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

Cover Page

Order ID : Q2806

Project ID : NWIRP Bethpage 112G08005-WE13

Client : Tetra Tech NUS, Inc.

Lab Sample Number	Client Sample Number
Q2806-01	RW7-SP100-20250807
Q2806-02	RW7-SP201-20250807
Q2806-03	RW7-SP303-20250807

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: 8/18/2025

NYDOH CERTIFICATION NO - 11376

NJDEP CERTIFICATION NO - 20012

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

CASE NARRATIVE

Tetra Tech NUS, Inc.
Project Name: NWIRP Bethpage 112G08005-WE13
Project Manager : Ernie Wu
Order ID # Q2806
Test Name: SVOC-SIMGroup1

A. Number of Samples and Date of Receipt:

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

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

D. QA/ QC Samples:
The Holding Times were met for all analysis.
The Surrogate recoveries were met for all analysis.
The Internal Standards Areas were met for all analysis.
The Retention Times were met for all analysis.
The RPD were met for all analysis.

The Blank Spike for {PB169222BS} with File ID: BN037596.D met requirements for all compounds except for 1,4-Dioxane[68%]. Recovery failed marginally low, Therefor no further corrective action was taken.

The Blank Spike Duplicate met requirements for all compounds.
The Blank analysis did not indicate the presence of lab contamination.
The Initial Calibration met the requirements.
The Continuous Calibration met the requirements.
The Tuning criteria met requirements.

E. Additional Comments:
The laboratory certifies that the all-electronic diskette deliverable exactly match the data summary forms (i.e. Form Is)."
The Form 6 is not included in the data package because the Initial Calibration was performed using 7 points.

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

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

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

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_____

284 Sheffield Street, Mountainside NJ 07092 Tel. 908-789-8900 Fax: 908-789-8922

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 is flag is used when similar situation arise on any organic parameter i.e. Pest, PCB and others.
B	Indicates the analyte was found in the blank as well as the sample report as "12 B".
E	Indicates the analyte 's concentration exceeds the calibrated range of the instrument for that specific analysis.
D	This flag identifies all compounds identified in an analysis at a secondary dilution factor.
P	This flag is used for Pesticide/PCB target analyte when there is >25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on Form 1 and flagged with a "P".
N	This flag indicates presumptive evidence of a compound. This is only used for tentatively identified compounds (TICs), where the identification is based on a mass spectral library search. It applies to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the flag is not used.
A	This flag indicates that a Tentatively Identified Compound is a suspected aldol-condensation product.
Q	Indicates the LCS did not meet the control limits requirements

ALLIANCE 284 Sheffield Street, Mountainside New Jersey 07092

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

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

ORDER ID: Q2806 MATRIX: Water

METHOD: 8270-Modified/3510

		NA	NO	YES
1.	Chromatograms Labeled/Compounds Identified. (Field samples and Method Blanks)			✓
2.	GC/MS Tuning Specifications. DFTPP Meet Criteria. (NOTE THAT THERE ARE DIFFERENT CRITERIA FOR NY ASP CLP, CLP AND NJ)			✓
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 Series.			✓
4.	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of sample analysis for 600 series and 12 hours for 8000 series.			✓
5.	GC/MS Calibration Requirements.			✓
	The Initial Calibration met the requirements. The Continuous Calibration met the requirements.			
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		✓	
7.	Surrogate Recoveries Meet Criteria		✓	
	If not met, list those compounds and their recoveries which fall outside the acceptable ranges.			
	The Surrogate recoveries were met for all analysis.			
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 for {PB169222BS} with File ID: BN037596.D met requirements for all compounds except for 1,4-Dioxane[68%]. Recovery failed marginally low, Therefor no further corrective action was taken.			
	The Blank Spike Duplicate met requirements for all compounds.			

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

(CONTINUED)

		NA	NO	YES
9.	Internal Standard Area/Retention Time Shift Meet Criteria			✓
	Comments:			
10.	Extraction Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			
11.	Analysis Holding Time Met			✓
	If not met, list number of days exceeded for each sample:			

ADDITIONAL COMMENTS:

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

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

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

_____ _____

QA REVIEW Date

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

APPENDIX A

QA REVIEW GENERAL DOCUMENTATION

Project #: **Q2806**

	Completed
For thorough review, the report must have the following:	
GENERAL:	
Are all original paperwork present (chain of custody, record of communication,airbill, sample management lab chronicle, login page)	✓
Check chain-of-custody for proper relinquish/return of samples	✓
Is the chain of custody signed and complete	✓
Check internal chain-of-custody for proper relinquish/return of samples /sample extracts	✓
Collect information for each project id from server. Were all requirements followed	✓
COVER PAGE:	
Do numbers of samples correspond to the number of samples in the Chain of Custody on login page	✓
Do lab numbers and client Ids on cover page agree with the Chain of Custody	✓
CHAIN OF CUSTODY:	
Do requested analyses on Chain of Custody agree with form I results	✓
Do requested analyses on Chain of Custody agree with the log-in page	✓
Were the correct method log-in for analysis according to the Analytical Request and Chain of Castody	✓
Were the samples received within hold time	✓
Were any problems found with the samples at arrival recorded in the Sample Management Laboratory Chronicle	✓
ANALYTICAL:	
Was method requirement followed?	✓
Was client requirement followed?	✓
Does the case narrative summarize all QC failure?	✓
All runlogs and manual integration are reviewed for requirements	✓
All manual calculations and /or hand notations verified	✓

QA Review Signature: **SOHIL JODHANI** **Date:** **08/18/2025**

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

LAB CHRONICLE

OrderID:	Q2806	**OrderDate:**	8/8/2025 9:55:00 AM
Client:	Tetra Tech NUS, Inc.	**Project:**	NWIRP Bethpage 112G08005-WE13
Contact:	Ernie Wu	**Location:**	J11

LabID	ClientID	Matrix	Test	Method	Sample Date	Prep Date	Anal Date	Received
Q2806-01	**RW7-SP100-20250807**	**Water**			**08/07/25**			**08/08/25**
			SVOC-SIMGroup1	8270-Modified		08/12/25	08/13/25	
Q2806-02	**RW7-SP201-20250807**	**Water**			**08/07/25**			**08/08/25**
			SVOC-SIMGroup1	8270-Modified		08/12/25	08/13/25	
Q2806-03	**RW7-SP303-20250807**	**Water**			**08/07/25**			**08/08/25**
			SVOC-SIMGroup1	8270-Modified		08/12/25	08/13/25	

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

Hit Summary Sheet
SW-846

SDG No.: Q2806

Client: Tetra Tech NUS, Inc.

Sample ID	Client ID		Parameter	Concentration	C	MDL	LOD	RDL	Units
Client ID :	**RW7-SP100-20250807**								
Q2806-01	RW7-SP100-20250807	WATER	1,4-Dioxane	3.400	Q	0.07	0.2	0.2	ug/L
			Total Svoc :	**3.40**					
			Total Concentration:	**3.40**					

QC
SUMMARY

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

Surrogate Summary

SW-846

SDG No.: Q2806

Client: Tetra Tech NUS, Inc.

Analytical Method: 8270-Modified

Lab Sample ID	Client ID	Parameter	Spike (PPM)	Result (PPM)	Recovery (%)	Qual	Limits (%) Low	Limits (%) High
PB169222BL	PB169222BL	2-Methylnaphthalene-d10	0.4	0.32	80		30	150
		Fluoranthene-d10	0.4	0.32	81		30	150
		Nitrobenzene-d5	0.4	0.34	86		55	111
		2-Fluorobiphenyl	0.4	0.35	86		53	106
		Terphenyl-d14	0.4	0.38	94		58	132
PB169222BS	PB169222BS	2-Methylnaphthalene-d10	0.4	0.34	84		30	150
		Fluoranthene-d10	0.4	0.30	75		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.36	89		53	106
		Terphenyl-d14	0.4	0.37	93		58	132
PB169222BSD	PB169222BSD	2-Methylnaphthalene-d10	0.4	0.35	88		30	150
		Fluoranthene-d10	0.4	0.32	80		30	150
		Nitrobenzene-d5	0.4	0.36	91		55	111
		2-Fluorobiphenyl	0.4	0.39	97		53	106
		Terphenyl-d14	0.4	0.41	101		58	132
Q2806-01	RW7-SP100-20250807	2-Methylnaphthalene-d10	0.4	0.30	75		30	150
		Fluoranthene-d10	0.4	0.37	92		30	150
		Nitrobenzene-d5	0.4	0.34	84		55	111
		2-Fluorobiphenyl	0.4	0.33	82		53	106
		Terphenyl-d14	0.4	0.48	120		58	132
Q2806-02	RW7-SP201-20250807	2-Methylnaphthalene-d10	0.4	0.31	78		30	150
		Fluoranthene-d10	0.4	0.38	94		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.35	87		53	106
		Terphenyl-d14	0.4	0.43	106		58	132
Q2806-03	RW7-SP303-20250807	2-Methylnaphthalene-d10	0.4	0.31	79		30	150
		Fluoranthene-d10	0.4	0.37	93		30	150
		Nitrobenzene-d5	0.4	0.35	88		55	111
		2-Fluorobiphenyl	0.4	0.35	88		53	106
		Terphenyl-d14	0.4	0.44	111		58	132

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2806 **Analytical Method:** 8270-Modified

Client: Tetra Tech NUS, Inc. **DataFile:** BN037596.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	RPD
PB169222BS	1,4-Dioxane	0.4	0.27	ug/L	68		*		70	130	

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

Laboratory Control Sample/Laboratory Control Sample Duplicate Summary

SW-846

SDG No.: Q2806 **Analytical Method:** 8270-Modified

Client: Tetra Tech NUS, Inc. **DataFile:** BN037597.D

Lab Sample ID	Parameter	Spike	Result	Unit	Rec	RPD	Qual	RPD Qual	Limits Low	Limits High	Limits RPD
PB169222BSD	1,4-Dioxane	0.4	0.29	ug/L	73	7			70	130	20

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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Client ID: PB169222BL

Lab Name: Alliance | Contract: TETR06

Lab Code: ACE | SDG NO.: Q2806

Lab File ID: BN037589.D | Lab Sample ID: PB169222BL

Instrument ID: BNA_N | Date Extracted: 08/12/2025

Matrix: (soil/water) Water | Date Analyzed: 08/13/2025

Level: (low/med) LOW | Time Analyzed: 11:05

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

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
PB169222BS	PB169222BS	BN037596.D	08/13/2025
RW7-SP100-20250807	Q2806-01	BN037592.D	08/13/2025
RW7-SP201-20250807	Q2806-02	BN037593.D	08/13/2025
RW7-SP303-20250807	Q2806-03	BN037594.D	08/13/2025
PB169222BSD	PB169222BSD	BN037597.D	08/13/2025

COMMENTS:

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance — Contract: TETR06

Lab Code: ACE — SDG NO.: Q2806

Lab File ID: BN037576.D — DFTPP Injection Date: 08/12/2025

Instrument ID: BNA_N — DFTPP Injection Time: 15:05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.6) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.1
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	87.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	16.2 (19.2) 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	BN037578.D	08/12/2025	16:26
SSTDICC0.2	SSTDICC0.2	BN037579.D	08/12/2025	17:03
SSTDICCC0.4	SSTDICCC0.4	BN037580.D	08/12/2025	17:39
SSTDICC0.8	SSTDICC0.8	BN037581.D	08/12/2025	18:16
SSTDICC1.6	SSTDICC1.6	BN037582.D	08/12/2025	18:52
SSTDICC3.2	SSTDICC3.2	BN037583.D	08/12/2025	19:29
SSTDICC5.0	SSTDICC5.0	BN037584.D	08/12/2025	20:05

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

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Alliance — Contract: TETR06

Lab Code: ACE — SDG NO.: Q2806

Lab File ID: BN037587.D — DFTPP Injection Date: 08/13/2025

Instrument ID: BNA_N — DFTPP Injection Time: 09:48

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
68	Less than 2.0% of mass 69	0.0 (0.0) 1
69	Mass 69 relative abundance	100
70	Less than 2.0% of mass 69	0.2 (0.5) 1
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.8
365	Greater than 1% of mass 198	3.9
441	Present, but less than mass 443	74.2
442	Greater than 50% of mass 198	100
443	15.0 - 24.0% of mass 442	19 (21) 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	BN037588.D	08/13/2025	10:28
PB169222BL	PB169222BL	BN037589.D	08/13/2025	11:05
RW7-SP100-20250807	Q2806-01	BN037592.D	08/13/2025	12:55
RW7-SP201-20250807	Q2806-02	BN037593.D	08/13/2025	13:31
RW7-SP303-20250807	Q2806-03	BN037594.D	08/13/2025	14:08
PB169222BS	PB169222BS	BN037596.D	08/13/2025	15:22
PB169222BSD	PB169222BSD	BN037597.D	08/13/2025	15:58
SSTDCCC0.4EC	SSTDCCC0.4	BN037598.D	08/13/2025	16:35

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

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE SDG NO.: Q2806

Client ID : SSTDCCC0.4 Date Analyzed: 08/13/2025

Lab File ID: BN037588.D Time Analyzed: 10:28

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	2728	7.717	6843	10.50	3392	14.35
	UPPER LIMIT	5456	8.217	13686	10.998	6784	14.845
	LOWER LIMIT	1364	7.217	3421.5	9.998	1696	13.845
	EPA SAMPLE NO.						
01	PB169222BL	2235	7.72	5344	10.50	2468	14.35
02	RW7-SP100-20250807	1915	7.72	4446	10.50	2152	14.35
03	PB169222BS	3068	7.72	7591	10.50	3534	14.35
04	PB169222BSD	2742	7.72	6598	10.50	3080	14.35
05	RW7-SP201-20250807	1937	7.72	4454	10.50	2122	14.35
06	RW7-SP303-20250807	1865	7.72	4331	10.50	2080	14.35

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.

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

8C

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Alliance

Lab Code: ACE SDG NO.: Q2806

Client ID: SSTDCCC0.4 Date Analyzed: 08/13/2025

Lab File ID: BN037588.D Time Analyzed: 10:28

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	6530	17.086	6467	21.268	5771	23.505
	UPPER LIMIT	13060	17.586	12934	21.768	11542	24.005
	LOWER LIMIT	3265	16.586	3233.5	20.768	2885.5	23.005
	EPA SAMPLE NO.						
01	PB169222BL	4726	17.10	3815	21.27	3770	23.51
02	RW7-SP100-20250807	4414	17.09	3975	21.28	3324	23.51
03	PB169222BS	6432	17.09	4873	21.28	4192	23.51
04	PB169222BSD	5659	17.09	4216	21.28	3616	23.51
05	RW7-SP201-20250807	4469	17.09	4166	21.28	3789	23.51
06	RW7-SP303-20250807	4148	17.09	3606	21.28	3055	23.51

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT 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.

Alliance
TECHNICAL GROUP

SAMPLE DATA

Raw Data: **BN037592.D**

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	08/07/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/08/25
Client Sample ID:	RW7-SP100-20250807	SDG No.:	Q2806
Lab Sample ID:	Q2806-01	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	980 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037592.D	1	08/12/25 08:52	08/13/25 12:55	PB169222

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	3.40	Q	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.30		30 - 150		75%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		92%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.33		53 - 106		82%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.48		58 - 132		120%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1920	7.717				
1146-65-2	Naphthalene-d8	4450	10.498				
15067-26-2	Acenaphthene-d10	2150	14.345				
1517-22-2	Phenanthrene-d10	4410	17.087				
1719-03-5	Chrysene-d12	3980	21.277				
1520-96-3	Perylene-d12	3320	23.508				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037592.D
Acq On : 13 Aug 2025 12:55
Operator : RC/JU
Sample : Q2806-01
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Quant Time: Aug 13 14:01:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

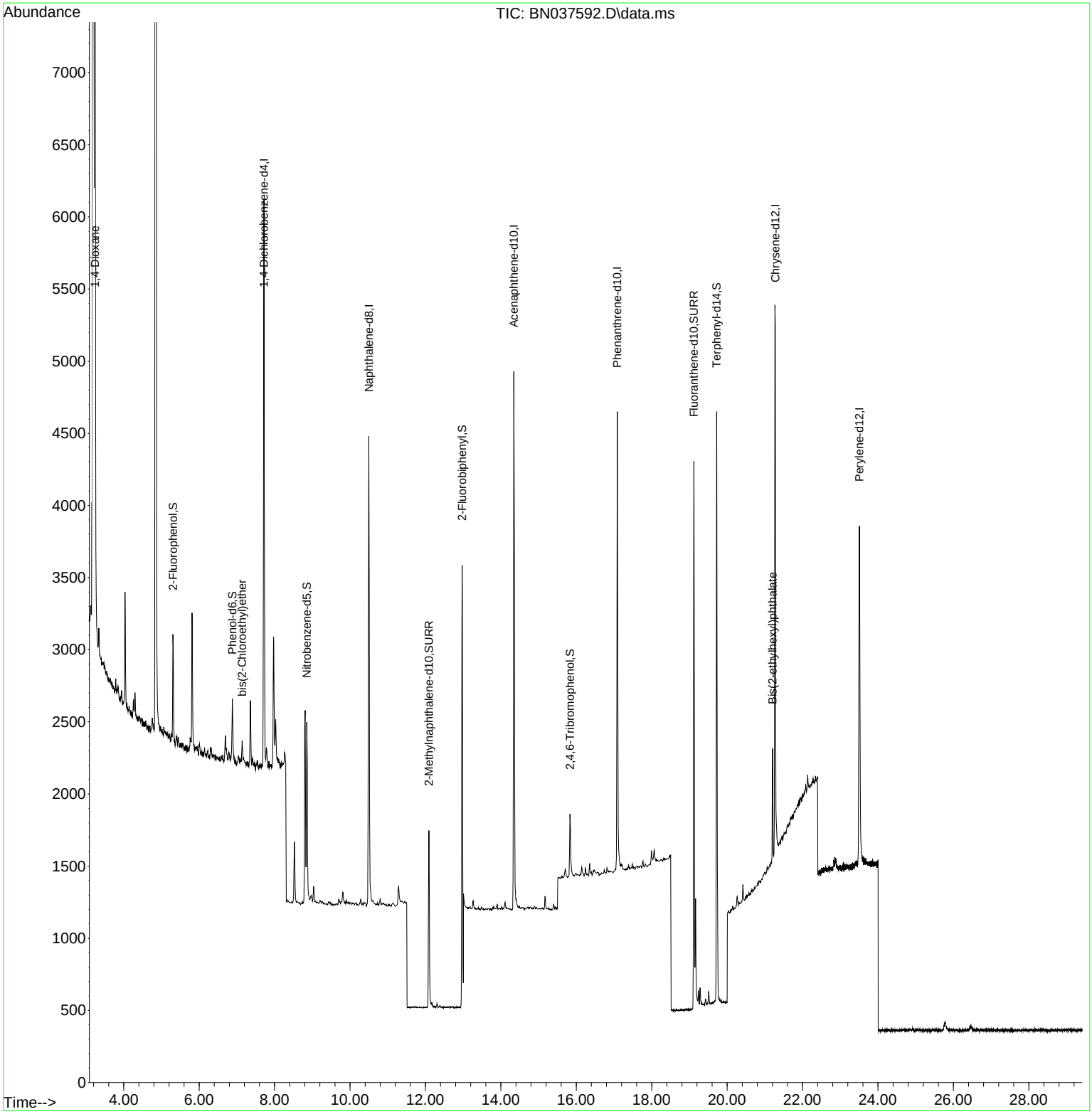
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.717	152	1915	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	4446	0.400	ng	0.00
13) Acenaphthene-d10	14.345	164	2152	0.400	ng	0.00
19) Phenanthrene-d10	17.087	188	4414	0.400	ng	0.00
29) Chrysene-d12	21.277	240	3975	0.400	ng	0.00
35) Perylene-d12	23.508	264	3324	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.305	112	587	0.135	ng	0.00
5) Phenol-d6	6.879	99	389	0.074	ng	0.00
8) Nitrobenzene-d5	8.854	82	1056	0.337	ng	0.00
11) 2-Methylnaphthalene-d10	12.091	152	1813	0.300	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	299	0.317	ng	0.00
15) 2-Fluorobiphenyl	12.973	172	4097	0.329	ng	0.00
27) Fluoranthene-d10	19.118	212	4272	0.368	ng	0.00
31) Terphenyl-d14	19.722	244	3942	0.482	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	6150	3.357	ng	98
6) bis(2-Chloroethyl)ether	7.139	93	101	0.021	ng	# 86
34) Bis(2-ethylhexyl)phtha...	21.205	149	701	0.128	ng	# 98

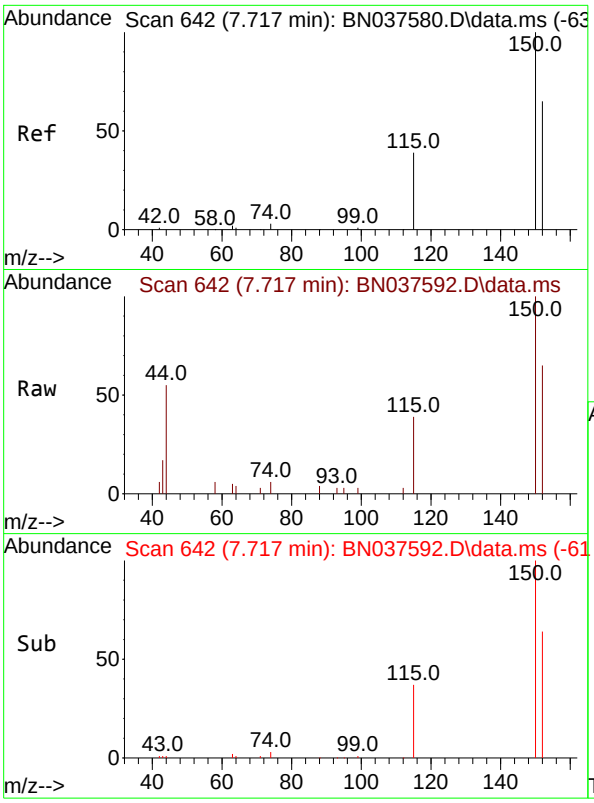
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037592.D
Acq On : 13 Aug 2025 12:55
Operator : RC/JU
Sample : Q2806-01
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Quant Time: Aug 13 14:01:44 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



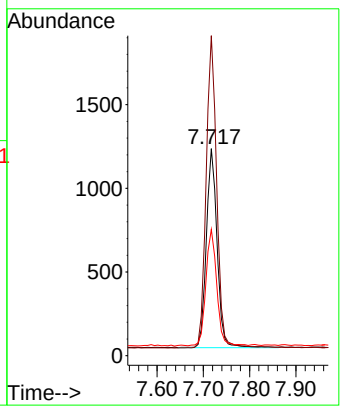


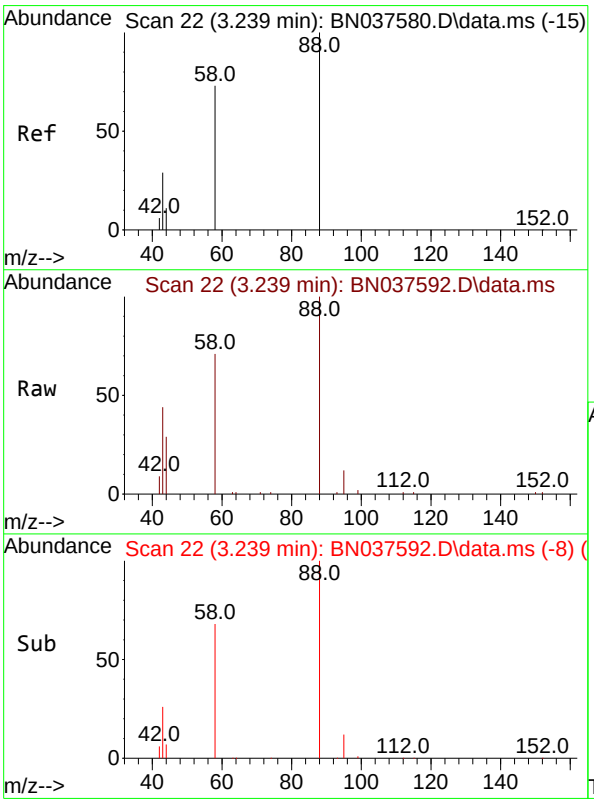
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:152 Resp: 1915

Ion	Ratio	Lower	Upper
152	100		
150	154.6	122.2	183.4
115	61.0	49.8	74.6

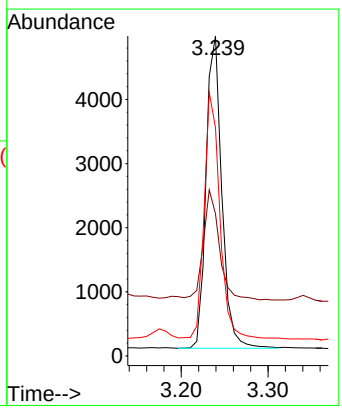


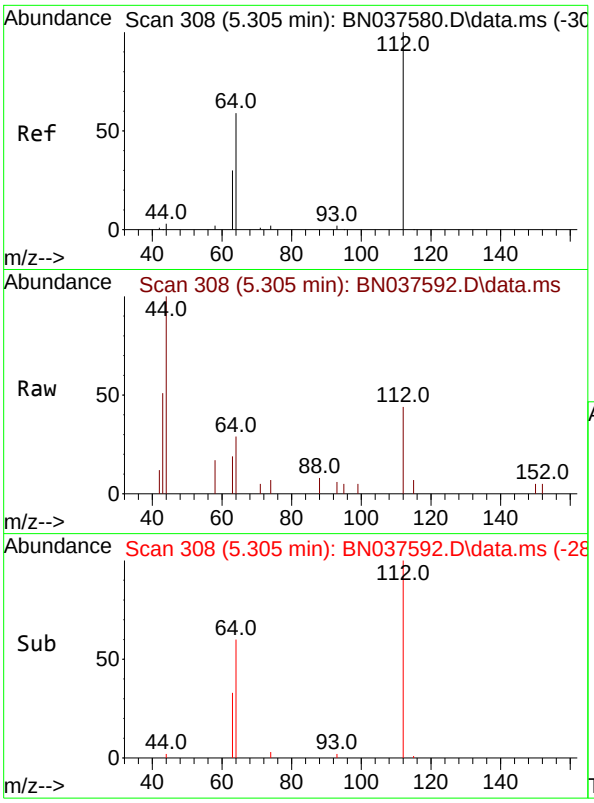


#2
1,4-Dioxane
Concen: 3.357 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion: 88 Resp: 6150

Ion	Ratio	Lower	Upper
88	100		
43	35.6	25.8	38.6
58	77.2	61.2	91.8



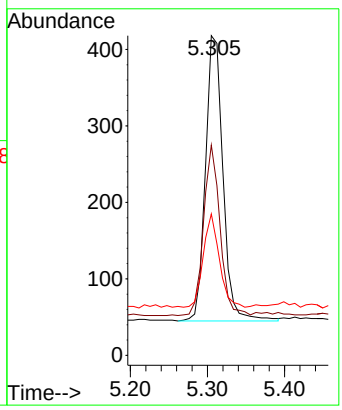


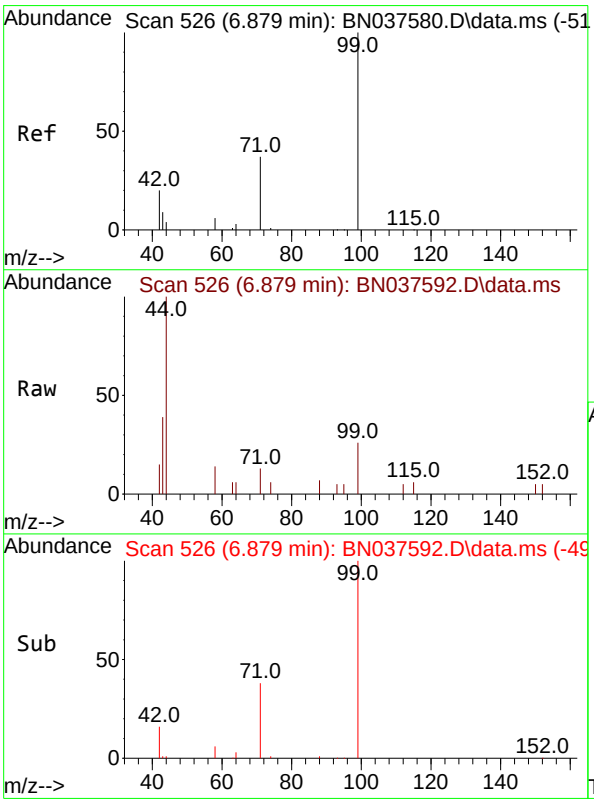
#4
2-Fluorophenol
Concen: 0.135 ng
RT: 5.305 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:112 Resp: 587

Ion	Ratio	Lower	Upper
112	100		
64	56.0	44.9	67.3
63	31.0	23.4	35.2

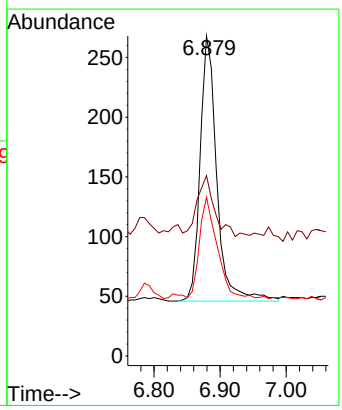


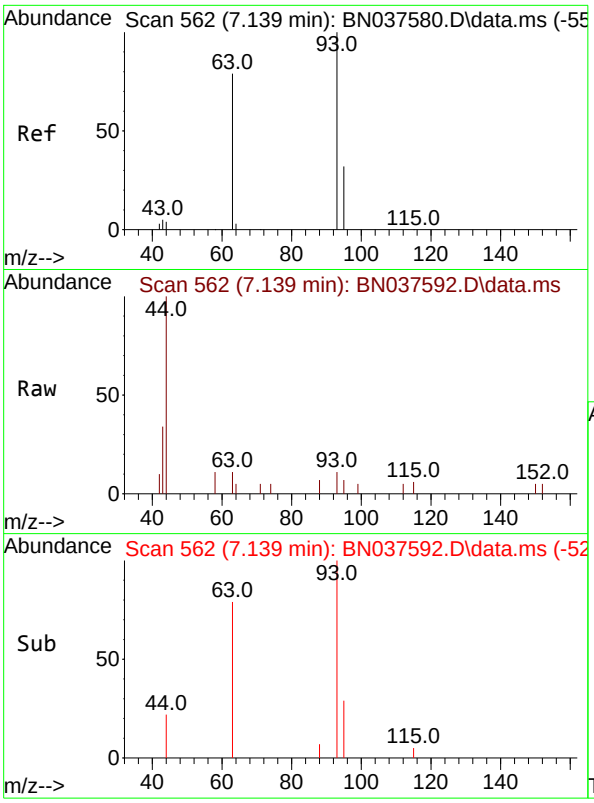


#5
Phenol-d6
Concen: 0.074 ng
RT: 6.879 min Scan# 526
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion: 99 Resp: 389

Ion	Ratio	Lower	Upper
99	100		
42	21.3	18.5	27.7
71	40.9	28.6	42.8



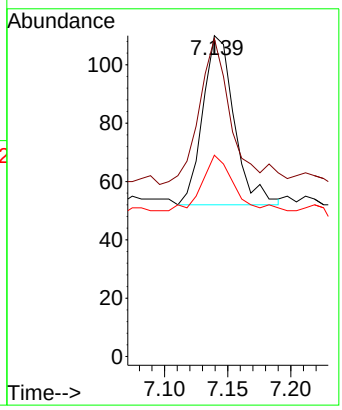


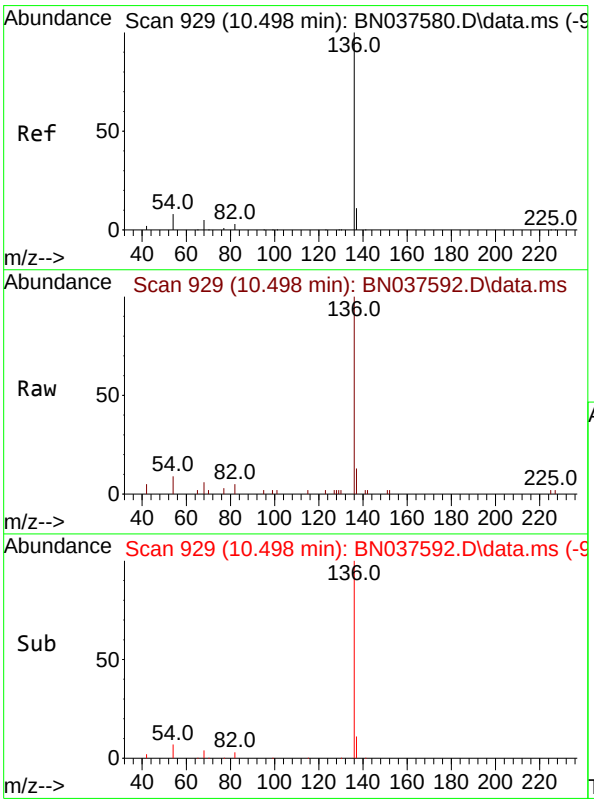
#6
bis(2-Chloroethyl)ether
Concen: 0.021 ng
RT: 7.139 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion: 93 Resp: 101

Ion	Ratio	Lower	Upper
93	100		
63	89.1	58.0	87.0#
95	31.7	24.9	37.3

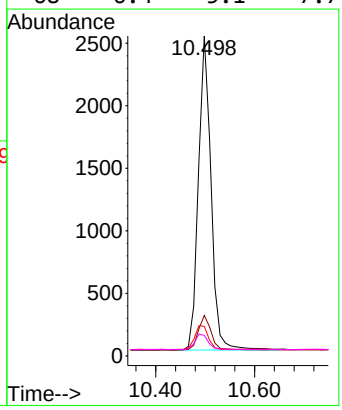


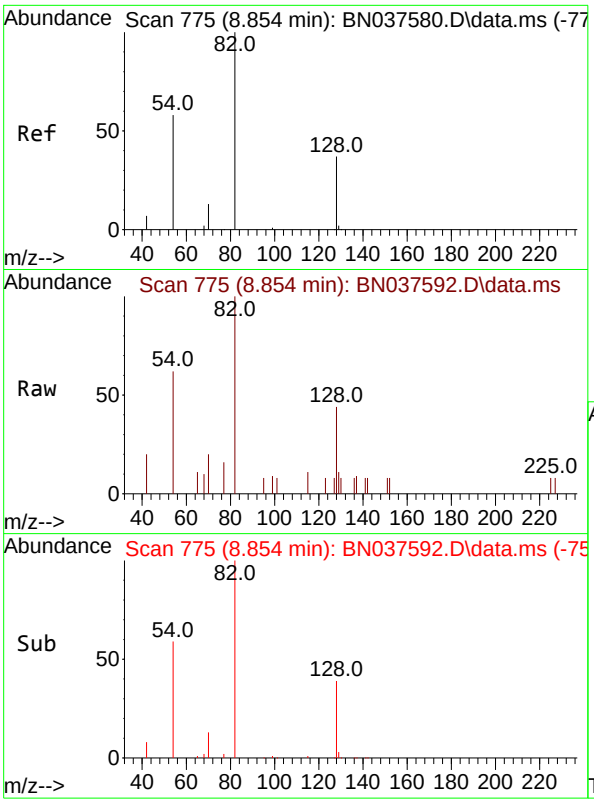


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 929
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion:136 Resp: 4446

Ion	Ratio	Lower	Upper
136	100		
137	12.7	9.5	14.3
54	9.3	7.3	10.9
68	6.4	5.1	7.7



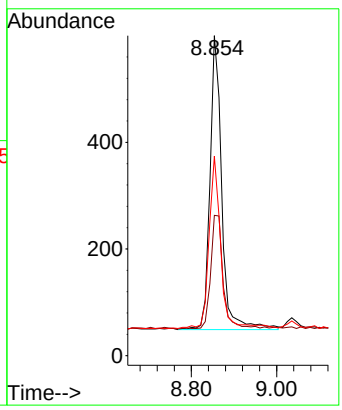


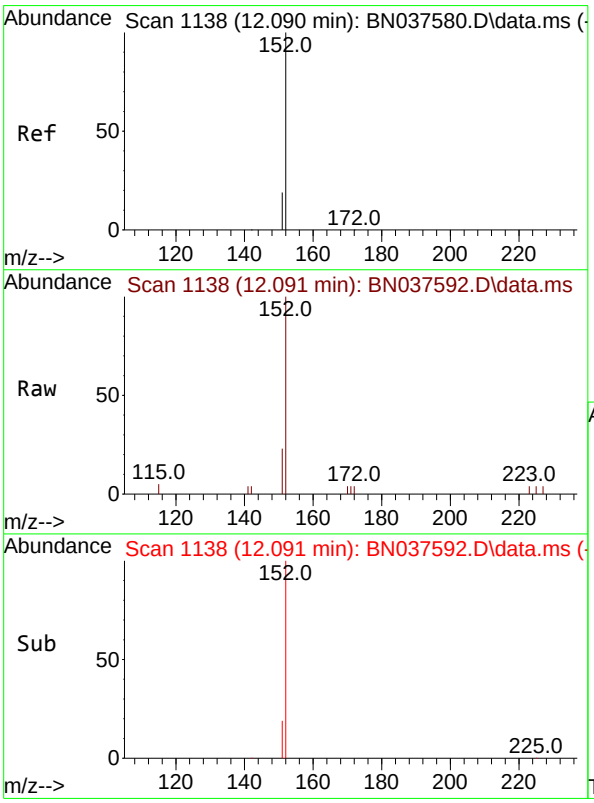
#8
Nitrobenzene-d5
Concen: 0.337 ng
RT: 8.854 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion: 82 Resp: 1056

Ion	Ratio	Lower	Upper
82	100		
128	43.8	32.6	48.8
54	62.3	48.9	73.3

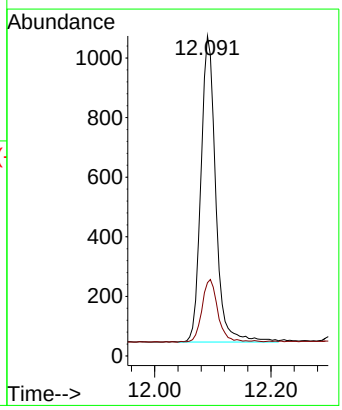


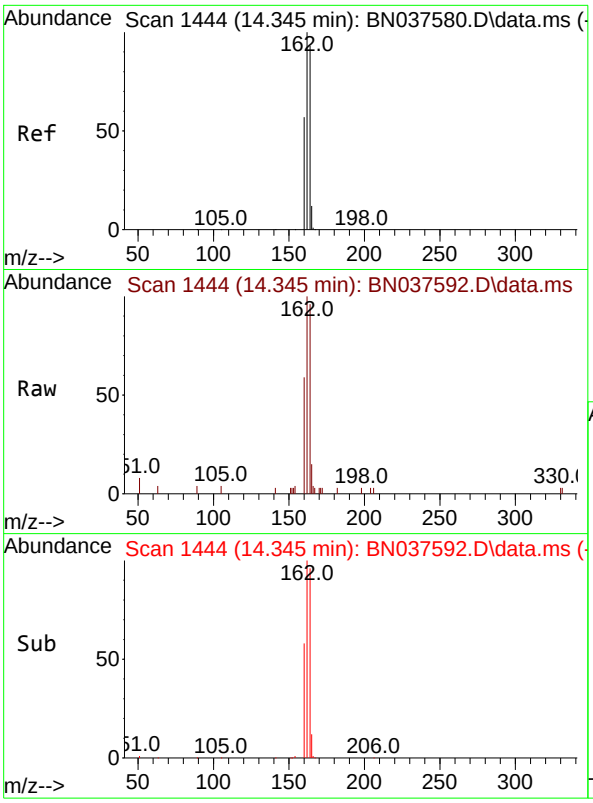


#11
2-Methylnaphthalene-d10
Concen: 0.300 ng
RT: 12.091 min Scan# 1138
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion:152 Resp: 1813

Ion	Ratio	Lower	Upper
152	100		
151	21.8	17.3	25.9



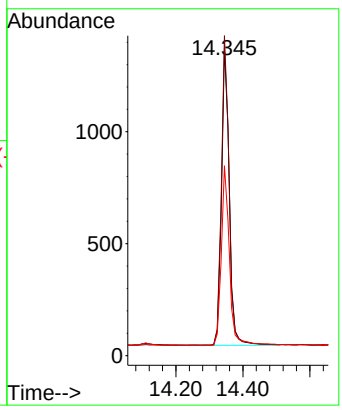


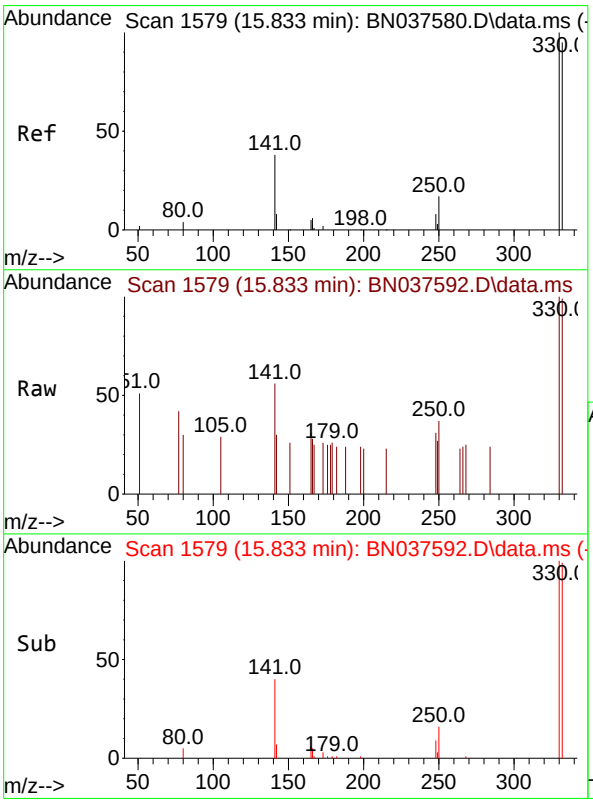
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:164 Resp: 2152

Ion	Ratio	Lower	Upper
164	100		
162	103.9	85.5	128.3
160	61.7	49.5	74.3

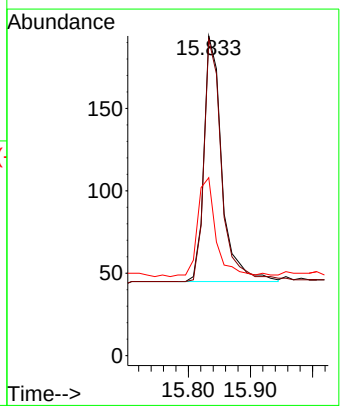


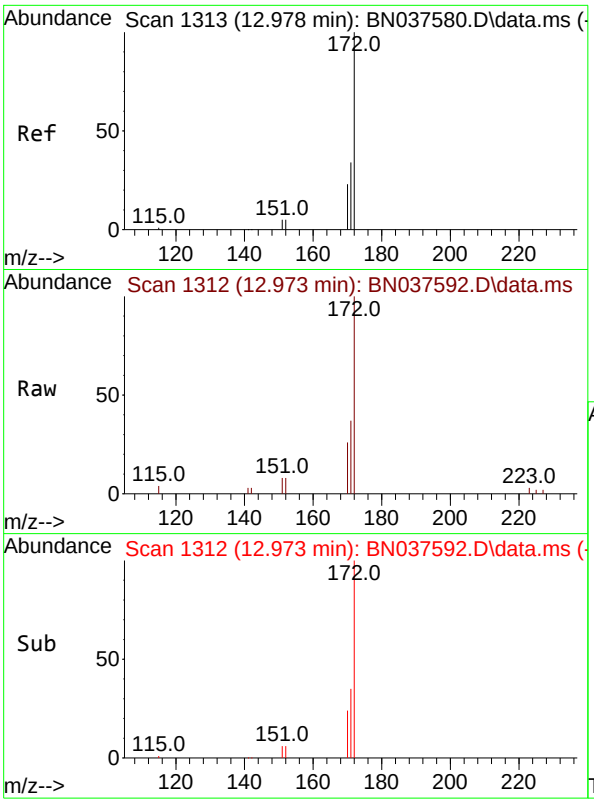


#14
2,4,6-Tribromophenol
Concen: 0.317 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion:330 Resp: 299

Ion	Ratio	Lower	Upper
330	100		
332	97.3	77.4	116.0
141	42.5	30.9	46.3



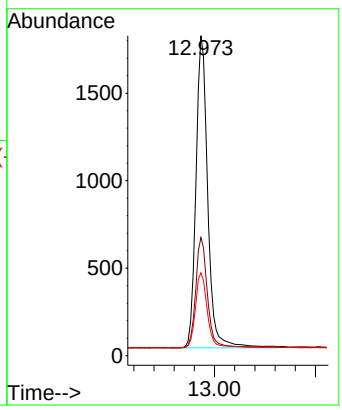


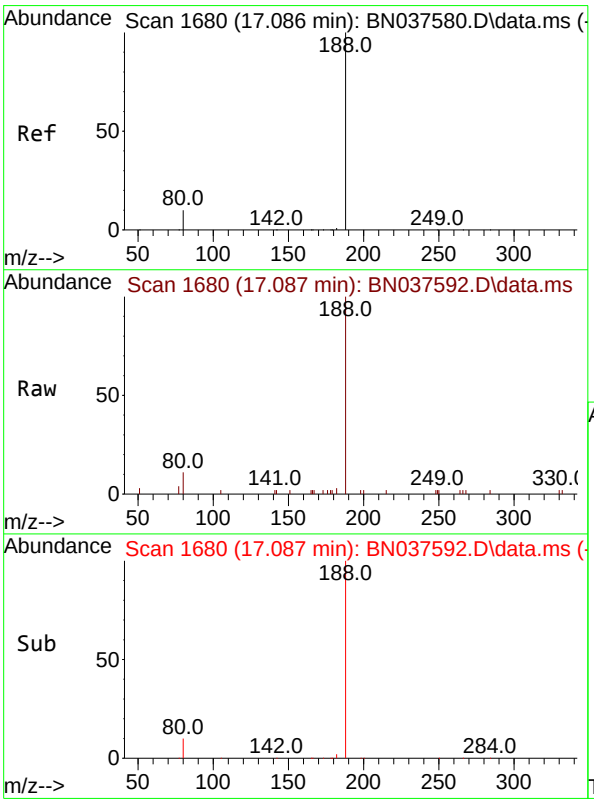
#15
2-Fluorobiphenyl
Concen: 0.329 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:172 Resp: 4097

Ion	Ratio	Lower	Upper
172	100		
171	36.9	28.2	42.4
170	25.9	19.2	28.8

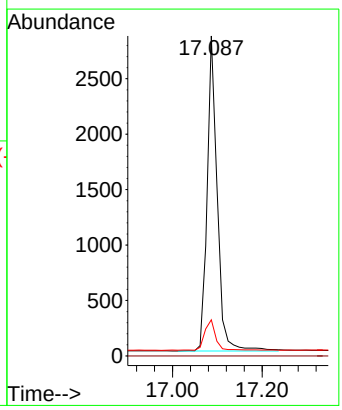


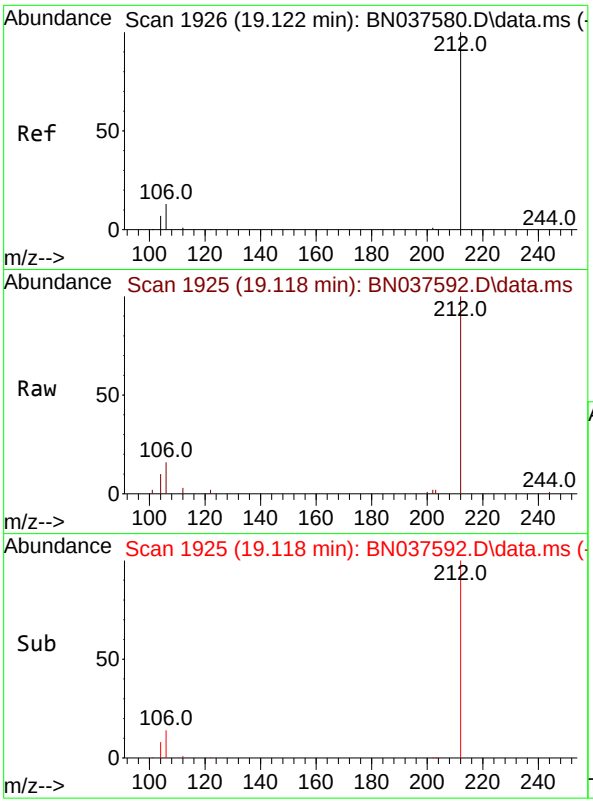


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion:188 Resp: 4414

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	9.1	13.7



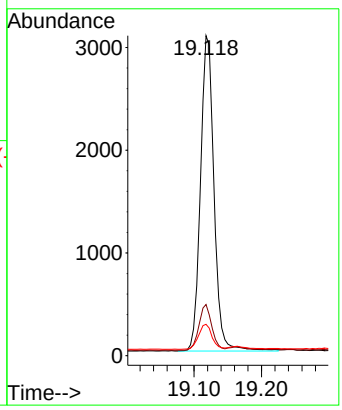


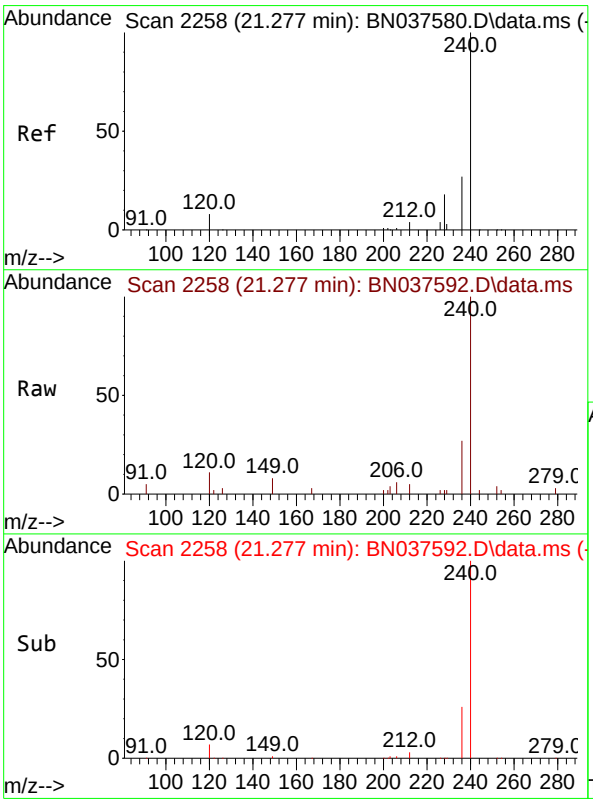
#27
Fluoranthene-d10
Concen: 0.368 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:212 Resp: 4272

Ion	Ratio	Lower	Upper
212	100		
106	13.7	11.5	17.3
104	7.9	6.6	9.8

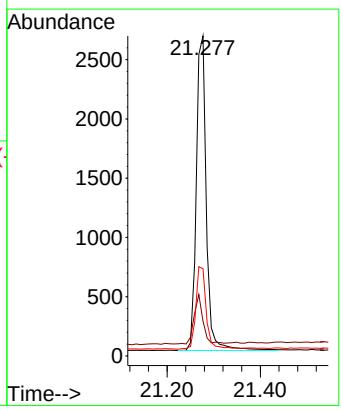


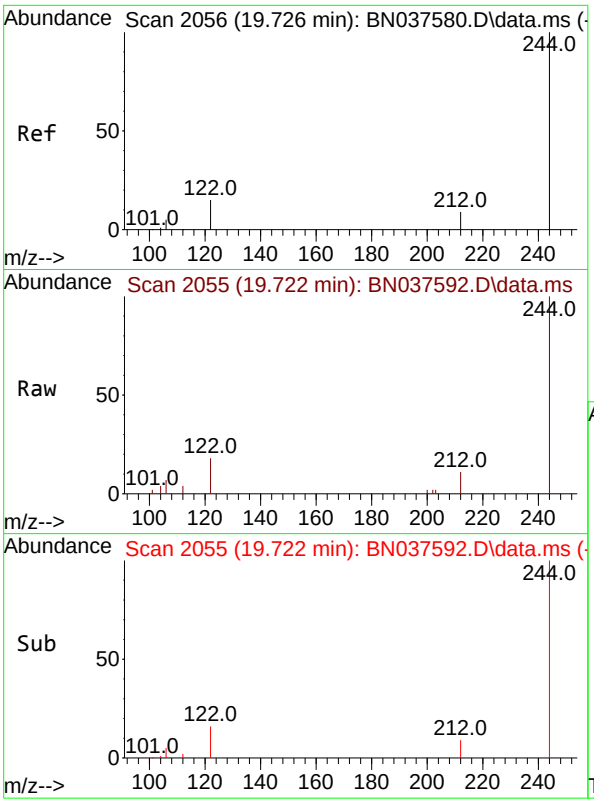


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion:240 Resp: 3975

Ion	Ratio	Lower	Upper
240	100		
120	10.9	8.9	13.3
236	27.3	22.6	33.8



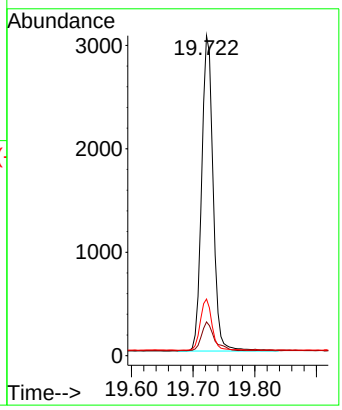


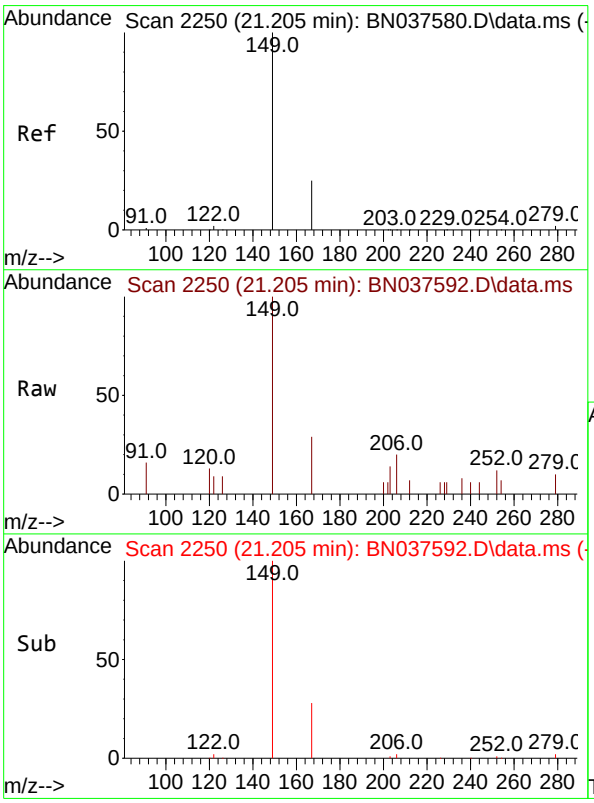
#31
Terphenyl-d14
Concen: 0.482 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:244 Resp: 3942

Ion	Ratio	Lower	Upper
244	100		
212	10.5	8.2	12.2
122	17.7	13.2	19.8

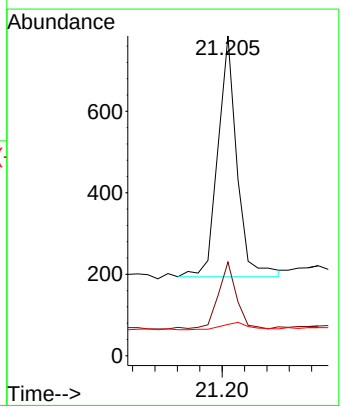


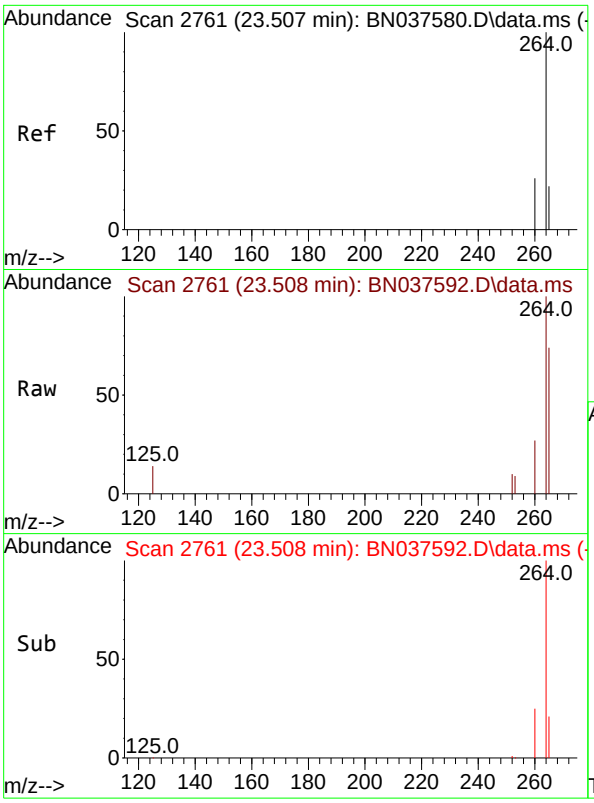


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.128 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Tgt Ion:149 Resp: 701

Ion	Ratio	Lower	Upper
149	100		
167	26.4	20.5	30.7
279	4.4	2.6	4.0#



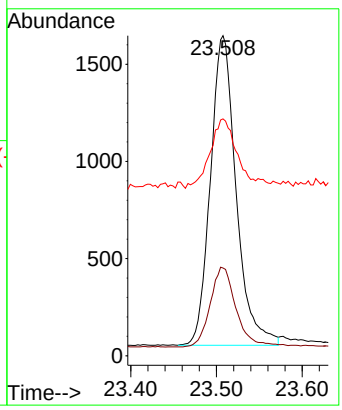


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.508 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037592.D
Acq: 13 Aug 2025 12:55

Instrument :
BNA_N
ClientSampleId :
RW7-SP100-20250807

Tgt Ion:264 Resp: 3324

Ion	Ratio	Lower	Upper
264	100		
260	27.4	21.6	32.4
265	74.0	48.2	72.4#



Raw Data: **BN037593.D**

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	08/07/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/08/25
Client Sample ID:	RW7-SP201-20250807	SDG No.:	Q2806
Lab Sample ID:	Q2806-02	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037593.D	1	08/12/25 08:52	08/13/25 13:31	PB169222

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	UQ	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		78%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.38		30 - 150		94%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		87%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.43		58 - 132		106%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1940	7.717				
1146-65-2	Naphthalene-d8	4450	10.498				
15067-26-2	Acenaphthene-d10	2120	14.345				
1517-22-2	Phenanthrene-d10	4470	17.087				
1719-03-5	Chrysene-d12	4170	21.277				
1520-96-3	Perylene-d12	3790	23.511				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **BN037593.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037593.D
Acq On : 13 Aug 2025 13:31
Operator : RC/JU
Sample : Q2806-02
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Quant Time: Aug 13 14:02:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

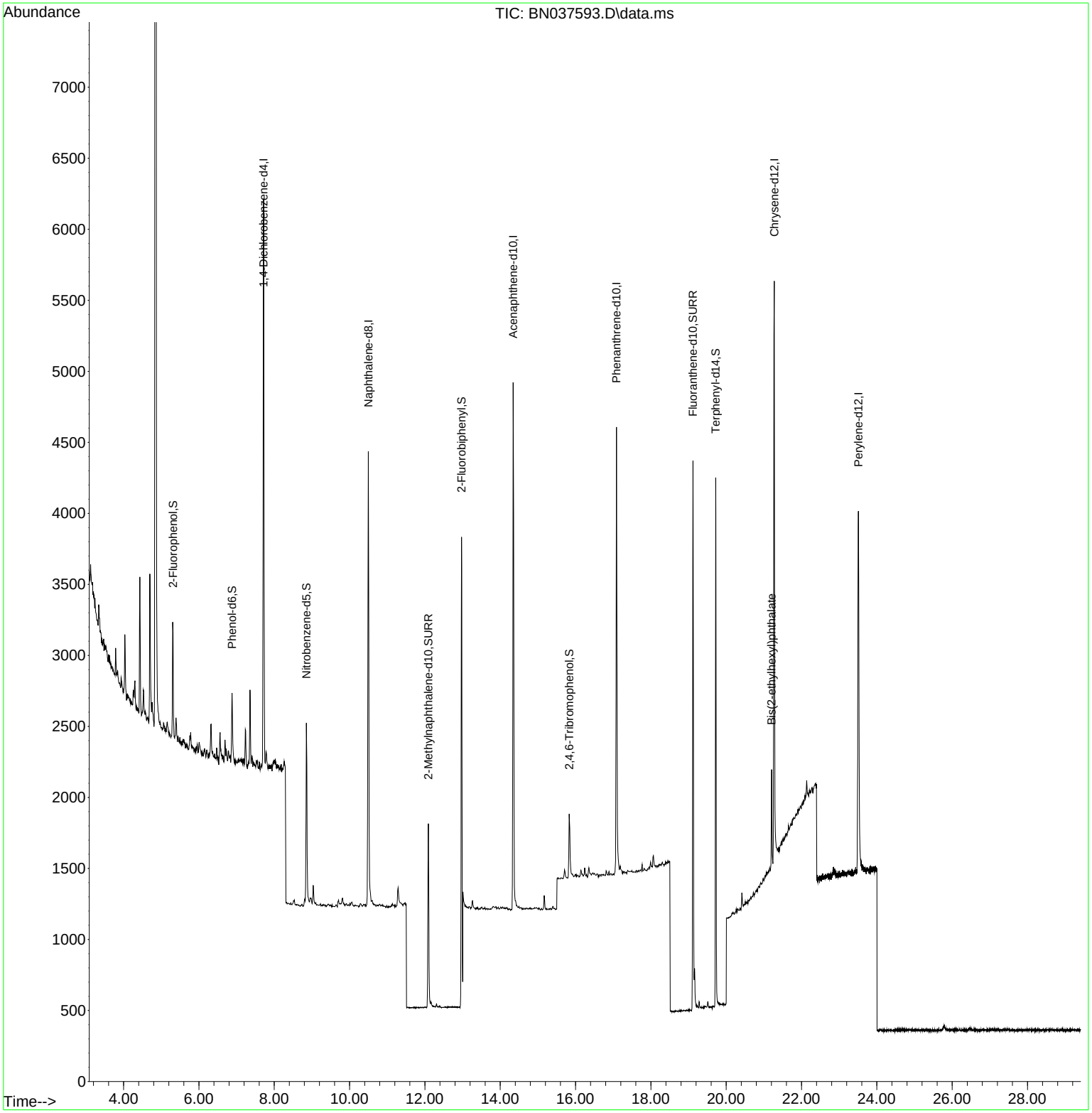
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.717	152	1937	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	4454	0.400	ng	0.00
13) Acenaphthene-d10	14.345	164	2122	0.400	ng	0.00
19) Phenanthrene-d10	17.087	188	4469	0.400	ng	0.00
29) Chrysene-d12	21.277	240	4166	0.400	ng	0.00
35) Perylene-d12	23.511	264	3789	0.400	ng	0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	647	0.147	ng	0.00
5) Phenol-d6	6.879	99	446	0.084	ng	0.00
8) Nitrobenzene-d5	8.854	82	1105	0.352	ng	0.00
11) 2-Methylnaphthalene-d10	12.091	152	1892	0.312	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	302	0.325	ng	0.00
15) 2-Fluorobiphenyl	12.973	172	4274	0.348	ng	0.00
27) Fluoranthene-d10	19.118	212	4415	0.376	ng	0.00
31) Terphenyl-d14	19.722	244	3642	0.425	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.205	149	645	0.112	ng	99

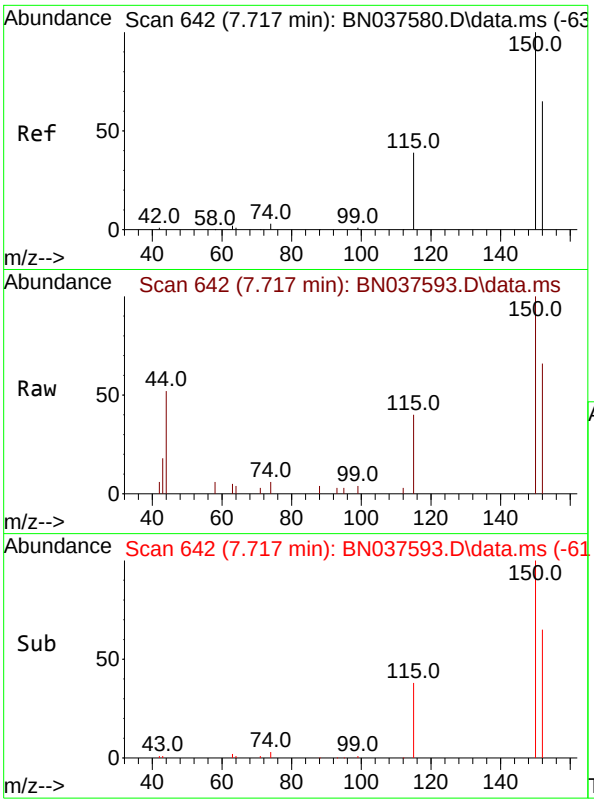
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037593.D
Acq On : 13 Aug 2025 13:31
Operator : RC/JU
Sample : Q2806-02
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Quant Time: Aug 13 14:02:01 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



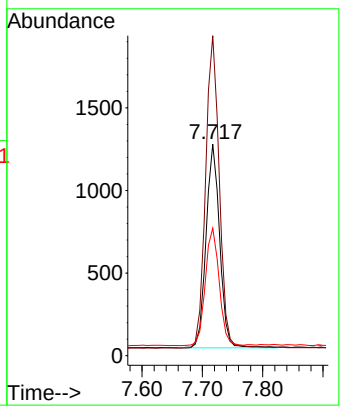


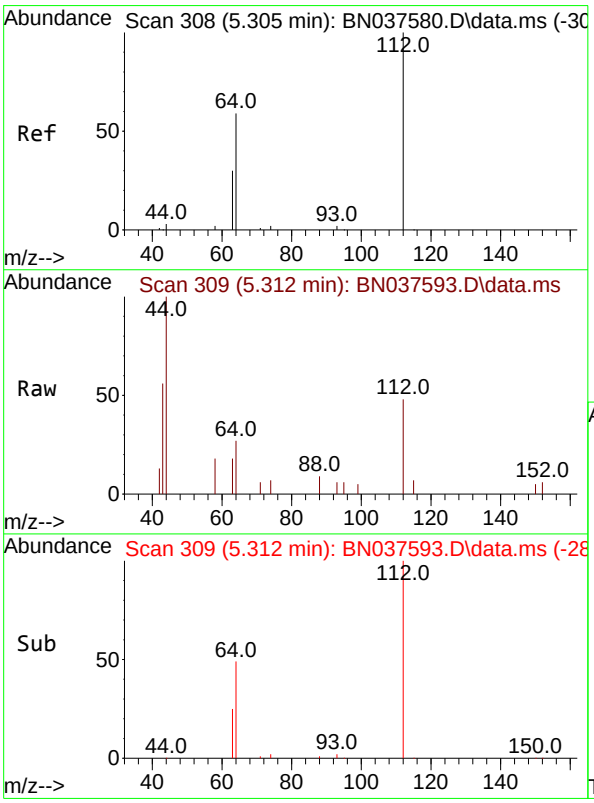
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion:152 Resp: 1937

Ion	Ratio	Lower	Upper
152	100		
150	151.3	122.2	183.4
115	60.3	49.8	74.6

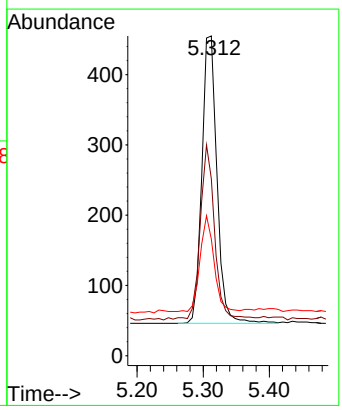


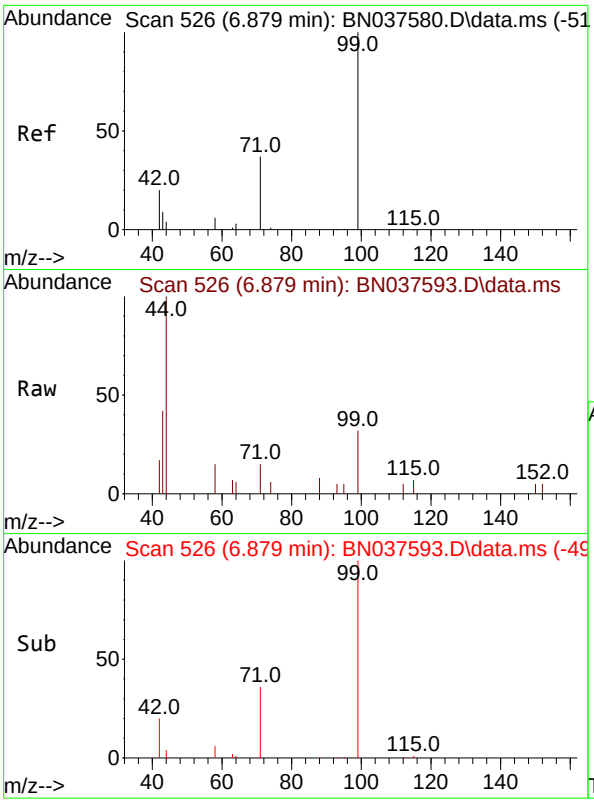


#4
2-Fluorophenol
Concen: 0.147 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.007 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:112 Resp: 647

Ion	Ratio	Lower	Upper
112	100		
64	58.7	44.9	67.3
63	30.9	23.4	35.2



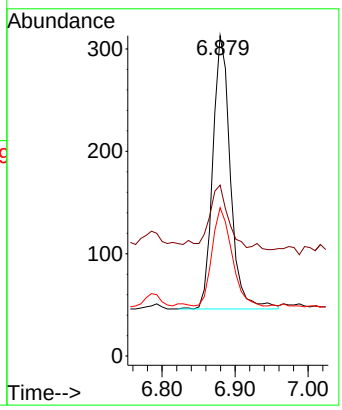


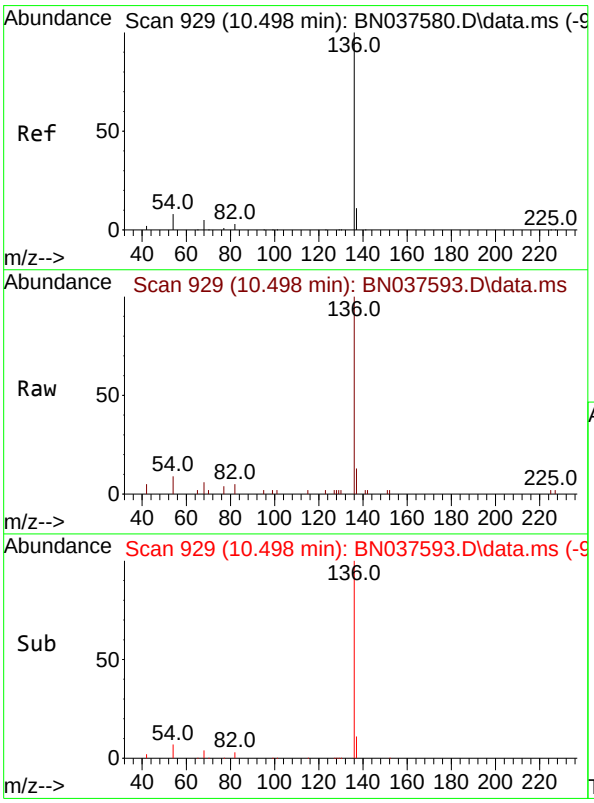
#5
Phenol-d6
Concen: 0.084 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion: 99 Resp: 446

Ion	Ratio	Lower	Upper
99	100		
42	21.7	18.5	27.7
71	41.5	28.6	42.8

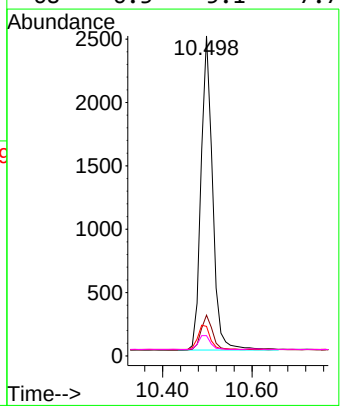


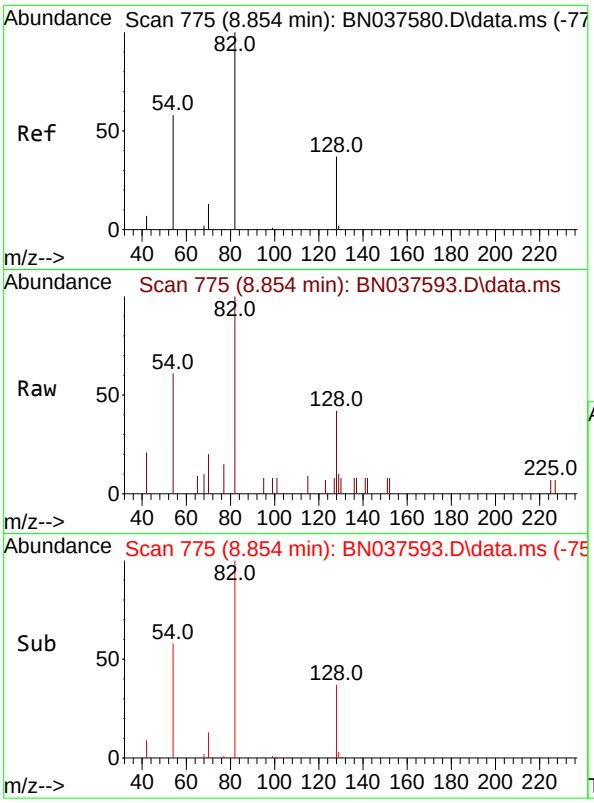


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 929
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:136 Resp: 4454

Ion	Ratio	Lower	Upper
136	100		
137	12.8	9.5	14.3
54	9.2	7.3	10.9
68	6.3	5.1	7.7



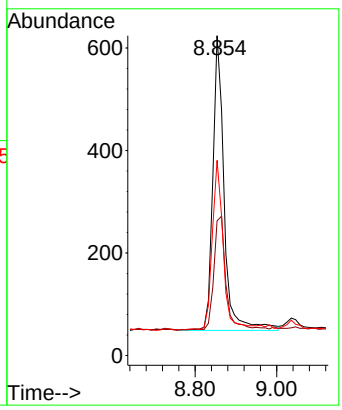


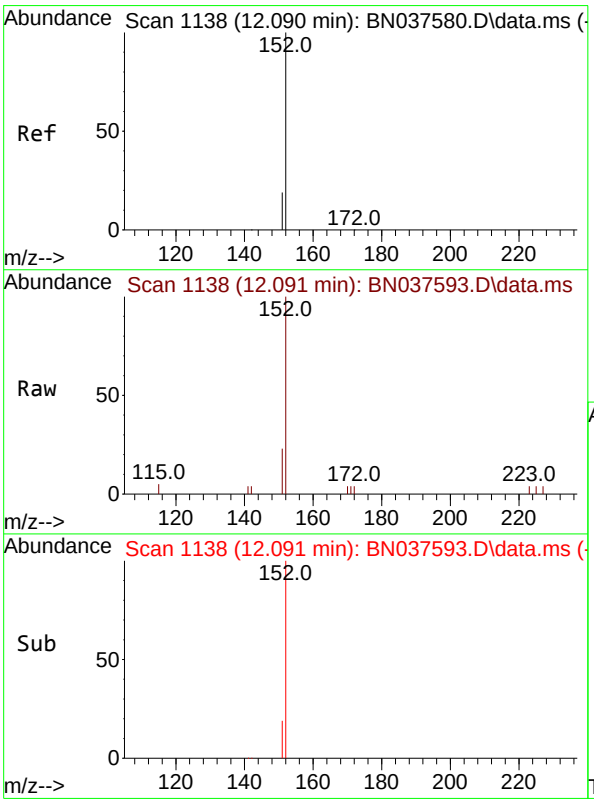
#8
Nitrobenzene-d5
Concen: 0.352 ng
RT: 8.854 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion: 82 Resp: 1105

Ion	Ratio	Lower	Upper
82	100		
128	42.1	32.6	48.8
54	61.1	48.9	73.3

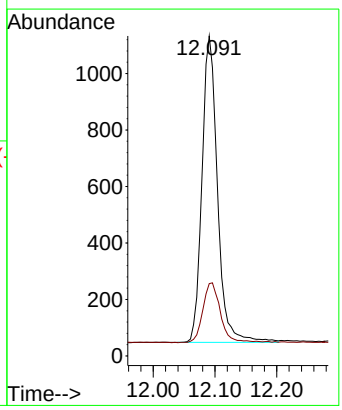


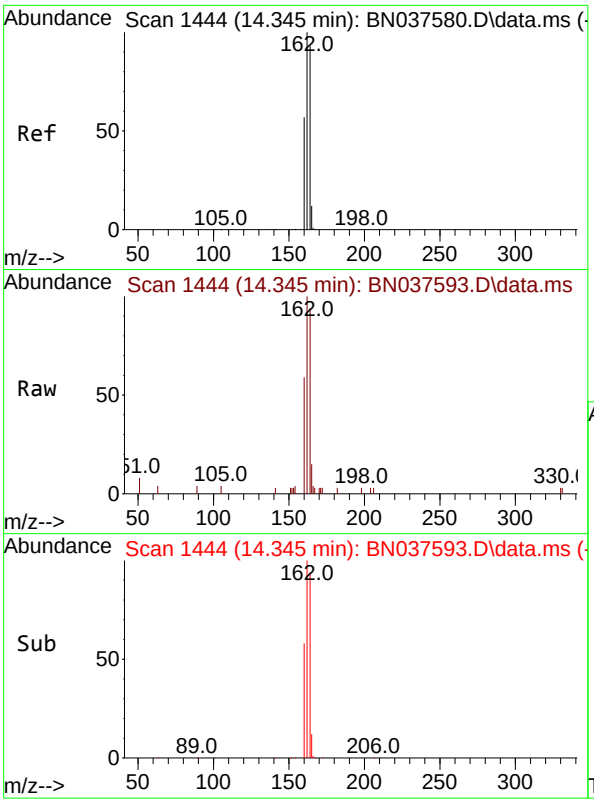


#11
2-Methylnaphthalene-d10
Concen: 0.312 ng
RT: 12.091 min Scan# 1138
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:152 Resp: 1892

Ion	Ratio	Lower	Upper
152	100		
151	22.3	17.3	25.9



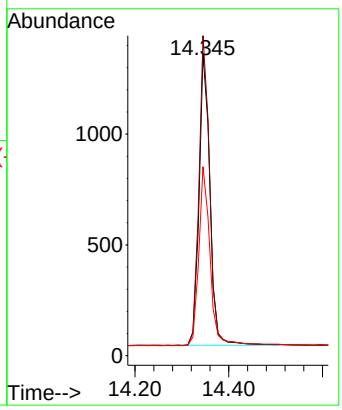


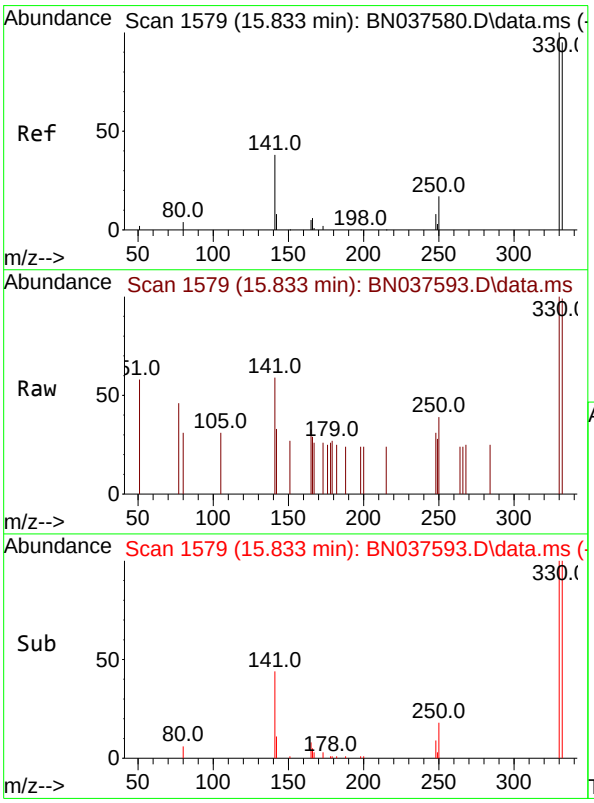
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion:164 Resp: 2122

Ion	Ratio	Lower	Upper
164	100		
162	105.9	85.5	128.3
160	62.6	49.5	74.3

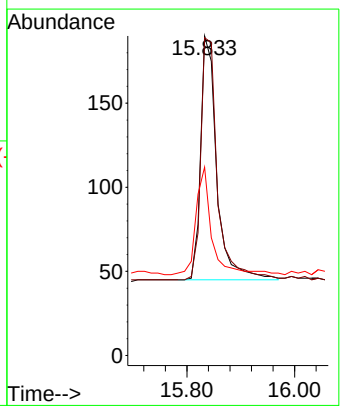


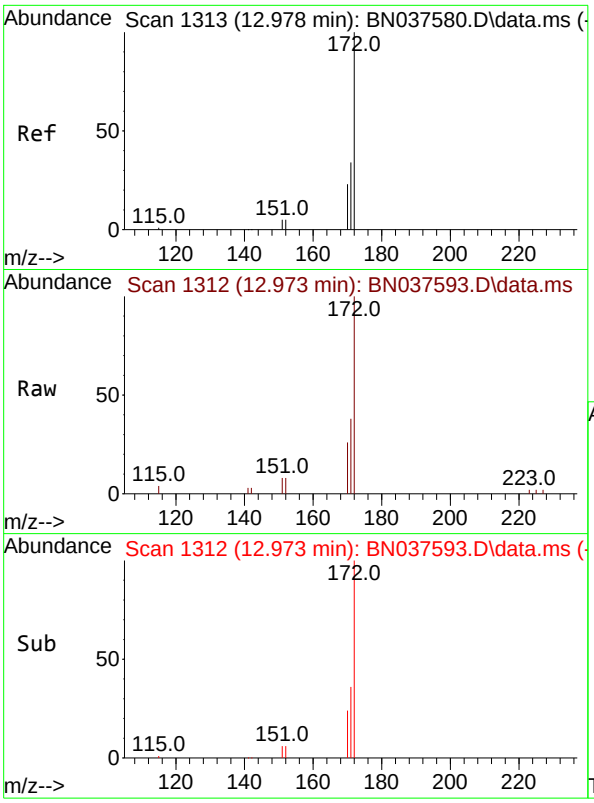


#14
2,4,6-Tribromophenol
Concen: 0.325 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:330 Resp: 302

Ion	Ratio	Lower	Upper
330	100		
332	102.3	77.4	116.0
141	43.4	30.9	46.3



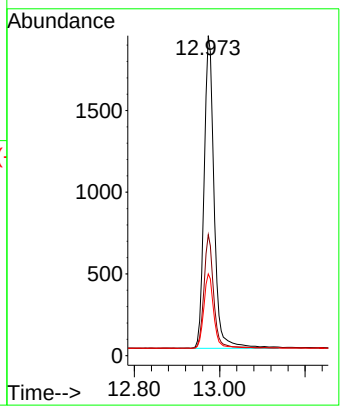


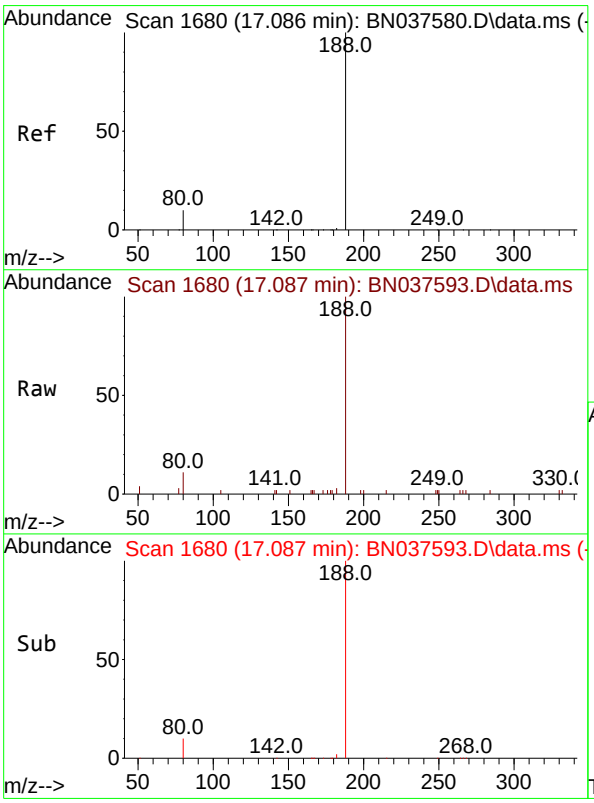
#15
2-Fluorobiphenyl
Concen: 0.348 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion:172 Resp: 4274

Ion	Ratio	Lower	Upper
172	100		
171	37.8	28.2	42.4
170	25.5	19.2	28.8

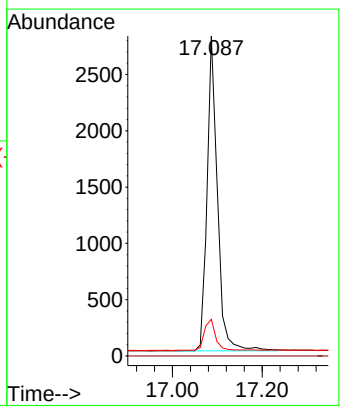


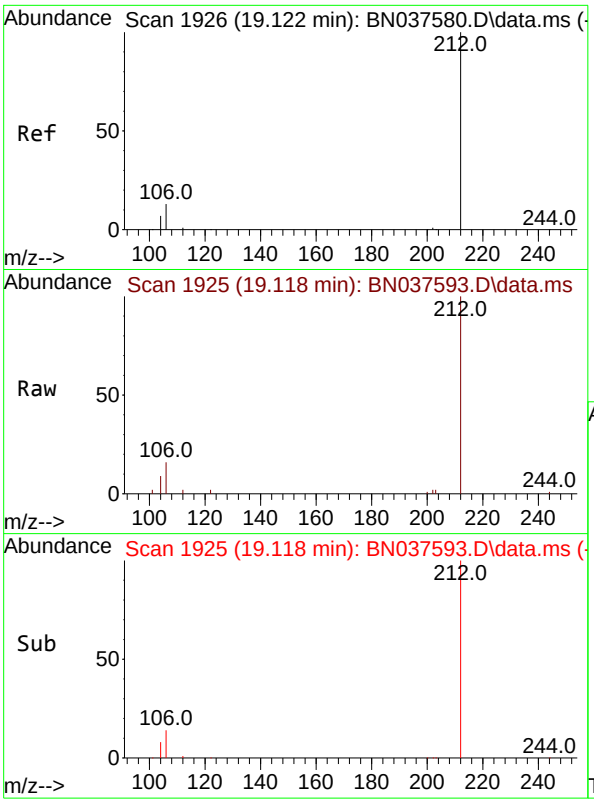


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:188 Resp: 4469

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.4	9.1	13.7



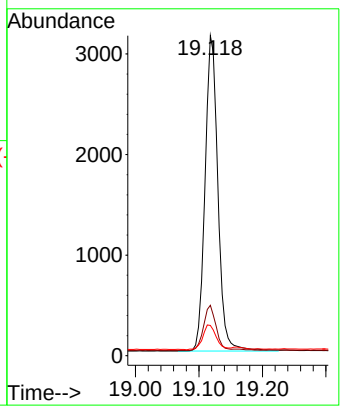


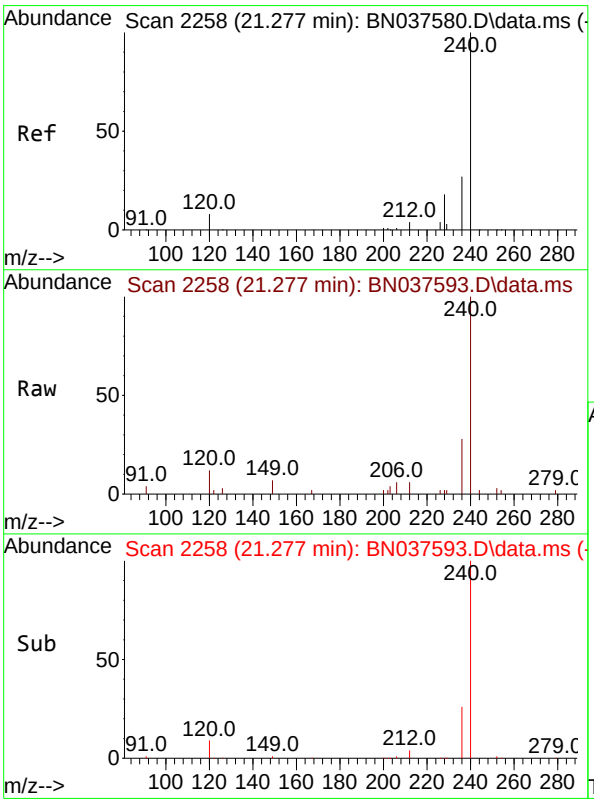
#27
Fluoranthene-d10
Concen: 0.376 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion:212 Resp: 4415

Ion	Ratio	Lower	Upper
212	100		
106	14.5	11.5	17.3
104	8.2	6.6	9.8

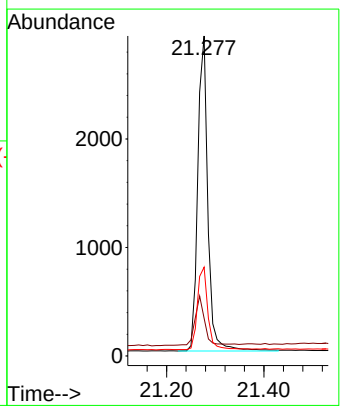


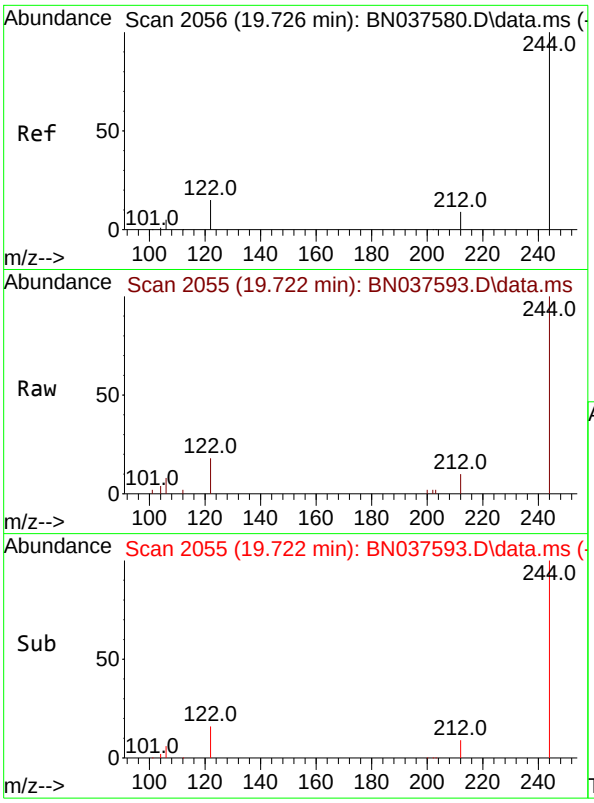


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:240 Resp: 4166

Ion	Ratio	Lower	Upper
240	100		
120	11.8	8.9	13.3
236	27.8	22.6	33.8



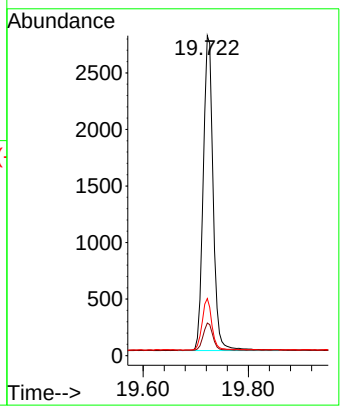


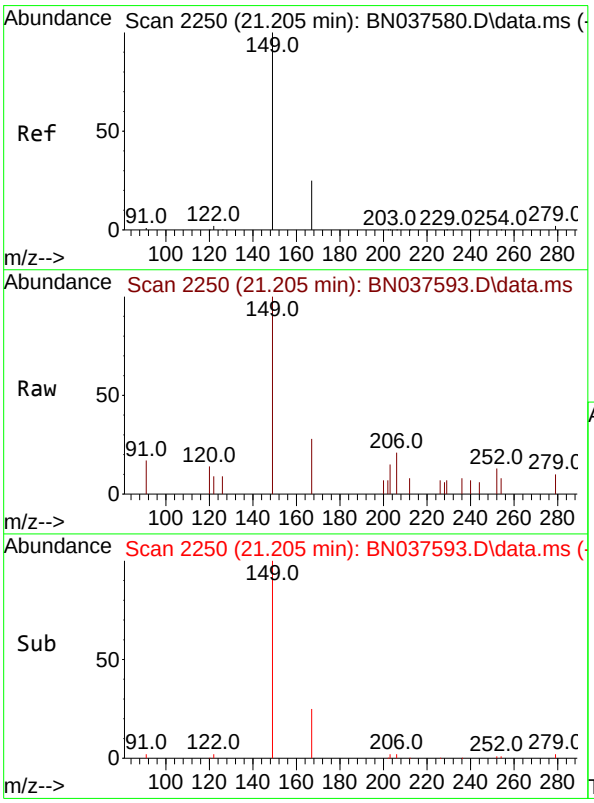
#31
Terphenyl-d14
Concen: 0.425 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion:244 Resp: 3642

Ion	Ratio	Lower	Upper
244	100		
212	10.2	8.2	12.2
122	17.9	13.2	19.8

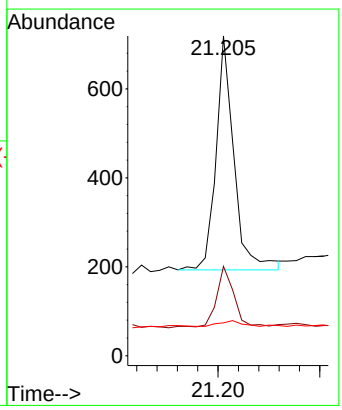


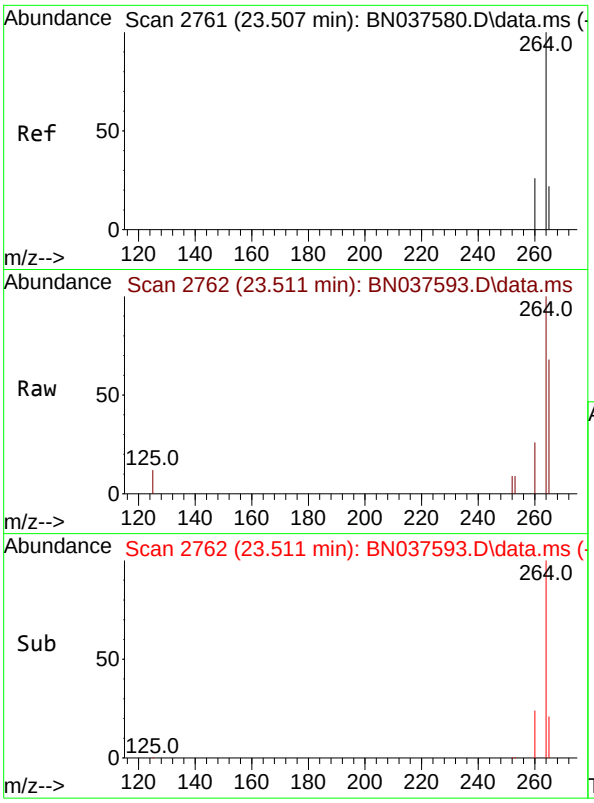


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.112 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Tgt Ion:149 Resp: 645

Ion	Ratio	Lower	Upper
149	100		
167	26.4	20.5	30.7
279	2.9	2.6	4.0



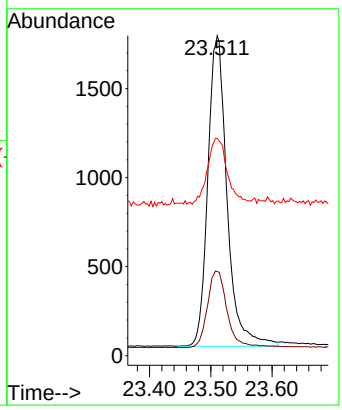


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.511 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037593.D
Acq: 13 Aug 2025 13:31

Instrument :
BNA_N
ClientSampleId :
RW7-SP201-20250807

Tgt Ion:264 Resp: 3789

Ion	Ratio	Lower	Upper
264	100		
260	26.3	21.6	32.4
265	67.9	48.2	72.4



Raw Data: **BN037594.D**

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	08/07/25
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	08/08/25
Client Sample ID:	RW7-SP303-20250807	SDG No.:	Q2806
Lab Sample ID:	Q2806-03	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	890 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037594.D	1	08/12/25 08:52	08/13/25 14:08	PB169222

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.22	UQ	0.070	0.22	0.22	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.31		30 - 150		79%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.37		30 - 150		93%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.35		55 - 111		88%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		88%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.44		58 - 132		111%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	1870	7.717				
1146-65-2	Naphthalene-d8	4330	10.498				
15067-26-2	Acenaphthene-d10	2080	14.345				
1517-22-2	Phenanthrene-d10	4150	17.086				
1719-03-5	Chrysene-d12	3610	21.277				
1520-96-3	Perylene-d12	3060	23.51				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Sample Results: **BN037594.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037594.D
Acq On : 13 Aug 2025 14:08
Operator : RC/JU
Sample : Q2806-03
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Quant Time: Aug 13 15:19:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

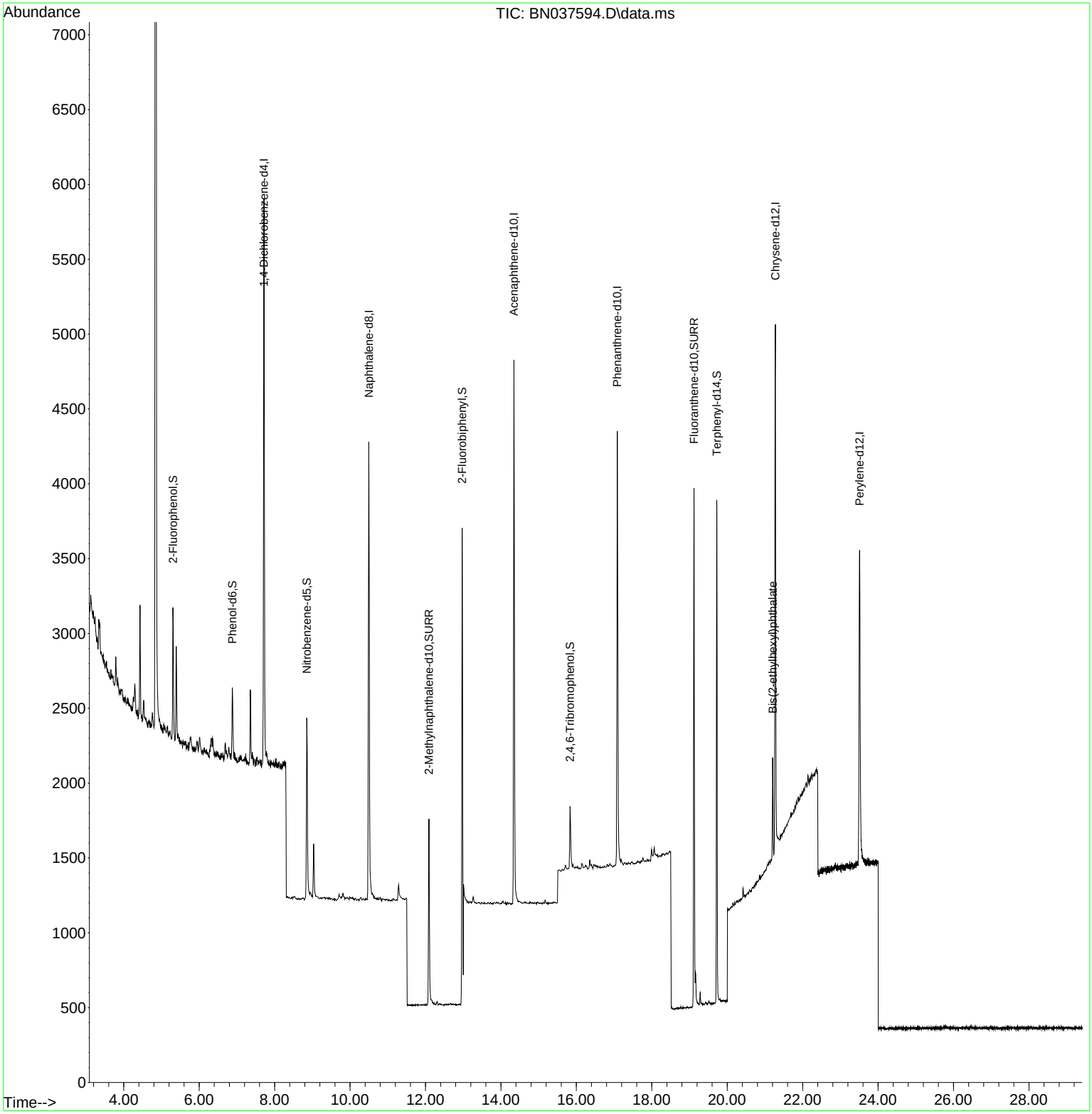
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.717	152	1865	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	4331	0.400	ng	0.00
13) Acenaphthene-d10	14.345	164	2080	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	4148	0.400	ng	0.00
29) Chrysene-d12	21.277	240	3606	0.400	ng	0.00
35) Perylene-d12	23.510	264	3055	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.305	112	673	0.159	ng	0.00
5) Phenol-d6	6.879	99	432	0.085	ng	0.00
8) Nitrobenzene-d5	8.854	82	1076	0.353	ng	0.00
11) 2-Methylnaphthalene-d10	12.091	152	1849	0.314	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	299	0.328	ng	0.00
15) 2-Fluorobiphenyl	12.973	172	4226	0.351	ng	0.00
27) Fluoranthene-d10	19.118	212	4041	0.370	ng	0.00
31) Terphenyl-d14	19.722	244	3279	0.442	ng	0.00
Target Compounds						Qvalue
34) Bis(2-ethylhexyl)phtha...	21.205	149	637	0.128	ng	99

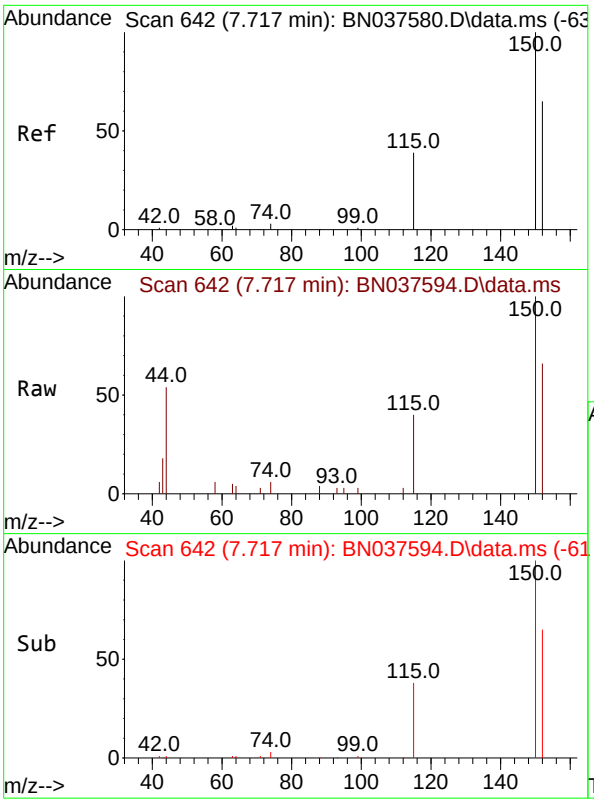
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037594.D
Acq On : 13 Aug 2025 14:08
Operator : RC/JU
Sample : Q2806-03
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Quant Time: Aug 13 15:19:20 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



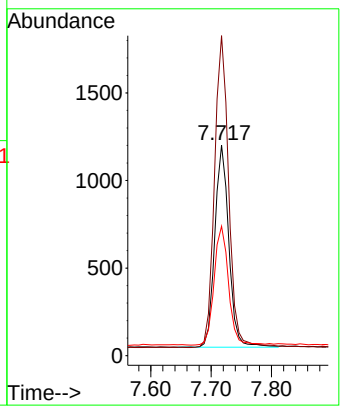


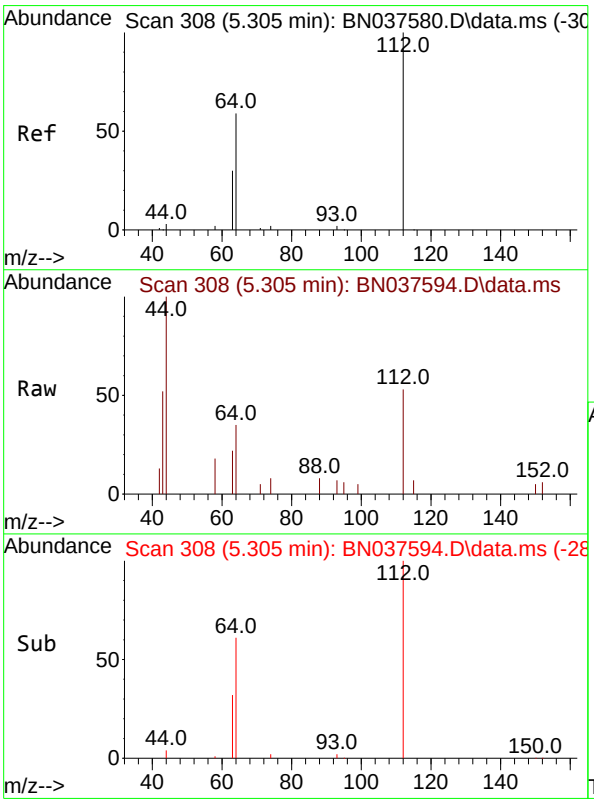
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion:152 Resp: 1865

Ion	Ratio	Lower	Upper
152	100		
150	152.0	122.2	183.4
115	61.5	49.8	74.6

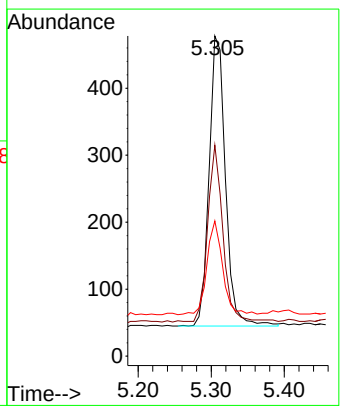


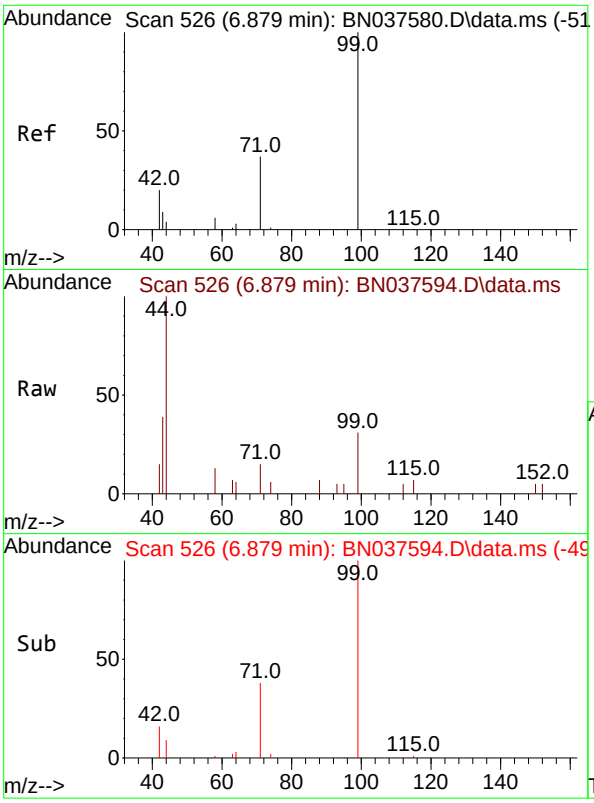


#4
2-Fluorophenol
Concen: 0.159 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:112 Resp: 673

Ion	Ratio	Lower	Upper
112	100		
64	55.7	44.9	67.3
63	30.9	23.4	35.2



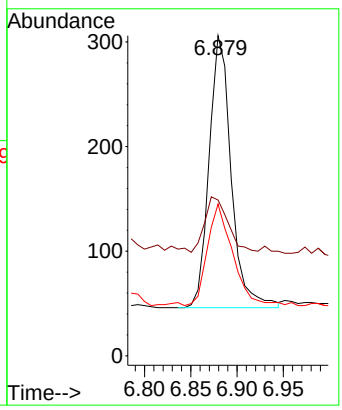


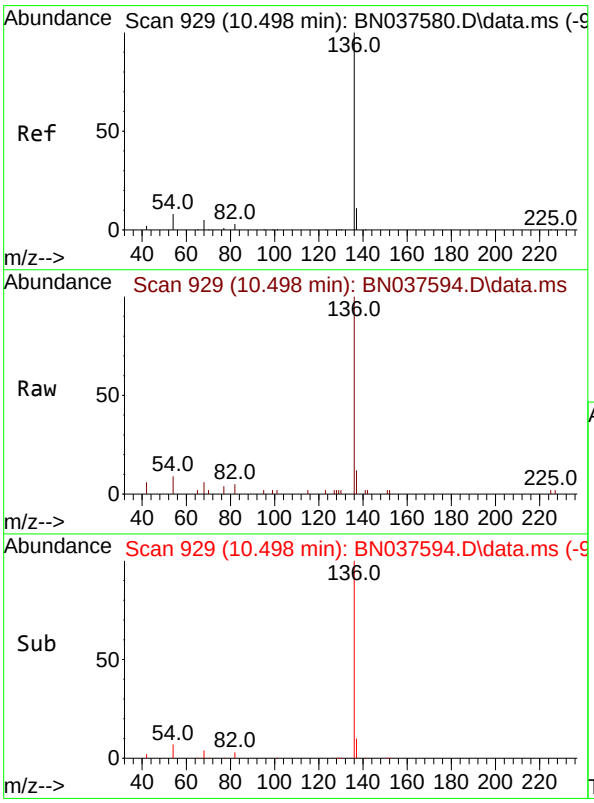
#5
Phenol-d6
Concen: 0.085 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion: 99 Resp: 432

Ion	Ratio	Lower	Upper
99	100		
42	21.1	18.5	27.7
71	43.5	28.6	42.8#

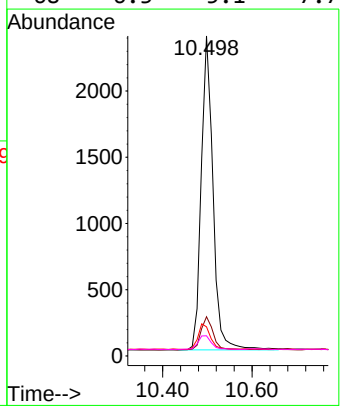


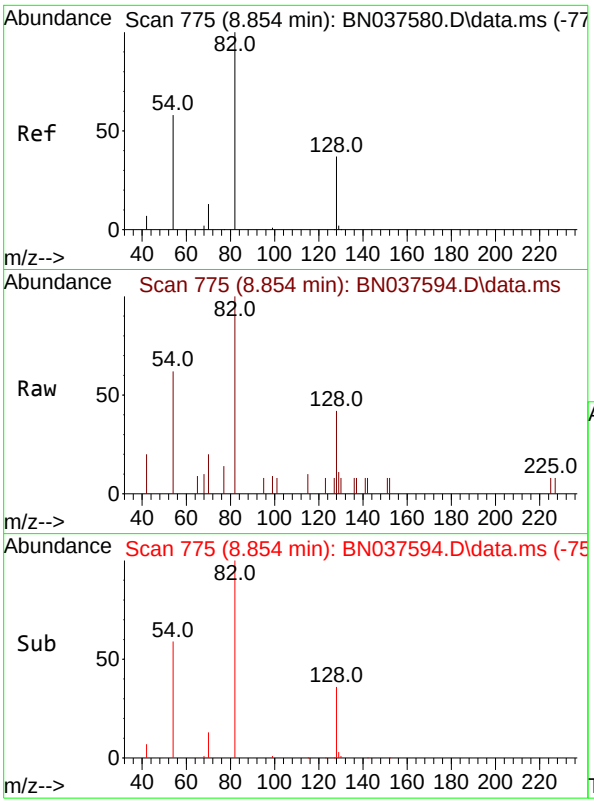


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 929
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:136 Resp: 4331

Ion	Ratio	Lower	Upper
136	100		
137	12.3	9.5	14.3
54	9.1	7.3	10.9
68	6.3	5.1	7.7



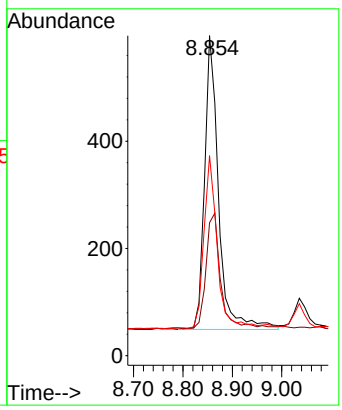


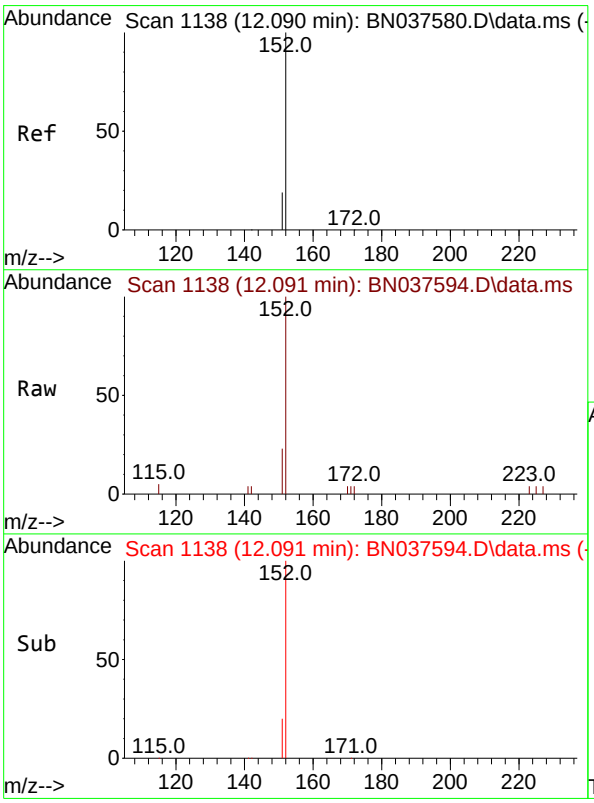
#8
Nitrobenzene-d5
Concen: 0.353 ng
RT: 8.854 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion: 82 Resp: 1076

Ion	Ratio	Lower	Upper
82	100		
128	41.5	32.6	48.8
54	62.5	48.9	73.3

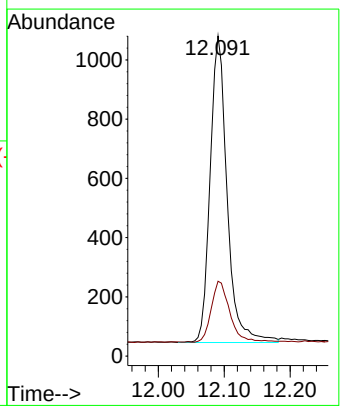


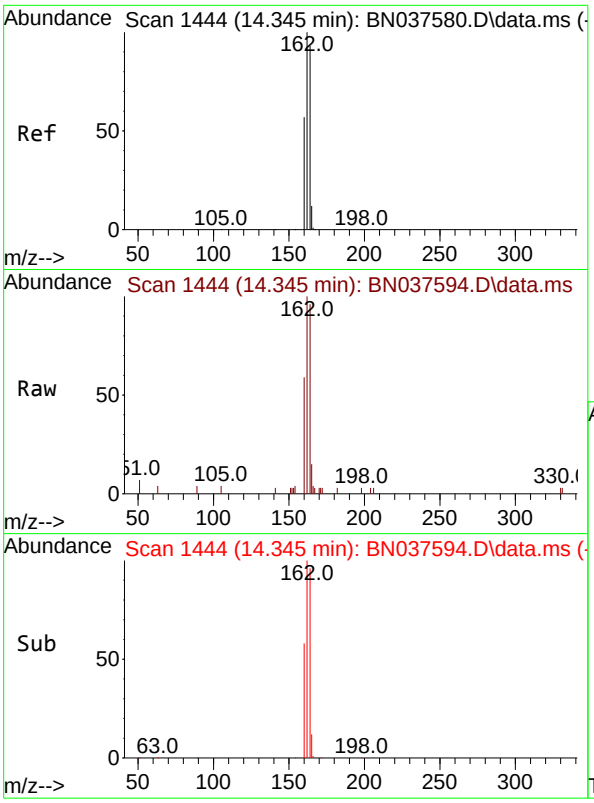


#11
2-Methylnaphthalene-d10
Concen: 0.314 ng
RT: 12.091 min Scan# 1138
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:152 Resp: 1849

Ion	Ratio	Lower	Upper
152	100		
151	22.1	17.3	25.9



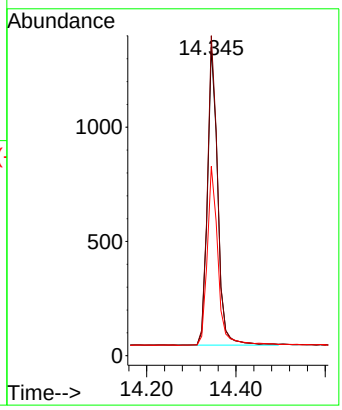


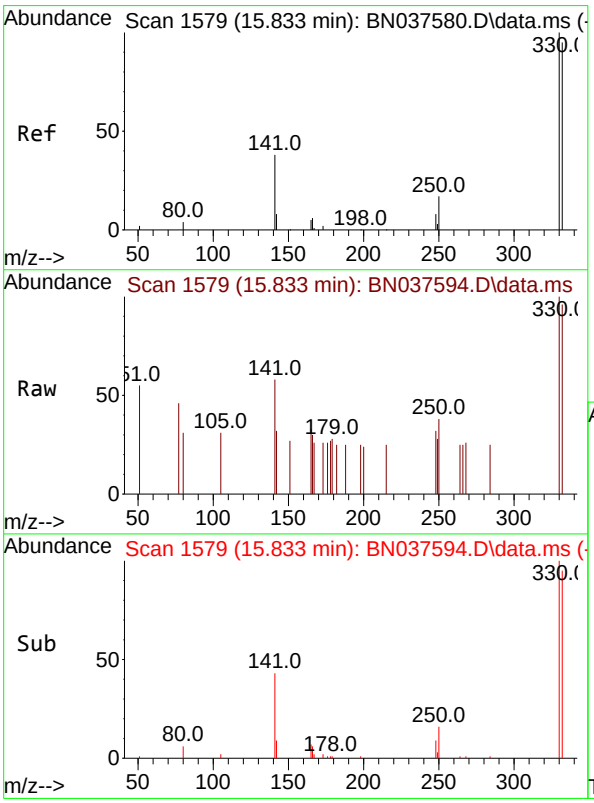
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion:164 Resp: 2080

Ion	Ratio	Lower	Upper
164	100		
162	103.8	85.5	128.3
160	61.4	49.5	74.3

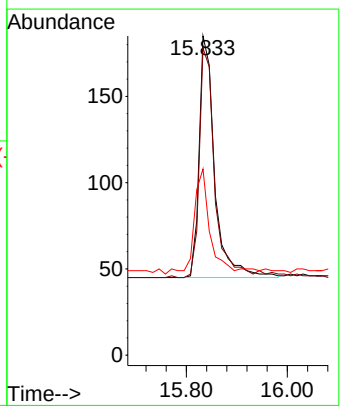


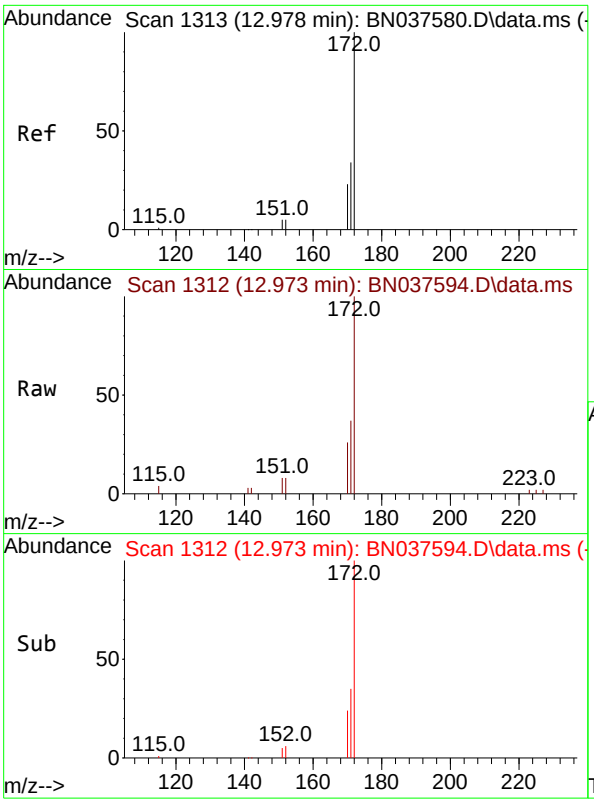


#14
2,4,6-Tribromophenol
Concen: 0.328 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:330 Resp: 299

Ion	Ratio	Lower	Upper
330	100		
332	93.3	77.4	116.0
141	44.5	30.9	46.3



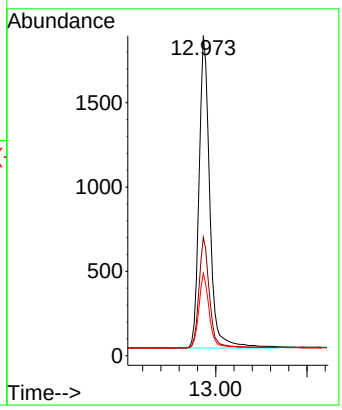


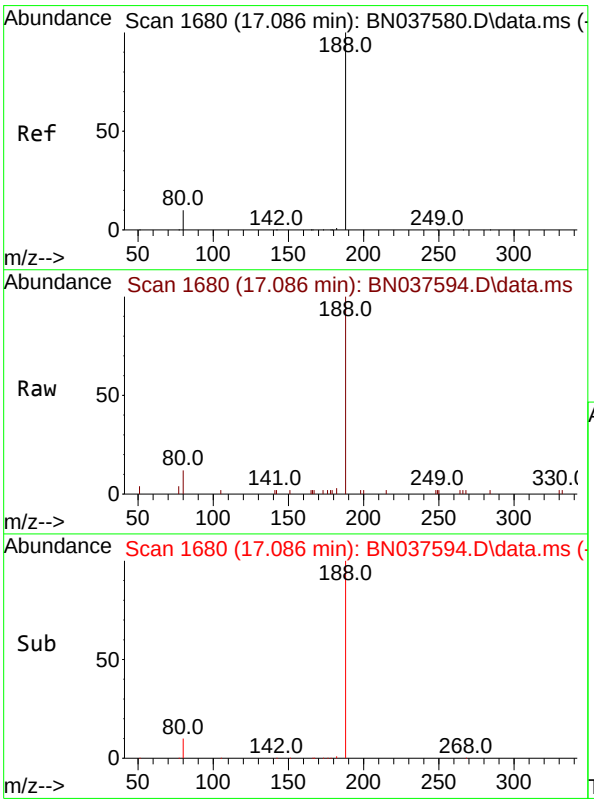
#15
2-Fluorobiphenyl
Concen: 0.351 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion:172 Resp: 4226

Ion	Ratio	Lower	Upper
172	100		
171	37.0	28.2	42.4
170	25.7	19.2	28.8

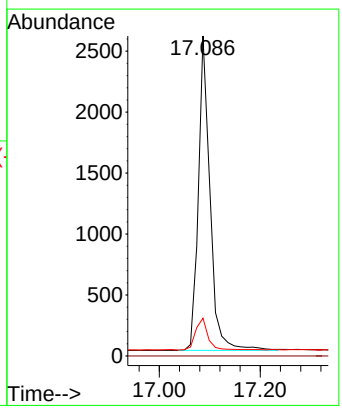


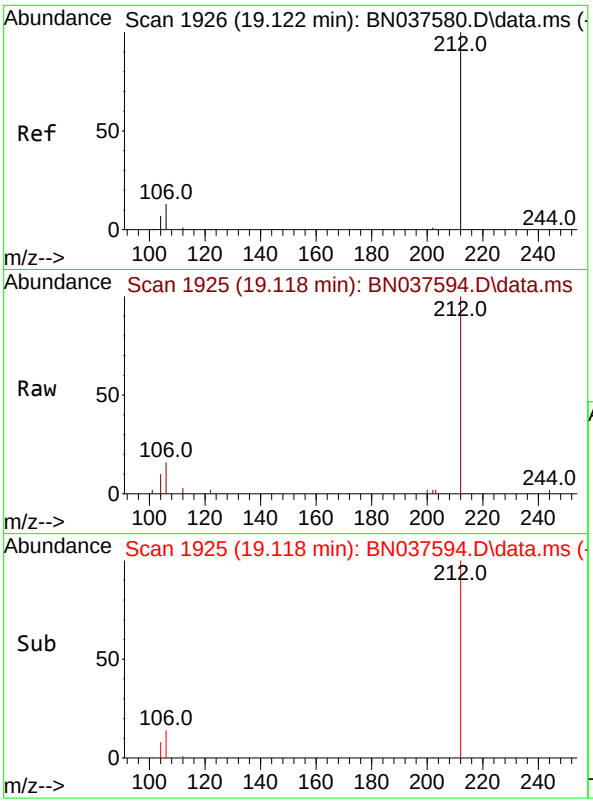


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1680
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:188 Resp: 4148

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.8	9.1	13.7



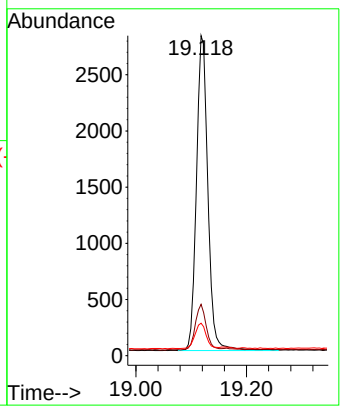


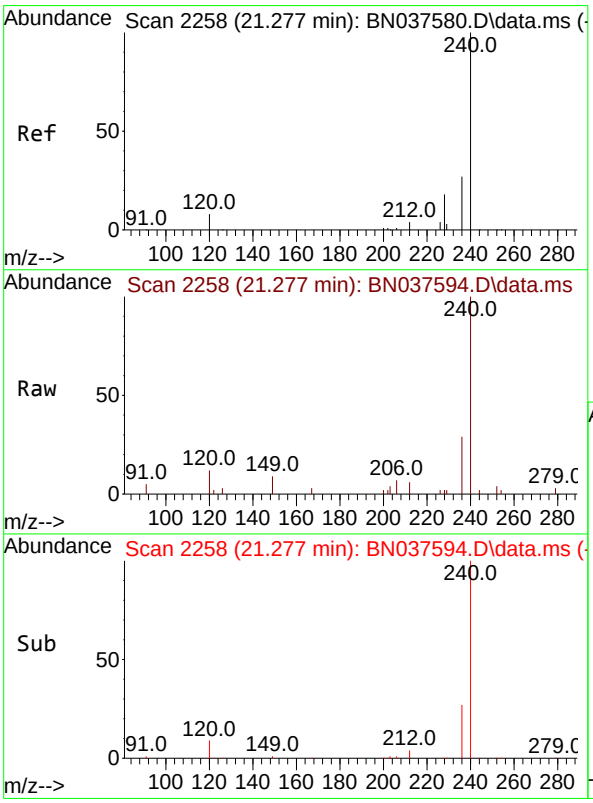
#27
Fluoranthene-d10
Concen: 0.370 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion:212 Resp: 4041

Ion	Ratio	Lower	Upper
212	100		
106	13.8	11.5	17.3
104	7.9	6.6	9.8

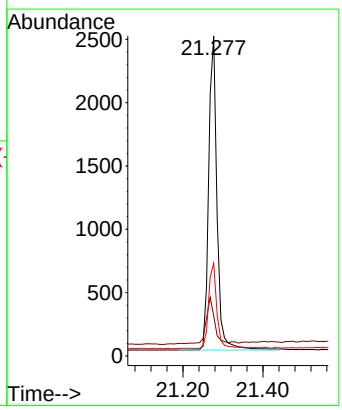


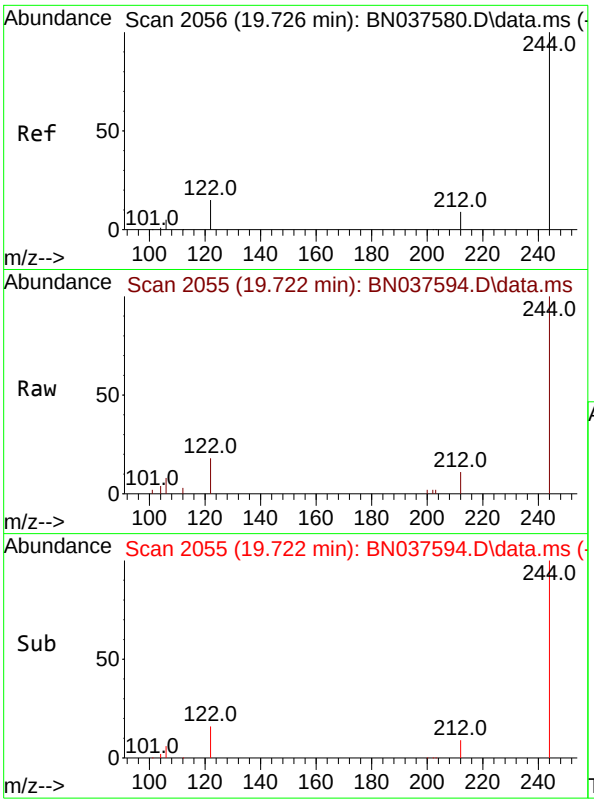


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2258
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:240 Resp: 3606

Ion	Ratio	Lower	Upper
240	100		
120	12.5	8.9	13.3
236	29.0	22.6	33.8



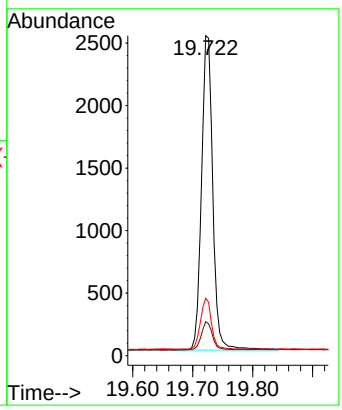


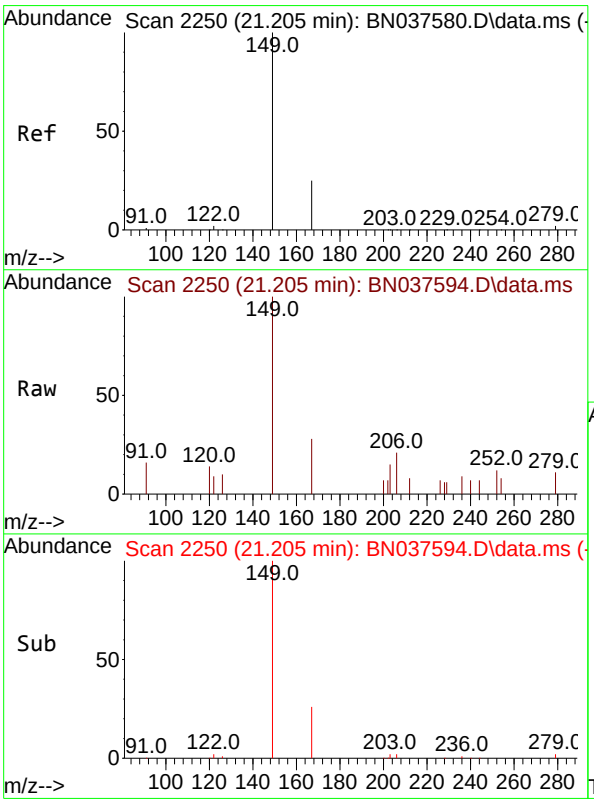
#31
Terphenyl-d14
Concen: 0.442 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion:244 Resp: 3279

Ion	Ratio	Lower	Upper
244	100		
212	10.7	8.2	12.2
122	17.9	13.2	19.8

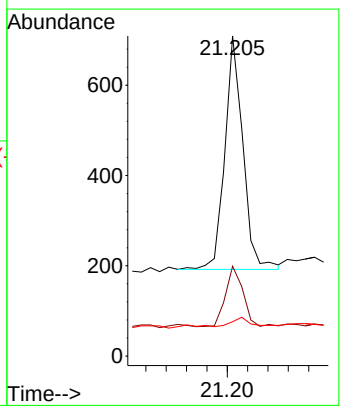


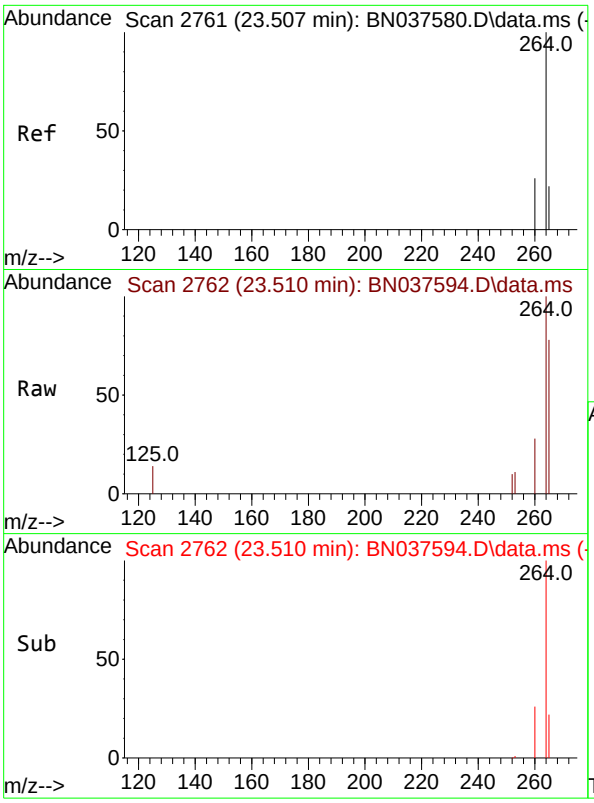


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.128 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Tgt Ion:149 Resp: 637

Ion	Ratio	Lower	Upper
149	100		
167	25.4	20.5	30.7
279	3.9	2.6	4.0



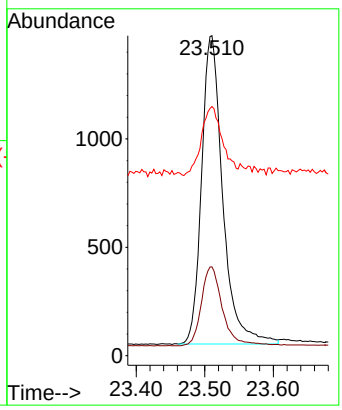


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.510 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037594.D
Acq: 13 Aug 2025 14:08

Instrument :
BNA_N
ClientSampleId :
RW7-SP303-20250807

Tgt Ion:264 Resp: 3055

Ion	Ratio	Lower	Upper
264	100		
260	27.8	21.6	32.4
265	77.8	48.2	72.4#



CALIBRATION SUMMARY

Response Factor Report BNA_N

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN081225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Aug 13 05:00:58 2025
Response Via : Initial Calibration

Calibration Files
0.1 =BN037578.D 0.2 =BN037579.D 0.4 =BN037580.D 0.8 =BN037581.D 1.6 =BN037582.D 3.2 =BN037583.D 5 =BN037584.D

		Compound	0.1	0.2	0.4	0.8	1.6	3.2	5	Avg	%RSD
1)	I	1,4-Dichlorobenzen...	----------ISTD----------								
2)		1,4-Dioxane	0.413	0.395	0.368	0.397	0.375	0.348	0.383		6.08
3)		n-Nitrosodimet...	0.471	0.488	0.471	0.493	0.503	0.508	0.489		3.19
4)	S	2-Fluorophenol	0.922	0.945	0.888	0.823	0.886	0.906	0.977	0.907	5.41
5)	S	Phenol-d6	1.045	1.051	1.044	0.983	1.198	1.117	1.201	1.091	7.66
6)		bis(2-Chloroet...	0.935	0.987	0.976	0.936	1.020	1.008	1.022	0.983	3.75
7)	I	Naphthalene-d8	----------ISTD----------								
8)	S	Nitrobenzene-d5	0.270	0.257	0.262	0.264	0.292	0.301	0.326	0.282	9.03
9)		Naphthalene	1.044	1.050	1.037	1.012	1.089	1.096	1.127	1.065	3.78
10)		Hexachlorobuta...	0.252	0.258	0.262	0.253	0.267	0.264	0.265	0.260	2.22
11)	SURR	2-Methylnaphth...	0.488	0.492	0.508	0.493	0.543	0.578	0.705	0.544	14.39
12)		2-Methylnaphth...	0.589	0.631	0.635	0.629	0.701	0.731	0.760	0.668	9.39
13)	I	Acenaphthene-d10	----------ISTD----------								
14)	S	2,4,6-Tribromo...	0.139	0.149	0.156	0.160	0.185	0.203	0.234	0.175	19.39
15)	S	2-Fluorobiphenyl	2.226	2.243	2.300	2.251	2.341	2.391	2.440	2.313	3.50
16)		Acenaphthylene	1.740	1.760	1.710	1.653	1.850	1.858	1.980	1.793	6.15
17)		Acenaphthene	1.144	1.150	1.172	1.154	1.283	1.286	1.348	1.220	6.86
18)		Fluorene	1.466	1.510	1.524	1.521	1.686	1.693	1.770	1.596	7.38
19)	I	Phenanthrene-d10	----------ISTD----------								
20)		4,6-Dinitro-2-...	0.042	0.046	0.047	0.061	0.070		0.053		22.37
21)		4-Bromophenyl-...	0.226	0.236	0.234	0.237	0.265	0.271	0.292	0.251	9.77
22)		Hexachlorobenzene	0.360	0.360	0.356	0.332	0.364	0.354	0.370	0.356	3.37
23)		Atrazine	0.127	0.126	0.130	0.134	0.160	0.176		0.142	14.76
24)		Pentachlorophenol	0.108	0.113	0.113	0.139	0.152		0.125		15.36
25)		Phenanthrene	1.146	1.162	1.170	1.138	1.281	1.269	1.347	1.216	6.72
26)		Anthracene	0.950	0.985	0.995	0.988	1.145	1.186	1.286	1.077	11.93
27)	SURR	Fluoranthene-d10	0.932	0.966	0.954	0.935	1.050	1.110	1.419	1.052	16.61
28)		Fluoranthene	1.241	1.264	1.299	1.291	1.503	1.533	1.648	1.397	11.53
29)	I	Chrysene-d12	----------ISTD----------								
30)		Pyrene	1.539	1.486	1.464	1.403	1.502	1.520	1.552	1.495	3.38
31)	S	Terphenyl-d14	0.814	0.801	0.796	0.763	0.833	0.853	0.901	0.823	5.45
32)		Benzo(a)anthra...	1.266	1.275	1.263	1.253	1.351	1.458	1.487	1.336	7.40
33)		Chrysene	1.547	1.515	1.433	1.379	1.511	1.489	1.551	1.489	4.21
34)		Bis(2-ethylhex...	0.518	0.522	0.483	0.522	0.593	0.671	0.551		12.47
35)	I	Perylene-d12	----------ISTD----------								

Method Path : Z:\svoasrv\HPCHEM1\BNA_N\Methods\
Method File : 8270-SIM-BN081225.M

36)		Indeno(1,2,3-c...	1.446	1.462	1.612	1.568	1.816	1.883	2.011	1.686	13.01
37)		Benzo(b)fluora...	1.351	1.375	1.338	1.432	1.615	1.674	1.825	1.516	12.52
38)		Benzo(k)fluora...	1.597	1.580	1.651	1.628	1.821	1.797	1.898	1.710	7.36
39)	C	Benzo(a)pyrene	1.146	1.136	1.149	1.157	1.322	1.382	1.508	1.257	11.77
40)		Dibenzo(a,h)an...	1.023	1.118	1.222	1.215	1.439	1.516	1.621	1.308	16.85
41)		Benzo(g,h,i)pe...	1.207	1.274	1.262	1.261	1.467	1.532	1.643	1.378	12.17

(#) = Out of Range

Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037578.D
Acq On : 12 Aug 2025 16:26
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Aug 13 04:47:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2217	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	5472	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2625	0.400	ng		0.00
19) Phenanthrene-d10	17.087	188	5296	0.400	ng		0.00
29) Chrysene-d12	21.277	240	4146	0.400	ng	#	0.00
35) Perylene-d12	23.514	264	4132	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	511	0.102	ng		0.00
5) Phenol-d6	6.879	99	579	0.096	ng		0.00
8) Nitrobenzene-d5	8.854	82	369	0.096	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	667	0.090	ng		0.00
14) 2,4,6-Tribromophenol	15.845	330	91	0.079	ng		0.01
15) 2-Fluorobiphenyl	12.978	172	1461	0.096	ng		0.00
27) Fluoranthene-d10	19.123	212	1234	0.089	ng		0.00
31) Terphenyl-d14	19.726	244	844	0.099	ng		0.00
Target Compounds							Qvalue
6) bis(2-Chloroethyl)ether	7.139	93	518	0.095	ng		94
9) Naphthalene	10.552	128	1428	0.098	ng	#	89
10) Hexachlorobutadiene	10.851	225	345	0.097	ng	#	99
12) 2-Methylnaphthalene	12.167	142	806	0.088	ng		94
16) Acenaphthylene	14.067	152	1142	0.097	ng		99
17) Acenaphthene	14.409	154	751	0.094	ng		95
18) Fluorene	15.403	166	962	0.092	ng		99
21) 4-Bromophenyl-phenylether	16.292	248	299	0.090	ng		90
22) Hexachlorobenzene	16.404	284	476	0.101	ng		99
23) Atrazine	16.565	200	168	0.089	ng	#	76
25) Phenanthrene	17.124	178	1517	0.094	ng		99
26) Anthracene	17.223	178	1258	0.088	ng		100
28) Fluoranthene	19.150	202	1643	0.089	ng		99
30) Pyrene	19.513	202	1595	0.103	ng		100
32) Benzo(a)anthracene	21.259	228	1312	0.095	ng		94
33) Chrysene	21.313	228	1603	0.104	ng		95
36) Indeno(1,2,3-cd)pyrene	25.771	276	1494	0.086	ng		99
37) Benzo(b)fluoranthene	22.841	252	1396	0.089	ng	#	74
38) Benzo(k)fluoranthene	22.885	252	1650	0.093	ng	#	72
39) Benzo(a)pyrene	23.411	252	1184	0.091	ng	#	64
40) Dibenzo(a,h)anthracene	25.791	278	1057	0.078	ng	#	72
41) Benzo(g,h,i)perylene	26.458	276	1247	0.088	ng	#	84

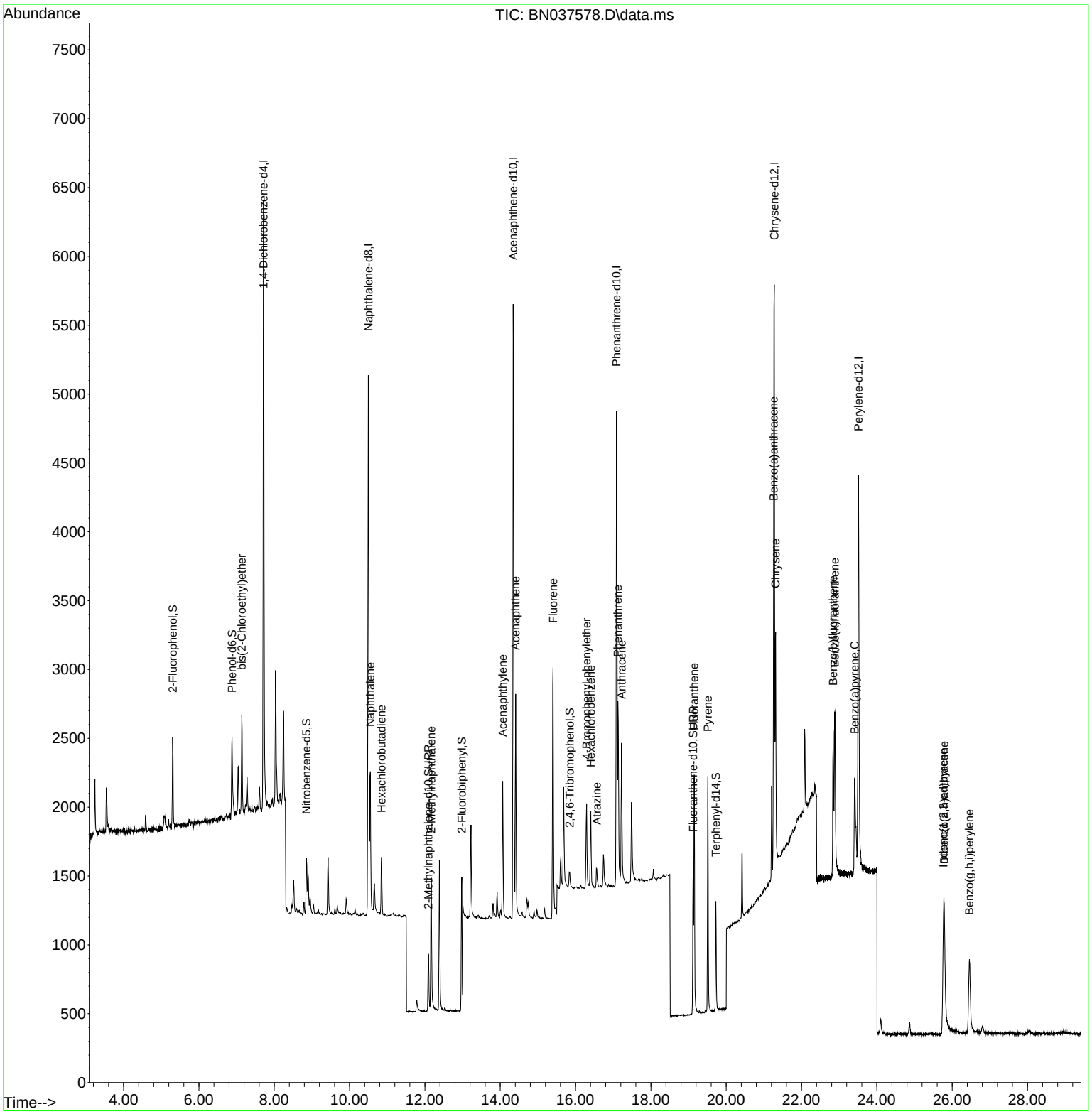
(#) = qualifier out of range (m) = manual integration (+) = signals summed

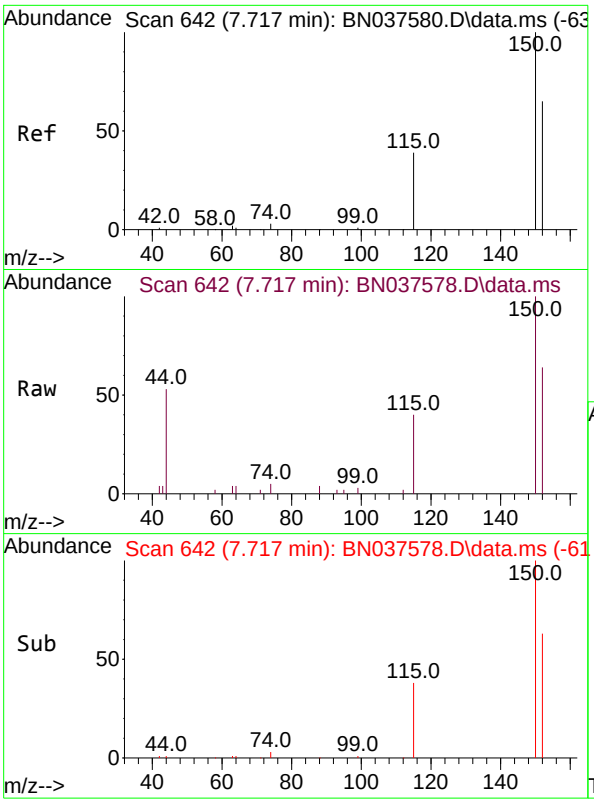
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037578.D
Acq On : 12 Aug 2025 16:26
Operator : RC/JU
Sample : SSTDICC0.1
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Quant Time: Aug 13 04:47:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



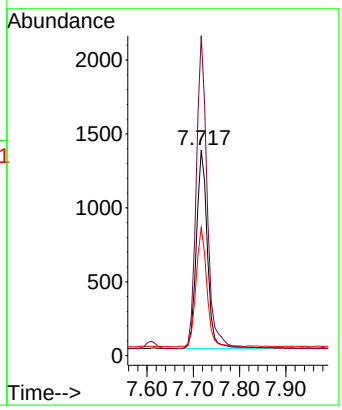


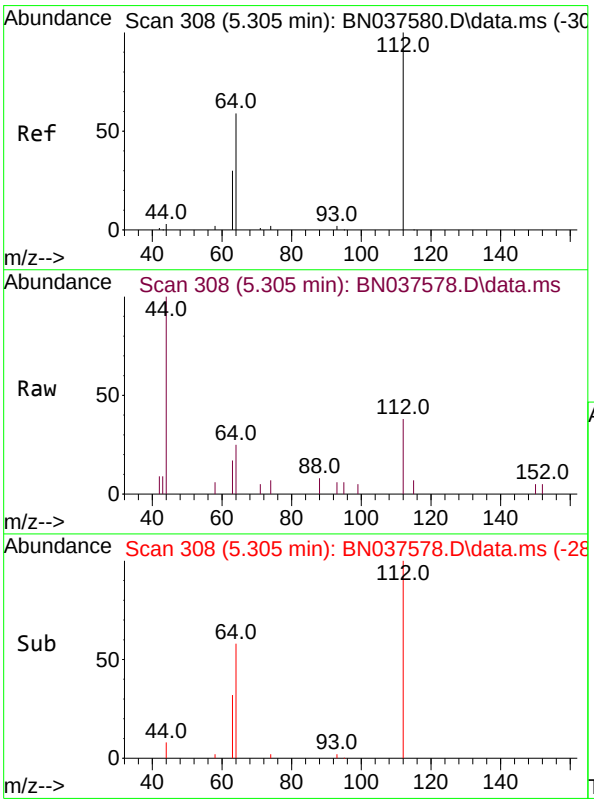
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 2217

Ion	Ratio	Lower	Upper
152	100		
150	155.6	122.2	183.4
115	62.3	49.8	74.6

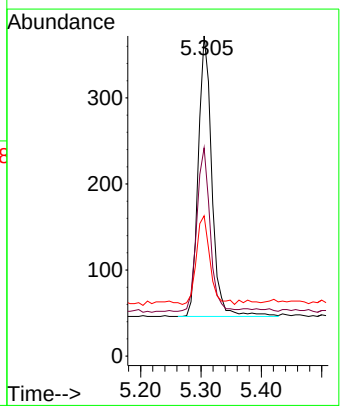


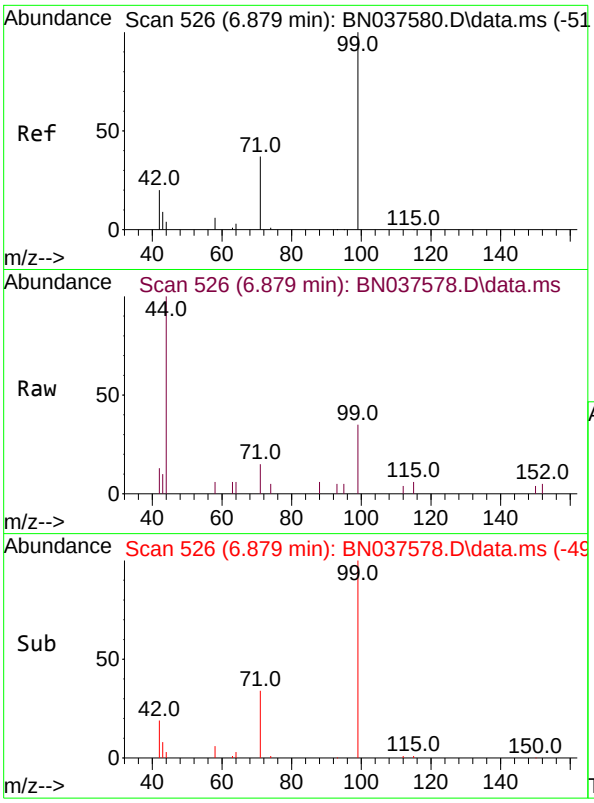


#4
2-Fluorophenol
Concen: 0.102 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:112 Resp: 511

Ion	Ratio	Lower	Upper
112	100		
64	56.6	44.9	67.3
63	31.3	23.4	35.2



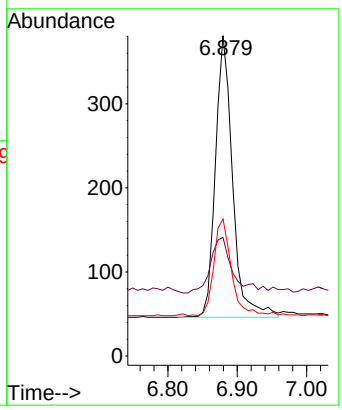


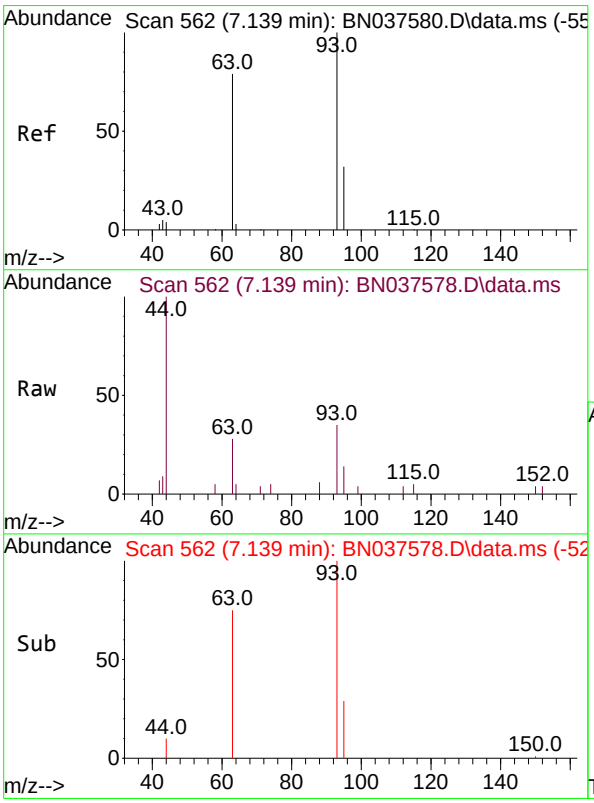
#5
Phenol-d6
Concen: 0.096 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion: 99 Resp: 579

Ion	Ratio	Lower	Upper
99	100		
42	26.9	18.5	27.7
71	35.4	28.6	42.8

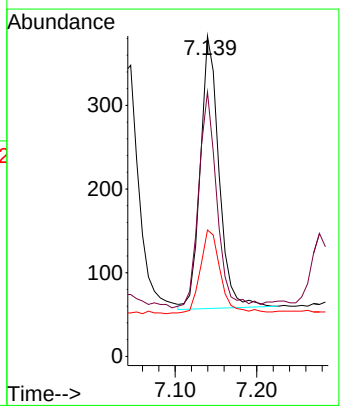


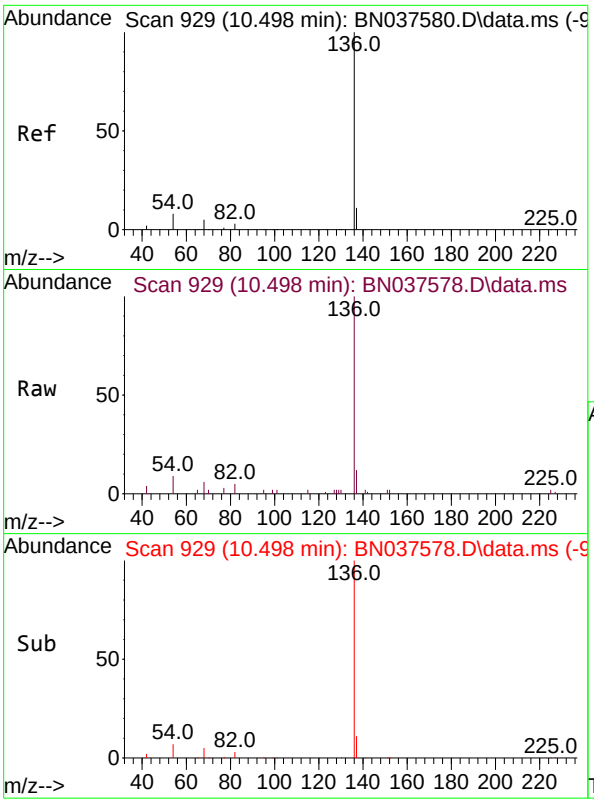


#6
bis(2-Chloroethyl)ether
Concen: 0.095 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion: 93 Resp: 518

Ion	Ratio	Lower	Upper
93	100		
63	78.0	58.0	87.0
95	33.8	24.9	37.3



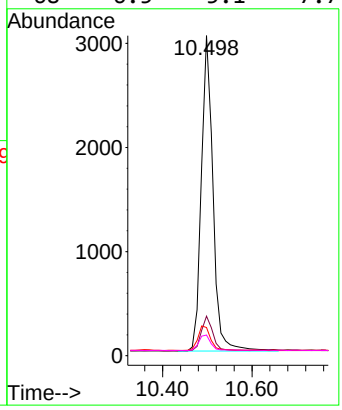


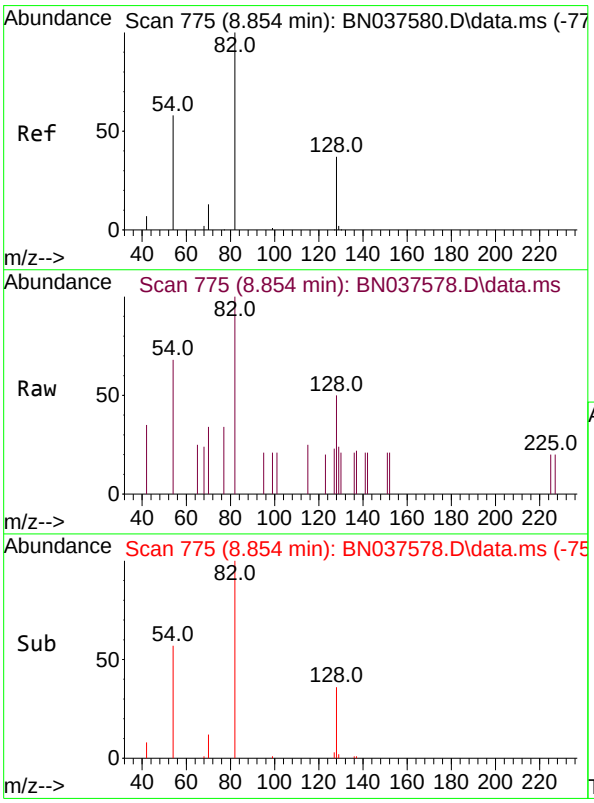
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:136 Resp: 5472

Ion	Ratio	Lower	Upper
136	100		
137	12.4	9.5	14.3
54	8.8	7.3	10.9
68	6.5	5.1	7.7

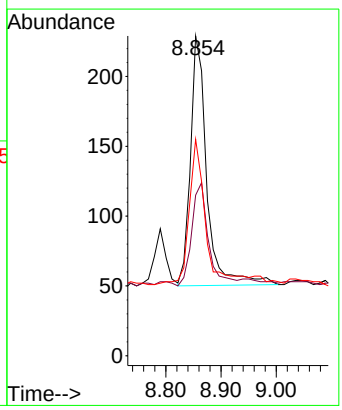


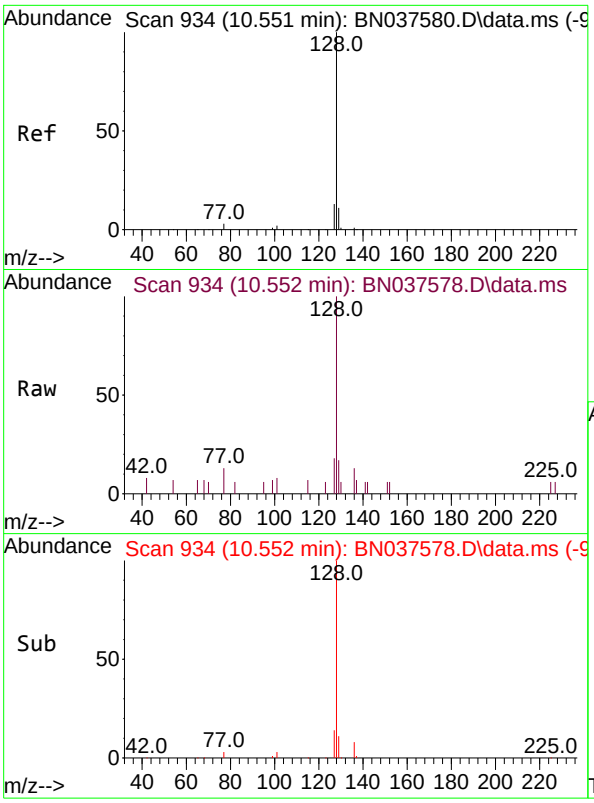


#8
Nitrobenzene-d5
Concen: 0.096 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion: 82 Resp: 369

Ion	Ratio	Lower	Upper
82	100		
128	50.2	32.6	48.8#
54	67.7	48.9	73.3



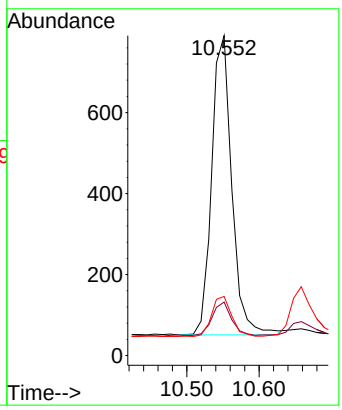


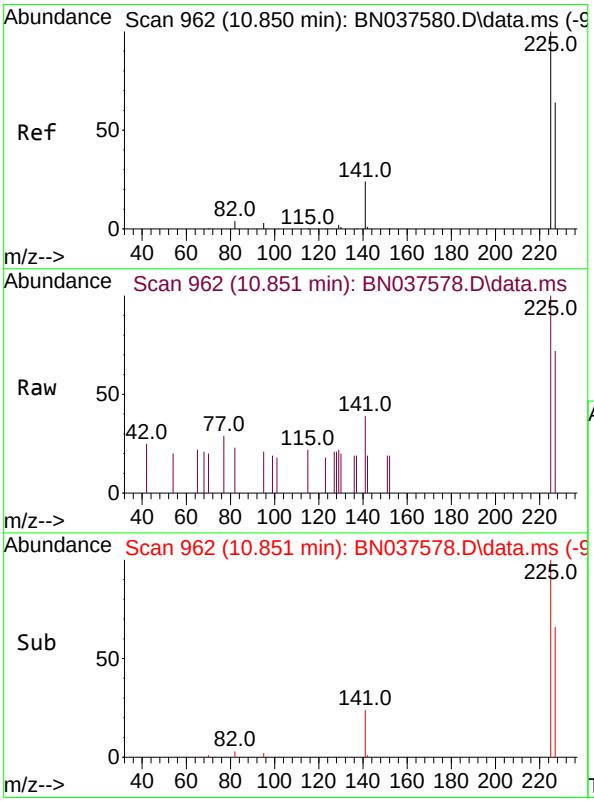
#9
Naphthalene
Concen: 0.098 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:128 Resp: 1428

Ion	Ratio	Lower	Upper
128	100		
129	16.7	9.8	14.6#
127	18.5	11.5	17.3#

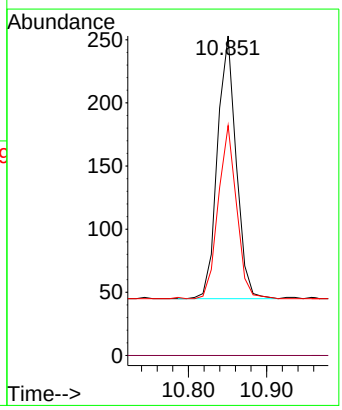


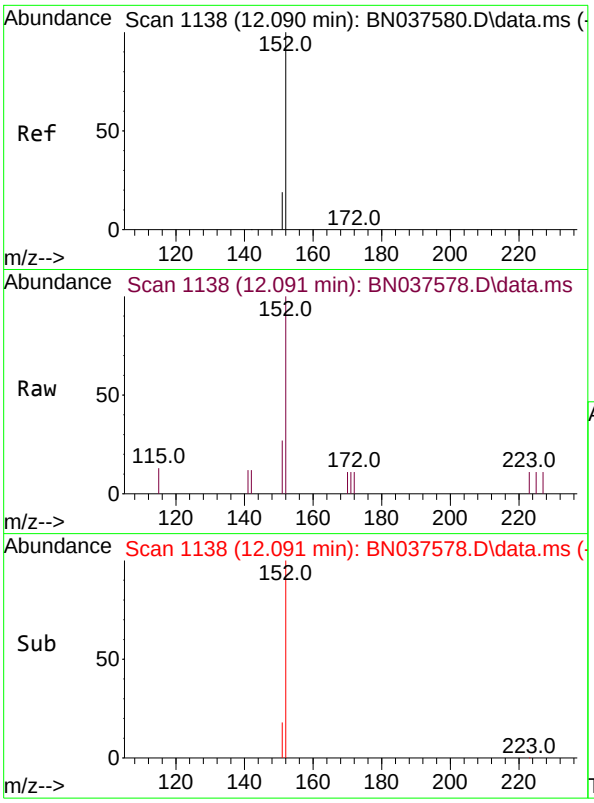


#10
Hexachlorobutadiene
Concen: 0.097 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:225 Resp: 345

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.3	50.8	76.2



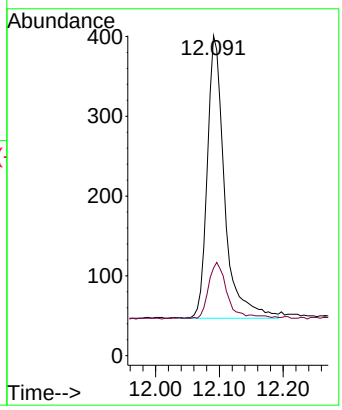


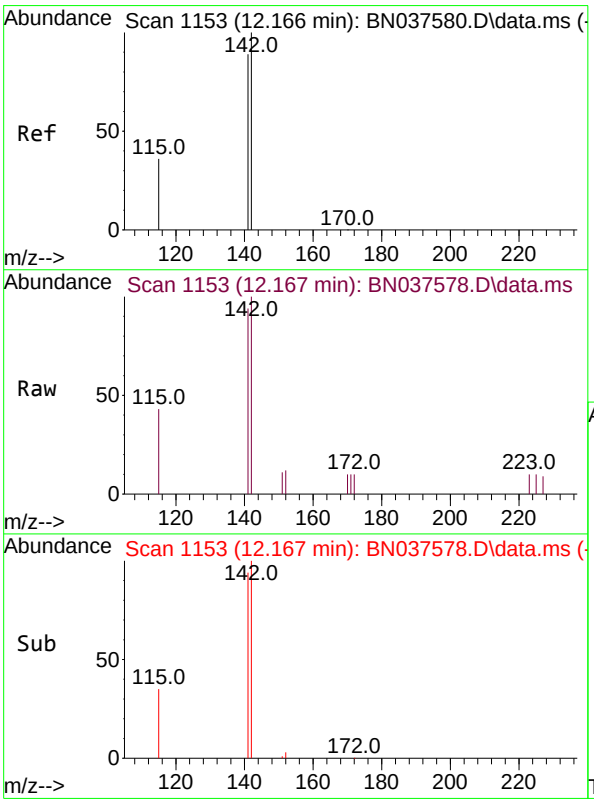
#11
2-Methylnaphthalene-d10
Concen: 0.090 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:152 Resp: 667

Ion	Ratio	Lower	Upper
152	100		
151	21.1	17.3	25.9

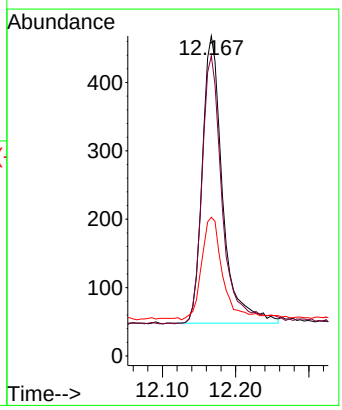


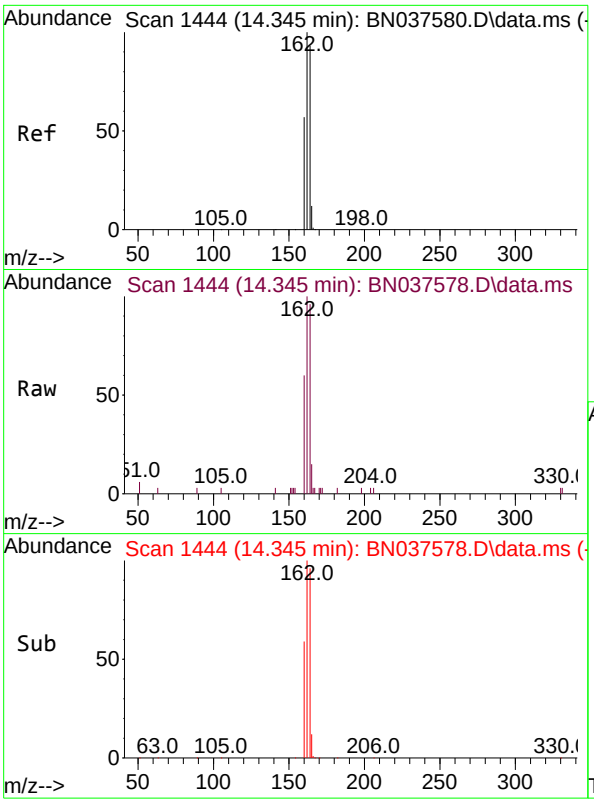


#12
2-Methylnaphthalene
Concen: 0.088 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:142 Resp: 806

Ion	Ratio	Lower	Upper
142	100		
141	93.8	71.4	107.0
115	43.4	30.2	45.4



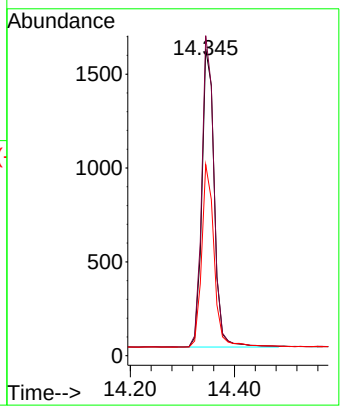


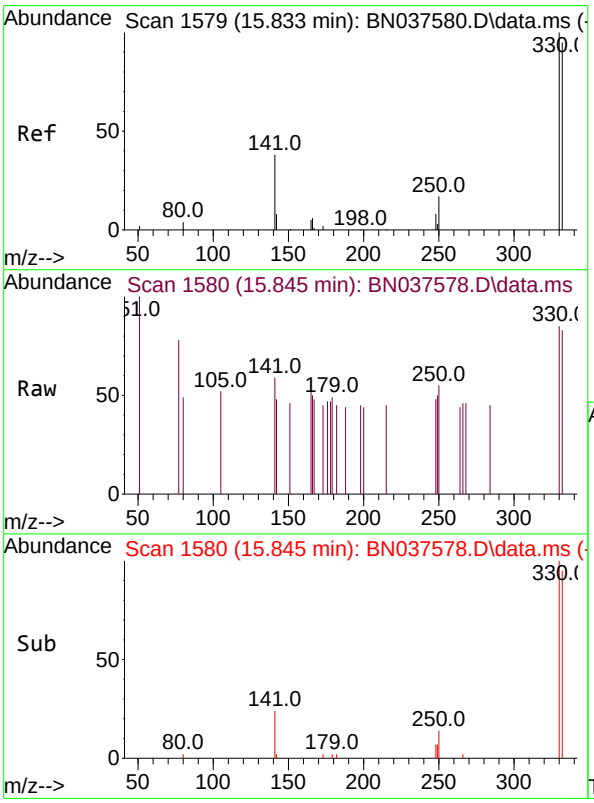
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:164 Resp: 2625

Ion	Ratio	Lower	Upper
164	100		
162	104.3	85.5	128.3
160	62.3	49.5	74.3

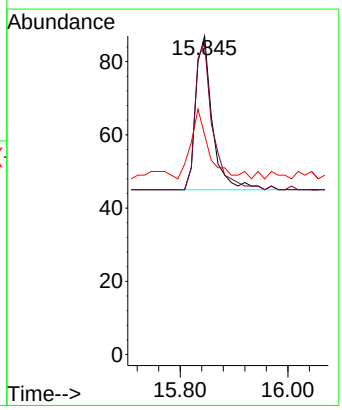


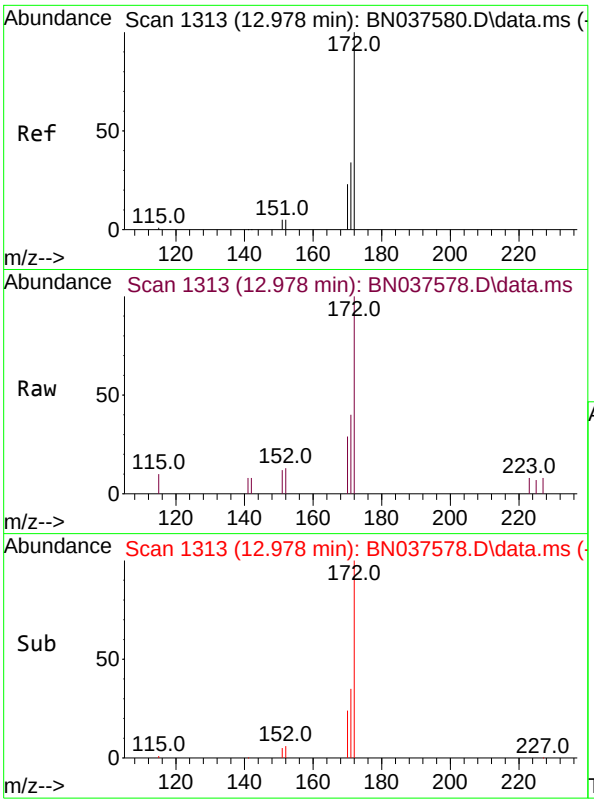


#14
2,4,6-Tribromophenol
Concen: 0.079 ng
RT: 15.845 min Scan# 1580
Delta R.T. 0.013 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:330 Resp: 91

Ion	Ratio	Lower	Upper
330	100		
332	101.1	77.4	116.0
141	47.3	30.9	46.3#



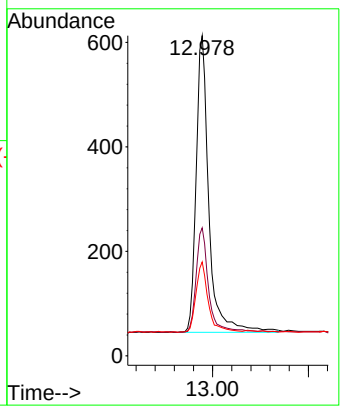


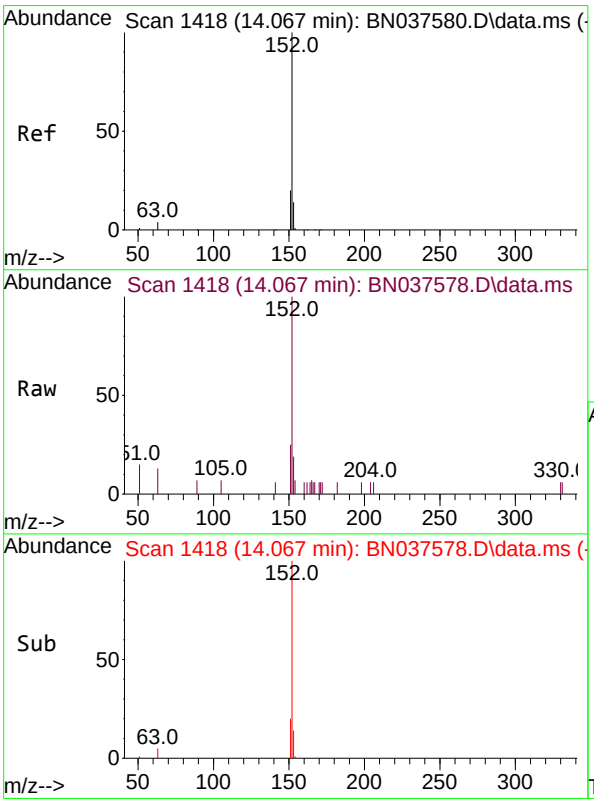
#15
2-Fluorobiphenyl
Concen: 0.096 ng
RT: 12.978 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:172 Resp: 1461

Ion	Ratio	Lower	Upper
172	100		
171	40.0	28.2	42.4
170	29.4	19.2	28.8#

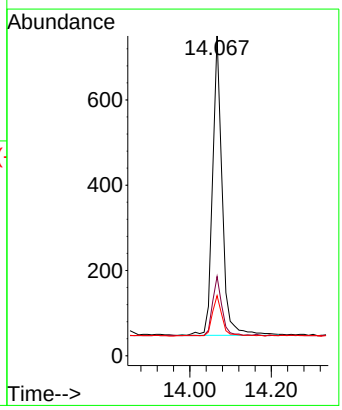


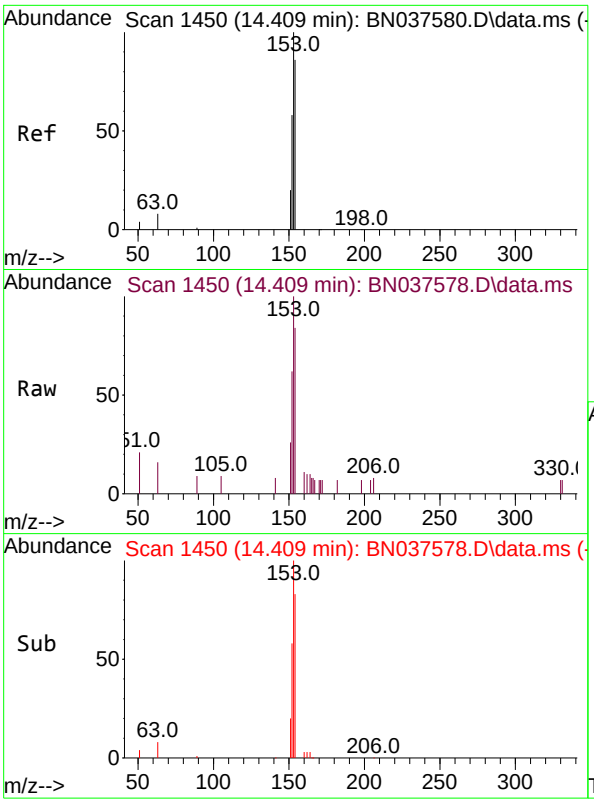


#16
Acenaphthylene
Concen: 0.097 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:152 Resp: 1142

Ion	Ratio	Lower	Upper
152	100		
151	19.5	16.1	24.1
153	13.6	10.7	16.1



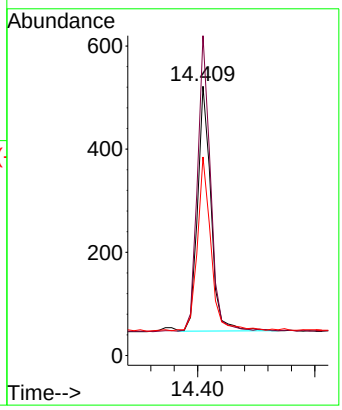


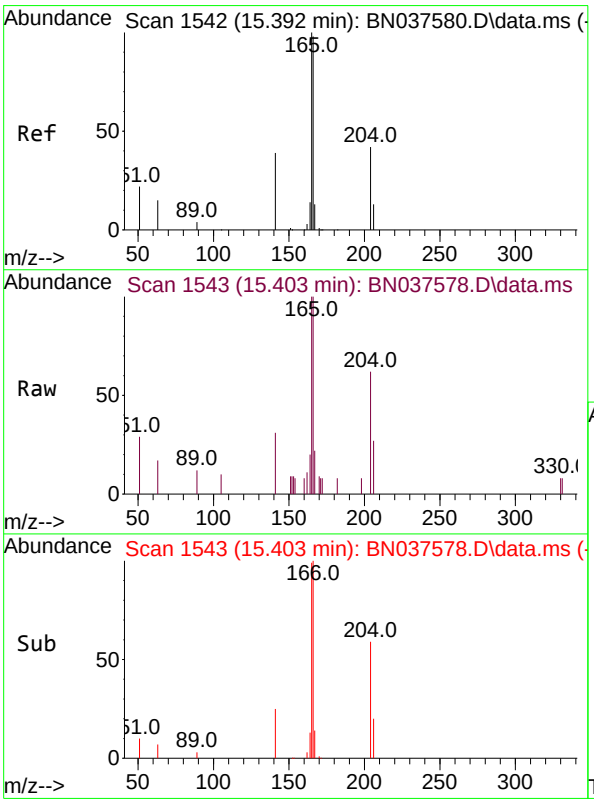
#17
Acenaphthene
Concen: 0.094 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:154 Resp: 751

Ion	Ratio	Lower	Upper
154	100		
153	118.8	90.6	135.8
152	71.6	54.9	82.3

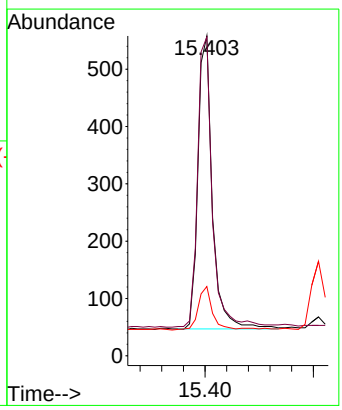


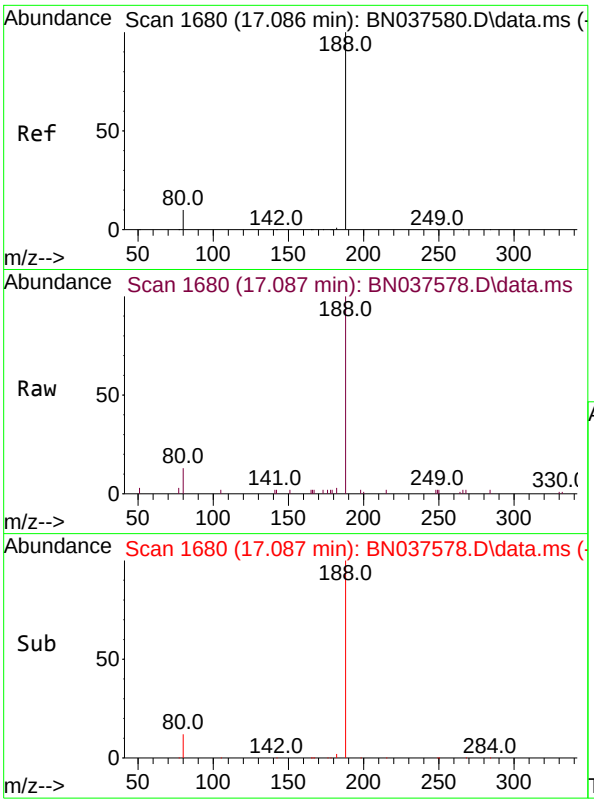


#18
Fluorene
Concen: 0.092 ng
RT: 15.403 min Scan# 1543
Delta R.T. 0.011 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:166 Resp: 962

Ion	Ratio	Lower	Upper
166	100		
165	99.8	78.9	118.3
167	14.2	10.7	16.1



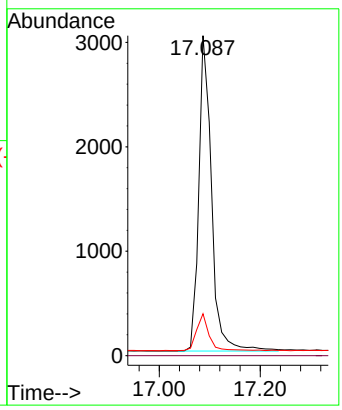


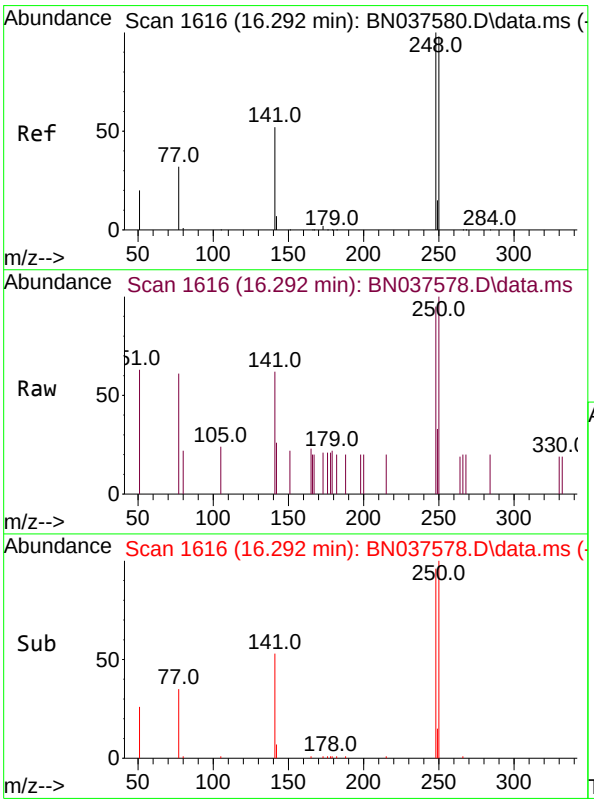
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:188 Resp: 5296

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	13.1	9.1	13.7

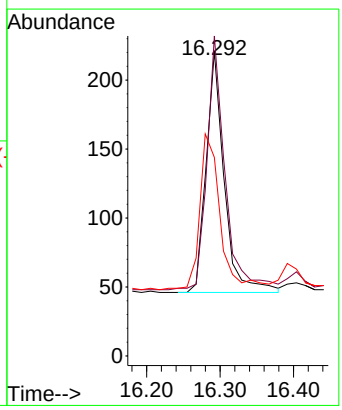


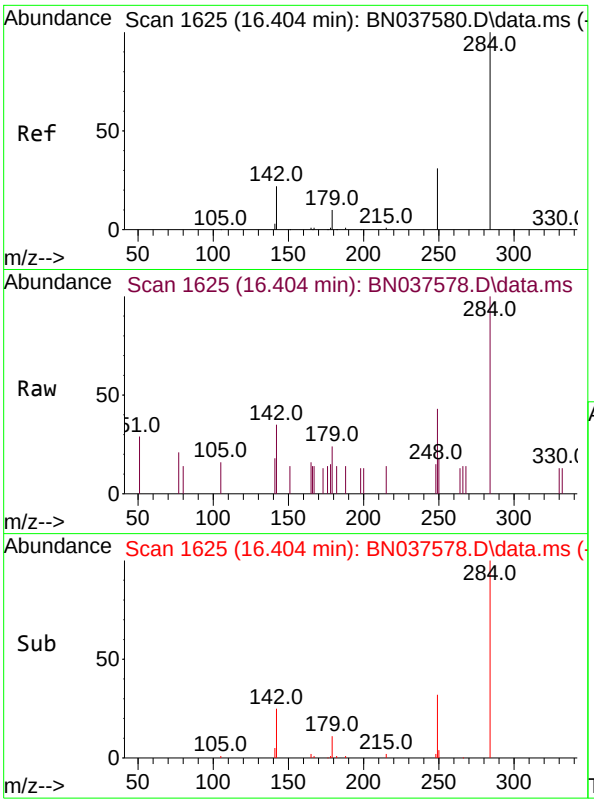


#21
4-Bromophenyl-phenylether
Concen: 0.090 ng
RT: 16.292 min Scan# 1616
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:248 Resp: 299

Ion	Ratio	Lower	Upper
248	100		
250	105.0	78.6	118.0
141	65.2	43.7	65.5



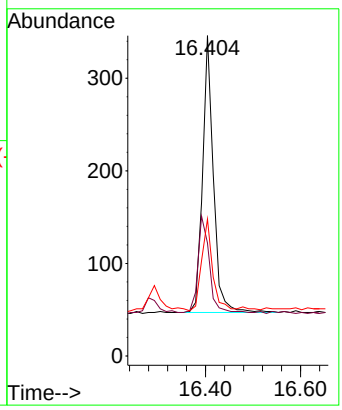


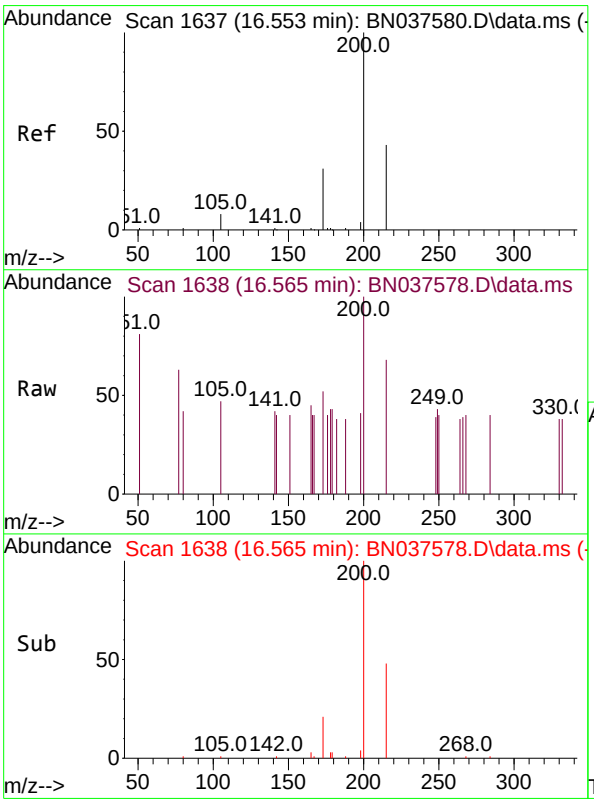
#22
Hexachlorobenzene
Concen: 0.101 ng
RT: 16.404 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:284 Resp: 476

Ion	Ratio	Lower	Upper
284	100		
142	36.8	29.8	44.6
249	33.4	26.0	39.0

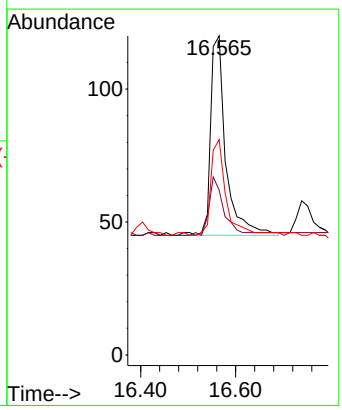


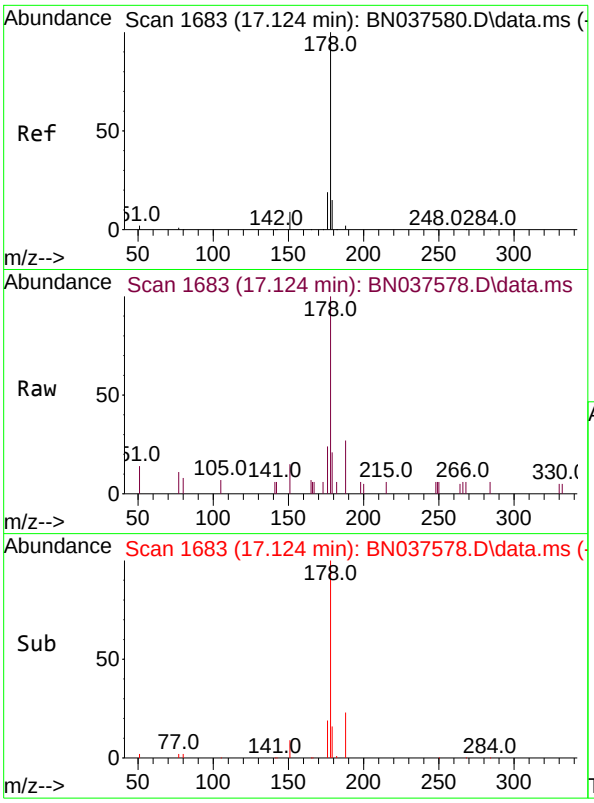


#23
Atrazine
Concen: 0.089 ng
RT: 16.565 min Scan# 1638
Delta R.T. 0.012 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:200 Resp: 168

Ion	Ratio	Lower	Upper
200	100		
173	51.7	31.0	46.4#
215	67.5	39.4	59.0#



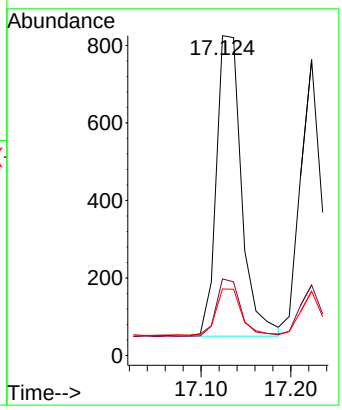


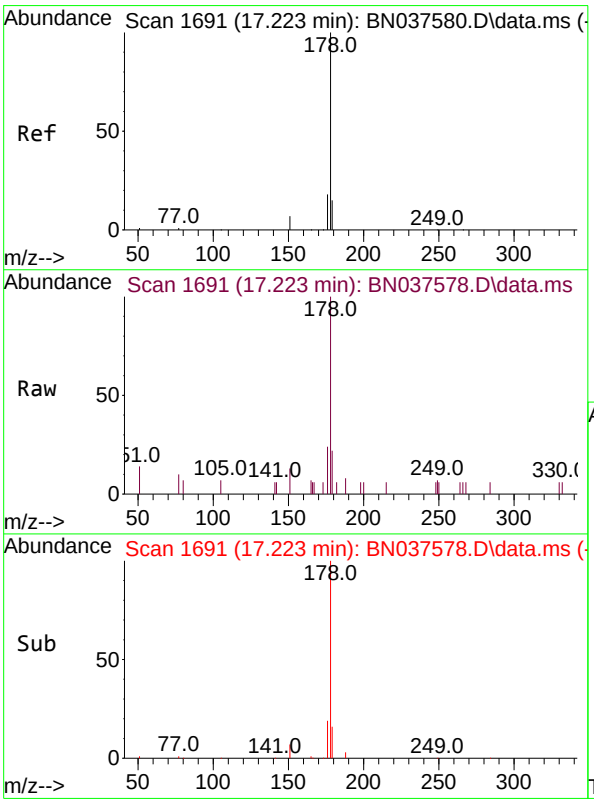
#25
Phenanthrene
Concen: 0.094 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:178 Resp: 1517

Ion	Ratio	Lower	Upper
178	100		
176	18.4	15.0	22.6
179	16.0	12.3	18.5

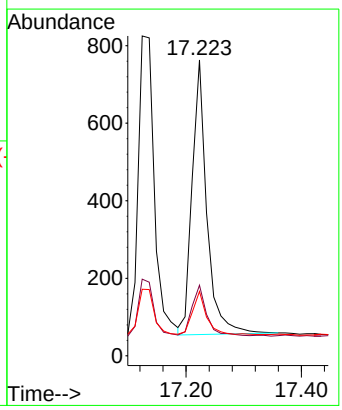


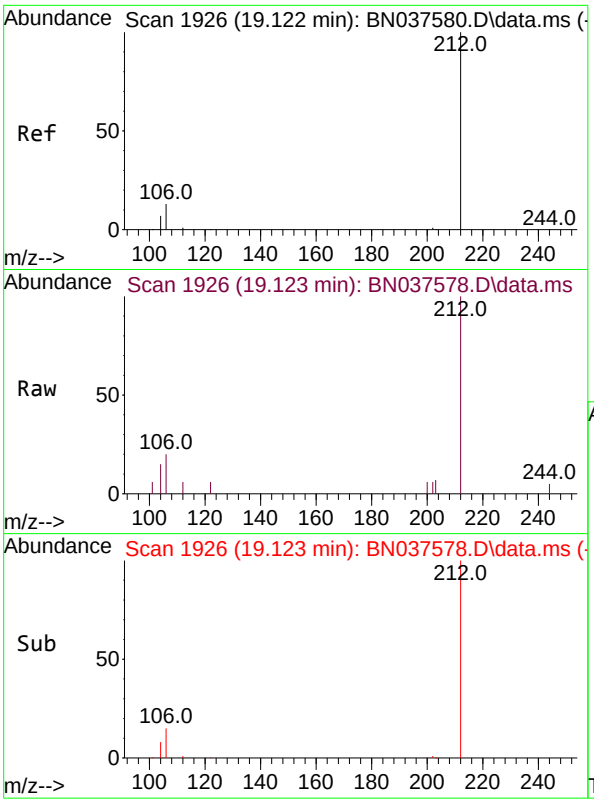


#26
Anthracene
Concen: 0.088 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:178 Resp: 1258

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.7	22.1
179	15.5	12.3	18.5



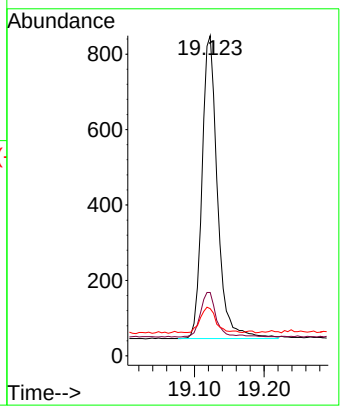


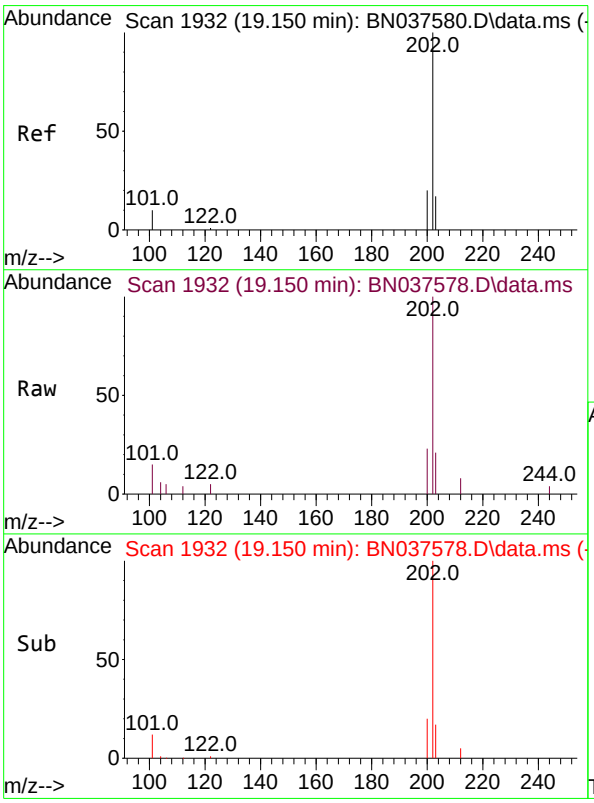
#27
Fluoranthene-d10
Concen: 0.089 ng
RT: 19.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:212 Resp: 1234

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.5	17.3
104	8.6	6.6	9.8

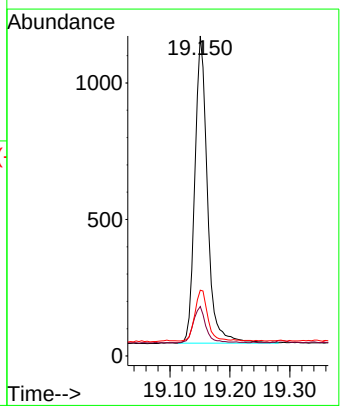


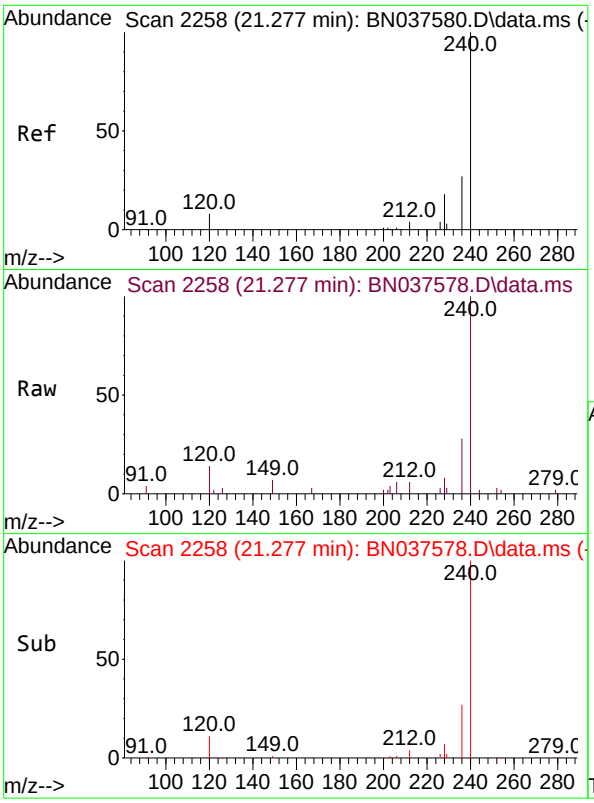


#28
Fluoranthene
Concen: 0.089 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:202 Resp: 1643

Ion	Ratio	Lower	Upper
202	100		
101	11.9	9.0	13.6
203	16.7	13.8	20.8



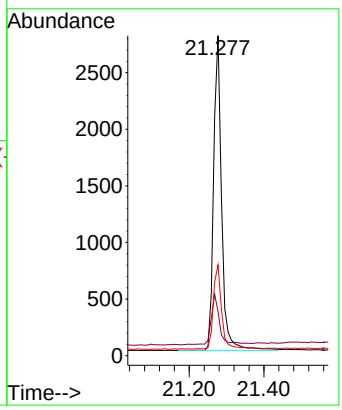


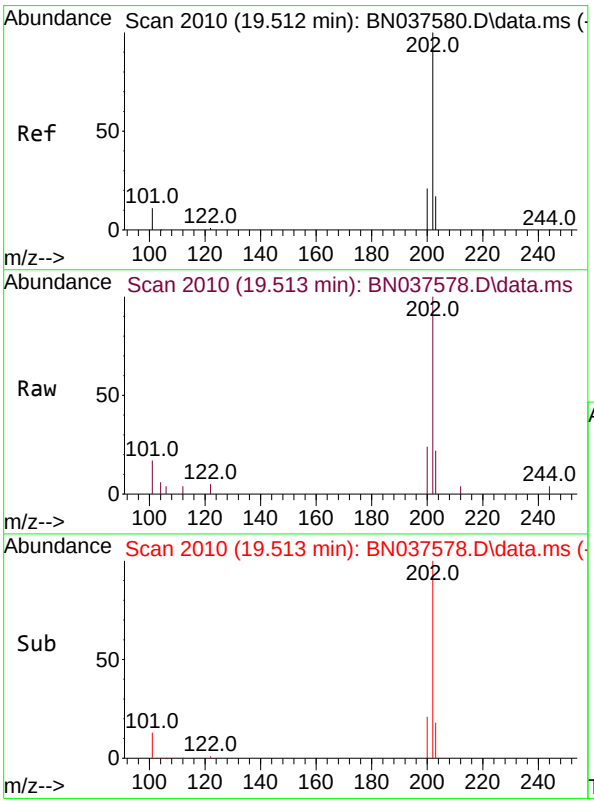
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:240 Resp: 4146

Ion	Ratio	Lower	Upper
240	100		
120	13.8	8.9	13.3#
236	28.4	22.6	33.8

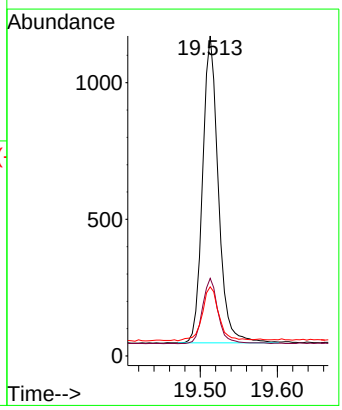


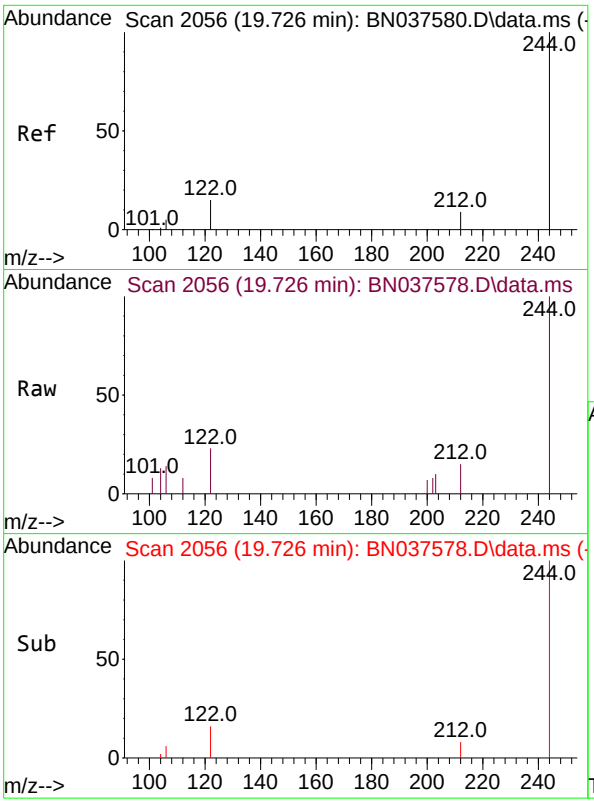


#30
Pyrene
Concen: 0.103 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:202 Resp: 1595

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.6	25.0
203	18.0	14.3	21.5



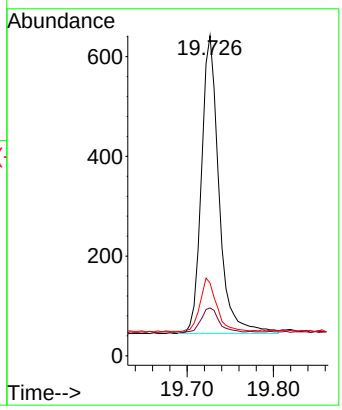


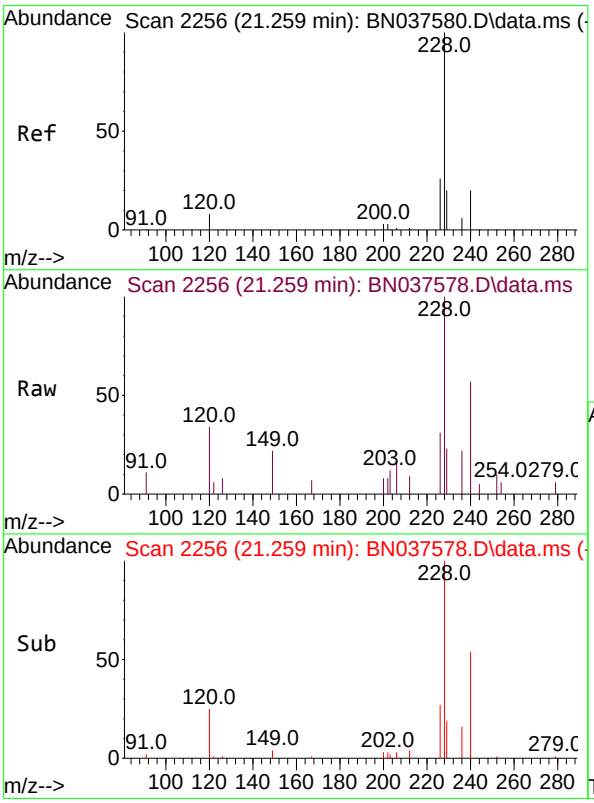
#31
Terphenyl-d14
Concen: 0.099 ng
RT: 19.726 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:244 Resp: 844

Ion	Ratio	Lower	Upper
244	100		
212	15.0	8.2	12.2#
122	22.7	13.2	19.8#

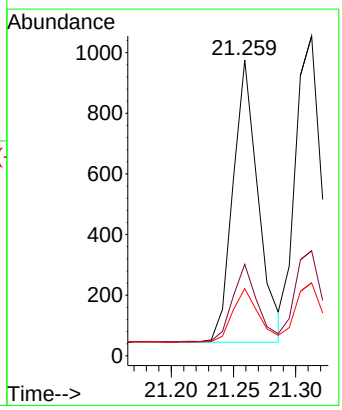


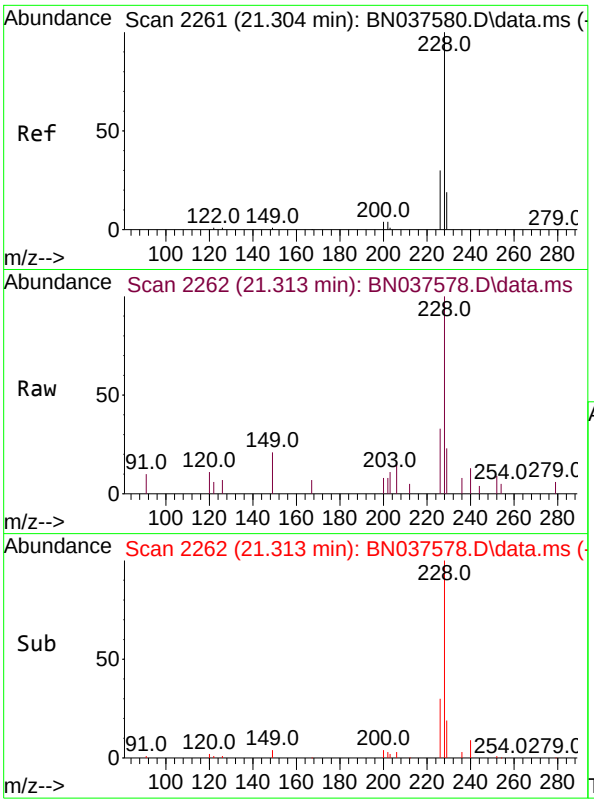


#32
Benzo(a)anthracene
Concen: 0.095 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:228 Resp: 1312

Ion	Ratio	Lower	Upper
228	100		
226	30.9	21.5	32.3
229	22.7	16.5	24.7



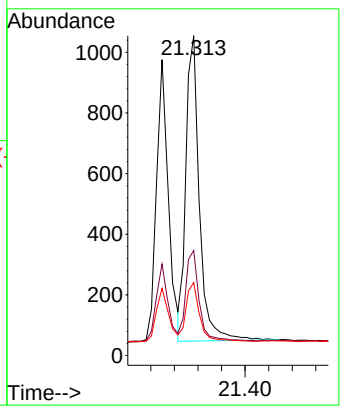


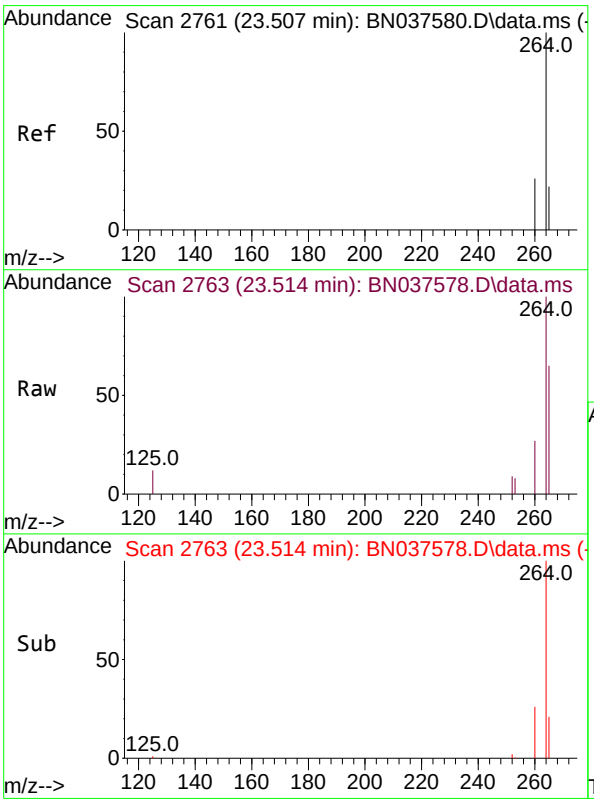
#33
Chrysene
Concen: 0.104 ng
RT: 21.313 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:228 Resp: 1603

Ion	Ratio	Lower	Upper
228	100		
226	32.9	24.9	37.3
229	22.8	15.8	23.8

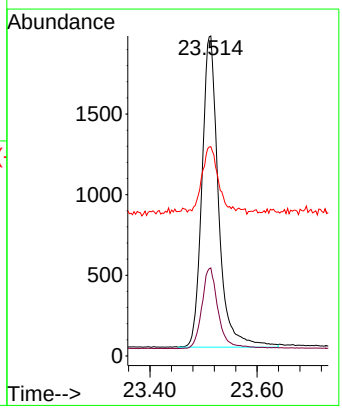


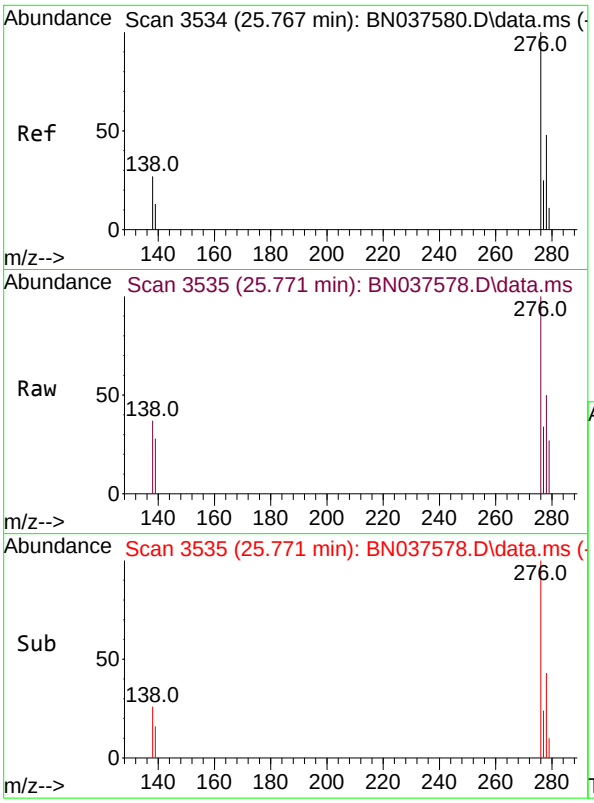


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.514 min Scan# 2763
Delta R.T. 0.006 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:264 Resp: 4132

Ion	Ratio	Lower	Upper
264	100		
260	27.5	21.6	32.4
265	65.4	48.2	72.4



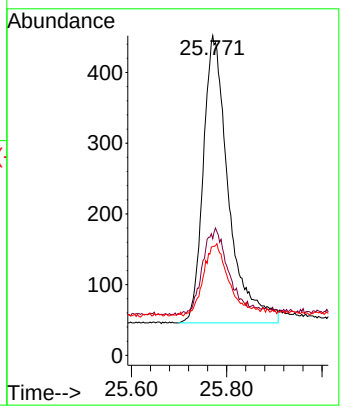


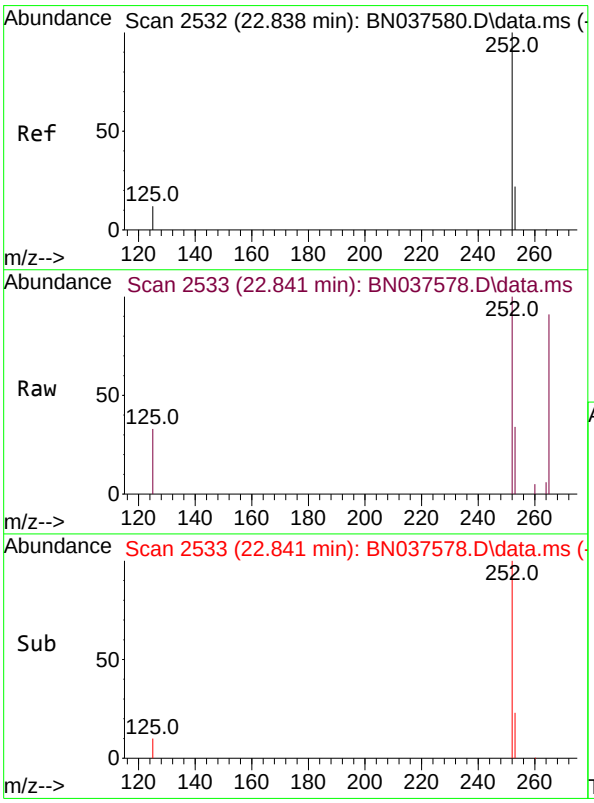
#36
Indeno(1,2,3-cd)pyrene
Concen: 0.086 ng
RT: 25.771 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:276 Resp: 1494

Ion	Ratio	Lower	Upper
276	100		
138	29.2	23.3	34.9
277	24.9	19.5	29.3

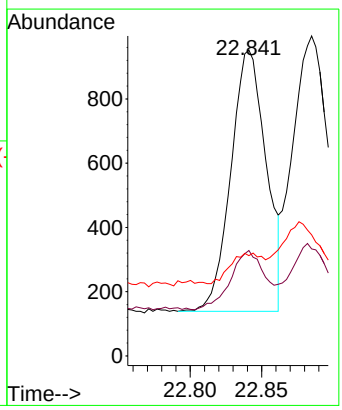


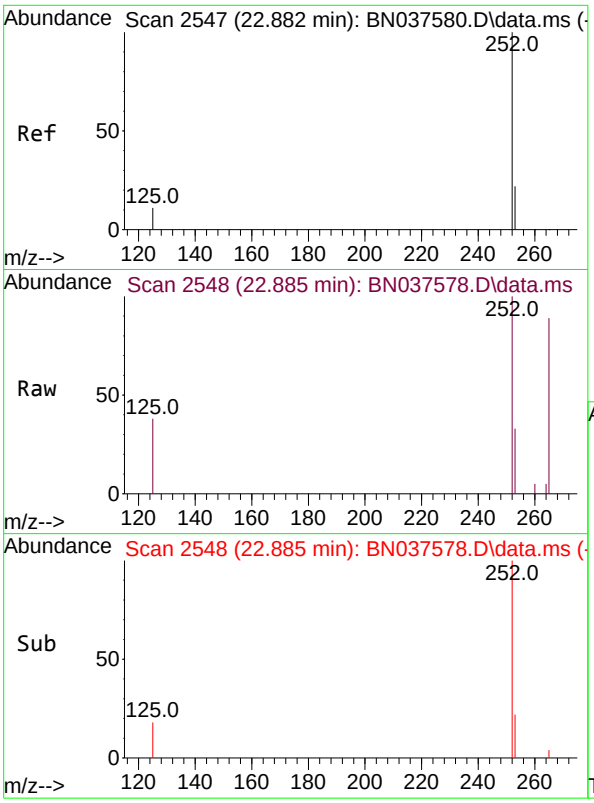


#37
Benzo(b)fluoranthene
Concen: 0.089 ng
RT: 22.841 min Scan# 2533
Delta R.T. 0.003 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:252 Resp: 1396

Ion	Ratio	Lower	Upper
252	100		
253	34.5	20.0	30.0#
125	32.8	13.8	20.6#



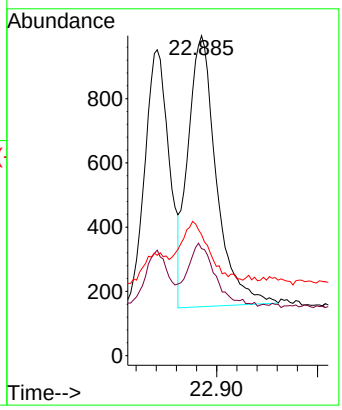


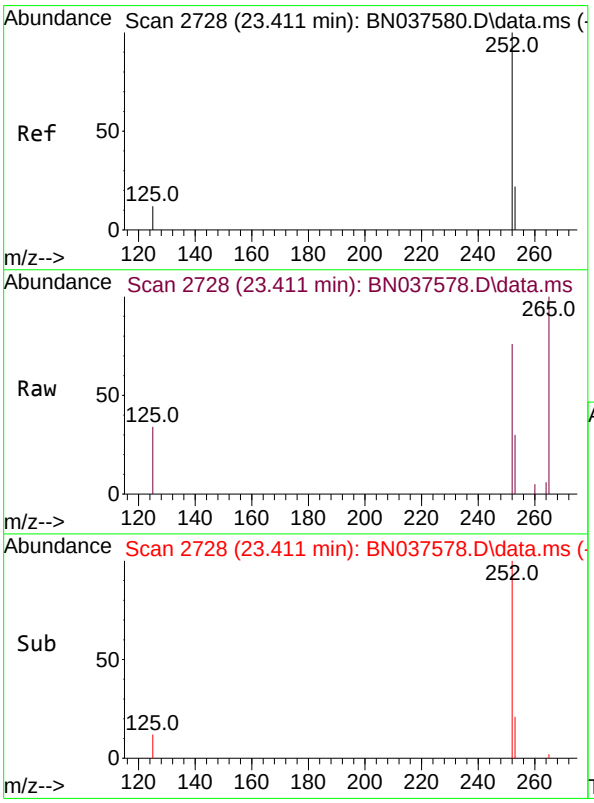
#38
Benzo(k)fluoranthene
Concen: 0.093 ng
RT: 22.885 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:252 Resp: 1650

Ion	Ratio	Lower	Upper
252	100		
253	33.4	19.9	29.9#
125	37.9	15.0	22.6#

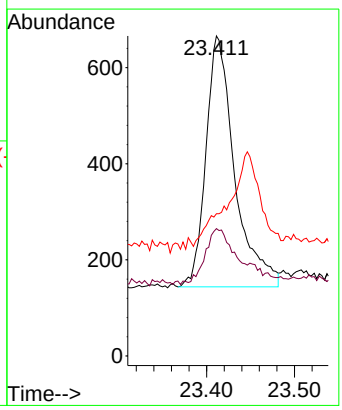


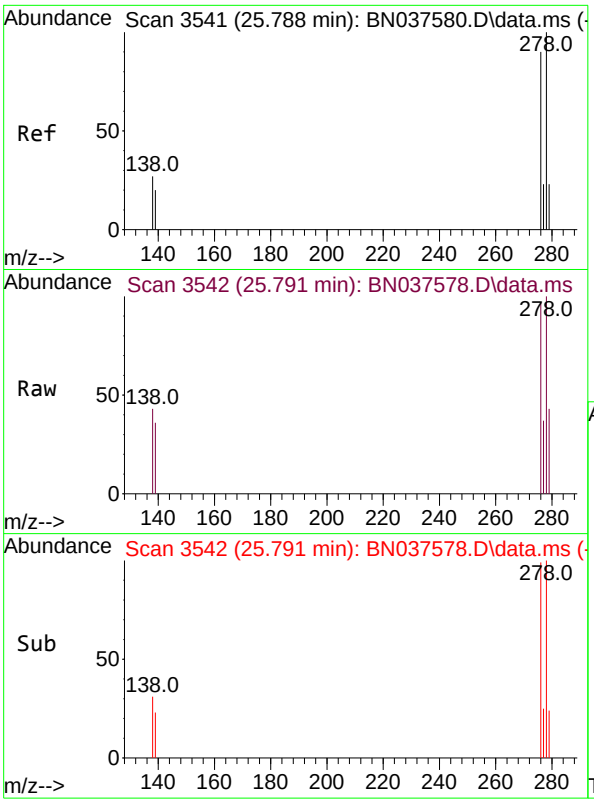


#39
Benzo(a)pyrene
Concen: 0.091 ng
RT: 23.411 min Scan# 2728
Delta R.T. 0.000 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:252 Resp: 1184

Ion	Ratio	Lower	Upper
252	100		
253	39.8	21.6	32.4#
125	44.4	16.8	25.2#



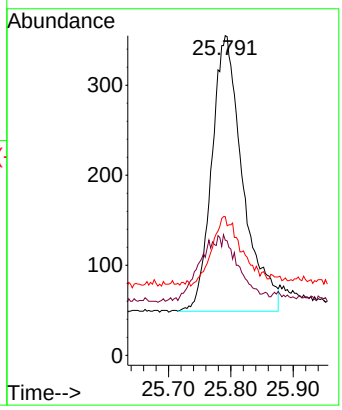


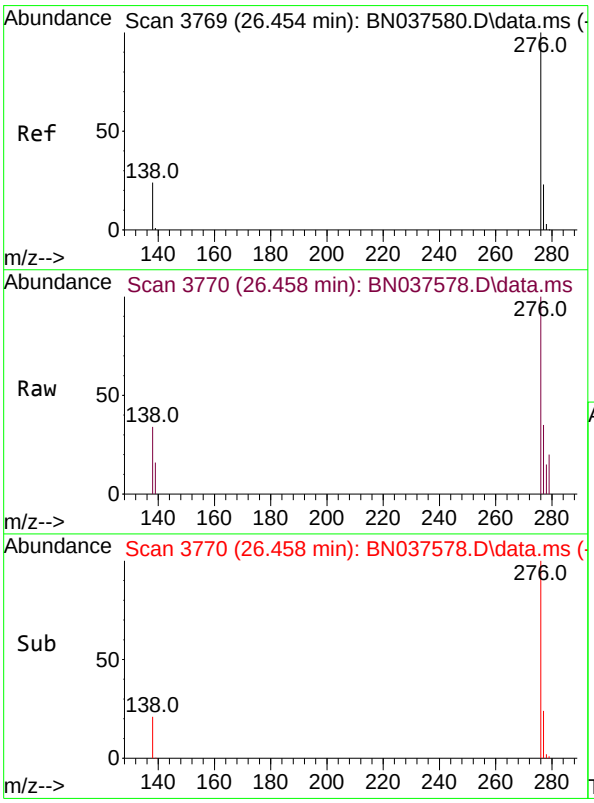
#40
Dibenzo(a,h)anthracene
Concen: 0.078 ng
RT: 25.791 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.1

Tgt Ion:278 Resp: 1057

Ion	Ratio	Lower	Upper
278	100		
139	36.1	18.3	27.5#
279	43.4	22.5	33.7#

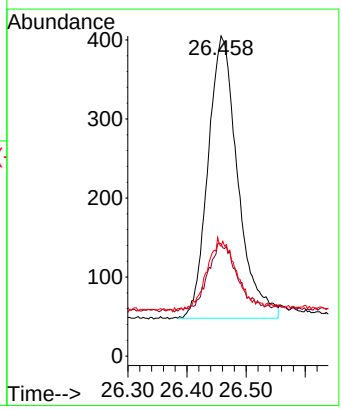




#41
Benzo(g,h,i)perylene
Concen: 0.088 ng
RT: 26.458 min Scan# 3770
Delta R.T. 0.003 min
Lab File: BN037578.D
Acq: 12 Aug 2025 16:26

Tgt Ion:276 Resp: 1247

Ion	Ratio	Lower	Upper
276	100		
277	35.1	21.0	31.4#
138	34.3	21.7	32.5#



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037579.D
Acq On : 12 Aug 2025 17:03
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Aug 13 04:47:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2031	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	4975	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2407	0.400	ng		0.00
19) Phenanthrene-d10	17.087	188	4812	0.400	ng		0.00
29) Chrysene-d12	21.277	240	4019	0.400	ng		0.00
35) Perylene-d12	23.508	264	3859	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	960	0.209	ng		0.00
5) Phenol-d6	6.879	99	1067	0.193	ng		0.00
8) Nitrobenzene-d5	8.854	82	640	0.183	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	1225	0.181	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	179	0.170	ng		0.00
15) 2-Fluorobiphenyl	12.978	172	2700	0.194	ng		0.00
27) Fluoranthene-d10	19.123	212	2323	0.184	ng		0.00
31) Terphenyl-d14	19.726	244	1609	0.195	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	419	0.216	ng		96
3) n-Nitrosodimethylamine	3.543	42	478	0.193	ng	#	94
6) bis(2-Chloroethyl)ether	7.139	93	1002	0.201	ng		99
9) Naphthalene	10.552	128	2613	0.197	ng		96
10) Hexachlorobutadiene	10.851	225	641	0.198	ng	#	99
12) 2-Methylnaphthalene	12.167	142	1570	0.189	ng		98
16) Acenaphthylene	14.067	152	2118	0.196	ng		100
17) Acenaphthene	14.409	154	1384	0.189	ng		98
18) Fluorene	15.393	166	1817	0.189	ng		98
20) 4,6-Dinitro-2-methylph...	15.467	198	100	0.295	ng	#	58
21) 4-Bromophenyl-phenylether	16.292	248	567	0.187	ng		97
22) Hexachlorobenzene	16.404	284	865	0.202	ng		99
23) Atrazine	16.553	200	303	0.177	ng	#	83
24) Pentachlorophenol	16.739	266	260	0.173	ng		95
25) Phenanthrene	17.124	178	2796	0.191	ng		99
26) Anthracene	17.223	178	2371	0.183	ng		99
28) Fluoranthene	19.150	202	3041	0.181	ng		99
30) Pyrene	19.513	202	2987	0.199	ng		99
32) Benzo(a)anthracene	21.259	228	2563	0.191	ng		97
33) Chrysene	21.304	228	3045	0.204	ng		98
34) Bis(2-ethylhexyl)phtha...	21.205	149	1040	0.188	ng	#	97
36) Indeno(1,2,3-cd)pyrene	25.771	276	2821	0.173	ng		98
37) Benzo(b)fluoranthene	22.838	252	2653	0.181	ng	#	91
38) Benzo(k)fluoranthene	22.882	252	3049	0.185	ng	#	90
39) Benzo(a)pyrene	23.414	252	2191	0.181	ng	#	83
40) Dibenzo(a,h)anthracene	25.785	278	2157	0.171	ng	#	89
41) Benzo(g,h,i)perylene	26.455	276	2459	0.185	ng		93

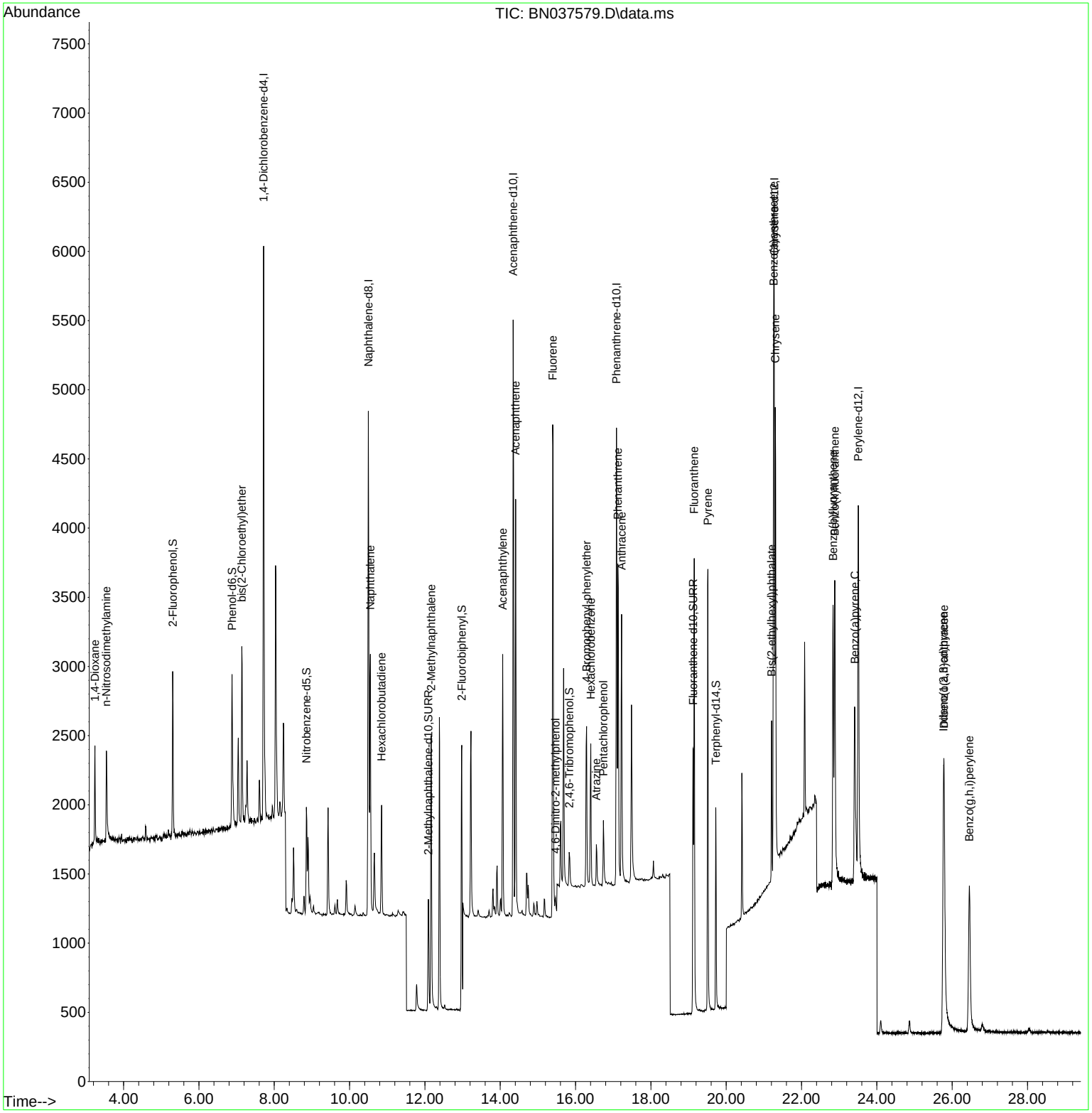
(#) = qualifier out of range (m) = manual integration (+) = signals summed

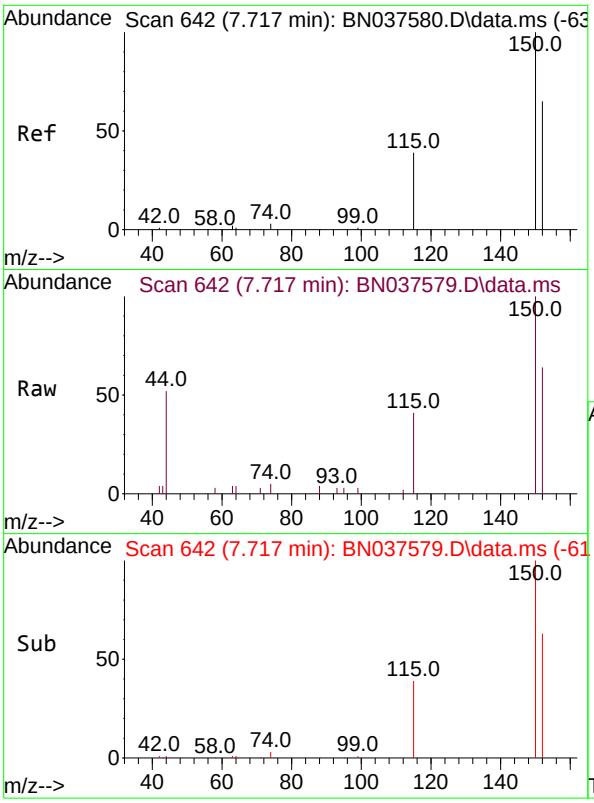
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037579.D
Acq On : 12 Aug 2025 17:03
Operator : RC/JU
Sample : SSTDICC0.2
Misc :
ALS Vial : 4 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Quant Time: Aug 13 04:47:58 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



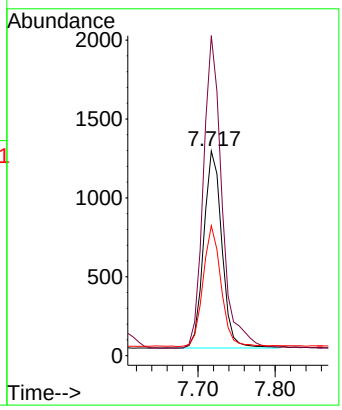


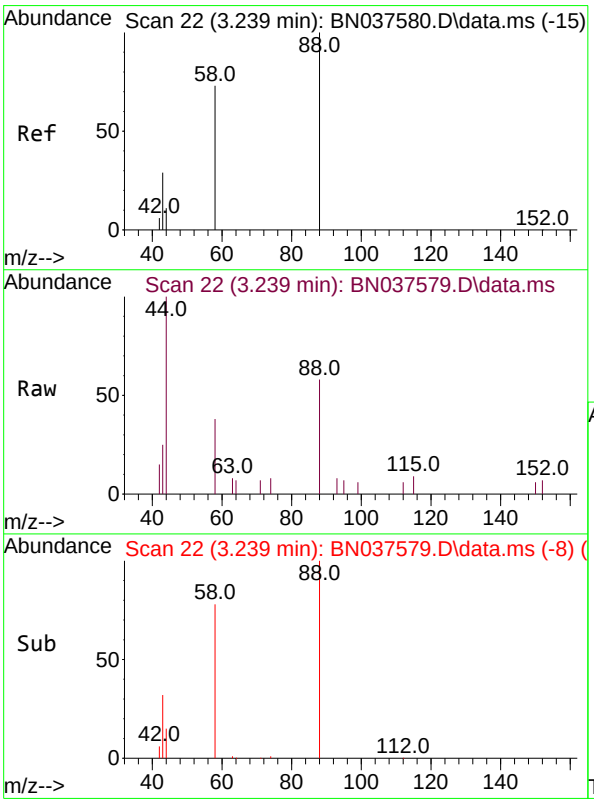
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 2031

Ion	Ratio	Lower	Upper
152	100		
150	156.4	122.2	183.4
115	63.5	49.8	74.6

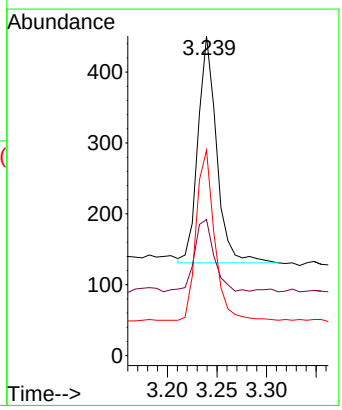


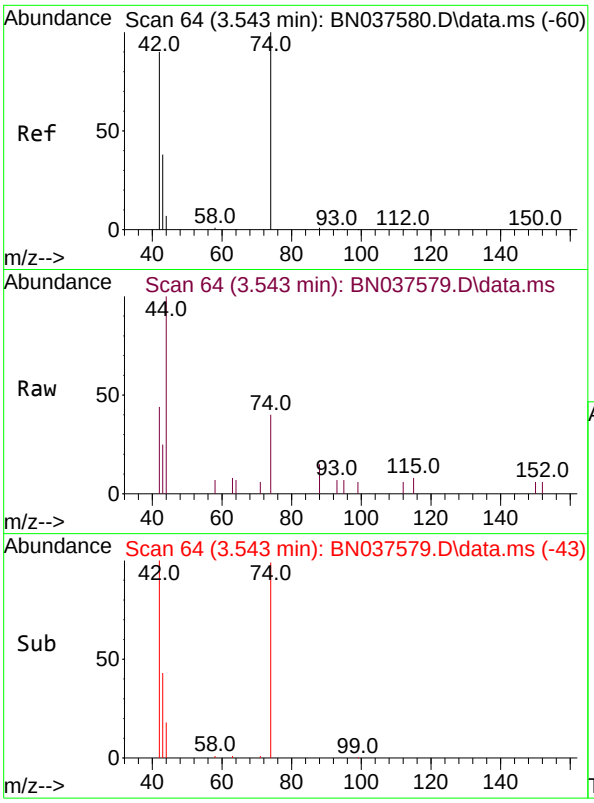


#2
1,4-Dioxane
Concen: 0.216 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion: 88 Resp: 419

Ion	Ratio	Lower	Upper
88	100		
43	34.8	25.8	38.6
58	73.7	61.2	91.8



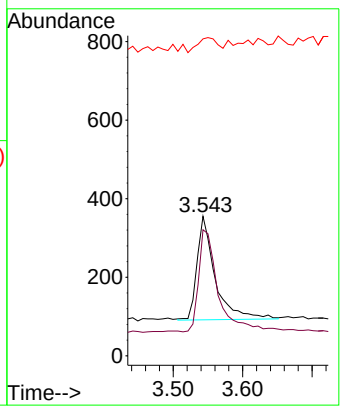


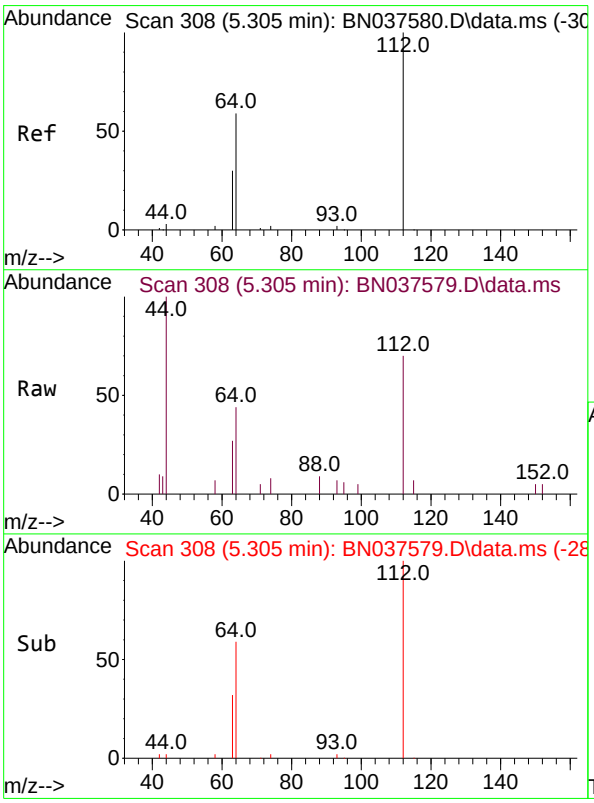
#3
n-Nitrosodimethylamine
Concen: 0.193 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 42 Resp: 478

Ion	Ratio	Lower	Upper
42	100		
74	107.5	82.0	123.0
44	15.7	7.9	11.9#

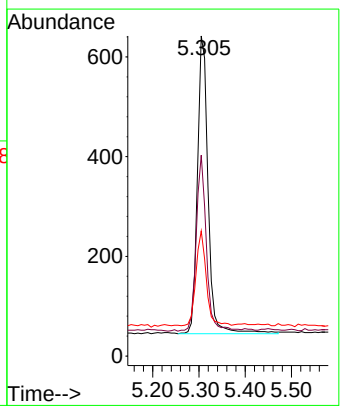


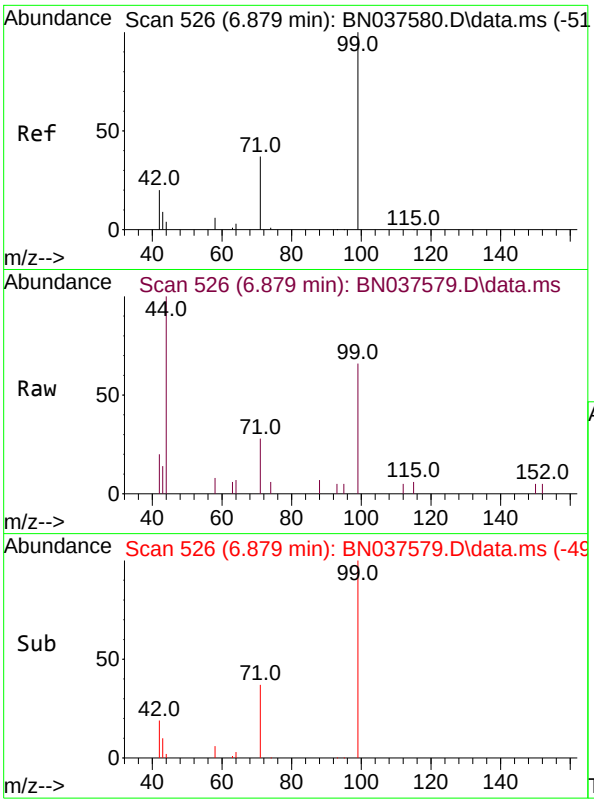


#4
2-Fluorophenol
Concen: 0.209 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:112 Resp: 960

Ion	Ratio	Lower	Upper
112	100		
64	56.3	44.9	67.3
63	30.9	23.4	35.2



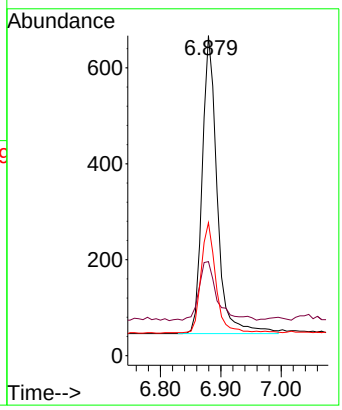


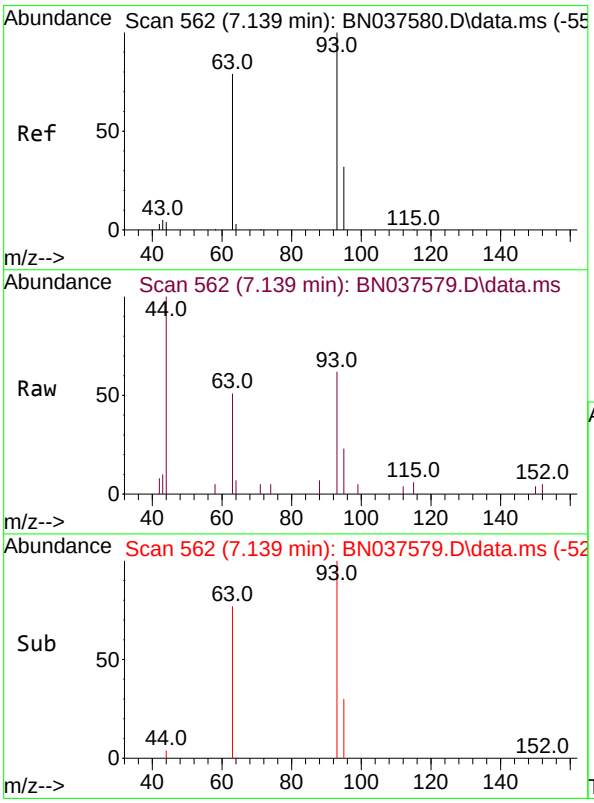
#5
Phenol-d6
Concen: 0.193 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion: 99 Resp: 1067

Ion	Ratio	Lower	Upper
99	100		
42	24.4	18.5	27.7
71	35.7	28.6	42.8

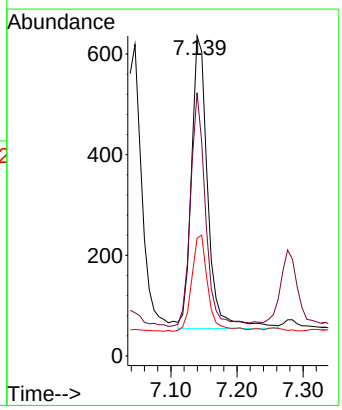


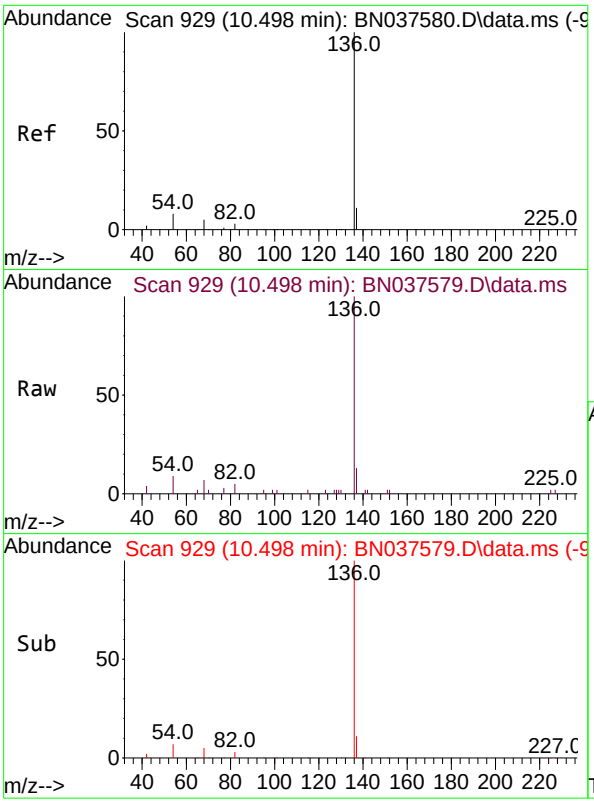


#6
bis(2-Chloroethyl)ether
Concen: 0.201 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion: 93 Resp: 1002

Ion	Ratio	Lower	Upper
93	100		
63	73.4	58.0	87.0
95	32.5	24.9	37.3



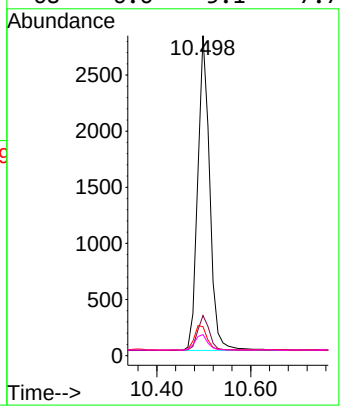


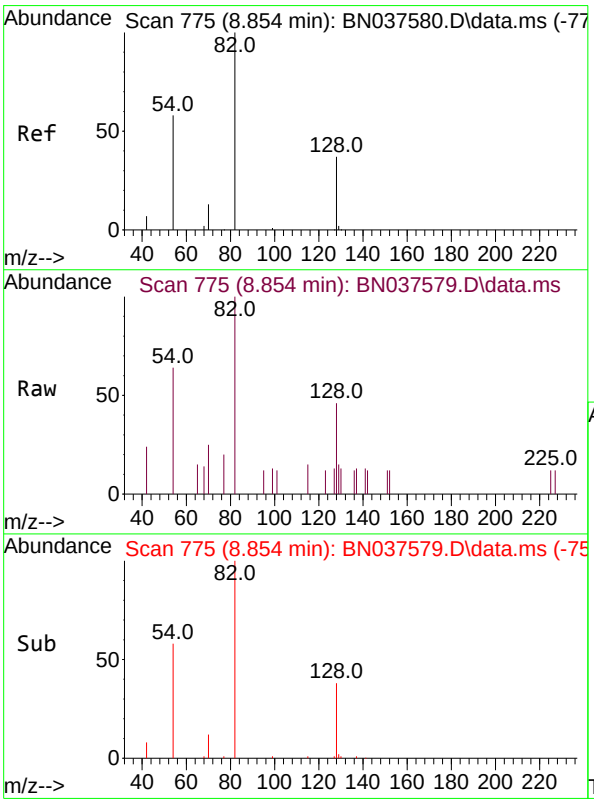
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:136 Resp: 4975

Ion	Ratio	Lower	Upper
136	100		
137	12.6	9.5	14.3
54	9.0	7.3	10.9
68	6.6	5.1	7.7

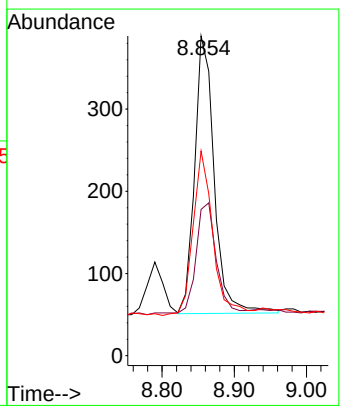


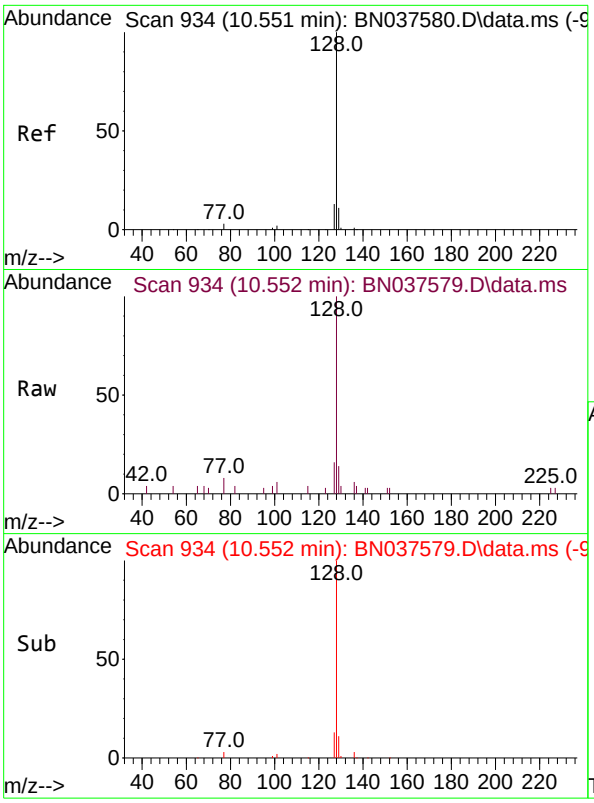


#8
Nitrobenzene-d5
Concen: 0.183 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion: 82 Resp: 640

Ion	Ratio	Lower	Upper
82	100		
128	45.8	32.6	48.8
54	64.0	48.9	73.3



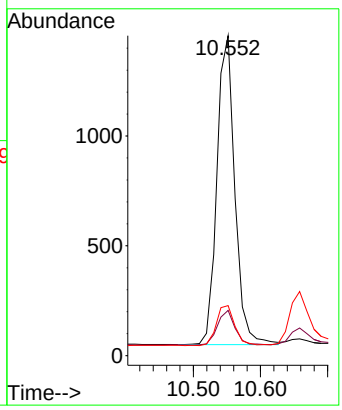


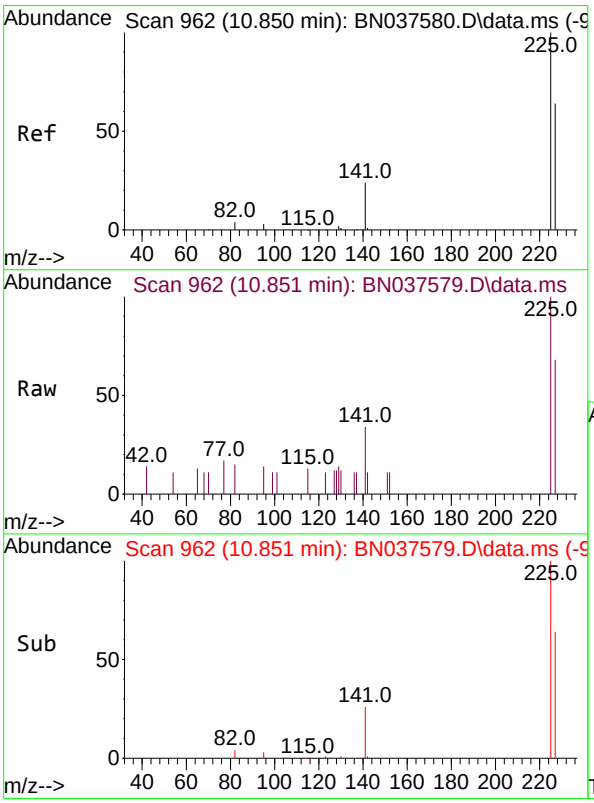
#9
Naphthalene
Concen: 0.197 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:128 Resp: 2613

Ion	Ratio	Lower	Upper
128	100		
129	14.1	9.8	14.6
127	15.6	11.5	17.3

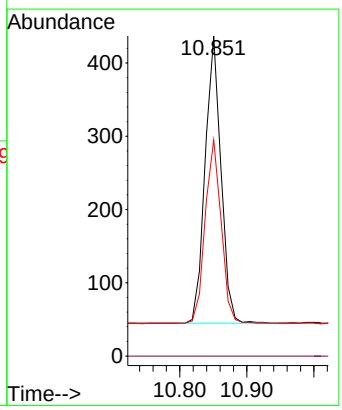


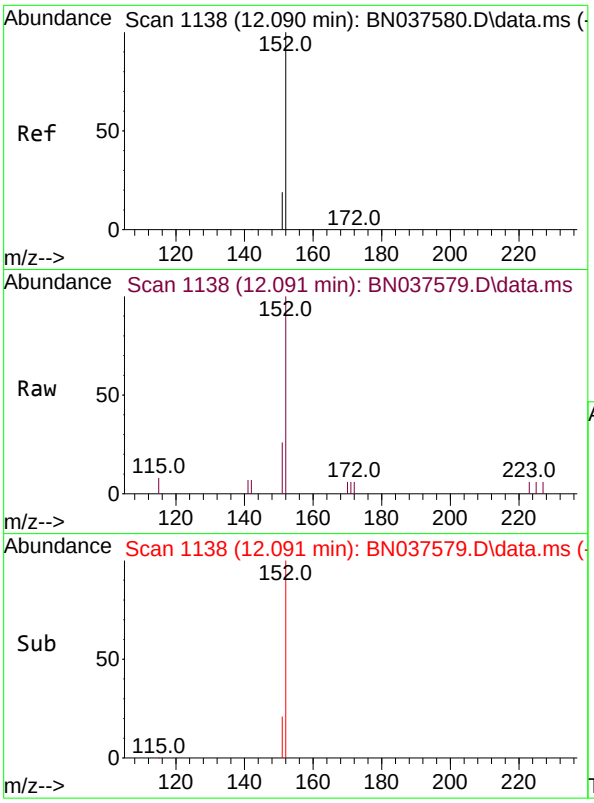


#10
Hexachlorobutadiene
Concen: 0.198 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:225 Resp: 641

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	50.8	76.2



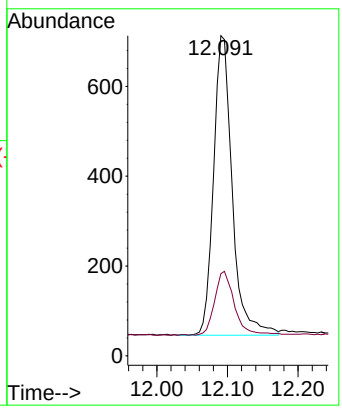


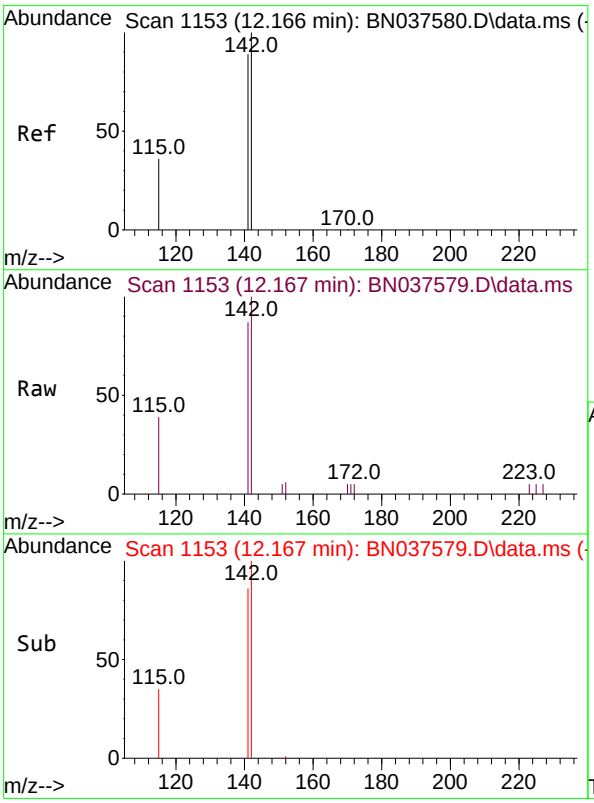
#11
2-Methylnaphthalene-d10
Concen: 0.181 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:152 Resp: 1225

Ion	Ratio	Lower	Upper
152	100		
151	22.7	17.3	25.9

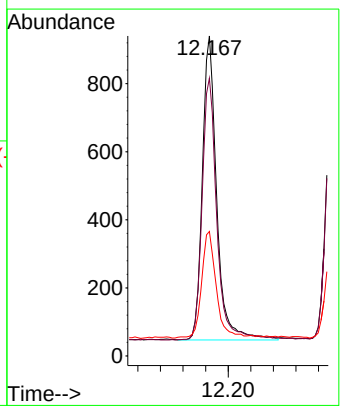


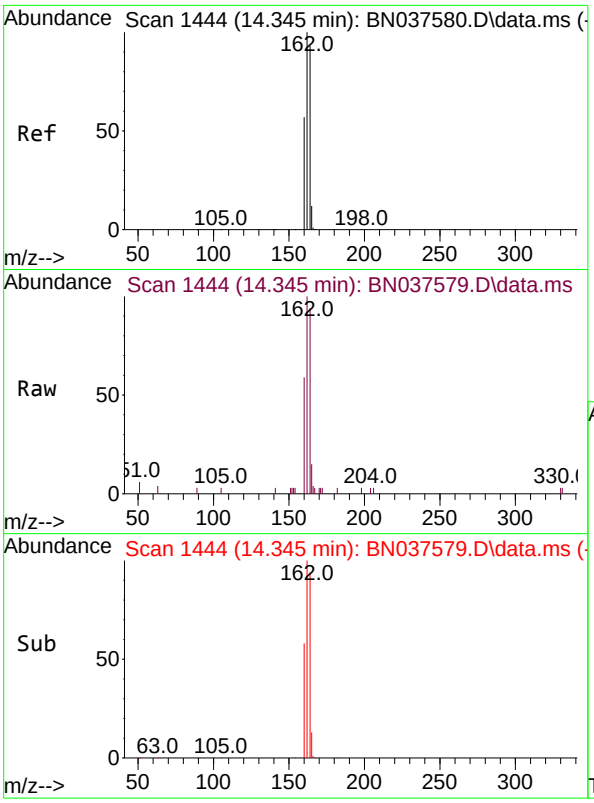


#12
2-Methylnaphthalene
Concen: 0.189 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:142 Resp: 1570

Ion	Ratio	Lower	Upper
142	100		
141	86.8	71.4	107.0
115	38.9	30.2	45.4



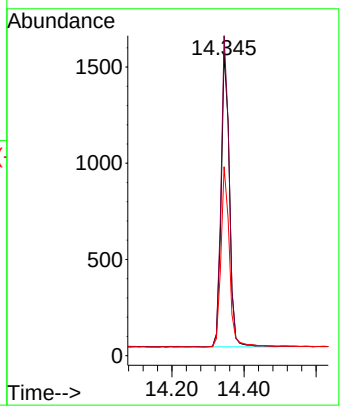


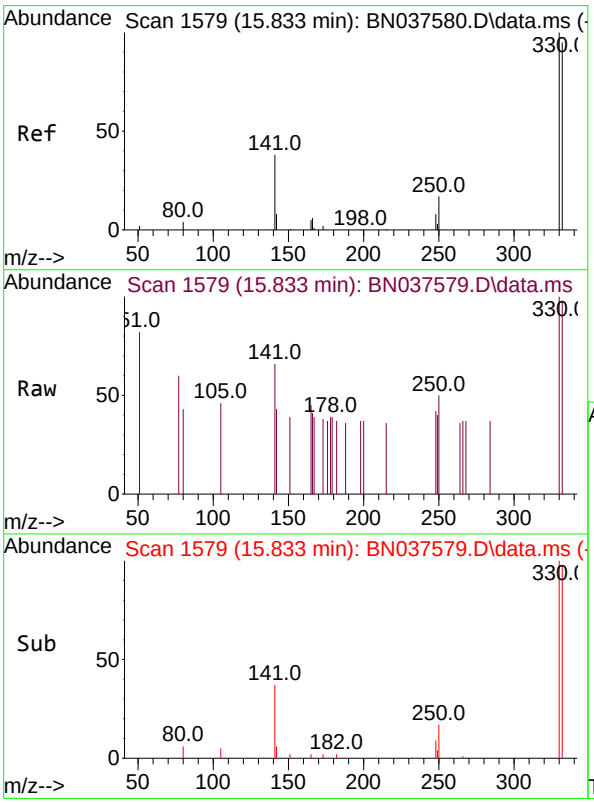
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:164 Resp: 2407

Ion	Ratio	Lower	Upper
164	100		
162	106.0	85.5	128.3
160	62.6	49.5	74.3

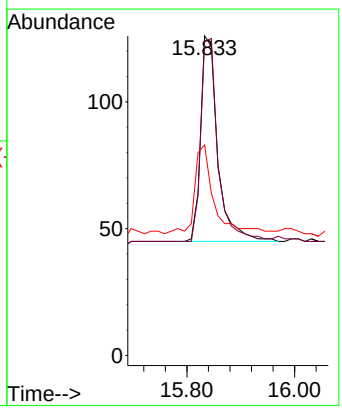


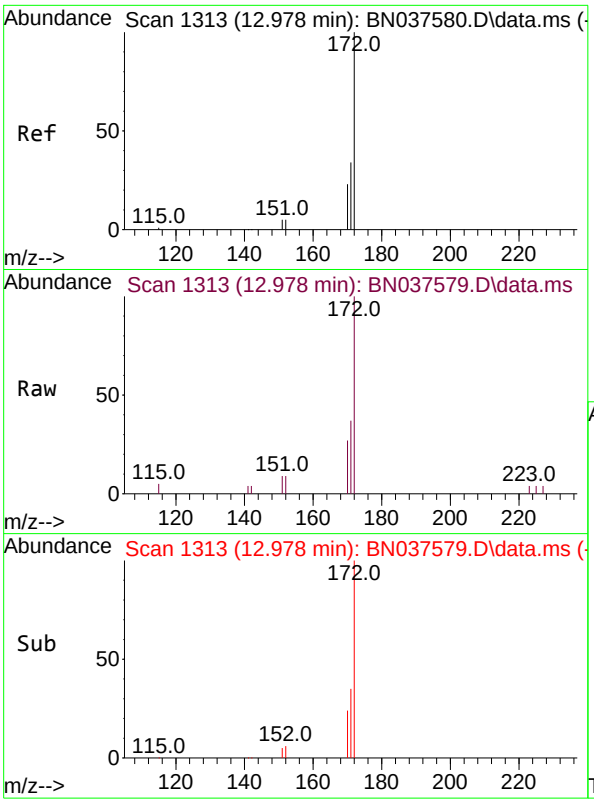


#14
2,4,6-Tribromophenol
Concen: 0.170 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:330 Resp: 179

Ion	Ratio	Lower	Upper
330	100		
332	98.9	77.4	116.0
141	48.0	30.9	46.3#



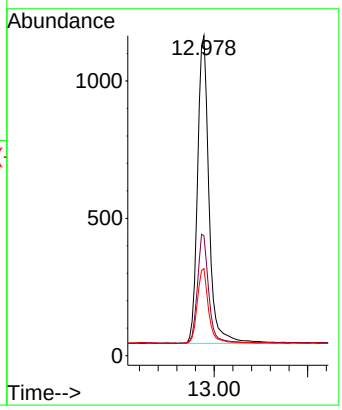


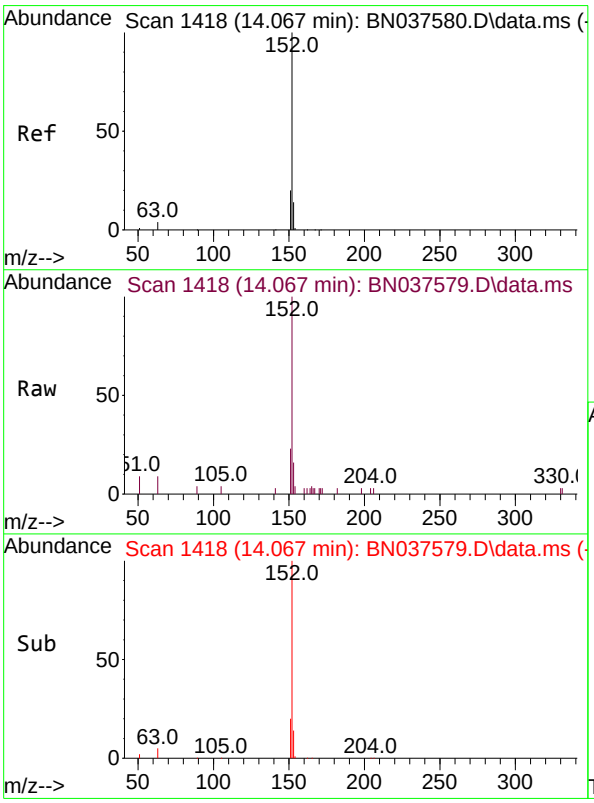
#15
2-Fluorobiphenyl
Concen: 0.194 ng
RT: 12.978 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:172 Resp: 2700

Ion	Ratio	Lower	Upper
172	100		
171	37.4	28.2	42.4
170	27.2	19.2	28.8

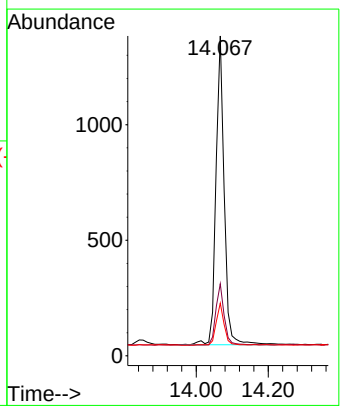


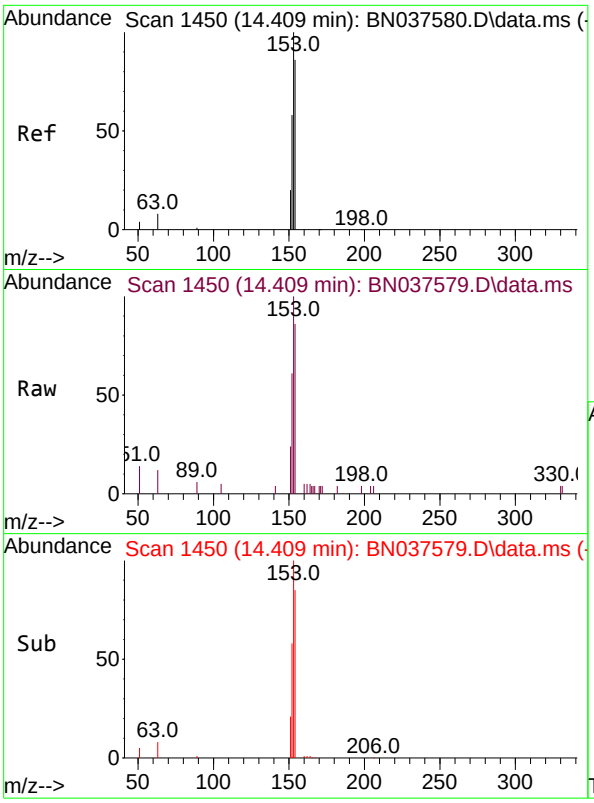


#16
Acenaphthylene
Concen: 0.196 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:152 Resp: 2118

Ion	Ratio	Lower	Upper
152	100		
151	20.4	16.1	24.1
153	13.3	10.7	16.1



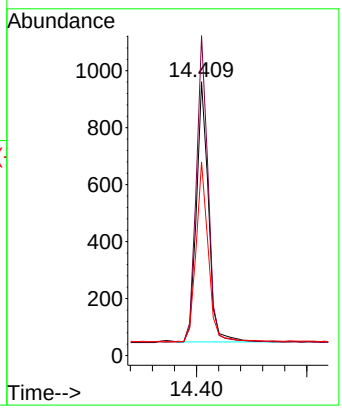


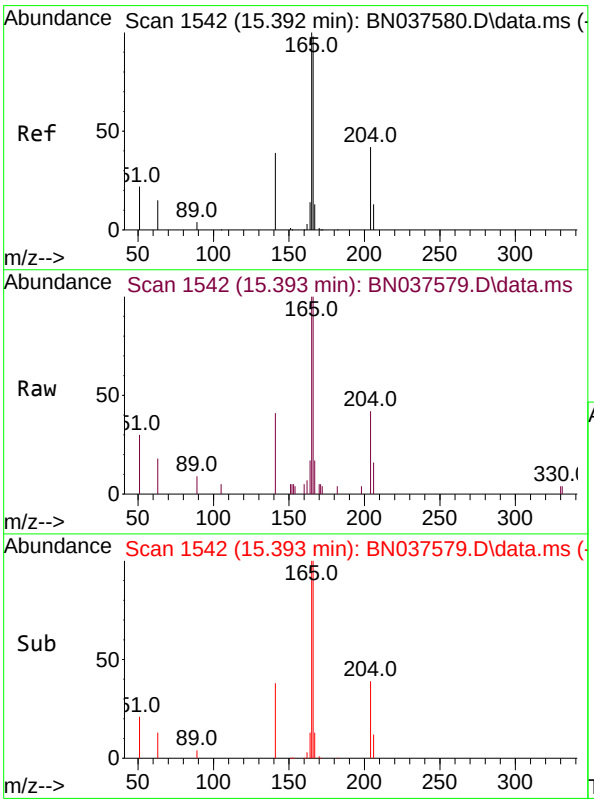
#17
Acenaphthene
Concen: 0.189 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:154 Resp: 1384

Ion	Ratio	Lower	Upper
154	100		
153	115.7	90.6	135.8
152	70.7	54.9	82.3

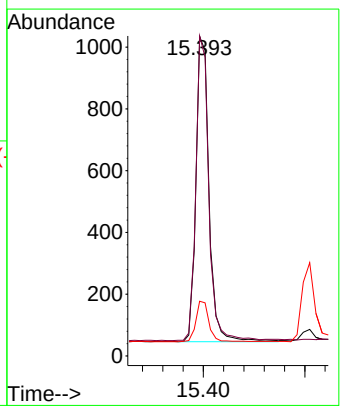


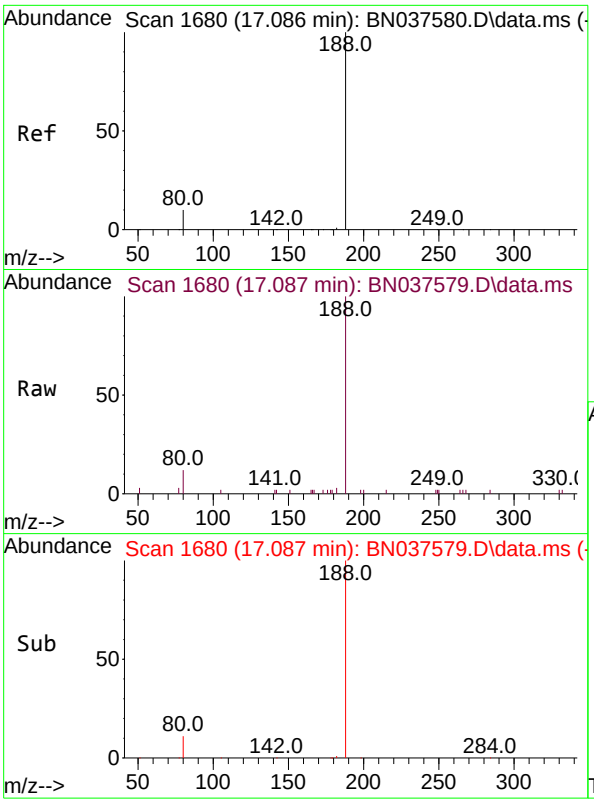


#18
Fluorene
Concen: 0.189 ng
RT: 15.393 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:166 Resp: 1817

Ion	Ratio	Lower	Upper
166	100		
165	96.0	78.9	118.3
167	12.9	10.7	16.1



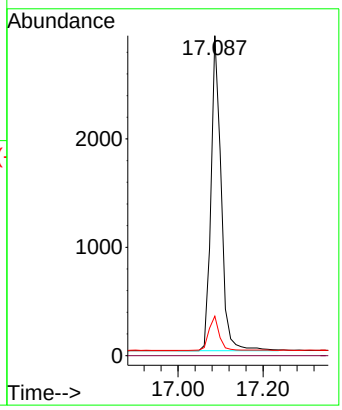


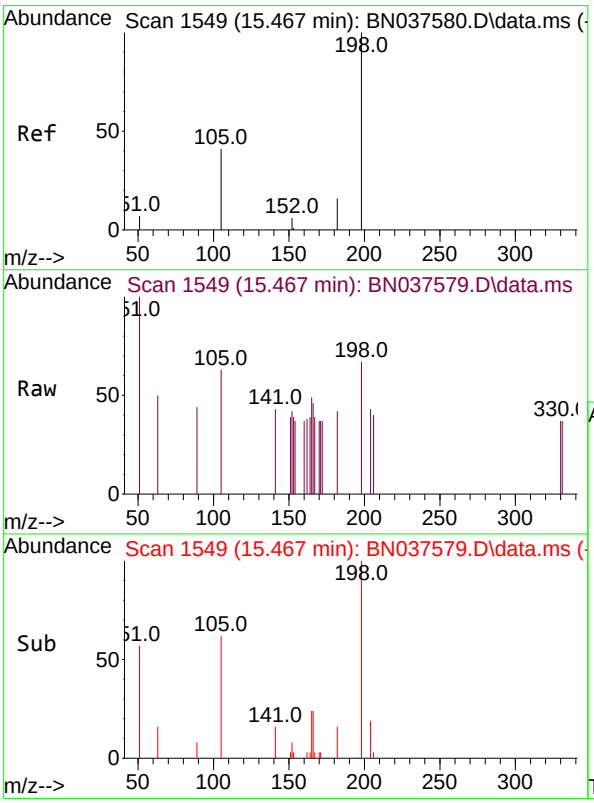
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:188 Resp: 4812

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	12.3	9.1	13.7

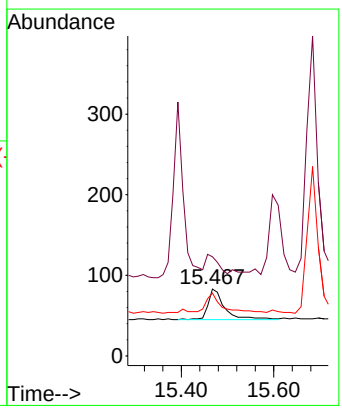


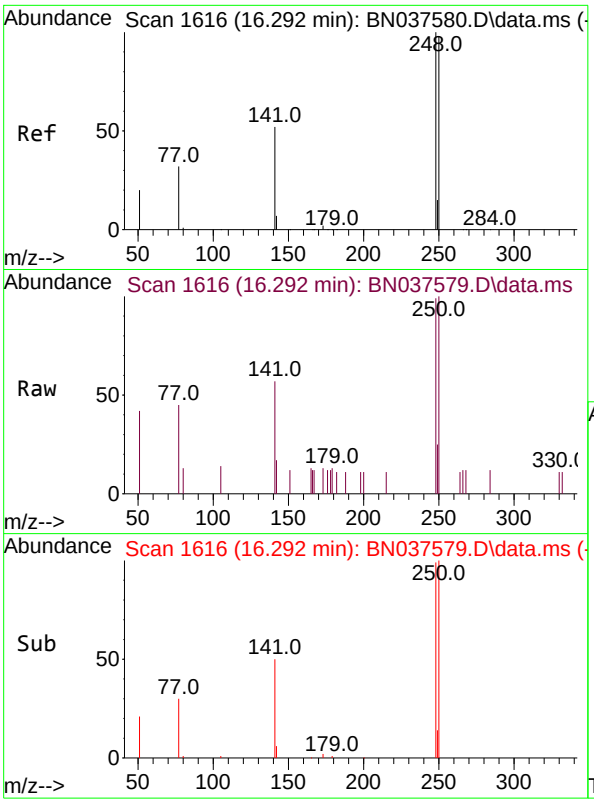


#20
4,6-Dinitro-2-methylphenol
Concen: 0.295 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:198 Resp: 100

Ion	Ratio	Lower	Upper
198	100		
51	148.2	81.0	121.6#
105	94.0	52.5	78.7#



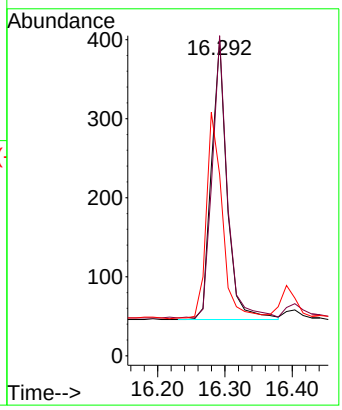


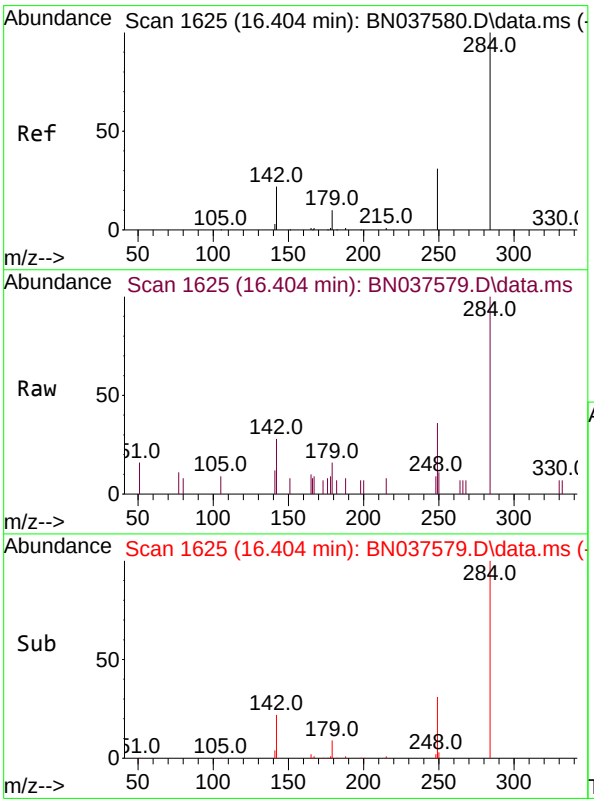
#21
4-Bromophenyl-phenylether
Concen: 0.187 ng
RT: 16.292 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:248 Resp: 567

Ion	Ratio	Lower	Upper
248	100		
250	101.3	78.6	118.0
141	57.3	43.7	65.5

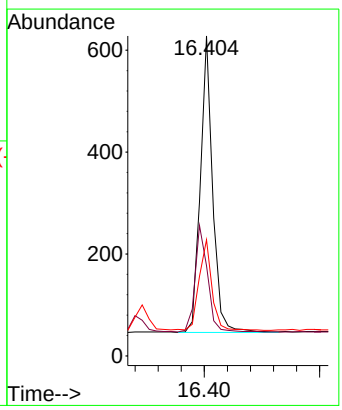


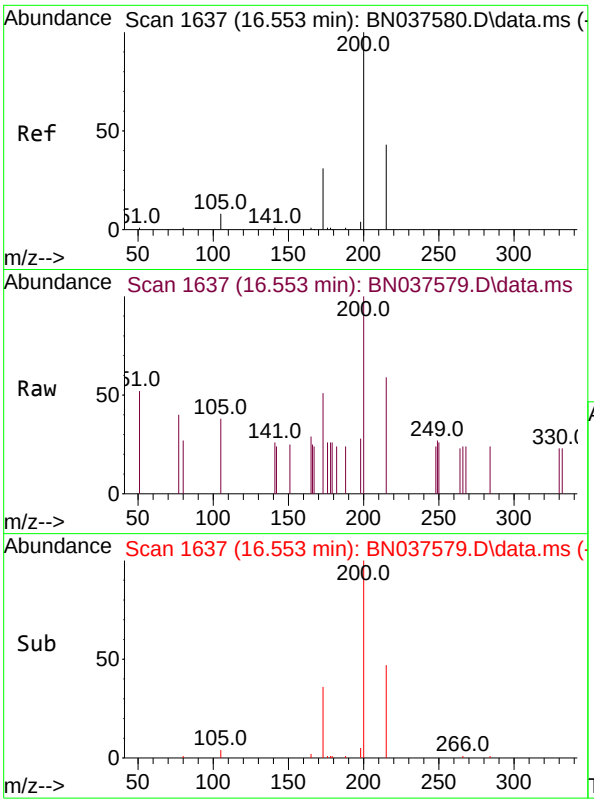


#22
Hexachlorobenzene
Concen: 0.202 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:284 Resp: 865

Ion	Ratio	Lower	Upper
284	100		
142	36.3	29.8	44.6
249	32.6	26.0	39.0



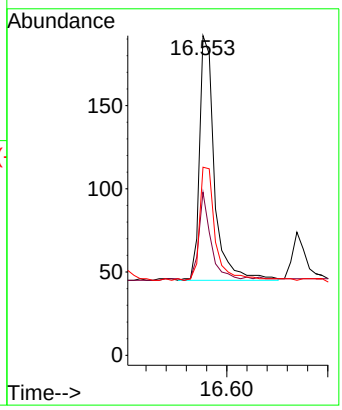


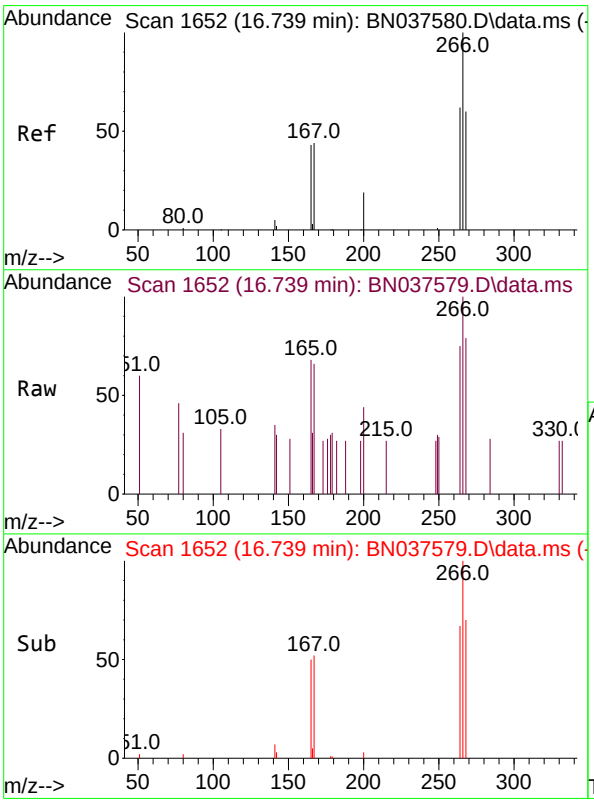
#23
Atrazine
Concen: 0.177 ng
RT: 16.553 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:200 Resp: 303

Ion	Ratio	Lower	Upper
200	100		
173	51.0	31.0	46.4#
215	58.9	39.4	59.0

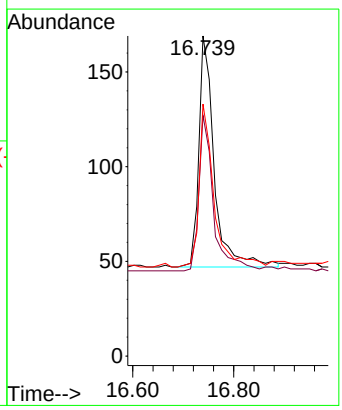


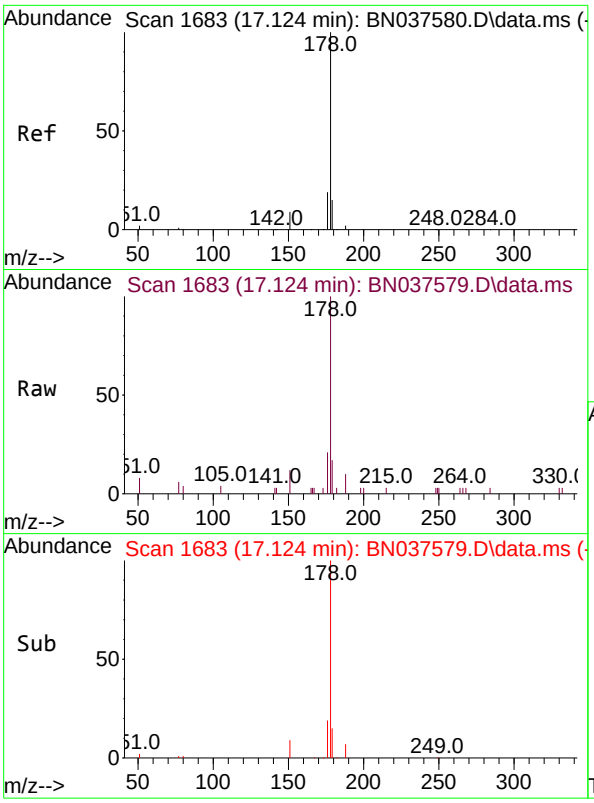


#24
Pentachlorophenol
Concen: 0.173 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:266 Resp: 260

Ion	Ratio	Lower	Upper
266	100		
264	63.5	49.6	74.4
268	68.1	49.2	73.8



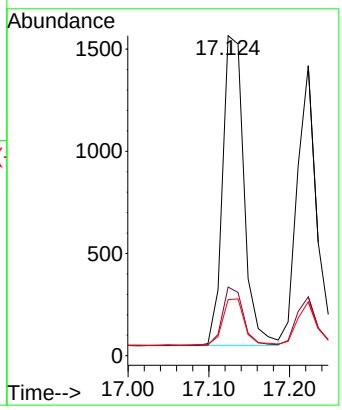


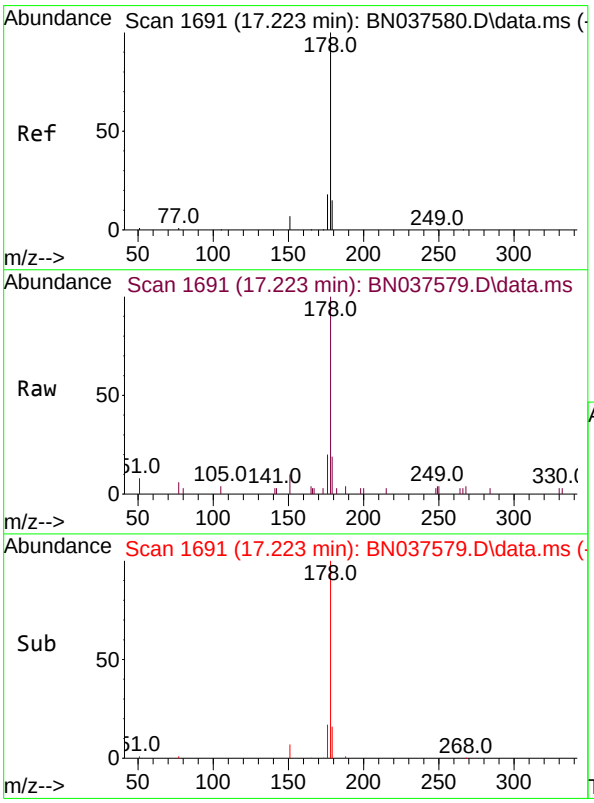
#25
Phenanthrene
Concen: 0.191 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:178 Resp: 2796

Ion	Ratio	Lower	Upper
178	100		
176	18.5	15.0	22.6
179	15.2	12.3	18.5

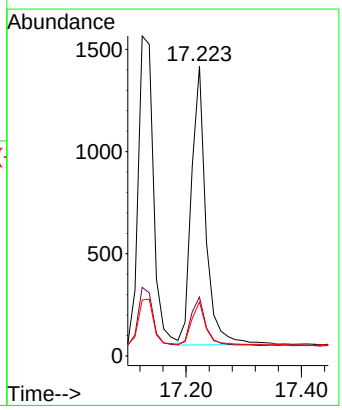


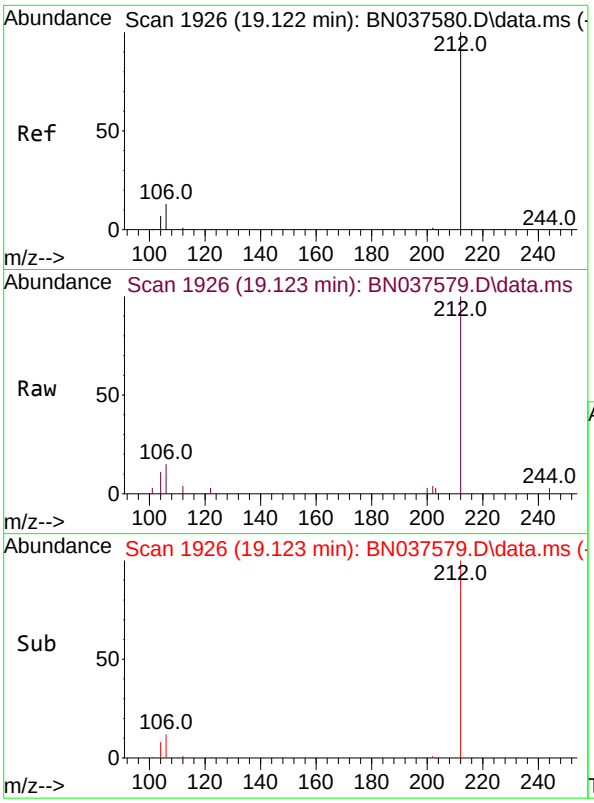


#26
Anthracene
Concen: 0.183 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:178 Resp: 2371

Ion	Ratio	Lower	Upper
178	100		
176	18.0	14.7	22.1
179	15.4	12.3	18.5



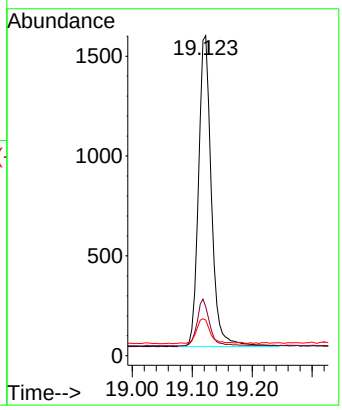


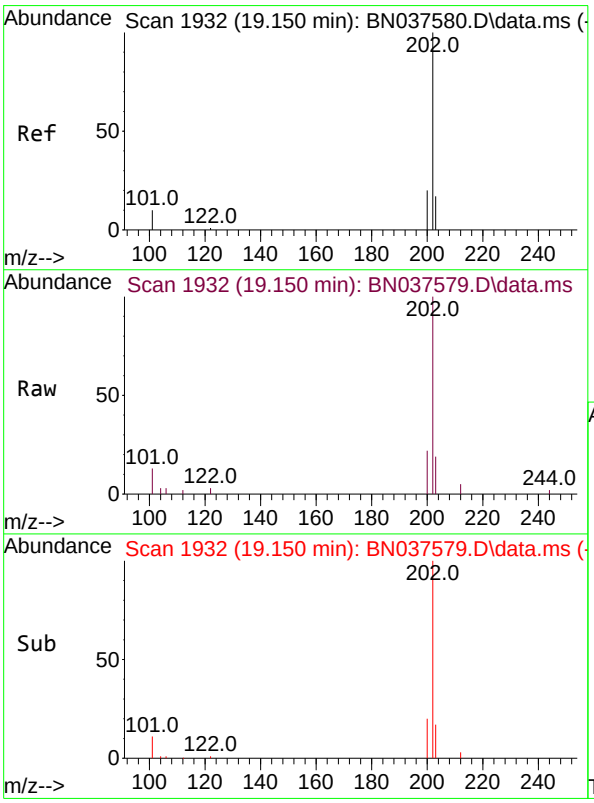
#27
Fluoranthene-d10
Concen: 0.184 ng
RT: 19.123 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:212 Resp: 2323

Ion	Ratio	Lower	Upper
212	100		
106	14.5	11.5	17.3
104	8.7	6.6	9.8

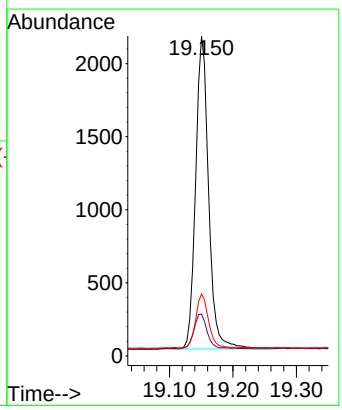


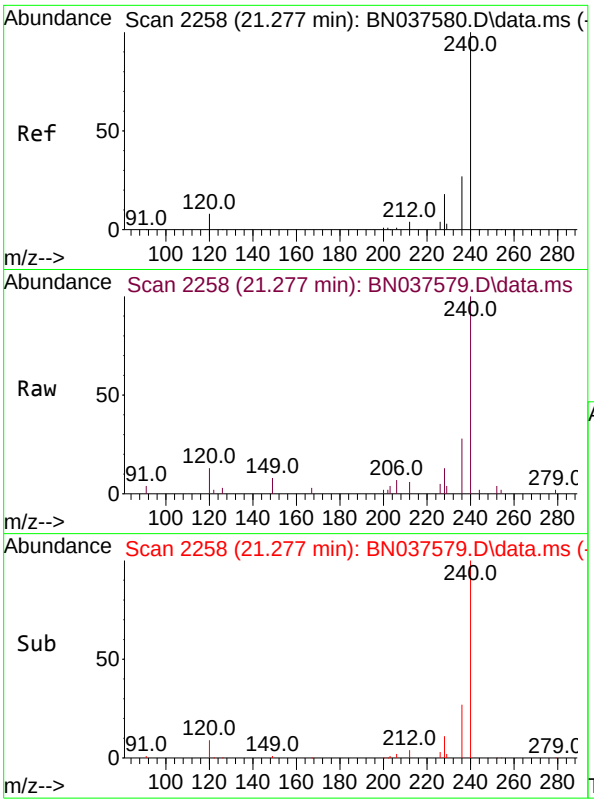


#28
Fluoranthene
Concen: 0.181 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:202 Resp: 3041

Ion	Ratio	Lower	Upper
202	100		
101	11.5	9.0	13.6
203	16.9	13.8	20.8



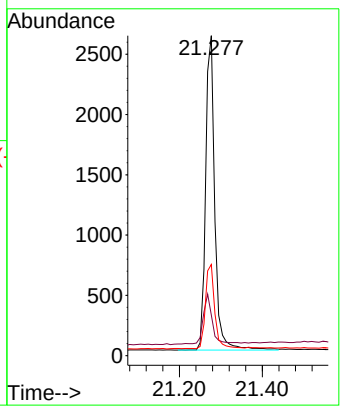


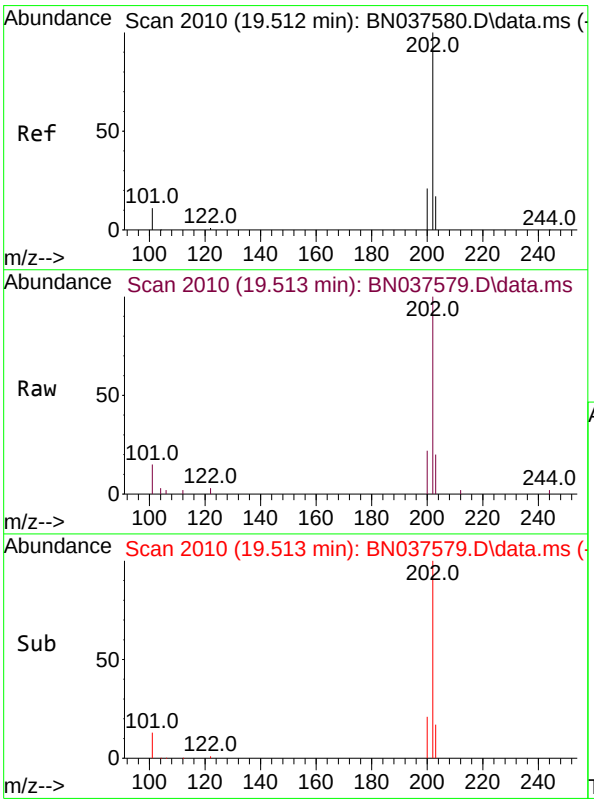
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:240 Resp: 4019

Ion	Ratio	Lower	Upper
240	100		
120	12.7	8.9	13.3
236	28.5	22.6	33.8

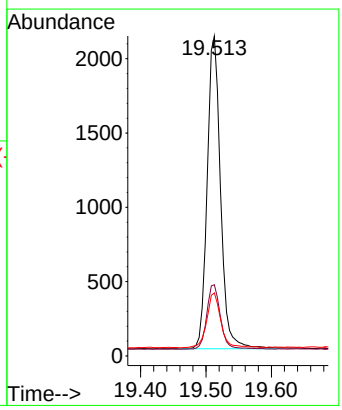


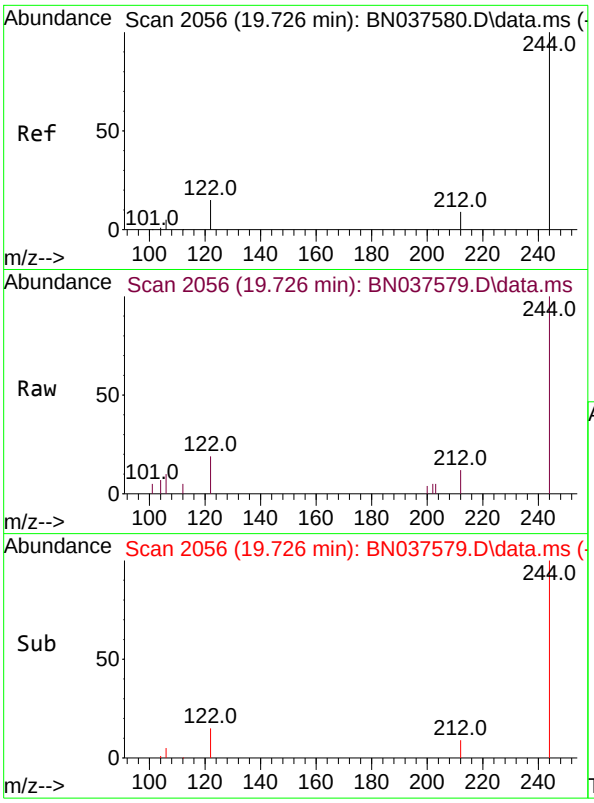


#30
Pyrene
Concen: 0.199 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:202 Resp: 2987

Ion	Ratio	Lower	Upper
202	100		
200	20.9	16.6	25.0
203	18.5	14.3	21.5



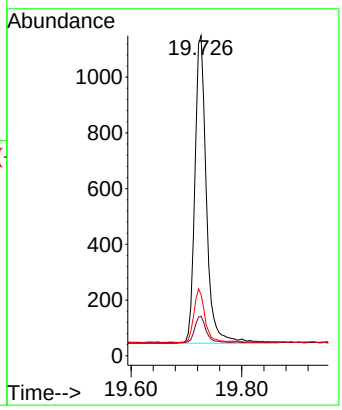


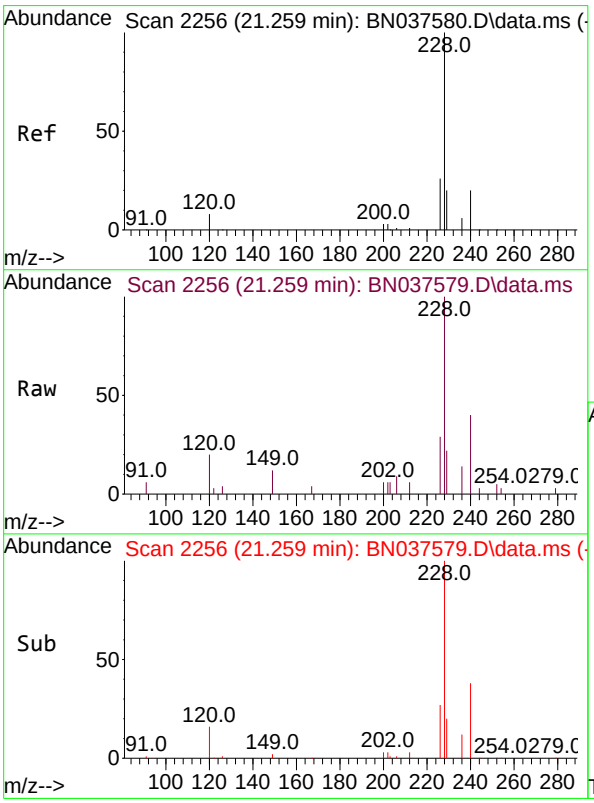
#31
Terphenyl-d14
Concen: 0.195 ng
RT: 19.726 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:244 Resp: 1609

Ion	Ratio	Lower	Upper
244	100		
212	12.4	8.2	12.2#
122	19.1	13.2	19.8

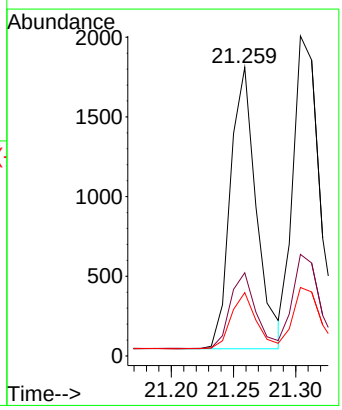


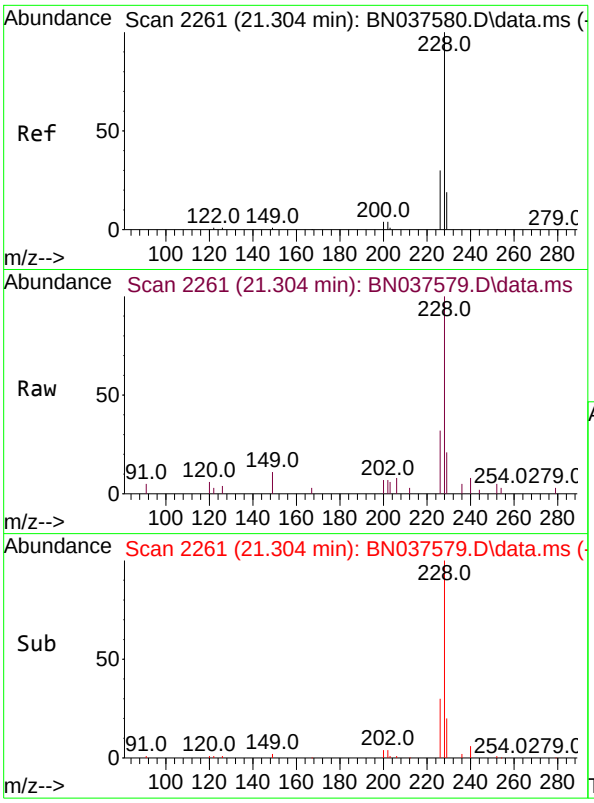


#32
Benzo(a)anthracene
Concen: 0.191 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:228 Resp: 2563

Ion	Ratio	Lower	Upper
228	100		
226	28.8	21.5	32.3
229	22.0	16.5	24.7



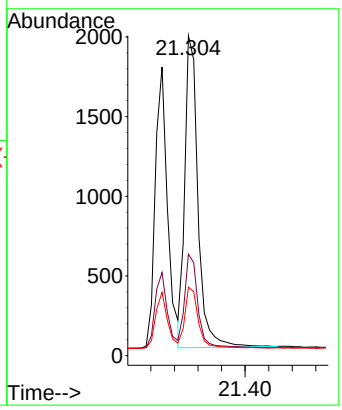


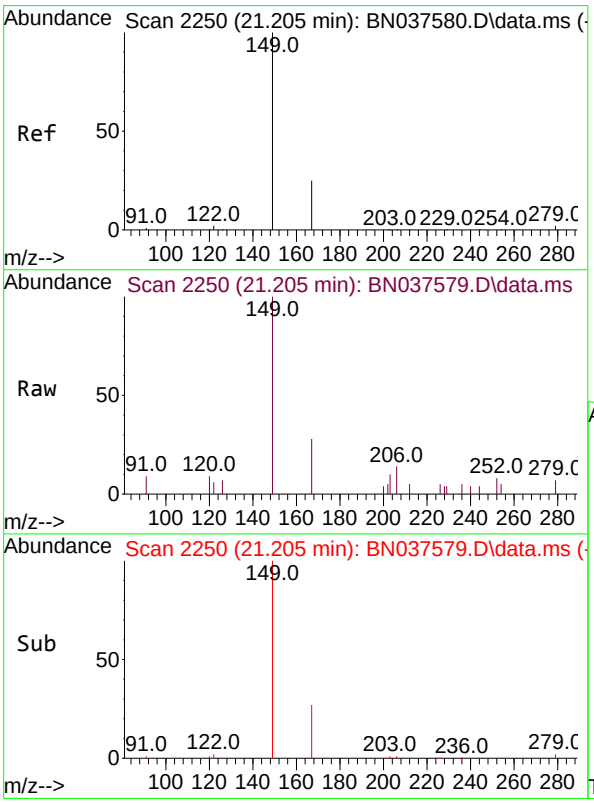
#33
Chrysene
Concen: 0.204 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:228 Resp: 3045

Ion	Ratio	Lower	Upper
228	100		
226	31.8	24.9	37.3
229	21.4	15.8	23.8

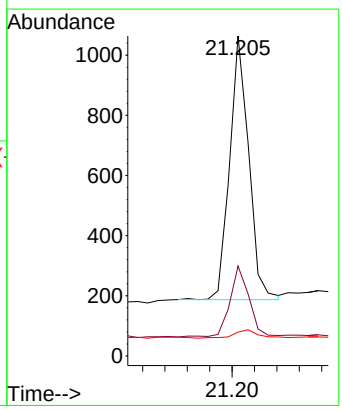


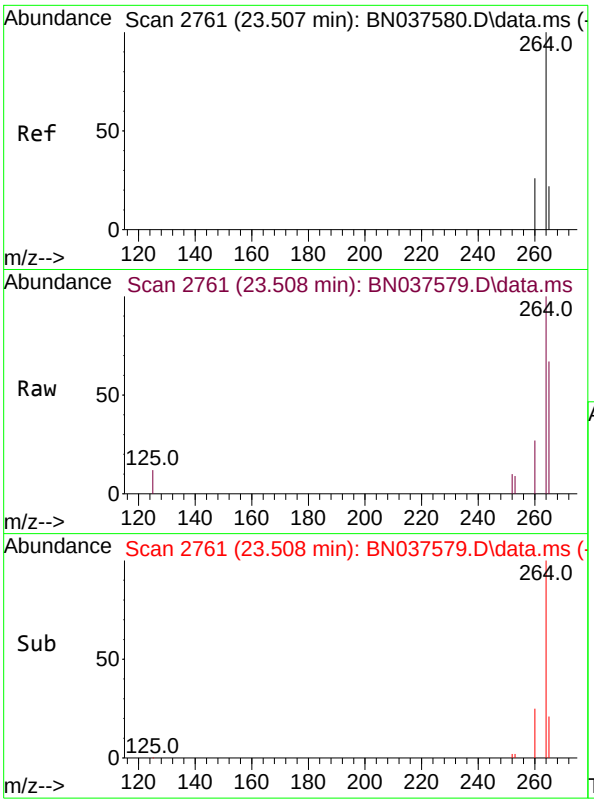


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.188 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:149 Resp: 1040

Ion	Ratio	Lower	Upper
149	100		
167	27.2	20.5	30.7
279	4.0	2.6	4.0#



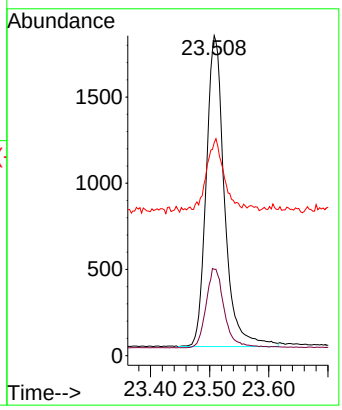


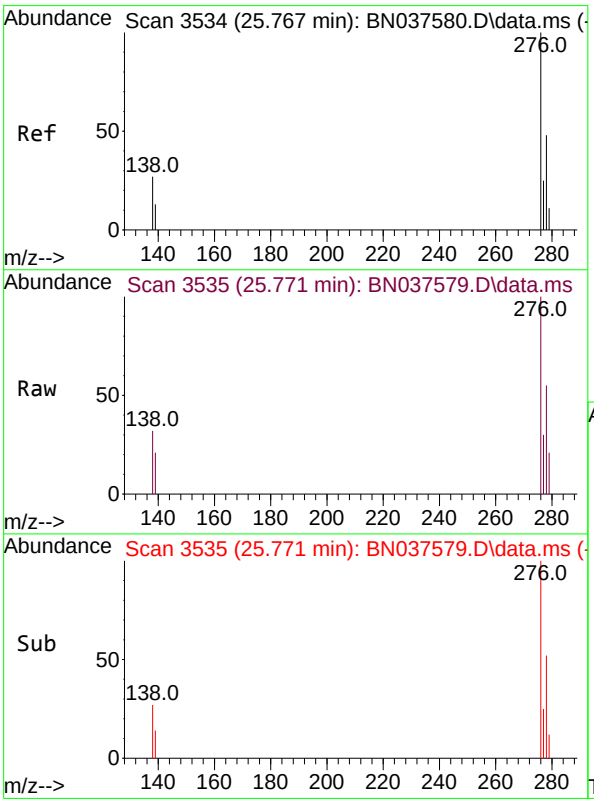
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.508 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:264 Resp: 3859

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.6	32.4
265	66.5	48.2	72.4

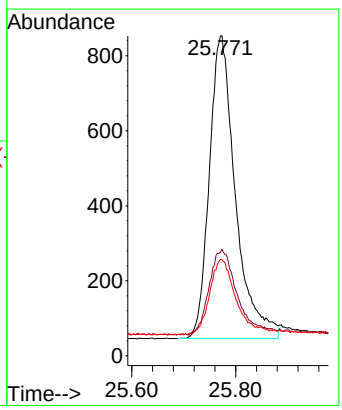


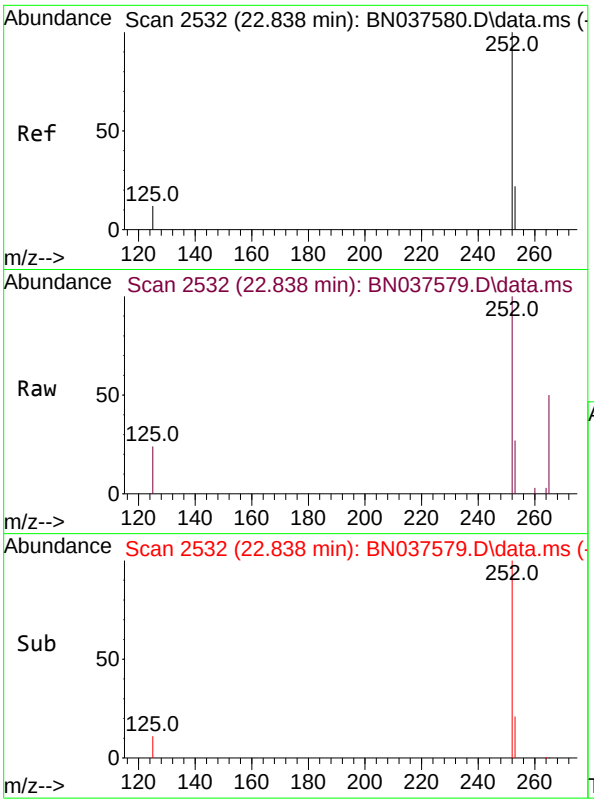


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.173 ng
RT: 25.771 min Scan# 3535
Delta R.T. 0.003 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:276 Resp: 2821

Ion	Ratio	Lower	Upper
276	100		
138	30.8	23.3	34.9
277	25.2	19.5	29.3



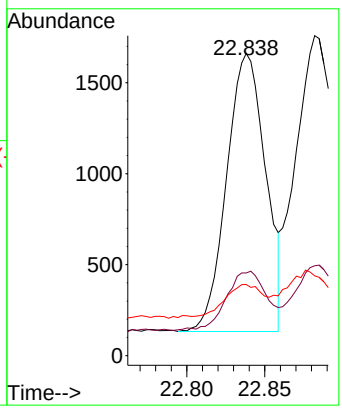


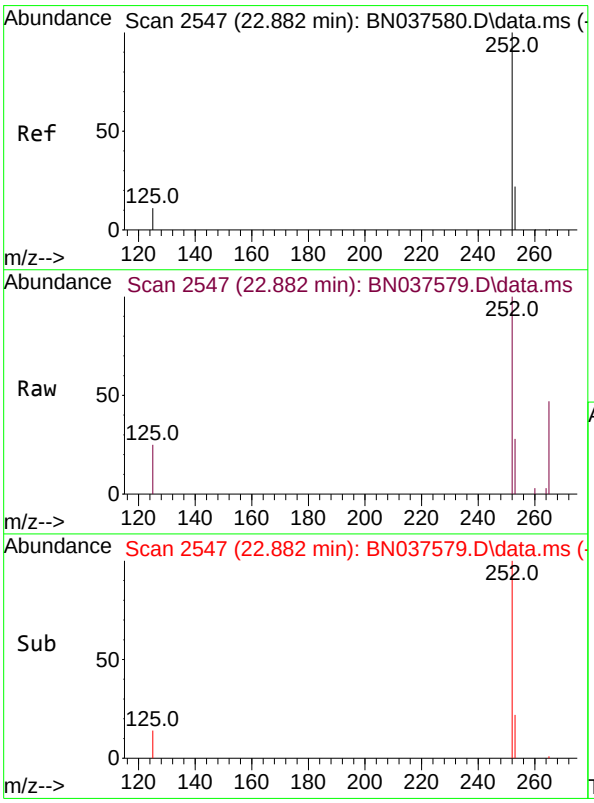
#37
Benzo(b)fluoranthene
Concen: 0.181 ng
RT: 22.838 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 2653

Ion	Ratio	Lower	Upper
252	100		
253	27.4	20.0	30.0
125	23.5	13.8	20.6#

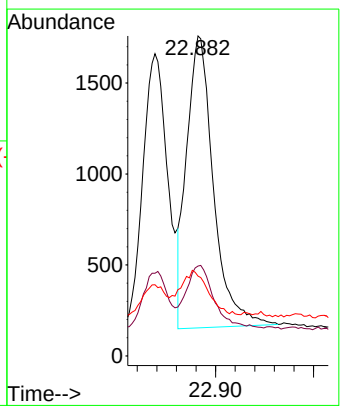


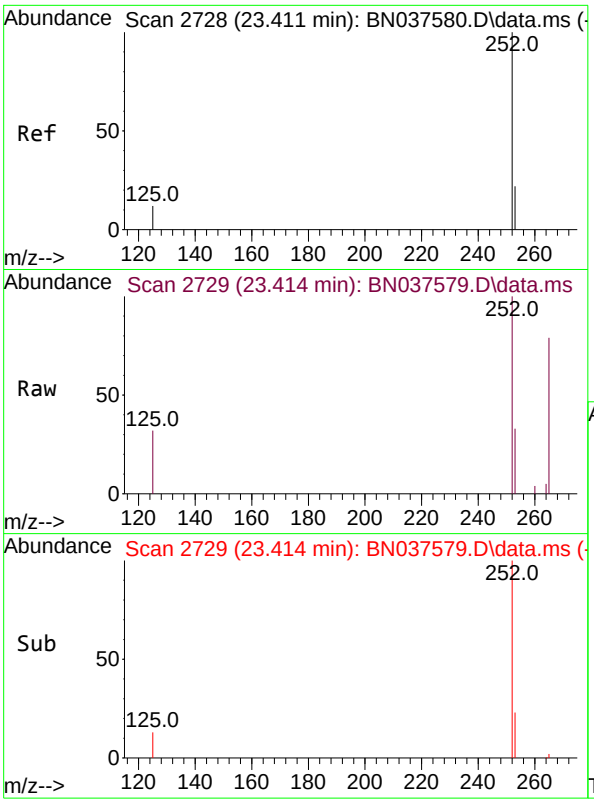


#38
Benzo(k)fluoranthene
Concen: 0.185 ng
RT: 22.882 min Scan# 2547
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:252 Resp: 3049

Ion	Ratio	Lower	Upper
252	100		
253	28.1	19.9	29.9
125	25.0	15.0	22.6#



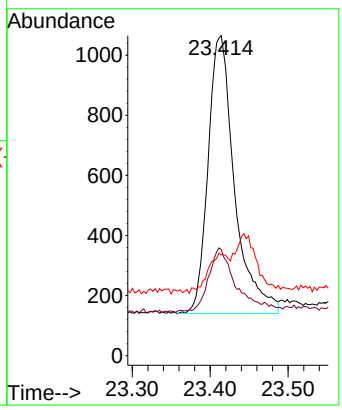


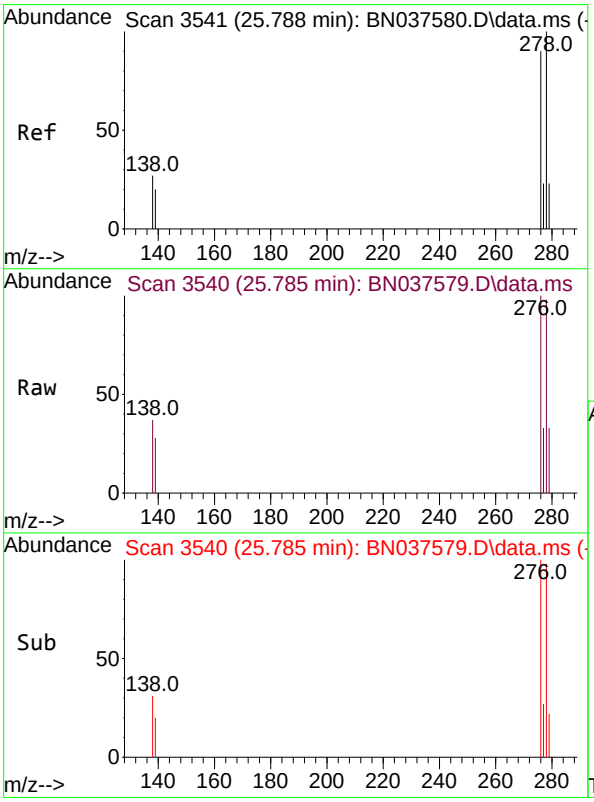
#39
Benzo(a)pyrene
Concen: 0.181 ng
RT: 23.414 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:252 Resp: 2191

Ion	Ratio	Lower	Upper
252	100		
253	33.1	21.6	32.4#
125	31.5	16.8	25.2#

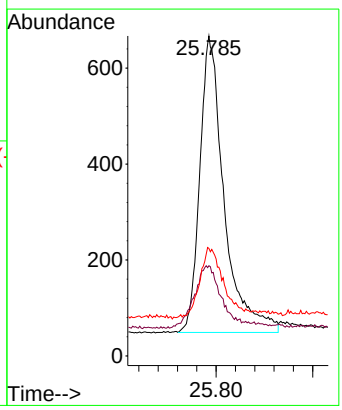


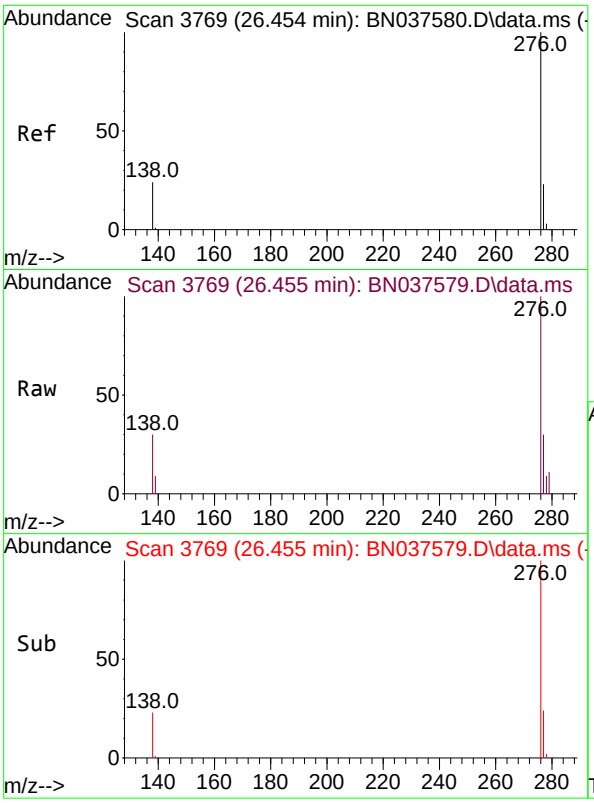


#40
Dibenzo(a,h)anthracene
Concen: 0.171 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.003 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Tgt Ion:278 Resp: 2157

Ion	Ratio	Lower	Upper
278	100		
139	28.2	18.3	27.5#
279	33.6	22.5	33.7



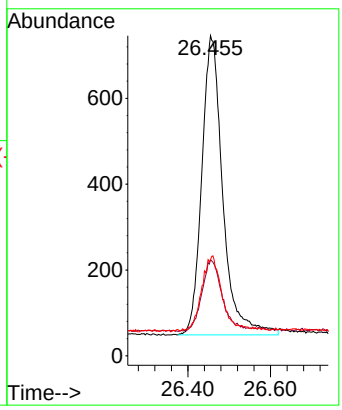


#41
Benzo(g,h,i)perylene
Concen: 0.185 ng
RT: 26.455 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037579.D
Acq: 12 Aug 2025 17:03

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.2

Tgt Ion:276 Resp: 2459

Ion	Ratio	Lower	Upper
276	100		
277	30.0	21.0	31.4
138	30.0	21.7	32.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037580.D
Acq On : 12 Aug 2025 17:39
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Aug 13 04:48:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2104	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	5140	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2534	0.400	ng		0.00
19) Phenanthrene-d10	17.086	188	5032	0.400	ng		0.00
29) Chrysene-d12	21.277	240	4317	0.400	ng		0.00
35) Perylene-d12	23.507	264	4188	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	1869	0.392	ng		0.00
5) Phenol-d6	6.879	99	2197	0.383	ng		0.00
8) Nitrobenzene-d5	8.854	82	1348	0.372	ng		0.00
11) 2-Methylnaphthalene-d10	12.090	152	2609	0.373	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	396	0.357	ng		0.00
15) 2-Fluorobiphenyl	12.978	172	5829	0.398	ng		0.00
27) Fluoranthene-d10	19.122	212	4801	0.363	ng		0.00
31) Terphenyl-d14	19.726	244	3436	0.387	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	832	0.413	ng		99
3) n-Nitrosodimethylamine	3.543	42	1027	0.399	ng		100
6) bis(2-Chloroethyl)ether	7.139	93	2053	0.397	ng		100
9) Naphthalene	10.551	128	5329	0.389	ng		100
10) Hexachlorobutadiene	10.850	225	1347	0.403	ng	#	100
12) 2-Methylnaphthalene	12.166	142	3264	0.380	ng		100
16) Acenaphthylene	14.067	152	4334	0.382	ng		100
17) Acenaphthene	14.409	154	2969	0.384	ng		100
18) Fluorene	15.392	166	3861	0.382	ng		100
20) 4,6-Dinitro-2-methylph...	15.467	198	231	0.433	ng		100
21) 4-Bromophenyl-phenylether	16.292	248	1177	0.372	ng		100
22) Hexachlorobenzene	16.404	284	1790	0.399	ng		100
23) Atrazine	16.553	200	654	0.366	ng		100
24) Pentachlorophenol	16.739	266	571	0.363	ng		100
25) Phenanthrene	17.124	178	5887	0.385	ng		100
26) Anthracene	17.223	178	5009	0.370	ng		100
28) Fluoranthene	19.150	202	6535	0.372	ng		100
30) Pyrene	19.512	202	6320	0.392	ng		100
32) Benzo(a)anthracene	21.259	228	5452	0.378	ng		100
33) Chrysene	21.304	228	6185	0.385	ng		100
34) Bis(2-ethylhexyl)phtha...	21.205	149	2252	0.378	ng		100
36) Indeno(1,2,3-cd)pyrene	25.767	276	6753	0.383	ng		100
37) Benzo(b)fluoranthene	22.838	252	5604	0.353	ng		100
38) Benzo(k)fluoranthene	22.882	252	6915	0.386	ng		100
39) Benzo(a)pyrene	23.411	252	4812	0.366	ng		100
40) Dibenzo(a,h)anthracene	25.788	278	5118	0.374	ng		100
41) Benzo(g,h,i)perylene	26.454	276	5284	0.366	ng		100

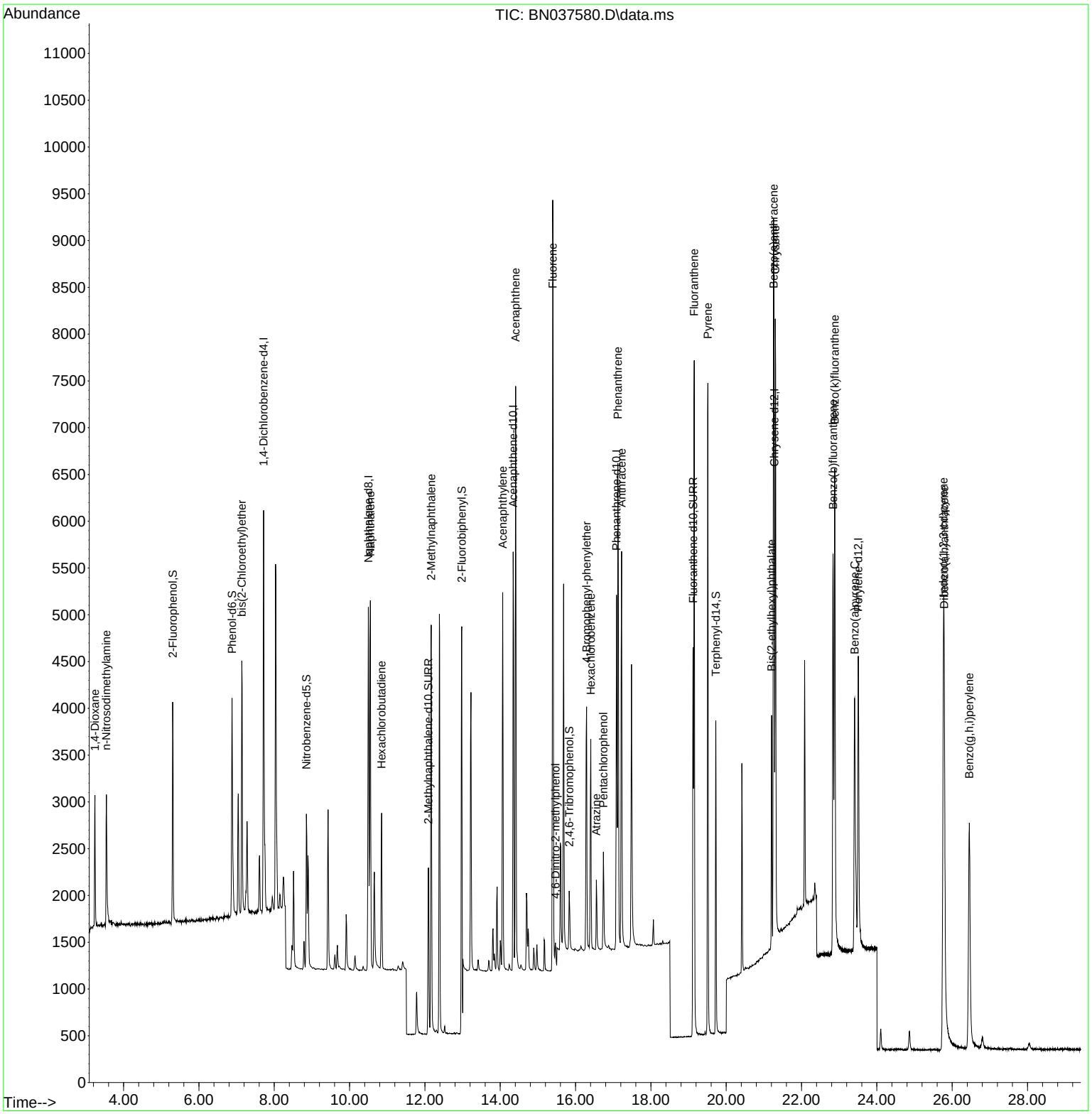
(#) = qualifier out of range (m) = manual integration (+) = signals summed

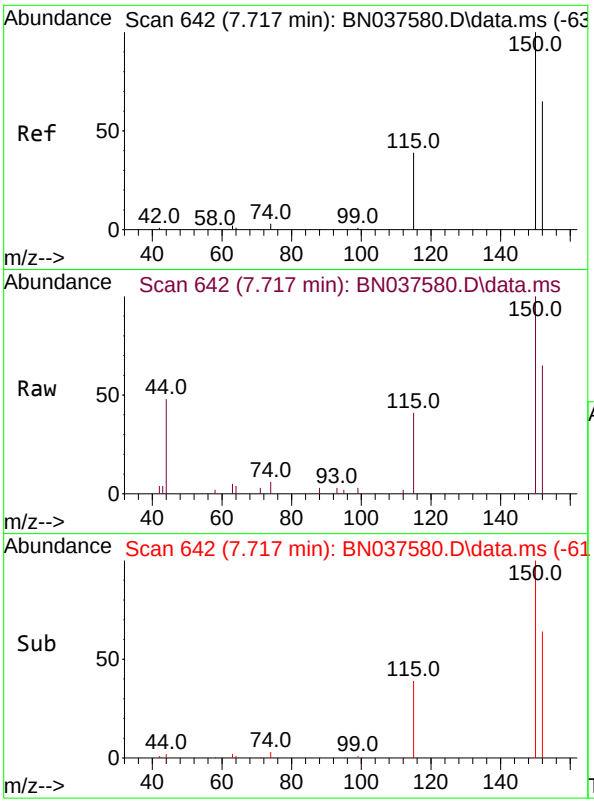
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037580.D
Acq On : 12 Aug 2025 17:39
Operator : RC/JU
Sample : SSTDICCC0.4
Misc :
ALS Vial : 5 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Quant Time: Aug 13 04:48:21 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



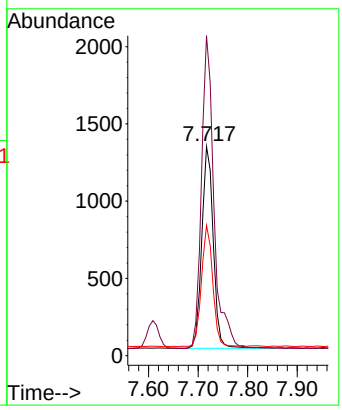


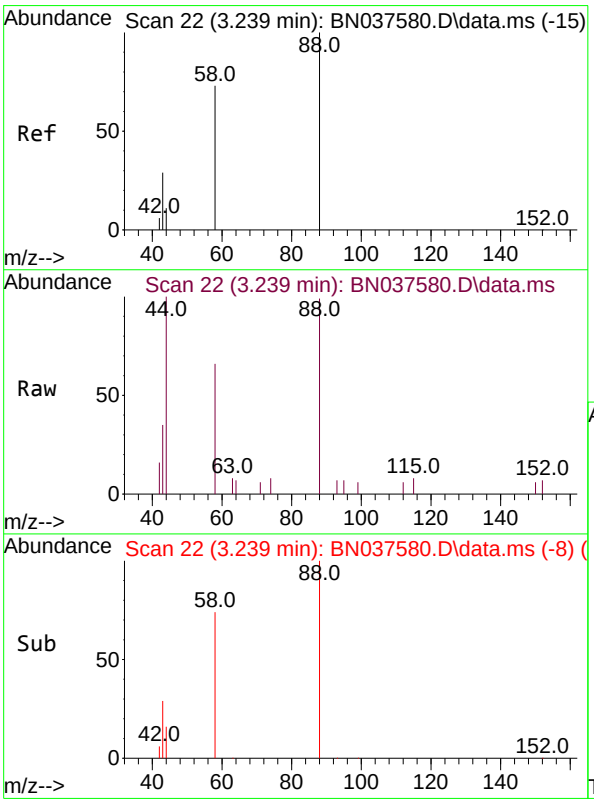
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. -0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 2104

Ion	Ratio	Lower	Upper
152	100		
150	152.8	122.2	183.4
115	62.2	49.8	74.6

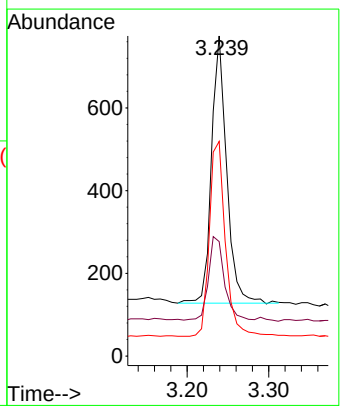


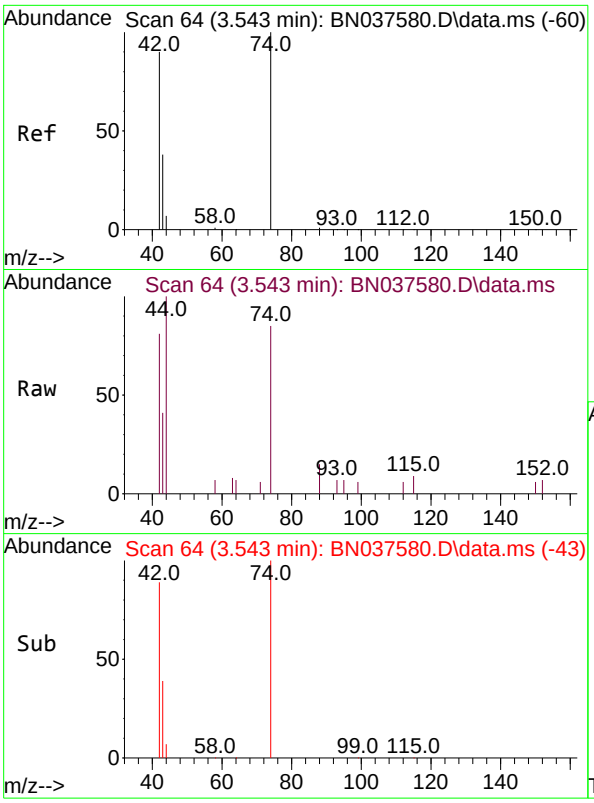


#2
1,4-Dioxane
Concen: 0.413 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion: 88 Resp: 832

Ion	Ratio	Lower	Upper
88	100		
43	33.2	25.8	38.6
58	77.6	61.2	91.8



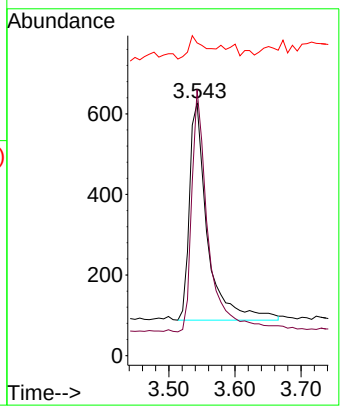


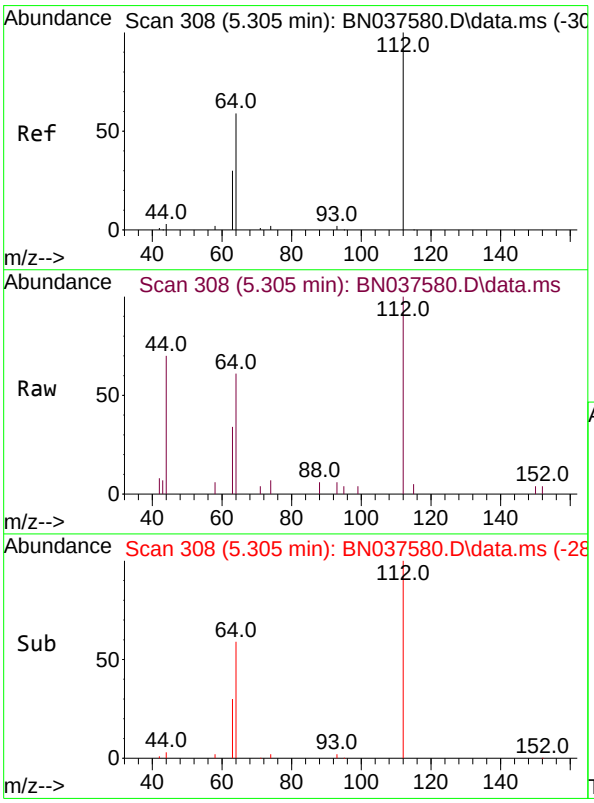
#3
n-Nitrosodimethylamine
Concen: 0.399 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 42 Resp: 1027

Ion	Ratio	Lower	Upper
42	100		
74	102.7	82.0	123.0
44	9.8	7.9	11.9

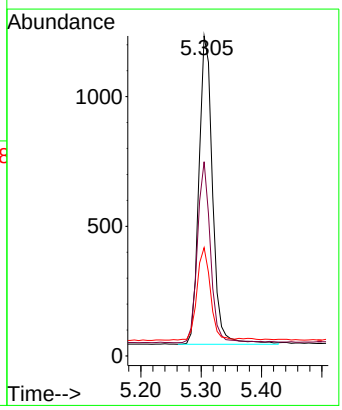


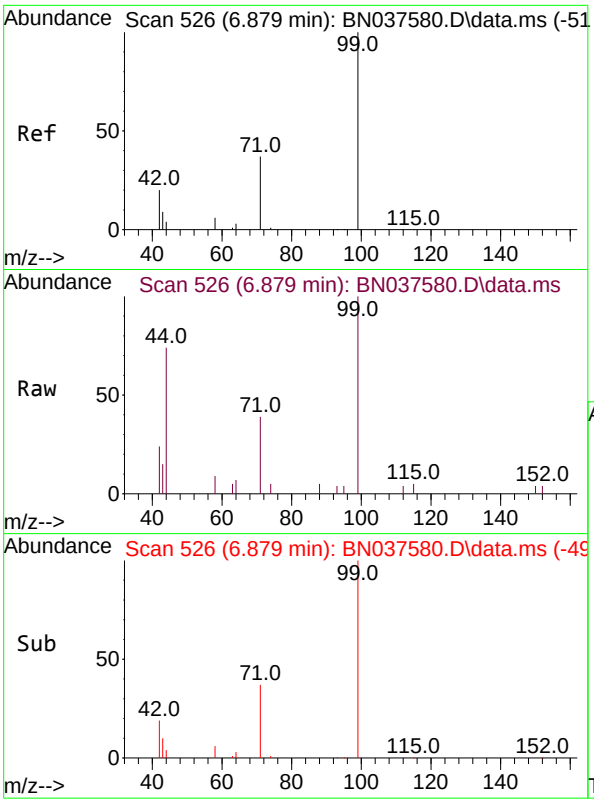


#4
2-Fluorophenol
Concen: 0.392 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:112 Resp: 1869

Ion	Ratio	Lower	Upper
112	100		
64	56.1	44.9	67.3
63	29.3	23.4	35.2



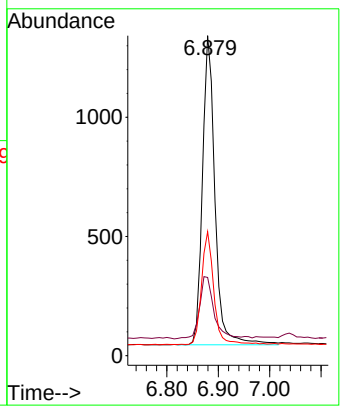


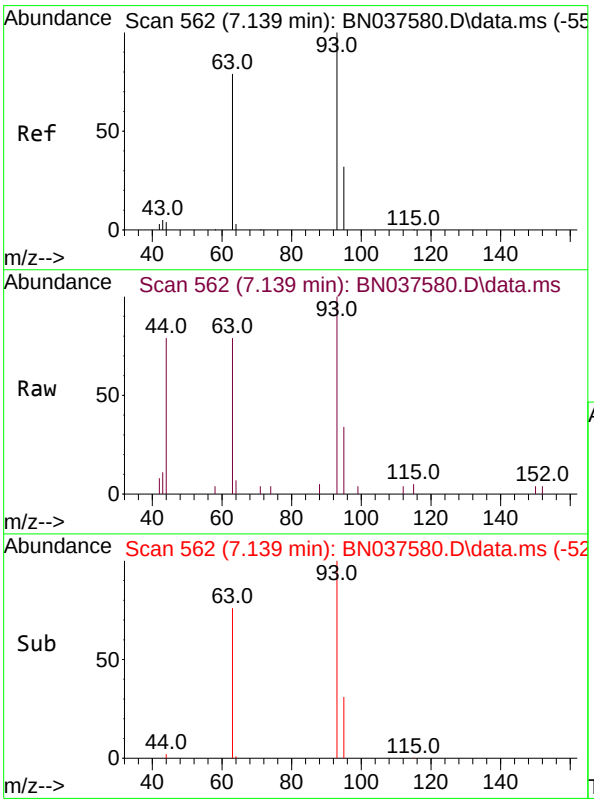
#5
Phenol-d6
Concen: 0.383 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion: 99 Resp: 2197

Ion	Ratio	Lower	Upper
99	100		
42	23.1	18.5	27.7
71	35.7	28.6	42.8

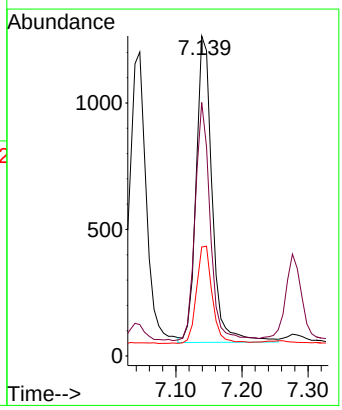


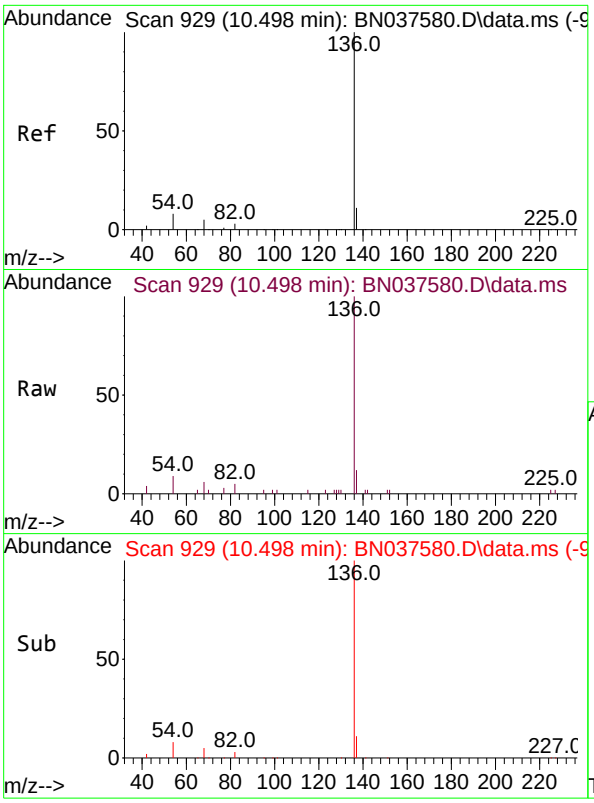


#6
bis(2-Chloroethyl)ether
Concen: 0.397 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion: 93 Resp: 2053

Ion	Ratio	Lower	Upper
93	100		
63	72.5	58.0	87.0
95	31.1	24.9	37.3



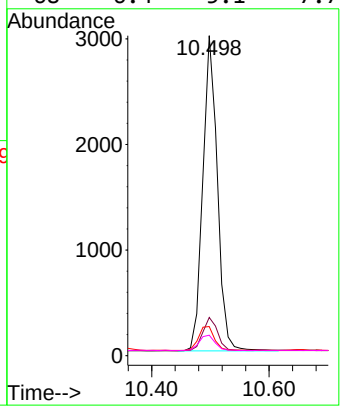


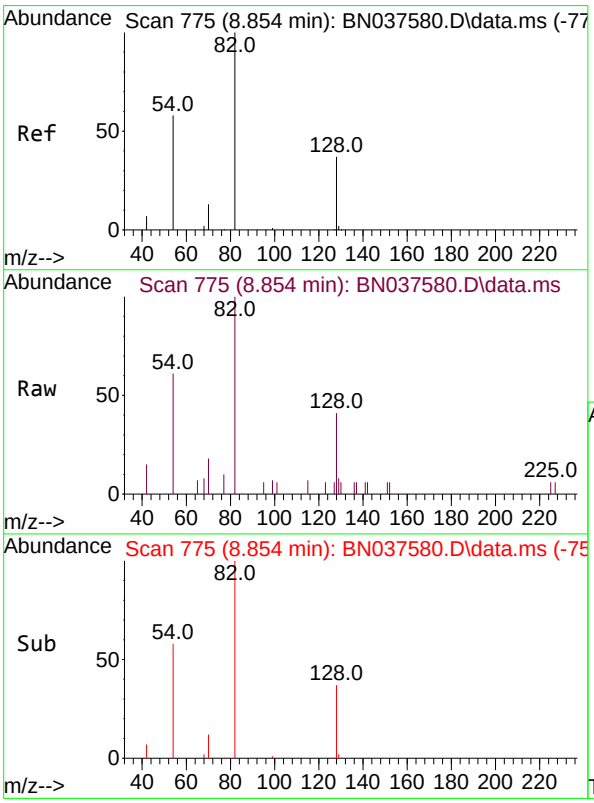
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:136 Resp: 5140

Ion	Ratio	Lower	Upper
136	100		
137	11.9	9.5	14.3
54	9.1	7.3	10.9
68	6.4	5.1	7.7

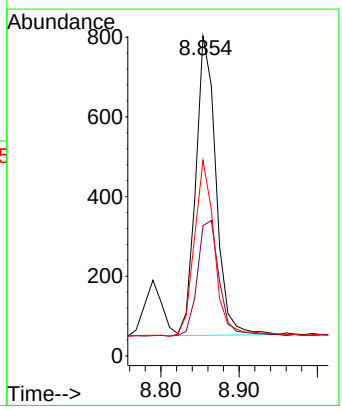


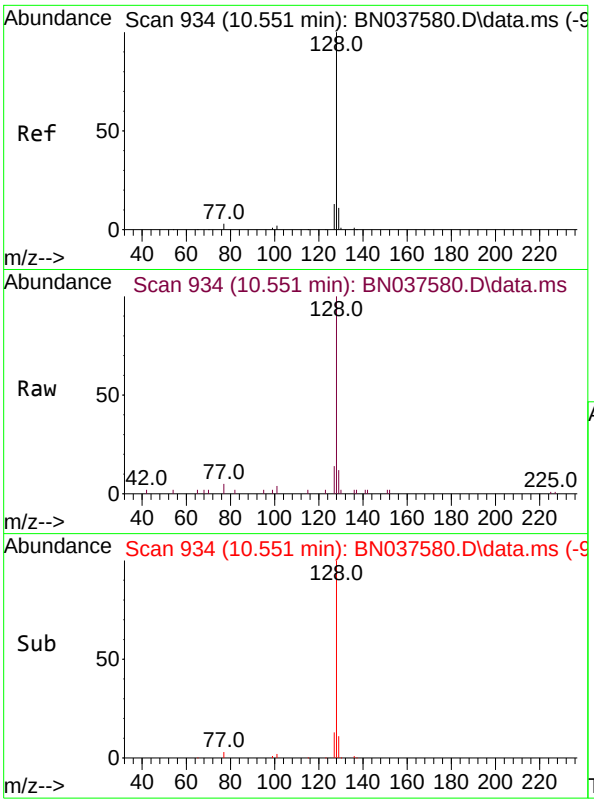


#8
Nitrobenzene-d5
Concen: 0.372 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion: 82 Resp: 1348

Ion	Ratio	Lower	Upper
82	100		
128	40.7	32.6	48.8
54	61.1	48.9	73.3



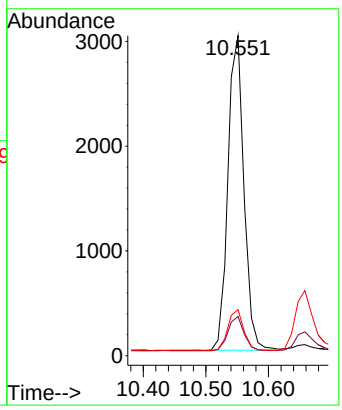


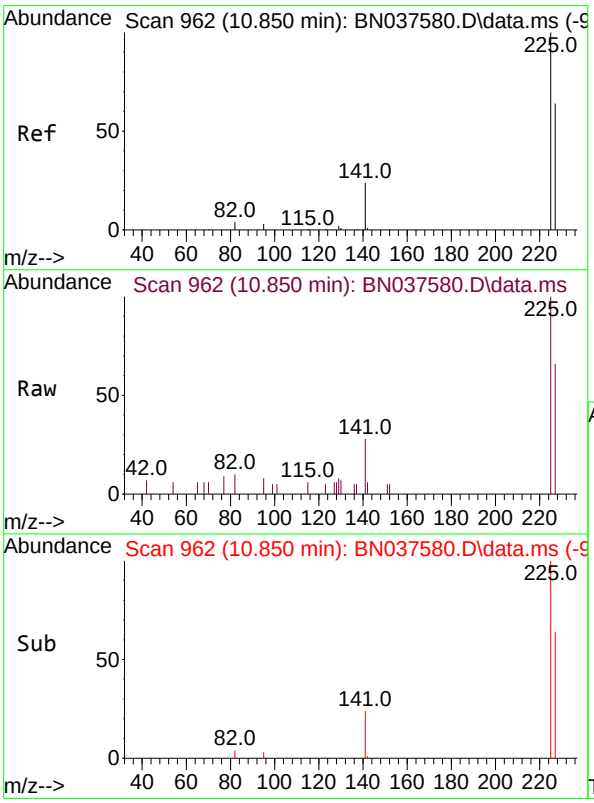
#9
Naphthalene
Concen: 0.389 ng
RT: 10.551 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:128 Resp: 5329

Ion	Ratio	Lower	Upper
128	100		
129	12.2	9.8	14.6
127	14.4	11.5	17.3

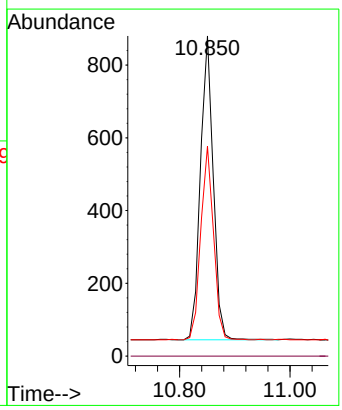


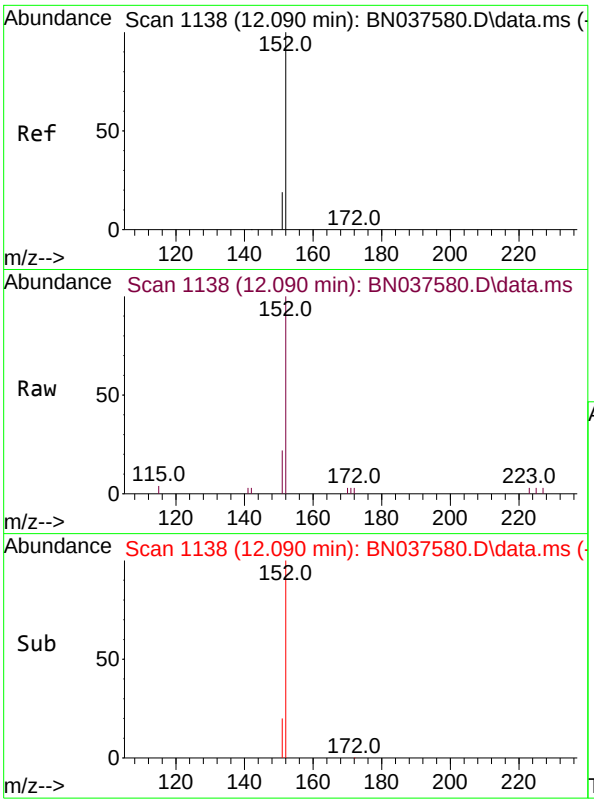


#10
Hexachlorobutadiene
Concen: 0.403 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:225 Resp: 1347

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.5	50.8	76.2



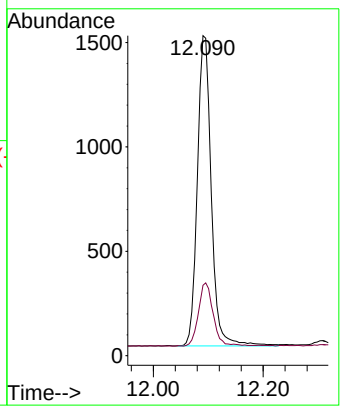


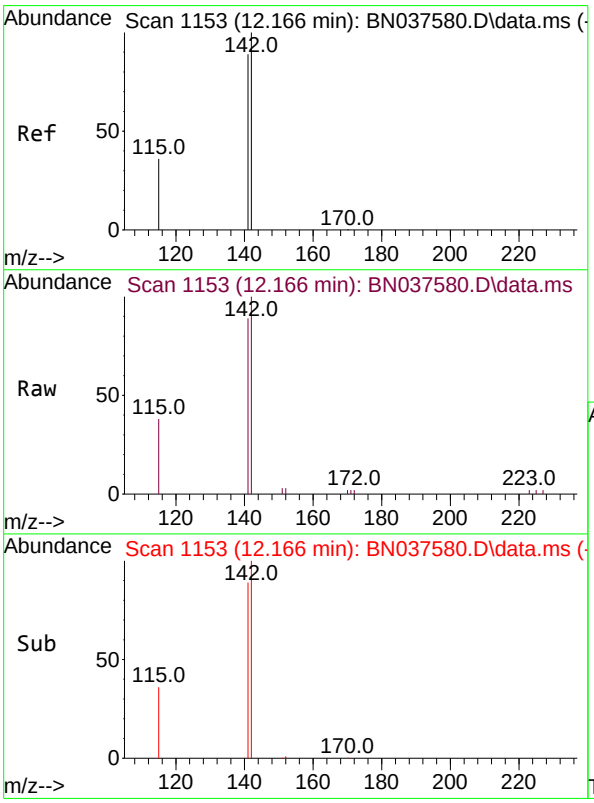
#11
2-Methylnaphthalene-d10
Concen: 0.373 ng
RT: 12.090 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:152 Resp: 2609

Ion	Ratio	Lower	Upper
152	100		
151	21.6	17.3	25.9

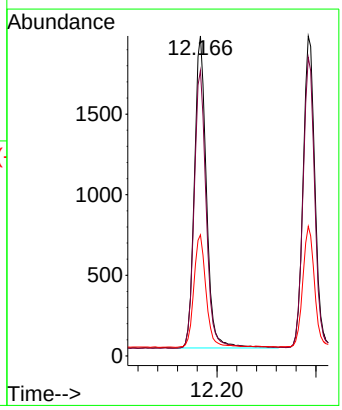


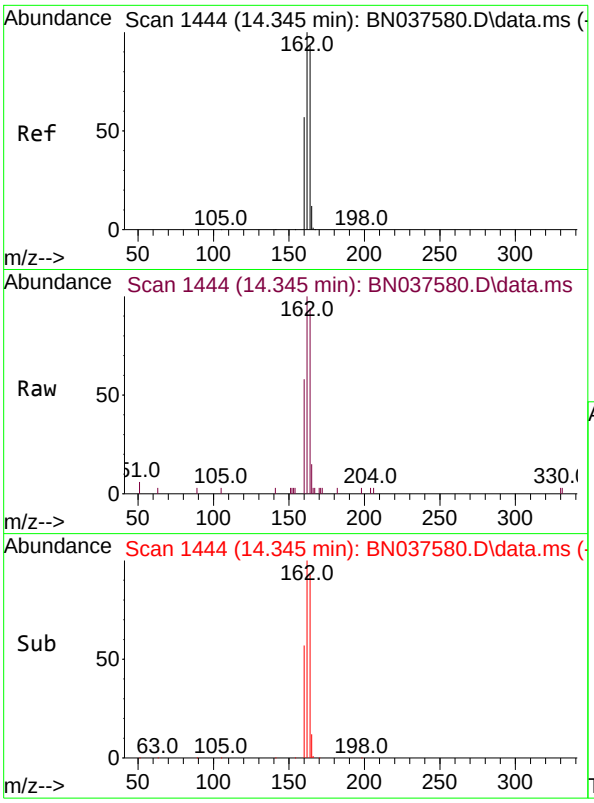


#12
2-Methylnaphthalene
Concen: 0.380 ng
RT: 12.166 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:142 Resp: 3264

Ion	Ratio	Lower	Upper
142	100		
141	89.2	71.4	107.0
115	37.8	30.2	45.4



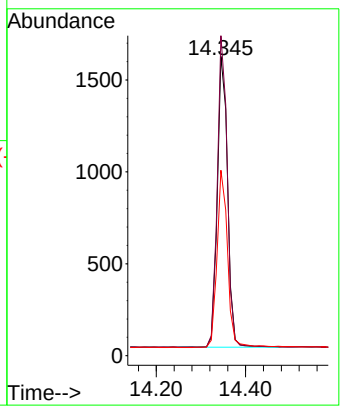


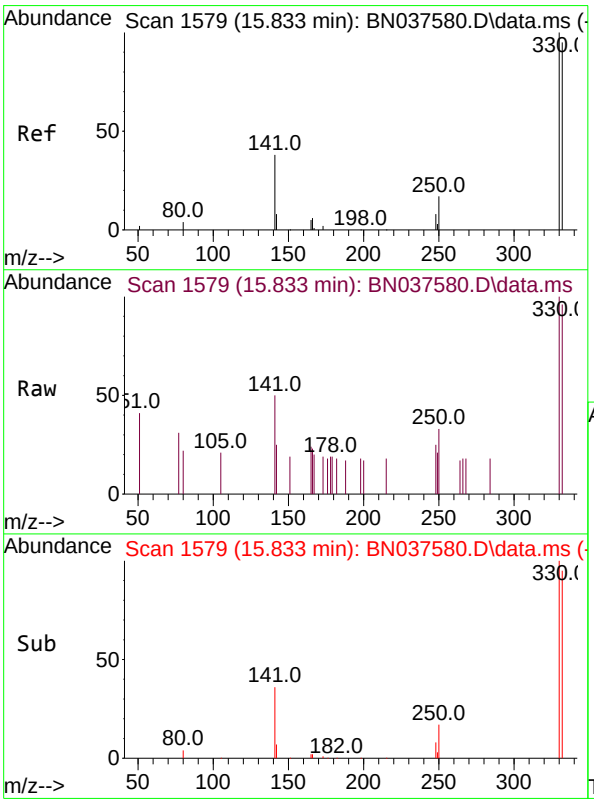
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:164 Resp: 2534

Ion	Ratio	Lower	Upper
164	100		
162	106.9	85.5	128.3
160	61.9	49.5	74.3

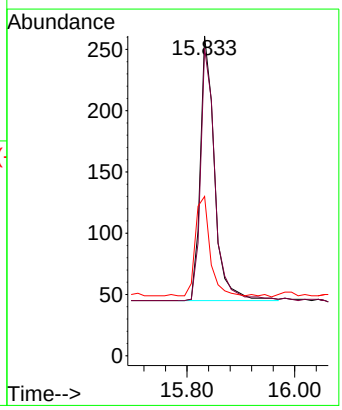


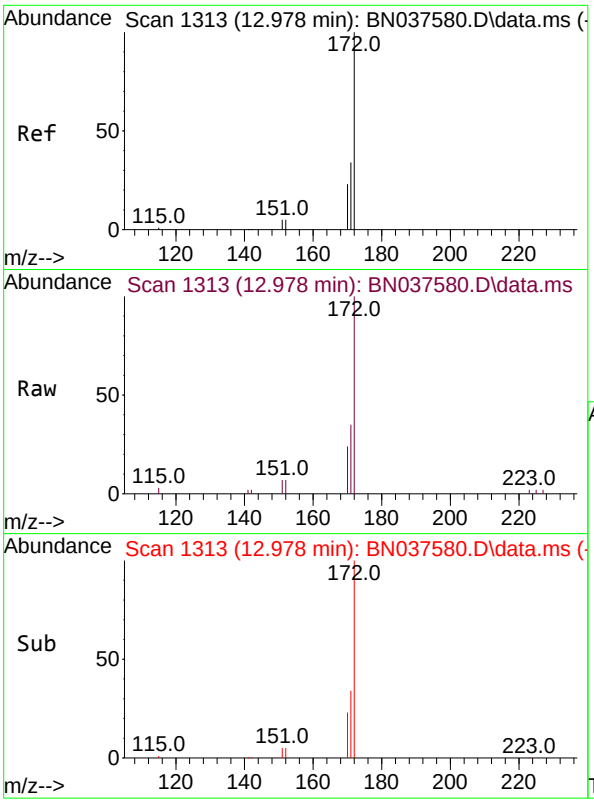


#14
2,4,6-Tribromophenol
Concen: 0.357 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:330 Resp: 396

Ion	Ratio	Lower	Upper
330	100		
332	96.7	77.4	116.0
141	38.6	30.9	46.3



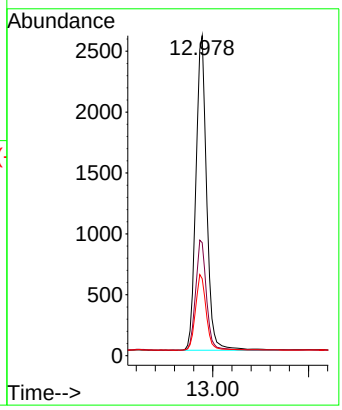


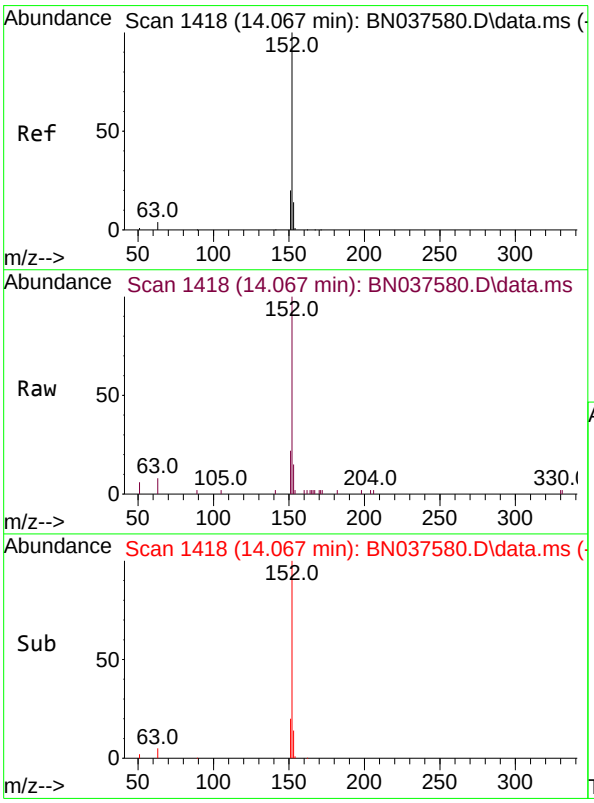
#15
2-Fluorobiphenyl
Concen: 0.398 ng
RT: 12.978 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:172 Resp: 5829

Ion	Ratio	Lower	Upper
172	100		
171	35.3	28.2	42.4
170	24.0	19.2	28.8

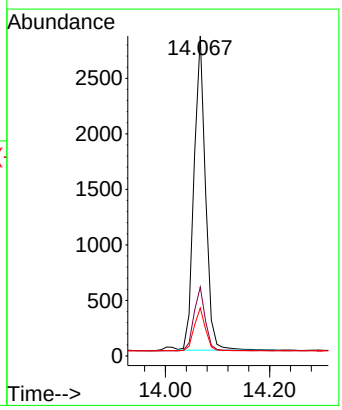


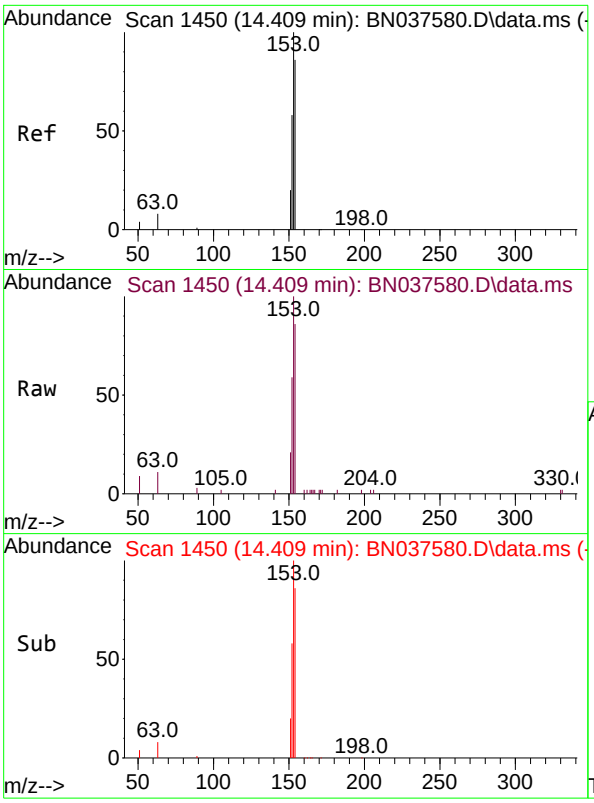


#16
Acenaphthylene
Concen: 0.382 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:152 Resp: 4334

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.1	24.1
153	13.4	10.7	16.1



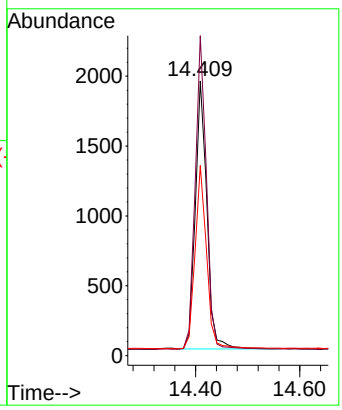


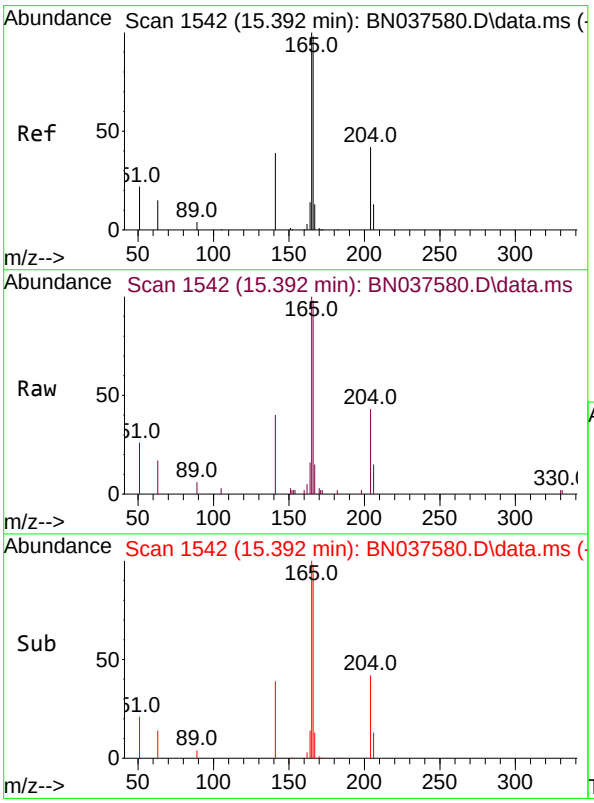
#17
Acenaphthene
Concen: 0.384 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:154 Resp: 2969

Ion	Ratio	Lower	Upper
154	100		
153	113.2	90.6	135.8
152	68.6	54.9	82.3

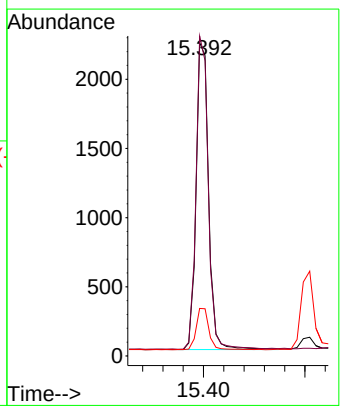


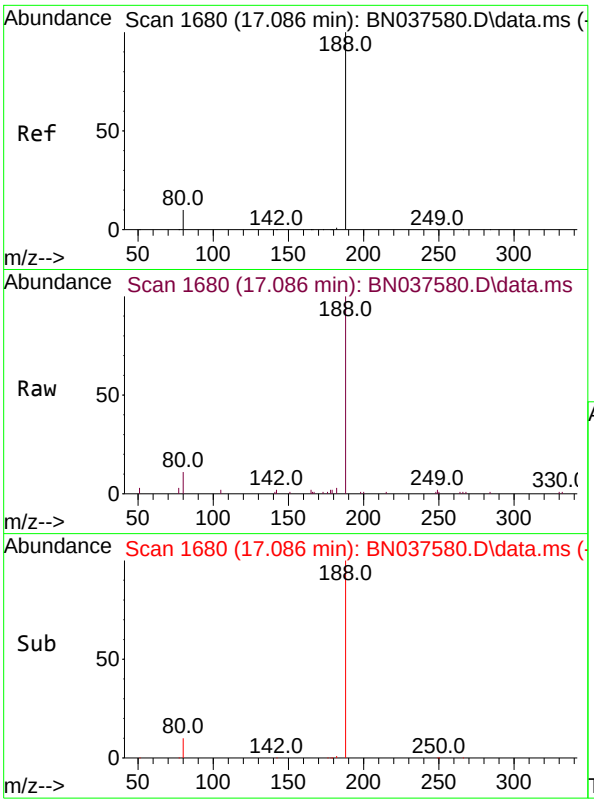


#18
Fluorene
Concen: 0.382 ng
RT: 15.392 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:166 Resp: 3861

Ion	Ratio	Lower	Upper
166	100		
165	98.6	78.9	118.3
167	13.4	10.7	16.1



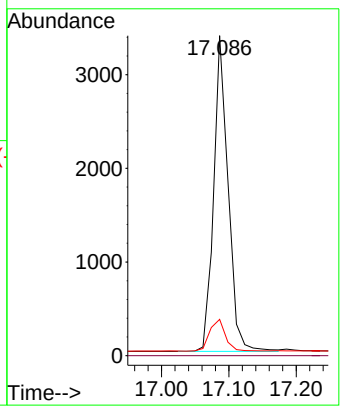


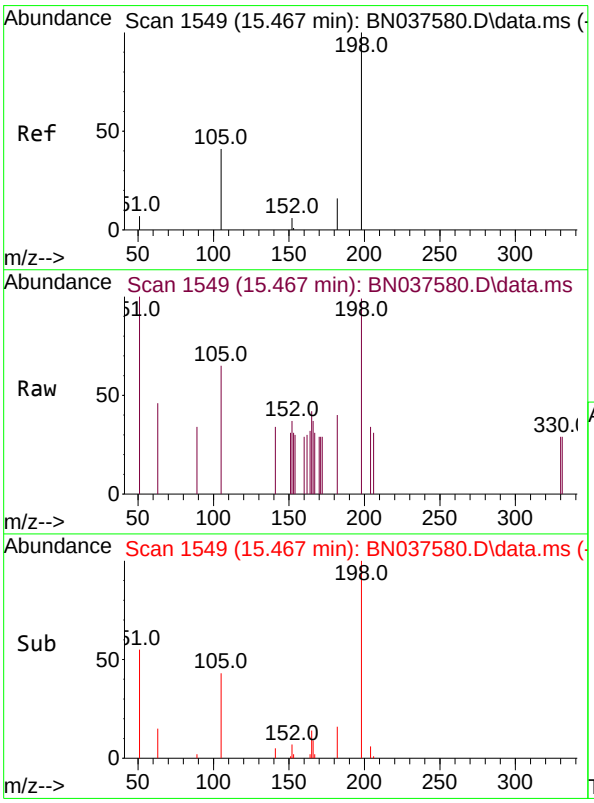
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:188 Resp: 5032

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.4	9.1	13.7

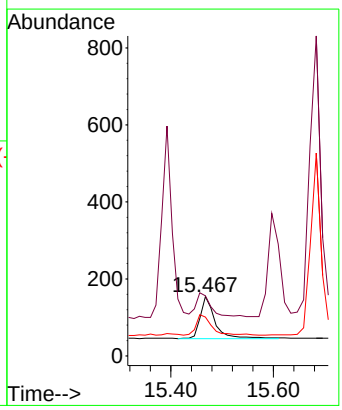


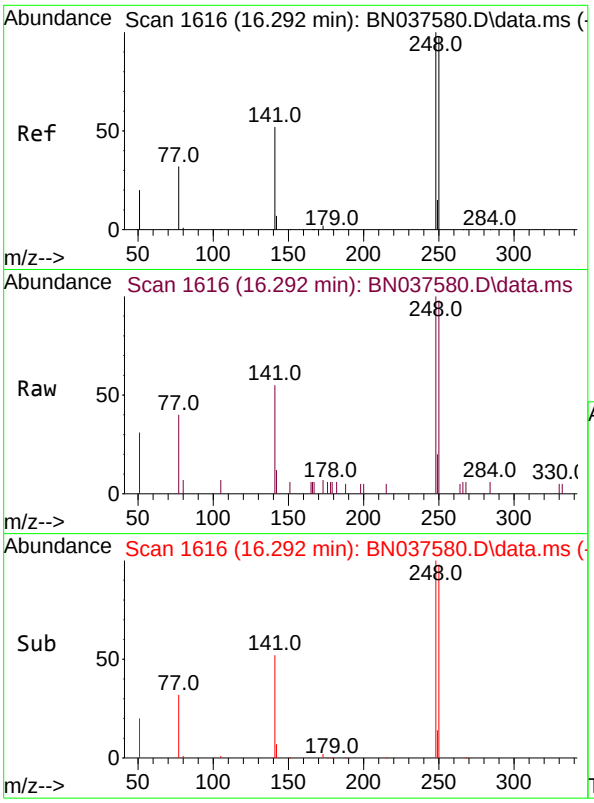


#20
4,6-Dinitro-2-methylphenol
Concen: 0.433 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:198 Resp: 231

Ion	Ratio	Lower	Upper
198	100		
51	101.3	81.0	121.6
105	65.6	52.5	78.7



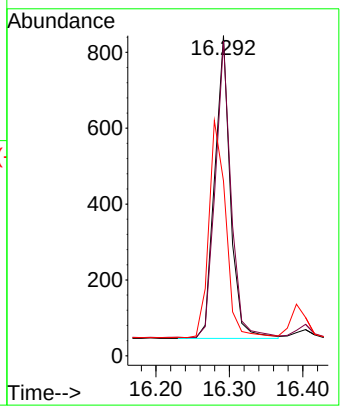


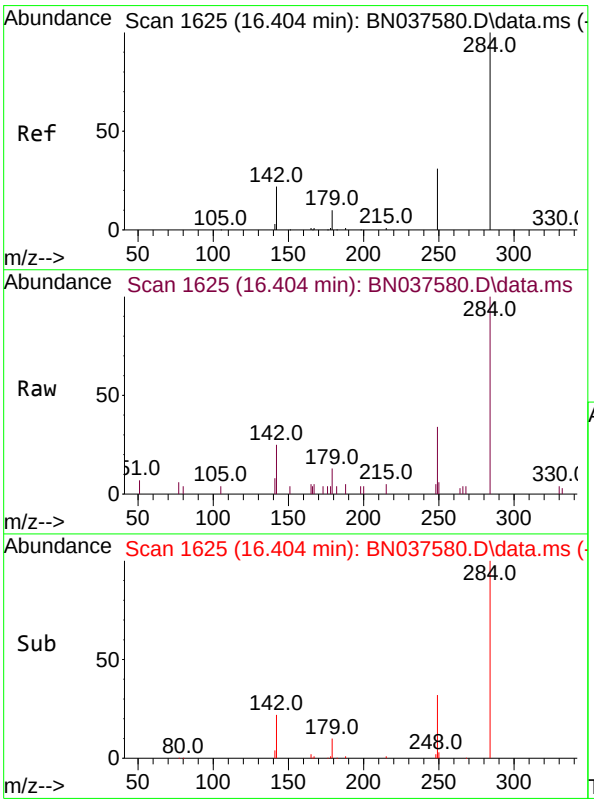
#21
4-Bromophenyl-phenylether
Concen: 0.372 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:248 Resp: 1177

Ion	Ratio	Lower	Upper
248	100		
250	98.3	78.6	118.0
141	54.6	43.7	65.5

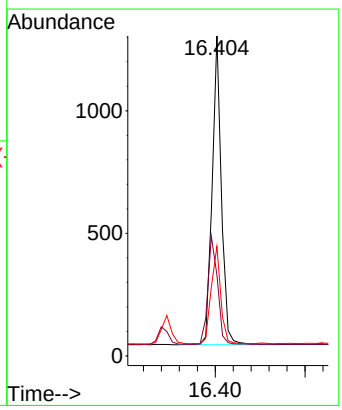


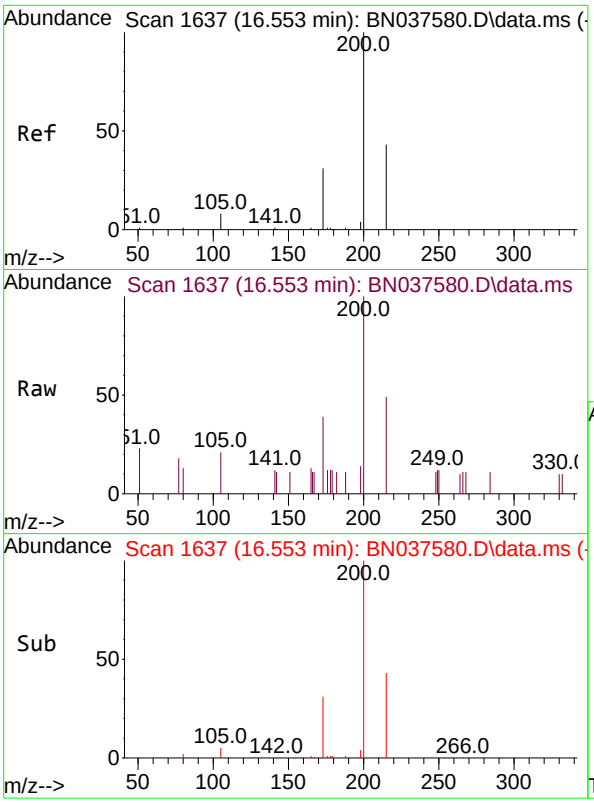


#22
Hexachlorobenzene
Concen: 0.399 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:284 Resp: 1790

Ion	Ratio	Lower	Upper
284	100		
142	36.9	29.8	44.6
249	32.5	26.0	39.0



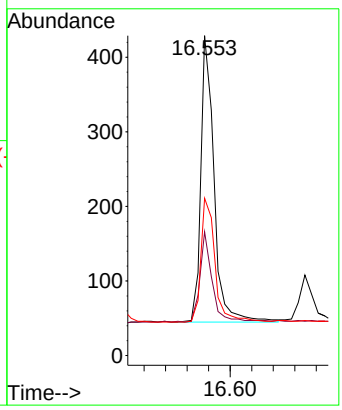


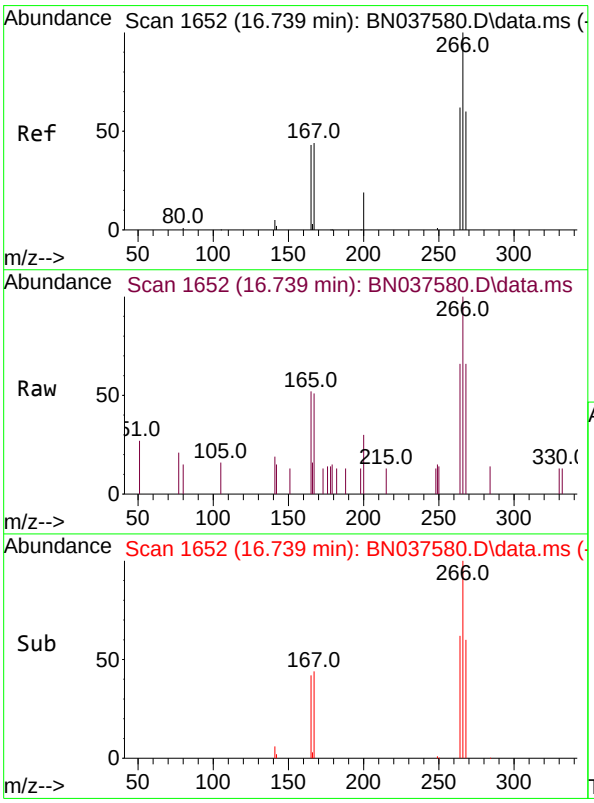
#23
Atrazine
Concen: 0.366 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:200 Resp: 654

Ion	Ratio	Lower	Upper
200	100		
173	38.7	31.0	46.4
215	49.2	39.4	59.0

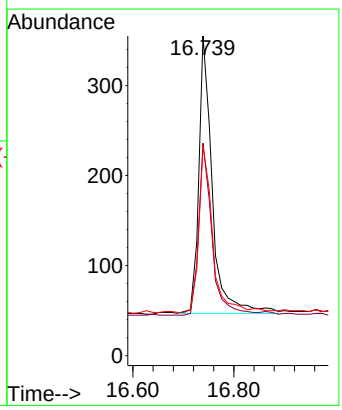


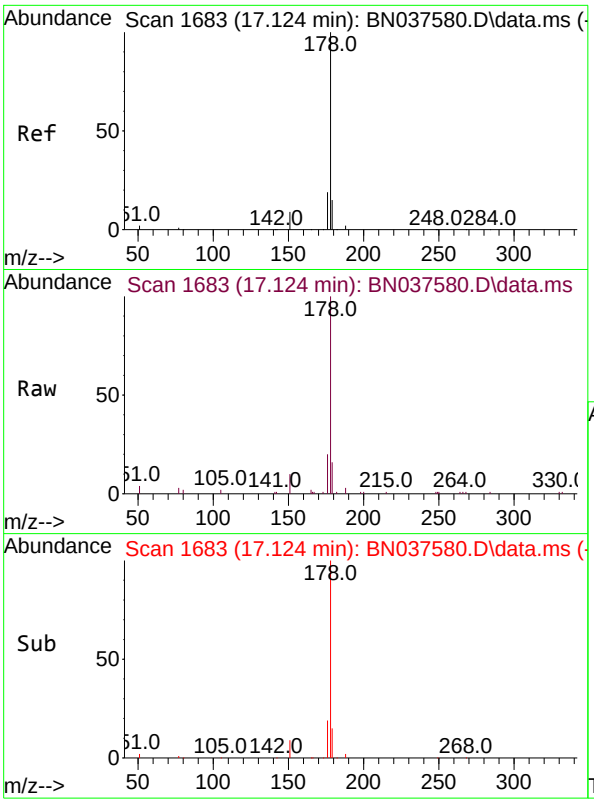


#24
Pentachlorophenol
Concen: 0.363 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:266 Resp: 571

Ion	Ratio	Lower	Upper
266	100		
264	62.0	49.6	74.4
268	61.5	49.2	73.8



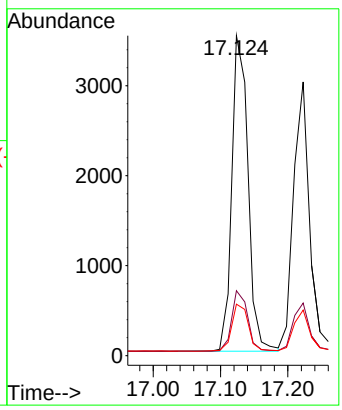


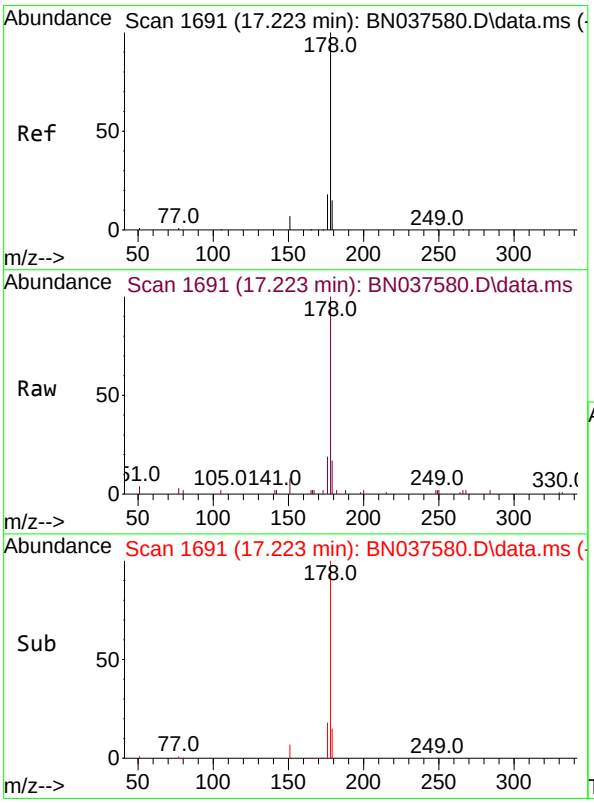
#25
Phenanthrene
Concen: 0.385 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:178 Resp: 5887

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.6
179	15.4	12.3	18.5

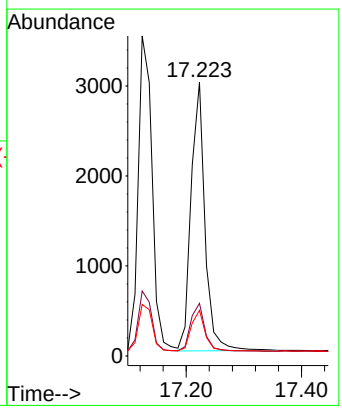


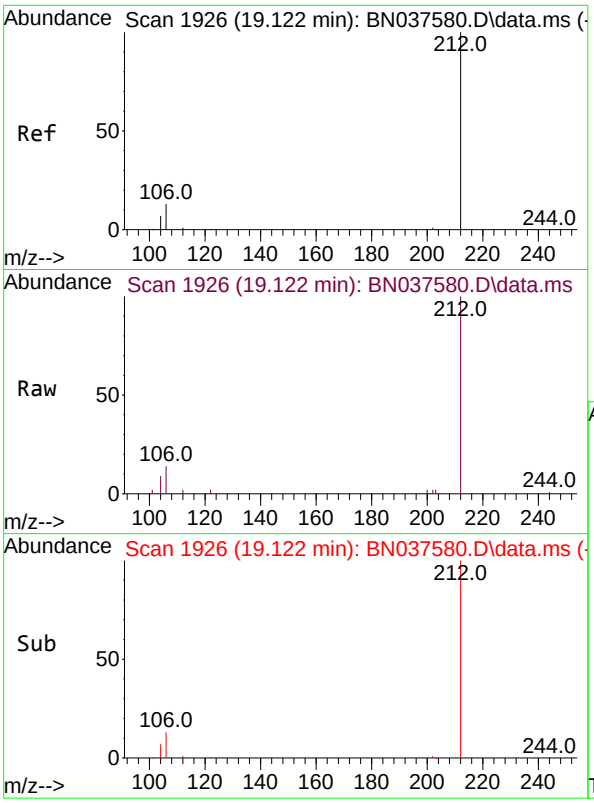


#26
Anthracene
Concen: 0.370 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:178 Resp: 5009

Ion	Ratio	Lower	Upper
178	100		
176	18.4	14.7	22.1
179	15.4	12.3	18.5



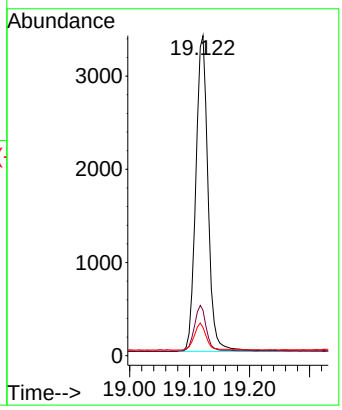


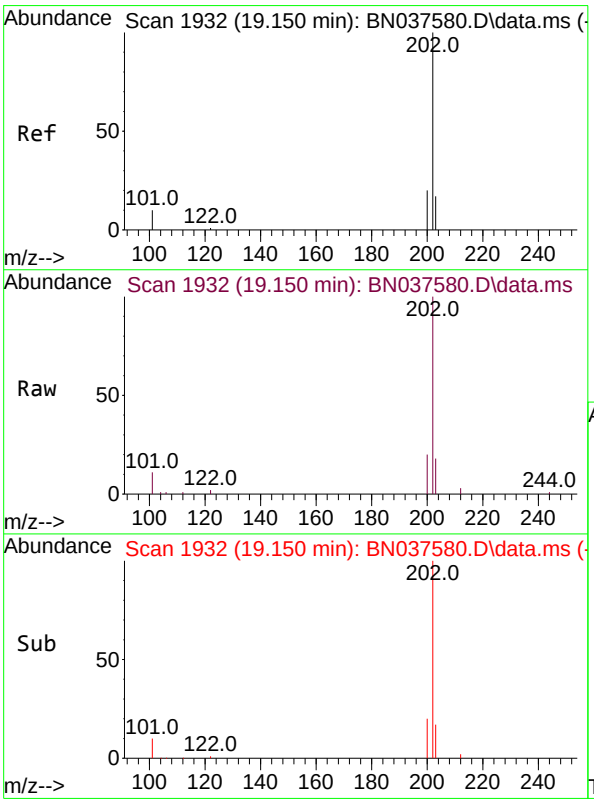
#27
Fluoranthene-d10
Concen: 0.363 ng
RT: 19.122 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:212 Resp: 4801

Ion	Ratio	Lower	Upper
212	100		
106	14.4	11.5	17.3
104	8.2	6.6	9.8

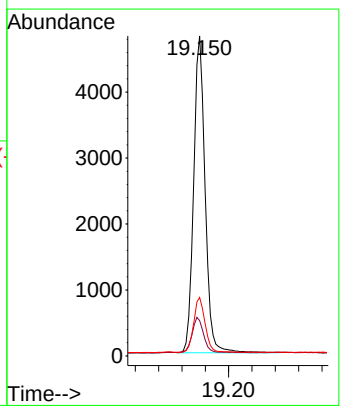


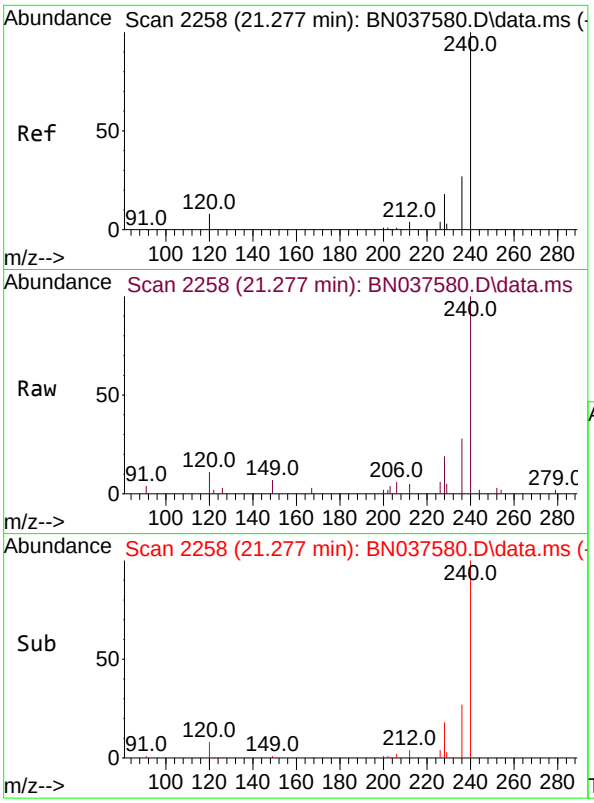


#28
Fluoranthene
Concen: 0.372 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:202 Resp: 6535

Ion	Ratio	Lower	Upper
202	100		
101	11.3	9.0	13.6
203	17.3	13.8	20.8



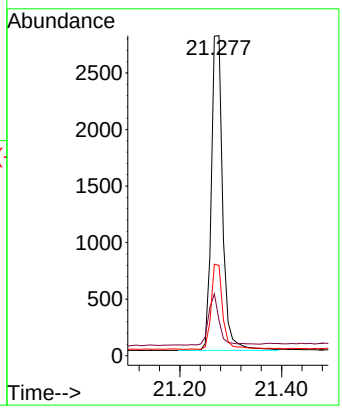


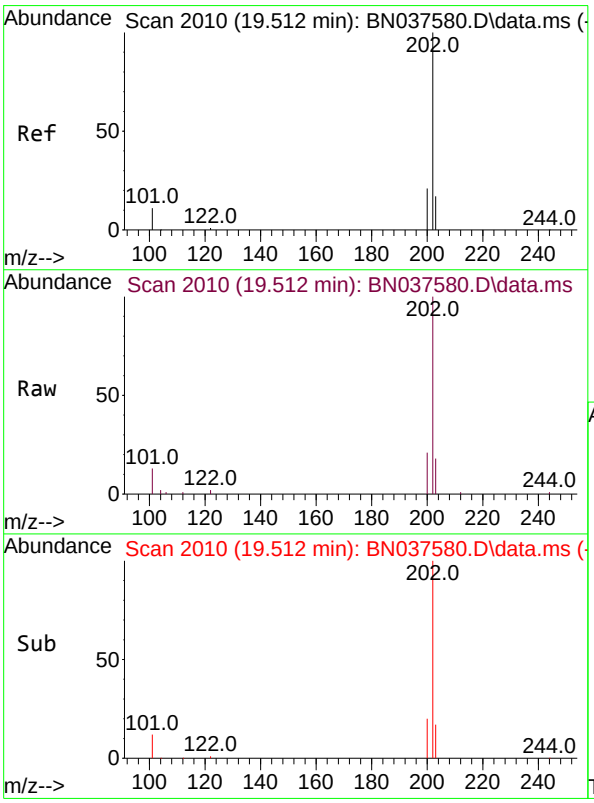
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:240 Resp: 4317

Ion	Ratio	Lower	Upper
240	100		
120	11.1	8.9	13.3
236	28.2	22.6	33.8

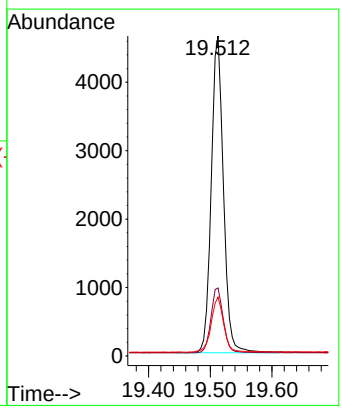


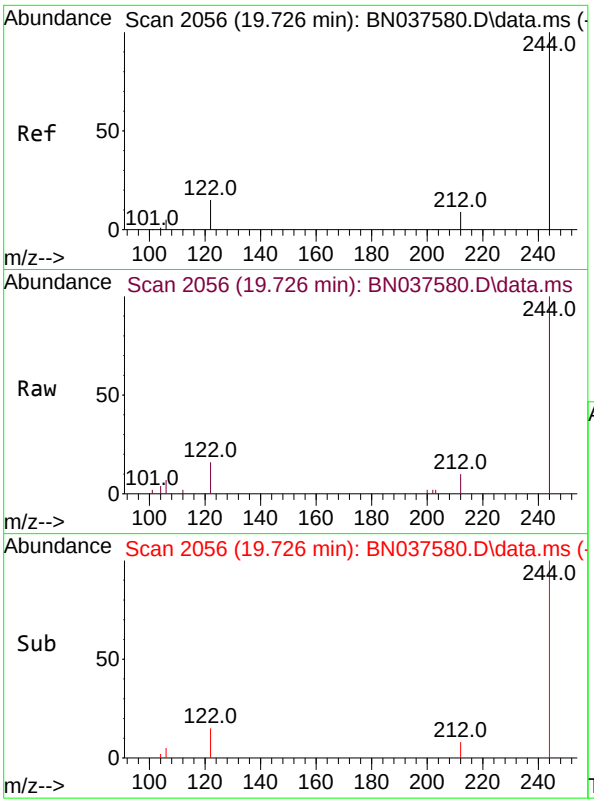


#30
Pyrene
Concen: 0.392 ng
RT: 19.512 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:202 Resp: 6320

Ion	Ratio	Lower	Upper
202	100		
200	20.8	16.6	25.0
203	17.9	14.3	21.5



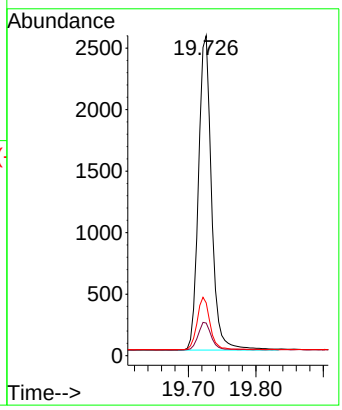


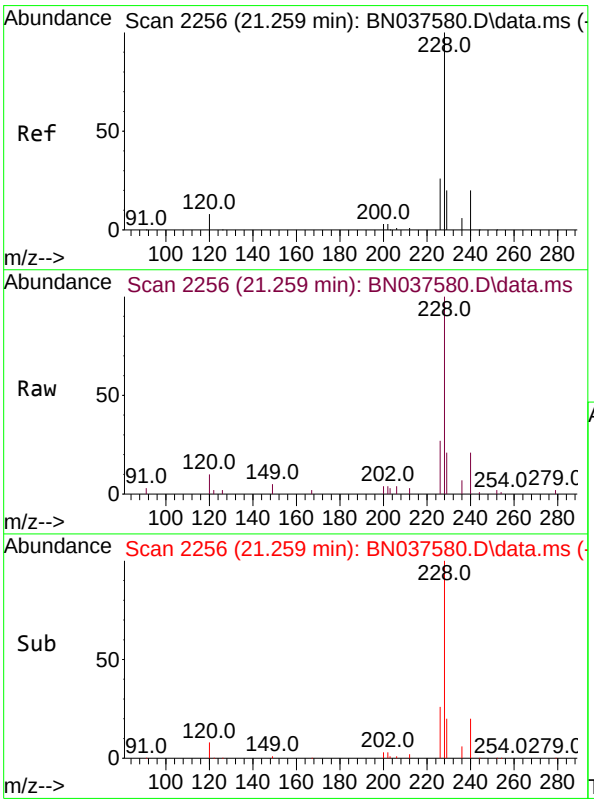
#31
Terphenyl-d14
Concen: 0.387 ng
RT: 19.726 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:244 Resp: 3436

Ion	Ratio	Lower	Upper
244	100		
212	10.2	8.2	12.2
122	16.5	13.2	19.8

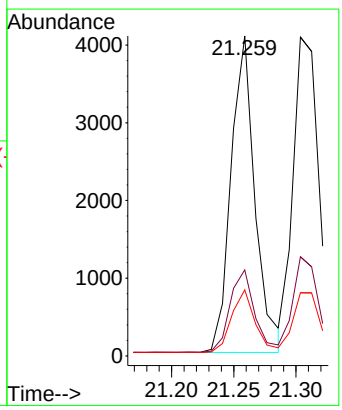


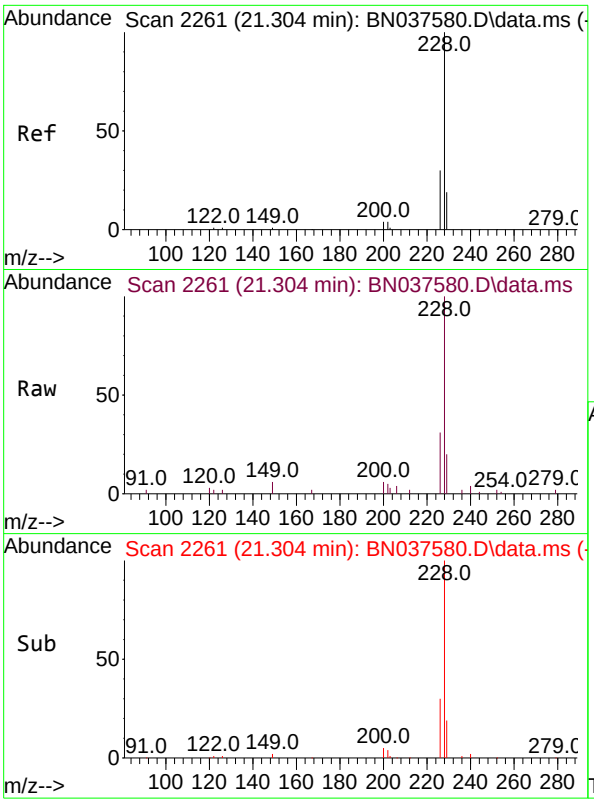


#32
Benzo(a)anthracene
Concen: 0.378 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:228 Resp: 5452

Ion	Ratio	Lower	Upper
228	100		
226	26.9	21.5	32.3
229	20.6	16.5	24.7



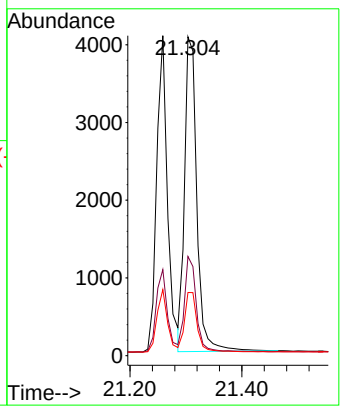


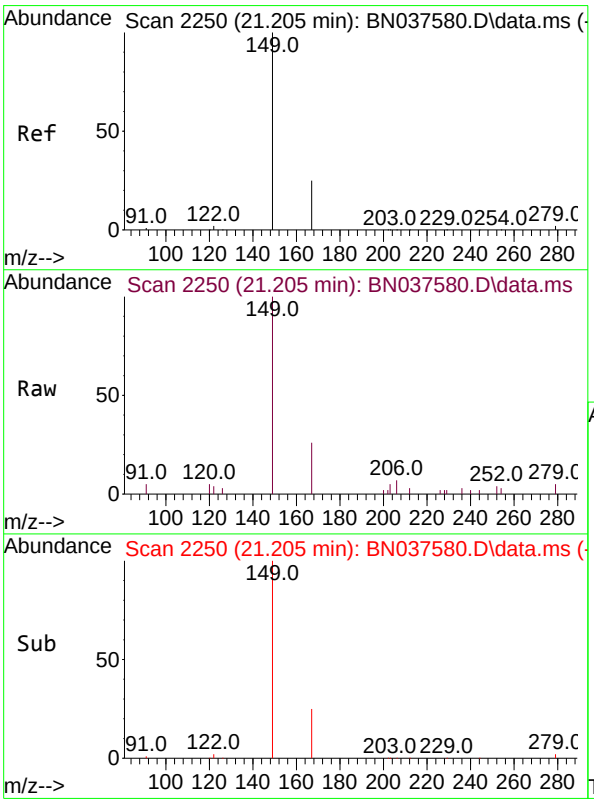
#33
Chrysene
Concen: 0.385 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:228 Resp: 6185

Ion	Ratio	Lower	Upper
228	100		
226	31.1	24.9	37.3
229	19.8	15.8	23.8

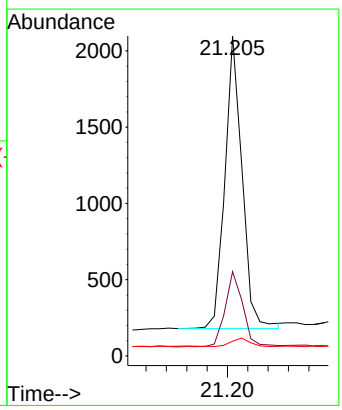


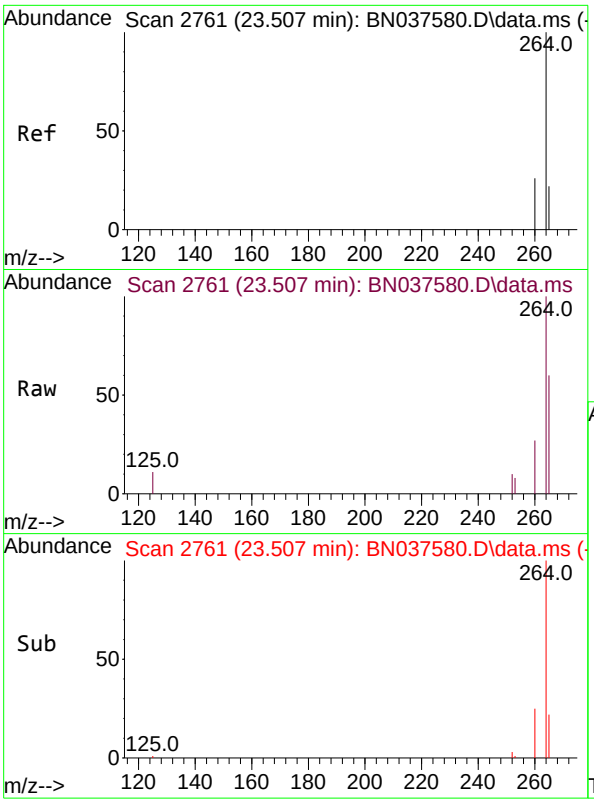


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.378 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:149 Resp: 2252

Ion	Ratio	Lower	Upper
149	100		
167	25.6	20.5	30.7
279	3.8	2.6	4.0



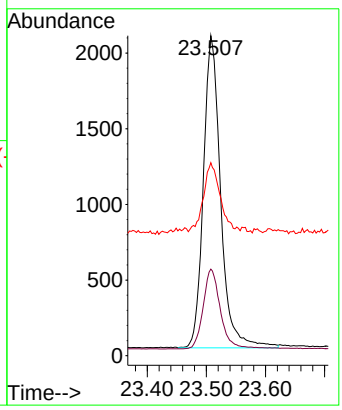


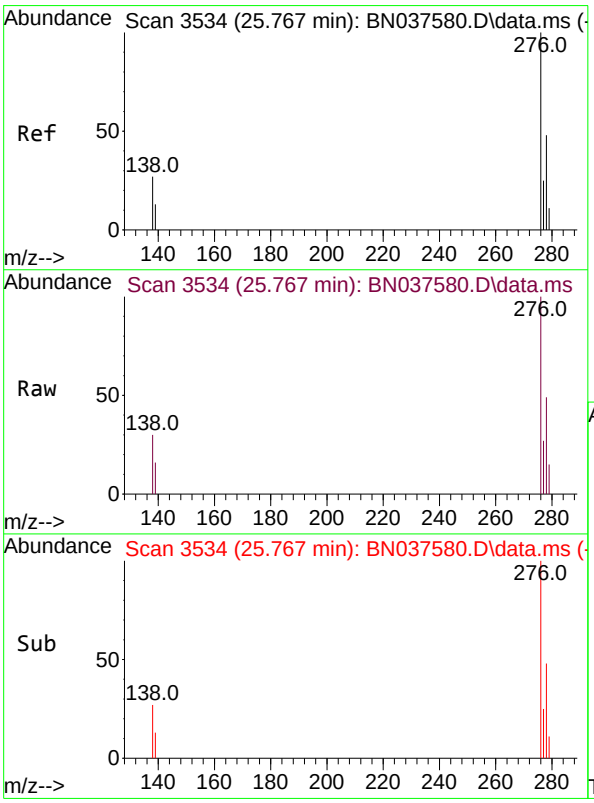
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.507 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:264 Resp: 4188

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.6	32.4
265	60.3	48.2	72.4

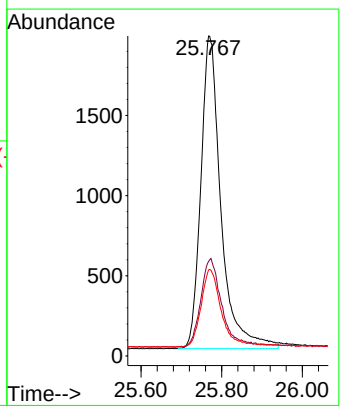


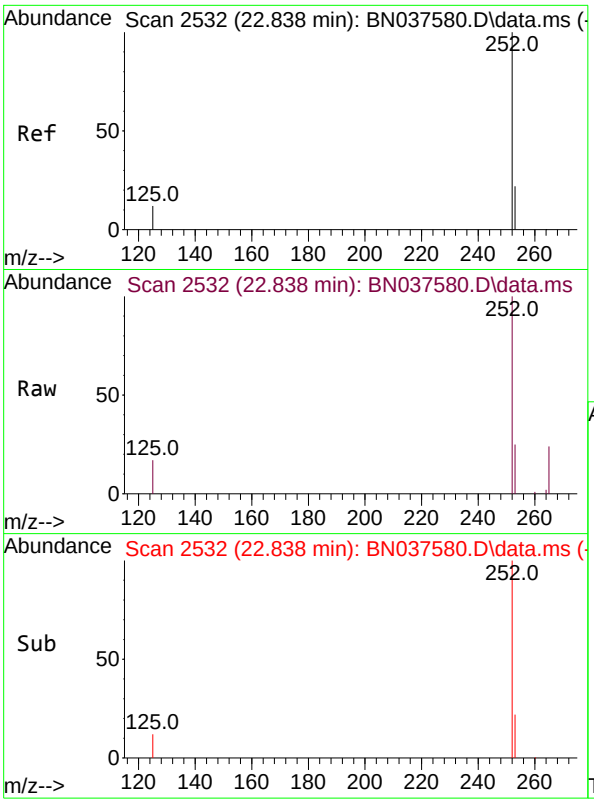


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.383 ng
RT: 25.767 min Scan# 3534
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:276 Resp: 6753

Ion	Ratio	Lower	Upper
276	100		
138	29.1	23.3	34.9
277	24.4	19.5	29.3



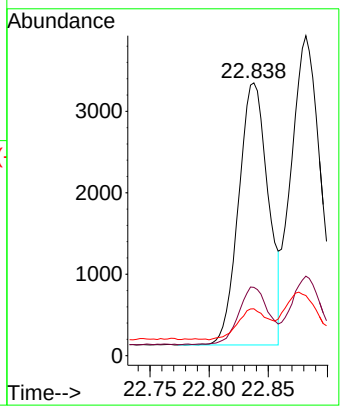


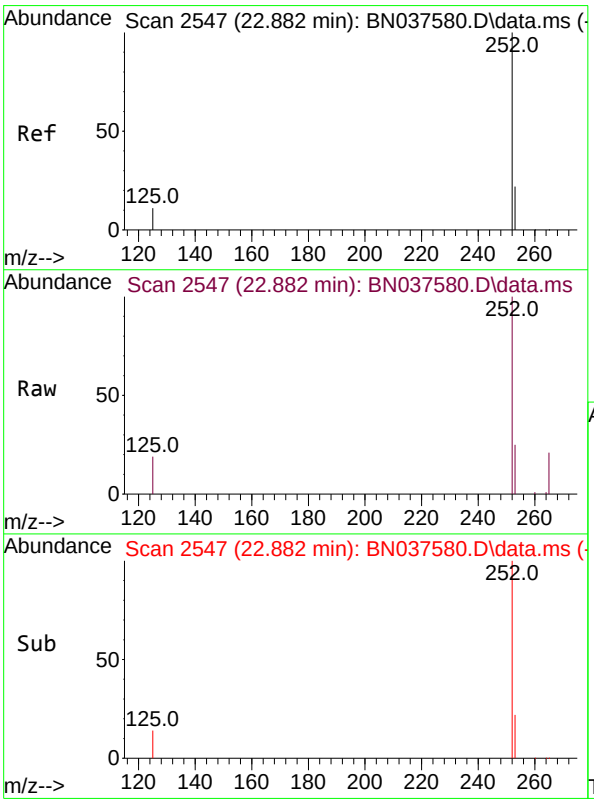
#37
Benzo(b)fluoranthene
Concen: 0.353 ng
RT: 22.838 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 5604

Ion	Ratio	Lower	Upper
252	100		
253	25.0	20.0	30.0
125	17.2	13.8	20.6

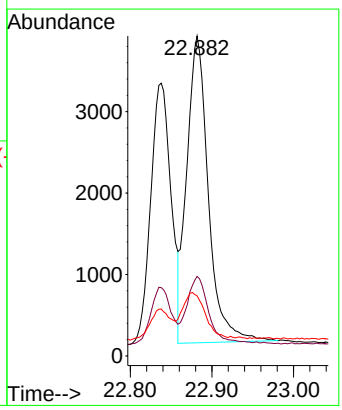


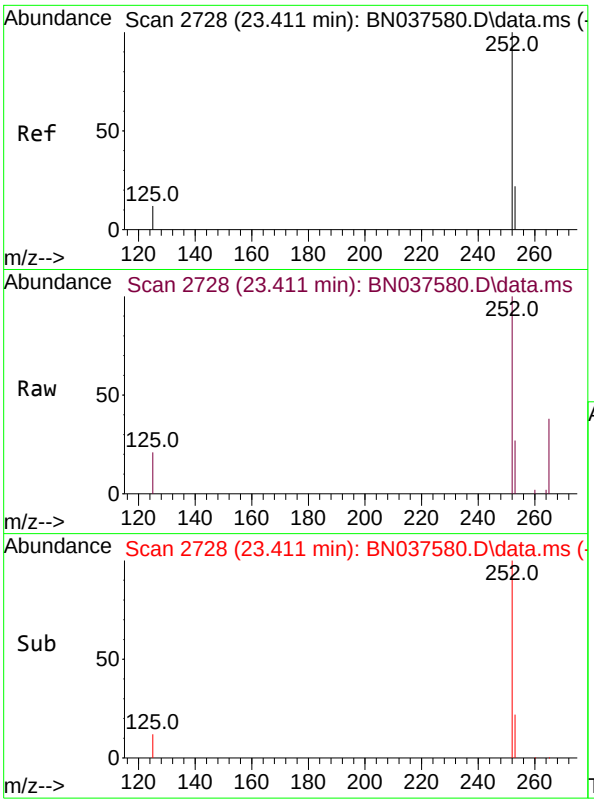


#38
Benzo(k)fluoranthene
Concen: 0.386 ng
RT: 22.882 min Scan# 2547
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:252 Resp: 6915

Ion	Ratio	Lower	Upper
252	100		
253	24.9	19.9	29.9
125	18.8	15.0	22.6



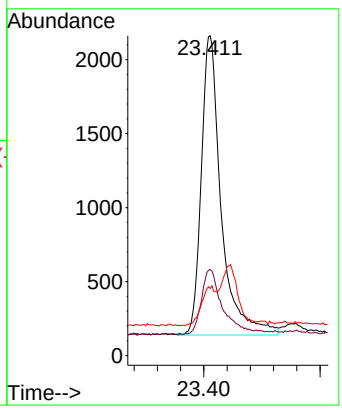


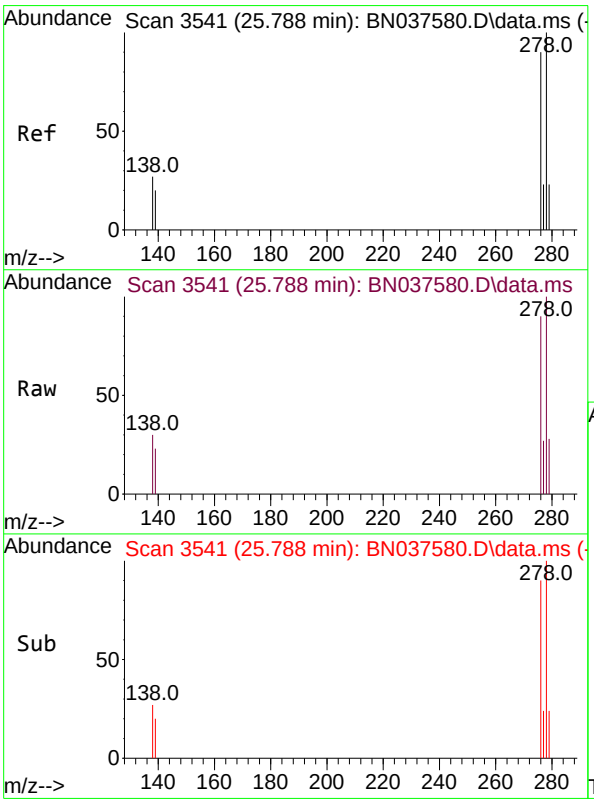
#39
Benzo(a)pyrene
Concen: 0.366 ng
RT: 23.411 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:252 Resp: 4812

Ion	Ratio	Lower	Upper
252	100		
253	27.0	21.6	32.4
125	21.0	16.8	25.2

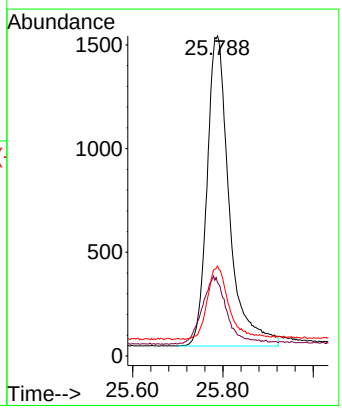


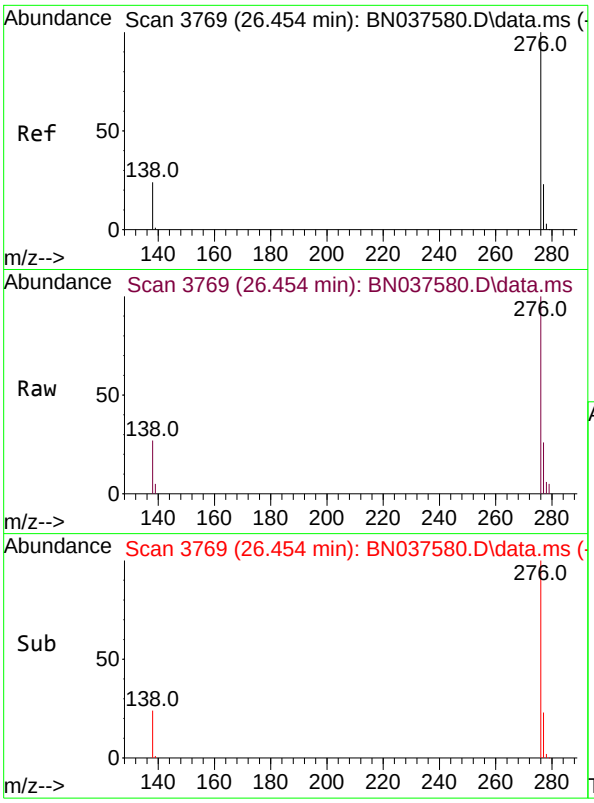


#40
Dibenzo(a,h)anthracene
Concen: 0.374 ng
RT: 25.788 min Scan# 3541
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Tgt Ion:278 Resp: 5118

Ion	Ratio	Lower	Upper
278	100		
139	22.9	18.3	27.5
279	28.1	22.5	33.7



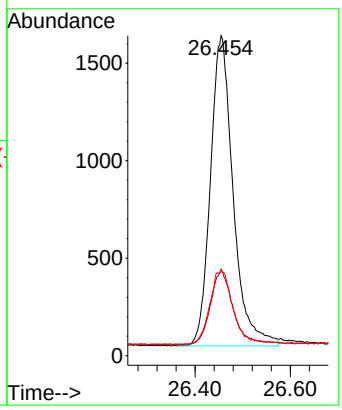


#41
Benzo(g,h,i)perylene
Concen: 0.366 ng
RT: 26.454 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037580.D
Acq: 12 Aug 2025 17:39

Instrument :
BNA_N
ClientSampleId :
SSTDICCC0.4

Tgt Ion:276 Resp: 5284

Ion	Ratio	Lower	Upper
276	100		
277	26.2	21.0	31.4
138	27.1	21.7	32.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037581.D
Acq On : 12 Aug 2025 18:16
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Aug 13 04:48:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	1885	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	4579	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2311	0.400	ng		0.00
19) Phenanthrene-d10	17.086	188	4680	0.400	ng		0.00
29) Chrysene-d12	21.268	240	4185	0.400	ng		# 0.00
35) Perylene-d12	23.505	264	3775	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	3101	0.726	ng		0.00
5) Phenol-d6	6.879	99	3707	0.721	ng		0.00
8) Nitrobenzene-d5	8.854	82	2415	0.749	ng		0.00
11) 2-Methylnaphthalene-d10	12.090	152	4517	0.726	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	739	0.731	ng		0.00
15) 2-Fluorobiphenyl	12.978	172	10405	0.778	ng		0.00
27) Fluoranthene-d10	19.118	212	8750	0.711	ng		0.00
31) Terphenyl-d14	19.726	244	6383	0.741	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	1386	0.769	ng		96
3) n-Nitrosodimethylamine	3.535	42	1777	0.771	ng	#	96
6) bis(2-Chloroethyl)ether	7.139	93	3530	0.762	ng		98
9) Naphthalene	10.551	128	9265	0.760	ng		99
10) Hexachlorobutadiene	10.850	225	2321	0.779	ng	#	99
12) 2-Methylnaphthalene	12.166	142	5758	0.753	ng		98
16) Acenaphthylene	14.067	152	7638	0.737	ng		99
17) Acenaphthene	14.409	154	5336	0.757	ng		98
18) Fluorene	15.392	166	7030	0.763	ng		99
20) 4,6-Dinitro-2-methylph...	15.467	198	439	0.697	ng	#	75
21) 4-Bromophenyl-phenylether	16.292	248	2217	0.754	ng		95
22) Hexachlorobenzene	16.404	284	3105	0.745	ng		99
23) Atrazine	16.553	200	1251	0.752	ng		95
24) Pentachlorophenol	16.739	266	1061	0.725	ng		98
25) Phenanthrene	17.124	178	10654	0.749	ng		100
26) Anthracene	17.223	178	9251	0.734	ng		100
28) Fluoranthene	19.150	202	12088	0.740	ng		100
30) Pyrene	19.513	202	11747	0.751	ng		100
32) Benzo(a)anthracene	21.259	228	10489	0.750	ng		100
33) Chrysene	21.313	228	11541	0.741	ng		98
34) Bis(2-ethylhexyl)phtha...	21.205	149	4046	0.701	ng		100
36) Indeno(1,2,3-cd)pyrene	25.770	276	11835	0.744	ng		98
37) Benzo(b)fluoranthene	22.838	252	10811	0.756	ng		95
38) Benzo(k)fluoranthene	22.882	252	12288	0.761	ng	#	94
39) Benzo(a)pyrene	23.408	252	8737	0.736	ng	#	93
40) Dibenzo(a,h)anthracene	25.785	278	9175	0.743	ng		96
41) Benzo(g,h,i)perylene	26.454	276	9524	0.732	ng		98

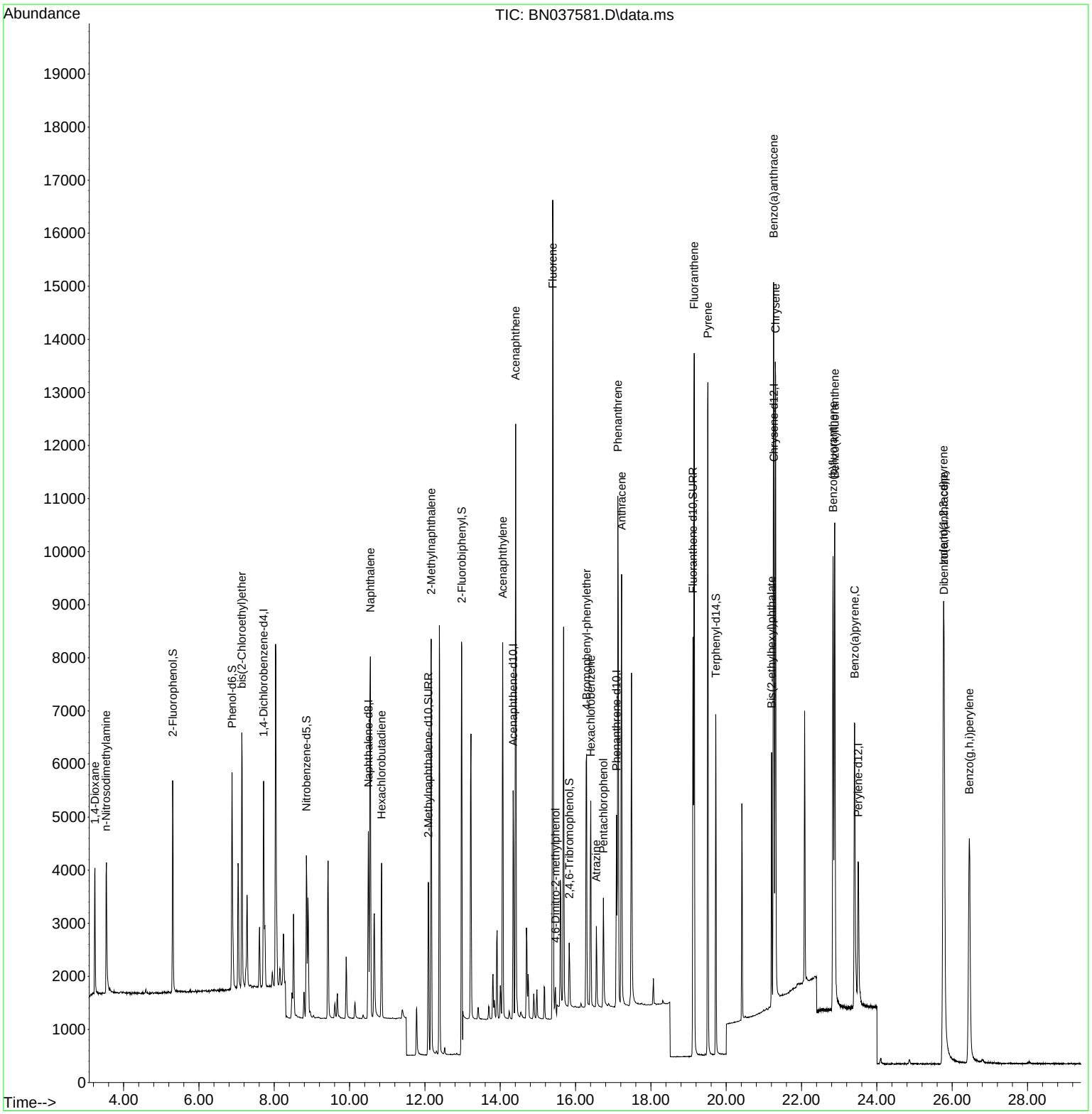
(#) = qualifier out of range (m) = manual integration (+) = signals summed

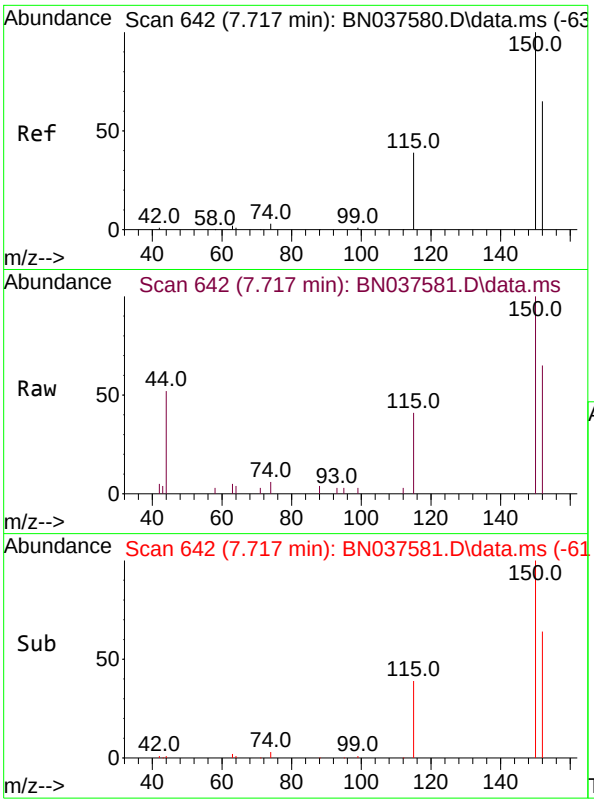
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037581.D
Acq On : 12 Aug 2025 18:16
Operator : RC/JU
Sample : SSTDICC0.8
Misc :
ALS Vial : 6 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Quant Time: Aug 13 04:48:43 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



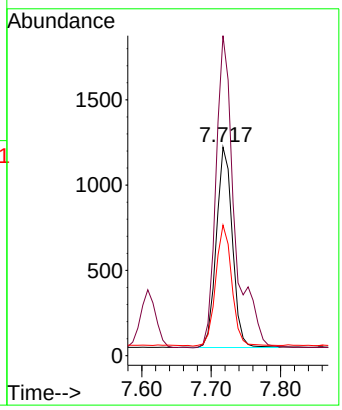


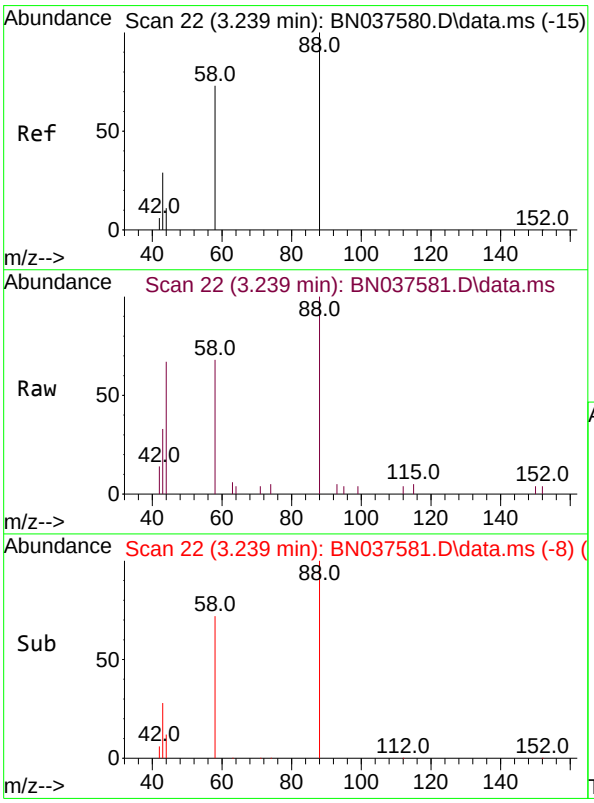
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 1885

Ion	Ratio	Lower	Upper
152	100		
150	153.5	122.2	183.4
115	62.7	49.8	74.6

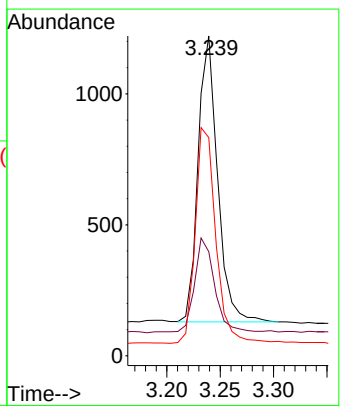


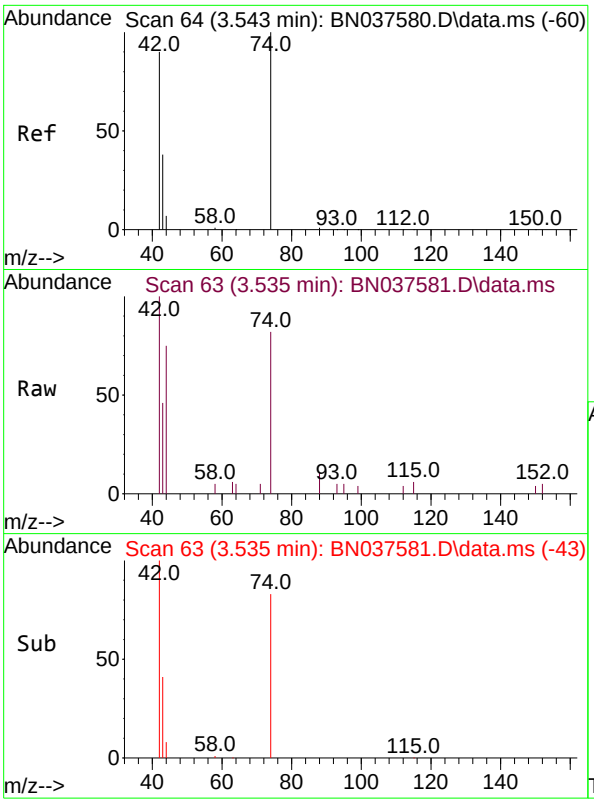


#2
1,4-Dioxane
Concen: 0.769 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion: 88 Resp: 1386

Ion	Ratio	Lower	Upper
88	100		
43	35.4	25.8	38.6
58	79.9	61.2	91.8



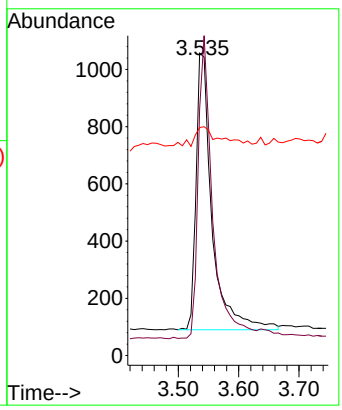


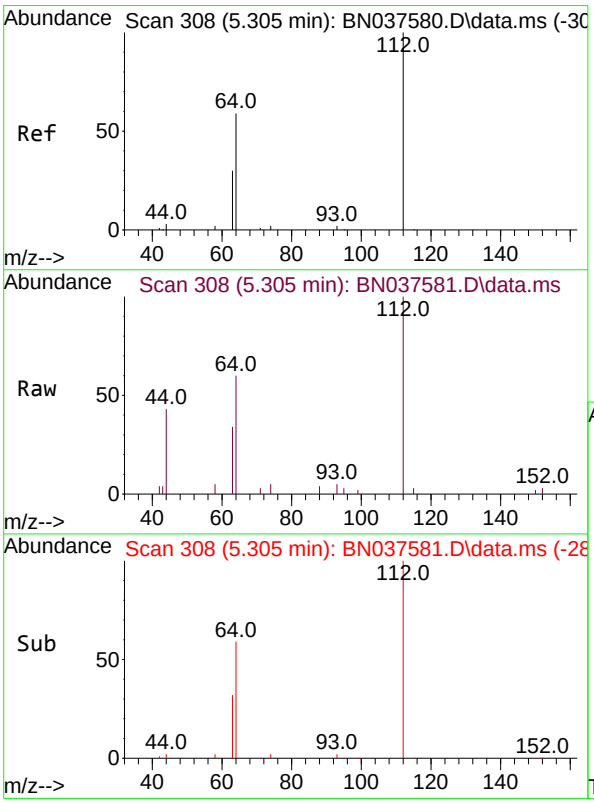
#3
n-Nitrosodimethylamine
Concen: 0.771 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 42 Resp: 1777

Ion	Ratio	Lower	Upper
42	100		
74	98.9	82.0	123.0
44	12.9	7.9	11.9#

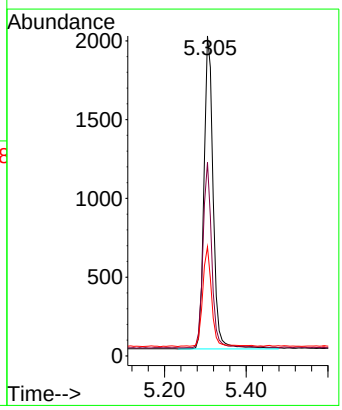


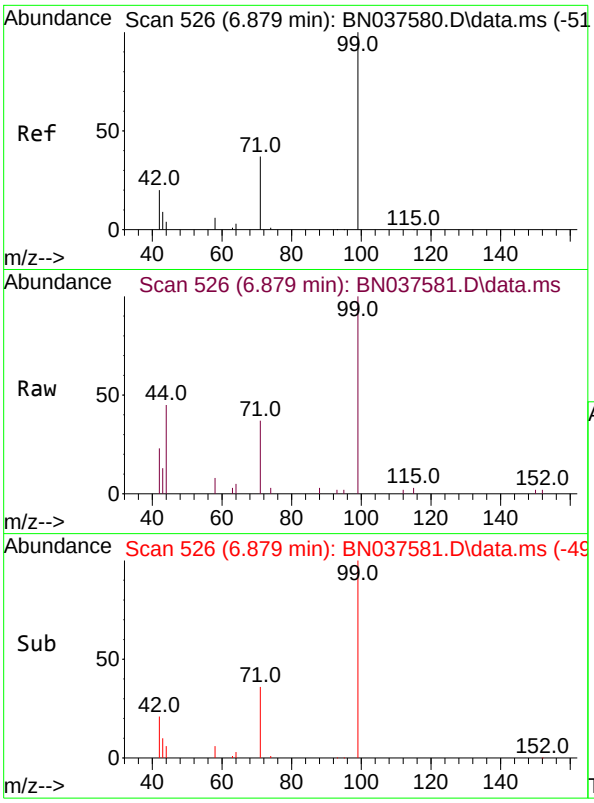


#4
2-Fluorophenol
Concen: 0.726 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:112 Resp: 3101

Ion	Ratio	Lower	Upper
112	100		
64	56.5	44.9	67.3
63	31.0	23.4	35.2



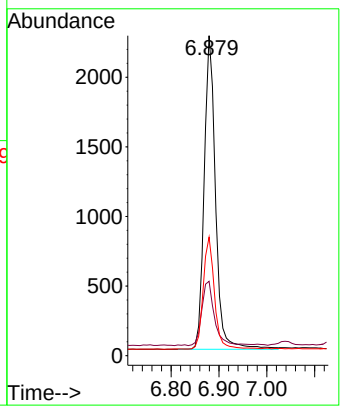


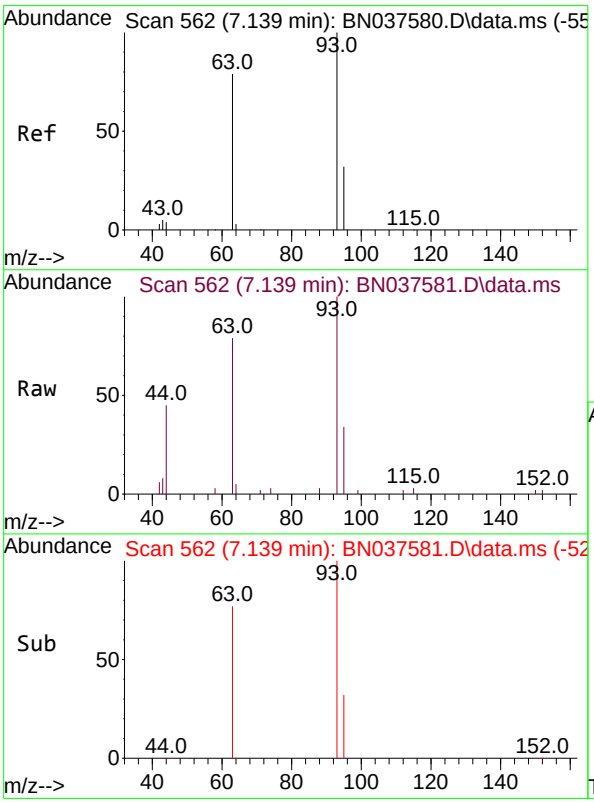
#5
Phenol-d6
Concen: 0.721 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion: 99 Resp: 3707

Ion	Ratio	Lower	Upper
99	100		
42	22.9	18.5	27.7
71	35.5	28.6	42.8

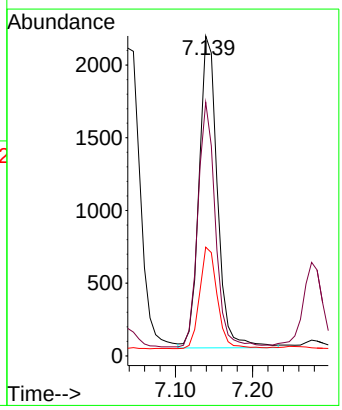


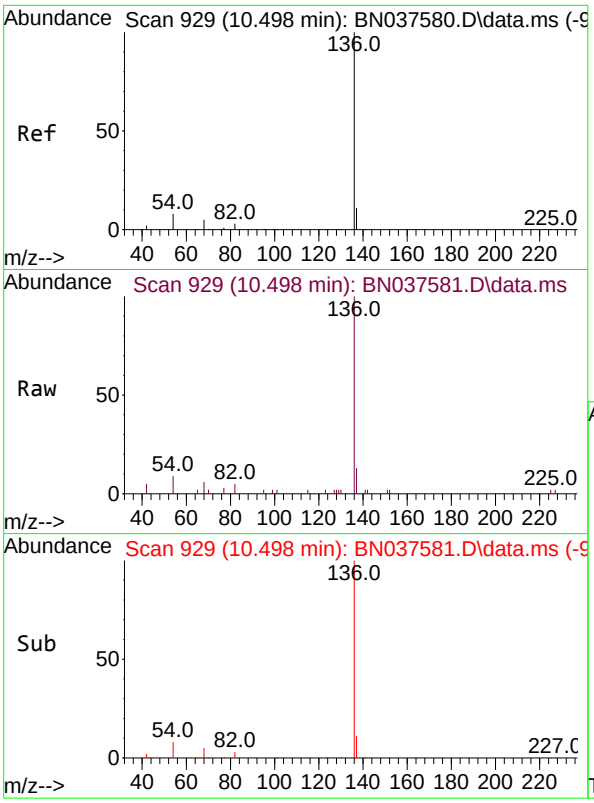


#6
bis(2-Chloroethyl)ether
Concen: 0.762 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion: 93 Resp: 3530

Ion	Ratio	Lower	Upper
93	100		
63	74.6	58.0	87.0
95	31.4	24.9	37.3



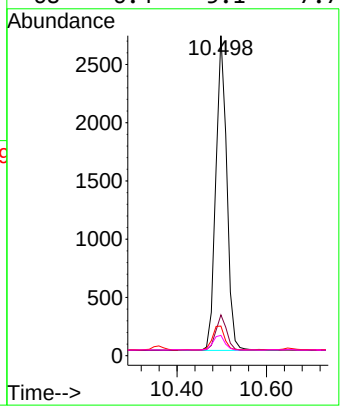


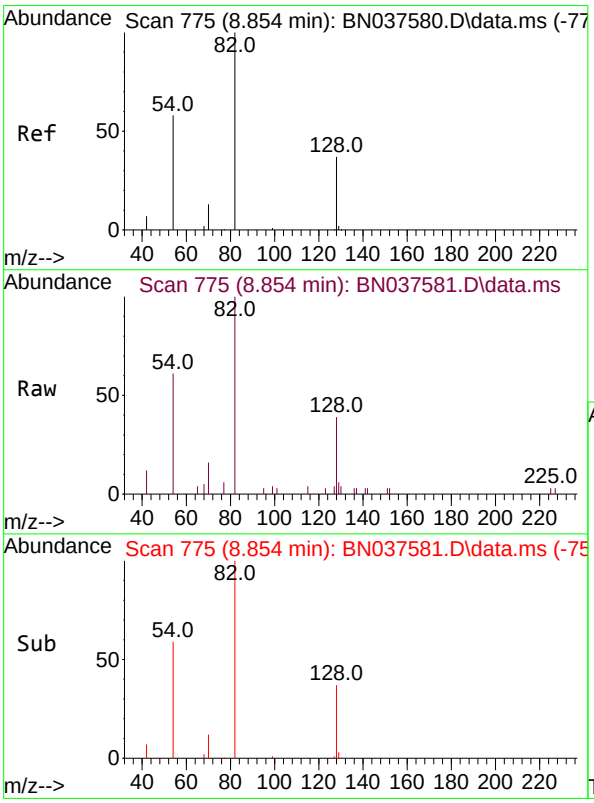
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:136 Resp: 4579

Ion	Ratio	Lower	Upper
136	100		
137	12.8	9.5	14.3
54	9.3	7.3	10.9
68	6.4	5.1	7.7

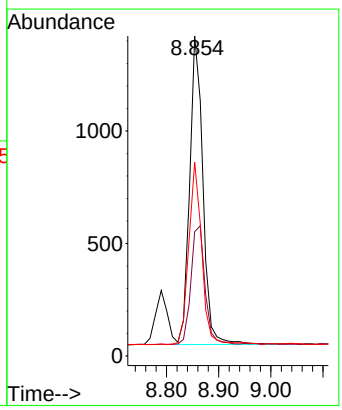


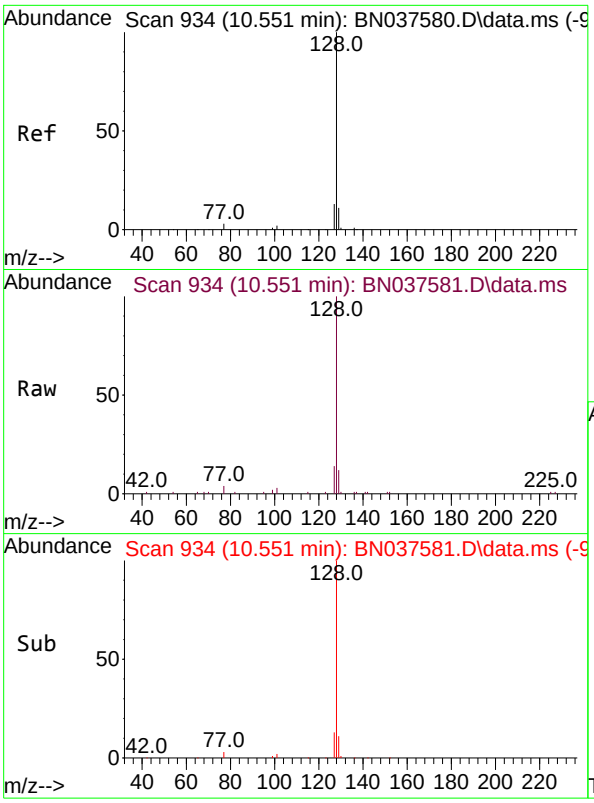


#8
Nitrobenzene-d5
Concen: 0.749 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion: 82 Resp: 2415

Ion	Ratio	Lower	Upper
82	100		
128	38.9	32.6	48.8
54	60.6	48.9	73.3



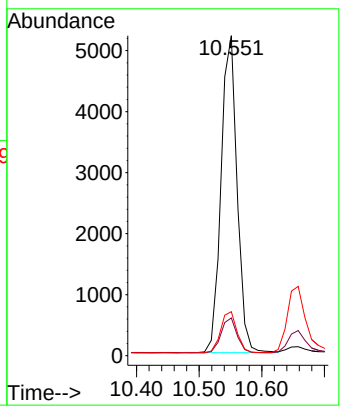


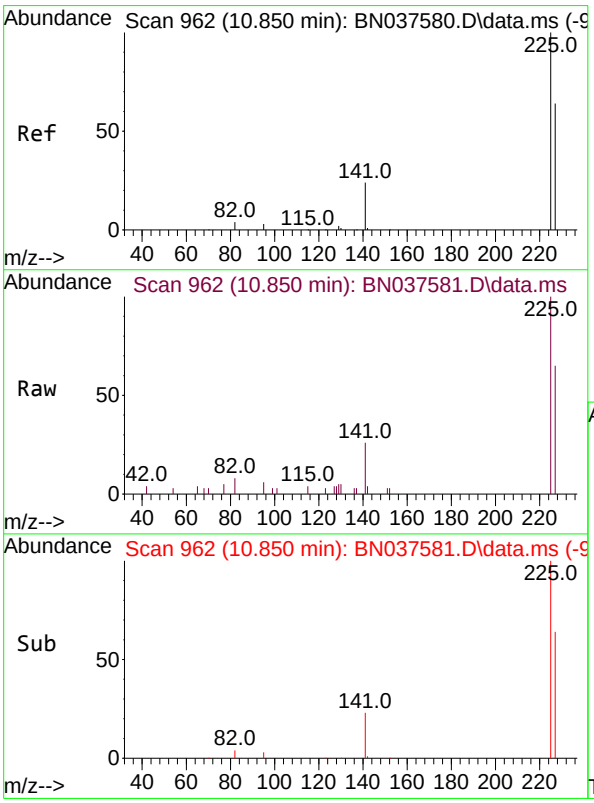
#9
Naphthalene
Concen: 0.760 ng
RT: 10.551 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:128 Resp: 9265

Ion	Ratio	Lower	Upper
128	100		
129	11.8	9.8	14.6
127	13.8	11.5	17.3

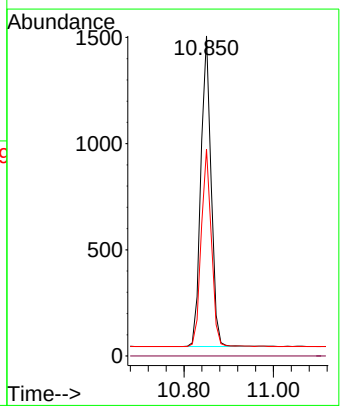


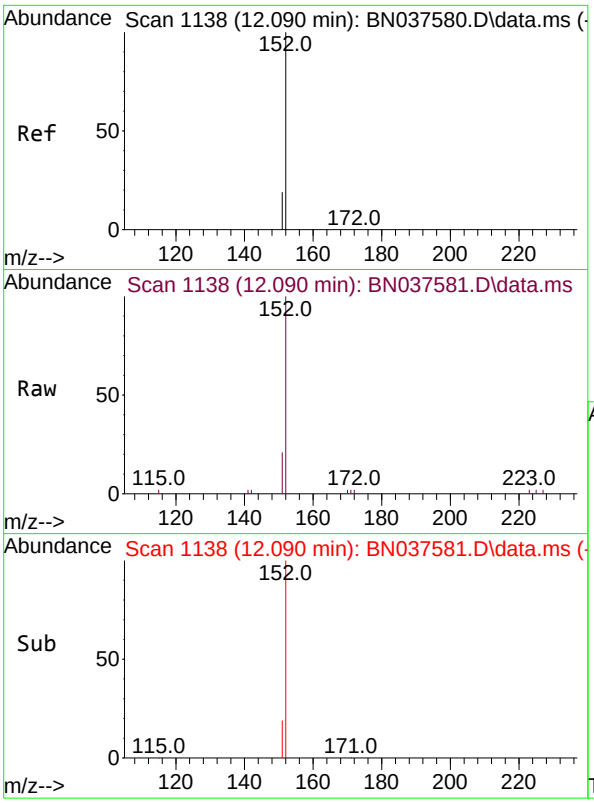


#10
Hexachlorobutadiene
Concen: 0.779 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:225 Resp: 2321

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.0	50.8	76.2



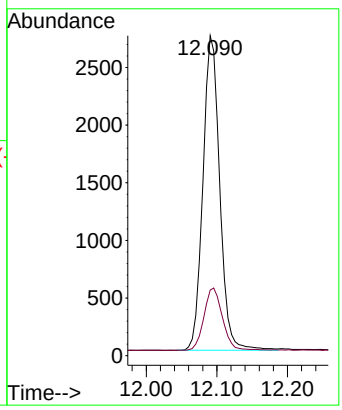


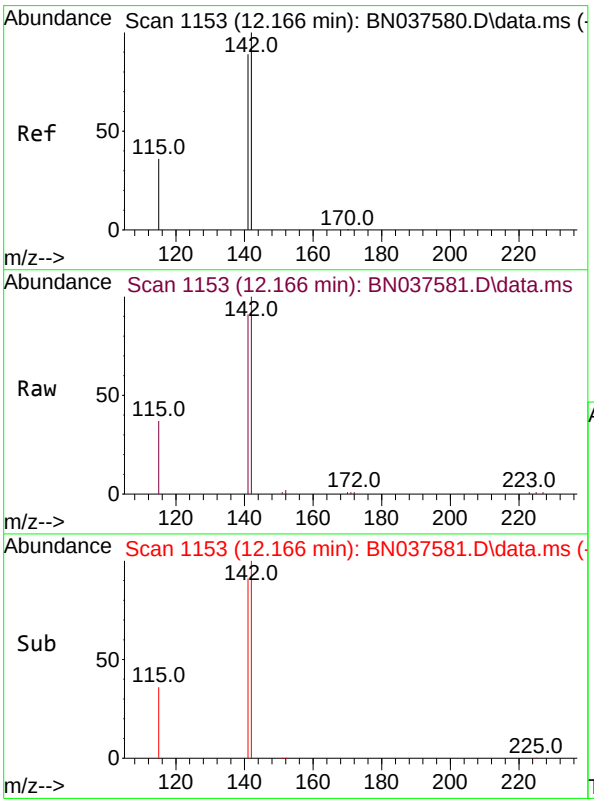
#11
2-Methylnaphthalene-d10
Concen: 0.726 ng
RT: 12.090 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:152 Resp: 4517

Ion	Ratio	Lower	Upper
152	100		
151	21.9	17.3	25.9

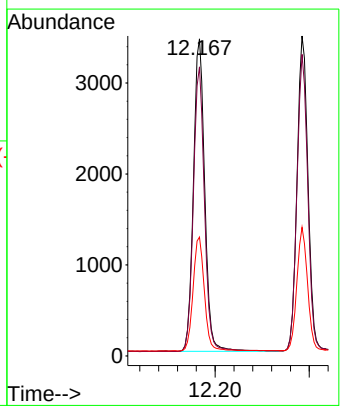


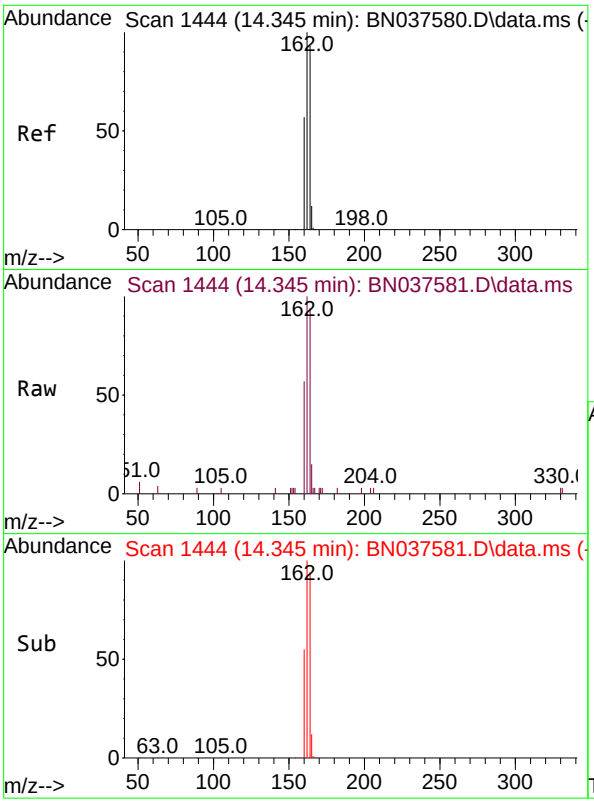


#12
2-Methylnaphthalene
Concen: 0.753 ng
RT: 12.166 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:142 Resp: 5758

Ion	Ratio	Lower	Upper
142	100		
141	91.2	71.4	107.0
115	37.5	30.2	45.4



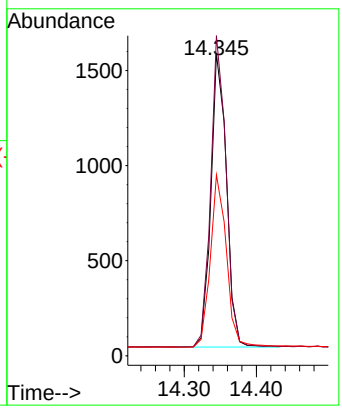


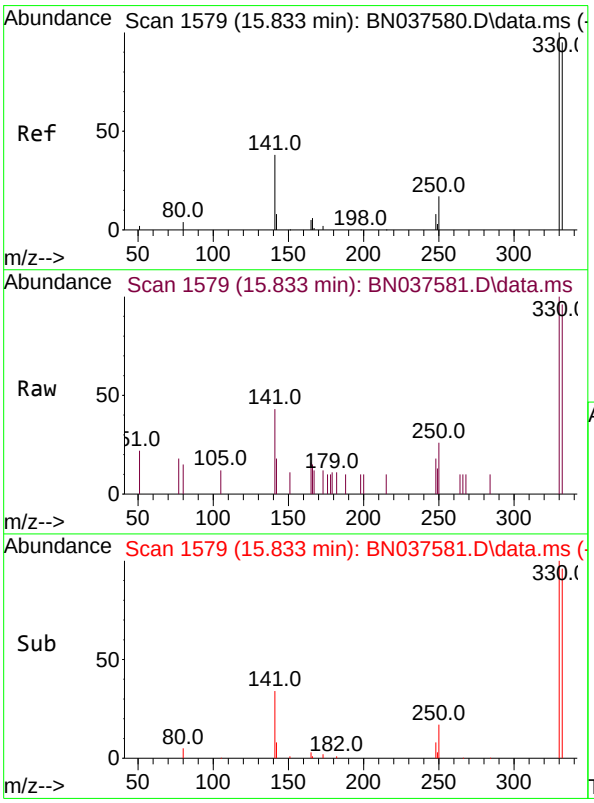
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:164 Resp: 2311

Ion	Ratio	Lower	Upper
164	100		
162	105.9	85.5	128.3
160	59.8	49.5	74.3

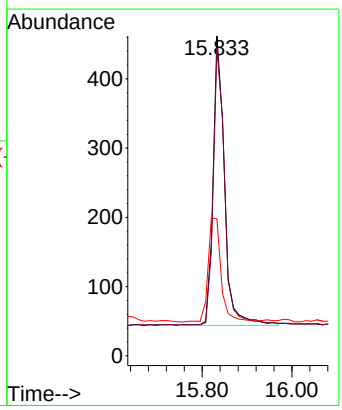


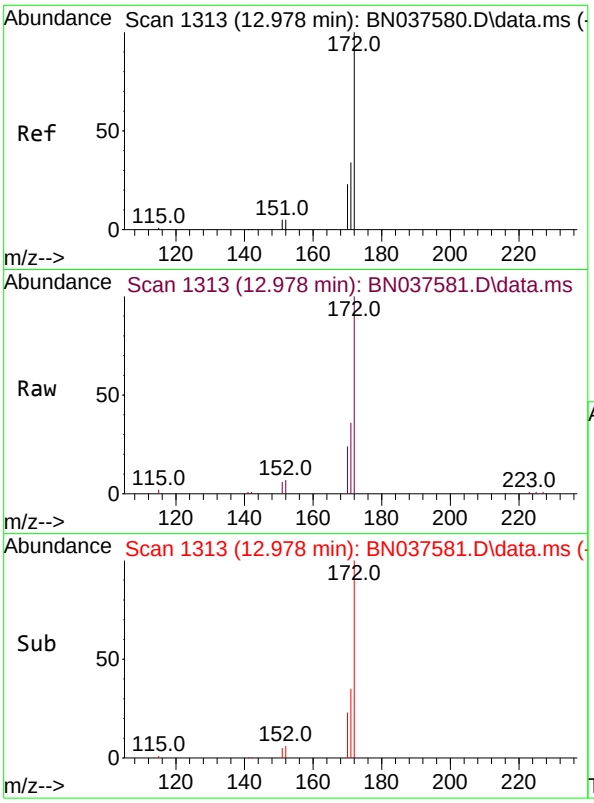


#14
2,4,6-Tribromophenol
Concen: 0.731 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:330 Resp: 739

Ion	Ratio	Lower	Upper
330	100		
332	94.3	77.4	116.0
141	40.5	30.9	46.3



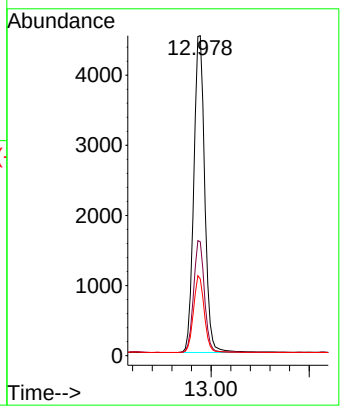


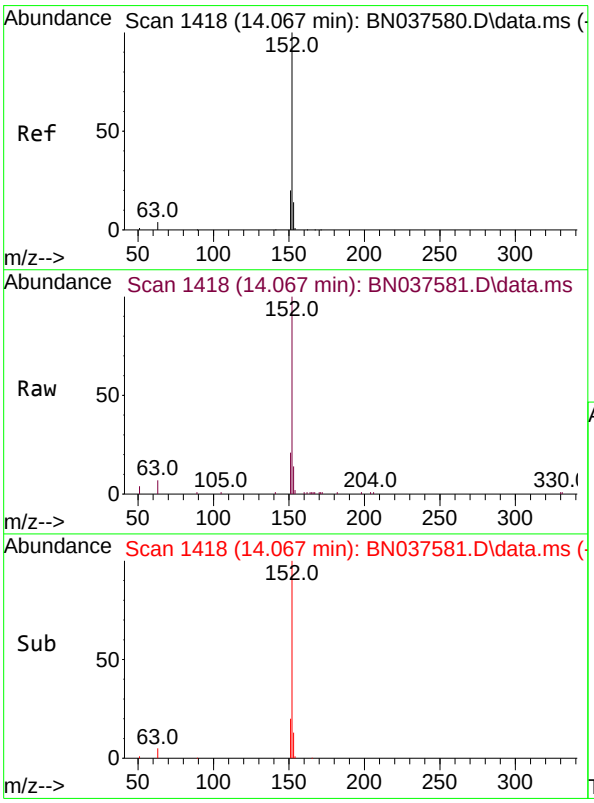
#15
2-Fluorobiphenyl
Concen: 0.778 ng
RT: 12.978 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:172 Resp: 10405

Ion	Ratio	Lower	Upper
172	100		
171	35.6	28.2	42.4
170	24.0	19.2	28.8

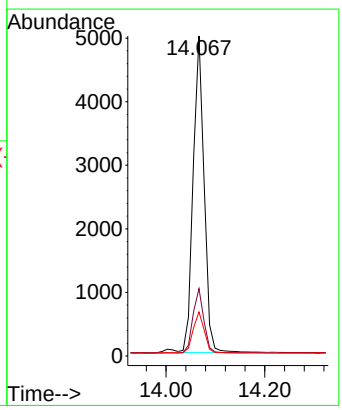


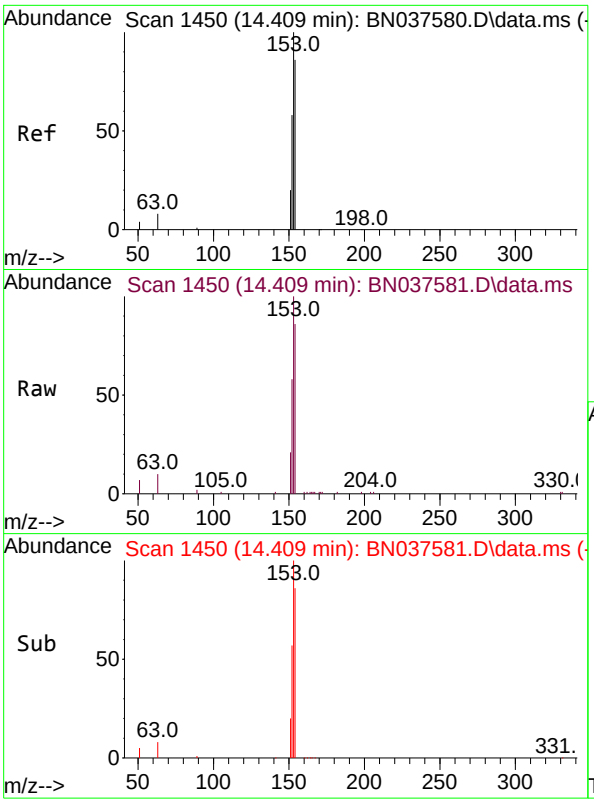


#16
Acenaphthylene
Concen: 0.737 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:152 Resp: 7638

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.1	24.1
153	13.1	10.7	16.1



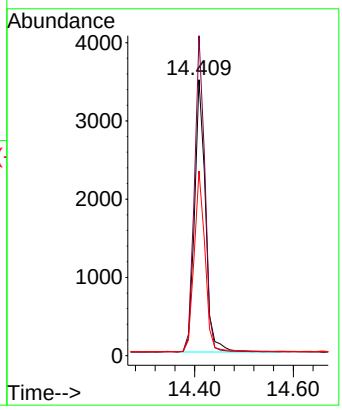


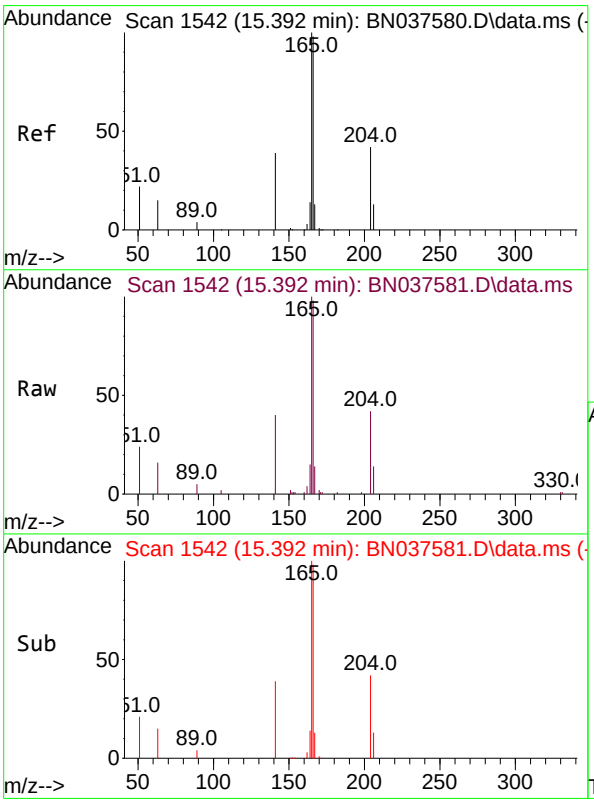
#17
Acenaphthene
Concen: 0.757 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:154 Resp: 5336

Ion	Ratio	Lower	Upper
154	100		
153	111.8	90.6	135.8
152	66.9	54.9	82.3

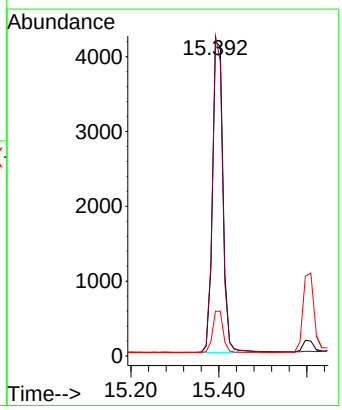


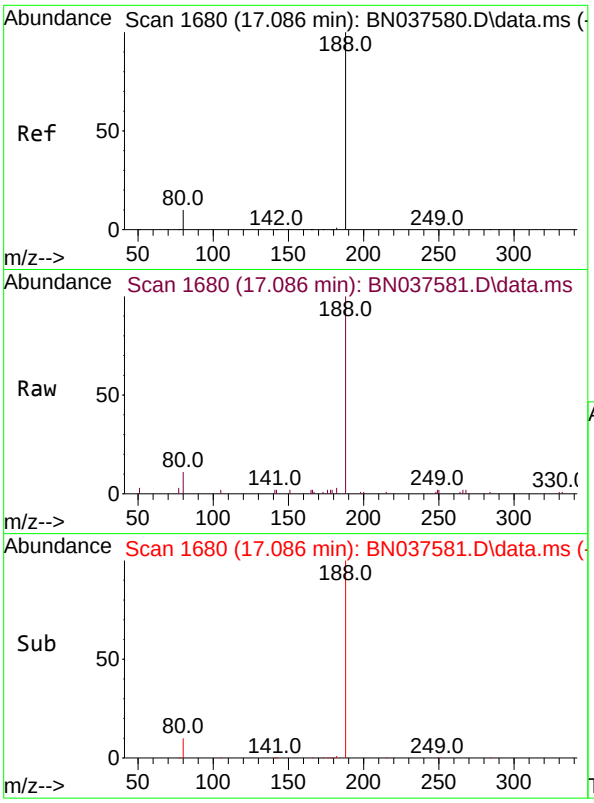


#18
Fluorene
Concen: 0.763 ng
RT: 15.392 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:166 Resp: 7030

Ion	Ratio	Lower	Upper
166	100		
165	99.5	78.9	118.3
167	13.4	10.7	16.1



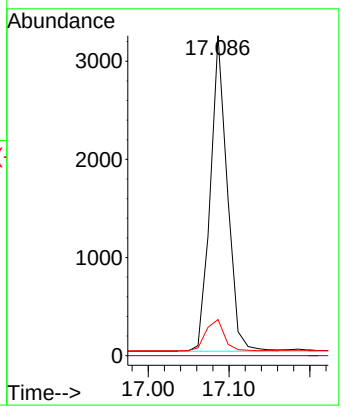


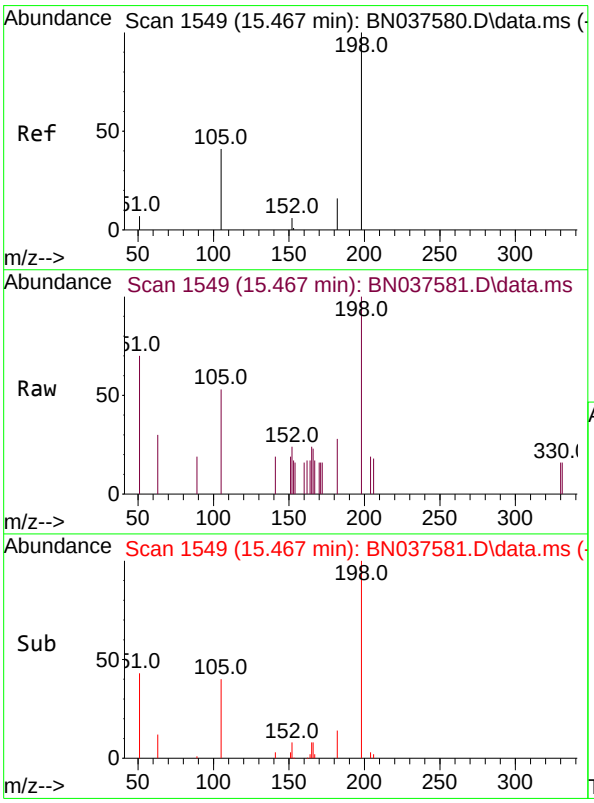
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:188 Resp: 4680

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	9.1	13.7

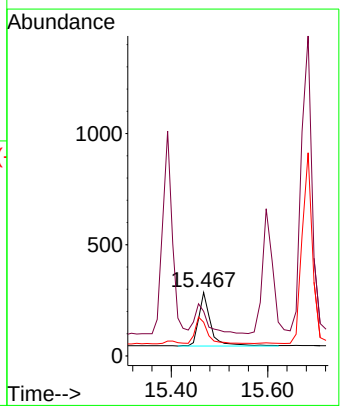


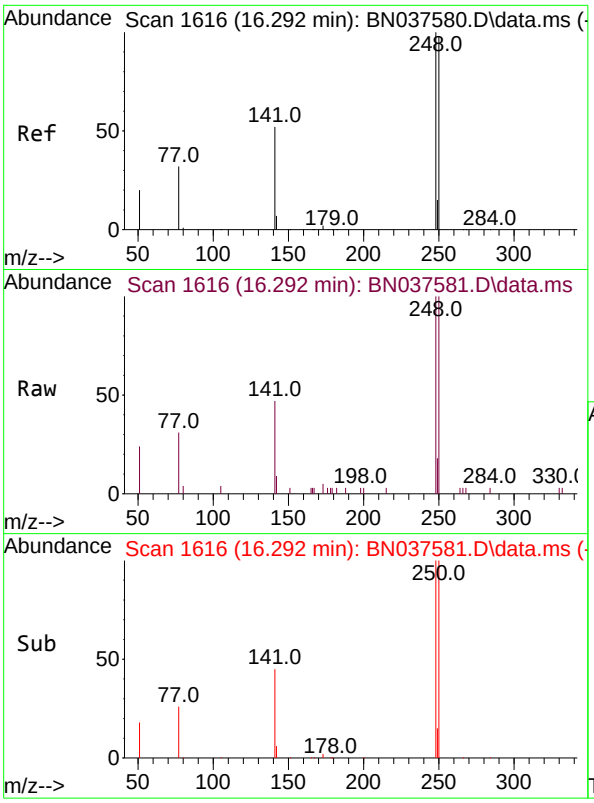


#20
4,6-Dinitro-2-methylphenol
Concen: 0.697 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:198 Resp: 439

Ion	Ratio	Lower	Upper
198	100		
51	70.3	81.0	121.6#
105	53.1	52.5	78.7



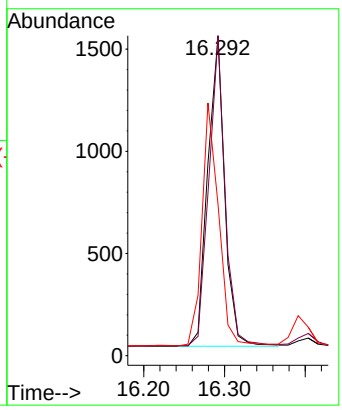


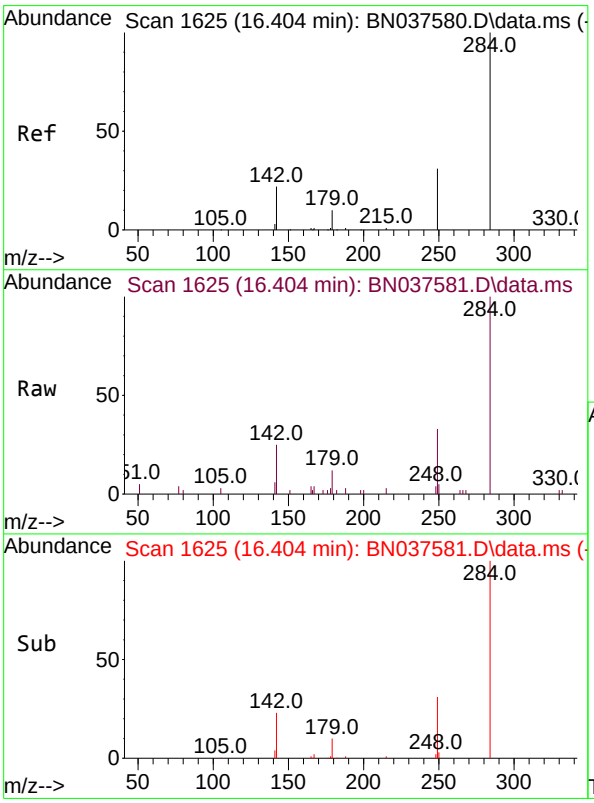
#21
4-Bromophenyl-phenylether
Concen: 0.754 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:248 Resp: 2217

Ion	Ratio	Lower	Upper
248	100		
250	100.1	78.6	118.0
141	47.3	43.7	65.5

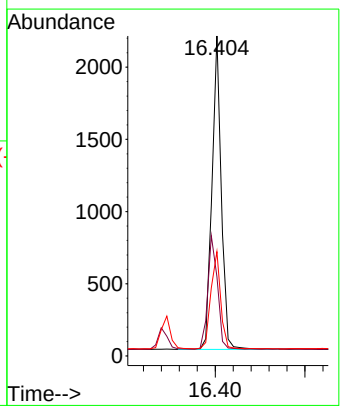


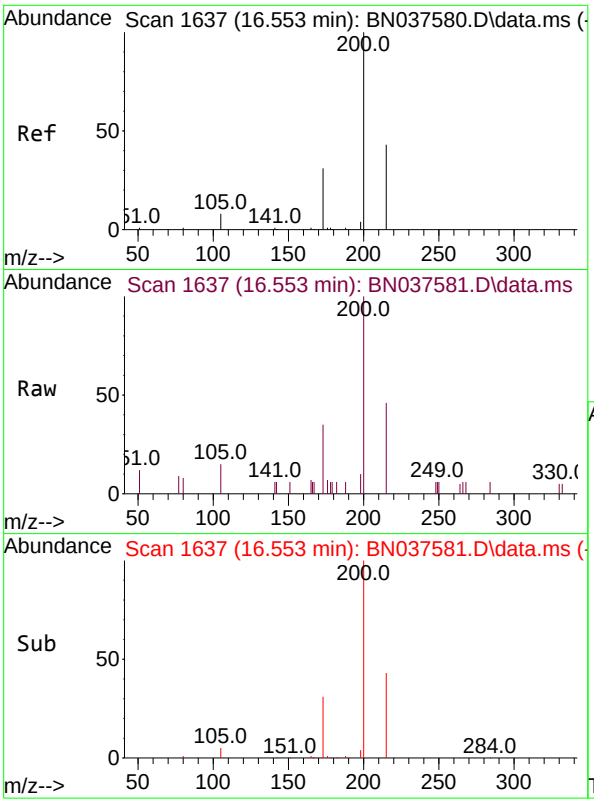


#22
Hexachlorobenzene
Concen: 0.745 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:284 Resp: 3105

Ion	Ratio	Lower	Upper
284	100		
142	37.6	29.8	44.6
249	32.9	26.0	39.0



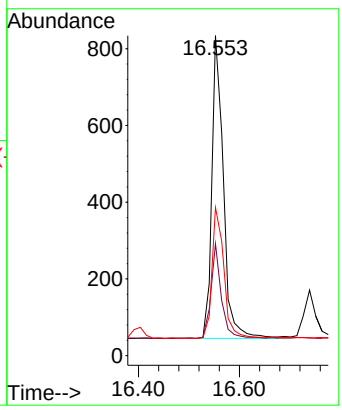


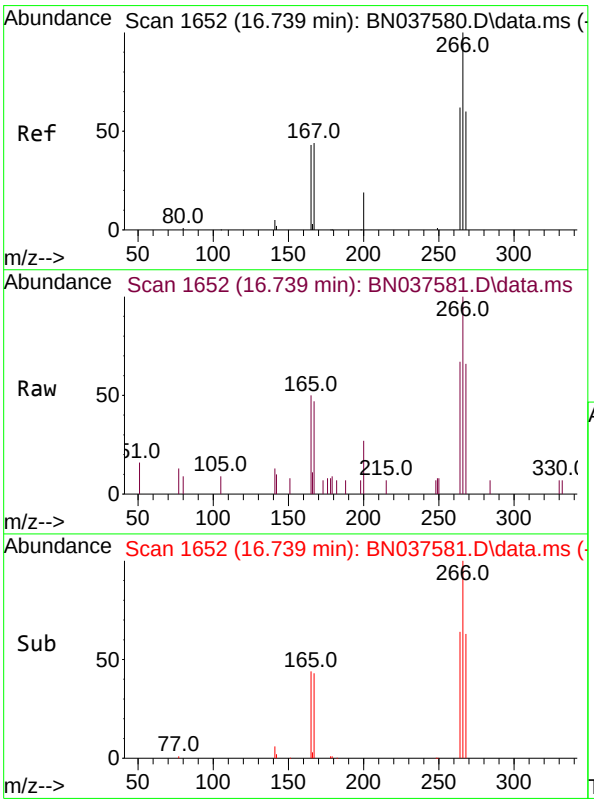
#23
Atrazine
Concen: 0.752 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:200 Resp: 1251

Ion	Ratio	Lower	Upper
200	100		
173	35.0	31.0	46.4
215	46.3	39.4	59.0

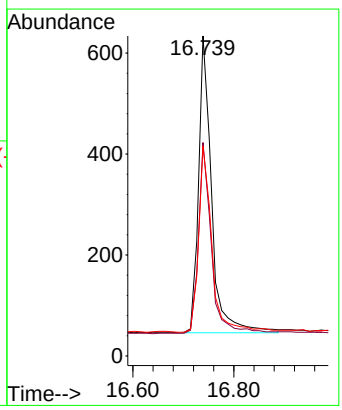


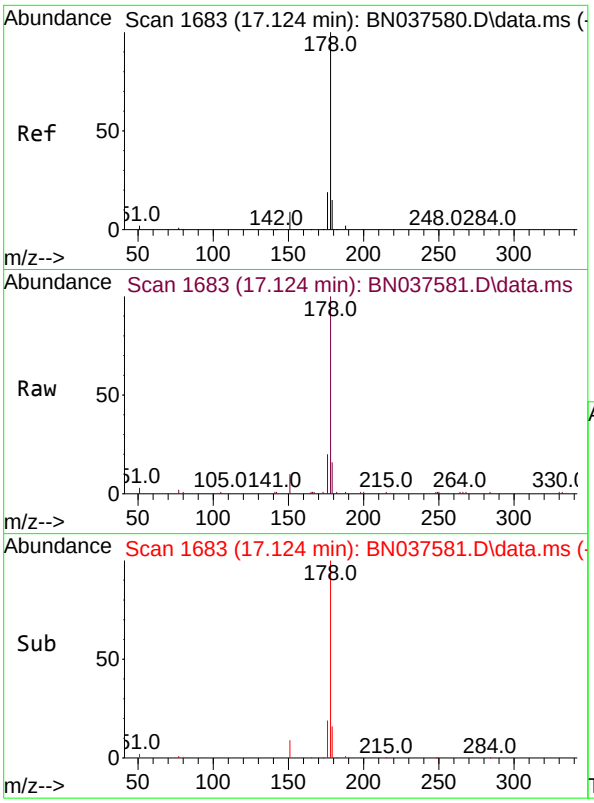


#24
Pentachlorophenol
Concen: 0.725 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:266 Resp: 1061

Ion	Ratio	Lower	Upper
266	100		
264	62.3	49.6	74.4
268	63.9	49.2	73.8



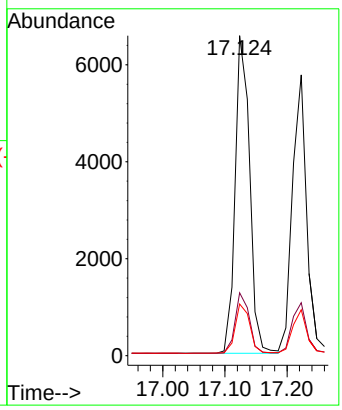


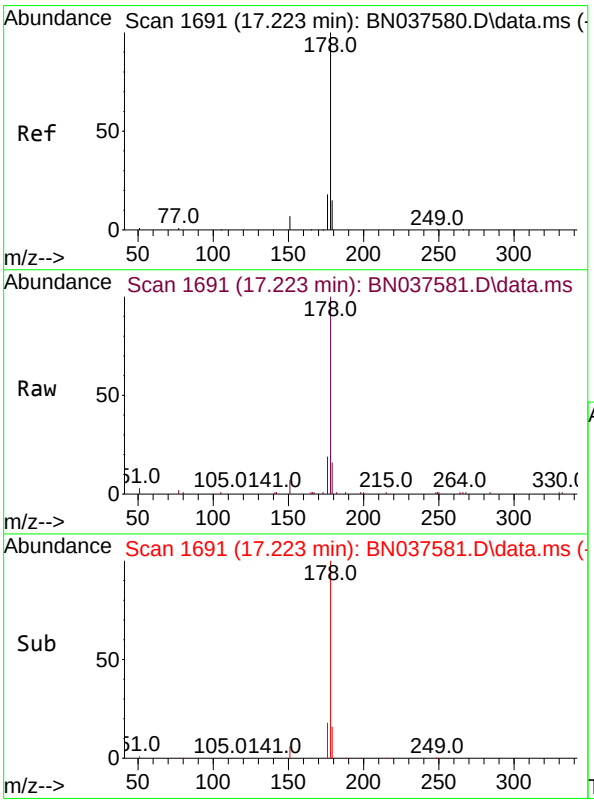
#25
Phenanthrene
Concen: 0.749 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:178 Resp: 10654

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.6
179	15.7	12.3	18.5

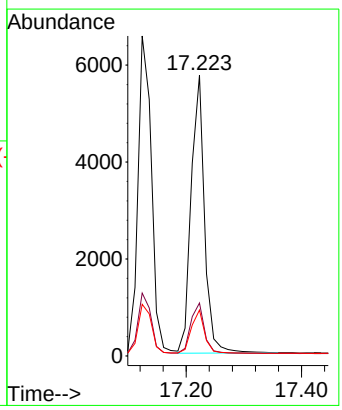


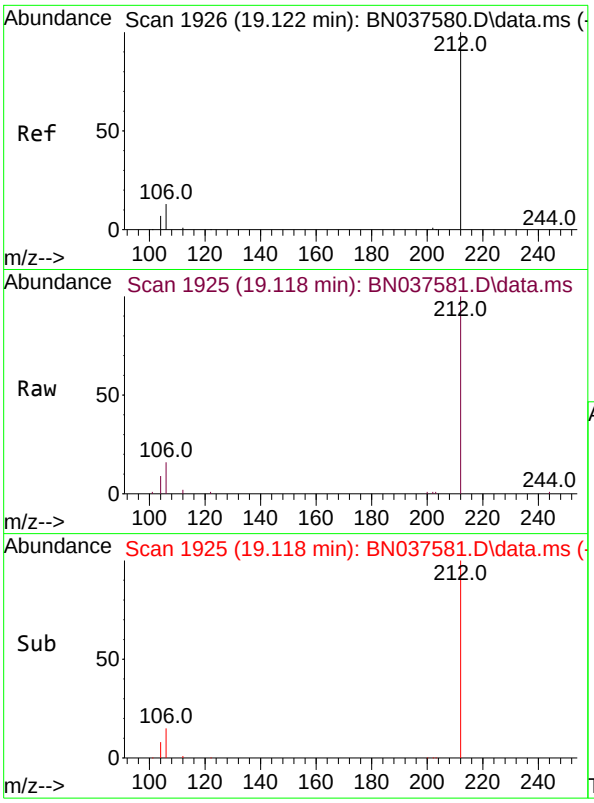


#26
Anthracene
Concen: 0.734 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:178 Resp: 9251

Ion	Ratio	Lower	Upper
178	100		
176	18.5	14.7	22.1
179	15.6	12.3	18.5



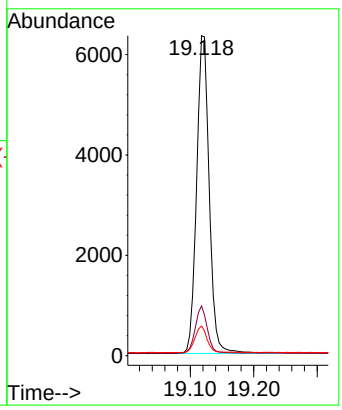


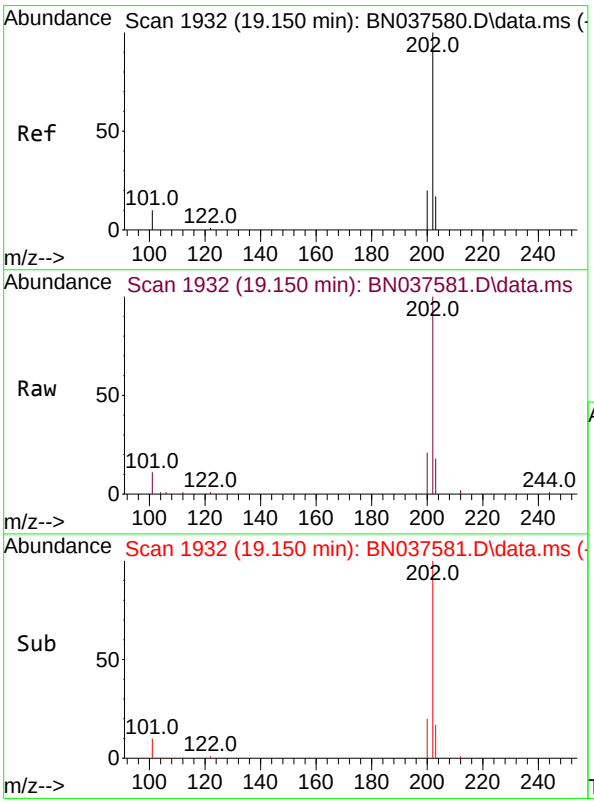
#27
Fluoranthene-d10
Concen: 0.711 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:212 Resp: 8750

Ion	Ratio	Lower	Upper
212	100		
106	14.1	11.5	17.3
104	8.2	6.6	9.8

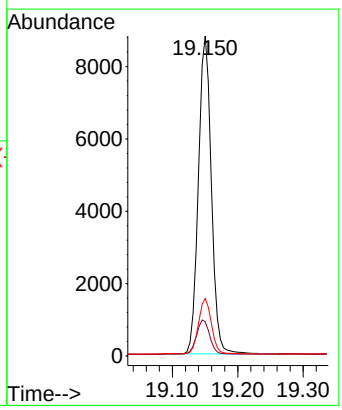


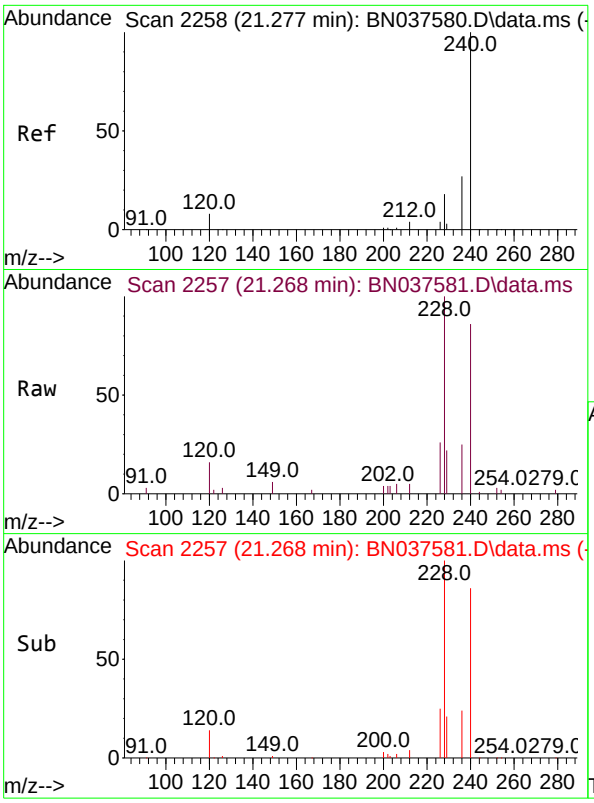


#28
Fluoranthene
Concen: 0.740 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:202 Resp: 12088

Ion	Ratio	Lower	Upper
202	100		
101	11.3	9.0	13.6
203	17.4	13.8	20.8



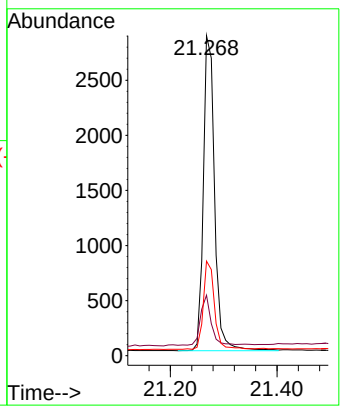


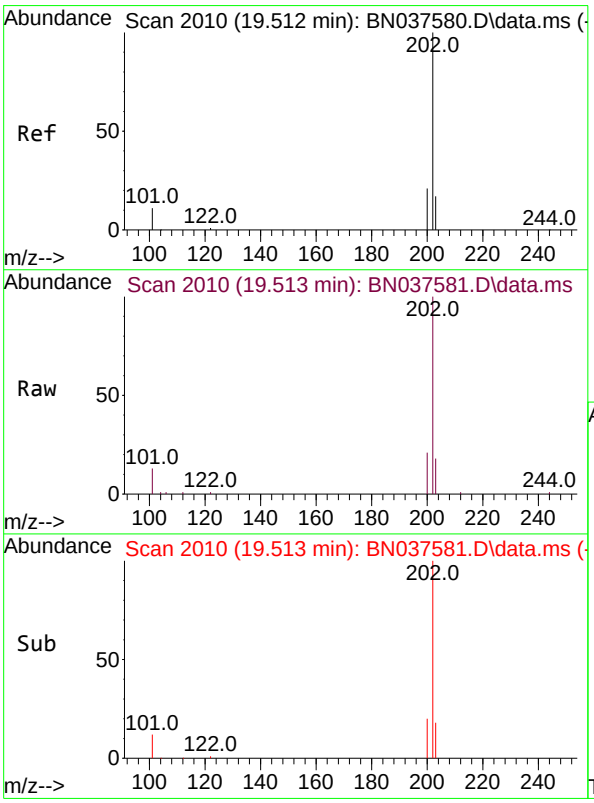
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:240 Resp: 4185

Ion	Ratio	Lower	Upper
240	100		
120	18.9	8.9	13.3#
236	29.5	22.6	33.8

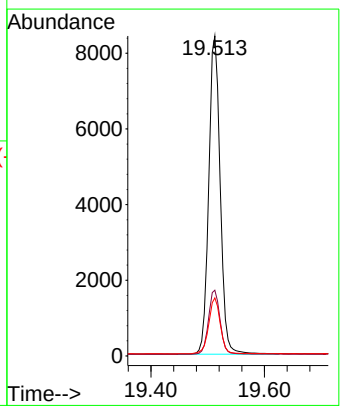


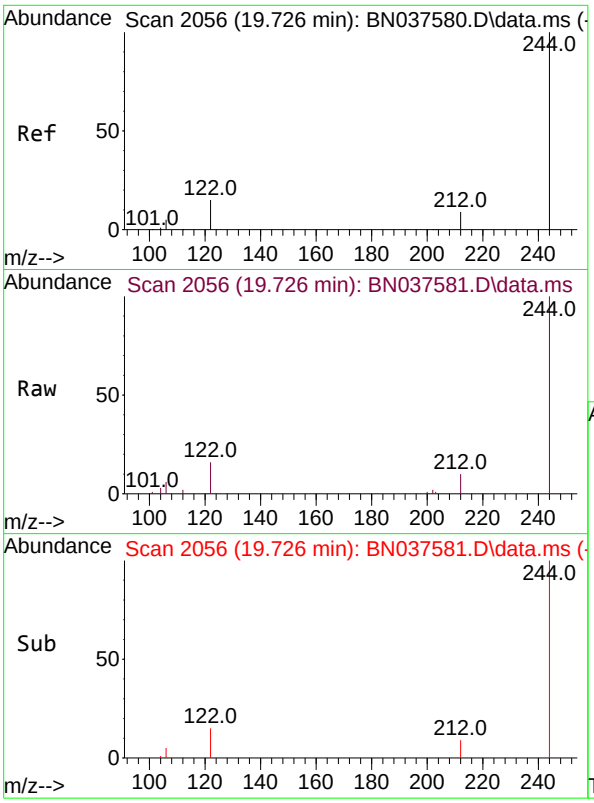


#30
Pyrene
Concen: 0.751 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:202 Resp: 11747

Ion	Ratio	Lower	Upper
202	100		
200	20.5	16.6	25.0
203	17.9	14.3	21.5



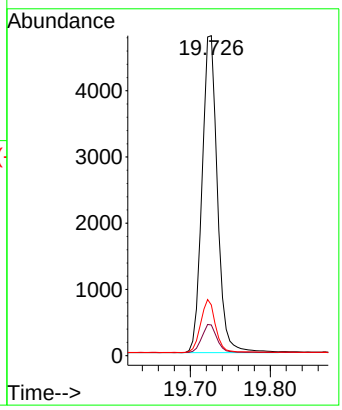


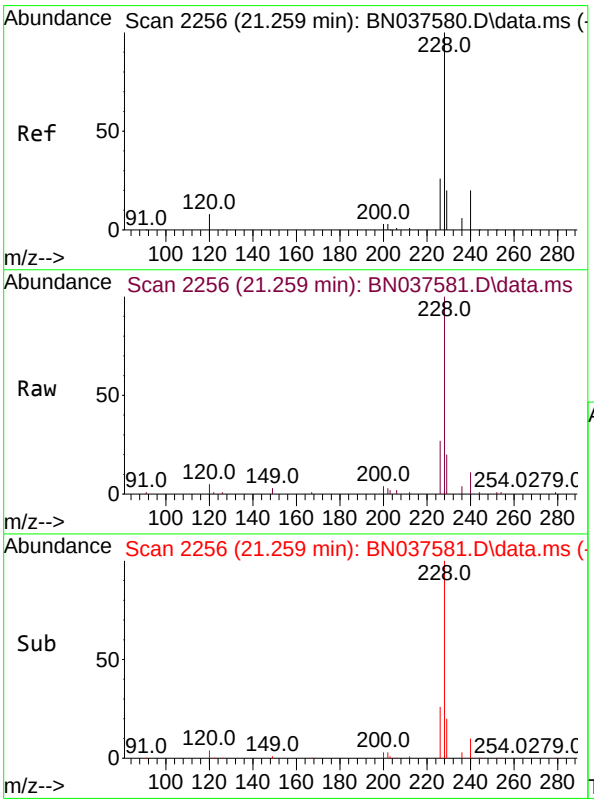
#31
Terphenyl-d14
Concen: 0.741 ng
RT: 19.726 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:244 Resp: 6383

Ion	Ratio	Lower	Upper
244	100		
212	9.6	8.2	12.2
122	15.9	13.2	19.8

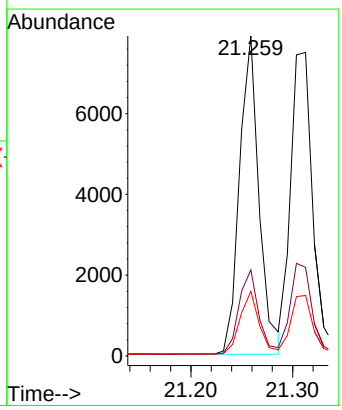


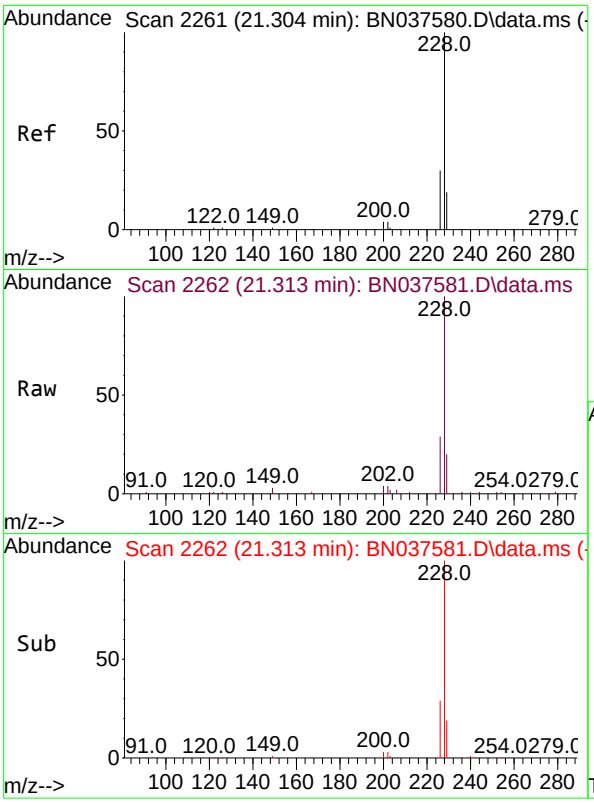


#32
Benzo(a)anthracene
Concen: 0.750 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:228 Resp: 10489

Ion	Ratio	Lower	Upper
228	100		
226	26.9	21.5	32.3
229	20.1	16.5	24.7



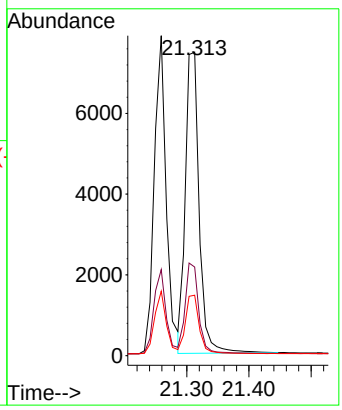


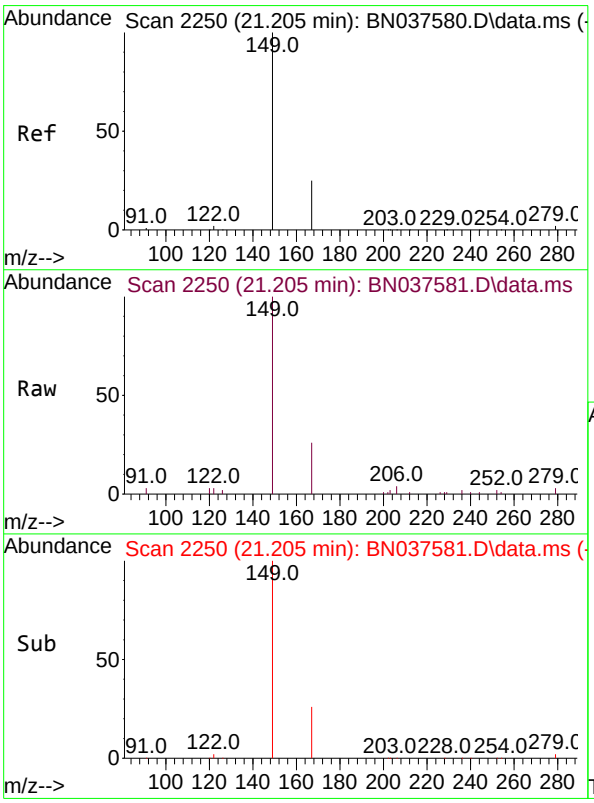
#33
Chrysene
Concen: 0.741 ng
RT: 21.313 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:228 Resp: 11541

Ion	Ratio	Lower	Upper
228	100		
226	29.2	24.9	37.3
229	19.9	15.8	23.8

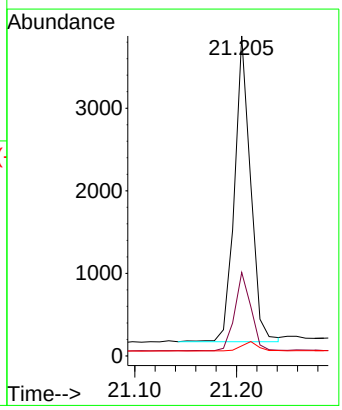


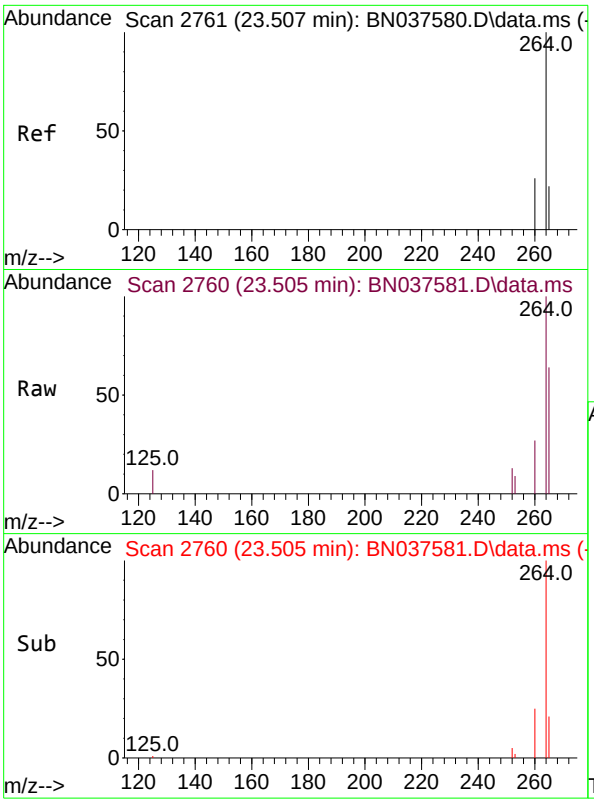


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.701 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:149 Resp: 4046

Ion	Ratio	Lower	Upper
149	100		
167	25.8	20.5	30.7
279	3.2	2.6	4.0



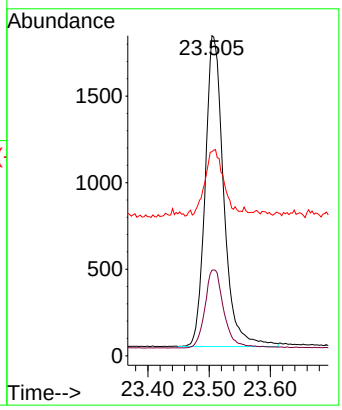


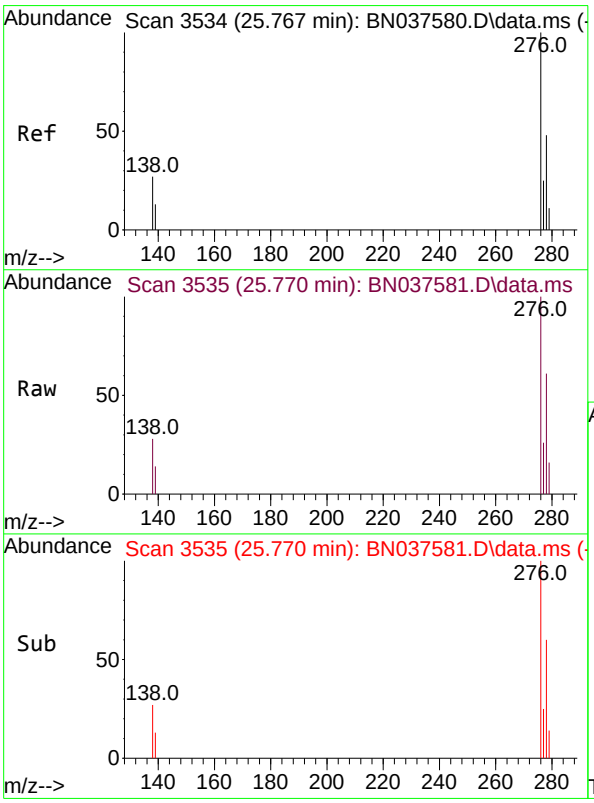
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.505 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:264 Resp: 3775

Ion	Ratio	Lower	Upper
264	100		
260	26.7	21.6	32.4
265	63.8	48.2	72.4

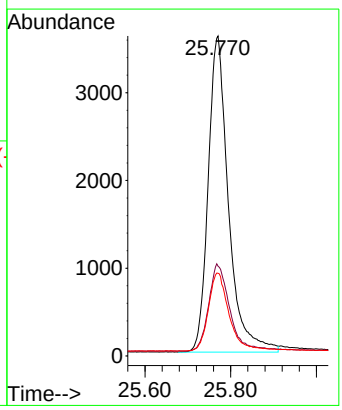


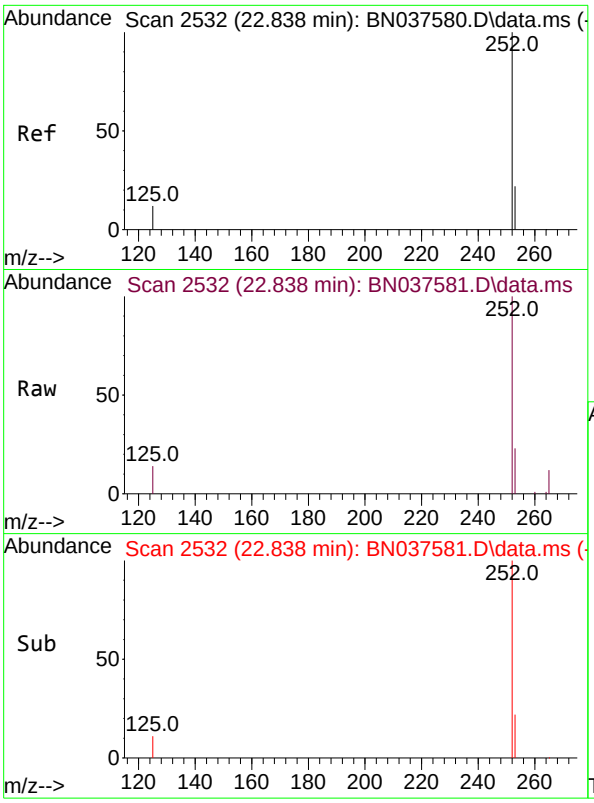


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.744 ng
RT: 25.770 min Scan# 3535
Delta R.T. 0.003 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:276 Resp: 11835

Ion	Ratio	Lower	Upper
276	100		
138	28.4	23.3	34.9
277	25.4	19.5	29.3



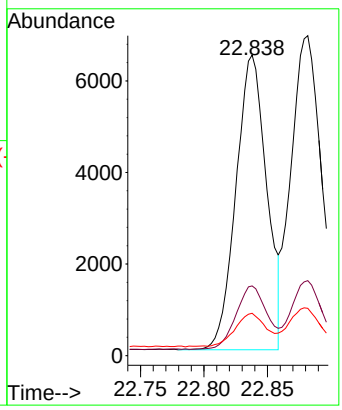


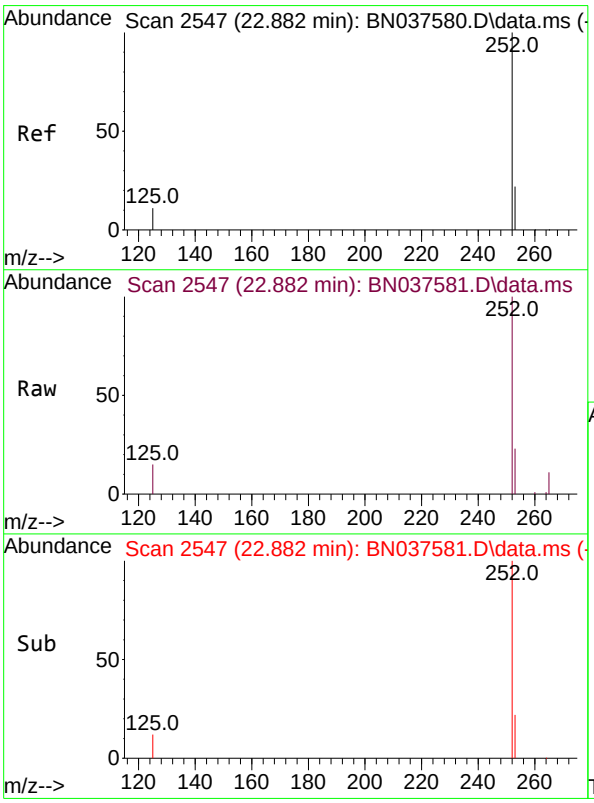
#37
Benzo(b)fluoranthene
Concen: 0.756 ng
RT: 22.838 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 10811

Ion	Ratio	Lower	Upper
252	100		
253	23.2	20.0	30.0
125	14.1	13.8	20.6

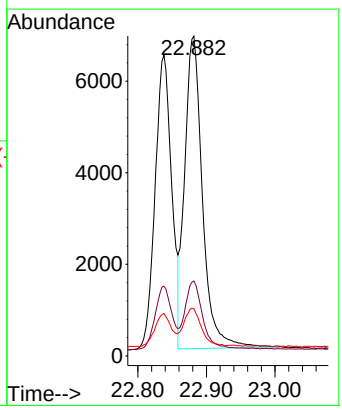


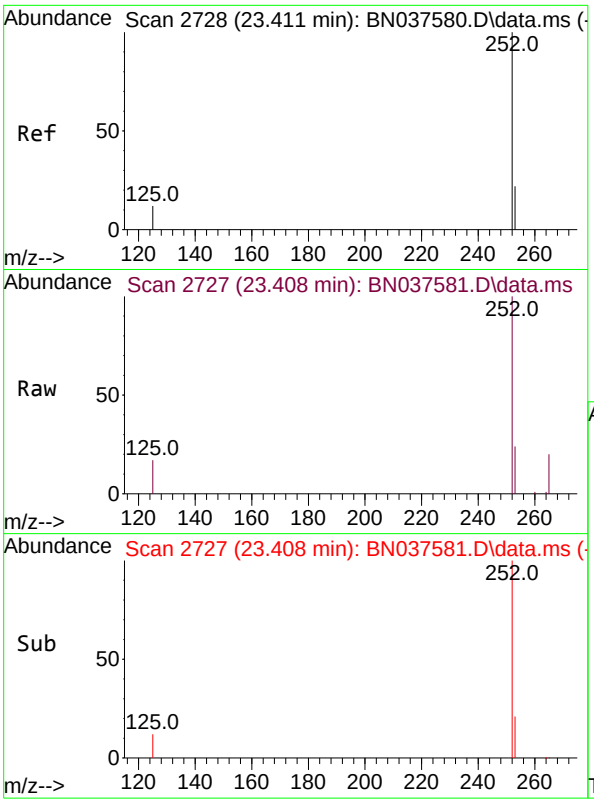


#38
Benzo(k)fluoranthene
Concen: 0.761 ng
RT: 22.882 min Scan# 2547
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:252 Resp: 12288

Ion	Ratio	Lower	Upper
252	100		
253	23.4	19.9	29.9
125	14.8	15.0	22.6#



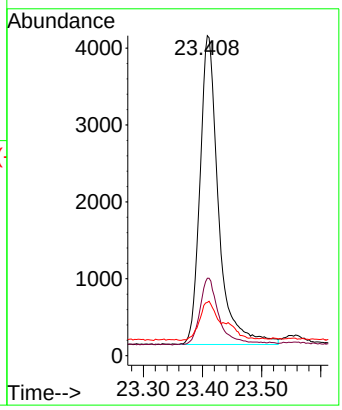


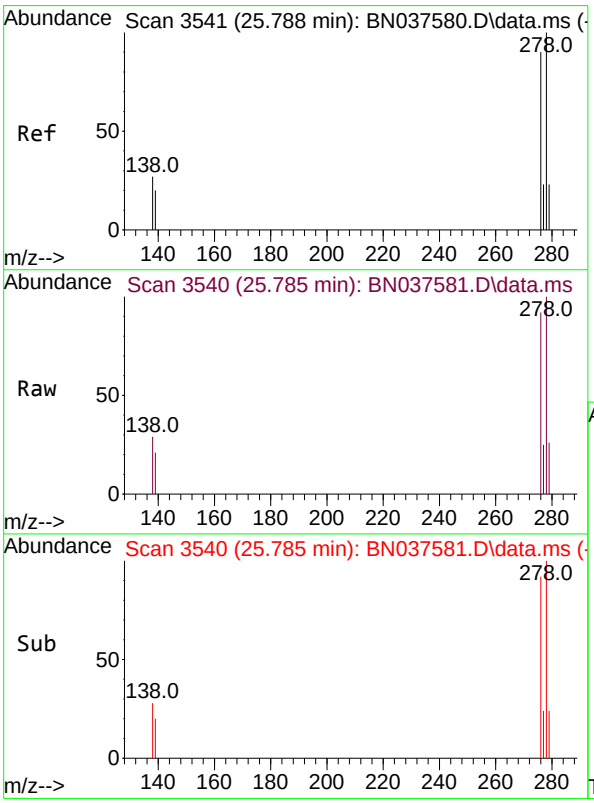
#39
Benzo(a)pyrene
Concen: 0.736 ng
RT: 23.408 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:252 Resp: 8737

Ion	Ratio	Lower	Upper
252	100		
253	24.2	21.6	32.4
125	16.7	16.8	25.2#

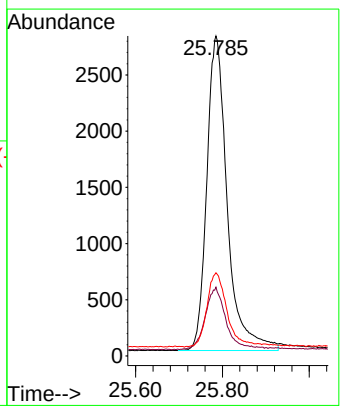


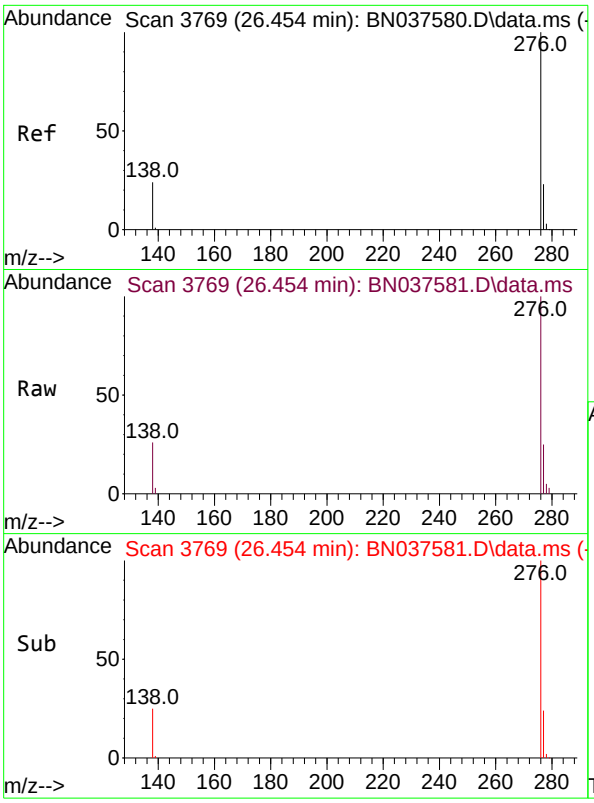


#40
Dibenzo(a,h)anthracene
Concen: 0.743 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.003 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Tgt Ion:278 Resp: 9175

Ion	Ratio	Lower	Upper
278	100		
139	21.5	18.3	27.5
279	26.0	22.5	33.7



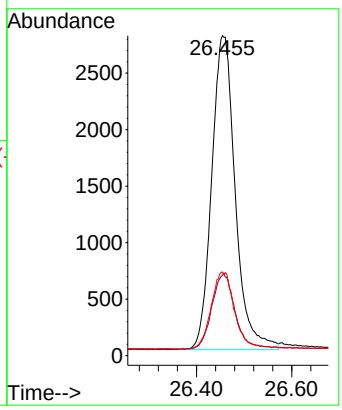


#41
Benzo(g,h,i)perylene
Concen: 0.732 ng
RT: 26.454 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037581.D
Acq: 12 Aug 2025 18:16

Instrument :
BNA_N
ClientSampleId :
SSTDICC0.8

Tgt Ion:276 Resp: 9524

Ion	Ratio	Lower	Upper
276	100		
277	25.2	21.0	31.4
138	26.2	21.7	32.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037582.D
Acq On : 12 Aug 2025 18:52
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Aug 13 04:49:09 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	1999	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	4868	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2499	0.400	ng		0.00
19) Phenanthrene-d10	17.086	188	4868	0.400	ng		0.00
29) Chrysene-d12	21.268	240	4728	0.400	ng	#	0.00
35) Perylene-d12	23.505	264	4054	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	7088	1.564	ng		0.00
5) Phenol-d6	6.879	99	9580	1.757	ng		0.00
8) Nitrobenzene-d5	8.854	82	5686	1.658	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	10567	1.597	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	1852	1.693	ng		0.00
15) 2-Fluorobiphenyl	12.973	172	23403	1.619	ng		0.00
27) Fluoranthene-d10	19.118	212	20450	1.597	ng		0.00
31) Terphenyl-d14	19.722	244	15761	1.620	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	3171	1.658	ng		97
3) n-Nitrosodimethylamine	3.535	42	3942	1.613	ng		97
6) bis(2-Chloroethyl)ether	7.139	93	8159	1.660	ng		98
9) Naphthalene	10.552	128	21204	1.636	ng		98
10) Hexachlorobutadiene	10.851	225	5193	1.640	ng	#	100
12) 2-Methylnaphthalene	12.167	142	13647	1.679	ng		99
16) Acenaphthylene	14.067	152	18492	1.651	ng		100
17) Acenaphthene	14.409	154	12820	1.682	ng		96
18) Fluorene	15.393	166	16858	1.691	ng		100
20) 4,6-Dinitro-2-methylph...	15.467	198	1182	1.517	ng	#	56
21) 4-Bromophenyl-phenylether	16.292	248	5158	1.686	ng		94
22) Hexachlorobenzene	16.404	284	7080	1.633	ng		100
23) Atrazine	16.553	200	3118	1.803	ng		93
24) Pentachlorophenol	16.739	266	2704	1.775	ng		99
25) Phenanthrene	17.124	178	24938	1.685	ng		100
26) Anthracene	17.223	178	22287	1.701	ng		100
28) Fluoranthene	19.150	202	29263	1.721	ng		100
30) Pyrene	19.513	202	28406	1.607	ng		99
32) Benzo(a)anthracene	21.259	228	25547	1.618	ng		99
33) Chrysene	21.304	228	28577	1.624	ng		99
34) Bis(2-ethylhexyl)phtha...	21.205	149	9868	1.514	ng		99
36) Indeno(1,2,3-cd)pyrene	25.768	276	29448	1.724	ng		99
37) Benzo(b)fluoranthene	22.835	252	26189	1.705	ng	#	92
38) Benzo(k)fluoranthene	22.879	252	29528	1.703	ng	#	91
39) Benzo(a)pyrene	23.408	252	21441	1.683	ng	#	89
40) Dibenzo(a,h)anthracene	25.779	278	23334	1.761	ng		93
41) Benzo(g,h,i)perylene	26.455	276	23781	1.703	ng		96

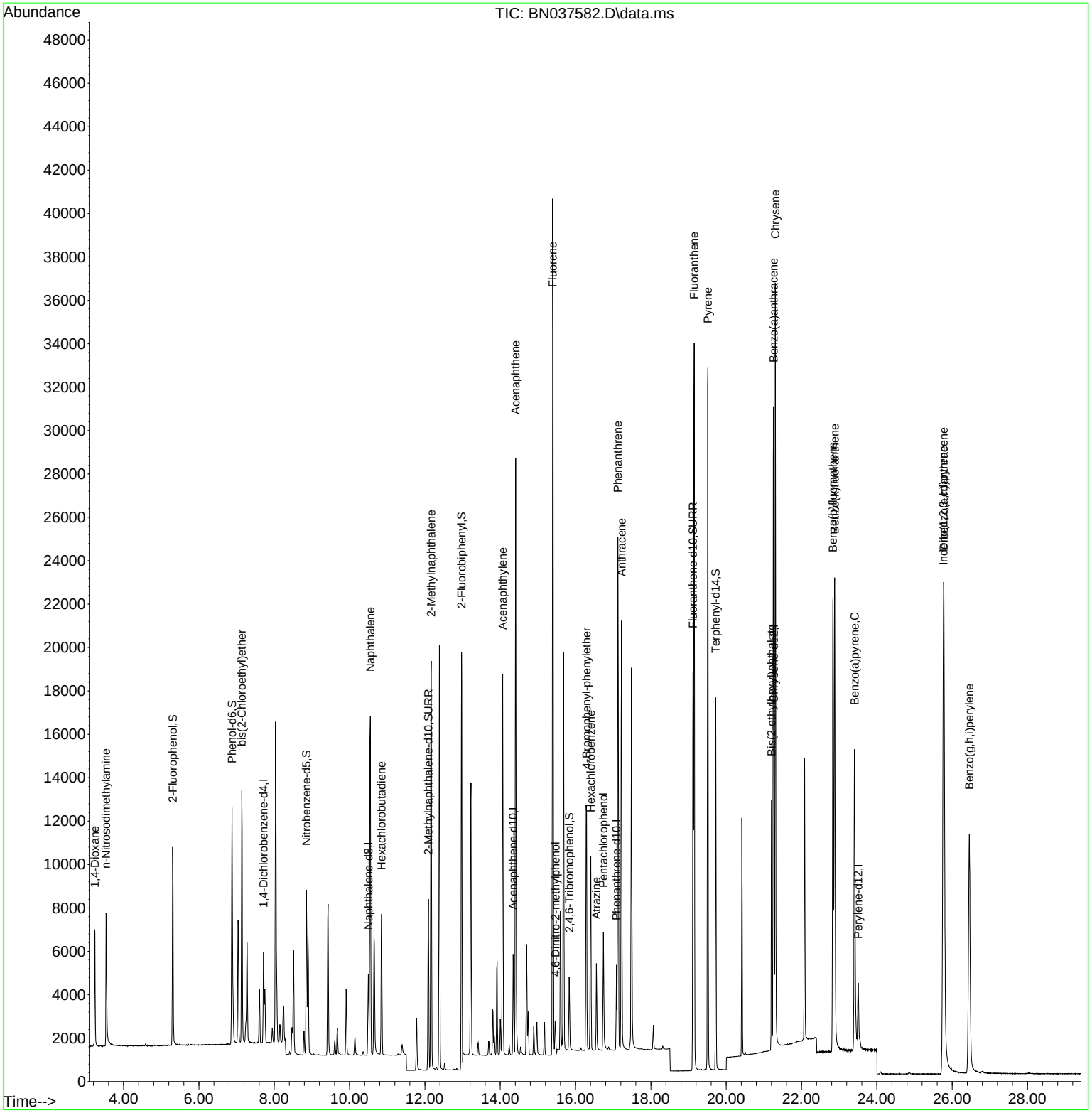
(#) = qualifier out of range (m) = manual integration (+) = signals summed

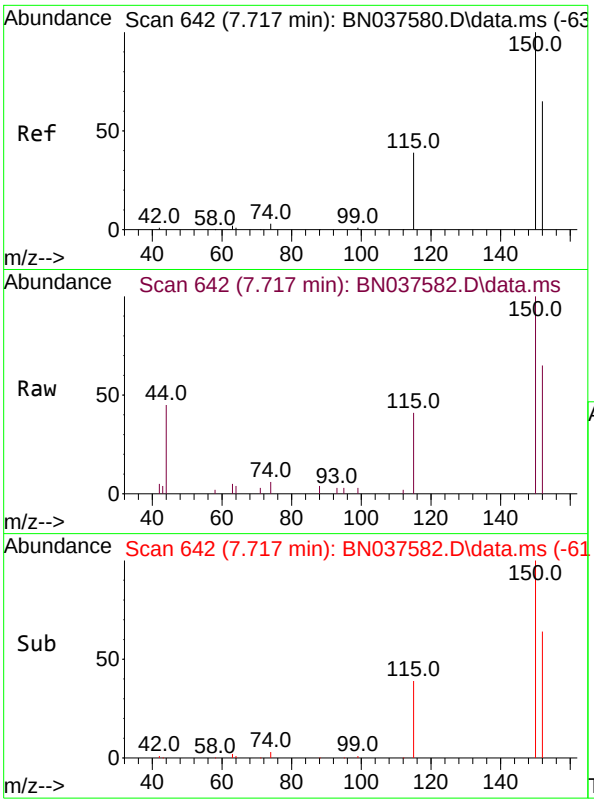
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037582.D
Acq On : 12 Aug 2025 18:52
Operator : RC/JU
Sample : SSTDICC1.6
Misc :
ALS Vial : 7 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Quant Time: Aug 13 04:49:09 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



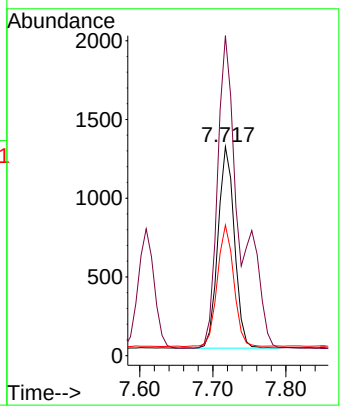


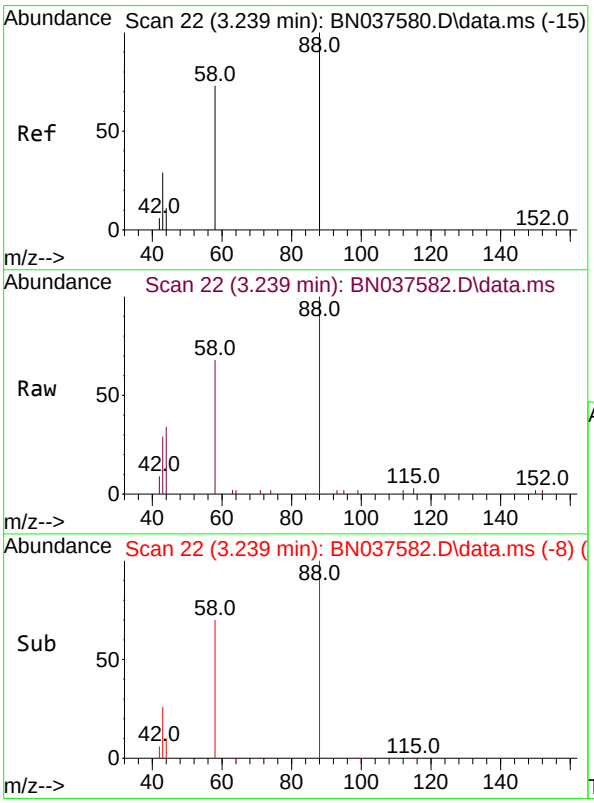
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 1999

Ion	Ratio	Lower	Upper
152	100		
150	153.1	122.2	183.4
115	62.5	49.8	74.6

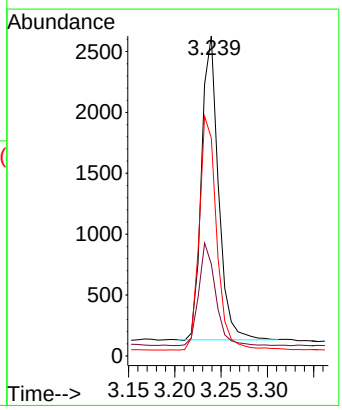


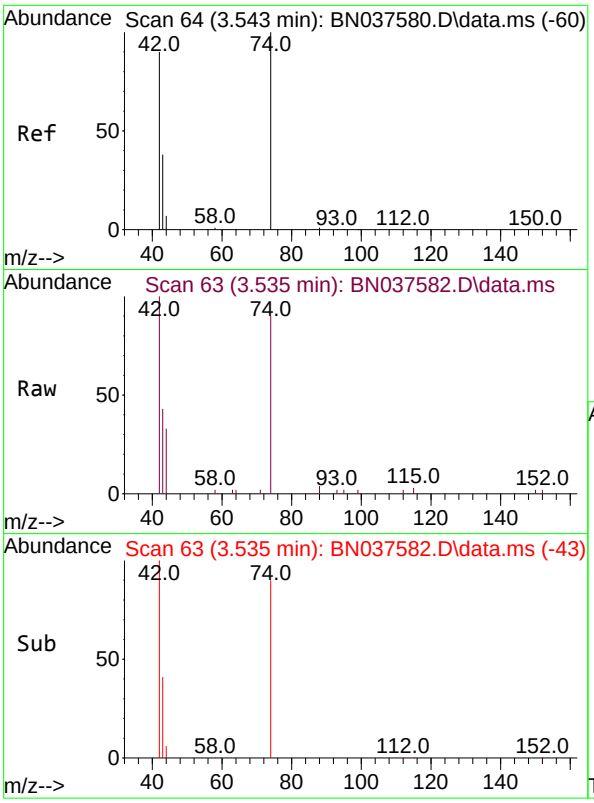


#2
1,4-Dioxane
Concen: 1.658 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion: 88 Resp: 3171

Ion	Ratio	Lower	Upper
88	100		
43	33.6	25.8	38.6
58	79.6	61.2	91.8



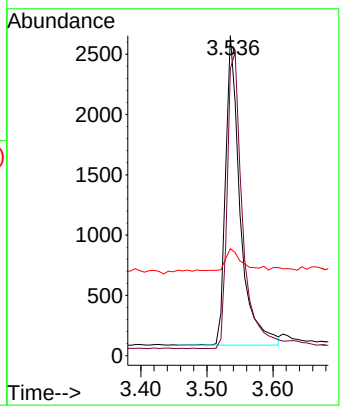


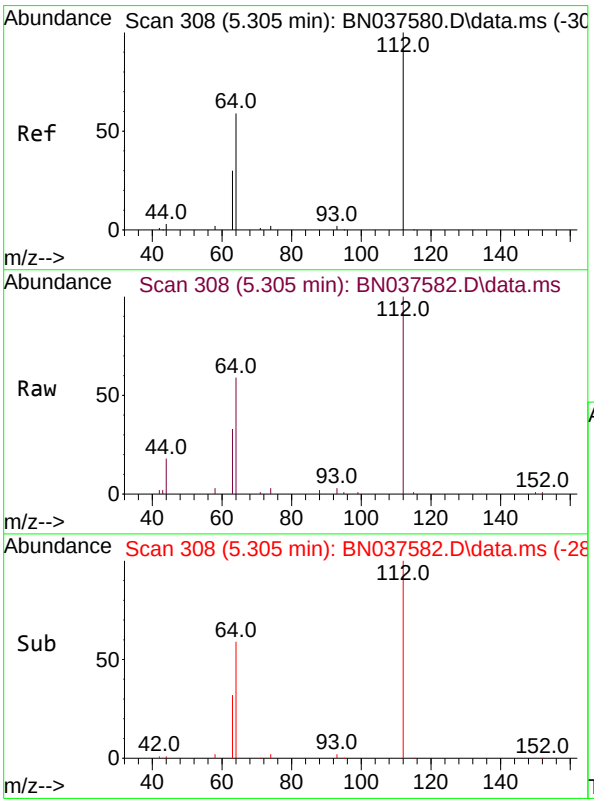
#3
n-Nitrosodimethylamine
Concen: 1.613 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 42 Resp: 3942

Ion	Ratio	Lower	Upper
42	100		
74	105.0	82.0	123.0
44	8.0	7.9	11.9

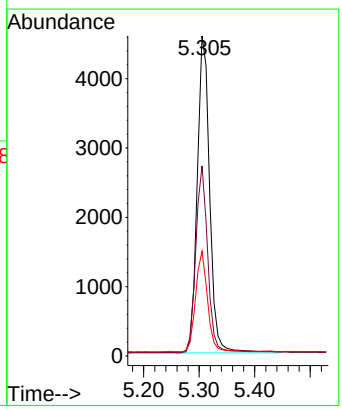


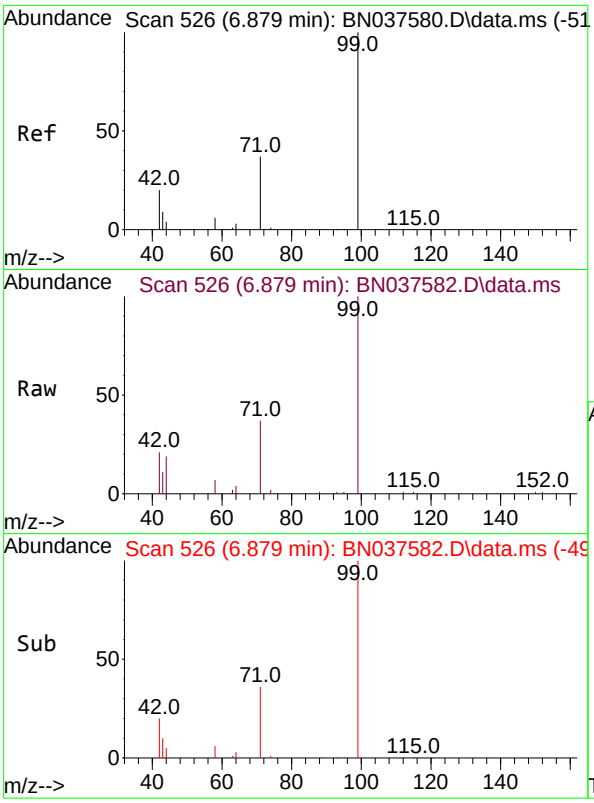


#4
2-Fluorophenol
Concen: 1.564 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:112 Resp: 7088

Ion	Ratio	Lower	Upper
112	100		
64	56.7	44.9	67.3
63	30.5	23.4	35.2



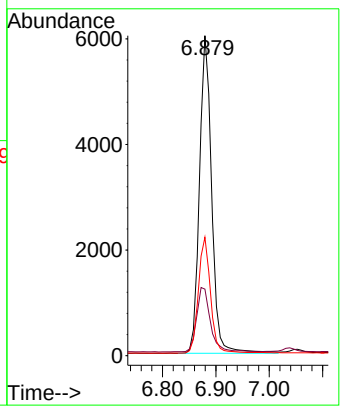


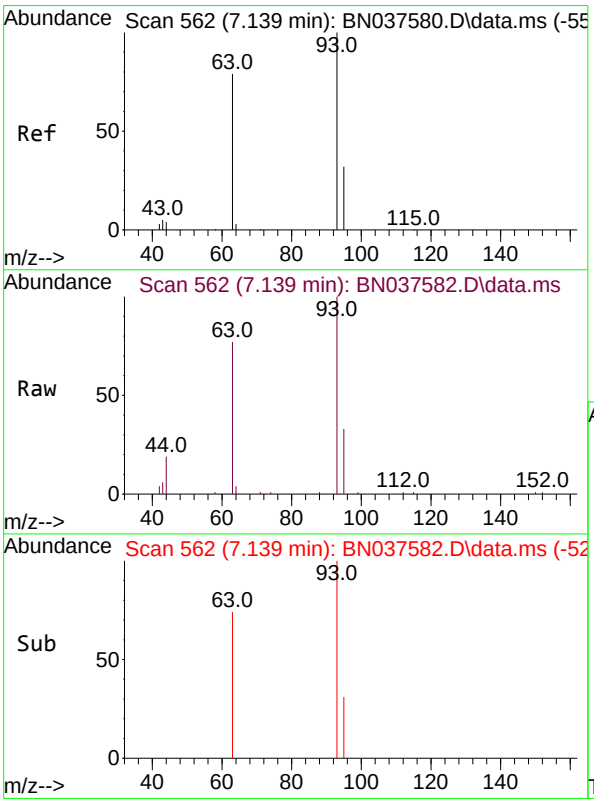
#5
Phenol-d6
Concen: 1.757 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion: 99 Resp: 9580

Ion	Ratio	Lower	Upper
99	100		
42	22.9	18.5	27.7
71	36.8	28.6	42.8

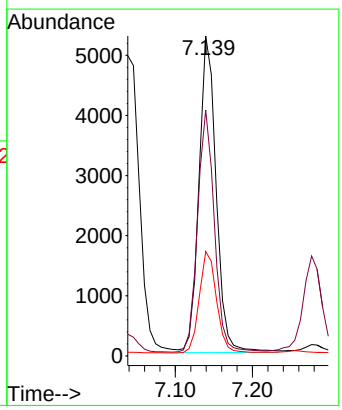


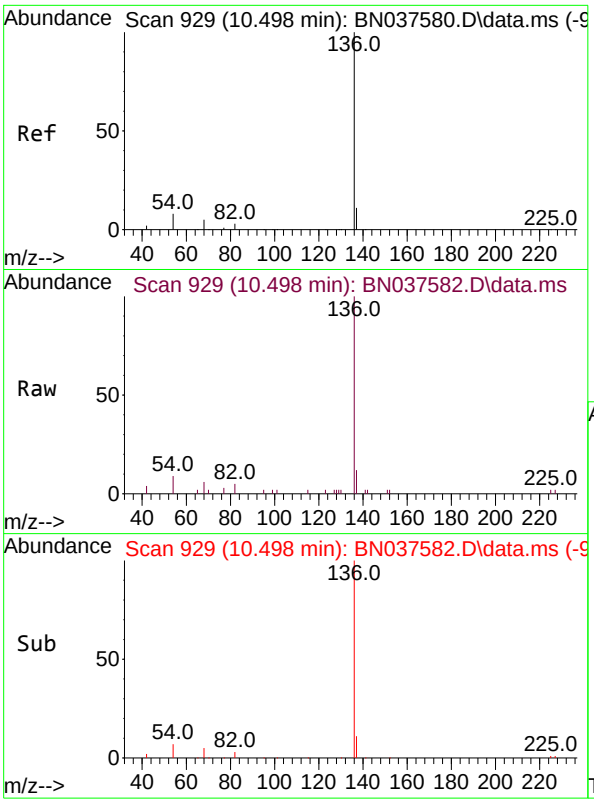


#6
bis(2-Chloroethyl)ether
Concen: 1.660 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion: 93 Resp: 8159

Ion	Ratio	Lower	Upper
93	100		
63	74.6	58.0	87.0
95	32.2	24.9	37.3



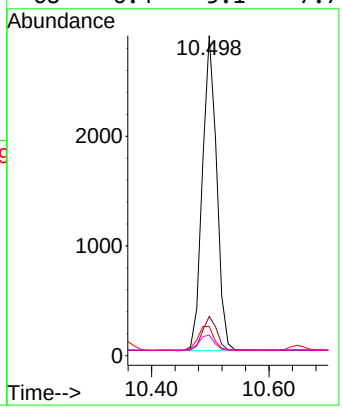


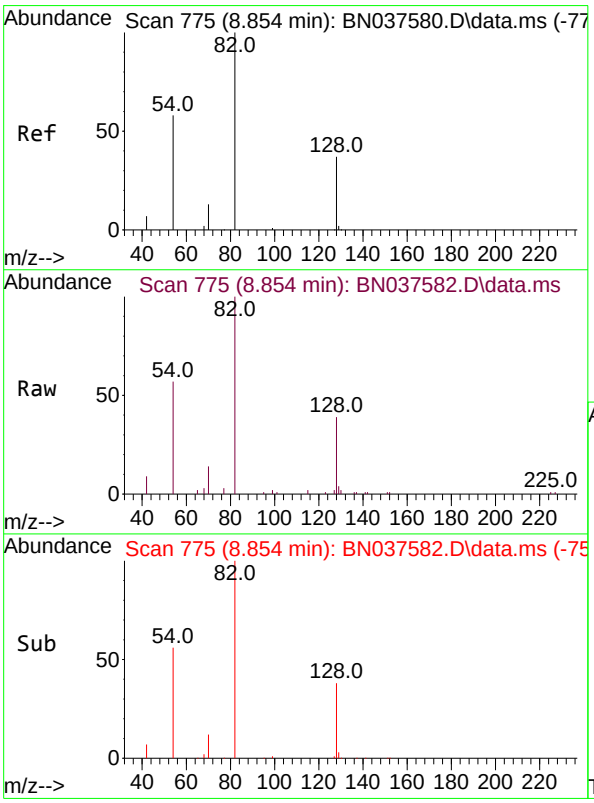
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:136 Resp: 4868

Ion	Ratio	Lower	Upper
136	100		
137	12.2	9.5	14.3
54	9.1	7.3	10.9
68	6.4	5.1	7.7

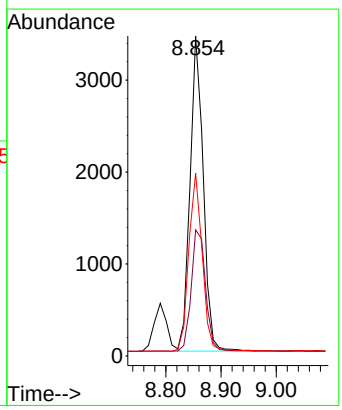


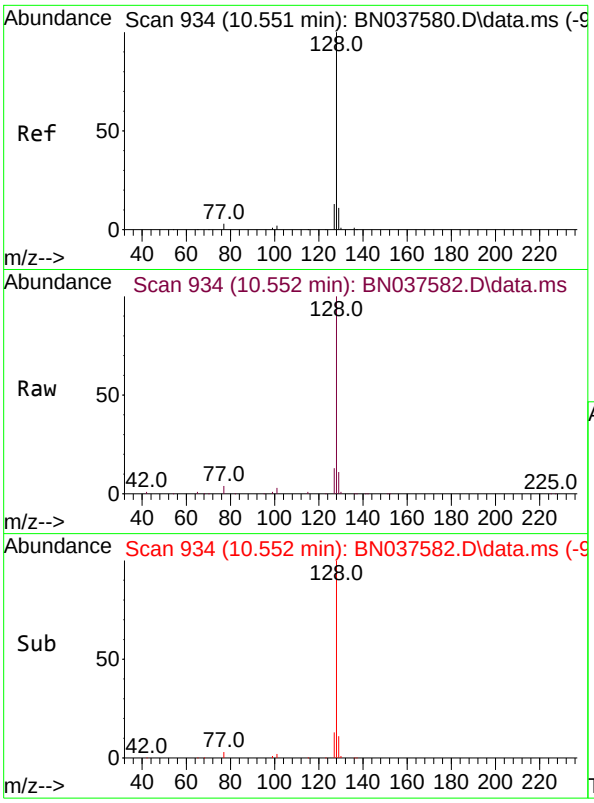


#8
Nitrobenzene-d5
Concen: 1.658 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion: 82 Resp: 5686

Ion	Ratio	Lower	Upper
82	100		
128	39.4	32.6	48.8
54	57.2	48.9	73.3



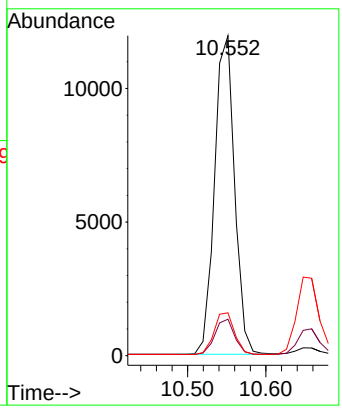


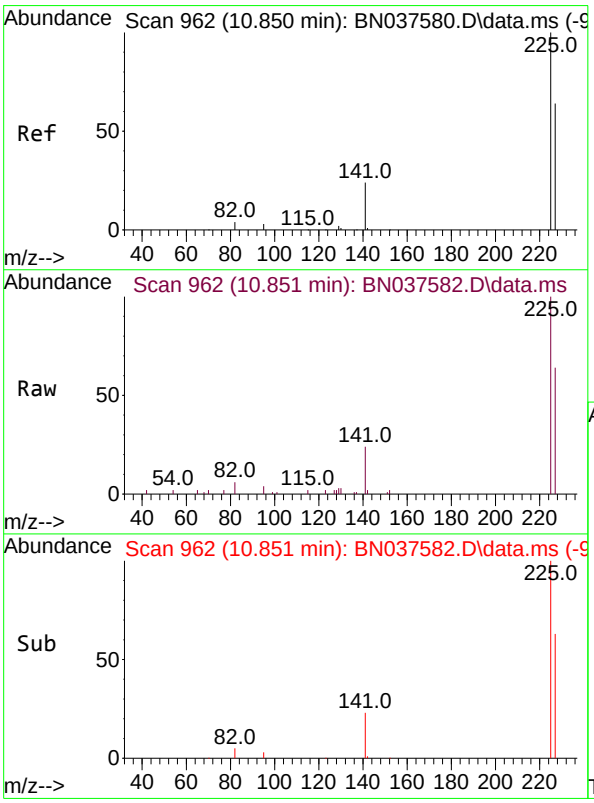
#9
Naphthalene
Concen: 1.636 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:128 Resp: 21204

Ion	Ratio	Lower	Upper
128	100		
129	11.4	9.8	14.6
127	13.4	11.5	17.3

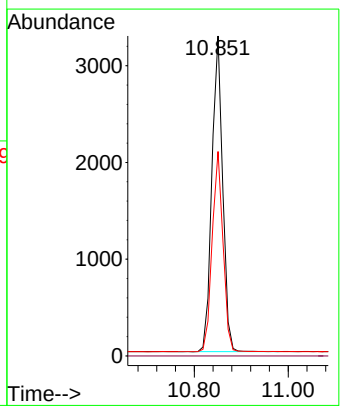


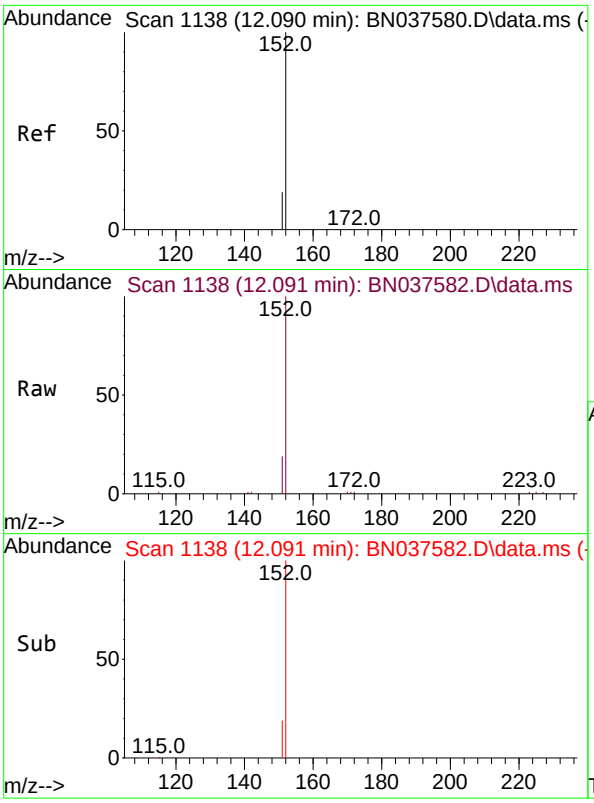


#10
Hexachlorobutadiene
Concen: 1.640 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:225 Resp: 5193

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.6	50.8	76.2



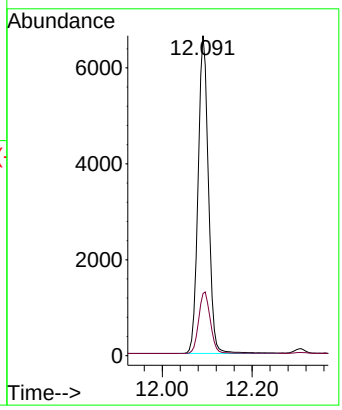


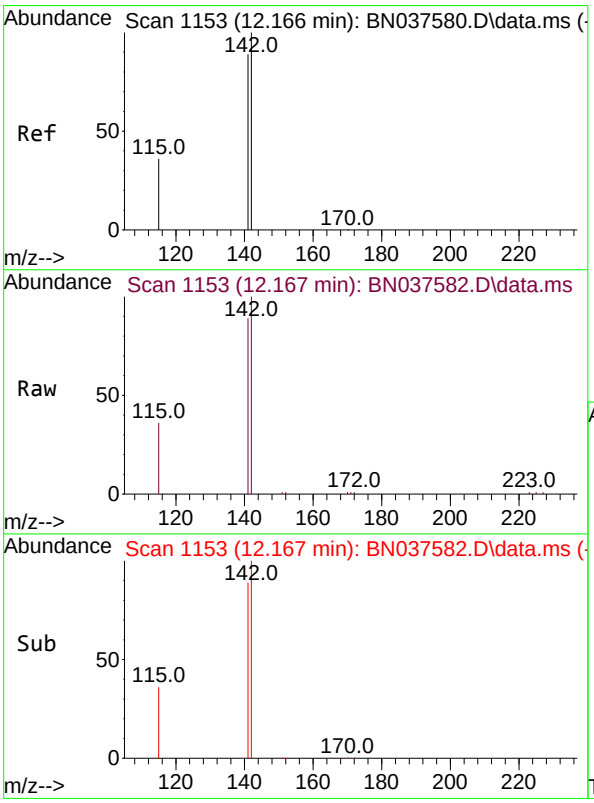
#11
2-Methylnaphthalene-d10
Concen: 1.597 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:152 Resp: 10567

Ion	Ratio	Lower	Upper
152	100		
151	21.8	17.3	25.9

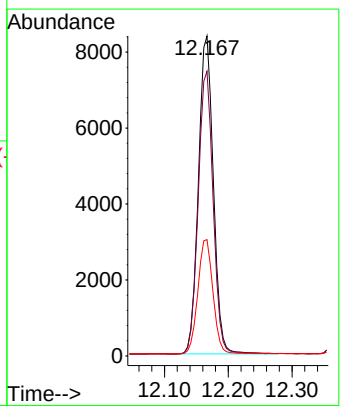


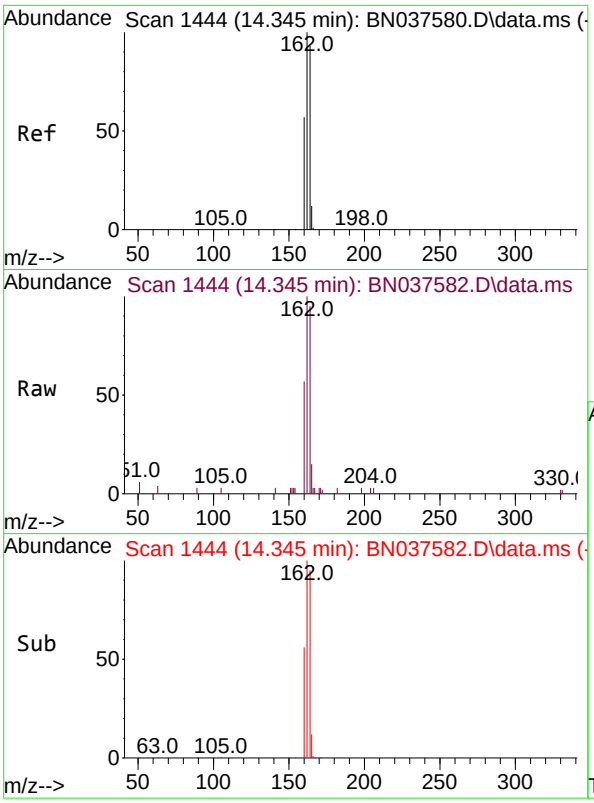


#12
2-Methylnaphthalene
Concen: 1.679 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:142 Resp: 13647

Ion	Ratio	Lower	Upper
142	100		
141	88.9	71.4	107.0
115	36.4	30.2	45.4



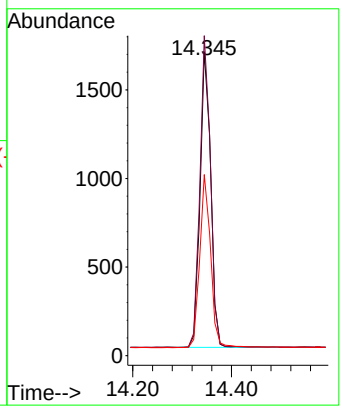


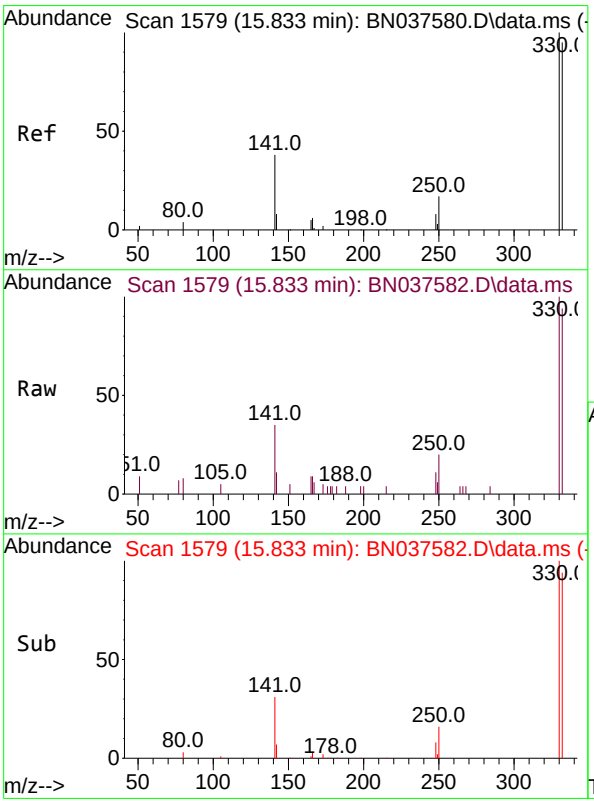
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:164 Resp: 2499

Ion	Ratio	Lower	Upper
164	100		
162	105.2	85.5	128.3
160	59.6	49.5	74.3

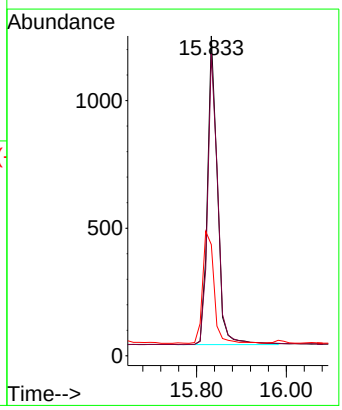


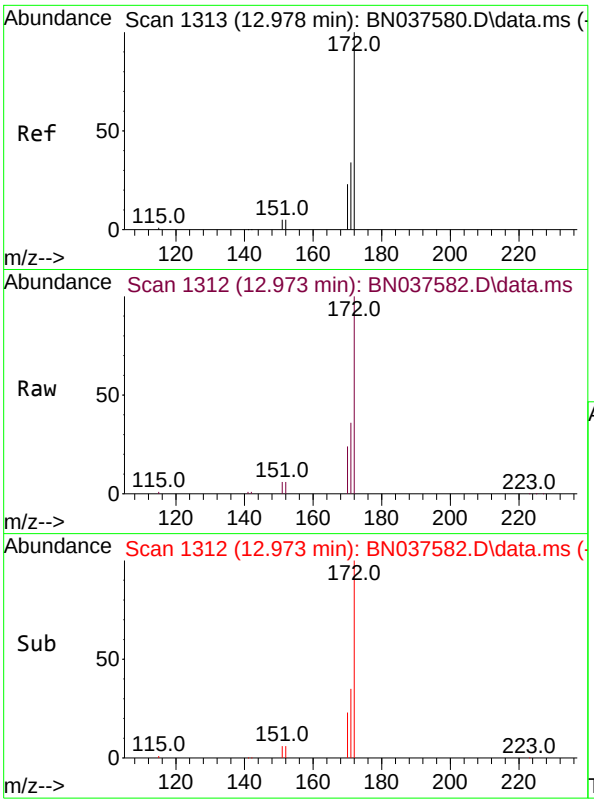


#14
2,4,6-Tribromophenol
Concen: 1.693 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:330 Resp: 1852

Ion	Ratio	Lower	Upper
330	100		
332	96.2	77.4	116.0
141	41.4	30.9	46.3



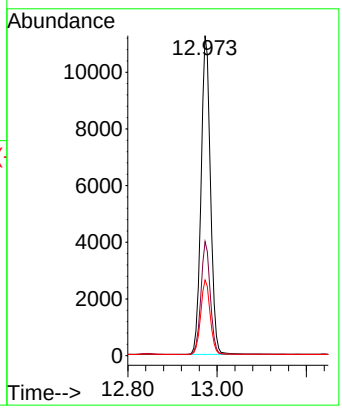


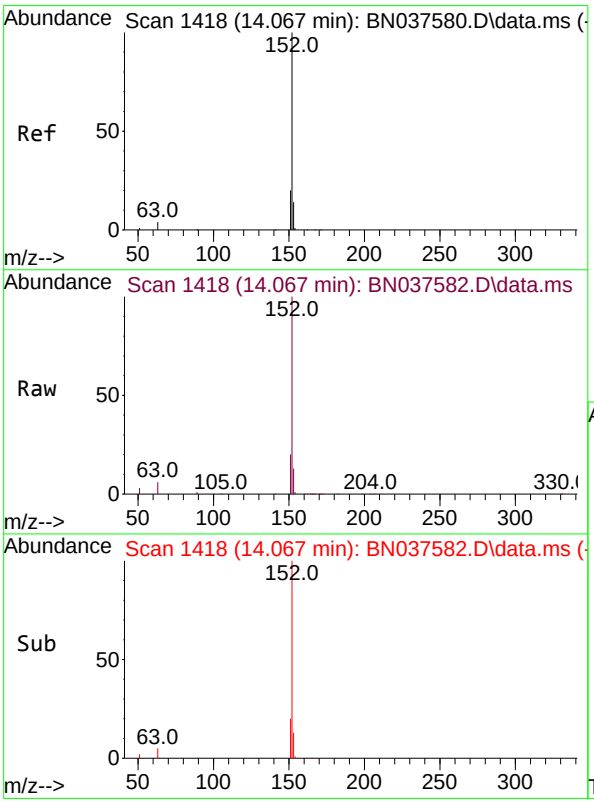
#15
2-Fluorobiphenyl
Concen: 1.619 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:172 Resp: 23403

Ion	Ratio	Lower	Upper
172	100		
171	35.7	28.2	42.4
170	23.7	19.2	28.8

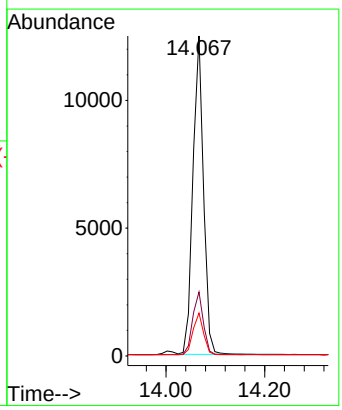


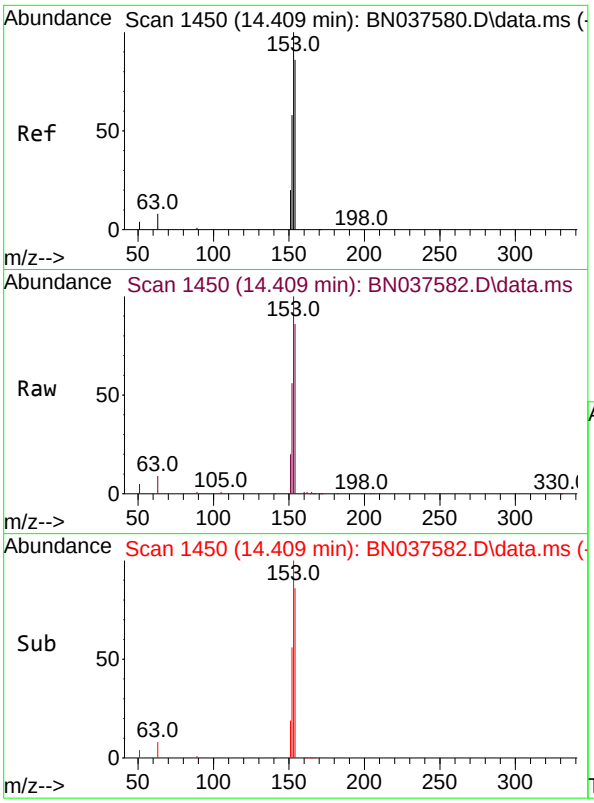


#16
Acenaphthylene
Concen: 1.651 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:152 Resp: 18492

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.1	24.1
153	13.0	10.7	16.1



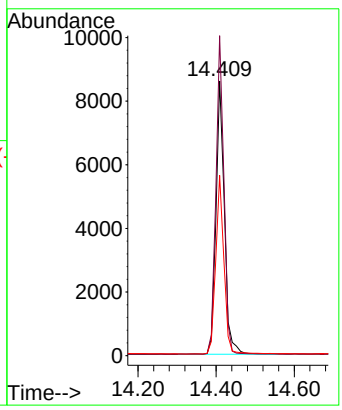


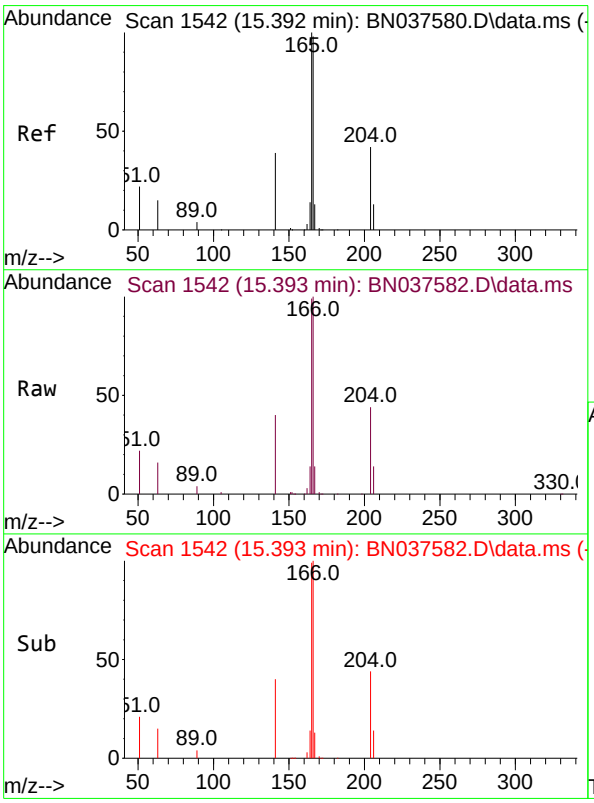
#17
Acenaphthene
Concen: 1.682 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:154 Resp: 12820

Ion	Ratio	Lower	Upper
154	100		
153	110.6	90.6	135.8
152	63.8	54.9	82.3

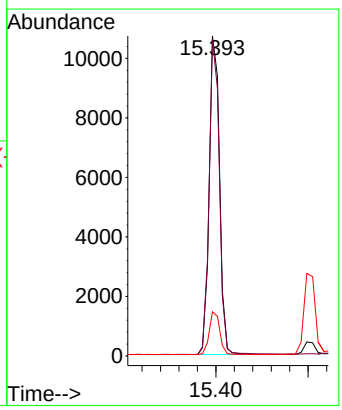


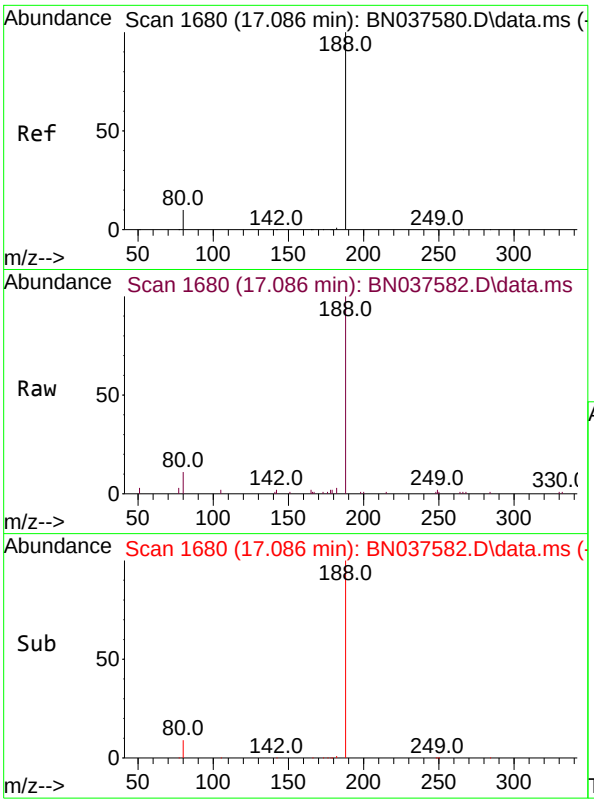


#18
Fluorene
Concen: 1.691 ng
RT: 15.393 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:166 Resp: 16858

Ion	Ratio	Lower	Upper
166	100		
165	99.0	78.9	118.3
167	13.4	10.7	16.1



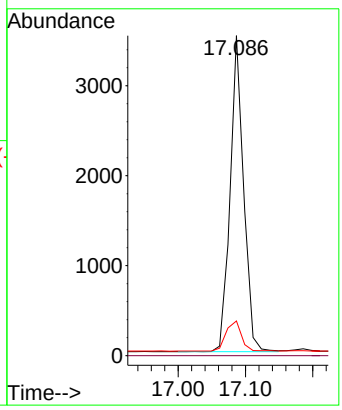


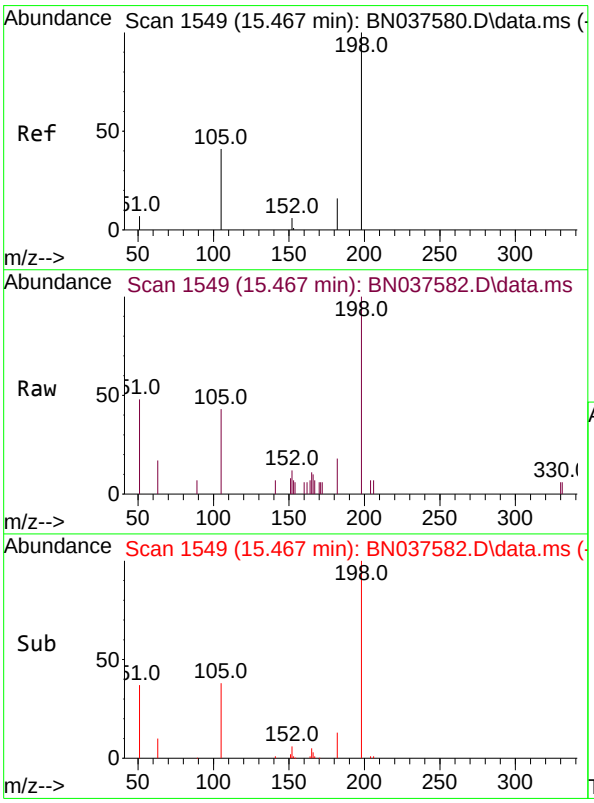
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:188 Resp: 4868

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.9	9.1	13.7

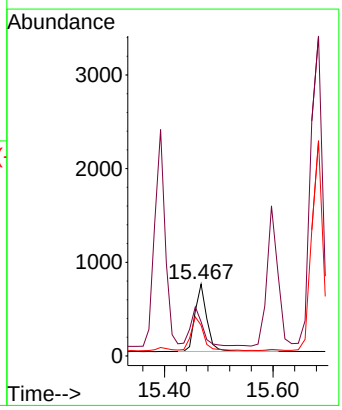


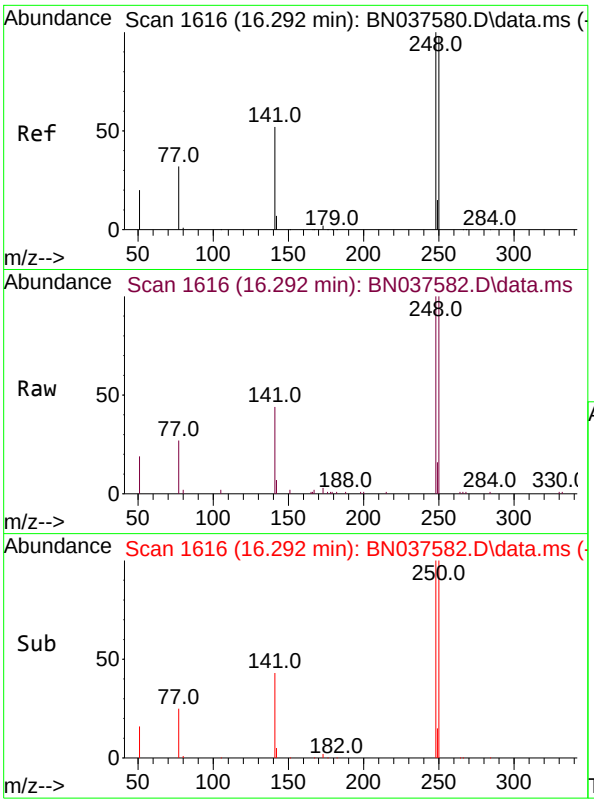


#20
4,6-Dinitro-2-methylphenol
Concen: 1.517 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:198 Resp: 1182

Ion	Ratio	Lower	Upper
198	100		
51	47.6	81.0	121.6#
105	42.8	52.5	78.7#



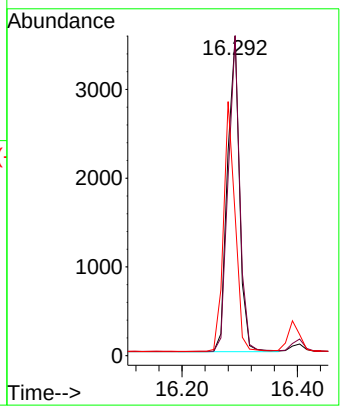


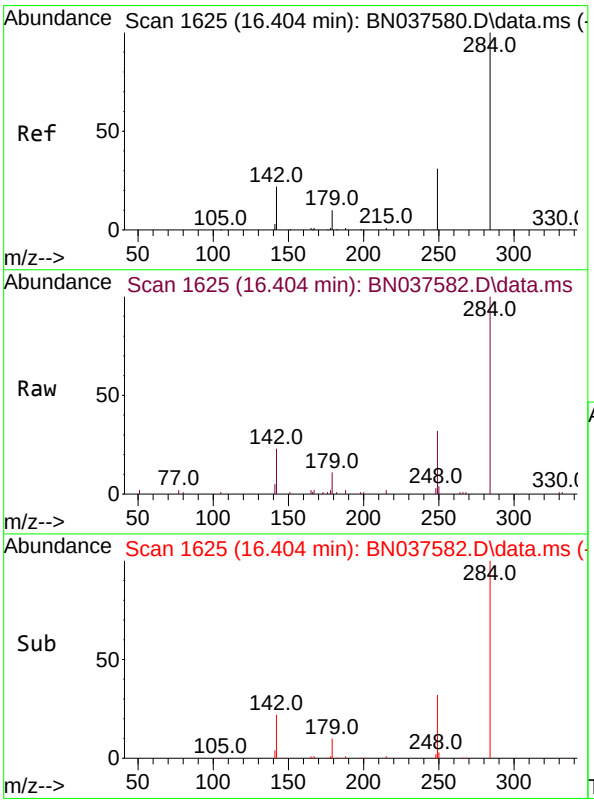
#21
4-Bromophenyl-phenylether
Concen: 1.686 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:248 Resp: 5158

Ion	Ratio	Lower	Upper
248	100		
250	100.1	78.6	118.0
141	43.9	43.7	65.5

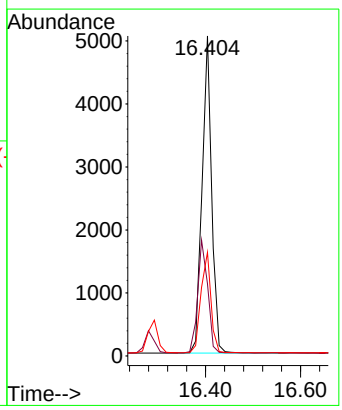


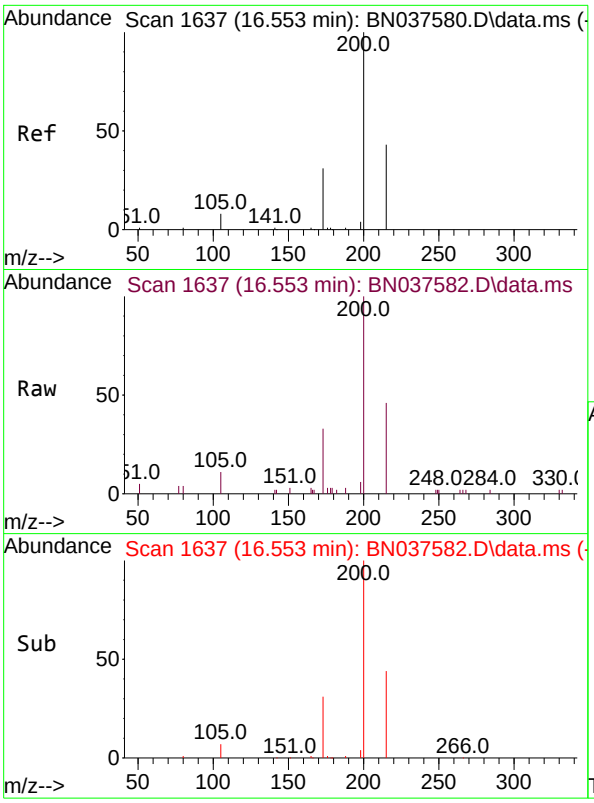


#22
Hexachlorobenzene
Concen: 1.633 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:284 Resp: 7080

Ion	Ratio	Lower	Upper
284	100		
142	37.2	29.8	44.6
249	33.1	26.0	39.0



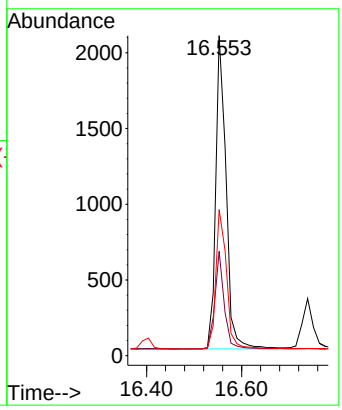


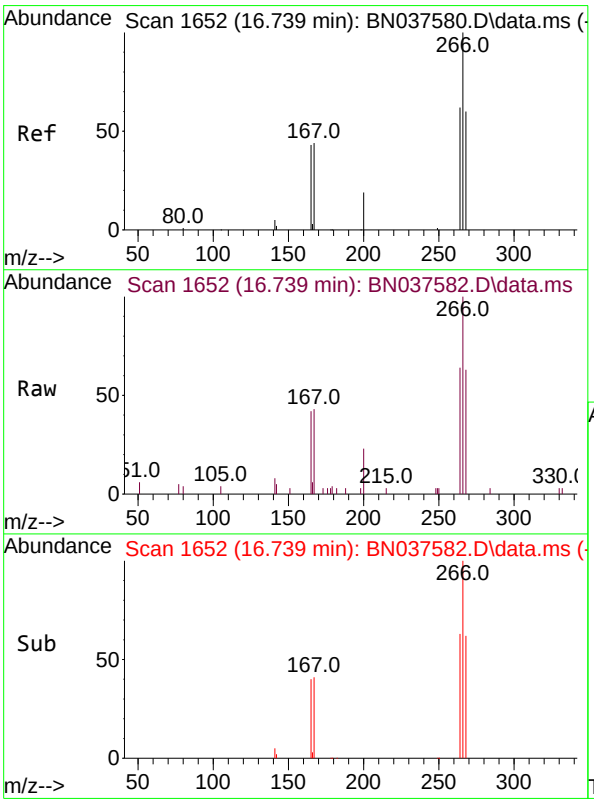
#23
Atrazine
Concen: 1.803 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:200 Resp: 3118

Ion	Ratio	Lower	Upper
200	100		
173	32.6	31.0	46.4
215	45.7	39.4	59.0

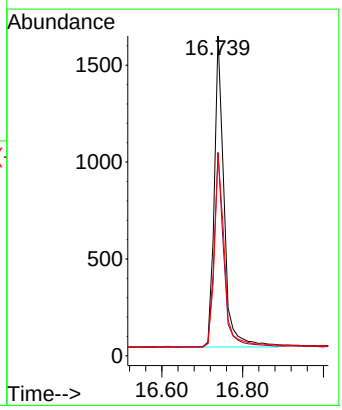


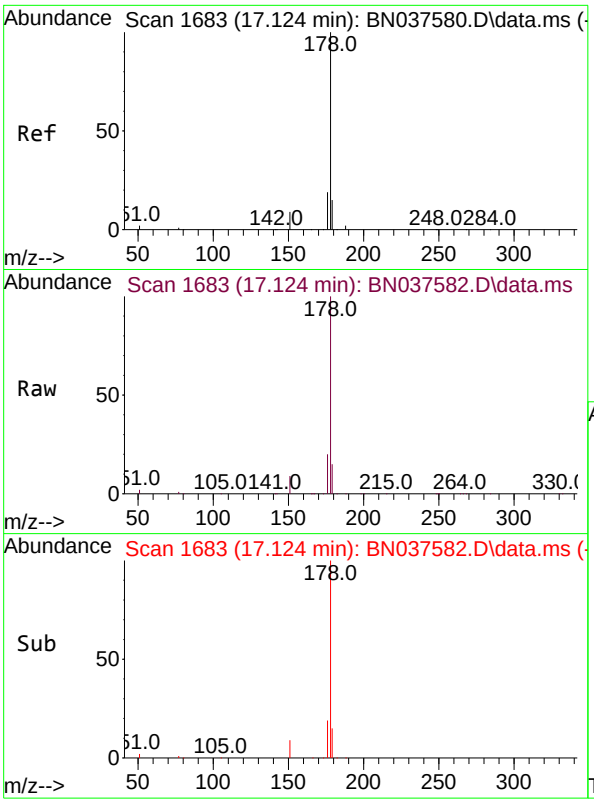


#24
Pentachlorophenol
Concen: 1.775 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:266 Resp: 2704

Ion	Ratio	Lower	Upper
266	100		
264	62.2	49.6	74.4
268	63.5	49.2	73.8



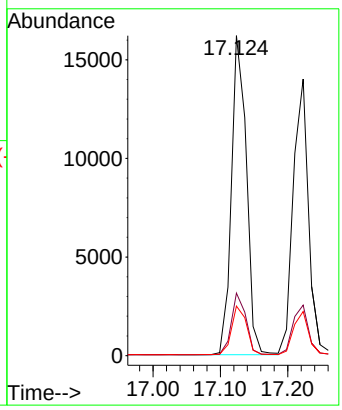


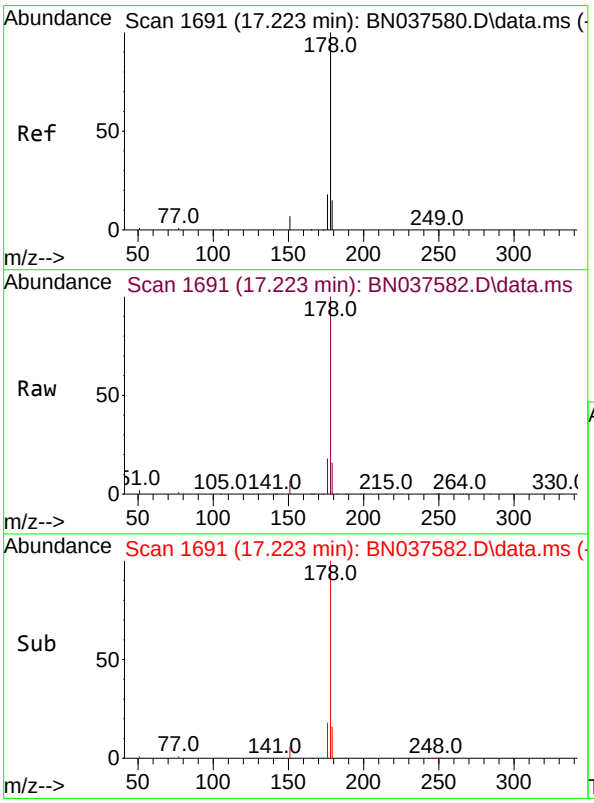
#25
Phenanthrene
Concen: 1.685 ng
RT: 17.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:178 Resp: 24938

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.6
179	15.4	12.3	18.5

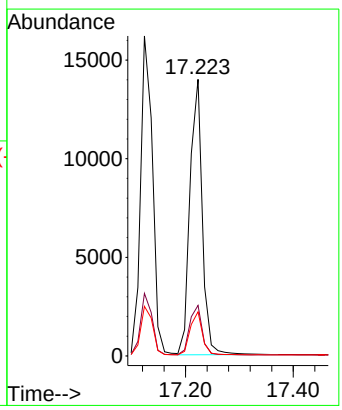


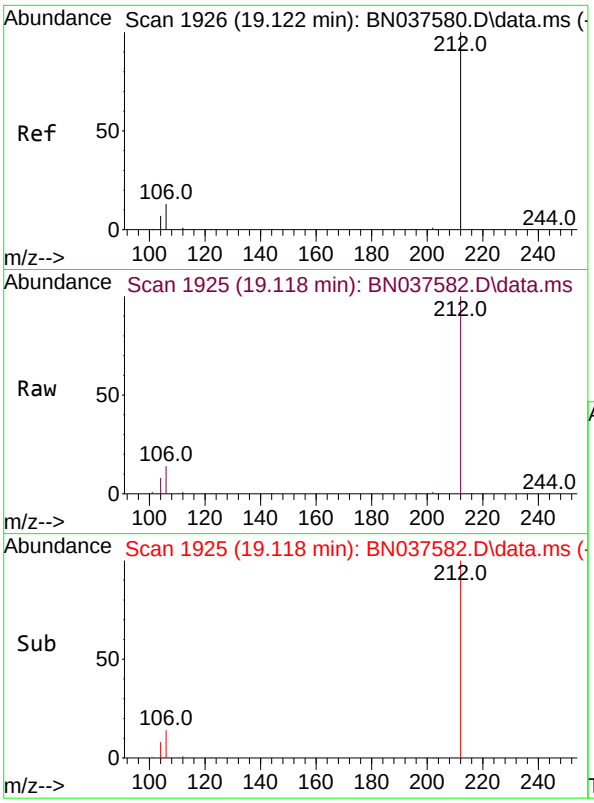


#26
Anthracene
Concen: 1.701 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:178 Resp: 22287

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.7	22.1
179	15.4	12.3	18.5



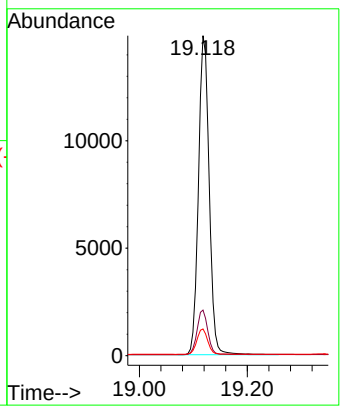


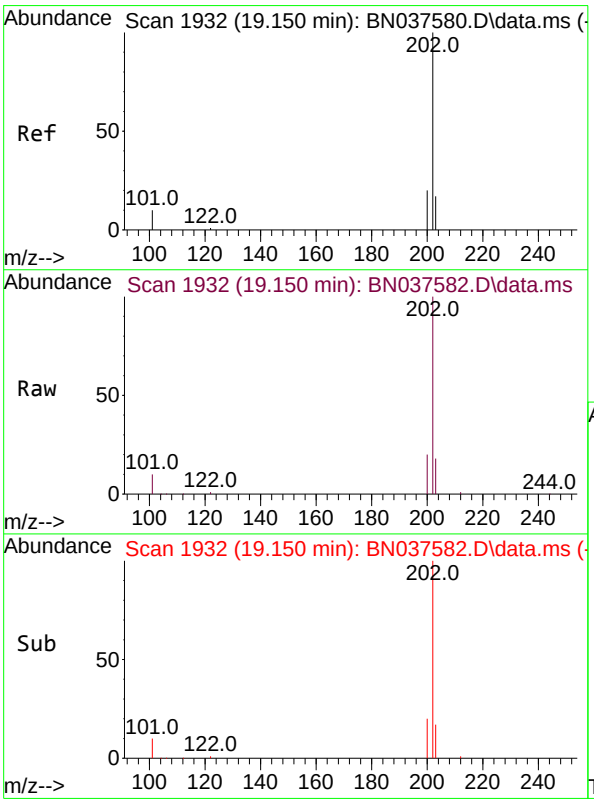
#27
Fluoranthene-d10
Concen: 1.597 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:212 Resp: 20450

Ion	Ratio	Lower	Upper
212	100		
106	14.0	11.5	17.3
104	8.0	6.6	9.8

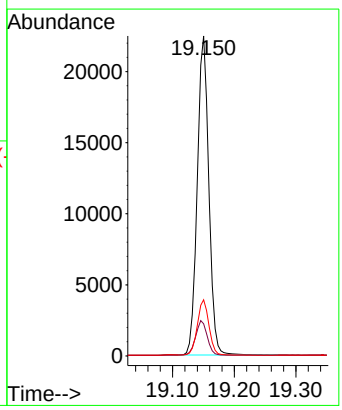


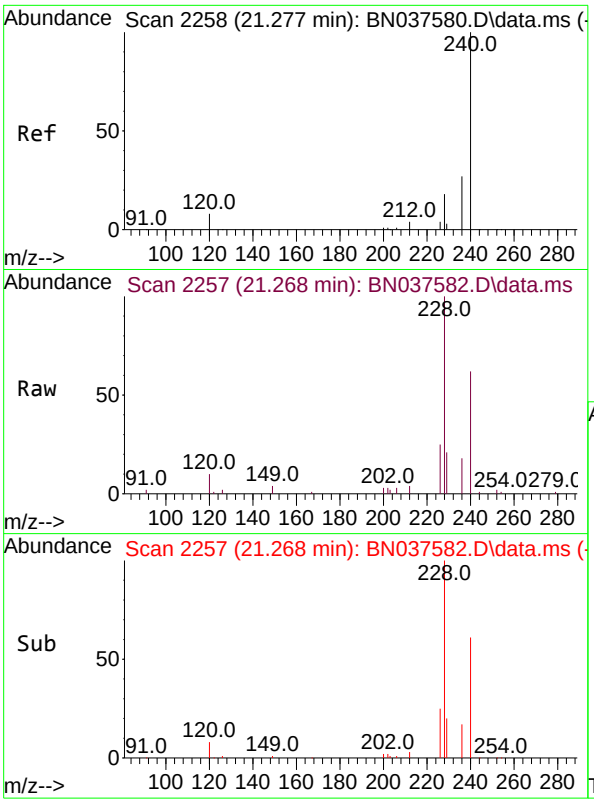


#28
Fluoranthene
Concen: 1.721 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:202 Resp: 29263

Ion	Ratio	Lower	Upper
202	100		
101	11.1	9.0	13.6
203	17.4	13.8	20.8



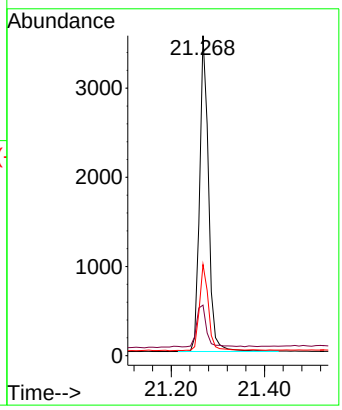


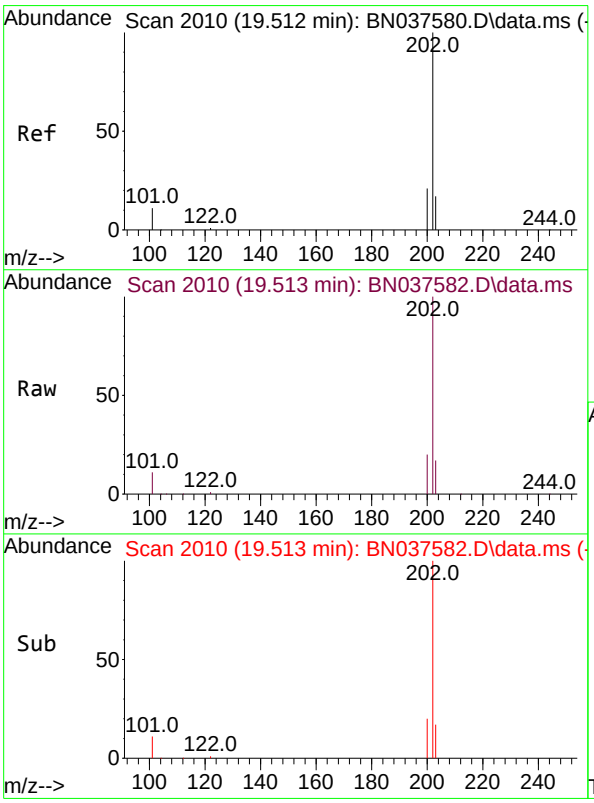
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:240 Resp: 4728

Ion	Ratio	Lower	Upper
240	100		
120	15.8	8.9	13.3#
236	28.5	22.6	33.8

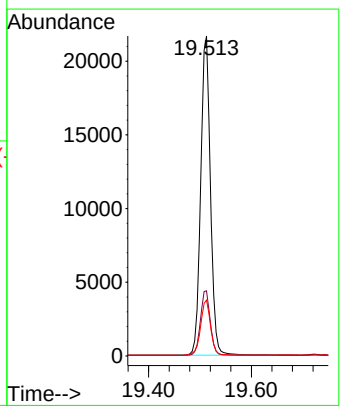


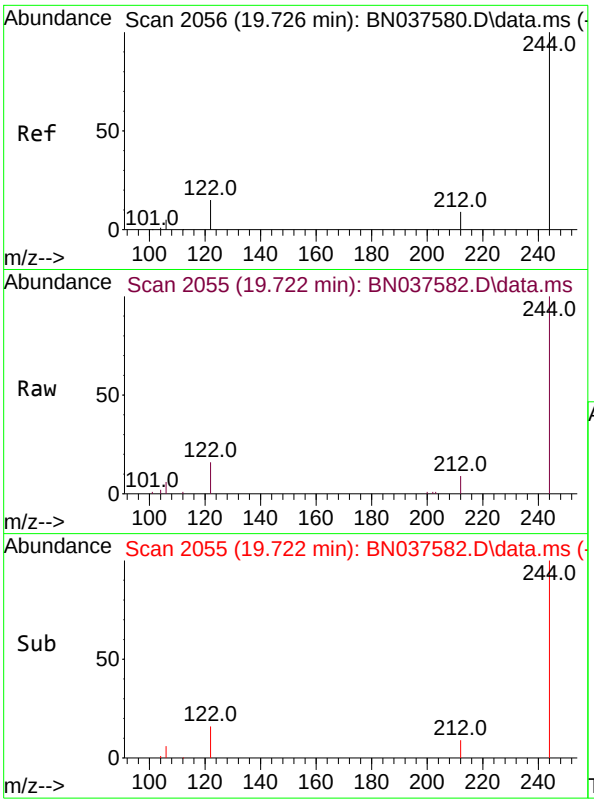


#30
Pyrene
Concen: 1.607 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:202 Resp: 28406

Ion	Ratio	Lower	Upper
202	100		
200	20.5	16.6	25.0
203	17.6	14.3	21.5



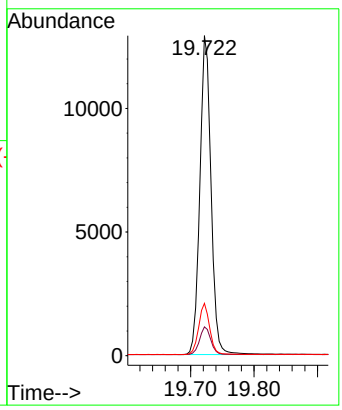


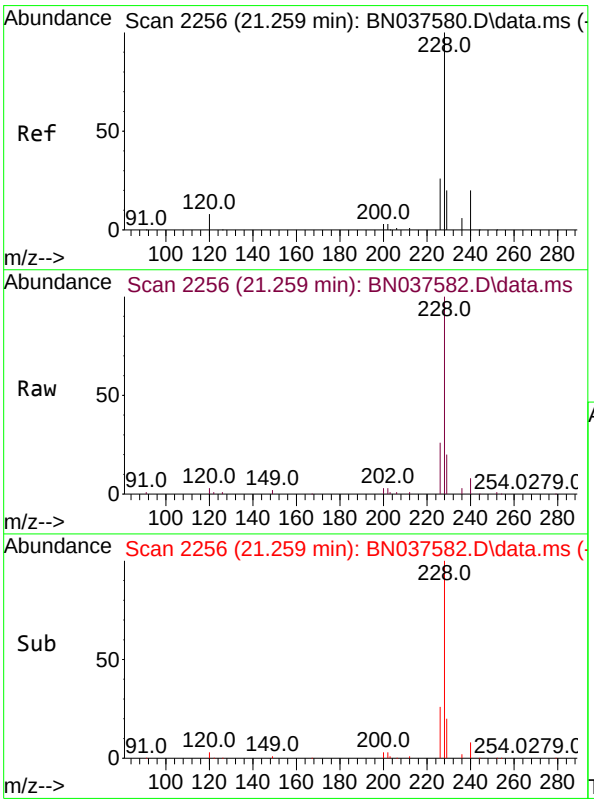
#31
Terphenyl-d14
Concen: 1.620 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:244 Resp: 15761

Ion	Ratio	Lower	Upper
244	100		
212	9.0	8.2	12.2
122	16.3	13.2	19.8

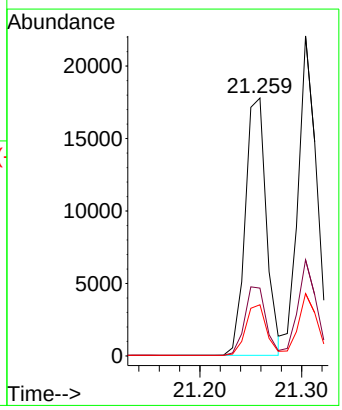


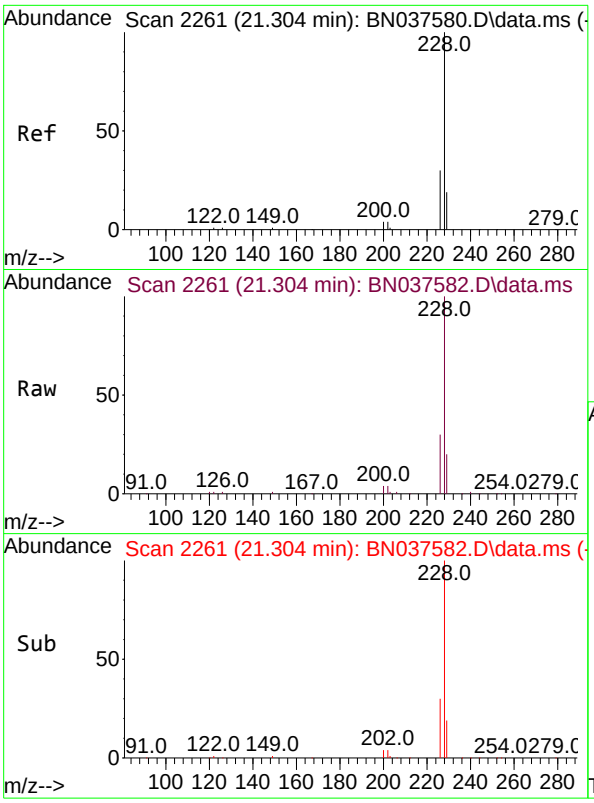


#32
Benzo(a)anthracene
Concen: 1.618 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:228 Resp: 25547

Ion	Ratio	Lower	Upper
228	100		
226	26.3	21.5	32.3
229	19.9	16.5	24.7



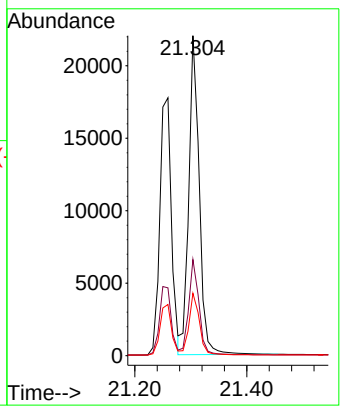


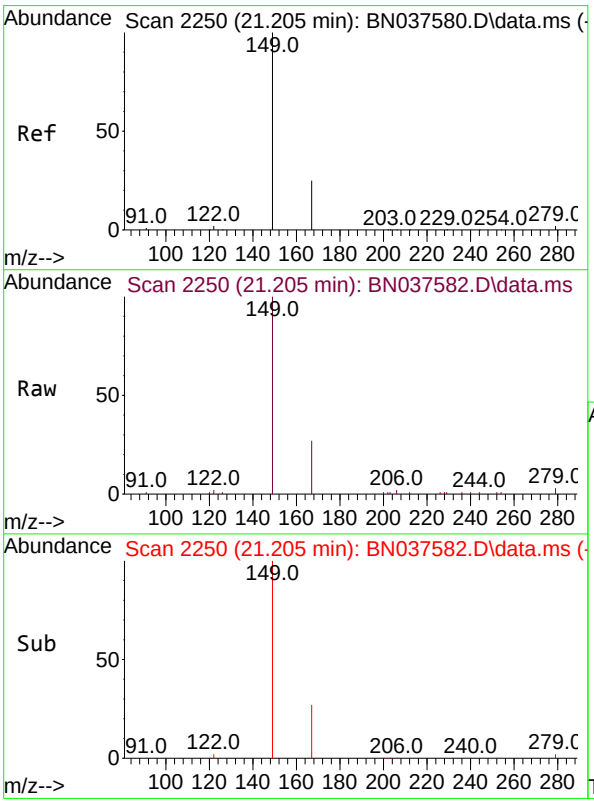
#33
Chrysene
Concen: 1.624 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:228 Resp: 28577

Ion	Ratio	Lower	Upper
228	100		
226	30.0	24.9	37.3
229	19.5	15.8	23.8

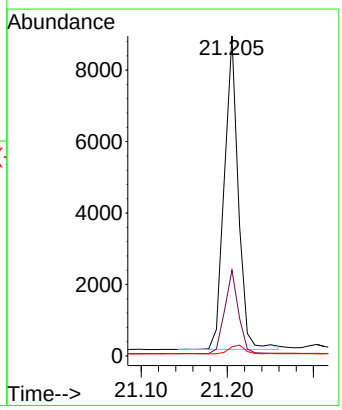


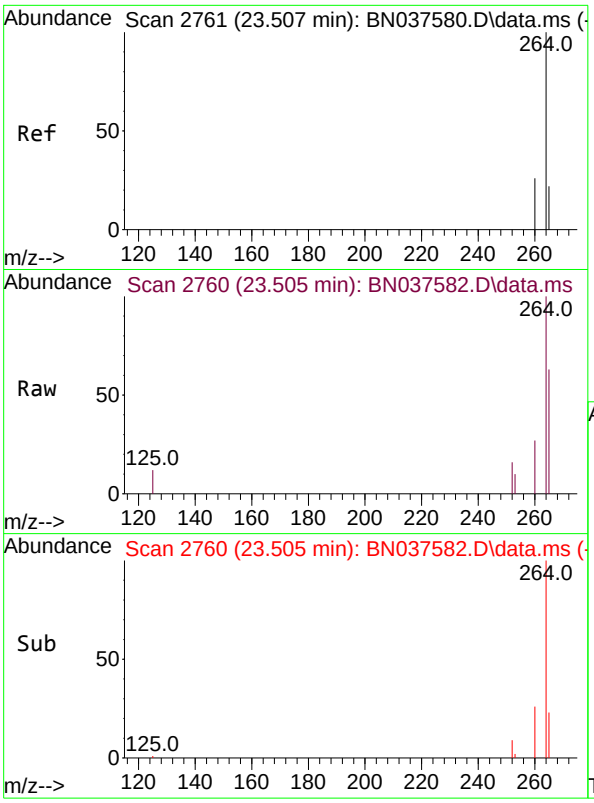


#34
Bis(2-ethylhexyl)phthalate
Concen: 1.514 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:149 Resp: 9868

Ion	Ratio	Lower	Upper
149	100		
167	26.1	20.5	30.7
279	3.1	2.6	4.0



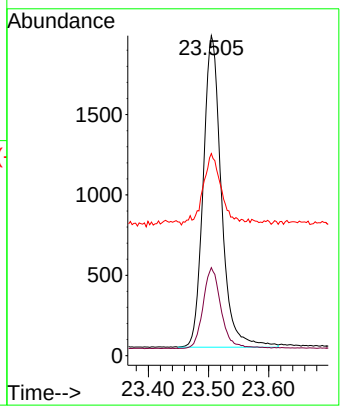


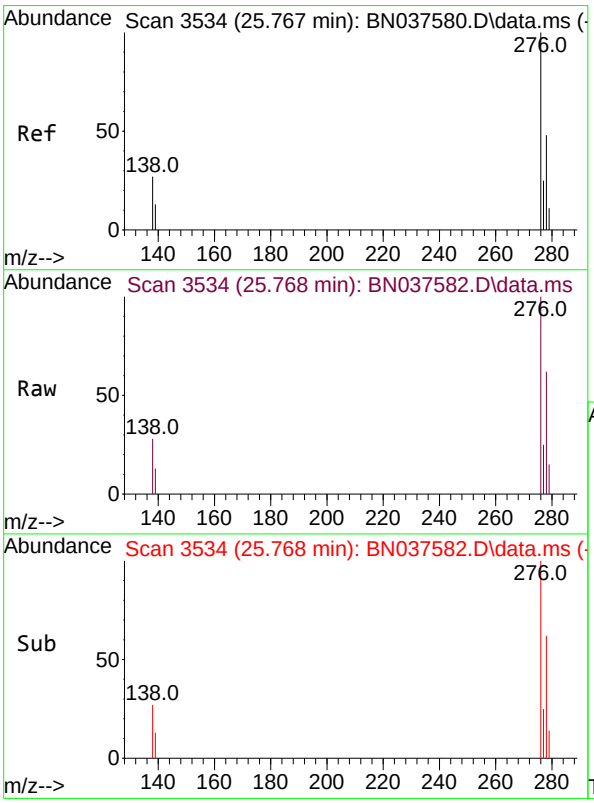
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.505 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:264 Resp: 4054

Ion	Ratio	Lower	Upper
264	100		
260	27.5	21.6	32.4
265	63.1	48.2	72.4

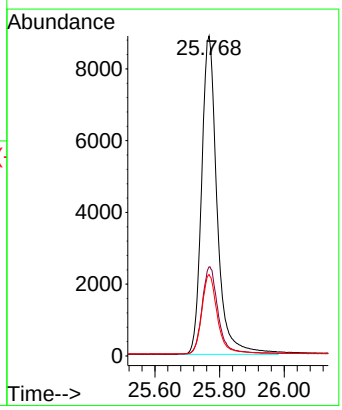


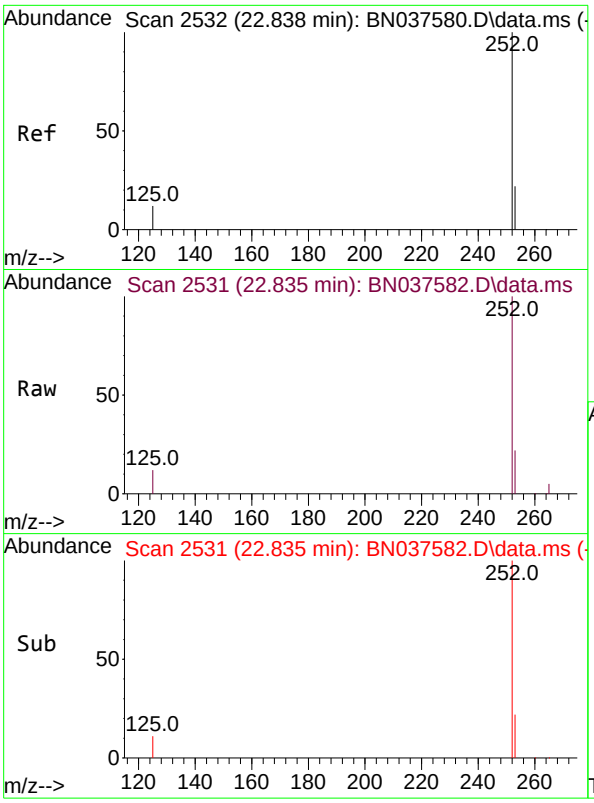


#36
Indeno(1,2,3-cd)pyrene
Concen: 1.724 ng
RT: 25.768 min Scan# 3534
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:276 Resp: 29448

Ion	Ratio	Lower	Upper
276	100		
138	28.3	23.3	34.9
277	25.0	19.5	29.3



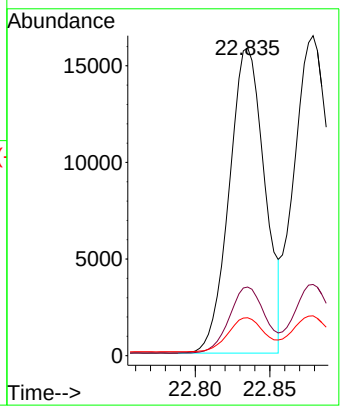


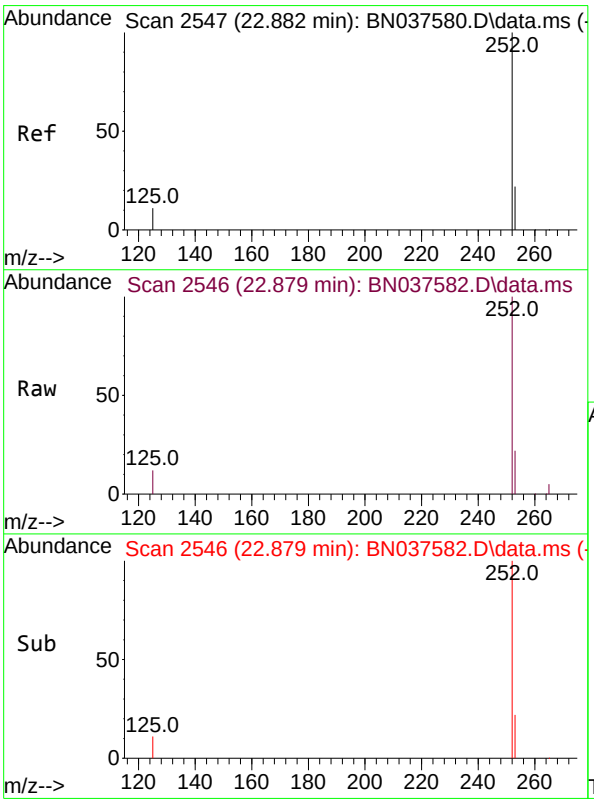
#37
Benzo(b)fluoranthene
Concen: 1.705 ng
RT: 22.835 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 26189

Ion	Ratio	Lower	Upper
252	100		
253	22.3	20.0	30.0
125	12.3	13.8	20.6#

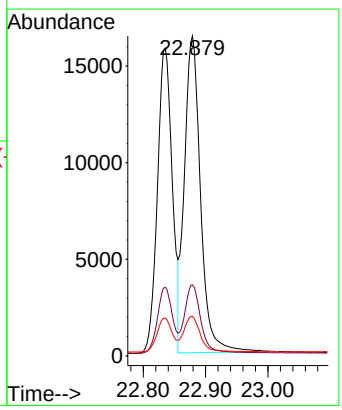


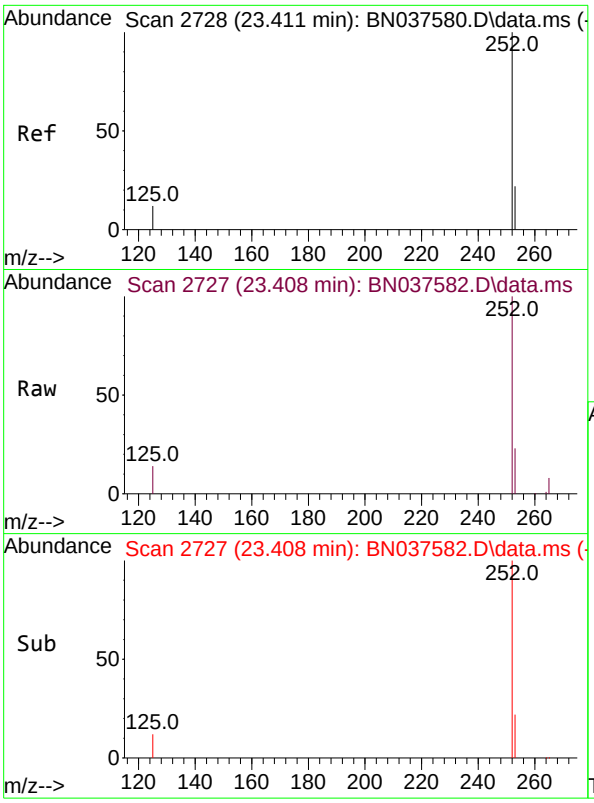


#38
Benzo(k)fluoranthene
Concen: 1.703 ng
RT: 22.879 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:252 Resp: 29528

Ion	Ratio	Lower	Upper
252	100		
253	22.2	19.9	29.9
125	12.5	15.0	22.6#



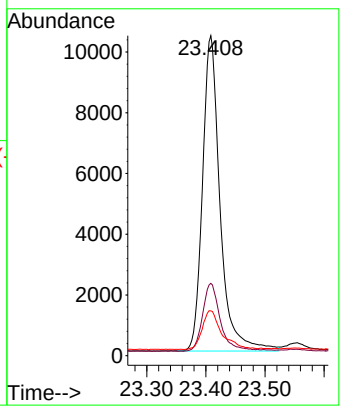


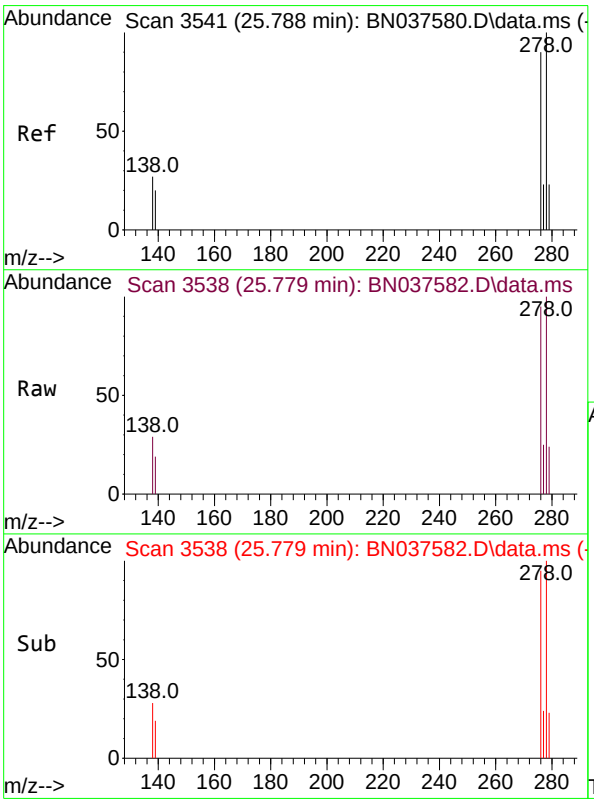
#39
Benzo(a)pyrene
Concen: 1.683 ng
RT: 23.408 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:252 Resp: 21441

Ion	Ratio	Lower	Upper
252	100		
253	22.6	21.6	32.4
125	14.0	16.8	25.2#

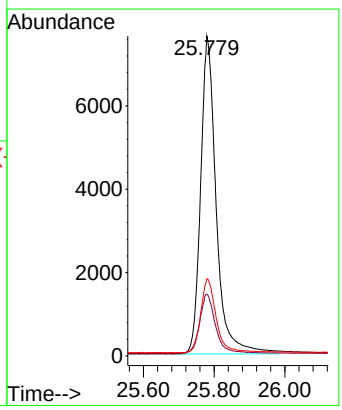


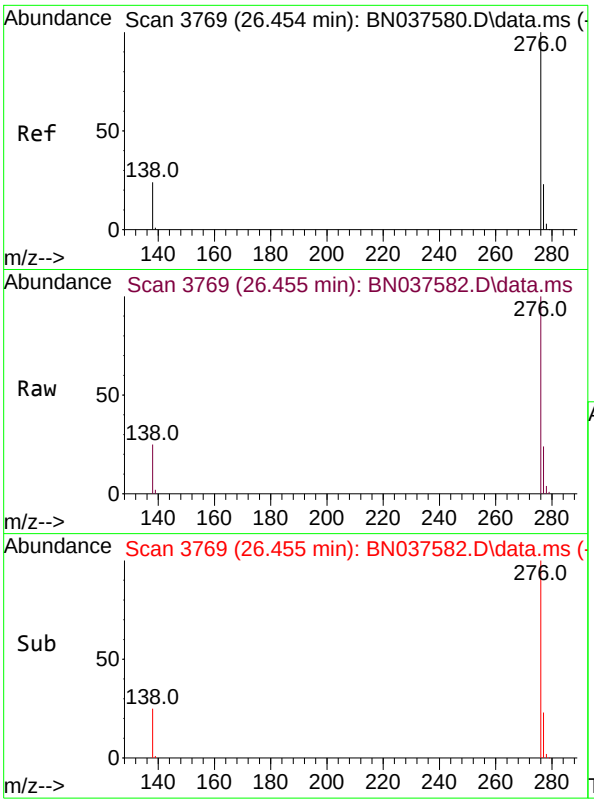


#40
Dibenzo(a,h)anthracene
Concen: 1.761 ng
RT: 25.779 min Scan# 3538
Delta R.T. -0.009 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Tgt Ion:278 Resp: 23334

Ion	Ratio	Lower	Upper
278	100		
139	19.3	18.3	27.5
279	24.2	22.5	33.7



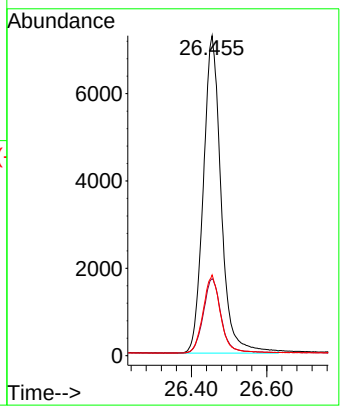


#41
Benzo(g,h,i)perylene
Concen: 1.703 ng
RT: 26.455 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037582.D
Acq: 12 Aug 2025 18:52

Instrument :
BNA_N
ClientSampleId :
SSTDICC1.6

Tgt Ion:276 Resp: 23781

Ion	Ratio	Lower	Upper
276	100		
277	24.1	21.0	31.4
138	25.2	21.7	32.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037583.D
Acq On : 12 Aug 2025 19:29
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Aug 13 04:49:35 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2075	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	5019	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2699	0.400	ng		0.00
19) Phenanthrene-d10	17.087	188	5200	0.400	ng		0.00
29) Chrysene-d12	21.268	240	5116	0.400	ng	#	0.00
35) Perylene-d12	23.508	264	4411	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	15044	3.198	ng		0.00
5) Phenol-d6	6.879	99	18546	3.276	ng		0.00
8) Nitrobenzene-d5	8.854	82	12097	3.422	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	23211	3.402	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	4382	3.710	ng		0.00
15) 2-Fluorobiphenyl	12.973	172	51634	3.308	ng		0.00
27) Fluoranthene-d10	19.118	212	46178	3.376	ng		0.00
31) Terphenyl-d14	19.722	244	34892	3.315	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	6233	3.140	ng		98
3) n-Nitrosodimethylamine	3.536	42	8352	3.292	ng		97
6) bis(2-Chloroethyl)ether	7.139	93	16734	3.280	ng		98
9) Naphthalene	10.552	128	43991	3.292	ng		97
10) Hexachlorobutadiene	10.851	225	10602	3.248	ng	#	99
12) 2-Methylnaphthalene	12.167	142	29337	3.501	ng		98
16) Acenaphthylene	14.067	152	40122	3.316	ng		99
17) Acenaphthene	14.409	154	27774	3.375	ng		94
18) Fluorene	15.393	166	36565	3.396	ng		100
20) 4,6-Dinitro-2-methylph...	15.467	198	2906	3.257	ng	#	49
21) 4-Bromophenyl-phenylether	16.292	248	11254	3.444	ng	#	92
22) Hexachlorobenzene	16.404	284	14747	3.183	ng		100
23) Atrazine	16.553	200	7330	3.967	ng		94
24) Pentachlorophenol	16.739	266	6325	3.887	ng		97
25) Phenanthrene	17.124	178	52784	3.339	ng		100
26) Anthracene	17.223	178	49333	3.525	ng		100
28) Fluoranthene	19.150	202	63765	3.511	ng		100
30) Pyrene	19.513	202	62227	3.254	ng		100
32) Benzo(a)anthracene	21.259	228	59663	3.491	ng		98
33) Chrysene	21.304	228	60925	3.199	ng		99
34) Bis(2-ethylhexyl)phtha...	21.205	149	24265	3.440	ng		99
36) Indeno(1,2,3-cd)pyrene	25.768	276	66459	3.576	ng		99
37) Benzo(b)fluoranthene	22.835	252	59086	3.535	ng	#	92
38) Benzo(k)fluoranthene	22.879	252	63422	3.363	ng	#	90
39) Benzo(a)pyrene	23.411	252	48767	3.518	ng	#	87
40) Dibenzo(a,h)anthracene	25.782	278	53486	3.709	ng		92
41) Benzo(g,h,i)perylene	26.455	276	54068	3.558	ng		95

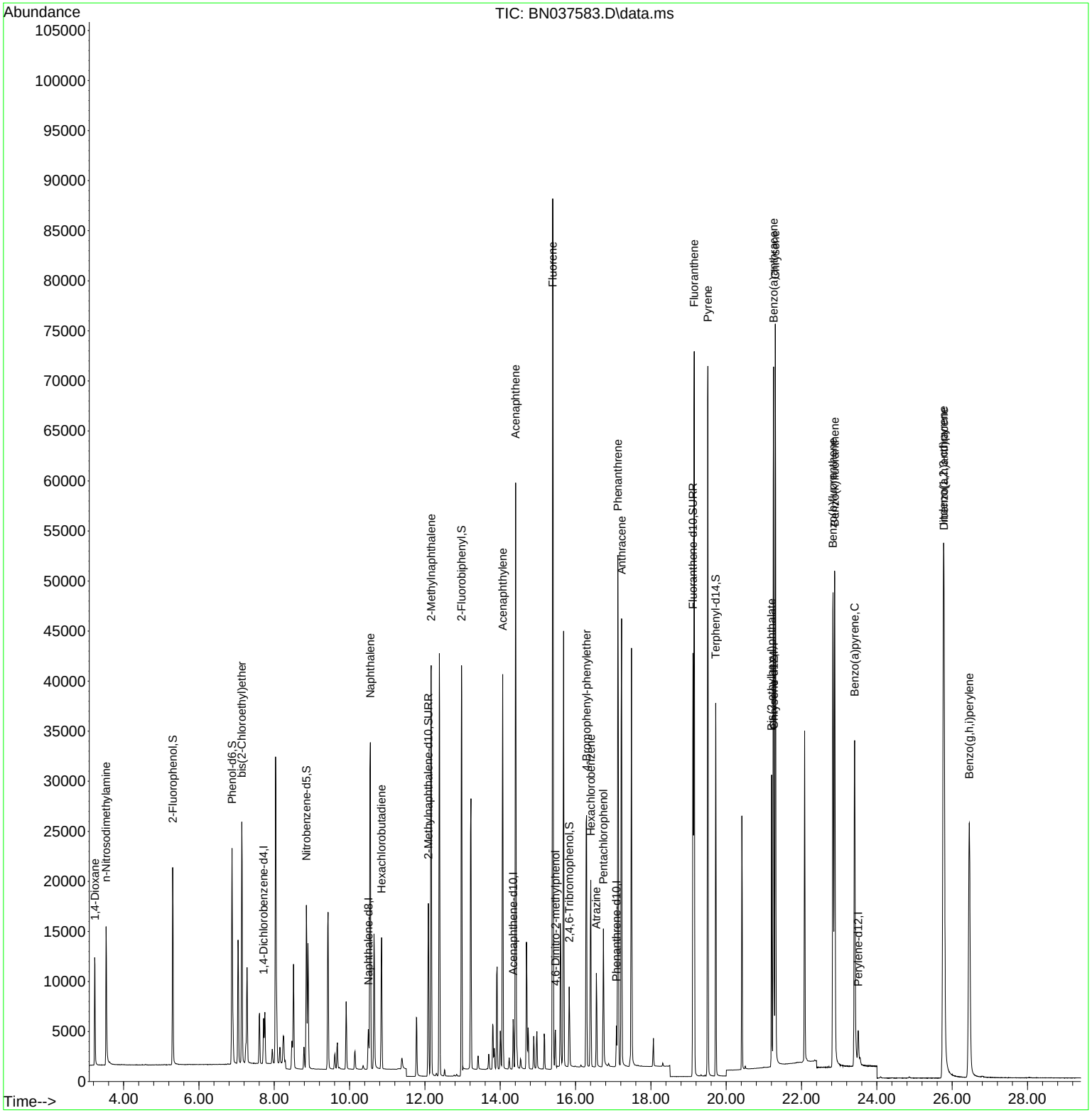
(#) = qualifier out of range (m) = manual integration (+) = signals summed

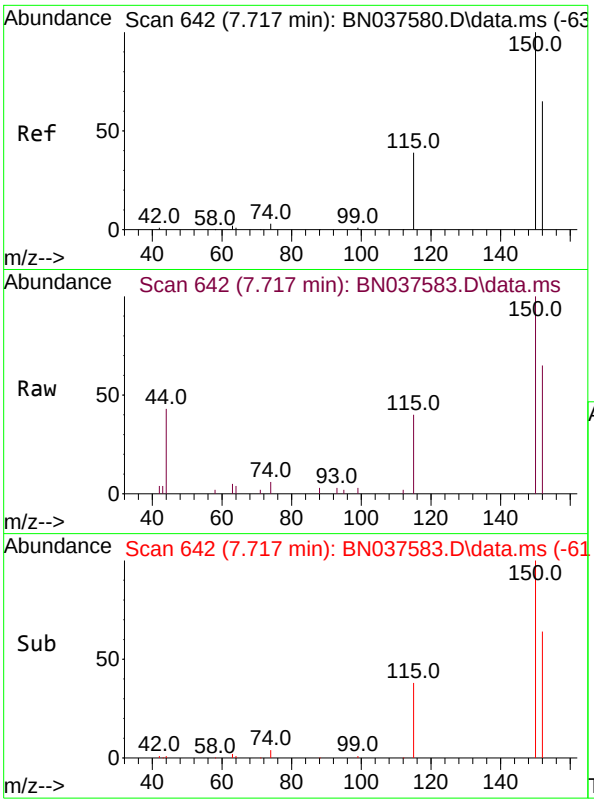
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037583.D
Acq On : 12 Aug 2025 19:29
Operator : RC/JU
Sample : SSTDICC3.2
Misc :
ALS Vial : 8 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Quant Time: Aug 13 04:49:35 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



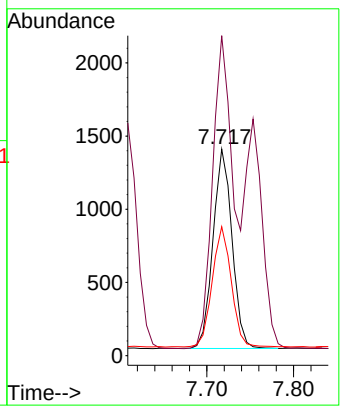


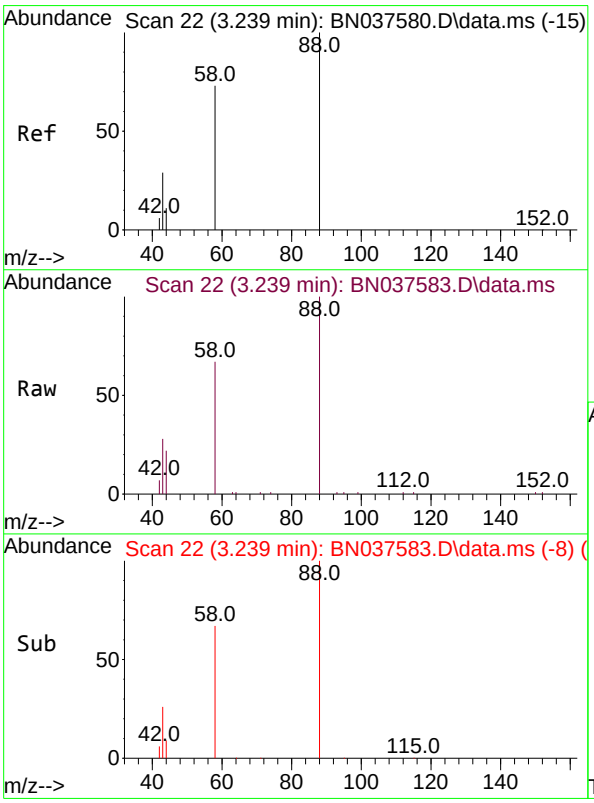
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 2075

Ion	Ratio	Lower	Upper
152	100		
150	154.9	122.2	183.4
115	62.4	49.8	74.6

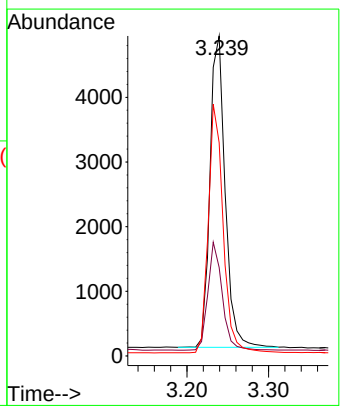


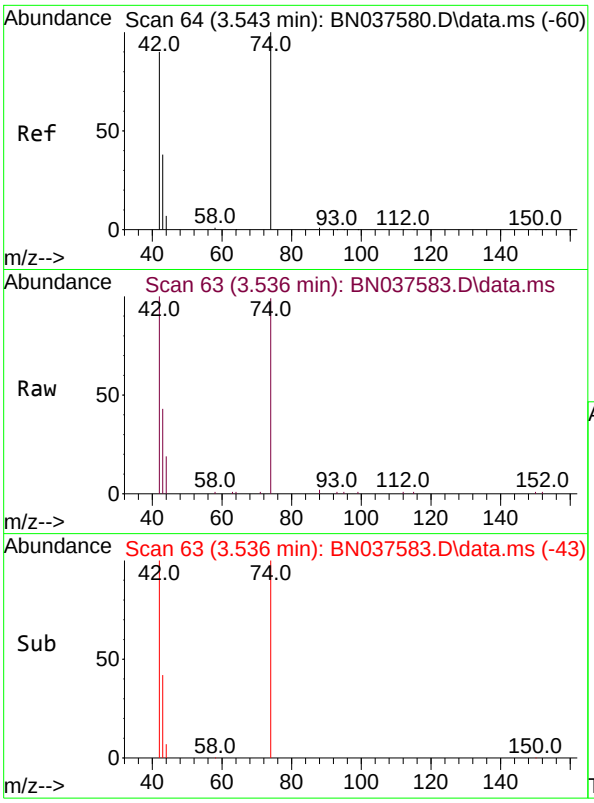


#2
1,4-Dioxane
Concen: 3.140 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion: 88 Resp: 6233

Ion	Ratio	Lower	Upper
88	100		
43	32.9	25.8	38.6
58	78.1	61.2	91.8



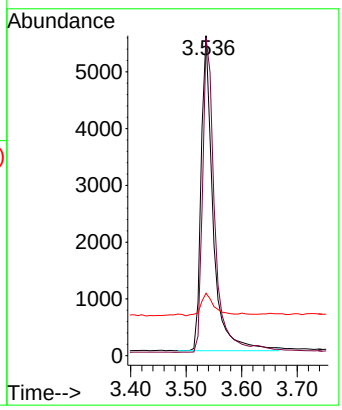


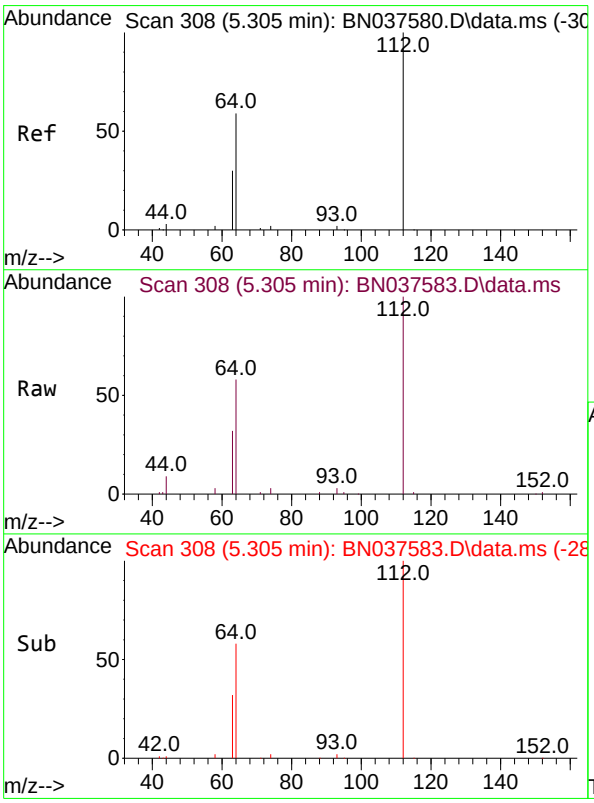
#3
n-Nitrosodimethylamine
Concen: 3.292 ng
RT: 3.536 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 42 Resp: 8352

Ion	Ratio	Lower	Upper
42	100		
74	99.7	82.0	123.0
44	8.0	7.9	11.9

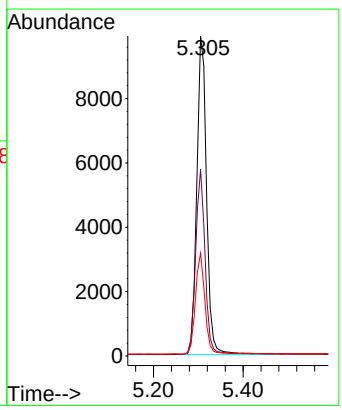


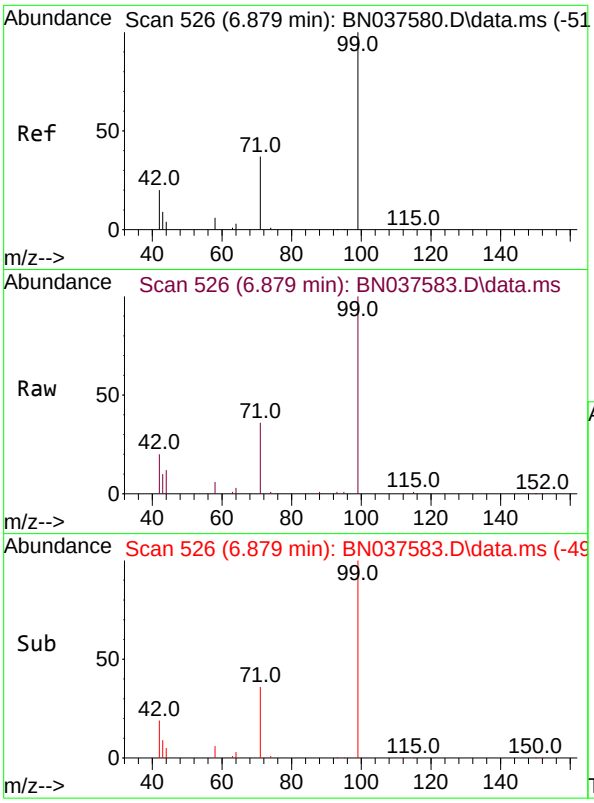


#4
2-Fluorophenol
Concen: 3.198 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:112 Resp: 15044

Ion	Ratio	Lower	Upper
112	100		
64	56.5	44.9	67.3
63	30.7	23.4	35.2



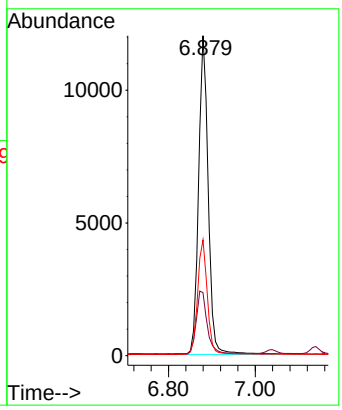


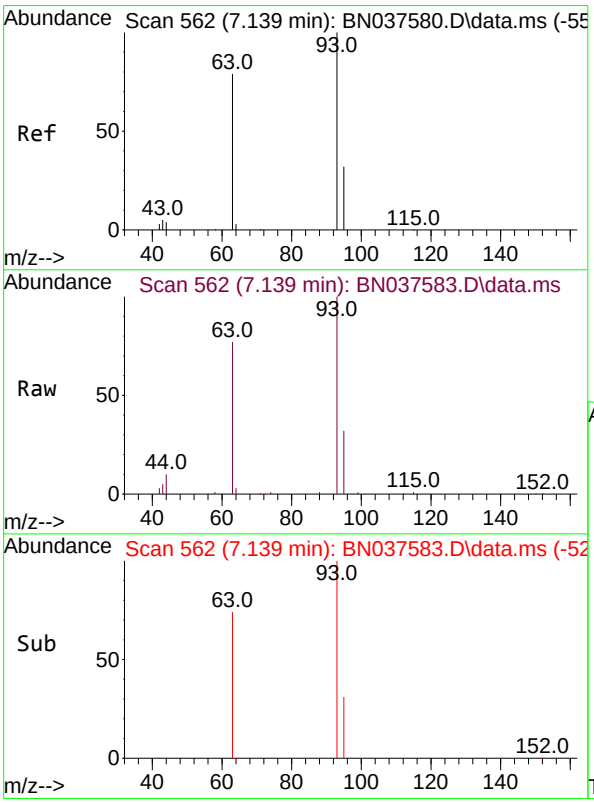
#5
Phenol-d6
Concen: 3.276 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion: 99 Resp: 18546

Ion	Ratio	Lower	Upper
99	100		
42	22.2	18.5	27.7
71	36.1	28.6	42.8

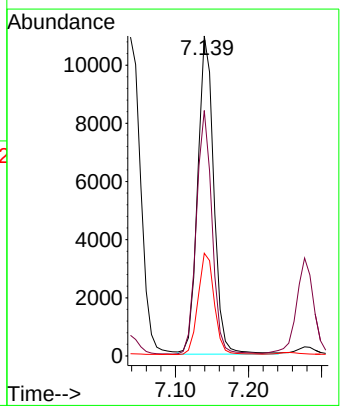


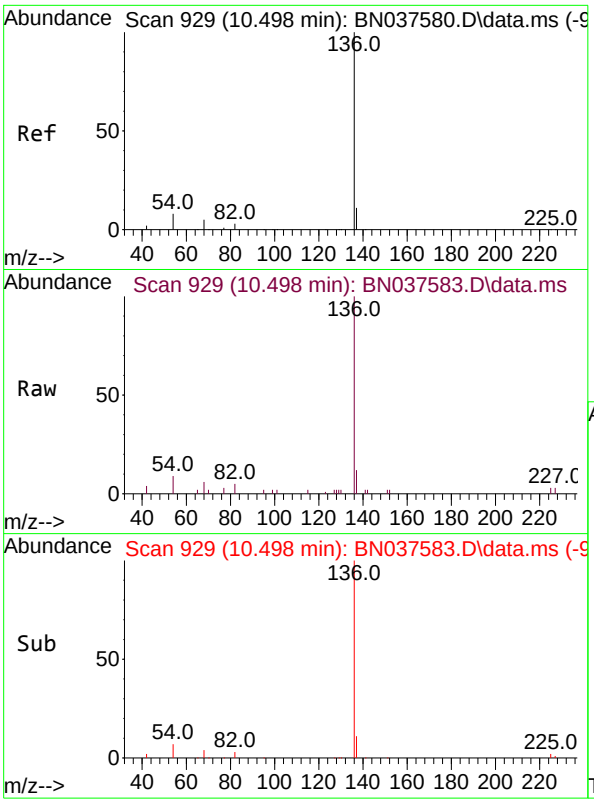


#6
bis(2-Chloroethyl)ether
Concen: 3.280 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion: 93 Resp: 16734

Ion	Ratio	Lower	Upper
93	100		
63	74.4	58.0	87.0
95	32.0	24.9	37.3



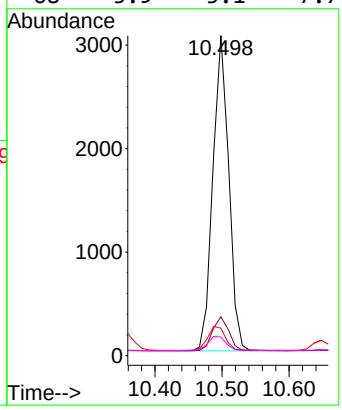


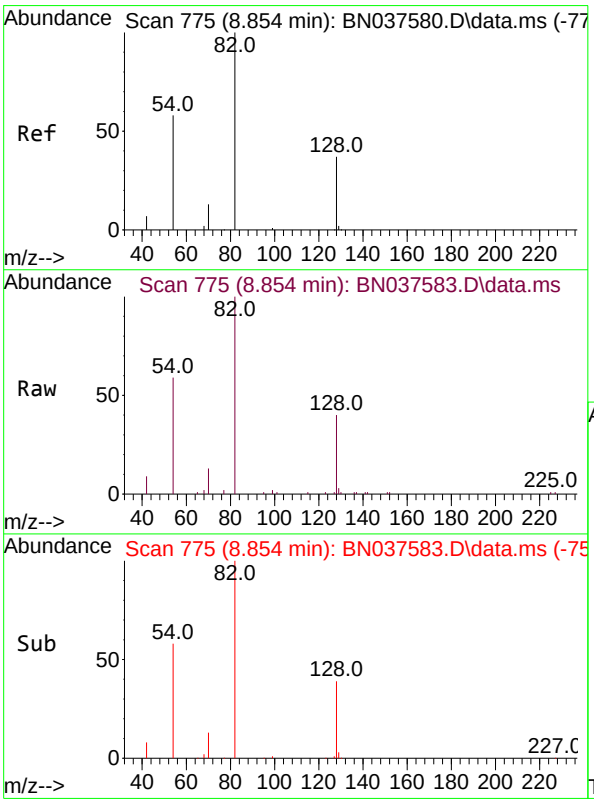
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:136 Resp: 5019

Ion	Ratio	Lower	Upper
136	100		
137	12.1	9.5	14.3
54	8.6	7.3	10.9
68	5.9	5.1	7.7

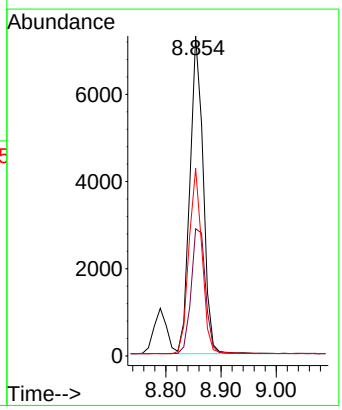


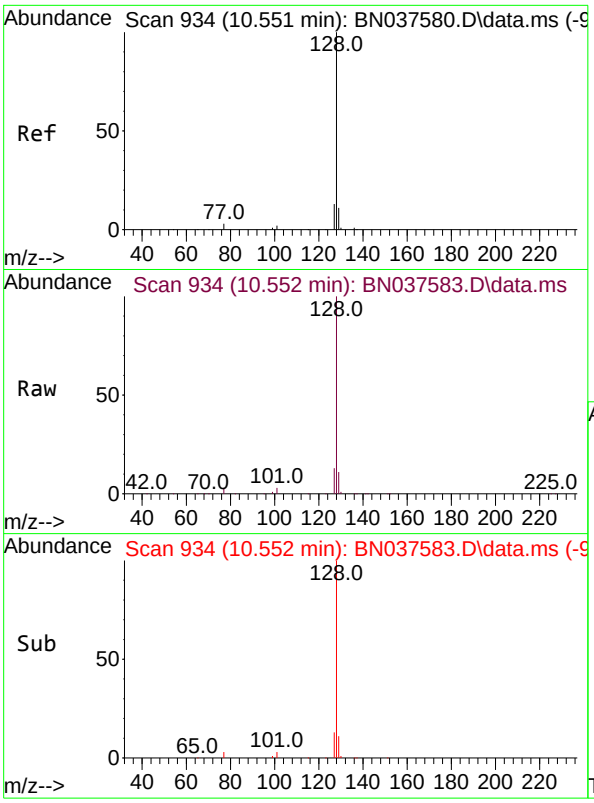


#8
Nitrobenzene-d5
Concen: 3.422 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion: 82 Resp: 12097

Ion	Ratio	Lower	Upper
82	100		
128	39.7	32.6	48.8
54	58.6	48.9	73.3



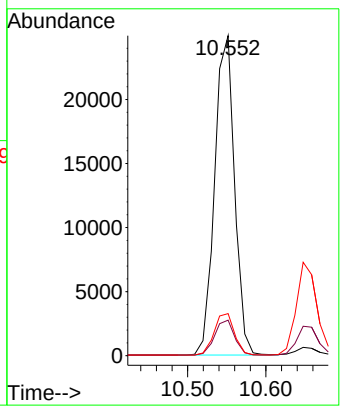


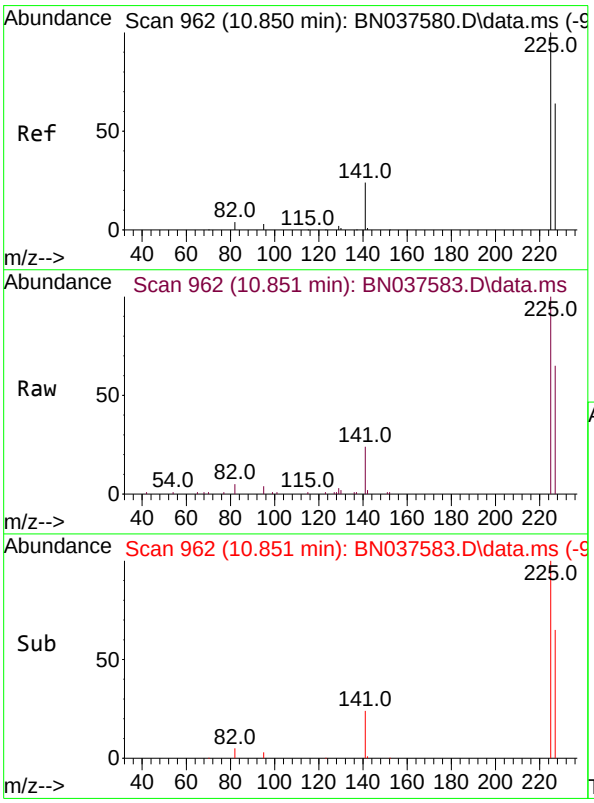
#9
Naphthalene
Concen: 3.292 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:128 Resp: 43991

Ion	Ratio	Lower	Upper
128	100		
129	11.1	9.8	14.6
127	13.2	11.5	17.3

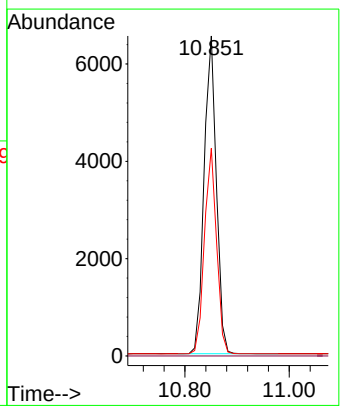


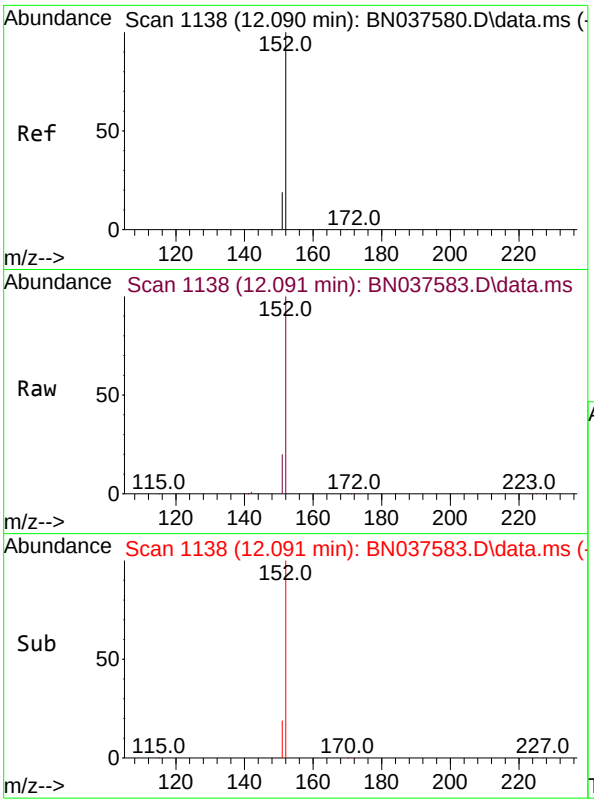


#10
Hexachlorobutadiene
Concen: 3.248 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:225 Resp: 10602

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.0	50.8	76.2



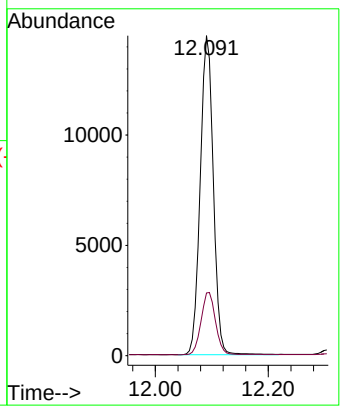


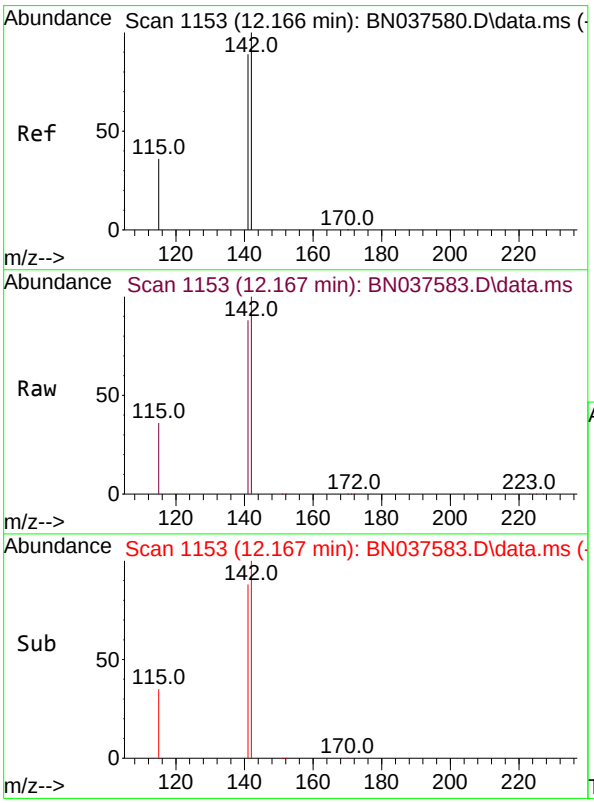
#11
2-Methylnaphthalene-d10
Concen: 3.402 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:152 Resp: 23211

Ion	Ratio	Lower	Upper
152	100		
151	21.5	17.3	25.9

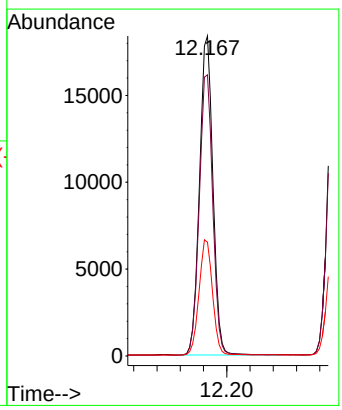


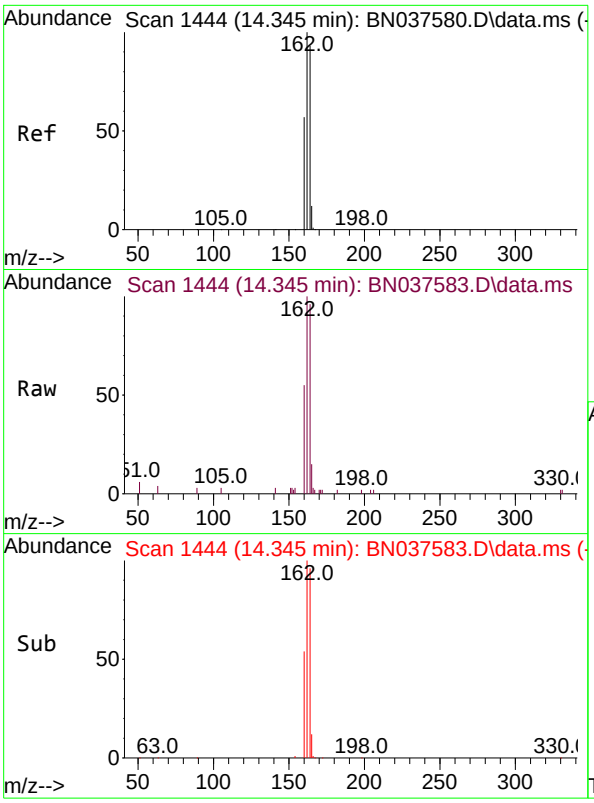


#12
2-Methylnaphthalene
Concen: 3.501 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:142 Resp: 29337

Ion	Ratio	Lower	Upper
142	100		
141	87.9	71.4	107.0
115	35.5	30.2	45.4



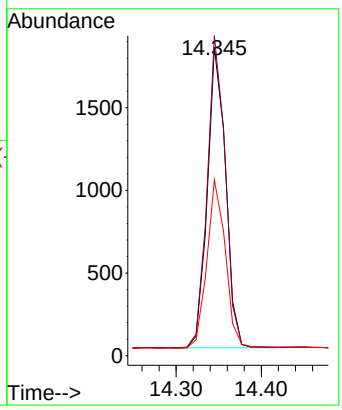


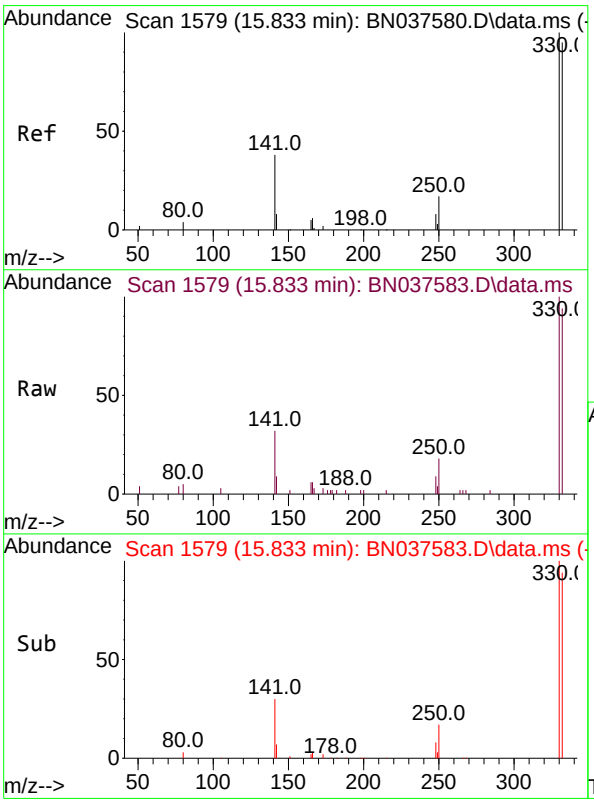
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:164 Resp: 2699

Ion	Ratio	Lower	Upper
164	100		
162	103.8	85.5	128.3
160	57.0	49.5	74.3

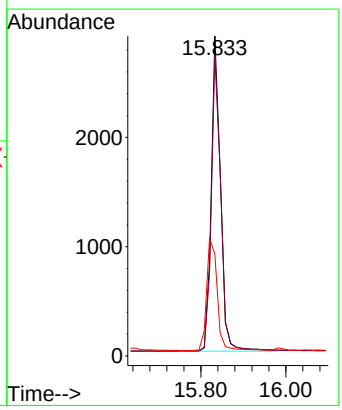


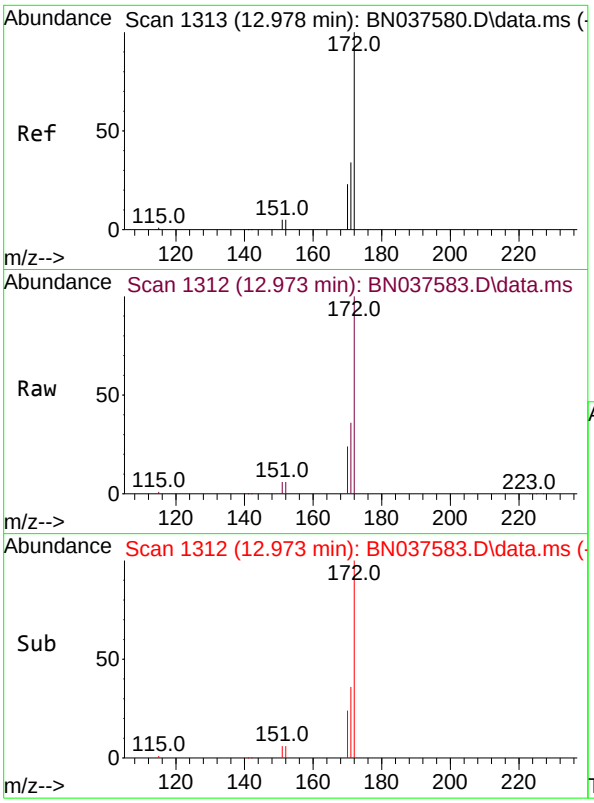


#14
2,4,6-Tribromophenol
Concen: 3.710 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:330 Resp: 4382

Ion	Ratio	Lower	Upper
330	100		
332	95.1	77.4	116.0
141	40.3	30.9	46.3



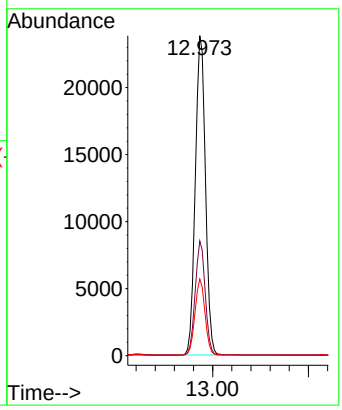


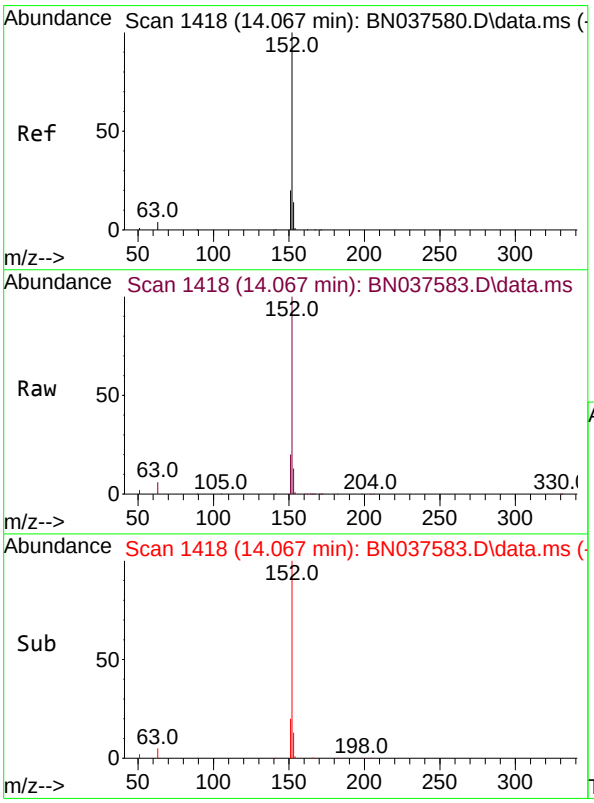
#15
2-Fluorobiphenyl
Concen: 3.308 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:172 Resp: 51634

Ion	Ratio	Lower	Upper
172	100		
171	35.9	28.2	42.4
170	24.0	19.2	28.8

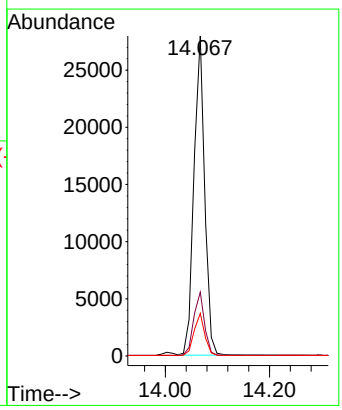


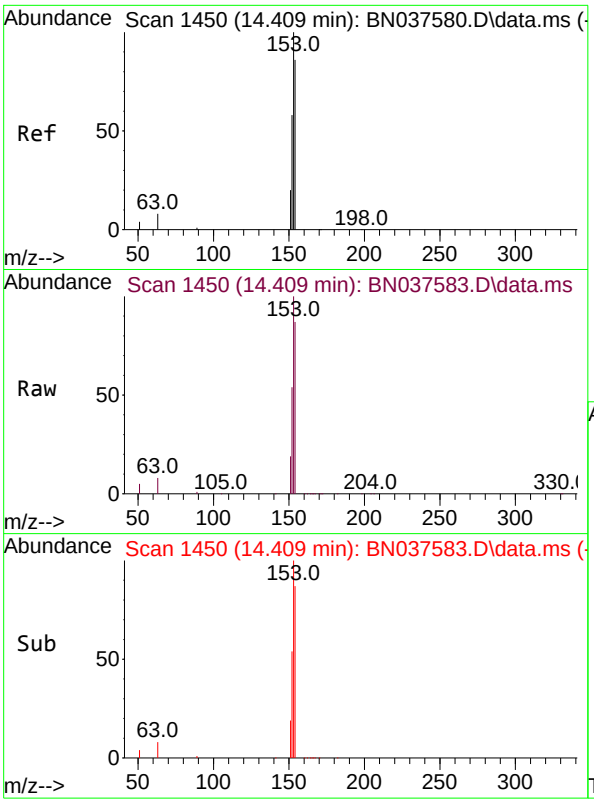


#16
Acenaphthylene
Concen: 3.316 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:152 Resp: 40122

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.1	24.1
153	13.0	10.7	16.1



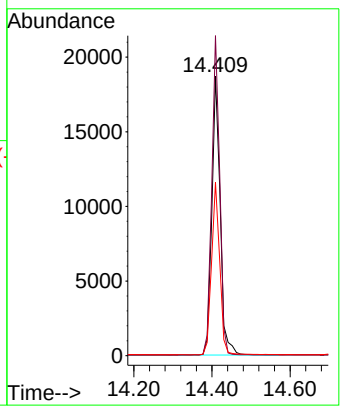


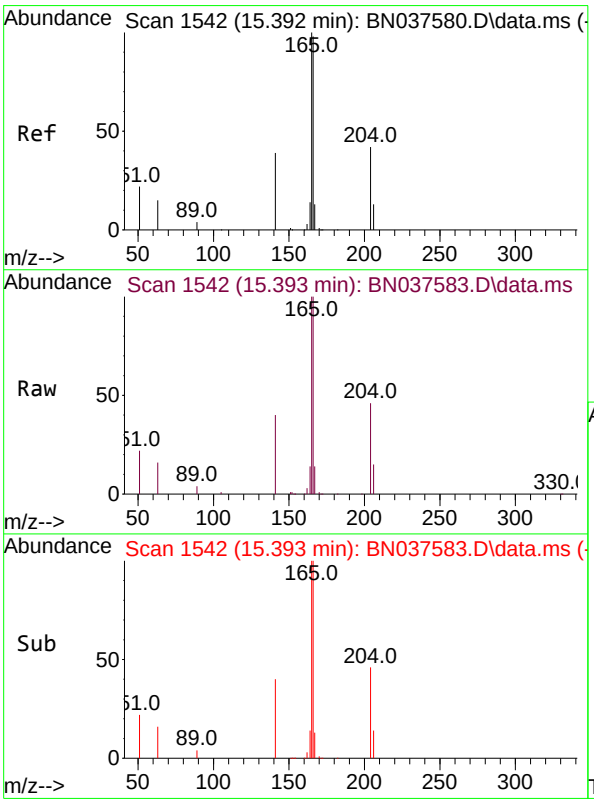
#17
Acenaphthene
Concen: 3.375 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:154 Resp: 27774

Ion	Ratio	Lower	Upper
154	100		
153	109.4	90.6	135.8
152	60.7	54.9	82.3

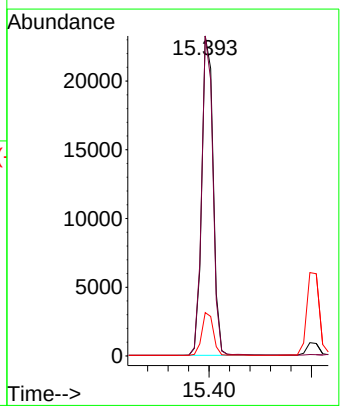


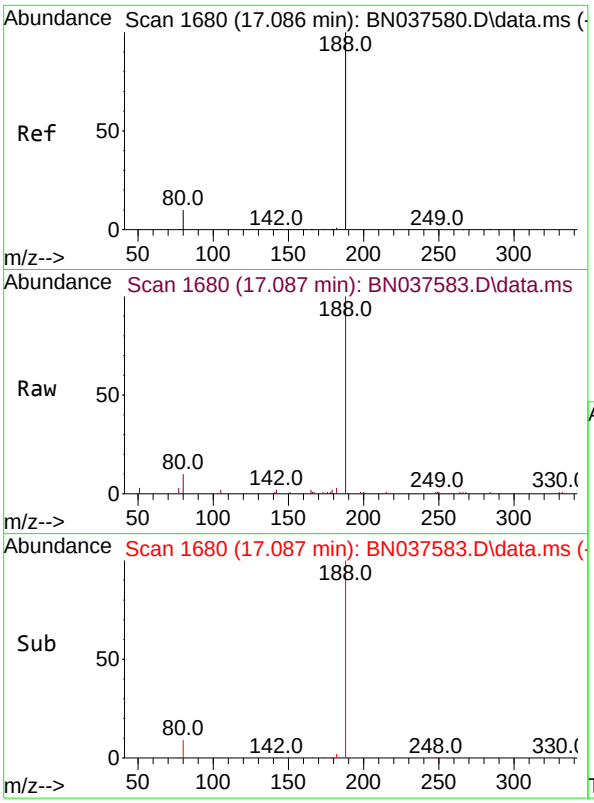


#18
Fluorene
Concen: 3.396 ng
RT: 15.393 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:166 Resp: 36565

Ion	Ratio	Lower	Upper
166	100		
165	98.5	78.9	118.3
167	13.4	10.7	16.1



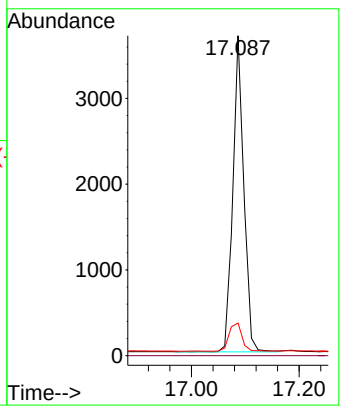


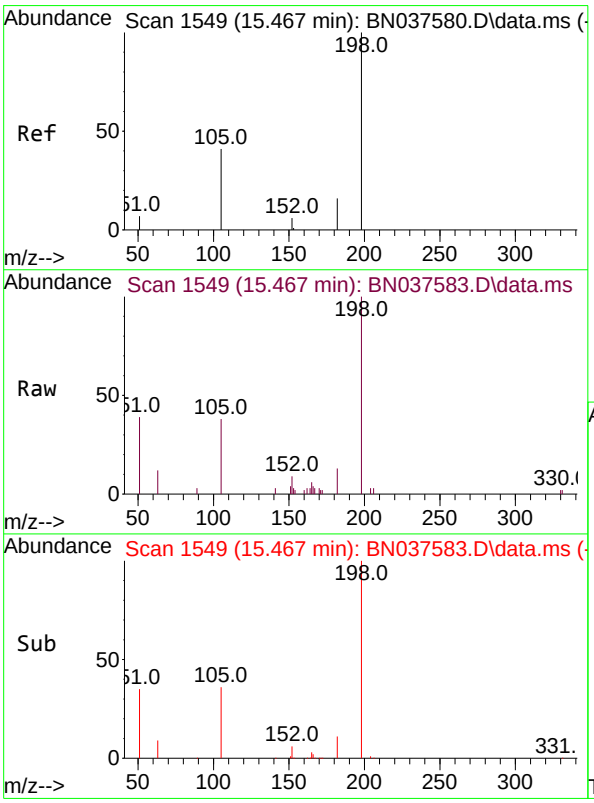
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:188 Resp: 5200

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.2	9.1	13.7

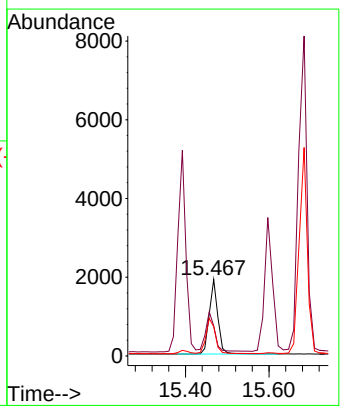


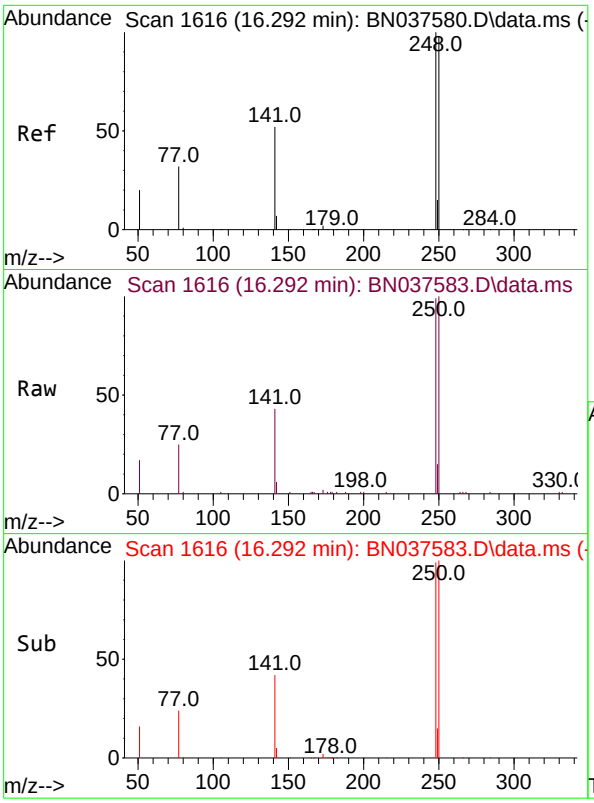


#20
4,6-Dinitro-2-methylphenol
Concen: 3.257 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:198 Resp: 2906

Ion	Ratio	Lower	Upper
198	100		
51	39.4	81.0	121.6#
105	38.3	52.5	78.7#



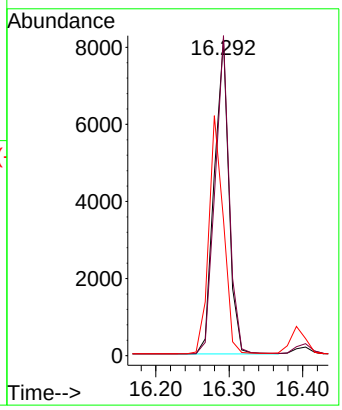


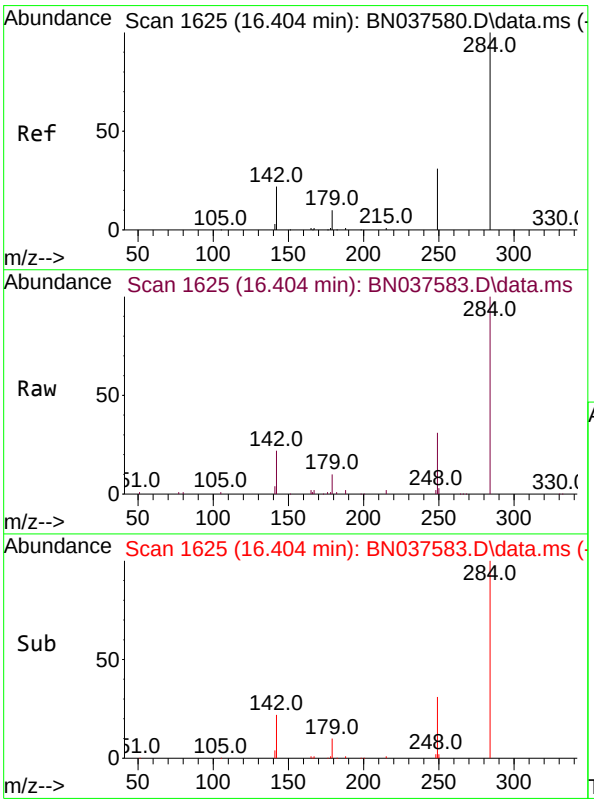
#21
4-Bromophenyl-phenylether
Concen: 3.444 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:248 Resp: 11254

Ion	Ratio	Lower	Upper
248	100		
250	101.0	78.6	118.0
141	42.9	43.7	65.5#

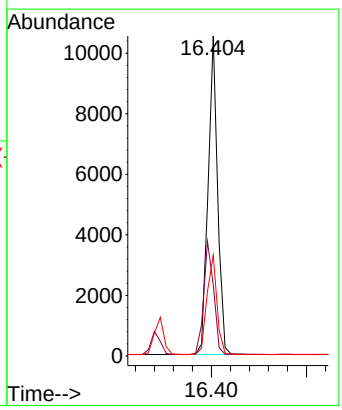


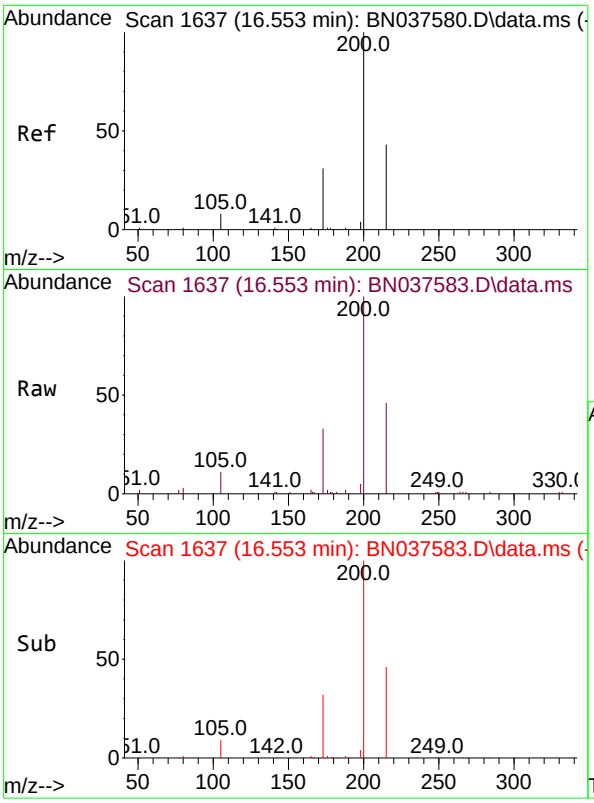


#22
Hexachlorobenzene
Concen: 3.183 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:284 Resp: 14747

Ion	Ratio	Lower	Upper
284	100		
142	37.0	29.8	44.6
249	32.6	26.0	39.0



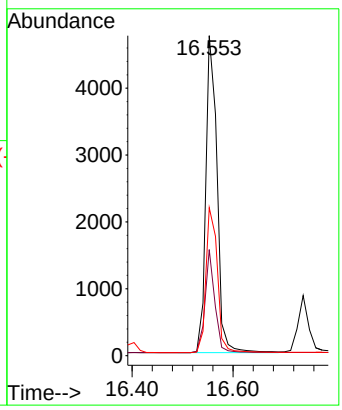


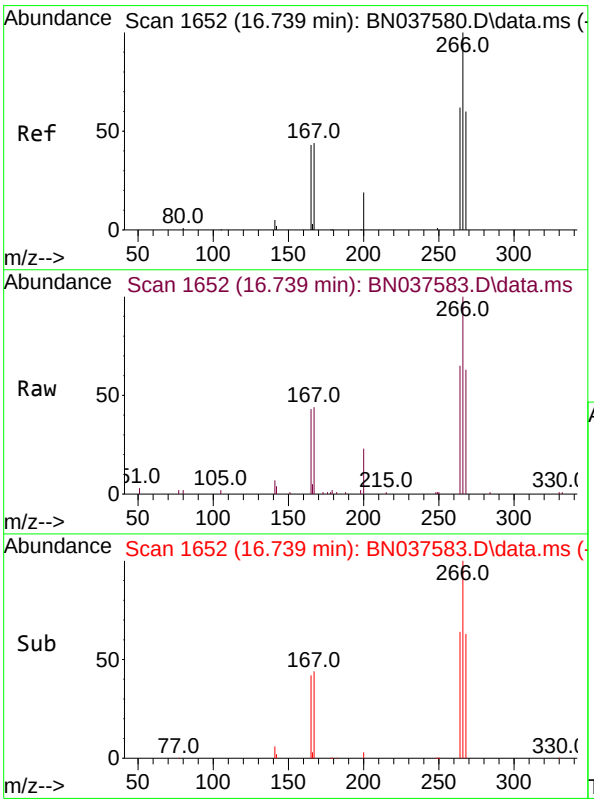
#23
Atrazine
Concen: 3.967 ng
RT: 16.553 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:200 Resp: 7330

Ion	Ratio	Lower	Upper
200	100		
173	33.1	31.0	46.4
215	46.2	39.4	59.0

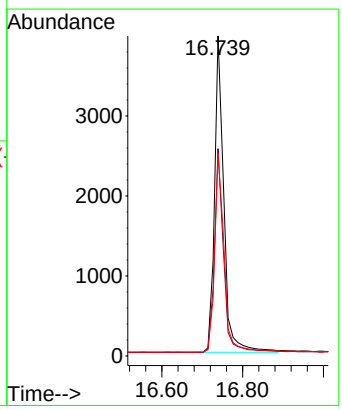


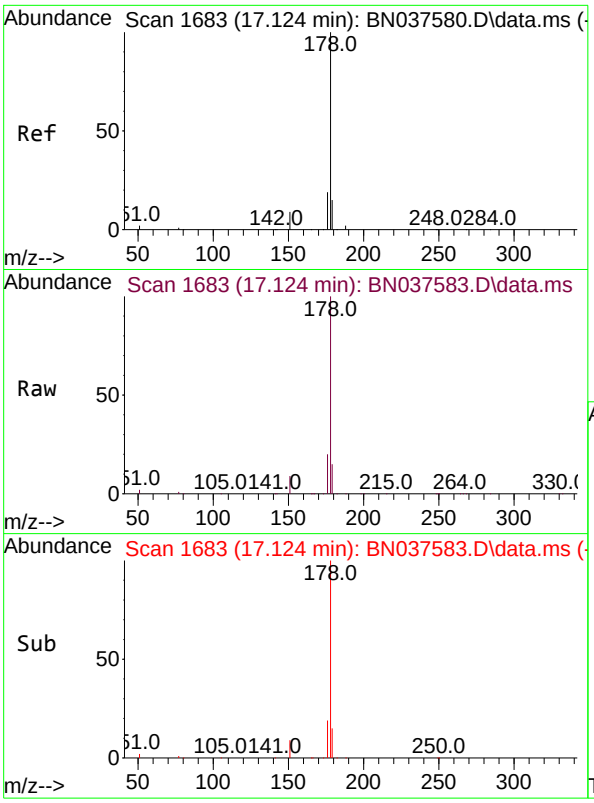


#24
Pentachlorophenol
Concen: 3.887 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:266 Resp: 6325

Ion	Ratio	Lower	Upper
266	100		
264	63.4	49.6	74.4
268	64.3	49.2	73.8



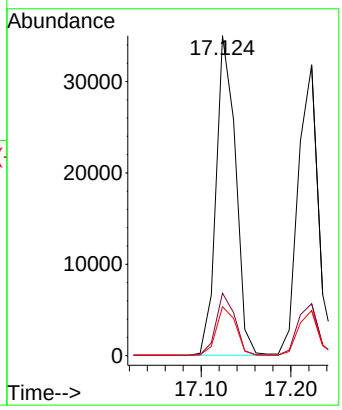


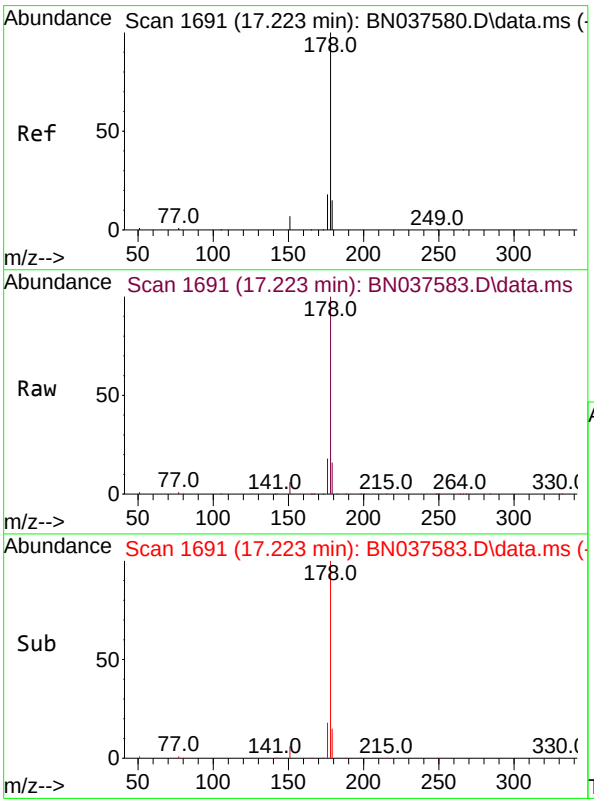
#25
Phenanthrene
Concen: 3.339 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:178 Resp: 52784

Ion	Ratio	Lower	Upper
178	100		
176	18.9	15.0	22.6
179	15.3	12.3	18.5

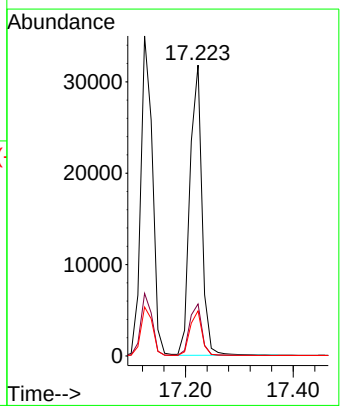


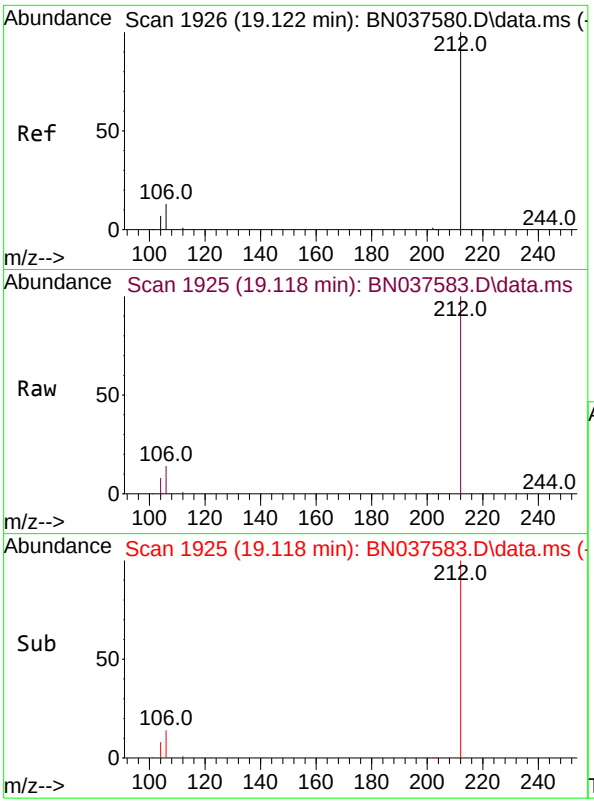


#26
Anthracene
Concen: 3.525 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:178 Resp: 49333

Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.7	22.1
179	15.3	12.3	18.5



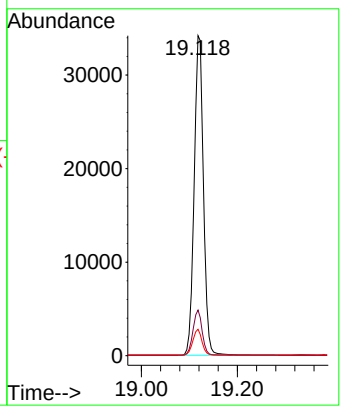


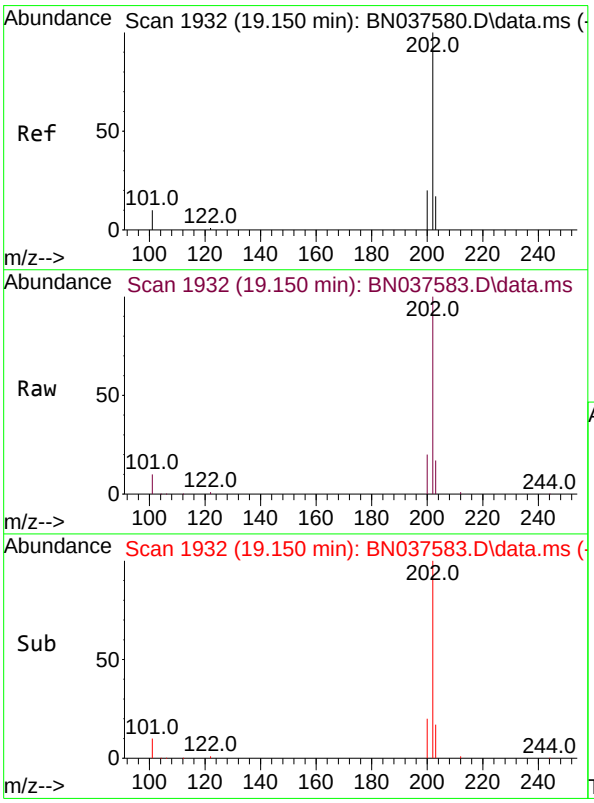
#27
Fluoranthene-d10
Concen: 3.376 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:212 Resp: 46178

Ion	Ratio	Lower	Upper
212	100		
106	13.9	11.5	17.3
104	8.0	6.6	9.8

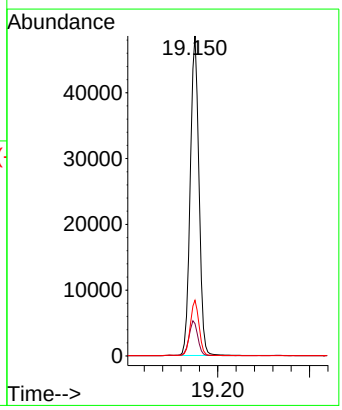


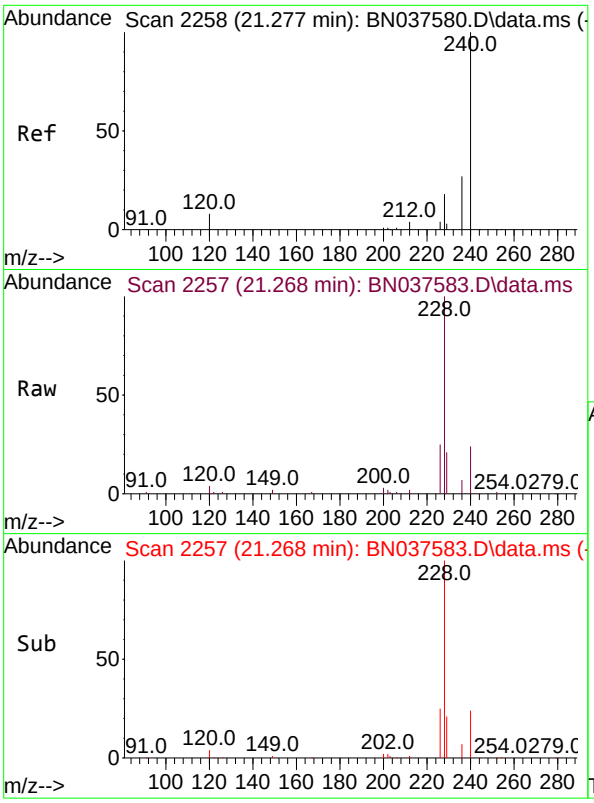


#28
Fluoranthene
Concen: 3.511 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:202 Resp: 63765

Ion	Ratio	Lower	Upper
202	100		
101	11.1	9.0	13.6
203	17.3	13.8	20.8



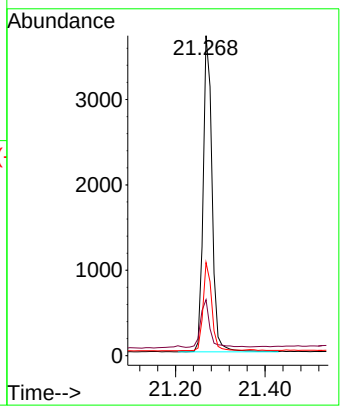


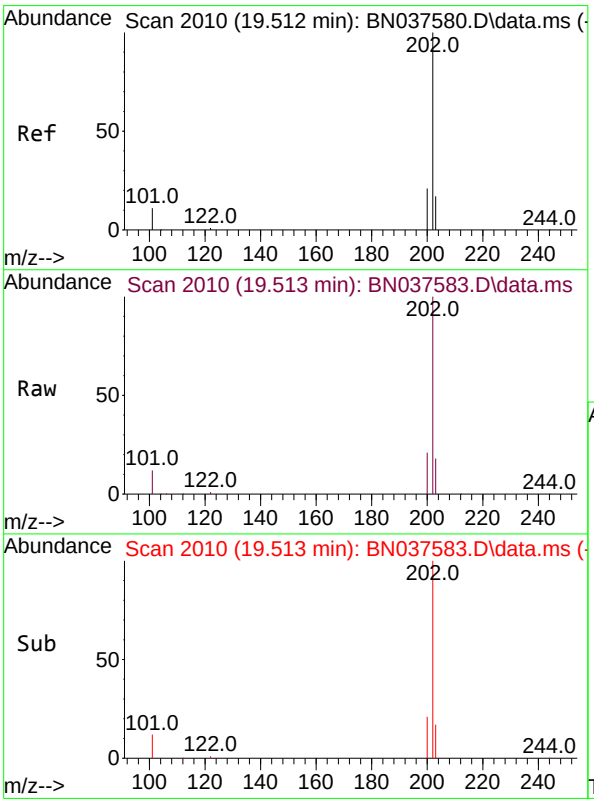
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:240 Resp: 5116

Ion	Ratio	Lower	Upper
240	100		
120	17.5	8.9	13.3#
236	29.1	22.6	33.8

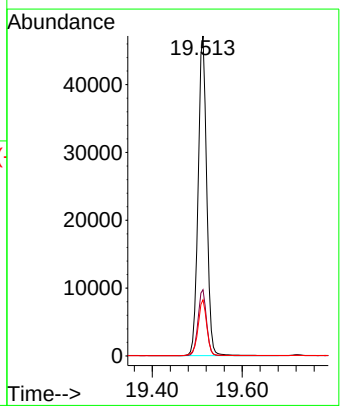


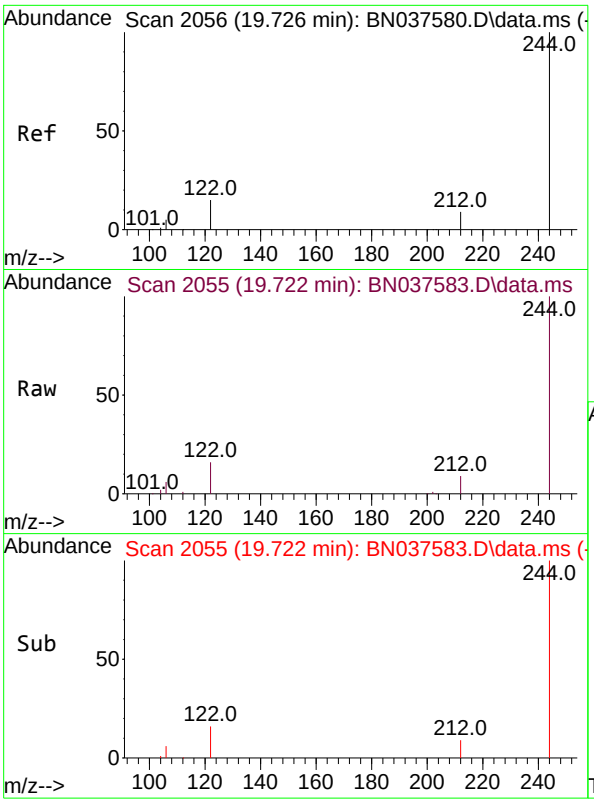


#30
Pyrene
Concen: 3.254 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:202 Resp: 62227

Ion	Ratio	Lower	Upper
202	100		
200	20.6	16.6	25.0
203	17.8	14.3	21.5



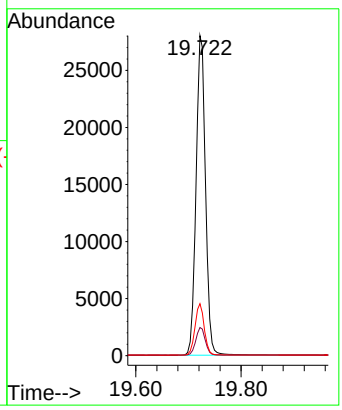


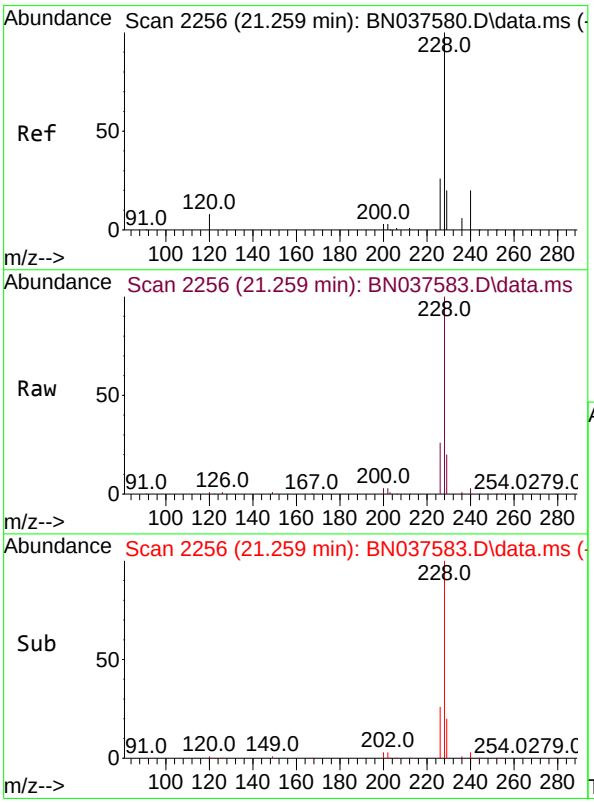
#31
Terphenyl-d14
Concen: 3.315 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:244 Resp: 34892

Ion	Ratio	Lower	Upper
244	100		
212	8.8	8.2	12.2
122	16.2	13.2	19.8

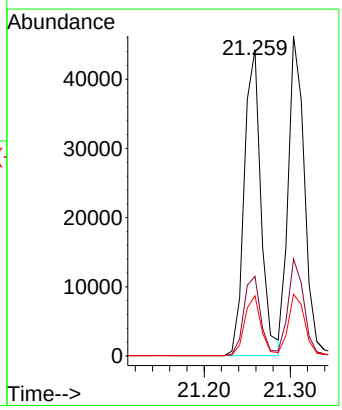


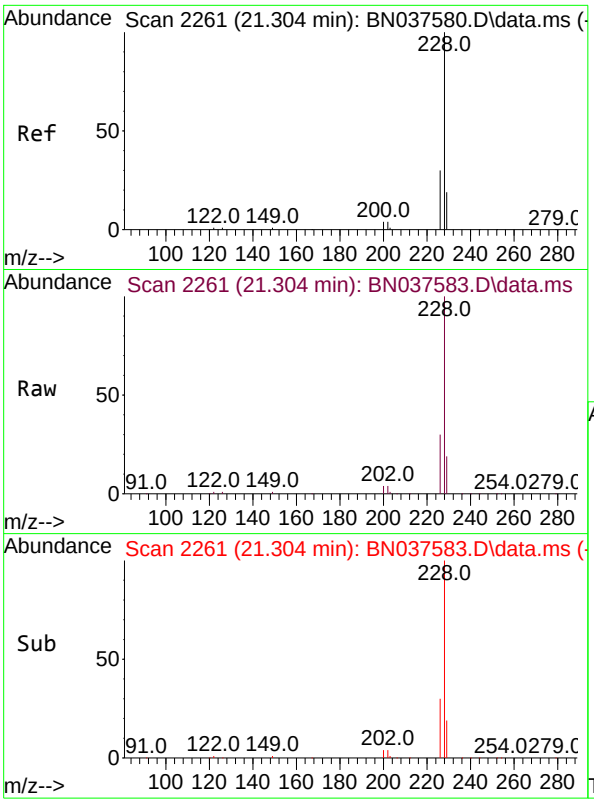


#32
Benzo(a)anthracene
Concen: 3.491 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:228 Resp: 59663

Ion	Ratio	Lower	Upper
228	100		
226	26.0	21.5	32.3
229	19.6	16.5	24.7



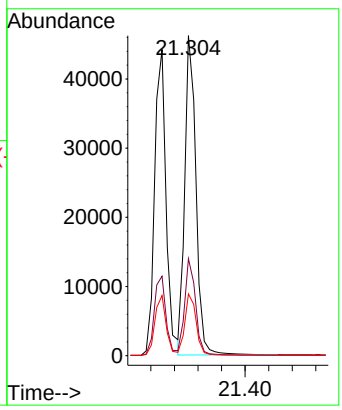


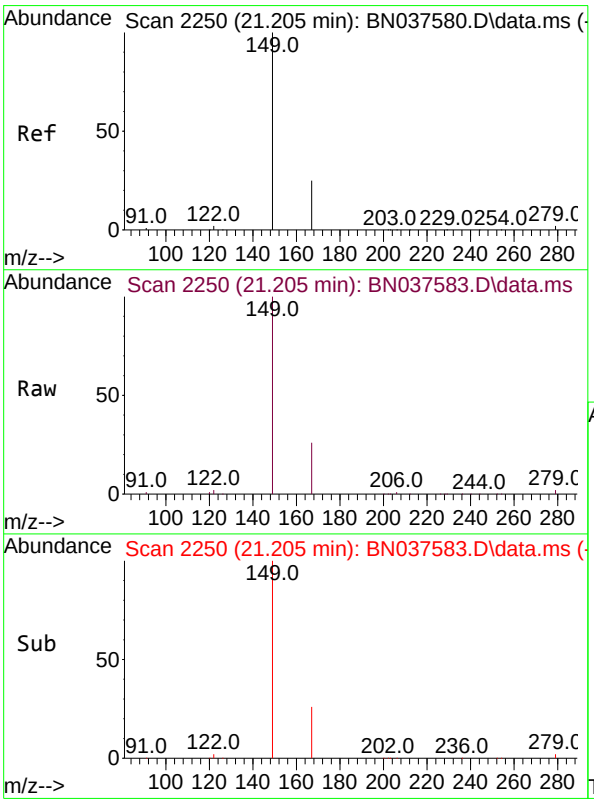
#33
Chrysene
Concen: 3.199 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:228 Resp: 60925

Ion	Ratio	Lower	Upper
228	100		
226	30.3	24.9	37.3
229	19.3	15.8	23.8

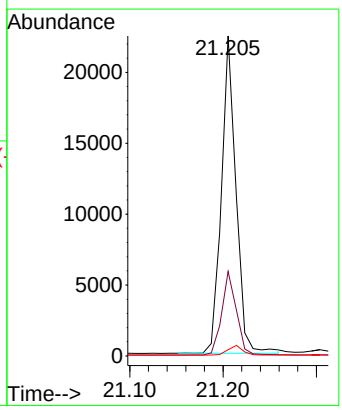


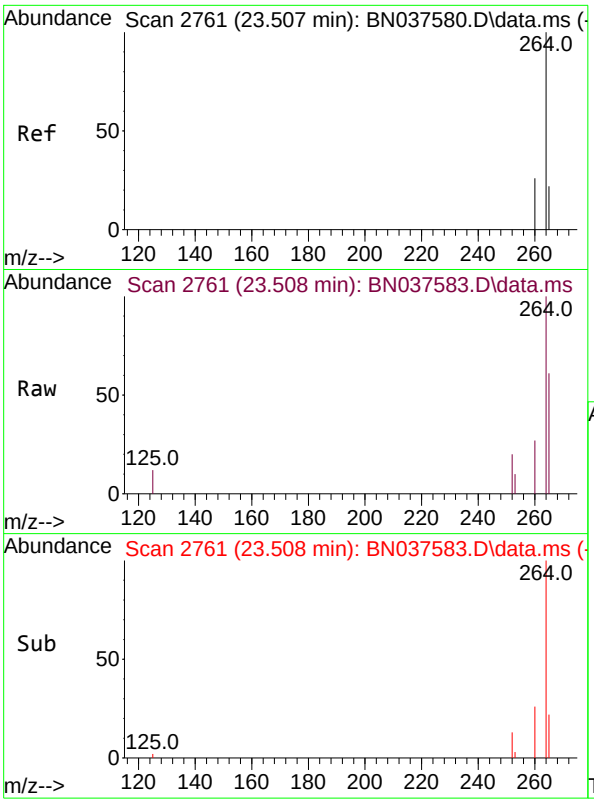


#34
Bis(2-ethylhexyl)phthalate
Concen: 3.440 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:149 Resp: 24265

Ion	Ratio	Lower	Upper
149	100		
167	26.3	20.5	30.7
279	3.1	2.6	4.0



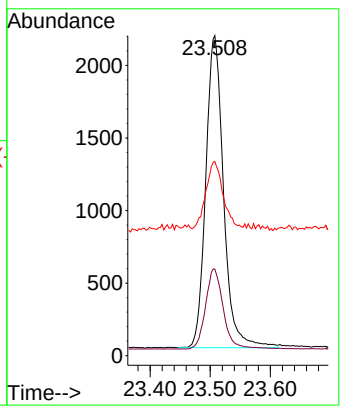


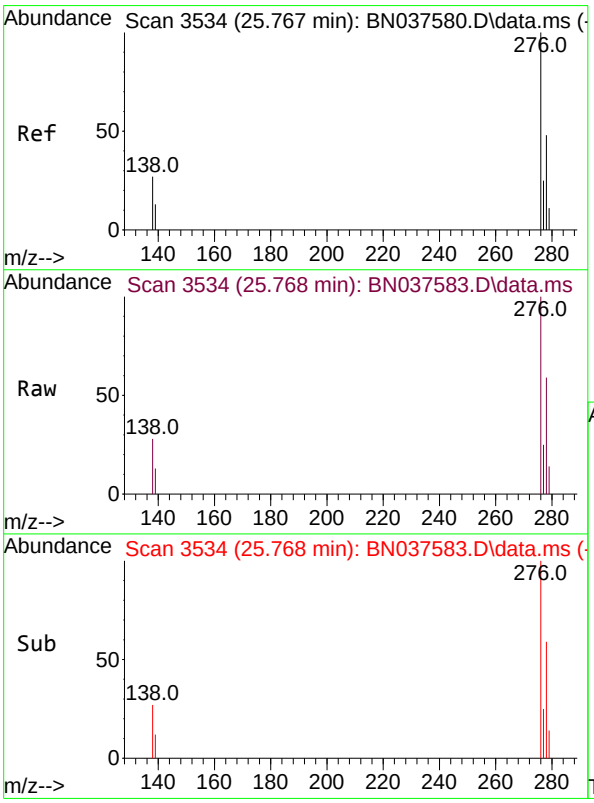
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.508 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:264 Resp: 4411

Ion	Ratio	Lower	Upper
264	100		
260	27.1	21.6	32.4
265	60.7	48.2	72.4

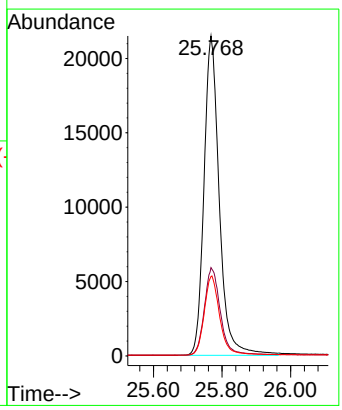


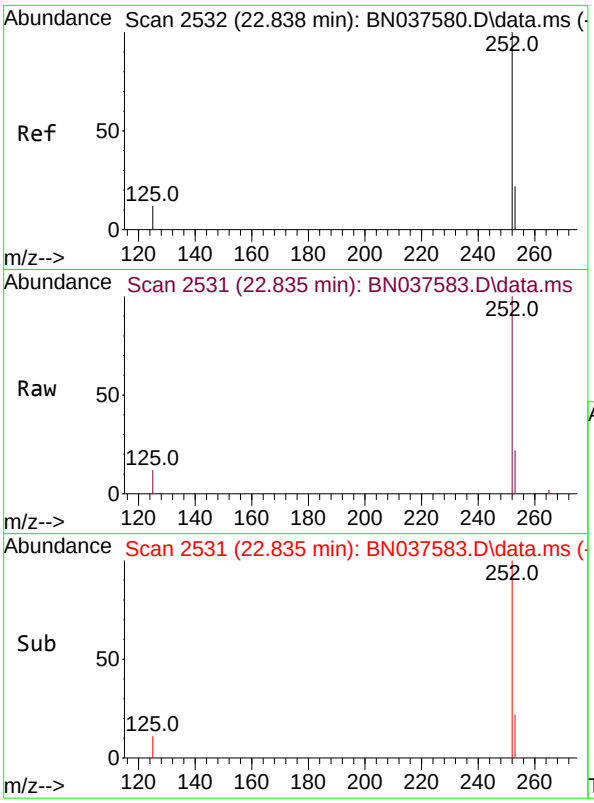


#36
Indeno(1,2,3-cd)pyrene
Concen: 3.576 ng
RT: 25.768 min Scan# 3534
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:276 Resp: 66459

Ion	Ratio	Lower	Upper
276	100		
138	28.5	23.3	34.9
277	25.1	19.5	29.3



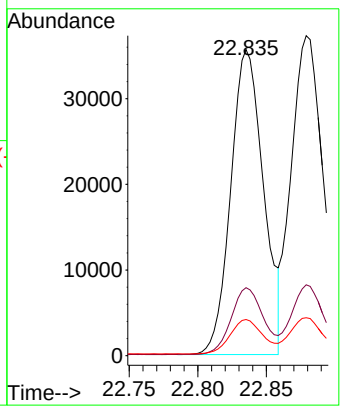


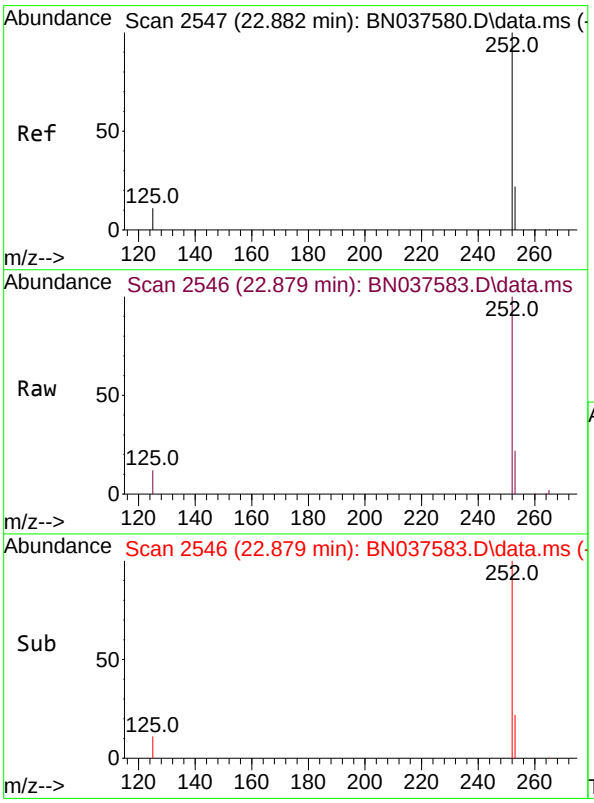
#37
Benzo(b)fluoranthene
Concen: 3.535 ng
RT: 22.835 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 59086

Ion	Ratio	Lower	Upper
252	100		
253	22.2	20.0	30.0
125	11.8	13.8	20.6#

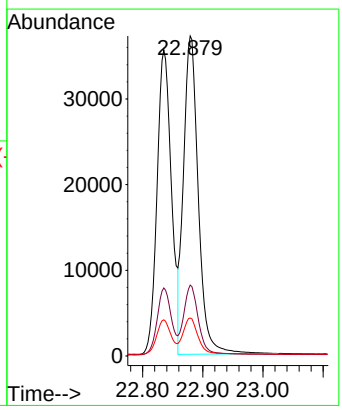


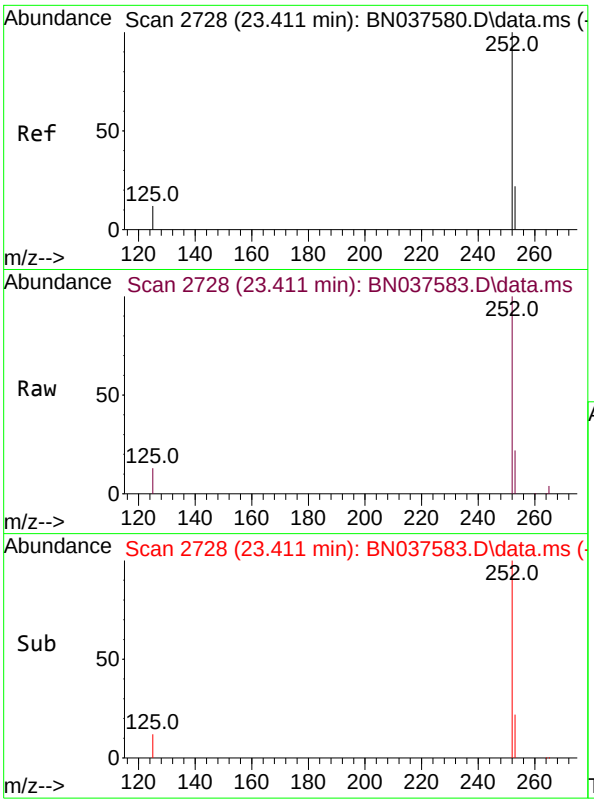


#38
Benzo(k)fluoranthene
Concen: 3.363 ng
RT: 22.879 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:252 Resp: 63422

Ion	Ratio	Lower	Upper
252	100		
253	22.2	19.9	29.9
125	11.8	15.0	22.6#



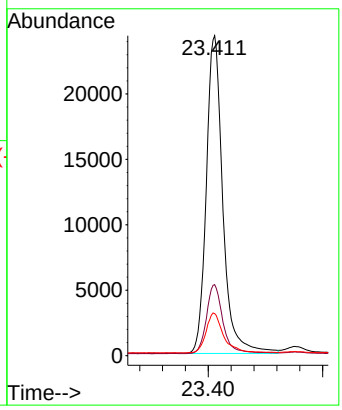


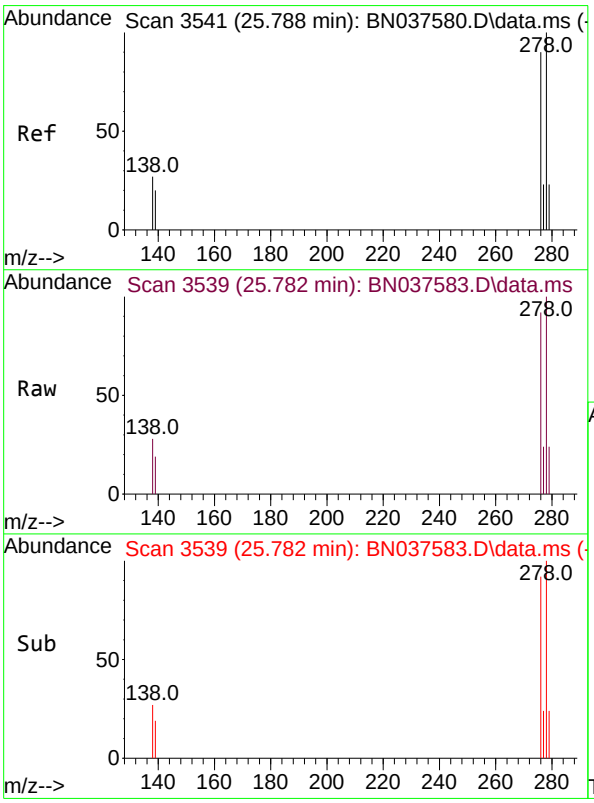
#39
Benzo(a)pyrene
Concen: 3.518 ng
RT: 23.411 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:252 Resp: 48767

Ion	Ratio	Lower	Upper
252	100		
253	22.2	21.6	32.4
125	13.1	16.8	25.2#

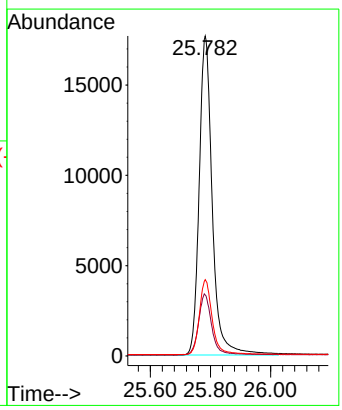


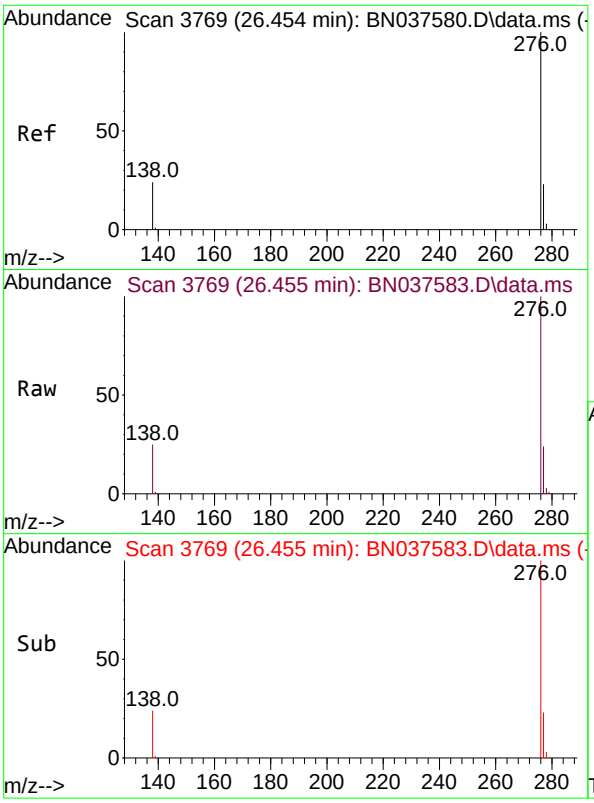


#40
Dibenzo(a,h)anthracene
Concen: 3.709 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.006 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Tgt Ion:278 Resp: 53486

Ion	Ratio	Lower	Upper
278	100		
139	19.0	18.3	27.5
279	23.9	22.5	33.7



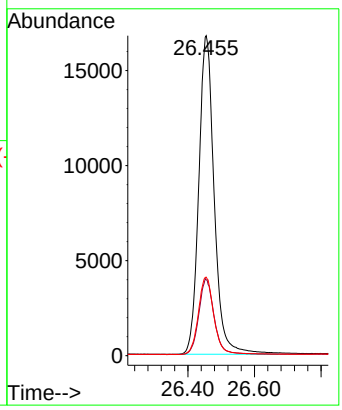


#41
Benzo(g,h,i)perylene
Concen: 3.558 ng
RT: 26.455 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037583.D
Acq: 12 Aug 2025 19:29

Instrument :
BNA_N
ClientSampleId :
SSTDICC3.2

Tgt Ion:276 Resp: 54068

Ion	Ratio	Lower	Upper
276	100		
277	23.7	21.0	31.4
138	24.6	21.7	32.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037584.D
Acq On : 12 Aug 2025 20:05
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Aug 13 04:50:02 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2149	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	5152	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2803	0.400	ng		0.00
19) Phenanthrene-d10	17.086	188	5318	0.400	ng		0.00
29) Chrysene-d12	21.268	240	5600	0.400	ng	#	0.00
35) Perylene-d12	23.505	264	4653	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	26238	5.386	ng		0.00
5) Phenol-d6	6.879	99	32269	5.504	ng		0.00
8) Nitrobenzene-d5	8.854	82	20990	5.784	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	45385	6.480	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	8185	6.672	ng		0.00
15) 2-Fluorobiphenyl	12.973	172	85489	5.273	ng		0.00
27) Fluoranthene-d10	19.118	212	94332	6.743	ng		0.00
31) Terphenyl-d14	19.722	244	63100	5.477	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	9359	4.552	ng		99
3) n-Nitrosodimethylamine	3.535	42	13640	5.192	ng	#	99
6) bis(2-Chloroethyl)ether	7.139	93	27456	5.197	ng		98
9) Naphthalene	10.551	128	72603	5.293	ng		97
10) Hexachlorobutadiene	10.850	225	17071	5.094	ng	#	100
12) 2-Methylnaphthalene	12.167	142	48917	5.686	ng		98
16) Acenaphthylene	14.067	152	69369	5.521	ng		99
17) Acenaphthene	14.409	154	47237	5.527	ng		92
18) Fluorene	15.392	166	62012	5.546	ng		99
21) 4-Bromophenyl-phenylether	16.292	248	19417	5.809	ng	#	91
22) Hexachlorobenzene	16.404	284	24588	5.190	ng		100
25) Phenanthrene	17.124	178	89516	5.537	ng		100
26) Anthracene	17.223	178	85474	5.972	ng		100
28) Fluoranthene	19.150	202	109583	5.900	ng		100
30) Pyrene	19.513	202	108658	5.190	ng		100
32) Benzo(a)anthracene	21.250	228	104084	5.564	ng		98
33) Chrysene	21.304	228	108554	5.207	ng		99
34) Bis(2-ethylhexyl)phtha...	21.205	149	46994	6.087	ng		98
36) Indeno(1,2,3-cd)pyrene	25.768	276	116962	5.965	ng		99
37) Benzo(b)fluoranthene	22.835	252	106138	6.019	ng	#	91
38) Benzo(k)fluoranthene	22.879	252	110373	5.548	ng	#	90
39) Benzo(a)pyrene	23.408	252	87699	5.997	ng	#	87
40) Dibenzo(a,h)anthracene	25.782	278	94267	6.197	ng		92
41) Benzo(g,h,i)perylene	26.458	276	95537	5.960	ng		95

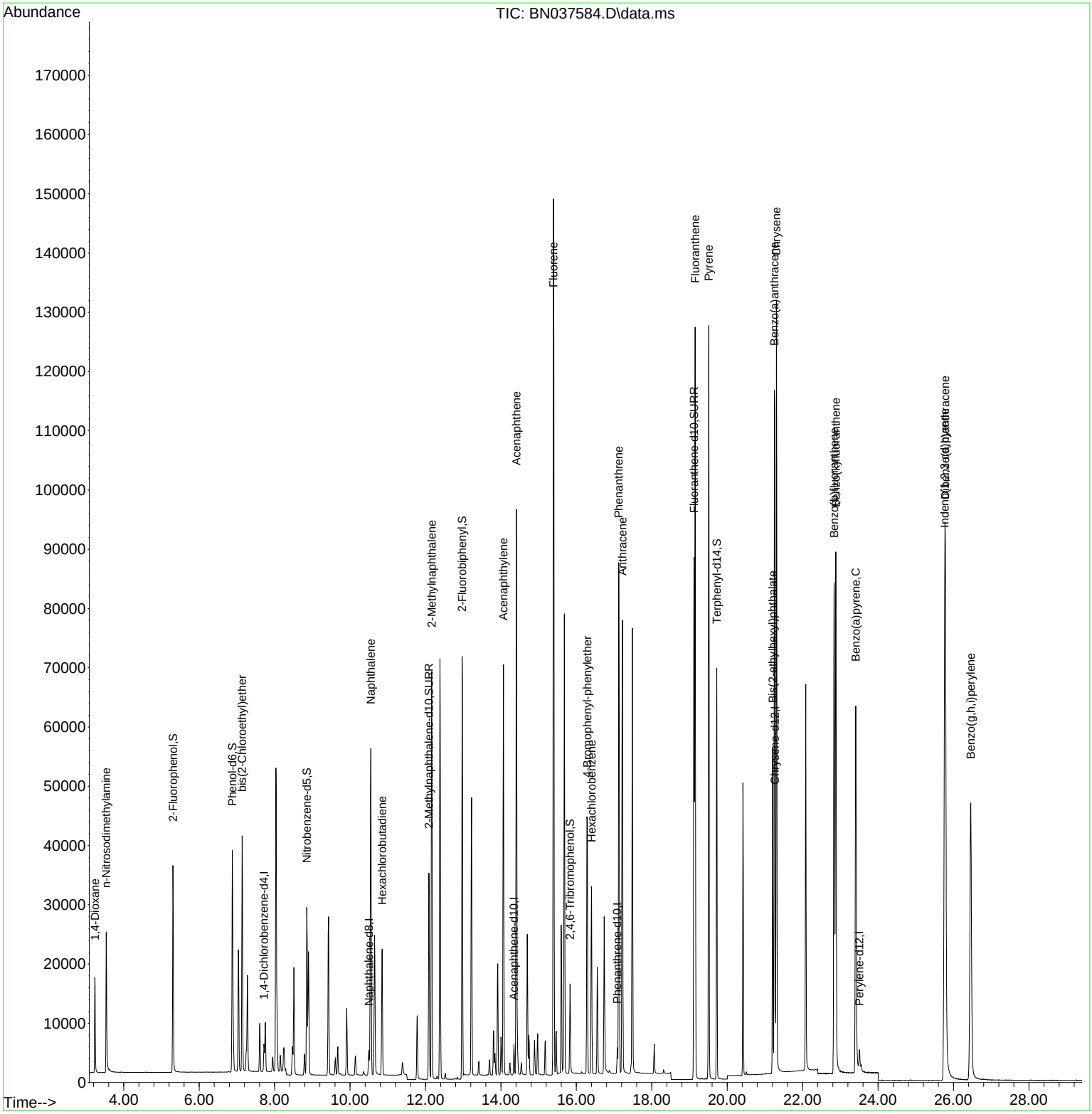
(#) = qualifier out of range (m) = manual integration (+) = signals summed

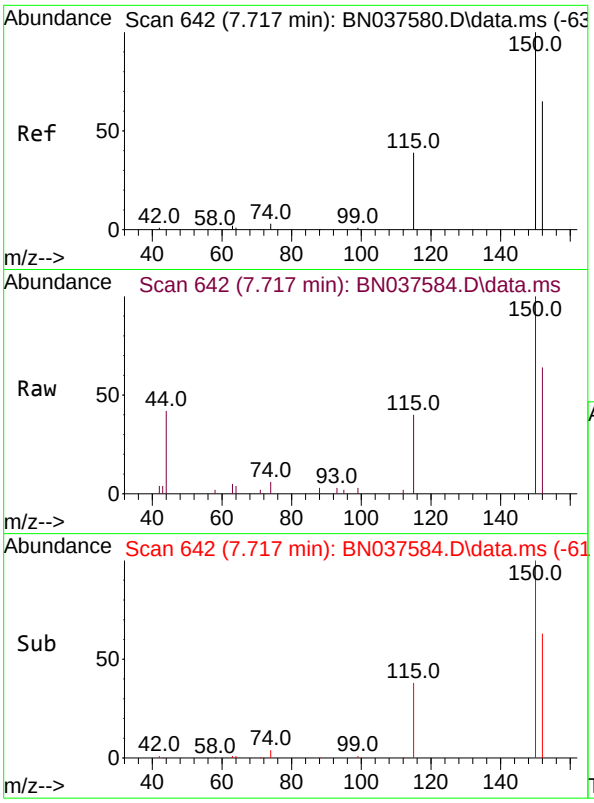
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037584.D
Acq On : 12 Aug 2025 20:05
Operator : RC/JU
Sample : SSTDICC5.0
Misc :
ALS Vial : 9 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Quant Time: Aug 13 04:50:02 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 04:46:02 2025
Response via : Initial Calibration



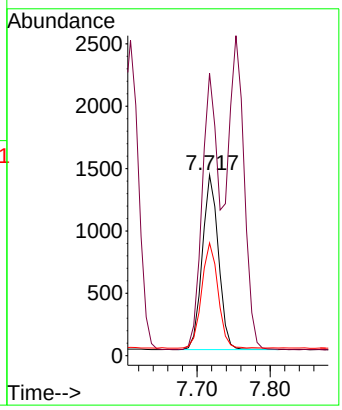


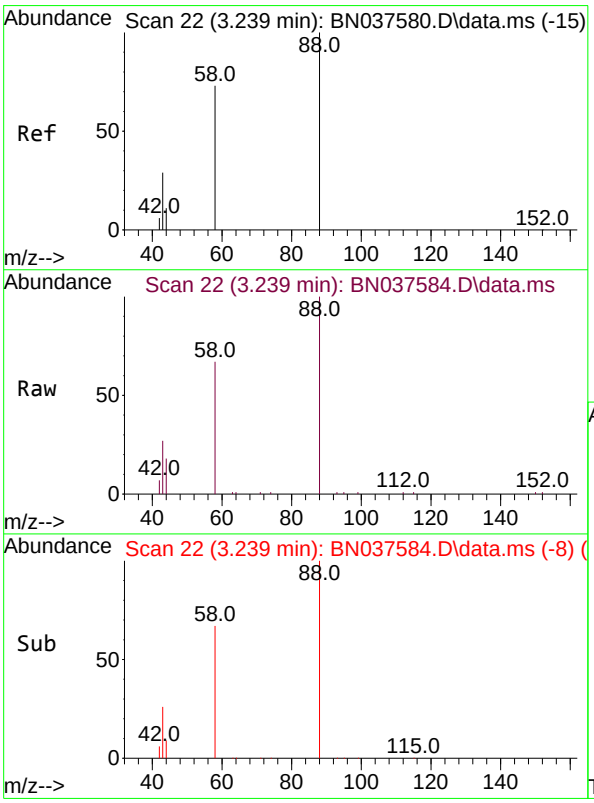
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 2149

Ion	Ratio	Lower	Upper
152	100		
150	156.4	122.2	183.4
115	62.4	49.8	74.6

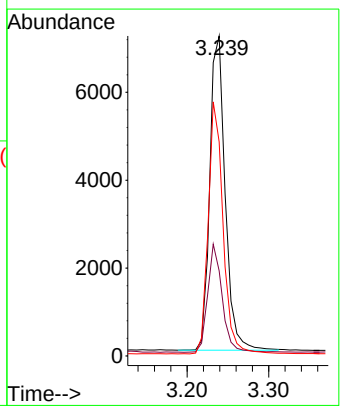


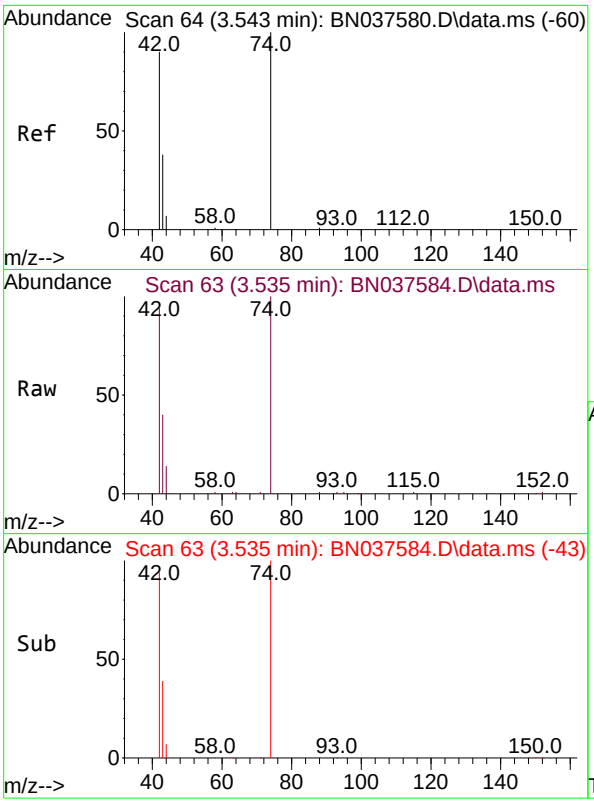


#2
1,4-Dioxane
Concen: 4.552 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion: 88 Resp: 9359

Ion	Ratio	Lower	Upper
88	100		
43	32.5	25.8	38.6
58	77.5	61.2	91.8



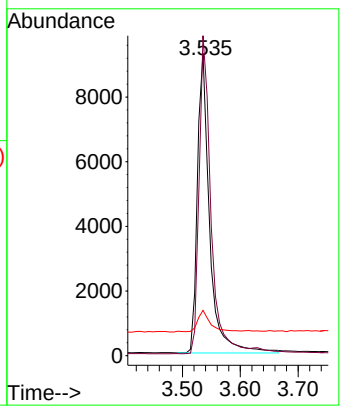


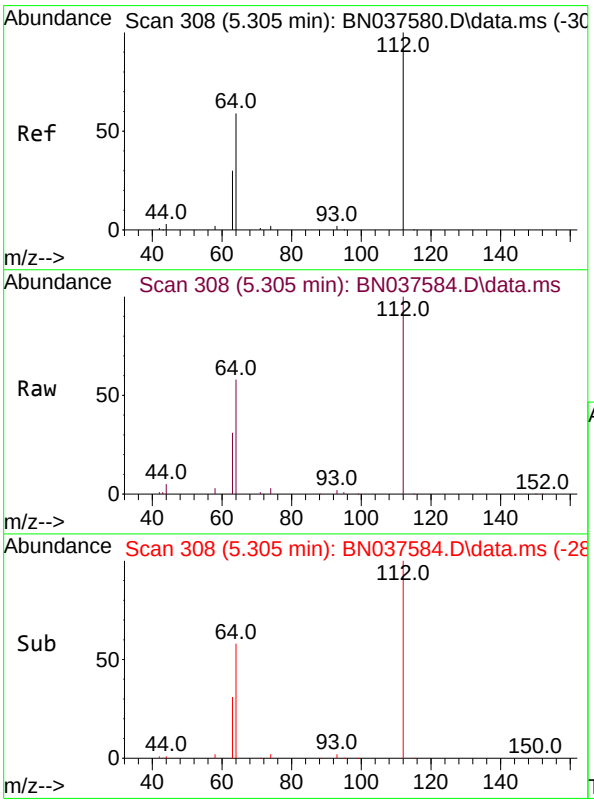
#3
n-Nitrosodimethylamine
Concen: 5.192 ng
RT: 3.535 min Scan# 6
Delta R.T. -0.007 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 42 Resp: 13640

Ion	Ratio	Lower	Upper
42	100		
74	102.7	82.0	123.0
44	7.6	7.9	11.9#

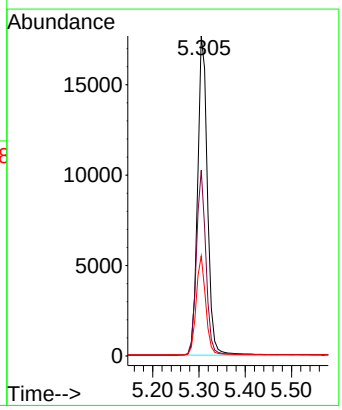


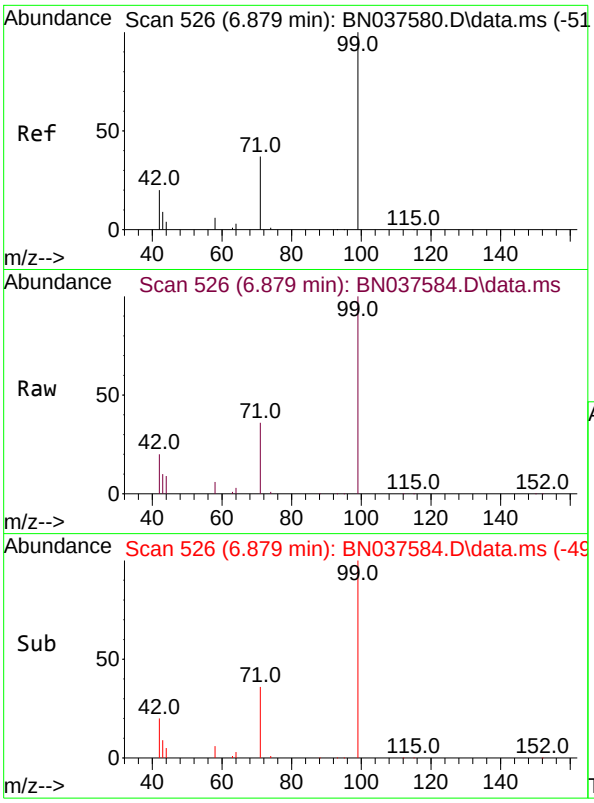


#4
2-Fluorophenol
Concen: 5.386 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:112 Resp: 26238

Ion	Ratio	Lower	Upper
112	100		
64	56.5	44.9	67.3
63	30.1	23.4	35.2



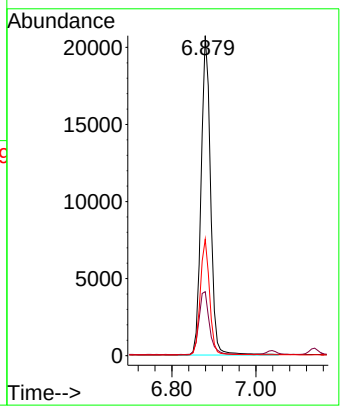


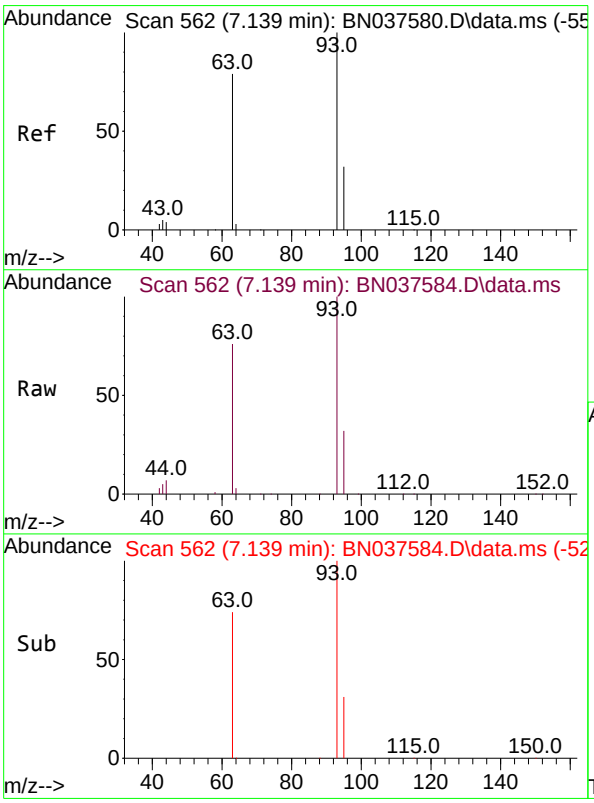
#5
Phenol-d6
Concen: 5.504 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion: 99 Resp: 32269

Ion	Ratio	Lower	Upper
99	100		
42	21.8	18.5	27.7
71	35.9	28.6	42.8

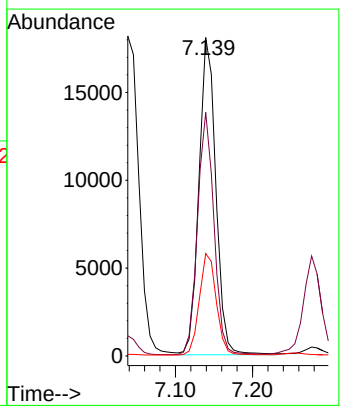


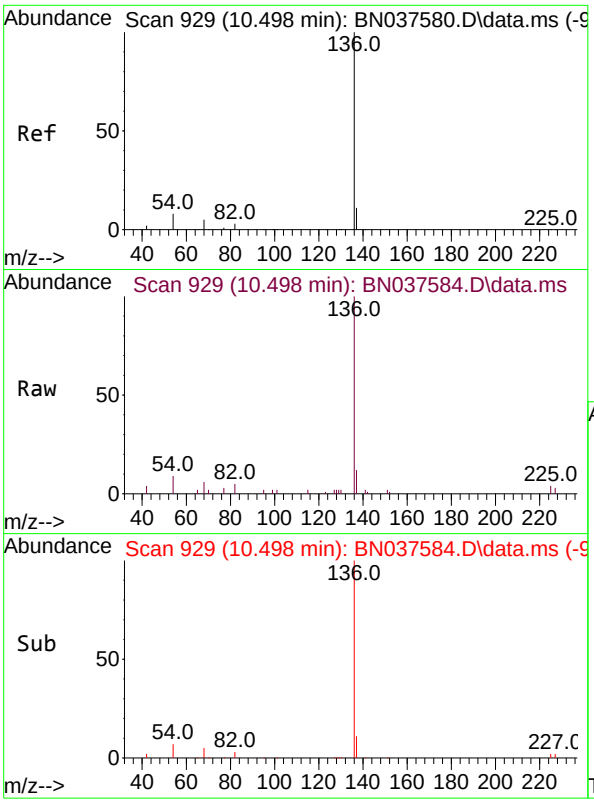


#6
bis(2-Chloroethyl)ether
Concen: 5.197 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion: 93 Resp: 27456

Ion	Ratio	Lower	Upper
93	100		
63	74.3	58.0	87.0
95	32.1	24.9	37.3



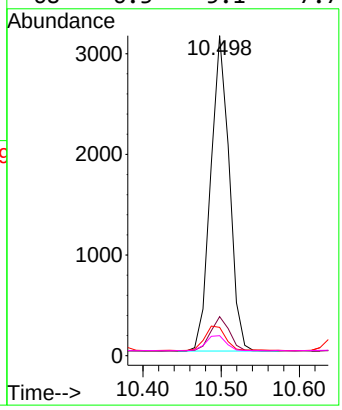


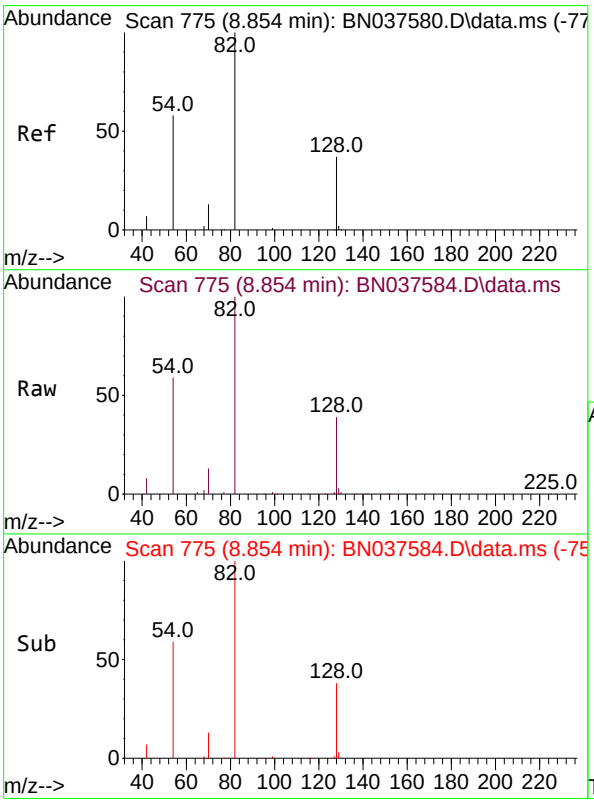
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:136 Resp: 5152

Ion	Ratio	Lower	Upper
136	100		
137	12.2	9.5	14.3
54	8.9	7.3	10.9
68	6.3	5.1	7.7

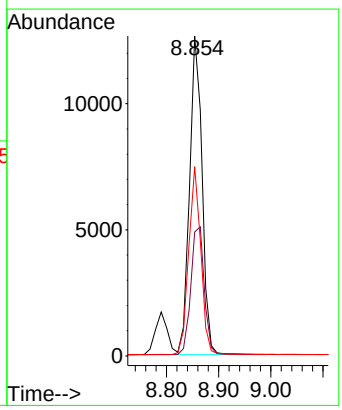


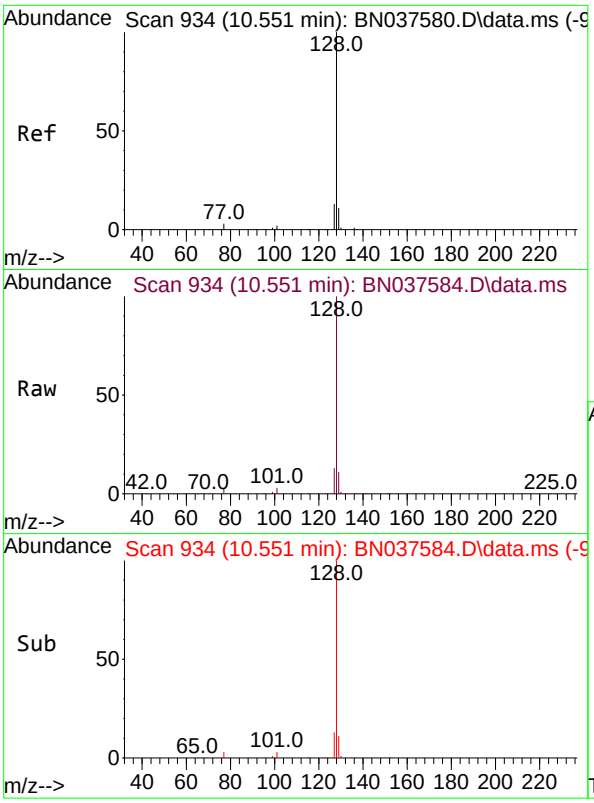


#8
Nitrobenzene-d5
Concen: 5.784 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion: 82 Resp: 20990

Ion	Ratio	Lower	Upper
82	100		
128	38.7	32.6	48.8
54	59.1	48.9	73.3



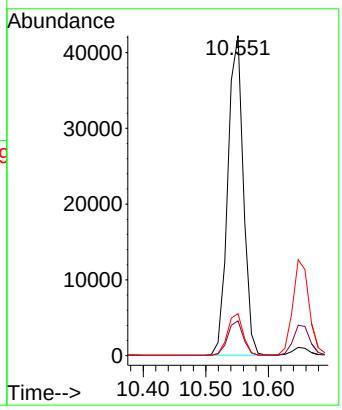


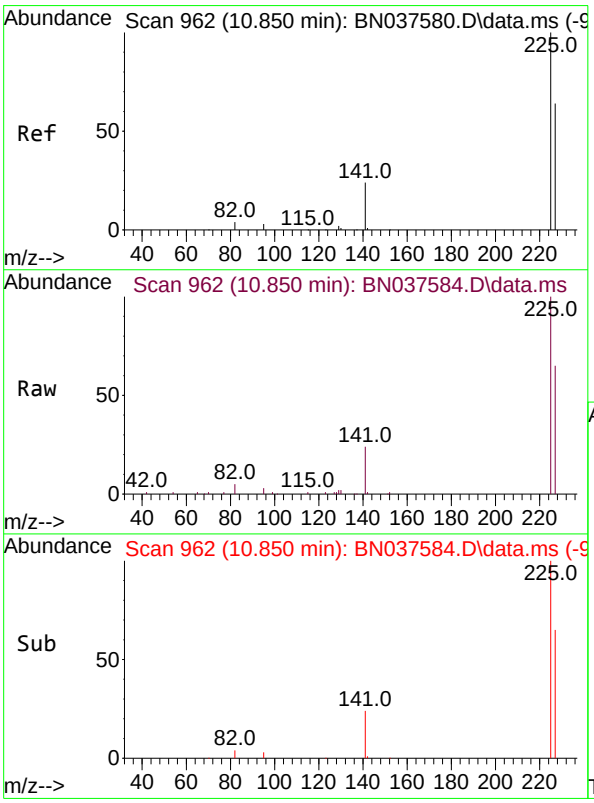
#9
Naphthalene
Concen: 5.293 ng
RT: 10.551 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:128 Resp: 72603

Ion	Ratio	Lower	Upper
128	100		
129	10.9	9.8	14.6
127	13.1	11.5	17.3

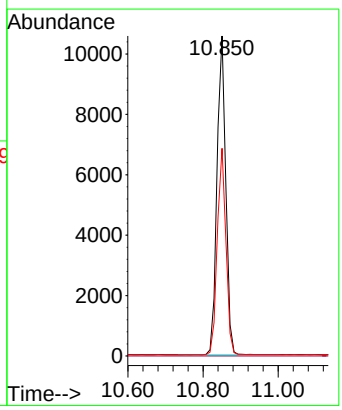


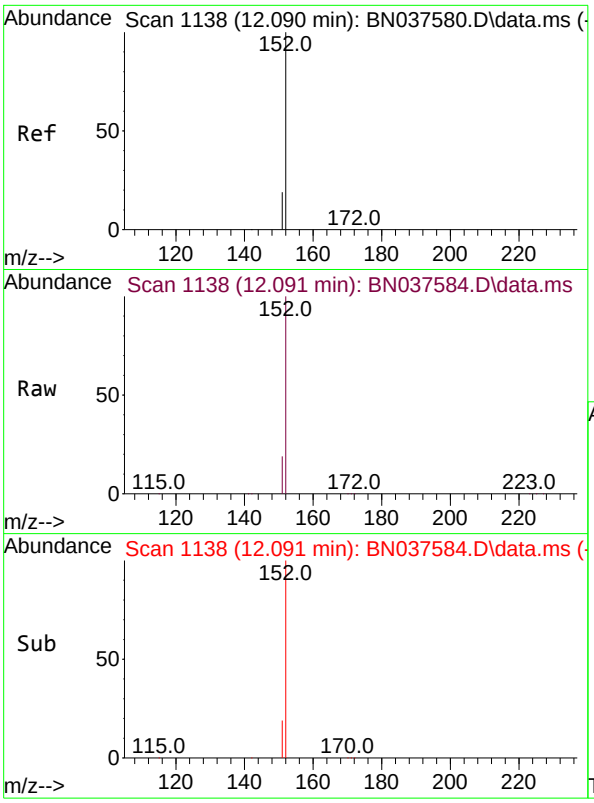


#10
Hexachlorobutadiene
Concen: 5.094 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:225 Resp: 17071

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.8	50.8	76.2



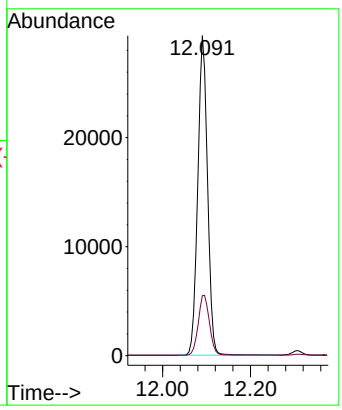


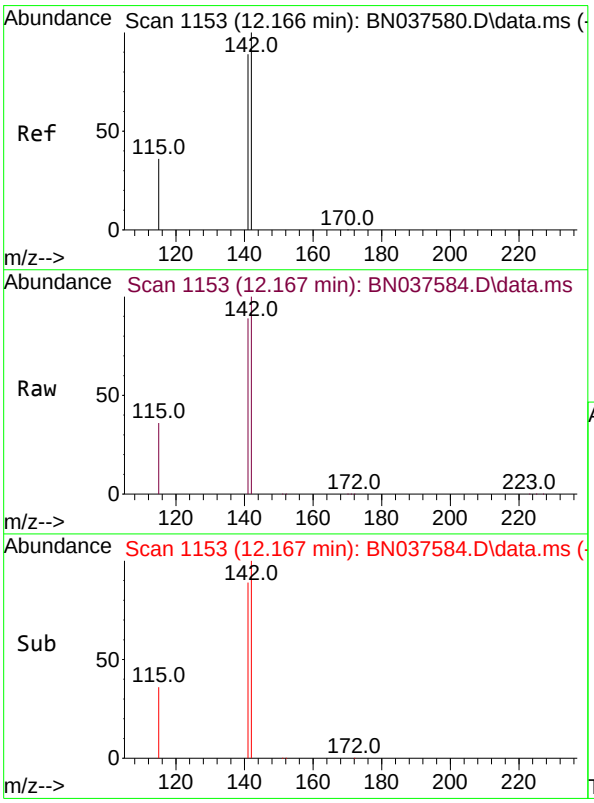
#11
2-Methylnaphthalene-d10
Concen: 6.480 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:152 Resp: 45385

Ion	Ratio	Lower	Upper
152	100		
151	21.4	17.3	25.9

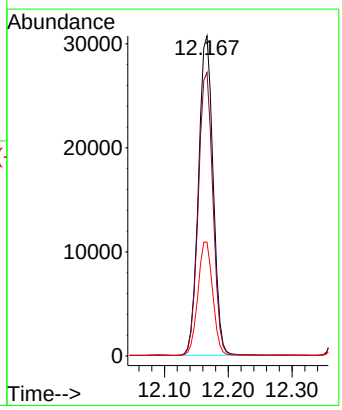


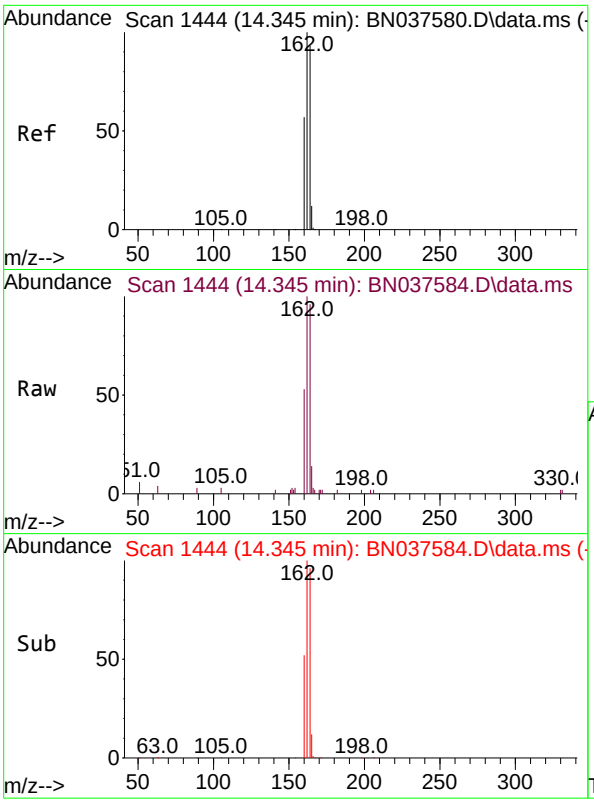


#12
2-Methylnaphthalene
Concen: 5.686 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:142 Resp: 48917

Ion	Ratio	Lower	Upper
142	100		
141	88.6	71.4	107.0
115	35.6	30.2	45.4



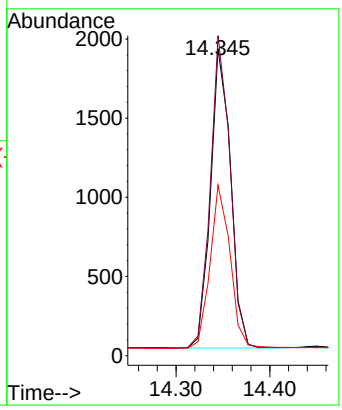


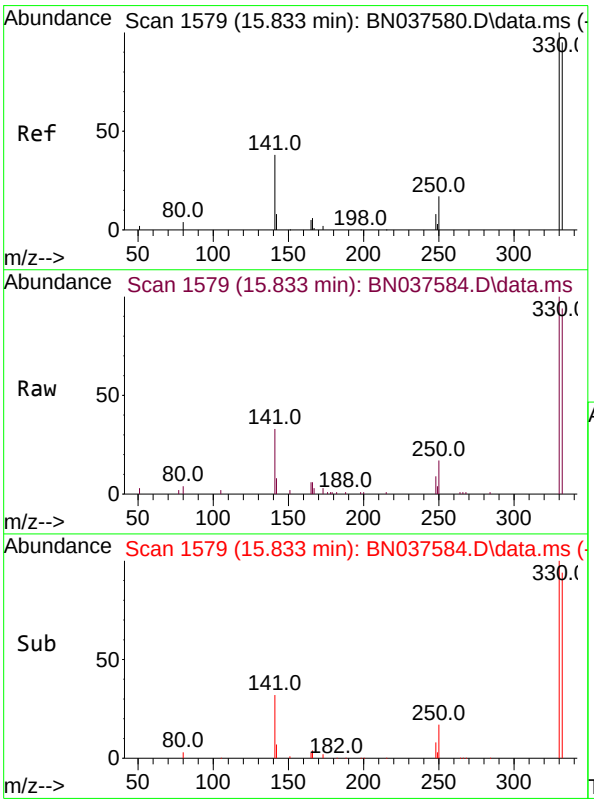
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:164 Resp: 2803

Ion	Ratio	Lower	Upper
164	100		
162	104.2	85.5	128.3
160	55.5	49.5	74.3

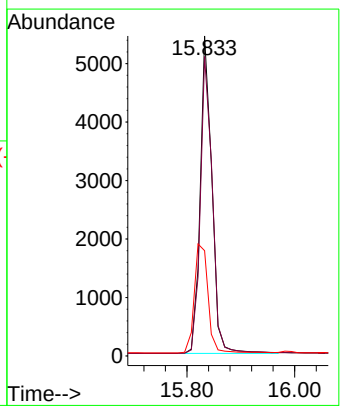


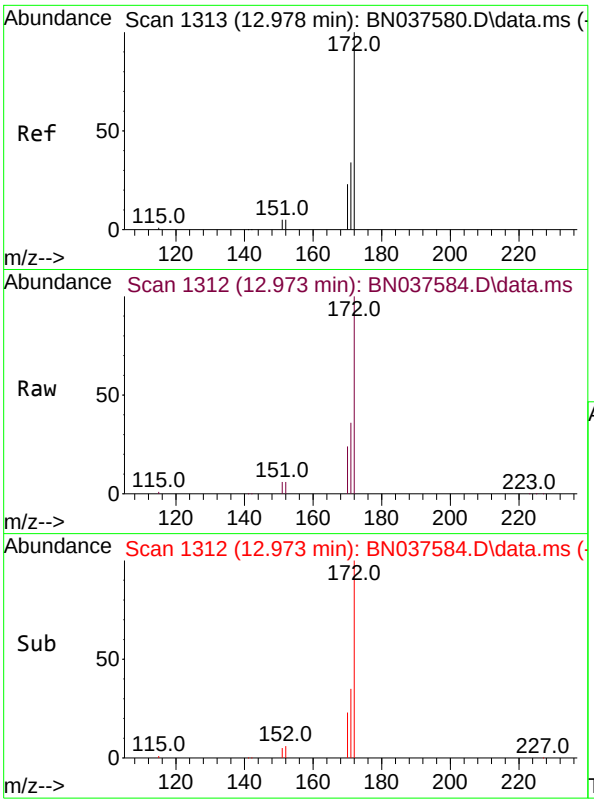


#14
2,4,6-Tribromophenol
Concen: 6.672 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:330 Resp: 8185

Ion	Ratio	Lower	Upper
330	100		
332	96.2	77.4	116.0
141	40.7	30.9	46.3



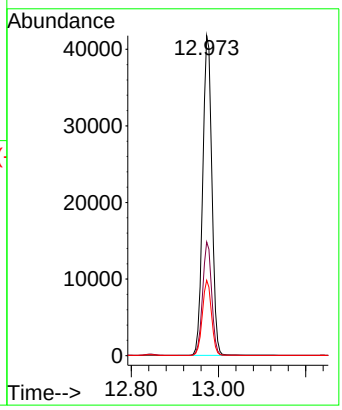


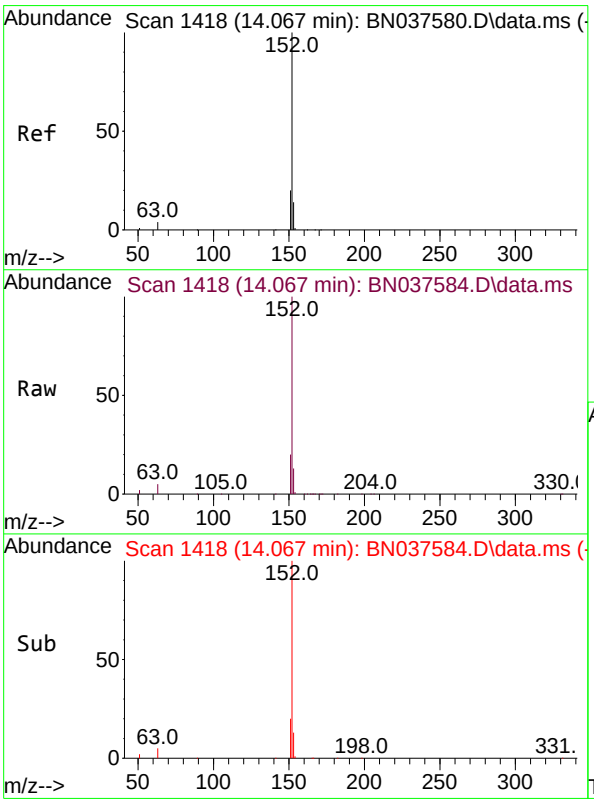
#15
2-Fluorobiphenyl
Concen: 5.273 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:172 Resp: 85489

Ion	Ratio	Lower	Upper
172	100		
171	35.6	28.2	42.4
170	23.6	19.2	28.8

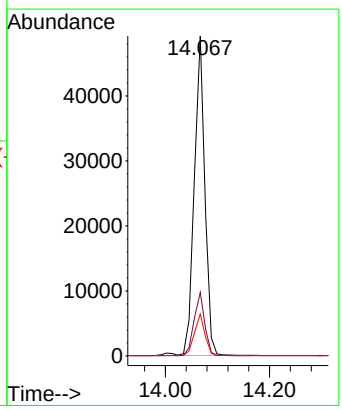


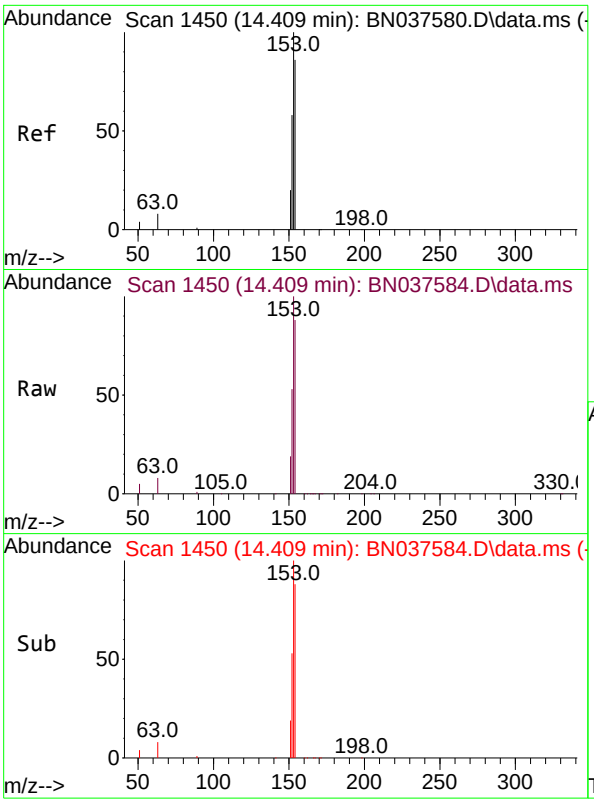


#16
Acenaphthylene
Concen: 5.521 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:152 Resp: 69369

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.1	24.1
153	12.9	10.7	16.1



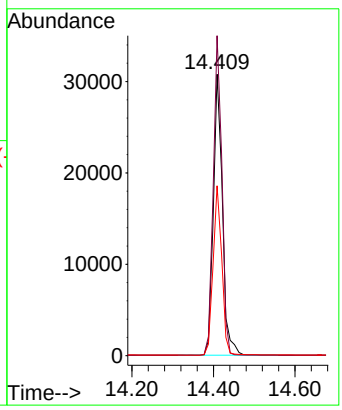


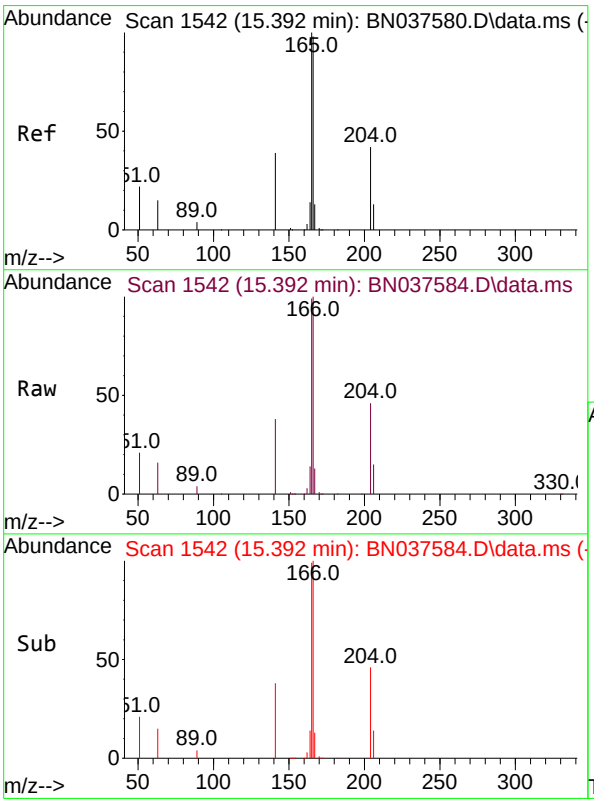
#17
Acenaphthene
Concen: 5.527 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:154 Resp: 47237

Ion	Ratio	Lower	Upper
154	100		
153	108.5	90.6	135.8
152	58.2	54.9	82.3

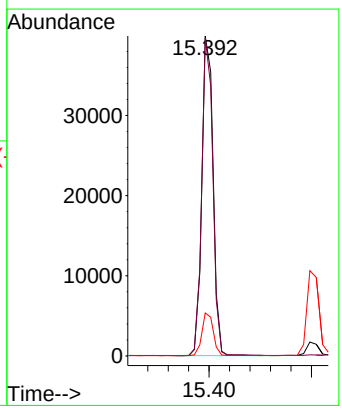


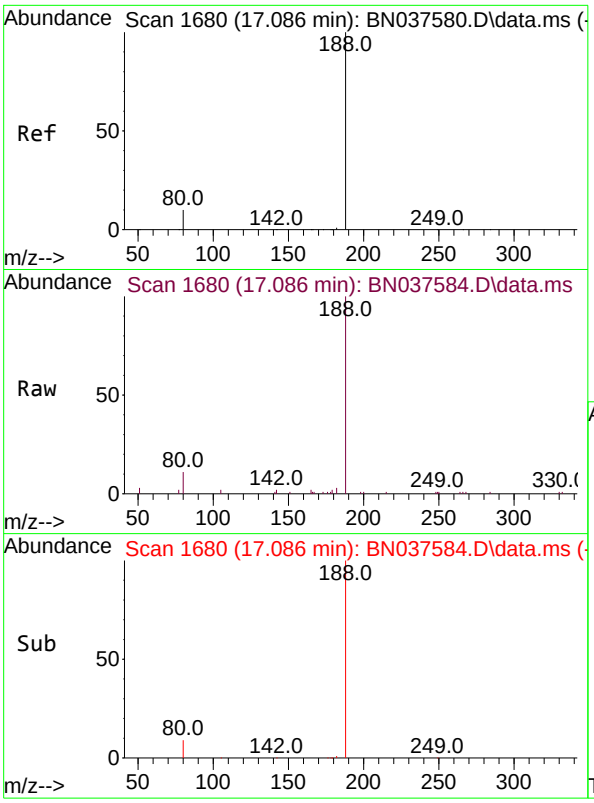


#18
Fluorene
Concen: 5.546 ng
RT: 15.392 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:166 Resp: 62012

Ion	Ratio	Lower	Upper
166	100		
165	97.8	78.9	118.3
167	13.3	10.7	16.1



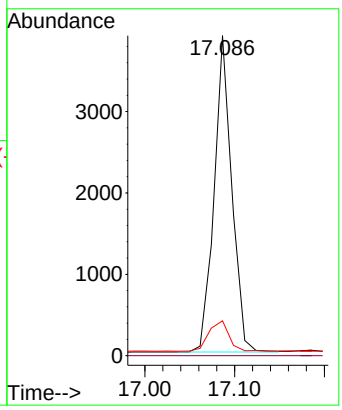


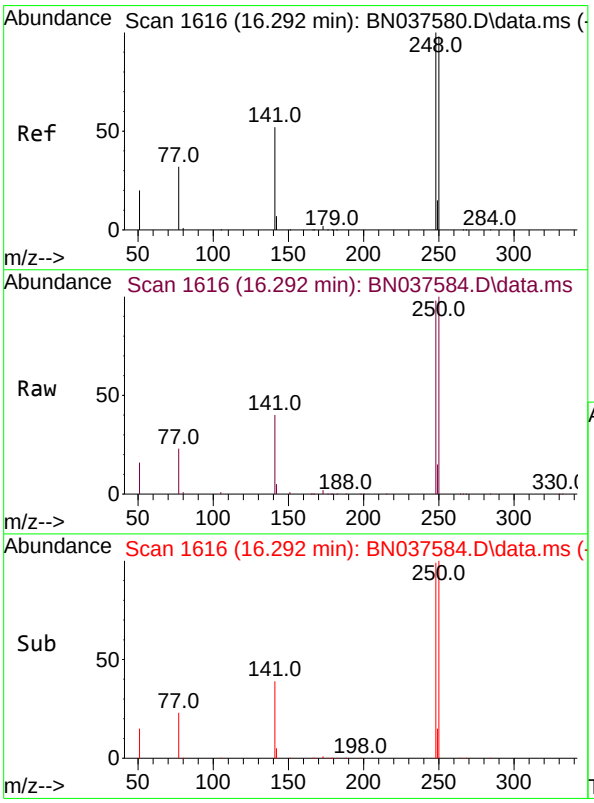
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:188 Resp: 5318

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.9	9.1	13.7

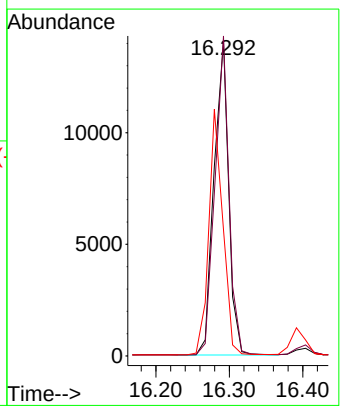


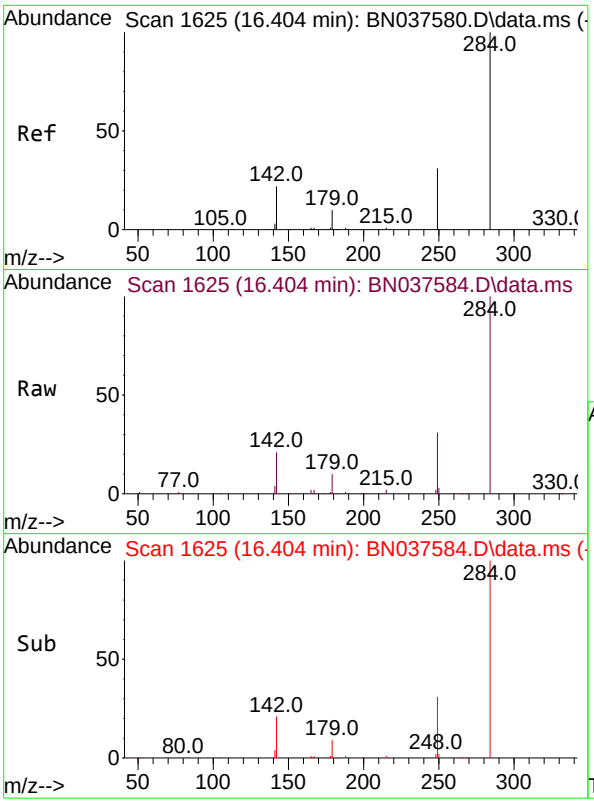


#21
4-Bromophenyl-phenylether
Concen: 5.809 ng
RT: 16.292 min Scan# 1616
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:248 Resp: 19417

Ion	Ratio	Lower	Upper
248	100		
250	101.5	78.6	118.0
141	40.1	43.7	65.5#



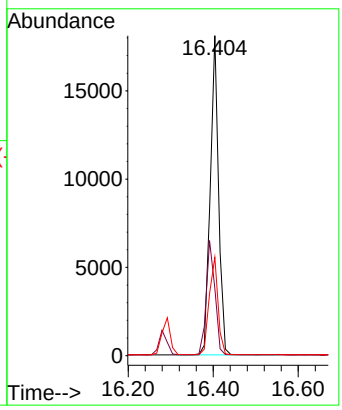


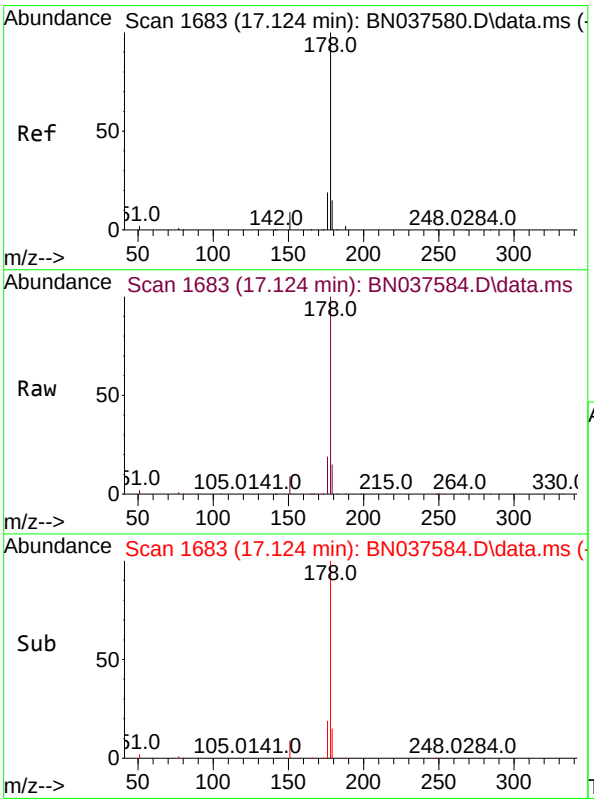
#22
Hexachlorobenzene
Concen: 5.190 ng
RT: 16.404 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:284 Resp: 24588

Ion	Ratio	Lower	Upper
284	100		
142	37.2	29.8	44.6
249	32.3	26.0	39.0

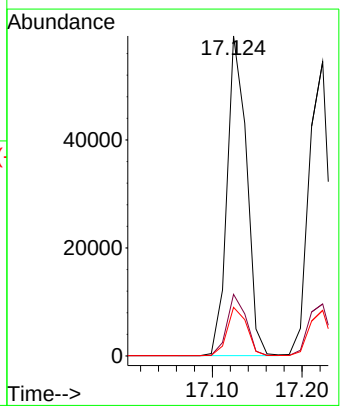


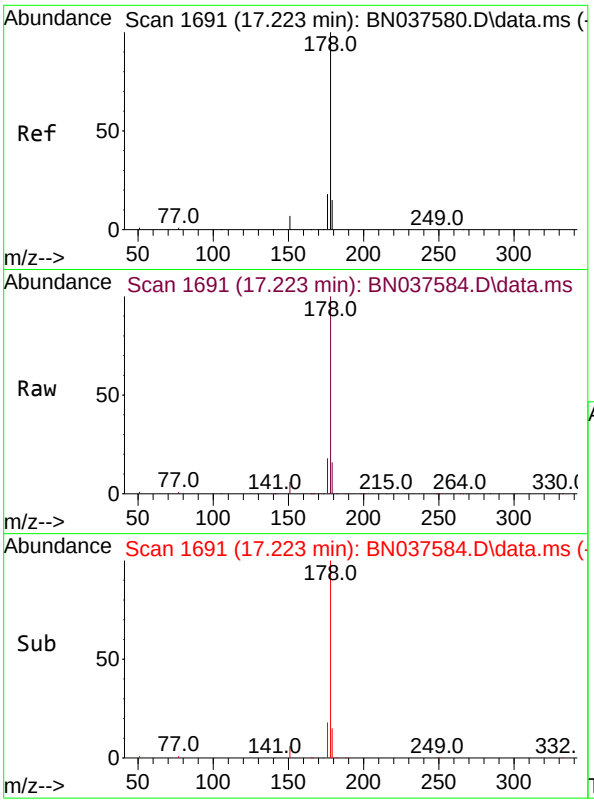


#25
Phenanthrene
Concen: 5.537 ng
RT: 17.124 min Scan# 1683
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:178 Resp: 89516

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.6
179	15.3	12.3	18.5



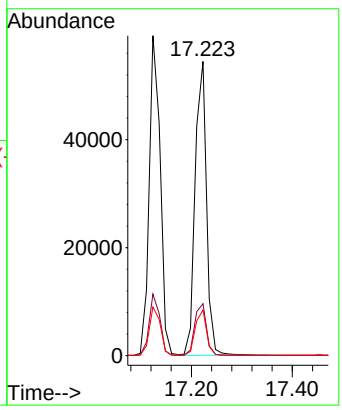


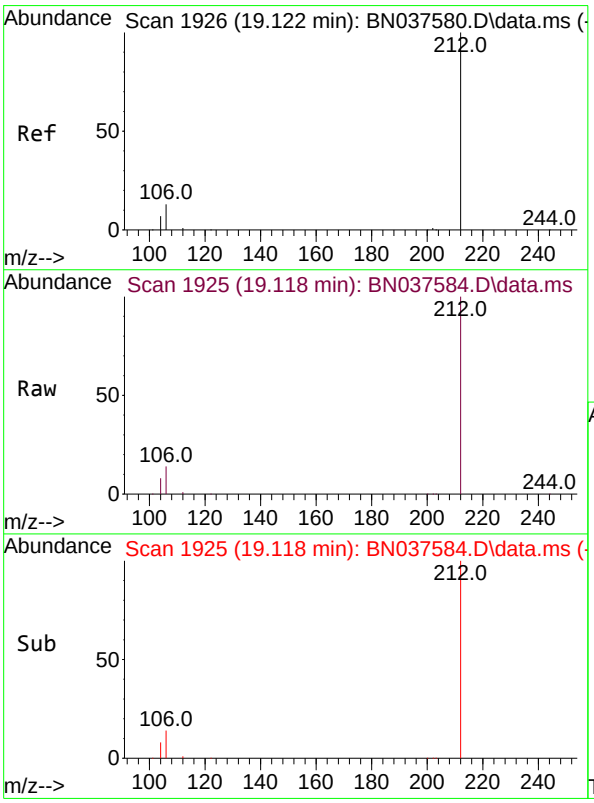
#26
Anthracene
Concen: 5.972 ng
RT: 17.223 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:178 Resp: 85474

Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.7	22.1
179	15.4	12.3	18.5

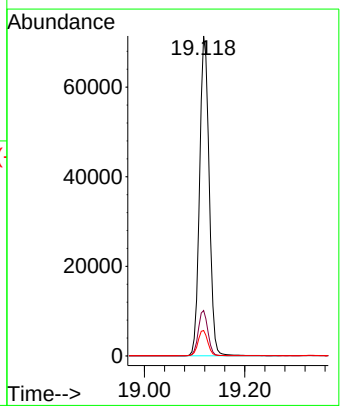


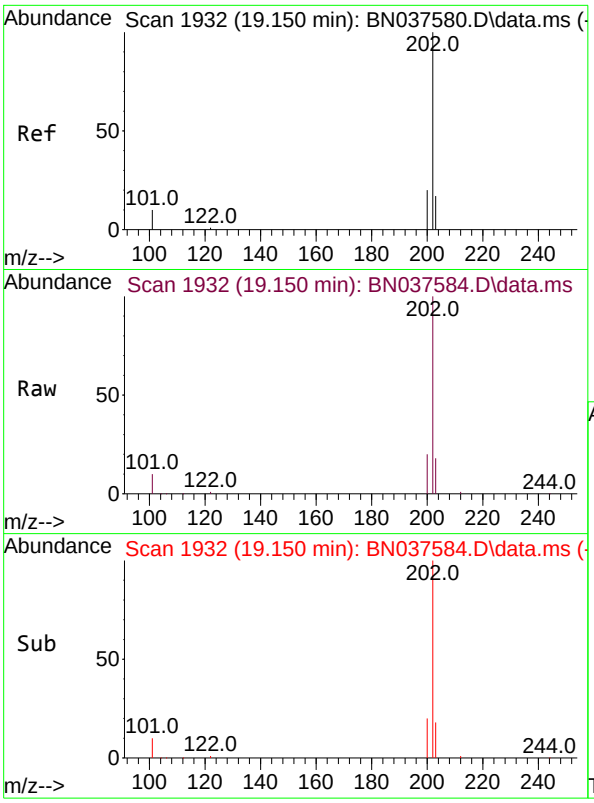


#27
Fluoranthene-d10
Concen: 6.743 ng
RT: 19.118 min Scan# 1925
Delta R.T. -0.005 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:212 Resp: 94332

Ion	Ratio	Lower	Upper
212	100		
106	14.2	11.5	17.3
104	8.0	6.6	9.8



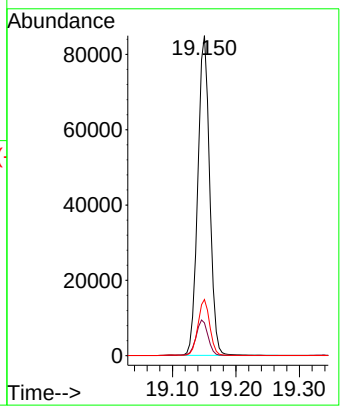


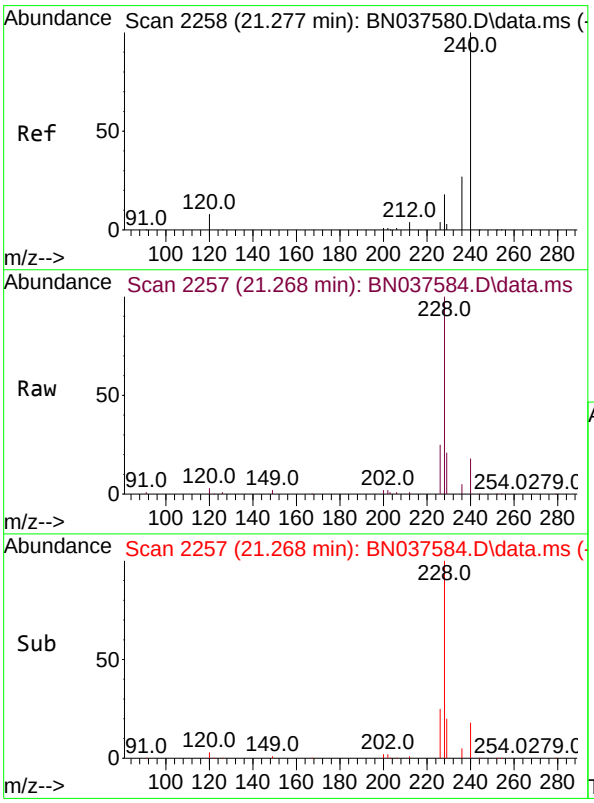
#28
Fluoranthene
Concen: 5.900 ng
RT: 19.150 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:202 Resp: 109583

Ion	Ratio	Lower	Upper
202	100		
101	11.4	9.0	13.6
203	17.4	13.8	20.8

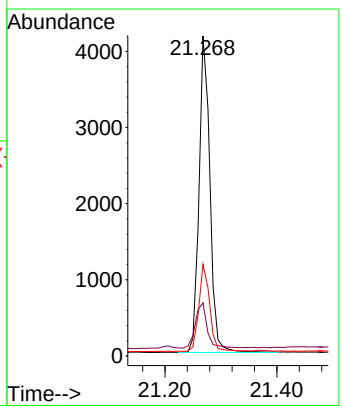


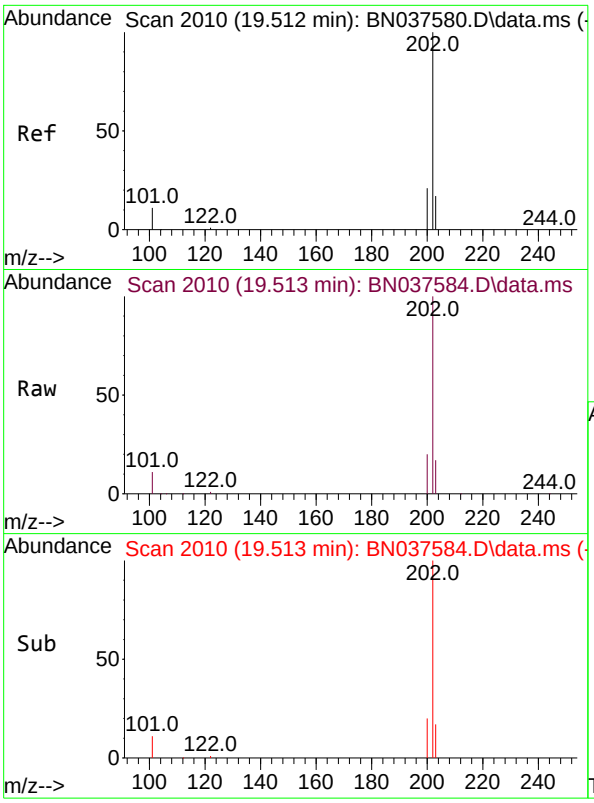


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2257
Delta R.T. -0.009 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:240 Resp: 5600

Ion	Ratio	Lower	Upper
240	100		
120	16.6	8.9	13.3#
236	28.6	22.6	33.8



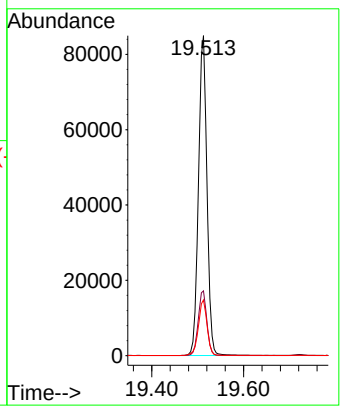


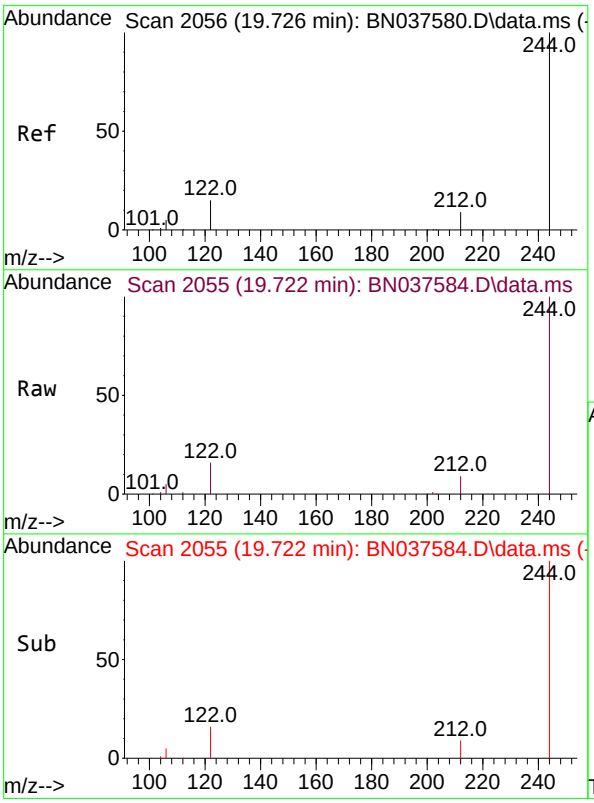
#30
Pyrene
Concen: 5.190 ng
RT: 19.513 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:202 Resp: 108658

Ion	Ratio	Lower	Upper
202	100		
200	20.6	16.6	25.0
203	17.8	14.3	21.5

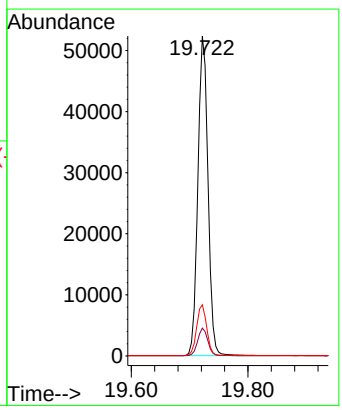


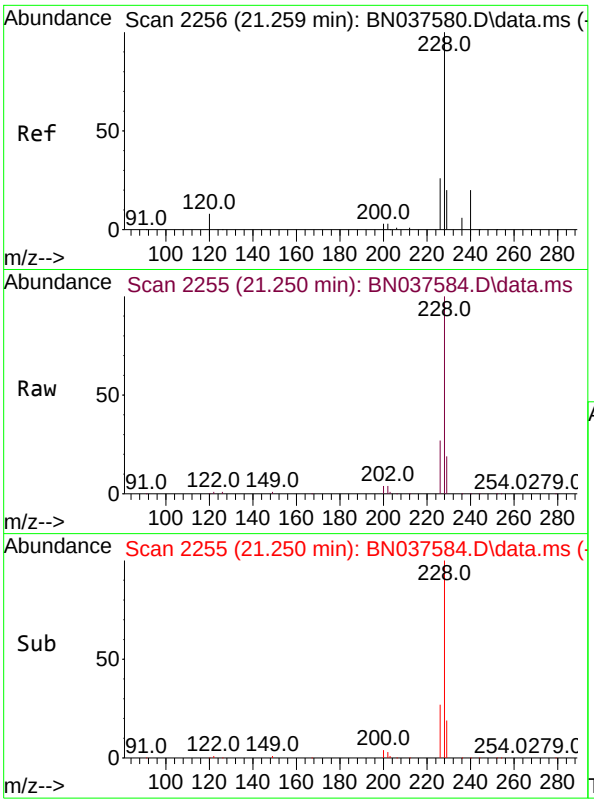


#31
Terphenyl-d14
Concen: 5.477 ng
RT: 19.722 min Scan# 2055
Delta R.T. -0.005 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:244 Resp: 63100

Ion	Ratio	Lower	Upper
244	100		
212	8.7	8.2	12.2
122	16.0	13.2	19.8



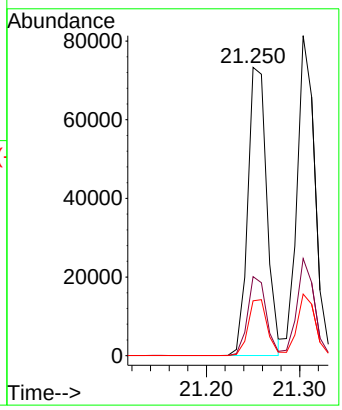


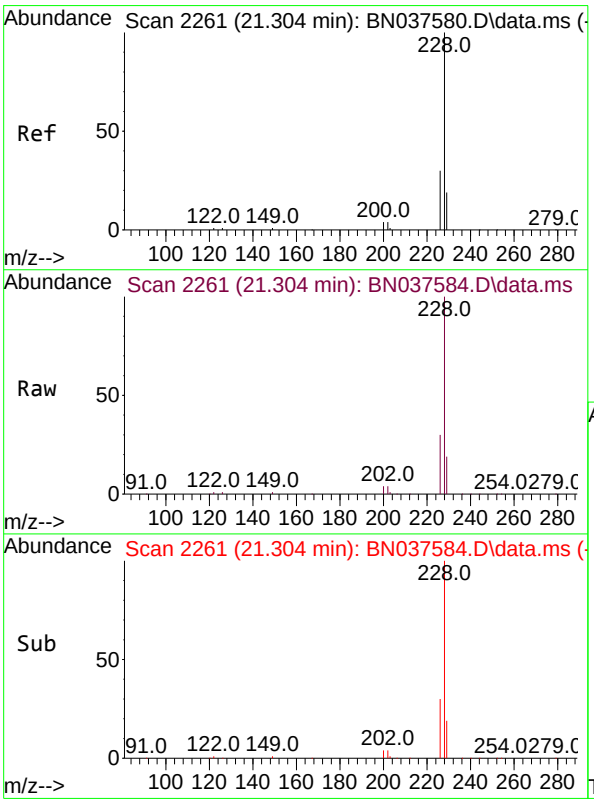
#32
Benzo(a)anthracene
Concen: 5.564 ng
RT: 21.250 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:228 Resp: 104084

Ion	Ratio	Lower	Upper
228	100		
226	27.4	21.5	32.3
229	19.0	16.5	24.7

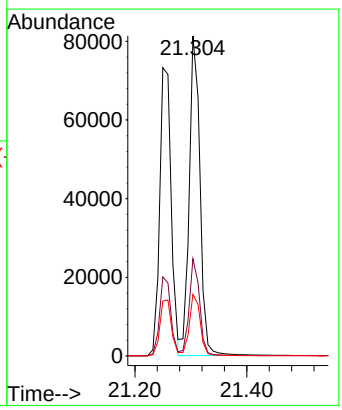


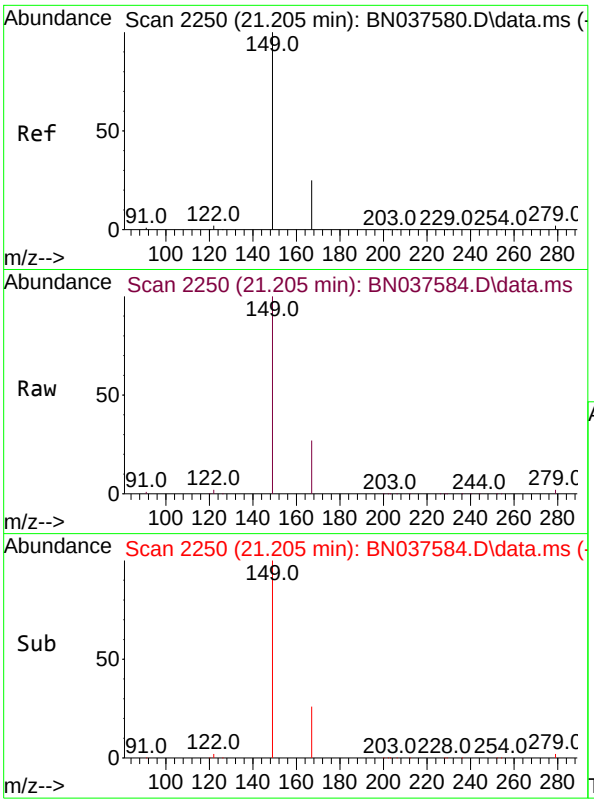


#33
Chrysene
Concen: 5.207 ng
RT: 21.304 min Scan# 2261
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:228 Resp: 108554

Ion	Ratio	Lower	Upper
228	100		
226	30.4	24.9	37.3
229	19.2	15.8	23.8



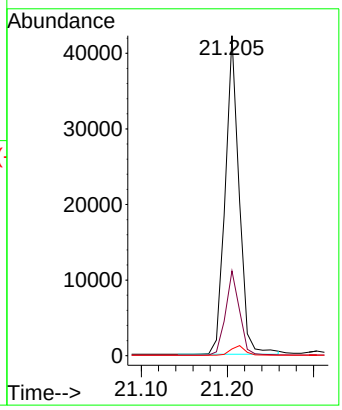


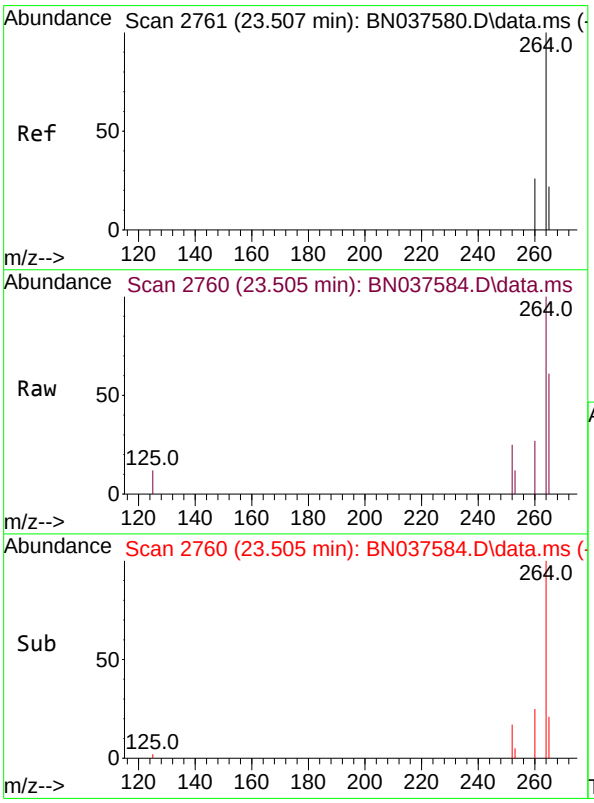
#34
Bis(2-ethylhexyl)phthalate
Concen: 6.087 ng
RT: 21.205 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:149 Resp: 46994

Ion	Ratio	Lower	Upper
149	100		
167	26.4	20.5	30.7
279	3.1	2.6	4.0

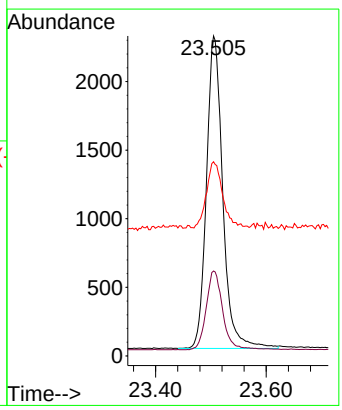


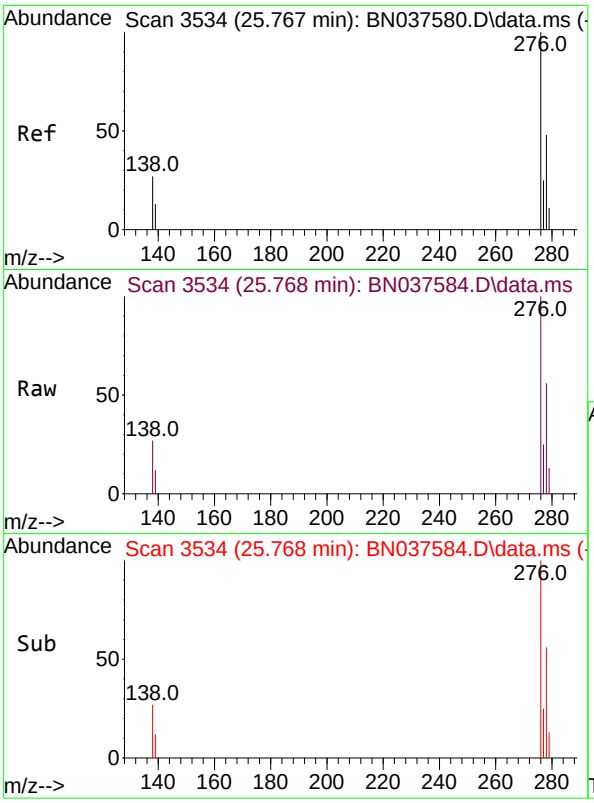


#35
Perylene-d12
Concen: 0.400 ng
RT: 23.505 min Scan# 2760
Delta R.T. -0.003 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:264 Resp: 4653

Ion	Ratio	Lower	Upper
264	100		
260	26.5	21.6	32.4
265	60.7	48.2	72.4



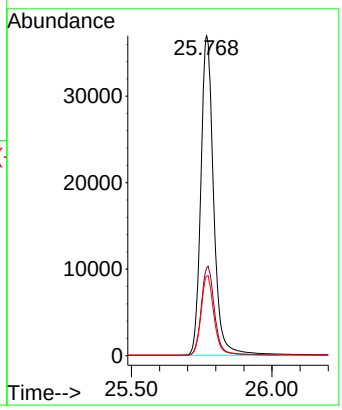


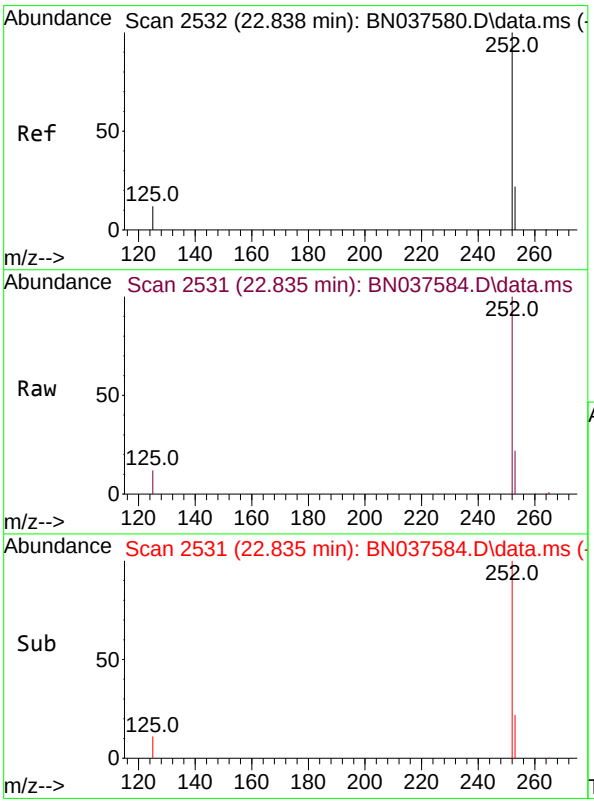
#36
Indeno(1,2,3-cd)pyrene
Concen: 5.965 ng
RT: 25.768 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:276 Resp: 116962

Ion	Ratio	Lower	Upper
276	100		
138	28.5	23.3	34.9
277	25.2	19.5	29.3

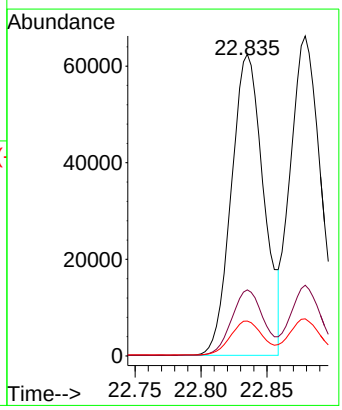


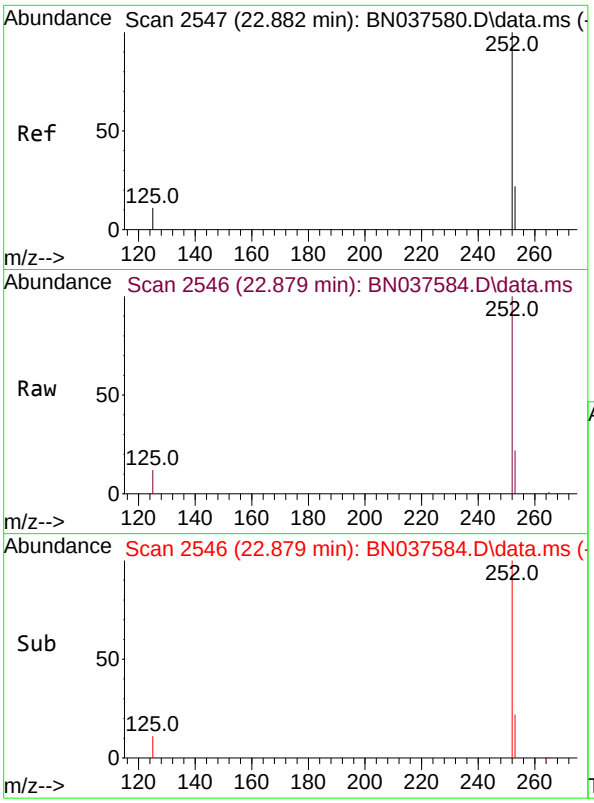


#37
Benzo(b)fluoranthene
Concen: 6.019 ng
RT: 22.835 min Scan# 2531
Delta R.T. -0.003 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:252 Resp: 106138

Ion	Ratio	Lower	Upper
252	100		
253	21.9	20.0	30.0
125	11.6	13.8	20.6#



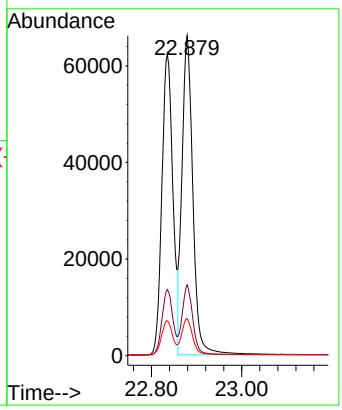


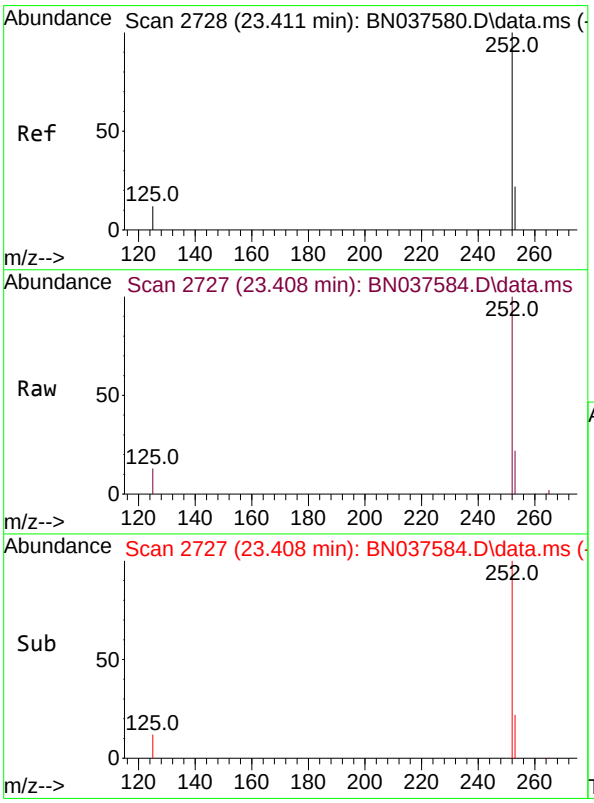
#38
Benzo(k)fluoranthene
Concen: 5.548 ng
RT: 22.879 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:252 Resp: 110373

Ion	Ratio	Lower	Upper
252	100		
253	22.1	19.9	29.9
125	11.6	15.0	22.6#

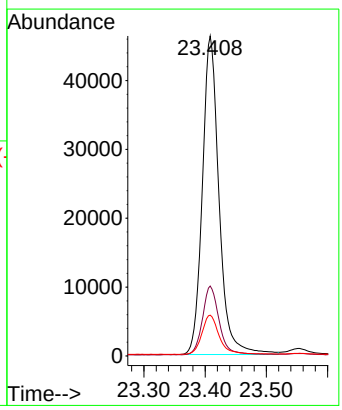


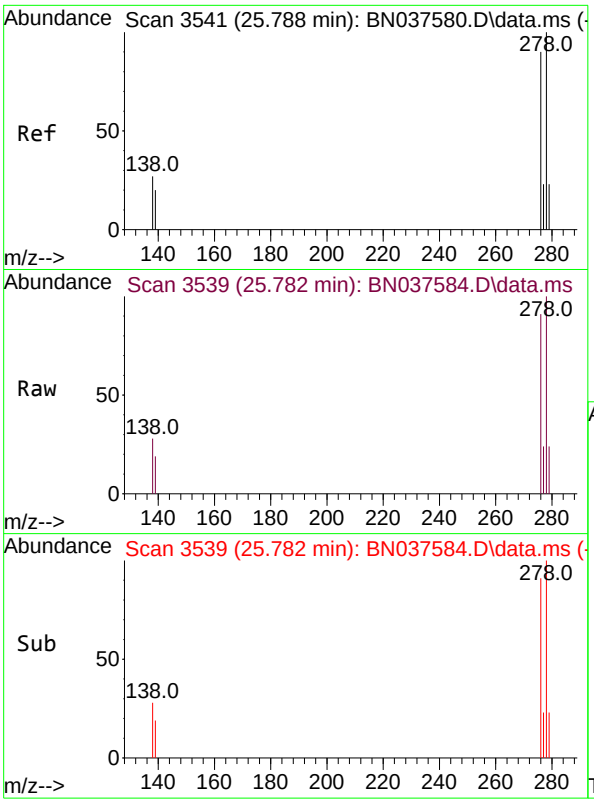


#39
Benzo(a)pyrene
Concen: 5.997 ng
RT: 23.408 min Scan# 2727
Delta R.T. -0.003 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:252 Resp: 87699

Ion	Ratio	Lower	Upper
252	100		
253	21.8	21.6	32.4
125	12.8	16.8	25.2#



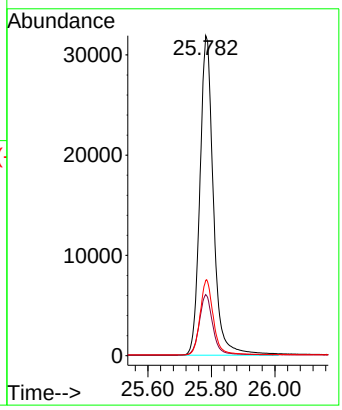


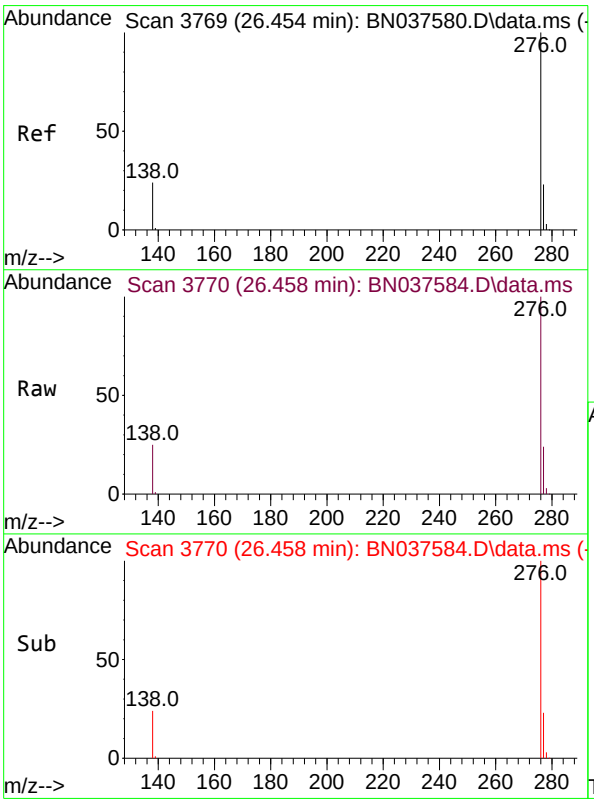
#40
Dibenzo(a,h)anthracene
Concen: 6.197 ng
RT: 25.782 min Scan# 3
Delta R.T. -0.006 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Instrument :
BNA_N
ClientSampleId :
SSTDICC5.0

Tgt Ion:278 Resp: 94267

Ion	Ratio	Lower	Upper
278	100		
139	19.1	18.3	27.5
279	23.6	22.5	33.7

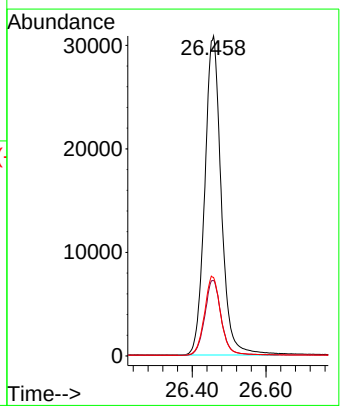




#41
Benzo(g,h,i)perylene
Concen: 5.960 ng
RT: 26.458 min Scan# 3770
Delta R.T. 0.003 min
Lab File: BN037584.D
Acq: 12 Aug 2025 20:05

Tgt Ion:276 Resp: 95537

Ion	Ratio	Lower	Upper
276	100		
277	23.6	21.0	31.4
138	24.5	21.7	32.5



Quantitation Report (QT Reviewed)

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037585.D
Acq On : 12 Aug 2025 20:42
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Quant Time: Aug 13 05:03:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	1850	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	4517	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2241	0.400	ng		0.00
19) Phenanthrene-d10	17.087	188	4564	0.400	ng		0.00
29) Chrysene-d12	21.268	240	4001	0.400	ng	#	0.00
35) Perylene-d12	23.511	264	3490	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	1785	0.426	ng		0.00
5) Phenol-d6	6.880	99	2272	0.450	ng		0.00
8) Nitrobenzene-d5	8.854	82	1408	0.443	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	2611	0.425	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	358	0.365	ng		0.00
15) 2-Fluorobiphenyl	12.973	172	5746	0.443	ng		0.00
27) Fluoranthene-d10	19.118	212	4866	0.405	ng		0.00
31) Terphenyl-d14	19.727	244	3884	0.472	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.240	88	889	0.502	ng		99
3) n-Nitrosodimethylamine	3.543	42	1054	0.466	ng		98
6) bis(2-Chloroethyl)ether	7.140	93	1993	0.438	ng		99
9) Naphthalene	10.552	128	4985	0.415	ng		100
10) Hexachlorobutadiene	10.851	225	1259	0.429	ng	#	100
12) 2-Methylnaphthalene	12.167	142	2809	0.372	ng		98
16) Acenaphthylene	14.067	152	4504	0.448	ng		99
17) Acenaphthene	14.409	154	2768	0.405	ng		99
18) Fluorene	15.393	166	3592	0.402	ng		99
20) 4,6-Dinitro-2-methylph...	15.467	198	209	0.433	ng		97
21) 4-Bromophenyl-phenylether	16.292	248	1147	0.400	ng		98
22) Hexachlorobenzene	16.404	284	1702	0.419	ng		99
23) Atrazine	16.553	200	681	0.420	ng		98
24) Pentachlorophenol	16.739	266	484	0.339	ng		96
25) Phenanthrene	17.124	178	5612	0.404	ng		100
26) Anthracene	17.223	178	4939	0.402	ng		99
28) Fluoranthene	19.150	202	6097	0.382	ng		100
30) Pyrene	19.513	202	5925	0.396	ng		100
32) Benzo(a)anthracene	21.259	228	5497	0.411	ng		100
33) Chrysene	21.304	228	6035	0.405	ng		98
34) Bis(2-ethylhexyl)phtha...	21.205	149	2306	0.418	ng		99
36) Indeno(1,2,3-cd)pyrene	25.765	276	6028	0.410	ng		99
37) Benzo(b)fluoranthene	22.835	252	5410	0.409	ng		99
38) Benzo(k)fluoranthene	22.879	252	6026	0.404	ng		99
39) Benzo(a)pyrene	23.408	252	4761	0.434	ng		99
40) Dibenzo(a,h)anthracene	25.788	278	4571	0.401	ng		100
41) Benzo(g,h,i)perylene	26.458	276	4888	0.407	ng		99

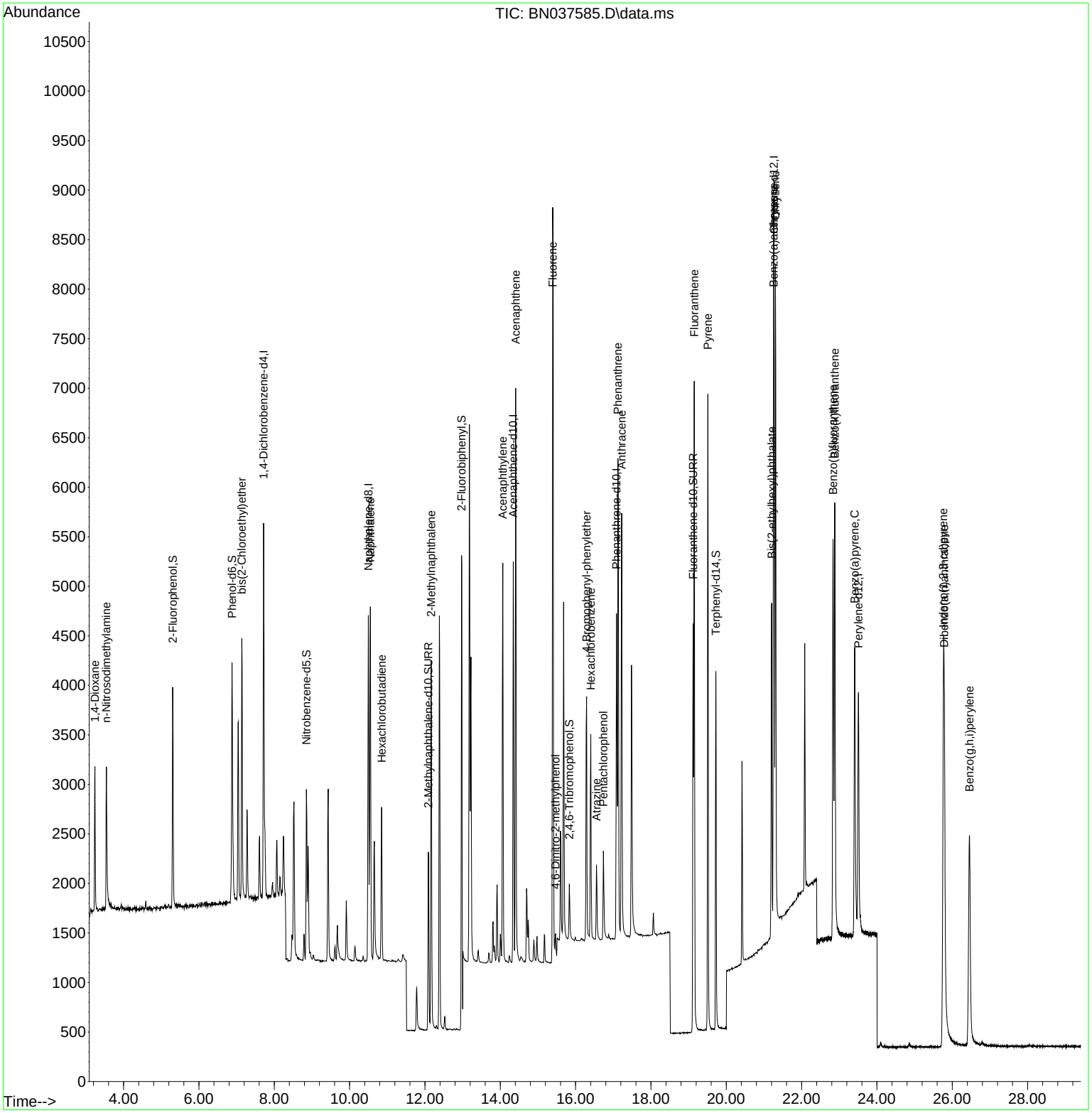
(#) = qualifier out of range (m) = manual integration (+) = signals summed

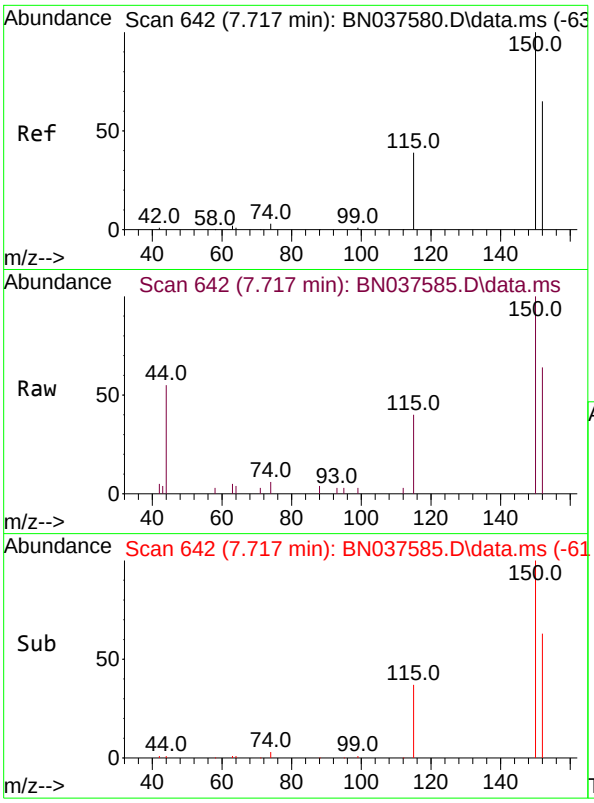
ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037585.D
Acq On : 12 Aug 2025 20:42
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Quant Time: Aug 13 05:03:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



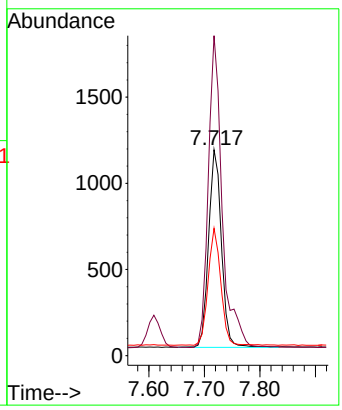


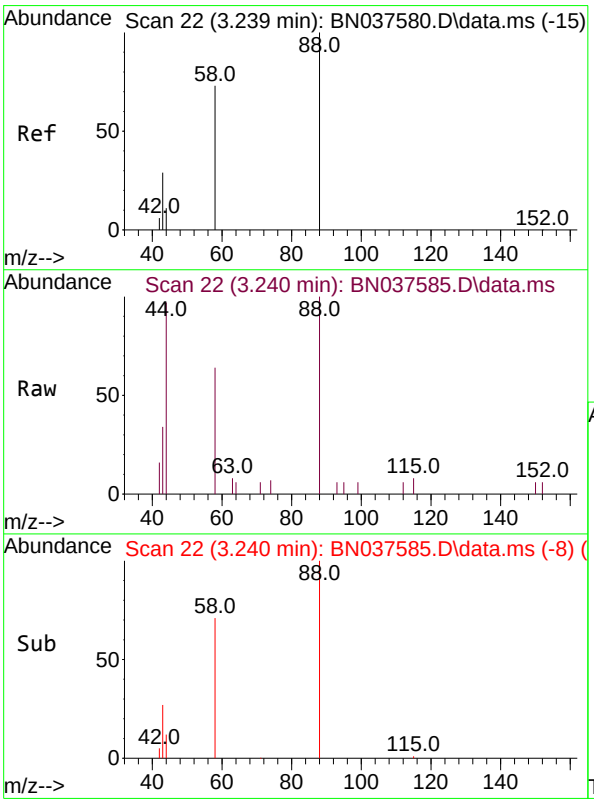
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:152 Resp: 1850

Ion	Ratio	Lower	Upper
152	100		
150	155.4	122.2	183.4
115	61.8	49.8	74.6

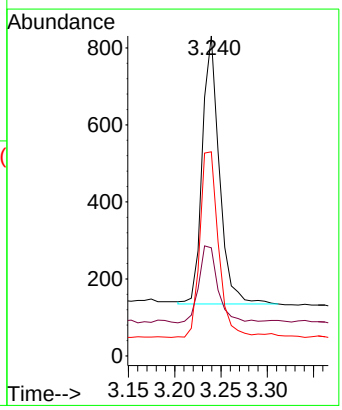


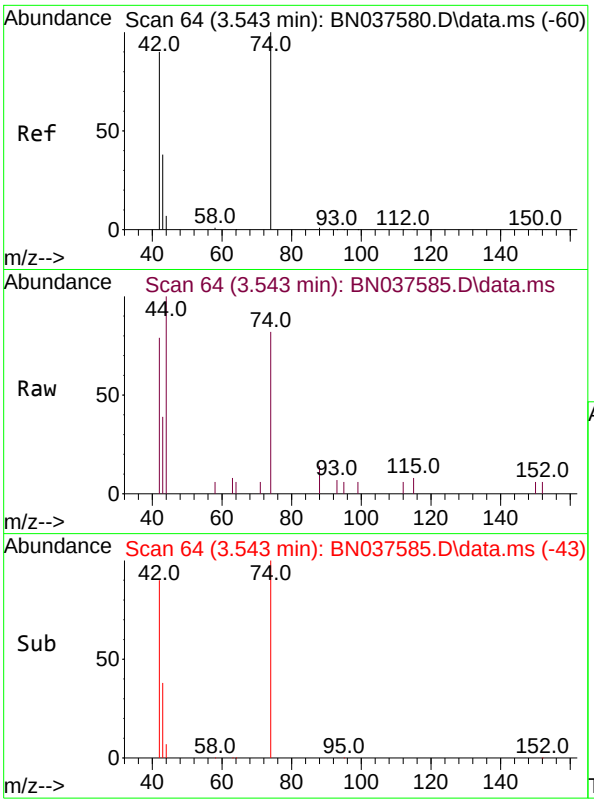


#2
1,4-Dioxane
Concen: 0.502 ng
RT: 3.240 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion: 88 Resp: 889

Ion	Ratio	Lower	Upper
88	100		
43	32.6	25.8	38.6
58	76.0	61.2	91.8



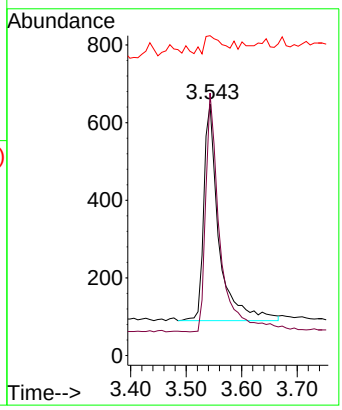


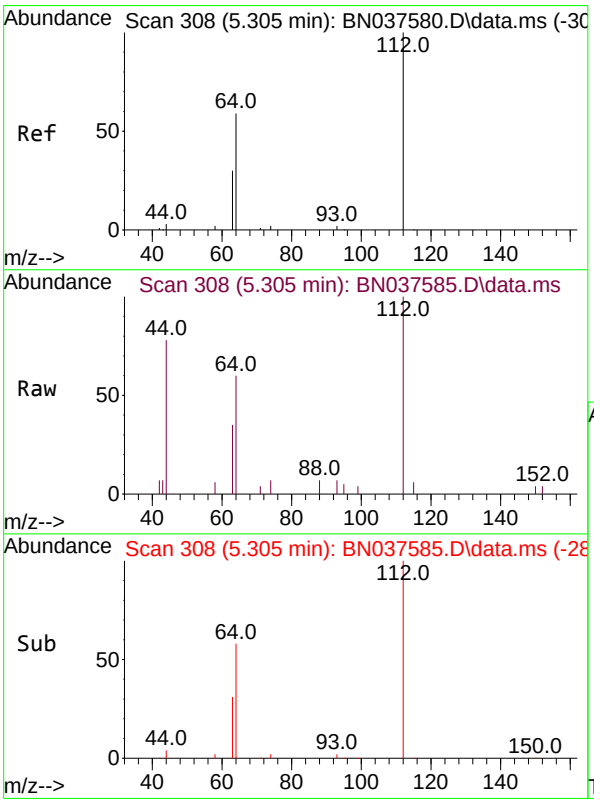
#3
n-Nitrosodimethylamine
Concen: 0.466 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion: 42 Resp: 1054

Ion	Ratio	Lower	Upper
42	100		
74	104.6	82.0	123.0
44	9.7	7.9	11.9

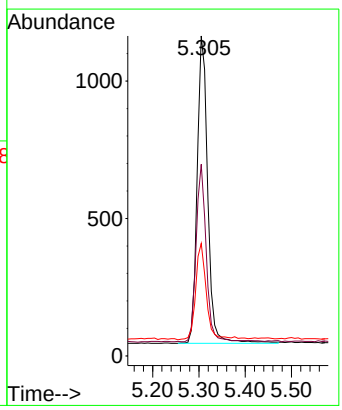


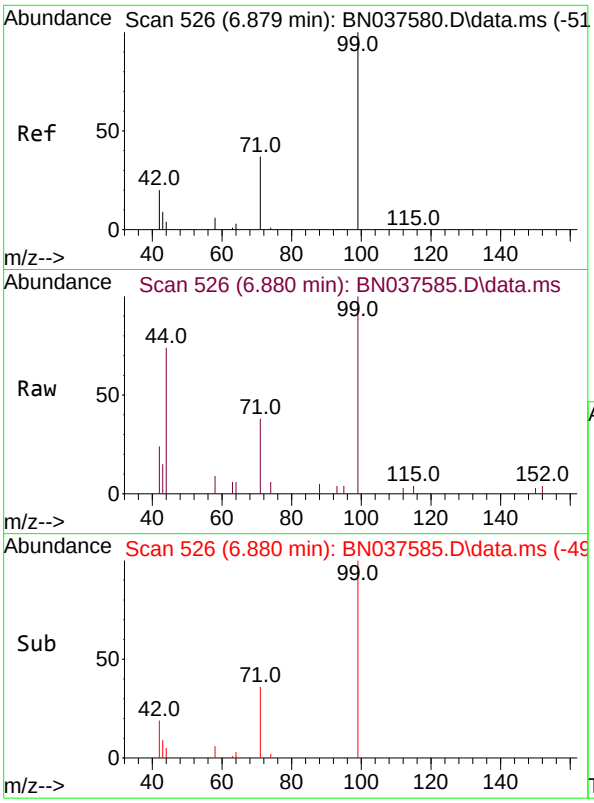


#4
2-Fluorophenol
Concen: 0.426 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:112 Resp: 1785

Ion	Ratio	Lower	Upper
112	100		
64	55.4	44.9	67.3
63	31.3	23.4	35.2



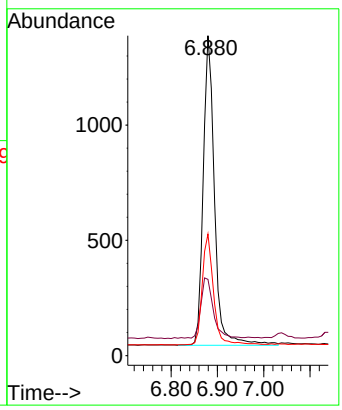


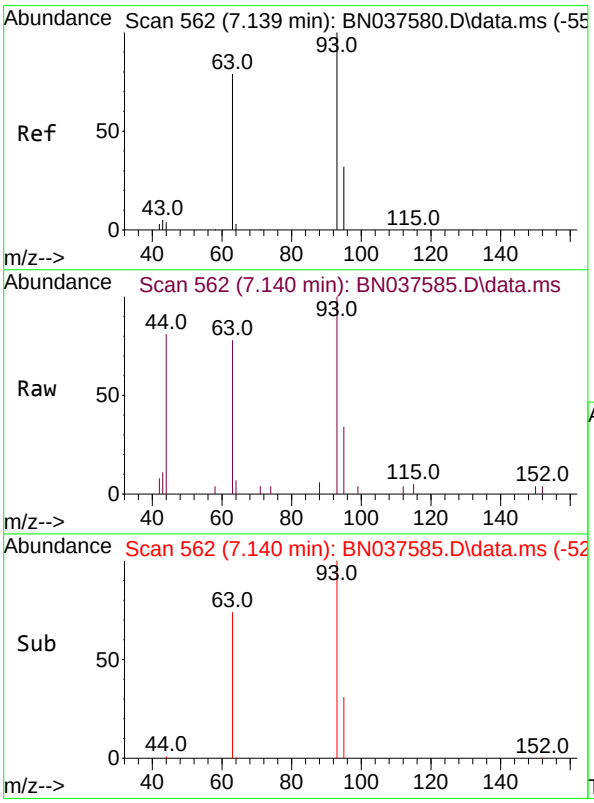
#5
Phenol-d6
Concen: 0.450 ng
RT: 6.880 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion: 99 Resp: 2272

Ion	Ratio	Lower	Upper
99	100		
42	21.9	18.5	27.7
71	35.6	28.6	42.8

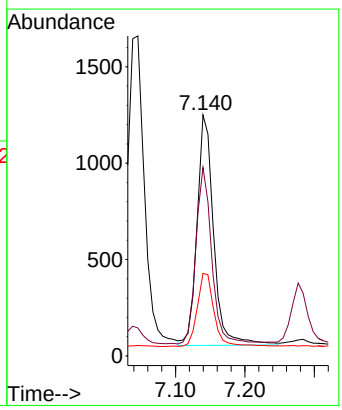


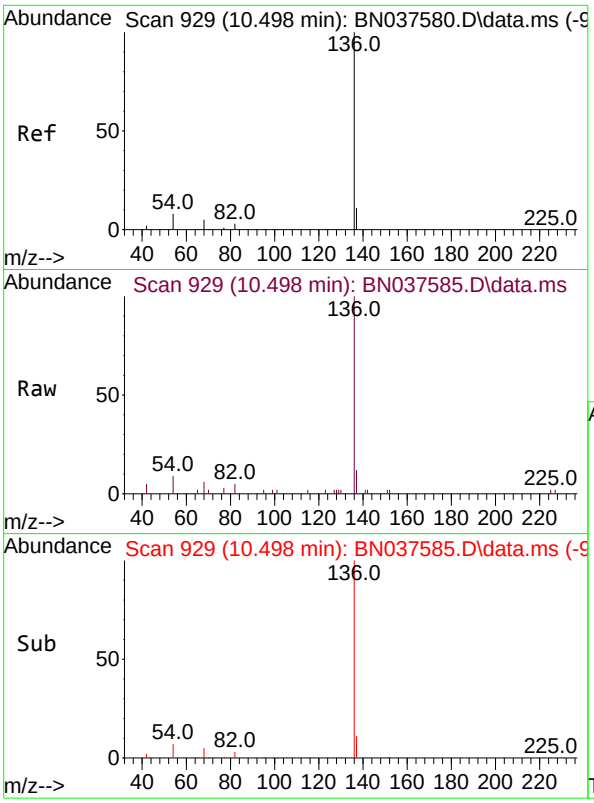


#6
bis(2-Chloroethyl)ether
Concen: 0.438 ng
RT: 7.140 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion: 93 Resp: 1993

Ion	Ratio	Lower	Upper
93	100		
63	72.5	58.0	87.0
95	32.1	24.9	37.3



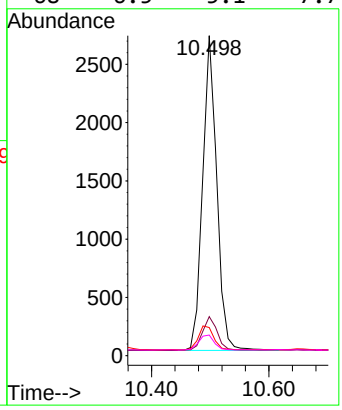


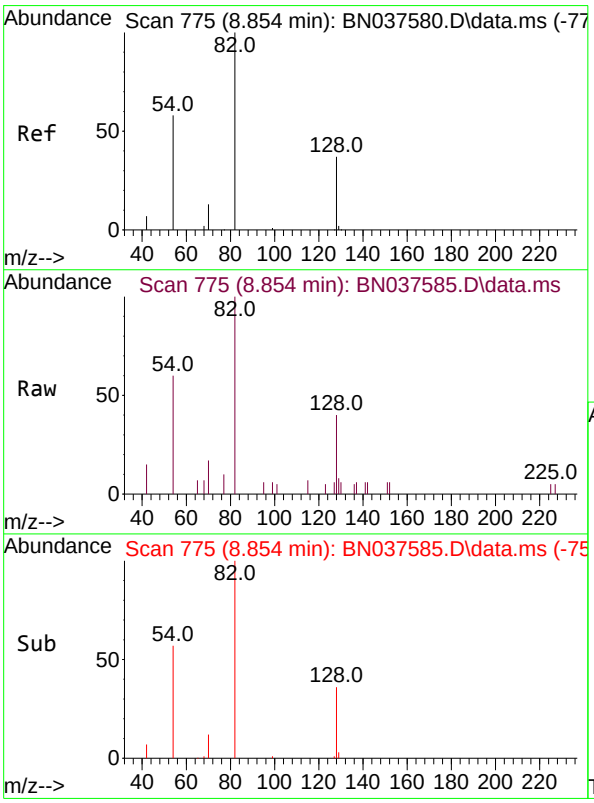
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:136 Resp: 4517

Ion	Ratio	Lower	Upper
136	100		
137	12.2	9.5	14.3
54	8.8	7.3	10.9
68	6.5	5.1	7.7

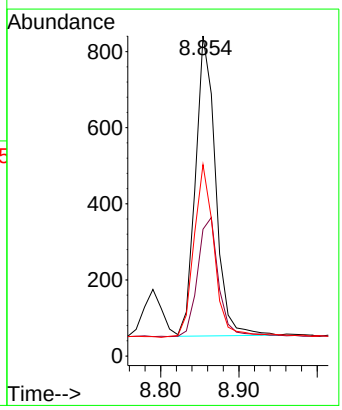


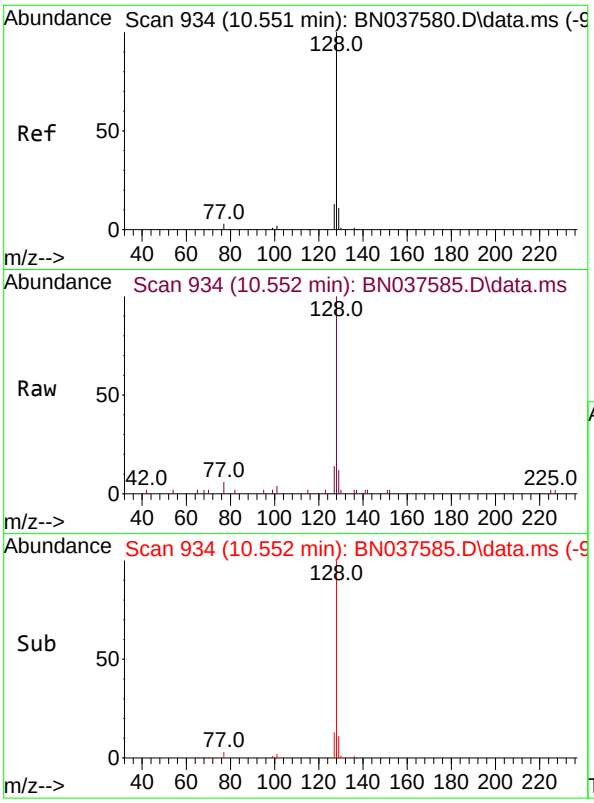


#8
Nitrobenzene-d5
Concen: 0.443 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion: 82 Resp: 1408

Ion	Ratio	Lower	Upper
82	100		
128	39.6	32.6	48.8
54	59.8	48.9	73.3



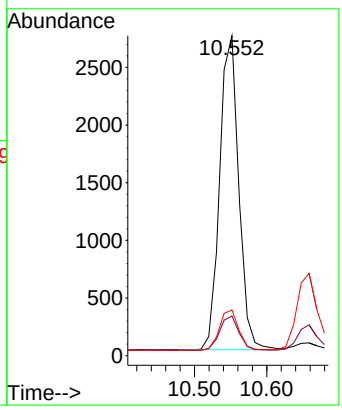


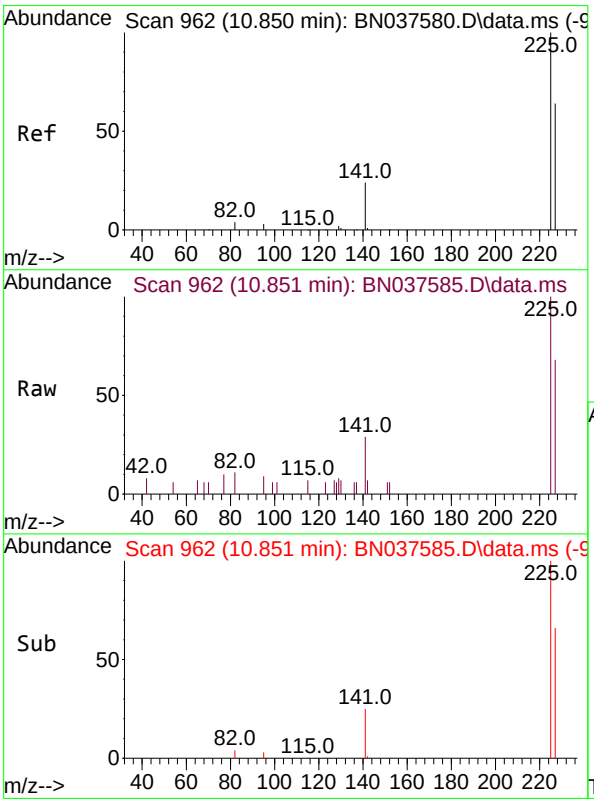
#9
Naphthalene
Concen: 0.415 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:128 Resp: 4985

Ion	Ratio	Lower	Upper
128	100		
129	12.4	9.8	14.6
127	14.3	11.5	17.3

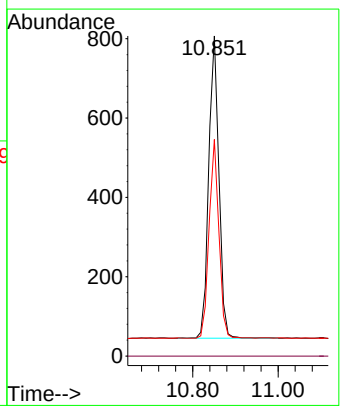


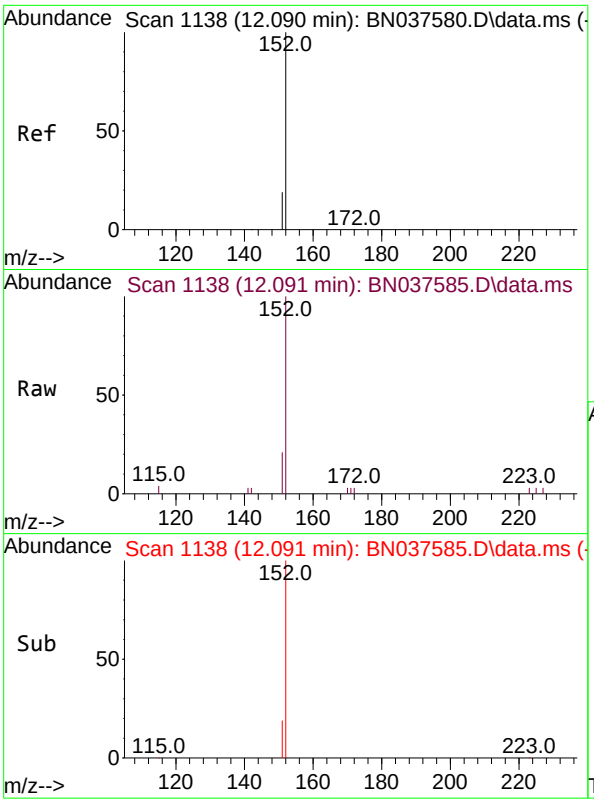


#10
Hexachlorobutadiene
Concen: 0.429 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:225 Resp: 1259

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.4	50.8	76.2



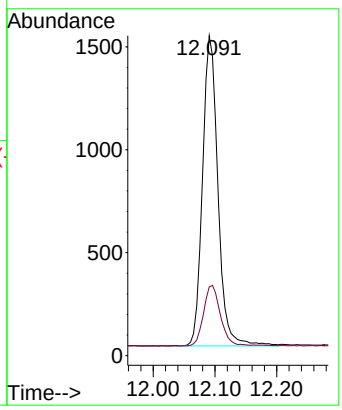


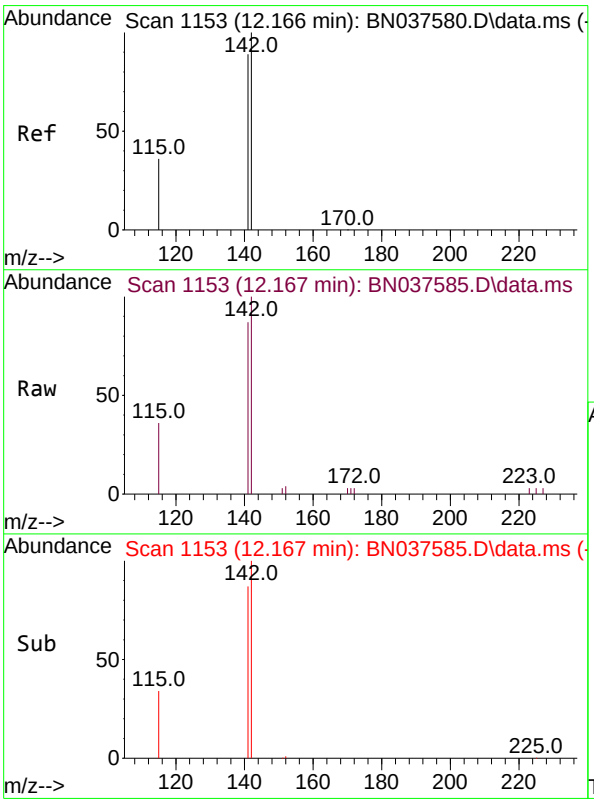
#11
2-Methylnaphthalene-d10
Concen: 0.425 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:152 Resp: 2611

Ion	Ratio	Lower	Upper
152	100		
151	21.5	17.3	25.9

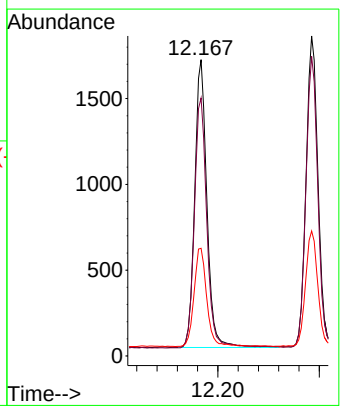


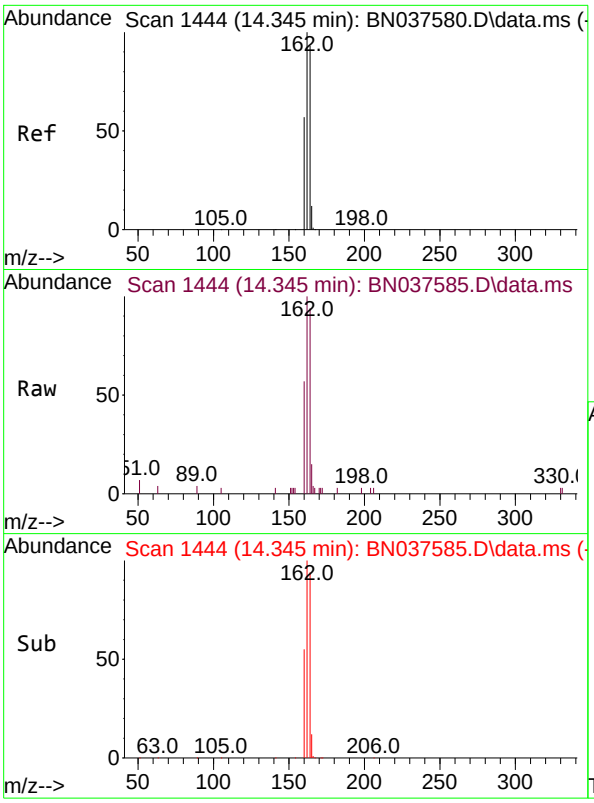


#12
2-Methylnaphthalene
Concen: 0.372 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:142 Resp: 2809

Ion	Ratio	Lower	Upper
142	100		
141	87.0	71.4	107.0
115	36.4	30.2	45.4



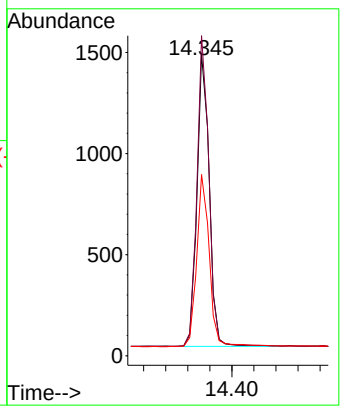


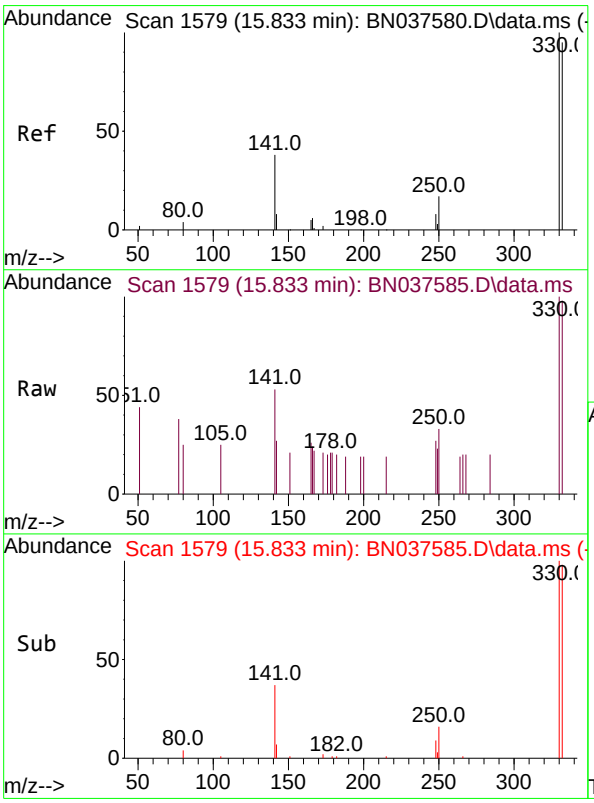
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:164 Resp: 2241

Ion	Ratio	Lower	Upper
164	100		
162	106.2	85.5	128.3
160	60.1	49.5	74.3

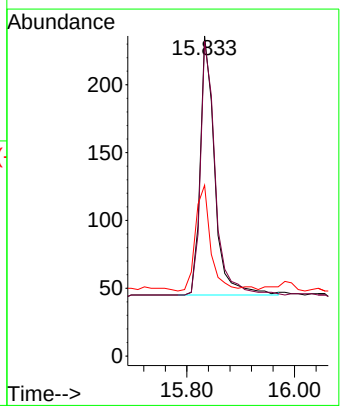


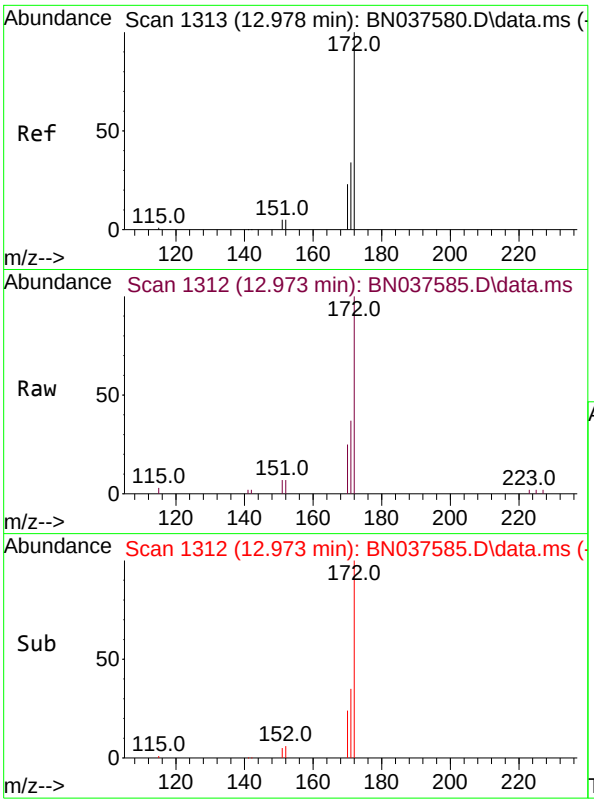


#14
2,4,6-Tribromophenol
Concen: 0.365 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:330 Resp: 358

Ion	Ratio	Lower	Upper
330	100		
332	99.7	77.4	116.0
141	42.7	30.9	46.3



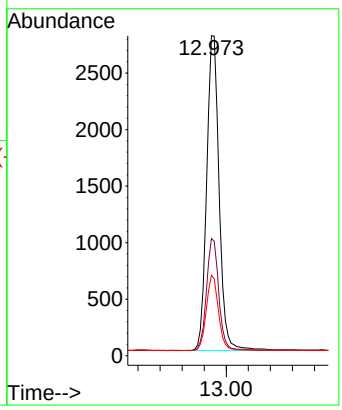


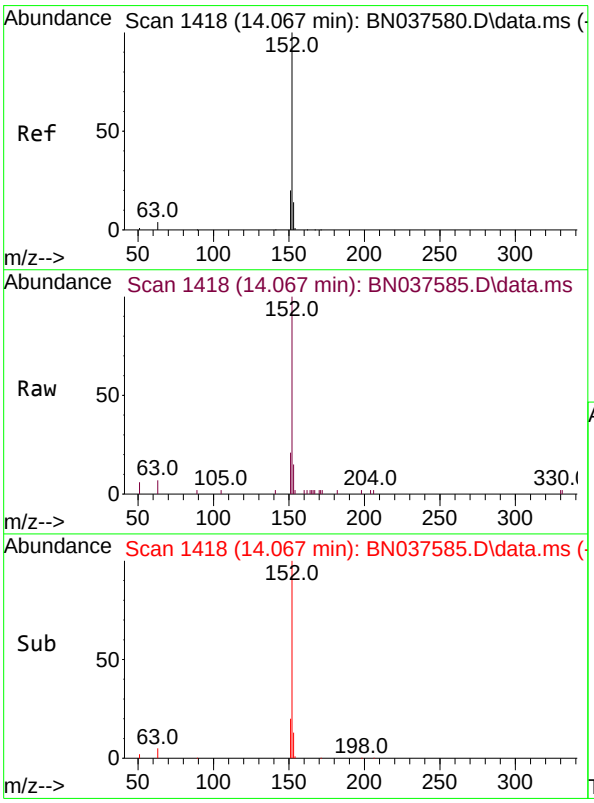
#15
2-Fluorobiphenyl
Concen: 0.443 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:172 Resp: 5746

Ion	Ratio	Lower	Upper
172	100		
171	36.6	28.2	42.4
170	25.1	19.2	28.8

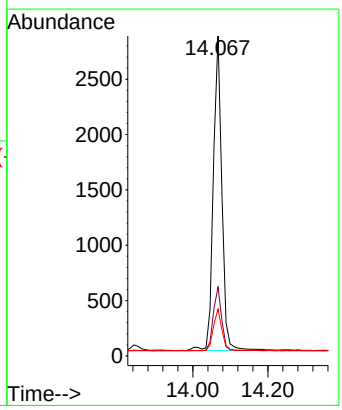


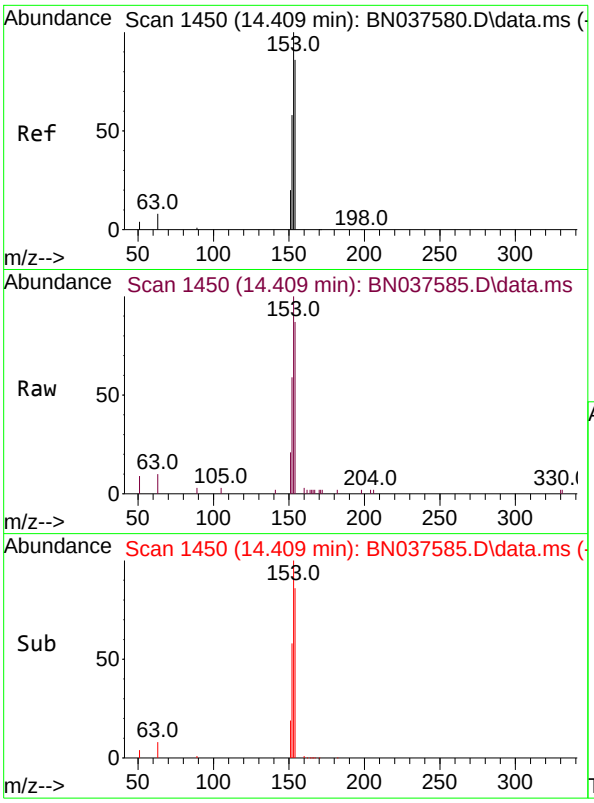


#16
Acenaphthylene
Concen: 0.448 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:152 Resp: 4504

Ion	Ratio	Lower	Upper
152	100		
151	19.9	16.1	24.1
153	13.1	10.7	16.1



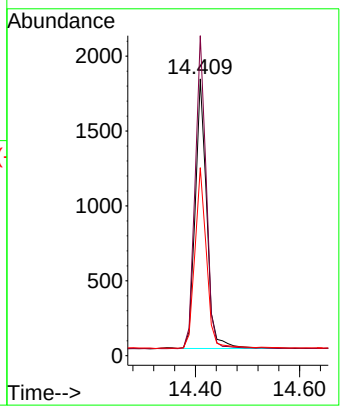


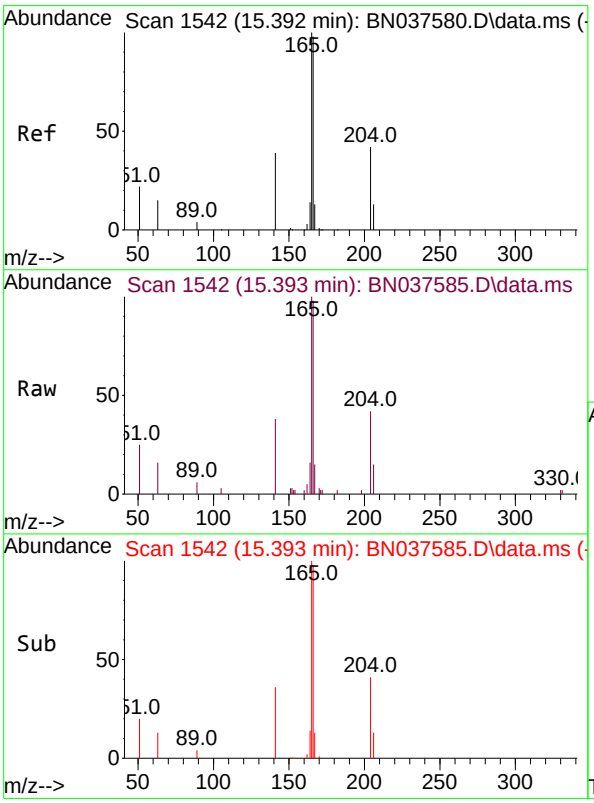
#17
Acenaphthene
Concen: 0.405 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:154 Resp: 2768

Ion	Ratio	Lower	Upper
154	100		
153	112.4	90.6	135.8
152	67.8	54.9	82.3

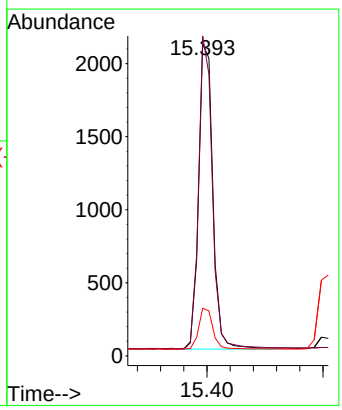


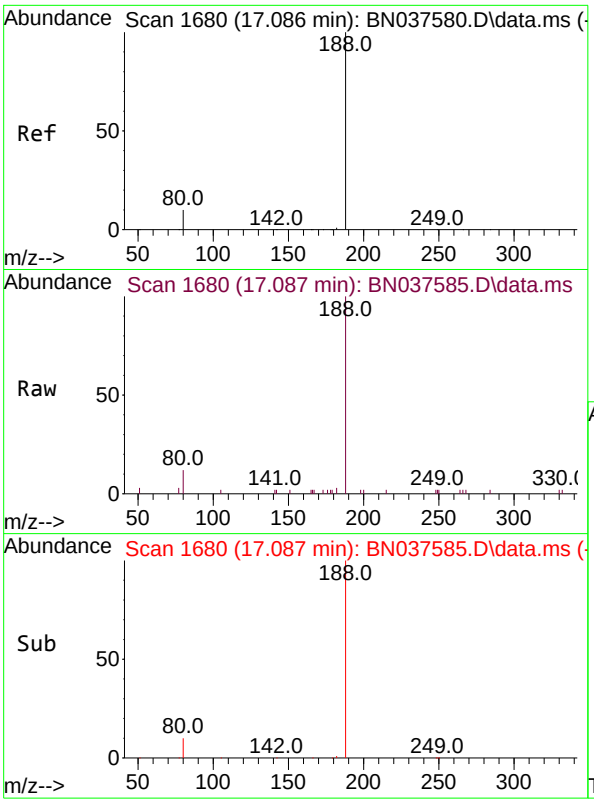


#18
Fluorene
Concen: 0.402 ng
RT: 15.393 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:166 Resp: 3592

Ion	Ratio	Lower	Upper
166	100		
165	100.0	78.9	118.3
167	14.0	10.7	16.1



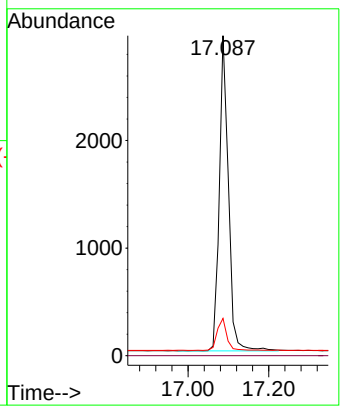


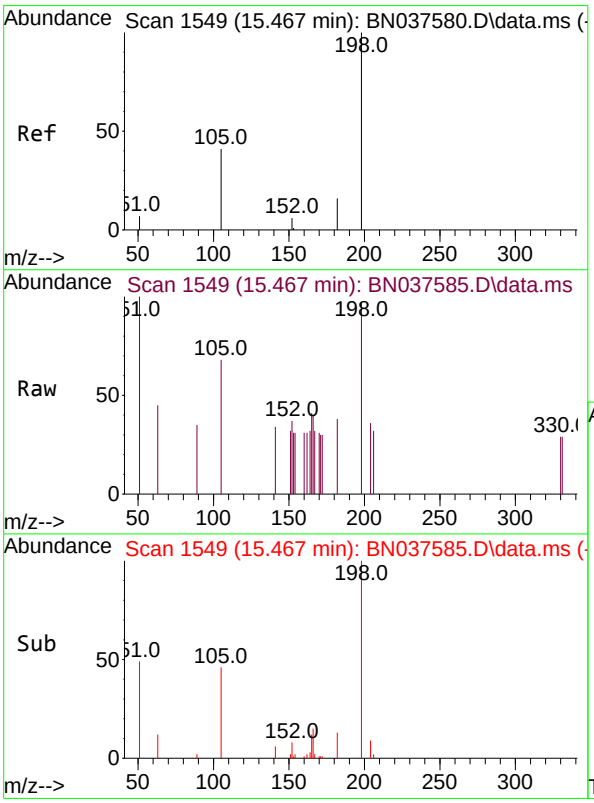
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:188 Resp: 4564

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.6	9.1	13.7

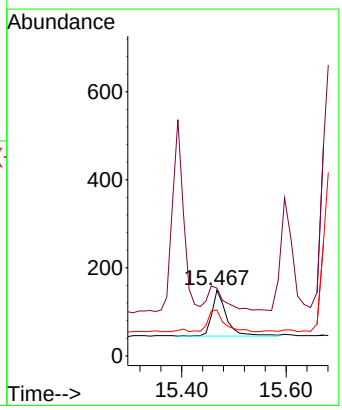


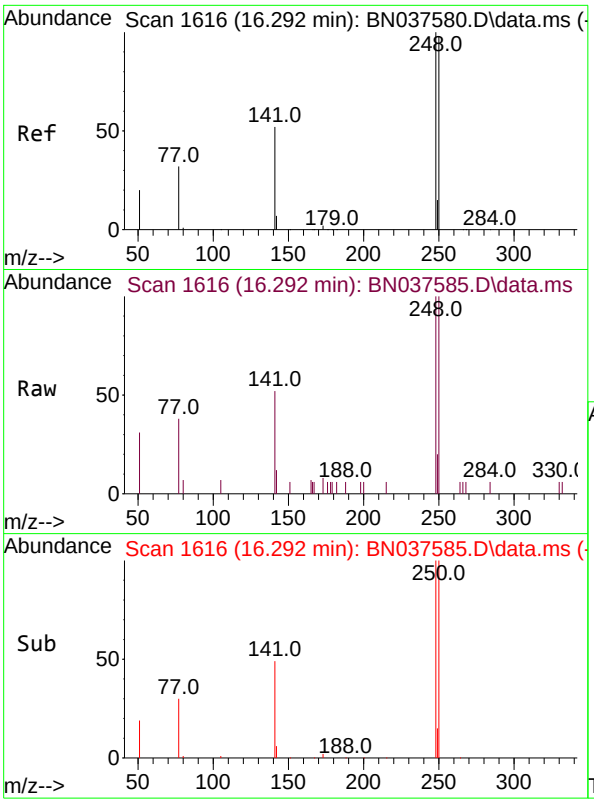


#20
4,6-Dinitro-2-methylphenol
Concen: 0.433 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:198 Resp: 209

Ion	Ratio	Lower	Upper
198	100		
51	103.4	81.0	121.6
105	69.8	52.5	78.7



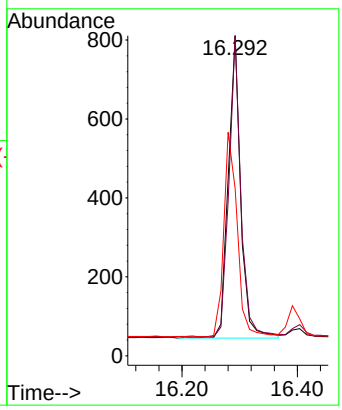


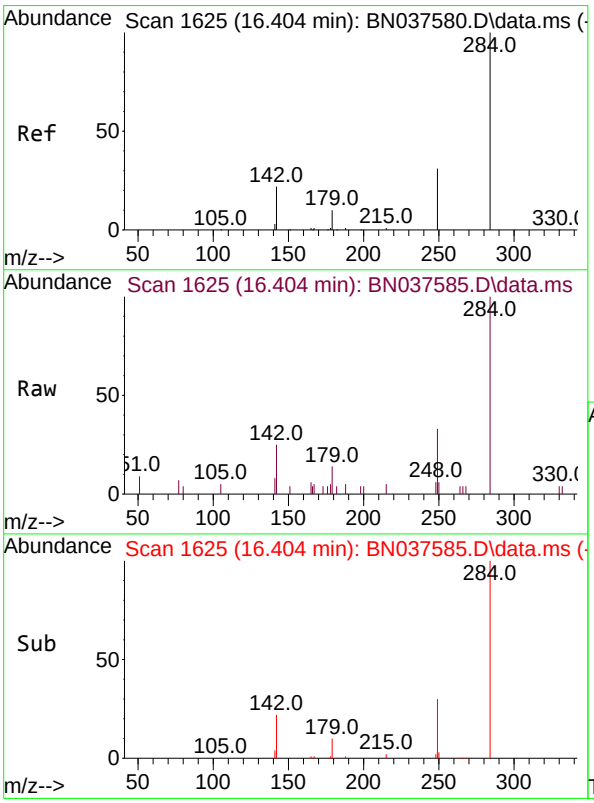
#21
4-Bromophenyl-phenylether
Concen: 0.400 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:248 Resp: 1147

Ion	Ratio	Lower	Upper
248	100		
250	100.0	78.6	118.0
141	52.2	43.7	65.5

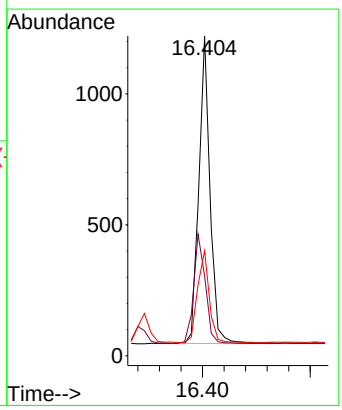


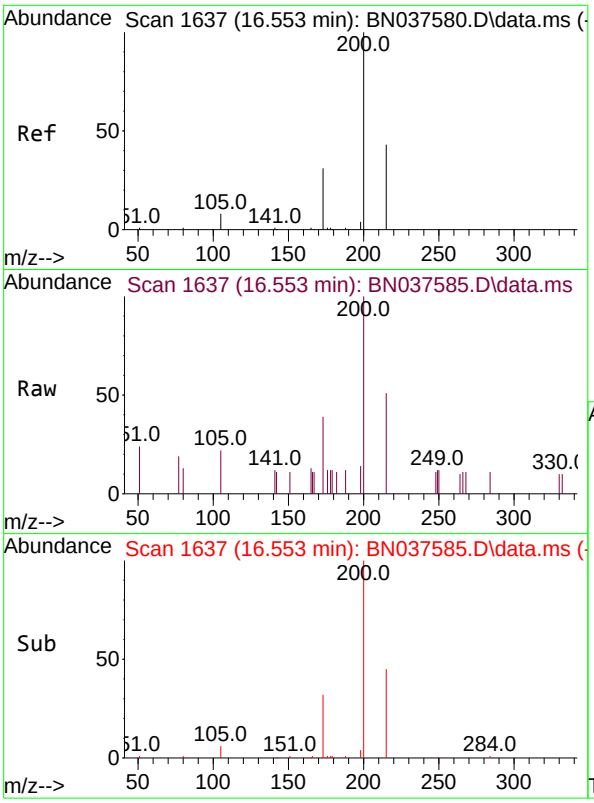


#22
Hexachlorobenzene
Concen: 0.419 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:284 Resp: 1702

Ion	Ratio	Lower	Upper
284	100		
142	37.1	29.8	44.6
249	31.6	26.0	39.0



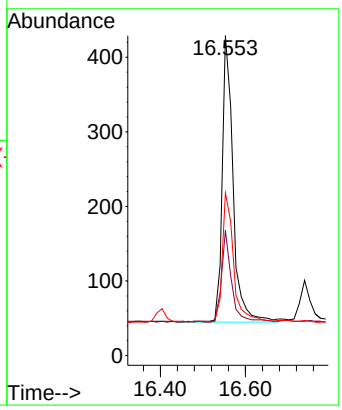


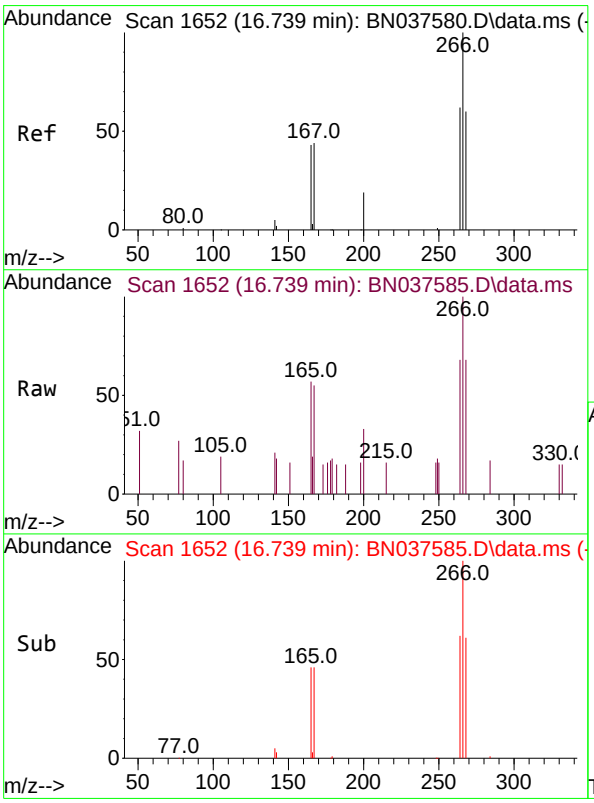
#23
Atrazine
Concen: 0.420 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:200 Resp: 681

Ion	Ratio	Lower	Upper
200	100		
173	39.2	31.0	46.4
215	50.8	39.4	59.0

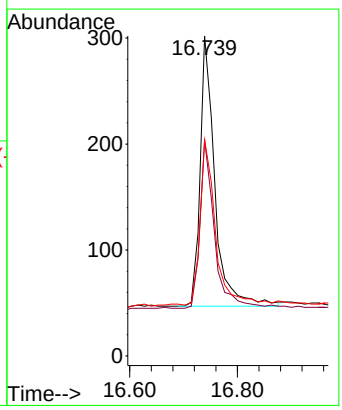


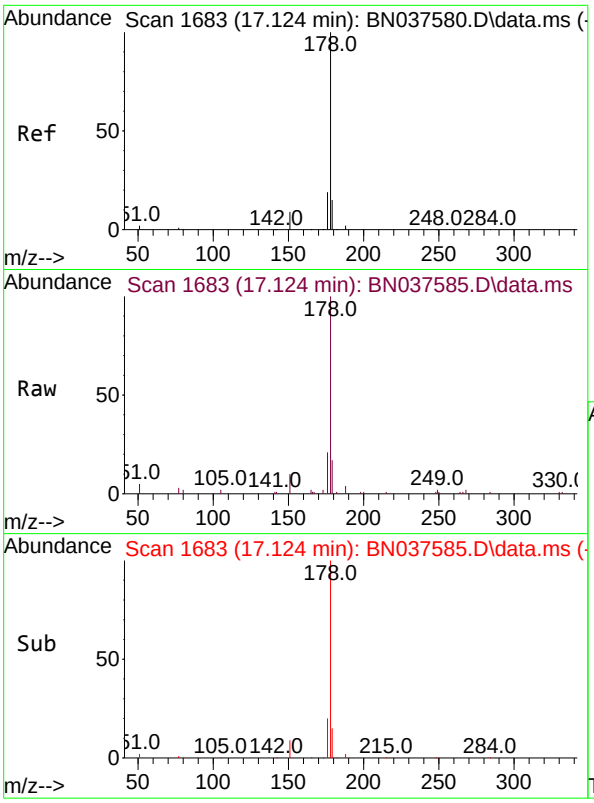


#24
Pentachlorophenol
Concen: 0.339 ng
RT: 16.739 min Scan# 1652
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:266 Resp: 484

Ion	Ratio	Lower	Upper
266	100		
264	61.8	49.6	74.4
268	67.4	49.2	73.8



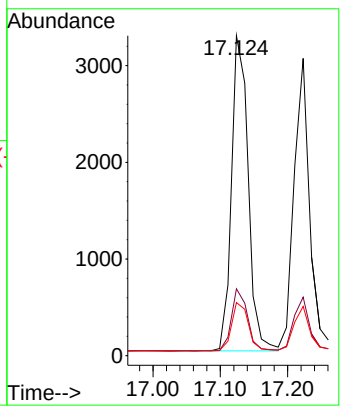


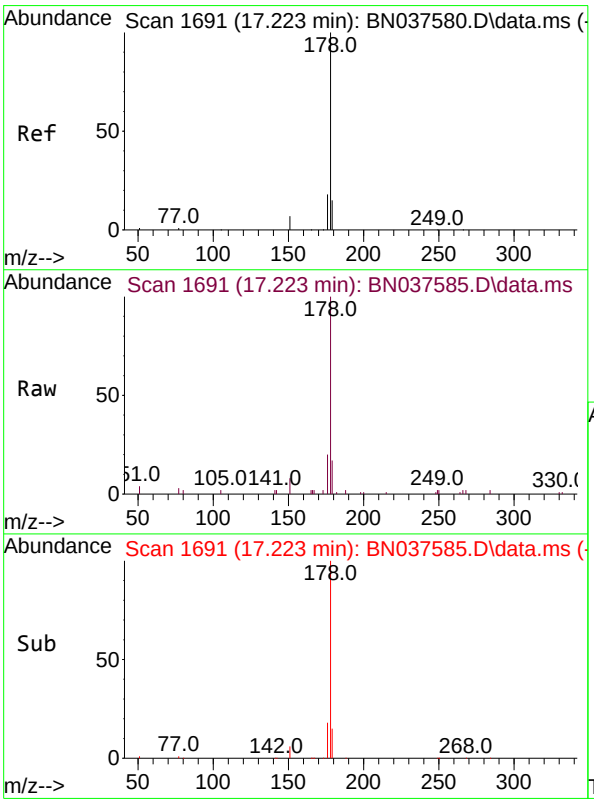
#25
Phenanthrene
Concen: 0.404 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:178 Resp: 5612

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.0	22.6
179	15.3	12.3	18.5

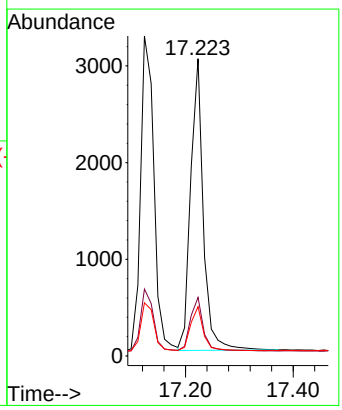


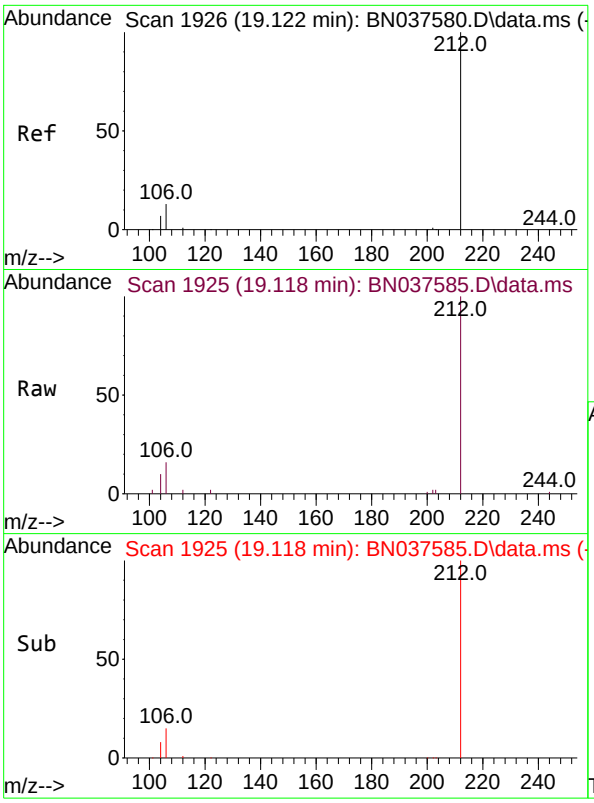


#26
Anthracene
Concen: 0.402 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:178 Resp: 4939

Ion	Ratio	Lower	Upper
178	100		
176	19.0	14.7	22.1
179	15.5	12.3	18.5



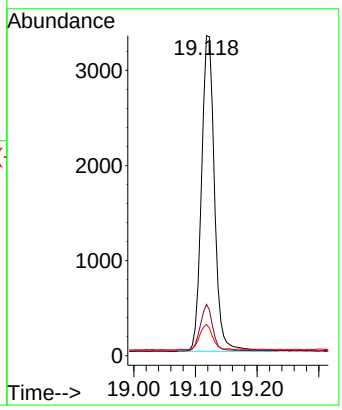


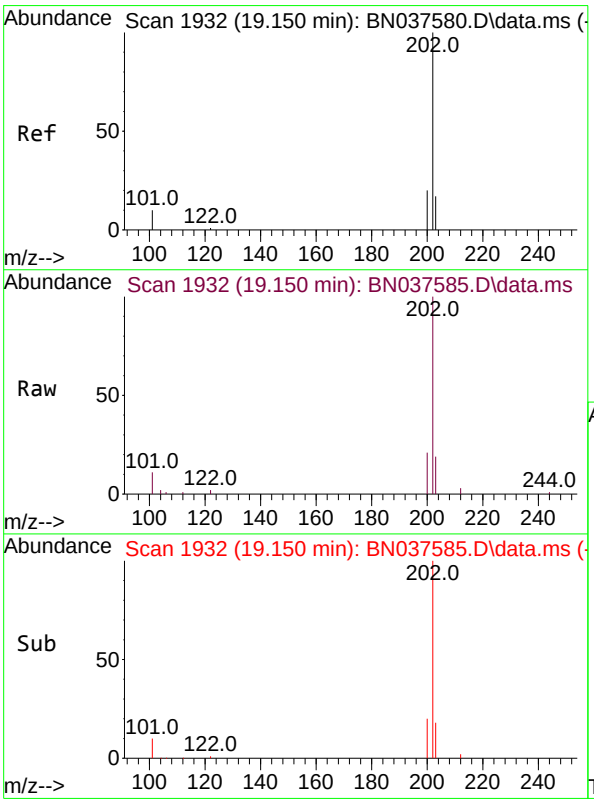
#27
Fluoranthene-d10
Concen: 0.405 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:212 Resp: 4866

Ion	Ratio	Lower	Upper
212	100		
106	14.3	11.5	17.3
104	7.7	6.6	9.8

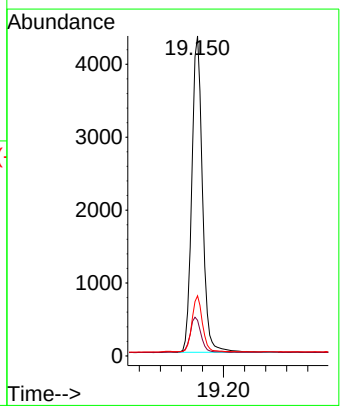


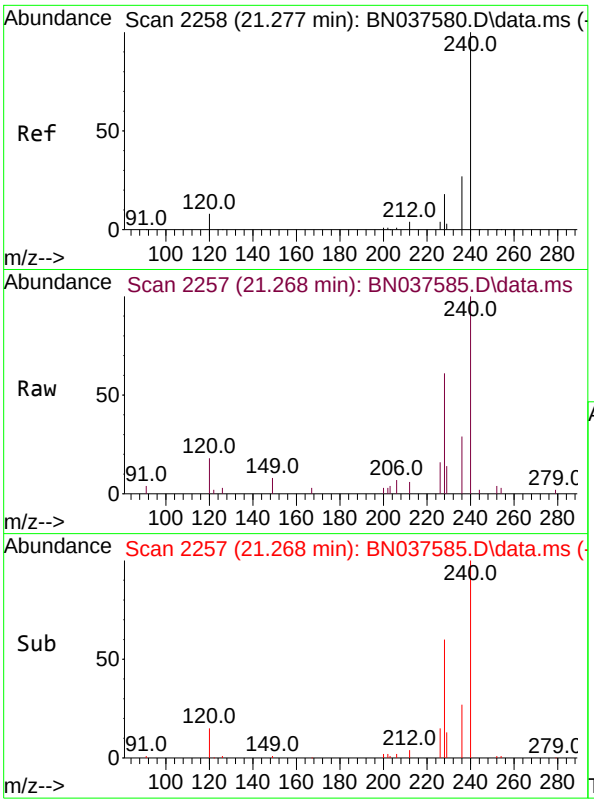


#28
Fluoranthene
Concen: 0.382 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:202 Resp: 6097

Ion	Ratio	Lower	Upper
202	100		
101	11.5	9.0	13.6
203	17.4	13.8	20.8



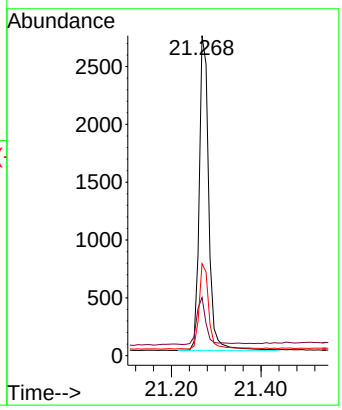


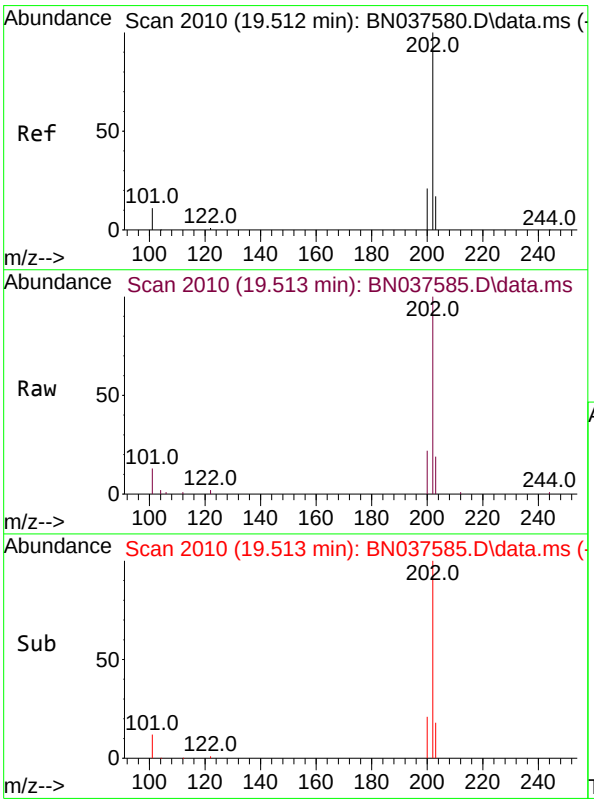
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:240 Resp: 4001

Ion	Ratio	Lower	Upper
240	100		
120	18.2	8.9	13.3#
236	28.8	22.6	33.8

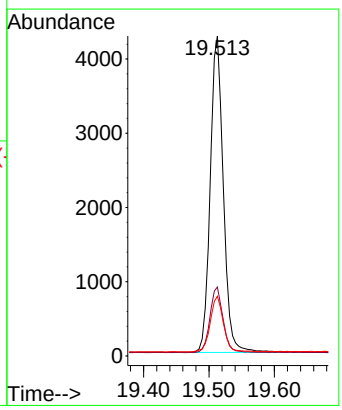


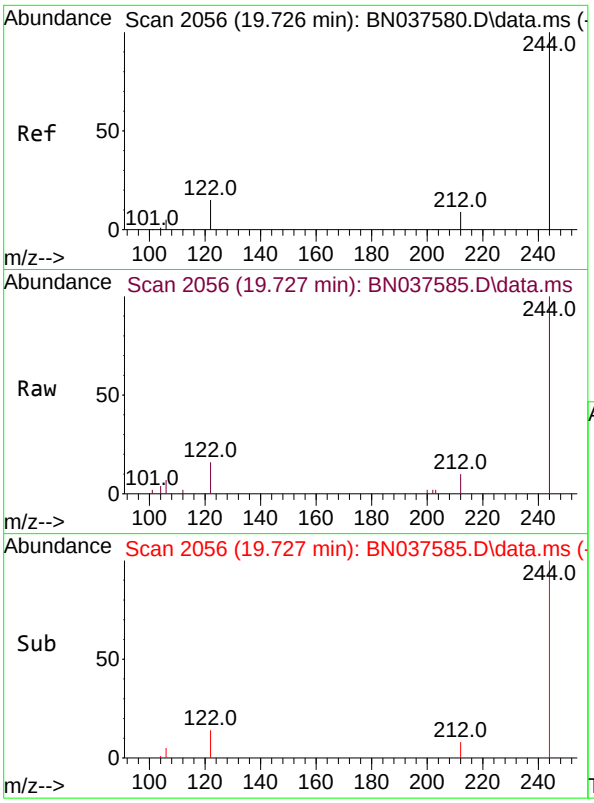


#30
Pyrene
Concen: 0.396 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:202 Resp: 5925

Ion	Ratio	Lower	Upper
202	100		
200	20.6	16.6	25.0
203	17.7	14.3	21.5



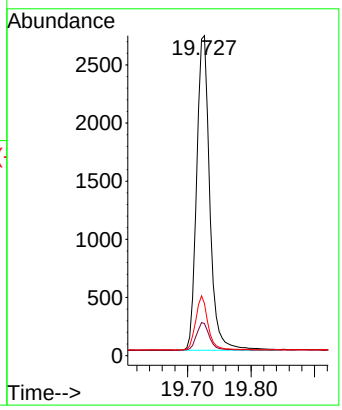


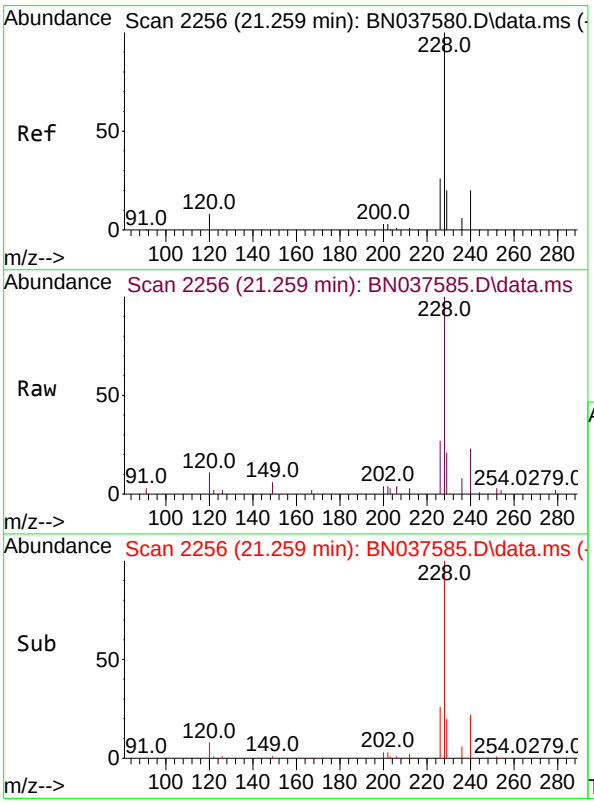
#31
Terphenyl-d14
Concen: 0.472 ng
RT: 19.727 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:244 Resp: 3884

Ion	Ratio	Lower	Upper
244	100		
212	10.0	8.2	12.2
122	16.3	13.2	19.8

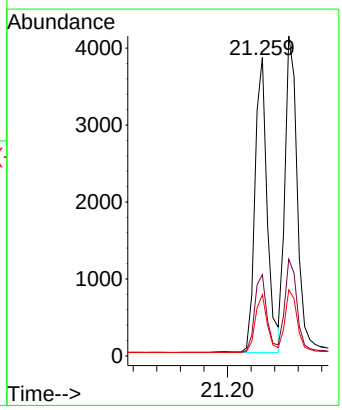


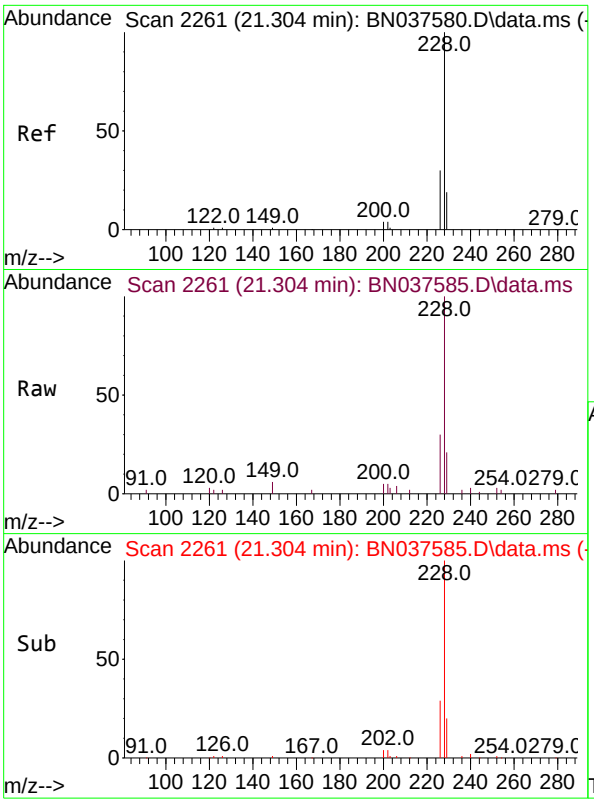


#32
Benzo(a)anthracene
Concen: 0.411 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:228 Resp: 5497

Ion	Ratio	Lower	Upper
228	100		
226	27.2	21.5	32.3
229	20.5	16.5	24.7



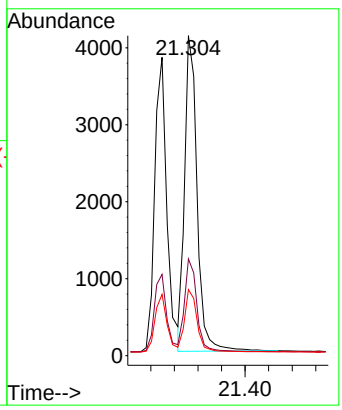


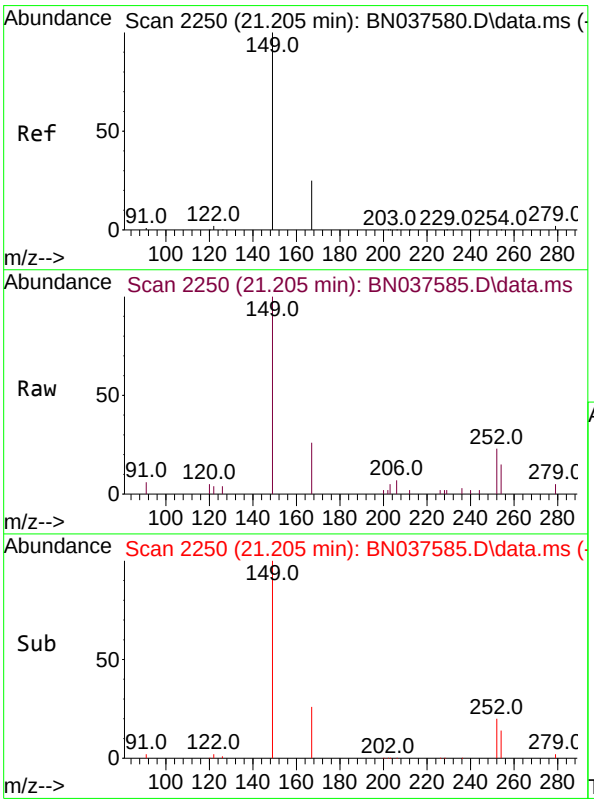
#33
Chrysene
Concen: 0.405 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:228 Resp: 6035

Ion	Ratio	Lower	Upper
228	100		
226	30.3	24.9	37.3
229	20.7	15.8	23.8

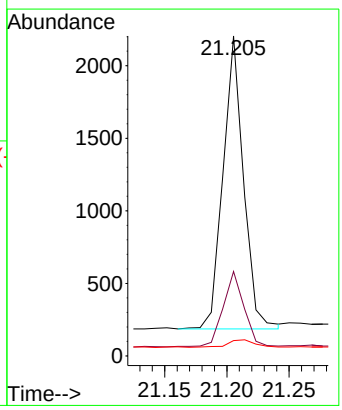


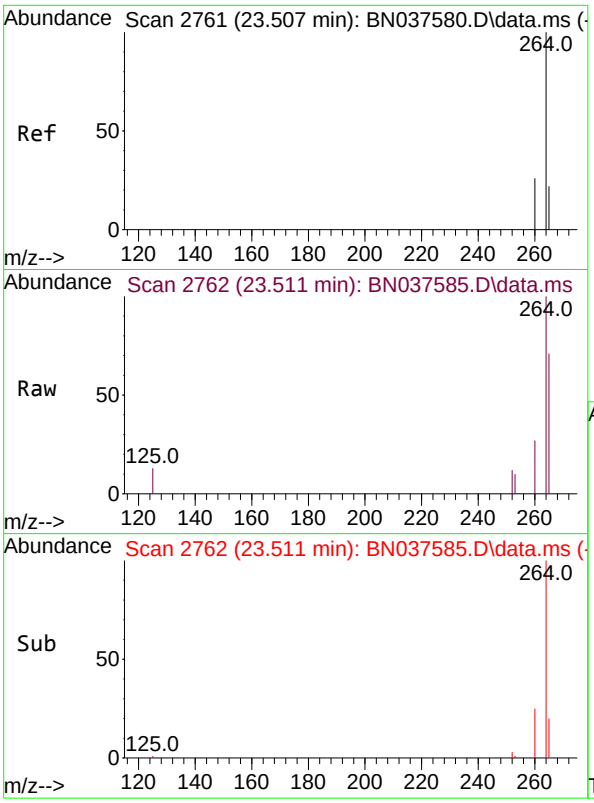


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.418 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:149 Resp: 2306

Ion	Ratio	Lower	Upper
149	100		
167	26.3	20.5	30.7
279	3.3	2.6	4.0



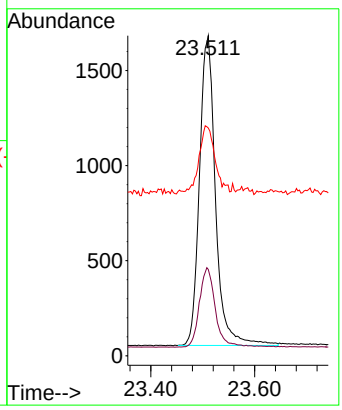


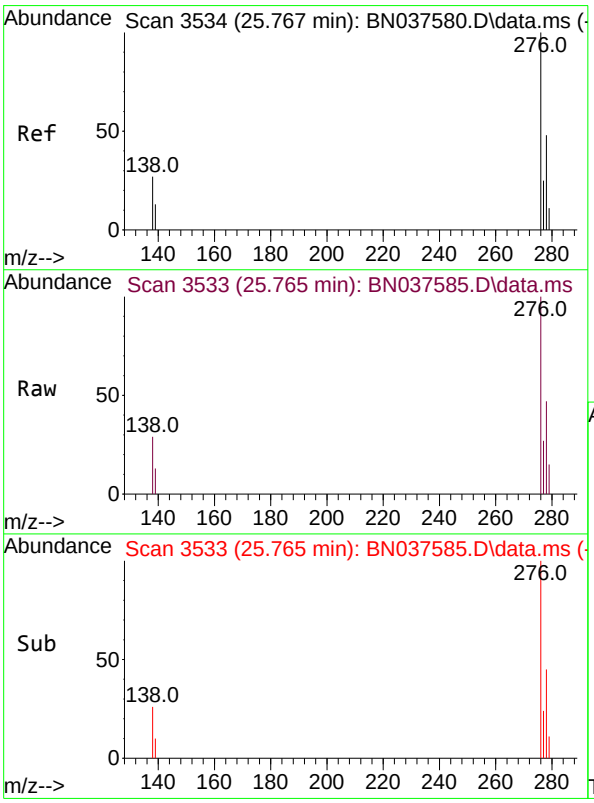
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.511 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:264 Resp: 3490

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.6	32.4
265	71.2	48.2	72.4

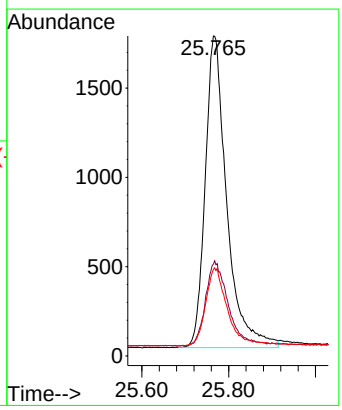


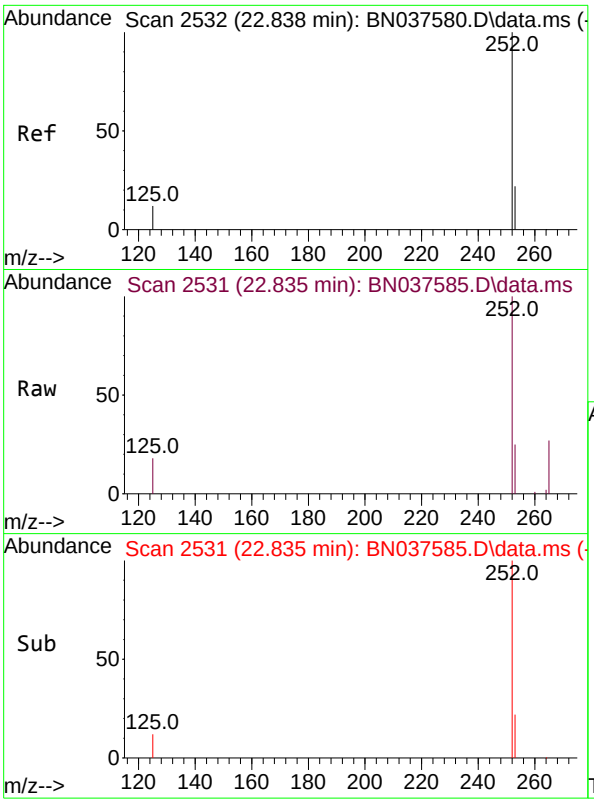


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.410 ng
RT: 25.765 min Scan# 3533
Delta R.T. -0.003 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:276 Resp: 6028

Ion	Ratio	Lower	Upper
276	100		
138	28.3	23.3	34.9
277	24.2	19.5	29.3



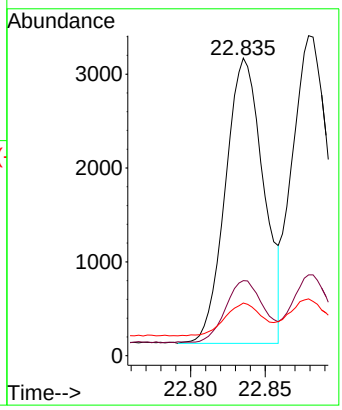


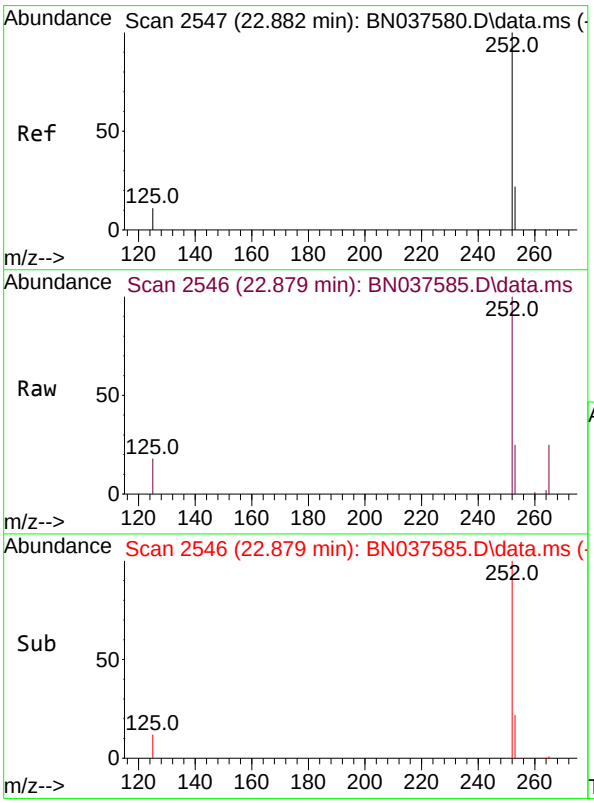
#37
Benzo(b)fluoranthene
Concen: 0.409 ng
RT: 22.835 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:252 Resp: 5410

Ion	Ratio	Lower	Upper
252	100		
253	25.2	20.0	30.0
125	17.7	13.8	20.6

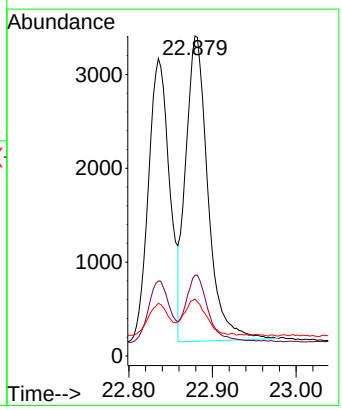


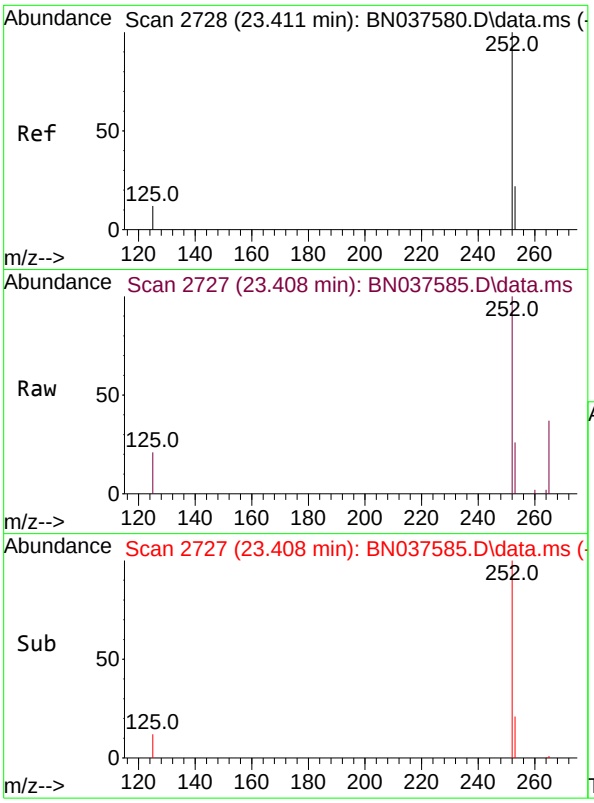


#38
Benzo(k)fluoranthene
Concen: 0.404 ng
RT: 22.879 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:252 Resp: 6026

Ion	Ratio	Lower	Upper
252	100		
253	25.2	19.9	29.9
125	17.7	15.0	22.6



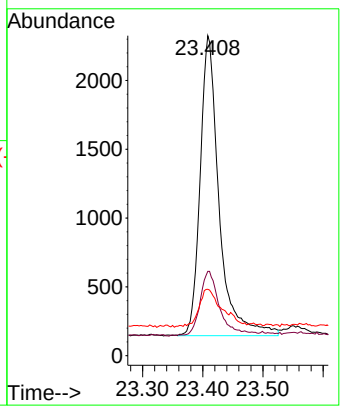


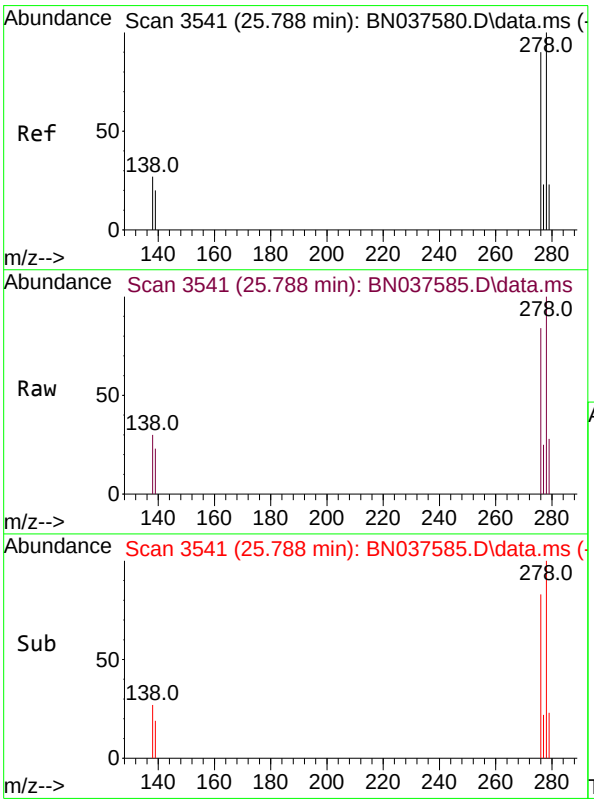
#39
Benzo(a)pyrene
Concen: 0.434 ng
RT: 23.408 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:252 Resp: 4761

Ion	Ratio	Lower	Upper
252	100		
253	26.4	21.6	32.4
125	20.7	16.8	25.2

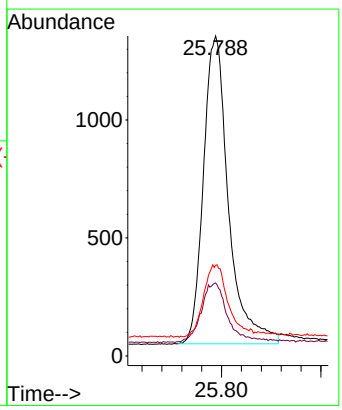


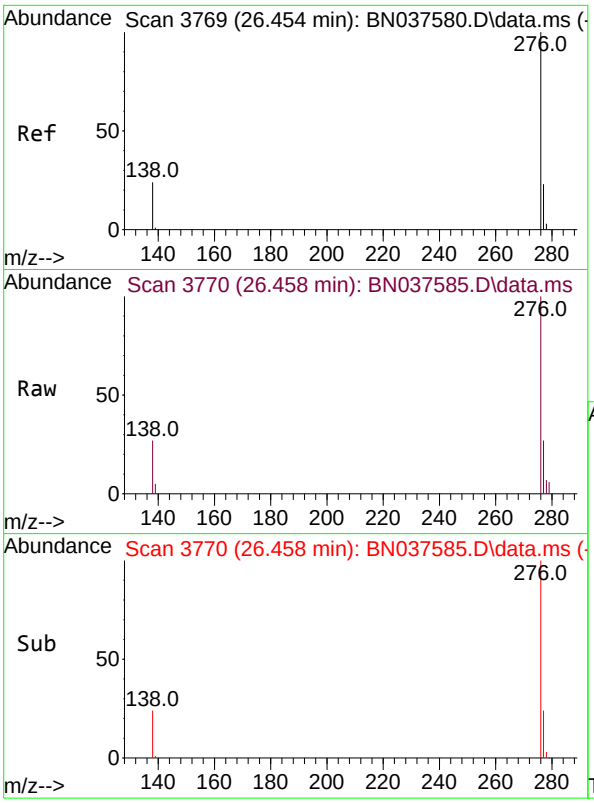


#40
Dibenzo(a,h)anthracene
Concen: 0.401 ng
RT: 25.788 min Scan# 3541
Delta R.T. 0.000 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Tgt Ion:278 Resp: 4571

Ion	Ratio	Lower	Upper
278	100		
139	22.8	18.3	27.5
279	28.3	22.5	33.7



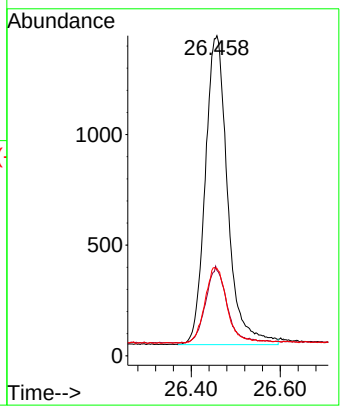


#41
Benzo(g,h,i)perylene
Concen: 0.407 ng
RT: 26.458 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN037585.D
Acq: 12 Aug 2025 20:42

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Tgt Ion:276 Resp: 4888

Ion	Ratio	Lower	Upper
276	100		
277	26.7	21.0	31.4
138	27.3	21.7	32.5



Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037585.D
Acq On : 12 Aug 2025 20:42
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Quant Time: Aug 13 05:03:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	88	0.00
2		1,4-Dioxane	0.383	0.481	-25.6#	107	0.00
3		n-Nitrosodimethylamine	0.489	0.570	-16.6	103	0.00
4	S	2-Fluorophenol	0.907	0.965	-6.4	96	0.00
5	S	Phenol-d6	1.091	1.228	-12.6	103	0.00
6		bis(2-Chloroethyl)ether	0.983	1.077	-9.6	97	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	88	0.00
8	S	Nitrobenzene-d5	0.282	0.312	-10.6	104	0.00
9		Naphthalene	1.065	1.104	-3.7	94	0.00
10		Hexachlorobutadiene	0.260	0.279	-7.3	93	0.00
11	SURR	2-Methylnaphthalene-d10	0.544	0.578	-6.2	100	0.00
12		2-Methylnaphthalene	0.668	0.622	6.9	86	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	88	0.00
14	S	2,4,6-Tribromophenol	0.175	0.160	8.6	90	0.00
15	S	2-Fluorobiphenyl	2.313	2.564	-10.9	99	0.00
16		Acenaphthylene	1.793	2.010	-12.1	104	0.00
17		Acenaphthene	1.220	1.235	-1.2	93	0.00
18		Fluorene	1.596	1.603	-0.4	93	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	91	0.00
20		4,6-Dinitro-2-methylphenol	0.053	0.046	13.2	90	0.00
21		4-Bromophenyl-phenylether	0.251	0.251	0.0	97	0.00
22		Hexachlorobenzene	0.356	0.373	-4.8	95	0.00
23		Atrazine	0.142	0.149	-4.9	104	0.00
24		Pentachlorophenol	0.125	0.106	15.2	85	0.00
25		Phenanthrene	1.216	1.230	-1.2	95	0.00
26		Anthracene	1.077	1.082	-0.5	99	0.00
27	SURR	Fluoranthene-d10	1.052	1.066	-1.3	101	0.00
28		Fluoranthene	1.397	1.336	4.4	93	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	93	0.00
30		Pyrene	1.495	1.481	0.9	94	0.00
31	S	Terphenyl-d14	0.823	0.971	-18.0	113	0.00
32		Benzo(a)anthracene	1.336	1.374	-2.8	101	0.00
33		Chrysene	1.489	1.508	-1.3	98	0.00
34		Bis(2-ethylhexyl)phthalate	0.551	0.576	-4.5	102	0.00
35	I	Perylene-d12	1.000	1.000	0.0	83	0.00
36		Indeno(1,2,3-cd)pyrene	1.686	1.727	-2.4	89	0.00
37		Benzo(b)fluoranthene	1.516	1.550	-2.2	97	0.00
38		Benzo(k)fluoranthene	1.710	1.727	-1.0	87	0.00
39	C	Benzo(a)pyrene	1.257	1.364	-8.5	99	0.00
40		Dibenzo(a,h)anthracene	1.308	1.310	-0.2	89	0.00
41		Benzo(g,h,i)perylene	1.378	1.401	-1.7	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Evaluate Continuing Calibration Report

ICAL Form

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037585.D
Acq On : 12 Aug 2025 20:42
Operator : RC/JU
Sample : SSTDICV0.4
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
ICVBN081225

Quant Time: Aug 13 05:03:37 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	88	0.00
2		1,4-Dioxane	0.400	0.502	-25.5#	107	0.00
3		n-Nitrosodimethylamine	0.400	0.466	-16.5	103	0.00
4	S	2-Fluorophenol	0.400	0.426	-6.5	96	0.00
5	S	Phenol-d6	0.400	0.450	-12.5	103	0.00
6		bis(2-Chloroethyl)ether	0.400	0.438	-9.5	97	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	88	0.00
8	S	Nitrobenzene-d5	0.400	0.443	-10.7	104	0.00
9		Naphthalene	0.400	0.415	-3.7	94	0.00
10		Hexachlorobutadiene	0.400	0.429	-7.2	93	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.425	-6.2	100	0.00
12		2-Methylnaphthalene	0.400	0.372	7.0	86	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	88	0.00
14	S	2,4,6-Tribromophenol	0.400	0.365	8.8	90	0.00
15	S	2-Fluorobiphenyl	0.400	0.443	-10.7	99	0.00
16		Acenaphthylene	0.400	0.448	-12.0	104	0.00
17		Acenaphthene	0.400	0.405	-1.3	93	0.00
18		Fluorene	0.400	0.402	-0.5	93	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	91	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.433	-8.2	90	0.00
21		4-Bromophenyl-phenylether	0.400	0.400	0.0	97	0.00
22		Hexachlorobenzene	0.400	0.419	-4.7	95	0.00
23		Atrazine	0.400	0.420	-5.0	104	0.00
24		Pentachlorophenol	0.400	0.339	15.3	85	0.00
25		Phenanthrene	0.400	0.404	-1.0	95	0.00
26		Anthracene	0.400	0.402	-0.5	99	0.00
27	SURR	Fluoranthene-d10	0.400	0.405	-1.3	101	0.00
28		Fluoranthene	0.400	0.382	4.5	93	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	93	0.00
30		Pyrene	0.400	0.396	1.0	94	0.00
31	S	Terphenyl-d14	0.400	0.472	-18.0	113	0.00
32		Benzo(a)anthracene	0.400	0.411	-2.7	101	0.00
33		Chrysene	0.400	0.405	-1.3	98	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.418	-4.5	102	0.00
35	I	Perylene-d12	0.400	0.400	0.0	83	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.410	-2.5	89	0.00
37		Benzo(b)fluoranthene	0.400	0.409	-2.2	97	0.00
38		Benzo(k)fluoranthene	0.400	0.404	-1.0	87	0.00
39	C	Benzo(a)pyrene	0.400	0.434	-8.5	99	0.00
40		Dibenzo(a,h)anthracene	0.400	0.401	-0.3	89	0.00
41		Benzo(g,h,i)perylene	0.400	0.407	-1.7	93	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	Alliance	Contract:	TETR06
Lab Code:	ACE	SDG No.:	Q2806
Instrument ID:	BNA_N	Calibration Date/Time:	08/13/2025 10:28
Lab File ID:	BN037588.D	Init. Calib. Date(s):	08/12/2025 08/12/2025
EPA Sample No.:	SSTDCCC0.4	Init. Calib. Time(s):	16:26 20:05

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.508		-6.6	20.0
Fluoranthene-d10	1.052	0.929		-11.7	20.0
2-Fluorophenol	0.907	0.923		1.8	20.0
Phenol-d6	1.091	1.135		4.0	20.0
Nitrobenzene-d5	0.282	0.265		-6.0	20.0
2-Fluorobiphenyl	2.313	2.297		-0.7	20.0
2,4,6-Tribromophenol	0.175	0.166		-5.1	20.0
Terphenyl-d14	0.823	0.727		-11.7	20.0
1,4-Dioxane	0.383	0.412		7.6	20.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037588.D
Acq On : 13 Aug 2025 10:28
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Aug 13 11:18:48 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

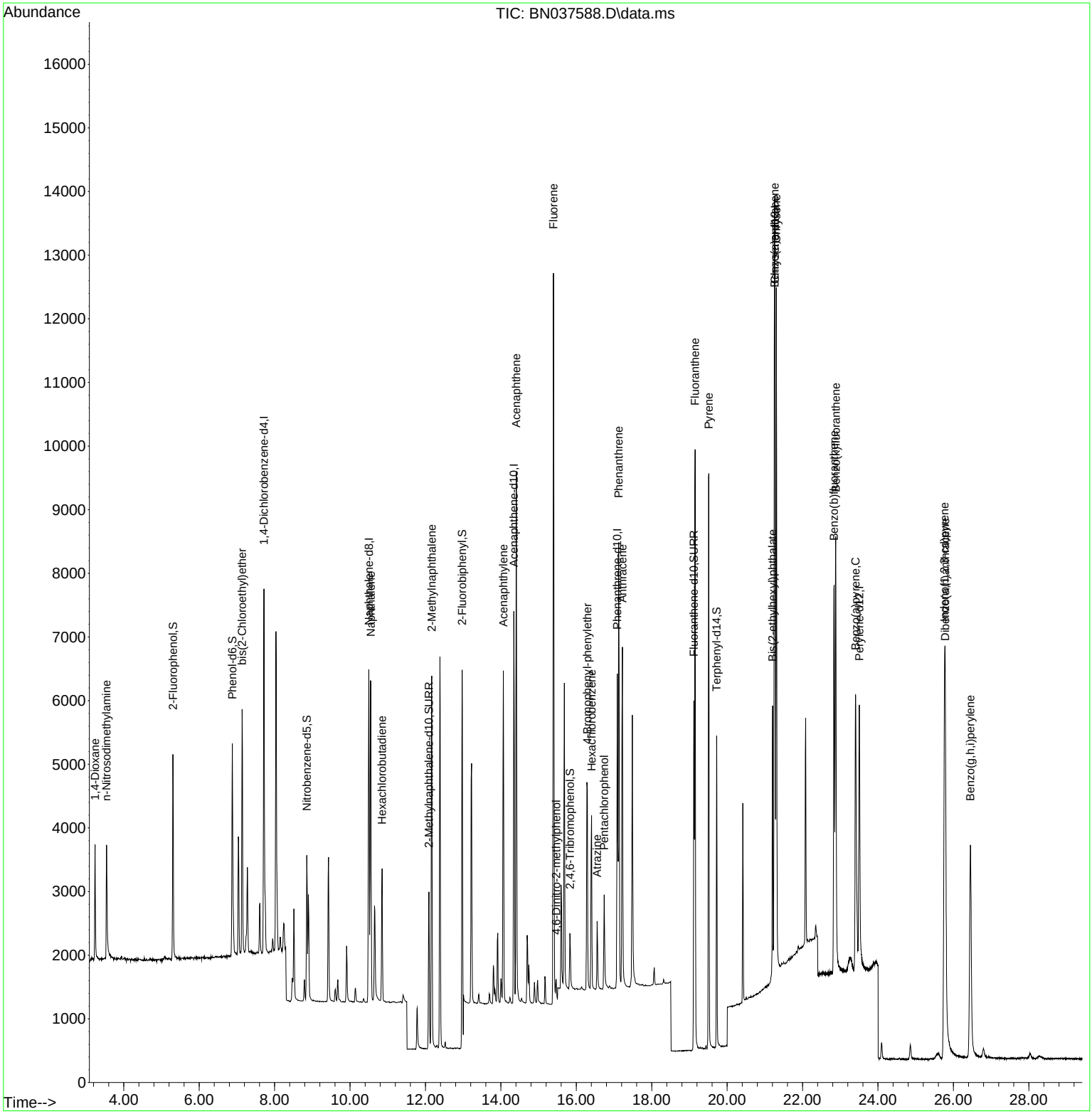
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2728	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	6843	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	3392	0.400	ng		0.00
19) Phenanthrene-d10	17.086	188	6530	0.400	ng		0.00
29) Chrysene-d12	21.268	240	6467	0.400	ng	#	0.00
35) Perylene-d12	23.505	264	5771	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	2517	0.407	ng		0.00
5) Phenol-d6	6.879	99	3095	0.416	ng		0.00
8) Nitrobenzene-d5	8.854	82	1815	0.377	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	3475	0.374	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	562	0.379	ng		0.00
15) 2-Fluorobiphenyl	12.973	172	7792	0.397	ng		0.00
27) Fluoranthene-d10	19.118	212	6069	0.353	ng		0.00
31) Terphenyl-d14	19.722	244	4699	0.353	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.239	88	1125	0.431	ng		95
3) n-Nitrosodimethylamine	3.543	42	1239	0.372	ng		93
6) bis(2-Chloroethyl)ether	7.139	93	2771	0.413	ng		98
9) Naphthalene	10.552	128	7172	0.394	ng		100
10) Hexachlorobutadiene	10.851	225	1680	0.377	ng	#	98
12) 2-Methylnaphthalene	12.167	142	4410	0.386	ng		98
16) Acenaphthylene	14.067	152	5779	0.380	ng		99
17) Acenaphthene	14.409	154	3915	0.379	ng		99
18) Fluorene	15.393	166	5059	0.374	ng		99
20) 4,6-Dinitro-2-methylph...	15.467	198	279	0.416	ng		96
21) 4-Bromophenyl-phenylether	16.292	248	1578	0.384	ng		94
22) Hexachlorobenzene	16.404	284	2318	0.398	ng		98
23) Atrazine	16.553	200	910	0.392	ng		98
24) Pentachlorophenol	16.739	266	795	0.389	ng		97
25) Phenanthrene	17.124	178	7610	0.383	ng		100
26) Anthracene	17.223	178	6413	0.365	ng		100
28) Fluoranthene	19.150	202	8323	0.365	ng		99
30) Pyrene	19.513	202	8327	0.344	ng		100
32) Benzo(a)anthracene	21.259	228	9150	0.424	ng		99
33) Chrysene	21.304	228	9021	0.375	ng		99
34) Bis(2-ethylhexyl)phtha...	21.205	149	3651	0.410	ng		92
36) Indeno(1,2,3-cd)pyrene	25.765	276	9278	0.382	ng		98
37) Benzo(b)fluoranthene	22.835	252	7838	0.358	ng		99
38) Benzo(k)fluoranthene	22.879	252	8909	0.361	ng		100
39) Benzo(a)pyrene	23.405	252	7079	0.390	ng		98
40) Dibenzo(a,h)anthracene	25.785	278	7165	0.380	ng		98
41) Benzo(g,h,i)perylene	26.452	276	7382	0.371	ng		100

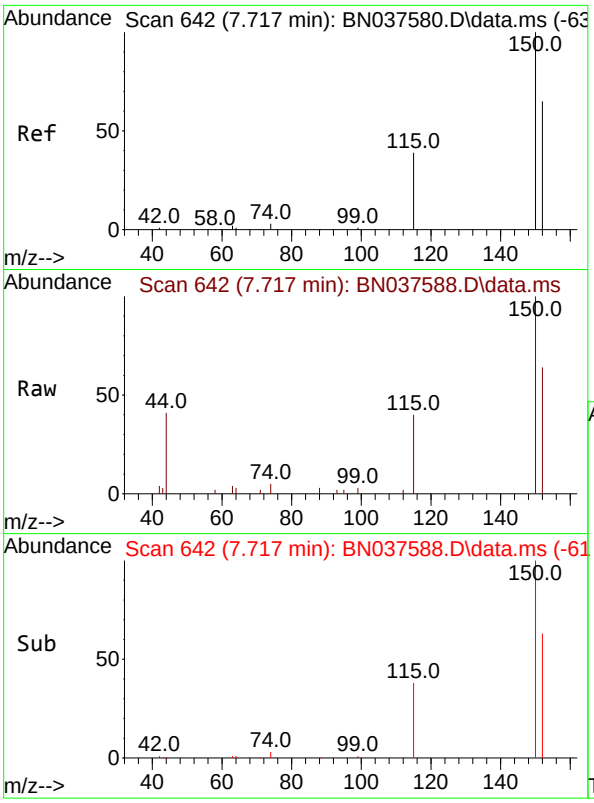
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037588.D
Acq On : 13 Aug 2025 10:28
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Quant Time: Aug 13 11:18:48 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



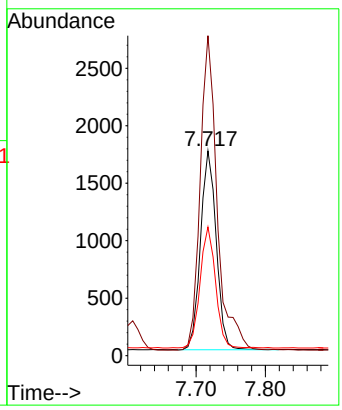


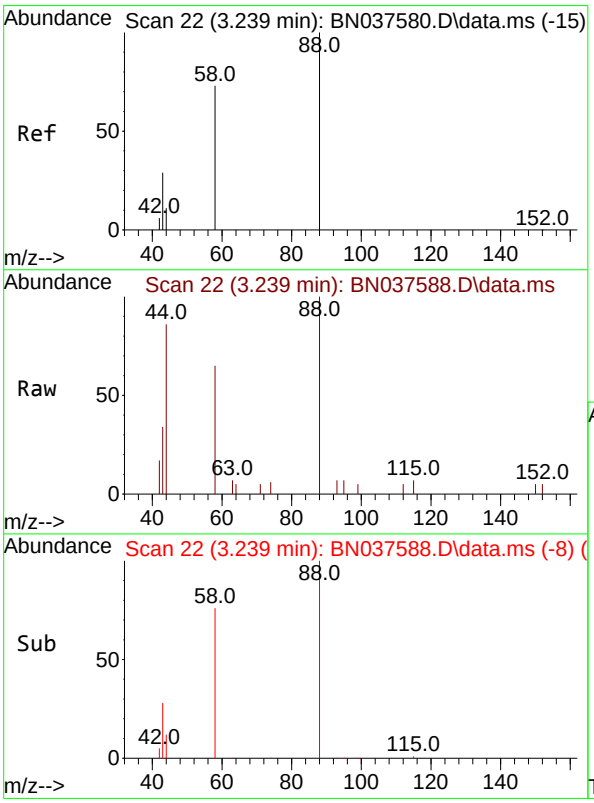
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 2728

Ion	Ratio	Lower	Upper
152	100		
150	156.3	122.2	183.4
115	62.8	49.8	74.6

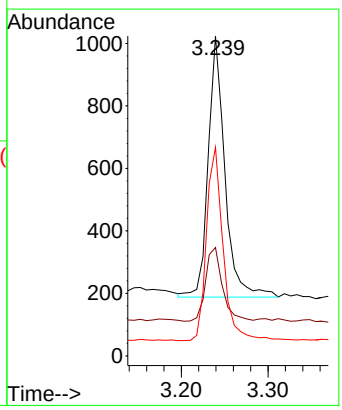


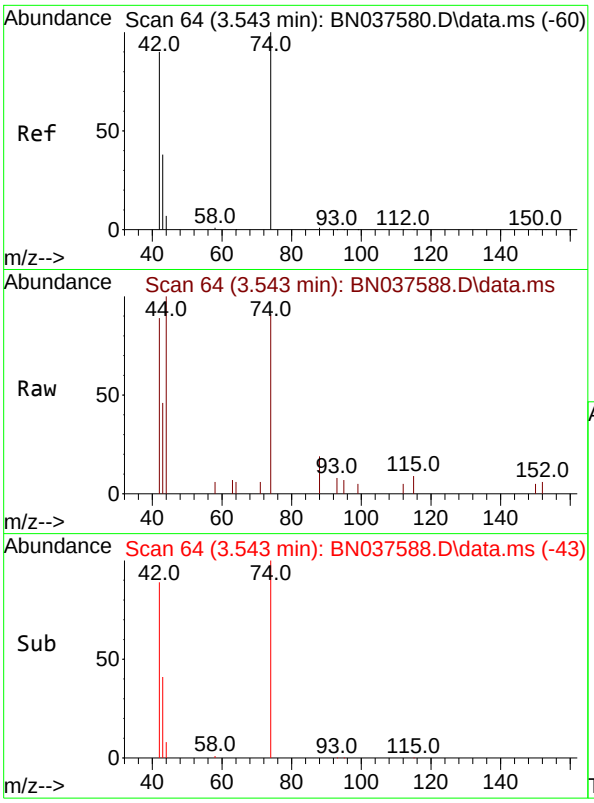


#2
1,4-Dioxane
Concen: 0.431 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion: 88 Resp: 1125

Ion	Ratio	Lower	Upper
88	100		
43	28.4	25.8	38.6
58	73.2	61.2	91.8



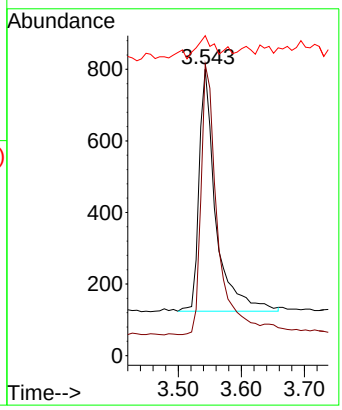


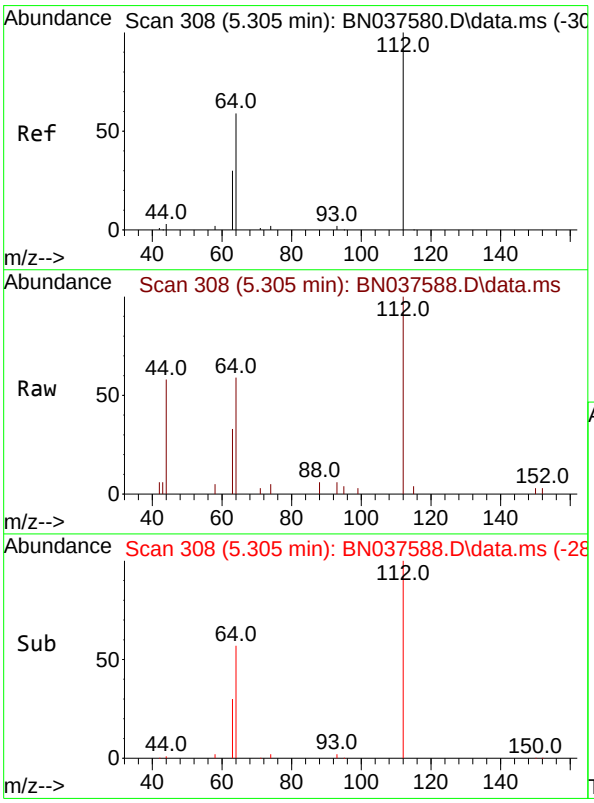
#3
n-Nitrosodimethylamine
Concen: 0.372 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 42 Resp: 1239

Ion	Ratio	Lower	Upper
42	100		
74	109.8	82.0	123.0
44	10.3	7.9	11.9

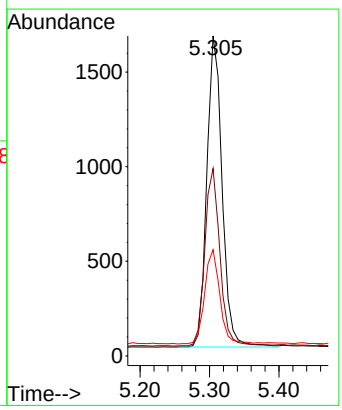


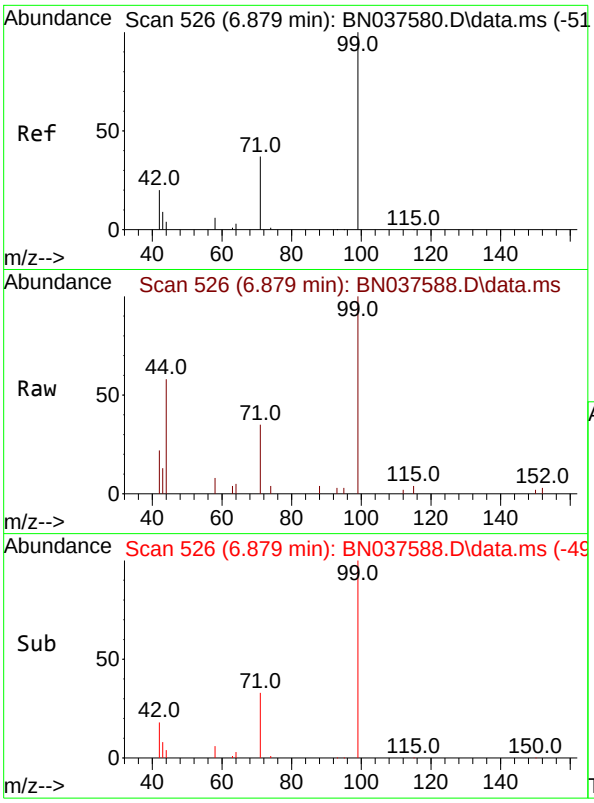


#4
2-Fluorophenol
Concen: 0.407 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:112 Resp: 2517

Ion	Ratio	Lower	Upper
112	100		
64	56.7	44.9	67.3
63	30.0	23.4	35.2



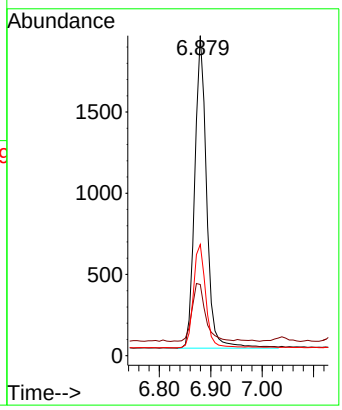


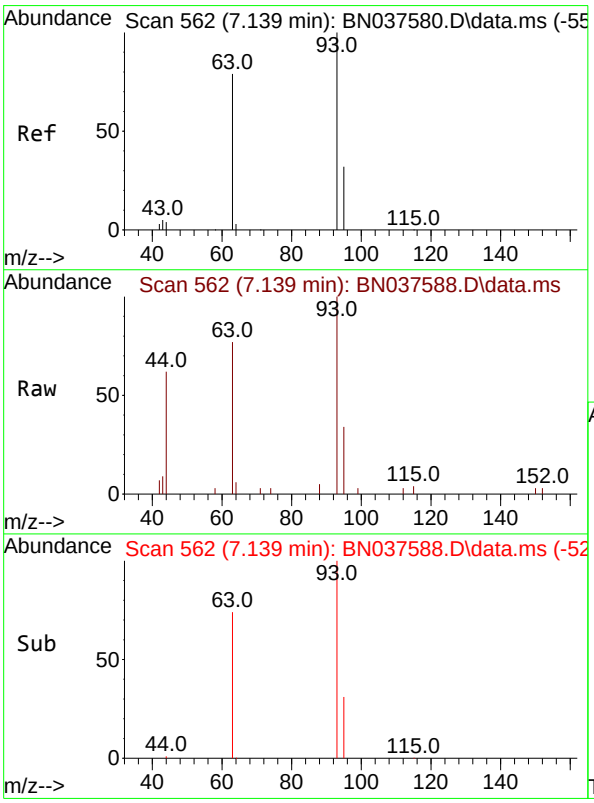
#5
Phenol-d6
Concen: 0.416 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion: 99 Resp: 3095

Ion	Ratio	Lower	Upper
99	100		
42	21.0	18.5	27.7
71	34.2	28.6	42.8

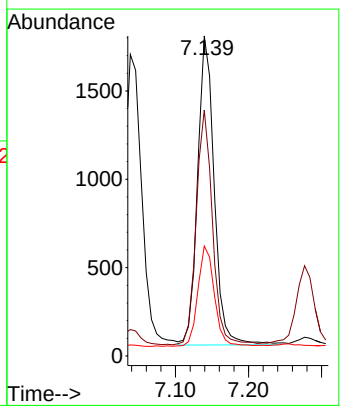


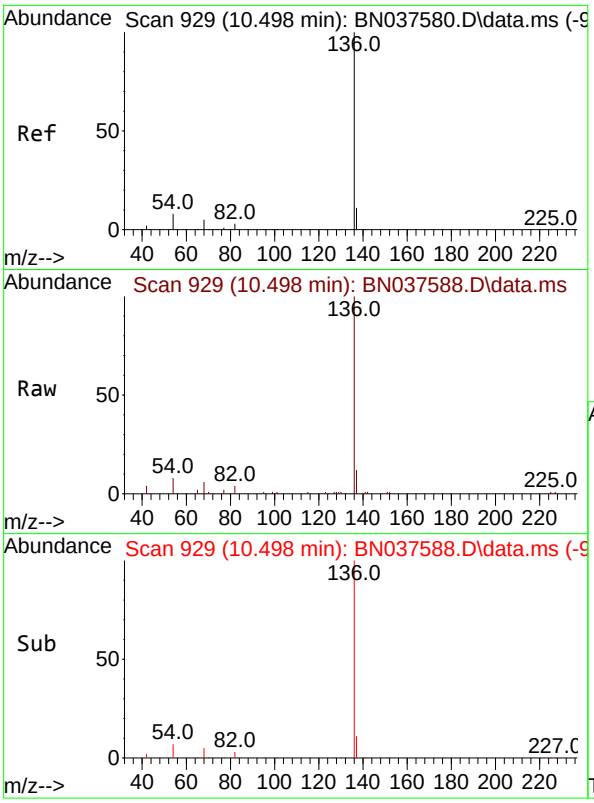


#6
bis(2-Chloroethyl)ether
Concen: 0.413 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion: 93 Resp: 2771

Ion	Ratio	Lower	Upper
93	100		
63	73.7	58.0	87.0
95	32.2	24.9	37.3



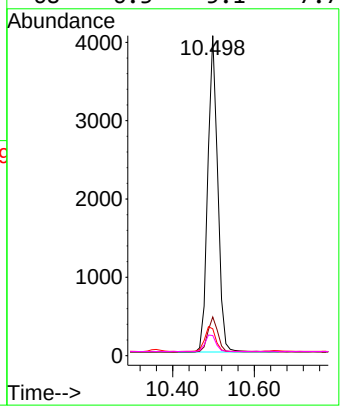


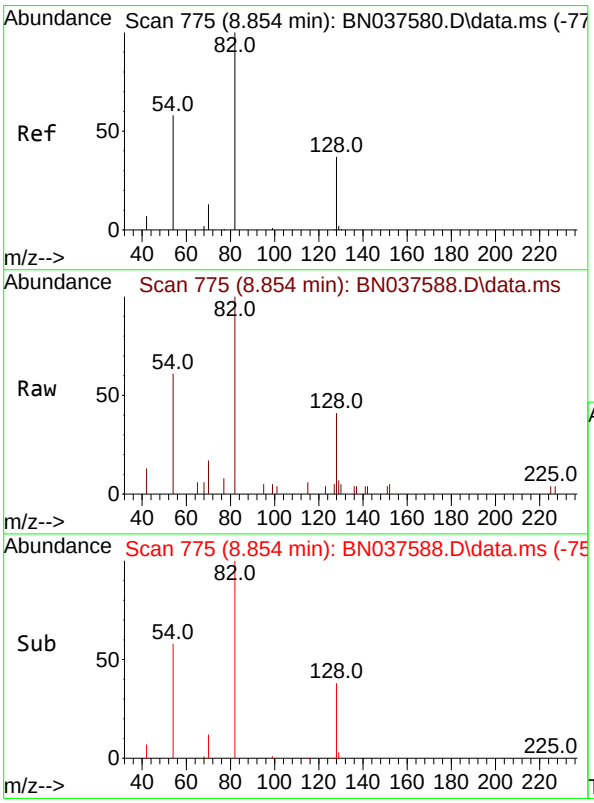
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:136 Resp: 6843

Ion	Ratio	Lower	Upper
136	100		
137	12.1	9.5	14.3
54	8.4	7.3	10.9
68	6.3	5.1	7.7

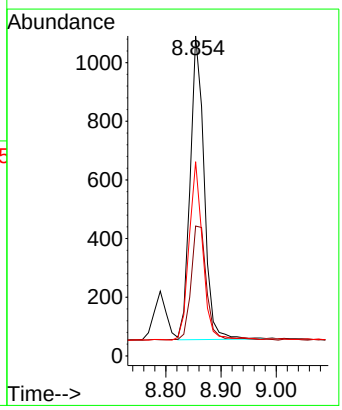


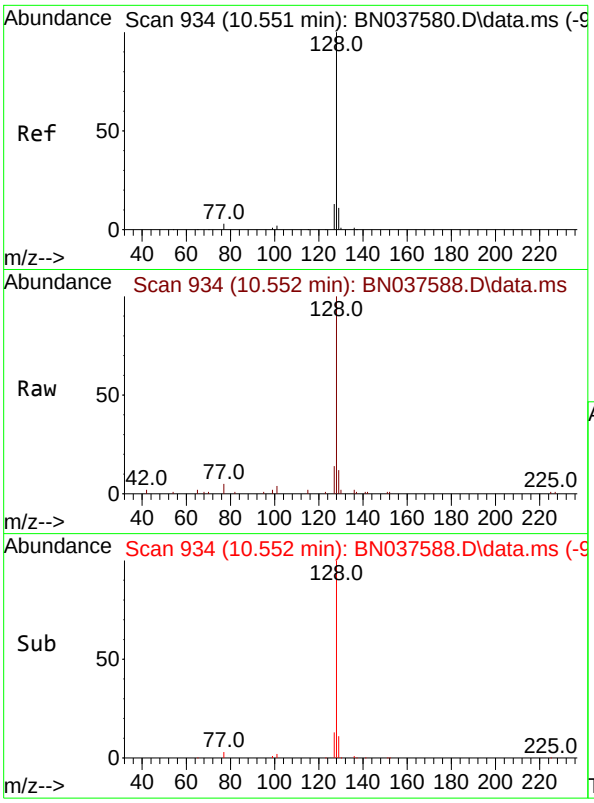


#8
Nitrobenzene-d5
Concen: 0.377 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion: 82 Resp: 1815

Ion	Ratio	Lower	Upper
82	100		
128	40.6	32.6	48.8
54	60.7	48.9	73.3



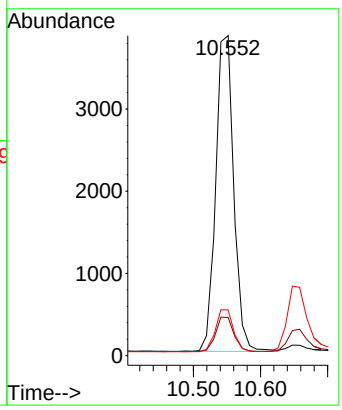


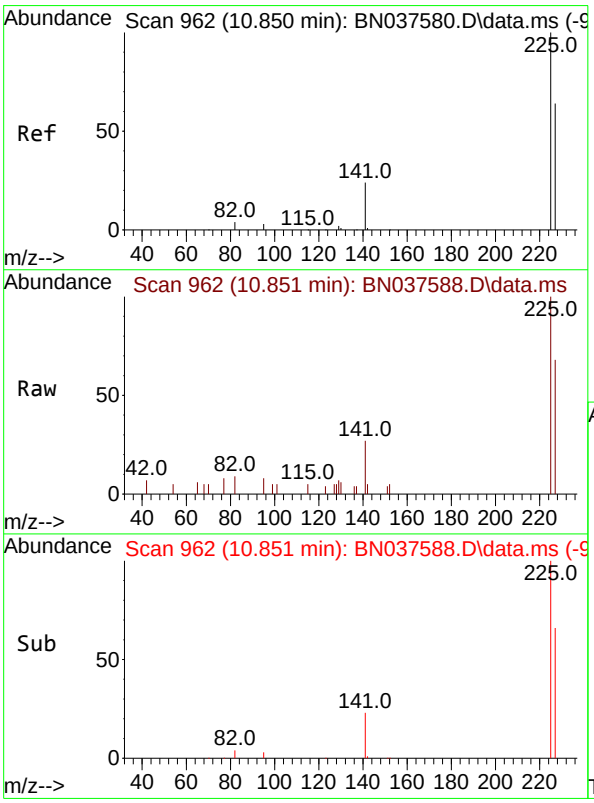
#9
Naphthalene
Concen: 0.394 ng
RT: 10.552 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:128 Resp: 7172

Ion	Ratio	Lower	Upper
128	100		
129	11.9	9.8	14.6
127	14.3	11.5	17.3

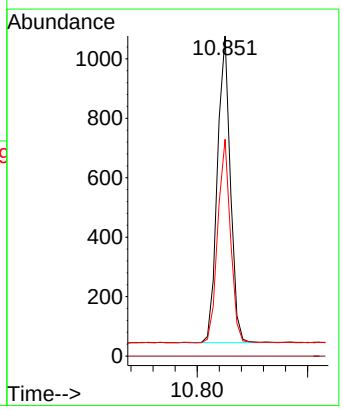


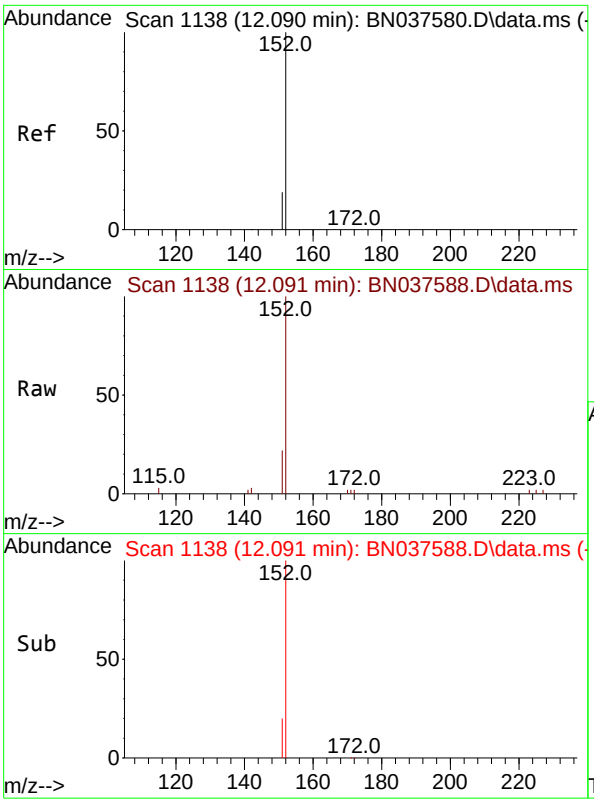


#10
Hexachlorobutadiene
Concen: 0.377 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:225 Resp: 1680

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.8	50.8	76.2



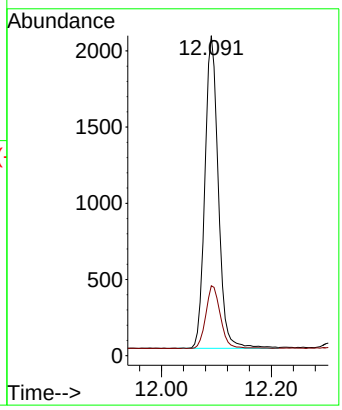


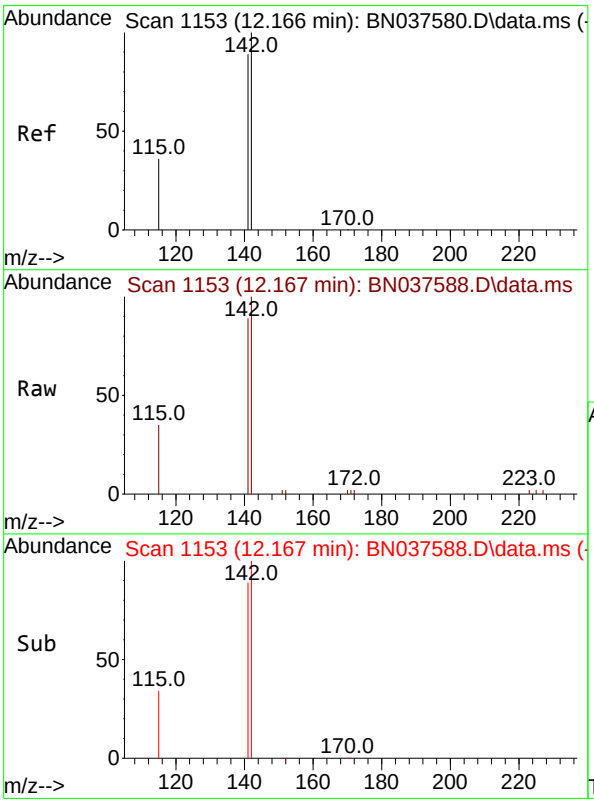
#11
2-Methylnaphthalene-d10
Concen: 0.374 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:152 Resp: 3475

Ion	Ratio	Lower	Upper
152	100		
151	21.8	17.3	25.9

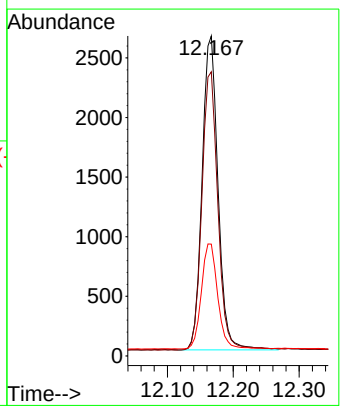


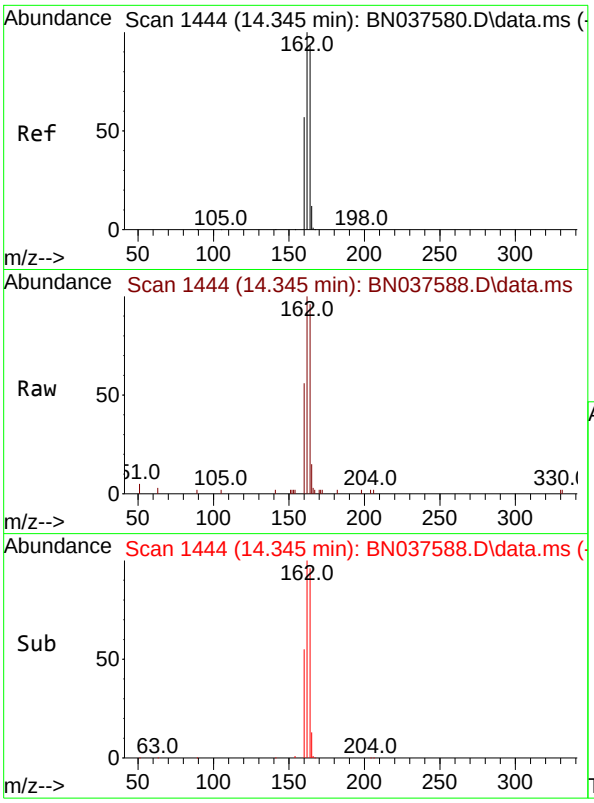


#12
2-Methylnaphthalene
Concen: 0.386 ng
RT: 12.167 min Scan# 1153
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:142 Resp: 4410

Ion	Ratio	Lower	Upper
142	100		
141	88.8	71.4	107.0
115	34.9	30.2	45.4



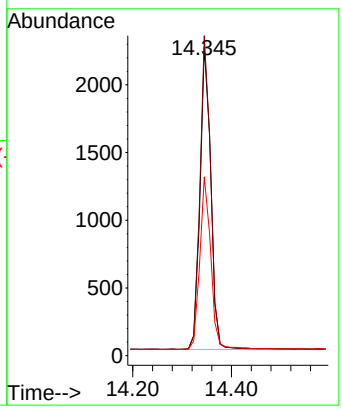


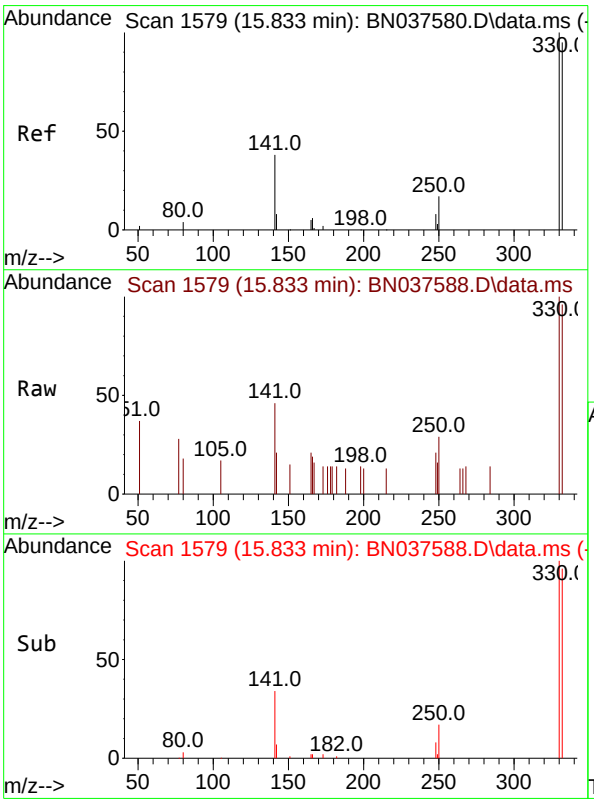
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:164 Resp: 3392

Ion	Ratio	Lower	Upper
164	100		
162	103.7	85.5	128.3
160	58.0	49.5	74.3

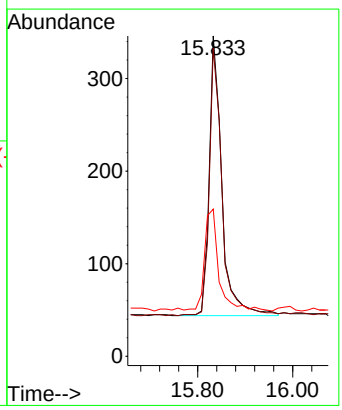


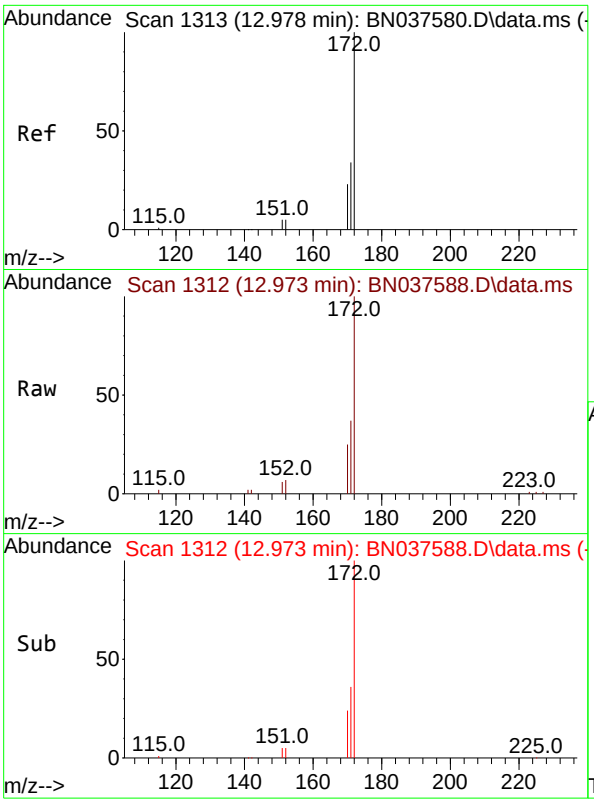


#14
2,4,6-Tribromophenol
Concen: 0.379 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:330 Resp: 562

Ion	Ratio	Lower	Upper
330	100		
332	95.7	77.4	116.0
141	41.1	30.9	46.3



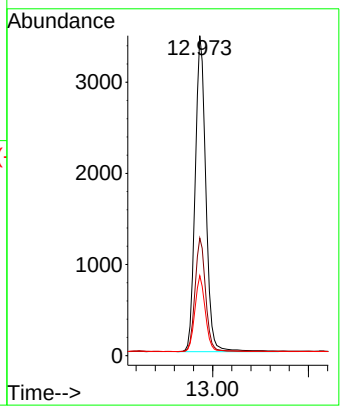


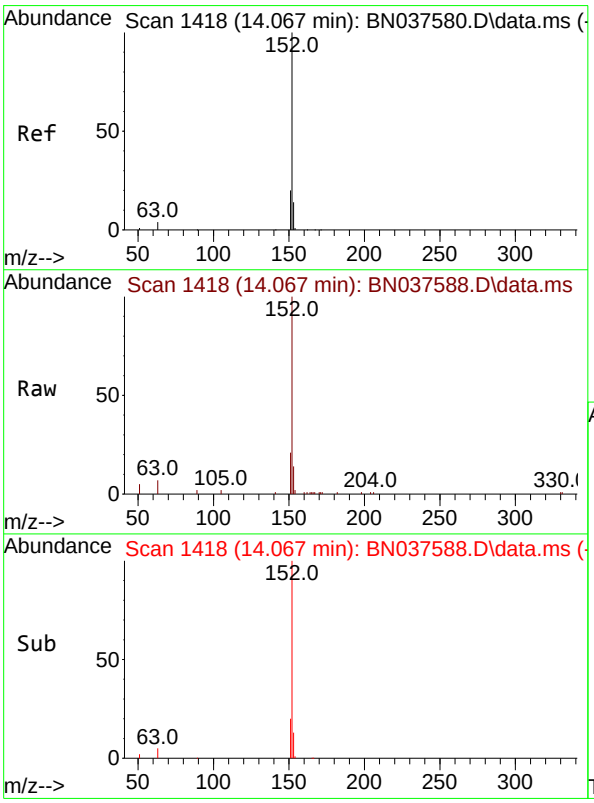
#15
2-Fluorobiphenyl
Concen: 0.397 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:172 Resp: 7792

Ion	Ratio	Lower	Upper
172	100		
171	36.8	28.2	42.4
170	25.0	19.2	28.8

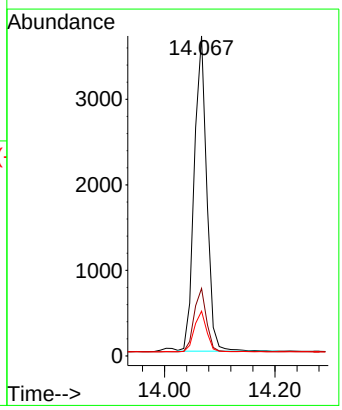


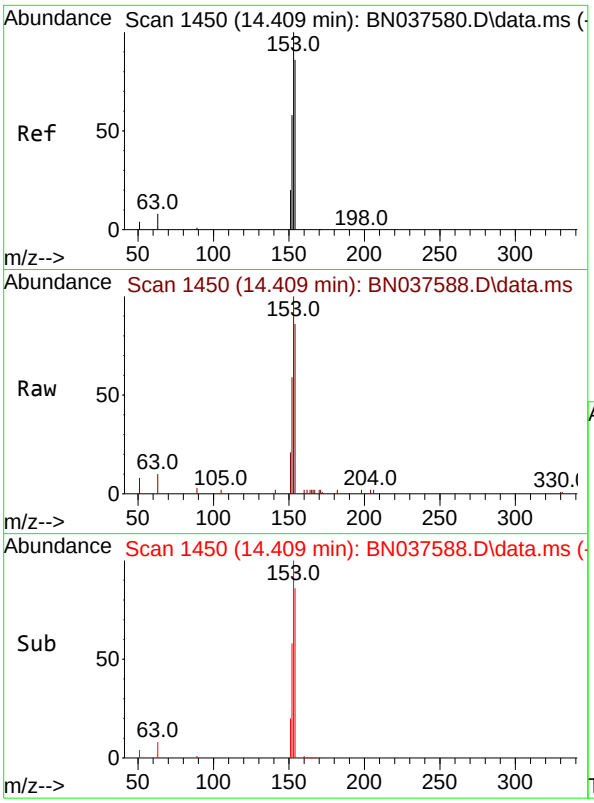


#16
Acenaphthylene
Concen: 0.380 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:152 Resp: 5779

Ion	Ratio	Lower	Upper
152	100		
151	20.3	16.1	24.1
153	13.0	10.7	16.1



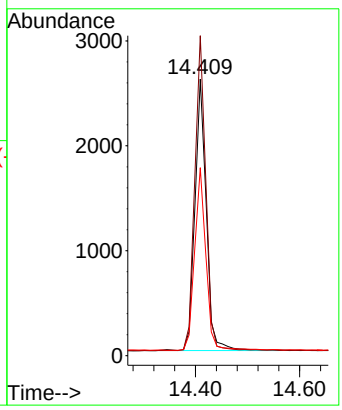


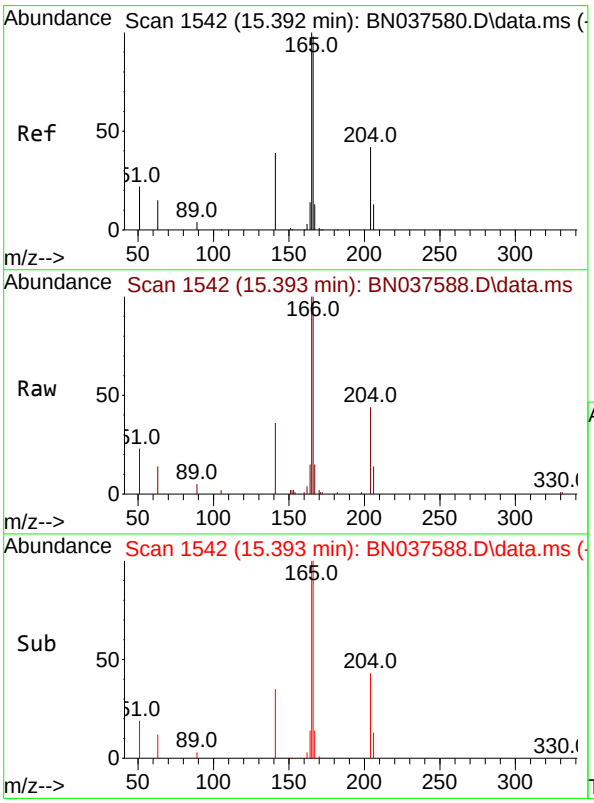
#17
Acenaphthene
Concen: 0.379 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:154 Resp: 3915

Ion	Ratio	Lower	Upper
154	100		
153	113.5	90.6	135.8
152	67.5	54.9	82.3

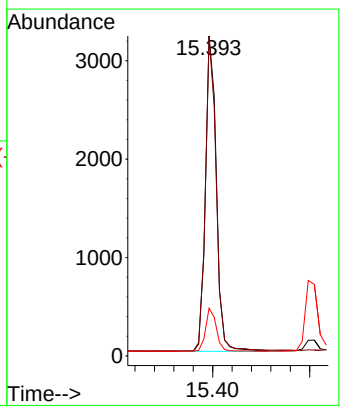


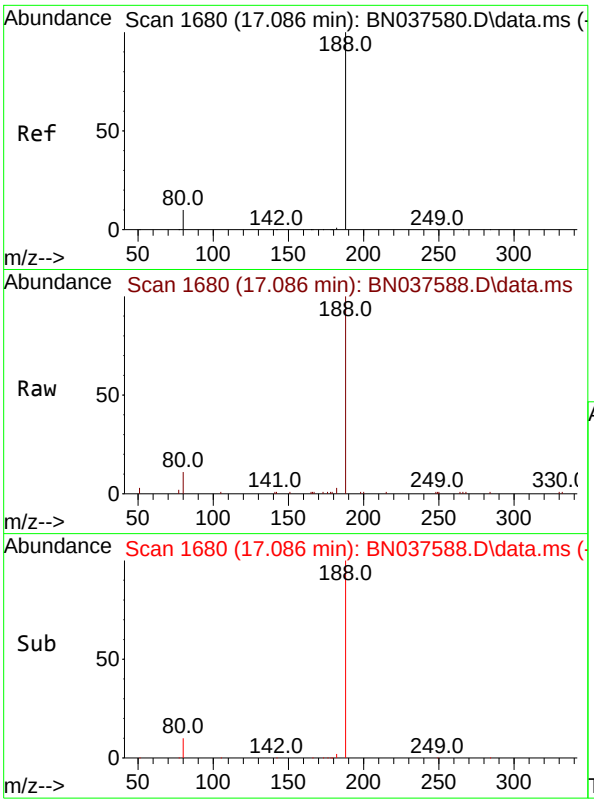


#18
Fluorene
Concen: 0.374 ng
RT: 15.393 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:166 Resp: 5059

Ion	Ratio	Lower	Upper
166	100		
165	97.8	78.9	118.3
167	13.3	10.7	16.1



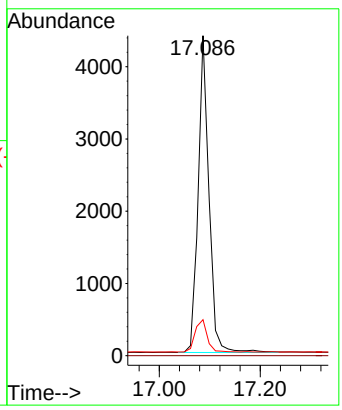


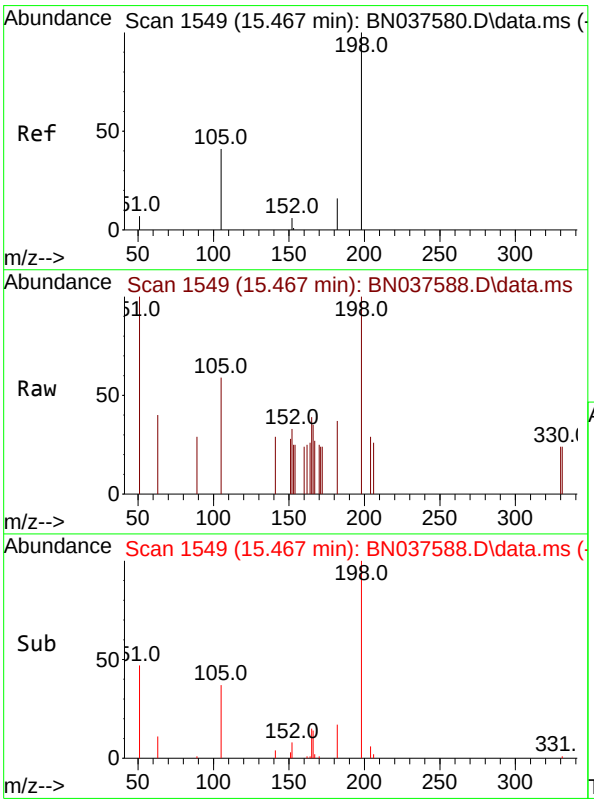
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:188 Resp: 6530

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.3	9.1	13.7

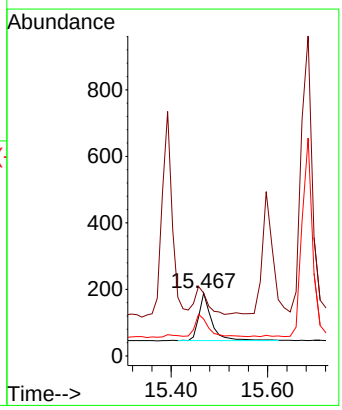


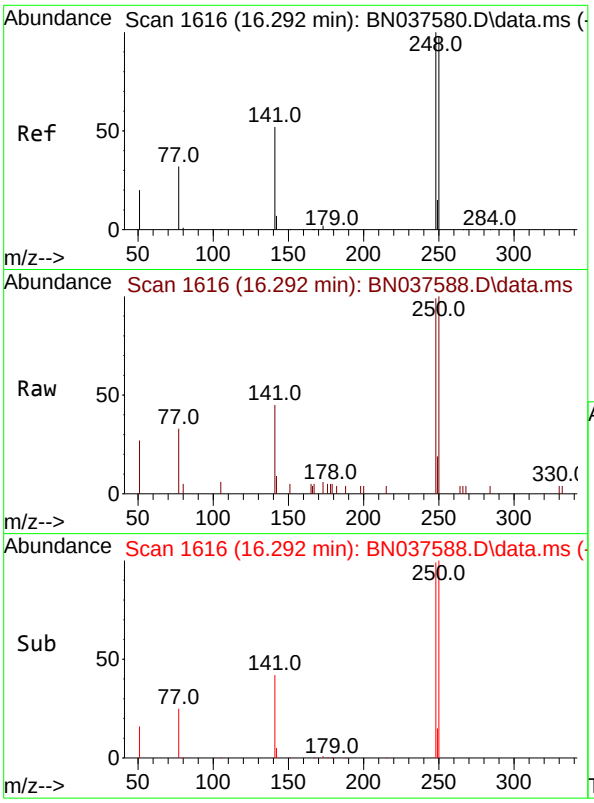


#20
4,6-Dinitro-2-methylphenol
Concen: 0.416 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:198 Resp: 279

Ion	Ratio	Lower	Upper
198	100		
51	100.0	81.0	121.6
105	58.7	52.5	78.7



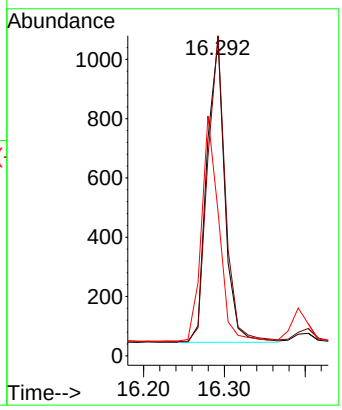


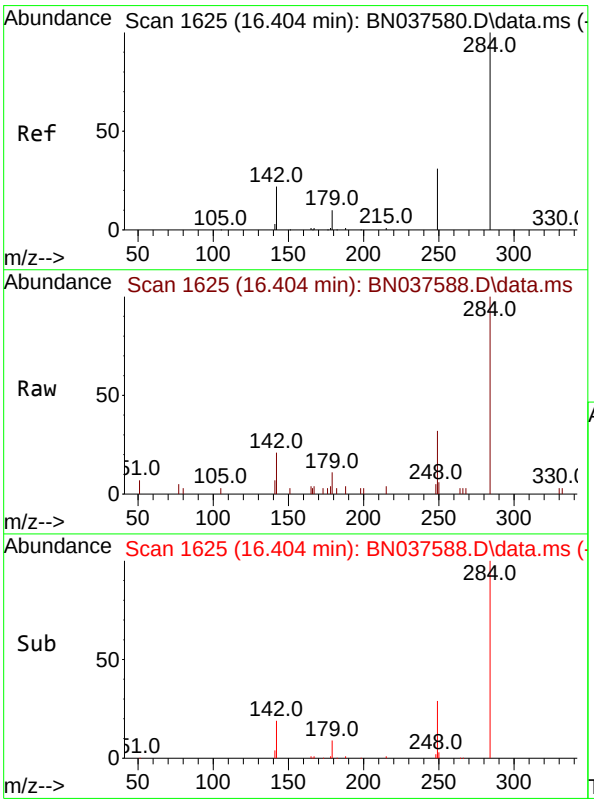
#21
4-Bromophenyl-phenylether
Concen: 0.384 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:248 Resp: 1578

Ion	Ratio	Lower	Upper
248	100		
250	101.2	78.6	118.0
141	45.5	43.7	65.5

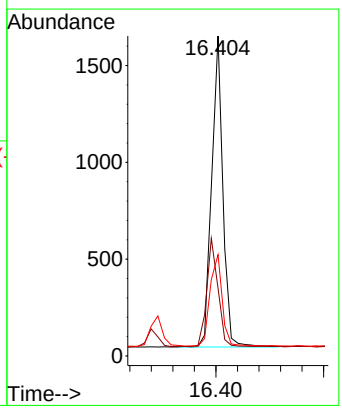


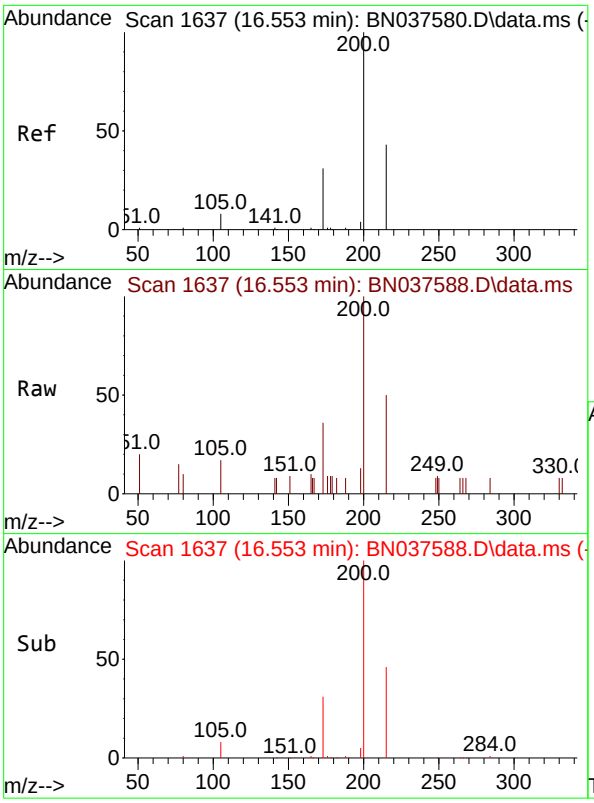


#22
Hexachlorobenzene
Concen: 0.398 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:284 Resp: 2318

Ion	Ratio	Lower	Upper
284	100		
142	35.3	29.8	44.6
249	32.1	26.0	39.0



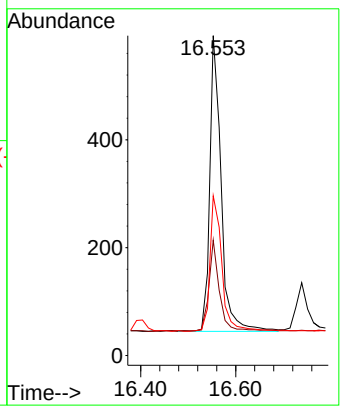


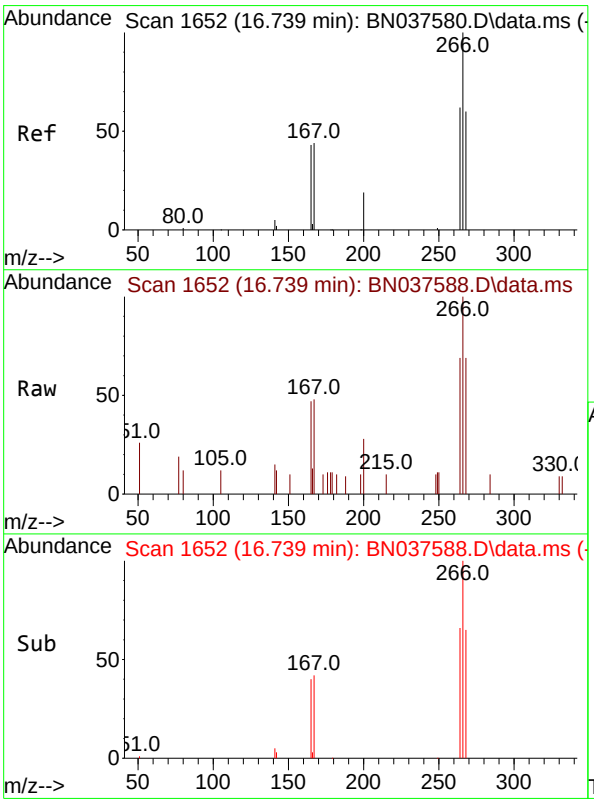
#23
Atrazine
Concen: 0.392 ng
RT: 16.553 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:200 Resp: 910

Ion	Ratio	Lower	Upper
200	100		
173	36.1	31.0	46.4
215	49.9	39.4	59.0

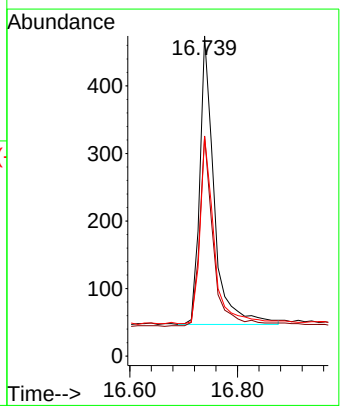


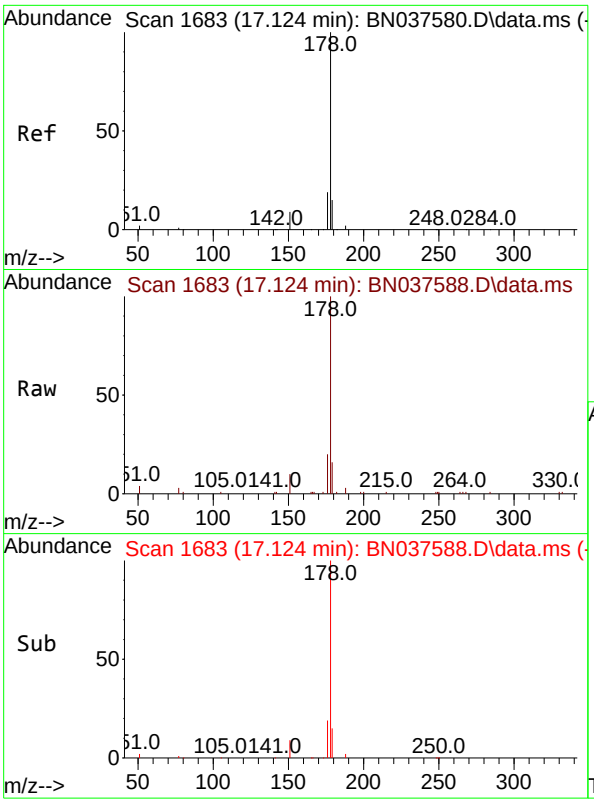


#24
Pentachlorophenol
Concen: 0.389 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:266 Resp: 795

Ion	Ratio	Lower	Upper
266	100		
264	64.2	49.6	74.4
268	63.6	49.2	73.8



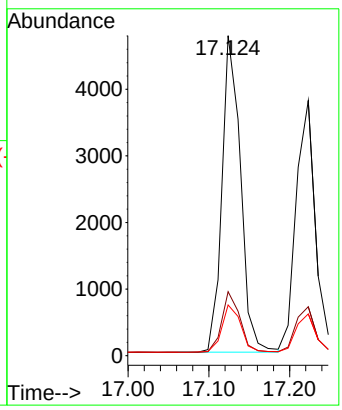


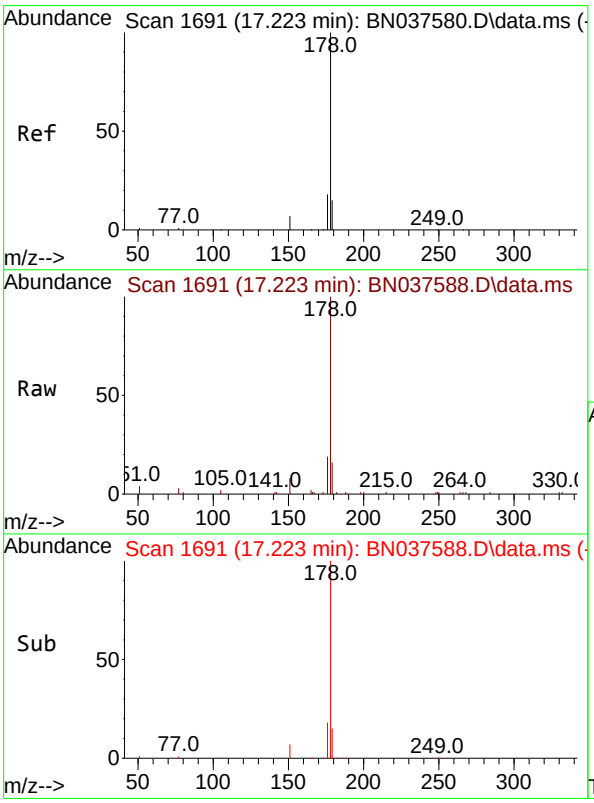
#25
Phenanthrene
Concen: 0.383 ng
RT: 17.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:178 Resp: 7610

Ion	Ratio	Lower	Upper
178	100		
176	18.7	15.0	22.6
179	15.4	12.3	18.5

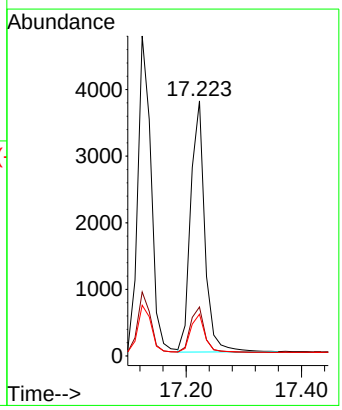


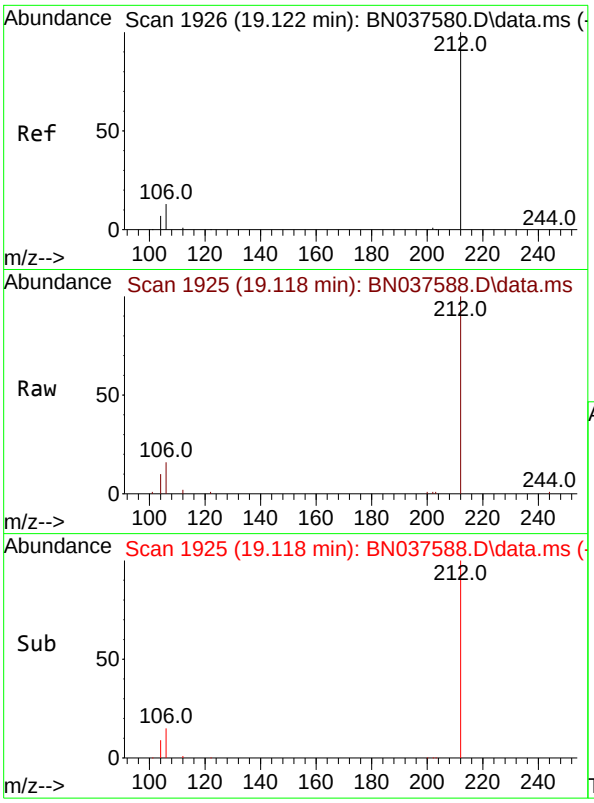


#26
Anthracene
Concen: 0.365 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:178 Resp: 6413

Ion	Ratio	Lower	Upper
178	100		
176	18.3	14.7	22.1
179	15.5	12.3	18.5



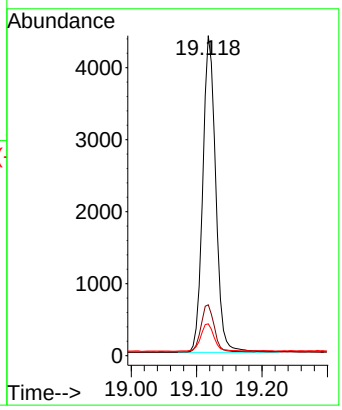


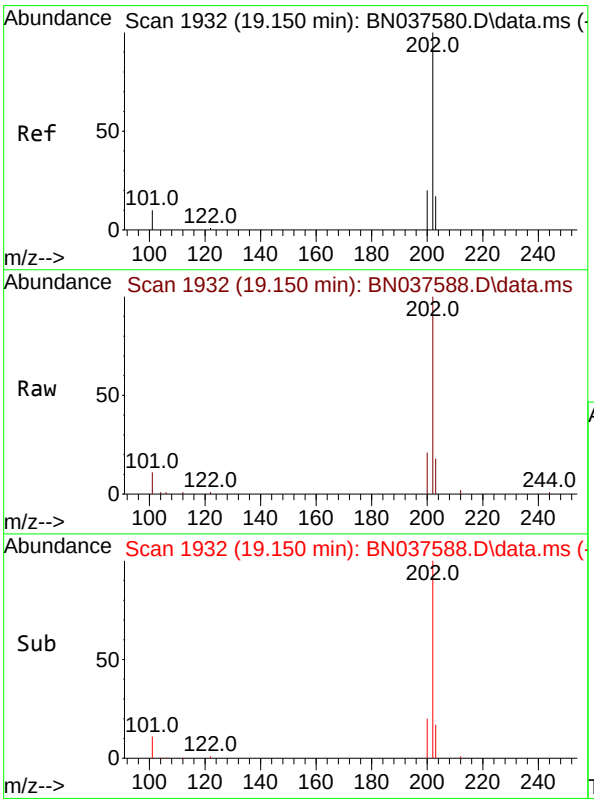
#27
Fluoranthene-d10
Concen: 0.353 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:212 Resp: 6069

Ion	Ratio	Lower	Upper
212	100		
106	15.2	11.5	17.3
104	8.9	6.6	9.8

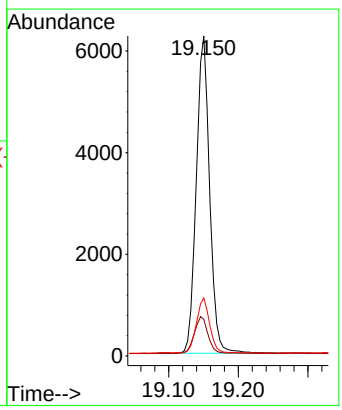


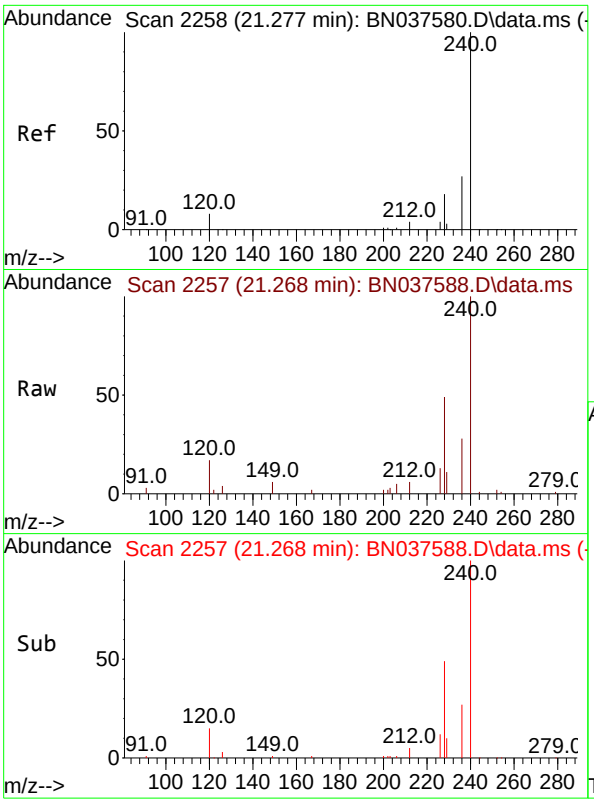


#28
Fluoranthene
Concen: 0.365 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:202 Resp: 8323

Ion	Ratio	Lower	Upper
202	100		
101	11.9	9.0	13.6
203	17.1	13.8	20.8



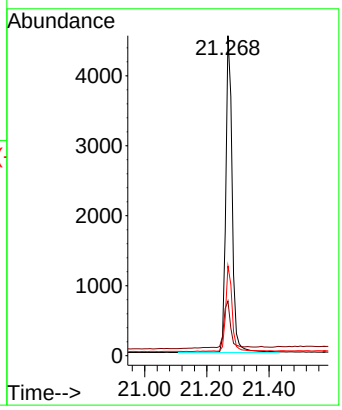


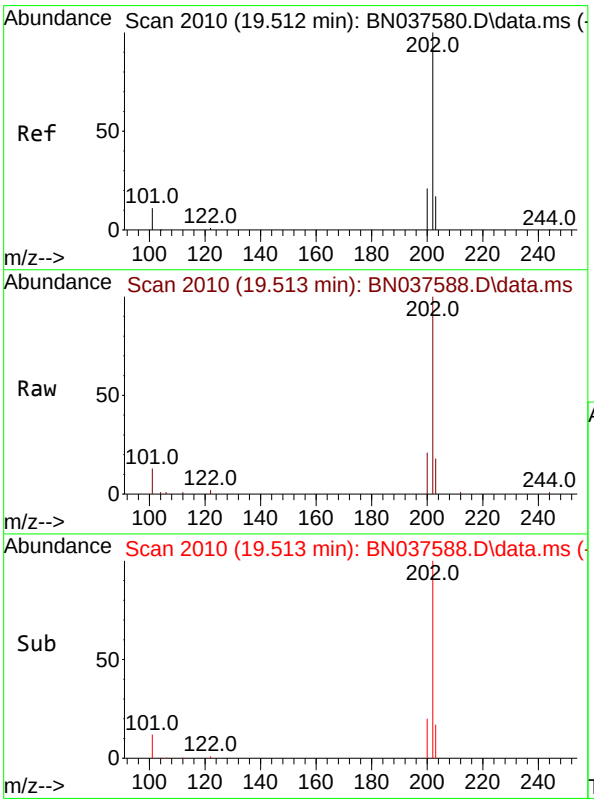
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:240 Resp: 6467

Ion	Ratio	Lower	Upper
240	100		
120	17.1	8.9	13.3#
236	28.1	22.6	33.8

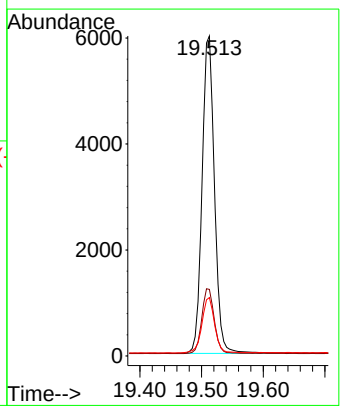


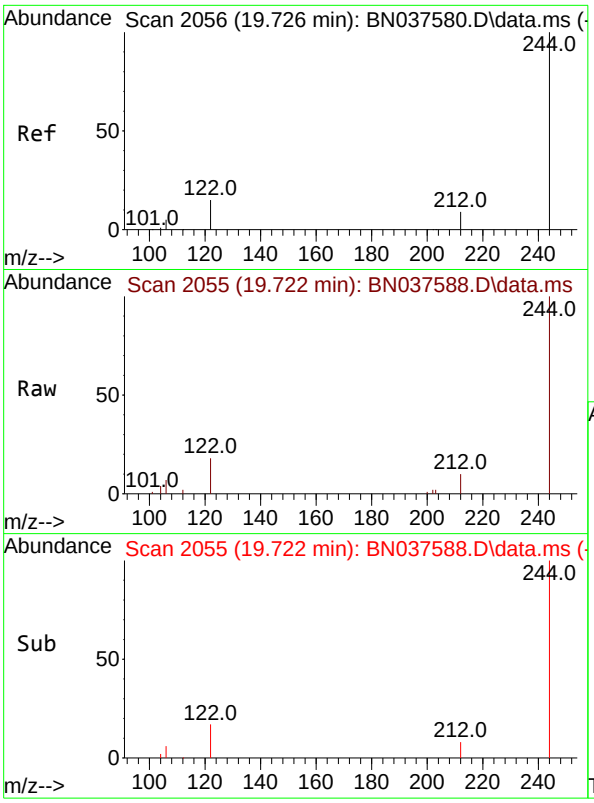


#30
Pyrene
Concen: 0.344 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:202 Resp: 8327

Ion	Ratio	Lower	Upper
202	100		
200	20.7	16.6	25.0
203	17.9	14.3	21.5



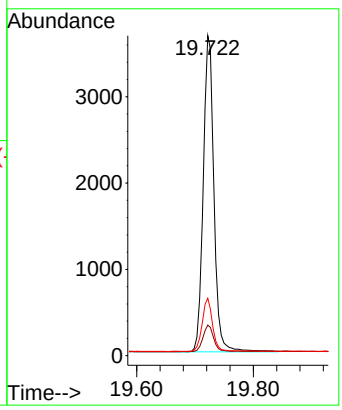


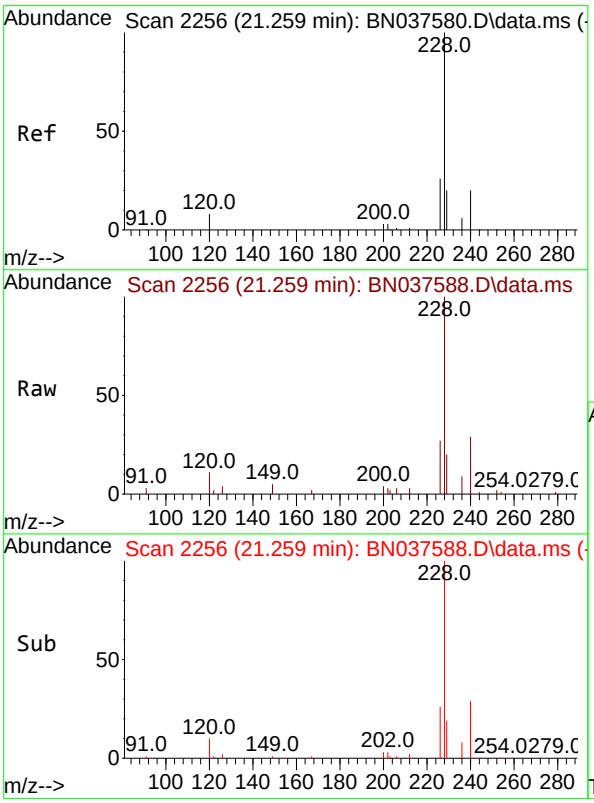
#31
Terphenyl-d14
Concen: 0.353 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:244 Resp: 4699

Ion	Ratio	Lower	Upper
244	100		
212	9.6	8.2	12.2
122	18.0	13.2	19.8

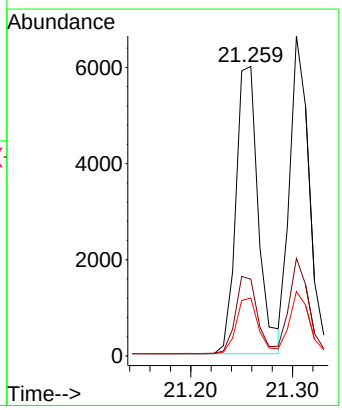


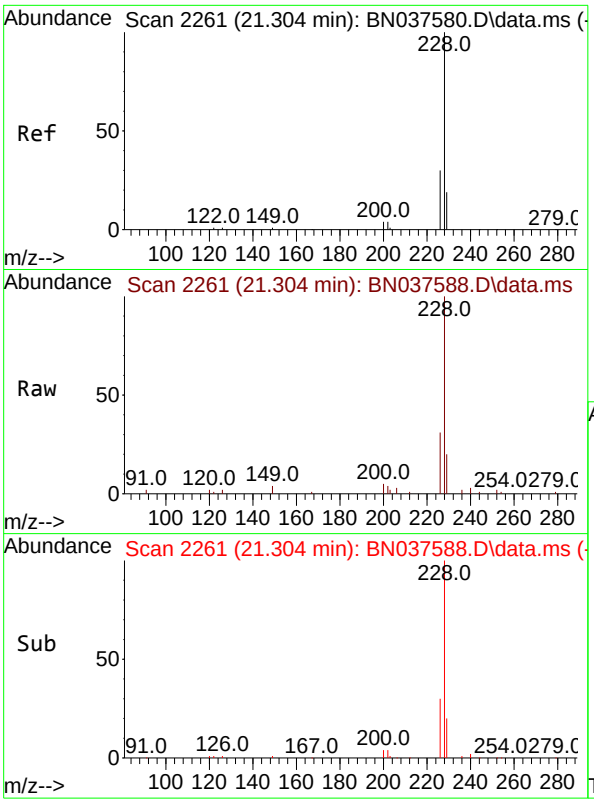


#32
Benzo(a)anthracene
Concen: 0.424 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:228 Resp: 9150

Ion	Ratio	Lower	Upper
228	100		
226	26.5	21.5	32.3
229	20.0	16.5	24.7



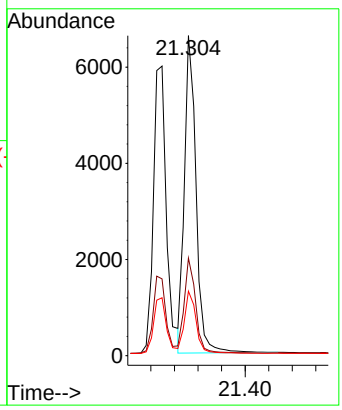


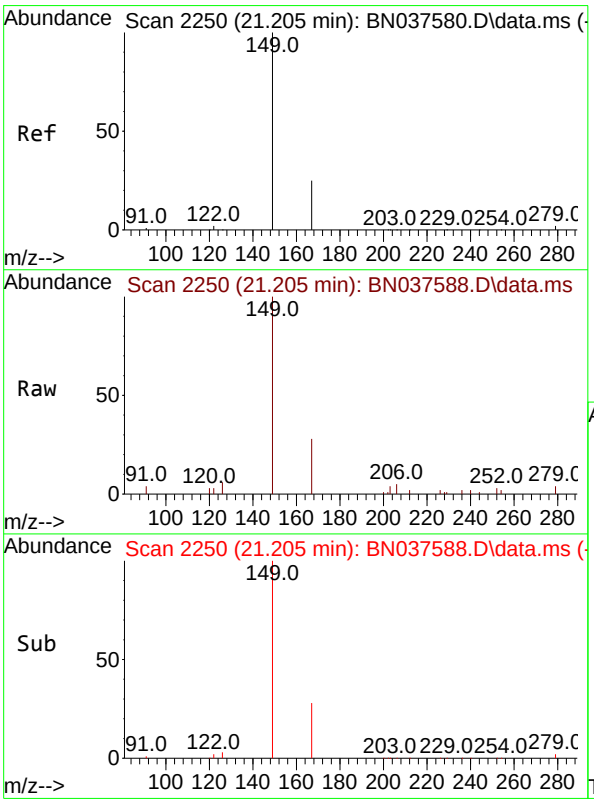
#33
Chrysene
Concen: 0.375 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:228 Resp: 9021

Ion	Ratio	Lower	Upper
228	100		
226	30.5	24.9	37.3
229	20.1	15.8	23.8

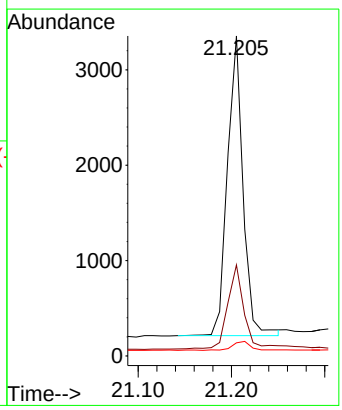


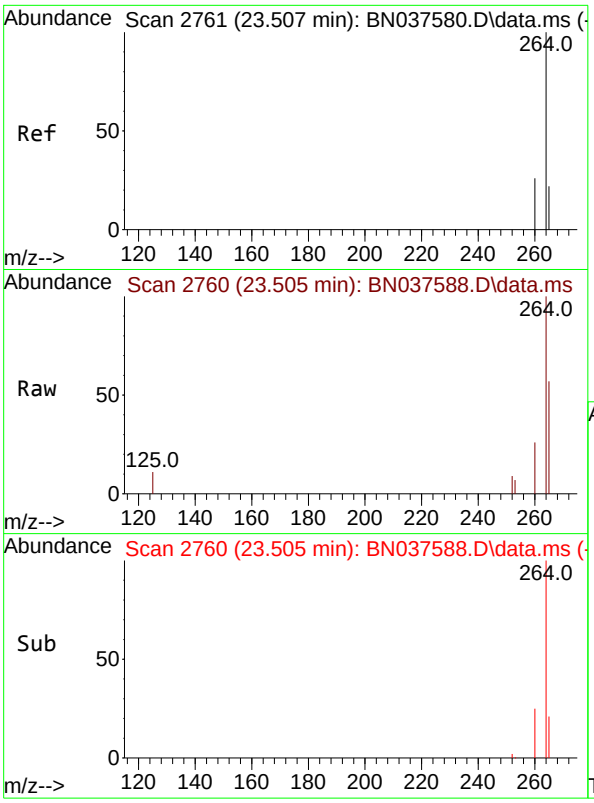


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.410 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:149 Resp: 3651

Ion	Ratio	Lower	Upper
149	100		
167	29.9	20.5	30.7
279	3.6	2.6	4.0



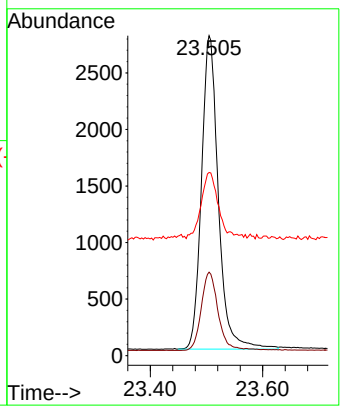


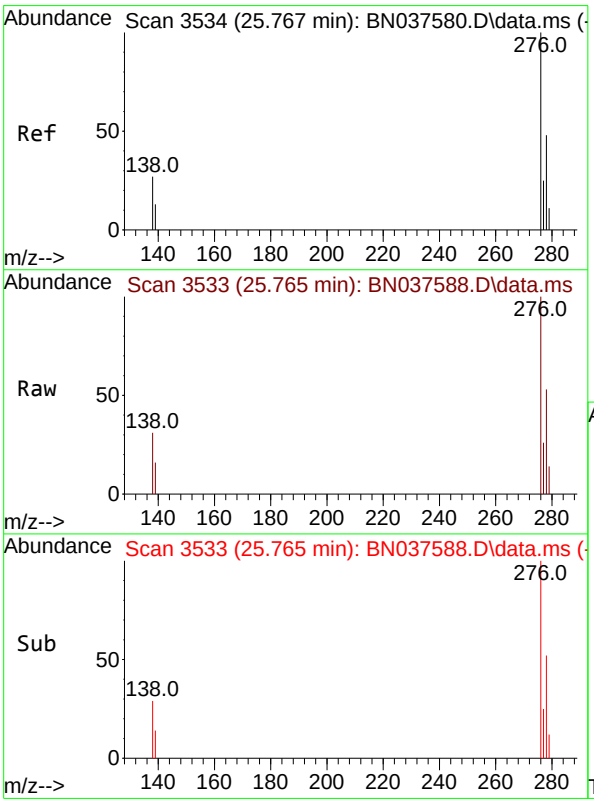
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.505 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:264 Resp: 5771

Ion	Ratio	Lower	Upper
264	100		
260	26.1	21.6	32.4
265	57.3	48.2	72.4

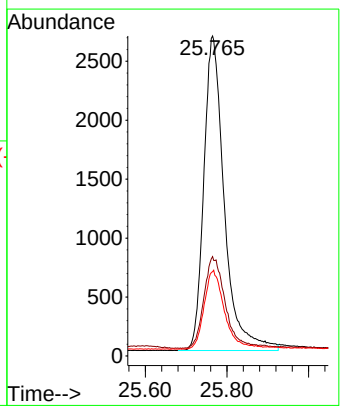


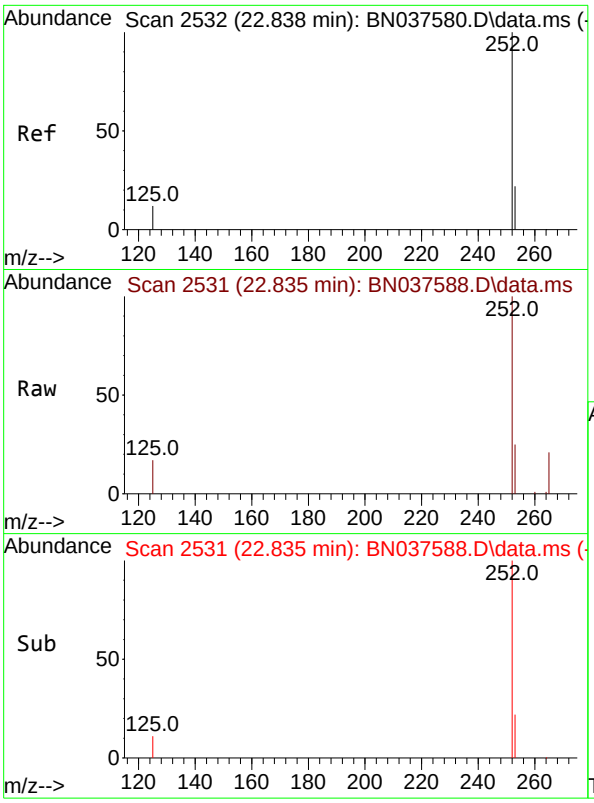


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.382 ng
RT: 25.765 min Scan# 3533
Delta R.T. -0.003 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:276 Resp: 9278

Ion	Ratio	Lower	Upper
276	100		
138	30.3	23.3	34.9
277	24.8	19.5	29.3



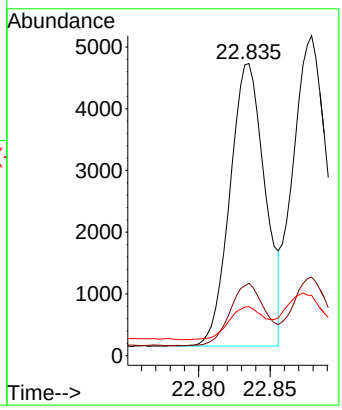


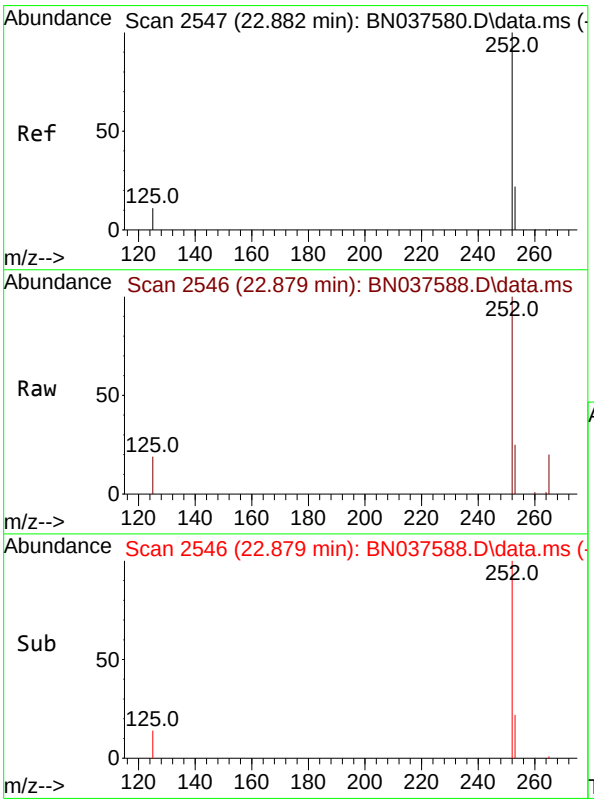
#37
Benzo(b)fluoranthene
Concen: 0.358 ng
RT: 22.835 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 7838

Ion	Ratio	Lower	Upper
252	100		
253	24.8	20.0	30.0
125	16.8	13.8	20.6

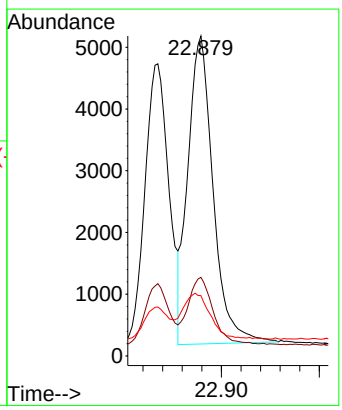


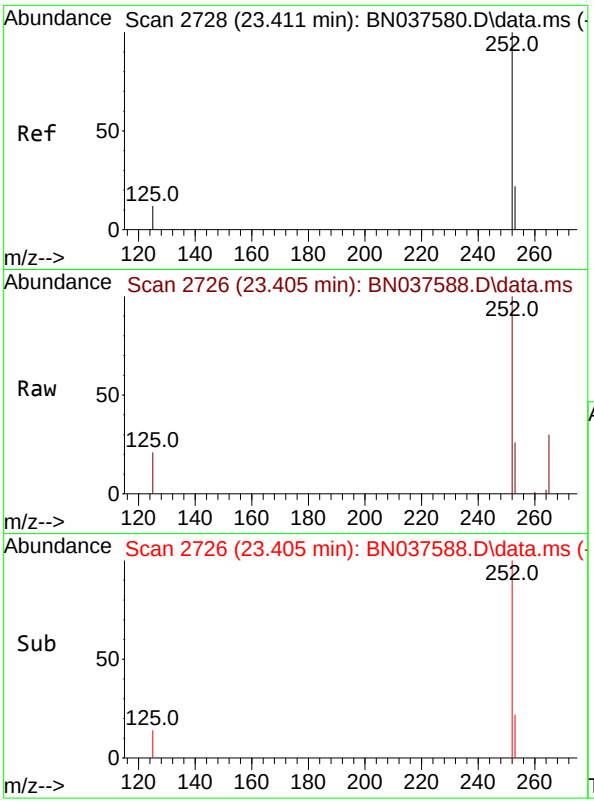


#38
Benzo(k)fluoranthene
Concen: 0.361 ng
RT: 22.879 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:252 Resp: 8909

Ion	Ratio	Lower	Upper
252	100		
253	24.6	19.9	29.9
125	18.9	15.0	22.6



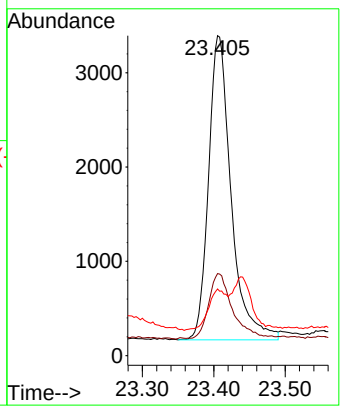


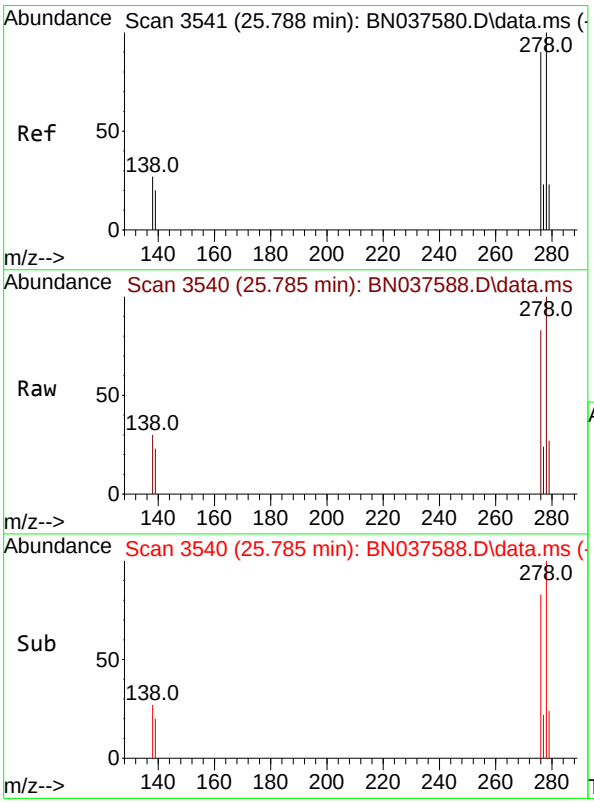
#39
Benzo(a)pyrene
Concen: 0.390 ng
RT: 23.405 min Scan# 2
Delta R.T. -0.006 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:252 Resp: 7079

Ion	Ratio	Lower	Upper
252	100		
253	25.6	21.6	32.4
125	20.9	16.8	25.2

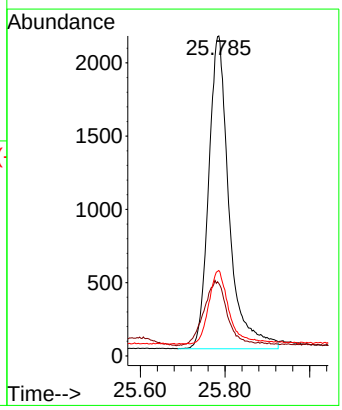


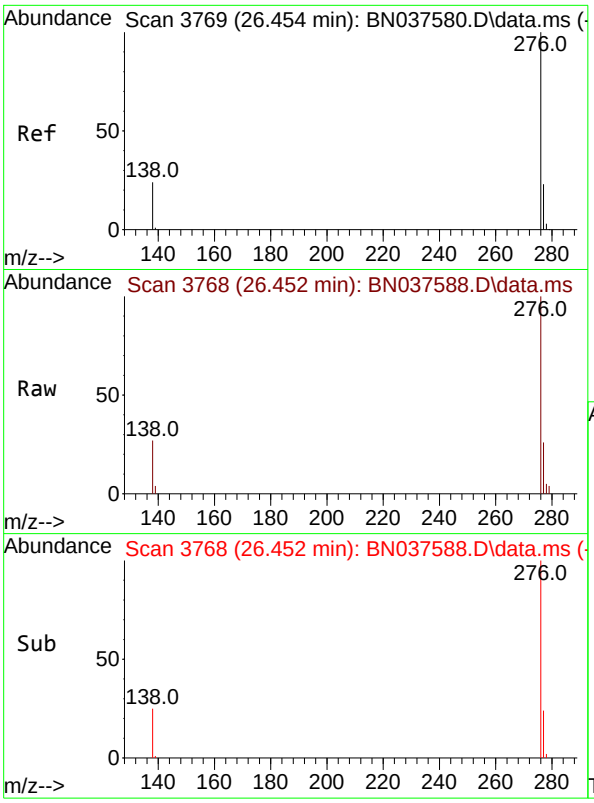


#40
Dibenzo(a,h)anthracene
Concen: 0.380 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.003 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Tgt Ion:278 Resp: 7165

Ion	Ratio	Lower	Upper
278	100		
139	22.6	18.3	27.5
279	26.7	22.5	33.7



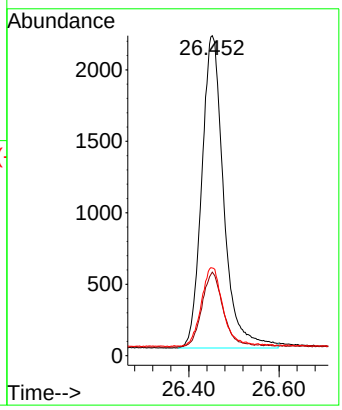


#41
Benzo(g,h,i)perylene
Concen: 0.371 ng
RT: 26.452 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN037588.D
Acq: 13 Aug 2025 10:28

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4

Tgt Ion:276 Resp: 7382

Ion	Ratio	Lower	Upper
276	100		
277	26.1	21.0	31.4
138	27.4	21.7	32.5



Sample Results: **BN037588.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037588.D
Acq On : 13 Aug 2025 10:28
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Aug 13 11:18:48 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	130	0.00
2		1,4-Dioxane	0.383	0.412	-7.6	135	0.00
3		n-Nitrosodimethylamine	0.489	0.454	7.2	121	0.00
4	S	2-Fluorophenol	0.907	0.923	-1.8	135	0.00
5	S	Phenol-d6	1.091	1.135	-4.0	141	0.00
6		bis(2-Chloroethyl)ether	0.983	1.016	-3.4	135	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	133	0.00
8	S	Nitrobenzene-d5	0.282	0.265	6.0	135	0.00
9		Naphthalene	1.065	1.048	1.6	135	0.00
10		Hexachlorobutadiene	0.260	0.246	5.4	125	0.00
11	SURR	2-Methylnaphthalene-d10	0.544	0.508	6.6	133	0.00
12		2-Methylnaphthalene	0.668	0.644	3.6	135	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	134	0.00
14	S	2,4,6-Tribromophenol	0.175	0.166	5.1	142	0.00
15	S	2-Fluorobiphenyl	2.313	2.297	0.7	134	0.00
16		Acenaphthylene	1.793	1.704	5.0	133	0.00
17		Acenaphthene	1.220	1.154	5.4	132	0.00
18		Fluorene	1.596	1.491	6.6	131	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	130	0.00
20		4,6-Dinitro-2-methylphenol	0.053	0.043	18.9	121	0.00
21		4-Bromophenyl-phenylether	0.251	0.242	3.6	134	0.00
22		Hexachlorobenzene	0.356	0.355	0.3	129	0.00
23		Atrazine	0.142	0.139	2.1	139	0.00
24		Pentachlorophenol	0.125	0.122	2.4	139	0.00
25		Phenanthrene	1.216	1.165	4.2	129	0.00
26		Anthracene	1.077	0.982	8.8	128	0.00
27	SURR	Fluoranthene-d10	1.052	0.929	11.7	126	0.00
28		Fluoranthene	1.397	1.275	8.7	127	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	150	0.00
30		Pyrene	1.495	1.288	13.8	132	0.00
31	S	Terphenyl-d14	0.823	0.727	11.7	137	0.00
32		Benzo(a)anthracene	1.336	1.415	-5.9	168#	0.00
33		Chrysene	1.489	1.395	6.3	146	0.00
34		Bis(2-ethylhexyl)phthalate	0.551	0.565	-2.5	162#	0.00
35	I	Perylene-d12	1.000	1.000	0.0	138	0.00
36		Indeno(1,2,3-cd)pyrene	1.686	1.608	4.6	137	0.00
37		Benzo(b)fluoranthene	1.516	1.358	10.4	140	0.00
38		Benzo(k)fluoranthene	1.710	1.544	9.7	129	0.00
39	C	Benzo(a)pyrene	1.257	1.227	2.4	147	0.00
40		Dibenzo(a,h)anthracene	1.308	1.242	5.0	140	0.00
41		Benzo(g,h,i)perylene	1.378	1.279	7.2	140	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BN037588.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037588.D
Acq On : 13 Aug 2025 10:28
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Aug 13 11:18:48 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	130	0.00
2		1,4-Dioxane	0.400	0.431	-7.7	135	0.00
3		n-Nitrosodimethylamine	0.400	0.372	7.0	121	0.00
4	S	2-Fluorophenol	0.400	0.407	-1.7	135	0.00
5	S	Phenol-d6	0.400	0.416	-4.0	141	0.00
6		bis(2-Chloroethyl)ether	0.400	0.413	-3.2	135	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	133	0.00
8	S	Nitrobenzene-d5	0.400	0.377	5.8	135	0.00
9		Naphthalene	0.400	0.394	1.5	135	0.00
10		Hexachlorobutadiene	0.400	0.377	5.8	125	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.374	6.5	133	0.00
12		2-Methylnaphthalene	0.400	0.386	3.5	135	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	134	0.00
14	S	2,4,6-Tribromophenol	0.400	0.379	5.3	142	0.00
15	S	2-Fluorobiphenyl	0.400	0.397	0.8	134	0.00
16		Acenaphthylene	0.400	0.380	5.0	133	0.00
17		Acenaphthene	0.400	0.379	5.3	132	0.00
18		Fluorene	0.400	0.374	6.5	131	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	130	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.416	-4.0	121	0.00
21		4-Bromophenyl-phenylether	0.400	0.384	4.0	134	0.00
22		Hexachlorobenzene	0.400	0.398	0.5	129	0.00
23		Atrazine	0.400	0.392	2.0	139	0.00
24		Pentachlorophenol	0.400	0.389	2.8	139	0.00
25		Phenanthrene	0.400	0.383	4.3	129	0.00
26		Anthracene	0.400	0.365	8.8	128	0.00
27	SURR	Fluoranthene-d10	0.400	0.353	11.8	126	0.00
28		Fluoranthene	0.400	0.365	8.8	127	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	150	0.00
30		Pyrene	0.400	0.344	14.0	132	0.00
31	S	Terphenyl-d14	0.400	0.353	11.8	137	0.00
32		Benzo(a)anthracene	0.400	0.424	-6.0	168	0.00
33		Chrysene	0.400	0.375	6.3	146	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.410	-2.5	162	0.00
35	I	Perylene-d12	0.400	0.400	0.0	138	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.382	4.5	137	0.00
37		Benzo(b)fluoranthene	0.400	0.358	10.5	140	0.00
38		Benzo(k)fluoranthene	0.400	0.361	9.8	129	0.00
39	C	Benzo(a)pyrene	0.400	0.390	2.5	147	0.00
40		Dibenzo(a,h)anthracene	0.400	0.380	5.0	140	0.00
41		Benzo(g,h,i)perylene	0.400	0.371	7.3	140	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

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

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name:	Alliance	Contract:	TETR06
Lab Code:	ACE	SDG No.:	Q2806
Instrument ID:	BNA_N	Calibration Date/Time:	08/13/2025 16:35
Lab File ID:	BN037598.D	Init. Calib. Date(s):	08/12/2025 08/12/2025
EPA Sample No.:	SSTDCCC0.4EC	Init. Calib. Time(s):	16:26 20:05

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

COMPOUND	RRF	RRF0.4	MIN RRF	%D	MAX%D
2-Methylnaphthalene-d10	0.544	0.504		-7.4	50.0
Fluoranthene-d10	1.052	0.931		-11.5	50.0
2-Fluorophenol	0.907	0.859		-5.3	50.0
Phenol-d6	1.091	1.022		-6.3	50.0
Nitrobenzene-d5	0.282	0.261		-7.4	50.0
2-Fluorobiphenyl	2.313	2.278		-1.5	50.0
2,4,6-Tribromophenol	0.175	0.157		-10.3	50.0
Terphenyl-d14	0.823	0.804		-2.3	50.0
1,4-Dioxane	0.383	0.389		1.6	50.0

All other compounds must meet a minimum RRF of 0.010.

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037598.D
Acq On : 13 Aug 2025 16:35
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Aug 13 17:01:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

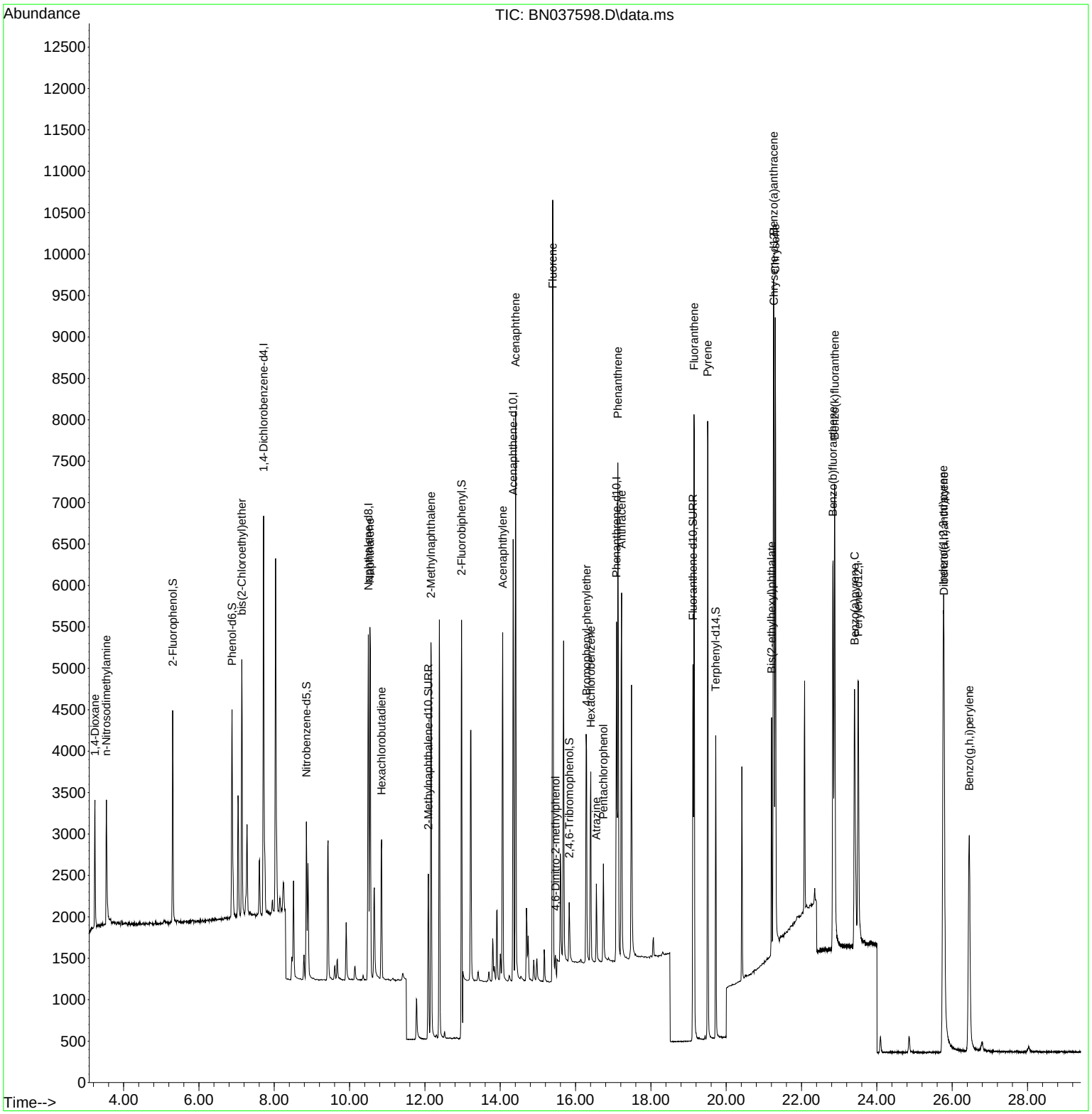
Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	7.717	152	2322	0.400	ng		0.00
7) Naphthalene-d8	10.498	136	5610	0.400	ng		0.00
13) Acenaphthene-d10	14.345	164	2803	0.400	ng		0.00
19) Phenanthrene-d10	17.087	188	5531	0.400	ng		0.00
29) Chrysene-d12	21.268	240	4673	0.400	ng	#	0.00
35) Perylene-d12	23.505	264	4448	0.400	ng		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	5.305	112	1994	0.379	ng		0.00
5) Phenol-d6	6.880	99	2372	0.374	ng		0.00
8) Nitrobenzene-d5	8.854	82	1467	0.371	ng		0.00
11) 2-Methylnaphthalene-d10	12.091	152	2827	0.371	ng		0.00
14) 2,4,6-Tribromophenol	15.833	330	441	0.360	ng		0.00
15) 2-Fluorobiphenyl	12.973	172	6385	0.394	ng		0.00
27) Fluoranthene-d10	19.118	212	5147	0.354	ng		0.00
31) Terphenyl-d14	19.722	244	3757	0.391	ng		0.00
Target Compounds							Qvalue
2) 1,4-Dioxane	3.240	88	904	0.407	ng		96
3) n-Nitrosodimethylamine	3.543	42	1132	0.399	ng		98
6) bis(2-Chloroethyl)ether	7.140	93	2261	0.396	ng		99
9) Naphthalene	10.541	128	5905	0.395	ng		99
10) Hexachlorobutadiene	10.851	225	1475	0.404	ng	#	98
12) 2-Methylnaphthalene	12.162	142	3586	0.383	ng		99
16) Acenaphthylene	14.067	152	4705	0.374	ng		100
17) Acenaphthene	14.409	154	3280	0.384	ng		98
18) Fluorene	15.393	166	4249	0.380	ng		98
20) 4,6-Dinitro-2-methylph...	15.467	198	228	0.408	ng		99
21) 4-Bromophenyl-phenylether	16.292	248	1326	0.381	ng		95
22) Hexachlorobenzene	16.404	284	1968	0.399	ng		99
23) Atrazine	16.553	200	778	0.396	ng		98
24) Pentachlorophenol	16.739	266	611	0.353	ng		98
25) Phenanthrene	17.124	178	6363	0.378	ng		99
26) Anthracene	17.223	178	5414	0.364	ng		100
28) Fluoranthene	19.146	202	6990	0.362	ng		99
30) Pyrene	19.508	202	6799	0.389	ng		100
32) Benzo(a)anthracene	21.259	228	5881	0.377	ng		100
33) Chrysene	21.304	228	6633	0.381	ng		99
34) Bis(2-ethylhexyl)phtha...	21.205	149	2404	0.373	ng		98
36) Indeno(1,2,3-cd)pyrene	25.765	276	7590	0.405	ng		99
37) Benzo(b)fluoranthene	22.835	252	6124	0.363	ng		99
38) Benzo(k)fluoranthene	22.879	252	7297	0.384	ng		100
39) Benzo(a)pyrene	23.408	252	5075	0.363	ng		99
40) Dibenzo(a,h)anthracene	25.782	278	5872	0.404	ng		99
41) Benzo(g,h,i)perylene	26.455	276	5962	0.389	ng		99

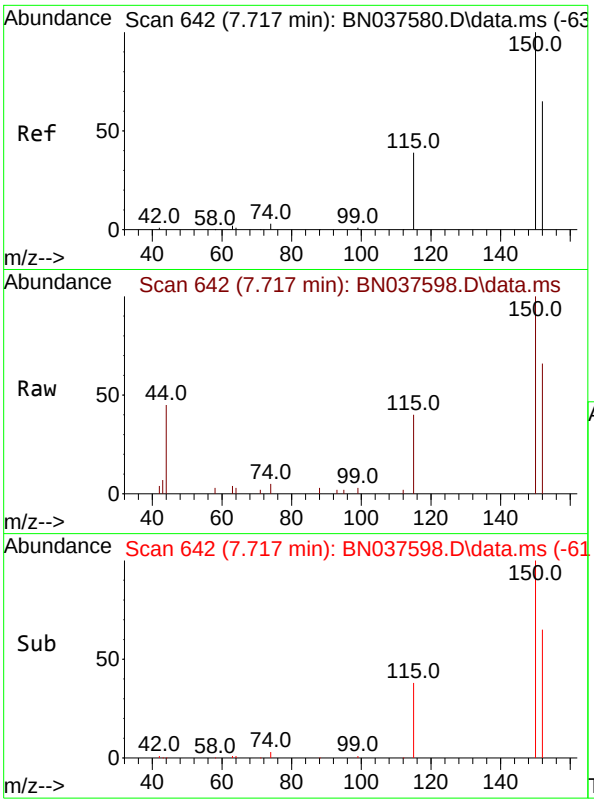
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037598.D
Acq On : 13 Aug 2025 16:35
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Quant Time: Aug 13 17:01:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



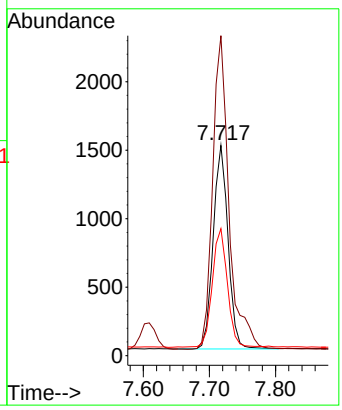


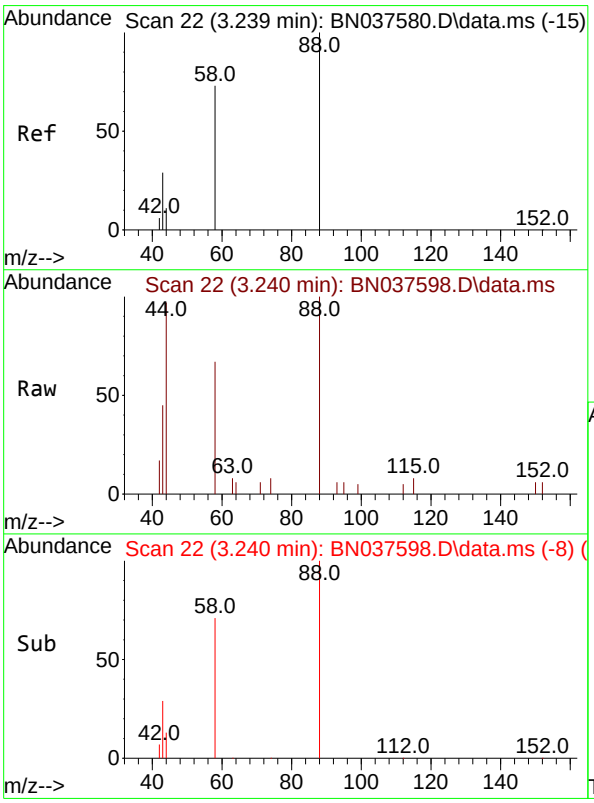
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2322

Ion	Ratio	Lower	Upper
152	100		
150	152.2	122.2	183.4
115	60.5	49.8	74.6

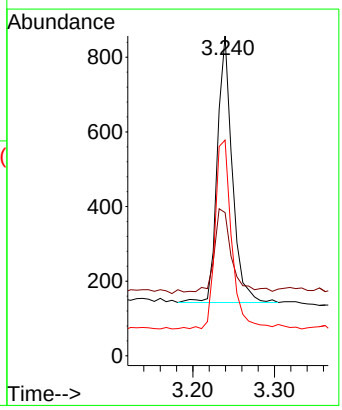


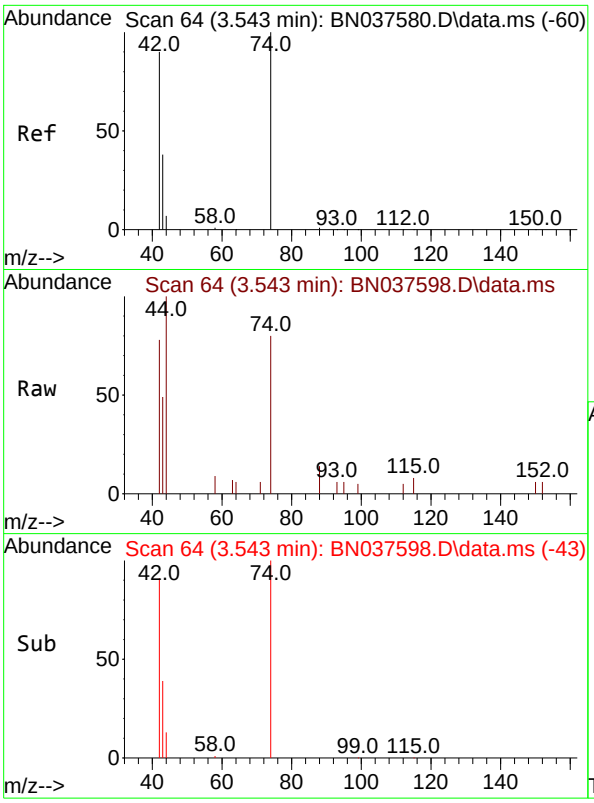


#2
1,4-Dioxane
Concen: 0.407 ng
RT: 3.240 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion: 88 Resp: 904

Ion	Ratio	Lower	Upper
88	100		
43	35.4	25.8	38.6
58	79.1	61.2	91.8



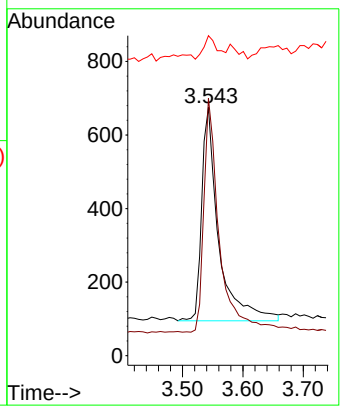


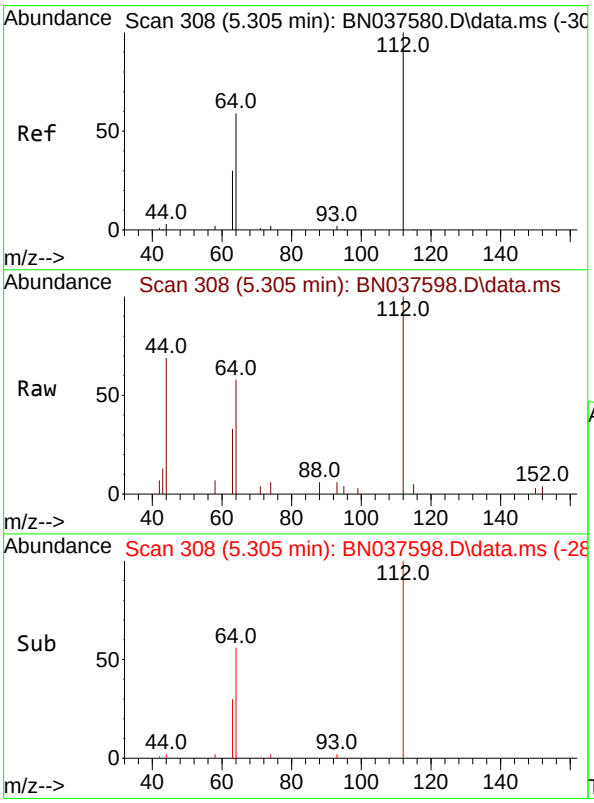
#3
n-Nitrosodimethylamine
Concen: 0.399 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 42 Resp: 1132

Ion	Ratio	Lower	Upper
42	100		
74	100.6	82.0	123.0
44	8.6	7.9	11.9

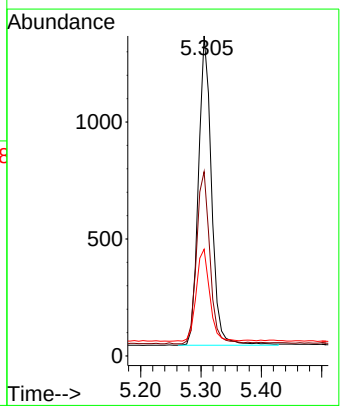


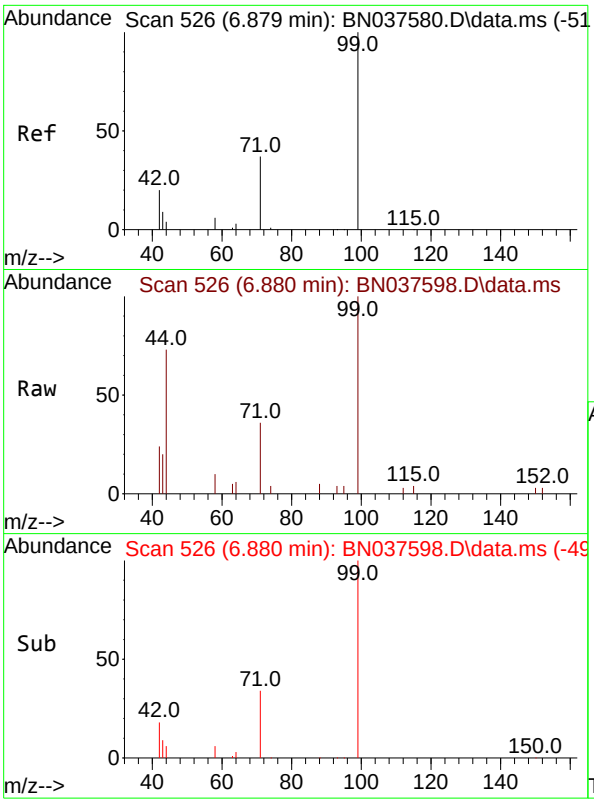


#4
2-Fluorophenol
Concen: 0.379 ng
RT: 5.305 min Scan# 308
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:112 Resp: 1994

Ion	Ratio	Lower	Upper
112	100		
64	56.4	44.9	67.3
63	30.4	23.4	35.2



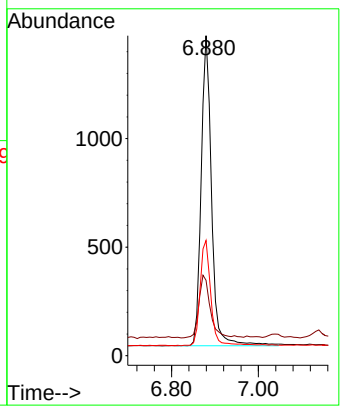


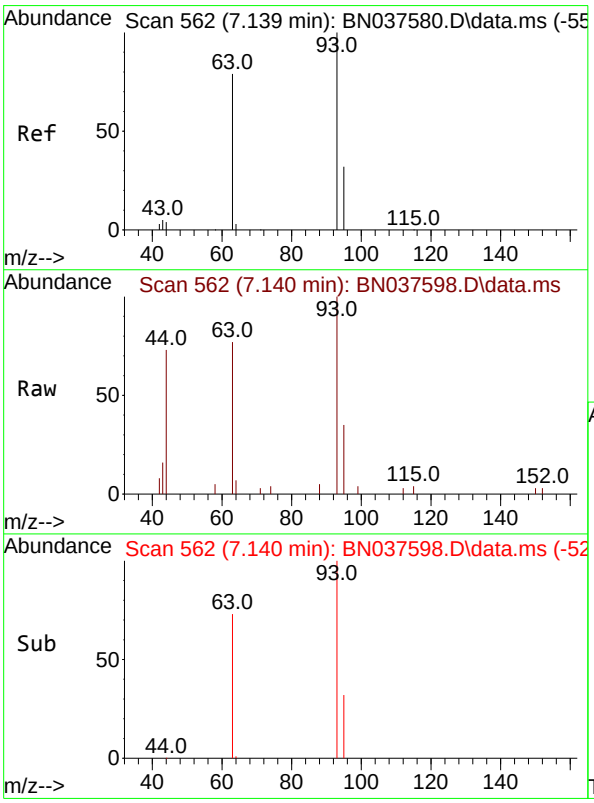
#5
Phenol-d6
Concen: 0.374 ng
RT: 6.880 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion: 99 Resp: 2372

Ion	Ratio	Lower	Upper
99	100		
42	22.0	18.5	27.7
71	35.1	28.6	42.8

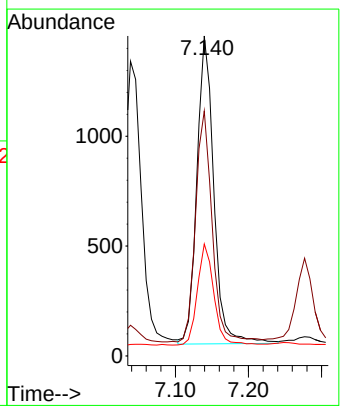


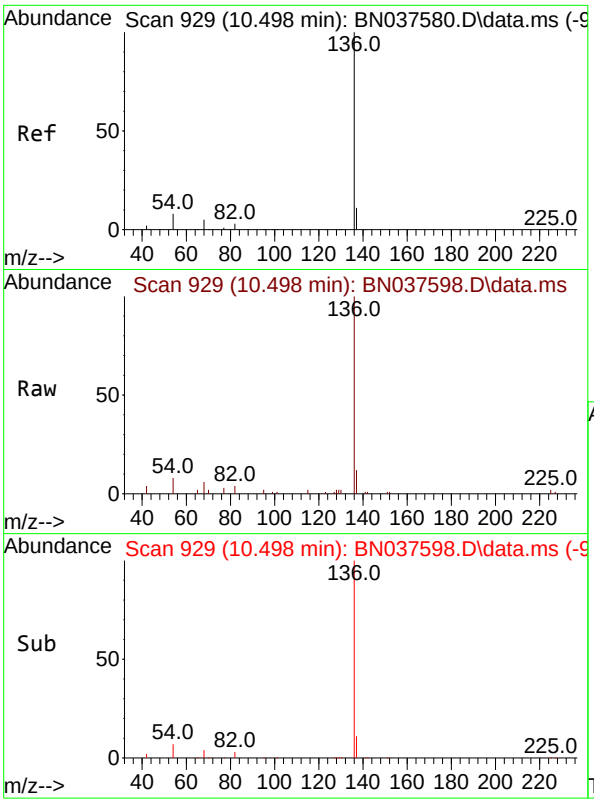


#6
bis(2-Chloroethyl)ether
Concen: 0.396 ng
RT: 7.140 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion: 93 Resp: 2261

Ion	Ratio	Lower	Upper
93	100		
63	73.3	58.0	87.0
95	32.0	24.9	37.3



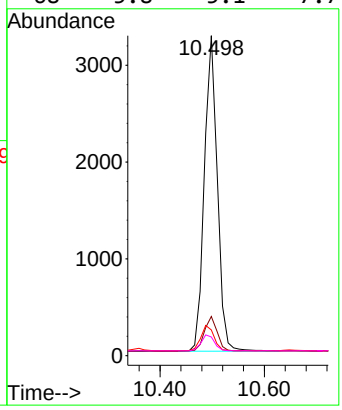


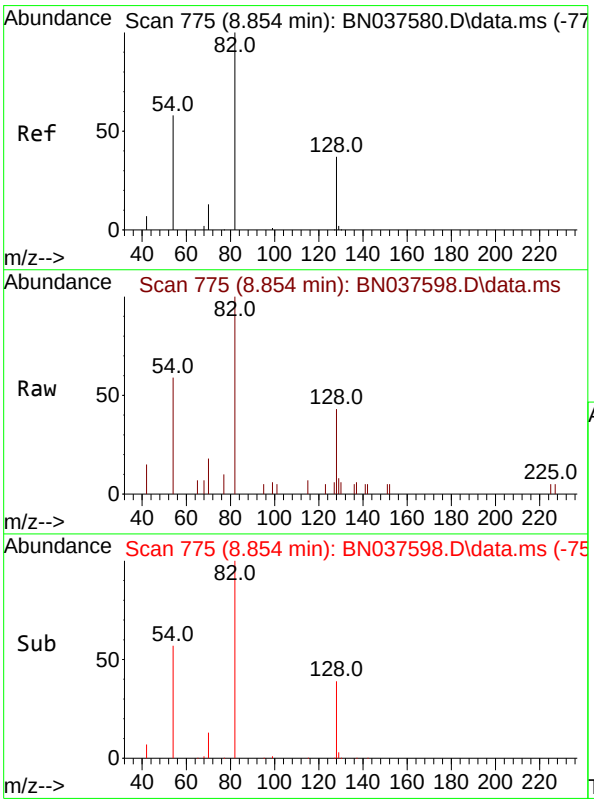
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:136 Resp: 5610

Ion	Ratio	Lower	Upper
136	100		
137	12.3	9.5	14.3
54	8.0	7.3	10.9
68	5.8	5.1	7.7

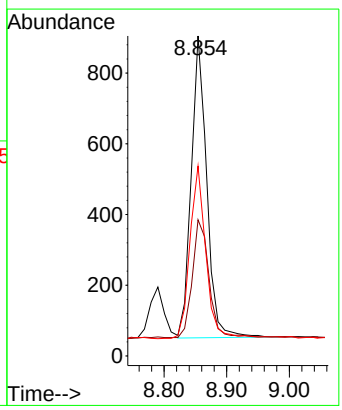


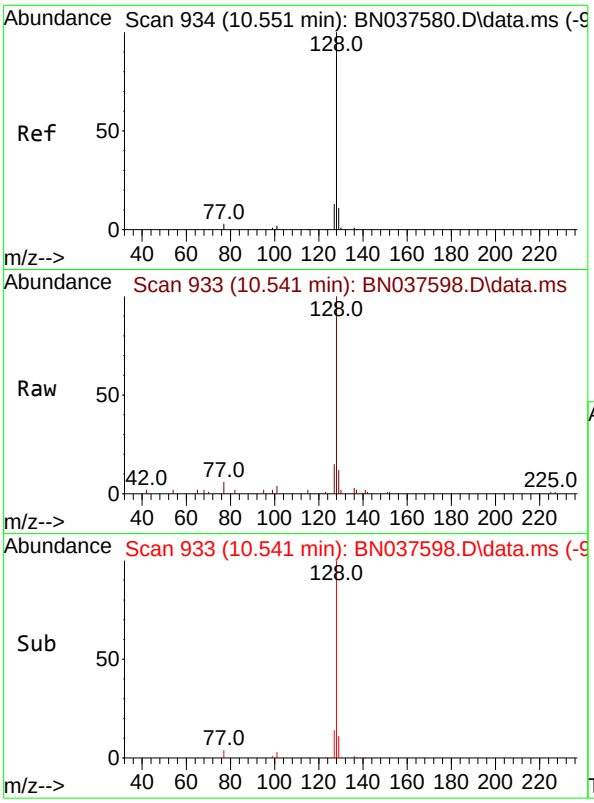


#8
Nitrobenzene-d5
Concen: 0.371 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion: 82 Resp: 1467

Ion	Ratio	Lower	Upper
82	100		
128	42.5	32.6	48.8
54	59.3	48.9	73.3



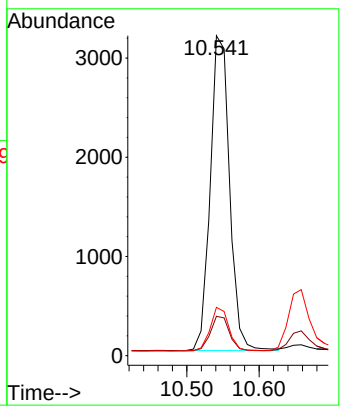


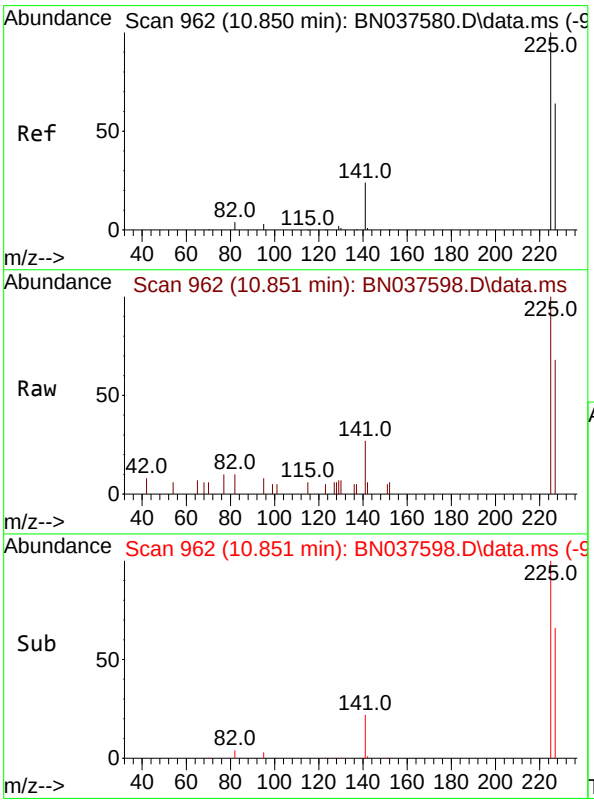
#9
Naphthalene
Concen: 0.395 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.010 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:128 Resp: 5905

Ion	Ratio	Lower	Upper
128	100		
129	12.3	9.8	14.6
127	15.1	11.5	17.3

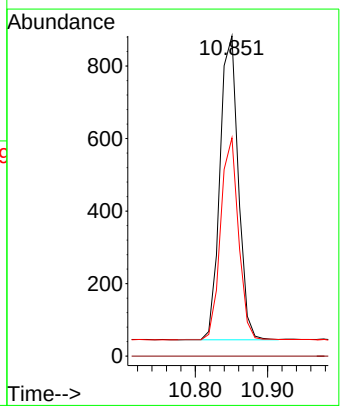


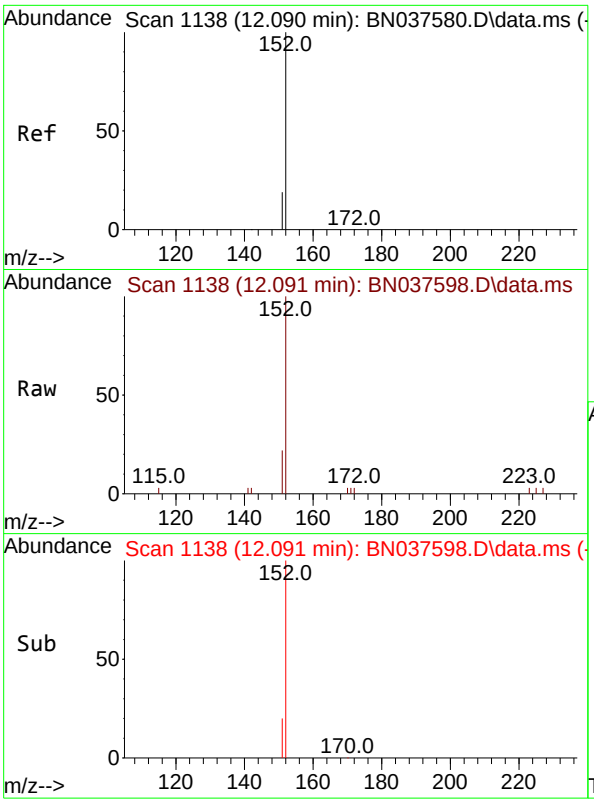


#10
Hexachlorobutadiene
Concen: 0.404 ng
RT: 10.851 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:225 Resp: 1475

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.8	50.8	76.2



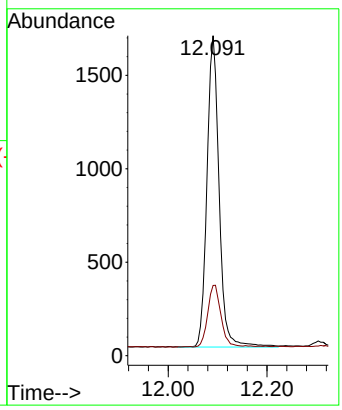


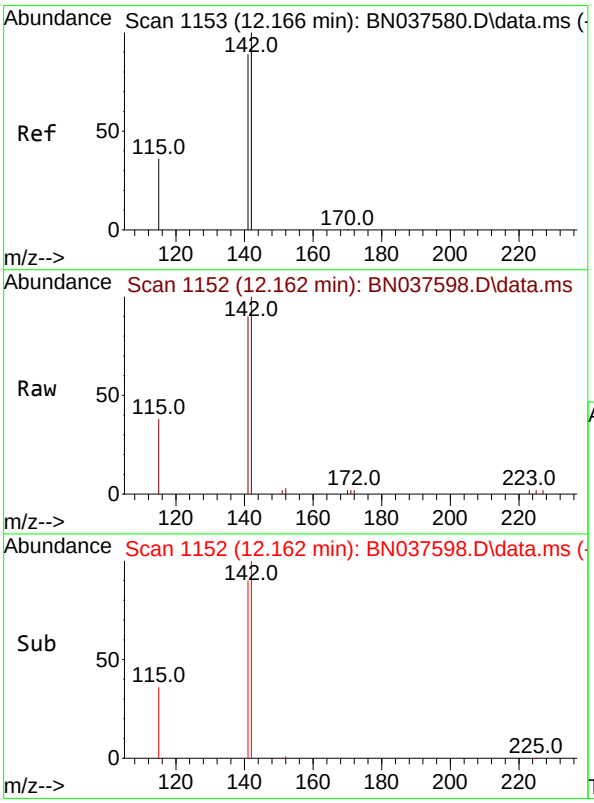
#11
2-Methylnaphthalene-d10
Concen: 0.371 ng
RT: 12.091 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:152 Resp: 2827

Ion	Ratio	Lower	Upper
152	100		
151	21.6	17.3	25.9

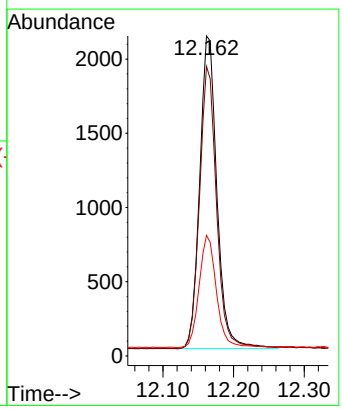


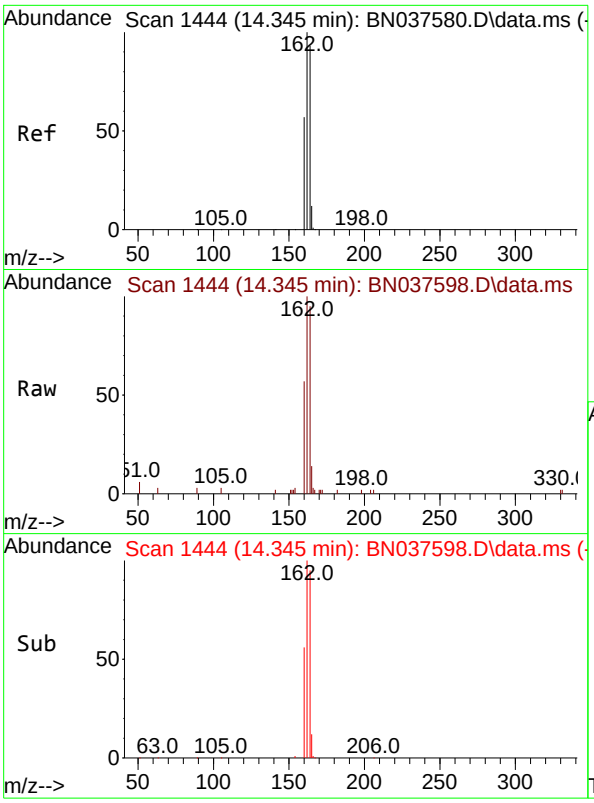


#12
2-Methylnaphthalene
Concen: 0.383 ng
RT: 12.162 min Scan# 1152
Delta R.T. -0.005 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:142 Resp: 3586

Ion	Ratio	Lower	Upper
142	100		
141	90.5	71.4	107.0
115	37.7	30.2	45.4



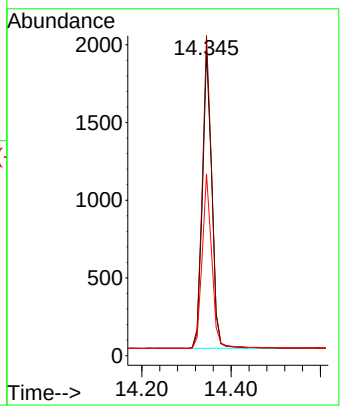


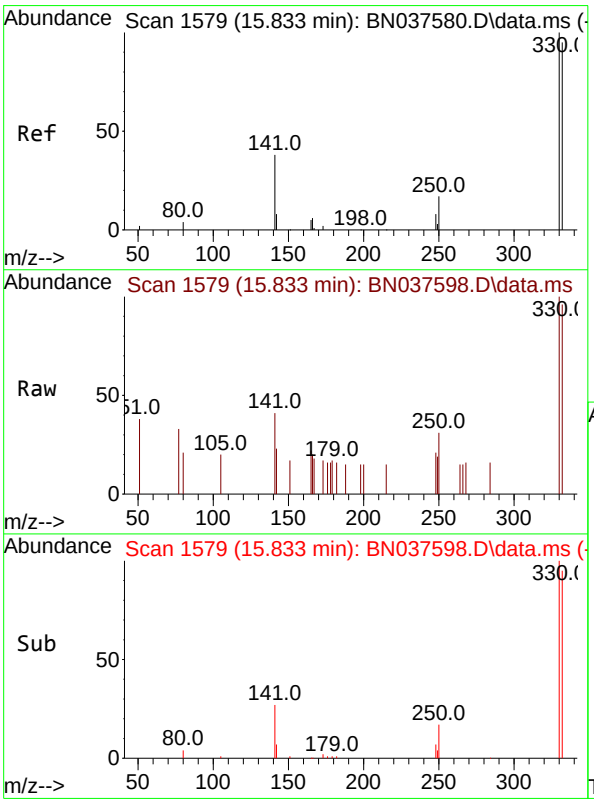
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:164 Resp: 2803

Ion	Ratio	Lower	Upper
164	100		
162	104.9	85.5	128.3
160	59.6	49.5	74.3

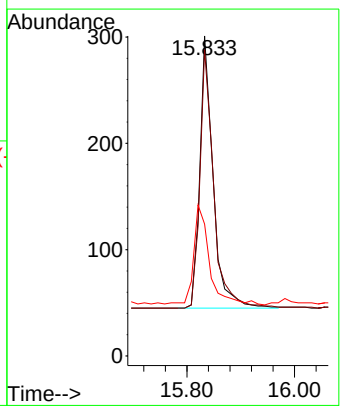


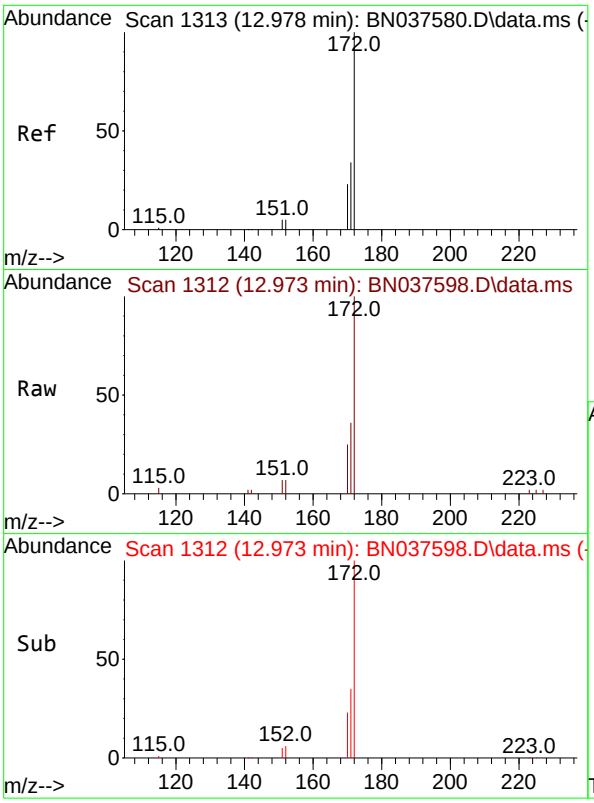


#14
2,4,6-Tribromophenol
Concen: 0.360 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:330 Resp: 441

Ion	Ratio	Lower	Upper
330	100		
332	98.2	77.4	116.0
141	43.8	30.9	46.3



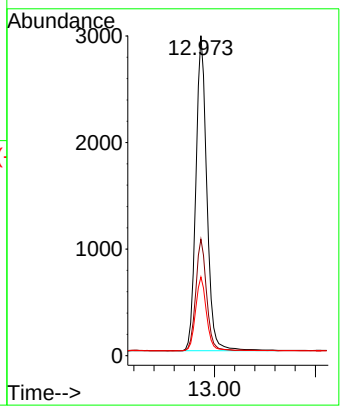


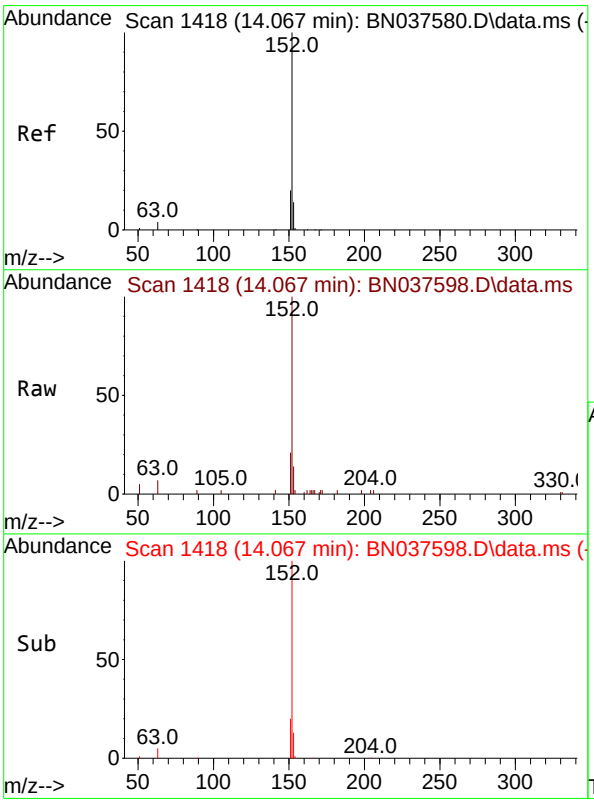
#15
2-Fluorobiphenyl
Concen: 0.394 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:172 Resp: 6385

Ion	Ratio	Lower	Upper
172	100		
171	36.4	28.2	42.4
170	24.6	19.2	28.8

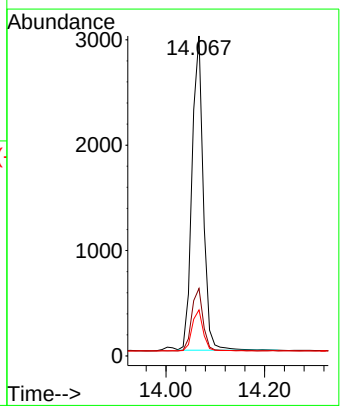


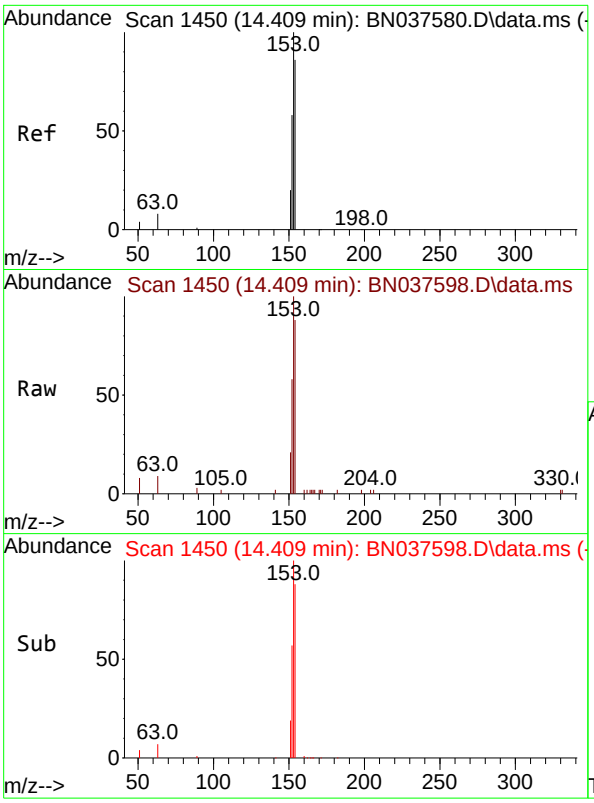


#16
Acenaphthylene
Concen: 0.374 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:152 Resp: 4705

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.1	24.1
153	13.2	10.7	16.1



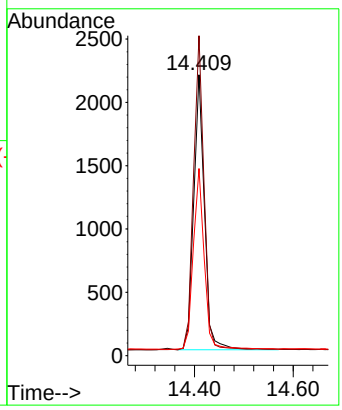


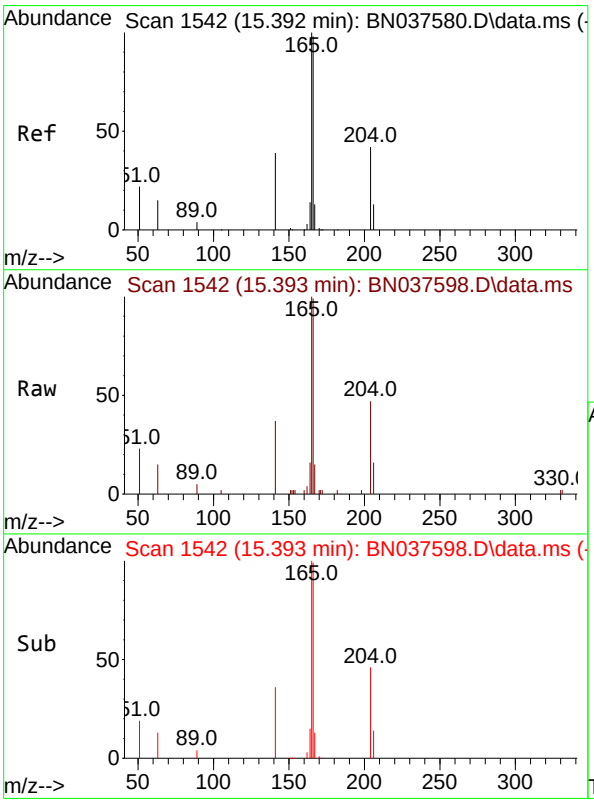
#17
Acenaphthene
Concen: 0.384 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:154 Resp: 3280

Ion	Ratio	Lower	Upper
154	100		
153	111.4	90.6	135.8
152	66.7	54.9	82.3

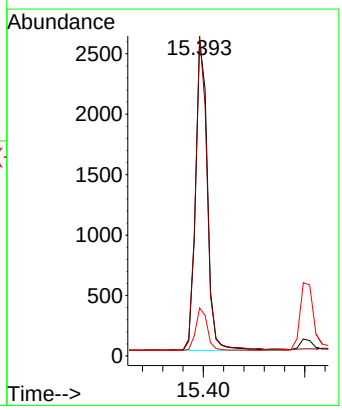


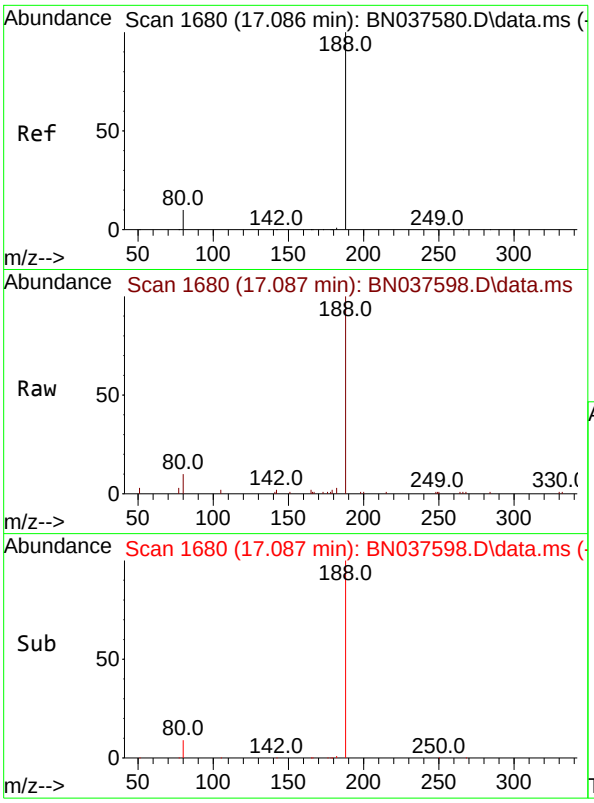


#18
Fluorene
Concen: 0.380 ng
RT: 15.393 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:166 Resp: 4249

Ion	Ratio	Lower	Upper
166	100		
165	96.7	78.9	118.3
167	13.3	10.7	16.1



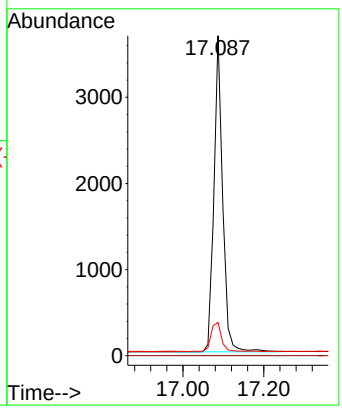


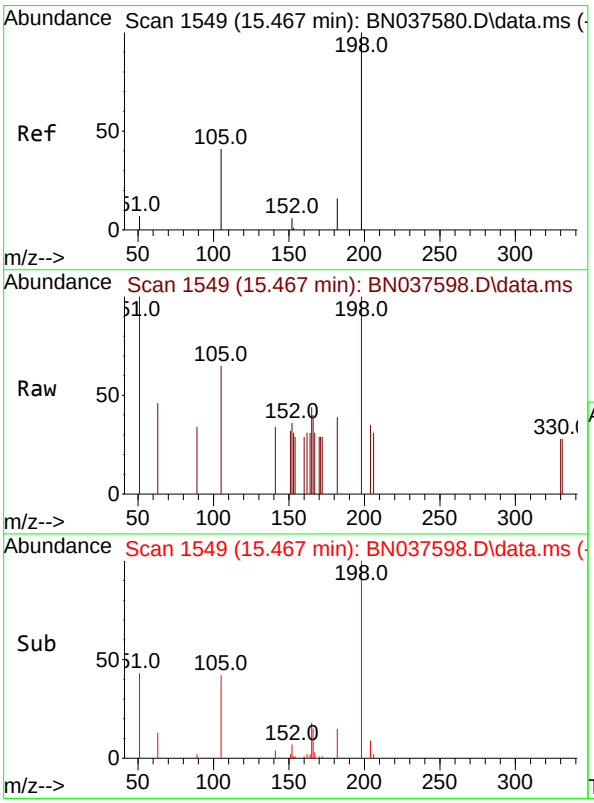
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.087 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:188 Resp: 5531

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.4	9.1	13.7

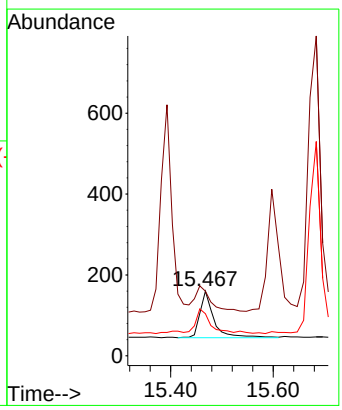


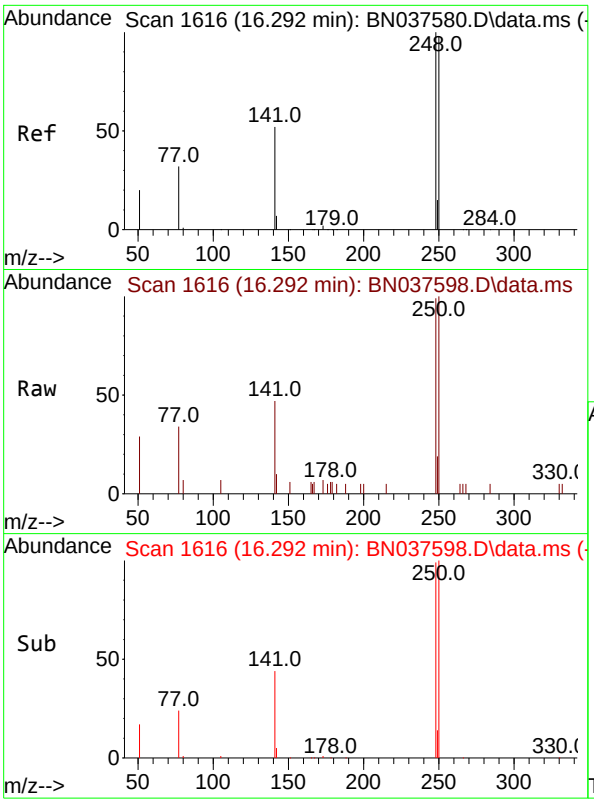


#20
4,6-Dinitro-2-methylphenol
Concen: 0.408 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:198 Resp: 228

Ion	Ratio	Lower	Upper
198	100		
51	100.0	81.0	121.6
105	65.0	52.5	78.7



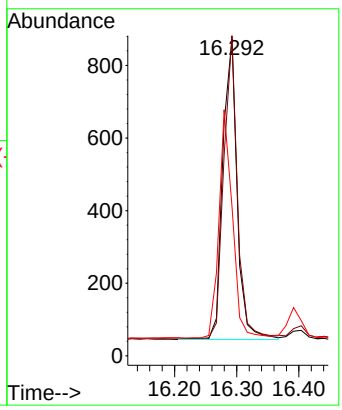


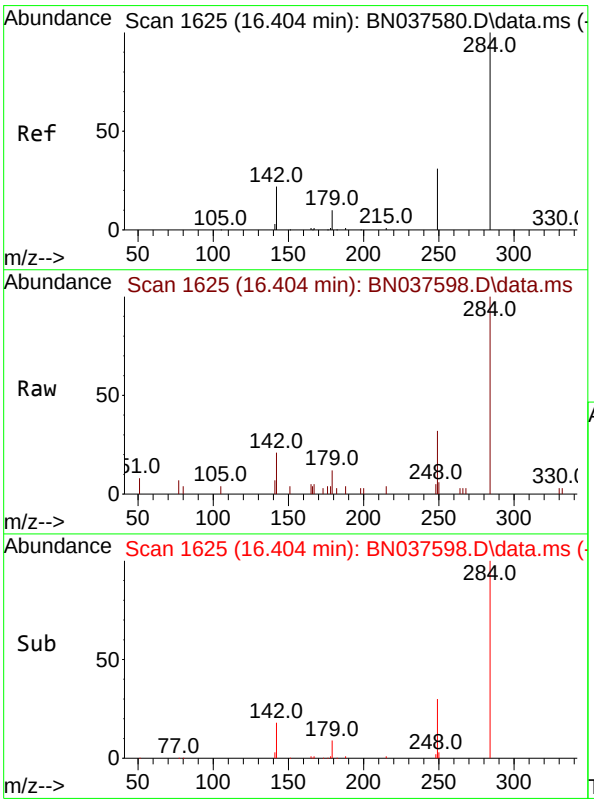
#21
4-Bromophenyl-phenylether
Concen: 0.381 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:248 Resp: 1326

Ion	Ratio	Lower	Upper
248	100		
250	100.9	78.6	118.0
141	47.3	43.7	65.5

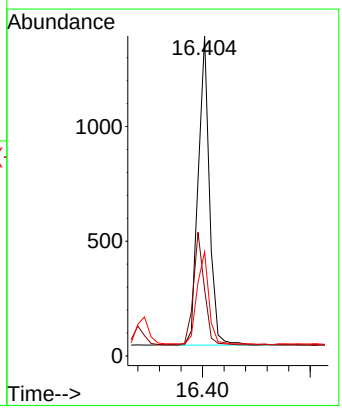


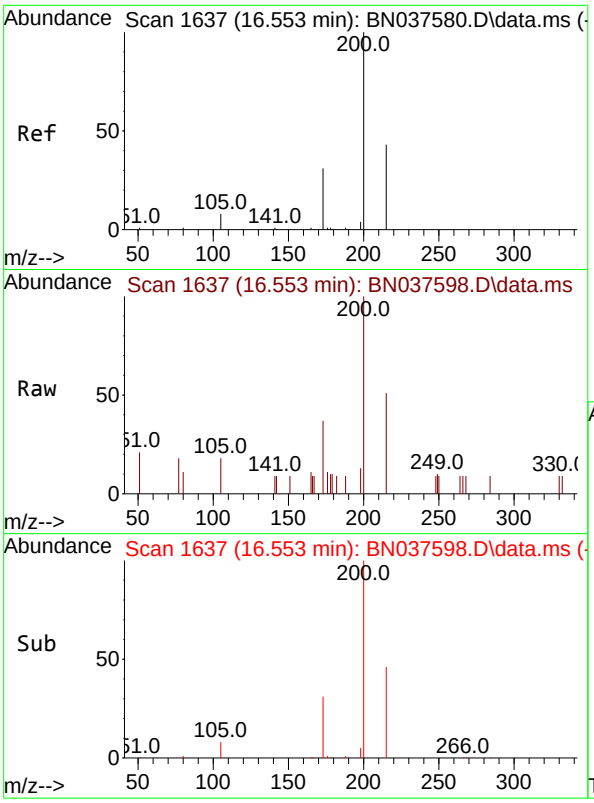


#22
Hexachlorobenzene
Concen: 0.399 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:284 Resp: 1968

Ion	Ratio	Lower	Upper
284	100		
142	35.8	29.8	44.6
249	32.4	26.0	39.0



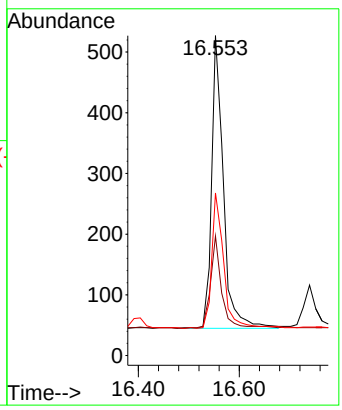


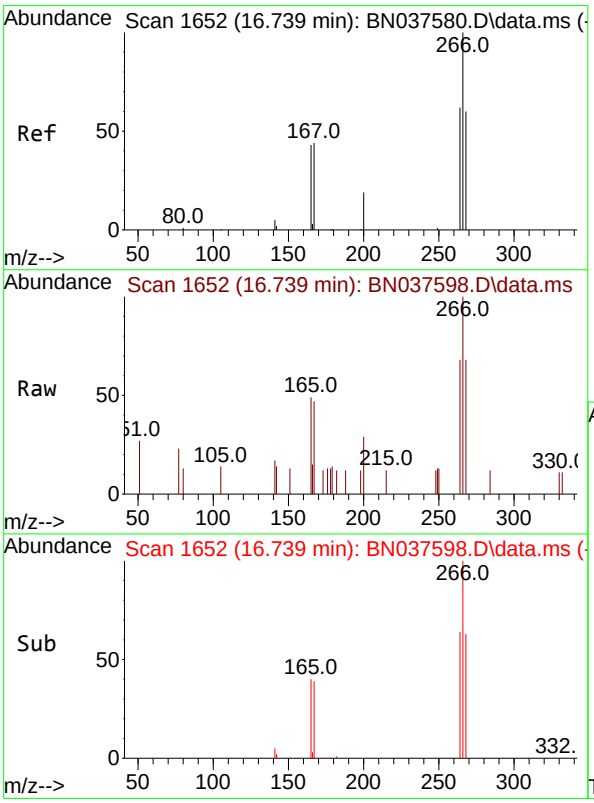
#23
Atrazine
Concen: 0.396 ng
RT: 16.553 min Scan# 1(
Delta R.T. -0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:200 Resp: 778

Ion	Ratio	Lower	Upper
200	100		
173	37.4	31.0	46.4
215	50.9	39.4	59.0

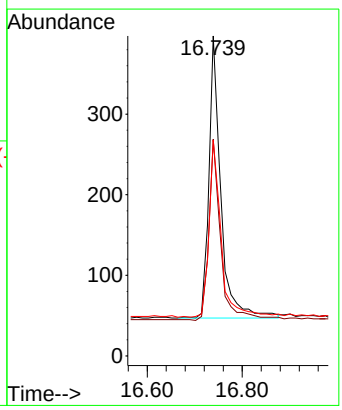


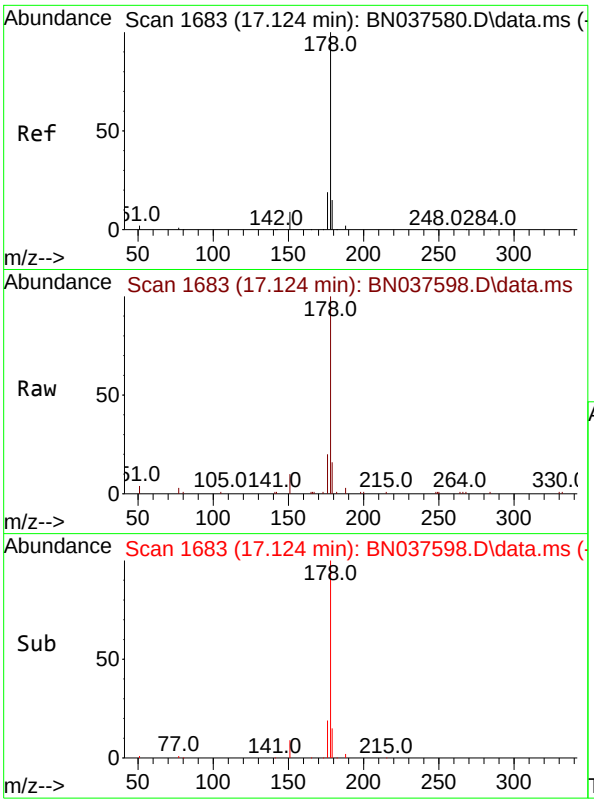


#24
Pentachlorophenol
Concen: 0.353 ng
RT: 16.739 min Scan# 1652
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:266 Resp: 611

Ion	Ratio	Lower	Upper
266	100		
264	62.4	49.6	74.4
268	64.6	49.2	73.8



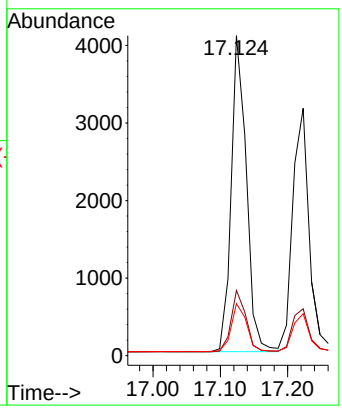


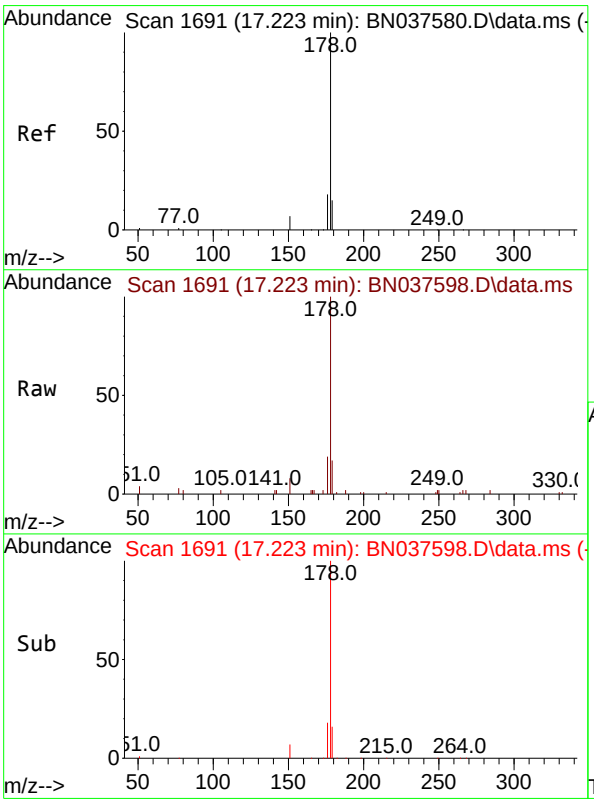
#25
Phenanthrene
Concen: 0.378 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:178 Resp: 6363

Ion	Ratio	Lower	Upper
178	100		
176	19.0	15.0	22.6
179	15.7	12.3	18.5

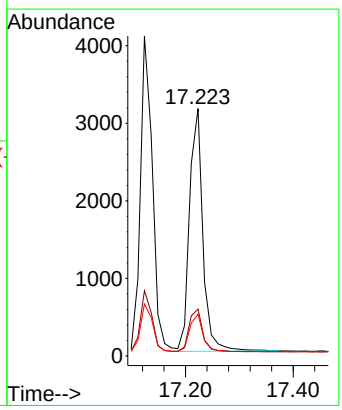


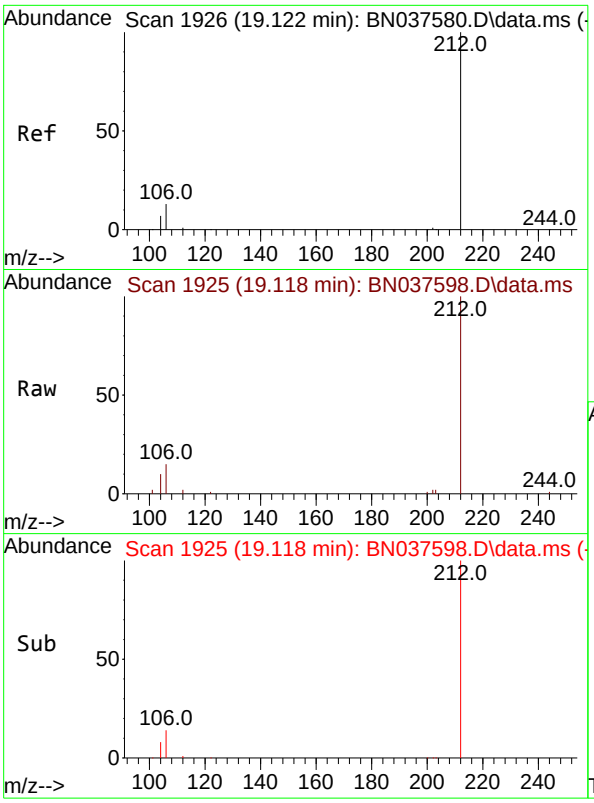


#26
Anthracene
Concen: 0.364 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:178 Resp: 5414

Ion	Ratio	Lower	Upper
178	100		
176	18.4	14.7	22.1
179	15.3	12.3	18.5



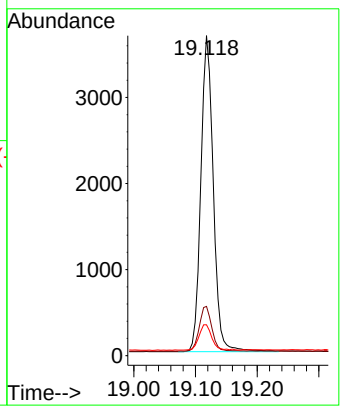


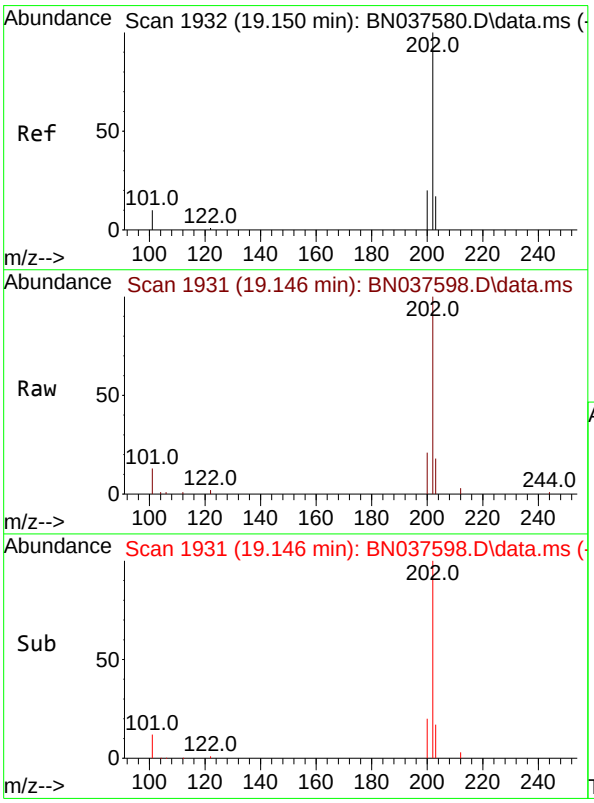
#27
Fluoranthene-d10
Concen: 0.354 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.004 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:212 Resp: 5147

Ion	Ratio	Lower	Upper
212	100		
106	14.3	11.5	17.3
104	8.3	6.6	9.8

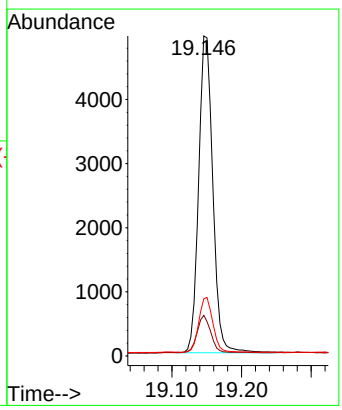


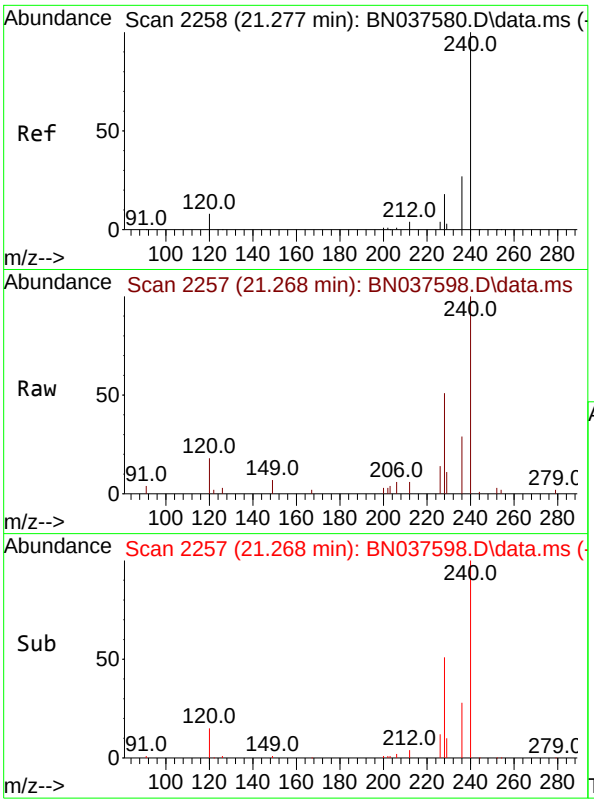


#28
Fluoranthene
Concen: 0.362 ng
RT: 19.146 min Scan# 1931
Delta R.T. -0.004 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:202 Resp: 6990

Ion	Ratio	Lower	Upper
202	100		
101	11.5	9.0	13.6
203	17.1	13.8	20.8



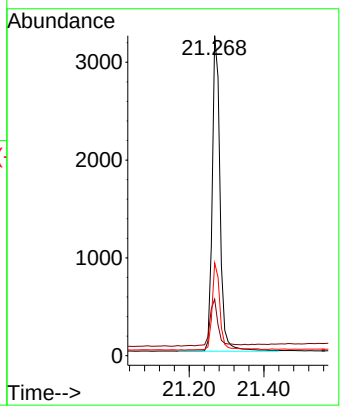


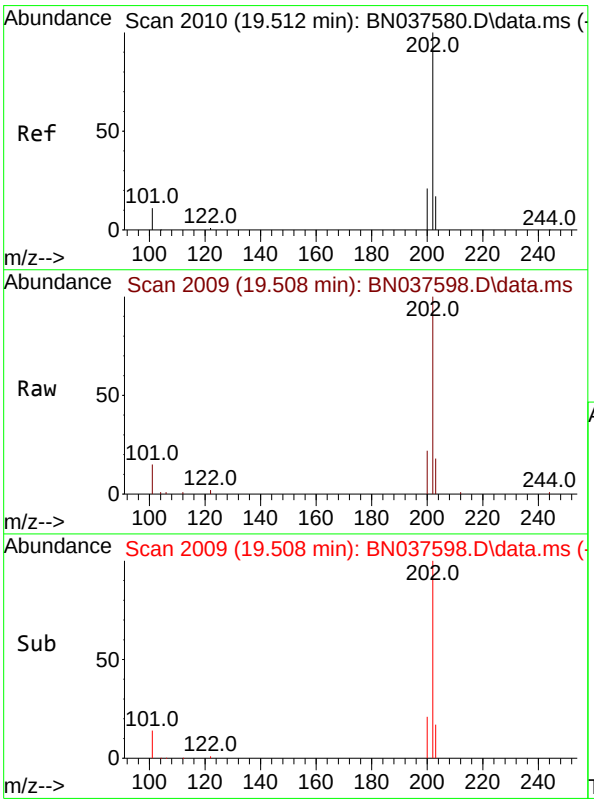
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2
Delta R.T. -0.009 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:240 Resp: 4673

Ion	Ratio	Lower	Upper
240	100		
120	17.6	8.9	13.3#
236	29.0	22.6	33.8

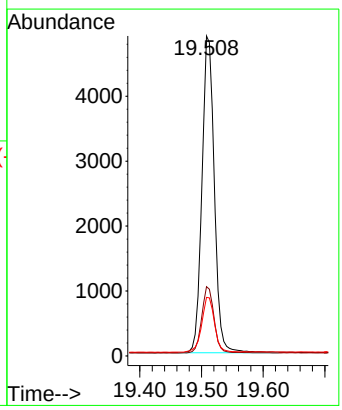


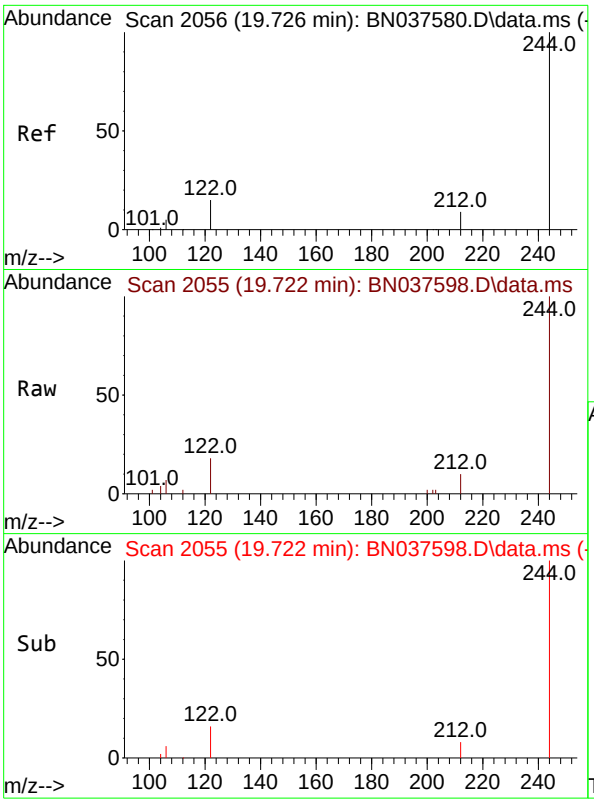


#30
Pyrene
Concen: 0.389 ng
RT: 19.508 min Scan# 2009
Delta R.T. -0.004 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:202 Resp: 6799

Ion	Ratio	Lower	Upper
202	100		
200	20.8	16.6	25.0
203	17.9	14.3	21.5



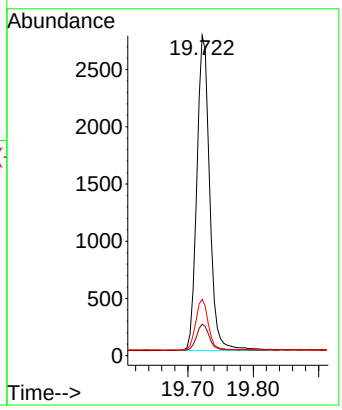


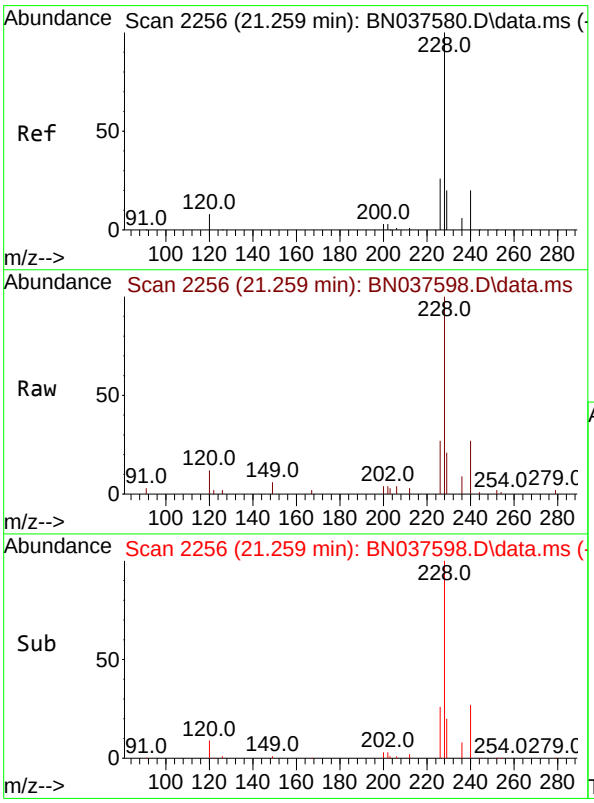
#31
Terphenyl-d14
Concen: 0.391 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.004 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:244 Resp: 3757

Ion	Ratio	Lower	Upper
244	100		
212	9.9	8.2	12.2
122	17.6	13.2	19.8

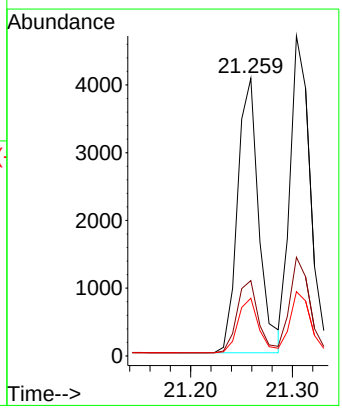


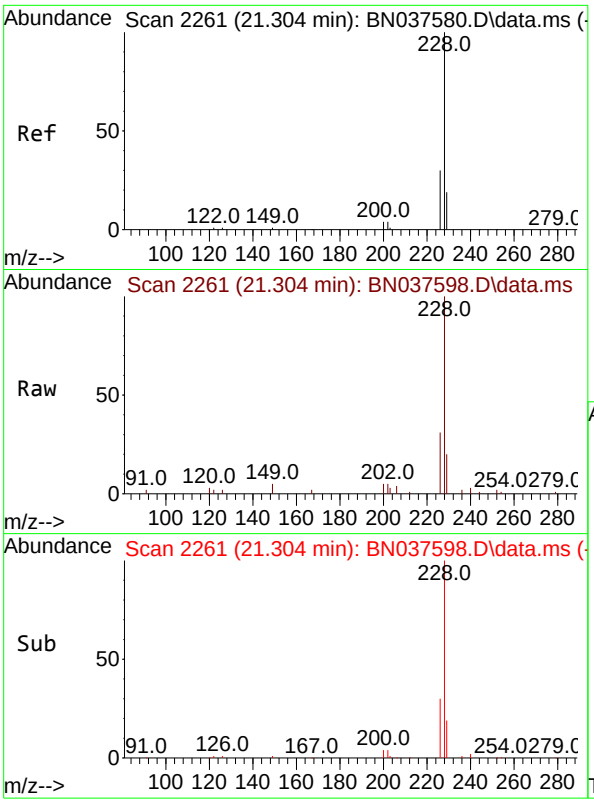


#32
Benzo(a)anthracene
Concen: 0.377 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:228 Resp: 5881

Ion	Ratio	Lower	Upper
228	100		
226	27.1	21.5	32.3
229	20.8	16.5	24.7



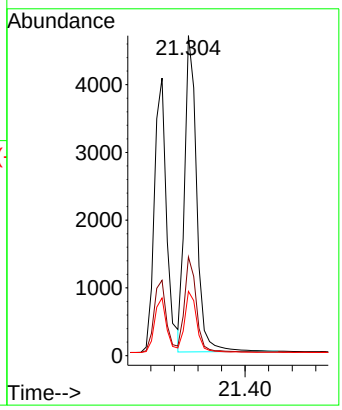


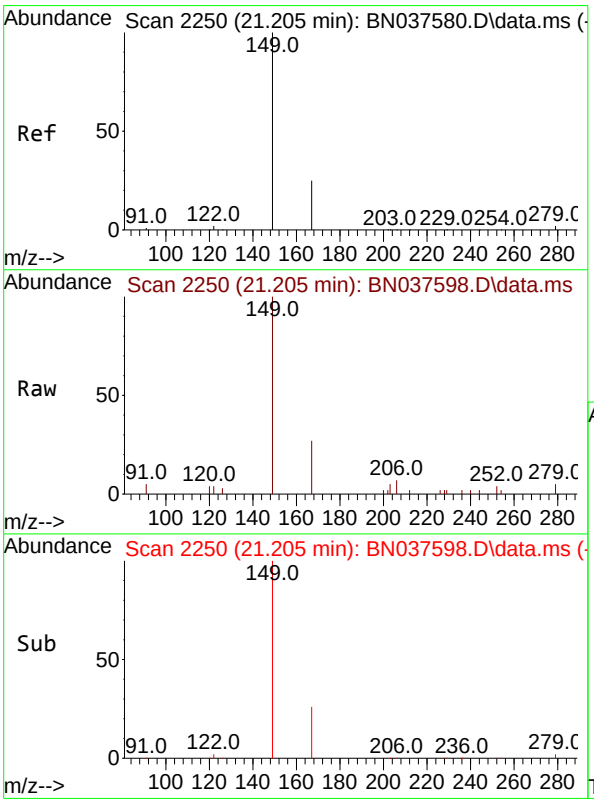
#33
Chrysene
Concen: 0.381 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:228 Resp: 6633

Ion	Ratio	Lower	Upper
228	100		
226	30.9	24.9	37.3
229	20.1	15.8	23.8

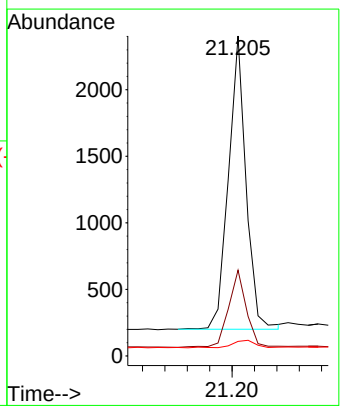


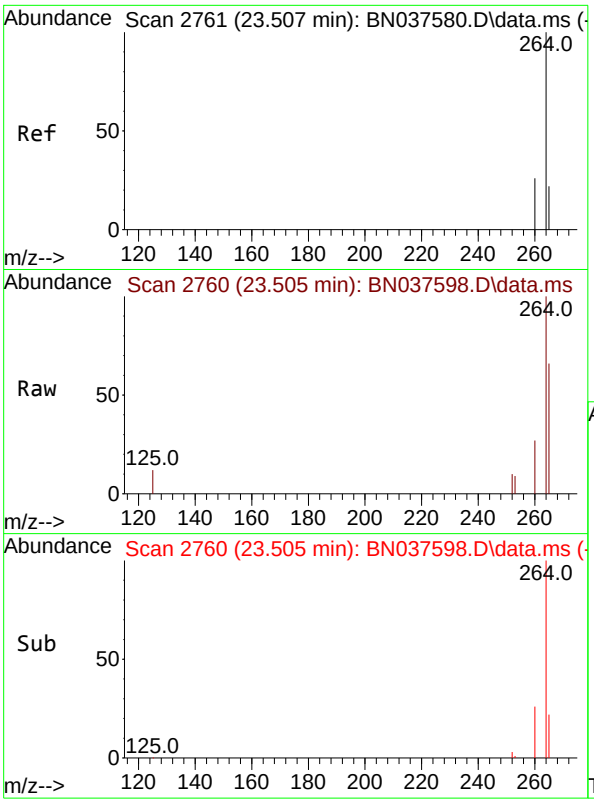


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.373 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:149 Resp: 2404

Ion	Ratio	Lower	Upper
149	100		
167	26.8	20.5	30.7
279	3.3	2.6	4.0



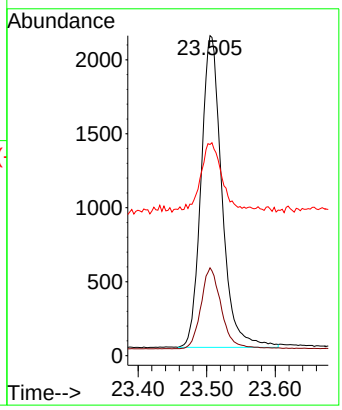


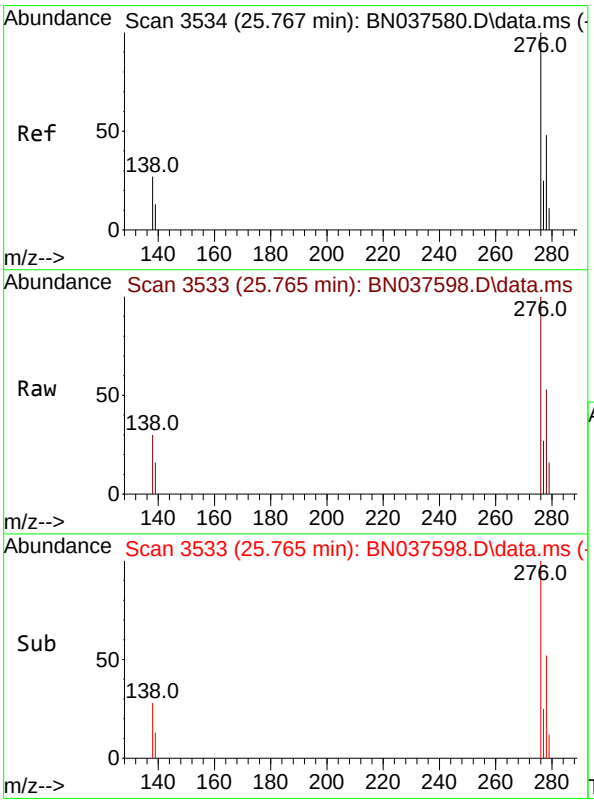
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.505 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:264 Resp: 4448

Ion	Ratio	Lower	Upper
264	100		
260	27.5	21.6	32.4
265	66.0	48.2	72.4

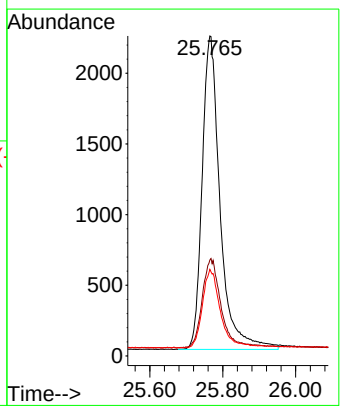


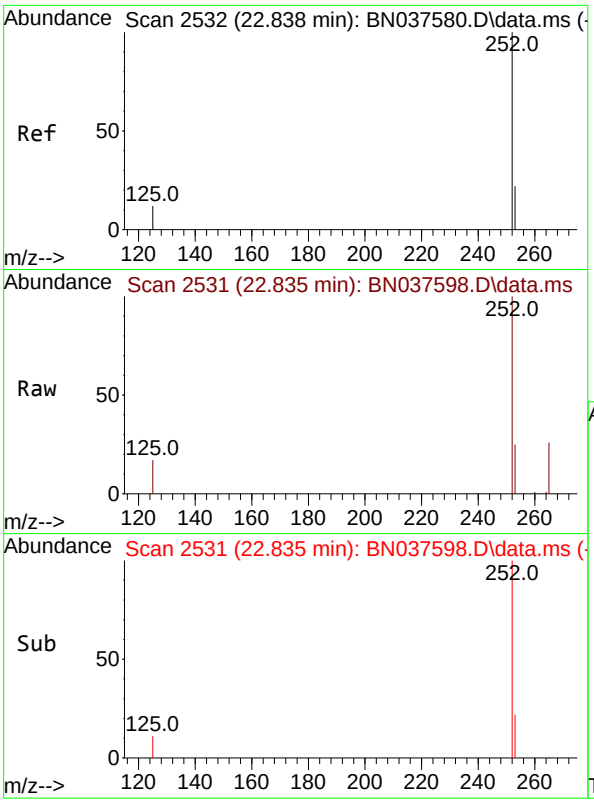


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.405 ng
RT: 25.765 min Scan# 3533
Delta R.T. -0.003 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:276 Resp: 7590

Ion	Ratio	Lower	Upper
276	100		
138	29.7	23.3	34.9
277	24.9	19.5	29.3



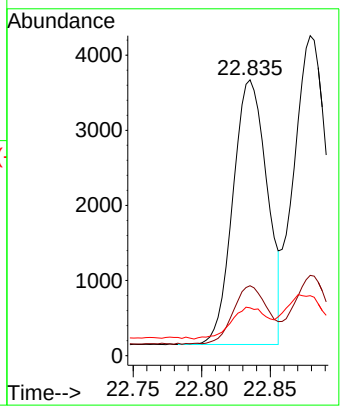


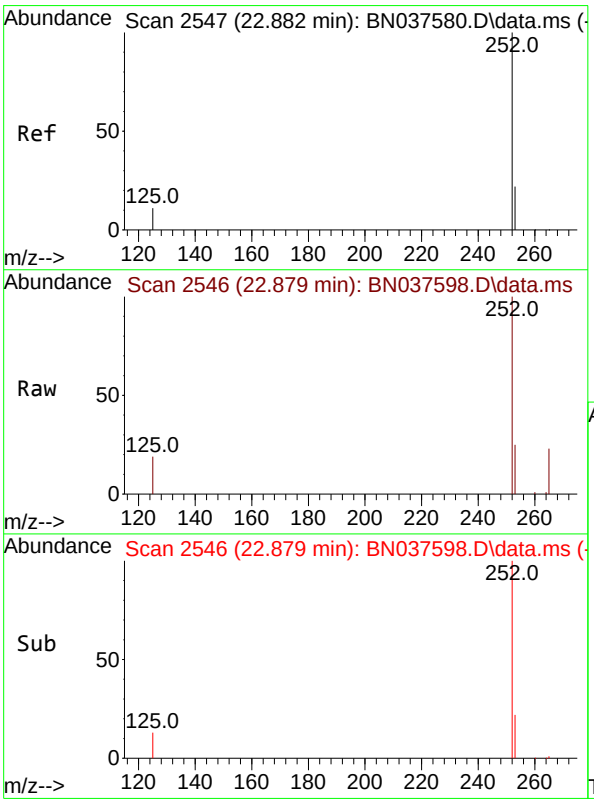
#37
Benzo(b)fluoranthene
Concen: 0.363 ng
RT: 22.835 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 6124

Ion	Ratio	Lower	Upper
252	100		
253	25.3	20.0	30.0
125	17.3	13.8	20.6

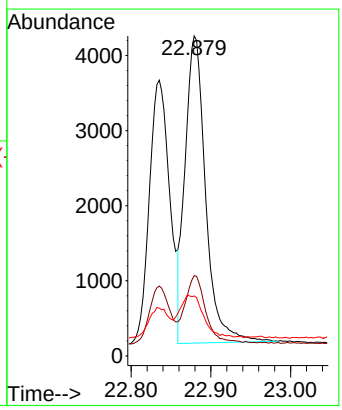


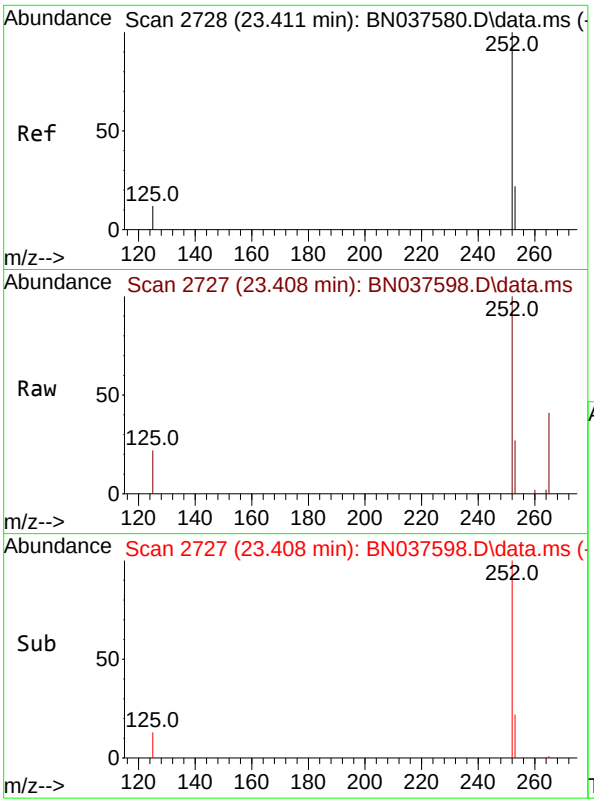


#38
Benzo(k)fluoranthene
Concen: 0.384 ng
RT: 22.879 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:252 Resp: 7297

Ion	Ratio	Lower	Upper
252	100		
253	25.1	19.9	29.9
125	18.7	15.0	22.6



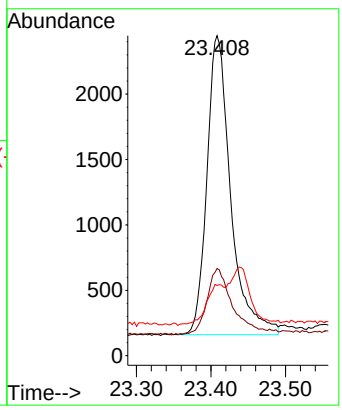


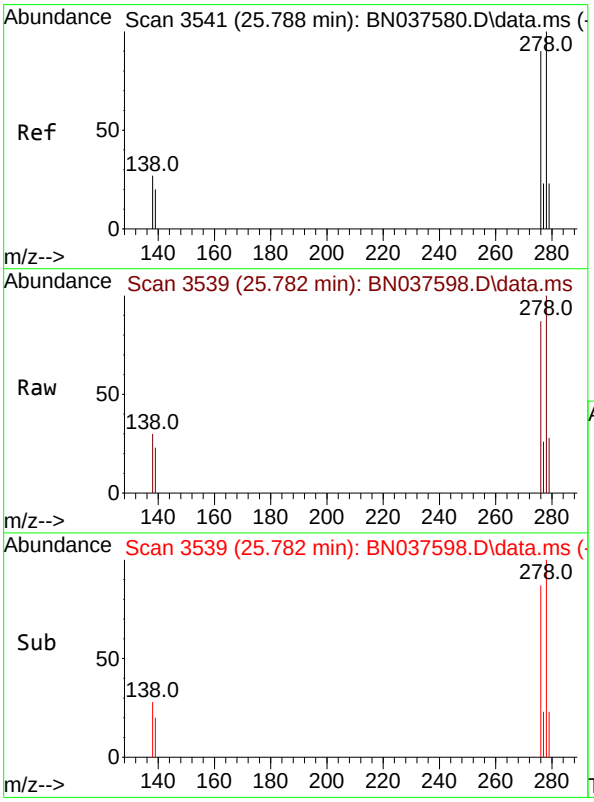
#39
Benzo(a)pyrene
Concen: 0.363 ng
RT: 23.408 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:252 Resp: 5075

Ion	Ratio	Lower	Upper
252	100		
253	27.3	21.6	32.4
125	22.0	16.8	25.2

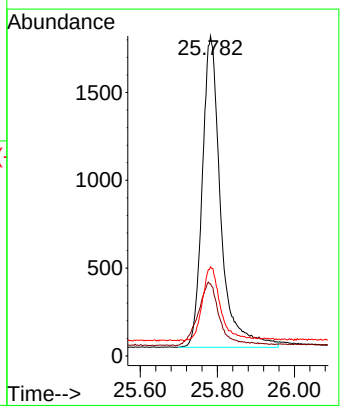


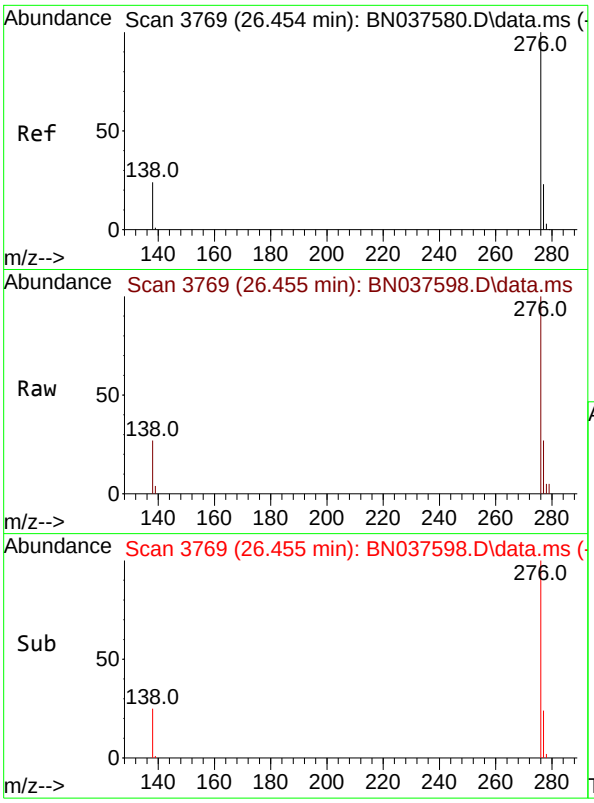


#40
Dibenzo(a,h)anthracene
Concen: 0.404 ng
RT: 25.782 min Scan# 3539
Delta R.T. -0.006 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Tgt Ion:278 Resp: 5872

Ion	Ratio	Lower	Upper
278	100		
139	22.5	18.3	27.5
279	27.8	22.5	33.7



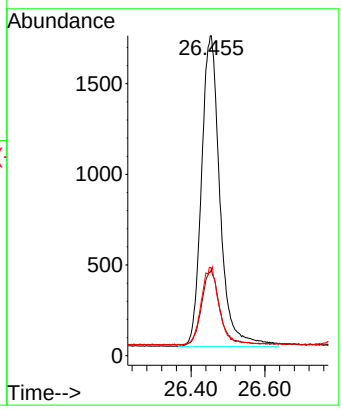


#41
Benzo(g,h,i)perylene
Concen: 0.389 ng
RT: 26.455 min Scan# 3
Delta R.T. 0.000 min
Lab File: BN037598.D
Acq: 13 Aug 2025 16:35

Instrument :
BNA_N
ClientSampleId :
SSTDCCC0.4EC

Tgt Ion:276 Resp: 5962

Ion	Ratio	Lower	Upper
276	100		
277	26.9	21.0	31.4
138	27.1	21.7	32.5



Sample Results: **BN037598.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037598.D
Acq On : 13 Aug 2025 16:35
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Aug 13 17:01:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	110	0.00
2		1,4-Dioxane	0.383	0.389	-1.6	109	0.00
3		n-Nitrosodimethylamine	0.489	0.488	0.2	110	0.00
4	S	2-Fluorophenol	0.907	0.859	5.3	107	0.00
5	S	Phenol-d6	1.091	1.022	6.3	108	0.00
6		bis(2-Chloroethyl)ether	0.983	0.974	0.9	110	0.00
7	I	Naphthalene-d8	1.000	1.000	0.0	109	0.00
8	S	Nitrobenzene-d5	0.282	0.261	7.4	109	0.00
9		Naphthalene	1.065	1.053	1.1	111	-0.01
10		Hexachlorobutadiene	0.260	0.263	-1.2	110	0.00
11	SURR	2-Methylnaphthalene-d10	0.544	0.504	7.4	108	0.00
12		2-Methylnaphthalene	0.668	0.639	4.3	110	0.00
13	I	Acenaphthene-d10	1.000	1.000	0.0	111	0.00
14	S	2,4,6-Tribromophenol	0.175	0.157	10.3	111	0.00
15	S	2-Fluorobiphenyl	2.313	2.278	1.5	110	0.00
16		Acenaphthylene	1.793	1.679	6.4	109	0.00
17		Acenaphthene	1.220	1.170	4.1	110	0.00
18		Fluorene	1.596	1.516	5.0	110	0.00
19	I	Phenanthrene-d10	1.000	1.000	0.0	110	0.00
20		4,6-Dinitro-2-methylphenol	0.053	0.041	22.6	99	0.00
21		4-Bromophenyl-phenylether	0.251	0.240	4.4	113	0.00
22		Hexachlorobenzene	0.356	0.356	0.0	110	0.00
23		Atrazine	0.142	0.141	0.7	119	0.00
24		Pentachlorophenol	0.125	0.110	12.0	107	0.00
25		Phenanthrene	1.216	1.150	5.4	108	0.00
26		Anthracene	1.077	0.979	9.1	108	0.00
27	SURR	Fluoranthene-d10	1.052	0.931	11.5	107	0.00
28		Fluoranthene	1.397	1.264	9.5	107	0.00
29	I	Chrysene-d12	1.000	1.000	0.0	108	0.00
30		Pyrene	1.495	1.455	2.7	108	0.00
31	S	Terphenyl-d14	0.823	0.804	2.3	109	0.00
32		Benzo(a)anthracene	1.336	1.259	5.8	108	0.00
33		Chrysene	1.489	1.419	4.7	107	0.00
34		Bis(2-ethylhexyl)phthalate	0.551	0.514	6.7	107	0.00
35	I	Perylene-d12	1.000	1.000	0.0	106	0.00
36		Indeno(1,2,3-cd)pyrene	1.686	1.706	-1.2	112	0.00
37		Benzo(b)fluoranthene	1.516	1.377	9.2	109	0.00
38		Benzo(k)fluoranthene	1.710	1.641	4.0	106	0.00
39	C	Benzo(a)pyrene	1.257	1.141	9.2	105	0.00
40		Dibenzo(a,h)anthracene	1.308	1.320	-0.9	115	0.00
41		Benzo(g,h,i)perylene	1.378	1.340	2.8	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Sample Results: **BN037598.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037598.D
Acq On : 13 Aug 2025 16:35
Operator : RC/JU
Sample : SSTDCCC0.4
Misc :
ALS Vial : 2 Sample Multiplier: 1

Instrument :
BNA_N
LabSampleId :
SSTDCCC0.4

Quant Time: Aug 13 17:01:45 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

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

		Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1	I	1,4-Dichlorobenzene-d4	0.400	0.400	0.0	110	0.00
2		1,4-Dioxane	0.400	0.407	-1.7	109	0.00
3		n-Nitrosodimethylamine	0.400	0.399	0.3	110	0.00
4	S	2-Fluorophenol	0.400	0.379	5.3	107	0.00
5	S	Phenol-d6	0.400	0.374	6.5	108	0.00
6		bis(2-Chloroethyl)ether	0.400	0.396	1.0	110	0.00
7	I	Naphthalene-d8	0.400	0.400	0.0	109	0.00
8	S	Nitrobenzene-d5	0.400	0.371	7.3	109	0.00
9		Naphthalene	0.400	0.395	1.3	111	-0.01
10		Hexachlorobutadiene	0.400	0.404	-1.0	110	0.00
11	SURR	2-Methylnaphthalene-d10	0.400	0.371	7.3	108	0.00
12		2-Methylnaphthalene	0.400	0.383	4.3	110	0.00
13	I	Acenaphthene-d10	0.400	0.400	0.0	111	0.00
14	S	2,4,6-Tribromophenol	0.400	0.360	10.0	111	0.00
15	S	2-Fluorobiphenyl	0.400	0.394	1.5	110	0.00
16		Acenaphthylene	0.400	0.374	6.5	109	0.00
17		Acenaphthene	0.400	0.384	4.0	110	0.00
18		Fluorene	0.400	0.380	5.0	110	0.00
19	I	Phenanthrene-d10	0.400	0.400	0.0	110	0.00
20		4,6-Dinitro-2-methylphenol	0.400	0.408	-2.0	99	0.00
21		4-Bromophenyl-phenylether	0.400	0.381	4.8	113	0.00
22		Hexachlorobenzene	0.400	0.399	0.3	110	0.00
23		Atrazine	0.400	0.396	1.0	119	0.00
24		Pentachlorophenol	0.400	0.353	11.8	107	0.00
25		Phenanthrene	0.400	0.378	5.5	108	0.00
26		Anthracene	0.400	0.364	9.0	108	0.00
27	SURR	Fluoranthene-d10	0.400	0.354	11.5	107	0.00
28		Fluoranthene	0.400	0.362	9.5	107	0.00
29	I	Chrysene-d12	0.400	0.400	0.0	108	0.00
30		Pyrene	0.400	0.389	2.8	108	0.00
31	S	Terphenyl-d14	0.400	0.391	2.3	109	0.00
32		Benzo(a)anthracene	0.400	0.377	5.8	108	0.00
33		Chrysene	0.400	0.381	4.8	107	0.00
34		Bis(2-ethylhexyl)phthalate	0.400	0.373	6.8	107	0.00
35	I	Perylene-d12	0.400	0.400	0.0	106	0.00
36		Indeno(1,2,3-cd)pyrene	0.400	0.405	-1.3	112	0.00
37		Benzo(b)fluoranthene	0.400	0.363	9.3	109	0.00
38		Benzo(k)fluoranthene	0.400	0.384	4.0	106	0.00
39	C	Benzo(a)pyrene	0.400	0.363	9.3	105	0.00
40		Dibenzo(a,h)anthracene	0.400	0.404	-1.0	115	0.00
41		Benzo(g,h,i)perylene	0.400	0.389	2.8	113	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

QC SAMPLE DATA

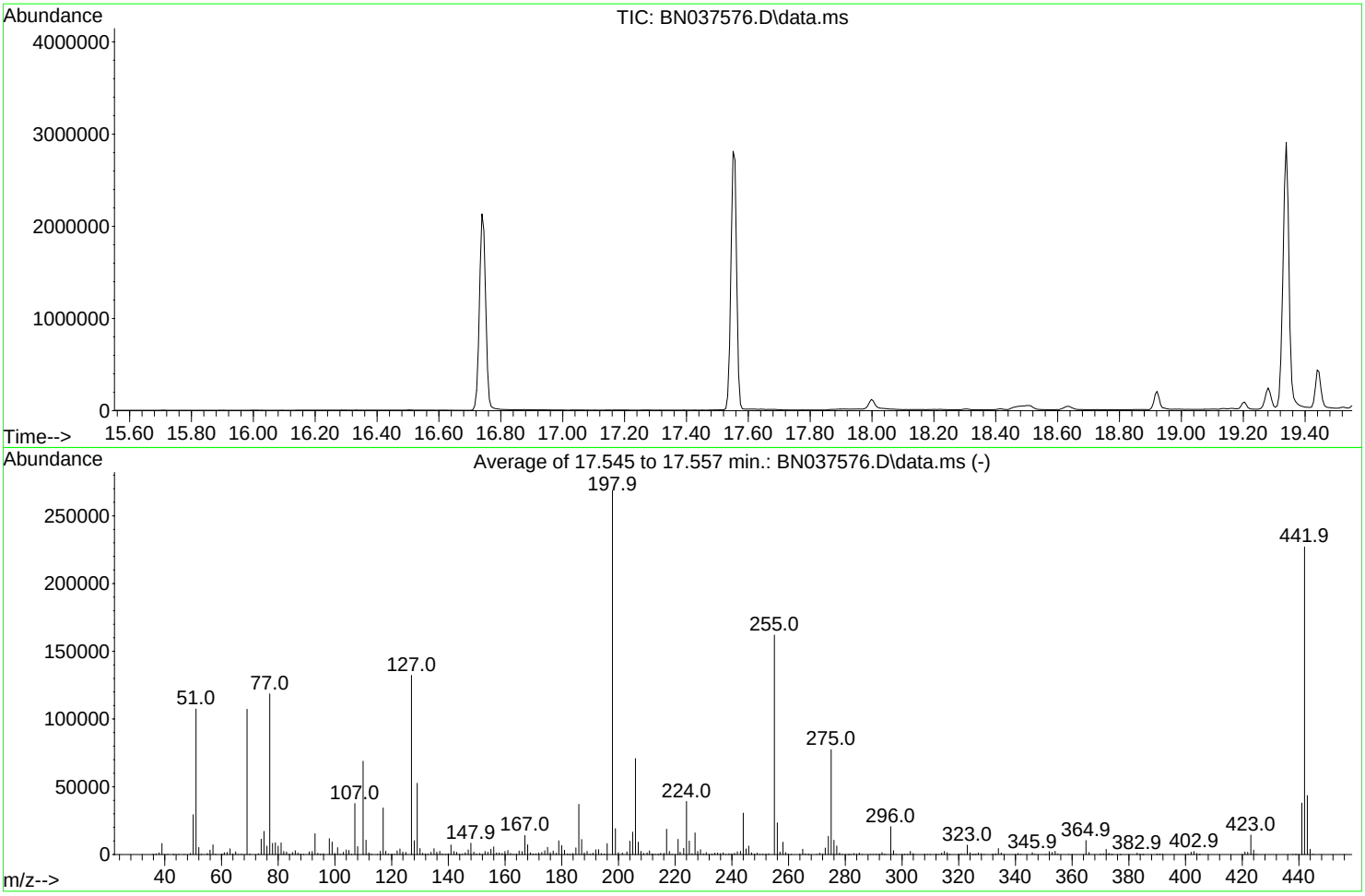
Sample Results: **BN037576.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037576.D
Acq On : 12 Aug 2025 15:05
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Aug 13 05:00:58 2025



AutoFind: Scans 2458, 2459, 2460; Background Corrected with Scan 2451

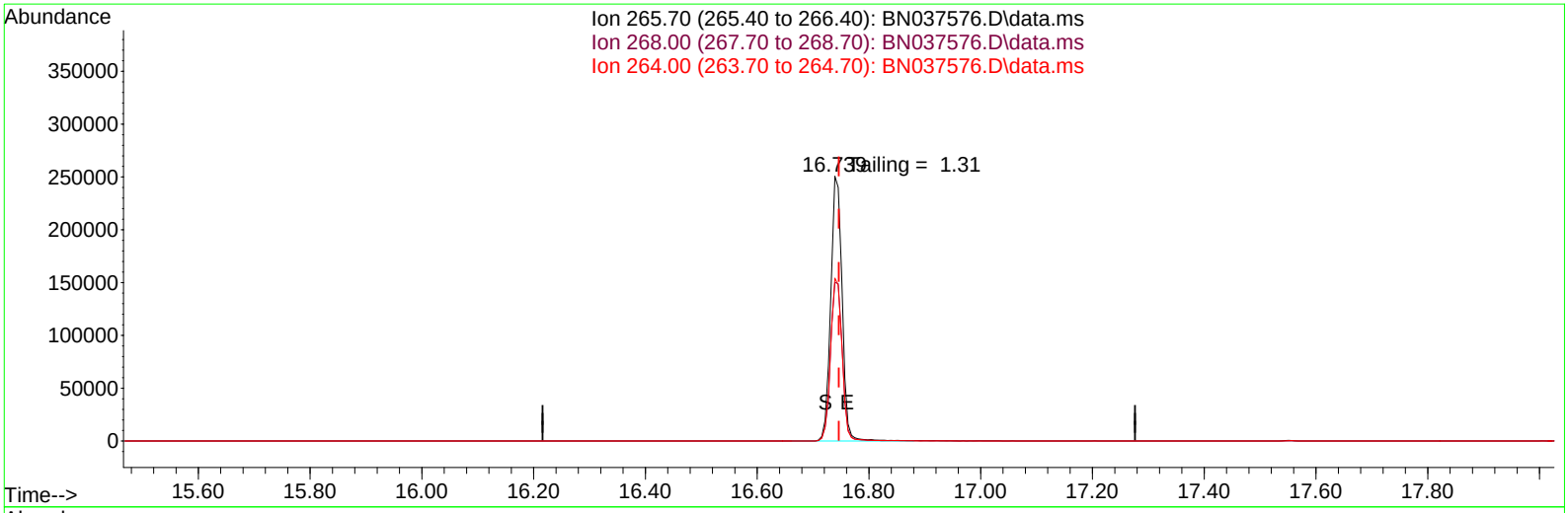
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	107227	PASS
70	69	0.00	2	0.6	598	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	268651	PASS
199	198	5	9	7.1	19058	PASS
365	198	1	100	3.9	10363	PASS
441	443	0.01	150	87.2	38019	PASS
442	442	100	100	100.0	227139	PASS
443	442	15	24	19.2	43589	PASS

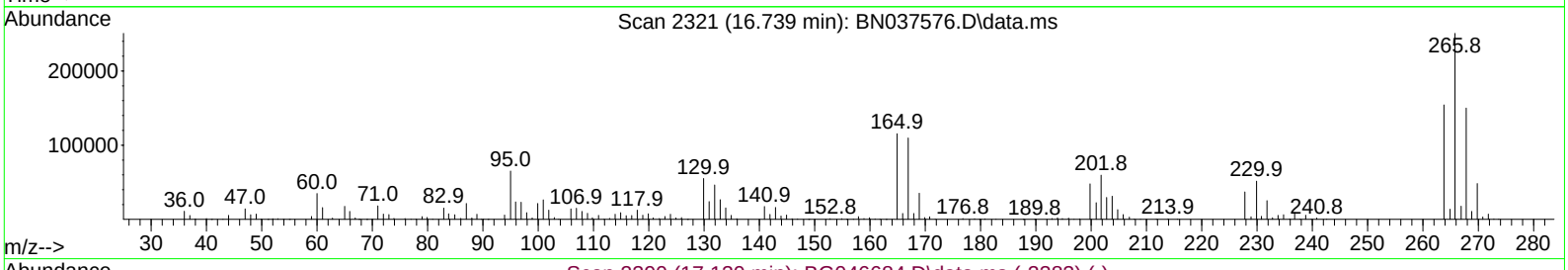
Sample Results: **BN037576.D**

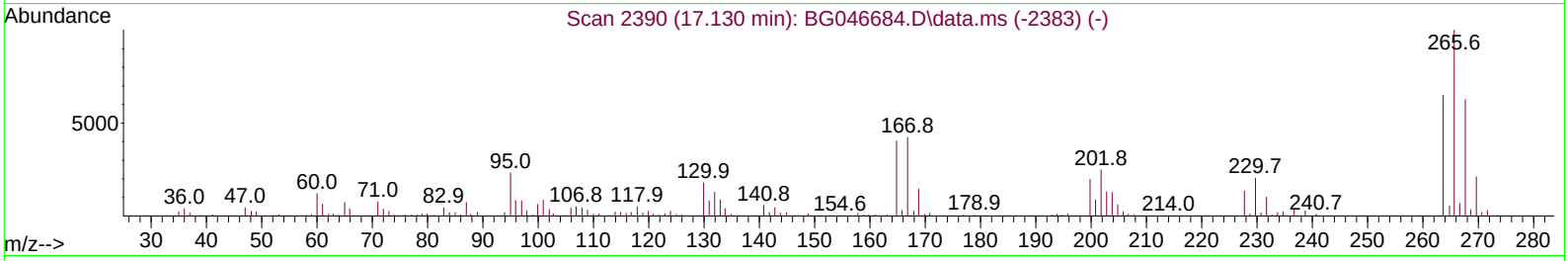
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037576.D
Acq On : 12 Aug 2025 15:05
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Aug 13 06:28:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 06 01:49:15 2025
Response via : Initial Calibration







TIC: BN037576.D\data.ms

(70) Pentachlorophenol (C)

16.739min (-0.007) 29662.60 ng

response 357790

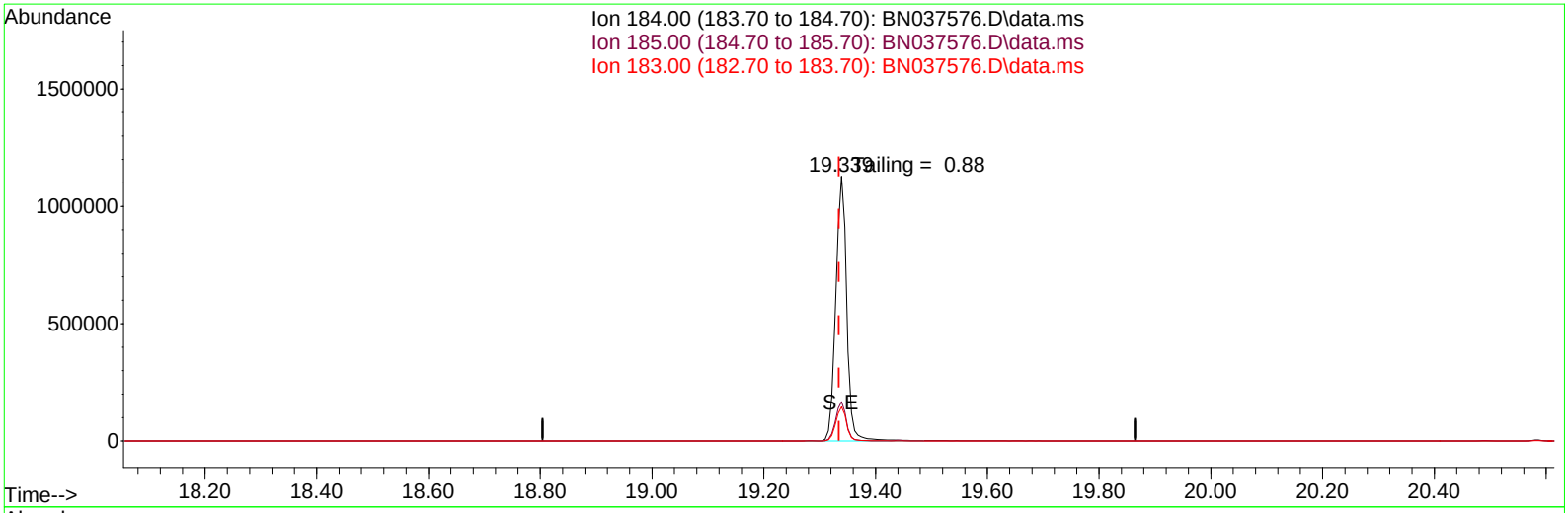
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	59.87
264.00	61.60	61.53
0.00	0.00	0.00

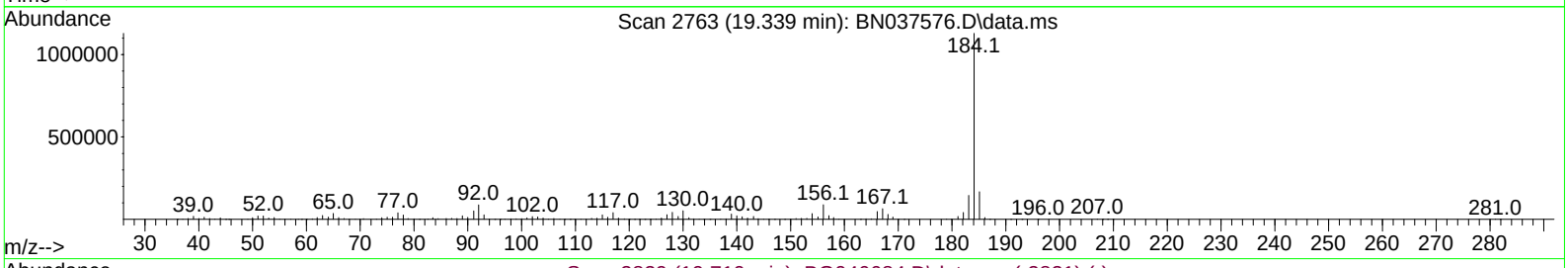
Sample Results: **BN037576.D**

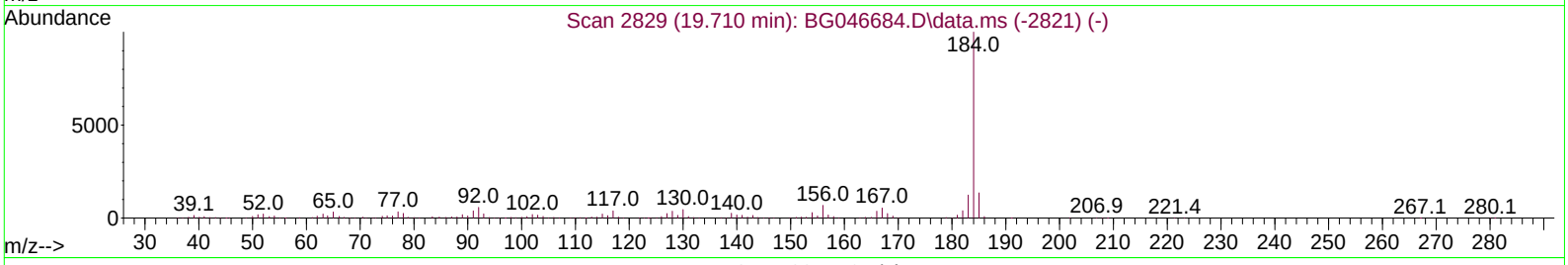
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081225\
Data File : BN037576.D
Acq On : 12 Aug 2025 15:05
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Aug 13 06:28:28 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 06 01:49:15 2025
Response via : Initial Calibration







TIC: BN037576.D\data.ms

(77) Benzidine

19.339min (+ 0.005) 0.00 ng

response 1542567

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.86
183.00	13.20	12.90
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
8/12/2025	BNA_N	BN037576.D
Compound Name	**Response**	**Retention Time**
DDT	903527	20.586
DDD	9291	20.192
DDE	170	19.633
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
9461	912988	1.04

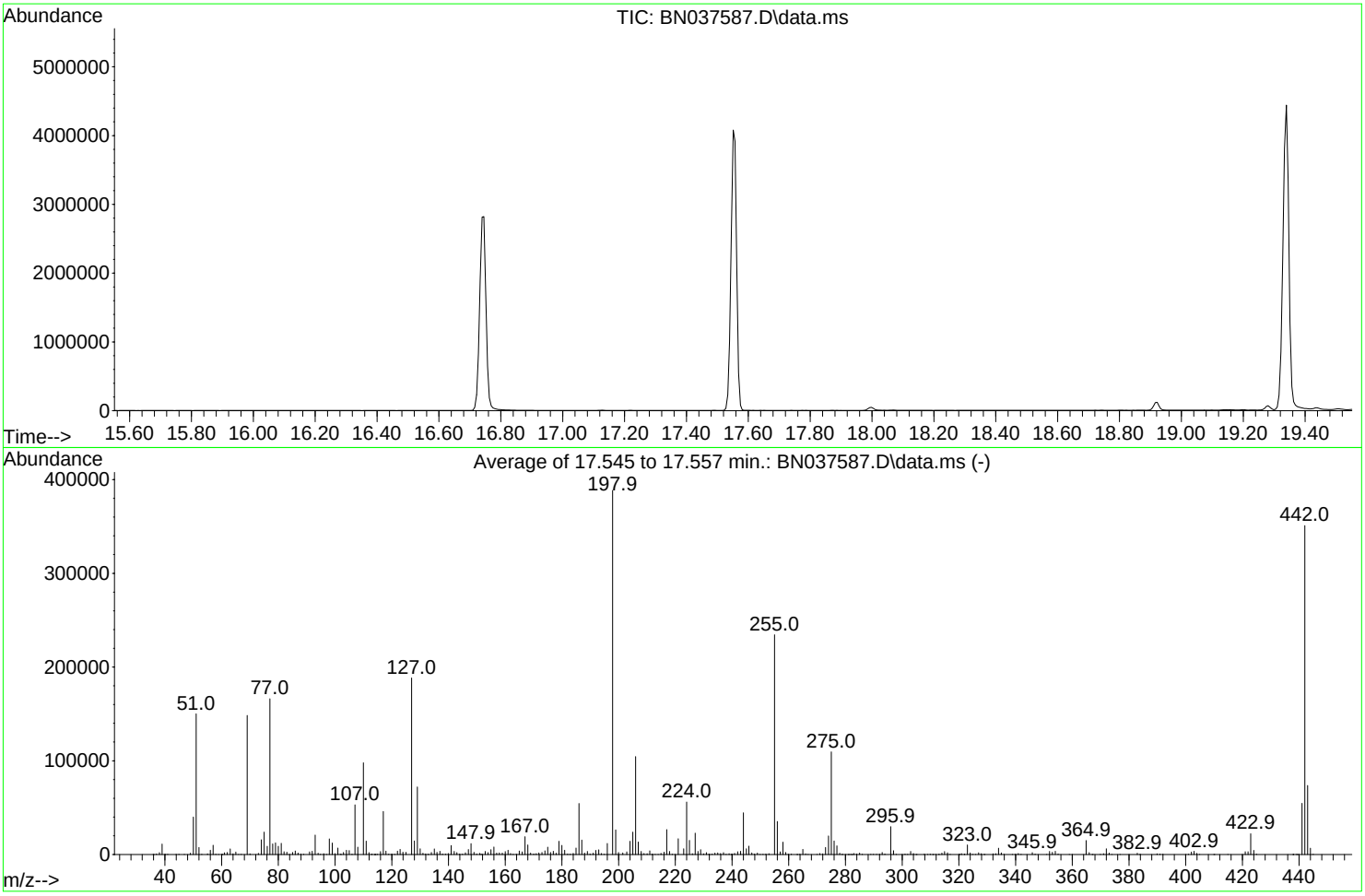
Sample Results: **BN037587.D**

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037587.D
Acq On : 13 Aug 2025 09:48
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Integration File: rteint.p

Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
Last Update : Wed Aug 13 05:00:58 2025



AutoFind: Scans 2458, 2459, 2460; Background Corrected with Scan 2451

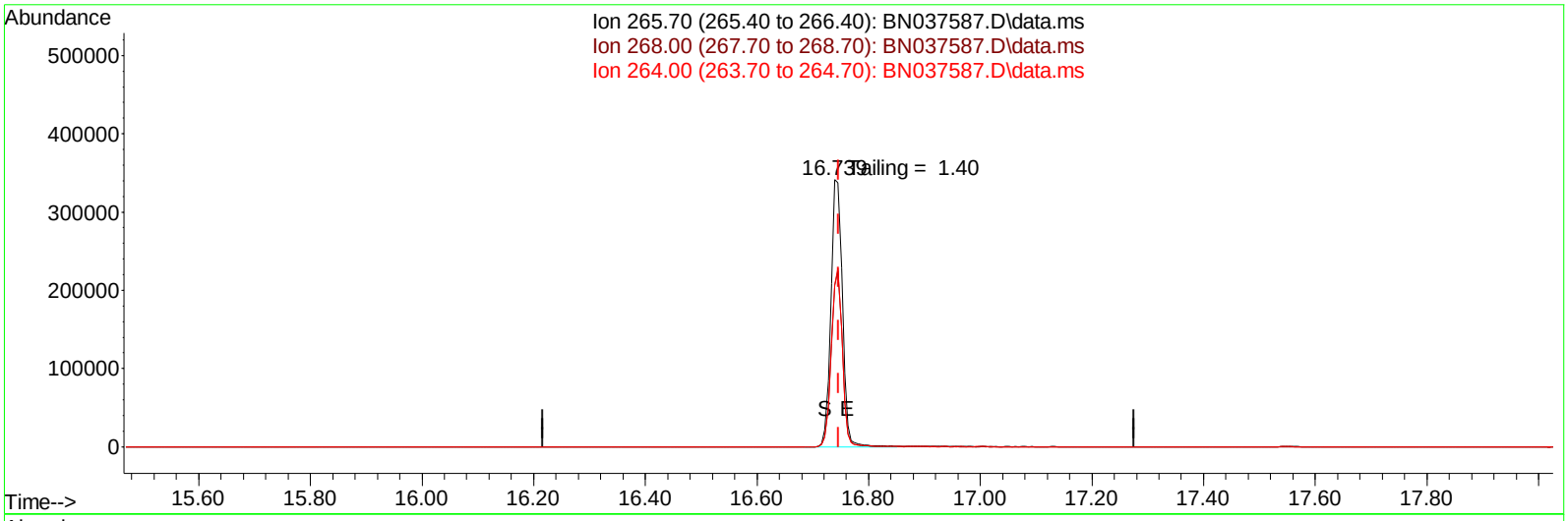
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	148448	PASS
70	69	0.00	2	0.5	736	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	388309	PASS
199	198	5	9	6.8	26275	PASS
365	198	1	100	3.9	15039	PASS
441	443	0.01	150	74.2	54659	PASS
442	442	100	100	100.0	350869	PASS
443	442	15	24	21.0	73643	PASS

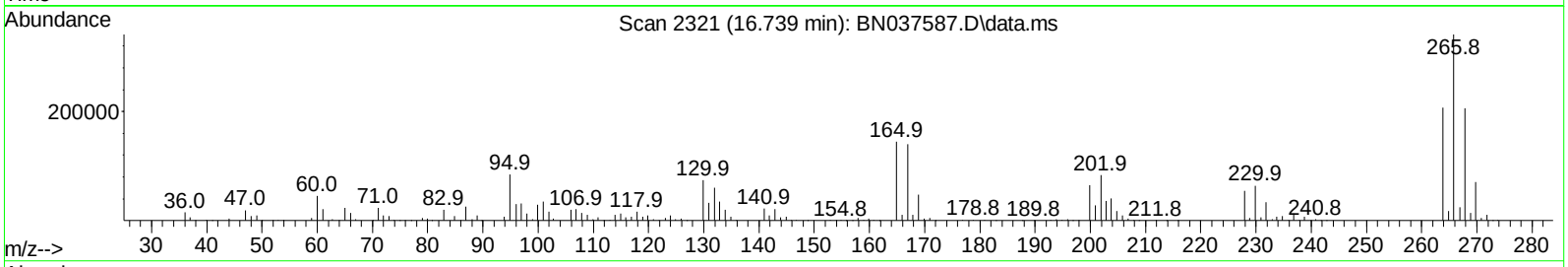
Sample Results: **BN037587.D**

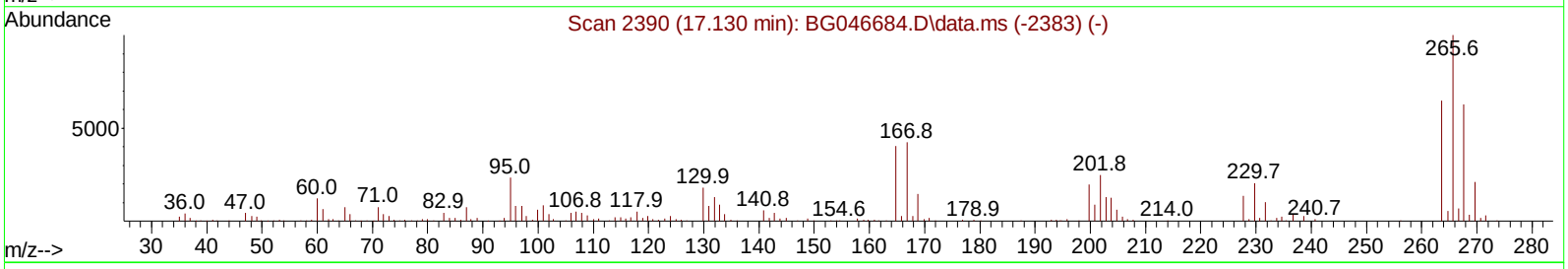
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037587.D
Acq On : 13 Aug 2025 09:48
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Aug 13 12:38:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 06 01:49:15 2025
Response via : Initial Calibration







TIC: BN037587.D\data.ms

(70) Pentachlorophenol (C)

16.739min (-0.007) 26359.62 ng

response 484061

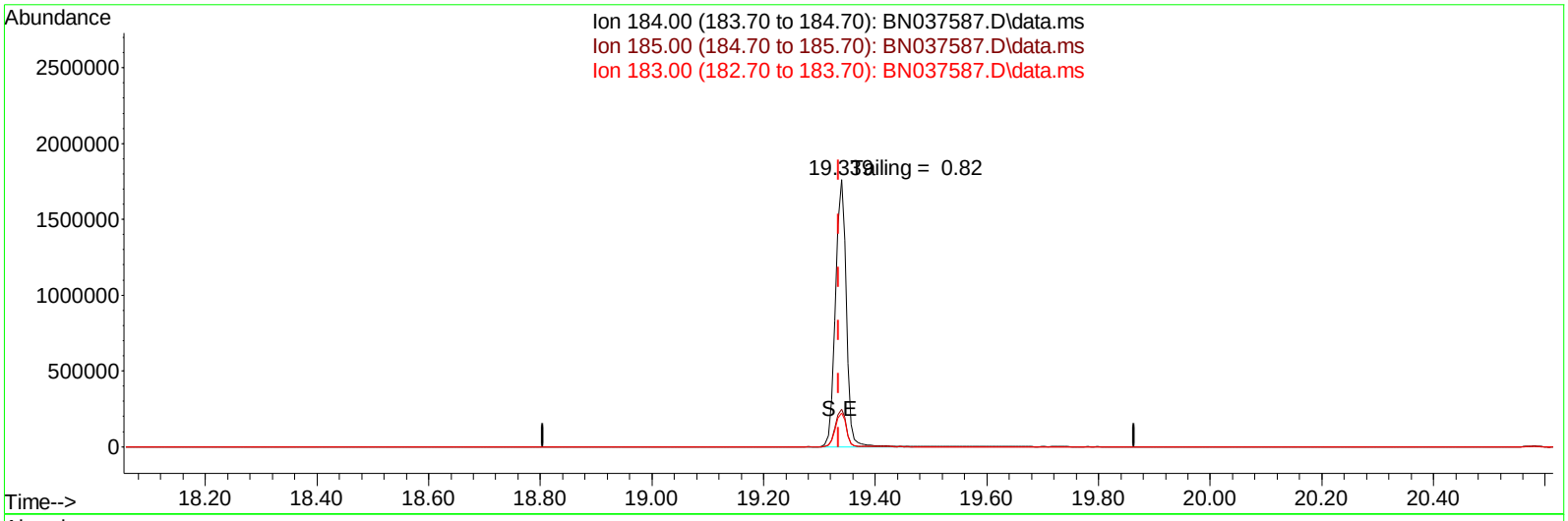
Ion	Exp%	Act%
265.70	100.00	100.00
268.00	62.20	60.50
264.00	61.60	60.78
0.00	0.00	0.00

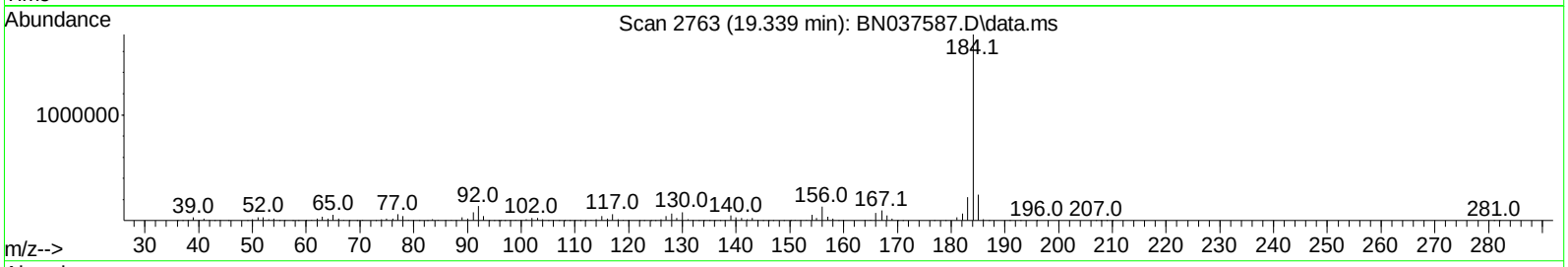
Sample Results: **BN037587.D**

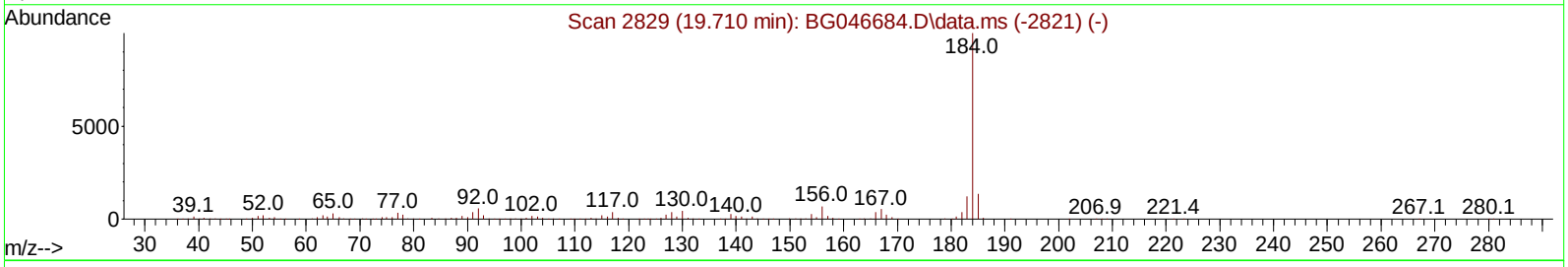
Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037587.D
Acq On : 13 Aug 2025 09:48
Operator : RC/JU
Sample : DFTPP
Misc :
ALS Vial : 1 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
DFTPP

Quant Time: Aug 13 12:38:31 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270E-Tune.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 06 01:49:15 2025
Response via : Initial Calibration







TIC: BN037587.D\data.ms

(77) Benzidine

19.339min (+ 0.005) 0.00 ng

response 2377211

Ion	Exp%	Act%
184.00	100.00	100.00
185.00	15.50	14.03
183.00	13.20	12.54
0.00	0.00	0.00

Instrument :
BNA_N
ClientSampleId :
DFTPP

DDT Breakdown

Date	Instrument Name	DFTPP Data File
8/13/2025	BNA_N	BN037587.D
Compound Name	**Response**	**Retention Time**
DDT	1163963	20.58
DDD	16801	20.192
DDE	162	19.627
SUM(DDD+DDE)	**SUM(DDT+DDD+DDE)**	**% Breakdown Of DDT**
16963	1180926	1.44

Raw Data: **BN037589.D**

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB169222BL	SDG No.:	Q2806
Lab Sample ID:	PB169222BL	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037589.D	1	08/12/25 08:52	08/13/25 11:05	PB169222

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.20	U	0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.32		30 - 150		80%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		81%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		86%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.35		53 - 106		86%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.38		58 - 132		94%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2240	7.717				
1146-65-2	Naphthalene-d8	5340	10.498				
15067-26-2	Acenaphthene-d10	2470	14.345				
1517-22-2	Phenanthrene-d10	4730	17.099				
1719-03-5	Chrysene-d12	3820	21.268				
1520-96-3	Perylene-d12	3770	23.508				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037589.D
Acq On : 13 Aug 2025 11:05
Operator : RC/JU
Sample : PB169222BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Quant Time: Aug 13 11:31:52 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

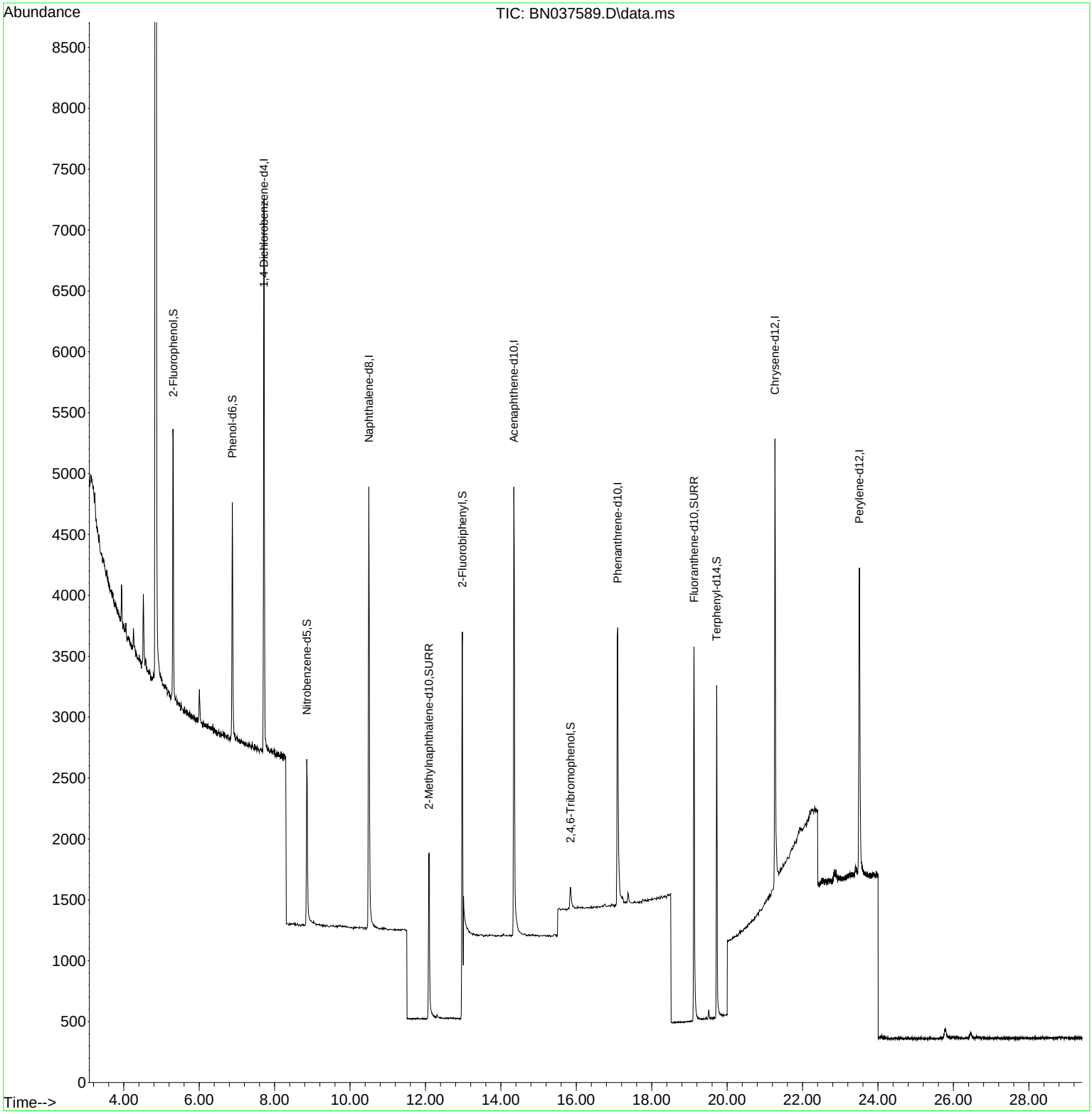
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.717	152	2235	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	5344	0.400	ng	0.00
13) Acenaphthene-d10	14.345	164	2468	0.400	ng	0.00
19) Phenanthrene-d10	17.099	188	4726	0.400	ng	0.01
29) Chrysene-d12	21.268	240	3815	0.400	ng	# 0.00
35) Perylene-d12	23.508	264	3770	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	1799	0.355	ng	0.00
5) Phenol-d6	6.879	99	1927	0.316	ng	0.00
8) Nitrobenzene-d5	8.854	82	1286	0.342	ng	0.00
11) 2-Methylnaphthalene-d10	12.091	152	2324	0.320	ng	0.00
14) 2,4,6-Tribromophenol	15.845	330	184	0.170	ng	0.01
15) 2-Fluorobiphenyl	12.978	172	4926	0.345	ng	0.00
27) Fluoranthene-d10	19.122	212	4019	0.323	ng	0.00
31) Terphenyl-d14	19.722	244	2955	0.376	ng	0.00
Target Compounds						Qvalue

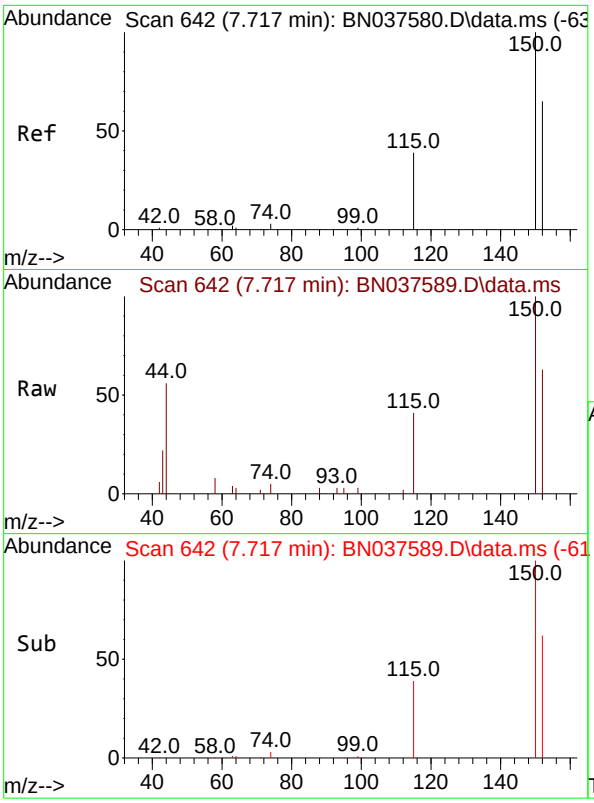
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037589.D
Acq On : 13 Aug 2025 11:05
Operator : RC/JU
Sample : PB169222BL
Misc :
ALS Vial : 3 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Quant Time: Aug 13 11:31:52 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



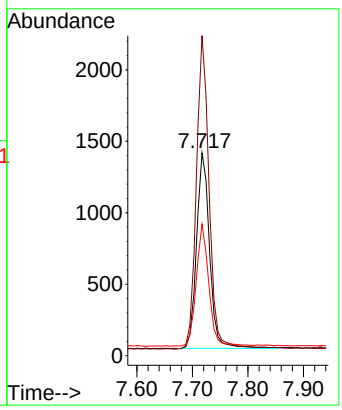


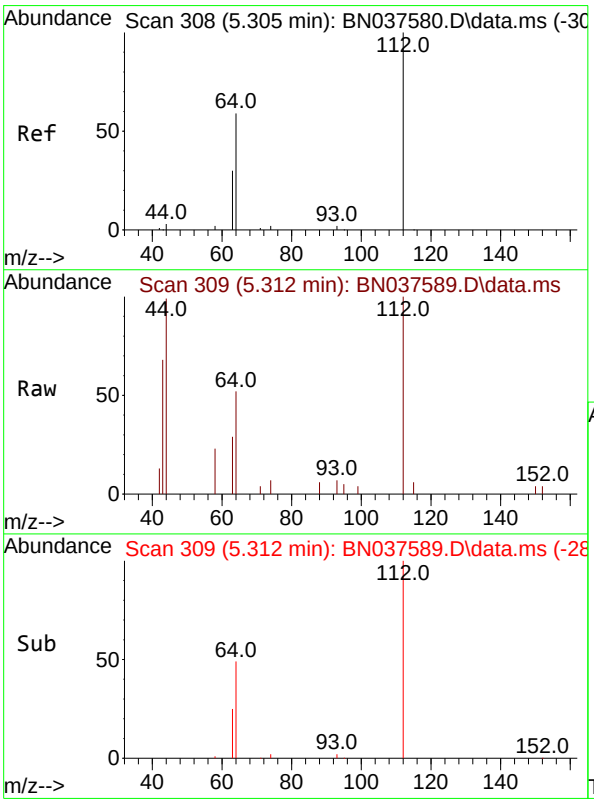
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion:152 Resp: 2235

Ion	Ratio	Lower	Upper
152	100		
150	157.9	122.2	183.4
115	64.9	49.8	74.6

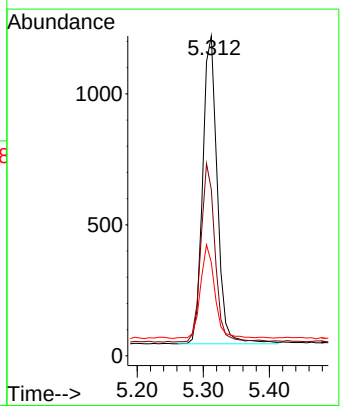


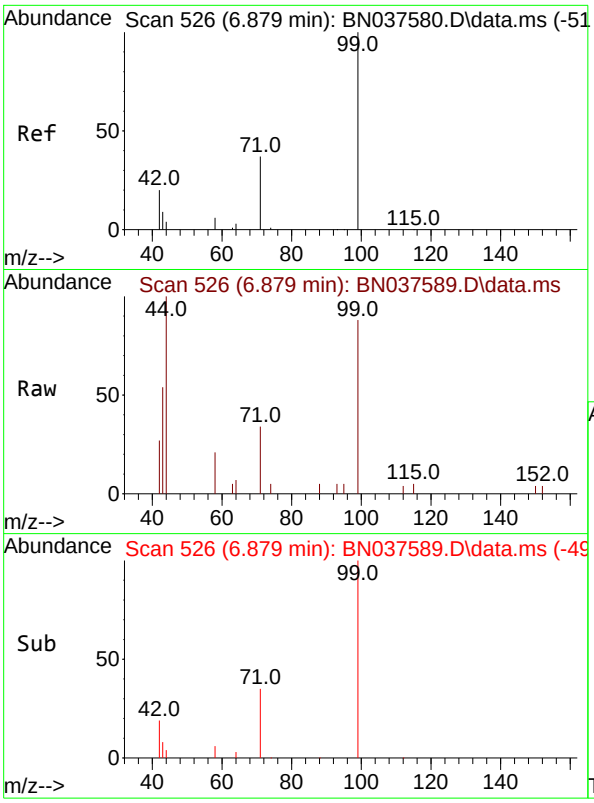


#4
2-Fluorophenol
Concen: 0.355 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.007 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:112 Resp: 1799

Ion	Ratio	Lower	Upper
112	100		
64	55.9	44.9	67.3
63	29.9	23.4	35.2



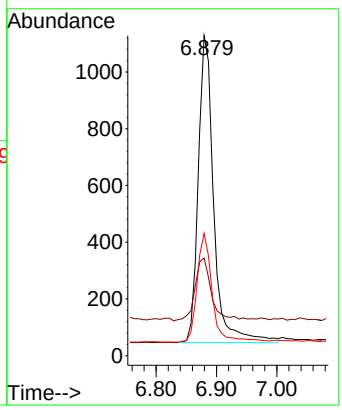


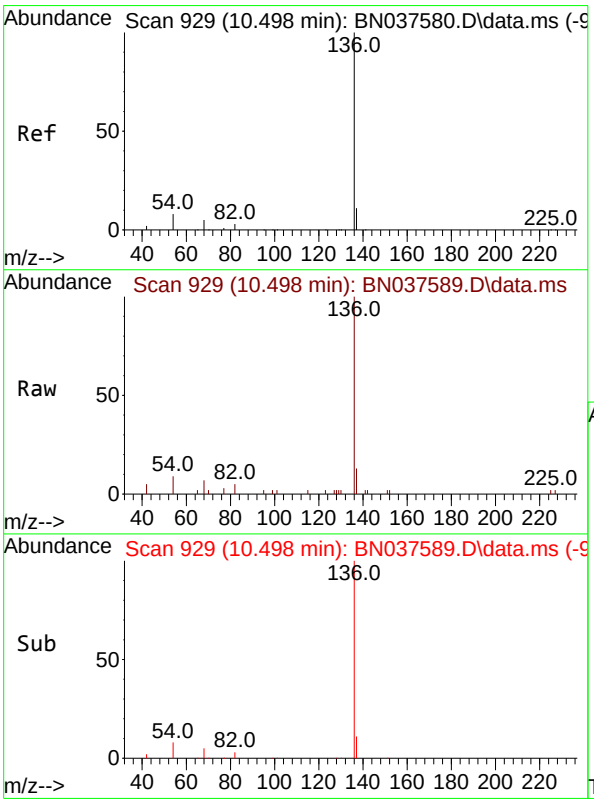
#5
Phenol-d6
Concen: 0.316 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion: 99 Resp: 1927

Ion	Ratio	Lower	Upper
99	100		
42	22.0	18.5	27.7
71	34.4	28.6	42.8

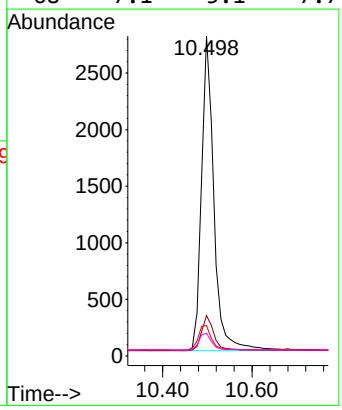


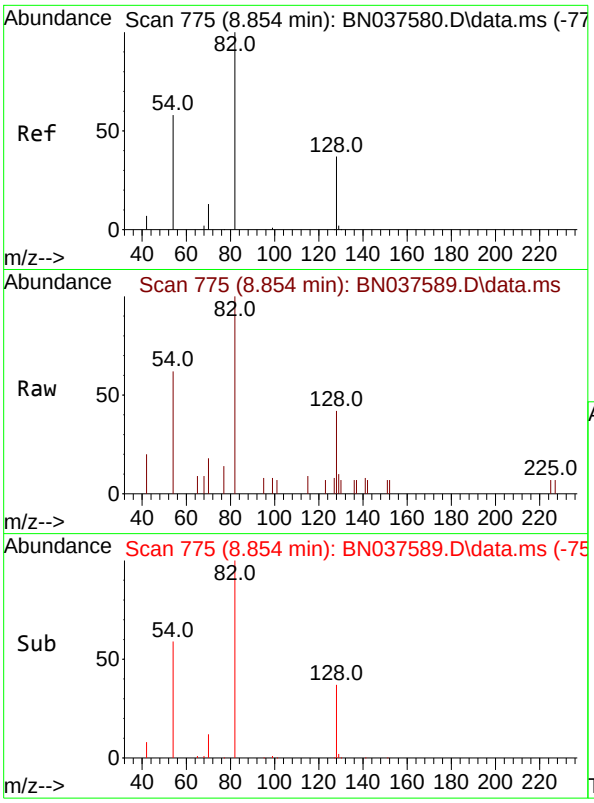


#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 929
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:136 Resp: 5344

Ion	Ratio	Lower	Upper
136	100		
137	12.6	9.5	14.3
54	9.5	7.3	10.9
68	7.1	5.1	7.7



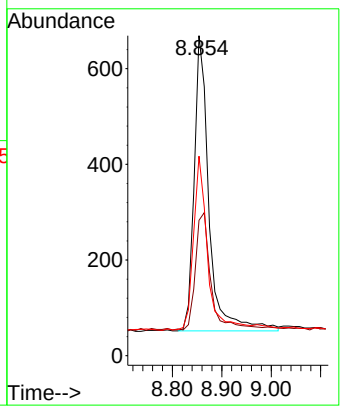


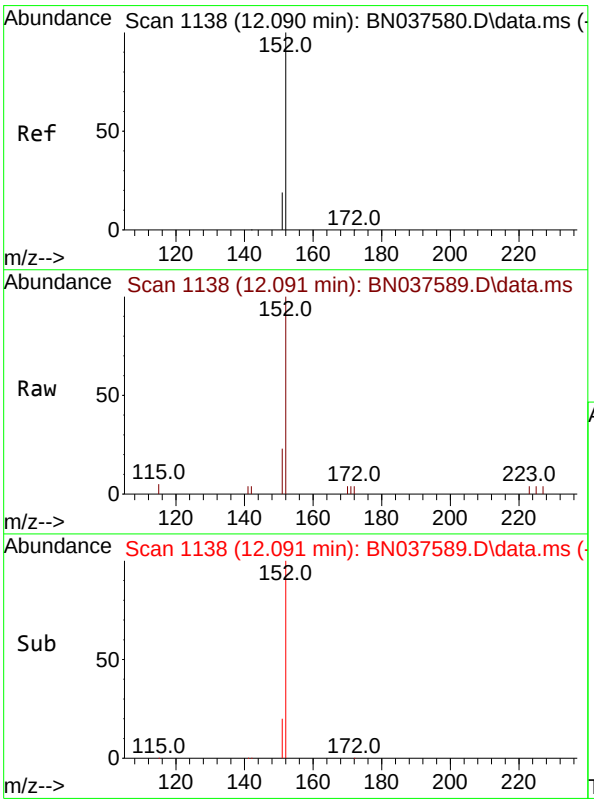
#8
Nitrobenzene-d5
Concen: 0.342 ng
RT: 8.854 min Scan# 7
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion: 82 Resp: 1286

Ion	Ratio	Lower	Upper
82	100		
128	42.3	32.6	48.8
54	62.3	48.9	73.3

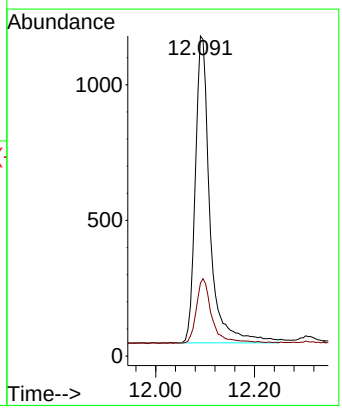


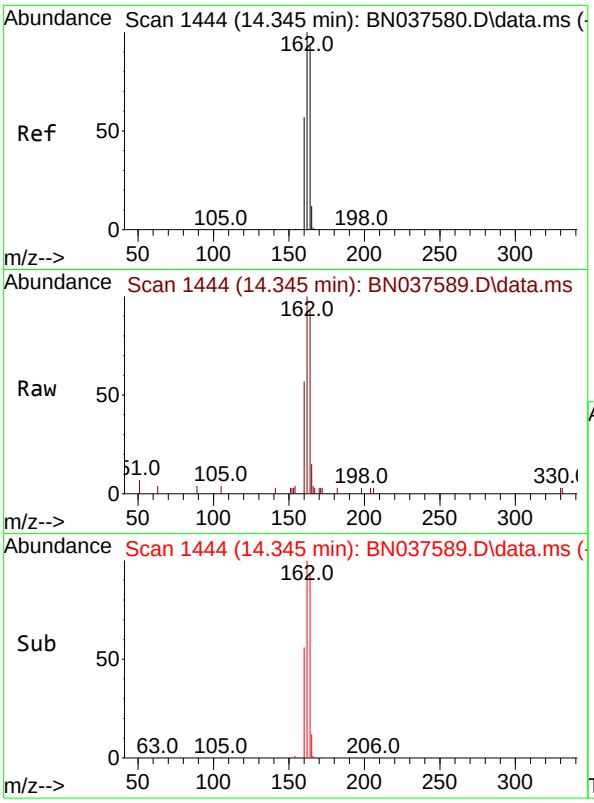


#11
2-Methylnaphthalene-d10
Concen: 0.320 ng
RT: 12.091 min Scan# 1138
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:152 Resp: 2324

Ion	Ratio	Lower	Upper
152	100		
151	21.9	17.3	25.9



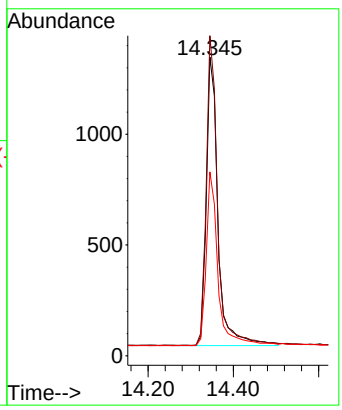


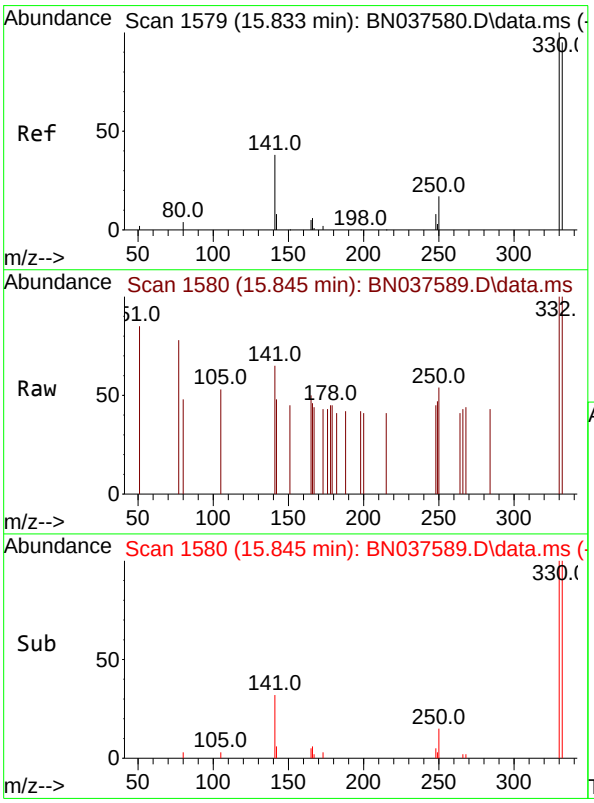
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion:164 Resp: 2468

Ion	Ratio	Lower	Upper
164	100		
162	107.1	85.5	128.3
160	61.5	49.5	74.3

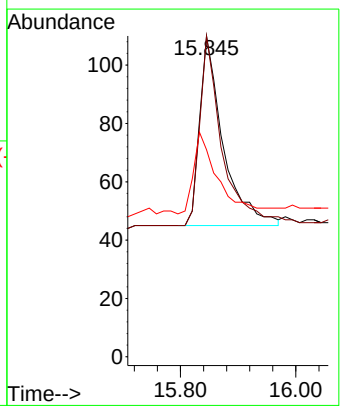


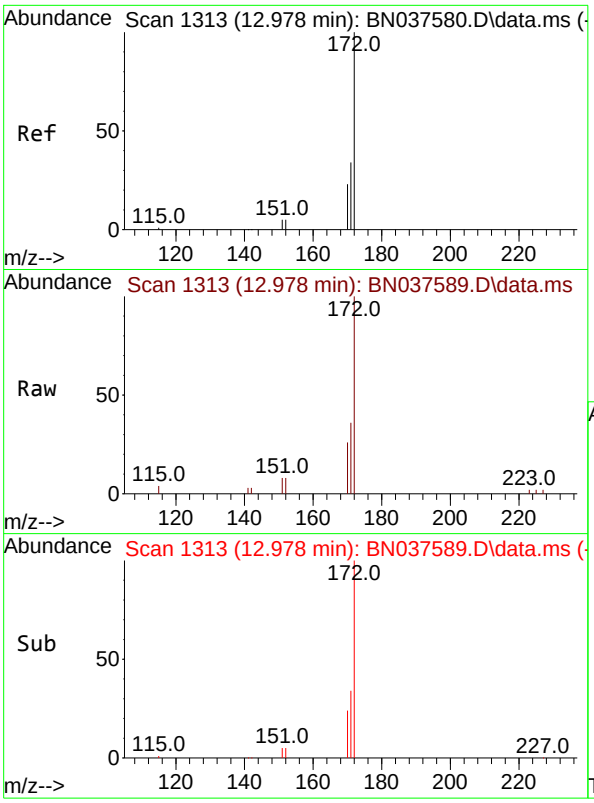


#14
2,4,6-Tribromophenol
Concen: 0.170 ng
RT: 15.845 min Scan# 1580
Delta R.T. 0.013 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:330 Resp: 184

Ion	Ratio	Lower	Upper
330	100		
332	96.2	77.4	116.0
141	44.0	30.9	46.3



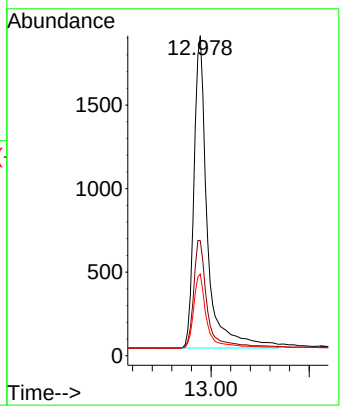


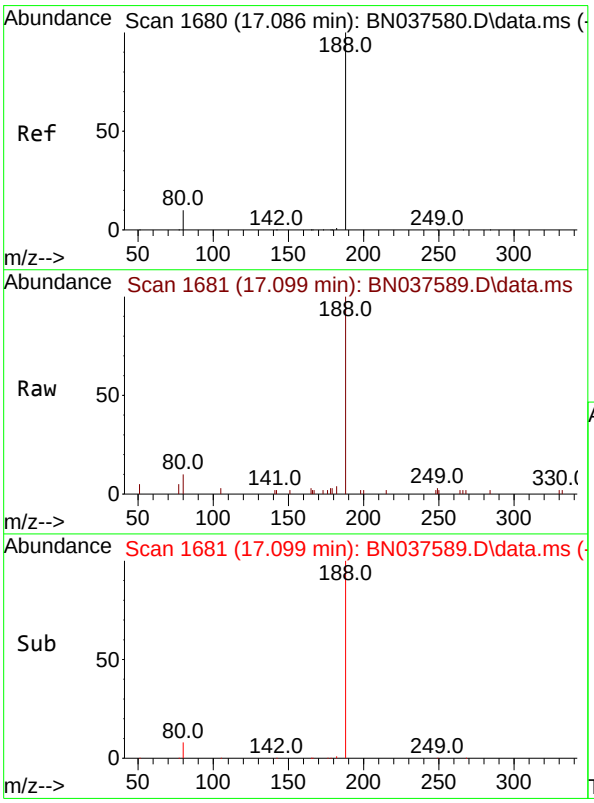
#15
2-Fluorobiphenyl
Concen: 0.345 ng
RT: 12.978 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion:172 Resp: 4926

Ion	Ratio	Lower	Upper
172	100		
171	35.9	28.2	42.4
170	25.5	19.2	28.8

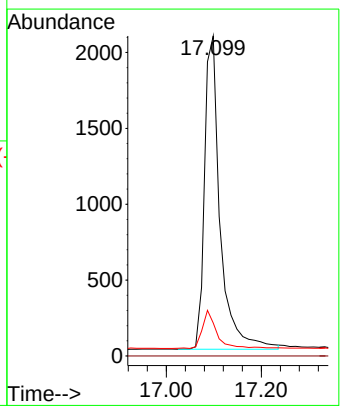


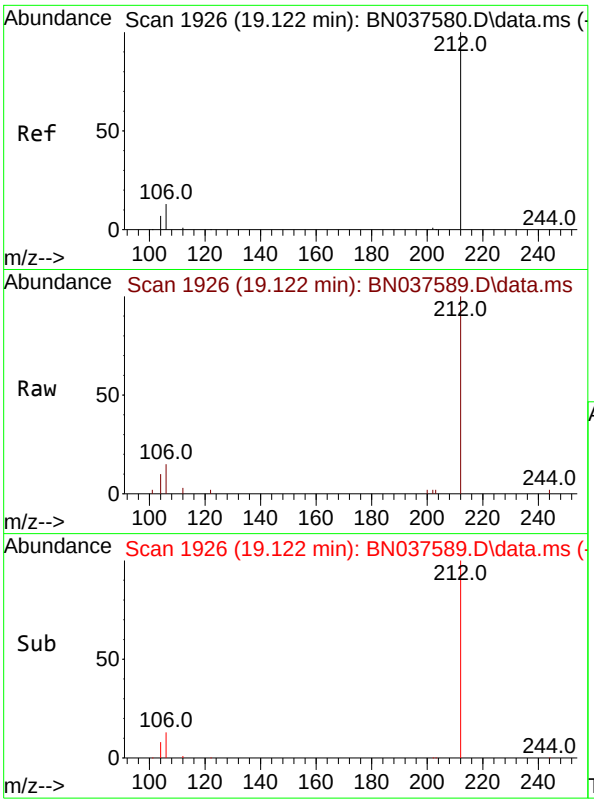


#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.099 min Scan# 1681
Delta R.T. 0.013 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:188 Resp: 4726

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.3	9.1	13.7



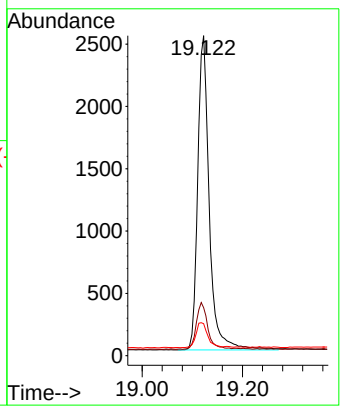


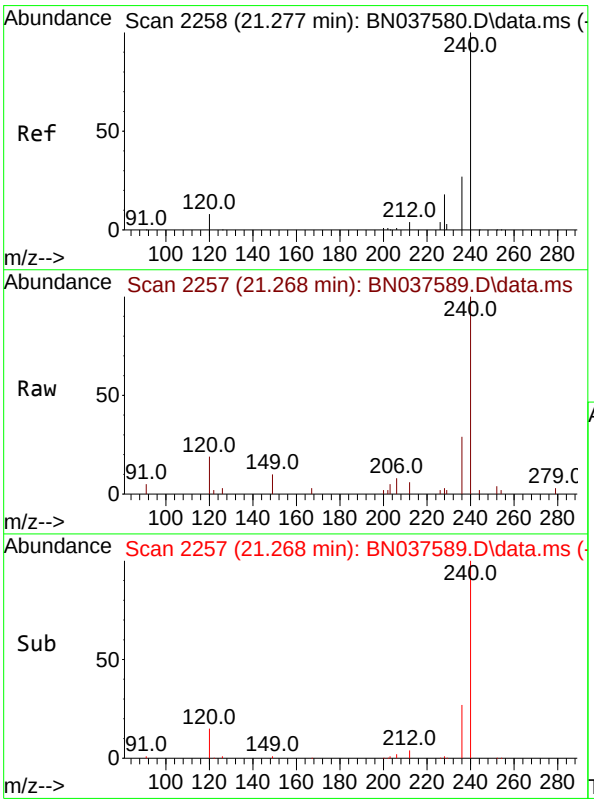
#27
Fluoranthene-d10
Concen: 0.323 ng
RT: 19.122 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion:212 Resp: 4019

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.5	17.3
104	8.1	6.6	9.8

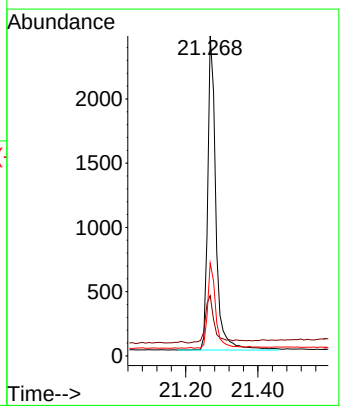


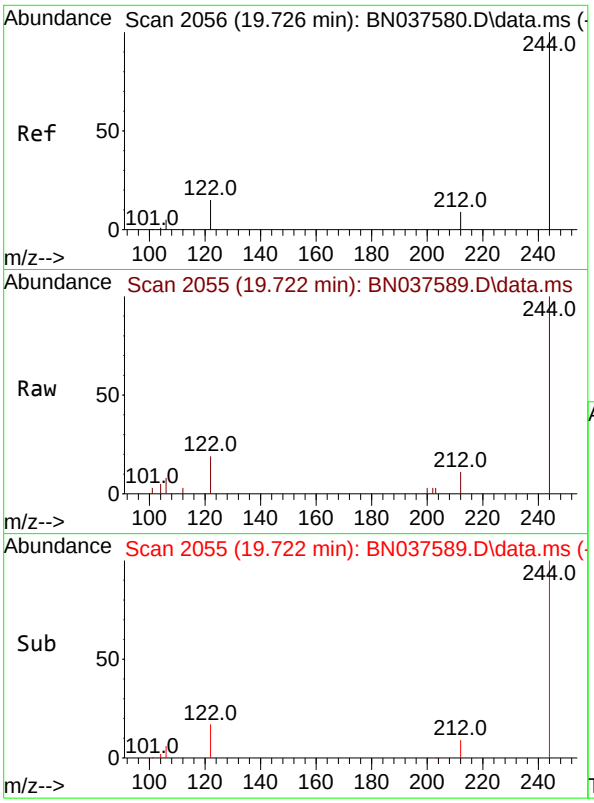


#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.268 min Scan# 2257
Delta R.T. -0.009 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:240 Resp: 3815

Ion	Ratio	Lower	Upper
240	100		
120	18.8	8.9	13.3#
236	29.0	22.6	33.8



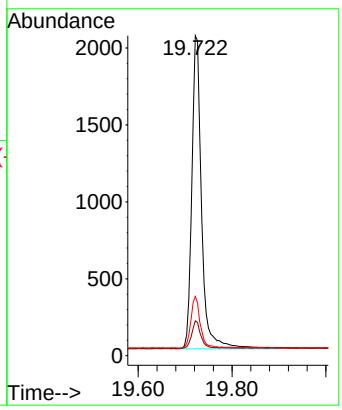


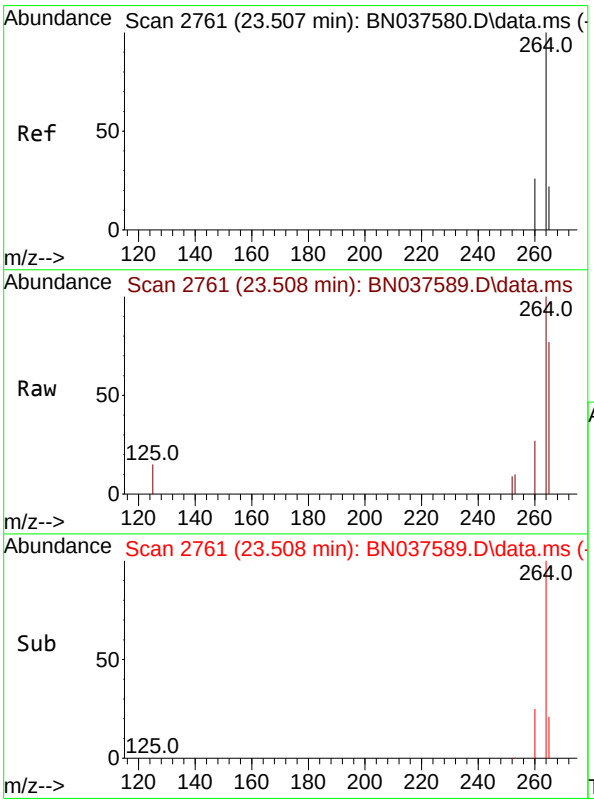
#31
Terphenyl-d14
Concen: 0.376 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Instrument :
BNA_N
ClientSampleId :
PB169222BL

Tgt Ion:244 Resp: 2955

Ion	Ratio	Lower	Upper
244	100		
212	10.9	8.2	12.2
122	18.5	13.2	19.8

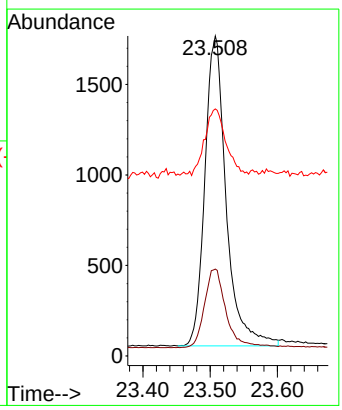




#35
Perylene-d12
Concen: 0.400 ng
RT: 23.508 min Scan# 2761
Delta R.T. 0.000 min
Lab File: BN037589.D
Acq: 13 Aug 2025 11:05

Tgt Ion:264 Resp: 3770

Ion	Ratio	Lower	Upper
264	100		
260	27.1	21.6	32.4
265	77.2	48.2	72.4#



Raw Data: **BN037596.D**

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB169222BS	SDG No.:	Q2806
Lab Sample ID:	PB169222BS	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup : N	PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037596.D	1	08/12/25 08:52	08/13/25 15:22	PB169222

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.27		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.34		30 - 150		84%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.30		30 - 150		75%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.34		55 - 111		84%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.36		53 - 106		89%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.37		58 - 132		93%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	3070	7.717				
1146-65-2	Naphthalene-d8	7590	10.498				
15067-26-2	Acenaphthene-d10	3530	14.345				
1517-22-2	Phenanthrene-d10	6430	17.086				
1719-03-5	Chrysene-d12	4870	21.277				
1520-96-3	Perylene-d12	4190	23.51				

U = Not Detected
LOQ = Limit of Quantitation
MDL = Method Detection Limit
LOD = Limit of Detection
E = Value Exceeds Calibration Range
Q = indicates LCS control criteria did not meet requirements
M = MS/MSD acceptance criteria did not meet requirements

J = Estimated Value
B = Analyte Found in Associated Method Blank
N = Presumptive Evidence of a Compound
* = Values outside of QC limits
D = Dilution
() = Laboratory InHouse Limit
A = Aldol-Condensation Reaction Products

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037596.D
Acq On : 13 Aug 2025 15:22
Operator : RC/JU
Sample : PB169222BS
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Quant Time: Aug 13 15:43:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

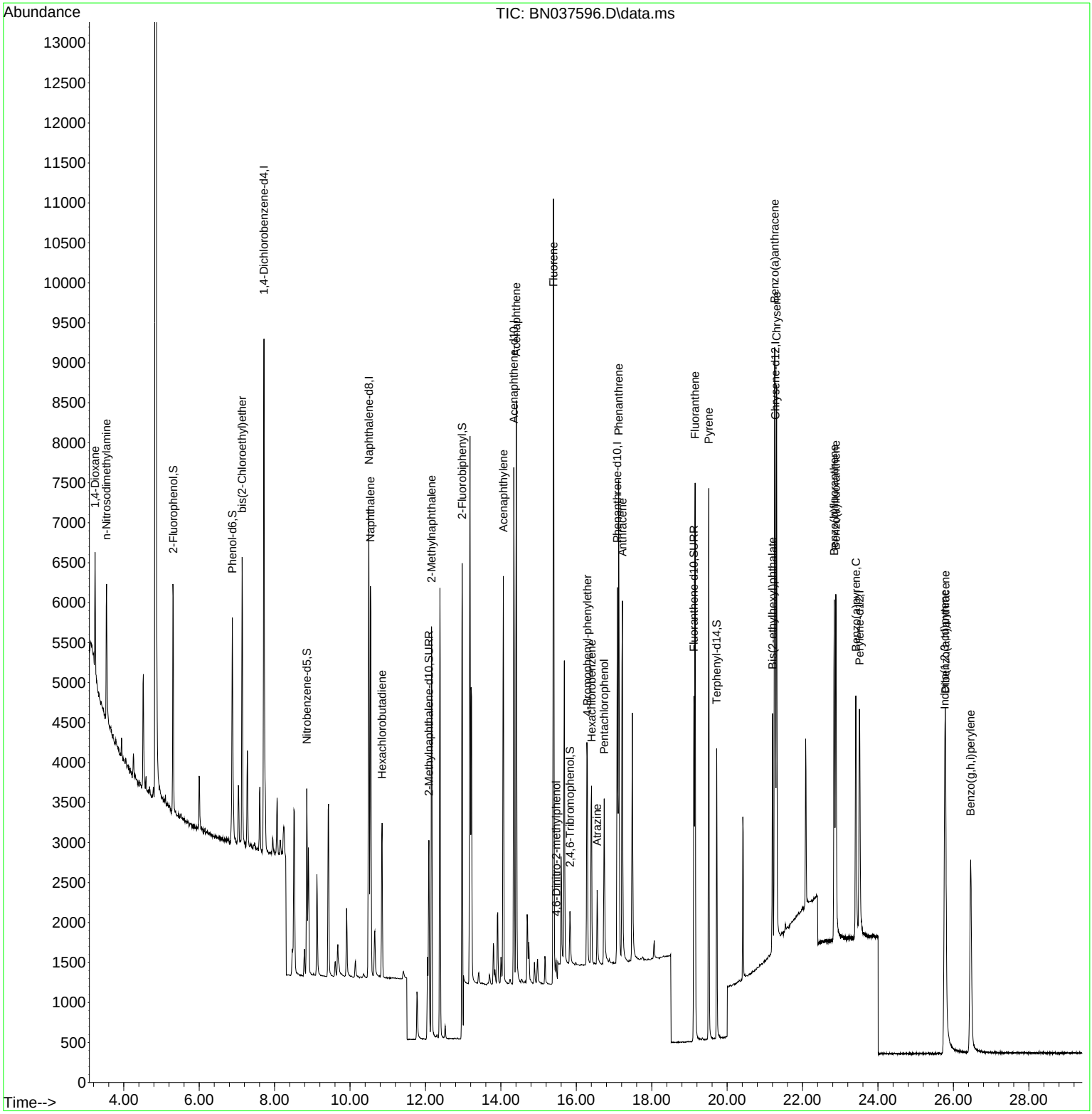
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.717	152	3068	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	7591	0.400	ng	0.00
13) Acenaphthene-d10	14.345	164	3534	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	6432	0.400	ng	0.00
29) Chrysene-d12	21.277	240	4873	0.400	ng	0.00
35) Perylene-d12	23.510	264	4192	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	2293	0.330	ng	0.00
5) Phenol-d6	6.879	99	2590	0.309	ng	0.00
8) Nitrobenzene-d5	8.854	82	1791	0.335	ng	0.00
11) 2-Methylnaphthalene-d10	12.090	152	3480	0.337	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	442	0.286	ng	0.00
15) 2-Fluorobiphenyl	12.973	172	7275	0.356	ng	0.00
27) Fluoranthene-d10	19.118	212	5070	0.300	ng	0.00
31) Terphenyl-d14	19.722	244	3723	0.371	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	802	0.273	ng	# 76
3) n-Nitrosodimethylamine	3.543	42	1116	0.298	ng	# 85
6) bis(2-Chloroethyl)ether	7.139	93	2600	0.345	ng	98
9) Naphthalene	10.541	128	6736	0.333	ng	100
10) Hexachlorobutadiene	10.850	225	1635	0.331	ng	# 100
12) 2-Methylnaphthalene	12.161	142	3749	0.296	ng	98
16) Acenaphthylene	14.067	152	5698	0.360	ng	99
17) Acenaphthene	14.409	154	3471	0.322	ng	99
18) Fluorene	15.392	166	4368	0.310	ng	100
20) 4,6-Dinitro-2-methylph...	15.467	198	231	0.378	ng	90
21) 4-Bromophenyl-phenylether	16.292	248	1337	0.331	ng	93
22) Hexachlorobenzene	16.404	284	2000	0.349	ng	99
23) Atrazine	16.553	200	807	0.353	ng	98
24) Pentachlorophenol	16.739	266	1130	0.561	ng	98
25) Phenanthrene	17.124	178	6473	0.331	ng	99
26) Anthracene	17.223	178	5692	0.329	ng	99
28) Fluoranthene	19.150	202	6474	0.288	ng	99
30) Pyrene	19.513	202	6217	0.341	ng	100
32) Benzo(a)anthracene	21.259	228	5547	0.341	ng	99
33) Chrysene	21.313	228	6161	0.340	ng	99
34) Bis(2-ethylhexyl)phtha...	21.205	149	2008	0.299	ng	96
36) Indeno(1,2,3-cd)pyrene	25.770	276	5987	0.339	ng	100
37) Benzo(b)fluoranthene	22.841	252	5458	0.344	ng	97
38) Benzo(k)fluoranthene	22.882	252	5754	0.321	ng	99
39) Benzo(a)pyrene	23.414	252	4770	0.362	ng	97
40) Dibenzo(a,h)anthracene	25.791	278	4628	0.338	ng	100
41) Benzo(g,h,i)perylene	26.457	276	5279	0.366	ng	99

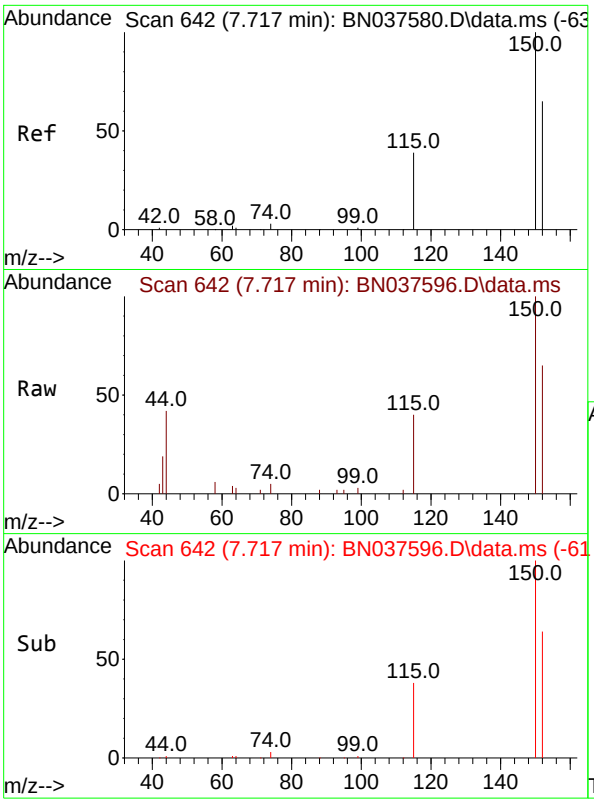
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037596.D
Acq On : 13 Aug 2025 15:22
Operator : RC/JU
Sample : PB169222BS
Misc :
ALS Vial : 10 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Quant Time: Aug 13 15:43:30 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



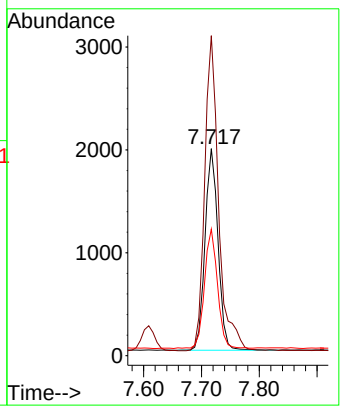


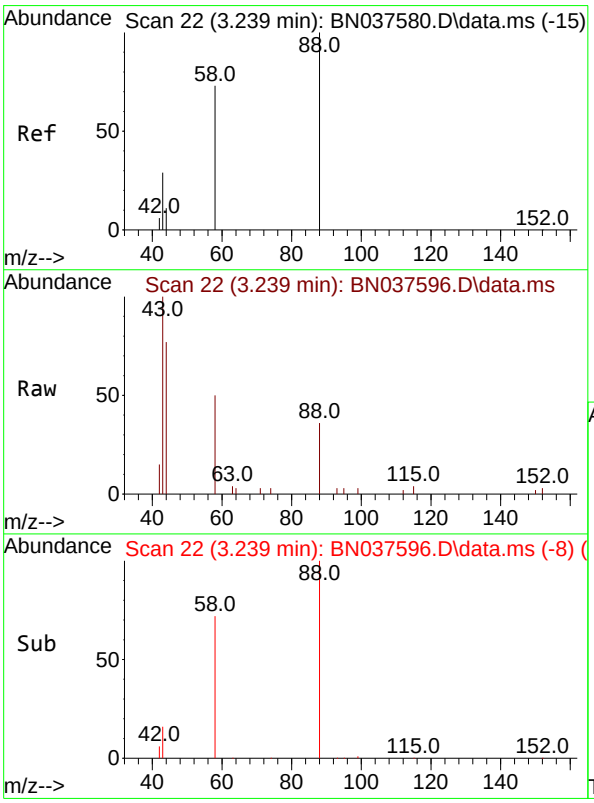
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:152 Resp: 3068

Ion	Ratio	Lower	Upper
152	100		
150	154.6	122.2	183.4
115	61.1	49.8	74.6

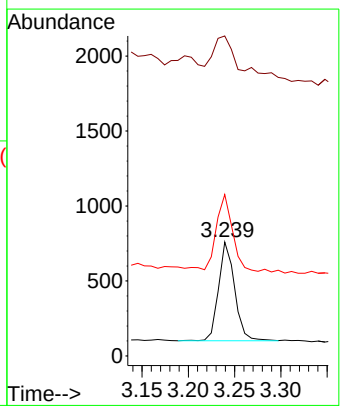


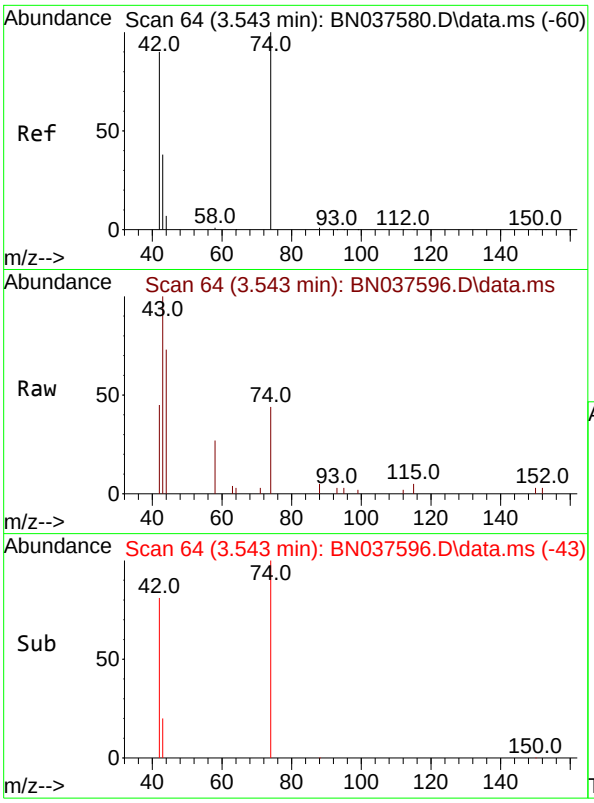


#2
1,4-Dioxane
Concen: 0.273 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion: 88 Resp: 802

Ion	Ratio	Lower	Upper
88	100		
43	76.8	25.8	38.6#
58	76.8	61.2	91.8



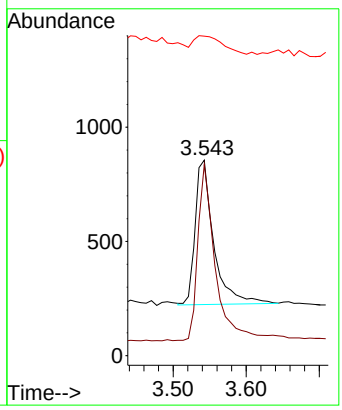


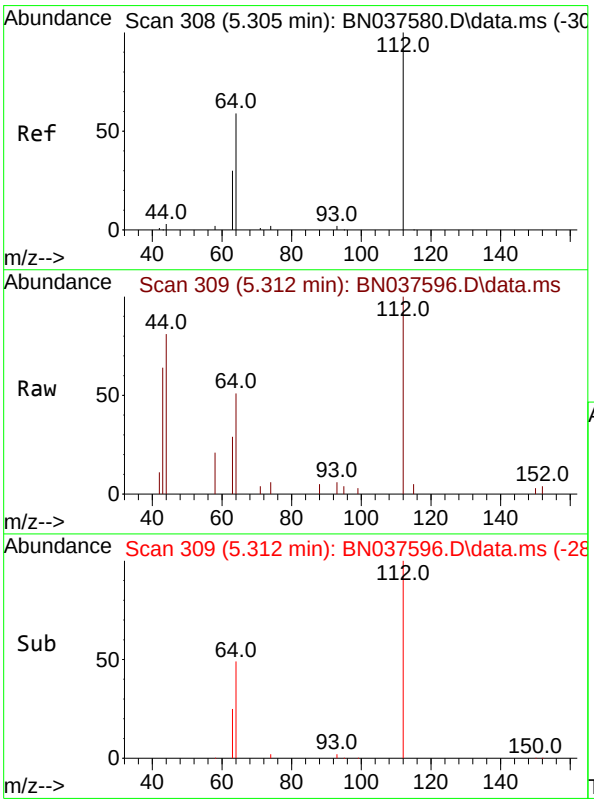
#3
n-Nitrosodimethylamine
Concen: 0.298 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion: 42 Resp: 1116

Ion	Ratio	Lower	Upper
42	100		
74	116.8	82.0	123.0
44	19.4	7.9	11.9#

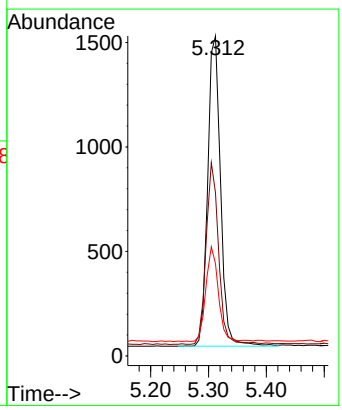


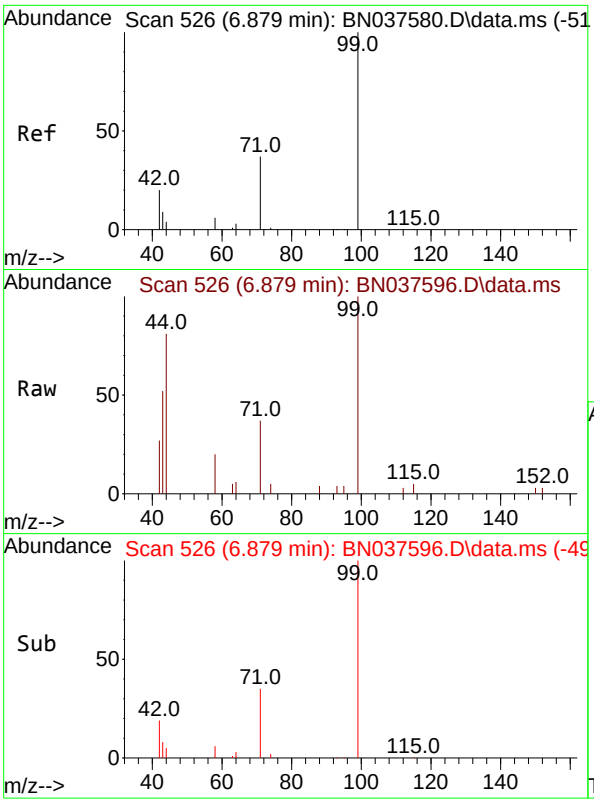


#4
2-Fluorophenol
Concen: 0.330 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.007 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:112 Resp: 2293

Ion	Ratio	Lower	Upper
112	100		
64	56.8	44.9	67.3
63	30.0	23.4	35.2



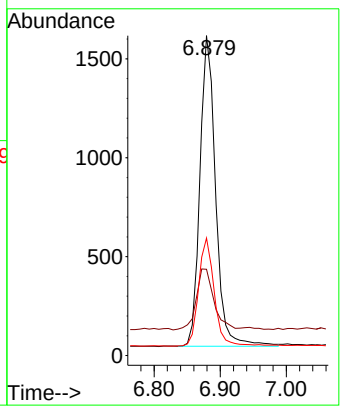


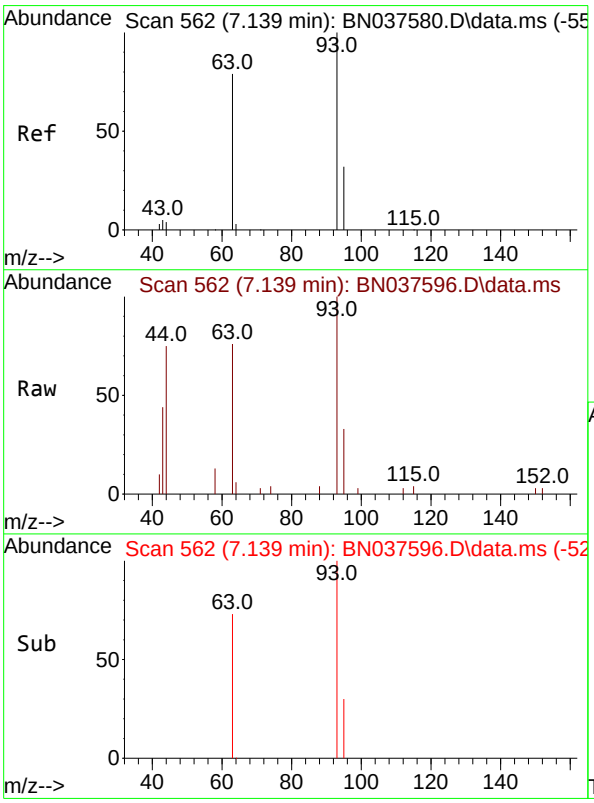
#5
Phenol-d6
Concen: 0.309 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion: 99 Resp: 2590

Ion	Ratio	Lower	Upper
99	100		
42	22.1	18.5	27.7
71	35.0	28.6	42.8

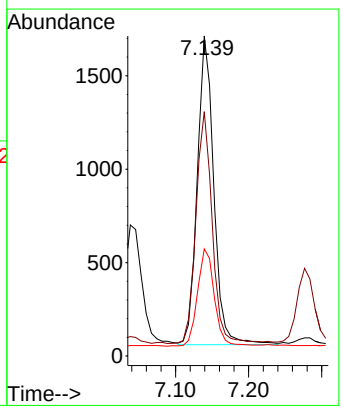


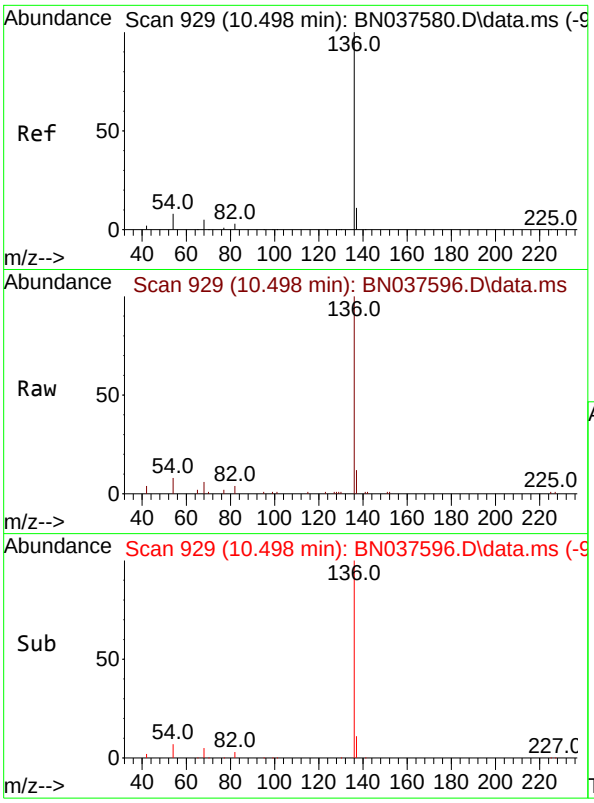


#6
bis(2-Chloroethyl)ether
Concen: 0.345 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion: 93 Resp: 2600

Ion	Ratio	Lower	Upper
93	100		
63	74.2	58.0	87.0
95	32.0	24.9	37.3



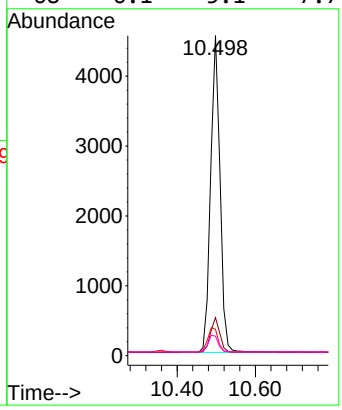


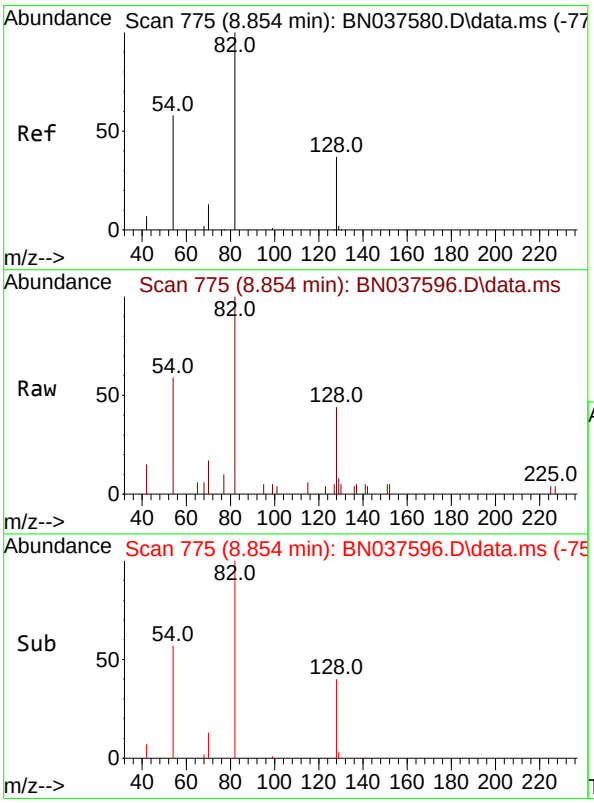
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:136 Resp: 7591

Ion	Ratio	Lower	Upper
136	100		
137	11.9	9.5	14.3
54	8.3	7.3	10.9
68	6.1	5.1	7.7

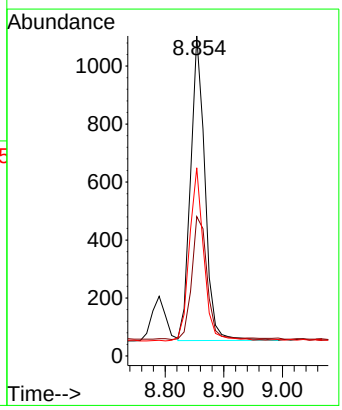


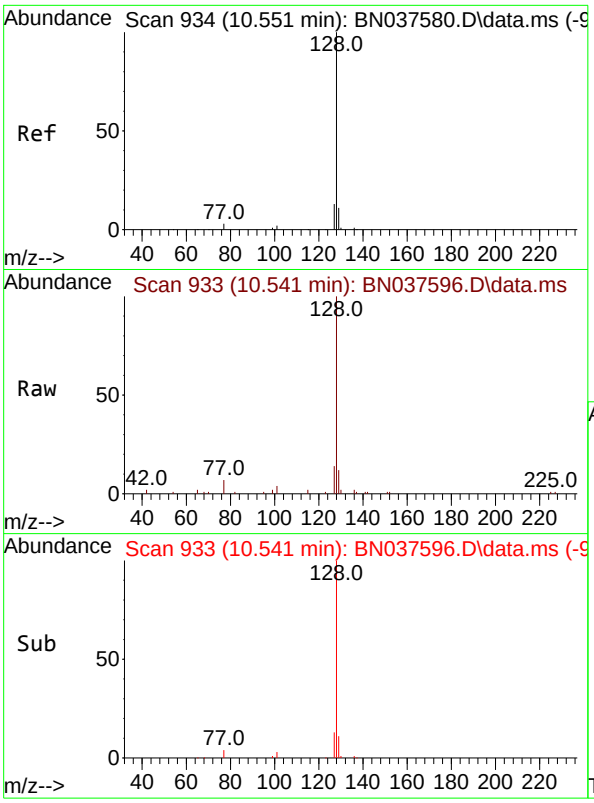


#8
Nitrobenzene-d5
Concen: 0.335 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion: 82 Resp: 1791

Ion	Ratio	Lower	Upper
82	100		
128	43.6	32.6	48.8
54	58.8	48.9	73.3



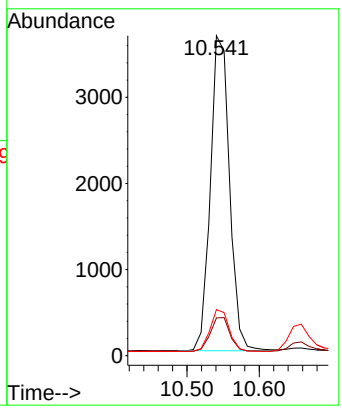


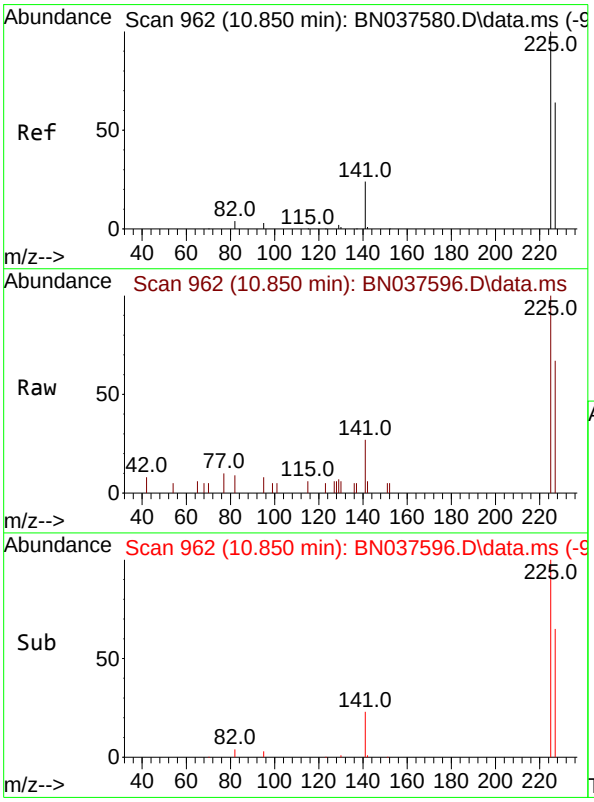
#9
Naphthalene
Concen: 0.333 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:128 Resp: 6736

Ion	Ratio	Lower	Upper
128	100		
129	11.8	9.8	14.6
127	14.4	11.5	17.3

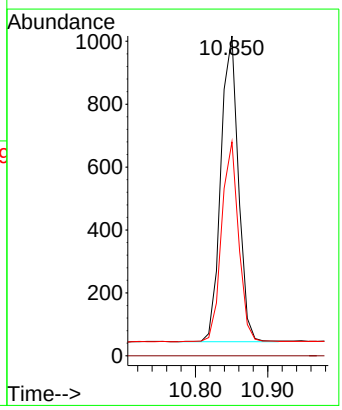


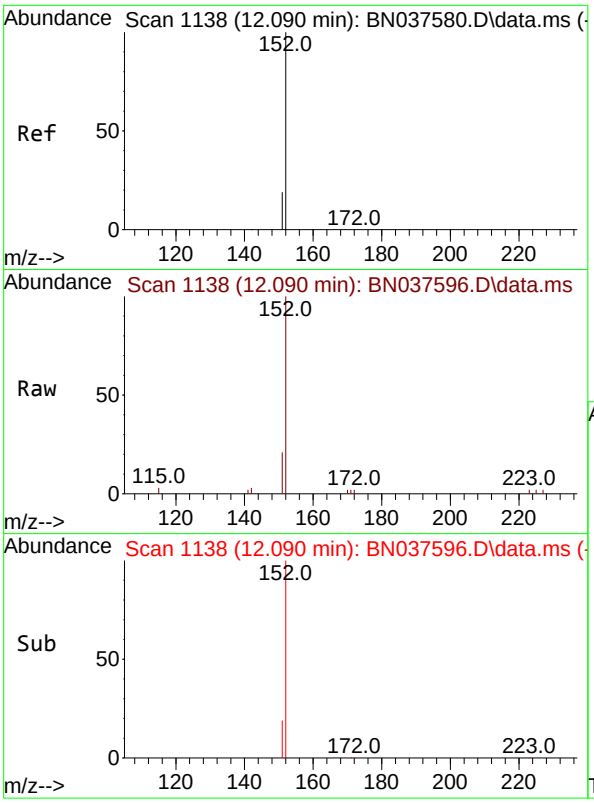


#10
Hexachlorobutadiene
Concen: 0.331 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:225 Resp: 1635

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	63.7	50.8	76.2



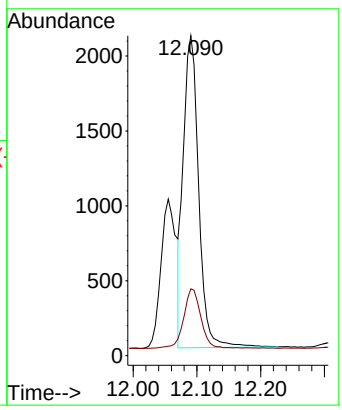


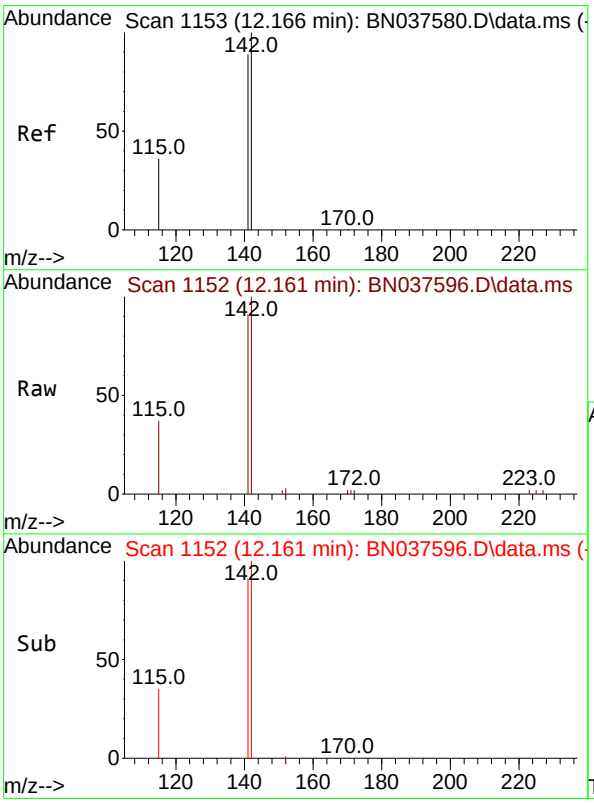
#11
2-Methylnaphthalene-d10
Concen: 0.337 ng
RT: 12.090 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:152 Resp: 3480

Ion	Ratio	Lower	Upper
152	100		
151	21.7	17.3	25.9

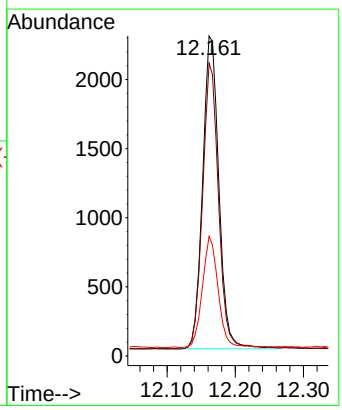


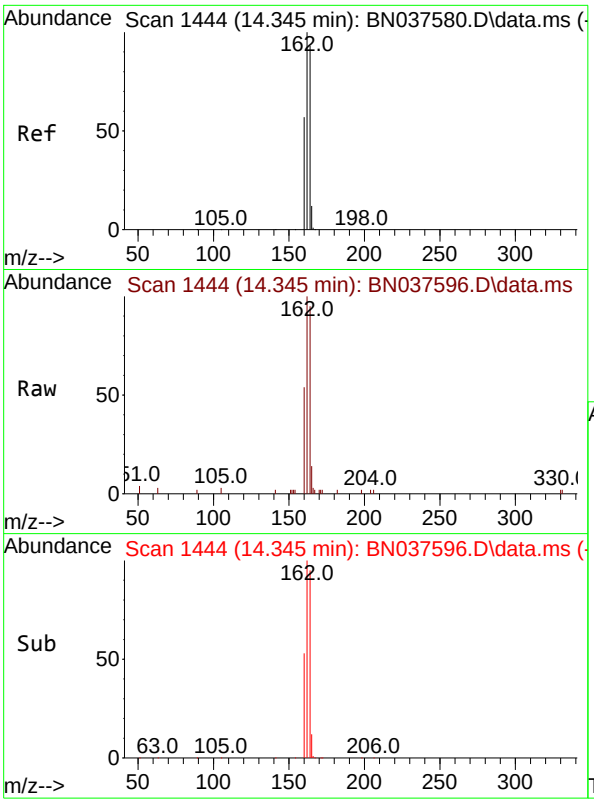


#12
2-Methylnaphthalene
Concen: 0.296 ng
RT: 12.161 min Scan# 1152
Delta R.T. -0.005 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:142 Resp: 3749

Ion	Ratio	Lower	Upper
142	100		
141	91.5	71.4	107.0
115	37.4	30.2	45.4



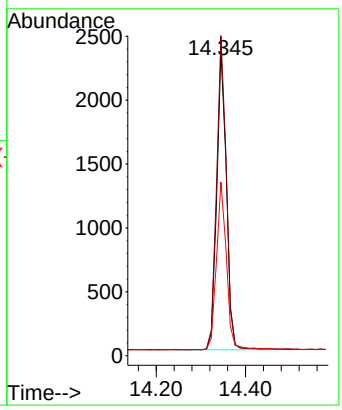


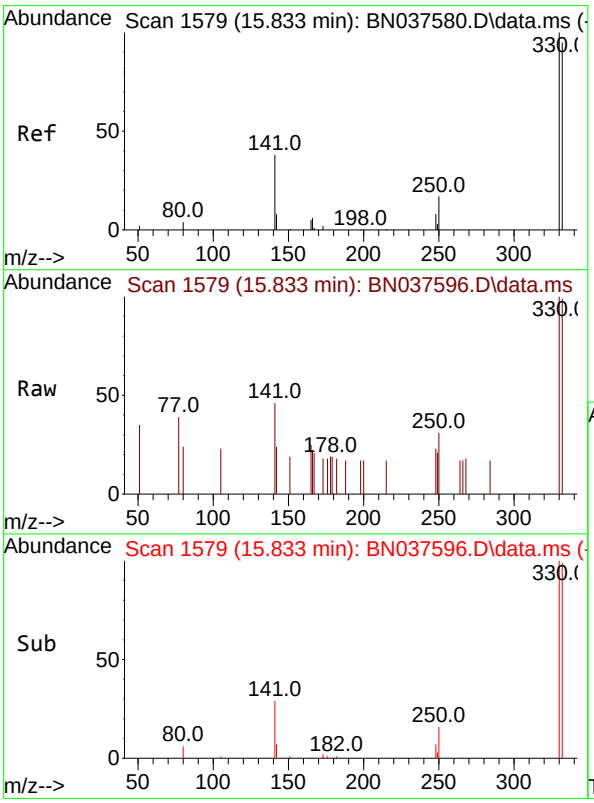
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:164 Resp: 3534

Ion	Ratio	Lower	Upper
164	100		
162	105.0	85.5	128.3
160	57.0	49.5	74.3

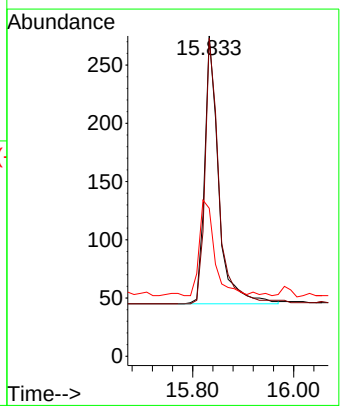


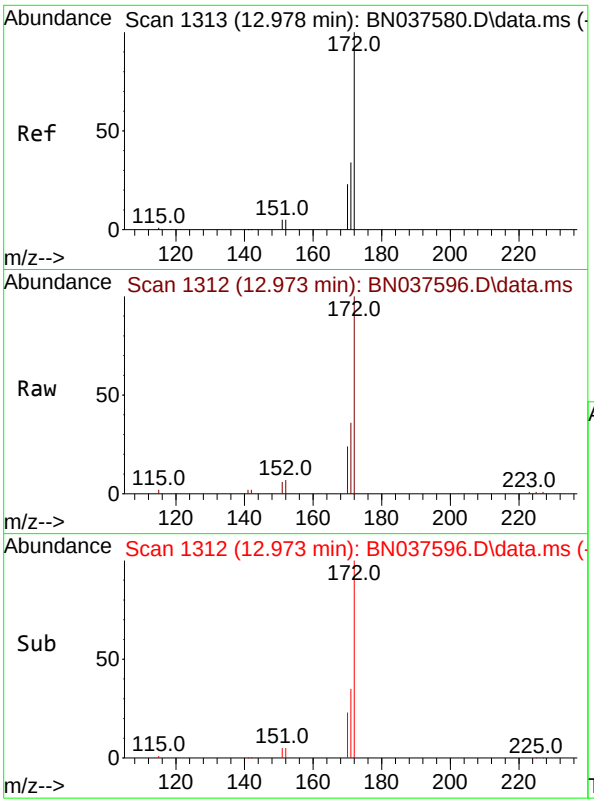


#14
2,4,6-Tribromophenol
Concen: 0.286 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:330 Resp: 442

Ion	Ratio	Lower	Upper
330	100		
332	97.3	77.4	116.0
141	38.7	30.9	46.3



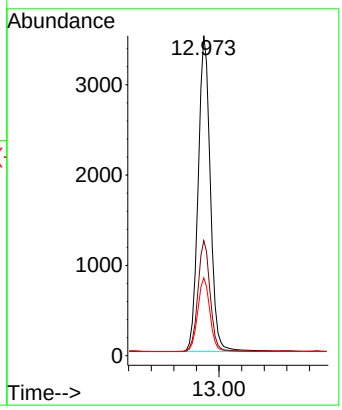


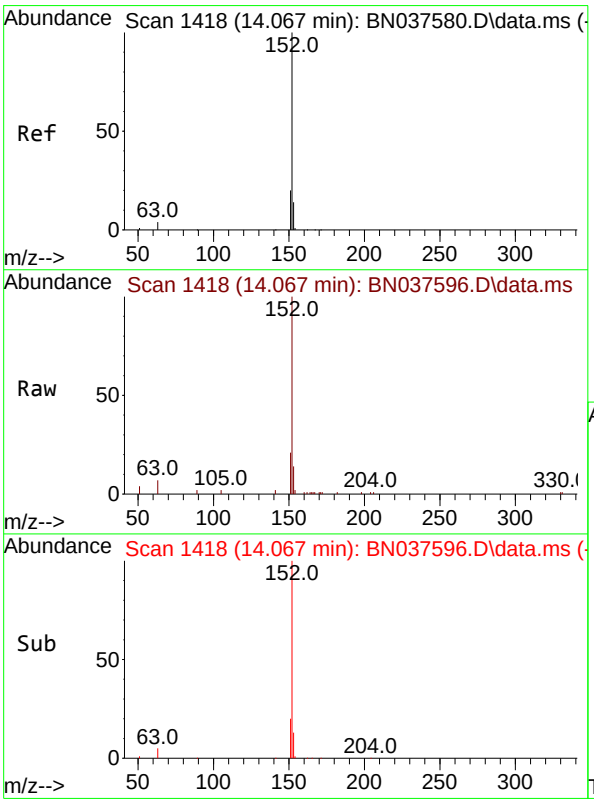
#15
2-Fluorobiphenyl
Concen: 0.356 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:172 Resp: 7275

Ion	Ratio	Lower	Upper
172	100		
171	36.0	28.2	42.4
170	24.3	19.2	28.8

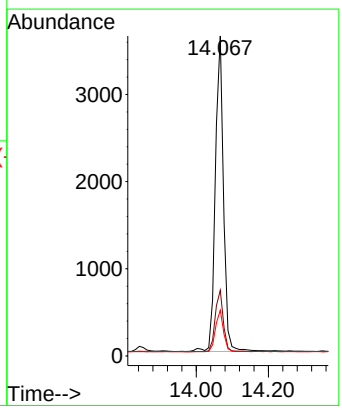


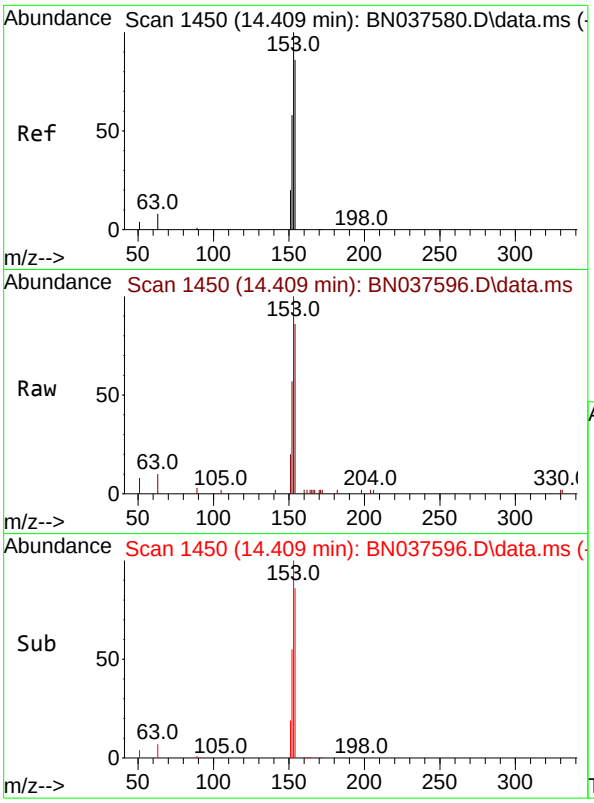


#16
Acenaphthylene
Concen: 0.360 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:152 Resp: 5698

Ion	Ratio	Lower	Upper
152	100		
151	19.6	16.1	24.1
153	13.1	10.7	16.1



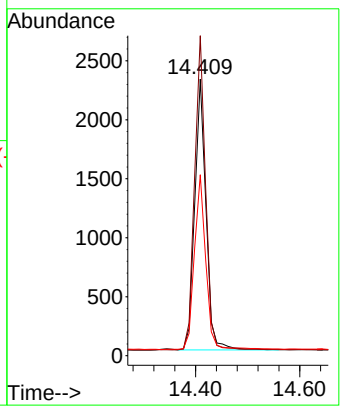


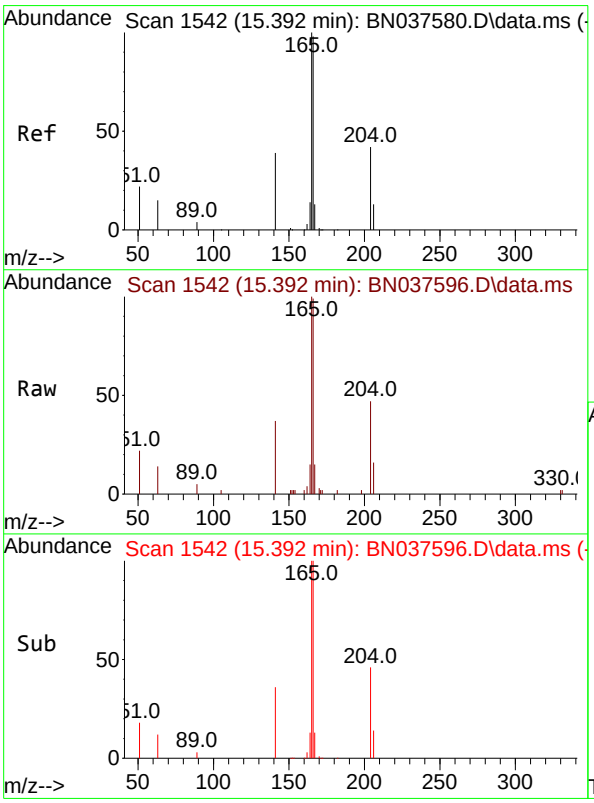
#17
Acenaphthene
Concen: 0.322 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:154 Resp: 3471

Ion	Ratio	Lower	Upper
154	100		
153	113.0	90.6	135.8
152	65.8	54.9	82.3

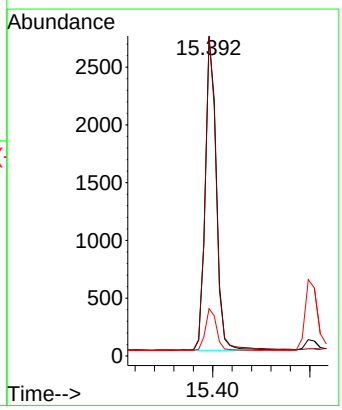


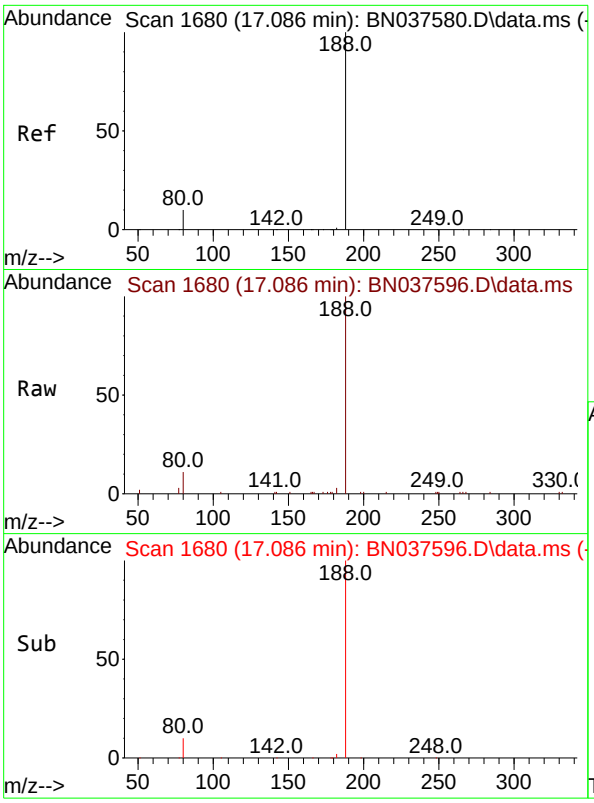


#18
Fluorene
Concen: 0.310 ng
RT: 15.392 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:166 Resp: 4368

Ion	Ratio	Lower	Upper
166	100		
165	98.9	78.9	118.3
167	13.0	10.7	16.1



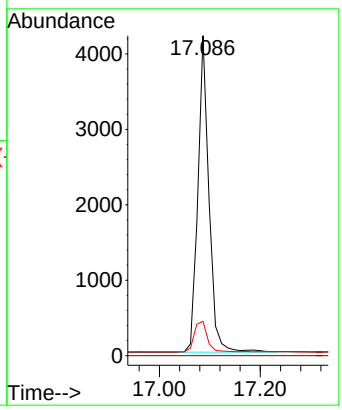


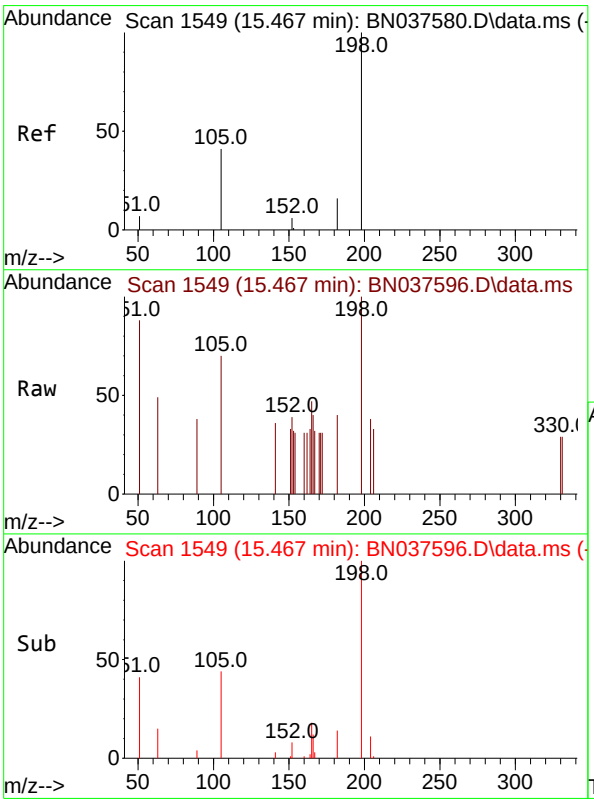
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:188 Resp: 6432

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	10.7	9.1	13.7

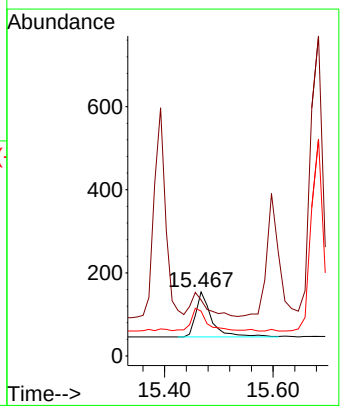


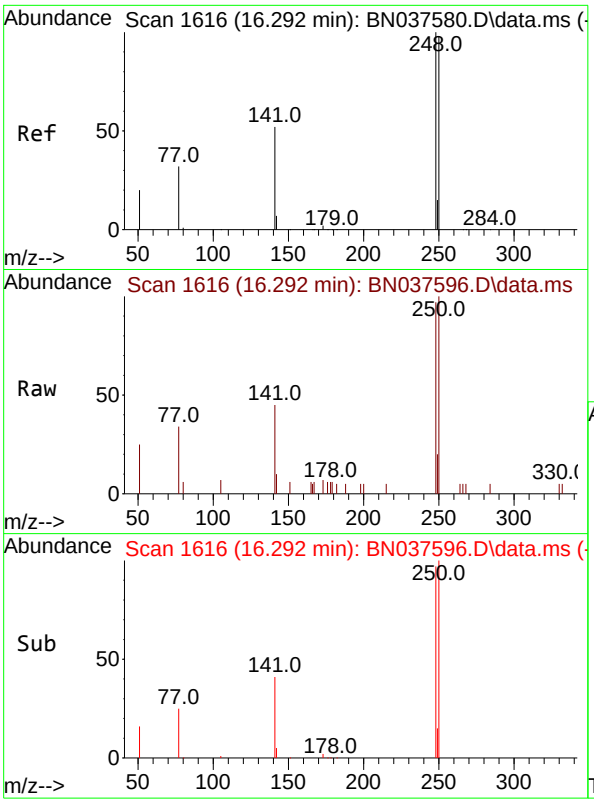


#20
4,6-Dinitro-2-methylphenol
Concen: 0.378 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:198 Resp: 231

Ion	Ratio	Lower	Upper
198	100		
51	87.7	81.0	121.6
105	70.1	52.5	78.7



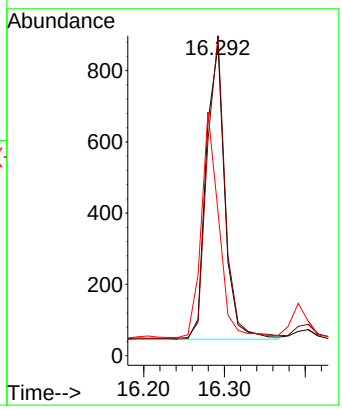


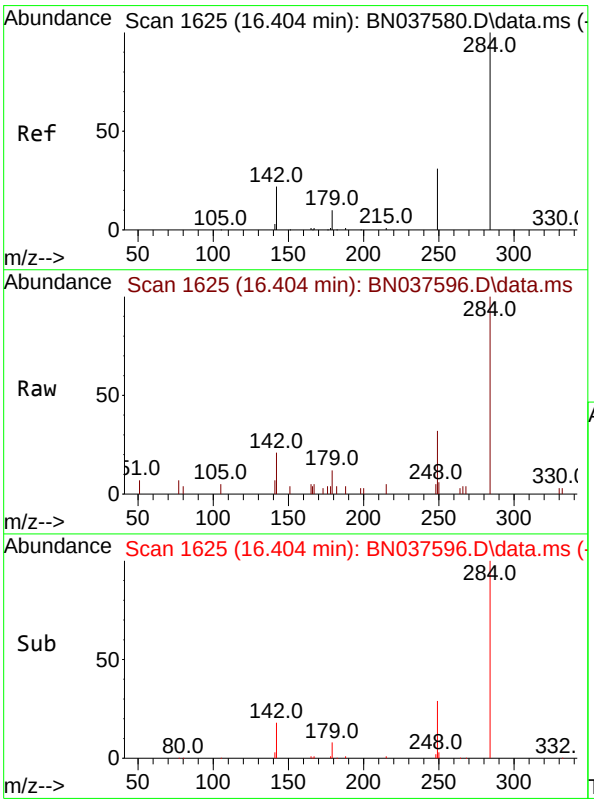
#21
4-Bromophenyl-phenylether
Concen: 0.331 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:248 Resp: 1337

Ion	Ratio	Lower	Upper
248	100		
250	103.1	78.6	118.0
141	46.3	43.7	65.5

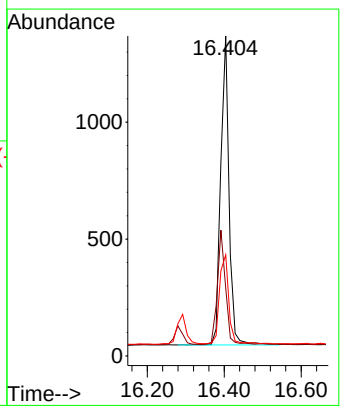


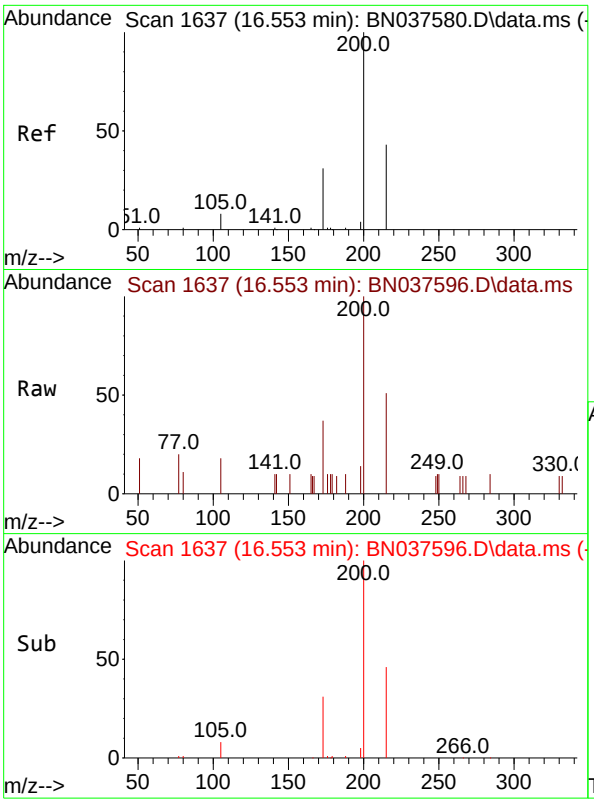


#22
Hexachlorobenzene
Concen: 0.349 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:284 Resp: 2000

Ion	Ratio	Lower	Upper
284	100		
142	36.1	29.8	44.6
249	32.3	26.0	39.0



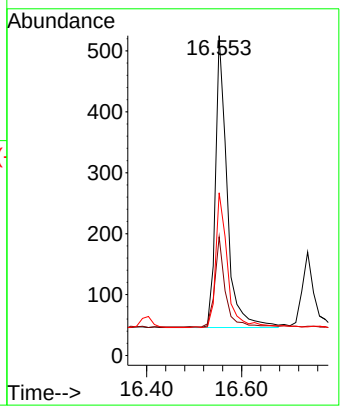


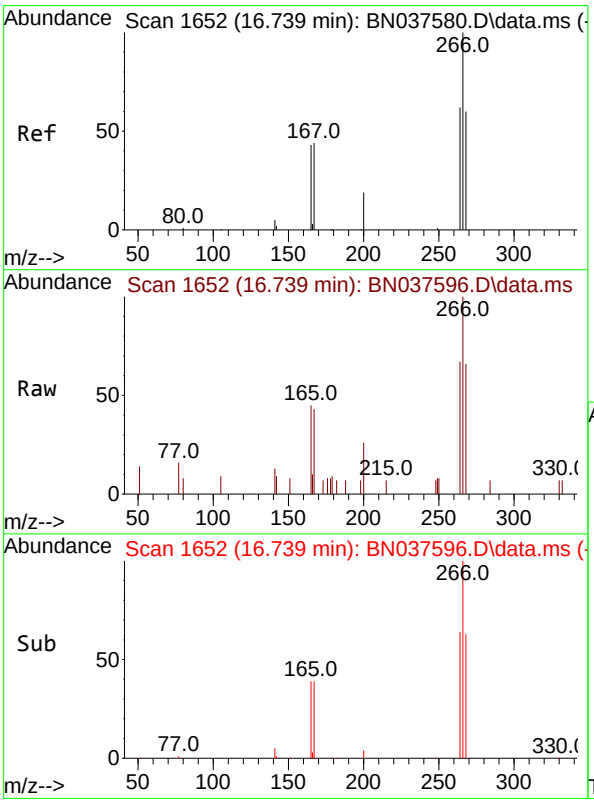
#23
Atrazine
Concen: 0.353 ng
RT: 16.553 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:200 Resp: 807

Ion	Ratio	Lower	Upper
200	100		
173	37.1	31.0	46.4
215	50.9	39.4	59.0

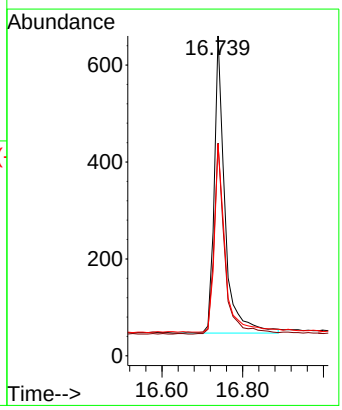


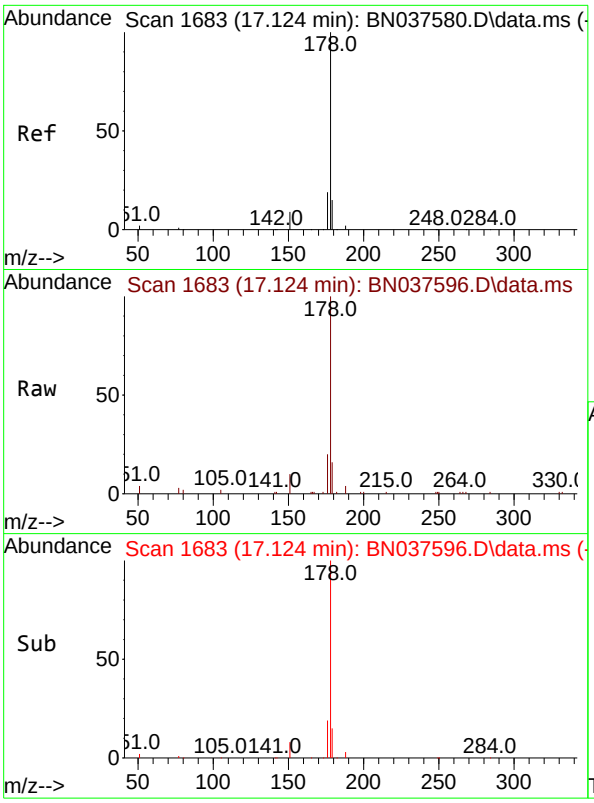


#24
Pentachlorophenol
Concen: 0.561 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:266 Resp: 1130

Ion	Ratio	Lower	Upper
266	100		
264	63.7	49.6	74.4
268	62.9	49.2	73.8



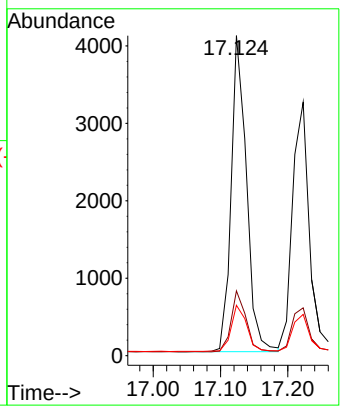


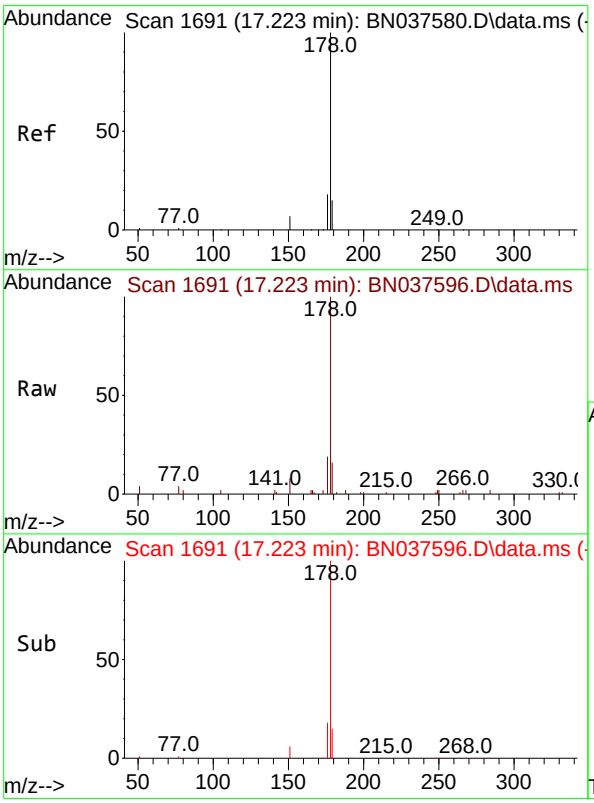
#25
Phenanthrene
Concen: 0.331 ng
RT: 17.124 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:178 Resp: 6473

Ion	Ratio	Lower	Upper
178	100		
176	18.8	15.0	22.6
179	14.9	12.3	18.5

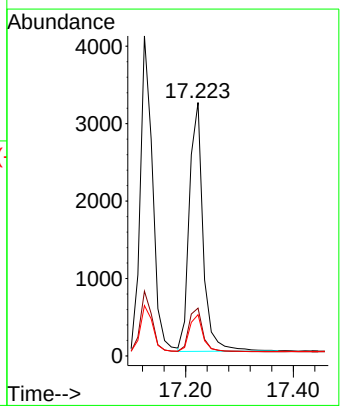


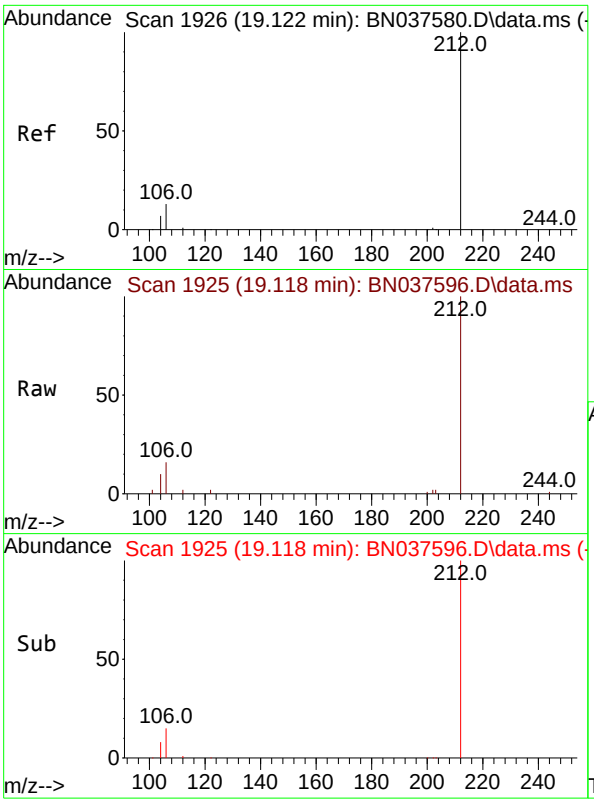


#26
Anthracene
Concen: 0.329 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:178 Resp: 5692

Ion	Ratio	Lower	Upper
178	100		
176	18.2	14.7	22.1
179	14.8	12.3	18.5



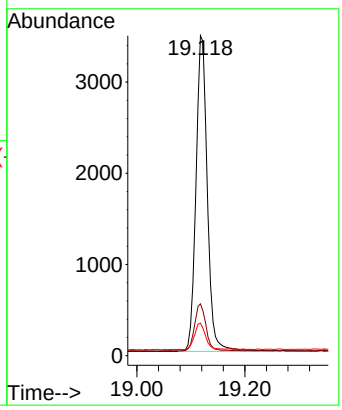


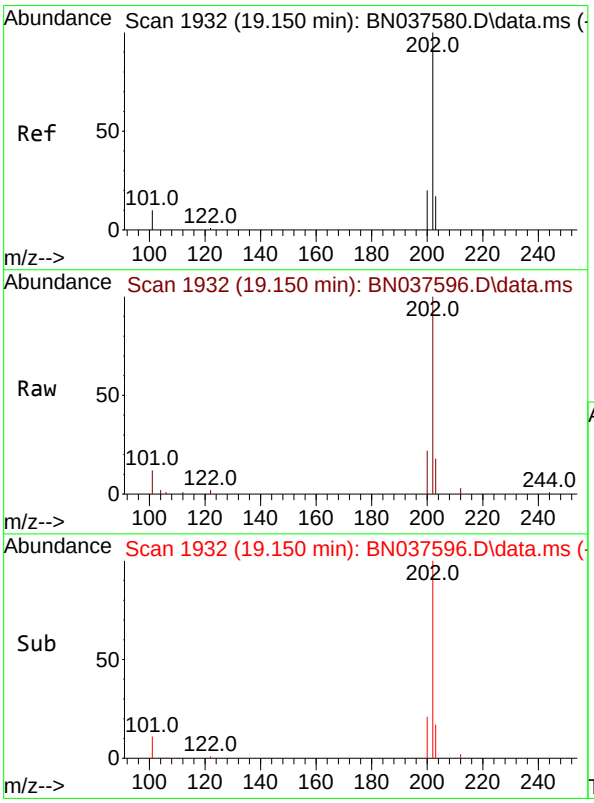
#27
Fluoranthene-d10
Concen: 0.300 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:212 Resp: 5070

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.5	17.3
104	8.1	6.6	9.8

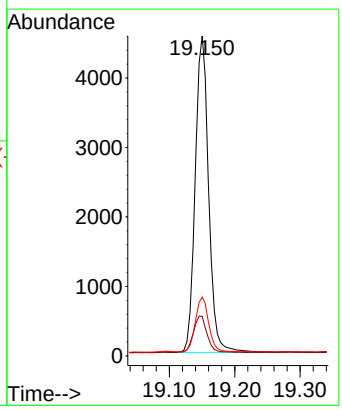


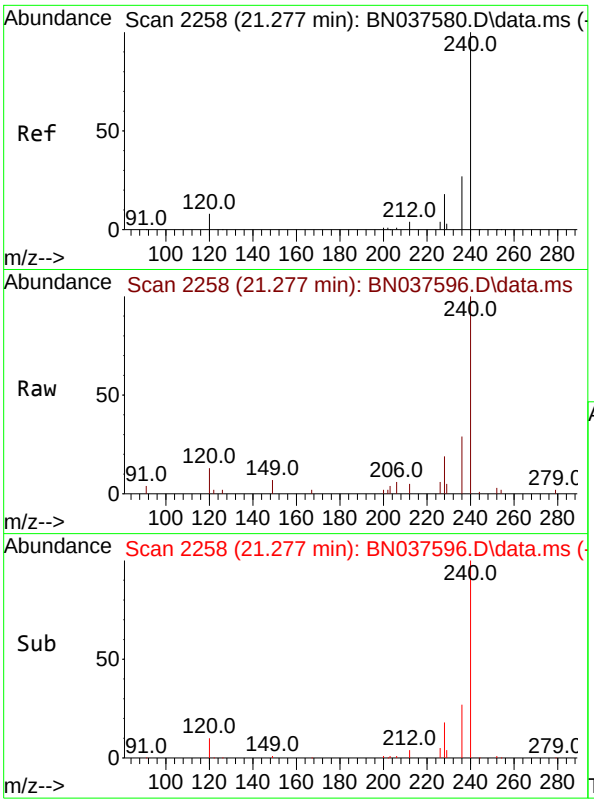


#28
Fluoranthene
Concen: 0.288 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:202 Resp: 6474

Ion	Ratio	Lower	Upper
202	100		
101	12.0	9.0	13.6
203	17.1	13.8	20.8



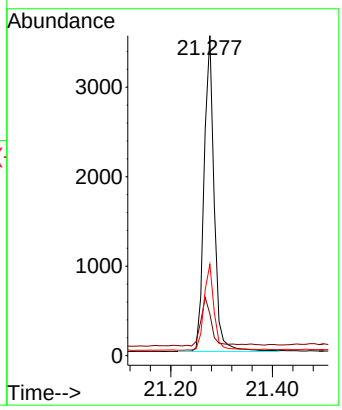


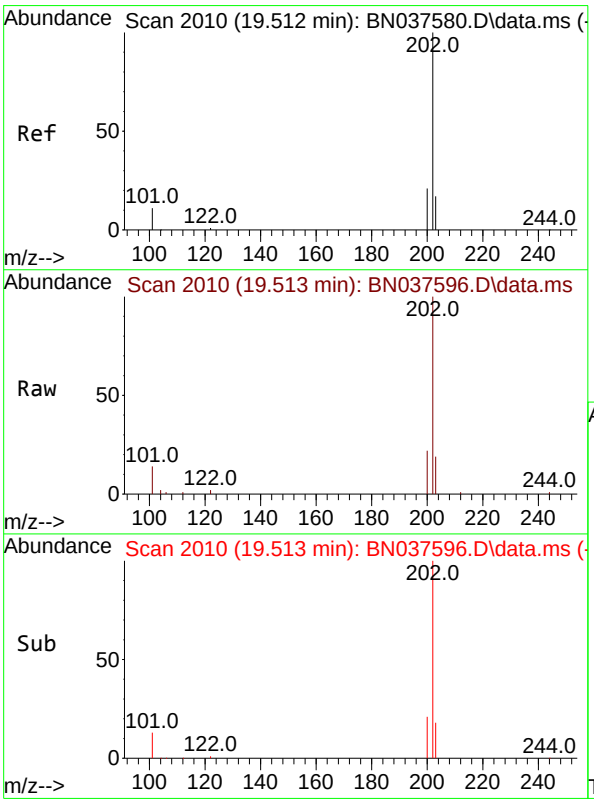
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:240 Resp: 4873

Ion	Ratio	Lower	Upper
240	100		
120	13.1	8.9	13.3
236	28.6	22.6	33.8

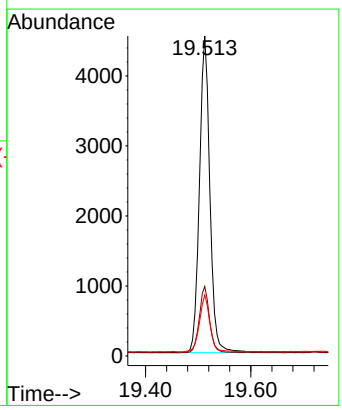


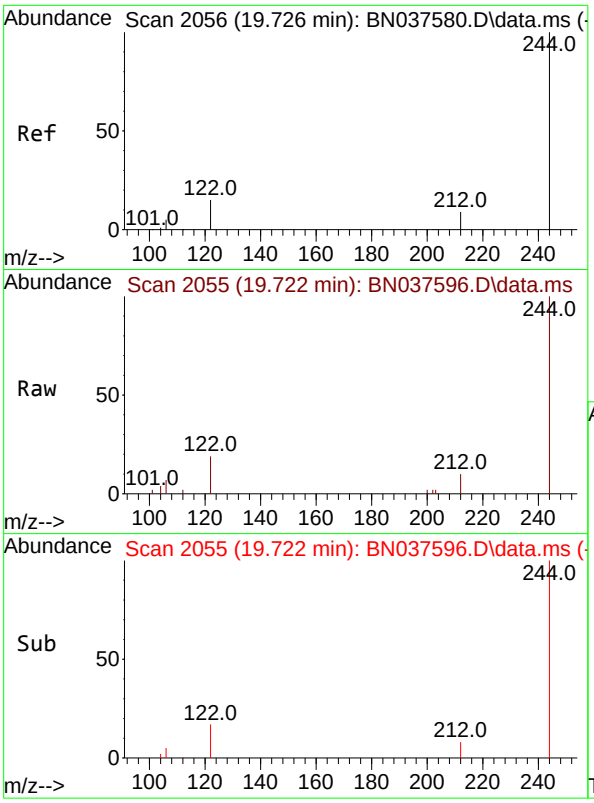


#30
Pyrene
Concen: 0.341 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:202 Resp: 6217

Ion	Ratio	Lower	Upper
202	100		
200	20.6	16.6	25.0
203	17.7	14.3	21.5



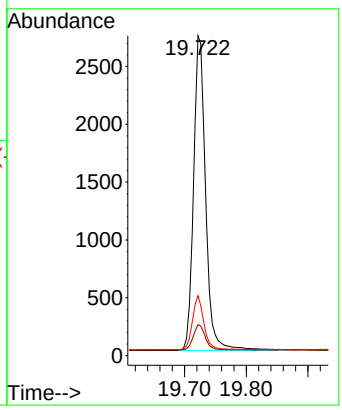


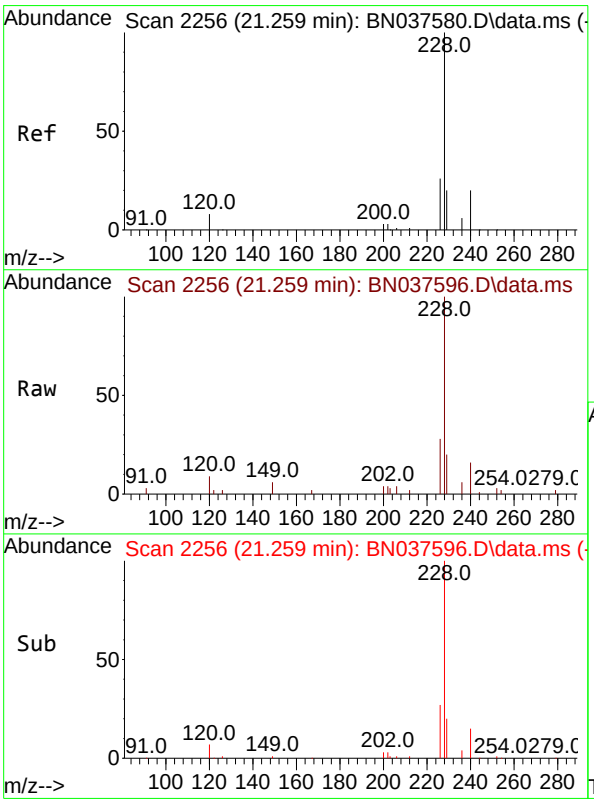
#31
Terphenyl-d14
Concen: 0.371 ng
RT: 19.722 min Scan# 2
Delta R.T. -0.005 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:244 Resp: 3723

Ion	Ratio	Lower	Upper
244	100		
212	9.7	8.2	12.2
122	18.7	13.2	19.8

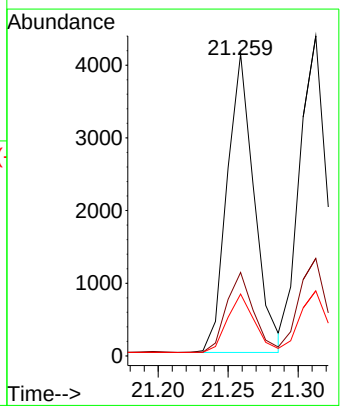


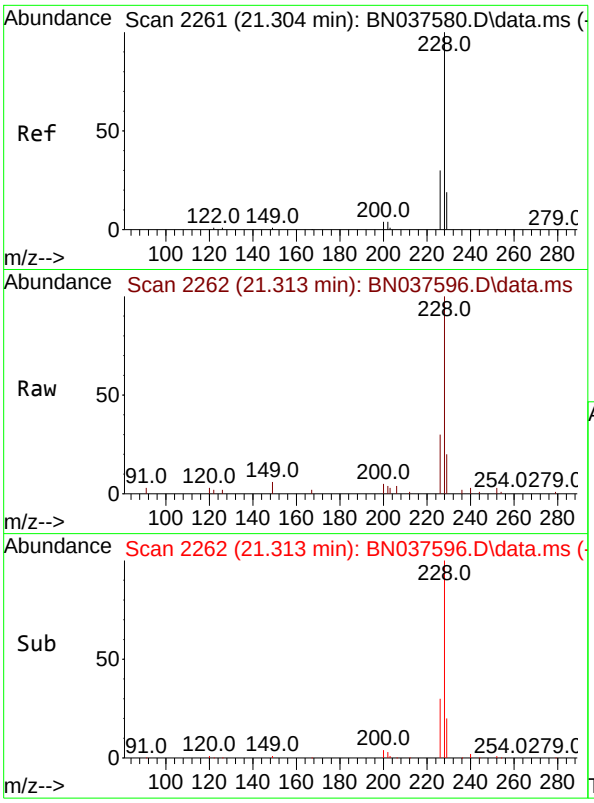


#32
Benzo(a)anthracene
Concen: 0.341 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:228 Resp: 5547

Ion	Ratio	Lower	Upper
228	100		
226	27.6	21.5	32.3
229	20.5	16.5	24.7



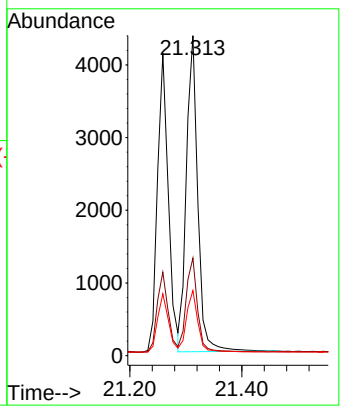


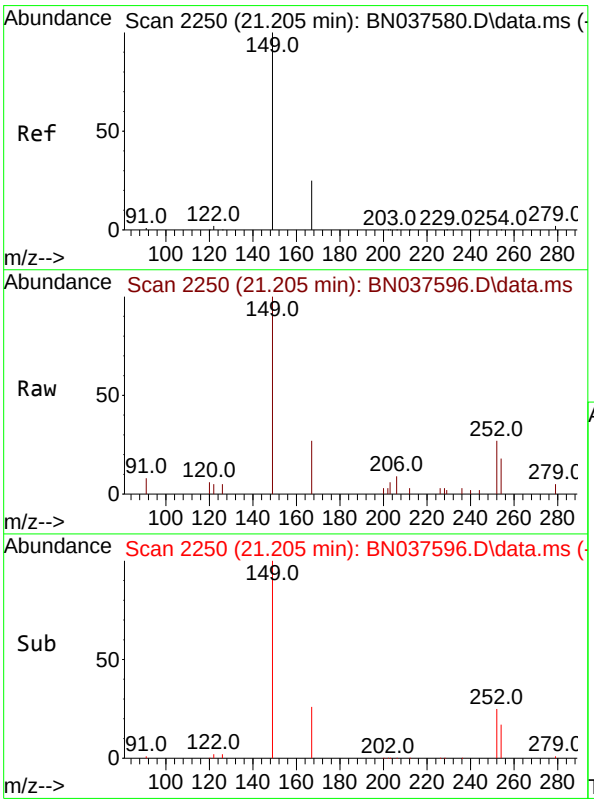
#33
Chrysene
Concen: 0.340 ng
RT: 21.313 min Scan# 2
Delta R.T. 0.009 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:228 Resp: 6161

Ion	Ratio	Lower	Upper
228	100		
226	30.5	24.9	37.3
229	20.4	15.8	23.8

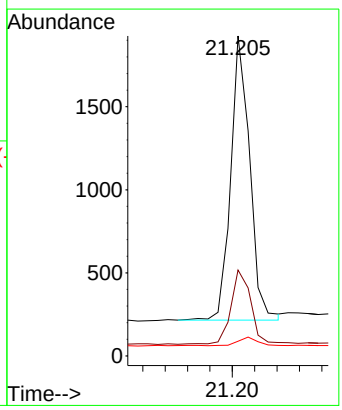


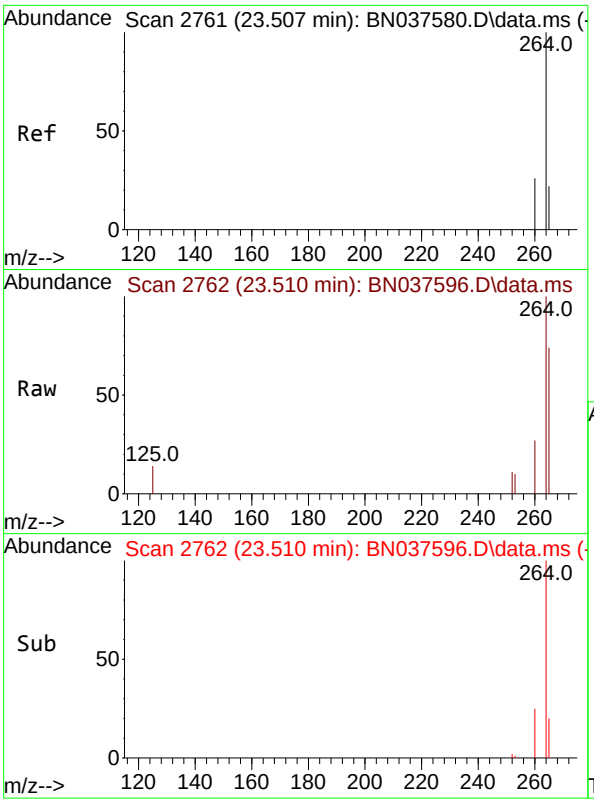


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.299 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:149 Resp: 2008

Ion	Ratio	Lower	Upper
149	100		
167	27.8	20.5	30.7
279	3.1	2.6	4.0



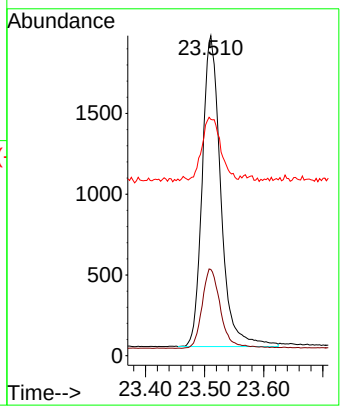


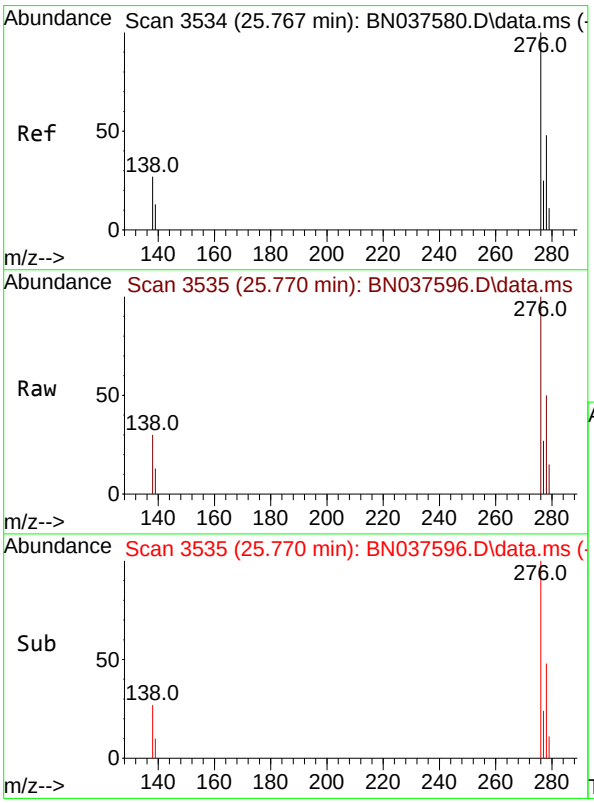
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.510 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:264 Resp: 4192

Ion	Ratio	Lower	Upper
264	100		
260	27.0	21.6	32.4
265	73.9	48.2	72.4#

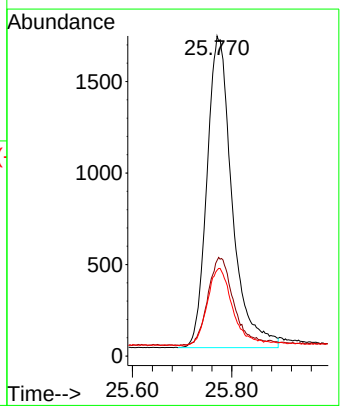


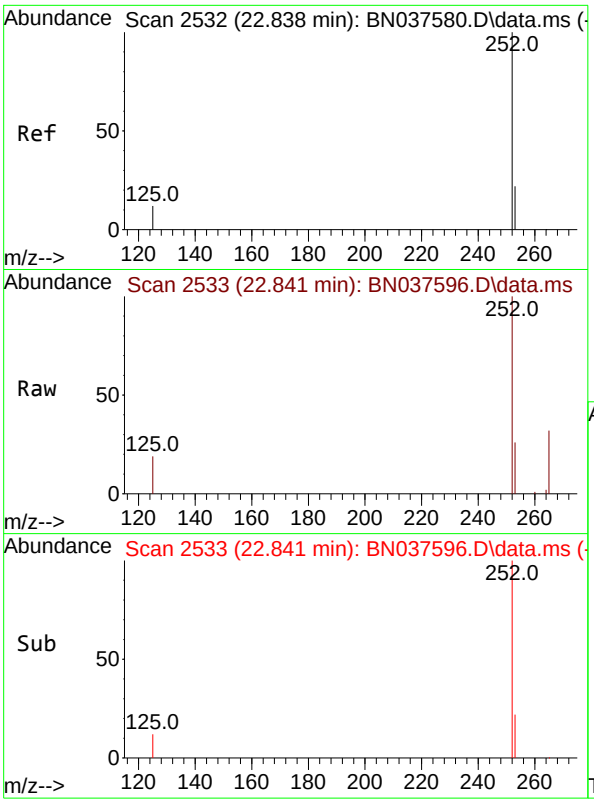


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.339 ng
RT: 25.770 min Scan# 3535
Delta R.T. 0.003 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:276 Resp: 5987

Ion	Ratio	Lower	Upper
276	100		
138	28.9	23.3	34.9
277	24.7	19.5	29.3



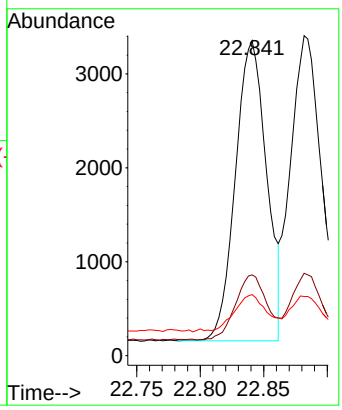


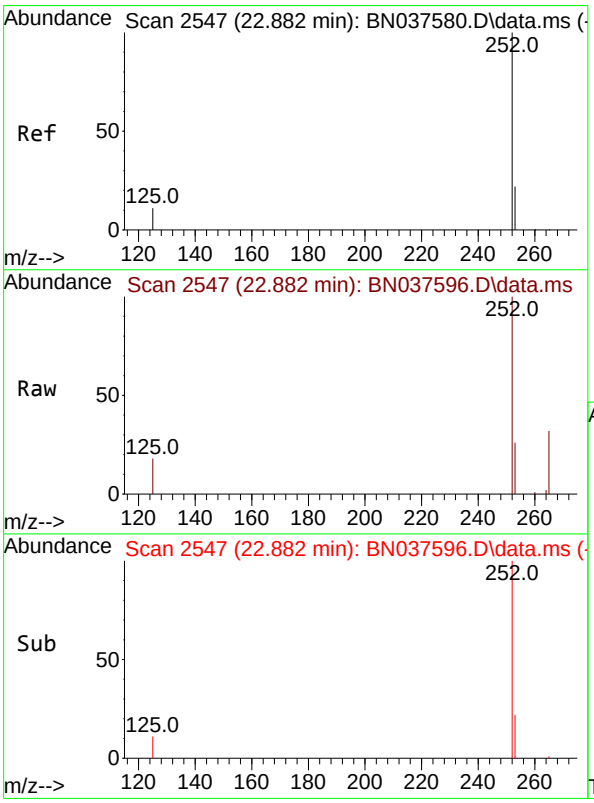
#37
Benzo(b)fluoranthene
Concen: 0.344 ng
RT: 22.841 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:252 Resp: 5458

Ion	Ratio	Lower	Upper
252	100		
253	25.7	20.0	30.0
125	19.4	13.8	20.6

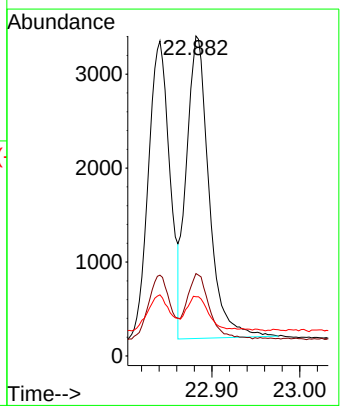


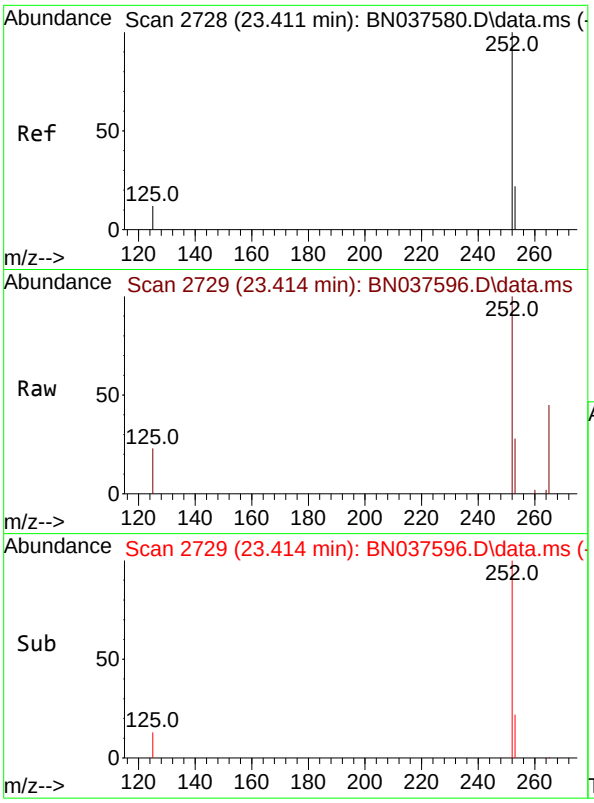


#38
Benzo(k)fluoranthene
Concen: 0.321 ng
RT: 22.882 min Scan# 2547
Delta R.T. 0.000 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:252 Resp: 5754

Ion	Ratio	Lower	Upper
252	100		
253	25.7	19.9	29.9
125	18.5	15.0	22.6



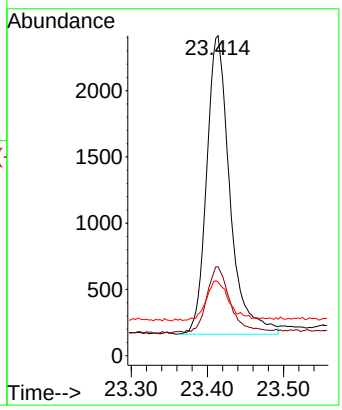


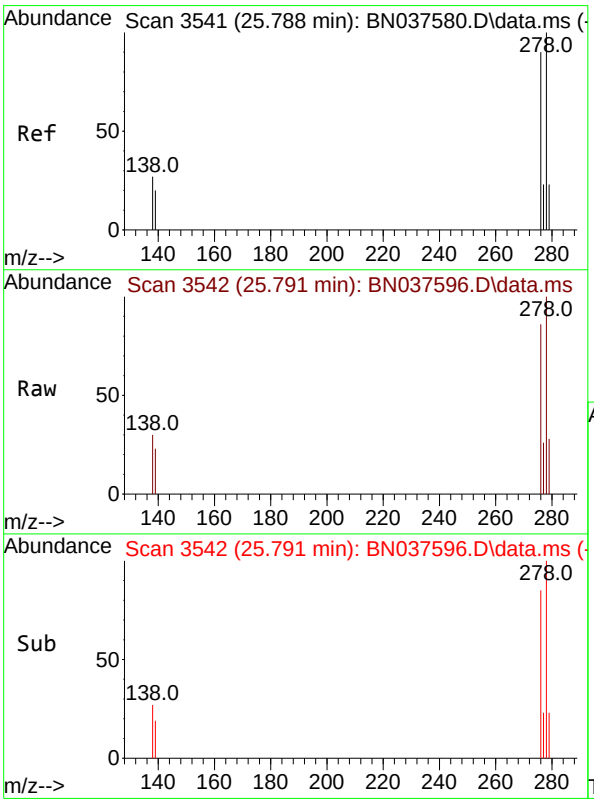
#39
Benzo(a)pyrene
Concen: 0.362 ng
RT: 23.414 min Scan# 2
Delta R.T. 0.003 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:252 Resp: 4770

Ion	Ratio	Lower	Upper
252	100		
253	27.8	21.6	32.4
125	23.1	16.8	25.2

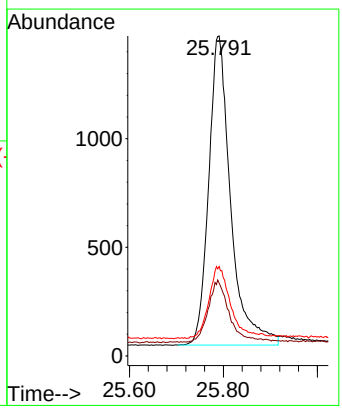


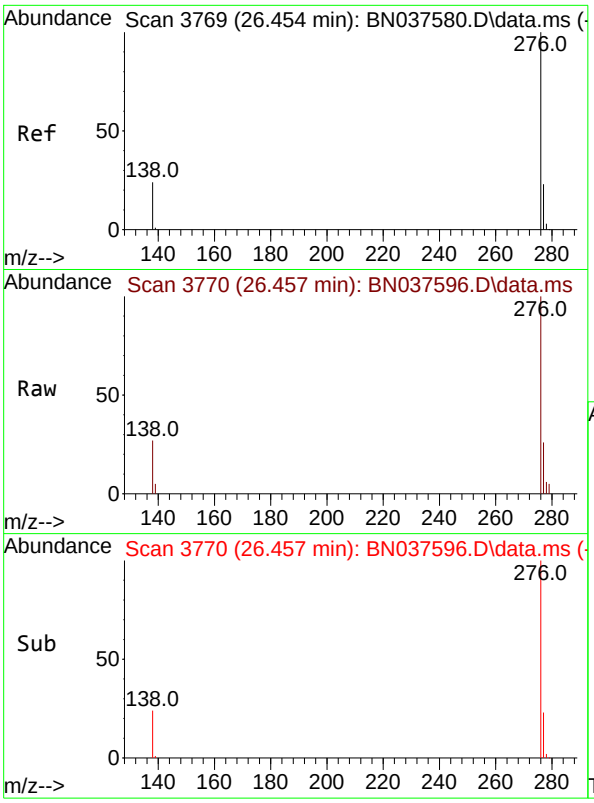


#40
Dibenzo(a,h)anthracene
Concen: 0.338 ng
RT: 25.791 min Scan# 3542
Delta R.T. 0.003 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Tgt Ion:278 Resp: 4628

Ion	Ratio	Lower	Upper
278	100		
139	22.7	18.3	27.5
279	28.0	22.5	33.7



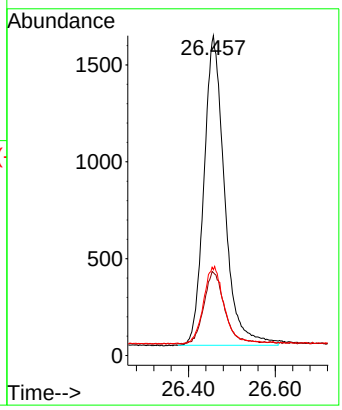


#41
Benzo(g,h,i)perylene
Concen: 0.366 ng
RT: 26.457 min Scan# 3
Delta R.T. 0.003 min
Lab File: BN037596.D
Acq: 13 Aug 2025 15:22

Instrument :
BNA_N
ClientSampleId :
PB169222BS

Tgt Ion:276 Resp: 5279

Ion	Ratio	Lower	Upper
276	100		
277	25.9	21.0	31.4
138	26.8	21.7	32.5



Raw Data: **BN037597.D**

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

Report of Analysis

Client:	Tetra Tech NUS, Inc.	Date Collected:	
Project:	NWIRP Bethpage 112G08005-WE13	Date Received:	
Client Sample ID:	PB169222BSD	SDG No.:	Q2806
Lab Sample ID:	PB169222BSD	Matrix:	Water
Analytical Method:	SW8270ESIM	% Solid:	0
Sample Wt/Vol:	1000 Units: mL	Final Vol:	1000 uL
Soil Aliquot Vol:	uL	Test:	SVOC-SIMGroup1
Extraction Type :	Decanted : N	Level :	LOW
Injection Volume :	GPC Factor : 1.0	GPC Cleanup :	N PH :
Prep Method :			

File ID/Qc Batch:	Dilution:	Prep Date	Date Analyzed	Prep Batch ID
BN037597.D	1	08/12/25 08:52	08/13/25 15:58	PB169222

CAS Number	Parameter	Conc.	Qualifier	MDL	LOD	LOQ / CRQL	Units
TARGETS							
123-91-1	1,4-Dioxane	0.29		0.070	0.20	0.20	ug/L
SURROGATES							
7297-45-2	2-Methylnaphthalene-d10	0.35		30 - 150		88%	SPK: 0.4
93951-69-0	Fluoranthene-d10	0.32		30 - 150		80%	SPK: 0.4
4165-60-0	Nitrobenzene-d5	0.36		55 - 111		91%	SPK: 0.4
321-60-8	2-Fluorobiphenyl	0.39		53 - 106		97%	SPK: 0.4
1718-51-0	Terphenyl-d14	0.41		58 - 132		101%	SPK: 0.4
INTERNAL STANDARDS							
3855-82-1	1,4-Dichlorobenzene-d4	2740	7.717				
1146-65-2	Naphthalene-d8	6600	10.498				
15067-26-2	Acenaphthene-d10	3080	14.345				
1517-22-2	Phenanthrene-d10	5660	17.086				
1719-03-5	Chrysene-d12	4220	21.277				
1520-96-3	Perylene-d12	3620	23.505				

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\BN081325\
Data File : BN037597.D
Acq On : 13 Aug 2025 15:58
Operator : RC/JU
Sample : PB169222BSD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Quant Time: Aug 13 16:26:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration

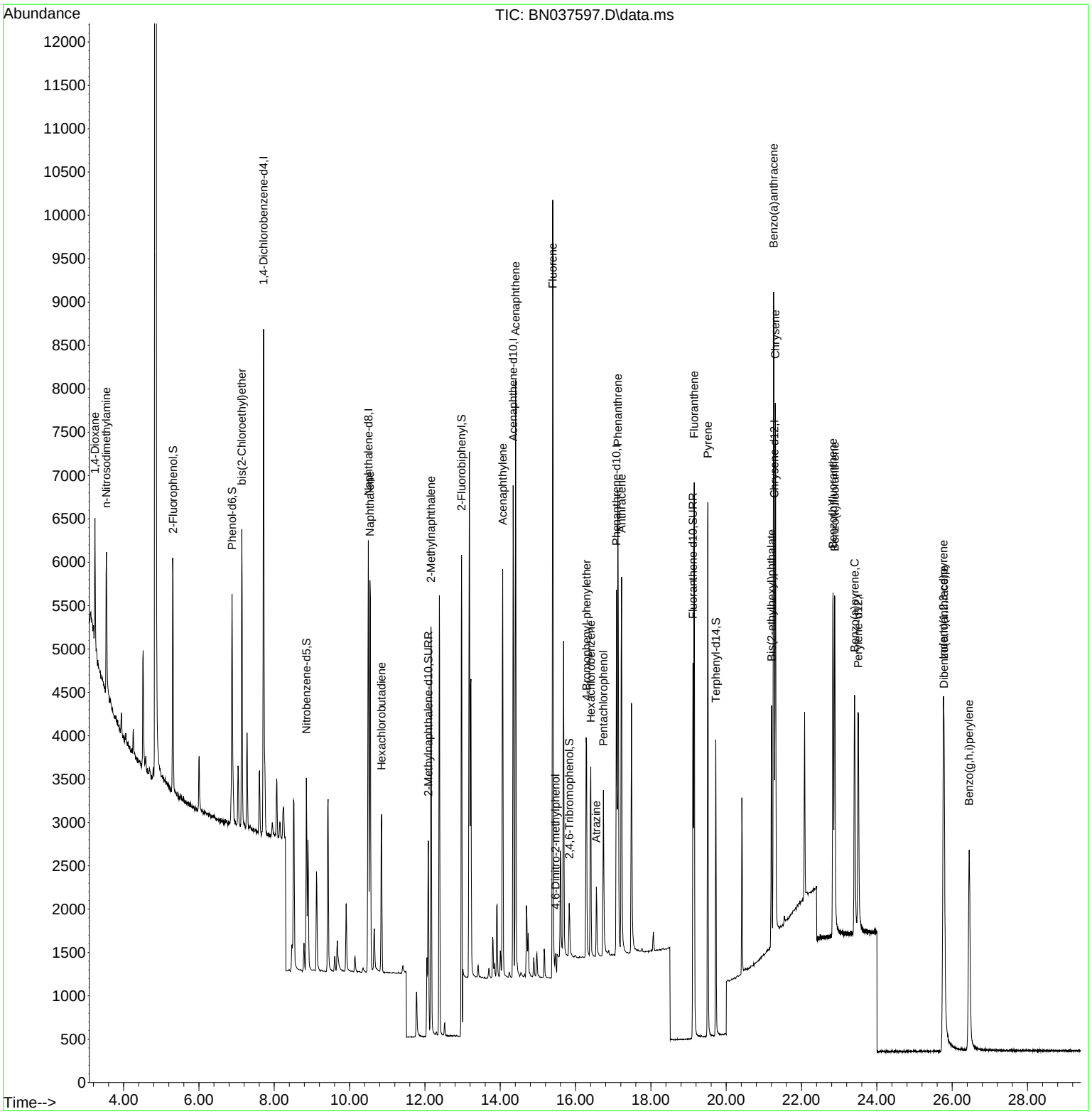
Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	7.717	152	2742	0.400	ng	0.00
7) Naphthalene-d8	10.498	136	6598	0.400	ng	0.00
13) Acenaphthene-d10	14.345	164	3080	0.400	ng	0.00
19) Phenanthrene-d10	17.086	188	5659	0.400	ng	0.00
29) Chrysene-d12	21.277	240	4216	0.400	ng	0.00
35) Perylene-d12	23.505	264	3616	0.400	ng	# 0.00
System Monitoring Compounds						
4) 2-Fluorophenol	5.312	112	2133	0.343	ng	0.00
5) Phenol-d6	6.879	99	2445	0.327	ng	0.00
8) Nitrobenzene-d5	8.854	82	1693	0.364	ng	0.00
11) 2-Methylnaphthalene-d10	12.090	152	3138	0.350	ng	0.00
14) 2,4,6-Tribromophenol	15.833	330	400	0.297	ng	0.00
15) 2-Fluorobiphenyl	12.973	172	6923	0.389	ng	0.00
27) Fluoranthene-d10	19.118	212	4762	0.320	ng	0.00
31) Terphenyl-d14	19.726	244	3509	0.405	ng	0.00
Target Compounds						Qvalue
2) 1,4-Dioxane	3.239	88	759	0.289	ng	# 75
3) n-Nitrosodimethylamine	3.543	42	1121	0.334	ng	# 93
6) bis(2-Chloroethyl)ether	7.139	93	2433	0.361	ng	97
9) Naphthalene	10.541	128	6304	0.359	ng	99
10) Hexachlorobutadiene	10.850	225	1564	0.364	ng	# 99
12) 2-Methylnaphthalene	12.161	142	3491	0.317	ng	99
16) Acenaphthylene	14.067	152	5329	0.386	ng	98
17) Acenaphthene	14.409	154	3263	0.347	ng	97
18) Fluorene	15.392	166	4095	0.333	ng	99
20) 4,6-Dinitro-2-methylph...	15.467	198	193	0.369	ng	95
21) 4-Bromophenyl-phenylether	16.292	248	1254	0.353	ng	94
22) Hexachlorobenzene	16.404	284	1910	0.379	ng	99
23) Atrazine	16.553	200	751	0.373	ng	98
24) Pentachlorophenol	16.739	266	1030	0.582	ng	98
25) Phenanthrene	17.124	178	6061	0.352	ng	99
26) Anthracene	17.223	178	5316	0.349	ng	99
28) Fluoranthene	19.150	202	6065	0.307	ng	99
30) Pyrene	19.513	202	5813	0.369	ng	99
32) Benzo(a)anthracene	21.259	228	5245	0.372	ng	99
33) Chrysene	21.304	228	5767	0.367	ng	99
34) Bis(2-ethylhexyl)phtha...	21.205	149	1866	0.321	ng	100
36) Indeno(1,2,3-cd)pyrene	25.767	276	5820	0.382	ng	100
37) Benzo(b)fluoranthene	22.835	252	5199	0.379	ng	98
38) Benzo(k)fluoranthene	22.879	252	5467	0.354	ng	99
39) Benzo(a)pyrene	23.411	252	4407	0.388	ng	98
40) Dibenzo(a,h)anthracene	25.785	278	4450	0.376	ng	99
41) Benzo(g,h,i)perylene	26.452	276	5052	0.406	ng	99

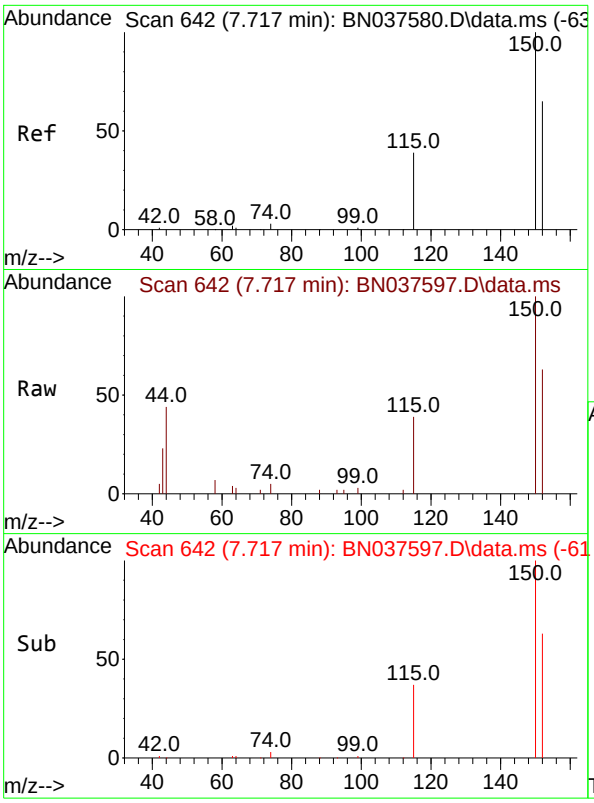
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : Z:\svoasrv\HPCHEM1\BNA_N\Data\BN081325\
Data File : BN037597.D
Acq On : 13 Aug 2025 15:58
Operator : RC/JU
Sample : PB169222BSD
Misc :
ALS Vial : 11 Sample Multiplier: 1

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Quant Time: Aug 13 16:26:16 2025
Quant Method : Z:\svoasrv\HPCHEM1\BNA_N\Methods\8270-SIM-BN081225.M
Quant Title : ASP BNA STANDARDS FOR 5 POINT CALIBRATION
QLast Update : Wed Aug 13 05:00:58 2025
Response via : Initial Calibration



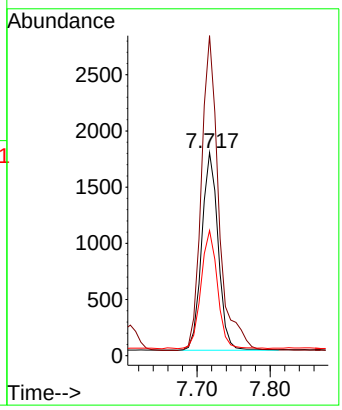


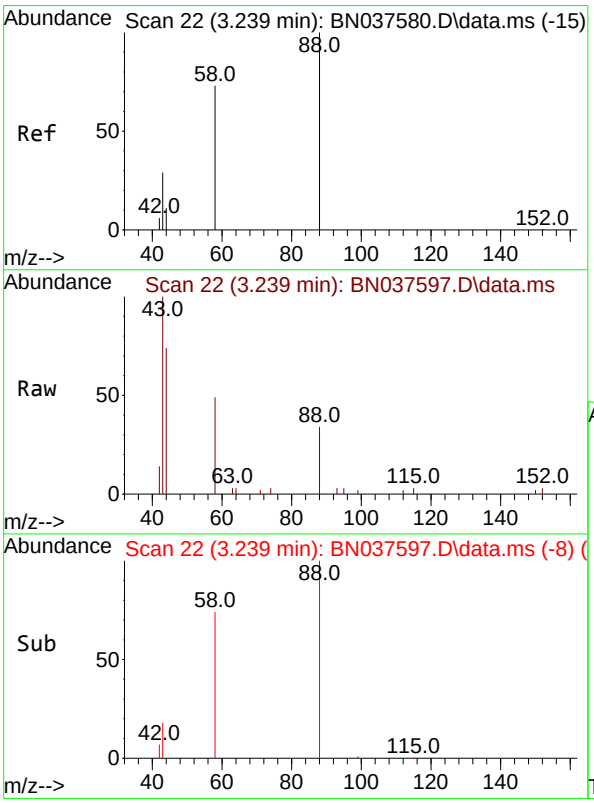
#1
1,4-Dichlorobenzene-d4
Concen: 0.400 ng
RT: 7.717 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:152 Resp: 2742

Ion	Ratio	Lower	Upper
152	100		
150	157.6	122.2	183.4
115	61.6	49.8	74.6

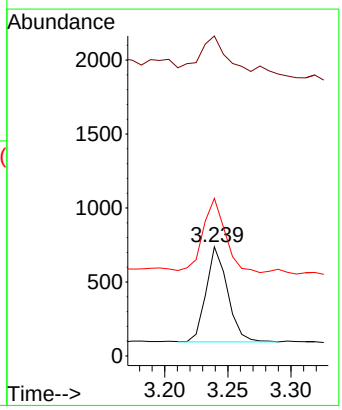


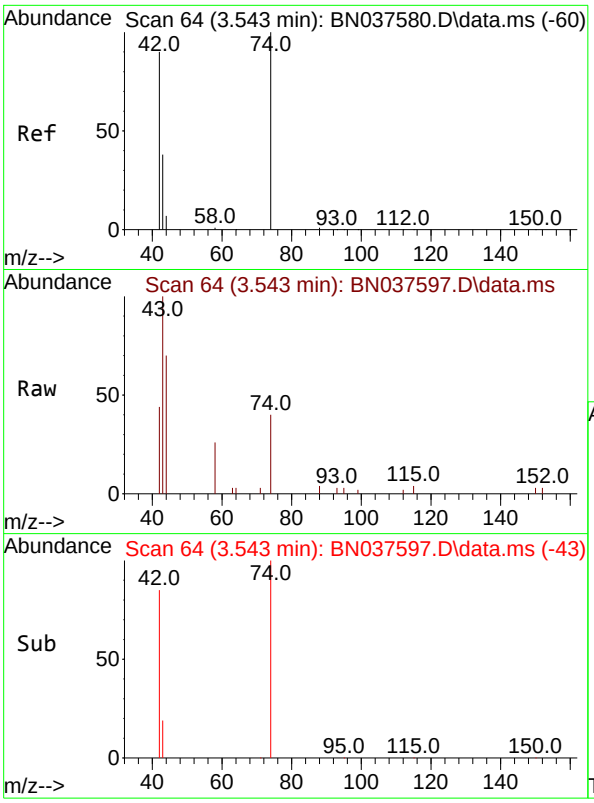


#2
1,4-Dioxane
Concen: 0.289 ng
RT: 3.239 min Scan# 22
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion: 88 Resp: 759

Ion	Ratio	Lower	Upper
88	100		
43	71.5	25.8	38.6#
58	81.8	61.2	91.8



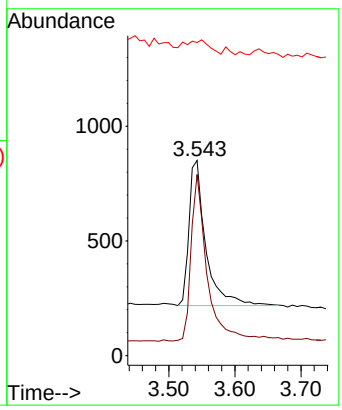


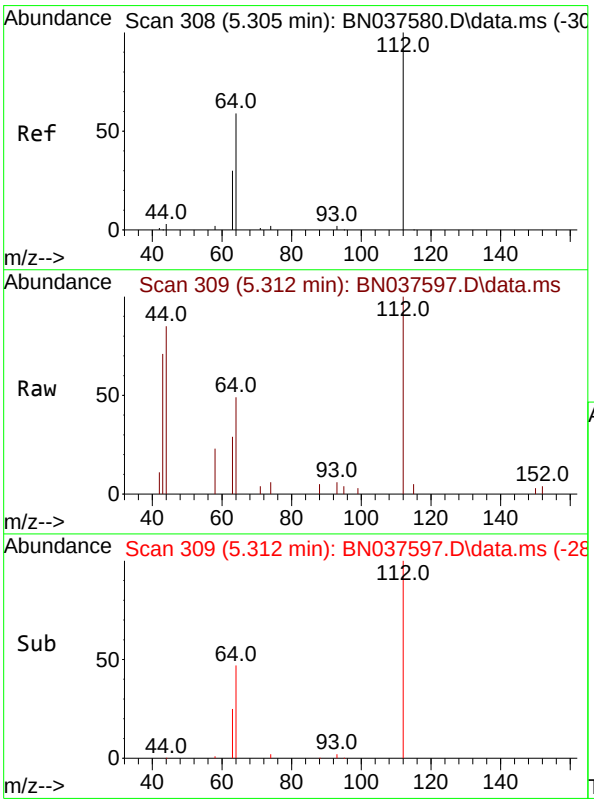
#3
n-Nitrosodimethylamine
Concen: 0.334 ng
RT: 3.543 min Scan# 64
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion: 42 Resp: 1121

Ion	Ratio	Lower	Upper
42	100		
74	109.5	82.0	123.0
44	13.6	7.9	11.9#

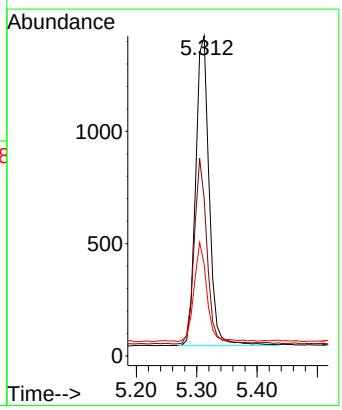


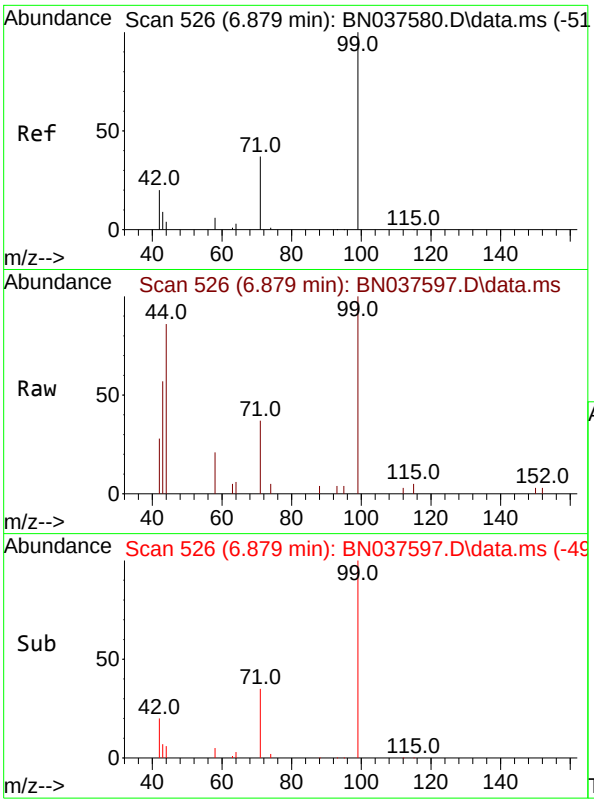


#4
2-Fluorophenol
Concen: 0.343 ng
RT: 5.312 min Scan# 309
Delta R.T. 0.007 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:112 Resp: 2133

Ion	Ratio	Lower	Upper
112	100		
64	56.7	44.9	67.3
63	30.2	23.4	35.2



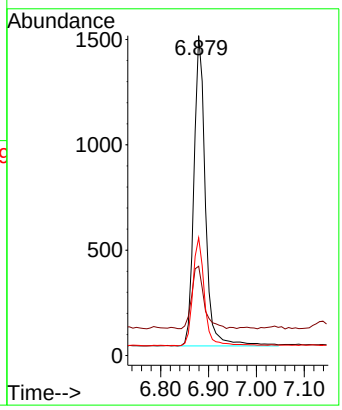


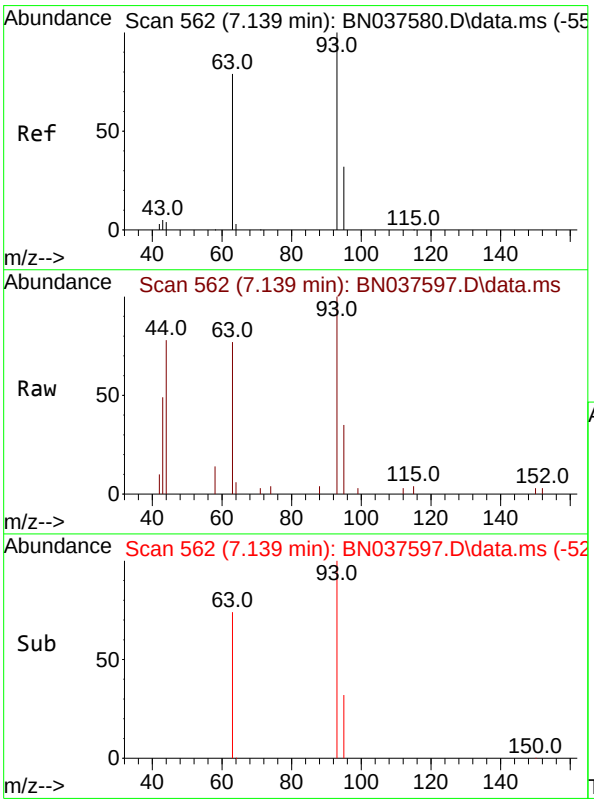
#5
Phenol-d6
Concen: 0.327 ng
RT: 6.879 min Scan# 5
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion: 99 Resp: 2445

Ion	Ratio	Lower	Upper
99	100		
42	21.6	18.5	27.7
71	35.1	28.6	42.8

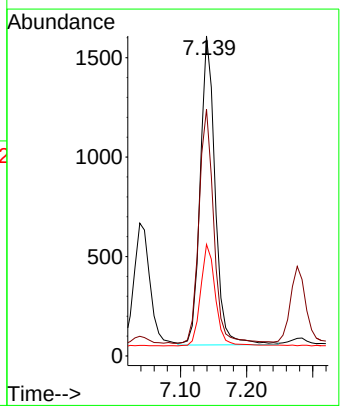


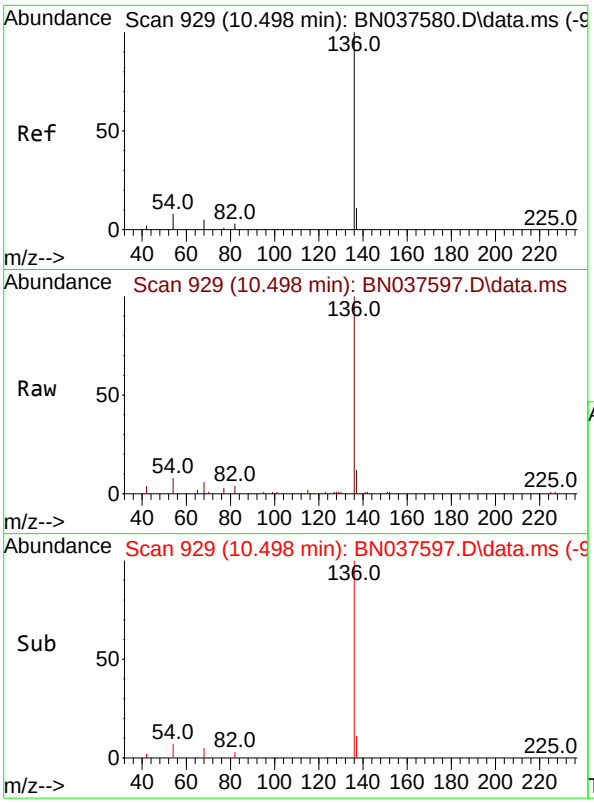


#6
bis(2-Chloroethyl)ether
Concen: 0.361 ng
RT: 7.139 min Scan# 562
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion: 93 Resp: 2433

Ion	Ratio	Lower	Upper
93	100		
63	75.3	58.0	87.0
95	32.4	24.9	37.3



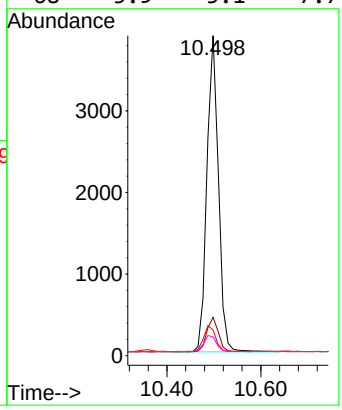


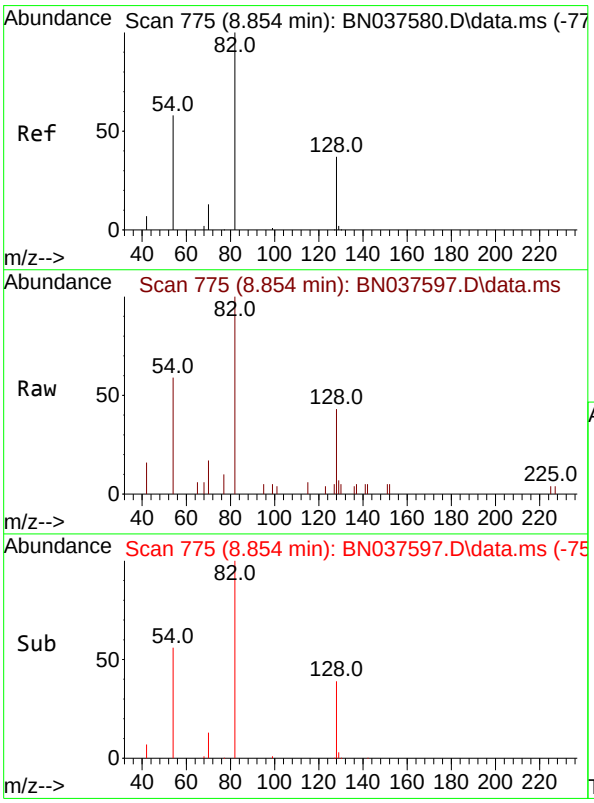
#7
Naphthalene-d8
Concen: 0.400 ng
RT: 10.498 min Scan# 9
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:136 Resp: 6598

Ion	Ratio	Lower	Upper
136	100		
137	12.0	9.5	14.3
54	8.0	7.3	10.9
68	5.9	5.1	7.7

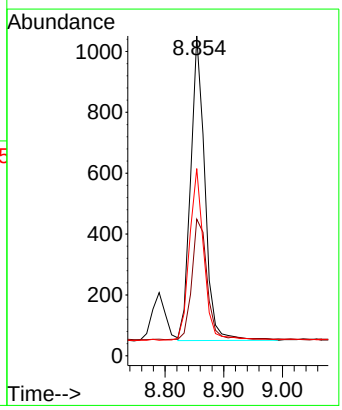


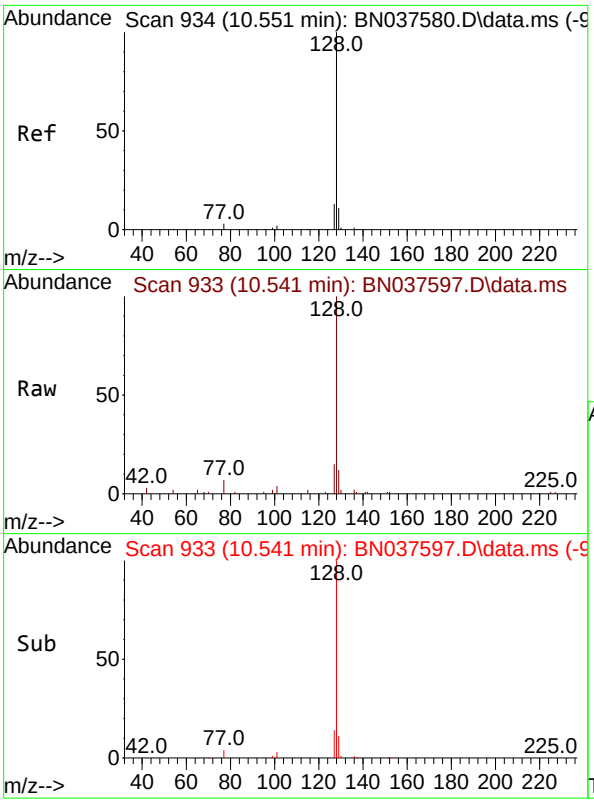


#8
Nitrobenzene-d5
Concen: 0.364 ng
RT: 8.854 min Scan# 775
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion: 82 Resp: 1693

Ion	Ratio	Lower	Upper
82	100		
128	42.7	32.6	48.8
54	58.5	48.9	73.3



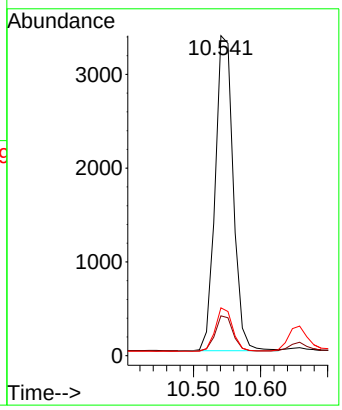


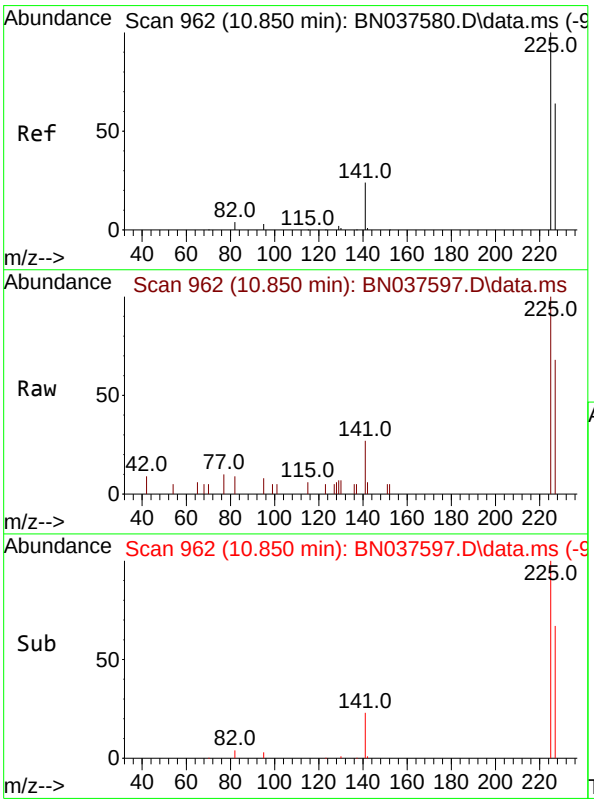
#9
Naphthalene
Concen: 0.359 ng
RT: 10.541 min Scan# 9
Delta R.T. -0.011 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:128 Resp: 6304

Ion	Ratio	Lower	Upper
128	100		
129	12.5	9.8	14.6
127	15.0	11.5	17.3

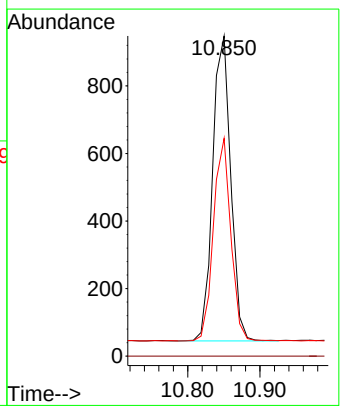


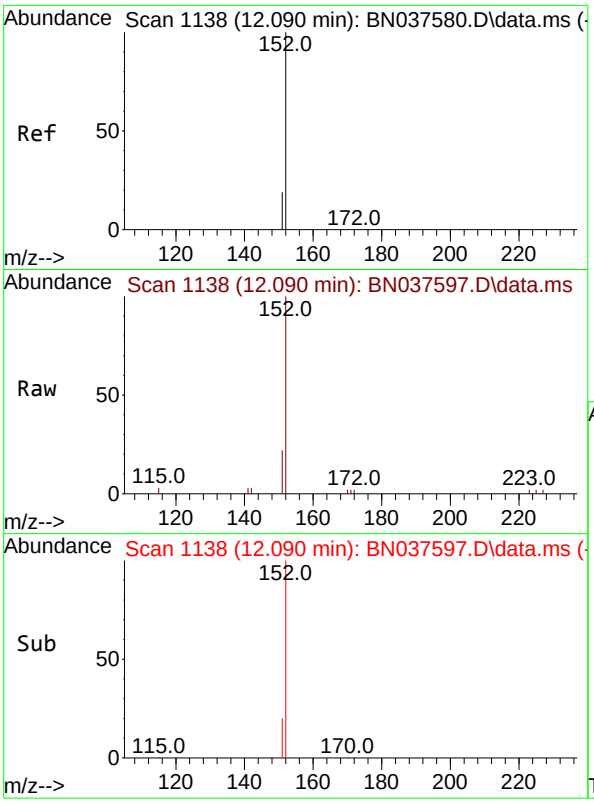


#10
Hexachlorobutadiene
Concen: 0.364 ng
RT: 10.850 min Scan# 962
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:225 Resp: 1564

Ion	Ratio	Lower	Upper
225	100		
223	0.0	0.0	0.0
227	64.1	50.8	76.2



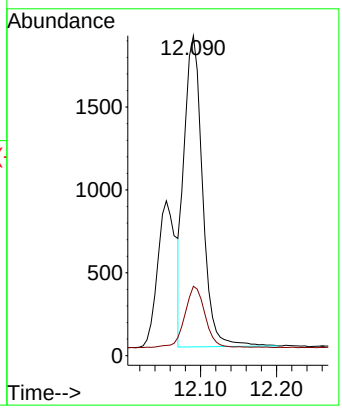


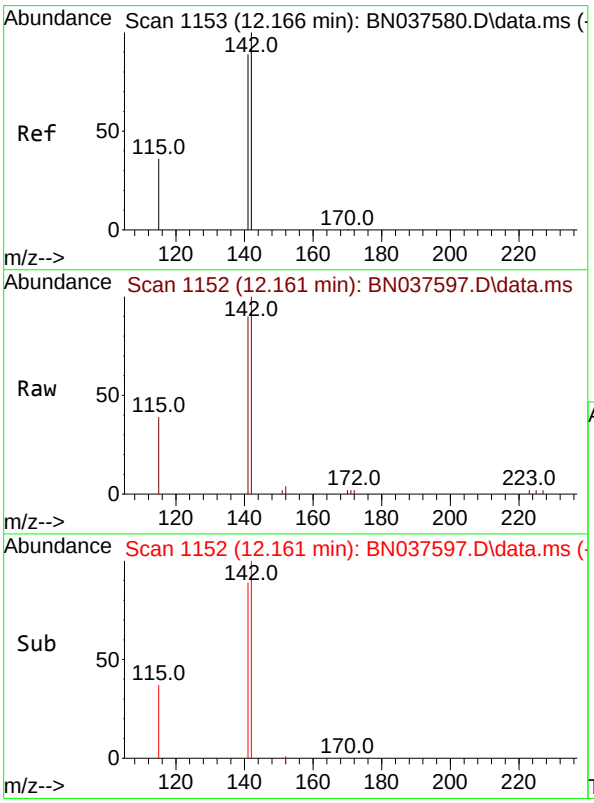
#11
2-Methylnaphthalene-d10
Concen: 0.350 ng
RT: 12.090 min Scan# 11
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:152 Resp: 3138

Ion	Ratio	Lower	Upper
152	100		
151	22.5	17.3	25.9

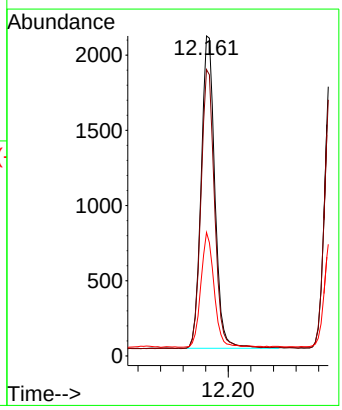


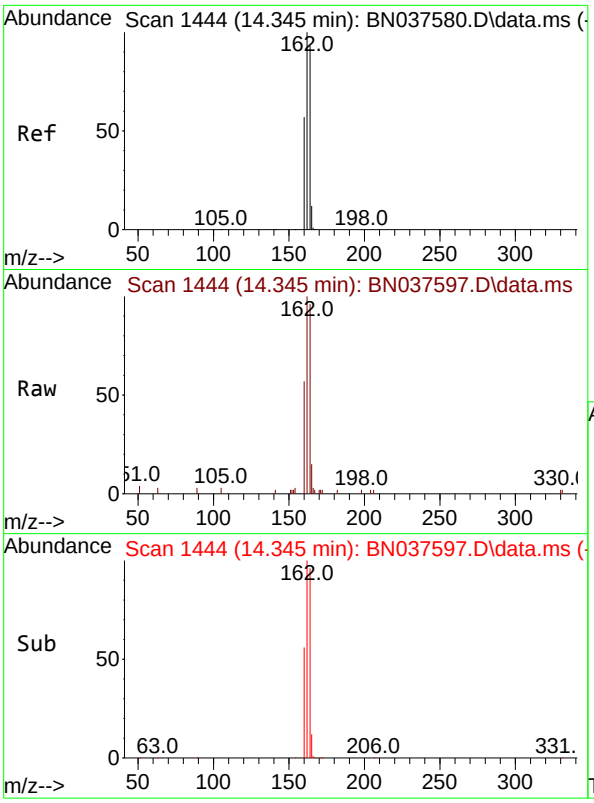


#12
2-Methylnaphthalene
Concen: 0.317 ng
RT: 12.161 min Scan# 1152
Delta R.T. -0.005 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:142 Resp: 3491

Ion	Ratio	Lower	Upper
142	100		
141	89.5	71.4	107.0
115	38.6	30.2	45.4



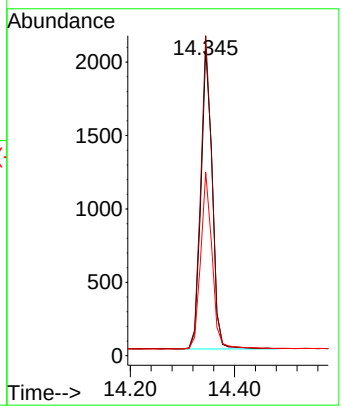


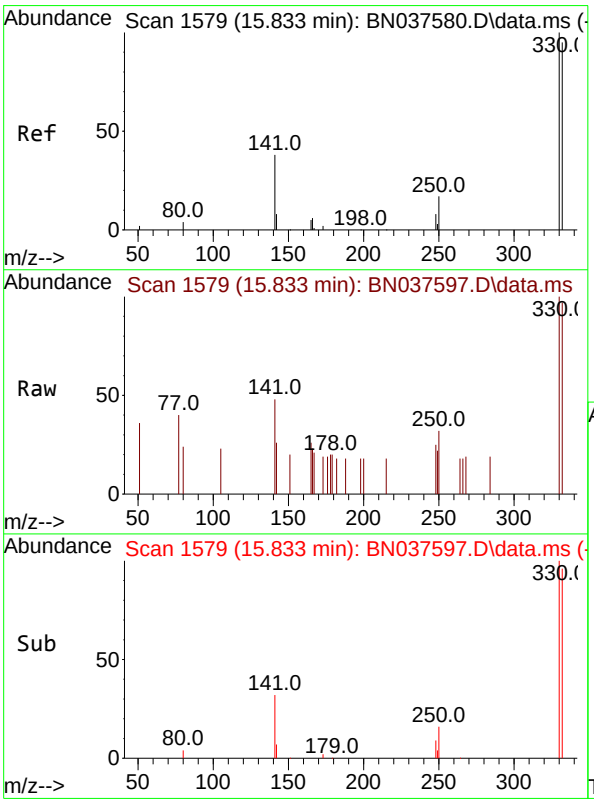
#13
Acenaphthene-d10
Concen: 0.400 ng
RT: 14.345 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:164 Resp: 3080

Ion	Ratio	Lower	Upper
164	100		
162	104.3	85.5	128.3
160	59.8	49.5	74.3

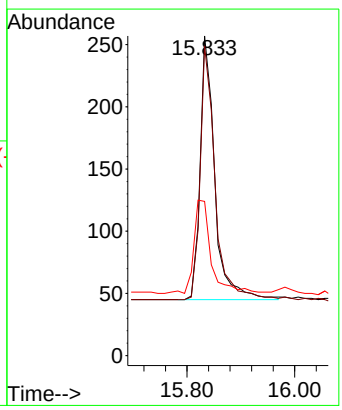


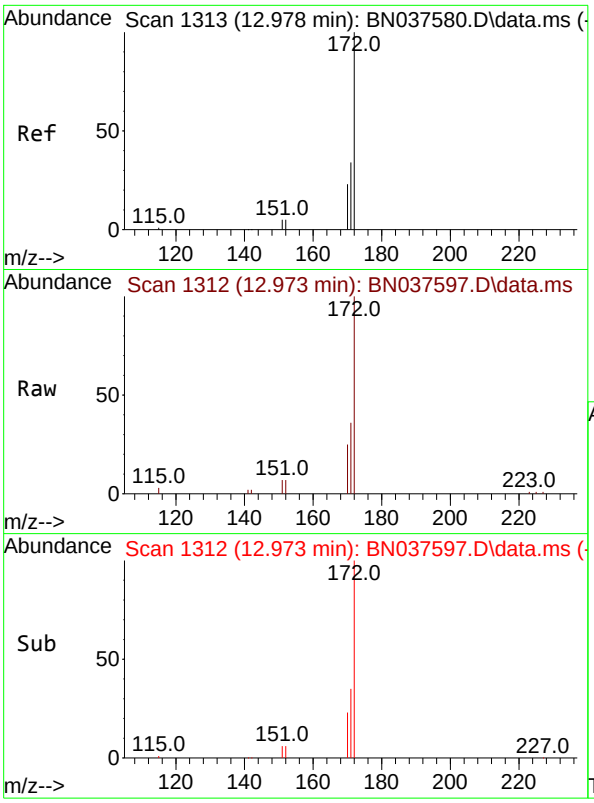


#14
2,4,6-Tribromophenol
Concen: 0.297 ng
RT: 15.833 min Scan# 1579
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:330 Resp: 400

Ion	Ratio	Lower	Upper
330	100		
332	97.5	77.4	116.0
141	41.8	30.9	46.3



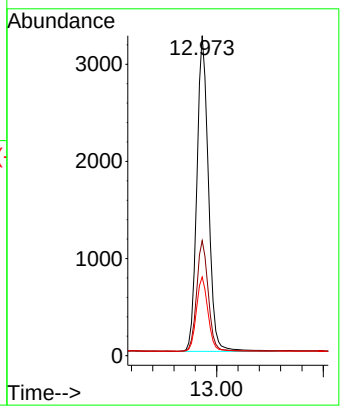


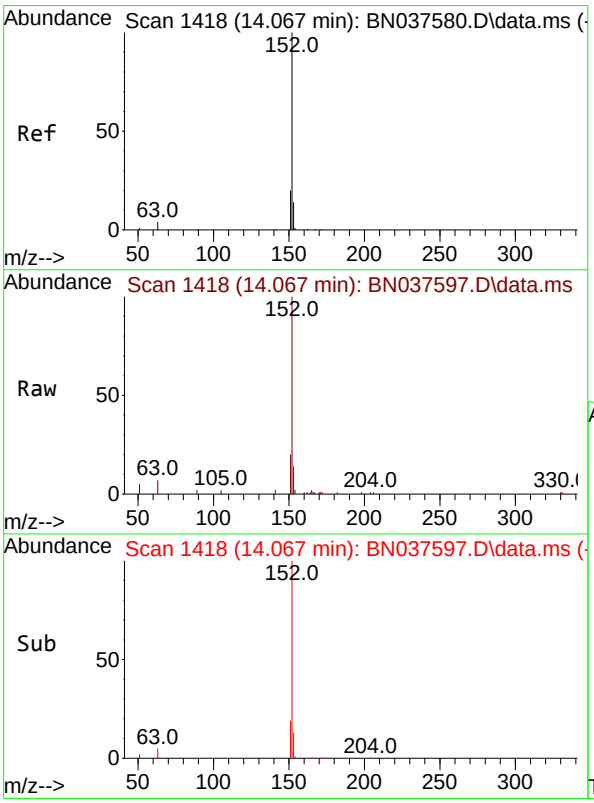
#15
2-Fluorobiphenyl
Concen: 0.389 ng
RT: 12.973 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:172 Resp: 6923

Ion	Ratio	Lower	Upper
172	100		
171	35.9	28.2	42.4
170	24.6	19.2	28.8

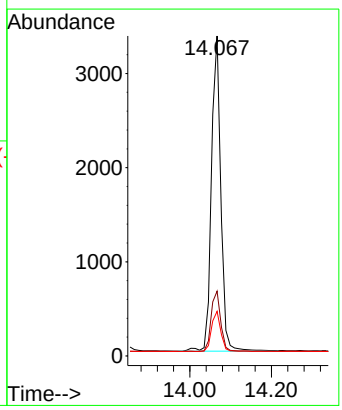


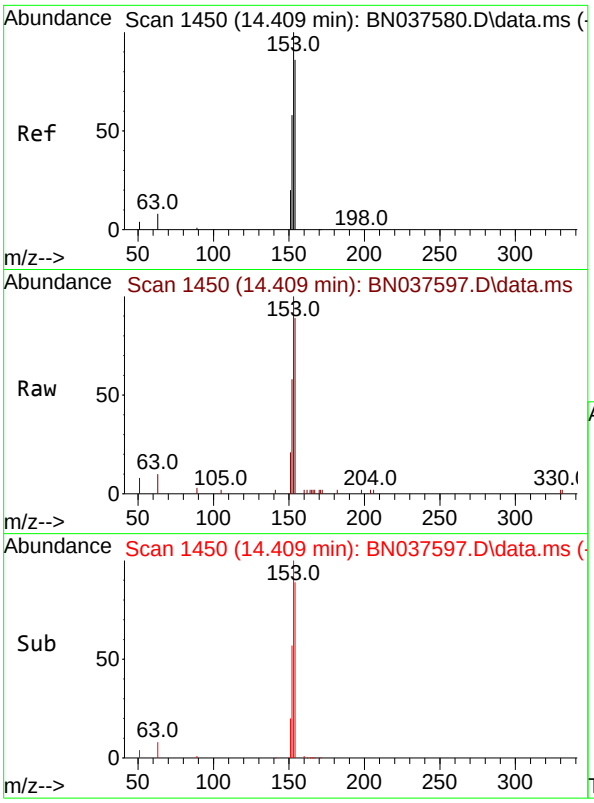


#16
Acenaphthylene
Concen: 0.386 ng
RT: 14.067 min Scan# 1418
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:152 Resp: 5329

Ion	Ratio	Lower	Upper
152	100		
151	19.5	16.1	24.1
153	12.4	10.7	16.1



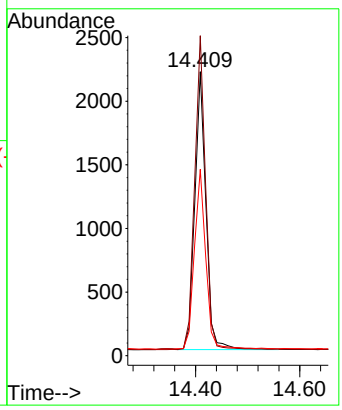


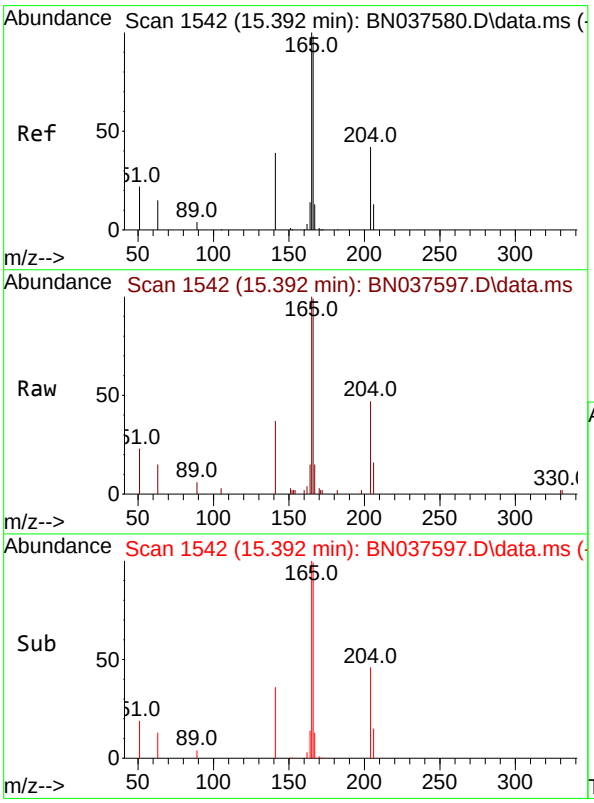
#17
Acenaphthene
Concen: 0.347 ng
RT: 14.409 min Scan# 14
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:154 Resp: 3263

Ion	Ratio	Lower	Upper
154	100		
153	110.6	90.6	135.8
152	66.4	54.9	82.3

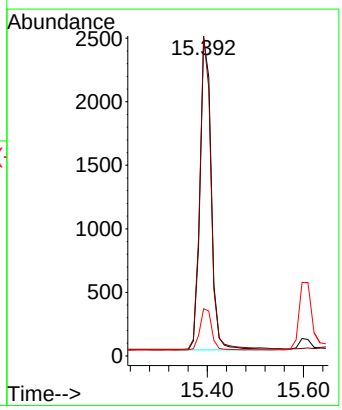


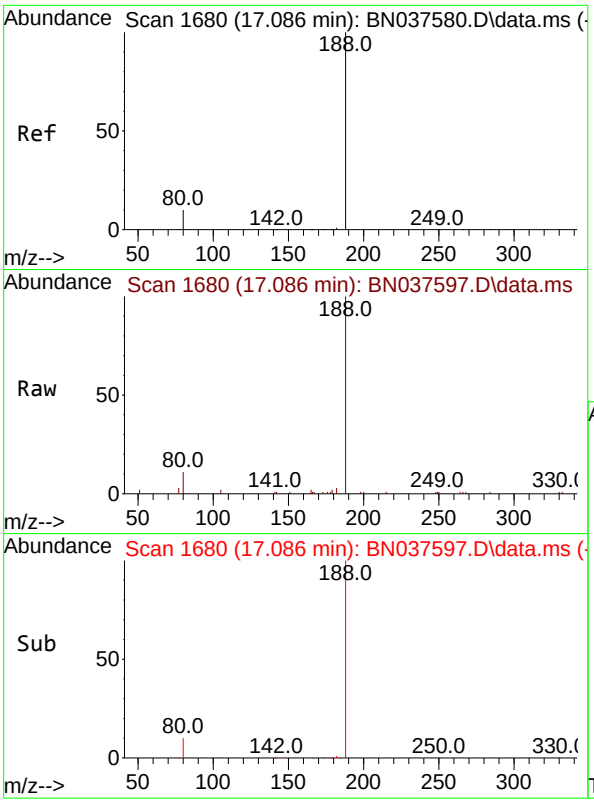


#18
Fluorene
Concen: 0.333 ng
RT: 15.392 min Scan# 1542
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:166 Resp: 4095

Ion	Ratio	Lower	Upper
166	100		
165	99.5	78.9	118.3
167	13.4	10.7	16.1



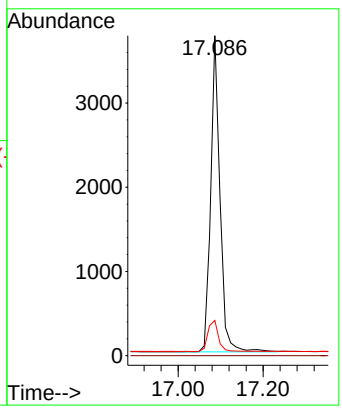


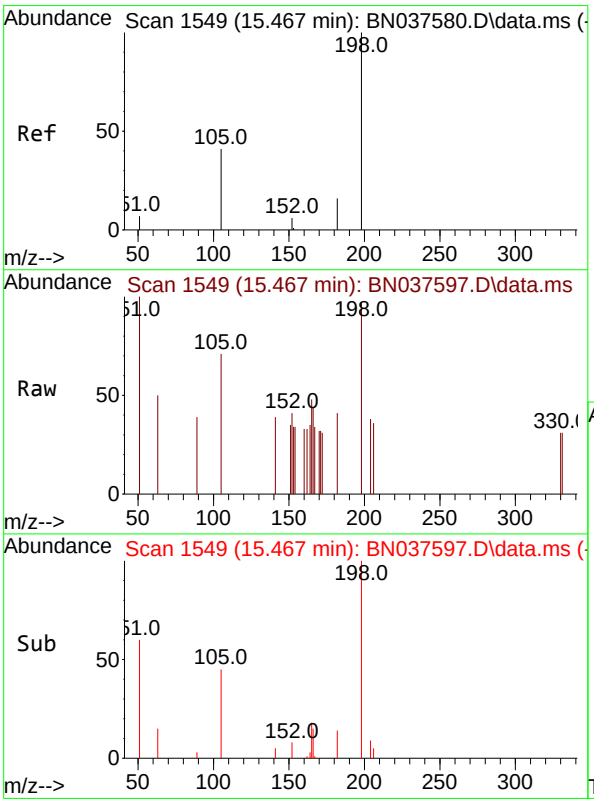
#19
Phenanthrene-d10
Concen: 0.400 ng
RT: 17.086 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:188 Resp: 5659

Ion	Ratio	Lower	Upper
188	100		
94	0.0	0.0	0.0
80	11.0	9.1	13.7

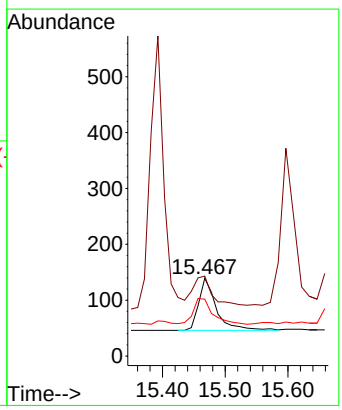


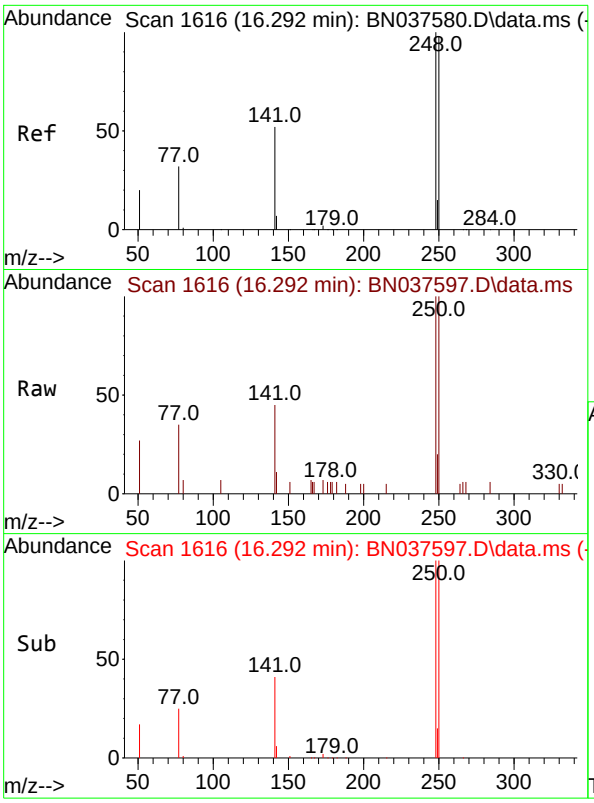


#20
4,6-Dinitro-2-methylphenol
Concen: 0.369 ng
RT: 15.467 min Scan# 1549
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:198 Resp: 193

Ion	Ratio	Lower	Upper
198	100		
51	102.9	81.0	121.6
105	73.4	52.5	78.7



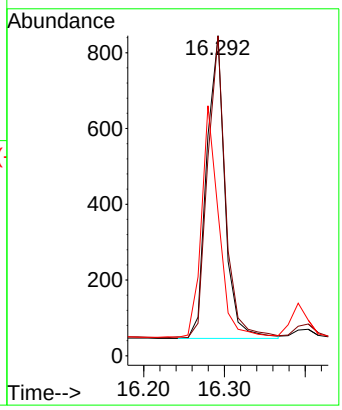


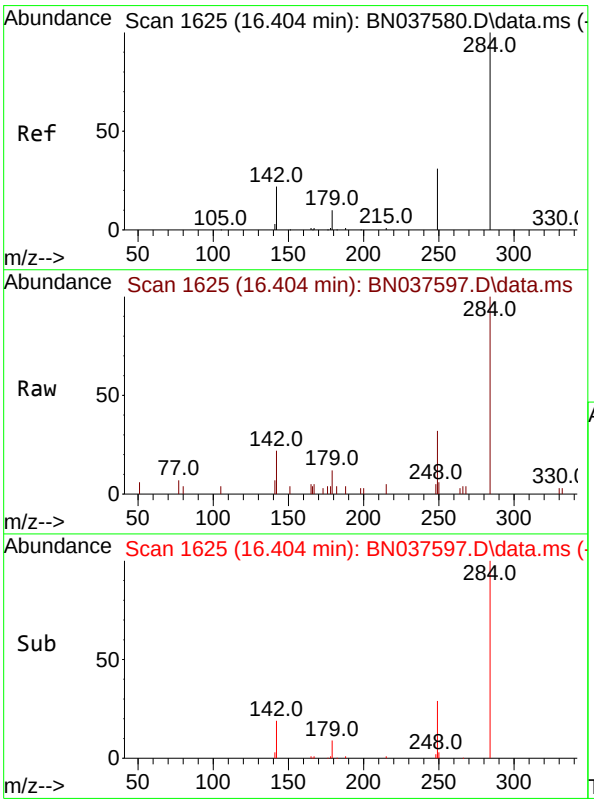
#21
4-Bromophenyl-phenylether
Concen: 0.353 ng
RT: 16.292 min Scan# 1
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:248 Resp: 1254

Ion	Ratio	Lower	Upper
248	100		
250	99.9	78.6	118.0
141	44.9	43.7	65.5

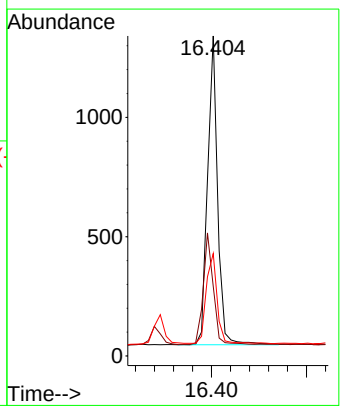


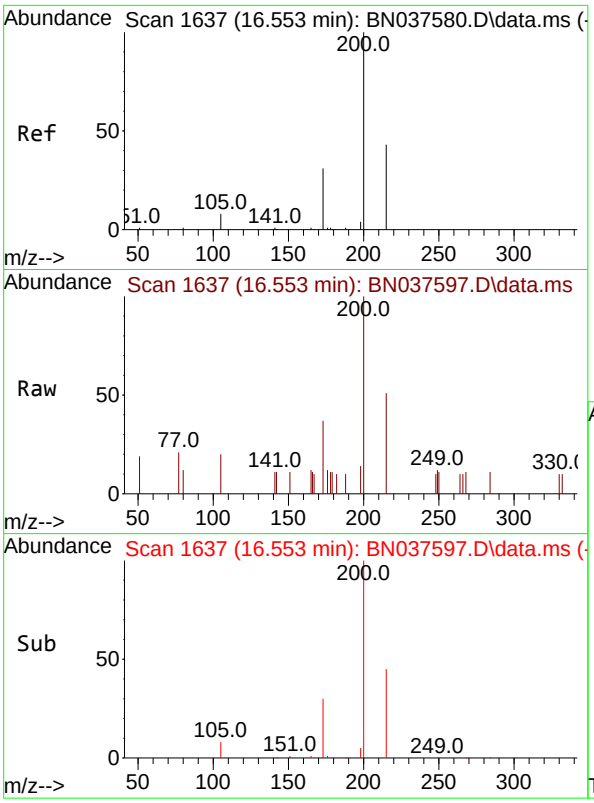


#22
Hexachlorobenzene
Concen: 0.379 ng
RT: 16.404 min Scan# 1625
Delta R.T. -0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:284 Resp: 1910

Ion	Ratio	Lower	Upper
284	100		
142	36.0	29.8	44.6
249	32.4	26.0	39.0



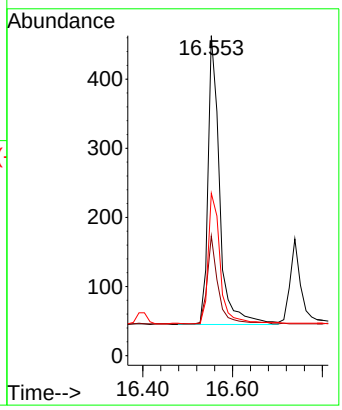


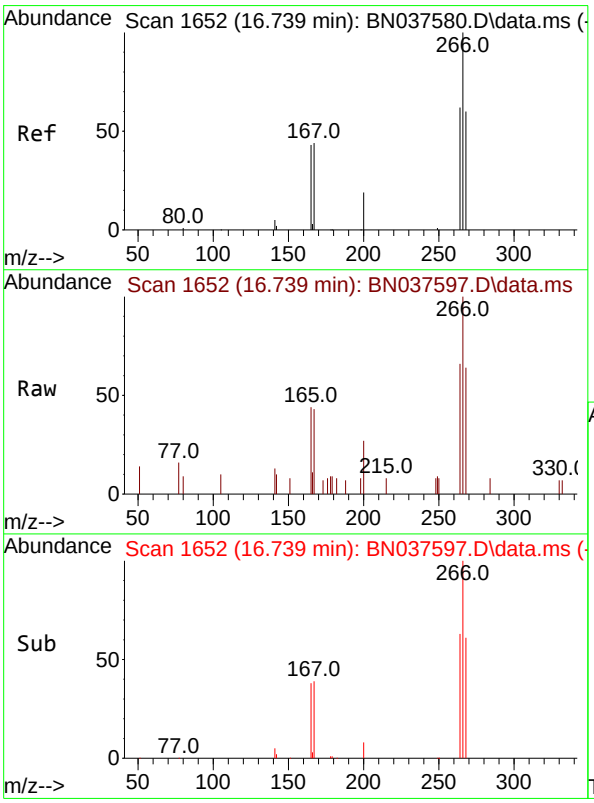
#23
Atrazine
Concen: 0.373 ng
RT: 16.553 min Scan# 1
Delta R.T. -0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:200 Resp: 751

Ion	Ratio	Lower	Upper
200	100		
173	37.4	31.0	46.4
215	50.8	39.4	59.0

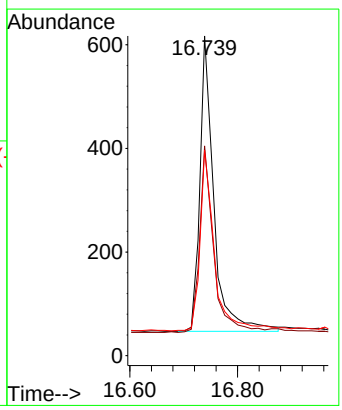


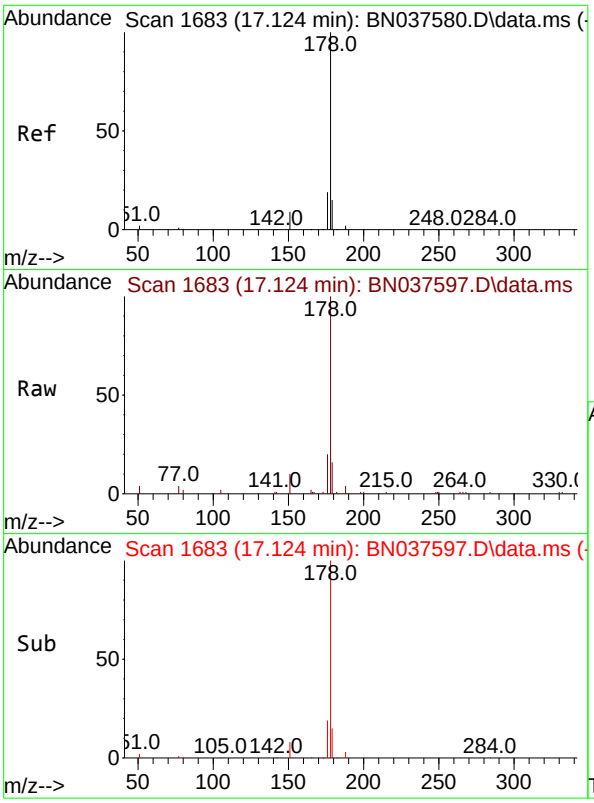


#24
Pentachlorophenol
Concen: 0.582 ng
RT: 16.739 min Scan# 1652
Delta R.T. -0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:266 Resp: 1030

Ion	Ratio	Lower	Upper
266	100		
264	62.7	49.6	74.4
268	63.1	49.2	73.8



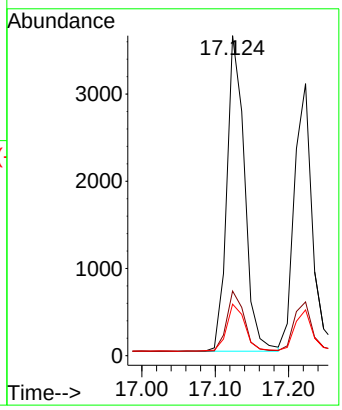


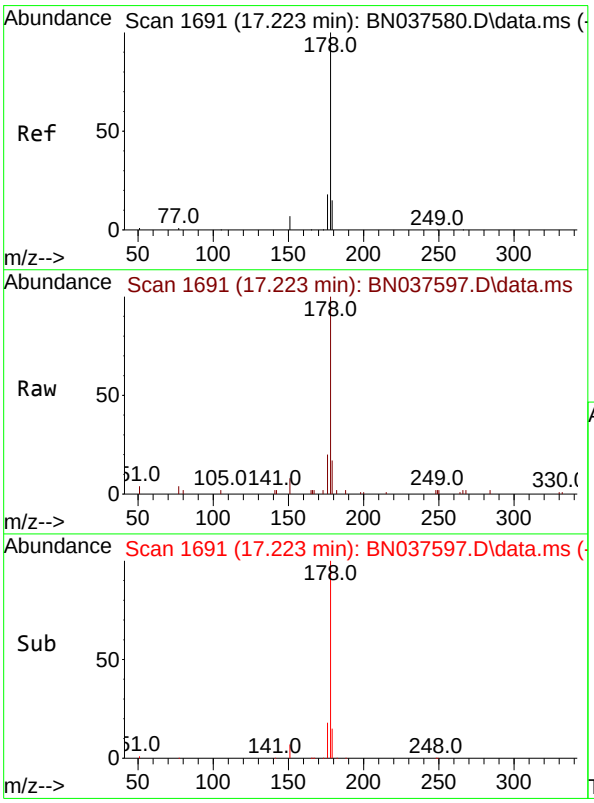
#25
Phenanthrene
Concen: 0.352 ng
RT: 17.124 min Scan# 1(
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:178 Resp: 6061

Ion	Ratio	Lower	Upper
178	100		
176	19.1	15.0	22.6
179	15.6	12.3	18.5

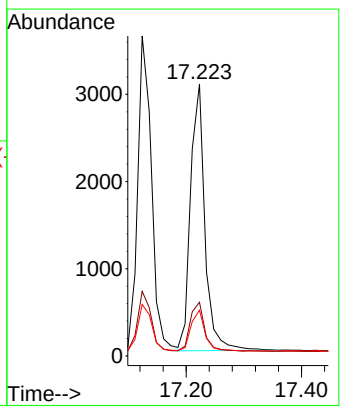


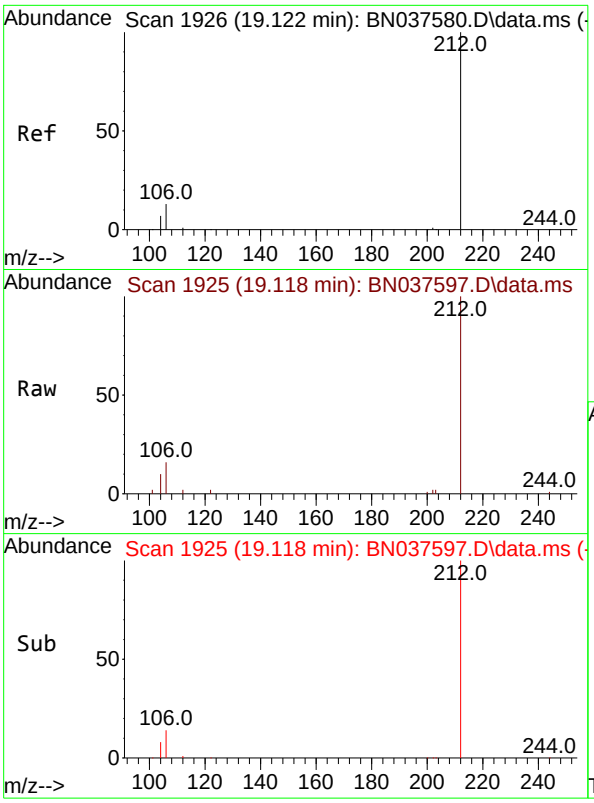


#26
Anthracene
Concen: 0.349 ng
RT: 17.223 min Scan# 1691
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:178 Resp: 5316

Ion	Ratio	Lower	Upper
178	100		
176	18.8	14.7	22.1
179	15.3	12.3	18.5



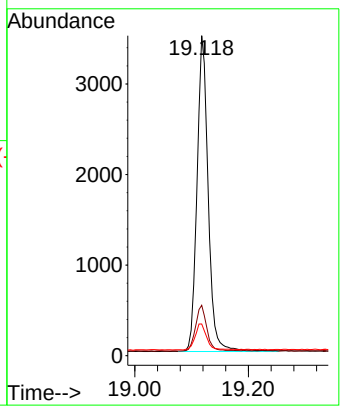


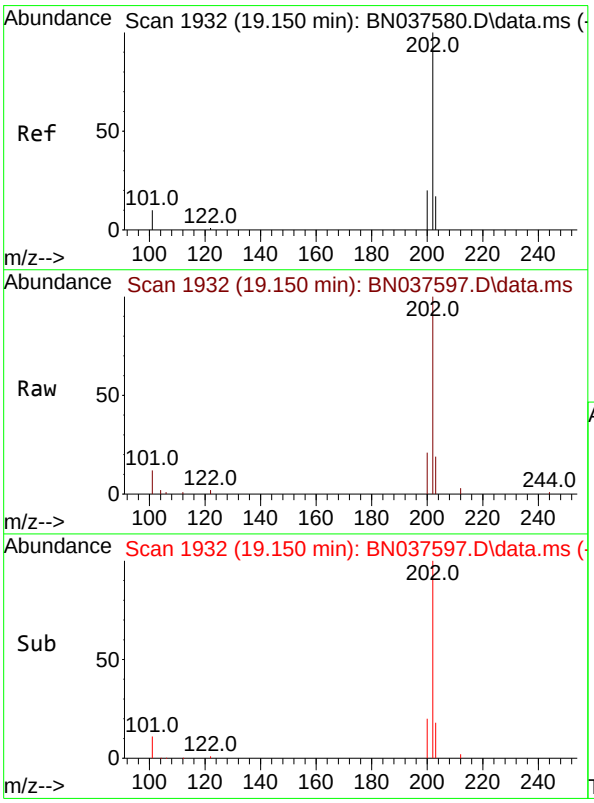
#27
Fluoranthene-d10
Concen: 0.320 ng
RT: 19.118 min Scan# 1
Delta R.T. -0.005 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:212 Resp: 4762

Ion	Ratio	Lower	Upper
212	100		
106	14.6	11.5	17.3
104	8.5	6.6	9.8

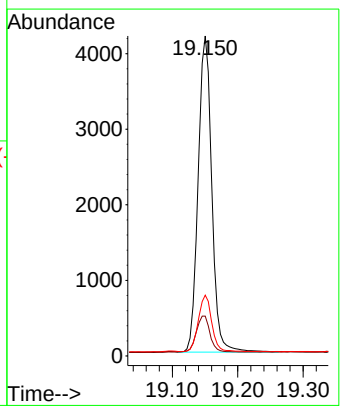


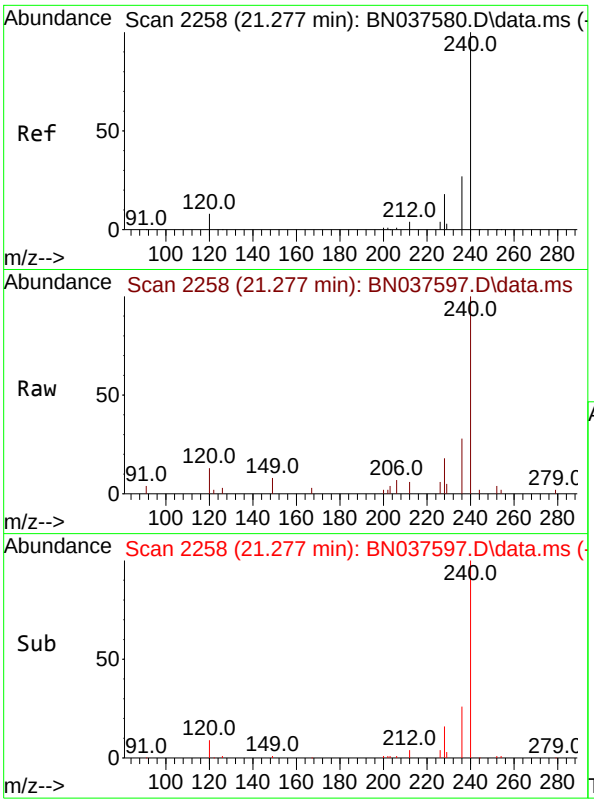


#28
Fluoranthene
Concen: 0.307 ng
RT: 19.150 min Scan# 1932
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:202 Resp: 6065

Ion	Ratio	Lower	Upper
202	100		
101	11.6	9.0	13.6
203	17.5	13.8	20.8



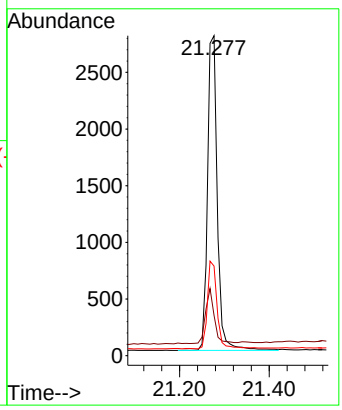


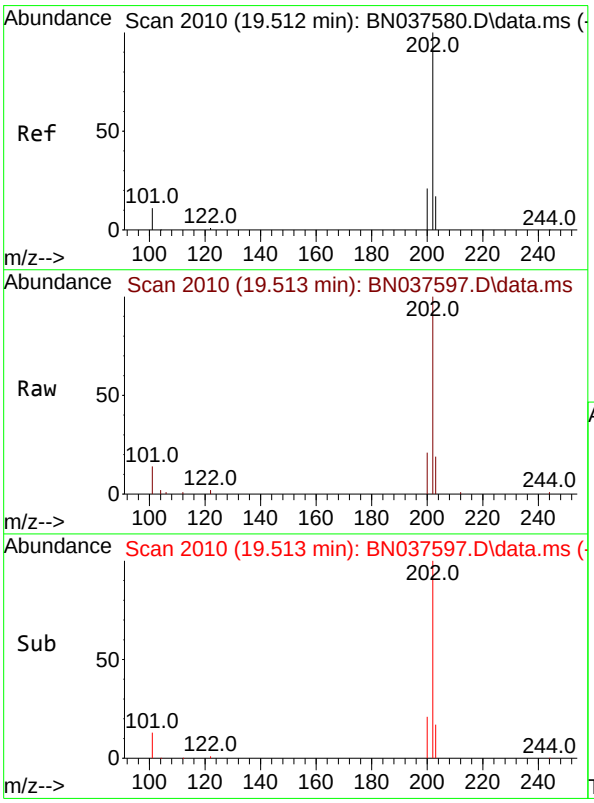
#29
Chrysene-d12
Concen: 0.400 ng
RT: 21.277 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:240 Resp: 4216

Ion	Ratio	Lower	Upper
240	100		
120	12.6	8.9	13.3
236	28.0	22.6	33.8

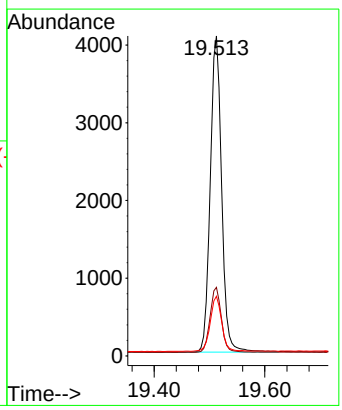


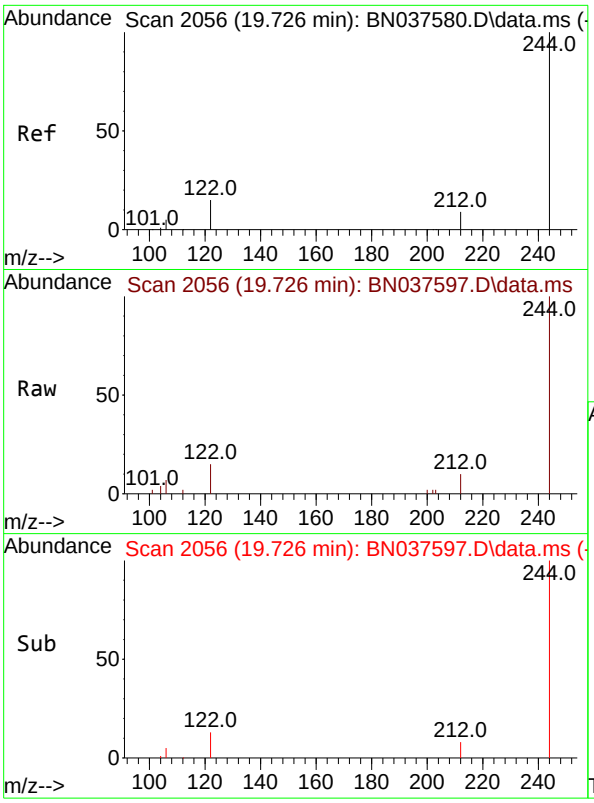


#30
Pyrene
Concen: 0.369 ng
RT: 19.513 min Scan# 2010
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:202 Resp: 5813

Ion	Ratio	Lower	Upper
202	100		
200	20.5	16.6	25.0
203	17.7	14.3	21.5



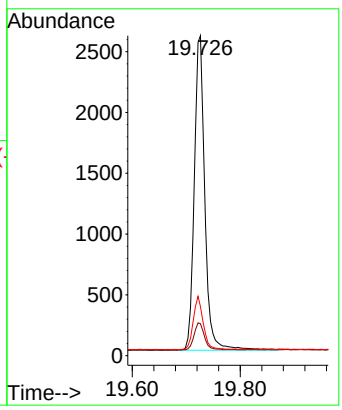


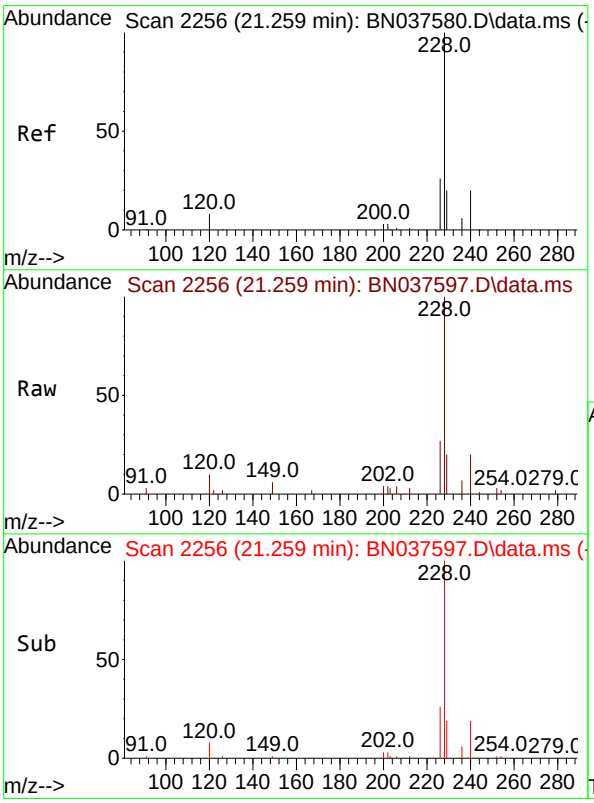
#31
Terphenyl-d14
Concen: 0.405 ng
RT: 19.726 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:244 Resp: 3509

Ion	Ratio	Lower	Upper
244	100		
212	10.0	8.2	12.2
122	15.4	13.2	19.8

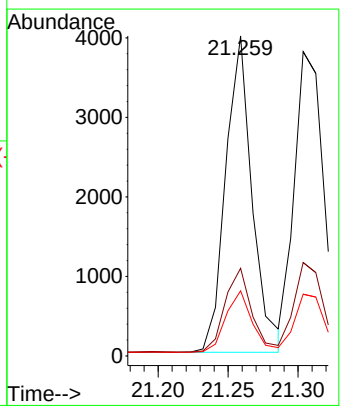


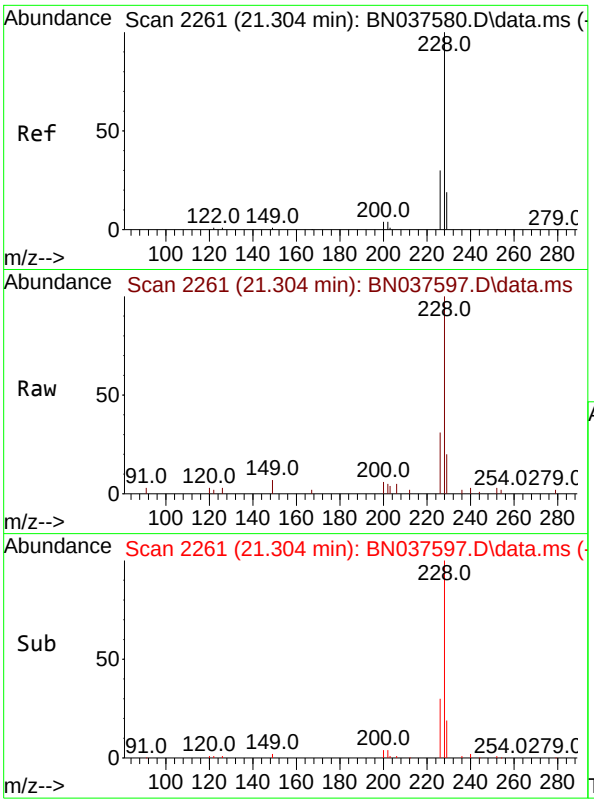


#32
Benzo(a)anthracene
Concen: 0.372 ng
RT: 21.259 min Scan# 2256
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:228 Resp: 5245

Ion	Ratio	Lower	Upper
228	100		
226	27.4	21.5	32.3
229	20.4	16.5	24.7



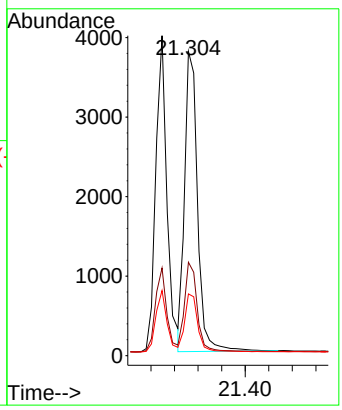


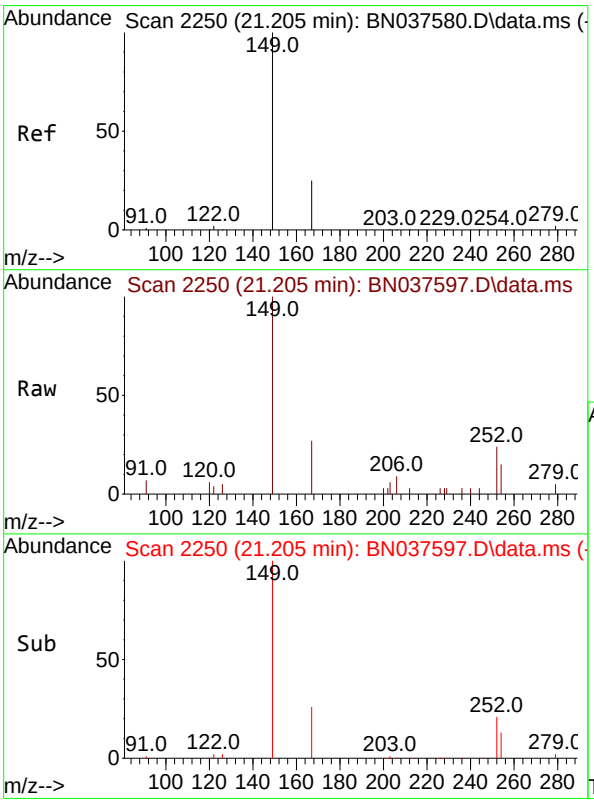
#33
Chrysene
Concen: 0.367 ng
RT: 21.304 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:228 Resp: 5767

Ion	Ratio	Lower	Upper
228	100		
226	30.7	24.9	37.3
229	20.3	15.8	23.8

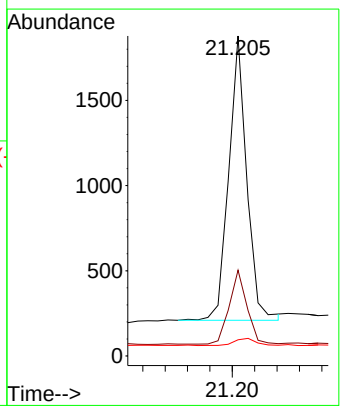


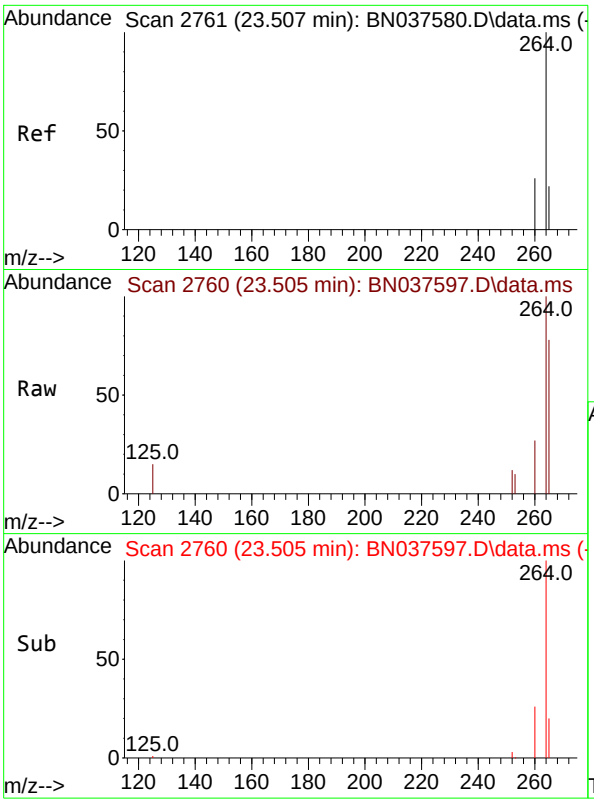


#34
Bis(2-ethylhexyl)phthalate
Concen: 0.321 ng
RT: 21.205 min Scan# 2250
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:149 Resp: 1866

Ion	Ratio	Lower	Upper
149	100		
167	25.3	20.5	30.7
279	3.3	2.6	4.0



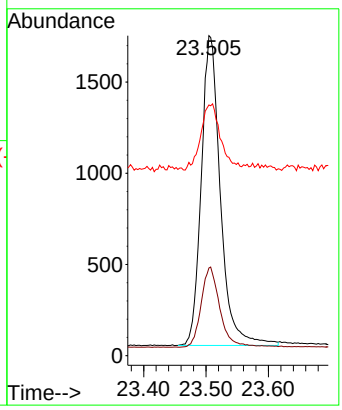


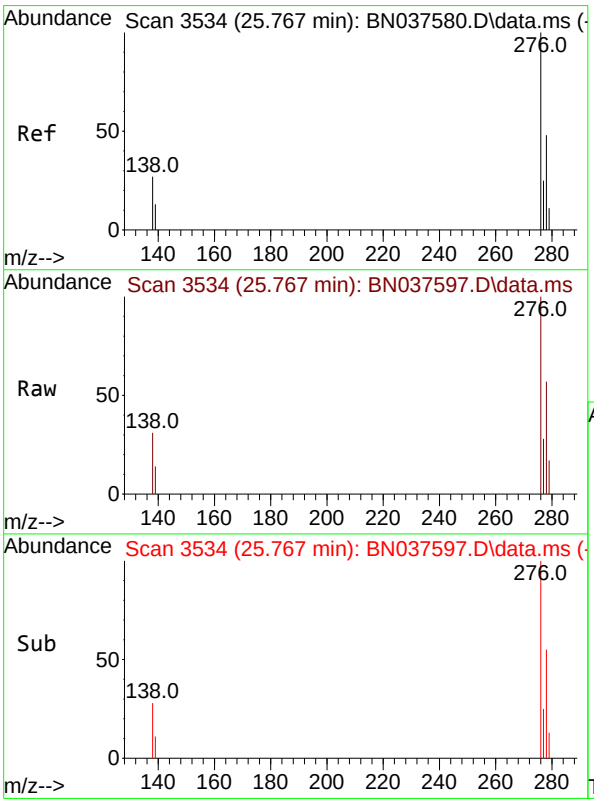
#35
Perylene-d12
Concen: 0.400 ng
RT: 23.505 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:264 Resp: 3616

Ion	Ratio	Lower	Upper
264	100		
260	27.4	21.6	32.4
265	78.3	48.2	72.4#

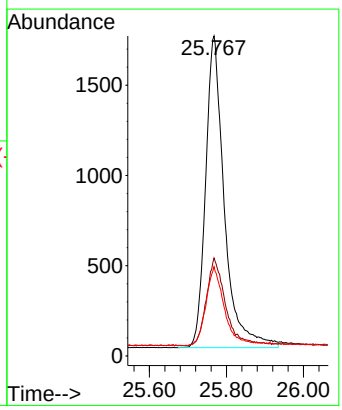


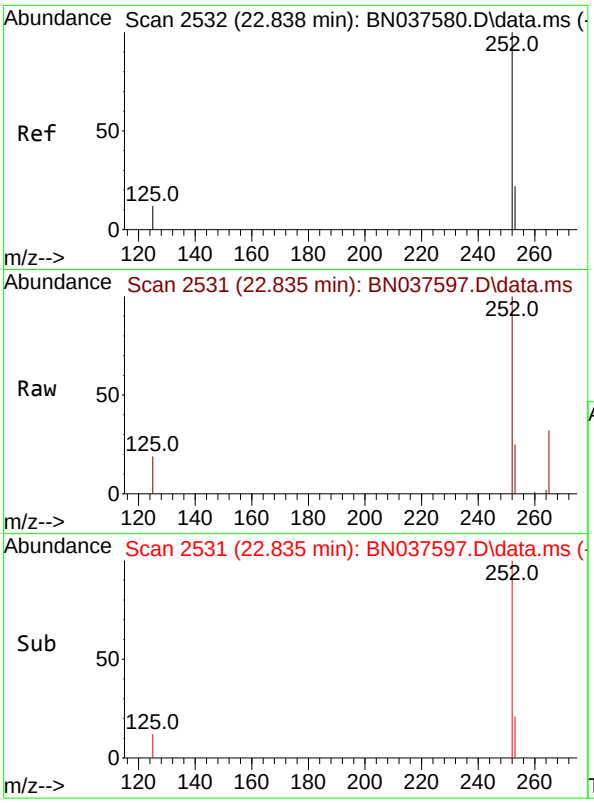


#36
Indeno(1,2,3-cd)pyrene
Concen: 0.382 ng
RT: 25.767 min Scan# 3534
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:276 Resp: 5820

Ion	Ratio	Lower	Upper
276	100		
138	28.8	23.3	34.9
277	24.4	19.5	29.3



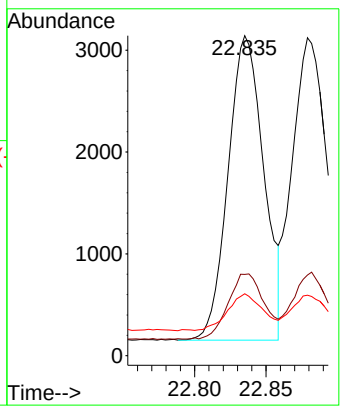


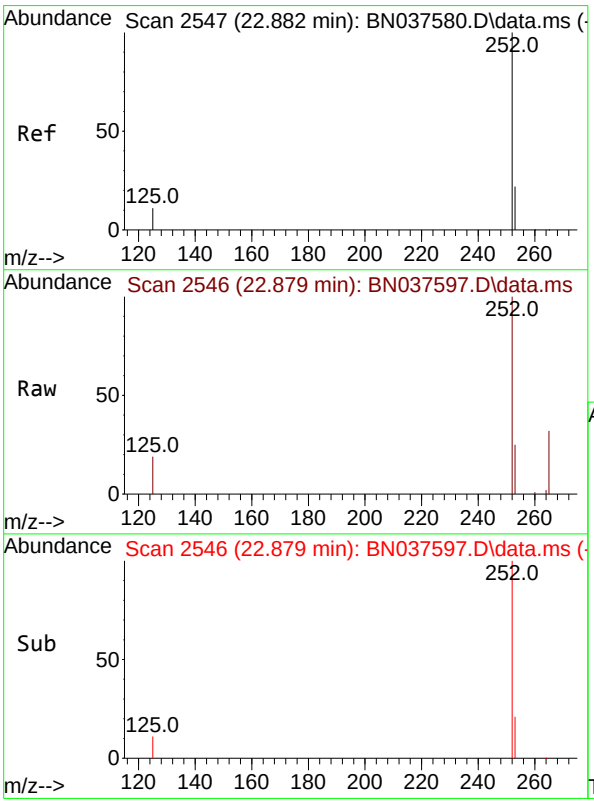
#37
Benzo(b)fluoranthene
Concen: 0.379 ng
RT: 22.835 min Scan# 2
Delta R.T. -0.003 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:252 Resp: 5199

Ion	Ratio	Lower	Upper
252	100		
253	25.4	20.0	30.0
125	19.4	13.8	20.6

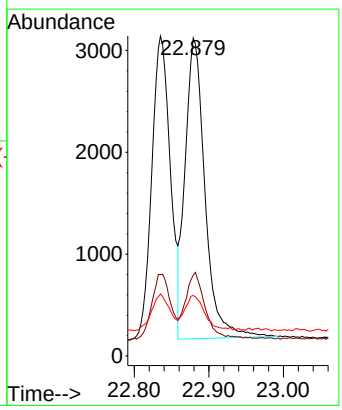


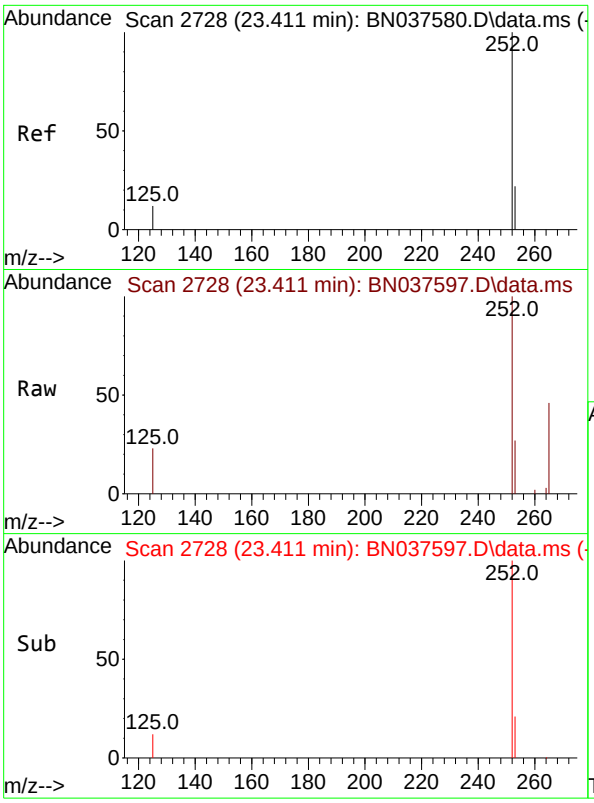


#38
Benzo(k)fluoranthene
Concen: 0.354 ng
RT: 22.879 min Scan# 2546
Delta R.T. -0.003 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:252 Resp: 5467

Ion	Ratio	Lower	Upper
252	100		
253	25.4	19.9	29.9
125	19.1	15.0	22.6



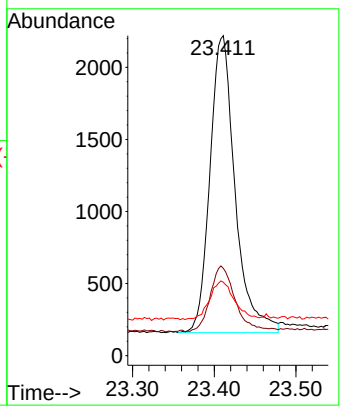


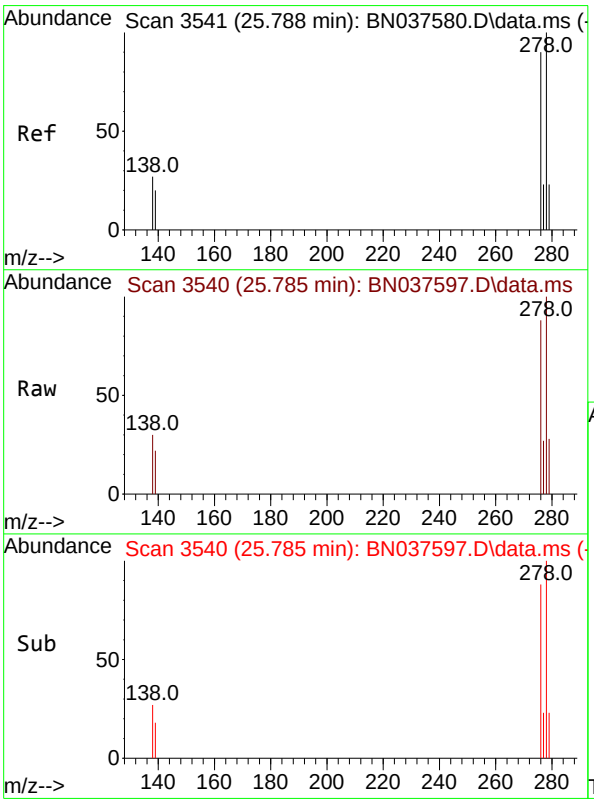
#39
Benzo(a)pyrene
Concen: 0.388 ng
RT: 23.411 min Scan# 2
Delta R.T. 0.000 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:252 Resp: 4407

Ion	Ratio	Lower	Upper
252	100		
253	27.3	21.6	32.4
125	22.9	16.8	25.2

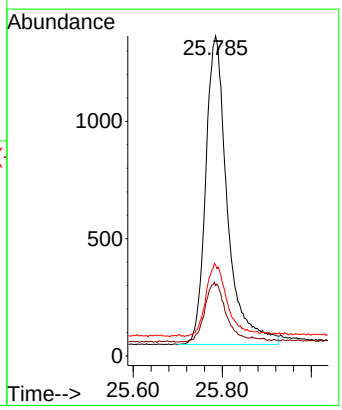


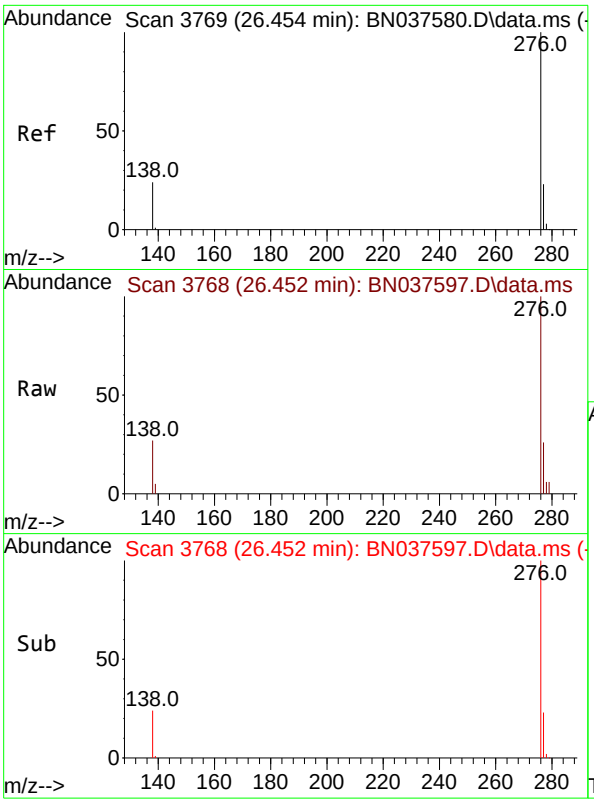


#40
Dibenzo(a,h)anthracene
Concen: 0.376 ng
RT: 25.785 min Scan# 3540
Delta R.T. -0.003 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Tgt Ion:278 Resp: 4450

Ion	Ratio	Lower	Upper
278	100		
139	22.0	18.3	27.5
279	28.4	22.5	33.7



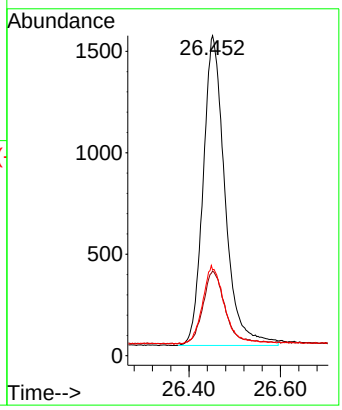


#41
Benzo(g,h,i)perylene
Concen: 0.406 ng
RT: 26.452 min Scan# 3
Delta R.T. -0.003 min
Lab File: BN037597.D
Acq: 13 Aug 2025 15:58

Instrument :
BNA_N
ClientSampleId :
PB169222BSD

Tgt Ion:276 Resp: 5052

Ion	Ratio	Lower	Upper
276	100		
277	26.4	21.0	31.4
138	26.8	21.7	32.5



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

Manual Integration Report

Sequence:	BN081225	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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

Manual Integration Report

Sequence:	BN081325	Instrument	BNA_n

Sample ID	File ID	Parameter	Review By	Review On	Supervised By	Supervised On	Reason

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN081225

Review By	Rahul	Review On	8/13/2025 11:25:23 AM		
Supervise By	Jagrut	Supervise On	8/13/2025 11:26:50 AM		
SubDirectory	BN081225	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn081225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848
CCC	SP6846
Internal Standard/PEM	SP6830,1ul/100ul sample
ICV/I.BLK	SP6854
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN037576.D	12 Aug 2025 15:05	RC/JU	Ok
2	SSTDCCC0.4	BN037577.D	12 Aug 2025 15:49	RC/JU	Not Ok
3	SSTDICC0.1	BN037578.D	12 Aug 2025 16:26	RC/JU	Ok
4	SSTDICC0.2	BN037579.D	12 Aug 2025 17:03	RC/JU	Ok
5	SSTDICCC0.4	BN037580.D	12 Aug 2025 17:39	RC/JU	Ok
6	SSTDICC0.8	BN037581.D	12 Aug 2025 18:16	RC/JU	Ok
7	SSTDICC1.6	BN037582.D	12 Aug 2025 18:52	RC/JU	Ok
8	SSTDICC3.2	BN037583.D	12 Aug 2025 19:29	RC/JU	Ok
9	SSTDICC5.0	BN037584.D	12 Aug 2025 20:05	RC/JU	Ok
10	SSTDICV0.4	BN037585.D	12 Aug 2025 20:42	RC/JU	Ok
11	PB169094BL	BN037586.D	12 Aug 2025 21:55	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN081325

Review By	Rahul	Review On	8/14/2025 10:14:13 AM		
Supervise By	Jagrut	Supervise On	8/15/2025 3:48:33 PM		
SubDirectory	BN081325	HP Acquire Method	BNA_N, 8270_SIM	HP Processing Method	bn081225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848
CCC	SP6846
Internal Standard/PEM	SP6830,1ul/100ul sample
ICV/I.BLK	SP6854
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	Data File Name	Date-Time	Operator	Status
1	DFTPP	BN037587.D	13 Aug 2025 09:48	RC/JU	Ok
2	SSTDCCC0.4	BN037588.D	13 Aug 2025 10:28	RC/JU	Ok
3	PB169222BL	BN037589.D	13 Aug 2025 11:05	RC/JU	Ok
4	Q2805-01	BN037590.D	13 Aug 2025 11:42	RC/JU	Ok
5	Q2805-02	BN037591.D	13 Aug 2025 12:18	RC/JU	Ok
6	Q2806-01	BN037592.D	13 Aug 2025 12:55	RC/JU	Ok
7	Q2806-02	BN037593.D	13 Aug 2025 13:31	RC/JU	Ok
8	Q2806-03	BN037594.D	13 Aug 2025 14:08	RC/JU	Ok
9	Q2825-01	BN037595.D	13 Aug 2025 14:45	RC/JU	Ok
10	PB169222BS	BN037596.D	13 Aug 2025 15:22	RC/JU	Ok
11	PB169222BSD	BN037597.D	13 Aug 2025 15:58	RC/JU	Ok
12	SSTDCCC0.4	BN037598.D	13 Aug 2025 16:35	RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN081225

Review By	Rahul	Review On	8/13/2025 11:25:23 AM	
Supervise By	Jagrut	Supervise On	8/13/2025 11:26:50 AM	
SubDirectory	BN081225	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn081225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848
CCC	SP6846
Internal Standard/PEM	SP6830,1ul/100ul sample
ICV/I.BLK	SP6854
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN037576.D	12 Aug 2025 15:05		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN037577.D	12 Aug 2025 15:49	A Fresh Calibration is required	RC/JU	Not Ok
3	SSTDICC0.1	SSTDICC0.1	BN037578.D	12 Aug 2025 16:26		RC/JU	Ok
4	SSTDICC0.2	SSTDICC0.2	BN037579.D	12 Aug 2025 17:03		RC/JU	Ok
5	SSTDICCC0.4	SSTDICCC0.4	BN037580.D	12 Aug 2025 17:39	Compound #20 kept on LR	RC/JU	Ok
6	SSTDICC0.8	SSTDICC0.8	BN037581.D	12 Aug 2025 18:16		RC/JU	Ok
7	SSTDICC1.6	SSTDICC1.6	BN037582.D	12 Aug 2025 18:52		RC/JU	Ok
8	SSTDICC3.2	SSTDICC3.2	BN037583.D	12 Aug 2025 19:29		RC/JU	Ok
9	SSTDICC5.0	SSTDICC5.0	BN037584.D	12 Aug 2025 20:05	Comp #20,23,24 removed from 5ppm	RC/JU	Ok
10	SSTDICV0.4	ICVBN081225	BN037585.D	12 Aug 2025 20:42		RC/JU	Ok
11	PB169094BL	PB169094BL	BN037586.D	12 Aug 2025 21:55		RC/JU	Ok

M : Manual Integration

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

Instrument ID: BNA_N

Daily Analysis Runlog For Sequence/QCBatch ID # BN081325

Review By	Rahul	Review On	8/14/2025 10:14:13 AM	
Supervise By	Jagrut	Supervise On	8/15/2025 3:48:33 PM	
SubDirectory	BN081325	HP Acquire Method	BNA_N, 8270_HP Processing Method	bn081225

STD. NAME	STD REF.#
Tune/Reschk	SP6757
Initial Calibration Stds	SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848
CCC	SP6846
Internal Standard/PEM	SP6830,1ul/100ul sample
ICV/I.BLK	SP6854
Surrogate Standard	
MS/MSD Standard	
LCS Standard	

Sr#	SampleId	ClientID	Data File Name	Date-Time	Comment	Operator	Status
1	DFTPP	DFTPP	BN037587.D	13 Aug 2025 09:48		RC/JU	Ok
2	SSTDCCC0.4	SSTDCCC0.4	BN037588.D	13 Aug 2025 10:28		RC/JU	Ok
3	PB169222BL	PB169222BL	BN037589.D	13 Aug 2025 11:05		RC/JU	Ok
4	Q2805-01	RW8-SP100-20250807	BN037590.D	13 Aug 2025 11:42		RC/JU	Ok
5	Q2805-02	RW8-SP303-20250807	BN037591.D	13 Aug 2025 12:18		RC/JU	Ok
6	Q2806-01	RW7-SP100-20250807	BN037592.D	13 Aug 2025 12:55		RC/JU	Ok
7	Q2806-02	RW7-SP201-20250807	BN037593.D	13 Aug 2025 13:31		RC/JU	Ok
8	Q2806-03	RW7-SP303-20250807	BN037594.D	13 Aug 2025 14:08		RC/JU	Ok
9	Q2825-01	TW1	BN037595.D	13 Aug 2025 14:45		RC/JU	Ok
10	PB169222BS	PB169222BS	BN037596.D	13 Aug 2025 15:22		RC/JU	Ok
11	PB169222BSD	PB169222BSD	BN037597.D	13 Aug 2025 15:58		RC/JU	Ok
12	SSTDCCC0.4	SSTDCCC0.4EC	BN037598.D	13 Aug 2025 16:35		RC/JU	Ok

M : Manual Integration

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PB169222

SOP ID:	M3510C,3580A-Extraction SVOC-21				
Clean Up SOP #:	N/A			**Extraction Start Date :**	08/12/2025
Matrix :	Water			**Extraction Start Time :**	08:52
Weigh By:	N/A	**Extraction By:**	RS	**Extraction End Date :**	08/12/2025
Balance check:	N/A	**Filter By:**	RJ	**Extraction End Time :**	13:50
Balance ID:	N/A	**pH Meter ID:**	N/A	**Concentration By:**	RS
pH Strip Lot#:	E3880	**Hood ID:**	4,6,7	**Supervisor By :**	RUPESH

Extraction Method: [√] Seperatory Funnel [ ] Continious Liquid/Liquid [ ] Sonication [ ] Waste Dilution [ ] Soxhlet

Standared Name	MLS USED	Concentration ug/mL	STD REF. # FROM LOG
Spike Sol 1	1.0ML	0.4 PPM	SP6855
Surrogate	1.0ML	0.4 PPM	SP6831
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

Chemical Used	ML/SAMPLE USED	Lot Number
Methylene Chloride	N/A	E3954
Baked Na2SO4	N/A	EP2632
10N NaoH	N/A	EP2609
H2SO4 1:1	N/A	EP2610
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:

1.5 ML Vial lot# 2210443. pH Adjusted<2 with 1:1 H2SO4 &>11 with 10 N NaOH.

KD Bath ID:	WATER BATH-1,2	**Envap ID:**	NEVAP-02
KD Bath Temperature:	60 °C	**Envap Temperature:**	40 °C

Date / Time	Prepped Sample Relinquished By/Location	Received By/Location
8/12/25	RS (Ext-Lab)	RC/SVOC
13:55	**Preparation Group**	**Analysis Group**

Alliance TECHNICAL GROUP

EXTRACTION LOGPAGE

PrepBatch ID : PB169222

Analytical Method: M3510C,3580A-Extraction SVOC-21 **Concentration Date:** 08/04/2025

Sample ID	Client Sample ID	Test	g / mL	PH	Surr/Spike By:		Final Vol. (mL)	JarID	Comments	Prep Pos
					AddedBy	VerifiedBy				
PB169222BL	SBLK222	SVOC-SIMGroup1	1000	6	RUPESH	ritesh	1			SEP-1
PB169222BS	SLCS222	SVOC-SIMGroup1	1000	6	RUPESH	ritesh	1			2
PB169222BSD	SLCSD222	SVOC-SIMGroup1	1000	6	RUPESH	ritesh	1			3
Q2805-01	RW8-SP100-20250807	SVOC-SIMGroup1	990	6	RUPESH	ritesh	1	B		4
Q2805-02	RW8-SP303-20250807	SVOC-SIMGroup1	980	6	RUPESH	ritesh	1	D		5
Q2806-01	RW7-SP100-20250807	SVOC-SIMGroup1	980	6	RUPESH	ritesh	1			6
Q2806-02	RW7-SP201-20250807	SVOC-SIMGroup1	1000	6	RUPESH	ritesh	1			7
Q2806-03	RW7-SP303-20250807	SVOC-SIMGroup1	890	6	RUPESH	ritesh	1			8
Q2825-01	TW1	SVOC-SIMGroup1	990	6	RUPESH	ritesh	1	D		9

RS 8/12

* **Extracts relinguished on the same date as received.**

169222
8:52

WORKLIST(Hardcopy Internal Chain)

WorkList Name : Q2805 **WorkList ID :** 191234 **Department :** Extraction **Date :** 08-12-2025 08:47:10

Sample	Customer Sample	Matrix	Test	Preservative	Customer	Raw Sample Storage Location	Collect Date	Method
Q2805-01	RW8-SP100-20250807	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	J22	08/07/2025	8270-Modified
Q2805-02	RW8-SP303-20250807	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	J22	08/07/2025	8270-Modified
Q2806-01	RW7-SP100-20250807	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	J11	08/07/2025	8270-Modified
Q2806-02	RW7-SP201-20250807	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	J11	08/07/2025	8270-Modified
Q2806-03	RW7-SP303-20250807	Water	SVOC-SIMGroup1	Cool 4 deg C	TETR06	J11	08/07/2025	8270-Modified
Q2825-01	TW1	Water	SVOC-SIMGroup1	Cool 4 deg C	GENV01	D31	08/10/2025	8270-Modified

Date/Time 8/12/25 8:47
Raw Sample Received by: RS (Ext Lab)
Raw Sample Relinquished by: CP SM

Date/Time 8/12/25 9:30
Raw Sample Received by: CP SM
Raw Sample Relinquished by: RS (Ext Lab)

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

Prep Standard - Chemical Standard Summary

Order ID : Q2806

Test : SVOC-SIMGroup1

Prepbatch ID : PB169222,

Sequence ID/Qc Batch ID: BN081325,

Standard ID :
EP2609,EP2610,EP2632,SP6757,SP6830,SP6831,SP6841,SP6842,SP6843,SP6844,SP6845,SP6846,SP6847,SP6848,SP6853,SP6854,SP6855,

Chemical ID :
1ul/100ul sample,E3657,E3875,E3904,E3932,E3940,E3942,E3943,E3954,M6157,S10105,S11073,S11496,S11652,S11807,S11828,S12115,S12195,S12197,S12216,S12220,S12273,S12498,S12499,S12552,S12577,S12670,S12986,S13058,W3112,

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

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
1874	10 N SODIUM HYDROXIDE SOLN	EP2609	05/07/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/07/2025

FROM 1000.00000ml of W3112 + 400.00000gram of E3657 = Final Quantity: 1000.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
314	1.1 H2SO4 SOLN	EP2610	05/07/2025	11/07/2025	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 05/07/2025

FROM 1000.00000ml of M6157 + 1000.00000ml of W3112 = Final Quantity: 2000.000 ml

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

Extractions STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3923	Baked Sodium Sulfate	EP2632	08/11/2025	01/28/2026	RUPESHKUMAR SHAH	Extraction_SCALE_2 (EX-SC-2)	None	Riteshkumar Patel 08/11/2025

FROM 4000.00000gram of E3875 = Final Quantity: 4000.000 gram

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3895	50 ug/ml DFTPP 8270E	SP6757	03/31/2025	09/30/2025	Rahul Chavli	None	None	Jagrut Upadhyay 04/01/2025

FROM 1.00000ml of S12577 + 19.00000ml of E3904 = Final Quantity: 20.000 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3493	Internal Standard 0.4 PPM	SP6830	06/17/2025	12/13/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/19/2025

FROM 0.10000ml of S12670 + 4.90000ml of E3942 = Final Quantity: 5.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3491	8270-SIM-Surrogate 0.4 PPM	SP6831	06/18/2025	09/18/2025	Rahul Chavli	None	None	Jagrut Upadhyay 06/18/2025

FROM 0.00800ml of S12195 + 0.01600ml of S12216 + 0.04000ml of S11828 + 199.93600ml of E3940 = Final Quantity: 200.000 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3339	8270 sim calibration stock 10ppm (CPI)	SP6841	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.03350ml of S10105 + 0.05000ml of S11496 + 0.12500ml of S11828 + 0.12500ml of S12115 + 0.25000ml of S12273 + 0.25000ml of S13058 + 24.16650ml of E3943 = Final Quantity: 25.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3361	8270-SIM MDL-5PPM CALIBRATION SOLUTION	SP6842	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6841 = Final Quantity: 1.010 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3341	8270-SIM MDL-3.2PPM CALIBRATION SOLUTION	SP6843	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.68000ml of E3943 + 0.01000ml of SP6830 + 0.32000ml of SP6841 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3344	8270-SIM MDL-1.6PPM CALIBRATION SOLUTION	SP6844	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.84000ml of E3943 + 0.01000ml of SP6830 + 0.16000ml of SP6841 = Final Quantity: 1.010 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3342	8270-SIM MDL-0.8PPM CALIBRATION SOLUTION	SP6845	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.92000ml of E3943 + 0.01000ml of SP6830 + 0.08000ml of SP6841 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3343	8270-SIM MDL-0.4PPM CALIBRATION SOLUTION	SP6846	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.96000ml of E3943 + 0.01000ml of SP6830 + 0.04000ml of SP6841 = Final Quantity: 1.010 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3345	8270-SIM MDL-0.2PPM CALIBRATION SOLUTION	SP6847	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.50000ml of E3943 + 0.01000ml of SP6830 + 0.50000ml of SP6846 = Final Quantity: 1.010 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3346	8270-SIM MDL-0.1PPM CALIBRATION SOLUTION	SP6848	06/25/2025	10/28/2025	Jagrut Upadhyay	None	None	Rahul Chavli 06/25/2025

FROM 0.75000ml of E3943 + 0.01000ml of SP6830 + 0.25000ml of SP6846 = Final Quantity: 1.010 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3355	8270-SIM MDL-3.2PPM CALIBRATION STOCK SOL- 2ND SOURCE	SP6853	07/02/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli 07/08/2025

FROM 0.00630ml of S12197 + 0.01280ml of S12220 + 0.03200ml of S11073 + 0.03200ml of S11828 + 0.06400ml of S12499 + 0.06400ml of S12552 + 0.06400ml of S12986 + 19.72490ml of E3943 = Final Quantity: 20.000 ml

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3356	8270-SIM MDL-0.4PPM CALIBRATION SOL ICV-2ND SOURCE	SP6854	07/02/2025	09/30/2025	Jagrut Upadhyay	None	None	Rahul Chavli 07/16/2025

FROM 0.87500ml of E3943 + 0.01000ml of SP6830 + 0.12500ml of SP6853 = Final Quantity: 1.010 ml

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

SVOC STANDARD PREPARATION LOG

Recipe ID	NAME	NO.	Prep Date	Expiration Date	Prepared By	ScaleID	PipetteID	Supervised By
3492	8270-SIM-Spike 0.4 PPM	SP6855	07/30/2025	09/30/2025	Rahul Chavli	None	None	Jagrut Upadhyay 08/05/2025

FROM 0.00080ml of S11652 + 0.01000ml of S11807 + 0.02000ml of S12498 + 0.02000ml of S12552 + 0.02000ml of S12986 + 49.92920ml of E3932 = Final Quantity: 50.000 ml

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
PCI Scientific Supply, Inc.	PC19510-5 / Sodium Hydroxide Pellets 2.5 Kg, Pk of 4	23B1556310	12/31/2025	12/04/2023 / Rajesh	12/01/2023 / Rajesh	E3657

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	417203	01/28/2026	07/28/2025 / RUPESH	01/29/2025 / Rajesh	E3875

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	24K1762005	01/07/2026	03/13/2025 / RUPESH	12/27/2024 / RUPESH	E3904

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)	24H1462005	11/05/2025	05/05/2025 / RUPESH	04/23/2025 / RUPESH	E3932

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)	24H1462005	12/11/2025	06/11/2025 / Rajesh	06/04/2025 / Rajesh	E3940

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)	25A2862010	12/13/2025	06/13/2025 / Rajesh	02/28/2025 / Rajesh	E3942

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	BA-9644-A4 / Methylene Chloride,U-Resi, Cycle-Tainer (215L)	25A2862010	12/13/2025	06/13/2025 / Rajesh	02/28/2025 / Rajesh	E3943

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)	25B1862001	03/19/2026	07/14/2025 / RUPESH	06/11/2025 / RUPESH	E3954

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)	24i1262013	11/07/2025	05/07/2025 / RUPESH	02/18/2025 / Mohan	M6157

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	12/19/2025	06/19/2025 / Jagrut	12/09/2021 / Christian	S10105

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	A0187043	11/16/2025	05/16/2025 / Jagrut	02/06/2023 / Christian	S11073

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	Z-110094-02 / CLP Base/Neutral Surrogate Solution, 5000 mg/L, 1ml	506889	10/28/2025	04/28/2025 / Jagrut	08/11/2023 / Yogesh	S11496

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	555872 / Custom Standard, pentachlorophenol Std [CS 5328-5]	A0201728	01/30/2026	07/30/2025 / Rahul	11/09/2023 / Yogesh	S11652

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	A0200655	01/01/2026	07/01/2025 / Rahul	11/21/2023 / rahul	S11807

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	33913 / SOM01.0 SIM Analysis Standard (Surrogate), 2000 PPM	A0201976	12/09/2025	06/09/2025 / Jagrut	11/21/2023 / rahul	S11828

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
CPI International	z-010223-01 / 1,4-Dioxane Solution, 2,000mg/L, 1ml	454157	10/28/2025	04/28/2025 / Jagrut	03/08/2024 / Rahul	S12115

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12195

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31087 / Acid Surrogate 10,000ug/ml,methanol,5ml/ ampul	A0206206	01/02/2026	07/02/2025 / Jagrut	03/15/2024 / Rahul	S12197

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	09/18/2025	03/18/2025 / anahy	03/15/2024 / Rahul	S12216

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31086 / Base Neutral Surrogate 5000ug/ml,CH2Cl2,5ml	A0206381	01/02/2026	07/02/2025 / Jagrut	03/15/2024 / Rahul	S12220

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	520963	12/25/2025	06/25/2025 / Jagrut	05/24/2024 / Rahul	S12273

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] [CS 4978-1]	A0214021	12/04/2025	06/04/2025 / Jagrut	07/23/2024 / RAHUL	S12498

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] [CS 4978-1]	A0214021	01/01/2026	07/01/2025 / Rahul	07/23/2024 / RAHUL	S12499

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] [CS 4978-2]	A0214017	01/01/2026	07/01/2025 / Rahul	07/23/2024 / RAHUL	S12552

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

CHEMICAL RECEIPT LOG BOOK

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31615 / SV Mixture, GC/MS Tuning Mixture, CH2Cl2, 1mL,	A0212955	06/30/2027	03/31/2025 / Rahul	08/01/2024 / Rahul	S12577

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31206 / SV Mix, CLP method, Internal Std, 2000ug/mL, CH2Cl2, 1mL	A0212266	12/16/2025	06/16/2025 / anahy	09/20/2024 / anahy	S12670

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Restek	31850 / 8270 SV Mix, 8270 Mega Mix 1mL, 1000ug/mL, CH2Cl2 [New Solvent 100% CH2Cl2]	A0219438	09/30/2025	06/04/2025 / Jagrut	12/11/2024 / anahy	S12986

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)	531243	12/25/2025	06/25/2025 / Jagrut	01/16/2025 / anahy	S13058

Supplier	ItemCode / ItemName	Lot #	Expiration Date	Date Opened / Opened By	Received Date / Received By	Chemtech Lot #
Seidler Chemical	DIW / DI Water	Daily Lab-Certified	07/03/2029	07/03/2024 / Iwona	07/03/2024 / Iwona	W3112

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-112090-04	440246	≤ -10 °C	Methylene Chloride	2/16/2026	CLP Acid Surrogate Solution, 7,500 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
2-chlorophenol-d_4	93951-73-6	99.3	248.12.7P	7487 ± 17.2
2-fluorophenol	367-12-4	99.8	10.7.3.3P	7513 ± 17.26
phenol-d6	13127-88-3	99.9	949.120.8P	7481 ± 17.19
2,4,6-tribromophenol	118-79-6	99.8	12.1.6P	7469 ± 17.17

Received on
02/25/21
by
CG

S9236
to
S9240

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: Erica Castiglione

Erica Castiglione
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

RESTEK® CERTIFIED REFERENCE MATERIAL

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Received on 02/06/23 by CG

S11071 to S11075

Catalog No. : 31853 **Lot No.:** A0187043

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2027 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	2,019.0 µg/mL	+/- 11.8486	µg/mL	Gravimetric
	CAS # 123-91-1 (Lot SHBN5929)		+/- 43.2570	µg/mL	Unstressed
	Purity 99%		+/- 44.5129	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)

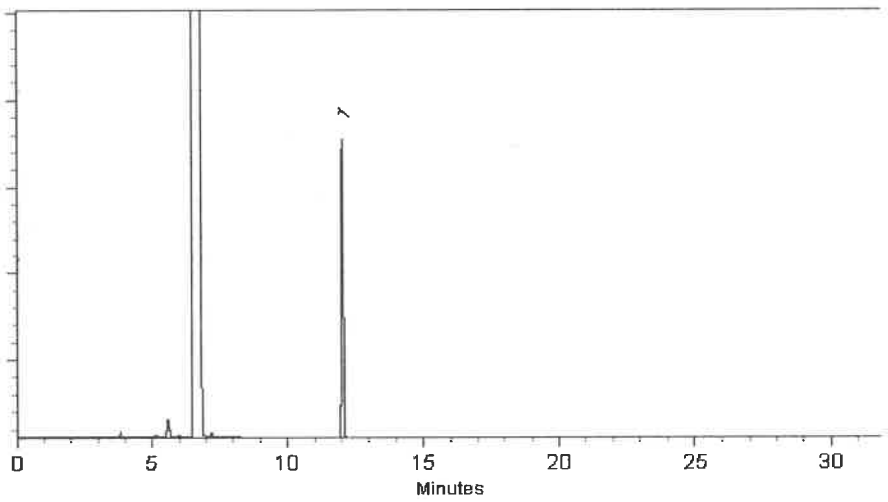
Carrier Gas:
hydrogen-constant pressure 11.0 psi.

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.

Brittany Federinko - Operations Tech I

Date Mixed: 07-Jul-2022 **Balance:** 1128360905

Marlina Cowan – Operations Tech II ARM QC

Date Passed: 12-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

VWR®

Certificate of Analysis

Sodium Hydroxide (Pellets)

Material: 0583
Grade: ACS GRADE
Batch Number: 23B1556310

Chemical Formula: NaOH
Molecular Weight: 40
CAS #: 1310-73-2
Appearance:

Pellets

Manufacture Date: 12/14/2022
Expiration Date: 12/31/2025

Storage: Room Temperature

TEST	SPECIFICATION	ANALYSIS	DISPOSITION
Calcium	<= 0.005 %	<0.005 %	PASS
Chloride	<= 0.005 %	0.002 %	PASS
Heavy Metals	<= 0.002 %	<0.002 %	PASS
Iron	<= 0.001 %	<0.001 %	PASS
Magnesium	<= 0.002 %	<0.002 %	PASS
Mercury	<= 0.1 ppm	<0.1 ppm	PASS
Nickel	<= 0.001 %	<0.001 %	PASS
Nitrogen Compounds	<= 0.001 %	<0.001 %	PASS
Phosphate	<= 0.001 %	<0.001 %	PASS
Potassium	<= 0.02 %	<0.02 %	PASS
Purity	>= 97.0 %	99.2 %	PASS
Sodium Carbonate	<= 1.0 %	0.5 %	PASS
Sulfate	<= 0.003 %	<0.003 %	PASS

Internal ID #: 710

Signature

We certify that this batch conforms to the specifications listed.

This document has been electronically produced and is valid without a signature.

Leona Edwardson, Quality Control Sr. Manager - Solon
VWR Chemicals, LLC.
28600 Fountain Parkway, Solon OH 44139 USA

Additional Information

Analysis may have been rounded to significant digits in specification limits.

Product meets analytical specifications of the grades listed.

E 3657	E 3659
E 3654	E 3660

PRODUCTOS QUIMICOS 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 :	Na_2SO_4
SPECIFICATION NUMBER:	6399	RELEASE DATE:	MAY/23/2024
LOT NUMBER :	417203		

TEST	SPECIFICATIONS	LOT VALUES
Assay (Na_2SO_4)	Min. 99.0%	99.8 %
pH of a 5% solution at 25°C	5.2 - 9.2	6.2
Insoluble matter	Max. 0.01%	0.001 %
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%	0.001 %
Magnesium (Mg)	Max. 0.005%	0.001 %
Potassium (K)	Max. 0.008%	0.001 %
Extraction-concentration suitability	Passes test	Passes test
Appearance	Passes test	Passes test
Identification	Passes test	Passes test
Solubility and foreing matter	Passes test	Passes test
Retained on US Standard No. 10 sieve	Max. 1%	0.2 %
Retained on US Standard No. 60 sieve	Min. 94%	96.2 %
Through US Standard No. 60 sieve	Max. 5%	3.5 %
Through US Standard No. 100 sieve	Max. 10%	0.1 %

COMMENTS

QC: PhC Irma Belmares

If you need further details, please call our factory or contact our local distributor.

E 3875

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

Material No.: 9254-03
Batch No.: 24H1462005
Manufactured Date: 2024-05-24
Expiration Date:2027-05-24
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD RS

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E 3932

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

Acetone
BAKER RESI-ANALYZED® Reagent
For Organic Residue Analysis

avantor™ | J.T.Baker

Material No.: 9254-03
Batch No.: 24H1462005
Manufactured Date: 2024-05-24
Expiration Date:2027-05-24
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
Assay ($(CH_3)_2CO$) (by GC, corrected forwater)	>= 99.4 %	99.8 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.2 ppm
Substances Reducing Permanganate	Passes Test	Passes Test
Titrable Acid (µeq/g)	<= 0.3	0.2
Titrable Base (µeq/g)	<= 0.6	<0.1
Water (H_2O)	<= 0.5 %	0.2 %
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	1

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Recd by RP on 6/11/25

E3940

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A2862010
Manufactured Date: 2024-12-18
Expiration Date:2026-03-19
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3942

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 25A2862010
Manufactured Date: 2024-12-18
Expiration Date:2026-03-19
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

E3943

JCroak
Jamie Croak
Director Quality Operations, Bioscience Production

Methylene Chloride
ULTRA RESI-ANALYZED
For Organic Residue Analysis
(dichloromethane)

avantor™ | J.T.Baker

Material No.: 9266-A4
Batch No.: 25B1862001
Manufactured Date: 2024-12-18
Expiration Date:2026-03-19
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
FID-Sensitive Impurities (as 2-Octanol)Single Impurity Peak (ng/mL)	<= 5	<1
ECD Sensitive Impurities (as HeptachlorEpoxide) Single Peak (pg/mL)	<= 10	2
Assay (CH_2Cl_2) (by GC, exclusive of preservative, corrected for water)	>= 99.8 %	99.9 %
Color (APHA)	<= 10	5
Residue after Evaporation	<= 1.0 ppm	0.3 ppm
Titrable Acid (µeq/g)	<= 0.3	<0.1
Chloride (Cl)	<= 10 ppm	<5 ppm
Water (by KF, coulometric)	<= 0.02 %	<0.01 %

For Laboratory,Research,or Manufacturing Use
MEETS SPECIFICATIONS WITHIN THE EXPIRATION PERIOD

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

RS 7/14/25

E3954

JCroak

Jamie Croak
Director Quality Operations, Bioscience Production

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

M615 MB

avantor | J.T.Baker

Material No.: 9673-33
Batch No.: 24I1262013
Manufactured Date: 2024-08-07
Retest Date:2029-08-06
Revision No.: 0

Certificate of Analysis

Test	Specification	Result
ACS - Assay (H_2SO_4)	95.0 - 98.0 %	96.2 %
Appearance	Passes Test	Passes Test
ACS - Color (APHA)	<= 10	5
ACS - Residue after Ignition	<= 3 ppm	<1 ppm
ACS - Substances Reducing Permanganate(as SO2)	<= 2 ppm	<2 ppm
Ammonium (NH_4)	<= 1 ppm	<1 ppm
Chloride (Cl)	<= 0.1 ppm	<0.1 ppm
Nitrate (NO_3)	<= 0.2 ppm	0.1 ppm
Phosphate (PO_4)	<= 0.5 ppm	<0.1 ppm
Trace Impurities - Aluminum (Al)	<= 30.0 ppb	<5.0 ppb
Arsenic & Antimony (as As)	<= 4.0 ppb	<2.0 ppb
Trace Impurities - Boron (B)	<= 10.0 ppb	<5.0 ppb
Trace Impurities - Cadmium (Cd)	<= 2.0 ppb	<1.0 ppb
Trace Impurities - Chromium (Cr)	<= 6.0 ppb	<1.0 ppb
Trace Impurities - Cobalt (Co)	<= 0.5 ppb	<0.3 ppb
Trace Impurities - Copper (Cu)	<= 1.0 ppb	<1.0 ppb
Trace Impurities - Gold (Au)	<= 10.0 ppb	<5.0 ppb
Heavy Metals (as Pb)	<= 500.0 ppb	<100.0 ppb
Trace Impurities - Iron (Fe)	<= 50.0 ppb	<1.0 ppb
Trace Impurities - Lead (Pb)	<= 0.5 ppb	<0.5 ppb
Trace Impurities - Magnesium (Mg)	<= 7.0 ppb	<1.0 ppb
Trace Impurities - Manganese (Mn)	<= 1.0 ppb	<1.0 ppb
Trace Impurities - Mercury (Hg)	<= 0.5 ppb	<0.1 ppb
Trace Impurities - Nickel (Ni)	<= 2.0 ppb	<0.3 ppb
Trace Impurities - Potassium (K)	<= 500.0 ppb	<10.0 ppb
Trace Impurities - Selenium (Se)	<= 50.0 ppb	7.2 ppb
Trace Impurities - Silicon (Si)	<= 100.0 ppb	12.8 ppb
Trace Impurities - Silver (Ag)	<= 1.0 ppb	<1.0 ppb

Sulfuric Acid
BAKER INSTRA-ANALYZED® Reagent
For Trace Metal Analysis
Low Selenium

avantor™ | J.T.Baker

Material No.: 9673-33
Batch No.: 24I1262013

Test	Specification	Result
Trace Impurities - Sodium (Na)	<= 500.0 ppb	<5.0 ppb
Trace Impurities - Strontium (Sr)	<= 5.0 ppb	<1.0 ppb
Trace Impurities - Tin (Sn)	<= 5.0 ppb	1.1 ppb
Trace Impurities - Zinc (Zn)	<= 5.0 ppb	<1.0 ppb

For Laboratory,Research,or Manufacturing Use

Country of Origin: United States
Packaging Site: Phillipsburg Mfg Ctr & DC

Jamie Croak
Director Quality Operations, Bioscience Production

For questions on this Certificate of Analysis please contact Technical Services at 855.282.6867 or +1.610.386.1700

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110094-02	506889	≤ -10 °C	Methylene Chloride	7/25/2028	CLP Base/Neutral Surrogate Solution, 5,000 mg/L, 1 ml

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2-dichlorobenzene-d_4	2199-69-1	99.7	247.29.3P	5035 ± 28.02
2-fluorobiphenyl	321-60-8	99.69	8.286.1.1P	4999 ± 103.66
nitrobenzene-d5	4165-60-0	99.67	7.9.3P	4988 ± 27.32
p-terphenyl-d14	1718-51-0	99.3	9.120.8P	5005 ± 27.85

511494 to 511498 } Y.P. 08/11/2023

*Not a certified value

Certified By: _____

Clint Tipton
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

511649 ↓ 511658 Y.P. 11/13/23

Catalog No. : 555872 **Lot No.:** A0201728

Description : Custom Pentachlorophenol Standard

Custom Pentachlorophenol Standard 25,000µg/mL, Methanol, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP230530RSR	99%	25,000.0 µg/mL	+/- 777.0837

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Josh McCloskey - Operations Technician I

Date Mixed: 05-Sep-2023 **Balance:** B251644995

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31853 **Lot No.:** A0200655

S11795 ↓ S11808 RC 11/30/23

Description : 1,4-dioxane

1,4-Dioxane 2,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2028 **Storage:** 0°C or colder

Ship: Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dioxane	123-91-1	SHBQ1693	99%	2,007.0 µg/mL	+/- 24.9775

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

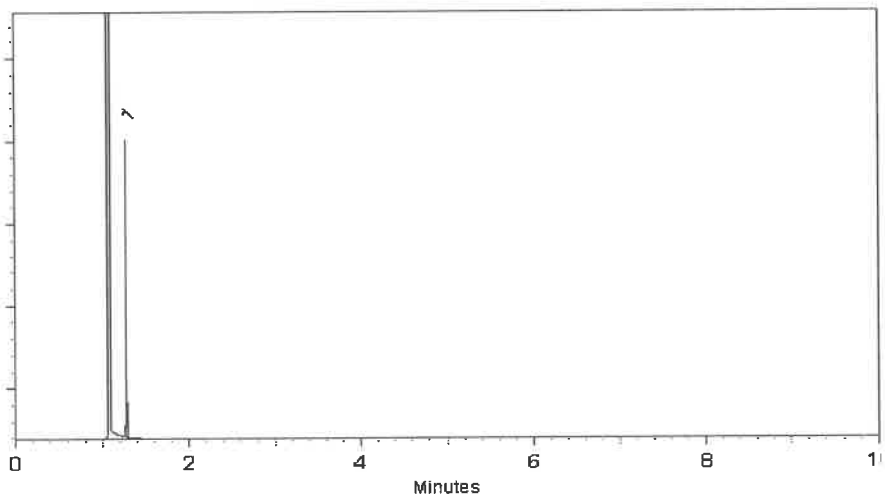
Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID

Split Vent:
100 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 06-Aug-2023 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 08-Aug-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 33913 **Lot No.:** A0201976

Description : SOM01.0 SIM Analysis Standard

SOM01.0 SIM Analysis Standard 2000µg/mL, Methylene chloride, 1mL /ampul

S11828 ↓ S11832 } RC/ 11/30/23

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : August 31, 2029 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Methylnaphthalene-d10	7297-45-2	EF-135	98%	2,015.9 µg/mL	+/- 90.8098
2	Fluoranthene-d10	93951-69-0	PR-32557	99%	2,020.0 µg/mL	+/- 90.9963

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

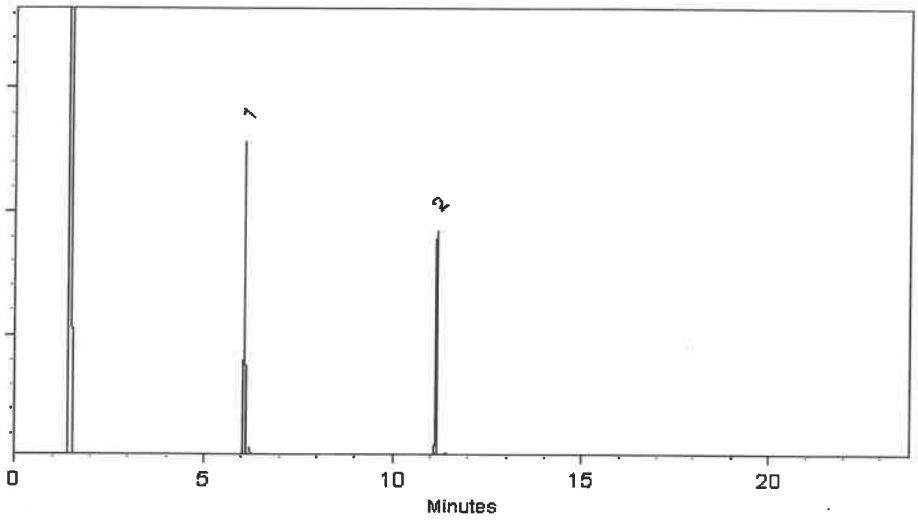
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dakota Parson - Operations Technician I

Date Mixed: 13-Sep-2023 **Balance Serial #** B442140311

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 28-Sep-2023

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received:_____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-020223-01	454157	≤ -10 °C	P/T Methanol	6/10/2026	1,4-Dioxane Solution, 2000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,4-dioxane	123-91-1	100	223.1.3P	1997 ± 57.08

S12112 ↓ S12116 } RC/ 03/08/24

*Not a certified value

Certified By: Melissa Workoff

Melissa Workoff
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31087 **Lot No.:** A0206206

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 : January 31, 2032 **Storage:** 10°C or colder

Ship: Ambient

S12187 ↓ S12206 } RC/ 03/18/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	2-Fluorophenol	367-12-4	STBK1705	99%	10,005.3 µg/mL	+/- 302.5390
2	Phenol-d6	13127-88-3	PR-33287A	99%	10,005.5 µg/mL	+/- 302.5475
3	2,4,6-Tribromophenol	118-79-6	RP230831RSR	99%	10,006.6 µg/mL	+/- 302.5783

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methanol
CAS # 67-56-1
Purity 99%

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

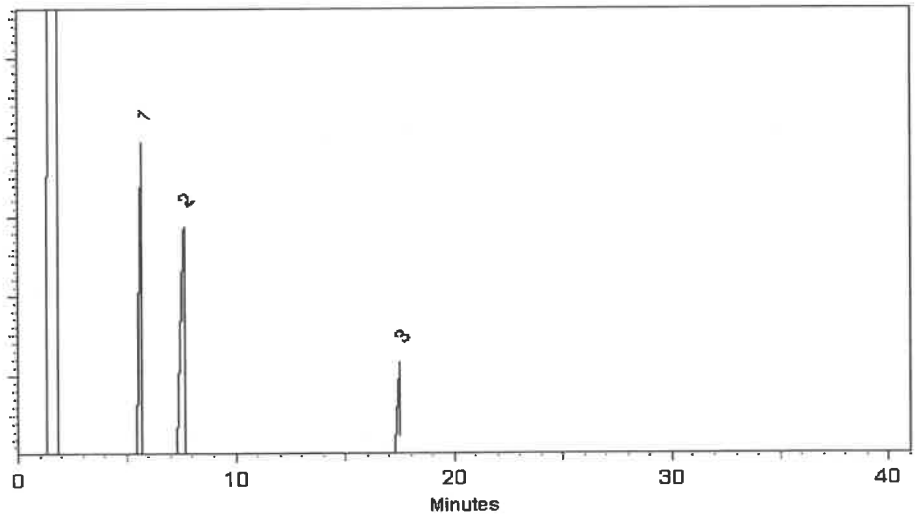
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Penelope Riglin - Operations Tech I

Date Mixed: 04-Jan-2024 **Balance Serial #** 1128360905

Christie Mills - Operations Lead Tech - ARM QC

Date Passed: 08-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

Certificate of Analysis

chromatographic plus

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31086 **Lot No.:** A0206381

Description : B/N Surrogate Mix (4/89 SOW)

Base Neutral Surrogate 5000µg/mL, Methylene Chloride, 5mL/ampul

S12207 ↓ S12221 RC 03/18/24

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2029 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Nitrobenzene-d5	4165-60-0	I-25158	99%	5,029.3 µg/mL	+/- 226.5204
2	2-Fluorobiphenyl	321-60-8	00021384	99%	5,030.9 µg/mL	+/- 226.5936
3	p-Terphenyl-d14	1718-51-0	PR-32599	99%	5,026.4 µg/mL	+/- 226.3909

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Quality Confirmation Test

Column:
30m x 0.25mm x 0.25µm
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.)

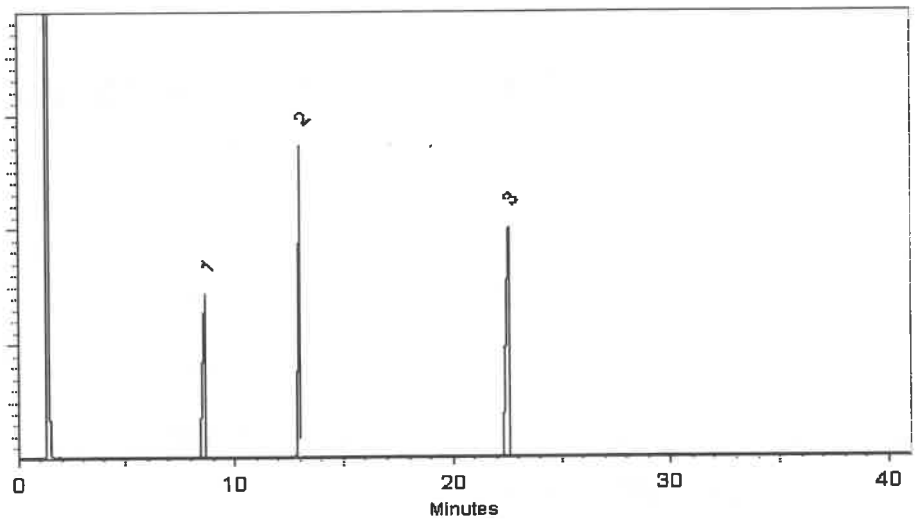
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
2 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Jess Hoy - Operations Tech I

Date Mixed: 09-Jan-2024 **Balance Serial #** 1128360905

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 11-Jan-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110381-01	520963	≤ -10 °C	Methylene Chloride	10/10/2028	Method 8270 Calibration Solution, 76-1, 500 & 1,000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
acenaphthene	83-32-9	99.9	13.1.5P	1010 ± 9.89
acenaphthylene	208-96-8	97.6	14.290.1P	1014 ± 9.93
aniline	62-53-3	99.97	64.1.4P	1001 ± 9.8
anthracene	120-12-7	99.5	15.7.1P	999.6 ± 9.79
azobenzene	103-33-3	98.1	252.7.2P	999.1 ± 9.8
benzo[a]anthracene	56-55-3	100	16.7.3P	1007 ± 9.86
benzo[b]fluoranthene	205-99-2	99.8	17.421.3P	1011 ± 14.11
benzo[k]fluoranthene	207-08-9	98.9	18.421.4P	1001 ± 10.96
benzo[ghi]perylene	191-24-2	93	19.286.4P	999.6 ± 13.95
benzo[a]pyrene	50-32-8	97	20.286.2P	999.9 ± 22.24
benzyl alcohol	100-51-6	99.9	65.18.1P	1001 ± 9.82
bis(2-chloroethoxy)methane	111-91-1	99.1	31.3.15P	1000 ± 14.69
bis(2-chloroethyl)ether	111-44-4	99.8	32.7.1P	1003 ± 13.89
bis(2-chloro-1-methylethyl) ether	108-60-1	99.5	34.3.15P	999.4 ± 14.68
bis(2-ethylhexyl)adipate	103-23-1	99.5	874.7.1P	999.5 ± 9.8
bis(2-ethylhexyl)phthalate	117-81-7	99.4	33.29.1P	998.8 ± 17.03
4-bromophenyl phenyl ether	101-55-3	99.4	35.7.1.1P	1000 ± 13.85
butyl benzyl phthalate	85-68-7	98.4	36.1.6P	984.7 ± 16.79
carbazole	86-74-8	99.4	239.7.2P	1000 ± 9.8

S12270 ↓ S12274 } RC/ 05/24/24

*Not a certified value

Kerry E Kane

Certified By: _____

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
4-chloroaniline	106-47-8	100	66.7.1P	1000 ± 9.79
4-chlorophenylphenyl ether	7005-72-3	98	37.158.2P	1001 ± 17.07
4-chloro-3-methylphenol	59-50-7	99	102.1.2P	1006 ± 17.16
2-chloronaphthalene	91-58-7	99.9	42.7.6P	1000 ± 9.79
2-chlorophenol	95-57-8	99.8	103.7.1P	1007 ± 13.96
chrysene	218-01-9	96	21.286.2P	998.4 ± 12.85
dibenz[a,h]anthracene	53-70-3	99.44	22.286.3P	1000 ± 9.74
dibenzofuran	132-64-9	100	67.7.2.1P	1002 ± 9.77
di-n-butyl phthalate	84-74-2	99.84	40.286.1P	1007 ± 24.48
1,2-dichlorobenzene	95-50-1	99.8	43.7.1P	1000 ± 9.79
1,3-dichlorobenzene	541-73-1	99.5	44.1.3P	999.4 ± 9.79
1,4-dichlorobenzene	106-46-7	99.9	45.29.2P	1000 ± 9.79
2,4-dichlorophenol	120-83-2	99.6	104.7.1.1P	1005 ± 13.93
diethyl phthalate	84-66-2	99.8	38.7.1P	1011 ± 14
2,4-dimethylphenol	105-67-9	99.6	105.7.1.1P	1009 ± 13.98
dimethyl phthalate	131-11-3	99.9	39.9.2P	996.5 ± 13.8
1,2-dinitrobenzene	528-29-0	99.86	86.7.3.1P	999.5 ± 9.75
1,3-dinitrobenzene	99-65-0	100	313.7.2P	998 ± 9.79
1,4-dinitrobenzene	100-25-4	100	907.7.1P	999.5 ± 9.8
2,4-dinitrophenol	51-28-5	99.9	106.1.6DP	1002 ± 13.89
2,4-dinitrotoluene	121-14-2	100	87.7.3P	999.8 ± 13.85
2,6-dinitrotoluene	606-20-2	99.4	88.7.2.1P	999.6 ± 13.85
di-n-octyl phthalate	117-84-0	99.1	41.7.5P	991.6 ± 13.74
diphenylamine	122-39-4	100	78.1.6P	998 ± 13.79
2,3,5,6-tetrachlorophenol	935-95-5	97	1112.286.1P	1004 ± 14.02
fluoranthene	206-44-0	98.6	23.7.4P	999.6 ± 9.79
fluorene	86-73-7	98.4	24.7.1P	999.7 ± 9.79

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
hexachlorobenzene	118-74-1	99	46.158.4P	999.9 ± 13.96
hexachlorobutadiene	87-68-3	97.4	47.1.4P	1000 ± 9.79
hexachlorocyclopentadiene	77-47-4	99.2	48.2.2P	1001 ± 9.8
hexachloroethane	67-72-1	99.9	49.1.4P	1003 ± 9.82
indeno[1,2,3-cd]pyrene	193-39-5	98	25.286.4P	999.4 ± 22.23
isophorone	78-59-1	98.9	90.1.4P	999.9 ± 13.85
2-methyl-4,6-dinitrophenol	534-52-1	99.6	107.421.2DP	991 ± 24.09
1-methylnaphthalene	90-12-0	97.1	249.7.5P	999.2 ± 13.95
2-methylnaphthalene	91-57-6	97.4	68.7.2P	1006 ± 22.38
2-methylphenol	95-48-7	99.6	114.7.3P	1001 ± 13.87
3-methylphenol	108-39-4	99.1	115.7.4P	499.7 ± 6.92
4-methylphenol	106-44-5	99.5	116.7.1P	501.2 ± 6.94
naphthalene	91-20-3	99.8	26.9.1P	1018 ± 9.97
2-nitroaniline	88-74-4	99.7	69.29.1P	999.6 ± 9.79
3-nitroaniline	99-09-2	100	70.7.3P	1000 ± 9.74
4-nitroaniline	100-01-6	99.7	71.29.1P	1001 ± 9.8
nitrobenzene	98-95-3	100	94.7.1P	1000 ± 13.85
2-nitrophenol	88-75-5	99.1	108.29.1P	996.5 ± 13.81
4-nitrophenol	100-02-7	100	109.7.1P	1000 ± 13.82
N-nitrosodimethylamine	62-75-9	99.5	57.3.19P	998.5 ± 14.67
N-nitrosodi-n-propylamine	621-64-7	99.8	59.286.1P	996.8 ± 17
pentachlorophenol	87-86-5	99	110.1.7P	1004 ± 13.92
phenanthrene	85-01-8	99.7	27.1.5P	999 ± 12.87
phenol	108-95-2	100	112.7.1P	998.5 ± 13.8
pyrene	129-00-0	99.2	28.9.2P	998.9 ± 9.78
pyridine	110-86-1	100	101.24.1P	999 ± 9.73
2,3,4,6-Tetrachlorophenol	58-90-2	91.8	120.421.1P	996.5 ± 13.92

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

Certificate of Analysis

Catalog No.: Z-110381-01 **Lot No.:** 520963 **Expiration Date:** 10/10/2028

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
1,2,4-trichlorobenzene	120-82-1	99.6	54.29.1P	999.6 ± 9.79
2,4,5-trichlorophenol	95-95-4	96.5	121.7.1.1P	999.5 ± 13.85
2,4,6-trichlorophenol	88-06-2	99.6	113.7.1P	996 ± 13.8

*Not a certified value

Certified By: Kerry E Kane

Kerry Kane
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

gravimetric

ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555223 **Lot No.:** A0214021

Description : Custom 8270 Plus Standard #1

Custom 8270 Plus Standard #1 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Handling: This product is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	3,3'-Dichlorobenzidine	91-94-1	S240326RSR	99%	1,004.0 µg/mL	+/- 23.0487
2	Atrazine	1912-24-9	5FYWL	99%	1,005.0 µg/mL	+/- 23.0717
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 µg/mL	+/- 23.0947
4	epsilon-Caprolactam	105-60-2	Y16H012	99%	1,000.0 µg/mL	+/- 22.9569

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12449 ↓ S12508 } RC 7/24/24

Rebecca Gingerich - Operations Tech II **Date Mixed:** 18-Jul-2024 **Balance:** 1128353505

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

Certificate of Analysis

gravimetric

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 555224 **Lot No.:** A0214017

Description : Custom 8270 Plus Standard #2

Custom 8270 Plus Standard #2 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : July 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

CERTIFIED VALUES

Component #	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,2,4,5-Tetrachlorobenzene	95-94-3	MKCT9480	99%	1,005.0 µg/mL	+/- 29.541899
2	Acetophenone	98-86-2	STBH8205	99%	1,005.0 µg/mL	+/- 29.541899
3	Benzaldehyde	100-52-7	RD231129RSRA	99%	1,008.0 µg/mL	+/- 29.630084
4	Benzoic acid	65-85-0	MKCR2694	99%	1,010.0 µg/mL	+/- 29.688874
5	Biphenyl	92-52-4	MKCS5928	99%	1,008.0 µg/mL	+/- 29.630084

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12509 ↓ S12568 } RC/ 7/24/24

Jess Hoy - Operations Tech I

Date Mixed: 18-Jul-2024 **Balance:** 1128360905

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified expanded uncertainty value includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ uncertainty} = k\sqrt{u^2_{gravimetric} + u^2_{homogeneity} + u^2_{storage\ stability} + u^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- The packaged amount is the minimum sample size for which uncertainty is valid. The ampuls are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampuls. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31615 **Lot No.:** A0212955

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 : June 30, 2027 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,004.5 µg/mL	+/- 44.8902
2	DFTPP (Decafluorotriphenylphosphine)	5074-71-5	Q117-147	99%	1,004.5 µg/mL	+/- 44.8902
3	Benzidine	92-87-5	S240430RSR	99%	1,006.0 µg/mL	+/- 44.9572
4	4,4'-DDT	50-29-3	S240530RSR	97%	1,000.1 µg/mL	+/- 44.6922

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12577 ↓ S12579 } RC 8/2/24

Quality Confirmation Test

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.)

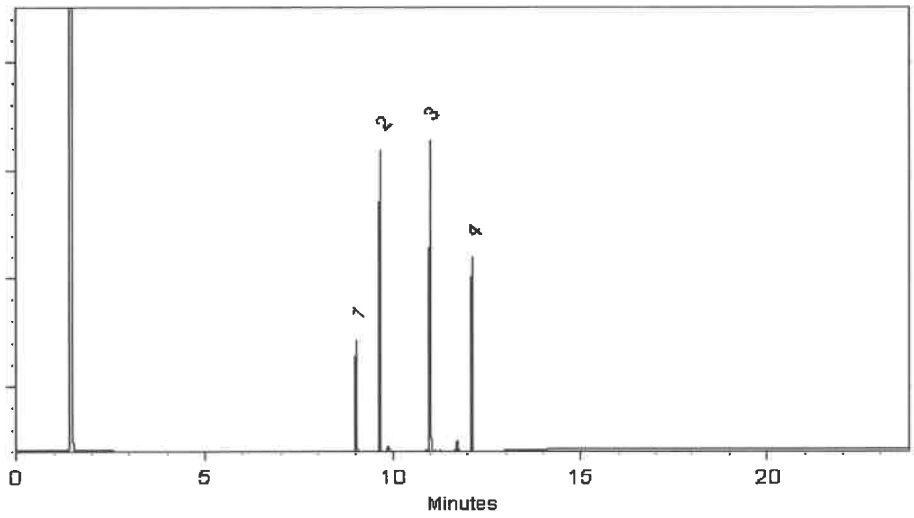
Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID

Split Vent:
10 ml/min.

Inj. Vol
1µl



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Ethan Winiarski - Operations Tech I

Date Mixed: 19-Jun-2024 **Balance Serial #** 1128353505

Jennifer Pollino - Operations Tech III - ARM QC

Date Passed: 26-Jun-2024

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ilac-MRA A2LA ACCREDITED ISO 17034 Accredited Reference Material Producer Certificate #3222.01

ilac-MRA A2LA ACCREDITED ISO/IEC 17025 Accredited Testing Laboratory Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31206 **Lot No.:** A0212266

Description : SV Internal Standard Mix 2mg/ml

SV Internal Standard Mix 2mg/ml 2000 µg/ml, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2030 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	1,4-Dichlorobenzene-d4	3855-82-1	PR-30447	99%	2,000.6 µg/mL	+/- 90.1075
2	Naphthalene-d8	1146-65-2	M-2180	99%	2,000.3 µg/mL	+/- 90.0925
3	Acenaphthene-d10	15067-26-2	PR-33507	99%	2,000.4 µg/mL	+/- 90.1000
4	Phenanthrene-d10	1517-22-2	PR-34099	99%	2,000.5 µg/mL	+/- 90.1037
5	Chrysene-d12	1719-03-5	PR-33506	99%	2,000.7 µg/mL	+/- 90.1112
6	Perylene-d12	1520-96-3	PR-33205	99%	2,000.6 µg/mL	+/- 90.1075

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

S12645 ↓ S12674 AC 10/1/24

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: 1-814-353-1300
Fax: 1-814-353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

chromatographic plus

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31850 **Lot No.:** A0219438

Description : 8270 MegaMix®

8270 MegaMix® 500-1000 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : September 30, 2025 **Storage:** 0°C or colder

Handling: Sonication required. Mix is photosensitive. **Ship:** Ambient

S12963 ↓ S12992 AC 12/17/24

CERTIFIED VALUES

Elution Order	Compound	CAS #	Lot #	Purity	Grav. Conc. (weight/volume)	Expanded Uncertainty * (95% C.L.; K=2)
1	Pyridine	110-86-1	SHBP6240	99%	1,008.3 µg/mL	+/- 36.6849
2	N-Nitrosodimethylamine	62-75-9	S240313RSR	99%	1,008.6 µg/mL	+/- 36.6985
3	Phenol	108-95-2	MKCK1120	99%	1,003.5 µg/mL	+/- 36.5120
4	Aniline	62-53-3	X22F726	99%	1,002.9 µg/mL	+/- 36.4893
5	Bis(2-chloroethyl)ether	111-44-4	002891T24M	99%	1,003.0 µg/mL	+/- 36.4938
6	2-Chlorophenol	95-57-8	STBJ3909	99%	1,005.6 µg/mL	+/- 36.5894
7	1,3-Dichlorobenzene	541-73-1	BCCD5315	99%	1,004.1 µg/mL	+/- 36.5348
8	1,4-Dichlorobenzene	106-46-7	MKBS7929V	99%	1,002.1 µg/mL	+/- 36.4620
9	Benzyl alcohol	100-51-6	SHBK5469	99%	1,003.5 µg/mL	+/- 36.5120
10	1,2-Dichlorobenzene	95-50-1	SHBL6287	99%	1,005.3 µg/mL	+/- 36.5757
11	2-Methylphenol (o-cresol)	95-48-7	SHBN7598	99%	1,008.4 µg/mL	+/- 36.6894
12	2,2'-oxybis(1-chloropropane)	108-60-1	29-MAR-45-5	99%	1,004.6 µg/mL	+/- 36.5530
13	3-Methylphenol (m-cresol)	108-39-4	STBJ0710	99%	502.1 µg/mL	+/- 18.2697
14	4-Methylphenol (p-cresol)	106-44-5	SHBN3411	99%	503.8 µg/mL	+/- 18.3288
15	N-Nitroso-di-n-propylamine	621-64-7	N63MG	99%	1,006.5 µg/mL	+/- 36.6212
16	Hexachloroethane	67-72-1	DAXRI	99%	1,004.5 µg/mL	+/- 36.5484
17	Nitrobenzene	98-95-3	10224044	99%	1,002.5 µg/mL	+/- 36.4757

18	Isophorone	78-59-1	MKCR3249	99%	1,003.4	µg/mL	+/- 36.5075
19	2-Nitrophenol	88-75-5	RP230710	99%	1,002.5	µg/mL	+/- 36.4757
20	2,4-Dimethylphenol	105-67-9	XW5GK	99%	1,006.5	µg/mL	+/- 36.6212
21	Bis(2-chloroethoxy)methane	111-91-1	15705100	99%	1,006.6	µg/mL	+/- 36.6257
22	2,4-Dichlorophenol	120-83-2	BCCK6969	99%	1,001.5	µg/mL	+/- 36.4393
23	1,2,4-Trichlorobenzene	120-82-1	SHBP5900	99%	1,006.4	µg/mL	+/- 36.6166
24	Naphthalene	91-20-3	STBL1057	99%	1,002.1	µg/mL	+/- 36.4620
25	4-Chloroaniline	106-47-8	BCCJ3217	99%	1,004.4	µg/mL	+/- 36.5439
26	Hexachlorobutadiene	87-68-3	X05J	98%	1,002.5	µg/mL	+/- 36.4771
27	4-Chloro-3-methylphenol	59-50-7	BCCD4461	99%	1,004.5	µg/mL	+/- 36.5484
28	2-Methylnaphthalene	91-57-6	STBL3028	99%	1,000.0	µg/mL	+/- 36.3847
29	1-Methylnaphthalene	90-12-0	5234.00-8	98%	990.2	µg/mL	+/- 36.0269
30	Hexachlorocyclopentadiene	77-47-4	099063I14L	98%	1,001.3	µg/mL	+/- 36.4325
31	2,4,6-Trichlorophenol	88-06-2	STBK8870	99%	1,006.4	µg/mL	+/- 36.6166
32	2,4,5-Trichlorophenol	95-95-4	3YFRE	97%	1,004.6	µg/mL	+/- 36.5505
33	2-Chloronaphthalene	91-58-7	RPN7O	99%	1,004.3	µg/mL	+/- 36.5393
34	2-Nitroaniline	88-74-4	RP240715RSR	99%	1,004.4	µg/mL	+/- 36.5439
35	1,4-Dinitrobenzene	100-25-4	RP240703RSR	99%	1,002.8	µg/mL	+/- 36.4847
36	Acenaphthylene	208-96-8	RP241029RSR	98%	1,000.0	µg/mL	+/- 36.3835
37	1,3-Dinitrobenzene	99-65-0	TRC3-1075941-2-1	99%	1,006.3	µg/mL	+/- 36.6121
38	Dimethylphthalate	131-11-3	358221L17K	99%	1,008.9	µg/mL	+/- 36.7076
39	2,6-Dinitrotoluene	606-20-2	BCCG1833	99%	1,006.6	µg/mL	+/- 36.6257
40	1,2-Dinitrobenzene	528-29-0	RP240701RSR	99%	1,002.5	µg/mL	+/- 36.4757
41	Acenaphthene	83-32-9	MKCR7169	99%	1,000.0	µg/mL	+/- 36.3847
42	3-Nitroaniline	99-09-2	RP240708RSR	99%	1,004.6	µg/mL	+/- 36.5530
43	2,4-Dinitrophenol	51-28-5	D240927RSR	----%	1,005.6	µg/mL	+/- 36.5894
44	Dibenzofuran	132-64-9	MKCN1772	99%	1,003.5	µg/mL	+/- 36.5120
45	2,4-Dinitrotoluene	121-14-2	102869V26E	99%	1,008.3	µg/mL	+/- 36.6849
46	4-Nitrophenol	100-02-7	20241029-2-AN	99%	1,004.8	µg/mL	+/- 36.5575
47	2,3,4,6-Tetrachlorophenol	58-90-2	PR-34476	99%	1,005.8	µg/mL	+/- 36.5939
48	2,3,5,6-Tetrachlorophenol	935-95-5	RP231219RSR	99%	1,006.4	µg/mL	+/- 36.6166
49	Fluorene	86-73-7	10246250	98%	1,000.7	µg/mL	+/- 36.4102
50	4-Chlorophenyl phenyl ether	7005-72-3	MKCT7248	99%	1,004.9	µg/mL	+/- 36.5621
51	Diethylphthalate	84-66-2	BCCJ6241	99%	1,003.9	µg/mL	+/- 36.5257
52	4-Nitroaniline	100-01-6	RP230111	99%	1,006.6	µg/mL	+/- 36.6257
53	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)	534-52-1	S241008RSR	99%	1,001.3	µg/mL	+/- 36.4302

54	Diphenylamine	122-39-4	MKCT1512	99%	1,003.0	µg/mL	+/- 36.4938
55	Azobenzene	103-33-3	BCCK0887	99%	1,002.4	µg/mL	+/- 36.4711
56	4-Bromophenyl phenyl ether	101-55-3	STBH6361	99%	1,008.8	µg/mL	+/- 36.7031
57	Hexachlorobenzene	118-74-1	15458400	99%	1,005.1	µg/mL	+/- 36.5712
58	Pentachlorophenol	87-86-5	RP240517RSR	99%	1,005.9	µg/mL	+/- 36.5984
59	Phenanthrene	85-01-8	MKCT3391	99%	1,004.9	µg/mL	+/- 36.5621
60	Anthracene	120-12-7	101492T18R	99%	1,005.1	µg/mL	+/- 36.5712
61	Carbazole	86-74-8	15276700	99%	1,005.4	µg/mL	+/- 36.5803
62	Di-n-butylphthalate	84-74-2	MKCN4337	99%	1,006.3	µg/mL	+/- 36.6121
63	Fluoranthene	206-44-0	MKCQ4728	99%	1,003.5	µg/mL	+/- 36.5120
64	Pyrene	129-00-0	BCCK2592	99%	1,002.0	µg/mL	+/- 36.4575
65	Benzyl butyl phthalate	85-68-7	X12I018	99%	1,007.5	µg/mL	+/- 36.6576
66	Bis(2-ethylhexyl)adipate	103-23-1	MKCM1988	99%	1,005.9	µg/mL	+/- 36.5984
67	Benz(a)anthracene	56-55-3	I70012022BAA	99%	1,005.5	µg/mL	+/- 36.5848
68	Chrysene	218-01-9	RP241007RSR	99%	1,005.3	µg/mL	+/- 36.5757
69	Bis(2-ethylhexyl)phthalate	117-81-7	MKCS8065	99%	1,007.5	µg/mL	+/- 36.6576
70	Di-n-octyl phthalate	117-84-0	15566400	99%	1,002.3	µg/mL	+/- 36.4666
71	Benzo(b)fluoranthene	205-99-2	052013B	99%	1,004.1	µg/mL	+/- 36.5348
72	Benzo(k)fluoranthene	207-08-9	012022K	99%	1,002.8	µg/mL	+/- 36.4847
73	Benzo(a)pyrene	50-32-8	NQLXA	98%	1,006.2	µg/mL	+/- 36.6108
74	Indeno(1,2,3-cd)pyrene	193-39-5	12-JKL-118-9	97%	1,001.8	µg/mL	+/- 36.4490
75	Dibenz(a,h)anthracene	53-70-3	2-ASA-59-1	99%	1,003.3	µg/mL	+/- 36.5029
76	Benzo(g,h,i)perylene	191-24-2	RP241014RSR	98%	1,003.8	µg/mL	+/- 36.5217

* Expanded Uncertainty displayed in same units as Grav. Conc.

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
N-Nitrosodiphenylamine (86-30-6) is prone to breakdown in the injection port and will be converted to Diphenylamine (122-39-4). When comparing the response of Diphenylamine to mixtures manufactured using N-Nitrosodiphenylamine, a difference in response will be observed. The ratio of the MW can be used to calculate the theoretical concentration of the N-Nitrosodiphenylamine.

CPI INTERNATIONAL

5580 Skylane Blvd
Santa Rosa, CA 95403

(707)525-5788
(800)878-7654 Toll Free
(707)545-7901 Fax

Manufacturer's Quality System
Audited & Registered
by TUV USA to ISO 9001:2015

Date Received: _____

Certificate of Analysis

Rev 0

Catalog No.:	Lot No.:	Storage:	Solvent:	Exp. Date:	Description:
Z-110816-01	531243	≤ -10 °C	Methylene Chloride	1/2/2030	Custom 8270 Mix, 4-79, 1000 mg/L, 1 mL

Compound	CAS No.	Purity (%)	Compound Lot No.	Concentration, mg/L
atrazine	1912-24-9	99.5	337.7.4P	997 ± 5.81
benzidine	92-87-5	99.9	124.18.6.2P	993.8 ± 5.78
caprolactam	105-60-2	99.9	271.1.6P	999 ± 5.82

513057 ↓ 513061 AC 1/16/25

*Not a certified value

Manufactured by o2si smart solutions, Accredited to ISO 9001:2008 by NSF and ISO/IEC 17025:2005 (Certification No. 3031.01) and ISO Guide 34:2009 (Certification No. 3031.02) by A2LA

Certified By: Melissa Workoff

Melissa Workoff
Chemist

All weights are traceable through N. I. S. T. Test No. 822/264157-00. Concentration (correct for purity) and uncertainty (95% confidence) values listed are determined gravimetricly.

SHIPPING DOCUMENTS

CHEMTECH
CHAIN OF CUSTODY RECORD

284 Sheffield Street, Mountainside, NJ 07092
(908) 789-8900 Fax: (908) 78-8922
www.chemtech.net

Chemtech Project Number: 22806

COC Number:

CLIENT INFORMATION

COMPANY: Tetra Tech
ADDRESS: 4433 Corporation Ln, Suite 300
CITY: Virginia Beach STATE: VA ZIP: 23462
ATTENTION: Ernie Wu
PHONE: 757-466-4901 FAX: 757-461-4148

PROJECT INFORMATION

PROJECT NAME: NWIRP Bethpage
PROJECT #: 112G08005-WE13 LOCATION: RW7B
PROJECT MANAGER: Ernie Wu
E-MAIL: ernie,wu@tetratech.com
PHONE: 757-466-4901 FAX: 757-461-4148

BILLING INFORMATION

BILL TO: PO#
ADDRESS:
CITY: STATE: ZIP:
ATTENTION: PHONE:

DATA TURNAROUND INFORMATION

FAX: 10 DAYS*
HARD COPY: 10 DAYS*
EDD 10 DAYS*
* TO BE APPROVED BY CHEMTECH
STANDARD TURNAROUND TIME IS 10 BUSINESS DAYS

DATA DELIVERABLE INFORMATION

- ☐ RESEULTS ONLY
- ☐ RESULTS + QC
- ☐ New Jersey REDUCED
- ☐ New Jersey CLP
- ☐ USEPA CLP
- ☐ New York State ASP "B"
- ☐ New York State ASP "A"
- ☐ Other
- ☐ EDD Format

ANALYSIS

1	2	3	4	5	6	7	8	9
1,4-Dioxane SW846 8270 SIM								

CHEMTECH SAMPLE ID	PROJECT SAMPLE IDENTIFICATION	SAMPLE MATRIX	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE COLLECTION DATE	SAMPLE COLLECTION TIME	# of Bottles	PRESERVATIVES 1	2	3	4	5	6	7	8	9	COMMENTS
1.	RW7-SP100-20250807	GW		x	8/7/25	12:15	1	x									
2.	RW7-SP201-20250807	GW		x	8/7/25	12:17	1	x									
3.	RW7-SP303-20250807	GW		x	8/7/25	12:29	1	x									
4.																	
5.																	
6.																	
7.																	
8.																	
9.																	
10.																	

<-- Specify Preservatives
A-HCl B-HNO3
C-H2SO4 D-NaOH
E-ICE F-Other

SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE PROSSESSION INCLUDING COURIER DELIVERY

RELINQUISHED BY SAMPLER	DATE/TIME	RECEIVED BY
1.	8/7/25 1520	1.
RELINQUISHED BY	DATE/TIME	RECEIVED BY
2.	8/8/25 925	2.
RELINQUISHED BY	DATE/TIME	RECEIVED FOR LAB BY
3.		3.

Conditions of bottles or coolers at receipt: ☐ Compliant ☐ Non Compliant ☐ Cooler Temp 2.1°C
MeOH extraction requires an additional 4oz. Jar for percent solid ☐ Ice in Cooler?: yes
Comments:
TR Gun #1

Page ____ of ____

SHIPPED VIA: CLIENT: ☐ Hand Delivered ☐ Overnight
CHEMTECH: ☐ Picked Up ☐ Overnight

Shipment Complete ☐ YES ☐ NO

WHITE - CHEMTECH COPYFOR RETURN TO CLIENT **YELLOW** - CHEMTECH COPY **PINK** - SAMPLER COPY

284 Sheffield Street, Mountainside NJ 07092 (908)-789-8900 Fax : 908 789 8922

Laboratory Certification

Certified By	License No.
CAS EPA CLP Contract	68HERH20D0011
Connecticut	PH-0830
DOD ELAP (ANAB)	L2219
Maine	2024021
Maryland	296
New Hampshire	255424 Rev 1
New Jersey	20012
New York	11376
Pennsylvania	68-00548
Soil Permit	525-24-234-08441
Texas	T104704488

QA Control Code: A2070148