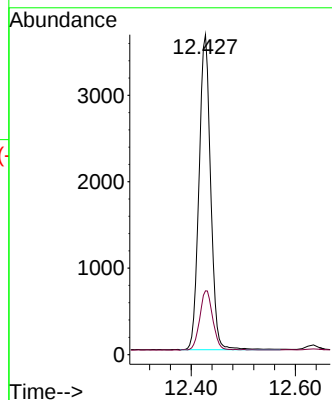
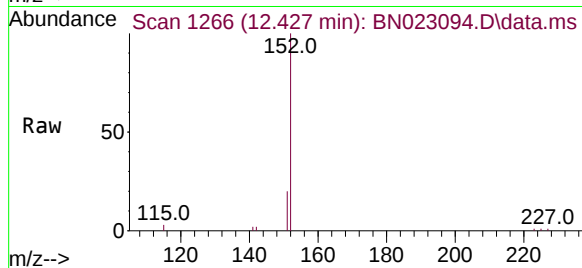




#11
2-Methylnaphthalene-d10
Concen: 0.174 ng
RT: 12.427 min Scan# 11
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

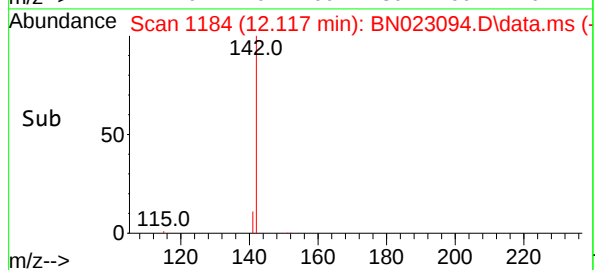
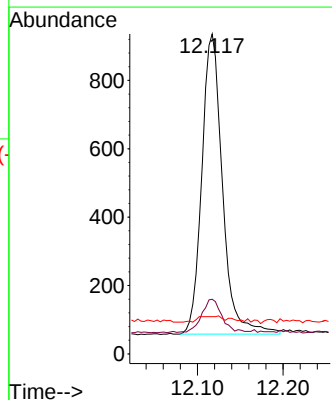
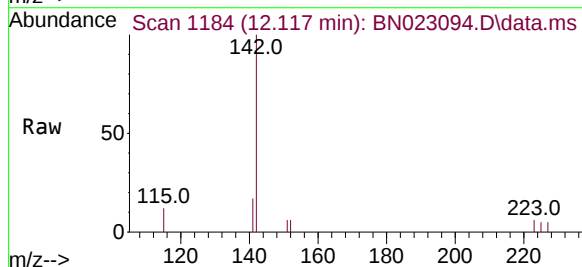
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

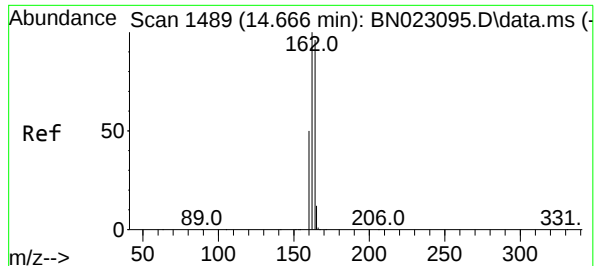
Tgt Ion:152 Resp: 7153
Ion Ratio Lower Upper
152 100
151 16.7 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.149 ng
RT: 12.117 min Scan# 1184
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:142 Resp: 1474
Ion Ratio Lower Upper
142 100
141 17.1 10.9 16.3#
115 11.6 5.7 8.5#





#13

Acenaphthene-d10

Concen: 0.400 ng

RT: 14.666 min Scan# 1489

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

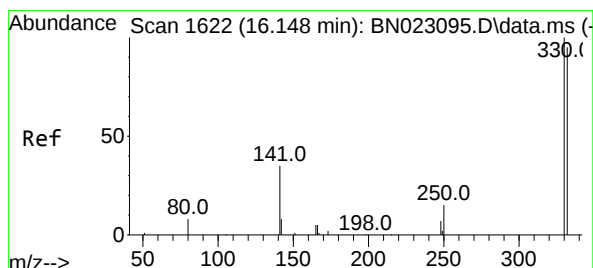
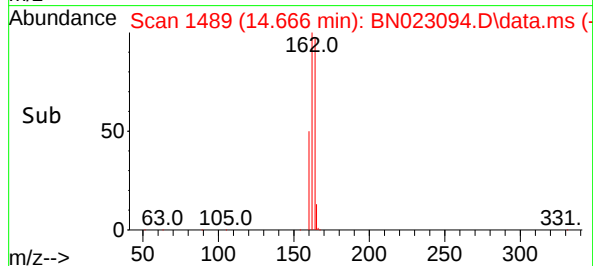
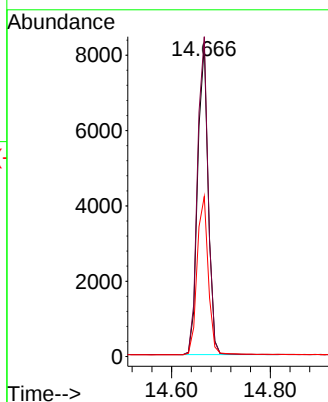
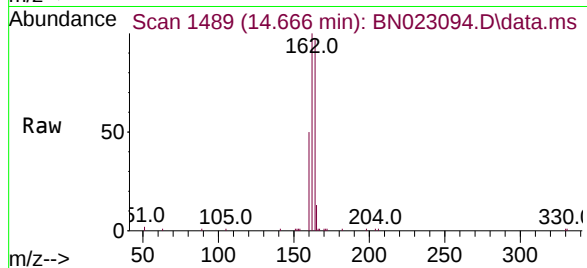
Tgt Ion:164 Resp: 12180

Ion Ratio Lower Upper

164 100

162 102.8 83.4 125.0

160 51.4 41.8 62.8



#14

2,4,6-Tribromophenol

Concen: 0.144 ng

RT: 16.148 min Scan# 1622

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

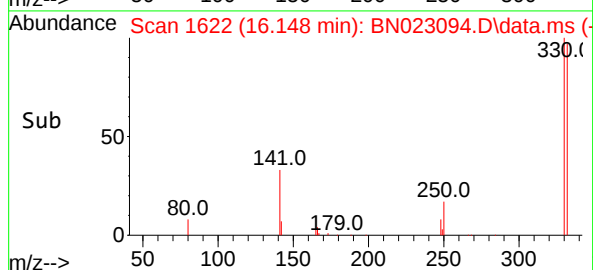
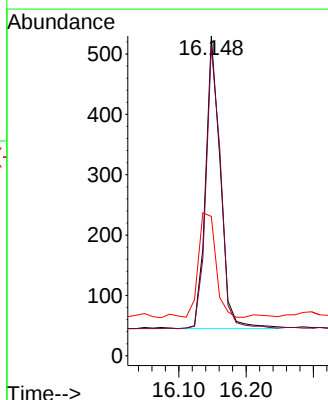
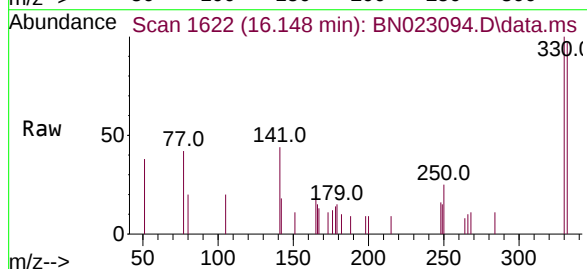
Tgt Ion:330 Resp: 740

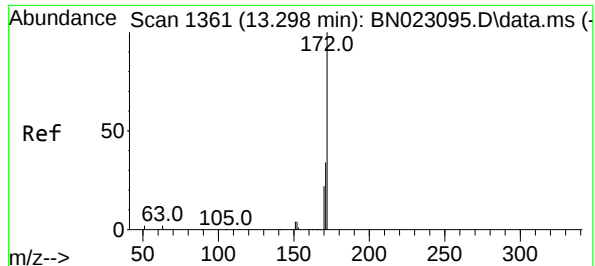
Ion Ratio Lower Upper

330 100

332 96.4 77.3 115.9

141 43.1 33.5 50.3





#15

2-Fluorobiphenyl

Concen: 0.177 ng

RT: 13.298 min Scan# 1361

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

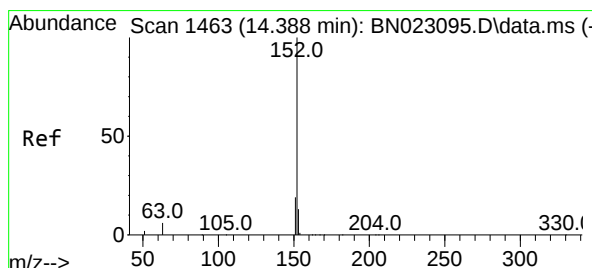
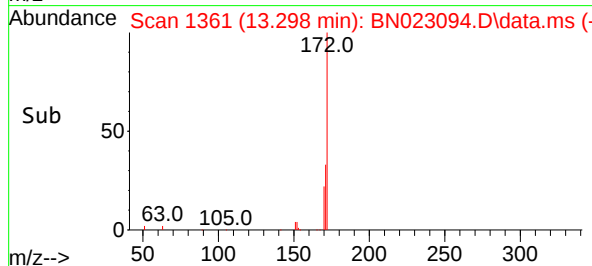
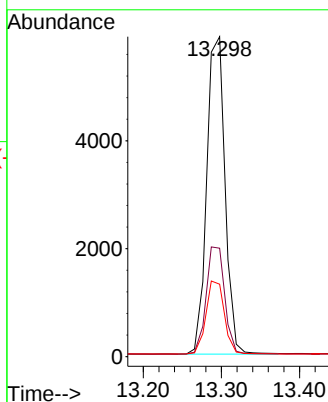
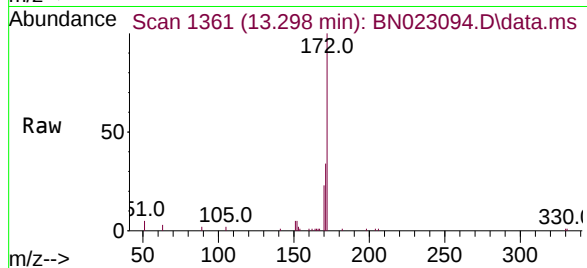
Tgt Ion:172 Resp: 9585

Ion Ratio Lower Upper

172 100

171 33.9 27.4 41.0

170 22.6 17.9 26.9



#16

Acenaphthylene

Concen: 0.147 ng

RT: 14.388 min Scan# 1463

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

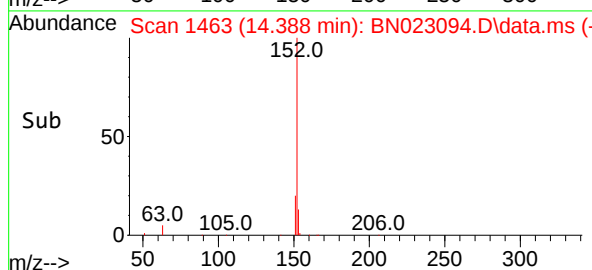
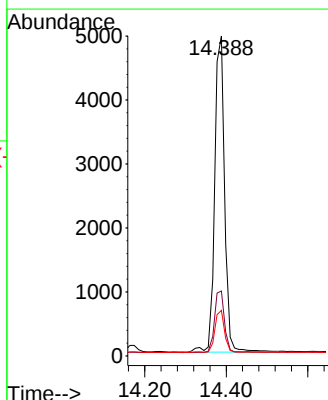
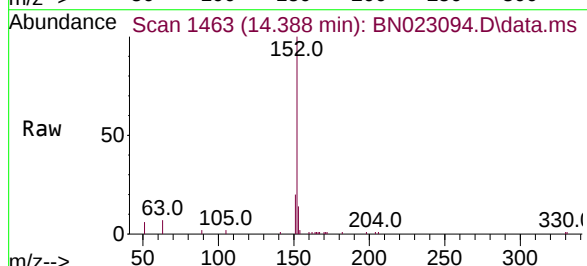
Tgt Ion:152 Resp: 8400

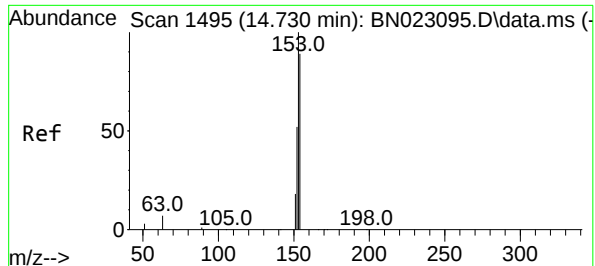
Ion Ratio Lower Upper

152 100

151 19.7 15.4 23.2

153 12.9 10.3 15.5





#17

Acenaphthene

Concen: 0.162 ng

RT: 14.730 min Scan# 1495

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

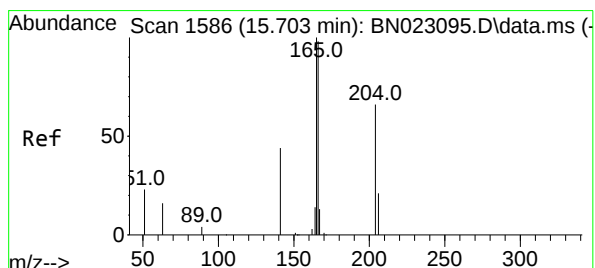
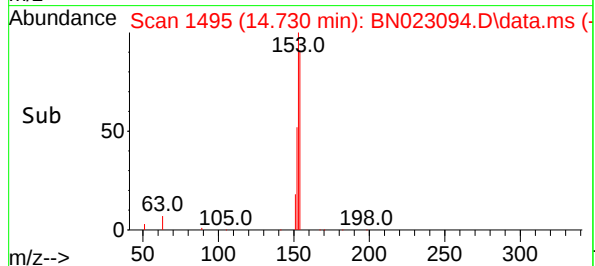
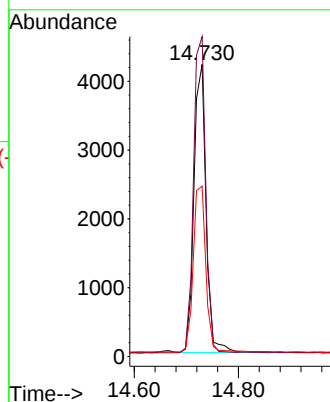
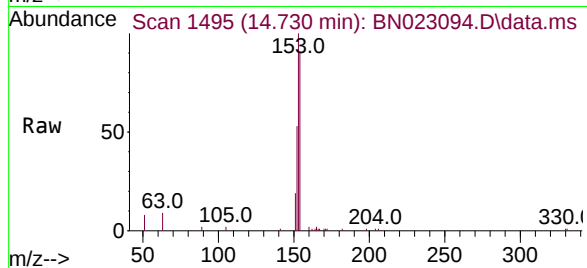
Tgt Ion:154 Resp: 6737

Ion Ratio Lower Upper

154 100

153 110.4 88.6 132.8

152 59.7 48.1 72.1



#18

Fluorene

Concen: 0.159 ng

RT: 15.703 min Scan# 1586

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

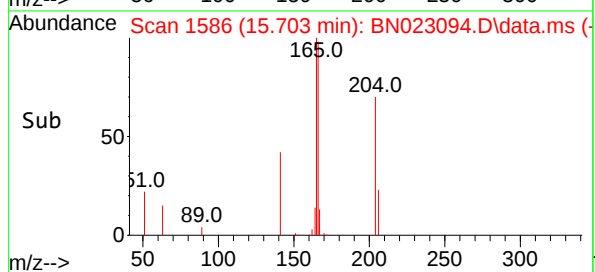
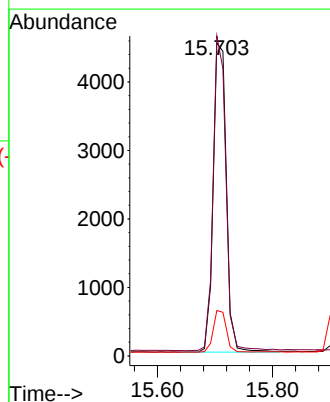
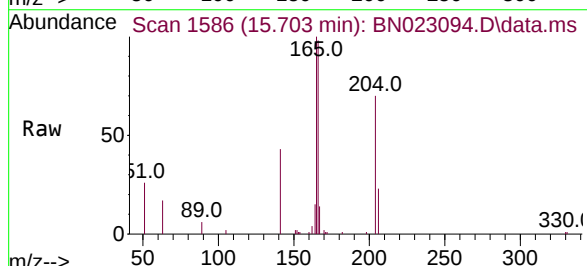
Tgt Ion:166 Resp: 7437

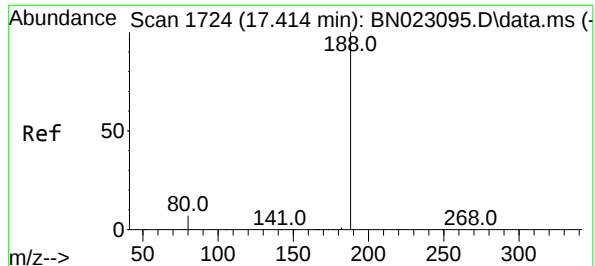
Ion Ratio Lower Upper

166 100

165 100.3 79.8 119.6

167 12.9 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.402 min Scan# 11

Delta R.T. -0.012 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

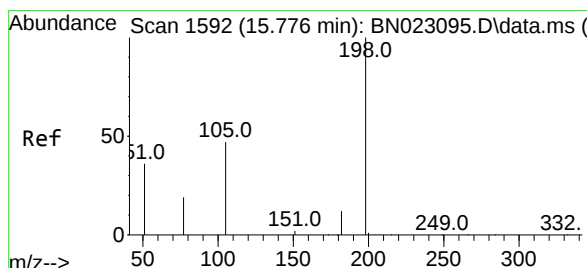
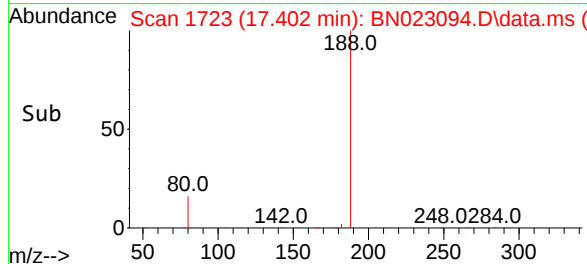
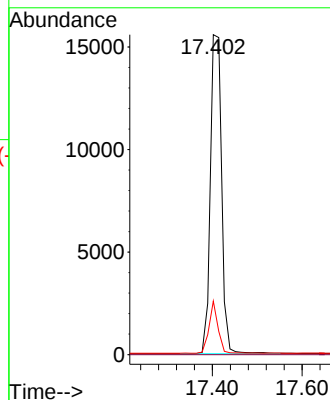
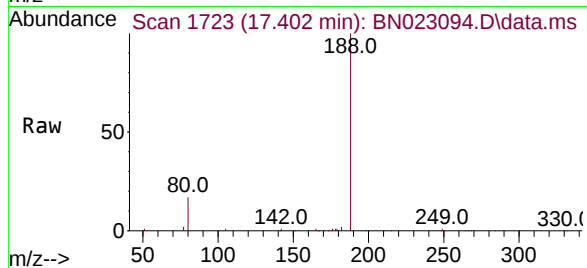
Tgt Ion:188 Resp: 27325

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 16.7 6.1 9.1#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.148 ng

RT: 15.776 min Scan# 1592

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

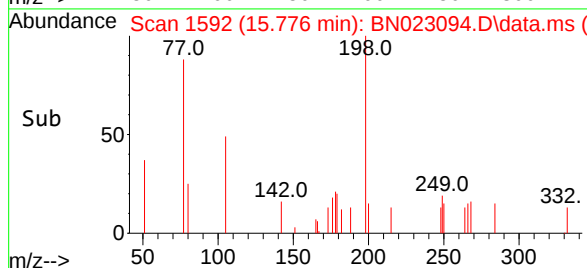
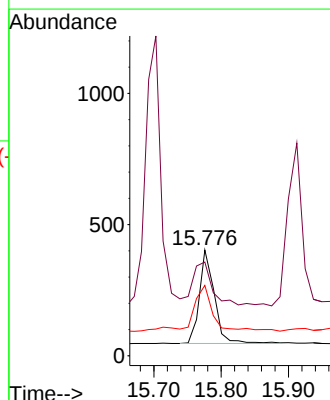
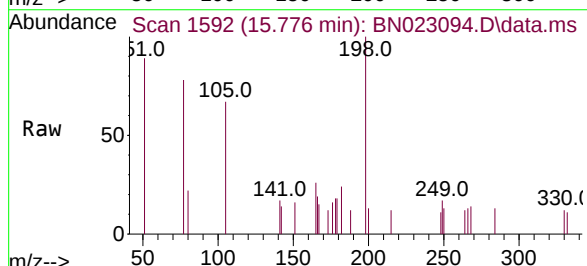
Tgt Ion:198 Resp: 547

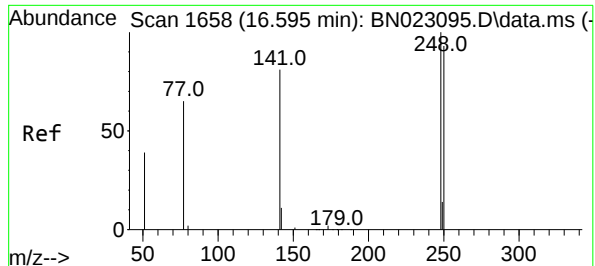
Ion Ratio Lower Upper

198 100

51 88.6 57.0 85.4#

105 66.5 47.2 70.8





#21

4-Bromophenyl-phenylether

Concen: 0.164 ng

RT: 16.595 min Scan# 1658

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

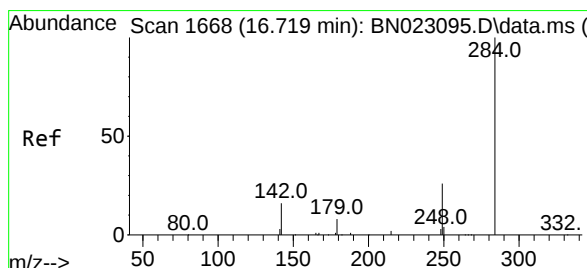
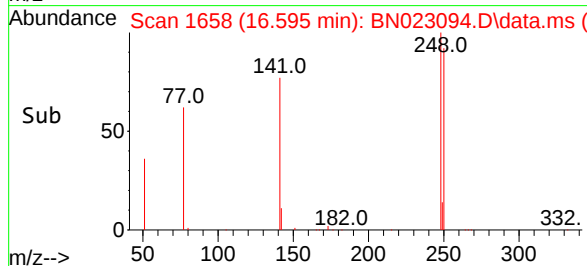
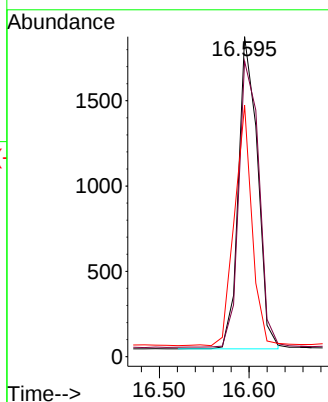
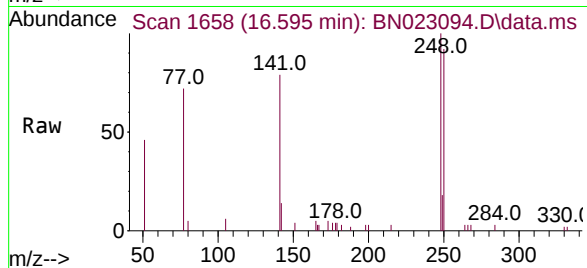
Tgt Ion:248 Resp: 2698

Ion Ratio Lower Upper

248 100

250 92.3 74.3 111.5

141 78.6 65.0 97.6



#22

Hexachlorobenzene

Concen: 0.171 ng

RT: 16.719 min Scan# 1668

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

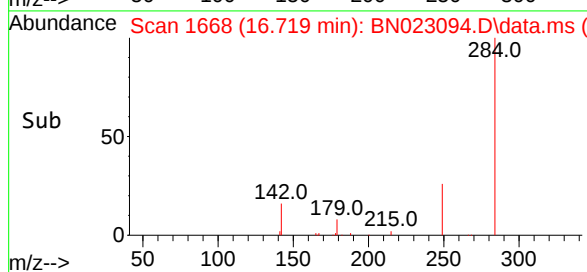
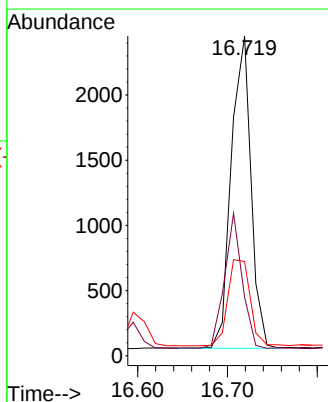
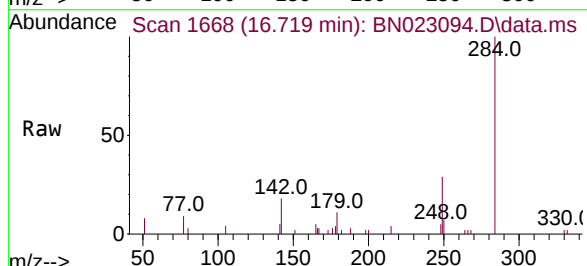
Tgt Ion:284 Resp: 3650

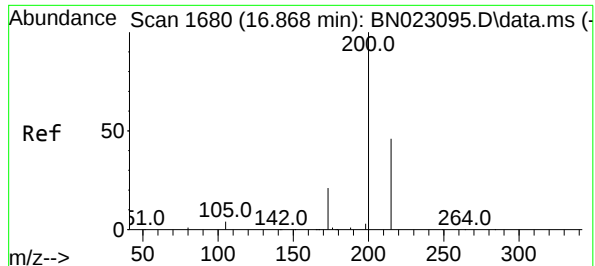
Ion Ratio Lower Upper

284 100

142 38.6 31.0 46.4

249 31.1 24.4 36.6

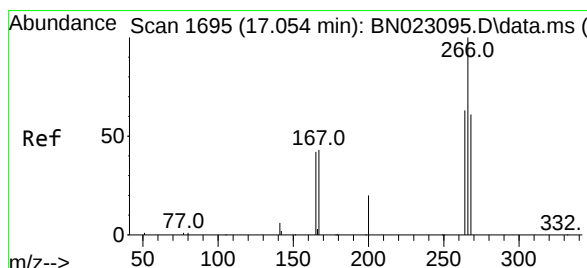
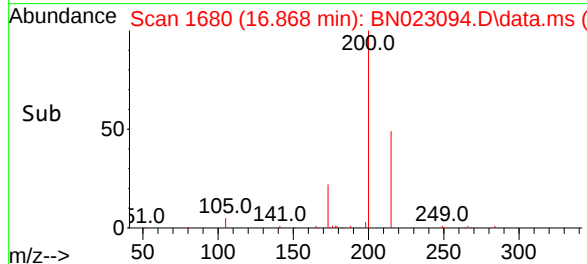
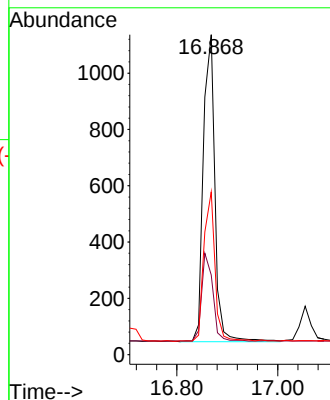
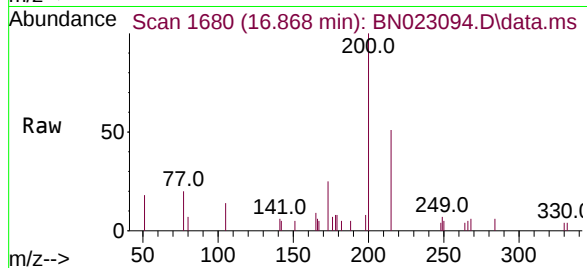




#23
Atrazine
Concen: 0.144 ng
RT: 16.868 min Scan# 1680
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

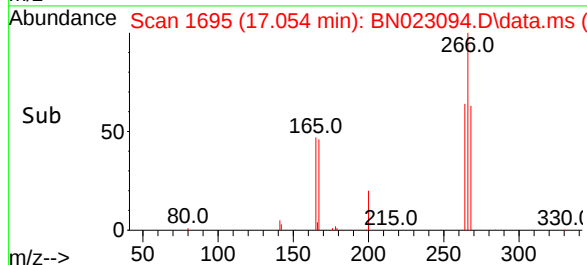
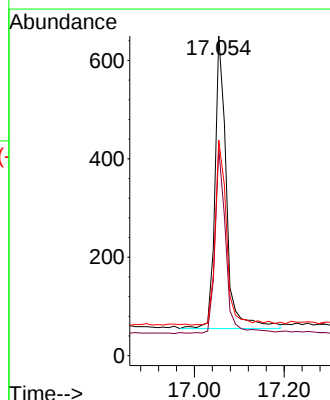
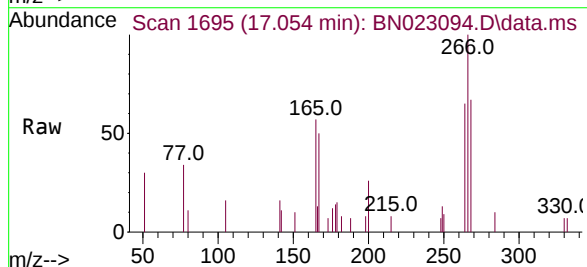
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

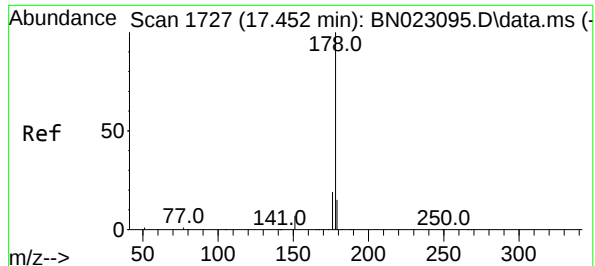
Tgt Ion:200 Resp: 1729
Ion Ratio Lower Upper
200 100
173 24.9 18.2 27.4
215 50.8 38.0 57.0



#24
Pentachlorophenol
Concen: 0.169 ng
RT: 17.054 min Scan# 1695
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:266 Resp: 1064
Ion Ratio Lower Upper
266 100
264 58.0 50.1 75.1
268 63.0 49.7 74.5

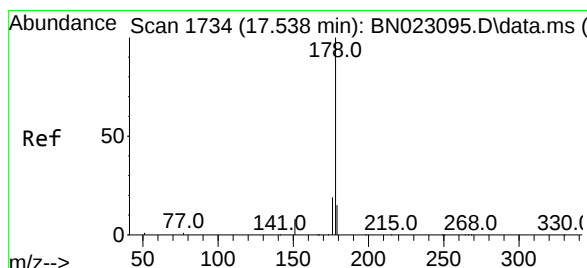
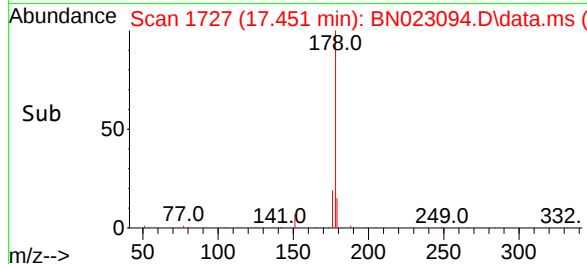
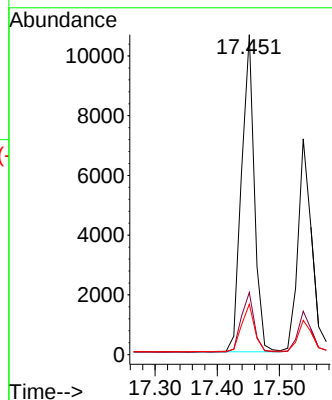
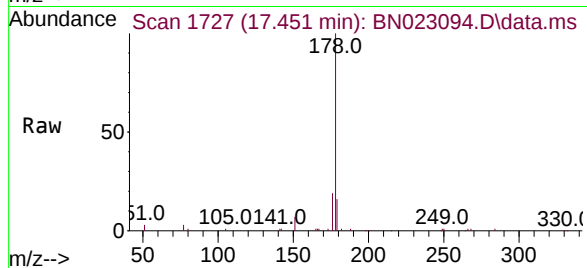




#25
Phenanthrene
Concen: 0.165 ng
RT: 17.451 min Scan# 1727
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

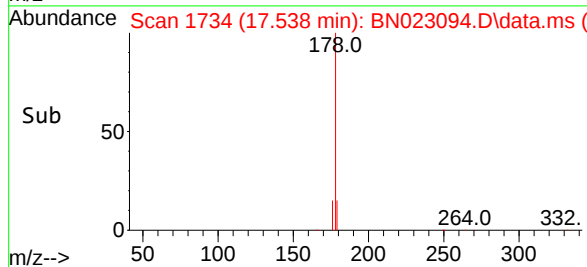
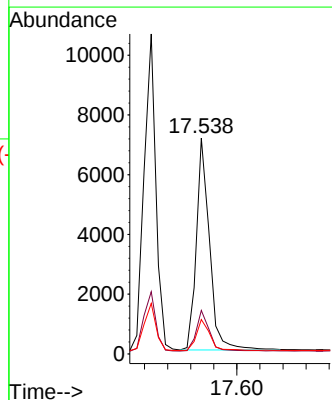
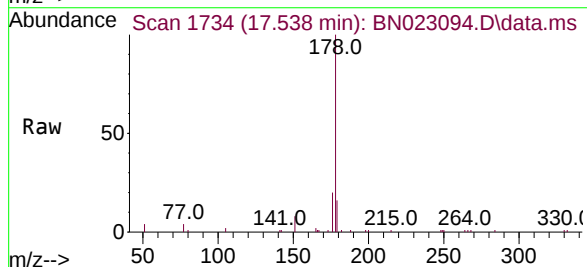
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

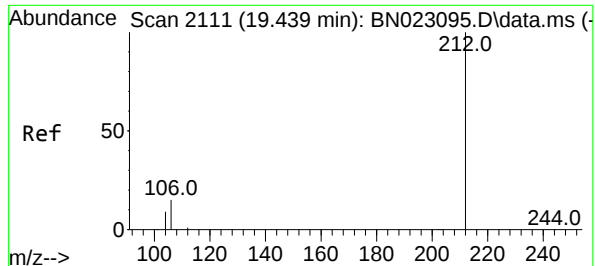
Tgt Ion:178 Resp: 15180
Ion Ratio Lower Upper
178 100
176 19.0 15.4 23.2
179 15.4 12.2 18.2



#26
Anthracene
Concen: 0.152 ng
RT: 17.538 min Scan# 1734
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:178 Resp: 11253
Ion Ratio Lower Upper
178 100
176 18.8 15.1 22.7
179 14.7 12.2 18.4





#27

Fluoranthene-d10

Concen: 0.156 ng

RT: 19.439 min Scan# 2111

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

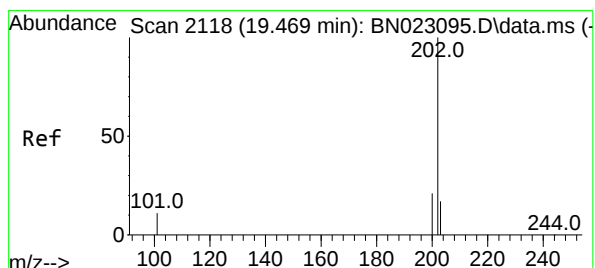
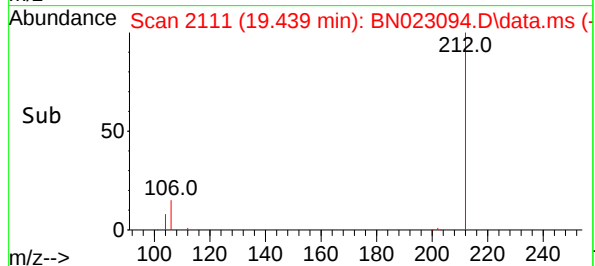
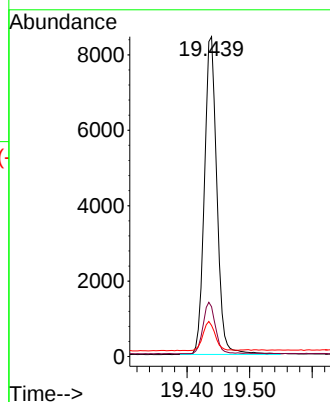
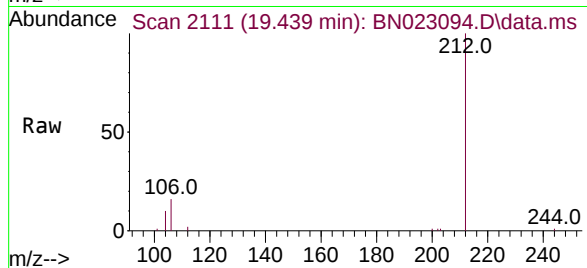
Tgt Ion:212 Resp: 11666

Ion Ratio Lower Upper

212 100

106 16.1 13.0 19.4

104 9.0 7.5 11.3



#28

Fluoranthene

Concen: 0.154 ng

RT: 19.469 min Scan# 2118

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

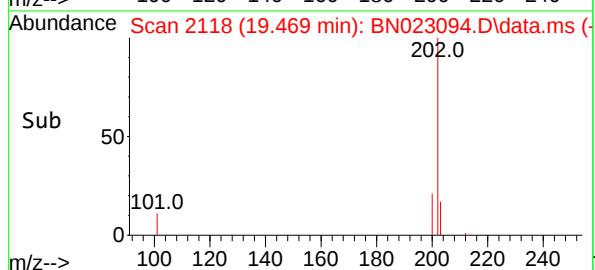
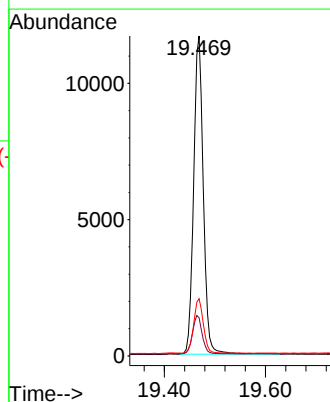
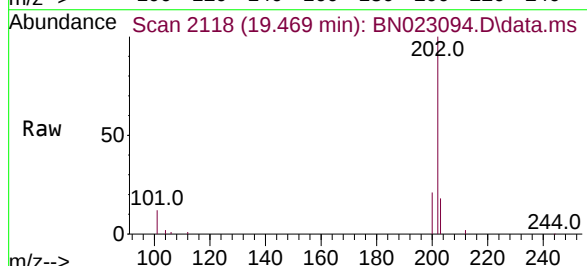
Tgt Ion:202 Resp: 15457

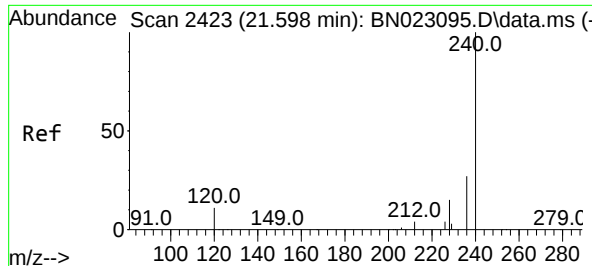
Ion Ratio Lower Upper

202 100

101 12.6 9.7 14.5

203 17.0 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.589 min Scan# 24

Delta R.T. -0.009 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2

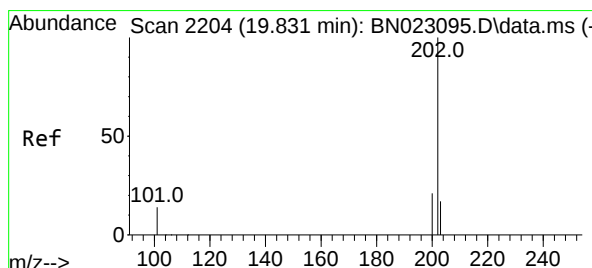
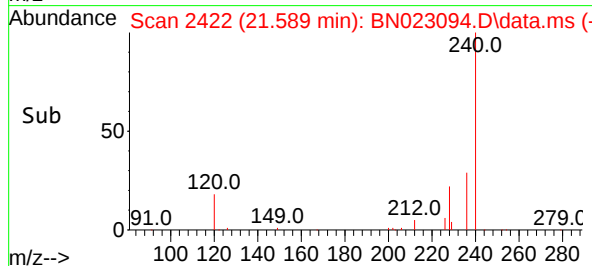
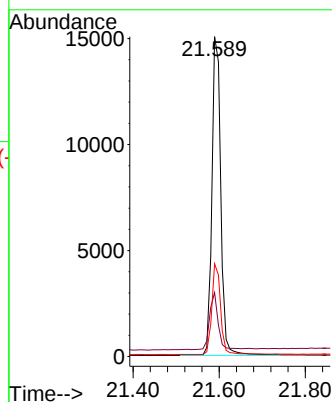
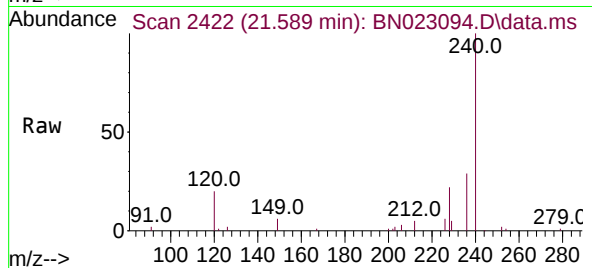
Tgt Ion:240 Resp: 21585

Ion Ratio Lower Upper

240 100

120 20.0 10.1 15.1#

236 29.0 22.2 33.4



#30

Pyrene

Concen: 0.171 ng

RT: 19.831 min Scan# 2204

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

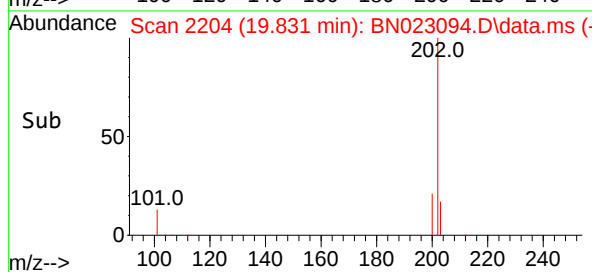
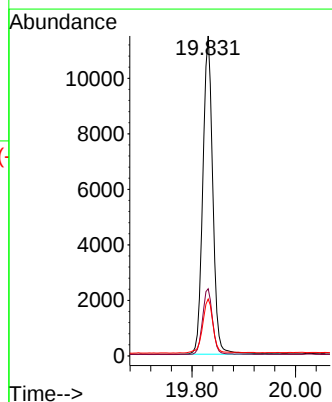
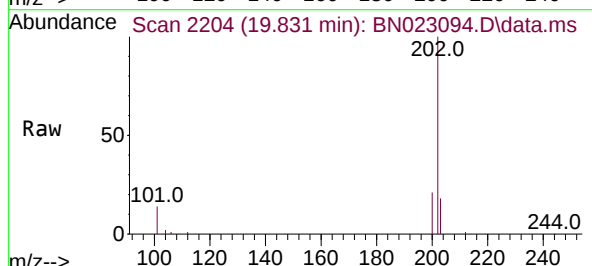
Tgt Ion:202 Resp: 15365

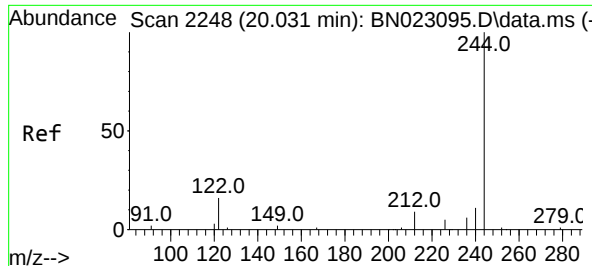
Ion Ratio Lower Upper

202 100

200 20.7 16.9 25.3

203 17.4 14.2 21.4

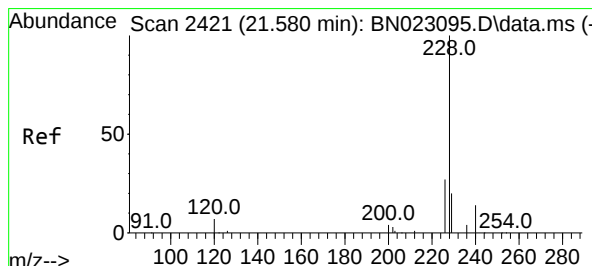
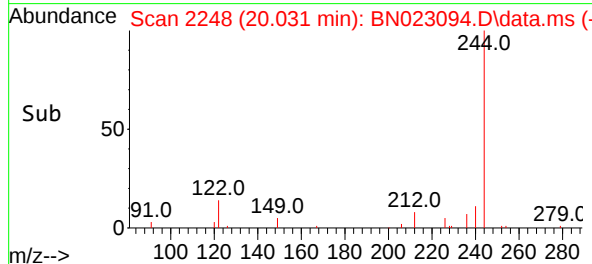
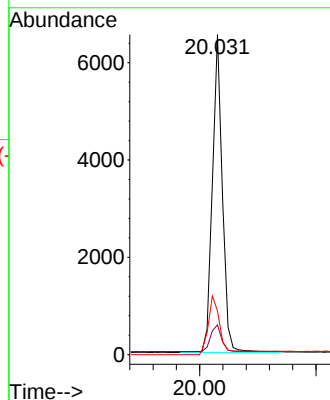
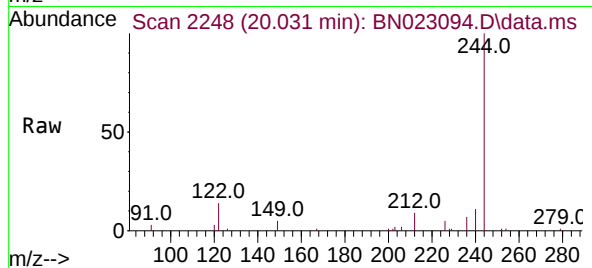




#31
Terphenyl-d14
Concen: 0.152 ng
RT: 20.031 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

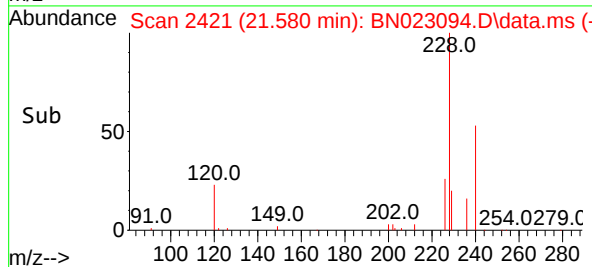
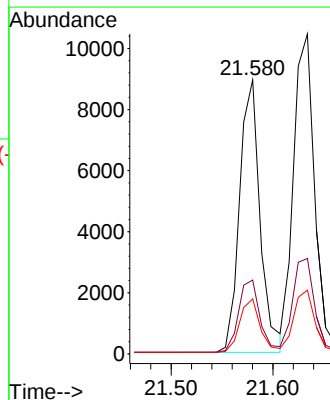
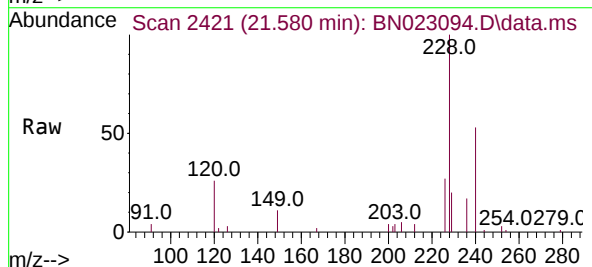
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

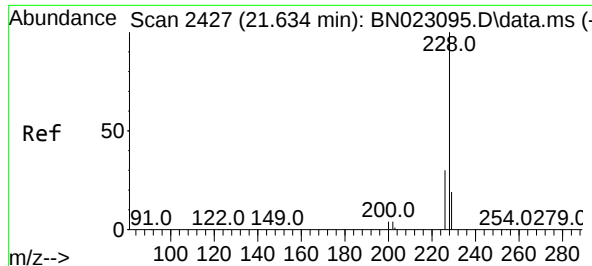
Tgt Ion:244 Resp: 6228
Ion Ratio Lower Upper
244 100
212 9.3 7.6 11.4
122 13.6 12.6 18.8



#32
Benzo(a)anthracene
Concen: 0.158 ng
RT: 21.580 min Scan# 2421
Delta R.T. -0.000 min
Lab File: BN023094.D
Acq: 08 Dec 2022 14:37

Tgt Ion:228 Resp: 12565
Ion Ratio Lower Upper
228 100
226 27.0 22.0 33.0
229 20.0 15.8 23.8





#33

Chrysene

Concen: 0.169 ng

RT: 21.634 min Scan# 2427

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

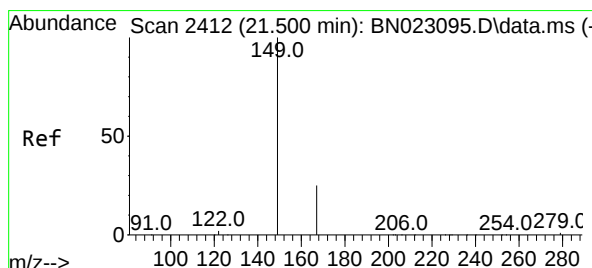
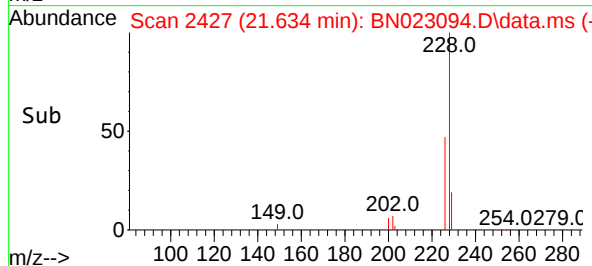
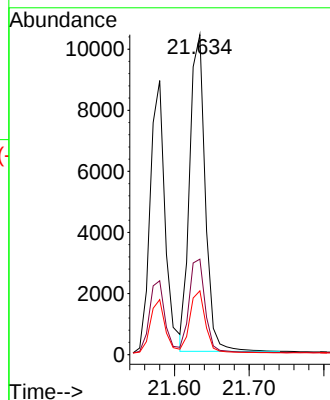
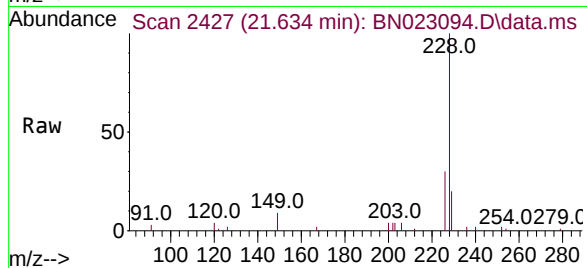
Tgt Ion:228 Resp: 15019

Ion Ratio Lower Upper

228 100

226 29.8 24.4 36.6

229 19.9 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.159 ng

RT: 21.500 min Scan# 2412

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

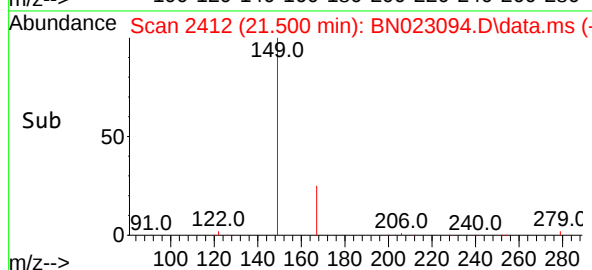
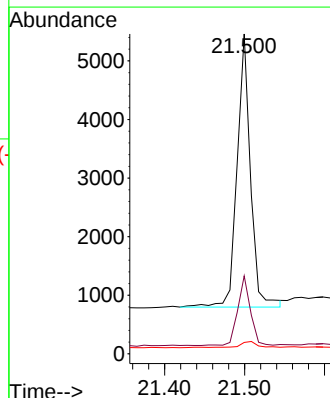
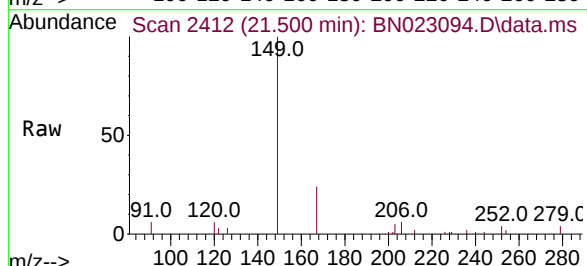
Tgt Ion:149 Resp: 5458

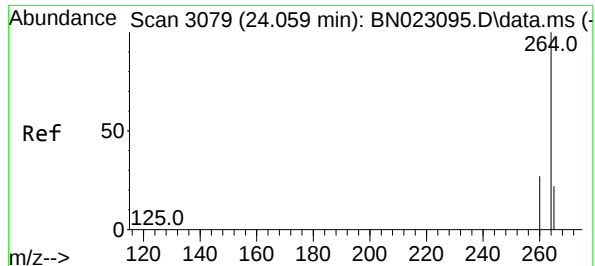
Ion Ratio Lower Upper

149 100

167 23.9 20.2 30.2

279 3.4 2.3 3.5





#35

Perylene-d12

Concen: 0.400 ng

RT: 24.056 min Scan# 3078

Delta R.T. -0.003 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

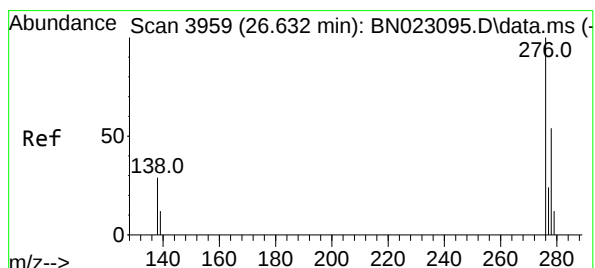
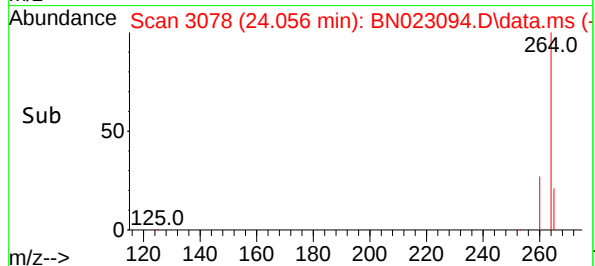
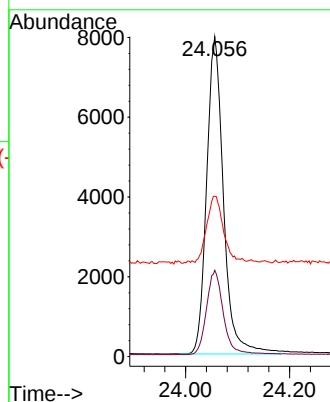
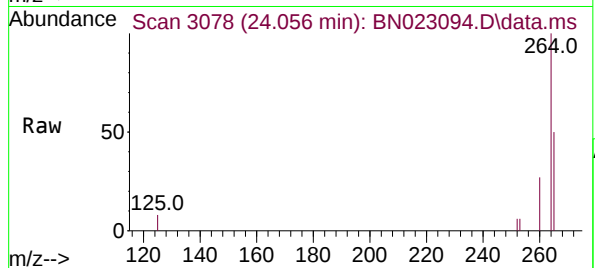
Tgt Ion:264 Resp: 17922

Ion Ratio Lower Upper

264 100

260 27.0 21.7 32.5

265 50.1 43.2 64.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.137 ng

RT: 26.629 min Scan# 3958

Delta R.T. -0.003 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

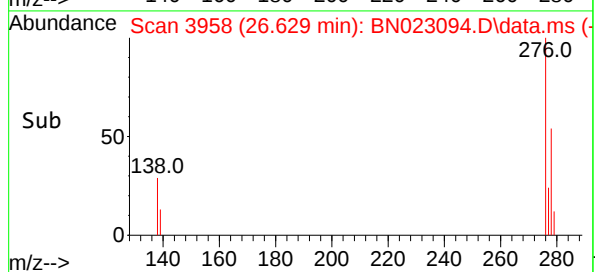
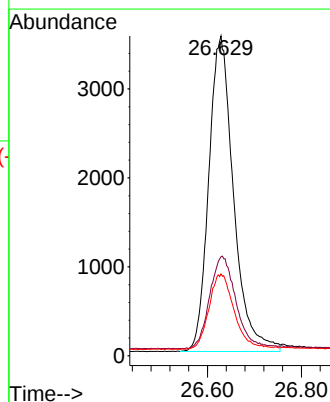
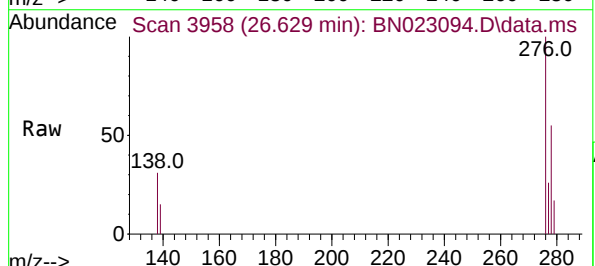
Tgt Ion:276 Resp: 13007

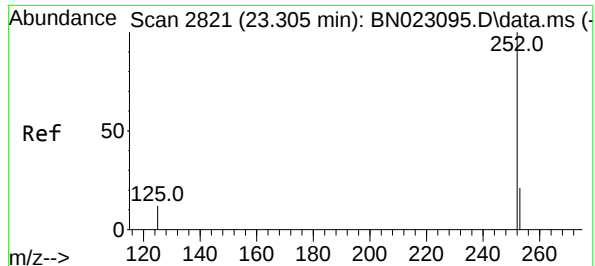
Ion Ratio Lower Upper

276 100

138 30.8 25.0 37.6

277 24.3 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.153 ng

RT: 23.302 min Scan# 2821

Delta R.T. -0.003 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

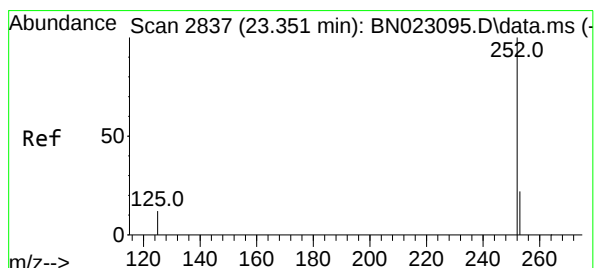
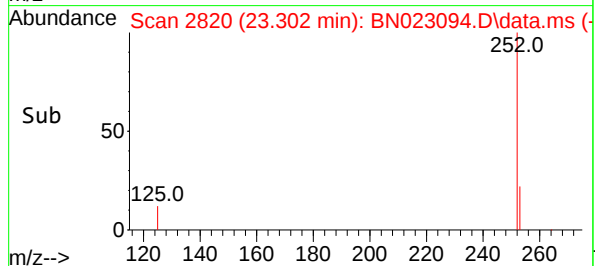
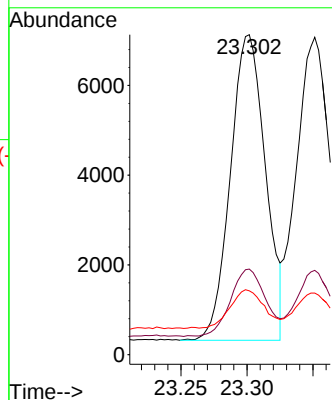
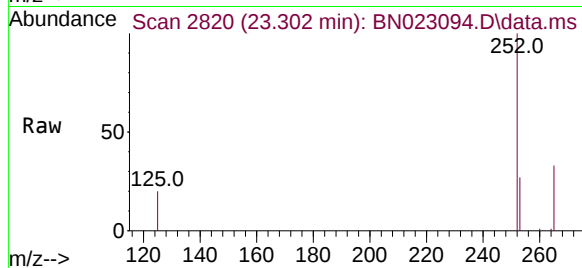
Tgt Ion:252 Resp: 12559

Ion Ratio Lower Upper

252 100

253 26.7 19.0 28.4

125 19.9 12.8 19.2#



#38

Benzo(k)fluoranthene

Concen: 0.147 ng

RT: 23.351 min Scan# 2837

Delta R.T. -0.000 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

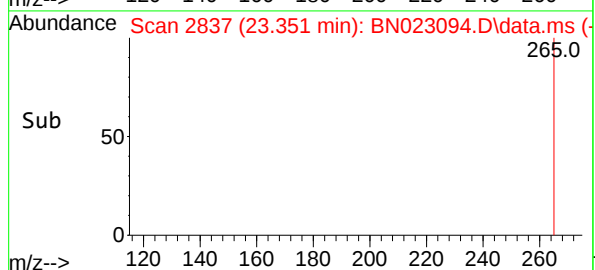
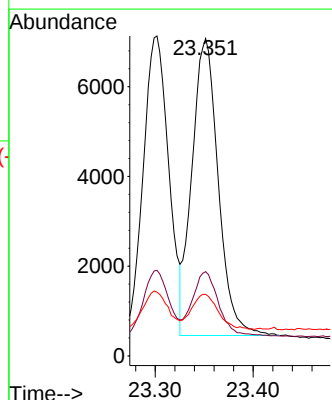
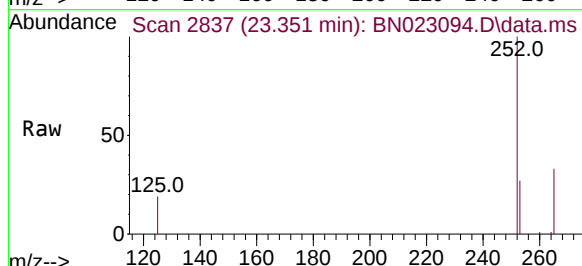
Tgt Ion:252 Resp: 12349

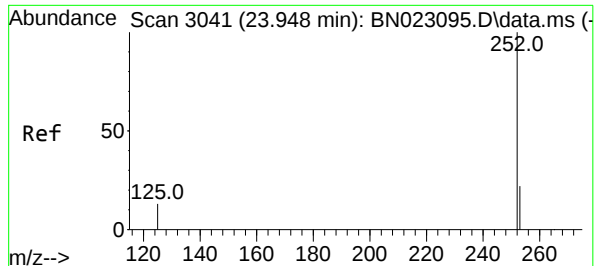
Ion Ratio Lower Upper

252 100

253 26.6 19.1 28.7

125 19.4 12.5 18.7#





#39

Benzo(a)pyrene

Concen: 0.136 ng

RT: 23.942 min Scan# 3041

Delta R.T. -0.006 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.2

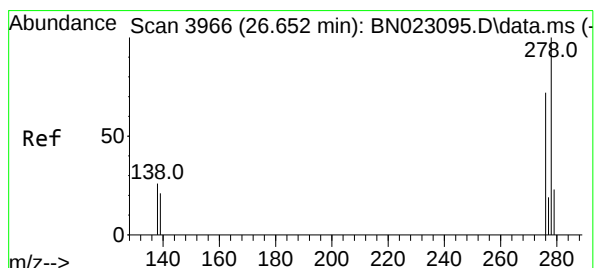
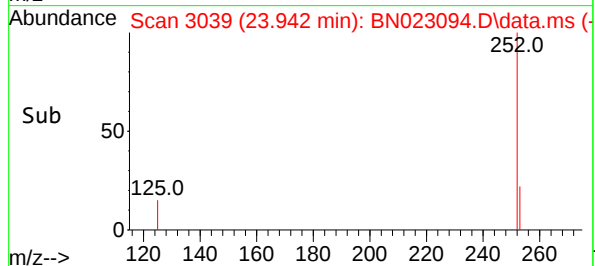
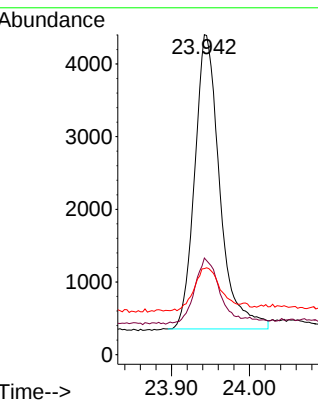
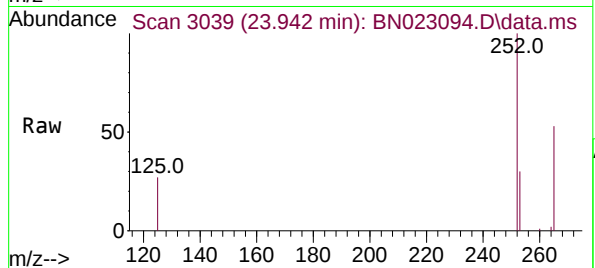
Tgt Ion:252 Resp: 9043

Ion Ratio Lower Upper

252 100

253 30.2 20.6 30.8

125 26.9 15.8 23.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.136 ng

RT: 26.646 min Scan# 3964

Delta R.T. -0.006 min

Lab File: BN023094.D

Acq: 08 Dec 2022 14:37

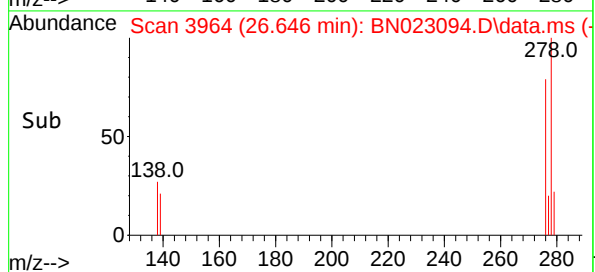
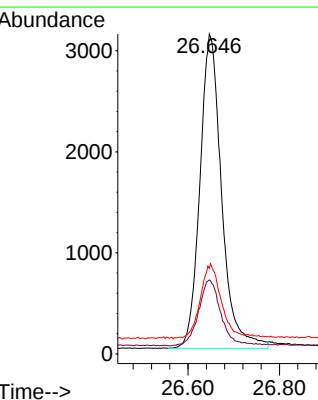
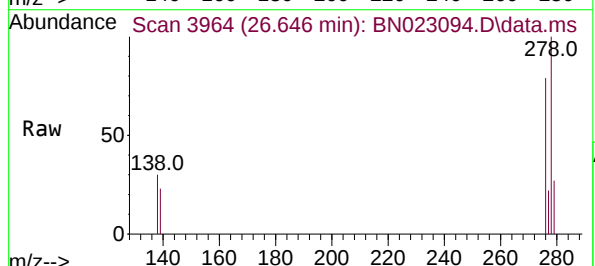
Tgt Ion:278 Resp: 10252

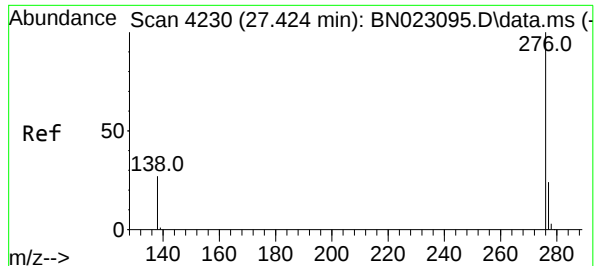
Ion Ratio Lower Upper

278 100

139 23.1 17.5 26.3

279 26.7 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.150 ng

RT: 27.418 min Scan# 41

Delta R.T. -0.006 min

Lab File: BN023094.D

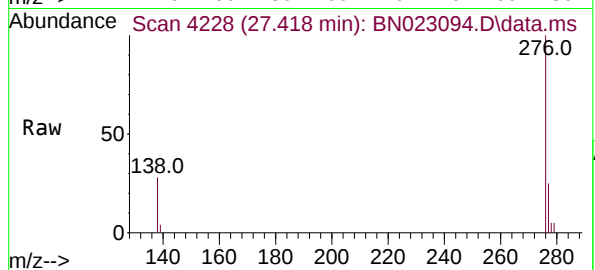
Acq: 08 Dec 2022 14:37

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.2



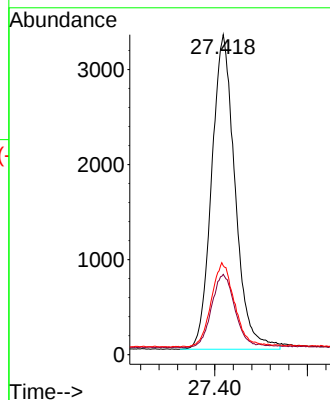
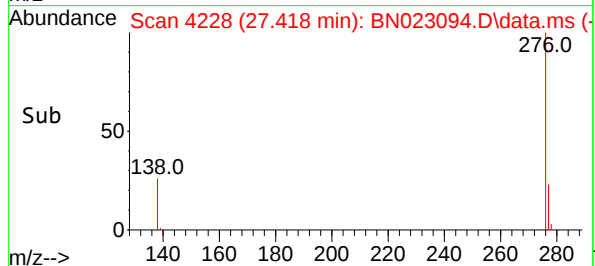
Tgt Ion:276 Resp: 11608

Ion Ratio Lower Upper

276 100

277 25.1 19.9 29.9

138 27.8 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023095.D
 Acq On : 08 Dec 2022 15:13
 Operator : CG/JU
 Sample : SSTDICCC0.4
 Misc :
 ALS Vial : 4 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICCC0.4

Quant Time: Dec 09 07:28:06 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:25:53 2022
 Response via : Initial Calibration

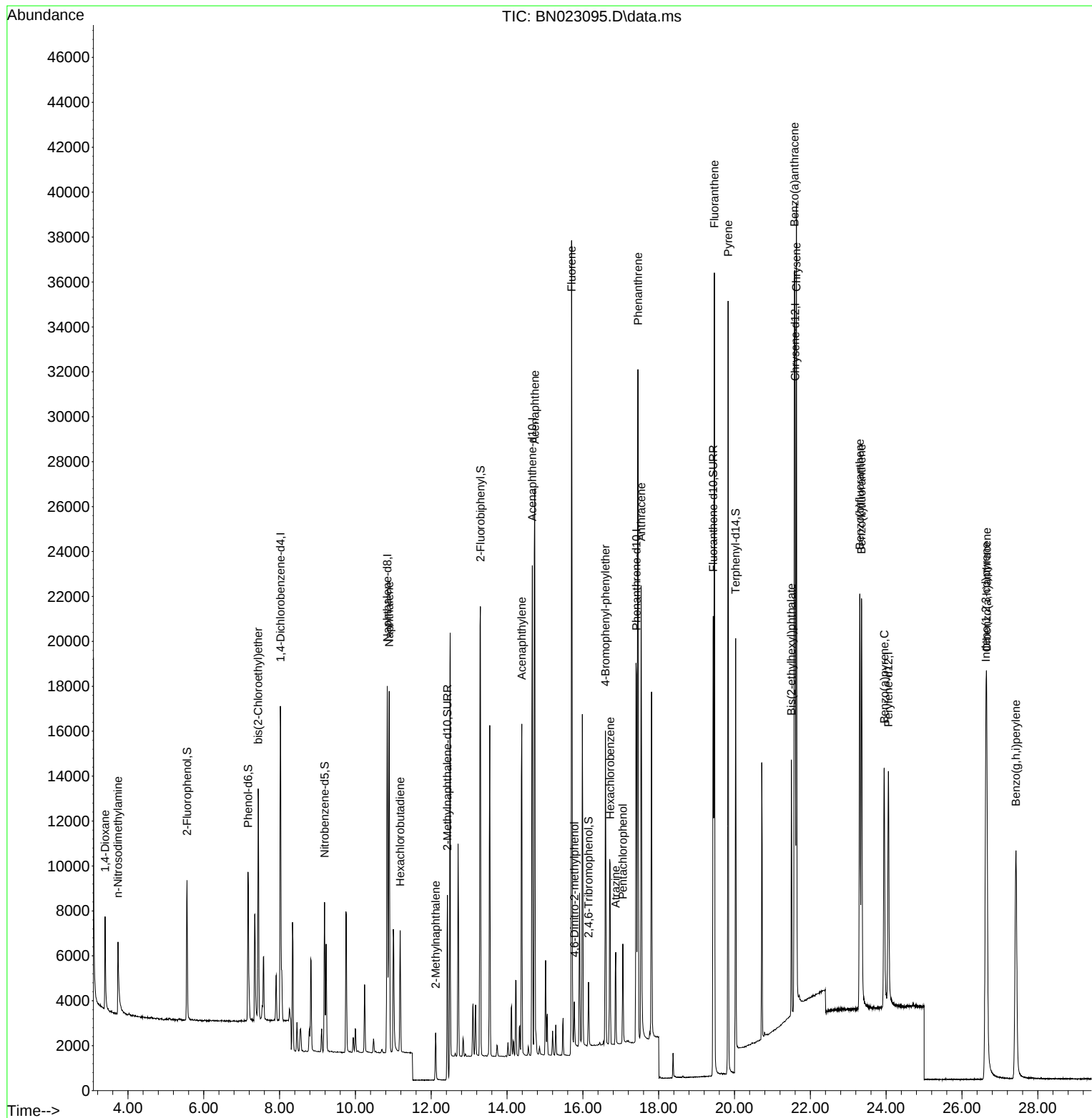
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.020	152	6900	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	20701	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	11453	0.400	ng	0.00
19) Phenanthrene-d10	17.414	188	25275	0.400	ng	0.00
29) Chrysene-d12	21.598	240	20569	0.400	ng	0.00
35) Perylene-d12	24.059	264	15521	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	5158	0.323	ng	0.00
5) Phenol-d6	7.168	99	6316	0.315	ng	0.00
8) Nitrobenzene-d5	9.185	82	5132	0.330	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	13294	0.340	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	1509	0.312	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	18409	0.362	ng	0.00
27) Fluoranthene-d10	19.439	212	22299	0.322	ng	0.00
31) Terphenyl-d14	20.031	244	14076	0.361	ng	0.00
Target Compounds						
						Qvalue
2) 1,4-Dioxane	3.398	88	2794	0.327	ng	100
3) n-Nitrosodimethylamine	3.738	42	2572	0.307	ng	100
6) bis(2-Chloroethyl)ether	7.435	93	7602	0.343	ng	100
9) Naphthalene	10.893	128	20658	0.336	ng	100
10) Hexachlorobutadiene	11.181	225	4047	0.351	ng	# 100
12) 2-Methylnaphthalene	12.117	142	3041	0.324	ng	100
16) Acenaphthylene	14.388	152	16880	0.314	ng	100
17) Acenaphthene	14.730	154	13187	0.336	ng	100
18) Fluorene	15.703	166	14809	0.337	ng	100
20) 4,6-Dinitro-2-methylph...	15.776	198	1159	0.339	ng	100
21) 4-Bromophenyl-phenylether	16.595	248	5161	0.339	ng	100
22) Hexachlorobenzene	16.719	284	7088	0.358	ng	100
23) Atrazine	16.868	200	3382	0.305	ng	100
24) Pentachlorophenol	17.054	266	2029	0.349	ng	100
25) Phenanthrene	17.452	178	28996	0.340	ng	100
26) Anthracene	17.538	178	21713	0.316	ng	100
28) Fluoranthene	19.469	202	30350	0.327	ng	100
30) Pyrene	19.831	202	29786	0.347	ng	100
32) Benzo(a)anthracene	21.580	228	24652	0.325	ng	100
33) Chrysene	21.634	228	29670	0.350	ng	100
34) Bis(2-ethylhexyl)phtha...	21.500	149	10060	0.307	ng	100
36) Indeno(1,2,3-cd)pyrene	26.632	276	26282	0.319	ng	100
37) Benzo(b)fluoranthene	23.305	252	24739	0.349	ng	100
38) Benzo(k)fluoranthene	23.351	252	24998	0.344	ng	100
39) Benzo(a)pyrene	23.948	252	17239	0.300	ng	100
40) Dibenzo(a,h)anthracene	26.652	278	21269	0.326	ng	100
41) Benzo(g,h,i)perylene	27.424	276	23466	0.351	ng	100

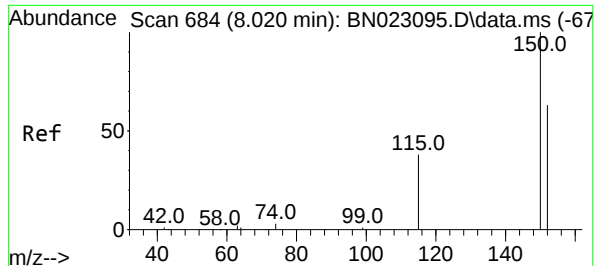
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023095.D
Acq On : 08 Dec 2022 15:13
Operator : CG/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Dec 09 07:28:06 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

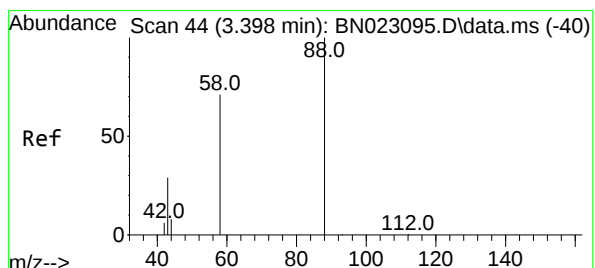
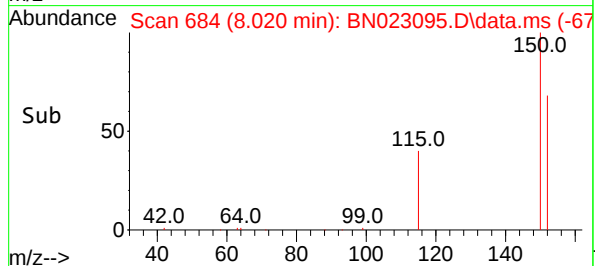
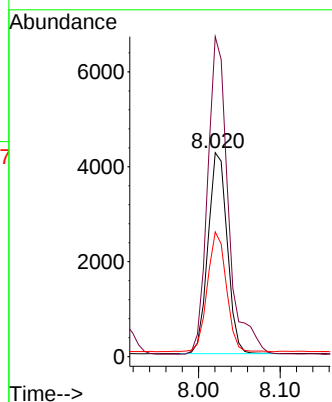
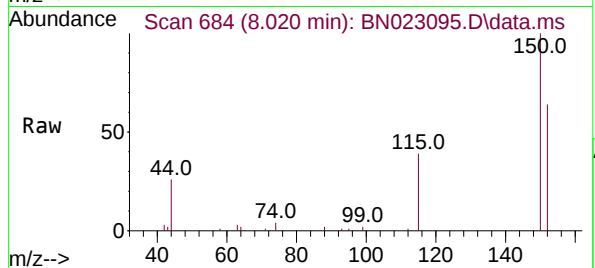




#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 8.020 min Scan# 684
 Delta R.T. 0.000 min
 Lab File: BN023095.D
 Acq: 08 Dec 2022 15:13

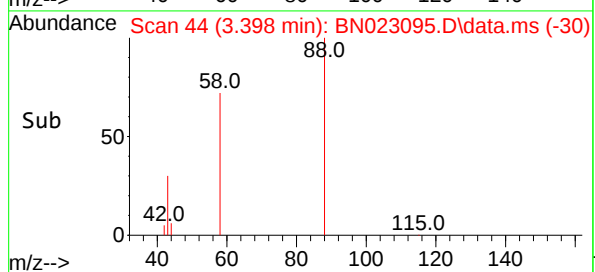
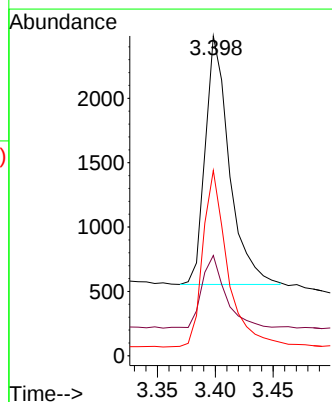
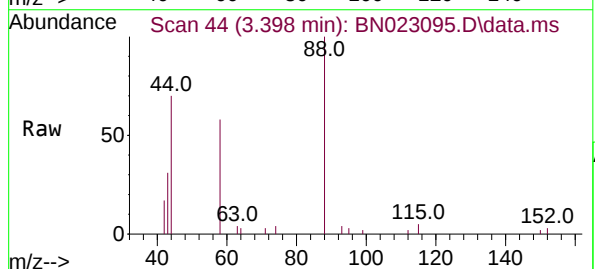
Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.4

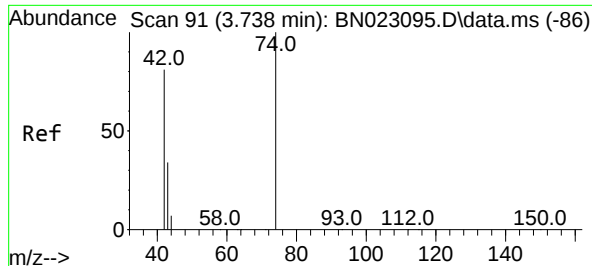
Tgt Ion:152 Resp: 6900
 Ion Ratio Lower Upper
 152 100
 150 157.0 125.6 188.4
 115 61.2 49.0 73.4



#2
 1,4-Dioxane
 Concen: 0.327 ng
 RT: 3.398 min Scan# 44
 Delta R.T. 0.000 min
 Lab File: BN023095.D
 Acq: 08 Dec 2022 15:13

Tgt Ion: 88 Resp: 2794
 Ion Ratio Lower Upper
 88 100
 43 29.1 23.3 34.9
 58 72.9 58.0 87.0

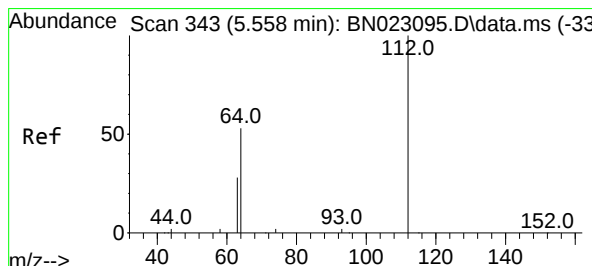
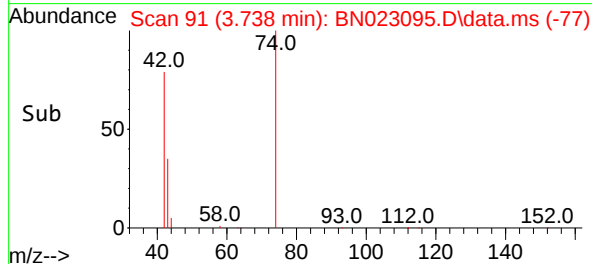
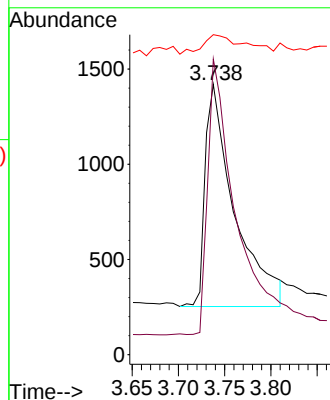
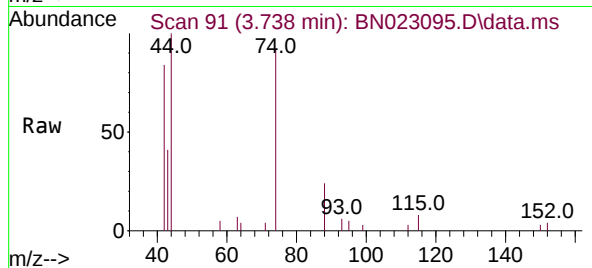




#3
n-Nitrosodimethylamine
Concen: 0.307 ng
RT: 3.738 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

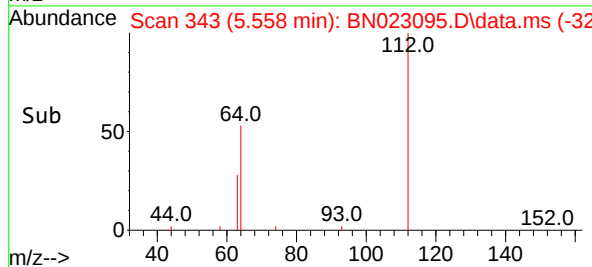
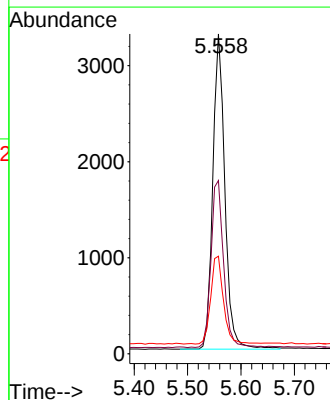
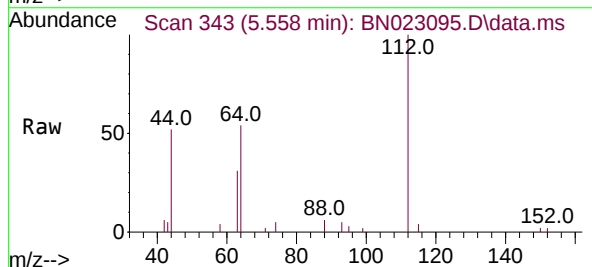
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

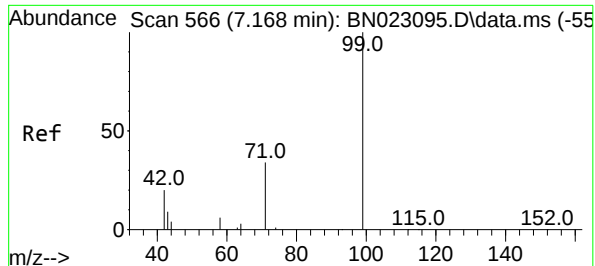
Tgt Ion: 42 Resp: 2572
Ion Ratio Lower Upper
42 100
74 119.8 95.8 143.6
44 10.3 8.4 12.6



#4
2-Fluorophenol
Concen: 0.323 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion: 112 Resp: 5158
Ion Ratio Lower Upper
112 100
64 55.5 44.4 66.6
63 29.6 23.7 35.5

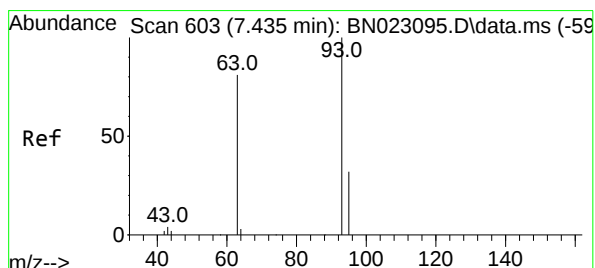
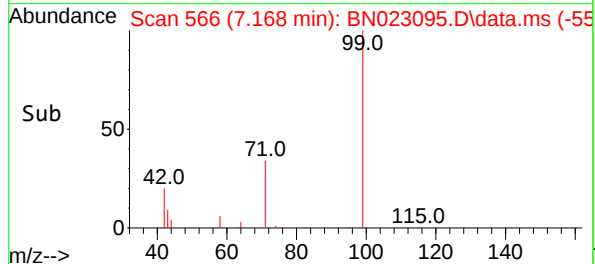
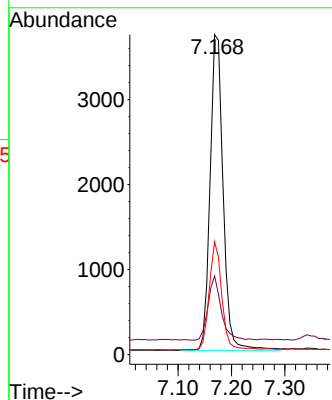
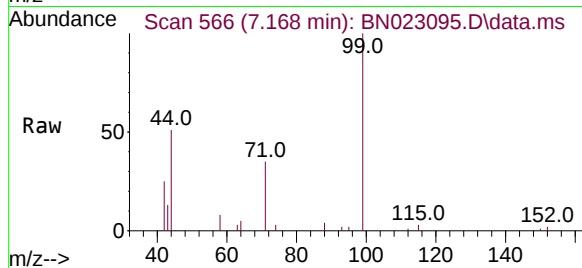




#5
Phenol-d6
Concen: 0.315 ng
RT: 7.168 min Scan# 566
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

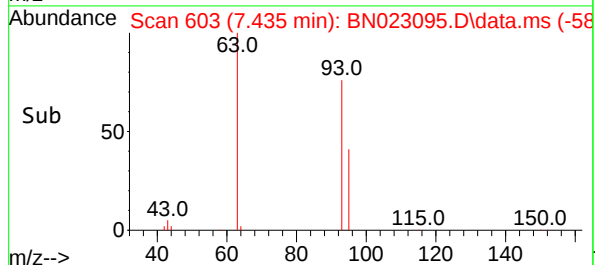
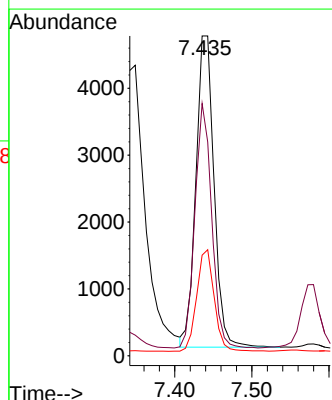
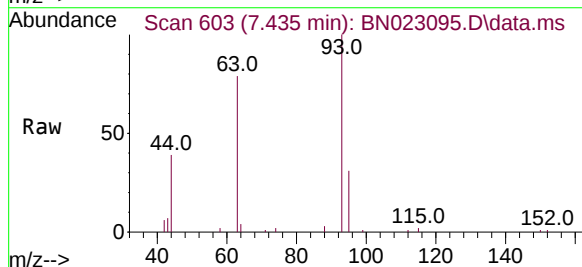
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

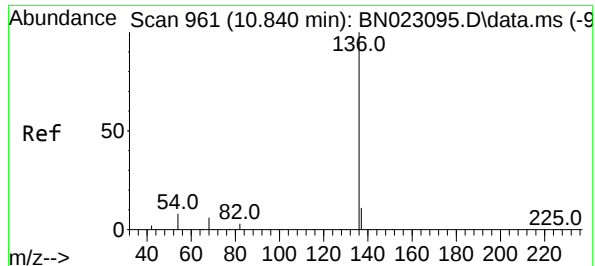
Tgt Ion: 99 Resp: 6316
Ion Ratio Lower Upper
99 100
42 20.4 16.3 24.5
71 33.1 26.5 39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.343 ng
RT: 7.435 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion: 93 Resp: 7602
Ion Ratio Lower Upper
93 100
63 72.6 58.1 87.1
95 31.5 25.2 37.8

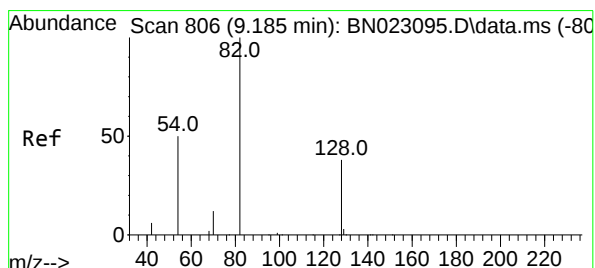
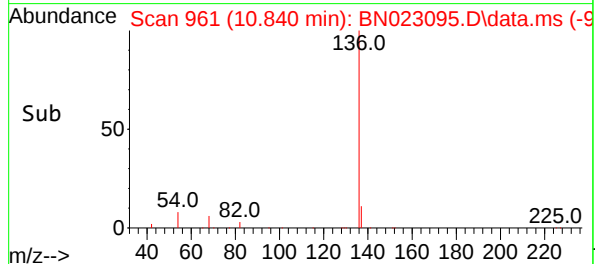
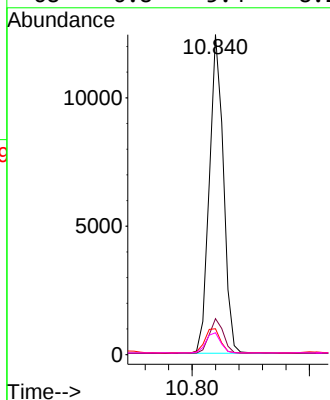
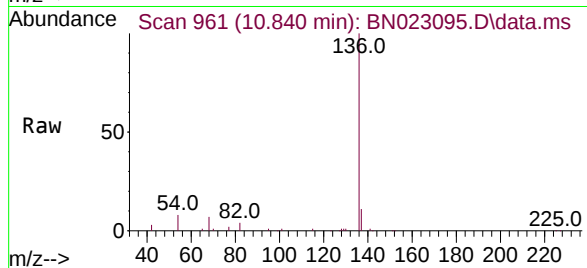




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

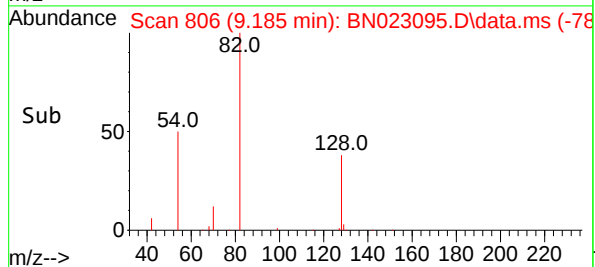
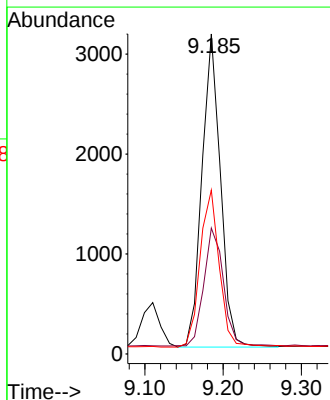
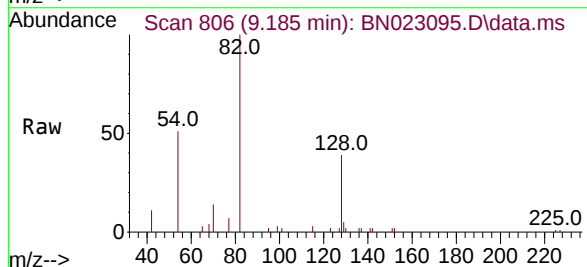
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

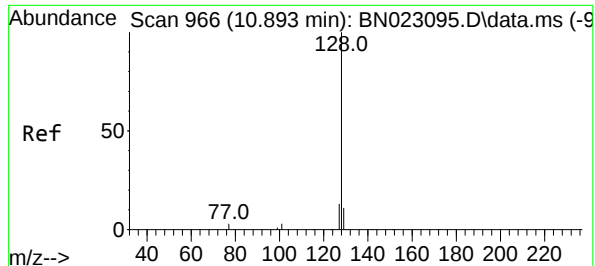
Tgt Ion:	136	Resp:	20701
Ion Ratio	Lower	Upper	
136	100		
137	11.2	9.0	13.4
54	8.1	6.5	9.7
68	6.8	5.4	8.2



#8
Nitrobenzene-d5
Concen: 0.330 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:	82	Resp:	5132
Ion Ratio	Lower	Upper	
82	100		
128	39.3	31.4	47.2
54	51.2	41.0	61.4

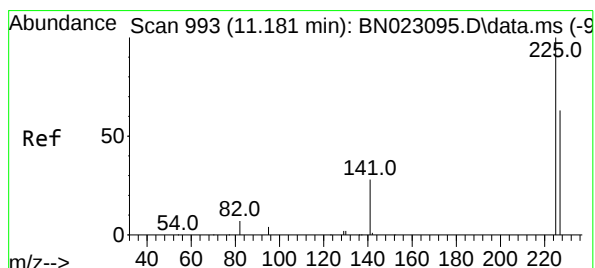
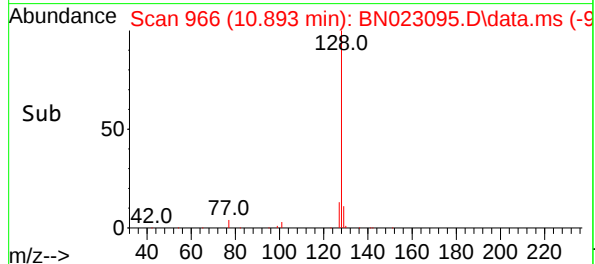
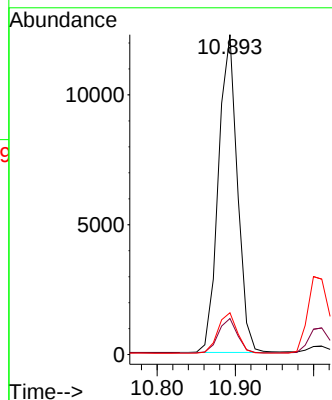
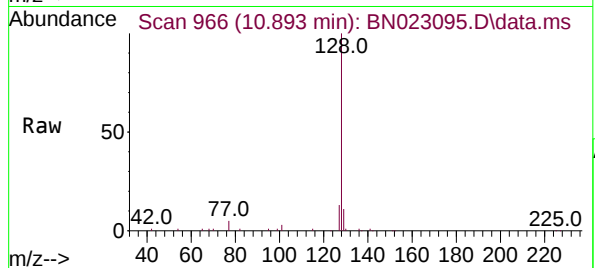




#9
Naphthalene
Concen: 0.336 ng
RT: 10.893 min Scan# 966
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

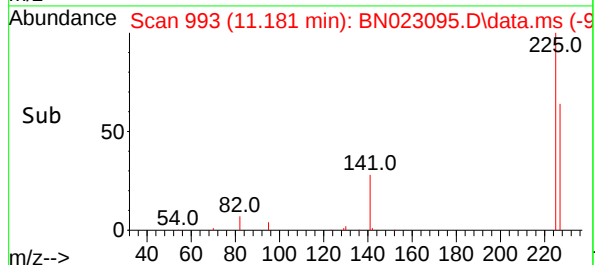
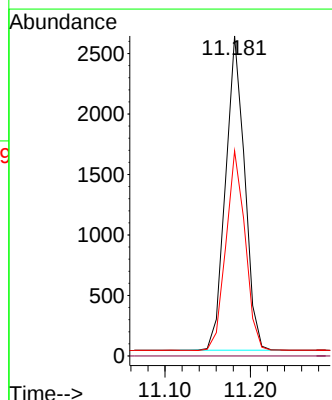
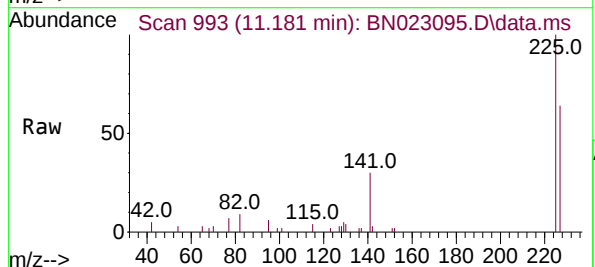
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

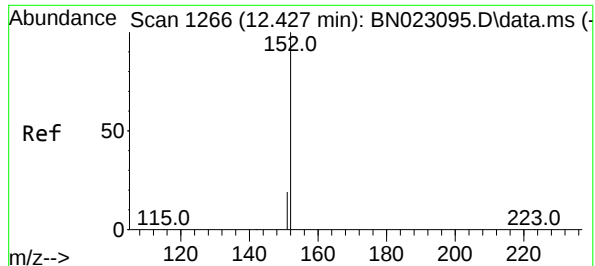
Tgt Ion:128 Resp: 20658
Ion Ratio Lower Upper
128 100
129 11.3 9.0 13.6
127 13.1 10.5 15.7



#10
Hexachlorobutadiene
Concen: 0.351 ng
RT: 11.181 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:225 Resp: 4047
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.9 51.1 76.7

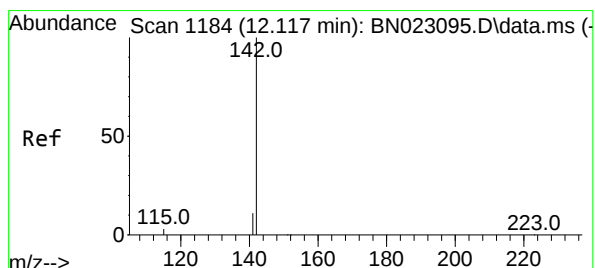
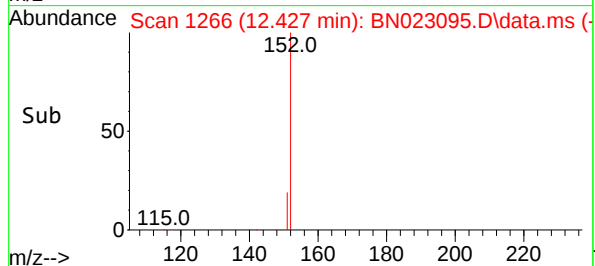
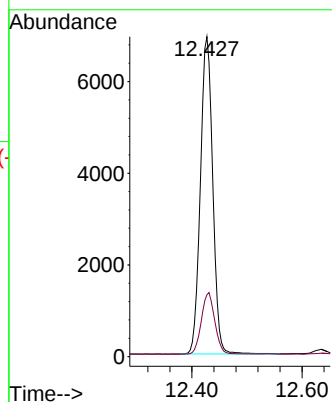
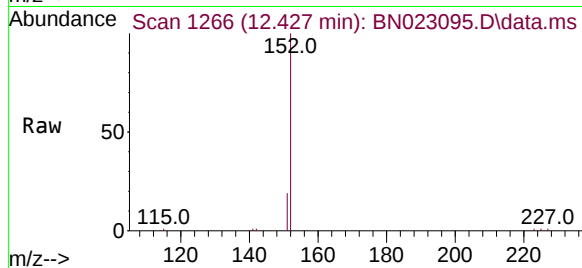




#11
2-Methylnaphthalene-d10
Concen: 0.340 ng
RT: 12.427 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

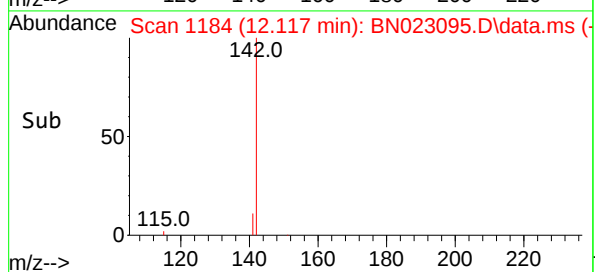
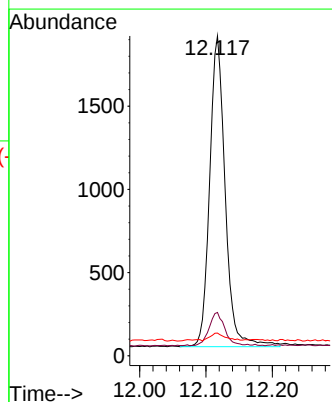
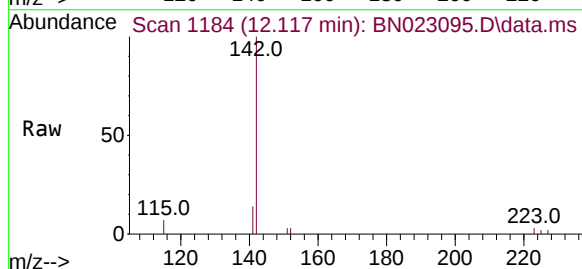
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

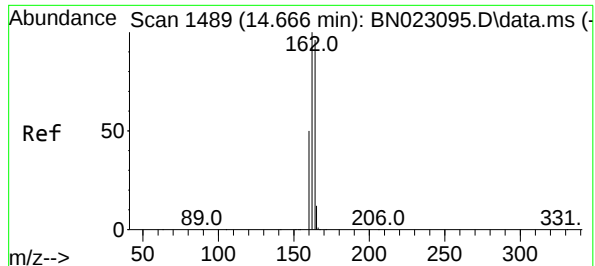
Tgt Ion:152 Resp: 13294
Ion Ratio Lower Upper
152 100
151 18.9 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.324 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:142 Resp: 3041
Ion Ratio Lower Upper
142 100
141 13.6 10.9 16.3
115 7.1 5.7 8.5

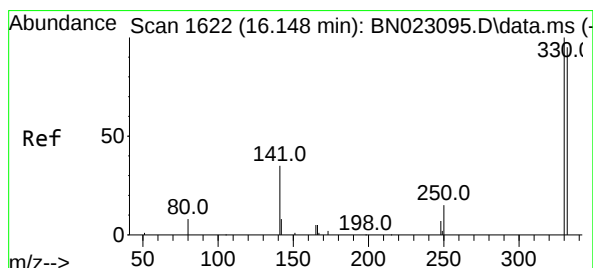
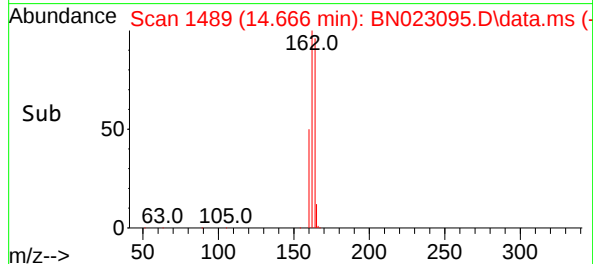
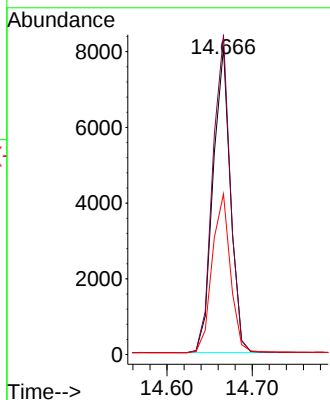
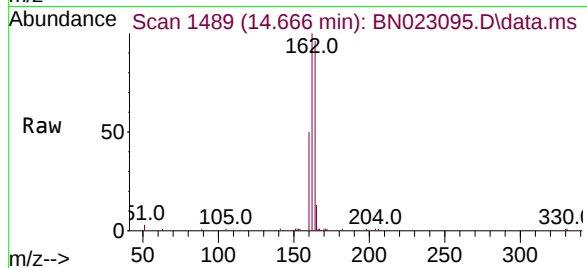




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

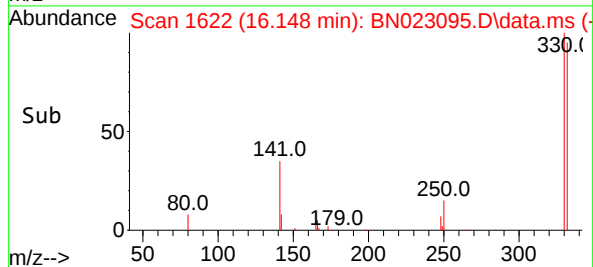
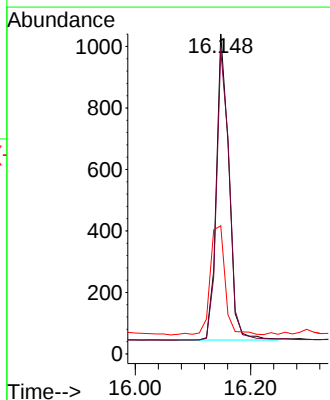
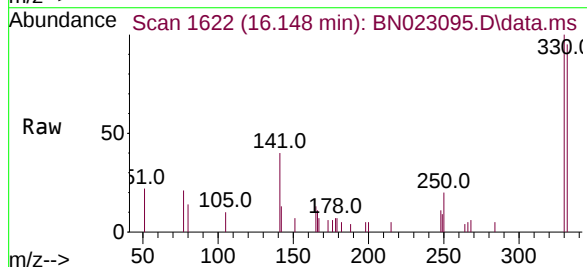
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

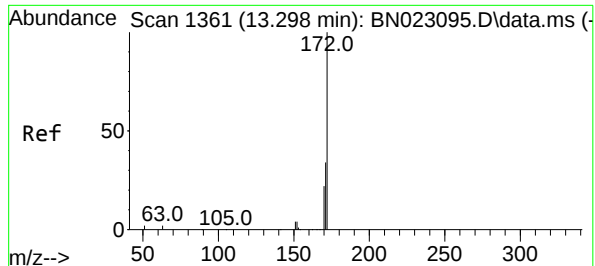
Tgt Ion:164 Resp: 11453
Ion Ratio Lower Upper
164 100
162 104.2 83.4 125.0
160 52.3 41.8 62.8



#14
2,4,6-Tribromophenol
Concen: 0.312 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:330 Resp: 1509
Ion Ratio Lower Upper
330 100
332 96.6 77.3 115.9
141 41.9 33.5 50.3





#15

2-Fluorobiphenyl

Concen: 0.362 ng

RT: 13.298 min Scan# 1361

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

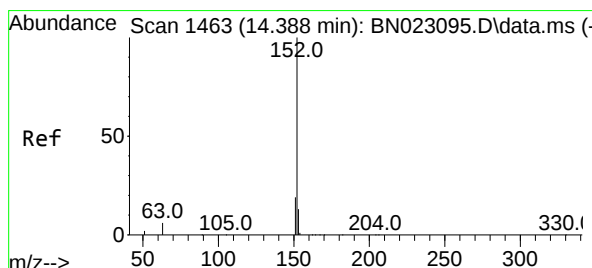
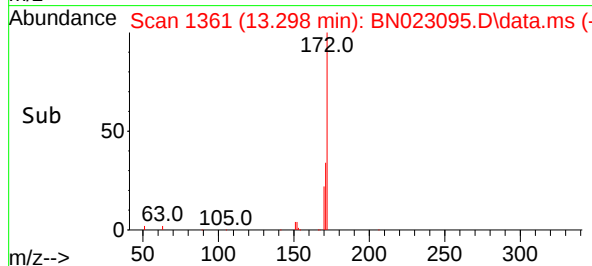
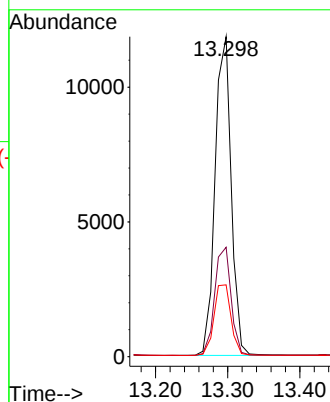
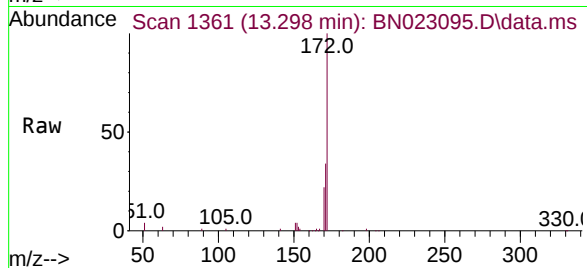
Tgt Ion:172 Resp: 18409

Ion Ratio Lower Upper

172 100

171 34.2 27.4 41.0

170 22.4 17.9 26.9



#16

Acenaphthylene

Concen: 0.314 ng

RT: 14.388 min Scan# 1463

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

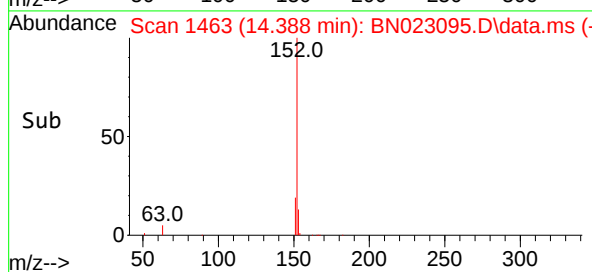
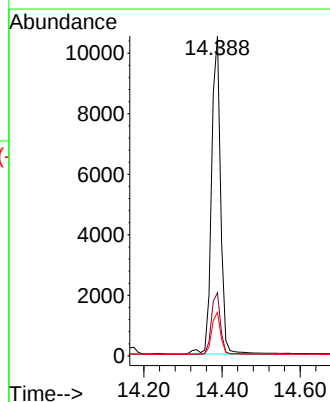
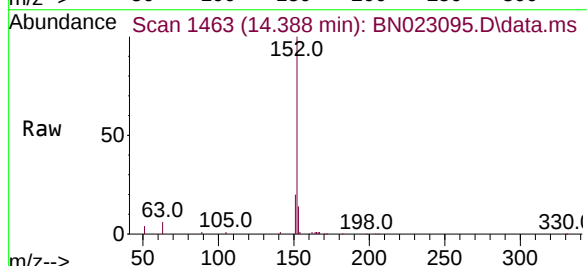
Tgt Ion:152 Resp: 16880

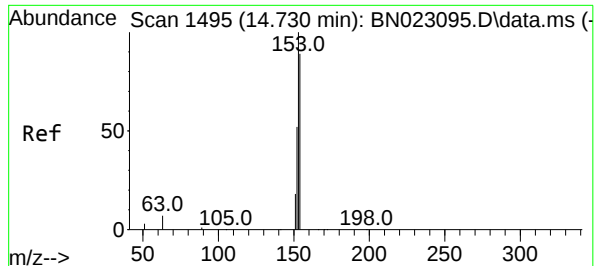
Ion Ratio Lower Upper

152 100

151 19.3 15.4 23.2

153 12.9 10.3 15.5

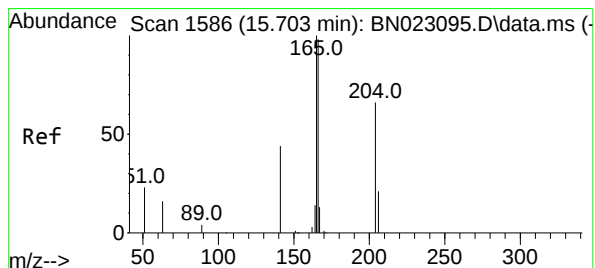
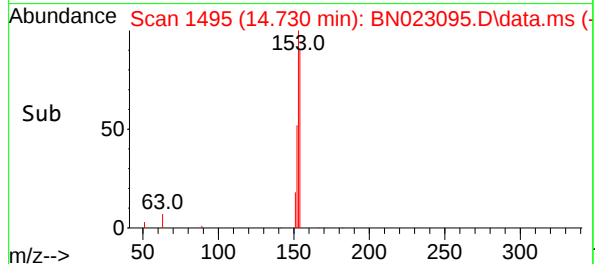
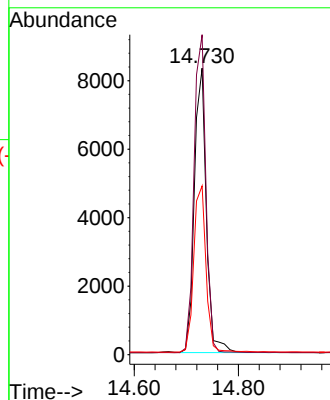
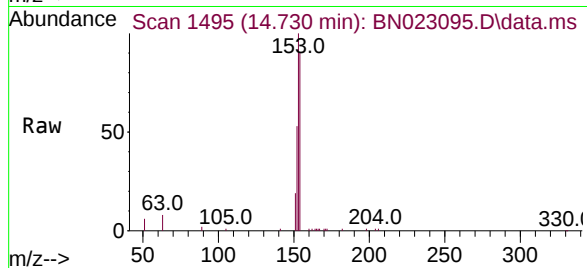




#17
Acenaphthene
Concen: 0.336 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

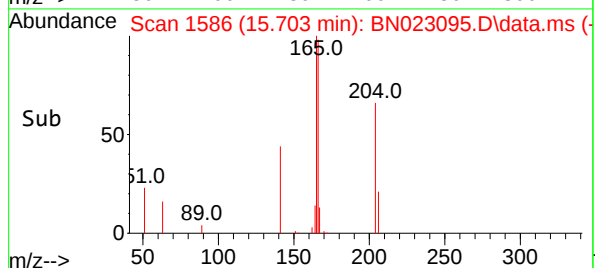
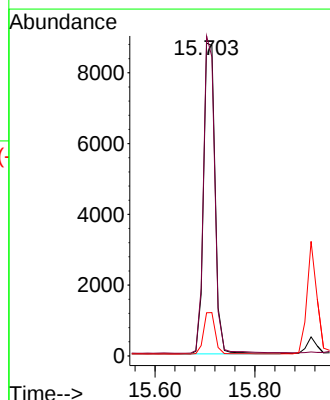
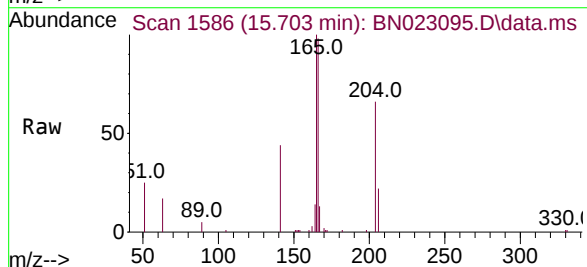
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

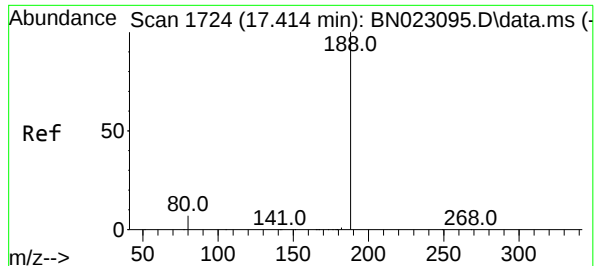
Tgt Ion:154 Resp: 13187
Ion Ratio Lower Upper
154 100
153 110.7 88.6 132.8
152 60.1 48.1 72.1



#18
Fluorene
Concen: 0.337 ng
RT: 15.703 min Scan# 1586
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:166 Resp: 14809
Ion Ratio Lower Upper
166 100
165 99.2 79.8 119.6
167 13.3 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.414 min Scan# 1724

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

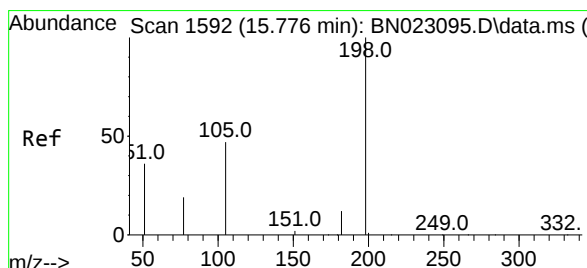
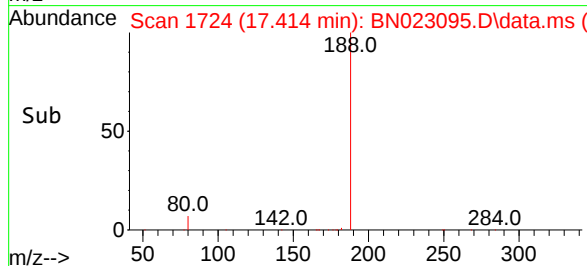
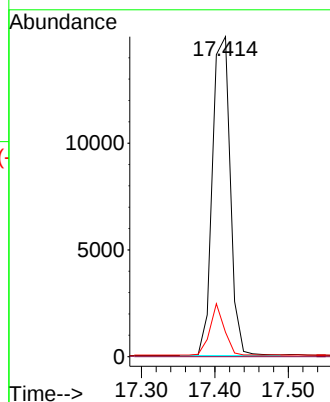
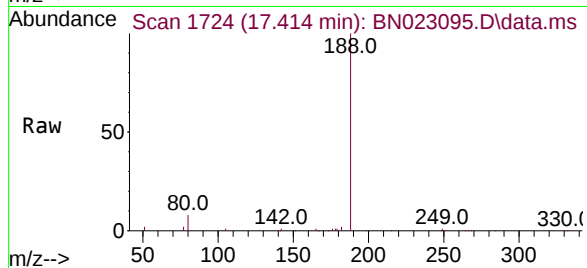
Tgt Ion:188 Resp: 25275

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.6 6.1 9.1



#20

4,6-Dinitro-2-methylphenol

Concen: 0.339 ng

RT: 15.776 min Scan# 1592

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

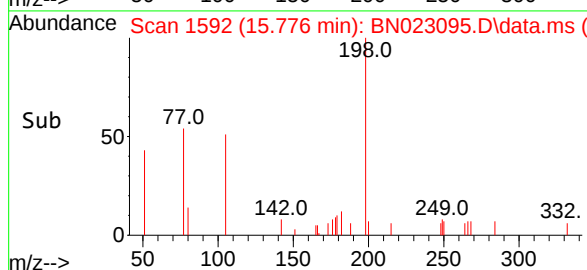
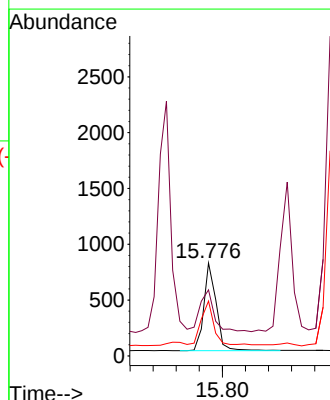
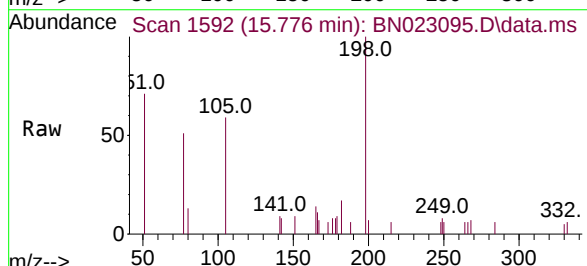
Tgt Ion:198 Resp: 1159

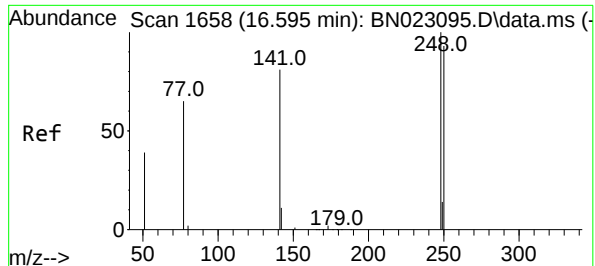
Ion Ratio Lower Upper

198 100

51 71.2 57.0 85.4

105 59.0 47.2 70.8

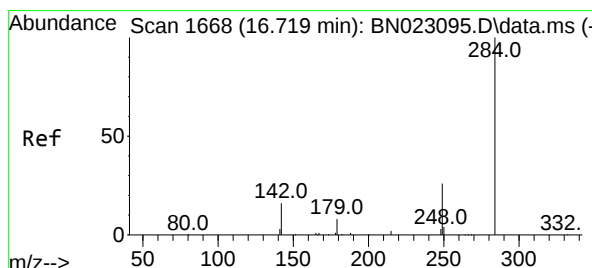
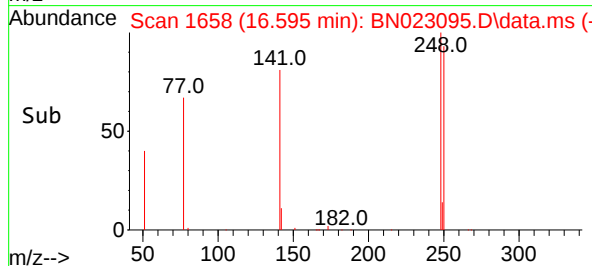
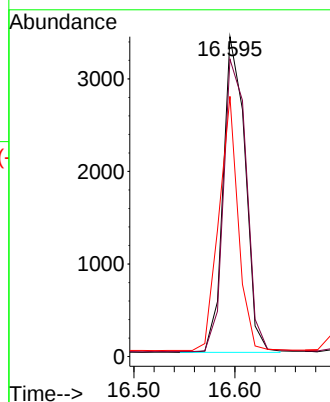
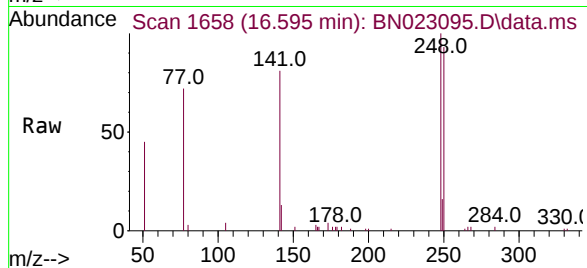




#21
4-Bromophenyl-phenylether
Concen: 0.339 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

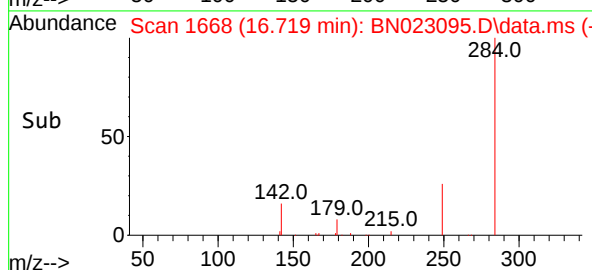
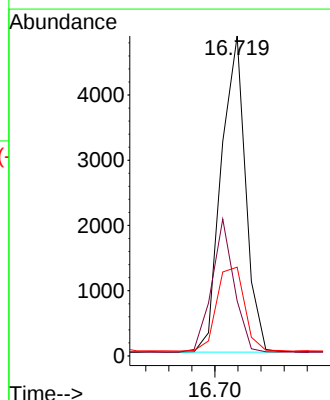
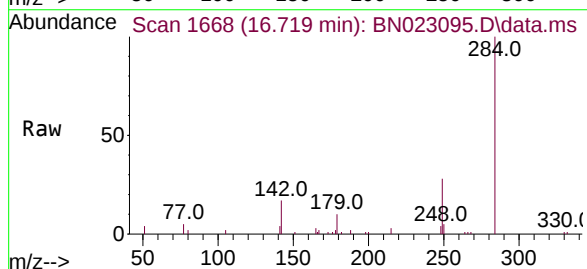
Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

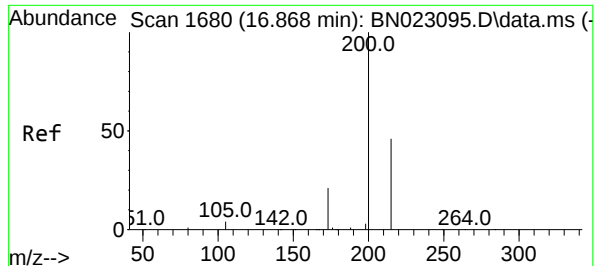
Tgt Ion:248 Resp: 5161
Ion Ratio Lower Upper
248 100
250 92.9 74.3 111.5
141 81.3 65.0 97.6



#22
Hexachlorobenzene
Concen: 0.358 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023095.D
Acq: 08 Dec 2022 15:13

Tgt Ion:284 Resp: 7088
Ion Ratio Lower Upper
284 100
142 38.7 31.0 46.4
249 30.5 24.4 36.6





#23

Atrazine

Concen: 0.305 ng

RT: 16.868 min Scan# 1680

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

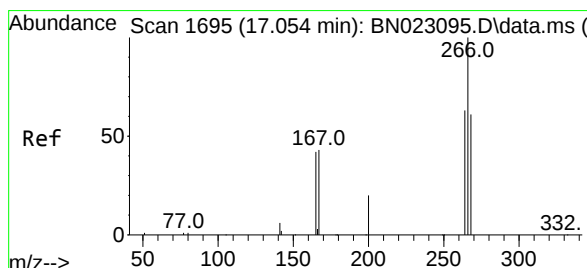
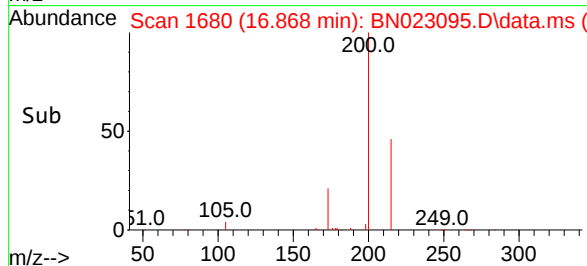
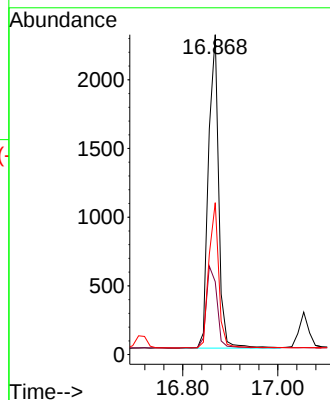
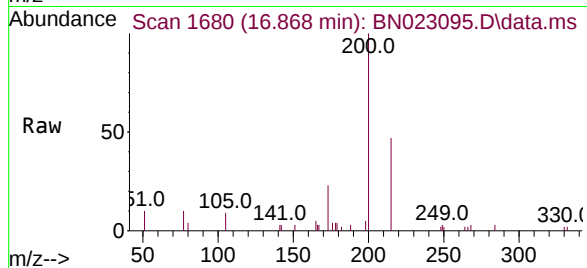
Tgt Ion:200 Resp: 3382

Ion Ratio Lower Upper

200 100

173 22.8 18.2 27.4

215 47.5 38.0 57.0



#24

Pentachlorophenol

Concen: 0.349 ng

RT: 17.054 min Scan# 1695

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

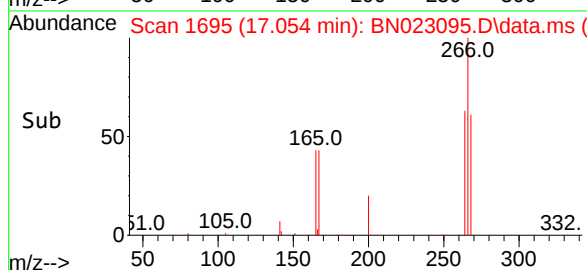
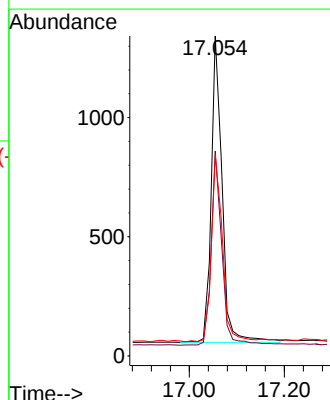
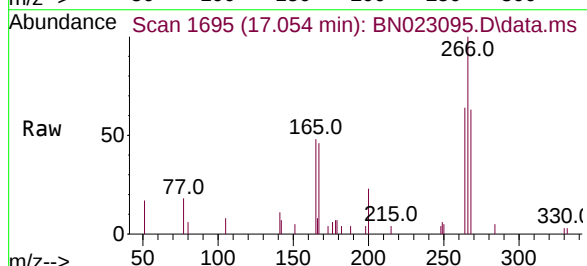
Tgt Ion:266 Resp: 2029

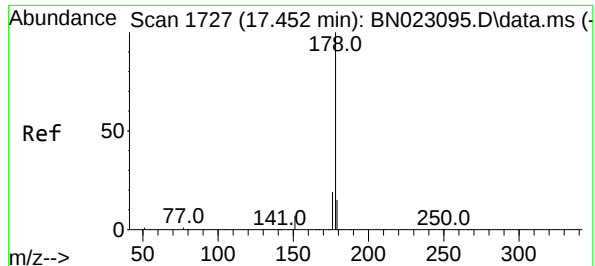
Ion Ratio Lower Upper

266 100

264 62.6 50.1 75.1

268 62.1 49.7 74.5





#25

Phenanthrene

Concen: 0.340 ng

RT: 17.452 min Scan# 1727

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

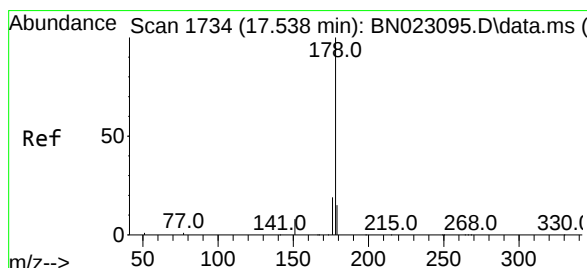
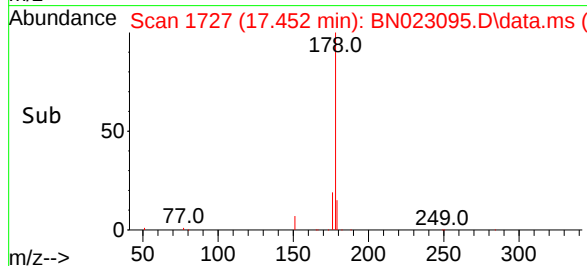
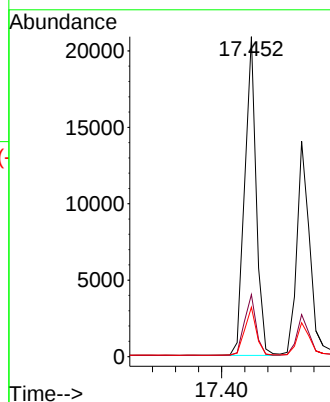
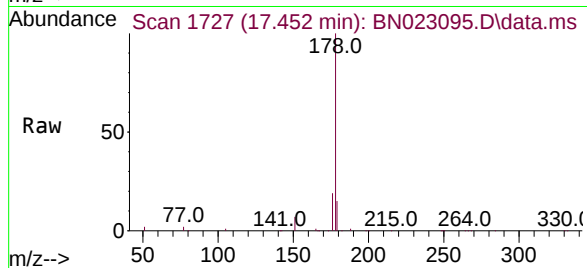
Tgt Ion:178 Resp: 28996

Ion Ratio Lower Upper

178 100

176 19.3 15.4 23.2

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.316 ng

RT: 17.538 min Scan# 1734

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

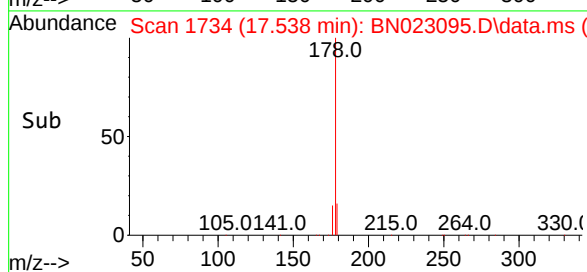
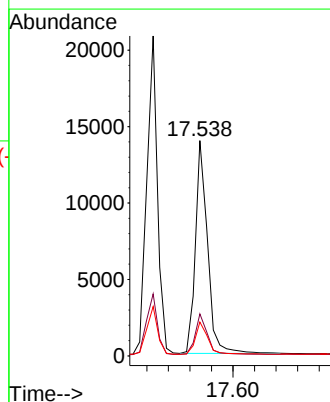
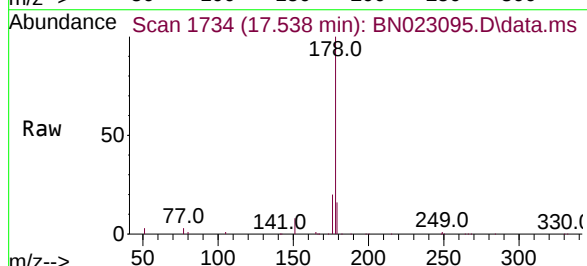
Tgt Ion:178 Resp: 21713

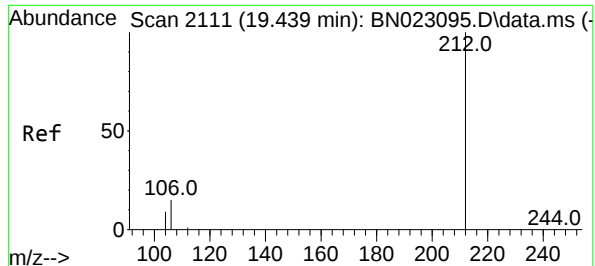
Ion Ratio Lower Upper

178 100

176 18.9 15.1 22.7

179 15.3 12.2 18.4





#27

Fluoranthene-d10

Concen: 0.322 ng

RT: 19.439 min Scan# 2111

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

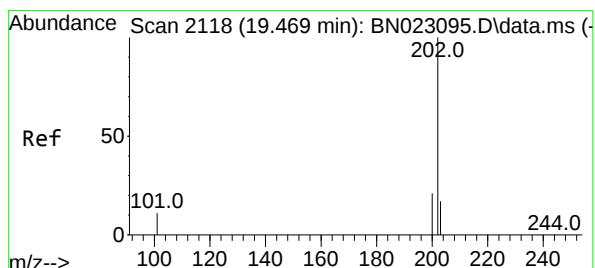
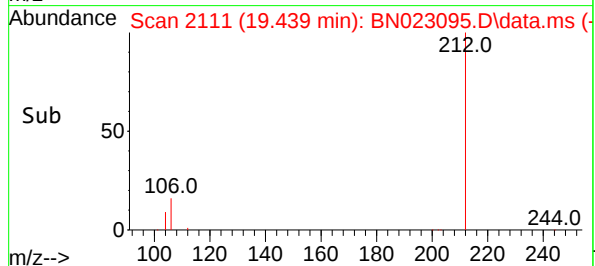
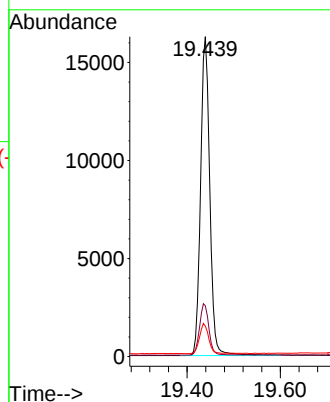
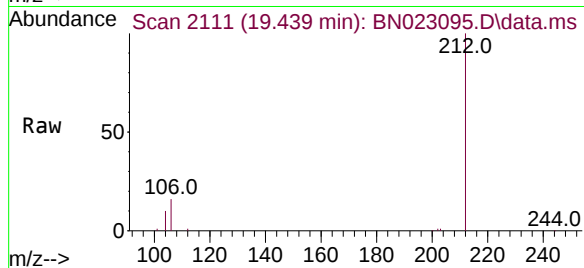
Tgt Ion:212 Resp: 22299

Ion Ratio Lower Upper

212 100

106 16.2 13.0 19.4

104 9.4 7.5 11.3



#28

Fluoranthene

Concen: 0.327 ng

RT: 19.469 min Scan# 2118

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

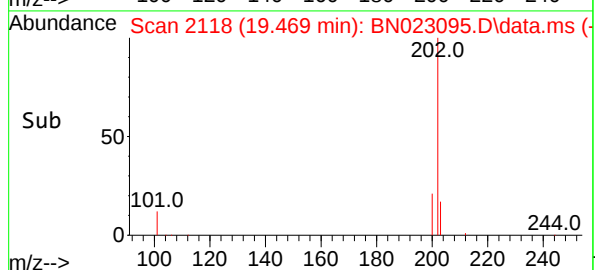
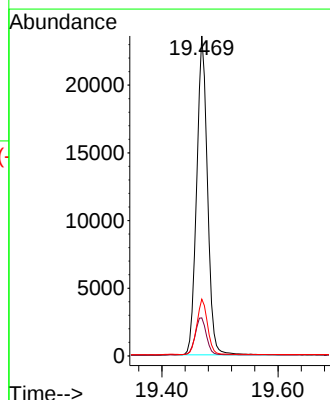
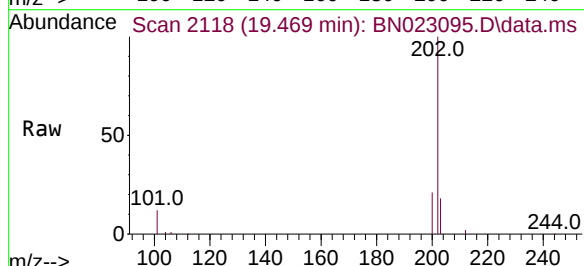
Tgt Ion:202 Resp: 30350

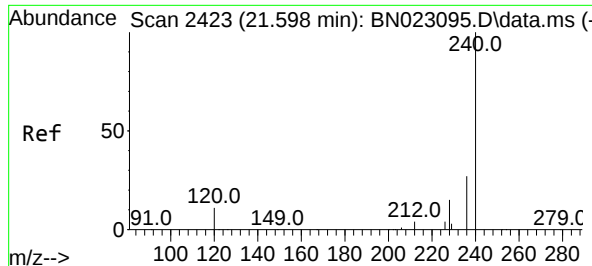
Ion Ratio Lower Upper

202 100

101 12.1 9.7 14.5

203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.598 min Scan# 2423

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

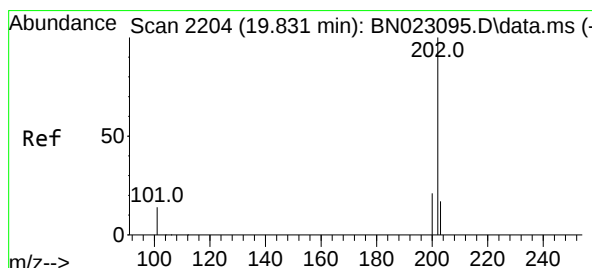
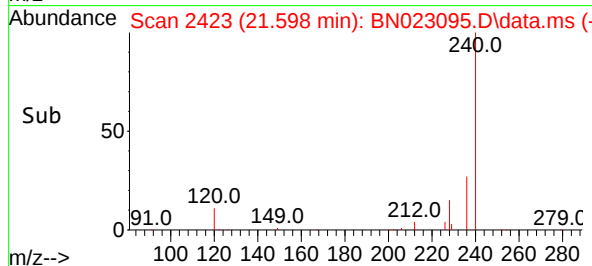
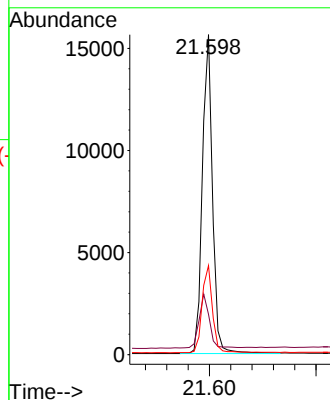
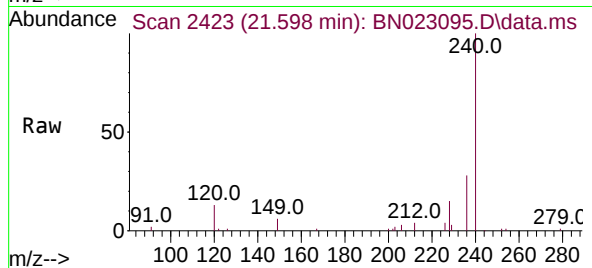
Tgt Ion:240 Resp: 20569

Ion Ratio Lower Upper

240 100

120 12.6 10.1 15.1

236 27.8 22.2 33.4



#30

Pyrene

Concen: 0.347 ng

RT: 19.831 min Scan# 2204

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

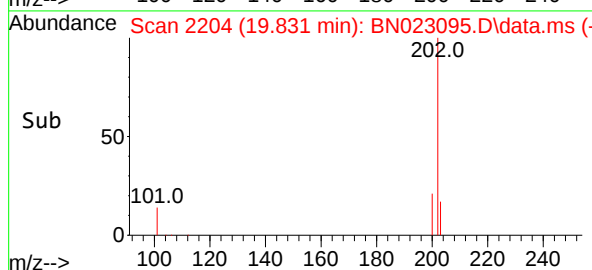
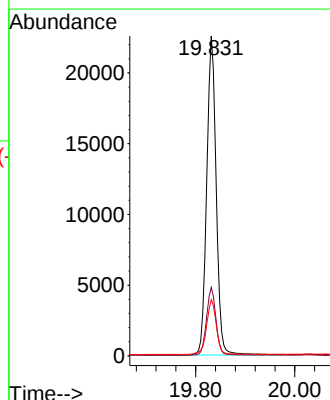
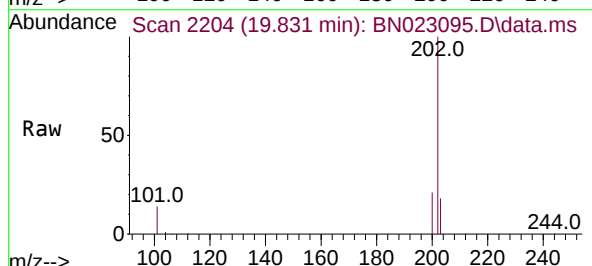
Tgt Ion:202 Resp: 29786

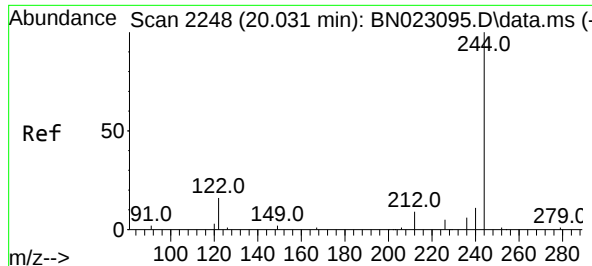
Ion Ratio Lower Upper

202 100

200 21.1 16.9 25.3

203 17.8 14.2 21.4

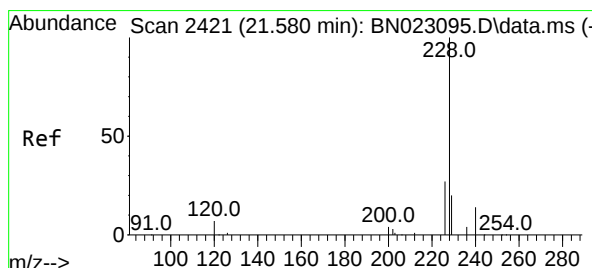
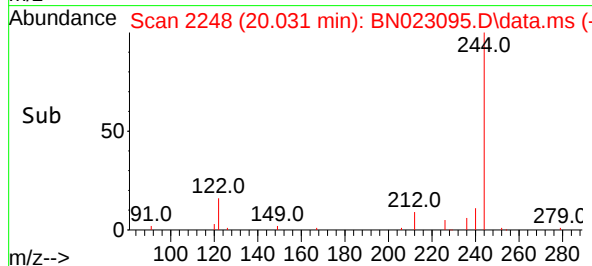
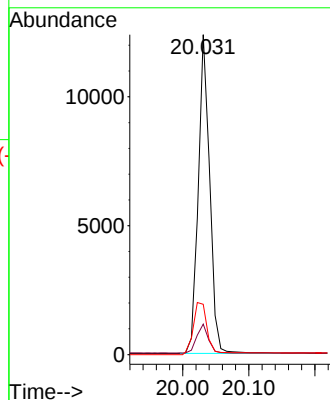
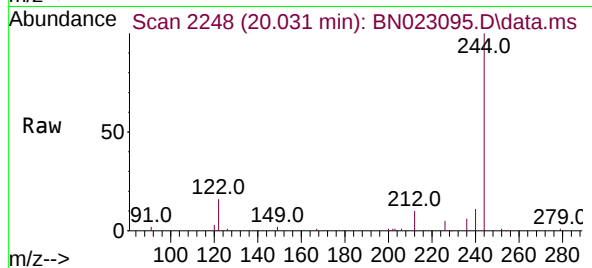




#31
 Terphenyl-d14
 Concen: 0.361 ng
 RT: 20.031 min Scan# 21
 Delta R.T. 0.000 min
 Lab File: BN023095.D
 Acq: 08 Dec 2022 15:13

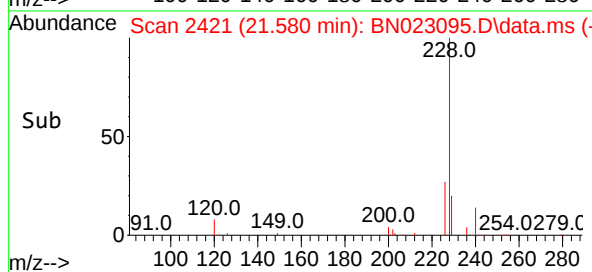
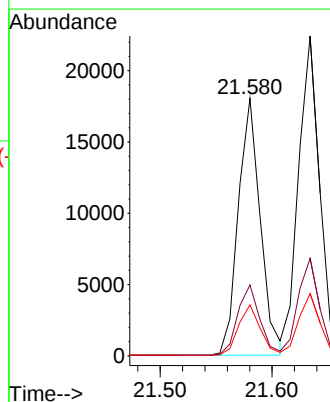
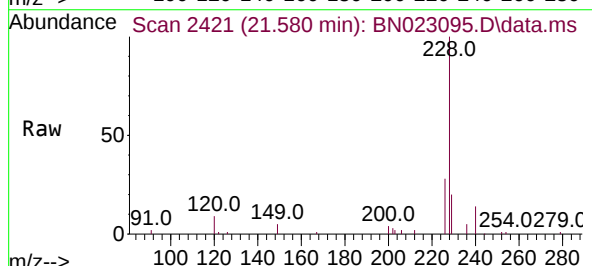
Instrument :
 BNA_N
 ClientSampleId :
 SSTDICCC0.4

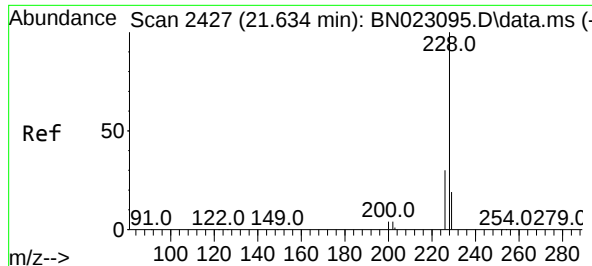
Tgt Ion:244 Resp: 14076
 Ion Ratio Lower Upper
 244 100
 212 9.5 7.6 11.4
 122 15.7 12.6 18.8



#32
 Benzo(a)anthracene
 Concen: 0.325 ng
 RT: 21.580 min Scan# 2421
 Delta R.T. 0.000 min
 Lab File: BN023095.D
 Acq: 08 Dec 2022 15:13

Tgt Ion:228 Resp: 24652
 Ion Ratio Lower Upper
 228 100
 226 27.5 22.0 33.0
 229 19.8 15.8 23.8





#33

Chrysene

Concen: 0.350 ng

RT: 21.634 min Scan# 2427

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

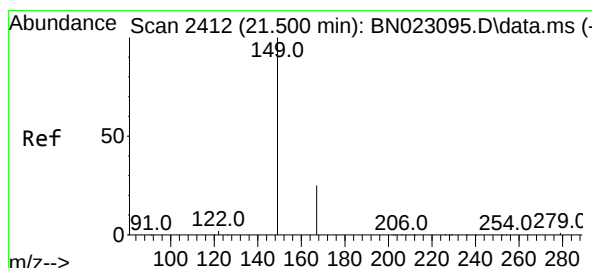
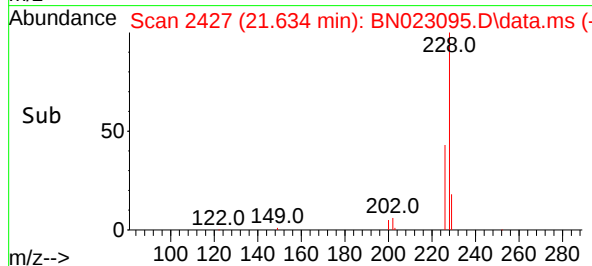
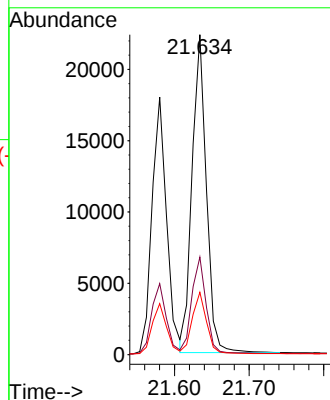
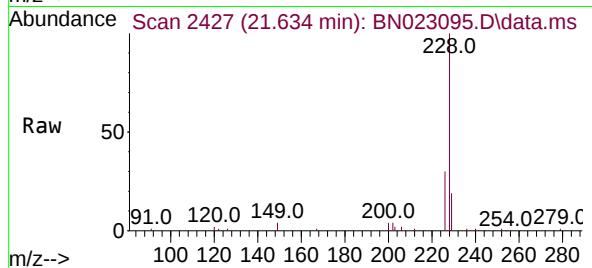
Tgt Ion:228 Resp: 29670

Ion Ratio Lower Upper

228 100

226 30.5 24.4 36.6

229 19.5 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.307 ng

RT: 21.500 min Scan# 2412

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

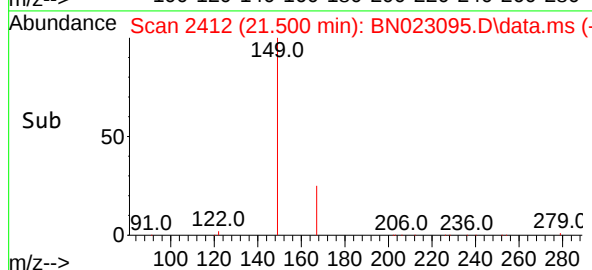
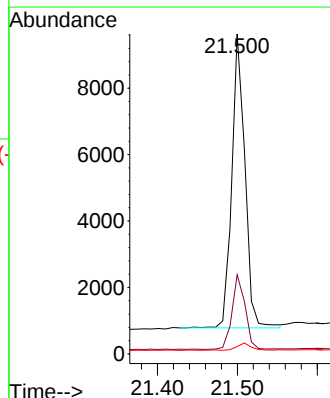
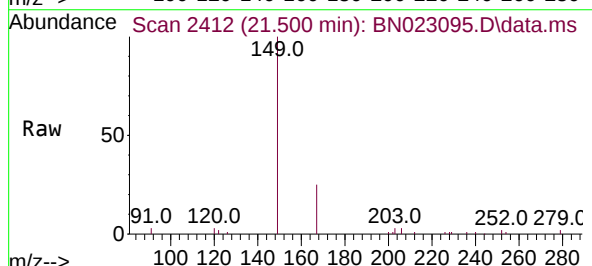
Tgt Ion:149 Resp: 10060

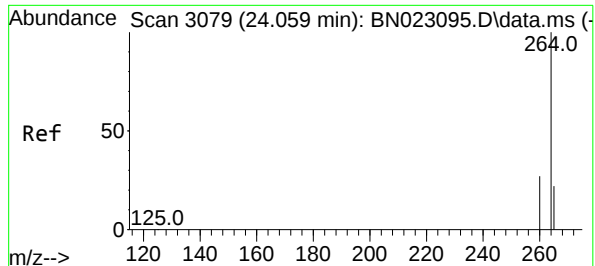
Ion Ratio Lower Upper

149 100

167 25.2 20.2 30.2

279 2.9 2.3 3.5





#35

Perylene-d12

Concen: 0.400 ng

RT: 24.059 min Scan# 3079

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

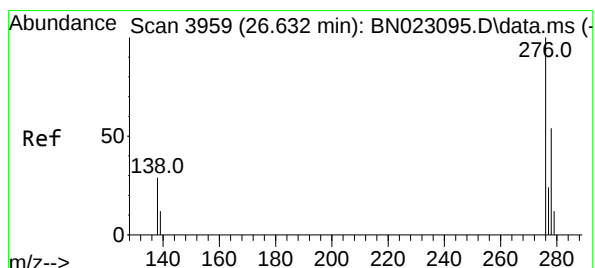
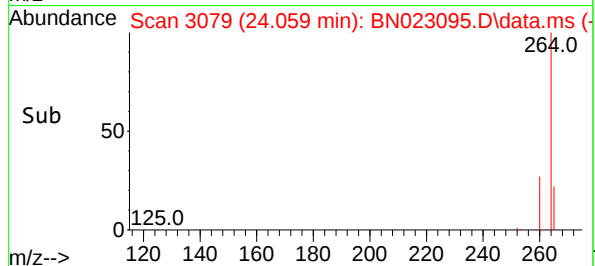
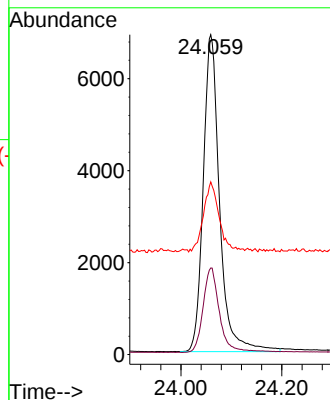
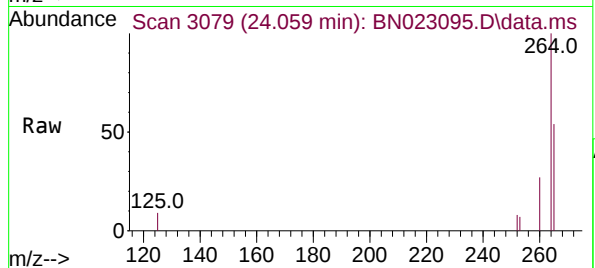
Tgt Ion:264 Resp: 15521

Ion Ratio Lower Upper

264 100

260 27.1 21.7 32.5

265 54.0 43.2 64.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.319 ng

RT: 26.632 min Scan# 3959

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

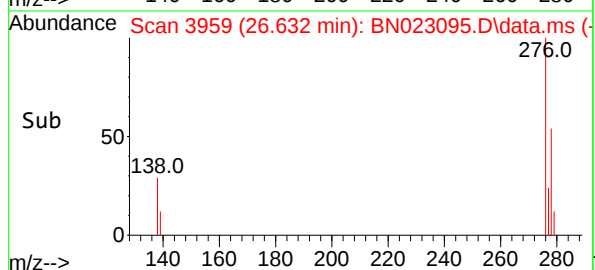
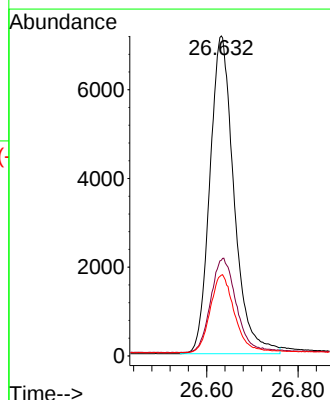
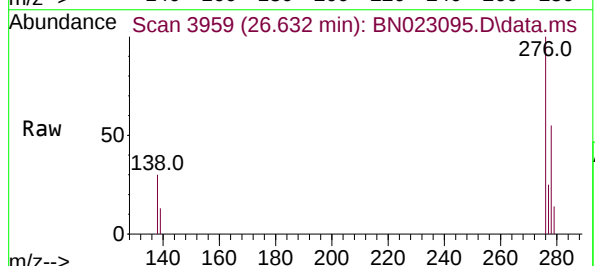
Tgt Ion:276 Resp: 26282

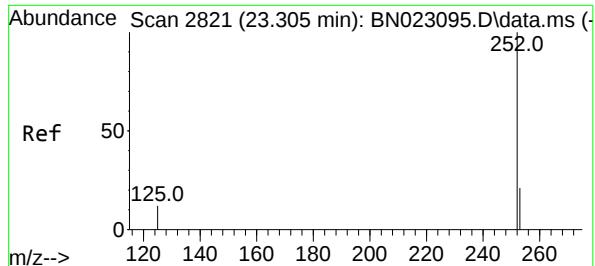
Ion Ratio Lower Upper

276 100

138 31.4 25.0 37.6

277 24.8 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.349 ng

RT: 23.305 min Scan# 2821

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

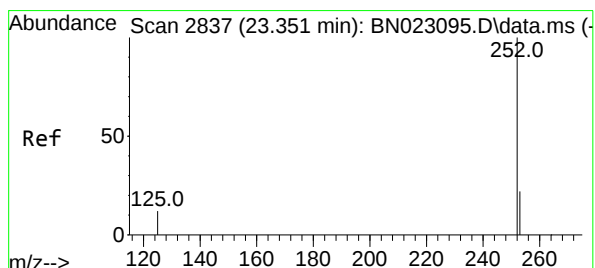
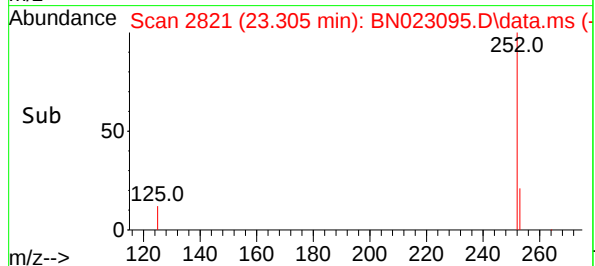
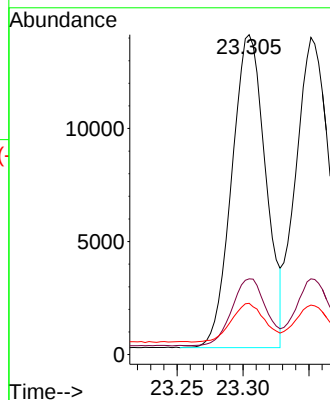
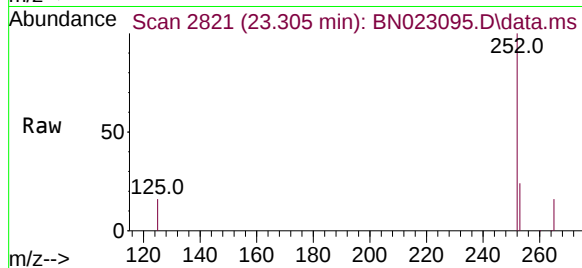
Tgt Ion:252 Resp: 24739

Ion Ratio Lower Upper

252 100

253 23.7 19.0 28.4

125 16.0 12.8 19.2



#38

Benzo(k)fluoranthene

Concen: 0.344 ng

RT: 23.351 min Scan# 2837

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

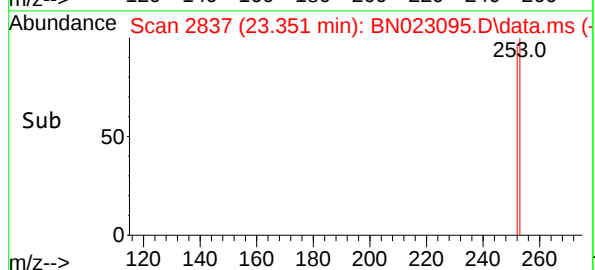
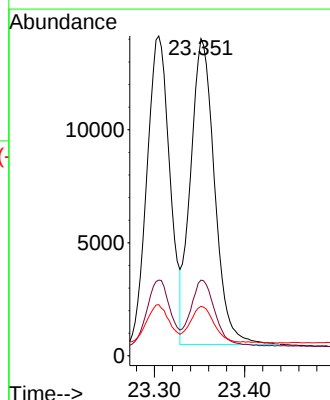
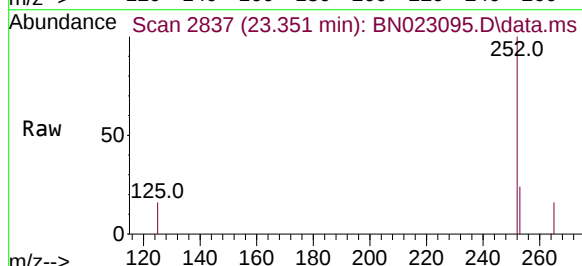
Tgt Ion:252 Resp: 24998

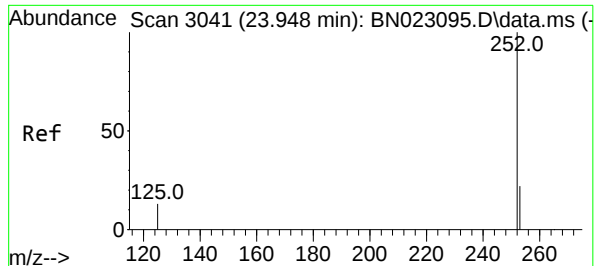
Ion Ratio Lower Upper

252 100

253 23.9 19.1 28.7

125 15.6 12.5 18.7





#39

Benzo(a)pyrene

Concen: 0.300 ng

RT: 23.948 min Scan# 3041

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4

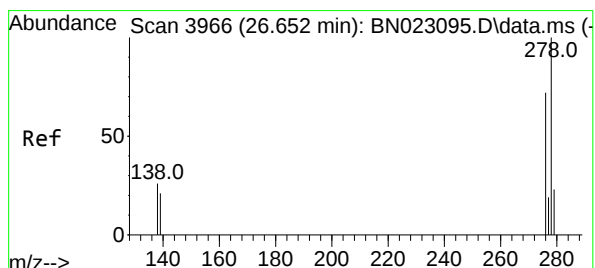
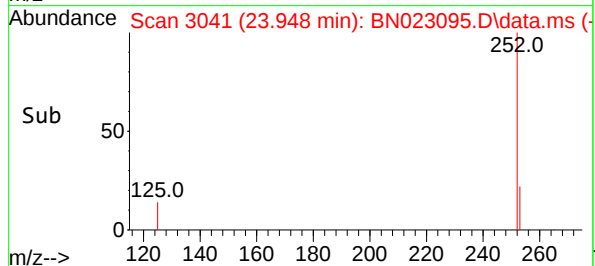
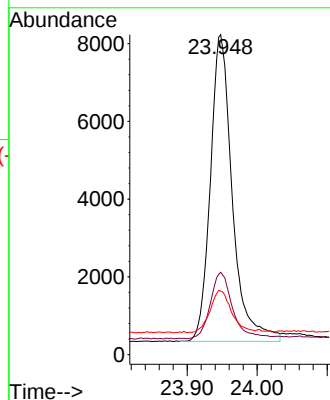
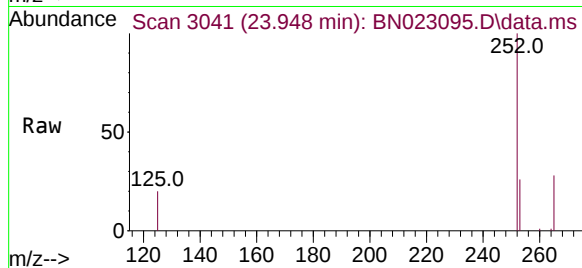
Tgt Ion:252 Resp: 17239

Ion Ratio Lower Upper

252 100

253 25.7 20.6 30.8

125 19.8 15.8 23.8



#40

Dibenzo(a,h)anthracene

Concen: 0.326 ng

RT: 26.652 min Scan# 3966

Delta R.T. 0.000 min

Lab File: BN023095.D

Acq: 08 Dec 2022 15:13

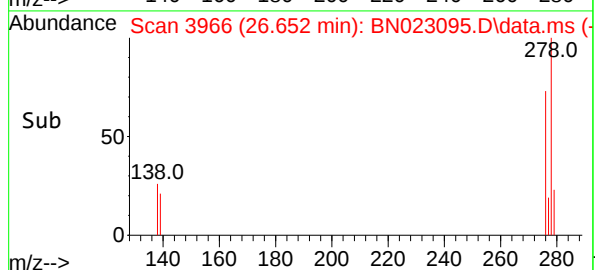
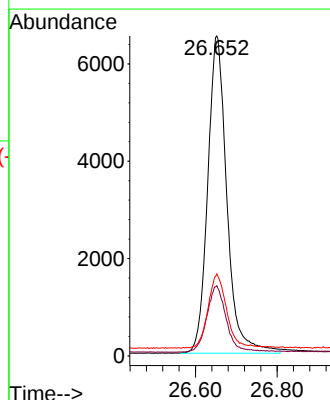
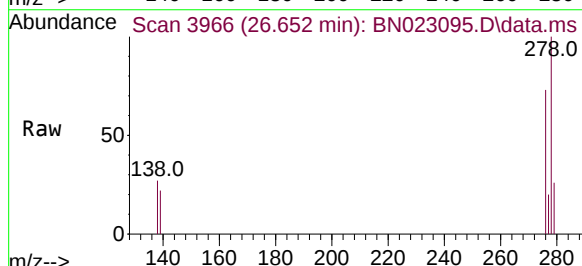
Tgt Ion:278 Resp: 21269

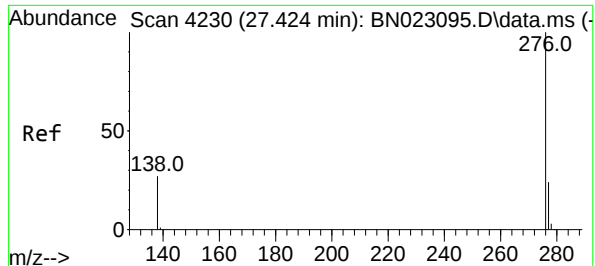
Ion Ratio Lower Upper

278 100

139 21.9 17.5 26.3

279 25.6 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.351 ng

RT: 27.424 min Scan# 41

Delta R.T. 0.000 min

Lab File: BN023095.D

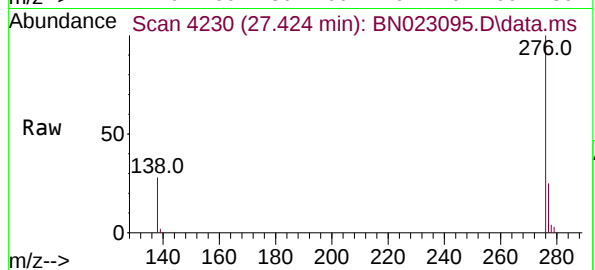
Acq: 08 Dec 2022 15:13

Instrument :

BNA_N

ClientSampleId :

SSTDICCC0.4



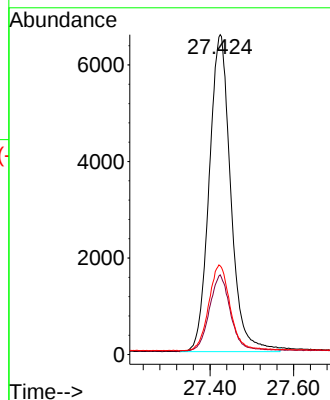
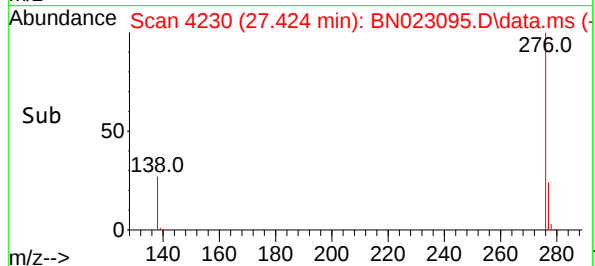
Tgt Ion:276 Resp: 23466

Ion Ratio Lower Upper

276 100

277 24.9 19.9 29.9

138 27.7 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023096.D
 Acq On : 08 Dec 2022 15:50
 Operator : CG/JU
 Sample : SSTDICC0.8
 Misc :
 ALS Vial : 5 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.8

Quant Time: Dec 09 07:28:23 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:25:53 2022
 Response via : Initial Calibration

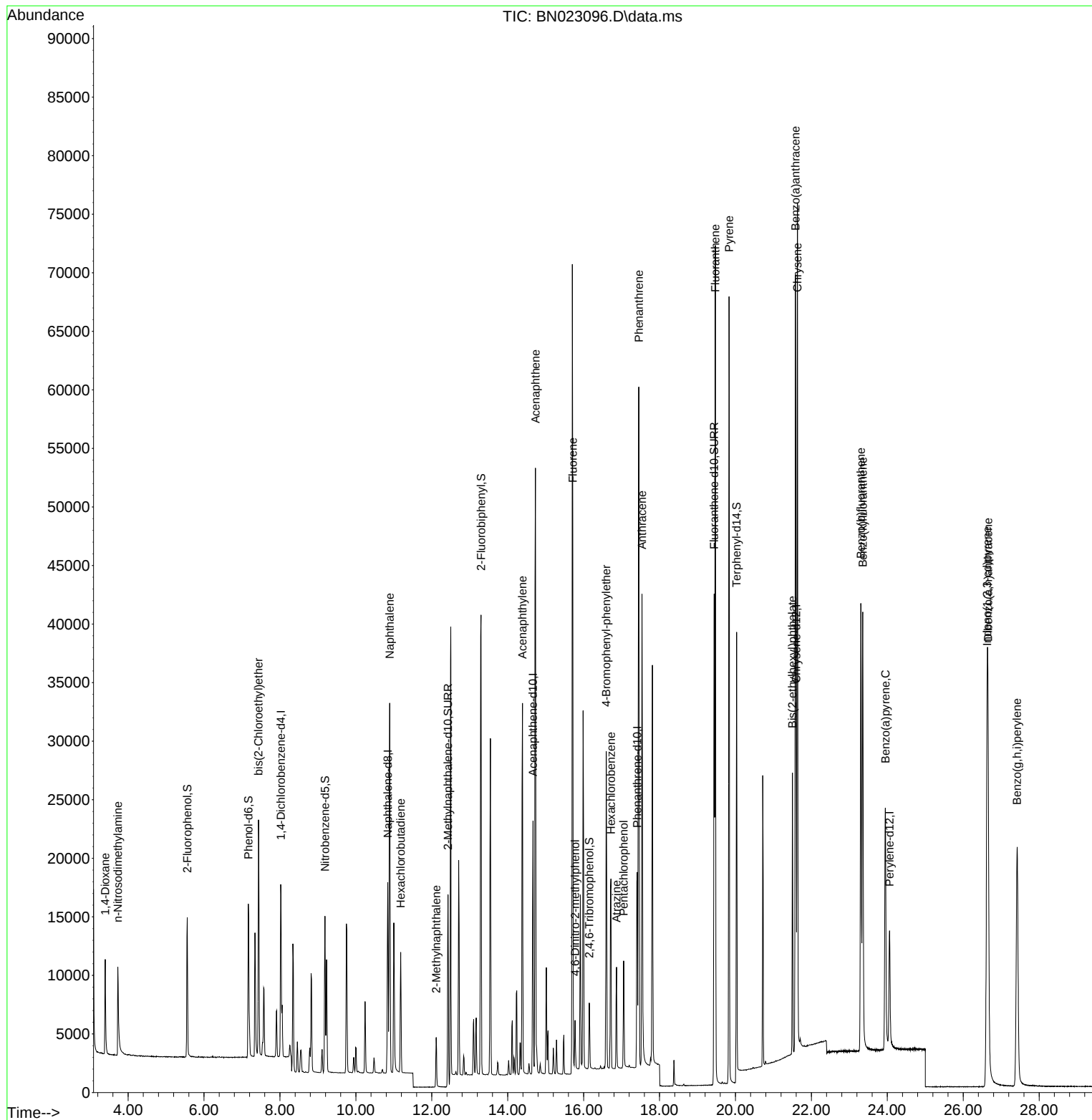
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.020	152	7156	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	20210	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	11426	0.400	ng	0.00
19) Phenanthrene-d10	17.414	188	24706	0.400	ng	0.00
29) Chrysene-d12	21.598	240	20806	0.400	ng	0.00
35) Perylene-d12	24.059	264	15181	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	9728	0.588	ng	0.00
5) Phenol-d6	7.168	99	12278	0.590	ng	0.00
8) Nitrobenzene-d5	9.185	82	10150	0.669	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	26746	0.701	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	3033	0.628	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	35533	0.701	ng	0.00
27) Fluoranthene-d10	19.439	212	44274	0.654	ng	0.00
31) Terphenyl-d14	20.031	244	27028	0.684	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.398	88	5467	0.616	ng	99
3) n-Nitrosodimethylamine	3.730	42	5353	0.617	ng	# 98
6) bis(2-Chloroethyl)ether	7.435	93	14530	0.632	ng	98
9) Naphthalene	10.893	128	40429	0.674	ng	100
10) Hexachlorobutadiene	11.181	225	7814	0.694	ng	# 100
12) 2-Methylnaphthalene	12.117	142	6224	0.678	ng	# 96
16) Acenaphthylene	14.388	152	34662	0.645	ng	100
17) Acenaphthene	14.730	154	26163	0.669	ng	99
18) Fluorene	15.714	166	29372	0.669	ng	99
20) 4,6-Dinitro-2-methylph...	15.776	198	2377	0.711	ng	91
21) 4-Bromophenyl-phenylether	16.595	248	10088	0.678	ng	95
22) Hexachlorobenzene	16.719	284	13630	0.705	ng	99
23) Atrazine	16.868	200	6823	0.630	ng	99
24) Pentachlorophenol	17.054	266	4149	0.731	ng	99
25) Phenanthrene	17.452	178	56706	0.681	ng	100
26) Anthracene	17.538	178	44125	0.657	ng	100
28) Fluoranthene	19.469	202	61820	0.680	ng	99
30) Pyrene	19.831	202	59340	0.684	ng	100
32) Benzo(a)anthracene	21.580	228	51136	0.666	ng	100
33) Chrysene	21.634	228	59672	0.695	ng	100
34) Bis(2-ethylhexyl)phtha...	21.500	149	20192	0.608	ng	99
36) Indeno(1,2,3-cd)pyrene	26.629	276	53216	0.660	ng	99
37) Benzo(b)fluoranthene	23.302	252	50131	0.722	ng	96
38) Benzo(k)fluoranthene	23.354	252	50862	0.715	ng	96
39) Benzo(a)pyrene	23.948	252	34953	0.622	ng	95
40) Dibenzo(a,h)anthracene	26.652	278	43165	0.676	ng	99
41) Benzo(g,h,i)perylene	27.418	276	46710	0.715	ng	99

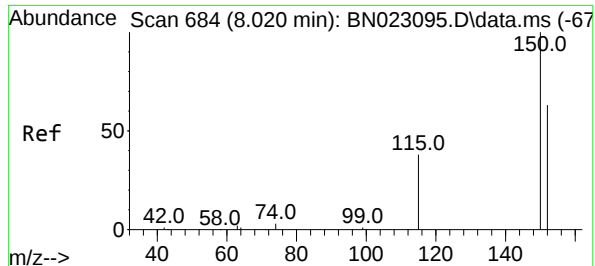
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023096.D
Acq On : 08 Dec 2022 15:50
Operator : CG/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Dec 09 07:28:23 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration





#1

1,4-Dichlorobenzene-d4

Concen: 0.400 ng

RT: 8.020 min Scan# 684

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

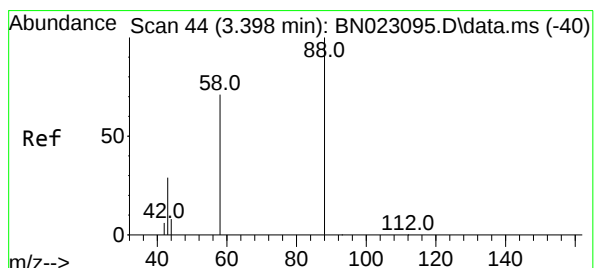
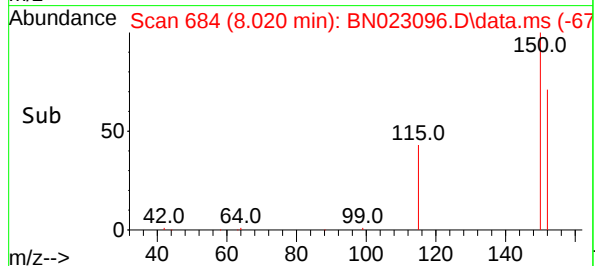
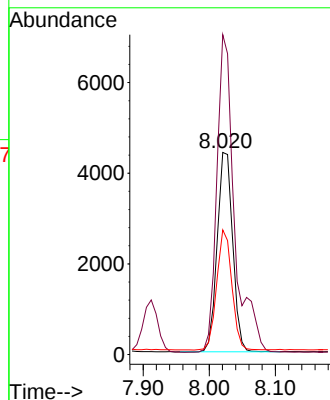
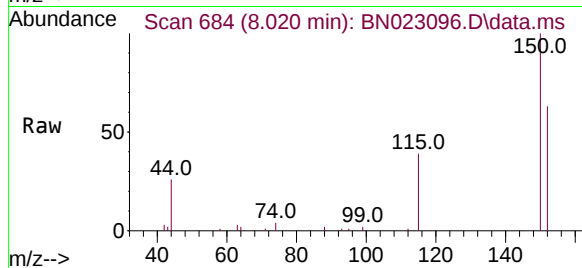
Tgt Ion:152 Resp: 7156

Ion Ratio Lower Upper

152 100

150 158.3 125.6 188.4

115 61.7 49.0 73.4



#2

1,4-Dioxane

Concen: 0.616 ng

RT: 3.398 min Scan# 44

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

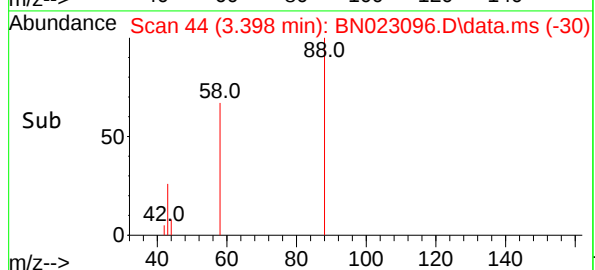
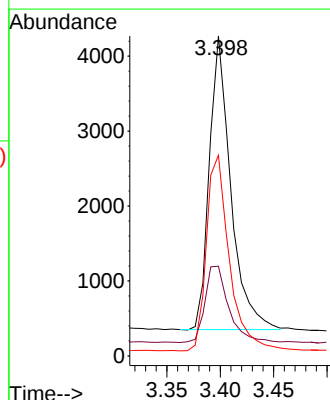
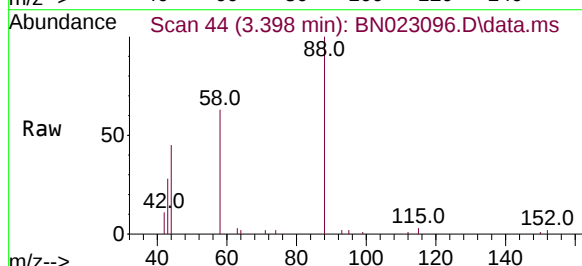
Tgt Ion: 88 Resp: 5467

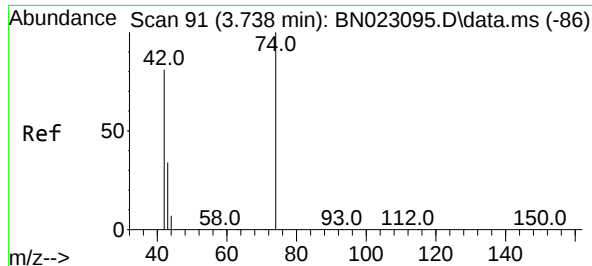
Ion Ratio Lower Upper

88 100

43 28.9 23.3 34.9

58 71.5 58.0 87.0

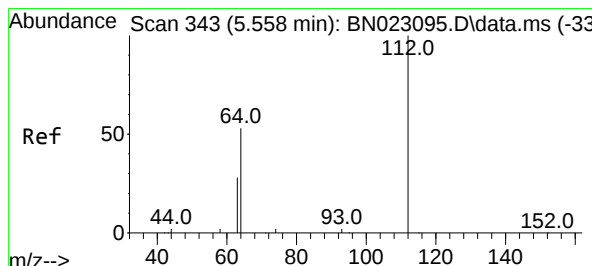
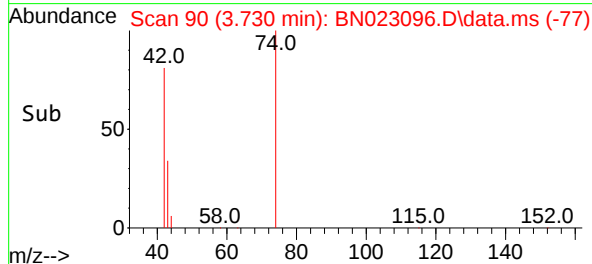
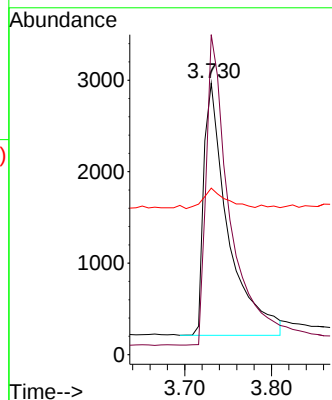
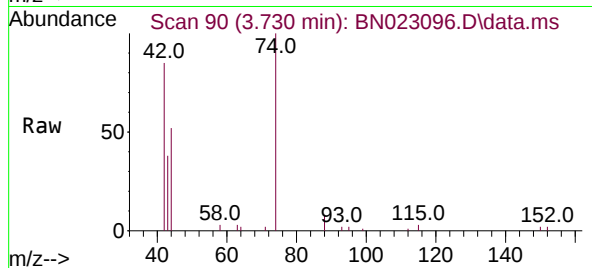




#3
n-Nitrosodimethylamine
Concen: 0.617 ng
RT: 3.730 min Scan# 90
Delta R.T. -0.007 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

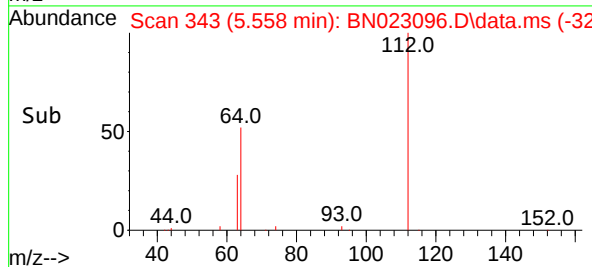
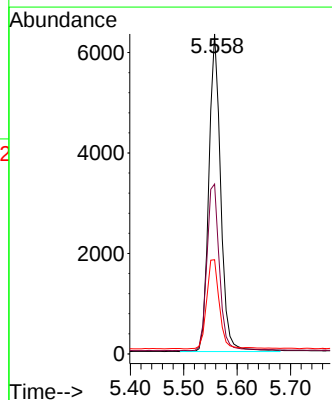
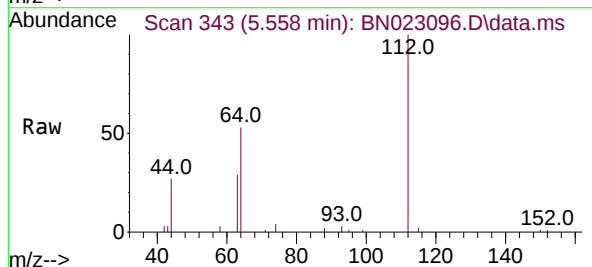
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

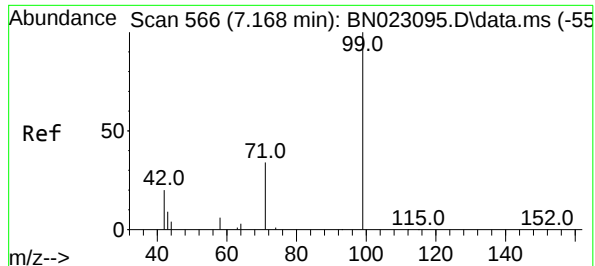
Tgt Ion: 42 Resp: 5353
Ion Ratio Lower Upper
42 100
74 121.4 95.8 143.6
44 7.5 8.4 12.6#



#4
2-Fluorophenol
Concen: 0.588 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion: 112 Resp: 9728
Ion Ratio Lower Upper
112 100
64 55.5 44.4 66.6
63 29.7 23.7 35.5





#5

Phenol-d6

Concen: 0.590 ng

RT: 7.168 min Scan# 566

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

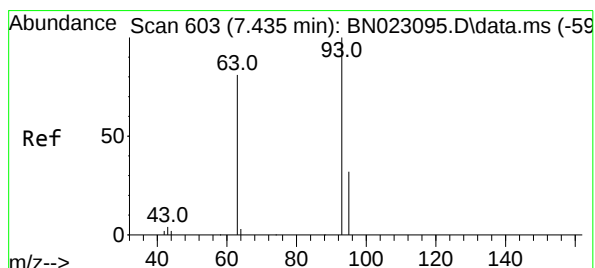
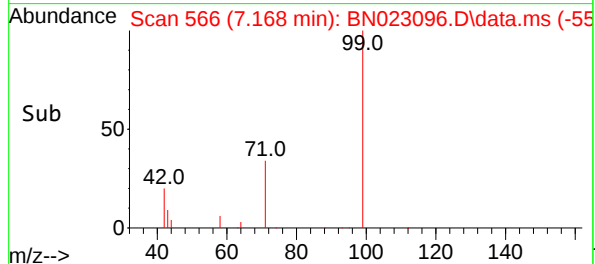
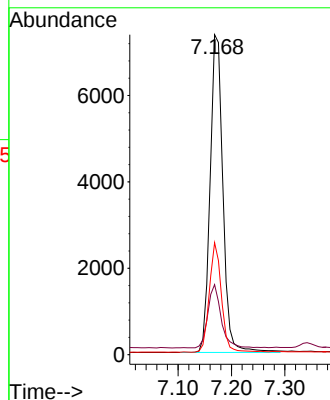
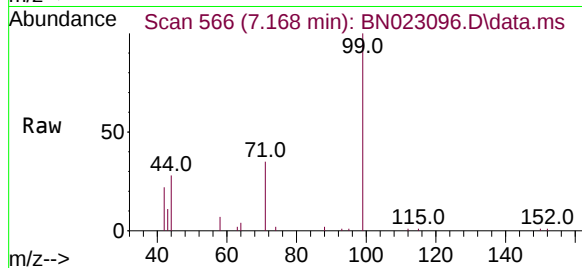
Tgt Ion: 99 Resp: 12278

Ion Ratio Lower Upper

99 100

42 20.5 16.3 24.5

71 32.8 26.5 39.7



#6

bis(2-Chloroethyl)ether

Concen: 0.632 ng

RT: 7.435 min Scan# 603

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

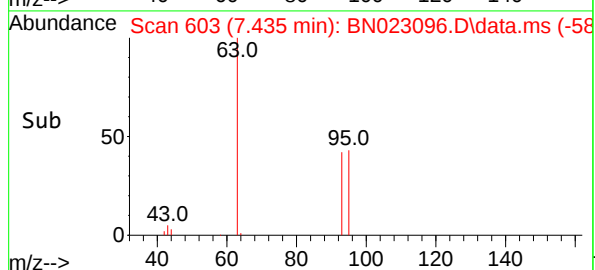
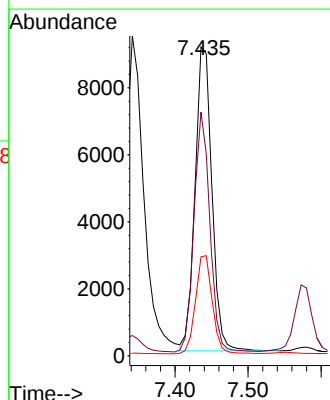
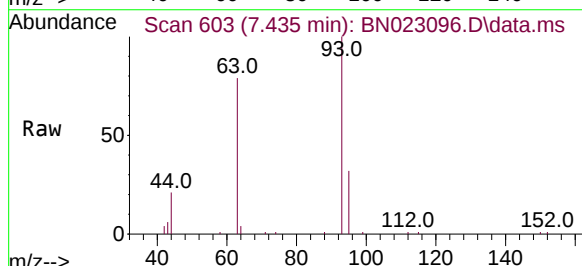
Tgt Ion: 93 Resp: 14530

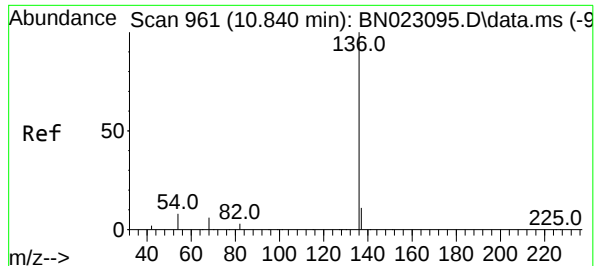
Ion Ratio Lower Upper

93 100

63 74.5 58.1 87.1

95 32.2 25.2 37.8

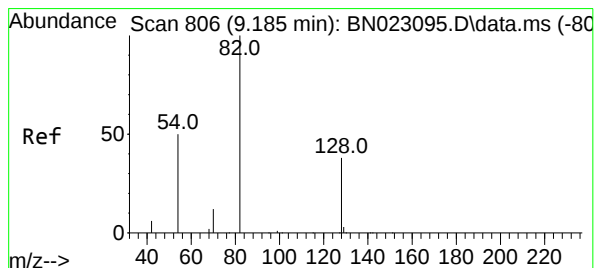
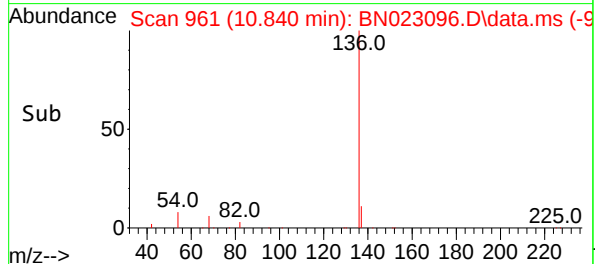
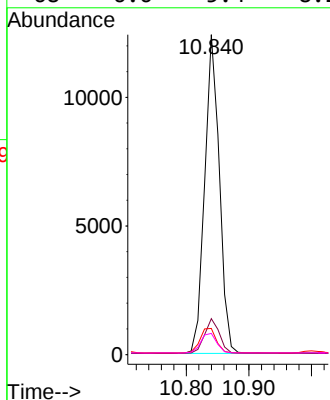
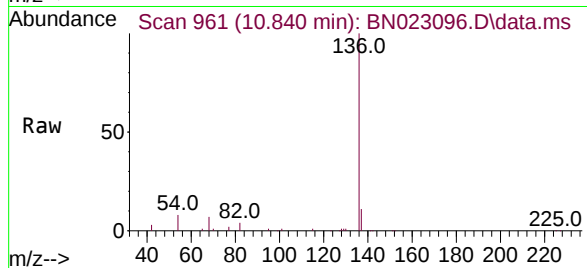




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

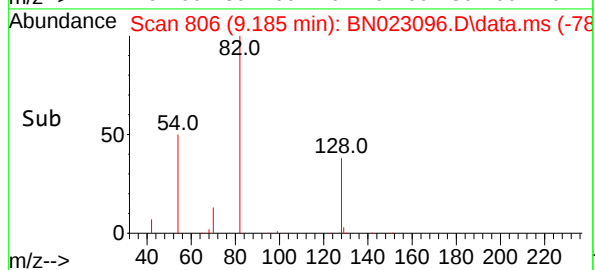
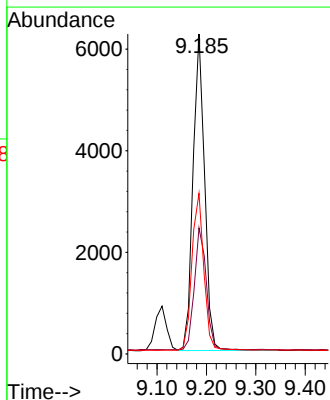
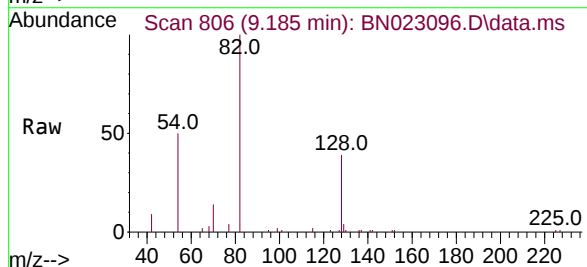
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

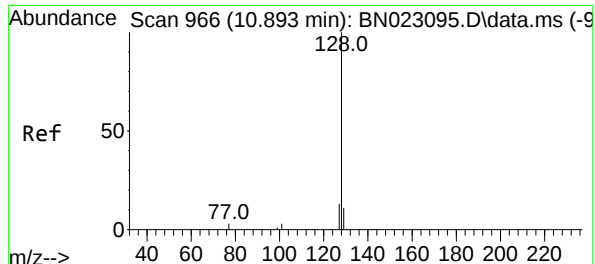
Tgt Ion:	136	Resp:	20210
Ion	Ratio	Lower	Upper
136	100		
137	11.2	9.0	13.4
54	8.2	6.5	9.7
68	6.6	5.4	8.2



#8
Nitrobenzene-d5
Concen: 0.669 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:	82	Resp:	10150
Ion	Ratio	Lower	Upper
82	100		
128	39.4	31.4	47.2
54	50.2	41.0	61.4

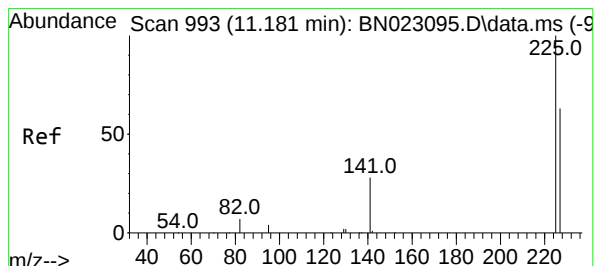
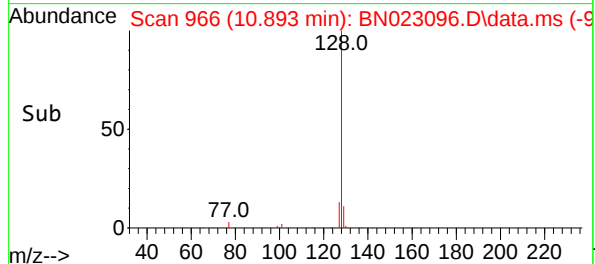
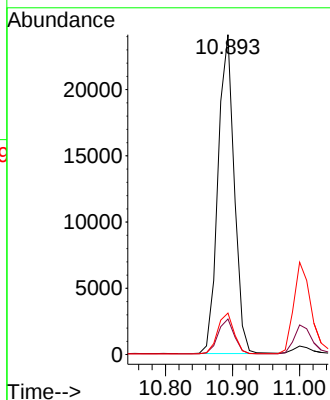
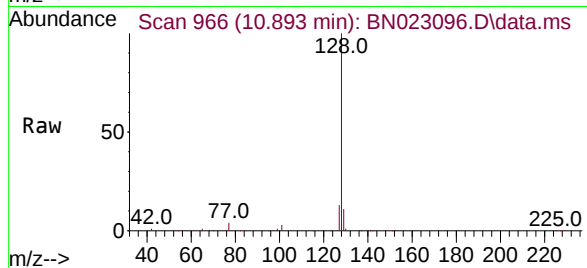




#9
Naphthalene
Concen: 0.674 ng
RT: 10.893 min Scan# 966
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

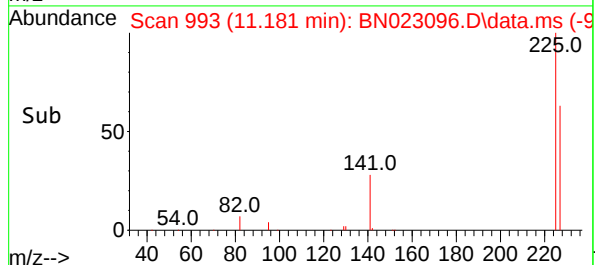
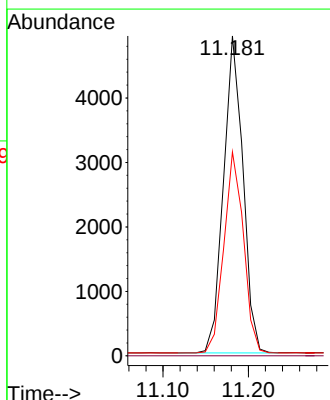
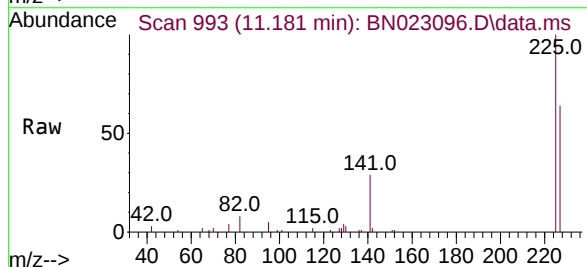
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

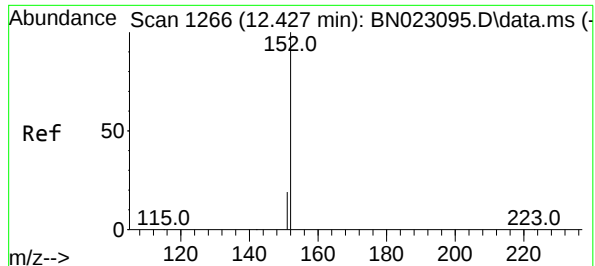
Tgt Ion	128	129	127
Resp:	40429	11.1	13.0
Lower		9.0	10.5
Upper		13.6	15.7



#10
Hexachlorobutadiene
Concen: 0.694 ng
RT: 11.181 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion	225	223	227
Resp:	7814	0.0	63.7
Lower		0.0	51.1
Upper		0.0	76.7

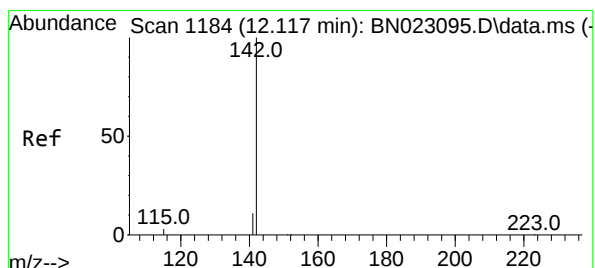
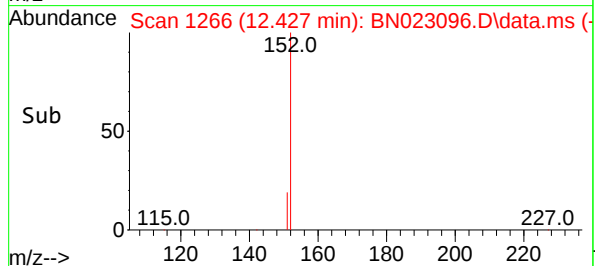
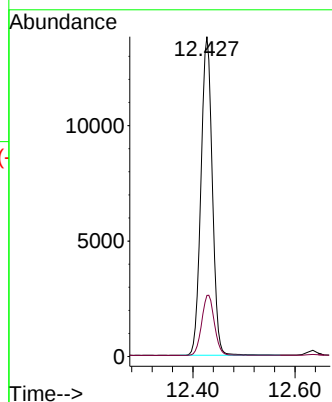
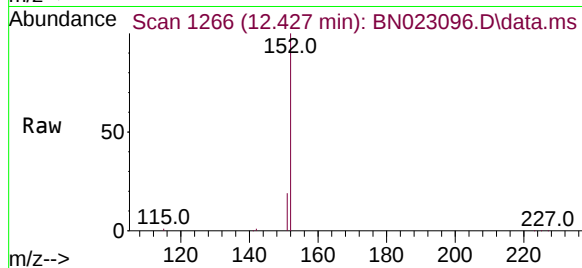




#11
2-Methylnaphthalene-d10
Concen: 0.701 ng
RT: 12.427 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

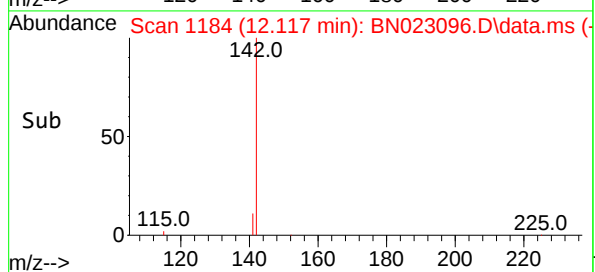
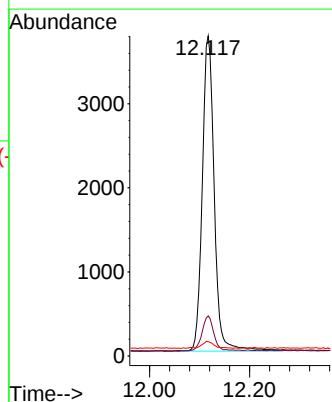
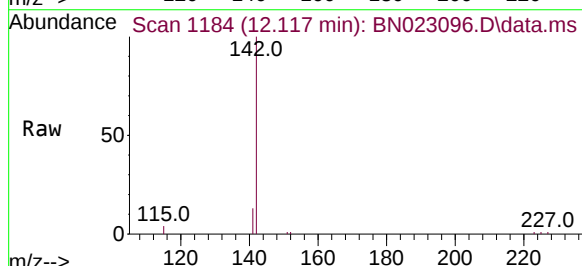
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

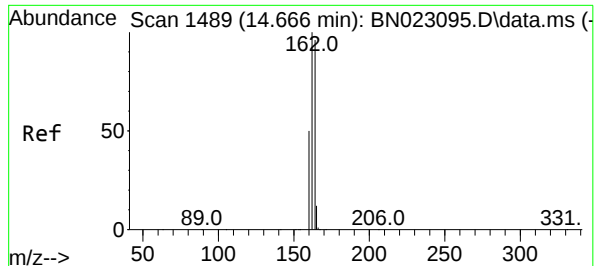
Tgt Ion:152 Resp: 26746
Ion Ratio Lower Upper
152 100
151 17.6 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.678 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:142 Resp: 6224
Ion Ratio Lower Upper
142 100
141 12.5 10.9 16.3
115 4.4 5.7 8.5#

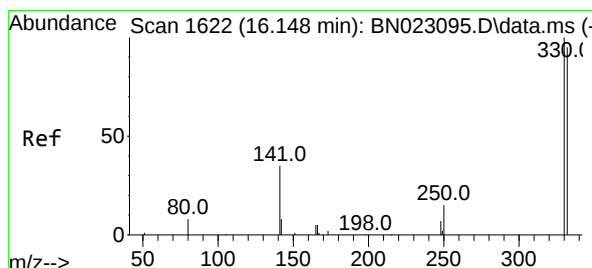
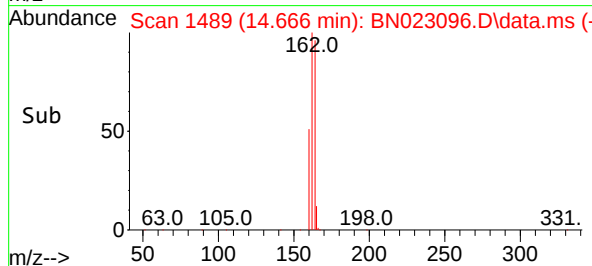
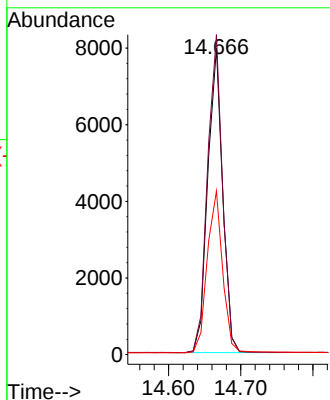
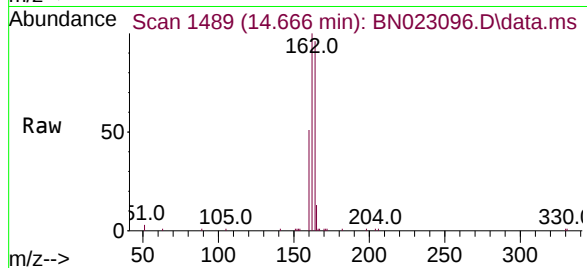




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

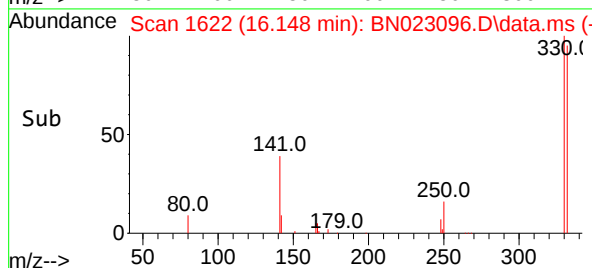
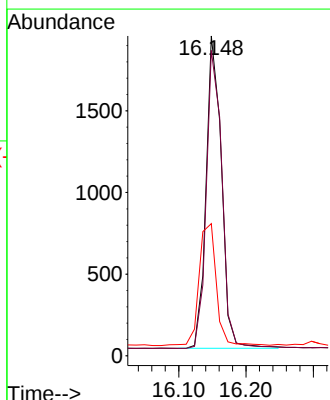
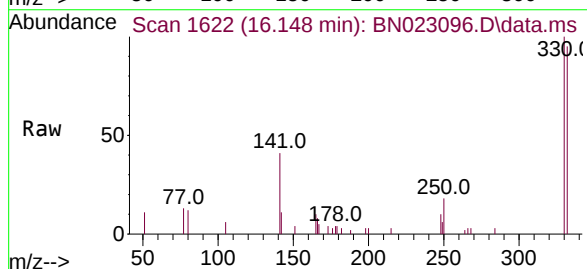
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

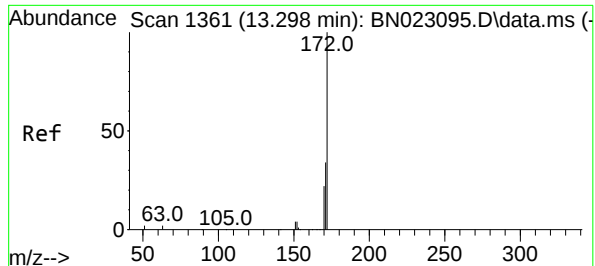
Tgt Ion:164 Resp: 11426
Ion Ratio Lower Upper
164 100
162 104.3 83.4 125.0
160 53.4 41.8 62.8



#14
2,4,6-Tribromophenol
Concen: 0.628 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:330 Resp: 3033
Ion Ratio Lower Upper
330 100
332 97.2 77.3 115.9
141 43.5 33.5 50.3





#15

2-Fluorobiphenyl

Concen: 0.701 ng

RT: 13.298 min Scan# 1361

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

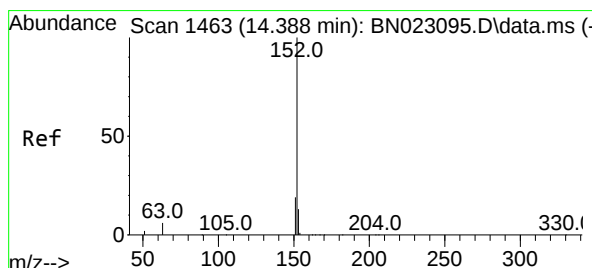
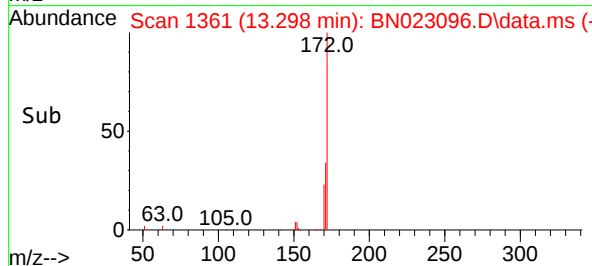
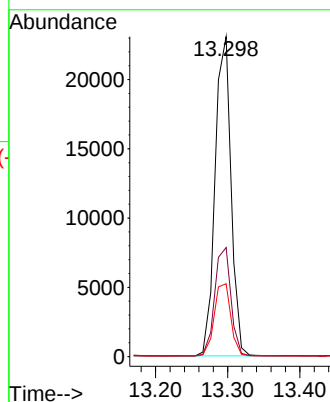
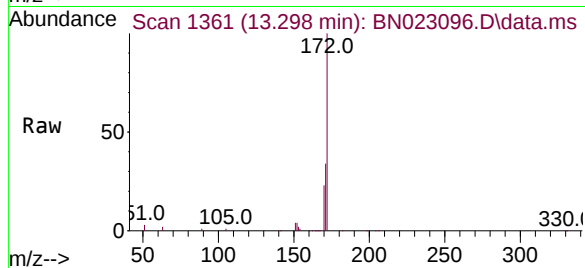
Tgt Ion:172 Resp: 35533

Ion Ratio Lower Upper

172 100

171 34.1 27.4 41.0

170 22.8 17.9 26.9



#16

Acenaphthylene

Concen: 0.645 ng

RT: 14.388 min Scan# 1463

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

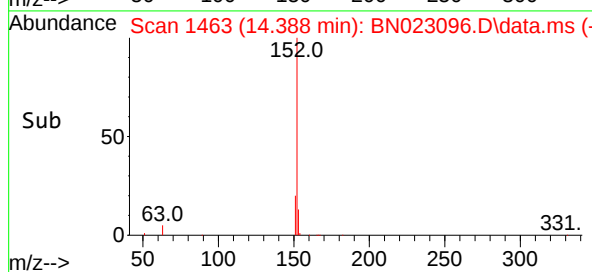
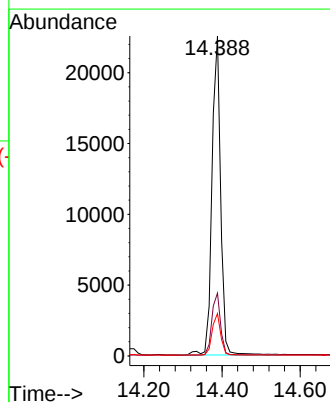
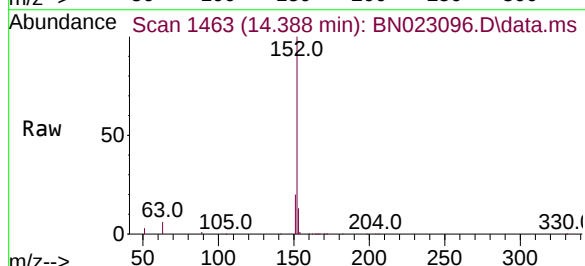
Tgt Ion:152 Resp: 34662

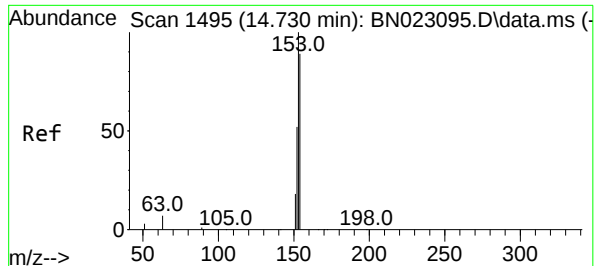
Ion Ratio Lower Upper

152 100

151 19.5 15.4 23.2

153 12.9 10.3 15.5

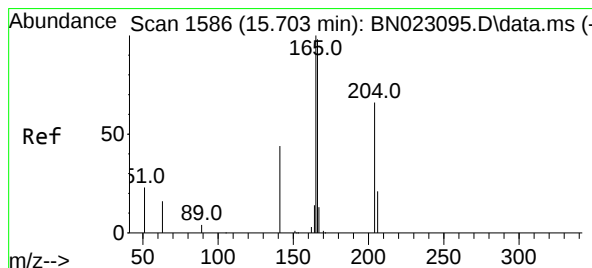
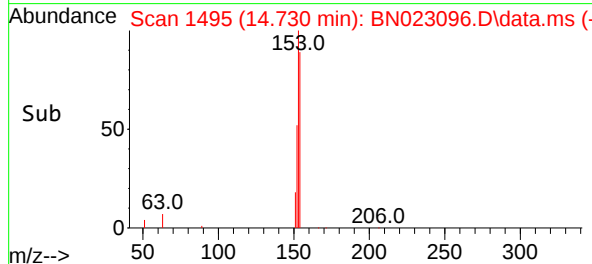
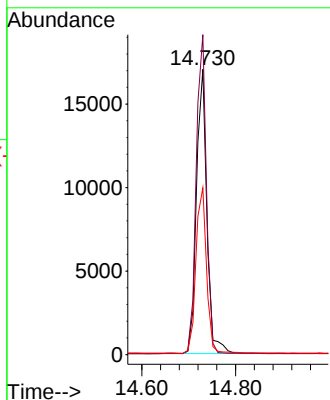
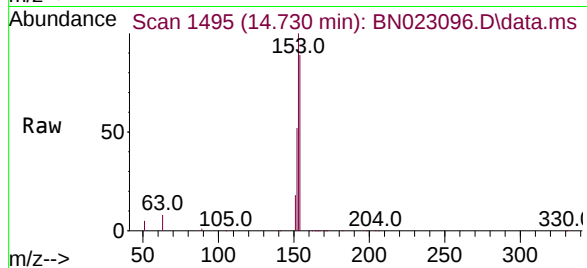




#17
Acenaphthene
Concen: 0.669 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

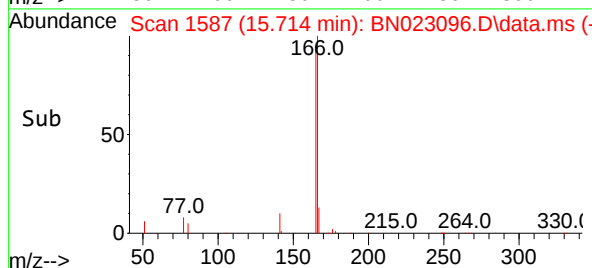
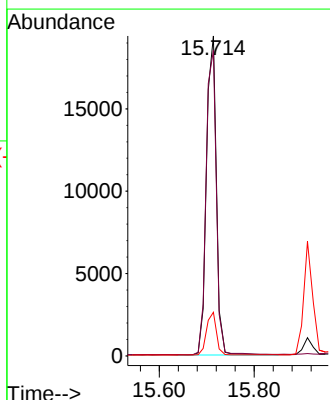
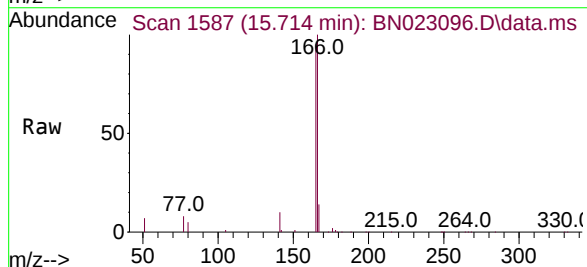
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

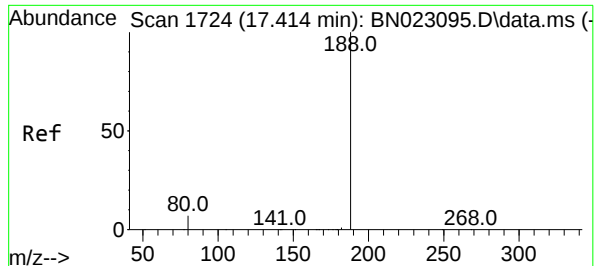
Tgt Ion:154 Resp: 26163
Ion Ratio Lower Upper
154 100
153 109.9 88.6 132.8
152 59.4 48.1 72.1



#18
Fluorene
Concen: 0.669 ng
RT: 15.714 min Scan# 1587
Delta R.T. 0.011 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:166 Resp: 29372
Ion Ratio Lower Upper
166 100
165 99.0 79.8 119.6
167 13.3 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.414 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

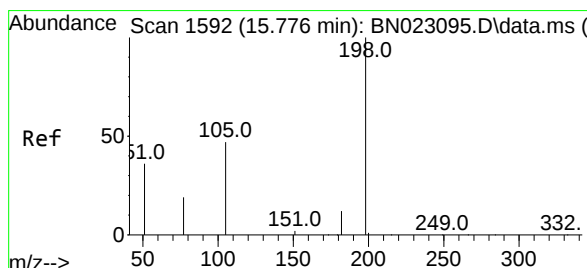
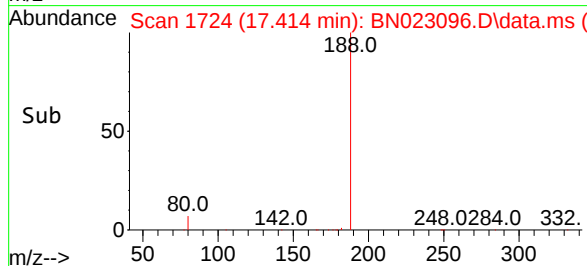
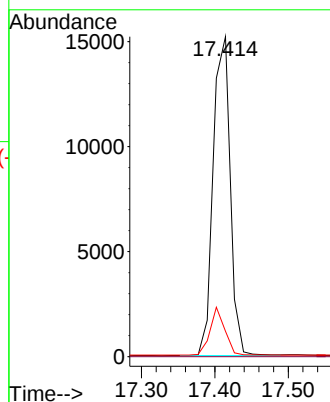
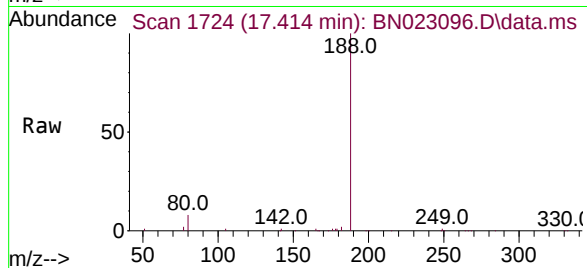
Tgt Ion:188 Resp: 24706

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.9 6.1 9.1



#20

4,6-Dinitro-2-methylphenol

Concen: 0.711 ng

RT: 15.776 min Scan# 1592

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

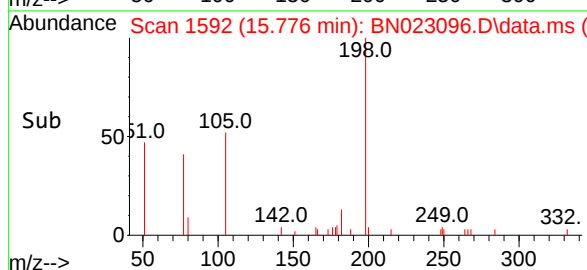
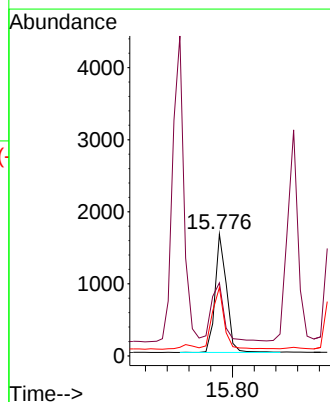
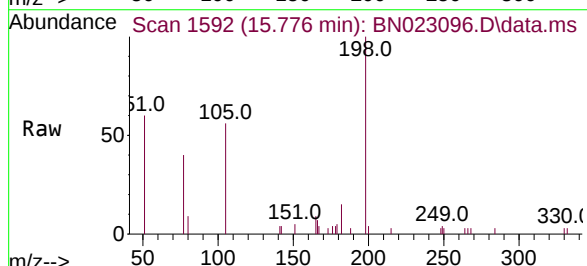
Tgt Ion:198 Resp: 2377

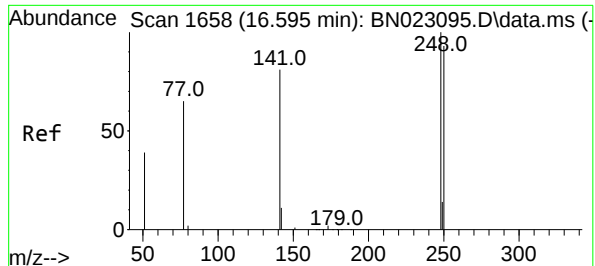
Ion Ratio Lower Upper

198 100

51 60.0 57.0 85.4

105 56.2 47.2 70.8

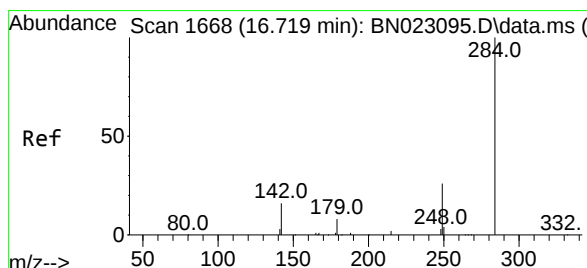
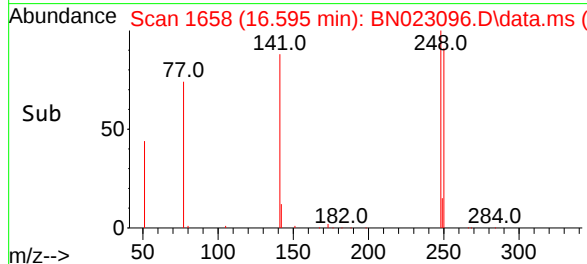
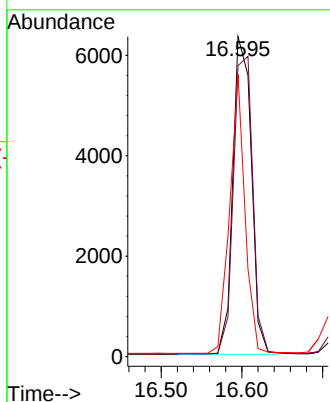
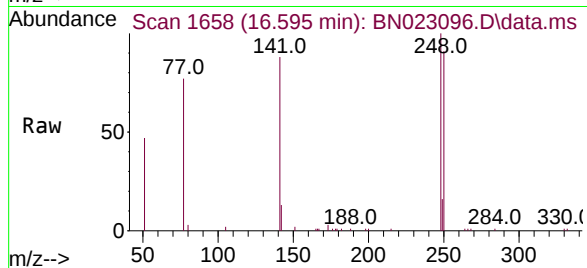




#21
4-Bromophenyl-phenylether
Concen: 0.678 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

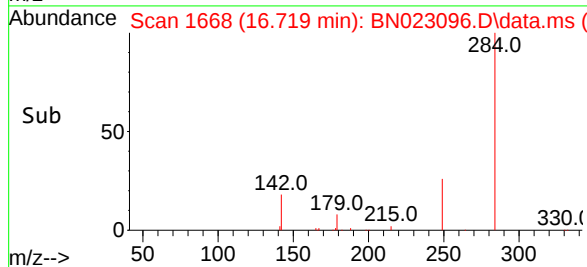
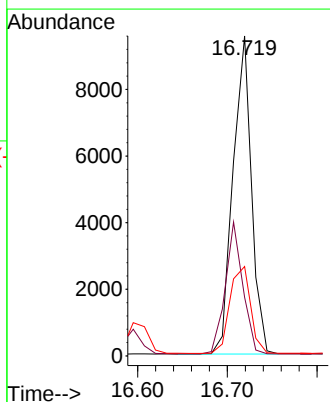
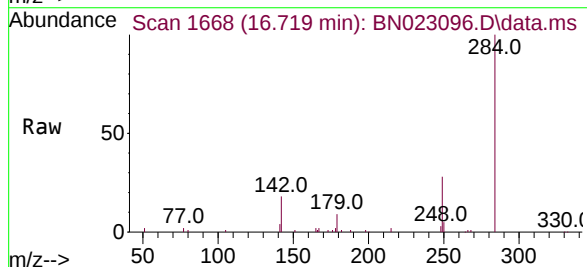
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

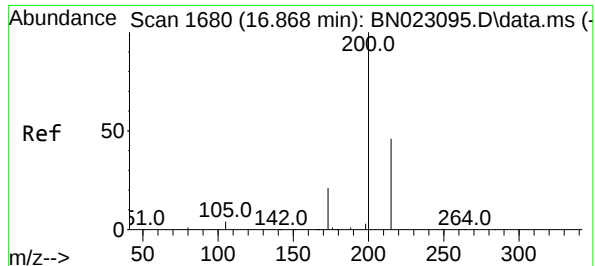
Tgt Ion:248 Resp: 10088
Ion Ratio Lower Upper
248 100
250 90.9 74.3 111.5
141 88.1 65.0 97.6



#22
Hexachlorobenzene
Concen: 0.705 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:284 Resp: 13630
Ion Ratio Lower Upper
284 100
142 39.3 31.0 46.4
249 30.6 24.4 36.6

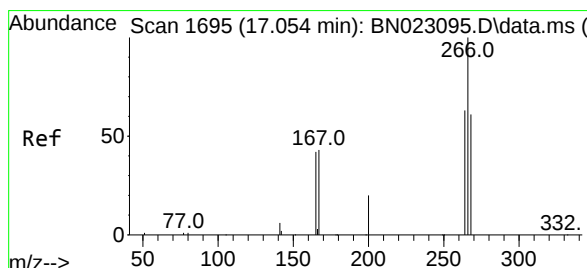
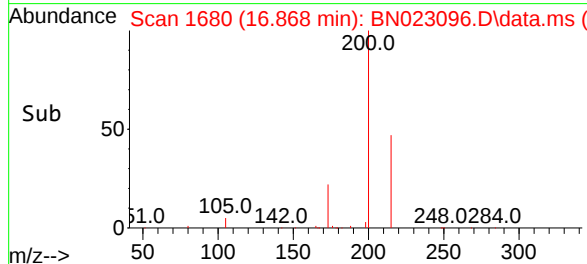
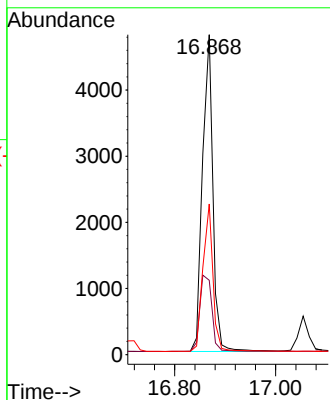
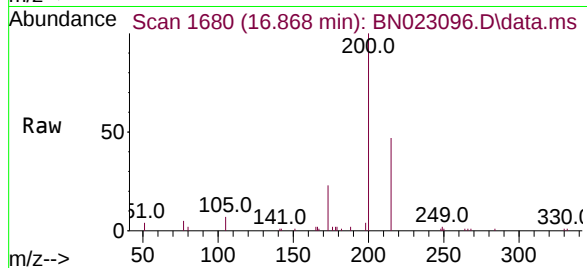




#23
Atrazine
Concen: 0.630 ng
RT: 16.868 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

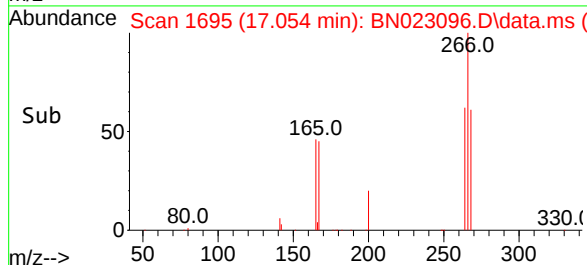
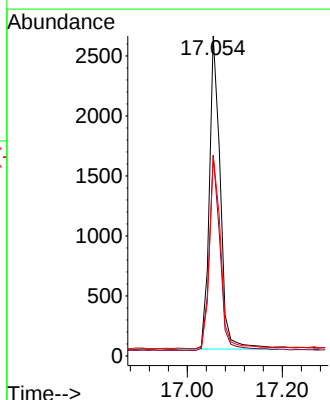
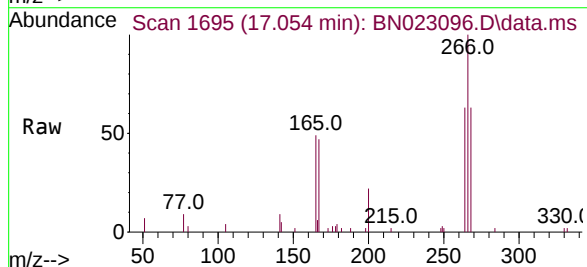
Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

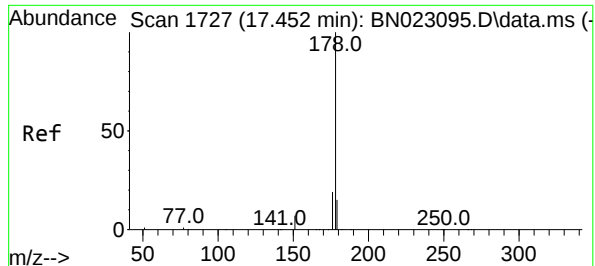
Tgt Ion:200 Resp: 6823
Ion Ratio Lower Upper
200 100
173 23.2 18.2 27.4
215 47.1 38.0 57.0



#24
Pentachlorophenol
Concen: 0.731 ng
RT: 17.054 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023096.D
Acq: 08 Dec 2022 15:50

Tgt Ion:266 Resp: 4149
Ion Ratio Lower Upper
266 100
264 61.8 50.1 75.1
268 62.8 49.7 74.5





#25

Phenanthrene

Concen: 0.681 ng

RT: 17.452 min Scan# 1727

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8

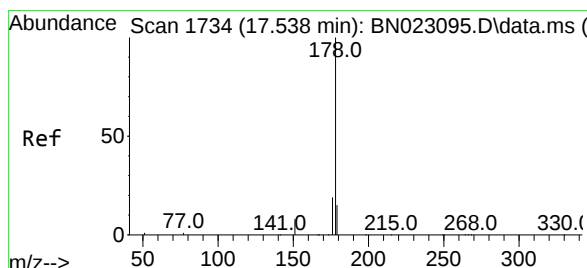
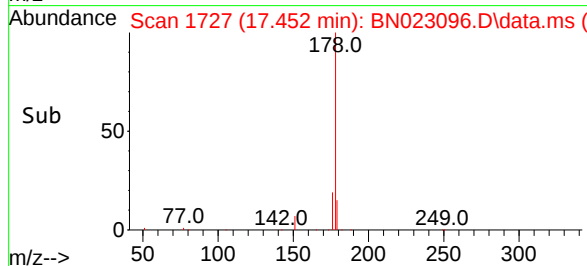
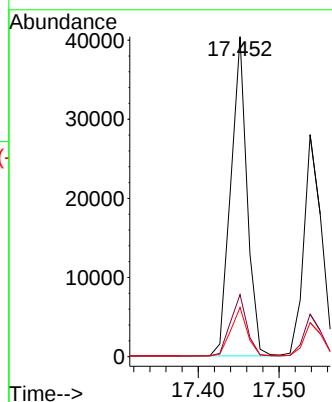
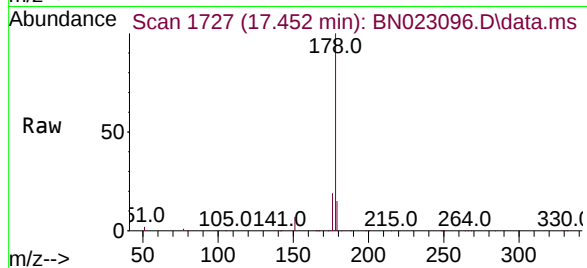
Tgt Ion:178 Resp: 56706

Ion Ratio Lower Upper

178 100

176 19.5 15.4 23.2

179 15.2 12.2 18.2



#26

Anthracene

Concen: 0.657 ng

RT: 17.538 min Scan# 1734

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

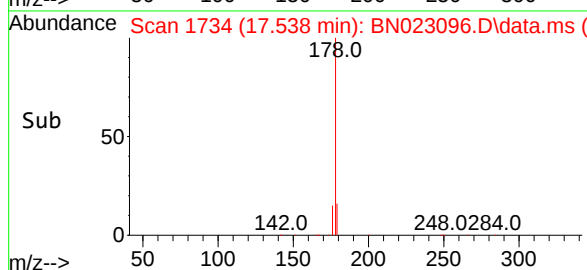
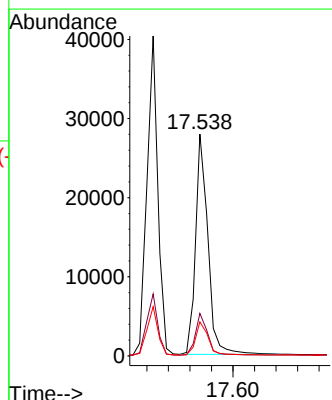
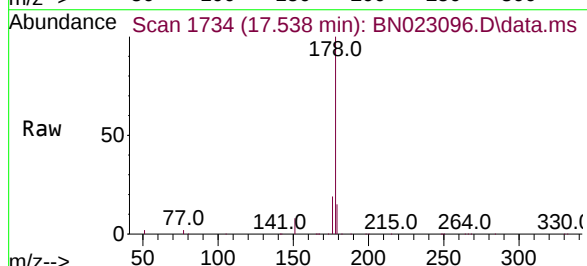
Tgt Ion:178 Resp: 44125

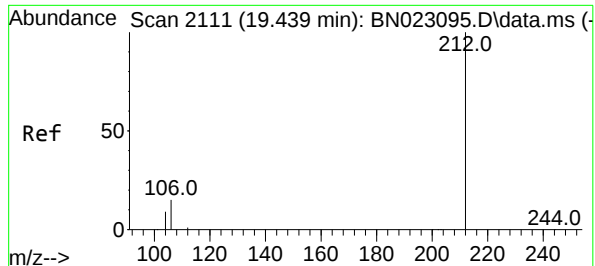
Ion Ratio Lower Upper

178 100

176 18.7 15.1 22.7

179 15.2 12.2 18.4





#27

Fluoranthene-d10

Concen: 0.654 ng

RT: 19.439 min Scan# 2111

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

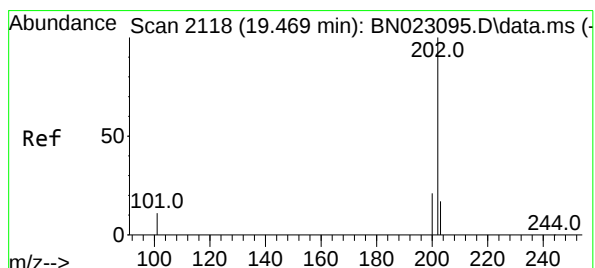
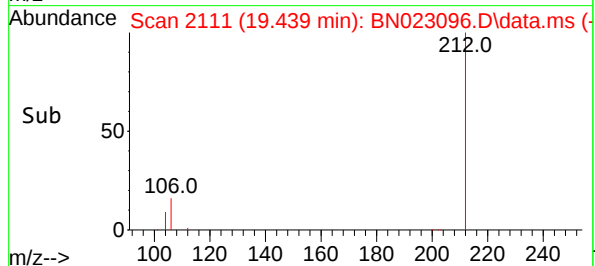
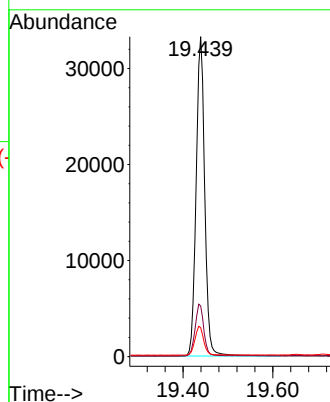
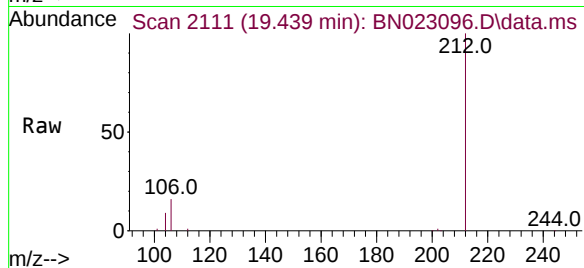
Tgt Ion:212 Resp: 44274

Ion Ratio Lower Upper

212 100

106 16.2 13.0 19.4

104 9.2 7.5 11.3



#28

Fluoranthene

Concen: 0.680 ng

RT: 19.469 min Scan# 2118

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

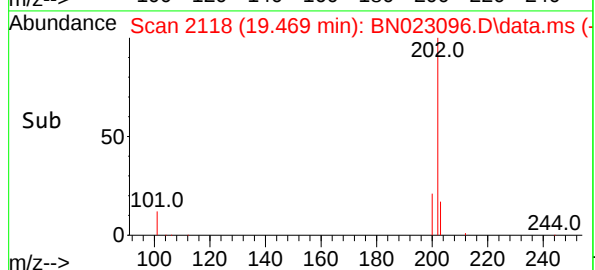
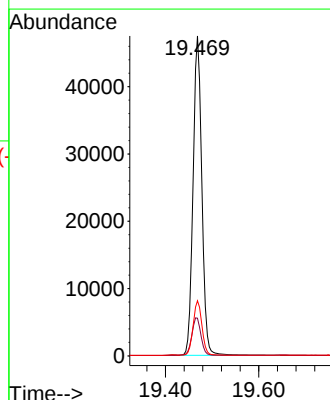
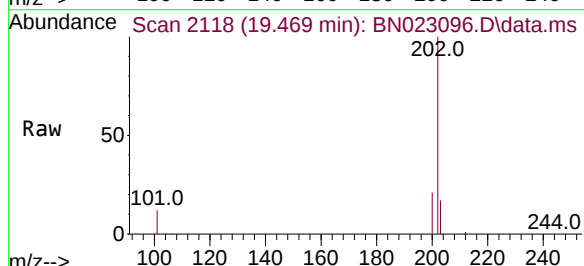
Tgt Ion:202 Resp: 61820

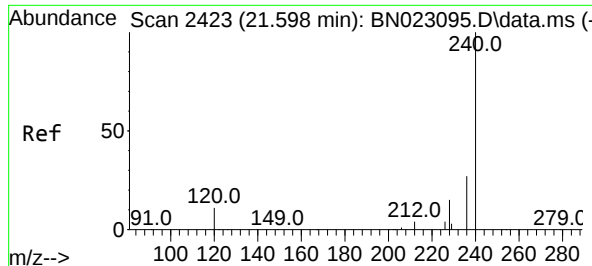
Ion Ratio Lower Upper

202 100

101 12.4 9.7 14.5

203 17.0 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.598 min Scan# 2423

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

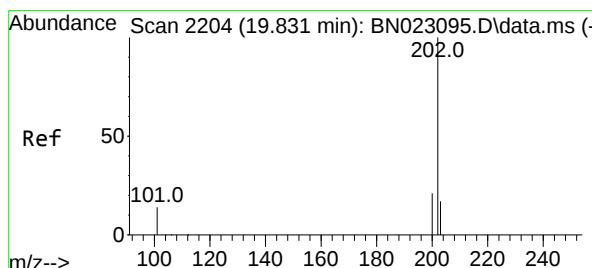
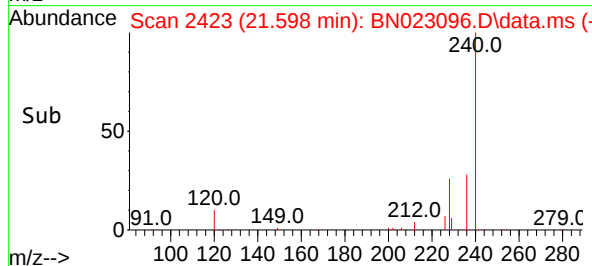
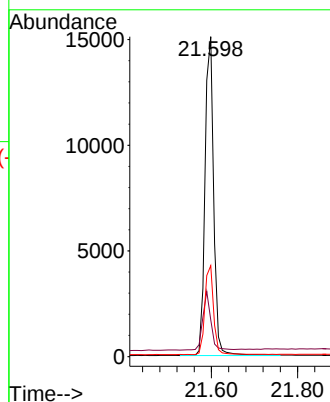
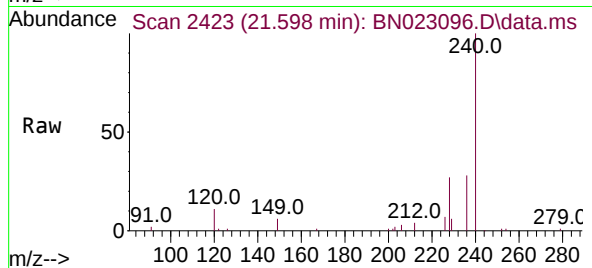
Tgt Ion:240 Resp: 20806

Ion Ratio Lower Upper

240 100

120 11.5 10.1 15.1

236 28.4 22.2 33.4



#30

Pyrene

Concen: 0.684 ng

RT: 19.831 min Scan# 2204

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

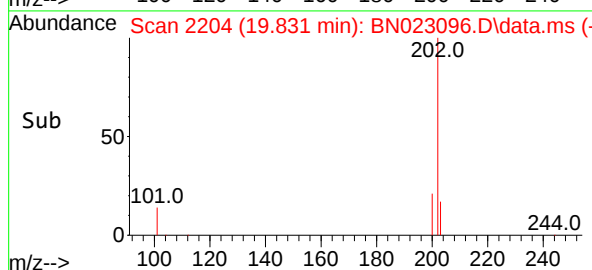
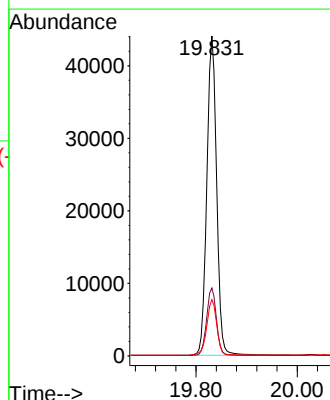
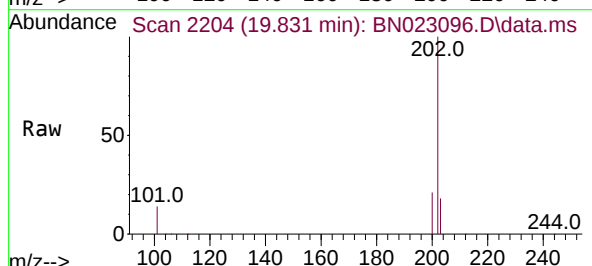
Tgt Ion:202 Resp: 59340

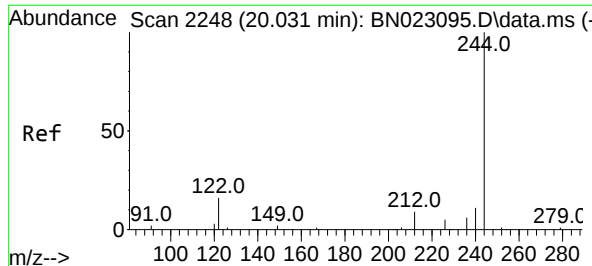
Ion Ratio Lower Upper

202 100

200 21.2 16.9 25.3

203 17.8 14.2 21.4

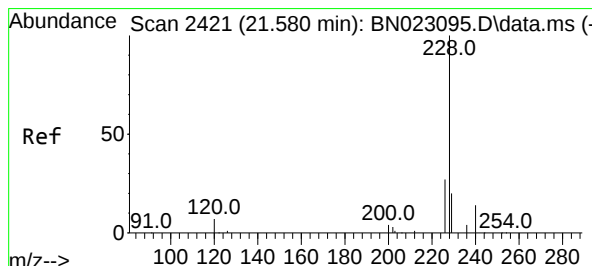
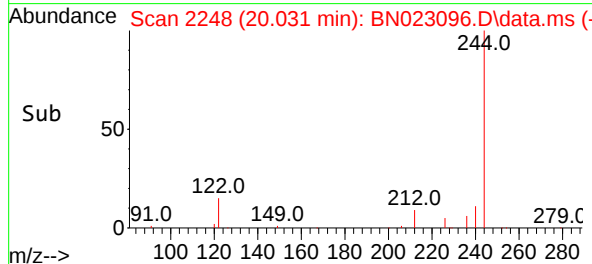
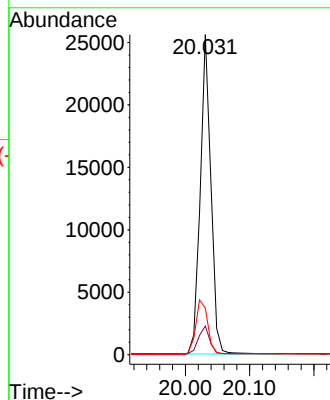
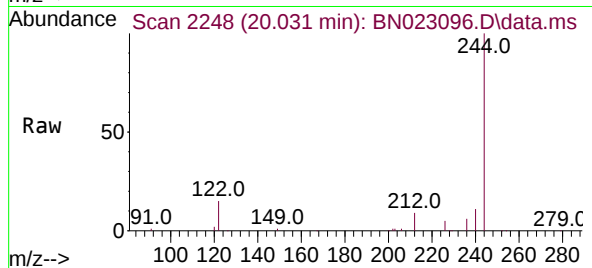




#31
 Terphenyl-d14
 Concen: 0.684 ng
 RT: 20.031 min Scan# 21
 Delta R.T. 0.000 min
 Lab File: BN023096.D
 Acq: 08 Dec 2022 15:50

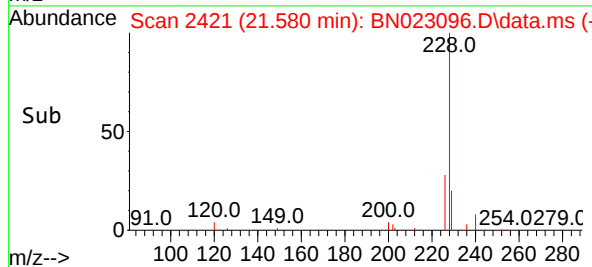
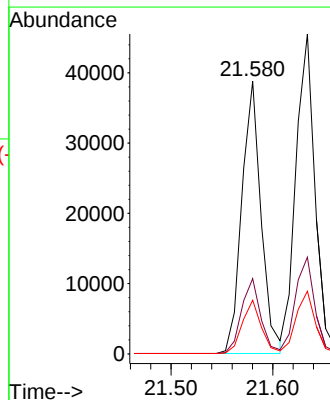
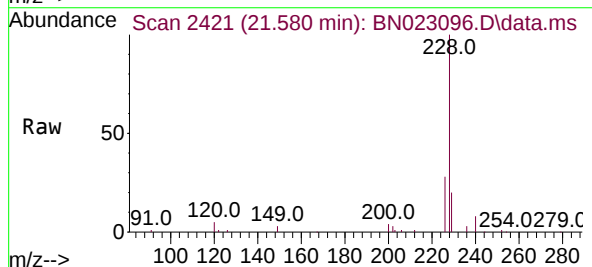
Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC0.8

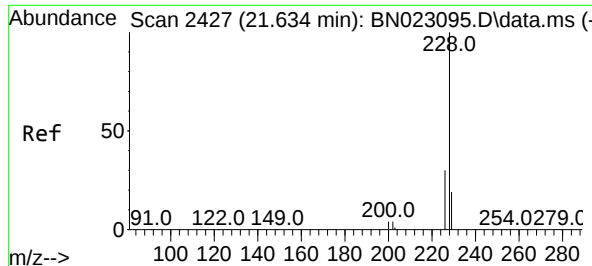
Tgt Ion:244 Resp: 27028
 Ion Ratio Lower Upper
 244 100
 212 8.9 7.6 11.4
 122 14.5 12.6 18.8



#32
 Benzo(a)anthracene
 Concen: 0.666 ng
 RT: 21.580 min Scan# 2421
 Delta R.T. 0.000 min
 Lab File: BN023096.D
 Acq: 08 Dec 2022 15:50

Tgt Ion:228 Resp: 51136
 Ion Ratio Lower Upper
 228 100
 226 27.6 22.0 33.0
 229 19.7 15.8 23.8





#33

Chrysene

Concen: 0.695 ng

RT: 21.634 min Scan# 2427

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

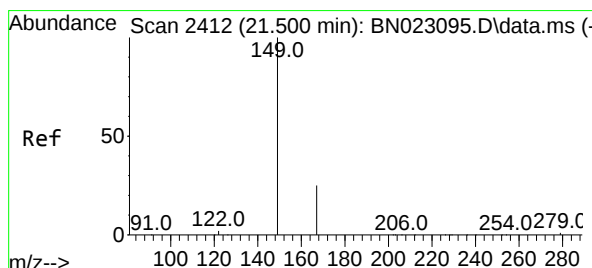
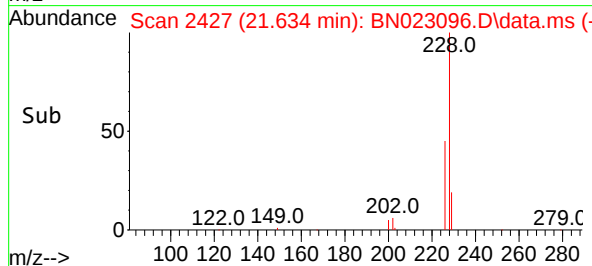
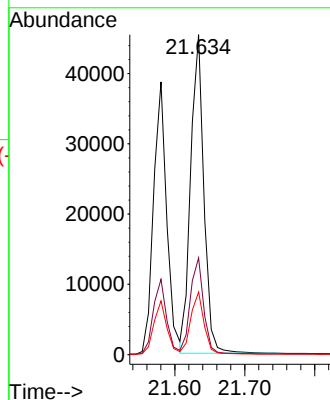
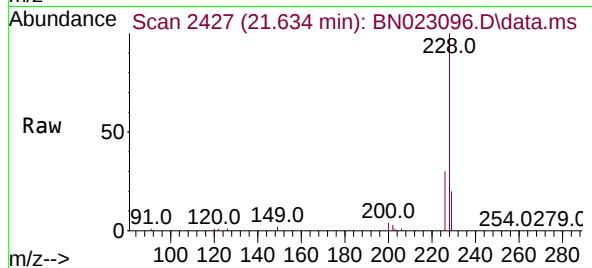
Tgt Ion:228 Resp: 59672

Ion Ratio Lower Upper

228 100

226 30.2 24.4 36.6

229 19.6 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.608 ng

RT: 21.500 min Scan# 2412

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

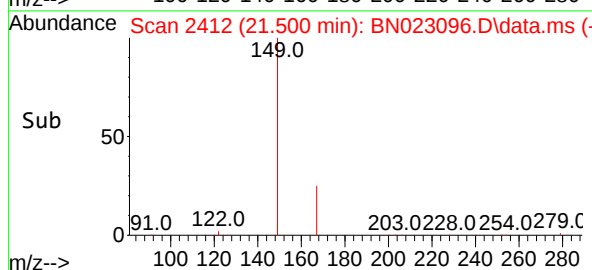
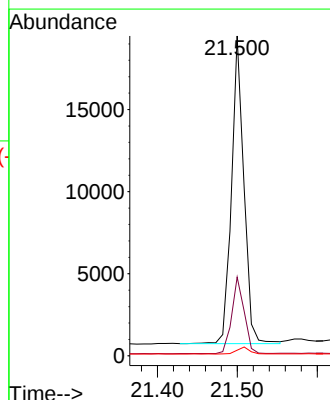
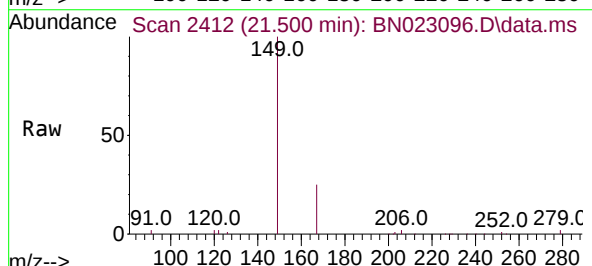
Tgt Ion:149 Resp: 20192

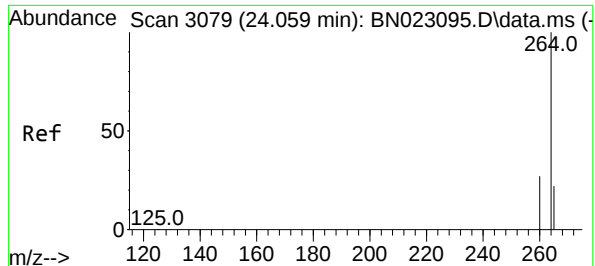
Ion Ratio Lower Upper

149 100

167 25.0 20.2 30.2

279 2.4 2.3 3.5





#35

Perylene-d12

Concen: 0.400 ng

RT: 24.059 min Scan# 3079

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

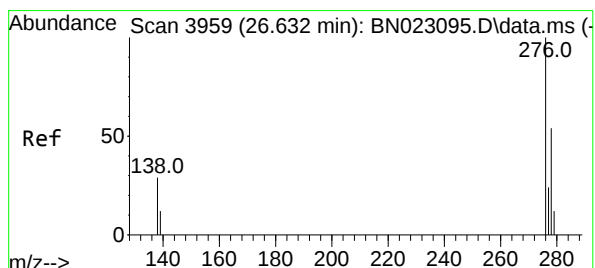
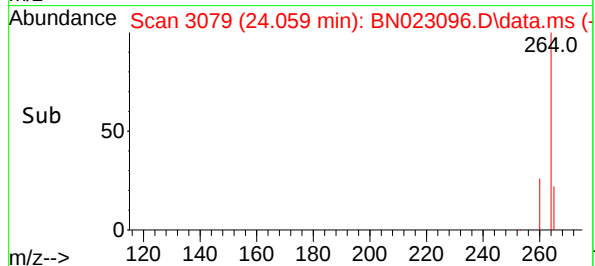
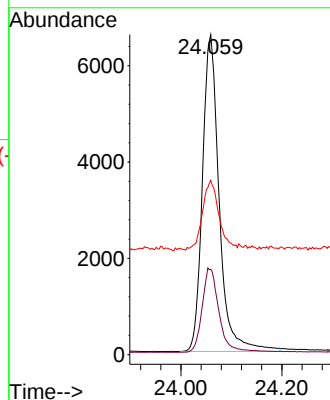
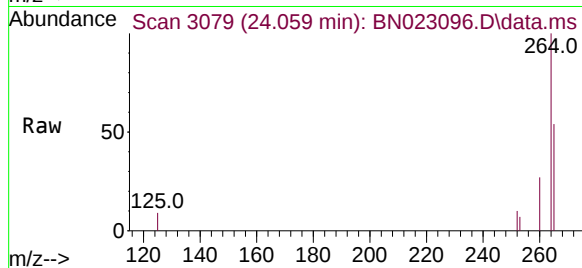
Tgt Ion:264 Resp: 15181

Ion Ratio Lower Upper

264 100

260 26.7 21.7 32.5

265 54.5 43.2 64.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.660 ng

RT: 26.629 min Scan# 3958

Delta R.T. -0.003 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

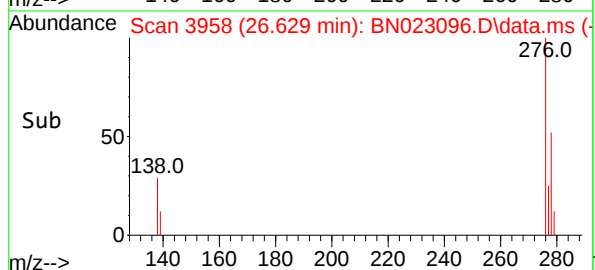
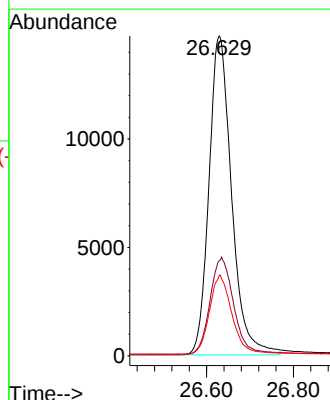
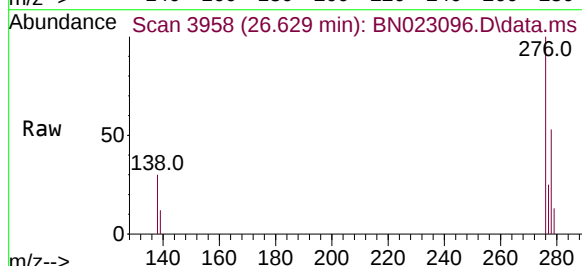
Tgt Ion:276 Resp: 53216

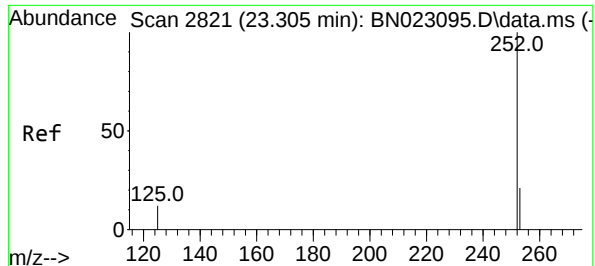
Ion Ratio Lower Upper

276 100

138 31.6 25.0 37.6

277 24.6 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.722 ng

RT: 23.302 min Scan# 2821

Delta R.T. -0.003 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

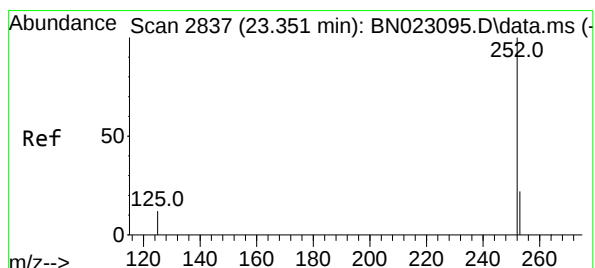
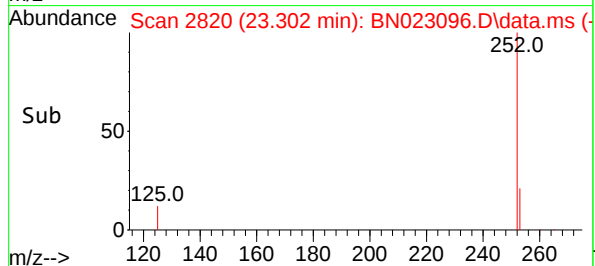
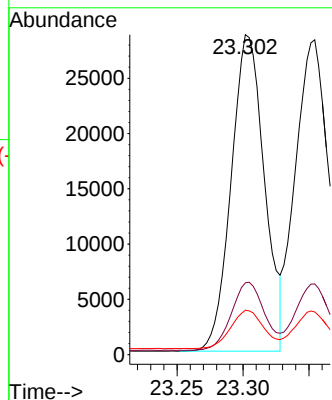
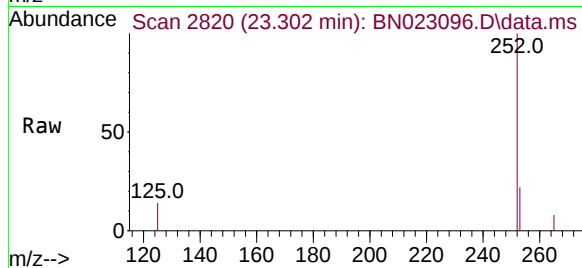
Tgt Ion:252 Resp: 50131

Ion Ratio Lower Upper

252 100

253 22.4 19.0 28.4

125 13.9 12.8 19.2



#38

Benzo(k)fluoranthene

Concen: 0.715 ng

RT: 23.354 min Scan# 2838

Delta R.T. 0.003 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

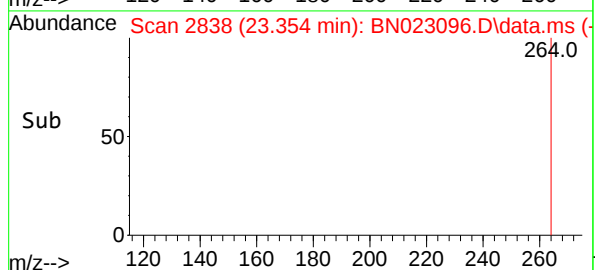
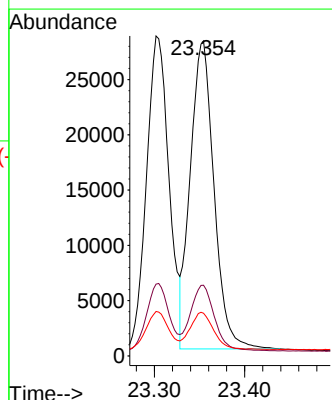
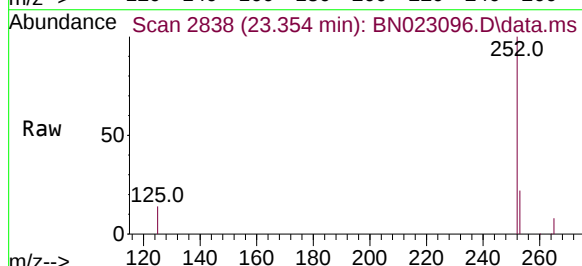
Tgt Ion:252 Resp: 50862

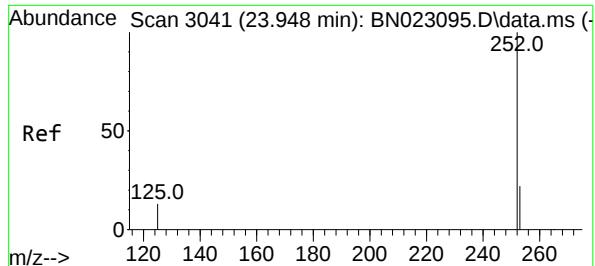
Ion Ratio Lower Upper

252 100

253 22.4 19.1 28.7

125 13.5 12.5 18.7





#39

Benzo(a)pyrene

Concen: 0.622 ng

RT: 23.948 min Scan# 3041

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDIC0.8

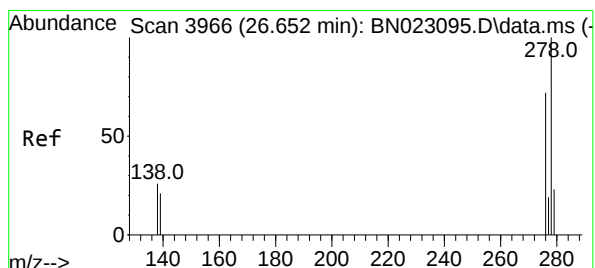
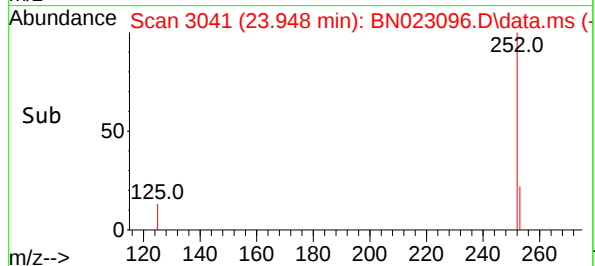
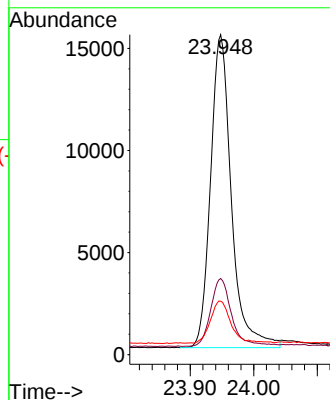
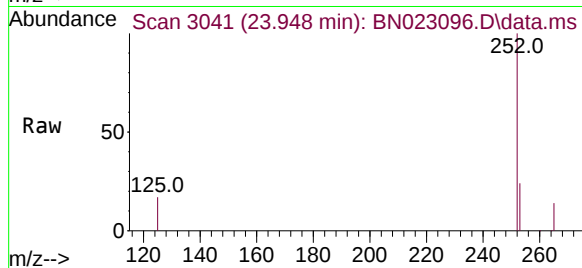
Tgt Ion:252 Resp: 34953

Ion Ratio Lower Upper

252 100

253 23.8 20.6 30.8

125 16.7 15.8 23.8



#40

Dibenzo(a,h)anthracene

Concen: 0.676 ng

RT: 26.652 min Scan# 3966

Delta R.T. 0.000 min

Lab File: BN023096.D

Acq: 08 Dec 2022 15:50

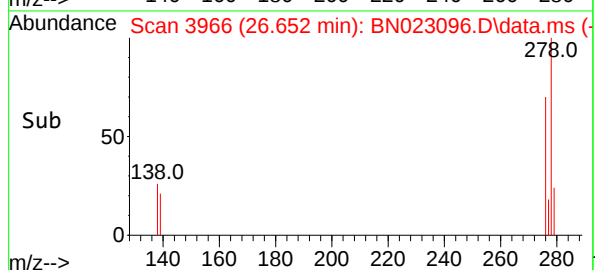
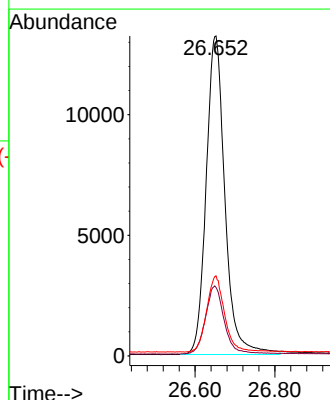
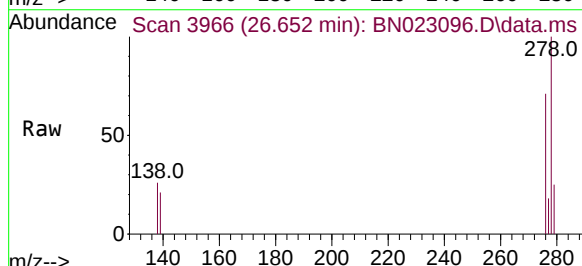
Tgt Ion:278 Resp: 43165

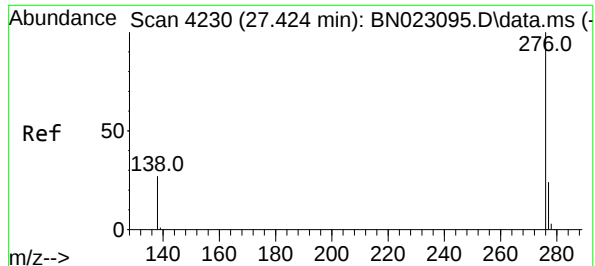
Ion Ratio Lower Upper

278 100

139 21.4 17.5 26.3

279 25.0 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.715 ng

RT: 27.418 min Scan# 41

Delta R.T. -0.006 min

Lab File: BN023096.D

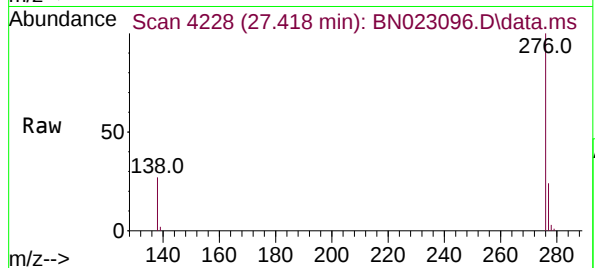
Acq: 08 Dec 2022 15:50

Instrument :

BNA_N

ClientSampleId :

SSTDICC0.8



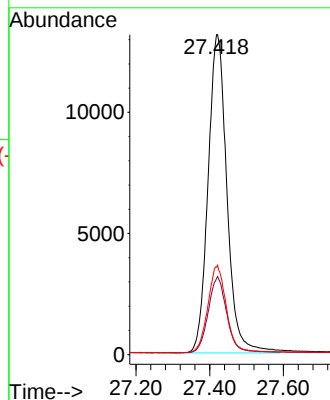
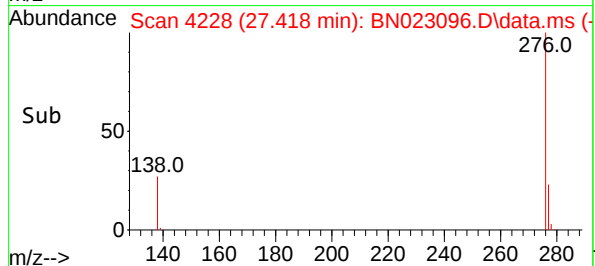
Tgt Ion:276 Resp: 46710

Ion Ratio Lower Upper

276 100

277 23.8 19.9 29.9

138 27.3 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023097.D
 Acq On : 08 Dec 2022 16:26
 Operator : CG/JU
 Sample : SSTDICC1.6
 Misc :
 ALS Vial : 6 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC1.6

Quant Time: Dec 09 07:28:39 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:25:53 2022
 Response via : Initial Calibration

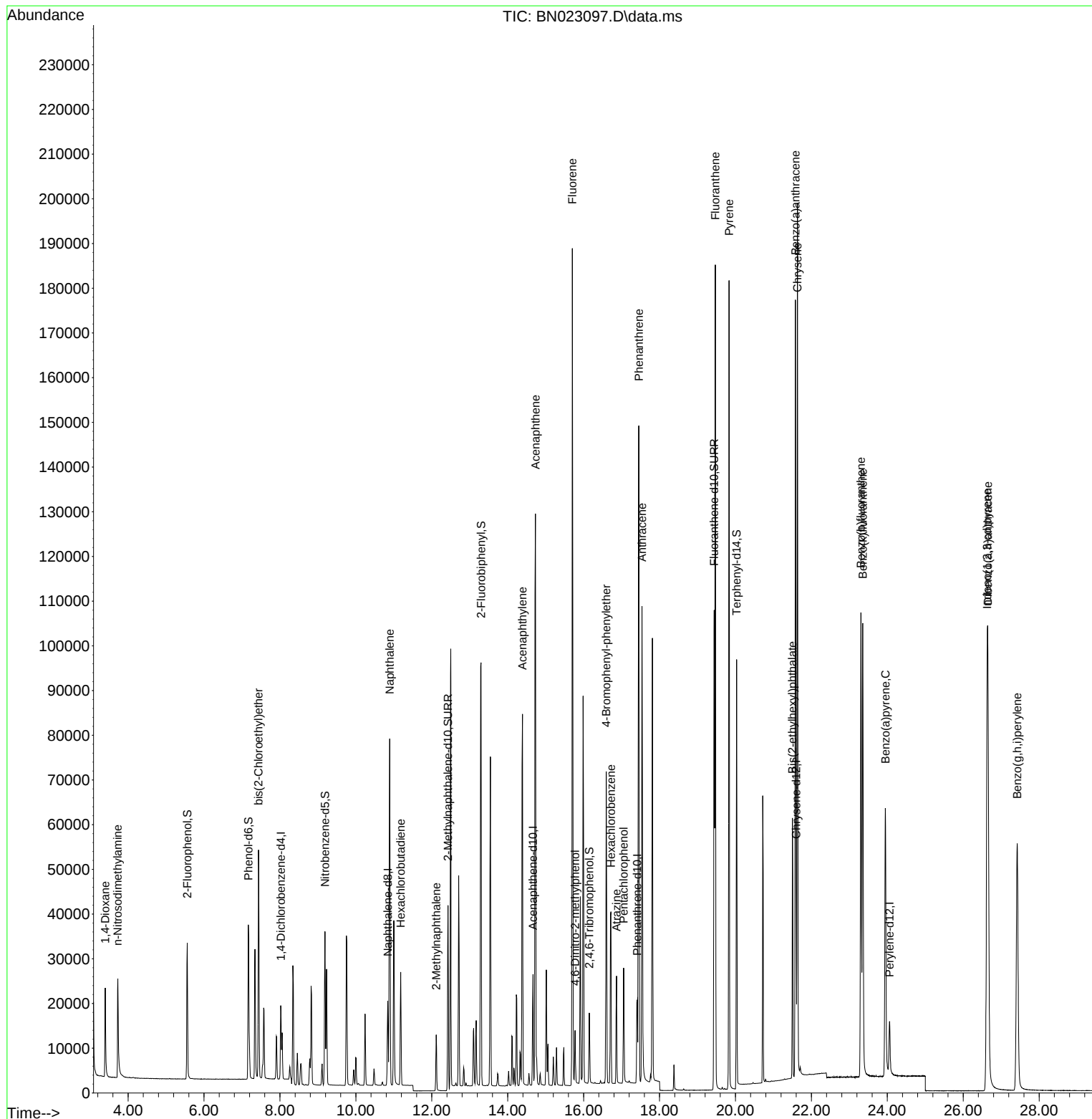
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.021	152	7961	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	23515	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	13256	0.400	ng	0.00
19) Phenanthrene-d10	17.414	188	27793	0.400	ng	0.00
29) Chrysene-d12	21.598	240	24897	0.400	ng	0.00
35) Perylene-d12	24.059	264	17546	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	24725	1.343	ng	0.00
5) Phenol-d6	7.168	99	32018	1.383	ng	0.00
8) Nitrobenzene-d5	9.185	82	26154	1.482	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	67111	1.512	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	8264	1.476	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	88442	1.503	ng	0.00
27) Fluoranthene-d10	19.439	212	111381	1.463	ng	0.00
31) Terphenyl-d14	20.031	244	68689	1.454	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.398	88	13318	1.349	ng	98
3) n-Nitrosodimethylamine	3.723	42	14509	1.503	ng	# 99
6) bis(2-Chloroethyl)ether	7.436	93	35736	1.398	ng	97
9) Naphthalene	10.893	128	99339	1.424	ng	99
10) Hexachlorobutadiene	11.182	225	18899	1.443	ng	# 100
12) 2-Methylnaphthalene	12.117	142	17618	1.651	ng	# 92
16) Acenaphthylene	14.388	152	94028	1.509	ng	100
17) Acenaphthene	14.730	154	66404	1.463	ng	99
18) Fluorene	15.703	166	75662	1.486	ng	99
20) 4,6-Dinitro-2-methylph...	15.776	198	6771	1.801	ng	# 81
21) 4-Bromophenyl-phenylether	16.595	248	25451	1.520	ng	98
22) Hexachlorobenzene	16.719	284	32935	1.515	ng	99
23) Atrazine	16.868	200	18156	1.490	ng	99
24) Pentachlorophenol	17.055	266	11351	1.778	ng	99
25) Phenanthrene	17.452	178	139569	1.490	ng	100
26) Anthracene	17.539	178	115325	1.528	ng	100
28) Fluoranthene	19.469	202	156823	1.534	ng	100
30) Pyrene	19.831	202	152036	1.465	ng	100
32) Benzo(a)anthracene	21.580	228	137563	1.497	ng	99
33) Chrysene	21.634	228	152270	1.482	ng	100
34) Bis(2-ethylhexyl)phtha...	21.500	149	53634	1.350	ng	99
36) Indeno(1,2,3-cd)pyrene	26.632	276	143051	1.534	ng	100
37) Benzo(b)fluoranthene	23.305	252	129768	1.618	ng	# 94
38) Benzo(k)fluoranthene	23.355	252	135698	1.651	ng	95
39) Benzo(a)pyrene	23.948	252	96478	1.485	ng	# 91
40) Dibenzo(a,h)anthracene	26.650	278	116720	1.582	ng	97
41) Benzo(g,h,i)perylene	27.421	276	121454	1.608	ng	98

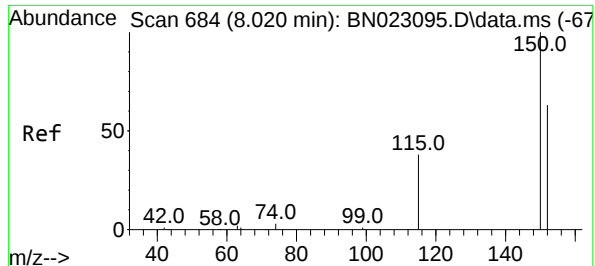
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023097.D
Acq On : 08 Dec 2022 16:26
Operator : CG/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Dec 09 07:28:39 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

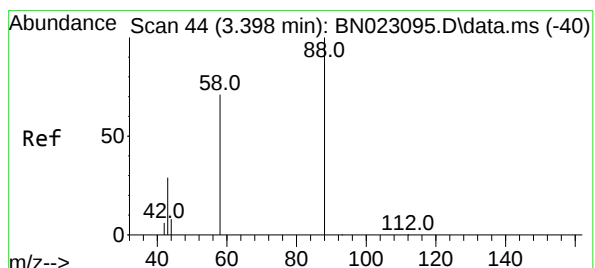
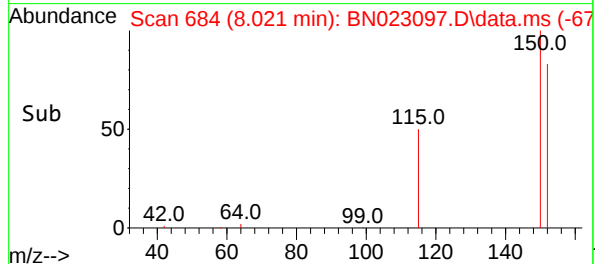
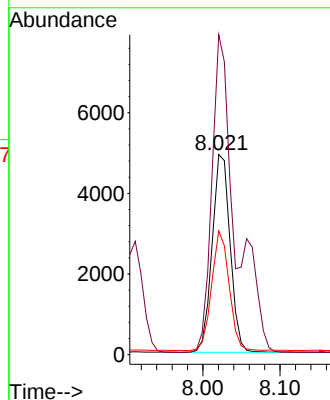
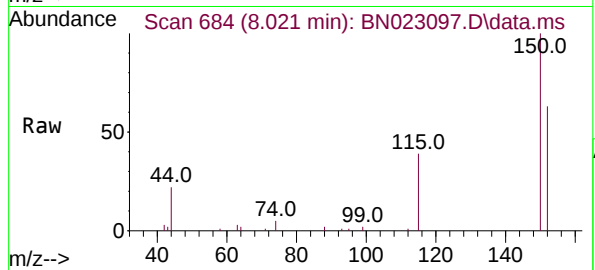




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.021 min Scan# 684
Delta R.T. 0.001 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

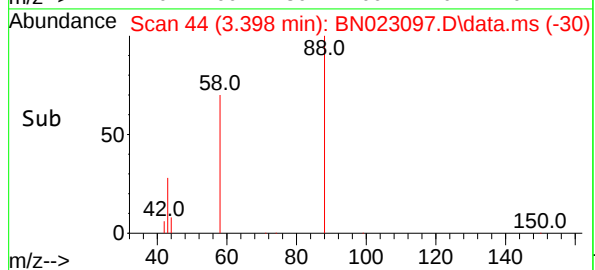
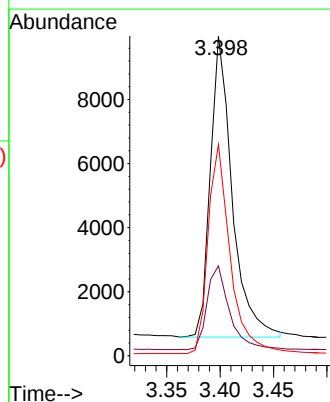
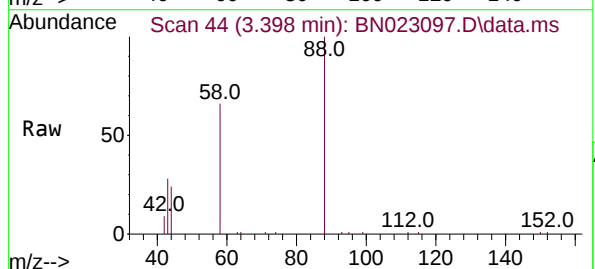
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

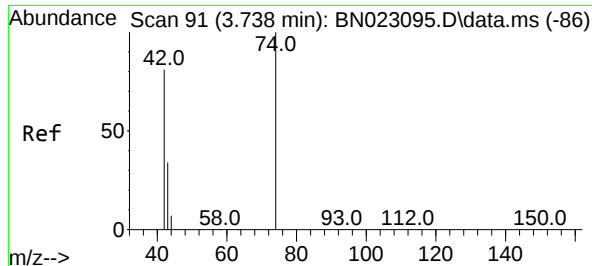
Tgt Ion:152 Resp: 7961
Ion Ratio Lower Upper
152 100
150 159.9 125.6 188.4
115 61.8 49.0 73.4



#2
1,4-Dioxane
Concen: 1.349 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion: 88 Resp: 13318
Ion Ratio Lower Upper
88 100
43 28.6 23.3 34.9
58 70.2 58.0 87.0

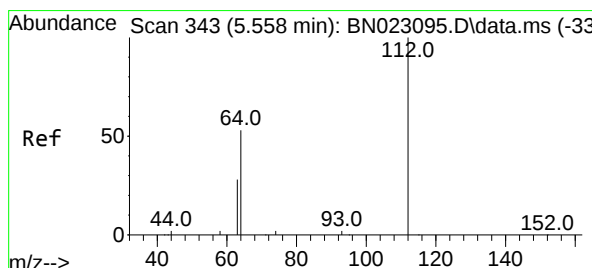
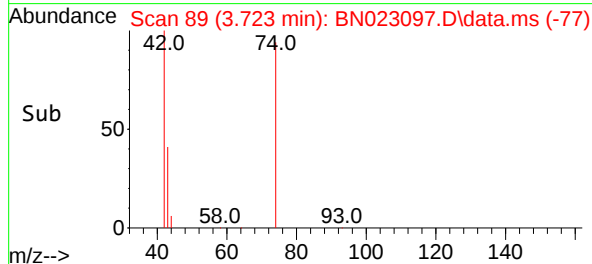
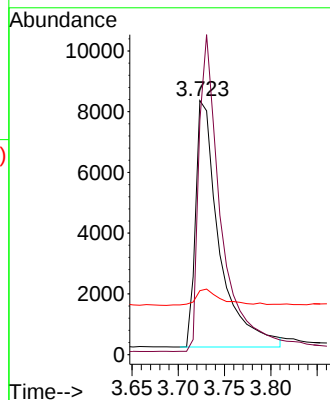
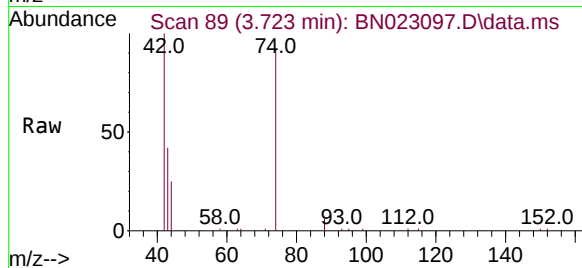




#3
n-Nitrosodimethylamine
Concen: 1.503 ng
RT: 3.723 min Scan# 89
Delta R.T. -0.014 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

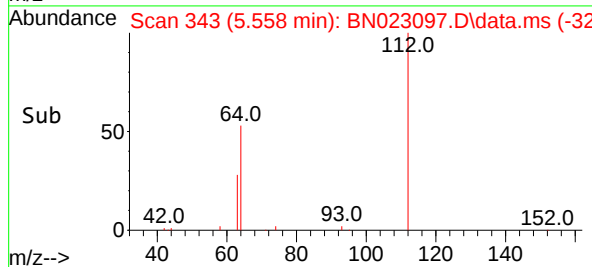
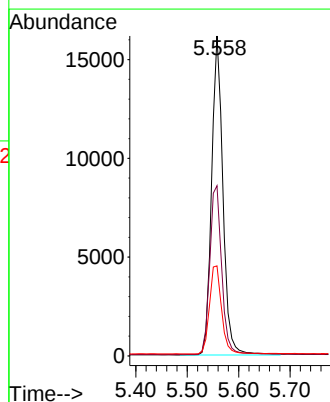
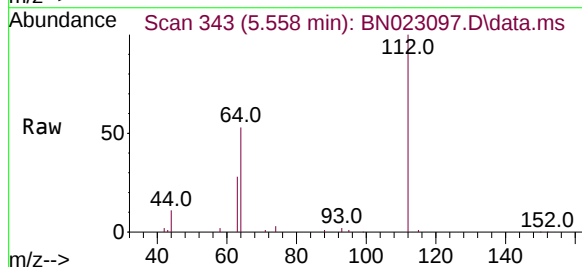
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

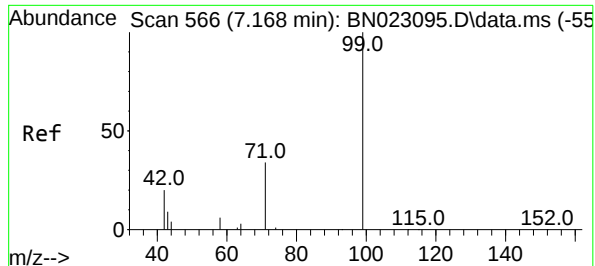
Tgt Ion: 42 Resp: 14509
Ion Ratio Lower Upper
42 100
74 120.3 95.8 143.6
44 6.7 8.4 12.6#



#4
2-Fluorophenol
Concen: 1.343 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion: 112 Resp: 24725
Ion Ratio Lower Upper
112 100
64 56.0 44.4 66.6
63 29.6 23.7 35.5





#5

Phenol-d6

Concen: 1.383 ng

RT: 7.168 min Scan# 566

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

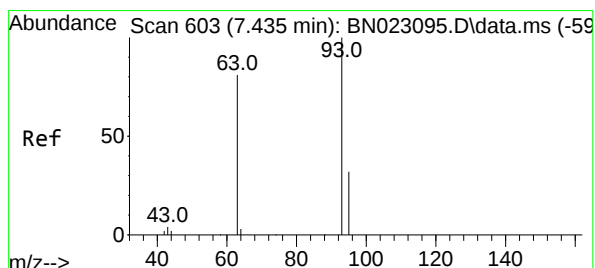
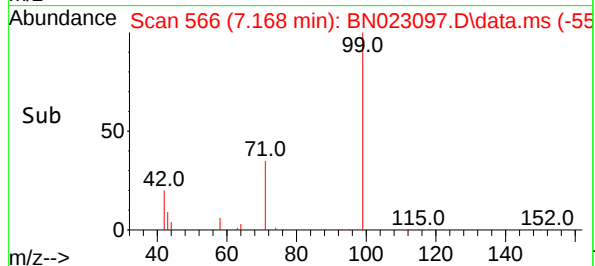
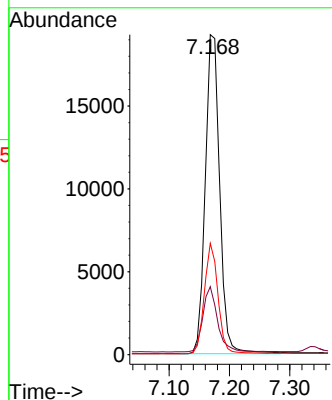
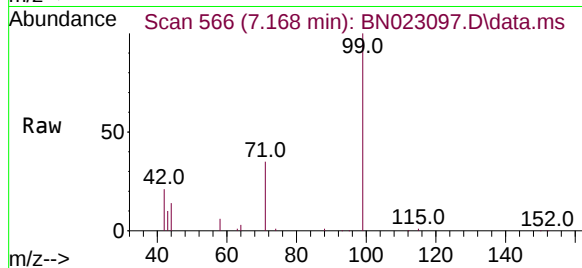
Tgt Ion: 99 Resp: 32018

Ion Ratio Lower Upper

99 100

42 20.9 16.3 24.5

71 33.0 26.5 39.7



#6

bis(2-Chloroethyl)ether

Concen: 1.398 ng

RT: 7.436 min Scan# 603

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

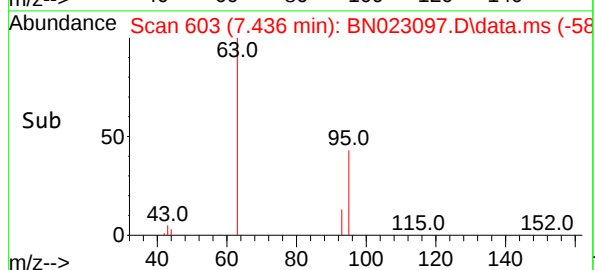
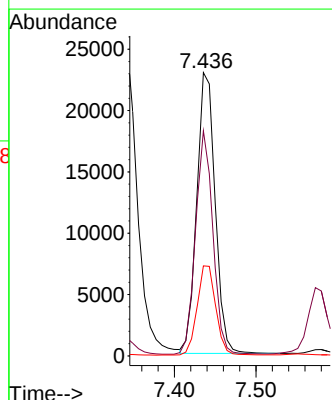
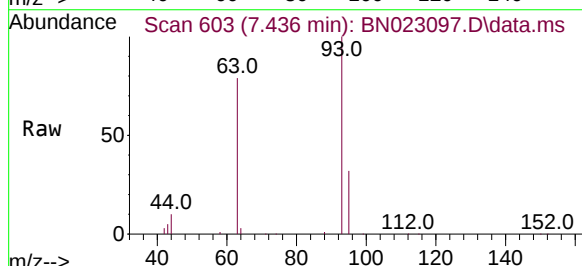
Tgt Ion: 93 Resp: 35736

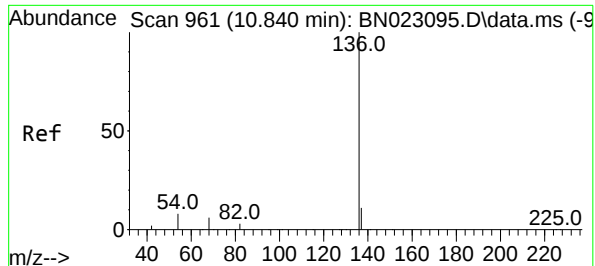
Ion Ratio Lower Upper

93 100

63 75.2 58.1 87.1

95 32.2 25.2 37.8

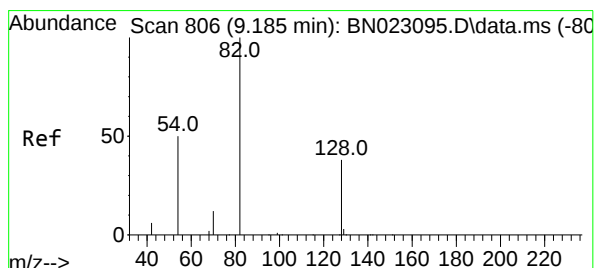
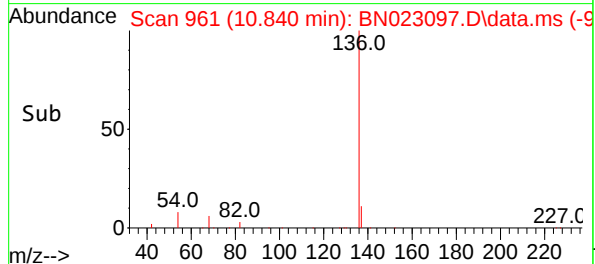
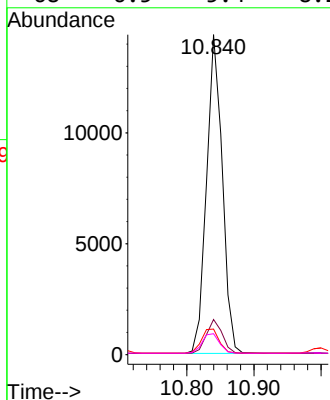
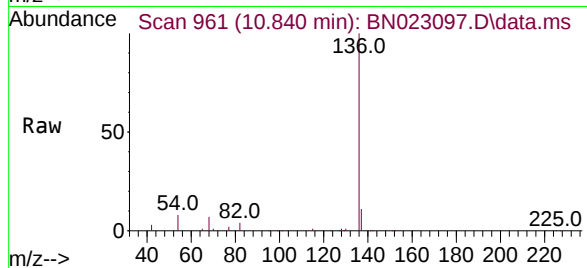




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

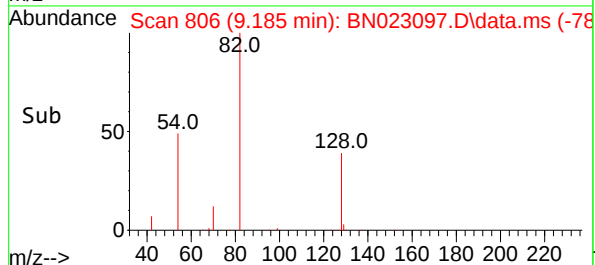
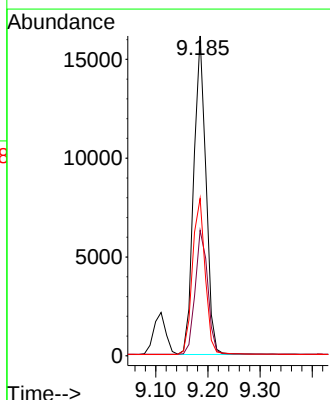
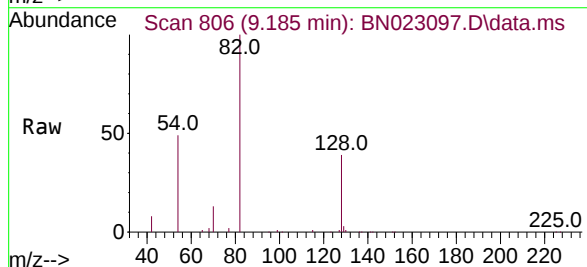
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

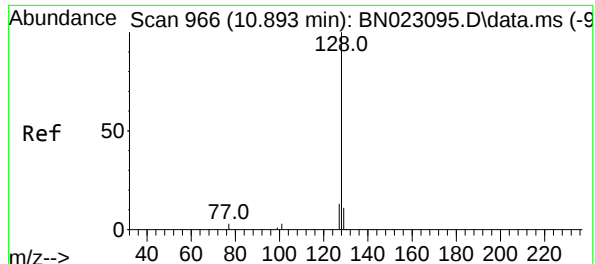
Tgt Ion:	136	Resp:	23515
Ion Ratio	Lower	Upper	
136	100		
137	11.0	9.0	13.4
54	8.0	6.5	9.7
68	6.5	5.4	8.2



#8
Nitrobenzene-d5
Concen: 1.482 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:	82	Resp:	26154
Ion Ratio	Lower	Upper	
82	100		
128	39.2	31.4	47.2
54	49.2	41.0	61.4





#9

Naphthalene

Concen: 1.424 ng

RT: 10.893 min Scan# 966

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

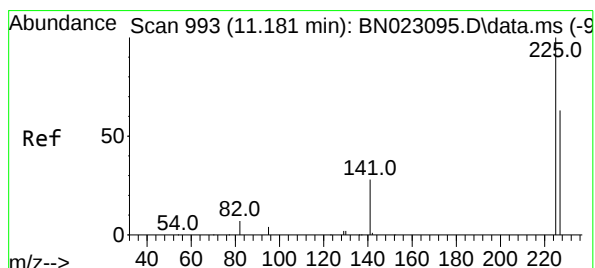
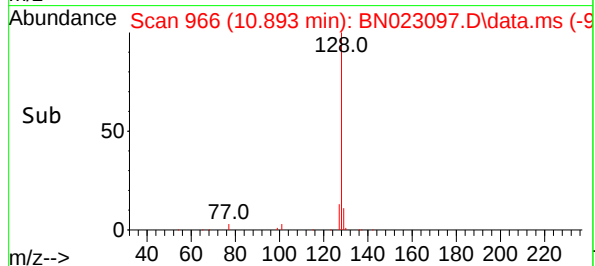
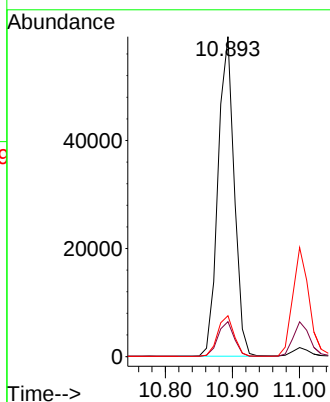
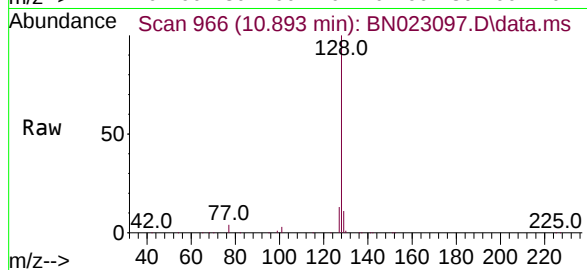
Tgt Ion:128 Resp: 99339

Ion Ratio Lower Upper

128 100

129 11.0 9.0 13.6

127 12.8 10.5 15.7



#10

Hexachlorobutadiene

Concen: 1.443 ng

RT: 11.182 min Scan# 993

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

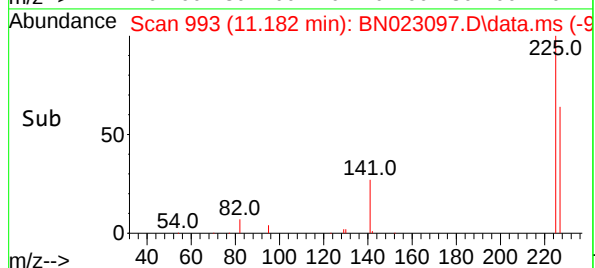
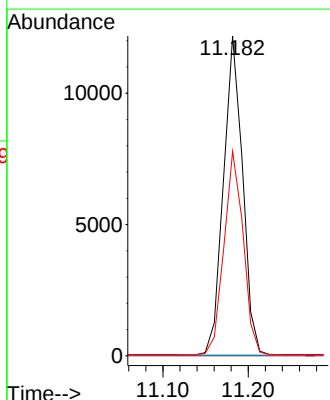
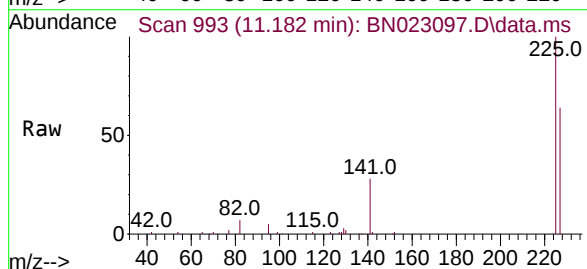
Tgt Ion:225 Resp: 18899

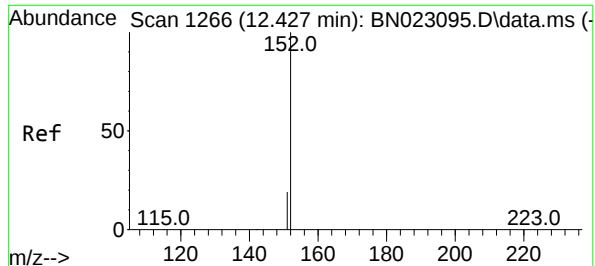
Ion Ratio Lower Upper

225 100

223 0.0 0.0 0.0

227 64.1 51.1 76.7

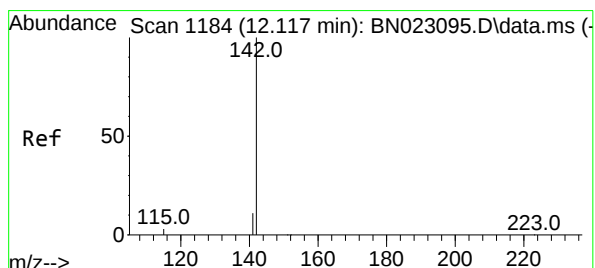
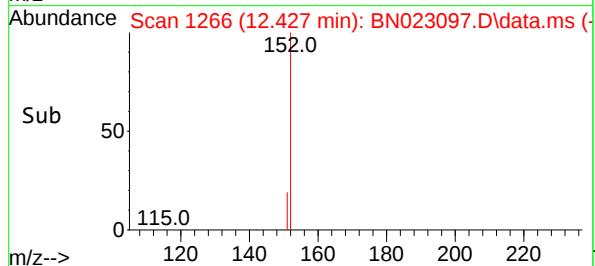
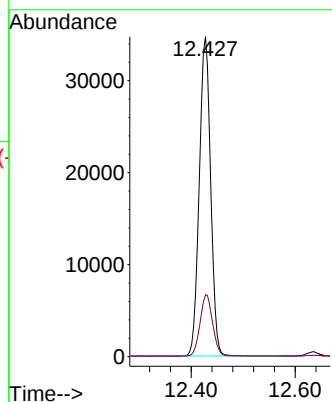
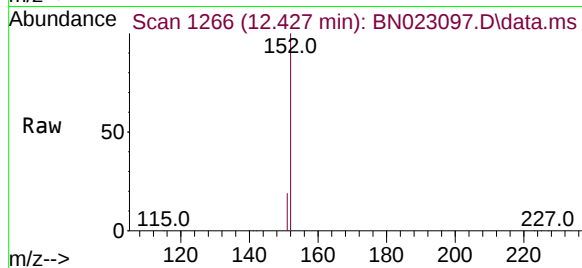




#11
2-Methylnaphthalene-d10
Concen: 1.512 ng
RT: 12.427 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

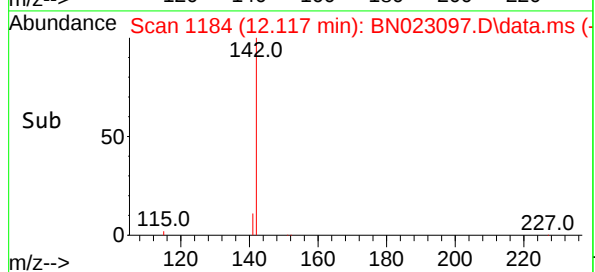
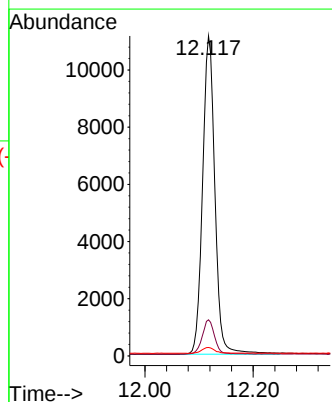
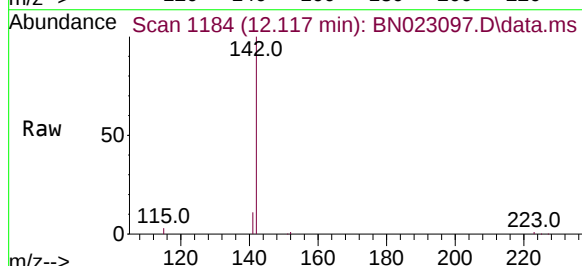
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

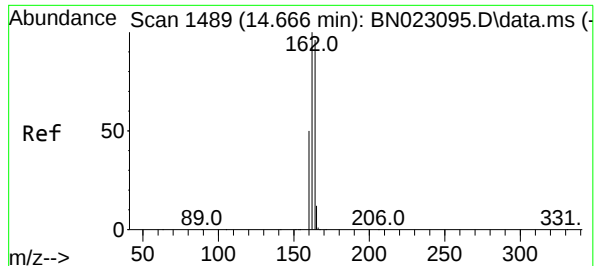
Tgt Ion:152 Resp: 67111
Ion Ratio Lower Upper
152 100
151 21.9 15.1 22.7



#12
2-Methylnaphthalene
Concen: 1.651 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:142 Resp: 17618
Ion Ratio Lower Upper
142 100
141 11.3 10.9 16.3
115 2.6 5.7 8.5#

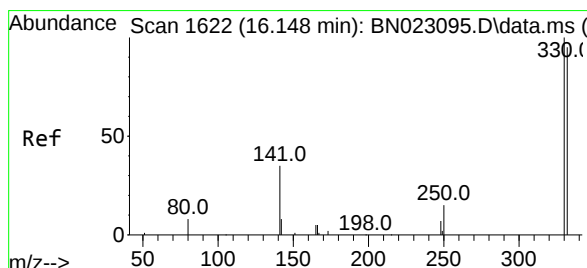
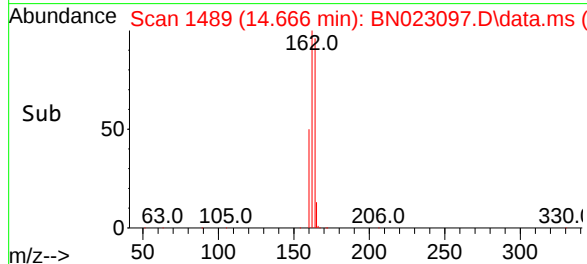
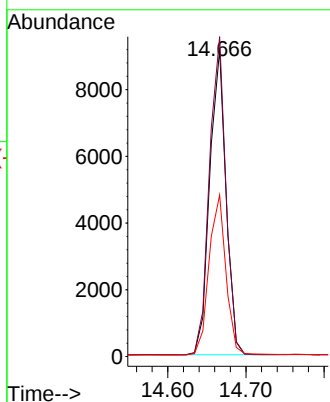
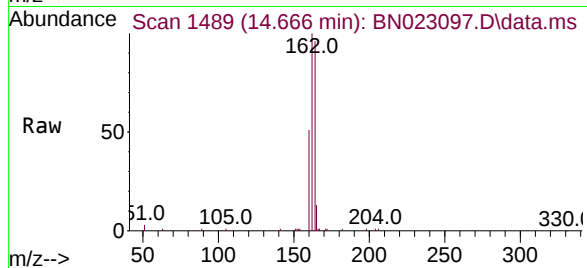




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

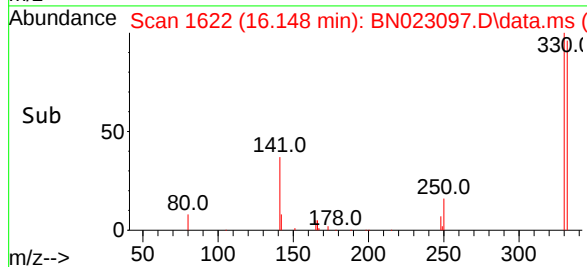
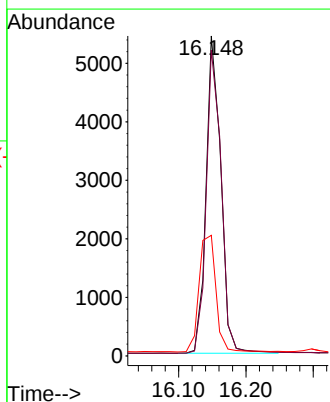
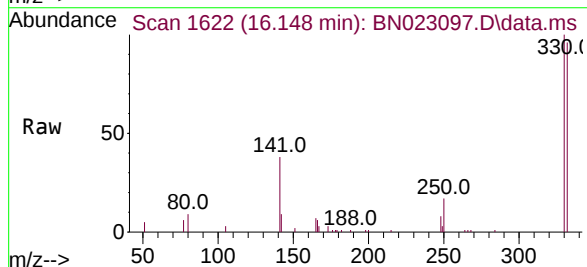
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

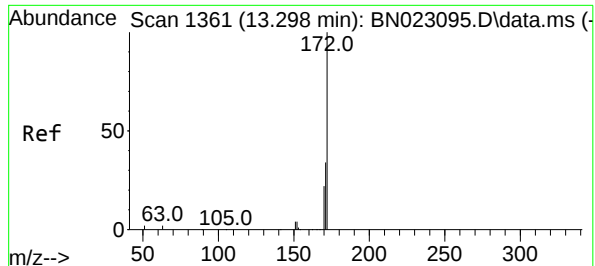
Tgt Ion	Ratio	Lower	Upper
164	100		
162	104.3	83.4	125.0
160	52.7	41.8	62.8



#14
2,4,6-Tribromophenol
Concen: 1.476 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion	Ratio	Lower	Upper
330	100		
332	97.1	77.3	115.9
141	41.8	33.5	50.3

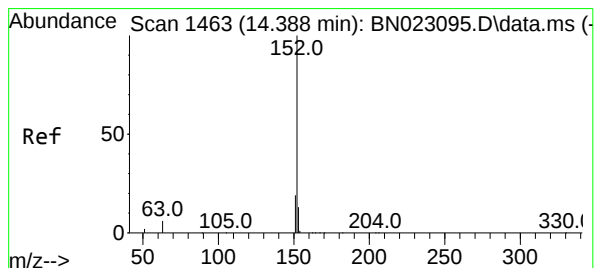
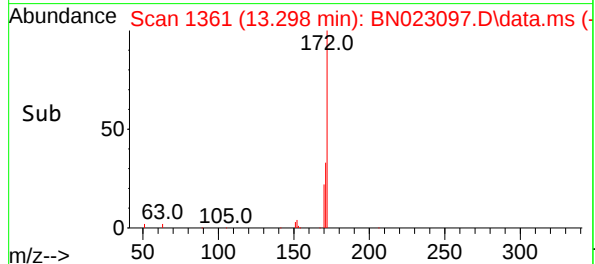
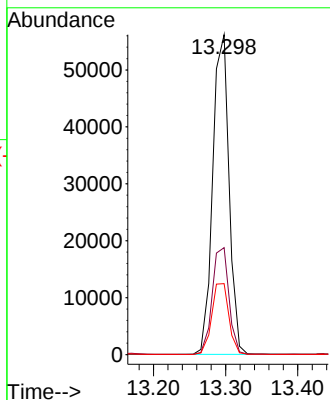
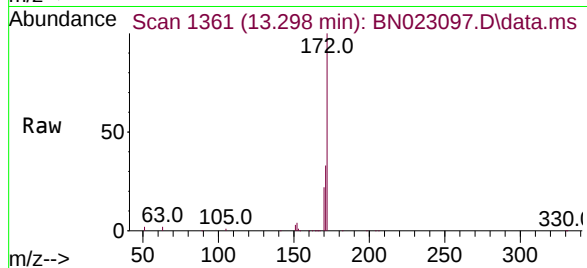




#15
2-Fluorobiphenyl
Concen: 1.503 ng
RT: 13.298 min Scan# 1361
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

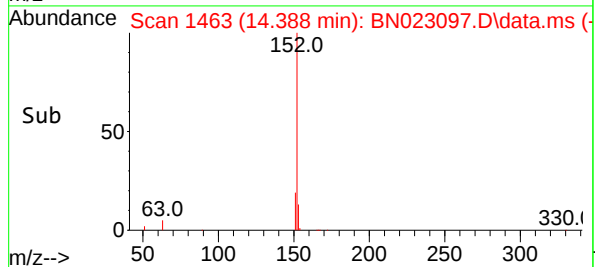
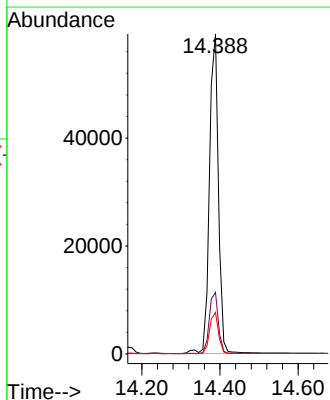
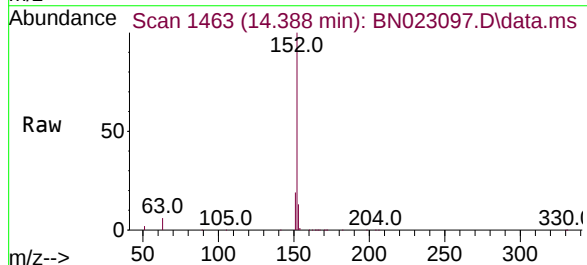
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

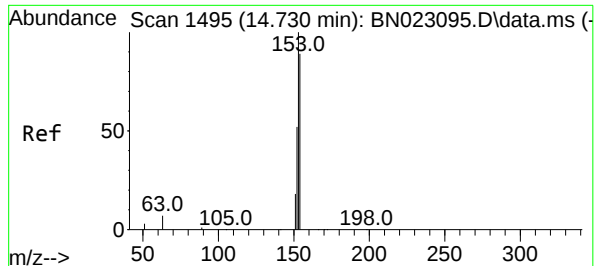
Tgt Ion:172 Resp: 88442
Ion Ratio Lower Upper
172 100
171 33.4 27.4 41.0
170 22.2 17.9 26.9



#16
Acenaphthylene
Concen: 1.509 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:152 Resp: 94028
Ion Ratio Lower Upper
152 100
151 19.5 15.4 23.2
153 12.9 10.3 15.5

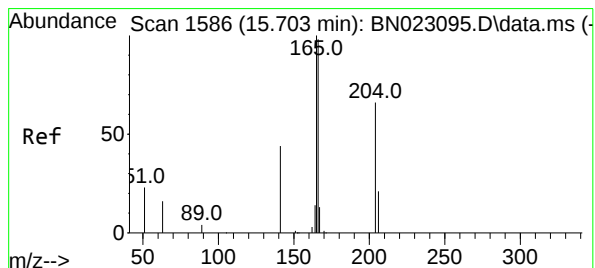
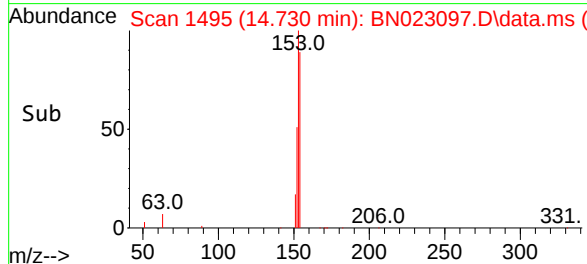
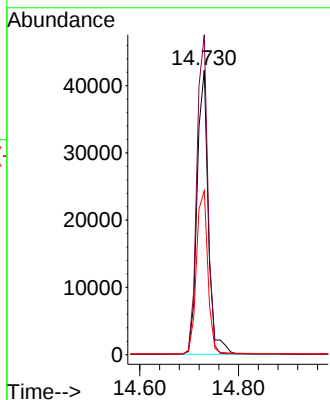
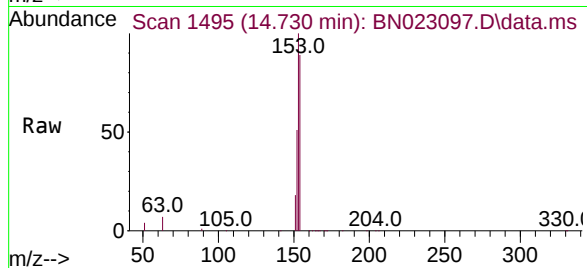




#17
Acenaphthene
Concen: 1.463 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

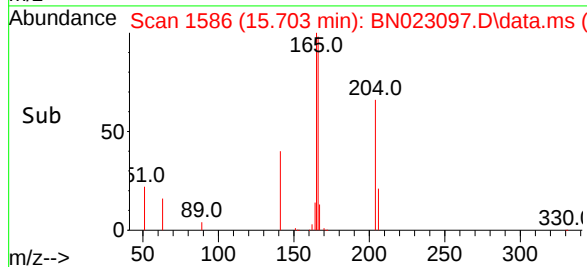
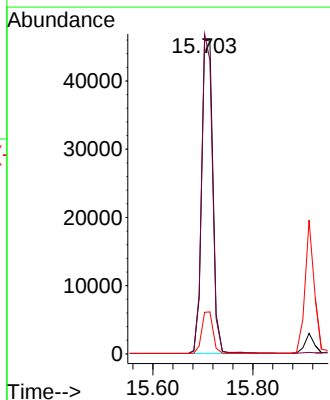
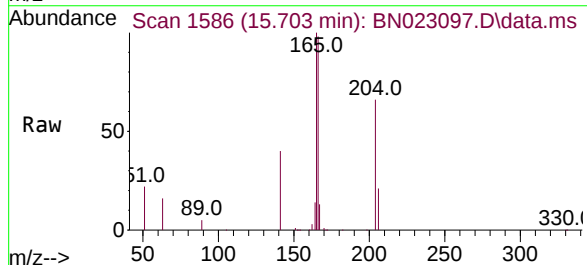
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

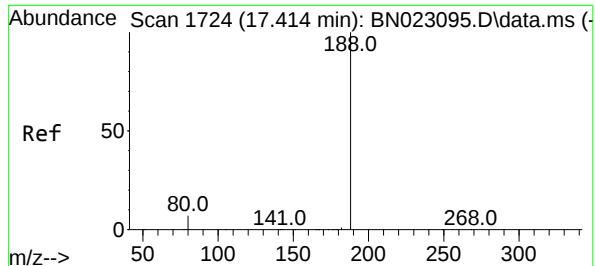
Tgt Ion:154 Resp: 66404
Ion Ratio Lower Upper
154 100
153 109.7 88.6 132.8
152 58.4 48.1 72.1



#18
Fluorene
Concen: 1.486 ng
RT: 15.703 min Scan# 1586
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:166 Resp: 75662
Ion Ratio Lower Upper
166 100
165 99.1 79.8 119.6
167 12.7 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.414 min Scan# 11

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

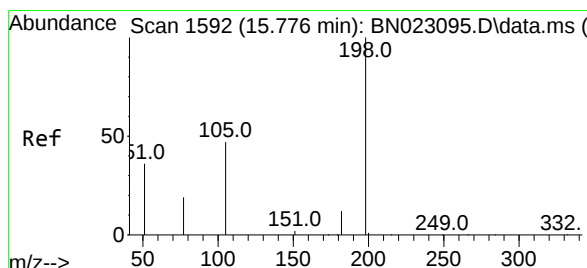
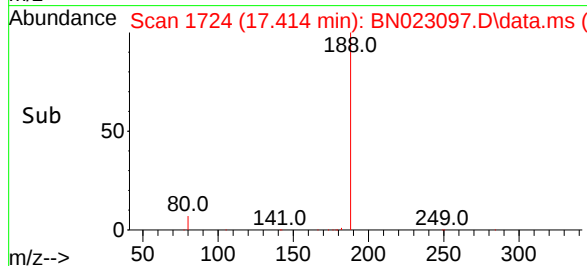
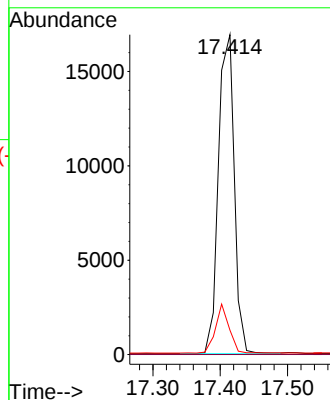
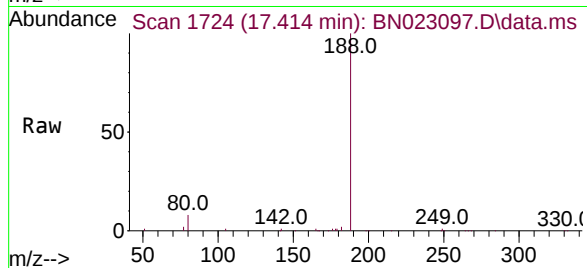
Tgt Ion:188 Resp: 27793

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 7.6 6.1 9.1



#20

4,6-Dinitro-2-methylphenol

Concen: 1.801 ng

RT: 15.776 min Scan# 1592

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

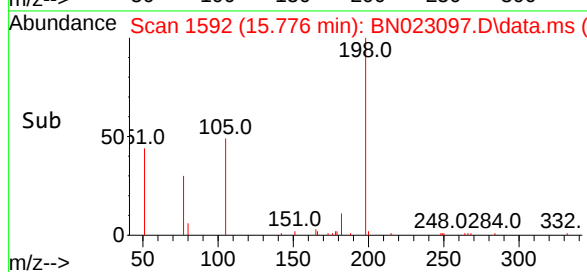
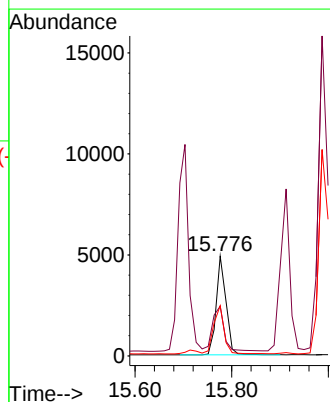
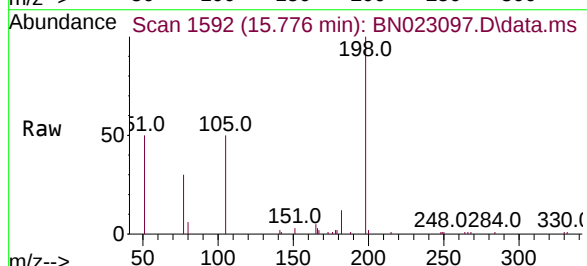
Tgt Ion:198 Resp: 6771

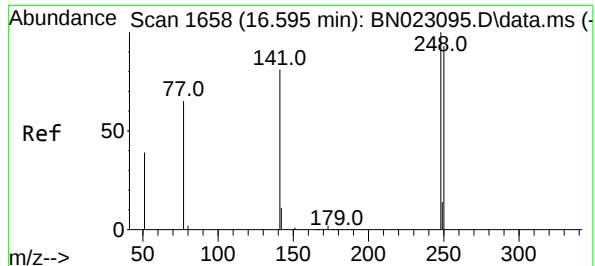
Ion Ratio Lower Upper

198 100

51 49.8 57.0 85.4#

105 50.3 47.2 70.8

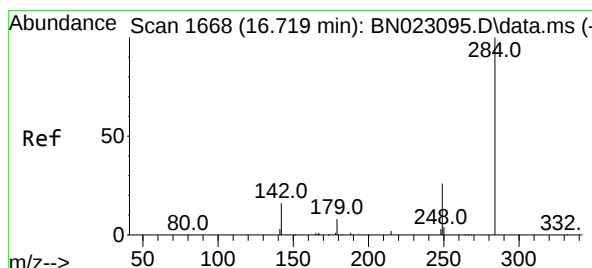
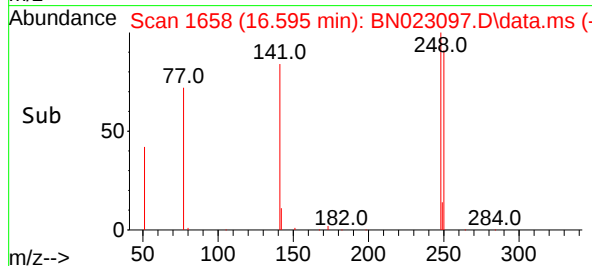
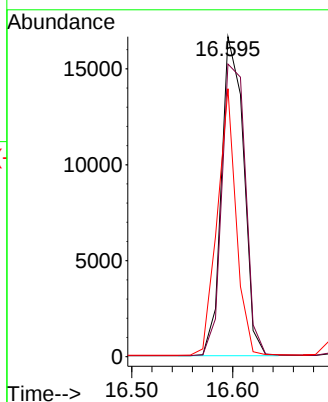
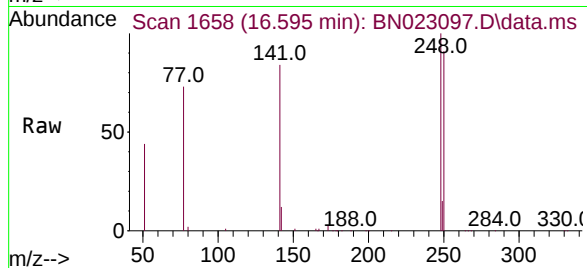




#21
4-Bromophenyl-phenylether
Concen: 1.520 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

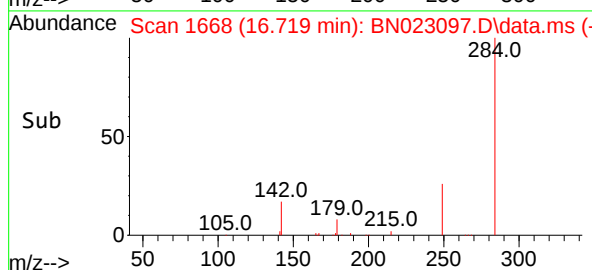
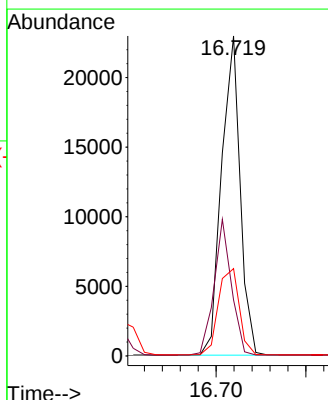
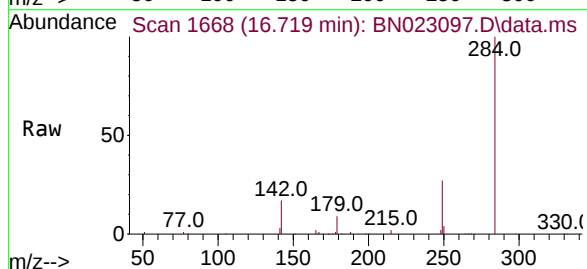
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

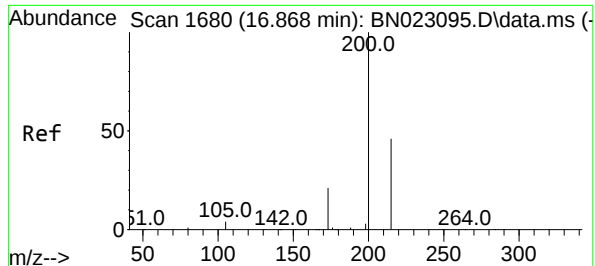
Tgt Ion	Ratio	Lower	Upper
248	100		
250	91.4	74.3	111.5
141	83.7	65.0	97.6



#22
Hexachlorobenzene
Concen: 1.515 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion	Ratio	Lower	Upper
284	100		
142	39.6	31.0	46.4
249	30.5	24.4	36.6

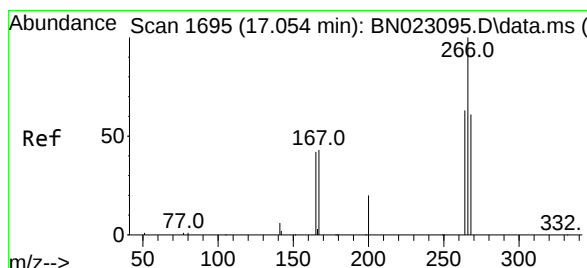
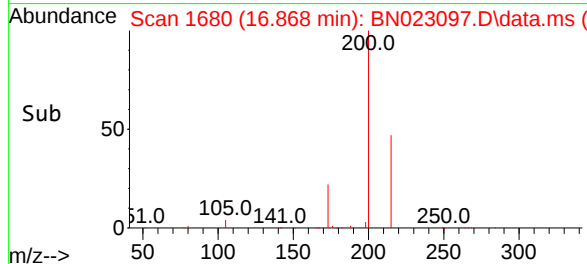
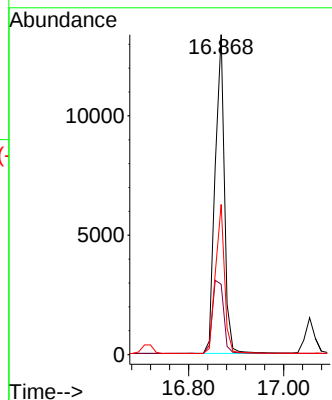
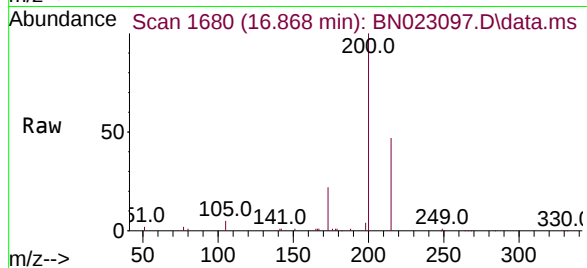




#23
Atrazine
Concen: 1.490 ng
RT: 16.868 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

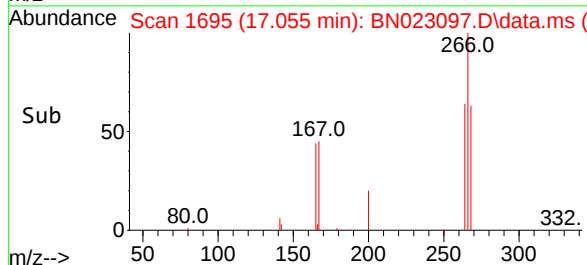
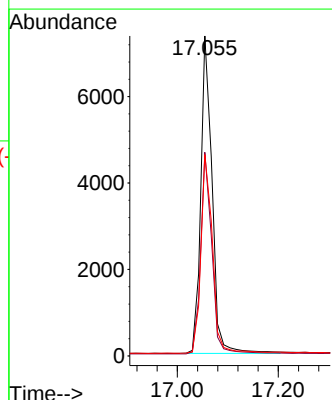
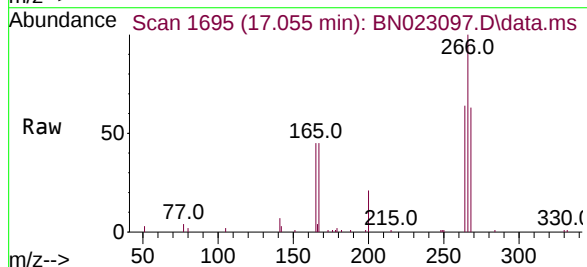
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

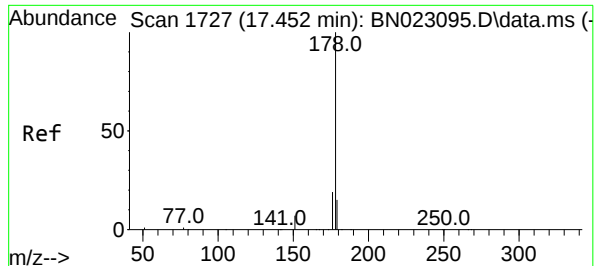
Tgt Ion:200 Resp: 18156
Ion Ratio Lower Upper
200 100
173 22.0 18.2 27.4
215 46.9 38.0 57.0



#24
Pentachlorophenol
Concen: 1.778 ng
RT: 17.055 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:266 Resp: 11351
Ion Ratio Lower Upper
266 100
264 62.8 50.1 75.1
268 63.9 49.7 74.5





#25

Phenanthrene

Concen: 1.490 ng

RT: 17.452 min Scan# 1727

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

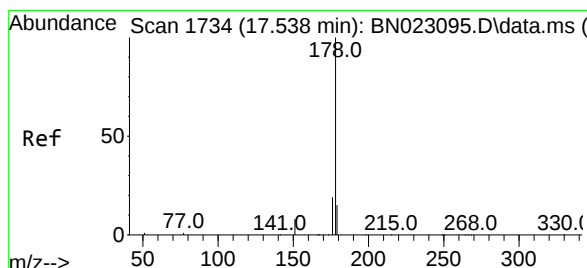
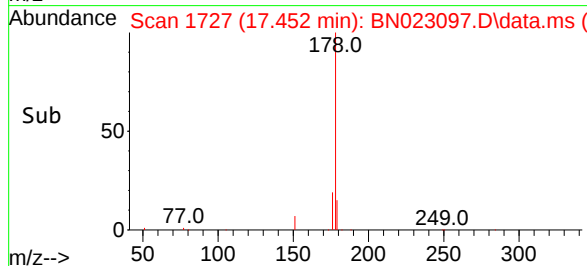
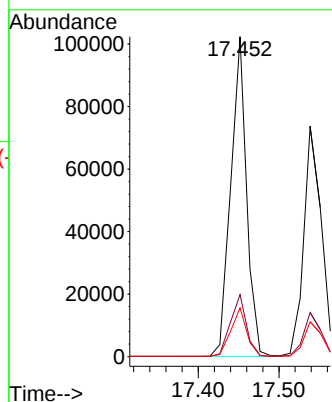
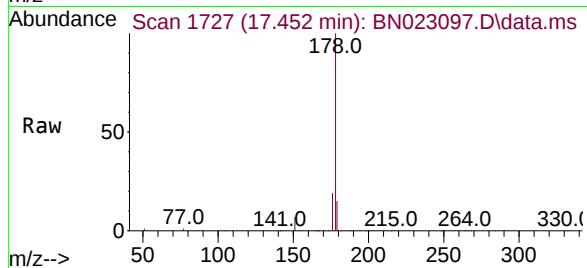
Tgt Ion:178 Resp: 139569

Ion Ratio Lower Upper

178 100

176 19.4 15.4 23.2

179 15.2 12.2 18.2



#26

Anthracene

Concen: 1.528 ng

RT: 17.539 min Scan# 1734

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

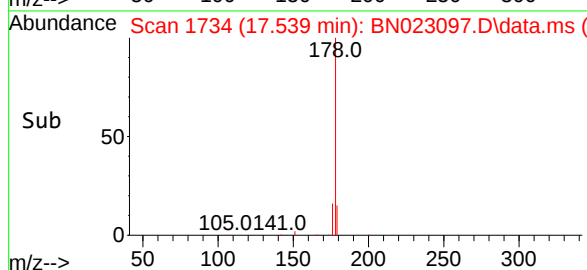
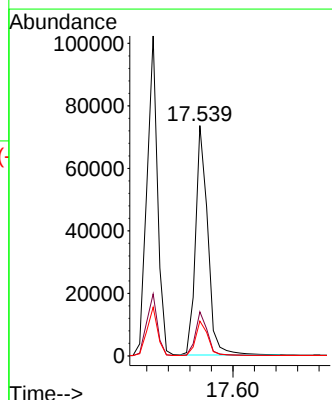
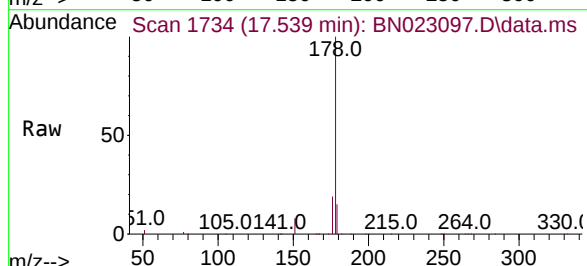
Tgt Ion:178 Resp: 115325

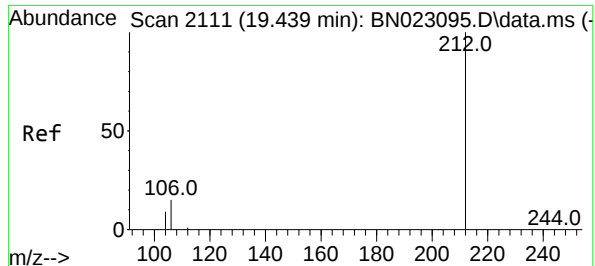
Ion Ratio Lower Upper

178 100

176 18.8 15.1 22.7

179 15.2 12.2 18.4

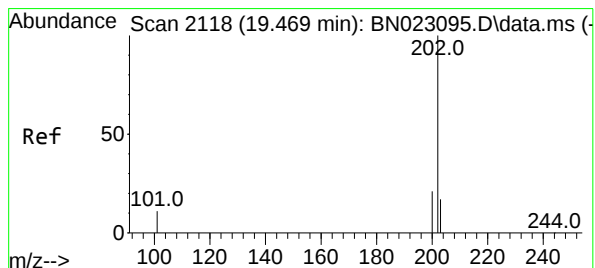
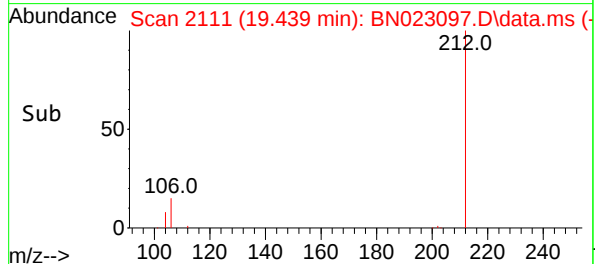
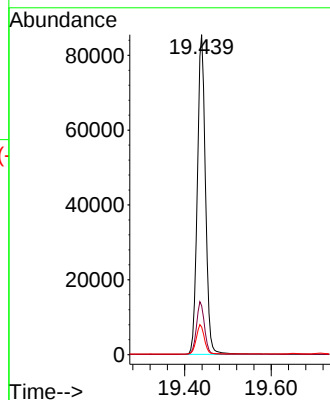
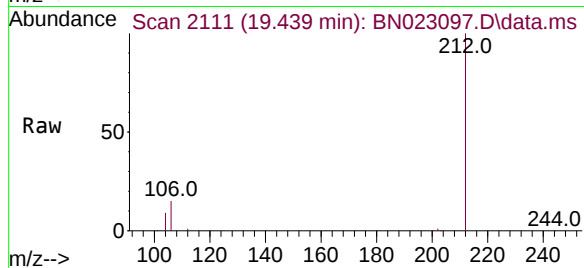




#27
Fluoranthene-d10
Concen: 1.463 ng
RT: 19.439 min Scan# 2111
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

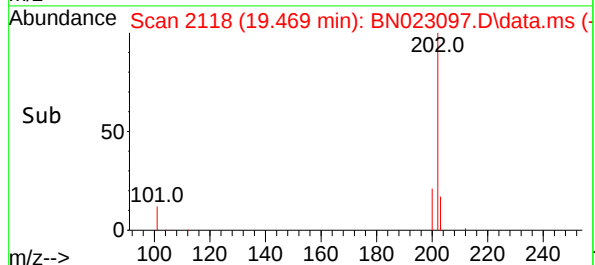
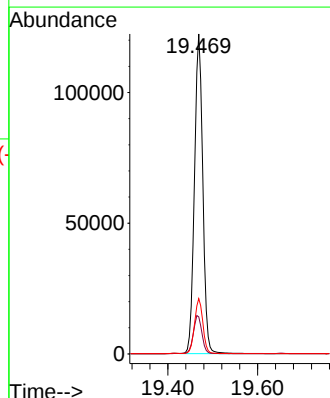
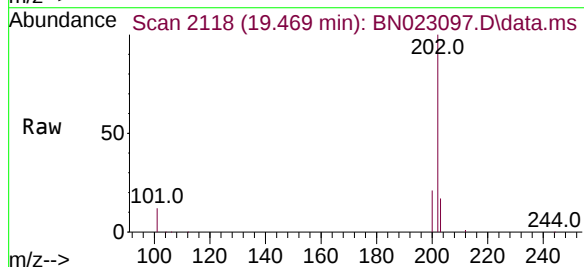
Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

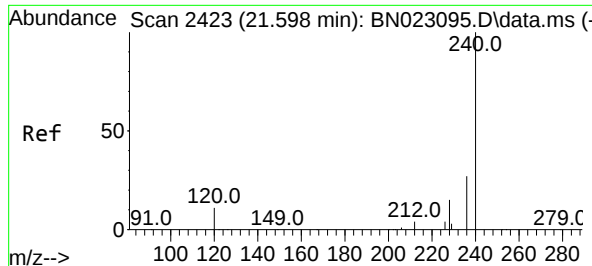
Tgt Ion:212 Resp: 111381
Ion Ratio Lower Upper
212 100
106 16.4 13.0 19.4
104 9.2 7.5 11.3



#28
Fluoranthene
Concen: 1.534 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023097.D
Acq: 08 Dec 2022 16:26

Tgt Ion:202 Resp: 156823
Ion Ratio Lower Upper
202 100
101 12.4 9.7 14.5
203 17.2 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.598 min Scan# 2423

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

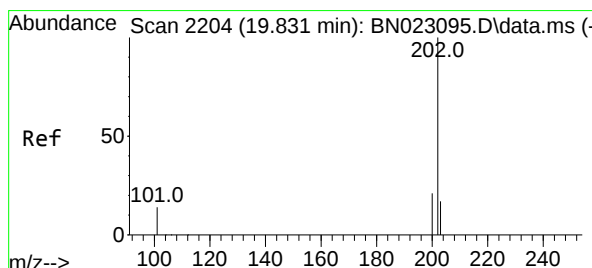
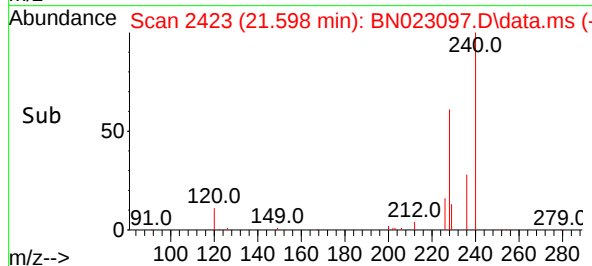
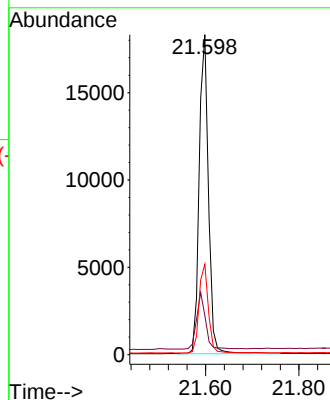
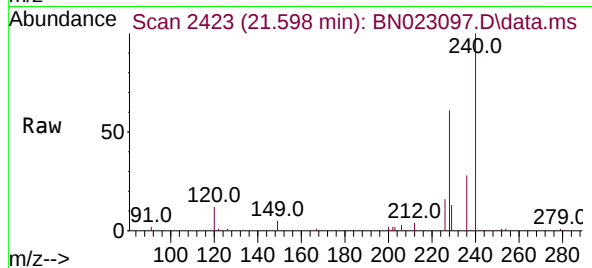
Tgt Ion:240 Resp: 24897

Ion Ratio Lower Upper

240 100

120 12.2 10.1 15.1

236 28.3 22.2 33.4



#30

Pyrene

Concen: 1.465 ng

RT: 19.831 min Scan# 2204

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

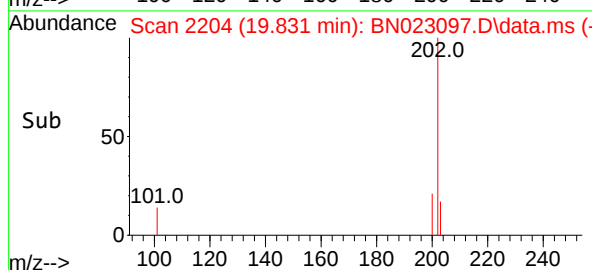
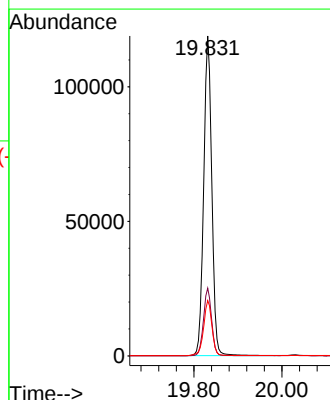
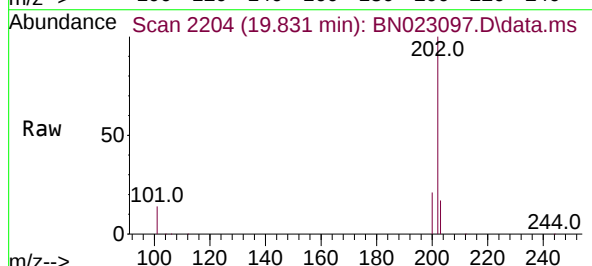
Tgt Ion:202 Resp: 152036

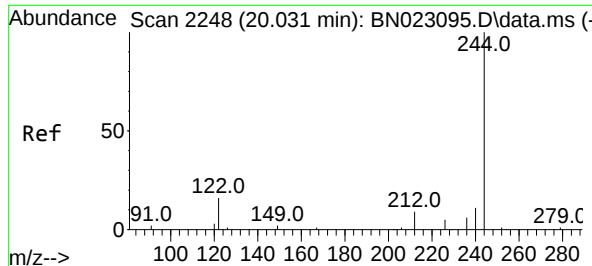
Ion Ratio Lower Upper

202 100

200 21.2 16.9 25.3

203 17.7 14.2 21.4

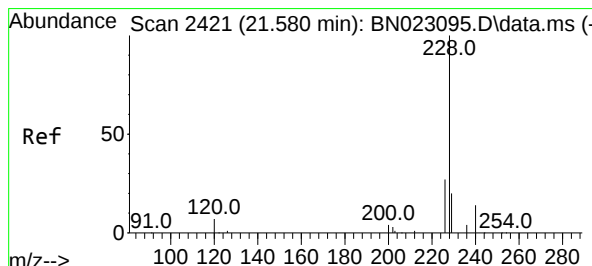
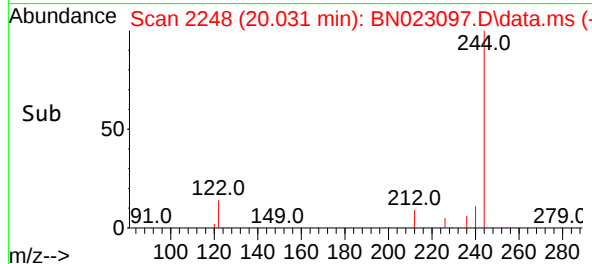
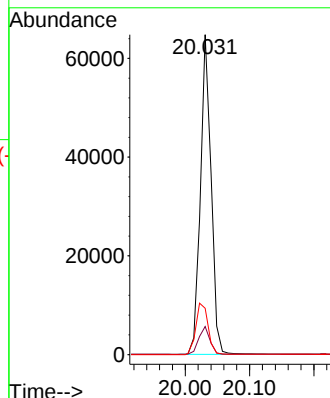
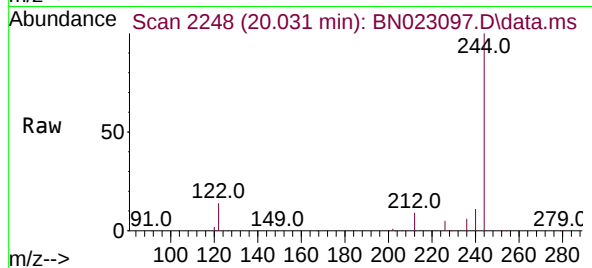




#31
 Terphenyl-d14
 Concen: 1.454 ng
 RT: 20.031 min Scan# 21
 Delta R.T. 0.000 min
 Lab File: BN023097.D
 Acq: 08 Dec 2022 16:26

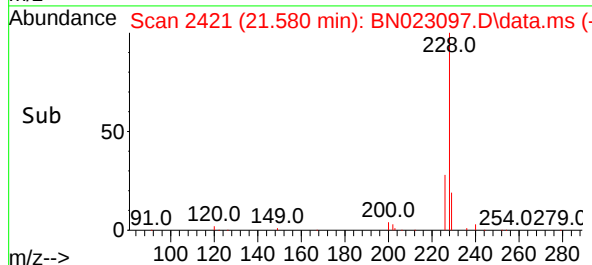
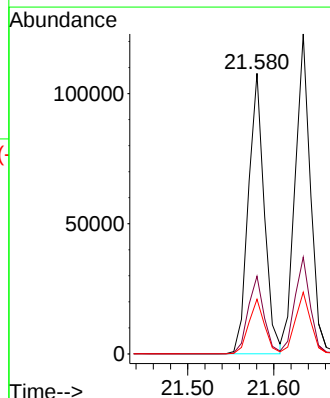
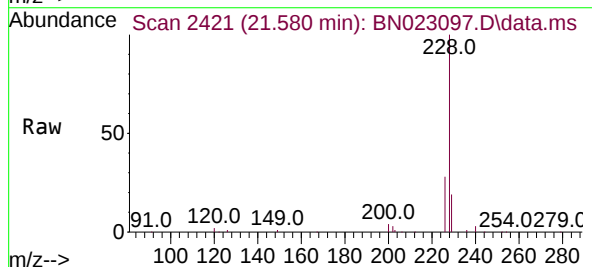
Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC1.6

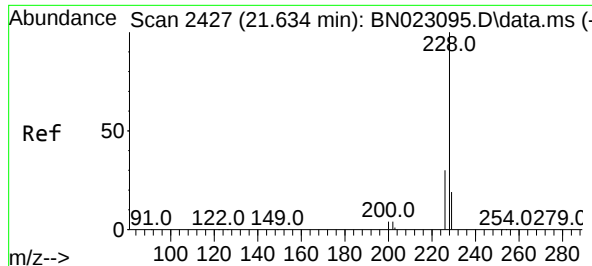
Tgt Ion:244 Resp: 68689
 Ion Ratio Lower Upper
 244 100
 212 8.8 7.6 11.4
 122 14.5 12.6 18.8



#32
 Benzo(a)anthracene
 Concen: 1.497 ng
 RT: 21.580 min Scan# 2421
 Delta R.T. 0.000 min
 Lab File: BN023097.D
 Acq: 08 Dec 2022 16:26

Tgt Ion:228 Resp: 137563
 Ion Ratio Lower Upper
 228 100
 226 27.7 22.0 33.0
 229 19.5 15.8 23.8





#33

Chrysene

Concen: 1.482 ng

RT: 21.634 min Scan# 2427

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

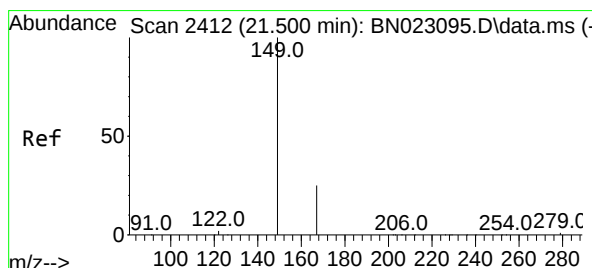
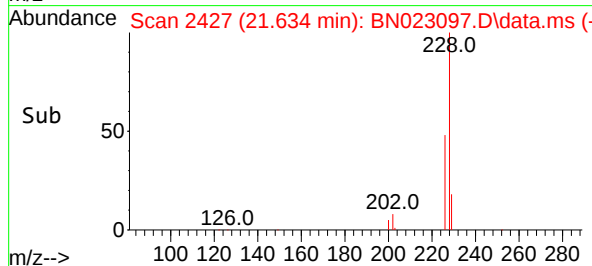
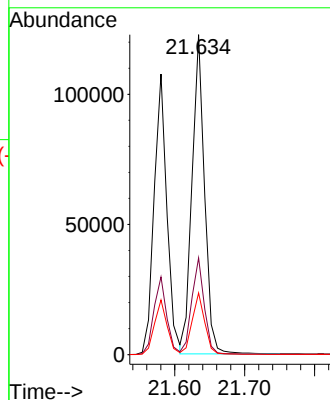
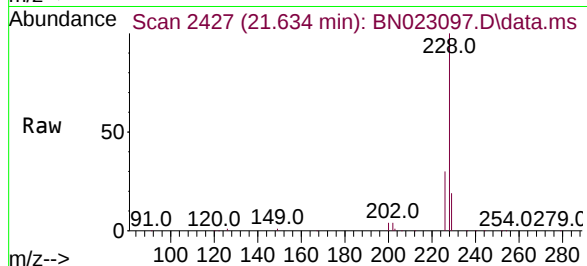
Tgt Ion:228 Resp: 152270

Ion Ratio Lower Upper

228 100

226 30.2 24.4 36.6

229 19.3 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 1.350 ng

RT: 21.500 min Scan# 2412

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

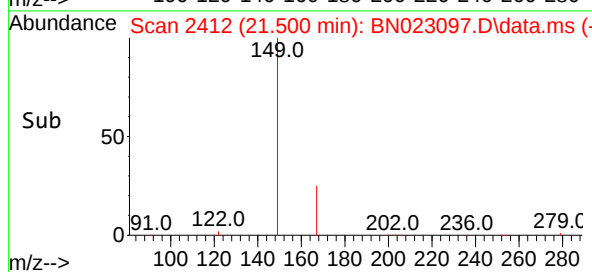
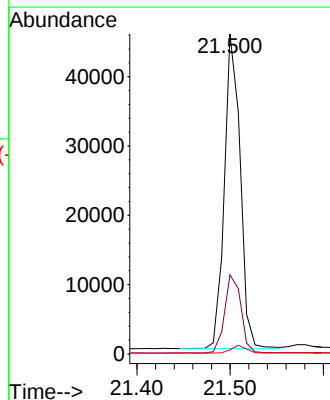
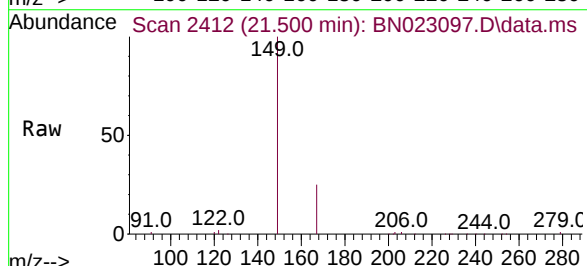
Tgt Ion:149 Resp: 53634

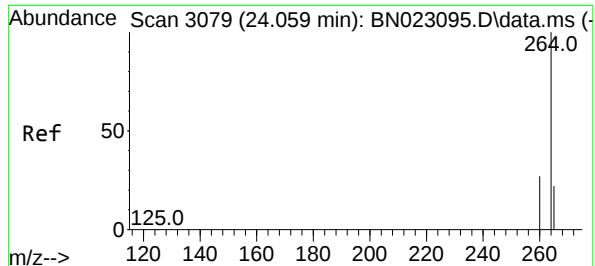
Ion Ratio Lower Upper

149 100

167 25.6 20.2 30.2

279 2.4 2.3 3.5





#35

Perylene-d12

Concen: 0.400 ng

RT: 24.059 min Scan# 3079

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

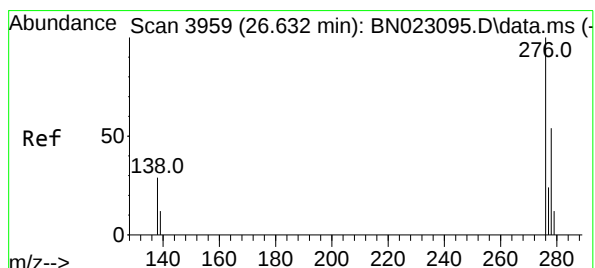
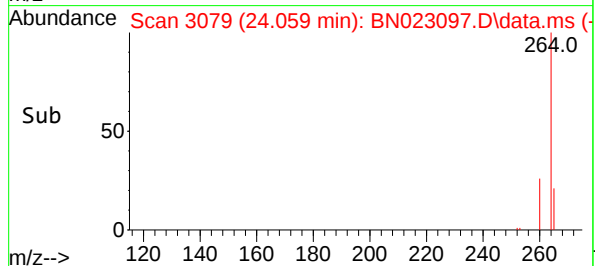
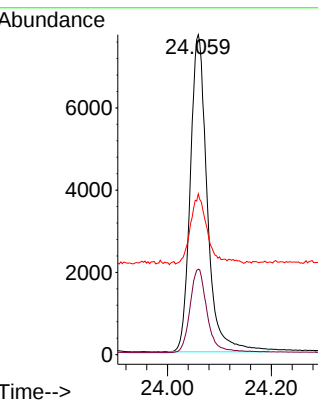
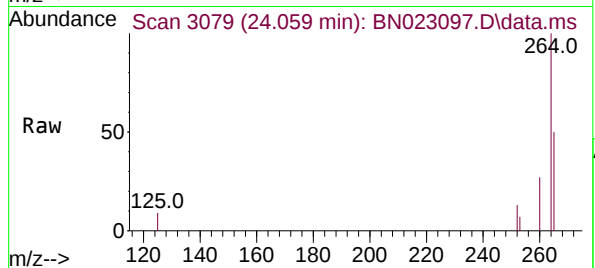
Tgt Ion:264 Resp: 17546

Ion Ratio Lower Upper

264 100

260 26.7 21.7 32.5

265 50.2 43.2 64.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 1.534 ng

RT: 26.632 min Scan# 3959

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

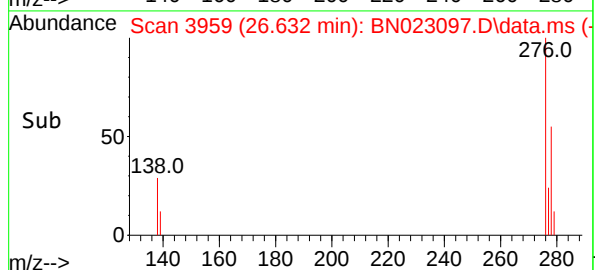
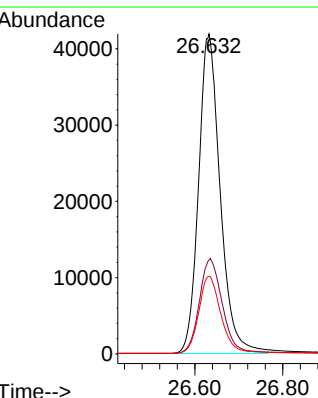
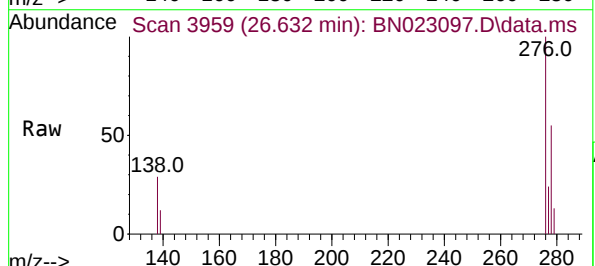
Tgt Ion:276 Resp: 143051

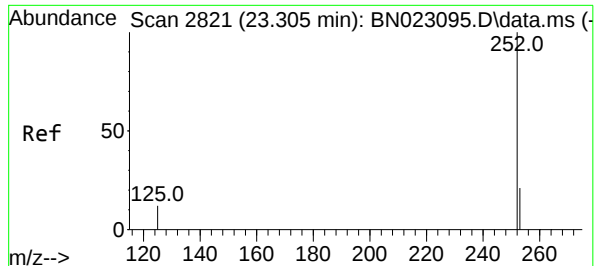
Ion Ratio Lower Upper

276 100

138 31.4 25.0 37.6

277 24.7 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 1.618 ng

RT: 23.305 min Scan# 2821

Delta R.T. 0.000 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6

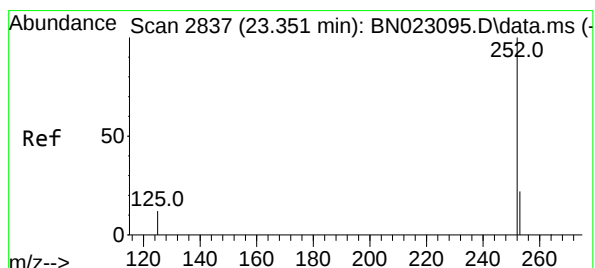
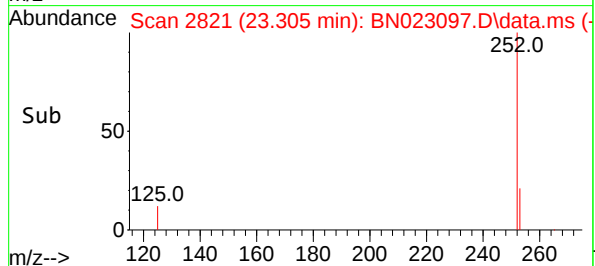
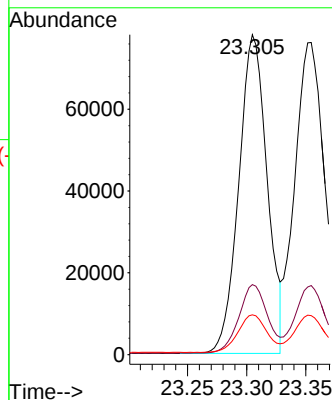
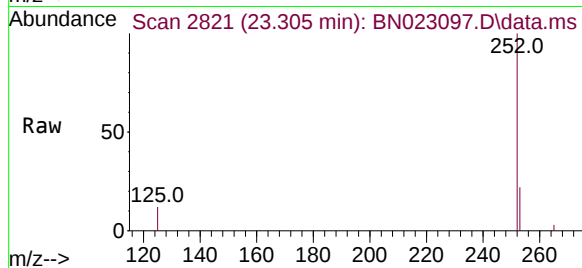
Tgt Ion:252 Resp: 129768

Ion Ratio Lower Upper

252 100

253 21.9 19.0 28.4

125 12.5 12.8 19.2#



#38

Benzo(k)fluoranthene

Concen: 1.651 ng

RT: 23.355 min Scan# 2838

Delta R.T. 0.003 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

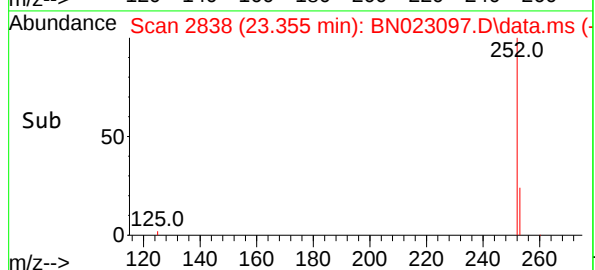
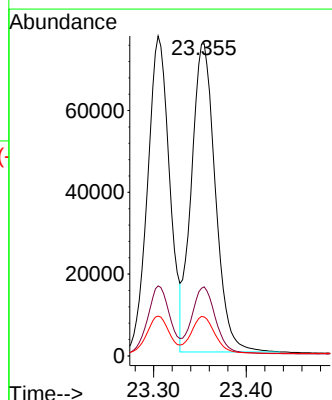
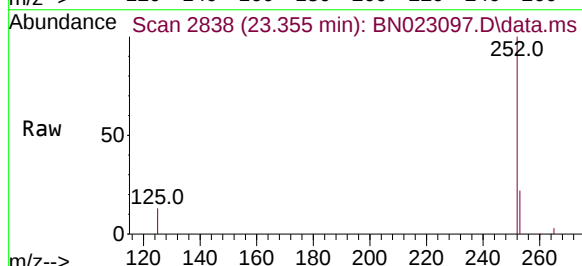
Tgt Ion:252 Resp: 135698

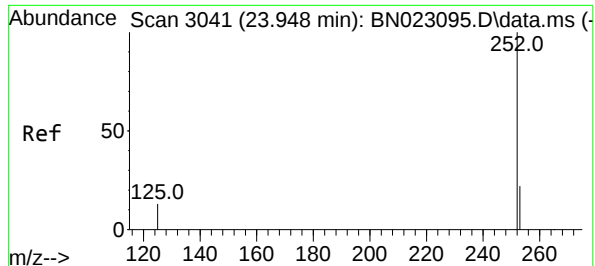
Ion Ratio Lower Upper

252 100

253 22.1 19.1 28.7

125 12.5 12.5 18.7





#39

Benzo(a)pyrene

Concen: 1.485 ng

RT: 23.948 min Scan# 3041

Delta R.T. 0.000 min

Lab File: BN023097.D

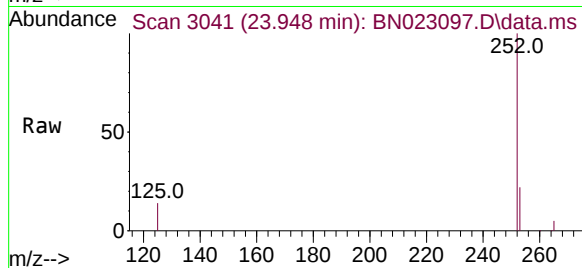
Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6



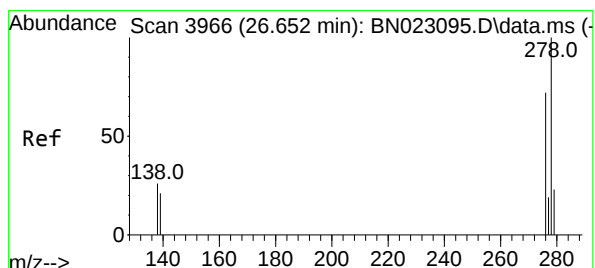
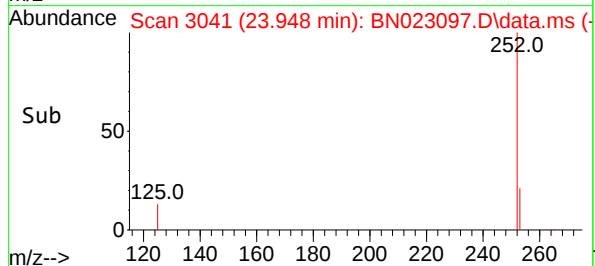
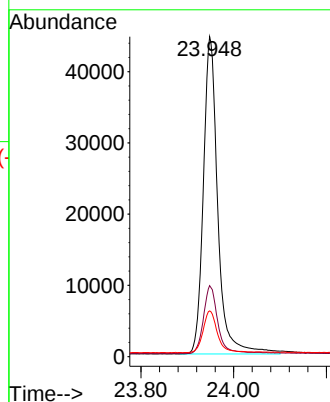
Tgt Ion:252 Resp: 96478

Ion Ratio Lower Upper

252 100

253 22.2 20.6 30.8

125 14.3 15.8 23.8#



#40

Dibenzo(a,h)anthracene

Concen: 1.582 ng

RT: 26.650 min Scan# 3965

Delta R.T. -0.003 min

Lab File: BN023097.D

Acq: 08 Dec 2022 16:26

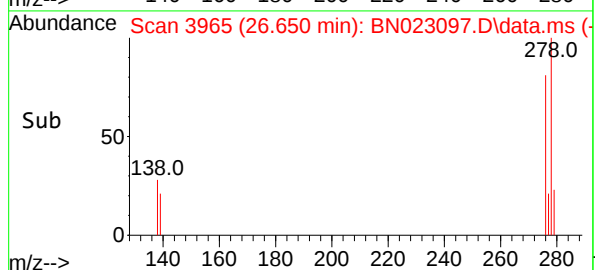
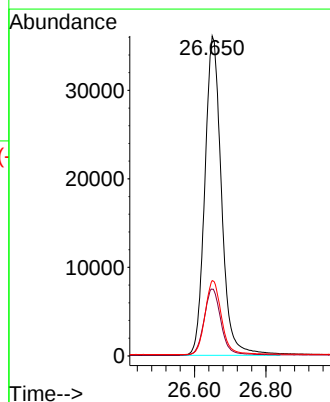
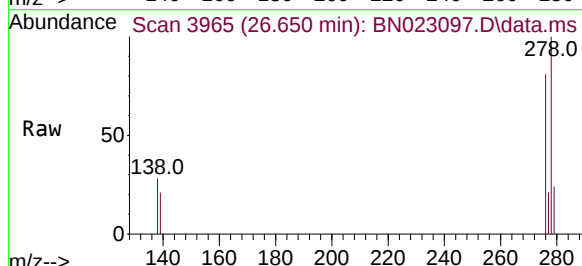
Tgt Ion:278 Resp: 116720

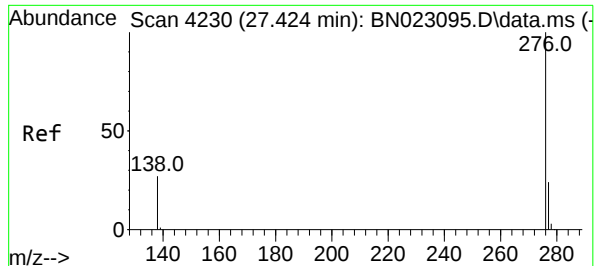
Ion Ratio Lower Upper

278 100

139 20.9 17.5 26.3

279 23.5 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 1.608 ng

RT: 27.421 min Scan# 41

Delta R.T. -0.003 min

Lab File: BN023097.D

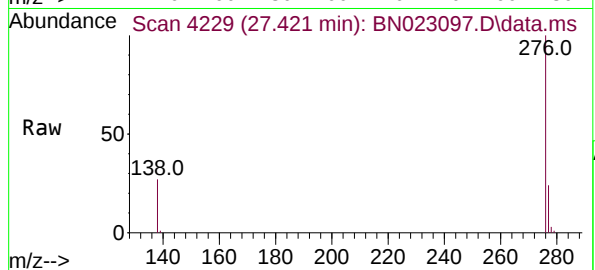
Acq: 08 Dec 2022 16:26

Instrument :

BNA_N

ClientSampleId :

SSTDICC1.6



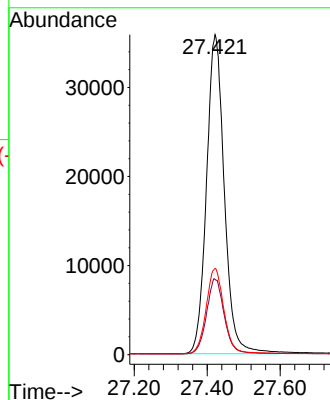
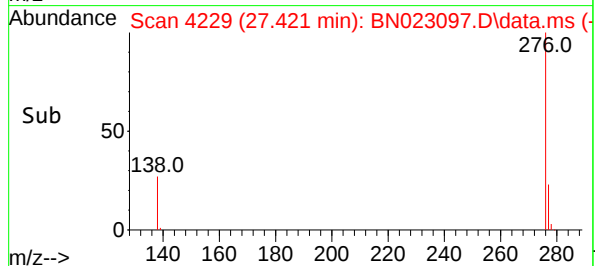
Tgt Ion:276 Resp: 121454

Ion Ratio Lower Upper

276 100

277 23.5 19.9 29.9

138 26.9 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023098.D
 Acq On : 08 Dec 2022 17:03
 Operator : CG/JU
 Sample : SSTDICC3.2
 Misc :
 ALS Vial : 7 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDICC3.2

Quant Time: Dec 09 07:28:55 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:25:53 2022
 Response via : Initial Calibration

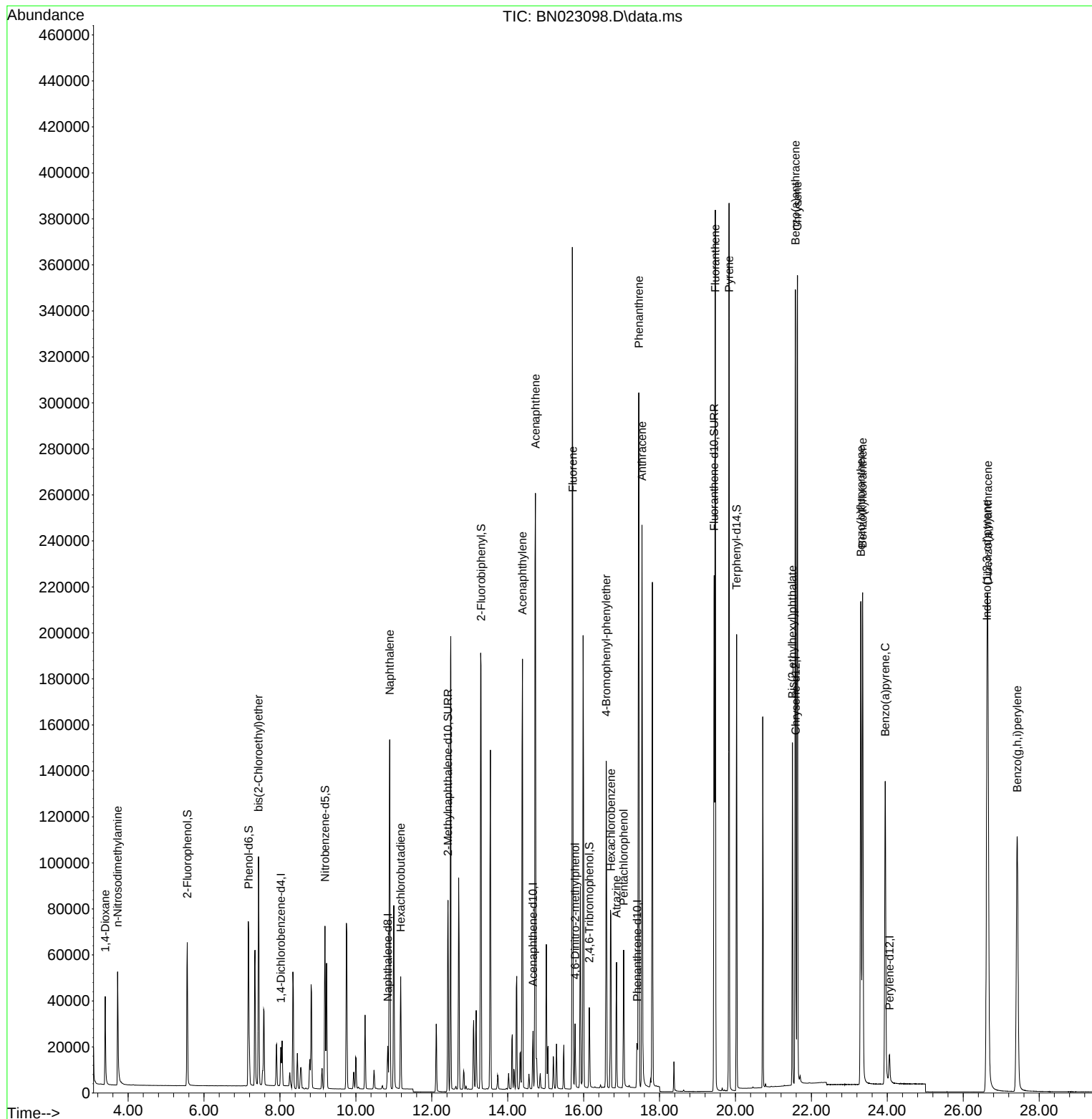
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.020	152	8090	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	23133	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	13470	0.400	ng	0.00
19) Phenanthrene-d10	17.414	188	28191	0.400	ng	0.00
29) Chrysene-d12	21.589	240	26247	0.400	ng	# 0.00
35) Perylene-d12	24.056	264	17877	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	49643	2.653	ng	0.00
5) Phenol-d6	7.175	99	65990	2.805	ng	0.00
8) Nitrobenzene-d5	9.185	82	52766	3.040	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	138357	3.168	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	18487	3.249	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	173988	2.910	ng	0.00
27) Fluoranthene-d10	19.439	212	234419	3.037	ng	0.00
31) Terphenyl-d14	20.031	244	139156	2.793	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.398	88	25353	2.527	ng	Qvalue 98
3) n-Nitrosodimethylamine	3.723	42	28858	2.941	ng	# 96
6) bis(2-Chloroethyl)ether	7.435	93	69322	2.669	ng	98
9) Naphthalene	10.893	128	195994	2.856	ng	99
10) Hexachlorobutadiene	11.181	225	36427	2.827	ng	# 100
16) Acenaphthylene	14.388	152	201290	3.180	ng	100
17) Acenaphthene	14.730	154	136104	2.951	ng	97
18) Fluorene	15.714	166	154549	2.988	ng	99
20) 4,6-Dinitro-2-methylph...	15.776	198	16007	4.197	ng	# 81
21) 4-Bromophenyl-phenylether	16.595	248	52085	3.067	ng	98
22) Hexachlorobenzene	16.719	284	66183	3.001	ng	100
23) Atrazine	16.868	200	40499	3.278	ng	98
24) Pentachlorophenol	17.054	266	26196	4.044	ng	99
25) Phenanthrene	17.452	178	287541	3.026	ng	100
26) Anthracene	17.538	178	247626	3.234	ng	100
28) Fluoranthene	19.469	202	324068	3.126	ng	100
30) Pyrene	19.831	202	320665	2.930	ng	100
32) Benzo(a)anthracene	21.580	228	298657	3.082	ng	99
33) Chrysene	21.634	228	307277	2.838	ng	99
34) Bis(2-ethylhexyl)phtha...	21.500	149	124141	2.965	ng	99
36) Indeno(1,2,3-cd)pyrene	26.626	276	293290	3.087	ng	100
37) Benzo(b)fluoranthene	23.302	252	268022	3.280	ng	# 94
38) Benzo(k)fluoranthene	23.351	252	279632	3.339	ng	# 94
39) Benzo(a)pyrene	23.945	252	206454	3.118	ng	# 90
40) Dibenzo(a,h)anthracene	26.649	278	236723	3.149	ng	97
41) Benzo(g,h,i)perylene	27.421	276	245390	3.189	ng	98

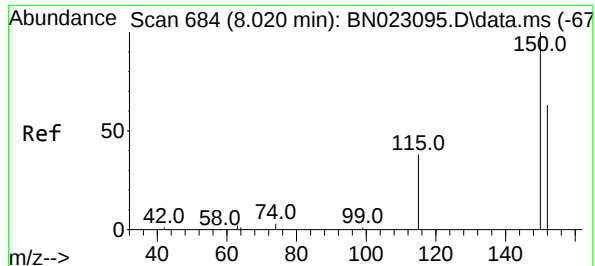
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Data File : BN023098.D
Acq On : 08 Dec 2022 17:03
Operator : CG/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Dec 09 07:28:55 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

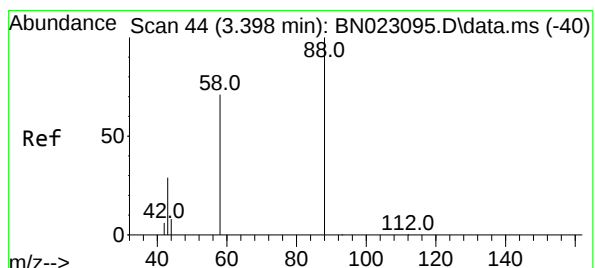
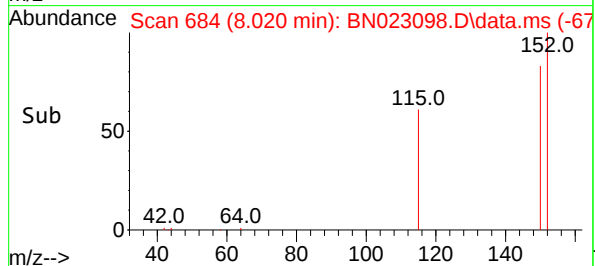
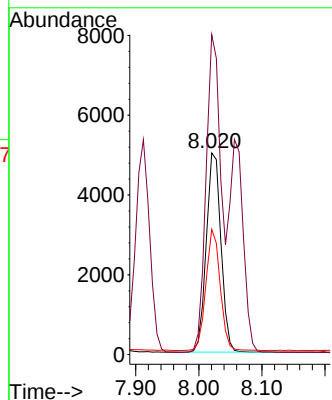
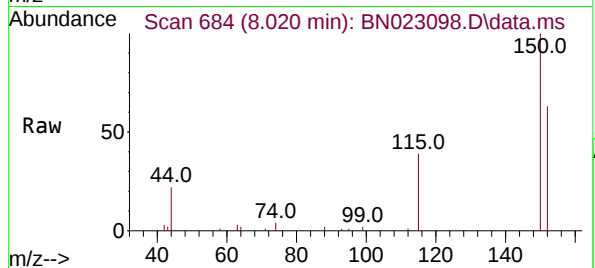




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.020 min Scan# 684
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

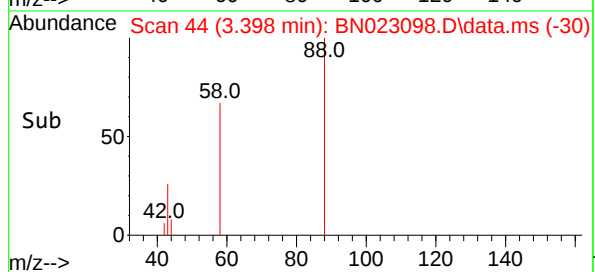
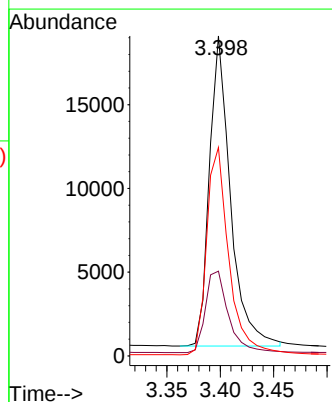
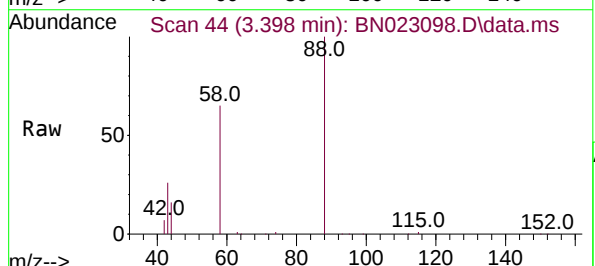
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

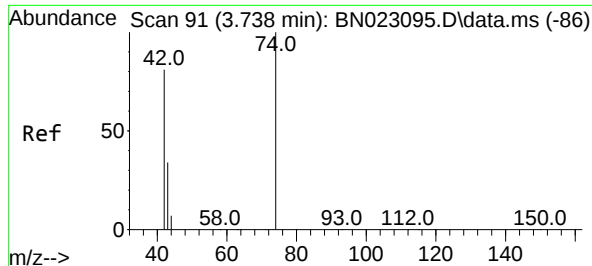
Tgt Ion:152 Resp: 8090
Ion Ratio Lower Upper
152 100
150 158.7 125.6 188.4
115 62.1 49.0 73.4



#2
1,4-Dioxane
Concen: 2.527 ng
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion: 88 Resp: 25353
Ion Ratio Lower Upper
88 100
43 28.7 23.3 34.9
58 70.4 58.0 87.0

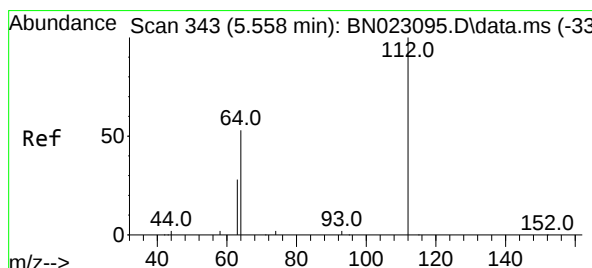
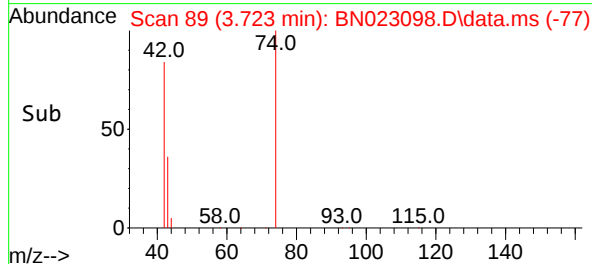
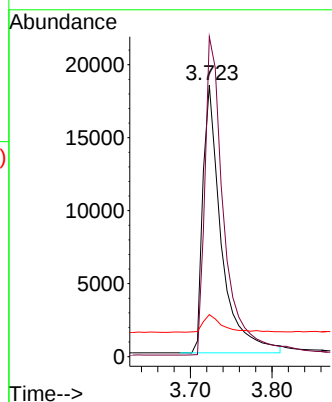
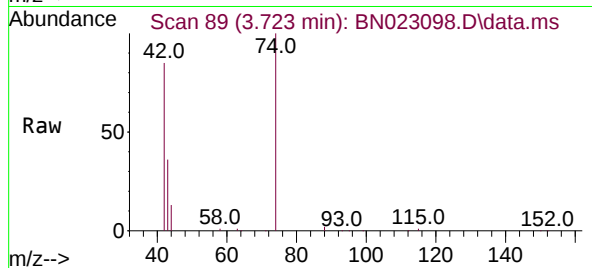




#3
n-Nitrosodimethylamine
Concen: 2.941 ng
RT: 3.723 min Scan# 89
Delta R.T. -0.014 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

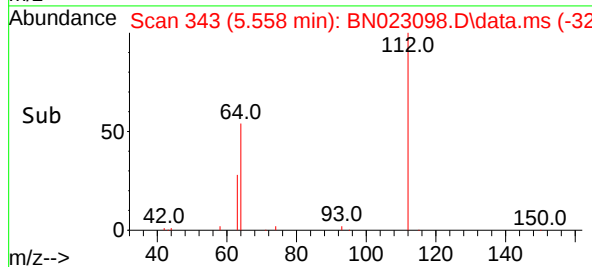
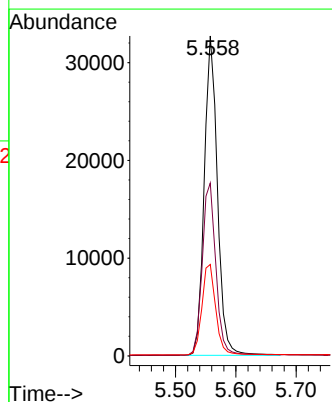
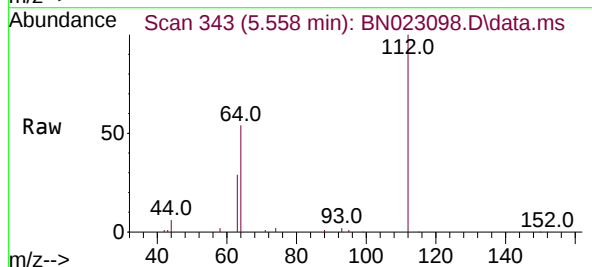
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

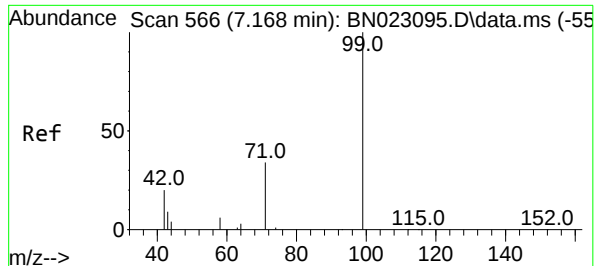
Tgt Ion: 42 Resp: 28858
Ion Ratio Lower Upper
42 100
74 123.3 95.8 143.6
44 7.1 8.4 12.6#



#4
2-Fluorophenol
Concen: 2.653 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion: 112 Resp: 49643
Ion Ratio Lower Upper
112 100
64 55.8 44.4 66.6
63 29.8 23.7 35.5

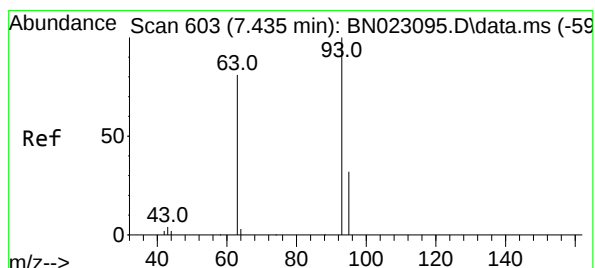
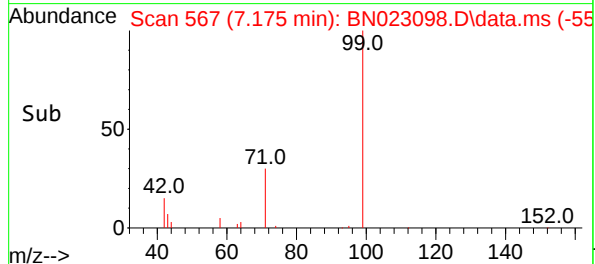
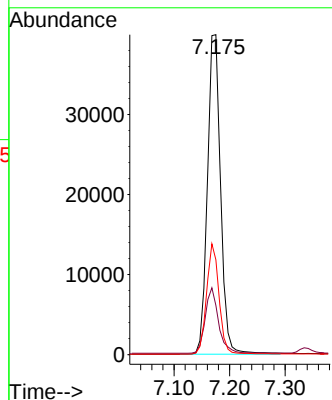
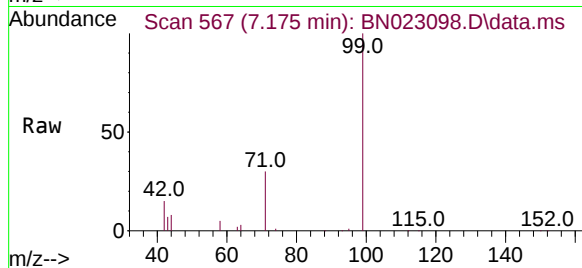




#5
Phenol-d6
Concen: 2.805 ng
RT: 7.175 min Scan# 567
Delta R.T. 0.007 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

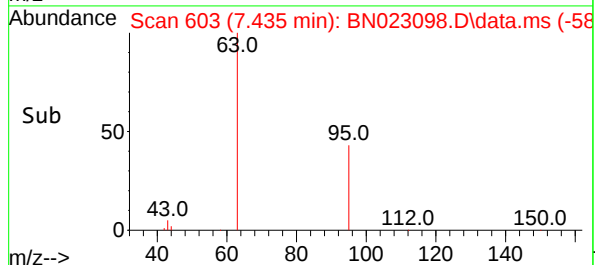
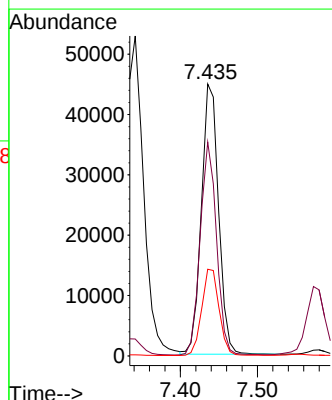
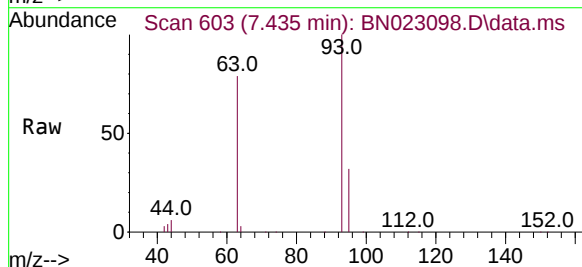
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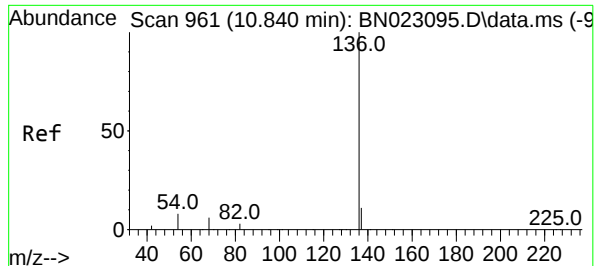
Tgt Ion: 99 Resp: 65990
Ion Ratio Lower Upper
99 100
42 20.8 16.3 24.5
71 32.7 26.5 39.7



#6
bis(2-Chloroethyl)ether
Concen: 2.669 ng
RT: 7.435 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion: 93 Resp: 69322
Ion Ratio Lower Upper
93 100
63 74.9 58.1 87.1
95 32.3 25.2 37.8

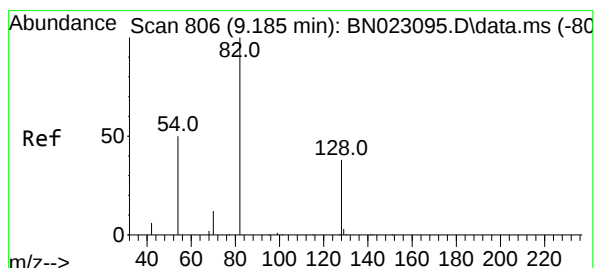
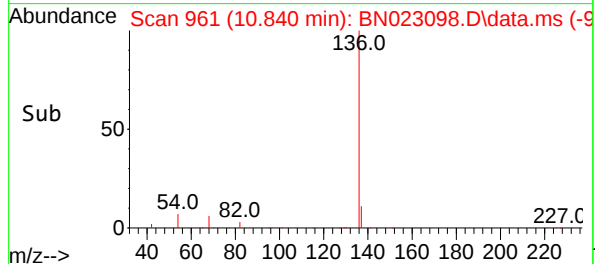
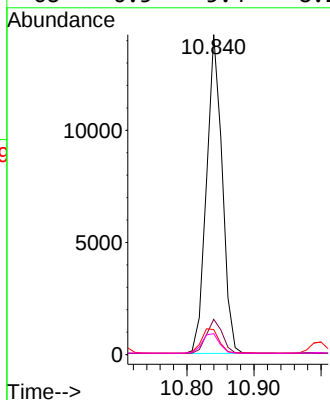
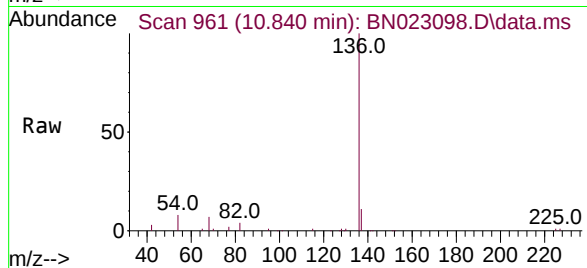




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

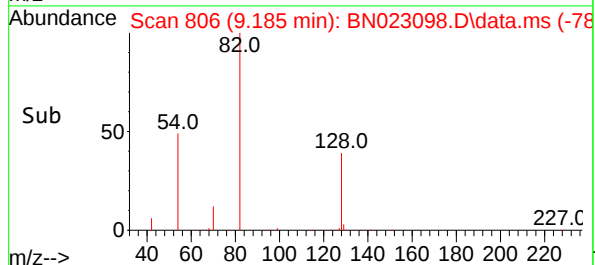
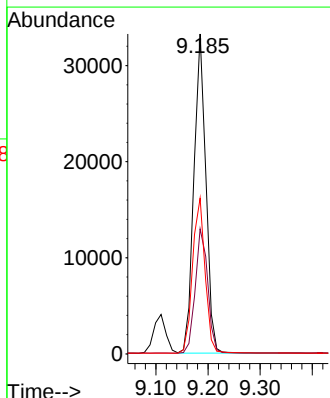
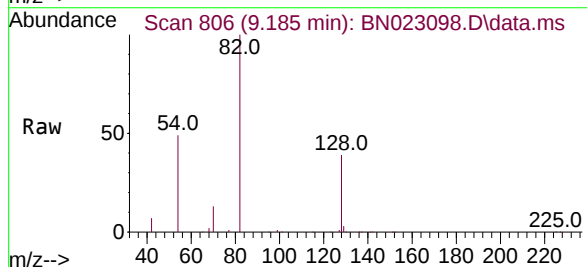
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

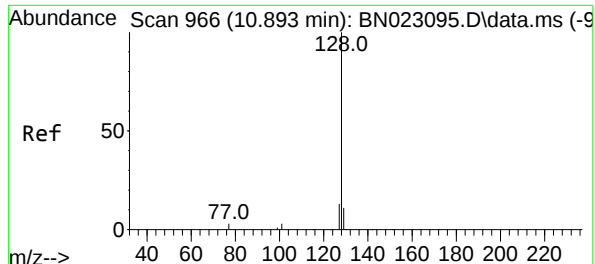
Tgt Ion:	136	Resp:	23133
Ion Ratio	Lower	Upper	
136	100		
137	11.0	9.0	13.4
54	7.9	6.5	9.7
68	6.5	5.4	8.2



#8
Nitrobenzene-d5
Concen: 3.040 ng
RT: 9.185 min Scan# 806
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:	82	Resp:	52766
Ion Ratio	Lower	Upper	
82	100		
128	39.1	31.4	47.2
54	48.7	41.0	61.4

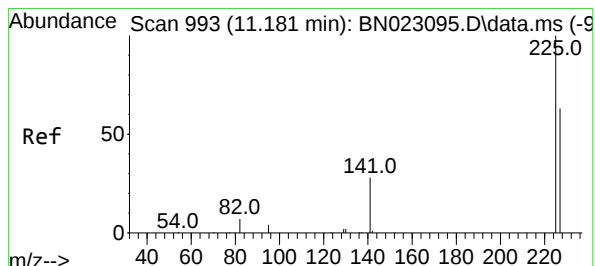
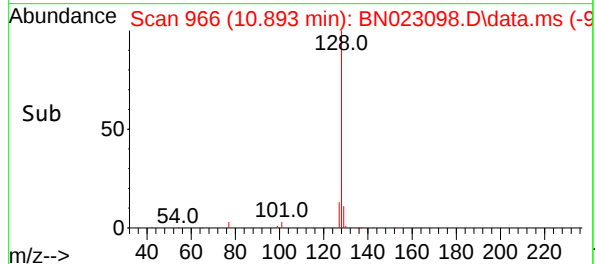
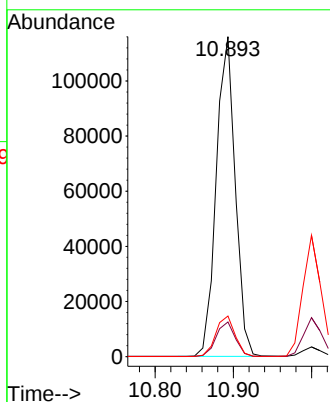
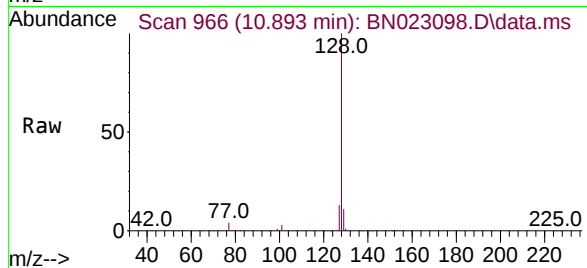




#9
Naphthalene
Concen: 2.856 ng
RT: 10.893 min Scan# 966
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

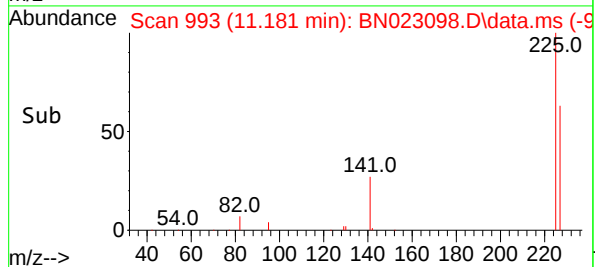
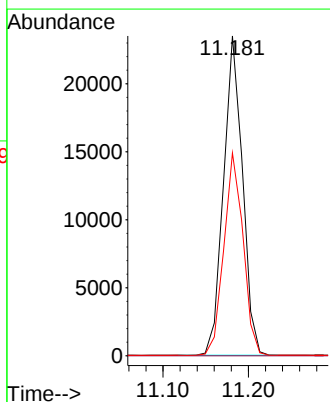
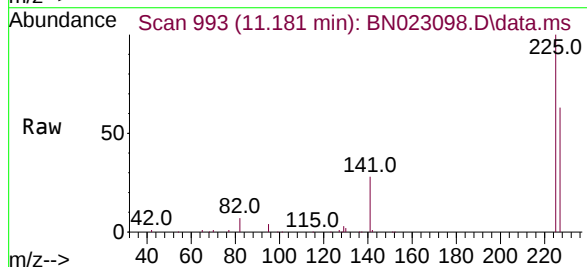
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ClientSampleId :
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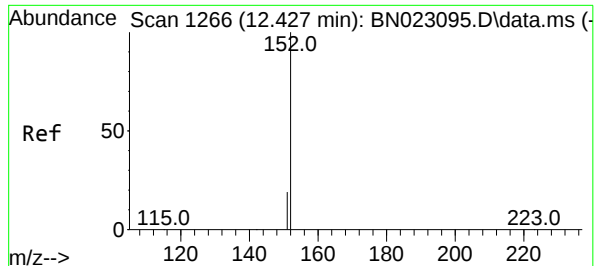
Tgt Ion:128 Resp: 195994
Ion Ratio Lower Upper
128 100
129 10.9 9.0 13.6
127 12.7 10.5 15.7



#10
Hexachlorobutadiene
Concen: 2.827 ng
RT: 11.181 min Scan# 993
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:225 Resp: 36427
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 64.0 51.1 76.7

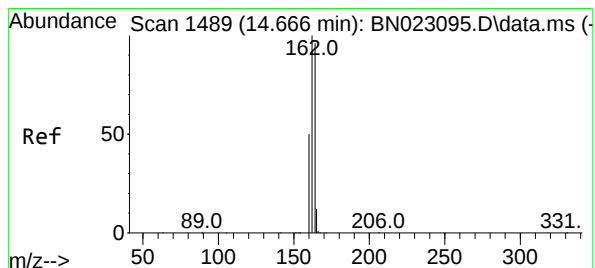
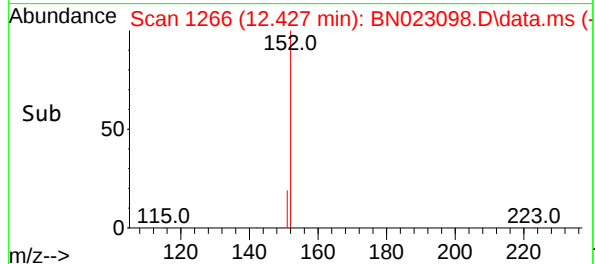
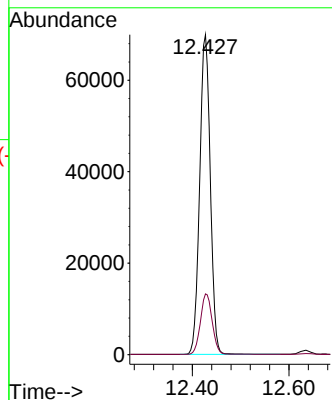
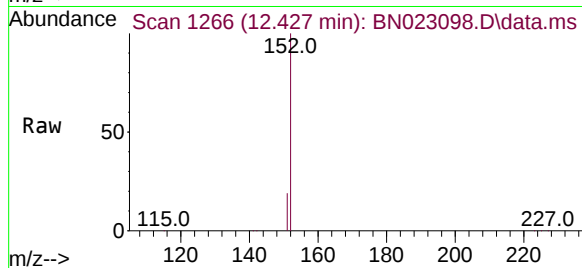




#11
2-Methylnaphthalene-d10
Concen: 3.168 ng
RT: 12.427 min Scan# 1266
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

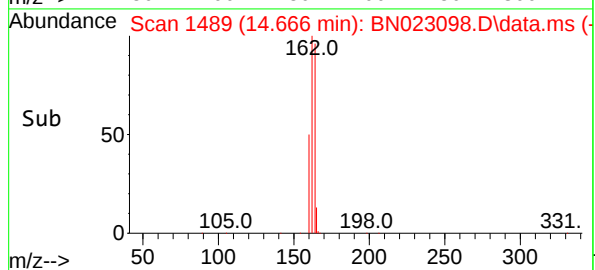
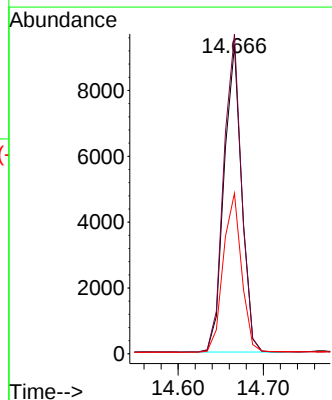
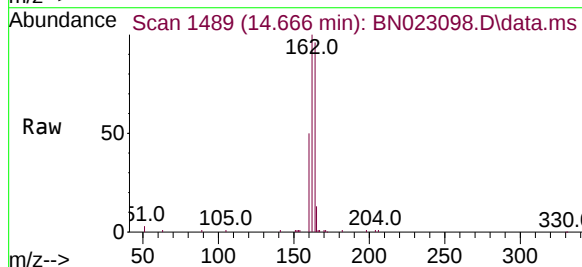
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BNA_N
ClientSampleId :
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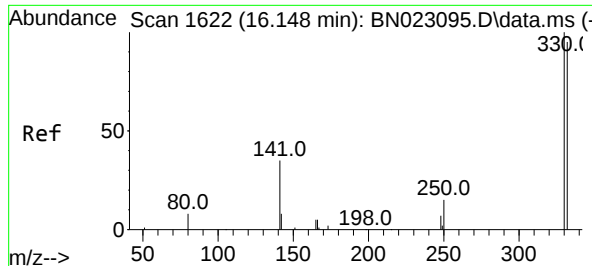
Tgt Ion:152 Resp: 138357
Ion Ratio Lower Upper
152 100
151 19.7 15.1 22.7



#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. -0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:164 Resp: 13470
Ion Ratio Lower Upper
164 100
162 103.7 83.4 125.0
160 52.0 41.8 62.8





#14

2,4,6-Tribromophenol

Concen: 3.249 ng

RT: 16.148 min Scan# 1622

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

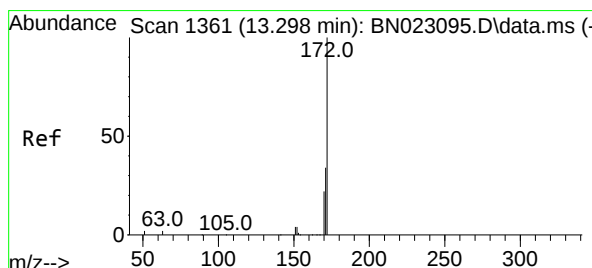
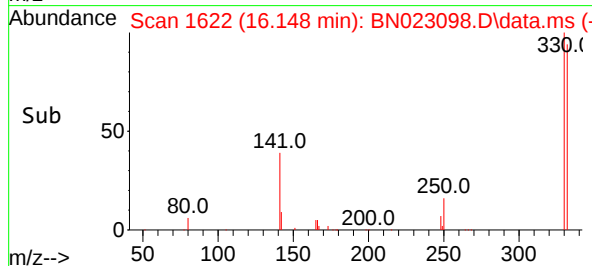
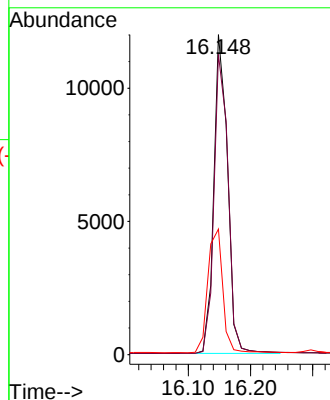
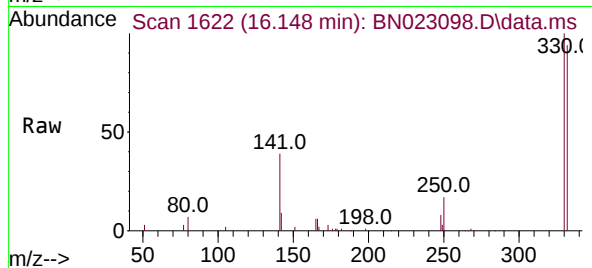
Tgt Ion:330 Resp: 18487

Ion Ratio Lower Upper

330 100

332 96.4 77.3 115.9

141 41.8 33.5 50.3



#15

2-Fluorobiphenyl

Concen: 2.910 ng

RT: 13.298 min Scan# 1361

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

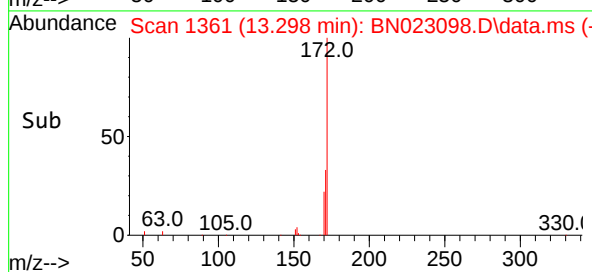
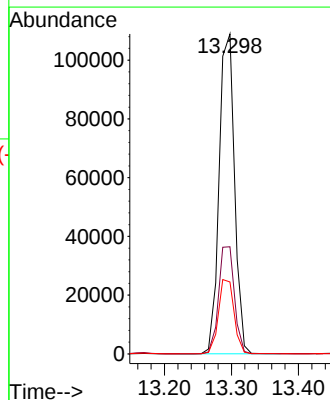
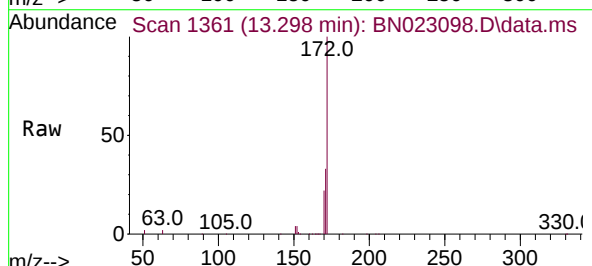
Tgt Ion:172 Resp: 173988

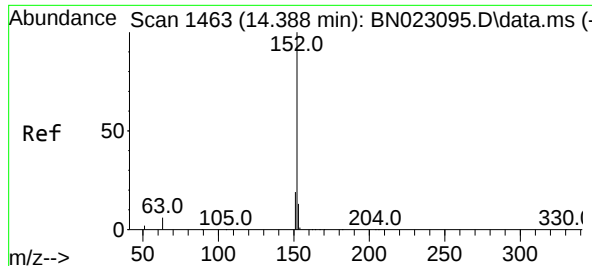
Ion Ratio Lower Upper

172 100

171 33.5 27.4 41.0

170 22.5 17.9 26.9

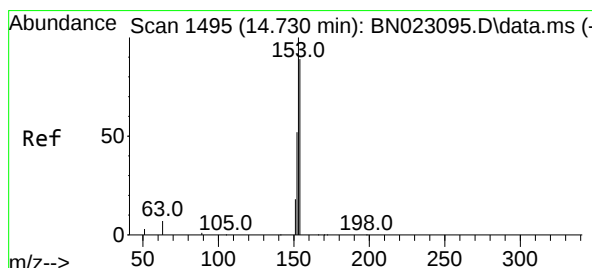
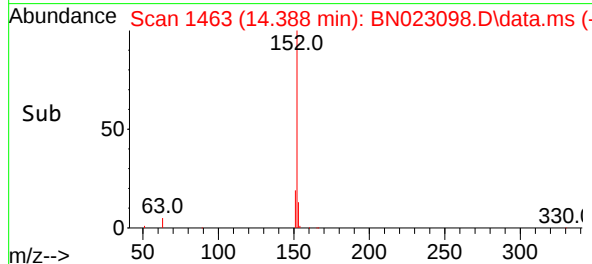
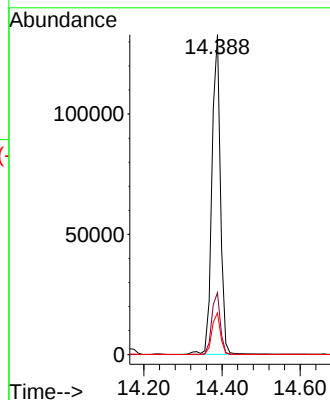
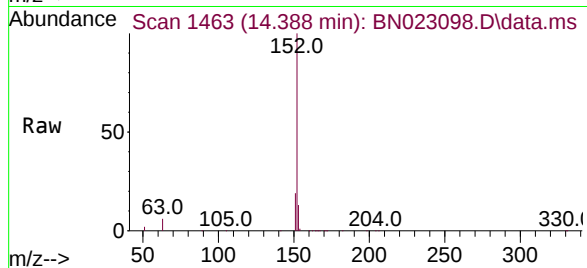




#16
Acenaphthylene
Concen: 3.180 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

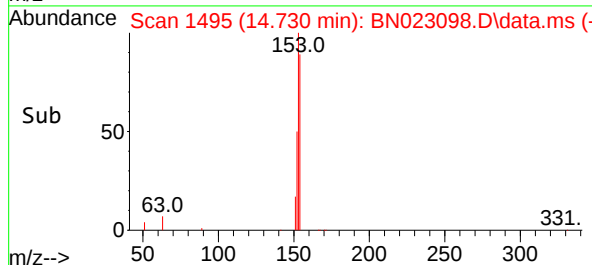
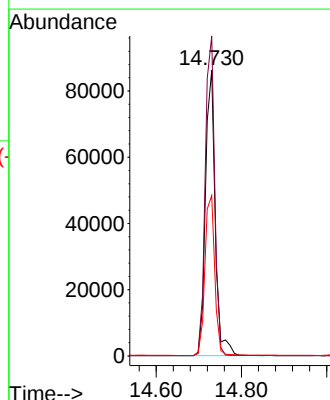
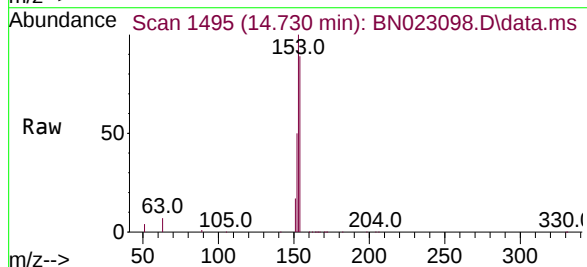
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

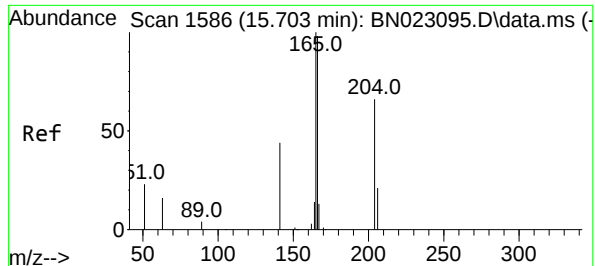
Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.4	15.4	23.2
153	13.0	10.3	15.5



#17
Acenaphthene
Concen: 2.951 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion	Ratio	Lower	Upper
154	100		
153	108.9	88.6	132.8
152	56.7	48.1	72.1

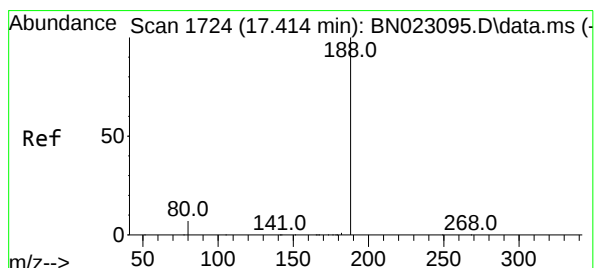
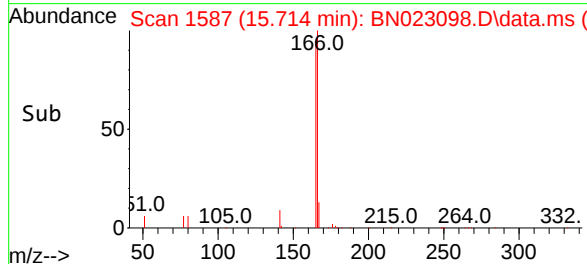
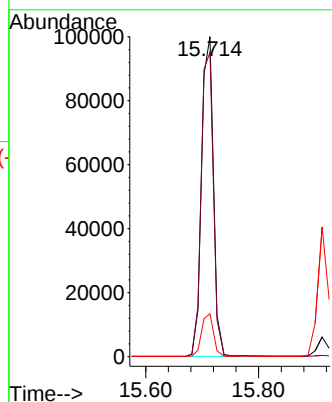
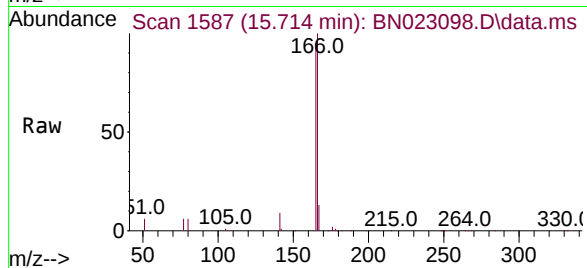




#18
Fluorene
Concen: 2.988 ng
RT: 15.714 min Scan# 1587
Delta R.T. 0.011 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

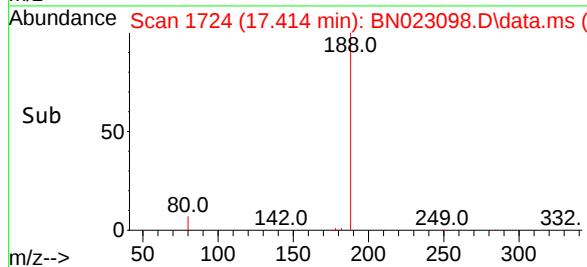
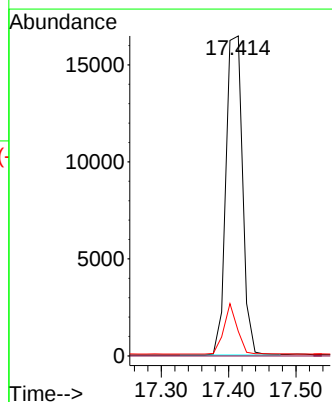
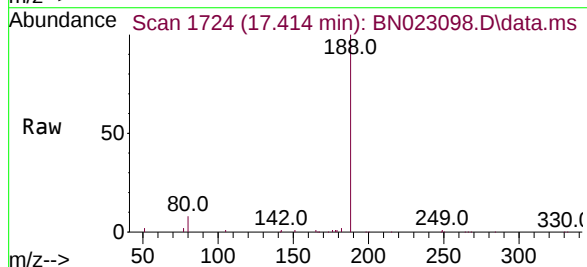
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

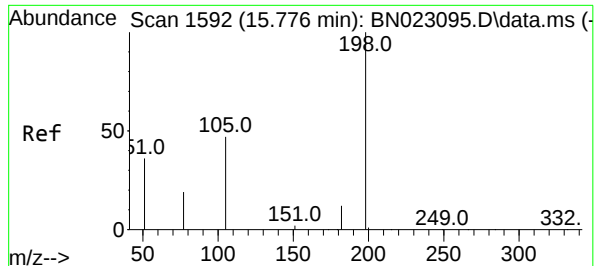
Tgt Ion:166 Resp: 154549
Ion Ratio Lower Upper
166 100
165 98.3 79.8 119.6
167 12.9 10.6 16.0



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.414 min Scan# 1724
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:188 Resp: 28191
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 7.7 6.1 9.1

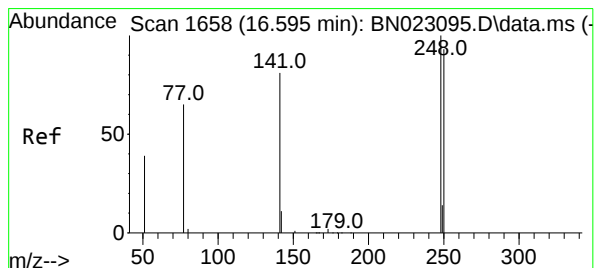
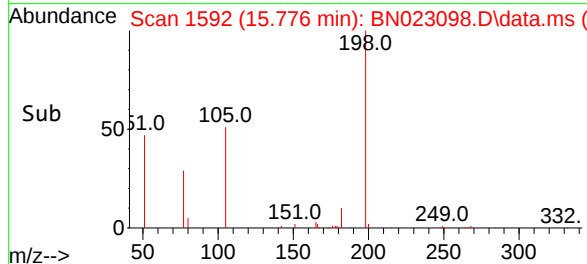
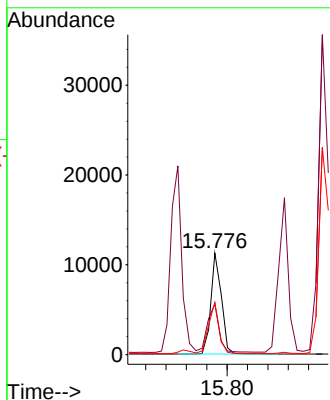
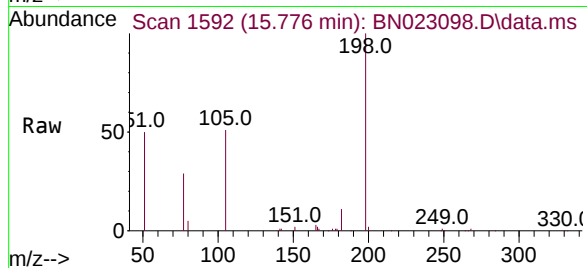




#20
4,6-Dinitro-2-methylphenol
Concen: 4.197 ng
RT: 15.776 min Scan# 1592
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

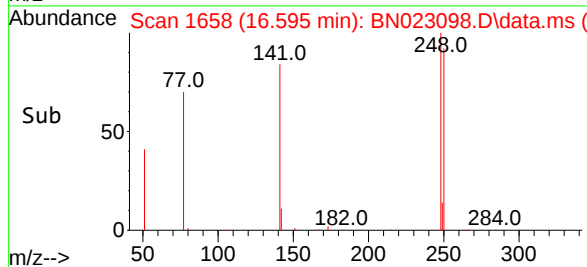
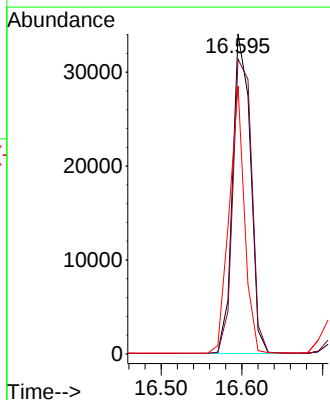
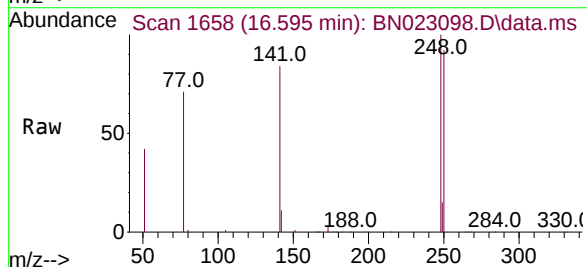
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

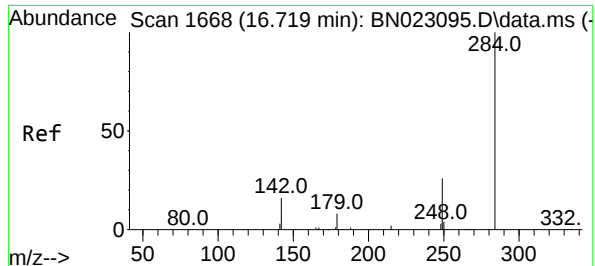
Tgt Ion:198 Resp: 16007
Ion Ratio Lower Upper
198 100
51 49.8 57.0 85.4#
105 51.4 47.2 70.8



#21
4-Bromophenyl-phenylether
Concen: 3.067 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:248 Resp: 52085
Ion Ratio Lower Upper
248 100
250 92.1 74.3 111.5
141 83.7 65.0 97.6





#22

Hexachlorobenzene

Concen: 3.001 ng

RT: 16.719 min Scan# 1668

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

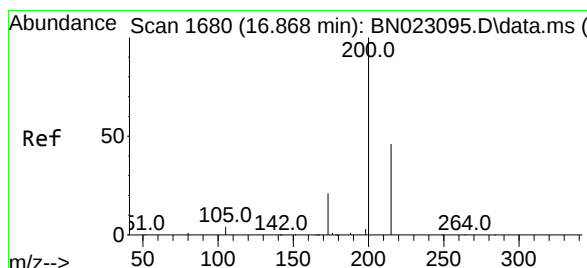
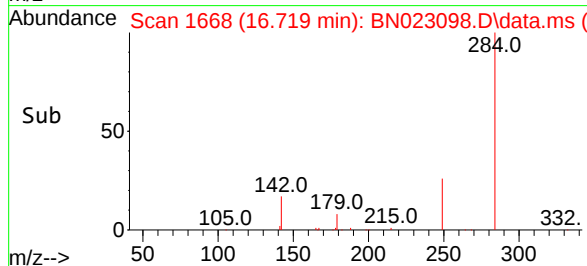
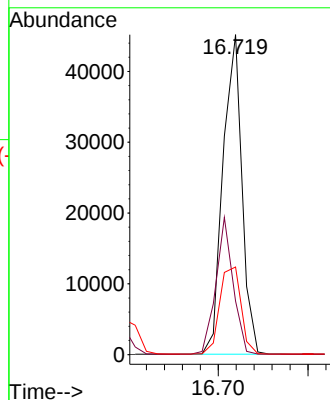
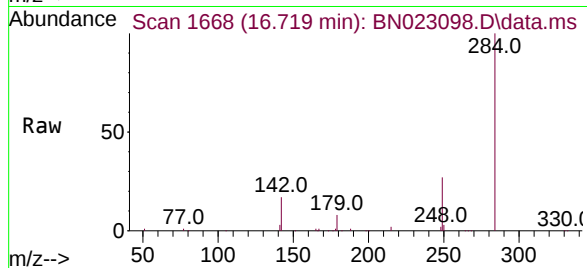
Tgt Ion:284 Resp: 66183

Ion Ratio Lower Upper

284 100

142 39.1 31.0 46.4

249 30.7 24.4 36.6



#23

Atrazine

Concen: 3.278 ng

RT: 16.868 min Scan# 1680

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

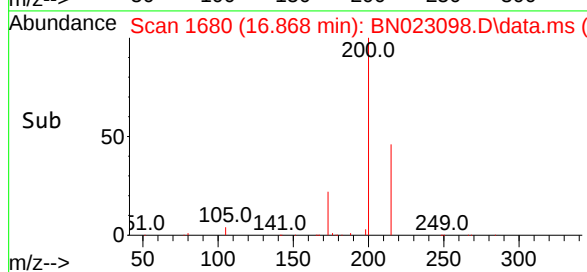
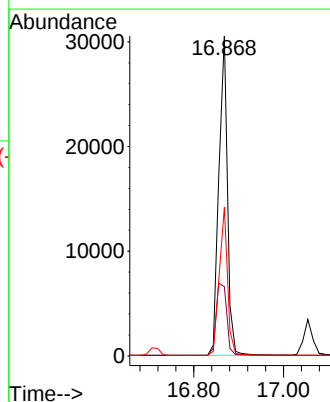
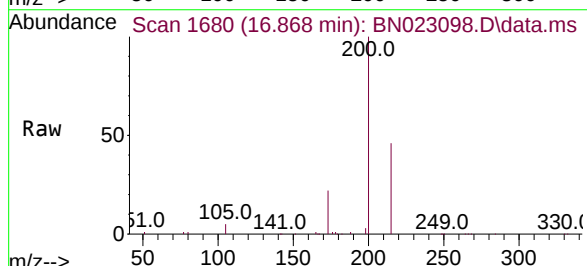
Tgt Ion:200 Resp: 40499

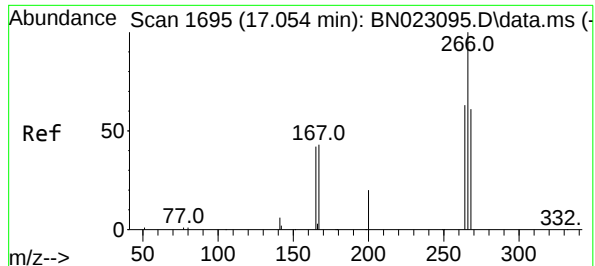
Ion Ratio Lower Upper

200 100

173 21.6 18.2 27.4

215 46.4 38.0 57.0





#24

Pentachlorophenol

Concen: 4.044 ng

RT: 17.054 min Scan# 1695

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

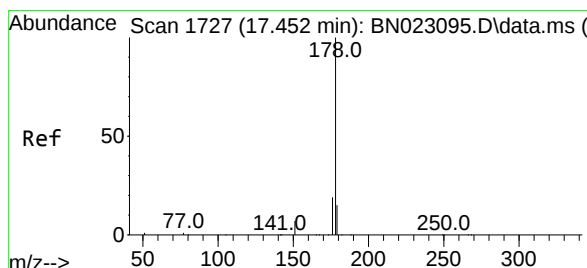
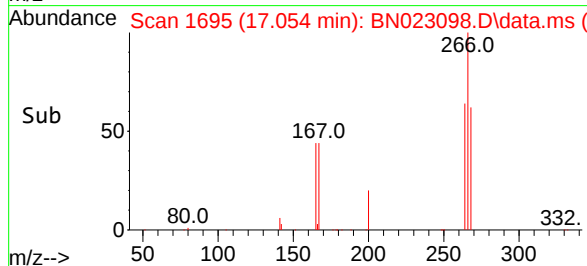
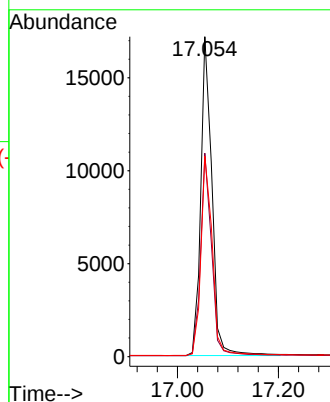
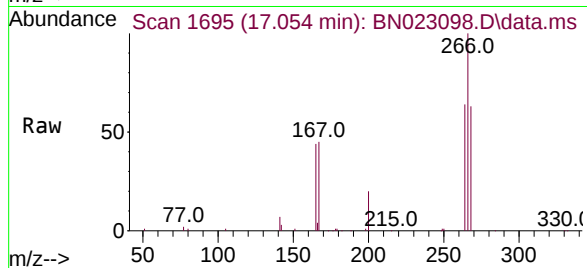
Tgt Ion:266 Resp: 26196

Ion Ratio Lower Upper

266 100

264 62.6 50.1 75.1

268 63.9 49.7 74.5



#25

Phenanthrene

Concen: 3.026 ng

RT: 17.452 min Scan# 1727

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

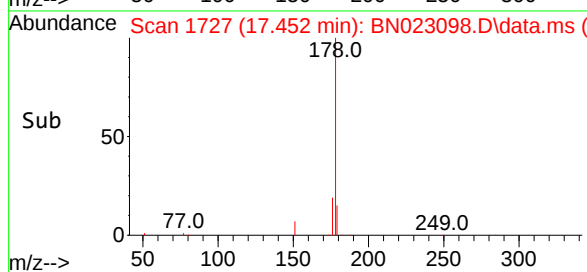
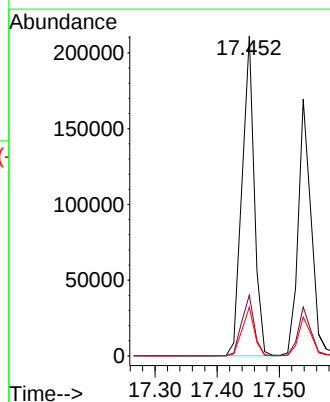
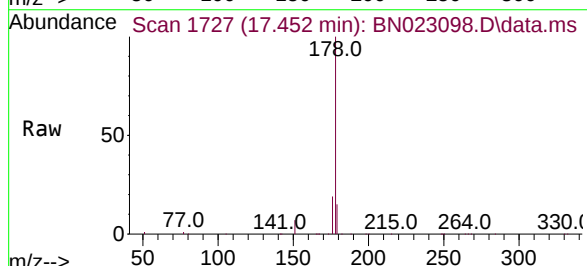
Tgt Ion:178 Resp: 287541

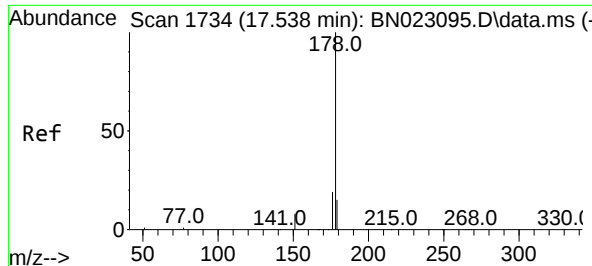
Ion Ratio Lower Upper

178 100

176 19.3 15.4 23.2

179 15.2 12.2 18.2

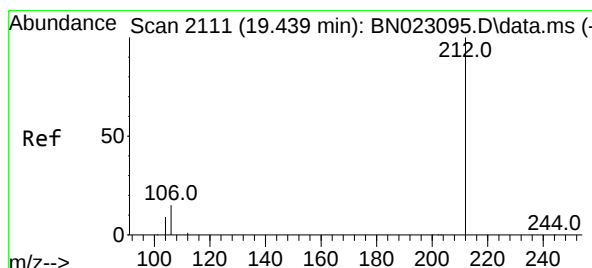
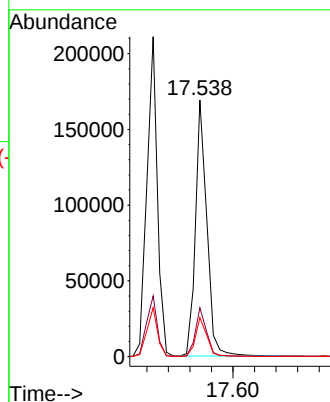
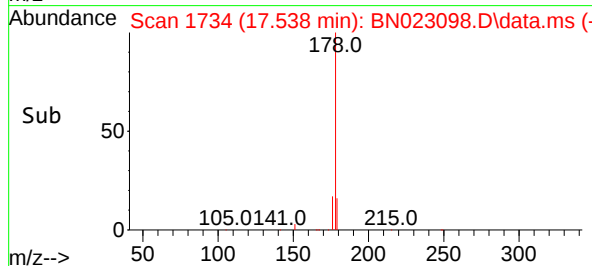
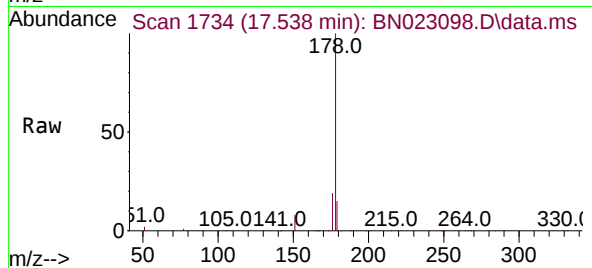




#26
Anthracene
Concen: 3.234 ng
RT: 17.538 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

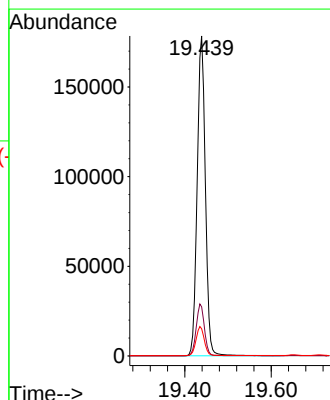
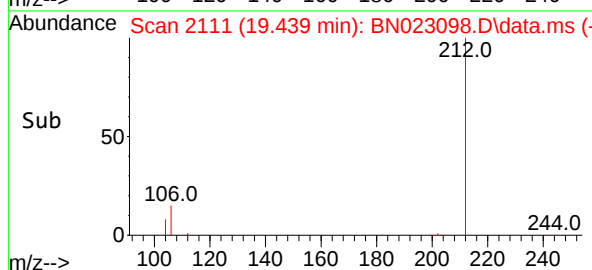
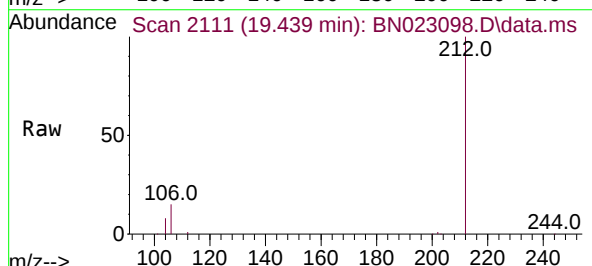
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

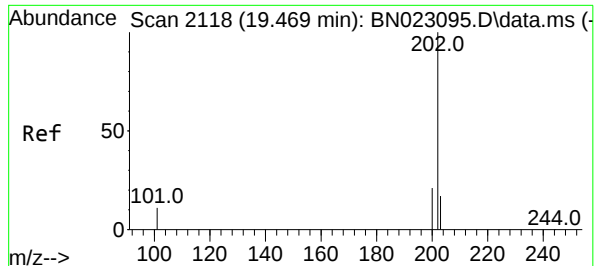
Tgt Ion:178 Resp: 247626
Ion Ratio Lower Upper
178 100
176 18.7 15.1 22.7
179 15.2 12.2 18.4



#27
Fluoranthene-d10
Concen: 3.037 ng
RT: 19.439 min Scan# 2111
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:212 Resp: 234419
Ion Ratio Lower Upper
212 100
106 16.2 13.0 19.4
104 9.2 7.5 11.3

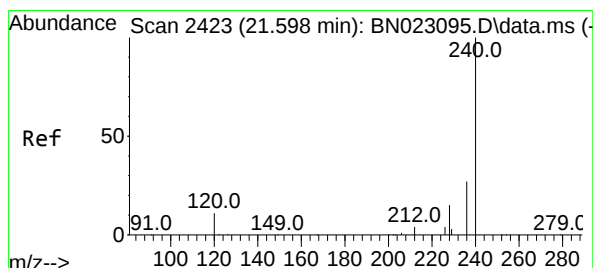
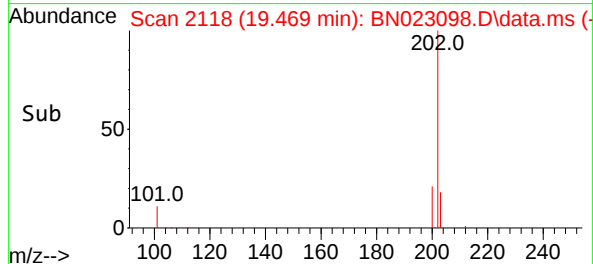
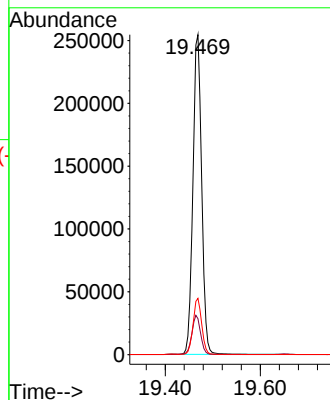
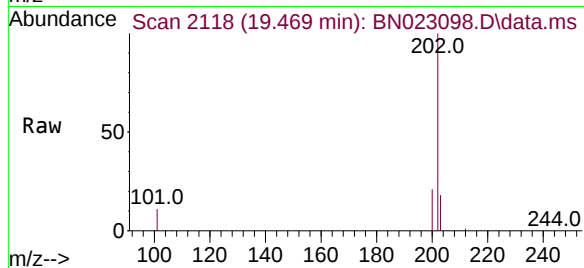




#28
Fluoranthene
Concen: 3.126 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

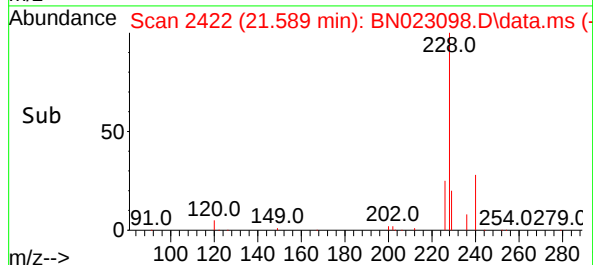
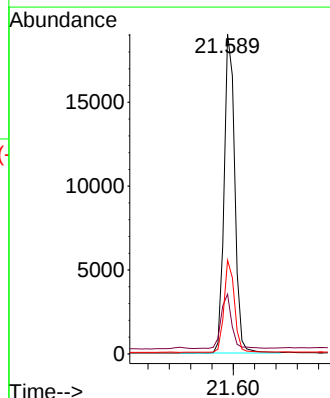
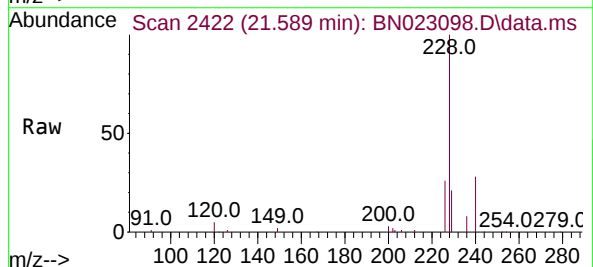
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

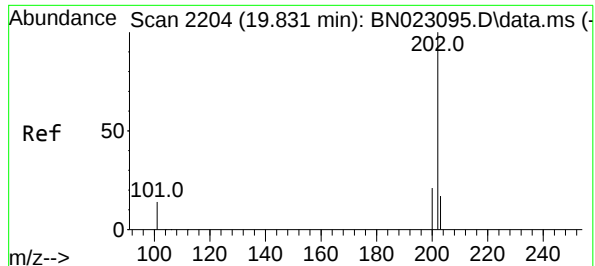
Tgt Ion:202 Resp: 324068
Ion Ratio Lower Upper
202 100
101 12.3 9.7 14.5
203 17.4 13.8 20.6



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.589 min Scan# 2422
Delta R.T. -0.009 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:240 Resp: 26247
Ion Ratio Lower Upper
240 100
120 18.7 10.1 15.1#
236 29.3 22.2 33.4





#30

Pyrene

Concen: 2.930 ng

RT: 19.831 min Scan# 2204

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

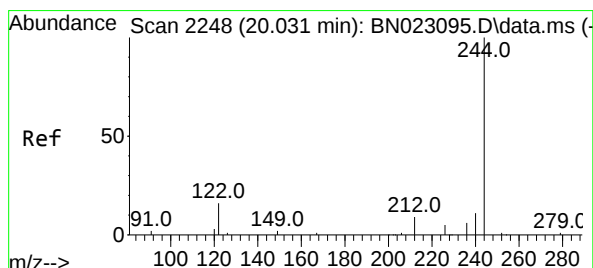
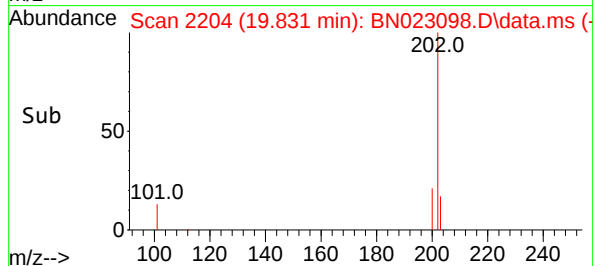
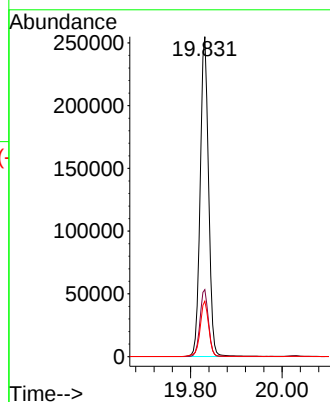
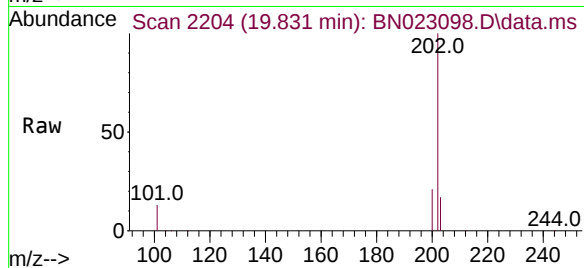
Tgt Ion:202 Resp: 320665

Ion Ratio Lower Upper

202 100

200 21.1 16.9 25.3

203 17.8 14.2 21.4



#31

Terphenyl-d14

Concen: 2.793 ng

RT: 20.031 min Scan# 2248

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

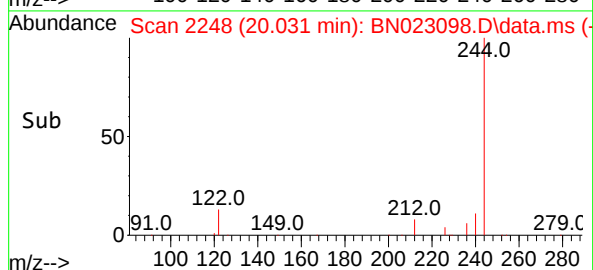
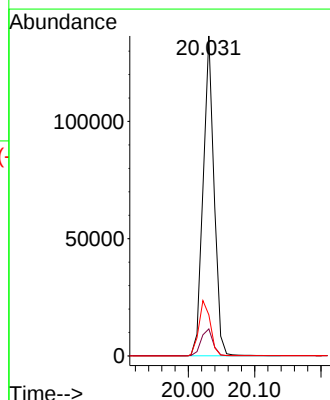
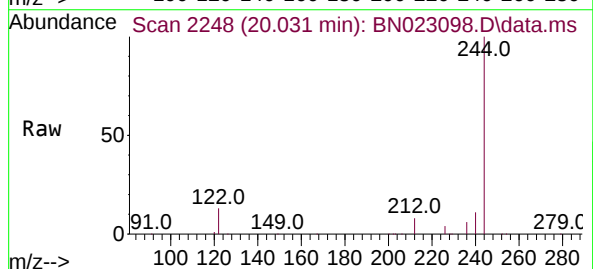
Tgt Ion:244 Resp: 139156

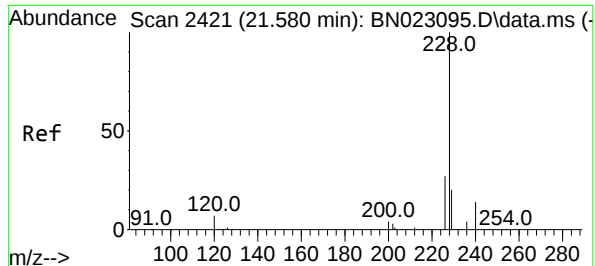
Ion Ratio Lower Upper

244 100

212 8.4 7.6 11.4

122 12.8 12.6 18.8





#32

Benzo(a)anthracene

Concen: 3.082 ng

RT: 21.580 min Scan# 2421

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

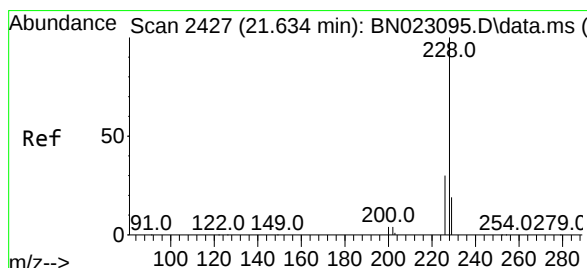
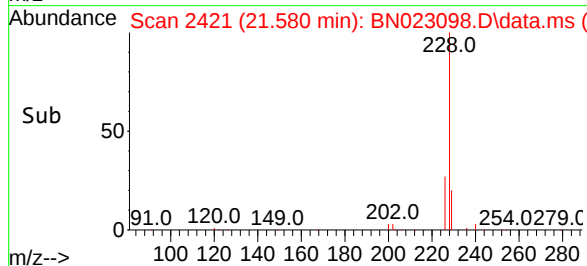
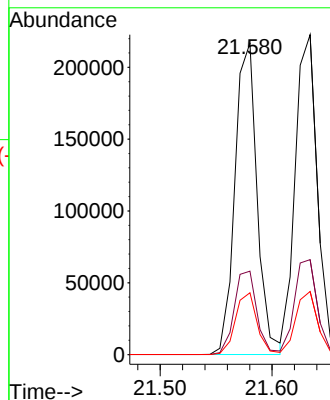
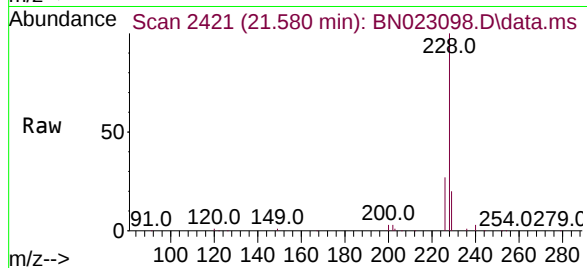
Tgt Ion:228 Resp: 298657

Ion Ratio Lower Upper

228 100

226 26.8 22.0 33.0

229 19.8 15.8 23.8



#33

Chrysene

Concen: 2.838 ng

RT: 21.634 min Scan# 2427

Delta R.T. -0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

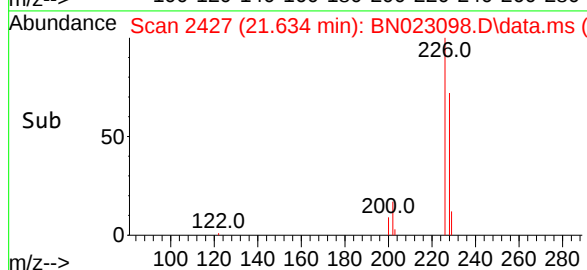
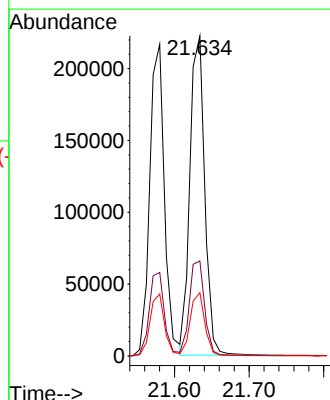
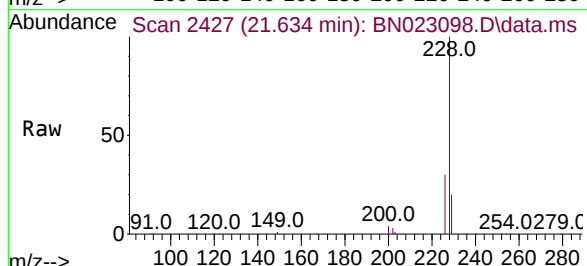
Tgt Ion:228 Resp: 307277

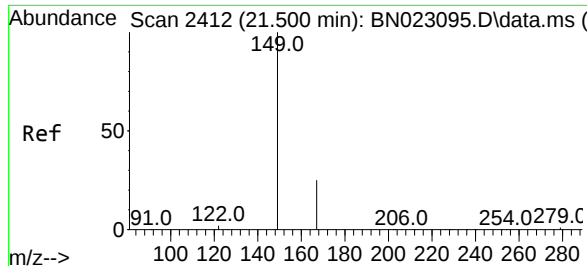
Ion Ratio Lower Upper

228 100

226 29.7 24.4 36.6

229 19.7 15.6 23.4

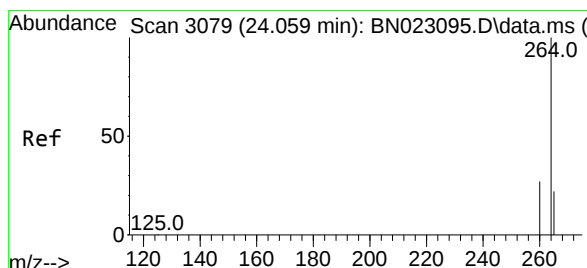
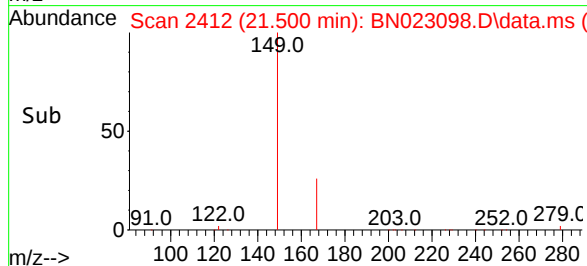
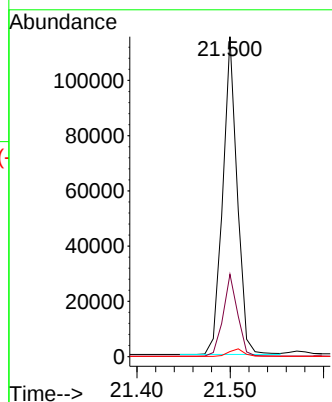
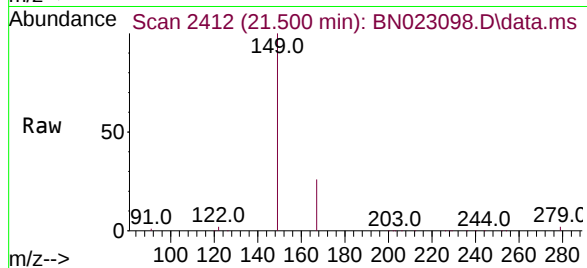




#34
Bis(2-ethylhexyl)phthalate
Concen: 2.965 ng
RT: 21.500 min Scan# 2412
Delta R.T. 0.000 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

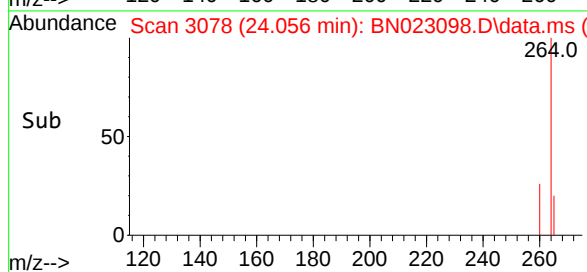
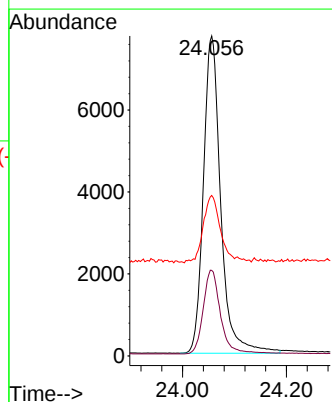
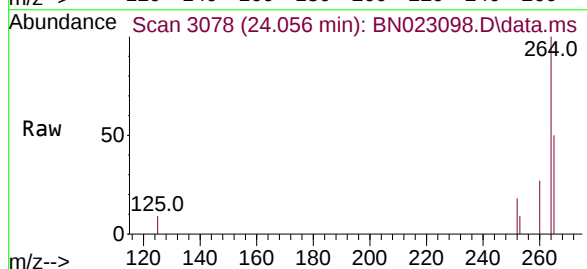
Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

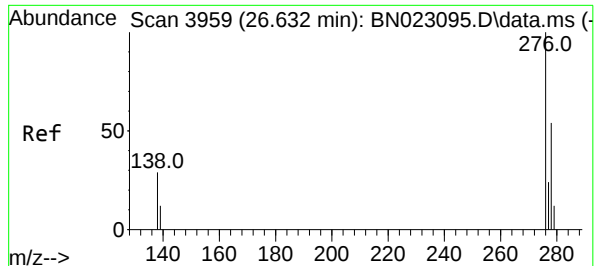
Tgt Ion:149 Resp: 124141
Ion Ratio Lower Upper
149 100
167 25.7 20.2 30.2
279 2.5 2.3 3.5



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.056 min Scan# 3078
Delta R.T. -0.003 min
Lab File: BN023098.D
Acq: 08 Dec 2022 17:03

Tgt Ion:264 Resp: 17877
Ion Ratio Lower Upper
264 100
260 26.7 21.7 32.5
265 50.1 43.2 64.8





#36

Indeno(1,2,3-cd)pyrene

Concen: 3.087 ng

RT: 26.626 min Scan# 3959

Delta R.T. -0.006 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

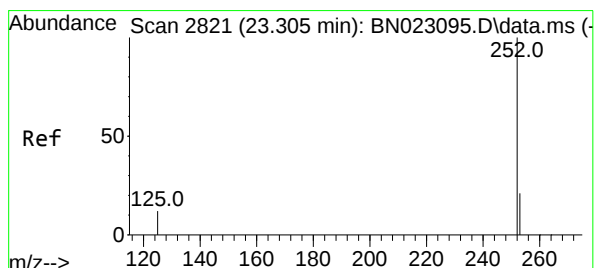
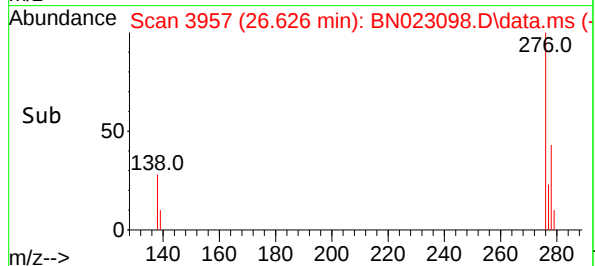
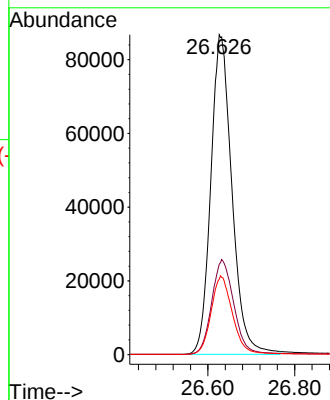
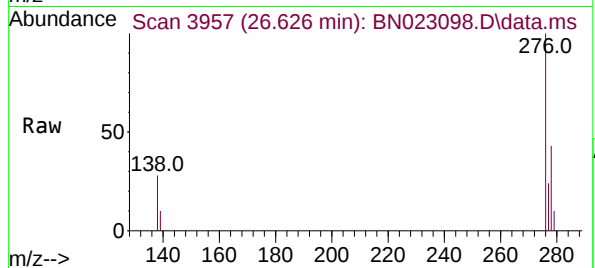
Tgt Ion:276 Resp: 293290

Ion Ratio Lower Upper

276 100

138 30.9 25.0 37.6

277 24.7 19.8 29.8



#37

Benzo(b)fluoranthene

Concen: 3.280 ng

RT: 23.302 min Scan# 2820

Delta R.T. -0.003 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

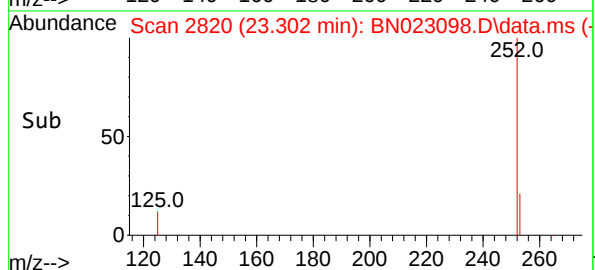
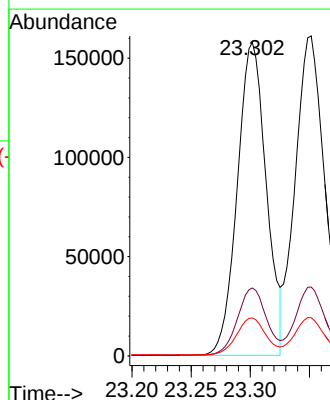
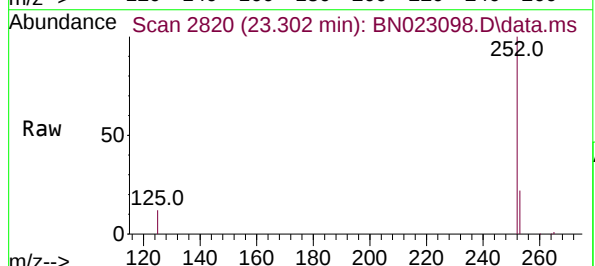
Tgt Ion:252 Resp: 268022

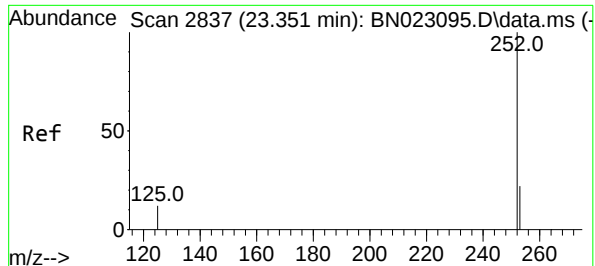
Ion Ratio Lower Upper

252 100

253 21.6 19.0 28.4

125 12.1 12.8 19.2#





#38

Benzo(k)fluoranthene

Concen: 3.339 ng

RT: 23.351 min Scan# 2837

Delta R.T. 0.000 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

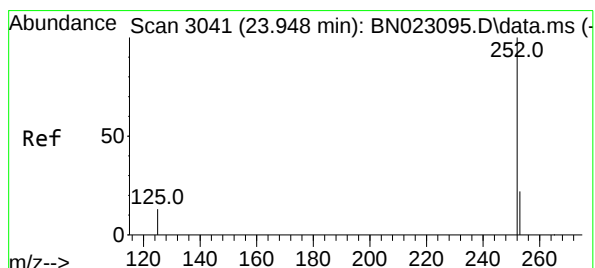
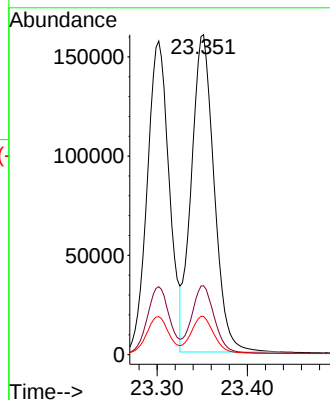
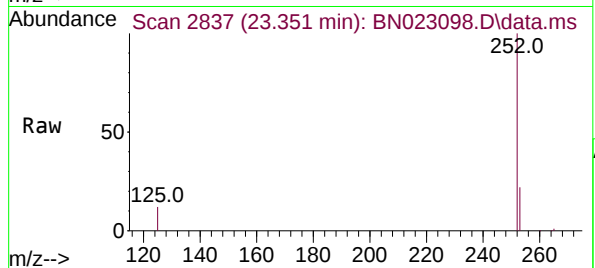
Tgt Ion:252 Resp: 279632

Ion Ratio Lower Upper

252 100

253 21.6 19.1 28.7

125 11.9 12.5 18.7#



#39

Benzo(a)pyrene

Concen: 3.118 ng

RT: 23.945 min Scan# 3040

Delta R.T. -0.003 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

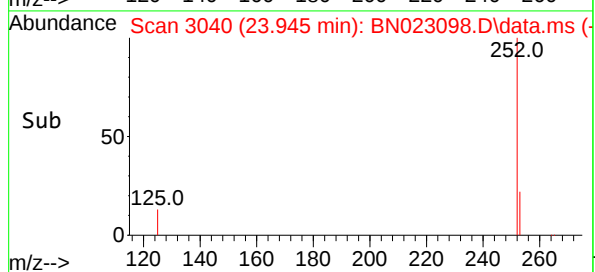
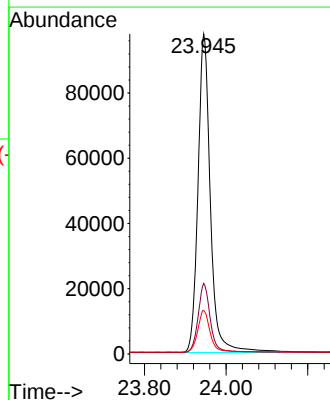
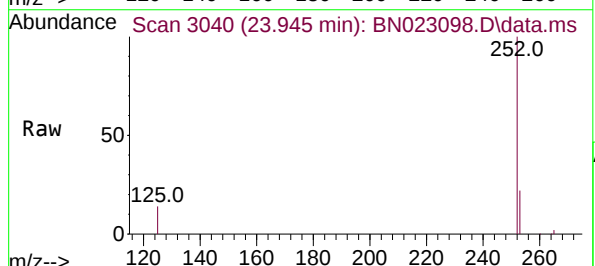
Tgt Ion:252 Resp: 206454

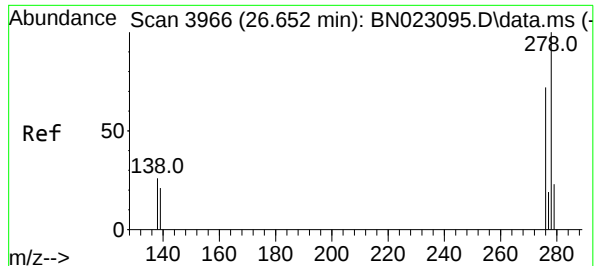
Ion Ratio Lower Upper

252 100

253 22.0 20.6 30.8

125 13.5 15.8 23.8#





#40

Dibenzo(a,h)anthracene

Concen: 3.149 ng

RT: 26.649 min Scan# 3966

Delta R.T. -0.003 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

Instrument :

BNA_N

ClientSampleId :

SSTDICC3.2

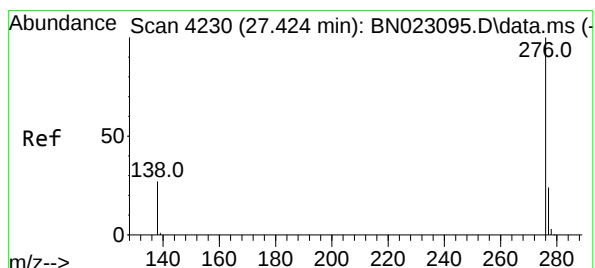
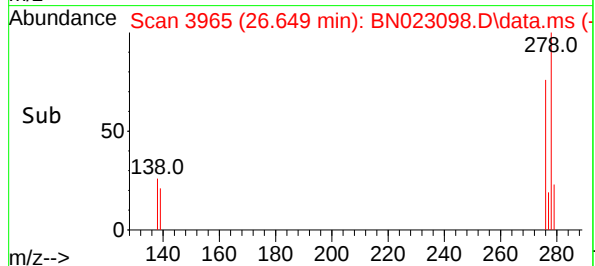
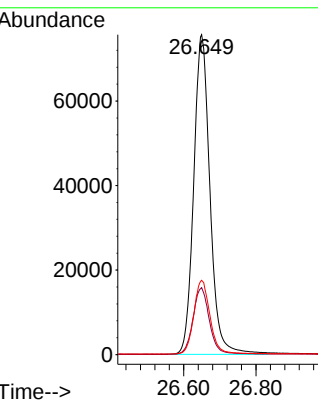
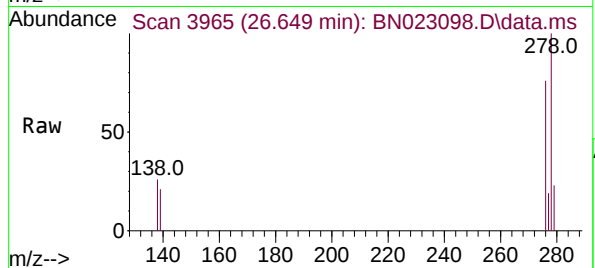
Tgt Ion:278 Resp: 236723

Ion Ratio Lower Upper

278 100

139 20.9 17.5 26.3

279 23.2 20.5 30.7



#41

Benzo(g,h,i)perylene

Concen: 3.189 ng

RT: 27.421 min Scan# 4229

Delta R.T. -0.003 min

Lab File: BN023098.D

Acq: 08 Dec 2022 17:03

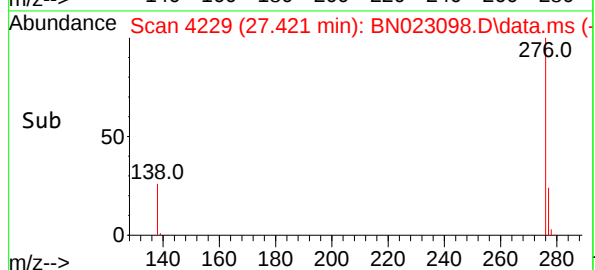
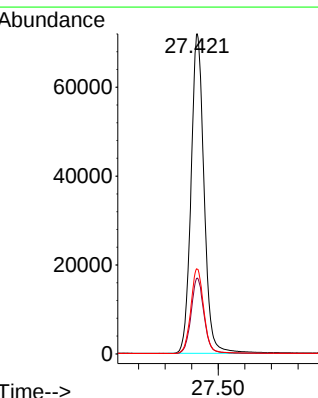
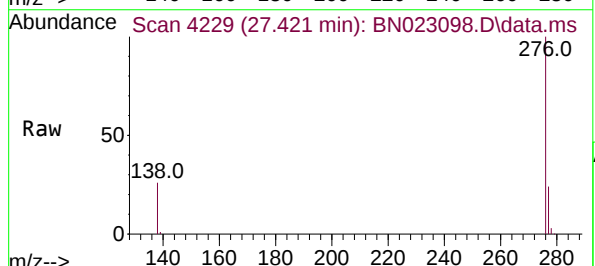
Tgt Ion:276 Resp: 245390

Ion Ratio Lower Upper

276 100

277 23.7 19.9 29.9

138 26.5 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023099.D
 Acq On : 08 Dec 2022 17:40
 Operator : CG/JU
 Sample : SSTDICC5.0
 Misc :
 ALS Vial : 8 Sample Multiplier: 1

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

Manual Integrations

APPROVED

Reviewed By : Christian Giraldo 12/13/2022
 Supervised By : Jagrut Upadhyay 12/13/2022

Quant Time: Dec 09 07:29:11 2022

Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M

Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION

QLast Update : Fri Dec 09 07:25:53 2022

Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)

Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.021	152	8360	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	23462	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	13758	0.400	ng	0.00
19) Phenanthrene-d10	17.402	188	28616	0.400	ng	#-0.01
29) Chrysene-d12	21.589	240	26816	0.400	ng	# 0.00
35) Perylene-d12	24.053	264	18277	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	78686	4.070	ng	0.00
5) Phenol-d6	7.168	99	107140	4.407	ng	0.00
8) Nitrobenzene-d5	9.185	82	85223	4.841	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	217799	4.917	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	31378	5.398	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	274850	4.501	ng	0.00
27) Fluoranthene-d10	19.439	212	377753	4.821	ng	0.00
31) Terphenyl-d14	20.031	244	224844	4.418	ng	0.00
Target Compounds					Qvalue	
2) 1,4-Dioxane	3.398	88	39029m	3.765	ng	
3) n-Nitrosodimethylamine	3.723	42	45253	4.463	ng	# 96
6) bis(2-Chloroethyl)ether	7.436	93	107173	3.993	ng	98
9) Naphthalene	10.893	128	305357	4.387	ng	99
10) Hexachlorobutadiene	11.182	225	55800	4.270	ng	# 100
16) Acenaphthylene	14.388	152	329503	5.096	ng	100
17) Acenaphthene	14.730	154	218157	4.631	ng	96
18) Fluorene	15.714	166	247542	4.685	ng	98
20) 4,6-Dinitro-2-methylph...	15.776	198	27445	7.089	ng	# 79
21) 4-Bromophenyl-phenylether	16.595	248	83257	4.830	ng	98
22) Hexachlorobenzene	16.719	284	103010	4.601	ng	100
23) Atrazine	16.868	200	66765	5.323	ng	98
24) Pentachlorophenol	17.055	266	45088	6.858	ng	99
25) Phenanthrene	17.452	178	452445	4.690	ng	100
26) Anthracene	17.539	178	401356	5.163	ng	100
28) Fluoranthene	19.469	202	506003	4.809	ng	100
30) Pyrene	19.831	202	511132	4.571	ng	100
32) Benzo(a)anthracene	21.571	228	490036	4.950	ng	99
33) Chrysene	21.634	228	485095	4.385	ng	99
34) Bis(2-ethylhexyl)phtha...	21.500	149	234584	5.484	ng	99
36) Indeno(1,2,3-cd)pyrene	26.629	276	474956	4.890	ng	99
37) Benzo(b)fluoranthene	23.299	252	429250	5.138	ng	# 94
38) Benzo(k)fluoranthene	23.352	252	444851	5.195	ng	# 94
39) Benzo(a)pyrene	23.945	252	338522	5.001	ng	# 90
40) Dibenzo(a,h)anthracene	26.647	278	381911	4.970	ng	97
41) Benzo(g,h,i)perylene	27.421	276	399388	5.077	ng	97

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

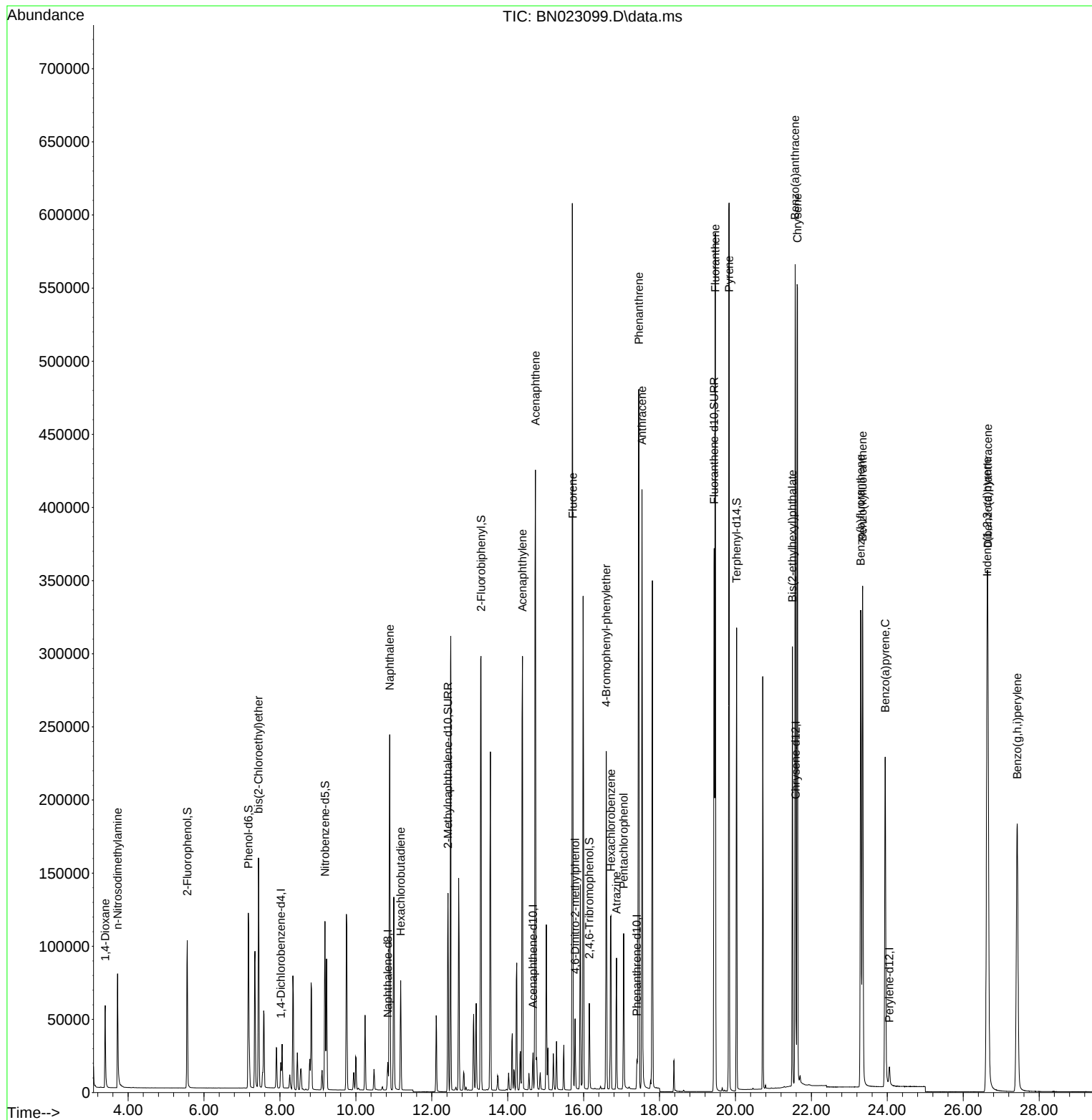
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Data File : BN023099.D
Acq On : 08 Dec 2022 17:40
Operator : CG/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 8 Sample Multiplier: 1

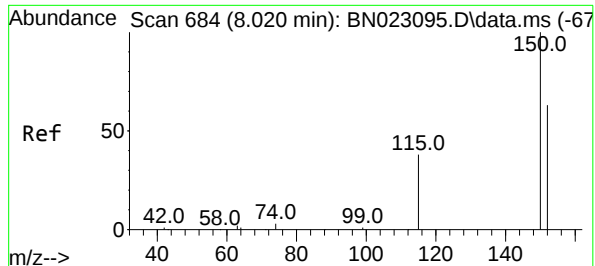
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Dec 09 07:29:11 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 07:25:53 2022
Response via : Initial Calibration

Manual Integrations
APPROVED

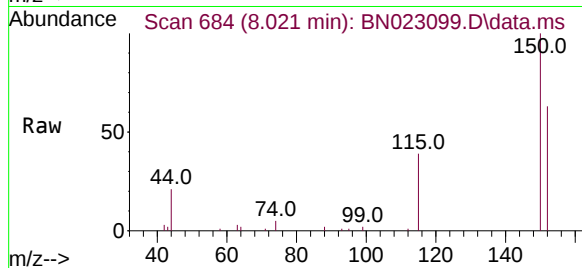
Reviewed By : Christian Giraldo 12/13/2022
Supervised By : Jagrut Upadhyay 12/13/2022





#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 8.021 min Scan# 684
Delta R.T. 0.001 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

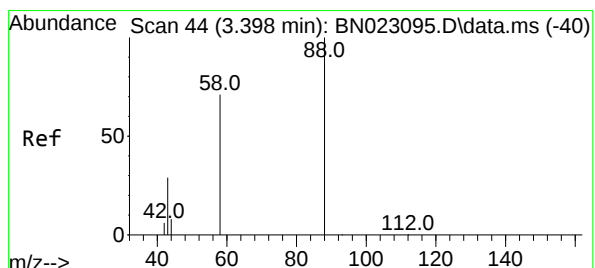
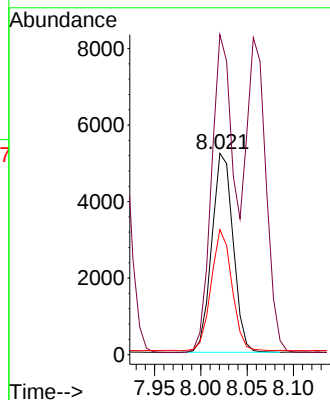
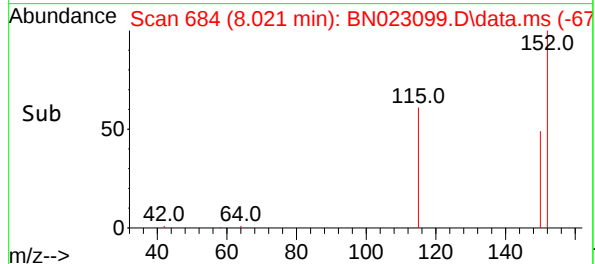
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



Tgt Ion: 152 Resp: 8360
Ion Ratio Lower Upper
152 100
150 159.0 125.6 188.4
115 62.1 49.0 73.4

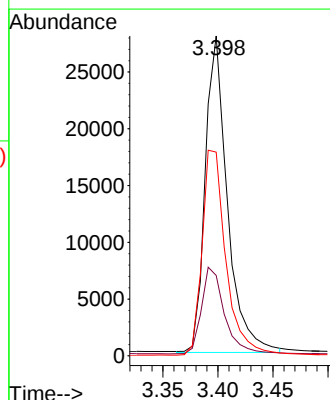
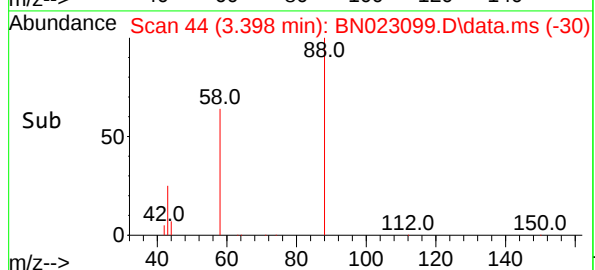
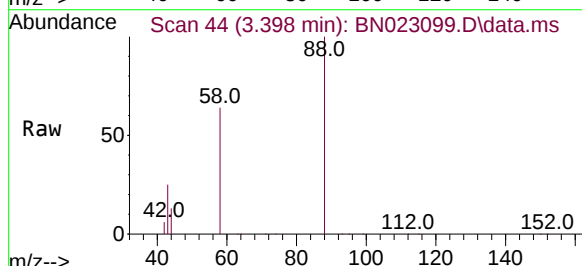
Manual Integrations
APPROVED

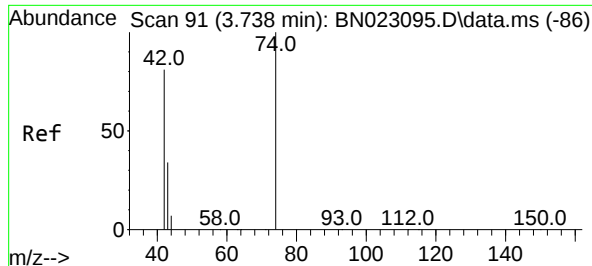
Reviewed By : Christian Giraldo 12/13/2022
Supervised By : Jagrut Upadhyay 12/13/2022



#2
1,4-Dioxane
Concen: 3.765 ng m
RT: 3.398 min Scan# 44
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion: 88 Resp: 39029
Ion Ratio Lower Upper
88 100
43 28.3 23.3 34.9
58 69.5 58.0 87.0





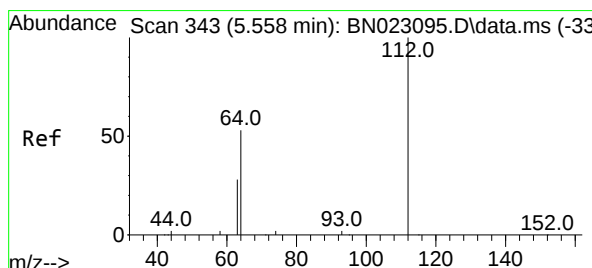
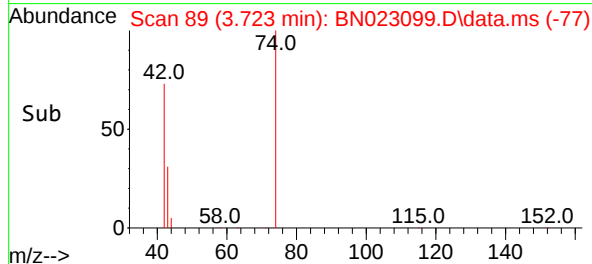
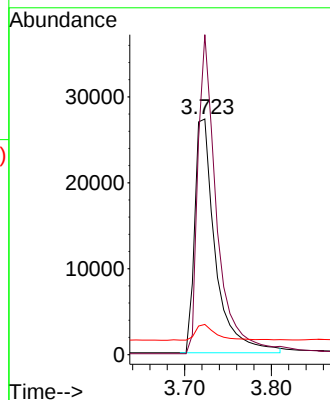
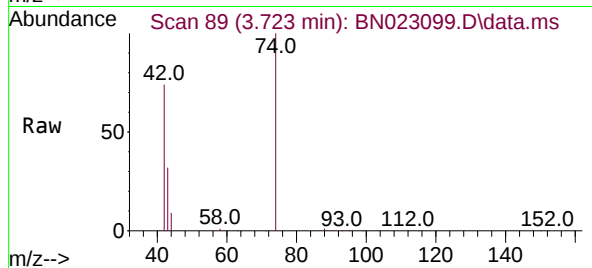
#3
n-Nitrosodimethylamine
Concen: 4.463 ng
RT: 3.723 min Scan# 89
Delta R.T. -0.014 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 4525
Ion Ratio Lower Upper
42 100
74 123.1 95.8 143.6
44 6.9 8.4 12.6

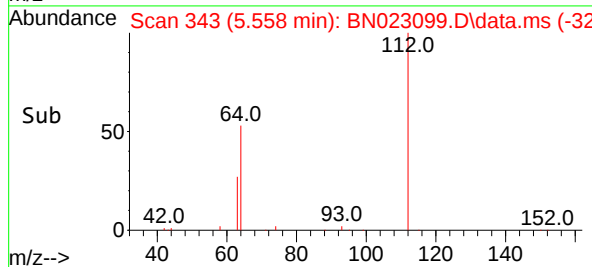
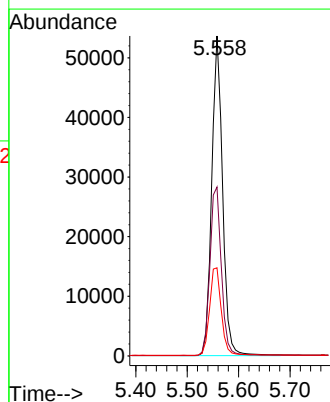
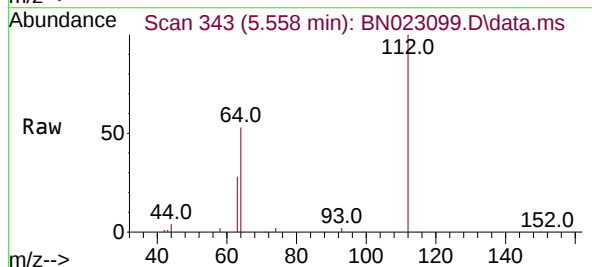
Manual Integrations
APPROVED

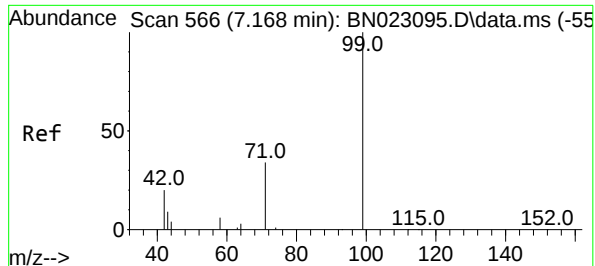
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#4
2-Fluorophenol
Concen: 4.070 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

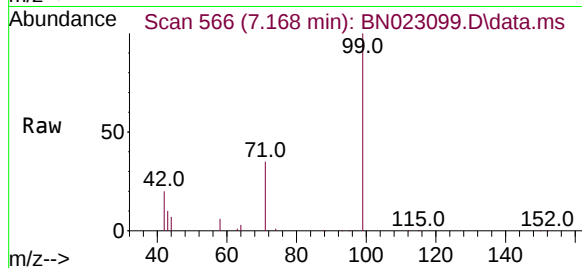
Tgt Ion:112 Resp: 78686
Ion Ratio Lower Upper
112 100
64 55.8 44.4 66.6
63 29.5 23.7 35.5





#5
Phenol-d6
Concen: 4.407 ng
RT: 7.168 min Scan# 566
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

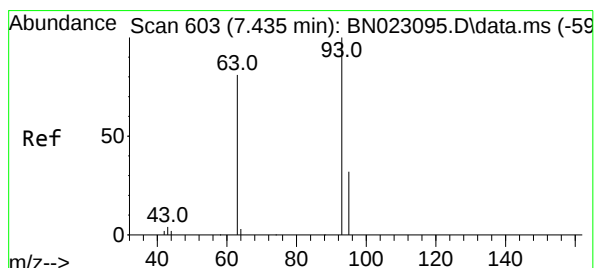
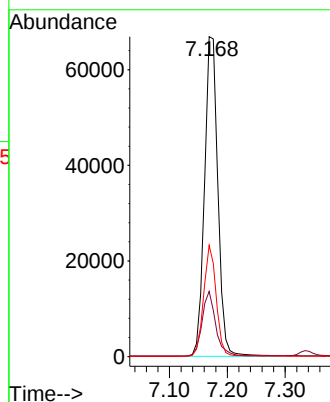
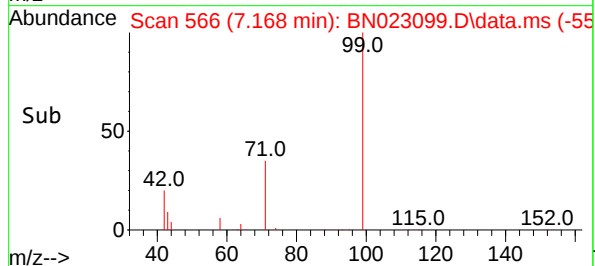
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



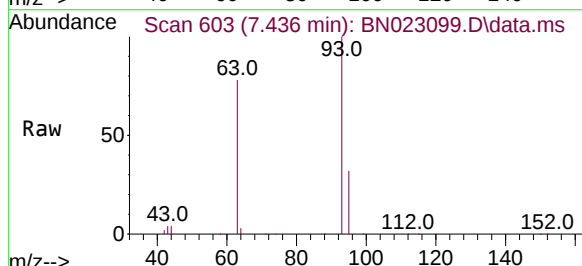
Tgt Ion: 99 Resp: 107140
Ion Ratio Lower Upper
99 100
42 20.4 16.3 24.5
71 32.8 26.5 39.7

Manual Integrations
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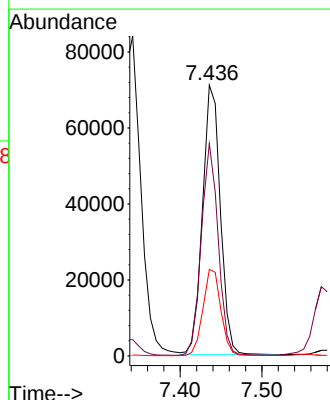
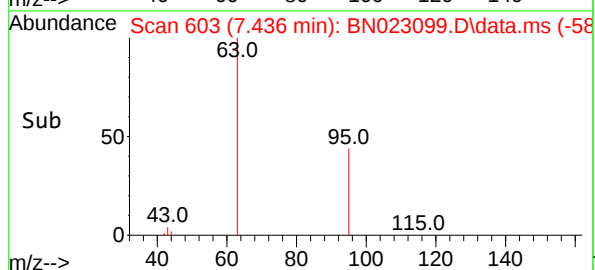
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

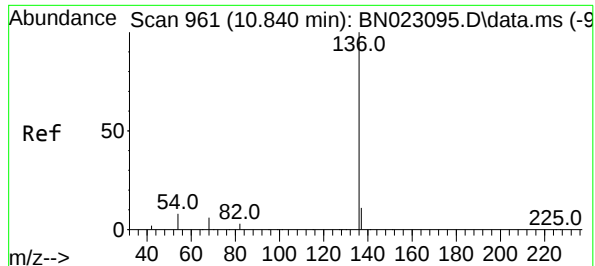


#6
bis(2-Chloroethyl)ether
Concen: 3.993 ng
RT: 7.436 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40



Tgt Ion: 93 Resp: 107173
Ion Ratio Lower Upper
93 100
63 74.7 58.1 87.1
95 32.3 25.2 37.8





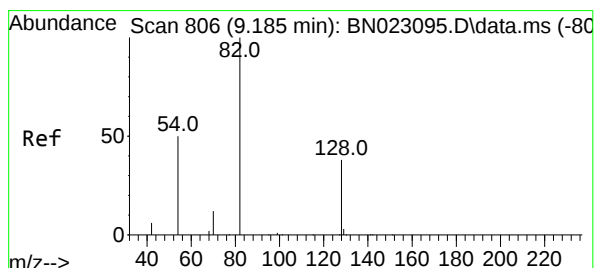
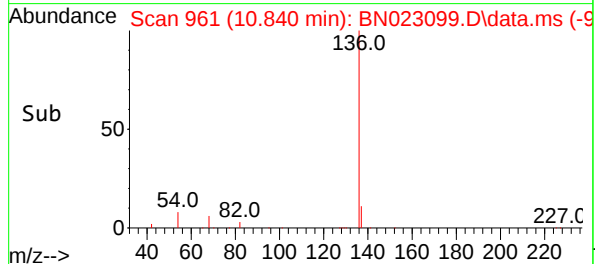
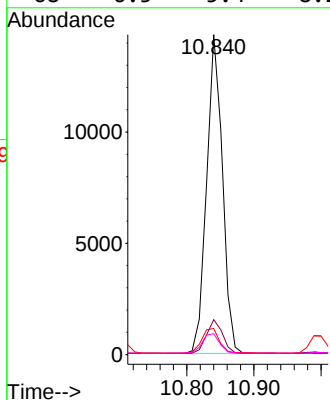
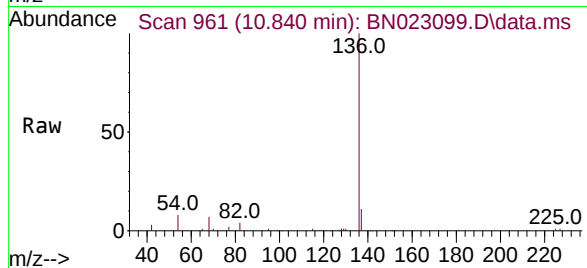
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:	136	Resp:	23462
Ion Ratio	Lower	Upper	
136	100		
137	10.9	9.0	13.4
54	8.2	6.5	9.7
68	6.5	5.4	8.2

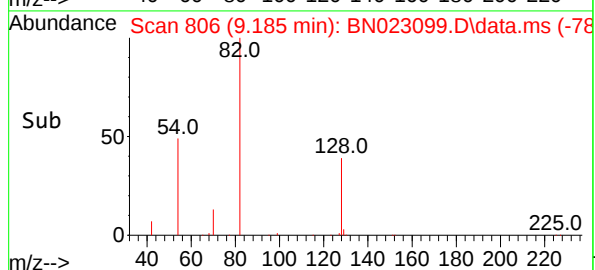
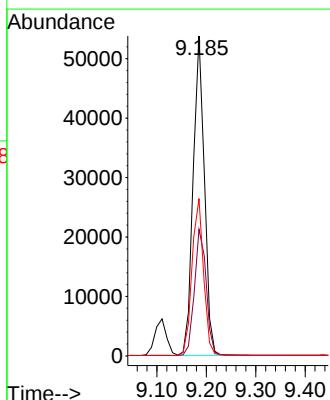
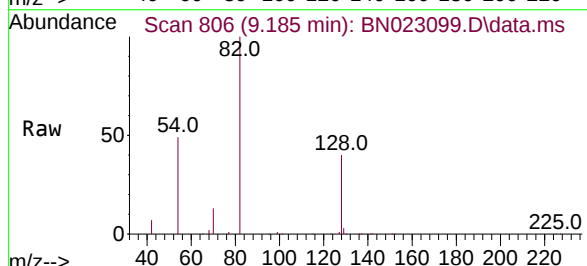
Manual Integrations
APPROVED

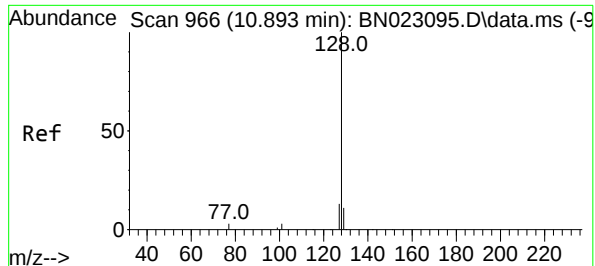
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#8
Nitrobenzene-d5
Concen: 4.841 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:	82	Resp:	85223
Ion Ratio	Lower	Upper	
82	100		
128	39.6	31.4	47.2
54	49.2	41.0	61.4





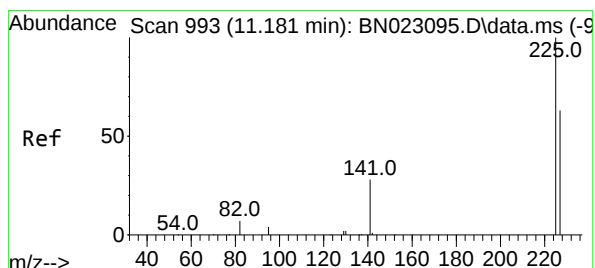
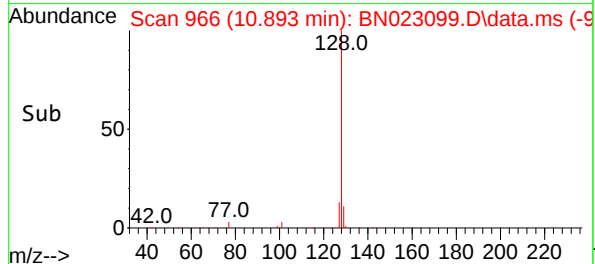
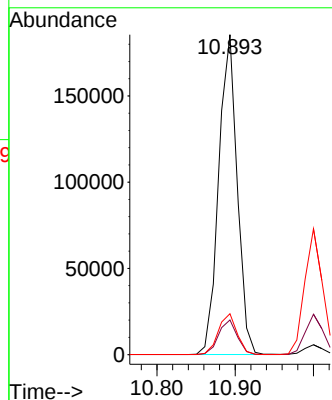
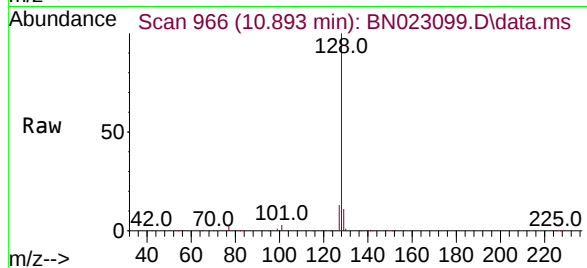
#9
Naphthalene
Concen: 4.387 ng
RT: 10.893 min Scan# 966
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 305352
Ion Ratio Lower Upper
128 100
129 10.8 9.0 13.6
127 12.8 10.5 15.7

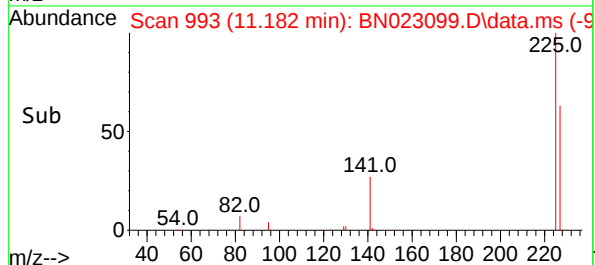
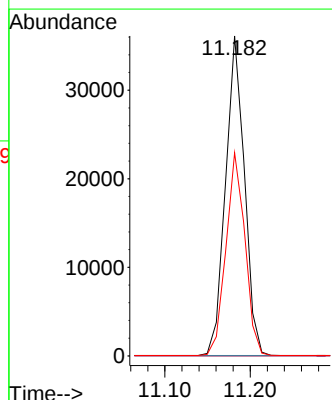
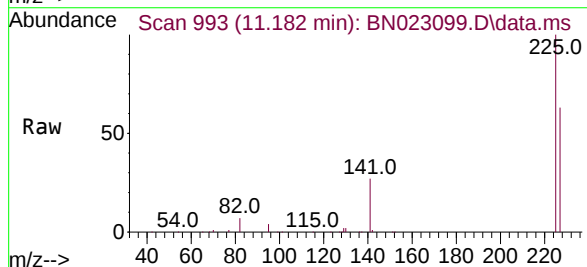
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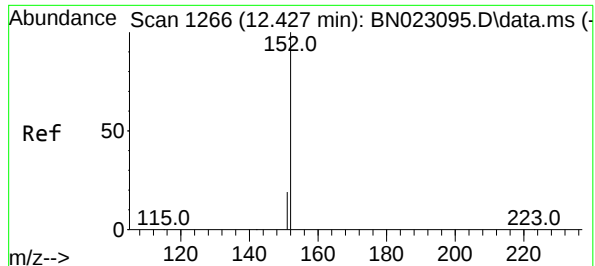
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#10
Hexachlorobutadiene
Concen: 4.270 ng
RT: 11.182 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

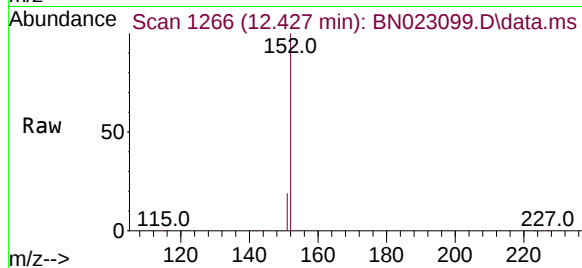
Tgt Ion:225 Resp: 55800
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.8 51.1 76.7





#11
2-Methylnaphthalene-d10
Concen: 4.917 ng
RT: 12.427 min Scan# 1266
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

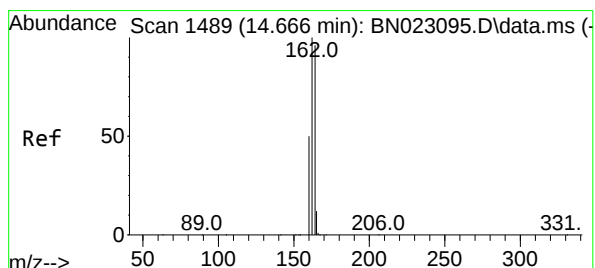
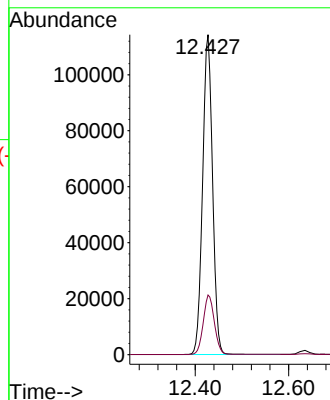
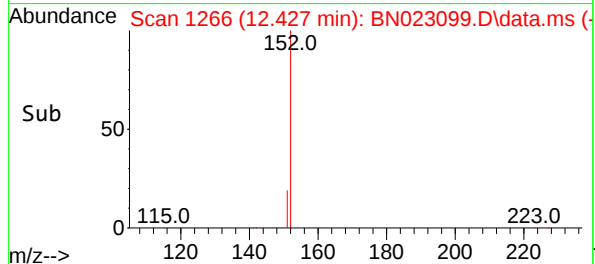
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



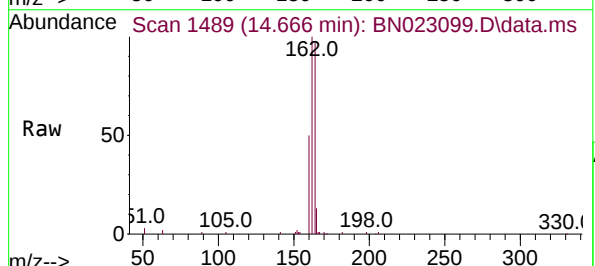
Tgt Ion:152 Resp: 217799
Ion Ratio Lower Upper
152 100
151 20.3 15.1 22.7

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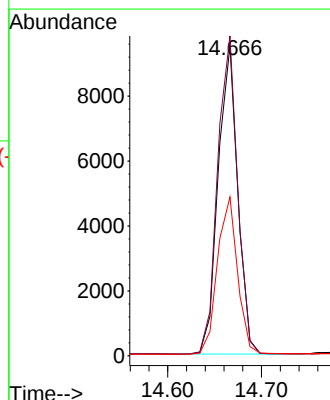
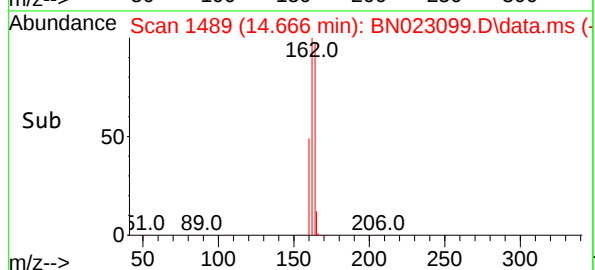
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

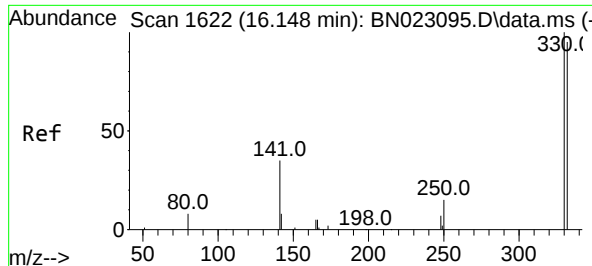


#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40



Tgt Ion:164 Resp: 13758
Ion Ratio Lower Upper
164 100
162 103.1 83.4 125.0
160 51.2 41.8 62.8





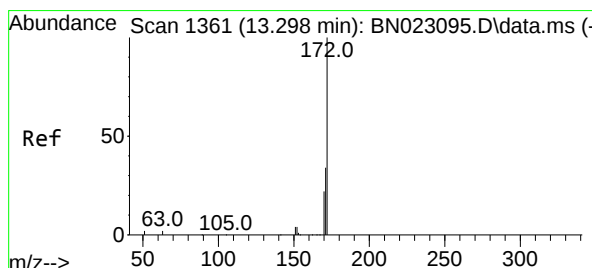
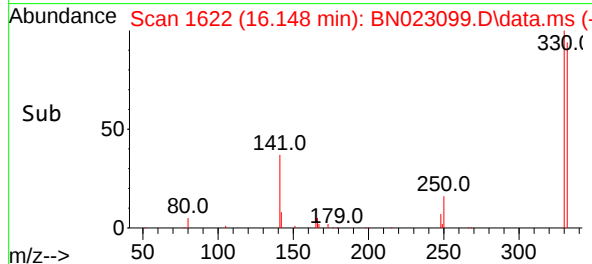
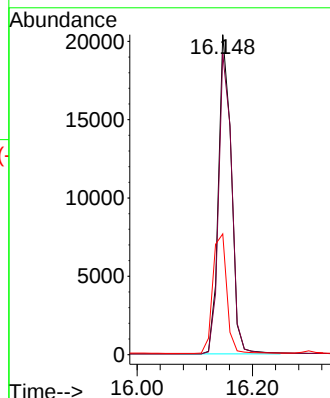
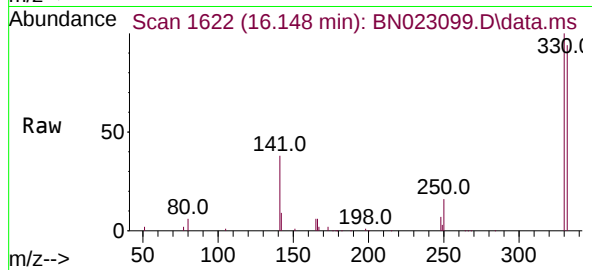
#14
2,4,6-Tribromophenol
Concen: 5.398 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 330 Resp: 31378
Ion Ratio Lower Upper
330 100
332 96.2 77.3 115.9
141 41.2 33.5 50.3

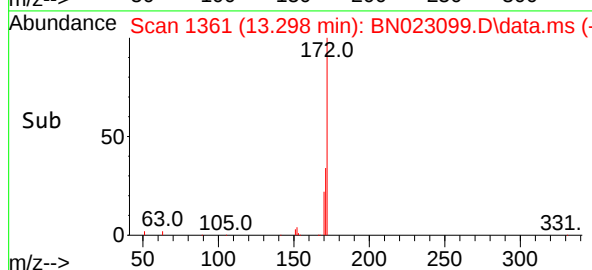
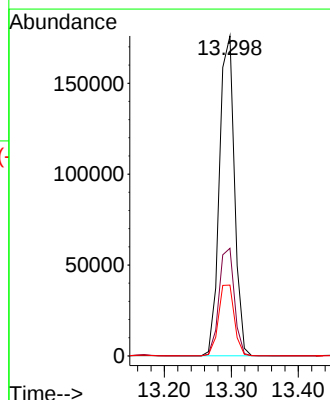
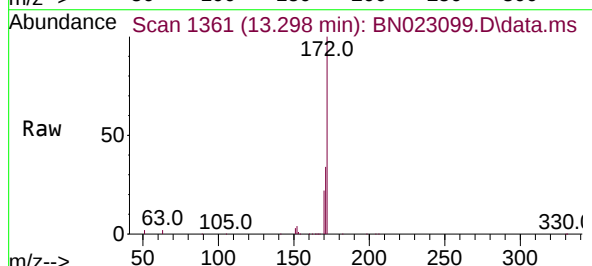
Manual Integrations
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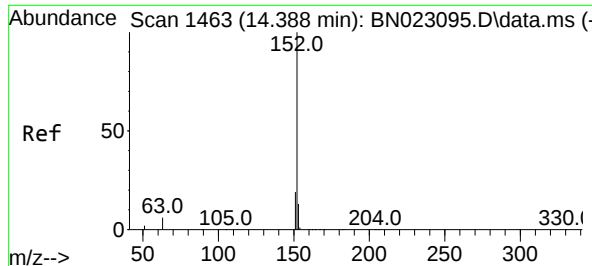
Reviewed By : Christian Giraldo 12/13/2022
Supervised By : Jagrut Upadhyay 12/13/2022



#15
2-Fluorobiphenyl
Concen: 4.501 ng
RT: 13.298 min Scan# 1361
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion: 172 Resp: 274850
Ion Ratio Lower Upper
172 100
171 33.6 27.4 41.0
170 22.1 17.9 26.9





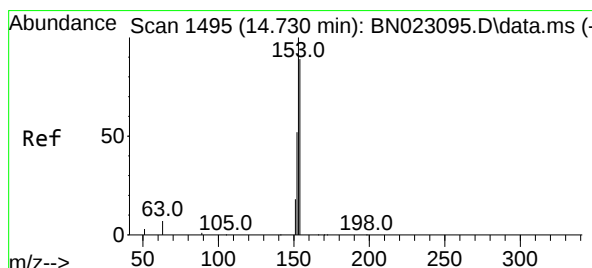
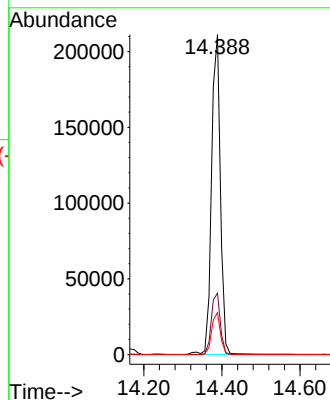
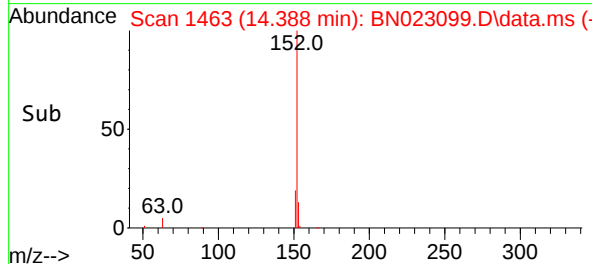
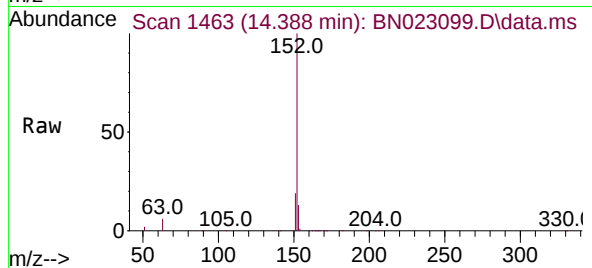
#16
Acenaphthylene
Concen: 5.096 ng
RT: 14.388 min Scan# 1463
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 329503
Ion Ratio Lower Upper
152 100
151 19.4 15.4 23.2
153 13.0 10.3 15.5

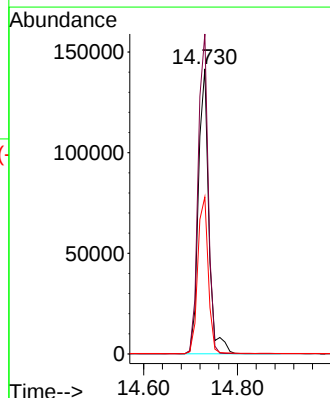
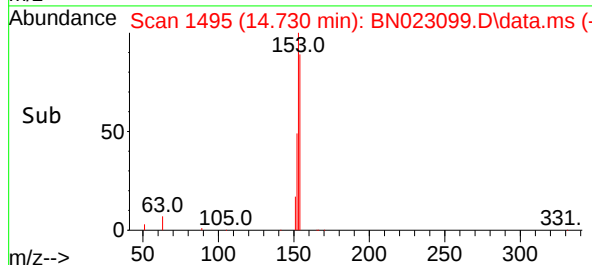
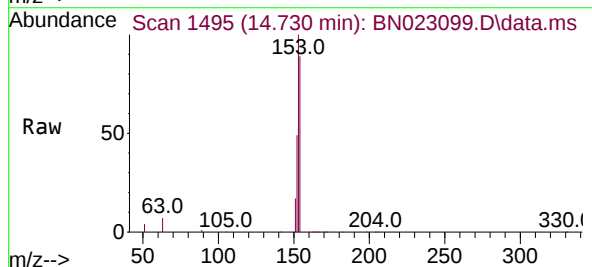
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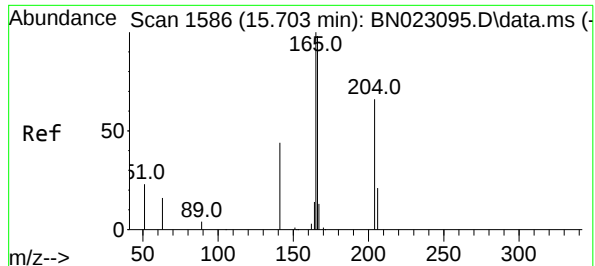
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#17
Acenaphthene
Concen: 4.631 ng
RT: 14.730 min Scan# 1495
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

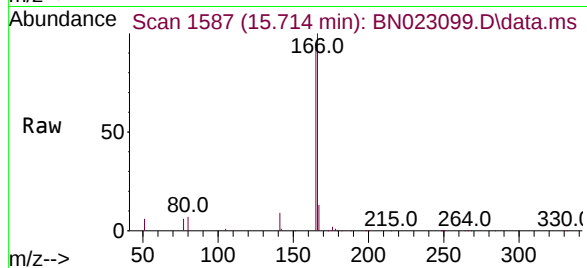
Tgt Ion:154 Resp: 218157
Ion Ratio Lower Upper
154 100
153 108.2 88.6 132.8
152 55.1 48.1 72.1





#18
Fluorene
Concen: 4.685 ng
RT: 15.714 min Scan# 11
Delta R.T. 0.011 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

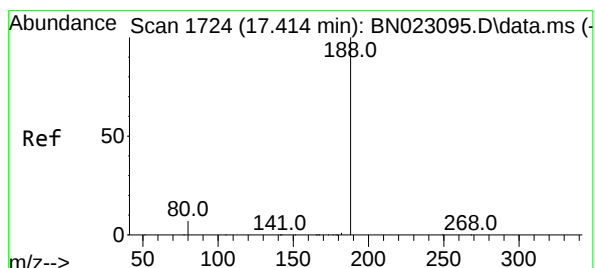
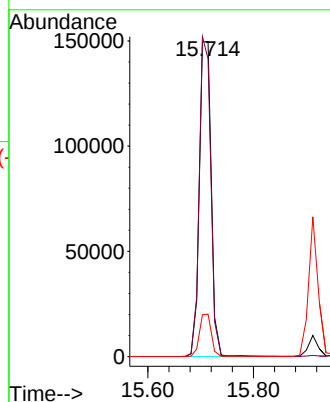
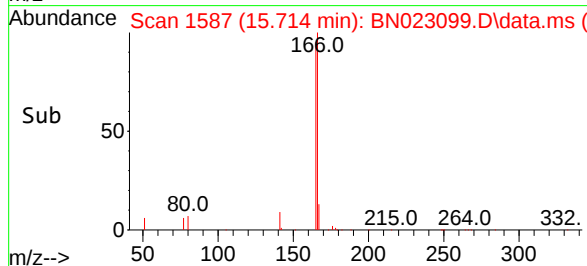
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



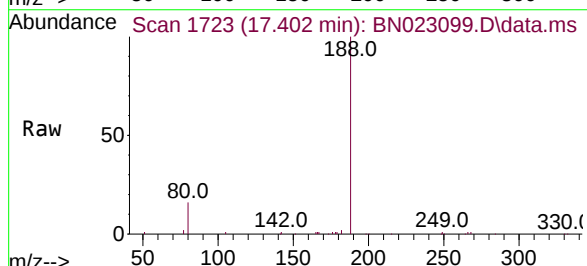
Tgt Ion:166 Resp: 247542
Ion Ratio Lower Upper
166 100
165 97.3 79.8 119.6
167 12.8 10.6 16.0

Manual Integrations
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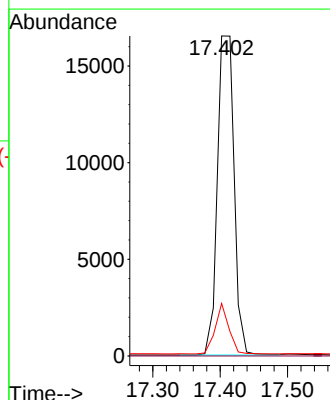
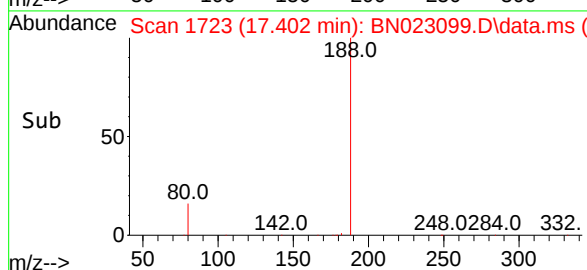
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

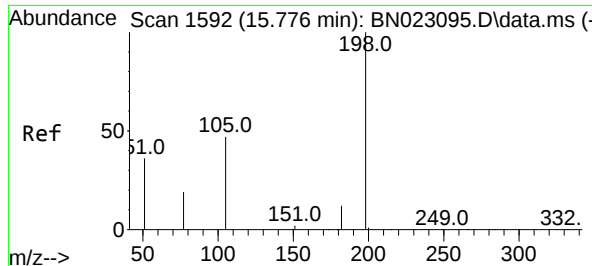


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.402 min Scan# 1723
Delta R.T. -0.012 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40



Tgt Ion:188 Resp: 28616
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 16.4 6.1 9.1#





#20

4,6-Dinitro-2-methylphenol

Concen: 7.089 ng

RT: 15.776 min Scan# 1592

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:198 Resp: 27445

Ion Ratio Lower Upper

198 100

51 48.2 57.0 85.4

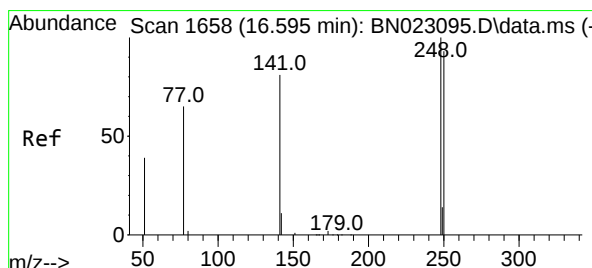
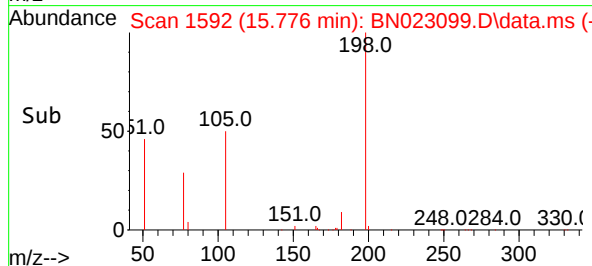
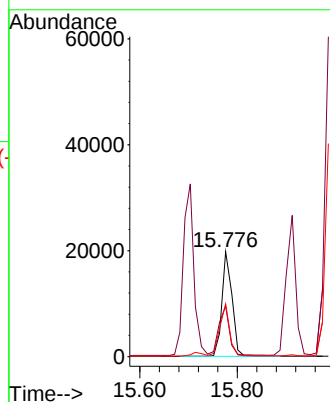
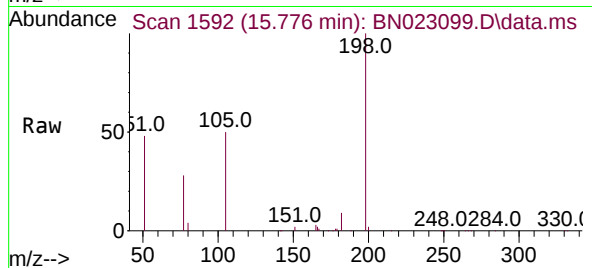
105 50.2 47.2 70.8

Manual Integrations

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Reviewed By :Christian Giraldo 12/13/2022

Supervised By :Jagrut Upadhyay 12/13/2022



#21

4-Bromophenyl-phenylether

Concen: 4.830 ng

RT: 16.595 min Scan# 1658

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

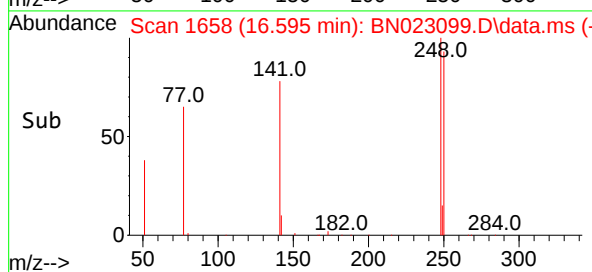
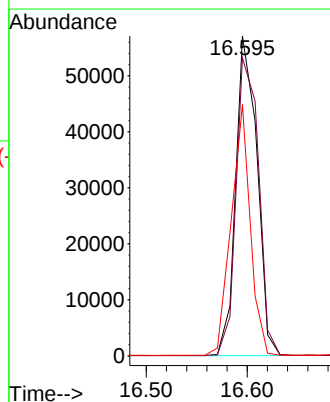
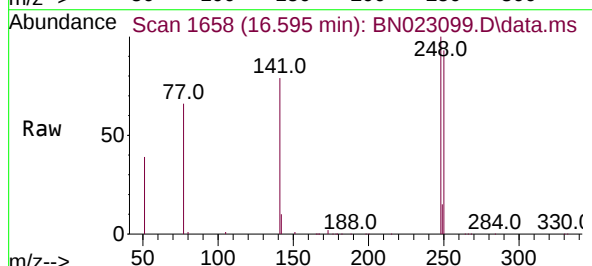
Tgt Ion:248 Resp: 83257

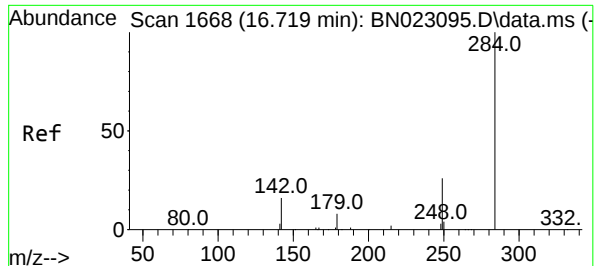
Ion Ratio Lower Upper

248 100

250 93.2 74.3 111.5

141 78.5 65.0 97.6





#22

Hexachlorobenzene

Concen: 4.601 ng

RT: 16.719 min Scan# 1668

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:284 Resp: 103010

Ion Ratio Lower Upper

284 100

142 39.1 31.0 46.4

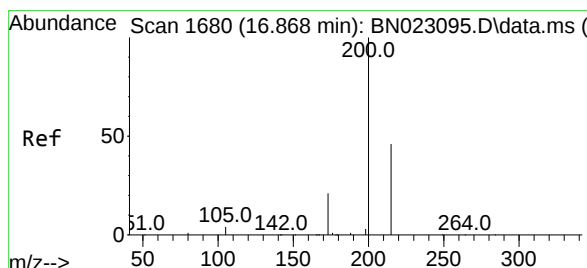
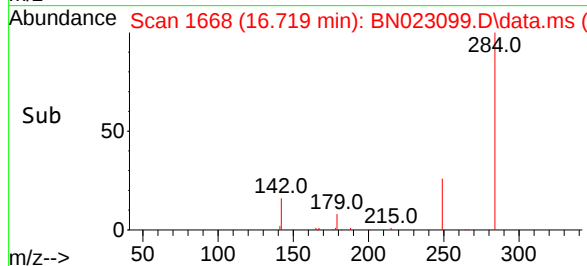
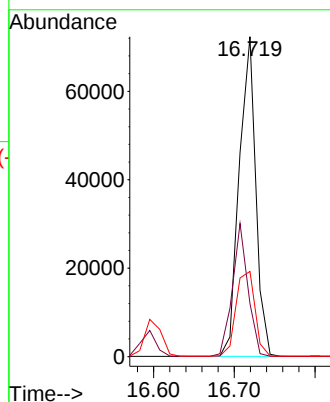
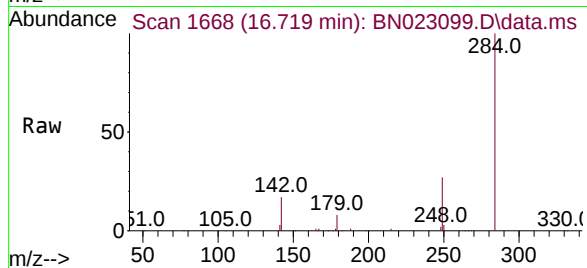
249 30.5 24.4 36.6

Manual Integrations

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Reviewed By :Christian Giraldo 12/13/2022

Supervised By :Jagrut Upadhyay 12/13/2022



#23

Atrazine

Concen: 5.323 ng

RT: 16.868 min Scan# 1680

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

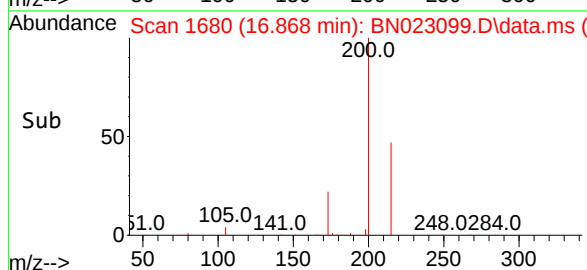
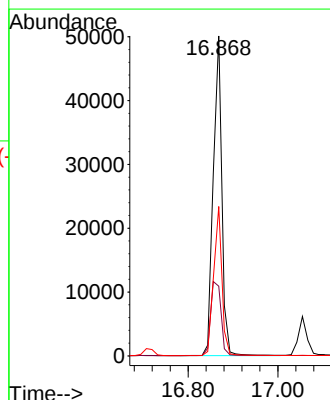
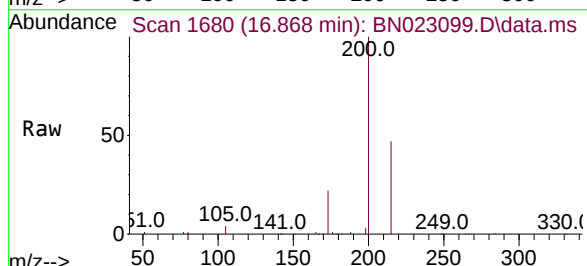
Tgt Ion:200 Resp: 66765

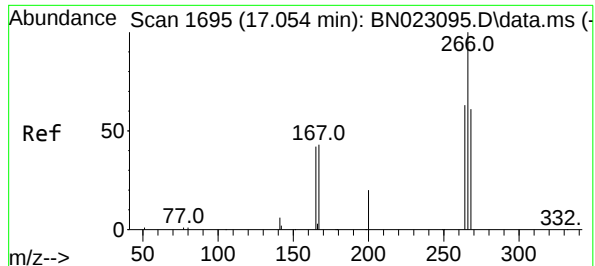
Ion Ratio Lower Upper

200 100

173 21.8 18.2 27.4

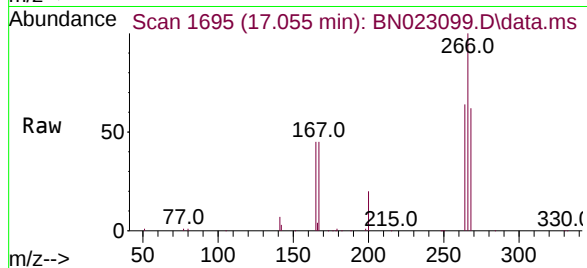
215 46.7 38.0 57.0





#24
Pentachlorophenol
Concen: 6.858 ng
RT: 17.055 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

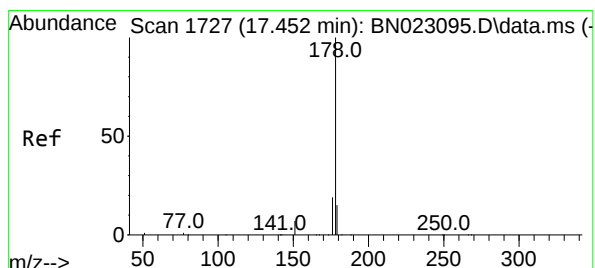
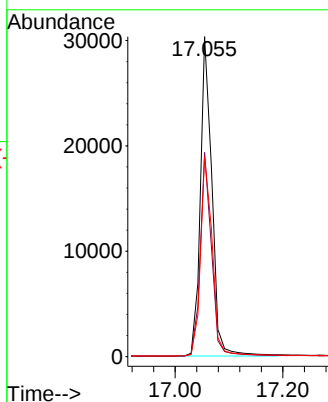
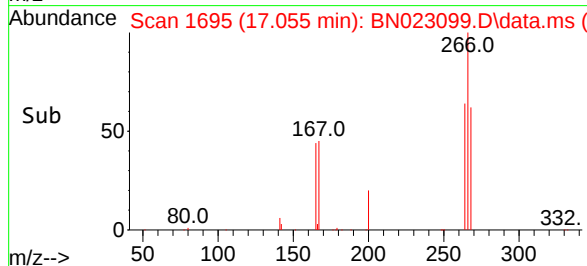
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



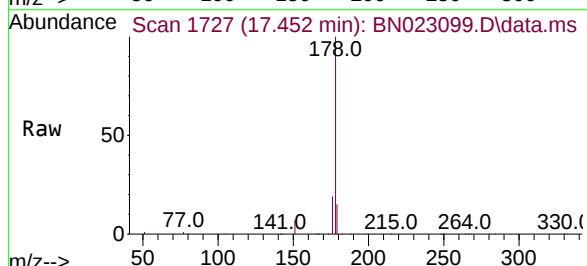
Tgt Ion:266 Resp: 45088
Ion Ratio Lower Upper
266 100
264 62.4 50.1 75.1
268 63.6 49.7 74.5

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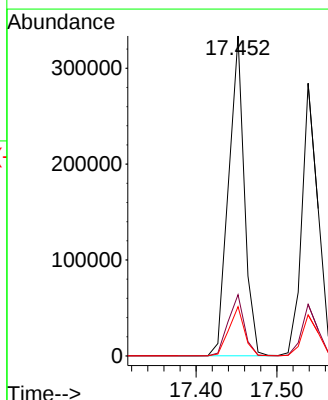
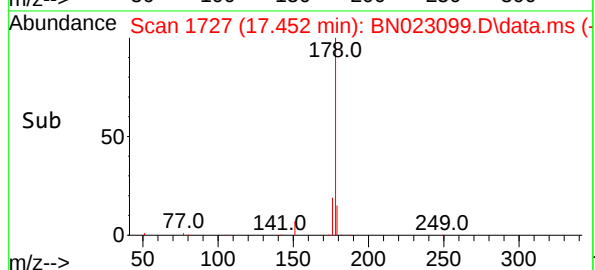
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022

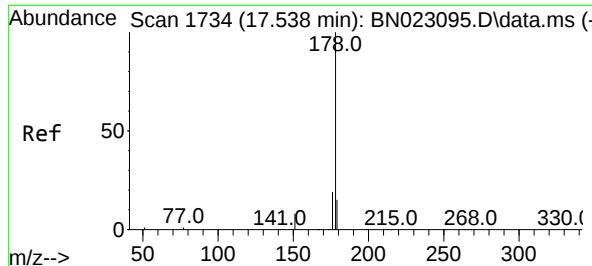


#25
Phenanthrene
Concen: 4.690 ng
RT: 17.452 min Scan# 1727
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40



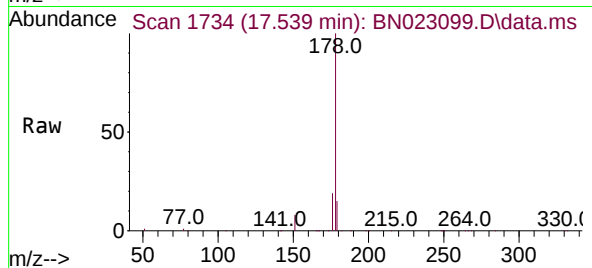
Tgt Ion:178 Resp: 452445
Ion Ratio Lower Upper
178 100
176 19.4 15.4 23.2
179 15.3 12.2 18.2





#26
Anthracene
Concen: 5.163 ng
RT: 17.539 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

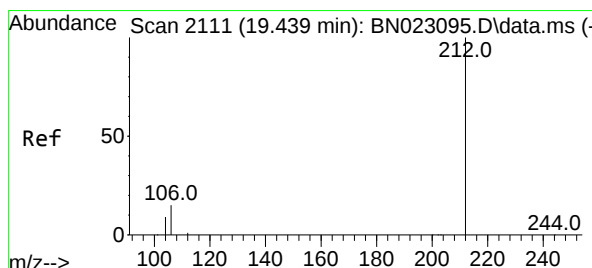
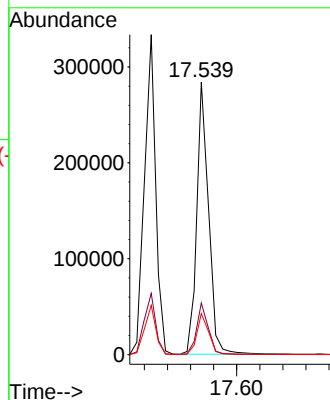
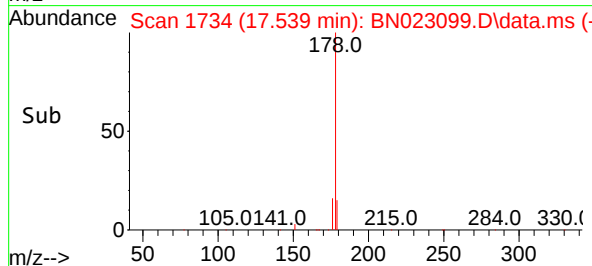
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



Tgt Ion:178 Resp: 401356
Ion Ratio Lower Upper
178 100
176 18.7 15.1 22.7
179 15.2 12.2 18.4

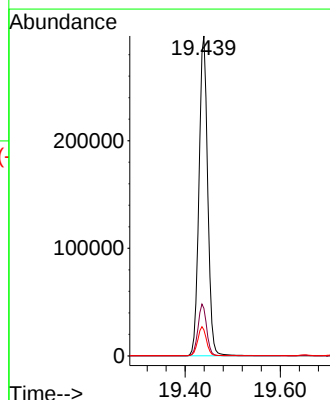
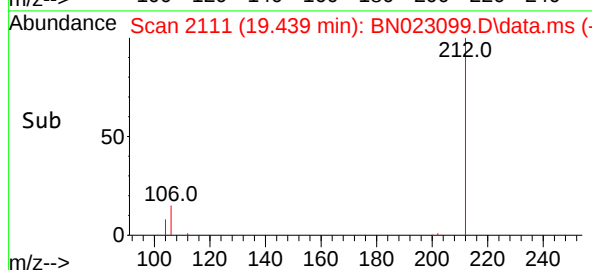
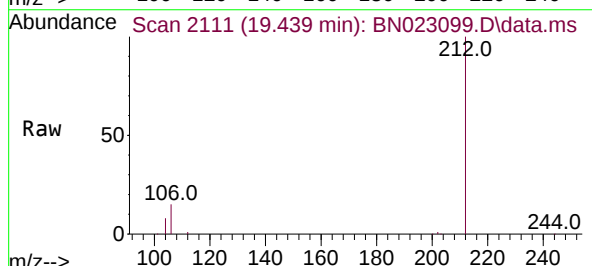
Manual Integrations
APPROVED

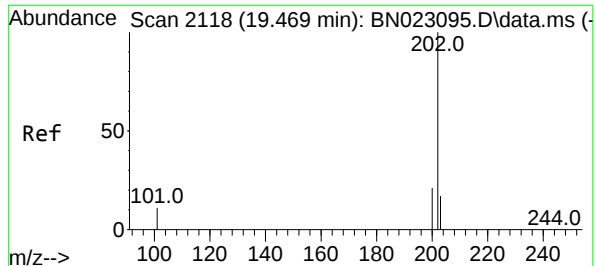
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#27
Fluoranthene-d10
Concen: 4.821 ng
RT: 19.439 min Scan# 2111
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

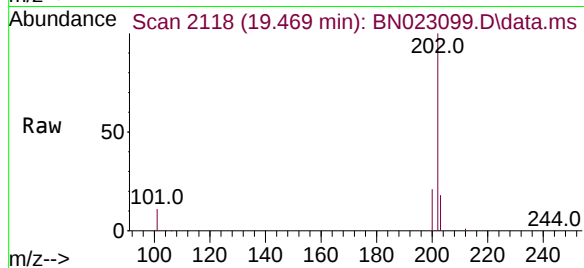
Tgt Ion:212 Resp: 377753
Ion Ratio Lower Upper
212 100
106 16.1 13.0 19.4
104 9.0 7.5 11.3





#28
Fluoranthene
Concen: 4.809 ng
RT: 19.469 min Scan# 2118
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

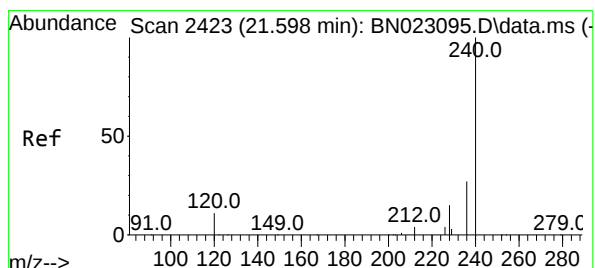
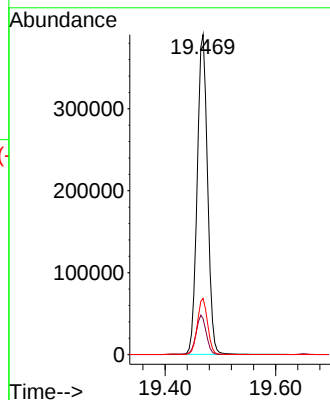
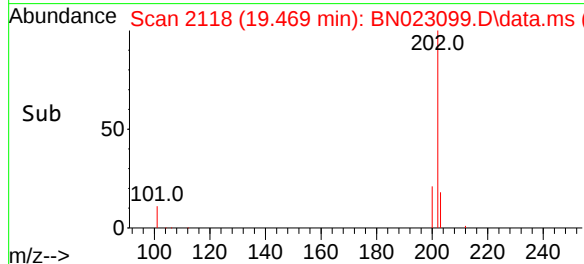
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



Tgt Ion:202 Resp: 506003
Ion Ratio Lower Upper
202 100
101 12.3 9.7 14.5
203 17.4 13.8 20.6

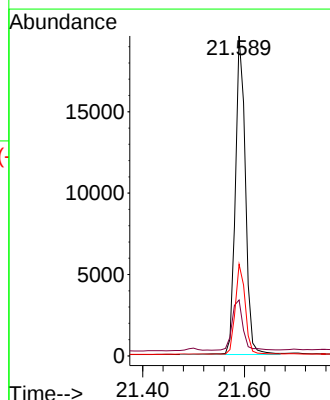
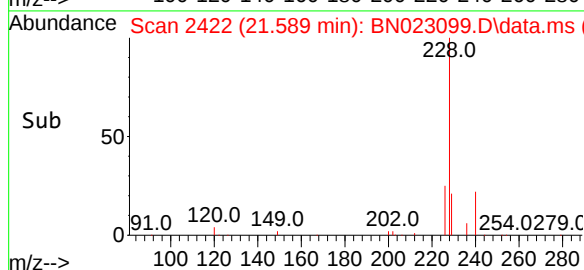
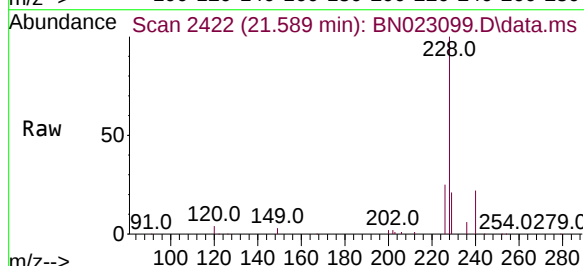
Manual Integrations
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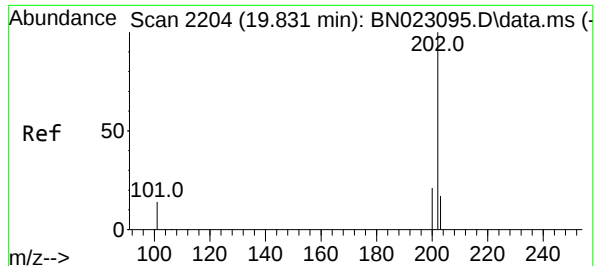
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.589 min Scan# 2422
Delta R.T. -0.009 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:240 Resp: 26816
Ion Ratio Lower Upper
240 100
120 17.5 10.1 15.1#
236 28.6 22.2 33.4





#30

Pyrene

Concen: 4.571 ng

RT: 19.831 min Scan# 21

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:202 Resp: 51113

Ion Ratio Lower Upper

202 100

200 21.1 16.9 25.3

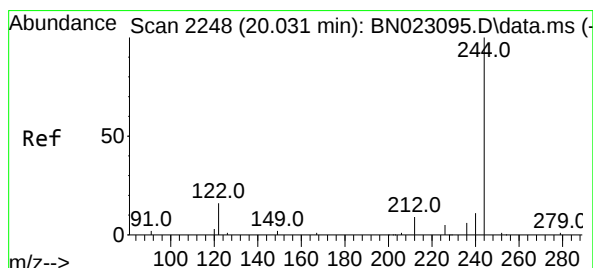
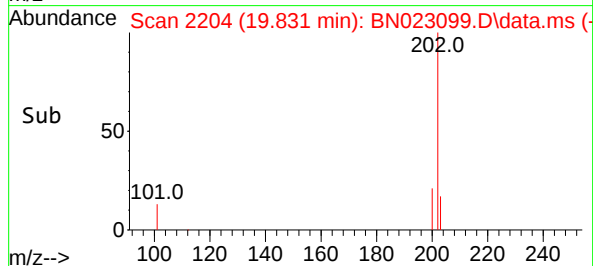
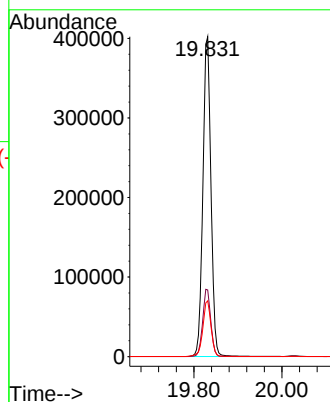
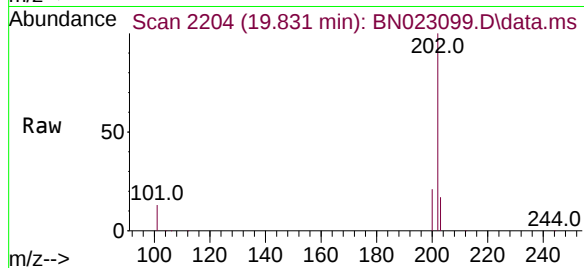
203 17.8 14.2 21.4

Manual Integrations

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Reviewed By :Christian Giraldo 12/13/2022

Supervised By :Jagrut Upadhyay 12/13/2022



#31

Terphenyl-d14

Concen: 4.418 ng

RT: 20.031 min Scan# 2248

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

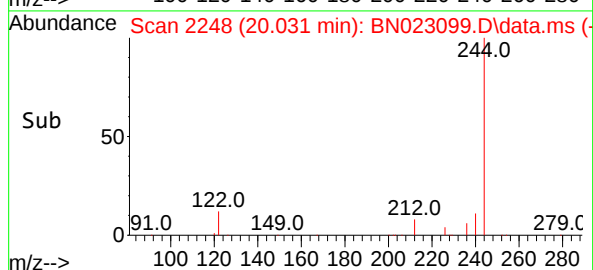
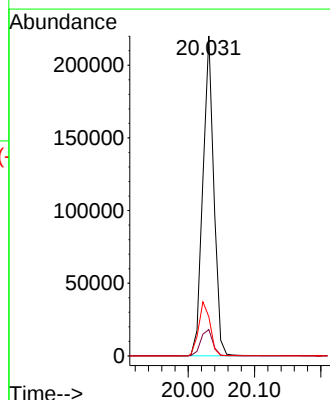
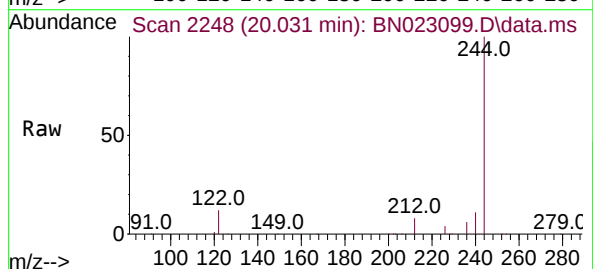
Tgt Ion:244 Resp: 224844

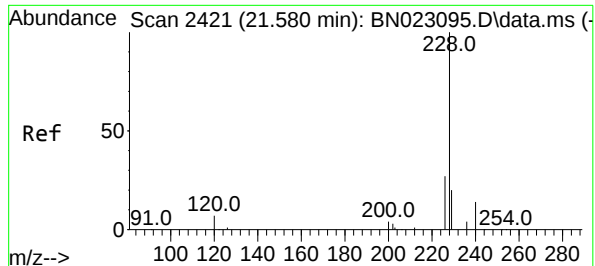
Ion Ratio Lower Upper

244 100

212 8.2 7.6 11.4

122 12.2 12.6 18.8#





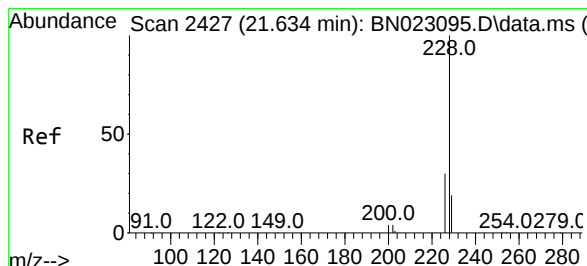
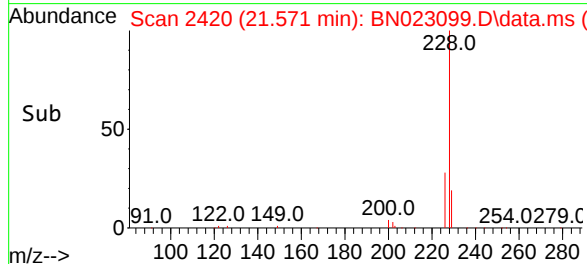
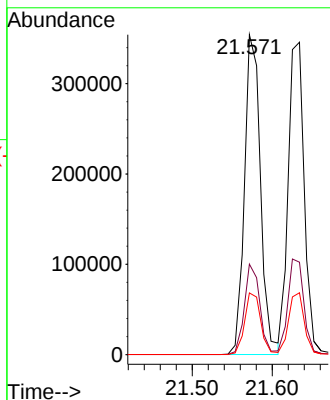
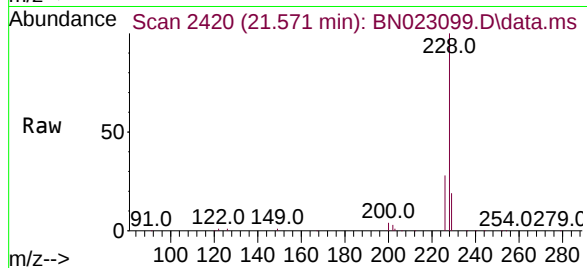
#32
Benzo(a)anthracene
Concen: 4.950 ng
RT: 21.571 min Scan# 2420
Delta R.T. -0.009 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 490036
Ion Ratio Lower Upper
228 100
226 28.3 22.0 33.0
229 19.3 15.8 23.8

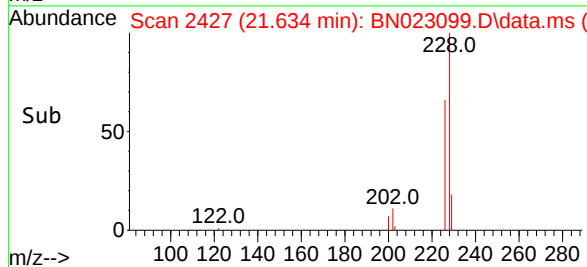
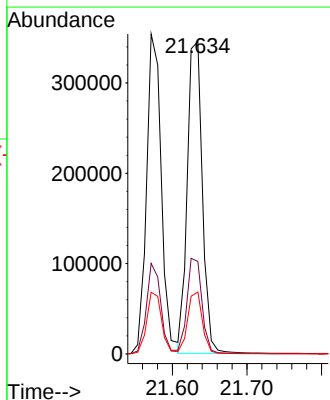
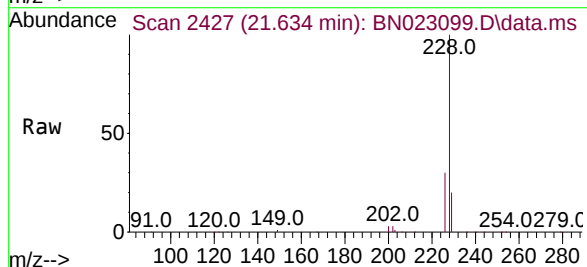
Manual Integrations
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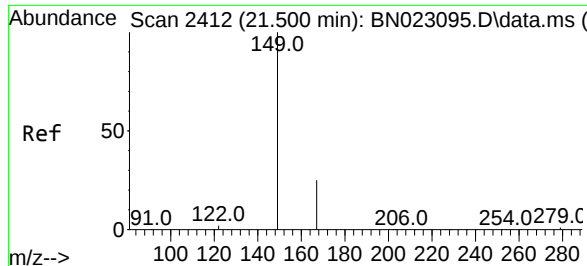
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#33
Chrysene
Concen: 4.385 ng
RT: 21.634 min Scan# 2427
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

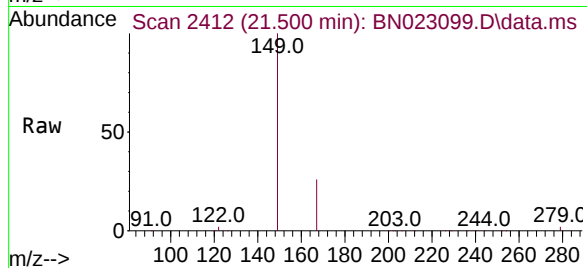
Tgt Ion:228 Resp: 485095
Ion Ratio Lower Upper
228 100
226 29.6 24.4 36.6
229 19.8 15.6 23.4





#34
Bis(2-ethylhexyl)phthalate
Concen: 5.484 ng
RT: 21.500 min Scan# 2412
Delta R.T. 0.000 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

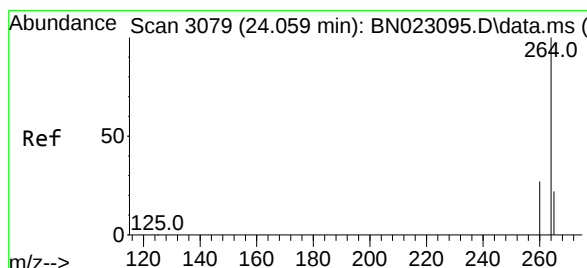
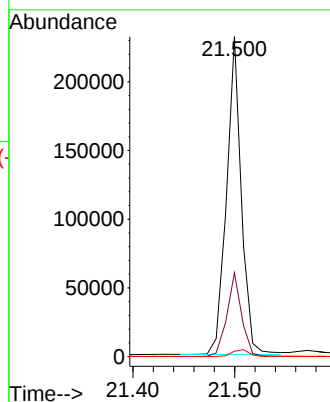
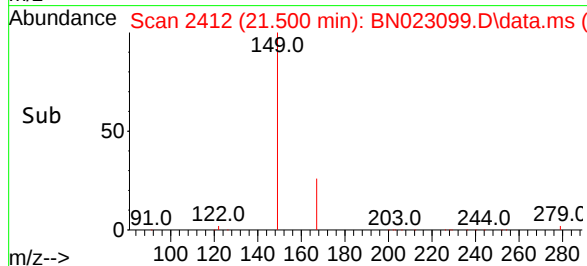
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



Tgt Ion:149 Resp: 234584
Ion Ratio Lower Upper
149 100
167 25.9 20.2 30.2
279 2.4 2.3 3.5

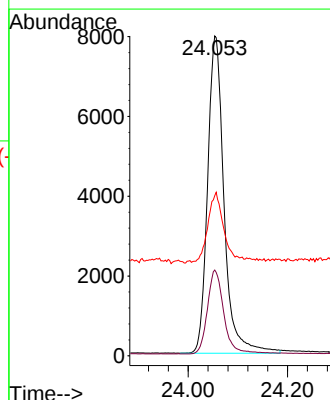
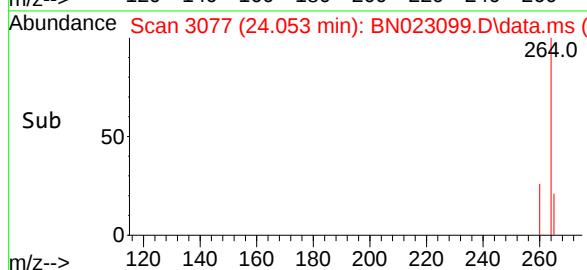
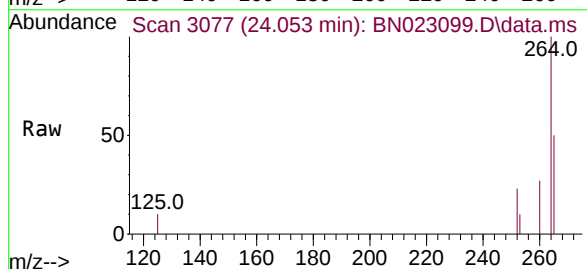
Manual Integrations
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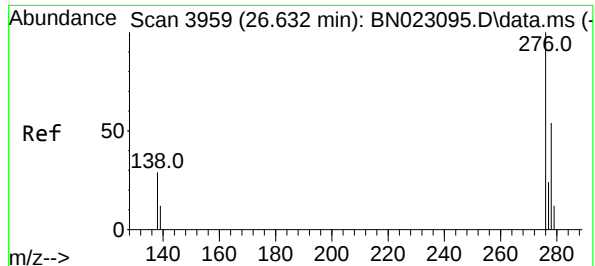
Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.053 min Scan# 3077
Delta R.T. -0.006 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:264 Resp: 18277
Ion Ratio Lower Upper
264 100
260 26.8 21.7 32.5
265 50.1 43.2 64.8





#36

Indeno(1,2,3-cd)pyrene

Concen: 4.890 ng

RT: 26.629 min Scan# 3959

Delta R.T. -0.003 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:276 Resp: 474956

Ion Ratio Lower Upper

276 100

138 30.7 25.0 37.6

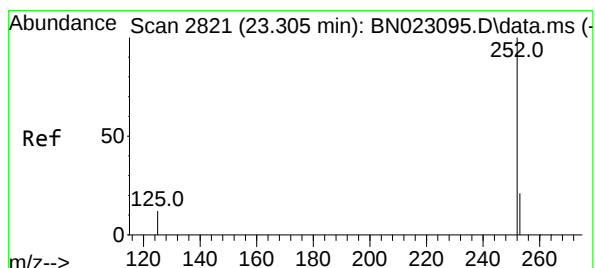
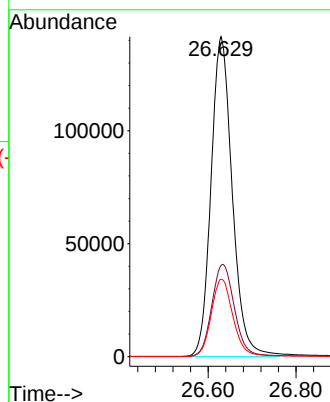
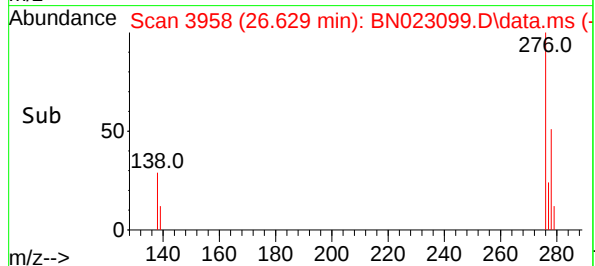
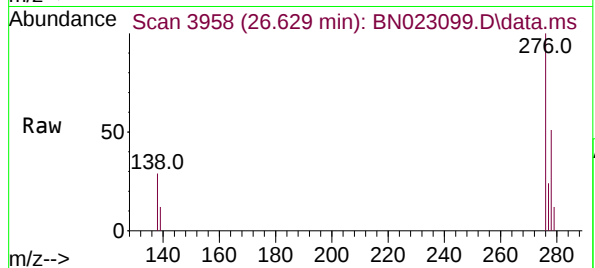
277 24.8 19.8 29.8

Manual Integrations

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Reviewed By :Christian Giraldo 12/13/2022

Supervised By :Jagrut Upadhyay 12/13/2022



#37

Benzo(b)fluoranthene

Concen: 5.138 ng

RT: 23.299 min Scan# 2819

Delta R.T. -0.006 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

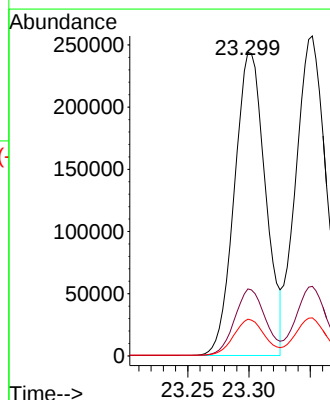
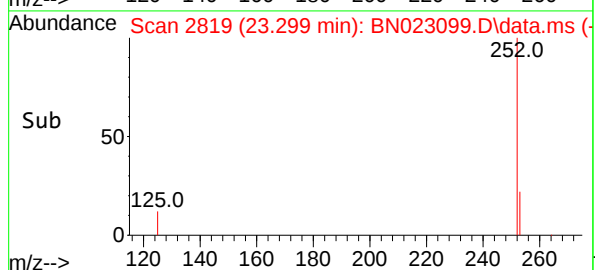
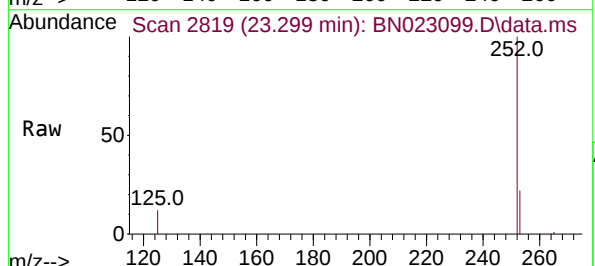
Tgt Ion:252 Resp: 429250

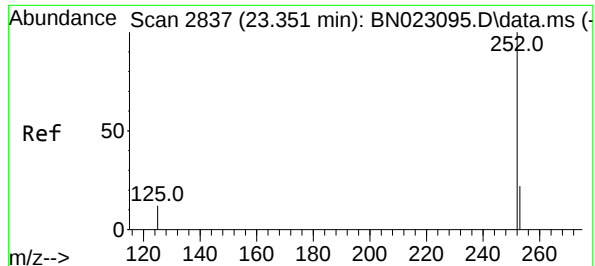
Ion Ratio Lower Upper

252 100

253 22.1 19.0 28.4

125 12.1 12.8 19.2#





#38

Benzo(k)fluoranthene

Concen: 5.195 ng

RT: 23.352 min Scan# 2837

Delta R.T. 0.000 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

Instrument :

BNA_N

ClientSampleId :

SSTDICC5.0

Tgt Ion:252 Resp: 44485

Ion Ratio Lower Upper

252 100

253 21.8 19.1 28.7

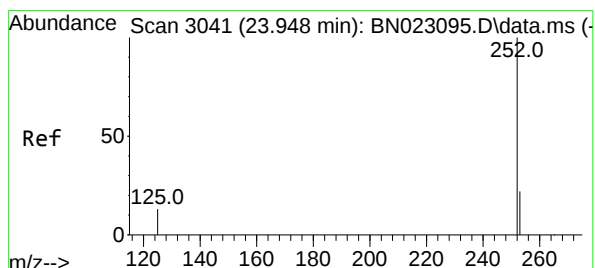
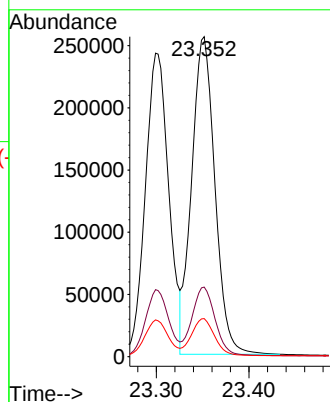
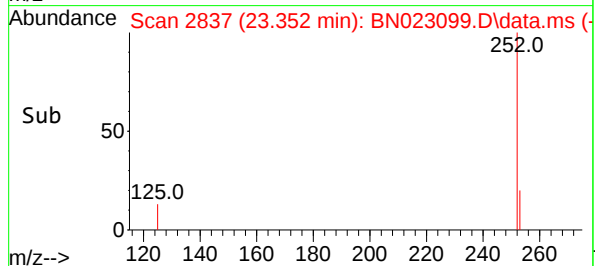
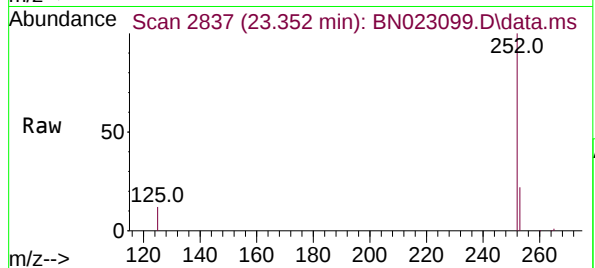
125 11.9 12.5 18.7

Manual Integrations

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Reviewed By :Christian Giraldo 12/13/2022

Supervised By :Jagrut Upadhyay 12/13/2022



#39

Benzo(a)pyrene

Concen: 5.001 ng

RT: 23.945 min Scan# 3040

Delta R.T. -0.003 min

Lab File: BN023099.D

Acq: 08 Dec 2022 17:40

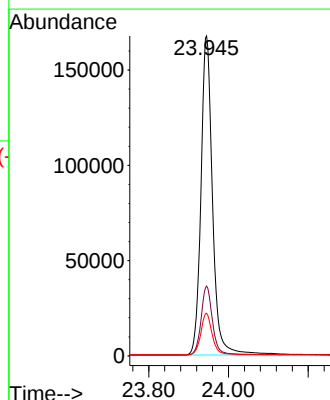
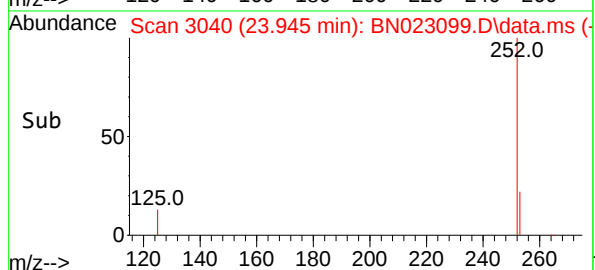
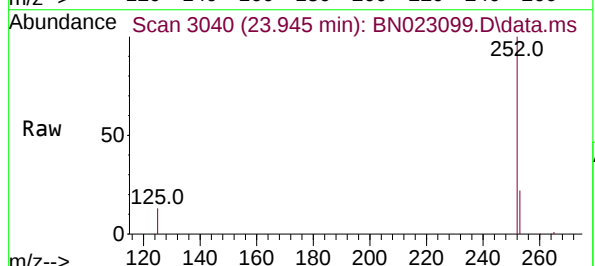
Tgt Ion:252 Resp: 338522

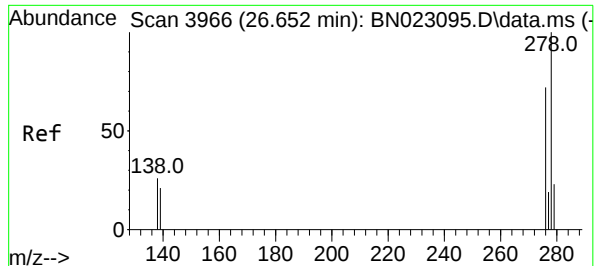
Ion Ratio Lower Upper

252 100

253 21.8 20.6 30.8

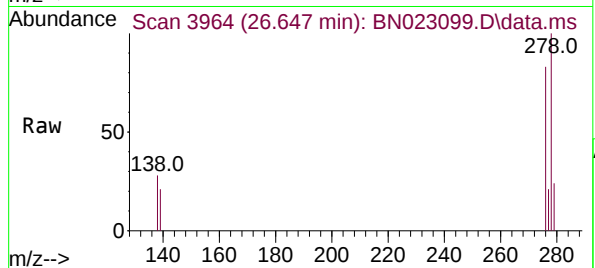
125 13.3 15.8 23.8#





#40
Dibenzo(a,h)anthracene
Concen: 4.970 ng
RT: 26.647 min Scan# 3966
Delta R.T. -0.006 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

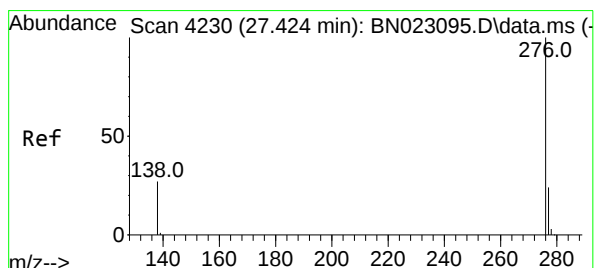
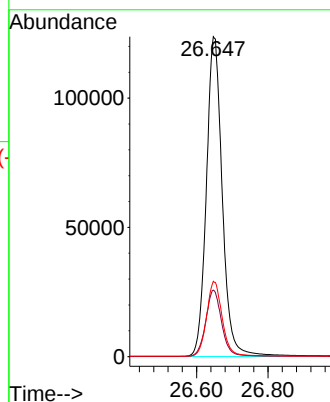
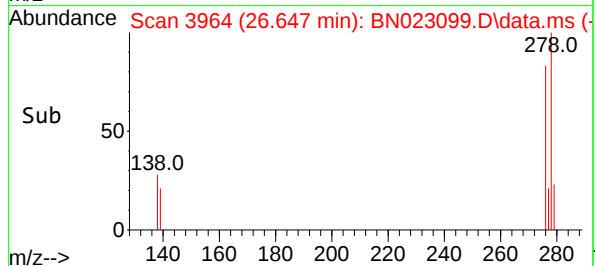
Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0



Tgt Ion:278 Resp: 381911
Ion Ratio Lower Upper
278 100
139 20.8 17.5 26.3
279 23.5 20.5 30.7

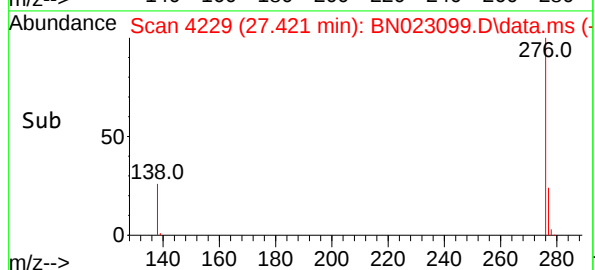
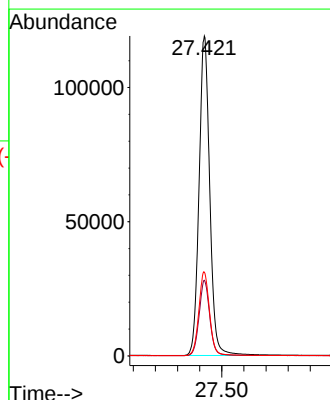
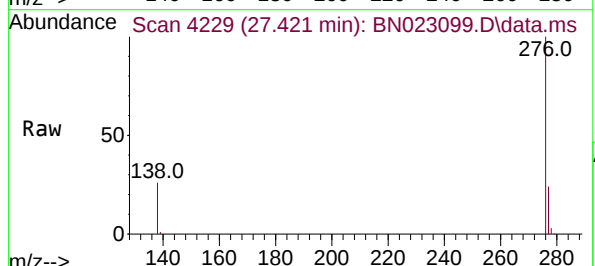
Manual Integrations
APPROVED

Reviewed By :Christian Giraldo 12/13/2022
Supervised By :Jagrut Upadhyay 12/13/2022



#41
Benzo(g,h,i)perylene
Concen: 5.077 ng
RT: 27.421 min Scan# 4229
Delta R.T. -0.003 min
Lab File: BN023099.D
Acq: 08 Dec 2022 17:40

Tgt Ion:276 Resp: 399388
Ion Ratio Lower Upper
276 100
277 23.6 19.9 29.9
138 26.2 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023100.D
 Acq On : 08 Dec 2022 18:17
 Operator : CG/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN120822

Quant Time: Dec 09 07:47:50 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:44:40 2022
 Response via : Initial Calibration

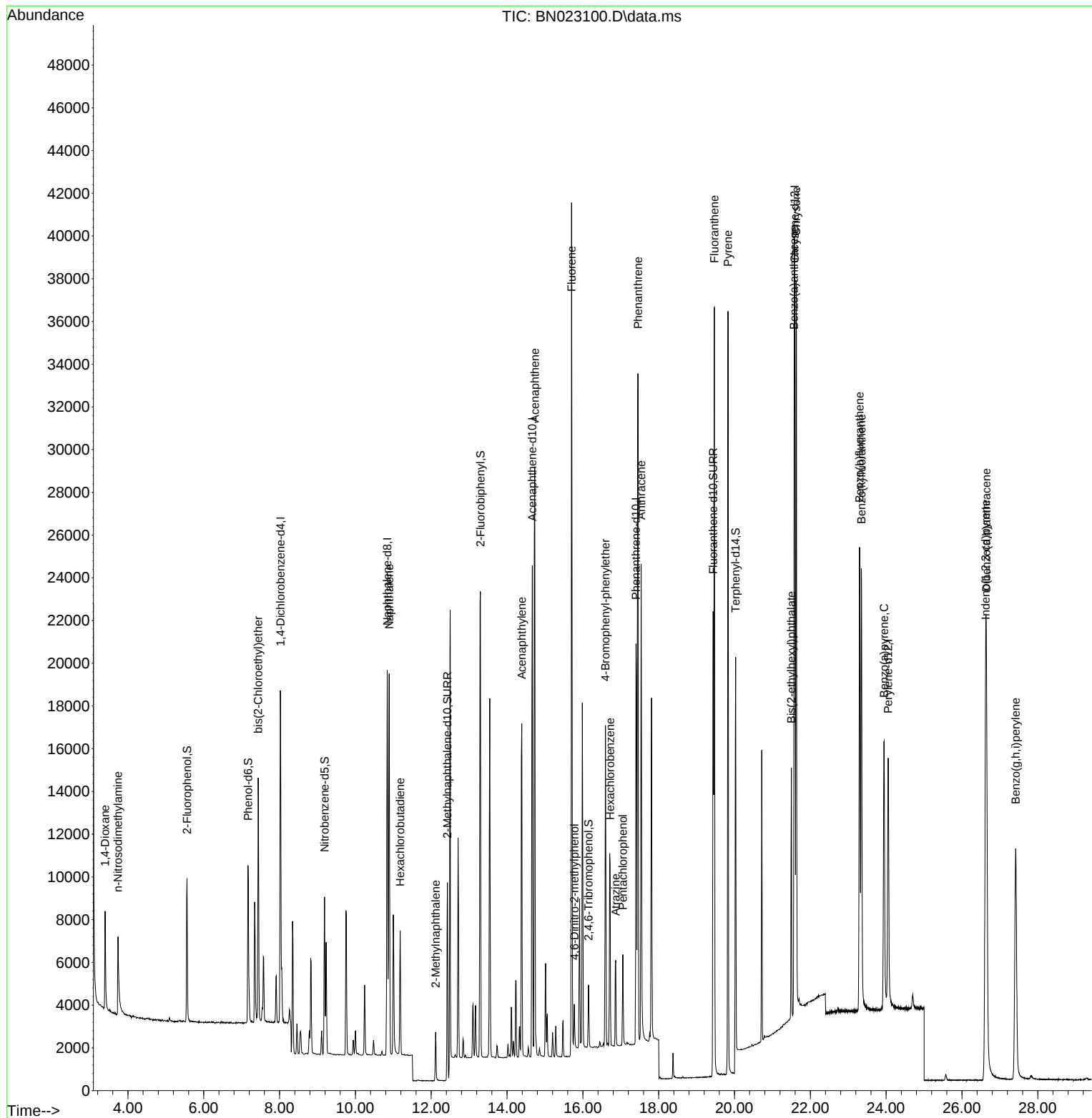
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.021	152	7612	0.400	ng	0.00
7) Naphthalene-d8	10.840	136	22566	0.400	ng	0.00
13) Acenaphthene-d10	14.666	164	12449	0.400	ng	0.00
19) Phenanthrene-d10	17.402	188	27164	0.400	ng	#-0.01
29) Chrysene-d12	21.589	240	22009	0.400	ng	# 0.00
35) Perylene-d12	24.053	264	17542	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.558	112	5566	0.393	ng	0.00
5) Phenol-d6	7.168	99	6971	0.387	ng	0.00
8) Nitrobenzene-d5	9.185	82	5658	0.381	ng	0.00
11) 2-Methylnaphthalene-d10	12.427	152	15694	0.410	ng	0.00
14) 2,4,6-Tribromophenol	16.148	330	1561	0.346	ng	0.00
15) 2-Fluorobiphenyl	13.298	172	20220	0.407	ng	0.00
27) Fluoranthene-d10	19.439	212	24017	0.378	ng	0.00
31) Terphenyl-d14	20.031	244	14543	0.407	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.398	88	3062	0.408	ng	99
3) n-Nitrosodimethylamine	3.738	42	2878	0.390	ng	99
6) bis(2-Chloroethyl)ether	7.436	93	8241	0.403	ng	98
9) Naphthalene	10.893	128	22785	0.396	ng	100
10) Hexachlorobutadiene	11.182	225	4421	0.404	ng	# 100
12) 2-Methylnaphthalene	12.117	142	3243	0.379	ng	99
16) Acenaphthylene	14.388	152	18308	0.365	ng	100
17) Acenaphthene	14.730	154	14119	0.383	ng	99
18) Fluorene	15.703	166	15779	0.383	ng	100
20) 4,6-Dinitro-2-methylph...	15.776	198	1113	0.440	ng	98
21) 4-Bromophenyl-phenylether	16.595	248	5541	0.382	ng	99
22) Hexachlorobenzene	16.719	284	7695	0.405	ng	100
23) Atrazine	16.868	200	3573	0.350	ng	99
24) Pentachlorophenol	17.055	266	1977	0.300	ng	98
25) Phenanthrene	17.452	178	31445	0.388	ng	100
26) Anthracene	17.539	178	23419	0.363	ng	99
28) Fluoranthene	19.469	202	32800	0.378	ng	100
30) Pyrene	19.827	202	31897	0.396	ng	100
32) Benzo(a)anthracene	21.571	228	25864	0.365	ng	98
33) Chrysene	21.625	228	31807	0.399	ng	98
34) Bis(2-ethylhexyl)phtha...	21.500	149	10468	0.349	ng	100
36) Indeno(1,2,3-cd)pyrene	26.623	276	31454	0.400	ng	100
37) Benzo(b)fluoranthene	23.299	252	28324	0.389	ng	99
38) Benzo(k)fluoranthene	23.346	252	27995	0.379	ng	99
39) Benzo(a)pyrene	23.942	252	20767	0.381	ng	96
40) Dibenzo(a,h)anthracene	26.644	278	25035	0.397	ng	99
41) Benzo(g,h,i)perylene	27.418	276	24921	0.370	ng	99

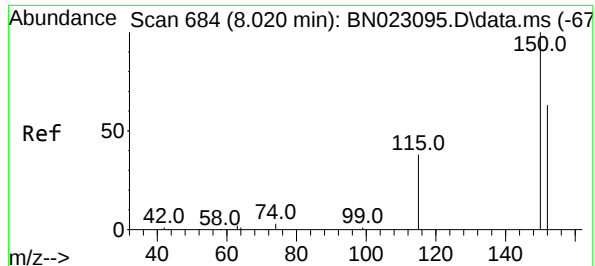
(#) = qualifier out of range (m) = manual integration (+) = signals summed

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Data File : BN023100.D
Acq On : 08 Dec 2022 18:17
Operator : CG/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN120822

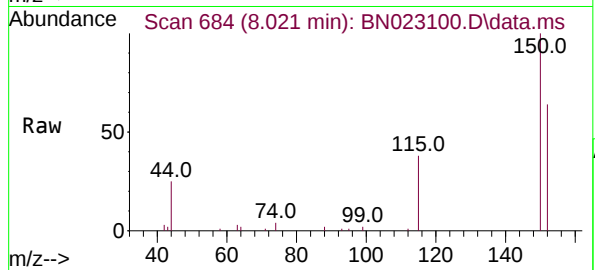
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QLast Update : Fri Dec 09 07:44:40 2022
Response via : Initial Calibration





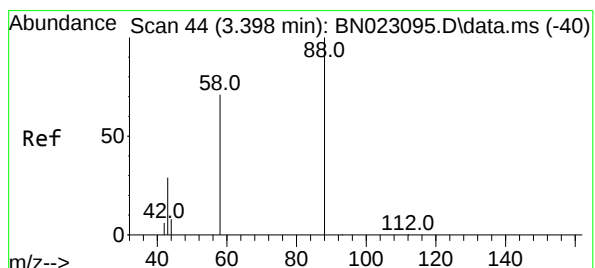
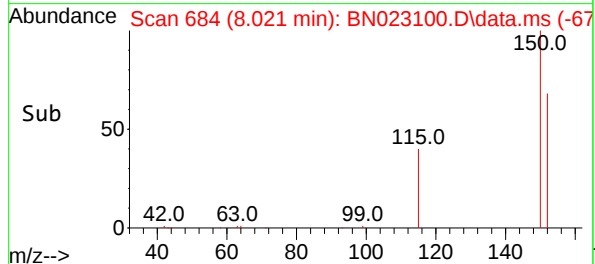
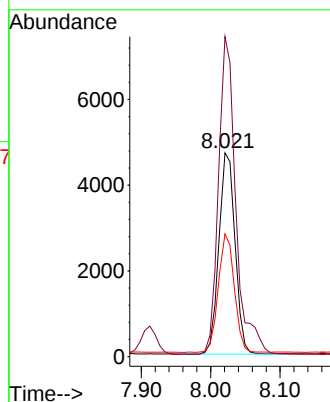
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 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 8.021 min Scan# 684
 Delta R.T. 0.001 min
 Lab File: BN023100.D
 Acq: 08 Dec 2022 18:17

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN120822



Tgt Ion: 152 Resp: 7612

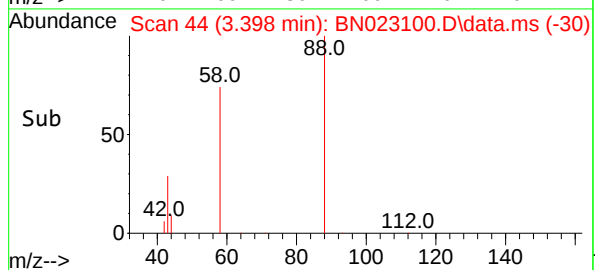
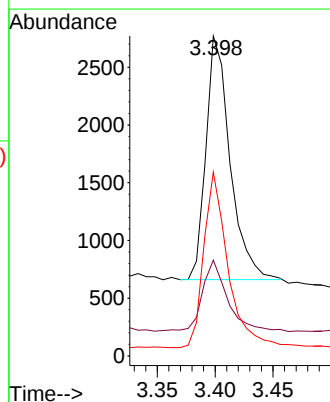
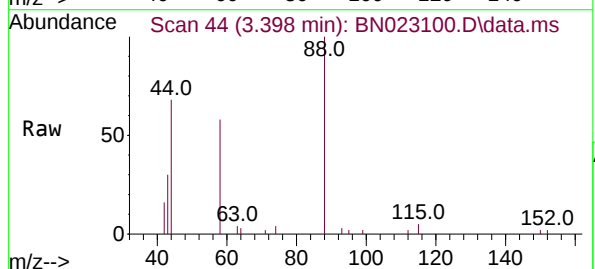
Ion	Ratio	Lower	Upper
152	100		
150	157.1	125.6	188.4
115	60.2	49.0	73.4

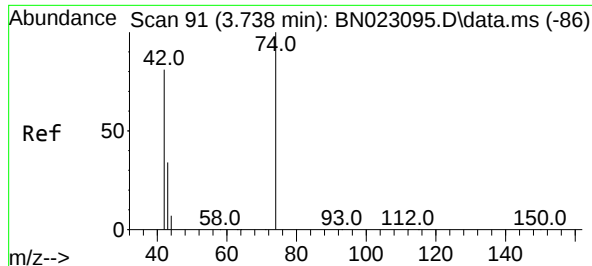


#2
 1,4-Dioxane
 Concen: 0.408 ng
 RT: 3.398 min Scan# 44
 Delta R.T. 0.000 min
 Lab File: BN023100.D
 Acq: 08 Dec 2022 18:17

Tgt Ion: 88 Resp: 3062

Ion	Ratio	Lower	Upper
88	100		
43	29.9	23.3	34.9
58	72.0	58.0	87.0

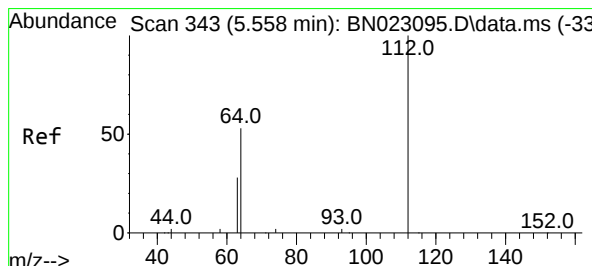
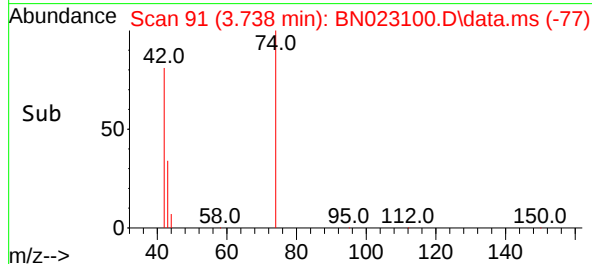
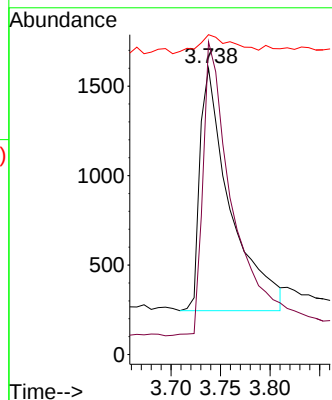
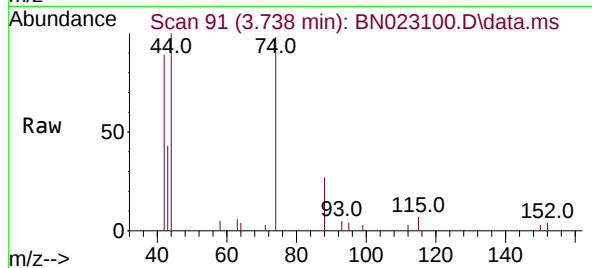




#3
n-Nitrosodimethylamine
Concen: 0.390 ng
RT: 3.738 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

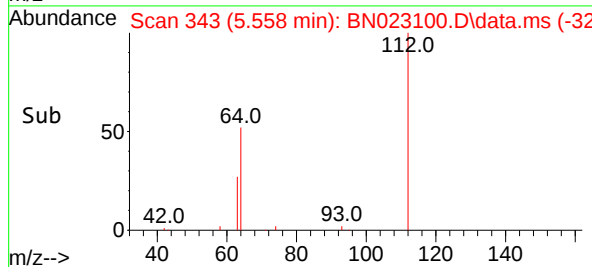
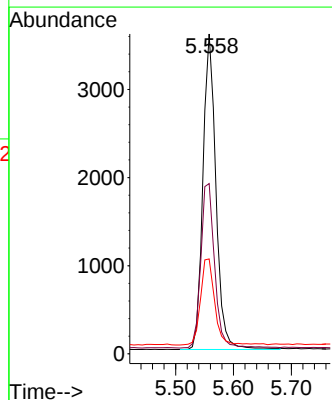
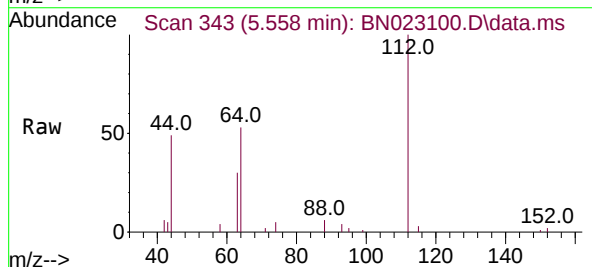
Instrument :
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ClientSampleId :
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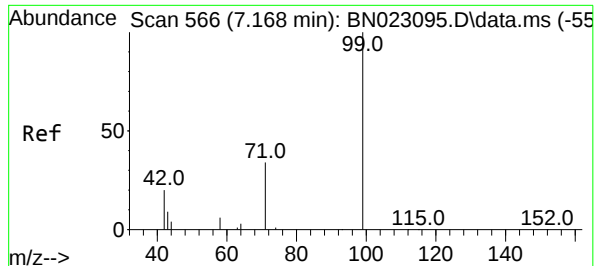
Tgt Ion: 42 Resp: 2878
Ion Ratio Lower Upper
42 100
74 120.6 95.8 143.6
44 9.0 8.4 12.6



#4
2-Fluorophenol
Concen: 0.393 ng
RT: 5.558 min Scan# 343
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion: 112 Resp: 5566
Ion Ratio Lower Upper
112 100
64 55.6 44.4 66.6
63 29.7 23.7 35.5

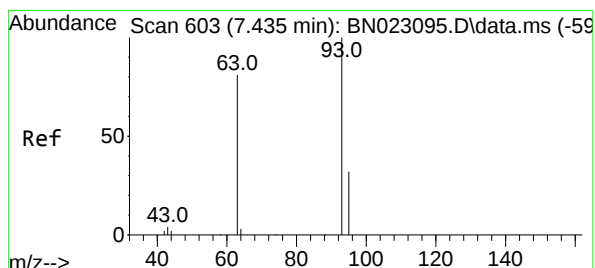
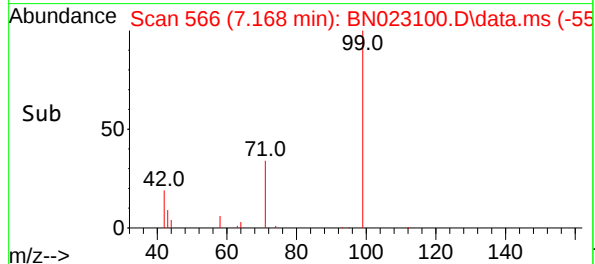
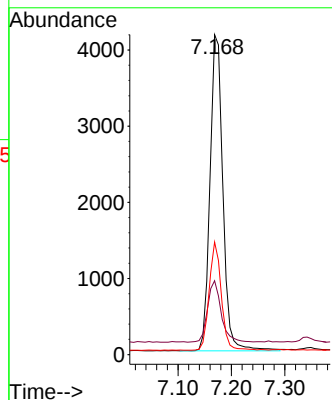
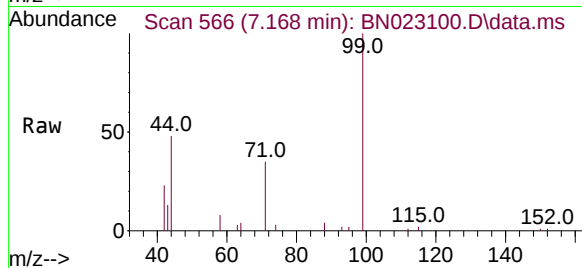




#5
Phenol-d6
Concen: 0.387 ng
RT: 7.168 min Scan# 566
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

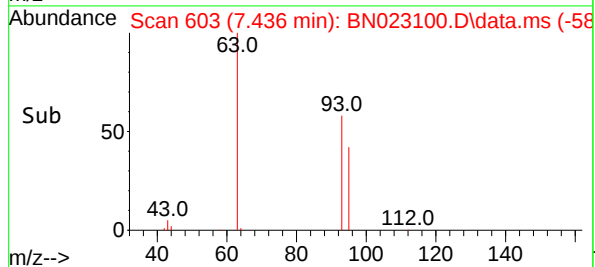
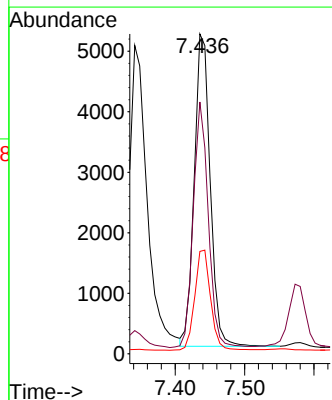
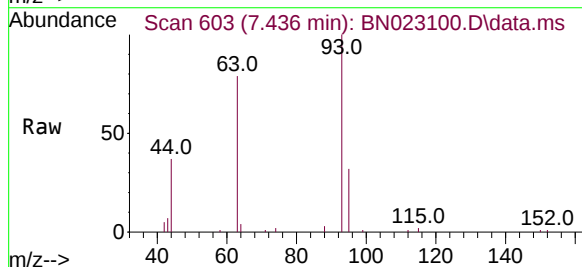
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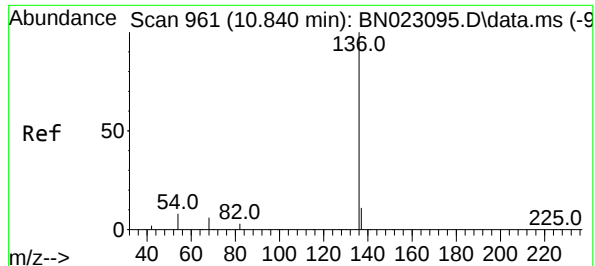
Tgt Ion: 99 Resp: 6971
Ion Ratio Lower Upper
99 100
42 20.5 16.3 24.5
71 32.3 26.5 39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.403 ng
RT: 7.436 min Scan# 603
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion: 93 Resp: 8241
Ion Ratio Lower Upper
93 100
63 74.4 58.1 87.1
95 31.9 25.2 37.8

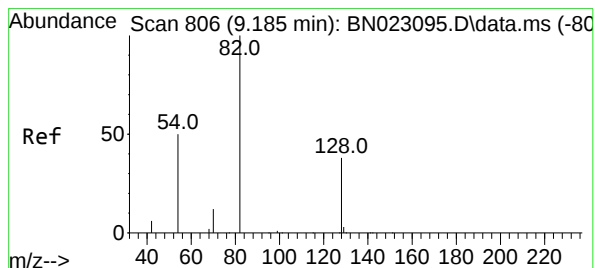
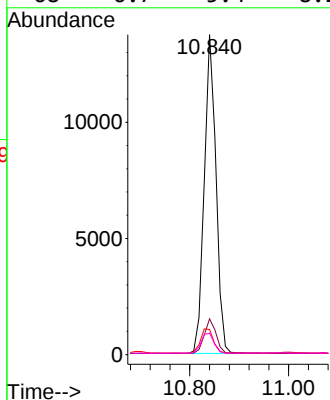
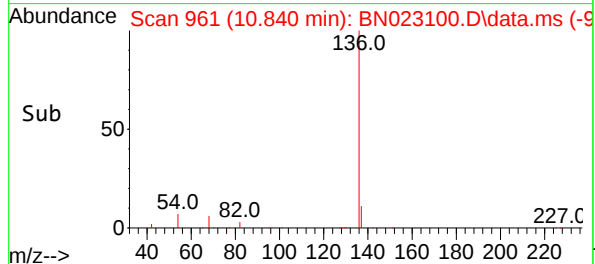
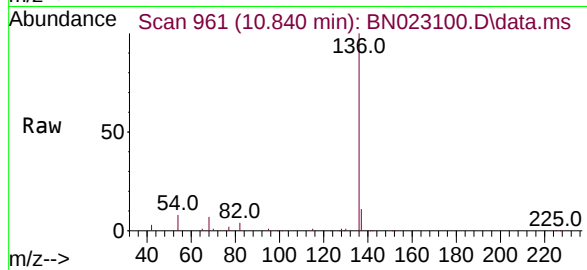




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.840 min Scan# 961
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

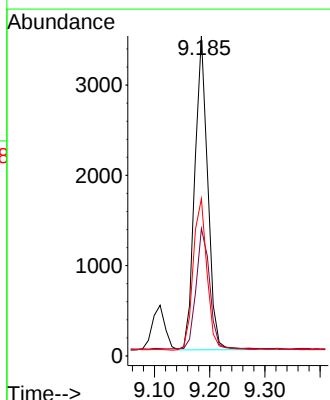
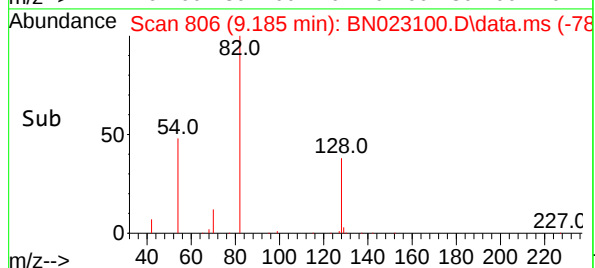
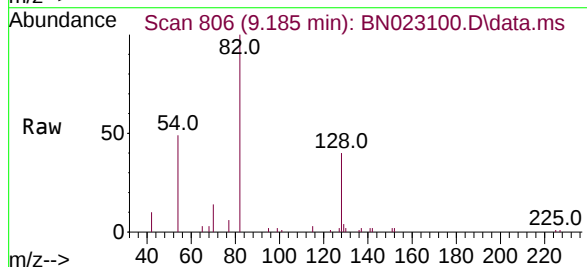
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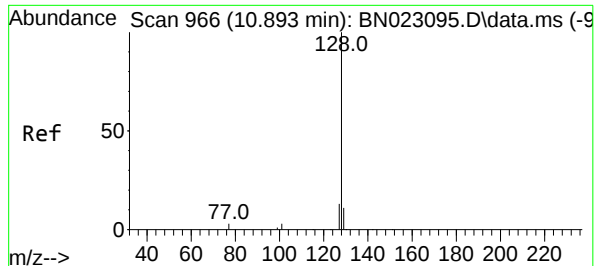
Tgt Ion:	136	Resp:	22566
Ion Ratio	Lower	Upper	
136	100		
137	11.2	9.0	13.4
54	7.9	6.5	9.7
68	6.7	5.4	8.2



#8
Nitrobenzene-d5
Concen: 0.381 ng
RT: 9.185 min Scan# 806
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:	82	Resp:	5658
Ion Ratio	Lower	Upper	
82	100		
128	39.8	31.4	47.2
54	49.1	41.0	61.4

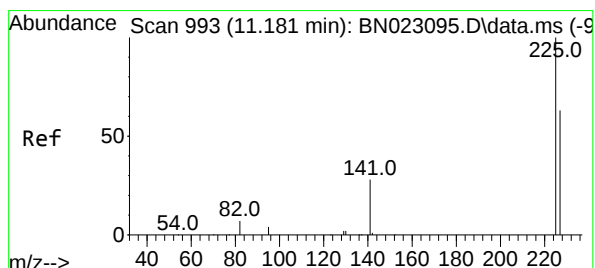
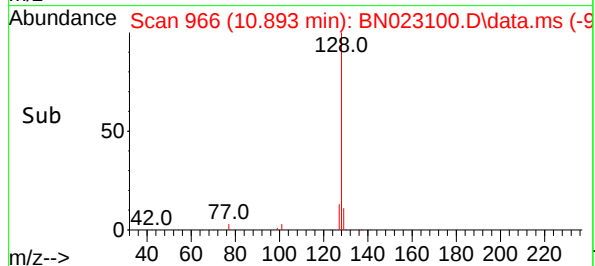
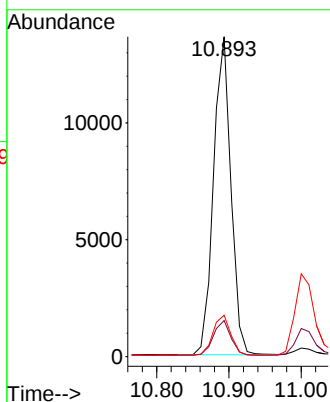
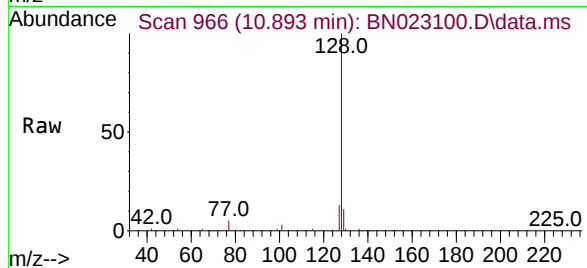




#9
Naphthalene
Concen: 0.396 ng
RT: 10.893 min Scan# 966
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

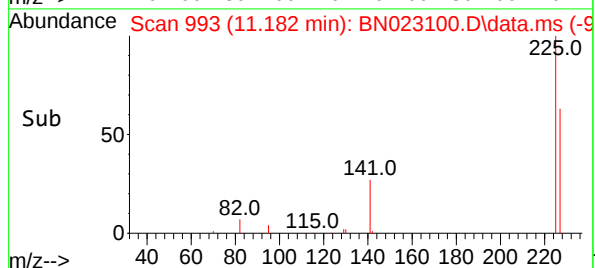
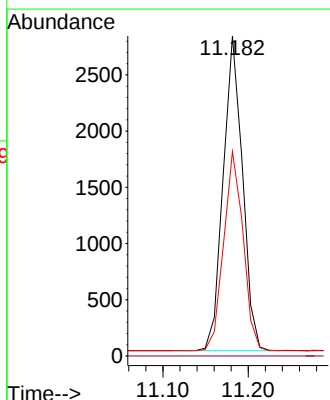
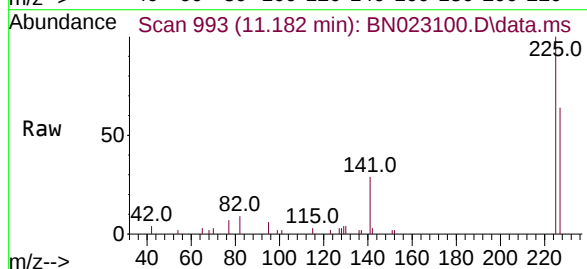
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ClientSampleId :
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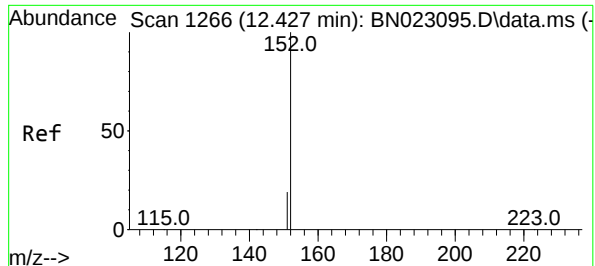
Tgt Ion:128 Resp: 22785
Ion Ratio Lower Upper
128 100
129 11.3 9.0 13.6
127 12.9 10.5 15.7



#10
Hexachlorobutadiene
Concen: 0.404 ng
RT: 11.182 min Scan# 993
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:225 Resp: 4421
Ion Ratio Lower Upper
225 100
223 0.0 0.0 0.0
227 63.5 51.1 76.7

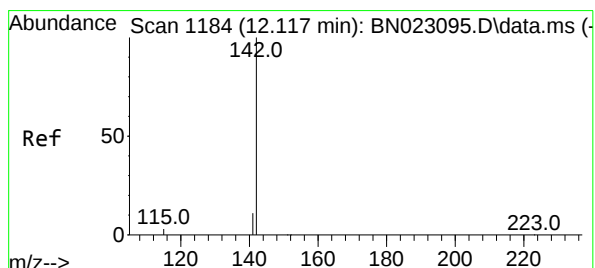
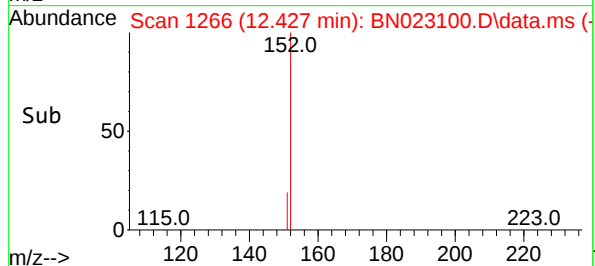
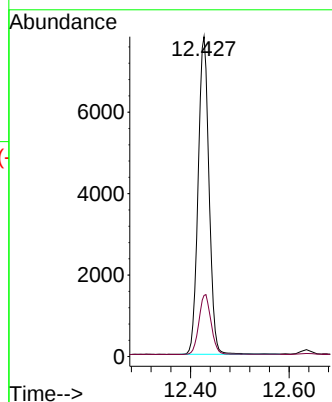
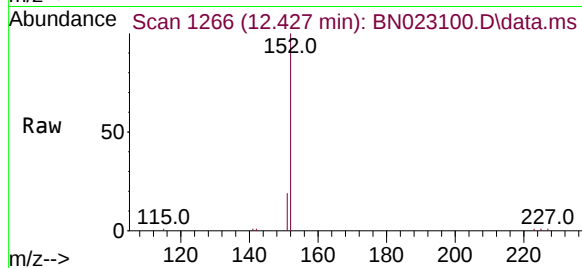




#11
2-Methylnaphthalene-d10
Concen: 0.410 ng
RT: 12.427 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

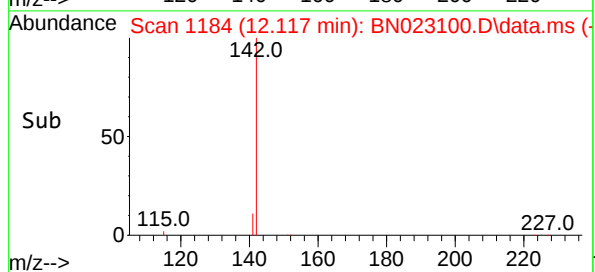
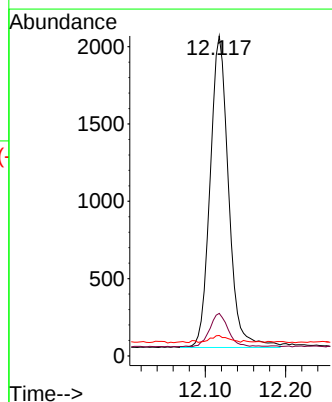
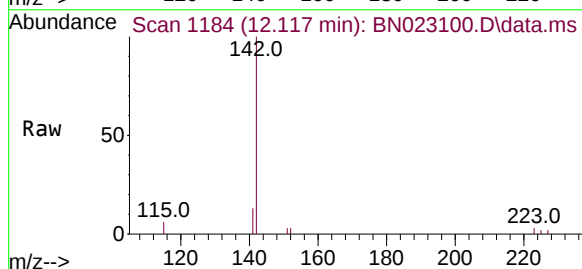
Instrument :
BNA_N
ClientSampleId :
ICVBN120822

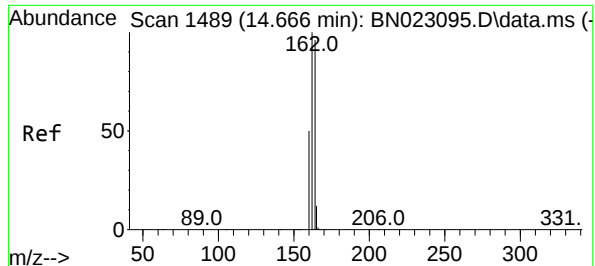
Tgt Ion:152 Resp: 15694
Ion Ratio Lower Upper
152 100
151 15.9 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.379 ng
RT: 12.117 min Scan# 1184
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:142 Resp: 3243
Ion Ratio Lower Upper
142 100
141 13.3 10.9 16.3
115 6.4 5.7 8.5

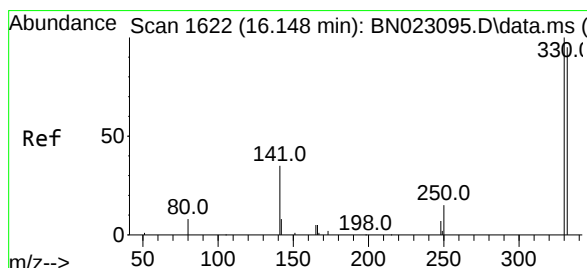
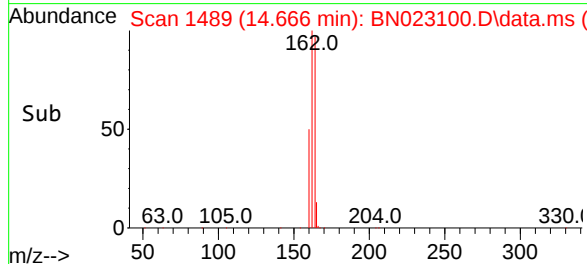
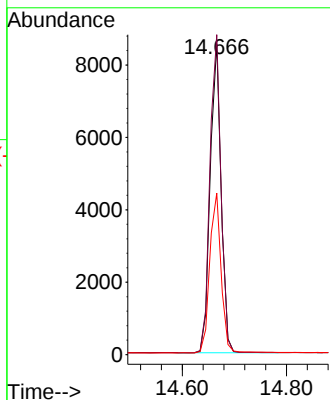
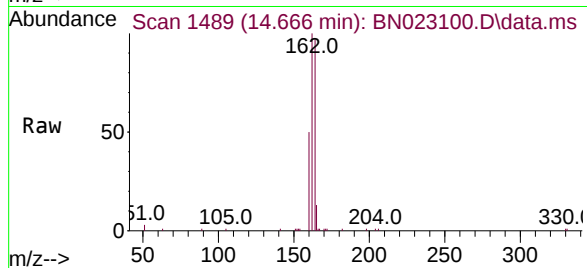




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.666 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

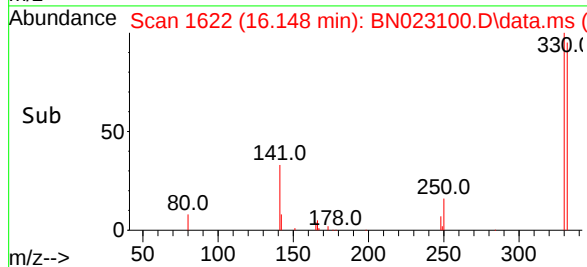
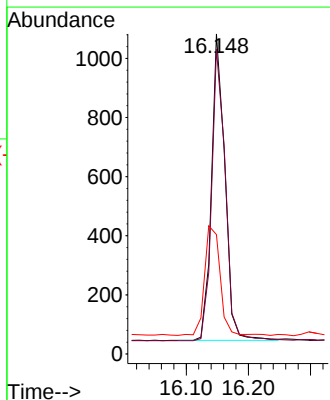
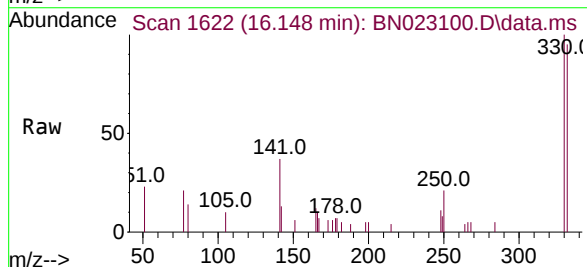
Instrument :
BNA_N
ClientSampleId :
ICVBN120822

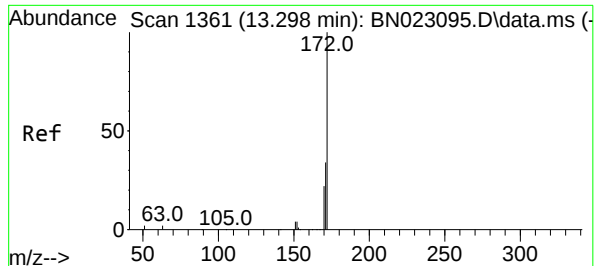
Tgt Ion	Ratio	Lower	Upper
164	100		
162	102.9	83.4	125.0
160	51.9	41.8	62.8



#14
2,4,6-Tribromophenol
Concen: 0.346 ng
RT: 16.148 min Scan# 1622
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion	Ratio	Lower	Upper
330	100		
332	97.1	77.3	115.9
141	41.2	33.5	50.3





#15

2-Fluorobiphenyl

Concen: 0.407 ng

RT: 13.298 min Scan# 1361

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

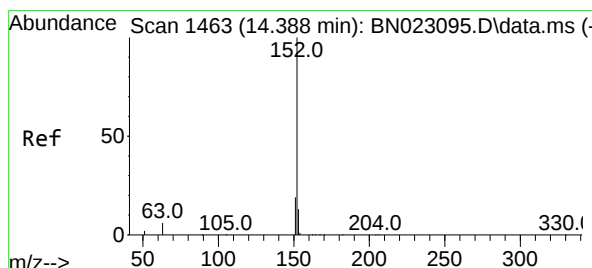
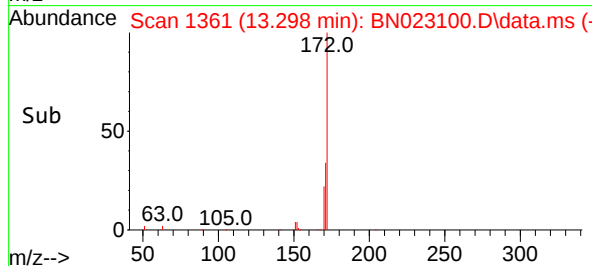
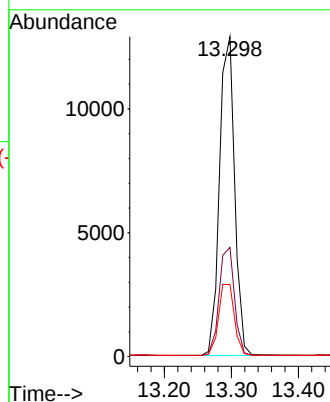
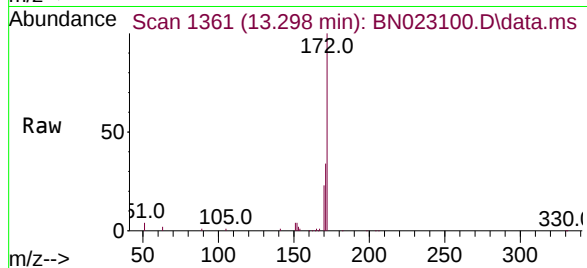
Tgt Ion:172 Resp: 20220

Ion Ratio Lower Upper

172 100

171 34.1 27.4 41.0

170 22.5 17.9 26.9



#16

Acenaphthylene

Concen: 0.365 ng

RT: 14.388 min Scan# 1463

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

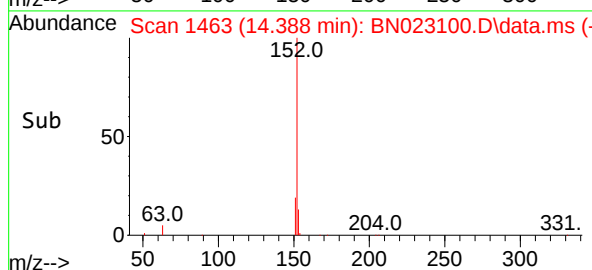
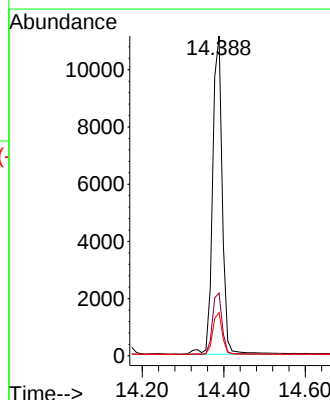
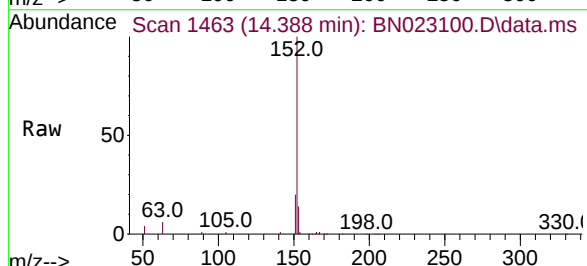
Tgt Ion:152 Resp: 18308

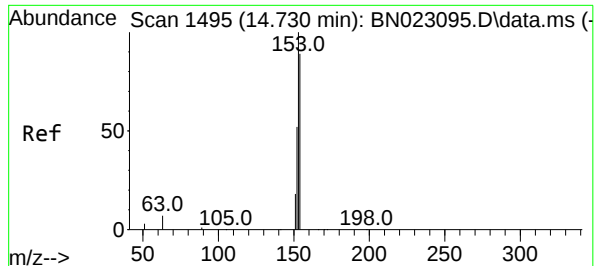
Ion Ratio Lower Upper

152 100

151 19.5 15.4 23.2

153 12.9 10.3 15.5





#17

Acenaphthene

Concen: 0.383 ng

RT: 14.730 min Scan# 1495

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

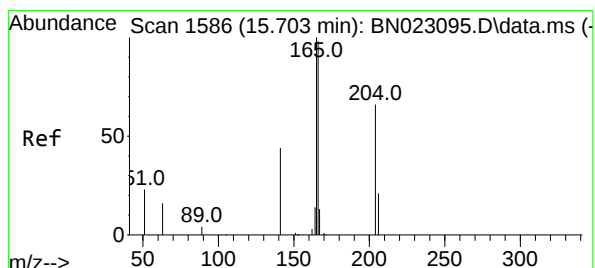
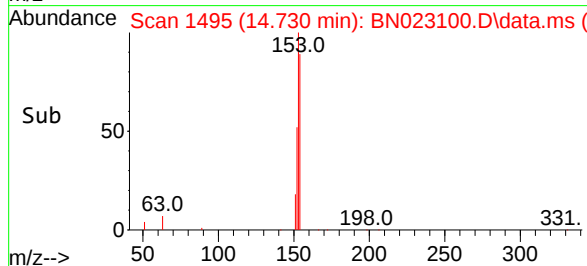
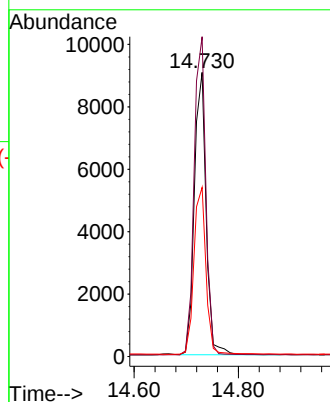
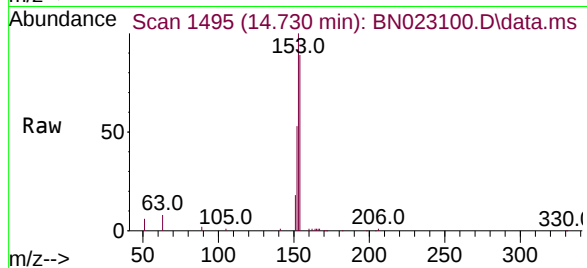
Tgt Ion:154 Resp: 14119

Ion Ratio Lower Upper

154 100

153 111.9 88.6 132.8

152 60.6 48.1 72.1



#18

Fluorene

Concen: 0.383 ng

RT: 15.703 min Scan# 1586

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

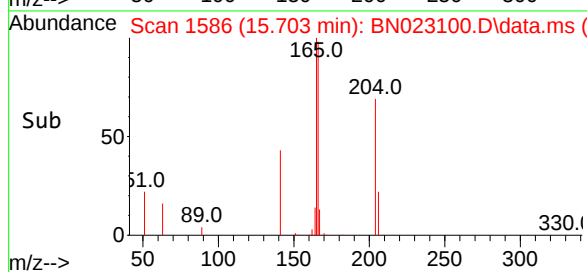
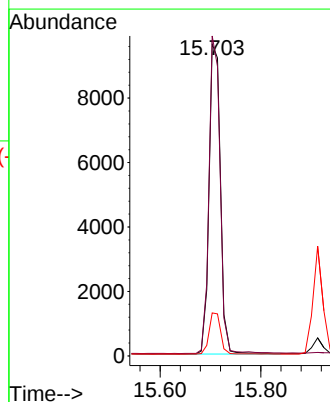
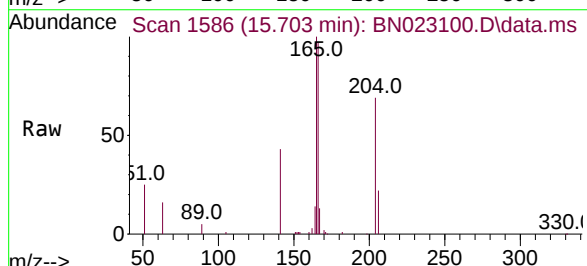
Tgt Ion:166 Resp: 15779

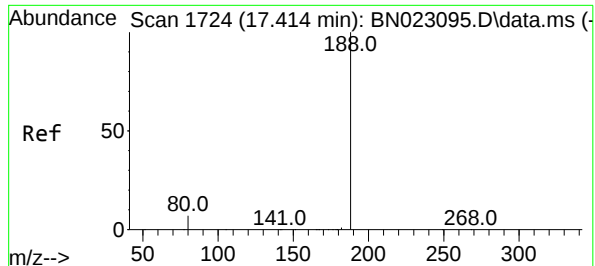
Ion Ratio Lower Upper

166 100

165 99.9 79.8 119.6

167 13.8 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.402 min Scan# 1723

Delta R.T. -0.012 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

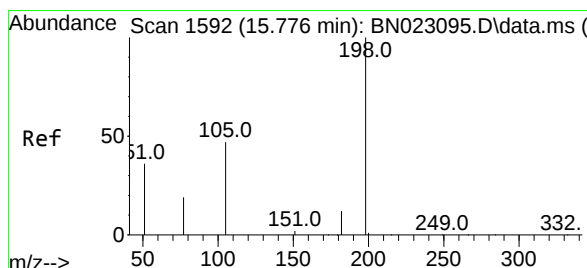
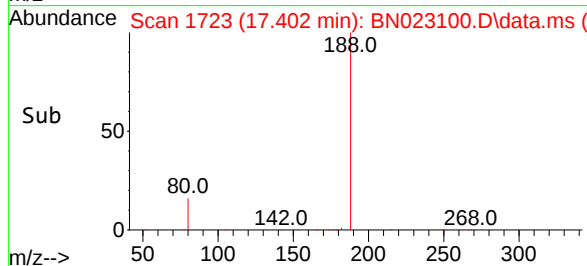
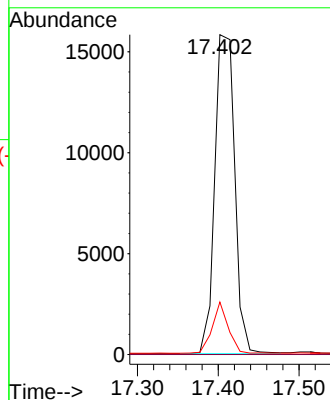
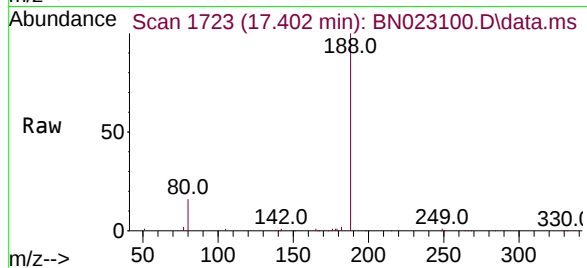
Tgt Ion:188 Resp: 27164

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 16.4 6.1 9.1#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.440 ng

RT: 15.776 min Scan# 1592

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

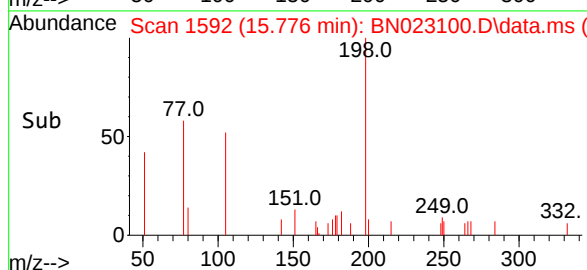
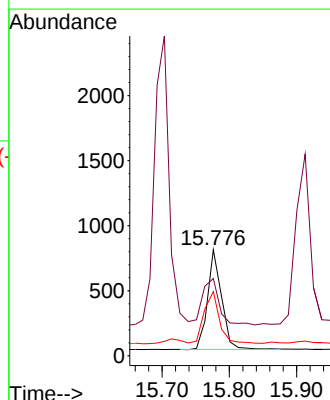
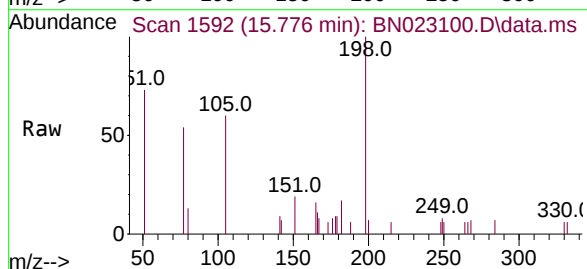
Tgt Ion:198 Resp: 1113

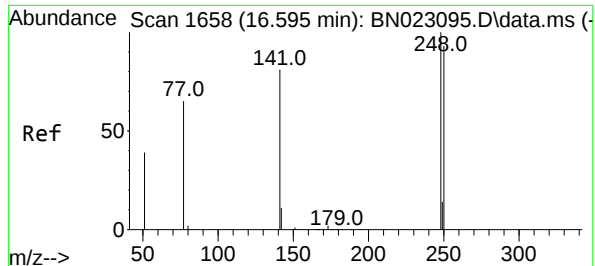
Ion Ratio Lower Upper

198 100

51 72.8 57.0 85.4

105 60.4 47.2 70.8

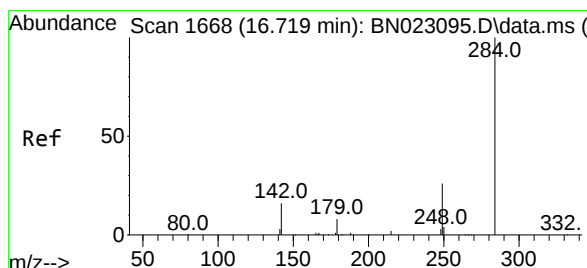
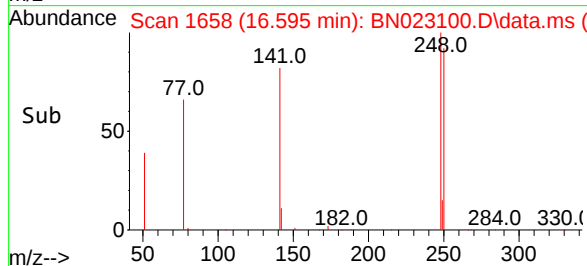
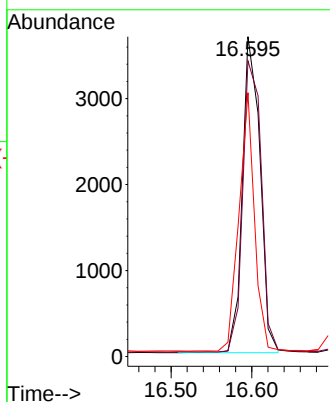
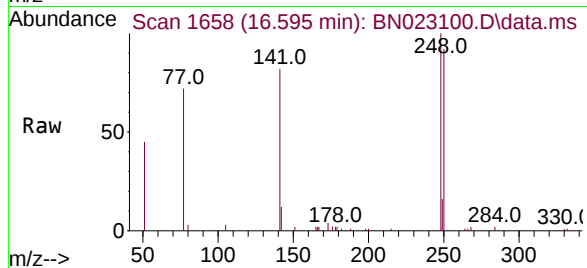




#21
4-Bromophenyl-phenylether
Concen: 0.382 ng
RT: 16.595 min Scan# 1658
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

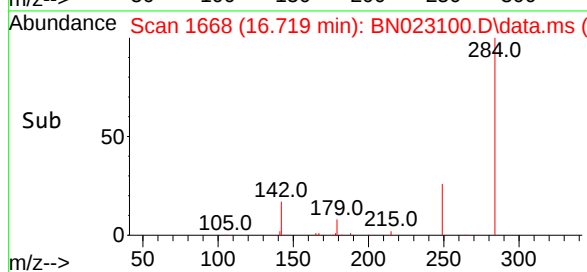
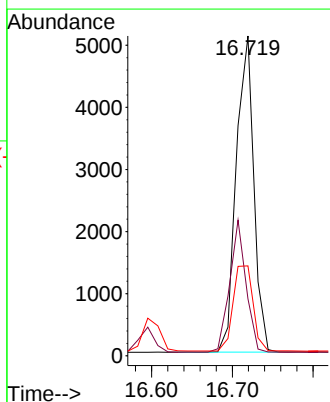
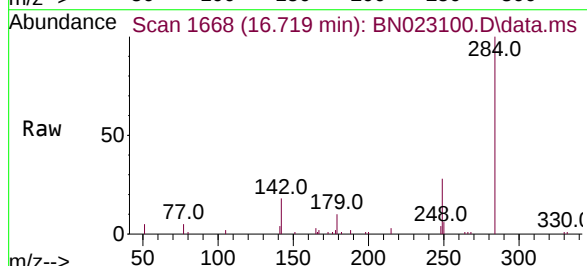
Instrument :
BNA_N
ClientSampleId :
ICVBN120822

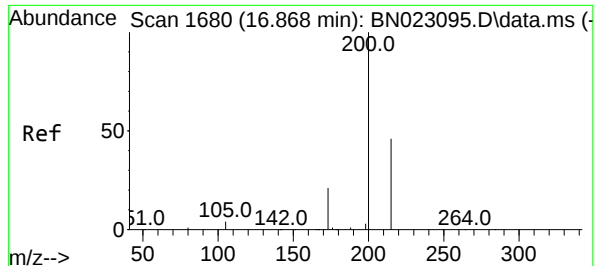
Tgt Ion:248 Resp: 5541
Ion Ratio Lower Upper
248 100
250 92.4 74.3 111.5
141 82.5 65.0 97.6



#22
Hexachlorobenzene
Concen: 0.405 ng
RT: 16.719 min Scan# 1668
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:284 Resp: 7695
Ion Ratio Lower Upper
284 100
142 38.7 31.0 46.4
249 30.6 24.4 36.6

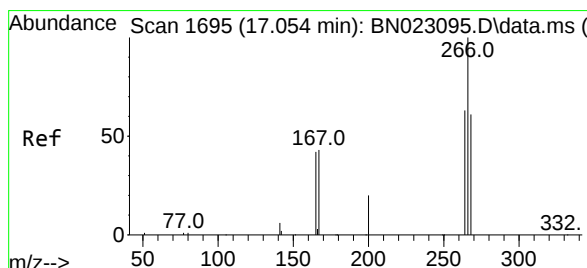
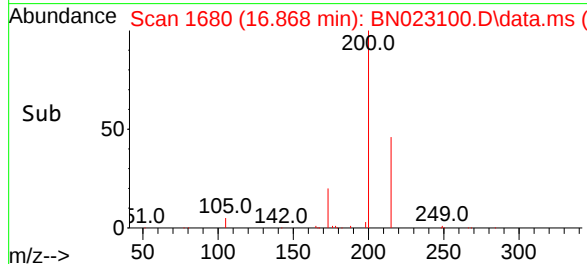
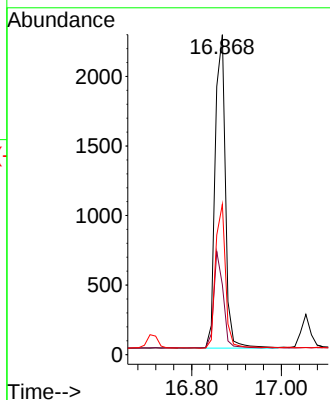
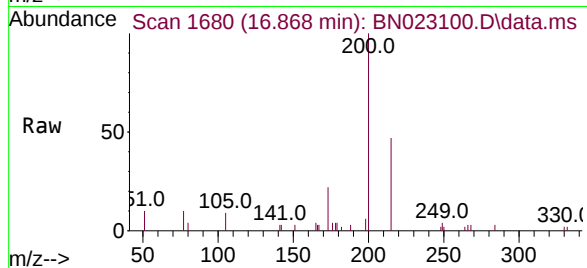




#23
Atrazine
Concen: 0.350 ng
RT: 16.868 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

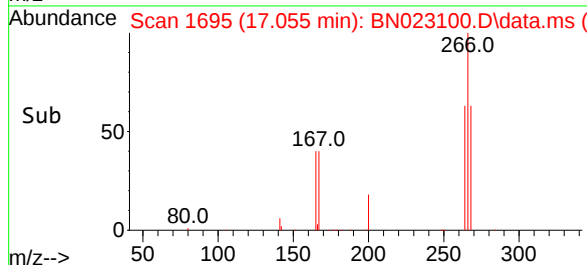
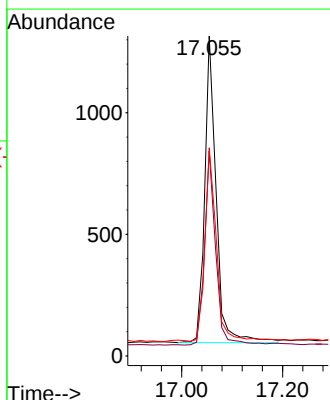
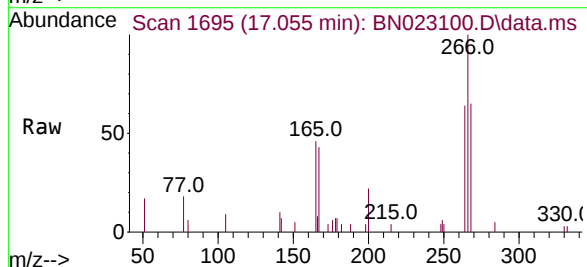
Instrument :
BNA_N
ClientSampleId :
ICVBN120822

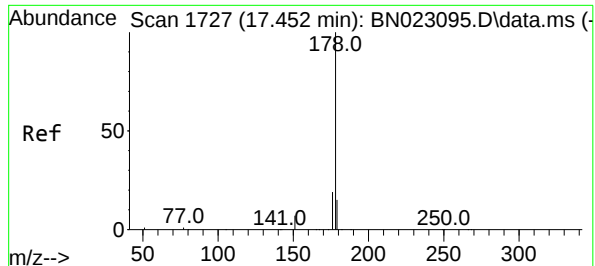
Tgt Ion:200 Resp: 3573
Ion Ratio Lower Upper
200 100
173 21.8 18.2 27.4
215 47.0 38.0 57.0



#24
Pentachlorophenol
Concen: 0.300 ng
RT: 17.055 min Scan# 1695
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:266 Resp: 1977
Ion Ratio Lower Upper
266 100
264 61.5 50.1 75.1
268 63.3 49.7 74.5

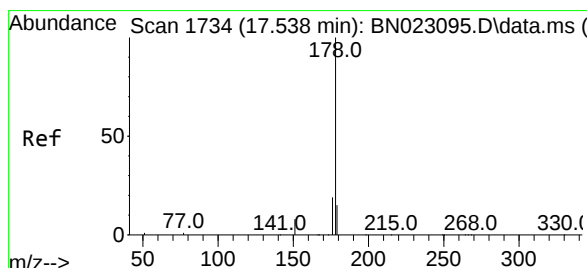
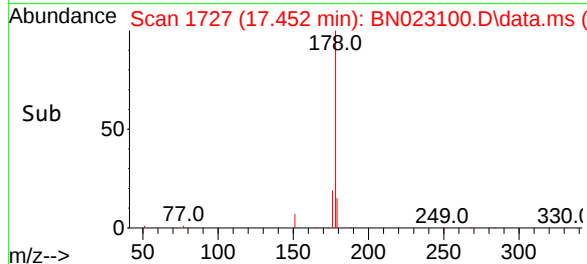
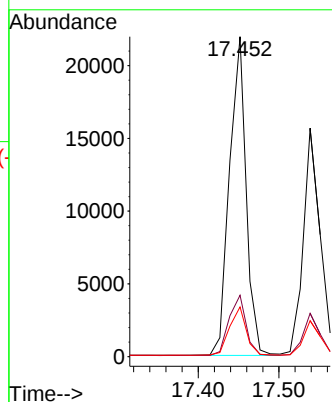
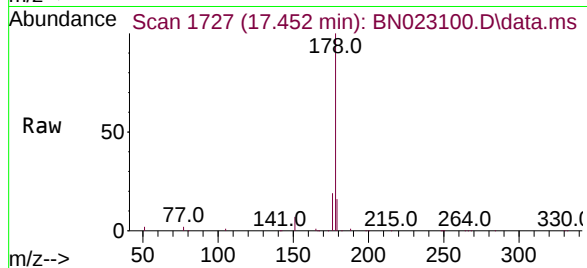




#25
Phenanthrene
Concen: 0.388 ng
RT: 17.452 min Scan# 1727
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

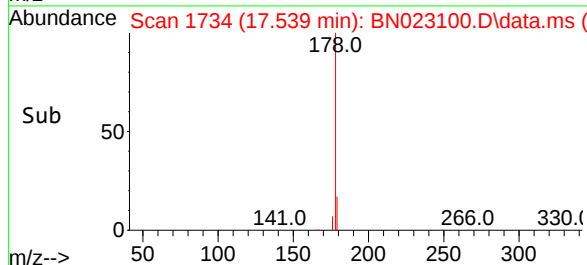
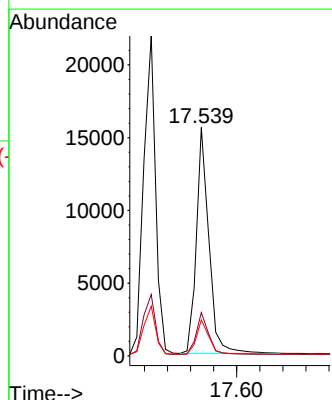
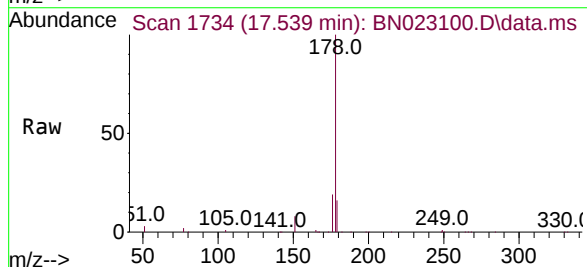
Instrument :
BNA_N
ClientSampleId :
ICVBN120822

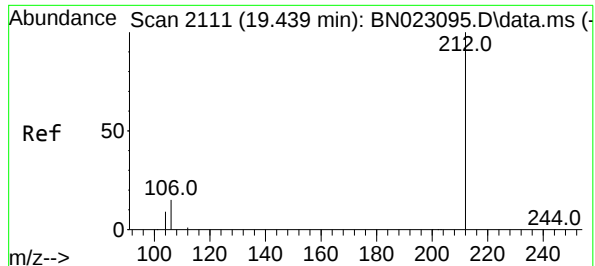
Tgt Ion	Ratio	Lower	Upper
178	100		
176	19.4	15.4	23.2
179	15.2	12.2	18.2



#26
Anthracene
Concen: 0.363 ng
RT: 17.539 min Scan# 1734
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion	Ratio	Lower	Upper
178	100		
176	18.4	15.1	22.7
179	15.5	12.2	18.4





#27

Fluoranthene-d10

Concen: 0.378 ng

RT: 19.439 min Scan# 2111

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

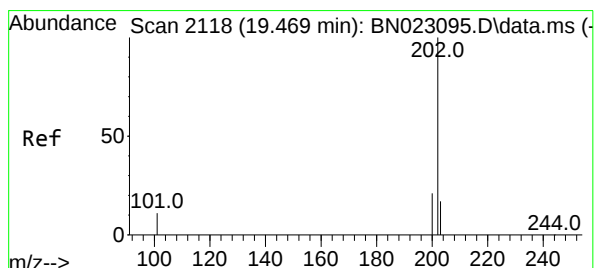
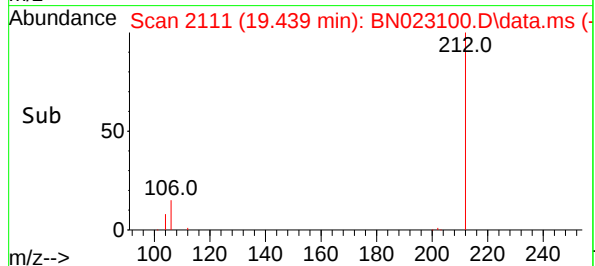
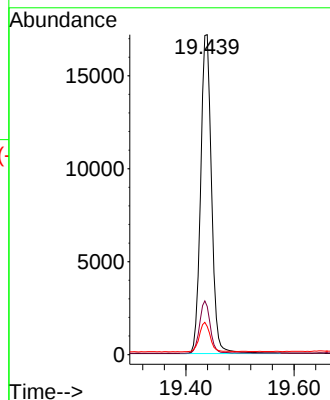
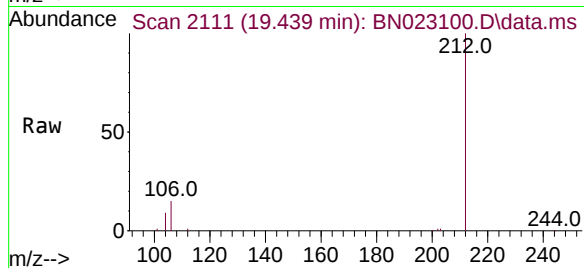
Tgt Ion:212 Resp: 24017

Ion Ratio Lower Upper

212 100

106 16.0 13.0 19.4

104 9.1 7.5 11.3



#28

Fluoranthene

Concen: 0.378 ng

RT: 19.469 min Scan# 2118

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

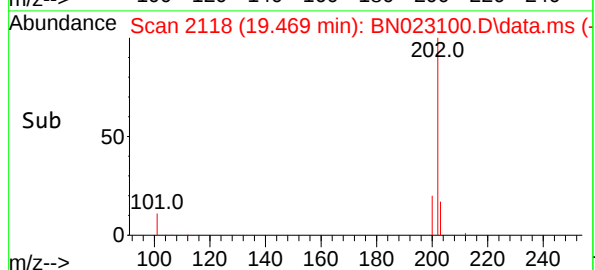
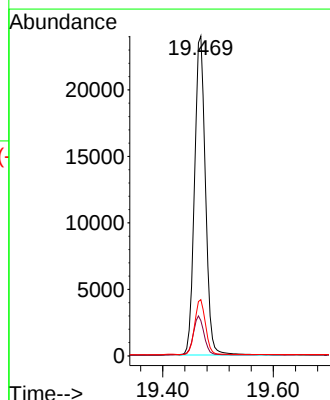
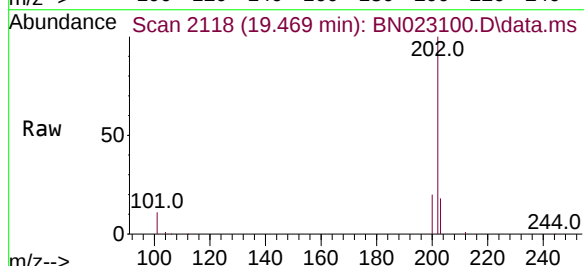
Tgt Ion:202 Resp: 32800

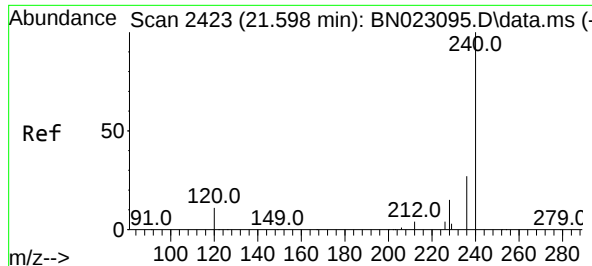
Ion Ratio Lower Upper

202 100

101 12.3 9.7 14.5

203 17.1 13.8 20.6





#29

Chrysene-d12

Concen: 0.400 ng

RT: 21.589 min Scan# 24

Delta R.T. -0.009 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

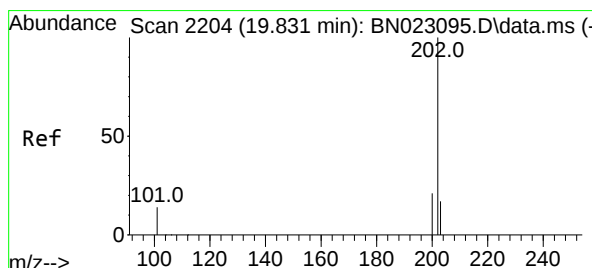
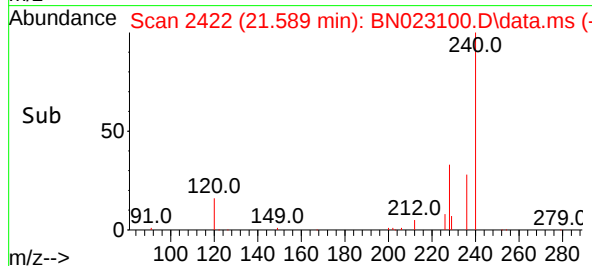
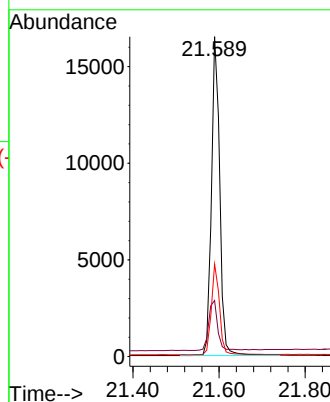
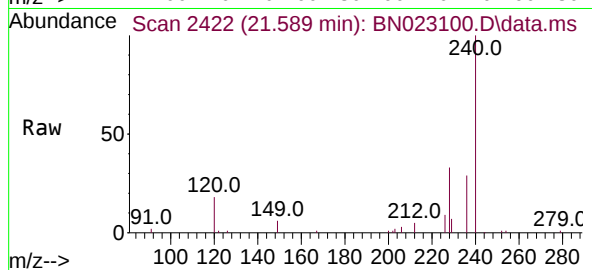
Tgt Ion:240 Resp: 22009

Ion Ratio Lower Upper

240 100

120 17.5 10.1 15.1#

236 28.9 22.2 33.4



#30

Pyrene

Concen: 0.396 ng

RT: 19.827 min Scan# 2203

Delta R.T. -0.004 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

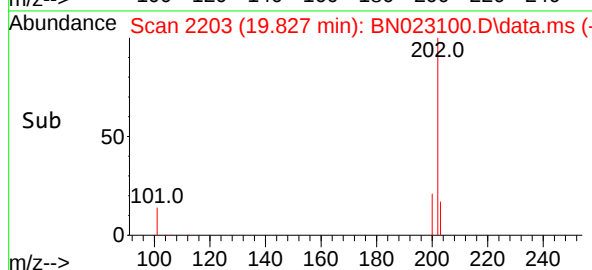
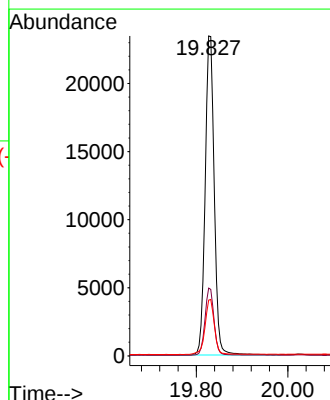
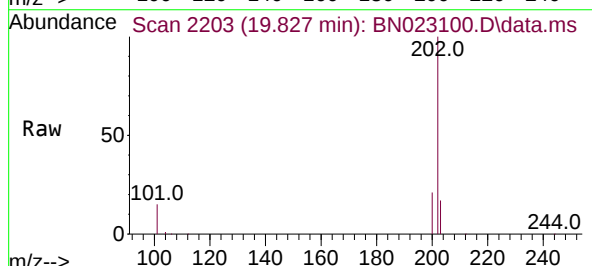
Tgt Ion:202 Resp: 31897

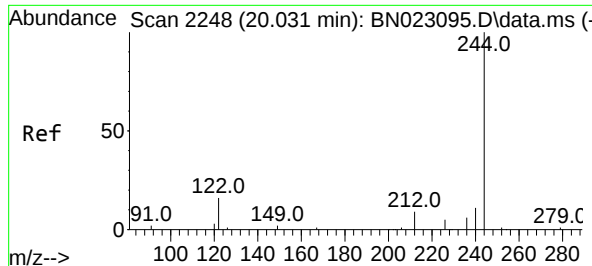
Ion Ratio Lower Upper

202 100

200 20.9 16.9 25.3

203 17.7 14.2 21.4

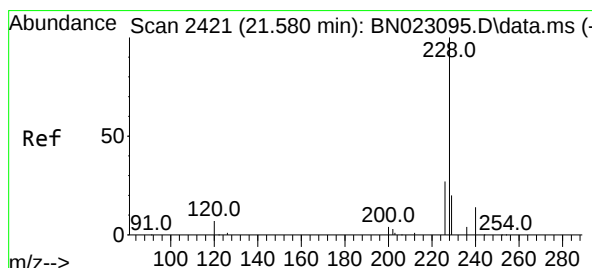
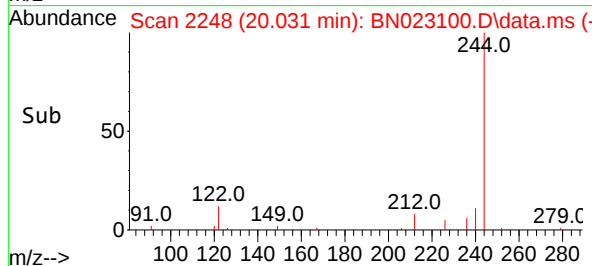
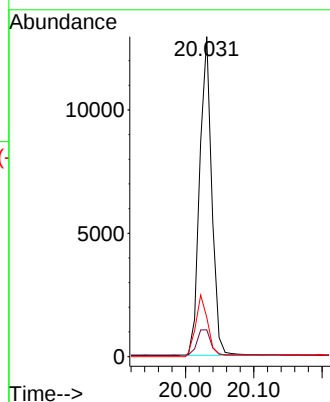
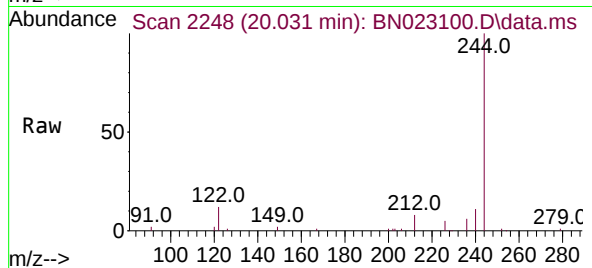




#31
Terphenyl-d14
Concen: 0.407 ng
RT: 20.031 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

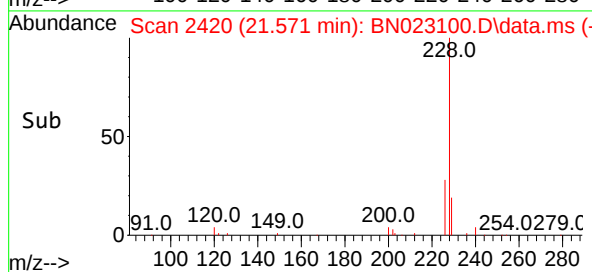
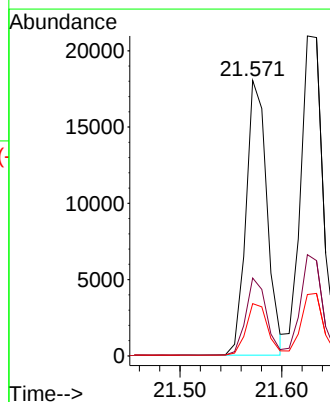
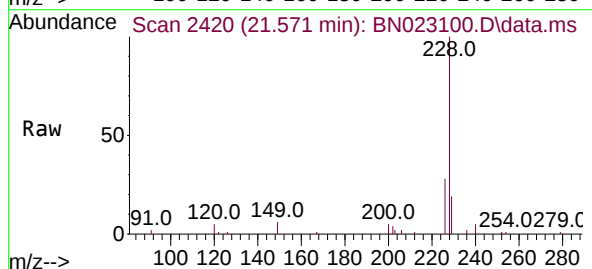
Instrument :
BNA_N
ClientSampleId :
ICVBN120822

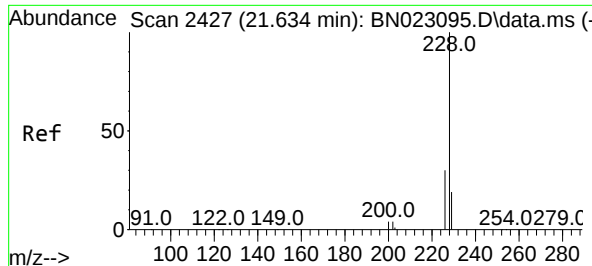
Tgt Ion:244 Resp: 14543
Ion Ratio Lower Upper
244 100
212 8.4 7.6 11.4
122 12.3 12.6 18.8#



#32
Benzo(a)anthracene
Concen: 0.365 ng
RT: 21.571 min Scan# 2420
Delta R.T. -0.009 min
Lab File: BN023100.D
Acq: 08 Dec 2022 18:17

Tgt Ion:228 Resp: 25864
Ion Ratio Lower Upper
228 100
226 28.3 22.0 33.0
229 19.0 15.8 23.8





#33

Chrysene

Concen: 0.399 ng

RT: 21.625 min Scan# 2426

Delta R.T. -0.009 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

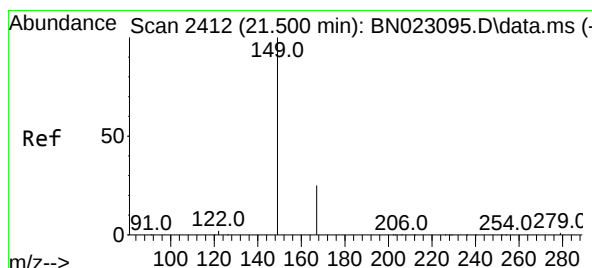
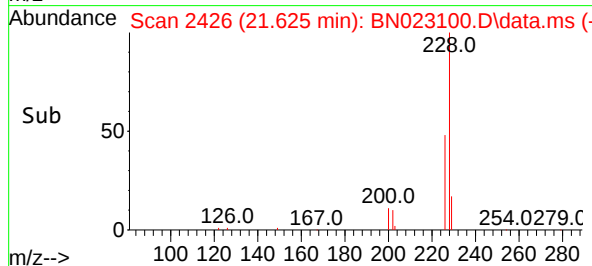
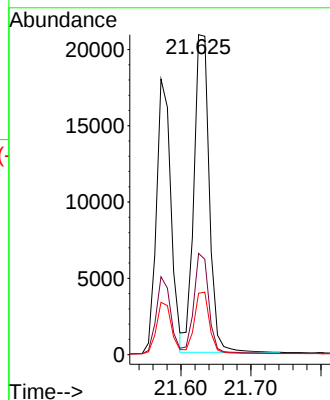
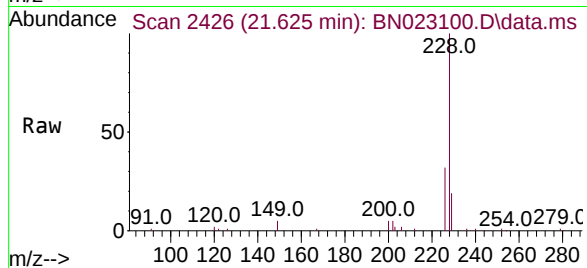
Tgt Ion:228 Resp: 31807

Ion Ratio Lower Upper

228 100

226 31.6 24.4 36.6

229 19.2 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.349 ng

RT: 21.500 min Scan# 2412

Delta R.T. 0.000 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

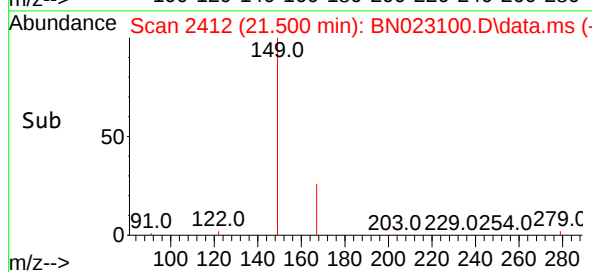
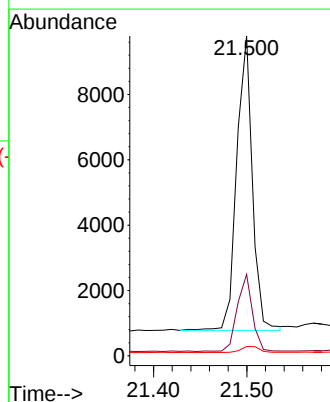
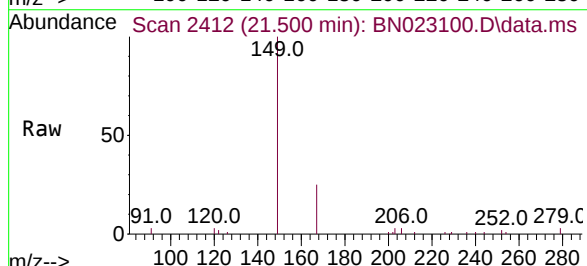
Tgt Ion:149 Resp: 10468

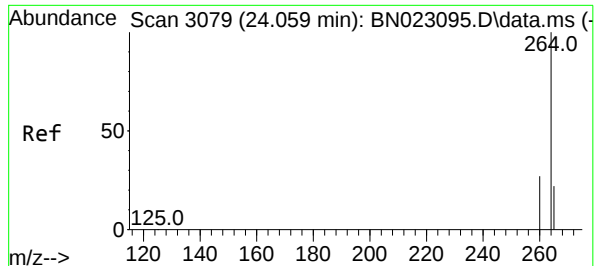
Ion Ratio Lower Upper

149 100

167 25.4 20.2 30.2

279 2.5 2.3 3.5





#35

Perylene-d12

Concen: 0.400 ng

RT: 24.053 min Scan# 3077

Delta R.T. -0.006 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

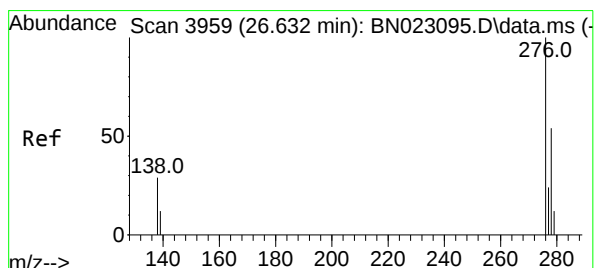
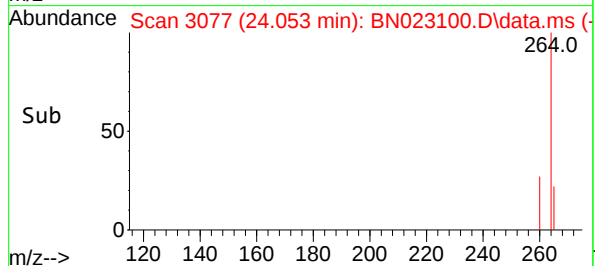
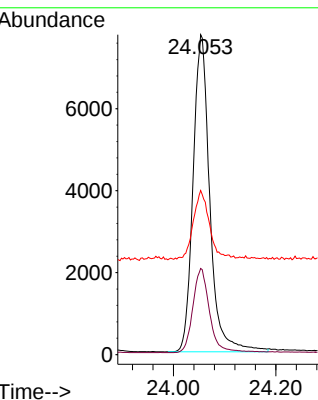
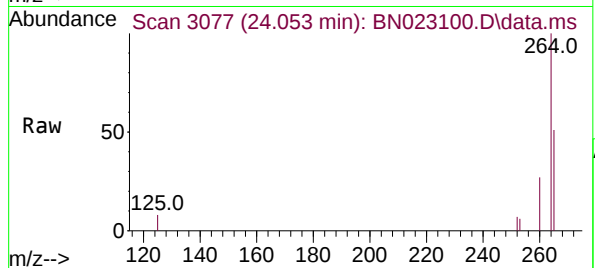
Tgt Ion:264 Resp: 17542

Ion Ratio Lower Upper

264 100

260 26.9 21.7 32.5

265 51.3 43.2 64.8



#36

Indeno(1,2,3-cd)pyrene

Concen: 0.400 ng

RT: 26.623 min Scan# 3956

Delta R.T. -0.009 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

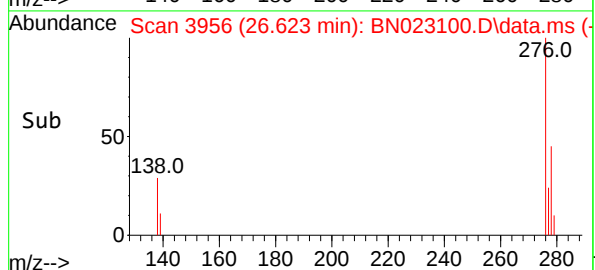
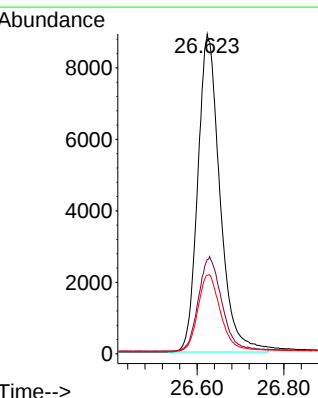
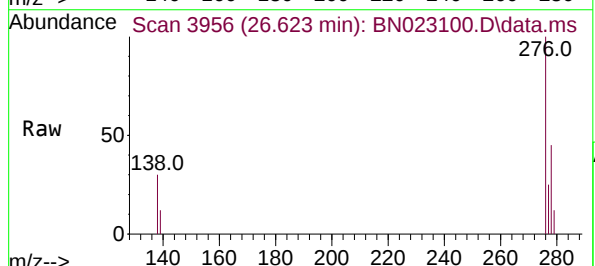
Tgt Ion:276 Resp: 31454

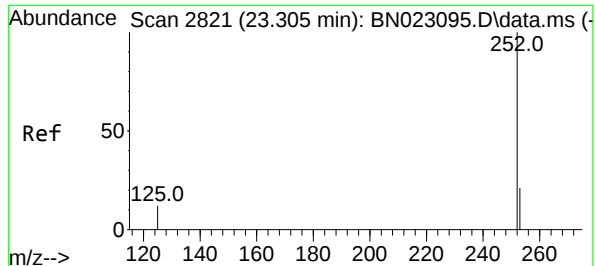
Ion Ratio Lower Upper

276 100

138 31.3 25.0 37.6

277 24.6 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.389 ng

RT: 23.299 min Scan# 2819

Delta R.T. -0.006 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822

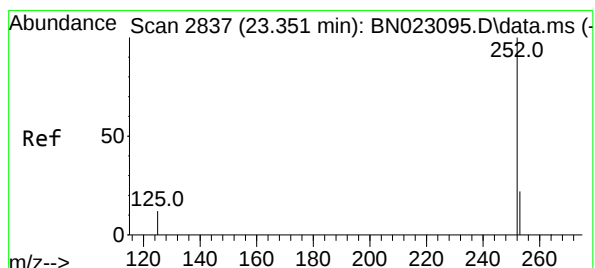
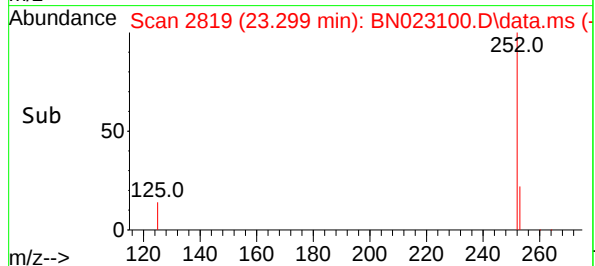
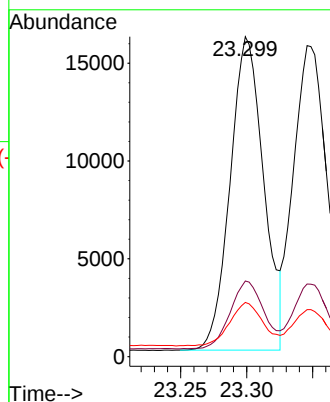
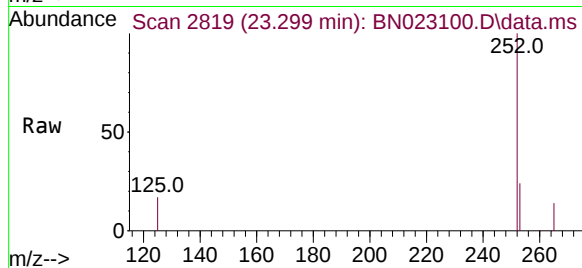
Tgt Ion:252 Resp: 28324

Ion Ratio Lower Upper

252 100

253 23.6 19.0 28.4

125 16.9 12.8 19.2



#38

Benzo(k)fluoranthene

Concen: 0.379 ng

RT: 23.346 min Scan# 2835

Delta R.T. -0.006 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

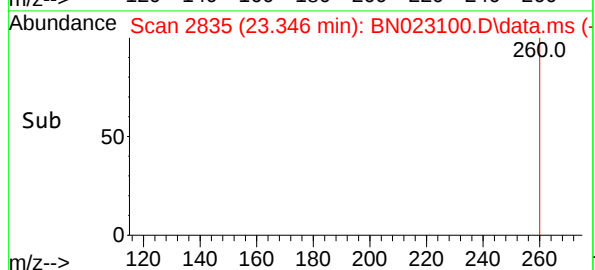
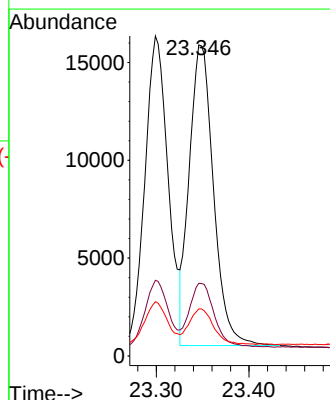
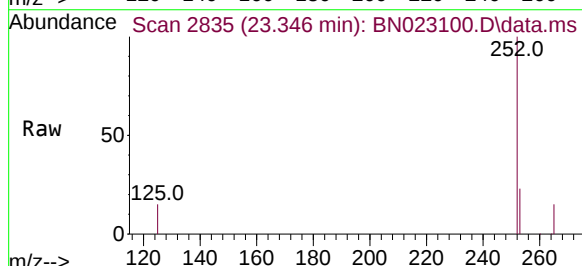
Tgt Ion:252 Resp: 27995

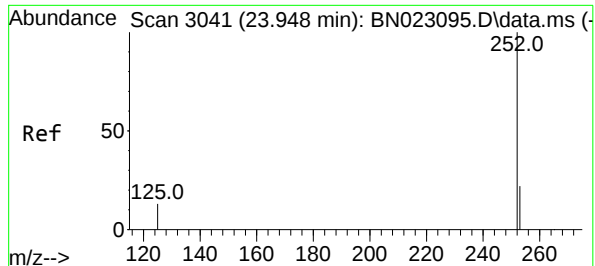
Ion Ratio Lower Upper

252 100

253 23.3 19.1 28.7

125 15.1 12.5 18.7





#39

Benzo(a)pyrene

Concen: 0.381 ng

RT: 23.942 min Scan# 3041

Delta R.T. -0.006 min

Lab File: BN023100.D

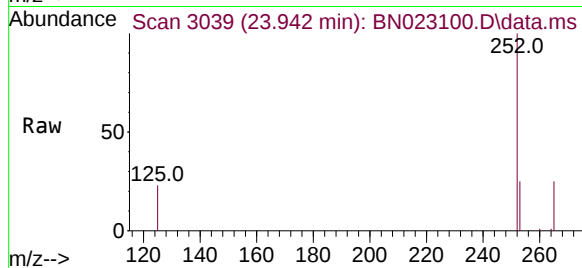
Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822



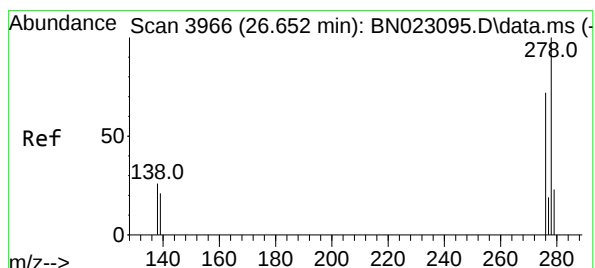
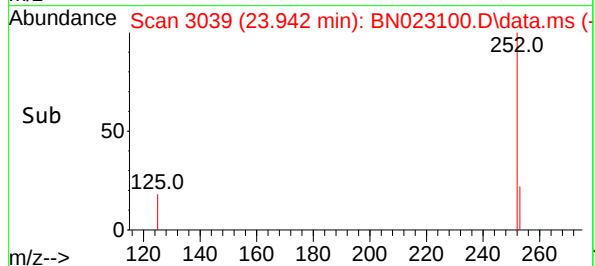
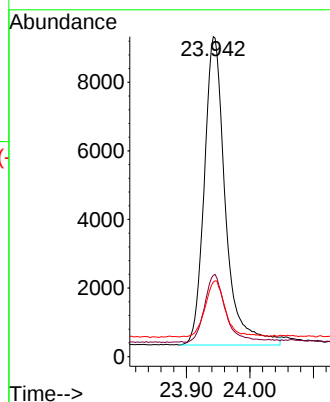
Tgt Ion:252 Resp: 20767

Ion Ratio Lower Upper

252 100

253 25.4 20.6 30.8

125 23.3 15.8 23.8



#40

Dibenzo(a,h)anthracene

Concen: 0.397 ng

RT: 26.644 min Scan# 3963

Delta R.T. -0.009 min

Lab File: BN023100.D

Acq: 08 Dec 2022 18:17

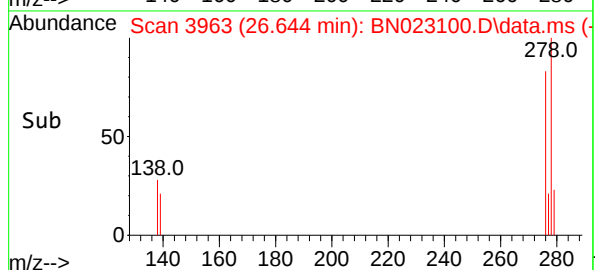
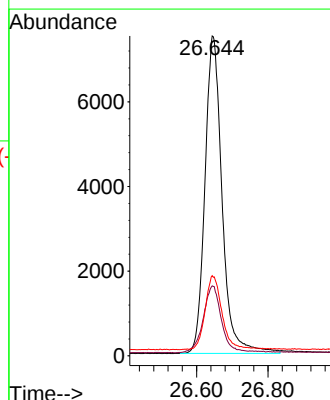
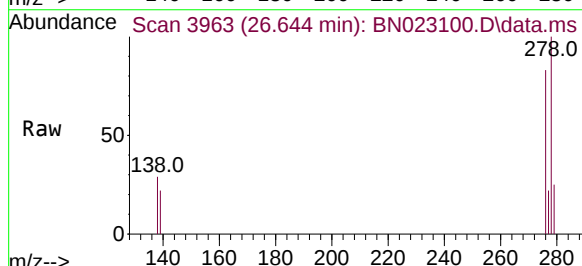
Tgt Ion:278 Resp: 25035

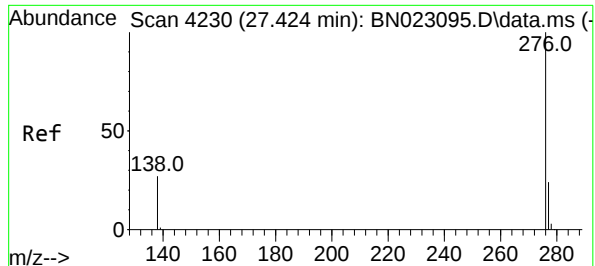
Ion Ratio Lower Upper

278 100

139 21.9 17.5 26.3

279 25.1 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.370 ng

RT: 27.418 min Scan# 41

Delta R.T. -0.006 min

Lab File: BN023100.D

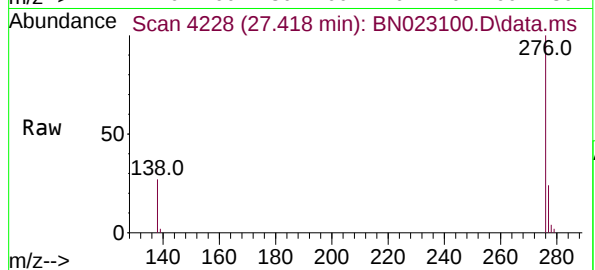
Acq: 08 Dec 2022 18:17

Instrument :

BNA_N

ClientSampleId :

ICVBN120822



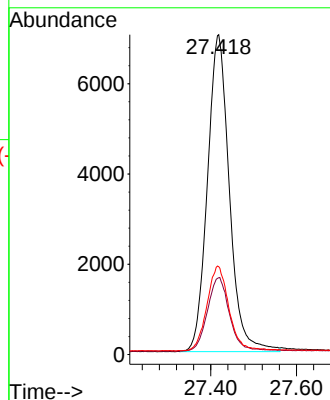
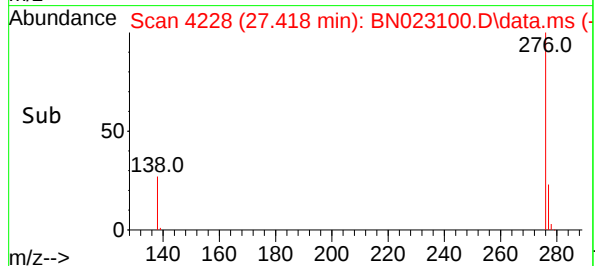
Tgt Ion:276 Resp: 24921

Ion Ratio Lower Upper

276 100

277 24.0 19.9 29.9

138 27.5 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023100.D
 Acq On : 08 Dec 2022 18:17
 Operator : CG/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN120822

Quant Time: Dec 09 07:47:50 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:44:40 2022
 Response via : Initial Calibration

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

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
2	1,4-Dioxane	0.395	0.402	-1.8	110	0.00
3	n-Nitrosodimethylamine	0.388	0.378	2.6	112	0.00
4 S	2-Fluorophenol	0.745	0.731	1.9	108	0.00
5 S	Phenol-d6	0.947	0.916	3.3	110	0.00
6	bis(2-Chloroethyl)ether	1.076	1.083	-0.7	108	0.00
7 I	Naphthalene-d8	1.000	1.000	0.0	109	0.00
8 S	Nitrobenzene-d5	0.264	0.251	4.9	110	0.00
9	Naphthalene	1.019	1.010	0.9	110	0.00
10	Hexachlorobutadiene	0.194	0.196	-1.0	109	0.00
11 SURR	2-Methylnaphthalene-d10	0.678	0.695	-2.5	118	0.00
12	2-Methylnaphthalene	0.152	0.144	5.3	107	0.00
13 I	Acenaphthene-d10	1.000	1.000	0.0	109	0.00
14 S	2,4,6-Tribromophenol	0.145	0.125	13.8	103	0.00
15 S	2-Fluorobiphenyl	1.598	1.624	-1.6	110	0.00
16	Acenaphthylene	1.611	1.471	8.7	108	0.00
17	Acenaphthene	1.184	1.134	4.2	107	0.00
18	Fluorene	1.325	1.267	4.4	107	0.00
19 I	Phenanthrene-d10	1.000	1.000	0.0	107	-0.01
20	4,6-Dinitro-2-methylphenol	0.057	0.041	28.1#	96	0.00
21	4-Bromophenyl-phenylether	0.213	0.204	4.2	107	0.00
22	Hexachlorobenzene	0.280	0.283	-1.1	109	0.00
23	Atrazine	0.150	0.132	12.0	106	0.00
24	Pentachlorophenol	0.097	0.073	24.7	97	0.00
25	Phenanthrene	1.192	1.158	2.9	108	0.00
26	Anthracene	0.950	0.862	9.3	108	0.00
27 SURR	Fluoranthene-d10	0.936	0.884	5.6	108	0.00
28	Fluoranthene	1.276	1.207	5.4	108	0.00
29 I	Chrysene-d12	1.000	1.000	0.0	107	0.00
30	Pyrene	1.464	1.449	1.0	107	0.00
31 S	Terphenyl-d14	0.649	0.661	-1.8	103	0.00
32	Benzo(a)anthracene	1.289	1.175	8.8	105	0.00
33	Chrysene	1.449	1.445	0.3	107	0.00
34	Bis(2-ethylhexyl)phthalate	0.545	0.476	12.7	104	0.00
35 I	Perylene-d12	1.000	1.000	0.0	113	0.00
36	Indeno(1,2,3-cd)pyrene	1.793	1.793	0.0	120	0.00
37	Benzo(b)fluoranthene	1.658	1.615	2.6	114	0.00
38	Benzo(k)fluoranthene	1.684	1.596	5.2	112	0.00
39 C	Benzo(a)pyrene	1.244	1.184	4.8	120	0.00
40	Dibenzo(a,h)anthracene	1.439	1.427	0.8	118	0.00
41	Benzo(g,h,i)perylene	1.537	1.421	7.5	106	0.00

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
 Data File : BN023100.D
 Acq On : 08 Dec 2022 18:17
 Operator : CG/JU
 Sample : SSTDICV0.4
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 ICVBN120822

Quant Time: Dec 09 07:47:50 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Fri Dec 09 07:44:40 2022
 Response via : Initial Calibration

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

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	110	0.00
2	1,4-Dioxane	0.400	0.408	-2.0	110	0.00
3	n-Nitrosodimethylamine	0.400	0.390	2.5	112	0.00
4 S	2-Fluorophenol	0.400	0.393	1.8	108	0.00
5 S	Phenol-d6	0.400	0.387	3.3	110	0.00
6	bis(2-Chloroethyl)ether	0.400	0.403	-0.8	108	0.00
7 I	Naphthalene-d8	0.400	0.400	0.0	109	0.00
8 S	Nitrobenzene-d5	0.400	0.381	4.8	110	0.00
9	Naphthalene	0.400	0.396	1.0	110	0.00
10	Hexachlorobutadiene	0.400	0.404	-1.0	109	0.00
11 SURR	2-Methylnaphthalene-d10	0.400	0.410	-2.5	118	0.00
12	2-Methylnaphthalene	0.400	0.379	5.3	107	0.00
13 I	Acenaphthene-d10	0.400	0.400	0.0	109	0.00
14 S	2,4,6-Tribromophenol	0.400	0.346	13.5	103	0.00
15 S	2-Fluorobiphenyl	0.400	0.407	-1.7	110	0.00
16	Acenaphthylene	0.400	0.365	8.8	108	0.00
17	Acenaphthene	0.400	0.383	4.3	107	0.00
18	Fluorene	0.400	0.383	4.3	107	0.00
19 I	Phenanthrene-d10	0.400	0.400	0.0	107	-0.01
20	4,6-Dinitro-2-methylphenol	0.400	0.440	-10.0	96	0.00
21	4-Bromophenyl-phenylether	0.400	0.382	4.5	107	0.00
22	Hexachlorobenzene	0.400	0.405	-1.3	109	0.00
23	Atrazine	0.400	0.350	12.5	106	0.00
24	Pentachlorophenol	0.400	0.300	25.0#	97	0.00
25	Phenanthrene	0.400	0.388	3.0	108	0.00
26	Anthracene	0.400	0.363	9.3	108	0.00
27 SURR	Fluoranthene-d10	0.400	0.378	5.5	108	0.00
28	Fluoranthene	0.400	0.378	5.5	108	0.00
29 I	Chrysene-d12	0.400	0.400	0.0	107	0.00
30	Pyrene	0.400	0.396	1.0	107	0.00
31 S	Terphenyl-d14	0.400	0.407	-1.7	103	0.00
32	Benzo(a)anthracene	0.400	0.365	8.8	105	0.00
33	Chrysene	0.400	0.399	0.3	107	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.349	12.8	104	0.00
35 I	Perylene-d12	0.400	0.400	0.0	113	0.00
36	Indeno(1,2,3-cd)pyrene	0.400	0.400	0.0	120	0.00
37	Benzo(b)fluoranthene	0.400	0.389	2.8	114	0.00
38	Benzo(k)fluoranthene	0.400	0.379	5.3	112	0.00
39 C	Benzo(a)pyrene	0.400	0.381	4.8	120	0.00
40	Dibenzo(a,h)anthracene	0.400	0.397	0.8	118	0.00
41	Benzo(g,h,i)perylene	0.400	0.370	7.5	106	0.00

(#) = Out of Range

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



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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CHEMTECH Contract: JAC005
 Lab Code: CHEM Case No.: N6070 SAS No.: N6070 SDG No.: N6070
 Instrument ID: BNA_N Calibration Date/Time: 12/19/2022 11:22
 Lab File ID: BN023280.D Init. Calib. Date(s): 12/08/2022 12/08/2022
 EPA Sample No.: SSTDCCC0.4 Init. Calib. Time(s): 14:00 17:40
 GC Column: ZB-GR ID: 0.25 (mm)

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.678	0.625		-7.8	20.0
Fluoranthene-d10	0.936	0.950		1.5	20.0
2-Fluorophenol	0.745	0.926		24.3	20.0
Phenol-d6	0.947	1.181		24.7	20.0
Nitrobenzene-d5	0.264	0.271		2.7	20.0
2-Fluorobiphenyl	1.598	1.405		-12.1	20.0
2,4,6-Tribromophenol	0.145	0.172		18.6	20.0
Terphenyl-d14	0.649	0.685		5.5	20.0
1,4-Dioxane	0.395	0.440		11.4	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
 Data File : BN023280.D
 Acq On : 19 Dec 2022 11:22
 Operator : CG/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 Response via : Initial Calibration

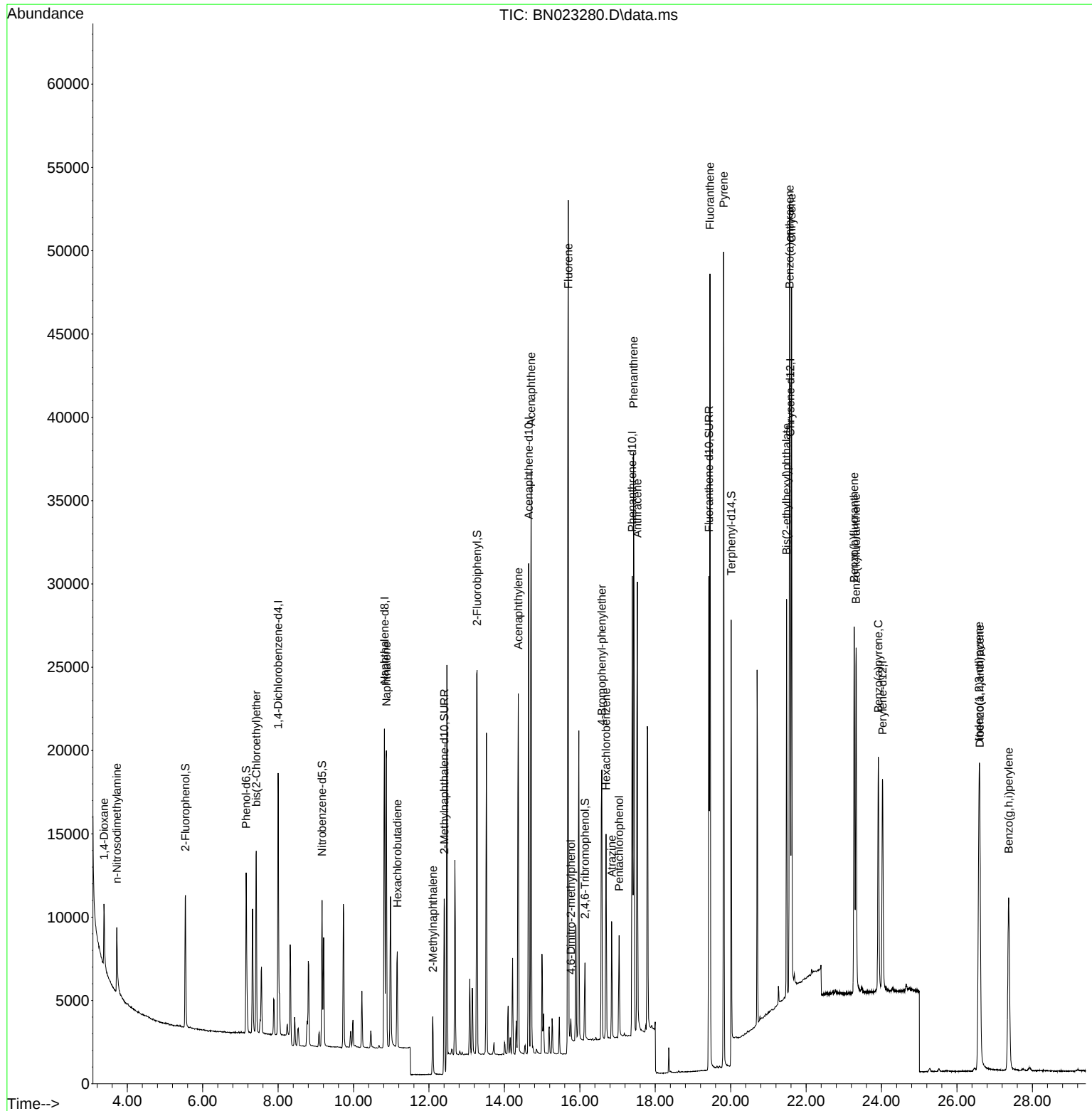
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	7661	0.400	ng	0.00
7) Naphthalene-d8	10.819	136	24904	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	15496	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	33722	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	25842	0.400	ng	0.00
35) Perylene-d12	24.027	264	18763	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	7094	0.497	ng	0.00
5) Phenol-d6	7.154	99	9048	0.499	ng	0.00
8) Nitrobenzene-d5	9.164	82	6755	0.412	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	15577	0.369	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2663	0.474	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	21769	0.352	ng	0.00
27) Fluoranthene-d10	19.422	212	32028	0.406	ng	0.00
31) Terphenyl-d14	20.013	244	17696	0.422	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.384	88	3369	0.446	ng	Qvalue 86
3) n-Nitrosodimethylamine	3.723	42	2724	0.367	ng	# 80
6) bis(2-Chloroethyl)ether	7.421	93	8163	0.396	ng	99
9) Naphthalene	10.872	128	24598	0.388	ng	100
10) Hexachlorobutadiene	11.160	225	4773	0.395	ng	# 100
12) 2-Methylnaphthalene	12.102	142	5285	0.560	ng	97
16) Acenaphthylene	14.367	152	23837	0.382	ng	100
17) Acenaphthene	14.709	154	17079	0.372	ng	97
18) Fluorene	15.693	166	23490	0.458	ng	99
20) 4,6-Dinitro-2-methylph...	15.764	198	866	0.362	ng	99
21) 4-Bromophenyl-phenylether	16.583	248	7067	0.393	ng	# 77
22) Hexachlorobenzene	16.695	284	8969	0.381	ng	97
23) Atrazine	16.843	200	5103	0.402	ng	# 92
24) Pentachlorophenol	17.042	266	2939	0.359	ng	99
25) Phenanthrene	17.427	178	37463	0.373	ng	100
26) Anthracene	17.526	178	30364	0.379	ng	100
28) Fluoranthene	19.452	202	41357	0.384	ng	100
30) Pyrene	19.814	202	41984	0.444	ng	100
32) Benzo(a)anthracene	21.562	228	33710	0.405	ng	100
33) Chrysene	21.616	228	34659	0.370	ng	100
34) Bis(2-ethylhexyl)phtha...	21.482	149	20171	0.573	ng	97
36) Indeno(1,2,3-cd)pyrene	26.585	276	27074	0.322	ng	97
37) Benzo(b)fluoranthene	23.276	252	28714	0.369	ng	98
38) Benzo(k)fluoranthene	23.325	252	27427	0.347	ng	99
39) Benzo(a)pyrene	23.916	252	21593	0.370	ng	97
40) Dibenzo(a,h)anthracene	26.606	278	21241	0.315	ng	100
41) Benzo(g,h,i)perylene	27.372	276	23015	0.319	ng	99

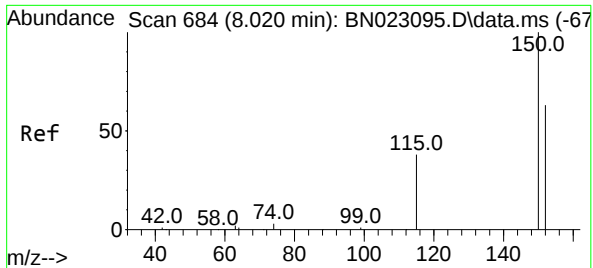
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Data File : BN023280.D
Acq On : 19 Dec 2022 11:22
Operator : CG/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

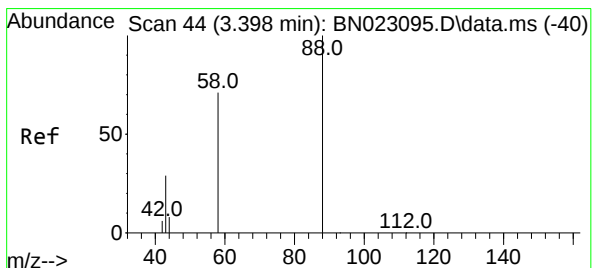
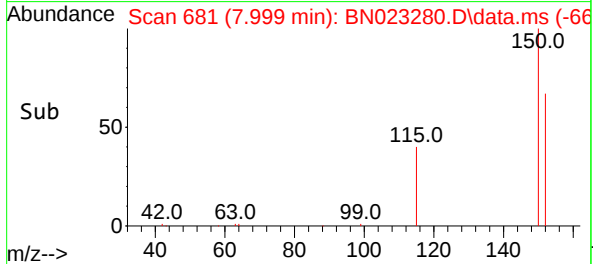
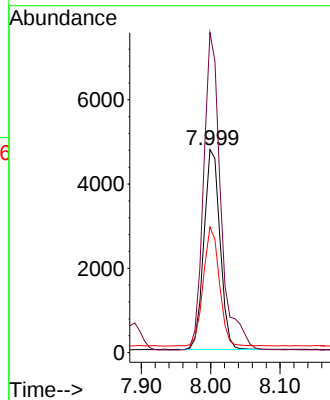
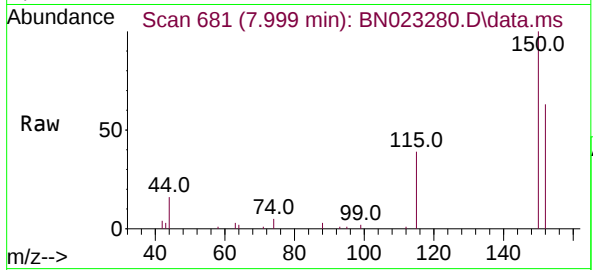




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 681
Delta R.T. -0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

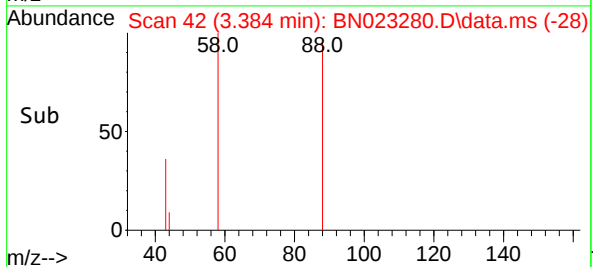
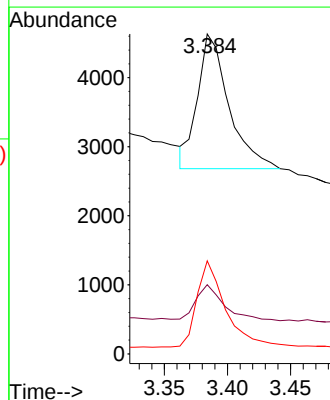
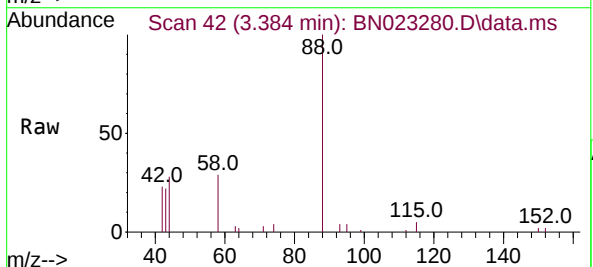
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

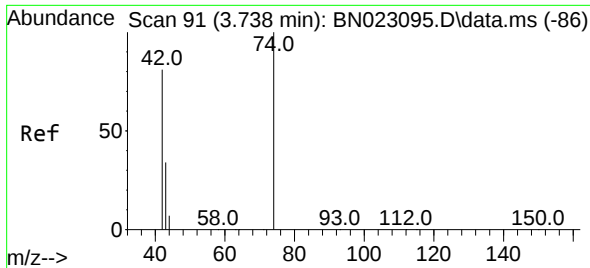
Tgt Ion: 152 Resp: 7661
Ion Ratio Lower Upper
152 100
150 157.6 125.6 188.4
115 61.8 49.0 73.4



#2
1,4-Dioxane
Concen: 0.446 ng
RT: 3.384 min Scan# 42
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion: 88 Resp: 3369
Ion Ratio Lower Upper
88 100
43 24.0 23.3 34.9
58 59.0 58.0 87.0

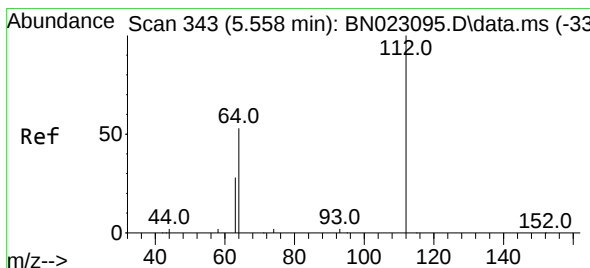
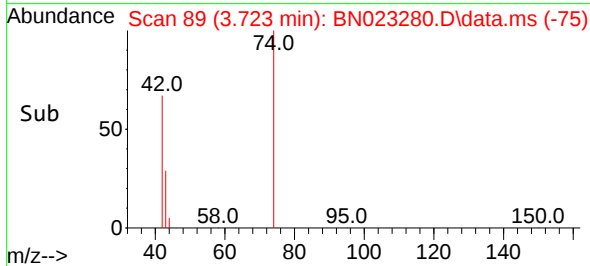
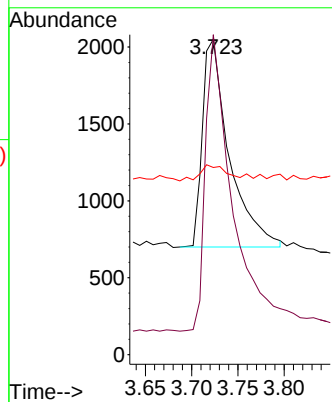
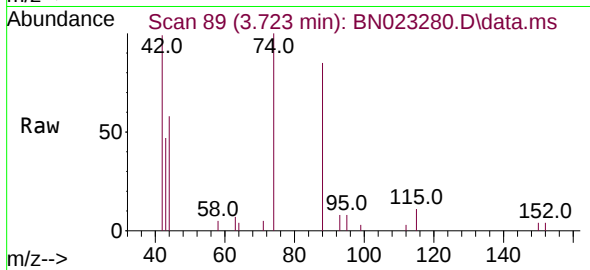




#3
n-Nitrosodimethylamine
Concen: 0.367 ng
RT: 3.723 min Scan# 89
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

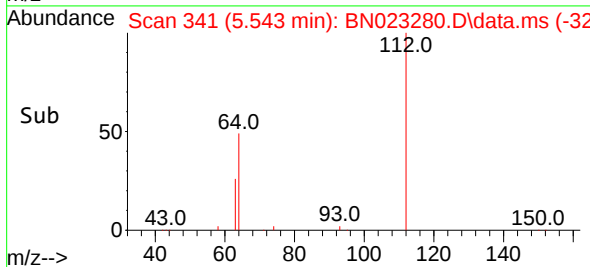
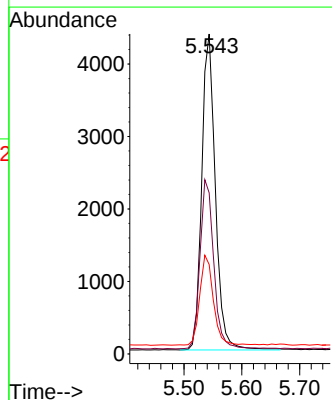
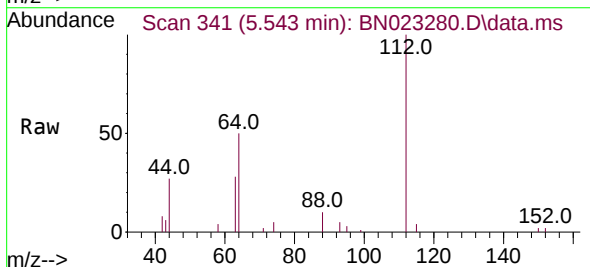
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

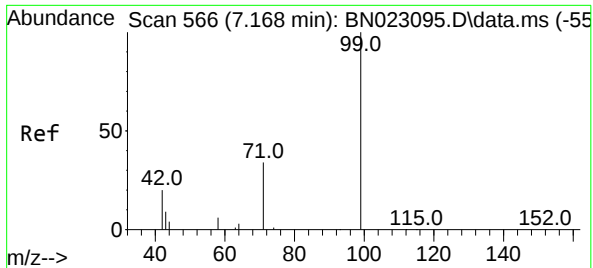
Tgt Ion: 42 Resp: 2724
Ion Ratio Lower Upper
42 100
74 142.7 95.8 143.6
44 7.4 8.4 12.6#



#4
2-Fluorophenol
Concen: 0.497 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion: 112 Resp: 7094
Ion Ratio Lower Upper
112 100
64 54.3 44.4 66.6
63 28.5 23.7 35.5

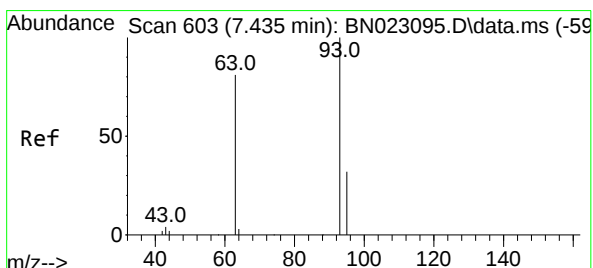
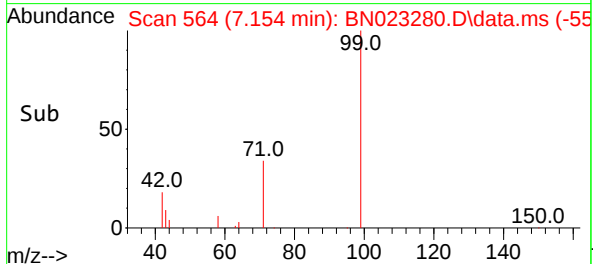
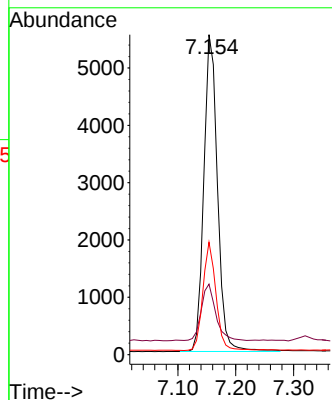
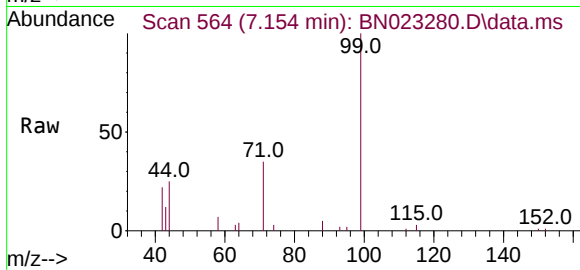




#5
Phenol-d6
Concen: 0.499 ng
RT: 7.154 min Scan# 564
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

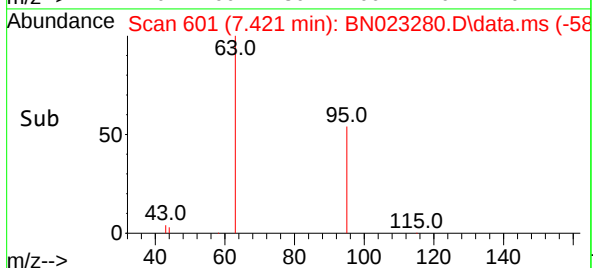
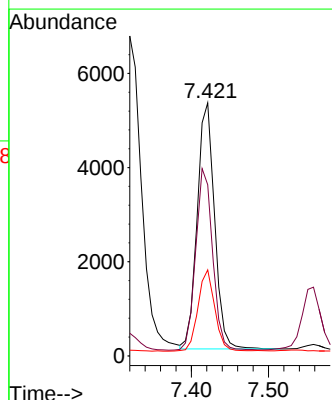
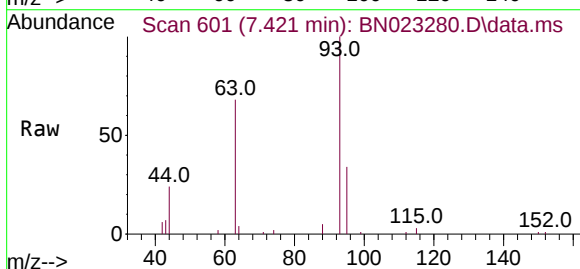
Instrument :
BNA_N
ClientSampleId :
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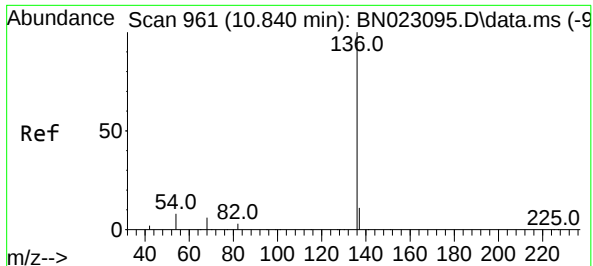
Tgt Ion	Ratio	Lower	Upper
99	100		
42	18.6	16.3	24.5
71	32.6	26.5	39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.396 ng
RT: 7.421 min Scan# 601
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion	Ratio	Lower	Upper
93	100		
63	71.8	58.1	87.1
95	32.0	25.2	37.8

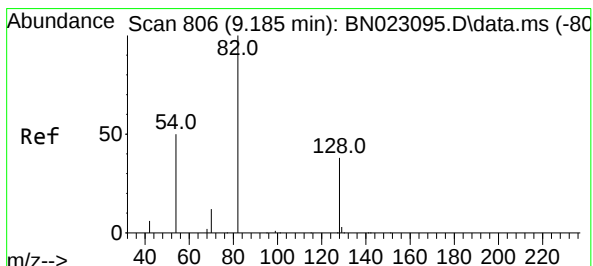
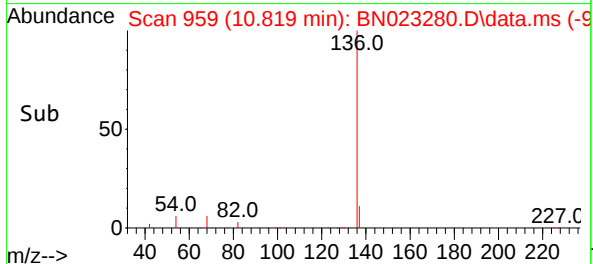
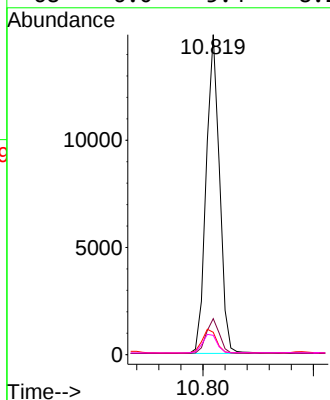
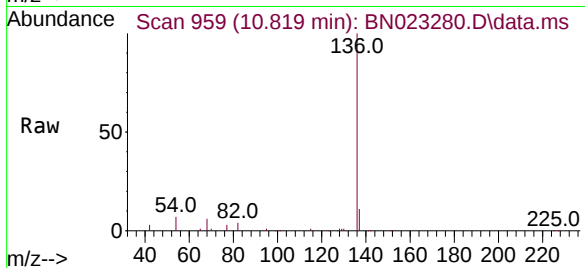




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

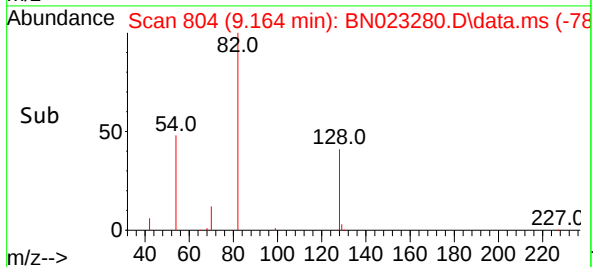
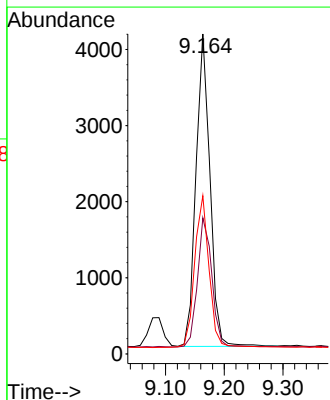
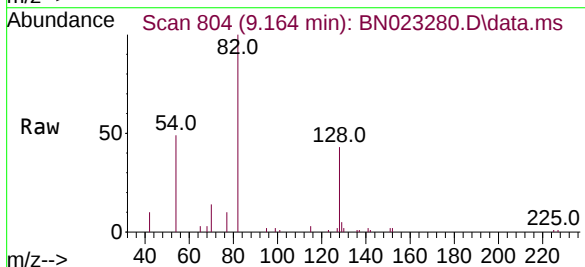
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BNA_N
ClientSampleId :
SSTDCCC0.4

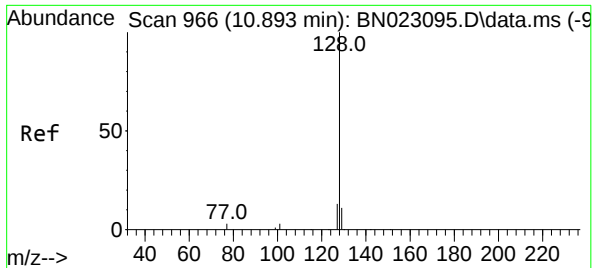
Tgt Ion:	136	Resp:	24904
Ion Ratio	Lower	Upper	
136	100		
137	11.2	9.0	13.4
54	7.0	6.5	9.7
68	6.0	5.4	8.2



#8
Nitrobenzene-d5
Concen: 0.412 ng
RT: 9.164 min Scan# 804
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:	82	Resp:	6755
Ion Ratio	Lower	Upper	
82	100		
128	42.5	31.4	47.2
54	49.4	41.0	61.4

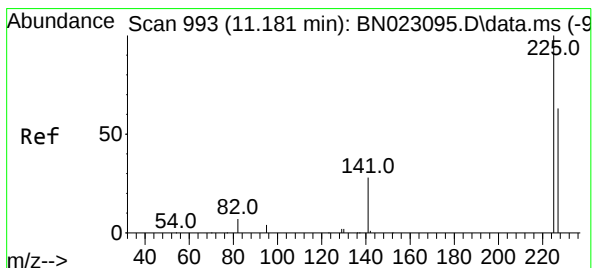
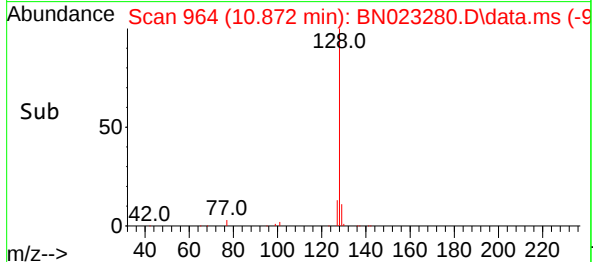
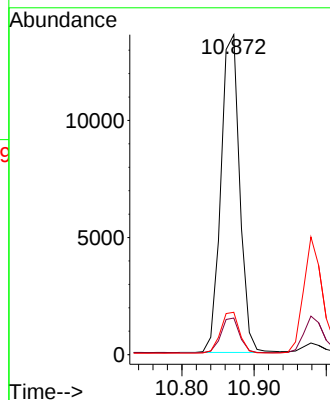
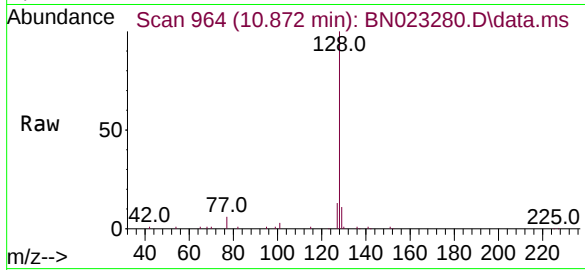




#9
Naphthalene
Concen: 0.388 ng
RT: 10.872 min Scan# 90
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

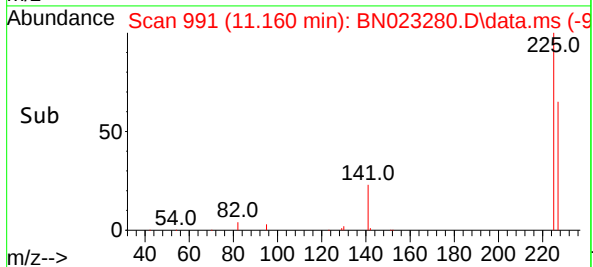
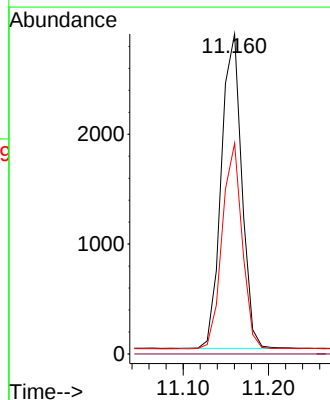
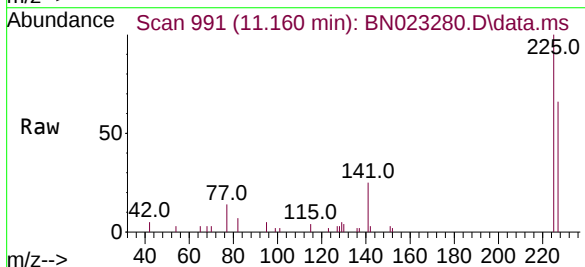
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

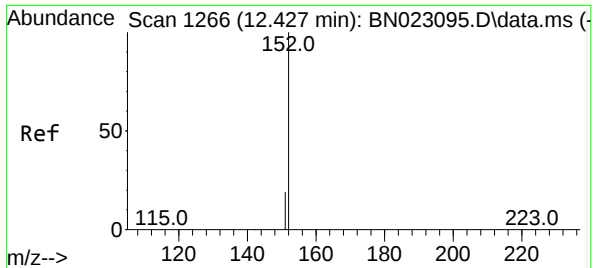
Tgt Ion:128	Resp:	24598
Ion Ratio	Lower	Upper
128	100	
129	11.4	9.0 13.6
127	13.2	10.5 15.7



#10
Hexachlorobutadiene
Concen: 0.395 ng
RT: 11.160 min Scan# 991
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:225	Resp:	4773
Ion Ratio	Lower	Upper
225	100	
223	0.0	0.0 0.0
227	63.6	51.1 76.7

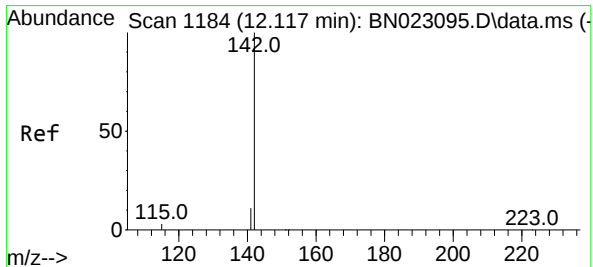
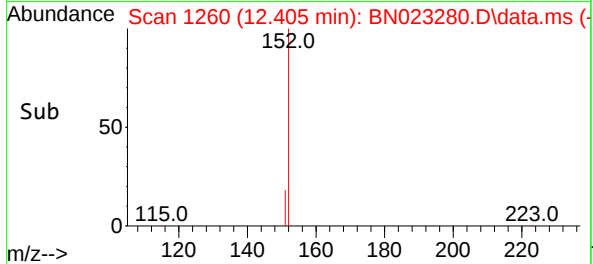
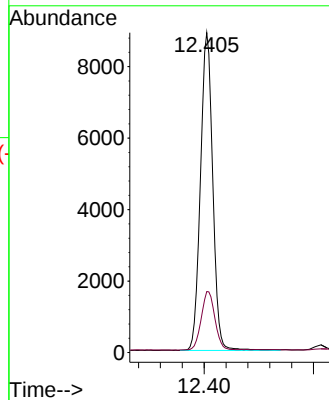
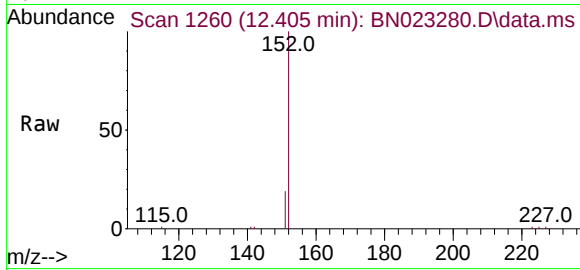




#11
2-Methylnaphthalene-d10
Concen: 0.369 ng
RT: 12.405 min Scan# 1180
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

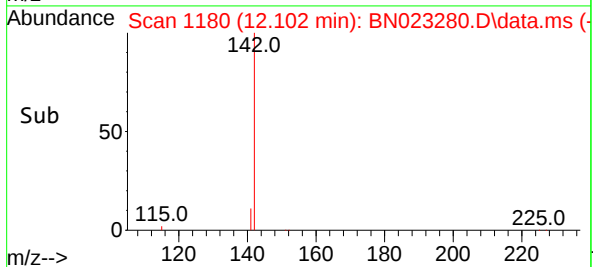
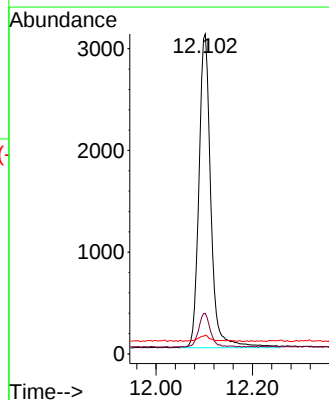
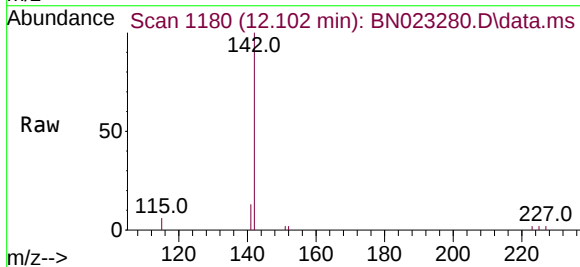
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

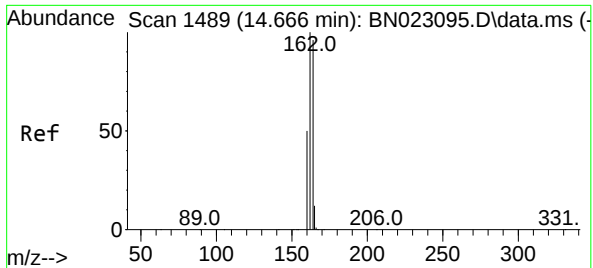
Tgt Ion:152 Resp: 15577
Ion Ratio Lower Upper
152 100
151 18.3 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.560 ng
RT: 12.102 min Scan# 1180
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:142 Resp: 5285
Ion Ratio Lower Upper
142 100
141 12.7 10.9 16.3
115 5.9 5.7 8.5

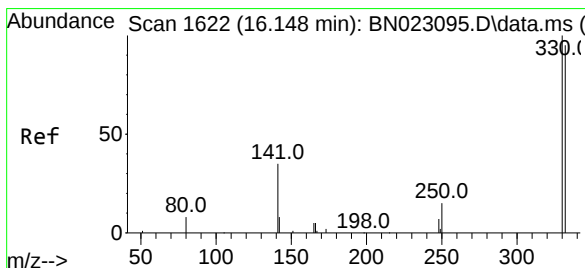
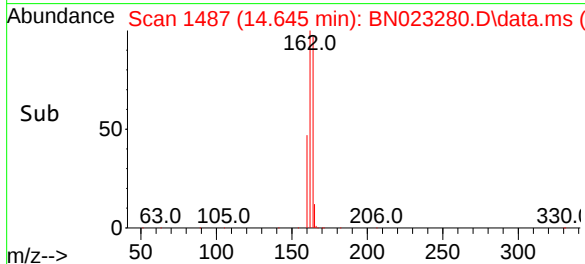
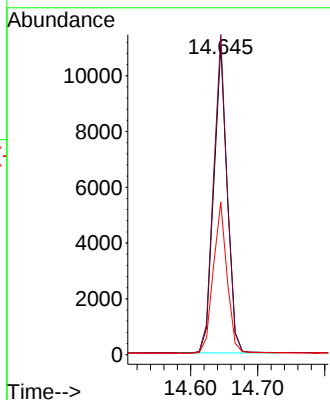
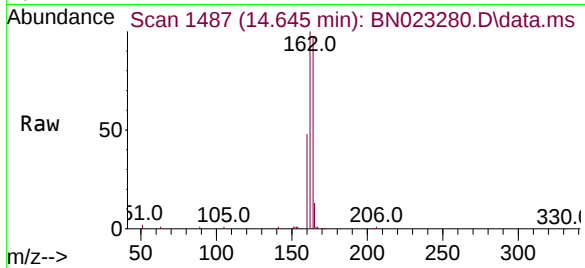




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1487
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

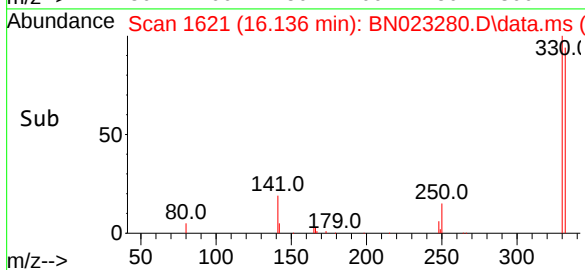
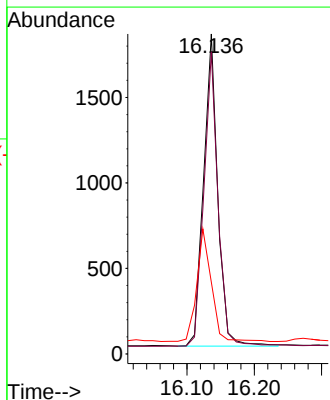
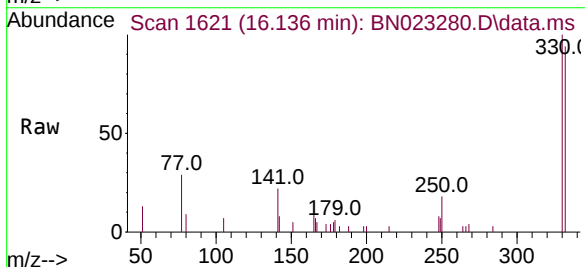
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

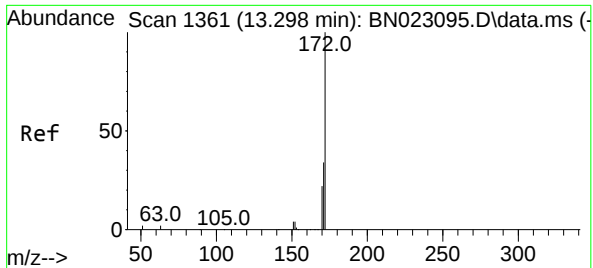
Tgt Ion	Ratio	Lower	Upper
164	100		
162	103.5	83.4	125.0
160	49.3	41.8	62.8



#14
2,4,6-Tribromophenol
Concen: 0.474 ng
RT: 16.136 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion	Ratio	Lower	Upper
330	100		
332	94.2	77.3	115.9
141	36.8	33.5	50.3

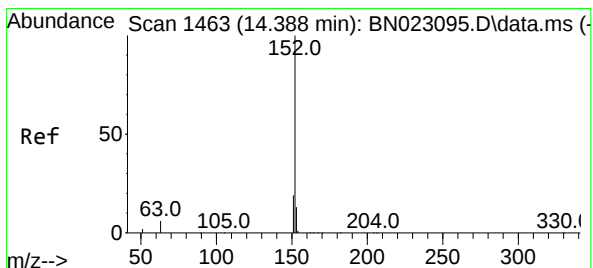
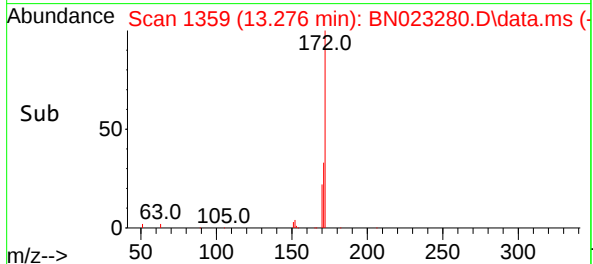
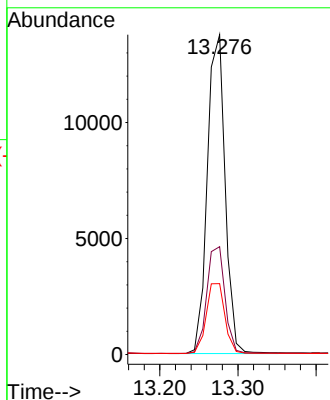
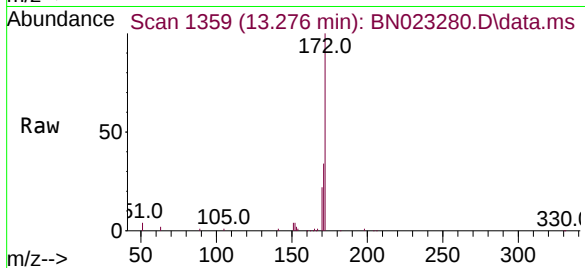




#15
2-Fluorobiphenyl
Concen: 0.352 ng
RT: 13.276 min Scan# 1359
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

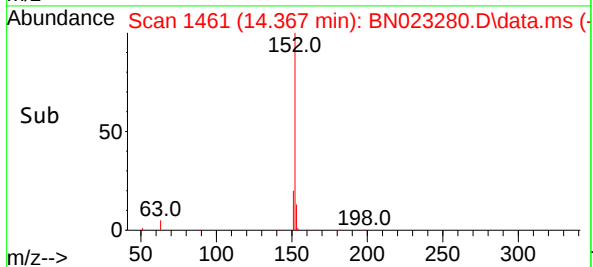
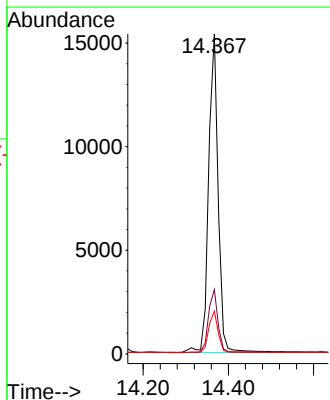
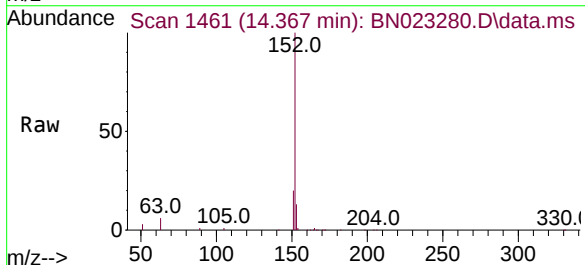
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

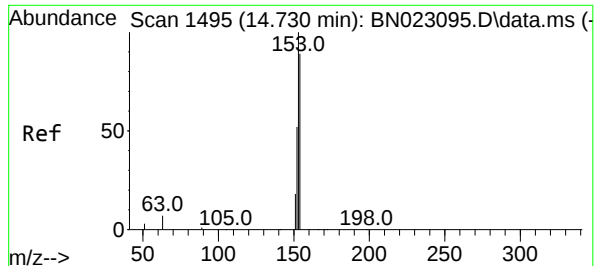
Tgt Ion	Ratio	Lower	Upper
172	100		
171	33.7	27.4	41.0
170	22.2	17.9	26.9



#16
Acenaphthylene
Concen: 0.382 ng
RT: 14.367 min Scan# 1461
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.4	23.2
153	12.9	10.3	15.5

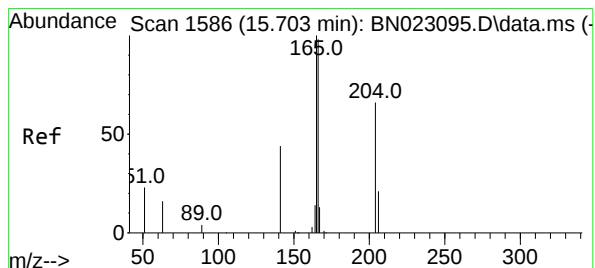
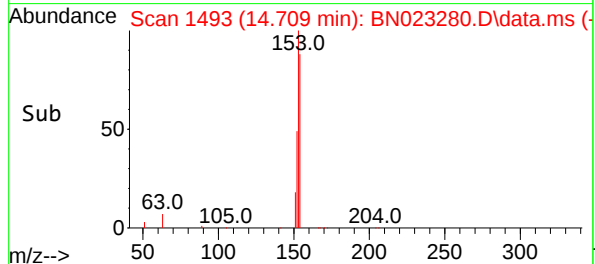
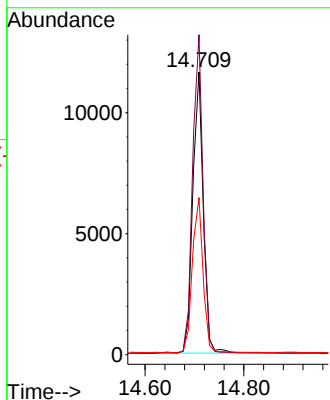
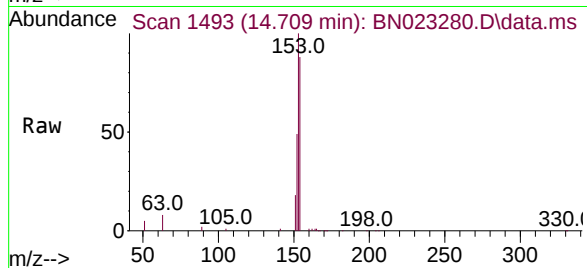




#17
Acenaphthene
Concen: 0.372 ng
RT: 14.709 min Scan# 1493
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

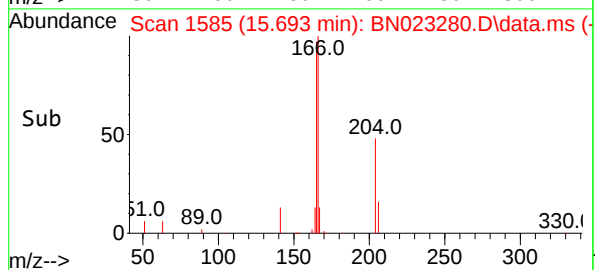
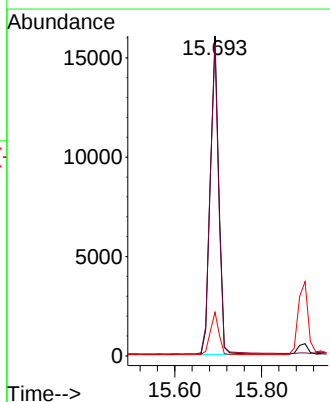
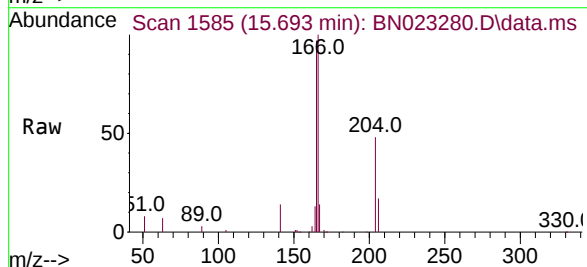
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

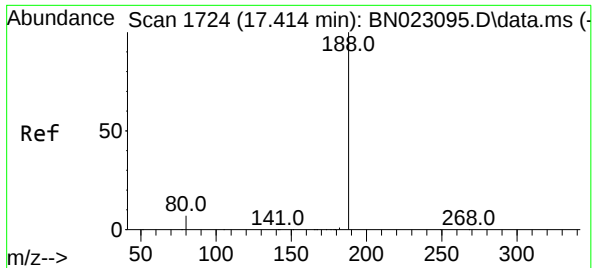
Tgt Ion:154 Resp: 17079
Ion Ratio Lower Upper
154 100
153 113.0 88.6 132.8
152 56.2 48.1 72.1



#18
Fluorene
Concen: 0.458 ng
RT: 15.693 min Scan# 1585
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:166 Resp: 23490
Ion Ratio Lower Upper
166 100
165 98.6 79.8 119.6
167 13.4 10.6 16.0

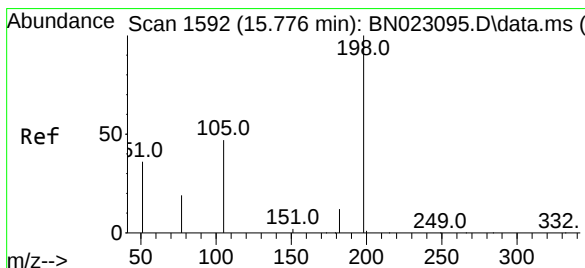
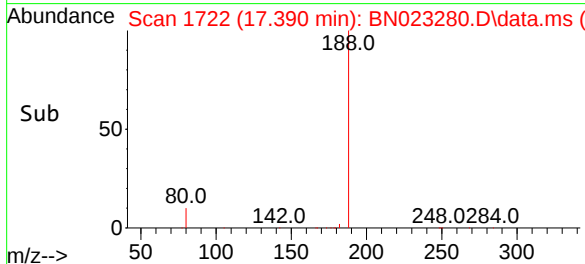
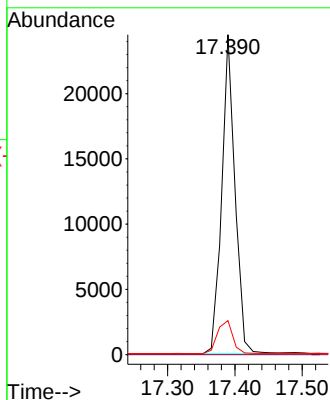
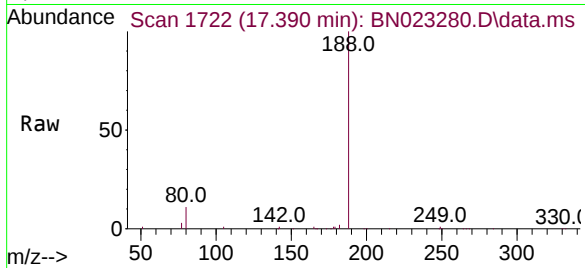




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

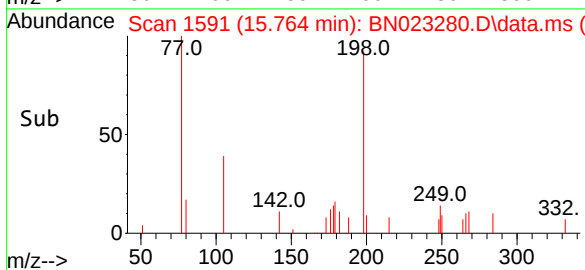
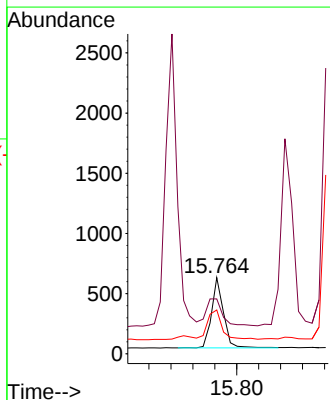
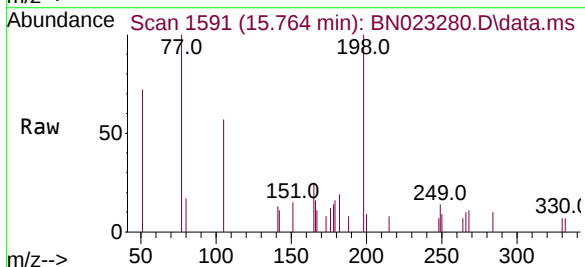
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

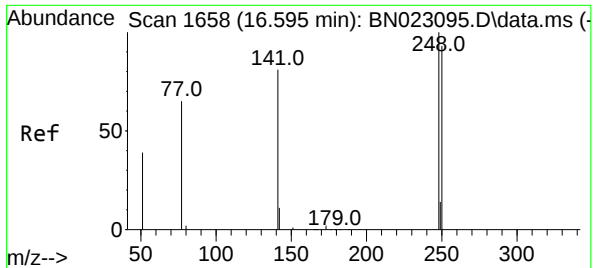
Tgt Ion	188	94	80
Ratio	100	0.0	10.6
Lower		0.0	6.1
Upper		0.0	9.1



#20
4,6-Dinitro-2-methylphenol
Concen: 0.362 ng
RT: 15.764 min Scan# 1591
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion	198	51	105
Ratio <td>100</td> <td>72.0</td> <td>57.7</td>	100	72.0	57.7
Lower <td></td> <td>57.0</td> <td>47.2</td>		57.0	47.2
Upper <td></td> <td>85.4</td> <td>70.8</td>		85.4	70.8

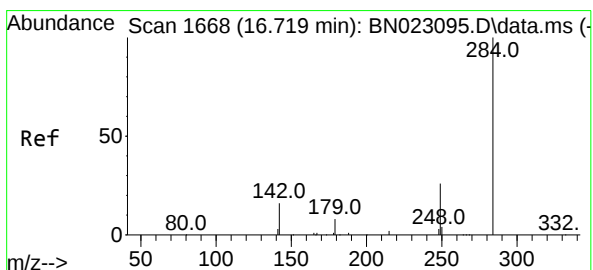
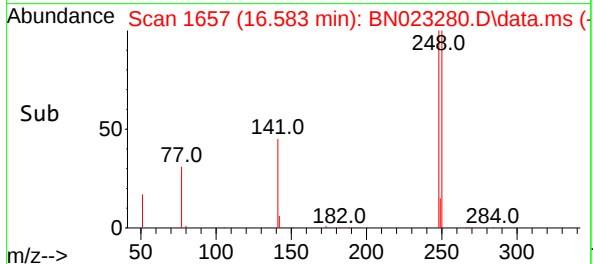
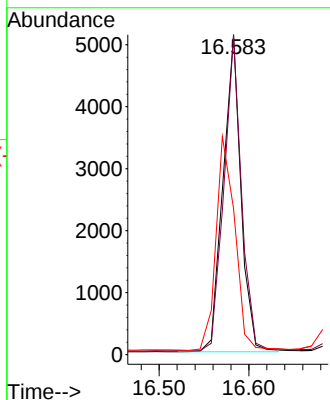
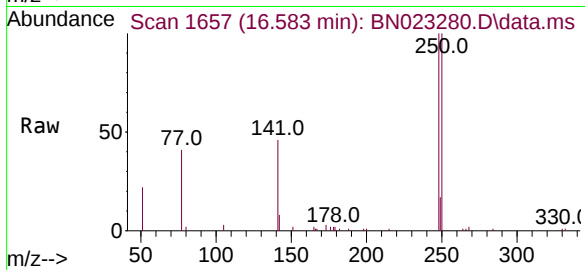




#21
4-Bromophenyl-phenylether
Concen: 0.393 ng
RT: 16.583 min Scan# 1657
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

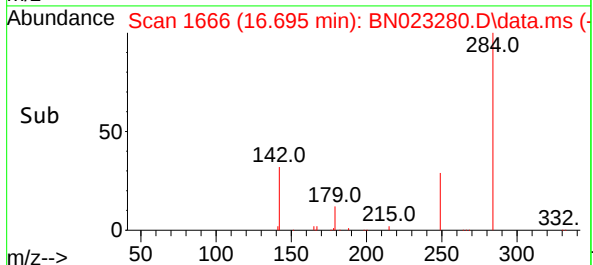
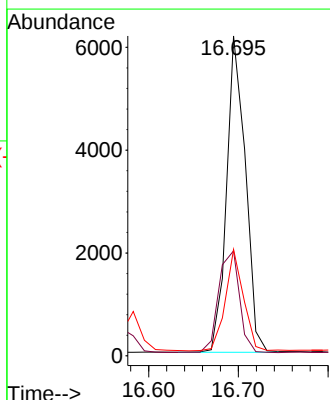
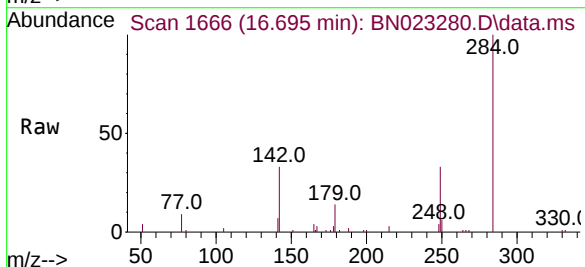
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

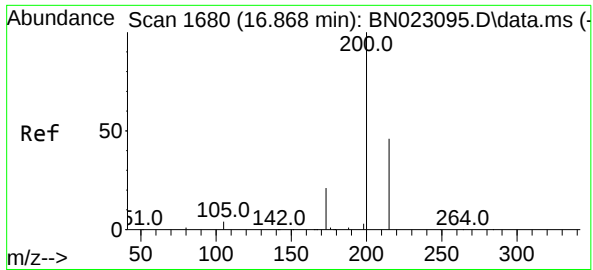
Tgt Ion:248 Resp: 7067
Ion Ratio Lower Upper
248 100
250 99.8 74.3 111.5
141 45.6 65.0 97.6#



#22
Hexachlorobenzene
Concen: 0.381 ng
RT: 16.695 min Scan# 1666
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:284 Resp: 8969
Ion Ratio Lower Upper
284 100
142 35.6 31.0 46.4
249 30.7 24.4 36.6

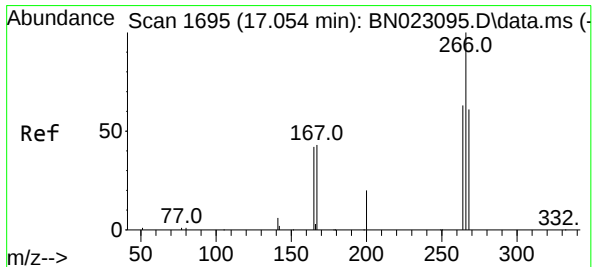
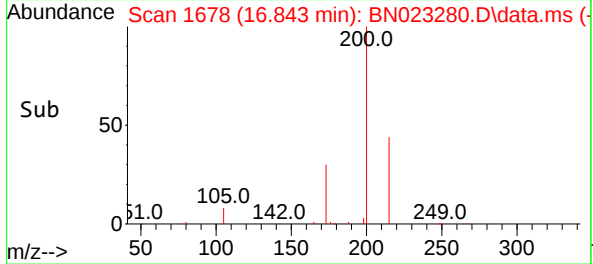
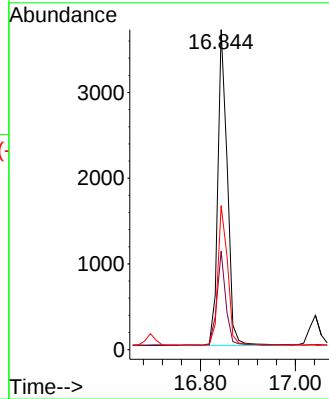
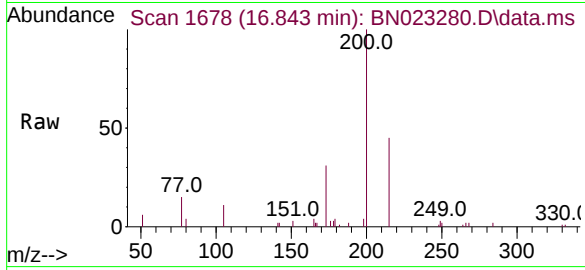




#23
Atrazine
Concen: 0.402 ng
RT: 16.843 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

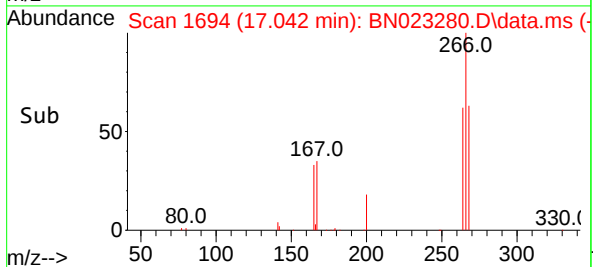
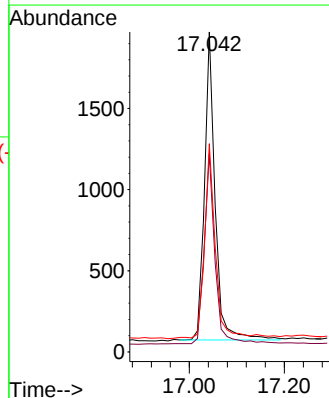
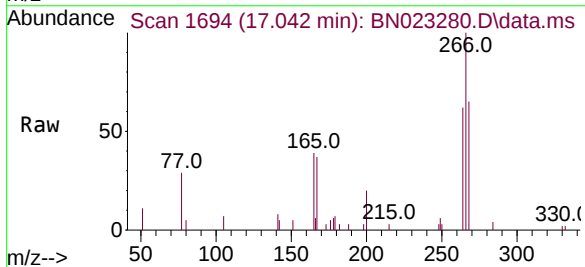
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

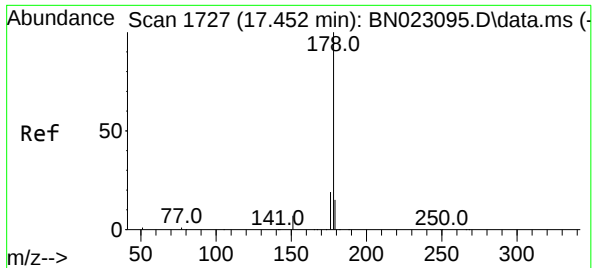
Tgt Ion:200 Resp: 5103
Ion Ratio Lower Upper
200 100
173 30.7 18.2 27.4#
215 45.0 38.0 57.0



#24
Pentachlorophenol
Concen: 0.359 ng
RT: 17.042 min Scan# 1694
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:266 Resp: 2939
Ion Ratio Lower Upper
266 100
264 62.3 50.1 75.1
268 63.0 49.7 74.5

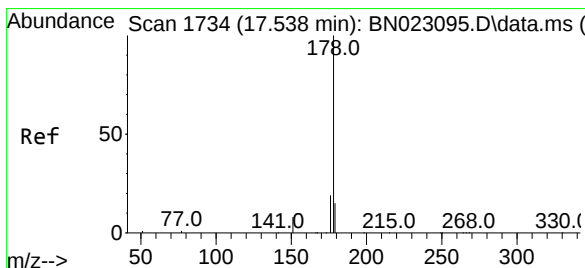
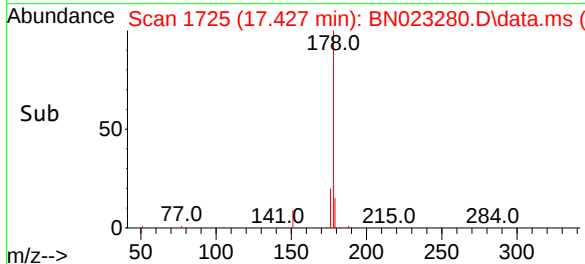
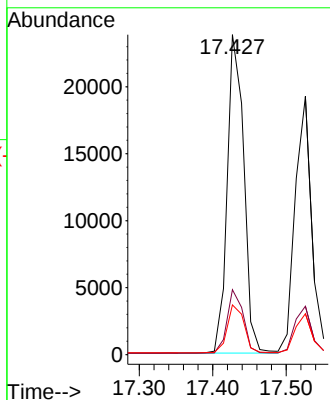
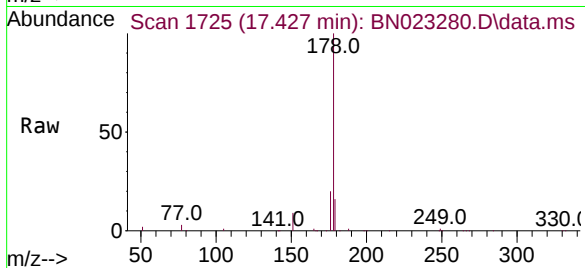




#25
Phenanthrene
Concen: 0.373 ng
RT: 17.427 min Scan# 1725
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

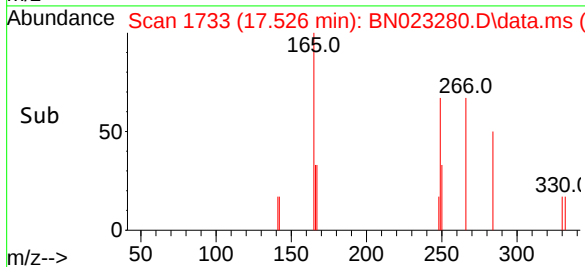
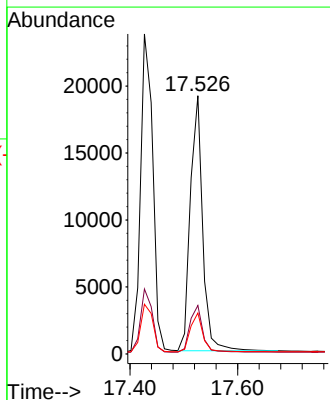
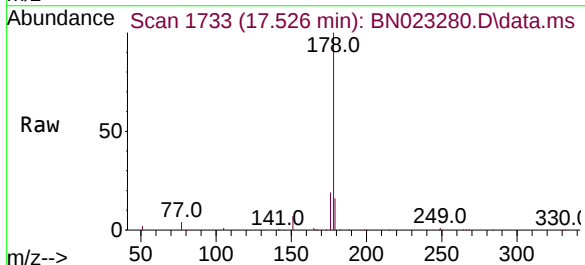
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

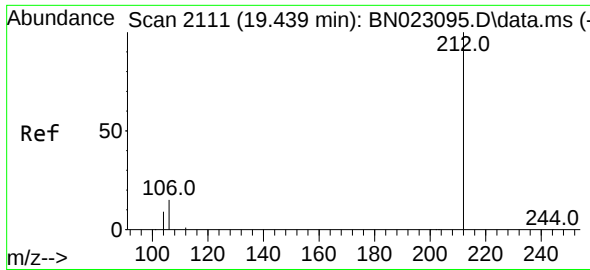
Tgt Ion:178 Resp: 37463
Ion Ratio Lower Upper
178 100
176 19.4 15.4 23.2
179 15.3 12.2 18.2



#26
Anthracene
Concen: 0.379 ng
RT: 17.526 min Scan# 1733
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:178 Resp: 30364
Ion Ratio Lower Upper
178 100
176 18.7 15.1 22.7
179 15.2 12.2 18.4

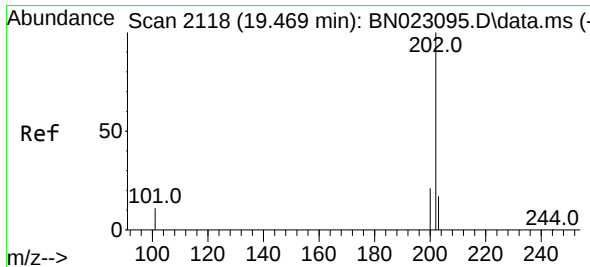
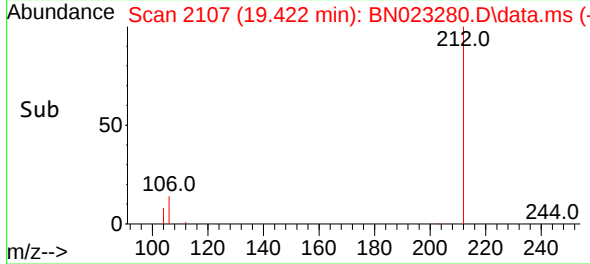
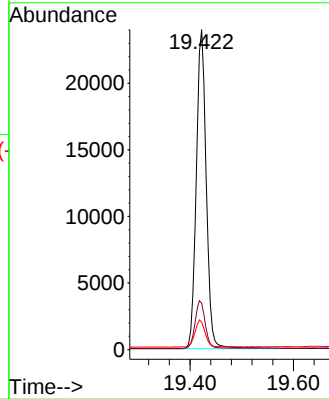
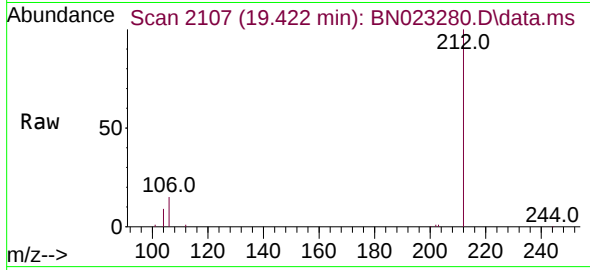




#27
Fluoranthene-d10
Concen: 0.406 ng
RT: 19.422 min Scan# 2110
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

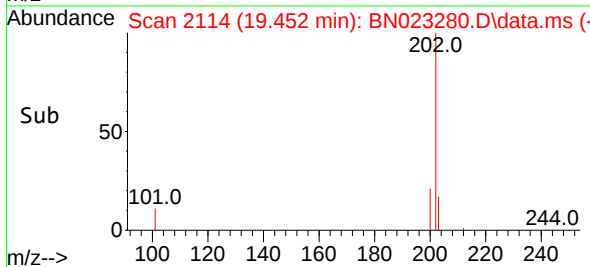
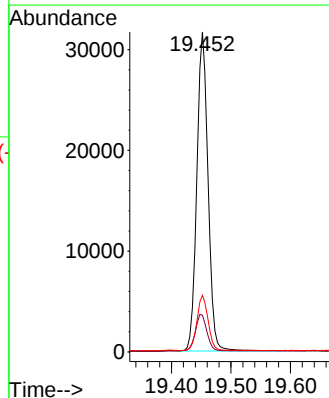
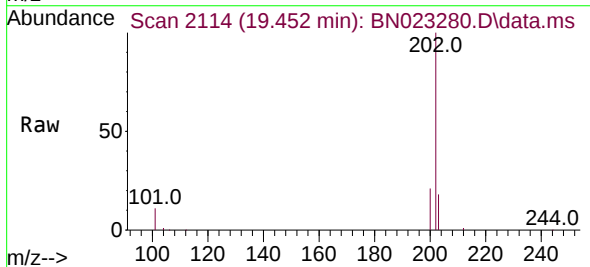
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

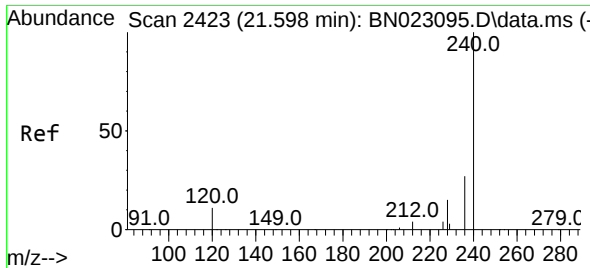
Tgt Ion:212 Resp: 32028
Ion Ratio Lower Upper
212 100
106 15.1 13.0 19.4
104 8.7 7.5 11.3



#28
Fluoranthene
Concen: 0.384 ng
RT: 19.452 min Scan# 2114
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:202 Resp: 41357
Ion Ratio Lower Upper
202 100
101 11.9 9.7 14.5
203 17.1 13.8 20.6

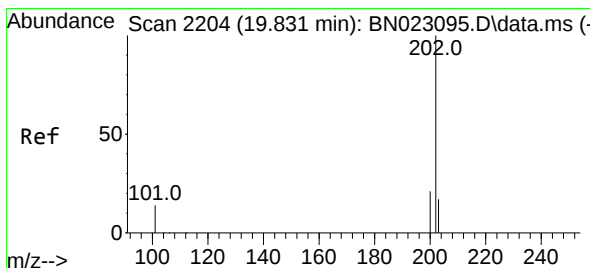
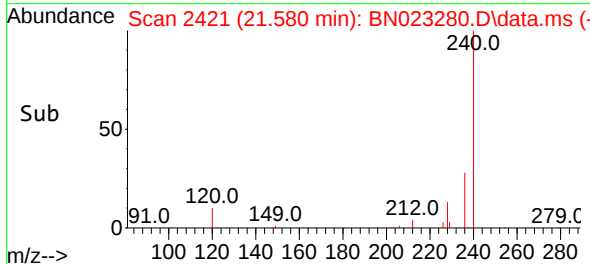
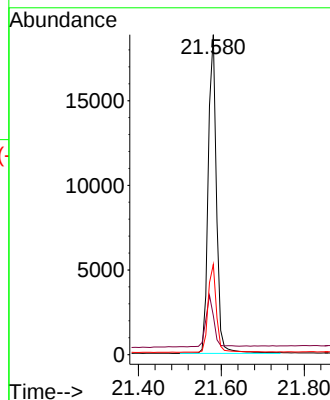
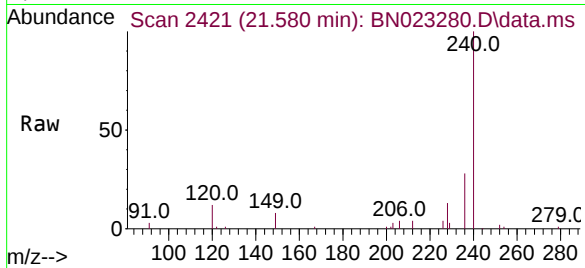




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2423
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

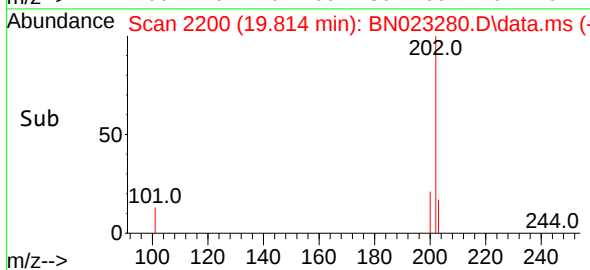
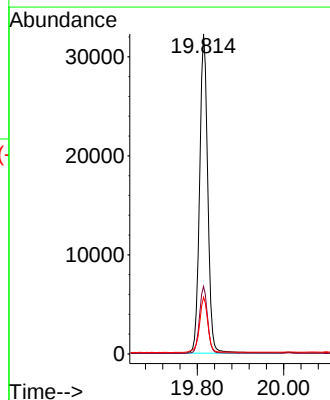
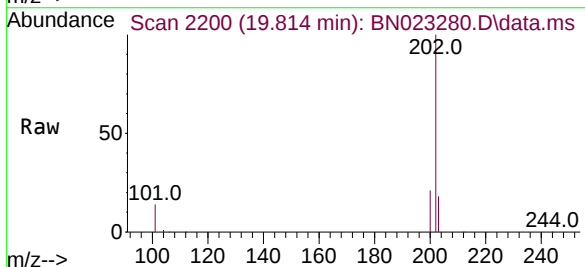
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

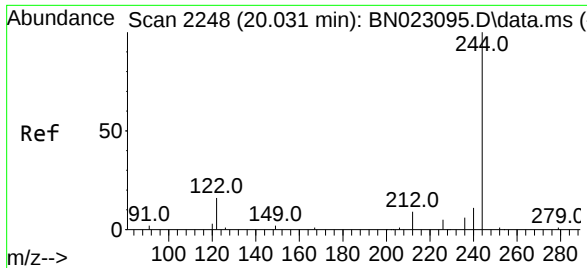
Tgt Ion:	240	Resp:	25842
Ion Ratio	Lower	Upper	
240	100		
120	12.2	10.1	15.1
236	28.2	22.2	33.4



#30
Pyrene
Concen: 0.444 ng
RT: 19.814 min Scan# 2200
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:	202	Resp:	41984
Ion Ratio	Lower	Upper	
202	100		
200	20.9	16.9	25.3
203	17.6	14.2	21.4

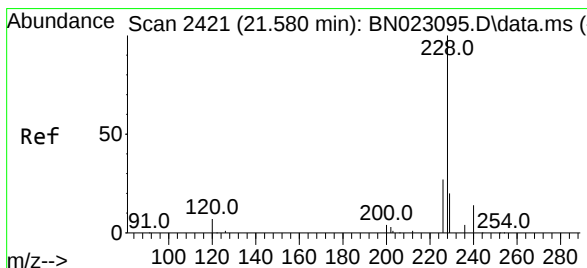
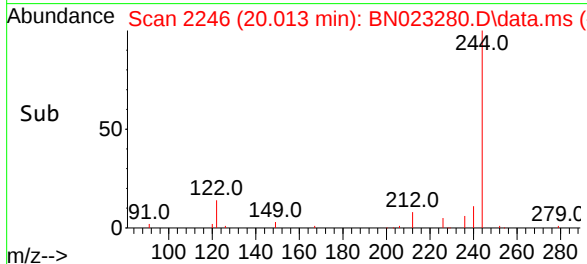
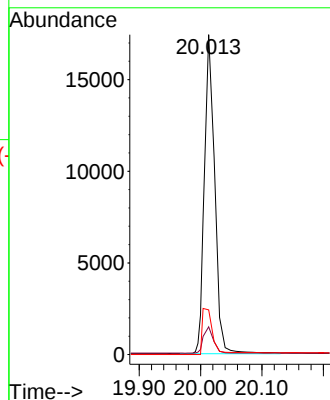
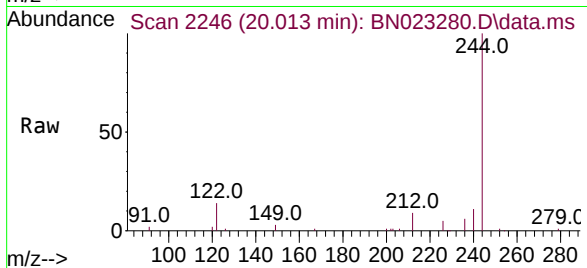




#31
Terphenyl-d14
Concen: 0.422 ng
RT: 20.013 min Scan# 21
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

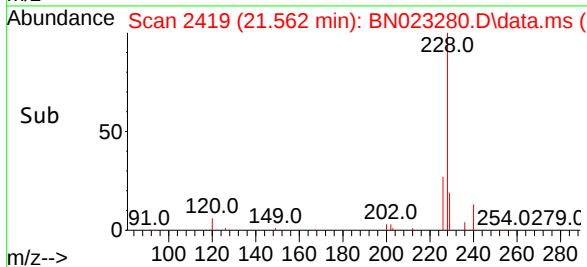
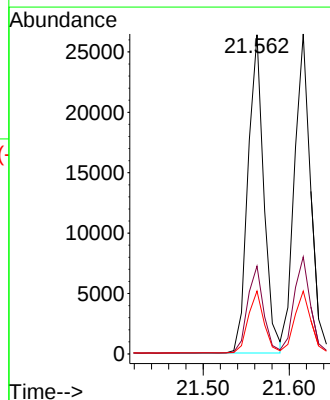
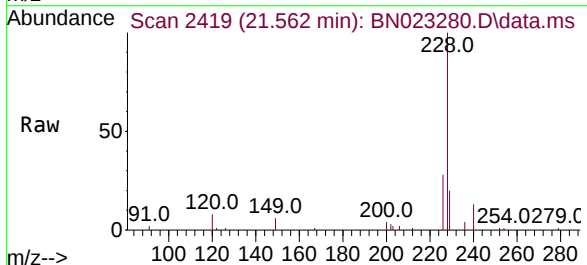
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

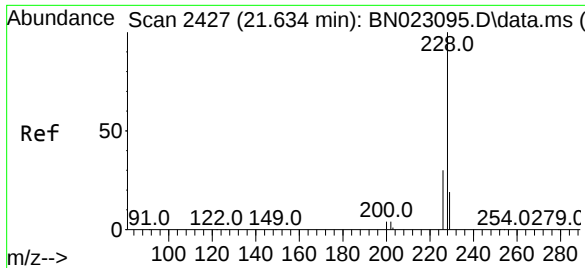
Tgt Ion:244 Resp: 17696
Ion Ratio Lower Upper
244 100
212 8.7 7.6 11.4
122 14.0 12.6 18.8



#32
Benzo(a)anthracene
Concen: 0.405 ng
RT: 21.562 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:228 Resp: 33710
Ion Ratio Lower Upper
228 100
226 27.5 22.0 33.0
229 19.7 15.8 23.8





#33

Chrysene

Concen: 0.370 ng

RT: 21.616 min Scan# 2410

Delta R.T. 0.000 min

Lab File: BN023280.D

Acq: 19 Dec 2022 11:22

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

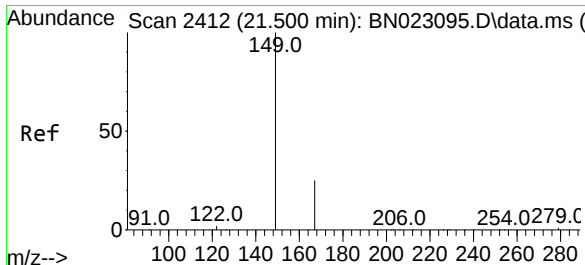
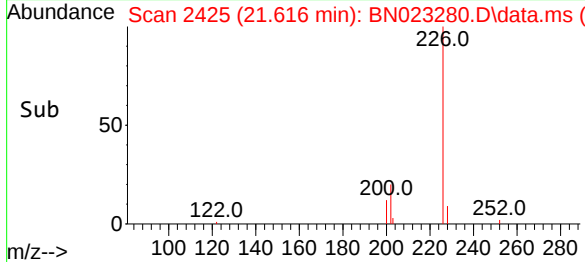
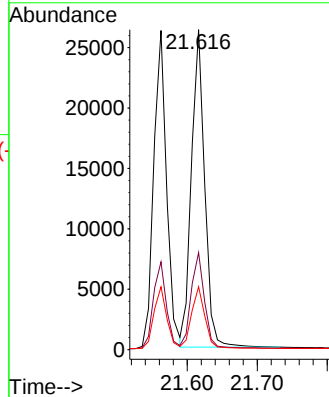
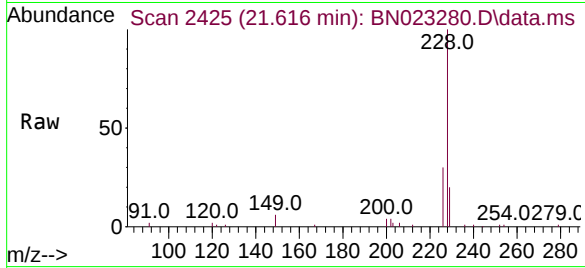
Tgt Ion:228 Resp: 34659

Ion Ratio Lower Upper

228 100

226 30.3 24.4 36.6

229 19.6 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.573 ng

RT: 21.482 min Scan# 2410

Delta R.T. 0.000 min

Lab File: BN023280.D

Acq: 19 Dec 2022 11:22

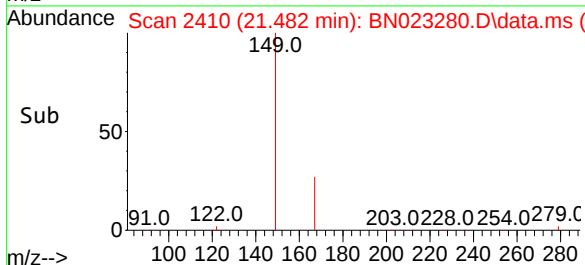
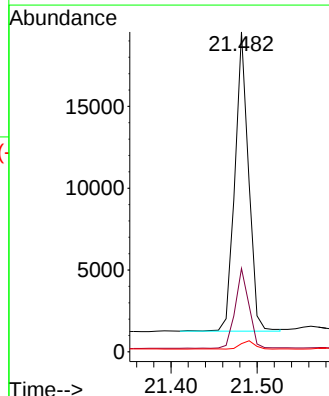
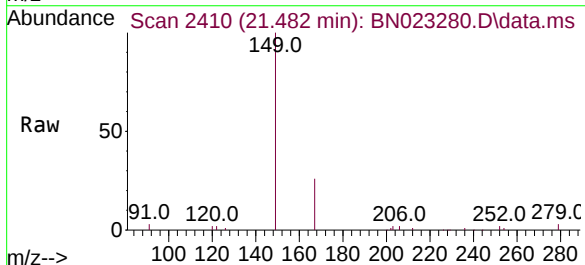
Tgt Ion:149 Resp: 20171

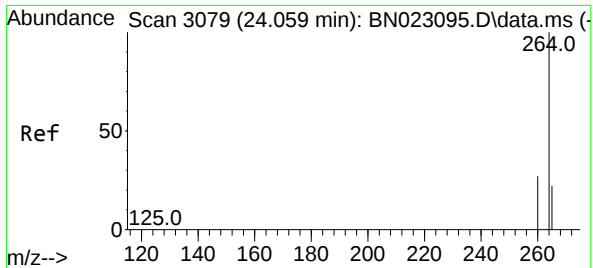
Ion Ratio Lower Upper

149 100

167 26.9 20.2 30.2

279 3.1 2.3 3.5

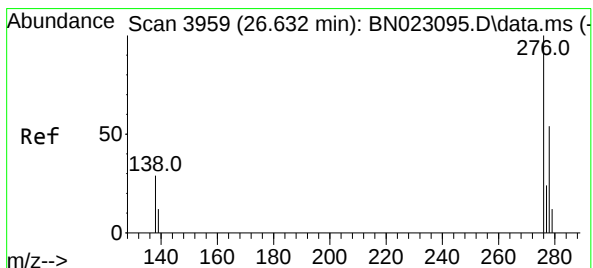
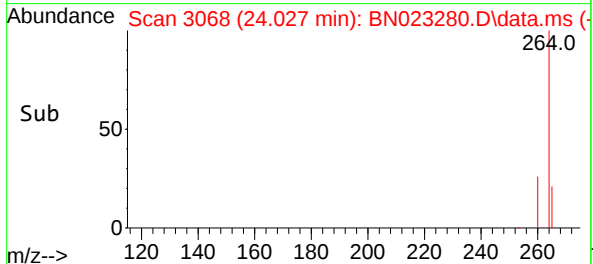
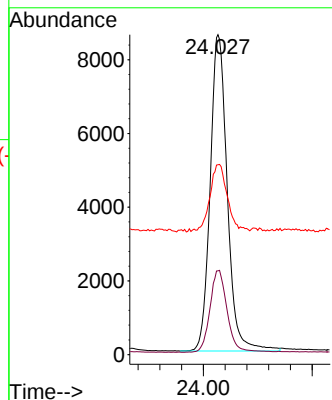
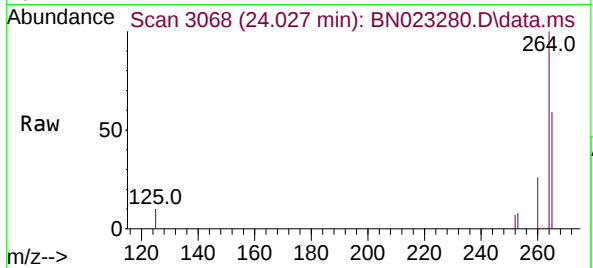




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3079
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

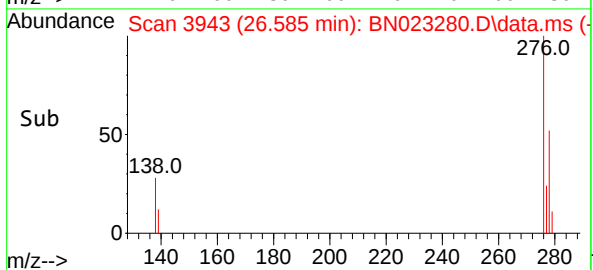
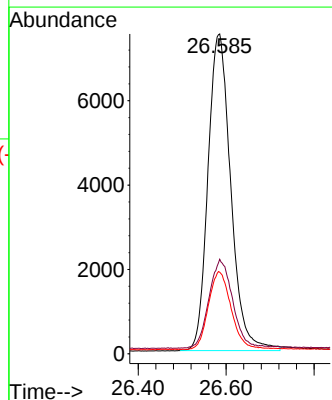
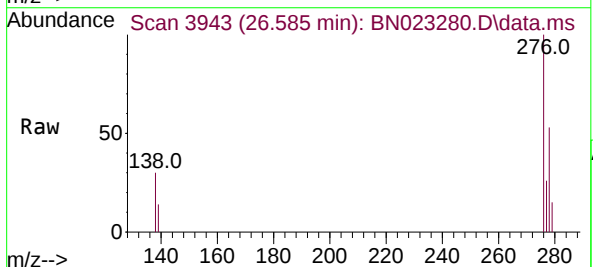
Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

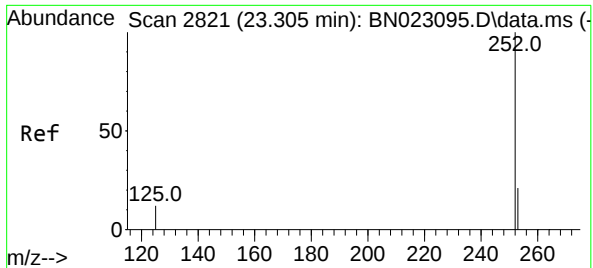
Tgt Ion:	264	Resp:	18763
Ion Ratio	Lower	Upper	
264	100		
260	26.2	21.7	32.5
265	59.3	43.2	64.8



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.322 ng
RT: 26.585 min Scan# 3943
Delta R.T. 0.000 min
Lab File: BN023280.D
Acq: 19 Dec 2022 11:22

Tgt Ion:	276	Resp:	27074
Ion Ratio	Lower	Upper	
276	100		
138	28.8	25.0	37.6
277	24.4	19.8	29.8





#37

Benzo(b)fluoranthene

Concen: 0.369 ng

RT: 23.276 min Scan# 2811

Delta R.T. 0.000 min

Lab File: BN023280.D

Acq: 19 Dec 2022 11:22

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

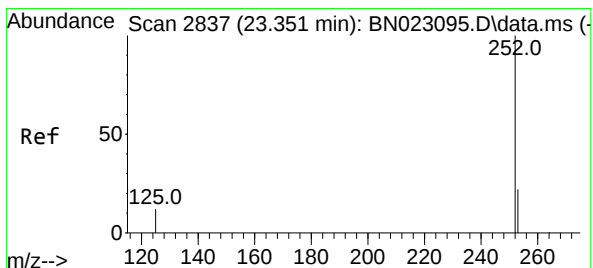
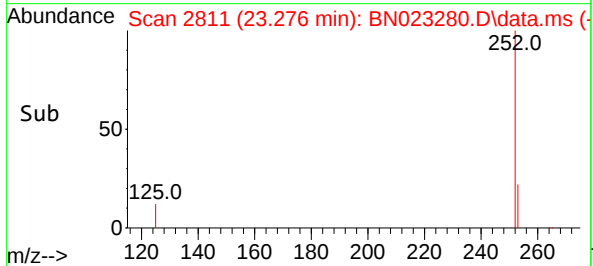
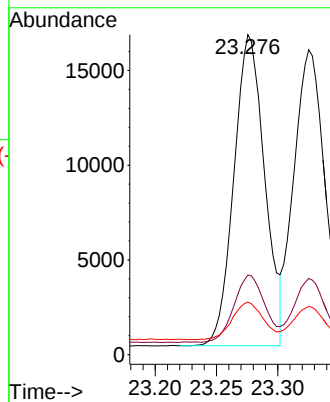
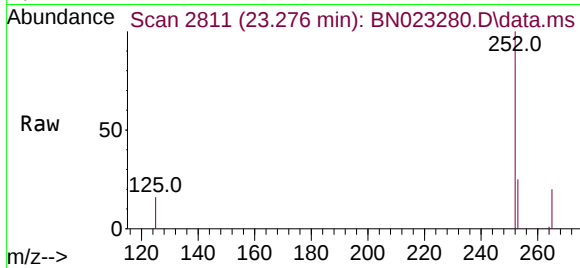
Tgt Ion:252 Resp: 28714

Ion Ratio Lower Upper

252 100

253 24.9 19.0 28.4

125 16.4 12.8 19.2



#38

Benzo(k)fluoranthene

Concen: 0.347 ng

RT: 23.325 min Scan# 2828

Delta R.T. 0.000 min

Lab File: BN023280.D

Acq: 19 Dec 2022 11:22

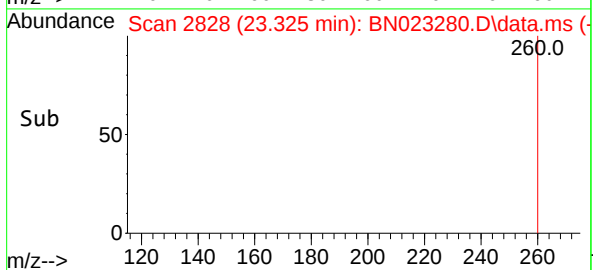
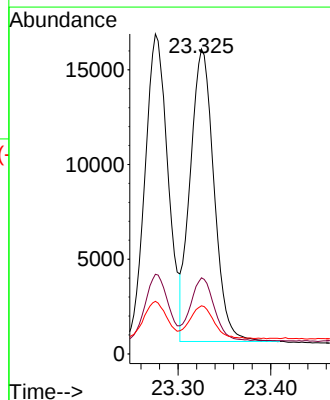
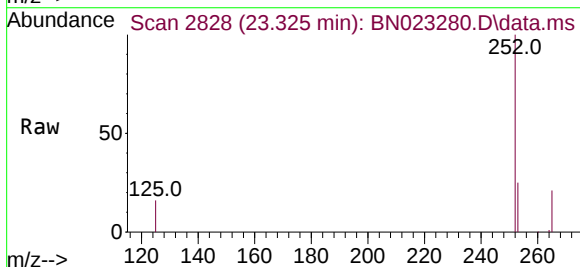
Tgt Ion:252 Resp: 27427

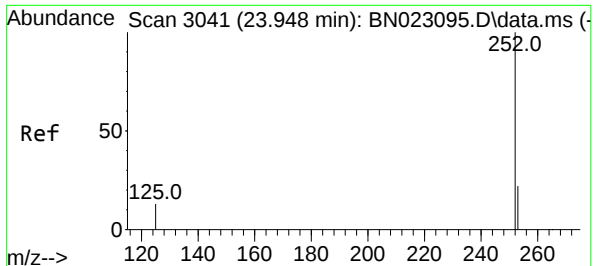
Ion Ratio Lower Upper

252 100

253 24.9 19.1 28.7

125 15.8 12.5 18.7





#39

Benzo(a)pyrene

Concen: 0.370 ng

RT: 23.916 min Scan# 30

Delta R.T. 0.000 min

Lab File: BN023280.D

Acq: 19 Dec 2022 11:22

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4

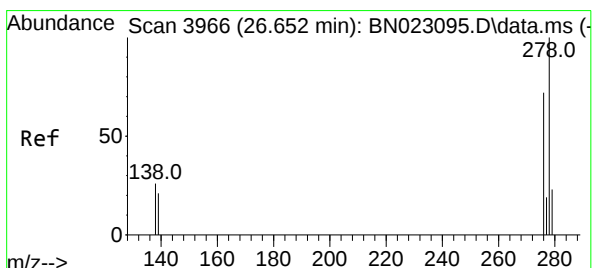
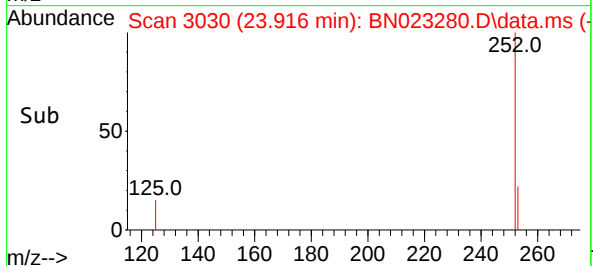
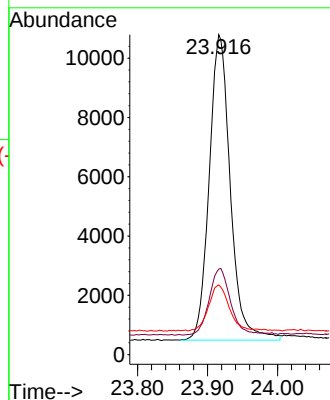
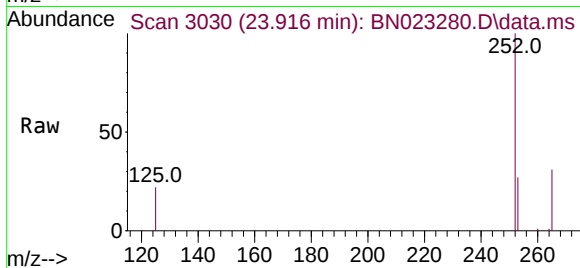
Tgt Ion:252 Resp: 21593

Ion Ratio Lower Upper

252 100

253 26.7 20.6 30.8

125 21.8 15.8 23.8



#40

Dibenzo(a,h)anthracene

Concen: 0.315 ng

RT: 26.606 min Scan# 3950

Delta R.T. 0.000 min

Lab File: BN023280.D

Acq: 19 Dec 2022 11:22

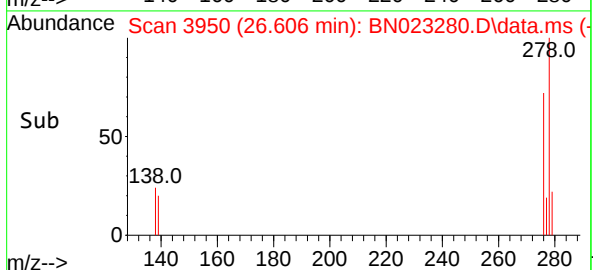
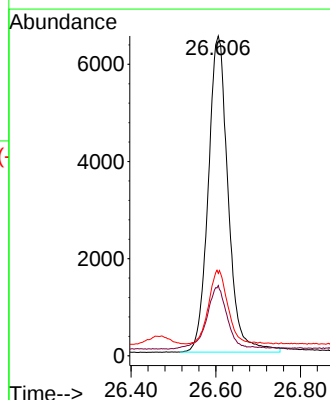
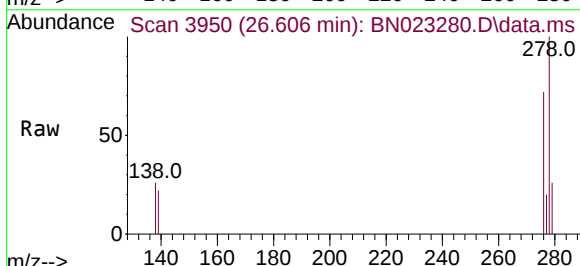
Tgt Ion:278 Resp: 21241

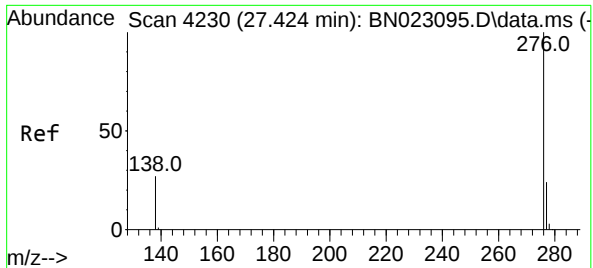
Ion Ratio Lower Upper

278 100

139 22.0 17.5 26.3

279 25.8 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.319 ng

RT: 27.372 min Scan# 41

Delta R.T. 0.000 min

Lab File: BN023280.D

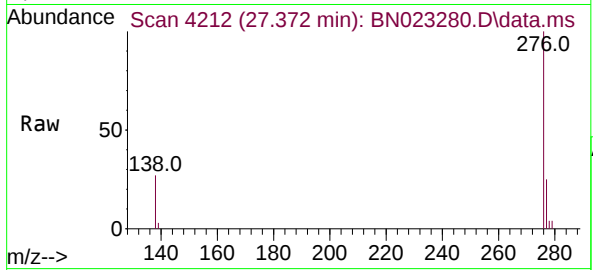
Acq: 19 Dec 2022 11:22

Instrument :

BNA_N

ClientSampleId :

SSTDCCC0.4



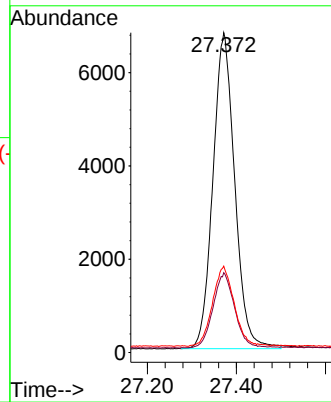
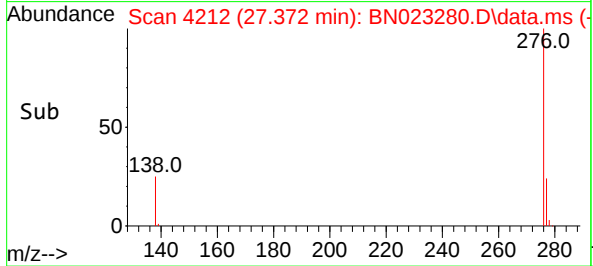
Tgt Ion:276 Resp: 23015

Ion Ratio Lower Upper

276 100

277 25.0 19.9 29.9

138 27.0 22.2 33.2



Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
 Data File : BN023280.D
 Acq On : 19 Dec 2022 11:22
 Operator : CG/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 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	111	-0.02
2	1,4-Dioxane	0.395	0.440	-11.4	121	-0.01
3	n-Nitrosodimethylamine	0.388	0.356	8.2	106	-0.01
4 S	2-Fluorophenol	0.745	0.926	-24.3	138	0.00
5 S	Phenol-d6	0.947	1.181	-24.7	143	-0.01
6	bis(2-Chloroethyl)ether	1.076	1.066	0.9	107	-0.01
7 I	Naphthalene-d8	1.000	1.000	0.0	120	-0.02
8 S	Nitrobenzene-d5	0.264	0.271	-2.7	132	-0.02
9	Naphthalene	1.019	0.988	3.0	119	-0.01
10	Hexachlorobutadiene	0.194	0.192	1.0	118	-0.02
11 SURR	2-Methylnaphthalene-d10	0.678	0.625	7.8	117	-0.02
12	2-Methylnaphthalene	0.152	0.212	-39.5#	174#	-0.01
13 I	Acenaphthene-d10	1.000	1.000	0.0	135	-0.01
14 S	2,4,6-Tribromophenol	0.145	0.172	-18.6	176#	-0.01
15 S	2-Fluorobiphenyl	1.598	1.405	12.1	118	-0.01
16	Acenaphthylene	1.611	1.538	4.5	141	-0.01
17	Acenaphthene	1.184	1.102	6.9	130	-0.01
18	Fluorene	1.325	1.516	-14.4	159#	-0.01
19 I	Phenanthrene-d10	1.000	1.000	0.0	133	-0.01
20	4,6-Dinitro-2-methylphenol	0.057	0.026	54.4#	75	-0.01
21	4-Bromophenyl-phenylether	0.213	0.210	1.4	137	-0.01
22	Hexachlorobenzene	0.280	0.266	5.0	127	-0.01
23	Atrazine	0.150	0.151	-0.7	151#	-0.01
24	Pentachlorophenol	0.097	0.087	10.3	145	-0.01
25	Phenanthrene	1.192	1.111	6.8	129	-0.01
26	Anthracene	0.950	0.900	5.3	140	-0.01
27 SURR	Fluoranthene-d10	0.936	0.950	-1.5	144	-0.01
28	Fluoranthene	1.276	1.226	3.9	136	-0.01
29 I	Chrysene-d12	1.000	1.000	0.0	126	0.00
30	Pyrene	1.464	1.625	-11.0	141	-0.01
31 S	Terphenyl-d14	0.649	0.685	-5.5	126	-0.02
32	Benzo(a)anthracene	1.289	1.304	-1.2	137	0.00
33	Chrysene	1.449	1.341	7.5	117	0.00
34	Bis(2-ethylhexyl)phthalate	0.545	0.781	-43.3#	201#	0.00
35 I	Perylene-d12	1.000	1.000	0.0	121	-0.02
36	Indeno(1,2,3-cd)pyrene	1.793	1.443	19.5	103	-0.03
37	Benzo(b)fluoranthene	1.658	1.530	7.7	116	-0.02
38	Benzo(k)fluoranthene	1.684	1.462	13.2	110	-0.02
39 C	Benzo(a)pyrene	1.244	1.151	7.5	125	-0.03
40	Dibenzo(a,h)anthracene	1.439	1.132	21.3	100	-0.03
41	Benzo(g,h,i)perylene	1.537	1.227	20.2	98	-0.04

(#) = Out of Range

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

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
 Data File : BN023280.D
 Acq On : 19 Dec 2022 11:22
 Operator : CG/JU
 Sample : SSTDCCC0.4
 Misc :
 ALS Vial : 2 Sample Multiplier: 1

Instrument :
 BNA_N
 LabSampleId :
 SSTDCCC0.4

Quant Time: Dec 19 15:45:22 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 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	111	-0.02
2	1,4-Dioxane	0.400	0.446	-11.5	121	-0.01
3	n-Nitrosodimethylamine	0.400	0.367	8.3	106	-0.01
4 S	2-Fluorophenol	0.400	0.497	-24.2	138	0.00
5 S	Phenol-d6	0.400	0.499	-24.7	143	-0.01
6	bis(2-Chloroethyl)ether	0.400	0.396	1.0	107	-0.01
7 I	Naphthalene-d8	0.400	0.400	0.0	120	-0.02
8 S	Nitrobenzene-d5	0.400	0.412	-3.0	132	-0.02
9	Naphthalene	0.400	0.388	3.0	119	-0.01
10	Hexachlorobutadiene	0.400	0.395	1.3	118	-0.02
11 SURR	2-Methylnaphthalene-d10	0.400	0.369	7.8	117	-0.02
12	2-Methylnaphthalene	0.400	0.560	-40.0#	174	-0.01
13 I	Acenaphthene-d10	0.400	0.400	0.0	135	-0.01
14 S	2,4,6-Tribromophenol	0.400	0.474	-18.5	176	-0.01
15 S	2-Fluorobiphenyl	0.400	0.352	12.0	118	-0.01
16	Acenaphthylene	0.400	0.382	4.5	141	-0.01
17	Acenaphthene	0.400	0.372	7.0	130	-0.01
18	Fluorene	0.400	0.458	-14.5	159	-0.01
19 I	Phenanthrene-d10	0.400	0.400	0.0	133	-0.01
20	4,6-Dinitro-2-methylphenol	0.400	0.362	9.5	75	-0.01
21	4-Bromophenyl-phenylether	0.400	0.393	1.8	137	-0.01
22	Hexachlorobenzene	0.400	0.381	4.8	127	-0.01
23	Atrazine	0.400	0.402	-0.5	151	-0.01
24	Pentachlorophenol	0.400	0.359	10.3	145	-0.01
25	Phenanthrene	0.400	0.373	6.8	129	-0.01
26	Anthracene	0.400	0.379	5.3	140	-0.01
27 SURR	Fluoranthene-d10	0.400	0.406	-1.5	144	-0.01
28	Fluoranthene	0.400	0.384	4.0	136	-0.01
29 I	Chrysene-d12	0.400	0.400	0.0	126	0.00
30	Pyrene	0.400	0.444	-11.0	141	-0.01
31 S	Terphenyl-d14	0.400	0.422	-5.5	126	-0.02
32	Benzo(a)anthracene	0.400	0.405	-1.3	137	0.00
33	Chrysene	0.400	0.370	7.5	117	0.00
34	Bis(2-ethylhexyl)phthalate	0.400	0.573	-43.2#	201	0.00
35 I	Perylene-d12	0.400	0.400	0.0	121	-0.02
36	Indeno(1,2,3-cd)pyrene	0.400	0.322	19.5	103	-0.03
37	Benzo(b)fluoranthene	0.400	0.369	7.8	116	-0.02
38	Benzo(k)fluoranthene	0.400	0.347	13.3	110	-0.02
39 C	Benzo(a)pyrene	0.400	0.370	7.5	125	-0.03
40	Dibenzo(a,h)anthracene	0.400	0.315	21.3	100	-0.03
41	Benzo(g,h,i)perylene	0.400	0.319	20.3	98	-0.04

(#) = Out of Range

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

QC SAMPLE DATA

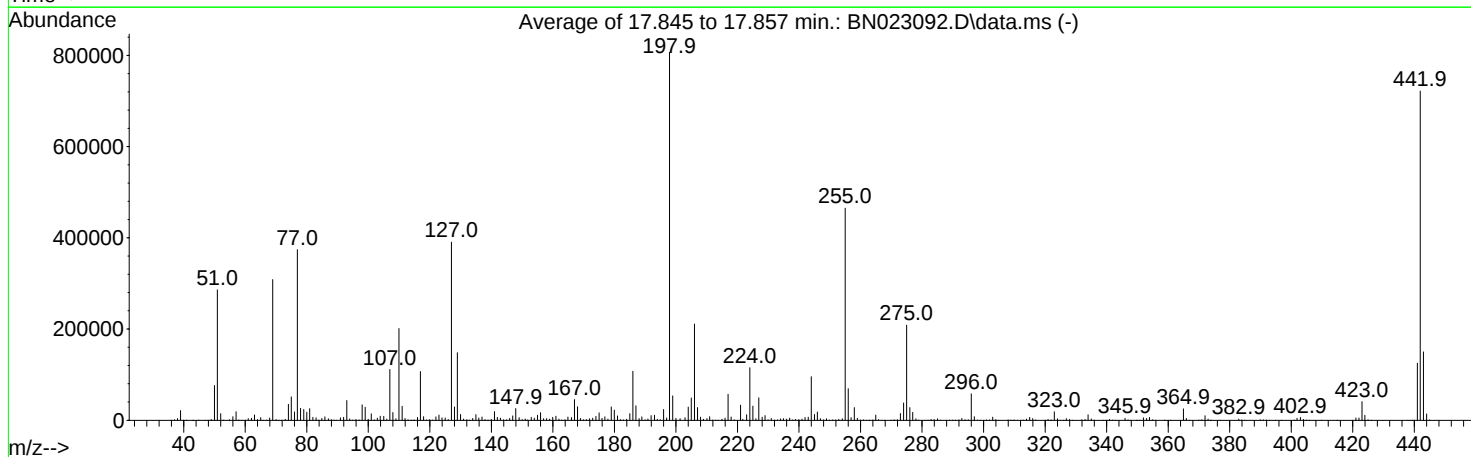
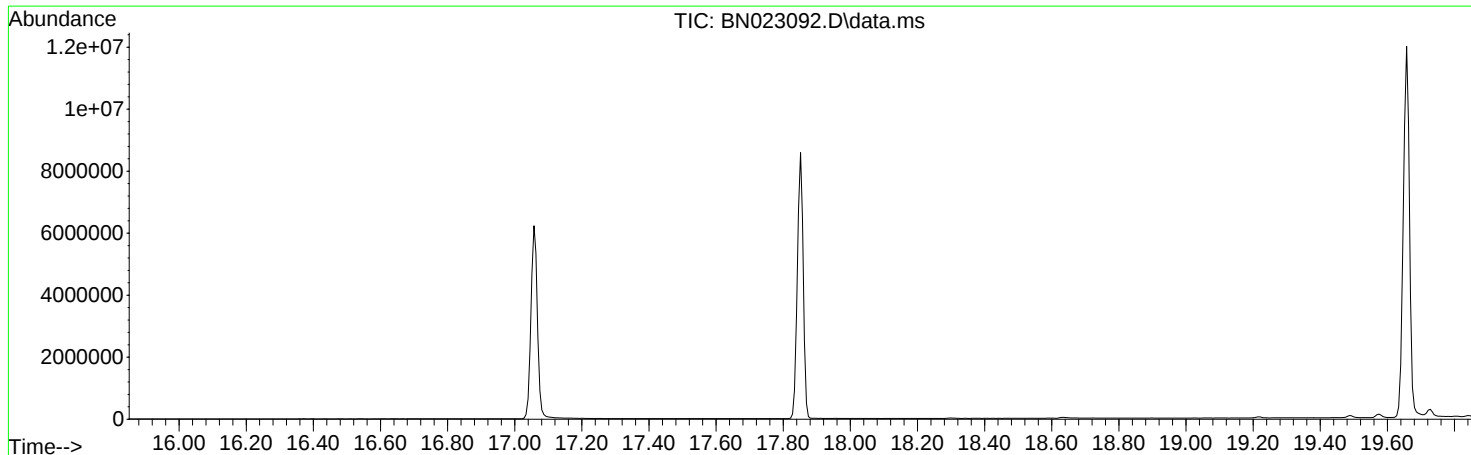
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Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023092.D
Acq On : 08 Dec 2022 12:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Fri Dec 09 07:44:40 2022



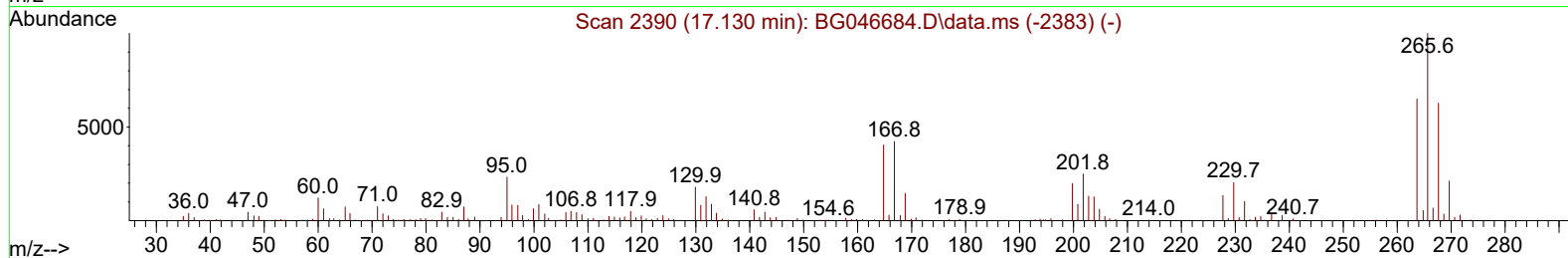
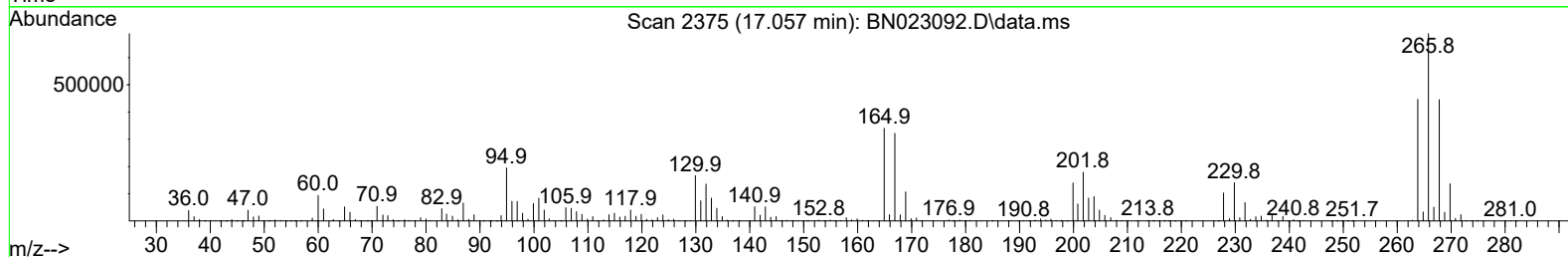
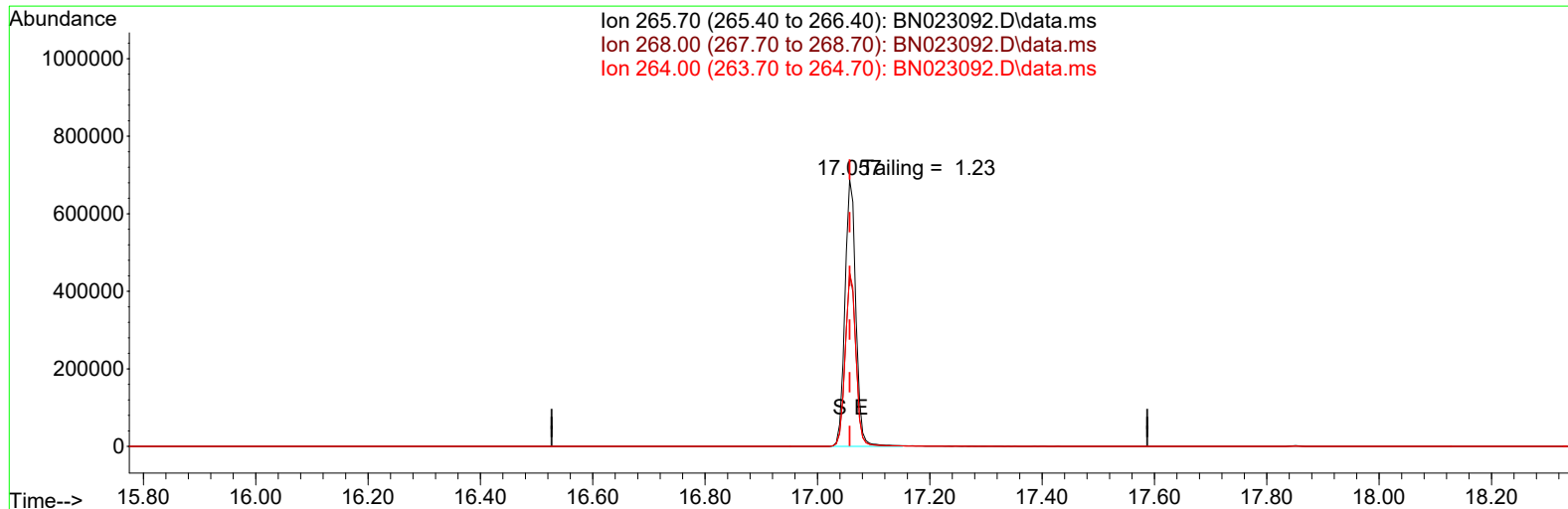
AutoFind: Scans 2509, 2510, 2511; Background Corrected with Scan 2501

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	35.5	286051	PASS
68	69	0.00	2	1.6	5003	PASS
69	198	0.00	100	38.2	308437	PASS
70	69	0.00	2	0.5	1672	PASS
127	198	10	80	48.4	390485	PASS
197	198	0.00	2	0.6	5002	PASS
198	198	100	100	100.0	806400	PASS
199	198	5	9	6.6	53560	PASS
275	198	10	60	25.9	208533	PASS
365	198	1	100	3.1	25240	PASS
441	198	0.01	100	15.5	125061	PASS
442	442	50	100	100.0	721600	PASS
443	442	15	24	20.8	149963	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023092.D
Acq On : 08 Dec 2022 12:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 09 09:10:53 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 09:10:48 2022
Response via : Initial Calibration



TIC: BN023092.D\data.ms

(70) Pentachlorophenol (C)

17.057min (0.000) 22077.14 ng

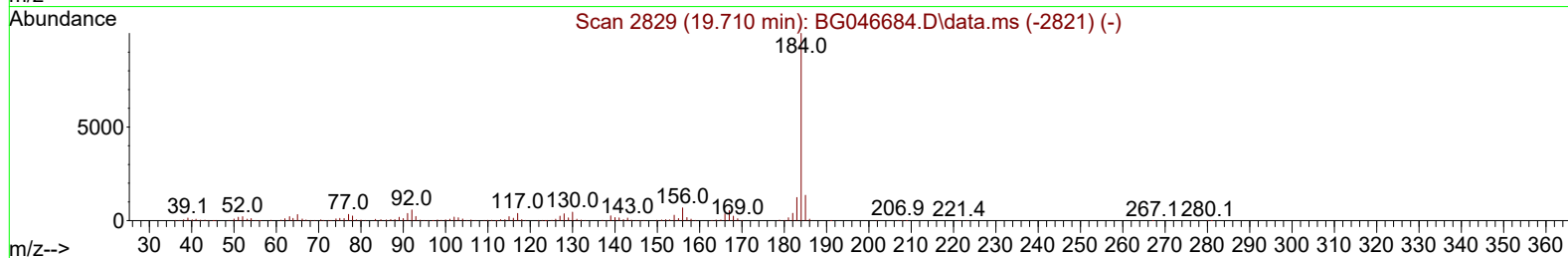
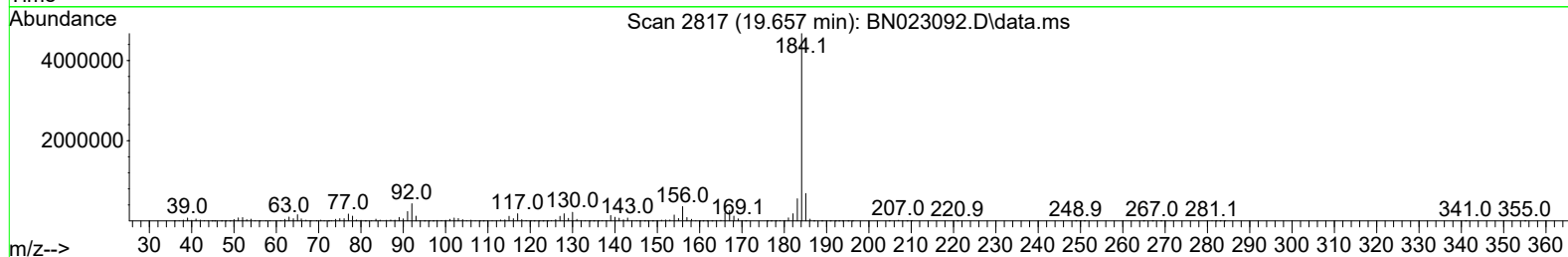
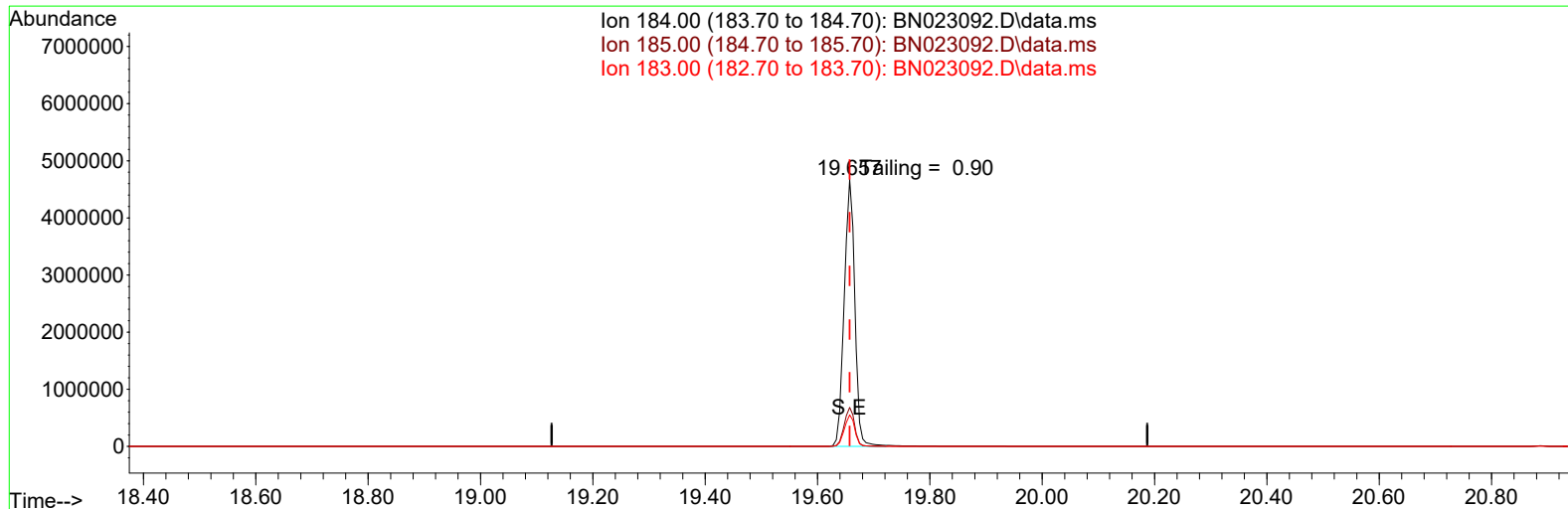
response 935928

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.79
264.00	61.60	64.96
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN120822\
Data File : BN023092.D
Acq On : 08 Dec 2022 12:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 09 09:10:53 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Fri Dec 09 09:10:48 2022
Response via : Initial Calibration



TIC: BN023092.D\data.ms

(77) Benizidine**19.657min (0.000) 3431862.86 ng****response 6135730**

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.62
183.00	13.20	11.85
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

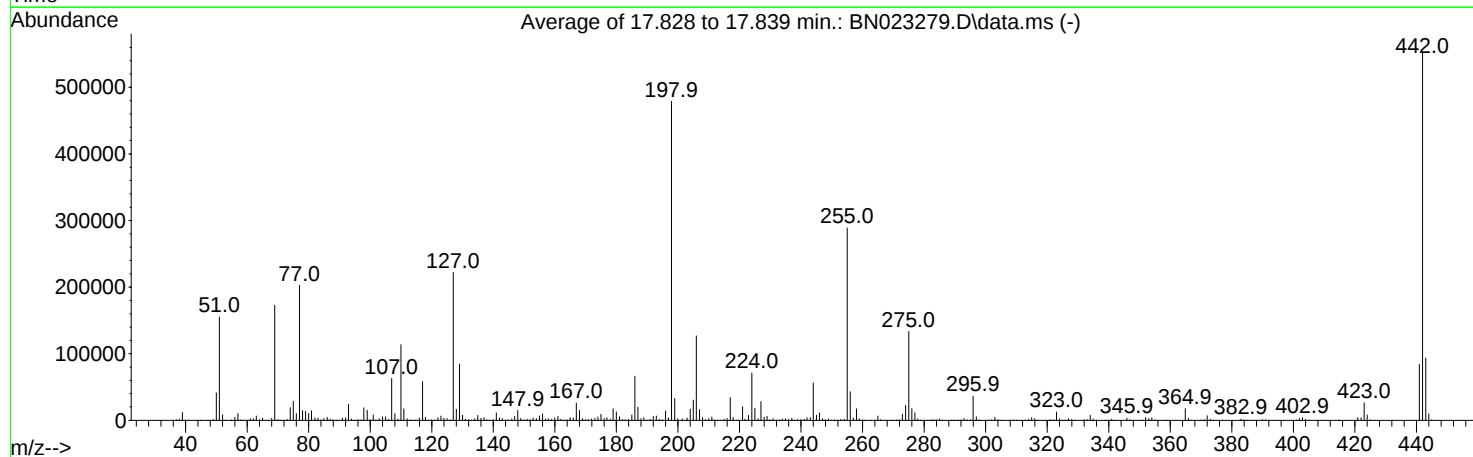
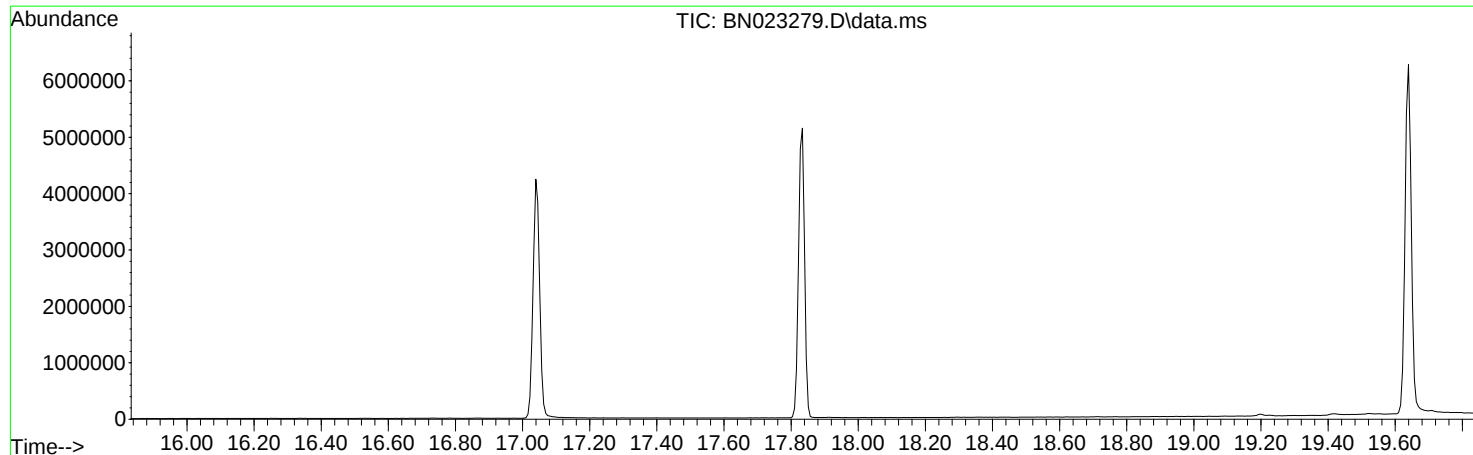
Date	Instrument Name	DFTPP Data File
12/8/2022	BNA_N	<u>BN023092.D</u>
Compound Name	Response	Retention Time
DDT	2597977	20.886
DDD	21198	20.498
DDE	214	19.939
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
21412	2619389	0.82

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023279.D
Acq On : 19 Dec 2022 10:45
Operator : CG/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-BN120822.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Mon Dec 19 15:44:58 2022



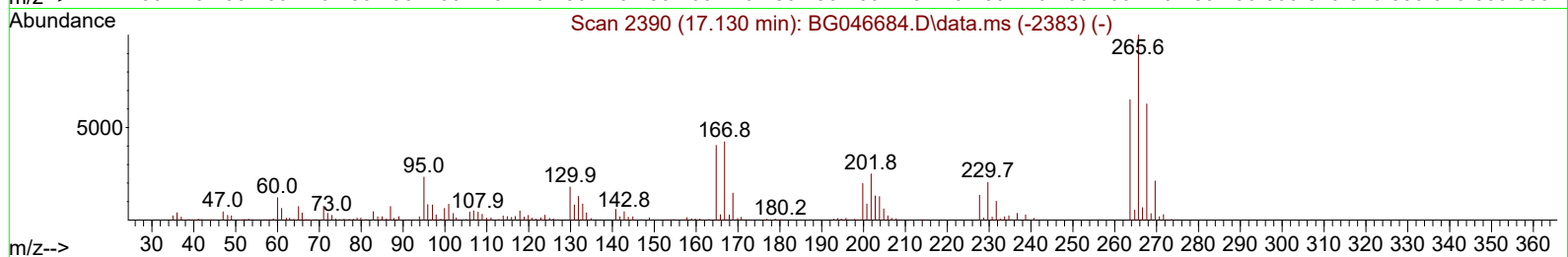
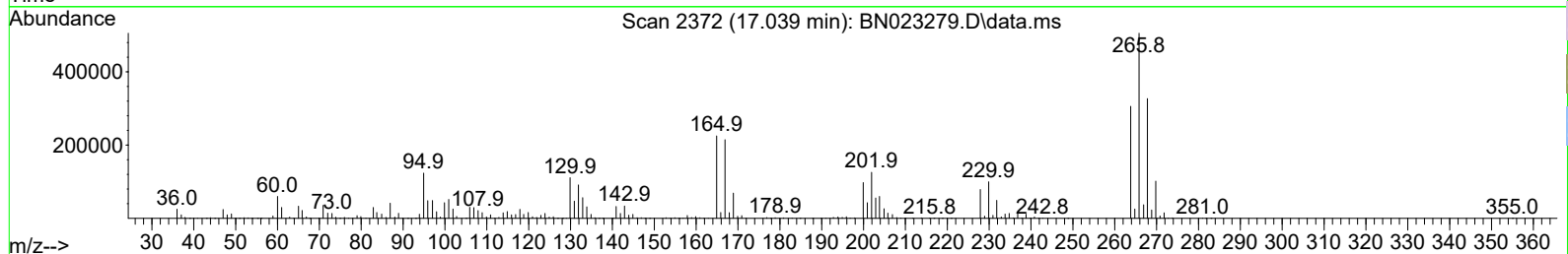
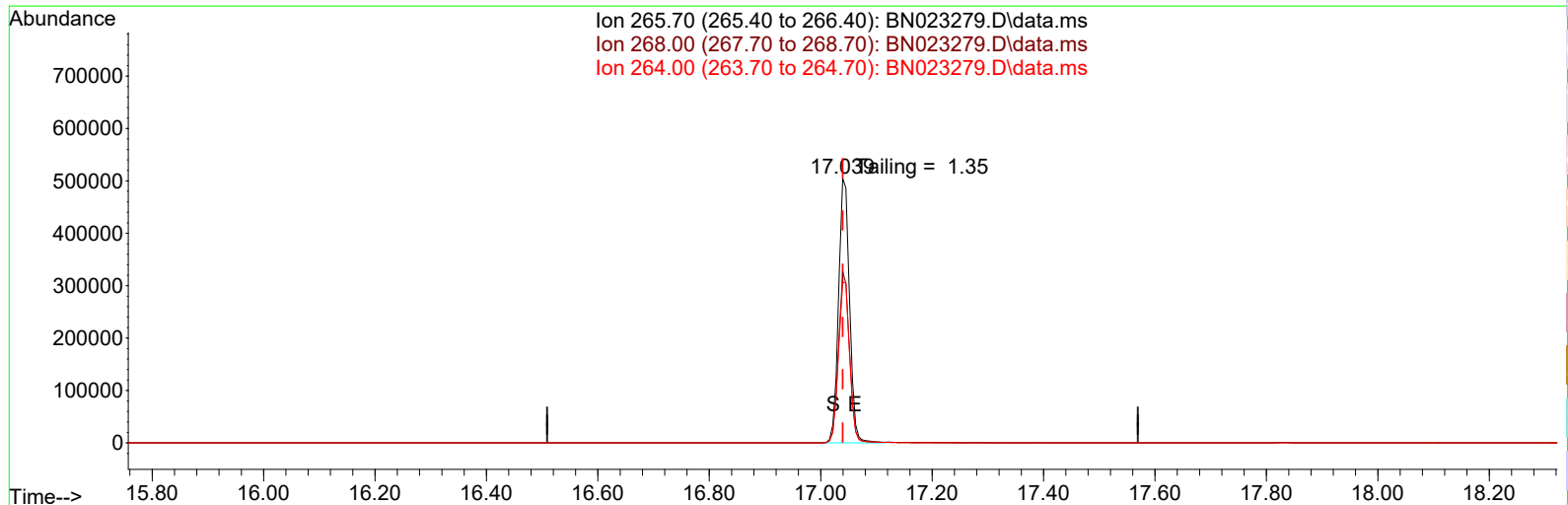
AutoFind: Scans 2506, 2507, 2508; Background Corrected with Scan 2498

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	32.4	155011	PASS
68	69	0.00	2	1.6	2838	PASS
69	198	0.00	100	36.0	172621	PASS
70	69	0.00	2	0.6	1058	PASS
127	198	10	80	46.3	221845	PASS
197	198	0.00	2	0.8	3681	PASS
198	198	100	100	100.0	478933	PASS
199	198	5	9	6.8	32725	PASS
275	198	10	60	27.9	133419	PASS
365	198	1	100	3.6	17402	PASS
441	198	0.01	100	17.5	83835	PASS
442	442	50	100	100.0	552363	PASS
443	442	15	24	16.9	93541	PASS

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023279.D
Acq On : 19 Dec 2022 10:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 20 06:26:08 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Dec 20 06:26:03 2022
Response via : Initial Calibration



TIC: BN023279.D\data.ms

(70) Pentachlorophenol (C)

17.039min (0.000) 25233.58 ng

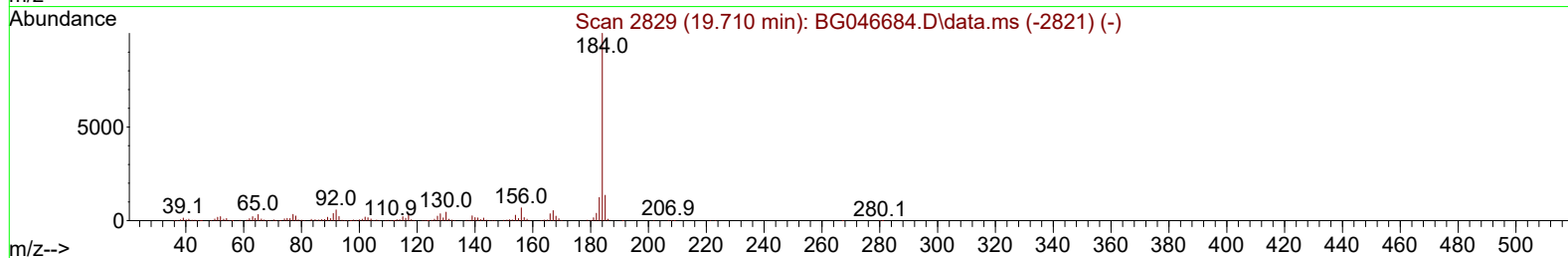
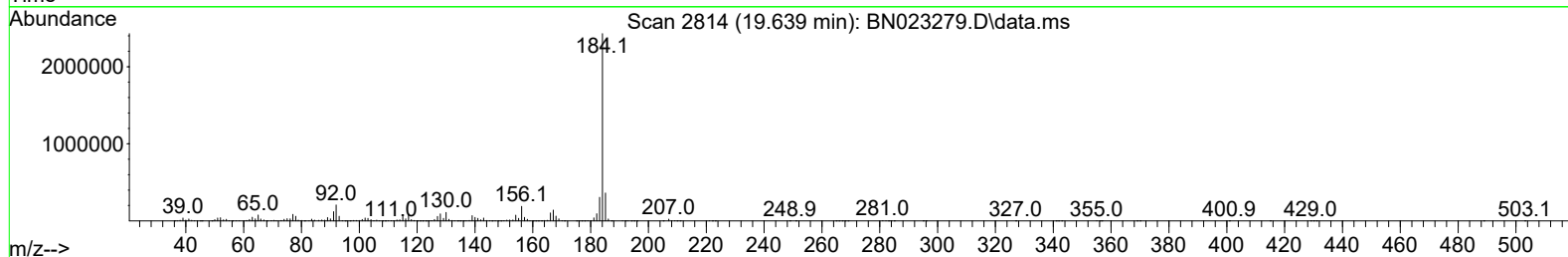
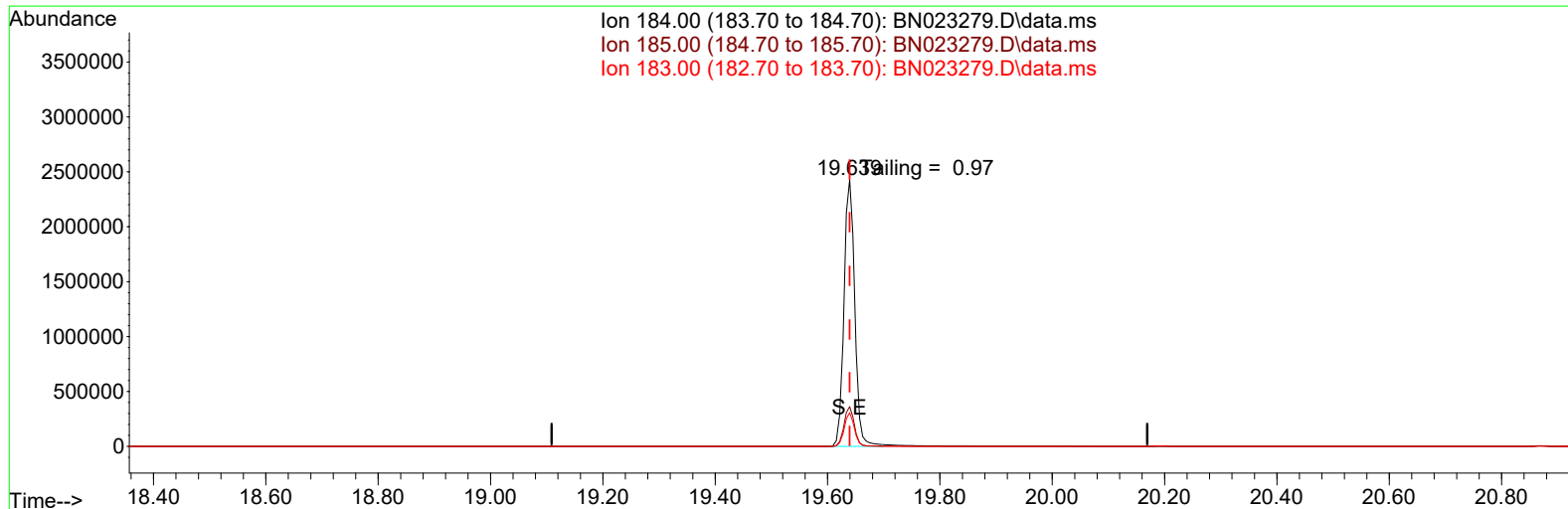
response 695470

Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	64.68
264.00	61.60	60.53
0.00	0.00	0.00

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023279.D
Acq On : 19 Dec 2022 10:45
Operator : CG/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Dec 20 06:26:08 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Tue Dec 20 06:26:03 2022
Response via : Initial Calibration



TIC: BN023279.D\data.ms

(77) Benzidine

19.639min (0.000) 579785.01 ng

response 3234848

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.91
183.00	13.20	12.65
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
12/19/2022	BNA_N	<u>BN023279.D</u>
Compound Name	Response	Retention Time
DDT	1544427	20.869
DDD	201124	20.427
DDE	7574	19.922
SUM(DDD+DDE)	SUM(DDT+DDD+DDE)	% Breakdown Of DDT
208698	1753125	11.90



Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	PB149692BL	SDG No.:	N6070
Lab Sample ID:	PB149692BL	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
BN023281.D	1	12/16/22 08:59	12/19/22 12:02	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.060	U	0.060	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.37		30 (30) - 150 (150)	94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 (30) - 150 (150)	93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.41		30 (11) - 130 (175)	102%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		30 (10) - 130 (175)	87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.46		30 (54) - 130 (171)	114%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	8900	7.999			
1146-65-2	Naphthalene-d8	28100	10.818			
15067-26-2	Acenaphthene-d10	17400	14.645			
1517-22-2	Phenanthrene-d10	38500	17.39			
1719-03-5	Chrysene-d12	26400	21.58			
1520-96-3	Perylene-d12	19400	24.027			

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\BN121922\
Data File : BN023281.D
Acq On : 19 Dec 2022 12:02
Operator : CG/JU
Sample : PB149692BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Quant Time: Dec 19 15:45:25 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	8904	0.400	ng	0.00
7) Naphthalene-d8	10.818	136	28123	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	17435	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	38498	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	26428	0.400	ng	0.00
35) Perylene-d12	24.027	264	19388	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	9396	0.567	ng	0.00
5) Phenol-d6	7.154	99	12090	0.573	ng	0.00
8) Nitrobenzene-d5	9.163	82	7571	0.409	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	17845	0.374	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	1986	0.314	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	24341	0.349	ng	0.00
27) Fluoranthene-d10	19.422	212	33448	0.371	ng	0.00
31) Terphenyl-d14	20.013	244	19618	0.457	ng	0.00

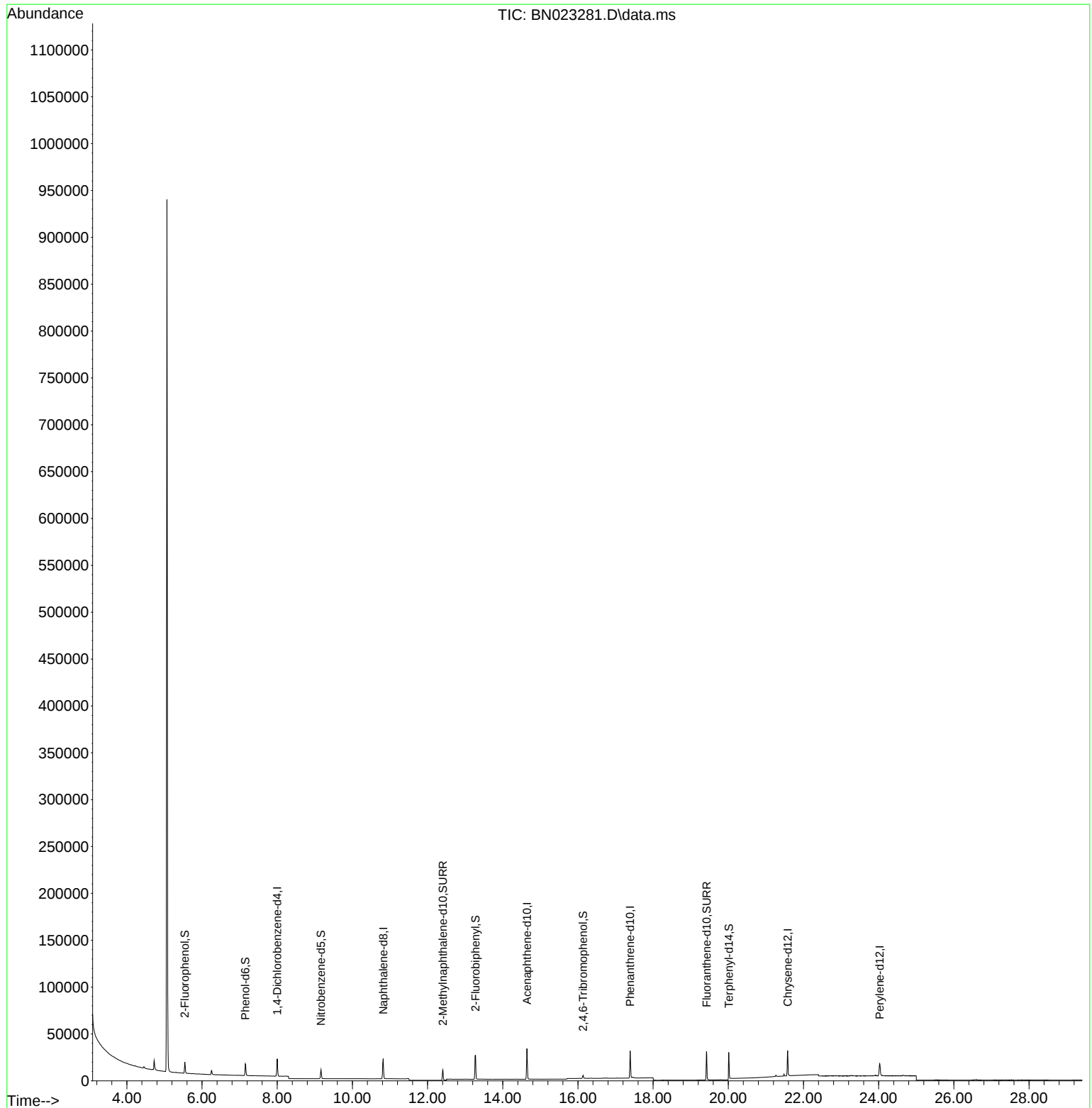
Target Compounds	Qvalue
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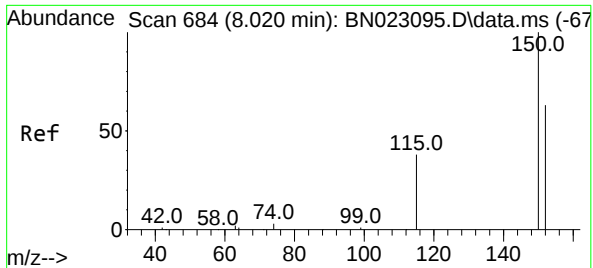
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023281.D
Acq On : 19 Dec 2022 12:02
Operator : CG/JU
Sample : PB149692BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BL

Quant Time: Dec 19 15:45:25 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

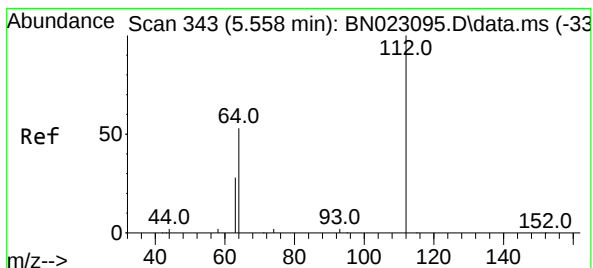
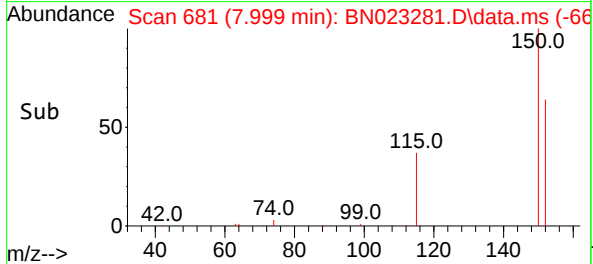
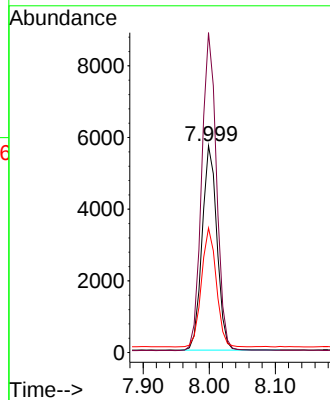
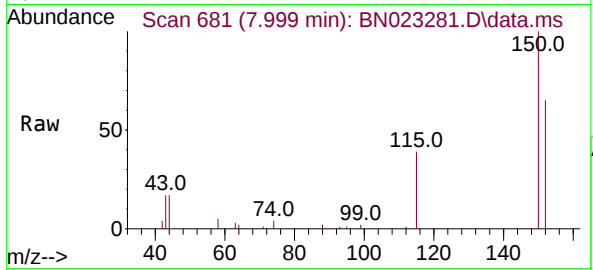




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 681
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

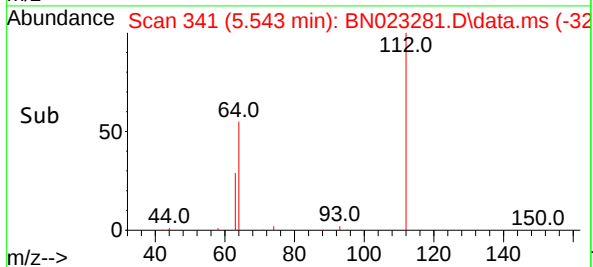
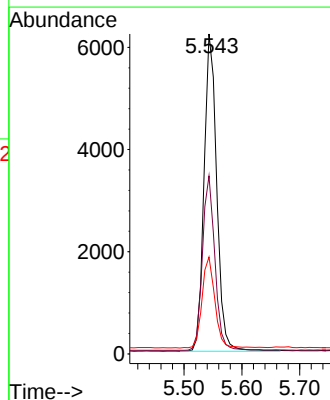
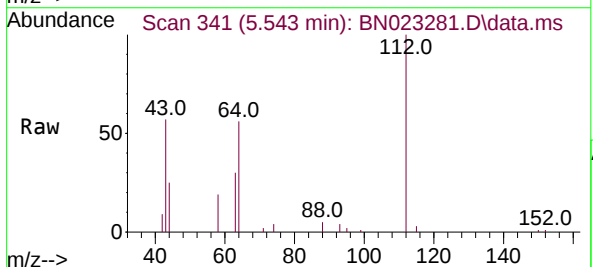
Instrument :
BNA_N
ClientSampleId :
PB149692BL

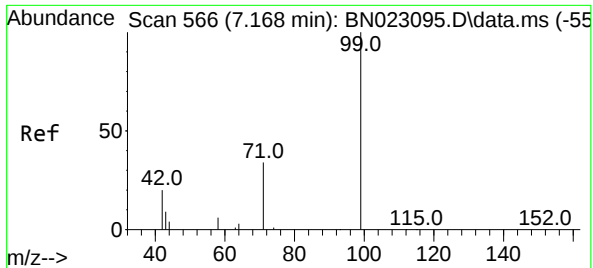
Tgt Ion:152 Resp: 8904
Ion Ratio Lower Upper
152 100
150 154.8 125.6 188.4
115 60.3 49.0 73.4



#4
2-Fluorophenol
Concen: 0.567 ng
RT: 5.543 min Scan# 341
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:112 Resp: 9396
Ion Ratio Lower Upper
112 100
64 54.1 44.4 66.6
63 29.3 23.7 35.5

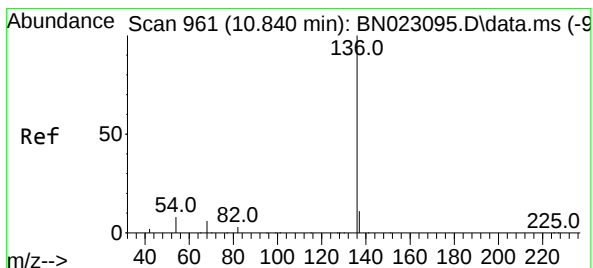
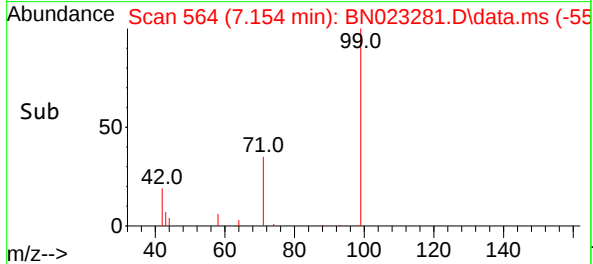
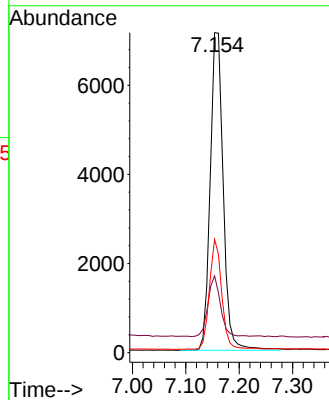
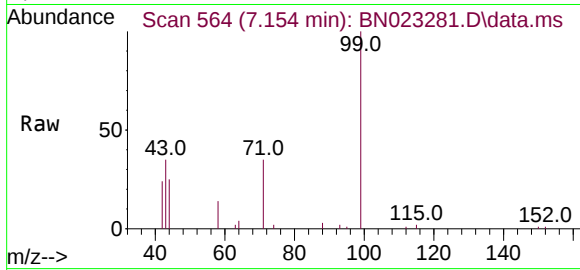




#5
Phenol-d6
Concen: 0.573 ng
RT: 7.154 min Scan# 50
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

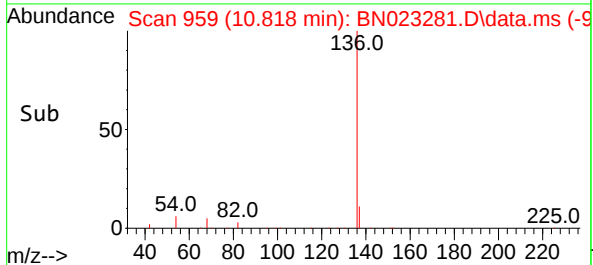
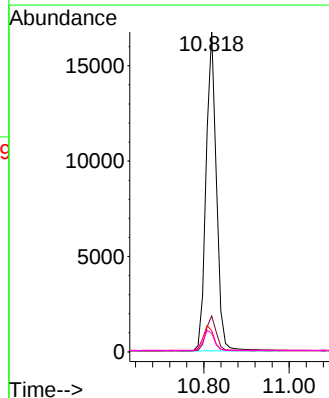
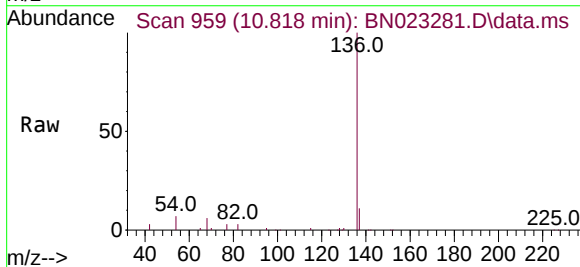
Instrument :
BNA_N
ClientSampleId :
PB149692BL

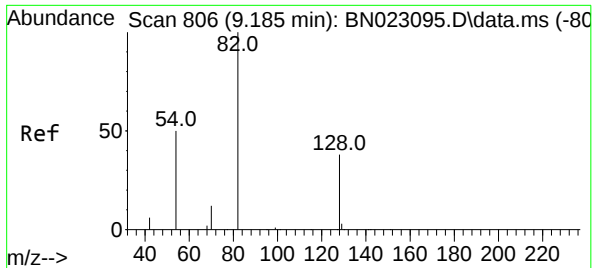
Tgt Ion: 99 Resp: 12090
Ion Ratio Lower Upper
99 100
42 18.1 16.3 24.5
71 32.8 26.5 39.7



#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 959
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion: 136 Resp: 28123
Ion Ratio Lower Upper
136 100
137 11.2 9.0 13.4
54 6.6 6.5 9.7
68 5.8 5.4 8.2

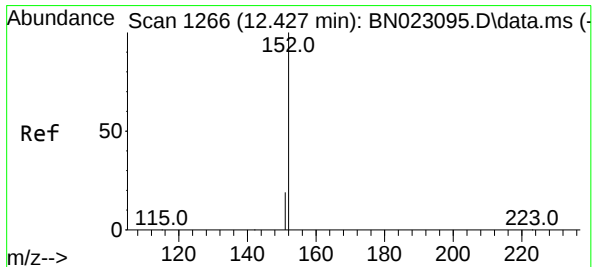
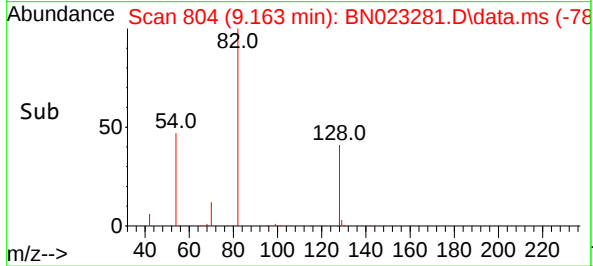
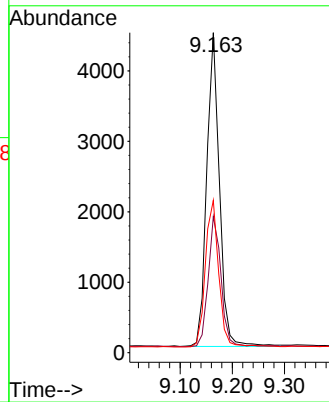
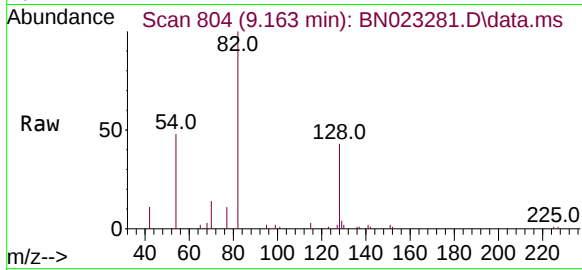




#8
Nitrobenzene-d5
Concen: 0.409 ng
RT: 9.163 min Scan# 804
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

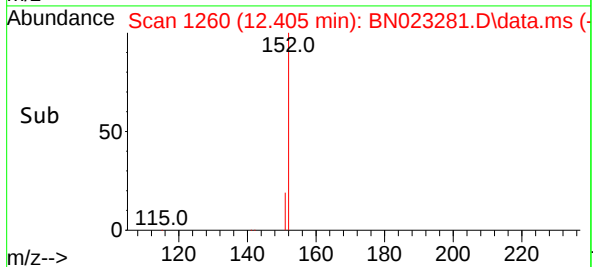
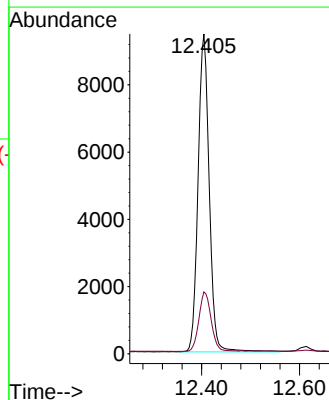
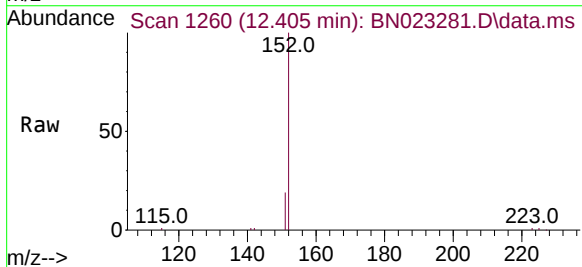
Instrument :
BNA_N
ClientSampleId :
PB149692BL

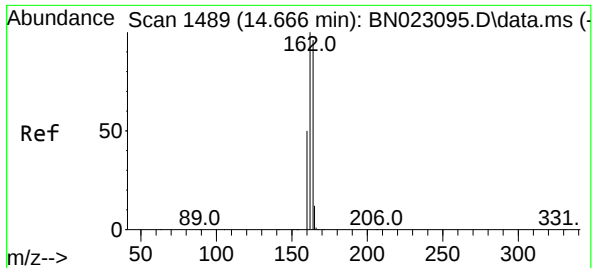
Tgt Ion:	82	Resp:	7571
Ion	Ratio	Lower	Upper
82	100		
128	42.6	31.4	47.2
54	47.6	41.0	61.4



#11
2-Methylnaphthalene-d10
Concen: 0.374 ng
RT: 12.405 min Scan# 1260
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:	152	Resp:	17845
Ion	Ratio	Lower	Upper
152	100		
151	17.2	15.1	22.7

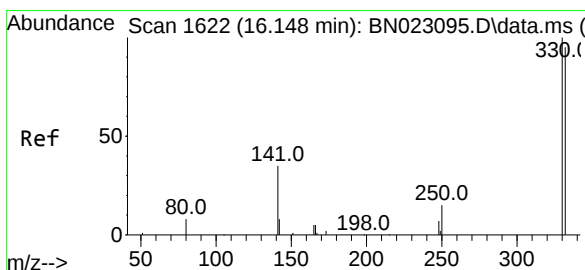
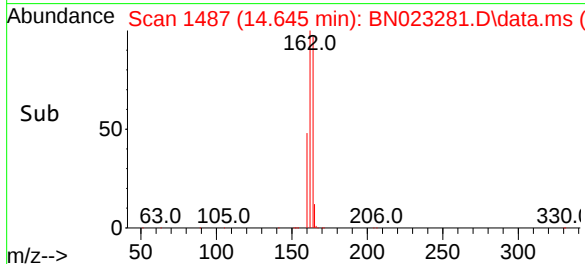
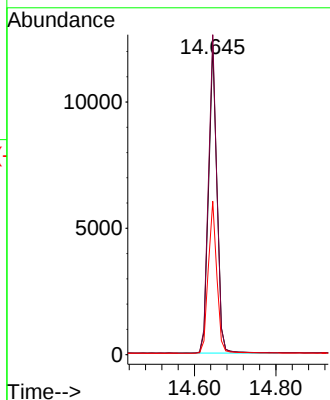
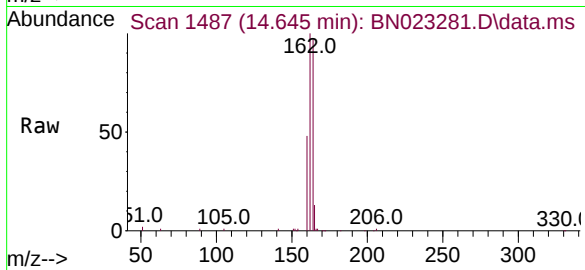




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1489
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

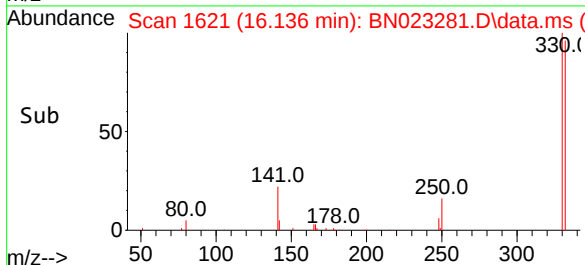
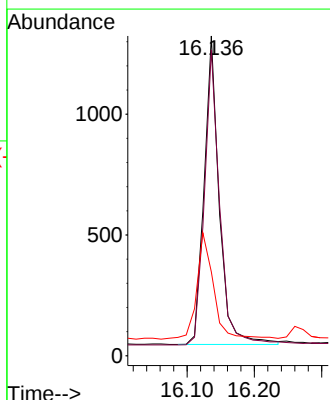
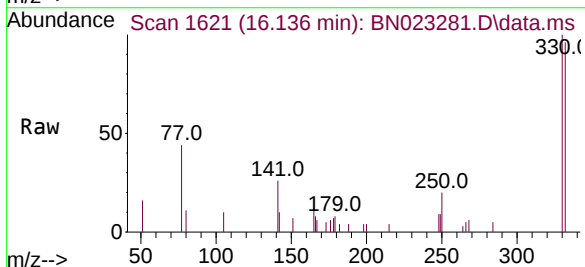
Instrument :
BNA_N
ClientSampleId :
PB149692BL

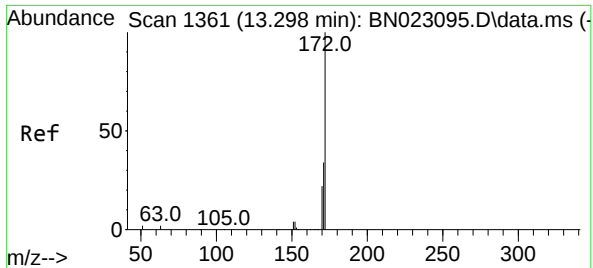
Tgt Ion:164 Resp: 17435
Ion Ratio Lower Upper
164 100
162 103.3 83.4 125.0
160 49.5 41.8 62.8



#14
2,4,6-Tribromophenol
Concen: 0.314 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:330 Resp: 1986
Ion Ratio Lower Upper
330 100
332 96.2 77.3 115.9
141 38.3 33.5 50.3

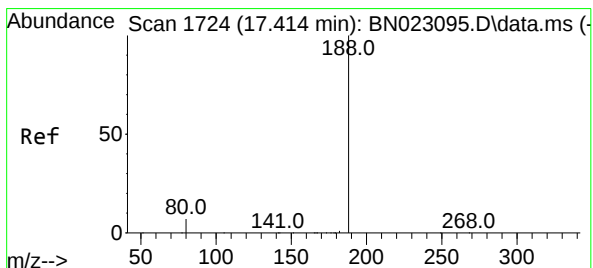
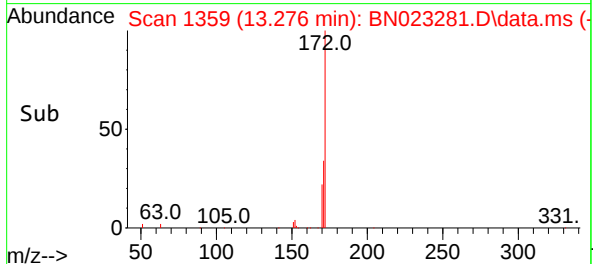
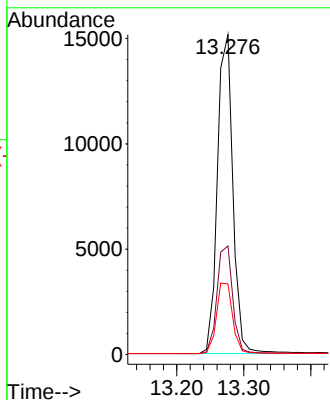
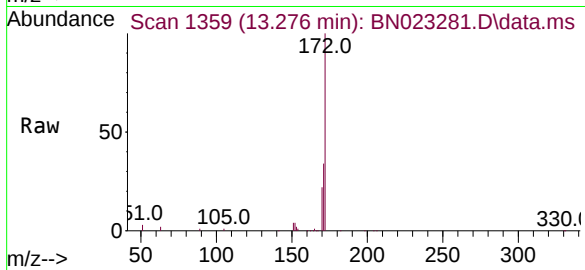




#15
2-Fluorobiphenyl
Concen: 0.349 ng
RT: 13.276 min Scan# 1361
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

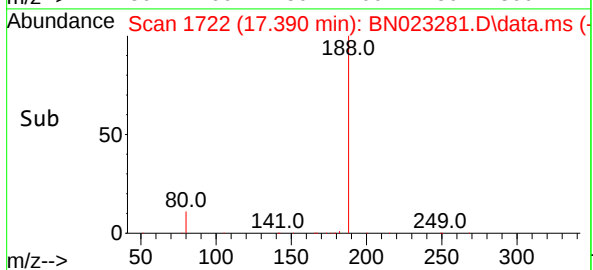
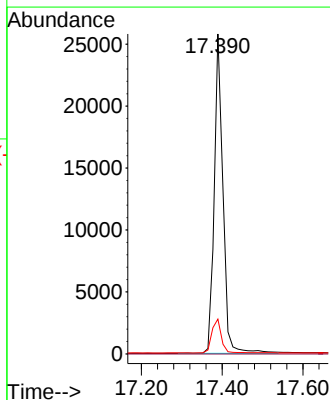
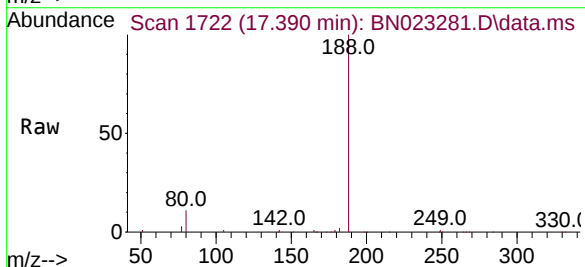
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BNA_N
ClientSampleId :
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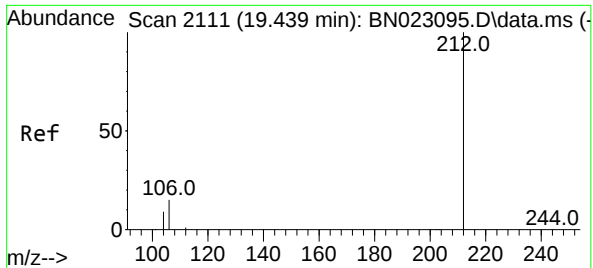
Tgt Ion:172 Resp: 24341
Ion Ratio Lower Upper
172 100
171 34.0 27.4 41.0
170 22.1 17.9 26.9



#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:188 Resp: 38498
Ion Ratio Lower Upper
188 100
94 0.0 0.0 0.0
80 10.9 6.1 9.1#

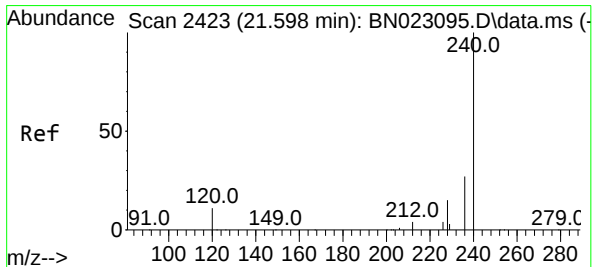
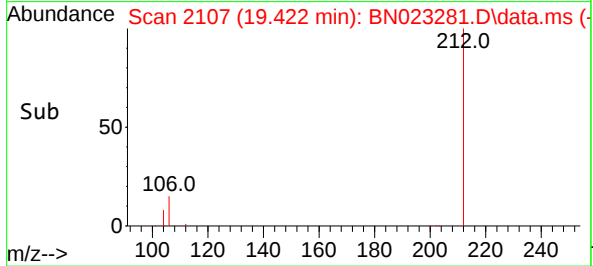
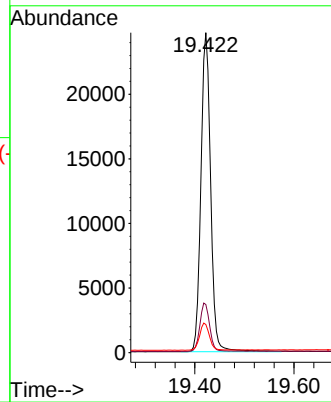
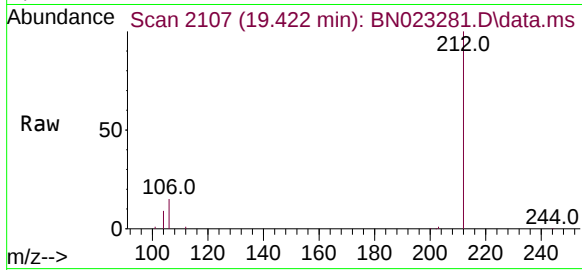




#27
Fluoranthene-d10
Concen: 0.371 ng
RT: 19.422 min Scan# 2111
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

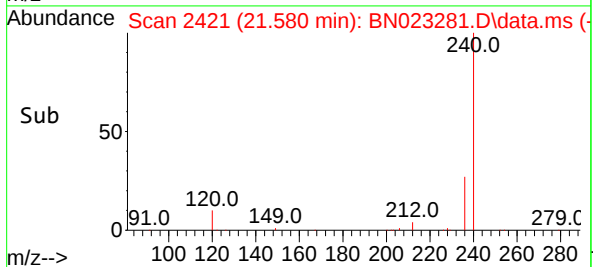
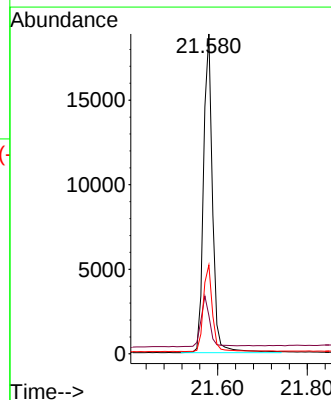
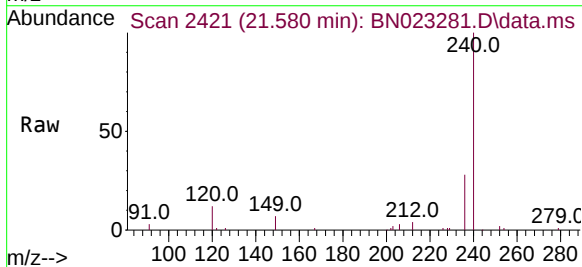
Instrument :
BNA_N
ClientSampleId :
PB149692BL

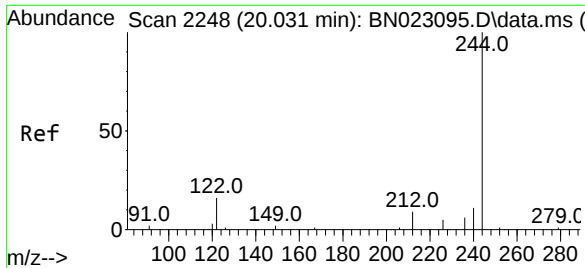
Tgt Ion	Ratio	Lower	Upper
212	100		
106	15.1	13.0	19.4
104	8.5	7.5	11.3



#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2421
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion	Ratio	Lower	Upper
240	100		
120	12.0	10.1	15.1
236	27.8	22.2	33.4

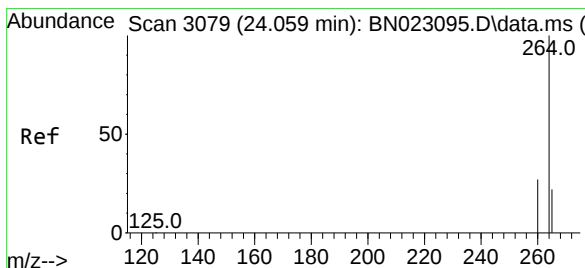
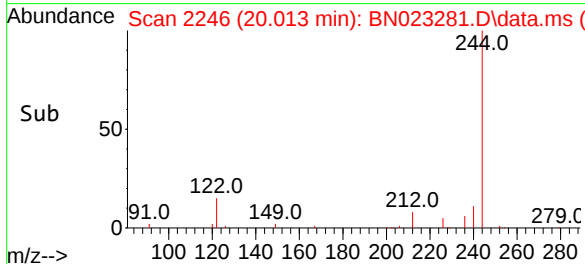
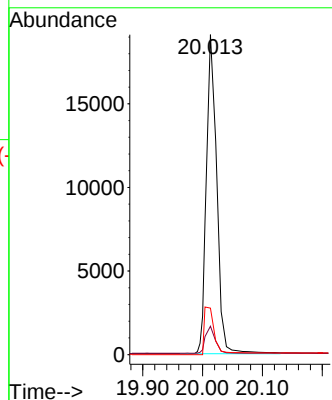
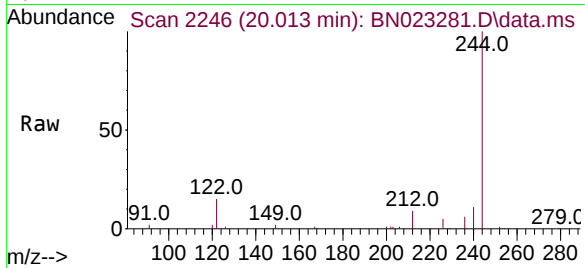




#31
Terphenyl-d14
Concen: 0.457 ng
RT: 20.013 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

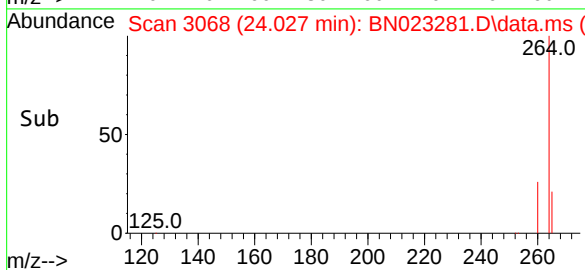
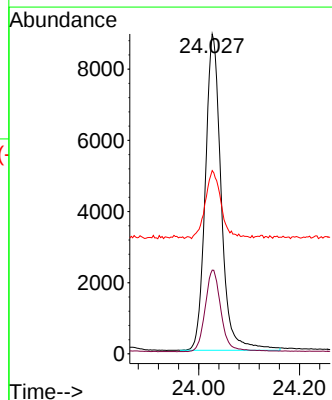
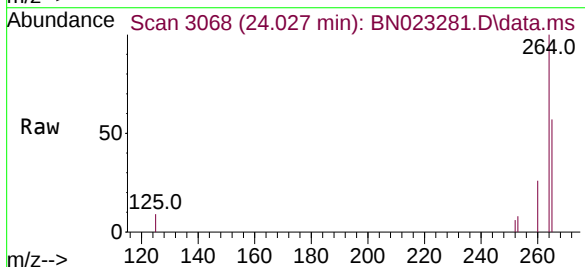
Instrument :
BNA_N
ClientSampleId :
PB149692BL

Tgt Ion:244 Resp: 19618
Ion Ratio Lower Upper
244 100
212 8.9 7.6 11.4
122 14.5 12.6 18.8



#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3068
Delta R.T. -0.000 min
Lab File: BN023281.D
Acq: 19 Dec 2022 12:02

Tgt Ion:264 Resp: 19388
Ion Ratio Lower Upper
264 100
260 26.2 21.7 32.5
265 57.3 43.2 64.8





Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	PB149692BS	SDG No.:	N6070
Lab Sample ID:	PB149692BS	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
BN023287.D	1	12/16/22 08:59	12/19/22 15:44	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.40		0.060	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.32		30 (30) - 150 (150)	80%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.40		30 (30) - 150 (150)	101%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		30 (11) - 130 (175)	104%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		30 (10) - 130 (175)	90%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		30 (54) - 130 (171)	108%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	8510	8.006			
1146-65-2	Naphthalene-d8	26900	10.819			
15067-26-2	Acenaphthene-d10	16200	14.645			
1517-22-2	Phenanthrene-d10	34300	17.39			
1719-03-5	Chrysene-d12	26400	21.58			
1520-96-3	Perylene-d12	18700	24.03			

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\BN121922\
 Data File : BN023287.D
 Acq On : 19 Dec 2022 15:44
 Operator : CG/JU
 Sample : PB149692BS
 Misc :
 ALS Vial : 9 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB149692BS

Quant Time: Dec 19 16:21:01 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 Response via : Initial Calibration

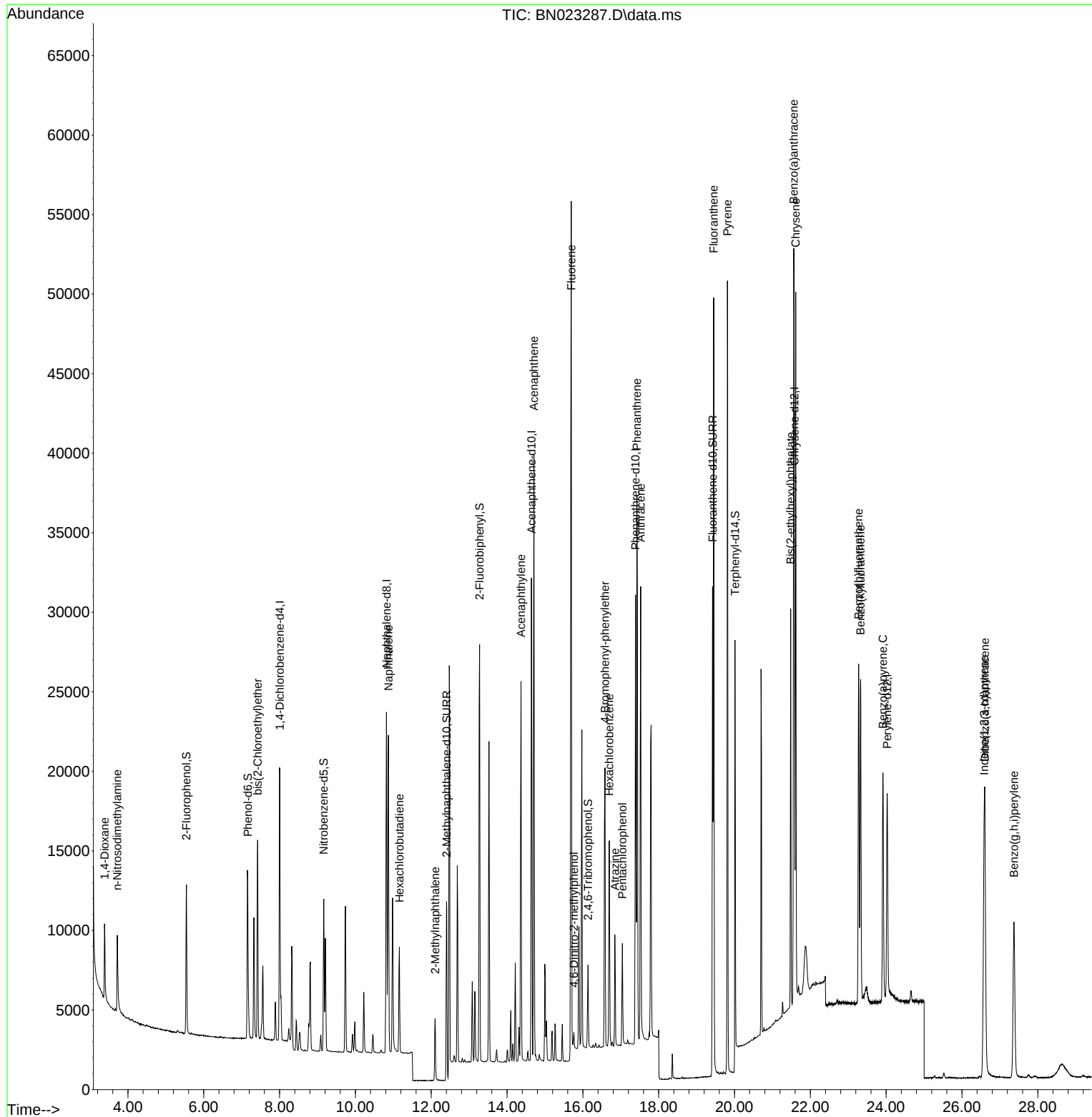
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	8.006	152	8509	0.400	ng	0.00
7) Naphthalene-d8	10.819	136	26860	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	16157	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	34289	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	26436	0.400	ng	0.00
35) Perylene-d12	24.030	264	18732	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	7784	0.491	ng	0.00
5) Phenol-d6	7.161	99	10156	0.504	ng	0.00
8) Nitrobenzene-d5	9.164	82	7338	0.415	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	14614	0.321	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2898	0.494	ng	0.00
15) 2-Fluorobiphenyl	13.277	172	23189	0.359	ng	0.00
27) Fluoranthene-d10	19.422	212	32347	0.403	ng	0.00
31) Terphenyl-d14	20.013	244	18539	0.432	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.384	88	3385	0.403	ng	Qvalue 94
3) n-Nitrosodimethylamine	3.716	42	3247	0.394	ng	# 82
6) bis(2-Chloroethyl)ether	7.421	93	9092	0.397	ng	99
9) Naphthalene	10.872	128	26722	0.391	ng	100
10) Hexachlorobutadiene	11.160	225	5223	0.401	ng	# 100
12) 2-Methylnaphthalene	12.102	142	5684	0.558	ng	97
16) Acenaphthylene	14.367	152	25141	0.386	ng	100
17) Acenaphthene	14.709	154	17630	0.369	ng	97
18) Fluorene	15.693	166	24191	0.452	ng	100
20) 4,6-Dinitro-2-methylph...	15.764	198	618	0.323	ng	91
21) 4-Bromophenyl-phenylether	16.583	248	7469	0.408	ng	# 78
22) Hexachlorobenzene	16.695	284	9396	0.392	ng	97
23) Atrazine	16.844	200	5392	0.418	ng	# 91
24) Pentachlorophenol	17.042	266	2968	0.356	ng	99
25) Phenanthrene	17.427	178	38060	0.372	ng	99
26) Anthracene	17.526	178	30966	0.380	ng	99
28) Fluoranthene	19.452	202	41811	0.382	ng	99
30) Pyrene	19.814	202	42283	0.437	ng	100
32) Benzo(a)anthracene	21.563	228	34347	0.403	ng	99
33) Chrysene	21.616	228	35404	0.370	ng	99
34) Bis(2-ethylhexyl)phtha...	21.482	149	20630	0.573	ng	97
36) Indeno(1,2,3-cd)pyrene	26.582	276	26339	0.314	ng	98
37) Benzo(b)fluoranthene	23.276	252	28455	0.366	ng	96
38) Benzo(k)fluoranthene	23.325	252	27179	0.345	ng	98
39) Benzo(a)pyrene	23.916	252	21767	0.374	ng	# 95
40) Dibenzo(a,h)anthracene	26.606	278	20754	0.308	ng	98
41) Benzo(g,h,i)perylene	27.372	276	21609	0.300	ng	98

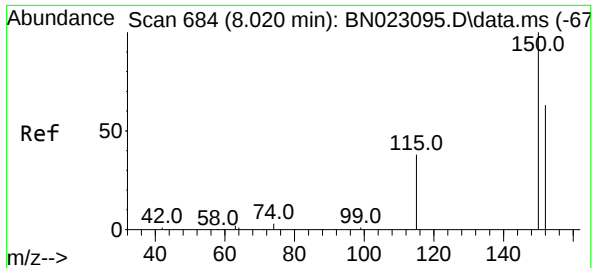
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023287.D
Acq On : 19 Dec 2022 15:44
Operator : CG/JU
Sample : PB149692BS
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BS

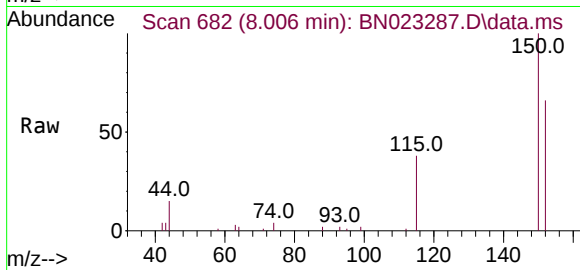
Quant Time: Dec 19 16:21:01 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration



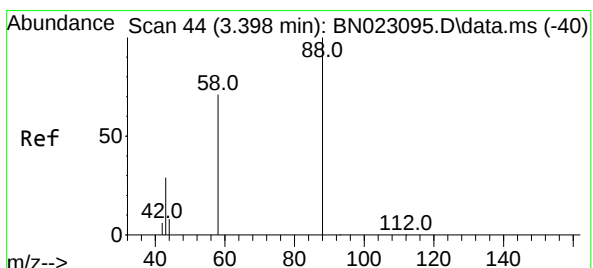
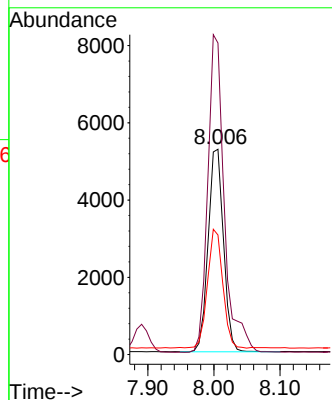
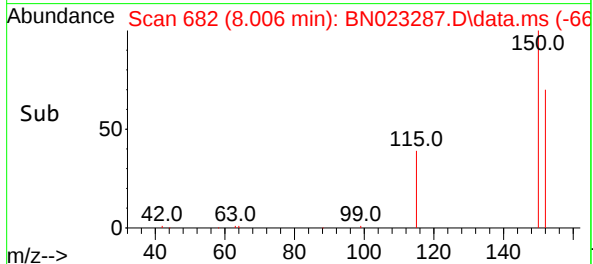


#1
 1,4-Dichlorobenzene-d4
 Concen: 0.400 ng
 RT: 8.006 min Scan# 684
 Delta R.T. 0.007 min
 Lab File: BN023287.D
 Acq: 19 Dec 2022 15:44

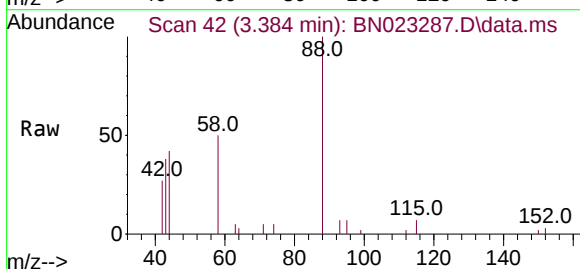
Instrument :
 BNA_N
 ClientSampleId :
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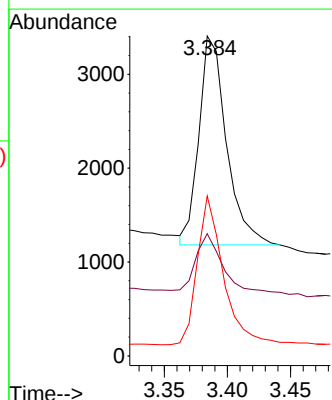
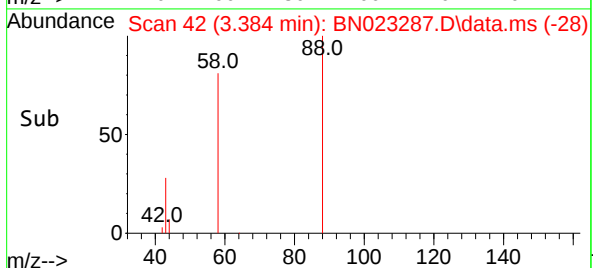
Tgt Ion: 152 Resp: 8509
 Ion Ratio Lower Upper
 152 100
 150 151.7 125.6 188.4
 115 58.3 49.0 73.4

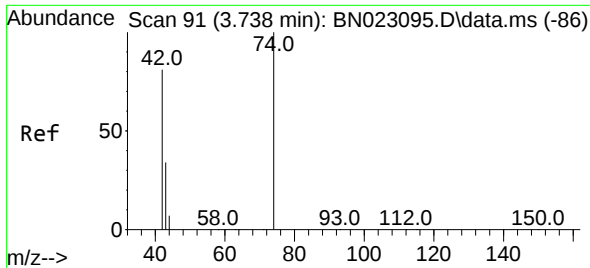


#2
 1,4-Dioxane
 Concen: 0.403 ng
 RT: 3.384 min Scan# 42
 Delta R.T. 0.000 min
 Lab File: BN023287.D
 Acq: 19 Dec 2022 15:44



Tgt Ion: 88 Resp: 3385
 Ion Ratio Lower Upper
 88 100
 43 26.5 23.3 34.9
 58 67.6 58.0 87.0

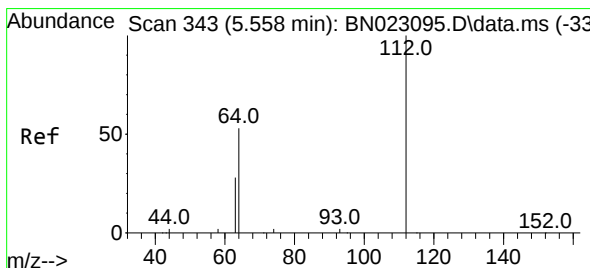
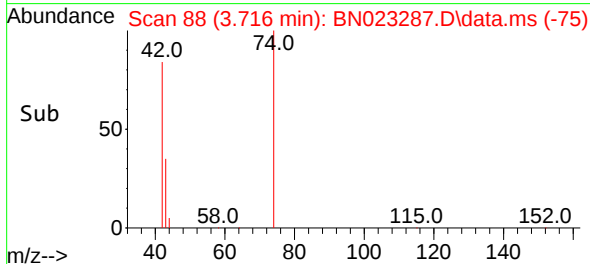
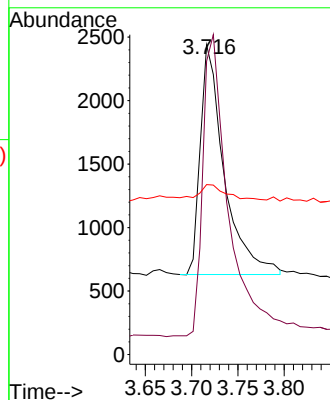
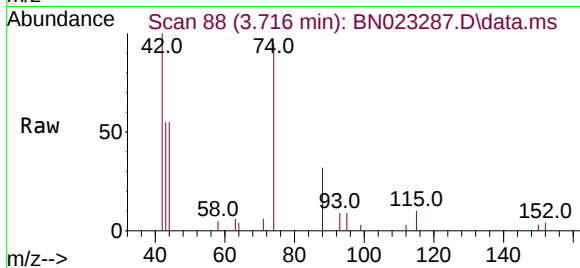




#3
n-Nitrosodimethylamine
Concen: 0.394 ng
RT: 3.716 min Scan# 88
Delta R.T. -0.007 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

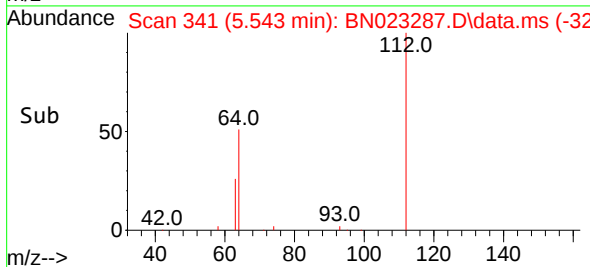
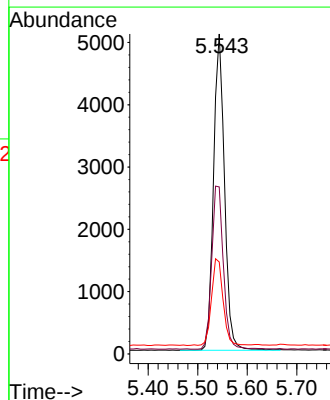
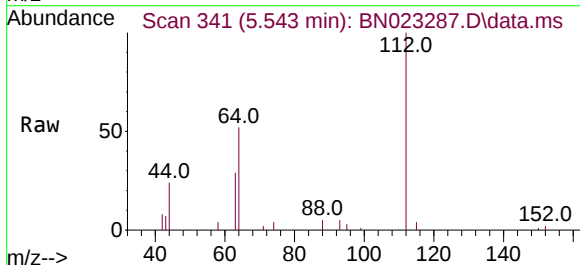
Instrument :
BNA_N
ClientSampleId :
PB149692BS

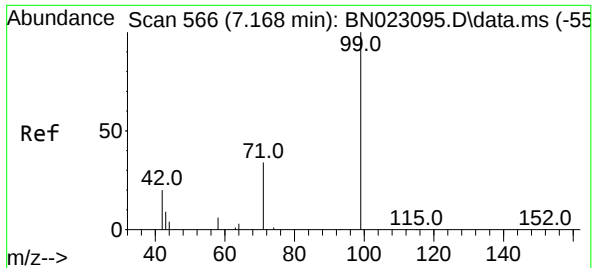
Tgt Ion: 42 Resp: 3247
Ion Ratio Lower Upper
42 100
74 141.2 95.8 143.6
44 7.8 8.4 12.6#



#4
2-Fluorophenol
Concen: 0.491 ng
RT: 5.543 min Scan# 341
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion: 112 Resp: 7784
Ion Ratio Lower Upper
112 100
64 54.9 44.4 66.6
63 28.9 23.7 35.5

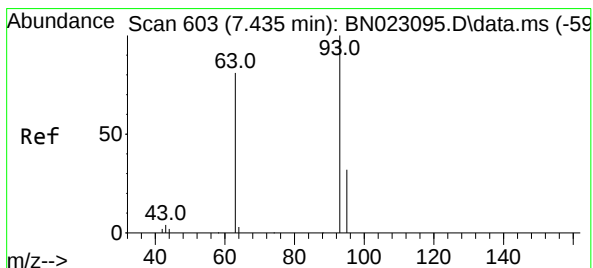
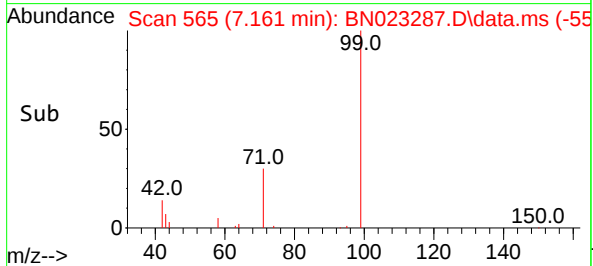
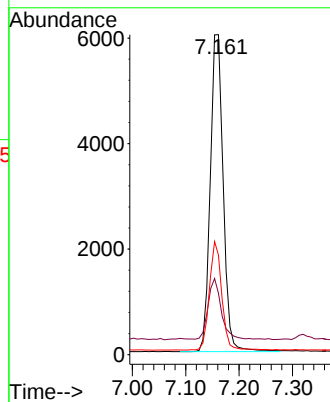
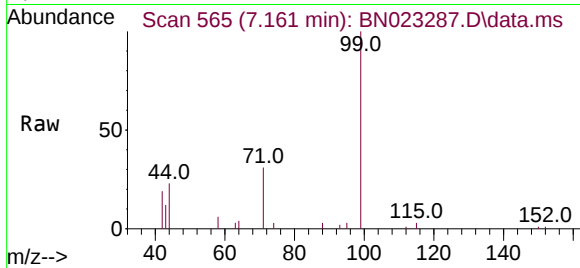




#5
Phenol-d6
Concen: 0.504 ng
RT: 7.161 min Scan# 566
Delta R.T. 0.007 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

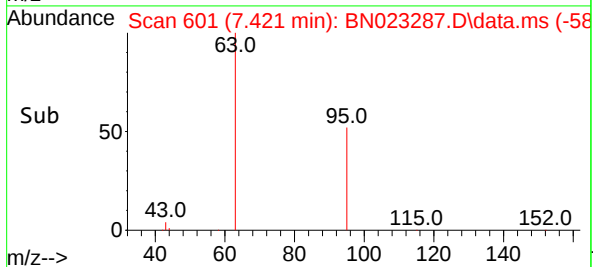
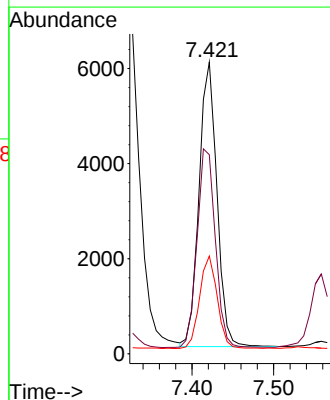
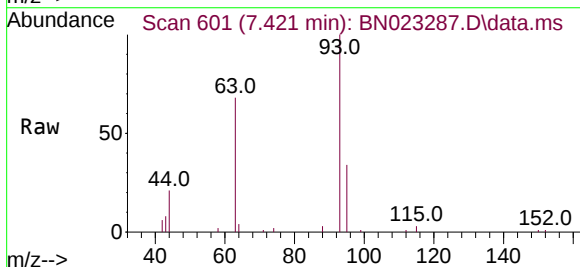
Instrument :
BNA_N
ClientSampleId :
PB149692BS

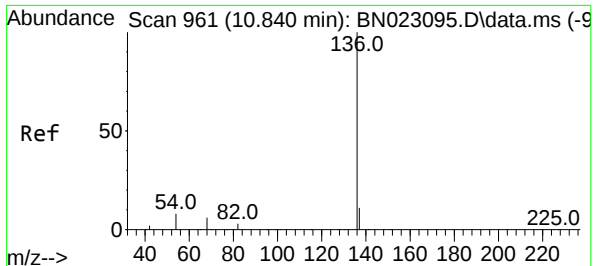
Tgt Ion	Ratio	Lower	Upper
99	100		
42	19.5	16.3	24.5
71	32.7	26.5	39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.397 ng
RT: 7.421 min Scan# 601
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion	Ratio	Lower	Upper
93	100		
63	71.6	58.1	87.1
95	32.1	25.2	37.8

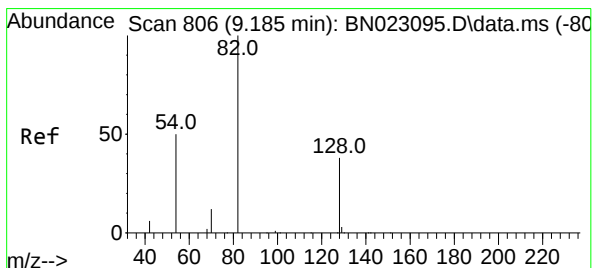
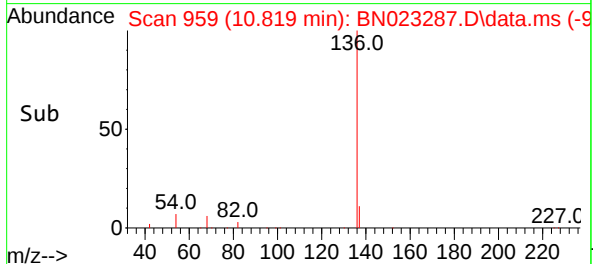
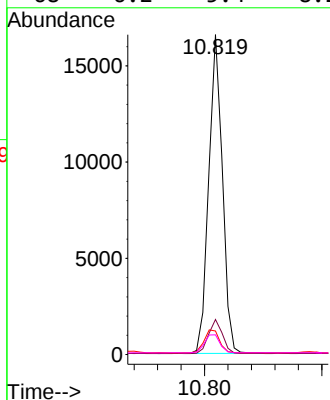
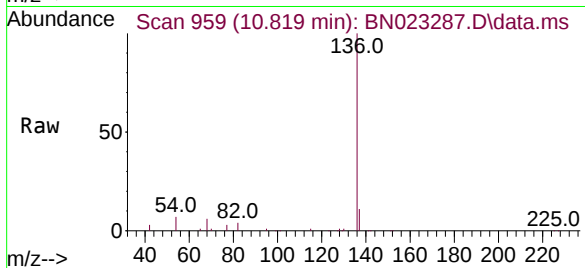




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.819 min Scan# 91
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

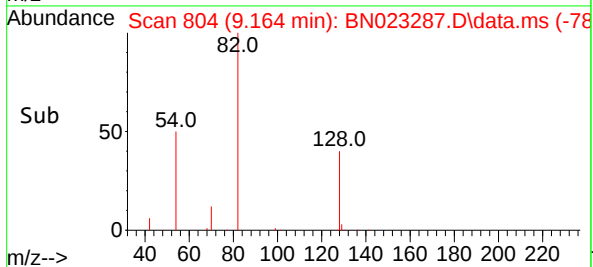
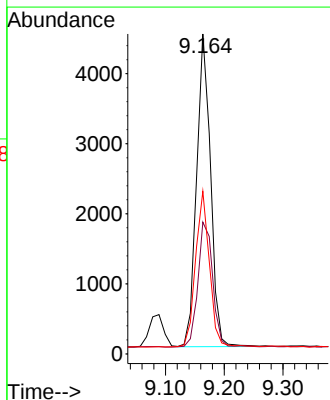
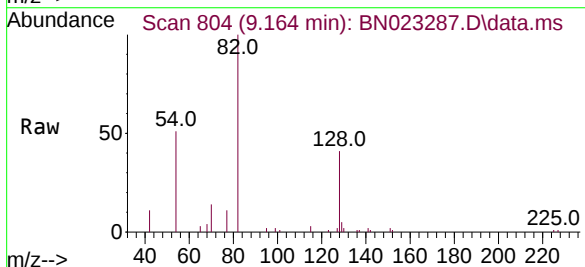
Instrument :
BNA_N
ClientSampleId :
PB149692BS

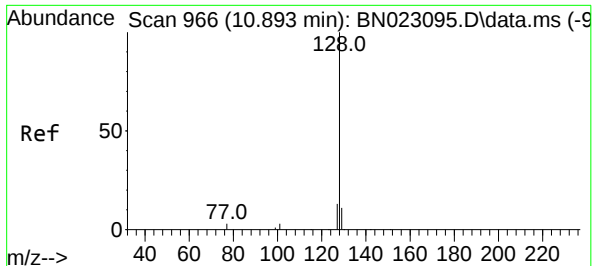
Tgt Ion:	136	Resp:	26860
Ion Ratio	Lower	Upper	
136	100		
137	11.0	9.0	13.4
54	7.4	6.5	9.7
68	6.2	5.4	8.2



#8
Nitrobenzene-d5
Concen: 0.415 ng
RT: 9.164 min Scan# 804
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:	82	Resp:	7338
Ion Ratio	Lower	Upper	
82	100		
128	41.2	31.4	47.2
54	50.8	41.0	61.4

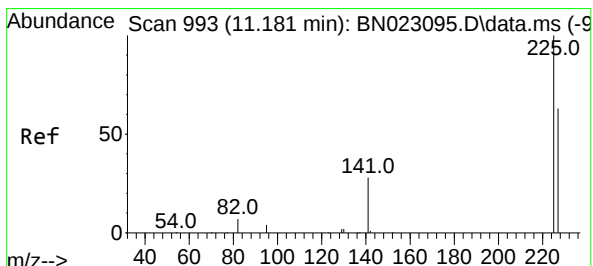
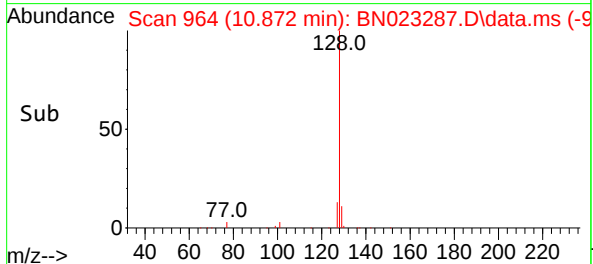
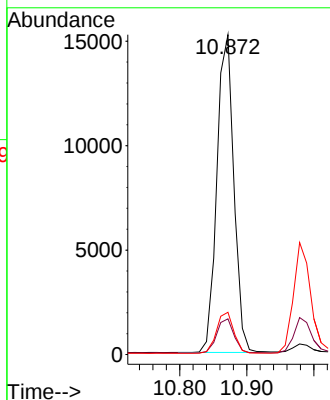
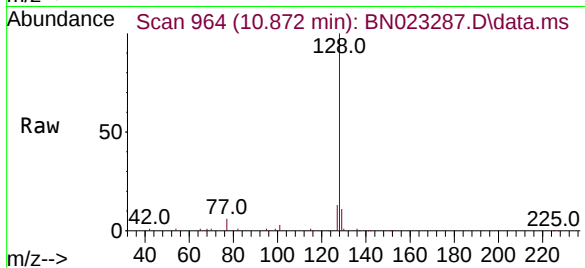




#9
Naphthalene
Concen: 0.391 ng
RT: 10.872 min Scan# 90
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

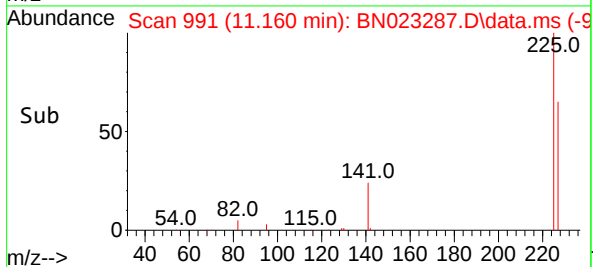
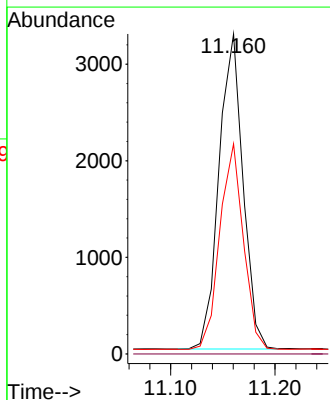
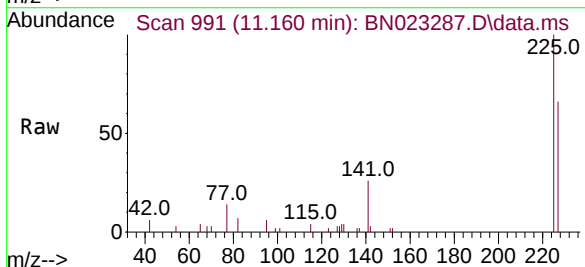
Instrument :
BNA_N
ClientSampleId :
PB149692BS

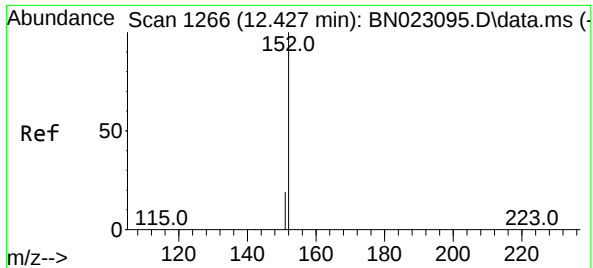
Tgt Ion	Ratio	Lower	Upper
128	100		
129	11.2	9.0	13.6
127	13.2	10.5	15.7



#10
Hexachlorobutadiene
Concen: 0.401 ng
RT: 11.160 min Scan# 991
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.2	51.1	76.7

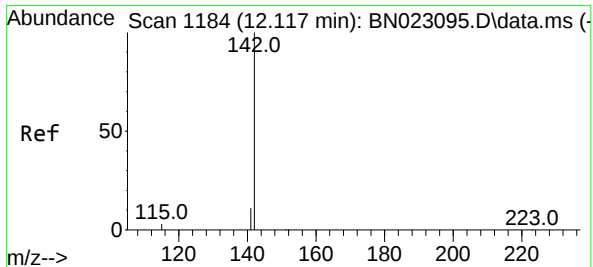
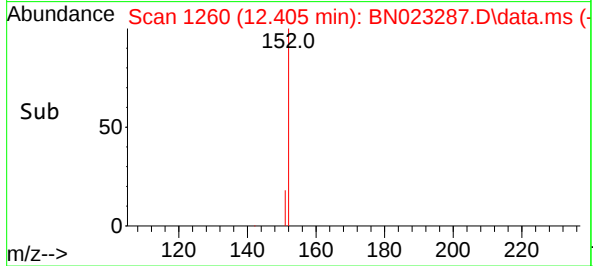
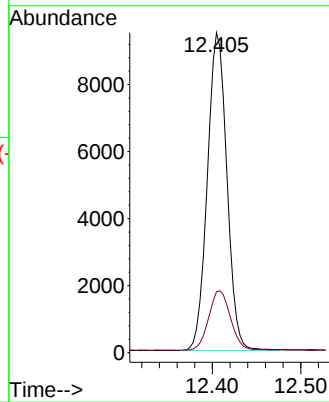
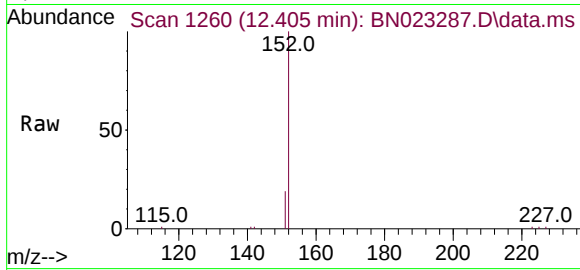




#11
2-Methylnaphthalene-d10
Concen: 0.321 ng
RT: 12.405 min Scan# 1180
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

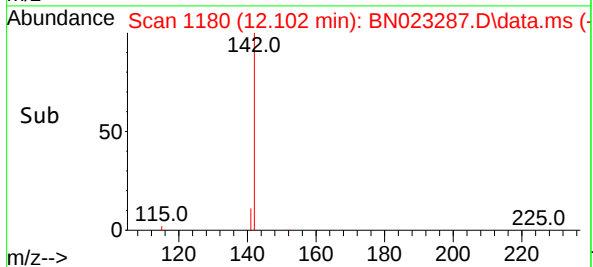
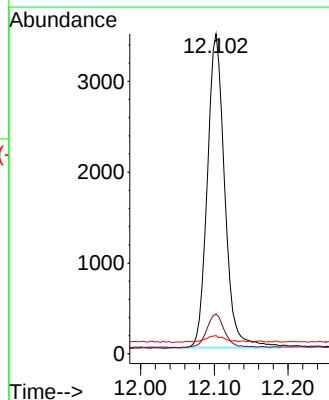
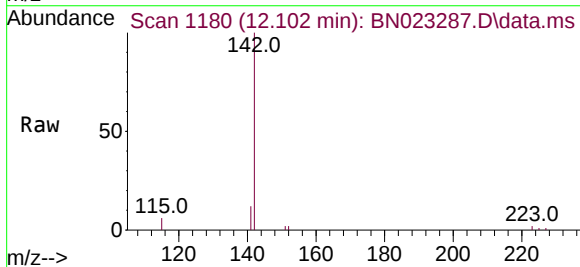
Instrument :
BNA_N
ClientSampleId :
PB149692BS

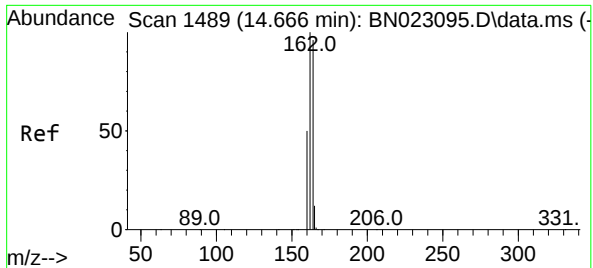
Tgt Ion:152 Resp: 14614
Ion Ratio Lower Upper
152 100
151 20.8 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.558 ng
RT: 12.102 min Scan# 1180
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:142 Resp: 5684
Ion Ratio Lower Upper
142 100
141 12.5 10.9 16.3
115 5.7 5.7 8.5

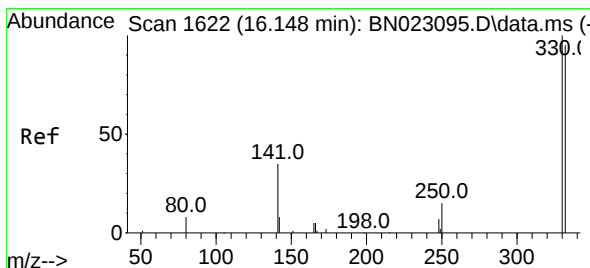
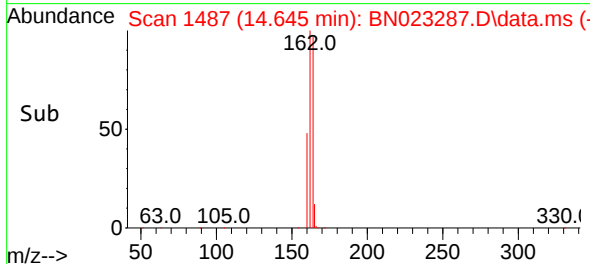
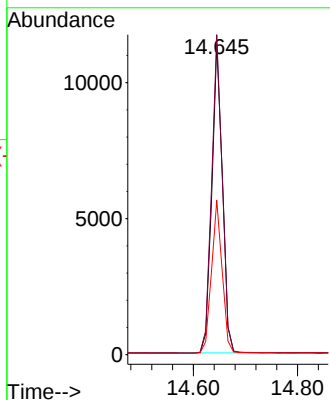
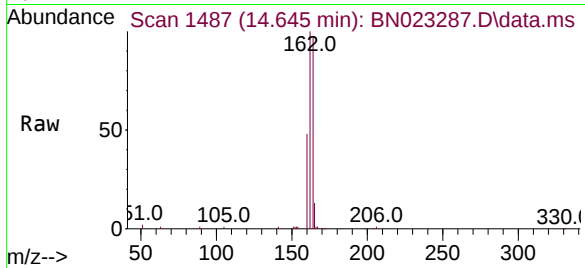




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1489
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

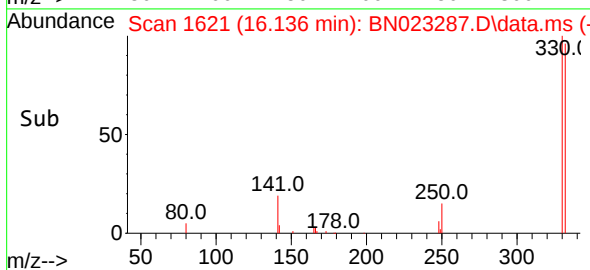
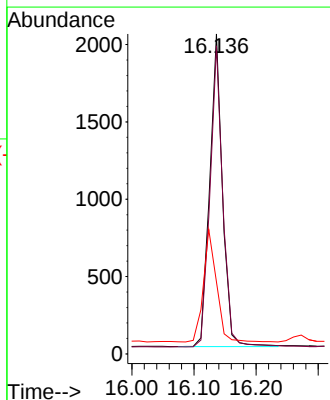
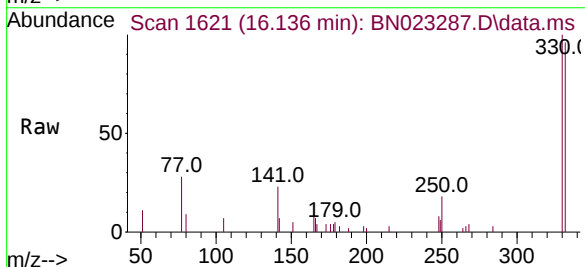
Instrument :
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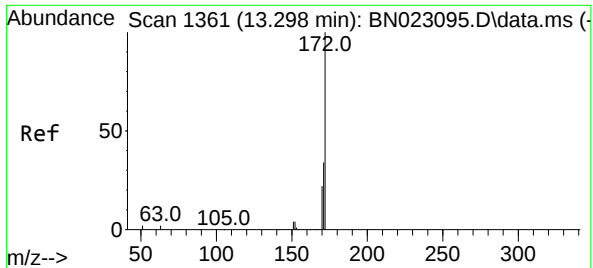
Tgt Ion	Ratio	Lower	Upper
164	100		
162	103.0	83.4	125.0
160	49.7	41.8	62.8



#14
2,4,6-Tribromophenol
Concen: 0.494 ng
RT: 16.136 min Scan# 1621
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion	Ratio	Lower	Upper
330	100		
332	96.7	77.3	115.9
141	36.7	33.5	50.3

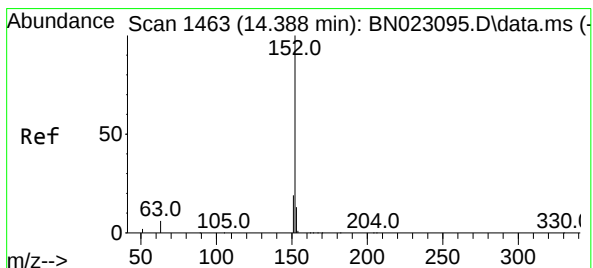
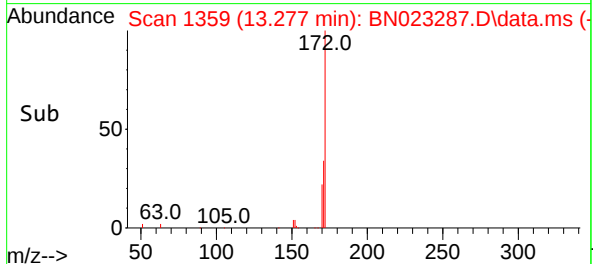
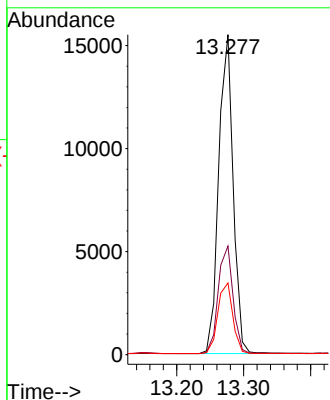
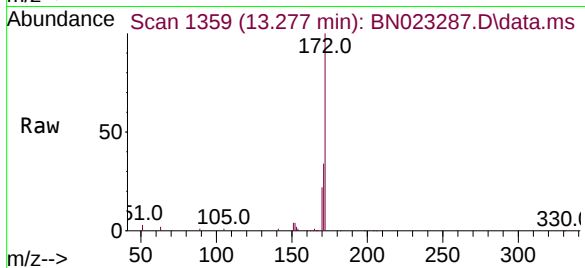




#15
2-Fluorobiphenyl
Concen: 0.359 ng
RT: 13.277 min Scan# 1359
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

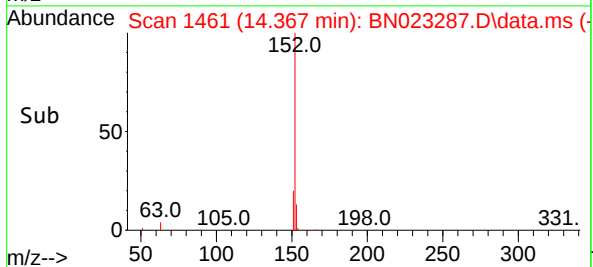
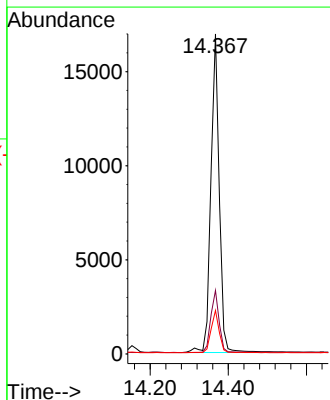
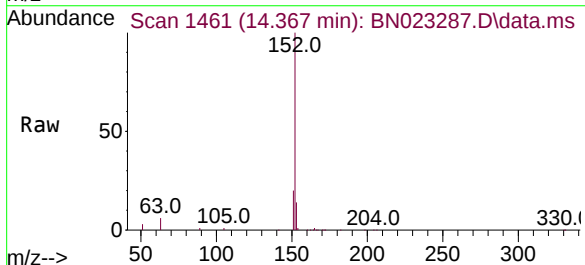
Instrument :
BNA_N
ClientSampleId :
PB149692BS

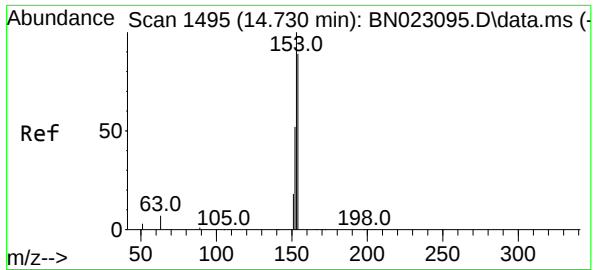
Tgt Ion	Ratio	Lower	Upper
172	100		
171	33.9	27.4	41.0
170	22.4	17.9	26.9



#16
Acenaphthylene
Concen: 0.386 ng
RT: 14.367 min Scan# 1461
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.6	15.4	23.2
153	12.9	10.3	15.5

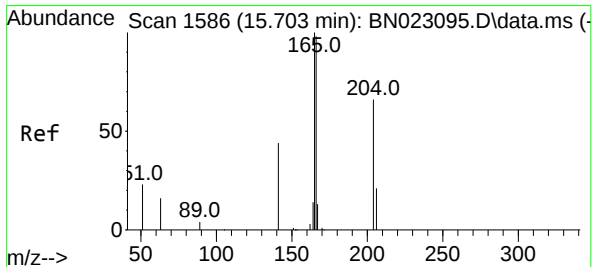
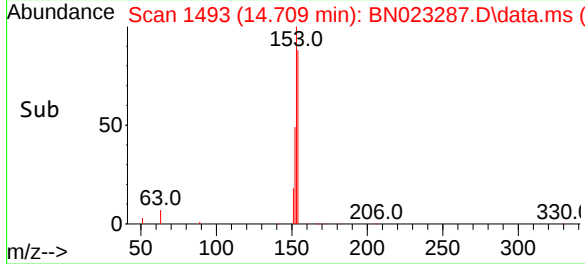
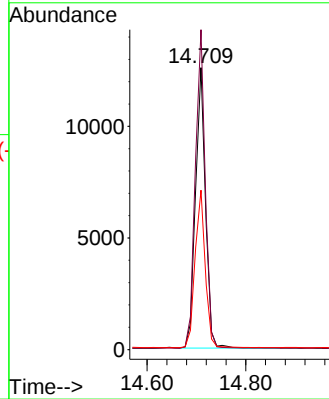
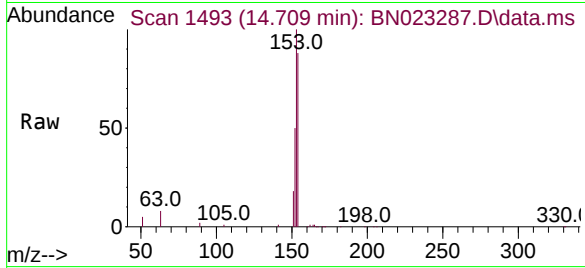




#17
Acenaphthene
Concen: 0.369 ng
RT: 14.709 min Scan# 1493
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

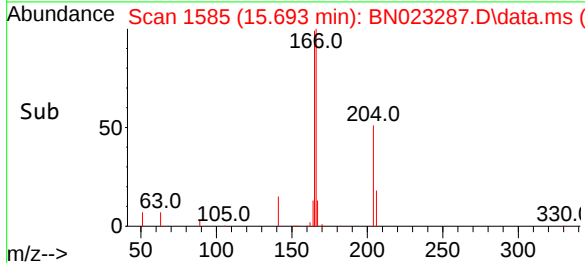
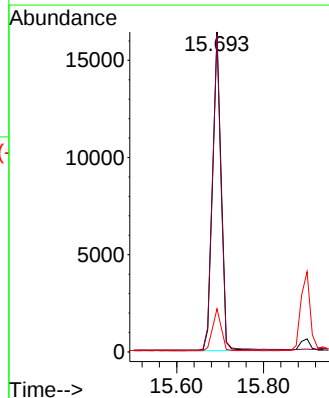
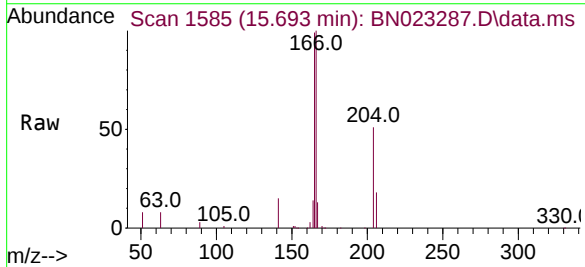
Instrument :
BNA_N
ClientSampleId :
PB149692BS

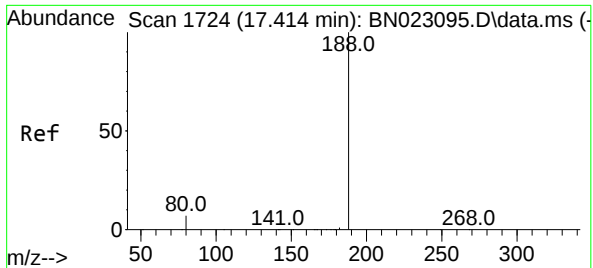
Tgt Ion:154 Resp: 17630
Ion Ratio Lower Upper
154 100
153 113.5 88.6 132.8
152 57.4 48.1 72.1



#18
Fluorene
Concen: 0.452 ng
RT: 15.693 min Scan# 1585
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:166 Resp: 24191
Ion Ratio Lower Upper
166 100
165 100.1 79.8 119.6
167 12.9 10.6 16.0

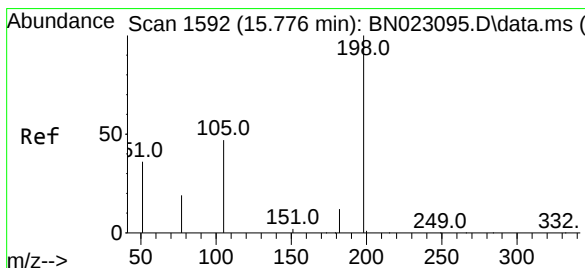
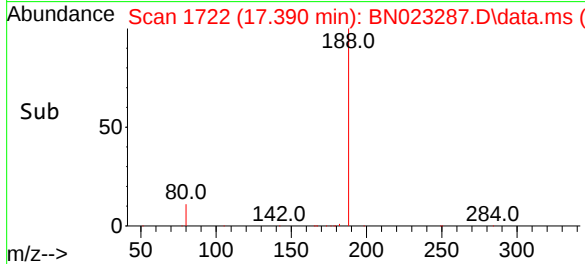
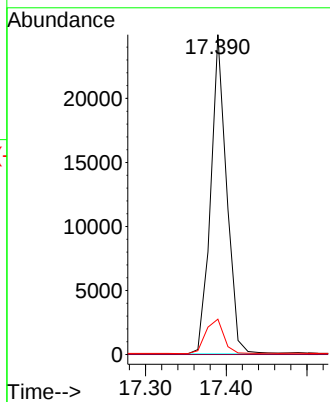
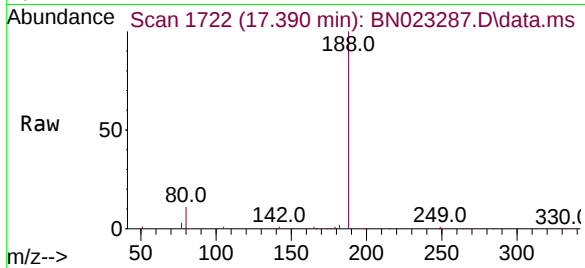




#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.390 min Scan# 1722
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

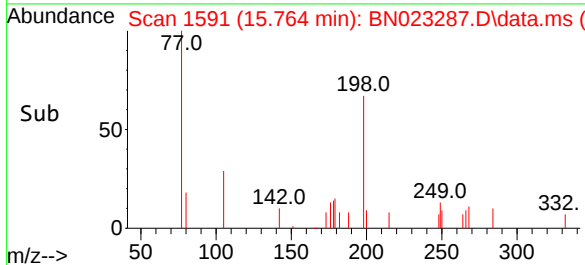
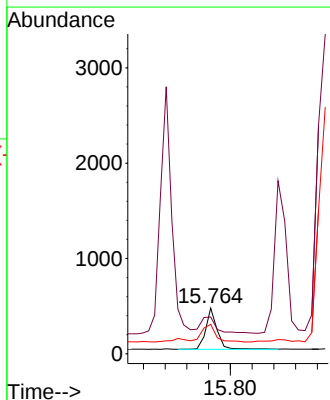
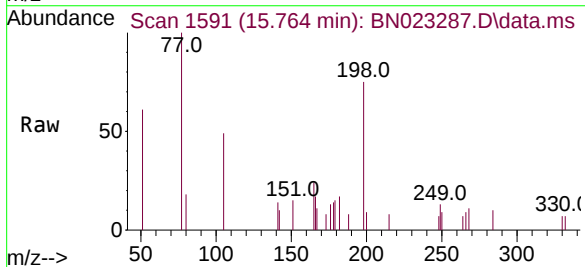
Instrument :
BNA_N
ClientSampleId :
PB149692BS

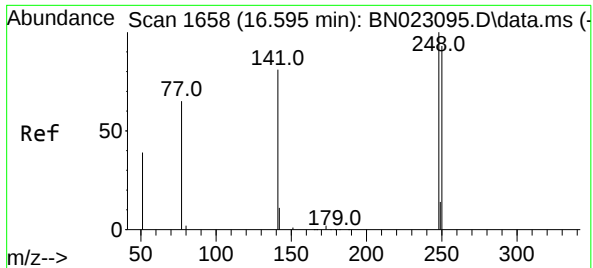
Tgt Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.1	6.1	9.1



#20
4,6-Dinitro-2-methylphenol
Concen: 0.323 ng
RT: 15.764 min Scan# 1591
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion	Ratio	Lower	Upper
198	100		
51	80.4	57.0	85.4
105	64.6	47.2	70.8

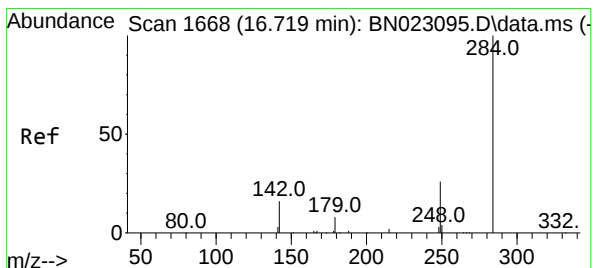
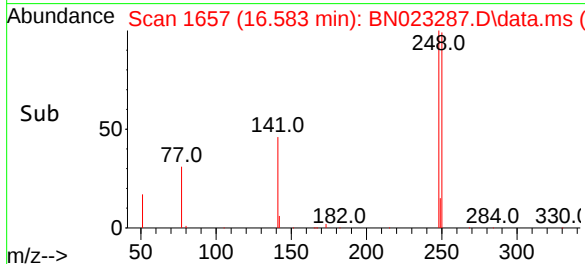
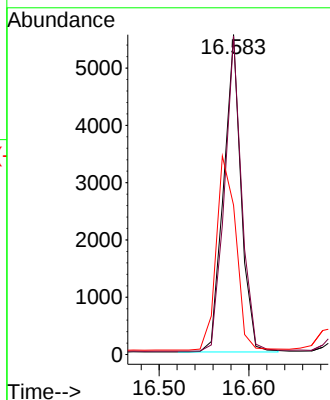
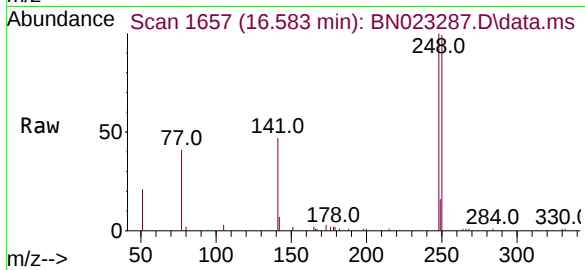




#21
4-Bromophenyl-phenylether
Concen: 0.408 ng
RT: 16.583 min Scan# 1657
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

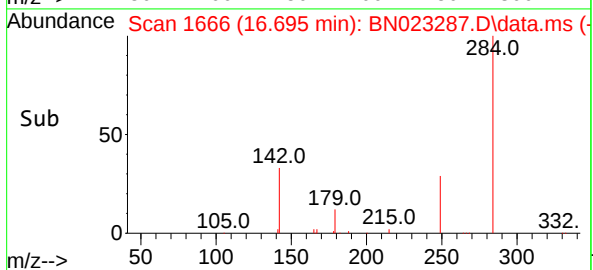
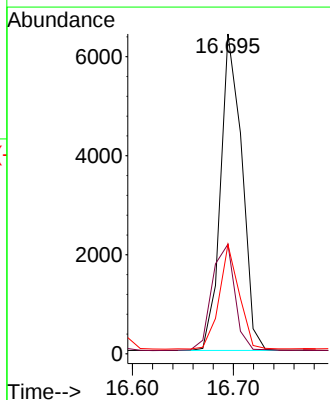
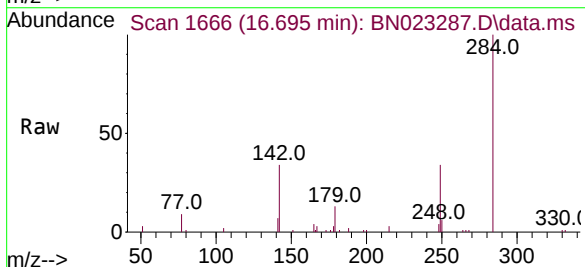
Instrument :
BNA_N
ClientSampleId :
PB149692BS

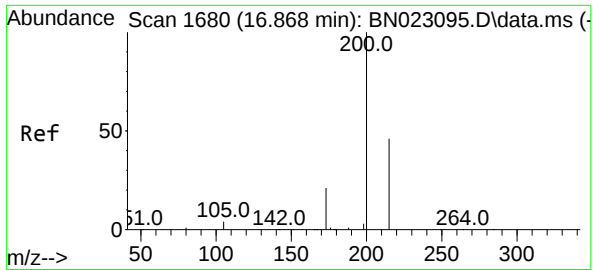
Tgt Ion:248 Resp: 7469
Ion Ratio Lower Upper
248 100
250 99.5 74.3 111.5
141 46.7 65.0 97.6#



#22
Hexachlorobenzene
Concen: 0.392 ng
RT: 16.695 min Scan# 1666
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:284 Resp: 9396
Ion Ratio Lower Upper
284 100
142 36.2 31.0 46.4
249 30.9 24.4 36.6

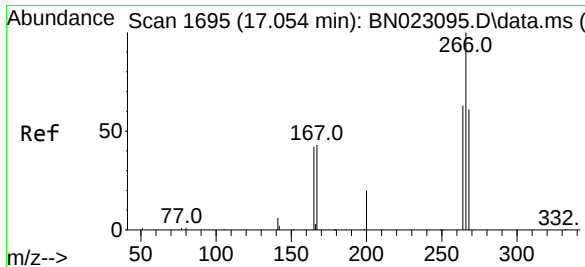
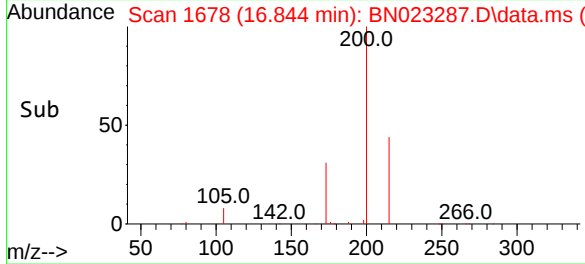
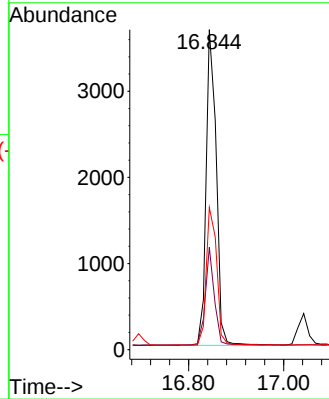
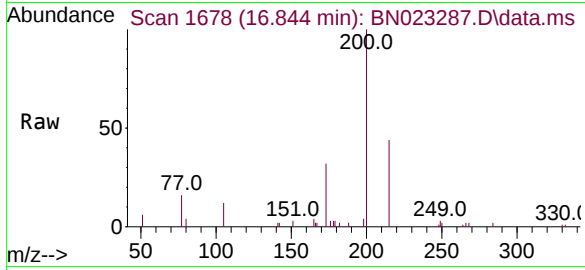




#23
Atrazine
Concen: 0.418 ng
RT: 16.844 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

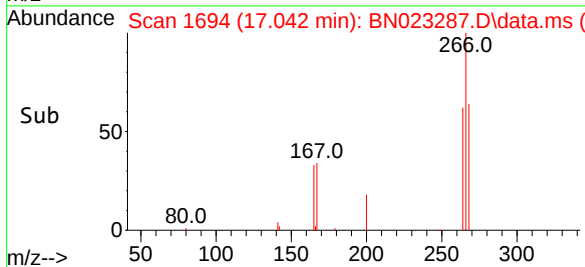
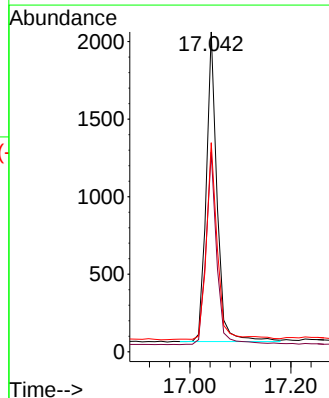
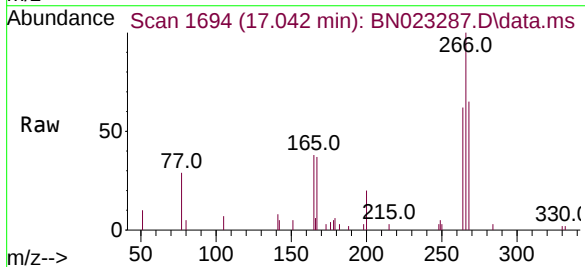
Instrument :
BNA_N
ClientSampleId :
PB149692BS

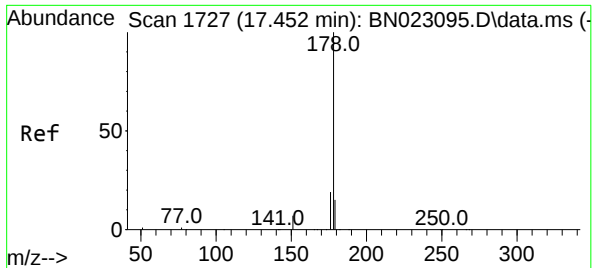
Tgt Ion:200 Resp: 5392
Ion Ratio Lower Upper
200 100
173 32.0 18.2 27.4#
215 44.5 38.0 57.0



#24
Pentachlorophenol
Concen: 0.356 ng
RT: 17.042 min Scan# 1694
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:266 Resp: 2968
Ion Ratio Lower Upper
266 100
264 62.3 50.1 75.1
268 63.5 49.7 74.5

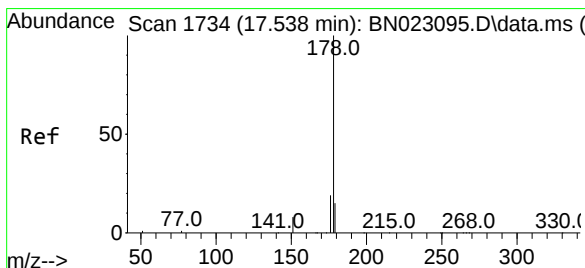
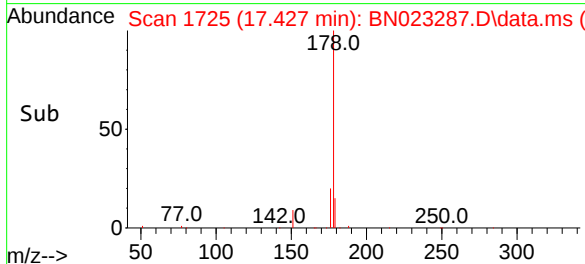
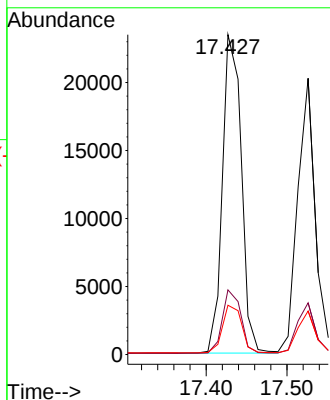
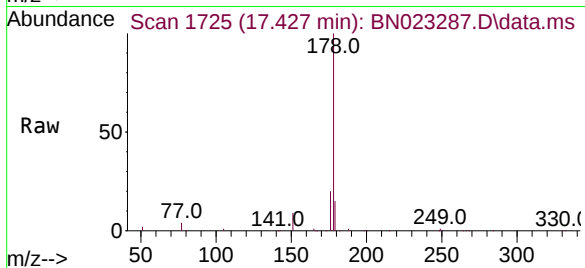




#25
Phenanthrene
Concen: 0.372 ng
RT: 17.427 min Scan# 1725
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

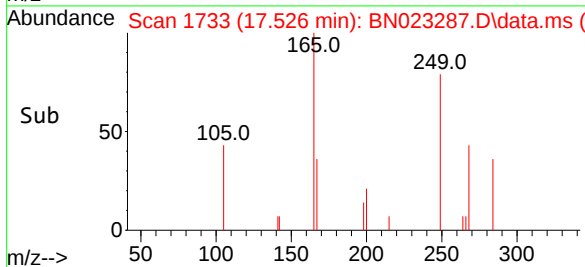
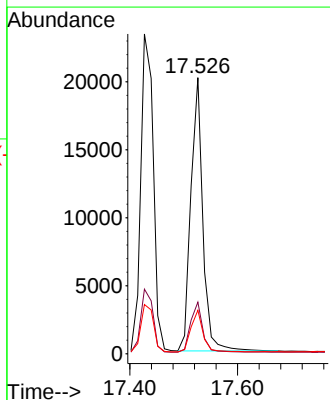
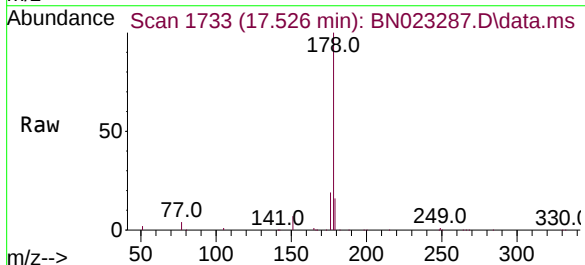
Instrument :
BNA_N
ClientSampleId :
PB149692BS

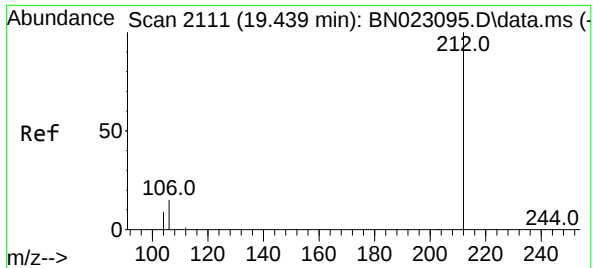
Tgt Ion:178 Resp: 38060
Ion Ratio Lower Upper
178 100
176 19.6 15.4 23.2
179 15.5 12.2 18.2



#26
Anthracene
Concen: 0.380 ng
RT: 17.526 min Scan# 1733
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:178 Resp: 30966
Ion Ratio Lower Upper
178 100
176 18.5 15.1 22.7
179 15.4 12.2 18.4

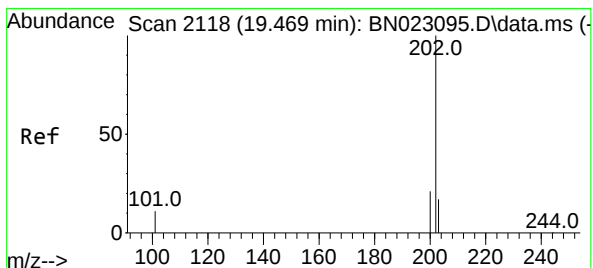
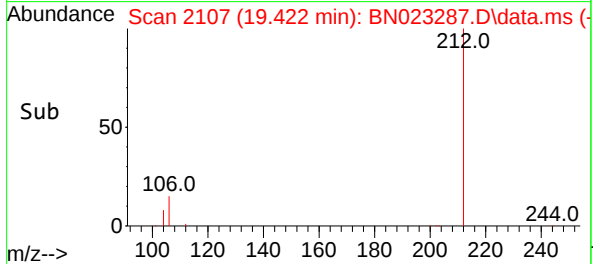
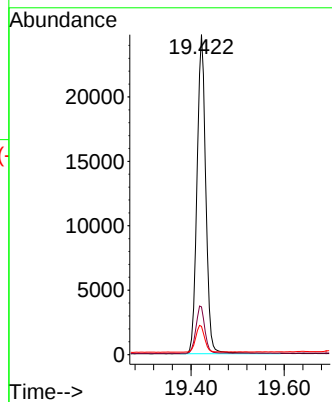
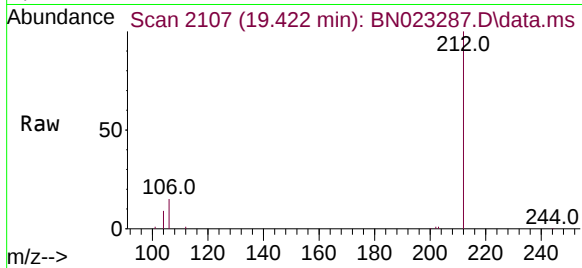




#27
Fluoranthene-d10
Concen: 0.403 ng
RT: 19.422 min Scan# 2111
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

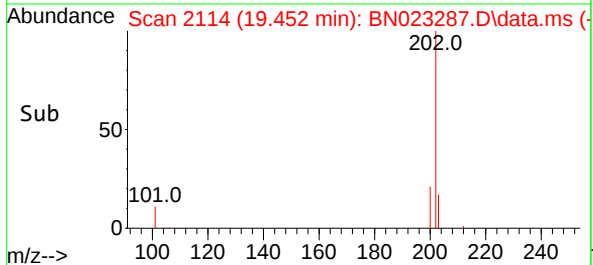
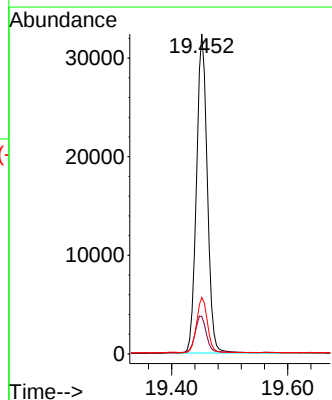
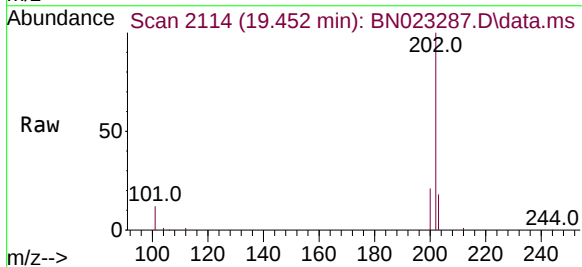
Instrument :
BNA_N
ClientSampleId :
PB149692BS

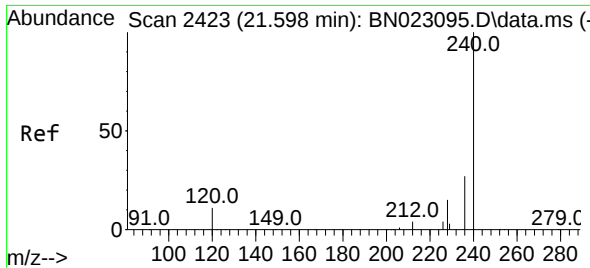
Tgt Ion:212 Resp: 32347
Ion Ratio Lower Upper
212 100
106 15.1 13.0 19.4
104 8.5 7.5 11.3



#28
Fluoranthene
Concen: 0.382 ng
RT: 19.452 min Scan# 2114
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:202 Resp: 41811
Ion Ratio Lower Upper
202 100
101 12.6 9.7 14.5
203 17.1 13.8 20.6

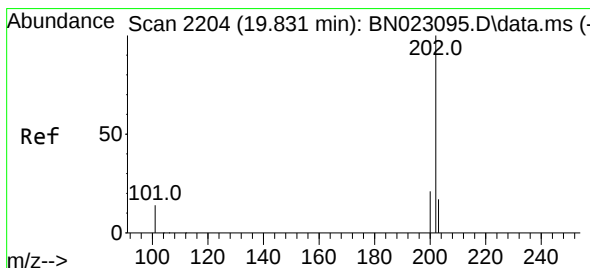
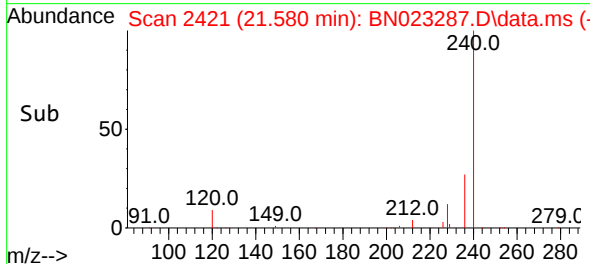
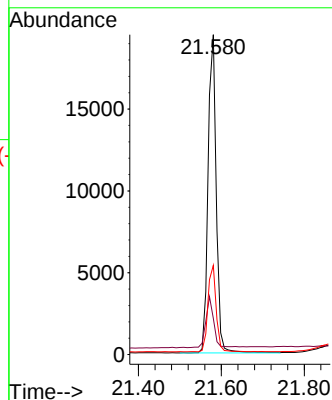
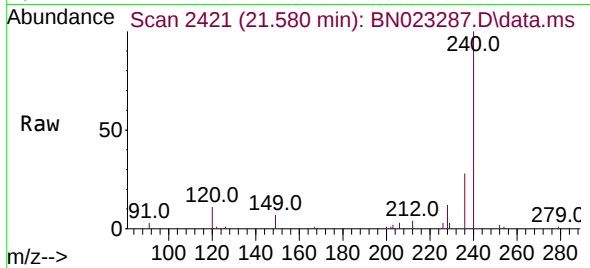




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2423
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

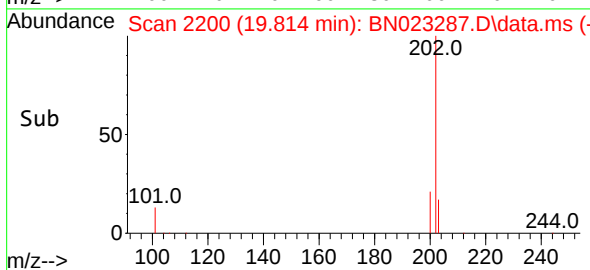
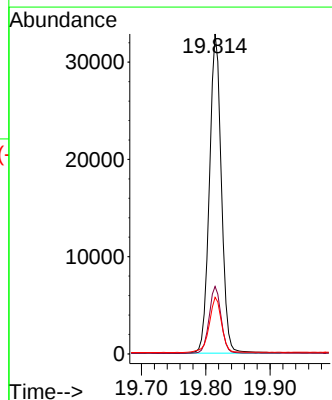
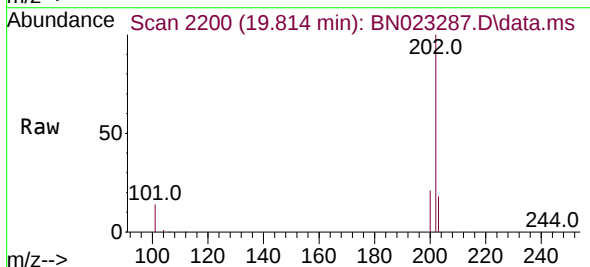
Instrument :
BNA_N
ClientSampleId :
PB149692BS

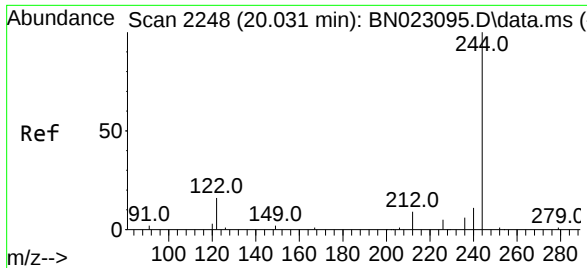
Tgt Ion	Ratio	Lower	Upper
240	100		
120	11.3	10.1	15.1
236	27.9	22.2	33.4



#30
Pyrene
Concen: 0.437 ng
RT: 19.814 min Scan# 2200
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.9	25.3
203	17.8	14.2	21.4

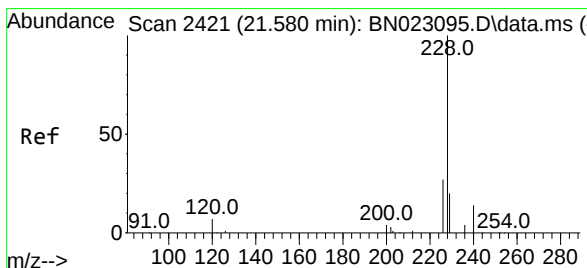
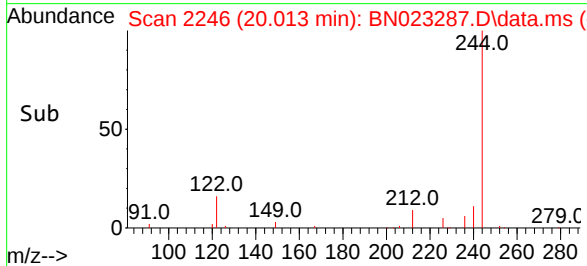
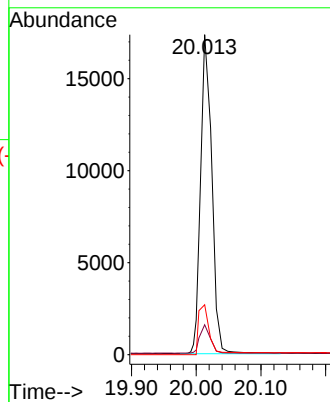
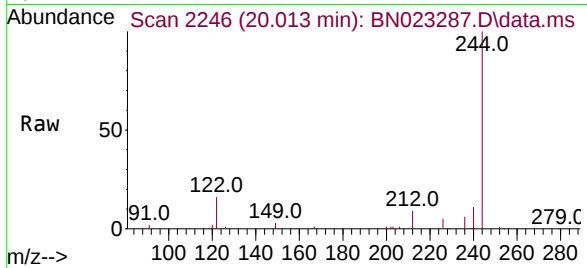




#31
Terphenyl-d14
Concen: 0.432 ng
RT: 20.013 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

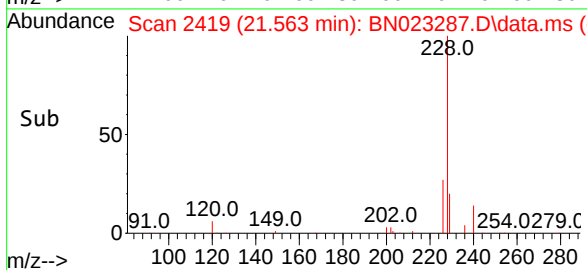
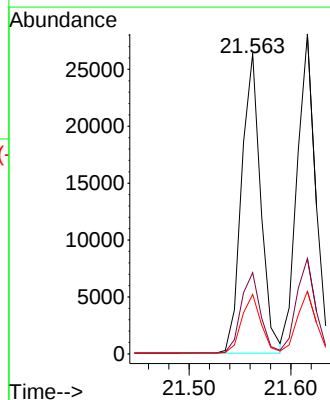
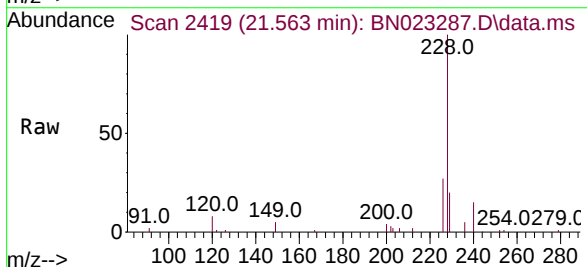
Instrument :
BNA_N
ClientSampleId :
PB149692BS

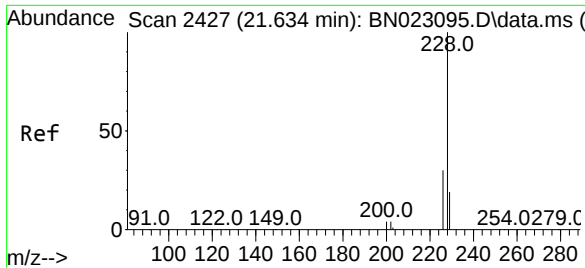
Tgt Ion:244 Resp: 18539
Ion Ratio Lower Upper
244 100
212 9.3 7.6 11.4
122 15.6 12.6 18.8



#32
Benzo(a)anthracene
Concen: 0.403 ng
RT: 21.563 min Scan# 2419
Delta R.T. 0.000 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:228 Resp: 34347
Ion Ratio Lower Upper
228 100
226 27.1 22.0 33.0
229 19.8 15.8 23.8





#33

Chrysene

Concen: 0.370 ng

RT: 21.616 min Scan# 24

Delta R.T. 0.000 min

Lab File: BN023287.D

Acq: 19 Dec 2022 15:44

Instrument :

BNA_N

ClientSampleId :

PB149692BS

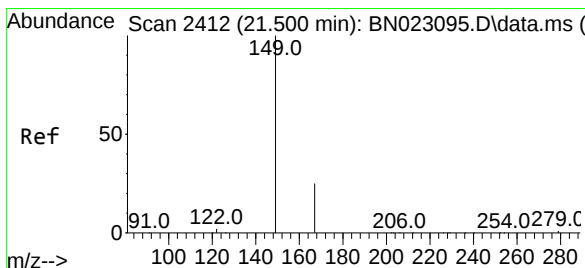
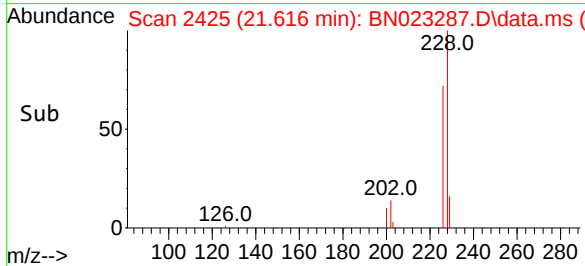
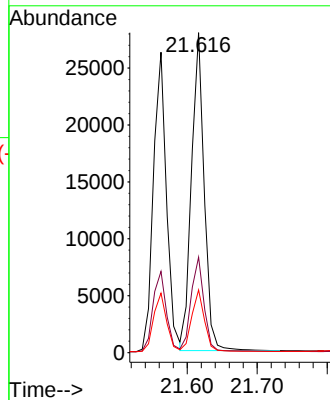
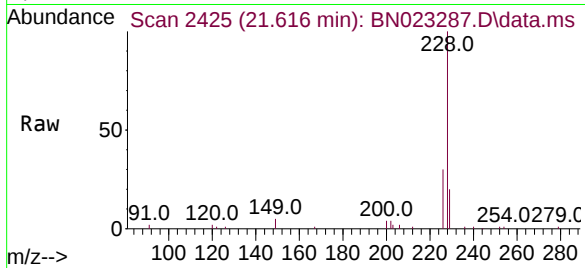
Tgt Ion:228 Resp: 35404

Ion Ratio Lower Upper

228 100

226 29.8 24.4 36.6

229 19.6 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.573 ng

RT: 21.482 min Scan# 2410

Delta R.T. 0.000 min

Lab File: BN023287.D

Acq: 19 Dec 2022 15:44

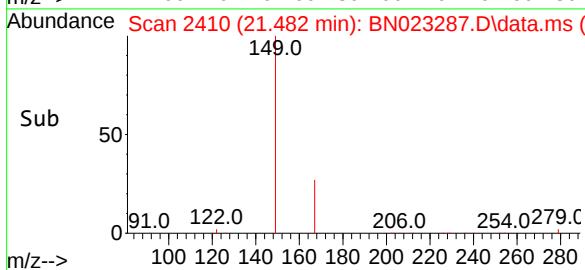
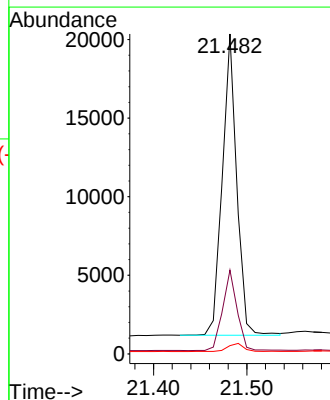
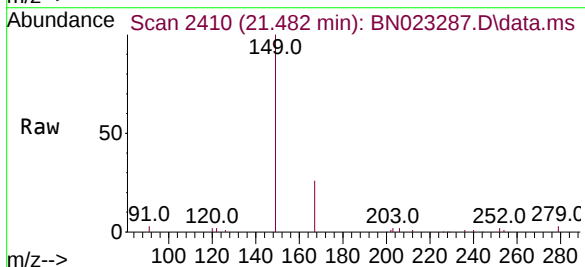
Tgt Ion:149 Resp: 20630

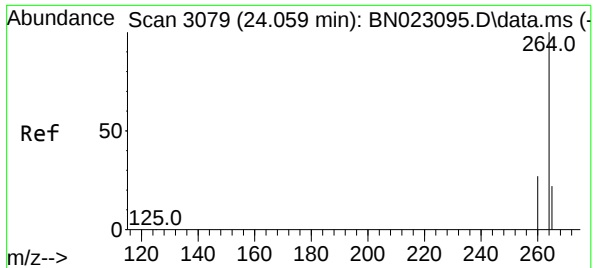
Ion Ratio Lower Upper

149 100

167 26.9 20.2 30.2

279 3.0 2.3 3.5

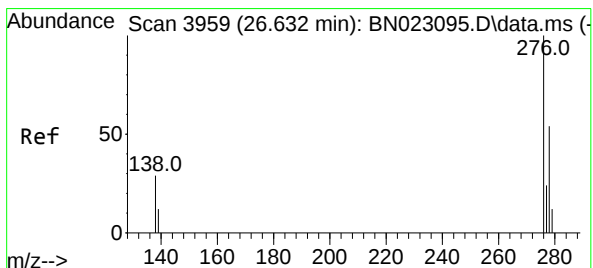
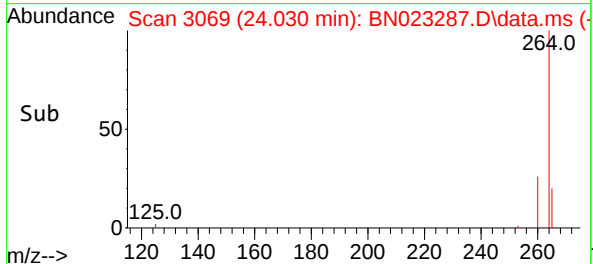
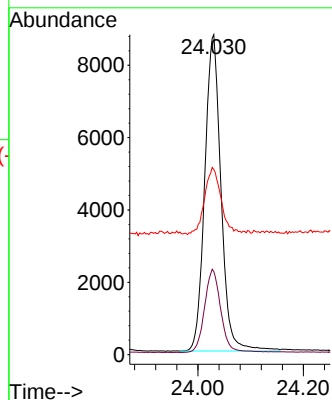
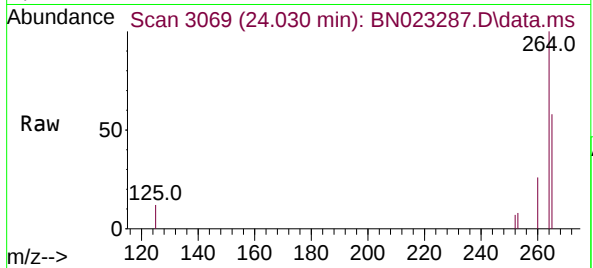




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.030 min Scan# 3079
Delta R.T. 0.003 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

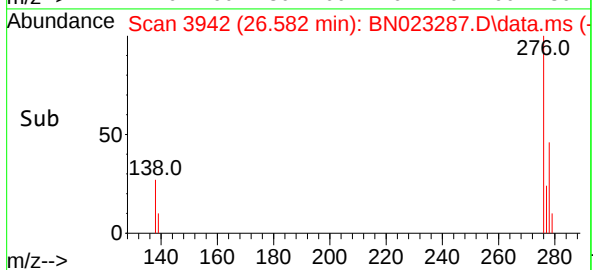
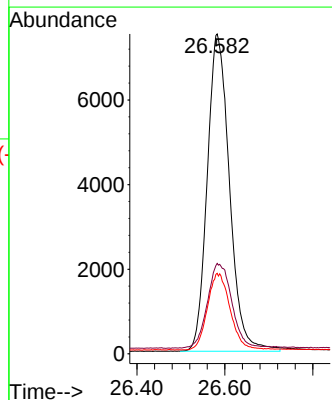
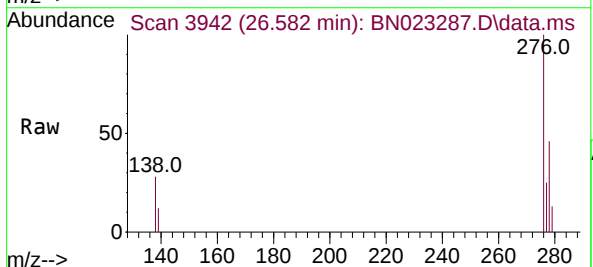
Instrument :
BNA_N
ClientSampleId :
PB149692BS

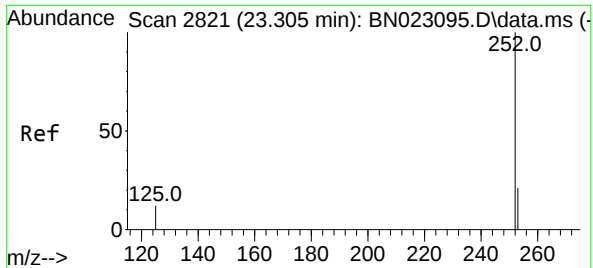
Tgt Ion:264 Resp: 18732
Ion Ratio Lower Upper
264 100
260 26.0 21.7 32.5
265 57.9 43.2 64.8



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.314 ng
RT: 26.582 min Scan# 3942
Delta R.T. -0.003 min
Lab File: BN023287.D
Acq: 19 Dec 2022 15:44

Tgt Ion:276 Resp: 26339
Ion Ratio Lower Upper
276 100
138 29.1 25.0 37.6
277 24.6 19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.366 ng

RT: 23.276 min Scan# 2811

Delta R.T. 0.000 min

Lab File: BN023287.D

Acq: 19 Dec 2022 15:44

Instrument :

BNA_N

ClientSampleId :

PB149692BS

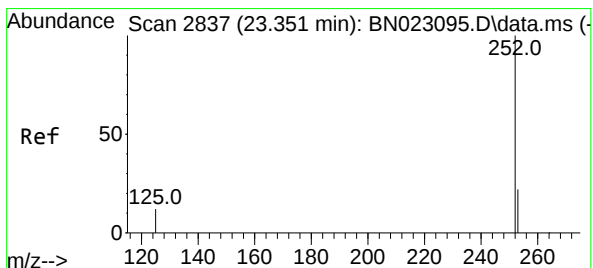
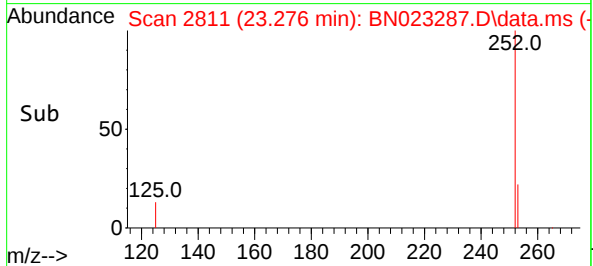
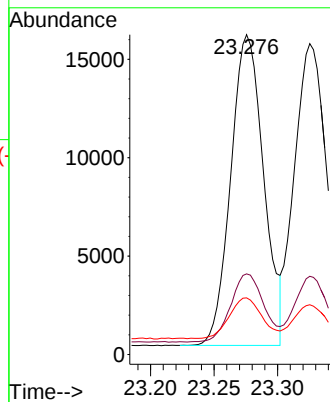
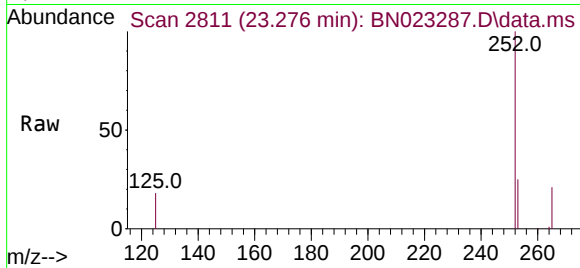
Tgt Ion:252 Resp: 28455

Ion Ratio Lower Upper

252 100

253 25.2 19.0 28.4

125 17.7 12.8 19.2



#38

Benzo(k)fluoranthene

Concen: 0.345 ng

RT: 23.325 min Scan# 2828

Delta R.T. 0.000 min

Lab File: BN023287.D

Acq: 19 Dec 2022 15:44

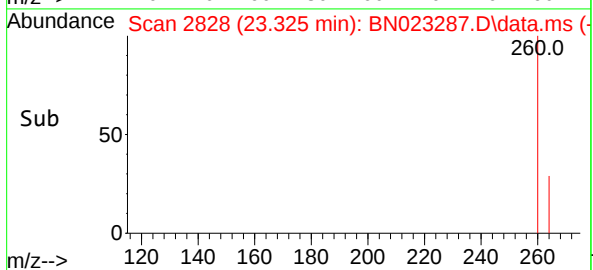
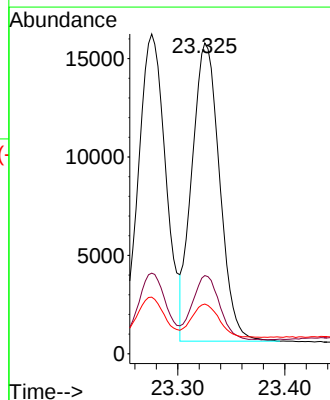
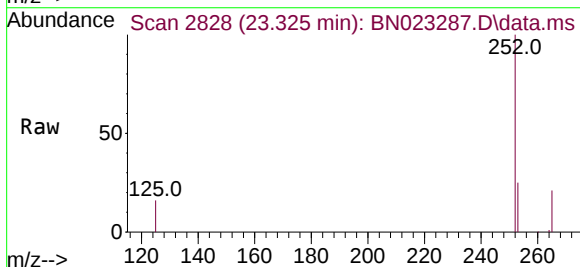
Tgt Ion:252 Resp: 27179

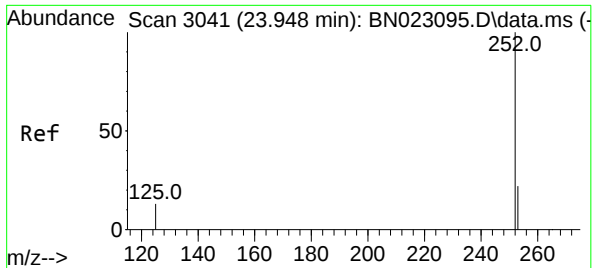
Ion Ratio Lower Upper

252 100

253 25.2 19.1 28.7

125 16.0 12.5 18.7





#39

Benzo(a)pyrene

Concen: 0.374 ng

RT: 23.916 min Scan# 30

Delta R.T. 0.000 min

Lab File: BN023287.D

Acq: 19 Dec 2022 15:44

Instrument :

BNA_N

ClientSampleId :

PB149692BS

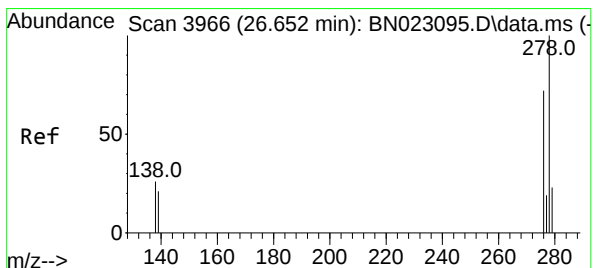
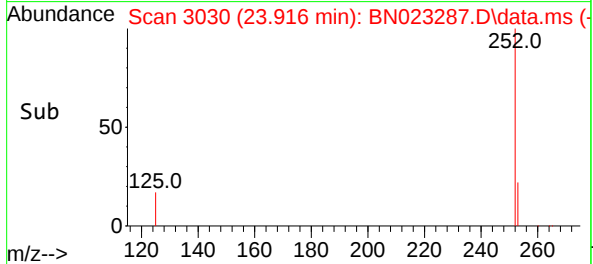
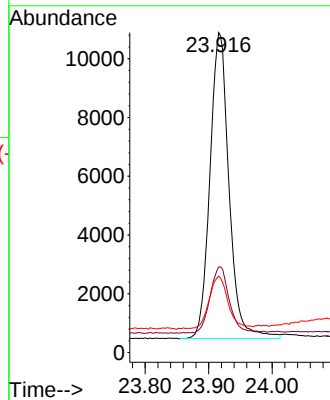
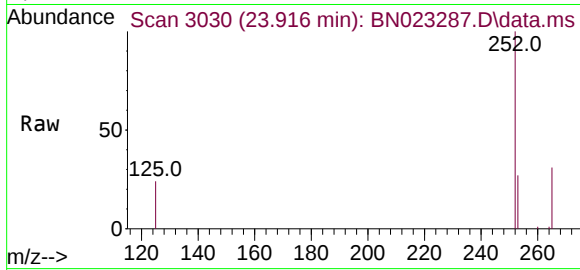
Tgt Ion:252 Resp: 21767

Ion Ratio Lower Upper

252 100

253 26.8 20.6 30.8

125 23.9 15.8 23.8#



#40

Dibenzo(a,h)anthracene

Concen: 0.308 ng

RT: 26.606 min Scan# 3950

Delta R.T. 0.000 min

Lab File: BN023287.D

Acq: 19 Dec 2022 15:44

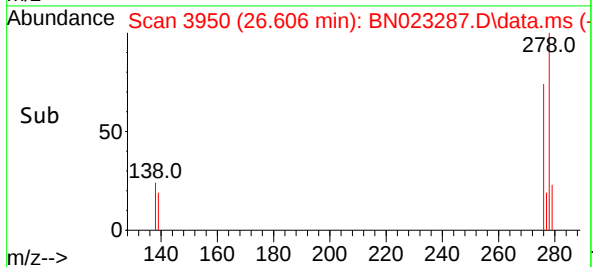
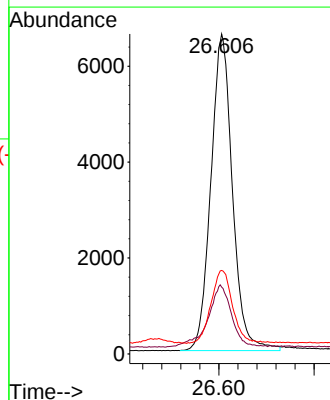
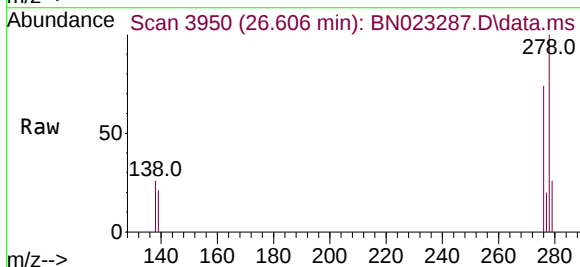
Tgt Ion:278 Resp: 20754

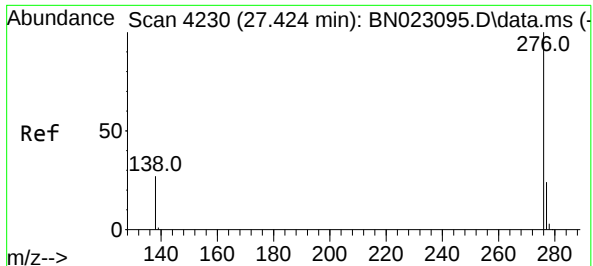
Ion Ratio Lower Upper

278 100

139 20.9 17.5 26.3

279 26.1 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.300 ng

RT: 27.372 min Scan# 41

Delta R.T. 0.000 min

Lab File: BN023287.D

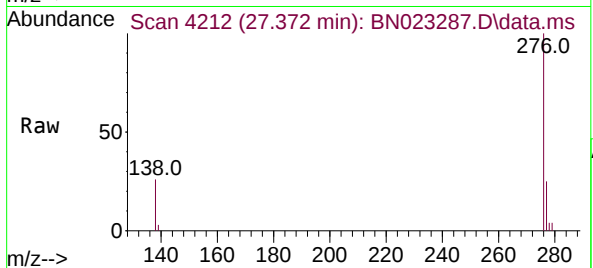
Acq: 19 Dec 2022 15:44

Instrument :

BNA_N

ClientSampleId :

PB149692BS



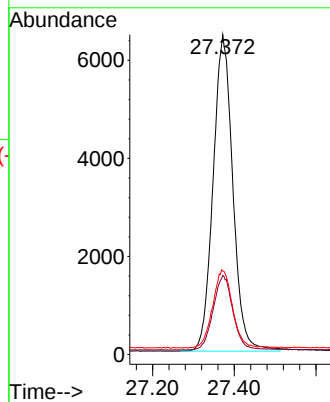
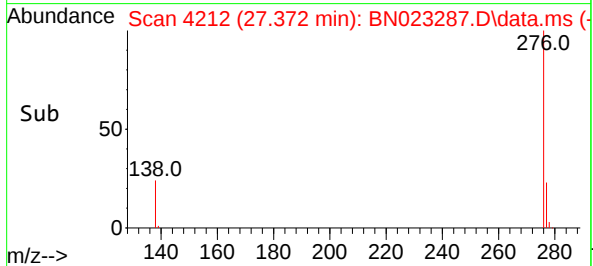
Tgt Ion:276 Resp: 21609

Ion Ratio Lower Upper

276 100

277 24.7 19.9 29.9

138 26.1 22.2 33.2





Report of Analysis

Client:	JACOBS Engineering Group, Inc.	Date Collected:	
Project:	Former Schlumberger Site Princeton NJ	Date Received:	
Client Sample ID:	PB149692BSD	SDG No.:	N6070
Lab Sample ID:	PB149692BSD	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
BN023288.D	1	12/16/22 08:59	12/19/22 16:21	PB149692

CAS Number	Parameter	Conc.	Qualifier	MDL	LOQ / CRQL	Units
TARGETS						
123-91-1	1,4-Dioxane	0.39		0.060	0.20	ug/L
SURROGATES						
7297-45-2	2-Methylnaphthalene-d10	0.37		30 (30) - 150 (150)	94%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.41		30 (30) - 150 (150)	103%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.42		30 (11) - 130 (175)	105%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		30 (10) - 130 (175)	89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.42		30 (54) - 130 (171)	105%	SPK: 0.4
INTERNAL STANDARDS						
3855-82-1	1,4-Dichlorobenzene-d4	8380	7.999			
1146-65-2	Naphthalene-d8	26100	10.818			
15067-26-2	Acenaphthene-d10	15600	14.645			
1517-22-2	Phenanthrene-d10	33500	17.39			
1719-03-5	Chrysene-d12	27800	21.58			
1520-96-3	Perylene-d12	19300	24.027			

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\BN121922\
 Data File : BN023288.D
 Acq On : 19 Dec 2022 16:21
 Operator : CG/JU
 Sample : PB149692BSD
 Misc :
 ALS Vial : 10 Sample Multiplier: 1

Instrument :
 BNA_N
 ClientSampleId :
 PB149692BSD

Quant Time: Dec 19 17:36:15 2022
 Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
 Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
 QLast Update : Mon Dec 19 15:44:58 2022
 Response via : Initial Calibration

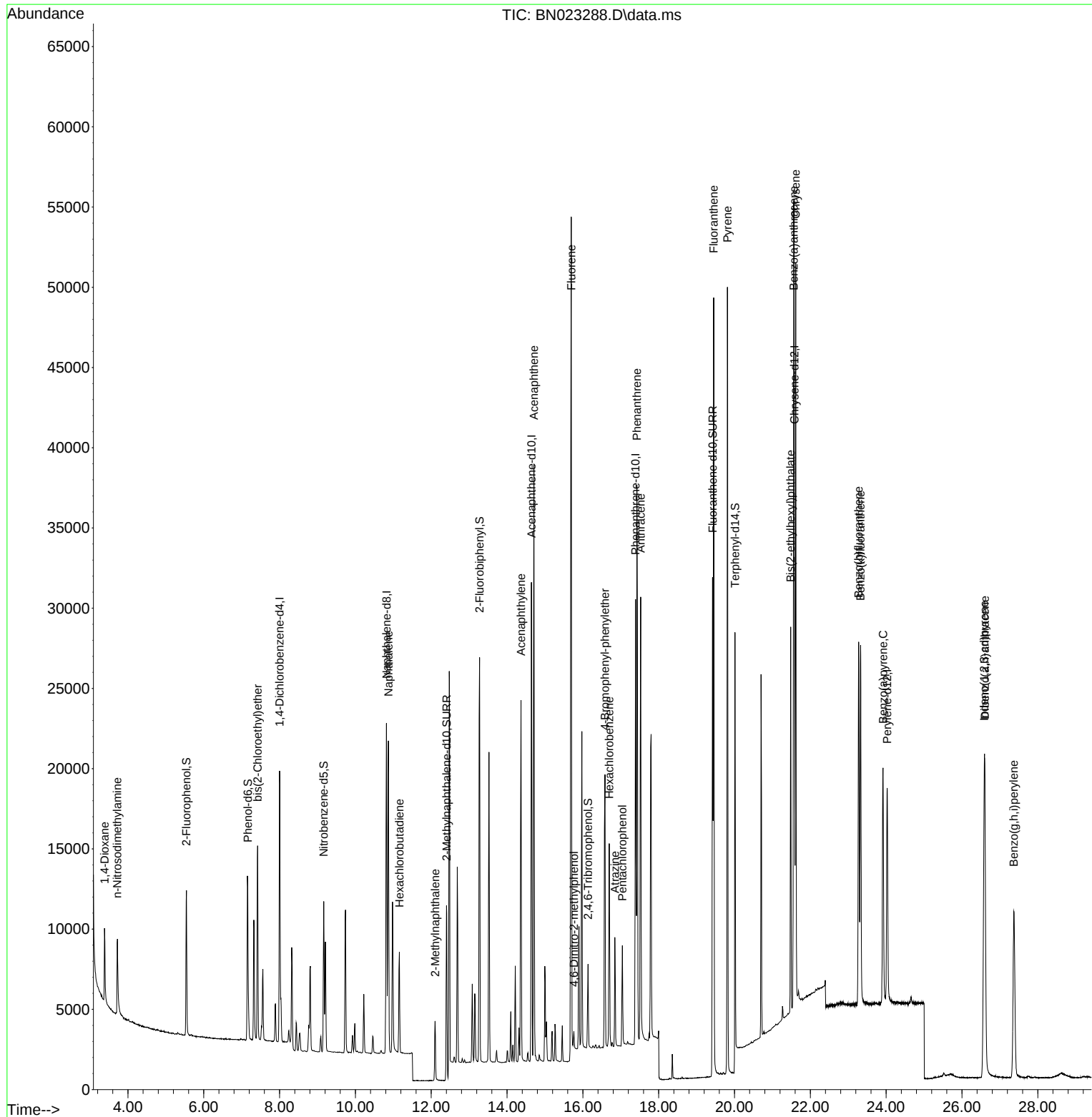
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.999	152	8380	0.400	ng	0.00
7) Naphthalene-d8	10.818	136	26080	0.400	ng	0.00
13) Acenaphthene-d10	14.645	164	15594	0.400	ng	0.00
19) Phenanthrene-d10	17.390	188	33450	0.400	ng	# 0.00
29) Chrysene-d12	21.580	240	27783	0.400	ng	0.00
35) Perylene-d12	24.027	264	19326	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.543	112	7545	0.483	ng	0.00
5) Phenol-d6	7.161	99	9755	0.492	ng	0.00
8) Nitrobenzene-d5	9.164	82	7213	0.420	ng	0.00
11) 2-Methylnaphthalene-d10	12.405	152	16556	0.374	ng	0.00
14) 2,4,6-Tribromophenol	16.136	330	2840	0.502	ng	0.00
15) 2-Fluorobiphenyl	13.276	172	22265	0.357	ng	0.00
27) Fluoranthene-d10	19.422	212	32302	0.412	ng	0.00
31) Terphenyl-d14	20.013	244	19027	0.422	ng	0.00
Target Compounds						
2) 1,4-Dioxane	3.384	88	3249	0.393	ng	97
3) n-Nitrosodimethylamine	3.716	42	3278	0.404	ng	# 87
6) bis(2-Chloroethyl)ether	7.421	93	8864	0.393	ng	99
9) Naphthalene	10.872	128	25915	0.390	ng	100
10) Hexachlorobutadiene	11.160	225	5090	0.402	ng	# 100
12) 2-Methylnaphthalene	12.102	142	5521	0.558	ng	# 97
16) Acenaphthylene	14.367	152	24287	0.387	ng	100
17) Acenaphthene	14.709	154	17134	0.371	ng	97
18) Fluorene	15.693	166	23685	0.458	ng	99
20) 4,6-Dinitro-2-methylph...	15.764	198	614	0.325	ng	92
21) 4-Bromophenyl-phenylether	16.583	248	7247	0.406	ng	# 78
22) Hexachlorobenzene	16.694	284	9218	0.394	ng	98
23) Atrazine	16.843	200	5175	0.411	ng	# 91
24) Pentachlorophenol	17.042	266	2942	0.362	ng	99
25) Phenanthrene	17.427	178	37812	0.379	ng	100
26) Anthracene	17.526	178	30463	0.384	ng	100
28) Fluoranthene	19.452	202	41868	0.392	ng	99
30) Pyrene	19.814	202	42727	0.420	ng	100
32) Benzo(a)anthracene	21.562	228	36084	0.403	ng	100
33) Chrysene	21.616	228	36965	0.367	ng	99
34) Bis(2-ethylhexyl)phtha...	21.482	149	19873	0.525	ng	97
36) Indeno(1,2,3-cd)pyrene	26.588	276	28213	0.326	ng	98
37) Benzo(b)fluoranthene	23.276	252	30332	0.379	ng	98
38) Benzo(k)fluoranthene	23.325	252	29310	0.360	ng	100
39) Benzo(a)pyrene	23.919	252	22613	0.376	ng	98
40) Dibenzo(a,h)anthracene	26.603	278	22498	0.324	ng	99
41) Benzo(g,h,i)perylene	27.369	276	23348	0.314	ng	99

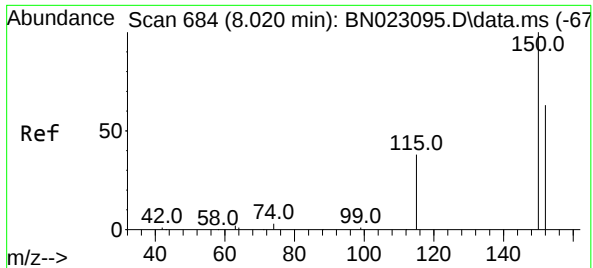
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN121922\
Data File : BN023288.D
Acq On : 19 Dec 2022 16:21
Operator : CG/JU
Sample : PB149692BSD
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB149692BSD

Quant Time: Dec 19 17:36:15 2022
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN120822.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Mon Dec 19 15:44:58 2022
Response via : Initial Calibration

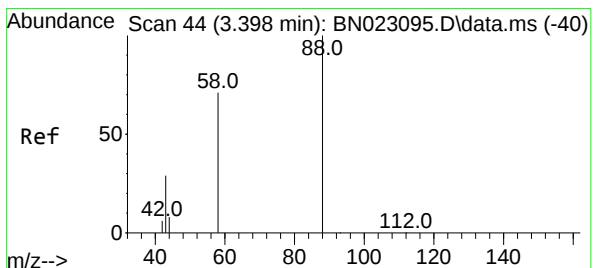
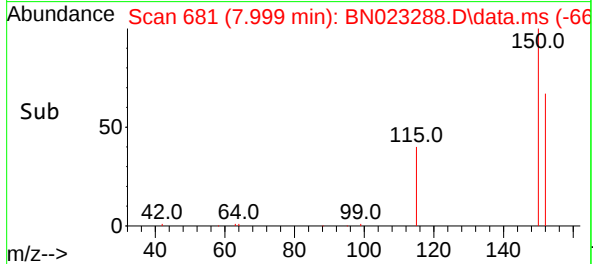
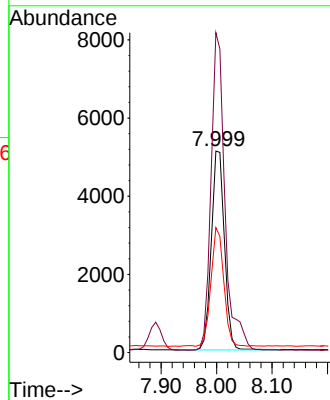
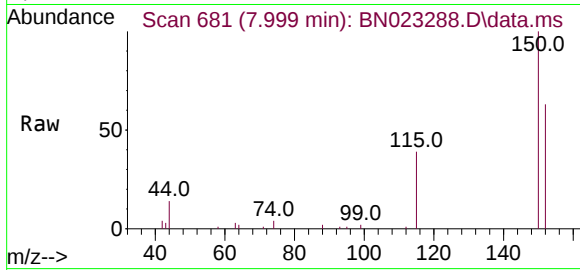




#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.999 min Scan# 684
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

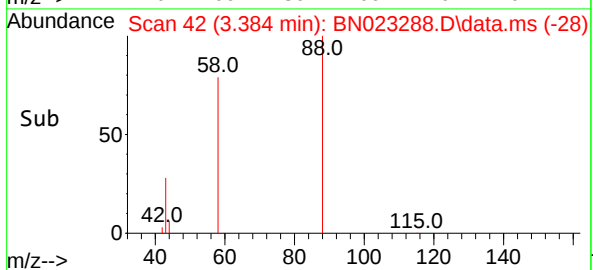
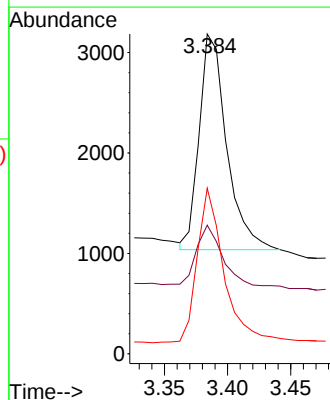
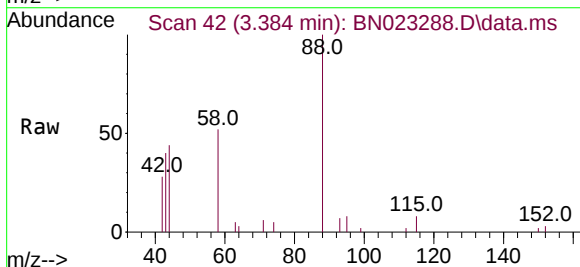
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

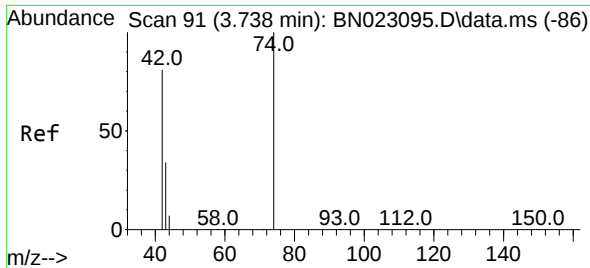
Tgt Ion:152 Resp: 8380
Ion Ratio Lower Upper
152 100
150 158.8 125.6 188.4
115 62.1 49.0 73.4



#2
1,4-Dioxane
Concen: 0.393 ng
RT: 3.384 min Scan# 42
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion: 88 Resp: 3249
Ion Ratio Lower Upper
88 100
43 26.9 23.3 34.9
58 70.1 58.0 87.0

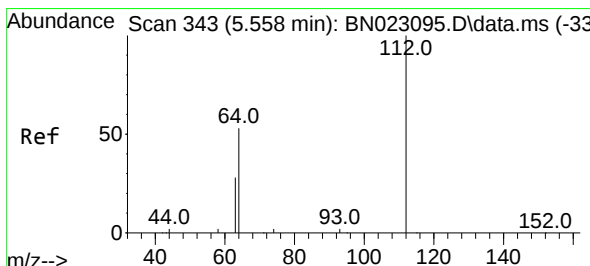
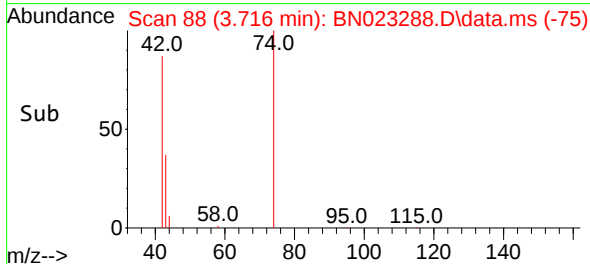
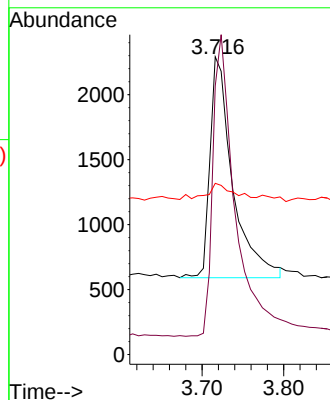
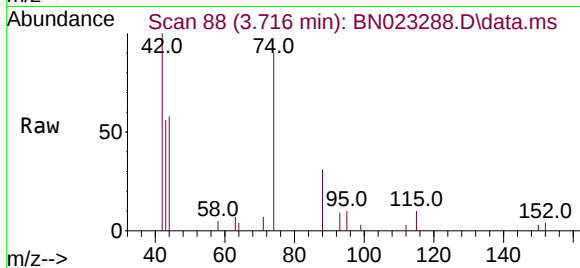




#3
 n-Nitrosodimethylamine
 Concen: 0.404 ng
 RT: 3.716 min Scan# 88
 Delta R.T. -0.007 min
 Lab File: BN023288.D
 Acq: 19 Dec 2022 16:21

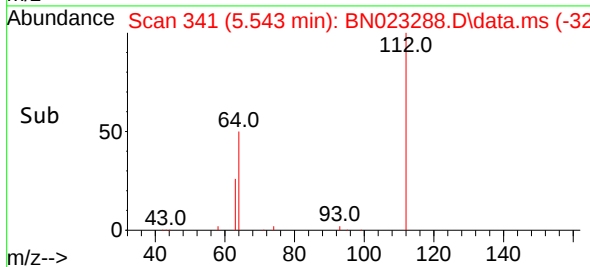
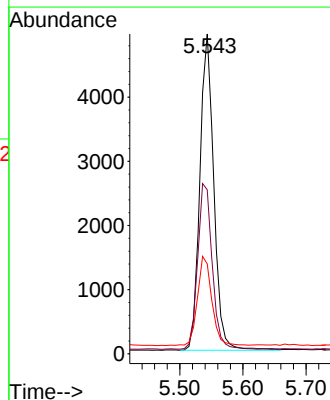
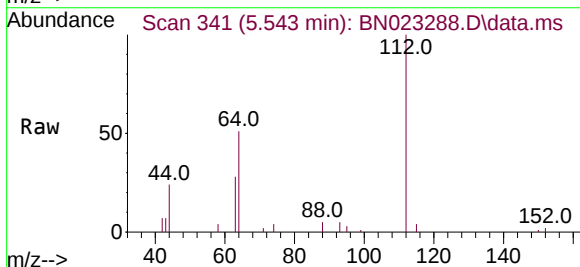
Instrument :
 BNA_N
 ClientSampleId :
 PB149692BSD

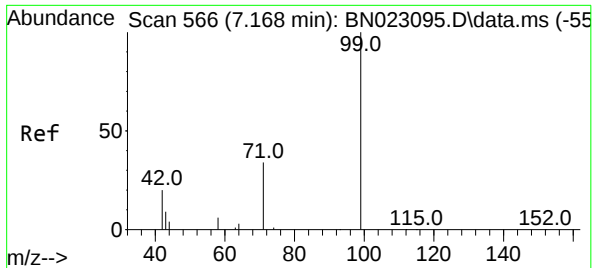
Tgt Ion: 42 Resp: 3278
 Ion Ratio Lower Upper
 42 100
 74 133.9 95.8 143.6
 44 6.6 8.4 12.6#



#4
 2-Fluorophenol
 Concen: 0.483 ng
 RT: 5.543 min Scan# 341
 Delta R.T. -0.000 min
 Lab File: BN023288.D
 Acq: 19 Dec 2022 16:21

Tgt Ion: 112 Resp: 7545
 Ion Ratio Lower Upper
 112 100
 64 54.8 44.4 66.6
 63 29.3 23.7 35.5

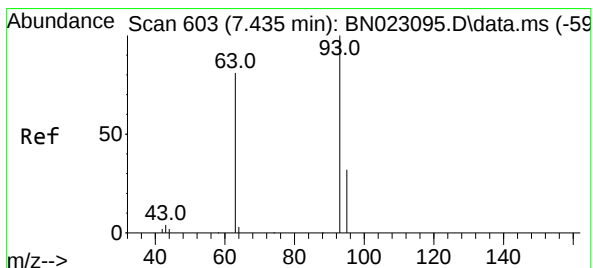
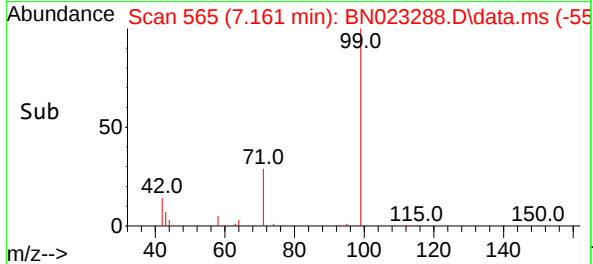
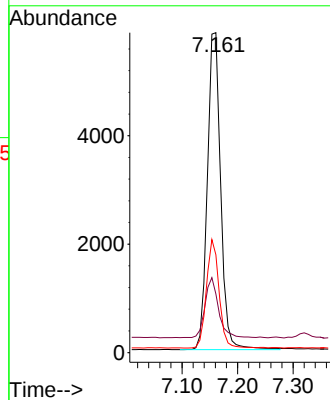
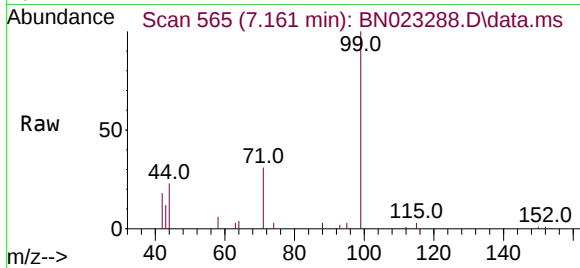




#5
Phenol-d6
Concen: 0.492 ng
RT: 7.161 min Scan# 566
Delta R.T. 0.007 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

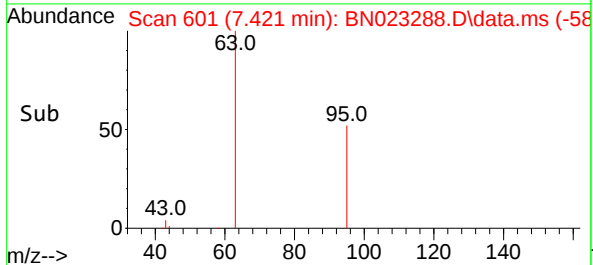
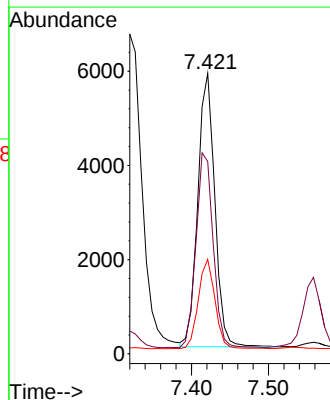
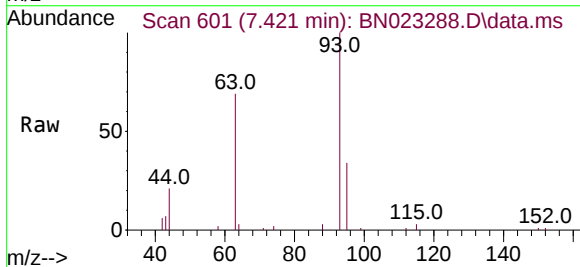
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

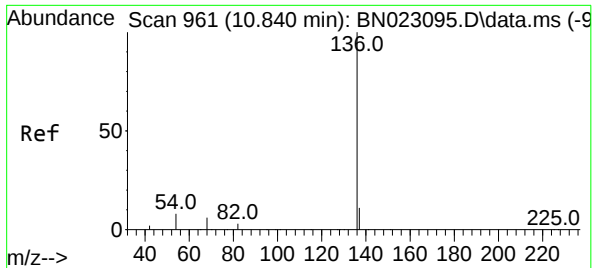
Tgt Ion:	99	Resp:	9755
Ion	Ratio	Lower	Upper
99	100		
42	19.4	16.3	24.5
71	32.6	26.5	39.7



#6
bis(2-Chloroethyl)ether
Concen: 0.393 ng
RT: 7.421 min Scan# 601
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:	93	Resp:	8864
Ion	Ratio	Lower	Upper
93	100		
63	71.9	58.1	87.1
95	32.4	25.2	37.8

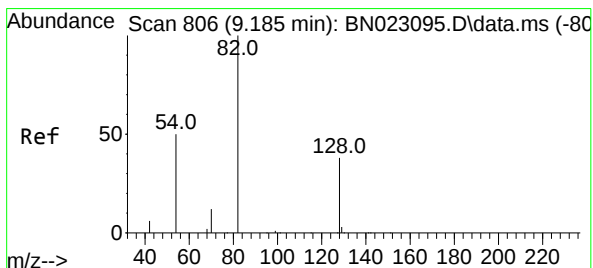
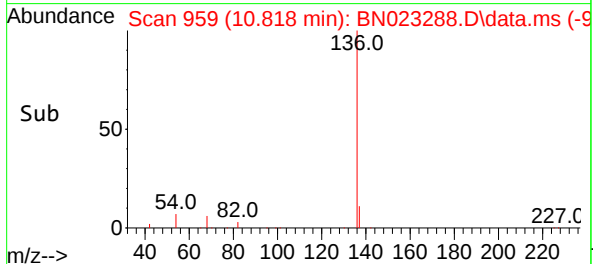
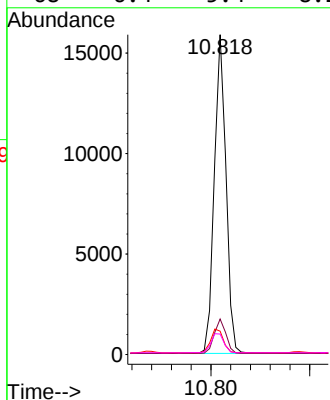
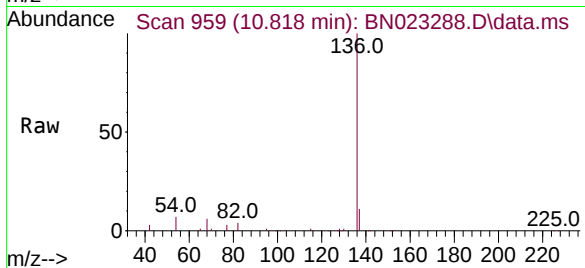




#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.818 min Scan# 91
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

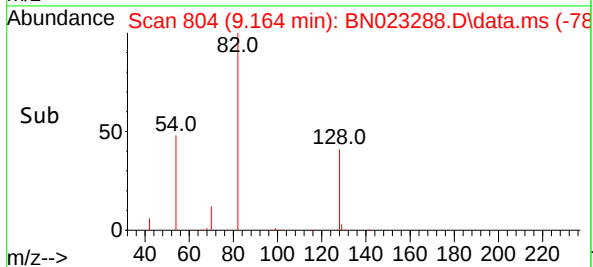
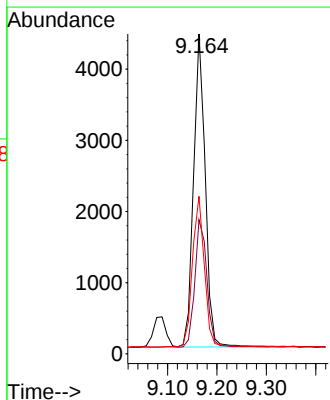
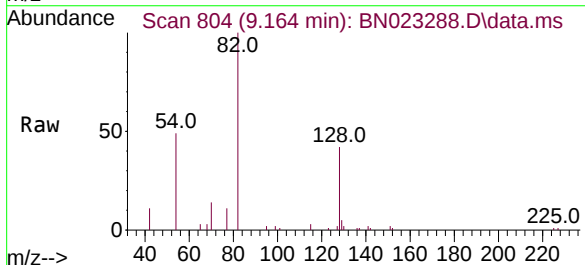
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

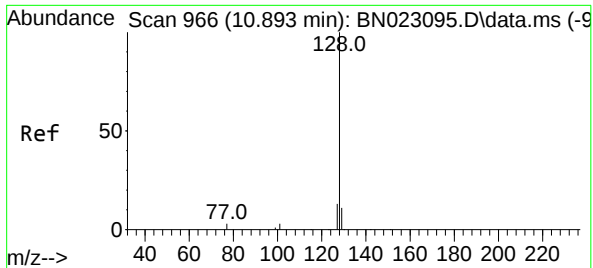
Tgt Ion:136	Resp:	26080
Ion Ratio	Lower	Upper
136	100	
137	11.1	9.0 13.4
54	7.3	6.5 9.7
68	6.4	5.4 8.2



#8
Nitrobenzene-d5
Concen: 0.420 ng
RT: 9.164 min Scan# 804
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion: 82	Resp:	7213
Ion Ratio	Lower	Upper
82	100	
128	41.9	31.4 47.2
54	49.2	41.0 61.4

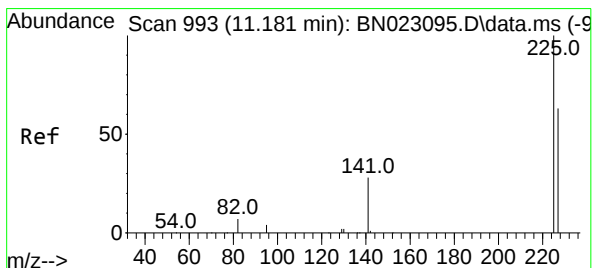
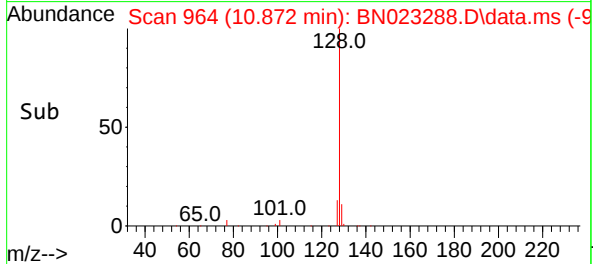
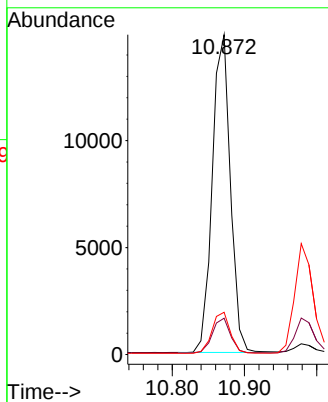
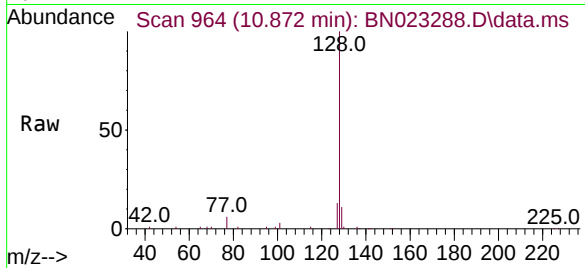




#9
Naphthalene
Concen: 0.390 ng
RT: 10.872 min Scan# 90
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

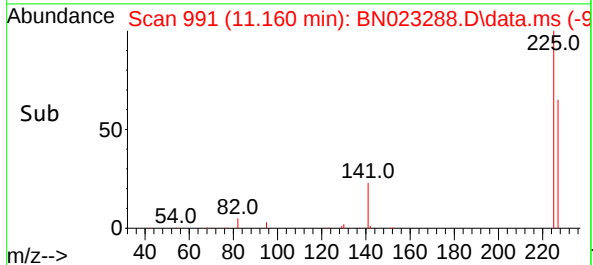
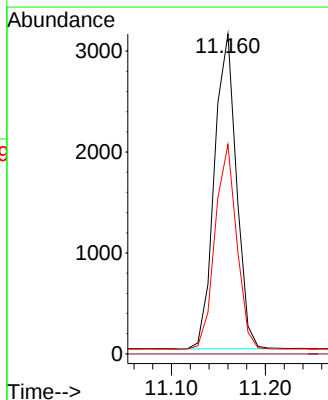
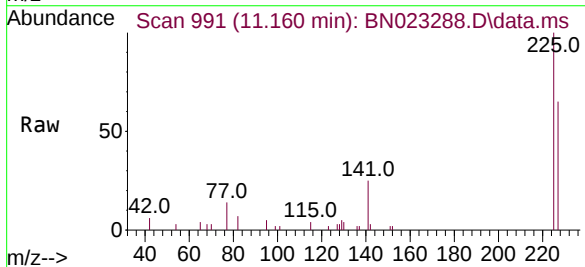
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

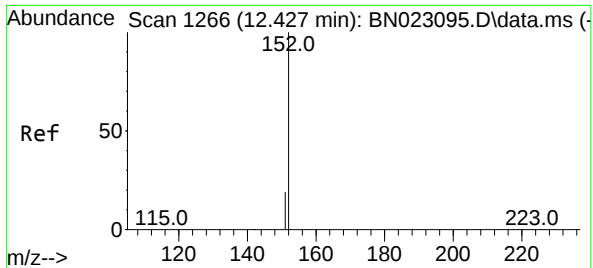
Tgt Ion	128	129	127
Resp:	25915		
Ion Ratio	100	11.4	13.2
Lower		9.0	10.5
Upper		13.6	15.7



#10
Hexachlorobutadiene
Concen: 0.402 ng
RT: 11.160 min Scan# 991
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion	225	223	227
Resp:	5090		
Ion Ratio	100	0.0	63.7
Lower		0.0	51.1
Upper		0.0	76.7

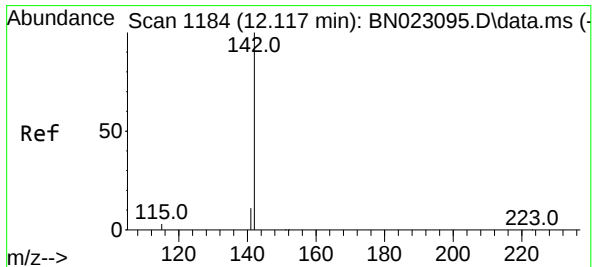
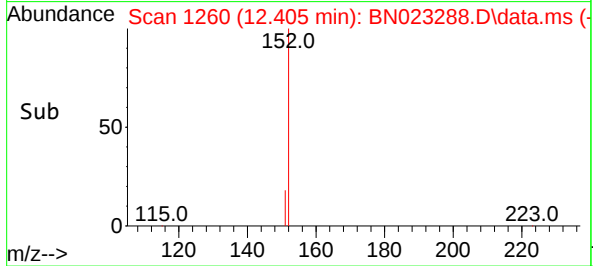
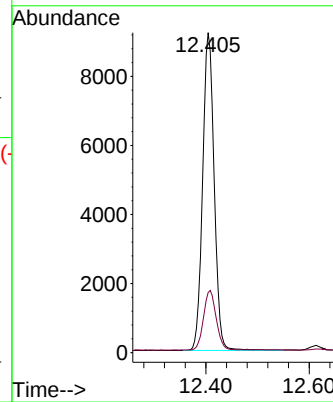
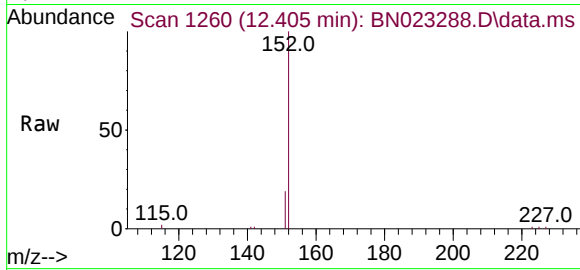




#11
2-Methylnaphthalene-d10
Concen: 0.374 ng
RT: 12.405 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

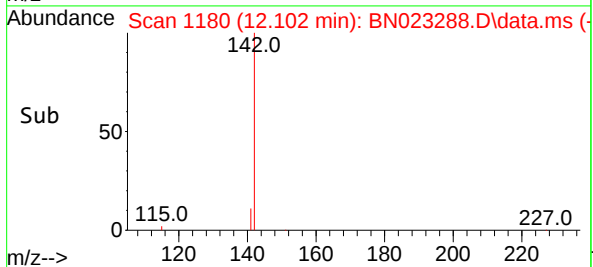
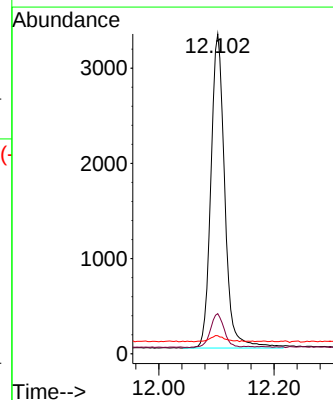
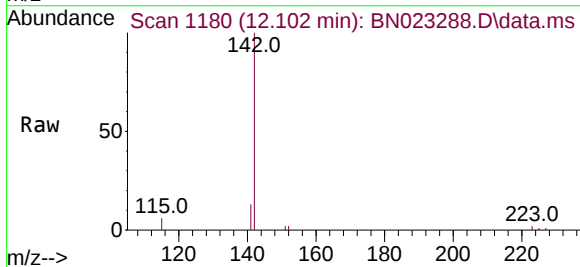
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

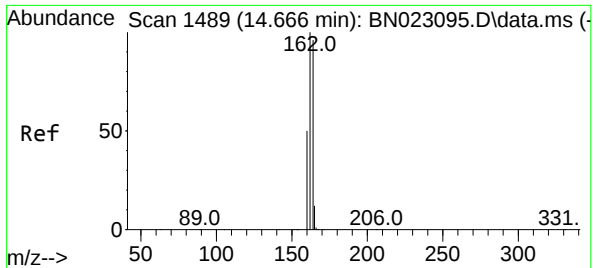
Tgt Ion:152 Resp: 16556
Ion Ratio Lower Upper
152 100
151 17.6 15.1 22.7



#12
2-Methylnaphthalene
Concen: 0.558 ng
RT: 12.102 min Scan# 1180
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:142 Resp: 5521
Ion Ratio Lower Upper
142 100
141 12.6 10.9 16.3
115 5.7 5.7 8.5#

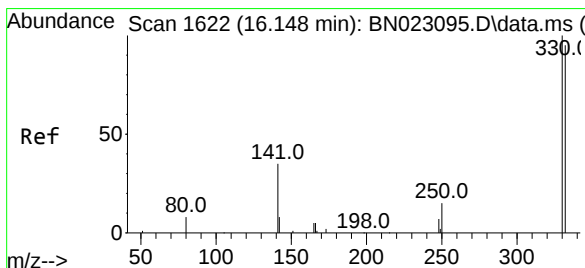
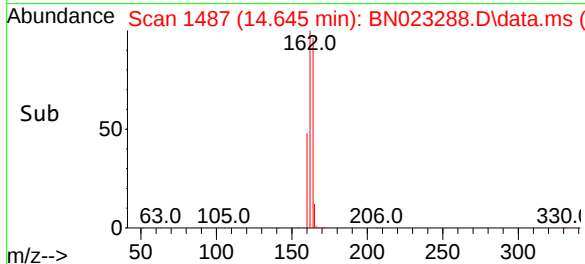
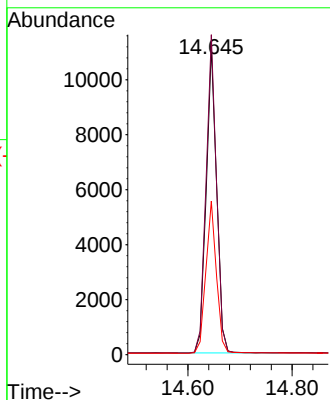
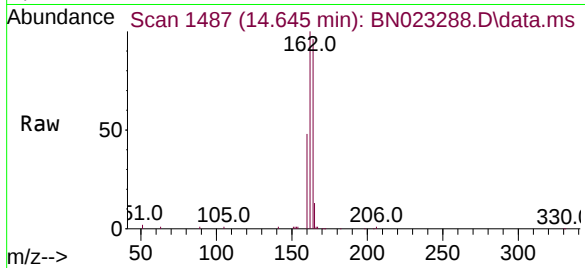




#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.645 min Scan# 1487
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

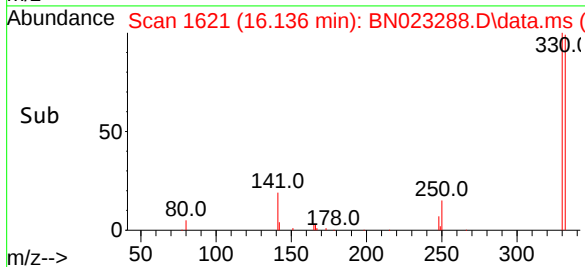
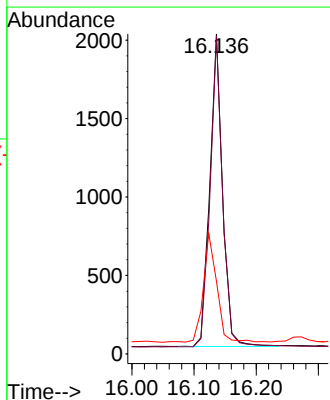
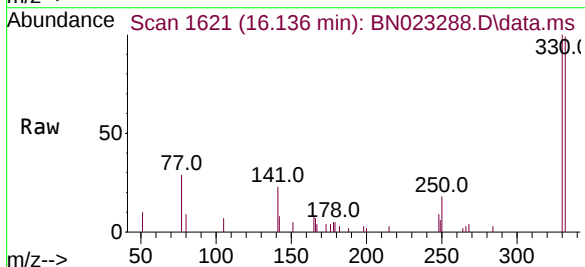
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

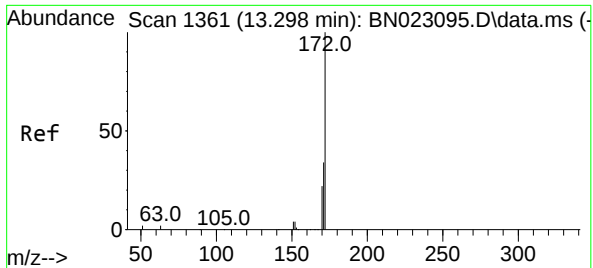
Tgt Ion:164 Resp: 15594
Ion Ratio Lower Upper
164 100
162 104.2 83.4 125.0
160 50.0 41.8 62.8



#14
2,4,6-Tribromophenol
Concen: 0.502 ng
RT: 16.136 min Scan# 1621
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:330 Resp: 2840
Ion Ratio Lower Upper
330 100
332 97.4 77.3 115.9
141 35.8 33.5 50.3

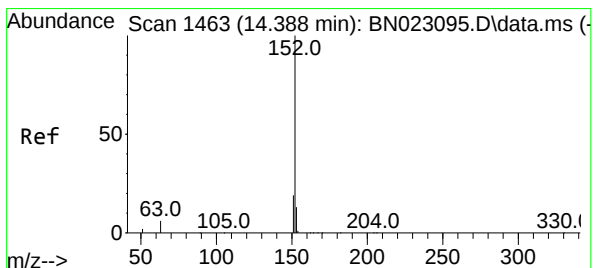
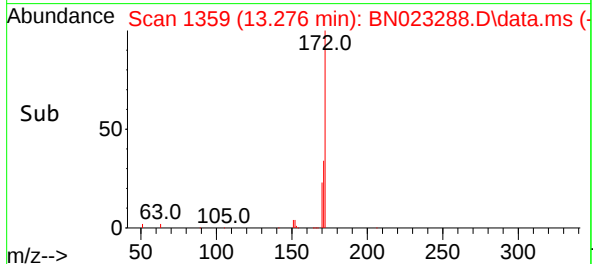
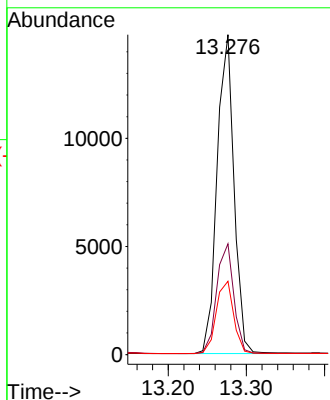
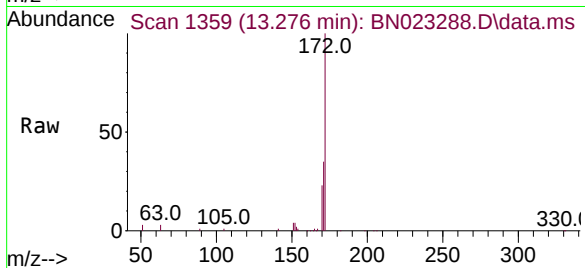




#15
2-Fluorobiphenyl
Concen: 0.357 ng
RT: 13.276 min Scan# 1359
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

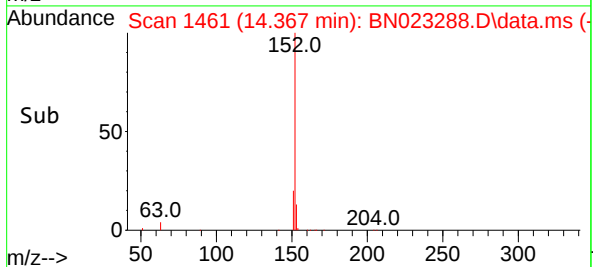
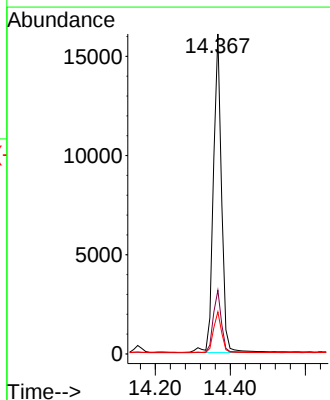
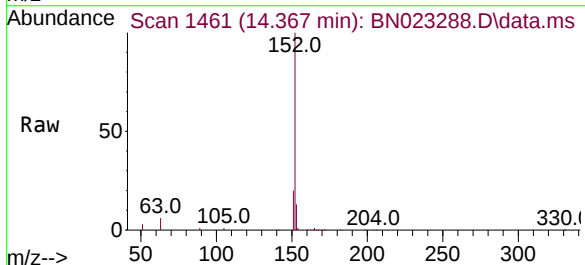
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

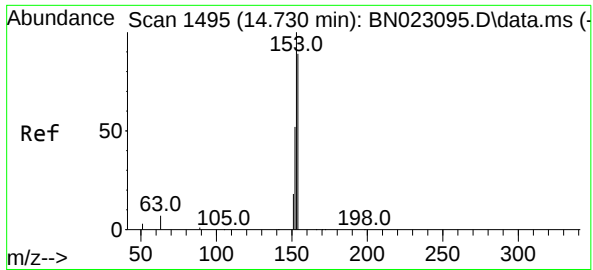
Tgt Ion	Ratio	Lower	Upper
172	100		
171	34.6	27.4	41.0
170	22.9	17.9	26.9



#16
Acenaphthylene
Concen: 0.387 ng
RT: 14.367 min Scan# 1461
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion	Ratio	Lower	Upper
152	100		
151	19.3	15.4	23.2
153	12.8	10.3	15.5

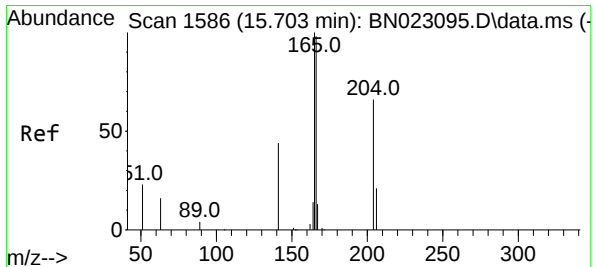
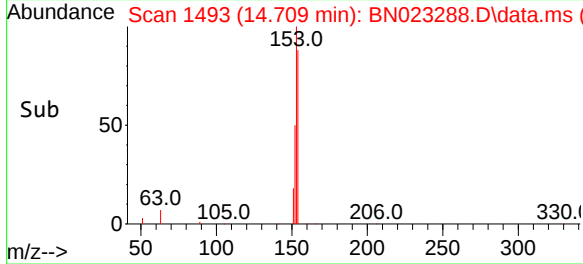
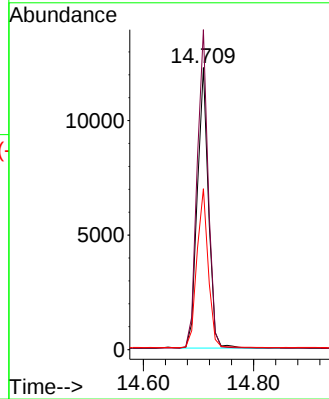
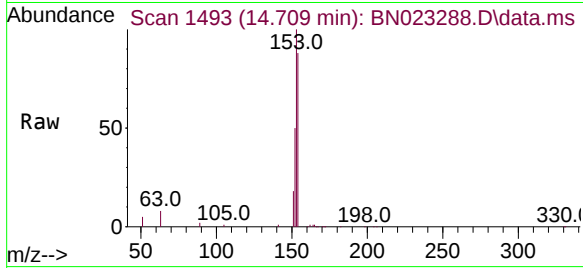




#17
Acenaphthene
Concen: 0.371 ng
RT: 14.709 min Scan# 1493
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

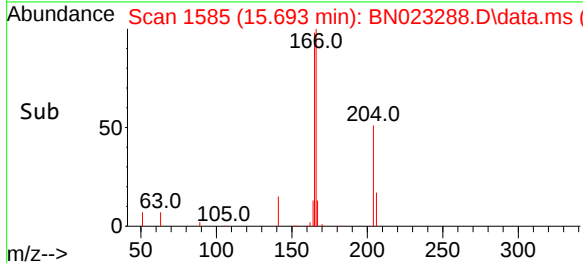
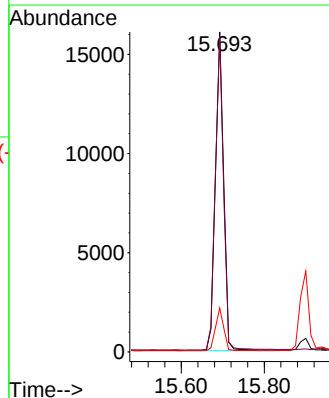
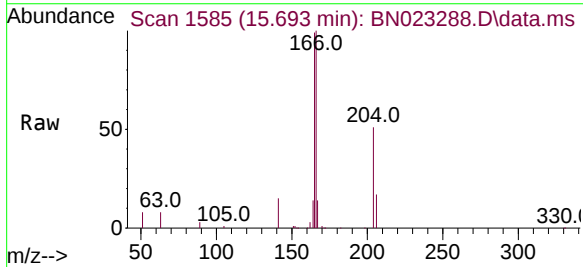
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

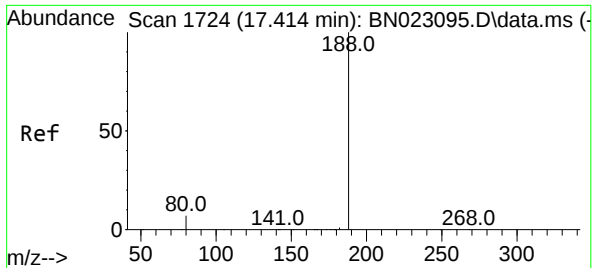
Tgt Ion:154 Resp: 17134
Ion Ratio Lower Upper
154 100
153 113.4 88.6 132.8
152 57.6 48.1 72.1



#18
Fluorene
Concen: 0.458 ng
RT: 15.693 min Scan# 1585
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:166 Resp: 23685
Ion Ratio Lower Upper
166 100
165 98.1 79.8 119.6
167 13.5 10.6 16.0





#19

Phenanthrene-d10

Concen: 0.400 ng

RT: 17.390 min Scan# 11

Delta R.T. -0.000 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

Instrument :

BNA_N

ClientSampleId :

PB149692BSD

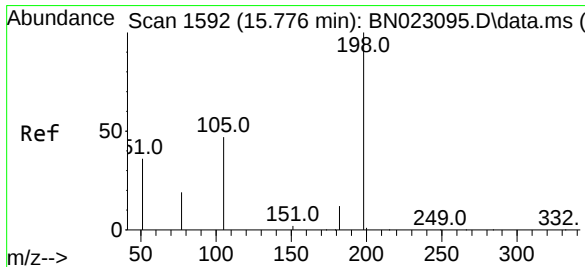
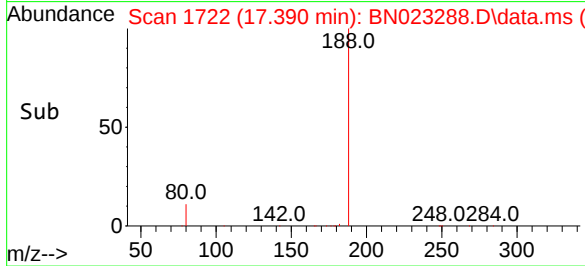
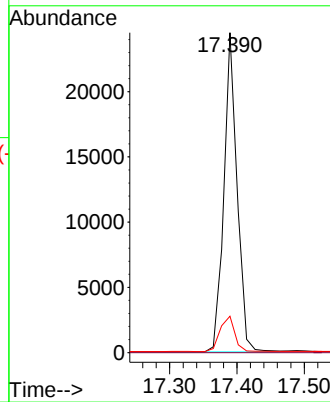
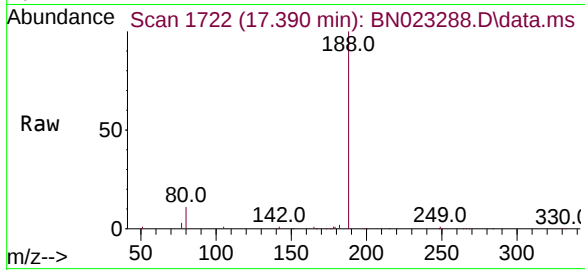
Tgt Ion:188 Resp: 33450

Ion Ratio Lower Upper

188 100

94 0.0 0.0 0.0

80 11.4 6.1 9.1#



#20

4,6-Dinitro-2-methylphenol

Concen: 0.325 ng

RT: 15.764 min Scan# 1591

Delta R.T. -0.000 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

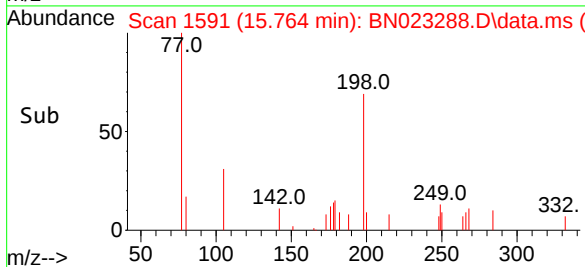
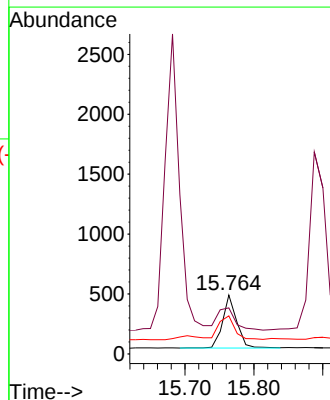
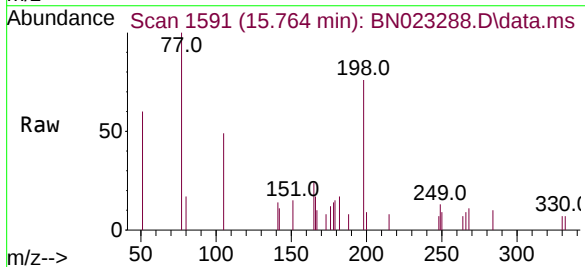
Tgt Ion:198 Resp: 614

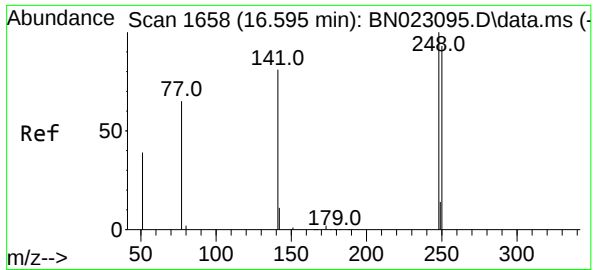
Ion Ratio Lower Upper

198 100

51 78.2 57.0 85.4

105 64.6 47.2 70.8

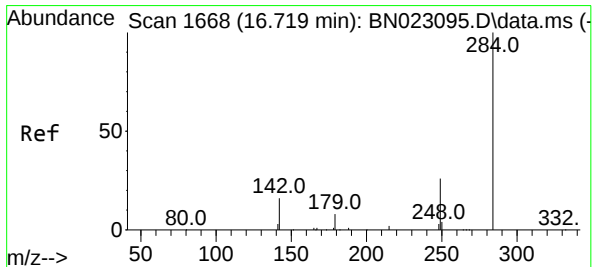
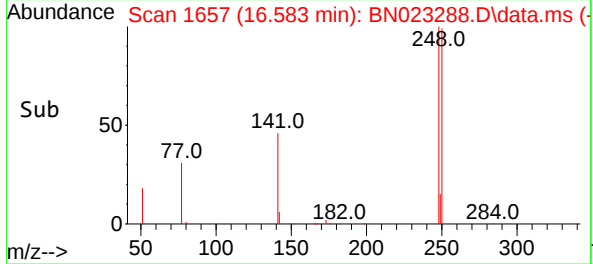
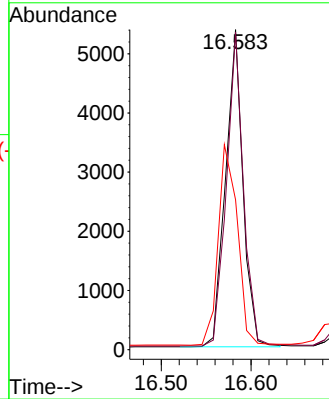
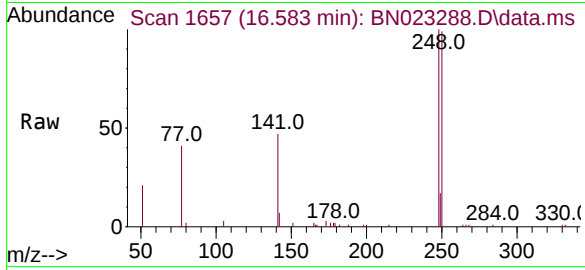




#21
4-Bromophenyl-phenylether
Concen: 0.406 ng
RT: 16.583 min Scan# 1657
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

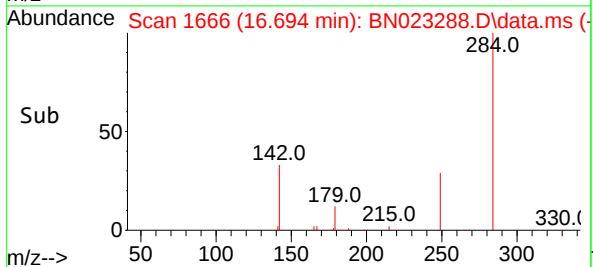
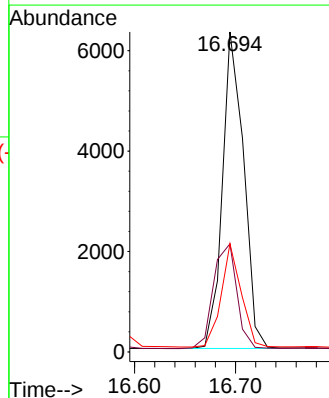
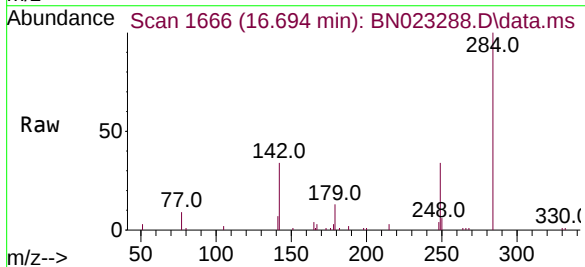
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

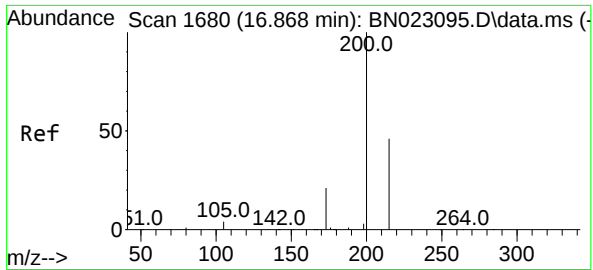
Tgt Ion	Ratio	Lower	Upper
248	100		
250	99.1	74.3	111.5
141	46.8	65.0	97.6



#22
Hexachlorobenzene
Concen: 0.394 ng
RT: 16.694 min Scan# 1666
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion	Ratio	Lower	Upper
284	100		
142	36.5	31.0	46.4
249	30.5	24.4	36.6

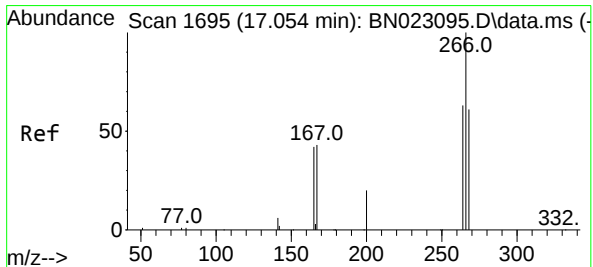
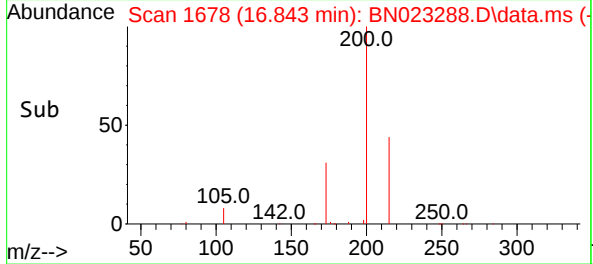
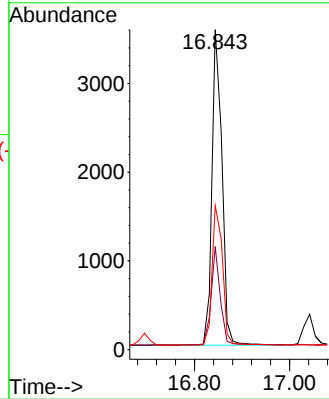
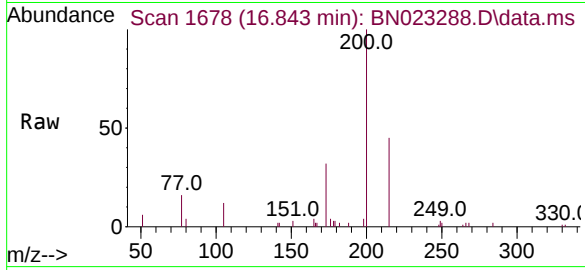




#23
Atrazine
Concen: 0.411 ng
RT: 16.843 min Scan# 1678
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

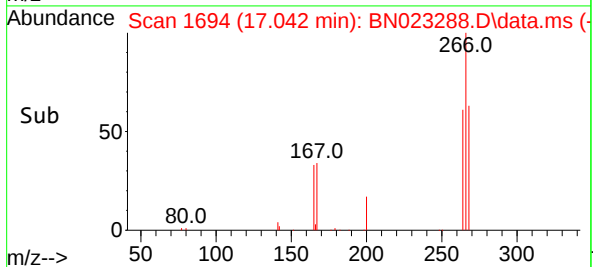
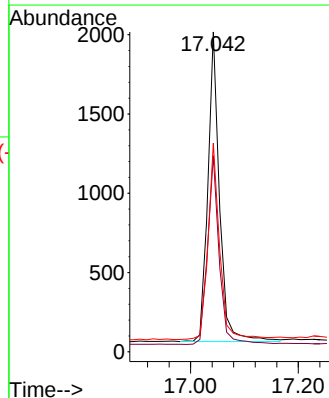
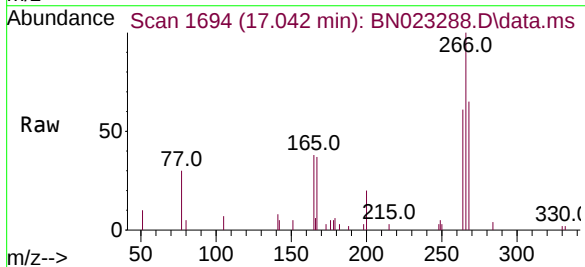
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

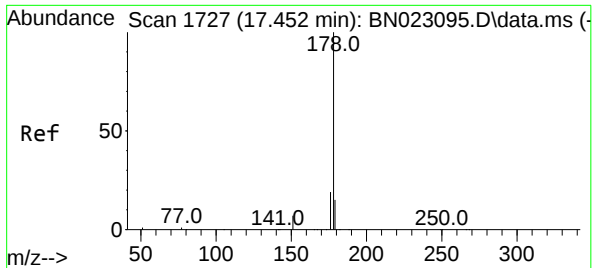
Tgt Ion:200 Resp: 5175
Ion Ratio Lower Upper
200 100
173 32.2 18.2 27.4#
215 45.0 38.0 57.0



#24
Pentachlorophenol
Concen: 0.362 ng
RT: 17.042 min Scan# 1694
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:266 Resp: 2942
Ion Ratio Lower Upper
266 100
264 61.6 50.1 75.1
268 63.2 49.7 74.5

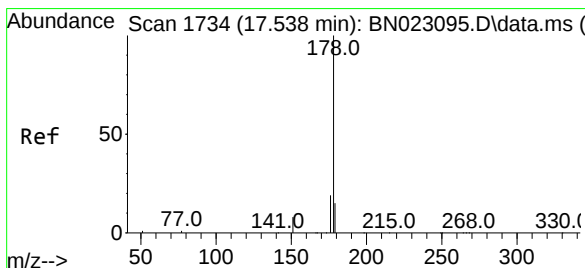
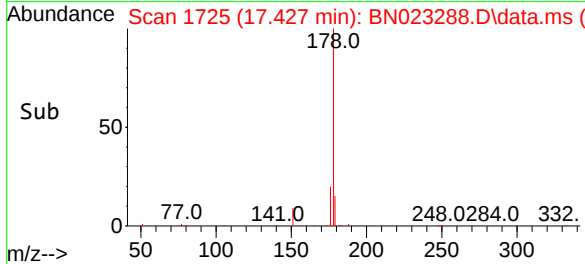
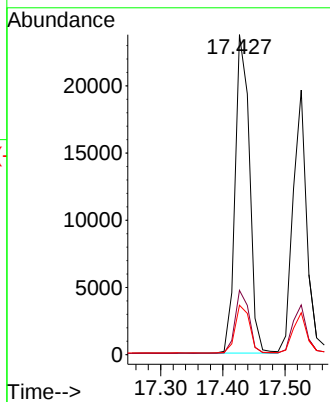
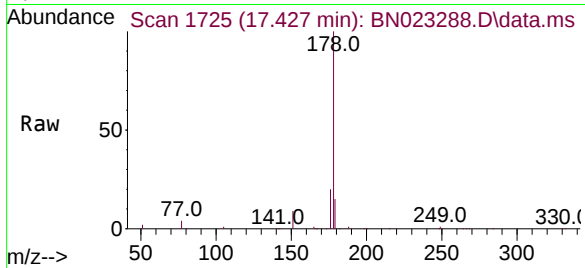




#25
Phenanthrene
Concen: 0.379 ng
RT: 17.427 min Scan# 1725
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

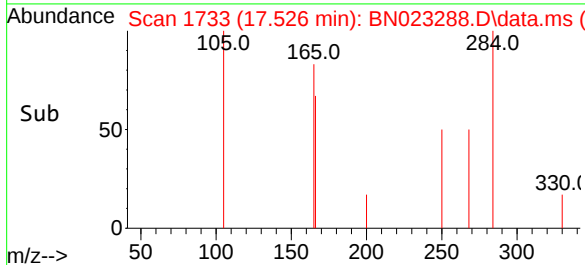
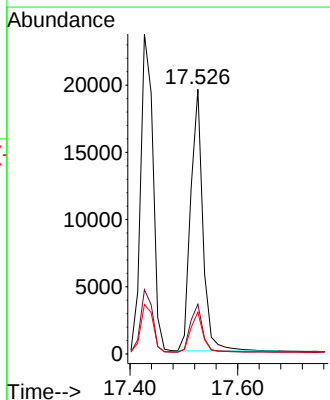
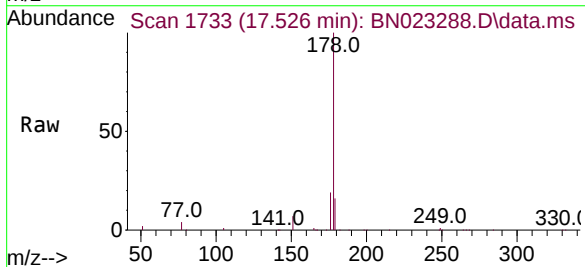
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

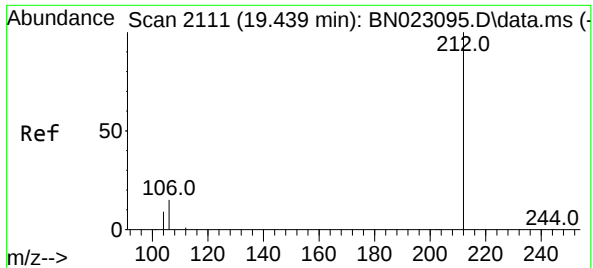
Tgt Ion:178 Resp: 37812
Ion Ratio Lower Upper
178 100
176 19.4 15.4 23.2
179 15.4 12.2 18.2



#26
Anthracene
Concen: 0.384 ng
RT: 17.526 min Scan# 1733
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:178 Resp: 30463
Ion Ratio Lower Upper
178 100
176 18.8 15.1 22.7
179 15.4 12.2 18.4

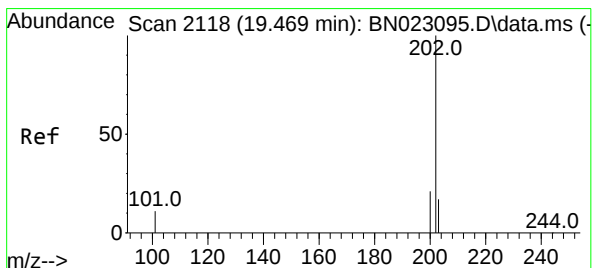
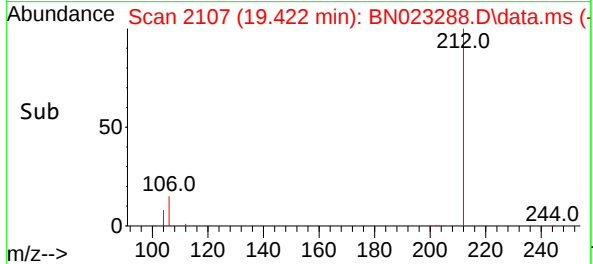
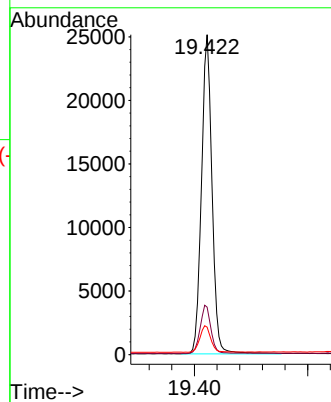
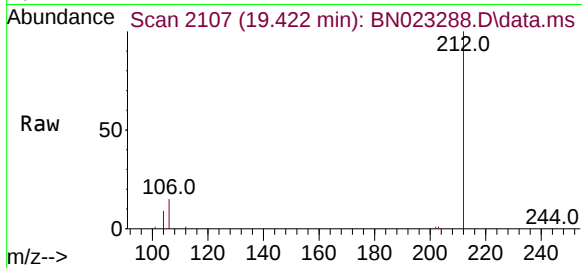




#27
Fluoranthene-d10
Concen: 0.412 ng
RT: 19.422 min Scan# 2111
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

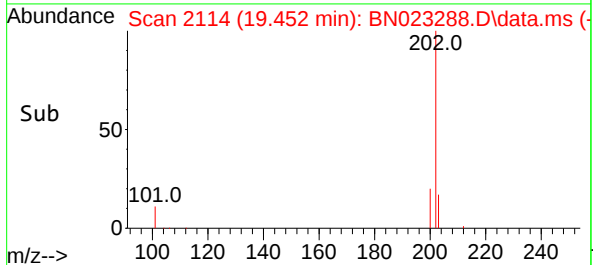
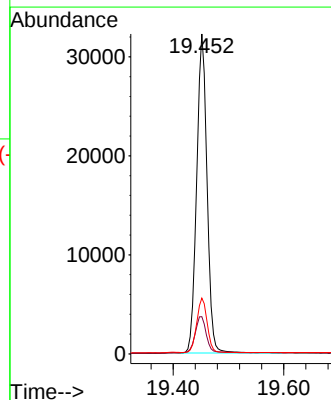
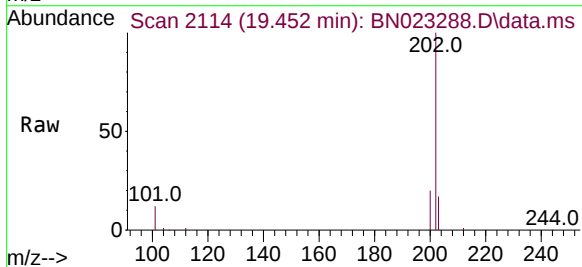
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

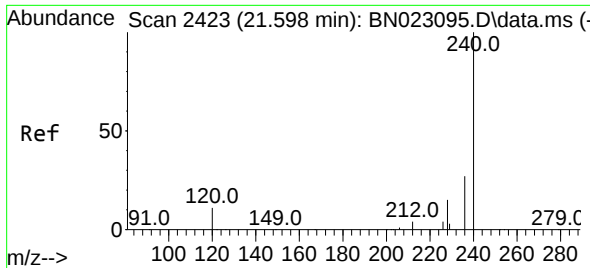
Tgt Ion	Ratio	Lower	Upper
212	100		
106	15.4	13.0	19.4
104	8.5	7.5	11.3



#28
Fluoranthene
Concen: 0.392 ng
RT: 19.452 min Scan# 2114
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion	Ratio	Lower	Upper
202	100		
101	12.5	9.7	14.5
203	17.1	13.8	20.6

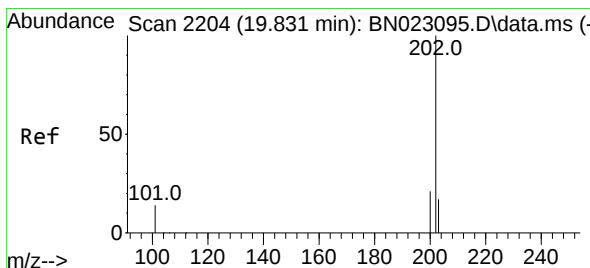
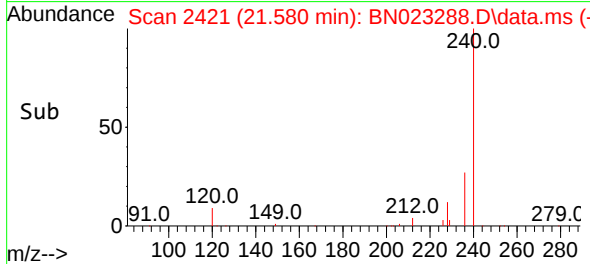
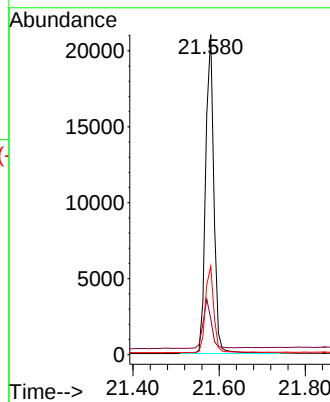
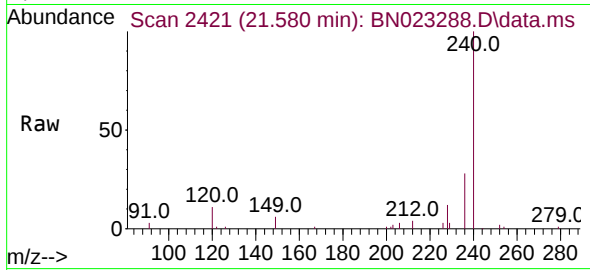




#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.580 min Scan# 2423
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

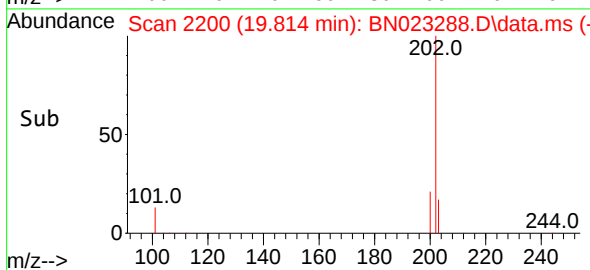
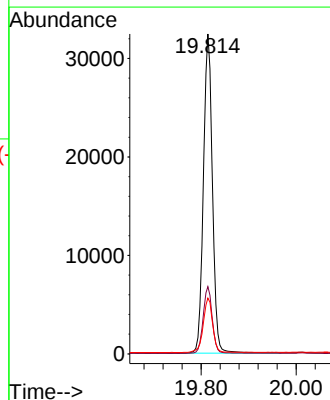
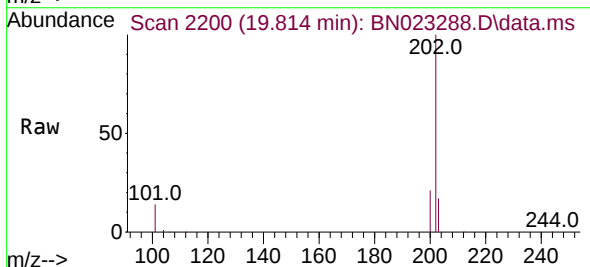
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

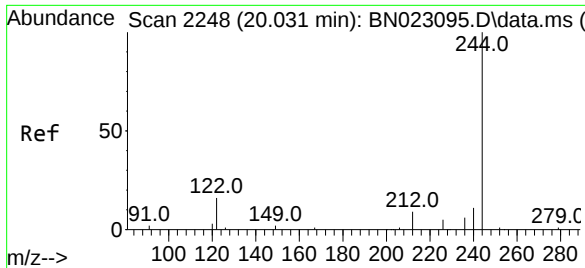
Tgt Ion	Ratio	Lower	Upper
240	100		
120	11.2	10.1	15.1
236	27.6	22.2	33.4



#30
Pyrene
Concen: 0.420 ng
RT: 19.814 min Scan# 2200
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion	Ratio	Lower	Upper
202	100		
200	21.0	16.9	25.3
203	17.7	14.2	21.4

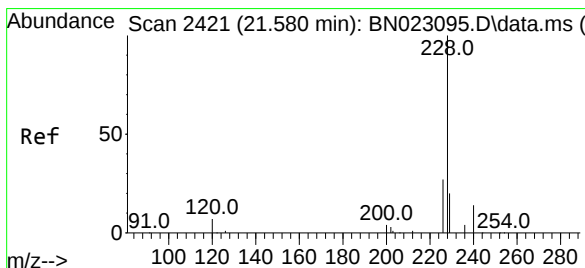
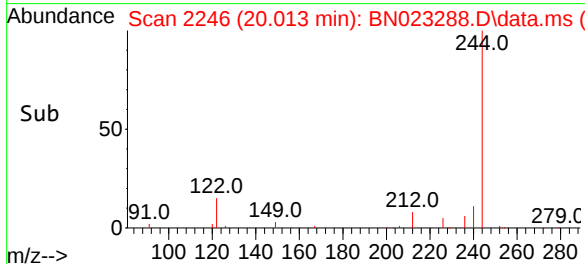
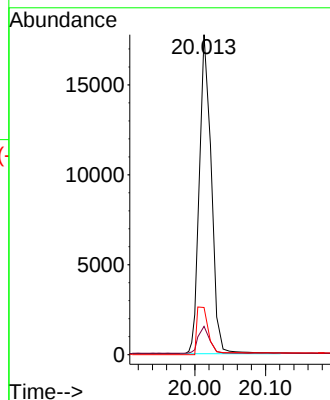
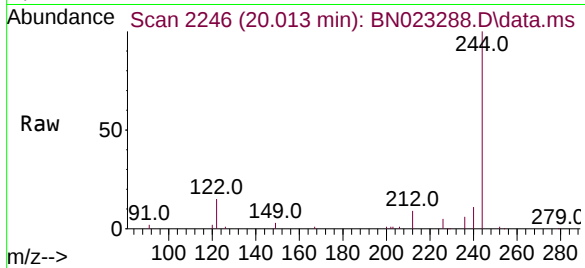




#31
Terphenyl-d14
Concen: 0.422 ng
RT: 20.013 min Scan# 21
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

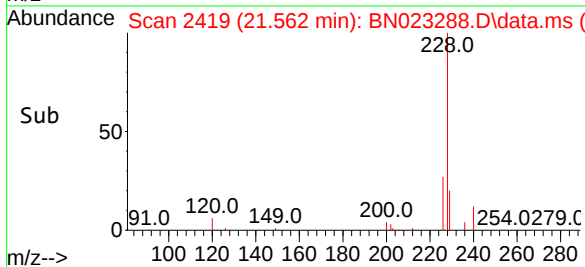
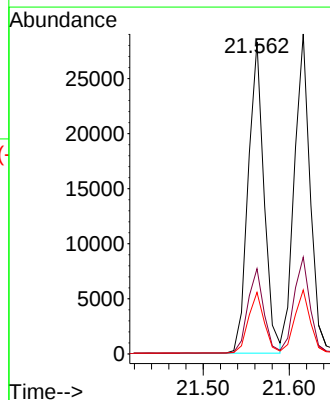
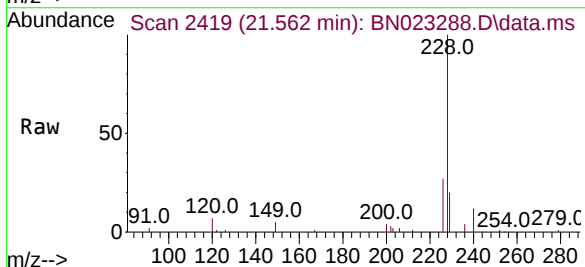
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

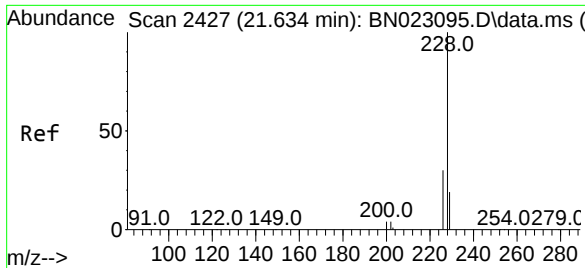
Tgt Ion:244 Resp: 19027
Ion Ratio Lower Upper
244 100
212 8.8 7.6 11.4
122 14.7 12.6 18.8



#32
Benzo(a)anthracene
Concen: 0.403 ng
RT: 21.562 min Scan# 2419
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:228 Resp: 36084
Ion Ratio Lower Upper
228 100
226 27.3 22.0 33.0
229 19.7 15.8 23.8





#33

Chrysene

Concen: 0.367 ng

RT: 21.616 min Scan# 24

Delta R.T. -0.000 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

Instrument :

BNA_N

ClientSampleId :

PB149692BSD

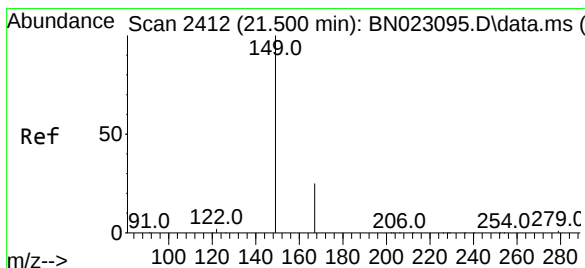
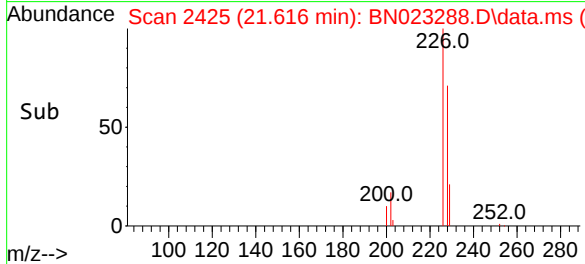
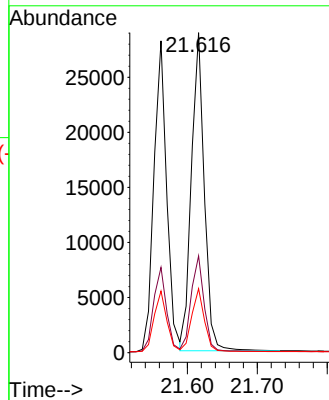
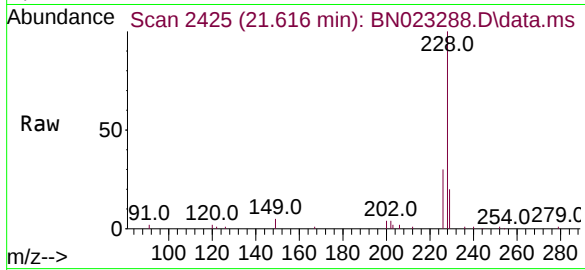
Tgt Ion:228 Resp: 36965

Ion Ratio Lower Upper

228 100

226 30.2 24.4 36.6

229 20.0 15.6 23.4



#34

Bis(2-ethylhexyl)phthalate

Concen: 0.525 ng

RT: 21.482 min Scan# 2410

Delta R.T. -0.000 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

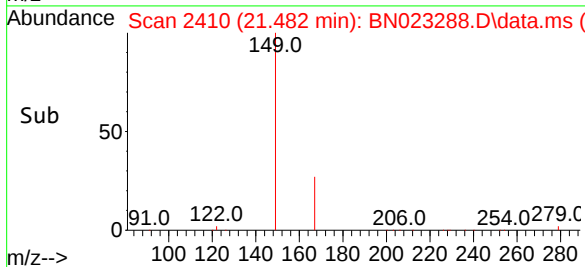
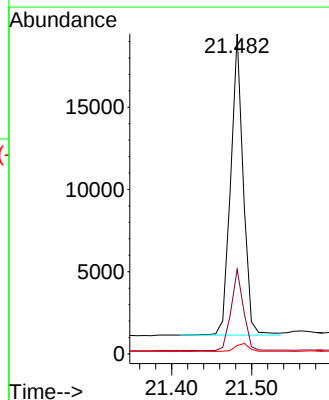
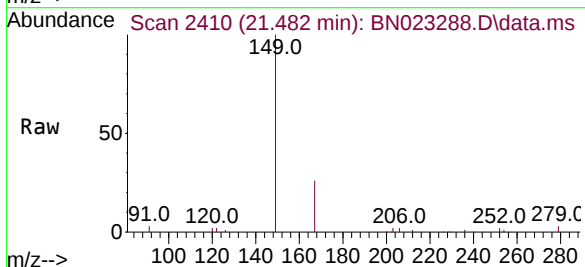
Tgt Ion:149 Resp: 19873

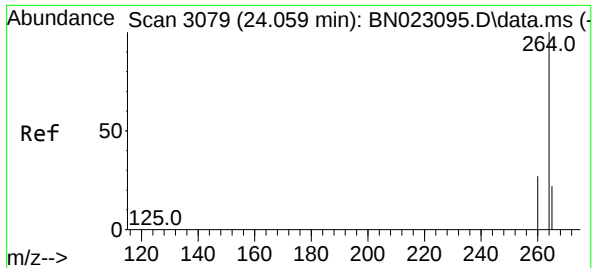
Ion Ratio Lower Upper

149 100

167 26.8 20.2 30.2

279 2.9 2.3 3.5

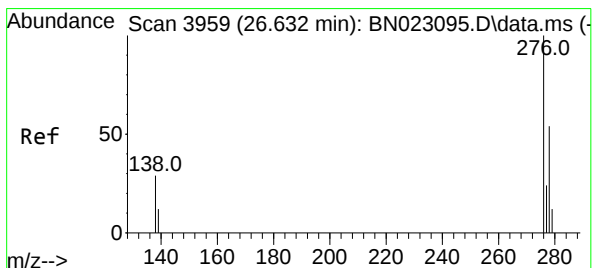
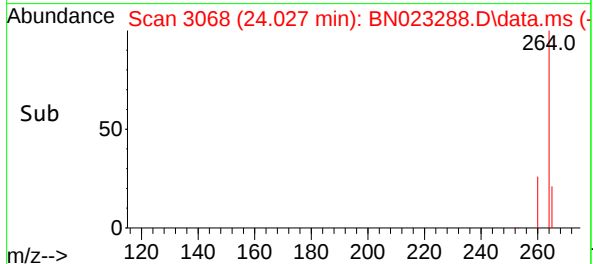
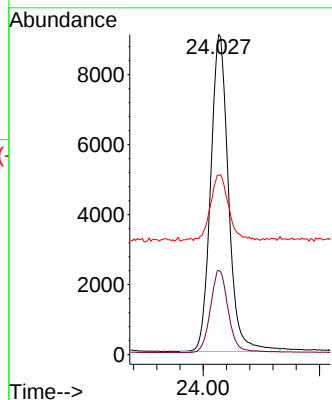
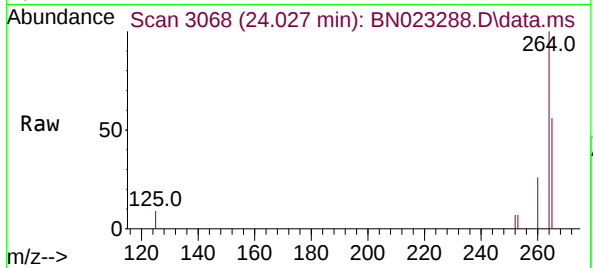




#35
Perylene-d12
Concen: 0.400 ng
RT: 24.027 min Scan# 3079
Delta R.T. -0.000 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

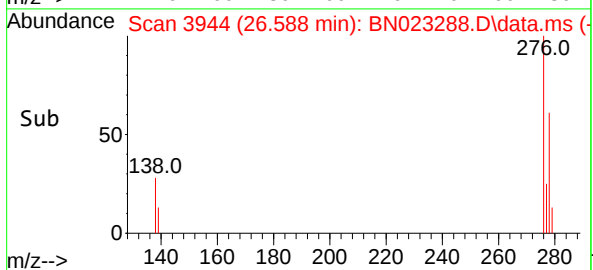
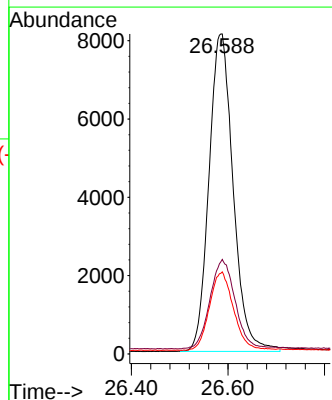
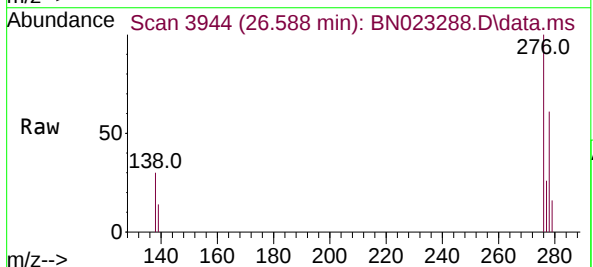
Instrument :
BNA_N
ClientSampleId :
PB149692BSD

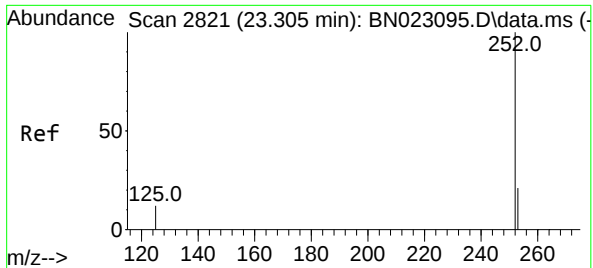
Tgt Ion:264	Resp:	19326
Ion Ratio	Lower	Upper
264	100	
260	26.3	21.7 32.5
265	56.1	43.2 64.8



#36
Indeno(1,2,3-cd)pyrene
Concen: 0.326 ng
RT: 26.588 min Scan# 3944
Delta R.T. 0.003 min
Lab File: BN023288.D
Acq: 19 Dec 2022 16:21

Tgt Ion:276	Resp:	28213
Ion Ratio	Lower	Upper
276	100	
138	29.2	25.0 37.6
277	24.4	19.8 29.8





#37

Benzo(b)fluoranthene

Concen: 0.379 ng

RT: 23.276 min Scan# 2811

Delta R.T. -0.000 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

Instrument :

BNA_N

ClientSampleId :

PB149692BSD

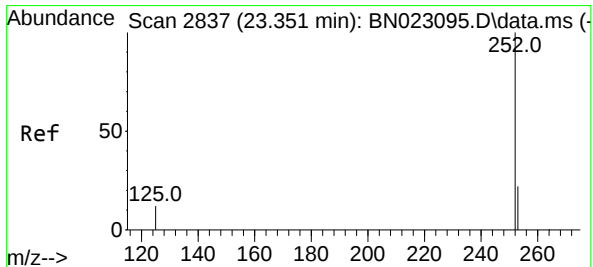
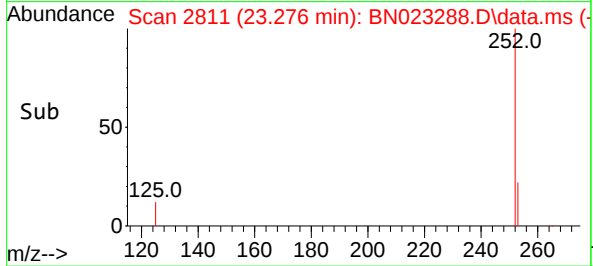
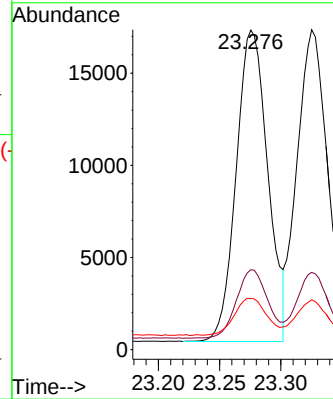
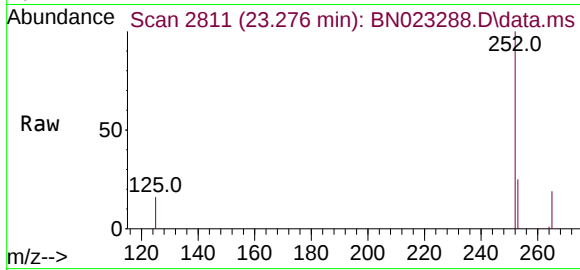
Tgt Ion:252 Resp: 30332

Ion Ratio Lower Upper

252 100

253 25.0 19.0 28.4

125 16.0 12.8 19.2



#38

Benzo(k)fluoranthene

Concen: 0.360 ng

RT: 23.325 min Scan# 2828

Delta R.T. -0.000 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

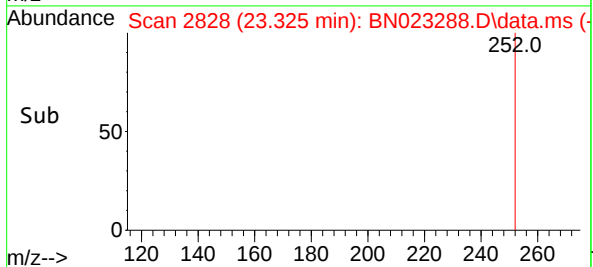
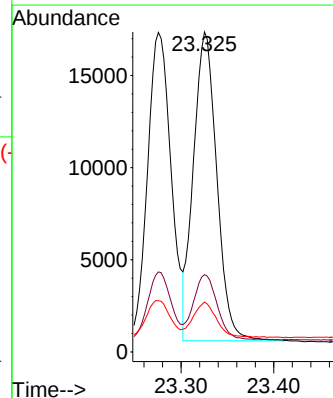
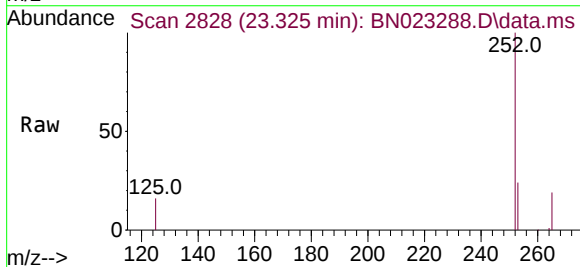
Tgt Ion:252 Resp: 29310

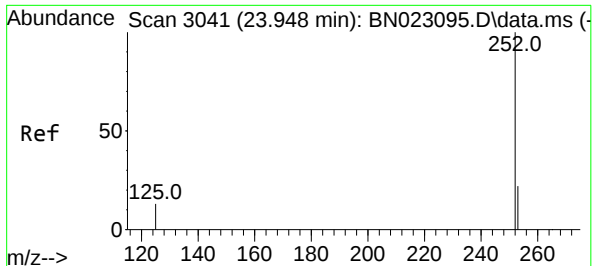
Ion Ratio Lower Upper

252 100

253 24.1 19.1 28.7

125 15.6 12.5 18.7





#39

Benzo(a)pyrene

Concen: 0.376 ng

RT: 23.919 min Scan# 3041

Delta R.T. 0.003 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

Instrument :

BNA_N

ClientSampleId :

PB149692BSD

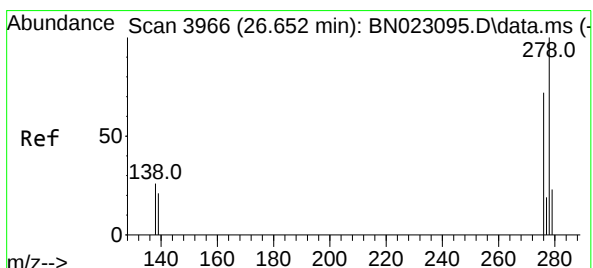
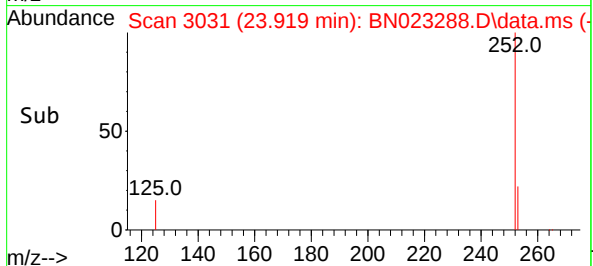
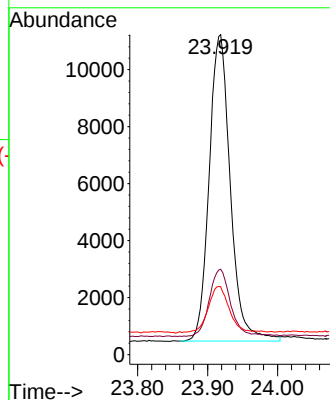
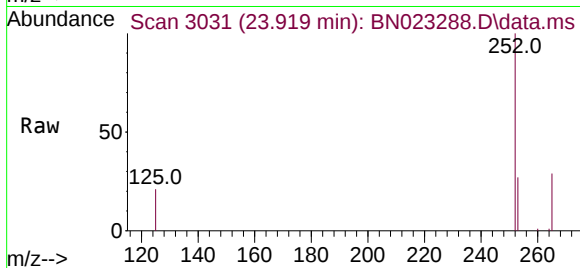
Tgt Ion:252 Resp: 22613

Ion Ratio Lower Upper

252 100

253 26.7 20.6 30.8

125 21.2 15.8 23.8



#40

Dibenzo(a,h)anthracene

Concen: 0.324 ng

RT: 26.603 min Scan# 3949

Delta R.T. -0.003 min

Lab File: BN023288.D

Acq: 19 Dec 2022 16:21

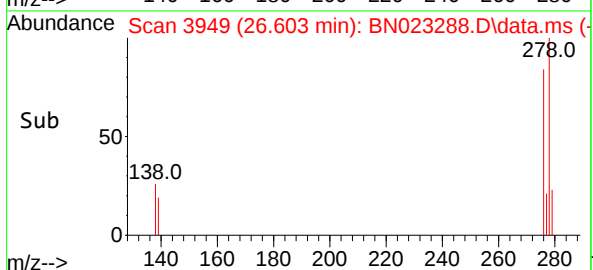
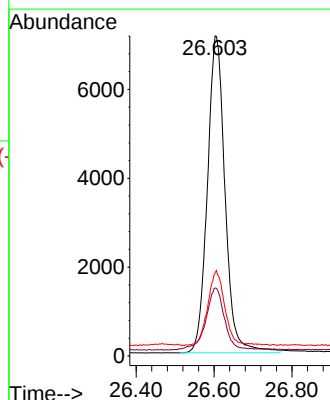
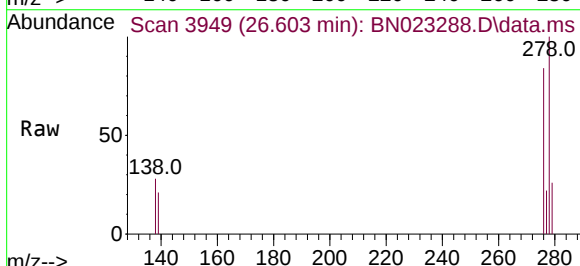
Tgt Ion:278 Resp: 22498

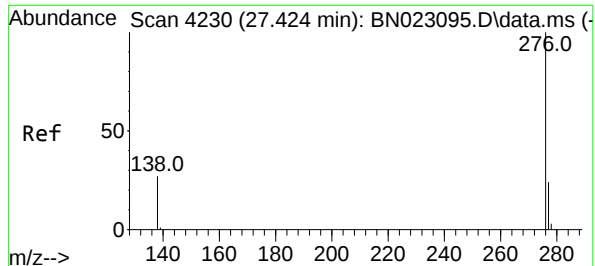
Ion Ratio Lower Upper

278 100

139 21.2 17.5 26.3

279 26.0 20.5 30.7





#41

Benzo(g,h,i)perylene

Concen: 0.314 ng

RT: 27.369 min Scan# 41

Delta R.T. -0.003 min

Lab File: BN023288.D

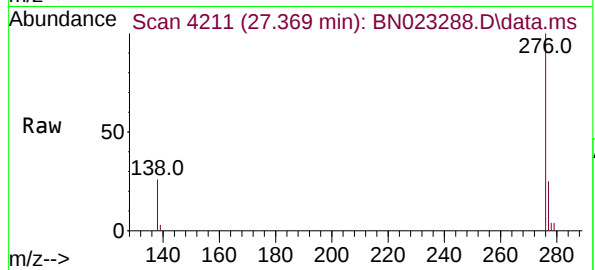
Acq: 19 Dec 2022 16:21

Instrument :

BNA_N

ClientSampleId :

PB149692BSD



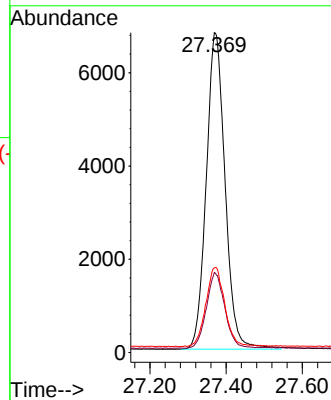
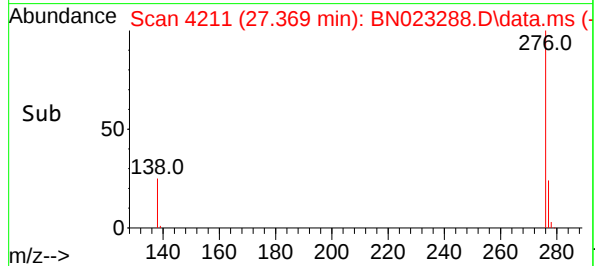
Tgt Ion:276 Resp: 23348

Ion Ratio Lower Upper

276 100

277 25.0 19.9 29.9

138 26.5 22.2 33.2





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

Manual Integration Report

Sequence:	BN120822	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
SSTDICC5.0	BN023099.D	1,4-Dioxane	Christian	12/13/2022 10:05:00 AM	Jagrut	12/13/2022 10:06:45 AM	Peak Integrated by Software

Manual Integration Report

Sequence:	BN121922	Instrument	BNA_n
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Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason
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Daily Analysis Runlog For Sequence/QC Batch ID # BN120822

Review By	Christian	Review On	12/13/2022 10:05:36 AM
Supervise By	Jagrut	Supervise On	12/13/2022 10:07:05 AM
SubDirectory	BN120822	HP Acquire Method	BNA_N,8270_SIM HP Processing Method Bn120822
STD. NAME	STD REF.#		
Tune/Reschk	SP6029		
Initial Calibration Stds	SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078		
CCC	SP6082		
Internal Standard/PEM	SP6065,10ul/1000ul sample		
ICV/I.BLK	SP6031		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	Sampled	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN023092.D	08 Dec 2022 12:45	CG/JU	Ok
2	SSTDICC0.1	BN023093.D	08 Dec 2022 14:00	CG/JU	Ok
3	SSTDICC0.2	BN023094.D	08 Dec 2022 14:37	CG/JU	Ok
4	SSTDICCC0.4	BN023095.D	08 Dec 2022 15:13	CG/JU	Ok
5	SSTDICC0.8	BN023096.D	08 Dec 2022 15:50	CG/JU	Ok
6	SSTDICC1.6	BN023097.D	08 Dec 2022 16:26	CG/JU	Ok
7	SSTDICC3.2	BN023098.D	08 Dec 2022 17:03	CG/JU	Ok
8	SSTDICC5.0	BN023099.D	08 Dec 2022 17:40	CG/JU	Ok,M
9	SSTDICV0.4	BN023100.D	08 Dec 2022 18:17	CG/JU	Ok
10	PB149367BL	BN023101.D	08 Dec 2022 19:30	CG/JU	Not Ok

M : Manual Integration

Daily Analysis Runlog For Sequence/QC Batch ID # BN121922

Review By	Christian	Review On	12/20/2022 9:10:56 AM
Supervise By	mohammad	Supervise On	12/20/2022 5:04:40 PM
SubDirectory	BN121922	HP Acquire Method	BNA_N,8270_SIM HP Processing Method Bn120822
STD. NAME	STD REF.#		
Tune/Reschk	SP6029		
Initial Calibration Stds	SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078		
CCC	SP6082		
Internal Standard/PEM	SP6065,10ul/1000ul sample		
ICV/I.BLK	SP6031		
Surrogate Standard			
MS/MSD Standard			
LCS Standard			

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN023279.D	19 Dec 2022 10:45	CG/JU	Ok
2	SSTDCCC0.4	BN023280.D	19 Dec 2022 11:22	CG/JU	Ok
3	PB149692BL	BN023281.D	19 Dec 2022 12:02	CG/JU	Ok
4	N6070-01	BN023282.D	19 Dec 2022 12:40	CG/JU	Ok
5	N6070-03	BN023283.D	19 Dec 2022 13:16	CG/JU	Ok
6	N6070-04	BN023284.D	19 Dec 2022 13:53	CG/JU	Ok
7	N6070-05	BN023285.D	19 Dec 2022 14:30	CG/JU	Ok
8	N6095-01	BN023286.D	19 Dec 2022 15:07	CG/JU	Ok
9	PB149692BS	BN023287.D	19 Dec 2022 15:44	CG/JU	Ok
10	PB149692BSD	BN023288.D	19 Dec 2022 16:21	CG/JU	Ok

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN120822

Review By	Christian	Review On	12/13/2022 10:05:36 AM				
Supervise By	Jagrut	Supervise On	12/13/2022 10:07:05 AM				
SubDirectory	BN120822	HP Acquire Method	BNA_N,8270_5HP Processing Method Bn120822				
STD. NAME		STD REF.#					
Tune/Reschk		SP6029					
Initial Calibration Stds		SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078					
CCC		SP6082					
Internal Standard/PEM		SP6065,10ul/1000ul sample					
ICV/I.BLK		SP6031					
Surrogate Standard							
MS/MSD Standard							
LCS Standard							

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN023092.D	08 Dec 2022 12:45		CG/JU	Ok
2	SSTDICC0.1	SSTDICC0.1	BN023093.D	08 Dec 2022 14:00	Compound #20 removed from 0.1ppm	CG/JU	Ok
3	SSTDICC0.2	SSTDICC0.2	BN023094.D	08 Dec 2022 14:37	Compound #20 Kept on LR	CG/JU	Ok
4	SSTDICCC0.4	SSTDICCC0.4	BN023095.D	08 Dec 2022 15:13	Method is Good For DOD	CG/JU	Ok
5	SSTDICC0.8	SSTDICC0.8	BN023096.D	08 Dec 2022 15:50		CG/JU	Ok
6	SSTDICC1.6	SSTDICC1.6	BN023097.D	08 Dec 2022 16:26		CG/JU	Ok
7	SSTDICC3.2	SSTDICC3.2	BN023098.D	08 Dec 2022 17:03	Compound #12 removed from 3.2ppm	CG/JU	Ok
8	SSTDICC5.0	SSTDICC5.0	BN023099.D	08 Dec 2022 17:40	Compound #12 removed from 5.0ppm	CG/JU	Ok,M
9	SSTDICV0.4	ICVBN120822	BN023100.D	08 Dec 2022 18:17		CG/JU	Ok
10	PB149367BL	PB149367BL	BN023101.D	08 Dec 2022 19:30	END CCC Missing	CG/JU	Not Ok

M : Manual Integration

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QC Batch ID # BN121922

Review By	Christian	Review On	12/20/2022 9:10:56 AM				
Supervise By	mohammad	Supervise On	12/20/2022 5:04:40 PM				
SubDirectory	BN121922	HP Acquire Method	BNA_N,8270_5HP Processing Method Bn120822				
STD. NAME		STD REF.#					
Tune/Reschk		SP6029					
Initial Calibration Stds		SP6085,SP6083,SP6082,SP6081,SP6080,SP6079,SP6078					
CCC		SP6082					
Internal Standard/PEM		SP6065,10ul/1000ul sample					
ICV/I.BLK		SP6031					
Surrogate Standard							
MS/MSD Standard							
LCS Standard							

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN023279.D	19 Dec 2022 10:45		CG/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN023280.D	19 Dec 2022 11:22		CG/JU	Ok
3	PB149692BL	PB149692BL	BN023281.D	19 Dec 2022 12:02		CG/JU	Ok
4	N6070-01	GW-BR-04-226-245-12	BN023282.D	19 Dec 2022 12:40		CG/JU	Ok
5	N6070-03	OWBR-01-160-180-12	BN023283.D	19 Dec 2022 13:16		CG/JU	Ok
6	N6070-04	OWBR-02-160-180-12	BN023284.D	19 Dec 2022 13:53		CG/JU	Ok
7	N6070-05	OWBR-03-128-148-12	BN023285.D	19 Dec 2022 14:30		CG/JU	Ok
8	N6095-01	GW-BR-04-270-289-12	BN023286.D	19 Dec 2022 15:07		CG/JU	Ok
9	PB149692BS	PB149692BS	BN023287.D	19 Dec 2022 15:44		CG/JU	Ok
10	PB149692BSD	PB149692BSD	BN023288.D	19 Dec 2022 16:21		CG/JU	Ok

M : Manual Integration

SOP ID: M3510C,3580A-Extraction SVOC-19

Clean Up SOP #: N/A

Matrix: Water

Weigh By: N/A

Balance check: N/A

Balance ID: N/A

pH Strip Lot#: E3433

Extraction By: RP

Filter By: RS

pH Meter ID: N/A

Hood ID: 4,5,6,7

Extraction Start Date: 12/16/2022

Extraction Start Time: 08:59

Extraction End Date: 12/16/2022

Extraction End Time: 15:00

Concentration By: RS

Supervisor By: rajesh

Extraction Method: ☒ Separatory Funnel ☐ Continuous Liquid/Liquid ☐ Sonication ☐ Waste Dilution ☐ Soxhlet

Standard Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	0.4 PPM	SP6059
Surrogate	1.0ML	0.4 PPM	SP6064
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	E3446
Baked Na2SO4	N/A	EP2279
10N NaOH	N/A	EP2278
H2SO4 1:1	N/A	EP2260
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A
N/A	N/A	N/A

Extraction Conformance/Non-Conformance Comments:

N6095 added in batch at 09:53. pH Adjusted < 2 with 1:1 H2SO4 & >11 with 10 N NaOH.

KD Bath ID: W.BATH-1,2

KD Bath Temperature: 60 °C

Envap ID: NE VAP-02

Envap Temperature: 40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
12/16/22	RP (Eat. Lab)	JH / SVOC Lab
15:05	Preparation Group	Analysis Group

Analytical Method: M3510C,3580A-Extraction SVOC-19

Concentration Date: 12/16/2022

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB149692BL	SBLK692	SVOC-SIMGrou p1	1000.0	6	RUPESEH	rajesh	1			SEP-09
PB149692BS	SLCS692	SVOC-SIMGrou p1	1000.0	6	RUPESEH	rajesh	1			10
PB149692BS D	SLCSD692	SVOC-SIMGrou p1	1000.0	6	RUPESEH	rajesh	1			11
N6070-01	GW-BR-04-226-245-1214 22	SVOC-SIMGrou p1	980.0	6	RUPESEH	rajesh	1	C		12
N6070-03	GW-BR-01-160-180-1214 22 <i>OWBR</i>	SVOC-SIMGrou p1	970.0	6	RUPESEH	rajesh	1	C		13
N6070-04	GW-BR-02-160-180-1214 22 <i>OWBR</i>	SVOC-SIMGrou p1	960.0	6	RUPESEH	rajesh	1	C		14
N6070-05	GW-BR-03-128-148-1214 22 <i>OWBR</i>	SVOC-SIMGrou p1	960.0	6	RUPESEH	rajesh	1	C		15
N6095-01	GW-BR-04-270-289-1215 22	SVOC-SIMGrou p1	1000.0	6	RUPESEH	rajesh	1	C		16

* Extracts relinquished on the same date as received.

WORKLIST(Hardcopy Internal Chain)

WorkList Name : N6070

WorkList ID : 165856

Department : Extraction

Date : 12-16-2022 08:50:48

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
12/16/2022	Water	N6070-01	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-04-226-245-121422	12/14/2022	8270-Modified
12/16/2022	Water	N6070-03	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-01-160-180-121422	12/14/2022	8270-Modified
12/16/2022	Water	N6070-04	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-02-160-180-121422	12/14/2022	8270-Modified
12/16/2022	Water	N6070-05	SVOC-SIMGroup1	Cool 4 deg C	JACO05	M11	GW-BR-03-128-148-121422	12/14/2022	8270-Modified

Date/Time 12/16/22 8:59

Raw Sample Received by: PS (St. Lab)

Raw Sample Relinquished by: L-C (sm)

Date/Time 12/16/22 9:28

Raw Sample Received by: L-C (sm)

Raw Sample Relinquished by: PS (St. Lab)

WORKLIST(Hardcopy Internal Chain)

WorkList Name : n6095

WorkList ID : 165889

Department : Extraction

Date : 12-16-2022 09:53:03

Due Date	Matrix	Sample	Test	Preservative	Customer	Raw Sample Storage Location	Customer Sample	Collect Date	Method
12/19/2022	Water	N6095-01	SVOC-SIMGroup1	Cool 4 deg C	JACO05	N11	GW-BR-04-270-289-121522	12/15/2022	8270-Modified

Date/Time 12/16/22 9:53

Raw Sample Received by: RS (Est. Lab)

Raw Sample Relinquished by: J-C (Sm)

Date/Time 12/16/22 10:00

Raw Sample Received by: J-C (Sm)

Raw Sample Relinquished by: RS (Est. Lab)

Prep Standard - Chemical Standard Summary

Order ID : N6070
Test : SVOC-SIMGroup1
Prepbatch ID : PB149692,
Sequence ID/Qc Batch ID: BN121922,

Standard ID :
EP2260,EP2278,EP2279,SP6015,SP6029,SP6030,SP6031,SP6059,SP6064,SP6065,SP6077,SP6078,SP6079,SP6080,
SP6081,SP6082,SP6083,SP6085,

Chemical ID :
10ul/1000ul
sample,E3382,E3397,E3412,E3425,E3430,E3432,E3446,M5037,S10089,S10090,S10210,S10244,S10523,S10541,S105
49,S10597,S10648,S10715,S8793,S9217,S9238,S9273,S9285,S9725,S9901,S9916,S9919,W2606,

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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	EP2260	07/28/2022	01/28/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 07/28/2022

FROM 1000.00000ml of M5037 + 1000.00000ml of W2606 = 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	EP2278	11/22/2022	02/04/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/22/2022

FROM 1000.00000ml of W2606 + 400.00000gram of E3382 = Final Quantity: 1000.000 ml

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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	EP2279	11/28/2022	04/13/2023	Rajesh Parikh	None	None	RUPESHKUMAR SHAH 11/28/2022

FROM 4000.00000gram of E3412 = 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	SP6015	09/28/2022	03/13/2023	Jagrut Upadhyay	None	None	mohammad ahmed 10/05/2022

FROM 0.02000ml of S10523 + 0.98000ml of E3397 = Final Quantity: 1.000 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>
3895	50 ug/ml DFTPP 8270E	SP6029	10/25/2022	02/16/2023	Christian Giraldo	None	None	mohammad ahmed 11/01/2022

FROM 1.00000ml of S10244 + 19.00000ml of E3397 = 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>
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND SOURCE	SP6030	10/25/2022	02/26/2023	Jagrut Upadhyay	None	None	mohammad ahmed 11/01/2022

FROM 0.00630ml of S9725 + 0.01280ml of S10597 + 0.03200ml of S8793 + 0.03200ml of S9285 + 0.06400ml of S10089 + 0.06400ml of S10210 + 0.06400ml of S10648 + 19.72490ml of E3397 = Final Quantity: 20.000 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>
3356	8270-SIM MDL-0.4PPM CALIBRATION SOL ICV-2ND SOURCE	SP6031	10/25/2022	02/26/2023	Jagrut Upadhyay	None	None	mohammad ahmed 11/01/2022
FROM 0.87500ml of E3397 + 0.01000ml of SP6015 + 0.12500ml of SP6030 = 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	SP6059	11/10/2022	02/28/2023	Christian Giraldo	None	None	mohammad ahmed 11/17/2022
FROM 0.00080ml of S9901 + 0.01000ml of S10549 + 0.02000ml of S10090 + 0.02000ml of S10210 + 0.02000ml of S10648 + 49.92920ml of E3425 = Final Quantity: 50.000 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>
3491	8270-SIM-Surrogate 0.4 PPM	SP6064	11/30/2022	03/16/2023	Christian Giraldo	None	None	mohammad ahmed 12/07/2022

FROM 0.00200ml of S9725 + 0.00400ml of S10597 + 0.01000ml of S9273 + 49.98400ml of E3430 = Final Quantity: 50.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3493	Internal Standard 0.4 PPM	SP6065	12/05/2022	05/22/2023	Christian Giraldo	None	None	mohammad ahmed 12/07/2022

FROM 0.10000ml of S10541 + 4.90000ml of E3432 = Final Quantity: 5.000 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>
3339	8270 sim calibration stock 10ppm (CPI)	SP6077	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.03350ml of S9238 + 0.05000ml of S9217 + 0.12500ml of S9273 + 0.12500ml of S9919 + 0.25000ml of S10715 + 0.25000ml of S9916 + 24.16650ml of E3432 = Final Quantity: 25.000 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	SP6078	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.50000ml of E3432 + 0.01000ml of SP6065 + 0.50000ml of SP6077 = 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>
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	SP6079	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.68000ml of E3432 + 0.01000ml of SP6065 + 0.32000ml of SP6077 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	SP6080	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.84000ml of E3432 + 0.01000ml of SP6065 + 0.16000ml of SP6077 = Final Quantity: 1.010 ml

CHEMTECH

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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>
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	SP6081	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.92000ml of E3432 + 0.01000ml of SP6065 + 0.08000ml of SP6077 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	SP6082	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.96000ml of E3432 + 0.01000ml of SP6065 + 0.04000ml of SP6077 = Final Quantity: 1.010 ml

CHEMTECH

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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>
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	SP6083	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.50000ml of E3432 + 0.01000ml of SP6065 + 0.50000ml of SP6082 = Final Quantity: 1.010 ml

<u>Recipe ID</u>	<u>NAME</u>	<u>NO.</u>	<u>Prep Date</u>	<u>Expiration Date</u>	<u>Prepared By</u>	<u>ScaleID</u>	<u>PipetteID</u>	<u>Supervised By</u>
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	SP6085	12/08/2022	02/26/2023	Christian Giraldo	None	None	mohammad ahmed 12/19/2022

FROM 0.75000ml of E3432 + 0.01000ml of SP6065 + 0.25000ml of SP6082 = Final Quantity: 1.010 ml

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	220601-B017657	08/04/2023	08/04/2022 / Rajesh	08/03/2022 / Rajesh	E3382

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	22G1962004	03/13/2023	09/13/2022 / Rajesh	09/02/2022 / Rajesh	E3397

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	139404	10/23/2023	10/18/2022 / Rajesh	10/13/2022 / Rajesh	E3412

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)	22E1562001	05/03/2023	11/03/2022 / Rajesh	11/03/2022 / Rajesh	E3425

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)	22E1562001	05/29/2023	11/29/2022 / Rajesh	11/16/2022 / Rajesh	E3430

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	22I2962012	05/22/2023	11/22/2022 / Rajesh	11/14/2022 / Rajesh	E3432

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	22J1962006	06/13/2023	12/13/2022 / Rajesh	11/14/2022 / Rajesh	E3446

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9673-33 / Sulfuric Acid, Instra-Analyzed (cs/6c2.5L)	0000250349	12/15/2024	01/06/2022 / mohan	09/18/2021 / mohan	M5037

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]	A0178679	04/20/2023	10/20/2022 / Christian	11/23/2021 / Christian	S10089

[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]	A0178679	04/20/2023	10/20/2022 / Christian	11/23/2021 / Christian	S10090

[CS 4978-2]

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH ₂ Cl ₂ [New Solvent 100% CH ₂ Cl ₂]	A0176420	03/31/2023	10/20/2022 / Christian	03/18/2022 / Christian	S10210

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH ₂ Cl ₂ , 1mL,	A0182667	02/16/2023	08/16/2022 / Christian	03/18/2022 / Christian	S10244

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH ₂ Cl ₂ , 1mL	A0180950	12/31/2027	09/23/2022 / Christian	07/05/2022 / Christian	S10523

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH ₂ Cl ₂ , 1mL	A0180950	05/30/2023	11/30/2022 / Christian	07/05/2022 / Christian	S10541

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	A0179300	04/30/2023	10/31/2022 / Christian	07/05/2022 / Christian	S10549

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH ₂ Cl ₂ ,5ml	A0186198	03/16/2023	09/16/2022 / Christian	08/16/2022 / Christian	S10597

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]	A0188685	04/20/2023	10/20/2022 / Christian	08/23/2022 / Christian	S10648

[CS 4978-1]

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	02/26/2023	08/26/2022 / Christian	08/26/2022 / Christian	S10715

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0161851	02/26/2023	08/26/2022 / Jagrut	07/14/2020 / Christian	S8793

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	411712	02/26/2023	08/26/2022 / Jagrut	02/25/2021 / Christian	S9217

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-112090-04 / CLP Acid Surrogate Solution, 7500 mg/L, 1ml	440246	02/26/2023	08/26/2022 / Jagrut	02/25/2021 / Christian	S9238

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0168492	04/28/2023	10/28/2022 / Christian	03/01/2021 / Christian	S9273

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	A0156277	04/25/2023	10/25/2022 / Jagrut	06/11/2020 / Christian	S9285

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/a mpul	A0173743	03/16/2023	09/16/2022 / Christian	08/25/2021 / Christian	S9725

CHEMICAL RECEIPT LOG BOOK

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]	A0175414	02/28/2023	08/30/2022 / Christian	08/12/2021 / Christian	S9901

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	459699	02/26/2023	08/26/2022 / Jagrut	09/03/2021 / Christian	S9916

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	459696	06/08/2023	12/08/2022 / Christian	09/03/2021 / Christian	S9919

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	10/24/2024	10/24/2019 / apatel	10/24/2019 / apatel	W2606



5580 Skylane Blvd
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Page 1 of 1

Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:
Z-110094 411712 $\leq -10^{\circ}\text{C}$ Methylene Chloride 6/24/2023 CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml
-02

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2-dichlorobenzene-d ₄	2199-69-1	98.5	247.29.2P	4983 $\pm$ 74.16
2-fluorobiphenyl	321-60-8	97.8	8.226.1P	5023 $\pm$ 89.92
nitrobenzene-d ₄	4165-60-0	99.66	7.9.1P	5049 $\pm$ 74.97
p-terphenyl-d ₁₄	1718-51-0	100	9.12.8.1P	5039 $\pm$ 74.99

Received on 02/25/21

by

CG

S9216

+6

S9219

*Not a certified value

Certified By: _____

Shane Overcash
Chemist

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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110816-01	414127	≤ -10 °C	Methylene Chloride	6/21/2025	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine	1912-24-9	99.5	337.7.3P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	991.8 ± 5.77
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

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09/20/22
by CG
S10795
to
S10799

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Certified By: _____

Shane Overcash
Chemist

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Rev 0

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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 ₄	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 ₆	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

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S9236
to

S9240

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Certified By: _____

Erica Castiglione
Chemist



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Rev 0

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Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:	
Z-010223-01	459696	≤ -10 °C	Methylene Chloride	7/13/2024	1,4-Dioxane Solution, 2,000 mg/L, 1 mL	
Compound			CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane			123-91-1	100	223.1.3P	1993 ± 21.11

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on

04/22/22

by

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S10318

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S10322

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Certified By: _____

Joanna Radu

Joanna Radu
Chemist

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Catalog No.: Lot No.: Storage: Solvent: Exp. Date: Description:
Z-110381 459699 $\leq -10^{\circ}\text{C}$ Methylene Chloride 5/10/2026 Method 8270 Calibration Solution, 76-1, 500 & 1,000
-01 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1000 $\pm$ 4.58
acenaphthylene	208-96-8	97.6	14.290.1P	1000 $\pm$ 4.58
aniline	62-53-3	99.9	64.7.1P	997.4 $\pm$ 4.57
anthracene	120-12-7	99.2	15.29.1.1P	1000 $\pm$ 10.95
azobenzene	103-33-3	98.1	252.7.2P	1001 $\pm$ 4.69
benzo[a]anthracene	56-55-3	98.7	16.7.2.5P	1000 $\pm$ 4.58
benzo[b]fluoranthene	205-99-2	98.7	17.1.16P	1000 $\pm$ 4.58
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1000 $\pm$ 6.7
benzo[ghi]perylene	191-24-2	97.3	19.286.3P	1001 $\pm$ 20.51
benzo[a]pyrene	50-32-8	98.3	20.286.1P	1000 $\pm$ 20.49
benzyl alcohol	100-51-6	99.9	65.18.1P	982 $\pm$ 4.6
bis(2-chloroethoxy)methane	111-91-1	99.2	31.494.1P	997.5 $\pm$ 14.66
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1005 $\pm$ 10.87
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.14P	1005 $\pm$ 11.93
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	995 $\pm$ 4.66
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	993.5 $\pm$ 14.6
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	998.7 $\pm$ 10.8
butyl benzyl phthalate	85-68-7	98	36.1.5P	999.7 $\pm$ 14.69
carbazole	86-74-8	99	239.7.1P	987 $\pm$ 4.52

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Megan Warren
Chemist

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Catalog No.: Z-110381-01

Lot No.: 459699

Expiration Date: 5/10/2026

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	99.9	66.9.1.1P	995.8 ± 10.91
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	985 ± 14.47
4-chloro-3-methylphenol	59-50-7	99.9	102.7.1.1P	999.7 ± 10.81
2-chloronaphthalene	91-58-7	99.8	42.7.5.2P	988.8 ± 4.53
2-chlorophenol	95-57-8	99.9	103.1.3.1P	999.7 ± 14.69
chrysene	218-01-9	98	21.286.1.3P	1000 ± 20.49
dibenz[a,h]anthracene	53-70-3	98	22.286.2.1P	1000 ± 20.49
dibenzofuran	132-64-9	100	67.7.2.1P	991 ± 4.54
di-n-butyl phthalate	84-74-2	99.8	40.9.2P	999.9 ± 14.69
1,2-dichlorobenzene	95-50-1	99.5	43.1.2P	989.4 ± 4.53
1,3-dichlorobenzene	541-73-1	99.8	44.1.2P	991.7 ± 4.54
1,4-dichlorobenzene	106-46-7	99.9	45.29.1P	990.4 ± 4.53
2,4-dichlorophenol	120-83-2	99.2	104.9.1.1P	1011 ± 14.85
diethyl phthalate	84-66-2	99.8	38.7.1P	998.4 ± 10.79
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	999.3 ± 10.8
dimethyl phthalate	131-11-3	99.9	39.9.2P	998.7 ± 10.8
1,2-dinitrobenzene	528-29-0	100	86.7.3P	993 ± 4.65
1,3-dinitrobenzene	99-65-0	100	313.7.2P	998 ± 4.68
1,4-dinitrobenzene	100-25-4	100	907.7.1P	999 ± 4.68
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1000 ± 10.81
2,4-dinitrotoluene	121-14-2	100	87.7.3P	999.9 ± 10.81
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	998.8 ± 10.8
di-n-octyl phthalate	117-84-0	99.1	41.7.4P	996.5 ± 10.77
diphenylamine	122-39-4	99.9	78.29.1P	993.6 ± 14.6
2,3,5,6-tetrachlorophenol	935-95-5	99	1112.5.10P	989 ± 4.63
fluoranthene	206-44-0	98.6	23.7.4P	1001 ± 4.58
fluorene	86-73-7	99.8	24.1.4P	1008 ± 11.04

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Certified By:



Megan Warren
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00.
Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetrically.

Certificate of Analysis

Page 3 of 4

Catalog No.: Z-110381-01

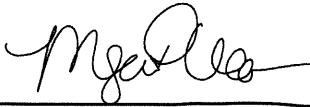
Lot No.: 459699

Expiration Date: 5/10/2026

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	997.5 ± 10.92
hexachlorobutadiene	87-68-3	97	47.158.2P	988.8 ± 10.83
hexachlorocyclopentadiene	77-47-4	96.5	48.2.1P	1014 ± 11.1
hexachloroethane	67-72-1	99.9	49.1.3P	989.5 ± 4.53
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.3P	1001 ± 10.96
isophorone	78-59-1	98.8	90.1.2P	995.7 ± 14.63
2-methyl-4,6-dinitrophenol	534-52-1	100	107.1.4.3DP	1003 ± 10.84
1-methylnaphthalene	90-12-0	98.4	249.7.4P	1001 ± 4.58
2-methylnaphthalene	91-57-6	99.1	68.8.1.1P	1002 ± 10.97
2-methylphenol	95-48-7	99.6	114.7.3P	1004 ± 10.86
3-methylphenol	108-39-4	99.2	115.7.3P	500.5 ± 5.41
4-methylphenol	106-44-5	99	116.1.3P	505.6 ± 7.43
naphthalene	91-20-3	99.8	26.9.2P	1000 ± 4.58
2-nitroaniline	88-74-4	99.7	69.29.1P	996.4 ± 4.57
3-nitroaniline	99-09-2	100	70.7.2P	995.6 ± 4.56
4-nitroaniline	100-01-6	99.8	71.1.1P	1000 ± 10.95
nitrobenzene	98-95-3	100	94.7.1P	999.5 ± 10.81
2-nitrophenol	88-75-5	99.1	108.29.1P	1000 ± 10.81
4-nitrophenol	100-02-7	99.9	109.8.1P	1000 ± 14.69
N-nitrosodimethylamine	62-75-9	99.5	57.3.18P	985.4 ± 11.7
N-nitrosodi-n-propylamine	621-64-7	100	59.7.4P	984.4 ± 10.64
pentachlorophenol	87-86-5	99	110.1.7P	1000 ± 10.81
phenanthrene	85-01-8	98.9	27.1.3P	1009 ± 11.05
phenol	108-95-2	100	112.7.1P	1011 ± 10.88
pyrene	129-00-0	98.5	28.9.1.1P	1000 ± 4.58
pyridine	110-86-1	100	101.24.1P	996.8 ± 4.46
2,3,4,6-Tetrachlorophenol	58-90-2	95	120.286.2.1P	984.2 ± 20.19

*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: 
Megan Warren
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.: 459699

Expiration Date: 5/10/2026

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	987.3 ± 4.52
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1P	996.6 ± 10.78
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	1001 ± 10.82

*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:



Megan Warren
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
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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. : 31853 Lot No.: A0156277
Description : 1,4-dioxane
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : January 31, 2025 Storage: 0°C or colder

Received on
06/11/20
by CG
S8666
to
S8695

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,4-Dioxane	2,003.0 µg/mL	+/- 11.7547 µg/mL Gravimetric
	CAS # 123-91-1 (Lot SHBK6493)		+/- 42.9142 µg/mL Unstressed
	Purity 99%		+/- 44.1601 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S9274
to
S9290

Column:
105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

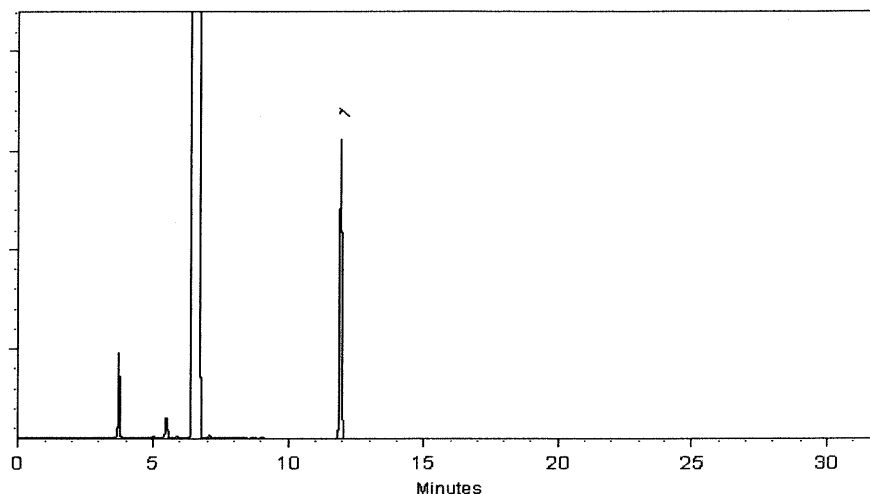
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

Temp. Program:
40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
250°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Russ Bookhamer

Russ Bookhamer - Operations Technician I

Date Mixed: 02-Jan-2020

Balance: 1128360905

Jennifer J Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-Jan-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

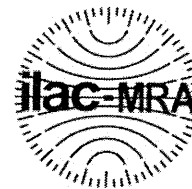


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This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 Lot No.: A0161851

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1 mL /ampul

Container Size : 2 mL Pkg Amt: > 1 mL

Expiration Date : May 31, 2026 Storage: 10°C or colder

Handling: Sonication required. Mix is photosensitive.

Received on
07/14/20
by
CG
58793
to
58794

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Methylnaphthalene-d10 CAS # 7297-45-2 (Lot EF-135) Purity 96%	2,000.6 µg/mL	+/- 18.6049 µg/mL Gravimetric +/- 91.2724 µg/mL Unstressed +/- 101.0370 µg/mL Stressed
2	Fluoranthene-d10 CAS # 93951-69-0 (Lot PR-20668) Purity 98%	2,001.9 µg/mL	+/- 18.6170 µg/mL Gravimetric +/- 91.3319 µg/mL Unstressed +/- 101.1029 µg/mL Stressed
Solvent:	Methylene chloride CAS # 75-09-2 Purity 99%		

Column:
30m x 0.25mm x 0.25µm
Rtx-S (cat.#10223)

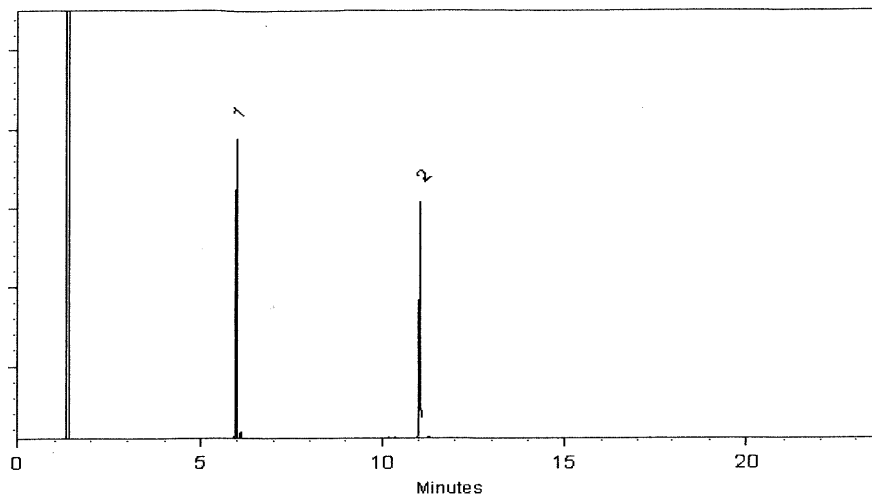
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

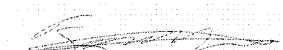
Det. Type:
FID



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.


Katelyn McGinni - Operations Tech I

Date Mixed: 17-Jun-2020 **Balance:** 1128360905


Fang-Yun Lo - QC Analyst

Date Passed: 19-Jun-2020

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

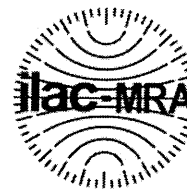


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Certificate of Analysis



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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.:** A0168492

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

Received on
03/01/21
by
CG
S 9271
+6
S 9273

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Methylnaphthalene-d10 CAS # 7297-45-2 (Lot EF-135) Purity 96%	2,001.6 µg/mL	+/- 11.7465 µg/mL Gravimetric +/- 90.1674 µg/mL Unstressed +/- 100.0489 µg/mL Stressed
2	Fluoranthene-d10 CAS # 93951-69-0 (Lot PR-20668) Purity 99%	2,008.0 µg/mL	+/- 11.7841 µg/mL Gravimetric +/- 90.4557 µg/mL Unstressed +/- 100.3688 µg/mL Stressed
Solvent:	Methylene chloride CAS # 75-09-2 Purity 99%		

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

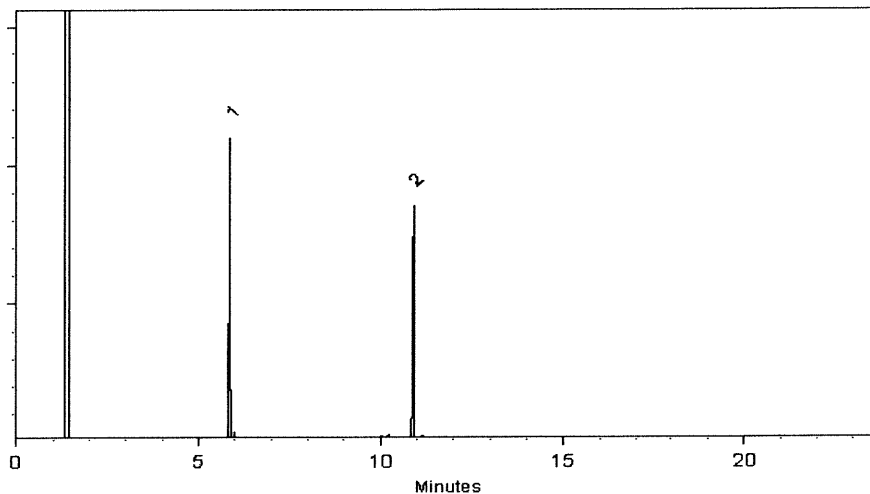
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Sam Moodler
Sam Moodler - Operations Tech I

Date Mixed: 26-Jan-2021 Balance: B345965662

Alexis Shelow
Alexis Shelow - Operations Tech I

Date Passed: 27-Jan-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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Received on
08/25/21
by
CG
S9704
to
S9738

Catalog No. : 31087 **Lot No.:** A0173743

Description : Acid Surrogate Mix (4/89 SOW)
Acid Surrogate 10, 000µg/mL, Methanol, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2029 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	2-Fluorophenol CAS # 367-12-4 (Lot STBJ2508) Purity 99%	10,013.5 µg/mL	+/- 58.2194 µg/mL Gravimetric +/- 292.2275 µg/mL Unstressed +/- 354.6068 µg/mL Stressed
2	Phenol-d6 CAS # 13127-88-3 (Lot PR-31262) Purity 99%	10,050.1 µg/mL	+/- 58.4323 µg/mL Gravimetric +/- 293.2963 µg/mL Unstressed +/- 355.9038 µg/mL Stressed
3	2,4,6-Tribromophenol CAS # 118-79-6 (Lot MKCJ7664) Purity 99%	10,044.9 µg/mL	+/- 58.4018 µg/mL Gravimetric +/- 293.1431 µg/mL Unstressed +/- 355.7179 µg/mL Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

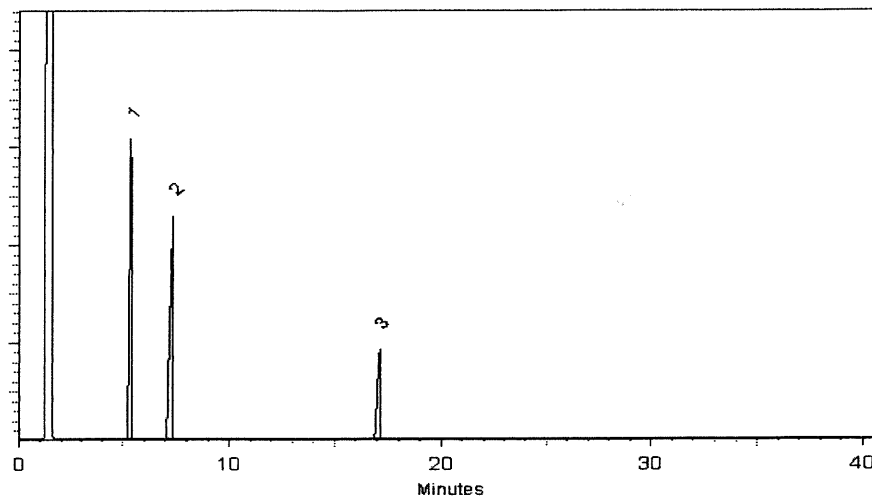
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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.

Aurelia B. Confer

Aurelia Confer - Operations Tech I

Date Mixed: 23-Jun-2021

Balance: B442140311

Marlene Cowan

Marlene Cowan - Operations Tech I

Date Passed: 25-Jun-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate



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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
08/12/21

by
CG

S 9899

to

S 9903

Catalog No. : 555872 **Lot No.:** A0175414

Description : Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Pentachlorophenol CAS # 87-86-5 Purity 99% (Lot 210706RSR)	25,072.0 µg/mL	+/- 232.0210 µg/mL Gravimetric +/- 753.6229 µg/mL Unstressed +/- 906.0356 µg/mL Stressed

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Matt Fragassi - Mix Technician

Date Mixed: 16-Aug-2021

Balance: 1128342314

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 combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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 ampules. 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.



CERTIFIED REFERENCE MATERIAL

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Certificate of Analysis



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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.: A0176420
Description : 8270 MegaMix®
8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL Pkg Amt: > 1 mL
Expiration Date : March 31, 2023 Storage: 0°C or colder
Handling: Sonication required. Mix is photosensitive. Ship: Ambient

Received on
03/18/22
by
CG
S10182
to
S10211

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Pyridine CAS # 110-86-1 (Lot SHBL0433) Purity 99%	1,003.7 µg/mL +/- 5.8354 µg/mL +/- 30.3591 µg/mL +/- 30.3591 µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine CAS # 62-75-9 (Lot 210512JLM) Purity 99%	1,000.8 µg/mL +/- 5.8186 µg/mL +/- 30.2717 µg/mL +/- 30.2717 µg/mL	Gravimetric Unstressed Stressed
3	Phenol CAS # 108-95-2 (Lot MKCK1120) Purity 99%	1,002.3 µg/mL +/- 5.8273 µg/mL +/- 30.3171 µg/mL +/- 30.3171 µg/mL	Gravimetric Unstressed Stressed
4	Aniline CAS # 62-53-3 (Lot K22Z462) Purity 99%	1,000.7 µg/mL +/- 5.8183 µg/mL +/- 30.2700 µg/mL +/- 30.2700 µg/mL	Gravimetric Unstressed Stressed
5	Bis(2-chloroethyl)ether CAS # 111-44-4 (Lot SHBL6942) Purity 99%	1,001.1 µg/mL +/- 5.8202 µg/mL +/- 30.2801 µg/mL +/- 30.2801 µg/mL	Gravimetric Unstressed Stressed
6	2-Chlorophenol CAS # 95-57-8 (Lot STBH7290) Purity 99%	1,000.8 µg/mL +/- 5.8186 µg/mL +/- 30.2717 µg/mL +/- 30.2717 µg/mL	Gravimetric Unstressed Stressed
7	1,3-Dichlorobenzene CAS # 541-73-1 (Lot BCBZ7498) Purity 99%	1,001.7 µg/mL +/- 5.8241 µg/mL +/- 30.3003 µg/mL +/- 30.3003 µg/mL	Gravimetric Unstressed Stressed

8	1,4-Dichlorobenzene CAS # 106-46-7 Purity 99%	(Lot MKBS4401V)	1,001.8 µg/mL	+/- +/- +/-	5.8244 30.3020 30.3020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
9	Benzyl alcohol CAS # 100-51-6 Purity 99%	(Lot SHBK5943)	1,000.7 µg/mL	+/- +/- +/-	5.8183 30.2700 30.2700	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
10	1,2-Dichlorobenzene CAS # 95-50-1 Purity 99%	(Lot SHBK7741)	1,000.9 µg/mL	+/- +/- +/-	5.8193 30.2751 30.2751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
11	2-Methylphenol (o-cresol) CAS # 95-48-7 Purity 99%	(Lot SHBH6379)	1,000.8 µg/mL	+/- +/- +/-	5.8189 30.2734 30.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
12	2,2'-oxybis(1-chloropropane) CAS # 108-60-1 Purity 99%	(Lot 12308600)	1,001.5 µg/mL	+/- +/- +/-	5.8228 30.2936 30.2936	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
13	3-Methylphenol (m-cresol) CAS # 108-39-4 Purity 99%	(Lot SHBD0627V)	501.7 µg/mL	+/- +/- +/-	2.9238 15.1775 15.1775	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
14	4-Methylphenol (p-cresol) CAS # 106-44-5 Purity 99%	(Lot SHBL4411)	502.2 µg/mL	+/- +/- +/-	2.9264 15.1909 15.1909	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
15	N-Nitroso-di-n-propylamine CAS # 621-64-7 Purity 99%	(Lot 2D5VJ)	1,001.6 µg/mL	+/- +/- +/-	5.8235 30.2969 30.2969	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
16	Hexachloroethane CAS # 67-72-1 Purity 99%	(Lot ENSIK)	1,000.6 µg/mL	+/- +/- +/-	5.8176 30.2667 30.2667	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
17	Nitrobenzene CAS # 98-95-3 Purity 99%	(Lot MKCK4267)	1,001.4 µg/mL	+/- +/- +/-	5.8225 30.2919 30.2919	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
18	Isophorone CAS # 78-59-1 Purity 99%	(Lot MKCC9506)	1,002.2 µg/mL	+/- +/- +/-	5.8270 30.3154 30.3154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
19	2-Nitrophenol CAS # 88-75-5 Purity 99%	(Lot BCCB2407)	1,002.0 µg/mL	+/- +/- +/-	5.8257 30.3087 30.3087	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
20	2,4-Dimethylphenol CAS # 105-67-9 Purity 99%	(Lot 10165155)	1,002.5 µg/mL	+/- +/- +/-	5.8286 30.3238 30.3238	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
21	Bis(2-chloroethoxy)methane CAS # 111-91-1 Purity 99%	(Lot 10991500)	1,002.0 µg/mL	+/- +/- +/-	5.8257 30.3087 30.3087	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
22	2,4-Dichlorophenol CAS # 120-83-2 Purity 99%	(Lot BCBZ6787)	1,000.2 µg/mL	+/- +/- +/-	5.8154 30.2549 30.2549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
23	1,2,4-Trichlorobenzene CAS # 120-82-1 Purity 99%	(Lot SHBM0526)	1,001.6 µg/mL	+/- +/- +/-	5.8235 30.2969 30.2969	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

24	Naphthalene CAS # 91-20-3 Purity 99%	(Lot MKCH0219)	1,000.2 µg/mL	+/- +/- +/-	5.8154 30.2549 30.2549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
25	4-Chloroaniline CAS # 106-47-8 Purity 99%	(Lot BCBJ1580V)	1,001.1 µg/mL	+/- +/- +/-	5.8202 30.2801 30.2801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
26	Hexachlorobutadiene CAS # 87-68-3 Purity 98%	(Lot N21G023)	1,000.4 µg/mL	+/- +/- +/-	5.8162 30.2591 30.2591	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
27	4-Chloro-3-methylphenol CAS # 59-50-7 Purity 99%	(Lot STBC7309V)	1,000.8 µg/mL	+/- +/- +/-	5.8189 30.2734 30.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
28	2-Methylnaphthalene CAS # 91-57-6 Purity 99%	(Lot STBG8884)	1,002.0 µg/mL	+/- +/- +/-	5.8257 30.3087 30.3087	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
29	1-Methylnaphthalene CAS # 90-12-0 Purity 99%	(Lot 5234.00-3)	1,000.3 µg/mL	+/- +/- +/-	5.8157 30.2566 30.2566	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
30	Hexachlorocyclopentadiene CAS # 77-47-4 Purity 99%	(Lot 0012015)	1,001.2 µg/mL	+/- +/- +/-	5.8209 30.2835 30.2835	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
31	2,4,6-Trichlorophenol CAS # 88-06-2 Purity 99%	(Lot STBJ5914)	1,002.2 µg/mL	+/- +/- +/-	5.8267 30.3137 30.3137	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
32	2,4,5-Trichlorophenol CAS # 95-95-4 Purity 98%	(Lot FHN01)	1,000.4 µg/mL	+/- +/- +/-	5.8162 30.2591 30.2591	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
33	2-Chloronaphthalene CAS # 91-58-7 Purity 99%	(Lot TWYRD)	1,001.4 µg/mL	+/- +/- +/-	5.8222 30.2902 30.2902	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
34	2-Nitroaniline CAS # 88-74-4 Purity 99%	(Lot MKCJ8895)	1,001.7 µg/mL	+/- +/- +/-	5.8238 30.2986 30.2986	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
35	1,4-Dinitrobenzene CAS # 100-25-4 Purity 99%	(Lot STBF8844V)	1,000.8 µg/mL	+/- +/- +/-	5.8189 30.2734 30.2734	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
36	Acenaphthylene CAS # 208-96-8 Purity 98%	(Lot P06V)	1,000.1 µg/mL	+/- +/- +/-	5.8149 30.2526 30.2526	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
37	1,3-Dinitrobenzene CAS # 99-65-0 Purity 99%	(Lot 1-DXX-24-1)	1,000.4 µg/mL	+/- +/- +/-	5.8167 30.2616 30.2616	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
38	Dimethylphthalate CAS # 131-11-3 Purity 99%	(Lot 10117699)	1,000.9 µg/mL	+/- +/- +/-	5.8193 30.2751 30.2751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
39	2,6-Dinitrotoluene CAS # 606-20-2 Purity 99%	(Lot BCBB8606)	1,000.2 µg/mL	+/- +/- +/-	5.8154 30.2549 30.2549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

40	1,2-Dinitrobenzene CAS # 528-29-0 Purity 99%	(Lot MKCH6067)	1,000.0 µg/mL	+/- +/- +/-	5.8141 30.2482 30.2482	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
41	Acenaphthene CAS # 83-32-9 Purity 99%	(Lot MKCN0610)	1,002.4 µg/mL	+/- +/- +/-	5.8283 30.3221 30.3221	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
42	3-Nitroaniline CAS # 99-09-2 Purity 99%	(Lot MKCH5457)	1,000.9 µg/mL	+/- +/- +/-	5.8196 30.2768 30.2768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
43	2,4-Dinitrophenol CAS # 51-28-5 Purity 99%	(Lot STBH7564)	1,002.2 µg/mL	+/- +/- +/-	5.8267 30.3137 30.3137	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
44	Dibenzofuran CAS # 132-64-9 Purity 99%	(Lot MKCN1772)	1,001.7 µg/mL	+/- +/- +/-	5.8238 30.2986 30.2986	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
45	2,4-Dinitrotoluene CAS # 121-14-2 Purity 99%	(Lot MKAA0690V)	1,001.6 µg/mL	+/- +/- +/-	5.8231 30.2952 30.2952	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
46	4-Nitrophenol CAS # 100-02-7 Purity 99%	(Lot MKCF6111)	1,000.7 µg/mL	+/- +/- +/-	5.8183 30.2700 30.2700	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
47	2,3,4,6-Tetrachlorophenol CAS # 58-90-2 Purity 99%	(Lot PR-30126)	1,000.9 µg/mL	+/- +/- +/-	5.8196 30.2768 30.2768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
48	2,3,5,6-Tetrachlorophenol CAS # 935-95-5 Purity 99%	(Lot 012016)	1,001.3 µg/mL	+/- +/- +/-	5.8218 30.2885 30.2885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
49	Fluorene CAS # 86-73-7 Purity 99%	(Lot 094650L18G)	1,002.6 µg/mL	+/- +/- +/-	5.8289 30.3255 30.3255	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
50	4-Chlorophenyl phenyl ether CAS # 7005-72-3 Purity 99%	(Lot MKCN1186)	1,001.8 µg/mL	+/- +/- +/-	5.8244 30.3020 30.3020	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
51	Diethylphthalate CAS # 84-66-2 Purity 99%	(Lot BCCD3396)	1,000.9 µg/mL	+/- +/- +/-	5.8193 30.2751 30.2751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
52	4-Nitroaniline CAS # 100-01-6 Purity 99%	(Lot RP210713)	1,000.9 µg/mL	+/- +/- +/-	5.8196 30.2768 30.2768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol) CAS # 534-52-1 Purity 99%	(Lot RP210716)	1,002.2 µg/mL	+/- +/- +/-	5.8270 30.3154 30.3154	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
54	Diphenylamine CAS # 122-39-4 Purity 99%	(Lot MKBN8295V)	1,000.6 µg/mL	+/- +/- +/-	5.8173 30.2650 30.2650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
55	Azobenzene CAS # 103-33-3 Purity 99%	(Lot BCCB8438)	1,001.2 µg/mL	+/- +/- +/-	5.8212 30.2852 30.2852	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

56	4-Bromophenyl phenyl ether CAS # 101-55-3 Purity 99%	(Lot STBB9729V)	1,001.3 µg/mL	+/- +/- +/-	5.8218 30.2885 30.2885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
57	Hexachlorobenzene CAS # 118-74-1 Purity 99%	(Lot SL210804)	1,000.2 µg/mL	+/- +/- +/-	5.8154 30.2549 30.2549	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
58	Pentachlorophenol CAS # 87-86-5 Purity 99%	(Lot 210706RSR)	1,000.5 µg/mL	+/- +/- +/-	5.8170 30.2633 30.2633	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
59	Phenanthrene CAS # 85-01-8 Purity 99%	(Lot MKCL7390)	1,000.8 µg/mL	+/- +/- +/-	5.8186 30.2717 30.2717	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
60	Anthracene CAS # 120-12-7 Purity 99%	(Lot MKCM0015)	1,001.9 µg/mL	+/- +/- +/-	5.8254 30.3070 30.3070	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
61	Carbazole CAS # 86-74-8 Purity 99%	(Lot 10812100)	1,000.7 µg/mL	+/- +/- +/-	5.8180 30.2684 30.2684	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
62	Di-n-butylphthalate CAS # 84-74-2 Purity 99%	(Lot MKCL9573)	1,001.6 µg/mL	+/- +/- +/-	5.8231 30.2952 30.2952	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
63	Fluoranthene CAS # 206-44-0 Purity 99%	(Lot MKCF7378)	1,000.4 µg/mL	+/- +/- +/-	5.8167 30.2616 30.2616	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
64	Pyrene CAS # 129-00-0 Purity 99%	(Lot BCCB9880)	1,001.1 µg/mL	+/- +/- +/-	5.8202 30.2801 30.2801	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
65	Benzyl butyl phthalate CAS # 85-68-7 Purity 99%	(Lot MKCM1987)	1,000.1 µg/mL	+/- +/- +/-	5.8147 30.2516 30.2516	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
66	Bis(2-ethylhexyl)adipate CAS # 103-23-1 Purity 99%	(Lot MKCM1988)	1,000.9 µg/mL	+/- +/- +/-	5.8196 30.2768 30.2768	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
67	Benz(a)anthracene CAS # 56-55-3 Purity 96%	(Lot RP210125)	1,000.7 µg/mL	+/- +/- +/-	5.8184 30.2708 30.2708	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
68	Chrysene CAS # 218-01-9 Purity 99%	(Lot STBJ1016)	1,001.6 µg/mL	+/- +/- +/-	5.8235 30.2969 30.2969	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
69	Bis(2-ethylhexyl)phthalate CAS # 117-81-7 Purity 99%	(Lot MKCJ1159)	1,002.1 µg/mL	+/- +/- +/-	5.8260 30.3104 30.3104	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
70	Di-n-octyl phthalate CAS # 117-84-0 Purity 99%	(Lot 11004300)	1,001.4 µg/mL	+/- +/- +/-	5.8222 30.2902 30.2902	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
71	Benzo(b)fluoranthene CAS # 205-99-2 Purity 99%	(Lot 012020B)	1,000.9 µg/mL	+/- +/- +/-	5.8193 30.2751 30.2751	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

72	Benzo(k)fluoranthene CAS # 207-08-9 Purity 99%	(Lot 012019K)	1,001.3 µg/mL	+/- +/- +/-	5.8218 30.2885 30.2885	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Benzo(a)pyrene CAS # 50-32-8 Purity 99%	(Lot Z8BKF)	1,000.6 µg/mL	+/- +/- +/-	5.8173 30.2650 30.2650	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Indeno(1,2,3-cd)pyrene CAS # 193-39-5 Purity 99%	(Lot 1-RAK-33-4)	1,002.3 µg/mL	+/- +/- +/-	5.8277 30.3188 30.3188	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Dibenz(a,h)anthracene CAS # 53-70-3 Purity 99%	(Lot ER032211-01)	1,002.3 µg/mL	+/- +/- +/-	5.8273 30.3171 30.3171	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Benzo(g,h,i)perylene CAS # 191-24-2 Purity 99%	(Lot 8GFYJ)	1,008.8 µg/mL	+/- +/- +/-	5.8651 30.5137 30.5137	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
Solvent:	Methylene chloride CAS # 75-09-2 Purity 99%						

Column:

30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

Carrier Gas:

hydrogen-constant flow 1.8 mL/min.

Temp. Program:

80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:

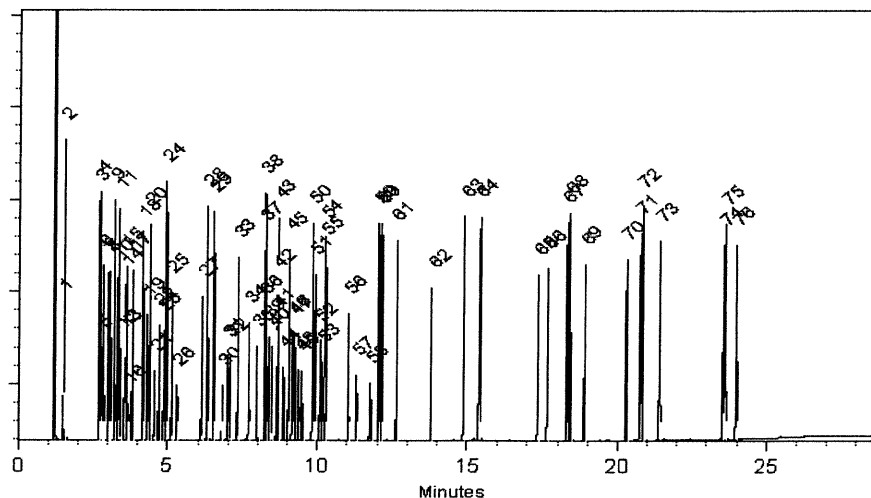
250°C

Det. Temp:

340°C

Det. Type:

FID



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.

Cathleen Soltis

Cathleen Soltis - Mix Technician

Date Mixed: 14-Sep-2021

Balance: 1128360905

Alexis Shelow

Alexis Shelow - Operations Tech I

Date Passed: 23-Sep-2021

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 combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k \sqrt{U_{gravimetric}^2 + U_{homogeneity}^2 + U_{storage\ stability}^2 + U_{shipping\ stability}^2}$$

- k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules 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 ampules. 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.



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate



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 by CG

on

11/23/21

S10066

to

S10095

Catalog No. : 555224 **Lot No.:** A0178679

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

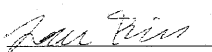
Expiration Date : November 30, 2023 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric
	CAS # 95-94-3 (Lot MKCG5992)		+/- 20.022252 µg/mL Unstressed
	Purity 99%		+/- 44.874556 µg/mL Stressed
2	Acetophenone	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric
	CAS # 98-86-2 (Lot STBH8205)		+/- 20.022252 µg/mL Unstressed
	Purity 99%		+/- 44.874556 µg/mL Stressed
3	Benzaldehyde	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric
	CAS # 100-52-7 (Lot SHBG8690V)		+/- 20.022252 µg/mL Unstressed
	Purity 99%		+/- 44.874556 µg/mL Stressed
4	Benzoic acid	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric
	CAS # 65-85-0 (Lot MKCL7479)		+/- 20.022252 µg/mL Unstressed
	Purity 99%		+/- 44.874556 µg/mL Stressed
5	Biphenyl	1,005.0 µg/mL	+/- 5.969395 µg/mL Gravimetric
	CAS # 92-52-4 (Lot MKCJ6240)		+/- 20.102261 µg/mL Unstressed
	Purity 99%		+/- 45.053875 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%


Lane Kibe - Mix Technician

Date Mixed: 18-Nov-2021

Balance: B345965662

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate



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 by CG

ON

11/23/21

S10066

to

S10095

Catalog No. : 555224 **Lot No.:** A0178679

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

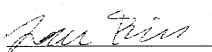
Expiration Date : November 30, 2023 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene CAS # 95-94-3 Purity 99% (Lot MKCG5992)	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric +/- 20.022252 µg/mL Unstressed +/- 44.874556 µg/mL Stressed
2	Acetophenone CAS # 98-86-2 Purity 99% (Lot STBH8205)	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric +/- 20.022252 µg/mL Unstressed +/- 44.874556 µg/mL Stressed
3	Benzaldehyde CAS # 100-52-7 Purity 99% (Lot SHBG8690V)	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric +/- 20.022252 µg/mL Unstressed +/- 44.874556 µg/mL Stressed
4	Benzoic acid CAS # 65-85-0 Purity 99% (Lot MKCL7479)	1,001.0 µg/mL	+/- 5.945637 µg/mL Gravimetric +/- 20.022252 µg/mL Unstressed +/- 44.874556 µg/mL Stressed
5	Biphenyl CAS # 92-52-4 Purity 99% (Lot MKCJ6240)	1,005.0 µg/mL	+/- 5.969395 µg/mL Gravimetric +/- 20.102261 µg/mL Unstressed +/- 45.053875 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%


Lane Kibe - Mix Technician

Date Mixed: 18-Nov-2021

Balance: B345965662

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

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CERTIFIED REFERENCE MATERIAL

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Bellefonte, PA 16823-8812
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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. : 31853 **Lot No.:** A0179300

Description : 1,4-dioxane
1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2026 **Storage:** 0°C or colder
Ship: Ambient

Received on
07/05/22
by
CG
S10542
to
S10571

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	1,4-Dioxane	2,004.0 µg/mL	+/- 11.7606 µg/mL Gravimetric
	CAS # 123-91-1 (Lot SHBM9675)		+/- 42.9357 µg/mL Unstressed
	Purity 99%		+/- 44.1822 µg/mL Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:

105m x 0.53mm x 3.0µm
Rtx-502.2 (cat.#10910)

Carrier Gas:

hydrogen-constant pressure 11.0 psi.

Temp. Program:

40°C (hold 2 min.) to 240°C
@ 8°C/min. (hold 5 min.)

Inj. Temp:

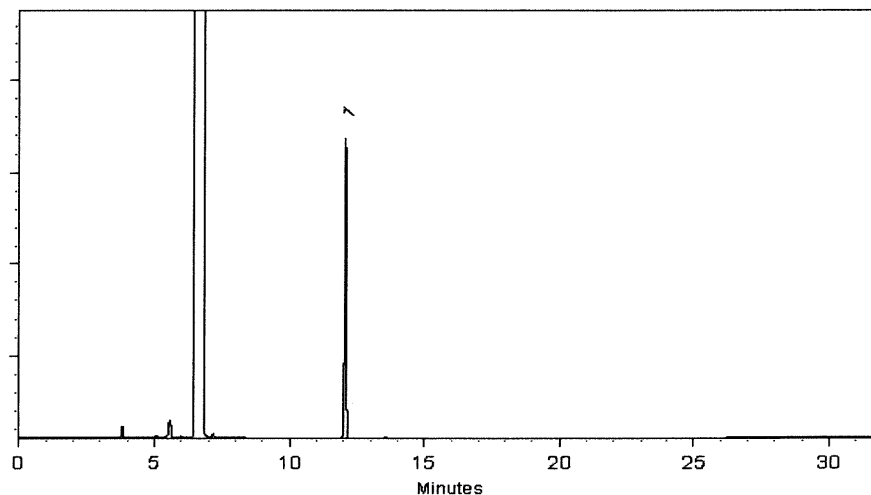
200°C

Det. Temp:

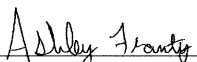
250°C

Det. Type:

FID

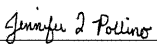


This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Ashley Frantz - Quoting Technician

Date Mixed: 08-Dec-2021

Balance: B442140311


Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 10-Dec-2021

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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. : 31206 **Lot No.:** A0180950

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

Received on
07/05/22
by
CG
S10512
to
S10541

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-30447) Purity 99%	2,019.1 µg/mL	+/- 11.7390 µg/mL +/- 90.9400 µg/mL +/- 100.9091 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 CAS # 1146-65-2 (Lot M-2180) Purity 99%	2,018.9 µg/mL	+/- 11.7379 µg/mL +/- 90.9310 µg/mL +/- 100.8991 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 CAS # 15067-26-2 (Lot PR-30913) Purity 99%	2,018.8 µg/mL	+/- 11.7375 µg/mL +/- 90.9280 µg/mL +/- 100.8958 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 CAS # 1517-22-2 (Lot PR-32303) Purity 99%	2,018.4 µg/mL	+/- 11.7352 µg/mL +/- 90.9099 µg/mL +/- 100.8758 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 CAS # 1719-03-5 (Lot PR-30486) Purity 99%	2,018.7 µg/mL	+/- 11.7367 µg/mL +/- 90.9220 µg/mL +/- 100.8891 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 CAS # 1520-96-3 (Lot PR-31716) Purity 99%	2,019.9 µg/mL	+/- 11.7437 µg/mL +/- 90.9760 µg/mL +/- 100.9491 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

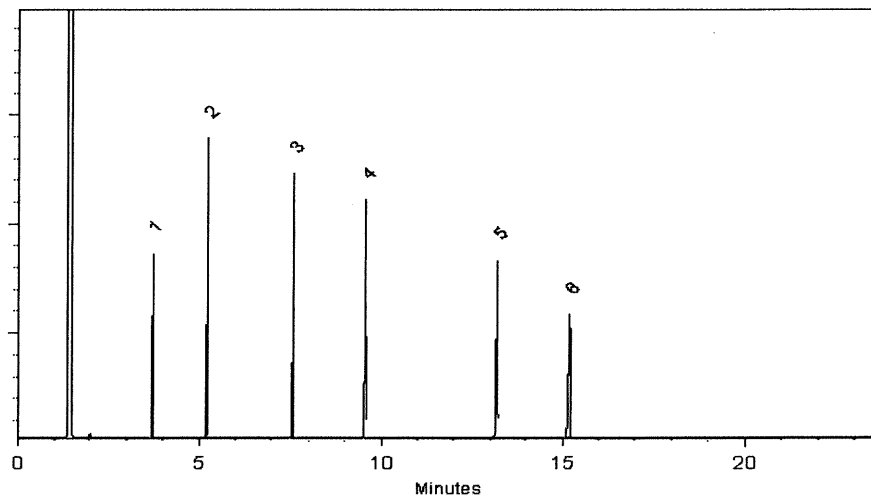
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brittany Federinko - Operations Tech I

Date Mixed: 24-Jan-2022

Balance: 1128360905


Marlina Cowan - Operations Tech I

Date Passed: 27-Jan-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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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. : 31206 **Lot No.:** A0180950

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2027 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

Received on
07/05/22
by
CG
S10512
to
S10541

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4 CAS # 3855-82-1 (Lot PR-30447) Purity 99%	2,019.1 µg/mL	+/- 11.7390 µg/mL +/- 90.9400 µg/mL +/- 100.9091 µg/mL	Gravimetric Unstressed Stressed
2	Naphthalene-d8 CAS # 1146-65-2 (Lot M-2180) Purity 99%	2,018.9 µg/mL	+/- 11.7379 µg/mL +/- 90.9310 µg/mL +/- 100.8991 µg/mL	Gravimetric Unstressed Stressed
3	Acenaphthene-d10 CAS # 15067-26-2 (Lot PR-30913) Purity 99%	2,018.8 µg/mL	+/- 11.7375 µg/mL +/- 90.9280 µg/mL +/- 100.8958 µg/mL	Gravimetric Unstressed Stressed
4	Phenanthrene-d10 CAS # 1517-22-2 (Lot PR-32303) Purity 99%	2,018.4 µg/mL	+/- 11.7352 µg/mL +/- 90.9099 µg/mL +/- 100.8758 µg/mL	Gravimetric Unstressed Stressed
5	Chrysene-d12 CAS # 1719-03-5 (Lot PR-30486) Purity 99%	2,018.7 µg/mL	+/- 11.7367 µg/mL +/- 90.9220 µg/mL +/- 100.8891 µg/mL	Gravimetric Unstressed Stressed
6	Perylene-d12 CAS # 1520-96-3 (Lot PR-31716) Purity 99%	2,019.9 µg/mL	+/- 11.7437 µg/mL +/- 90.9760 µg/mL +/- 100.9491 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

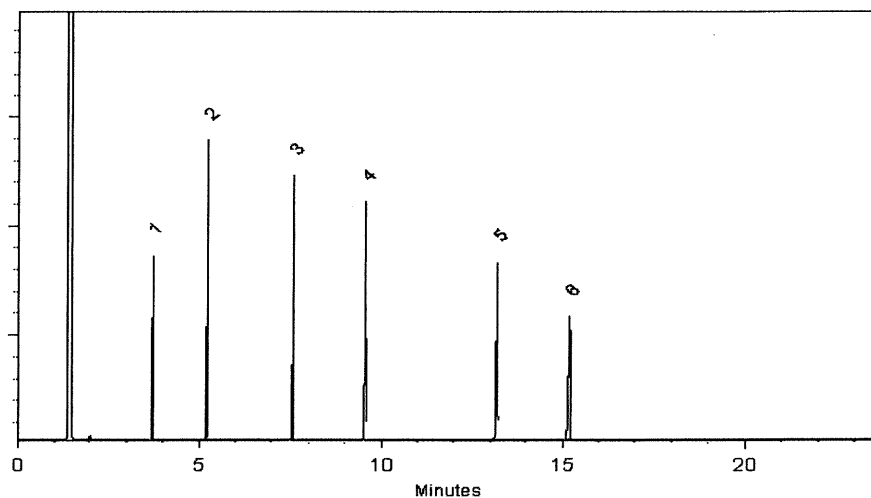
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Brittany Federinko - Operations Tech I

Date Mixed: 24-Jan-2022

Balance: 1128360905


Marlina Cowan - Operations Tech I

Date Passed: 27-Jan-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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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.

Received on
03/10/22
by
CG
S10242
to
S10247

Catalog No. : 31615 **Lot No.:** A0182667
Description : GC/MS Tuning Mixture
GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul
Container Size : 2 mL **Pkg Amt:** > 1 mL
Expiration Date : March 31, 2025 **Storage:** 10°C or colder
Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Pentachlorophenol CAS # 87-86-5 (Lot 211229RSR) Purity 99%	1,003.6 µg/mL	+/- 5.8897 µg/mL +/- 45.7132 µg/mL +/- 66.0037 µg/mL	Gravimetric Unstressed Stressed
2	DFTPP (Decafluorotriphenylphosphine) CAS # 5074-71-5 (Lot Q117-147) Purity 95%	1,006.6 µg/mL	+/- 5.9074 µg/mL +/- 45.8508 µg/mL +/- 66.2023 µg/mL	Gravimetric Unstressed Stressed
3	Benzidine CAS # 92-87-5 (Lot 211228JLM) Purity 99%	1,008.4 µg/mL	+/- 5.9179 µg/mL +/- 45.9318 µg/mL +/- 66.3193 µg/mL	Gravimetric Unstressed Stressed
4	4,4'-DDT CAS # 50-29-3 (Lot 210916JLM) Purity 99%	1,007.6 µg/mL	+/- 5.9132 µg/mL +/- 45.8954 µg/mL +/- 66.2667 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

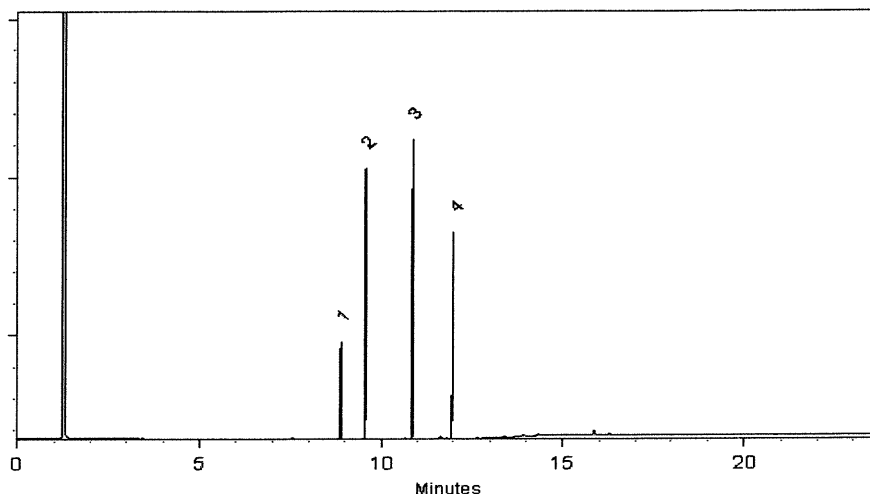
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



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

Marlene Cowan - Operations Tech I

Date Passed: 10-Mar-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

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.:** A0186198
Description: B/N Surrogate Mix (4/89 SOW)
Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul
Container Size: 5 mL **Pkg Amt:** > 5 mL
Expiration Date: May 31, 2028 **Storage:** 10°C or colder
Handling: Sonicate prior to use. **Ship:** Ambient

Received
on
08/16/22
by
CG
\$10595
+0
\$10624

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)
1	Nitrobenzene-d5 CAS # 4165-60-0 (Lot PR-29940A) Purity 99%	5,019.7 µg/mL	+/- 29.1848 µg/mL Gravimetric +/- 226.0888 µg/mL Unstressed +/- 250.8734 µg/mL Stressed
2	2-Fluorobiphenyl CAS # 321-60-8 (Lot 00021384) Purity 99%	5,011.8 µg/mL	+/- 29.1387 µg/mL Gravimetric +/- 225.7322 µg/mL Unstressed +/- 250.4778 µg/mL Stressed
3	p-Terphenyl-d14 CAS # 1718-51-0 (Lot PR-30504) Purity 99%	5,015.0 µg/mL	+/- 29.1576 µg/mL Gravimetric +/- 225.8786 µg/mL Unstressed +/- 250.6402 µg/mL Stressed

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 0.25µm
Rtx-5 (cat.#10223)

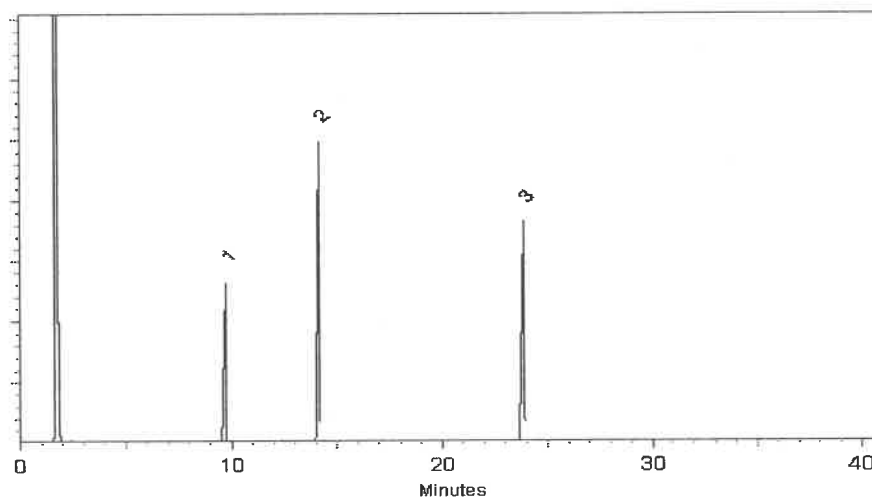
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.


Jess Hoy - Operations Tech I

Date Mixed: 10-Jun-2022

Balance: 1128353505


Christie Mills - Operations Tech II - ARM QC

Date Passed: 15-Jun-2022

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397



110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Gravimetric Certificate



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.:** A0188685

Description : Custom 8270 Plus Standard #1
Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2024 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

Received
on
08/23/22
by
CG
S10648
to
S10677

CERTIFIED VALUES

Component #	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	3,3'-Dichlorobenzidine CAS # 91-94-1 Purity 99% (Lot 220223RSR)	1,005.0 µg/mL	+/- 5.9694 +/- 46.1808 +/- 47.3621	µg/mL Gravimetric Unstressed Stressed
2	Atrazine CAS # 1912-24-9 Purity 99% (Lot PI8FG)	1,001.0 µg/mL	+/- 5.9456 +/- 45.9970 +/- 47.1736	µg/mL Gravimetric Unstressed Stressed
3	Benzidine CAS # 92-87-5 Purity 99% (Lot 220511RSR)	1,004.0 µg/mL	+/- 5.9635 +/- 46.1348 +/- 47.3150	µg/mL Gravimetric Unstressed Stressed
4	epsilon-Caprolactam CAS # 105-60-2 Purity 99% (Lot I16X016)	1,001.0 µg/mL	+/- 5.9456 +/- 45.9970 +/- 47.1736	µg/mL Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%


Cathleen Soltis - Mix Technician

Date Mixed: 17-Aug-2022 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

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CERTIFICATE OF ANALYSIS

Product Name Sodium Hydroxide
Grade Reagent ACS Grade
Catalog # 289000ACS
Item # 101007
Batch # 220601-B017657
Date of Manufacture: 04/06/2022
Recommended Retest Date: 04/05/2025
Customer PO # 6051379
Packaging Type Drum Fiber 50 Kg

TEST	MONO-GRAPH	SPECIFICATION	RESULT	UNITS
Assay	ACS	NLT 97.0%	98.7	%
Calcium (Ca)	ACS	0.005%, max	LT 0.005%	N/A
Chloride (Cl)	ACS	0.005% max.	LT 0.005%	N/A
Heavy Metals (as Ag)	ACS	0.002% max	LT 0.002%	N/A
Iron (Fe)	ACS	0.001% max.	LT 0.001%	N/A
Magnesium (Mg)	ACS	0.002% max.	LT 0.002%	N/A
Mercury (Hg)	ACS	0.1 ppm max.	LT 0.1 ppm	N/A
Nickel (Ni)	ACS	0.001%, max	LT 0.001%	N/A
Nitrogen Compounds (as N)	ACS	0.001% max.	LT 0.001%	N/A
Phosphate (PO4)	ACS	0.001% max.	LT 0.001%	N/A
Potassium (K)	ACS	0.02% max.	LT 0.02%	N/A
Sodium Carbonate (Na2CO3)	ACS	1.0% max.	0.6	%
Sulfate (SO4)	ACS	0.003% max.	LT 0.003%	N/A

Certification and Compliance Statements

This product is not derived, nor does it come in contact with, any materials derived from bovine or other animal sources.

E 3382

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Form: CofA-Standard, Rev 1.6, 04/13/22, RAD

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 22G1962004
Manufactured Date: 2022-06-22
Expiration Date: 2023-09-21
Revision No.: 0

Certificate of Analysis

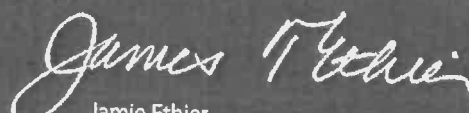
Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8\%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	0.1 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	≤ 10 ppm	5 ppm
Water (by KF, coulometric)	$\leq 0.02\%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by R on 9/13/22

E 3397


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
Page 1 of 1



**PRODUCTOS
QUÍMICOS
MONTERREY, S.A. DE C.V.**



MIRADOR 201, COL. MIRADOR
MONTERREY, N.L. MÉXICO
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 :** Na₂SO₄
SPECIFICATION NUMBER : 6399 **RELEASE DATE:** OCT/28/2021
LOT NUMBER : 139404

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na ₂ SO ₄)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.0
Insoluble matter	Max. 0.01%	0.005 %
Loss on ignition	Max. 0.5%	0.1 %
Chloride (Cl)	Max. 0.001%	<0.001 %
Nitrogen compounds (as N)	Max. 5 ppm	<5 ppm
Phosphate (PO ₄)	Max. 0.001%	<0.001 %
Heavy metals (as Pb)	Max. 5 ppm	<5 ppm
Iron (Fe)	Max. 0.001%	<0.001 %
Calcium (Ca)	Max. 0.01%	0.002 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.002 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreign matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	97.6 %
Through US Standard No. 60 sieve	Max. 5%	2.1 %
Through US Standard No. 100 sieve	Max. 10%	0.2 %
COMMENTS		
 QC: PhC Irma Belmares		

If you need further details, please call our factory or contact our local distributor.

RE-02-01, Ed. 3

E 3412

Recd. by RP on 10/13/22

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis



Material No.: 9254-03
Batch No.: 22E1562001
Manufactured Date: 2022-05-03
Expiration Date: 2025-05-02
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.8 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 1.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RP on 11/3/22

E3425

James Ethier

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

Page 1 of 1

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis



Material No.: 9254-03
Batch No.: 22E1562001
Manufactured Date: 2022-05-03
Expiration Date: 2025-05-02
Revision No.: 0

Certificate of Analysis

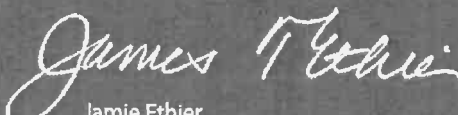
Test	Specification	Result
Assay ((CH ₃) ₂ CO) (by GC, corrected for water)	≥ 99.4 %	99.8 %
Color (APHA)	≤ 10	5
Residue after Evaporation	≤ 1.0 ppm	< 1.0 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titration Acid (μeq/g)	≤ 0.3	0.1
Titration Base (μeq/g)	≤ 0.6	< 0.1
Water (H ₂ O)	≤ 0.5 %	0.1 %
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	< 1
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	1

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd. by RPA 11/16/22

E 3430


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

Page 1 of 1

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 2212962012
Manufactured Date: 2022-09-10
Expiration Date: 2023-12-10
Revision No.: 0

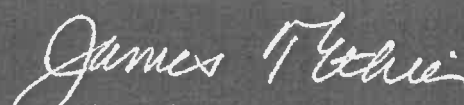
Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol) Single Impurity Peak (ng/mL)	≤ 5	2
ECD Sensitive Impurities (as Heptachlor Epoxide) Single Peak (pg/mL)	≤ 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	< 0.1 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3432


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

Page 1 of 1

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)



Material No.: 9266-A4
Batch No.: 22J1962006
Manufactured Date: 2022-09-23
Expiration Date: 2023-12-23
Revision No.: 0

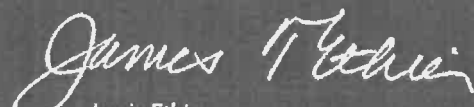
Certificate of Analysis

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	6
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	$\geq 99.8 \%$	100.0 %
Color (APHA)	≤ 10	5
Residue after Evaporation	$\leq 1.0 \text{ ppm}$	0.1 ppm
Titration Acid ($\mu\text{eq/g}$)	≤ 0.3	< 0.1
Chloride (Cl)	$\leq 10 \text{ ppm}$	< 5 ppm
Water (by KF, coulometric)	$\leq 0.02 \%$	< 0.01 %

For Laboratory, Research, or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: USA
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3446


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
Page 1 of 1

Sulfuric Acid

BAKER INSTRA-ANALYZED® Reagent

For Trace Metal Analysis

Low Selenium

avantor™



Material No.: 9673-33

Batch No.: 0000250349

Manufactured Date: 2019/12/17

Retest Date: 2024/12/15

Revision No: 1

MS037-38-39-40
no

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H ₂ SO ₄)	95.0 - 98.0 %	96.5
Appearance	Passes Test	PT
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	1
ACS - Substances Reducing Permanganate (as SO ₂)	<= 2 ppm	< 2
Ammonium (NH ₄)	<= 1 ppm	< 1
Chloride (Cl)	<= 0.1 ppm	< 0.1
Nitrate (NO ₃)	<= 0.2 ppm	< 0.1
Phosphate (PO ₄)	<= 0.5 ppm	< 0.1
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	0.2
Arsenic and Antimony (as As)	<= 4 ppb	< 2
Trace Impurities - Barium (Ba)	<= 10.0 ppb	< 1.0
Trace Impurities - Beryllium (Be)	<= 10.0 ppb	< 1.0
Trace Impurities - Bismuth (Bi)	<= 10.0 ppb	< 1.0
Trace Impurities - Boron (B)	<= 10.0 ppb	< 5.0
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	< 0.3
Trace Impurities - Calcium (Ca)	<= 50.0 ppb	2.9
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	< 0.4
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	< 0.3
Trace Impurities - Copper (Cu)	<= 1.0 ppb	< 0.1
Trace Impurities - Gallium (Ga)	<= 10.0 ppb	< 1.0
Trace Impurities - Germanium (Ge)	<= 10.0 ppb	< 10.0
Trace Impurities - Gold (Au)	<= 10.0 ppb	< 0.2
Heavy Metals (as Pb)	<= 500 ppb	< 100

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Test	Specification	Result
Trace Impurities - Iron (Fe)	<= 50.0 ppb	4.1
Trace Impurities - Lead (Pb)	<= 0.5 ppb	< 0.5
Trace Impurities - Lithium (Li)	<= 10.0 ppb	< 1.0
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	0.4
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	< 0.4
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	< 0.1
Trace Impurities - Molybdenum (Mo)	<= 10.0 ppb	< 5.0
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	< 0.3
Trace Impurities - Niobium (Nb)	<= 10.0 ppb	< 1.0
Trace Impurities - Potassium (K)	<= 500.0 ppb	< 2.0
Trace Impurities - Selenium (Se)	<= 50.0 ppb	22.9
Trace Impurities - Silicon (Si)	<= 100.0 ppb	< 10.0
Trace Impurities - Silver (Ag)	<= 1.0 ppb	< 0.3
Trace Impurities - Sodium (Na)	<= 500.0 ppb	2.7
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	< 0.2
Trace Impurities - Tantalum (Ta)	<= 10.0 ppb	< 5.0
Trace Impurities - Thallium (Tl)	<= 20.0 ppb	< 5.0
Trace Impurities - Tin (Sn)	<= 5.0 ppb	< 0.8
Trace Impurities - Titanium (Ti)	<= 10.0 ppb	< 1.0
Trace Impurities - Vanadium (V)	<= 10.0 ppb	< 1.0
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	0.3
Trace Impurities - Zirconium (Zr)	<= 10.0 ppb	< 1.0

For Laboratory, Research or Manufacturing Use

Country of Origin: US
Packaging Site: Phillipsburg Mfg Ctr & DC

James Ethier
Jamie Ethier
Vice President Global Quality

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SHIPPING DOCUMENTS

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CHEMTECH

CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 • Fax (908) 789-8922
www.chemtech.net

CHEMTECH PROJECT NO. **N6070**
QUOTE NO. **N6070**
COC Number **2035954**

CLIENT INFORMATION

REPORT TO BE SENT TO:
COMPANY: **Jacobs**
ADDRESS: **10 10th Street Suite 1400**
CITY: **Atlanta** STATE: **GA** ZIP: **30309**
ATTENTION: **Melissa Warren**
PHONE: FAX:

CLIENT PROJECT INFORMATION

PROJECT NAME: **Princeton Site**
PROJECT NO.: **D3662225** LOCATION: **Princeton Mountainside**
PROJECT MANAGER: **Chris English**
e-mail: **Chris.English@Jacobs.com**
PHONE: FAX:

CLIENT BILLING INFORMATION

BILL TO: **Chris English** PO#:
ADDRESS:
CITY STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX (RUSH) **Rush!** DAYS*
HARDCOPY (DATA PACKAGE): **24Hr VOC** DAYS*
EDD: **48 Hr 44 DWN** DAYS*
*TO BE APPROVED BY CHEMTECH
STANDARD HARDCOPY TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

☐ Level 1 (Results Only) ☐ Level 4 (QC + Full Raw Data)
☐ Level 2 (Results + QC) ☐ NJ Reduced ☐ US EPA CLP
☐ Level 3 (Results + QC) ☐ NYS ASP A ☐ NYS ASP B
+ Raw Data ☐ Other
☐ EDD FORMAT

*Side Specific VOCs
1.4 DWN*

PRESERVATIVES

COMMENTS

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE		SAMPLE COLLECTION		# OF BOTTLES	PRESERVATIVES									COMMENTS
			COMP	GRAB	DATE	TIME		A	E								
1.	GW-BR-04-226-245-121422	GW		X	12-14-22	1030	3	X	X								Rush!
2.	TB-01-121422	DI		X	12-14-22	1035	2	X									
3.	QWBR-01-160-180-121422	GW		X	12-14-22	800	3	X	X								Rush!
4.	OWBR-02-160-180-121422	GW		X	12-14-22	900	3	X	X								Rush!
5.	QWBR-03-128-148-121422	GW		X	12-14-22	1000	3	X	X								Rush!
6.																	
7.																	
8.																	
9.																	
10.																	

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER: 1. <i>[Signature]</i>	DATE/TIME: 12-14-22/1600	RECEIVED BY: <i>[Signature]</i> 1600	Conditions of bottles or coolers at receipt: ☒ COMPLIANT ☐ NON COMPLIANT ☐ COOLER TEMP: 4.2 °C
RELINQUISHED BY SAMPLER: 2. <i>[Signature]</i>	DATE/TIME:	RECEIVED BY:	Comments: See work order for site specific VOC list
RELINQUISHED BY SAMPLER: 3. <i>[Signature]</i>	DATE/TIME: 12-14-22	RECEIVED BY: SB	

Page 1 of 1

CLIENT: ☒ Hand Delivered ☐ Other
CHEMTECH: ☒ Picked Up ☐ Field Sampling

Shipment Complete
☒ YES ☐ NO

From: Ynfante, John <John.Ynfante@jacobs.com>
Sent: Thursday, December 22, 2022 10:14 PM
To: Jordan Hedvat; Samantha@chemtech.net
Cc: CHEMTECH-Data@chemtech.net
Subject: RE: [EXTERNAL] Summary Report Details For Project Former Schlumberger Site Princeton NJ-N6070.

Jordan and Samantha,

It was brought to my attention that this report N6070 has some incorrect sample IDs. The first sample GW-BR-04-226-245-121422 is correct, but the other 3 samples need to be corrected to match the chain as listed below:
GW-BR-01-160-180-121422 should be "OWBR-01-160-180-121422"
GW-BR-02-160-180-121422 should be "OWBR-02-160-180-121422"
GW-BR-03-128-148-121422 should be "OWBR-03-128-148-121422"

Please revise and reissue the data. Thanks!

- John Y.

From: CHEMTECH-Data@chemtech.net <CHEMTECH-Data@chemtech.net>
Sent: Monday, December 19, 2022 5:35 PM
To: Murphy, Mary <Mary.Murphy@jacobs.com>; Warren, Melissa <Melissa.Warren@jacobs.com>; Scott, Doug <Doug.Scott@jacobs.com>; Bingeman, Ian <Ian.Bingeman@jacobs.com>; Jones, Philip <Philip.Jones1@jacobs.com>; Garvey, Bethany <Bethany.Garvey@jacobs.com>; khummmler@chemtech.net; Ynfante, John <John.Ynfante@jacobs.com>
Subject: [EXTERNAL] Summary Report Details For Project Former Schlumberger Site Princeton NJ-N6070.



To Doug Scott;

Please see the attached Summary Report for the following project, or download the file using your login credentials from the link below.

Order ID : N6070
Project ID : Former Schlumberger Site Princeton NJ
Download File : <https://chemtech.net/secureLogin.aspx>
Order Date : 12/14/2022 4:13:00 PM

CHEMTECH's Project Manager : Samantha Beazley , Samantha@chemtech.net , Ext :

CHEMTECH's Sales Executive : Kurt Hummler , khummler@chemtech.net , 908-728-3143 Ext :3143

Thank you for the opportunity to provide you with our services. For any questions please feel free to contact your project manager.

Click Here for our short online customer Survey [//chemtech.net/ClientSurvey.aspx](http://chemtech.net/ClientSurvey.aspx).

Thank you,

CHEMTECH

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Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0649
DOD ELAP (L-A-B)	L2219
Maine	2022022
Maryland	296
New Hampshire	255422
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	P330-21-00137
Texas	T104704488-23-16



LOGIN REPORT/SAMPLE TRANSFER

Order ID : N6070 JACO05

Order Date : 12/14/2022 4:13:00 PM

Project Mgr :

Client Name : JACOBS Engineering Grou

Project Name : Former Schlumberger Site F

Report Type : Level 4

Client Contact : Doug Scott

Receive DateTime : 12/14/2022 12:00:00 AM

EDD Type : CH2MHILL

Invoice Name : JACOBS Engineering Grou

Purchase Order :

Hard Copy Date :

Invoice Contact : Doug Scott

Date Signoff :

LAB ID	CLIENT ID	MATRIX	SAMPLE DATE	SAMPLE TIME	TEST	TEST GROUP	METHOD	FAX DATE	DUE DATES
N6070-01	GW-BR-04-226-245-121422	Water	12/14/2022	10:30	VOCMS Group3		8260-Low	1 Bus. Day	
N6070-02	TB-01-121422	Water	12/14/2022	10:35	VOCMS Group3		8260-Low	10 Bus. Days	
N6070-03	OWBR GW-BR -01-160-180-121422	Water	12/14/2022	08:00	VOCMS Group3		8260-Low	1 Bus. Day	
N6070-04	OWBR GW-BR -02-160-180-121422	Water	12/14/2022	09:00	VOCMS Group3		8260-Low	1 Bus. Day	
N6070-05	OWBR GW-BR -03-128-148-121422	Water	12/14/2022	10:00	VOCMS Group3		8260-Low	1 Bus. Day	
	SB 12/28/2022				VOCMS Group3		8260-Low	1 Bus. Day	

Relinquished By : 

Date / Time : 12-14-22 1740

Received By : 

Date / Time : 12/14/22 1740

Storage Area : VOA Refridgerator Room